

Flowood - Home 2

LED VE Version

*ALL INTERIOR LIGHTING NEEDS TO BE 35K

<u>Qty</u>	<u>Type</u>	<u>Description</u>	<u>MFG</u>	<u>PN#</u>
41	B	PROG SURF 6" LT	PROGRESS	P822222830K9AC1L10
714	C	Juno LED 6" Trim	Juno	6RLDG29356WWH
714	C	Juno 6" Can	Juno	IC22
10	G	LED COVE LIGHT	SIMKAR	LCHFA503KU1
18	H	LED 2X2	HUBBEL	LCAT2235MLGEDU
22	K	WALL MNT STAIRWELL	COLUMBIA	LCL435MLEDU
20	L	LED WRAP	HUBBEL	LAW435MLEDU
41	M	LED 2X4	HUBBEL	LCAT2435GEDU
67	N	Juno WallWash LED	Juno	J6RLEDG435K6WH
67	N	Juno 6" Can	Juno	IC22
2	S	ELEV LIGHT	NSI	VTW15012
2	S	A19 LED LAMP	SATCO	
6	T	BEACON LIGHT	BROWNL	7016C24LED35KBZ
4	W	PROG SURF 6" LT	PROGRESS	P822222830K9AC1L10
21	X	EXIT	COMPASS	CER
57	EM	EMG 2 HEAD	COMPASS	CU2
16	OA	BULLET FLOOD	INSIGHT	MQ230W35K100SMINT1TN
9	OB	ROUND WALLPK	LUMIERE	1235CRDD4LED12012CS
4	OC	WALL PACK SMALL	SATCO	65062
2	OD	GROUND FLOOD	KIM	LTV82FFNF18L4KUV
1	OF	LIGHT STRING 100FT	AMERICAN LTG	LSMS24100BK
1	OF	LED LAMPS BOX 25	AMERICAN LTG	PS14E26WW
1	OF	500' SPOOL CABLE	AMERICAN LTG	LSCABLE500
1	OF	CABLE LOCKS	AMERICAN LTG	LSLOCK
13	OG	SGL HEAD 25FT POLE	DECO	D824LED15050UNVLPT4BZD824PMBZ
5	OH	TRIPLE 25FT POLE	DECO	D824LED15050UNVLPT4BZD824PMBZ
9	OK	WALLPACK	LITH	ASW1LED42C53040KSR3MVOLTDDBXD
2	OL	SGL HEAD 25FT POLE	DECO	D824LED15050UNVLPT4BZD824PMBZ
30	OCC	SWITCH SENSOR	LEV	OSSMTGDW
10	CEILOCC	CEILING OCC SENSOR	WATT	CI205
5	PP	POWER PACK	WATT	BZ50

P8222 Series

LED Flush Mount • Wet Location



Specifications:

Description:

The P8222 delivers a solution for flush mount, for both residential and commercial markets. In addition, the P8222 is wet located and is a cost effective solution for fire rated application. The P8222 features a 120V alternating current source and eliminates the need for a traditional LED driver. This modular approach results in an encapsulated luminaire that unites performance, cost and safety benefits.

Construction:

- Diffused polycarbonate lens controls direct glare from the LEDs
- Simple snap in installation for J-Box
- Die-cast aluminum construction with a powder coat paint finish
- Can be installed in a 4" J-Box
- Lumen output and distribution comparable to a 100W incandescent lamp
- Suitable for use in IC or NON-IC Applications with 25°C (77°F) continuous room side ambient temperature.

Performance:

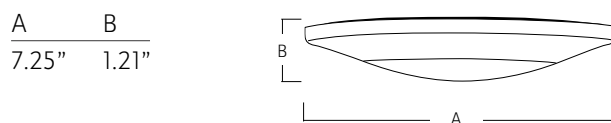
Input Power	17W
Input Voltage	120V
Input Frequency	60Hz
Lumens	1032 (LM-79)
CCT	3000K
CRI	90+
LPW	60
Life	42,000 (L70/TM-21)
EMI/RFI	FCC Title 47, Part 15, Class B
Min. Start Temp	-30° C
Max. Operating Temp	30° C
Warranty	5 yrs.
Labels	cCSAus classified for wet locations ENERGY STAR® qualified

P8222-28/30K9-AC1-L10

Images:

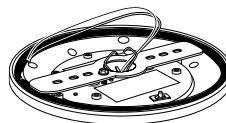


Dimensions:

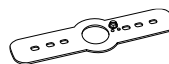


Included Mounting Options:

J-Box Mount



J-Box
Adapter



Catalog number:

Base	Finish	Color Temp	Voltage	Lumen Package
P8222	28 - White	30K9 - 3000K 90 CRI	AC1 - 120V	L10 - 1032 Lumens

Photometrics:

P8222-28/30K9-AC1-L10

ELECTRICAL DATA

P8222-28/30K9-AC1-L10

Input Voltage	120V
Input Frequency	60 Hz
Constant Current Output	700mA
Power Factor	≥0.90
THD	<20%
EMI Filtering	FCC 47CFR Part 15, Class B
Operating Temperature	-30°C to 30°C
Dimming	Yes*

Over-voltage, over-current, short-circuit protected

*See Dimming Notes for more information

PERFORMANCE DATA CHART

Single Unit, Initial Footcandles, 30" Work Plane						Ceiling to Floor Height (ft)	Multiple Units, Initial Footcandles, 30" Work Plane				
Nadir		10°		20°			Spacing is Maximum Over Work Plane, SMH= 1.2				
FC	FC	Dia (ft)	FC	Dia (ft)	FC		Dia (ft)	Fixture Spacing (ft)	RCR 2	RCR 5	RCR 7
32	30	1	24	3	17		4	6	4.0	53	37
13	12	2	10	4	7	6	8	7.0	21	15	12
6	6	3	5	6	3	9	10.5	10.0	10	7	6
4	4	3	3	7	2	11	12	11.0	7	5	4

