



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Confidential Client
Douglas Street
El Segundo, CA 90245

Back-Check No. 2

ASI 009

Release: January 15, 2016

Prepared for:

ROSSETTI
160 WEST FORT, SUITE 400
DETROIT, MI 48226



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F03

2' X 2' LIGHT PANEL FIXTURE

Manufacturer: CORONET

Fixture Line: TDJD LED 2x2

Fixture: 2x2 LED

Catalog #: TDHD LED-2X2-LTG1-3000K-277-MOUNTING-OPTIONS

Mounting: RECESSED

Fixture Wattage: 29.5w

Fixture Voltage: 277

Lamp Spec: LED 3000K, 3375 lm



TDJD LED 2x2

coronet



DATE

JOB NAME

TYPE

Features

- Two outer and one center inverted frosted acrylic lenses
- Shallow design for mounting in obstructed ceiling plenums
- Clean appearance, no exposed fasteners
- 3 1/2" deep housing

Applications

- Office Areas
- Class Rooms
- Retail Stores
- Hospitals

Series	Size	LED System	Color Temp	Voltage	Mounting	Options
TDJD LED	2x2	LTG1- Standard LTG2- Low LTG3- High C- Custom Package (Consult Factory)	3000K 3500K 4000K 5000K	120 277 UNV	T-Lay-in for Grid Ceiling* F-Flange Kit for Sheetrock SG - Slot Grid	EM-EM Pack* DB- Dimming AR- Air Return SC- Separate Circuit WH- Whips

Ordering Example: TDJD LED-2X2-LTG2-4000K-UNV-SG-DB

*Standard Tee is 9/16". **Must** specify if 15/16"

* **Voltage must be specified with EM option**

LED System Information

Options:

PACKAGE	SYSTEM WATTS	DELIVERED LUMENS
LTG1 (STANDARD)	29.5W	3375Lm
LTG2 (LOW)	27W	3065Lm
LTG3 (HIGH)	33W	3815Lm

***FOR ANY CUSTOM LED PACKAGE REQUESTS CONSULT FACTORY

Color
Temperature
Pro-rate:

CCT	OUTPUT
3000K	95%
3500K	97%
4000K	100%
5000K	103%

Details

Application Features: Premium grade, recessed, high performance direct/indirect architectural luminaire with two outer and one center frosted acrylic lenses. For use in indoor applications where a LED luminaire with soft, low-glare illumination and modern styling is required.

Construction: Die formed and spot welded, 20 ga. cold rolled steel housing with precision formed, cold rolled steel arched reflector and die formed, cold rolled steel perforated lamp shield. Shielding flexes over mounting studs on housing for easy installation and re-lamping. Sufficient knock-outs provided on back of housing for flexible conduit attachment.

Electrical: Integral Driver

Approvals: Union made, ETL listed and manufactured in the US.

Mounting: Recessed mounting for T-Bar, Slot Grid or with Flange Kit for sheetrock ceiling installations.

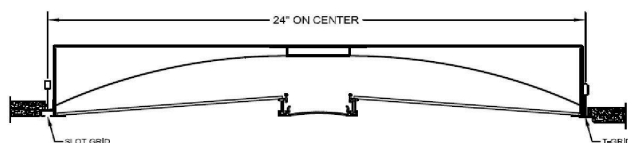
Optics: Two outer and one inverted center frosted acrylic lenses

Options: Emergency Backup, Separate Circuit, Air Return Slots, 6' Whips.

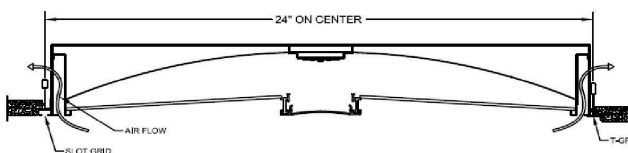
TDJD LED 2x2

coronet

Dimensions:



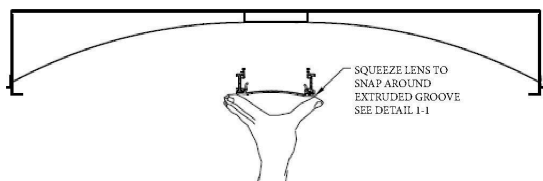
CROSS SECTION VIEW



CROSS SECTION VIEW
WITH AIR RETURN

Lens Installation Instructions:

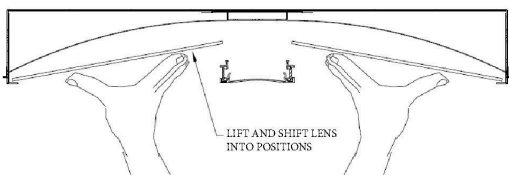
STEP 1



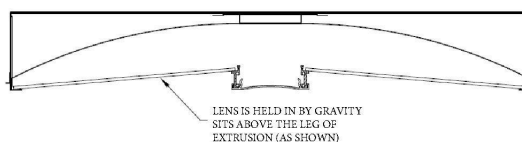
Detail 1-1:



STEP 2



STEP 3



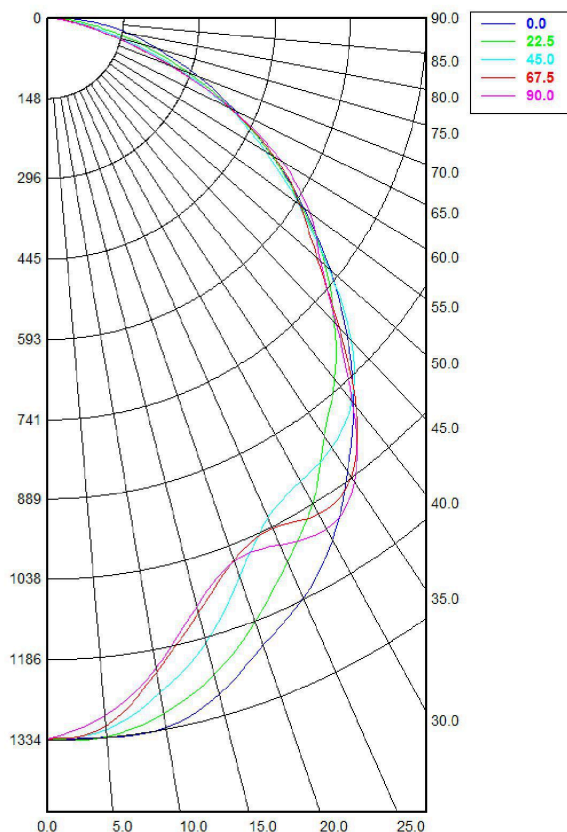


TDJD LED 2x2

coronet

Photometrics:

TDJD LED-2X2-LTG1-4000K:



Candela Distribution:

	0.0	22.5	45.0	67.5	90.0
0.0	1331.21	1331.21	1331.21	1331.21	1331.21
5.0	1334.01	1332.85	1319.58	1313.09	1294.13
10.0	1331.21	1304.85	1266.09	1226.62	1219.57
15.0	1293.61	1255.91	1194.18	1138.48	1125.29
20.0	1232.99	1187.19	1097.47	1065.07	1067.50
25.0	1183.63	1108.92	1018.57	1040.04	1073.96
30.0	1115.65	1038.40	989.38	1060.32	1091.83
35.0	1024.95	944.86	969.83	1036.85	1048.32
40.0	932.11	874.41	926.69	940.54	929.34
45.0	830.26	795.15	841.73	807.29	799.42
50.0	721.61	711.37	720.20	689.99	698.02
55.0	613.26	608.62	601.64	605.85	627.98
60.0	504.25	503.03	491.29	511.75	525.94
65.0	403.35	395.71	387.00	392.64	394.82
70.0	310.88	289.42	267.71	253.94	251.50
75.0	224.03	192.65	156.62	137.56	133.37
80.0	157.83	110.68	80.15	66.54	62.42
85.0	96.59	50.00	30.96	23.13	20.09
90.0	33.38	16.24	9.42	5.67	3.41

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	965	24.6	28.6
0- 40	1584	40.5	47.0
0- 60	2752	70.3	81.6
0- 90	3372	86.1	100.0
90-120	0	0.0	0.0
90-150	0	0.0	0.0
90-180	0	0.0	0.0
0-180	3372	86.1	100.0

Total Luminaire Optical Efficiency = 86.1%

Coefficients of Utilization - Zonal Cavity Method

pfc = 0.20

pcc->

pw-> .7 .5 .3 .0 .7 .5 .3 .0 .5 .3 .0 .5 .3 .0 .5 .3 .0 .0

RCR

0	103	103	103	103	100	100	100	100	96	96	96	92	92	92	88	88	88	86
1	94	90	87	82	92	88	85	81	85	82	79	81	79	76	74	74	74	73
2	86	79	74	67	84	78	72	66	75	70	65	72	68	63	62	62	62	62
3	79	70	63	55	76	68	62	55	66	60	54	63	59	53	53	53	53	52
4	72	62	55	47	70	61	54	46	59	53	46	57	51	45	45	45	45	45
5	66	55	48	40	65	54	47	40	53	46	39	51	45	39	39	39	39	39
6	61	50	42	35	60	49	42	35	48	41	34	46	40	34	34	34	34	34
7	57	45	38	31	55	45	38	30	43	37	30	42	36	30	30	30	30	30
8	53	41	34	27	52	41	34	27	40	33	27	39	33	27	27	27	27	27
9	49	38	31	24	48	37	31	24	37	30	24	36	30	24	24	24	24	24
10	46	35	28	22	45	35	28	22	34	28	22	33	27	22	22	22	22	22



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PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F07.A

RECESSED SQUARE DOWNLIGHT

Manufacturer: KURT VERSEN

Fixture Line: B2142

Fixture: MEDIUM BEAM RECESSED SQUARE DOWNLIGHT

Catalog #: B2142 13 30 27

Mounting: RECESSED

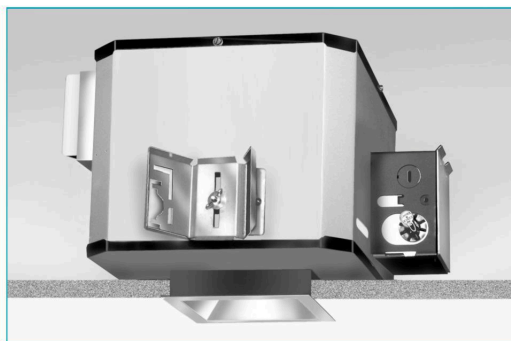
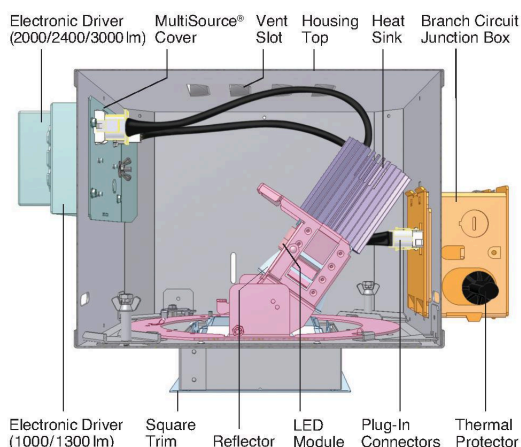
Fixture Wattage: 22w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED 3000K, 1300 lm





Dimensions and Sources

Number	A Depth	B Aperture	C Width*	D Length	LED Module
	10 3/16" 259mm	4 1/2" 114mm	14 3/4" 375mm	16 3/8" 416mm	1000 lm or 1300 lm Xicato® XSM
B2142	10 3/16" 259mm	4 1/2" 114mm	16 1/8" 410mm	16 3/8" 416mm	2000 lm, 2400 lm or 3000 lm Xicato® XSM

*For 1000 lm and 1300 lm with Lutron dimming use 16 1/8".

Energy and Ordering Information

Fixture	Module Lumens	System Lumens	System Watts	lm/W	Order Code Model L K V
B2142	1000	765	16	47.8	B2142 10 30 27
	1300	1007	22	45.8	B2142 13 30 27
	2000	1547	37	42.0	B2142 20 30 27
	2400	1535	32	48.0	B2142 24 30 27
	3000	1811	38	48.0	B2142 30 30 27

B2142 1000, 1300, 2000, 2400, 3000 lm

Wide Beam, Directional Downlight

4 1/2" Square Parabolic Trim, Xicato® XSM Remote Phosphor MultiSource® Technology

Optics and Applications

Directional systems are designed with locking capability to rotate 360° and angulate 35°. Optics designed to control the rigors of sloped ceiling installations. Beam distributions can be changed in the field. Beam angle is 50°.

Design Features - MultiSource® Capable

Fixture housings are designed with MultiSource® plug and play connectors allowing field conversion to other sources. New lighting technologies will be incorporated as they become available assuring continuity. The fixture incorporates an aperture assembly which slides 1/4" in any direction and pivots 7° while maintaining optimum photometric performance. Proprietary passive heat sinks ensure proper temperatures are maintained. Service from below only. Maximum ceiling thickness is 1 1/2".

Modules

Xicato® XSM remote phosphor modules use high efficiency blue LEDs that convert to white light when directed through a phosphor lens. Fixture lumen packages are 1000 lm, 1300 lm, 2000 lm, 2400 lm and 3000 lm. Standard 80 CRI. 2700K, 3000K, 3500K, 4000K available. Rated Life is 50,000 hours at 70% lumen output.

Dimming Driver

Dimming is standard 0-10V/10%. See accessories for additional dimming options. Specify Voltage: 120 or 277.

Finish

Standard trim is anodized Softglow® clear. SoftSheen™ is a new finish that lowers apparent brightness due to remote phosphor sources. Colors available, see accessories. Steel parts are phosphate conditioned then painted matte black to suppress light leaks.

Warranty

5 year limited. See KV website for manufacturers details.

General

Fixture is pre-wired and thermally protected, UL and C-UL listed, for damp location and eight wire, 75°C, branch circuit wiring. All products are union made. Designed and manufactured in the USA.

Accessories

SB	Softglow black.	WT	White trim flange.
SG	Softglow gold.	WHT	White complete cone.
SW	Softglow wheat.	27	2700 Kelvin temp.
SY	Softglow pewter.	30	3000 Kelvin temp.
R2	26" support rails.	35	3500 Kelvin temp.
R5	52" support rails.	40	4000 Kelvin temp.
SO	Fine microprism lens*	DP	Fixed downlight position.
LL	Linear lens*	FR	Frosted lens, specify lens type.
F	Fuse.		
FMH4	Flush mount, drywall.		
	For wood and other materials contact factory.		
FLT4	Full lens trim, specify lens type.		
D1	Lutron to 1%, 3 wire control.		
DE	Lutron EcoSystem to 1%, digital 4 wire.		
REM	Remote Bodine EM. Includes battery pack, charger light, test switch and single lamp operation for 90 minutes. Ceiling access required.		
SS	SoftSheen™ add SS, e.g. SSW, SoftSheen™ Wheat.		
AS	Xicato® XSM Artist Series 95 CRI modules 1000 lm or 1300 lm. Contact factory for energy information.		

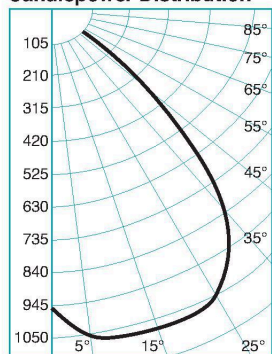
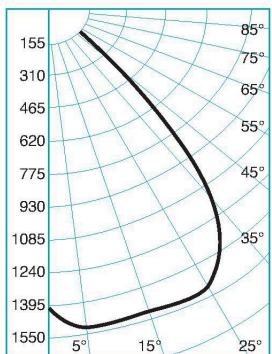
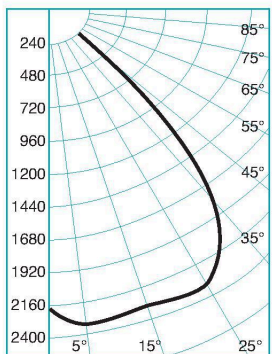
*(Requires FLT4 option)

B2142

Footcandle Values at 15° Tilt

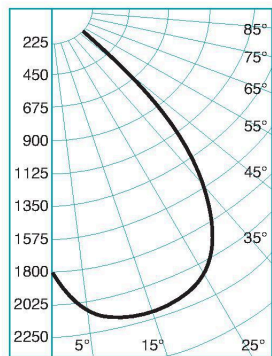
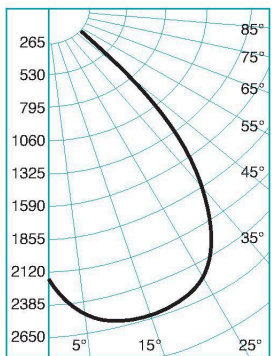
Distance	5'						8'						10'						15'					
	0°		5°		15°		0°		5°		15°		0°		5°		15°		0°		5°		15°	
Lamps	FC	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam
B4142 1000 lm 3000K	43	43	1'	35	3'	17	17	1'	14	4'	11	11	2'	9	5'	5	5	3'	4	8'				
B4142 1300 lm 3000K	60	60	1'	51	3'	23	23	1'	20	4'	15	15	2'	13	5'	7	7	3'	6	8'				
B4142 2000 lm 3000K	92	92	1'	79	3'	36	36	1'	31	4'	23	23	2'	20	5'	10	10	3'	9	8'				
B4142 2400 lm 3000K	89	87	1'	65	3'	35	34	1'	26	4'	22	22	2'	16	5'	10	10	3'	7	8'				
B4142 3000 lm 3000K	106	104	1'	79	3'	41	40	1'	31	4'	26	26	2'	20	5'	12	12	3'	9	8'				

Candlepower Distribution

B2142 Xicato® XSM 1000lm 3000K
15° Tilt
Luminous efficacy 47.8 S/M .86B2142 Xicato® XSM 1300lm 3000K
15° Tilt
Luminous efficacy 45.8 S/M .86B2142 Xicato® XSM 2000lm 3000K
15° Tilt
Luminous efficacy 42.0 S/M .86

Candelas

	B2142 16W	B2142 22W	B2142 37W
0	1077	1496	2300
5	1078	1511	2325
10	1054	1521	2339
15	980	1421	2197
20	839	1159	1799
25	618	750	1178
30	335	385	598
35	134	141	214
40	60	42	55
45	25	15	24
50	14	10	14
55	8	7	9
60	6	4	6
65	0	3	4
70	0	2	3
75	0	1	3
80	0	0	1
85	0	0	0
90	0	0	0

° Vertical Angles
* Luminaire LumensB2142 Xicato® XSM 2400lm 3000K
15° Tilt
Luminous efficacy 48.0 S/M .82B2142 Xicato® XSM 1300lm 3000K
15° Tilt
Luminous efficacy 48.0 S/M .82

	B2142 32W	B2142 38W
0	2217	2638
5	2191	2618
10	2094	2500
15	1811	2186
20	1577	1901
25	1121	1291
30	663	756
35	331	376
40	127	148
45	62	72
50	36	44
55	20	25
60	13	16
65	10	11
70	8	9
75	0	0
80	0	0
85	0	0
90	0	0

° Vertical Angles
* Luminaire Lumens

Notes

- Photometric Reports: B2142 KV Report No. 63013 for 1000 lm, B2142 LTL Report No. 26461-A for 1300 lm, B2142 LTL Report No. 26461-B for 2000 lm, B2142 KV Report No. 51414-B for 2400 lm and B2142 KV Report No. 51314-A for 3000 lm.
- Specular colored cone multipliers, contact factory.
- SoftSheen™ cone multipliers, contact factory.
- Single unit Datachart pattern diameters are determined by the number of degrees from each side of nadir. Therefore a 15° diameter represents a total 30° pattern width. Footcandle values are at the edge of that diameter.
- The luminous efficacy (lm/W) refers to the total measured luminous flux (lumens) of the fixture divided by the total measured electrical input power (watts) of the complete fixture.



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ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F07.B

RECESSED SQUARE DOWNLIGHT

Manufacturer: KURT VERSEN

Fixture Line: B2142

Fixture: MEDIUM BEAM RECESSED SQUARE DOWNLIGHT

Catalog #: B2142 10 30 27

Mounting: RECESSED

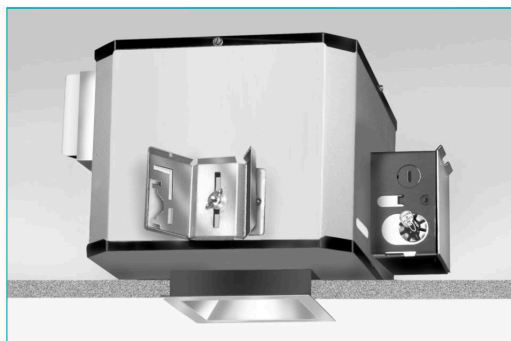
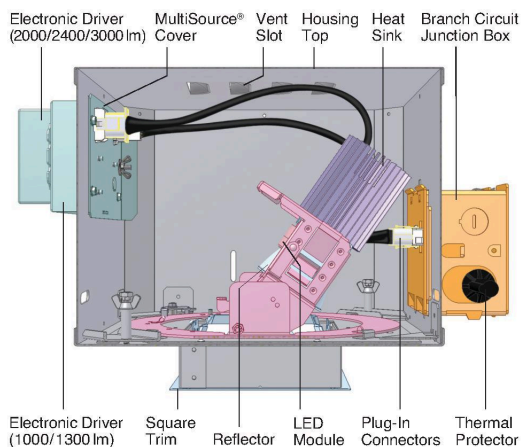
Fixture Wattage: 16w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED 3000K, 1000 lm



**B2142** 1000, 1300, 2000, 2400, 3000 lm**Wide Beam, Directional Downlight**

4 1/2" Square Parabolic Trim, Xicato® XSM Remote Phosphor MultiSource® Technology

Optics and Applications

Directional systems are designed with locking capability to rotate 360° and angulate 35°. Optics designed to control the rigors of sloped ceiling installations. Beam distributions can be changed in the field. Beam angle is 50°.

Design Features - MultiSource® Capable

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Modules

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Dimming Driver

Dimming is standard 0-10V/10%. See accessories for additional dimming options. Specify Voltage: 120 or 277.

Finish

Standard trim is anodized Softglow® clear. SoftSheen™ is a new finish that lowers apparent brightness due to remote phosphor sources. Colors available, see accessories. Steel parts are phosphate conditioned then painted matte black to suppress light leaks.

Warranty

5 year limited. See KV website for manufacturers details.

General

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SY	Softglow pewter.	30	3000 Kelvin temp.
R2	26" support rails.	35	3500 Kelvin temp.
R5	52" support rails.	40	4000 Kelvin temp.
SO	Fine microprism lens*	DP	Fixed downlight position.
LL	Linear lens*	FR	Frosted lens, specify lens type.
F	Fuse.		

FMH4 Flush mount, drywall.

For wood and other materials contact factory.

FLT4 Full lens trim, specify lens type.

D1 Lutron to 1%, 3 wire control.

DE Lutron EcoSystem to 1%, digital 4 wire.

REM Remote Bodine EM. Includes battery pack, charger light, test switch and single lamp operation for 90 minutes. Ceiling access required.

SS SoftSheen™ add SS, e.g. SSW, SoftSheen™ Wheat.

AS Xicato® XSM Artist Series 95 CRI modules 1000 lm or 1300 lm. Contact factory for energy information.

*(Requires FLT4 option)

Dimensions and Sources

Number	A Depth	B Aperture	C Width*	D Length	LED Module
B2142	10 3/16" 259mm	4 1/2" 114mm	14 3/4" 375mm	16 3/8" 416mm	1000 lm or 1300 lm Xicato® XSM
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*For 1000 lm and 1300 lm with Lutron dimming use 16 1/8".

Energy and Ordering Information

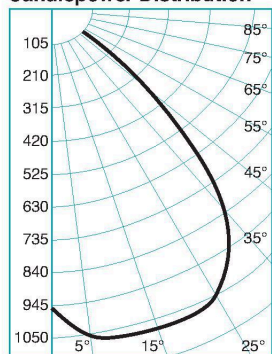
Fixture	Module Lumens	System Lumens	System Watts	lm/W	Order Code Model L K V
B2142	1000	765	16	47.8	B2142 10 30 27
	1300	1007	22	45.8	B2142 13 30 27
	2000	1547	37	42.0	B2142 20 30 27
	2400	1535	32	48.0	B2142 24 30 27
	3000	1811	38	48.0	B2142 30 30 27

B2142

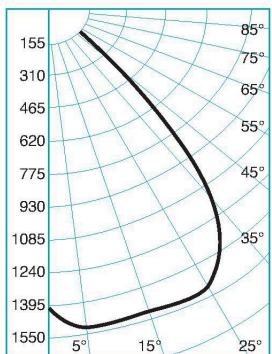
Footcandle Values at 15° Tilt

Distance	5'						8'						10'						15'					
	0°		5°		15°		0°		5°		15°		0°		5°		15°		0°		5°		15°	
Lamps	FC	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam
B4142 1000 lm 3000K	43	43	1'	35	3'	17	17	1'	14	4'	11	11	2'	9	5'	5	5	3'	4	8'				
B4142 1300 lm 3000K	60	60	1'	51	3'	23	23	1'	20	4'	15	15	2'	13	5'	7	7	3'	6	8'				
B4142 2000 lm 3000K	92	92	1'	79	3'	36	36	1'	31	4'	23	23	2'	20	5'	10	10	3'	9	8'				
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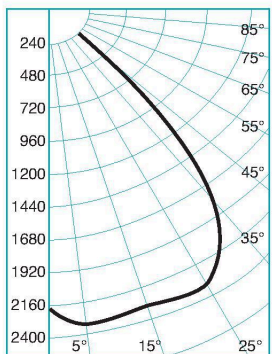
Candlepower Distribution



B2142 Xicato® XSM 1000lm 3000K
15° Tilt
Luminous efficacy 47.8 S/M .86



B2142 Xicato® XSM 1300lm 3000K
15° Tilt
Luminous efficacy 45.8 S/M .86

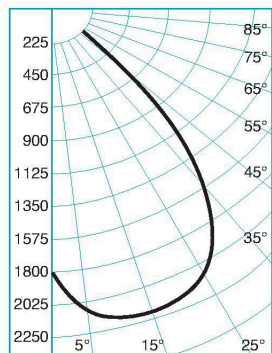


B2142 Xicato® XSM 2000lm 3000K
15° Tilt
Luminous efficacy 42.0 S/M .86

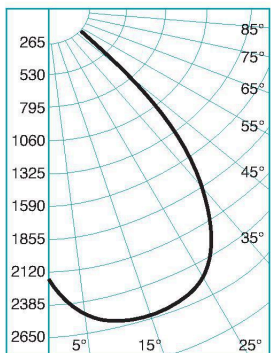
Candelas

	B2142 16W	B2142 22W	B2142 37W
0	1077	1496	2300
5	1078	1511	2325
10	1054	1521	2339
15	980	1421	2197
20	839	1159	1799
25	618	750	1178
30	335	385	598
35	134	141	214
40	60	42	55
45	25	15	24
50	14	10	14
55	8	7	9
60	6	4	6
65	0	3	4
70	0	2	3
75	0	1	3
80	0	0	1
85	0	0	0
90	0	0	0

° Vertical Angles
* Luminaire Lumens



B2142 Xicato® XSM 2400lm 3000K
15° Tilt
Luminous efficacy 48.0 S/M .82



B2142 Xicato® XSM 1300lm 3000K
15° Tilt
Luminous efficacy 48.0 S/M .82

	B2142 32W	B2142 38W
0	2217	2638
5	2191	2618
10	2094	2500
15	1811	2186
20	1577	1901
25	1121	1291
30	663	756
35	331	376
40	127	148
45	62	72
50	36	44
55	20	25
60	13	16
65	10	11
70	8	9
75	0	0
80	0	0
85	0	0
90	0	0

° Vertical Angles
* Luminaire Lumens

Notes

- Photometric Reports: B2142 KV Report No. 63013 for 1000 lm, B2142 LTL Report No. 26461-A for 1300 lm, B2142 LTL Report No. 26461-B for 2000 lm, B2142 KV Report No. 51414-B for 2400 lm and B2142 KV Report No. 51314-A for 3000 lm.
- Specular colored cone multipliers, contact factory.
- SoftSheen™ cone multipliers, contact factory.
- Single unit Datachart pattern diameters are determined by the number of degrees from each side of nadir. Therefore a 15° diameter represents a total 30° pattern width. Footcandle values are at the edge of that diameter.
- The luminous efficacy (lm/W) refers to the total measured luminous flux (lumens) of the fixture divided by the total measured electrical input power (watts) of the complete fixture.



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F08

ROUND DOWNLIGHT

Manufacturer: AMERLUX

Fixture Line: EVOKE DOWNLIGHTS

Fixture: EVOKE 4.75" ROUND DOWNLIGHT

Catalog #: E4.75R-A14-21-LED-277 + E4.75RLD-A14-SLW-VWF-3000

Mounting: RECESSED

Fixture Wattage: 21w

Fixture Voltage: 277

Load Type: Non-Dim

Lamp Spec: LED 3000K, 1400 lm, 83 CRI



EVOKE® ROUND LENS DOWNLIGHT

4.75" ROUND LENSED DOWNLIGHT LED

APPLICATION:

Commercial & hospitality ambient lighting

CONSTRUCTION:

20 ga. galvanized steel frame
18 ga. galvanized steel splice housing and hanger brackets
Die-cast aluminum heatsink
Wet location option adds silicone flange gasket

OPTICS:

Spun aluminum self-flanged reflector, anodized finish
High reflectance, highly diffuse mixing chamber
Engineered nano technology lens provides transmission while concealing LED image

LED:

Color Temp Options: 2700K, 3000K, 3500K, 4000K
CRI: 83 (2700K, 3000K, 3500K, 4000K)
97 (2700K, 3000K)

Amerlux® Crisp White technology available

R9 Value: 11 (83 CRI), 92 (97 CRI)

Life: 50,000 hrs

Lumen Maintenance: >70% of initial lumens @ 50,000 hrs

Lumen Output at 3000K:

16w	21w	30w	34w
1088 lm	1427 lm	2039 lm	2311 lm

ELECTRICAL:

Standard:

Electronic constant current LED driver, 120v or 277v input
ELV and Triac dimming standard, 120v or 277v.

This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Amerlux recommends using additional surge protection with this unit (supplied by others), surge damage is not covered by warranty.

Options:

Dimming: 0-10v, DALI & Lutron Hi-Lume®/EcoSystem 3 wire

See following pages for more information

Emergency Battery Pack: IOTA ILB-CP05 Emergency battery pack with remote test switch, output of 5w (approx. 300 lumens) for 90 minutes.

MOUNTING:

For use in grid or sheetrock ceilings, max ceiling thickness 1"
Consult factory for other thicknesses
Hanger bars included

LABELING:



pending to UL standards as tested by CSA

IC/AT rated (optional, 21w only)

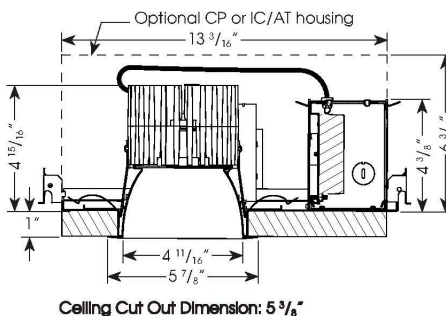
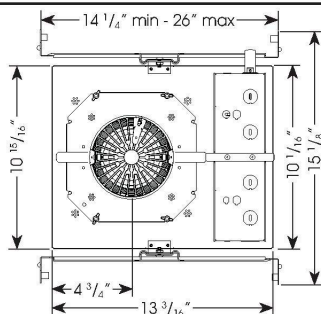
Damp location (standard)

Wet location (interior shower)

E4.75RLD-A14
LED

PROJECT:

TYPE:



ELECTRICAL

Driver	16w		21w		30w		34w	
	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps
Electronic 120v	16	0.13	21	0.18	30	0.25	34	0.28
277v	16	0.06	21	0.08	30	0.11	34	0.12

Class 2 constant current driver

Includes thermal protection, 2w power consumption

ORDERING INFORMATION:

HOUSING:					REFLECTOR/LED OPTIC:				
Model	Wattage	Lamp Type	Voltage	Options	Model	Aperture Cone/Flange Finish	Beam Spread	Color Temp	Options
E4.75R-A14	16	LED	120	HILUME - Lutron Hi-Lume®/EcoSystem 3 wire, 1% dimming 0-10V - 0-10v dimming DALI - DALI driver EM - emergency battery pack with remote test switch (not for use on CP or IC/AT options) CP - Chicago Plenum (CCEA) (16w, 21w & 30w only) IC/AT - insulated ceiling/air tight (16w & 21w only)	E4.75RLD-A14	Reflector with White Painted Flange	VWF - very wide flood, 75°	2700	WET - wet location
	21		277			SDW - semi-diffuse		3000	
	30					CLW - specular clear		3500	
	34					MWW - matte white		4000	
						Reflector with Clear Flange (flange finish matches cone finish)		2700-97	
						SDC - semi-diffuse		3000-97	
						CLC - specular clear		CRISP - crisp white	

Complete Unit Example: E4.75R-A14-34-LED-120/E4.75RLD-A14-MWW-VWF-3000

Housing Example: E4.75R-A14-34-LED-120

Reflector Example: E4.75RLD-A14-MWW-VWF-3000

Cat #:

Amerlux reserves the right to change details that do not affect overall function and performance.



(see next page for details)



5 year limited warranty
AMERLUX LED
(see website for details)

QUICKSHIP EVOKE® 4.75 DOWNLIGHT

4.75" ROUND LENSED DOWNLIGHT LED

Amerlux® QuickShip makes it possible not only to keep up with expectations, but to keep ahead of them. We help enhance your competitive edge, ensuring you can start installation more quickly than you thought possible.

We can ship within 5-10 business days of your Amerlux QuickShip order, depending upon the selection.

- **QuickShip must be clearly marked on all P.O.'s.**
- **Must note on P.O. if requesting frames ship first.**
- **Standard shipping terms apply.**
- **See terms & conditions below.**

Quantity: 100 pieces or less
Housing: 5 days
Trims: 10 days

E4.75RLD-A14
LED



PROJECT:

TYPE:

QUICKSHIP ORDERING INFORMATION:

Housing: Model	Wattage	Lamp Type	Voltage	Options	Trim: Model	Aperture Cone/ Flange Finish	Beam Spread	Color Temp
E4.75R-A14	21 30 34	LED	120 277	0-10V - 0-10v dimming	E4.75RLD-A14	MWW - matte white/ white	VWF - very wide flood, 60°	83 CRI 3000 3500

Complete **QuickShip** Example: E4.75R-A14-21-LED-120/E4.75RLD-A14-MWW-VWF-3000

Housing Example: E4.75R-A14-21-LED-120

Trim Example: E4.75RLD-A14-MWW-VWF-3000

Cat #:

Terms & Conditions

1. For QuickShip processing, please submit QuickShip items on separate purchase order and indicate "QuickShip" on order.
2. Configurations outside of what is displayed on the QuickShip program are not available under the QuickShip lead times.
3. Please contact Customer Support to process orders with quantities larger than those listed.
4. Orders will be entered within 24 hours of receipt of a clean purchase order. Lead times are calculated by business days from time of sales order confirmation. Orders will ship within QuickShip lead times or sooner.
5. Change orders and order cancellations cannot be processed after sales order confirmation is generated.
6. For freight allowed (greater than \$3,000), order will ship complete based on longest lead time item. Please indicate on PO if Partial Shipments are approved and indicate freight method. For partial shipments under \$3,000, customer will be invoiced for freight.
7. All Lead times indicate when the fixture ships from Amerlux®. Arrival at destination is contingent upon carrier.

Expedite your orders by providing:

- Separate purchase order noting "QuickShip Program"
- Complete and accurate configurations
- Accurate pricing, quote number, shipping and contact information

Amerlux reserves the right to modify this program at any time.



EVOKE® ROUND LENS DOWNLIGHT

4.75" ROUND LENS DOWNLIGHT LED

E4.75RLD-A14
LED



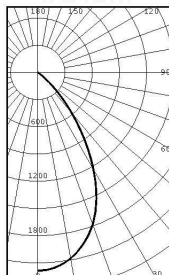
TYPE:



FIXTURE DATA: For 16w data, multiply by 0.47; For 21w data, multiply by 0.62; For 30w data, multiply by 0.88 Complete photometric data (ies format) available upon request.
CCT Correction Factors: 2700-97 = 0.77; 2700-83 = 0.92; 3000-97 = 0.84; 3500-83 = 1.08; 4000-83 = 1.17; CRISP = 0.78

34W LED

VERY WIDE FLOOD
DISTRIBUTION
LTL # 843155

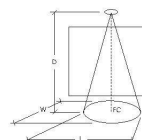


Candelas at Nadir Deg	Candela
0	2187
5	2161
15	1952
25	1530
35	889
45	317

APPLICATION DATA:

Notes and Definitions:

Beam spread is to 50% center beam candlepower (CBCP).
D=Distance to floor or wall.
FC=Footcandles on floor or wall at center beam aiming location.
L=Effective Visual Beam length in feet (50% of maximum footcandle level).
W=Effective Visual Beam width in feet (50% of maximum footcandle level).
CB=Distance across or down to center beam location.



SINGLE UNIT



0° Aiming Angle
Horizontal
Footcandle

	D	FC	L	W
VERY WIDE FLOOD 30W	5.0'	94	4.7	4.7
	7.5'	41	7.1	7.1
	10.0'	23	9.5	9.5
	12.5'	15	12.1	12.1

MULTIPLE UNITS 50'x50' ROOM

Spacing	VERY WIDE FLOOD, 30W, 10' MOUNTING HEIGHT	
	FC on Floor (avg/max)	FC at 2.5' AFF (avg/max)
6'x6'	19/71	17/71
8'x8'	10/40	8/48
10'x10'	9/29	7/42



EVOKE® ROUND LENS DOWNLIGHT

4.75" ROUND LENS DOWNLIGHT LED

E4.75RLD-A14
LED



TYPE:



DIMMING COMPATIBILITY:

Amerlux® fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc) may affect dimming performance.

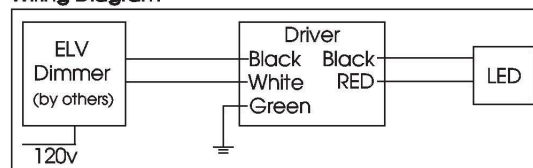
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (standard)

Utilizes specialized "ELV" dimmers. Best for New Construction applications

Notes:

- 120v or 277v
- Dims down to less than 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements

Wiring Diagram



Compatible Dimmers

Wall Box (ELV Style)

Lutron "Diva"	Lutron "Vareo"
Lutron "Nova-T"	Lutron "Skylark"
Lutron "Maestro"	
Leviton "Surslide"	Leviton "Vizio"

Central System

ETC "SR" Rack w/ELV10 Module	ETC "DRD" Rack w/ELV10 Module
Lutron "GP" Panel with PHPM-PA Interface	Lutron Grafix Eye QS with PHPM-PA Interface

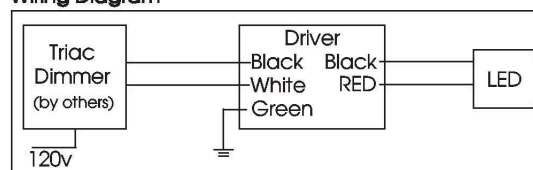
TRIAC (Forward Phase) DIMMING (standard)

Utilizes "Standard" incandescent dimmers that are in wide use in installations across the US. Best for retrofit applications where Triac dimmers are installed.

Notes:

- 120v or 277v
- Dims down to less than 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements per dimming manufacturer

Wiring Diagram



Compatible Dimmers

Wall Box (Incandescent Style, Wattage as required)

Lutron "Diva"	Lutron "Vareo"
Lutron "Nova-T"	Lutron "Skylark"
Lutron "Maestro"	

Central System

ETC "SR" Rack w/D20 Module	ETC "DRD" Rack w/D20 Module
Lutron "GP" Panel	Lutron Grafix Eye QS



EVOKE® ROUND LENS DOWNLIGHT

4.75" ROUND LENS DOWNLIGHT LED

E4.75RLD-A14
LED



TYPE:



LUTRON HI-LUME / ECO-SYSTEM (-HILUME Option)

Integrates into a variety of building management and daylighting controls

Notes:

- 120v or 277v
- Dims down to less than 5% light output
- May use 3-Wire or Ecosystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

Compatible Dimmers

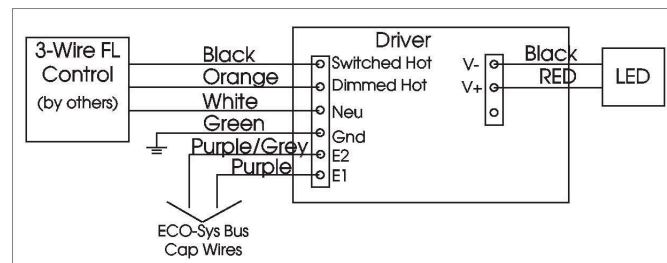
Wall Box (3-Wire Fluorescent)

DIVA
Maestro
Nova T
Vareo

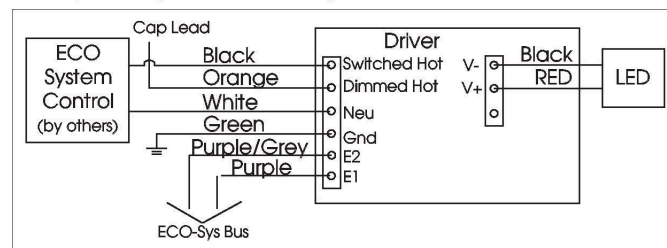
Central System

Lutron ECO-System compatible controls
ETC "SR" Rack w/D20F Module
ETC "DRD" Rack w/D20F Module

3-Wire Wiring Diagram



ECO System Digital Control Wiring



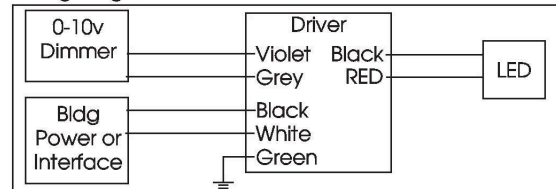
0-10V - DIMMING (-0-10V Option)

Integrates into a variety of building management and daylighting controls

Notes:

- 120v - 277v
- Dims down to less than 10% light output
- Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

Wiring Diagram



Compatible Dimmers

Wall Box

Lutron "Diva" - DDTV with
PP-120H Interface

Leviton Renoir II 0-10v

Central System

Lutron Grafix Eye with
GRX-TVI Interface



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F11

ADJUSTABLE DOWNLIGHT

Manufacturer: LUCIFER

Fixture Line: DL8ZP (OBSOLETE)

Fixture: ADJUSTABLE HALOGEN ROUND DOWNLIGHT

Catalog #: DL8ZP-FINSIH-LED-FGL-2 + DH-NIC-ZF-LED-10-120E

Mounting: RECESSED

Fixture Wattage: 9.8w

Fixture Voltage: 120

Load Type: ELV

Lamp Spec: (SORRA LAMP)
MR16-50-B01-12-930-25



**DL8ZP**

RECESSED DOWNLIGHT
ROUND ADJUSTABLE DUAL-AXIS

DL8ZP

DESCRIPTION**A Aiming**

Two axes of adjustment; up to 45° tilt in
ceilings up to 1" thick; 357° rotation;
manually adjustable and lockable from above

B Special Features

Die-cast, deeply regressed round aperture;
Professional Baffle minimizes aperture glare;
sealed collar prevents light leak

C Effects Devices

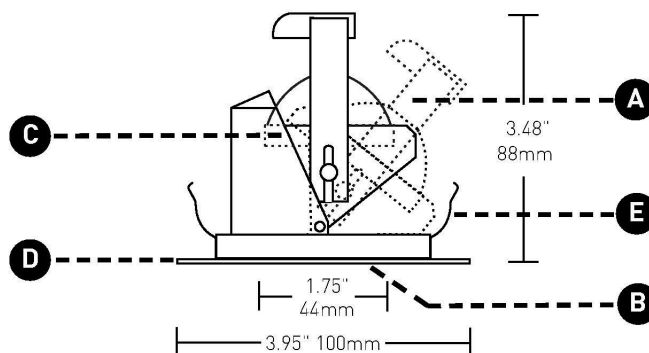
Frosted glass lens included; adjustable yoke
allows secure placement of multiple effects
devices [see chart below for total per light
source]

D Trim Plate

Thickness measures 0.055"; install as
zero-sightline or flange overlay

E Retention

Torsion spring clips accommodate varying
ceiling thicknesses (up to 1") and ensure
snug fit of trim against ceiling

**TECHNICAL****CONSTRUCTION**

Trim: Steel and aluminum; painted finishes are granulated
powdercoat

HOUSING

See housing specifications (page 2)

LISTING

ETL listed in US and Canada for dry/damp locations

LAMP

MR-16 style lamp options: 12V halogen (**HAL**) *max wattage is housing dependent*, ceramic metal halide (**HID**) *max wattage is housing dependent*, light emitting diode (**LED**)

To ensure optimal results, it is recommended to specify
lamps supplied by Lucifer Lighting* (see page 2)

WARRANTY

Manufacturer's one year warranty guarantees product(s)
listed to be free from defects in material workmanship
under normal use and service. Warranty is conditional
upon use of manufacturer supplied transformer or
ballast.

ORDERING INFORMATION (downlight)

Example: DL8ZP-W-HAL				Example: 12-50-HRIR-MF			
DL8ZP				*			
SERIES	FINISH	LIGHT SOURCE	EFFECTS DEVICES	LAMP			
DL8ZP	W Matte White* B Matte Black* C Polished Chrome IG Industrial Gray (Bead Blasted SS) MG Metallic Gray* SS Brushed Stainless Steel ABR Architectural Bronze* BRP Polished Oil-Rubbed Bronze Plate BRM Matte Oil-Rubbed Bronze Plate	HAL Halogen HID High Intensity Discharge LED Light Emitting Diode	<input type="checkbox"/> AGL-2 Amber Glass Lens <input type="checkbox"/> CGL-2 Clear Glass Lens <input type="checkbox"/> FGL-2 Frosted Glass Lens (standard) <input type="checkbox"/> HCL-2 Honeycomb Louver <input type="checkbox"/> LSL-2 Linear Spread Lens <input type="checkbox"/> SFL-2 Soft Focus Lens <input type="checkbox"/> SGL-2 Spread Lens <input type="checkbox"/> UVL-2 Ultra Violet Lens <input type="checkbox"/> WTL-2 Warm Tone Lens	* Optional (see page 2)			
				Light Source	HAL	HID	LED
				Total Effects Devices	3	1	3

*Powdercoat

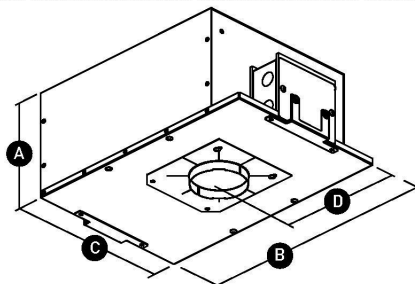
UNIVERSAL HOUSINGS

DL8ZP

IC

For use with recessed downlights in IC accessible and non-accessible ceilings up to 1" thick. Transformer compartment and all splice connections may be serviced from room side. Certified Chicago Plenum and ASTM E283 Airtight version available. Hanging bars are included and can be fitted to all sides of the housing.

Maximum wattage: 50W for halogen, 20W for HID.



- A 6.1" / 155mm
- B 16.3" / 414mm
- C 10" / 254mm
- D 7.2" / 183mm (aperture centerline)

Ceiling cut-out diameter

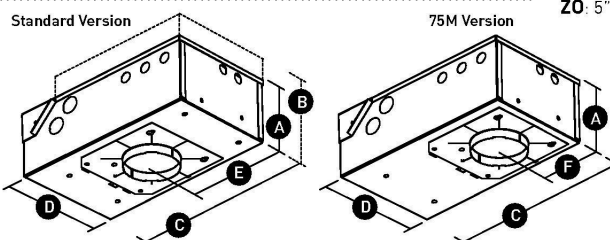
ZF: 3.5" / 89mm

ZO: 5" / 127mm

NON-IC

For use with recessed downlights in non-IC, accessible and non-accessible ceilings up to 1" thick. Transformer compartment and all splice connections serviceable from room side. Hanging bars are included and can be fitted to all sides of the housing for installation in spaces as narrow as 9".

Maximum wattage: 75W* for halogen, 39W for HID. HID version comes with extended top. The lowest profile housing (see measurement A) is for use with halogen lamp. *Note: 75 watt version has modified aperture centerline (see measurement F). Specify "75M" for max watts.



- A 3.7" / 94mm (HAL)
- B 6" / 152mm (HID)
- C 12" / 305mm
- D 6.8" / 172mm
- E 6.3" / 160mm (standard aperture centerline)
- F 3" / 76mm (75M version aperture centerline)

ORDERING INFORMATION (housing)

EX: DH-IC-ZF-HAL-50-120E

DH	HOUSING	RATING	SERIES	LIGHT SOURCE	MAX WATTS	POWER SUPPLY (primary)
DH	IC	IC only	ZF Z Series	HAL Halogen Low Voltage	75M (NIC only)	120E 120V Electronic
	AC	IC, Airtight, CCEA	Flange Overlay		50	277E 277V Electronic
	NIC	Non-IC	ZO Z Series			120M 120V Magnetic
			Zero-Sightline			277M 277V Magnetic
						REM Remote
					50	120EZL 120V Electronic Zero-Load*
					50	120T 120V Torroidal
					37	
					20	
				HID Metal Halide	39 (NIC only)	120E 120V Electronic
					20	277E 277V Electronic
						REM Remote
				LED MR-16 Style LED	10	120E 120V Electronic

*Zero-Load transformer accommodates retrofit 50W max MR-16 style LED lamp.

ORDERING INFORMATION (lamps)*

12-37-HRIR-SP	37W IR Halogen 10° Spot	12-50-HR-MF	50W Halogen 30° Medium Flood
12-37-HRIR-MF	37W IR Halogen 25° Medium Flood	12-50-HR-FL	50W Halogen 40° Flood
12-37-HRIR-FL	37W IR Halogen 35° Flood		
12-37-HRIR-WF	37W IR Halogen 60° Wide Flood	120-20-MH-SP	20W Ceramic Metal Halide HID 12° Spot
12-50-HRIR-SP	50W IR Halogen 10° Spot	120-20-MH-MF	20W Ceramic Metal Halide HID 25° Medium Flood
12-50-HRIR-MF	50W IR Halogen 25° Medium Flood	120-20-MH-FL	20W Ceramic Metal Halide HID 40° Flood
12-50-HRIR-FL	50W IR Halogen 35° Flood	120-39-MH-SP	39W Ceramic Metal Halide HID 12° Spot
12-50-HRIR-WF	50W IR Halogen 60° Wide Flood	120-39-MH-MF	39W Ceramic Metal Halide HID 25° Medium Flood
		120-39-MH-FL	39W Ceramic Metal Halide HID 40° Flood
12-20-HL-SP	20W Halogen 12° Spot		
12-20-HL-MF	20W Halogen 15° Medium Flood	12-5-LED-SP	5W MR-16 Style LED 10° Spot
12-20-HL-FL	20W Halogen 25° Flood	12-5-LED-MF	5W MR-16 Style LED 25° Medium Flood
12-50-HR-SP	50W Halogen 15° Spot		

page 2

ZERO-SIGHTLINE

APPLIQUÉS

DESCRIPTION

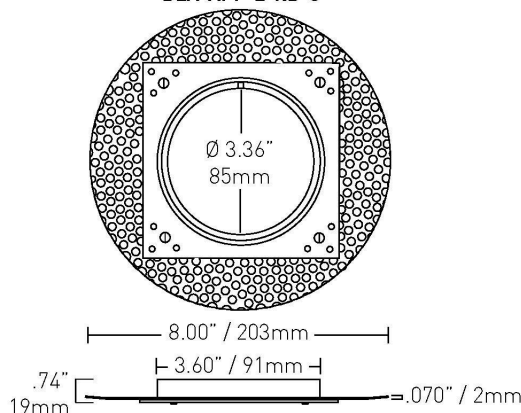
• Appliqué

Round and square appliques are necessary to complete a Z Series zero-sightline installation. Available in standard and reduced profile versions. All models include a removable plaster plug to ensure flush trim fit after mudding.

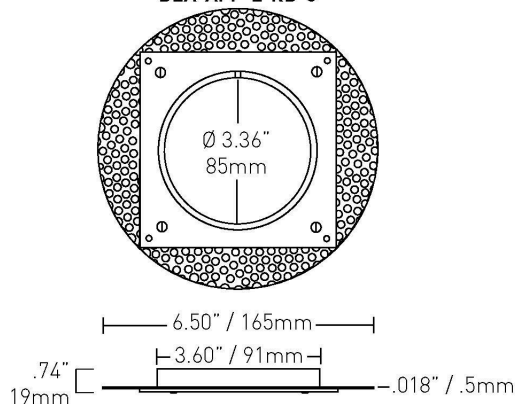
DLA-APP-Z-RD-3 is recommended for all applications as it provides maximum structural reinforcement.

DLA-APP-Z-RD-5 has a thinner profile and smaller diameter and is optional for installations where a thinner profile to apply mudding is preferred.

DLA-APP-Z-RD-3



DLA-APP-Z-RD-5



TECHNICAL

CONSTRUCTION

Steel and aluminum, nylon screws

WARRANTY

Manufacturer's one year warranty guarantees product(s) listed to be free from defects in material or workmanship under normal use and service. Warranty is conditional upon use of manufacturer supplied transformer or ballast.

ORDERING INFORMATION

EX: DLA-APP-Z-RD-3		
DLA-APP-Z	RD	
APPLIQUE	TRIM SHAPE	PROFILE
DLA-APP-Z	RD Round	-3 Recommended
		-5 Level 5 Ceilings



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F11.1

LED RETROFIT LAMP

Manufacturer: SORAA

Fixture Line: VIVID 2 (3000K) + SNAP

Fixture: GU5.3 BASE MR16

Catalog #: MR16-50-B01-12-930-25

Mounting: FIXTURE

Fixture Wattage: 9.8w

Fixture Voltage: 12



SORAA® VIVID 2
LED MR16 3000K 12V 8-10W

Narrow Flood and Flood



Narrow Spot

POWERED BY

reddot design award
winner 2013

RoHS



Soraa Inc.
6500 Kaiser Drive,
Fremont, CA 94555
855 GO-SORAA
855 467-6722
www.soraa.com

OUTPUT	1100-4500 CBCP, 340-420 Lumens
BEAM	10°, 20°, 25°, 36°
COLOR	CCT: 3000K CRI>95, R9>95
APPLICATION	Halogen replacement for enclosed indoor and outdoor applications

PERFORMANCE

CBCP matches standard halogen lamps
Single light source, single crisp shadow
Dimmable to 20%
Power Factor: 0.93
12V (10.8 min, 13.2 max)

COLOR AND WHITENESS

CCT: 3000K, CRI>95, R9>95
White point accuracy within 3 SDCM
Rich full-spectrum color rendering
Excellent color stability
Superior white rendering based on >70%
excitation of Optical Brightening Agents
(OBA) with spectral emission between
400nm and 440nm

OPTIMIZED FORM

ANSI standard MR16 form factor:
1.96" (50mm) W x 1.86" (47.4mm) H
Compatible with standard fixtures
Weight: 40g
Proprietary fanless aluminum design
provides superior thermal dissipation

HIGHLY COMPATIBLE

Works with magnetic and electronic
transformers and dimmers (see complete
list at www.soraa.com)
Lightweight, comparable to typical
halogen lamps

LONG LIFE, LOW MAINTENANCE

Life of 35,000 hours. Three year warranty

ENERGY EFFICIENT

80% more energy efficient than standard
halogen lamps
Typical payback of one year or less

INTENDED USE AND APPLICATIONS

LED retrofit lamp to replace 12VAC
halogen MR16 lamps in recessed
downlights, track lighting, and other
indoor and outdoor applications. Suitable
for enclosed fixtures

North America: This product can be
incorporated into emergency lighting
fixtures qualified to UL 924

Outside of North America: This product
can be incorporated into emergency
lighting fixtures qualified to IEC/EN
60598-2-22

Operating Temperature: Minimum -40°C
(ambient); Typical: 80-110°C (base);
Maximum: 125°C (base)

Soraa lamps are designed to safely shut
down due to conditions in any thermal
environment not conducive to minimum
airflow or proper ventilation

Suitable for damp locations

CERTIFICATIONS

UL, CUL for 12VAC NEC Class 1 and Class
2 systems, FCC 47 CFR Part 15 and Part 18
(EMI), RoHS, CE, C-tick

12VAC



3000K

CRI
>95R9
>95

DIM



SPECIFICATIONS*

Reference Number	Product Code	Beam	Field	CBCP	Watts	Halogen Equivalent**	Lumens	ENERGY STAR
MR16-40-B01-12-930-10-2	00261	10°	20°	4500	8.0	40W	340 (42 lm/W)	✓
MR16-50-B01-12-930-20-2	00221	20°	38°	2650	9.8	50W	420 (43 lm/W)	-
MR16-50-B01-12-930-25-2	00229	25°	42°	2400	9.8	50W	420 (43 lm/W)	✓
MR16-50-B01-12-930-36-2	00273	36°	60°	1100	9.8	50W	420 (43 lm/W)	✓

*at stable operating conditions in well ventilated fixtures (25°C ambient) **Energy Star Minimum

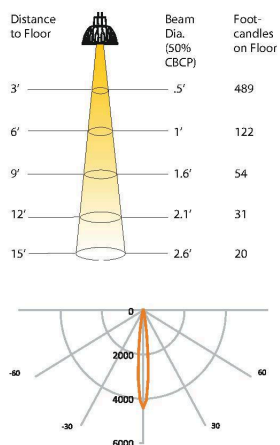
Form Factor | Base | Voltage | CRI | CCT | Beam
MR16 - 65 - B01 - 12 - 930 - 25

The diagram at left shows how to read the
different components of the reference number.
Base type B01 refers to the GU 5.3 base.

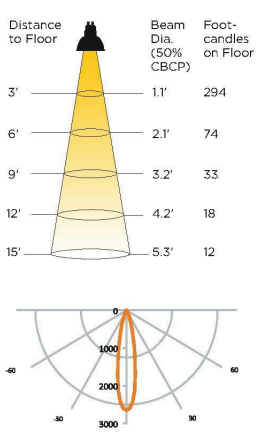
SORAA VIVID 2 MR16 LED 3000K 12V 8-10W

PHOTOMETRICS

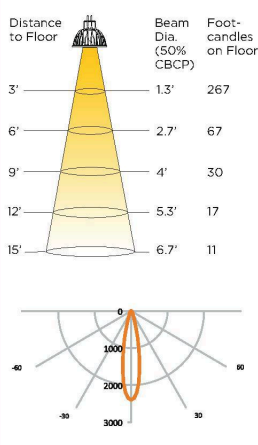
Narrow Spot - 10°



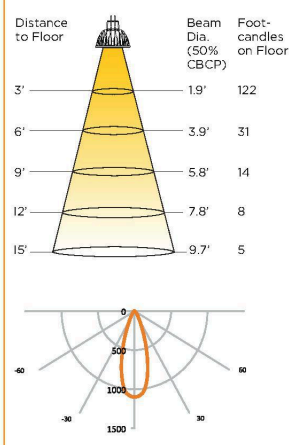
Narrow Flood - 20°



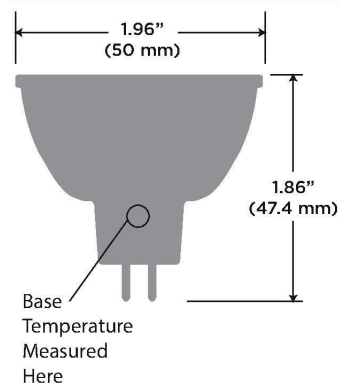
Narrow Flood - 25°



Flood - 36°

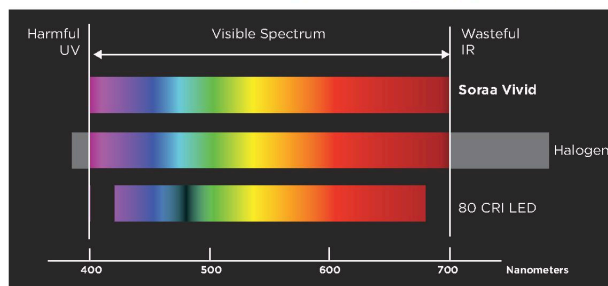
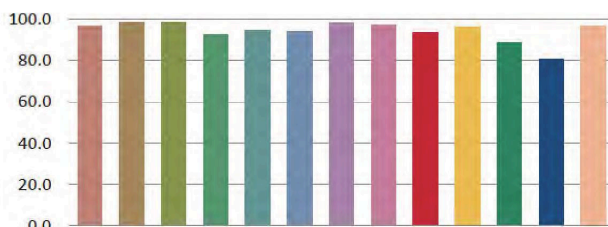


DIMENSIONS



COLOR RENDERING

CRI- Relative R Values



SAFETY NOTE ON HEAT

Soraa's unique LED technology allows its lamps to operate effectively and efficiently at higher temperatures than other LED lamps, resulting in more light output per diode. Although Soraa's lamps operate at cooler temperatures than halogen lamps, it is recommended that gloves be worn when handling bare lamps that have been energized.

TRANSFORMER/DIMMER COMPATIBILITY

Dimmable to 20% or lower, depending on dimmer. Complete transformer and dimmer compatibility information available at www.soraa.com.

Information and specifications subject to change. Rev R 06.01.14 D-110133

Soraa Inc. 6500 Kaiser Drive, Fremont, CA 94555
855 GO-SORAA / 855 467-6722 www.soraa.com



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F12

RECESSED DOWNLIGHT

Manufacturer: LUCIFER

Fixture Line: DL1ZP (OBSOLETE)

Fixture: RECESSED HALOGEN DOWNLIGHT

Catalog #: DL1ZP-FINSIH-LED-FGL-2 + DH-NIC-ZF-LED-10-120E

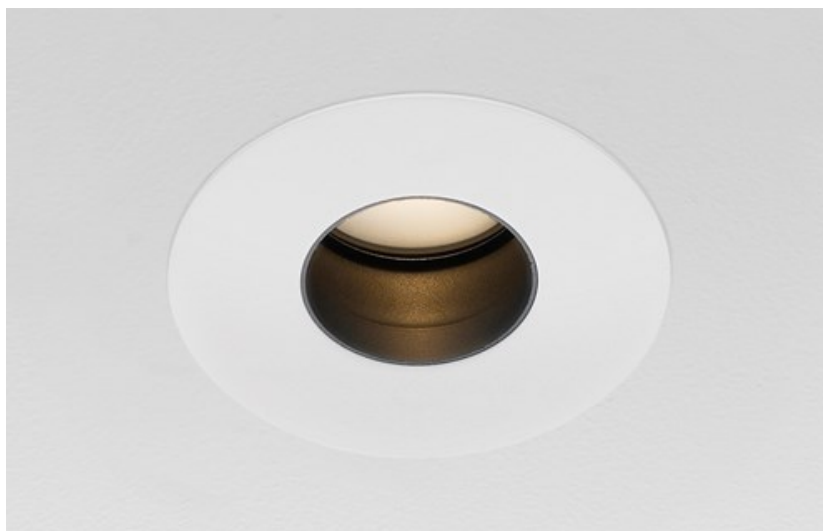
Mounting: RECESSED

Fixture Wattage: 9.8w

Fixture Voltage: 120

Load Type: ELV

Lamp Spec: (SORRA LAMP)
MR16-50-B01-12-930-25





DL1ZP

RECESSED DOWNLIGHT
ROUND FIXED

DL1ZP

DESCRIPTION

A Aiming

Fixed vertical lampholder

B Special Features

Die-cast Professional Baffle minimizes aperture glare; sealed collar prevents light leak

C Effects Devices

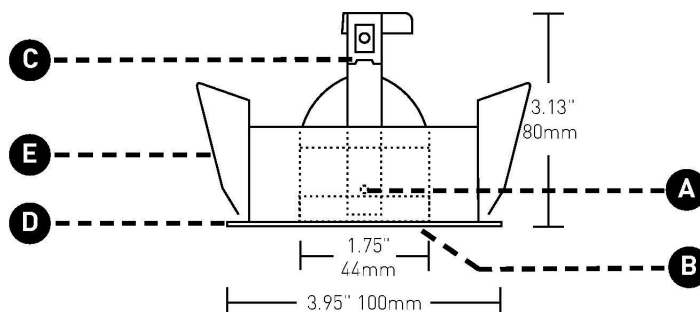
Frosted glass lens included; registered yoke allows secure placement of multiple effects devices (see chart below for total per light source)

D Trim Plate

Thickness measures 0.055"; install as zero-sightline or flange overlay

E Retention

Torsion spring clips accommodate varying ceiling thicknesses (up to 1") and ensure snug fit of trim against ceiling



TECHNICAL

CONSTRUCTION

Trim: Steel and aluminum; painted finishes are granulated powdercoat

HOUSING

See housing specifications (page 2)

LISTING

ETL listed in US and Canada for dry/damp locations

LAMP

MR-16 style lamp options: 12V halogen (HAL) *max wattage is housing dependent*, ceramic metal halide (HID) *max wattage is housing dependent*, light emitting diode (LED)

To ensure optimal results, it is recommended to specify lamps supplied by Lucifer Lighting* (see page 2)

WARRANTY

Manufacturer's one year warranty guarantees product(s) listed to be free from defects in material workmanship under normal use and service. Warranty is conditional upon use of manufacturer supplied transformer or ballast.

ORDERING INFORMATION (downlight)

SERIES	FINISH	LIGHT SOURCE	EFFECTS DEVICES	LAMP
DL1ZP	W Matte White*	HAL Halogen	<input type="checkbox"/> AGL-2 Amber Glass Lens	*Optional (see page 2)
	B Matte Black*	HID High Intensity Discharge	<input type="checkbox"/> CGL-2 Clear Glass Lens	
	C Polished Chrome	LED Light Emitting Diode	<input type="checkbox"/> FGL-2 Frosted Glass Lens (standard)	
	IG Industrial Gray (Bead Blasted SS)		<input type="checkbox"/> HCL-2 Honeycomb Louver	
	MG Metallic Gray*		<input type="checkbox"/> LSL-2 Linear Spread Lens	
	SS Brushed Stainless Steel		<input type="checkbox"/> SFL-2 Soft Focus Lens	
	ABR Architectural Bronze*		<input type="checkbox"/> SGL-2 Spread Lens	
	BRP Polished Oil-Rubbed Bronze Plate		<input type="checkbox"/> UVL-2 Ultra Violet Lens	
	BRM Matte Oil-Rubbed Bronze Plate		<input type="checkbox"/> WTL-2 Warm Tone Lens	

Light Source

HAL	HID	LED
3	2	1

Total Effects Devices

*Powdercoat

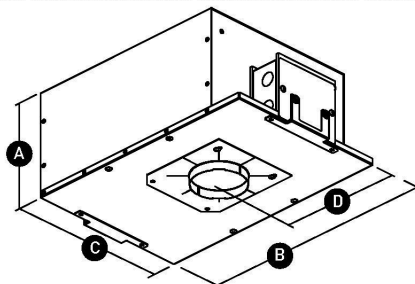
UNIVERSAL HOUSINGS

DL12P

IC

For use with recessed downlights in IC accessible and non-accessible ceilings up to 1" thick. Transformer compartment and all splice connections may be serviced from room side. Certified Chicago Plenum and ASTM E283 Airtight version available. Hanging bars are included and can be fitted to all sides of the housing.

Maximum wattage: 50W for halogen, 20W for HID.



- A 6.1" / 155mm
- B 16.3" / 414mm
- C 10" / 254mm
- D 7.2" / 183mm (aperture centerline)

Ceiling cut-out diameter

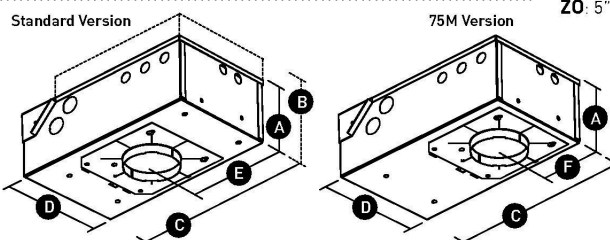
ZF: 3.5" / 89mm

ZO: 5" / 127mm

NON-IC

For use with recessed downlights in non-IC, accessible and non-accessible ceilings up to 1" thick. Transformer compartment and all splice connections serviceable from room side. Hanging bars are included and can be fitted to all sides of the housing for installation in spaces as narrow as 9".

Maximum wattage: 75W* for halogen, 39W for HID. HID version comes with extended top. The lowest profile housing (see measurement A) is for use with halogen lamp. *Note: 75 watt version has modified aperture centerline (see measurement F). Specify "75M" for max watts.



- A 3.7" / 94mm (HAL)
- B 6" / 152mm (HID)
- C 12" / 305mm
- D 6.8" / 172mm
- E 6.3" / 160mm (standard aperture centerline)
- F 3" / 76mm (75M version aperture centerline)

ORDERING INFORMATION (housing)

EX: DH-IC-ZF-HAL-50-120E

DH	HOUSING	RATING	SERIES	LIGHT SOURCE	MAX WATTS	POWER SUPPLY (primary)
DH	IC	IC only	ZF Z Series	HAL Halogen Low Voltage	75M (NIC only)	120E 120V Electronic
	AC	IC, Airtight, CCEA	Flange Overlay		50	277E 277V Electronic
	NIC	Non-IC	ZO Z Series			120M 120V Magnetic
			Zero-Sightline			277M 277V Magnetic
						REM Remote
					50	120EZL 120V Electronic Zero-Load*
					50	120T 120V Torroidal
					37	
					20	
				HID Metal Halide	39 (NIC only)	120E 120V Electronic
					20	277E 277V Electronic
						REM Remote
				LED MR-16 Style LED	10	120E 120V Electronic

*Zero-Load transformer accommodates retrofit 50W max MR-16 style LED lamp.

ORDERING INFORMATION (lamps)*

12-37-HRIR-SP	37W IR Halogen 10° Spot	12-50-HR-MF	50W Halogen 30° Medium Flood
12-37-HRIR-MF	37W IR Halogen 25° Medium Flood	12-50-HR-FL	50W Halogen 40° Flood
12-37-HRIR-FL	37W IR Halogen 35° Flood		
12-37-HRIR-WF	37W IR Halogen 60° Wide Flood	120-20-MH-SP	20W Ceramic Metal Halide HID 12° Spot
12-50-HRIR-SP	50W IR Halogen 10° Spot	120-20-MH-MF	20W Ceramic Metal Halide HID 25° Medium Flood
12-50-HRIR-MF	50W IR Halogen 25° Medium Flood	120-20-MH-FL	20W Ceramic Metal Halide HID 40° Flood
12-50-HRIR-FL	50W IR Halogen 35° Flood	120-39-MH-SP	39W Ceramic Metal Halide HID 12° Spot
12-50-HRIR-WF	50W IR Halogen 60° Wide Flood	120-39-MH-MF	39W Ceramic Metal Halide HID 25° Medium Flood
		120-39-MH-FL	39W Ceramic Metal Halide HID 40° Flood
12-20-HL-SP	20W Halogen 12° Spot	12-5-LED-SP	5W MR-16 Style LED 10° Spot
12-20-HL-MF	20W Halogen 15° Medium Flood	12-5-LED-MF	5W MR-16 Style LED 25° Medium Flood
12-20-HL-FL	20W Halogen 25° Flood		
12-50-HR-SP	50W Halogen 15° Spot		

page 2

ZERO-SIGHTLINE

APPLIQUÉS

DESCRIPTION

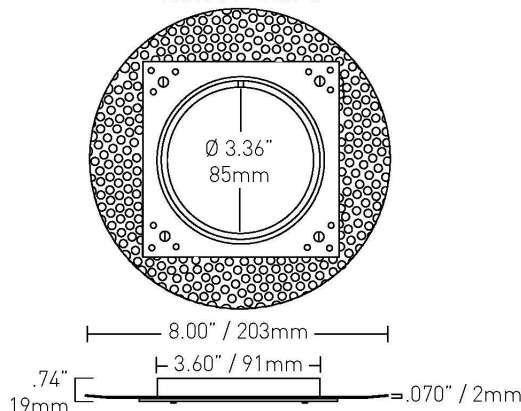
• Appliqué

Round and square appliques are necessary to complete a Z Series zero-sightline installation. Available in standard and reduced profile versions. All models include a removable plaster plug to ensure flush trim fit after mudding.

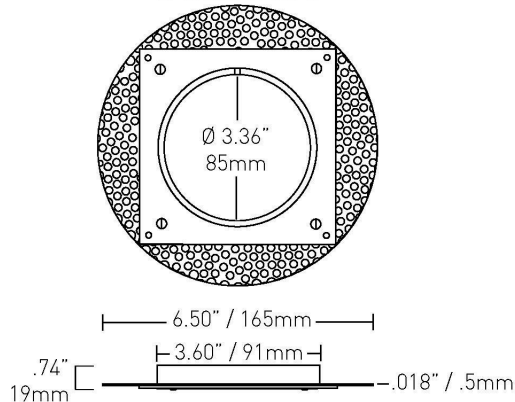
DLA-APP-Z-RD-3 is recommended for all applications as it provides maximum structural reinforcement.

DLA-APP-Z-RD-5 has a thinner profile and smaller diameter and is optional for installations where a thinner profile to apply mudding is preferred.

DLA-APP-Z-RD-3



DLA-APP-Z-RD-5



TECHNICAL

CONSTRUCTION

Steel and aluminum, nylon screws

WARRANTY

Manufacturer's one year warranty guarantees product(s) listed to be free from defects in material or workmanship under normal use and service. Warranty is conditional upon use of manufacturer supplied transformer or ballast.

ORDERING INFORMATION

EX: DLA-APP-Z-RD-3		
DLA-APP-Z	RD	
APPLIQUE	TRIM SHAPE	PROFILE
DLA-APP-Z	RD Round	-3 Recommended
		-5 Level 5 Ceilings



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F12.1

LED RETROFIT LAMP

Manufacturer: SORAA

Fixture Line: VIVID 2 (3000K) + SNAP

Fixture: GU5.3 BASE MR16

Catalog #: MR16-50-B01-12-930-25

Mounting: FIXTURE

Fixture Wattage: 9.8w

Fixture Voltage: 12



SORAA® VIVID 2
LED MR16 3000K 12V 8-10W

Narrow Flood and Flood



Narrow Spot

POWERED BY

reddot design award
winner 2013

RoHS



Soraa Inc.
6500 Kaiser Drive,
Fremont, CA 94555
855 GO-SORAA
855 467-6722
www.soraa.com

OUTPUT	1100-4500 CBCP, 340-420 Lumens
BEAM	10°, 20°, 25°, 36°
COLOR	CCT: 3000K CRI>95, R9>95
APPLICATION	Halogen replacement for enclosed indoor and outdoor applications

PERFORMANCE

CBCP matches standard halogen lamps
Single light source, single crisp shadow
Dimmable to 20%
Power Factor: 0.93
12V (10.8 min, 13.2 max)

COLOR AND WHITENESS

CCT: 3000K, CRI>95, R9>95
White point accuracy within 3 SDCM
Rich full-spectrum color rendering
Excellent color stability
Superior white rendering based on >70%
excitation of Optical Brightening Agents
(OBA) with spectral emission between
400nm and 440nm

OPTIMIZED FORM

ANSI standard MR16 form factor:
1.96" (50mm) W x 1.86" (47.4mm) H
Compatible with standard fixtures
Weight: 40g
Proprietary fanless aluminum design
provides superior thermal dissipation

HIGHLY COMPATIBLE

Works with magnetic and electronic
transformers and dimmers (see complete
list at www.soraa.com)
Lightweight, comparable to typical
halogen lamps

LONG LIFE, LOW MAINTENANCE

Life of 35,000 hours. Three year warranty

ENERGY EFFICIENT

80% more energy efficient than standard
halogen lamps
Typical payback of one year or less

INTENDED USE AND APPLICATIONS

LED retrofit lamp to replace 12VAC
halogen MR16 lamps in recessed
downlights, track lighting, and other
indoor and outdoor applications. Suitable
for enclosed fixtures

North America: This product can be
incorporated into emergency lighting
fixtures qualified to UL 924

Outside of North America: This product
can be incorporated into emergency
lighting fixtures qualified to IEC/EN
60598-2-22

Operating Temperature: Minimum -40°C
(ambient); Typical: 80-110°C (base);
Maximum: 125°C (base)

Soraa lamps are designed to safely shut
down due to conditions in any thermal
environment not conducive to minimum
airflow or proper ventilation

Suitable for damp locations

CERTIFICATIONS

UL, CUL for 12VAC NEC Class 1 and Class
2 systems, FCC 47 CFR Part 15 and Part 18
(EMI), RoHS, CE, C-tick

12VAC



3000K

CRI
>95R9
>95

DIM



SPECIFICATIONS*

Reference Number	Product Code	Beam	Field	CBCP	Watts	Halogen Equivalent**	Lumens	ENERGY STAR
MR16-40-B01-12-930-10-2	00261	10°	20°	4500	8.0	40W	340 (42 lm/W)	✓
MR16-50-B01-12-930-20-2	00221	20°	38°	2650	9.8	50W	420 (43 lm/W)	-
MR16-50-B01-12-930-25-2	00229	25°	42°	2400	9.8	50W	420 (43 lm/W)	✓
MR16-50-B01-12-930-36-2	00273	36°	60°	1100	9.8	50W	420 (43 lm/W)	✓

*at stable operating conditions in well ventilated fixtures (25°C ambient) **Energy Star Minimum

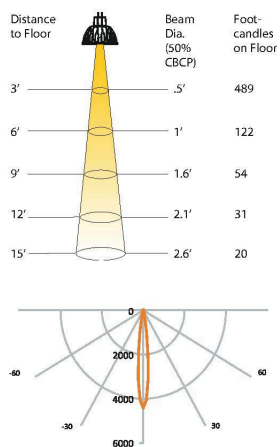
Form Factor | Base | Voltage | CRI | CCT | Beam
MR16 - 65 - B01 - 12 - 930 - 25

The diagram at left shows how to read the
different components of the reference number.
Base type B01 refers to the GU 5.3 base.

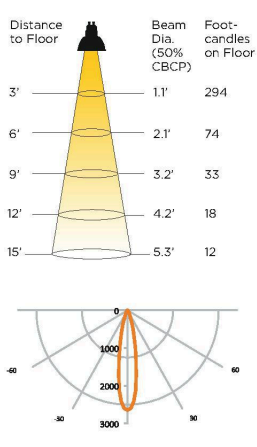
SORAA VIVID 2 MR16 LED 3000K 12V 8-10W

PHOTOMETRICS

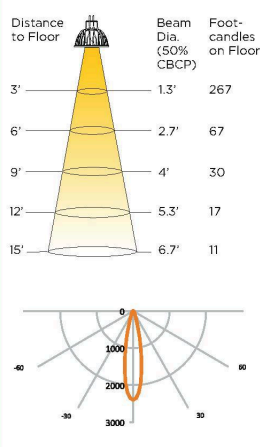
Narrow Spot - 10°



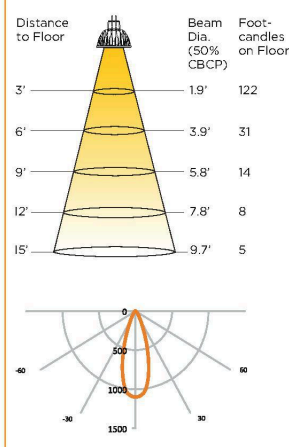
Narrow Flood - 20°



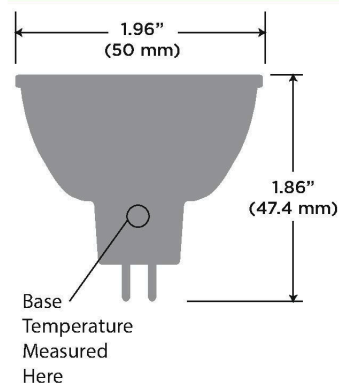
Narrow Flood - 25°



Flood - 36°

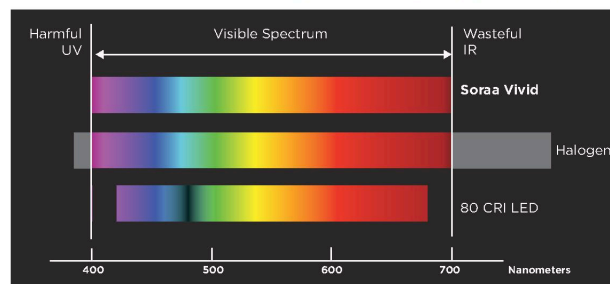
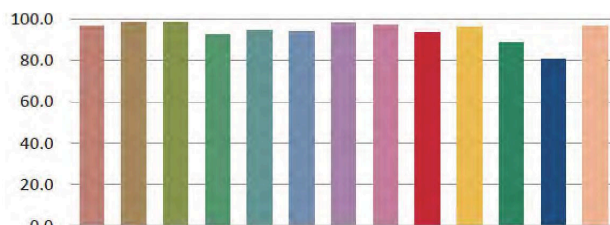


DIMENSIONS



COLOR RENDERING

CRI- Relative R Values



SAFETY NOTE ON HEAT

Soraa's unique LED technology allows its lamps to operate effectively and efficiently at higher temperatures than other LED lamps, resulting in more light output per diode. Although Soraa's lamps operate at cooler temperatures than halogen lamps, it is recommended that gloves be worn when handling bare lamps that have been energized.

TRANSFORMER/DIMMER COMPATIBILITY

Dimmable to 20% or lower, depending on dimmer. Complete transformer and dimmer compatibility information available at www.soraa.com.

Information and specifications subject to change. Rev R 06.01.14 D-110133

Soraa Inc. 6500 Kaiser Drive, Fremont, CA 94555
855 GO-SORAA / 855 467-6722 www.soraa.com



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F13

RECESSED WALL WASH

Manufacturer: LUCIFER

Fixture Line: DL5ZP (OBSOLETE)

Fixture: HALOGEN WALL WASH

Catalog #: DL5ZP-FINSIH-LED-FGL-2 + DH-NIC-ZF-LED-10-120E

Mounting: RECESSED

Fixture Wattage: 9.8w

Fixture Voltage: 120

Load Type: ELV

Lamp Spec: (SORRA LAMP)
MR16-50-B01-12-930-25



**DL5ZP**

RECESSED DOWNLIGHT
ROUND WALLWASH MIRAGE®

DL5ZP

DESCRIPTION**A Aiming**

Utilizes integral kick reflector and angled lampholder for even wallwashing

B Special Features

Die-cast Professional Baffle minimizes aperture glare; sealed collar prevents light leak

C Effects Devices

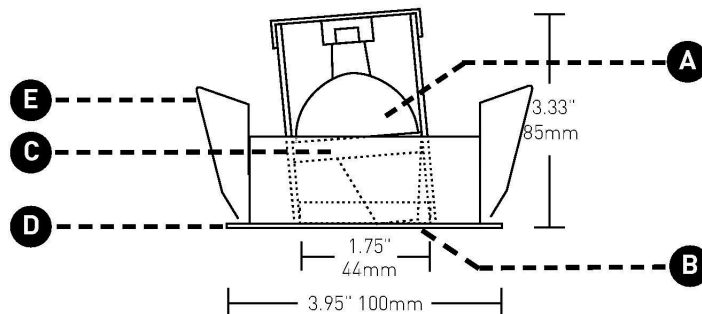
Sealed frosted glass lens included; registered yoke allows secure placement of 1 additional effects device when used with halogen lamp (HAL)

D Trim Plate

Thickness measures 0.055"; install as zero-sightline or flange overlay

E Retention

Torsion spring clips accommodate varying ceiling thicknesses (up to 1") and ensure snug fit of trim against ceiling

**TECHNICAL****CONSTRUCTION**

Trim: Steel and aluminum; painted finishes are granulated powdercoat

LAMP

MR-16 style lamp options: 12V halogen (HAL) *max wattage is housing dependent*, ceramic metal halide (HID) *max wattage is housing dependent*, light emitting diode (LED)

50W 30° EXX (12-50-HR-MF) recommended for HAL applications; 20W 25° (120-20-MH-MF) recommended for HID applications

To ensure optimal results, it is recommended to specify lamps supplied by Lucifer Lighting* (see page 2)

INSTALLATION GUIDELINES

Recommended fixture spacing is minimum 24" on center with 18" setback from wall plane.

LISTING

ETL listed in US and Canada for dry/damp locations; patented design

WARRANTY

Manufacturer's one year warranty guarantees product(s) listed to be free from defects in material workmanship under normal use and service. Warranty is conditional upon use of manufacturer supplied transformer or ballast.

ORDERING INFORMATION (downlight)

Example: DL5ZP-W-HAL			Example: 12-50-HR-MF		
DL5ZP				*	
SERIES	FINISH	LIGHT SOURCE	ADDITIONAL EFFECTS DEVICES	LAMP	
DL5ZP	W Matte White* B Matte Black* C Polished Chrome IG Industrial Gray (Bead Blasted SS) MG Metallic Gray* SS Brushed Stainless Steel ABR Architectural Bronze* BRP Polished Oil-Rubbed Bronze Plate BRM Matte Oil-Rubbed Bronze Plate	HAL Halogen HID High Intensity Discharge LED Light Emitting Diode	<input type="checkbox"/> UVL-2 Ultra Violet Lens <input type="checkbox"/> WTL-2 Warm Tone Lens	*Optional (see page 2)	
			Light Source	HAL	HID
			Total Effects Devices	1	0
				0	0

*Powdercoat

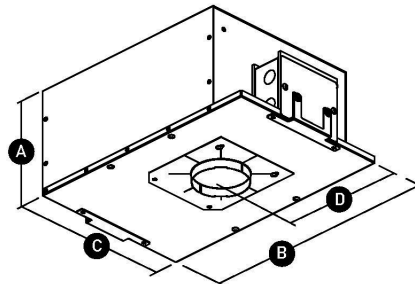
UNIVERSAL HOUSINGS

DL5ZP

IC

For use with recessed downlights in IC accessible and non-accessible ceilings up to 1" thick. Transformer compartment and all splice connections may be serviced from room side. Certified Chicago Plenum and ASTM E283 Airtight version available. Hanging bars are included and can be fitted to all sides of the housing.

Maximum wattage: 50W for halogen, 20W for HID.



- A 6.1" / 155mm
- B 16.3" / 414mm
- C 10" / 254mm
- D 7.2" / 183mm (aperture centerline)

Ceiling cut-out diameter

ZF: 3.5" / 89mm

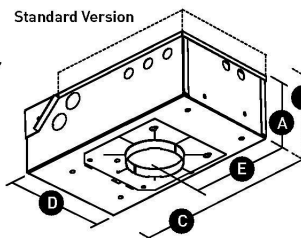
ZO: 5" / 127mm

NON-IC

For use with recessed downlights in non-IC, accessible and non-accessible ceilings up to 1" thick. Transformer compartment and all splice connections serviceable from room side. Hanging bars are included and can be fitted to all sides of the housing for installation in spaces as narrow as 9".

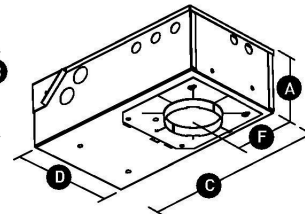
Maximum wattage: 75W* for halogen, 39W for HID. HID version comes with extended top. The lowest profile housing (see measurement A) is for use with halogen lamp. *Note: 75 watt version has modified aperture centerline (see measurement F). Specify "75M" for max watts.

Standard Version



- A 3.7" / 94mm (HAL)
- B 6" / 152mm (HID)
- C 12" / 305mm
- D 6.8" / 172mm
- E 6.3" / 160mm (standard aperture centerline)
- F 3" / 76mm (75M version aperture centerline)

75M Version



ORDERING INFORMATION (housing)

EX: DH-IC-ZF-HAL-50-120E

DH	HOUSING	RATING	SERIES	LIGHT SOURCE	MAX WATTS	POWER SUPPLY (primary)
DH	IC	IC only	ZF Z Series	HAL Halogen Low Voltage	75M (NIC only)	120E 120V Electronic
	AC	IC, Airtight, CCEA	Flange Overlay		50	277E 277V Electronic
	NIC	Non-IC	ZO Z Series			120M 120V Magnetic
			Zero-Sightline			277M 277V Magnetic
						REM Remote
					50	120EZL 120V Electronic Zero-Load*
					50	120T 120V Torroidal
					37	
					20	
				HID Metal Halide	39 (NIC only)	120E 120V Electronic
					20	277E 277V Electronic
						REM Remote
				LED MR-16 Style LED	10	120E 120V Electronic

*Zero-Load transformer accommodates retrofit 50W max MR-16 style LED lamp.

ORDERING INFORMATION (lamps)*

12-37-HRIR-SP	37W IR Halogen 10° Spot	12-50-HR-MF	50W Halogen 30° Medium Flood
12-37-HRIR-MF	37W IR Halogen 25° Medium Flood	12-50-HR-FL	50W Halogen 40° Flood
12-37-HRIR-FL	37W IR Halogen 35° Flood		
12-37-HRIR-WF	37W IR Halogen 60° Wide Flood	120-20-MH-SP	20W Ceramic Metal Halide HID 12° Spot
12-50-HRIR-SP	50W IR Halogen 10° Spot	120-20-MH-MF	20W Ceramic Metal Halide HID 25° Medium Flood
12-50-HRIR-MF	50W IR Halogen 25° Medium Flood	120-20-MH-FL	20W Ceramic Metal Halide HID 40° Flood
12-50-HRIR-FL	50W IR Halogen 35° Flood	120-39-MH-SP	39W Ceramic Metal Halide HID 12° Spot
12-50-HRIR-WF	50W IR Halogen 60° Wide Flood	120-39-MH-MF	39W Ceramic Metal Halide HID 25° Medium Flood
		120-39-MH-FL	39W Ceramic Metal Halide HID 40° Flood
12-20-HL-SP	20W Halogen 12° Spot		
12-20-HL-MF	20W Halogen 15° Medium Flood	12-5-LED-SP	5W MR-16 Style LED 10° Spot
12-20-HL-FL	20W Halogen 25° Flood	12-5-LED-MF	5W MR-16 Style LED 25° Medium Flood
12-50-HR-SP	50W Halogen 15° Spot		

page 2

ZERO-SIGHTLINE

APPLIQUÉS

DESCRIPTION

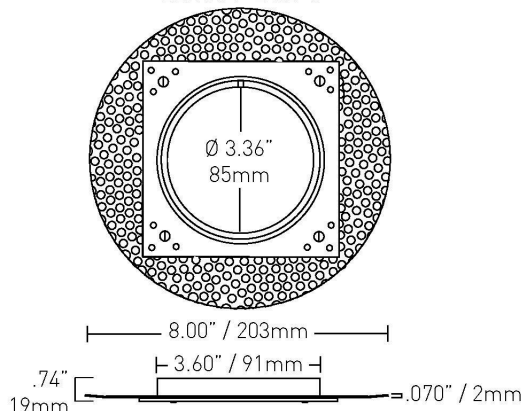
• Appliqué

Round and square appliques are necessary to complete a Z Series zero-sightline installation. Available in standard and reduced profile versions. All models include a removable plaster plug to ensure flush trim fit after mudding.

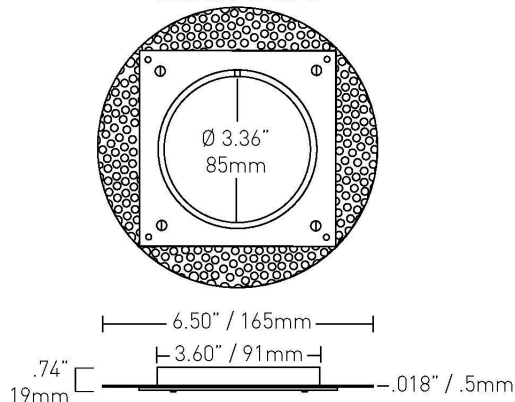
DLA-APP-Z-RD-3 is recommended for all applications as it provides maximum structural reinforcement.

DLA-APP-Z-RD-5 has a thinner profile and smaller diameter and is optional for installations where a thinner profile to apply mudding is preferred.

DLA-APP-Z-RD-3



DLA-APP-Z-RD-5



TECHNICAL

CONSTRUCTION

Steel and aluminum, nylon screws

WARRANTY

Manufacturer's one year warranty guarantees product(s) listed to be free from defects in material or workmanship under normal use and service. Warranty is conditional upon use of manufacturer supplied transformer or ballast.

ORDERING INFORMATION

EX: DLA-APP-Z-RD-3		
DLA-APP-Z	RD	
APPLIQUE	TRIM SHAPE	PROFILE
DLA-APP-Z	RD Round	-3 Recommended
		-5 Level 5 Ceilings



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F13.1

LED RETROFIT LAMP

Manufacturer: SORAA

Fixture Line: VIVID 2 (3000K) + SNAP

Fixture: GU5.3 BASE MR16

Catalog #: MR16-50-B01-12-930-25

Mounting: FIXTURE

Fixture Wattage: 9.8w

Fixture Voltage: 12



SORAA® VIVID 2
LED MR16 3000K 12V 8-10W

Narrow Flood and Flood



Narrow Spot

POWERED BY

reddot design award
winner 2013

RoHS



Soraa Inc.
6500 Kaiser Drive,
Fremont, CA 94555
855 GO-SORAA
855 467-6722
www.soraa.com

OUTPUT	1100-4500 CBCP, 340-420 Lumens
BEAM	10°, 20°, 25°, 36°
COLOR	CCT: 3000K CRI>95, R9>95
APPLICATION	Halogen replacement for enclosed indoor and outdoor applications

PERFORMANCE

CBCP matches standard halogen lamps
Single light source, single crisp shadow
Dimmable to 20%
Power Factor: 0.93
12V (10.8 min, 13.2 max)

COLOR AND WHITENESS

CCT: 3000K, CRI>95, R9>95
White point accuracy within 3 SDCM
Rich full-spectrum color rendering
Excellent color stability
Superior white rendering based on >70%
excitation of Optical Brightening Agents
(OBA) with spectral emission between
400nm and 440nm

OPTIMIZED FORM

ANSI standard MR16 form factor:
1.96" (50mm) W x 1.86" (47.4mm) H
Compatible with standard fixtures
Weight: 40g
Proprietary fanless aluminum design
provides superior thermal dissipation

HIGHLY COMPATIBLE

Works with magnetic and electronic
transformers and dimmers (see complete
list at www.soraa.com)
Lightweight, comparable to typical
halogen lamps

LONG LIFE, LOW MAINTENANCE

Life of 35,000 hours. Three year warranty

ENERGY EFFICIENT

80% more energy efficient than standard
halogen lamps
Typical payback of one year or less

INTENDED USE AND APPLICATIONS

LED retrofit lamp to replace 12VAC
halogen MR16 lamps in recessed
downlights, track lighting, and other
indoor and outdoor applications. Suitable
for enclosed fixtures

North America: This product can be
incorporated into emergency lighting
fixtures qualified to UL 924

Outside of North America: This product
can be incorporated into emergency
lighting fixtures qualified to IEC/EN
60598-2-22

Operating Temperature: Minimum -40°C
(ambient); Typical: 80-110°C (base);
Maximum: 125°C (base)

Soraa lamps are designed to safely shut
down due to conditions in any thermal
environment not conducive to minimum
airflow or proper ventilation

Suitable for damp locations

CERTIFICATIONS

UL, CUL for 12VAC NEC Class 1 and Class
2 systems, FCC 47 CFR Part 15 and Part 18
(EMI), RoHS, CE, C-tick

12VAC



3000K

CRI
>95R9
>95

DIM



SPECIFICATIONS*

Reference Number	Product Code	Beam	Field	CBCP	Watts	Halogen Equivalent**	Lumens	ENERGY STAR
MR16-40-B01-12-930-10-2	00261	10°	20°	4500	8.0	40W	340 (42 lm/W)	✓
MR16-50-B01-12-930-20-2	00221	20°	38°	2650	9.8	50W	420 (43 lm/W)	-
MR16-50-B01-12-930-25-2	00229	25°	42°	2400	9.8	50W	420 (43 lm/W)	✓
MR16-50-B01-12-930-36-2	00273	36°	60°	1100	9.8	50W	420 (43 lm/W)	✓

*at stable operating conditions in well ventilated fixtures (25°C ambient) **Energy Star Minimum

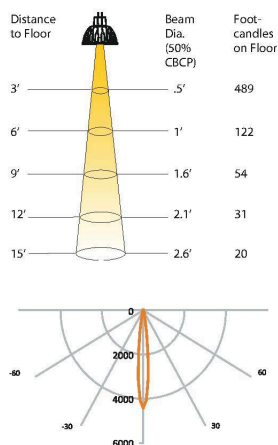
Form Factor | Base | Voltage | CRI | CCT | Beam
MR16 - 65 - B01 - 12 - 930 - 25

The diagram at left shows how to read the
different components of the reference number.
Base type B01 refers to the GU 5.3 base.

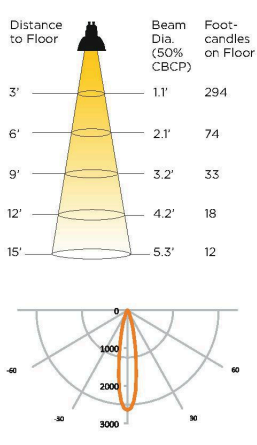
SORAA VIVID 2 MR16 LED 3000K 12V 8-10W

PHOTOMETRICS

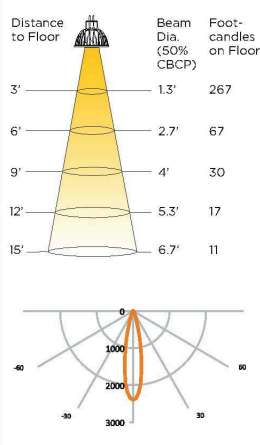
Narrow Spot - 10°



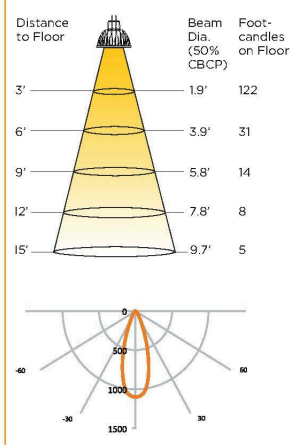
Narrow Flood - 20°



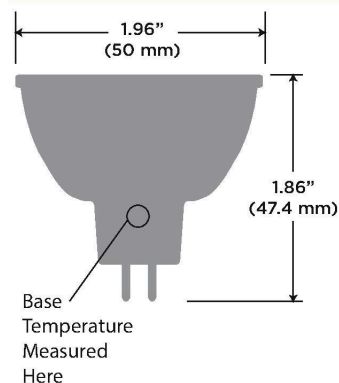
Narrow Flood - 25°



Flood - 36°

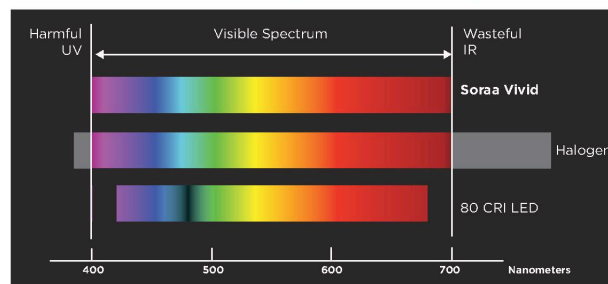
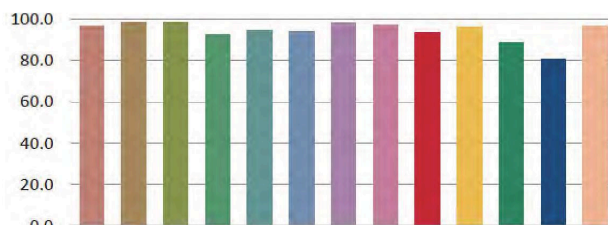


DIMENSIONS



COLOR RENDERING

CRI- Relative R Values



SAFETY NOTE ON HEAT

Soraa's unique LED technology allows its lamps to operate effectively and efficiently at higher temperatures than other LED lamps, resulting in more light output per diode. Although Soraa's lamps operate at cooler temperatures than halogen lamps, it is recommended that gloves be worn when handling bare lamps that have been energized.

TRANSFORMER/DIMMER COMPATIBILITY

Dimmable to 20% or lower, depending on dimmer. Complete transformer and dimmer compatibility information available at www.soraa.com.