P8222-28/30K9-AC1-L10

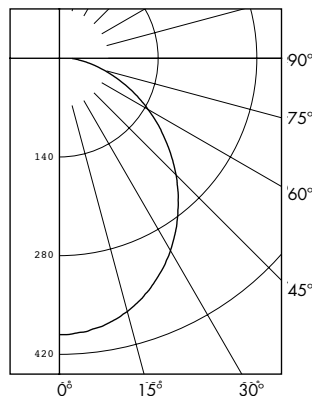
LED Light Engine: 3000K, 90 CRI

System Wattage: 16.4

Fixture delivered lumens: 1032

Fixture Efficacy: 63.0

Spacing Criteria: 1.2



CANDELA DISTRIBUTION

DEG CANDELA

0	392
5	390
15	372
25	337
35	290
45	234
45	175
55	117
65	66
75	28
90	16

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	297	28.8
0-40	478	46.3
0-60	814	78.9
0-90	1032	100.0

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance															
	80%				70%				50%				30%			
	20% Effective Floor Cavity Reflectance															
	% Wall Reflectance															
	70	50	30	10	70	10	50	30	50	30	50	30				
1	108	104	99	95	106	94	97	94	93	90	87	84				
3	90	80	71	65	88	64	75	69	72	67	63	60				
5	76	63	54	48	74	47	60	53	58	52	48	45				
7	65	52	43	37	64	37	50	42	48	41	37	34				
9	57	44	35	30	56	30	42	35	41	34	30	27				

Test No. 14.00618 2768255-4

Tested at 25° Ambient in accordance to IESNA LM-79-2008

P8027-28/30K9-AC1-L10

Test No. 14.00618 2768255-4

P8222 Series

LED Flush Mount • Wet Location



Dimming Notes:

P8222-28/30K9-AC1-L10

P8222 is designed to be compatible with many Electronic Low Voltage (ELV-Reverse Phase) controls. LED rated dimmer controls may offer favorable dimming performance.

The following is a partial list of known compatible dimmer controls:

Electronic Low Voltage ELV Reverse Phase Controls

Leviton	Renoir II	AWRMG-EAW
Lutron	Diva Series	(Part Number DVELV-300)
Lutron	Maestro Series	(Part Number MAELV-600)
Lutron	Nova T Series	(Part Number NTELV-300)
Lutron	Spacer Series	(Part Number SPSELV-600)
Lutron	Vierti Series	(Part Number VTELV-600)

LED Rated Controls

Pass & Seymour	(Part Number DCL453PTCCCV6)
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Incandescent Digital type dimmers are not recommended.

Dimming capabilities will vary depending on the dimmer control, load, and circuit installation.
Always refer to dimmer manufacturer instructions or a controls specialist for specific requirements.

Dimmer control brand names where identified above are trade names or registered trademarks of each respective company.



6" ECONOMY UNIVERSAL IC HOUSING

INCANDESCENT LAMPS

IC22

Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

PRODUCT DESCRIPTION

IC Air-Loc® Housing • Energy efficient, sealed housing • Can be completely covered with insulation • When used with Air-Loc Gasket (see accessories), stops infiltration and exfiltration of air, reducing heating and cooling costs • Trims shown with Air-Loc symbol **Air-Loc** do not require a gasket.

PRODUCT SPECIFICATIONS

Lamp Lamp ratings based on trim selected—see reverse.

Socket Medium base porcelain with nickel-plated copper screw shell • Adjustable socket plate and detachable socket with snap-in springs to accommodate various lamp and trim combinations • Socket plate secured at two points for consistent, straight lamp positioning.

Trims Trim selection shown on reverse.

Labels U.L. listed for through-branch wiring, damp locations and IP • Product thermally protected against improper use of lamps • UL Listed/CSA certified • Trims 239, 241 and 242 are wet location approved for covered ceiling applications • Trims 28, 29 are wet location approved for covered ceiling applications, **when used with outdoor rated lamps.**

Testing All reports are based on published industry procedures; field performance may differ from laboratory performance.

Product specifications subject to change without notice.

INSTALLATION

Real Nail 3 Bar Hangers Telescoping, Patented (US Patent D552,969) Real Nail 3 system permits quick placement of housing anywhere within 24" O.C. joists or suspended ceilings • Integral T-bar notch and clip secures housing in suspended ceiling grid – no accessory clips required • 24" expansion stop allows quick placement of fixture in standard grid spacing • Bars scored in two locations for fast, clean breaking, allowing housing installation in tight applications • Bars captive to mounting frame • Edge-mounted for extra strength • Captive bugle-headed ring shank nail for quick one-step installation and easy removal with claw hammer for fixture relocation • Quick-Loc slot (location identified on the mounting frame) and oversized locking set screw lock fixture in position • Bar hanger foot contoured to align to bottom of construction joist • Alternate mounting holes included.

Junction Box Pre-wired junction box provided with (5) ½" and (1) ¾" knockouts, (4) Non-metallic sheathed cable connectors and ground wire, U.L. listed/CSA certified for through-branch wiring, maximum 8 No. 12 AWG 90° C branch circuit conductors (4 in, 4 out) • Junction box provided with removable access plates • Knockouts equipped with pryout slots.

Mounting Frame 22-gauge die-formed galvanized steel mounting frame • Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation • Sight lines embossed on mounting frame to allow for easy viewing when aligning fixtures.

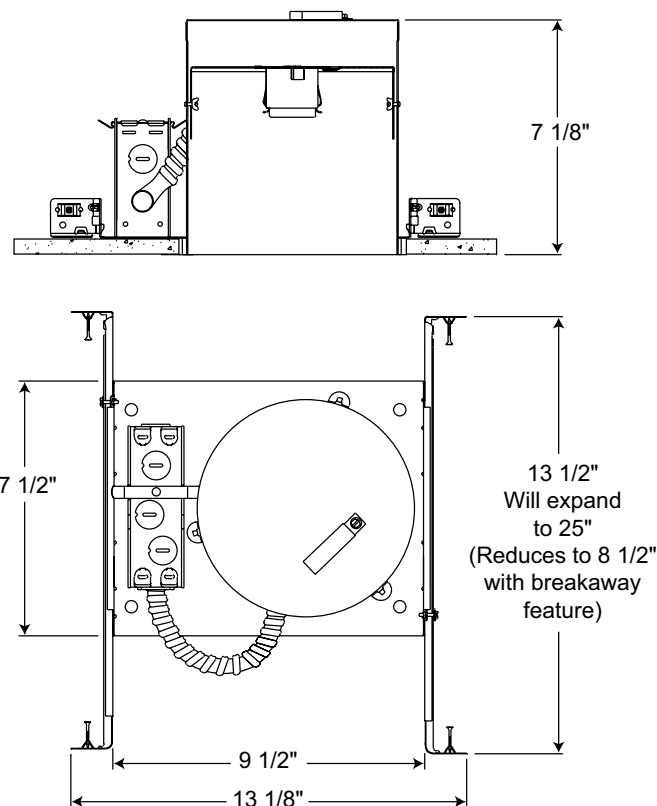
Housing IC housing, .032" aluminum sealed for Air-Loc Compliance • Housing is vertically adjustable to accommodate up to a 1" ceiling thickness.

PRODUCT CODES

Catalog Number	Input Voltage	Lamp Rating (max.)
IC22	120V	A19/BR30/BR40/PAR16/PAR20/PAR30/PAR30L/PAR38/R20 (See reverse for max. trim rating)

REV-5/15

DIMENSIONS



6 7/8" CEILING CUTOUT

ACCESSORIES

Catalog No.	Description
ALG6	Air-Loc Gasket




























To order, specify catalog number.


6" ECONOMY UNIVERSAL IC HOUSING

INCANDESCENT LAMPS

IC22

TRIMS/LAMPS

Cat. No.	Description	Max. Lamp Rating		Cat. No.	Description	Max. Lamp Rating
 **	24B-WH Conical Black Baffle 24B-SC Conical Black Baffle 24B-ABZ Conical Black Baffle 24B-BL Conical Black Baffle 24W-WH Conical White Baffle	50W PAR30, 75W PAR30L, 65W BR30		248W-WH R20 Eyeball in White Baffle	50W PAR20/R20	
 **	25B-WH Straight Black Baffle 25B-SC Straight Black Baffle 25B-ABZ Straight Black Baffle 25B-BL Straight Black Baffle 25W-WH Straight White Baffle	50W PAR30, 65W BR30		249B-WH BR30 Eyeball in Black Baffle 249W-WH BR30 Eyeball in White Baffle	75W PAR30L, 65W BR30	
 	28B-WH ♦♦ Conical Black Baffle 28W-WH ♦♦ Conical White Baffle	60W A19, 65W BR30, 75W PAR30/30L, 90W PAR38, 90W BR40		264B-WH PAR30 Adjustable - Black Baffle 264W-WH PAR30 Adjustable - White Baffle	50W PAR30	
 	29C-WH ♦♦ Deep Cone Clear Cone 29W-WH ♦♦ Deep Cone White Cone	60W A19, 65W BR30, 75W PAR30/30L, 90W PAR38, 90W BR40		267C-WH PAR30 Adjustable - Clear Alzak® 267G-WH PAR30 Adjustable - Gold Alzak® 267B-WH PAR30 Adjustable - Black Alzak® 267HZ-WH PAR30 Adjustable - Haze 267WHZ-WH PAR30 Adjustable - Wheat Haze	50W PAR30	
 **	27C-WH Conical Cone in Clear Alzak® 27G-WH Conical Cone in Gold Alzak® 27B-WH Conical Cone in Black Alzak® 27PT-SC Conical Cone in Pewter Alzak® 27W-WH Conical Cone in Gloss White 27HZ-WH Conical Cone in Haze 27WHZ-WH Conical Cone in Wheat Haze 27WHZ-ABZ Conical Cone in Wheat Haze	50W PAR30, 75W PAR30L, 65W BR30		XR30101WH AVIO Square Gimbal Ring - White XR30101BL AVIO Square Gimbal Ring - Black XR30101GP AVIO Square Gimbal Ring - Graphite XR30101SL AVIO Square Gimbal Ring - Silver	75W PAR30	
 **	244B-WH Conical Black Baffle 244W-WH Conical White Baffle	75W PAR30L, 60W PAR30, 65W BR30		239-WH ♦ Frosted Lens	40W A19	
 **	247C-WH Cone - Clear Alzak® 247G-WH Cone - Gold Alzak® 247B-WH Cone - Black Alzak® 247HZ-WH Cone - Haze 247WHZ-WH Cone - Wheat Haze	75W PAR30L, 65W BR30, 75W PAR30		241-WH ♦ Drop Opal with Reflector 241-PW ♦ Shower/Closet Light	40W A19	
	250-WH Open Frame 250-SC Open Frame 250-ABZ Open Frame	65W BR30		242-WH ♦ Shower Trim, 242-SC ♦ Frosted Lens with Clear Center 242-ABZ ♦	45W PAR38	
	252-WH Regressed Open Frame	75W R/BR30		9324-SC Luminous Disc	50W PAR30, 65W BR30, 75W PAR30	
	231C-WH Multiplier - Clear Alzak® 231G-WH Multiplier - Gold Alzak® 231W-WH Multiplier - Gloss White	60W A19		9702 Luminous Collar	50W PAR30, 65W BR30, 75W PAR30L	
	226B-WH Black Cylinder w/Black Baffle 226W-WH White Cylinder w/White Baffle	60W PAR16		9024W-WH White Octagonal w/White Baffle	50W PAR30, 65W BR30, 75W PAR30	
	228-WH R20 Regressed Eyeball	50W PAR20/R20		9524-SC Chrome Band	65W BR30, 50W PAR30, 75W PAR30L	
	229-WH BR30 Regressed Eyeball 229-SC BR30 Regressed Eyeball 229-ABZ BR30 Regressed Eyeball 229-BL BR30 Regressed Eyeball	75W PAR30L, 65W BR30	Trim Size: 7 $\frac{5}{8}$ " O.D. (except Cat. Nos. 228, 229, 241, 9024, - 8" O.D., Cat. No. 9702 - 7 $\frac{3}{4}$ " O.D.). Trim Finish: ABZ - Classic Aged Bronze, BL - Black, GP - Graphite, PW - Plastic White (Polycarbonate material shower trim), SC - Satin Chrome, SL - Silver, WH - White. Alzak is a registered trademark of Alcoa Corp. Note: In Canada when insulation is present, Type IC fixtures must be used.			