Information and specifications subject to change. Rev R 06.01.14 D-110133

Soraa Inc. 6500 Kaiser Drive, Fremont, CA 94555
855 GO-SORAA / 855 467-6722 www.soraa.com



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F14

DECORATIVE SCONCE FIXTURE

Manufacturer: TEGAN LIGHTING

Fixture Line: KORE LINEAR LED

Fixture: DECORATIVE SCONCE FIXTURE

Catalog #: TG-KLS-25-AL-LED-277V-DSO-DM-0-10V

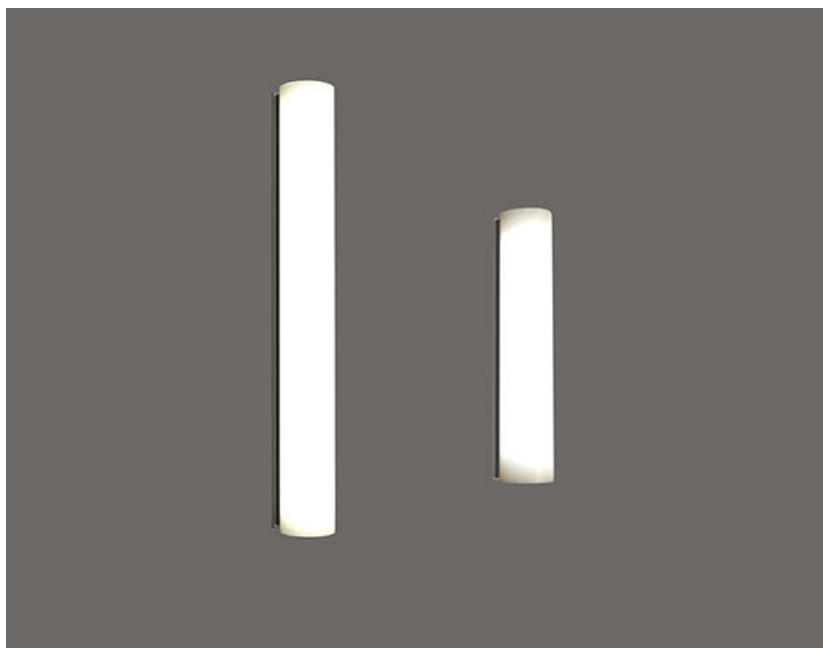
Mounting: SURFACE

Fixture Wattage: 14w

Fixture Voltage: 277

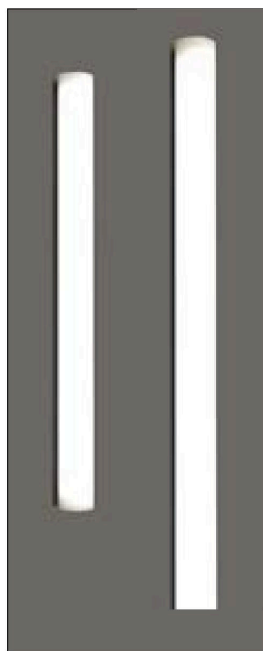
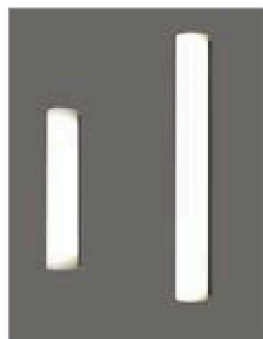
Load Type: 0-10V

Lamp Spec: LED 3000K, Standard Output, 1100
lm



Kore LED Linear

Interior/Exterior Ceiling & Wall Surface



- Category:** The Kore LED Linear is a minimalist, luminous approach to linear illumination. These fixtures are ADA-compliant, can be listed for Wet Location, and are offered in four lengths: 16", 25", 38" and 48", with a 3" dia. frosted acrylic shade. The Kore LED Linear form can be specified alone or can be coupled with a decorative shade to become an architectural accent. All offer wattage packages from 7-56W, dimming and non-dimming drivers and high CRI LED's. Kore Linear is ideal for retail, museums, commercial office, hospitality and residential applications.
- Material:** Kore LED Linear: Aluminum and steel recessed driver enclosure for driver with aluminum trim with a frosted acrylic tubular diffuser. Use of silicone sealant material for Wet Location.
- Finish:** Anodized Aluminum (AL). Contact factory custom finishes.
- Kore:** Kore Linear Surface 16" (KLS16), Kore Linear Surface 25" (KLS25), Kore Linear Surface 38" (KLS38), Kore Linear Surface 48" (KLS48).
- Shades:** Refer to [Spec Sheet 55](#) and [Spec Sheet 57](#) for Slot and Weave decorative shades. Contact factory for Wet Location Shade options.
- Source:** KLS16: Standard Output 7W @ 550 Lumens, High Output 14W @ 1100 Lumens.
KLS25: Standard Output - 14W @ 1100 Lumens, LED High Output - 28W @ 2200 Lumens.
KLS38: Standard Output - 21W @ 1650 Lumens, LED High Output - 42W @ 3300 Lumens.
KLS48: Standard Output - 28W @ 2200 Lumens, LED High Output - 56W @ 4400 Lumens.
80-85 CRI typical. All values are initial lumens. For exact lumen output and wattage consumption data, please consult LM-79 reports. Power consumption does not include driver losses. 3000K and 4000K LED standard.
- Optics:** Refer to [Photometric Report](#) for details.
- Power Supply:** **KLS16:** Standard Output Non-Dimming Driver 120V or 277V (DSO), High Output Non-Dimming Driver 120 or 277V (DHO), High Output Dimming Driver 0-10V 120 or 277V (DHO-DM-0-10V), High Output - Non-Dimming/Dimming Driver - Lutron 120/277V (DHO-LUT).
KLS25: Standard Output Non-Dimming Driver 120V or 277V (DSO), Standard Output Dimming Driver 0-10V 120 or 277V (DSO-DM-0-10V), Standard Output -Non-Dimming/Dimming Driver - Lutron 120/277V (DSO-LUT), High Output Non-Dimming Driver 120 or 277V(DHO), High Output Dimming Driver 0-10V 120/277V (DHO-DM-0-10V), High Output - Non-Dimming/Dimming Driver - Lutron 120/277V (DHO-LUT).
KLS38: Standard Output Non-Dimming Driver 120V or 277V (DSO), High Output Non-Dimming Driver 120 or 277V (DHO), High Output Dimming Driver 0-10V 120 or 277V (DHO-DM-0-10V), High Output - Non-Dimming/Dimming Driver - Lutron 120/277V (DHO-LUT).
KLS48: Standard Output Non-Dimming Driver 120V or 277V (DSO), High Output Non-Dimming Driver 120 or 277V (DHO), High Output Dimming Driver 0-10V 120 or 277V (DHO-DM-0-10V), High Output - Non-Dimming/Dimming Driver - Lutron 120/277V (DHO-LUT). Refer to Driver table on page 5 for details.
- Installation:** Horizontal, vertical; wall or ceiling mount. The recessed driver enclosure, which functions as a custom j-box, is installed into new construction with adjustable brackets for electrical connections, with gypsum or other coverings installed around and up to the edge of the aperture of the housing. The Kore LED Linear fixture is then connected to the housing with electrical connections and supplied mechanical fasteners (supplied). The diffuser is attached last, resulting in a hardware-free aesthetic. Refer to [Installation Sheet](#) for more details.
- Sidekicks:** [Kore LED Linear Pendant](#), [Moz Slot Recessed Wall](#), [Moz Slot Surface Wall](#)
- Labels:** CSA listed - Tested to USA UL/ANSI standards #8750 and #1598 and Canadian standards CSA C22.2, # 250.0-08 & #250.13-12. Interior, Damp and Wet applications. ADA-Compliant. LM79/80. In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials. Technical specification sheets that appear on [teganlighting.com](#) are the most recent version and supersede all other versions that exist in any other printed or electronic form. 3 Year Warranty.



Kore LED Linear

Interior/Exterior Ceiling & Wall Surface

Example: TG - KLS-25 - AL - LED - 120V - DSO-LUT

Tegan	Kore Linear ^{1,2}	Kore Finish	Wet Location ⁶	Source ^{3,4}	Voltage ²	Power Supply ²	Shade ⁵
TG		AL	WL	LED			
	KLS-16			LED3K	120V	DSO	
	KLS-25			LED4K	277V	DSO-LUT	
	KLS-38					DSO-DM-0-10V ⁷	
	KLS-48					DHO	
						DHO-LUT	
						DHO-DM-0-10V	

Notes:

¹ Shades are specified separately from the Kore LED Ambient Quadrant Pendant(s) but are designed to easily attach. Refer to the links on page 1 to specify a luminaire with a shade. Refer to compatibility chart on page 5 for details.

² Select one.

³ Refer to Driver table on page 5 for details.

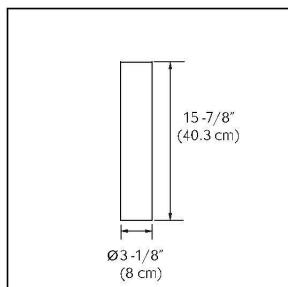
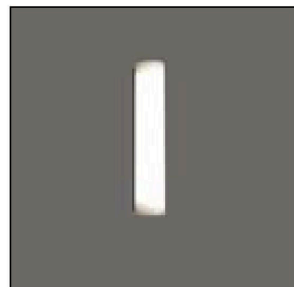
⁴ Tegan LED emitters, like all LEDs, undergo a natural depreciation in lumen output. This depreciation is within the specifications of LM-80. Extreme ambient temperatures, dusty environments, and power conditions may affect the depreciation. Wattage requirements and lumen output are subject to change with ongoing developments in LED technology.

⁵ Leave blank or add the shade catalog number when specifying a luminaire with a shade. Refer to the compatibility chart on page 4 for a catalog number example. Refer to the Shade specification sheets for details.

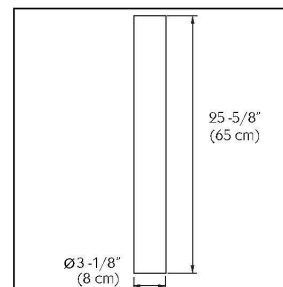
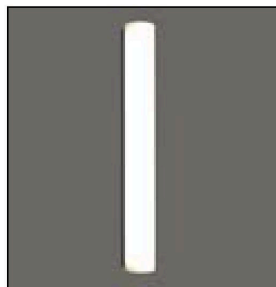
⁶ Contact factory for Wet Location Decorative Shade Options or to "design your own shade."

⁷ Contact factory for DSO-DM-0-10V for KLS-16.

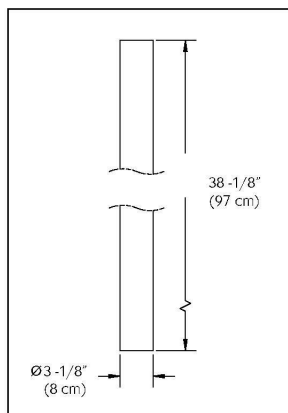
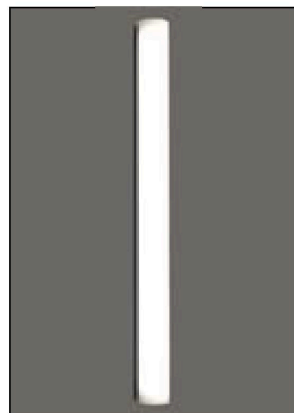
Kore LED Linear



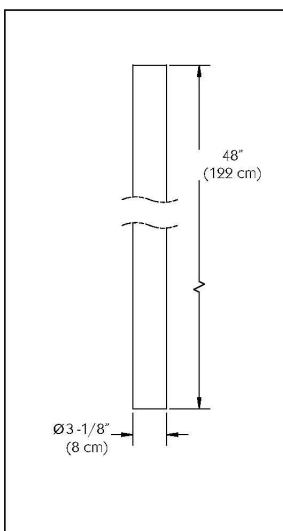
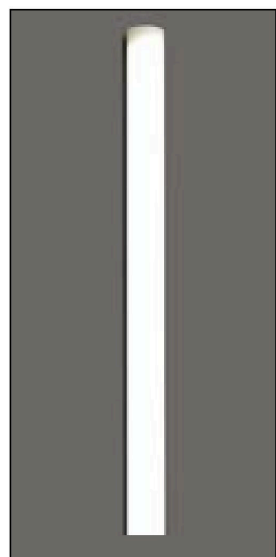
16" Kore Linear Surface Mount Wall (KLS16)



25" Kore Linear Surface Mount Wall (KLS25)



38" Kore Linear Surface Mount Wall (KLS38)



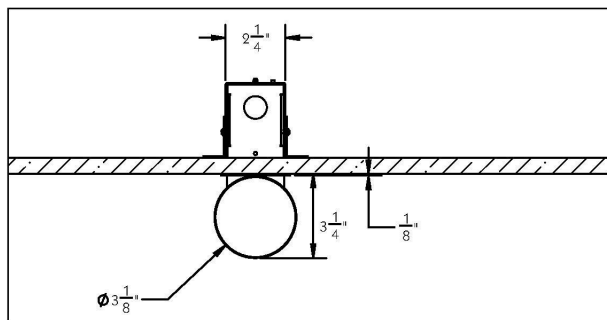
48" Kore Linear Surface Mount Wall (KLS48)



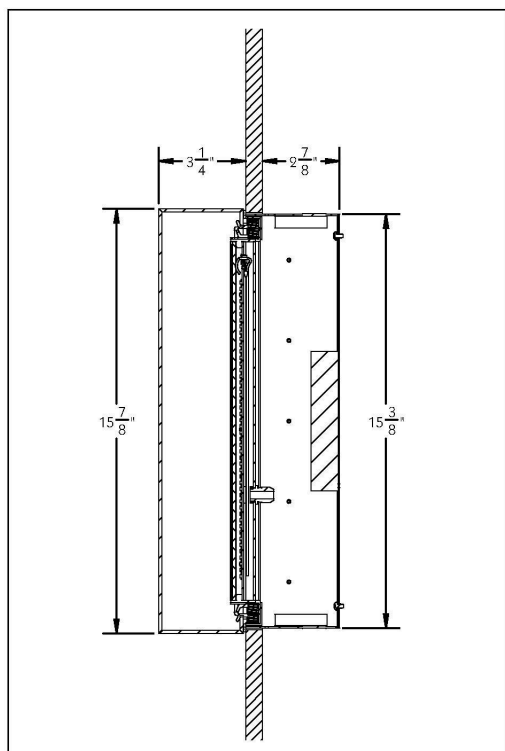
Kore LED Linear

Interior/Exterior Ceiling & Wall Surface

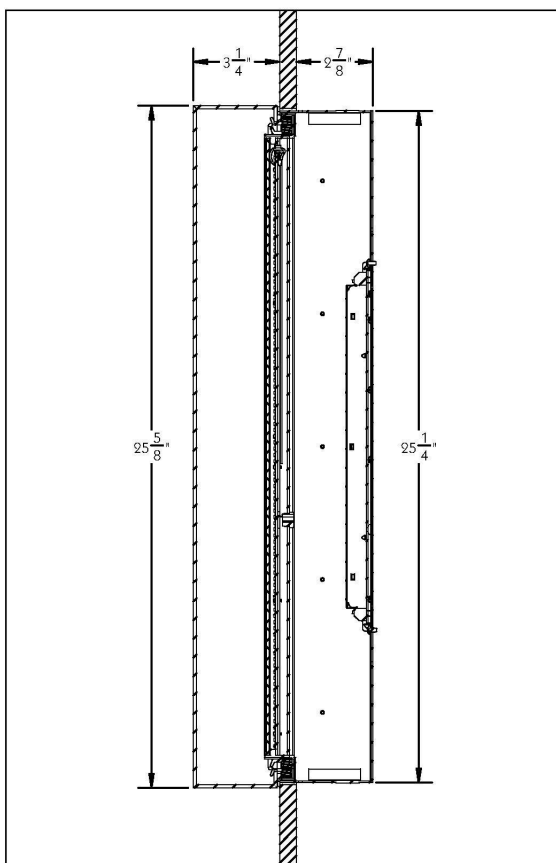
Kore LED Linear - Drawing Details



Kore Linear Surface Mount Wall with recessed driver enclosure (replaces the use of a j-box) - Plan View



16" Kore Linear Surface Mount Wall (KLS16) with recessed driver enclosure (replaces the use of a j-box) - Side View

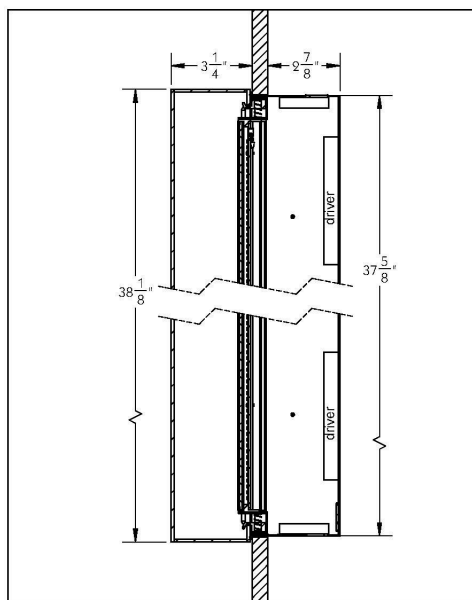


25" Kore Linear Surface Mount Wall (KLS25) with recessed driver enclosure (replaces the use of a j-box) - Side View

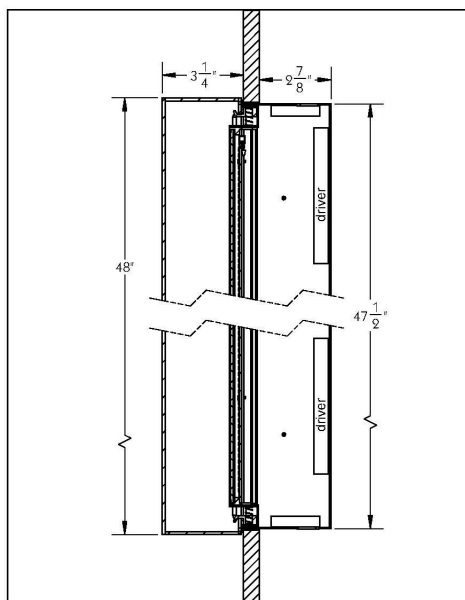


Kore LED Linear

Interior/Exterior Ceiling & Wall Surface



38" Kore Linear Surface Mount Wall (KLS36) with recessed driver enclosure
(replaces the use of a j-box) - Side View



48" Kore Linear Surface Mount Wall (KLS48) with recessed driver enclosure
(replaces the use of a j-box) - Side View





Kore LED Linear

Interior/Exterior Ceiling & Wall Surface

Kore LED Linear - Surface Mount - Drivers

Description ³	Tegan Power Supply Catalog #	Voltage ⁴	Dimming	Typical Driver Link ^{1,2}
16" Kore Linear - LED - Standard Output Driver	DSO	120V	Non-DM	Advance LED120A0350C28FQ
16" Kore Linear - LED - Standard Output Driver - Lutron	DSO - LUT	120/277V	Non-DM-DM	L3DA4U1UMN
16" Kore Linear - LED - Standard Output Dimming Driver	DSO-DM-0-10V	120V	DM	Contact Factory
16" Kore Linear- LED - High Output Driver	DHO	120V	Non-DM	Advance 17W0.7A24V120V
16" Kore Linear - LED - High Output Dimming Driver - 0-10V	DHO-DM-0-10V	120V	DM	Advance LED120A0700C28DQ
16" Kore Linear - LED - High Output Driver - Lutron	DHO-LUT	120/277V	Non-DM-DM	L3DA4U1UMN
25" Kore Linear- LED - Standard Output Driver	DSO	120V	Non-DM	Advance 17W0.7A24V120V
25" Kore Linear- LED - Standard Output Driver - Lutron	DSO-LUT	120/277V	Non-DM/DM	L3DA4U1UMN
25" Kore Linear- LED - Standard Output Dimming Driver - 0 -10V	DSO-DM-0-10V	120V	DM	Advance LED120A0700C28DQ
25" Kore Linear- LED - High Output Driver	DHO	120V	Non-DM	Advance LED LEDINTA2000C24DQ
25" Kore Linear- LED - High Output Driver - Lutron	DHO-LUT	120/277V	Non-DM/DM	Lutron L3DA4U1UMN
25" Kore Linear- LED - High Output Dimming Driver - 0 -10V	DHO-DM-0-10V	120V	DM	Advance LED LEDINTA2000C24DQ
38" Kore Linear- LED - Standard Output Driver	DSO	120V	Non-DM	LUC-024S105DSP
38" Kore Linear- LED - Standard Output Driver - Lutron	DSO-LUT	120/277V	Non-DM/DM	L3DA4U1UMN
38" Kore Linear- LED - Standard Output Dimming Driver - 0 -10V	DSO-DM-0-10V	120V	DM	LUC-024S105DSP
38" Kore Linear- LED - High Output Driver	DHO	120V	Non-DM	LED50W-24-C2100-D
38" Kore Linear- LED - High Output Driver - Lutron	DHO-LUT	120/277V	Non-DM/DM	L3DA4U1UMN
38" Kore Linear- LED - High Output Dimming Driver - 0 -10V	DHO-DM-0-10V	120V	DM	LED50W-24-C2100-D
48" Kore Linear- LED - Standard Output Driver	DSO	120V	Non-DM	LUC-052S140DSE
48" Kore Linear- LED - Standard Output Driver - Lutron	DSO-LUT	120/277V	Non-DM/DM	L3DA4U1UMN
48" Kore Linear- LED - Standard Output Dimming Driver - 0 -10V	DSO-DM-0-10V	120V	DM	LUC-052S140DSE
48" Kore Linear- LED - High Output Driver	DHO	120V	Non-DM	LED50W-020-C2500-D
48" Kore Linear- LED - High Output Driver - Lutron	DHO-LUT	120/277V	Non-DM/DM	L3DA4U1UMN
48" Kore Linear- LED - High Output Dimming Driver - 0 -10V	DHO-DM-0-10V	120V	DM	LED50W-020-C2500-D

Notes:

¹ Refer to manufacturer's spec sheets for compatible controls and additional detail.

² Due to the rapidly evolving technology for Semiconductor products, Tegan driver options are subject to change at any time, without notice. In addition, if any of the standard drivers are out of stock or discontinued, Tegan Lighting will supply an equal as needed. Tegan can also supply alternative drivers upon request; contact the factory for details.

³ Tegan LED emitters, like all LEDs, undergo a natural depreciation in lumen output. This depreciation is within the specifications of LM-80. Extreme ambient temperatures, dusty environments, and power conditions may affect the depreciation. Wattage requirements and lumen output are subject to change with ongoing developments in LED technology.

⁴ Contact factory for 277V and additional dimming options





Kore LED Linear

Interior/Exterior Ceiling & Wall Surface

Kore LED Linear - Surface Mount - Shade Options¹

	Moz Slot Surface 20	Moz Slot Surface 30	Moz Weave Surface 16
16" Kore LED Linear Surface (KLS16)	Spec Sheet 55		Spec Sheet 57
25" Kore LED Linear Surface (KLS25)		Spec Sheet 55	
Example catalog # to specify a luminaire with a shade	TG - KLS16 - AL - LED - DHO - 120V - SSW20 - RDT	TG - KLS25 - AL - LED - DSO - 120V - SSW30 - FFB	TG - KLS16 - AL - LED - DHO - LUT-120/277V - WW16 - OPSS

¹ Shades available for 16" and 25" only. Contact factory for shade options for larger sizes and Wet Location options.





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F15

STEAM SHOWER LED FIXTURE

Manufacturer: BK LIGHTING

Fixture Line: VERSA STAR

Fixture: STEAM SHOWER LED

Catalog #: MATERIAL-VS-LED-E22-MFL-A9-FINISH-12

Mounting: RECESSED

Fixture Wattage: 8.4w

Fixture Voltage: 12

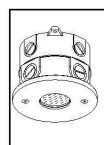
Load Type: Non-Dim

Lamp Spec: LED 3000K

Fixture Specification Notes

- 1) Fixture requires remote transformer





BKSSL
SOLID STATE LIGHTING

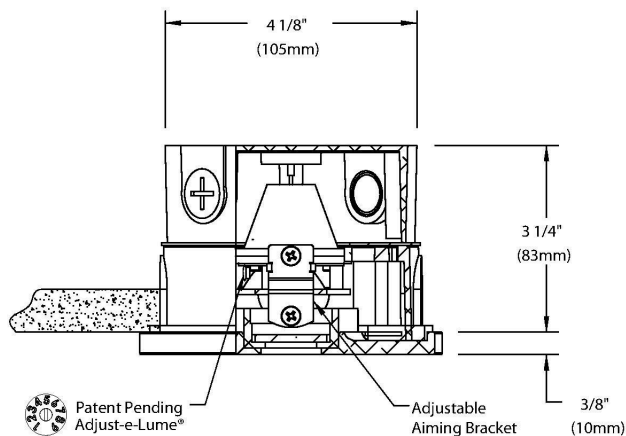


VERSA STAR™

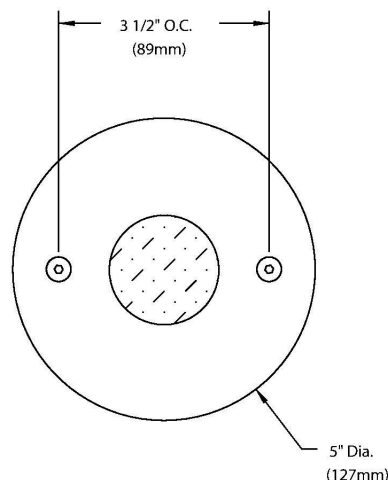
PROJECT:

TYPE:

SIDE VIEW



FACEPLATE DETAIL



Accessories (Configure separately)

Remote options:

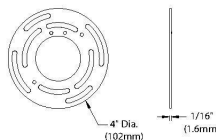


TR Series



PMRM™

UNIVERSAL RING



All dimensions indicated on this submittal are nominal.
Contact Technical Sales if you require more stringent specifications.

SPECIFICATIONS

GreenSource Initiative™

Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced onsite. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult www.bklighting.com/greensource for program requirements.

Materials

Furnished in Copper-Free Aluminum (Type 6061-T6), Brass (Type 360) or Stainless Steel (Type 316).

Backbox

Round, 4-1/4" dia. x 3-1/8" deep construction with [2] mounting tabs. Front access for wire connection and inspection. Provided with [5] 1/2" NPS tapped holes and [4] plugs. Suitable for concrete pour.

Faceplate

Fully machined from solid billet. Countersunk holes provide for flush hardware mounting with [2] tamper-resistant, stainless steel mounting screws. Stainless steel universal mounting ring for faceplate adjustment and 1/8" thick HT-805A silicone foam gasket with acrylic adhesive for water-tight seal. Accommodates [1] lens or louver media.

Lens

Shock resistant, tempered, glass lens is factory adhered to faceplate. Specify soft focus (#12) or rectilinear (#13) lens.

BKSSL®

Integrated solid state system with 'e' technology is scalable for field upgrade. Modular design with electrical quick disconnects permit field maintenance. High power, forward throw source complies with ANSI C78.377 binning requirements. Exceeds ENERGY STAR® lumen maintenance requirements. LM-80 certified components.

Integral, constant current driver. 12VAC/VDC input. 50/60Hz. Proprietary input control scheme achieves power factor correction and eliminates inrush current. Output, over-voltage, open-circuit, and short circuit protected. Inrush current limited to <1A (non-dimming). Conforms to Safety Std. C22.2 No. 250.13-12.

Line dimmable. For use with low voltage dimmer with dedicated neutral conductor. Minimum 25 watt load required for dimming.

Optics

Interchangeable OPTIKIT™ modules permit field changes to optical distribution. Color-coded for easy reference: Narrow Spot (NSP) = Red. Spot (SP) = Green. Medium Flood (MFL) = Yellow. Wide Flood (WFL) = Blue. Adjustable optical bracket provides up to 24° vertical aiming.

Adjust-e-Lume® (Pat. Pending)

Integral electronics allows dynamic lumen response at the individual fixture. Indexed (100% to 25% nom.) lumen output. Maintains output at desired level or may be changed as conditions require. Specify factory preset output intensity.

Transformer

For use with 12VAC **BKSSL** remote transformer.

Wiring

Teflon® coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard.

Hardware

Tamper-resistant, stainless steel hardware. Faceplate screws are additionally black oxide treated for additional corrosion resistance.

Finish

StarGuard®, our exclusive RoHS compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating. Brass components are available in powder coat or handcrafted metal finish. Stainless steel components are available in handcrafted metal finish. (Brushed finish for interior use only).

Warranty

5 year limited warranty.

Certification and Listing

ITL tested to IESNA LM-79. Lighting Facts Registration per USDOE (www.lightingfacts.com). ETL Listed to ANSI/UL Standard 1838 and UL Subject 8750 and Certified to CAN/CSA Standard C22.2 No. 9. RoHS compliant. Suitable for indoor or outdoor use. Suitable for installation in combustible materials (Type Non-IC). Suitable for use in wet locations. Suitable for installation within 4' of the ground. IP65 Rated. Made in USA.



*Teflon is a registered trademark of DuPont Corporation.
*Energy Star is a registered trademark of the United States Environmental Protection Agency.

adjust-e-lume®
TECHNOLOGY

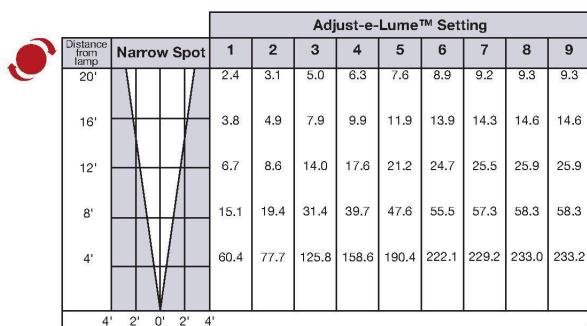
Photometry for use with e36

2.7K

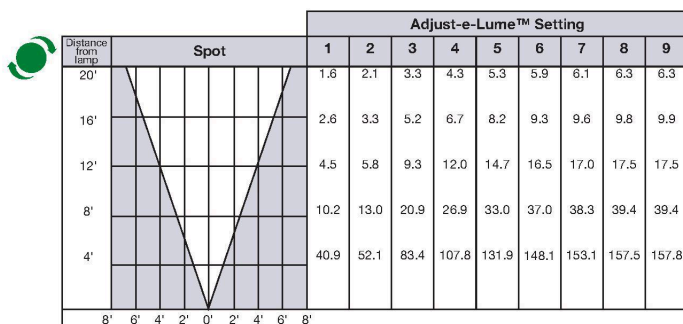
Select OptiKit™ for desired distribution

- RED  **Narrow Spot (NSP)**
 GREEN  **Spot (SP)**
 YELLOW  **Medium Flood (MFL)**
 BLUE  **Wide Flood (WFL)**

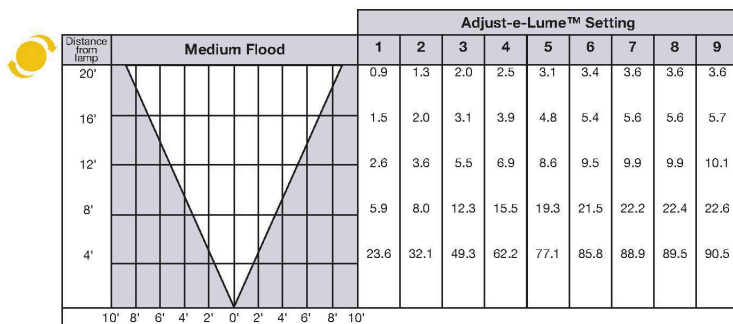
Set adjust-e-lume™ Dial to desired output



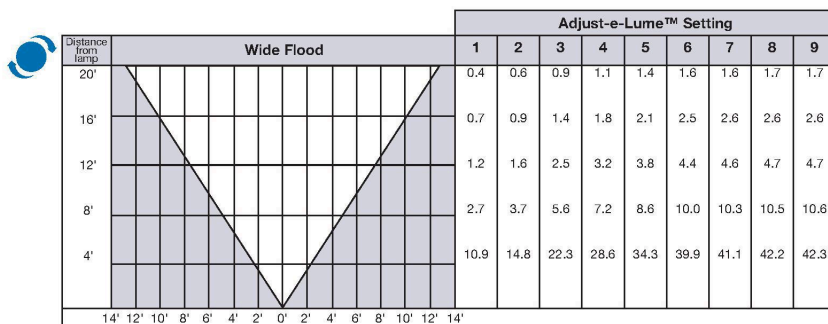
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



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adjust-e-lume®

TECHNOLOGY

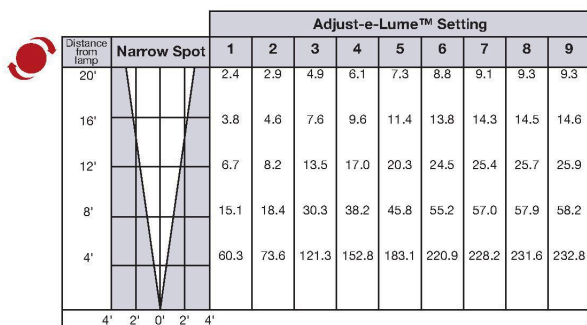
Photometry for use with e22



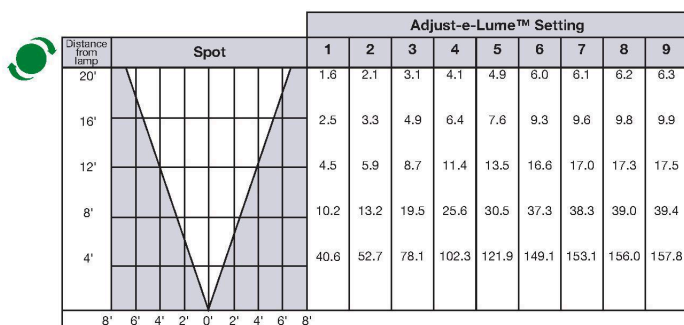
Select OptiKit™ for desired distribution

- RED Narrow Spot (NSP)
- GREEN Spot (SP)
- YELLOW Medium Flood (MFL)
- BLUE Wide Flood (WFL)

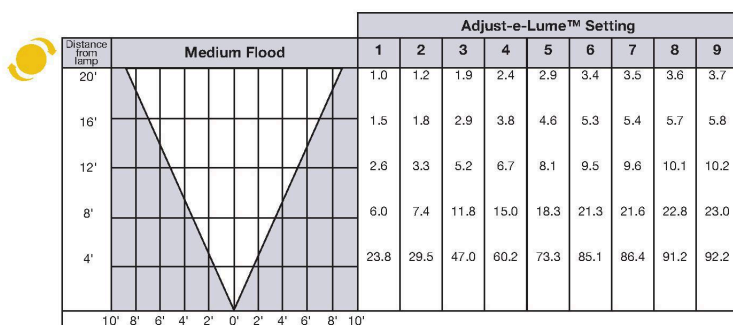
Set adjust-e-lume™ Dial to desired output



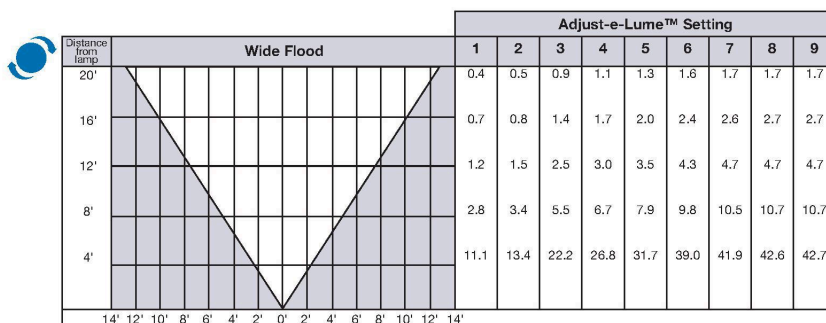
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



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adjust-e-lume[®]
TECHNOLOGY

Photometry for use with e23

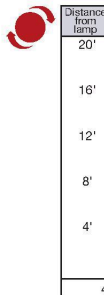
4K

Select OptiKit™ for desired distribution

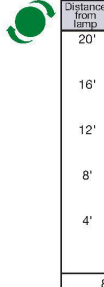
- RED  **Narrow Spot (NSP)**
 GREEN  **Spot (SP)**
 YELLOW  **Medium Flood (MFL)**
 BLUE  **Wide Flood (WFL)**

Set adjust-e-lume™ Dial to desired output

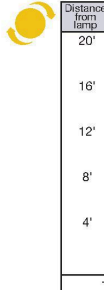


Distance from lamp	Narrow Spot	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		2.7	3.7	5.5	6.9	8.5	10.1	10.4	10.6	10.6
16'		4.3	5.7	8.7	10.8	13.3	15.7	16.2	16.5	16.5
12'		7.6	10.2	15.4	19.2	23.6	27.9	28.8	29.3	29.4
8'		17.1	23.0	34.7	43.2	53.0	62.8	64.8	66.0	66.1
4'		68.6	91.9	138.6	172.9	212.1	251.3	259.2	263.8	264.3
	4' 2' 0' 2' 4'									

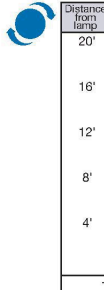
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Distance from lamp	Spot	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		1.9	2.4	3.7	4.8	6.0	6.8	7.1	7.1	7.1
16'		2.9	3.7	5.9	7.4	9.4	10.6	11.0	11.1	11.2
12'		5.2	6.6	10.4	13.2	16.7	18.9	19.6	19.8	19.8
8'		11.8	14.9	23.4	29.7	37.6	42.5	44.1	44.6	44.6
4'		47.0	59.6	93.6	118.9	150.3	170.1	176.3	178.3	178.6
	8' 6' 4' 2' 0' 2' 4' 6' 8'									

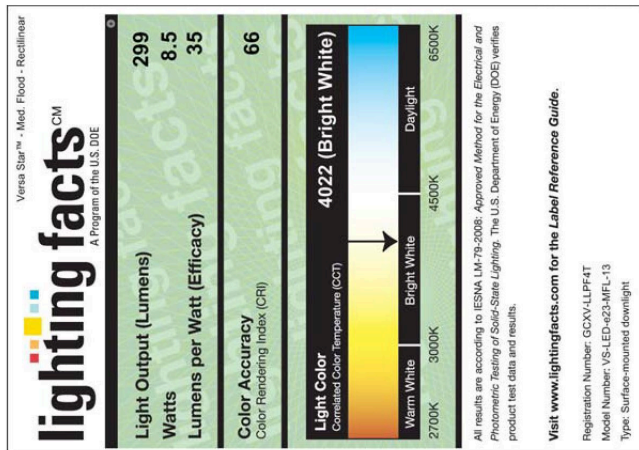
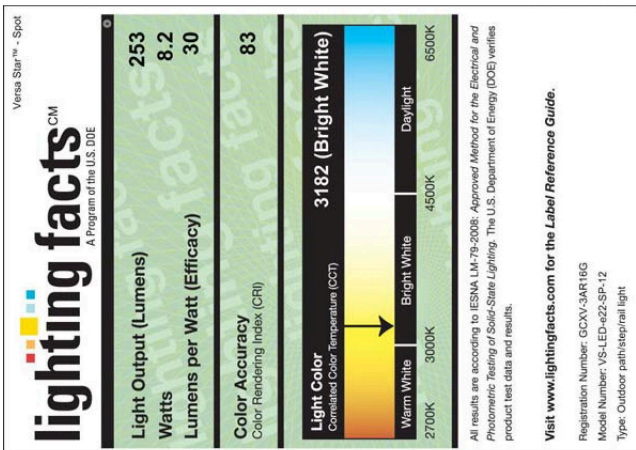
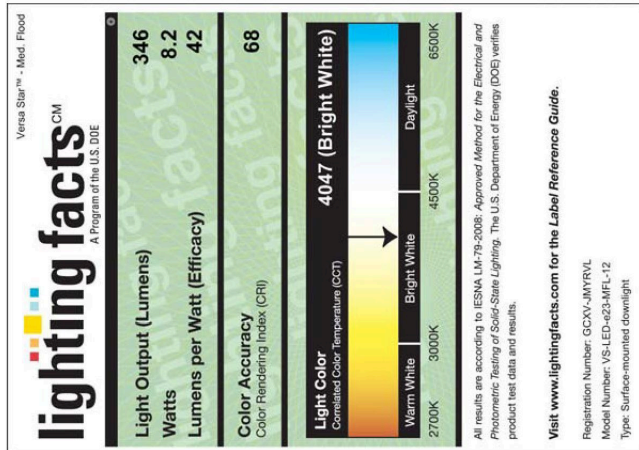
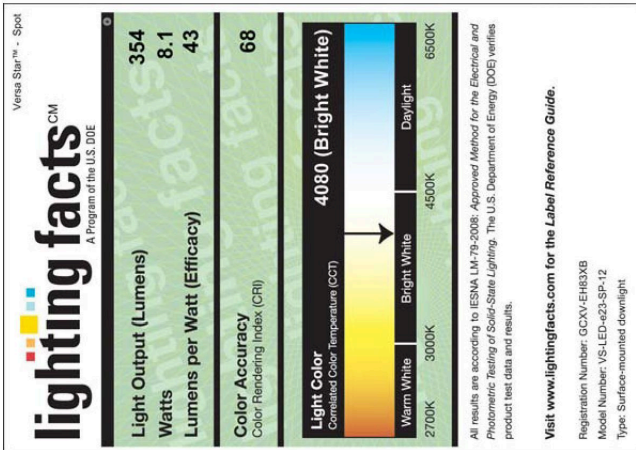
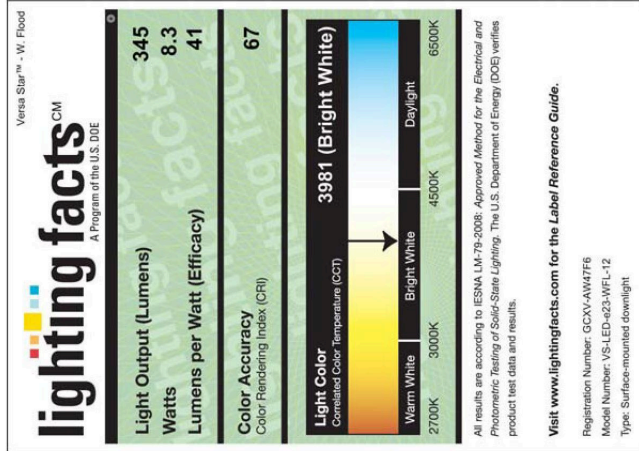
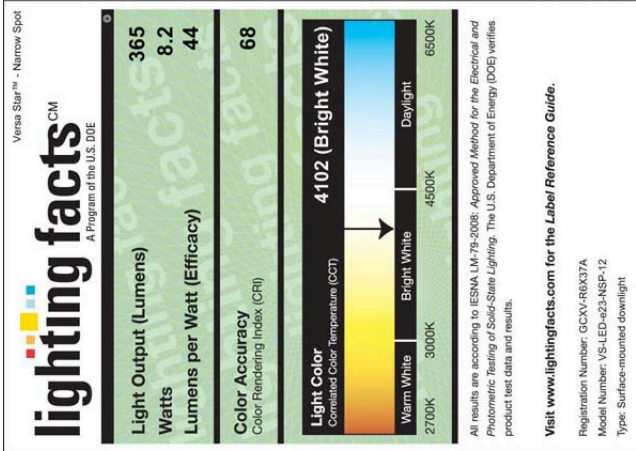
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Distance from lamp	Medium Flood	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		1.1	1.4	2.2	2.8	3.3	3.8	4.0	4.1	4.1
16'		1.7	2.1	3.4	4.3	5.1	5.9	6.3	6.4	6.4
12'		3.0	3.8	6.1	7.7	9.1	10.5	11.2	11.3	11.4
8'		6.7	8.5	13.8	17.3	20.5	23.7	25.2	25.4	25.6
4'		26.9	34.2	55.0	69.3	81.9	94.7	100.6	101.6	102.4
	10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10'									

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Distance from lamp	Wide Flood	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		0.5	0.6	1.0	1.2	1.4	1.7	1.8	1.8	1.8
16'		0.8	1.0	1.5	1.8	2.2	2.7	2.8	2.8	2.9
12'		1.3	1.8	2.7	3.3	3.9	4.7	4.9	5.0	5.1
8'		3.0	4.0	6.0	7.3	8.8	10.7	11.1	11.3	11.4
4'		12.0	15.9	23.9	29.3	35.1	42.6	44.4	45.1	45.7
	14' 12' 10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10' 12' 14'									

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F15.1

TRANSFORMER FOR F16 FIXTURE

Manufacturer: BK LIGHTING

Fixture Line: TR SERIES (TRANSFORMERS)

Fixture: TRANSFORMER

Catalog #: TR150-277

Mounting: SURFACE

Fixture Wattage: 150w

Fixture Voltage: 277

Load Type: Non-Dim

Lamp Spec: N/A





KAPLAN GEHRING McCARROLL
ARCHITECTURAL LIGHTING

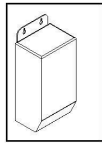
PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F15.1

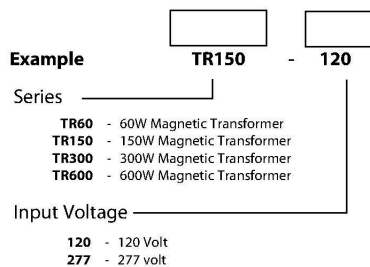


Magnetic Transformer

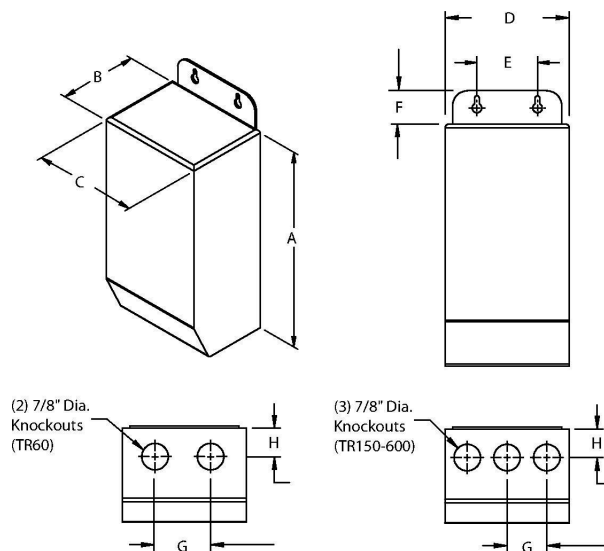
TR SERIES

PROJECT:	
TYPE:	
CATALOG NUMBER:	
SOURCE:	
NOTES:	

CATALOG NUMBER LOGIC



DIMENSIONS



TRANSFORMER DATA

All dimensions indicated on this submittal are nominal.
Contact Technical Sales if you require more stringent specifications.

Series	Input Voltage	Max. Load	Circuit Breaker	Weight	Height A	Depth B	C	D	E	F	G	H
TR60	120V	60W	8A	3.7 lbs.	7-1/2"	2-15/16"	3"	3-7/64"	1-1/2"	1-1/16"	1-1/2"	3/4"
TR150	120V	150W	25A	6 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	2"	1-1/8"	1-5/16"	15/16"
TR300	120V	300W	25A	7.13 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	2"	1-1/8"	1-5/16"	15/16"
TR600	120V	600W	25A	14.9 lbs.	9-13/32"	4-3/32"	4-19/32"	5-3/4"	2"	1-1/16"	1-1/2"	1-1/4"
TR60	277V	60W	8A	3.7 lbs.	7-1/2"	2-15/16"	3"	3-7/64"	1-1/2"	1-1/16"	1-1/2"	3/4"
TR150	277V	150W	25A	6 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	4-1/8"	1-1/8"	1-5/16"	15/16"
TR300	277V	300W	25A	7.13 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	4-1/8"	1-1/8"	1-5/16"	15/16"
TR600	277V	600W	25A	14.9 lbs.	9-13/32"	4-3/32"	4-19/32"	5-3/4"	4-5/8"	1-1/16"	1-1/2"	1-1/4"

SPECIFICATIONS

Housing

Stainless steel, NEMA Outdoor 3R rated enclosure. [2] (TR60) or [3] (TR150-600) bottom entry 7/8" knockouts provide access to wiring compartment. Riveted, hinged cover opens vertically from bottom to top for service access.

Transformer

Fully encapsulated, Class B insulated, low voltage magnetic transformer. 120VAC or 277VAC input. 12VAC output (fully loaded). 0.6A (120VAC) or 0.3A (277VAC) maximum no load input current. Manual thermal reset. Secondary circuit breaker. Enclosure temperature <65° C when fully loaded (in 40° C ambient).

For use with halogen and **BISS** products. Fully dimmable utilizing magnetic low voltage dimmers. Consult fixture specification for dimming capability.

Output Wiring

See B-K Lighting Low Voltage Design Guide on reverse.

Warranty

Limited five year warranty.

Certification and Listings

Nema Type 3R Enclosure. Suitable for indoor and outdoor use. UL Listed to ANSI/UL Standard 1012.



B-K LIGHTING

40429 Brickyard Drive • Madera, CA 93636 • USA
559.438.5800 • FAX 559.438.5900
www.bklighting.com • info@bklighting.com

SUBMITTAL DATE
07-08-15

SUBMITTAL NUMBER
SUB-2067-00

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Low Voltage Guide

Many B-K LIGHTING fixtures operate on 12 volts. Taking advantage of these energy-saving fixtures requires appropriate care in planning the electrical wiring system. To maintain expected lamp performance, we recommend the following procedures in sizing your low-voltage wiring system.

SIZING OF LOW VOLTAGE WIRING

1. Locate and plot fixtures on plan. Choose the lighting equipment necessary to create the desired lighting effects. Mark lamp wattage for each fixture location.
2. Identify potential transformer locations. The ideal locations are those which provide for the shortest possible low voltage distances (inconspicuous areas, behind rocks, shrubbery, etc., within the landscape). UPM, Power Pipe™, Power Pipe II™, or, if available, transformers integral in the fixture are good ways to hide the transformer and reduce voltage drop problems.
3. Add the total wattage for the proposed low voltage run. Measure the wire lengths from the transformer to the fixture locations. Find the distance to the "CENTER OF LOAD" of the low voltage run.

$$\text{CENTER OF LOAD} = \frac{\text{Distance from first to last fixture}}{(2) \text{ Two}} + \text{Distance from transformer to first fixture}$$

4. Using the B-K LIGHTING Wire Selection Table, select the wattage column which applies. Look down the column stopping at a distance, in feet, that is equal or greater than the "CENTER OF LOAD" distance. Look across to find the proper wire size for your layout.

Note: In the event of multiple runs from a given transformer, treat each run separately.

12-VOLT WIRE SELECTION TABLE

WIRE SIZE	TOTAL WATTAGE																
	12	20	24	35	40	50	60	70	80	100	105	120	140	150	160	200	250
12	178	106	89	60	53	42	35	30	26	21	20	17	15	13	—	—	—
10	283	169	141	96	85	67	56	48	42	33	32	28	24	22	19	17	13
8	450	269	225	154	135	107	90	77	67	54	51	45	38	36	31	27	21
6	715	428	357	245	214	171	143	122	107	85	81	71	61	57	49	42	34
	CENTER OF LOAD WIRING DISTANCES IN FEET																

CENTER OF LOAD WIRING DISTANCES IN FEET

The Wire Selection Table provided is based on a maximum allowable voltage drop of 5%. Electrical designs which allow greater than 5% voltage drop, reduce rated light output beyond acceptable levels.

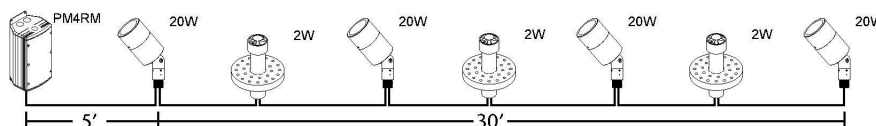
The importance of the proper wire selection is demonstrated below. Both examples have the same total watts and identical overall lengths of wire run, yet require different wire sizes, or multiple wire runs, to operate within the 5% maximum voltage drop B-K LIGHTING criteria.

EXAMPLE:

Total wattage:
(20w x 4) + (2w x 3) = 86 watts

CENTER OF LOAD:
 $\left(\frac{30'}{2}\right) + 5' = 20'$

SINGLE WIRE RUN:
12 gauge

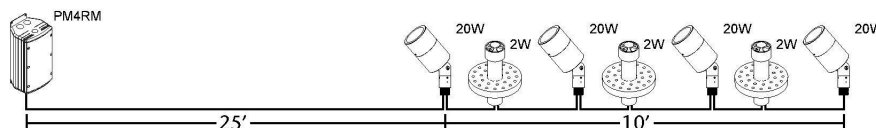


EXAMPLE:

Total wattage:
(20w x 4) + (2w x 3) = 86 watts

CENTER OF LOAD:
 $\left(\frac{10'}{2}\right) + 25' = 30'$

SINGLE WIRE RUN:
10 gauge



TRANSFORMERS

For areas which are far reaching from fixtures, running 120 volt power to each fixture location with individual transformers, such as TRSS75 or TRSS150, provides an excellent economic solution to voltage drop. These transformers can also be specified in the UPM, Power Pipe™, and Power Pipe II™ transformer housings.

Note: Installations should be in accordance with the National Electric Code and applicable local codes.



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F16

IN GRADE UPLIGHT

Manufacturer: BK LIGHTING

Fixture Line: SQUARE GOLD STAR

Fixture: INGRADE UPLIGHT

Catalog #: MATERIAL-GQ-LED-E22-MFL-ADJUST E LUMEN-FINISH-12-SHIELDING

Mounting: IN GRADE

Accessories: F16.1 TRANSFORMER FOR CIRCUIT

Fixture Wattage: 8.4w

Fixture Voltage: 12

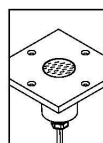
Load Type: Non-Dim

Lamp Spec: LED 3000K

Fixture Specification Notes

- 1) Fixture requires remote transformer





B-K LIGHTING



SQUARE GOLD STAR™

PROJECT:

TYPE:

CATALOG
NUMBER:

SOURCE:

NOTES:

CATALOG NUMBER LOGIC

Example:

Material

Blank - Aluminum
B - Brass
S - Stainless Steel

Series

GQ - Square Gold Star™

Source

LED - 'e' Technology with Integral Dimming Driver (25W min. load when dimmed)
*Requires magnetic Low Voltage dimmer

LED Type

e36 - 8WLED/2.7K e23 - 8WLED/4K
e22 - 8WLED/3K e27 - 8WLED/Amber

Optics*

NSP - Narrow Spot (Red Indicator) MFL - Medium Flood (Yellow Indicator)
SP - Spot (Green Indicator) WFL - Wide Flood (Blue Indicator)

Adjust-e-Lume® Output Intensity** (Choose factory setting)

A9 (Standard), A8, A7, A6, A5, A4, A3, A2, A1
**Please see Adjust-e-Lume® photometry to determine desired intensity.

Finish

Aluminum Finish			Brass Finish		Premium Finish		
Powder Coat Color	Satin	Wrinkle	Machined	MAC	ABP	CMG	RMG
Bronze	BZP	BZW	Polished	POL	AMG	CRI	SDS
Black	BLP	BLW	Mitique™	MIT	AQW	CRM	SMG
White (Gloss)	WHP	WHW	Stainless Finish		BCM	HUG	TXF
Aluminum	SAP	—	Machined	MAC	BGE	MDS	WCP
Verde	—	VER	Polished	POL	BPP	NBP	WIR
			Brushed	BRU	CAP	OCP	
				<small>Interior use only.</small>			<small>Also available in ITAL Finishes See submittal SUB-1439-00</small>

Lens Type

12 - Soft Focus Lens

13 - Rectilinear Lens

Shielding

11 - Honeycomb Baffle

DRIVER DATA

Input Volts

12VAC/DC 50/60Hz

InRush Current

< 1A (non-dimmed)

Dimmable

Magnetic Low Voltage Dimmer

Operation Ambient Temperature

-10°F-130°F

LM79 DATA

BK No.	CCT (Typ.)	Input Watts (Typ.)	CRI (Typ.)
e36	2700K	8.4	90
e22	3100K	8.4	90
e23	4100K	8.4	75
e27	Amber (590nm)	7.9	~

L70 DATA

Minimum Rated Life (hrs.) 70% of Initial Lumens (L70)
50,000
50,000
50,000
50,000

*OPTICAL DATA

Beam Type	Angle	Visual Indicator
Narrow Spot	14°	Red Dot
Spot	18°	Green Dot
Medium Flood	25°	Yellow Dot
Wide Flood	36°	Blue Dot

B-K LIGHTING

40429 Brickyard Drive • Madera, CA 93636 • USA
559.438.5800 • FAX 559.438.5900
www.bklighting.com • info@bklighting.com

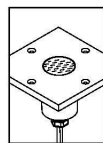
SUBMITTAL DATE

1-8-14

DRAWING NUMBER

SUB001154

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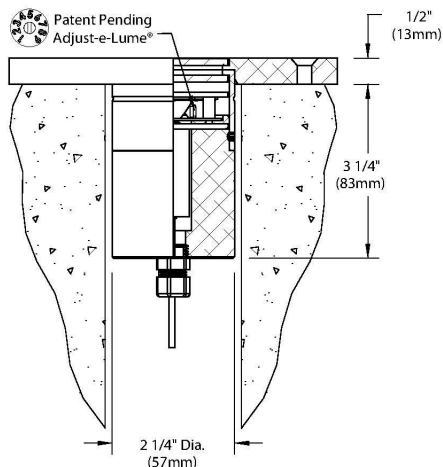


SQUARE GOLD STAR™

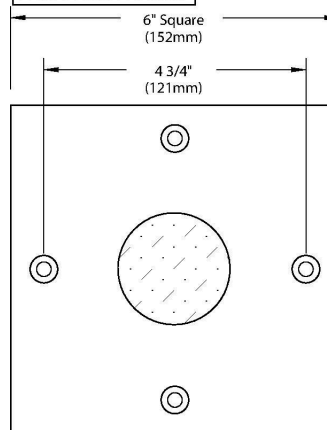
PROJECT:

TYPE:

SIDE VIEW



FACEPLATE DETAIL



Accessories (Configure separately)

Remote options:



TR Series



PMRM™

All dimensions indicated on this submittal are nominal.
Contact Technical Sales if you require more stringent specifications.

SPECIFICATIONS

GreenSource Initiative™

Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced onsite. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult www.bklighting.com/greensource for program requirements.

Materials

Furnished in Copper-Free Aluminum (Type 6061-T6), Brass (Type 360) or Stainless Steel (Type 304).

Core Drill

Allows for mounting into existing structures that will not easily accept a standard box. 2-1/2" dia. hole required for slip fit.

Body

Fully machined from solid billet. Unibody design provides enclosed, water-proof wireway and integral heat sink for maximum component life. High temperature, silicone 'O' Ring provides water-tight seal. Provided with hard-coat (Type III) black anodize finish for maximum corrosion resistance. Weather-tight cable connector with 50', 18Ga., 2 wire low voltage cable.

Faceplate

Fully machined from solid billet. Countersunk holes provide for flush hardware mounting (by others). Accommodates [1] lens or louver media.

Lens

Flush mount, shock resistant, tempered, glass lens is factory adhered to faceplate and provides hermetically sealed optical compartment. Specify soft focus (#12) or rectilinear (#13) lens.

BKSSL®

Integrated solid state system with 'e' technology is scalable for field upgrade. Modular design with electrical quick disconnects permit field maintenance. High power, forward throw source complies with ANSI C78.377 binning requirements. Exceeds ENERGY STAR® lumen maintenance requirements. LM-80 certified components.

Integral, constant current driver. 12VAC/VDC input. 50/60Hz. Proprietary input control scheme achieves power factor correction and eliminates inrush current. Output, over-voltage, open-circuit, and short circuit protected. Inrush current limited to <1A (non-dimming). Conforms to Safety Std. C22.2 No. 250.13-12.

Line dimmable. For use with low voltage dimmer with dedicated neutral conductor. Minimum 25 watt load required for dimming.

Optics

Interchangeable OPTIKIT™ modules permit field changes to optical distribution. Color-coded for easy reference: Narrow Spot (NSP) = Red. Spot (SP) = Green. Medium Flood (MFL) = Yellow. Wide Flood (WFL) = Blue.

Adjust-e-Lume® (Pat. Pending)

Integral electronics allows dynamic lumen response at the individual fixture. Indexed (100% to 25% nom.) lumen output. Maintains output at desired level or may be changed as conditions require. Specify factory preset output intensity.

Adjust-e-Lume® (Pat. Pending)

Integral electronics allows dynamic lumen response at the individual fixture. Indexed (100% to 25% nom.) lumen output. Maintains output at desired level or may be changed as conditions require. Specify factory preset output intensity.

Transformer

For use with 12VAC  remote transformer.

Wiring

Teflon® coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard.

Hardware

Tamper-resistant, stainless steel hardware. Mounting hardware by others.

Finish

StarGuard®, our exclusive RoHS compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating. Brass components are available in powder coat or handcrafted metal finish. Stainless steel components are available in handcrafted metal finish. (Brushed finish for interior use only).

Warranty

5 year limited warranty.

Certification and Listing

ITL tested to IESNA LM-79. Lighting Facts Registration per USDOE (www.lightingfacts.com). ETL Listed to ANSI/UL Standard 1838 and UL Standard 8750 and Certified to CAN/CSA C22.2 No. 9, CSA TIL B-58B. RoHS compliant. Suitable for indoor or outdoor use. Suitable for installation in combustible materials (Type Non-IC). Suitable for use in wet locations. Suitable for installation within 4' of the ground. IP65 Rated. Made in USA.



*Teflon is a registered trademark of DuPont Corporation.
*Energy Star is a registered trademark of the United States Environmental Protection Agency.

adjust-e-lume[®]
TECHNOLOGY

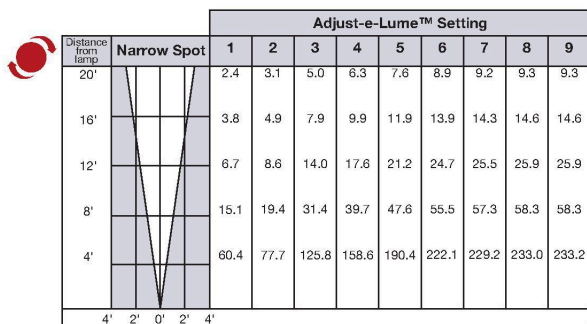
Photometry for use with e36

2.7K

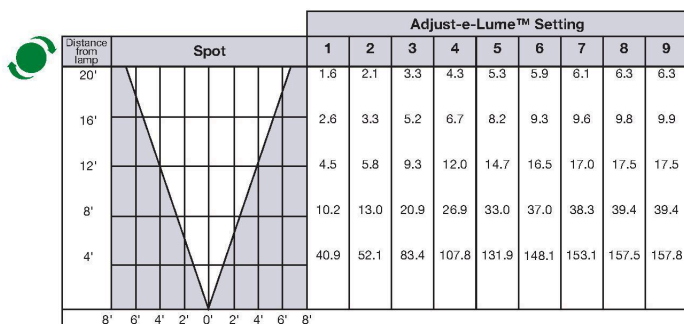
Select OptiKit™ for desired distribution

- RED  **Narrow Spot (NSP)**
 GREEN  **Spot (SP)**
 YELLOW  **Medium Flood (MFL)**
 BLUE  **Wide Flood (WFL)**

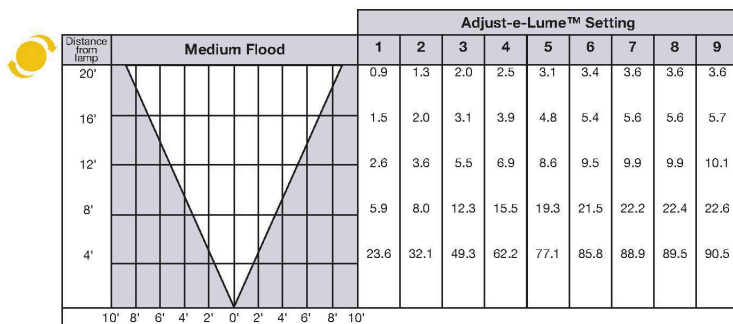
Set adjust-e-lume™ Dial to desired output



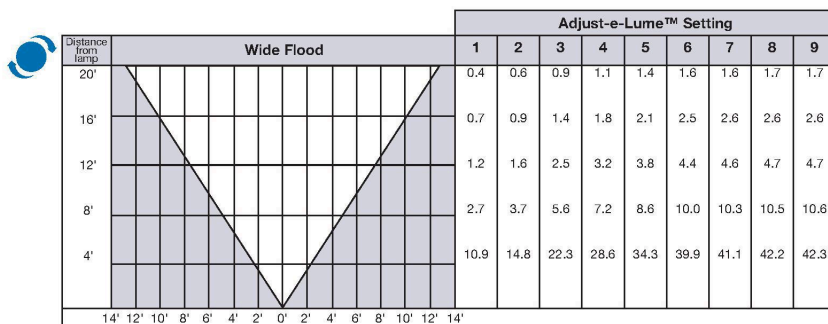
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



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adjust-e-lume®

TECHNOLOGY

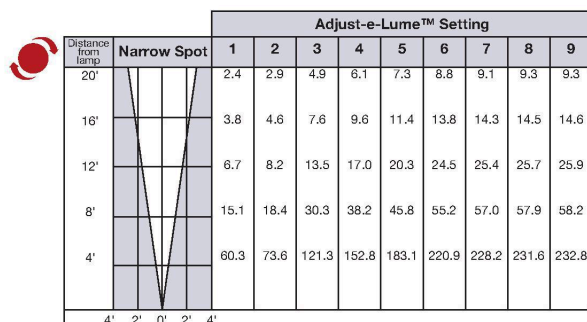
Photometry for use with e22



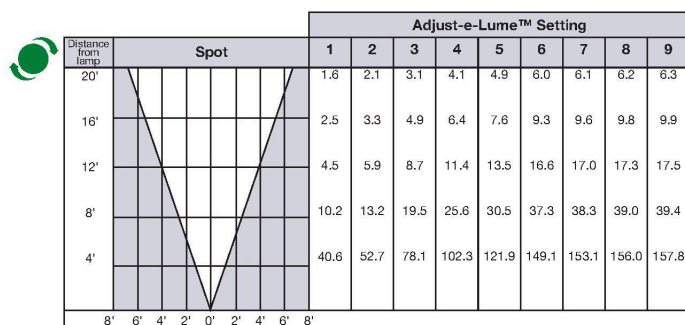
Select OptiKit™ for desired distribution

- RED Narrow Spot (NSP)
- GREEN Spot (SP)
- YELLOW Medium Flood (MFL)
- BLUE Wide Flood (WFL)

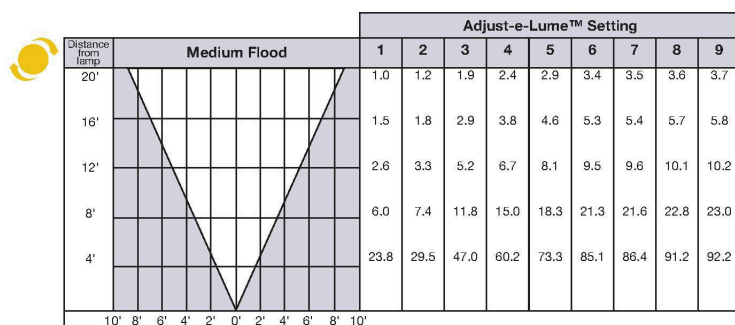
Set adjust-e-lume™ Dial to desired output



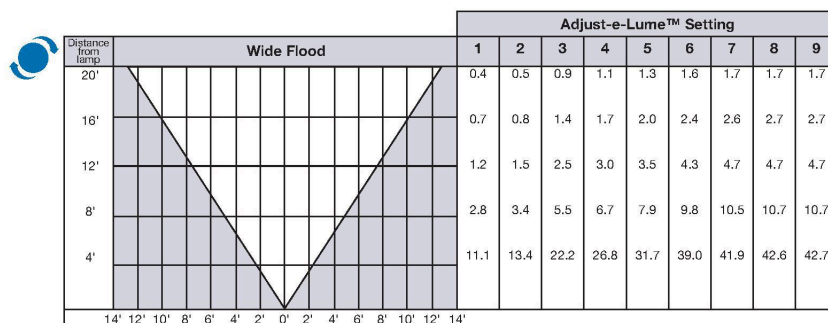
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



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Note: If using No. 11 honeycomb baffle multiply footcandle values by .80



Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

adjust-e-lume®
TECHNOLOGY

Photometry for use with e23

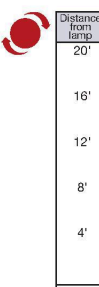
4K

Select OptiKit™ for desired distribution

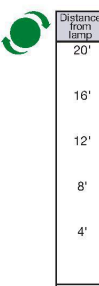
- RED**  **Narrow Spot (NSP)**
- GREEN**  **Spot (SP)**
- YELLOW**  **Medium Flood (MFL)**
- BLUE**  **Wide Flood (WFL)**

Set adjust-e-lume™ Dial to desired output

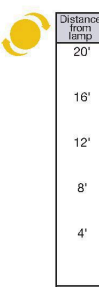


Distance from lamp	Narrow Spot	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		2.7	3.7	5.5	6.9	8.5	10.1	10.4	10.6	
16'		4.3	5.7	8.7	10.8	13.3	15.7	16.2	16.5	
12'		7.6	10.2	15.4	19.2	23.6	27.9	28.8	29.3	
8'		17.1	23.0	34.7	43.2	53.0	62.8	64.8	66.0	
4'		68.6	91.9	138.6	172.9	212.1	251.3	259.2	263.8	
	4' 2' 0' 2' 4'									

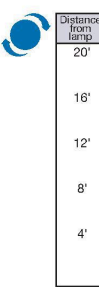
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Distance from lamp	Spot	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		1.9	2.4	3.7	4.8	6.0	6.8	7.1	7.1	7.1
16'		2.9	3.7	5.9	7.4	9.4	10.6	11.0	11.1	11.2
12'		5.2	6.6	10.4	13.2	16.7	18.9	19.6	19.8	19.8
8'		11.8	14.9	23.4	29.7	37.6	42.5	44.1	44.6	44.6
4'		47.0	59.6	93.6	118.9	150.3	170.1	176.3	178.3	178.6
	8' 6' 4' 2' 0' 2' 4' 6' 8'									

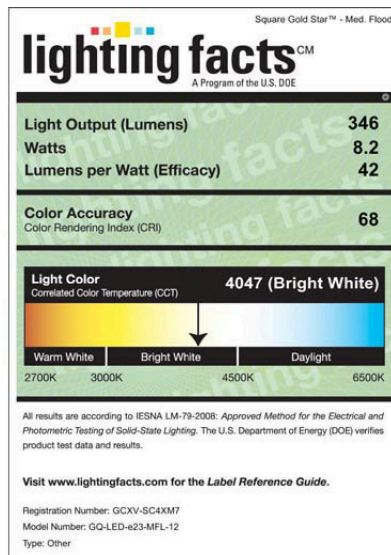
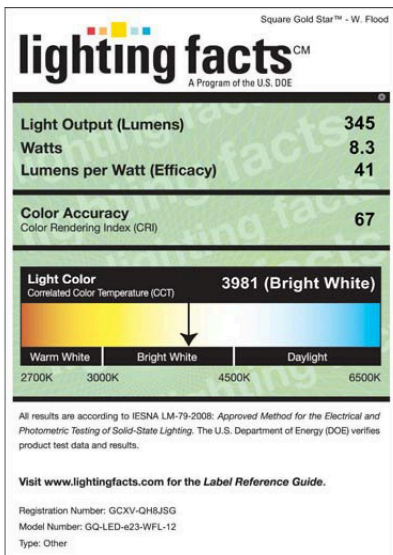
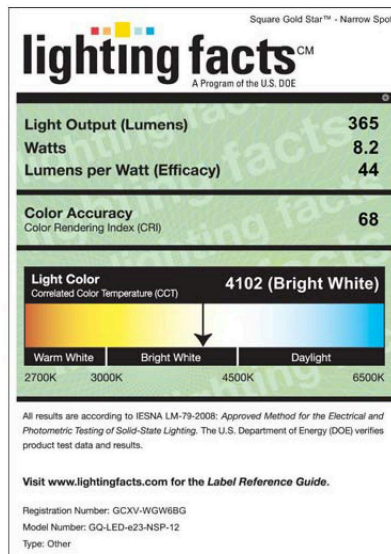
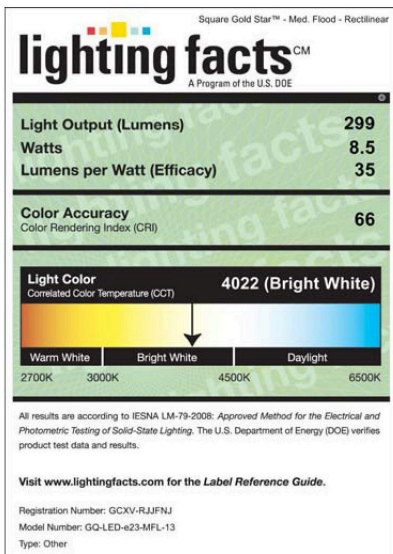
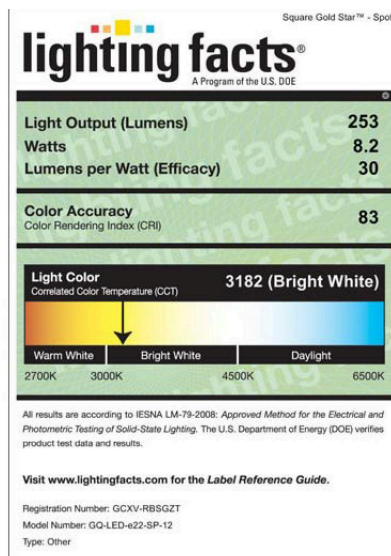
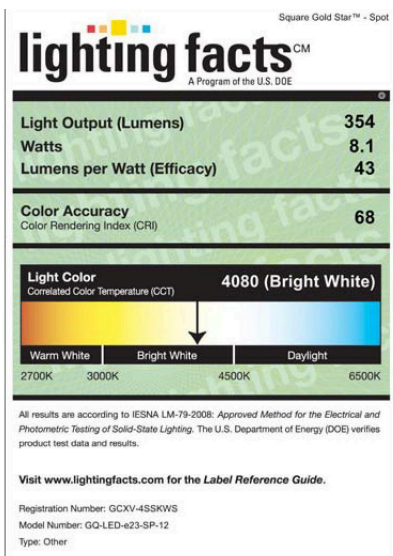
Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Distance from lamp	Medium Flood	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		1.1	1.4	2.2	2.8	3.3	3.8	4.0	4.1	4.1
16'		1.7	2.1	3.4	4.3	5.1	5.9	6.3	6.4	6.4
12'		3.0	3.8	6.1	7.7	9.1	10.5	11.2	11.3	11.4
8'		6.7	8.5	13.8	17.3	20.5	23.7	25.2	25.4	25.6
4'		26.9	34.2	55.0	69.3	81.9	94.7	100.6	101.6	102.4
	10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10'									

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Distance from lamp	Wide Flood	Adjust-e-Lume™ Setting								
		1	2	3	4	5	6	7	8	9
20'		0.5	0.6	1.0	1.2	1.4	1.7	1.8	1.8	1.8
16'		0.8	1.0	1.5	1.8	2.2	2.7	2.8	2.8	2.9
12'		1.3	1.8	2.7	3.3	3.9	4.7	4.9	5.0	5.1
8'		3.0	4.0	6.0	7.3	8.8	10.7	11.1	11.3	11.4
4'		12.0	15.9	23.9	29.3	35.1	42.6	44.4	45.1	45.7
	14' 12' 10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10' 12' 14'									

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F16.1

TRANSFORMER FOR F16 FIXTURE

Manufacturer: BK LIGHTING

Fixture Line: TR SERIES (TRANSFORMERS)

Fixture: TRANSFORMER

Catalog #: TR150-277

Mounting: SURFACE

Fixture Wattage: 150w

Fixture Voltage: 277

Load Type: Non-Dim

Lamp Spec: N/A





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

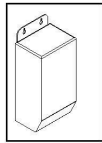
PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F16.1



Magnetic Transformer

TR SERIES

PROJECT:	
TYPE:	
CATALOG NUMBER:	
SOURCE:	
NOTES:	

CATALOG NUMBER LOGIC

Example TR150 - 120

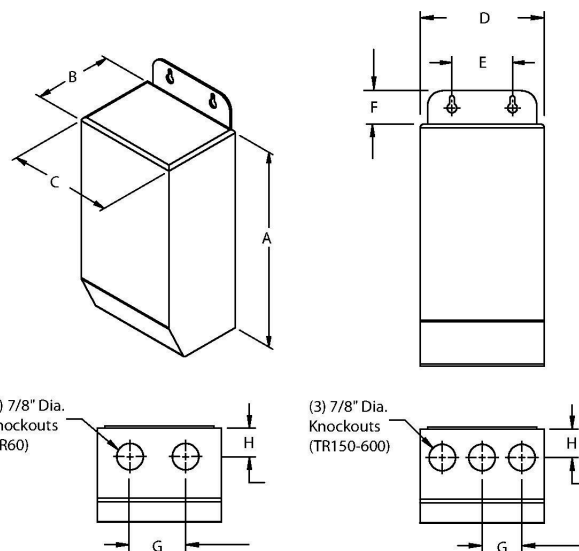
Series TR150

Input Voltage 120

TR60 - 60W Magnetic Transformer
TR150 - 150W Magnetic Transformer
TR300 - 300W Magnetic Transformer
TR600 - 600W Magnetic Transformer

120 - 120 Volt
277 - 277 volt

DIMENSIONS



TRANSFORMER DATA

All dimensions indicated on this submittal are nominal.
Contact Technical Sales if you require more stringent specifications.

Series	Input Voltage	Max. Load	Circuit Breaker	Weight	Height A	Depth B	C	D	E	F	G	H
TR60	120V	60W	8A	3.7 lbs.	7-1/2"	2-15/16"	3"	3-7/64"	1-1/2"	1-1/16"	1-1/2"	3/4"
TR150	120V	150W	25A	6 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	2"	1-1/8"	1-5/16"	15/16"
TR300	120V	300W	25A	7.13 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	2"	1-1/8"	1-5/16"	15/16"
TR600	120V	600W	25A	14.9 lbs.	9-13/32"	4-3/32"	4-19/32"	5-3/4"	2"	1-1/16"	1-1/2"	1-1/4"
TR60	277V	60W	8A	3.7 lbs.	7-1/2"	2-15/16"	3"	3-7/64"	1-1/2"	1-1/16"	1-1/2"	3/4"
TR150	277V	150W	25A	6 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	4-1/8"	1-1/8"	1-5/16"	15/16"
TR300	277V	300W	25A	7.13 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	4-1/8"	1-1/8"	1-5/16"	15/16"
TR600	277V	600W	25A	14.9 lbs.	9-13/32"	4-3/32"	4-19/32"	5-3/4"	4-5/8"	1-1/16"	1-1/2"	1-1/4"

SPECIFICATIONS

Housing

Stainless steel, NEMA Outdoor 3R rated enclosure. [2] (TR60) or [3] (TR150-600) bottom entry 7/8" knockouts provide access to wiring compartment. Riveted, hinged cover opens vertically from bottom to top for service access.

Transformer

Fully encapsulated, Class B insulated, low voltage magnetic transformer. 120VAC or 277VAC input. 12VAC output (fully loaded). 0.6A (120VAC) or 0.3A (277VAC) maximum no load input current. Manual thermal reset. Secondary circuit breaker. Enclosure temperature <65° C when fully loaded (in 40° C ambient).

For use with halogen and **BISS** products. Fully dimmable utilizing magnetic low voltage dimmers. Consult fixture specification for dimming capability.

Output Wiring

See B-K Lighting Low Voltage Design Guide on reverse.

Warranty

Limited five year warranty.

Certification and Listings

Nema Type 3R Enclosure. Suitable for indoor and outdoor use. UL Listed to ANSI/UL Standard 1012.



B-K LIGHTING

40429 Brickyard Drive • Madera, CA 93636 • USA
559.438.5800 • FAX 559.438.5900
www.bklighting.com • info@bklighting.com

SUBMITTAL DATE

07-08-15

SUBMITTAL NUMBER

SUB-2067-00

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Low Voltage Guide

Many B-K LIGHTING fixtures operate on 12 volts. Taking advantage of these energy-saving fixtures requires appropriate care in planning the electrical wiring system. To maintain expected lamp performance, we recommend the following procedures in sizing your low-voltage wiring system.

SIZING OF LOW VOLTAGE WIRING

1. Locate and plot fixtures on plan. Choose the lighting equipment necessary to create the desired lighting effects. Mark lamp wattage for each fixture location.
2. Identify potential transformer locations. The ideal locations are those which provide for the shortest possible low voltage distances (inconspicuous areas, behind rocks, shrubbery, etc., within the landscape). UPM, Power Pipe™, Power Pipe II™, or, if available, transformers integral in the fixture are good ways to hide the transformer and reduce voltage drop problems.
3. Add the total wattage for the proposed low voltage run. Measure the wire lengths from the transformer to the fixture locations. Find the distance to the "CENTER OF LOAD" of the low voltage run.

$$\text{CENTER OF LOAD} = \frac{\text{Distance from first to last fixture}}{(2) \text{ Two}} + \text{Distance from transformer to first fixture}$$

4. Using the B-K LIGHTING Wire Selection Table, select the wattage column which applies. Look down the column stopping at a distance, in feet, that is equal or greater than the "CENTER OF LOAD" distance. Look across to find the proper wire size for your layout.

Note: In the event of multiple runs from a given transformer, treat each run separately.

12-VOLT WIRE SELECTION TABLE

WIRE SIZE	TOTAL WATTAGE																
	12	20	24	35	40	50	60	70	80	100	105	120	140	150	160	200	250
12	178	106	89	60	53	42	35	30	26	21	20	17	15	13	—	—	—
10	283	169	141	96	85	67	56	48	42	33	32	28	24	22	19	17	13
8	450	269	225	154	135	107	90	77	67	54	51	45	38	36	31	27	21
6	715	428	357	245	214	171	143	122	107	85	81	71	61	57	49	42	34
	CENTER OF LOAD WIRING DISTANCES IN FEET																

CENTER OF LOAD WIRING DISTANCES IN FEET

The Wire Selection Table provided is based on a maximum allowable voltage drop of 5%. Electrical designs which allow greater than 5% voltage drop, reduce rated light output beyond acceptable levels.

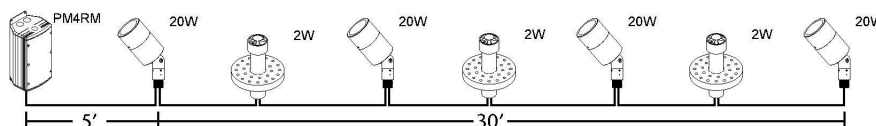
The importance of the proper wire selection is demonstrated below. Both examples have the same total watts and identical overall lengths of wire run, yet require different wire sizes, or multiple wire runs, to operate within the 5% maximum voltage drop B-K LIGHTING criteria.

EXAMPLE:

Total wattage:
(20w x 4) + (2w x 3) = 86 watts

CENTER OF LOAD:
 $\left(\frac{30'}{2}\right) + 5' = 20'$

SINGLE WIRE RUN:
12 gauge

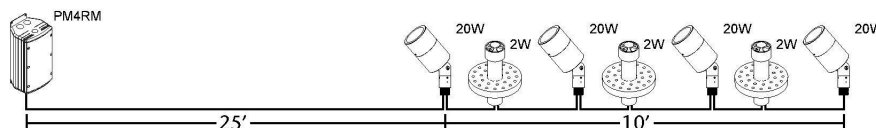


EXAMPLE:

Total wattage:
(20w x 4) + (2w x 3) = 86 watts

CENTER OF LOAD:
 $\left(\frac{10'}{2}\right) + 25' = 30'$

SINGLE WIRE RUN:
10 gauge



TRANSFORMERS

For areas which are far reaching from fixtures, running 120 volt power to each fixture location with individual transformers, such as TRSS75 or TRSS150, provides an excellent economic solution to voltage drop. These transformers can also be specified in the UPM, Power Pipe™, and Power Pipe II™ transformer housings.

Note: Installations should be in accordance with the National Electric Code and applicable local codes.



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F18

LED THEATRICAL FRESNEL

Manufacturer: SELECON

Fixture Line: PLFRESNEL 1 LED

Fixture: THEATRICAL FRESNEL

Catalog #: PLFR1-03-WHITE FINISH

Mounting: SURFACE

Accessories: 20BDMX four way barn door

Fixture Wattage: 150w

Fixture Voltage: 120

Load Type: DMX

Addl. 1 X 10ft DMX cable +

Requirements: 1X PC3PC Powercon jumper cable

Lamp Spec: RGBW



Selecon LED Fixtures



PLFRESNEL1 LED Luminaire

The PLFRESNEL1 LED Luminaire is a general purpose lighting fixture for theatre, small studio, and display lighting applications. It produces an adjustable cone of light with a soft edge which is easily blended with adjacent beams to provide even illumination. Using LED source technology combined with a traditional Fresnel lens, the PLFRESNEL1 LED Luminaire delivers Philips Selecon's industry benchmark quality without the compromising performance of spreader lenses.

A key benefit of the PLFRESNEL1 LED Luminaire is that it is no longer necessary to change lamps or color filters. Combining the superior control and light quality of a Philips Selecon Fresnel with seamless fading between colors allows designers a new level of creativity. Less power consumption and no dimmer circuits makes the PLFRESNEL1 LED Luminaire the obvious choice for any stage lighting need.

The PLFRESNEL1 also hosts smart cable management with the inclusion of PLICB (PL Interconnect Box). The PLICB mounts to the luminaires yoke, between the C-Clamp and the yoke and swivels independently to allow for the luminaire to move freely through its focus range with no need for a cable service loop. The PLICB allows for all of the luminaires cabling with DMX and PowerCon in and through Connections.

Features

- Delivers the performance of a 500 watt fresnel fixture with a maximum power consumption of 150 watts
- Variable beam angle from 15 to 54 degrees
- Infinite color choice from the RGBW engine and supporting color temperatures from 2700K to 5600K in white
- Homogenized fully mixed color output light, no multiple color shadows
- Ten's of thousands of hours of life expectancy
- Quick selection of Warm White, Cool White, and Daylight
- User defined on board presets states available to record your color composition
- Color presets simplifies matching existing light sources
- Constant color balance down to very low light levels irrespective of intensity setting
- DMX512 Input/Output with 8 or 16-bit resolution or a simple 3-channel control (PLICB)
- On-board LCD menu for ease of luminaire set up and addressing
- No ultra-violet (wavelengths of less than 400nm) – for UVA, B or C or the Infrared spectrum (wavelengths of more than 775nm)
- Luminaire color: black
- Electronic universal power supply 100-240VAC
- PowerCon In and Through connectors (PLICB)
- Electronic power supply; ETL / cETL approved and CE marked



PLFRESNEL1 LED Luminaire

PHILIPS
Selecon

SPECIFICATION SUBMITTAL

CONSULTANT: <input type="text"/>	PROJECT NAME: <input type="text"/>	MODEL NUMBER QUANTITY: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
DATE: <input type="text"/>	PROJECT NUMBER: <input type="text"/>	APPROVED BY: <input type="text"/>

PLFRESNEL1 LED Luminaire



PLFRESNEL1 LED Luminaire

Advanced Control

The PLFRESNEL1 LED luminaire has an on-board LCD menu system for luminaire setup, control, and addressing. The menu system is extremely user-friendly and offers all configuration options with a few button presses.

Console Control

All PLFRESNEL1 luminaires support wired and wireless DMX512 control with a choice of 8 or 16 bit control resolution or simple 3-channel control. With the increased development of LED luminaires like PL1 and PL3 with 4 or more colors additional control is needed for intuitive operation. All Strand Lighting NEO and Palette family controls support extended color control and color temperature control to simplify programming and luminaire color matching.

PLFRESNEL1 LED Engine

The PLFRESNEL1 luminaire's powerful LED engines offer exceptional performance and life. Under normal operating conditions our LED engine has a potential life expectancy of up to 50,000 hours, however under worst case operating conditions with the luminaire set to continuous full output it is possible that a small percentage of LEDs may require replacement sooner. The Philips Selecon three-year limited warranty includes our guarantee against premature failure of the LED engine.

The PLFRESNEL1 luminaire uses the same proven LED engine as the Philips Selecon PL3, PL1, PLCYC1, PLPROFILE1 and the Philips Vari-Lite VLX luminaires meaning the color experience is simplified across the stage.

Selecon LED Fixtures

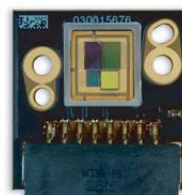


PLFRESNEL1 Luminaire Advanced Control

- ① LCD Menu Display
- ② Local controls offer the ability to access preset color temperatures; locally stored custom presets adjust intensity, colors and motorized focus.



Strand Lighting NEO Console



PLFRESNEL1 Luminaire LED Engine

PLFRESNEL1 LED Luminaire

Selecon LED Fixtures



For product photometric information, refer to the photometrics guide for this product on the Strand Lighting web site at www.strandlighting.com in the product downloads section.

Technical Specifications

Electrical Specifications

Source:	1 Each, True RGBW 120W LED chip
Operating Voltages:	120 to 240 Volts AC (auto-ranging)
Frequency:	50/60 Hz
Current Draw:	1.3 Amps (115V) / 0.65 Amps (230V) - Maximum load with all LEDs at full RGBW
Power Consumption:	150 Watts (max., RGBW at 100%)
Ambient Temperature:	0° to 40°C (32° to 104°F)
Control:	On-Board Menu / DMX512
DMX512 Channels:	15 Channels (16-Bit Mode) 9 Channels (8-Bit Mode) 3 Channels (3-Channel Mode)
Standards Compliance:	ETL/cETL Listed and CE Marked

Mechanical Specifications

Construction:	Machined aluminum, sheet metal, and molded engineering grade plastic components
Color:	Black
Weight:	12.3 lbs / 5.6 kg (luminaire only)

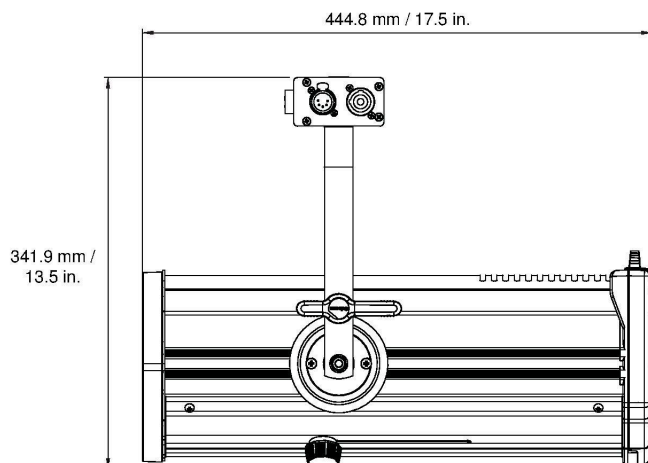
Optical Specifications

Output:	> 2,000 lumens (white light)
Beam Angle:	15 to 54 Degrees (user adjustable)

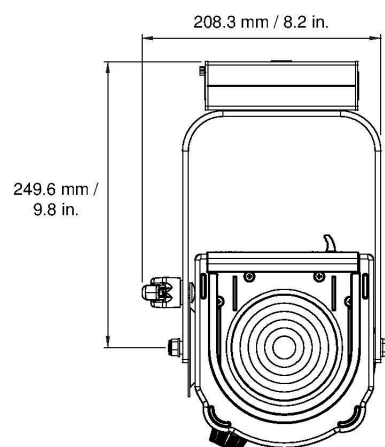


Dimensions

Side View

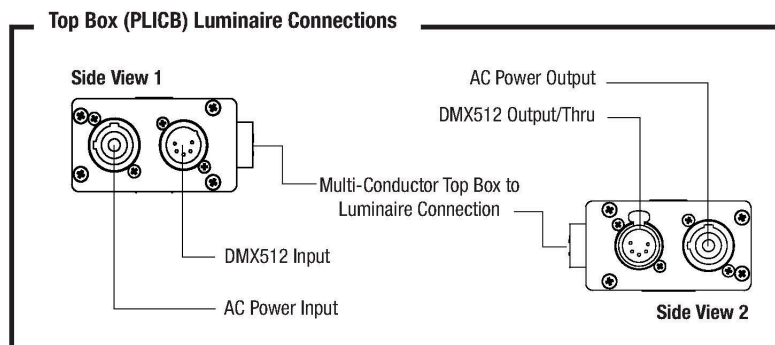


Front View



PLFRESNEL1 LED Luminaire

Selecon LED Fixtures



Ordering Information

Cat No. Description

PLFRESNEL1 LED Luminaires		Accessories - AC Power Input Cables	
PLFR1-03	PLFRESNEL1 LED Luminaire, 15-54 Degree Fresnel, Black, with Top Box (Interconnect) Assembly, SC C-Clamp, Safety Cable, and AC Input Cable*	PC1BE	PLFRESNEL1 Luminaire AC Power Input Cable (39 inches / 1 meter), Powercon without AC connector (bare end)
		PC1GP	PLFRESNEL1 Luminaire AC Power Input Cable (39 inches / 1 meter), Powercon with Stagepin Connector
		PC1GTL	PLFRESNEL1 Luminaire AC Power Input Cable (39 inches / 1 meter), Powercon with Twistlock Connector
		PC1GR	PLFRESNEL1 Luminaire AC Power Input Cable (39 inches / 1 meter), Powercon with Edison Connector
*This Luminaire utilizes a Neutrik powerCON Type A blue power inlet and ships with a 39 inch powerCON power input tail. If a factory-installed AC connector is required, for an additional charge, at time of ordering specify AC input connector (GR - Edison / GP - Grounded Stagepin / GTL - Twistlock).		Accessories - AC Interconnect Cables	
Accessories - Barndoors		PC3PC	
20BDMF	Acclaim Fresnel Barndoor, 4-Way, Black	PLFRESNEL1 Luminaire PowerCon Male to PowerCon Female 2.5 Meter Cable for interconnection between units	
Accessories - Clamps		Accessories - Luminaire Software Uploader Cable	
SC	Selecon Molded Yoke Rated C-Clamp	PLUPLD	
MC	Mega Claw, Black Anodized	USB Luminaire Software Programming Kit (for updating or reloading luminaire software only) - includes USB to DMX Dongle, Uploader Program, and Carry Bag	
Accessories - Top Box Assembly			
PLICB	Spare Top Box (Interconnect) Assembly		

Philips Selecon

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New Zealand
Tel: + 64 9 481 0100
Fax: + 64 9 481 0101

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www.seleconlight.com

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PHILIPS
Selecon



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F21

THEATRICAL SPOTLIGHT ON TEAM LOGO

Manufacturer: SELECON

Fixture Line: PL

Fixture: FRAMING SPOTLIGHT (LED)

Catalog #: PLZS1-1834-03 + 15ACGH

Mounting: SURFACE

Fixture Wattage: 150w

Fixture Voltage: 120

Load Type: DMX

Lamp Spec: LED, 2000 lm





Product Specification Sheet

PLPROFILE1



The PLPROFILE1 is a variable beam profile with precise beam control and pattern projection from a high output beam. An innovative combination of LED source technology and precision optical design, the PLPROFILE1 delivers Philips Selecon's industry benchmark projection quality in a compact, robust luminaire.

The PLPROFILE1 uses the same proven LED engine as the Philips Selecon PL3, PL1, PLCYC1, PLFRESNEL1 and the Philips Vari-Lite VLX ranges meaning colour matching is simplified across the stage. The user interface is the same ensuring ease of use.

A key benefit of the PLPROFILE1 is that it is no longer necessary to change lamps or colour filter. Combining the superior control and light quality of a Philips Selecon Profile with seamless fading between colours allows designers a new level of creativity. Less power consumption and no dimmer circuits makes the PLPROFILE1 the obvious choice for pattern projection and stage washes.

Features

Single source RGBW LED chip delivers limitless colour mixing and variable colour temperature.

Available in 18-34 or 24-44 beam angles.

Interchangeable lens tray between medium and wide versions.

Slot provided for iris, M size pattern holder, or third party effect accessory.

Homogenised fully mixed light, no multiple colour shadows.

Quick selection of colour pre-sets.

No need for lamp replacement or filter maintenance.

No need for dimmers, connect directly to mains supply.

PowerCon In/Out Power connectors.

DMX512 Input/Output with 8 or 16-bit resolution.

Onboard LCD Menu for ease of addressing/setup.

Fitted with rated safety cable.

Electrical Specifications

Voltage: 100 – 240 VAC

Wattage: 150W Max. (RGBW @100%)

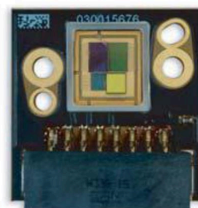
Current: 1.3A @115V / 0.65A @230V

Maximum 20A Thru Current

PLPROFILE1 LED Engine

The PLPROFILE1's powerful long-life LED engine offers exceptional performance and life.

The Philips Selecon three-year limited warranty includes our guarantee against premature failure of the LED engine.



Approvals



Designed to comply fully with CE standards.

Photometric Data

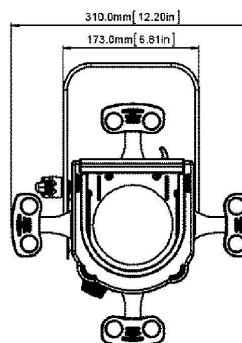
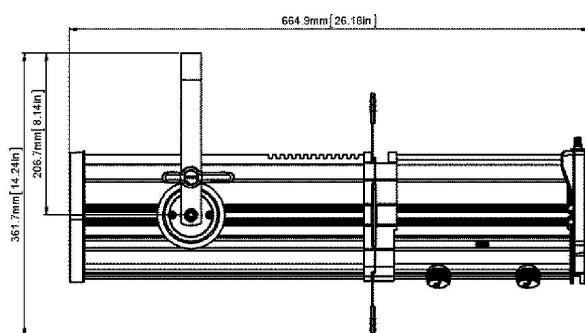
Beam Angle (Field Angle): 18° - 34°
 Nominal Chip Lumens : 2000 Lumens
 Maximum Chip Power: 120W
 Maximum Total Power: 150W

Colour	Chip Only Power (W)
WARM WHITE	64
COOL WHITE	81
DAY LIGHT	100
RED ONLY	23
GREEN ONLY	46
BLUE ONLY	26
WHITE ONLY	30

Physical Data

Weight: 8.5 kgs Provisional

Included: 1x M12 suspension bolt and instruction leaflet.

**Order Codes**

PLZS1-1834-03 18°-34° PLPROFILE-1 supplied with a single power cable and DMX in and DMX out cable, black.
PLZS1-1834-03P 18°-34° PLPROFILE-1 supplied with a single power cable, NZ/Australia plug and a DMX in and DMX out cable, black.
PLZS1-2444-03 24°-44° PLPROFILE-1 supplied with a single power cable and DMX in and DMX out cable, black.
PLZS1-2444-03P 24°-44° PLPROFILE-1 supplied with a single power cable, NZ/Australia plug and a DMX in and DMX out cable, black.

PLZS1-1834-03TBX 18°-34° PLPROFILE-1 supplied with a single power cable connected to a yoke mounted top box. The top box has Powercon in and out and DMX in and out sockets, black.
PLZS1-1834-03PTBXP 18°-34° PLPROFILE-1 supplied with a single power cable connected to a yoke mounted top box. The top box has Powercon in and out and DMX in and out sockets, NZ/Australia plug, black.
PLZS1-2444-03TBX 24°-44° PLPROFILE-1 supplied with a single power cable connected to a yoke mounted top box. The top box has Powercon in and out and DMX in and out sockets, black.
PLZS1-2444-03PTBXP 24°-44° PLPROFILE-1 supplied with a single power cable connected to a yoke mounted top box. The top box has Powercon in and out and DMX in and out sockets, NZ/Australia plug, black.
15ACGH Pattern holder for M size patterns - black handle.

Philips Selecon reserves the right to change the specifications without notice (November 2012).



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F21.1

DROP IN IRIS

Manufacturer: CITY THEATRICAL
Fixture Line: DROP-IN IRISES
Fixture: SELECON PACIFIC IRIS
Catalog #: 2187
Mounting: F21 FIXTURE

Lamp Spec: N/A

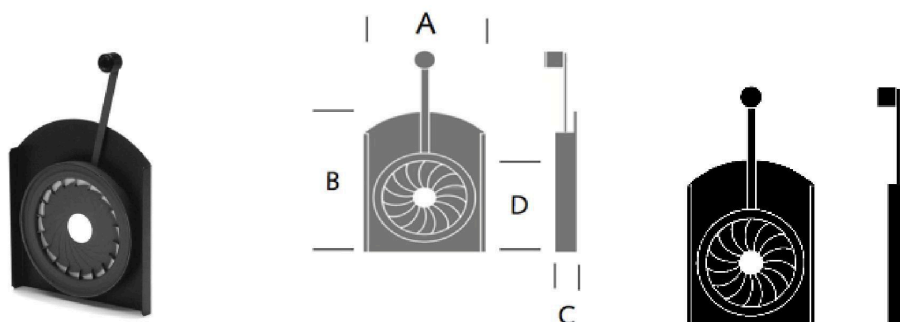




Drop-In Irises

A **Drop-In Iris** is the simple way of changing the beam size of a fixed focus ellipsoidal reflector spotlight. Just drop in an Iris, adjust the handle to change the beam size from fully open to nearly fully closed. We have Irises to fit a variety of popular lighting fixtures.

CTI provides a limited lifetime warranty on all of its manual drop in irises.



Features

Offers precise, smooth control of beam size

- Specially made leaves are tempered and heat resistant to over 1000°F (538°C)
- Fits easily into most standard theatrical ellipsoidals

Name	A	B	C	D	Cat. #
Source Four Iris	4 25/32"	5 7/16"	1/2"	3"	2180
Source Four Jr. Iris	3 1/8"	4 9/32"	1/2"	2 5/16"	2185
Strand SL Iris	4 3/16"	5 3/16"	1/2"	3"	2186
Selecon Pacific Iris	4 31/64"	5 63/64"	1/2"	3"	2187



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F22.A

PENDANT MOUNTED 2' UTILITY LIGHT

Manufacturer: PRUDENTIAL LTG

Fixture Line: SNAP LED(SATIN ACRYLIC)

Fixture: LINEAR LED

Catalog #: S1-LED3SO-02'-SAL-FINISH-277-MOUNTING-CEILING SYSTEM-ND

Mounting: PENDANT

Fixture Wattage: 18w

Fixture Voltage: 277

Load Type: Non-Dim

Lamp Spec: LED, 3000K, 1800 lm
9 W/LF

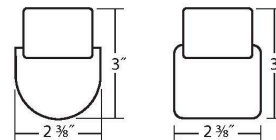
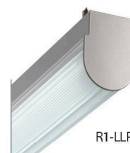




Snap™ (Satin Acrylic) | Linear, Surface

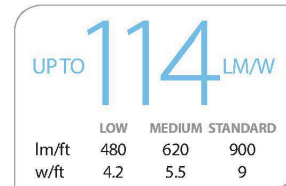
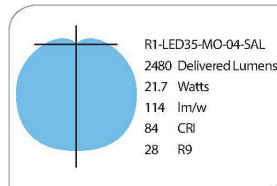


Satin Acrylic Lens (SAL)



Our basic lighting building block.

This perfectly scaled wrap simply snaps quickly, neatly and securely into a wide range of spaces. Industry-leading optical performance and integrated controls help make Snap one of our best-selling fixtures. Our LPA lens turns Snap into an outstanding Stack fixture ideal for warehouses, manufacturing, libraries and more. See HalfSnap for a smaller profile.