 JUNO IC housings meet IECC Energy Code requirements per ASTM E283.
Air-Loc® rated trims are pre-gasketed for minimum air leakage with IC housings.

♦ UL Listed for use in wet location.

♦♦ UL Listed for use in wet location with outdoor rated lamp.

** NOTE: TR6 Trim Ring compatible with 24, 25, 27, 244,
247, 264, 267 trims.



Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

6" BASICS SERIES™ LED RETROFIT BAFFLE TRIM

DOWNLIGHT RETROFIT FOR STANDARD 6"
RECESSED HOUSINGS

**6RLDG2 700L**

PRODUCT DESCRIPTION

Energy efficient LED retrofit module fits into standard 6" IC or non-IC recessed housings • Replaces 65W incandescent lamp, producing over 700 lumens • Dimmable with most standard incandescent, magnetic low voltage and electronic low voltage dimmers • LED retrofit module is designed to provide 36,000 hours of life • 5 year warranty

PRODUCT SPECIFICATIONS

LED Downlight Retrofit Trim Cast aluminum trim with white baffle and flange • All-in-one design where LED light engine mounts directly to trim for ease of installation into existing 6" recessed housings with medium base sockets • Provided with torsion springs.

LED Light Engine LEDs are mounted directly to cast aluminum housing providing superior thermal management to ensure long life • 2700K, 3000K, and 3500K LED color temperature • 90 CRI minimum • Accommodates 120 volts AC at 60Hz • Dimmable with most standard incandescent, magnetic low voltage and electronic low voltage dimmers • For a list of compatible dimmers, see [JUNORETROBASICS-DIM](#).

Electrical Connections Trim features quick connect plug installed as standard for installation into IC23-LEDT24 and IC23R-LEDT24 housings with mating connector • Trim ships with a medium base socket adapter whip for installation into 6" incandescent housings with medium base sockets.

Trim Cast aluminum baffle trim with white finish • Diffusing lens conceals the LEDs from direct view and provides uniform aperture luminance.

Life Rated for 36,000 hours at 70% lumen maintenance.

Labels ENERGY STAR® Certified • UL and cUL classified for use with most standard UL listed 6" recessed incandescent housings and Juno IC23-LEDT24 and IC23R-LEDT24; see below for specific compatibility requirements • Damp location • Suitable for wet locations (indoor covered ceilings).

Testing All reports are based on published industry procedures; field performance may differ from laboratory performance.

Product specifications subject to change without notice.

INSTALLATION

The LED retrofit baffle trim is provided with torsion springs as standard. Accessory kit available for use in housings that do not have torsion spring retaining brackets.

COMPATIBLE HOUSINGS

The 6RLD retrofit module is compatible with most 6" recessed housings measuring at least 4" high with an inside diameter between 5-3/4" and 7". Removal of the housing socket plate or socket mounting bracket may be required in order for the trim to fit properly.

Compatible housings include, but not limited to:

Juno housings: IC2, IC21, IC22, IC23 and TC2 Series

Juno quick-connect LED housings: [IC23-LEDT24](#) and [IC23R-LEDT24](#)

Vulite® housings: V6IC and V6TC Series

Lithonia® housings: L7X and LC6 Series

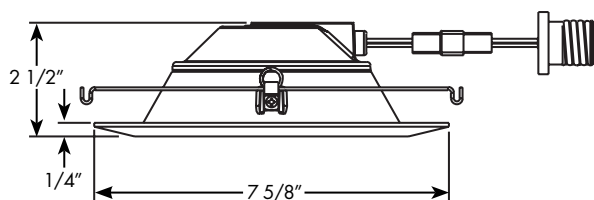
Halo® housings: H7 Series, H25 Series

Thomas® housings: PS1 and PS3 Series

Capri® housings: CR1, PR1, QL6 Series, P9ASIC Series



DIMENSIONS



PRODUCT CODES

Catalog Number	Description
6RLDG2-927-6-WWH	6" LED retrofit baffle trim, 2700K, 700 Lumen
6RLDG2-930-6-WWH	6" LED retrofit baffle trim, 3000K, 700 Lumen
6RLDG2-935-6-WWH	6" LED retrofit baffle trim, 3500K, 700 Lumen

MOUNTING ACCESSORIES

V6RL-TRB

Torsion receiver bracket kit to install into housings that do not have torsion receiver brackets.