Lumen output may vary +/- 5%
4000K used for lm/ft estimates above
3500K -2% if, 3000K -4%, 2700K -6%
See LED Details PDF for more info

*R1-LED40-SAL is DLC QPL listed. For other DLC listings, please consult factory.

SERIES	LED COLOR	OUTPUT	NOMINAL LENGTH	SHIELDING	COLOR/ FINISH	VOLTAGE	MOUNTING	CEILING SYSTEMS	CONTROLS	OPTIONS
R1 Round	LED27 2700K	LO Low	2'	SAL Satin Acrylic	TMW Textured Matte White	UNV 120-277	SUR Surface or Wall Mount	X1 T-Bar	ND Non-dimming	EML Emergency Battery, Low 4' or longer (remote for < 4')
S1 Square	LED3 3000K	MO Medium	3'	LLP Linear Prismatic Acrylic for LED (Stack optics) R1 Only	YGW Gloss White Standard		CA48" Aircraft Cable Adjustable	X3 Hard Ceiling	DM10 0-10v 10% dimming Standard	EMH Emergency Battery, High 4' or longer (remote for < 4')
	LED35 3500K	SO Standard	4'		Y Premium Color		CA96" Aircraft Cable Adjustable	X6 Slot Grid	DM01 0-10v 1% dimming	QC Quick Connect Assemblies
	LED4 4000K	PROG Programmable light output (specify desired lm/ft or w/ft)	6'	NOTE: See other Snap LED spec sheet for White Acrylic Lens	CC Custom Color				STEP Step Dimming 100-50-Off	OCO Integrated Occupancy Sensor 4' or longer fixtures
			8'		GLV Galvanized w/ Black endplates				DML 1% Lutron Dimming	TRS Tamper Resistant Screws
			R Length in 1" increments						DMD 0.1% DALI Dimming	EBCP1G Electrical Box Cover, Single Gang
									DMG 1% DALI Dimming	EBCP2G Dual Gang
										PRUBIN Meticulous binning and labeling every LED board within a 2-step MacAdams ellipse



Snap™ (Satin Acrylic) | Linear, Surface



PRUDENTIAL LTG.

PRULITE.COM 213.746.0360

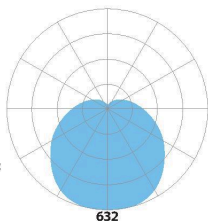
PHOTOMETRICS

Medium Output:

R1-LED35-MO-04-SAL
2480 Delivered Lumens
21.7 Watts
114 lm/w
4000 CCT
Light Labs Test
#L021508903

Zonal Lumen Summary:

0-90 = 84%
90-180 = 16%



632

Vertical Angle	0	25	45	65	90
0	632	632	632	632	632
5	633	632	631	629	627
15	620	617	610	602	591
25	584	577	565	548	531
35	534	534	502	476	449
45	479	463	431	393	357
55	421	398	357	309	263
65	355	330	282	225	172
75	285	258	208	148	88
85	215	191	144	83	22
90	186	164	120	62	1
95	169	150	110	57	0
105	142	127	94	49	0
115	119	107	80	42	0
125	100	89	67	35	0
135	81	72	52	27	0
145	62	55	37	20	0
155	43	35	26	14	0
165	24	19	15	10	0
175	9	9	9	8	0
180	0	0	0	0	0

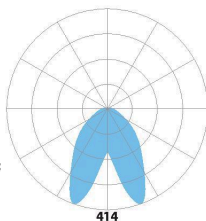
STACK OPTICS (R1 ONLY)

Low Output:

R1-LED4LO-04-LLP
2216 Delivered Lumens
19.1 Watts
116 lm/w
4000 CCT
Light Labs Test
#L121401601

Zonal Lumen Summary:

0-90 = 93%
90-180 = 7%



414

Vertical Angle	0	25	45	65	90
0	414	414	414	414	414
5	412	428	456	484	501
15	409	528	743	920	995
25	405	698	981	939	878
35	400	782	770	653	621
45	385	646	507	451	437
55	322	395	306	290	288
65	193	205	179	178	178
75	73	99	103	104	103
85	15	50	67	70	68
90	0	37	57	61	60
95	0	30	50	55	55
105	0	22	38	45	46
115	0	16	30	36	38
125	0	14	23	28	31
135	0	11	17	22	24
145	0	10	14	17	19
155	0	9	11	13	14
165	0	9	9	10	10
175	0	0	0	0	0
180	0	0	0	0	0

LUMEN MAINTENANCE

Designed to last with cool running mid-power LEDs projected to maintain 90% (L90) of their initial output for 100,000 hours (at HO), and L70 exceeding 150,000 hours.

LED SYSTEM

LED modules and drivers are field replaceable.

PROG. (optional)

Programmable light output. Specify desired lumens or watts per linear foot. Min: 2.5 w/ft, consult factory for requests above 12 w/ft.

BINNING

Standard binning (all Prudential LED boards) includes testing at the chip level and board integration to provide consistent color temperature within a 3-step MacAdam ellipse, with +/- 5% lumen output range and +/- .004 Duv.

PRUBIN™ (OPTIONAL)

Prudential Ltg's exclusive 'job binning' method that ensures color temperature consistency across all luminaires on a project. Meticulously testing and labeling EVERY LED BOARD to +/- 25 lumens, +/- 50k CCT and +/- .004 Duv — while also separating positive from negative — allows us to match color, hue and intensity throughout a project and provides a consistent color temperature within a 2-step MacAdam ellipse.

LABELS

ETL damp labeled and I.B.E.W. manufactured

ELECTRICAL

Must specify LED dimming controls. LED fixtures have constant current driver(s) with less than 20% THD when loaded to a minimum of 60%. Drivers sink a maximum of 6mA per driver. DM10 LED drivers are 0-10V dimmable and are compatible with most 0-10V wall slide dimmers and direct 0-10V analog signal dimmers. Max driver size 1.65" w x 1.25" h.

CONSTRUCTION

Housing Die-formed 22-gauge steel, >20% PC recycled, 100% recyclable

End Caps Spring-fastened aluminum, >25% PC recycled, 100% recyclable

Lens Single-piece (up to 8' lengths) extruded acrylic, 100% recyclable

MOUNTING Surface mounted to walls or ceilings or suspended by cable

WEIGHT 2 lbs/ft

WARRANTY Single-source, 5 year limited warranty covers standard components and construction





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F22.A



Snap™ (Satin Acrylic) | Linear, Surface



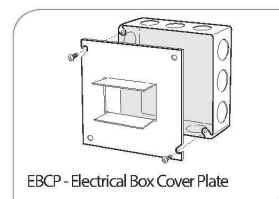
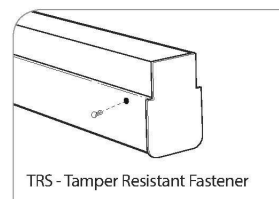
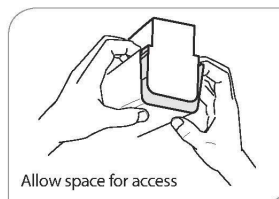
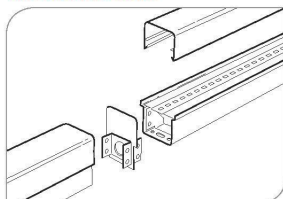
PRUDENTIAL LTG.

PRULITE.COM 213.746.0360

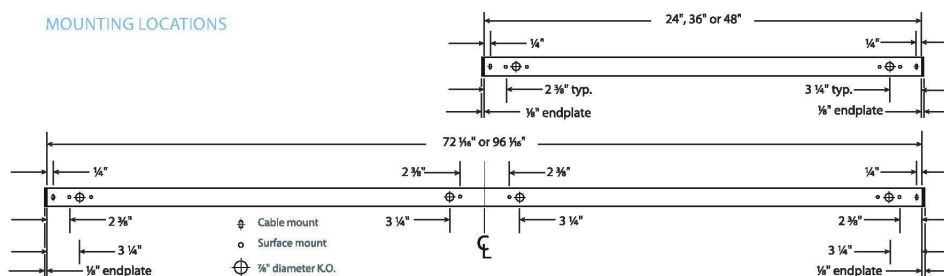


Client: CSUN Northridge, Architect: LPA Inc.

ADJOINING DETAIL



MOUNTING LOCATIONS



Prudential Ltg. reserves the right to change design specifications or materials without notice. Please visit www.prulite.com for most current data.
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Architectural Wrap

3

6-10-15



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F22.B

PENDANT MOUNTED 4' UTILITY LIGHT

Manufacturer: PRUDENTIAL LTG

Fixture Line: SNAP LED(SATIN ACRYLIC)

Fixture: LINEAR LED

Catalog #: S1-LED3SO-04'-SAL-FINISH-277-MOUNTING-CEILING SYSTEM-ND

Mounting: PENDANT

Fixture Wattage: 36w

Fixture Voltage: 277

Load Type: Non-Dim

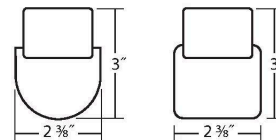
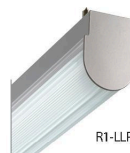
Lamp Spec: LED, 3000K, 1800 lm
9 W/LF



LED Snap™ (Satin Acrylic) | Linear, Surface

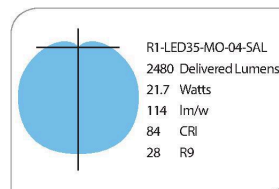


Satin Acrylic Lens
(SAL)



Our basic lighting building block.

This perfectly scaled wrap simply snaps quickly, neatly and securely into a wide range of spaces. Industry-leading optical performance and integrated controls help make Snap one of our best-selling fixtures. Our LPA lens turns Snap into an outstanding Stack fixture ideal for warehouses, manufacturing, libraries and more. See HalfSnap for a smaller profile.



Lumen output may vary +/- 5%
4000K used for lm/ft estimates above
3500K -2% if, 3000K -4%, 2700K -6%
See LED Details PDF for more info

*R1-LED40-SAL is DLC QPL listed. For other DLC listings, please consult factory.

SERIES	LED COLOR	OUTPUT	NOMINAL LENGTH	SHIELDING	COLOR/ FINISH	VOLTAGE	MOUNTING	CEILING SYSTEMS	CONTROLS	OPTIONS
R1 Round	LED27 2700K	LO Low	2'	SAL Satin Acrylic	TMW Textured Matte White	UNV 120-277	SUR Surface or Wall Mount	X1 T-Bar	ND Non-dimming	EML Emergency Battery, Low 4' or longer (remote for < 4')
S1 Square	LED3 3000K	MO Medium	3'	LLP Linear Prismatic Acrylic for LED (Stack optics)	YGW Gloss White Standard		CA48" Aircraft Cable Adjustable	X3 Hard Ceiling	DM10 0-10v 10% dimming Standard	EMH Emergency Battery, High 4' or longer (remote for < 4')
	LED35 3500K	SO Standard	4'	R1 Only	Y Premium Color		CA96" Aircraft Cable Adjustable	X6 Slot Grid	DM01 0-10v 1% dimming	QC Quick Connect Assemblies
	LED4 4000K	PROG Programmable light output (specify desired lm/ft or w/ft)	6'	NOTE: See other Snap LED spec sheet for White Acrylic Lens	CC Custom Color				STEP Step Dimming 100-50-Off	OCO Integrated Occupancy Sensor 4' or longer fixtures
			8'		GLV Galvanized w/ Black endplates				DML 1% Lutron Dimming	TRS Tamper Resistant Screws
			R Length in 1" increments						DMD 0.1% DALI Dimming	EBCP1G Electrical Box Cover, Single Gang
									DMG 1% DALI Dimming	EBCP2G Dual Gang
										PRUBIN Meticulous binning and labeling every LED board within a 2-step MacAdams ellipse



Snap™ (Satin Acrylic) | Linear, Surface



PRUDENTIAL LTG.

PRULITE.COM 213.746.0360

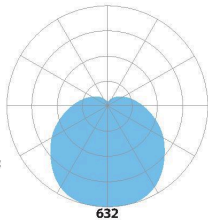
PHOTOMETRICS

Medium Output:

R1-LED35-MO-04-SAL
2480 Delivered Lumens
21.7 Watts
114 lm/w
4000 CCT
Light Labs Test
#L021508903

Zonal Lumen Summary:

0-90 = 84%
90-180 = 16%



632

Vertical Angle	0	25	45	65	90
0	632	632	632	632	632
5	633	632	631	629	627
15	620	617	610	602	591
25	584	577	565	548	531
35	534	534	502	476	449
45	479	463	431	393	357
55	421	398	357	309	263
65	355	330	282	225	172
75	285	258	208	148	88
85	215	191	144	83	22
90	186	164	120	62	1
95	169	150	110	57	0
105	142	127	94	49	0
115	119	107	80	42	0
125	100	89	67	35	0
135	81	72	52	27	0
145	62	55	37	20	0
155	43	35	26	14	0
165	24	19	15	10	0
175	9	9	9	8	0
180	0	0	0	0	0

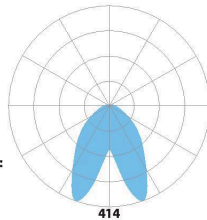
STACK OPTICS (R1 ONLY)

Low Output:

R1-LED4LO-04-LLP
2216 Delivered Lumens
19.1 Watts
116 lm/w
4000 CCT
Light Labs Test
#L121401601

Zonal Lumen Summary:

0-90 = 93%
90-180 = 7%



414

Vertical Angle	0	25	45	65	90
0	414	414	414	414	414
5	412	428	456	484	501
15	409	528	743	920	995
25	405	698	981	939	878
35	400	782	770	653	621
45	385	646	507	451	437
55	322	395	306	290	288
65	193	205	179	178	178
75	73	99	103	104	103
85	15	50	67	70	68
90	0	37	57	61	60
95	0	30	50	55	55
105	0	22	38	45	46
115	0	16	30	36	38
125	0	14	23	28	31
135	0	11	17	22	24
145	0	10	14	17	19
155	0	9	11	13	14
165	0	9	9	10	10
175	0	0	0	0	0
180	0	0	0	0	0

LUMEN MAINTENANCE

Designed to last with cool running mid-power LEDs projected to maintain 90% (L90) of their initial output for 100,000 hours (at HO), and L70 exceeding 150,000 hours.

LED SYSTEM

LED modules and drivers are field replaceable.

PROG. (optional)

Programmable light output. Specify desired lumens or watts per linear foot. Min: 2.5 w/ft, consult factory for requests above 12 w/ft.

BINNING

Standard binning (all Prudential LED boards) includes testing at the chip level and board integration to provide consistent color temperature within a 3-step MacAdam ellipse, with +/- 5% lumen output range and +/- .004 Duv.

PRUBIN™ (OPTIONAL)

Prudential Ltg's exclusive 'job binning' method that ensures color temperature consistency across all luminaires on a project. Meticulously testing and labeling EVERY LED BOARD to +/- 25 lumens, +/- 50k CCT and +/- .004 Duv — while also separating positive from negative — allows us to match color, hue and intensity throughout a project and provides a consistent color temperature within a 2-step MacAdam ellipse.

LABELS

ETL damp labeled and I.B.E.W. manufactured

ELECTRICAL

Must specify LED dimming controls. LED fixtures have constant current driver(s) with less than 20% THD when loaded to a minimum of 60%. Drivers sink a maximum of 6mA per driver. DM10 LED drivers are 0-10V dimmable and are compatible with most 0-10V wall slide dimmers and direct 0-10V analog signal dimmers. Max driver size 1.65" w x 1.25" h.

CONSTRUCTION

Housing Die-formed 22-gauge steel, >20% PC recycled, 100% recyclable

End Caps Spring-fastened aluminum, >25% PC recycled, 100% recyclable

Lens Single-piece (up to 8' lengths) extruded acrylic, 100% recyclable

MOUNTING Surface mounted to walls or ceilings or suspended by cable

WEIGHT 2 lbs/ft

WARRANTY Single-source, 5 year limited warranty covers standard components and construction





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F22.B



Snap™ (Satin Acrylic) | Linear, Surface



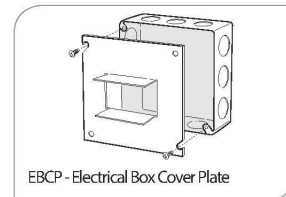
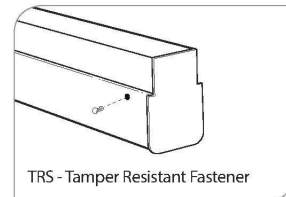
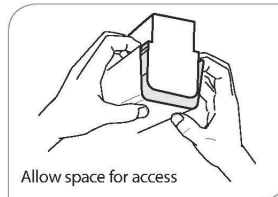
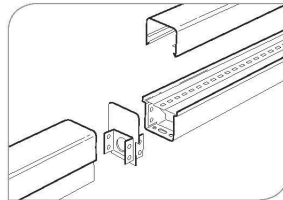
PRUDENTIAL LTG.

PRULITE.COM 213.746.0360

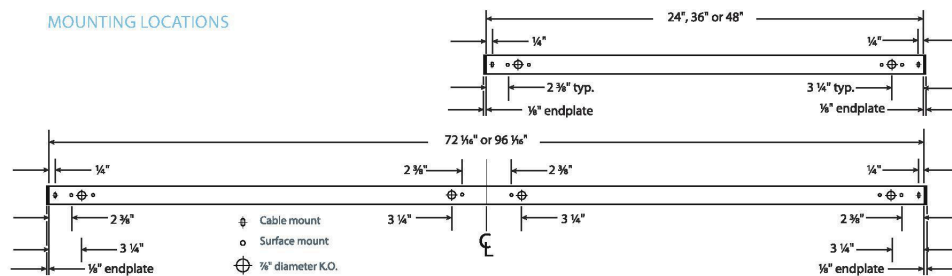


Client: CSUN Northridge, Architect: LPA Inc.

ADJOINING DETAIL



MOUNTING LOCATIONS



Prudential Ltg. reserves the right to change design specifications or materials without notice. Please visit www.prulite.com for most current data.
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Architectural Wrap

3

6-10-15



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F22.C

SURFACE MOUNTED 4' UTILITY LIGHT

Manufacturer: PRUDENTIAL LTG

Fixture Line: SNAP LED(SATIN ACRYLIC)

Fixture: LINEAR LED

Catalog #: S1-LED3SO-04'-SAL-FINISH-277-SUR-CEILING SYSTEM-ND

Mounting: SURFACE MOUNTED

Fixture Wattage: 36w

Fixture Voltage: 277

Load Type: Non-Dim

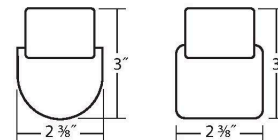
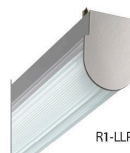
Lamp Spec: LED, 3000K, 1800 lm
9 W/LF



LED Snap™ (Satin Acrylic) | Linear, Surface

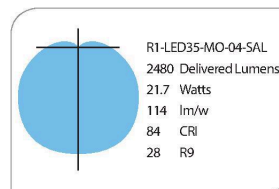


Satin Acrylic Lens (SAL)



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This perfectly scaled wrap simply snaps quickly, neatly and securely into a wide range of spaces. Industry-leading optical performance and integrated controls help make Snap one of our best-selling fixtures. Our LPA lens turns Snap into an outstanding Stack fixture ideal for warehouses, manufacturing, libraries and more. See HalfSnap for a smaller profile.



	UP TO 114 LM/W		
	LOW	MEDIUM	STANDARD
lm/ft	480	620	900
w/ft	4.2	5.5	9



Lumen output may vary +/- 5%
4000K used for lm/ft estimates above
3500K -2% if, 3000K -4%, 2700K -6%
See LED Details PDF for more info

*R1-LED40-SAL is DLC QPL listed. For other DLC listings, please consult factory.

SERIES	LED COLOR	OUTPUT	NOMINAL LENGTH	SHIELDING	COLOR/ FINISH	VOLTAGE	MOUNTING	CEILING SYSTEMS	CONTROLS	OPTIONS
R1 Round	LED27 2700K	LO Low	2'	SAL Satin Acrylic	TMW Textured Matte White	UNV 120-277	SUR Surface or Wall Mount	X1 T-Bar	ND Non-dimming	EML Emergency Battery, Low 4' or longer (remote for < 4')
S1 Square	LED3 3000K	MO Medium	3'	LLP Linear Prismatic Acrylic for LED (Stack optics) R1 Only	YGW Gloss White Standard		CA48" Aircraft Cable Adjustable	X3 Hard Ceiling	DM10 0-10v 10% dimming Standard	EMH Emergency Battery, High 4' or longer (remote for < 4')
	LED35 3500K	SO Standard	4'		Y Premium Color		CA96" Aircraft Cable Adjustable	X6 Slot Grid	DM01 0-10v 1% dimming	QC Quick Connect Assemblies
	LED4 4000K	PROG Programmable light output (specify desired lm/ft or w/ft)	6'	NOTE: See other Snap LED spec sheet for White Acrylic Lens	CC Custom Color				STEP Step Dimming 100-50-Off	OCO Integrated Occupancy Sensor 4' or longer fixtures
			8'		GLV Galvanized w/ Black endplates				DML 1% Lutron Dimming	TRS Tamper Resistant Screws
			R Length in 1" increments						DMD 0.1% DALI Dimming	EBCP1G Electrical Box Cover, Single Gang
									DMG 1% DALI Dimming	EBCP2G Dual Gang
										PRUBIN Meticulous binning and labeling every LED board within a 2-step MacAdams ellipse



Snap™ (Satin Acrylic) | Linear, Surface



PRUDENTIAL LTG.

PRULITE.COM 213.746.0360

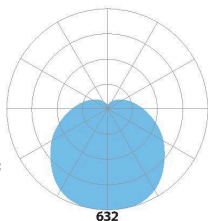
PHOTOMETRICS

Medium Output:

R1-LED35-MO-04-SAL
2480 Delivered Lumens
21.7 Watts
114 lm/w
4000 CCT
Light Labs Test
#L021508903

Zonal Lumen Summary:

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90-180 = 16%



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Vertical Angle	0	25	45	65	90
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75	285	258	208	148	88
85	215	191	144	83	22
90	186	164	120	62	1
95	169	150	110	57	0
105	142	127	94	49	0
115	119	107	80	42	0
125	100	89	67	35	0
135	81	72	52	27	0
145	62	55	37	20	0
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165	24	19	15	10	0
175	9	9	9	8	0
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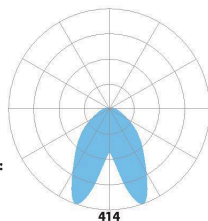
STACK OPTICS (R1 ONLY)

Low Output:

R1-LED4LO-04-LLP
2216 Delivered Lumens
19.1 Watts
116 lm/w
4000 CCT
Light Labs Test
#L121401601

Zonal Lumen Summary:

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90-180 = 7%



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15	409	528	743	920	995
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65	193	205	179	178	178
75	73	99	103	104	103
85	15	50	67	70	68
90	0	37	57	61	60
95	0	30	50	55	55
105	0	22	38	45	46
115	0	16	30	36	38
125	0	14	23	28	31
135	0	11	17	22	24
145	0	10	14	17	19
155	0	9	11	13	14
165	0	9	9	10	10
175	0	0	0	0	0
180	0	0	0	0	0

LUMEN MAINTENANCE

Designed to last with cool running mid-power LEDs projected to maintain 90% (L90) of their initial output for 100,000 hours (at HO), and L70 exceeding 150,000 hours.

LED SYSTEM

LED modules and drivers are field replaceable.

PROG. (optional)

Programmable light output. Specify desired lumens or watts per linear foot. Min: 2.5 w/ft, consult factory for requests above 12 w/ft.

BINNING

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LABELS

ETL damp labeled and I.B.E.W. manufactured

ELECTRICAL

Must specify LED dimming controls. LED fixtures have constant current driver(s) with less than 20% THD when loaded to a minimum of 60%. Drivers sink a maximum of 6mA per driver. DM10 LED drivers are 0-10V dimmable and are compatible with most 0-10V wall slide dimmers and direct 0-10V analog signal dimmers. Max driver size 1.65" w x 1.25" h.

CONSTRUCTION

Housing Die-formed 22-gauge steel, >20% PC recycled, 100% recyclable

End Caps Spring-fastened aluminum, >25% PC recycled, 100% recyclable

Lens Single-piece (up to 8' lengths) extruded acrylic, 100% recyclable

MOUNTING Surface mounted to walls or ceilings or suspended by cable

WEIGHT 2 lbs/ft

WARRANTY Single-source, 5 year limited warranty covers standard components and construction





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F22.C



Snap™ (Satin Acrylic) | Linear, Surface



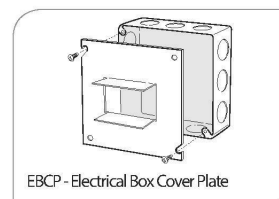
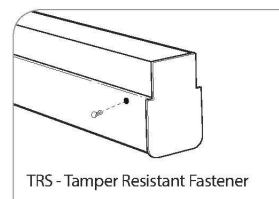
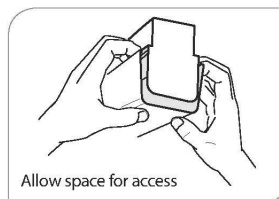
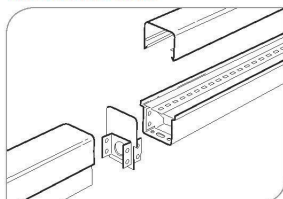
PRUDENTIAL LTG.

PRULITE.COM 213.746.0360

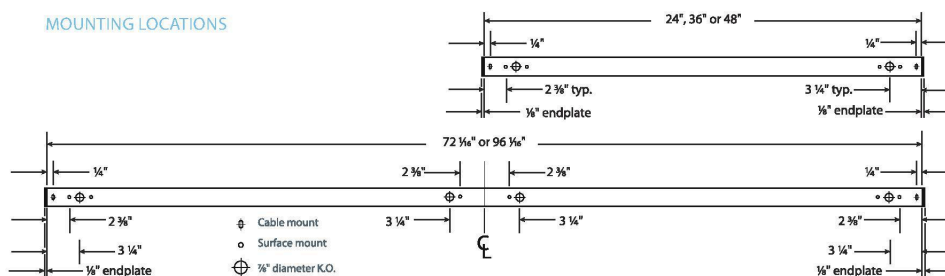


Client: CSUN Northridge, Architect: LPA Inc.

ADJOINING DETAIL



MOUNTING LOCATIONS



Prudential Ltg. reserves the right to change design specifications or materials without notice. Please visit www.prulite.com for most current data.
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Architectural Wrap

3

6-10-15



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F23.A

12' PENDANT MOUNT INDIRECT LINEAR LED

Manufacturer: AMERLUX

Fixture Line: LINEA

Fixture: 1.5 INDIRECT

Catalog #: LIN1.5-1-BAT-ASW10-10-LED-3000-FINISH-277-12-IND

Mounting: PENDANT

Fixture Wattage: 120w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED 3000K, 843 lm/ft
10 W/LF



LINEA® 1.5" INDIRECT

LINEAR INDIRECT LED

APPLICATIONS:

Commercial and retail indirect ambient lighting

CONSTRUCTION:

One piece extruded aluminum housing
Internal components are die-formed galvanized and cold-rolled steel
Individual housing lengths are 47 3/4" or 95 1/4"
Consult factory for continuous rows
High reflectance white finish. For other finishes, consult factory

OPTICS:

Custom engineered batwing uplight optic

Watts	Lumens
5w/ft	485 lm/ft
10w/ft	843 lm/ft

Die-formed high reflectance white enamel reflector

ELECTRICAL:


Electronic, multi-volt (120v-277v) constant current driver
0-10v dimming standard

This product complies with IEEE C62.41 for surge endurance up to 3KV. Amerlux® recommends using additional surge protection with this unit (supplied by others), surge damage is not covered by warranty.
Emergency circuit via remote inverter or auxiliary emergency power supply (by others)

MOUNTING:

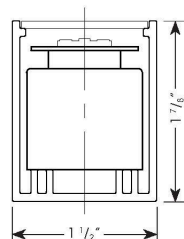
Aircraft cable suspension
Fixtures may be continuously row-mounted or configured in a pattern, consult factory

LABELING:

 pending
LIN1.5-I
LED

PROJECT:

TYPE:



ELECTRICAL

Electronic driver

Wattage per foot		4'		8'	
		System watts	Amps	System watts	Amps
5	120v	20	.17	40	.33
	277v	20	.07	40	.14
10	120v	40	.33	80	.67
	277v	40	.14	80	.29

ORDERING INFORMATION:

Model	Light Distr./ Shielding	Mounting	Wattage per Foot	Lamp Type	Color Temp	Finish	Voltage	Length	Configuration	Options
LIN1.5-I	BAT - batwing uplight	ASW10 - aircraft cable with straight feed, (18ga., 5 conduc- tor), white, 10'	5 10	LED	2700 3000 3500 4000	HW - high reflectance white _____ (other RAL)	120 277	4 8 (other to nearest ft)	IND - individual BOR - beginning of run MOR - middle of run EOR - end of run	HILUME-DH - Lutron Hi-lume® 3 wire, 1% dim HILUME-ECO - LutronHi-lume® EcoSystem, 1% dim

Example: LIN1.5-I-BAT-ASW10-10-LED-3500-HW-120-4-IND

Cat #:

Amerlux reserves the right to change details that do not affect overall function and performance.



LINEA® 1.5" INDIRECT

LINEAR INDIRECT LED



TYPE:

LIN1.5-I
LED



FIXTURE DATA: For 5w data, multiply by 0.57

Complete photometric data (ies format) available upon request.

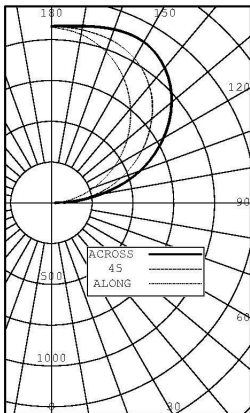
LINEA 1.5" INDIRECT, 10W (PER FT), 4' FIXTURE, 3500K

Lamp: 88 white LED's

Mounting: Pendant Indirect

LENS INDIRECT (BATWING)

LTL# 695282



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
180-150	890	23.15
180-140	1503	39.09
180-120	2813	73.18
180-90	3845	100.00
140-90	2342	60.91
120-90	1031	26.82
0-90	0	0.00
0-180	3845	100.00

Efficacy (lumens/watt) = 90.3

COEFFICIENTS OF UTILIZATION

RC	70	50	80	30	10
RW					
RGR					
0	0.95	0.95	0.95	0.95	0.95
1	0.87	0.83	0.79	0.76	0.76
2	0.79	0.72	0.66	0.61	0.61
3	0.72	0.63	0.57	0.51	0.51
4	0.65	0.56	0.48	0.43	0.43
5	0.60	0.48	0.42	0.36	0.36
6	0.55	0.44	0.36	0.31	0.31
7	0.50	0.39	0.32	0.27	0.27
8	0.46	0.35	0.28	0.23	0.23
9	0.43	0.32	0.25	0.20	0.20
10	0.40	0.29	0.22	0.18	0.18



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F23.C

35' PENDANT MOUNT INDIRECT LINEAR LED

Manufacturer: AMERLUX

Fixture Line: LINEA

Fixture: 1.5 INDIRECT

Catalog #: LIN1.5-1-BAT-ASW10-10-LED-3000-FINISH-277-35-IND

Mounting: PENDANT

Fixture Wattage: 350w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 843 lm/ft
10 W/LF



LINEA® 1.5" INDIRECT

LINEAR INDIRECT LED

APPLICATIONS:

Commercial and retail indirect ambient lighting

CONSTRUCTION:

One piece extruded aluminum housing
Internal components are die-formed galvanized and cold-rolled steel
Individual housing lengths are 47 3/4" or 95 1/4"
Consult factory for continuous rows
High reflectance white finish. For other finishes, consult factory

OPTICS:

Custom engineered batwing uplight optic

Watts	Lumens
5w/ft	485 lm/ft
10w/ft	843 lm/ft

Die-formed high reflectance white enamel reflector

ELECTRICAL:

Electronic, multi-volt (120v-277v) constant current driver
0-10v dimming standard

This product complies with IEEE C62.41 for surge endurance up to 3KV. Amerlux® recommends using additional surge protection with this unit (supplied by others), surge damage is not covered by warranty.
Emergency circuit via remote inverter or auxiliary emergency power supply (by others)

MOUNTING:

Aircraft cable suspension
Fixtures may be continuously row-mounted or configured in a pattern, consult factory

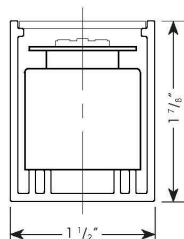
LABELING:

CS pending

LIN1.5-I
LED

PROJECT:

TYPE:



ELECTRICAL

Electronic driver

Wattage per foot		4'		8'	
		System watts	Amps	System watts	Amps
5	120v	20	.17	40	.33
	277v	20	.07	40	.14
10	120v	40	.33	80	.67
	277v	40	.14	80	.29

ORDERING INFORMATION:

Model	Light Distr./ Shielding	Mounting	Wattage per Foot	Lamp Type	Color Temp	Finish	Voltage	Length	Configuration	Options
LIN1.5-I	BAT - batwing uplight	ASW10 - aircraft cable with straight feed, (18ga., 5 conduc- tor), white, 10'	5 10	LED	2700 3000 3500 4000	HW - high reflectance white _____ (other RAL)	120 277	4 8 (other to nearest ft)	IND - individual BOR - beginning of run MOR - middle of run EOR - end of run	HILUME-DH - Lutron Hi-lume® 3 wire, 1% dim HILUME-ECO - LutronHi-lume® EcoSystem, 1% dim

Example: LIN1.5-I-BAT-ASW10-10-LED-3500-HW-120-4-IND

Cat #:

Amerlux reserves the right to change details that do not affect overall function and performance.



LINEA® 1.5" INDIRECT

LINEAR INDIRECT LED



TYPE:

LIN1.5-I
LED



FIXTURE DATA: For 5w data, multiply by 0.57

Complete photometric data (ies format) available upon request.

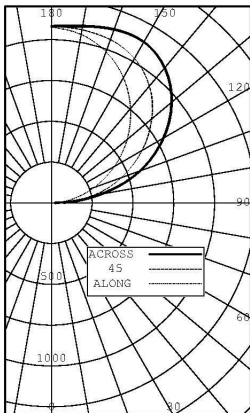
LINEA 1.5" INDIRECT, 10W (PER FT), 4' FIXTURE, 3500K

Lamp: 88 white LED's

Mounting: Pendant Indirect

LENS INDIRECT (BATWING)

LTL# 695282



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
180-150	890	23.15
180-140	1503	39.09
180-120	2813	73.18
180-90	3845	100.00
140-90	2342	60.91
120-90	1031	26.82
0-90	0	0.00
0-180	3845	100.00

Efficacy (lumens/watt) = 90.3

COEFFICIENTS OF UTILIZATION

RC	70	50	80	30	10
RW					
RGR					
0	0.95	0.95	0.95	0.95	0.95
1	0.87	0.83	0.79	0.76	0.76
2	0.79	0.72	0.66	0.61	0.61
3	0.72	0.63	0.57	0.51	0.51
4	0.65	0.56	0.48	0.43	0.43
5	0.60	0.48	0.42	0.36	0.36
6	0.55	0.44	0.36	0.31	0.31
7	0.50	0.39	0.32	0.27	0.27
8	0.46	0.35	0.28	0.23	0.23
9	0.43	0.32	0.25	0.20	0.20
10	0.40	0.29	0.22	0.18	0.18



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F23.D

18' PENDANT MOUNT INDIRECT LINEAR LED

Manufacturer: AMERLUX

Fixture Line: LINEA

Fixture: 1.5 INDIRECT

Catalog #: LIN1.5-1-BAT-ASW10-10-LED-3000-FINISH-277-18-IND

Mounting: PENDANT

Fixture Wattage: 180w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 843 lm/ft
10 W/LF



LINEA® 1.5" INDIRECT

LINEAR INDIRECT LED

APPLICATIONS:

Commercial and retail indirect ambient lighting

CONSTRUCTION:

One piece extruded aluminum housing
Internal components are die-formed galvanized and cold-rolled steel
Individual housing lengths are 47 3/4" or 95 1/4"
Consult factory for continuous rows
High reflectance white finish. For other finishes, consult factory

OPTICS:

Custom engineered batwing uplight optic

Watts	Lumens
5w/ft	485 lm/ft
10w/ft	843 lm/ft

Die-formed high reflectance white enamel reflector

ELECTRICAL:

Electronic, multi-volt (120v-277v) constant current driver 0-10v dimming standard

This product complies with IEEE C62.41 for surge endurance up to 3KV. Amerlux® recommends using additional surge protection with this unit (supplied by others), surge damage is not covered by warranty.
Emergency circuit via remote inverter or auxiliary emergency power supply (by others)

MOUNTING:

Aircraft cable suspension
Fixtures may be continuously row-mounted or configured in a pattern, consult factory

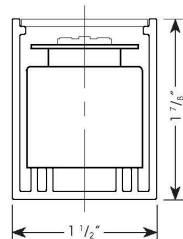
LABELING:

CS pending

LIN1.5-I
LED

PROJECT:

TYPE:



ELECTRICAL

Electronic driver

Wattage per foot		4'		8'	
		System watts	Amps	System watts	Amps
5	120v	20	.17	40	.33
	277v	20	.07	40	.14
10	120v	40	.33	80	.67
	277v	40	.14	80	.29

ORDERING INFORMATION:

Model	Light Distr./ Shielding	Mounting	Wattage per Foot	Lamp Type	Color Temp	Finish	Voltage	Length	Configuration	Options
LIN1.5-I	BAT - batwing uplight	ASW10 - aircraft cable with straight feed, (18ga., 5 conduc- tor), white, 10'	5 10	LED	2700 3000 3500 4000	HW - high reflectance white _____ (other RAL)	120 277	4 8 (other to nearest ft)	IND - individual BOR - beginning of run MOR - middle of run EOR - end of run	HILUME-DH - Lutron Hi-lume® 3 wire, 1% dim HILUME-ECO - LutronHi-lume® EcoSystem, 1% dim

Example: LIN1.5-I-BAT-ASW10-10-LED-3500-HW-120-4-IND

Cat #:

Amerlux reserves the right to change details that do not affect overall function and performance.



LINEA® 1.5" INDIRECT

LINEAR INDIRECT LED



TYPE:

LIN1.5-I
LED



FIXTURE DATA: For 5w data, multiply by 0.57

Complete photometric data (ies format) available upon request.

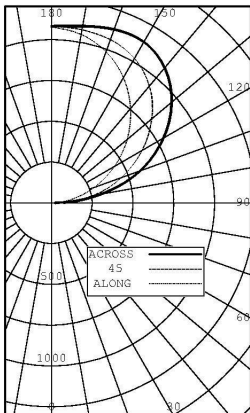
LINEA 1.5" INDIRECT, 10W (PER FT), 4' FIXTURE, 3500K

Lamp: 88 white LED's

Mounting: Pendant Indirect

LENS INDIRECT (BATWING)

LTL# 695282



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
180-150	890	23.15
180-140	1503	39.09
180-120	2813	73.18
180-90	3845	100.00
140-90	2342	60.91
120-90	1031	26.82
0-90	0	0.00
0-180	3845	100.00

Efficacy (lumens/watt) = 90.3

COEFFICIENTS OF UTILIZATION

RC	70	50	80	30	10
RW					
RGR					
0	0.95	0.95	0.95	0.95	0.95
1	0.87	0.83	0.79	0.76	0.76
2	0.79	0.72	0.66	0.61	0.61
3	0.72	0.63	0.57	0.51	0.51
4	0.65	0.56	0.48	0.43	0.43
5	0.60	0.48	0.42	0.36	0.36
6	0.55	0.44	0.36	0.31	0.31
7	0.50	0.39	0.32	0.27	0.27
8	0.46	0.35	0.28	0.23	0.23
9	0.43	0.32	0.25	0.20	0.20
10	0.40	0.29	0.22	0.18	0.18



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F24

10FT LINEAR SLOT (MED OUTPUT)

Manufacturer: LEDALITE

Fixture Line: TRUGROOVE (2200 lm/4ft)

Fixture: RECESSED LINEAR SLOT

Catalog #: 39C1-L-C-G-R-S-CEILING-10'-1-2-E

Mounting: RECESSED

Fixture Wattage: 70w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 550 lm/ft, 7 W/ft



Transforming
light into
an element of
design

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS
CRI >80 3000K, 2200 lm/4ft

Project:

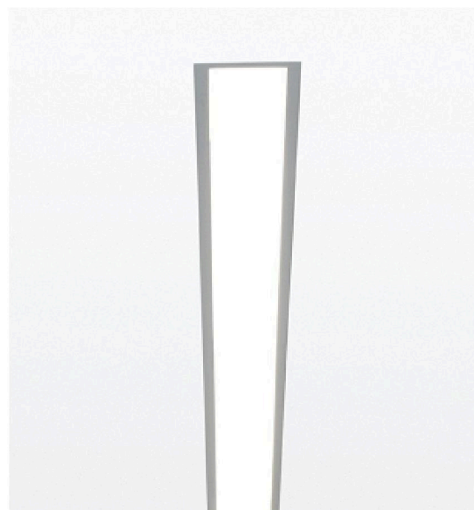
Spec Type:

Catalog No: 39C1LCGR

Qty

Line Notes:

TRUGROOVE CONTINUOUS Performance LED



Ordering guide

Product Type	Source	Color Temp *	Lumens *	Optics	Housing	Ceiling / Trim	Run Length	Wiring †	Voltage	Driver
39C1	L	C	G	R	S					
TruGroove Continuous Performance LED	L LED	A 4000K B 3500K C 3000K	E 3000 lm/4ft G 2200 lm/4ft K 1500 lm/4ft	Q Flush Meso Lens R Regressed Meso Lens	S Standard C Chicago Plenum	1 T-Grid 4 Drywall Trim 3 Drywall Trimless	Specify total housing run length in feet and inches	1 1 cct 3 1 cct w/ EM cct 5 1 cct w/ BP 7 1 cct w/ Dimming 8 1 cct w/ TW B 2 cct A/B	1 120V 2 277V 3 347V	E Philips Advance Other drivers available - consult factory

* Nominal values within a range. Consult ies file for exact color temp, lumens and up/down distribution † Consult website for complete list of standard wiring options

Mounting Hardware

Recessed

Mount Type

Consult separate mounting spec sheet for mount type options

Integrated Controls Please indicate with check mark.

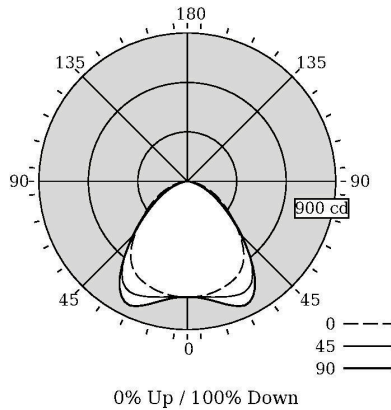
No Options Available



TRUGROOVE CONTINUOUS
Performance LED

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS

Photometry



Lighting facts®	
A Program of the U.S. DOE	
Light Output (Lumens)	1889
Watts	28.2
Lumens per Watt (Efficacy)	66
Color Accuracy	
Color Rendering Index (CRI)	82
Light Color	3084 (Bright White)
Correlated Color Temperature (CCT)	
Warm White	Bright White
2700K	3000K
4500K	6500K
All results are according to IESNA LM-79-08: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.	
Visit www.lightingfacts.com for the Label Reference Guide.	
Registration Number: F61Z-Y358Y8 (3/12/2014)	
Model Number: 39x1LCCR04	
Type: Luminaire - Linear	

Total Output	1889 lm
Efficacy	67.0 lm/W
CCT	3084K
CRI	82
R9	15
Distribution	0% Up / 100% Down
Spacing Criteria (0/90/180°)	1.33/1.48/NA
Meets RP-1-04 recommendations for VDT-Intensive spaces	

Values per 4ft unit

Fixture photometry has been conducted by an NVLAP accredited testing laboratory in accordance with IESNA LM-79-08

Lumen maintenance of the LEDs has been tested by the manufacturer in accordance with IESNA LM-80-08

IES files for this and other photometric options can be downloaded online at www.lightingproducts.philips.com

Candela Distribution

Vertical Angle	Horizontal Angle				Zonal Lumens
	0	22.5	45	67.5	90
0	702	702	702	702	702
5	702	702	705	707	707
15	689	699	727	755	762
25	661	685	756	812	830
35	594	625	691	712	714
45	446	460	473	468	463
55	295	295	282	270	263
65	179	171	155	143	137
75	87	78	66	55	49
85	20	13	11	11	11
90	0	0	0	0	0
95	0	0	0	0	0
105	0	0	0	0	0
115	0	0	0	0	0
125	0	0	0	0	0
135	0	0	0	0	0
145	0	0	0	0	0
155	0	0	0	0	0
165	0	0	0	0	0
175	0	0	0	0	0
180	0	0	0	0	0

Coefficients of Utilization (%)

RCR	Ceiling				Wall				70				50			
	70	50	30	10	70	50	30	10	70	50	30	10	70	50	30	10
0	119	119	119	119	116	116	116	111	111	111	111	111	111	111	111	111
1	110	106	102	99	108	104	100	100	97	94	94	94	97	94	94	94
2	101	94	88	83	99	92	87	89	84	80	80	80	89	84	80	80
3	93	84	76	70	91	82	75	79	73	69	69	69	81	73	69	69
4	86	75	67	61	84	74	66	71	65	59	59	59	73	65	59	59
5	79	67	59	53	77	66	58	64	57	52	52	52	66	57	52	52
6	73	61	53	47	72	60	52	58	51	46	46	46	60	51	46	46
7	68	55	47	41	67	55	47	53	46	41	41	41	55	46	41	41
8	64	51	43	37	62	50	42	49	42	37	37	37	51	42	37	37
9	60	47	39	34	58	46	39	45	38	33	33	33	47	38	33	33
10	56	43	35	30	55	43	35	42	35	30	30	30	43	35	30	30

Avg. Luminance (cd/m2)

Vertical Angle	Horizontal Angle		
	0	45	90
55	5651	5410	5035
65	4653	4035	3562
75	3680	2790	2077
85	2468	1410	1410

Electrical Specifications

Input Voltage	120V	277V
Input Power	28.2W	28.2W
Input Current	0.24A	0.12A
Power Factor	0.983	
Total Harm. Distortion	16.5%	
Tested values – contact technical support for rated values. Off-state power zero unless certain controls are specified.		

TRUGROOVE CONTINUOUS Performance LED

Modules & Runs

TruGroove Continuous LED nominal housing lengths

2ft, 3ft, 4ft, 8ft & incremental units

Standard units allow runs specifiable from 2ft in 1ft steps

Incremental units allow run lengths from 3ft in increments as small as 1/8in*.

**Note: Asymmetric and E-lumen package versions (3000lm/4ft) are only available in 2ft increments.*

Regress lens versions can only be installed in the ceiling (not in wall).

To ensure full cavity closure and simplify installation, there are both end-run units with one closed end and mid-run, open units.

Refer to module size details below for actual dimensions eg. trim, T-grid units fit within a standard 2' grid.

To specify corners and patterns, refer to TruGroove Corners data sheets.

Continuous Run Example

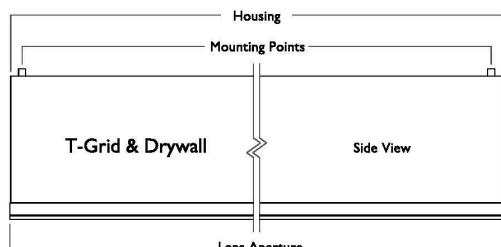
4 ft End	8 ft Mid	2 ft End
14 ft Run		

Housing lengths

Trim type	Run & housing	Lens aperture	Mounting points	Overall trim
T-Grid	Length L	L - 1"		L - 0.2"
Drywall Trimless	Length L	L	L - 0.8"	L + 3.3"
Drywall Trim	Length L	L	L - 0.8"	L + 1.5"

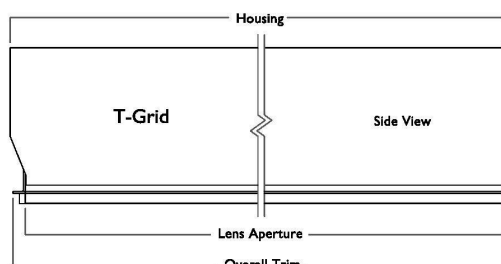
Module Dimensions

Continuous mid-run units

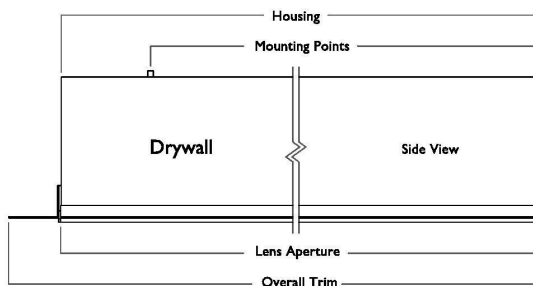


Nominal length	Housing & aperture	Mounting points
2ft	24.0"/610mm	23.2"/590mm
3ft	36.0"/914mm	35.2"/894mm
4ft	48.0"/1219mm	47.2"/1199mm
8ft	96.0"/2438mm	95.2"/2418mm
Increment	Length L	L - 0.8"

Continuous end-run units



Nominal length	Housing	Lens aperture	Trim - T-Grid
2ft	24.0"/610mm	23.5"/597mm	23.9"/606mm
3ft	36.0"/914mm	35.5"/902mm	35.9"/911mm
4ft	48.0"/1219mm	47.5"/1207mm	47.9"/1216mm
8ft	96.0"/2438mm	95.5"/2426mm	95.9"/2435mm
Increment	Length L	L - 0.5"	L - 0.1"

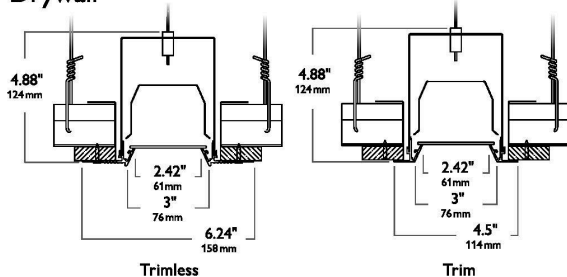


Nominal length	Housing	Mounting points	Trim - Drywall trimless	Trim - Drywall trim
2ft	24.0"/610mm	23.2"/590mm	25.7"/652mm	24.75"/629mm
3ft	36.0"/914mm	35.2"/894mm	37.7"/957mm	36.75"/933mm
4ft	48.0"/1219mm	47.2"/1199mm	49.7"/1262mm	48.75"/1238mm
8ft	96.0"/2438mm	95.2"/2418mm	97.7"/2481mm	96.75"/2457mm
Increment	Length L	L - 0.8"	L + 1.7"	L + 0.75"

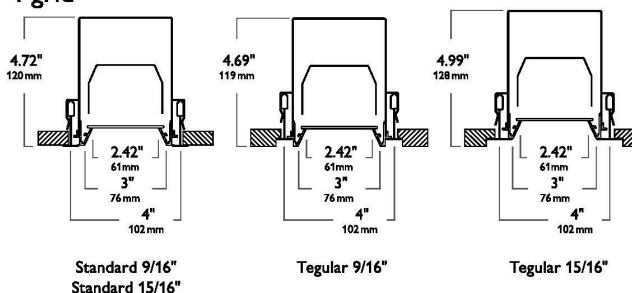
TRUGROOVE CONTINUOUS
Performance LED

Options and Details

Drywall



T-grid*



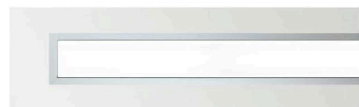
* Compatible with TechZone® 4" Ceiling Grid

Trim Views

Regressed lens



Drywall Trimless



Drywall Trim



T-grid

Housing

Die-formed 20 gauge cold-rolled steel. Multiple upper wire entrances available for continuous row mounting of fixtures.

Weight

Maximum 3.5lb/ft.

Optical System

Performance version: White light emitted from the LED sources is internally reflected and laterally redirected by a biconvex lens. Light is then reflected by Miro Silver panels and exits through the optical lens assembly. This assembly contains acrylic extrusion profiles to retain a layer of MesoOptics film, creating both an uninterrupted continuum of light and an optical batwing distribution.

Definition version: Light passes through a diffuse white acrylic lens to deliver a highly uniform luminous continuum.

Standard Driver

Dimming 0-10V, 5-100%. Output is Class 2 rated.

Lumen Maintenance

At an ambient temperature of 25°C in non-insulated contact applications, the LED lumen maintenance expectation for each lumen package is

K: L₈₀ (12k) 71,000 hrs

G: L₈₀ (12k) 68,000 hrs

E: L₈₀ (12k) 54,000 hrs

Mounting

Mounting brackets on housing sides support T-Grid installation. 1/16" diameter aircraft cable with self-locking, tamper-resistant, miniature cable gripper provides vertical adjustment for drywall. Aircraft cable, crimp and gripper independently tested to meet stringent safety requirements.

Compatible with 4" Armstrong TechZone ceiling grid.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Electrical

Factory pre-wired to section ends with quick-wire connectors.

Approvals

Certified to UL, CSA and IES standards. Insulation Contact (IC) rated.

Finish

Extruded aluminum trim and die-cast endplates coated with electrostatically applied and thermally cured polyester powder coat paint finish.

Environment

Rated for dry or damp locations in operating ambient temperatures 0-40°C (32-104°F). Certain luminaire components may be adversely affected by contaminants. Damage caused by sulfur, chlorine, petroleum based solutions or other contaminants are not covered under warranty.

Due to continuing product improvements, Philips Luminaire reserves the right to change the specifications without notice.



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Specifications are subject to change without notice.
www.philips.com/luminaires

TruGrvContPerfm_30K22Im_R.pdf 07.15 page 4 of 4

Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F24.A

36FT LINEAR SLOT (MED OUTPUT)

Manufacturer: LEDALITE

Fixture Line: TRUGROOVE (2200 lm/4ft)

Fixture: RECESSED LINEAR SLOT

Catalog #: 39C1-L-C-G-R-S-CEILING-36-1-2-E

Mounting: RECESSED

Fixture Wattage: 252w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 550 lm/ft, 7 W/ft



Transforming
light into
an element of
design

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS
CRI >80 3000K, 2200 lm/4ft

Project:

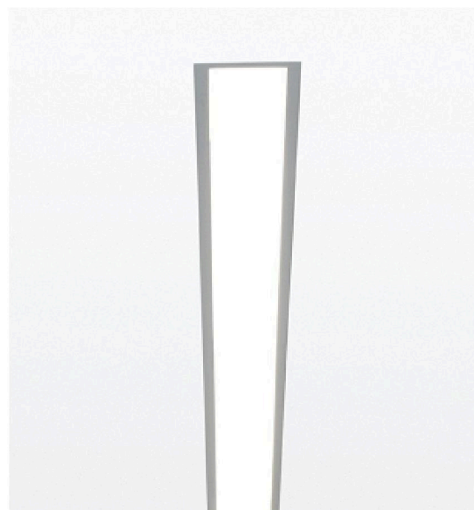
Spec Type:

Catalog No: 39C1LCGR

Qty

Line Notes:

TRUGROOVE CONTINUOUS Performance LED



Ordering guide

Product Type	Source	Color Temp *	Lumens *	Optics	Housing	Ceiling / Trim	Run Length	Wiring †	Voltage	Driver
39C1	L	C	G	R	S					
TruGroove Continuous Performance LED	L LED	A 4000K B 3500K C 3000K	E 3000 lm/4ft G 2200 lm/4ft K 1500 lm/4ft	Q Flush Meso Lens R Regressed Meso Lens	S Standard C Chicago Plenum	1 T-Grid 4 Drywall Trim 3 Drywall Trimless	Specify total housing run length in feet and inches	1 1 cct 3 1 cct w/ EM cct 5 1 cct w/ BP 7 1 cct w/ Dimming 8 1 cct w/ TW B 2 cct A/B	1 120V 2 277V 3 347V	E Philips Advance Other drivers available - consult factory

* Nominal values within a range. Consult ies file for exact color temp, lumens and up/down distribution † Consult website for complete list of standard wiring options

Mounting Hardware

Recessed

Mount Type

Consult separate mounting spec sheet for mount type options

Integrated Controls Please indicate with check mark.

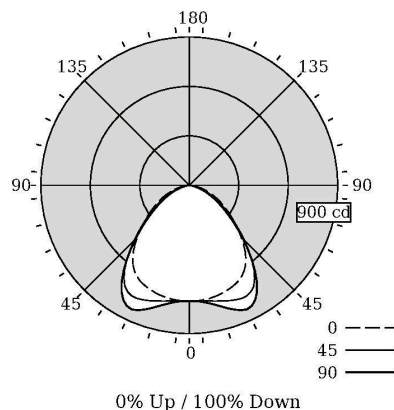
No Options Available



TRUGROOVE CONTINUOUS Performance LED

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS

Photometry



Lighting facts®	
A Program of the U.S. DOE	
Light Output (Lumens)	1889
Watts	28.2
Lumens per Watt (Efficacy)	66
Color Accuracy	82
Color Rendering Index (CRI)	
Light Color	3084 (Bright White)
Correlated Color Temperature (CCT)	
Warm White	Bright White
2700K	3000K
4500K	6500K

All results are according to IESNA LM-79-08: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: F61Z-Y35Y8 (3/12/2014)
Model Number: 39x1LGR0v04
Type: Luminaire - Linear

Total Output	1889 lm
Efficacy	67.0 lm/W
CCT	3084K
CRI	82
R9	15
Distribution	0% Up / 100% Down
Spacing Criteria (0/90/180°)	1.33/1.48/NA
Meets RP-1-04 recommendations for VDT-Intensive spaces	

Values per 4ft unit

Fixture photometry has been conducted by an NVLAP accredited testing laboratory in accordance with IESNA LM-79-08

Lumen maintenance of the LEDs has been tested by the manufacturer in accordance with IESNA LM-80-08

IES files for this and other photometric options can be downloaded online at www.lightingproducts.philips.com

Candela Distribution

Vertical Angle	0	22.5	45	67.5	90	Zonal Lumens
0	702	702	702	702	702	0
5	702	702	705	707	707	68
15	689	699	727	755	762	206
25	661	685	756	812	830	345
35	594	625	691	712	714	415
45	446	460	473	468	463	358
55	295	295	282	270	263	254
65	179	171	155	143	137	156
75	87	78	66	55	49	71
85	20	13	11	11	11	15
90	0	0	0	0	0	0
95	0	0	0	0	0	0
105	0	0	0	0	0	0
115	0	0	0	0	0	0
125	0	0	0	0	0	0
135	0	0	0	0	0	0
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	0

Coefficients of Utilization (%)

RCR	Ceiling: Wall:	70	50	30	10	70	50	30	50	30	10
0		119	119	119	119	116	116	116	111	111	111
1		110	106	102	99	108	104	100	100	97	94
2		101	94	88	83	99	92	87	89	84	80
3		93	84	76	70	91	82	75	79	73	69
4		86	75	67	61	84	74	66	71	65	59
5		79	67	59	53	77	66	58	64	57	52
6		73	61	53	47	72	60	52	58	51	46
7		68	55	47	41	67	55	47	53	46	41
8		64	51	43	37	62	50	42	49	42	37
9		60	47	39	34	58	46	39	45	38	33
10		56	43	35	30	55	43	35	42	35	30

Avg. Luminance (cd/m2)

Vertical Angle	0	45	90
55	5651	5410	5035
65	4653	4035	3562
75	3680	2790	2077
85	2468	1410	1410

Electrical Specifications

Input Voltage	120V	277V
Input Power	28.2W	28.2W
Input Current	0.24A	0.12A
Power Factor	0.983	
Total Harm. Distortion	16.5%	
Tested values – contact technical support for rated values. Off-state power zero unless certain controls are specified.		

TRUGROOVE CONTINUOUS Performance LED

Modules & Runs

TruGroove Continuous LED nominal housing lengths

2ft, 3ft, 4ft, 8ft & incremental units

Standard units allow runs specifiable from 2ft in 1ft steps

Incremental units allow run lengths from 3ft in increments as small as 1/8in*.

**Note: Asymmetric and E-lumen package versions (3000lm/4ft) are only available in 2ft increments.*

Regress lens versions can only be installed in the ceiling (not in wall).

To ensure full cavity closure and simplify installation, there are both end-run units with one closed end and mid-run, open units.

Refer to module size details below for actual dimensions eg. trim, T-grid units fit within a standard 2' grid.

To specify corners and patterns, refer to TruGroove Corners data sheets.

Continuous Run Example

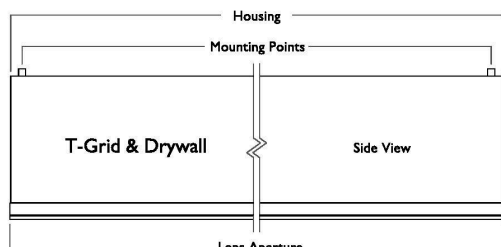
4 ft End	8 ft Mid	2 ft End
14 ft Run		

Housing lengths

Trim type	Run & housing	Lens aperture	Mounting points	Overall trim
T-Grid	Length L	L - 1"		L - 0.2"
Drywall Trimless	Length L	L	L - 0.8"	L + 3.3"
Drywall Trim	Length L	L	L - 0.8"	L + 1.5"

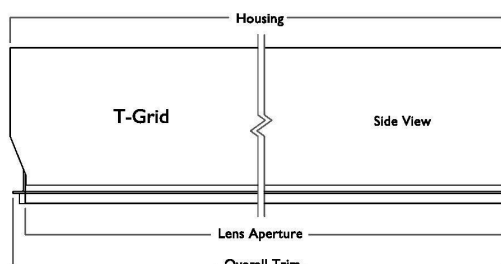
Module Dimensions

Continuous mid-run units

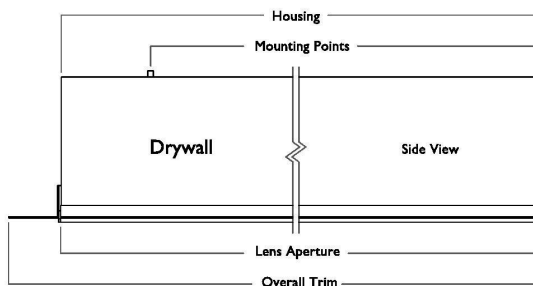


Nominal length	Housing & aperture	Mounting points
2ft	24.0"/610mm	23.2"/590mm
3ft	36.0"/914mm	35.2"/894mm
4ft	48.0"/1219mm	47.2"/1199mm
8ft	96.0"/2438mm	95.2"/2418mm
Increment	Length L	L - 0.8"

Continuous end-run units



Nominal length	Housing	Lens aperture	Trim - T-Grid
2ft	24.0"/610mm	23.5"/597mm	23.9"/606mm
3ft	36.0"/914mm	35.5"/902mm	35.9"/911mm
4ft	48.0"/1219mm	47.5"/1207mm	47.9"/1216mm
8ft	96.0"/2438mm	95.5"/2426mm	95.9"/2435mm
Increment	Length L	L - 0.5"	L - 0.1"

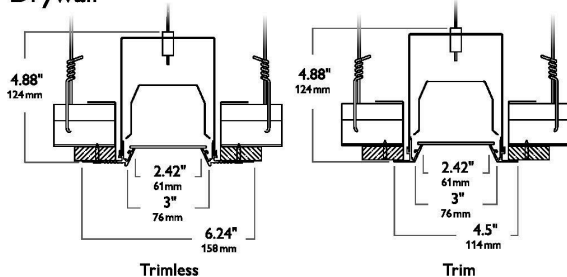


Nominal length	Housing	Mounting points	Trim - Drywall trimless	Trim - Drywall trim
2ft	24.0"/610mm	23.2"/590mm	25.7"/652mm	24.75"/629mm
3ft	36.0"/914mm	35.2"/894mm	37.7"/957mm	36.75"/933mm
4ft	48.0"/1219mm	47.2"/1199mm	49.7"/1262mm	48.75"/1238mm
8ft	96.0"/2438mm	95.2"/2418mm	97.7"/2481mm	96.75"/2457mm
Increment	Length L	L - 0.8"	L + 1.7"	L + 0.75"

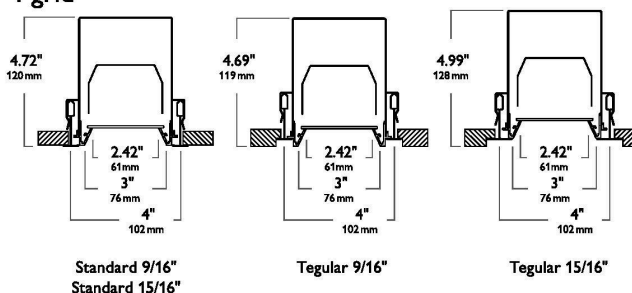
TRUGROOVE CONTINUOUS
Performance LED

Options and Details

Drywall



T-grid*



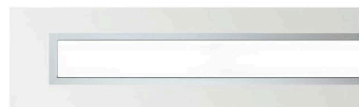
* Compatible with TechZone® 4" Ceiling Grid

Trim Views

Regressed lens



Drywall Trimless



Drywall Trim



T-grid

Housing

Die-formed 20 gauge cold-rolled steel. Multiple upper wire entrances available for continuous row mounting of fixtures.

Weight

Maximum 3.5lb/ft.

Optical System

Performance version: White light emitted from the LED sources is internally reflected and laterally redirected by a biconvex lens. Light is then reflected by Miro Silver panels and exits through the optical lens assembly. This assembly contains acrylic extrusion profiles to retain a layer of MesoOptics film, creating both an uninterrupted continuum of light and an optical batwing distribution.

Definition version: Light passes through a diffuse white acrylic lens to deliver a highly uniform luminous continuum.

Standard Driver

Dimming 0-10V, 5-100%. Output is Class 2 rated.

Lumen Maintenance

At an ambient temperature of 25°C in non-insulated contact applications, the LED lumen maintenance expectation for each lumen package is

K: L₈₀ (12k) 71,000 hrs

G: L₈₀ (12k) 68,000 hrs

E: L₈₀ (12k) 54,000 hrs

Mounting

Mounting brackets on housing sides support T-Grid installation. 1/16" diameter aircraft cable with self-locking, tamper-resistant, miniature cable gripper provides vertical adjustment for drywall. Aircraft cable, crimp and gripper independently tested to meet stringent safety requirements.

Compatible with 4" Armstrong TechZone ceiling grid.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Electrical

Factory pre-wired to section ends with quick-wire connectors.

Approvals

Certified to UL, CSA and IES standards. Insulation Contact (IC) rated.

Finish

Extruded aluminum trim and die-cast endplates coated with electrostatically applied and thermally cured polyester powder coat paint finish.

Environment

Rated for dry or damp locations in operating ambient temperatures 0-40°C (32-104°F). Certain luminaire components may be adversely affected by contaminants. Damage caused by sulfur, chlorine, petroleum based solutions or other contaminants are not covered under warranty.

Due to continuing product improvements, Philips Ledalite reserves the right to change the specifications without notice.



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Specifications are subject to change without notice.
www.philips.com/luminaires

TruGrvContPerfm_30K22Im_R.pdf 07.15 page 4 of 4

Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F24.B

24FT LINEAR SLOT (MED OUTPUT)

Manufacturer: LEDALITE

Fixture Line: TRUGROOVE (2200 lm/4ft)

Fixture: RECESSED LINEAR SLOT

Catalog #: 39C1-L-C-G-R-S-CEILING-36-1-2-E

Mounting: RECESSED

Fixture Wattage: 168w

Fixture Voltage: 277

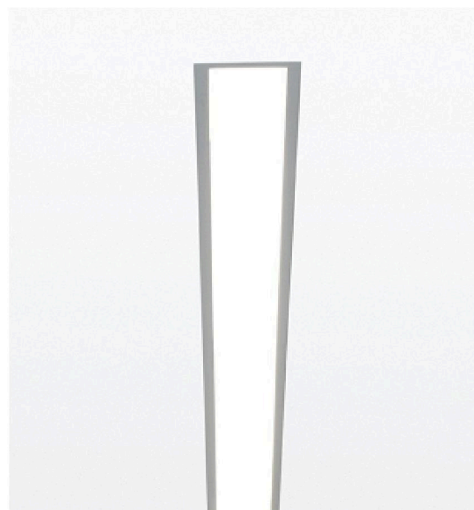
Load Type: 0-10V

Lamp Spec: LED, 3000K, 550 lm/ft, 7 W/ft



Transforming
light into
an element of
design

TRUGROOVE CONTINUOUS Performance LED



DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS
CRI >80 3000K, 2200 lm/4ft

Project:

Spec Type:

Catalog No: 39C1LCGR

Qty

Line Notes:

Ordering guide

Product Type	Source	Color Temp *	Lumens *	Optics	Housing	Ceiling / Trim	Run Length	Wiring †	Voltage	Driver
39C1	L	C	G	R	S					
TruGroove Continuous Performance LED	L LED	A 4000K B 3500K C 3000K	E 3000 lm/4ft G 2200 lm/4ft K 1500 lm/4ft	Q Flush Meso Lens R Regressed Meso Lens	S Standard C Chicago Plenum	1 T-Grid 4 Drywall Trim 3 Drywall Trimless	Specify total housing run length in feet and inches	1 1 cct 3 1 cct w/ EM cct 5 1 cct w/ BP 7 1 cct w/ Dimming 8 1 cct w/ TW B 2 cct A/B	1 120V 2 277V 3 347V	E Philips Advance Other drivers available - consult factory

* Nominal values within a range. Consult ies file for exact color temp, lumens and up/down distribution † Consult website for complete list of standard wiring options

Mounting Hardware

Recessed

Mount Type

Consult separate mounting spec sheet for mount type options

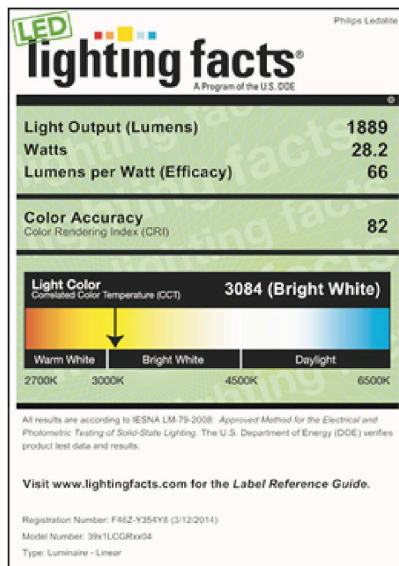
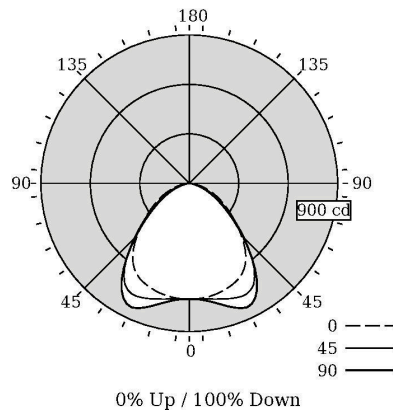
Integrated Controls Please indicate with check mark.

No Options Available

TRUGROOVE CONTINUOUS
Performance LED

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS

Photometry



Total Output	1889 lm
Efficacy	67.0 lm/W
CCT	3084K
CRI	82
R9	15
Distribution	0% Up / 100% Down
Spacing Criteria (0/90/180°)	1.33/1.48/NA
Meets RP-1-04 recommendations for VDT-Intensive spaces	

Values per 4ft unit

Fixture photometry has been conducted by an NVLAP accredited testing laboratory in accordance with IESNA LM-79-08

Lumen maintenance of the LEDs has been tested by the manufacturer in accordance with IESNA LM-80-08

IES files for this and other photometric options can be downloaded online at www.lightingproducts.philips.com

Candela Distribution

Vertical Angle	0	Horizontal Angle	22.5	45	67.5	90	Zonal Lumens
0	702	702	702	702	702	0	0
5	702	702	705	707	707	68	68
15	689	699	727	755	762	206	206
25	661	685	756	812	830	345	345
35	594	625	691	712	714	415	415
45	446	460	473	468	463	358	358
55	295	295	282	270	263	254	254
65	179	171	155	143	137	156	156
75	87	78	66	55	49	71	71
85	20	13	11	11	11	15	15
90	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0

Coefficients of Utilization (%)

RCR	Ceiling: Wall:	70	50	30	10	70	50	30	50	30	10
0		119	119	119	119	116	116	116	111	111	111
1		110	106	102	99	108	104	100	100	97	94
2		101	94	88	83	99	92	87	89	84	80
3		93	84	76	70	91	82	75	79	73	69
4		86	75	67	61	84	74	66	71	65	59
5		79	67	59	53	77	66	58	64	57	52
6		73	61	53	47	72	60	52	58	51	46
7		68	55	47	41	67	55	47	53	46	41
8		64	51	43	37	62	50	42	49	42	37
9		60	47	39	34	58	46	39	45	38	33
10		56	43	35	30	55	43	35	42	35	30

Avg. Luminance (cd/m2)

Vertical Angle	Horizontal Angle	0	45	90
55		5651	5410	5035
65		4653	4035	3562
75		3680	2790	2077
85		2468	1410	1410

Electrical Specifications

Input Voltage	120V	277V
Input Power	28.2W	28.2W
Input Current	0.24A	0.12A
Power Factor	0.983	
Total Harm. Distortion	16.5%	
Tested values – contact technical support for rated values. Off-state power zero unless certain controls are specified.		



TRUGROOVE CONTINUOUS Performance LED

Modules & Runs

TruGroove Continuous LED nominal housing lengths

2ft, 3ft, 4ft, 8ft & incremental units

Standard units allow runs specifiable from 2ft in 1ft steps

Incremental units allow run lengths from 3ft in increments as small as 1/8in*.

**Note: Asymmetric and E-lumen package versions (3000lm/4ft) are only available in 2ft increments.*

Regress lens versions can only be installed in the ceiling (not in wall).

To ensure full cavity closure and simplify installation, there are both end-run units with one closed end and mid-run, open units.

Refer to module size details below for actual dimensions eg. trim. T-grid units fit within a standard 2' grid.

To specify corners and patterns, refer to TruGroove Corners data sheets.

Continuous Run Example

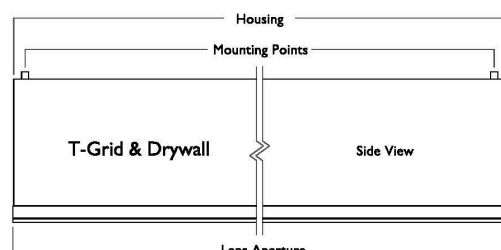
4 ft End	8 ft Mid	2 ft End
14 ft Run		

Housing lengths

Trim type	Run & housing	Lens aperture	Mounting points	Overall trim
T-Grid	Length L	L - 1"		L - 0.2"
Drywall Trimless	Length L	L	L - 0.8"	L + 3.3"
Drywall Trim	Length L	L	L - 0.8"	L + 1.5"

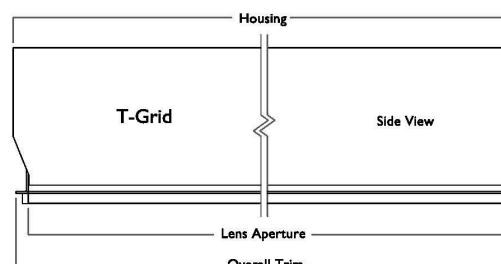
Module Dimensions

Continuous mid-run units

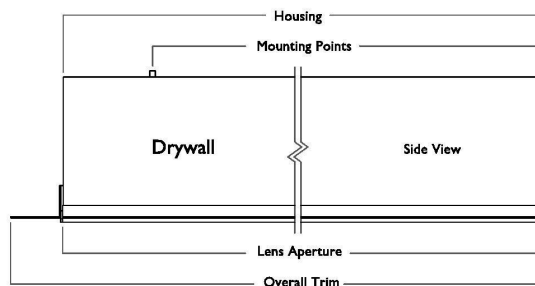


Nominal length	Housing & aperture	Mounting points
2ft	24.0"/610mm	23.2"/590mm
3ft	36.0"/914mm	35.2"/894mm
4ft	48.0"/1219mm	47.2"/1199mm
8ft	96.0"/2438mm	95.2"/2418mm
Increment	Length L	L - 0.8"

Continuous end-run units



Nominal length	Housing	Lens aperture	Trim - T-Grid
2ft	24.0"/610mm	23.5"/597mm	23.9"/606mm
3ft	36.0"/914mm	35.5"/902mm	35.9"/911mm
4ft	48.0"/1219mm	47.5"/1207mm	47.9"/1216mm
8ft	96.0"/2438mm	95.5"/2426mm	95.9"/2435mm
Increment	Length L	L - 0.5"	L - 0.1"

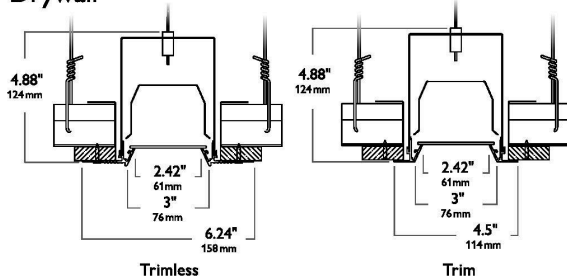


Nominal length	Housing	Mounting points	Trim - Drywall trimless	Trim - Drywall trim
2ft	24.0"/610mm	23.2"/590mm	25.7"/652mm	24.75"/629mm
3ft	36.0"/914mm	35.2"/894mm	37.7"/957mm	36.75"/933mm
4ft	48.0"/1219mm	47.2"/1199mm	49.7"/1262mm	48.75"/1238mm
8ft	96.0"/2438mm	95.2"/2418mm	97.7"/2481mm	96.75"/2457mm
Increment	Length L	L - 0.8"	L + 1.7"	L + 0.75"

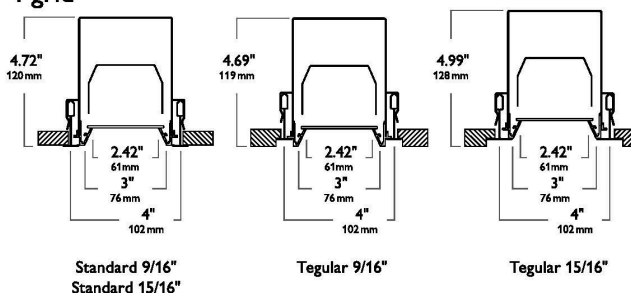
TRUGROOVE CONTINUOUS
Performance LED

Options and Details

Drywall



T-grid*



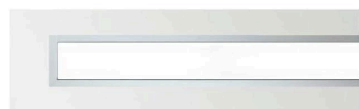
* Compatible with TechZone® 4" Ceiling Grid

Trim Views

Regressed lens



Drywall Trimless



Drywall Trim



T-grid

Housing

Die-formed 20 gauge cold-rolled steel. Multiple upper wire entrances available for continuous row mounting of fixtures.

Weight

Maximum 3.5lb/ft.

Optical System

Performance version: White light emitted from the LED sources is internally reflected and laterally redirected by a biconvex lens. Light is then reflected by Miro Silver panels and exits through the optical lens assembly. This assembly contains acrylic extrusion profiles to retain a layer of MesoOptics film, creating both an uninterrupted continuum of light and an optical batwing distribution.

Definition version: Light passes through a diffuse white acrylic lens to deliver a highly uniform luminous continuum.

Standard Driver

Dimming 0-10V, 5-100%. Output is Class 2 rated.

Lumen Maintenance

At an ambient temperature of 25°C in non-insulated contact applications, the LED lumen maintenance expectation for each lumen package is

K: L₈₀ (12k) 71,000 hrs

G: L₈₀ (12k) 68,000 hrs

E: L₈₀ (12k) 54,000 hrs

Mounting

Mounting brackets on housing sides support T-Grid installation. 1/16" diameter aircraft cable with self-locking, tamper-resistant, miniature cable gripper provides vertical adjustment for drywall. Aircraft cable, crimp and gripper independently tested to meet stringent safety requirements.

Compatible with 4" Armstrong TechZone ceiling grid.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Electrical

Factory pre-wired to section ends with quick-wire connectors.

Approvals

Certified to UL, CSA and IES standards. Insulation Contact (IC) rated.

Finish

Extruded aluminum trim and die-cast endplates coated with electrostatically applied and thermally cured polyester powder coat paint finish.

Environment

Rated for dry or damp locations in operating ambient temperatures 0-40°C (32-104°F). Certain luminaire components may be adversely affected by contaminants. Damage caused by sulfur, chlorine, petroleum based solutions or other contaminants are not covered under warranty.

Due to continuing product improvements, Philips Ledalite reserves the right to change the specifications without notice.



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Specifications are subject to change without notice.
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TruGrvContPerfm_30K22Im_R.pdf 07.15 page 4 of 4

Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F24.C

2FT LINEAR SLOT (MED OUTPUT)

Manufacturer: LEDALITE

Fixture Line: TRUGROOVE (2200 lm/4ft)

Fixture: RECESSED LINEAR SLOT

Catalog #: 39C1-L-C-G-R-S-CEILING-2-1-2-E

Mounting: RECESSED

Fixture Wattage: 14w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 550 lm/ft, 7 W/ft



Transforming
light into
an element of
design

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS
CRI >80 3000K, 2200 lm/4ft

Project:

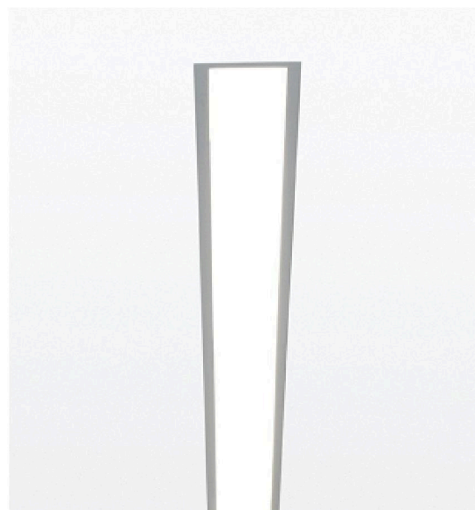
Spec Type:

Catalog No: 39C1LCGR

Qty

Line Notes:

TRUGROOVE CONTINUOUS Performance LED



Ordering guide

Product Type	Source	Color Temp *	Lumens *	Optics	Housing	Ceiling / Trim	Run Length	Wiring †	Voltage	Driver
39C1	L	C	G	R	S					
TruGroove Continuous Performance LED	L LED	A 4000K B 3500K C 3000K	E 3000 lm/4ft G 2200 lm/4ft K 1500 lm/4ft	Q Flush Meso Lens R Regressed Meso Lens	S Standard C Chicago Plenum	1 T-Grid 4 Drywall Trim 3 Drywall Trimless	Specify total housing run length in feet and inches	1 1 cct 3 1 cct w/ EM cct 5 1 cct w/ BP 7 1 cct w/ Dimming 8 1 cct w/ TW B 2 cct A/B	1 120V 2 277V 3 347V	E Philips Advance Other drivers available - consult factory

* Nominal values within a range. Consult ies file for exact color temp, lumens and up/down distribution † Consult website for complete list of standard wiring options

Mounting Hardware

Recessed

Mount Type

Consult separate mounting spec sheet for mount type options

Integrated Controls Please indicate with check mark.

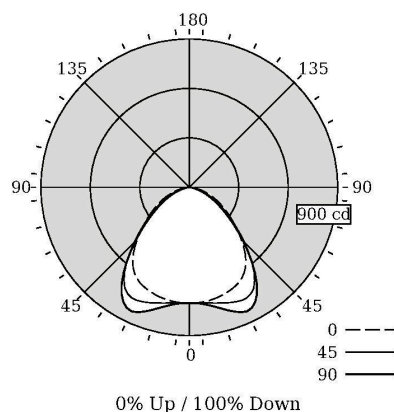
No Options Available



TRUGROOVE CONTINUOUS Performance LED

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS

Photometry



Lighting facts®	
A Program of the U.S. DOE	
Light Output (Lumens)	1889
Watts	28.2
Lumens per Watt (Efficacy)	66
Color Accuracy	82
Color Rendering Index (CRI)	
Light Color	3084 (Bright White)
Correlated Color Temperature (CCT)	
Warm White	Bright White
2700K	3000K
4500K	6500K
All results are according to IESNA LM-79-08: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.	
Visit www.lightingfacts.com for the Label Reference Guide.	
Registration Number: F61Z-Y358Y8 (3/12/2014)	
Model Number: 39x1LGR0x04	
Type: Luminaire - Linear	

Total Output	1889 lm
Efficacy	67.0 lm/W
CCT	3084K
CRI	82
R9	15
Distribution	0% Up / 100% Down
Spacing Criteria (0/90/180°)	1.33/1.48/NA
Meets RP-1-04 recommendations for VDT-Intensive spaces	

Values per 4ft unit

Fixture photometry has been conducted by an NVLAP accredited testing laboratory in accordance with IESNA LM-79-08

Lumen maintenance of the LEDs has been tested by the manufacturer in accordance with IESNA LM-80-08

IES files for this and other photometric options can be downloaded online at www.lightingproducts.philips.com

Candela Distribution

Vertical Angle	0	22.5	45	67.5	90	Zonal Lumens
0	702	702	702	702	702	0
5	702	702	705	707	707	68
15	689	699	727	755	762	206
25	661	685	756	812	830	345
35	594	625	691	712	714	415
45	446	460	473	468	463	358
55	295	295	282	270	263	254
65	179	171	155	143	137	156
75	87	78	66	55	49	71
85	20	13	11	11	11	15
90	0	0	0	0	0	0
95	0	0	0	0	0	0
105	0	0	0	0	0	0
115	0	0	0	0	0	0
125	0	0	0	0	0	0
135	0	0	0	0	0	0
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	0

Coefficients of Utilization (%)

RCR	Ceiling: Wall:	70	50	30	10	70	50	30	50	30	10
0		119	119	119	119	116	116	116	111	111	111
1		110	106	102	99	108	104	100	100	97	94
2		101	94	88	83	99	92	87	89	84	80
3		93	84	76	70	91	82	75	79	73	69
4		86	75	67	61	84	74	66	71	65	59
5		79	67	59	53	77	66	58	64	57	52
6		73	61	53	47	72	60	52	58	51	46
7		68	55	47	41	67	55	47	53	46	41
8		64	51	43	37	62	50	42	49	42	37
9		60	47	39	34	58	46	39	45	38	33
10		56	43	35	30	55	43	35	42	35	30

Avg. Luminance (cd/m2)

Vertical Angle	0	45	90
55	5651	5410	5035
65	4653	4035	3562
75	3680	2790	2077
85	2468	1410	1410

Electrical Specifications

Input Voltage	120V	277V
Input Power	28.2W	28.2W
Input Current	0.24A	0.12A
Power Factor	0.983	
Total Harm. Distortion	16.5%	
Tested values – contact technical support for rated values. Off-state power zero unless certain controls are specified.		

TRUGROOVE CONTINUOUS Performance LED

Modules & Runs

TruGroove Continuous LED nominal housing lengths

2ft, 3ft, 4ft, 8ft & incremental units

Standard units allow runs specifiable from 2ft in 1ft steps

Incremental units allow run lengths from 3ft in increments as small as 1/8in*.

**Note: Asymmetric and E-lumen package versions (3000lm/4ft) are only available in 2ft increments.*

Regress lens versions can only be installed in the ceiling (not in wall).

To ensure full cavity closure and simplify installation, there are both end-run units with one closed end and mid-run, open units.

Refer to module size details below for actual dimensions eg. trim, T-grid units fit within a standard 2' grid.

To specify corners and patterns, refer to TruGroove Corners data sheets.

Continuous Run Example

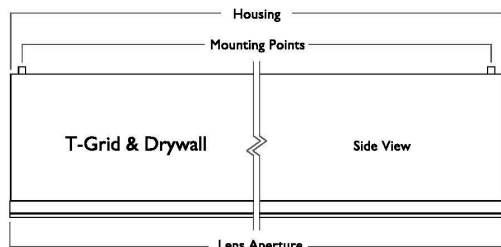
4 ft End	8 ft Mid	2 ft End
14 ft Run		

Housing lengths

Trim type	Run & housing	Lens aperture	Mounting points	Overall trim
T-Grid	Length L	L - 1"		L - 0.2"
Drywall Trimless	Length L	L	L - 0.8"	L + 3.3"
Drywall Trim	Length L	L	L - 0.8"	L + 1.5"

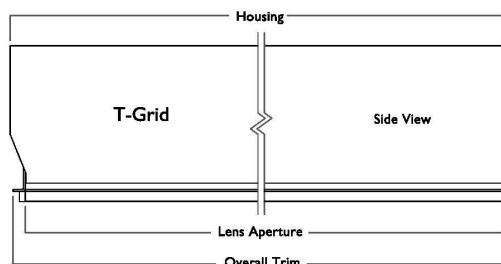
Module Dimensions

Continuous mid-run units

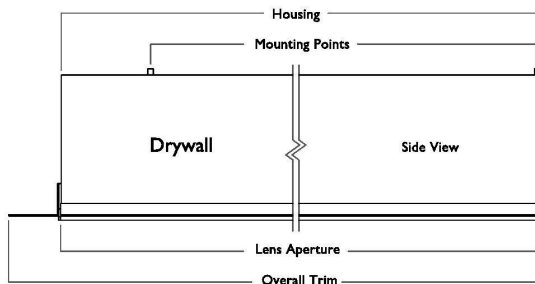


Nominal length	Housing & aperture	Mounting points
2ft	24.0"/610mm	23.2"/590mm
3ft	36.0"/914mm	35.2"/894mm
4ft	48.0"/1219mm	47.2"/1199mm
8ft	96.0"/2438mm	95.2"/2418mm
Increment	Length L	L - 0.8"

Continuous end-run units



Nominal length	Housing	Lens aperture	Trim - T-Grid
2ft	24.0"/610mm	23.5"/597mm	23.9"/606mm
3ft	36.0"/914mm	35.5"/902mm	35.9"/911mm
4ft	48.0"/1219mm	47.5"/1207mm	47.9"/1216mm
8ft	96.0"/2438mm	95.5"/2426mm	95.9"/2435mm
Increment	Length L	L - 0.5"	L - 0.1"

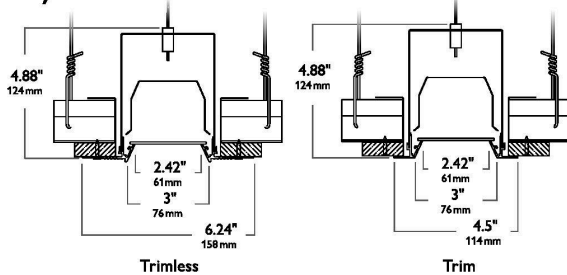


Nominal length	Housing	Mounting points	Trim - Drywall trimless	Trim - Drywall trim
2ft	24.0"/610mm	23.2"/590mm	25.7"/652mm	24.75"/629mm
3ft	36.0"/914mm	35.2"/894mm	37.7"/957mm	36.75"/933mm
4ft	48.0"/1219mm	47.2"/1199mm	49.7"/1262mm	48.75"/1238mm
8ft	96.0"/2438mm	95.2"/2418mm	97.7"/2481mm	96.75"/2457mm
Increment	Length L	L - 0.8"	L + 1.7"	L + 0.75"

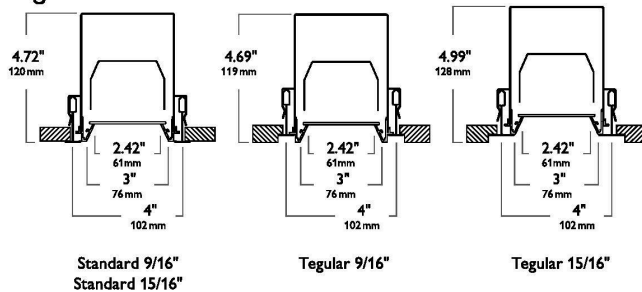
TRUGROOVE CONTINUOUS Performance LED

Options and Details

Drywall



T-grid*



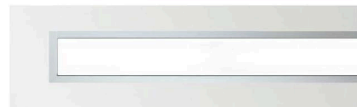
* Compatible with TechZone® 4" Ceiling Grid

Trim Views

Regressed lens



Drywall Trimless



Drywall Trim



T-grid

Housing

Die-formed 20 gauge cold-rolled steel. Multiple upper wire entrances available for continuous row mounting of fixtures.

Weight

Maximum 3.5lb/ft.

Optical System

Performance version: White light emitted from the LED sources is internally reflected and laterally redirected by a biconvex lens. Light is then reflected by Miro Silver panels and exits through the optical lens assembly. This assembly contains acrylic extrusion profiles to retain a layer of MesoOptics film, creating both an uninterrupted continuum of light and an optical batwing distribution.

Definition version: Light passes through a diffuse white acrylic lens to deliver a highly uniform luminous continuum.

Standard Driver

Dimming 0-10V, 5-100%. Output is Class 2 rated.

Lumen Maintenance

At an ambient temperature of 25°C in non-insulated contact applications, the LED lumen maintenance expectation for each lumen package is

K: L80 (12k) 71,000 hrs

G: L80 (12k) 68,000 hrs

E: L80 (12k) 54,000 hrs

Mounting

Mounting brackets on housing sides support T-Grid installation. 1/16" diameter aircraft cable with self-locking, tamper-resistant, miniature cable gripper provides vertical adjustment for drywall. Aircraft cable, crimp and gripper independently tested to meet stringent safety requirements. Compatible with 4" Armstrong TechZone ceiling grid.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Electrical

Factory pre-wired to section ends with quick-wire connectors.

Approvals

Certified to UL, CSA and IES standards. Insulation Contact (IC) rated.

Finish

Extruded aluminum trim and die-cast endplates coated with electrostatically applied and thermally cured polyester powder coat paint finish.

Environment

Rated for dry or damp locations in operating ambient temperatures 0-40°C (32-104°F). Certain luminaire components may be adversely affected by contaminants. Damage caused by sulfur, chlorine, petroleum based solutions or other contaminants are not covered under warranty.

Due to continuing product improvements, Philips Ledalite reserves the right to change the specifications without notice.



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www.philips.com/luminaires

TruGrvContPerfm_30K22Im_R.pdf 07.15 page 4 of 4

Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F24.D

4FT LINEAR SLOT (HIGH OUTPUT)

Manufacturer: LEDALITE

Fixture Line: TRUGROOVE (3000 lm/4ft)

Fixture: RECESSED LINEAR SLOT

Catalog #: 39C1-L-C-E-R-S-CEILING-4-1-2-E

Mounting: RECESSED

Fixture Wattage: 41.6w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 750 lm/ft, 10.4 W/ft



Transforming
light into
an element of
design

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS
CRI >80 3000K, 3000 lm/4ft

Project:

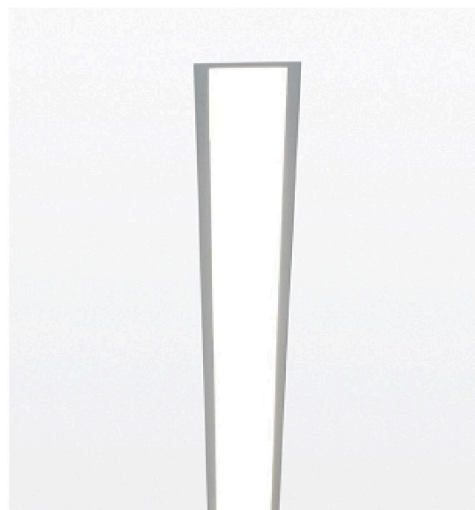
Spec Type:

Catalog No: 39C1LCER

Qty

Line Notes:

TRUGROOVE CONTINUOUS Performance LED



Ordering guide

Product Type	Source	Color Temp *	Lumens *	Optics	Housing	Ceiling / Trim	Run Length	Wiring †	Voltage	Driver
39C1	L	C	E	R	S					
TruGroove Continuous Performance LED	L LED	A 4000K B 3500K C 3000K	E 3000 lm/4ft G 2200 lm/4ft K 1500 lm/4ft	Q Flush Meso Lens R Regressed Meso Lens	S Standard C Chicago Plenum	1 T-Grid 4 Drywall Trim 3 Drywall Trimless	Specify total housing run length in feet and inches	1 1 cct 3 1 cct w/ EM cct 5 1 cct w/ BP 7 1 cct w/ Dimming 8 1 cct w/ TW B 2 cct A/B	1 120V 2 277V 3 347V	E Philips Advance Other drivers available - consult factory

* Nominal values within a range. Consult ies file for exact color temp, lumens and up/down distribution † Consult website for complete list of standard wiring options

Mounting Hardware

Recessed

Mount Type

Consult separate mounting spec sheet for mount type options

Integrated Controls Please indicate with check mark.

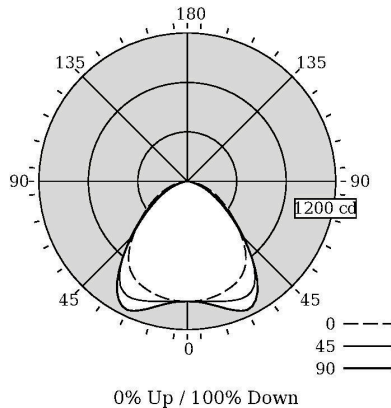
No Options Available



TRUGROOVE CONTINUOUS
Performance LED

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS

Photometry



Philips Ledlight

lighting facts®

A Program of the U.S. DOE

Light Output (Lumens)	2613
Watts	41.7
Lumens per Watt (Efficacy)	62

Color Accuracy	82
Color Rendering Index (CRI)	

Light Color		3085 (Bright White)	
Correlated Color Temperature (CCT)			
Warm White	Bright White	Daylight	
2700K	3000K	4500K	6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: F61Z-C581U0 (3/12/2014)

Model Number: 39x1LCERx04

Type: Luminaire - Linear

Total Output	2613 lm
Efficacy	62.7 lm/W
CCT	3085K
CRI	82
R9	15
Distribution	0% Up / 100% Down
Spacing Criteria (0/90/180°)	1.33/1.48/NA
Meets RP-1-04 recommendations for VDT-Normal spaces	

Values per 4ft unit

Fixture photometry has been conducted by an NVLAP accredited testing laboratory in accordance with IESNA LM-79-08

Lumen maintenance of the LEDs has been tested by the manufacturer in accordance with IESNA LM-80-08

IES files for this and other photometric options can be downloaded online at www.lightingproducts.philips.com

Candela Distribution

Vertical Angle	0	22.5	45	67.5	90	Zonal Lumens
0	971	971	971	971	971	0
5	971	971	975	979	979	93
15	953	967	1006	1044	1054	286
25	915	949	1046	1124	1149	477
35	822	864	955	984	988	574
45	617	636	654	648	640	496
55	408	408	391	373	364	351
65	248	236	215	197	190	216
75	120	108	91	75	68	99
85	27	17	15	15	15	21
90	0	0	0	0	0	0
95	0	0	0	0	0	0
105	0	0	0	0	0	0
115	0	0	0	0	0	0
125	0	0	0	0	0	0
135	0	0	0	0	0	0
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	0

Coefficients of Utilization (%)

RCR	Ceiling Wall	70	50	30	10	70	50	30	50	30	10
0	119	119	119	119	116	116	116	111	111	111	111
1	110	106	102	99	108	104	100	100	97	94	94
2	101	94	88	83	99	92	87	89	84	80	80
3	93	84	76	70	91	82	75	79	73	69	69
4	86	75	67	61	84	74	66	71	65	59	59
5	79	67	59	53	77	66	58	64	57	52	52
6	73	61	53	47	72	60	52	58	51	46	46
7	68	55	47	41	67	55	47	53	46	41	41
8	64	51	43	37	62	50	42	49	42	37	37
9	60	47	39	34	58	46	39	45	38	33	33
10	56	43	35	30	55	43	35	42	35	30	30

Avg. Luminance (cd/m2)

Vertical Angle	0	45	90
55	7818	7485	6966
65	6437	5582	4928
75	5091	3859	2874
85	3414	1951	1951

Electrical Specifications

Input Voltage	120V	277V
Input Power	41.7W	41.3W
Input Current	0.35A	0.16A
Power Factor	0.988	
Total Harm. Distortion	13.7%	
Tested values – contact technical support for rated values. Off-state power zero unless certain controls are specified.		

TRUGROOVE CONTINUOUS
Performance LED

Modules & Runs

TruGroove Continuous LED nominal housing lengths

2ft, 3ft, 4ft, 8ft & incremental units

Standard units allow runs specifiable from 2ft in 1ft steps

Incremental units allow run lengths from 3ft in increments as small as 1/8in*.

**Note: Asymmetric and E-lumen package versions (3000lm/4ft) are only available in 2ft increments.*

Regress lens versions can only be installed in the ceiling (not in wall).

To ensure full cavity closure and simplify installation, there are both end-run units with one closed end and mid-run, open units.

Refer to module size details below for actual dimensions eg. trim, T-grid units fit within a standard 2' grid.

To specify corners and patterns, refer to TruGroove Corners data sheets.

Continuous Run Example

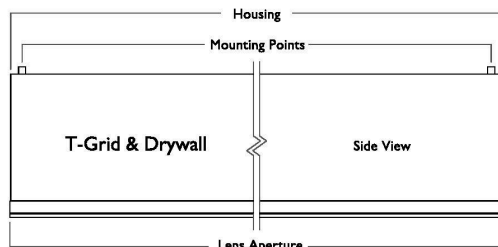
4 ft End	8 ft Mid	2 ft End
14 ft Run		

Housing lengths

Trim type	Run & housing	Lens aperture	Mounting points	Overall trim
T-Grid	Length L	L – 1"		L – 0.2"
Drywall Trimless	Length L	L	L – 0.8"	L + 3.3"
Drywall Trim	Length L	L	L – 0.8"	L + 1.5"

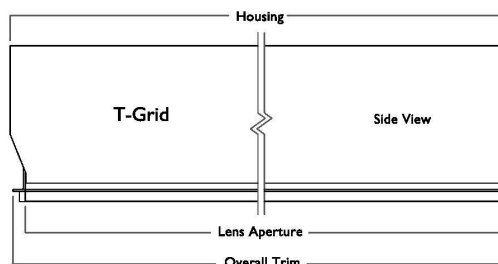
Module Dimensions

Continuous mid-run units

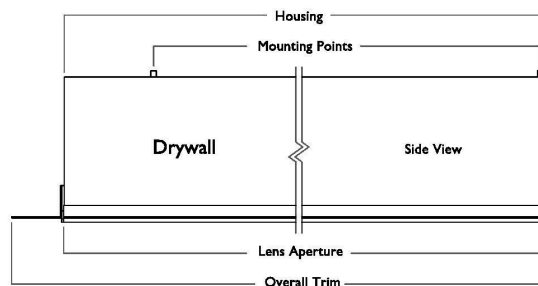


Nominal length	Housing & aperture	Mounting points
2ft	24.0"/610mm	23.2"/590mm
3ft	36.0"/914mm	35.2"/894mm
4ft	48.0"/1219mm	47.2"/1199mm
8ft	96.0"/2438mm	95.2"/2418mm
Increment	Length L	L – 0.8"

Continuous end-run units



Nominal length	Housing	Lens aperture	Trim – T-Grid
2ft	24.0"/610mm	23.5"/597mm	23.9"/606mm
3ft	36.0"/914mm	35.5"/902mm	35.9"/911mm
4ft	48.0"/1219mm	47.5"/1207mm	47.9"/1216mm
8ft	96.0"/2438mm	95.5"/2426mm	95.9"/2435mm
Increment	Length L	L – 0.5"	L – 0.1"

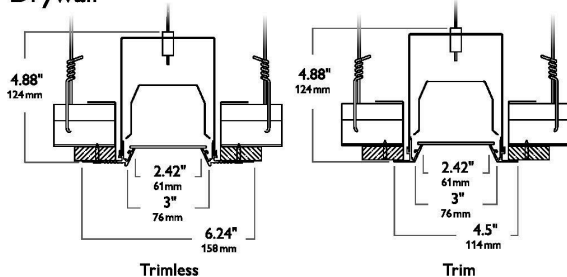


Nominal length	Housing	Mounting points	Trim – Drywall trimless	Trim – Drywall trim
2ft	24.0"/610mm	23.2"/590mm	25.7"/652mm	24.75"/629mm
3ft	36.0"/914mm	35.2"/894mm	37.7"/957mm	36.75"/933mm
4ft	48.0"/1219mm	47.2"/1199mm	49.7"/1262mm	48.75"/1238mm
8ft	96.0"/2438mm	95.2"/2418mm	97.7"/2481mm	96.75"/2457mm
Increment	Length L	L – 0.8"	L + 1.7"	L + 0.75"

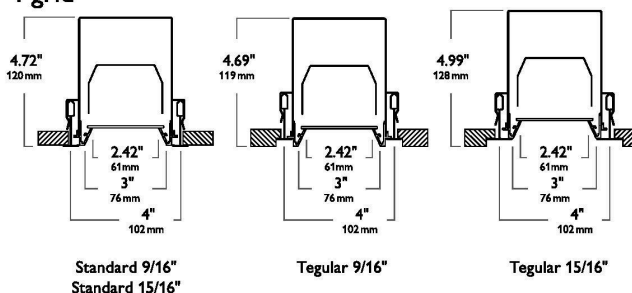
TRUGROOVE CONTINUOUS
Performance LED

Options and Details

Drywall



T-grid*



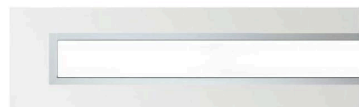
* Compatible with TechZone® 4" Ceiling Grid

Trim Views

Regressed lens



Drywall Trimless



Drywall Trim



T-grid

Housing

Die-formed 20 gauge cold-rolled steel. Multiple upper wire entrances available for continuous row mounting of fixtures.

Weight

Maximum 3.5lb/ft.

Optical System

Performance version: White light emitted from the LED sources is internally reflected and laterally redirected by a biconvex lens. Light is then reflected by Miro Silver panels and exits through the optical lens assembly. This assembly contains acrylic extrusion profiles to retain a layer of MesoOptics film, creating both an uninterrupted continuum of light and an optical batwing distribution.

Definition version: Light passes through a diffuse white acrylic lens to deliver a highly uniform luminous continuum.

Standard Driver

Dimming 0-10V, 5-100%. Output is Class 2 rated.

Lumen Maintenance

At an ambient temperature of 25°C in non-insulated contact applications, the LED lumen maintenance expectation for each lumen package is

K: L₈₀ (12k) 71,000 hrs

G: L₈₀ (12k) 68,000 hrs

E: L₈₀ (12k) 54,000 hrs

Mounting

Mounting brackets on housing sides support T-Grid installation. 1/16" diameter aircraft cable with self-locking, tamper-resistant, miniature cable gripper provides vertical adjustment for drywall. Aircraft cable, crimp and gripper independently tested to meet stringent safety requirements.

Compatible with 4" Armstrong TechZone ceiling grid.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Electrical

Factory pre-wired to section ends with quick-wire connectors.

Approvals

Certified to UL, CSA and IES standards. Insulation Contact (IC) rated.

Finish

Extruded aluminum trim and die-cast endplates coated with electrostatically applied and thermally cured polyester powder coat paint finish.

Environment

Rated for dry or damp locations in operating ambient temperatures 0-40°C (32-104°F). Certain luminaire components may be adversely affected by contaminants. Damage caused by sulfur, chlorine, petroleum based solutions or other contaminants are not covered under warranty.

Due to continuing product improvements, Philips Ledalite reserves the right to change the specifications without notice.



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TruGrvContPerfm_30K30lm_R.pdf 07.15 page 4 of 4

Philips Lighting
North America Corporation
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Phone: 855-486-2216



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F24.F

12FT LINEAR SLOT (MED OUTPUT)

Manufacturer: LEDALITE

Fixture Line: TRUGROOVE (2200 lm/4ft)

Fixture: RECESSED LINEAR SLOT

Catalog #: 39C1-L-C-G-R-S-CEILING-12-1-2-E

Mounting: RECESSED

Fixture Wattage: 84w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 550 lm/ft, 7 W/ft



Transforming
light into
an element of
design

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS
CRI >80 3000K, 2200 lm/4ft

Project:

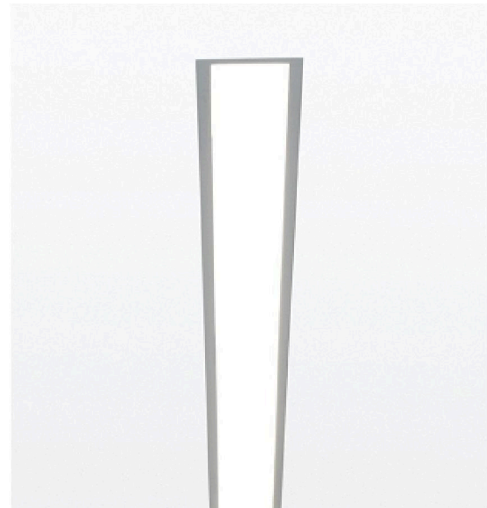
Spec Type:

Catalog No: 39C1LCGR

Qty

Line Notes:

TRUGROOVE CONTINUOUS Performance LED



Ordering guide

Product Type	Source	Color Temp *	Lumens *	Optics	Housing	Ceiling / Trim	Run Length	Wiring †	Voltage	Driver
39C1	L	C	G	R	S					
TruGroove Continuous Performance LED	L LED	A 4000K B 3500K C 3000K	E 3000 lm/4ft G 2200 lm/4ft K 1500 lm/4ft	Q Flush Meso Lens R Regressed Meso Lens	S Standard C Chicago Plenum	1 T-Grid 4 Drywall Trim 3 Drywall Trimless	Specify total housing run length in feet and inches	1 1 cct 3 1 cct w/ EM cct 5 1 cct w/ BP 7 1 cct w/ Dimming 8 1 cct w/ TW B 2 cct A/B	1 120V 2 277V 3 347V	E Philips Advance Other drivers available - consult factory

* Nominal values within a range. Consult ies file for exact color temp, lumens and up/down distribution † Consult website for complete list of standard wiring options

Mounting Hardware

Recessed

Mount Type

Consult separate mounting spec sheet for mount type options

Integrated Controls Please indicate with check mark.

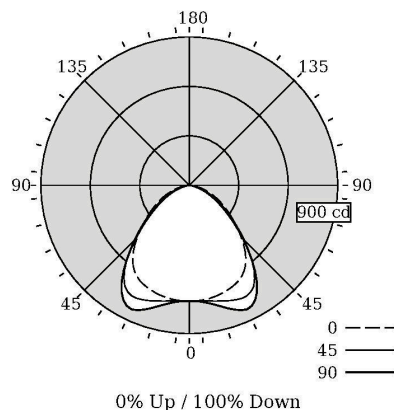
No Options Available



TRUGROOVE CONTINUOUS Performance LED

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS

Photometry



Lighting facts®	
A Program of the U.S. DOE	
Light Output (Lumens)	1889
Watts	28.2
Lumens per Watt (Efficacy)	66
Color Accuracy	82
Color Rendering Index (CRI)	
Light Color	3084 (Bright White)
Correlated Color Temperature (CCT)	
Warm White	Bright White
2700K	3000K
4500K	6500K

All results are according to IESNA LM-79-08: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: F61Z-Y35Y8 (3/12/2014)
Model Number: 39x1LGR04
Type: Luminaire - Linear

Total Output	1889 lm
Efficacy	67.0 lm/W
CCT	3084K
CRI	82
R9	15
Distribution	0% Up / 100% Down
Spacing Criteria (0/90/180°)	1.33/1.48/NA
Meets RP-1-04 recommendations for VDT-Intensive spaces	

Values per 4ft unit

Fixture photometry has been conducted by an NVLAP accredited testing laboratory in accordance with IESNA LM-79-08

Lumen maintenance of the LEDs has been tested by the manufacturer in accordance with IESNA LM-80-08

IES files for this and other photometric options can be downloaded online at www.lightingproducts.philips.com

Candela Distribution

Vertical Angle	Horizontal Angle				Zonal Lumens
	0	22.5	45	67.5	90
0	702	702	702	702	702
5	702	702	705	707	707
15	689	699	727	755	762
25	661	685	756	812	830
35	594	625	691	712	714
45	446	460	473	468	463
55	295	295	282	270	263
65	179	171	155	143	137
75	87	78	66	55	49
85	20	13	11	11	11
90	0	0	0	0	0
95	0	0	0	0	0
105	0	0	0	0	0
115	0	0	0	0	0
125	0	0	0	0	0
135	0	0	0	0	0
145	0	0	0	0	0
155	0	0	0	0	0
165	0	0	0	0	0
175	0	0	0	0	0
180	0	0	0	0	0

Coefficients of Utilization (%)

RCR	Ceiling				Wall				70				50			
	70	50	30	10	70	50	30	10	70	50	30	10	70	50	30	10
0	119	119	119	119	116	116	116	111	111	111	111	111	111	111	111	111
1	110	106	102	99	108	104	100	100	97	94	94	94	97	94	94	94
2	101	94	88	83	99	92	87	89	84	80	80	80	89	84	84	80
3	93	84	76	70	91	82	75	79	73	69	69	69	81	73	73	69
4	86	75	67	61	84	74	66	71	65	59	59	59	73	65	65	59
5	79	67	59	53	77	66	58	64	57	52	52	52	67	57	57	52
6	73	61	53	47	72	60	52	58	51	46	46	46	61	51	51	46
7	68	55	47	41	67	55	47	53	46	41	41	41	55	46	46	41
8	64	51	43	37	62	50	42	49	42	37	37	37	51	42	42	37
9	60	47	39	34	58	46	39	45	38	33	33	33	47	38	38	33
10	56	43	35	30	55	43	35	42	35	30	30	30	43	35	35	30

Avg. Luminance (cd/m2)

Vertical Angle	Horizontal Angle		
	0	45	90
55	5651	5410	5035
65	4653	4035	3562
75	3680	2790	2077
85	2468	1410	1410

Electrical Specifications

Input Voltage	120V	277V
Input Power	28.2W	28.2W
Input Current	0.24A	0.12A
Power Factor	0.983	
Total Harm. Distortion	16.5%	
Tested values – contact technical support for rated values. Off-state power zero unless certain controls are specified.		

TRUGROOVE CONTINUOUS
Performance LED

Modules & Runs

TruGroove Continuous LED nominal housing lengths

2ft, 3ft, 4ft, 8ft & incremental units

Standard units allow runs specifiable from 2ft in 1ft steps

Incremental units allow run lengths from 3ft in increments as small as 1/8in*.

**Note: Asymmetric and E-lumen package versions (3000lm/4ft) are only available in 2ft increments.*

Regress lens versions can only be installed in the ceiling (not in wall).

To ensure full cavity closure and simplify installation, there are both end-run units with one closed end and mid-run, open units.

Refer to module size details below for actual dimensions eg. trim, T-grid units fit within a standard 2' grid.

To specify corners and patterns, refer to TruGroove Corners data sheets.

Continuous Run Example

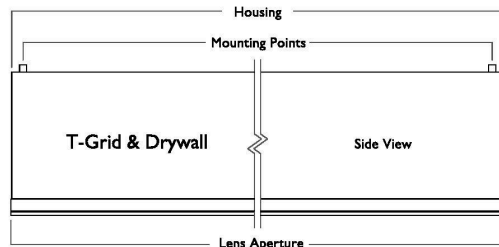
4 ft End	8 ft Mid	2 ft End
14 ft Run		

Housing lengths

Trim type	Run & housing	Lens aperture	Mounting points	Overall trim
T-Grid	Length L	L – 1"		L – 0.2"
Drywall Trimless	Length L	L	L – 0.8"	L + 3.3"
Drywall Trim	Length L	L	L – 0.8"	L + 1.5"

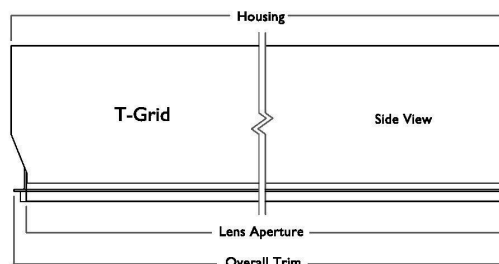
Module Dimensions

Continuous mid-run units

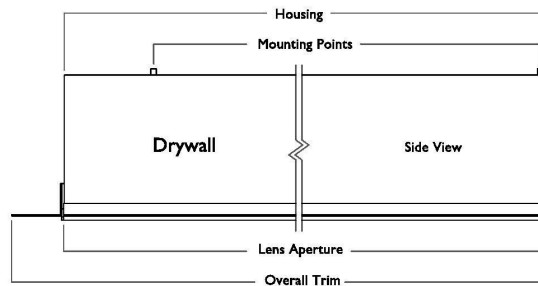


Nominal length	Housing & aperture	Mounting points
2ft	24.0"/610mm	23.2"/590mm
3ft	36.0"/914mm	35.2"/894mm
4ft	48.0"/1219mm	47.2"/1199mm
8ft	96.0"/2438mm	95.2"/2418mm
Increment	Length L	L – 0.8"

Continuous end-run units



Nominal length	Housing	Lens aperture	Trim – T-Grid
2ft	24.0"/610mm	23.5"/597mm	23.9"/606mm
3ft	36.0"/914mm	35.5"/902mm	35.9"/911mm
4ft	48.0"/1219mm	47.5"/1207mm	47.9"/1216mm
8ft	96.0"/2438mm	95.5"/2426mm	95.9"/2435mm
Increment	Length L	L – 0.5"	L – 0.1"

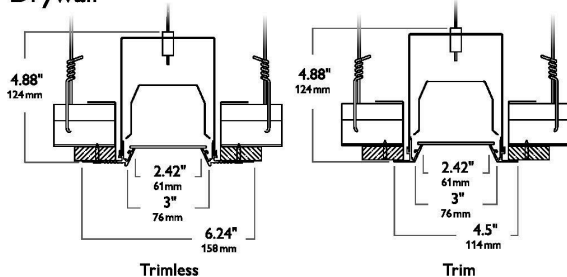


Nominal length	Housing	Mounting points	Trim – Drywall trimless	Trim – Drywall trim
2ft	24.0"/610mm	23.2"/590mm	25.7"/652mm	24.75"/629mm
3ft	36.0"/914mm	35.2"/894mm	37.7"/957mm	36.75"/933mm
4ft	48.0"/1219mm	47.2"/1199mm	49.7"/1262mm	48.75"/1238mm
8ft	96.0"/2438mm	95.2"/2418mm	97.7"/2481mm	96.75"/2457mm
Increment	Length L	L – 0.8"	L + 1.7"	L + 0.75"

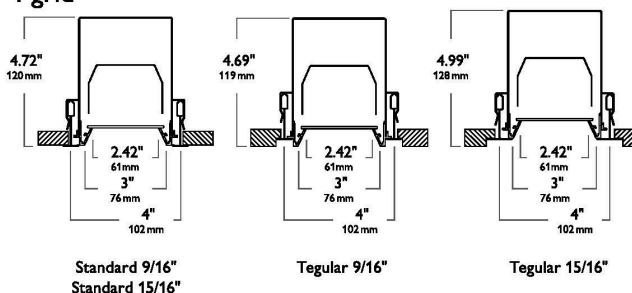
TRUGROOVE CONTINUOUS
Performance LED

Options and Details

Drywall



T-grid*



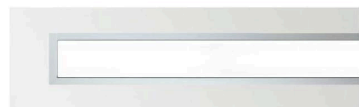
* Compatible with TechZone® 4" Ceiling Grid

Trim Views

Regressed lens



Drywall Trimless



Drywall Trim



T-grid

Housing

Die-formed 20 gauge cold-rolled steel. Multiple upper wire entrances available for continuous row mounting of fixtures.

Weight

Maximum 3.5lb/ft.

Optical System

Performance version: White light emitted from the LED sources is internally reflected and laterally redirected by a biconvex lens. Light is then reflected by Miro Silver panels and exits through the optical lens assembly. This assembly contains acrylic extrusion profiles to retain a layer of MesoOptics film, creating both an uninterrupted continuum of light and an optical batwing distribution.

Definition version: Light passes through a diffuse white acrylic lens to deliver a highly uniform luminous continuum.

Standard Driver

Dimming 0-10V, 5-100%. Output is Class 2 rated.

Lumen Maintenance

At an ambient temperature of 25°C in non-insulated contact applications, the LED lumen maintenance expectation for each lumen package is

K: L₈₀ (12k) 71,000 hrs

G: L₈₀ (12k) 68,000 hrs

E: L₈₀ (12k) 54,000 hrs

Mounting

Mounting brackets on housing sides support T-Grid installation. 1/16" diameter aircraft cable with self-locking, tamper-resistant, miniature cable gripper provides vertical adjustment for drywall. Aircraft cable, crimp and gripper independently tested to meet stringent safety requirements.

Compatible with 4" Armstrong TechZone ceiling grid.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Electrical

Factory pre-wired to section ends with quick-wire connectors.

Approvals

Certified to UL, CSA and IES standards. Insulation Contact (IC) rated.

Finish

Extruded aluminum trim and die-cast endplates coated with electrostatically applied and thermally cured polyester powder coat paint finish.

Environment

Rated for dry or damp locations in operating ambient temperatures 0-40°C (32-104°F). Certain luminaire components may be adversely affected by contaminants. Damage caused by sulfur, chlorine, petroleum based solutions or other contaminants are not covered under warranty.

Due to continuing product improvements, Philips Luminaire reserves the right to change the specifications without notice.



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Specifications are subject to change without notice.
www.philips.com/luminaires

TruGrvContPerfm_30K22Im_R.pdf 07.15 page 4 of 4

Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F24.G

6FT LINEAR SLOT (HIGH OUTPUT)

Manufacturer: LEDALITE

Fixture Line: TRUGROOVE (3000 lm/4ft)

Fixture: RECESSED LINEAR SLOT

Catalog #: 39C1-L-C-E-R-S-CEILING-6-1-2-E

Mounting: RECESSED

Fixture Wattage: 62.4w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 750 lm/ft, 10.4 W/ft



Transforming
light into
an element of
design

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS
CRI >80 3000K, 3000 lm/4ft

Project:

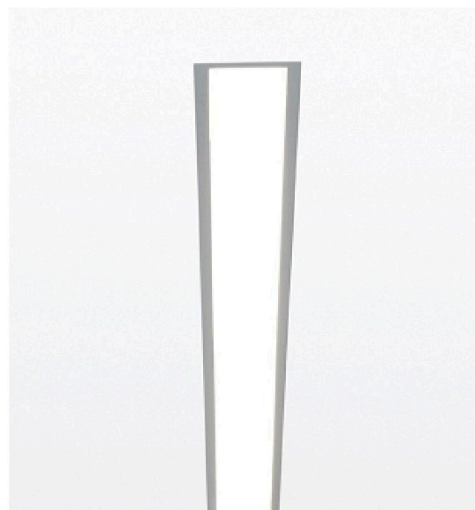
Spec Type:

Catalog No: 39C1LCER

Qty

Line Notes:

TRUGROOVE CONTINUOUS Performance LED



Ordering guide

Product Type	Source	Color Temp *	Lumens *	Optics	Housing	Ceiling / Trim	Run Length	Wiring †	Voltage	Driver
39C1	L	C	E	R	S					
TruGroove Continuous Performance LED	L LED	A 4000K B 3500K C 3000K	E 3000 lm/4ft G 2200 lm/4ft K 1500 lm/4ft	Q Flush Meso Lens R Regressed Meso Lens	S Standard C Chicago Plenum	1 T-Grid 4 Drywall Trim 3 Drywall Trimless	Specify total housing run length in feet and inches	1 1 cct 3 1 cct w/ EM cct 5 1 cct w/ BP 7 1 cct w/ Dimming 8 1 cct w/ TW B 2 cct A/B	1 120V 2 277V 3 347V	E Philips Advance Other drivers available - consult factory

* Nominal values within a range. Consult ies file for exact color temp, lumens and up/down distribution † Consult website for complete list of standard wiring options

Mounting Hardware

Recessed

Mount Type

Consult separate mounting spec sheet for mount type options

Integrated Controls Please indicate with check mark.

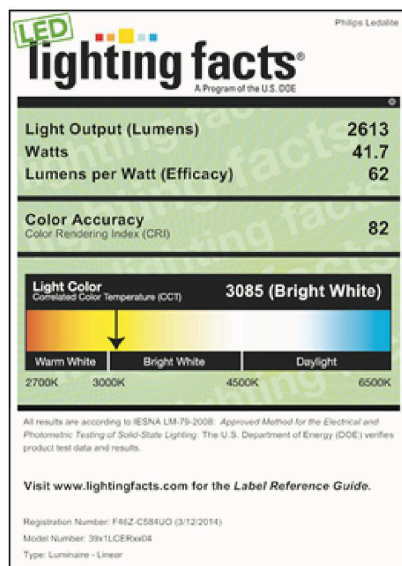
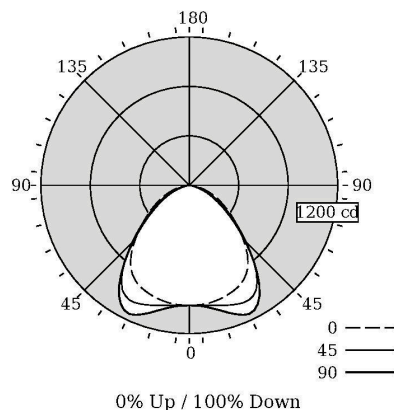
No Options Available



TRUGROOVE CONTINUOUS Performance LED

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS

Photometry



Total Output	2613 lm
Efficacy	62.7 lm/W
CCT	3085K
CRI	82
R9	15
Distribution	0% Up / 100% Down
Spacing Criteria (0/90/180°)	1.33/1.48/NA
Meets RP-1-04 recommendations for VDT-Normal spaces	

Values per 4ft unit

Fixture photometry has been conducted by an NVLAP accredited testing laboratory in accordance with IESNA LM-79-08

Lumen maintenance of the LEDs has been tested by the manufacturer in accordance with IESNA LM-80-08

IES files for this and other photometric options can be downloaded online at www.lightingproducts.philips.com

Candela Distribution

Vertical Angle	0	22.5	45	67.5	90	Zonal Lumens
0	971	971	971	971	971	0
5	971	971	975	979	979	93
15	953	967	1006	1044	1054	286
25	915	949	1046	1124	1149	477
35	822	864	955	984	988	574
45	617	636	654	648	640	496
55	408	408	391	373	364	351
65	248	236	215	197	190	216
75	120	108	91	75	68	99
85	27	17	15	15	15	21
90	0	0	0	0	0	0
95	0	0	0	0	0	0
105	0	0	0	0	0	0
115	0	0	0	0	0	0
125	0	0	0	0	0	0
135	0	0	0	0	0	0
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	0

Coefficients of Utilization (%)

RCR	Ceiling Wall	70	50	30	10	70	50	30	50	30	10
0		119	119	119	119	116	116	116	111	111	111
1		110	106	102	99	108	104	100	100	97	94
2		101	94	88	83	99	92	87	89	84	80
3		93	84	76	70	91	82	75	79	73	69
4		86	75	67	61	84	74	66	71	65	59
5		79	67	59	53	77	66	58	64	57	52
6		73	61	53	47	72	60	52	58	51	46
7		68	55	47	41	67	55	47	53	46	41
8		64	51	43	37	62	50	42	49	42	37
9		60	47	39	34	58	46	39	45	38	33
10		56	43	35	30	55	43	35	42	35	30

Avg. Luminance (cd/m2)

Vertical Angle	0	45	90
55	7818	7485	6966
65	6437	5582	4928
75	5091	3859	2874
85	3414	1951	1951

Electrical Specifications

Input Voltage	120V	277V
Input Power	41.7W	41.3W
Input Current	0.35A	0.16A
Power Factor	0.988	
Total Harm. Distortion	13.7%	
Tested values – contact technical support for rated values. Off-state power zero unless certain controls are specified.		



TRUGROOVE CONTINUOUS Performance LED

Modules & Runs

TruGroove Continuous LED nominal housing lengths

2ft, 3ft, 4ft, 8ft & incremental units

Standard units allow runs specifiable from 2ft in 1ft steps

Incremental units allow run lengths from 3ft in increments as small as 1/8in*.

**Note: Asymmetric and E-lumen package versions (3000lm/4ft) are only available in 2ft increments.*

Regress lens versions can only be installed in the ceiling (not in wall).

To ensure full cavity closure and simplify installation, there are both end-run units with one closed end and mid-run, open units.

Refer to module size details below for actual dimensions eg. trim, T-grid units fit within a standard 2' grid.

To specify corners and patterns, refer to TruGroove Corners data sheets.

Continuous Run Example

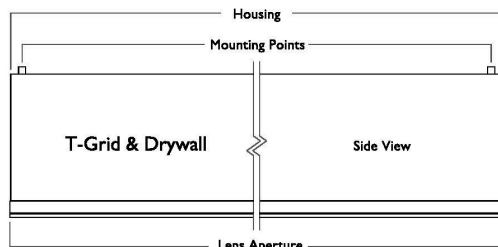
4 ft End	8 ft Mid	2 ft End
14 ft Run		

Housing lengths

Trim type	Run & housing	Lens aperture	Mounting points	Overall trim
T-Grid	Length L	L - 1"		L - 0.2"
Drywall Trimless	Length L	L	L - 0.8"	L + 3.3"
Drywall Trim	Length L	L	L - 0.8"	L + 1.5"

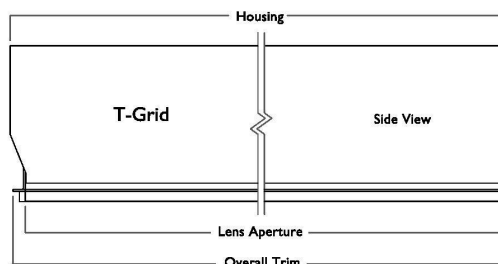
Module Dimensions

Continuous mid-run units

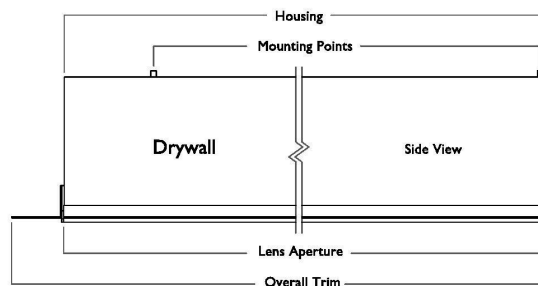


Nominal length	Housing & aperture	Mounting points
2ft	24.0"/610mm	23.2"/590mm
3ft	36.0"/914mm	35.2"/894mm
4ft	48.0"/1219mm	47.2"/1199mm
8ft	96.0"/2438mm	95.2"/2418mm
Increment	Length L	L - 0.8"

Continuous end-run units



Nominal length	Housing	Lens aperture	Trim - T-Grid
2ft	24.0"/610mm	23.5"/597mm	23.9"/606mm
3ft	36.0"/914mm	35.5"/902mm	35.9"/911mm
4ft	48.0"/1219mm	47.5"/1207mm	47.9"/1216mm
8ft	96.0"/2438mm	95.5"/2426mm	95.9"/2435mm
Increment	Length L	L - 0.5"	L - 0.1"

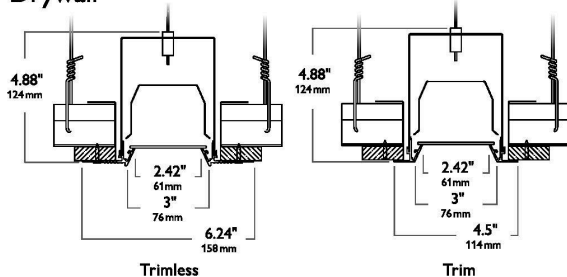


Nominal length	Housing	Mounting points	Trim - Drywall trimless	Trim - Drywall trim
2ft	24.0"/610mm	23.2"/590mm	25.7"/652mm	24.75"/629mm
3ft	36.0"/914mm	35.2"/894mm	37.7"/957mm	36.75"/933mm
4ft	48.0"/1219mm	47.2"/1199mm	49.7"/1262mm	48.75"/1238mm
8ft	96.0"/2438mm	95.2"/2418mm	97.7"/2481mm	96.75"/2457mm
Increment	Length L	L - 0.8"	L + 1.7"	L + 0.75"

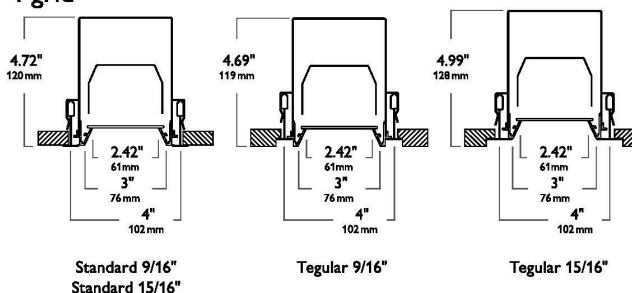
TRUGROOVE CONTINUOUS
Performance LED

Options and Details

Drywall



T-grid*



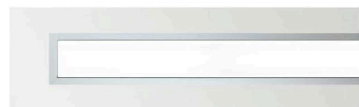
* Compatible with TechZone® 4" Ceiling Grid

Trim Views

Regressed lens



Drywall Trimless



Drywall Trim



T-grid

Housing

Die-formed 20 gauge cold-rolled steel. Multiple upper wire entrances available for continuous row mounting of fixtures.

Weight

Maximum 3.5lb/ft.

Optical System

Performance version: White light emitted from the LED sources is internally reflected and laterally redirected by a biconvex lens. Light is then reflected by Miro Silver panels and exits through the optical lens assembly. This assembly contains acrylic extrusion profiles to retain a layer of MesoOptics film, creating both an uninterrupted continuum of light and an optical batwing distribution.

Definition version: Light passes through a diffuse white acrylic lens to deliver a highly uniform luminous continuum.

Standard Driver

Dimming 0-10V, 5-100%. Output is Class 2 rated.

Lumen Maintenance

At an ambient temperature of 25°C in non-insulated contact applications, the LED lumen maintenance expectation for each lumen package is

K: L₈₀ (12k) 71,000 hrs

G: L₈₀ (12k) 68,000 hrs

E: L₈₀ (12k) 54,000 hrs

Mounting

Mounting brackets on housing sides support T-Grid installation. 1/16" diameter aircraft cable with self-locking, tamper-resistant, miniature cable gripper provides vertical adjustment for drywall. Aircraft cable, crimp and gripper independently tested to meet stringent safety requirements.

Compatible with 4" Armstrong TechZone ceiling grid.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Electrical

Factory pre-wired to section ends with quick-wire connectors.

Approvals

Certified to UL, CSA and IES standards. Insulation Contact (IC) rated.

Finish

Extruded aluminum trim and die-cast endplates coated with electrostatically applied and thermally cured polyester powder coat paint finish.

Environment

Rated for dry or damp locations in operating ambient temperatures 0-40°C (32-104°F). Certain luminaire components may be adversely affected by contaminants. Damage caused by sulfur, chlorine, petroleum based solutions or other contaminants are not covered under warranty.

Due to continuing product improvements, Philips Ledalite reserves the right to change the specifications without notice.



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TruGrvContPerfm_30K30lm_R.pdf 07.15 page 4 of 4

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KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F24.H

8FT LINEAR SLOT (MED OUTPUT)

Manufacturer: LEDALITE

Fixture Line: TRUGROOVE (2200 lm/4ft)

Fixture: RECESSED LINEAR SLOT

Catalog #: 39C1-L-C-G-R-S-CEILING-8-1-2-E

Mounting: RECESSED

Fixture Wattage: 56w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 550 lm/ft, 7 W/ft



Transforming
light into
an element of
design

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS
CRI >80 3000K, 2200 lm/4ft

Project:

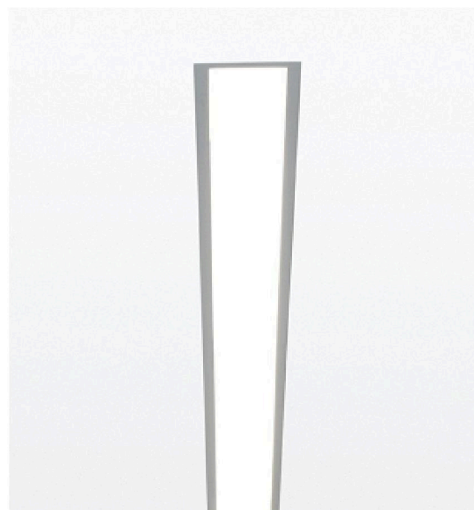
Spec Type:

Catalog No: 39C1LCGR

Qty

Line Notes:

TRUGROOVE CONTINUOUS Performance LED



Ordering guide

Product Type	Source	Color Temp *	Lumens *	Optics	Housing	Ceiling / Trim	Run Length	Wiring †	Voltage	Driver
39C1	L	C	G	R	S					
TruGroove Continuous Performance LED	L LED	A 4000K B 3500K C 3000K	E 3000 lm/4ft G 2200 lm/4ft K 1500 lm/4ft	Q Flush Meso Lens R Regressed Meso Lens	S Standard C Chicago Plenum	1 T-Grid 4 Drywall Trim 3 Drywall Trimless	Specify total housing run length in feet and inches	1 1 cct 3 1 cct w/ EM cct 5 1 cct w/ BP 7 1 cct w/ Dimming 8 1 cct w/ TW B 2 cct A/B	1 120V 2 277V 3 347V	E Philips Advance Other drivers available - consult factory

* Nominal values within a range. Consult ies file for exact color temp, lumens and up/down distribution † Consult website for complete list of standard wiring options

Mounting Hardware

Recessed

Mount Type

Consult separate mounting spec sheet for mount type options

Integrated Controls Please indicate with check mark.

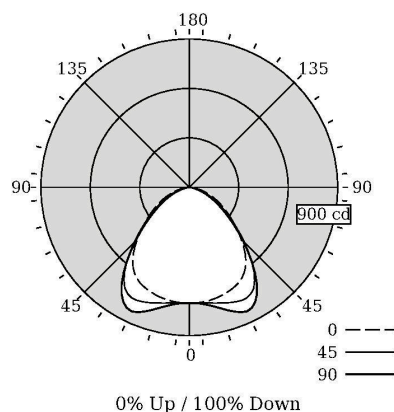
No Options Available



TRUGROOVE CONTINUOUS Performance LED

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS

Photometry



Lighting facts®	
A Program of the U.S. DOE	
Light Output (Lumens)	1889
Watts	28.2
Lumens per Watt (Efficacy)	66
Color Accuracy	82
Color Rendering Index (CRI)	
Light Color	3084 (Bright White)
Correlated Color Temperature (CCT)	
Warm White	Bright White
2700K	3000K
4500K	6500K

All results are according to IESNA LM-79-08: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: F61Z-Y35Y8 (3/12/2014)
Model Number: 39x1LCCR0v04
Type: Luminaire - Linear

Total Output	1889 lm
Efficacy	67.0 lm/W
CCT	3084K
CRI	82
R9	15
Distribution	0% Up / 100% Down
Spacing Criteria (0/90/180°)	1.33/1.48/NA
Meets RP-1-04 recommendations for VDT-Intensive spaces	

Values per 4ft unit

Fixture photometry has been conducted by an NVLAP accredited testing laboratory in accordance with IESNA LM-79-08

Lumen maintenance of the LEDs has been tested by the manufacturer in accordance with IESNA LM-80-08

IES files for this and other photometric options can be downloaded online at www.lightingproducts.philips.com

Candela Distribution

Vertical Angle	0	Horizontal Angle	22.5	45	67.5	90	Zonal Lumens
0	702	702	702	702	702	0	0
5	702	702	705	707	707	68	68
15	689	699	727	755	762	206	206
25	661	685	756	812	830	345	345
35	594	625	691	712	714	415	415
45	446	460	473	468	463	358	358
55	295	295	282	270	263	254	254
65	179	171	155	143	137	156	156
75	87	78	66	55	49	71	71
85	20	13	11	11	11	15	15
90	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0

Coefficients of Utilization (%)

RCR	Ceiling Wall	70	50	30	10	70	50	30	50	30	10
0	119	119	119	119	116	116	116	111	111	111	111
1	110	106	102	99	108	104	100	100	97	94	94
2	101	94	88	83	99	92	87	89	84	80	80
3	93	84	76	70	91	82	75	79	73	69	69
4	86	75	67	61	84	74	66	71	65	59	59
5	79	67	59	53	77	66	58	64	57	52	52
6	73	61	53	47	72	60	52	58	51	46	46
7	68	55	47	41	67	55	47	53	46	41	41
8	64	51	43	37	62	50	42	49	42	37	37
9	60	47	39	34	58	46	39	45	38	33	33
10	56	43	35	30	55	43	35	42	35	30	30

Avg. Luminance (cd/m2)

Vertical Angle	0	Horizontal Angle	45	90
55	5651	5410	5035	
65	4653	4035	3562	
75	3680	2790	2077	
85	2468	1410	1410	

Electrical Specifications

Input Voltage	120V	277V
Input Power	28.2W	28.2W
Input Current	0.24A	0.12A
Power Factor	0.983	
Total Harm. Distortion	16.5%	
Tested values – contact technical support for rated values. Off-state power zero unless certain controls are specified.		

TRUGROOVE CONTINUOUS
Performance LED

Modules & Runs

TruGroove Continuous LED nominal housing lengths

2ft, 3ft, 4ft, 8ft & incremental units

Standard units allow runs specifiable from 2ft in 1ft steps

Incremental units allow run lengths from 3ft in increments as small as 1/8in*.

**Note: Asymmetric and E-lumen package versions (3000lm/4ft) are only available in 2ft increments.*

Regress lens versions can only be installed in the ceiling (not in wall).

To ensure full cavity closure and simplify installation, there are both end-run units with one closed end and mid-run, open units.

Refer to module size details below for actual dimensions eg. trim. T-grid units fit within a standard 2' grid.

To specify corners and patterns, refer to TruGroove Corners data sheets.

Continuous Run Example

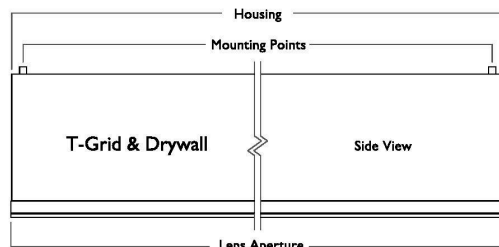
4 ft End	8 ft Mid	2 ft End
14 ft Run		

Housing lengths

Trim type	Run & housing	Lens aperture	Mounting points	Overall trim
T-Grid	Length L	L – 1"		L – 0.2"
Drywall Trimless	Length L	L	L – 0.8"	L + 3.3"
Drywall Trim	Length L	L	L – 0.8"	L + 1.5"

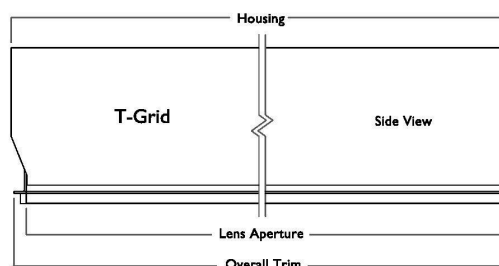
Module Dimensions

Continuous mid-run units

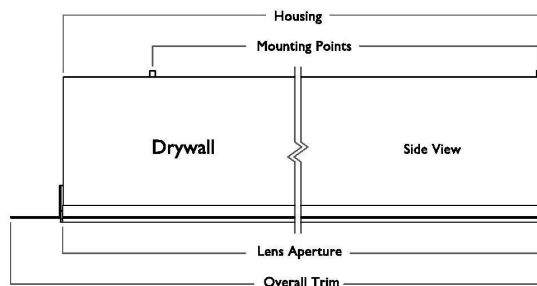


Nominal length	Housing & aperture	Mounting points
2ft	24.0"/610mm	23.2"/590mm
3ft	36.0"/914mm	35.2"/894mm
4ft	48.0"/1219mm	47.2"/1199mm
8ft	96.0"/2438mm	95.2"/2418mm
Increment	Length L	L – 0.8"

Continuous end-run units



Nominal length	Housing	Lens aperture	Trim – T-Grid
2ft	24.0"/610mm	23.5"/597mm	23.9"/606mm
3ft	36.0"/914mm	35.5"/902mm	35.9"/911mm
4ft	48.0"/1219mm	47.5"/1207mm	47.9"/1216mm
8ft	96.0"/2438mm	95.5"/2426mm	95.9"/2435mm
Increment	Length L	L – 0.5"	L – 0.1"

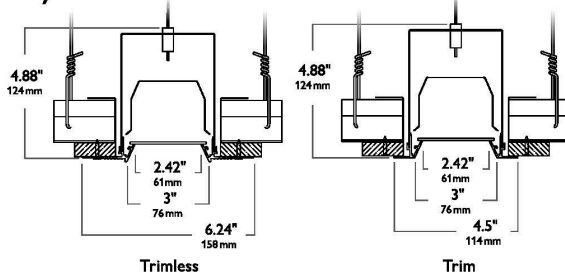


Nominal length	Housing	Mounting points	Trim – Drywall trimless	Trim – Drywall trim
2ft	24.0"/610mm	23.2"/590mm	25.7"/652mm	24.75"/629mm
3ft	36.0"/914mm	35.2"/894mm	37.7"/957mm	36.75"/933mm
4ft	48.0"/1219mm	47.2"/1199mm	49.7"/1262mm	48.75"/1238mm
8ft	96.0"/2438mm	95.2"/2418mm	97.7"/2481mm	96.75"/2457mm
Increment	Length L	L – 0.8"	L + 1.7"	L + 0.75"

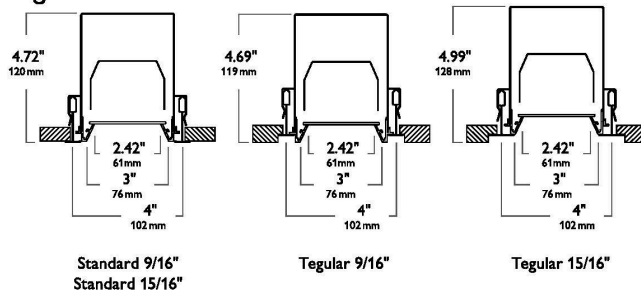
TRUGROOVE CONTINUOUS Performance LED

Options and Details

Drywall



T-grid*



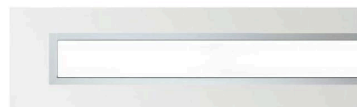
* Compatible with TechZone® 4" Ceiling Grid

Trim Views

Regressed lens



Drywall Trimless



Drywall Trim



T-grid

Housing

Die-formed 20 gauge cold-rolled steel. Multiple upper wire entrances available for continuous row mounting of fixtures.

Weight

Maximum 3.5lb/ft.

Optical System

Performance version: White light emitted from the LED sources is internally reflected and laterally redirected by a biconvex lens. Light is then reflected by Miro Silver panels and exits through the optical lens assembly. This assembly contains acrylic extrusion profiles to retain a layer of MesoOptics film, creating both an uninterrupted continuum of light and an optical batwing distribution.

Definition version: Light passes through a diffuse white acrylic lens to deliver a highly uniform luminous continuum.

Standard Driver

Dimming 0-10V, 5-100%. Output is Class 2 rated.

Lumen Maintenance

At an ambient temperature of 25°C in non-insulated contact applications, the LED lumen maintenance expectation for each lumen package is

K: L80 (12k) 71,000 hrs

G: L80 (12k) 68,000 hrs

E: L80 (12k) 54,000 hrs

Mounting

Mounting brackets on housing sides support T-Grid installation. 1/16" diameter aircraft cable with self-locking, tamper-resistant, miniature cable gripper provides vertical adjustment for drywall. Aircraft cable, crimp and gripper independently tested to meet stringent safety requirements. Compatible with 4" Armstrong TechZone ceiling grid.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Electrical

Factory pre-wired to section ends with quick-wire connectors.

Approvals

Certified to UL, CSA and IES standards. Insulation Contact (IC) rated.

Finish

Extruded aluminum trim and die-cast endplates coated with electrostatically applied and thermally cured polyester powder coat paint finish.

Environment

Rated for dry or damp locations in operating ambient temperatures 0-40°C (32-104°F). Certain luminaire components may be adversely affected by contaminants. Damage caused by sulfur, chlorine, petroleum based solutions or other contaminants are not covered under warranty.

Due to continuing product improvements, Philips Ledalite reserves the right to change the specifications without notice.



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Specifications are subject to change without notice.
www.philips.com/luminaires

TruGrvContPerfm_30K22Im_R.pdf 07.15 page 4 of 4

Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F24.J

20FT LINEAR SLOT (MED OUTPUT)

Manufacturer: LEDALITE

Fixture Line: TRUGROOVE (2200 lm/4ft)

Fixture: RECESSED LINEAR SLOT

Catalog #: 39C1-L-C-G-R-S-CEILING-20-1-2-E

Mounting: RECESSED

Fixture Wattage: 140w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 550 lm/ft, 7 W/ft



Transforming
light into
an element of
design

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS
CRI >80 3000K, 2200 lm/4ft

Project:

Spec Type:

Catalog No: 39C1LCGR

Qty

Line Notes:

TRUGROOVE CONTINUOUS Performance LED



Ordering guide

Product Type	Source	Color Temp *	Lumens *	Optics	Housing	Ceiling / Trim	Run Length	Wiring †	Voltage	Driver
39C1	L	C	G	R	S					
TruGroove Continuous Performance LED	L LED	A 4000K B 3500K C 3000K	E 3000 lm/4ft G 2200 lm/4ft K 1500 lm/4ft	Q Flush Meso Lens R Regressed Meso Lens	S Standard C Chicago Plenum	1 T-Grid 4 Drywall Trim 3 Drywall Trimless	Specify total housing run length in feet and inches	1 1 cct 3 1 cct w/ EM cct 5 1 cct w/ BP 7 1 cct w/ Dimming 8 1 cct w/ TW B 2 cct A/B	1 120V 2 277V 3 347V	E Philips Advance Other drivers available - consult factory

* Nominal values within a range. Consult ies file for exact color temp, lumens and up/down distribution † Consult website for complete list of standard wiring options

Mounting Hardware

Recessed

Mount Type

Consult separate mounting spec sheet for mount type options

Integrated Controls Please indicate with check mark.

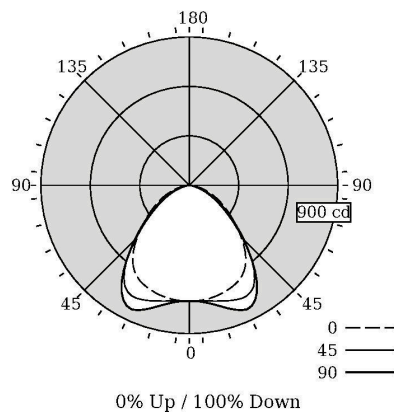
No Options Available



TRUGROOVE CONTINUOUS
Performance LED

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS

Photometry



Lighting facts®	
A Program of the U.S. DOE	
Light Output (Lumens)	1889
Watts	28.2
Lumens per Watt (Efficacy)	66
Color Accuracy	82
Color Rendering Index (CRI)	
Light Color	3084 (Bright White)
Correlated Color Temperature (CCT)	
Warm White	Bright White
2700K	3000K
4500K	6500K
All results are according to IESNA LM-79-08: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.	
Visit www.lightingfacts.com for the Label Reference Guide.	
Registration Number: F66Z-Y358Y8 (3/12/2014)	
Model Number: 39x1LCCR0v04	
Type: Luminaire - Linear	

Total Output	1889 lm
Efficacy	67.0 lm/W
CCT	3084K
CRI	82
R9	15
Distribution	0% Up / 100% Down
Spacing Criteria (0/90/180°)	1.33/1.48/NA
Meets RP-1-04 recommendations for VDT-Intensive spaces	

Values per 4ft unit

Fixture photometry has been conducted by an NVLAP accredited testing laboratory in accordance with IESNA LM-79-08

Lumen maintenance of the LEDs has been tested by the manufacturer in accordance with IESNA LM-80-08

IES files for this and other photometric options can be downloaded online at www.lightingproducts.philips.com

Candela Distribution

Vertical Angle	Horizontal Angle				Zonal Lumens
	0	22.5	45	67.5	90
0	702	702	702	702	702
5	702	702	705	707	707
15	689	699	727	755	762
25	661	685	756	812	830
35	594	625	691	712	714
45	446	460	473	468	463
55	295	295	282	270	263
65	179	171	155	143	137
75	87	78	66	55	49
85	20	13	11	11	11
90	0	0	0	0	0
95	0	0	0	0	0
105	0	0	0	0	0
115	0	0	0	0	0
125	0	0	0	0	0
135	0	0	0	0	0
145	0	0	0	0	0
155	0	0	0	0	0
165	0	0	0	0	0
175	0	0	0	0	0
180	0	0	0	0	0

Coefficients of Utilization (%)

RCR	Ceiling				Wall				Floor			
	70	50	30	10	70	50	30	10	50	30	10	50
0	119	119	119	119	116	116	116	111	111	111	111	111
1	110	106	102	99	108	104	100	100	97	94	94	94
2	101	94	88	83	99	92	87	89	84	80	80	80
3	93	84	76	70	91	82	75	79	73	69	69	69
4	86	75	67	61	84	74	66	71	65	59	59	59
5	79	67	59	53	77	66	58	64	57	52	52	52
6	73	61	53	47	72	60	52	58	51	46	46	46
7	68	55	47	41	67	55	47	53	46	41	41	41
8	64	51	43	37	62	50	42	49	42	37	37	37
9	60	47	39	34	58	46	39	45	38	33	33	33
10	56	43	35	30	55	43	35	42	35	30	30	30

Avg. Luminance (cd/m2)

Vertical Angle	Horizontal Angle		
	0	45	90
55	5651	5410	5035
65	4653	4035	3562
75	3680	2790	2077
85	2468	1410	1410

Electrical Specifications

Input Voltage	120V	277V
Input Power	28.2W	28.2W
Input Current	0.24A	0.12A
Power Factor	0.983	
Total Harm. Distortion	16.5%	
Tested values – contact technical support for rated values. Off-state power zero unless certain controls are specified.		

TRUGROOVE CONTINUOUS Performance LED

Modules & Runs

TruGroove Continuous LED nominal housing lengths

2ft, 3ft, 4ft, 8ft & incremental units

Standard units allow runs specifiable from 2ft in 1ft steps

Incremental units allow run lengths from 3ft in increments as small as 1/8in*.

**Note: Asymmetric and E-lumen package versions (3000lm/4ft) are only available in 2ft increments.*

Regress lens versions can only be installed in the ceiling (not in wall).

To ensure full cavity closure and simplify installation, there are both end-run units with one closed end and mid-run, open units.

Refer to module size details below for actual dimensions eg. trim, T-grid units fit within a standard 2' grid.

To specify corners and patterns, refer to TruGroove Corners data sheets.

Continuous Run Example

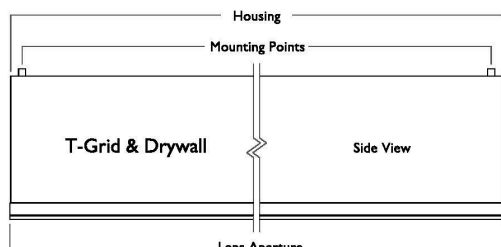
4 ft End	8 ft Mid	2 ft End
14 ft Run		

Housing lengths

Trim type	Run & housing	Lens aperture	Mounting points	Overall trim
T-Grid	Length L	L - 1"		L - 0.2"
Drywall Trimless	Length L	L	L - 0.8"	L + 3.3"
Drywall Trim	Length L	L	L - 0.8"	L + 1.5"

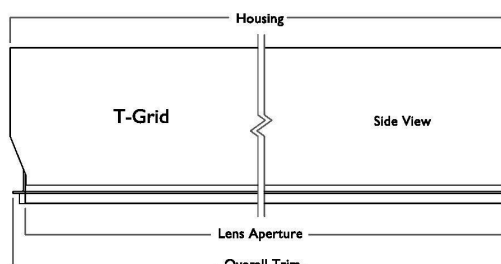
Module Dimensions

Continuous mid-run units

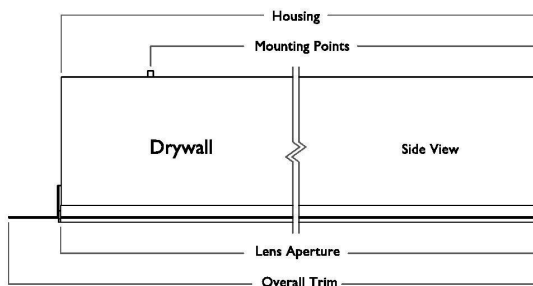


Nominal length	Housing & aperture	Mounting points
2ft	24.0"/610mm	23.2"/590mm
3ft	36.0"/914mm	35.2"/894mm
4ft	48.0"/1219mm	47.2"/1199mm
8ft	96.0"/2438mm	95.2"/2418mm
Increment	Length L	L - 0.8"

Continuous end-run units



Nominal length	Housing	Lens aperture	Trim - T-Grid
2ft	24.0"/610mm	23.5"/597mm	23.9"/606mm
3ft	36.0"/914mm	35.5"/902mm	35.9"/911mm
4ft	48.0"/1219mm	47.5"/1207mm	47.9"/1216mm
8ft	96.0"/2438mm	95.5"/2426mm	95.9"/2435mm
Increment	Length L	L - 0.5"	L - 0.1"

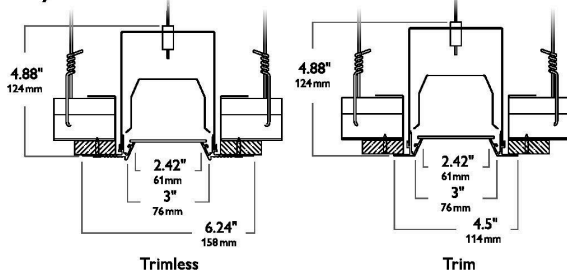


Nominal length	Housing	Mounting points	Trim - Drywall trimless	Trim - Drywall trim
2ft	24.0"/610mm	23.2"/590mm	25.7"/652mm	24.75"/629mm
3ft	36.0"/914mm	35.2"/894mm	37.7"/957mm	36.75"/933mm
4ft	48.0"/1219mm	47.2"/1199mm	49.7"/1262mm	48.75"/1238mm
8ft	96.0"/2438mm	95.2"/2418mm	97.7"/2481mm	96.75"/2457mm
Increment	Length L	L - 0.8"	L + 1.7"	L + 0.75"

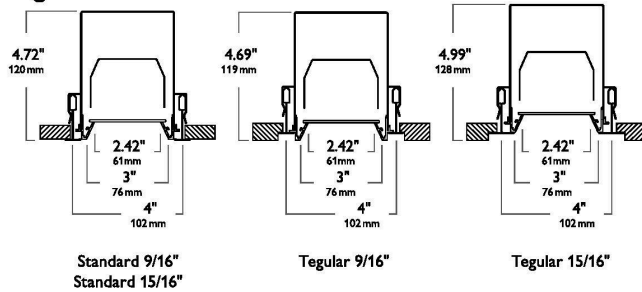
TRUGROOVE CONTINUOUS Performance LED

Options and Details

Drywall



T-grid*



* Compatible with TechZone® 4" Ceiling Grid

Trim Views

Regressed lens



Drywall Trimless



Drywall Trim



T-grid

Housing

Die-formed 20 gauge cold-rolled steel. Multiple upper wire entrances available for continuous row mounting of fixtures.

Weight

Maximum 3.5lb/ft.

Optical System

Performance version: White light emitted from the LED sources is internally reflected and laterally redirected by a biconvex lens. Light is then reflected by Miro Silver panels and exits through the optical lens assembly. This assembly contains acrylic extrusion profiles to retain a layer of MesoOptics film, creating both an uninterrupted continuum of light and an optical batwing distribution.

Definition version: Light passes through a diffuse white acrylic lens to deliver a highly uniform luminous continuum.

Standard Driver

Dimming 0-10V, 5-100%. Output is Class 2 rated.

Lumen Maintenance

At an ambient temperature of 25°C in non-insulated contact applications, the LED lumen maintenance expectation for each lumen package is

K: L80 (12k) 71,000 hrs

G: L80 (12k) 68,000 hrs

E: L80 (12k) 54,000 hrs

Mounting

Mounting brackets on housing sides support T-Grid installation. 1/16" diameter aircraft cable with self-locking, tamper-resistant, miniature cable gripper provides vertical adjustment for drywall. Aircraft cable, crimp and gripper independently tested to meet stringent safety requirements. Compatible with 4" Armstrong TechZone ceiling grid.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Electrical

Factory pre-wired to section ends with quick-wire connectors.

Approvals

Certified to UL, CSA and IES standards. Insulation Contact (IC) rated.

Finish

Extruded aluminum trim and die-cast endplates coated with electrostatically applied and thermally cured polyester powder coat paint finish.

Environment

Rated for dry or damp locations in operating ambient temperatures 0-40°C (32-104°F). Certain luminaire components may be adversely affected by contaminants. Damage caused by sulfur, chlorine, petroleum based solutions or other contaminants are not covered under warranty.

Due to continuing product improvements, Philips Ledalite reserves the right to change the specifications without notice.



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TruGrvContPerfm_30K22Im_R.pdf 07.15 page 4 of 4

Philips Lighting
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200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F24.K

14FT LINEAR SLOT (MED OUTPUT)

Manufacturer: LEDALITE

Fixture Line: TRUGROOVE (2200 lm/4ft)

Fixture: RECESSED LINEAR SLOT

Catalog #: 39C1-L-C-G-R-S-CEILING-14-1-2-E

Mounting: RECESSED

Fixture Wattage: 98w

Fixture Voltage: 277

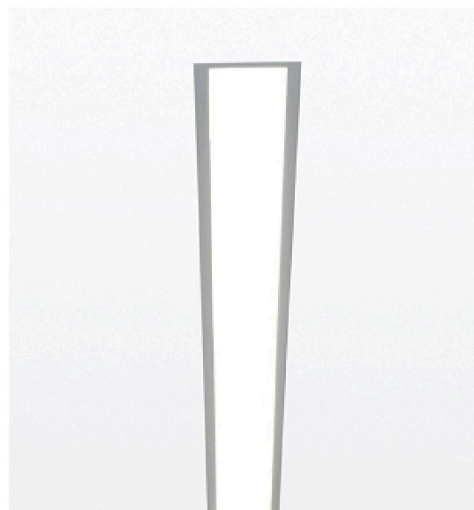
Load Type: 0-10V

Lamp Spec: LED, 3000K, 550 lm/ft, 7 W/ft



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TRUGROOVE CONTINUOUS Performance LED



DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS
CRI >80 3000K, 2200 lm/4ft

Project:

Spec Type:

Catalog No: 39C1LCGR

Qty

Line Notes:

Ordering guide

Product Type	Source	Color Temp *	Lumens *	Optics	Housing	Ceiling / Trim	Run Length	Wiring †	Voltage	Driver
39C1	L	C	G	R	S					
TruGroove Continuous Performance LED	L LED	A 4000K B 3500K C 3000K	E 3000 lm/4ft G 2200 lm/4ft K 1500 lm/4ft	Q Flush Meso Lens R Regressed Meso Lens	S Standard C Chicago Plenum	1 T-Grid 4 Drywall Trim 3 Drywall Trimless	Specify total housing run length in feet and inches	1 1 cct 3 1 cct w/ EM cct 5 1 cct w/ BP 7 1 cct w/ Dimming 8 1 cct w/ TW B 2 cct A/B	1 120V 2 277V 3 347V	E Philips Advance Other drivers available - consult factory

* Nominal values within a range. Consult ies file for exact color temp, lumens and up/down distribution † Consult website for complete list of standard wiring options

Mounting Hardware

Recessed

Mount Type

Consult separate mounting spec sheet for mount type options

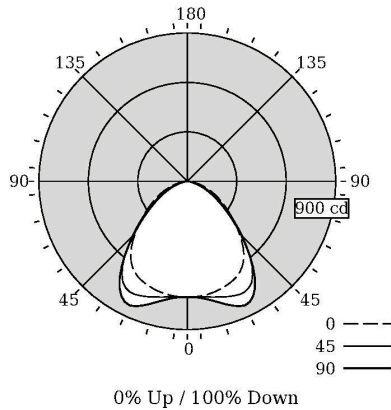
Integrated Controls Please indicate with check mark.

No Options Available

TRUGROOVE CONTINUOUS
Performance LED

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS

Photometry



Philips Ledlight

lighting facts®

A Program of the U.S. DOE

Light Output (Lumens)	1889
Watts	28.2
Lumens per Watt (Efficacy)	66

Color Accuracy	82
Color Rendering Index (CRI)	

Light Color
Correlated Color Temperature (CCT)

3084 (Bright White)

Warm White Bright White Daylight

2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-08: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: F61Z-Y358Y8 (3/12/2014)

Model Number: 39x1LCCR0x04

Type: Luminaire - Linear

Total Output	1889 lm
Efficacy	67.0 lm/W
CCT	3084K
CRI	82
R9	15
Distribution	0% Up / 100% Down
Spacing Criteria (0/90/180°)	1.33/1.48/NA
Meets RP-1-04 recommendations for VDT-Intensive spaces	

Values per 4ft unit

Fixture photometry has been conducted by an NVLAP accredited testing laboratory in accordance with IESNA LM-79-08

Lumen maintenance of the LEDs has been tested by the manufacturer in accordance with IESNA LM-80-08

IES files for this and other photometric options can be downloaded online at www.lightingproducts.philips.com

Candela Distribution

Vertical Angle	Horizontal Angle				Zonal Lumens
	0	22.5	45	67.5	90
0	702	702	702	702	702
5	702	702	705	707	707
15	689	699	727	755	762
25	661	685	756	812	830
35	594	625	691	712	714
45	446	460	473	468	463
55	295	295	282	270	263
65	179	171	155	143	137
75	87	78	66	55	49
85	20	13	11	11	11
90	0	0	0	0	0
95	0	0	0	0	0
105	0	0	0	0	0
115	0	0	0	0	0
125	0	0	0	0	0
135	0	0	0	0	0
145	0	0	0	0	0
155	0	0	0	0	0
165	0	0	0	0	0
175	0	0	0	0	0
180	0	0	0	0	0

Coefficients of Utilization (%)

RCR	Ceiling				Wall				Floor			
	70	50	30	10	70	50	30	10	70	50	30	10
0	119	119	119	119	116	116	116	111	111	111	111	111
1	110	106	102	99	108	104	100	100	97	94	94	94
2	101	94	88	83	99	92	87	89	84	80	80	80
3	93	84	76	70	91	82	75	79	73	69	69	69
4	86	75	67	61	84	74	66	71	65	59	59	59
5	79	67	59	53	77	66	58	64	57	52	52	52
6	73	61	53	47	72	60	52	58	51	46	46	46
7	68	55	47	41	67	55	47	53	46	41	41	41
8	64	51	43	37	62	50	42	49	42	37	37	37
9	60	47	39	34	58	46	39	45	38	33	33	33
10	56	43	35	30	55	43	35	42	35	30	30	30

Avg. Luminance (cd/m²)

Vertical Angle	Horizontal Angle		
	0	45	90
55	5651	5410	5035
65	4653	4035	3562
75	3680	2790	2077
85	2468	1410	1410

Electrical Specifications

Input Voltage	120V	277V
Input Power	28.2W	28.2W
Input Current	0.24A	0.12A
Power Factor	0.983	
Total Harm. Distortion	16.5%	
Tested values – contact technical support for rated values. Off-state power zero unless certain controls are specified.		

TRUGROOVE CONTINUOUS
Performance LED

Modules & Runs

TruGroove Continuous LED nominal housing lengths

2ft, 3ft, 4ft, 8ft & incremental units

Standard units allow runs specifiable from 2ft in 1ft steps

Incremental units allow run lengths from 3ft in increments as small as 1/8in*.

**Note: Asymmetric and E-lumen package versions (3000lm/4ft) are only available in 2ft increments.*

Regress lens versions can only be installed in the ceiling (not in wall).

To ensure full cavity closure and simplify installation, there are both end-run units with one closed end and mid-run, open units.

Refer to module size details below for actual dimensions eg. trim, T-grid units fit within a standard 2' grid.

To specify corners and patterns, refer to TruGroove Corners data sheets.

Continuous Run Example

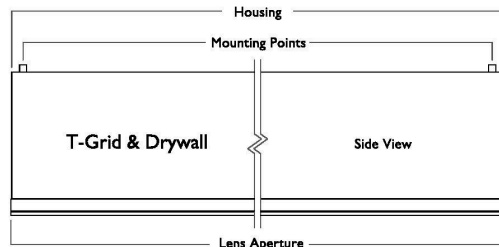
4 ft End	8 ft Mid	2 ft End
14 ft Run		

Housing lengths

Trim type	Run & housing	Lens aperture	Mounting points	Overall trim
T-Grid	Length L	L – 1"		L – 0.2"
Drywall Trimless	Length L	L	L – 0.8"	L + 3.3"
Drywall Trim	Length L	L	L – 0.8"	L + 1.5"

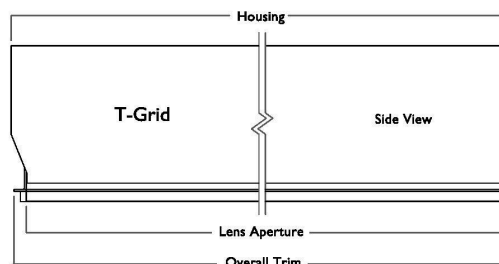
Module Dimensions

Continuous mid-run units

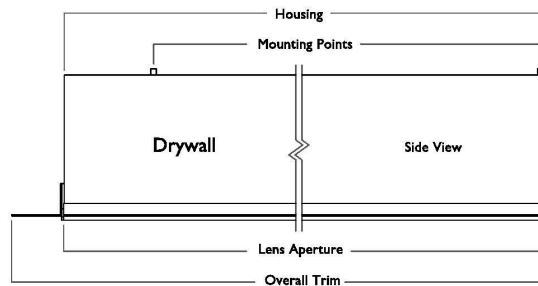


Nominal length	Housing & aperture	Mounting points
2ft	24.0"/610mm	23.2"/590mm
3ft	36.0"/914mm	35.2"/894mm
4ft	48.0"/1219mm	47.2"/1199mm
8ft	96.0"/2438mm	95.2"/2418mm
Increment	Length L	L – 0.8"

Continuous end-run units



Nominal length	Housing	Lens aperture	Trim – T-Grid
2ft	24.0"/610mm	23.5"/597mm	23.9"/606mm
3ft	36.0"/914mm	35.5"/902mm	35.9"/911mm
4ft	48.0"/1219mm	47.5"/1207mm	47.9"/1216mm
8ft	96.0"/2438mm	95.5"/2426mm	95.9"/2435mm
Increment	Length L	L – 0.5"	L – 0.1"

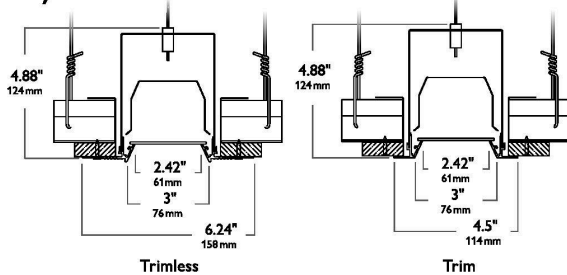


Nominal length	Housing	Mounting points	Trim – Drywall trimless	Trim – Drywall trim
2ft	24.0"/610mm	23.2"/590mm	25.7"/652mm	24.75"/629mm
3ft	36.0"/914mm	35.2"/894mm	37.7"/957mm	36.75"/933mm
4ft	48.0"/1219mm	47.2"/1199mm	49.7"/1262mm	48.75"/1238mm
8ft	96.0"/2438mm	95.2"/2418mm	97.7"/2481mm	96.75"/2457mm
Increment	Length L	L – 0.8"	L + 1.7"	L + 0.75"

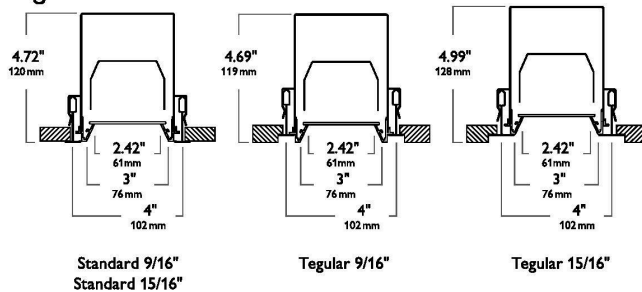
TRUGROOVE CONTINUOUS
Performance LED

Options and Details

Drywall



T-grid*



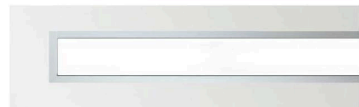
* Compatible with TechZone® 4" Ceiling Grid

Trim Views

Regressed lens



Drywall Trimless



Drywall Trim



T-grid

Housing

Die-formed 20 gauge cold-rolled steel. Multiple upper wire entrances available for continuous row mounting of fixtures.

Weight

Maximum 3.5lb/ft.

Optical System

Performance version: White light emitted from the LED sources is internally reflected and laterally redirected by a biconvex lens. Light is then reflected by Miro Silver panels and exits through the optical lens assembly. This assembly contains acrylic extrusion profiles to retain a layer of MesoOptics film, creating both an uninterrupted continuum of light and an optical batwing distribution.

Definition version: Light passes through a diffuse white acrylic lens to deliver a highly uniform luminous continuum.

Standard Driver

Dimming 0-10V, 5-100%. Output is Class 2 rated.

Lumen Maintenance

At an ambient temperature of 25°C in non-insulated contact applications, the LED lumen maintenance expectation for each lumen package is

K: L₈₀ (12k) 71,000 hrs

G: L₈₀ (12k) 68,000 hrs

E: L₈₀ (12k) 54,000 hrs

Mounting

Mounting brackets on housing sides support T-Grid installation. 1/16" diameter aircraft cable with self-locking, tamper-resistant, miniature cable gripper provides vertical adjustment for drywall. Aircraft cable, crimp and gripper independently tested to meet stringent safety requirements.

Compatible with 4" Armstrong TechZone ceiling grid.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Electrical

Factory pre-wired to section ends with quick-wire connectors.

Approvals

Certified to UL, CSA and IES standards. Insulation Contact (IC) rated.

Finish

Extruded aluminum trim and die-cast endplates coated with electrostatically applied and thermally cured polyester powder coat paint finish.

Environment

Rated for dry or damp locations in operating ambient temperatures 0-40°C (32-104°F). Certain luminaire components may be adversely affected by contaminants. Damage caused by sulfur, chlorine, petroleum based solutions or other contaminants are not covered under warranty.

Due to continuing product improvements, Philips Luminaire reserves the right to change the specifications without notice.



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Specifications are subject to change without notice.
www.philips.com/luminaires

TruGrvContPerfm_30K22Im_R.pdf 07.15 page 4 of 4

Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F24.M

32FT LINEAR SLOT (MED OUTPUT)

Manufacturer: LEDALITE

Fixture Line: TRUGROOVE (2200 lm/4ft)

Fixture: RECESSED LINEAR SLOT

Catalog #: 39C1-L-C-G-R-S-CEILING-32-1-2-E

Mounting: RECESSED

Fixture Wattage: 224w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 550 lm/ft, 7 W/ft



Transforming
light into
an element of
design

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS
CRI >80 3000K, 2200 lm/4ft

Project:

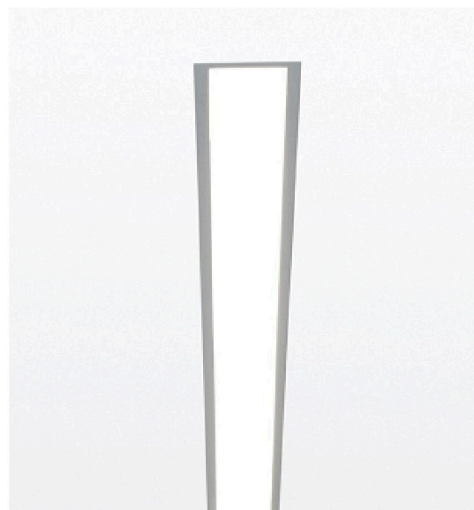
Spec Type:

Catalog No: 39C1LCGR

Qty

Line Notes:

TRUGROOVE CONTINUOUS Performance LED



Ordering guide

Product Type	Source	Color Temp *	Lumens *	Optics	Housing	Ceiling / Trim	Run Length	Wiring †	Voltage	Driver
39C1	L	C	G	R	S					
TruGroove Continuous Performance LED	L LED	A 4000K B 3500K C 3000K	E 3000 lm/4ft G 2200 lm/4ft K 1500 lm/4ft	Q Flush Meso Lens R Regressed Meso Lens	S Standard C Chicago Plenum	1 T-Grid 4 Drywall Trim 3 Drywall Trimless	Specify total housing run length in feet and inches	1 1 cct 3 1 cct w/ EM cct 5 1 cct w/ BP 7 1 cct w/ Dimming 8 1 cct w/ TW B 2 cct A/B	1 120V 2 277V 3 347V	E Philips Advance Other drivers available - consult factory

* Nominal values within a range. Consult ies file for exact color temp, lumens and up/down distribution † Consult website for complete list of standard wiring options

Mounting Hardware

Recessed

Mount Type

Consult separate mounting spec sheet for mount type options

Integrated Controls Please indicate with check mark.

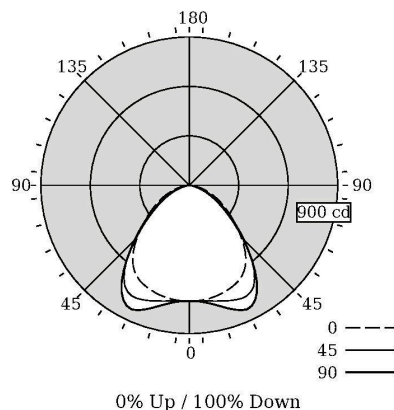
No Options Available



TRUGROOVE CONTINUOUS Performance LED

DIRECT PERFORMANCE, REGRESSED MESOOPTICS LENS

Photometry



Lighting facts®	
A Program of the U.S. DOE	
Light Output (Lumens)	1889
Watts	28.2
Lumens per Watt (Efficacy)	66
Color Accuracy	
Color Rendering Index (CRI)	82
Light Color	3084 (Bright White)
Correlated Color Temperature (CCT)	
Warm White	Bright White
2700K	3000K
4500K	6500K
All results are according to IESNA LM-79-08: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.	
Visit www.lightingfacts.com for the Label Reference Guide.	
Registration Number: F61Z-Y358Y8 (3/12/2014)	
Model Number: 39x1LGGRev04	
Type: Luminaire - Linear	

Total Output	1889 lm
Efficacy	67.0 lm/W
CCT	3084K
CRI	82
R9	15
Distribution	0% Up / 100% Down
Spacing Criteria (0/90/180°)	1.33/1.48/NA
Meets RP-1-04 recommendations for VDT-Intensive spaces	

Values per 4ft unit

Fixture photometry has been conducted by an NVLAP accredited testing laboratory in accordance with IESNA LM-79-08

Lumen maintenance of the LEDs has been tested by the manufacturer in accordance with IESNA LM-80-08

IES files for this and other photometric options can be downloaded online at www.lightingproducts.philips.com

Candela Distribution

Vertical Angle	0	Horizontal Angle	22.5	45	67.5	90	Zonal Lumens
0	702	702	702	702	702	0	0
5	702	702	705	707	707	68	68
15	689	699	727	755	762	206	206
25	661	685	756	812	830	345	345
35	594	625	691	712	714	415	415
45	446	460	473	468	463	358	358
55	295	295	282	270	263	254	254
65	179	171	155	143	137	156	156
75	87	78	66	55	49	71	71
85	20	13	11	11	11	15	15
90	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0

Coefficients of Utilization (%)

RCR	Ceiling: Wall:	70	50	30	10	70	50	30	50	30	10
0	119	119	119	119	116	116	116	111	111	111	111
1	110	106	102	99	108	104	100	100	97	94	94
2	101	94	88	83	99	92	87	89	84	80	80
3	93	84	76	70	91	82	75	79	73	69	69
4	86	75	67	61	84	74	66	71	65	59	59
5	79	67	59	53	77	66	58	64	57	52	52
6	73	61	53	47	72	60	52	58	51	46	46
7	68	55	47	41	67	55	47	53	46	41	41
8	64	51	43	37	62	50	42	49	42	37	37
9	60	47	39	34	58	46	39	45	38	33	33
10	56	43	35	30	55	43	35	42	35	30	30

Avg. Luminance (cd/m2)

Vertical Angle	0	Horizontal Angle	45	90
55	5651	5410	5035	
65	4653	4035	3562	
75	3680	2790	2077	
85	2468	1410	1410	

Electrical Specifications

Input Voltage	120V	277V
Input Power	28.2W	28.2W
Input Current	0.24A	0.12A
Power Factor	0.983	
Total Harm. Distortion	16.5%	
Tested values – contact technical support for rated values. Off-state power zero unless certain controls are specified.		

TRUGROOVE CONTINUOUS Performance LED

Modules & Runs

TruGroove Continuous LED nominal housing lengths

2ft, 3ft, 4ft, 8ft & incremental units

Standard units allow runs specifiable from 2ft in 1ft steps

Incremental units allow run lengths from 3ft in increments as small as 1/8in*.

**Note: Asymmetric and E-lumen package versions (3000lm/4ft) are only available in 2ft increments.*

Regress lens versions can only be installed in the ceiling (not in wall).

To ensure full cavity closure and simplify installation, there are both end-run units with one closed end and mid-run, open units.

Refer to module size details below for actual dimensions eg. trim, T-grid units fit within a standard 2' grid.

To specify corners and patterns, refer to TruGroove Corners data sheets.

Continuous Run Example

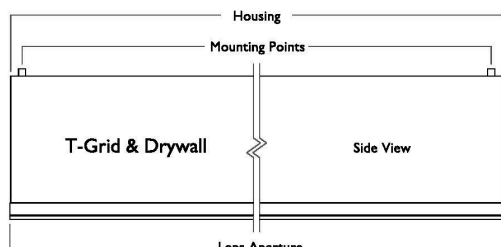
4 ft End	8 ft Mid	2 ft End
14 ft Run		

Housing lengths

Trim type	Run & housing	Lens aperture	Mounting points	Overall trim
T-Grid	Length L	L - 1"		L - 0.2"
Drywall Trimless	Length L	L	L - 0.8"	L + 3.3"
Drywall Trim	Length L	L	L - 0.8"	L + 1.5"

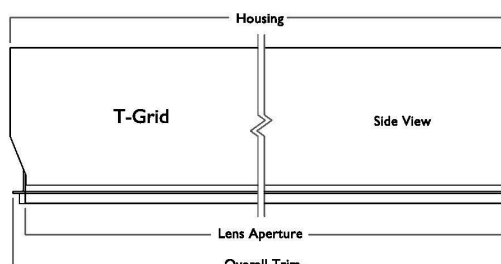
Module Dimensions

Continuous mid-run units

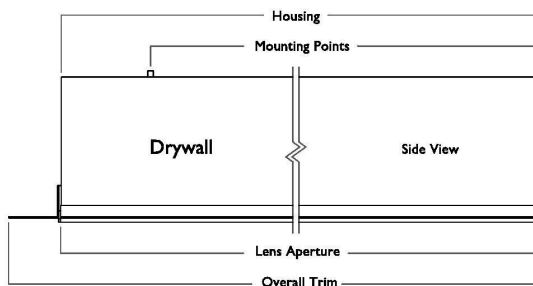


Nominal length	Housing & aperture	Mounting points
2ft	24.0"/610mm	23.2"/590mm
3ft	36.0"/914mm	35.2"/894mm
4ft	48.0"/1219mm	47.2"/1199mm
8ft	96.0"/2438mm	95.2"/2418mm
Increment	Length L	L - 0.8"

Continuous end-run units



Nominal length	Housing	Lens aperture	Trim - T-Grid
2ft	24.0"/610mm	23.5"/597mm	23.9"/606mm
3ft	36.0"/914mm	35.5"/902mm	35.9"/911mm
4ft	48.0"/1219mm	47.5"/1207mm	47.9"/1216mm
8ft	96.0"/2438mm	95.5"/2426mm	95.9"/2435mm
Increment	Length L	L - 0.5"	L - 0.1"

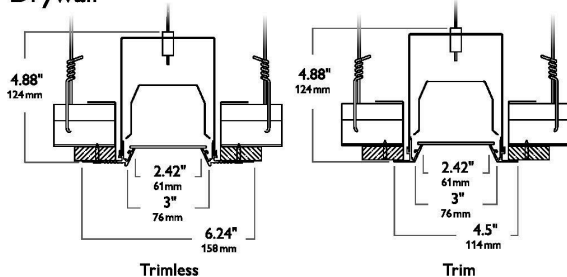


Nominal length	Housing	Mounting points	Trim - Drywall trimless	Trim - Drywall trim
2ft	24.0"/610mm	23.2"/590mm	25.7"/652mm	24.75"/629mm
3ft	36.0"/914mm	35.2"/894mm	37.7"/957mm	36.75"/933mm
4ft	48.0"/1219mm	47.2"/1199mm	49.7"/1262mm	48.75"/1238mm
8ft	96.0"/2438mm	95.2"/2418mm	97.7"/2481mm	96.75"/2457mm
Increment	Length L	L - 0.8"	L + 1.7"	L + 0.75"

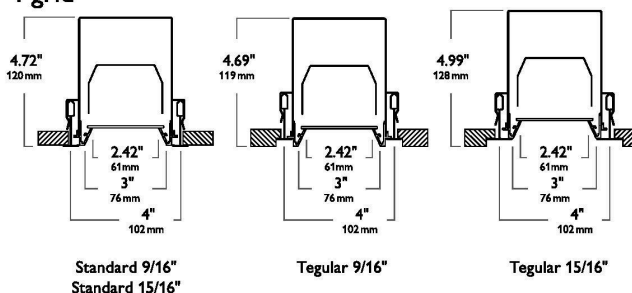
TRUGROOVE CONTINUOUS
Performance LED

Options and Details

Drywall



T-grid*



* Compatible with TechZone® 4" Ceiling Grid

Trim Views

Regressed lens



Drywall Trimless



Drywall Trim



T-grid

Housing

Die-formed 20 gauge cold-rolled steel. Multiple upper wire entrances available for continuous row mounting of fixtures.

Weight

Maximum 3.5lb/ft.

Optical System

Performance version: White light emitted from the LED sources is internally reflected and laterally redirected by a biconvex lens. Light is then reflected by Miro Silver panels and exits through the optical lens assembly. This assembly contains acrylic extrusion profiles to retain a layer of MesoOptics film, creating both an uninterrupted continuum of light and an optical batwing distribution.

Definition version: Light passes through a diffuse white acrylic lens to deliver a highly uniform luminous continuum.

Standard Driver

Dimming 0-10V, 5-100%. Output is Class 2 rated.

Lumen Maintenance

At an ambient temperature of 25°C in non-insulated contact applications, the LED lumen maintenance expectation for each lumen package is

K: L₈₀ (12k) 71,000 hrs

G: L₈₀ (12k) 68,000 hrs

E: L₈₀ (12k) 54,000 hrs

Mounting

Mounting brackets on housing sides support T-Grid installation. 1/16" diameter aircraft cable with self-locking, tamper-resistant, miniature cable gripper provides vertical adjustment for drywall. Aircraft cable, crimp and gripper independently tested to meet stringent safety requirements.

Compatible with 4" Armstrong TechZone ceiling grid.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Electrical

Factory pre-wired to section ends with quick-wire connectors.

Approvals

Certified to UL, CSA and IES standards. Insulation Contact (IC) rated.

Finish

Extruded aluminum trim and die-cast endplates coated with electrostatically applied and thermally cured polyester powder coat paint finish.

Environment

Rated for dry or damp locations in operating ambient temperatures 0-40°C (32-104°F). Certain luminaire components may be adversely affected by contaminants. Damage caused by sulfur, chlorine, petroleum based solutions or other contaminants are not covered under warranty.

Due to continuing product improvements, Philips Ledalite reserves the right to change the specifications without notice.



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TruGrvContPerfm_30K22Im_R.pdf 07.15 page 4 of 4

Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F25.G

3FT WET LOCATION LINEAR SLOT

Manufacturer: A-LIGHT (INTEGRATIONS)

Fixture Line: D5 Accolade

Fixture: LINEAR LED

Catalog #: D5-G-3-LS-30-2-HV-MOUNTING-FINISH-Q

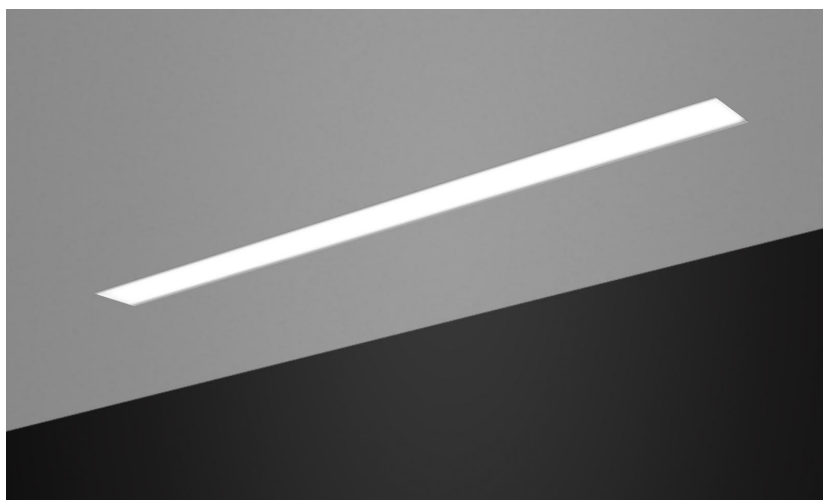
Mounting: RECESSED

Fixture Wattage: 30w

Fixture Voltage: 277

Load Type: Non-Dim

Lamp Spec: LED, 3000K, 10 W/LF





D5 | accolade⁵

project

type

quantity

Optics



a parabola™ louver | t-bar



FIT louver™ | trim flange



a cirrus™ | MR16 module | trim flange



HTLO™ | regressed gyp

Additional Integrations Selections

Lengths:

non-standard nominal individual lengths: 5', 6', 7', 9', 10', 11'
nominal rows longer than 24'
exact lengths to the nearest 100th of an inch

Options:

custom finish
MR16 modules
MRI configuration

Design-Assist:

in-house design-assist team manages your unique project

Mounting:

gyp trimless
1/2" trim
t-bar
+

custom mounting

precise lengths

shadow molding perimeter

hidden grid

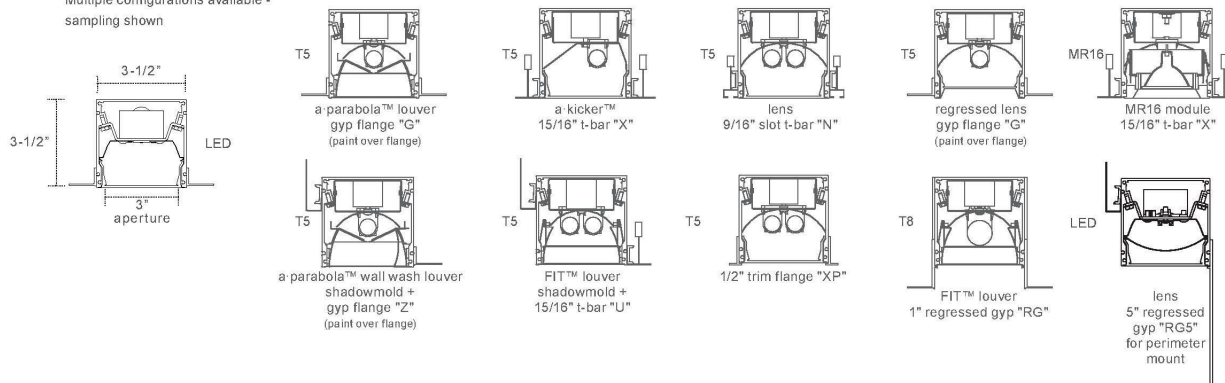
patterns

- ▣ custom angles
- ▣ precise lengths
- ▣ wall-to-wall specification
- ▣ L's, U's, squares and rectangles
- ▣ tig-welded corners, sanded smooth to eliminate light leaks
- ▣ fully lit corners with mitered lenses
- ▣ staggered trays eliminate socket shadows
- ▣ seamless transitions between sections and various mounting types
- ▣ LED recommended for patterns, T5 staggered allowed, T8 n/a

recessed

Cross Sections

Multiple configurations available -
sampling shown



Available Light Platforms



Available Mounting



D5 | accolade⁵**Linear Dimensions:**

Standard lengths available are located on the 'elements' spec sheet. All other lengths should be specified as follows...

Nominal Damp Location Row

R___: *Specify in nominal feet.*

Choose when nominal length is acceptable.

Actual length will be shorter or longer due to metric lamp lengths. Lengths over 12' are comprised of multiple sections.

Examples: a nominal 54ft row begins as **D5R54**; a 7ft individual as **D5R7**.

Nominal Wet Location Run

G___: *Specify in nominal feet.*

Choose when nominal length is acceptable and wet location is necessary.

Actual length will be shorter or longer due to metric lamp lengths. Lengths over 12' are comprised of multiple sections with minimal endcaps, joined via wet rated connectors (by others).

Examples: a nominal 54ft row begins as **D5G54**; a 7ft individual as **D5G7**.

Exact Row

M___: *Specify overall length in inches to the nearest hundredth.*

Choose when exact lengths are required as determined by space constraints, etc. Submittals required. Lengths over 12' are comprised of multiple sections.

Examples: an exact 54ft row begins as **D5M648.00**; a 7ft individual as **D5M84.00**.

Pattern Dimensions:

Each pattern contains a precision-formed optical platform engineered for maximum light output and even distribution.

Pattern

Specify overall length of each section in inches to the nearest hundredth.

Choose when multiple angles are necessary. Submittals required: contact our design-assist team and submit architectural drawings with precise lengths. 90° angles are assumed unless otherwise specified. LED + WSP™ + HTLO™ lens is recommended for patterns.

"L" patterns have 2 legs.

"U" patterns have 3 legs.

"R" patterns have 2 legs of equal size (4 legs total) or 1 leg total if exact square. All recessed patterns may be configured on a flat plane. "L's" and "U's" may be configured as overhead or perimeter with inside corners assumed unless otherwise specified. See nomenclature section for specification examples.

Lamping:

LED. 5yr warranty. >60,000hr LED life. Tested to LM-79 and LM-80. See wattage/lumen table for specifications per foot. All specifications are subject to change.



T5/T5HO. Single or dual lamps in cross section or staggered single lamping.

Low-profile electronic, high power factor, program start, sound rating A, inherent thermal protection, UL listed Class P, <10% THD. Dimming: specify manufacturer/model.



T8. Single lamp in cross section. Low-profile electronic, choose low, standard or high power factor, instant start, sound rating A, inherent thermal protection, UL listed Class P, <10% THD. Specify if program start or custom ballast factor required. Dimming: specify manufacturer/model.



MR16 Modules. Standard MR16 modules are 6" each. Sizing for modules in exact row lengths is determined by factory. Submittal drawings may be required. Use encapsulated 20w or 35w aluminized reflector or 20w or 37w IR MR16 lamps only (not included). See *MR16 Addendum* for lamp recommendations.

**Mounting:**

Flush gyp/hard ceiling or wall. "Flangeless" appearance for gyp or other hard ceiling/wall. Flange is not visible and is not factory-painted. Raw aluminum flange must be attached to blocking (by others), mudded over and painted by ceiling contractor for flangeless appearance.



Regressed flush gyp/hard ceiling or wall. Same as above except flange raises lens up into ceiling. "RG" is 1" regressed resulting in a 4.5" height. Interior 1" regressed portion is exposed raw aluminum and visible unless finish is chosen. Contractor should apply ceiling paint if finish is not chosen.



Trim Flange. 1/2" visible powdercoated flange. Use for any gyp or hard ceiling/wall that requires a minimal flange covering the ceiling cut-out edge. Choose finish color for trim flange.



T-Bar. Standard *T-Bar/Grid Ceiling*: 9/16" or 15/16" standard T-Bar or 9/16" slot ceiling. Raw aluminum flange sits on T-Bar, is not visible and is not painted. LED & T5 lamping available for all lengths; T8 available only in 4ft increments.



4" Armstrong Techzone™ / USG Logix™ or other 4" Utility Systems: Suitable for use in 4" on-center standard or slot T-Bar systems. Raw aluminum flange sits on T-Bar, is not visible and is not painted. The N4 option requires that the housing sit *on top* of the slot, creating a slightly recessed fixture. The T4 fixture will sit flush to ceiling.

Concealed Grid for Decoustic Ceilencio®: 2-3/4" panel/grid regress. Raw aluminum flange sits on T-Bar, is not visible and is not painted. LED & T5 only.

Shadowmold. Dual-flanged housing creates a 5/8" shadowed gap along wall/surface with choice of ceiling flange on opposite side for perimeter mounting. Gyp: LED, T5 or T8; T-Bar: LED or T5. Shadowmold spacer is painted black. Exposed side of housing next to wall is unpainted - housing may be field-painted if necessary.



"RG5" is intended only for perimeter mounting in gyp ceiling. The 5" regressed gyp flange on one side, with shadowmolding on the opposite side, results in a 8.5" overall height. Interior 5" regressed portion is exposed raw aluminum and visible unless finish is chosen. Contractor should apply ceiling paint if finish is not chosen.

Finish:

Electrostatically applied powder coat finish.

Construction:

60% recycled aluminum extruded housing. Steel endcaps with earthquake suspension cable attachment holes. Optional MRI housing configuration is specially built with all non-ferrous materials.

Listing:

UL/CUL. Damp or Wet Location.

Companion Luminaires:

D1 suspended, D2 suspended/wall, D3 suspended/ceiling/wall, D4 wall, D6 recessed.

Legend:

- Emergency ballast not applicable on lengths 3ft or less.
- Multi-circuiting: submit multi-circuiting requirements during submittal process.
- Standard on/off occupancy sensor: Wattstopper FS-205 with minimal 1" diameter.
- Standard occupancy sensor with photocell: Wattstopper FS-205 wired for daylight harvesting. Requires 0-10V dimming ballast.
- Lens is required for use in wet or natatorium locations.
- T5/T5HO only, 1 lamp in cross section.
- Fluorescent only. Staggered lamping not recommended with HTLO™.
- LED only. "SH" optics recommended.
- MR16 modules. Each module adds 6" total to luminaire length. Indicate quantity and location within row. Submittals may be required.
- Not available with staggered or dual lamping.
- Staggered lamping not available on lengths less than 8ft. 8ft length uses 3-3ft lamps. 12ft uses 2-3ft and 2-4ft lamps.
- Not available with LED.
- The N4 mounting requires the housing to sit on top of the slot T-Bar creating a slight regress and will not sit flush to ceiling tile.



D5 | accolade⁵

project

type

quantity

Series: D5

Row or Pattern Type: _____

for standard lengths available: see 'elements' specification sheet

damp location nominal length row R
wet location nominal length run G
exact length row M

patterns (specify length in inches to the nearest 100th)

"L" overhead - wall to ceiling, inside corner LCW
"L" horizontal/perimeter - wall to adjacent wall, inside corner LWW
"L" flat - wall only - standard "L" LWL
"L" flat - wall only - inverse "L" LWB
"L" flat - ceiling only - standard "L" LCL
"L" flat - ceiling only - inverse "L" LCB
"U" flat - wall only UW
"U" flat - ceiling only UC
"U" horizontal/perimeter - wall to wall to wall, inside corners UWW
"U" inverted - wall to ceiling to wall, inside corners UWC
rectangle/square flat - wall only RW
rectangle/square flat - ceiling only RC
custom pattern P

Length: _____

nominal length "R" or "G" (specify in feet)

exact length "M" (specify in inches to nearest 100th)

patterns (specify in inches to nearest 100th)

2 leg patterns "L"s and "R"s"
1st length = short leg x 2nd length = long leg
example: D5LCW103.65 x 134.80

3 leg patterns "U"s"
1st length x center length x last length
D5UWC103.65 x 134.80 x 103.65

> 3 legs of different lengths
enter lengths in order of placement
D5P103.65 x 134.80 x 103.65 x 35.00

for angles other than 90° use P and specify in submittals

Lamping: _____

LED standard output ⁸ LS
LED high output ⁸ LH
T5 (1) S
T5HO (1) H
T5 (2) D
T5HO (2) O
T5 staggered ¹¹ 2
T5HO staggered ¹¹ 4
T8 (1) low output T8L
T8 (1) standard output T8S
T8 (1) high output T8H
MR16 modules ⁹ 3

LED Temp (if applicable): _____

3000k 30
3500k 35
4000k 40

LED	1 board in cross
per foot	watts/ft lumens/ft
LS	5 600
LH	10 1200

Lumens at board at 4000k.
Consult IES files online for delivered lumens.
Specifications subject to change.

universal 120V - 277V
120V
277V
347V

Voltage: _____

U
1
2
3

Optics: _____

a-parabola™ louver ⁸ P
a-parabola™ wall wash louver ⁸ W
a-cirrus™ lens A
HTLO™ lens ⁷ H
HTLO™ vertical (LED only) ⁸ HV
HTLO™ vertical + horizontal (LED only) ⁸ HVH
WISP™ lens S
WISP™ + HTLO™ (LED only) ⁸ SH
½" regressed lens: choose "A", "H" or "S" R
a-wash™ kicker + lens: choose "A", "H" or "S" ¹⁰ K
a-wash™ LED kicker (LED only) ⁸ KSH
FIT™ white louver ¹² ZW
FIT™ aluminum louver ¹² ZA
a-lenszilla™ white louver + lens: choose "A" or "H" ZW
a-lenszilla™ aluminum louver + lens: choose "A" or "H" ZA
a-graze™ white louver + specular reflector ¹⁰ GW
35 or 37W MR16 module - add module qty ⁹ MF
20W MR16 module - add module qty ⁹ MZ

Mounting: _____

flush gyp/hard lid - no finish G
1" regressed gyp - optional finish RG
trim flange - choose finish XP
t-bar 9/16" - no finish T
t-bar 15/16" - no finish X
t-bar 9/16" slot - no finish N
4" on center standard t-bar - no finish T4
4" on center slot t-bar - no finish ¹³ N4
decoustics ceilencio® - no finish D
shadowmold + flush gyp - no finish Z
shadowmold + 9/16" t-bar - no finish Y
shadowmold + 15/16" t-bar - no finish U
shadowmold + 5" regressed gyp - optional finish RG5
custom C

Finish: _____

a-titanium™ T
satin white W
satin black B
textured eggshell white E
other - specify RAL# O
no finish (t-bar or gyp/no MR16) -
custom C

Options: _____

dimming - specify manufacturer, model/series and voltage D
emergency (fluorescent only) - specify model/series or lumens ¹ E
external fusing F
multi-circuit ² M
new york city code N
chicago plenum code C
occupancy sensor ³ O
photocell/daylight sensor ⁴ P
natatorium application ⁵ K
wet label ⁵ Q
MRI housing configuration MRI

recessed



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F25.H

4FT WET LOCATION LINEAR SLOT

Manufacturer: A-LIGHT (INTEGRATIONS)

Fixture Line: D5 Accolade

Fixture: LINEAR LED

Catalog #: D5-G-4-LS-30-2-HV-MOUNTING-FINISH-Q

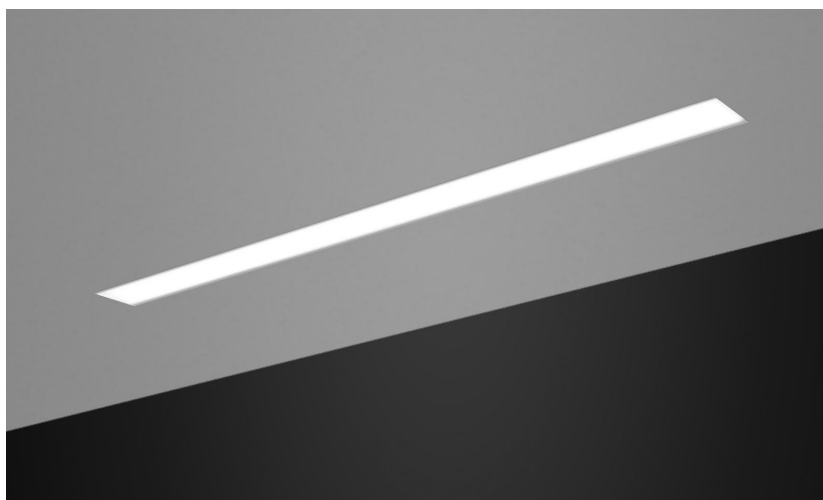
Mounting: RECESSED

Fixture Wattage: 40w

Fixture Voltage: 277

Load Type: Non-Dim

Lamp Spec: LED, 3000K, 10 W/LF





D5 | accolade⁵

project

type

quantity

Optics



a parabola™ louver | t-bar



FIT louver™ | trim flange



a cirrus™ | MR16 module | trim flange



HTLO™ | regressed gyp

Additional Integrations Selections

Lengths:

non-standard nominal individual lengths: 5', 6', 7', 9', 10', 11'
nominal rows longer than 24'
exact lengths to the nearest 100th of an inch

Options:

custom finish
MR16 modules
MRI configuration

Design-Assist:

in-house design-assist team manages your unique project

Mounting:

gyp trimless
1/2" trim
t-bar
+

custom mounting

precise lengths

shadow molding perimeter

hidden grid

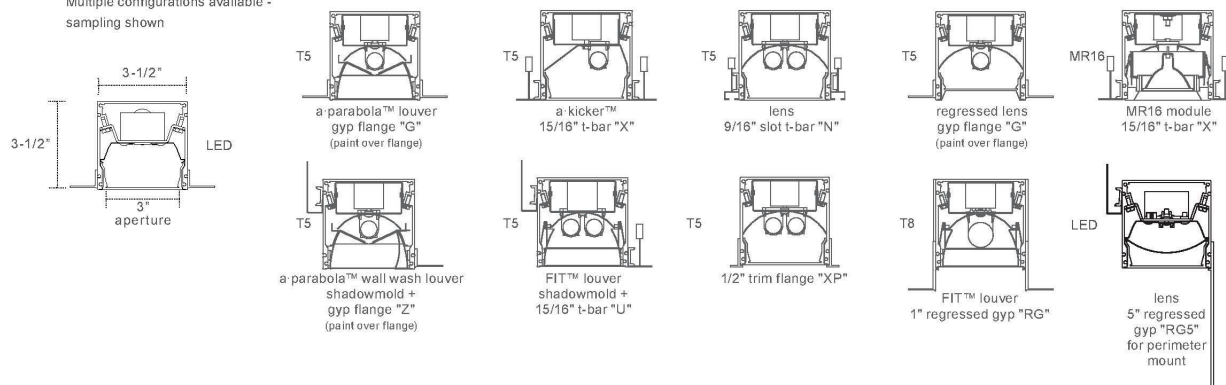
patterns

- ▣ custom angles
- ▣ precise lengths
- ▣ wall-to-wall specification
- ▣ L's, U's, squares and rectangles
- ▣ tig-welded corners, sanded smooth to eliminate light leaks
- ▣ fully lit corners with mitered lenses
- ▣ staggered trays eliminate socket shadows
- ▣ seamless transitions between sections and various mounting types
- ▣ LED recommended for patterns, T5 staggered allowed, T8 n/a

recessed

Cross Sections

Multiple configurations available -
sampling shown



Available Light Platforms



Available Mounting



D5 | accolade⁵**Linear Dimensions:**

Standard lengths available are located on the 'elements' spec sheet. All other lengths should be specified as follows...