PERFORMANCE DATA

	27K	3K	35K
Input Voltage	120V	120V	120V
Input Power Typical	10W	10W	10W
Frequency	60Hz	60Hz	60Hz
EMI/RFI	FCC Title 47, Part 15 Class B (consumer)	FCC Title 47, Part 15 Class B (consumer)	FCC Title 47, Part 15 Class B (consumer)
Minimum starting temp	-30°C (-22°F)	-30°C (-22°F)	-30°C (-22°F)
CRI	90 min.	90 min.	90 min.
CCT	2700K	3000K	3500K

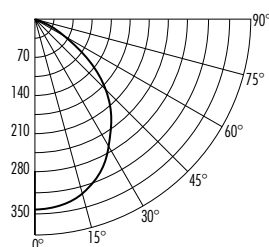
6" BASICS SERIES™ LED RETROFIT BAFFLE TRIM

DOWNLIGHT RETROFIT FOR STANDARD 6"
RECESSED HOUSINGS

6RLDG2 700L

PHOTOMETRIC REPORT

Test Report#: PT02161613R
Catalog No: 6RLDG2-927-6-WWH
Luminaire Spacing Criteria: 1.22
Luminaire LPW: 69



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	340
5	339
15	324
25	294
35	249
45	182
55	95
65	31
75	13
85	3
90	0

AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Ceiling 80%, Walls 50%, Floors 20%

Spacing	RCR1	RCR3	RCR5
4'	46	37	30
5'	29	24	20
6'	20	17	14
7'	17	13	11
8'	13	11	9
9'	10	8	7
10'	7	6	5

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	259	N/A	37.7
0-40°	414	N/A	60.2
0-60°	638	N/A	92.8
0-90°	687	N/A	100.0

INITIAL FOOTCANDLES (One Unit: 10W, 93° Beam)

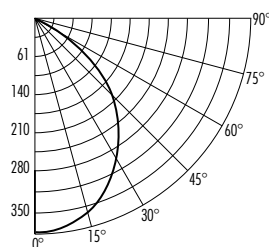
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	21.3	8.4
6'	9.4	12.6
8'	5.3	16.9
10'	3.4	21.1

LUMINANCE (Average cd/m²)

Angle in Degrees	Average 0-90°
45°	16650
55°	10666
65°	4721
75°	3267
85°	2198

PHOTOMETRIC REPORT

Test Report#: PT02161614R
Catalog No: 6RLDG2-930-6-WWH
Luminaire Spacing Criteria: 1.22
Luminaire LPW: 71



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	350
5	348
15	334
25	303
35	257
45	188
55	98
65	32
75	14
85	3
90	0

AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Ceiling 80%, Walls 50%, Floors 20%

Spacing	RCR1	RCR3	RCR5
4'	47	38	32
5'	30	24	20
6'	21	17	14
7'	17	14	11
8'	14	11	9
9'	10	8	7
10'	8	6	5

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	267	N/A	37.6
0-40°	427	N/A	60.1
0-60°	658	N/A	92.7
0-90°	710	N/A	100.0

INITIAL FOOTCANDLES (One Unit: 10W, 93.2° Beam)

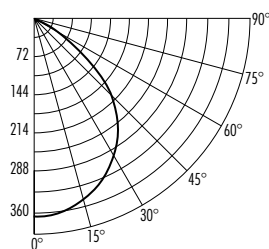
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	21.9	8.5
6'	9.7	12.7
8'	5.5	16.9
10'	3.5	21.1

LUMINANCE (Average cd/m²)

Angle in Degrees	Average 0-90°
45°	17969
55°	11545
65°	5109
75°	3571
85°	2374

PHOTOMETRIC REPORT

Test Report#: PT02161614R
Catalog No: 6RLDG2-935-6-WWH
Luminaire Spacing Criteria: 1.22
Luminaire LPW: 74



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	366
5	364
15	349
25	326
35	269
45	196
55	102
65	33
75	14
85	3
90	0

AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Ceiling 80%, Walls 50%, Floors 20%

Spacing	RCR1	RCR3	RCR5
4'	50	40	33
5'	32	26	21
6'	22	18	15
7'	18	14	12
8'	14	11	9
9'	11	9	7
10'	8	6	5

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	279	N/A	37.6
0-40°	446	N/A	60.1
0-60°	688	N/A	92.7
0-90°	742	N/A	100.0

INITIAL FOOTCANDLES (One Unit: 10W, 93.2° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	22.9	8.5
6'	10.2	12.7
8'	5.7	16.9
10'	3.7	21.1

LUMINANCE (Average cd/m²)

Angle in Degrees	Average 0-90°
45°	15250
55°	10639
65°	4808
75°	3130
85°	1992



The LCH series of low profile, lensed LED striplights provides superior energy efficiency and a longer, maintenance-free operating life over the traditional T5 and T8 fluorescent fixtures they are designed to replace. Using up to 54% less energy and operating for 60,000 hours (L70), LCH striplights deliver bright, even distribution, ideal for commercial, manufacturing, warehouse, and retail applications. LCH is available in 2', 4', and 8' lengths in 10 lumen packages in 3 color temperatures.

- Stylish frosted acrylic lens featuring bright, even illumination
- Energy efficient – up to 54% energy savings vs. fluorescent

HOUSING Housing, wireway cover and ends are die-formed heavy gauge steel with high gloss, baked white enamel finish over rust inhibiting phosphate coat. Housing and wireway cover act as a heat sink, maximizing the life of the LEDs and power supplies. Knockouts provided on back, ends, and sides.

OPTICS/SHIELDING Snap on, contoured, high transmission, frosted acrylic lens with internal lineal ribs shields the LEDs from direct view and provides an integrated finished look. Lens is capped by white thermoplastic ends. The 8' lensed units ship standard with (2) 4' lenses and (1) center white thermoplastic joiner band.