Nominal Damp Location Row

R___: *Specify in nominal feet.*

Choose when nominal length is acceptable.

Actual length will be shorter or longer due to metric lamp lengths. Lengths over 12' are comprised of multiple sections.

Examples: a nominal 54ft row begins as **D5R54**; a 7ft individual as **D5R7**.

Nominal Wet Location Run

G___: *Specify in nominal feet.*

Choose when nominal length is acceptable and wet location is necessary.

Actual length will be shorter or longer due to metric lamp lengths. Lengths over 12' are comprised of multiple sections with minimal endcaps, joined via wet rated connectors (by others).

Examples: a nominal 54ft row begins as **D5G54**; a 7ft individual as **D5G7**.

Exact Row

M___: *Specify overall length in inches to the nearest hundredth.*

Choose when exact lengths are required as determined by space constraints, etc. Submittals required. Lengths over 12' are comprised of multiple sections.

Examples: an exact 54ft row begins as **D5M648.00**; a 7ft individual as **D5M84.00**.

Pattern Dimensions:

Each pattern contains a precision-formed optical platform engineered for maximum light output and even distribution.

Pattern

Specify overall length of each section in inches to the nearest hundredth.

Choose when multiple angles are necessary. Submittals required: contact our design-assist team and submit architectural drawings with precise lengths. 90° angles are assumed unless otherwise specified. LED + WSP™ + HTLO™ lens is recommended for patterns.

"L" patterns have 2 legs.

"U" patterns have 3 legs.

"R" patterns have 2 legs of equal size (4 legs total) or 1 leg total if exact square. All recessed patterns may be configured on a flat plane. "L"s and "U"s may be configured as overhead or perimeter with inside corners assumed unless otherwise specified. See nomenclature section for specification examples.

Lamping:

LED. 5yr warranty. >60,000hr LED life. Tested to LM-79 and LM-80. See wattage/lumen table for specifications per foot. All specifications are subject to change.



T5/T5HO. Single or dual lamps in cross section or staggered single lamping.

Low-profile electronic, high power factor, program start, sound rating A, inherent thermal protection, UL listed Class P, <10% THD. Dimming: specify manufacturer/model.



T8. Single lamp in cross section. Low-profile electronic, choose low, standard or high power factor, instant start, sound rating A, inherent thermal protection, UL listed Class P, <10% THD. Specify if program start or custom ballast factor required. Dimming: specify manufacturer/model.



MR16 Modules. Standard MR16 modules are 6" each. Sizing for modules in exact row lengths is determined by factory. Submittal drawings may be required. Use encapsulated 20w or 35w aluminized reflector or 20w or 37w IR MR16 lamps only (not included). See *MR16 Addendum* for lamp recommendations.

**Mounting:**

Flush gyp/hard ceiling or wall. "Flangeless" appearance for gyp or other hard ceiling/wall. Flange is not visible and is not factory-painted. Raw aluminum flange must be attached to blocking (by others), mudded over and painted by ceiling contractor for flangeless appearance.



Regressed flush gyp/hard ceiling or wall. Same as above except flange raises lens up into ceiling. "RG" is 1" regressed resulting in a 4.5" height. Interior 1" regressed portion is exposed raw aluminum and visible unless finish is chosen. Contractor should apply ceiling paint if finish is not chosen.



Trim Flange. 1/2" visible powdercoated flange. Use for any gyp or hard ceiling/wall that requires a minimal flange covering the ceiling cut-out edge. Choose finish color for trim flange.



T-Bar. Standard *T-Bar/Grid Ceiling*: 9/16" or 15/16" standard T-Bar or 9/16" slot ceiling. Raw aluminum flange sits on T-Bar, is not visible and is not painted. LED & T5 lamping available for all lengths; T8 available only in 4ft increments.



4" Armstrong Techzone™ / USG Logix™ or other 4" Utility Systems: Suitable for use in 4" on-center standard or slot T-Bar systems. Raw aluminum flange sits on T-Bar, is not visible and is not painted. The N4 option requires that the housing sit *on top* of the slot, creating a slightly recessed fixture. The T4 fixture will sit flush to ceiling.

Concealed Grid for Decoustic Ceilencio®: 2-3/4" panel/grid regress. Raw aluminum flange sits on T-Bar, is not visible and is not painted. LED & T5 only.

Shadowmold. Dual-flanged housing creates a 5/8" shadowed gap along wall/surface with choice of ceiling flange on opposite side for perimeter mounting. Gyp: LED, T5 or T8; T-Bar: LED or T5. Shadowmold spacer is painted black. Exposed side of housing next to wall is unpainted - housing may be field-painted if necessary.



"RG5" is intended only for perimeter mounting in gyp ceiling. The 5" regressed gyp flange on one side, with shadowmolding on the opposite side, results in a 8.5" overall height. Interior 5" regressed portion is exposed raw aluminum and visible unless finish is chosen. Contractor should apply ceiling paint if finish is not chosen.

Finish:

Electrostatically applied powder coat finish.

Construction:

60% recycled aluminum extruded housing. Steel endcaps with earthquake suspension cable attachment holes. Optional MRI housing configuration is specially built with all non-ferrous materials.

Listing:

UL/CUL. Damp or Wet Location.

Companion Luminaires:

D1 suspended, D2 suspended/wall, D3 suspended/ceiling/wall, D4 wall, D6 recessed.

Legend:

- Emergency ballast not applicable on lengths 3ft or less.
- Multi-circuiting: submit multi-circuiting requirements during submittal process.
- Standard on/off occupancy sensor: Wattstopper FS-205 with minimal 1" diameter.
- Standard occupancy sensor with photocell: Wattstopper FS-205 wired for daylight harvesting. Requires 0-10V dimming ballast.
- Lens is required for use in wet or natatorium locations.
- T5/T5HO only, 1 lamp in cross section.
- Fluorescent only. Staggered lamping not recommended with HTLO™.
- LED only. "SH" optics recommended.
- MR16 modules. Each module adds 6" total to luminaire length. Indicate quantity and location within row. Submittals may be required.
- Not available with staggered or dual lamping.
- Staggered lamping not available on lengths less than 8ft. 8ft length uses 3-3ft lamps. 12ft uses 2-3ft and 2-4ft lamps.
- Not available with LED.
- The N4 mounting requires the housing to sit on top of the slot T-Bar creating a slight regress and will not sit flush to ceiling tile.



D5 | accolade⁵

project

type

quantity

Series: D5

Row or Pattern Type: _____

for standard lengths available: see 'elements' specification sheet

damp location nominal length row R _____
wet location nominal length run G _____
exact length row M _____

patterns (specify length in inches to the nearest 100th)

"L" overhead - wall to ceiling, inside corner LCW _____
"L" horizontal/perimeter - wall to adjacent wall, inside corner LWW _____
"L" flat - wall only - standard "L" LWL _____
"L" flat - wall only - inverse "L" LWB _____
"L" flat - ceiling only - standard "L" LCL _____
"L" flat - ceiling only - inverse "L" LCB _____
"U" flat - wall only UW _____
"U" flat - ceiling only UC _____
"U" horizontal/perimeter - wall to wall to wall, inside corners UWW _____
"U" inverted - wall to ceiling to wall, inside corners UWC _____
rectangle/square flat - wall only RW _____
rectangle/square flat - ceiling only RC _____
custom pattern P _____

Length: _____

nominal length "R" or "G" (specify in feet) _____

exact length "M" (specify in inches to nearest 100th) _____

patterns (specify in inches to nearest 100th)

2 leg patterns "L"s and "R"s"
1st length = short leg x 2nd length = long leg
example: D5LCW103.65 x 134.80 _____

3 leg patterns "U"s"
1st length x center length x last length
D5UWC103.65 x 134.80 x 103.65 _____

> 3 legs of different lengths
enter lengths in order of placement
D5P103.65 x 134.80 x 103.65 x 35.00 _____

for angles other than 90° use P and specify in submittals

Lamping: _____

LED standard output ⁸ LS _____
LED high output ⁸ LH _____
T5 (1) S _____
T5HO (1) H _____
T5 (2) D _____
T5HO (2) O _____
T5 staggered ¹¹ 2 _____
T5HO staggered ¹¹ 4 _____
T8 (1) low output T8L _____
T8 (1) standard output T8S _____
T8 (1) high output T8H _____
MR16 modules ⁹ 3 _____

LED Temp (if applicable): _____

3000k 30 _____
3500k 35 _____
4000k 40 _____

LED	1 board in cross	
per foot	watts/ft	lumens/ft
LS	5	600
LH	10	1200

Lumens at board at 4000k.
Consult IES files online for delivered lumens.
Specifications subject to change.

universal 120V - 277V

120V

277V

347V

Voltage: _____

U

1

2

3

Optics: _____

P

W

A

H

HV

HVH

S

SH

R

K

KSH

ZW

ZA

ZW

ZA

GW

MF

MZ

Mounting: _____

G

RG

XP

T

X

N

T4

N4

D

Z

Y

U

RG5

C

Finish: _____

T

W

B

E

O

-

C

Options: _____

D

E

F

M

N

C

O

P

K

Q

MRI

a-parabola™ louver

a-parabola™ wall wash louver

a-cirrus™ lens

HTLO™ lens

HTLO™ vertical (LED only)

HTLO™ vertical + horizontal (LED only)

WISP™ lens

WISP™ + HTLO™ (LED only)

½" regressed lens: choose "A", "H" or "S"

a-wash™ kicker + lens: choose "A", "H" or "S"

a-wash™ LED kicker (LED only)

FIT™ white louver

FIT™ aluminum louver

a-lenszilla™ white louver + lens: choose "A" or "H"

a-lenszilla™ aluminum louver + lens: choose "A" or "H"

a-graze™ white louver + specular reflector

35 or 37W MR16 module - add module qty

20W MR16 module - add module qty

flush gyp/hard lid - no finish

1" regressed gyp - optional finish

trim flange - choose finish

t-bar 9/16" - no finish

t-bar 15/16" - no finish

t-bar 9/16" slot - no finish

4" on center standard t-bar - no finish

4" on center slot t-bar - no finish

decoustics ceilencio® - no finish

shadowmold + flush gyp - no finish

shadowmold + 9/16" t-bar - no finish

shadowmold + 15/16" t-bar - no finish

shadowmold + 5" regressed gyp - optional finish

custom

a-titanium™

satin white

satin black

textured eggshell white

other - specify RAL#

no finish (t-bar or gyp/no MR16)

custom

dimming - specify manufacturer, model/series and voltage

emergency (fluorescent only) - specify model/series or lumens

external fusing

multi-circuit

new york city code

chicago plenum code

occupancy sensor

photocell/daylight sensor

natatorium application

wet label

MRI housing configuration

recessed



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F25.J

5FT WET LOCATION LINEAR SLOT

Manufacturer: A-LIGHT (INTEGRATIONS)

Fixture Line: D5 Accolade

Fixture: LINEAR LED

Catalog #: D5-G-5-LS-30-2-HV-MOUNTING-FINISH-Q

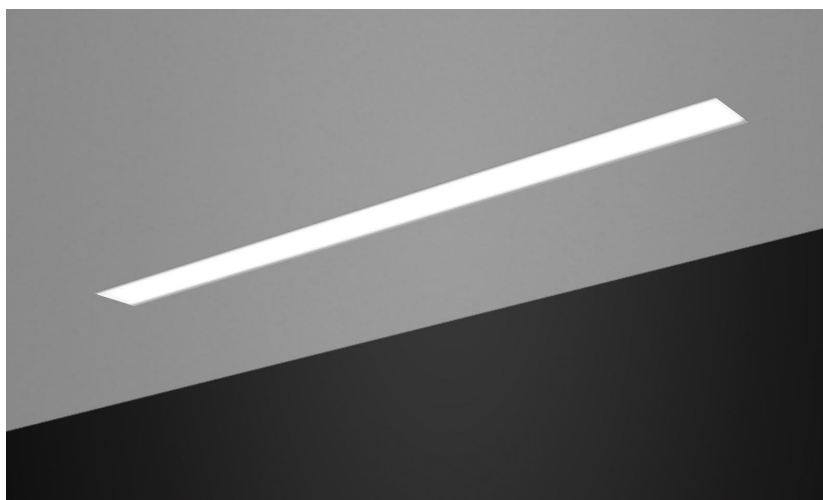
Mounting: RECESSED

Fixture Wattage: 50w

Fixture Voltage: 277

Load Type: Non-Dim

Lamp Spec: LED, 3000K, 10 W/LF





D5 | accolade⁵

project

type

quantity

Optics



a parabola™ louver | t-bar



FIT louver™ | trim flange



a cirrus™ | MR16 module | trim flange



HTLO™ | regressed gyp

Additional Integrations Selections

Lengths:

non-standard nominal individual lengths: 5', 6', 7', 9', 10', 11'
nominal rows longer than 24'
exact lengths to the nearest 100th of an inch

Options:

custom finish
MR16 modules
MRI configuration

Design-Assist:

in-house design-assist team manages your unique project

Mounting:

gyp trimless
1/2" trim
t-bar
+

custom mounting

precise lengths

shadow molding perimeter

hidden grid

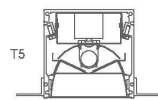
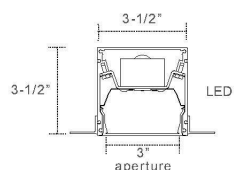
patterns

- ▣ custom angles
- ▣ precise lengths
- ▣ wall-to-wall specification
- ▣ L's, U's, squares and rectangles
- ▣ tig-welded corners, sanded smooth to eliminate light leaks
- ▣ fully lit corners with mitered lenses
- ▣ staggered trays eliminate socket shadows
- ▣ seamless transitions between sections and various mounting types
- ▣ LED recommended for patterns, T5 staggered allowed, T8 n/a

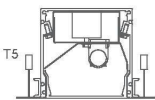
recessed

Cross Sections

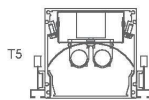
Multiple configurations available -
sampling shown



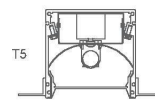
a parabola™ louver
gyp flange "G"
(paint over flange)



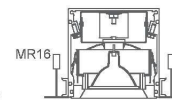
a kicker™
15/16" t-bar "X"



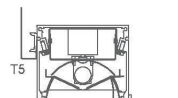
lens
9/16" slot t-bar "N"



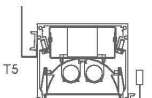
regressed lens
gyp flange "G"
(paint over flange)



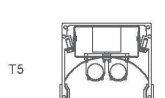
MR16 module
15/16" t-bar "X"



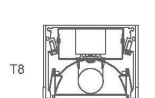
a parabola™ wall wash louver
shadowmold +
gyp flange "Z"
(paint over flange)



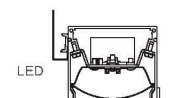
FIT™ louver
shadowmold +
15/16" t-bar "U"



1/2" trim flange "XP"



FIT™ louver
1" regressed gyp "RG"



lens
5" regressed
gyp "RG5"
for perimeter
mount

Available Light Platforms



Available Mounting



D5 | accolade⁵**Linear Dimensions:**

Standard lengths available are located on the 'elements' spec sheet. All other lengths should be specified as follows...

Nominal Damp Location Row

R___: *Specify in nominal feet.*

Choose when nominal length is acceptable.

Actual length will be shorter or longer due to metric lamp lengths. Lengths over 12' are comprised of multiple sections.

Examples: a nominal 54ft row begins as **D5R54**; a 7ft individual as **D5R7**.

Nominal Wet Location Run

G___: *Specify in nominal feet.*

Choose when nominal length is acceptable and wet location is necessary.

Actual length will be shorter or longer due to metric lamp lengths. Lengths over 12' are comprised of multiple sections with minimal endcaps, joined via wet rated connectors (by others).

Examples: a nominal 54ft row begins as **D5G54**; a 7ft individual as **D5G7**.

Exact Row

M___: *Specify overall length in inches to the nearest hundredth.*

Choose when exact lengths are required as determined by space constraints, etc. Submittals required. Lengths over 12' are comprised of multiple sections.

Examples: an exact 54ft row begins as **D5M648.00**; a 7ft individual as **D5M84.00**.

Pattern Dimensions:

Each pattern contains a precision-formed optical platform engineered for maximum light output and even distribution.

Pattern

Specify overall length of each section in inches to the nearest hundredth.

Choose when multiple angles are necessary. Submittals required: contact our design-assist team and submit architectural drawings with precise lengths. 90° angles are assumed unless otherwise specified. LED + WSP™ + HTLO™ lens is recommended for patterns.

"L" patterns have 2 legs.

"U" patterns have 3 legs.

"R" patterns have 2 legs of equal size (4 legs total) or 1 leg total if exact square. All recessed patterns may be configured on a flat plane. "L"s and "U"s may be configured as overhead or perimeter with inside corners assumed unless otherwise specified. See nomenclature section for specification examples.

Lamping:

LED. 5yr warranty. >60,000hr LED life. Tested to LM-79 and LM-80. See wattage/lumen table for specifications per foot. All specifications are subject to change.



T5/T5HO. Single or dual lamps in cross section or staggered single lamping.

Low-profile electronic, high power factor, program start, sound rating A, inherent thermal protection, UL listed Class P, <10% THD. Dimming: specify manufacturer/model.



T8. Single lamp in cross section. Low-profile electronic, choose low, standard or high power factor, instant start, sound rating A, inherent thermal protection, UL listed Class P, <10% THD. Specify if program start or custom ballast factor required. Dimming: specify manufacturer/model.



MR16 Modules. Standard MR16 modules are 6" each. Sizing for modules in exact row lengths is determined by factory. Submittal drawings may be required. Use encapsulated 20w or 35w aluminized reflector or 20w or 37w IR MR16 lamps only (not included). See *MR16 Addendum* for lamp recommendations.

**Mounting:**

Flush gyp/hard ceiling or wall. "Flangeless" appearance for gyp or other hard ceiling/wall. Flange is not visible and is not factory-painted. Raw aluminum flange must be attached to blocking (by others), mudded over and painted by ceiling contractor for flangeless appearance.



Regressed flush gyp/hard ceiling or wall. Same as above except flange raises lens up into ceiling. "RG" is 1" regressed resulting in a 4.5" height. Interior 1" regressed portion is exposed raw aluminum and visible unless finish is chosen. Contractor should apply ceiling paint if finish is not chosen.



Trim Flange. 1/2" visible powdercoated flange. Use for any gyp or hard ceiling/wall that requires a minimal flange covering the ceiling cut-out edge. Choose finish color for trim flange.



T-Bar. Standard *T-Bar/Grid Ceiling*: 9/16" or 15/16" standard T-Bar or 9/16" slot ceiling. Raw aluminum flange sits on T-Bar, is not visible and is not painted. LED & T5 lamping available for all lengths; T8 available only in 4ft increments.



4" *Armstrong Techzone™ / USG Logix™* or other 4" *Utility Systems*: Suitable for use in 4" on-center standard or slot T-Bar systems. Raw aluminum flange sits on T-Bar, is not visible and is not painted. The N4 option requires that the housing sit *on top* of the slot, creating a slightly recessed fixture. The T4 fixture will sit flush to ceiling.

Concealed Grid for Decoustic Ceilencio®: 2-3/4" panel/grid regress. Raw aluminum flange sits on T-Bar, is not visible and is not painted. LED & T5 only.

Shadowmold. Dual-flanged housing creates a 5/8" shadowed gap along wall/surface with choice of ceiling flange on opposite side for perimeter mounting. Gyp: LED, T5 or T8; T-Bar: LED or T5. Shadowmold spacer is painted black. Exposed side of housing next to wall is unpainted - housing may be field-painted if necessary.



"RG5" is intended only for perimeter mounting in gyp ceiling. The 5" regressed gyp flange on one side, with shadowmolding on the opposite side, results in a 8.5" overall height. Interior 5" regressed portion is exposed raw aluminum and visible unless finish is chosen. Contractor should apply ceiling paint if finish is not chosen.

Finish:

Electrostatically applied powder coat finish.

Construction:

60% recycled aluminum extruded housing. Steel endcaps with earthquake suspension cable attachment holes. Optional MRI housing configuration is specially built with all non-ferrous materials.

Listing:

UL/CUL. Damp or Wet Location.

Companion Luminaires:

D1 suspended, D2 suspended/wall, D3 suspended/ceiling/wall, D4 wall, D6 recessed.

Legend:

- Emergency ballast not applicable on lengths 3ft or less.
- Multi-circuiting: submit multi-circuiting requirements during submittal process.
- Standard on/off occupancy sensor: Wattstopper FS-205 with minimal 1" diameter.
- Standard occupancy sensor with photocell: Wattstopper FS-205 wired for daylight harvesting. Requires 0-10V dimming ballast.
- Lens is required for use in wet or natatorium locations.
- T5/T5HO only, 1 lamp in cross section.
- Fluorescent only. Staggered lamping not recommended with HTLO™.
- LED only. "SH" optics recommended.
- MR16 modules. Each module adds 6" total to luminaire length. Indicate quantity and location within row. Submittals may be required.
- Not available with staggered or dual lamping.
- Staggered lamping not available on lengths less than 8ft. 8ft length uses 3-3ft lamps. 12ft uses 2-3ft and 2-4ft lamps.
- Not available with LED.
- The N4 mounting requires the housing to sit on top of the slot T-Bar creating a slight regress and will not sit flush to ceiling tile.



D5 | accolade⁵

project

type

quantity

Series: D5

Row or Pattern Type: _____

for standard lengths available: see 'elements' specification sheet

damp location nominal length row R _____
wet location nominal length run G _____
exact length row M _____

patterns (specify length in inches to the nearest 100th)

"L" overhead - wall to ceiling, inside corner LCW _____
"L" horizontal/perimeter - wall to adjacent wall, inside corner LWW _____
"L" flat - wall only - standard "L" LWL _____
"L" flat - wall only - inverse "L" LWB _____
"L" flat - ceiling only - standard "L" LCL _____
"L" flat - ceiling only - inverse "L" LCB _____
"U" flat - wall only UW _____
"U" flat - ceiling only UC _____
"U" horizontal/perimeter - wall to wall to wall, inside corners UWW _____
"U" inverted - wall to ceiling to wall, inside corners UWC _____
rectangle/square flat - wall only RW _____
rectangle/square flat - ceiling only RC _____
custom pattern P _____

Length: _____

nominal length "R" or "G" (specify in feet) _____

exact length "M" (specify in inches to nearest 100th) _____

patterns (specify in inches to nearest 100th)

2 leg patterns "L"s and "R"s"
1st length = short leg x 2nd length = long leg
example: D5LCW103.65 x 134.80 _____

3 leg patterns "U"s"
1st length x center length x last length
D5UWC103.65 x 134.80 x 103.65 _____

> 3 legs of different lengths
enter lengths in order of placement
D5P103.65 x 134.80 x 103.65 x 35.00 _____

for angles other than 90° use P and specify in submittals

Lamping: _____

LED standard output ⁸ LS _____
LED high output ⁸ LH _____
T5 (1) S _____
T5HO (1) H _____
T5 (2) D _____
T5HO (2) O _____
T5 staggered ¹¹ 2 _____
T5HO staggered ¹¹ 4 _____
T8 (1) low output T8L _____
T8 (1) standard output T8S _____
T8 (1) high output T8H _____
MR16 modules ⁹ 3 _____

LED Temp (if applicable): _____

3000k 30 _____
3500k 35 _____
4000k 40 _____

LED	1 board in cross
per foot	watts/ft lumens/ft
LS	5 600
LH	10 1200

Lumens at board at 4000k.
Consult IES files online for delivered lumens.
Specifications subject to change.

universal 120V - 277V
120V
277V
347V

Voltage: _____

U _____
1 _____
2 _____
3 _____

Optics: _____

a-parabola™ louver ⁸ P _____
a-parabola™ wall wash louver ⁸ W _____
a-cirrus™ lens A _____
HTLO™ lens ⁷ H _____
HTLO™ vertical (LED only) ⁸ HV _____
HTLO™ vertical + horizontal (LED only) ⁸ HVH _____
WISP™ lens S _____
WISP™ + HTLO™ (LED only) ⁸ SH _____
½" regressed lens: choose "A", "H" or "S" R _____
a-wash™ kicker + lens: choose "A", "H" or "S" ¹⁰ K _____
a-wash™ LED kicker (LED only) ⁸ KSH _____
FIT™ white louver ¹² ZW _____
FIT™ aluminum louver ¹² ZA _____
a-lenszilla™ white louver + lens: choose "A" or "H" ZW _____
a-lenszilla™ aluminum louver + lens: choose "A" or "H" ZA _____
a-graze™ white louver + specular reflector ¹⁰ GW _____
35 or 37W MR16 module - add module qty ⁹ MF _____
20W MR16 module - add module qty ⁹ MZ _____

Mounting: _____

flush gyp/hard lid - no finish G _____
1" regressed gyp - optional finish RG _____
trim flange - choose finish XP _____
t-bar 9/16" - no finish T _____
t-bar 15/16" - no finish X _____
t-bar 9/16" slot - no finish N _____
4" on center standard t-bar - no finish T4 _____
4" on center slot t-bar - no finish ¹³ N4 _____
decoustics ceilencio® - no finish D _____
shadowmold + flush gyp - no finish Z _____
shadowmold + 9/16" t-bar - no finish Y _____
shadowmold + 15/16" t-bar - no finish U _____
shadowmold + 5" regressed gyp - optional finish RG5 _____
custom C _____

Finish: _____

a-titanium™ T _____
satin white W _____
satin black B _____
textured eggshell white E _____
other - specify RAL# O _____
no finish (t-bar or gyp/no MR16) - _____
custom C _____

Options: _____

dimming - specify manufacturer, model/series and voltage D _____
emergency (fluorescent only) - specify model/series or lumens ¹ E _____
external fusing F _____
multi-circuit ² M _____
new york city code N _____
chicago plenum code C _____
occupancy sensor ³ O _____
photocell/daylight sensor ⁴ P _____
natatorium application ⁵ K _____
wet label ⁵ Q _____
MRI housing configuration MRI _____

recessed



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F25.K

6FT WET LOCATION LINEAR SLOT

Manufacturer: A-LIGHT (INTEGRATIONS)

Fixture Line: D5 Accolade

Fixture: LINEAR LED

Catalog #: D5-G-6-LS-30-2-HV-MOUNTING-FINISH-Q

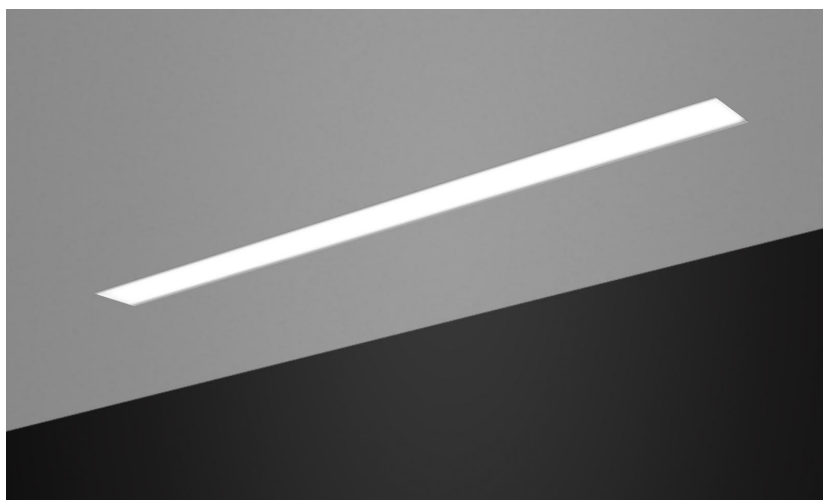
Mounting: RECESSED

Fixture Wattage: 60w

Fixture Voltage: 277

Load Type: Non-Dim

Lamp Spec: LED, 3000K, 10 W/LF





D5 | accolade⁵

project

type

quantity

Optics



a parabola™ louver | t-bar



FIT louver™ | trim flange



a cirrus™ | MR16 module | trim flange



HTLO™ | regressed gyp

Additional Integrations Selections

Lengths:

non-standard nominal individual lengths: 5', 6', 7', 9', 10', 11'
nominal rows longer than 24'
exact lengths to the nearest 100th of an inch

Options:

custom finish
MR16 modules
MRI configuration

Design-Assist:

in-house design-assist team manages your unique project

Mounting:

gyp trimless
1/2" trim
t-bar
+

custom mounting

precise lengths

shadow molding perimeter

hidden grid

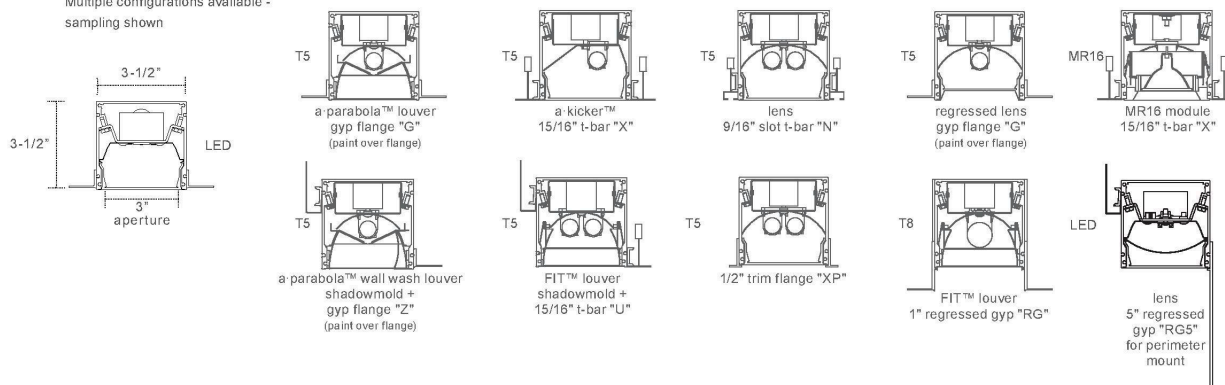
patterns

- ▮ custom angles
- ▮ precise lengths
- ▮ wall-to-wall specification
- ▮ L's, U's, squares and rectangles
- ▮ tig-welded corners, sanded smooth to eliminate light leaks
- ▮ fully lit corners with mitered lenses
- ▮ staggered trays eliminate socket shadows
- ▮ seamless transitions between sections and various mounting types
- ▮ LED recommended for patterns, T5 staggered allowed, T8 n/a

recessed

Cross Sections

Multiple configurations available -
sampling shown



Available Light Platforms



Available Mounting



D5 | accolade⁵**Linear Dimensions:**

Standard lengths available are located on the 'elements' spec sheet. All other lengths should be specified as follows...

Nominal Damp Location Row

R___: *Specify in nominal feet.*

Choose when nominal length is acceptable.

Actual length will be shorter or longer due to metric lamp lengths. Lengths over 12' are comprised of multiple sections.

Examples: a nominal 54ft row begins as **D5R54**; a 7ft individual as **D5R7**.

Nominal Wet Location Run

G___: *Specify in nominal feet.*

Choose when nominal length is acceptable and wet location is necessary.

Actual length will be shorter or longer due to metric lamp lengths. Lengths over 12' are comprised of multiple sections with minimal endcaps, joined via wet rated connectors (by others).

Examples: a nominal 54ft row begins as **D5G54**; a 7ft individual as **D5G7**.

Exact Row

M___: *Specify overall length in inches to the nearest hundredth.*

Choose when exact lengths are required as determined by space constraints, etc. Submittals required. Lengths over 12' are comprised of multiple sections.

Examples: an exact 54ft row begins as **D5M648.00**; a 7ft individual as **D5M84.00**.

Pattern Dimensions:

Each pattern contains a precision-formed optical platform engineered for maximum light output and even distribution.

Pattern

Specify overall length of each section in inches to the nearest hundredth.

Choose when multiple angles are necessary. Submittals required: contact our design-assist team and submit architectural drawings with precise lengths. 90° angles are assumed unless otherwise specified. LED + WSP™ + HTLO™ lens is recommended for patterns.

"L" patterns have 2 legs.

"U" patterns have 3 legs.

"R" patterns have 2 legs of equal size (4 legs total) or 1 leg total if exact square. All recessed patterns may be configured on a flat plane. "L"s and "U"s may be configured as overhead or perimeter with inside corners assumed unless otherwise specified. See nomenclature section for specification examples.

Lamping:

LED. 5yr warranty. >60,000hr LED life. Tested to LM-79 and LM-80. See wattage/lumen table for specifications per foot. All specifications are subject to change.



T5/T5HO. Single or dual lamps in cross section or staggered single lamping.

Low-profile electronic, high power factor, program start, sound rating A, inherent thermal protection, UL listed Class P, <10% THD. Dimming: specify manufacturer/model.



T8. Single lamp in cross section. Low-profile electronic, choose low, standard or high power factor, instant start, sound rating A, inherent thermal protection, UL listed Class P, <10% THD. Specify if program start or custom ballast factor required. Dimming: specify manufacturer/model.



MR16 Modules. Standard MR16 modules are 6" each. Sizing for modules in exact row lengths is determined by factory. Submittal drawings may be required. Use encapsulated 20w or 35w aluminized reflector or 20w or 37w IR MR16 lamps only (not included). See *MR16 Addendum* for lamp recommendations.

**Mounting:**

Flush gyp/hard ceiling or wall. "Flangeless" appearance for gyp or other hard ceiling/wall. Flange is not visible and is not factory-painted. Raw aluminum flange must be attached to blocking (by others), mudded over and painted by ceiling contractor for flangeless appearance.



Regressed flush gyp/hard ceiling or wall. Same as above except flange raises lens up into ceiling. "RG" is 1" regressed resulting in a 4.5" height. Interior 1" regressed portion is exposed raw aluminum and visible unless finish is chosen. Contractor should apply ceiling paint if finish is not chosen.



Trim Flange. 1/2" visible powdercoated flange. Use for any gyp or hard ceiling/wall that requires a minimal flange covering the ceiling cut-out edge. Choose finish color for trim flange.



T-Bar. Standard *T-Bar/Grid Ceiling*: 9/16" or 15/16" standard T-Bar or 9/16" slot ceiling. Raw aluminum flange sits on T-Bar, is not visible and is not painted. LED & T5 lamping available for all lengths; T8 available only in 4ft increments.



4" Armstrong Techzone™ / USG Logix™ or other 4" Utility Systems: Suitable for use in 4" on-center standard or slot T-Bar systems. Raw aluminum flange sits on T-Bar, is not visible and is not painted. The N4 option requires that the housing sit *on top* of the slot, creating a slightly recessed fixture. The T4 fixture will sit flush to ceiling.

Concealed Grid for Decoustic Ceilencio®: 2-3/4" panel/grid regress. Raw aluminum flange sits on T-Bar, is not visible and is not painted. LED & T5 only.

Shadowmold. Dual-flanged housing creates a 5/8" shadowed gap along wall/surface with choice of ceiling flange on opposite side for perimeter mounting. Gyp: LED, T5 or T8; T-Bar: LED or T5. Shadowmold spacer is painted black. Exposed side of housing next to wall is unpainted - housing may be field-painted if necessary.



"RG5" is intended only for perimeter mounting in gyp ceiling. The 5" regressed gyp flange on one side, with shadowmolding on the opposite side, results in a 8.5" overall height. Interior 5" regressed portion is exposed raw aluminum and visible unless finish is chosen. Contractor should apply ceiling paint if finish is not chosen.

Finish:

Electrostatically applied powder coat finish.

Construction:

60% recycled aluminum extruded housing. Steel endcaps with earthquake suspension cable attachment holes. Optional MRI housing configuration is specially built with all non-ferrous materials.

Listing:

UL/CUL. Damp or Wet Location.

Companion Luminaires:

D1 suspended, D2 suspended/wall, D3 suspended/ceiling/wall, D4 wall, D6 recessed.

Legend:

- Emergency ballast not applicable on lengths 3ft or less.
- Multi-circuiting: submit multi-circuiting requirements during submittal process.
- Standard on/off occupancy sensor: Wattstopper FS-205 with minimal 1" diameter.
- Standard occupancy sensor with photocell: Wattstopper FS-205 wired for daylight harvesting. Requires 0-10V dimming ballast.
- Lens is required for use in wet or natatorium locations.
- T5/T5HO only, 1 lamp in cross section.
- Fluorescent only. Staggered lamping not recommended with HTLO™.
- LED only. "SH" optics recommended.
- MR16 modules. Each module adds 6" total to luminaire length. Indicate quantity and location within row. Submittals may be required.
- Not available with staggered or dual lamping.
- Staggered lamping not available on lengths less than 8ft. 8ft length uses 3-3ft lamps. 12ft uses 2-3ft and 2-4ft lamps.
- Not available with LED.
- The N4 mounting requires the housing to sit on top of the slot T-Bar creating a slight regress and will not sit flush to ceiling tile.



D5 | accolade⁵

project

type

quantity

Series: D5

Row or Pattern Type: _____

for standard lengths available: see 'elements' specification sheet

damp location nominal length row R
wet location nominal length run G
exact length row M

patterns (specify length in inches to the nearest 100th)

"L" overhead - wall to ceiling, inside corner LCW
"L" horizontal/perimeter - wall to adjacent wall, inside corner LWW
"L" flat - wall only - standard "L" LWL
"L" flat - wall only - inverse "L" LWB
"L" flat - ceiling only - standard "L" LCL
"L" flat - ceiling only - inverse "L" LCB
"U" flat - wall only UW
"U" flat - ceiling only UC
"U" horizontal/perimeter - wall to wall to wall, inside corners UWW
"U" inverted - wall to ceiling to wall, inside corners UWC
rectangle/square flat - wall only RW
rectangle/square flat - ceiling only RC
custom pattern P

Length: _____

nominal length "R" or "G" (specify in feet)

exact length "M" (specify in inches to nearest 100th)

patterns (specify in inches to nearest 100th)

2 leg patterns "L's" and "R's"
1st length = short leg x 2nd length = long leg
example: D5LCW103.65 x 134.80

3 leg patterns "U's"
1st length x center length x last length
D5UWC103.65 x 134.80 x 103.65

> 3 legs of different lengths
enter lengths in order of placement
D5P103.65 x 134.80 x 103.65 x 35.00

for angles other than 90° use P and specify in submittals

Lamping: _____

LED standard output ⁸ LS
LED high output ⁸ LH
T5 (1) S
T5HO (1) H
T5 (2) D
T5HO (2) O
T5 staggered ¹¹ 2
T5HO staggered ¹¹ 4
T8 (1) low output T8L
T8 (1) standard output T8S
T8 (1) high output T8H
MR16 modules ⁹ 3

LED Temp (if applicable): _____

3000k 30
3500k 35
4000k 40

LED	1 board in cross	
per foot	watts/ft	lumens/ft
LS	5	600
LH	10	1200

Lumens at board at 4000k.
Consult IES files online for delivered lumens.
Specifications subject to change.

universal 120V - 277V
120V
277V
347V

Voltage: _____

U
1
2
3

Optics: _____

a-parabola™ louver ⁸ P
a-parabola™ wall wash louver ⁸ W
a-cirrus™ lens A
HTLO™ lens ⁷ H
HTLO™ vertical (LED only) ⁸ HV
HTLO™ vertical + horizontal (LED only) ⁸ HVH
WISP™ lens S
WISP™ + HTLO™ (LED only) ⁸ SH
½" regressed lens: choose "A", "H" or "S" R
a-wash™ kicker + lens: choose "A", "H" or "S" ¹⁰ K
a-wash™ LED kicker (LED only) ⁸ KSH
FIT™ white louver ¹² ZW
FIT™ aluminum louver ¹² ZA
a-lenszilla™ white louver + lens: choose "A" or "H" ZW
a-lenszilla™ aluminum louver + lens: choose "A" or "H" ZA
a-graze™ white louver + specular reflector ¹⁰ GW
35 or 37W MR16 module - add module qty ⁹ MF
20W MR16 module - add module qty ⁹ MZ

Mounting: _____

flush gyp/hard lid - no finish G
1" regressed gyp - optional finish RG
trim flange - choose finish XP
t-bar 9/16" - no finish T
t-bar 15/16" - no finish X
t-bar 9/16" slot - no finish N
4" on center standard t-bar - no finish T4
4" on center slot t-bar - no finish ¹³ N4
decoustics ceilencio® - no finish D
shadowmold + flush gyp - no finish Z
shadowmold + 9/16" t-bar - no finish Y
shadowmold + 15/16" t-bar - no finish U
shadowmold + 5" regressed gyp - optional finish RG5
custom C

Finish: _____

a-titanium™ T
satin white W
satin black B
textured eggshell white E
other - specify RAL# O
no finish (t-bar or gyp/no MR16) -
custom C

Options: _____

dimming - specify manufacturer, model/series and voltage D
emergency (fluorescent only) - specify model/series or lumens ¹ E
external fusing F
multi-circuit ² M
new york city code N
chicago plenum code C
occupancy sensor ³ O
photocell/daylight sensor ⁴ P
natatorium application ⁵ K
wet label ⁵ Q
MRI housing configuration MRI

recessed



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F28

13.3 FT WALL MOUNTED LINEAR LED FIXTURE

Manufacturer: AXIS

Fixture Line: AIR LED WALL MOUNT

Fixture: WALL MOUNTED LINEAR LED

Catalog #: ARWLED-B2-600-30-S-S13.3-FINISH-277-D-1

Mounting: SURFACE

Watts/LF: 85.12w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 6.4 W/LF



Air LED WALL MOUNT

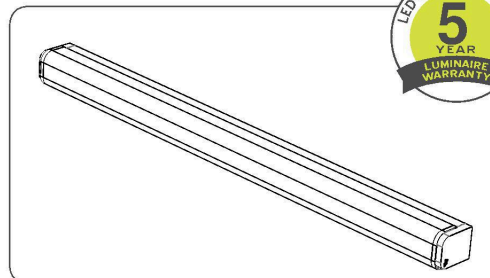
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axis
LIGHTING
1.800.263.AXIS
[T] 514.948.6272
[F] 514.948.6271
www.axislighting.com

PROJECT INFORMATION

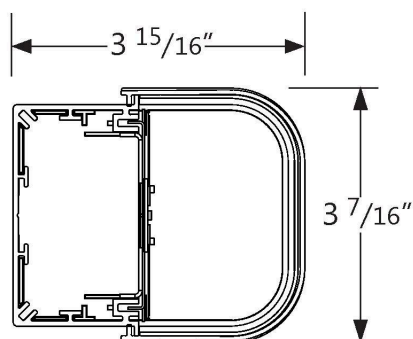
Project:

Type:

Notes:



DIMENSIONS -SECTION VIEWS



PERFORMANCE PER LINEAR FOOT AT 3500K

NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY
600 lm/ft	6.4 w/ft	98.3 lm/w

Please consult factory for custom lumen output and wattage.

ORDERING CODE

1	2	3	4	5	6	7	8	9	10	11	12	13	14
---	---	---	---	---	---	---	---	---	----	----	----	----	----

PRODUCT SPECIFICATIONS

1 PRODUCT ID		2 VERSION		3 NOM.LUMENS/FT		4 COLOUR TEMP.		5 SHIELDING		6 LENGTH/FT		7 FINISH	
ARWLED +BT	air wall led bent tube	B2	B2 (factory preset)	500	500 lm/ft	35	3500 k	S	satin lens	3	3'	AP	aluminum paint
	600		600 lm/ft	30	3000 k ⁽¹⁾	4	4'			W	white		
	800		800 lm/ft	40	4000 k ⁽¹⁾	6	6'			C	custom		
						8	8'						
										12	12'		
							(1) 8 week lead time for 3000k and 4000k			S#	System Run		

8 VOLTAGE		9 DRIVER		10 CIRCUITS		11 BATTERY		12 OTHER		13 IC CONTROLS	
120	120V	D	dimming ⁽²⁾	1	1 circuit	B#	battery pack 4' sections	F	fuse	DS#	daylight sensor
277	277V	LT	lutron	2	2 circuits					OS#	occupancy sensor
UNV	universal	RD	redwood ⁽³⁾	+E#	emergency section						
				+NL#	night light section						
				+GTD#	generator transfer device						
		(2) Standard with LED (3) Please consult factory				Please consult factory				See integrated controls guide for further details	

14 CUSTOM

C custom

Please specify

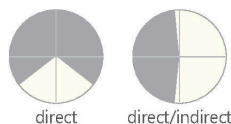
Driver, Battery Pack and Integrated Control Details and Custom Description:

AIR LED WALL MOUNT

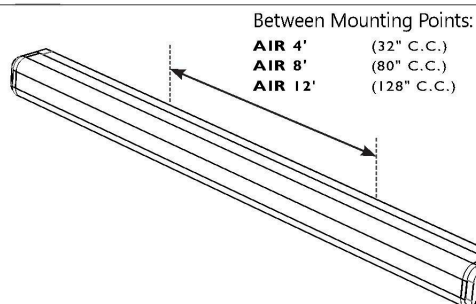
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LIGHTING

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www.axislighting.com

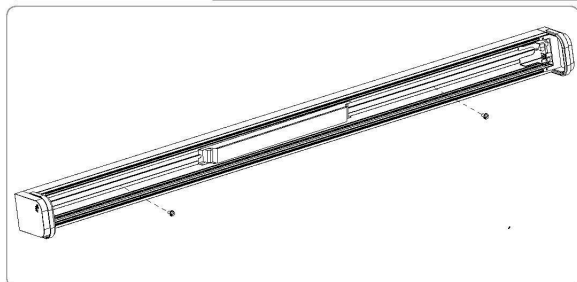
● LIGHT DISTRIBUTION



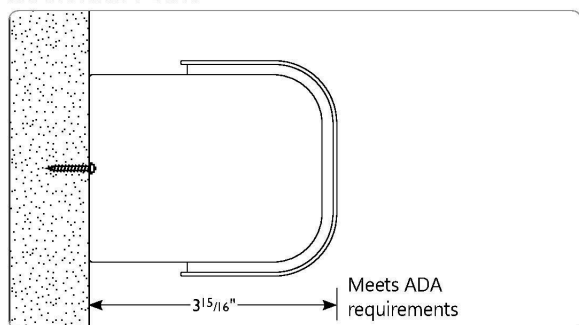
● MOUNTING SPACING



● MOUNTING OPTIONS



MOUNTING POINT



MOUNTING DETAIL

1 AIR can be mounted vertically or horizontally on the wall

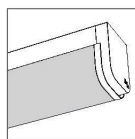
● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
AIR 8 ft	19 lbs / 8.6 Kg
AIR 12 ft	28.5 lbs / 12.9 Kg

1 Installation sheets for all mounting options are available at:
www.axislighting.com

FILE NAME:ARW.LED-B2.SPEC February 5, 2014

● OPTICAL SYSTEM



S satin lens

PMMA satin finish (0.060" nominal)

With efficiencies exceeding 80%, Air delivers softly diffused and ample illumination with a Satin lens which provides maximum glare reduction and light uniformity.

● SYSTEMS (S#)

Runs of AIR that are greater than 12ft in length are designated as systems (S#). This means that the run is comprised of a combination of sections to be assembled on site using our joining system. For more information on systems and joining, please refer to the AIR installation sheets available for download at www.axislighting.com

● OTHER MOUNTING OPTIONS

AIR is also available in pendant and surface mounted options.

1 Specification sheets for all mounting options are available for download at www.axislighting.com

● SPECIFICATIONS

CONSTRUCTION

Housing	Extruded aluminium (0.070" nominal) Up to 70% recycled content
End Cap	Die cast zinc (0.080" nominal)
Joiners	Die cast zinc (0.065" nominal)
Interior Brackets	Die formed Sheet Steel (18 gauge)
Reflectors	Die formed Sheet Steel (22 gauge)
Lens joiners	Die cast zinc (0.125" nominal)
Satin lens	Acrylic satin finish (0.060" nominal)

ELECTRICAL

LED	Use of OptimaLED technology based on mid-flux LED
Input Voltage	120V, 277V, UNV.
Driver	Dimming, HiLume, EcoSystem, DALI,
CRI	Minimum 80 color rendering index
CCT	Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).
LED life	Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency

Emergency battery pack or emergency circuit optional.

● FINISH

Aluminium paint, Powder Coated and custom finishes are also available.

● APPROVALS

Certified to UL and CUL standards. Meets ADA requirements.

AIR LED WALL MOUNT STEM

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axis
LIGHTING

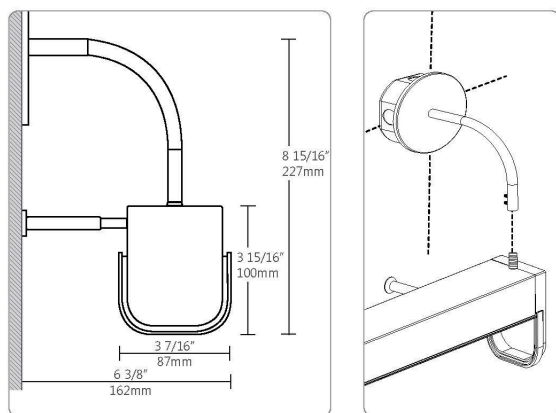
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[F] 514.948.6271
www.axislighting.com

● LIGHT DISTRIBUTION



direct

● MOUNTING OPTIONS




MOUNTING BRACKET

- Installation sheets for all mounting options are available at: www.axislighting.com

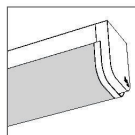
● FINISH

White PC, Aluminum PC, Custom

● APPROVALS

Certified to UL and CUL standards. 

● OPTICAL SYSTEM



S satin lens

PMMA satin finish (0.060" nominal)

With efficiencies exceeding 80%, Air delivers softly diffused and ample illumination with a Satin lens which provides maximum glare reduction and light uniformity.

● SYSTEMS (S#)

Runs of AIR that are greater than 12ft in length are designated as systems (S#). This means that the run is comprised of a combination of sections to be assembled on site using our joining system. For more information on systems and joining, please refer to the AIR installation sheets available for download at www.axislighting.com

● OTHER MOUNTING OPTIONS

AIR is also available in pendant and surface mounted options.

- Specification sheets for all mounting options are available for download at www.axislighting.com

● CONSTRUCTION

CONSTRUCTION

Housing	Extruded aluminium (0.070" nominal)
End Cap	Die cast zinc (0.080" nominal)
Joiners	Die cast zinc (0.065" nominal)
Interior Brackets	Die formed Sheet Steel (18 gauge)
Reflectors	Die formed Sheet Steel (22 gauge)
Lens joiners	Die cast zinc (0.125" nominal)

ELECTRICAL LED

Use of OptimaLED technology based on mid-flux LED

Input Voltage 120V, 277V, UNV.

Driver Dimming, HiLume, EcoSystem, DALI,

CRI Minimum 80 color rendering index

CCT Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).

LED life Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency Emergency battery pack or emergency circuit optional.

● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
AIR 8 ft	19 lbs / 8.6 Kg
AIR 12 ft	28.5 lbs / 12.9 Kg

AIR LED WALL MOUNT

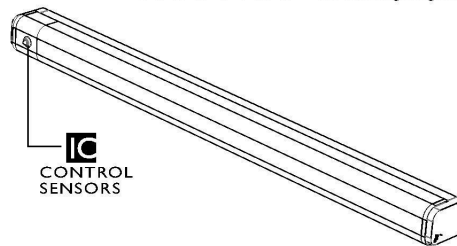
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● INTEGRATED CONTROL OPTIONS

AIR luminaires allow the use of integrated controls such as daylight sensors (DS), occupancy sensors (OS), individual daylight sensors and occupancy sensors (DS+OS), and combination daylight/occupancy sensors (DOS). These options can be seamlessly integrated into our luminaires. The control system could be used to optimize the lighting of the space by reducing energy consumption through daylight harvesting and occupancy, thereby improving the overall interior environment and allowing for LEED credits.

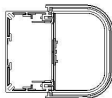
- Consult factory for other options.
- Refer to IC brochure for more information.



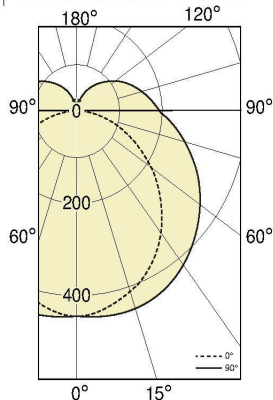
SENSORS	BRAND	Model	TYPE	CODE	COMPATIBLE DRIVER
Daylight Sensor (DS)	Lutron	EC-DIR-WH	Daylight	LD	EcoSystem
	Wattstopper	FD-301	Daylight	WD	Dimming 0-10V
	Philips	Luxsense	Daylight	PL	Dimming 0-10V
Occupancy Sensor (OS)	Wattstopper	FS-205	PIR Occupancy	WP1	Dimming or non-dimming
		FS-355 (Consult Factory)	PIR Occupancy	WP2	Dimming or non-dimming
Daylight and Occupancy Sensors (OS+DS)	Wattstopper Philips	Please consult factory			Dimming 0-10V

● PHOTOMETRIC DATA

600 lm/ft



PHOTOMETRIC CURVE



Luminaire Lumens: 600 lm/ft
Input Watts: 6.4 w/ft
Efficacy: 98.3 lm/w
IES FILE: ARWLED-B2-600-35-4.IES

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	23	45	68	90	
0	497	497	497	497	497	
5	492	497	499	503	505	12
15	473	487	498	507	511	35
25	436	457	479	496	504	55
35	384	413	447	471	481	69
45	321	359	403	438	450	77
55	250	296	353	397	411	77
65	173	228	297	349	365	71
75	95	160	238	295	313	59
85	24	100	182	240	258	45
90	1	77	159	217	235	39
95	0	68	147	203	220	36
105	0	56	127	178	194	30
115	0	47	107	152	166	24
125	0	39	88	126	138	18
135	0	29	69	99	109	12
145	0	21	48	73	80	7
155	0	14	30	45	53	3
165	0	7	16	22	28	1
175	0	2	4	5	2	0
180	0	0	0	0	0	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50			
Wall	70	50	30	10	70	50	30	10	50	30	10	100
0	114	114	114	114	109	109	109	109	100	100	100	100
1	101	95	90	83	96	91	86	80	83	79	74	
2	91	81	73	64	86	78	70	62	71	65	58	
3	82	70	61	51	78	67	59	50	61	54	46	
4	75	62	52	42	71	59	50	41	54	47	38	
5	68	55	45	35	65	52	44	34	48	40	32	
6	63	49	40	30	60	47	38	29	43	36	28	
7	58	44	35	26	55	42	34	26	39	32	24	
8	54	40	31	23	51	38	30	22	35	28	21	
9	50	37	28	20	48	35	27	20	32	26	19	
10	47	34	26	18	45	32	25	18	30	23	17	

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	4360	3738	3682
55	4182	3547	3538
65	3922	3366	3432
75	3529	3207	3338
85	2695	3152	3316

❗ All IES files are available for download at: www.axislighting.com



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F28.C

6FT WALL MOUNTED LINEAR LED FIXTURE

Manufacturer: AXIS

Fixture Line: AIR LED WALL MOUNT

Fixture: WALL MOUNTED LINEAR LED

Catalog #: ARWLED-B2-600-30-S-6-FINISH-277-D-1

Mounting: SURFACE

Fixture Wattage: 38.4w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 6.4 W/LF



Air LED WALL MOUNT

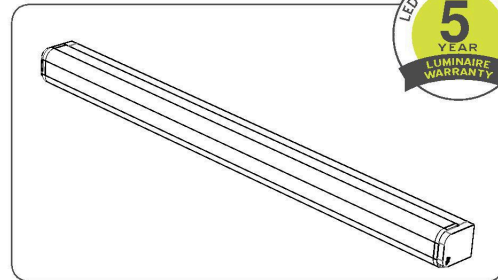
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PROJECT INFORMATION

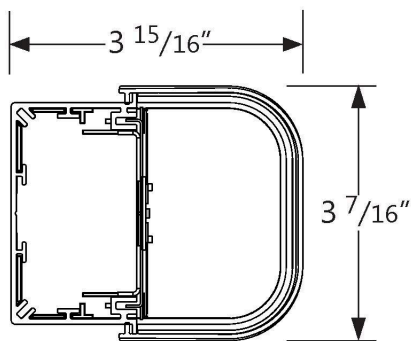
Project:

Type:

Notes:



DIMENSIONS -SECTION VIEWS



PERFORMANCE PER LINEAR FOOT AT 3500K

NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY
600 lm/ft	6.4 w/ft	98.3 lm/w

Please consult factory for custom lumen output and wattage.

ORDERING CODE

1	2	3	4	5	6	7	8	9	10	11	12	13	14
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PRODUCT SPECIFICATIONS

1 PRODUCT ID		2 VERSION		3 NOM.LUMENS/FT		4 COLOUR TEMP.		5 SHIELDING		6 LENGTH/FT		7 FINISH	
ARWLED +BT	air wall led bent tube	B2	B2 (factory preset)	500	500 lm/ft	35	3500 k	S	satin lens	3	3'	AP	aluminum paint
				600	600 lm/ft	30	3000 k ⁽¹⁾			4	4'	W	white
				800	800 lm/ft	40	4000 k ⁽¹⁾			6	6'	C	custom
										8	8'		
										12	12'	S#	System Run
						(1) 8 week lead time for 3000k and 4000k							

8 VOLTAGE		9 DRIVER		10 CIRCUITS		11 BATTERY		12 OTHER		13 IC CONTROLS	
120	120V	D	dimming ⁽²⁾	1	1 circuit	B#	battery pack 4' sections	F	fuse	DS#	daylight sensor
277	277V	LT	lutron	2	2 circuits					OS#	occupancy sensor
UNV	universal	RD	redwood ⁽³⁾	+E#	emergency section						
				+NL#	night light section						
				+GTD#	generator transfer device						
		(2) Standard with LED (3) Please consult factory				Please consult factory				See integrated controls guide for further details	

14 CUSTOM

C custom

Please specify

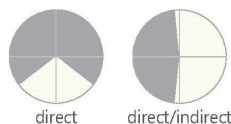
Driver, Battery Pack and Integrated Control Details and Custom Description:

AIR LED WALL MOUNT

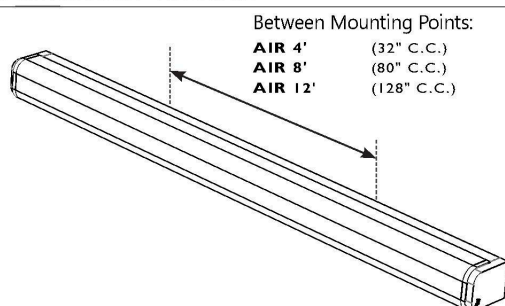
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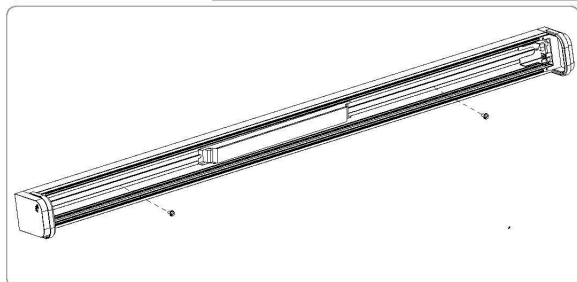
● LIGHT DISTRIBUTION



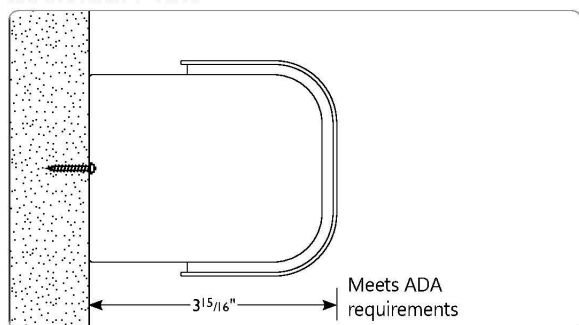
● MOUNTING SPACING



● MOUNTING OPTIONS



MOUNTING POINT



MOUNTING DETAIL

1 AIR can be mounted vertically or horizontally on the wall

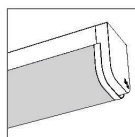
● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
AIR 8 ft	19 lbs / 8.6 Kg
AIR 12 ft	28.5 lbs / 12.9 Kg

1 Installation sheets for all mounting options are available at:
www.axislighting.com

FILE NAME:ARW.LED-B2.SPEC February 5, 2014

● OPTICAL SYSTEM



S satin lens

PMMA satin finish (0.060" nominal)

With efficiencies exceeding 80%, Air delivers softly diffused and ample illumination with a Satin lens which provides maximum glare reduction and light uniformity.

● SYSTEMS (S#)

Runs of AIR that are greater than 12ft in length are designated as systems (S#). This means that the run is comprised of a combination of sections to be assembled on site using our joining system. For more information on systems and joining, please refer to the AIR installation sheets available for download at www.axislighting.com

● OTHER MOUNTING OPTIONS

AIR is also available in pendant and surface mounted options.

1 Specification sheets for all mounting options are available for download at www.axislighting.com

● SPECIFICATIONS

CONSTRUCTION

Housing	Extruded aluminium (0.070" nominal) Up to 70% recycled content
End Cap	Die cast zinc (0.080" nominal)
Joiners	Die cast zinc (0.065" nominal)
Interior Brackets	Die formed Sheet Steel (18 gauge)
Reflectors	Die formed Sheet Steel (22 gauge)
Lens joiners	Die cast zinc (0.125" nominal)
Satin lens	Acrylic satin finish (0.060" nominal)

ELECTRICAL

LED	Use of OptimaLED technology based on mid-flux LED
Input Voltage	120V, 277V, UNV.
Driver	Dimming, HiLume, EcoSystem, DALI,
CRI	Minimum 80 color rendering index
CCT	Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).
LED life	Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency

Emergency battery pack or emergency circuit optional.

● FINISH

Aluminium paint, Powder Coated and custom finishes are also available.

● APPROVALS

Certified to UL and CUL standards. Meets ADA requirements.



AIR LED WALL MOUNT STEM

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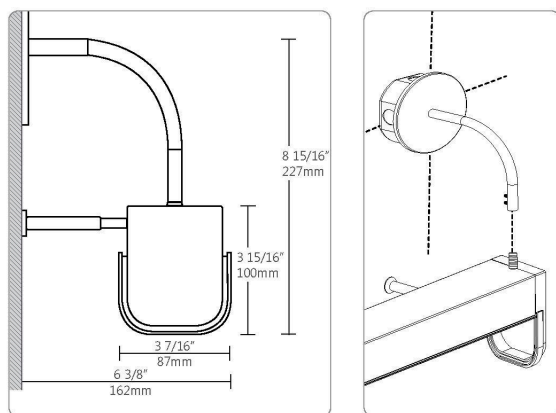
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● LIGHT DISTRIBUTION



direct

● MOUNTING OPTIONS



MOUNTING BRACKET

- Installation sheets for all mounting options are available at: www.axislighting.com

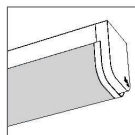
● FINISH

White PC, Aluminum PC, Custom

● APPROVALS

Certified to UL and CUL standards.

● OPTICAL SYSTEM



S satin lens

PMMA satin finish (0.060" nominal)

With efficiencies exceeding 80%, Air delivers softly diffused and ample illumination with a Satin lens which provides maximum glare reduction and light uniformity.

● SYSTEMS (S#)

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● OTHER MOUNTING OPTIONS

AIR is also available in pendant and surface mounted options.

- Specification sheets for all mounting options are available for download at www.axislighting.com

● CONSTRUCTION

CONSTRUCTION

Housing	Extruded aluminium (0.070" nominal)
End Cap	Die cast zinc (0.080" nominal)
Joiners	Die cast zinc (0.065" nominal)
Interior Brackets	Die formed Sheet Steel (18 gauge)
Reflectors	Die formed Sheet Steel (22 gauge)
Lens joiners	Die cast zinc (0.125" nominal)

ELECTRICAL LED

Use of OptimaLED technology based on mid-flux LED

Input Voltage 120V, 277V, UNV.

Driver Dimming, HiLume, EcoSystem, DALI,

CRI Minimum 80 color rendering index

CCT Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).

LED life Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency Emergency battery pack or emergency circuit optional.

● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
AIR 8 ft	19 lbs / 8.6 Kg
AIR 12 ft	28.5 lbs / 12.9 Kg



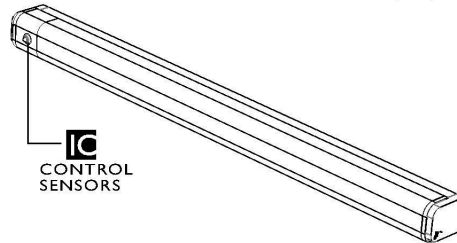
AIR LED WALL MOUNT

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www.axislighting.com

● INTEGRATED CONTROL OPTIONS

AIR luminaires allow the use of integrated controls such as daylight sensors (DS), occupancy sensors (OS), individual daylight sensors and occupancy sensors (DS+OS), and combination daylight/occupancy sensors (DOS). These options can be seamlessly integrated into our luminaires. The control system could be used to optimize the lighting of the space by reducing energy consumption through daylight harvesting and occupancy, thereby improving the overall interior environment and allowing for LEED credits.

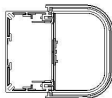
- Consult factory for other options.
- Refer to IC brochure for more information.



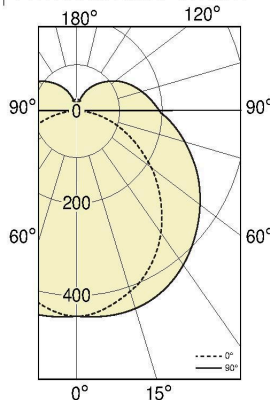
SENSORS	BRAND	Model	TYPE	CODE	COMPATIBLE DRIVER
Daylight Sensor (DS)	Lutron	EC-DIR-WH	Daylight	LD	EcoSystem
	Wattstopper	FD-301	Daylight	WD	Dimming 0-10V
	Philips	Luxsense	Daylight	PL	Dimming 0-10V
Occupancy Sensor (OS)	Wattstopper	FS-205	PIR Occupancy	WP1	Dimming or non-dimming
		FS-355 (Consult Factory)	PIR Occupancy	WP2	Dimming or non-dimming
Daylight and Occupancy Sensors (OS+DS)	Wattstopper Philips	Please consult factory			Dimming 0-10V

● PHOTOMETRIC DATA

600 lm/ft



PHOTOMETRIC CURVE



Luminaire Lumens: 600 lm/ft
Input Watts: 6.4 w/ft
Efficacy: 98.3 lm/w
IES FILE: ARWLED-B2-600-35-4.IES

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	23	45	68	90	
0	497	497	497	497	497	
5	492	497	499	503	505	12
15	473	487	498	507	511	35
25	436	457	479	496	504	55
35	384	413	447	471	481	69
45	321	359	403	438	450	77
55	250	296	353	397	411	77
65	173	228	297	349	365	71
75	95	160	238	295	313	59
85	24	100	182	240	258	45
90	1	77	159	217	235	39
95	0	68	147	203	220	36
105	0	56	127	178	194	30
115	0	47	107	152	166	24
125	0	39	88	126	138	18
135	0	29	69	99	109	12
145	0	21	48	73	80	7
155	0	14	30	45	53	3
165	0	7	16	22	28	1
175	0	2	4	5	2	0
180	0	0	0	0	0	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50			
Wall	70	50	30	10	70	50	30	10	50	30	10	100
0	114	114	114	114	109	109	109	109	100	100	100	100
1	101	95	90	83	96	91	86	80	83	79	74	
2	91	81	73	64	86	78	70	62	71	65	58	
3	82	70	61	51	78	67	59	50	61	54	46	
4	75	62	52	42	71	59	50	41	54	47	38	
5	68	55	45	35	65	52	44	34	48	40	32	
6	63	49	40	30	60	47	38	29	43	36	28	
7	58	44	35	26	55	42	34	26	39	32	24	
8	54	40	31	23	51	38	30	22	35	28	21	
9	50	37	28	20	48	35	27	20	32	26	19	
10	47	34	26	18	45	32	25	18	30	23	17	

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	4360	3738	3682
55	4182	3547	3538
65	3922	3366	3432
75	3529	3207	3338
85	2695	3152	3316

❗ All IES files are available for download at: www.axislighting.com



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F28.F

4FT WALL MOUNTED LINEAR LED FIXTURE

Manufacturer: AXIS

Fixture Line: AIR LED WALL MOUNT

Fixture: WALL MOUNTED LINEAR LED

Catalog #: ARWLED-B2-600-30-S-4-FINISH-277-D-1

Mounting: SURFACE

Fixture Wattage: 25.6w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 6.4 W/LF



Air LED WALL MOUNT

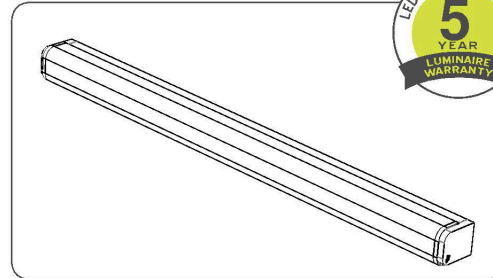
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● PROJECT INFORMATION

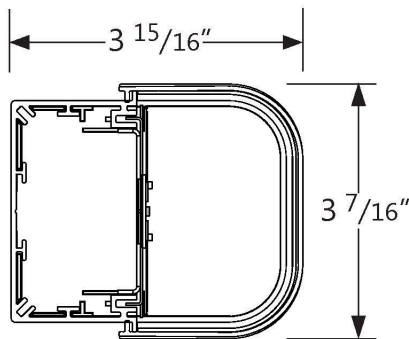
Project:

Type:

Notes:



● DIMENSIONS -SECTION VIEWS



PERFORMANCE PER LINEAR FOOT AT 3500K

NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY
600 lm/ft	6.4 w/ft	98.3 lm/w

Please consult factory for custom lumen output and wattage.

● ORDERING CODE

1	2	3	4	5	6	7	8	9	10	11	12	13	14
---	---	---	---	---	---	---	---	---	----	----	----	----	----

● PRODUCT SPECIFICATIONS

1 PRODUCT ID		2 VERSION		3 NOM.LUMENS/FT		4 COLOUR TEMP.		5 SHIELDING		6 LENGTH/FT		7 FINISH	
ARWLED +BT	air wall led bent tube	B2	B2 (factory preset)	500	500 lm/ft	35	3500 k	S	satin lens	3	3'	AP	aluminum paint
				600	600 lm/ft	30	3000 k ⁽¹⁾			4	4'	W	white
				800	800 lm/ft	40	4000 k ⁽¹⁾			6	6'	C	custom
										8	8'		
										12	12'		
								(1) 8 week lead time for 3000k and 4000k		S# System Run			

8 VOLTAGE		9 DRIVER		10 CIRCUITS		11 BATTERY		12 OTHER		13 IC CONTROLS	
120	120V	D	dimming ⁽²⁾	1	1 circuit	B#	battery pack 4' sections	F	fuse	DS#	daylight sensor
277	277V	LT	lutron	2	2 circuits					OS#	occupancy sensor
UNV	universal	RD	redwood ⁽³⁾	+E#	emergency section						
				+NL#	night light section						
				+GTD#	generator transfer device						
		(2) Standard with LED (3) Please consult factory				Please consult factory				See integrated controls guide for further details	

14 CUSTOM

C custom

Please specify

Driver, Battery Pack and Integrated Control Details and Custom Description:

AIR LED WALL MOUNT

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www.axislighting.com

● LIGHT DISTRIBUTION



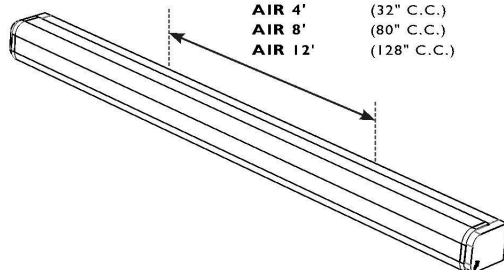
direct

direct/indirect

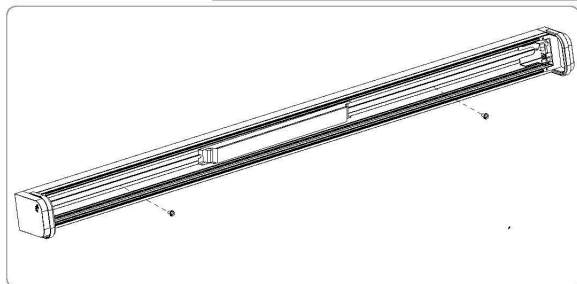
● MOUNTING SPACING

Between Mounting Points:

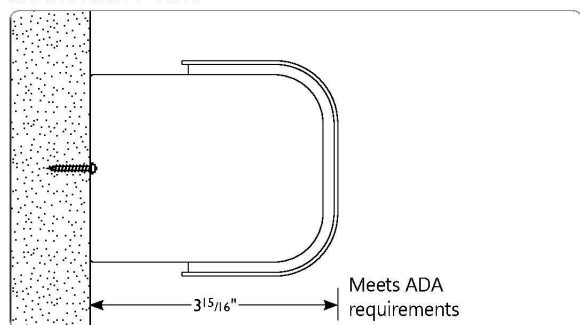
AIR 4' (32" C.C.)
AIR 8' (80" C.C.)
AIR 12' (128" C.C.)



● MOUNTING OPTIONS



MOUNTING POINT



MOUNTING DETAIL

i AIR can be mounted vertically or horizontally on the wall

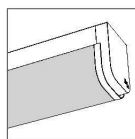
● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
AIR 8 ft	19 lbs / 8.6 Kg
AIR 12 ft	28.5 lbs / 12.9 Kg

i Installation sheets for all mounting options are available at:
www.axislighting.com

FILE NAME:ARW-LED-B2.SPEC February 5, 2014

● OPTICAL SYSTEM



S satin lens

PMMA satin finish (0.060" nominal)

With efficiencies exceeding 80%, Air delivers softly diffused and ample illumination with a Satin lens which provides maximum glare reduction and light uniformity.

● SYSTEMS (S#)

Runs of AIR that are greater than 12ft in length are designated as systems (S#). This means that the run is comprised of a combination of sections to be assembled on site using our joining system. For more information on systems and joining, please refer to the AIR installation sheets available for download at www.axislighting.com

● OTHER MOUNTING OPTIONS

AIR is also available in pendant and surface mounted options.

i Specification sheets for all mounting options are available for download at www.axislighting.com

● SPECIFICATIONS

CONSTRUCTION

Housing	Extruded aluminium (0.070" nominal) Up to 70% recycled content
End Cap	Die cast zinc (0.080" nominal)
Joiners	Die cast zinc (0.065" nominal)
Interior Brackets	Die formed Sheet Steel (18 gauge)
Reflectors	Die formed Sheet Steel (22 gauge)
Lens joiners	Die cast zinc (0.125" nominal)
Satin lens	Acrylic satin finish (0.060" nominal)

ELECTRICAL

LED	Use of OptimaLED technology based on mid-flux LED
Input Voltage	120V, 277V, UNV.
Driver	Dimming, HiLume, EcoSystem, DALI,
CRI	Minimum 80 color rendering index
CCT	Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).
LED life	Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency

Emergency battery pack or emergency circuit optional.

● FINISH

Aluminium paint, Powder Coated and custom finishes are also available.

● APPROVALS

Certified to UL and CUL standards. Meets ADA requirements.

AIR LED WALL MOUNT STEM

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axis
LIGHTING

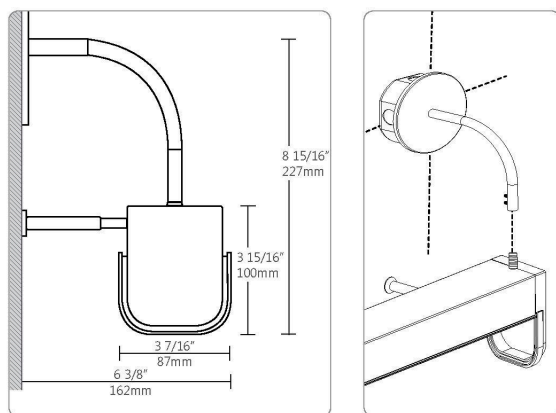
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[F] 514.948.6271
www.axislighting.com

● LIGHT DISTRIBUTION



direct

● MOUNTING OPTIONS




MOUNTING BRACKET

- Installation sheets for all mounting options are available at: www.axislighting.com

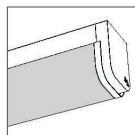
● FINISH

White PC, Aluminum PC, Custom

● APPROVALS

Certified to UL and CUL standards. 

● OPTICAL SYSTEM



S satin lens

PMMA satin finish (0.060" nominal)

With efficiencies exceeding 80%, Air delivers softly diffused and ample illumination with a Satin lens which provides maximum glare reduction and light uniformity.

● SYSTEMS (S#)

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● CONSTRUCTION

CONSTRUCTION

Housing	Extruded aluminium (0.070" nominal)
End Cap	Die cast zinc (0.080" nominal)
Joiners	Die cast zinc (0.065" nominal)
Interior Brackets	Die formed Sheet Steel (18 gauge)
Reflectors	Die formed Sheet Steel (22 gauge)
Lens joiners	Die cast zinc (0.125" nominal)

ELECTRICAL LED

Use of OptimaLED technology based on mid-flux LED

Input Voltage 120V, 277V, UNV.

Driver Dimming, HiLume, EcoSystem, DALI,

CRI Minimum 80 color rendering index

CCT Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).

LED life Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency Emergency battery pack or emergency circuit optional.

● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
AIR 8 ft	19 lbs / 8.6 Kg
AIR 12 ft	28.5 lbs / 12.9 Kg

AIR LED WALL MOUNT

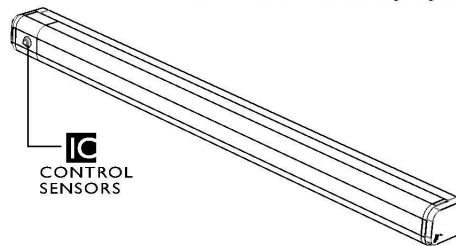
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● INTEGRATED CONTROL OPTIONS

AIR luminaires allow the use of integrated controls such as daylight sensors (DS), occupancy sensors (OS), individual daylight sensors and occupancy sensors (DS+OS), and combination daylight/occupancy sensors (DOS). These options can be seamlessly integrated into our luminaires. The control system could be used to optimize the lighting of the space by reducing energy consumption through daylight harvesting and occupancy, thereby improving the overall interior environment and allowing for LEED credits.

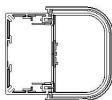
- Consult factory for other options.
- Refer to IC brochure for more information.



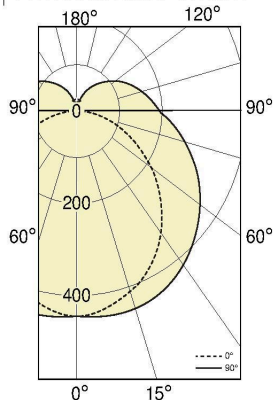
SENSORS	BRAND	Model	TYPE	CODE	COMPATIBLE DRIVER
Daylight Sensor (DS)	Lutron	EC-DIR-WH	Daylight	LD	EcoSystem
	Wattstopper	FD-301	Daylight	WD	Dimming 0-10V
	Philips	Luxsense	Daylight	PL	Dimming 0-10V
Occupancy Sensor (OS)	Wattstopper	FS-205	PIR Occupancy	WP1	Dimming or non-dimming
		FS-355 (Consult Factory)	PIR Occupancy	WP2	Dimming or non-dimming
Daylight and Occupancy Sensors (OS+DS)	Wattstopper Philips	Please consult factory			Dimming 0-10V

● PHOTOMETRIC DATA

600 lm/ft



PHOTOMETRIC CURVE



Luminaire Lumens: 600 lm/ft
Input Watts: 6.4 w/ft
Efficacy: 98.3 lm/w
IES FILE: ARWLED-B2-600-35-4.IES

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	23	45	68	90	
0	497	497	497	497	497	
5	492	497	499	503	505	12
15	473	487	498	507	511	35
25	436	457	479	496	504	55
35	384	413	447	471	481	69
45	321	359	403	438	450	77
55	250	296	353	397	411	77
65	173	228	297	349	365	71
75	95	160	238	295	313	59
85	24	100	182	240	258	45
90	1	77	159	217	235	39
95	0	68	147	203	220	36
105	0	56	127	178	194	30
115	0	47	107	152	166	24
125	0	39	88	126	138	18
135	0	29	69	99	109	12
145	0	21	48	73	80	7
155	0	14	30	45	53	3
165	0	7	16	22	28	1
175	0	2	4	5	2	0
180	0	0	0	0	0	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50			
Wall	70	50	30	10	70	50	30	10	50	30	10	100
0	114	114	114	114	109	109	109	109	100	100	100	100
1	101	95	90	83	96	91	86	80	83	79	74	
2	91	81	73	64	86	78	70	62	71	65	58	
3	82	70	61	51	78	67	59	50	61	54	46	
4	75	62	52	42	71	59	50	41	54	47	38	
5	68	55	45	35	65	52	44	34	48	40	32	
6	63	49	40	30	60	47	38	29	43	36	28	
7	58	44	35	26	55	42	34	26	39	32	24	
8	54	40	31	23	51	38	30	22	35	28	21	
9	50	37	28	20	48	35	27	20	32	26	19	
10	47	34	26	18	45	32	25	18	30	23	17	

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	4360	3738	3682
55	4182	3547	3538
65	3922	3366	3432
75	3529	3207	3338
85	2695	3152	3316

❗ All IES files are available for download at: www.axislighting.com



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F28.G

18FT WALL MOUNTED LINEAR LED FIXTURE

Manufacturer: AXIS

Fixture Line: AIR LED WALL MOUNT

Fixture: WALL MOUNTED LINEAR LED

Catalog #: ARWLED-B2-600-30-S-S18-FINISH-277-D-1

Mounting: SURFACE

Fixture Wattage: 115.2w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 6.4 W/LF



Air LED WALL MOUNT

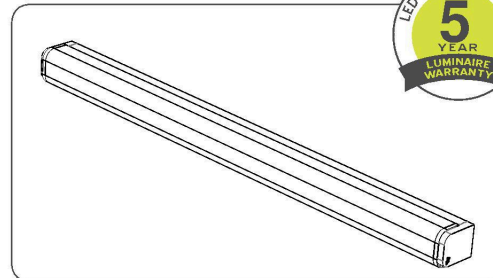
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PROJECT INFORMATION

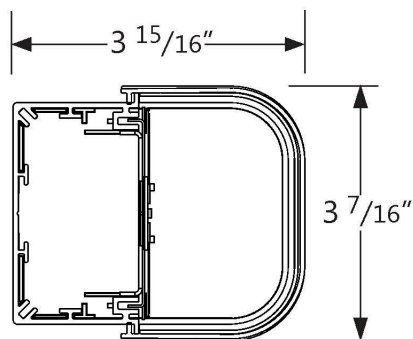
Project:

Type:

Notes:



DIMENSIONS -SECTION VIEWS



PERFORMANCE PER LINEAR FOOT AT 3500K

NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY
600 lm/ft	6.4 w/ft	98.3 lm/w

Please consult factory for custom lumen output and wattage.

ORDERING CODE

1	2	3	4	5	6	7	8	9	10	11	12	13	14
---	---	---	---	---	---	---	---	---	----	----	----	----	----

PRODUCT SPECIFICATIONS

1 PRODUCT ID		2 VERSION		3 NOM.LUMENS/FT		4 COLOUR TEMP.		5 SHIELDING		6 LENGTH/FT		7 FINISH					
ARWLED +BT	air wall led bent tube	B2	B2 (factory preset)	500	500 lm/ft	35	3500 k	S	satin lens	3	3'	AP	aluminum paint				
				600	600 lm/ft	30	3000 k ⁽¹⁾			4	4'			W	white		
				800	800 lm/ft	40	4000 k ⁽¹⁾			6	6'					C	custom
										8	8'						
										12	12'						
							(1) 8 week lead time for 3000k and 4000k			S#	System Run						

8 VOLTAGE		9 DRIVER		10 CIRCUITS		11 BATTERY		12 OTHER		13 IC CONTROLS	
120	120V	D	dimming ⁽²⁾	1	1 circuit	B#	battery pack 4' sections	F	fuse	DS#	daylight sensor
277	277V	LT	lutron	2	2 circuits					OS#	occupancy sensor
UNV	universal	RD	redwood ⁽³⁾	+E#	emergency section						
				+NL#	night light section						
				+GTD#	generator transfer device						
		(2) Standard with LED (3) Please consult factory				Please consult factory				See integrated controls guide for further details	

14 CUSTOM

C custom

Please specify

Driver, Battery Pack and Integrated Control Details and Custom Description:

AIR LED WALL MOUNT

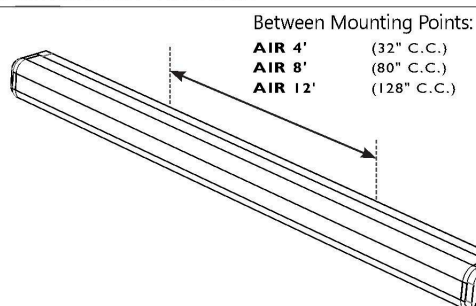
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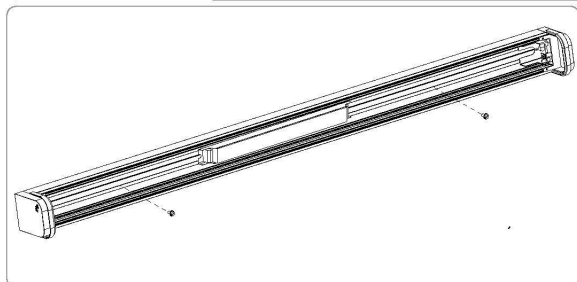
● LIGHT DISTRIBUTION



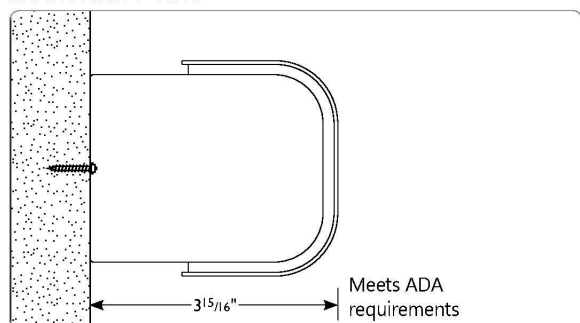
● MOUNTING SPACING



● MOUNTING OPTIONS



MOUNTING POINT



MOUNTING DETAIL

1 AIR can be mounted vertically or horizontally on the wall

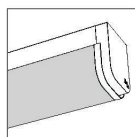
● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
AIR 8 ft	19 lbs / 8.6 Kg
AIR 12 ft	28.5 lbs / 12.9 Kg

1 Installation sheets for all mounting options are available at:
www.axislighting.com

FILE NAME:ARW.LED-B2.SPEC February 5, 2014

● OPTICAL SYSTEM



S satin lens

PMMA satin finish (0.060" nominal)

With efficiencies exceeding 80%, Air delivers softly diffused and ample illumination with a Satin lens which provides maximum glare reduction and light uniformity.

● SYSTEMS (S#)

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● OTHER MOUNTING OPTIONS

AIR is also available in pendant and surface mounted options.

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● SPECIFICATIONS

CONSTRUCTION

Housing	Extruded aluminium (0.070" nominal) Up to 70% recycled content
End Cap	Die cast zinc (0.080" nominal)
Joiners	Die cast zinc (0.065" nominal)
Interior Brackets	Die formed Sheet Steel (18 gauge)
Reflectors	Die formed Sheet Steel (22 gauge)
Lens joiners	Die cast zinc (0.125" nominal)
Satin lens	Acrylic satin finish (0.060" nominal)

ELECTRICAL

LED	Use of OptimaLED technology based on mid-flux LED
Input Voltage	120V, 277V, UNV.
Driver	Dimming, HiLume, EcoSystem, DALI,
CRI	Minimum 80 color rendering index
CCT	Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).
LED life	Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency

Emergency battery pack or emergency circuit optional.

● FINISH

Aluminium paint, Powder Coated and custom finishes are also available.

● APPROVALS

Certified to UL and CUL standards. Meets ADA requirements.



AIR LED WALL MOUNT STEM

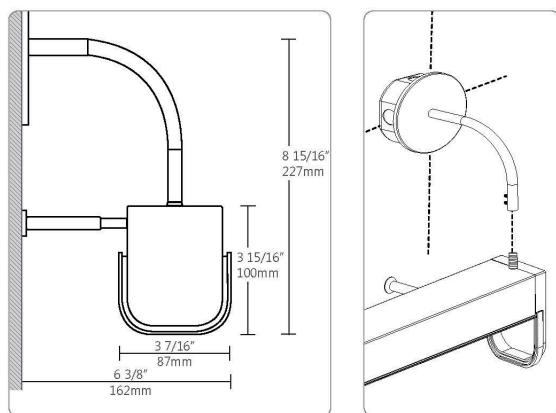
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● LIGHT DISTRIBUTION



● MOUNTING OPTIONS



MOUNTING BRACKET

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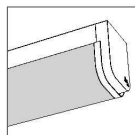
● FINISH

White PC, Aluminum PC, Custom

● APPROVALS

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ELECTRICAL LED

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Input Voltage 120V, 277V, UNV.

Driver Dimming, HiLume, EcoSystem, DALI,

CRI Minimum 80 color rendering index

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● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
AIR 8 ft	19 lbs / 8.6 Kg
AIR 12 ft	28.5 lbs / 12.9 Kg



AIR LED WALL MOUNT

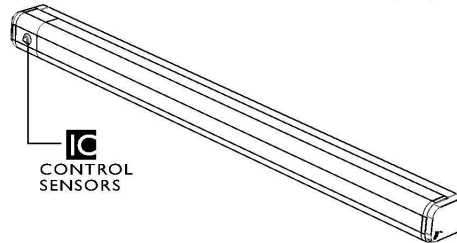
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● INTEGRATED CONTROL OPTIONS

AIR luminaires allow the use of integrated controls such as daylight sensors (DS), occupancy sensors (OS), individual daylight sensors and occupancy sensors (DS+OS), and combination daylight/occupancy sensors (DOS). These options can be seamlessly integrated into our luminaires. The control system could be used to optimize the lighting of the space by reducing energy consumption through daylight harvesting and occupancy, thereby improving the overall interior environment and allowing for LEED credits.

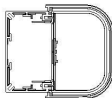
- Consult factory for other options.
- Refer to IC brochure for more information.



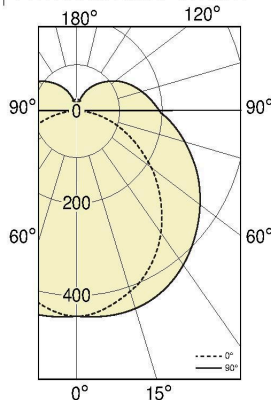
SENSORS	BRAND	Model	TYPE	CODE	COMPATIBLE DRIVER
Daylight Sensor (DS)	Lutron	EC-DIR-WH	Daylight	LD	EcoSystem
	Wattstopper	FD-301	Daylight	WD	Dimming 0-10V
	Philips	Luxsense	Daylight	PL	Dimming 0-10V
Occupancy Sensor (OS)	Wattstopper	FS-205	PIR Occupancy	WP1	Dimming or non-dimming
		FS-355 (Consult Factory)	PIR Occupancy	WP2	Dimming or non-dimming
Daylight and Occupancy Sensors (OS+DS)	Wattstopper Philips	Please consult factory			Dimming 0-10V

● PHOTOMETRIC DATA

600 lm/ft



PHOTOMETRIC CURVE



Luminaire Lumens: 600 lm/ft
Input Watts: 6.4 w/ft
Efficacy: 98.3 lm/w
IES FILE: ARWLED-B2-600-35-4.IES

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	23	45	68	90	
0	497	497	497	497	497	
5	492	497	499	503	505	12
15	473	487	498	507	511	35
25	436	457	479	496	504	55
35	384	413	447	471	481	69
45	321	359	403	438	450	77
55	250	296	353	397	411	77
65	173	228	297	349	365	71
75	95	160	238	295	313	59
85	24	100	182	240	258	45
90	1	77	159	217	235	39
95	0	68	147	203	220	36
105	0	56	127	178	194	30
115	0	47	107	152	166	24
125	0	39	88	126	138	18
135	0	29	69	99	109	12
145	0	21	48	73	80	7
155	0	14	30	45	53	3
165	0	7	16	22	28	1
175	0	2	4	5	2	0
180	0	0	0	0	0	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50			
Wall	70	50	30	10	70	50	30	10	50	30	10	100
0	114	114	114	114	109	109	109	109	100	100	100	100
1	101	95	90	83	96	91	86	80	83	79	74	
2	91	81	73	64	86	78	70	62	71	65	58	
3	82	70	61	51	78	67	59	50	61	54	46	
4	75	62	52	42	71	59	50	41	54	47	38	
5	68	55	45	35	65	52	44	34	48	40	32	
6	63	49	40	30	60	47	38	29	43	36	28	
7	58	44	35	26	55	42	34	26	39	32	24	
8	54	40	31	23	51	38	30	22	35	28	21	
9	50	37	28	20	48	35	27	20	32	26	19	
10	47	34	26	18	45	32	25	18	30	23	17	

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	4360	3738	3682
55	4182	3547	3538
65	3922	3366	3432
75	3529	3207	3338
85	2695	3152	3316

❗ All IES files are available for download at: www.axislighting.com



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F28.J

12FT WALL MOUNTED LINEAR LED FIXTURE

Manufacturer: AXIS

Fixture Line: AIR LED WALL MOUNT

Fixture: WALL MOUNTED LINEAR LED

Catalog #: ARWLED-B2-600-30-S-12-FINISH-277-D-1

Mounting: SURFACE

Fixture Wattage: 76.8w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 6.4 W/LF



Air LED WALL MOUNT

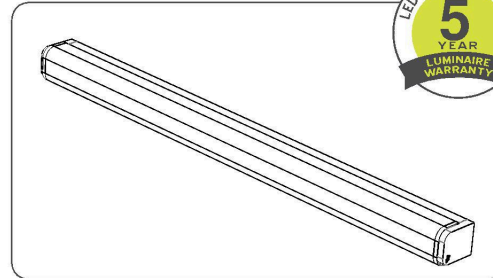
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PROJECT INFORMATION

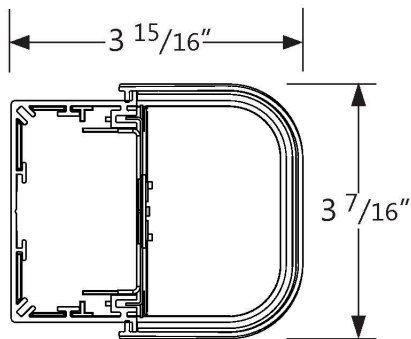
Project:

Type:

Notes:



DIMENSIONS -SECTION VIEWS



PERFORMANCE PER LINEAR FOOT AT 3500K

NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY
600 lm/ft	6.4 w/ft	98.3 lm/w

Please consult factory for custom lumen output and wattage.

ORDERING CODE

1	2	3	4	5	6	7	8	9	10	11	12	13	14
---	---	---	---	---	---	---	---	---	----	----	----	----	----

PRODUCT SPECIFICATIONS

1 PRODUCT ID		2 VERSION		3 NOM.LUMENS/FT		4 COLOUR TEMP.		5 SHIELDING		6 LENGTH/FT		7 FINISH					
ARWLED +BT	air wall led bent tube	B2	B2 (factory preset)	500	500 lm/ft	35	3500 k	S	satin lens	3	3'	AP	aluminum paint				
				600	600 lm/ft	30	3000 k ⁽¹⁾			4	4'			W	white		
				800	800 lm/ft	40	4000 k ⁽¹⁾			6	6'					C	custom
										8	8'						
										12	12'						
							(1) 8 week lead time for 3000k and 4000k			S#	System Run						
8 VOLTAGE		9 DRIVER		10 CIRCUITS		11 BATTERY		12 OTHER		13 IC CONTROLS							
120	120V	D	dimming ⁽²⁾	1	1 circuit	B#	battery pack 4' sections	F	fuse	DS#	daylight sensor						
277	277V	LT	lutron	2	2 circuits					OS#	occupancy sensor						
UNV	universal	RD	redwood ⁽³⁾	+E#	emergency section												
				+NL#	night light section												
				+GTD#	generator transfer device												
		(2) Standard with LED (3) Please consult factory				Please consult factory				See integrated controls guide for further details							

14 CUSTOM

C custom

Please specify

Driver, Battery Pack and Integrated Control Details and Custom Description:

AIR LED WALL MOUNT

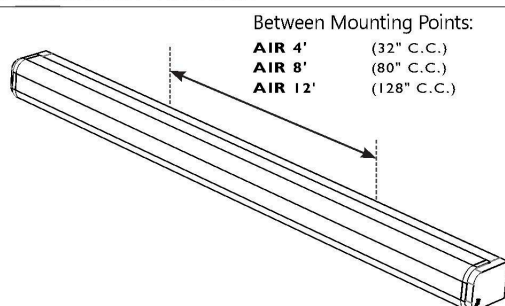
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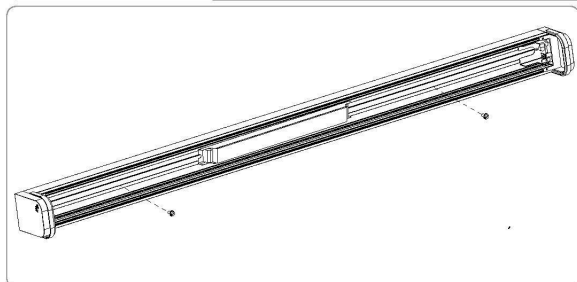
● LIGHT DISTRIBUTION



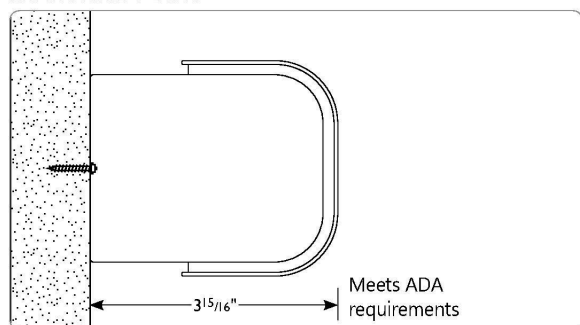
● MOUNTING SPACING



● MOUNTING OPTIONS



MOUNTING POINT



MOUNTING DETAIL

1 AIR can be mounted vertically or horizontally on the wall

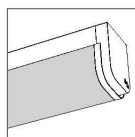
● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
AIR 8 ft	19 lbs / 8.6 Kg
AIR 12 ft	28.5 lbs / 12.9 Kg

1 Installation sheets for all mounting options are available at:
www.axislighting.com

FILE NAME:ARW.LED-B2.SPEC February 5, 2014

● OPTICAL SYSTEM



S satin lens

PMMA satin finish (0.060" nominal)

With efficiencies exceeding 80%, Air delivers softly diffused and ample illumination with a Satin lens which provides maximum glare reduction and light uniformity.