LEDS 2' fixtures available in 2 light levels (delivered); 2490 lumens (20.5W) and 2780 lumens (25W) at 4000K CCT, >80 CRI. **4' fixtures** available in 4 light levels (delivered); 2490 lumens (20.5W), 4536 lumens (35.9W), 6617 lumens (55.28W) and 8875 lumens (72.8W) at 4000K CCT, >80 CRI. **8' fixtures** available in 4 light levels (delivered); 4980 lumens (40.9W), 9072 lumens (71.8W), 12,234 lumens (110W) and 17,750 lumens (145.6W) at 4000K CCT, >80 CRI. All models also available in 3500K and 5000K color temperatures. Beam spread is 105 degrees. LEDs are Im-80 tested. Operating life is 60,000 hours (L70). Light engines consist of 48, 96, 192, or 384 mid-power LED chips mounted on aluminum core printed circuit boards. LED light engines are replaceable.

ELECTRICAL 120-277V LED power supply, power factor is >0.9. 0-10V dimmable, standard. are mounted in direct

- 60,000 hour operating life (L70) for maintenance savings
- Control friendly, 0-10V dimming, standard

contact with steel housing for cooler operation and longer life. Drive current is 750mA for units using 28W drivers. Drive current is 1A for units using 40W drivers. Drive current is 1.4A for units using 50W drivers. Drive current is 2.1A units using 60W drivers. Drivers are field replaceable. See performance table for number of drivers in each unit.

TEMPERATURE The LCH LED series is designed to operate in temperatures of -13°F (-25°C) to 104°F (40°C).

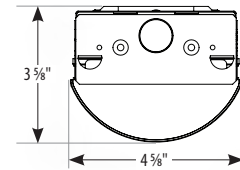
ACCESS / WIRING Toolless access to wireway striplight. Wireway cover/LED tray snaps onto the housing and can be removed without tools. Wireway cover/LED tray includes tethers (4' and 8' units) for easier installation and maintenance. Internal plug-in wiring harness.

MOUNTING Suitable for surface, pendant, or stem mounting, individually or in continuous rows. Use accessory CHJ combination end plate joiner for continuous rows. Also use accessory LCHJB joiner band for a finished look.

LISTINGS UL listed, damp location. DesignLights™ Consortium Listed direct linear ambient, low bay, and high bay.

WARRANTY 5 year limited warranty.

Project	HOME2 FLOWOOD
Catalog Number	LCH4FA5035U1
Type	G
Date	



Length: 24" / 48" / 96"

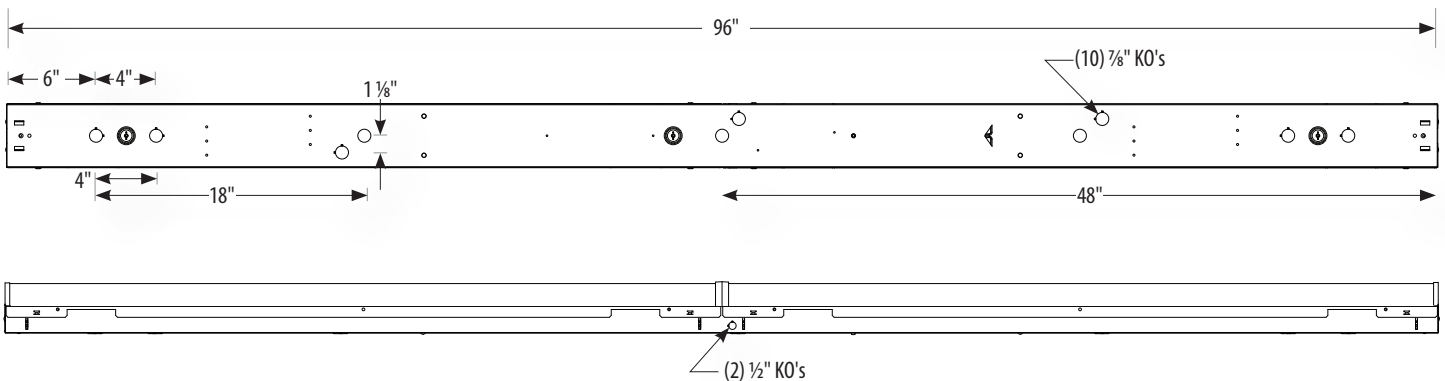
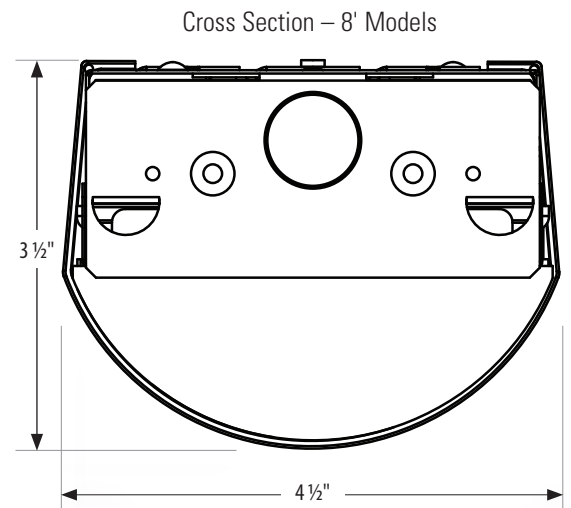
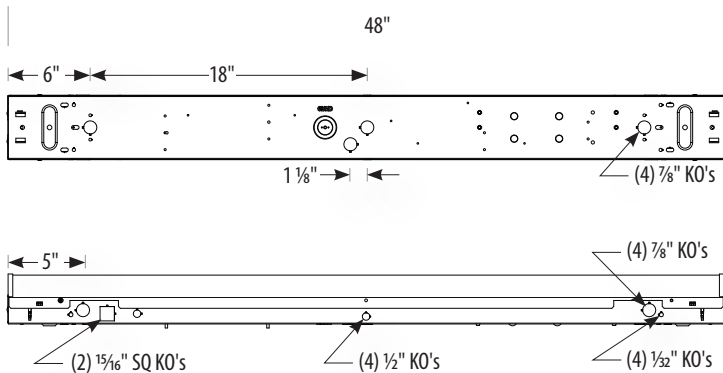
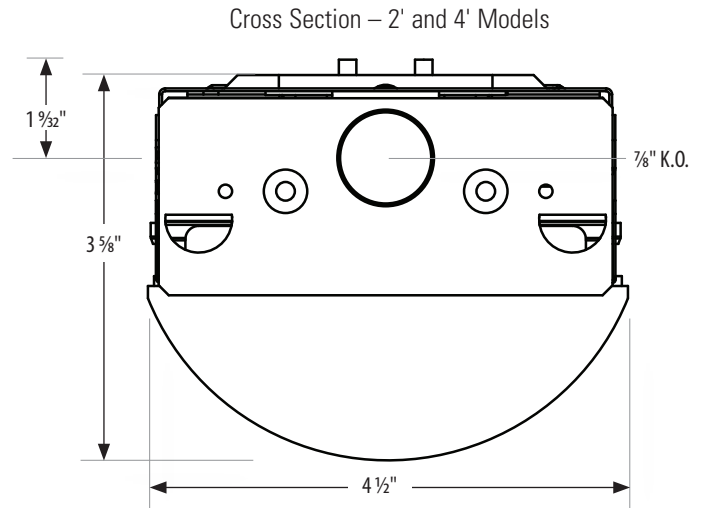
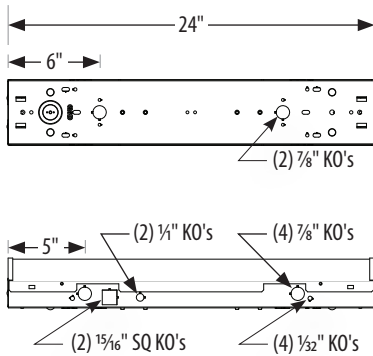


LCH Configuration

SERIES*	LENGTH	LENS	LUMENS*	CCT	VOLTAGE	OPTIONS	ACCESSORIES
LCH	2 = 2'	FA = Frosted acrylic (standard)	2' UNITS	35 = 3500°K	U1 = Universal 120-277V	ELS = Emergency Backup, 900lm	C = Single white canopy (for use with pendant mount)
	4 = 4'		25 = 2500 lm (20W)	40 = 4000°K	347 = 347V	6' CORD AND PLUG	CA24 = Chain Hanger Assembly-(2) 18" chains, (2) "V" hooks, (2) "S" hooks for total drop 24"
	8 = 8'		30 = 3000 lm (25W)	50 = 5000°K	480 = 480V	CPT(x)	CHJ = Housing Joiner (for continuous runs)
			4' UNITS			1 = 120V	LCHJB = Joiner Band (for use between lenses on continuous runs)
			25 = 2500 lm (20W)			2 = 277V	CS24 = "S" Hook (4) Chain Hanger Assembly (24" total drop)
			50 = 5000 lm (36W)			3 = 208V	PM2(x) = Pendant Mount, white stem-specify length in inches (24, 36, 48, 60, 72)
			70 = 7000 lm (55W)			4 = 240V	SN = Snapper Brackets
			90 = 9000 lm (73W)			5 = 480V	TBH = T-Bar grid mounting clip
			8' UNITS			CP3 = Cord & Plug-120V Straight Blade 5-15P	WG220 = 24" wire guard
			50 = 5000 lm (40W)			FL6 = 3/8" Flex with two connectors	WG240 = 48" wire guard (order 2 for 8' units)
			90 = 9000 lm (72W)			FL7 = 3/8" Flex with two connectors; for dual switching or ELS	
			120 = 12,000 lm (110W)				
			180 = 18,000 lm (146W)				
						SENSORS (FACTORY WIRED; SEE SWITCHING; FOR DAYLIGHT HARVESTING, PLEASE CONTACT FACTORY)	
						OS(x) = PIR Occupancy sensor (specify # of drivers controlled (1 or 2))	
						OSPC(x) = PIR Occupancy sensor with photocontrol (specify # of drivers controlled (1 or 2))	
						REFLECTORS	
						SRW = 48" symmetrical white; order 2 for 96" units.	