● SYSTEMS (S#)

Runs of AIR that are greater than 12ft in length are designated as systems (S#). This means that the run is comprised of a combination of sections to be assembled on site using our joining system. For more information on systems and joining, please refer to the AIR installation sheets available for download at www.axislighting.com

● OTHER MOUNTING OPTIONS

AIR is also available in pendant and surface mounted options.

1 Specification sheets for all mounting options are available for download at www.axislighting.com

● SPECIFICATIONS

CONSTRUCTION

Housing	Extruded aluminium (0.070" nominal) Up to 70% recycled content
End Cap	Die cast zinc (0.080" nominal)
Joiners	Die cast zinc (0.065" nominal)
Interior Brackets	Die formed Sheet Steel (18 gauge)
Reflectors	Die formed Sheet Steel (22 gauge)
Lens joiners	Die cast zinc (0.125" nominal)
Satin lens	Acrylic satin finish (0.060" nominal)

ELECTRICAL

LED	Use of OptimaLED technology based on mid-flux LED
Input Voltage	120V, 277V, UNV.
Driver	Dimming, HiLume, EcoSystem, DALI,
CRI	Minimum 80 color rendering index
CCT	Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).
LED life	Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency

Emergency battery pack or emergency circuit optional.

● FINISH

Aluminium paint, Powder Coated and custom finishes are also available.

● APPROVALS

Certified to UL and CUL standards. Meets ADA requirements.

AIR LED WALL MOUNT STEM

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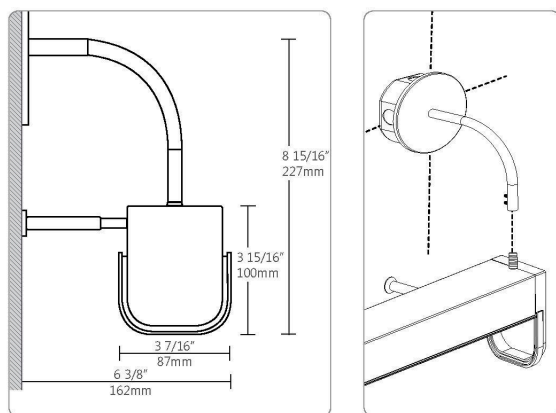
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[F] 514.948.6271
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● LIGHT DISTRIBUTION



direct

● MOUNTING OPTIONS




MOUNTING BRACKET

- Installation sheets for all mounting options are available at: www.axislighting.com

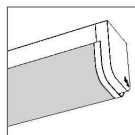
● FINISH

White PC, Aluminum PC, Custom

● APPROVALS

Certified to UL and CUL standards. 

● OPTICAL SYSTEM



S satin lens

PMMA satin finish (0.060" nominal)

With efficiencies exceeding 80%, Air delivers softly diffused and ample illumination with a Satin lens which provides maximum glare reduction and light uniformity.

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CONSTRUCTION

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Reflectors	Die formed Sheet Steel (22 gauge)
Lens joiners	Die cast zinc (0.125" nominal)

ELECTRICAL LED

Use of OptimaLED technology based on mid-flux LED

Input Voltage 120V, 277V, UNV.

Driver Dimming, HiLume, EcoSystem, DALI,

CRI Minimum 80 color rendering index

CCT Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).

LED life Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency Emergency battery pack or emergency circuit optional.

● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
AIR 8 ft	19 lbs / 8.6 Kg
AIR 12 ft	28.5 lbs / 12.9 Kg

AIR LED WALL MOUNT

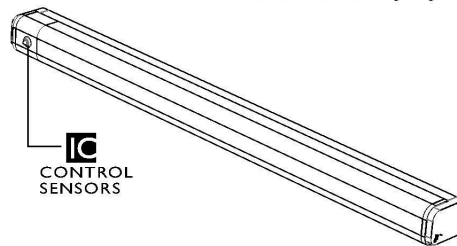
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● INTEGRATED CONTROL OPTIONS

AIR luminaires allow the use of integrated controls such as daylight sensors (DS), occupancy sensors (OS), individual daylight sensors and occupancy sensors (DS+OS), and combination daylight/occupancy sensors (DOS). These options can be seamlessly integrated into our luminaires. The control system could be used to optimize the lighting of the space by reducing energy consumption through daylight harvesting and occupancy, thereby improving the overall interior environment and allowing for LEED credits.

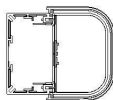
- Consult factory for other options.
- Refer to IC brochure for more information.



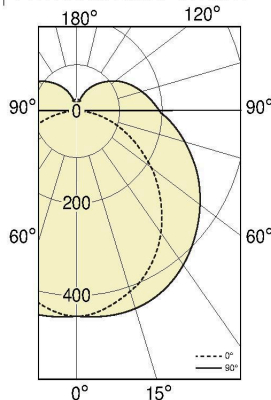
SENSORS	BRAND	Model	TYPE	CODE	COMPATIBLE DRIVER
Daylight Sensor (DS)	Lutron	EC-DIR-WH	Daylight	LD	EcoSystem
	Wattstopper	FD-301	Daylight	WD	Dimming 0-10V
	Philips	Luxsense	Daylight	PL	Dimming 0-10V
Occupancy Sensor (OS)	Wattstopper	FS-205	PIR Occupancy	WP1	Dimming or non-dimming
		FS-355 (Consult Factory)	PIR Occupancy	WP2	Dimming or non-dimming
Daylight and Occupancy Sensors (OS+DS)	Wattstopper Philips	Please consult factory			Dimming 0-10V

● PHOTOMETRIC DATA

600 lm/ft



PHOTOMETRIC CURVE



Luminaire Lumens: 600 lm/ft
Input Watts: 6.4 w/ft
Efficacy: 98.3 lm/w
IES FILE: ARWLED-B2-600-35-4.IES

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	23	45	68	90	
0	497	497	497	497	497	
5	492	497	499	503	505	12
15	473	487	498	507	511	35
25	436	457	479	496	504	55
35	384	413	447	471	481	69
45	321	359	403	438	450	77
55	250	296	353	397	411	77
65	173	228	297	349	365	71
75	95	160	238	295	313	59
85	24	100	182	240	258	45
90	1	77	159	217	235	39
95	0	68	147	203	220	36
105	0	56	127	178	194	30
115	0	47	107	152	166	24
125	0	39	88	126	138	18
135	0	29	69	99	109	12
145	0	21	48	73	80	7
155	0	14	30	45	53	3
165	0	7	16	22	28	1
175	0	2	4	5	2	0
180	0	0	0	0	0	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50			
Wall	70	50	30	10	70	50	30	10	50	30	10	100
0	114	114	114	114	109	109	109	109	100	100	100	100
1	101	95	90	83	96	91	86	80	83	79	74	
2	91	81	73	64	86	78	70	62	71	65	58	
3	82	70	61	51	78	67	59	50	61	54	46	
4	75	62	52	42	71	59	50	41	54	47	38	
5	68	55	45	35	65	52	44	34	48	40	32	
6	63	49	40	30	60	47	38	29	43	36	28	
7	58	44	35	26	55	42	34	26	39	32	24	
8	54	40	31	23	51	38	30	22	35	28	21	
9	50	37	28	20	48	35	27	20	32	26	19	
10	47	34	26	18	45	32	25	18	30	23	17	

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	4360	3738	3682
55	4182	3547	3538
65	3922	3366	3432
75	3529	3207	3338
85	2695	3152	3316

❗ All IES files are available for download at: www.axislighting.com



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F28.K

19FT WALL MOUNTED LINEAR LED FIXTURE

Manufacturer: AXIS

Fixture Line: AIR LED WALL MOUNT

Fixture: WALL MOUNTED LINEAR LED

Catalog #: ARWLED-B2-600-30-S-S19-FINISH-277-D-1

Mounting: SURFACE

Fixture Wattage: 121.6w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 6.4 W/LF



Air LED WALL MOUNT

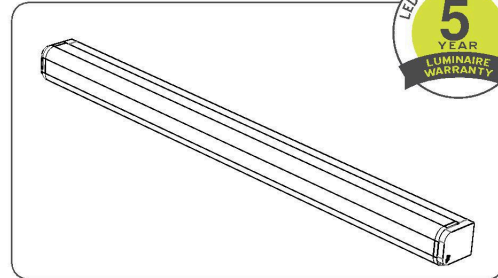
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PROJECT INFORMATION

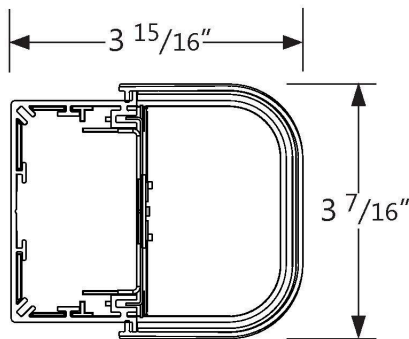
Project:

Type:

Notes:



DIMENSIONS -SECTION VIEWS



PERFORMANCE PER LINEAR FOOT AT 3500K

NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY
600 lm/ft	6.4 w/ft	98.3 lm/w

Please consult factory for custom lumen output and wattage.

ORDERING CODE

1	2	3	4	5	6	7	8	9	10	11	12	13	14
---	---	---	---	---	---	---	---	---	----	----	----	----	----

PRODUCT SPECIFICATIONS

1 PRODUCT ID	2 VERSION	3 NOM.LUMENS/FT	4 COLOUR TEMP.	5 SHIELDING	6 LENGTH/FT	7 FINISH
ARWLED +BT	B2 B2 (factory preset)	500 500 lm/ft 600 600 lm/ft 800 800 lm/ft	35 3500 k 30 3000 k ⁽¹⁾ 40 4000 k ⁽¹⁾	S satin lens	3 3' 4 4' 6 6' 8 8' 12 12' S# System Run	AP aluminum paint W white C custom
			(1) 8 week lead time for 3000k and 4000k			
8 VOLTAGE	9 DRIVER	10 CIRCUITS	11 BATTERY	12 OTHER	13 IC CONTROLS	
120 120V 277 277V UNV universal	D dimming ⁽²⁾ LT lutron RD redwood ⁽³⁾	1 1 circuit 2 2 circuits +E# emergency section +NL# night light section +GTD# generator transfer device	B# battery pack 4' sections	F fuse	DS# daylight sensor OS# occupancy sensor	
		(2) Standard with LED (3) Please consult factory	Please consult factory		See integrated controls guide for further details	

14 CUSTOM

C custom

Please specify

Driver, Battery Pack and Integrated Control Details and Custom Description:

AIR LED WALL MOUNT

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● LIGHT DISTRIBUTION



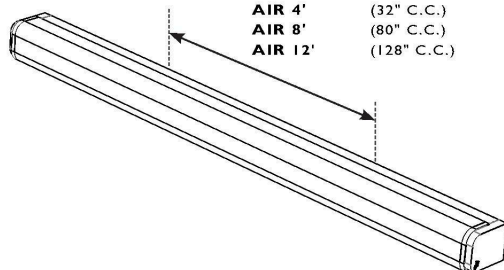
direct

direct/indirect

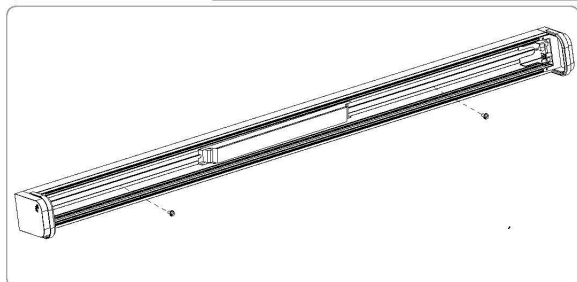
● MOUNTING SPACING

Between Mounting Points:

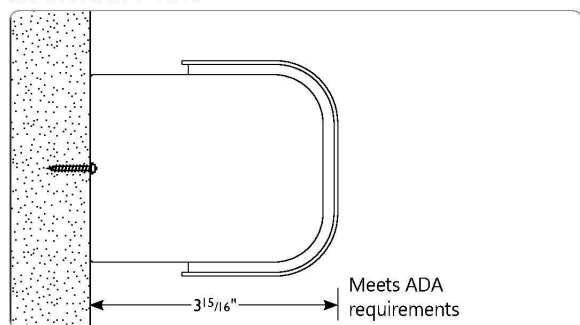
AIR 4' (32" C.C.)
AIR 8' (80" C.C.)
AIR 12' (128" C.C.)



● MOUNTING OPTIONS



MOUNTING POINT



MOUNTING DETAIL

1 AIR can be mounted vertically or horizontally on the wall

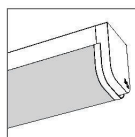
● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
AIR 8 ft	19 lbs / 8.6 Kg
AIR 12 ft	28.5 lbs / 12.9 Kg

1 Installation sheets for all mounting options are available at:
www.axislighting.com

FILE NAME:ARW.LED-B2.SPEC February 5, 2014

● OPTICAL SYSTEM



S satin lens

PMMA satin finish (0.060" nominal)

With efficiencies exceeding 80%, Air delivers softly diffused and ample illumination with a Satin lens which provides maximum glare reduction and light uniformity.

● SYSTEMS (S#)

Runs of AIR that are greater than 12ft in length are designated as systems (S#). This means that the run is comprised of a combination of sections to be assembled on site using our joining system. For more information on systems and joining, please refer to the AIR installation sheets available for download at www.axislighting.com

● OTHER MOUNTING OPTIONS

AIR is also available in pendant and surface mounted options.

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● SPECIFICATIONS

CONSTRUCTION

Housing	Extruded aluminium (0.070" nominal) Up to 70% recycled content
End Cap	Die cast zinc (0.080" nominal)
Joiners	Die cast zinc (0.065" nominal)
Interior Brackets	Die formed Sheet Steel (18 gauge)
Reflectors	Die formed Sheet Steel (22 gauge)
Lens joiners	Die cast zinc (0.125" nominal)
Satin lens	Acrylic satin finish (0.060" nominal)

ELECTRICAL

LED	Use of OptimaLED technology based on mid-flux LED
Input Voltage	120V, 277V, UNV.
Driver	Dimming, HiLume, EcoSystem, DALI,
CRI	Minimum 80 color rendering index
CCT	Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).
LED life	Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency

Emergency battery pack or emergency circuit optional.

● FINISH

Aluminium paint, Powder Coated and custom finishes are also available.

● APPROVALS

Certified to UL and CUL standards. Meets ADA requirements.

AIR LED WALL MOUNT STEM

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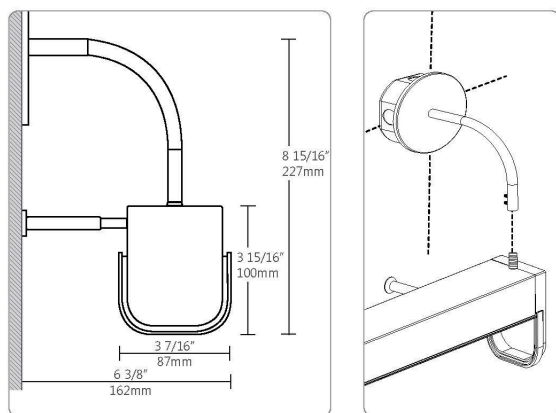
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www.axislighting.com

● LIGHT DISTRIBUTION



direct

● MOUNTING OPTIONS




MOUNTING BRACKET

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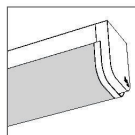
● FINISH

White PC, Aluminum PC, Custom

● APPROVALS

Certified to UL and CUL standards. 

● OPTICAL SYSTEM



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Input Voltage 120V, 277V, UNV.

Driver Dimming, HiLume, EcoSystem, DALI,

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● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
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AIR 12 ft	28.5 lbs / 12.9 Kg

AIR LED WALL MOUNT

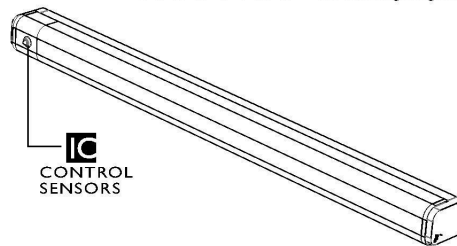
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● INTEGRATED CONTROL OPTIONS

AIR luminaires allow the use of integrated controls such as daylight sensors (DS), occupancy sensors (OS), individual daylight sensors and occupancy sensors (DS+OS), and combination daylight/occupancy sensors (DOS). These options can be seamlessly integrated into our luminaires. The control system could be used to optimize the lighting of the space by reducing energy consumption through daylight harvesting and occupancy, thereby improving the overall interior environment and allowing for LEED credits.

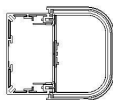
- Consult factory for other options.
- Refer to IC brochure for more information.



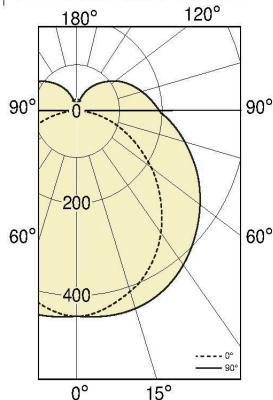
SENSORS	BRAND	Model	TYPE	CODE	COMPATIBLE DRIVER
Daylight Sensor (DS)	Lutron	EC-DIR-WH	Daylight	LD	EcoSystem
	Wattstopper	FD-301	Daylight	WD	Dimming 0-10V
	Philips	Luxsense	Daylight	PL	Dimming 0-10V
Occupancy Sensor (OS)	Wattstopper	FS-205	PIR Occupancy	WP1	Dimming or non-dimming
		FS-355 (Consult Factory)	PIR Occupancy	WP2	Dimming or non-dimming
Daylight and Occupancy Sensors (OS+DS)	Wattstopper Philips	Please consult factory			Dimming 0-10V

● PHOTOMETRIC DATA

600 lm/ft



PHOTOMETRIC CURVE



Luminaire Lumens: 600 lm/ft
Input Watts: 6.4 w/ft
Efficacy: 98.3 lm/w
IES FILE: ARWLED-B2-600-35-4.IES

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	23	45	68	90	
0	497	497	497	497	497	
5	492	497	499	503	505	12
15	473	487	498	507	511	35
25	436	457	479	496	504	55
35	384	413	447	471	481	69
45	321	359	403	438	450	77
55	250	296	353	397	411	77
65	173	228	297	349	365	71
75	95	160	238	295	313	59
85	24	100	182	240	258	45
90	1	77	159	217	235	39
95	0	68	147	203	220	36
105	0	56	127	178	194	30
115	0	47	107	152	166	24
125	0	39	88	126	138	18
135	0	29	69	99	109	12
145	0	21	48	73	80	7
155	0	14	30	45	53	3
165	0	7	16	22	28	1
175	0	2	4	5	2	0
180	0	0	0	0	0	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50			
Wall	70	50	30	10	70	50	30	10	50	30	10	100
0	114	114	114	114	109	109	109	109	100	100	100	100
1	101	95	90	83	96	91	86	80	83	79	74	
2	91	81	73	64	86	78	70	62	71	65	58	
3	82	70	61	51	78	67	59	50	61	54	46	
4	75	62	52	42	71	59	50	41	54	47	38	
5	68	55	45	35	65	52	44	34	48	40	32	
6	63	49	40	30	60	47	38	29	43	36	28	
7	58	44	35	26	55	42	34	26	39	32	24	
8	54	40	31	23	51	38	30	22	35	28	21	
9	50	37	28	20	48	35	27	20	32	26	19	
10	47	34	26	18	45	32	25	18	30	23	17	

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	4360	3738	3682
55	4182	3547	3538
65	3922	3366	3432
75	3529	3207	3338
85	2695	3152	3316

❗ All IES files are available for download at: www.axislighting.com



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F28.L

10FT WALL MOUNTED LINEAR LED FIXTURE

Manufacturer: AXIS

Fixture Line: AIR LED WALL MOUNT

Fixture: WALL MOUNTED LINEAR LED

Catalog #: ARWLED-B2-600-30-S-S10-FINISH-277-D-1

Mounting: SURFACE

Fixture Wattage: 64w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 6.4 W/LF



Air LED WALL MOUNT

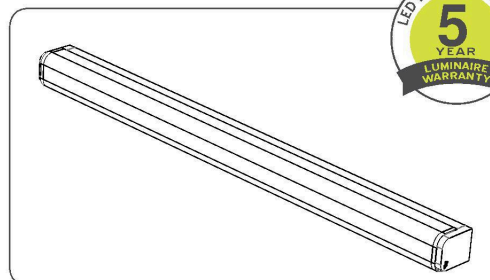
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PROJECT INFORMATION

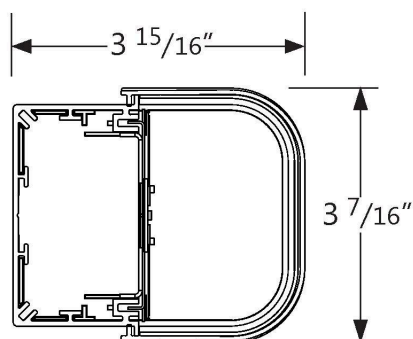
Project:

Type:

Notes:



DIMENSIONS -SECTION VIEWS



PERFORMANCE PER LINEAR FOOT AT 3500K

NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY
600 lm/ft	6.4 w/ft	98.3 lm/w

Please consult factory for custom lumen output and wattage.

ORDERING CODE

1	2	3	4	5	6	7	8	9	10	11	12	13	14
---	---	---	---	---	---	---	---	---	----	----	----	----	----

PRODUCT SPECIFICATIONS

1 PRODUCT ID		2 VERSION		3 NOM.LUMENS/FT		4 COLOUR TEMP.		5 SHIELDING		6 LENGTH/FT		7 FINISH	
ARWLED +BT	air wall led bent tube	B2	B2 (factory preset)	500	500 lm/ft	35	3500 k	S	satin lens	3	3'	AP	aluminum paint
	600		600 lm/ft	30	3000 k ⁽¹⁾	4	4'			W	white		
	800		800 lm/ft	40	4000 k ⁽¹⁾	6	6'			C	custom		
						8	8'						
										12	12'		
							(1) 8 week lead time for 3000k and 4000k			S#	System Run		

8 VOLTAGE		9 DRIVER		10 CIRCUITS		11 BATTERY		12 OTHER		13 IC CONTROLS	
120	120V	D	dimming ⁽²⁾	1	1 circuit	B#	battery pack 4' sections	F	fuse	DS#	daylight sensor
277	277V	LT	lutron	2	2 circuits					OS#	occupancy sensor
UNV	universal	RD	redwood ⁽³⁾	+E#	emergency section						
				+NL#	night light section						
				+GTD#	generator transfer device						
		(2) Standard with LED (3) Please consult factory				Please consult factory				See integrated controls guide for further details	

14 CUSTOM

C custom

Please specify

Driver, Battery Pack and Integrated Control Details and Custom Description:

AIR LED WALL MOUNT

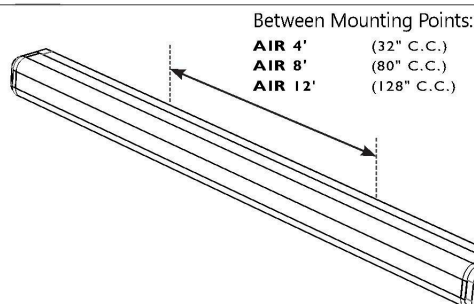
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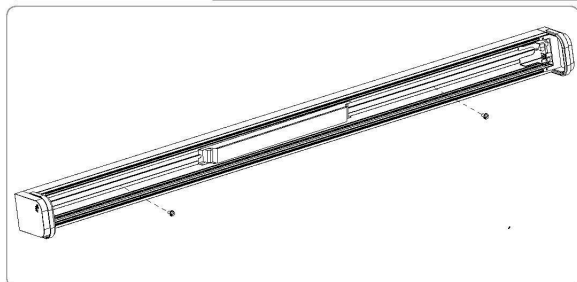
● LIGHT DISTRIBUTION



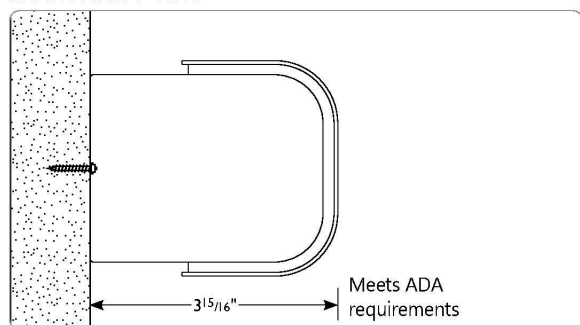
● MOUNTING SPACING



● MOUNTING OPTIONS



MOUNTING POINT



MOUNTING DETAIL

1 AIR can be mounted vertically or horizontally on the wall

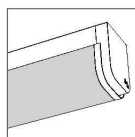
● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
AIR 8 ft	19 lbs / 8.6 Kg
AIR 12 ft	28.5 lbs / 12.9 Kg

1 Installation sheets for all mounting options are available at:
www.axislighting.com

FILE NAME:ARW.LED-B2.SPEC February 5, 2014

● OPTICAL SYSTEM



S satin lens

PMMA satin finish (0.060" nominal)

With efficiencies exceeding 80%, Air delivers softly diffused and ample illumination with a Satin lens which provides maximum glare reduction and light uniformity.

● SYSTEMS (S#)

Runs of AIR that are greater than 12ft in length are designated as systems (S#). This means that the run is comprised of a combination of sections to be assembled on site using our joining system. For more information on systems and joining, please refer to the AIR installation sheets available for download at www.axislighting.com

● OTHER MOUNTING OPTIONS

AIR is also available in pendant and surface mounted options.

1 Specification sheets for all mounting options are available for download at www.axislighting.com

● SPECIFICATIONS

CONSTRUCTION

Housing	Extruded aluminium (0.070" nominal) Up to 70% recycled content
End Cap	Die cast zinc (0.080" nominal)
Joiners	Die cast zinc (0.065" nominal)
Interior Brackets	Die formed Sheet Steel (18 gauge)
Reflectors	Die formed Sheet Steel (22 gauge)
Lens joiners	Die cast zinc (0.125" nominal)
Satin lens	Acrylic satin finish (0.060" nominal)

ELECTRICAL

LED	Use of OptimaLED technology based on mid-flux LED
Input Voltage	120V, 277V, UNV.
Driver	Dimming, HiLume, EcoSystem, DALI,
CRI	Minimum 80 color rendering index
CCT	Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).
LED life	Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency

Emergency battery pack or emergency circuit optional.

● FINISH

Aluminium paint, Powder Coated and custom finishes are also available.

● APPROVALS

Certified to UL and CUL standards. Meets ADA requirements.

AIR LED WALL MOUNT STEM

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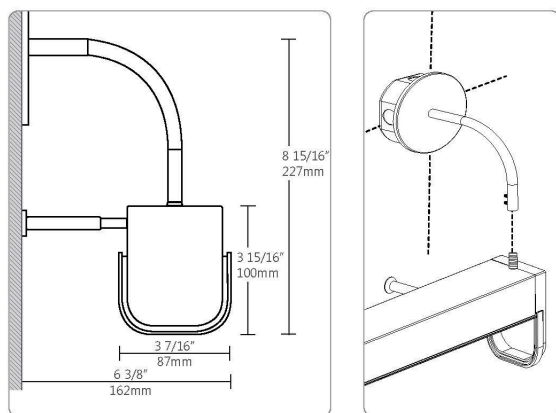
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www.axislighting.com

● LIGHT DISTRIBUTION



direct

● MOUNTING OPTIONS




MOUNTING BRACKET

- Installation sheets for all mounting options are available at: www.axislighting.com

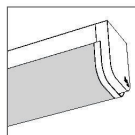
● FINISH

White PC, Aluminum PC, Custom

● APPROVALS

Certified to UL and CUL standards. 

● OPTICAL SYSTEM



S satin lens

PMMA satin finish (0.060" nominal)

With efficiencies exceeding 80%, Air delivers softly diffused and ample illumination with a Satin lens which provides maximum glare reduction and light uniformity.

● SYSTEMS (S#)

Runs of AIR that are greater than 12ft in length are designated as systems (S#). This means that the run is comprised of a combination of sections to be assembled on site using our joining system. For more information on systems and joining, please refer to the AIR installation sheets available for download at www.axislighting.com

● OTHER MOUNTING OPTIONS

AIR is also available in pendant and surface mounted options.

- Specification sheets for all mounting options are available for download at www.axislighting.com

● CONSTRUCTION

CONSTRUCTION

Housing	Extruded aluminium (0.070" nominal)
End Cap	Die cast zinc (0.080" nominal)
Joiners	Die cast zinc (0.065" nominal)
Interior Brackets	Die formed Sheet Steel (18 gauge)
Reflectors	Die formed Sheet Steel (22 gauge)
Lens joiners	Die cast zinc (0.125" nominal)

ELECTRICAL LED

Use of OptimaLED technology based on mid-flux LED

Input Voltage 120V, 277V, UNV.

Driver Dimming, HiLume, EcoSystem, DALI,

CRI Minimum 80 color rendering index

CCT Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).

LED life Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency Emergency battery pack or emergency circuit optional.

● WEIGHT

	WEIGHT
AIR 4 ft	9.5 lbs / 4.3 Kg
AIR 8 ft	19 lbs / 8.6 Kg
AIR 12 ft	28.5 lbs / 12.9 Kg

AIR LED WALL MOUNT

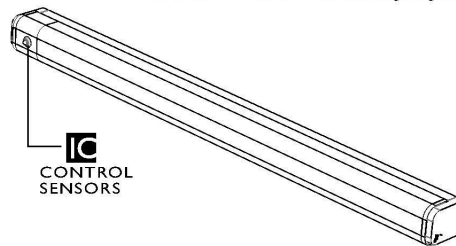
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● INTEGRATED CONTROL OPTIONS

AIR luminaires allow the use of integrated controls such as daylight sensors (DS), occupancy sensors (OS), individual daylight sensors and occupancy sensors (DS+OS), and combination daylight/occupancy sensors (DOS). These options can be seamlessly integrated into our luminaires. The control system could be used to optimize the lighting of the space by reducing energy consumption through daylight harvesting and occupancy, thereby improving the overall interior environment and allowing for LEED credits.

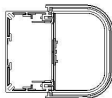
- Consult factory for other options.
- Refer to IC brochure for more information.



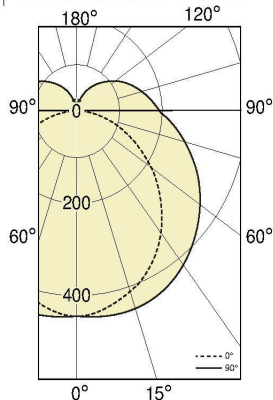
SENSORS	BRAND	Model	TYPE	CODE	COMPATIBLE DRIVER
Daylight Sensor (DS)	Lutron	EC-DIR-WH	Daylight	LD	EcoSystem
	Wattstopper	FD-301	Daylight	WD	Dimming 0-10V
	Philips	Luxsense	Daylight	PL	Dimming 0-10V
Occupancy Sensor (OS)	Wattstopper	FS-205	PIR Occupancy	WP1	Dimming or non-dimming
		FS-355 (Consult Factory)	PIR Occupancy	WP2	Dimming or non-dimming
Daylight and Occupancy Sensors (OS+DS)	Wattstopper Philips	Please consult factory			Dimming 0-10V

● PHOTOMETRIC DATA

600 lm/ft



PHOTOMETRIC CURVE



Luminaire Lumens: 600 lm/ft
Input Watts: 6.4 w/ft
Efficacy: 98.3 lm/w
IES FILE: ARWLED-B2-600-35-4.IES

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	23	45	68	90	
0	497	497	497	497	497	
5	492	497	499	503	505	12
15	473	487	498	507	511	35
25	436	457	479	496	504	55
35	384	413	447	471	481	69
45	321	359	403	438	450	77
55	250	296	353	397	411	77
65	173	228	297	349	365	71
75	95	160	238	295	313	59
85	24	100	182	240	258	45
90	1	77	159	217	235	39
95	0	68	147	203	220	36
105	0	56	127	178	194	30
115	0	47	107	152	166	24
125	0	39	88	126	138	18
135	0	29	69	99	109	12
145	0	21	48	73	80	7
155	0	14	30	45	53	3
165	0	7	16	22	28	1
175	0	2	4	5	2	0
180	0	0	0	0	0	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50			
Wall	70	50	30	10	70	50	30	10	50	30	10	100
0	114	114	114	114	109	109	109	109	100	100	100	100
1	101	95	90	83	96	91	86	80	83	79	74	
2	91	81	73	64	86	78	70	62	71	65	58	
3	82	70	61	51	78	67	59	50	61	54	46	
4	75	62	52	42	71	59	50	41	54	47	38	
5	68	55	45	35	65	52	44	34	48	40	32	
6	63	49	40	30	60	47	38	29	43	36	28	
7	58	44	35	26	55	42	34	26	39	32	24	
8	54	40	31	23	51	38	30	22	35	28	21	
9	50	37	28	20	48	35	27	20	32	26	19	
10	47	34	26	18	45	32	25	18	30	23	17	

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	4360	3738	3682
55	4182	3547	3538
65	3922	3366	3432
75	3529	3207	3338
85	2695	3152	3316

❗ All IES files are available for download at: www.axislighting.com



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F29.A

LOW OUTPUT LINEAR LED AT COVE - WASHING WALL

Manufacturer: PRUDENTIAL LTG

Fixture Line: P59 LED

Fixture: LINEAR LED AT COVE-WASHING WALL

Catalog #: P59-A6-LED3LO-RLENGTH-W-277-CEILING SYSTEM-ND

Mounting: SURFACE

Fixture Wattage: 5w

Fixture Voltage: 277

Load Type: Non-Dim

Lamp Spec: LED, 3000K, 5 W/LF



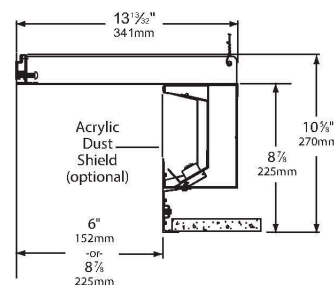
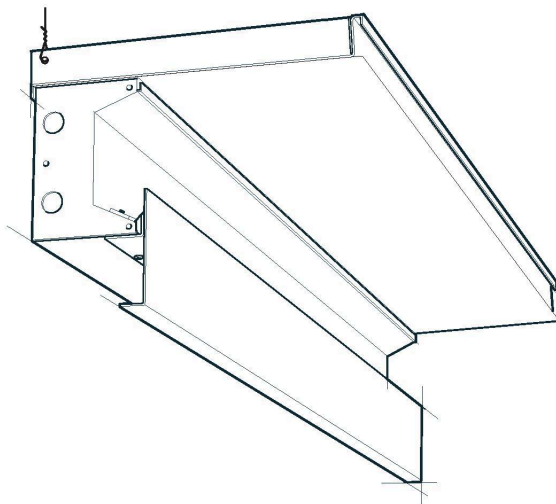


Type
Job Name
Catalog Number



Made in USA

P59 LED Cove & Perimeter



ordering - P59 LED

series	lamp rows	nominal length	reflector system	voltage	ceiling system	controls/options	
P59-__							
A6 6" aperture	LED3 LO, SO, HO* 3000K	2'	W white	UNV*	X1 exposed T-bar	ND non-dimming standard	EMH emergency battery (1100-1200 raw lumens)
A9 9" aperture	LED35 LO, SO, HO* 3500K	3'		*120-277	X3B hard ceiling (flange trim)	DM10 0-10v 10% dim- ming	QC quick-connect circuit assemblies
	LED4 LO, SO, HO* 4000K	4'			X7 hard ceiling (concealed flange)	DM01 0-10v 1% dimming	C2 90° corner - lit
	*LO-Low Output, SO-Standard Output HO-High Output	6'				STEP step dimming 100-50-off	CX special connector
		8'				DML 1% Lutron dim- ming	ADS acrylic dust cover
		R__*				DMD .1% DALI dimming	
		*Row length - advise factory of row and pattern dimensions				EML emergency battery (350-600 raw lumens)	
		Note: non-even lengths must use filler kits					

Features A prefabricated perimeter cove system offering an indirect wall wash effect. Using no louvers, the fixture illuminates walls while giving the ceiling the appearance of floating. Telescoping LED modules along with field trimmable extension kits allow for fully illuminated custom row lengths.

Construction The housing, available in 2-, 3-, 4-, 6- or 8-foot standard lengths, is made of 20-gauge steel. Trim flange is 1/16"-thick extruded aluminum.

Finish The standard housing and trim color is textured matte white (TMW) using polyester powder.

Electrical Must specify LED dimming controls. LED fixtures have constant current driver(s) with less than 20% THD when loaded to a minimum of 60%. Drivers sink a maximum of 6mA per driver. DM10 and DM01 LED drivers are 0-10V dimmable and are compatible with most 0-10V wall slide dimmers and direct 0-10V analog signal dimmers. Recommended wall dimmer is Leviton IP710 or equivalent. See data sheet to confirm all specified dimmers meet required specifications. Fixtures are ETL Damp labeled and I.B.E.W. manufactured. Maximum driver size is 1.625" width by 1.25" height.

Mounting Fixture is to be recess-mounted in either exposed T-bar or hard ceiling application(s).

Prudential reserves the right to change design specifications or materials without notice.

Cove & Perimeter **P59 LED**

photometric data

P-59-A6-LED3SO-04-W

Report # LSI31675A D=72% I=28%
Spacing Criteria: Along 1.2; Across 1.1

Delivered Lumens: 2497

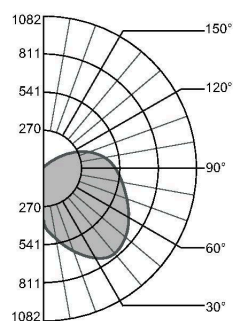
Input Watts: 40.1

Lumens/Watt: 62.3

Calculated L70 $\geq 100,000$ hours

Reported L70 (6k) \geq 36,000 hours

5 year LED warranty - see prulite.com



Zonal Lumen Summary

Zone	%Lumens	%Luminaire
0-90	1798	72.00
90-180	699	28.00

Candlepower Summary

Vertical Angle	Horizontal Angle					Output Lumens
	0°	22.5°	45°	67.5°	90°	
0	408	408	408	408	408	
5	414	450	439	427	454	22
15	405	556	516	455	571	72
25	385	660	588	482	685	131
35	353	747	650	499	778	193
45	311	758	659	500	775	240
55	258	707	647	500	726	262
65	196	636	567	463	659	259
75	125	561	476	361	589	232
85	55	492	395	248	521	194
90	22	461	361	203	491	
95	83	446	343	185	475	158
105	117	359	266	450	385	164
115	119	204	845	198	240	149
125	106	139	137	157	1082	121
135	87	45	97	122	5	30
145	67	27	66	83	0	17
155	43	13	39	47	0	7
165	20	1	13	22	0	2
175	0	0	0	0	0	0
180	0	0	0	0	0	

Coefficients of Utilization (%)

	Floor Ceiling Wall	effective floor cavity reflectance = 20											
		80				70				50			
		70	50	30	10	70	50	30	10	50	30	10	
0		1121	1212	1121	1210	1071	1071	1071	1071	96	96	96	
1		99	94	88	84	94	89	84	79	79	75	72	
2		89	80	72	66	84	76	69	63	67	62	57	
3		81	69	60	53	76	65	57	51	58	52	46	
4		74	61	52	44	69	58	49	43	52	45	39	
5		67	53	44	37	63	51	42	36	45	38	33	
6		61	47	38	32	58	45	36	30	40	33	28	
7		56	42	33	27	53	40	32	26	36	29	24	
8		52	38	29	23	49	36	28	22	32	26	21	
9		48	35	26	20	45	33	25	20	29	23	18	
10		45	33	23	18	42	30	22	17	27	20	16	

LED Delivered Lumens and Watts

P59	LED LO	LED SO	LED HO
Lumens	315 lm/ft	625 lm/ft	780 lm/ft
Watts	5 w/ft	10 w/ft	12 w/ft

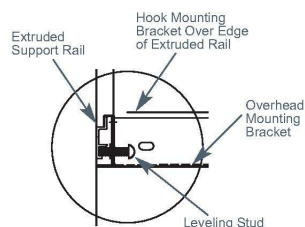
Lumen output and wattages are nominal for all 3 color changes and may vary +/- 5%.



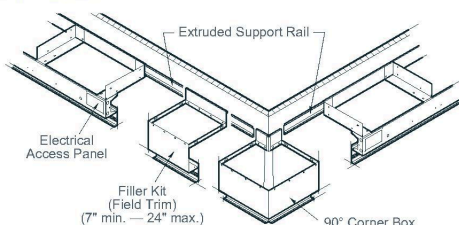
ProBin™ is Prudential Lighting's exclusive 'job binning' method that ensures color temperature consistency across all luminaires on a project. Meticulously testing and labeling EVERY LED board to +/- 25 lumens, +/- 50K CCT and +/- .004 Duv — while also separating positive from negative — allows us to match color, hue and intensity throughout a project and provides a consistent color temperature within a 2-step MacAdam ellipse.

installation

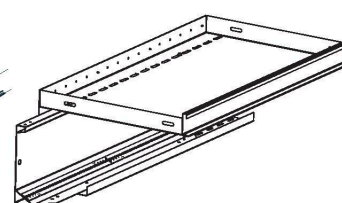
Mounting Detail



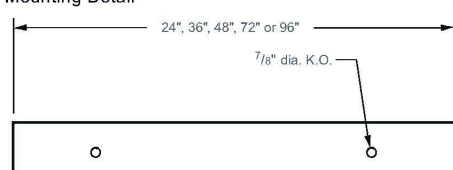
Corner Detail



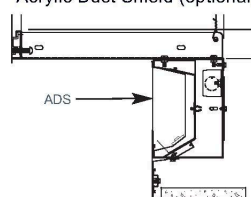
Telescoping LED Module



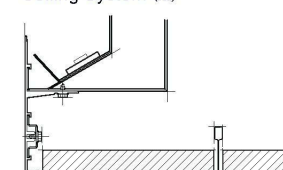
Mounting Detail



Acrylic Dust Shield (optional)



Ceiling System (x_1)





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F29.B

STANDARD OUTPUT LINEAR LED AT COVE - WASHING WALL

Manufacturer: PRUDENTIAL LTG

Fixture Line: P59 LED

Fixture: LINEAR LED AT COVE-WASHING WALL

Catalog #: P59-A6-LED3SO-RLENGTH-W-277-CEILING SYSTEM-ND

Mounting: SURFACE

Watts/LF: 10w

Fixture Voltage: 277

Load Type: Non-Dim

Lamp Spec: LED, 3000K, 10 W/LF



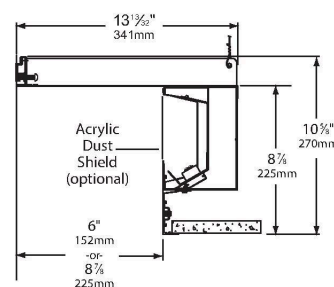
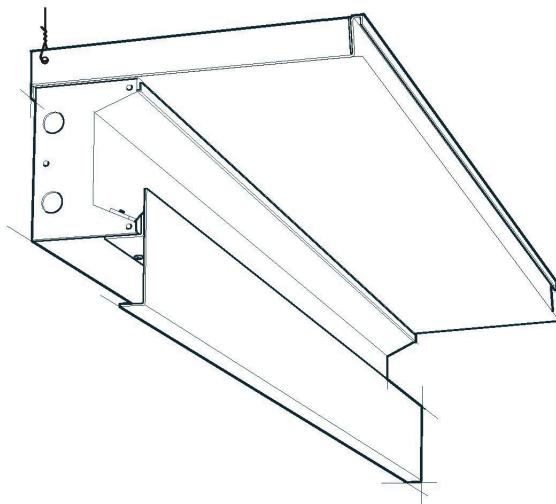


Type
Job Name
Catalog Number



Made in USA

P59 LED Cove & Perimeter



ordering - P59 LED

series	lamp rows	nominal length	reflector system	voltage	ceiling system	controls/options	
P59-__							
A6 6" aperture	LED3 LO, SO, HO* 3000K	2'	W white	UNV*	X1 exposed T-bar	ND non-dimming standard	EMH emergency battery (1100-1200 raw lumens)
A9 9" aperture	LED35 LO, SO, HO* 3500K	3'		*120-277	X3B hard ceiling (flange trim)	DM10 0-10v 10% dim- ming	QC quick-connect circuit assemblies
	LED4 LO, SO, HO* 4000K	4'			X7 hard ceiling (concealed flange)	DM01 0-10v 1% dimming	C2 90° corner - lit
	*LO-Low Output, SO-Standard Output HO-High Output	6'				STEP step dimming 100-50-off	CX special connector
		8'				DML 1% Lutron dim- ming	ADS acrylic dust cover
		R__*				DMD .1% DALI dimming	
		*Row length - advise factory of row and pattern dimensions				EML emergency battery (350-600 raw lumens)	
		Note: non-even lengths must use filler kits					

Features A prefabricated perimeter cove system offering an indirect wall wash effect. Using no louvers, the fixture illuminates walls while giving the ceiling the appearance of floating. Telescoping LED modules along with field trimmable extension kits allow for fully illuminated custom row lengths.

Construction The housing, available in 2-, 3-, 4-, 6- or 8-foot standard lengths, is made of 20-gauge steel. Trim flange is 1/16"-thick extruded aluminum.

Finish The standard housing and trim color is textured matte white (TMW) using polyester powder.

Electrical Must specify LED dimming controls. LED fixtures have constant current driver(s) with less than 20% THD when loaded to a minimum of 60%. Drivers sink a maximum of 6mA per driver. DM10 and DM01 LED drivers are 0-10V dimmable and are compatible with most 0-10V wall slide dimmers and direct 0-10V analog signal dimmers. Recommended wall dimmer is Leviton IP710 or equivalent. See data sheet to confirm all specified dimmers meet require specifications. Fixtures are ETL Damp labeled and I.B.E.W. manufactured. Maximum driver size is 1.625" width by 1.25" height.

Mounting Fixture is to be recess-mounted in either exposed T-bar or hard ceiling application(s).

Prudential reserves the right to change design specifications or materials without notice.



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F31

COVE WASHING UP ONTO CEILING

Manufacturer: PRUDENTIAL LTG
Fixture Line: MICRO COVE LED
Fixture: COVE WASHING UP ONTO CEILING
Catalog #: MIC-LED3SO-RLENGTH-SC-277-ND
Mounting: SURFACE

Watts/LF: 10w
Fixture Voltage: 277
Load Type: Non-Dim

Lamp Spec: LED, 3000K, 10 W/LF






Type
Job Name
Catalog Number

MICRO COVE LED Cove & Perimeter



ordering - MICRO COVE LED

Series	lamp rows 	nominal length	circuiting	voltage	controls/options
MIC					
	LED3 LO, SO, HO* 3000K	01'† 02' 03'	SC single circuit	UNV 120-277	ND non-dimming standard
	LED35 LO, SO, HO* 3500K	04' 06'			DM10 0-10v 10% dimming
	LED4 LO, SO, HO* 4000K	08'			DM01 0-10v 1% dimming
	*LO-Low Output, SO-Standard, HO-High Output	R_ Row length in 1' increments †1' unit acts as a satellite, no integral driver.			STEP step dimming 100-50-off
					DML 1% Lutron dimming
					DMD 1% DALI dimming
					Emergency Batteries: Must be remote, consult factory

Construction Housing is extruded aluminum with extruded lens and die-formed heavy gage aluminum endplates.

Finish The standard optical body finish is raw aluminum. Housing finish is gloss white.

Electrical Must specify LED dimming controls. LED fixtures have constant current driver(s) with less than 20% THD when loaded to a minimum of 60%. Drivers sink a maximum of 6mA per driver. DM10 and DM01 LED drivers are 0-10V dimmable and are compatible with most

0-10V wall slide dimmers and direct 0-10V analog signal dimmers. Recommended wall dimmer is Leviton IP710 or equivalent. See data sheet to confirm all specified dimmers meet require specifications. Fixtures are ETL Damp labeled and I.B.E.W. manufactured. Maximum driver size is 1.25" width by 1.0" height.

Mounting Fixture is to be surface-mounted within concealed coves.

Prudential reserves the right to change design specifications or materials without notice.

Cove & Perimeter MICRO COVE

photometric data

MC-LED4LO-04

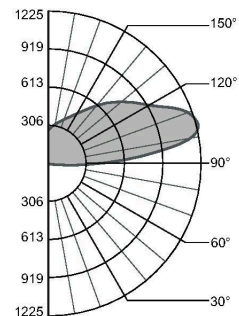
Report # L051400001
D=2.50% I=97.50%

Delivered Lumens: 1840

Input Watts: 19.07

Lumens/Watt: 96

Calculated L70 ≥ 100,000 hours
Reported L70 (6k) ≥ 36,000 hours
5 year LED warranty - see prulite.com



Zonal Lumen Summary

Zone	Lumens	%Luminaire
0-90	46.67	2.50
90-180	1793	97.50

Candlepower Summary

Vertical Angle	0°	25°	45°	65°	90°
80	0	0	0	0	0
85	87	75	39	6	2
90	372	345	268	118	3
95	770	693	520	201	15
100	1135	1033	725	247	36
105	1225	1111	723	260	61
115	1051	896	598	269	108
125	985	736	501	278	150
130	768	665	467	279	168
135	687	597	435	282	186
140	606	530	404	285	201
145	526	470	361	291	216
150	468	428	388	293	229
160	376	360	330	294	252
165	341	330	315	292	262
170	317	312	301	287	266
175	294	292	287	282	270
180	267	267	367	267	267

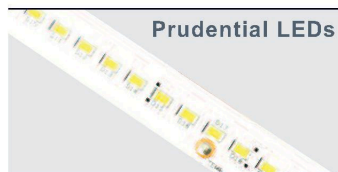
Coefficients of Utilization (%)

Floor Ceiling Wall	effective floor cavity reflectance = .20											
	80				70				50			
	70	50	30	10	70	50	30	10	70	50	30	10
0	96	96	96	96	82	82	82	82	57	57	57	57
1	86	82	78	74	74	70	67	64	48	46	44	44
2	78	71	65	60	67	61	56	52	42	39	37	37
3	71	62	56	50	61	54	48	43	37	33	30	30
4	65	55	48	42	55	47	41	36	33	29	26	26
5	60	49	41	36	51	42	36	31	29	25	22	22
6	55	43	36	30	47	37	31	27	26	22	19	19
7	50	39	32	26	43	33	27	23	23	19	16	16
8	46	35	28	23	40	30	24	20	21	17	14	14
9	43	32	25	20	37	27	21	17	19	15	12	12
10	40	29	22	18	34	25	19	15	17	14	11	11

LED Delivered Lumens, Watts & Calculated Life

	LED LO	LED SO	LED HO
Micro Cove	460 lm/ft	875 lm/ft	1050 lm/ft
	5 w/ft	10 w/ft	12 w/ft
Calc. Life	100,000 hr	100,000 hr	100,000 hr

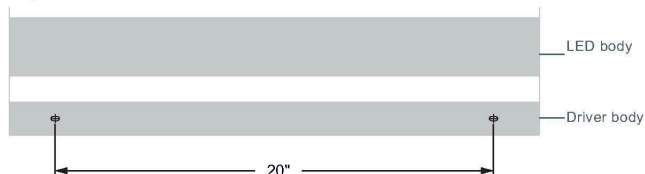
Lumen output and wattages are nominal for all 3 color changes and may vary +/- 5%.



PruBin™ is Prudential Lighting's exclusive 'job binning' method that ensures color temperature consistency across all luminaires on a project. Meticulously testing and labeling EVERY LED board to +/- 25 lumens, +/- 50k CCT and +/- .004 Duv — while also separating positive from negative — allows us to match color, hue and intensity throughout a project and provides a consistent color temperature within a 2-step MacAdam ellipse.

Mounting

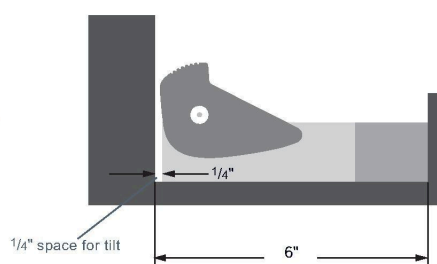
Top View



1'	12 7/16"
2'	24 7/16"
3'	36 1/2"
4'	48 1/2"
6'	72 3/8"
8'	96 3/8"

Actual Lengths of Individual Fixtures

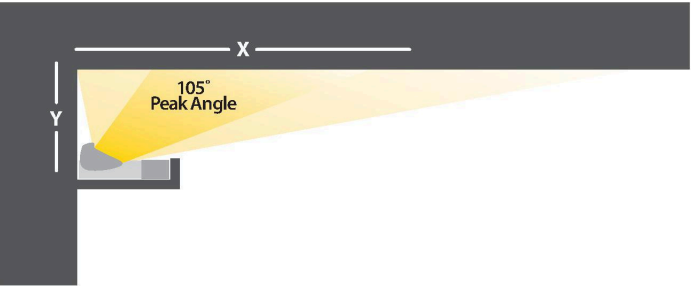
Cove Detail



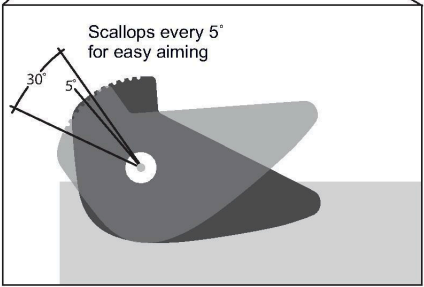
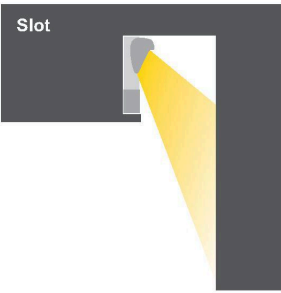
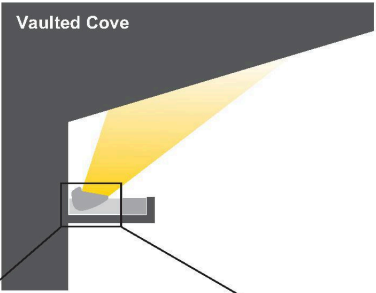
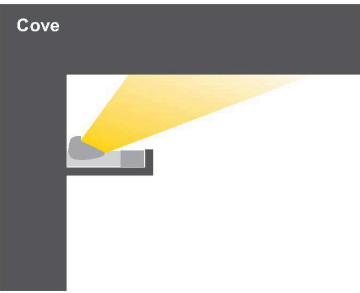


MICRO COVE LED Cove & Perimeter

installation



"Y" cove to ceiling	"X" peak candela @ 105°
12"	33"
18"	49"
24"	66"



Prudential reserves the right to change design specifications or materials without notice.



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F33

BLADE UPLIGHT-COLOR CHANGING-MEDIA CONTROLLER REQUIRED

Manufacturer: COLOR KINETICS

Fixture Line: COLORBLAST POWERCORE

Fixture: COLORBLAST 6

Catalog #: 116-000026-02

Mounting: SURFACE

Accessories: Egg Crate Louvers - 120-000016-03

Fixture Wattage: 25w

Fixture Voltage: 24

Load Type: DMX

Lamp Spec: LED RGBW

Fixture Specification Notes

- 1) DMX control system is required to change colors and program RGBW option.
- 2) POWER + DATA SUPPLIES REQUIRED





Date: _____ Type: _____

Firm Name: _____

Project: _____

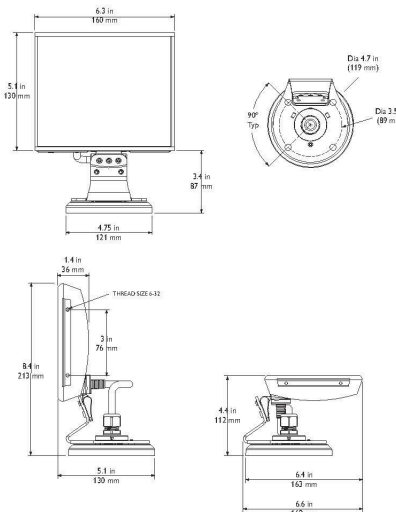
ColorBlast 6

10° clear lens

The original compact exterior LED wash fixture with intelligent color light

High-performance ColorBlast 6 LED fixtures generate rich, saturated colors and color-changing effects for a range of wall-washing and floodlighting applications. Designed with the needs of lighting designers, architects, and retail window directors in mind, ColorBlast 6 can be used in both indoor and outdoor installations. High-intensity LEDs produce superior light output in a compact, low-profile housing. ColorBlast 6 also offers full pan and tilt rotation, flexible mounting options, two beam angles, and superior control through Philips or third-party controllers.

- Two beam patterns — A frosted glass lens (21° beam angle) produces a soft-edge beam, while a clear glass lens (10° beam angle) affords extended light projection.
- Outdoor rated — Fully sealed for maximum fixture life and IP66 rated for outdoor applications, ColorBlast 6 fixtures meet or exceed specifications for use in wet locations. Rugged, die-cast aluminum housing is available in white or black powder-coated finish.
- Flexible mounting options — The versatile fixture canopy base can be mounted to a junction box or directly to a wall, ceiling, or floor. A liquid-tight cable fitting seals the canopy opening for use in damp or wet environments.
- Versatile light positioning — The locking canopy base offers friction-free rotation of up to 350°, and 110° fixture tilting lets installers quickly aim the fixture without special tools.
- Unified power and data cable — Each ColorBlast 6 fixture comes with a 60 ft (18.3 m) unified power and data cable to minimize wiring. ColorBlast 6 is intended for use with PDS-150e and PDS-60 24V power / data supplies.
- Industry-leading controls — ColorBlast 12 fixtures work seamlessly with the complete line of Philips Color Kinetics controllers, including iPlayer 3 Light System Manager, and ColorDial Pro, as well as third-party controllers.
- Additional options for controlling and dispersing light — Designed specifically for the family of ColorBlast fixtures by City Theatrical, Inc., accessories include top hats, half top hats, egg crate louvers, barn doors, and horizontal and vertical spread lenses.



For detailed product information, please refer to the ColorBlast 6 / ColorBlast 12 Product Guide at www.philipscolorkinetics.com/ls/colorblast6/

Specifications

Due to continuous improvements and innovations, specifications may change without notice.

Item	Specification	Details
Output	Beam Angle	10°
	Lumens*	584
	LED Channels	Red / Green / Blue
	Mixing Distance	6 in (152 mm) to uniform light
	Lumen Maintenance†	50,000+ hours L50 @ 50° C (full output)
Electrical	Input Voltage	24 VDC via PDS-150e or PDS-60
	Power Consumption	25 W maximum at full output, steady state
Control	Interface	PDS-150e 24V (DMX / Ethernet) PDS-60 24V (Pre-programmed or DMX / Ethernet)
	Control System	Philips full range of controllers, including Light System Manager, iPlayer 3, and ColorDial Pro, or third-party controllers
Physical	Dimensions (Height x Width x Depth)	8.4 x 6.3 x 5.1 in (213 x 160 x 130 mm)
	Weight	3 lb (1.4 kg)
	Housing	Die-cast aluminium, black or white powder-coated finish
	Lens	Clear glass
	Fixture Connections	60 ft (18.3 m) unified power / data cable
	Temperature Ranges	-40° – 122° F (-40° – 50° C) Operating -4° – 122° F (-20° – 50° C) Startup -40° – 176° F (-40° – 80° C) Storage
	Humidity	0 – 95%, non-condensing
	Maximum Fixtures Per Power / Data Supply	PDS-150e 24V: 6 PDS-60 24V: 2
Certification and Safety	Certification	UL / cUL, FCC Class A, CE, PSE, C-Tick, SAA, CQC
	Environment	Dry / Damp / Wet Location, IP66

* Lumen measurement complies with IES LM-79-08

† L50 = 50% lumen maintenance (when light output drops below 50% of initial output). Ambient luminaire temperatures specified. Lumen maintenance calculations are based on lifetime prediction graphs supplied by LED source manufacturers. Calculations for white-light LED fixtures are based on measurements that comply with IES LM-80-08 testing procedures. Refer to www.philipscolorkinetics.com/support/appnotes/lm-80-08.pdf for more information.



CHROMACORE CK TECHNOLOGY | OPTIBIN CK TECHNOLOGY

Fixtures and Power / Data Supplies

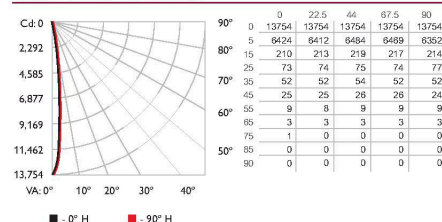
Item	Type	Item Number	Philips 12NC
ColorBlast 6	White	21° beam angle	116-000026-00 910503700593
		10° beam angle	116-000026-02 910503700595
	Black	21° beam angle	116-000026-01 910503700594
		10° beam angle	116-000026-03 910503700596
PDS-150e 24V	DMX / Ethernet	109-000008-01	910503700092
PDS-60 24V	Pre-programmed	109-000017-00	910503700096
	DMX / Ethernet	109-000017-03	910503700097

Use Item Number when ordering in North America.

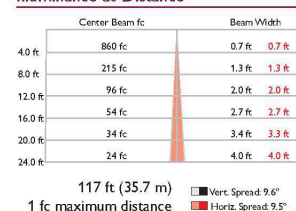
Photometrics

10° clear lens

Polar Candela Distribution



Illuminance at Distance



117 ft (35.7 m)
1 fc maximum distance

LED	Lumens	Efficacy
RGB	584	14.2

For lux multiply fc by 10.

Accessories

* Intended for use with Blast fixtures with 10° clear lens

Item	Type	Item Number	Philips 12NC
Accessory Holders	White	120-000004-03	910503702841
	Black	120-000004-04	910503702842
Half Top Hats	White	120-000010-03	910503702849
	Black	120-000010-04	910503702850
Top Hats	White	120-000006-03	910503702845
	Black	120-000006-04	910503702846
Egg Crate Louvers	White	120-000016-03	910503702853
	Black	120-000016-04	910503702854
Barndoors	White	120-000020-03	910503702857
	Black	120-000020-04	910503702858
Horizontal Glass Spread Lens*	36° (ribs out) 50° (ribs in)	120-000026-00	910503703899
Horizontal / Vertical Glass Spread Lens*	40°	120-000026-01	910503702772

Use Item Number when ordering in North America.



Philips Color Kinetics
3 Burlington Woods Drive
Burlington, Massachusetts 01803 USA
Tel 888.385.5742
Tel 617.423.9999
Fax 617.423.9998
www.philipscolorkinetics.com

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DAS-000034-04 R04 07-12



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F33.1

LED POWER/DATA SUPPLY

Manufacturer: PHILIPS

Fixture Line: PDS-150e

Fixture: POWER/DATA SUPPLY

Catalog #: 109-000008-01

Fixture Wattage: 150w

Fixture Voltage: 120

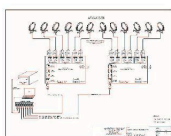
Load Type: Non-Dim

Lamp Spec: N/A





For device mounting and maintenance details, refer to the Installation Instructions included in the product packaging, or download documentation from www.philipscolorkinetics.com/files/pds/pds150e/



PDS-150e wiring diagrams are available online at www.philipscolorkinetics.com/support/wiring/

Date: _____ Type: _____

Firm Name: _____

Project: _____

PDS-150e

Power / data supply for Ethernet and DMX installations

PDS-150e is an indoor-rated power / data supply designed for LED lighting fixtures employing Chromacore technology from Philips Color Kinetics.

PDS-150e is compatible with both Ethernet and DMX controllers.

PDS-150e delivers 150 watts of total output via six output terminals and accommodates input voltages ranging from 100 VAC to 240 VAC. Short-circuit protection prevents device failure due to incorrectly wired fixtures.

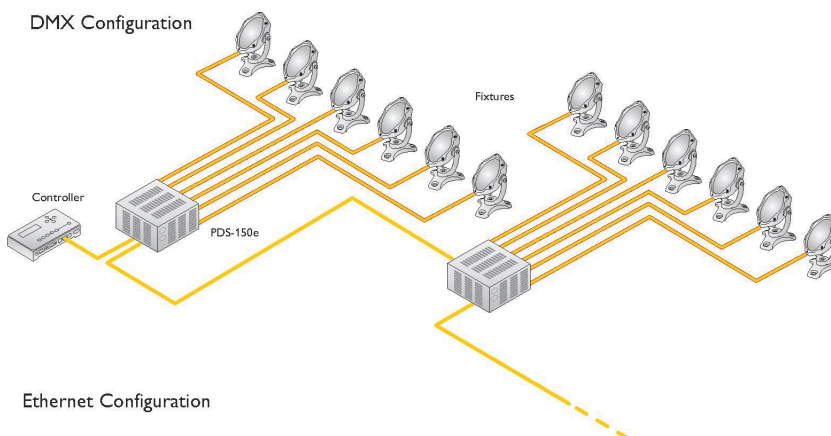
The PDS-150e enclosure is designed for use in dry locations. The built-in cooling fan and over-temperature protection circuitry prevent

the unit from operating beyond its rated temperature range. 14 pre-formed knockout holes accommodate standard conduit sizes.

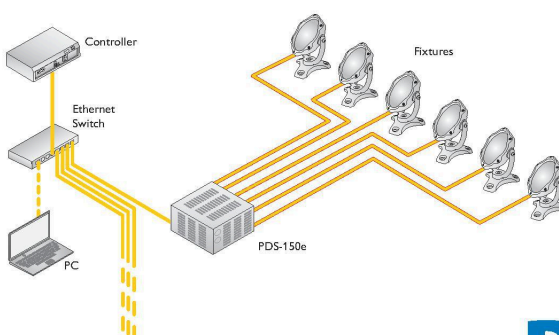
Compatible Fixtures

Fixture	Max. Quantity Per PDS-150e	Max. Quantity Per Fuse Group
C-Splash 2	6	2
ColorBlast 12	3	1
ColorBlast 6	6	2
ColorBurst 6	6	2

DMX Configuration



Ethernet Configuration



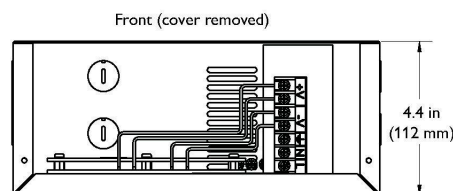
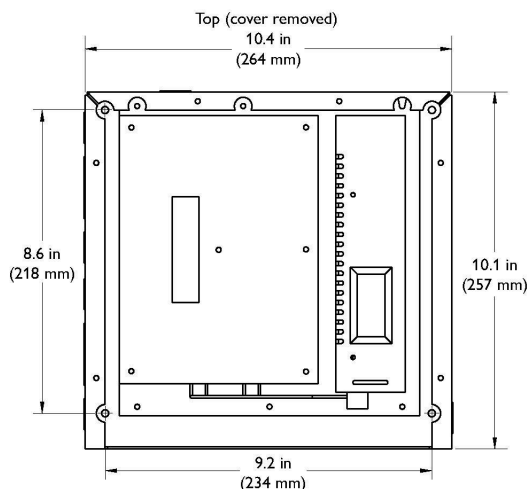
PHILIPS

Specifications

Due to continuous improvements and innovations, specifications may change without notice.

Item	Specification	Details
Electrical	Input Voltage	100 – 240 VAC, auto-switching, 50 / 60 Hz
	Maximum Input Current	2.8 A at 115 VAC, 1.4 A at 230 VAC
	Power Output	24 VDC, 150 W maximum
Physical	Dimensions (Height x Width x Depth)	4.4 x 10.4 x 10.1 in (112 x 264 x 257 mm)
	Weight	8 lb (3.6 kg)
	Construction	Painted steel housing, surface mount design
	Finish	Black matte
	Connectors	Data RJ-45 input and output connectors
		Power Output (6) terminal blocks
		Power Input Terminal block
	Temperature Ranges	14° – 122° F (-10° – 50° C) Operating 14° – 122° F (-10° – 50° C) Startup -40° – 176° F (-40° – 80° C) Storage
	Humidity	0 – 95%, non-condensing
	Cooling	Cooling fan
	Airflow	Rear panel input, side panel output
Certification and Safety	Certification	UL / cUL, FCC Class A, CE, PSE, C-Tick, SAA
	Classification	UL Class 2 power supply
	Environment	Dry Location, IP20
	Data Input	Philips full range of controllers, third-party DMX controllers, or KiNET-compatible* third-party Ethernet controllers

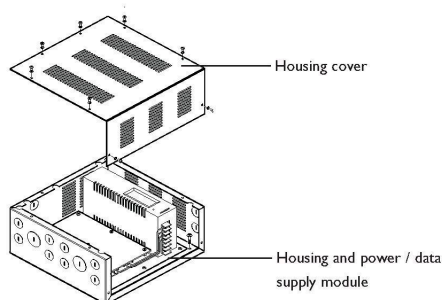
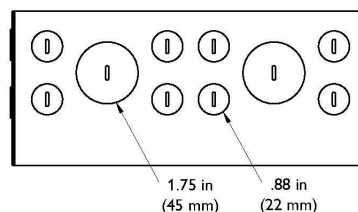
* KiNET is the Ethernet lighting protocol from Philips Color Kinetics.



Ordering Information

Item	Included Components	Item Number	Philips 12NC
PDS-150e	Power / data supply module, housing with cover and attaching screws, connectors, and installation instructions	109-000008-01	910503700092

Use Item Number when ordering in North America.



For complete instructions detailing how to address fixtures connected to a PDS-150e, refer to the *Addressing and Configuration Guide* available online at www.philipscolorkinetics.com/support/addressing/



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Tel 617.423.9999
Fax 617.423.9998
www.philipscolorkinetics.com

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KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F34

LINEAR UNDER CABINET LIGHT

Manufacturer: EATON - HALO

Fixture Line: HU10

Fixture: LED UNDERCABINET

Catalog #: HU10-LENGTH-9-30-FINISH

Mounting: SURFACE

Watts/LF: 5.25w

Fixture Voltage: 120

Load Type: ELV

Lamp Spec: LED, 3000K, 5.25 w/lf



DESCRIPTION

Ideal for task, accent, office, cove, and utility, under and above cabinet lighting display, the Halo Undercabinet low-profile design delivers maximum energy savings and life with easy installation. The integrated driver design allows 120V direct to the fixture for easy installation. Fixtures are available in 9", 18", 24", 36" and 48" lengths, the Halo system can be configured to fit almost anywhere. Each unit has an integrated on-off switch. Smooth dimming down to 5% using a standard dimmer*. Combination of direct wire to the fixture and connector cables provide for installation flexibility. Minimum Color Rendering Index (CRI) of 90 in 2700K, 3000K and 4000K color temperatures.

SPECIFICATION FEATURES**Even Light Distribution**

Specialized optical system consisting of tightly clustered proximity phosphor LEDs, advanced optical chamber coatings and lens materials resulting in soft illumination with very high efficiency. These fixtures are ideal for task lighting over glossy surfaces with no distracting shadow patterns.

Wiring Flexibility

Use any combination of three different wiring methods: Bring flexible conduit or Romex directly to either end of any size fixture. Conduit connector and romex strain relief hardware is included with each fixture. Utilize the available plug in connectors (sold separately) to link additional fixtures to the circuit or continue with flex conduit or romex (See instructions sheets for more detail).

Durable Low Profile Housing

Heavy gauge aluminum housing and color matched end caps with a 3/4" overall height.

Two Fastener Mounting

Each unit is secured directly to the mounting surface with just two fasteners keeping installation costs low. Can be mounted in horizontal and vertical orientations.

Continuous Runs

Link any combination of fixtures up to 450 W total load using available connectors.

Optional Accessories

Optional splice box has a connection port on each side to allow for runs in either or both directions. Includes Romex/ 1/2" conduit connector. Various connector cable options provide flexibility of mounting location.

Finish Options

Fixtures and accessories are available in both White (P) and Matte Black (MB) finishes.

Electronic Driver

Electronic driver provides full light output, flicker free and noise free operation.

Labels

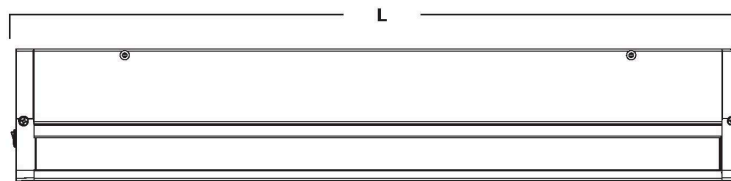
- cULus listed
- Can be used to meet IECC, ASHRAE commercial and residential standards
- ENERGY STAR® qualified
- FCC

HALO

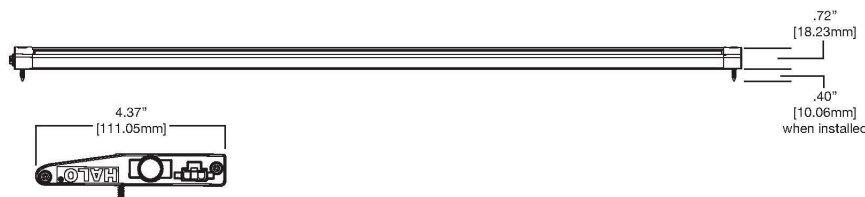
Catalog #		Type
Project		
Comments		Date
Prepared by		

**HU10P****HU10MB****HU10**

Integrated Driver
LED Undercabinet



Size Description	9 in. Nominal	18 in. Nominal	24 in. Nominal	36 in. Nominal	48 in. Nominal
Length "L"	8.98" [228.1mm]	16.55" [420.4mm]	23.98" [609.1mm]	32.44" [824mm]	47.18" [1,198.4mm]

**ENERGY DATA**

Power Factor: >0.99

THD: <10%

Color Temperature:

2700K, 3000, 4000K

Color Rendering Index: 90

Nominal Lumens/Ft: 330



Qualified and compliant. Refer to ENERGY STAR® Qualified Products List for listings. Can be used to comply with California Title 24 High Efficacy requirements. Certified to California Title 20 Appliance Efficiency Database.



KAPLAN GEHRING McCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F34

HALO

HU10

ORDERING INFORMATION

SAMPLE NUMBER: HU1009D930P (9" Dimmable Fixture, 90 CRI, 3000 K, White Finish)

Family	Length	Dimming	Lens	CRI	Color Temperature	Finish	Accessories
HU10 =Halo Integrated Driver Undercabinet	09=9" 18=18" 24=24" 36=36" 48=48"	D=Dimmable*	[Blank]=Frosted	9=90 CRI	27=2700K 30=3000K 40=4000K	P=White MB=Matte Black	HU101=3" Daisy Chain Connector HU102=6" Daisy Chain Connector HU103=24" Daisy Chain Connector HU104=120" Daisy Chain Connector HU105=48" Power Cord HU107=1-1/2" Male-to-Male Connector HU109=Splice Box HU1010=12" Daisy Chain Connector HU1011=18" Daisy Chain Connector HU10MS=Master Switch

*See our website for dimmer compatibility guide - www.cooperlighting.com

CONNECTORS



HU101
3" Daisy Chain Connector



HU102
6" Daisy Chain Connector



HU1010
12" Daisy Chain Connector



HU1011
18" Daisy Chain Connector



HU103
24" Daisy Chain Connector



HU104
120" Daisy Chain Connector



HU105
48" Power Cord



HU109
Splice Box



HU107
1-1/2" Male-to-Male Connector

Finish: P = White; MB = Matte Black Example: HU101P = 3" Daisy Chain Connector, White

HALO

HU10

PHOTOMETRY

Fixture Application Illustration

MOUNTING HEIGHT 24"

Top Number

Report: HU1024D930.IES

Middle Number

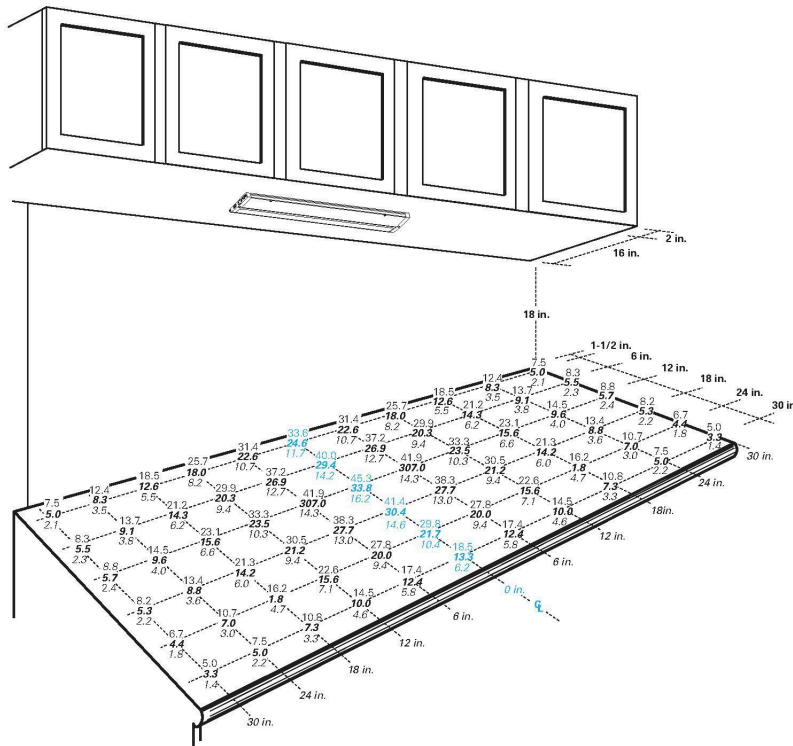
Report: HU1018D930.IES

Bottom Number

Report: HU1009D930.IES

Countertop 16" x 30"

Point By Point Illumination Scale is
Exaggerated on Fixture Application
and Mounting.



15" Mounting Height

Top Number Report - HU1024D930.IES

Middle Number Report - HU1018D930.IES

Bottom Number Report - HU1009D930.IES

5.6	11.1	19.8	31.8	42.2	46.2	42.2	31.8	19.8	11.1	5.6	1-1/2 in
3.6	7.1	12.8	21.8	30.9	35.0	30.9	21.8	12.8	7.1	3.6	
1.5	2.9	5.3	9.6	14.8	17.5	14.8	9.6	5.3	2.9	1.5	
6.5	13.0	25.3	43.6	60.3	66.6	60.3	43.6	25.3	13.0	6.5	6 in
4.1	8.1	15.9	29.3	44.5	51.2	44.5	29.3	15.9	8.1	4.1	
1.6	3.2	6.3	12.4	21.2	26.2	21.2	12.4	6.3	3.2	1.6	
6.9	14.5	31.1	59.5	86.1	95.5	86.1	59.5	31.1	14.5	6.9	12 in
4.2	8.7	18.8	39.1	64.4	75.8	64.4	39.1	18.8	8.7	4.2	
1.6	3.3	7.0	15.4	30.3	39.8	30.3	15.4	7.0	3.3	1.6	
6.1	12.7	27.2	51.6	74.4	82.6	74.4	51.6	27.2	12.7	6.1	18 in
3.7	7.5	16.2	33.5	56.9	64.6	56.9	33.5	16.2	7.5	3.7	
1.4	2.9	6.1	13.4	26.0	34.0	26.0	13.4	6.1	2.9	1.4	
4.4	8.6	16.4	28.0	38.5	42.5	38.5	28.0	16.4	8.6	4.4	24 in
2.7	5.2	10.2	18.6	28.1	32.3	28.1	18.6	10.2	5.2	2.7	
1.1	2.1	4.1	7.9	13.3	16.2	13.3	7.9	4.1	2.1	1.1	
2.9	4.9	8.3	12.5	16.2	17.6	16.2	12.5	8.3	4.9	2.9	30 in
1.8	3.1	5.3	8.5	11.6	13.0	11.6	8.5	5.3	3.1	1.8	
0.7	1.3	2.2	3.8	5.5	6.3	5.5	3.8	2.2	1.3	0.7	

18" Mounting Height

Top Number Report - HU1024D930.IES

Middle Number Report - HU1018D930.IES

Bottom Number Report - HU1009D930.IES

6.5	12.2	20.3	30.9	39.8	43.3	39.8	30.9	20.3	12.2	6.5	1-1/2 in
4.3	7.9	13.4	21.4	29.0	32.3	29.0	21.4	13.4	7.9	4.3	
1.7	3.3	5.7	9.5	13.8	15.8	13.8	9.5	5.7	3.3	1.7	
7.5	14.1	24.9	39.6	52.6	57.5	52.6	39.6	24.9	14.1	7.5	6 in
4.8	9.0	16.2	27.2	38.5	43.5	38.5	27.2	16.2	9.0	4.8	
2.0	3.6	6.7	11.8	18.3	21.7	18.3	11.8	6.7	3.6	2.0	
8.0	15.3	28.8	48.6	66.4	73.1	66.4	48.6	28.8	15.3	8.0	12 in
5.0	9.5	18.4	33.1	49.3	56.5	49.3	33.1	18.4	9.5	5.0	
2.0	3.8	7.3	13.9	23.2	28.4	23.2	13.9	7.3	3.8	2.0	
7.2	13.7	25.7	43.1	58.7	64.6	58.7	43.1	25.7	13.7	7.2	18 in
4.5	8.5	16.2	29.0	43.0	49.2	43.0	29.0	16.2	8.5	4.5	
1.8	3.4	6.4	12.2	20.4	24.9	20.4	12.2	6.4	3.4	1.8	
5.5	9.9	17.2	27.0	35.7	38.9	35.7	27.0	17.2	9.9	5.5	24 in
3.5	6.2	11.1	18.3	25.9	29.1	25.9	18.3	11.1	6.2	3.5	
1.4	2.5	4.6	8.1	12.2	14.3	12.2	8.1	4.6	2.5	1.4	
3.8	6.2	9.8	14.2	17.8	19.3	17.8	14.2	9.8	6.2	3.8	30 in
2.4	4.0	6.5	9.7	12.8	14.1	12.8	9.7	6.5	4.0	2.4	
1.0	1.7	2.8	4.4	6.0	6.8	6.0	4.4	2.8	1.7	1.0	



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F39

SURFACE MOUNTED LED STRIP LIGHT

Manufacturer: LUMINII

Fixture Line: KENDO M

Fixture: SURFACE MOUNT LENSED LED

Catalog #: KM-LENGTH-30K-HO-HF-F-FINISH-POWER FEED

Mounting: SURFACE MOUNTED

Accessories: POWER SUPPLY: PSD-WATTAGE-24

Watts/LF: 5.4w

Fixture Voltage: 24 VDC

Lamp Spec: LED, 3000K, 5.4W/LF

Fixture Specification Notes

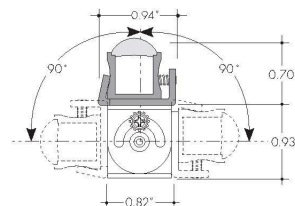
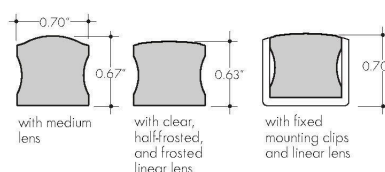
- 1) POWER SUPPLY REQUIRED





Kendo M | Linear illumination system

Extruded aluminum linear illumination system, Kendo M features specifically designed LED engine that provides constant illumination levels from the beginning to the end of the runs. Kendo M is suitable for cove lighting, architectural accents, under or above cabinets, display cases and many other applications. Available in sections up to 116" long with the option to extend up to 240" long with Kendo M Seamless runs in high output only (view last page). Class 2 listed for damp location installations. Approved for closet/storage space installation per NEC 410.16(A)(3) and 410.16(C)(5).



Adjustable mounting bracket allows 90° tilt in both directions.



TYPE IC



Finish options



Black powder coated



Bronze powder coated



Silver anodized



White powder coated

Technical information

Output type	Output Options				CCT/LUMEN MULTIPLIER		
	SO (LL36)	MO (LLX18)	HO (LLX22)	VHO (LL72)	Color temperature	Multiplier (Multiple light output of 3000K HO)	CRI
Lumens at 3000K (Clear lens)	118 lum/ft	189 lum/ft	311 lum/ft	349 lum/ft	2200 K	0.83	70+
Average power consumption at 4'	3.2 W/ft	4.8 W/ft	5.4 W/ft	6.5 W/ft	2700 K	0.81	98
Maximum system length	35'	25'	23'	18'	2900 K	0.86	97
Operating Voltage	24VDC	24VDC	24VDC	24VDC	3000 K	1.00	91
					3500 K	0.98	95
					4100 K	1.06	93

Ordering code

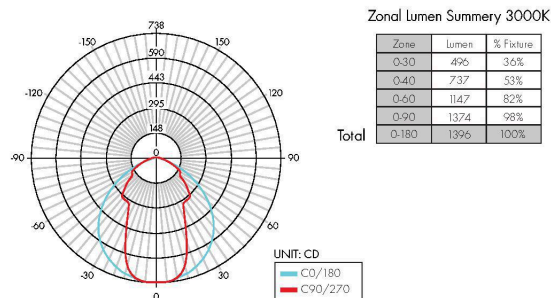
MODEL	LENGTH	CCT	OUTPUT	LENS	MOUNTING	FINISH	POWER FEED
KM Kendo M	12 12"-116" 4" increments	22K 22K - 2200 K 27K - 2700 K 29K - 2900 K 30K - 3000 K 35K - 3500 K 41K - 4100 K	SO SO - Standard MO - Medium HO - High VHO - Very High	C C - Clear HF - Half Frosted F - Frosted M - Medium SI - Satin Ice	A A - Adjustable F - Fixed	SA SA - Silver BK - Black BZ - Bronze WH - White (BK, BZ, WH finishes will have an upcharge and require longer lead times)	F1 F1 - 72" wire leads F2 - 72" wire leads at one end and quick connect at other F3 - Single quick connect F4 - Dual quick connect



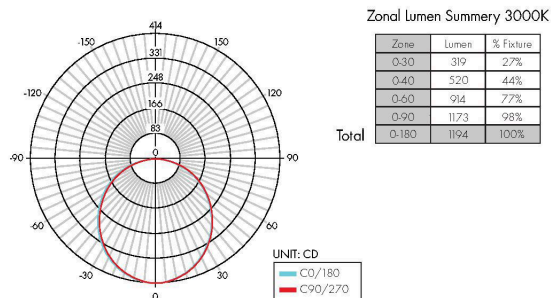
Kendo M | Linear illumination system

Photometry

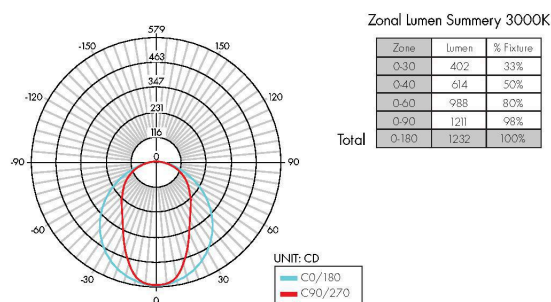
KM-48-30K-VHO-H-C-XX



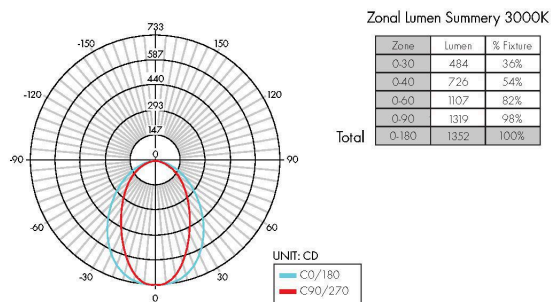
KM-48-30K-VHO-H-F-XX



KM-48-30K-VHO-H-H-F-XX



KM-48-30K-VHO-H-M-XX



CCT/LUMEN MULTIPLIER

Color temperature	Multiplier (Multiply Light Output of 3000K)	CRI
2200 K	0.83	70+
2700 K	0.81	98
2900 K	0.86	97
3000 K	1.00	91
3500 K	0.98	95
4100 K	1.06	93



Kendo M Linear illumination system

Power consumption per fixture length

Based on operation with PSD series of power supplies.

		SO		MO		HO		VHO			
Nominal length	Actual length	W/ft	Total wattage	W/ft	Total wattage	Actual length	W/ft	Total wattage	Actual length	W/ft	Total wattage
12"	13-2/16"	3.25	3.25	5.00	5.00	13-4/16"	5.60	5.60	12-15/16"	6.75	6.75
16"	17"	3.25	4.00	5.00	7.00	17-2/16"	5.60	7.50	16-15/16"	6.75	9.00
20"	20-14/16"	3.25	5.25	4.95	8.50	20-13/16"	5.60	9.30	20-13/16"	6.75	11.25
24"	24-14/16"	3.25	6.50	4.95	9.90	24-2/16"	5.55	11.10	24-12/16"	6.75	13.50
28"	28-12/16"	3.25	7.75	4.95	11.00	28-8/16"	5.55	13.50	28-11/16"	6.75	16.75
32"	32-11/16"	3.25	8.50	4.90	13.25	32-14/16"	5.55	15.00	32-10/16"	6.75	19.00
36"	36-10/16"	3.25	9.75	4.90	14.70	36-3/16"	5.50	16.50	36-10/16"	6.65	19.95
40"	40-9/16"	3.25	10.25	4.90	16.00	40-8/16"	5.50	18.00	40-8/16"	6.65	22.20
44"	44-8/16"	3.20	11.75	4.85	17.50	44-14/16"	5.50	19.80	44-7/16"	6.65	24.40
48"	48-7/16"	3.20	12.80	4.85	19.40	48-3/16"	5.45	21.80	48-6/16"	6.55	26.20
52"	52-6/16"	3.20	13.30	4.85	21.00	52-9/16"	5.45	23.00	52-5/16"	6.55	28.50
56"	56-5/16"	3.20	14.80	4.80	22.50	56-3/16"	5.45	25.50	56-4/16"	6.55	30.50
60"	60-4/16"	3.20	16.00	4.80	24.00	60-3/16"	5.40	27.00	61-3/16"	6.45	32.25
64"	64-3/16"	3.20	17.00	4.80	25.50	64-9/16"	5.40	28.50	64-7/16"	6.45	34.40
68"	68-2/16"	3.15	18.00	4.75	27.00	68-15/16"	5.40	30.00	68-1/16"	6.45	36.55
72"	72-1/16"	3.15	18.90	4.75	28.50	72-4/16"	5.35	32.10	73"	6.40	38.40
76"	76"	3.15	19.00	4.75	30.00	76-10/16"	5.35	33.90	76-15/16"	6.40	40.50
80"	79-15/16"	3.15	21.50	4.70	31.50	80-15/16"	5.35	35.00	80-13/16"	6.40	43.00
84"	83-14/16"	3.15	22.05	4.70	32.90	84-4/16"	5.25	36.70	84-12/16"	6.25	43.75
88"	87-13/16"	3.15	23.00	4.70	34.00	88-10/16"	5.25	38.20	88-11/16"	6.25	46.00
92"	91-12/16"	3.10	24.00	4.65	35.50	92-15/16"	5.25	39.60	92-10/16"	6.25	48.00
96"	95-12/16"	3.10	24.80	4.65	37.20	96-4/16"	5.20	41.60	96-10/16"	6.15	49.20
100"	99-10/16"	3.10	26.30	4.65	39.00	100-9/16"	5.20	43.20	100-9/16"	6.15	51.25
104"	103-8/16"	3.05	27.10	4.60	40.20	104-15/16"	5.20	44.00	103-8/16"	6.15	53.00
108"	107-7/16"	3.05	28.00	4.60	41.40	108-4/16"	5.10	45.90	108-7/16"	6.00	54.00
112"	111-7/16"	3.05	28.50	4.60	43.00	112-10/16"	5.10	47.00	112-6/16"	6.00	56.00
116"	115-6/16"	3.05	30.00	4.55	44.20	116-11/16"	5.10	48.50	116-5/16"	6.00	58.00

Power supply

See fixture and power supply instructions for wiring information. Dimming possible in select models - view luminii website for list of compatible dimmers.

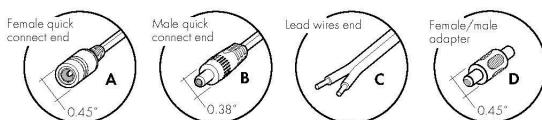
Series	Models	Height/Length	Width	Depth	VAC Input	Maximum wattage	Outdoor rated	Dimming
PSD (add -240 or -277 at the end of part number to order with higher input)	PSD-48-24	11.25"	3.37"	3.25"	120, 240, 277	48 W	Yes	Forward phase
	PSD-96-24	11.25"	3.37"	3.25"	120, 240, 277	96 W	Yes	Forward phase
	PSD-288-24	14.25"	8.43"	2.20"	120, 240, 277	3x 96 W	Yes	Forward phase
PSV* (at the end of part number, add DIM1-10 for 1-10 V dimming or -ND for non dimming)	PSV7P-25-24VU2	5.83"	1.57"	1.26"	90-305	25 W	Yes	1-10 V or N/A
	PSV7P-40-24VU2	6.40"	1.70"	1.26"	90-305	40 W	Yes	1-10 V or N/A
	PSV7P-60-24VU2	6.40"	1.70"	1.26"	90-305	60 W	Yes	1-10 V or N/A
	PSV7P-90-24VU2	6.34"	2.40"	1.42"	90-305	90 W	Yes	1-10 V or N/A
Lutron HLume A-series LTE	LTEA4U1UKL-CV240	4.89"	4"	2.62"	120	40 W	No	Forward Phase
Lutron HLume A-series L3D	L3DA4U1UKL-CV240	4.89"	4"	2.62"	120-277	40 W	No	Eco System

* Electrical enclosure required by others.

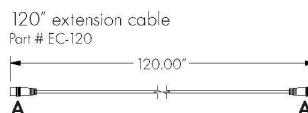
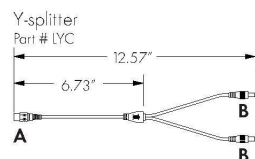
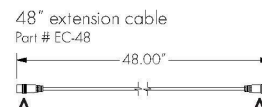
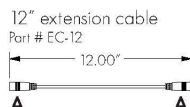
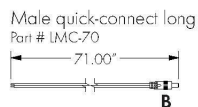
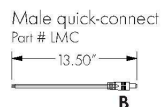


Kendo M | Linear illumination system

Connectors

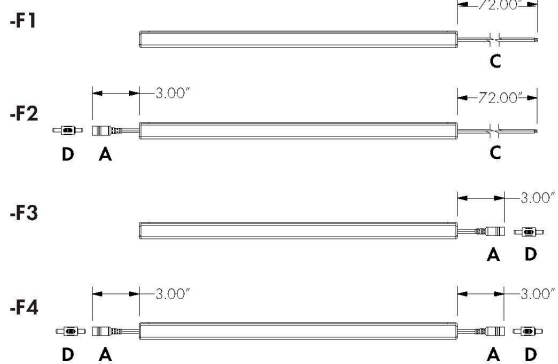


Linking and extension cable options



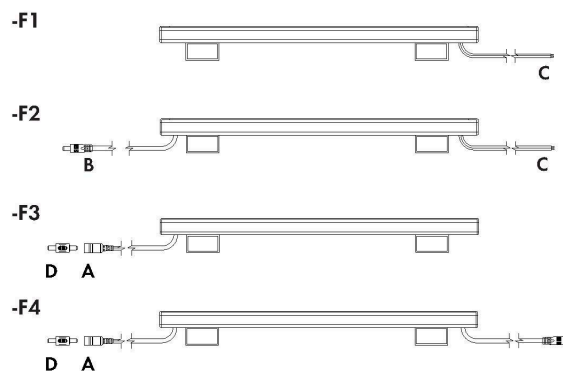
Powerfeed options

Powerfeed options with fixed bracket

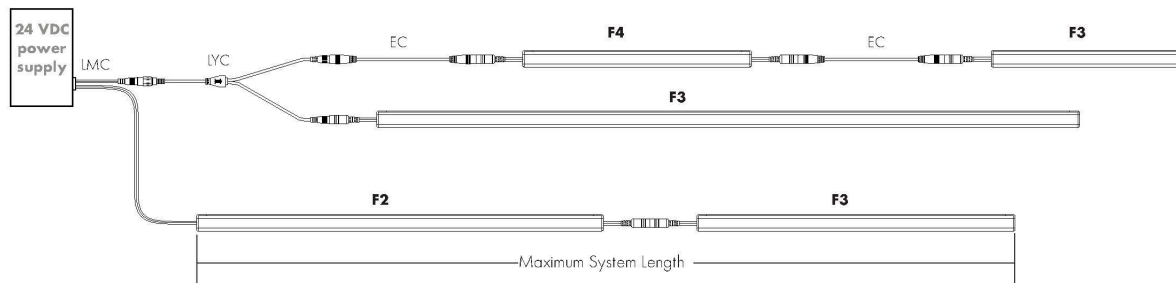


-F3 and -F4 powerfeed options require #LMC to connect to PSD series of power supplies.

Powerfeed options with adjustable bracket



Sample layout of powerfeed connections

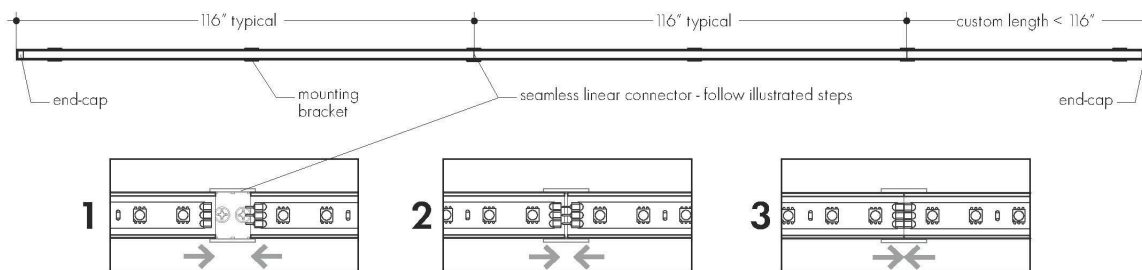




Kendo M Linear illumination system

Kendo M Seamless runs

Available only for high output (HO) fixtures.



Kendo M seamless run power consumption

Length		HO	
Nominal	Actual	W/ft	Total wattage
116"	116-11/16"	5.10	48.50
120"	120-4/16"	5.00	50.00
124"	124-10/16"	5.00	51.50
128"	128-12/16"	5.00	53.60
132"	132-10/16"	4.95	54.45
136"	136-5/16"	4.95	56.00
140"	139-10/16"	4.95	57.50
144"	144"	4.85	58.20
148"	148-6/16"	4.85	60.00
152"	151-11/16"	4.85	61.10
156"	156"	4.80	62.40
160"	160-6/16"	4.80	63.20
164"	163-11/16"	4.80	64.40
168"	168-1/16"	4.70	65.80
172"	171-11/16"	4.70	67.00
176"	175-11/16"	4.70	68.00

Length		HO	
Nominal	Actual	W/ft	Total wattage
180"	180-1/16"	4.60	69.00
184"	184-7/16"	4.60	70.00
188"	187-12/16"	4.60	71.00
192"	192-2/16"	4.50	72.00
196"	196-7/16"	4.50	73.20
200"	199-12/16"	4.50	74.40
204"	204-2/16"	4.45	75.65
208"	208-7/16"	4.45	77.00
212"	211-12/16"	4.45	78.10
216"	216-1/16"	4.40	79.20
220"	220-7/16"	4.40	80.50
224"	223-12/16"	4.40	81.60
228"	228-2/16"	4.35	82.65
232"	232-3/16"	4.35	84.00
236"	235-12/16"	4.35	85.00
240"	240-12/16"	4.30	86.00

Ordering code

MODEL	LENGTH	CCT	OUTPUT	OPTIC	MOUNTING	FINISH	POWER FEED
KMS	120	22	HO	C	A	SA	F1
KMS - Kendo M Seamless	120"-240" 4" increments	22K - 2200 K 27K - 2700 K 29K - 2900 K 30K - 3000 K 35K - 3500 K 41K - 4100 K	HO - High	C - Clear F - Frosted M - Medium	A - Adjustable F - Fixed	SA - Silver BK - Black BZ - Bronze WH - White <small>(BK,BZ,WH finishes will have an upcharge and require longer lead times)</small>	F1 - 7/2" wire leads F3 - Single quick connect



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F42.A

DECORATIVE PENDANT - Ø 40 cm / 15.7 in

Manufacturer: TOM DIXON

Fixture Line: Mirror Ball Gold 40 Pendant

Fixture: DECORATIVE PENDANT

Catalog #: MIRROR BALL GOLD 40 PENDANT

Mounting: PENDANT MOUNTED

Fixture Wattage: 12.5w

Fixture Voltage: 120

Load Type: Non-Dim

Lamp Spec: (PHILIPS LIGHTING)
PHILIPS PAR 30 LED-MODEL:
434944






Technical Specification Sheet



Mirror Ball Gold 40 Pendant

New addition to the Mirror Ball family. Vacuum gold metallised polycarbonate globe. Available in pendants: 50cm, 40cm and 25cm and in chrome.

Process	Mirror Ball Floor is formed using a technically advanced process of vacuum metallisation. The process involves vaporising a small amount of pure metal at a very high temperature and then sucking it on to a surface by applying an electrical charge. Extremely small holes can appear at times on the metal coating.		
Year of Design	2014		
Material	Polycarbonate		
Product Code	Shade (EU)	MBB40G	
	Fitting (EU)	MBA07GEU	
	Shade (US)	MBB40G	
	Fitting (US)	MBA07GUL	
Type	Pendant light		
Colour	 Gold		
Cleaning Instructions	Clean with a soft dry cloth only. Do not use polishing agents, water or abrasive materials when cleaning. Always switch off the electricity supply before cleaning.		

	Bulb spec			
	EU/UK	28W (max) E27 halogen		
	US	60W White G30		
	Cable length	250cm / 98.4in		
	Cable colour	Clear		
	Packaging (m)	H	W	D
	MBB40G	0.46	0.44	0.46
	Weight (kg)			
	MBB40G	2.30		
	Dimensions (cm/in)	Ø 40 cm / 15.7 in		



KAPLAN GEHRING MCCARROLL
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Back-Check No. 2

Jan 15, 2016

Fixture Type:

F42.B

DECORATIVE PENDANT - Ø 50 cm / 19.7 in

Manufacturer: TOM DIXON

Fixture Line: Mirror Ball Gold 50 Pendant

Fixture: DECORATIVE PENDANT GLOBE

Catalog #: MIRROR BALL GOLD 50 PENDANT

Mounting: PENDANT MOUNTED

Fixture Wattage: 12.5w

Fixture Voltage: 120

Load Type: Non-Dim

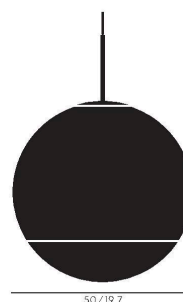
Lamp Spec: (PHILIPS LIGHTING)
PHILIPS PAR 30 LED-MODEL:
434944





Technical Specification Sheet


Tom
Dixon.



50 / 19.7

Mirror Ball Gold 50 Pendant

New addition to the Mirror Ball family. Vacuum gold metallised polycarbonate globe. Available in pendants: 50cm, 40cm and 25cm and in chrome.

Process	Mirror Ball Floor is formed using a technically advanced process of vacuum metallisation. The process involves vaporising a small amount of pure metal at a very high temperature and then sucking it on to a surface by applying an electrical charge. Extremely small holes can appear at times on the metal coating.		
Year of Design	2014		
Material	Polycarbonate		
Product Code	Shade (EU)	MBB50G	
	Fitting (EU)	MBA07GEU	
	Shade (US)	MBB50G	
	Fitting (US)	MBA07GUL	
Type	Pendant light		
Colour	 Gold		
Cleaning Instructions	Clean with a soft dry cloth only. Do not use polishing agents, water or abrasive materials when cleaning. Always switch off the electricity supply before cleaning.		

	Bulb spec			
	EU/UK	28w (max) E27 halogen		
	US	60W White G30 bulb		
	Cable length	250cm / 98.4in		
	Cable colour	Clear		
	Packaging (m)	H	W	D
	MBB50G	0.57	0.54	0.54
	Weight (kg)			
	MBB50G	3.30		
	Dimensions (cm/in)	Ø 50 cm / 19.7 in		



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F43

SEMI-RECESSED LINEAR LIGHT SLOT IN WALL

Manufacturer: AMERLUX

Fixture Line: FINO

Fixture: DRYWALL INTEGRATED COVE FIXTURE

Catalog #: FINO-6-LED-3000-HW-277-LENGTH-CON

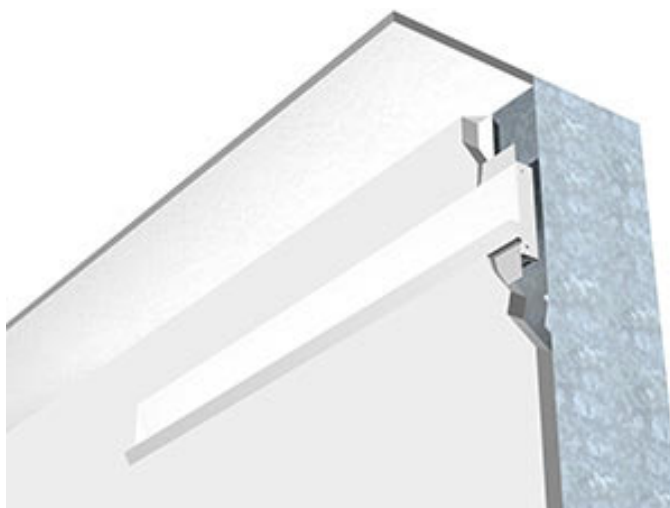
Mounting: SEMI-RECESSED

Watts/LF: 6w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED 3000K
6 W/LF



FINO®

ASYMMETRIC WALL MOUNT INDIRECT LED

APPLICATIONS:

Commercial and hospitality wall mounted indirect lighting for washing ceiling or floor

CONSTRUCTION:

2 pc construction: 5/8" deep extruded aluminum mud-in frame with gear and snap-in extruded aluminum optical assembly

Fixture lengths available in 6" increments (minimum 1')

Extruded latching system for hairline seams

Field replaceable LED board

OPTICS:

6w/ft or 12w/ft LED boards

Color Temp: 2700K, 3000K, 3500K, 4000K

CRI: 80 typ

Life: 50,000 hrs

Lumen Maintenance: >70% of initial lumens @ 50,000 hrs

Lumen output (3500K): 533 lm/ft (6w), 950 lm/ft (12w)

Engineered optical performance lens with internal asymmetric high reflectance white reflector (standard)

Optional Amerlux® exclusive designer lens for softer beam edges

ELECTRICAL:

Electronic constant current LED driver, 36" min., 8'-0" max. per driver. Must daisy chain min. 36" of fixture for short runs (driver on 1st fixture, daisy chain to others).

120v or 277v input

0-10v dimming to 10%, driver is accessible by removing LED module

This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Amerlux recommends using additional surge protection with this unit (supplied by others), surge damage is not covered by warranty.

MOUNTING:

For use in sheet rock walls

Extruded latching system for hairline seams

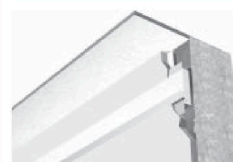
LABELING:



For indoor use only

IC rated

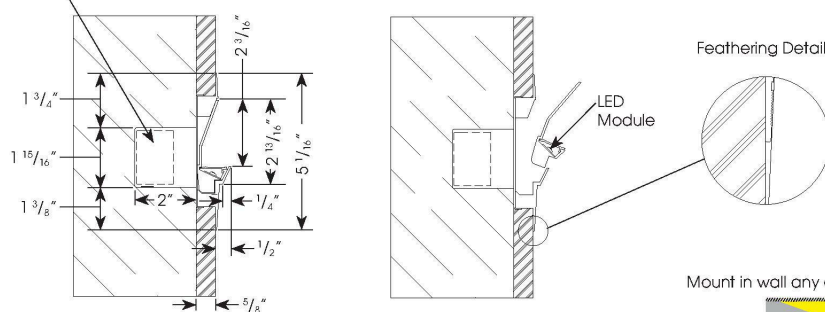
Damp location

FINO
LED

PROJECT:

TYPE:

Driver Compartment, fits between studs, sliding lateral adjustment (9" long)



Cut Out Dimension:
4' fixture = $3 \frac{5}{8}" \times 4'$
Continuous runs = $3 \frac{5}{8}" \times \text{fixture length} + 1"$

ELECTRICAL

Electronic driver

Wattage per foot		4'		8'	
		System watts	Amps	System watts	Amps
6	120v	24	0.20	48	0.40
	277v	24	0.09	48	0.17
12	120v	48	0.40	96	0.80
	277v	48	0.17	96	0.35

Mount in wall any orientation

Uplight

Downlight



Electrostatic sensitive device,
observe precautions for
handling

10 year limited
warranty
AMERLUX LED
(see website for details)

ORDERING INFORMATION:

Model	Wattage Per Foot	Lamp Type	Color Temp	Finish	Voltage	Length	Configuration	Options/Accessories
FINO	6 12	LED	2700 3000 3500 4000	HW - high reflectance white	120/277	1' 2' 3' 4' 5' 6' 7' 8'	IND - individual CON - continuous runs in excess of 8'	DL - Amerlux® designer lens HILUME - Lutron Hi-lume® dimming driver

*Note - For 12w fixtures - Due to driver limitations, not all output & length configurations are possible. Please consult factory.

Example: FINO-6-LED-3500-HW-120-4-IND

Cat #:

Amerlux reserves the right to change details that do not affect overall function and performance.

FINO®

ASYMMETRIC WALL MOUNT INDIRECT LED



TYPE:

FINO
LED

FIXTURE DATA:

Complete photometric data (.ies format) available upon request.

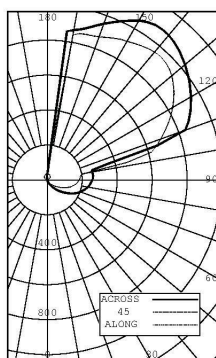
FINO 6W/FT LED 4' IND

SOURCE: 120 WHITE LEDS LUMENS/FT: 533 (3500K)
RECESSED

FINO 6W/FT LED 4' IND WITH DESIGNER LENS

SOURCE: 120 WHITE LEDS LUMENS/FT: 442 (3500K)
RECESSED

LTL# 34464



ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2	N/A	0.11
0-40	9	N/A	0.44
0-60	56	N/A	2.63
0-90	255	N/A	11.97
40-90	246	N/A	11.52
60-90	199	N/A	9.34
90-180	1877	N/A	88.03
0-180	2132	N/A	100.0

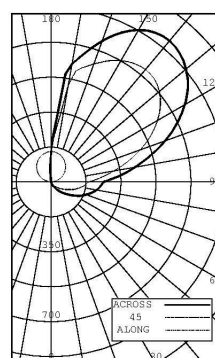
Total Luminaire Efficacy = 82.6 lumens/watt

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

RC	70	50	30	10
RCR				
0	0.98	0.98	0.98	0.98
1	0.87	0.83	0.78	0.74
2	0.79	0.71	0.64	0.59
3	0.71	0.62	0.54	0.48
4	0.65	0.54	0.46	0.40
5	0.59	0.47	0.40	0.34
6	0.54	0.42	0.34	0.29
7	0.50	0.38	0.30	0.24
8	0.46	0.34	0.26	0.21
9	0.42	0.31	0.23	0.18
10	0.39	0.28	0.21	0.16

LTL# 34463



ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2	N/A	0.12
0-40	8	N/A	0.47
0-60	49	N/A	2.76
0-90	237	N/A	13.42
40-90	229	N/A	12.95
60-90	189	N/A	10.66
90-180	1532	N/A	86.58
0-180	1769	N/A	100.0

Total Luminaire Efficacy = 68.6 lumens/watt

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

RC	70	50	30	10
RCR				
0	0.98	0.98	0.98	0.98
1	0.87	0.82	0.78	0.74
2	0.79	0.70	0.64	0.58
3	0.71	0.61	0.54	0.48
4	0.65	0.54	0.46	0.40
5	0.59	0.47	0.39	0.33
6	0.54	0.42	0.34	0.28
7	0.50	0.37	0.30	0.24
8	0.46	0.34	0.26	0.21
9	0.42	0.30	0.23	0.18
10	0.39	0.28	0.21	0.16



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F46.A

3' ADJUSTABLE WALL MOUNTED FIXTURE - COLOR CHANGING

Manufacturer: LUMENPULSE

Fixture Line: LUMENFACADE-STAND ALONE RGB

Fixture: WALL MOUNTED LINEAR LED

Catalog #: LOGP-277-36-RGBW-1FT-10X10-UMAS-FINISH

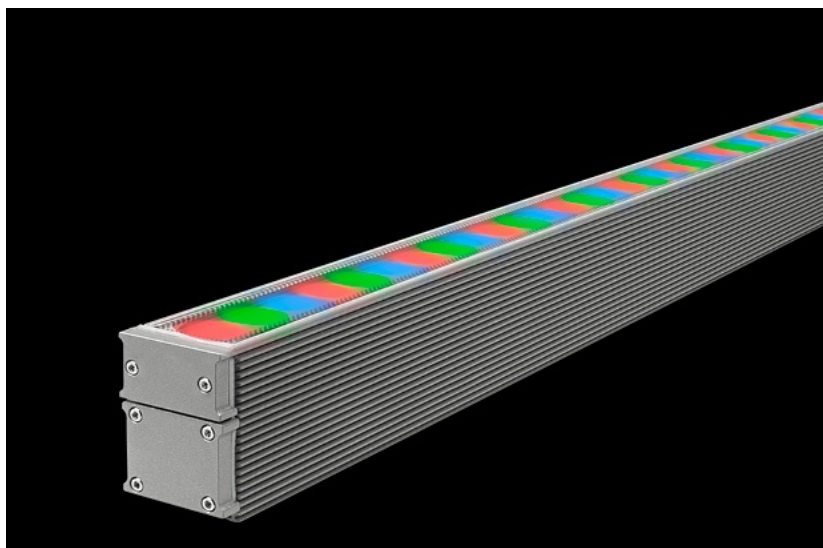
Mounting: WALL MOUNTED

Fixture Wattage: 51.75w

Fixture Voltage: 277

Load Type: DMX

Lamp Spec: LED RGBW
17.25 W/FT





SPECIFICATION SHEET

lumenfacade™

STAND ALONE - PROJECTOR
COLOR CHANGING

Client:

Project name:

Order #:

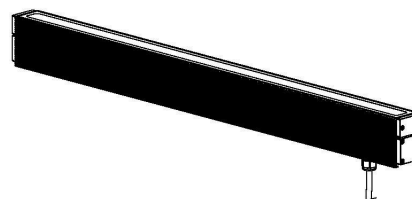
Type:

Qty:

FEATURES AND BENEFITS

Physical :

- Low copper content extruded aluminum housing
- Available in 1', 2', 3' or 4' sections
- Electro-statically applied polyester powder coat finish
- Machined aluminum end caps and silicone gaskets
- Stainless steel hardware
- Standard straight leader cable output, bottom feed
- Clear tempered glass
- 10° x 10°, 10° x 60°, 30° x 60° or 60° x 60° optics
- IP66
- IK07 rated
- Corrosion-resistant option for marine environments
- Meets 3G ANSI C136.31 Vibration standard for bridge applications

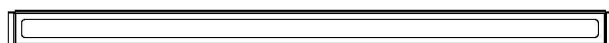


Performance :

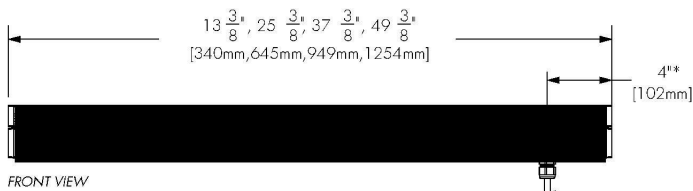
- 2,041 delivered lumens and 10,415 candelas at nadir (RGB full white, 4' unit, 10° x 60° optic)
- Color mixing options: RGB (3 channels) or RGBW (4 channels)
- Lumen maintenance 120,000 hrs [L70 @ 25°C]
- Lumen measurements comply with LM - 79 - 08 standard
- Resolution per foot or per fixture (see page 4)
- Operating temperatures: -25° C to 50° C [-13F to 122F]

Electrical :

- Line voltage luminaire for 100 to 277V
- Power and data in 1 cable (#16-5)
- Standard 10ft /3m cord
- 1725W/ft
- DMX 512 ready

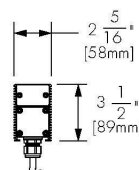


TOP VIEW



FRONT VIEW

* 6 $\frac{11}{16}$ " [169mm] on 1ft configuration



SIDE VIEW

5 year warranty

SPECIFICATION SHEET

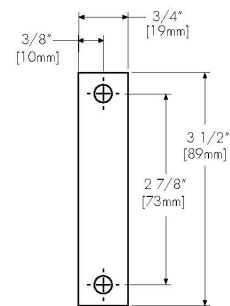
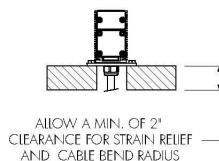
lumenfacade™

STAND ALONE - PROJECTOR
COLOR CHANGING

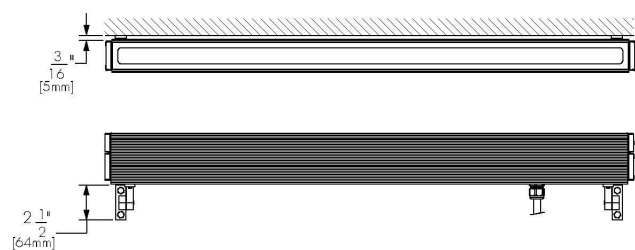
MOUNTING OPTIONS



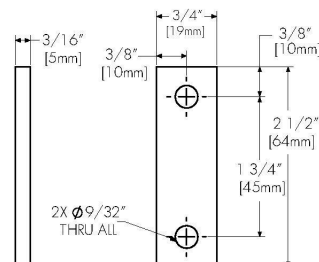
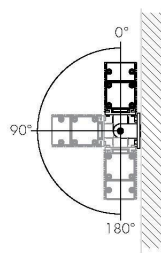
UMP
Fixed Mounting



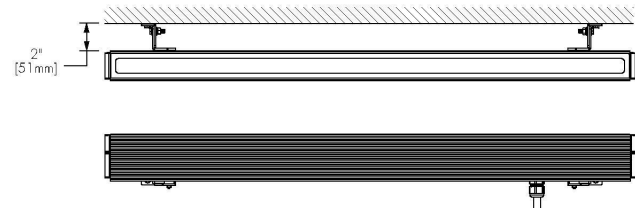
UMP
Mounting Hole Pattern



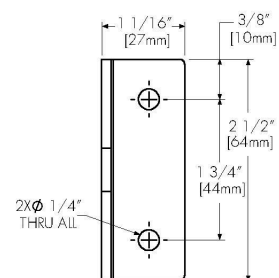
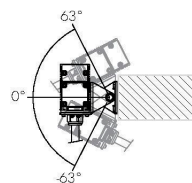
UMAS
Universal Adjustable Mounting



UMAS
Mounting Hole Pattern



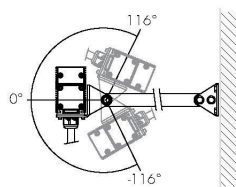
WAM2
Adjustable Wall Mounting



WAM
Mounting Hole Pattern



WAM6 & WAM12
Adjustable Extended Arm Mounting





SPECIFICATION SHEET

lumenfacade™

STAND ALONE - PROJECTOR
COLOR CHANGING

ACCESSORIES

Order separately

Control Systems:

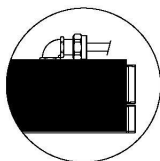
- LTO2** Lumentouch is a wall mount DMX 512 controller keypad.
- LCU** Lumencue is a USB / mini SD DMX 512 controller.
- LID** LumenID is a diagnostic and addressing DMX 512 controller.
It must be specified on all DMX applications.
Refer to LID specification sheet for details.
- LTN** Lumentone is a simple pre-programmed DMX 512 controller
with a push button rotary dial and live feedback.

Control Boxes:

- CBX** DMX/RDM control box.
Up to six power and data outputs to fixtures or fixture runs.
Ethernet enabled option.
Refer to CBX specification sheet for details.

OPTION

A - 90° angle cord output
top feed



SPECIFICATION SHEET

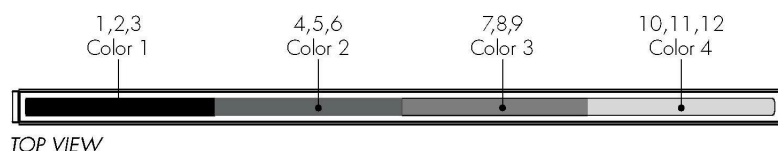
lumenfacade™

STAND ALONE - PROJECTOR
COLOR CHANGING

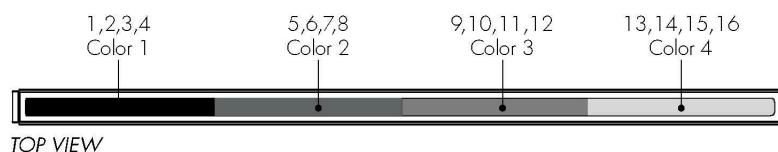
RESOLUTION DETAILS

1FT - Resolution per foot: each foot is addressed independently (recommended for most installations).

DMX ADDRESSES:



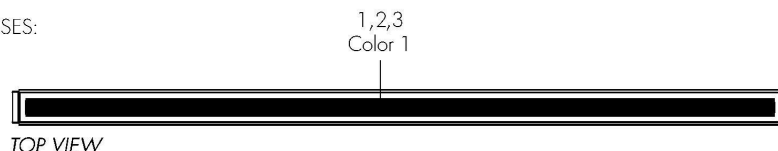
LOGP 48 inches
RGB Color Mixing Option



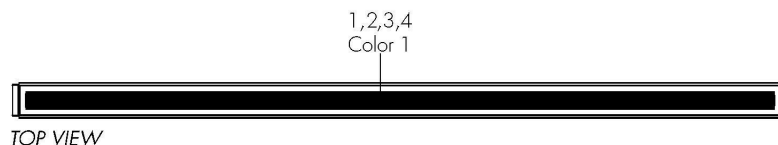
LOGP 48 inches
RGBW Color Mixing Option

1FX - Resolution per fixture: each fixture is addressed independently

DMX ADDRESSES:



LOGP 48 inches
RGB Color Mixing Option



LOGP 48 inches
RGBW Color Mixing Option

*Warning: resolution is a factory setting and cannot be changed in the field.

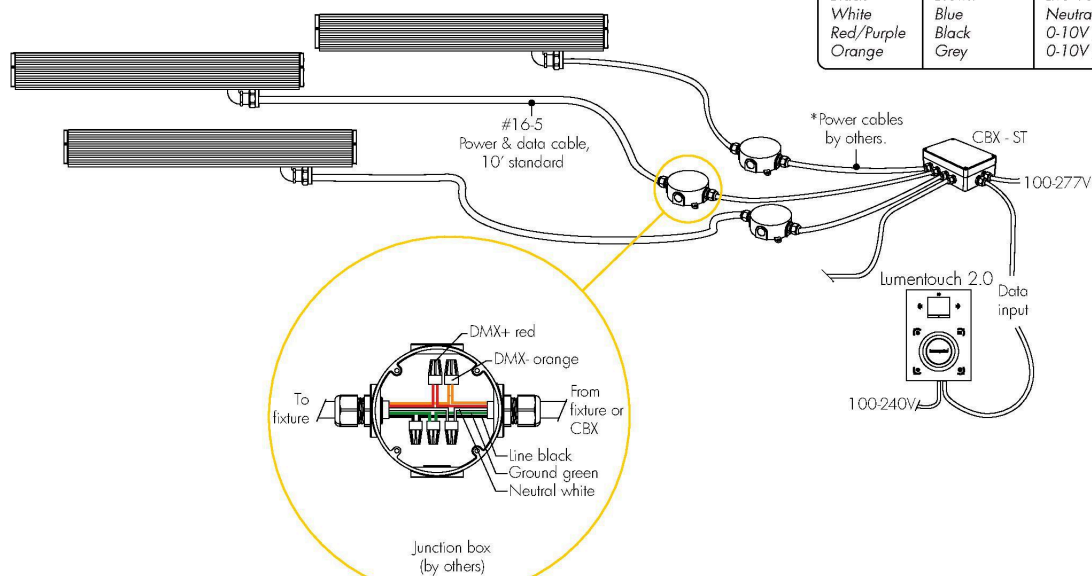
SPECIFICATION SHEET

lumenfacade™

STAND ALONE - PROJECTOR
COLOR CHANGING

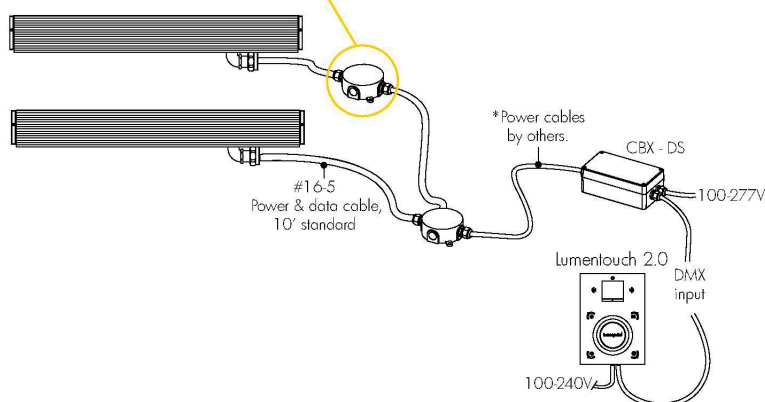
TYPICAL WIRING DIAGRAMS

Star Layout (DMX)



Maximum run length by 15A circuit:
64 linear feet of fixture - 320' feet maximum cable length.
(Consult factory for custom applications).

Daisy Chain Layout (DMX)



SPECIFICATION SHEET

lumenfacade™

STAND ALONE - PROJECTOR
COLOR CHANGING

HOW TO ORDER

LOGP	Select:	Select:	Select:	Select:	Select:	Select:	Select:	Select:
Housing	Voltage	Length	Colors and color temperatures	Resolution	Optic	Mounting Option	Finish	Option
1	2	3	4	5	6	7	8	9

1

Housing:

LOGP - Lumenfacade™ Stand Alone Projector

2

Voltage:

100 - 100 volts 220 - 220 volts
 120 - 120 volts 240 - 240 volts
 208 - 208 volts 277 - 277 volts

3

Length:

12 - 13 3/8 inches (340mm) (2 kg/4.50 lbs)
 24 - 25 3/8 inches (645mm) (3.17 kg/7 lbs)
 36 - 37 3/8 inches (949mm) (4.75 kg/10.50 lbs)
 48 - 49 3/8 inches (1254mm) (6.35 kg/14 lbs)

4

Colors and Color temperatures:

RGB - Additive red, green and blue
 RGBW - Additive red, green, blue and white 4000K

5

Resolution:

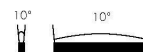
1FT - Resolution per foot 
 1FX - Resolution per fixture 

6

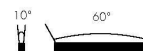
Optics:

10x10 - 10° x 10°

*For best results use 10° x 10° fixtures at a 6-inch (15cm) setback from surface. Contact factory for application support.



10x60 - 10° x 60°



30x60 - 30° x 60°



60x60 - 60° x 60°



7

Mounting Option:

UMP - Fixed Mounting
 (Suitable to use when 3GV option is specified)
 UMAS - Universal Adjustable Mounting
 (Suitable to use when 3GV option is specified)
 WAM2 - Adjustable Wall Mounting 2"
 WAM6 - Adjustable Extended Arm Mounting 6"
 WAM12 - Adjustable Extended Arm Mounting 12"

8

Finish:

SI - Silver SandText
 BK - Black SandText
 WH - White
 CC - Custom (please specify RAL color)

9

Option:

A - 90° angle cord output, bottom feed
 CRC - Corrosion-resistant Coating
 3GV - 3G ANSI C136.31 Vibration Rating
 N.B. Available with UMP and UMAS mounting options only.



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F46.B

4' ADJUSTABLE WALL MOUNTED FIXTURE - COLOR CHANGING

Manufacturer: LUMENPULSE

Fixture Line: LUMENFACADE-STAND ALONE RGB

Fixture: WALL MOUNTED LINEAR LED

Catalog #: LOGP-277-48-RGBW-1FT-10X10-UMAS-FINISH

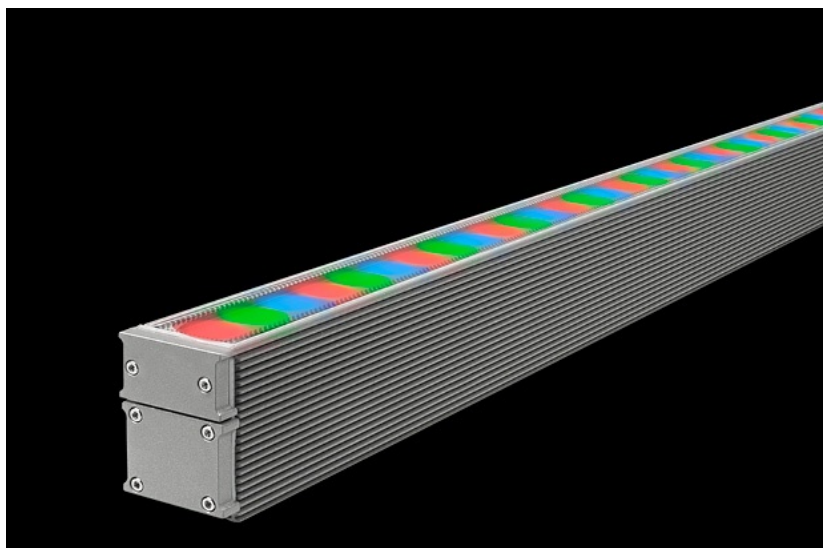
Mounting: WALL MOUNTED

Fixture Wattage: 69w

Fixture Voltage: 277

Load Type: DMX

Lamp Spec: LED RGB
17.25 W/FT



SPECIFICATION SHEET

lumenfacade™

STAND ALONE - PROJECTOR
COLOR CHANGING

Client:

Project name:

Order #:

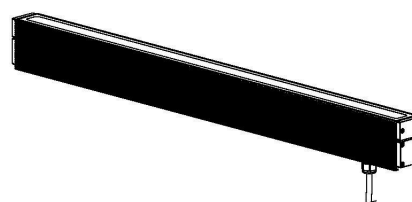
Type:

Qty:

FEATURES AND BENEFITS

Physical :

- Low copper content extruded aluminum housing
- Available in 1', 2', 3' or 4' sections
- Electro-statically applied polyester powder coat finish
- Machined aluminum end caps and silicone gaskets
- Stainless steel hardware
- Standard straight leader cable output, bottom feed
- Clear tempered glass
- 10° x 10°, 10° x 60°, 30° x 60° or 60° x 60° optics
- IP66
- IK07 rated
- Corrosion-resistant option for marine environments
- Meets 3G ANSI C136.31 Vibration standard for bridge applications

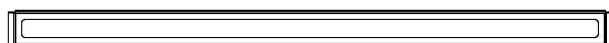


Performance :

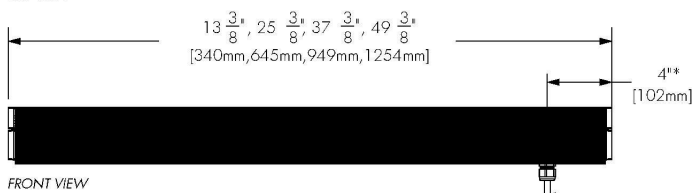
- 2,041 delivered lumens and 10,415 candelas at nadir (RGB full white, 4' unit, 10° x 60° optic)
- Color mixing options: RGB (3 channels) or RGBW (4 channels)
- Lumen maintenance 120,000 hrs [L70 @ 25°C]
- Lumen measurements comply with LM - 79 - 08 standard
- Resolution per foot or per fixture (see page 4)
- Operating temperatures: -25° C to 50° C [-13F to 122F]

Electrical :

- Line voltage luminaire for 100 to 277V
- Power and data in 1 cable (#16-5)
- Standard 10ft /3m cord
- 1725W/ft
- DMX 512 ready

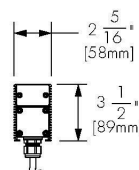


TOP VIEW



FRONT VIEW

* 6 11/16" [169mm] on 1ft configuration



SIDE VIEW

5 year warranty

SPECIFICATION SHEET

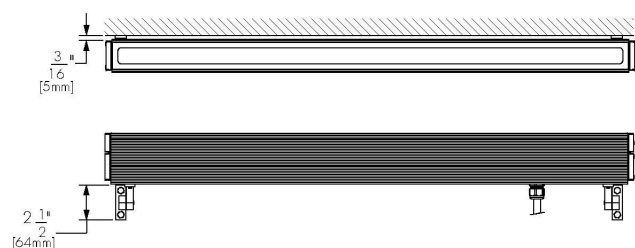
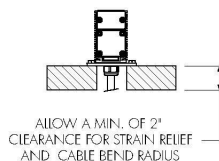
lumenfacade™

STAND ALONE - PROJECTOR
COLOR CHANGING

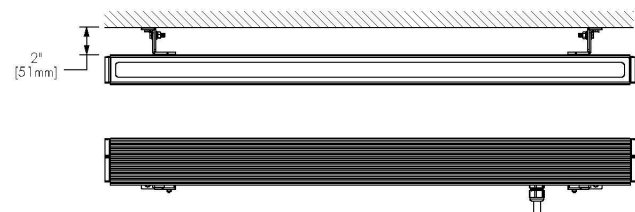
MOUNTING OPTIONS



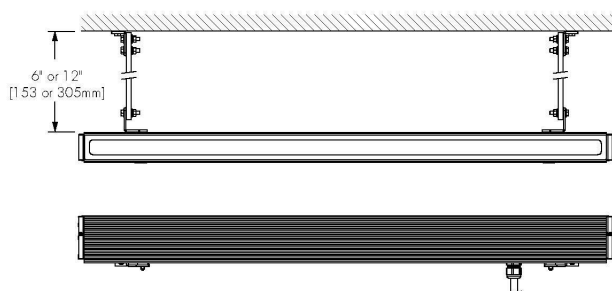
UMP
Fixed Mounting



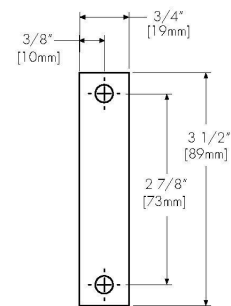
UMAS
Universal Adjustable Mounting



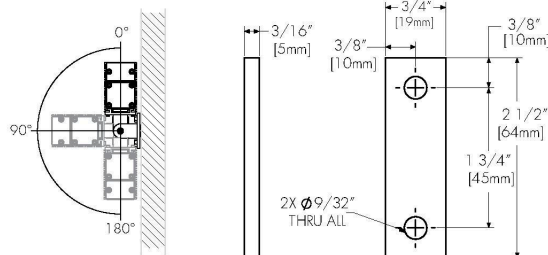
WAM2
Adjustable Wall Mounting



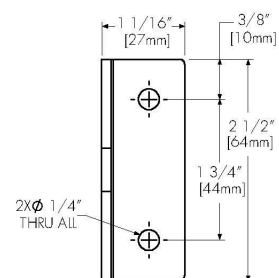
WAM6 & WAM12
Adjustable Extended Arm Mounting



UMP
Mounting Hole Pattern



UMAS
Mounting Hole Pattern



WAM
Mounting Hole Pattern



SPECIFICATION SHEET

lumenfacade™

STAND ALONE - PROJECTOR
COLOR CHANGING

ACCESSORIES

Order separately

Control Systems:

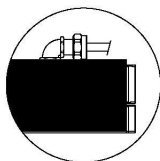
- LTO2** Lumentouch is a wall mount DMX 512 controller keypad.
- LCU** Lumencue is a USB / mini SD DMX 512 controller.
- LID** LumenID is a diagnostic and addressing DMX 512 controller.
It must be specified on all DMX applications.
Refer to LID specification sheet for details.
- LTN** Lumentone is a simple pre-programmed DMX 512 controller
with a push button rotary dial and live feedback.

Control Boxes:

- CBX** DMX/RDM control box.
Up to six power and data outputs to fixtures or fixture runs.
Ethernet enabled option.
Refer to CBX specification sheet for details.

OPTION

A - 90° angle cord output
top feed



SPECIFICATION SHEET

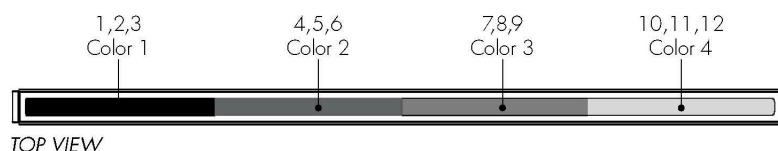
lumenfacade™

STAND ALONE - PROJECTOR
COLOR CHANGING

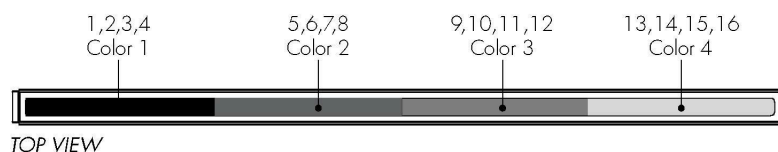
RESOLUTION DETAILS

1FT - Resolution per foot: each foot is addressed independently (recommended for most installations).

DMX ADDRESSES:



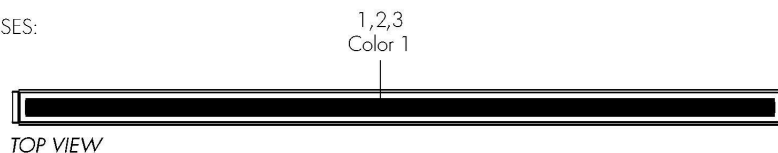
LOGP 48 inches
RGB Color Mixing Option



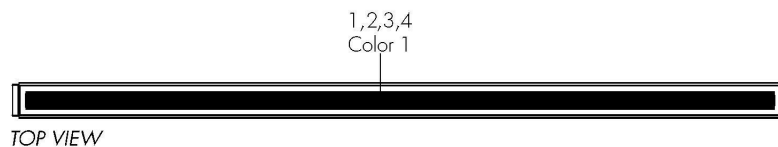
LOGP 48 inches
RGBW Color Mixing Option

1FX - Resolution per fixture: each fixture is addressed independently

DMX ADDRESSES:



LOGP 48 inches
RGB Color Mixing Option



LOGP 48 inches
RGBW Color Mixing Option

*Warning: resolution is a factory setting and cannot be changed in the field.

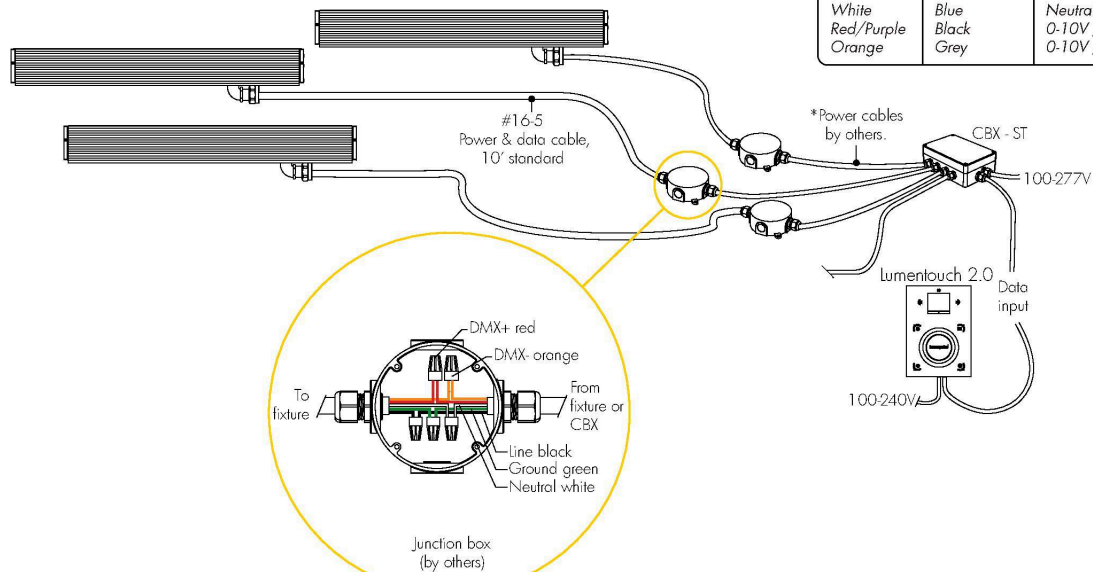
SPECIFICATION SHEET

lumenfacade™

STAND ALONE - PROJECTOR
COLOR CHANGING

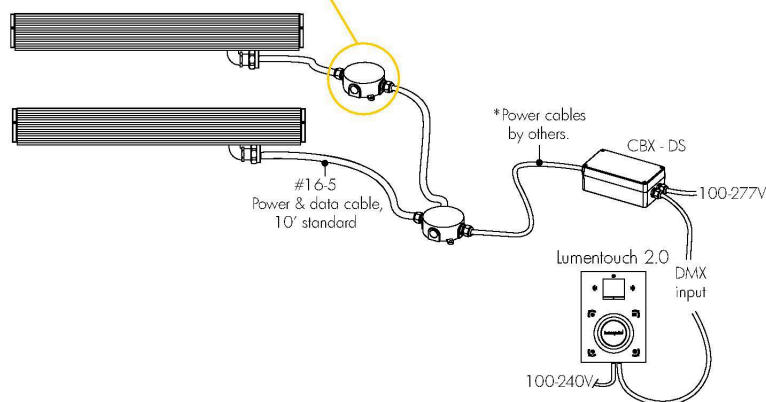
TYPICAL WIRING DIAGRAMS

Star Layout (DMX)



Maximum run length by 15A circuit:
64 linear feet of fixture - 320' feet maximum cable length.
(Consult factory for custom applications).

Daisy Chain Layout (DMX)



SPECIFICATION SHEET

lumenfacade™

STAND ALONE - PROJECTOR
COLOR CHANGING

HOW TO ORDER

LOGP	Select:	Select:	Select:	Select:	Select:	Select:	Select:	Select:
Housing	Voltage	Length	Colors and color temperatures	Resolution	Optic	Mounting Option	Finish	Option
1	2	3	4	5	6	7	8	9

1

Housing:

LOGP - Lumenfacade™ Stand Alone Projector

2

Voltage:

100 - 100 volts 220 - 220 volts
 120 - 120 volts 240 - 240 volts
 208 - 208 volts 277 - 277 volts

3

Length:

12 - 13 3/8 inches (340mm) (2 kg/4.50 lbs)
 24 - 25 3/8 inches (645mm) (3.17 kg/7 lbs)
 36 - 37 3/8 inches (949mm) (4.75 kg/10.50 lbs)
 48 - 49 3/8 inches (1254mm) (6.35 kg/14 lbs)

4

Colors and Color temperatures:

RGB - Additive red, green and blue
 RGBW - Additive red, green, blue and white 4000K

5

Resolution:

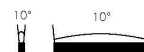
1FT - Resolution per foot 
 1FX - Resolution per fixture 

6

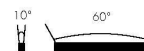
Optics:

10x10 - 10° x 10°

*For best results use 10° x 10° fixtures at a 6-inch (15cm) setback from surface. Contact factory for application support.



10x60 - 10° x 60°



30x60 - 30° x 60°



60x60 - 60° x 60°



7

Mounting Option:

UMP - Fixed Mounting
 (Suitable to use when 3GV option is specified)
 UMAS - Universal Adjustable Mounting
 (Suitable to use when 3GV option is specified)
 WAM2 - Adjustable Wall Mounting 2"
 WAM6 - Adjustable Extended Arm Mounting 6"
 WAM12 - Adjustable Extended Arm Mounting 12"

8

Finish:

SI - Silver SandText
 BK - Black SandText
 WH - White
 CC - Custom (please specify RAL color)

9

Option:

A - 90° angle cord output, bottom feed
 CRC - Corrosion-resistant Coating
 3GV - 3G ANSI C136.31 Vibration Rating
 N.B. Available with UMP and UMAS mounting options only.



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F47.B

WALL MOUNTED 4' UTILITY LIGHT

Manufacturer: PRUDENTIAL LTG

Fixture Line: SNAP LED(SATIN ACRYLIC)

Fixture: LINEAR LED

Catalog #: S1-LED3SO-04'-SAL-FINISH-277-SUR-CEILING SYSTEM-ND

Mounting: SURFACE MOUNT

Fixture Wattage: 36w

Fixture Voltage: 277

Load Type: Non-Dim

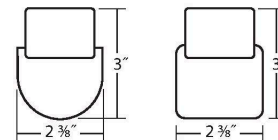
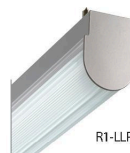
Lamp Spec: LED 3000K
9 W/LF



LED Snap™ (Satin Acrylic) | Linear, Surface

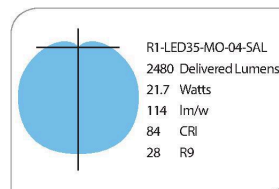


Satin Acrylic Lens (SAL)



Our basic lighting building block.

This perfectly scaled wrap simply snaps quickly, neatly and securely into a wide range of spaces. Industry-leading optical performance and integrated controls help make Snap one of our best-selling fixtures. Our LPA lens turns Snap into an outstanding Stack fixture ideal for warehouses, manufacturing, libraries and more. See HalfSnap for a smaller profile.



	UP TO 114 LM/W		
	LOW	MEDIUM	STANDARD
lm/ft	480	620	900
w/ft	4.2	5.5	9



Lumen output may vary +/- 5%
4000K used for lm/ft estimates above
3500K -2% if, 3000K -4%, 2700K -6%
See LED Details PDF for more info

*R1-LED40-SAL is DLC QPL listed. For other DLC listings, please consult factory.

SERIES	LED COLOR	OUTPUT	NOMINAL LENGTH	SHIELDING	COLOR/ FINISH	VOLTAGE	MOUNTING	CEILING SYSTEMS	CONTROLS	OPTIONS
R1 Round	LED27 2700K	LO Low	2'	SAL Satin Acrylic	TMW Textured Matte White	UNV 120-277	SUR Surface or Wall Mount	X1 T-Bar	ND Non-dimming	EML Emergency Battery, Low 4' or longer (remote for < 4')
S1 Square	LED3 3000K	MO Medium	3'	LLP Linear Prismatic Acrylic for LED (Stack optics)	YGW Gloss White Standard		CA48" Aircraft Cable Adjustable	X3 Hard Ceiling	DM10 0-10v 10% dimming Standard	EMH Emergency Battery, High 4' or longer (remote for < 4')
	LED35 3500K	SO Standard	4'	R1 Only	Y Premium Color		CA96" Aircraft Cable Adjustable	X6 Slot Grid	DM01 0-10v 1% dimming	QC Quick Connect Assemblies
	LED4 4000K	PROG Programmable light output (specify desired lm/ft or w/ft)	6'	NOTE: See other Snap LED spec sheet for White Acrylic Lens	CC Custom Color				STEP Step Dimming 100-50-Off	OCO Integrated Occupancy Sensor 4' or longer fixtures
			8'		GLV Galvanized w/ Black endplates				DML 1% Lutron Dimming	TRS Tamper Resistant Screws
			R Length in 1" increments						DMD 0.1% DALI Dimming	EBCP1G Electrical Box Cover, Single Gang
									DMG 1% DALI Dimming	EBCP2G Dual Gang
										PRUBIN Meticulous binning and labeling every LED board within a 2-step MacAdams ellipse



Snap™ (Satin Acrylic) | Linear, Surface



PRUDENTIAL LTG.

PRULITE.COM 213.746.0360

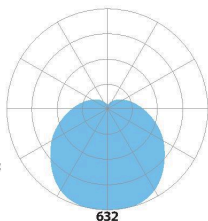
PHOTOMETRICS

Medium Output:

R1-LED35-MO-04-SAL
2480 Delivered Lumens
21.7 Watts
114 lm/w
4000 CCT
Light Labs Test
#L021508903

Zonal Lumen Summary:

0-90 = 84%
90-180 = 16%



632

Vertical Angle	0	25	45	65	90
0	632	632	632	632	632
5	633	632	631	629	627
15	620	617	610	602	591
25	584	577	565	548	531
35	534	534	502	476	449
45	479	463	431	393	357
55	421	398	357	309	263
65	355	330	282	225	172
75	285	258	208	148	88
85	215	191	144	83	22
90	186	164	120	62	1
95	169	150	110	57	0
105	142	127	94	49	0
115	119	107	80	42	0
125	100	89	67	35	0
135	81	72	52	27	0
145	62	55	37	20	0
155	43	35	26	14	0
165	24	19	15	10	0
175	9	9	9	8	0
180	0	0	0	0	0

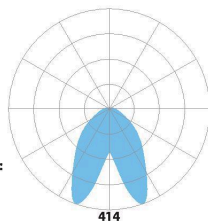
STACK OPTICS (R1 ONLY)

Low Output:

R1-LED4LO-04-LLP
2216 Delivered Lumens
19.1 Watts
116 lm/w
4000 CCT
Light Labs Test
#L121401601

Zonal Lumen Summary:

0-90 = 93%
90-180 = 7%



414

Vertical Angle	0	25	45	65	90
0	414	414	414	414	414
5	412	428	456	484	501
15	409	528	743	920	995
25	405	698	981	939	878
35	400	782	770	653	621
45	385	646	507	451	437
55	322	395	306	290	288
65	193	205	179	178	178
75	73	99	103	104	103
85	15	50	67	70	68
90	0	37	57	61	60
95	0	30	50	55	55
105	0	22	38	45	46
115	0	16	30	36	38
125	0	14	23	28	31
135	0	11	17	22	24
145	0	10	14	17	19
155	0	9	11	13	14
165	0	9	9	10	10
175	0	0	0	0	0
180	0	0	0	0	0

LUMEN MAINTENANCE

Designed to last with cool running mid-power LEDs projected to maintain 90% (L90) of their initial output for 100,000 hours (at HO), and L70 exceeding 150,000 hours.

LED SYSTEM

LED modules and drivers are field replaceable.

PROG. (optional)

Programmable light output. Specify desired lumens or watts per linear foot. Min: 2.5 w/ft, consult factory for requests above 12 w/ft.

BINNING

Standard binning (all Prudential LED boards) includes testing at the chip level and board integration to provide consistent color temperature within a 3-step MacAdam ellipse, with +/- 5% lumen output range and +/- .004 Duv.

PRUBIN™ (OPTIONAL)

Prudential Ltg's exclusive 'job binning' method that ensures color temperature consistency across all luminaires on a project. Meticulously testing and labeling EVERY LED BOARD to +/- 25 lumens, +/- 50k CCT and +/- .004 Duv — while also separating positive from negative — allows us to match color, hue and intensity throughout a project and provides a consistent color temperature within a 2-step MacAdam ellipse.

LABELS

ETL damp labeled and I.B.E.W. manufactured

ELECTRICAL

Must specify LED dimming controls. LED fixtures have constant current driver(s) with less than 20% THD when loaded to a minimum of 60%. Drivers sink a maximum of 6mA per driver. DM10 LED drivers are 0-10V dimmable and are compatible with most 0-10V wall slide dimmers and direct 0-10V analog signal dimmers. Max driver size 1.65" w x 1.25" h.

CONSTRUCTION

Housing Die-formed 22-gauge steel, >20% PC recycled, 100% recyclable

End Caps Spring-fastened aluminum, >25% PC recycled, 100% recyclable

Lens Single-piece (up to 8' lengths) extruded acrylic, 100% recyclable

MOUNTING Surface mounted to walls or ceilings or suspended by cable

WEIGHT 2 lbs/ft

WARRANTY Single-source, 5 year limited warranty covers standard components and construction





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F48

PENDANT DOWNLIGHT

Manufacturer: INTENSE LIGHTING

Fixture Line: ICCLED6

Fixture: 6" LED CYLINDER 1100lm 22W

Catalog #: ICCLED6-1100-30-STANDARD CYLINDER FINISH-HZ-P24

Mounting: PENDANT

Fixture Wattage: 22w

Fixture Voltage: 277

Load Type: Non-Dim

Lamp Spec: LED, 1100 lm, 3000K, 83 CRI

Fixture Specification Notes

1) CONFIRM STEM LENGTH PRIOR TO PLACING
ORDER

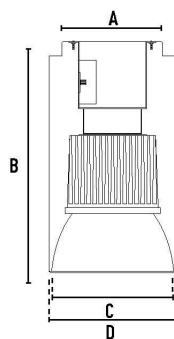


ICCLE6

6" LED Cylinder 1100 lm 22W



JOB NAME		CATALOG NUMBER	
NOTES		TYPE	



Specifications
ICCLE6
A - 6 1/4"
B - 13 1/4"
C - 6"
D - 8"



PENDANT



SURFACE



WALL MOUNT

Order Matrix | Example : ICCLE611003555-DIM-WC-P24

A	B	C	D	E	F	G	H	I
A Series					F Cylinder Finish			
ICCLE6	4" Vertical Solid State Cylinder				-B	Black Powder Coated		
B Module Lumen Output					-SV	Silver Powder Coated		
					-W	White Powder Coated		
1100	1100 lm 22W				G Reflector			
C Color Temperature					C	Clear Specular		
					HZ	Haze		
27	2700K				W	White		
30	3000K				H Mounting			
35	3500K							
40	4000K							
D Optic					-C144	144" Aircraft Cable		
blank	30° Beam Angle				-P12	12" Pendant		
55	55° Beam Angle				-P24	24" Pendant		
E Power Supply					-P36	36" Pendant		
					-P48	48" Pendant		
					-P96	96" Pendant ¹		
					-WB	Wall Bracket		
					-S	Surface		
					blank	120V/277V Electronic Driver		
-DIM	120V/277V 0-10V Dimming 10%							
-ED10V1	120V/277V eldLED 0-10V 1%							
-ED10V01	120V/277V eldLED 0-10V 0.1%							
-LUT1	120V/277V Lutron Hi-Lume® 1%							
-LUT	120V/277V Lutron EcoSystem® 5%							
-EDALI1	120V/277V eldLED DALI 1%							
-EDALI01	120V/277V eldLED DALI 0.1%							

Notes:

1. (2) 48" same with coupler

Notes:
1 - [2] 48" stems with coupler.

DESCRIPTION

Architectural LED cylinder with specification grade reflector available in 6" aperture. Standard mounting options are: surface mount, wall mount and pendant. Consult factory for custom pendant lengths.

FEATURES

- Durable aluminum spun housing
- No visible hardware
- Available for surface, pendant or wall mount

LED LIGHT ENGINE

- System input power = 22W
- Nominal delivered lighting output = 1100lm
- 30° or 55° beam spread
- 2700K/3000K/3500K/4000K color temperature 83 CRI
- LED's mounted to die cast aluminum heat sink
- 50,000 of average rated life at 70% output
- Fixture should not be installed in applications with an ambient temperature above 50°C. Applications with an installation above 50°C will result in reduced lamp life and void warranty
- LED module is easily upgradable to accommodate future solid state lighting technology

OPTICAL SYSTEM

Innovative optical design: a controlled light distribution at a 55° cut off. Meets RP-1 requirements. No LED pixelation is visible. Specification grade reflector 1.5mm thickness. Available in multiple iridescent free architectural finishes.

ELECTRICAL SYSTEM

- 120V/277V 50/60Hz input
- 1040 mA constant current output
- Class 2 power supply
- Over-voltage, over current and short circuit protection: auto recovery
- MTBF > 100,000 hours

FINISHES

Cylinder housings are available in standard, powder coated finishes including black, silver or white. Cylinders feature optional high quality clear specular, haze or white reflector. Consult factory for custom finishes and additional reflector options.

ACCESSORIES

Open reflector compatible with decorative drop and Infuz™ accessories. See accessories specification sheet.

MOUNTING

- Ceiling mount for direct installation to 3" and 4" octagon junction box or 4" square junction box.
- 144" Aircraft cable is supplied with complete canopy assembly. Aircraft cable is field cuttable and can be modified in the field.
- Wall mount bracket for installation to 4" octagon or square junction box.
- Pendant stems supplied with complete canopy assembly. Pendant stems are field cuttable and can be modified in the field.

LISTING/WARRANTY

- ETL listed to US and Canadian standards for damp locations
- 10-Year Intense LED Limited Warranty



6" Cylinder Accessories














DECORATIVE

Decorative glass and acrylic accessories are compatible with select cylinders. Customize and create your environment with the options below.

ORDERING INFORMATION:

Add accessory part number to the end of cylinder part number. (Example: ICCLED611003555-DIM-WC-P24-D1R)

JOB NAME		CATALOG NUMBER	
NOTES		TYPE	

ORDERING INFO	DESCRIPTION	OD	ID	THICKNESS
 -D1R	6" Red Acrylic Ring 1 3/8"	7 3/4"	5 1/2"	1/8"
 -D2R	6" Red Acrylic Ring 2 3/8"	7 3/4"	3 1/2"	1/8"
 -D1B	6" Blue Acrylic Ring 1 3/8"	7 3/4"	5 1/2"	1/8"
 -D2B	6" Blue Acrylic Ring 2 3/8"	7 3/4"	3 1/2"	1/8"
 -D1G	6" Green Acrylic Ring 1 3/8"	7 3/4"	5 1/2"	1/8"
 -D2G	6" Green Acrylic Ring 2 3/8"	7 3/4"	3 1/2"	1/8"
 -D5	6" Tempered Glass Decorative Drop	7 3/4"	NA	5/32"
 -D6	6" Tempered Glass Decorative Drop	7 3/4"	NA	5/32"
 -D7	6" Tempered Glass Decorative Drop	7 3/4"	NA	5/32"
 -D8	6" Tempered Glass Ring 1 3/8"	7 3/4"	5 1/2"	5/32"
 -D9	6" Sandblasted Tempered Glass Ring 2 3/8"	7 3/4"	3 1/2"	5/32"



INFUZ

Infuz decorative accessories may be used with select cylinders. Accessory kits are factory installed. Custom material available by special order. Minimum order and lead times may apply. Consult factory.

How to Order:

- Enter your specified cylinder under section "A".
- Specify the Infuz adder on the cylinder part number. (Example: ICCLED611003555-DIM-WC-P24-IZDM-5-MO)



Drop Mount Recessed

Order Matrix | Example: ICCLED611003555-DIM-WC-P24-IFZDM-1-SN

A	B	C	D
A	Cylinder	C	Material
	Specify Compatible Cylinder	-1	Red Crush
		-2	Blue Crush
		-3	Tiger Thatch
		-4	Linea Vert
		-5	Bronze Weave
		-6	Fossil Leaf
B	Series	D	Drop Hardware
-IFZDM	Drop Mount	-SN	Satin Nickel
		-MO	Mocha



Type: Red Crush
Item Code: 1



Type: Blue Crush
Item Code: 2



Type: Tiger Thatch
Item Code: 3



Type: Linea Vert
Item Code: 4



Type: Bronze Weave
Item Code: 5



Type: Fossil Leaf
Item Code: 6

Catalog #: ICCLED611003555-C-S

6" 1100 lm LED Cylinder with 55° Optic

Report #: 1209-05K

Reflector Finish: Specular Clear

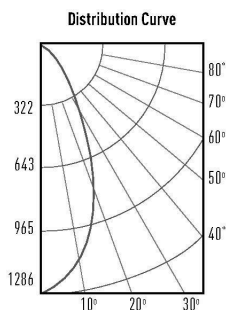
Color Temperature: 3500K

Total Lumen Output: 946 lm

Wattage: 22.36W

Efficiency: 42 lumens per watt

Spacing: 0.76



Zonal Lumens and Percentages

Zone	Lumens	%Fixture
0-30	630.12	66.6
0-40	789.15	83.4
0-60	920.29	97.3
0-90	946.28	100
90-180	0	0
0-180	946.28	100

JOB NAME		CATALOG NUMBER	
NOTES		TYPE	

Coefficients of Utilization

Effective Floor Cavity Reflectance = .20

RC		80				70				50				30				0
		Wall Reflectance																
RW		70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	
Room Cavity Ratio	1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	92	92	
	2	107	101	97	93	105	100	96	92	96	93	90	93	91	88	85	85	
	3	101	94	89	85	99	93	88	84	90	86	82	88	84	81	78	78	
	4	96	88	82	77	94	86	81	77	84	79	76	82	78	75	72	72	
	5	91	82	76	71	89	81	75	71	79	74	70	77	73	69	67	67	
	6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	63	63	
	7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	58	58	
	8	77	67	61	57	76	67	61	57	66	60	57	65	60	56	55	55	
	9	74	64	57	53	73	63	57	53	62	57	53	61	56	53	51	51	
	10	70	60	54	50	69	60	54	50	59	54	50	58	53	50	48	48	

Multiple Unit Data

Spacing on ctr.	Initial Footcandles	Watts/ Sq. Ft.	Number of Luminaires
4	53.4	1.3	36
6	23.5	0.6	16
8	13.6	0.3	9

25' x 25' x 9' Room
Workplace 2 1/2' above floor
80/50/20% Reflectances

Zonal Lumen Summary

Zone	CP	Lumens
0	1286	92.84
10	1107	277.23
20	812	260.05
30	395	159.03
40	179	103.57
50	53	27.56
60	11	10.43
70	8	7.72
80	6	7.84
90	0	0

Catalog #: ICCLED6110035-C-S

6" 1100 lm LED Cylinder with 30° Optic

Report #: 1209-05G

Reflector Finish: Specular Clear

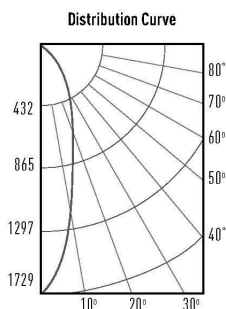
Color Temperature: 3500K

Total Lumen Output: 901 lm

Wattage: 22.38W

Efficiency: 40 lumens per watt

Spacing: 0.48



Zonal Lumens and Percentages

Zone	Lumens	%Fixture
0-30	582.7	64.7
0-40	744.01	82.6
0-60	877.81	97.4
0-90	900.81	100
90-180	0	0
0-180	900.81	100

Coefficients of Utilization

Effective Floor Cavity Reflectance = .20

RC		80				70				50				30				0
		Wall Reflectance																
Room Cavity Ratio	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
	1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	92	92	92
	2	107	102	97	94	105	100	96	92	97	93	90	94	91	89	85	85	85
	3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	78	78	78
	4	96	88	82	77	94	87	81	77	84	80	76	82	78	75	73	73	73
	5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	67	67	67
	6	86	77	70	66	85	76	70	66	74	69	65	73	68	65	63	63	63
	7	82	72	66	61	80	71	65	61	70	65	61	69	64	61	59	59	59
	8	78	68	62	57	76	67	61	57	66	61	57	65	60	57	55	55	55
	9	74	64	58	54	73	64	58	54	63	57	54	62	57	53	52	52	52
10	71	61	55	51	70	60	55	51	59	54	51	59	54	50	49	49	49	

Multiple Unit Data

Spacing on ctr.	Initial Footcandles	Watts/ Sq. Ft.	Number of Luminaires
4	50.6	1.3	36
6	22.4	0.6	16
8	13.0	0.3	9

25' x 25' x 9' Room
Workplace 2 1/2' above floor
80/50/20% Reflectances

Zonal Lumen Summary

Zone	CP	Lumens
0	1729	113.1
10	1174	247.44
20	640	222.16
30	387	161.32
40	188	107.52
50	51	26.28
60	10	9.01
70	7	6.69
80	6	7.3
90	0	0

Luminaire is tested to IESNA standards LM-79-08. Tested to absolute photometry.



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F49.0

TRACK MOUNTED SPOT LIGHT

Manufacturer: MKS

Fixture Line: LED TRACK LIGHT SERIES

Fixture: LED TRACK HEAD

Catalog #: 25-120-FINISH-3000K-BEAM ANGLE->90-TRACK ADAPTOR

Mounting: TRACK MOUNTED

Fixture Wattage: 25w

Fixture Voltage: 120

Load Type: ELV

Lamp Spec: LED 3000K





advanced LED™

LED Track Light Series

- Ideal for accent lighting (galleries, shops, schools, hotels and homes)
- Equivalent to 70W metal halide track light

LED Round Track Light

DESCRIPTION:

The MKS line of high quality, specification grade track lights are ideal for use where directional accent light is needed.

They are made of aluminum extrusion and can be powered using MKS track as well as many other manufacturers' currently installed track series. Utilizing the CREE CXA line of C.O.B. LED chips, the quality of light produced is second to none. With various options for optical beam spreads and color temperature choices ranging from 2700K through 5000K, the MKS track light series is the perfect choice for all of your track lighting needs.

FEATURES:

- Cameta™ Design: anti-glare, 80 lm/W
- COB LED + Cameta™: CREE COB LED, no shadows, strong penetrability
- High CRI 90 is available for 2700K/3000K
- Smooth dimming range from 100% to 10% without flicker, over 0.9 power factor
- Continuous 350° rotation and 90° pivot
- 50,000 Hours long life



ADAPTORS:



M-TYPE

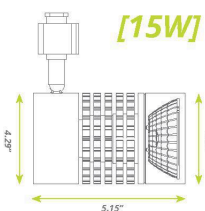


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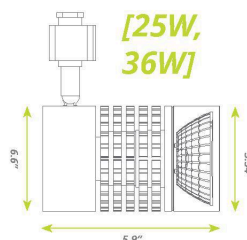


J-TYPE

DIMENSIONS:



[15W]



[25W,
36W]

OPTIONS FOR YOUR CHOICE:



Please fill out the form.

For any additional questions or custom enquiries, please contact MKS Advanced LED™: info@MKSLED.com

Wattage	Voltage	Finish	Color temperature (Kelvin)	Beam angle	CRI	Track Adaptor	Notes
15W <input type="checkbox"/>	120V <input type="checkbox"/>	Black <input type="checkbox"/>	2700K <input type="checkbox"/>	15° <input type="checkbox"/>	>80 <input type="checkbox"/>	M-MKS <input type="checkbox"/>	
25W <input type="checkbox"/>	<input type="checkbox"/>	White <input type="checkbox"/>	3000K <input type="checkbox"/>	24° <input type="checkbox"/>	>90 <input type="checkbox"/>	H-Halo <input type="checkbox"/>	
36W <input type="checkbox"/>			4000K <input type="checkbox"/>	38° <input type="checkbox"/>		J-Juno <input type="checkbox"/>	
			5000K <input type="checkbox"/>	60° <input type="checkbox"/>			
				90° <input type="checkbox"/>			



PHOTOMETRICS:

[15W]

BEAM ANGLE 15 DEG 3000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	6969/9316	0.25	
2	1742/2329	0.50	
3	774/1035	0.75	
4	436/588	1.00	
5	279/373	1.25	

BEAM ANGLE 20 DEG 3000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	3501/4860	0.33	
2	875/1215	0.66	
3	389/540	0.99	
4	219/304	1.32	
5	140/194	1.66	

BEAM ANGLE 30 DEG 3000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	1610/2255	0.60	
2	403/563	1.21	
3	179/250	1.81	
4	101/141	2.42	
5	64/90	3.02	

BEAM ANGLE 40 DEG 3000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	672/1134	1.02	
2	168/284	2.05	
3	75/126	3.07	
4	42/71	4.09	
5	27/45	5.12	

[25W]

BEAM ANGLE 24 DEG 3000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	2899.2/4052.5	0.54	
2	724.8/1013.1	1.08	
3	322.1/450.3	1.62	
4	181.2/253.8	2.17	
5	116/162.1	2.71	

BEAM ANGLE 30 DEG 3000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	1110.2/1517.8	0.74	
2	477.7/704.5	1.47	
3	212.3/313.3	2.21	
4	119.4/176.1	2.94	
5	76.4/112.7	3.68	

BEAM ANGLE 40 DEG 3000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	1017.4/1595.4	1.05	
2	254.3/396.7	2.09	
3	113/172.8	3.14	
4	63.6/99.7	4.19	
5	40.7/63.8	5.23	

[36W]

BEAM ANGLE 24 DEG 3000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	4169.1/5827.6	0.54	
2	1042.3/1456.9	1.08	
3	463.2/647.5	1.62	
4	255.3/364.8	2.17	
5	166.8/233.1	2.71	

BEAM ANGLE 30 DEG 3000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	2147.9/4052.1	0.74	
2	887/1013	1.47	
3	305.3/450.2	2.21	
4	171.7/253.3	2.94	
5	109.9/162.1	3.68	

BEAM ANGLE 40 DEG 3000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	1463.0/2294.3	1.05	
2	365.7/573.6	2.09	
3	162.6/254.9	3.14	
4	91.4/143.4	4.19	
5	58.5/91.8	5.23	

BEAM ANGLE 15 DEG 4000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	7645/10219	0.25	
2	1911/2555	0.50	
3	849/1135	0.75	
4	478/639	1.00	
5	306/409	1.25	

BEAM ANGLE 20 DEG 4000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	3840/5331	0.33	
2	960/1333	0.66	
3	427/592	0.99	
4	240/333	1.32	
5	154/213	1.66	

BEAM ANGLE 30 DEG 4000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	1767/2474	0.60	
2	442/619	1.21	
3	196/275	1.81	
4	110/155	2.42	
5	71/99	3.02	

BEAM ANGLE 40 DEG 4000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	737/1244	1.02	
2	184/311	2.05	
3	82/138	3.07	
4	46/78	4.09	
5	30/50	5.12	

BEAM ANGLE 15 DEG 5000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	7645/10219	0.25	
2	1911/2555	0.50	
3	849/1135	0.75	
4	478/639	1.00	
5	306/409	1.25	

BEAM ANGLE 20 DEG 5000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	3840/5331	0.33	
2	960/1333	0.66	
3	427/592	0.99	
4	240/333	1.32	
5	154/213	1.66	

BEAM ANGLE 30 DEG 5000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	1767/2474	0.60	
2	442/619	1.21	
3	196/275	1.81	
4	110/155	2.42	
5	71/99	3.02	

BEAM ANGLE 40 DEG 5000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	737/1244	1.02	
2	184/311	2.05	
3	82/138	3.07	
4	46/78	4.09	
5	30/50	5.12	

BEAM ANGLE 24 DEG 5000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	3108.4/4345	0.54	
2	777.1/1086.2	1.08	
3	345.4/482.8	1.62	
4	194.3/271.6	2.17	
5	124.3/173.8	2.71	

BEAM ANGLE 30 DEG 5000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	2048.8/3021.2	0.74	
2	519.2/755.3	1.47	
3	227.6/335.7	2.21	
4	128/188.8	2.94	
5	82/120.8	3.68	

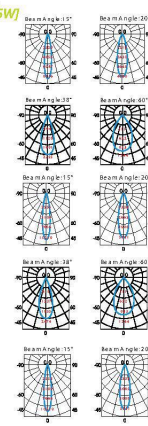
BEAM ANGLE 40 DEG 5000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	1090.8/1710.6	1.05	
2	272.7/427.6	2.09	
3	121.2/190.1	3.14	
4	68.2/106.9	4.19	
5	43.6/68.4	5.23	

BEAM ANGLE 24 DEG 5000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	4404.3/6156.4	0.54	
2	1101.1/1539.1	1.08	
3	489.4/684.0	1.62	
4	275.3/384.8	2.17	
5	176.2/246.3	2.71	

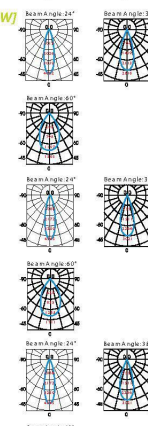
BEAM ANGLE 30 DEG 5000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	2902.9/4230.7	0.74	
2	725.7/1070.2	1.47	
3	322.5/475.6	2.21	
4	181.4/267.5	2.94	
5	116.1/171.2	3.68	

BEAM ANGLE 40 DEG 5000K			
Distance(m)	Avg./Max. E(lux)	Diameter(m)	
1	1545.5/2423.7	1.05	
2	386.4/605.9	2.09	
3	171.7/269.3	3.14	
4	96.6/151.5	4.19	
5	61.8/185	5.23	

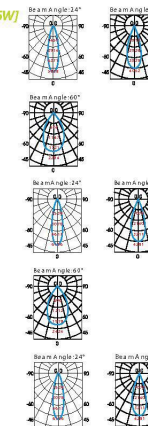
[15W]



[25W]



[36W]





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F49.T

LIGHT TRACK

Manufacturer: BRUCK
Fixture Line: ECO TRACK
Fixture: TRACK
Catalog #: 370GES-LENGTH-FINSIH
Mounting: SURFACE MOUNTED

Lamp Spec: N/A

Fixture Specification Notes

1) ACCESSORIES AS REQUIRED FOR COMPLETE SYSTEM





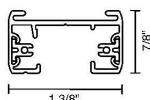
Job Name:

Contact:

Ordering Code:

Fixture Type:

Eco Track System

BRUCK
LEDRAbrands

Ordering Codes

Follow the steps to specify,

example: **370GES - 208 - bk**

1	Base	2	Length	3	Shape	4	Finish
	370GES ECO Track	204 4 ft 208 8 ft 212 12 ft		1	straight factory bent	bk black sv matte silver wh white	



Ordering Codes

Follow the steps to specify,

example: **370GES - 41 - sv**

1	Base	2	Type	3	Finish
	370GES ECO	41	end cap	bk sv wh	black matte silver white

Eco Track

Description

ECO Track is a 1 circuit, 20A rated, line voltage track system. Its lightweight, compact elegant design is easy to install saving on overall project costs. The track is a 120v 1-circuit system with 1 neutral. The rail is constructed of extruded aluminum section and the live circuit and neutral conductors are made of heavy gauge copper. ECO Track can be surface mounted, on drop rods or wire pendant suspension. Offered in white, matte silver or black. End caps are included with each piece of track.

Tech Specs

- 2400VA maximum
- 120VAC input
- 20-amp circuit
- #12-gauge copper conductors are co-extruded in PVC insulator.
- Suitable for dry location only
- made for Bruck and listed under the name Global Trac.

Eco End Cap

Description

End Cap for Recessed Track Mount for Bruck's ECO track. Offered in white, matte silver or black.

Tech Specs

- made for Bruck and listed under the name Global Trac.



Job Name:

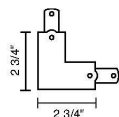
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Ordering Code:

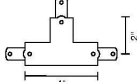
Fixture Type:



34



40



Eco Connectors

Description

Connectors for Eco Track. Offered in White, Matte Silver, or Black.

*23 flexible connector only available in black.

Adjustable L-Connector (34) includes 2 end caps.

T-Connector (40) includes 3 end caps.

X-Connector (38) includes 4 end caps.

Tech Specs

- 2400VA maximum
- 120VAC input
- 20-amp circuit
- made for Bruck and listed under the name Global Trac.

Ordering Codes

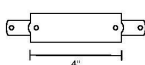
Follow the steps to specify,

example: **370GES - 34 - sv**

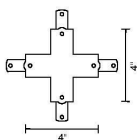
1 Base	2 Type	3 Finish*
370GES ECO	34 adjustable L-connector 40 T-connector 14 straight feed connector 38 X-connector 23 flexible connector* 21 linear coupler 1316 conduit continuation kit	bk black sv matte silver wh white



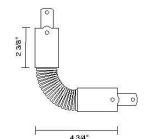
14



38



23



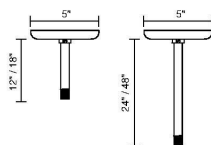
21



1316



37



Eco Mounting

Description

Stem and Canopy Kit for Bruck's ECO Track. Must be used with a Suspension Point. Offered in white or black.

*specify length on stem & canopy kit only

Tech Specs

- 2400VA maximum
- 120VAC input
- 20-amp circuit
- made for Bruck and listed under the name Global Trac.



10



11



Ordering Codes

Follow the steps to specify,

example: **370GEA - 10 - bk**

1 Base	2 Type	3 Length*	4 Finish
370GEA ECO	37 stem & canopy kit 10 universal stem suspension point 11 end feed stem suspension point	12 12 in 18 18 in 24 24 in 48 48 in	bk black wh white



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F49.T



Job Name:

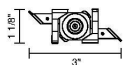
Contact:

Ordering Code:

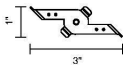
Fixture Type:



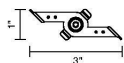
7



12



6



Eco Mounting Clips

Description
Mounting Clips for Eco Track.

Tech Specs

- 2400VA maximum
- 120VAC input
- 20-amp circuit
- made for Bruck and listed under the name Global Trac.

Ordering Codes
Follow the steps to specify,

example: **370GEA - 7**

1 Base	2 Type
370GEA ECO	7 15/16" T-bar clip 12 cable suspension clip 6 threaded rod mounting clip

Ordering Codes
Follow the steps to specify,

example: **370SKB - 31**

1 Base	2 Type	3 Finish*
370SKB ECO	30 ceiling cup 31 threaded rod, 6ft 34 suspension wire, 5ft 34/3m suspension wire, 9ft	bk black wh white



30

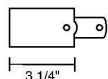
Mounting Clip Accessories

Description
Threaded rod for use with Threaded Rod mounting clip.
Ceiling Cup for use with Treaded Rod or Suspension Wire.

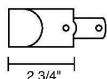
*Specify finish for Ceiling Cup only



11, 12



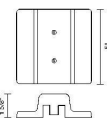
13, 16



17



17



Eco Power Feeds

Description
Power Feeds for Eco Track.
Live End Feed (11, 12) includes 1 end cap.
*T-bar Feed Kit (17) and Floating Feed (67) offered in White or Black only.

Tech Specs

- 2400VA maximum
- 120VAC input
- 20-amp circuit
- made for Bruck and listed under the name Global Trac.

Ordering Codes
Follow the steps to specify,

example: **370GES - 11 - bk**

1 Base	2 Type	3 Finish*
370GES ECO	11 end feed 12 end feed, mirror 13 conduit end feed 16 conduit end feed, mirror 17 T-bar feed kit 67 floating feed	bk black sv matte silver wh white



Job Name:

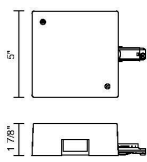
Contact:

Ordering Code:

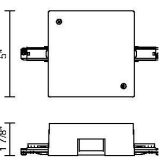
Fixture Type:



11cb, 12cb



14cb



Eco Circuit Breakers

Description

This power feed circuit breaker limits the allowable electric load that can be put on the circuit.

Tech Specs

- 2400VA maximum
- 120VAC input
- 20-amp circuit
- made for Bruck and listed under the name Global Trac.

Ordering Codes

Follow the steps to specify,

example: **370GES - 11cb - wh - 050**

1 Base	2 Type	3 Finish	2 Circuit Breaker
370GES ECO	11cb circuit breaker 12cb circuit breaker, mirror 14cb circuit breaker	bk black sv matte silver wh white	010 1 amp circuit breaker 020 2 amp circuit breaker 030 3 amp circuit breaker 050 5 amp circuit breaker 070 7 amp circuit breaker 100 10 amp circuit breaker 120 12 amp circuit breaker



Eco Adapters

Description

Step down adapter for Bruck low-voltage fixtures.

Tech Specs

- made for Bruck and listed under the name Global Trac.

Ordering Codes

Follow the steps to specify,

example: **370050 - bk**

1 Base	2 Finish
370050 Eco step down transformer	bk black sv matte silver wh white



15



70



Eco Cover & Monopoint

Description

Eco Outlet Box Cover.

Tech Specs

- made for Bruck and listed under the name Global Trac.

Ordering Codes

Follow the steps to specify,

example: **370GES - 15 - wh**

1 Base	2 Type	3 Finish
370GES GEO	15 outlet box cover 70 monopoint	bk black sv matte silver wh white



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F50.A

RECESSED SQUARE WALL WASHER

Manufacturer: KURT VERSEN

Fixture Line: B2555

Fixture: RECESSED WALL WASHER

Catalog #: B2555 30 30 27

Mounting: RECESSED

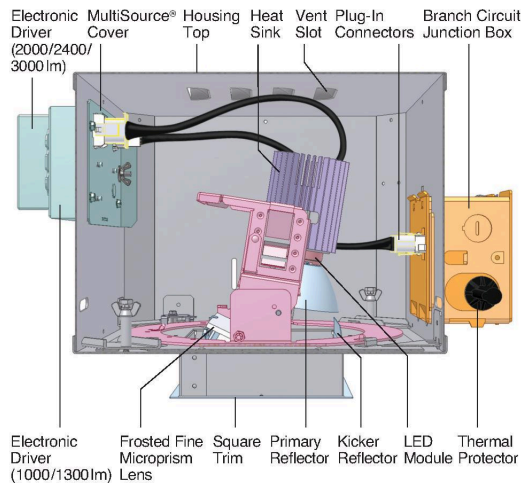
Fixture Wattage: 38w

Fixture Voltage: 277

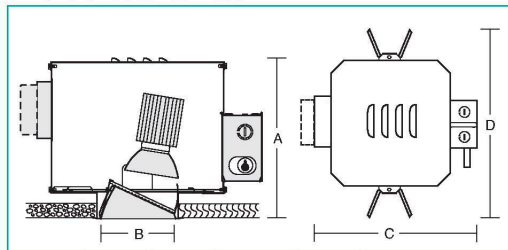
Load Type: 0-10V

Lamp Spec: LED, 3000K, 3000 lm





Dimensions and Sources



Number	A Depth	B Aperture	C Width*	D Length	LED Module
B2555	10 3/16" 259mm	4 1/8" 114mm	14 3/16" 375mm	16 3/16" 416mm	1000 lm or 1300 lm Xicato® XSM
	10 3/16" 259mm	4 1/8" 114mm	16 1/8" 410mm	16 3/16" 416mm	2000 lm, 2400 lm or 3000 lm Xicato® XSM

*For 1000 lm and 1300 lm with Lutron dimming use 16 1/8".

Energy and Ordering Information

Fixture	Module Lumens	System Lumens	System Watts	lm/W	Order Code Model L K V
B2555	1000	353	15	23.6	B2555 10 30 27
	1300	435	24	18.1	B2555 13 30 27
	2000	1089	36	30.2	B2555 20 30 27
	2400	1120	32	35.0	B2555 24 30 27
	3000	1293	38	34.0	B2555 30 30 27

B2555 1000, 1300, 2000, 2400, 3000 lm

Lens Wall Washer, 4 1/2" Square Parabolic Trim
Xicato® XSM Remote Phosphor
MultiSource® Technology

Optics and Applications

Kurt Versen square LED wall washers are designed to illuminate walls uniformly with soft photometric patterns with excellent deep-shielded brightness control. The frosted fine microprism spread lens projects light onto the wall surface creating a smooth appearance.

Design Features - MultiSource® Capable

Fixture housings are designed with MultiSource® plug and play connectors allowing field conversion to other sources. New lighting technologies will be incorporated as they become available assuring continuity. The fixture incorporates an aperture assembly which slides 1/4" in any direction and pivots 7° while maintaining optimum photometric performance. Proprietary passive heat sinks ensure proper temperatures are maintained. Service from below only. Maximum ceiling thickness is 1 1/2".

Modules

Xicato® XSM remote phosphor modules use high efficiency blue LEDs that convert to white light when directed through a phosphor lens. Fixture lumen packages are 1000 lm, 1300 lm, 2000 lm, 2400 lm and 3000 lm. Standard 80 CRI. 2700K, 3000K, 3500K, 4000K available. Rated Life is 50,000 hours at 70% lumen output.

Dimming Driver

Dimming is standard 0-10V/10%. See accessories for additional dimming options. Specify Voltage: 120 or 277.

Finish

Standard trim is anodized Softglow® clear. SoftSheen™ is a new finish that lowers apparent brightness due to remote phosphor sources. Colors available, see accessories. Steel parts are phosphate conditioned then painted matte black to suppress light leaks.

Warranty

5 year limited. See KV website for manufacturers details.

General

Fixture is pre-wired and thermally protected, UL and C-UL listed, for damp location and eight wire, 75°C, branch circuit wiring. All products are union made. Designed and manufactured in the USA.

Accessories

SB	Softglow black.	WT	White trim flange.
SG	Softglow gold.	WHT	White complete cone.
SW	Softglow wheat.	27	2700 Kelvin temp.
SY	Softglow pewter.	30	3000 Kelvin temp.
R2	26" support rails.	35	3500 Kelvin temp.
R5	52" support rails.	40	4000 Kelvin temp.
LLFR	Linear frosted.	F	Fuse.
FMH4	Flush mount, drywall.		

For wood and other materials contact factory.

D1 Lutron to 1%, 3 wire control.

DE Lutron EcoSystem to 1%, digital 4 wire.

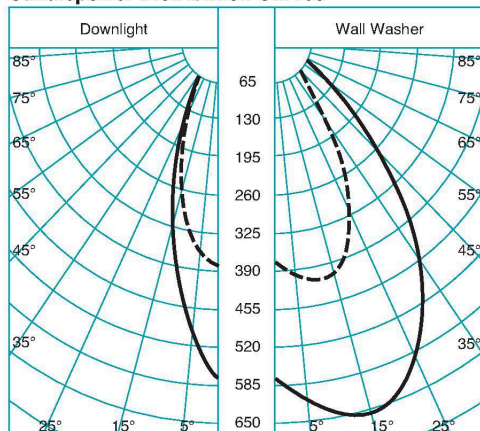
REM Remote Bodine EM. Includes battery pack, charger light, test switch and single lamp operation for 90 minutes. Ceiling access required.

SS SoftSheen™ add SS, e.g. SSW, SoftSheen™ Wheat.

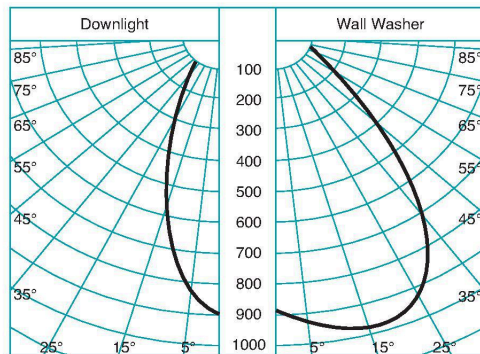
AS Xicato® XSM Artist Series 95 CRI modules 1000 lm or 1300 lm. Contact factory for energy information.

B2555

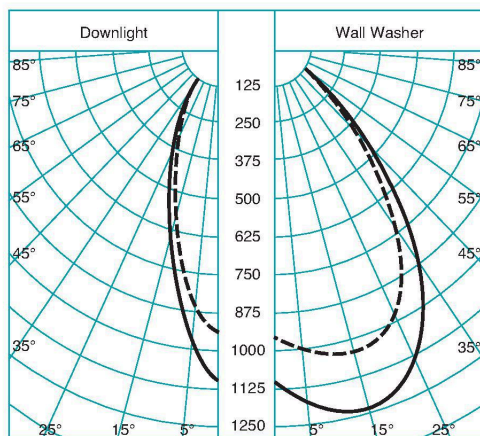
Candlepower Distribution Curves



B2555 Xicato® XSM 1000 lm 3000K Read Dotted Line
B2555 Xicato® XSM 1300 lm 3000K Read Solid Line



B2555 Xicato® XSM 2000 lm 3000K Lens Wall Washer



B2555 Xicato® XSM 2400 lm 3000K Read Dotted Line
B2555 Xicato® XSM 3000 lm 3000K Read Solid Line

Notes

- 1 Photometric Report: B2555 1000 lm KV Report No. 260356-A, 1300 lm LTL Report No. 260356, 2000 lm KV Report No. 102011, 2400 lm KV Report No. 51614, 3000 lm KV Report No. 51514-B.
- 2 All data calculated with Softglow® clear trims and a microprism spread lens.
- 3 If colored trims are required, only the lens trim will be tinted. The kicker reflector is always clear Alzak for maximum output and true color rendition. Multipliers should be used to correct brightness and downlight data only. Multiple units footcandles are correct as reported above.
- 4 SoftSheen™ trim multipliers, contact factory.
- 5 Softglow® colored trim multipliers, contact factory.

Multiple Units Footcandles

From Ceiling	2' from wall				3' from wall				4' from wall			
	2' Centers		3' Centers		3' Centers		4' Centers		4' Centers		6' Centers	
	CL	Mid	CL	Mid	CL	Mid	CL	Mid	CL	Mid	CL	Mid
1'	10	6	10	3	5	2	4	1	2	1	2	.2
2'	20	15	18	9	6	5	6	2	3	2	3	.4
3'	9	6	8	5	3	3	3	1	5	4	5	2
4'	28	26	23	15	10	8	9	5	5	4	5	2
5'	9	8	8	5	3	3	3	2	2	1	1	1
6'	30	30	22	18	12	12	11	7	6	5	5	2
7'	10	10	7	6	4	4	3	2	1	1	1	1
8'	24	24	16	15	14	14	11	9	7	7	6	3
9'	9	9	6	6	4	4	3	3	2	2	1	1
10'	18	18	12	12	13	13	10	9	8	8	6	4
11'	7	7	5	5	4	4	3	3	2	2	2	1
12'	13	13	9	9	11	11	8	8	8	8	6	4
13'	6	6	4	4	4	4	3	3	2	2	2	1
14'	10	10	7	7	9	9	7	7	7	7	5	4
15'	5	5	3	3	4	4	3	3	3	2	2	2
16'	8	8	5	5	7	7	5	5	6	6	4	4
17'	4	4	3	3	3	3	2	2	2	2	2	2
18'	6	6	4	4	6	6	5	4	5	5	4	3
19'	3	3	2	2	3	3	2	2	2	2	2	2
20'	5	5	3	3	5	5	4	4	5	4	3	3

B2555 Xicato® XSM 1000 lm 3000K Read Top Data
B2555 Xicato® XSM 1300 lm 3000K Read Bottom Data

From Ceiling	2' from wall				3' from wall				4' from wall			
	2' Centers		3' Centers		3' Centers		4' Centers		4' Centers		6' Centers	
	CL	Mid	CL	Mid	CL	Mid	CL	Mid	CL	Mid	CL	Mid
1'	35	26	32	15	12	9	11	4	6	3	5	1
2'	43	43	35	25	17	15	15	8	9	7	8	3
3'	44	46	32	29	19	19	16	12	10	9	8	4
4'	36	36	24	24	21	21	17	15	11	11	9	6
5'	27	28	18	19	19	19	14	14	12	12	9	7
6'	21	21	14	14	16	16	12	12	11	12	8	7
7'	16	16	11	11	14	14	10	10	10	11	7	7
8'	13	13	8	8	11	11	8	9	9	9	6	6
9'	10	10	7	7	9	9	7	7	8	8	5	5
10'	8	8	6	6	8	8	6	6	7	7	5	5

From Ceiling	2' from wall				3' from wall				4' from wall			
	2' Centers		3' Centers		3' Centers		4' Centers		4' Centers		6' Centers	
	CL	Mid	CL	Mid	CL	Mid	CL	Mid	CL	Mid	CL	Mid
1'	24	22	20	13	8	7	7	4	3	3	3	1
2'	27	24	23	14	8	7	7	4	4	3	3	1
3'	48	48	40	28	14	13	12	8	6	6	5	3
4'	55	54	45	32	16	15	13	9	7	6	6	3
5'	53	55	39	35	21	22	18	13	9	9	7	4
6'	62	63	45	40	24	24	21	15	10	10	8	5
7'	41	41	28	27	25	25	20	18	12	12	10	6
8'	48	48	32	32	29	29	23	21	14	14	11	7
9'	30	30	20	20	23	23	17	17	14	15	11	8
10'	35	35	23	23	26	26	20	20	16	17	13	9
11'	22	22	15	15	19	19	14	14	14	14	10	9
12'	26	26	18	18	22	22	16	16	16	16	11	10
13'	17	17	11	11	15	15	11	11	12	12	8	8
14'	20	20	13	13	18	18	13	13	14	14	10	9
15'	13	13	9	9	12	12	9	9	11	11	7	7
16'	15	15	10	10	14	14	11	11	12	12	8	8
17'	10	10	7	7	10	10	8	8	9	9	6	6
18'	12	12	8	8	12	12	9	9	11	10	7	7
19'	8	8	6	6	8	8	6	6	8	8	5	5
20'	10	10	7	7	10	10	7	7	9	9	6	6

B2555 Xicato® XSM 2400 lm 3000K Read Top Data
B2555 Xicato® XSM 3000 lm 3000K Read Bottom Data

- 6 Data are cosine corrected to the plane of the wall. Uncorrected data are much higher and depend upon the angle of incidence to the wall which varies with the mounting distance from the wall.
- 7 Kurt Versen wall washers minimize hard shadow lines at the ceiling. Intensity increases gradually to just above eye level. The illuminated field is uniform and devoid of hot spots, striations and spikes.
- 8 Above data measure output of the wall washers only. No contribution from adjacent downlights or ceiling, floor or wall reflectances is included. Total illumination on the wall increases with the contribution from other sources.
- 9 The luminous efficacy (lm/W) refers to the total measured luminous flux (lumens) of the fixture divided by the total measured electrical input power (watts) of the complete fixture.



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F50.B

RECESSED SQUARE WALL WASHER

Manufacturer: KURT VERSEN

Fixture Line: B2555

Fixture: RECESSED WALL WASHER

Catalog #: B2555 30 13 27

Mounting: RECESSED

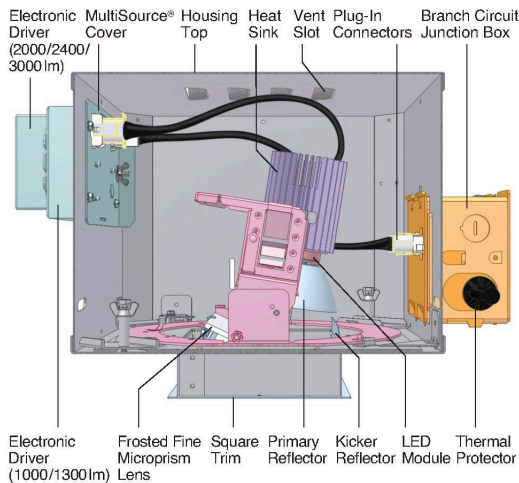
Fixture Wattage: 24w

Fixture Voltage: 277

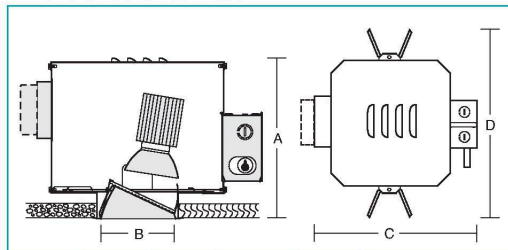
Load Type: 0-10V

Lamp Spec: LED, 3000K, 1300 lm





Dimensions and Sources



Number	A Depth	B Aperture	C Width*	D Length	LED Module
B2555	10 3/16" 259mm	4 1/8" 114mm	14 3/16" 375mm	16 3/16" 416mm	1000 lm or 1300 lm Xicato® XSM
	10 3/16" 259mm	4 1/8" 114mm	16 1/8" 410mm	16 3/16" 416mm	2000 lm, 2400 lm or 3000 lm Xicato® XSM

*For 1000 lm and 1300 lm with Lutron dimming use 16 1/8".

Energy and Ordering Information

Fixture	Module Lumens	System Lumens	System Watts	lm/W	Order Code Model L K V
B2555	1000	353	15	23.6	B2555 10 30 27
	1300	435	24	18.1	B2555 13 30 27
	2000	1089	36	30.2	B2555 20 30 27
	2400	1120	32	35.0	B2555 24 30 27
	3000	1293	38	34.0	B2555 30 30 27

B2555 1000, 1300, 2000, 2400, 3000 lm

Lens Wall Washer, 4 1/2" Square Parabolic Trim
Xicato® XSM Remote Phosphor
MultiSource® Technology

Optics and Applications

Kurt Versen square LED wall washers are designed to illuminate walls uniformly with soft photometric patterns with excellent deep-shielded brightness control. The frosted fine microprism spread lens projects light onto the wall surface creating a smooth appearance.

Design Features - MultiSource® Capable

Fixture housings are designed with MultiSource® plug and play connectors allowing field conversion to other sources. New lighting technologies will be incorporated as they become available assuring continuity. The fixture incorporates an aperture assembly which slides 1/4" in any direction and pivots 7° while maintaining optimum photometric performance. Proprietary passive heat sinks ensure proper temperatures are maintained. Service from below only. Maximum ceiling thickness is 1 1/2".

Modules

Xicato® XSM remote phosphor modules use high efficiency blue LEDs that convert to white light when directed through a phosphor lens. Fixture lumen packages are 1000 lm, 1300 lm, 2000 lm, 2400 lm and 3000 lm. Standard 80 CRI. 2700K, 3000K, 3500K, 4000K available. Rated Life is 50,000 hours at 70% lumen output.

Dimming Driver

Dimming is standard 0-10V/10%. See accessories for additional dimming options. Specify Voltage: 120 or 277.

Finish

Standard trim is anodized Softglow® clear. SoftSheen™ is a new finish that lowers apparent brightness due to remote phosphor sources. Colors available, see accessories. Steel parts are phosphate conditioned then painted matte black to suppress light leaks.

Warranty

5 year limited. See KV website for manufacturers details.

General

Fixture is pre-wired and thermally protected, UL and C-UL listed, for damp location and eight wire, 75°C, branch circuit wiring. All products are union made. Designed and manufactured in the USA.

Accessories

SB	Softglow black.	WT	White trim flange.
SG	Softglow gold.	WHT	White complete cone.
SW	Softglow wheat.	27	2700 Kelvin temp.
SY	Softglow pewter.	30	3000 Kelvin temp.
R2	26" support rails.	35	3500 Kelvin temp.
R5	52" support rails.	40	4000 Kelvin temp.
LLFR	Linear frosted.	F	Fuse.

FMH4 Flush mount, drywall.

For wood and other materials contact factory.

D1 Lutron to 1%, 3 wire control.

DE Lutron EcoSystem to 1%, digital 4 wire.

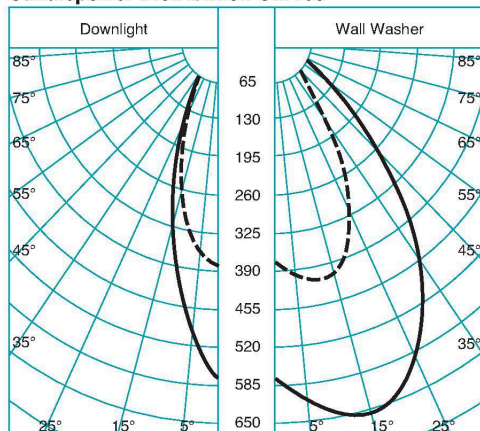
REM Remote Bodine EM. Includes battery pack, charger light, test switch and single lamp operation for 90 minutes. Ceiling access required.

SS SoftSheen™ add SS, e.g. SSW, SoftSheen™ Wheat.

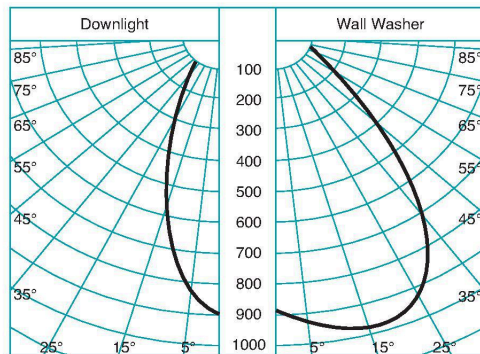
AS Xicato® XSM Artist Series 95 CRI modules 1000 lm or 1300 lm. Contact factory for energy information.

B2555

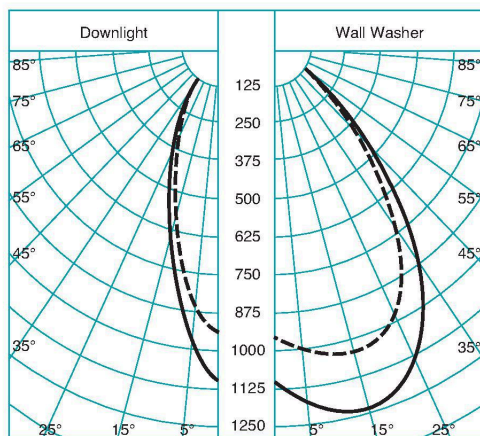
Candlepower Distribution Curves



B2555 Xicato® XSM 1000 lm 3000K Read Dotted Line
B2555 Xicato® XSM 1300 lm 3000K Read Solid Line



B2555 Xicato® XSM 2000 lm 3000K Lens Wall Washer



B2555 Xicato® XSM 2400 lm 3000K Read Dotted Line
B2555 Xicato® XSM 3000 lm 3000K Read Solid Line

Notes

- 1 Photometric Report: B2555 1000 lm KV Report No. 260356-A, 1300 lm LTL Report No. 260356, 2000 lm KV Report No. 102011, 2400 lm KV Report No. 51614, 3000 lm KV Report No. 51514-B.
- 2 All data calculated with Softglow® clear trims and a microprism spread lens.
- 3 If colored trims are required, only the lens trim will be tinted. The kicker reflector is always clear Alzak for maximum output and true color rendition. Multipliers should be used to correct brightness and downlight data only. Multiple units footcandles are correct as reported above.
- 4 SoftSheen™ trim multipliers, contact factory.
- 5 Softglow® colored trim multipliers, contact factory.

Multiple Units Footcandles

From Ceiling	2' from wall				3' from wall				4' from wall			
	2' Centers		3' Centers		3' Centers		4' Centers		4' Centers		6' Centers	
	CL	Mid	CL	Mid	CL	Mid	CL	Mid	CL	Mid	CL	Mid
1'	10	6	10	3	5	2	4	1	2	1	2	.2
2'	20	15	18	9	6	5	6	2	3	2	3	.4
3'	9	6	8	5	3	3	3	1	5	4	5	2
4'	28	26	23	15	10	8	9	5	5	4	5	2
5'	9	8	8	5	3	3	3	2	2	1	1	1
6'	30	30	22	18	12	12	11	7	6	5	5	2
7'	10	10	7	6	4	3	3	2	1	1	1	1
8'	24	24	16	15	14	14	11	9	7	7	6	3
9'	9	9	6	6	4	4	3	3	2	2	1	1
10'	18	18	12	12	13	13	10	9	8	8	6	4
11'	7	7	5	5	4	4	3	3	2	2	2	1
12'	13	13	9	9	11	11	8	8	8	8	6	4
13'	6	6	4	4	4	4	3	3	2	2	2	1
14'	10	10	7	7	9	9	7	7	7	7	5	4
15'	5	5	3	3	4	4	3	3	3	2	2	2
16'	8	8	5	5	7	7	5	5	6	6	4	4
17'	4	4	3	3	3	3	2	2	2	2	2	2
18'	6	6	4	4	6	6	5	4	5	5	4	3
19'	3	3	2	2	3	3	2	2	2	2	2	2
20'	5	5	3	3	5	5	4	4	5	4	3	3

B2555 Xicato® XSM 1000 lm 3000K Read Top Data
B2555 Xicato® XSM 1300 lm 3000K Read Bottom Data

From Ceiling	2' from wall				3' from wall				4' from wall			
	2' Centers		3' Centers		3' Centers		4' Centers		4' Centers		6' Centers	
	CL	Mid	CL	Mid	CL	Mid	CL	Mid	CL	Mid	CL	Mid
1'	35	26	32	15	12	9	11	4	6	3	5	1
2'	43	43	35	25	17	15	15	8	9	7	8	3
3'	44	46	32	29	19	19	16	12	10	9	8	4
4'	36	36	24	24	21	21	17	15	11	11	9	6
5'	27	28	18	19	19	19	14	14	12	12	9	7
6'	21	21	14	14	16	16	12	12	11	12	8	7
7'	16	16	11	11	14	14	10	10	10	11	7	7
8'	13	13	8	8	11	11	8	9	9	9	6	6
9'	10	10	7	7	9	9	7	7	8	8	5	5
10'	8	8	6	6	8	8	6	6	7	7	5	5

From Ceiling	2' from wall				3' from wall				4' from wall			
	2' Centers		3' Centers		3' Centers		4' Centers		4' Centers		6' Centers	
	CL	Mid	CL	Mid	CL	Mid	CL	Mid	CL	Mid	CL	Mid
1'	24	22	20	13	8	7	7	4	3	3	3	1
2'	27	24	23	14	8	7	7	4	4	3	3	1
3'	48	48	40	28	14	13	12	8	6	6	5	3
4'	55	54	45	32	16	15	13	9	7	6	6	3
5'	53	55	39	35	21	22	18	13	9	9	7	4
6'	62	63	45	40	24	24	21	15	10	10	8	5
7'	41	41	28	27	25	25	20	18	12	12	10	6
8'	48	48	32	32	29	29	23	21	14	14	11	7
9'	30	30	20	20	23	23	17	17	14	15	11	8
10'	35	35	23	23	26	26	20	20	16	17	13	9
11'	22	22	15	15	19	19	14	14	14	14	10	9
12'	26	26	18	18	22	22	16	16	16	16	11	10
13'	17	17	11	11	15	15	11	11	12	12	8	8
14'	20	20	13	13	18	18	13	13	14	14	10	9
15'	13	13	9	9	12	12	9	9	11	11	7	7
16'	15	15	10	10	14	14	11	11	12	12	8	8
17'	10	10	7	7	10	10	8	8	9	9	6	6
18'	12	12	8	8	12	12	9	9	11	10	7	7
19'	8	8	6	6	8	8	6	6	8	8	5	5
20'	10	10	7	7	10	10	7	7	9	9	6	6

B2555 Xicato® XSM 2400 lm 3000K Read Top Data
B2555 Xicato® XSM 3000 lm 3000K Read Bottom Data

- 6 Data are cosine corrected to the plane of the wall. Uncorrected data are much higher and depend upon the angle of incidence to the wall which varies with the mounting distance from the wall.
- 7 Kurt Versen wall washers minimize hard shadow lines at the ceiling. Intensity increases gradually to just above eye level. The illuminated field is uniform and devoid of hot spots, striations and spikes.
- 8 Above data measure output of the wall washers only. No contribution from adjacent downlights or ceiling, floor or wall reflectances is included. Total illumination on the wall increases with the contribution from other sources.
- 9 The luminous efficacy (lm/W) refers to the total measured luminous flux (lumens) of the fixture divided by the total measured electrical input power (watts) of the complete fixture.



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F51

RECESSED SQUARE DOWNLIGHT

Manufacturer: KURT VERSEN

Fixture Line: B2144

Fixture: MEDIUM BEAM RECESSED SQUARE DOWNLIGHT

Catalog #: B2144 20 30 27

Mounting: RECESSED

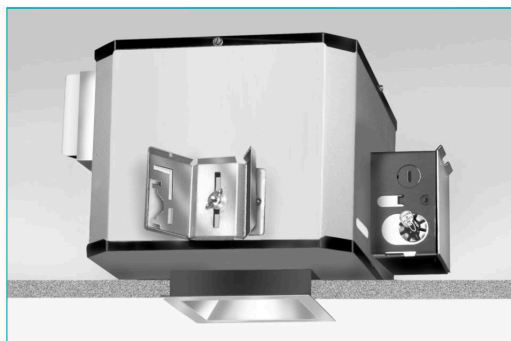
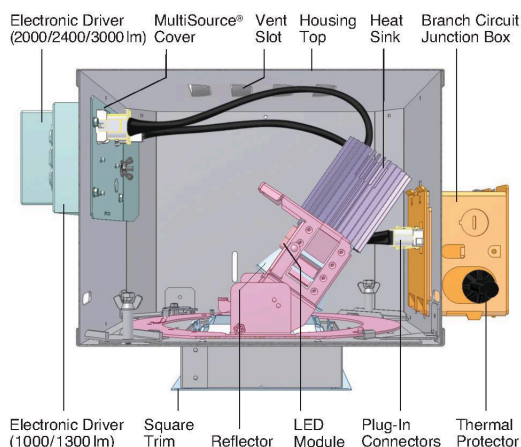
Fixture Wattage: 36w

Fixture Voltage: 277

Load Type: 0-10V

Lamp Spec: LED, 3000K, 2000 lm





Dimensions and Sources

Number	A Depth	B Aperture	C Width*	D Length	LED Module
	10 3/16" 259mm	4 1/2" 114mm	14 3/4" 375mm	16 3/8" 416mm	1000 lm or 1300 lm Xicato® XSM
B2144	10 3/16" 259mm	4 1/2" 114mm	16 1/8" 410mm	16 3/8" 416mm	2000 lm, 2400 lm or 3000 lm Xicato® XSM

*For 1000 lm and 1300 lm with Lutron dimming use 16 1/8".

Energy and Ordering Information

Fixture	Module Lumens	System Lumens	System Watts	lm/W	Order Code Model L K V
B2144	1000	639	18	36.1	B2144 10 30 27
	1300	835	22	37.9	B2144 13 30 27
	2000	1215	36	33.8	B2144 20 30 27
	2400	1641	32	51.0	B2144 24 30 27
	3000	1866	38	49.0	B2144 30 30 27

B2144 1000, 1300, 2000, 2400, 3000 lm

Medium Beam, Directional Downlight

4 1/2" Square Parabolic Trim, Xicato® XSM Remote Phosphor MultiSource® Technology

Optics and Applications

Directional systems are designed with locking capability to rotate 360° and angulate 35°. Optics designed to control the rigors of sloped ceiling installations. Beam distributions can be changed in the field. Beam angle is 40°.

Design Features - MultiSource® Capable

Fixture housings are designed with MultiSource® plug and play connectors allowing field conversion to other sources. New lighting technologies will be incorporated as they become available assuring continuity. The fixture incorporates an aperture assembly which slides 1/4" in any direction and pivots 7° while maintaining optimum photometric performance. Proprietary passive heat sinks ensure proper temperatures are maintained. Service from below only. Maximum ceiling thickness is 1 1/2".

Modules

Xicato® XSM remote phosphor modules use high efficiency blue LEDs that convert to white light when directed through a phosphor lens. Fixture lumen packages are 1000 lm, 1300 lm, 2000 lm, 2400 lm and 3000 lm. Standard 80 CRI. 2700K, 3000K, 3500K, 4000K available. Rated Life is 50,000 hours at 70% lumen output.

Dimming Driver

Dimming is standard 0-10V/10%. See accessories for additional dimming options. Specify Voltage: 120 or 277.

Finish

Standard trim is anodized Softglow® clear. SoftSheen™ is a new finish that lowers apparent brightness due to remote phosphor sources. Colors available, see accessories. Steel parts are phosphate conditioned then painted matte black to suppress light leaks.

Warranty

5 year limited. See KV website for manufacturers details.

General

Fixture is pre-wired and thermally protected, UL and C-UL listed, for damp location and eight wire, 75°C, branch circuit wiring. All products are union made. Designed and manufactured in the USA.

Accessories

SB	Softglow black.	WT	White trim flange.
SG	Softglow gold.	WHT	White complete cone.
SW	Softglow wheat.	27	2700 Kelvin temp.
SY	Softglow pewter.	30	3000 Kelvin temp.
R2	26" support rails.	35	3500 Kelvin temp.
R5	52" support rails.	40	4000 Kelvin temp.
SO	Fine microprism lens*	DP	Fixed downlight position.
LL	Linear lens*	FR	Frosted lens, specify lens type.
F	Fuse.		
FMH4	Flush mount, drywall.		
	For wood and other materials contact factory.		
FLT4	Full lens trim, specify lens type.		
D1	Lutron to 1%, 3 wire control.		
DE	Lutron EcoSystem to 1%, digital 4 wire.		
REM	Remote Bodine EM. Includes battery pack, charger light, test switch and single lamp operation for 90 minutes. Ceiling access required.		
SS	SoftSheen™ add SS, e.g. SSW, SoftSheen™ Wheat.		
AS	Xicato® XSM Artist Series 95 CRI modules 1000 lm or 1300 lm. Contact factory for energy information.		

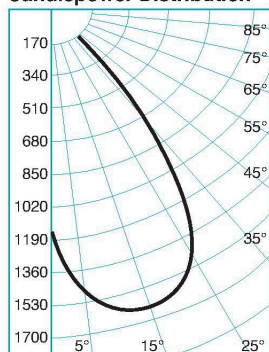
*(Requires FLT4 option)

B2144

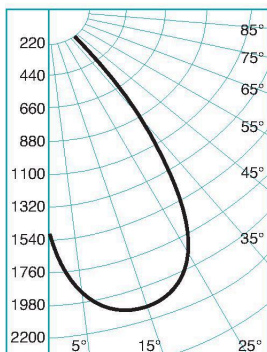
Footcandle Values at 15° Tilt

Distance	5'			8'			10'			15'			
	0°	5°	15°	0°	5°	15°	0°	5°	15°	0°	5°	15°	
Lamps	FC	FC	Diam	FC	FC	Diam	FC	FC	Diam	FC	FC	Diam	
B4144 1000 lm 3000K	65	64	1'	42	3'	26	25	1'	16	16	2'	10	5'
B4144 1300 lm 3000K	85	83	1'	54	3'	33	32	1'	21	21	2'	14	5'
B4144 2000 lm 3000K	145	136	1'	77	3'	57	53	1'	30	34	2'	19	5'
B4144 2400 lm 3000K	148	141	1'	90	3'	58	55	1'	35	35	2'	22	5'
B4144 3000 lm 3000K	178	166	1'	105	3'	70	65	1'	41	42	2'	26	5'

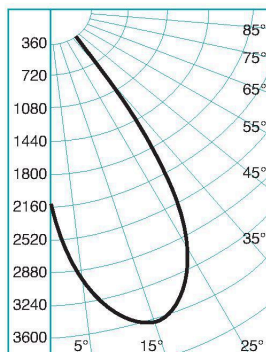
Candlepower Distribution



B2144 Xicato® XSM 1000 lm 3000K
15° Tilt
Luminous efficacy 36.1 S/M .62



B2144 Xicato® XSM 1300 lm 3000K
15° Tilt
Luminous efficacy 37.9 S/M .61

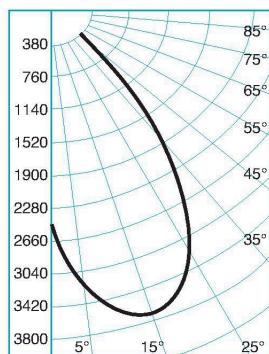


B2144 Xicato® XSM 2000 lm 3000K
15° Tilt
Luminous efficacy 33.8 S/M .56

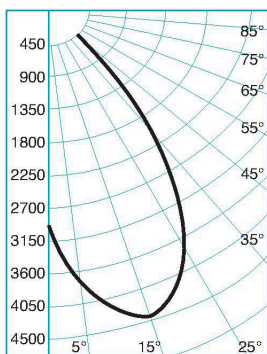
Candelas

	B2144 18W	B2144 22W	B2144 36W
°	639*	835*	1215*
0	1636	2126	3632
5	1611	2094	3451
10	1481	1924	2995
15	1155	1501	2144
20	625	812	1095
25	280	364	529
30	139	180	259
35	50	64	78
40	18	22	26
45	9	11	13
50	5	6	8
55	3	4	5
60	2	3	3
65	1	2	2
70	0	1	1
75	0	0	0
80	0	0	0
85	0	0	0
90	0	0	0

° Vertical Angles
* Luminaire Lumens



B2144 Xicato® XSM 2400 lm 3000K
15° Tilt
Luminous efficacy 51.0 S/M .64



B2144 Xicato® XSM 3000 lm 3000K
15° Tilt
Luminous efficacy 49.0 S/M .62

	B2144 32W	B2144 38W
°	1641*	1866*
0	3712	4453
5	3597	4208
10	3197	3758
15	2486	2911
20	1752	1945
25	869	927
30	435	472
35	202	226
40	60	76
45	28	33
50	19	22
55	13	15
60	10	8
65	8	7
70	7	0
75	0	0
80	0	0
85	0	0
90	0	0

° Vertical Angles
* Luminaire Lumens

Notes

- 1 Photometric Reports: B2144 LTL Report No. 260355 for 1000 lm, B2144 LTL Report No. 260355-A for 1300 lm, B2144 LTL Report No. 29200A for 2000 lm, B2144 KV Report No. 51414-A for 2400 lm and B2144 KV Report No. 51314 for 3000 lm.
- 2 Specular colored cone multipliers, contact factory.
- 3 SoftSheen™ cone multipliers, contact factory.
- 4 Single unit Datachart pattern diameters are determined by the number of degrees from each side of nadir. Therefore a 15° diameter represents a total 30° pattern width. Footcandle values are at the edge of that diameter.
- 5 The luminous efficacy (lm/W) refers to the total measured luminous flux (lumens) of the fixture divided by the total measured electrical input power (watts) of the complete fixture.



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F52

RECESSED LINEAR UPLIGHT

Manufacturer: INTERLUX - FILIX

Fixture Line: STEP UP DECO

Fixture: IN-GRADE LINEAR UPLIGHT

Catalog #: FX-SD-R LENGTH-H-30-GR-24-OPTIONS

Mounting: RECESSED

Accessories: POWER SUPPLY: D-520-24006

Fixture Wattage: 12w

Fixture Voltage: 24 VDC

Load Type: 0-10V

Lamp Spec: LED, 3000K, CRI>83, 12 W/LF

Fixture Specification Notes

1) Contractor to order power
supplies/ballasts/transformers/drivers as required.

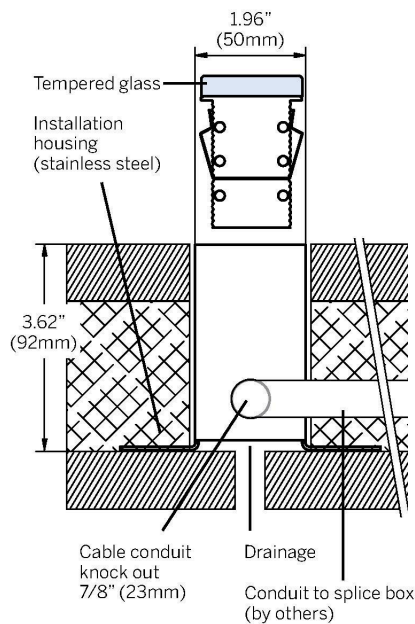


Step Up Deco Specifications

inter•lux



Linear line of light with high performance optics for outdoor and indoor use. Stainless steel housing with flush tempered glass lens for seamless integration into grade. Driveover rated.

Ordering Information¹

FX SD		H			24	
Model	Length	Power	Color Temp.	Optics	Voltage	Options
FX SD	12 (no RGB) 24 48 R XX" (continuous run of standard lengths)	H (12W/ft white only) (12W/ft RGB)	30 40 B RGB	SP (spot) SP20 (spot 20°) FL (flood) FL20 (flood 20°) GR (graze) WW (wallwash)	24 (VDC)	ML micro louver C20 (20' feed cable) C30 (30' feed cable)

¹Specify remote power supply separately below.

Luminaire

- Continuous run of standard lengths (See technical pages for details)
- High performance optics
- UL STD 1598, wet location, driveover rated, 3000 lb static load
- Remote power supply
- Stainless steel construction 304
- Clear tempered glass 3/8" thick
- Installation housing, stainless steel 304 construction, direct concrete pour
- Cross section 1.96" (W), 3.62" (H)
- Supplied with oil and water resistant 3' feed cable standard, single color 18/2 AWG, RGB 18/4 AWG

Length

- 12 = 12.6" (324mm) OAL
- 24 = 24.4" (624mm) OAL
- 48 = 48" (1224mm) OAL
- R XX" (continuous run of standard lengths)

Power

- H = 12W/ft 3000K, 680 lm/ft
- H = 12W/ft RGB, 625 lm/ft
R185 lm/ft, G400 lm/ft, B40 lm/ft

Power Supply³ length x power (watts) = power supply (no enclosure, unless stated)

Non-Dim

- ☐ D-520-24007: Osram 96W, 24VDC, 120-277VAC

Dim

- ☐ D-520-24006: Osram 10% 0-10V dimming, 96W, 24VDC, 120-277VAC
- ☐ IL-JB-LED-24003-120V-DFPN: Lutron LTE 1% Forward Phase (with neutral) dimming, 5-40W, 24VDC, 120VAC, Case K, dry location enclosure (not suitable for 48" fixtures)

Color Temperature

- 30 = 3000K
- 40 = 4000K
- B = Blue
- RGB
- 2 Step MacAdam
- CRI: > 83

Optics

- SP = Spot - 11°
- SP20 = Spot - 11°, 20° tilt
- FL = Flood - 36°
- FL20 = Flood - 36°, 20° tilt
- GR = Graze - 14 x 22°
- WW = Wallwash - 14 x 22°, 20° tilt

Voltage

- 24 = 24VDC fixture voltage

Options

- ML = micro louver
- C20/C30 = luminaire supplied with 20' or 30' feed cable (3' feed cable standard)

- ☐ IL-JB-LED-24010-UNV-D3W: Lutron L3D 1% 3-wire dimming, 5-40W, 24VDC, 120-277VAC, Case K, dry location enclosure (not suitable for 48" fixtures)

- ☐ IL-JB-LED-24010-UNV-DES: Lutron L3D 1% EcoSystem dimming, 5-40W, 24VDC, 120-277VAC, Case K, supplied in a dry location enclosure (not suitable for 48" fixtures)

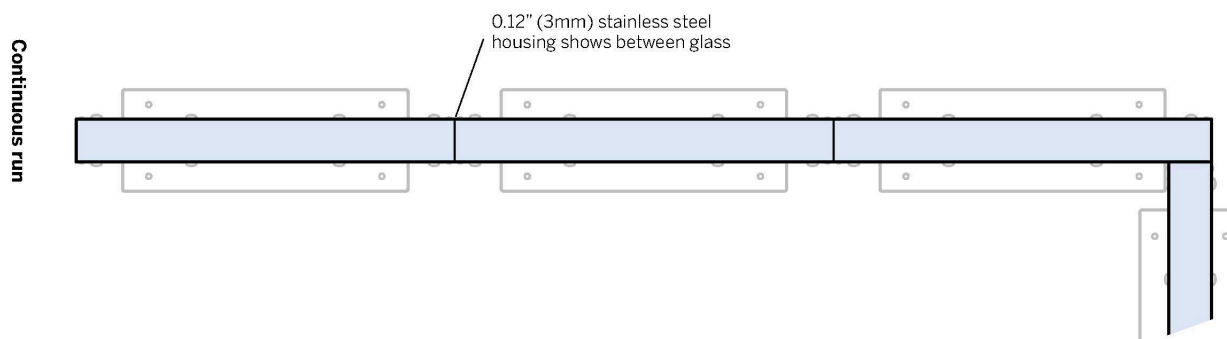
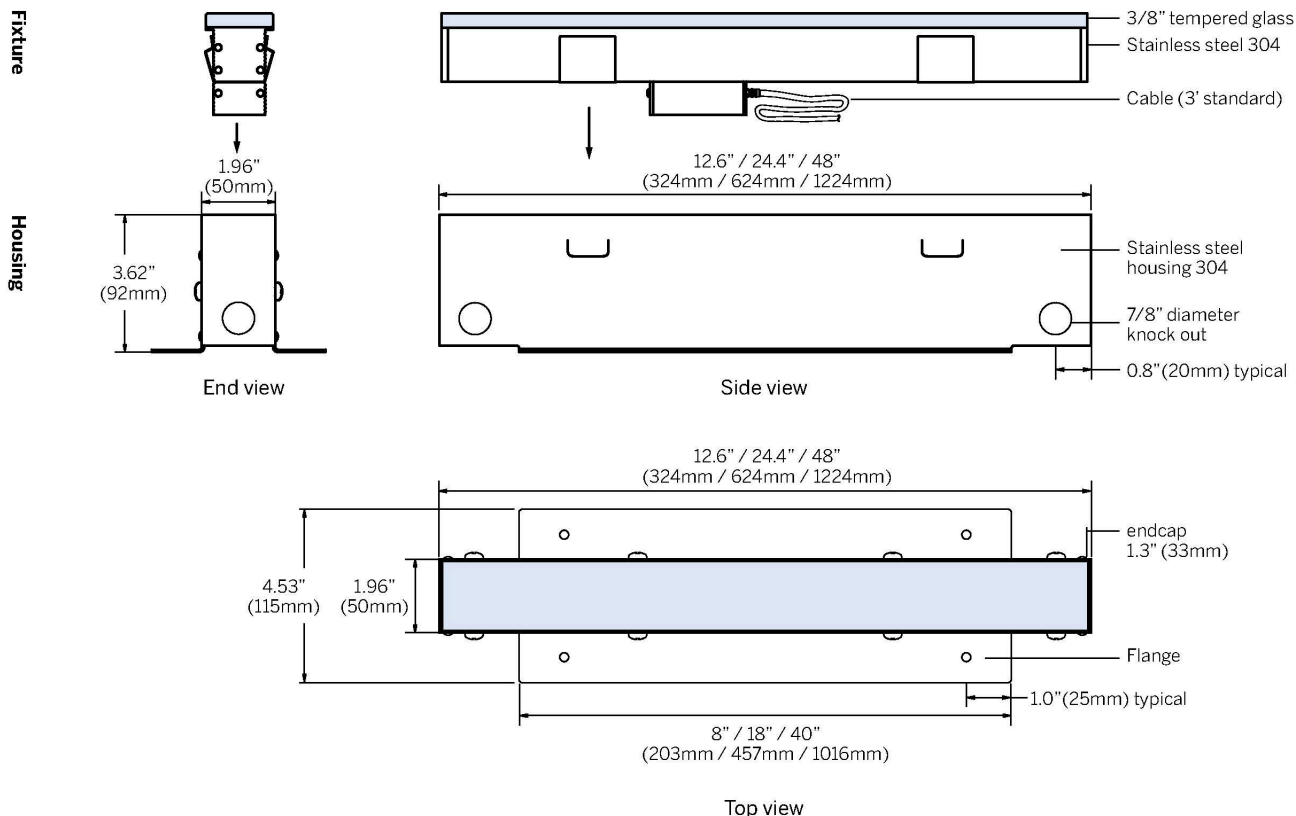
RGB

- ☐ D-550-20003: EldoLED LIN100D2, CV 24V DMX/Sequencer Interface, requires a 24VDC driver ordered separately. (DMX control not included)

³See power supply pages for details. lm80 values shown.

Step Up Deco Dimensions

inter•lux



Step Up Deco Power Supplies

inter•lux

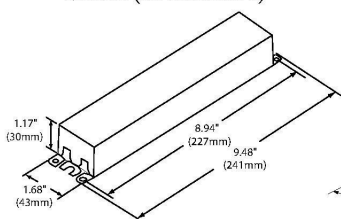
Single Color Drivers

Qty.	Part Number	Description	Case	Nominal Input Voltage (V)	Nominal Input Current (A)	Power Factor	Output Power Range (W)	Dimming Mode	Dimming Control	Dimming Range	Location Rating
	D-520-24007	Osram non-dim	1	120 277	0.97 0.39	0.9	1-96	N/A	N/A	N/A	Damp
	D-520-24006	Osram 0-10V dim	1	120 277	0.97 0.39	0.9	1-96	PWM	0-10V	10-100%	Damp
	IL-JB-LED-24003-120V-DFPN	Hi-Lume A Series LED LTE	2	120	0.38	0.99	5-40	PWM	Forward phase with neutral	1-100%	Dry
	IL-JB-LED-24010-UNV-D3W	Hi-Lume A Series LED L3D, 3-wire	2	120 277	0.38 0.17	0.99 0.96	5-40	PWM	3-Wire	1-100%	Dry
	IL-JB-LED-24010-UNV-DES	Hi-Lume A Series LED L3D, EcoSystem	2	120 277	0.37 0.17	0.99 0.96	5-40	PWM	Ecosystem*	1-100%	Dry

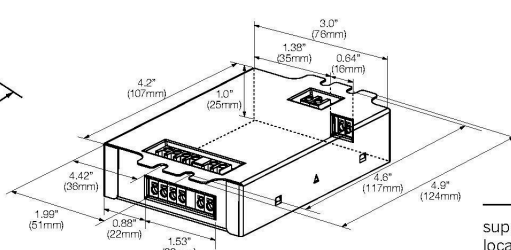
Although it is possible to exceed the remote mounting distance, the installer and/or end user must take precautions to prevent and/or test the effects of EMI (electromagnetic interference).

Case dimensions

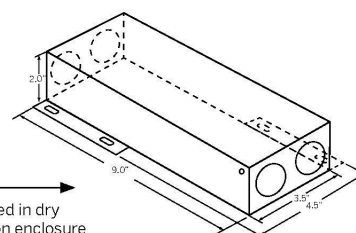
Case 1 (no enclosure)



Case 2 Hi-Lume, case K (enclosure supplied)

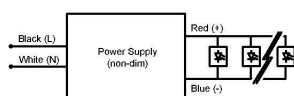


supplied in dry location enclosure

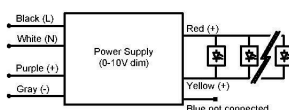


Wiring diagrams

96W Non-Dim

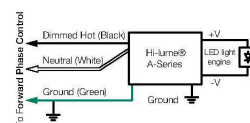


96W Dim



LTE (forward phase with neutral)

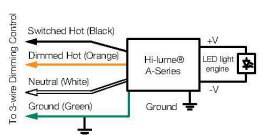
Wiring Diagram for Forward Phase Control



Note: Colors shown correspond to terminal blocks on driver.

L3D (3-wire)

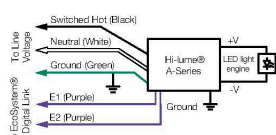
Wiring Diagram for 3-Wire Control



Note: Colors shown correspond to terminal blocks on driver.

L3D (Ecosystem*)

Wiring Diagram for EcoSystem® Digital Control



Note: Colors shown correspond to terminal blocks on driver.

Maximum wiring distance*

Wire gauge	Load per driver			
	Osram		Lutron	
	≤48W	≤72W	≤96W	≤40W
#18AWG	37'	25'	18'	15'
#16AWG	59'	39'	29'	25'
#14AWG	95'	63'	47'	40'
#12AWG	151'	101'	75'	60'
#10AWG	241'	160'	120'	—

*Voltage drop guide for 24VDC. Actual Voltage drop to be calculated by installer

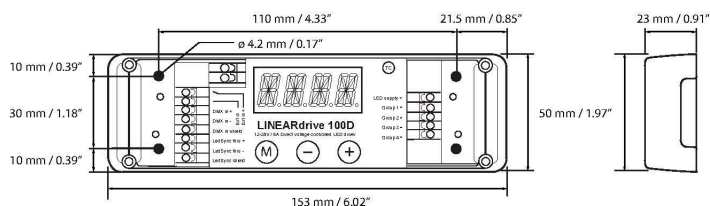
Step Up Deco RGB Interface

inter•lux

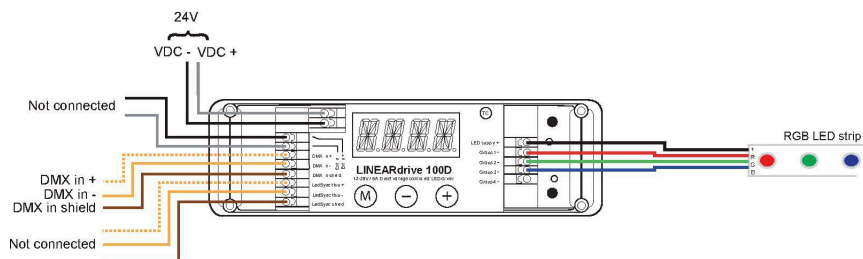
RGB Control Interface Details

Qty.	Part Number	Description	Nominal Input Voltage (V)	Maximum Output per channel (W)	Output Power Range (W)
	D-550-20003	DMX/Sequencer Interface	24	32	96

RGB Control case dimensions (DMX/Sequencer Interface)



Wiring Diagram



See installation / driver instructions for details.
Must order power supply separately



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F54

ROUND WALL WASH

Manufacturer: AMERLUX

Fixture Line: EVOKE DOWNLIGHTS

Fixture: EVOKE 4.75" ROUND WALL WASH

Catalog #: E4.75R-A14-30-LED-277 + E4.75RLW-SDW-WW-3000

Mounting: RECESSED

Fixture Wattage: 30w

Fixture Voltage: 277

Load Type: Non-Dim

Lamp Spec: LED, 3000K, 1863 lm, 83 CRI



EVOKE® ROUND LENS WALL WASH

4.75" ROUND LENS WALL WASH LED

APPLICATION:

Commercial & hospitality wall wash lighting

CONSTRUCTION:

20 ga. galvanized steel frame
18 ga. galvanized steel splice housing and hanger brackets
Die-cast aluminum heatsink

OPTICS:

Spun aluminum self-flanged reflector, anodized finish
High reflectance, highly diffuse mixing chamber
Engineered nano technology lens provides transmission while concealing LED image

LED:

Color Temp Options: 2700K, 3000K, 3500K, 4000K
CRI: 83 (2700K, 3000K, 3500K, 4000K)
97 (2700K, 3000K)

Amerlux® Crisp White technology available

R9 Value: 11 (83 CRI), 92 (97 CRI)

Life: 50,000 hrs

Lumen Maintenance: >70% of initial lumens @ 50,000 hrs

Lumen Output at 3000K:

16w	21w	30w	34w
993 lm	1304 lm	1863 lm	2111 lm

ELECTRICAL:

Standard:

Electronic constant current LED driver, 120v or 277v input
ELV and Triac dimming standard, 120v or 277v.**This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Amerlux recommends using additional surge protection with this unit (supplied by others), surge damage is not covered by warranty.**

Options:

Dimming: 0-10v and Lutron Hi-Lume®/EcoSystem 3 wire
See following pages for more information**Emergency Battery Pack:** IOTA ILB-CP05 Emergency battery pack with remote test switch, output of 5w (approx. 300 lumens) for 90 minutes.

MOUNTING:

For use in grid or sheetrock ceilings
Max ceiling thickness 1", Consult factory for other thicknesses

LABELING:

UL pending to UL standards as tested by CSA

IC/AT rated (optional, 16w & 21w only)

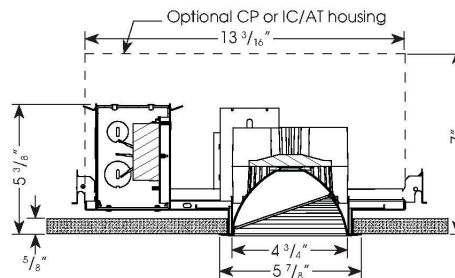
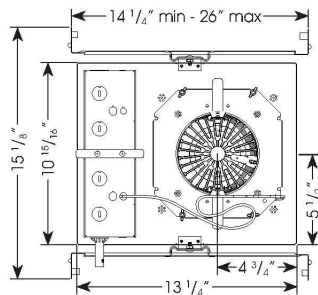
Damp location (standard)

Wet location option

E4.75RLW-A14
LED

PROJECT:

TYPE:



Ceiling Cut Out Dimension: 5 5/16"

ELECTRICAL

Driver	16w		21w		30w		34w	
	System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps
Electronic 120v	16	0.13	21	0.18	30	0.25	34	0.28
	277v	0.06	21	0.08	30	0.11	34	0.12

Class 2 constant current driver

Includes thermal protection, 2w power consumption

E4.75R-A14-30-LED-277 + E4.75RLW-SDW-WW-3000

HOUSING:					REFLECTOR/LED OPTIC:					
Model	Wattage	Lamp Type	Voltage	Options	Model	Aperture	Cone Finish	Flange Finish	Beam Spread	Color Temp
E4.75R-A14	16	LED	120	HILUME - Lutron Hi-Lume®/EcoSystem 3 wire, 1% dimming	E4.75RLW-A14	SD - semi-diffuse	W - white	WW - wall wash	2700	WET - wet location
	21		277	0-10V - 0-10v dimming		CL - clear	C - clear		3000	
	30			EM - emergency battery pack with remote test switch					3500	
	34			CP - Chicago Plenum (CCEA) (16w, 21w & 30w only)					4000	
				IC/AT - insulated ceiling/air tight (16w & 21w only)					2700-97	
									3000-97	
										CRISP - crisp white

Complete Unit Example: E4.75R-A14-34-LED-120/E4.75RLW-A14-SD-W-WW-3000

Housing Example: E4.75R-A14-34-LED-120

Reflector Example: E4.75RLW-A14-SD-W-WW-3000

Cat #:

Amerlux reserves the right to change details that do not affect overall function and performance.



(see next page for details)

5 year limited warranty
AMERLUX LED

(see website for details)



QUICKSHIP EVOKE® 4.75 DOWNLIGHT

4.75" ROUND LENSED WALL WASH LED

Amerlux® QuickShip makes it possible not only to keep up with expectations, but to keep ahead of them. We help enhance your competitive edge, ensuring you can start installation more quickly than you thought possible.

We can ship within 5-10 business days of your Amerlux QuickShip order, depending upon the selection.

- **QuickShip must be clearly marked on all P.O.'s.**
- **Must note on P.O. if requesting frames ship first.**
- **Standard shipping terms apply.**
- **See terms & conditions below.**

Quantity: 100 pieces or less
Housing: 5 days
Trims: 10 days

E4.75RLW-A14
LED



PROJECT:

TYPE:

QUICKSHIP ORDERING INFORMATION:

Housing: Model	Wattage	Lamp Type	Voltage	Options	Trim: Model	Aperture Cone Finish	Flange Finish	Beam Spread	Color Temp
E4.75R-A14	21 30 34	LED	120 277	0-10V - 0-10v dimming	E4.75RLW-A14	MW - matte white	W - white	VWF - very wide flood, 60°	83 CRI 3000 3500

Complete **QuickShip** Example: E4.75R-A14-21-LED-120/E4.75RLW-A14-MW-W-VWF-3000

Housing Example: E4.75R-A14-21-LED-120

Trim Example: E4.75RLW-A14-MW-W-VWF-3000

Cat #:

Terms & Conditions

1. For QuickShip processing, please submit QuickShip items on separate purchase order and indicate "QuickShip" on order.
2. Configurations outside of what is displayed on the QuickShip program are not available under the QuickShip lead times.
3. Please contact Customer Support to process orders with quantities larger than those listed.
4. Orders will be entered within 24 hours of receipt of a clean purchase order. Lead times are calculated by business days from time of sales order confirmation. Orders will ship within QuickShip lead times or sooner.
5. Change orders and order cancellations cannot be processed after sales order confirmation is generated.
6. For freight allowed (greater than \$3,000), order will ship complete based on longest lead time item. Please indicate on PO if Partial Shipments are approved and indicate freight method. For partial shipments under \$3,000, customer will be invoiced for freight.
7. All Lead times indicate when the fixture ships from Amerlux®. Arrival at destination is contingent upon carrier.

Expedite your orders by providing:

- Separate purchase order noting "QuickShip Program"
- Complete and accurate configurations
- Accurate pricing, quote number, shipping and contact information

Amerlux reserves the right to modify this program at any time.

EVOKE® ROUND LENS WALL WASH

4.75" ROUND LENS WALL WASH LED

E4.75RLW-A14
LED



TYPE:



FIXTURE DATA: For 16w data, multiply by 0.47; For 21w data, multiply by 0.62; For 30w data, multiply by 0.88

Complete photometric data (ies format) available upon request.

Evoke 4.75" Round Lens Wall Washer A14 34w LED

Source: 1 white LED array; Source Lumens: 2111

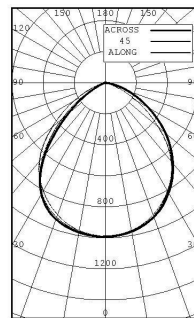
Recessed

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	763	36.14
0-40	1223	57.95
0-60	1929	91.38
0-90	2111	100.0
40-90	888	42.05
60-90	182	8.62
90-180	0	0.00
0-180	2111	100.0

Efficacy (lm/w): 61.5

LTL# 843157



APPLICATION DATA:

34W LED

Footcandles on Wall

Footcandles are average and rounded off.
Data for multiple units are based
on a minimum of five units.

2 Feet From Wall

	2'	2'	2'	2'
Distance from ceiling				
0.5'	28	25	28	28
1.5'	97	95	97	97
2.5'	91	92	95	91
3.5'	66	69	70	66
4.5'	47	49	50	46
5.5'	34	35	36	34
6.5'	25	26	27	25
7.5'	20	21	21	20
8.5'	17	17	17	17

2 Feet From Wall

	3'	3'	3'	3'
Distance from ceiling				
1'	24	17	17	24
2'	73	62	63	73
3'	65	64	64	65
4'	49	49	49	49
5'	34	36	37	35
6'	27	27	28	26
7'	21	21	22	21
8'	17	17	18	17
9'	14	15	15	14

3 Feet From Wall

	3'	3'	3'	3'
Distance from ceiling				
1'	8	8	9	8
2'	33	33	34	33
3'	46	46	47	46
4'	44	44	45	44
5'	37	38	39	37
6'	30	31	32	30
7'	25	25	26	25
8'	20	21	22	21
9'	17	18	18	17



EVOKE® ROUND LENS WALL WASH

4.75" ROUND LENS WALL WASH LED

E4.75RLW-A14
LED



TYPE:



DIMMING COMPATIBILITY:

Amerlux® "Evoke 4.75" fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc) may affect dimming performance.

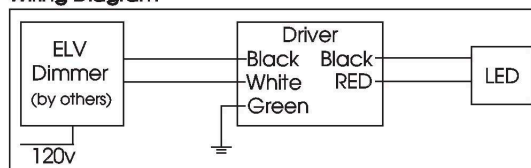
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (standard)

Utilizes specialized "ELV" dimmers. Best for New Construction applications

Notes:

- 120v or 277
- Dims down to less than 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements

Wiring Diagram



Compatible Dimmers

Wall Box (ELV Style)

Lutron "Diva"	Lutron "Vareo"
Lutron "Nova-T"	Lutron "Skylark"
Lutron "Maestro"	
Leviton "Surslide"	Leviton "Vizio"

Central System

ETC "SR" Rack w/ELV10 Module	ETC "DRD" Rack w/ELV10 Module
Lutron "GP" Panel with PHPM-PA Interface	Lutron Grafix Eye QS with PHPM-PA Interface

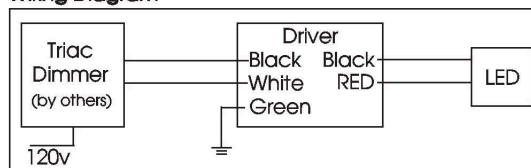
TRIAC (Forward Phase) DIMMING (standard)

Utilizes "Standard" incandescent dimmers that are in wide use in installations across the US. Best for retrofit applications where Triac dimmers are installed.

Notes:

- 120v or 277v
- Dims down to less than 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements per dimming manufacturer

Wiring Diagram



Compatible Dimmers

Wall Box (Incandescent Style, Wattage as required)

Lutron "Diva"	Lutron "Vareo"
Lutron "Nova-T"	Lutron "Skylark"
Lutron "Maestro"	

Central System

ETC "SR" Rack w/D20 Module	ETC "DRD" Rack w/D20 Module
Lutron "GP" Panel	Lutron Grafix Eye QS



EVOKE® ROUND LENS WALL WASH

4.75" ROUND LENS WALL WASH LED

E4.75RLW-A14
LED



TYPE:



LUTRON HI-LUME / ECO-SYSTEM (-HILUME Option)

Integrates into a variety of building management and daylighting controls

Notes:

- 120v or 277v
- Dims down to less than 5% light output
- May use 3-Wire or Ecosystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

Compatible Dimmers

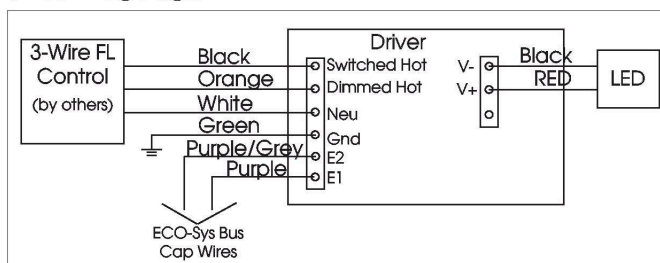
Wall Box (3-Wire Fluorescent)

DIVA
Maestro
Nova T
Vareo

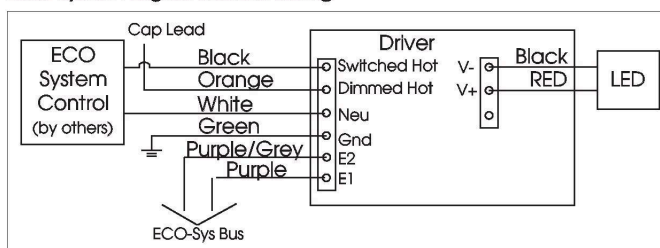
Central System

Lutron ECO-System compatible controls
ETC "SR" Rack w/D20F Module
ETC "DRD" Rack w/D20F Module

3-Wire Wiring Diagram



ECO System Digital Control Wiring



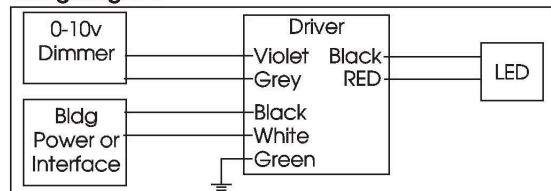
0-10V - DIMMING (-0-10V Option)

Integrates into a variety of building management and daylighting controls

Notes:

- 120v - 277v
- Dims down to less than 10% light output
- Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

Wiring Diagram



Compatible Dimmers

Wall Box

Lutron "Diva" - DDTV with
PP-120H Interface

Leviton Renoir II 0-10v

Central System

Lutron Grafix Eye with
GRX-TVI Interface



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F55

EXTERIOR LINEAR WHITE LED

Manufacturer: COLOR KINETICS

Fixture Line: VAYA

Fixture: LINEAR EXTERIOR MP (WHITE & MONO)

Catalog #: 912400130128

Mounting: SURFACE

Fixture Wattage: 60w

Fixture Voltage: 277 VAC

Load Type: Non-Dim

Lamp Spec: LED, 3000K, 840 lm/ft

Fixture Specification Notes

1) PROVIDE LEADER CABLE AND BRACKET AS
REQUIRED



Data sheet

PHILIPS

Vaya Linear MP, White & Mono

Vaya Linear MP White & Mono is a reliable and cost effective LED lighting fixture designed for white or mono color lighting effects. With wide and elliptical beam options, Vaya Linear MP is ideal for wall washing and grazing applications. Two lengths and daisy-chain connectors make this product versatile and easy to use.



Key Features

- Reliable, cost effective LED lighting fixture
- Available in standard 3000K or 4000K
- Custom options: 2700K, 5000K, R, G, B, A
- Available with 10°x50° or 50° Beams
- Auto-ranging 100V – 277V, 50 / 60Hz input
- Interior / Exterior - IP66
- DLC-listed with 5 years limited warranty

Product Data

Width	64 mm (2.5in)	
Height	102 mm (4.0in) including mounting hinge	
Length	310 mm (1 ft)	1210 mm (4 ft)
Mounting	Location adjustable and tilting surface-mount bracket	
Source	High-brightness White or Mono Color LEDs	
Beam Angle	Elliptical (10° x 50°) or Wide (50°)	
Luminous Flux	840 lumens	3,360 lumens
CRI	80Ra	
Efficacy	58 lm/W	
Lumen Maintenance	50,000 hrs L ₇₀ at 25°C	
Housing	Extruded aluminum, anodized finish RAL7043	
Weight	1.3 kg (2.85 lbs)	3.6kg (7.9 lbs)
Connection	Daisy-chain power input and output connectors	
Lens	Tempered Glass	
Control	On/Off, Not dimmable	
Input Voltage	100V – 277 VAC, 50 / 60Hz	
Power Consumption	18 W (White)	60 W (White)
Temperature Range	-20°C to 40°C (-4°F ~ 104°F) start-up temperature -40°C to 40°C (-40°F ~ 104°F) operating temperature	
Protection Rating	IP66, Wet location listed, IK06	
Certifications	UL / cUL, FCC Class A, CE, CB	
Warranty	5 Years	

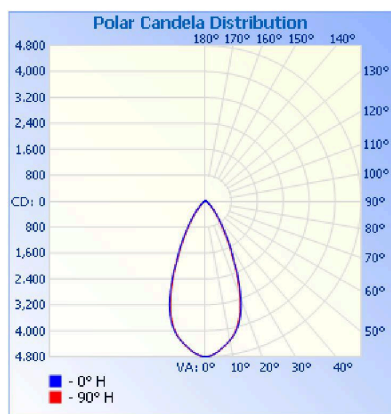
Data sheet

Photometrics (Per IESNA LM-79):

PHILIPS

Vaya Linear MP 3000K, 50deg, 1.2m (4ft)

Polar Candela Distribution



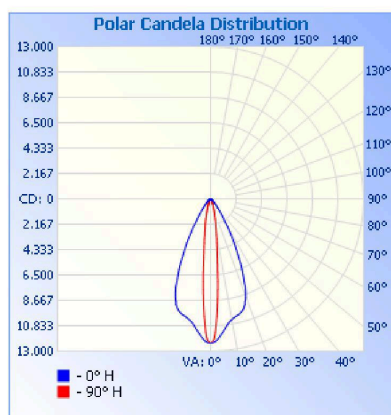
Illuminance at a Distance

	Center Beam LUX	Beam Width
1.3M	2,699.81 LUX	1.2M 1.2M
2.7M	674.95 LUX	2.3M 2.3M
4.0M	299.98 LUX	3.5M 3.5M
5.3M	168.74 LUX	4.7M 4.7M
6.7M	107.99 LUX	5.8M 5.8M
8.0M	74.99 LUX	7.0M 7.0M

Im = 3.28ft

Vaya Linear MP 3000K, 10x50deg, 1.2m (4ft)

Polar Candela Distribution



Illuminance at a Distance

	Center Beam LUX	Beam Width
1.3M	6,923.60 LUX	1.2M 0.3M
2.7M	1,730.90 LUX	2.5M 0.5M
4.0M	769.29 LUX	3.7M 0.8M
5.3M	432.72 LUX	4.9M 1.1M
6.7M	276.94 LUX	6.1M 1.3M
8.0M	192.32 LUX	7.4M 1.6M

Im = 3.28ft

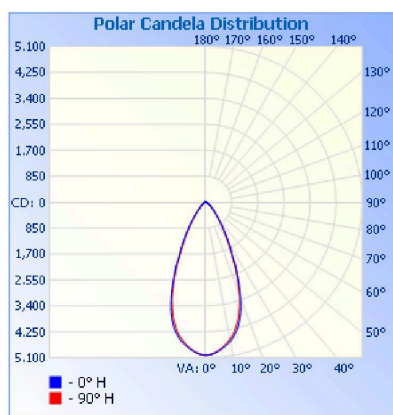
PHILIPS

Data sheet

Photometrics (Per IESNA LM-79):

Vaya Linear MP 4000K, 50deg, 1.2m (4ft)

Polar Candela Distribution



Illuminance at a Distance

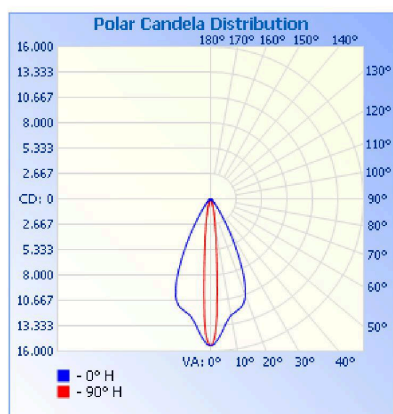
	Center Beam LUX	Beam Width
1.3M	2,823.54 LUX	1.2M 1.2M
2.7M	705.88 LUX	2.4M 2.3M
4.0M	313.73 LUX	3.5M 3.5M
5.3M	176.47 LUX	4.7M 4.6M
6.7M	112.94 LUX	5.9M 5.8M
8.0M	78.43 LUX	7.1M 6.9M

■ Vert. Spread: 47.7° ■ Horiz. Spread: 46.7°

Im = 3.28ft

Vaya Linear MP 4000K, 10x50deg, 1.2m (4ft)

Polar Candela Distribution



Illuminance at a Distance

	Center Beam LUX	Beam Width
1.3M	8,658.73 LUX	1.2M 0.2M
2.7M	2,164.68 LUX	2.4M 0.5M
4.0M	962.08 LUX	3.7M 0.7M
5.3M	541.17 LUX	4.9M 0.9M
6.7M	346.35 LUX	6.1M 1.2M
8.0M	240.52 LUX	7.3M 1.4M

■ Vert. Spread: 49.2° ■ Horiz. Spread: 9.9°

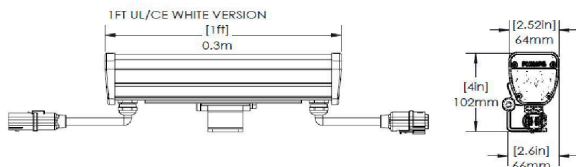
Im = 3.28ft

PHILIPS

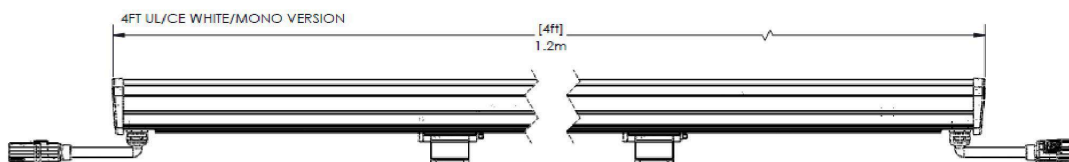
Data sheet

Dimensions:

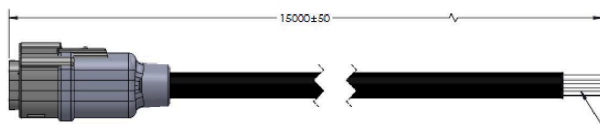
0.3m (1ft) Length



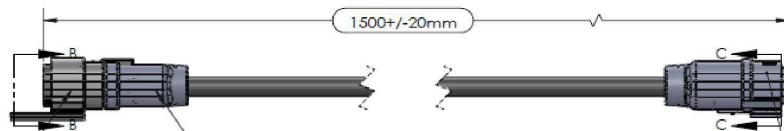
1.2m (4ft) Length



Leader Cable Dimensions:



Jumper Cable Dimensions:



Data sheet

PHILIPS

Vaya Linear MP White & Mono Ordering Codes:

CCT	Length	Beam Angle	Philips I2NC	Item Number	Certification
3000K	1ft	50°	912400130125	350-000011-08	UL
3000K	1ft	10° X 50°	912400130126	350-000011-09	UL
3000K	4ft	50°	912400130127	350-000011-10	UL
3000K	4ft	10° X 50°	912400130128	350-000011-11	UL
4000K	1ft	50°	912400130129	350-000011-12	UL
4000K	1ft	10° X 50°	912400130130	350-000011-13	UL
4000K	4ft	50°	912400130131	350-000011-14	UL
4000K	4ft	10° X 50°	912400130132	350-000011-15	UL

¹Custom options include 2700K, 5000K, Red, Green, Blue, Amber version in either lengths or beam angles.

Vaya Linear LP-MP White & Mono Cables:

Length	Product	Philips I2NC	Item Number	Certification
50ft	White Leader Cable	912400130050	308-000003-06	UL
5ft	White Jumper Cable	912400130052	308-000003-08	UL

Vaya Linear MP Accessories:

Product	Length	Philips I2NC	Item Number	Certification
Mounting Hinge	1 piece	912400133635	320-000011-02	UL/cUL, CE, CQC



Data sheet

PHILIPS

CCT	Length	Beam Angle	Philips I2NC	Item Number	Certification
2700K	1ft	50°	912400130145	350-000011-28	UL
2700K	1ft	10° X 50°	912400130146	350-000011-29	UL
2700K	4ft	50°	912400130147	350-000011-30	UL
2700K	4ft	10° X 50°	912400130148	350-000011-31	UL
5000K	1ft	50°	912400130157	350-000011-40	UL
5000K	1ft	10° X 50°	912400130158	350-000011-41	UL
5000K	4ft	50°	912400130159	350-000011-42	UL
5000K	4ft	10° X 50°	912400130160	350-000011-43	UL
Red	1ft	50°	912400130084	325-000011-16	UL
Red	1ft	10° X 50°	912400130085	325-000011-17	UL
Red	4ft	50°	912400130086	325-000011-18	UL
Red	4ft	10° X 50°	912400130087	325-000011-19	UL
Green	1ft	50°	912400130088	325-000011-20	UL
Green	1ft	10° X 50°	912400130089	325-000011-21	UL
Green	4ft	50°	912400130090	325-000011-22	UL
Green	4ft	10° X 50°	912400130091	325-000011-23	UL
Blue	1ft	50°	912400130092	325-000011-24	UL
Blue	1ft	10° X 50°	912400130093	325-000011-25	UL
Blue	4ft	50°	912400130094	325-000011-26	UL
Blue	4ft	10° X 50°	912400130095	325-000011-27	UL
Amber	1ft	50°	912400130096	325-000011-10	UL
Amber	1ft	10° X 50°	912400130097	325-000011-29	UL
Amber	4ft	50°	912400130098	325-000011-30	UL
Amber	4ft	10° X 50°	912400130099	325-000011-31	UL



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F56

STEP LIGHT

Manufacturer: JUNO

Fixture Line: MINI LED STEP LIGHTS

Fixture: RECESSED LED STEPLIGHT

Catalog #: LMS-3K-OPTICS-FINISHES

Fixture Wattage: 2.6w

Fixture Voltage: 120 VAC

Lamp Spec: LED, 3000K



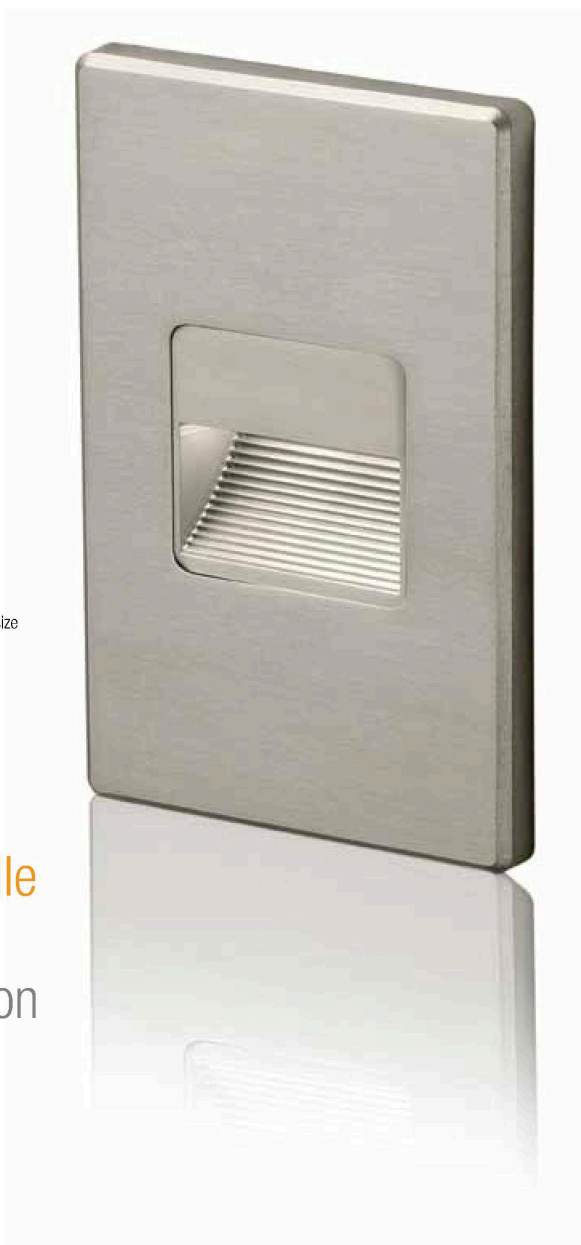


Juno Mini LED Step Lights make a big impression

For such a small fixture, Juno Mini LED Step Lights make a big impression. These architectural grade fixtures are about the size of a standard switch plate with an approximate aperture size of one-inch square, creating a unique, high-style appearance that blends seamlessly into its environment. An array of beautiful finishes completes the package. With their trendsetting design, extraordinary energy efficiency and long service life, Juno Mini LED Step Lights represent the new standard in upscale low-level lighting.

Shown in actual size

The perfect, **low-profile**
lighting solution for
virtually any application





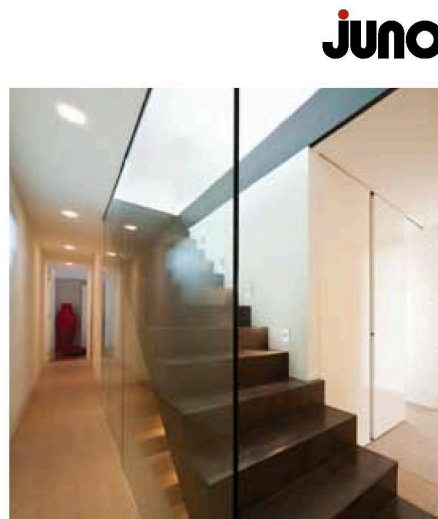
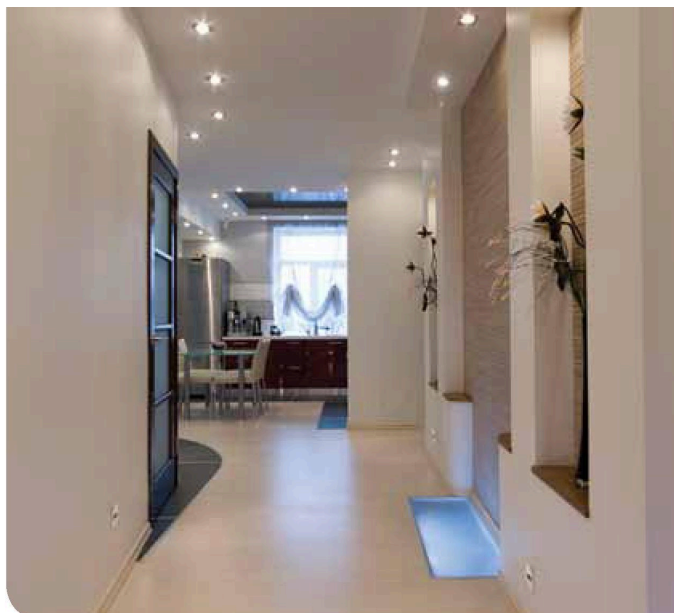
The ultimate **versatility** in design

A little light goes a long way. The compact, unique and modular construction of the Juno Mini LED Step Lights provides solutions for a diverse number of applications. The IC-rated, all-in-one design includes the 3W LED light engine, 120-volt dimmable driver, optic and decorative face plate that all mount directly to a standard 2" x 4" junction box. Choose from four distinct optic designs and a selection of high-quality finishes.



Delivering modular flexibility for **vertical** or **horizontal** installations

Juno Mini LED Step Lights can be mounted in the wall either vertically or horizontally (shipped from the factory in the vertical position). Fixture orientation can be easily changed by simply removing the optic, rotating the mounting plate and re-installing in the horizontal orientation. The face plate easily attaches to the back plate with a single set screw. Juno Mini LED Step Lights provide unsurpassed flexibility for virtually any installation.



Juno

Performance Optics

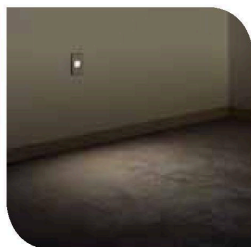
Flexible options to meet your needs

Four striking optical designs satisfy a variety of illumination and aesthetic requirements.

All four optics create a one-of-a-kind lighting effect – ranging from a subtle pool of accent lighting to wide distributions ideally suited for steps and pathways. Juno Mini LED Step

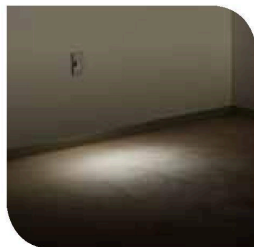
Lights are adaptable to a variety of low level applications.

Marker



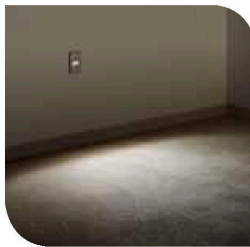
The opal lens produces an attractive glow ideal for marking corridors or pathways.

Hood



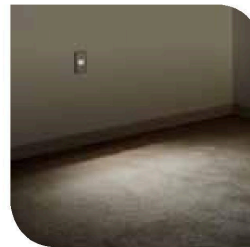
Casts a pleasant pool of light at floor level while eliminating glare - ideal for theatre or auditorium lighting.

Cutoff



Balances low glare with a wide light pattern for steps and pathway lighting.

Louver



Integral louver provides superior shielding, making it an excellent choice for step lighting and other low level applications.

Finishes



Juno Mini LED Step Lights are available for both indoor and outdoor applications.

High-quality indoor finishes include plated bronze and satin nickel; outdoor/wet location units are finished with corrosion-resistant textured bronze or silver for superior durability.

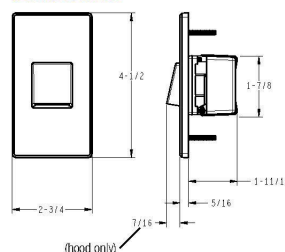
All fixtures are also available in white or black.

Indoor (LMS) finishes

Shown in vertical orientation



Dimensions:



LMS - Indoor
(Shown in vertical orientation)

IP65

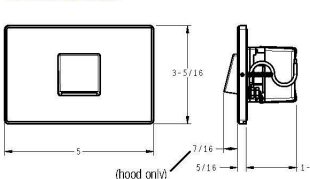


Outdoor/Wet Location (LMSW) finishes

Shown in horizontal orientation



Dimensions:



LMSW - Wet Location
(Shown in horizontal orientation)

Ordering Information



Ordering Example: **LMS-3K-C-BL, LMSW-41K-L-SR**

Catalog #	Color Temperature	Optics	Finishes
LMS - Indoor LMSW - Wet Location	3K - 3000K 41K - 4100K	C - Cutoff L - Louver H - Hood M - Marker	Indoor: BL - Black, Textured WH - White, Textured SN - Satin Nickel, Plated BZ - Bronze, Plated Wet Location: BL - Black, Textured WH - White, Textured SR - Silver, Textured BZ - Bronze, Textured

G5.6.7



Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

PRODUCT DESCRIPTION

The LMSW Mini LED step light is designed for installation in outdoor or indoor wall mount applications using standard junction boxes (not supplied) • IC rated for direct contact with insulating materials • Four distinct optics conceal LEDs and provide unique light distribution patterns • Modular design allows fixture to be mounted in horizontal or vertical orientation • Ideal for residential or commercial applications • Designed to provide 50,000 hours of life • 5 year warranty on LED components.

ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- No harmful ultraviolet or infrared wavelengths
- No lead or mercury

PRODUCT SPECIFICATIONS

LED Light Engine Utilizes two 1-watt high lumen LEDs binned to Energy Star standards • 3000K or 4100K color temperatures are available • Mounted directly to aluminum heat sink for superior thermal management.

Optics Available in hood, cutoff, louver, and marker optics to conceal LEDs and provide four unique light distribution patterns • Fixture provided in vertical orientation from factory.

Faceplates May be mounted in vertical (as provided from factory) or horizontal orientation • Fastens using 0.05 allen wrench provided with fixtures • Available in textured silver, bronze, black and white corrosion resistant paint.

LED Driver Accommodates an input voltage of 120 VAC at 60Hz • Power factor > 0.9 at 120V input • Driver is dimmable with the use of Juno qualified 120V electronic low voltage dimmers.

Mounting Designed to mount directly in standard J-Boxes: 2" x 4" (2 1/8" minimum depth) or 4" x 4" (1 1/2" minimum depth) fitted with a single-gang plaster ring 5/8" minimum depth • Modular design allows fixture to be mounted in horizontal or vertical orientation • J-Boxes and plaster ring are not provided • Gasketed to seal against intrusion of water and other contaminants in wet locations.

Life Rated for 50,000 hours at 70% Lumen Maintenance.

Labels UL listed for wet locations and through-branch wiring, maximum 4 No. 12 AWG 75° C through branch circuit conductors for 2 x 4 junction box or maximum 8 No. 12 AWG 75° C through branch circuit conductors for 4 x 4 junction box • UL and cUL Listed, RoHS compliant • IP65 rated.

Testing All reports are based on published industry procedures; field performance may differ from laboratory performance.

Product specifications subject to change without notice.

ELECTRICAL DATA

Input Voltage	120V
Input Power	2.6W
Input Current	0.03A
Frequency	60Hz
Minimum starting temp	-20°C (-4°F)

REV-3/11

MINI LED STEP LIGHT

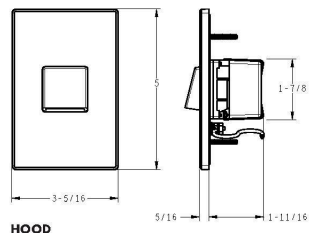
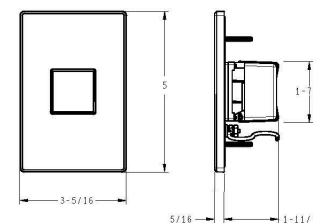
OUTDOOR/WET LOCATION

LED
LMSW
IP65

CUTOFF
 (VERTICAL ORIENTATION)

HOOD
 (HORIZONTAL ORIENTATION)

LOUVER
 (HORIZONTAL ORIENTATION)

MARKER
 (VERTICAL ORIENTATION)
DIMENSIONS**HOOD****MARKER, LOUVER, CUTOFF**

Note: Vertical orientation shown. All fixtures can be mounted in vertical or horizontal orientation.

DIMMER COMPATIBILITY

- Requires 120V AC electronic low voltage wall box dimmer
- Electronic low voltage dimmers require a neutral wire in the wall box • 100% to 20% or better dimming range depending on dimmer model with one fixture load minimum to maximum rated load for dimmer.

Juno qualified dimmers include:

Lutron® Model Numbers:

Nova T☆® NTELV Series
 Skylark® SELV Series
 Diva® DVELV Series
 Maestro® MAELV Series
 Faedra® FAELV Series
 Spacer System® SPSELV Series

Leviton® Model Numbers:

Illumatech™ IPE04 Series
 (dimmer has manual trim adjustment for low end of dimming range to achieve 5% dimming)





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F56

G5.6.7

MINI LED STEP LIGHT









OUTDOOR/WET LOCATION

LED

LMSW

ORDERING INFORMATION

Example: LMSW-3K-L-WH

Housing	Color Temperature	Optic	Finishes
LMSW	3K 3000K 41K 4100K	C Cutoff   L Louver   H Hood   M Opal Marker  	BL Black, Textured WH White, Textured SR Silver, Textured BZ Bronze, Textured



1300 S. Wolf Road • Des Plaines, IL 60018 • Phone (847) 827-9880 • Fax (847) 827-2925
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Visit us at www.junolightinggroup.com

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KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F57

FLOOR LAMP SHADE

Manufacturer: TOM DIXON

Fixture Line: BRONZE COPPER SHADE FLOOR LAMP

Fixture: Floor Lamp Shade

Catalog #:

Fixture Wattage: 9.5w

Fixture Voltage: 120

Lamp Spec: (PHILIPS LIGHTING) PHILIPS LED A
SHAPE
MODEL: LED 9.5W E26 2700K 120V
A10





Bronze Copper Shade Floor Lamp

By Tom Dixon



Details

- Designed by Tom Dixon
- Spherical polycarbonate shade
- Vacuum metallized Brass exterior and Copper interior
- 137" White fabric cord
- Foot switch
- Black rubber ring stand
- Not UL/ETL Listed
- Made In India

Dimensions

Fixture: Height 17.7", Diameter 16.4"

Lighting

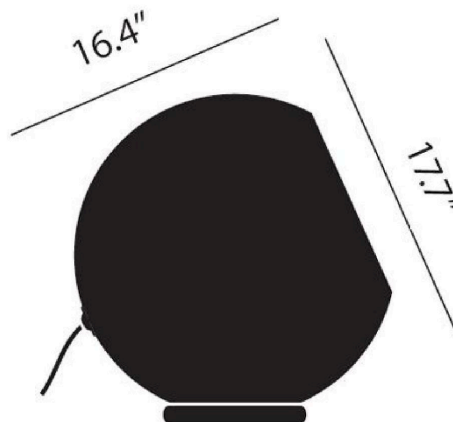
- One 60 Watt (600 Lumens) 120 Volt E26 Base Incandescent Lamp(s) (Not Included)

Additional Details

Product URL:

<http://www.lumens.com/bronze-copper-shade-floor-lamp-by-tom-dixon-uu326147.html>

Rating: Not UL/ETL Listed



Notes:

Product ID: uu326147

Prepared by:

Prepared for:

Project:

Room:

Placement:

Approval:





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F57.1

DECORATIVE FLOOR LAMP

Manufacturer: TOM DIXON

Fixture Line: MIRROR BALL STAND

Fixture: Floor Lamp Stand

Catalog #:

Mounting: PORTABLE





Mirror Ball Stand

By Tom Dixon



Details

- Made of stainless steel
- For use with floor lamp only

Dimensions

Item: Height 47"

Additional Details

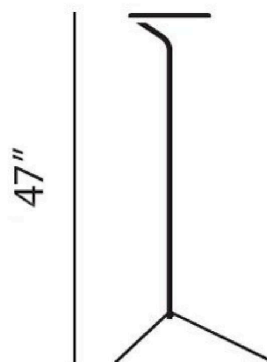
Product URL:

<http://www.lumens.com/mirror-ball-stand-by-tom-dixon-uu326133.html>

Rating: Not UL/ETL Listed



Shown in Stainless Steel



Notes:

Product ID: uu326133

Prepared by:

Prepared for:

Project:

Room:

Placement:

Approval:





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F58

LED WALL PACK

Manufacturer: RAB LIGHTING

Fixture Line: SLIM12Y

Fixture: LED SMALL EXTERIOR WALL PACK

Catalog #: SLIM12Y

Mounting: WALL MOUNTED

Fixture Wattage: 14w

Fixture Voltage: 277

Lamp Spec: LED, 3000K





SLIM12Y

12, 18 and 26 Watt SLIM wallpacks are ultra efficient and deliver impressive light distribution with a compact low-profile design that's super easy to install as a downlight or uplight.

LED Info

Watts: 12W
Color Temp: 3000K (Warm)
Color Accuracy: 82
L70 Lifespan: 100000
LM79 Lumens: 1,019
Efficacy: 72 LPW

Driver Info

Type: Constant Current
120V: 0.12A
208V: 0.08A
240V: 0.07A
277V: 0.06A
Input Watts: 14W
Efficiency: 85%

Technical Specifications

UL Listing:

Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

IP Rating:

Ingress Protection rating of IP66 for dust and water.

LED:

Multi-chip, long-life LED.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Driver:

Constant Current, Class 2, 100-277V, 50/60 Hz., 4KV surge protection, 350mA, 100-240VAC 0.3-0.15 Amps, 277VAC 0.15Amps, Power Factor 99%.

THD:

10.4% at 120V

Input Watts:

14W.

Output Lumens:

1,019.

Color Accuracy (CRI):

82 CRI

Correlated Color Temp. (Nominal CCT):

3000K

Cold Weather Starting:

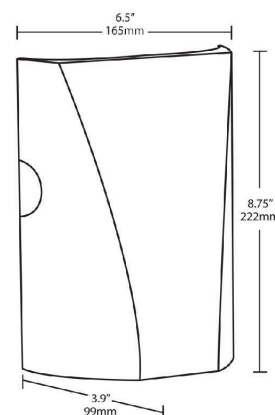
The minimum starting temperature is -40°F/-40°C.

Ambient Temperature:

Suitable for use in 40°C (104°F) ambient temperatures.

Color: Bronze

Weight: 4.5 lbs



Thermal Management:

Superior heat sinking with internal Air-Flow fins.

Housing:

Precision die-cast aluminum housing.

Mounting:

Heavy-duty mounting bracket with hinged housing for easy installation.

Recommended Mounting Height:

Up to 8 ft.

HID Replacement Range:

The SLIM12 can be used to replace 70W MH based on delivered lumens.

Lens:

Tempered glass lens.

Reflector:

Specular thermoplastic.

Gaskets:

High-temperature silicone.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

ADA Compliant:

SLIM™ is ADA Compliant.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.



SLIM12Y - continued

Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Green Technology:

Mercury and UV free, and RoHS compliant.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

Patents:

The design of the SLIM™ is protected by patents in U.S. Pat D681,864, and pending patents in Canada, China, Taiwan and Mexico.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods--Buy American Act-- Construction Materials (October 2010).

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.





KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F59

RECESSED ROUND DOWNLIGHT

Manufacturer: MODULAR LIGHTING

Fixture Line: SMART KUP 82 LED GE

Fixture: RECESSED ROUND DOWNLIGHT

Catalog #: US_12471509

Mounting: RECESSED

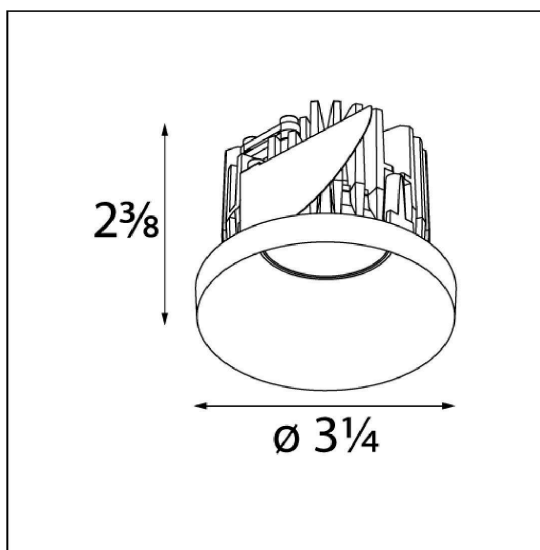
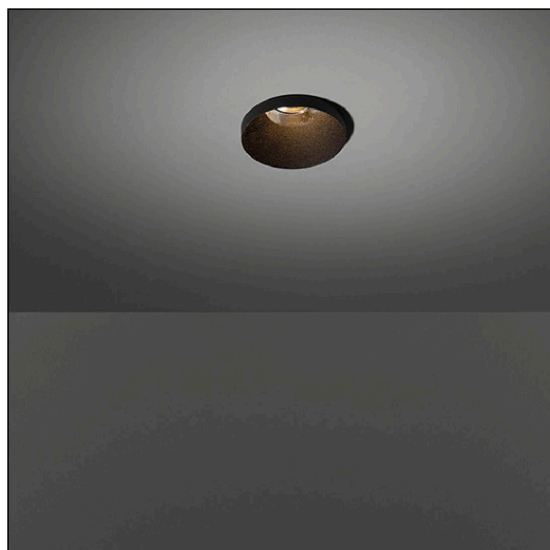
Fixture Wattage: 10.5w

Load Type: LED

Lamp Spec: LED, 3000K, 814 lm



SMART KUP



SMART KUP 82 LED GE

Smart kup is one of the 3 forms of the Smart family. The cone of the Smart kup ends in a fine trim. A trim particular Modular. The same subtle trim is used in several other Modular luminaires. The Smart family's styling is based on our most popular designs. Concretely this means that the luminaires consist of a light source (LED or halogen) which can be combined with one of three trims to suit your needs. The new spotlights can be combined with Smart mask, Smart surface box or surface tubed to form the perfect solution for any interior. Choose a white, black or gold finishing. Also available in different sizes, fix and adjustable, IP version, ...

Art. Nr. US_12471509

SPECIFICATIONS

Lamp	1x LED Array
Gear / Transfo	LED gear not incl.
Cut-out size	Ø 2"3/4 h 2"3/8
Weight	0.79lbs
Min. Distance	4 in.
IP	IP20
Glow Wire Test	960°
Source lifetime	50000 hrs
CRI	90
Power supply	500mA 21Vf
Connected load	10.5W
Lumen	814lm
Efficacy	77lm/W
UGR	18
Remark	! 3500K on request ! suitable for damp locations ! can be combined with Smart mask ! has to be used with surface box or appropriate housing (GI)

	WARM WHITE 2700K / CRI 90+		WARM WHITE 3000K / CRI 90+	
	MEDIUM 25°	FLOOD 50°	MEDIUM 25°	FLOOD 50°
black struc	US_12471032	US_12471232	US_12471432	US_12471532
gold	US_12471046	US_12471246	US_12471446	US_12471546
white struc	US_12471009	US_12471209	US_12471409	US_12471509





SMART KUP



SMART KUP 82 LED GE	
ACCESSORIES	
IC-BOX	
US_12065401	IC Box Smart 82 LED 0-10V
US_12065501	IC Box Smart2x 82 LED 0-10V
IC-UAT	
US_12065301	UAT IC Box Smart2x 82 LED 0-10V
US_12065201	UAT IC Box Smart 82 LED 0-10V



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

F60

RECESSED ROUND DOWNLIGHT

Manufacturer: MODULAR LIGHTING

Fixture Wattage: 10.5w

Fixture Line: SMART CAKE 82 LED GE

Fixture: RECESSED ROUND DOWNLIGHT

Load Type: LED

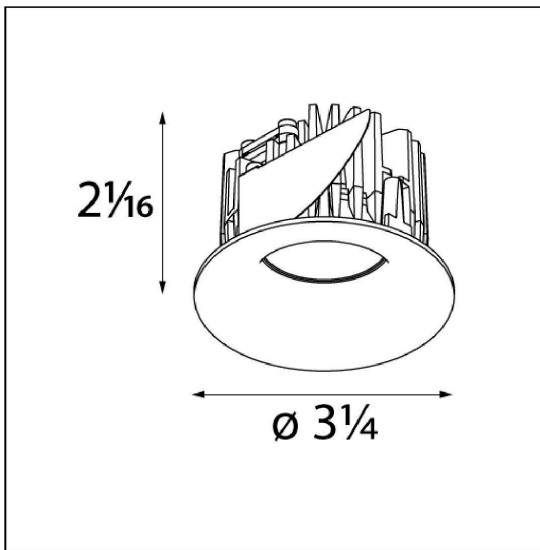
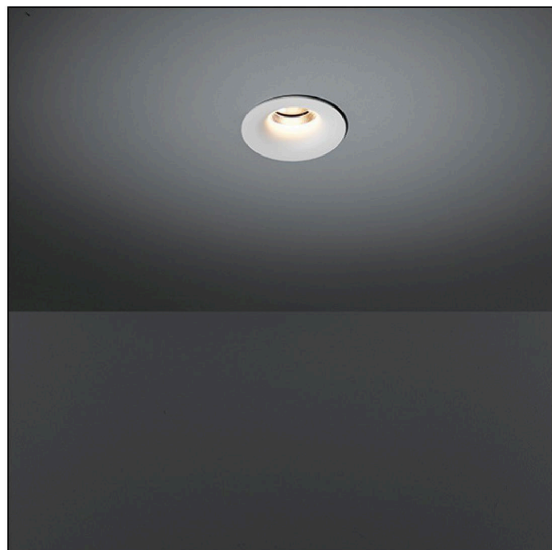
Catalog #: US_12411509

Mounting: RECESSED

Lamp Spec: LED, 3000K, 736 lm



SMART CAKE



SMART CAKE 82 LED GE

Smart cake is part of the Smart family. This family's styling is based on our most popular iconic designs. Its gently sloping sides ensure a soft distribution of light. Since its introduction in 2010, Smart has become an extensive portfolio with a broad range of accessories. Concretely this means that the luminaires consist of a LED light source which can be combined with one of three trims to suit your needs. The new spotlights can be combined with Smart mask or Smart surface box to form the perfect solution for any interior.

Art. Nr. US_12411509

SPECIFICATIONS

Lamp	1x LED Array
Gear / Transfo	LED gear not incl.
Cut-out size	Ø 2"3/4 h 2"3/8
Weight	0.80lbs
Min. Distance	4 in.
IP	IP20
Glow Wire Test	960°
Source lifetime	50000 hrs
CRI	90
Power supply	500mA 21Vf
Connected load	10.5W
Lumen	736lm
Efficacy	70lm/W
UGR	22
Remark	! 3500K on request ! suitable for damp locations ! can be combined with Smart mask ! has to be used with surface box or appropriate housing (GI)

	WARM WHITE 2700K / CRI 90+		WARM WHITE 3000K / CRI 90+	
	MEDIUM 25°	FLOOD 50°	MEDIUM 25°	FLOOD 50°
black struc	US_12411032	US_12411232	US_12411432	US_12411532
gold	US_12411046	US_12411246	US_12411446	US_12411546
white struc	US_12411009	US_12411209	US_12411409	US_12411509





SMART CAKE



SMART CAKE 82 LED GE	
ACCESSORIES	
IC-BOX	
US_12065401	IC Box Smart 82 LED 0-10V
US_12065501	IC Box Smart2x 82 LED 0-10V
IC-UAT	
US_12065301	UAT IC Box Smart2x 82 LED 0-10V
US_12065201	UAT IC Box Smart 82 LED 0-10V



KAPLAN GEHRING MCCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

LC01

DMX LIGHTING CONTROL

Manufacturer: Dynalite

Fixture Line: NETWORK GATEWAY

Fixture: DMX GATEWAY

Catalog #: (2) DDNG485 (Philips 12NC - 913703081209) + power supply and DIN enclosure

Mounting: SURFACE

Fixture Voltage: 120

Load Type: Non-Dim

Lamp Spec: N/A



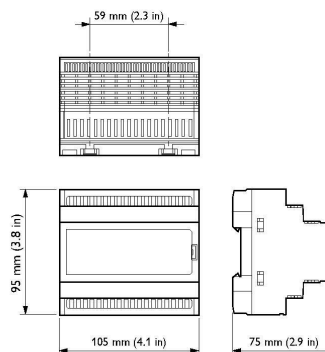


DDNG485 Network Gateway

Flexible network communications gateway for DyNet RS-485 networks

The Philips DYNALITE DDNG485 is a flexible network communications bridge designed for RS-485 networks. The two opto-isolated RS-485 ports enable the DDNG485 to implement a trunk and spur topology on large project sites, with the bridge providing a high-speed backbone opto-coupled to many lower speed spurs.

- Electrical fault isolation — Faults can be isolated to individual network spurs.
- Route DyNet to third-party systems — Such as audio-visual and building automation systems, providing an integrated approach to total building control and energy management.
- DMX512 mode — Transmit or receive up to 64 channels of DMX512, with automatic DyNet conversion and task triggering. Provides temporary control of house lights from the DMX512 console in an auditorium scenario.
- Internal controls — Including programmable logic controller capable of assembly and transmission of user-defined data strings.
- Flexible mounting solution — DIN-rail mountable, designed to be installed into a distribution board or other electrical enclosure.



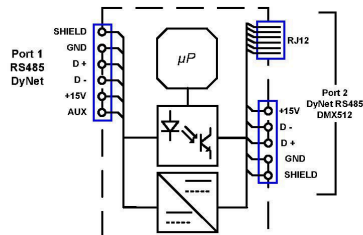
For detailed product information, please refer to the product information pages at www.philips.com/dynalite and follow the links.

Specifications

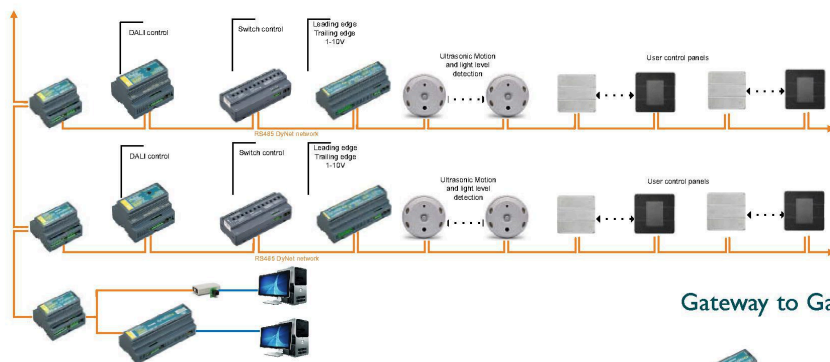
Due to continuous improvements and innovations, specifications may change without notice.

Item	Specification	Details
Electrical	Input Voltage	12 VDC max, 375 mA from the DyNet network (port 1)
	Control Ports	Two RS-485 DyNet / DyNet II serial ports
Control	Serial Port Isolation	3.75 KV RMS optical isolation between ports
	User Controls	Service switch Diagnostic LED
	Internal Controls	Programmable Logic Controller - 64 tasks
	DMX512 Support	DMX512 Receive: 64 channels DMX512 Transmit: 64 channels
	Diagnostic Functions	Device Online/Offline status
	Supply Terminals	Line, Neutral 1 x 4 mm ² max conductor size Earth link bar provided
Physical	Serial Port Terminals	Serial Port 1: SHLD, GND, D+, D-, +12V 1 x 2.5 mm ² max conductor size Serial Port 2: SHLD, GND, D+, D-, +12V 1 x 2.5 mm ² max conductor size 1 x RJ12 socket for plug in connection
	Dimensions (H x W x D)	95 mm x 105 mm x 75 mm (3.8" x 4.1" x 2.9")
	Packed Weight	0.25 kg
	Construction	Polycarbonate DIN-rail enclosure (6 unit)
	Operating Conditions	Temperature: 0 to 50° C ambient Humidity: 0 to 90% non-condensing
	Storage & Transport	Temperature: -25 to 60° C ambient Humidity: 0 to 90% non-condensing
	Certification	CE, C-Tick
Options & Ordering	Standard Product	DDNG485 (Philips 12NC - 913703081209)

Electrical Diagram



Network Topology Example



Gateway to Gateway



Philips Dynalite
6 / 691 Gardeners Road
Mascot, NSW 2020
Australia
Tel: +61 2 8338 9899
Email: dynalite.info@philips.com
Web: www.philips.com/dynalite

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KAPLAN GEHRING McCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

LC02

DMX OUTPUT RECEPTACLE

Manufacturer: PATHWAY CONNECTIVITY

Fixture Line: #1002 eDIN 4-WAY DMX512 OPTO-SPLITTER

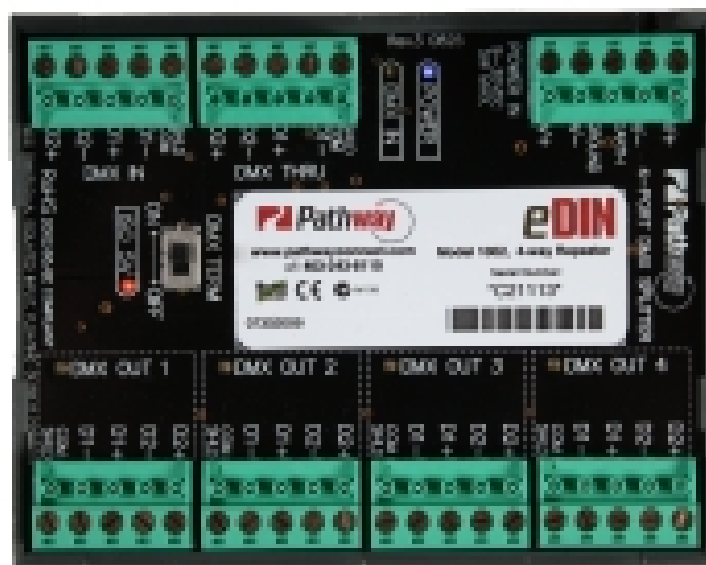
Fixture: eDIN 4-WAY DMX512 OPTO-SPLITTER

Load Type: DMX

Catalog #: 5102 + 5001

Mounting: WALL BOX

Lamp Spec: N/A





Job Name:	Catalog #:
Date:	Notes:

eDIN 4-WAY DMX512 OPTO-SPLITTER

#1002



PRODUCT OVERVIEW

An essential part of any permanent DMX512 distribution system, the DIN-rail mountable eDIN #1002 enables 'star' wiring configurations of DMX512 data lines. Each buffered output is isolated from the DMX input and protects all connected end-devices from harmful electrical faults and ground loops.

FEATURES

- One DMX512 input
- Four buffered DMX512 outputs
- One passive DMX512 thru connector
- Pluggable terminal blocks for all connectors
- Power and data easily daisy-chained between modules
- DMX IN indicator
- DC Power input indicator
- ISO 5V indicator
- Termination switch
- No fuses— self-resetting port protection recovers from voltage faults

SPECIFICATIONS

- 1500V opto-isolation between input and output ports
- 250V fault protection on input and output ports
- Input operating voltage: 9-30 VDC
- 5W power consumption
- Operating conditions: 0-40°C; 10-90% relative humidity, non-condensing

STANDARDS COMPLIANCE

- ANSI E1.11 DMX512-A(2008)/USITT DMX512(1990)
- CE/FCC
- RoHS 2002/95/EC
- Class 2 Low Voltage

WEIGHTS AND DIMENSIONS

- 0.50 lbs (0.26 kg)
- 3.6"W x 4.5"L x 1.5"H (91mm x 115mm x 38mm)

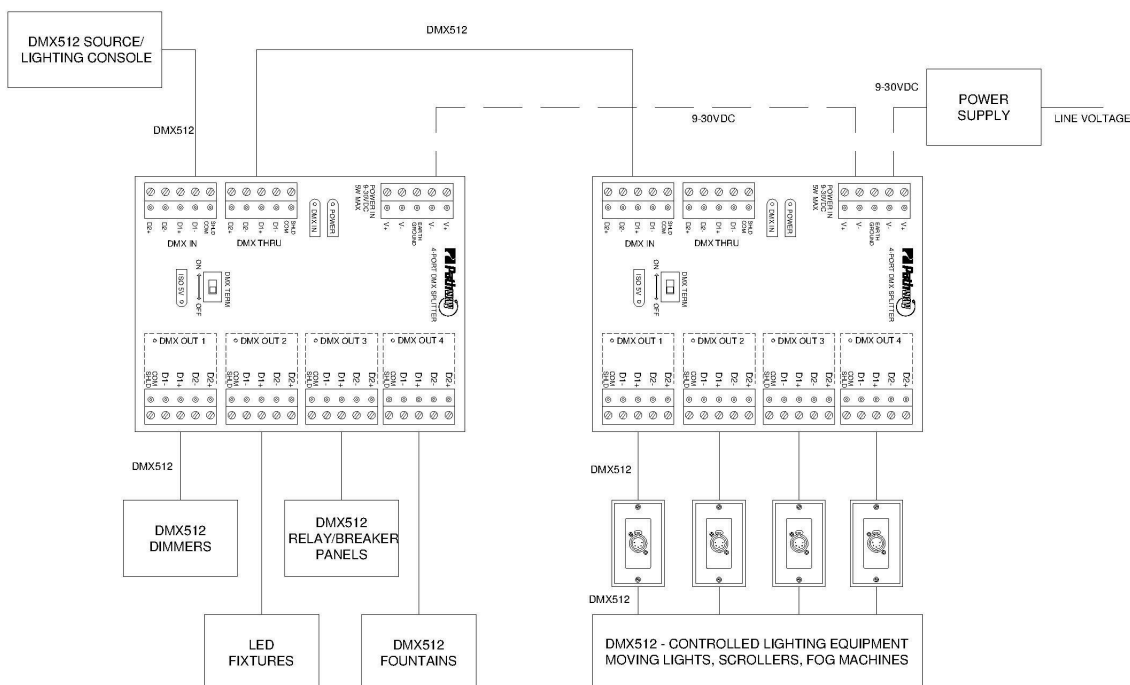
INCLUDED FURNISHINGS

- DIN tray (housing) with end caps
- 12" (300mm) x 35mm DIN rail
- Installation/Operations manual



eDIN #1002 Opto-Splitter

APPLICATION RISER



DMX512-A PINOUT:

XLR PIN #	PURPOSE
1	Shield
2	Data - (complement)
3	Data + (true)
4	Data - (pair 2 complement)
5	Data + (pair 2 true)

ORDERING INFORMATION

PART #	DESCRIPTION
1002	eDIN DMX512 Opto-Splitter, 1 in/4 out
ACCESSORIES	
1001-30	24VDC - 30W DIN-mountable Power Supply
1103	Rack-mount Panel Kit (2RU) with two 16.5" (420mm) sections of DIN rail
1105	Small eDIN Enclosure (NEMA1) with 9.5" (240mm) of vertical DIN rail
1106	Large eDIN Enclosure (NEMA1) with 19.5" (495mm) of vertical DIN rail
1107	Large eDIN Enclosure (NEMA1) with three rows of 9.5" (240mm) horizontal DIN rail
4000	eDIN Enclosure Assembly Service



KAPLAN GEHRING McCARROLL
ARCHITECTURAL LIGHTING

PRACTICE FACILITY - KGM #14098

Back-Check No. 2

Jan 15, 2016

Fixture Type:

LC03

DMX OUTPUT RECEPTACLE
COMBINED WITH
POWERCON RECEPTACLE

Manufacturer: PATHWAY CONNECTIVITY

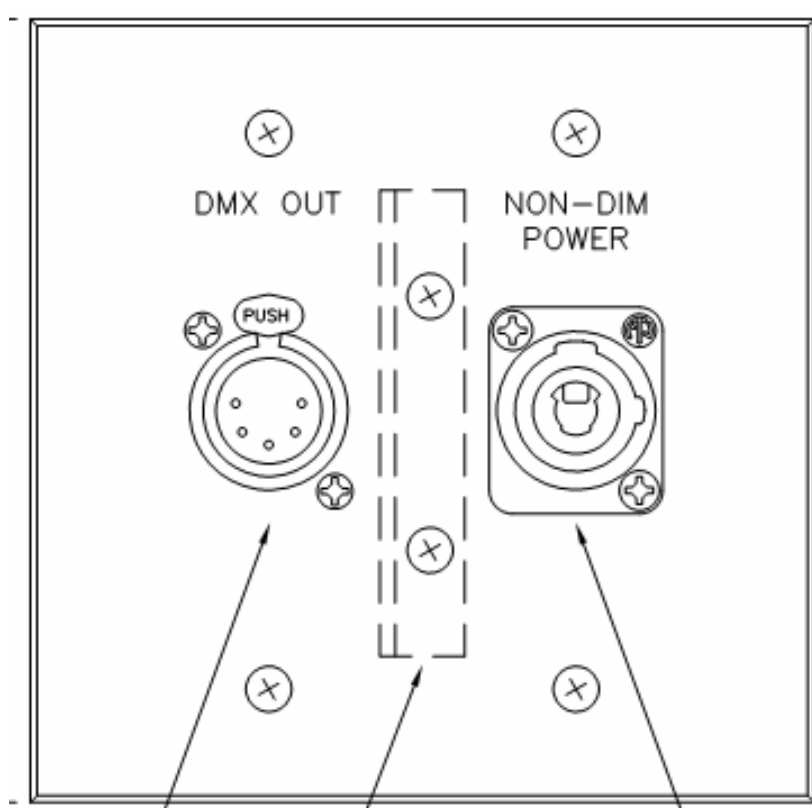
Fixture Line: DMX512 DISTRO

Fixture: CUSTOM RECEPTACLE

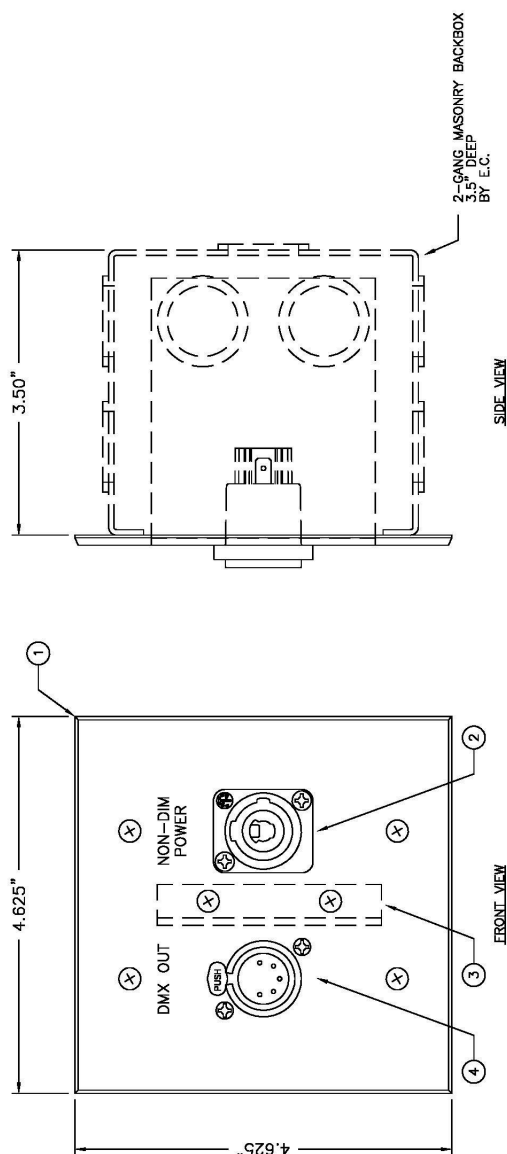
Catalog #: DMX OUT / POWERCON STATION

Mounting: 2 GANG WALL BOX

Lamp Spec: N/A



ITEM	1		DESCRIPTION
	COMPONENT NO.	QTY	
1	2-283—	1	CUSTOM FACE PLATE, 2 GANG, .125 ALUM, BLACK
1A	ENG/RCPT	1	CUSTOM MILL AND ENGRAVING
2	POWER F0101N	1	RECEPTACLE, POWERCON, NEUTRIK NAC3MPB-1
3	2-108754-010	1	VOLTAGE BARRIER
4	1-230064-0000	1	RECEPTACLE WITH PCB, PANEL MTD, NC5FD-1-1



MATERIAL:

PANEL: .125" ALUMINUM

FINISH:

ANEL: FLAT BLACK

LEGENDS:

ENGRAVED:
.125" HIGH WHITE CHARACTERS

BACK BOX MUST BE GROUNDED

[illegible]

DMX512
DISTRO

Receptacles

Custom receptacle plates that ship from stock! Faceplates and inserts can be easily arranged in any configuration, to suit your requirements. In stainless steel or matte black.



5165 BL
RJ45 Pass-Thru

5121 SS
XLR5 Dual M/F Insert



FACEPLATES

Model

Single gang faceplate	5001 (SS/BL)
Double gang faceplate	5002 (SS/BL)
Three gang faceplate	5003 (SS/BL)
Four gang faceplate	5004 (SS/BL)
Five gang faceplate	5005 (SS/BL)
Six gang faceplate	5006 (SS/BL)

DMX512 CONNECTORS

Model

Male 5-pin XLR insert (M)	5101 (SS/BL)
Female 5-pin XLR insert (F)	5102 (SS/BL)
One Male, one Female 5-pin XLR insert (M,F)	5121 (SS/BL)
Two Male 5-pin XLR insert (M,M)	5122 (SS/BL)
Two Female 5-pin XLR insert (F,F)	5123 (SS/BL)
One Male 5-pin XLR, one Ethercon™ RJ45 insert	5141 (SS/BL)
One Female 5-pin XLR, one Ethercon™ RJ45 insert	5142 (SS/BL)

ETHERNET

Model

One Ethercon™ RJ45 insert	5105 (SS/BL)
Two Ethercon™ RJ45 insert	5115 (SS/BL)
One Ethercon™ RJ45, one Male 5-pin XLR insert	5141 (SS/BL)
One Ethercon™ RJ45, one Female 5-pin XLR insert	5142 (SS/BL)
One Ethercon™ Feedthru insert (female RJ45 jack on rear board)	5165 (SS/BL)

HANDHELD REMOTE (Strand)/REMOTE FOCUS UNIT (ETC)

Model

Female 6-pin XLR insert (ETC RFU)	5110 (SS/BL)
Female 6-pin XLR insert (Strand/Colortran HHR)	5111 (SS/BL)
Male 6-pin XLR insert (ETC RFU)	5112 (SS/BL)
Male 6-pin XLR insert (Strand/Colortran HHR)	5113 (SS/BL)
Two Female 6-pin XLR insert (Strand/Colortran HHR)	5124 (SS/BL)
One Male, one Female 6-pin XLR insert (Strand/Colortran HHR)	5125 SS
One Female 6-pin, one Male 5-pin XLR insert (Strand/Colortran HHR)	5131 SS
Two Female 6-pin XLR insert (ETC RFU)	5134 SS
One Female, one Male 6-pin XLR insert (ETC RFU)	5135 SS

no show-stoppers here
www.pathwayconnect.com



DMX512
DISTRO

Receptacles

Custom receptacle plates that ship from stock! Faceplates and inserts can be easily arranged in any configuration, to suit your requirements. In stainless steel or matte black.

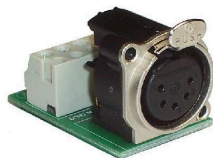


5180BL
Pass-Thru

5201SS
XLR5M to IDC



40-0024



40-0052

PASS-THROUGH CONNECTOR *(NEW!)*

Model

Male/ Female 5-pin XLR Pass-Through w/switch	5180BL
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DMX 512 TO IDC CONNECTORS *(NEW!)*

Model

Male 5-pin XLR insert (M)	5201 (SS/BL)
Female 5-pin XLR insert (F)	5202 (SS/BL)
One Male, one Female 5-pin XLR insert (M,F)	5221 (SS/BL)
Two Male 5-pin XLR insert (M,M)	5222 (SS/BL)
Two Female 5-pin XLR insert (F,F)	5223 (SS/BL)

MISCELLANEOUS

Model

Blank insert	5100 (SS/BL)
One Male 4-pin XLR insert	5103 (SS/BL)
One Female 4-pin XLR insert	5104 (SS/BL)
One Male 3-pin XLR insert	5107 (SS/BL)
One Female 3-pin XLR insert	5108 (SS/BL)
Two Male 3-pin XLR insert	5127 (SS/BL)
Two Female 3-pin XLR insert	5128 (SS/BL)
One Male, one Female 3-pin XLR insert	5129 (SS/BL)
One Female 3-pin, one Female 5-pin XLR insert	5136 (SS/BL)
One BNC bulkhead-type insert	5151 (SS/BL)
Two BNC bulkhead-type insert	5152 (SS/BL)

CONNECTORS WITH TERMINALS ONLY (no insert plate)

Model

One Male 5-pin XLR (D-type)	40-0024
One Female 5-pin XLR (D-type)	40-0025
One Male 6-pin XLR (D-type, Strand HHR)	40-0026
One Female 6-pin XLR (D-type, Strand HHR)	40-0027
One Female 6-pin XLR (D-type, ETC RFU)	40-0028
One Male 6-pin XLR (D-type, ETC RFU)	40-0029
One Male 5-pin XLR (B-type)	40-0051
One Female XLR (B-type)	40-0052
One Male 3-pin XLR (B-type)	40-0062
One Female XLR (B-type)	40-0063

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