*See performance table for specific values

Dimensions Not to scale



LCH Lensed LED Striplight Performance

Model	Length	Lumens*	Input Power	Drivers	Efficacy	Equivalent Fluorescent**
LCH2FA2535U1	2'	2,280	19.50W	1 28W 750mA	116.9 lm/W	2-17W T8, 1-24W T5HO
LCH2FA2540U1	2'	2,490	20.45W	1 28W 750mA	121.76 lm/W	2-17W T8, 1-24W T5HO
LCH2FA2550U1	2'	2,590	20.45W	1 28W 750mA	126.65 lm/W	2-17W T8, 1-24W T5HO
LCH2FA3035U1	2'	2,696	25W	1 40W 1A	107.84 lm/W	2-17W T8, 1-24W T5HO
LCH2FA3040U1	2'	2,780	25W	1 40W 1A	111 lm/W	2-17W T8, 1-24W T5HO
LCH2FA3050U1	2'	2,891	25W	1 40W 1A	115 lm/W	2-17W T8, 1-24W T5HO
LCH4FA2535U1	4'	2,417	20.45W	1 28W 750mA	118.2 lm/W	1-32W T8
LCH4FA2540U1	4'	2,490	20.45W	1 28W 750mA	121 lm/W	1-32W T8
LCH4FA2550U1	4'	2,590	20.45W	1 28W 750mA	126 lm/W	1-32W T8
LCH4FA5035U1	4'	4,417	36.5W	1 50W 1.4A	121.1 lm/W	2-32W T8, 1-54W T5HO
LCH4FA5040U1	4'	4,536	35.92W	1 50W 1.4A	126.3 lm/W	2-32W T8, 1-54W T5HO
LCH4FA5050U1	4'	4,795	36.81W	1 50W 1.4A	130.3 lm/W	2-32W T8, 1-54W T5HO
LCH4FA7035U1	4'	6,425	55.28W	1 60W 2100mA	116.2 lm/W	2-32W T8, 2 54W T5HO
LCH4FA7040U1	4'	6,617	55.28W	1 60W 2100mA	119.69 lm/W	2-32W T8, 2 54W T5HO
LCH4FA7050U1	4'	6,881	55.28W	1 60W 2100mA	124.47 lm/W	2-32W T8, 2 54W T5HO
LCH4FA9035U1	4'	8,615	72.81W	2 50W 1.4A	118.3 lm/W	2 54W T5HO
LCH4FA9040U1	4'	8,875	72.81W	2 50W 1.4A	121.89 lm/W	2 54W T5HO
LCH4FA9050U1	4'	9,230	72.81W	2 50W 1.4A	126.76 lm/W	2 54W T5HOx
LCH8FA5035U1	8'	4,830	40.9W	2 28W 750mA	118 lm/W	2-32W T8
LCH8FA5040U1	8'	4,980	40.9W	2 28W 750mA	121.76 lm/W	2-32W T8
LCH8FA5050U1	8'	5,179	40.9W	2 28W 750mA	126.62 lm/W	2-32W T8
LCH8FA9035U1	8'	8,779	71.84W	2 50W 1.4A	122 lm/W	2-32W T8, 2 54W T5HO
LCH8FA9040U1	8'	9,072	71.84W	2 50W 1.4A	126 lm/W	2-32W T8, 2 54W T5HO
LCH8FA9050U1	8'	9,434	71.84W	2 50W 1.4A	131.19 lm/W	2-32W T8, 2 54W T5HO
LCH8FA12035U1	8'	11,866	110W	2 60W 2.1A	107.87 lm/W	4-32W T8
LCH8FA12040U1	8'	12,234	110W	2 60W 2.1A	111.2 lm/W	4-32W T8
LCH8FA12050U1	8'	12,723	110W	2 60W 2.1A	115.66 lm/W	4-32W T8
LCH8FA18035U1	8'	17,217	145.62W	4 50W 1.4A	118.23 lm/W	4-54W T5HO
LCH8FA18040U1	8'	17,750	145.62W	4 50W 1.4A	121.89 lm/W	4-54W T5HO
LCH8FA18050U1	8'	18,460	145.62W	4 50W 1.4A	126.76 lm/W	4-54W T5HO

*Delivered **Consult a lighting engineer to meet specific requirements.

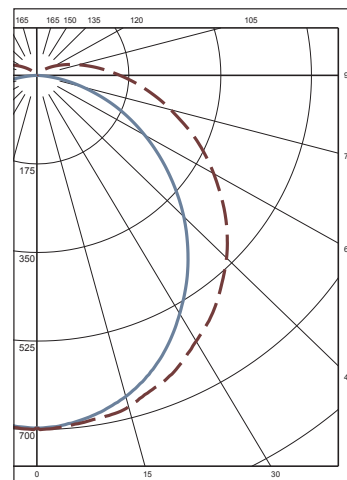
Photometric DataLuminaire Data

Catalog Number	LCH2FA2535U1
Lab Test#	UL1276871
(#) Power Supply	1 28W 750mA Driver
(#) Boards	1 48 LED Board
Color Temperature	3500K
Input Watts	19.50W
Delivered Lumens	2280 lm
Operating Life	60,000 Hours (L70)
Fixture Efficacy	116.9 lm/W

Utilization of Lumens - Zonal Cavity Method

CC Wall	80				50			30			
RCR	70	50	30	10	50	30	10	50	30	10	
0	2680	2680	2680	2680	2452	2452	2452	2317	2317	2317	
1	2406	2280	2167	2066	2087	2003	1927	1972	1904	1841	
2	2174	1969	1799	1656	1806	1676	1564	1708	1600	1506	
3	1976	1720	1522	1364	1582	1426	1299	1498	1367	1257	
4	1805	1519	1309	1148	1401	1233	1100	1330	1186	1069	
5	1658	1354	1141	985	1254	1080	948	1192	1042	924	
6	1530	1217	1007	857	1131	957	827	1078	925	808	
7	1418	1102	898	755	1028	856	731	982	829	715	
8	1319	1005	807	671	940	772	652	900	749	639	
9	1232	922	731	603	865	701	587	830	682	576	
10	1155	850	667	546	800	641	532	769	624	523	

Zonal cavity method Effective floor reflectance = 20%

Candela PlotZonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-40	872	38.2
0-60	1546	67.8
0-90	2134	93.6
90-180	147	6.4

Average Luminance (cd/m²)

ANGLE	0	45	90
0	10580	10580	10580
45	8079	7538	8098
55	7124	6757	7570
65	6058	6015	7102
75	4476	5274	6685
85	1644	4795	6620

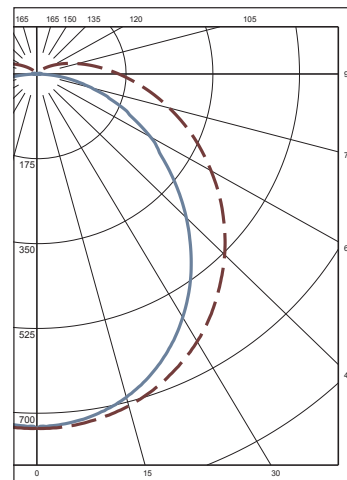
SC: 0-180: 1.17
90-270: 1.17**Photometric Data**Luminaire Data

Catalog Number	LCH4FA2535U1
Lab Test#	UL1263057
(#) Power Supply	1 28W 750mA Driver
(#) Boards	2 24 LED Boards
Color Temperature	3500K
Input Watts	20.45W
Delivered Lumens	2417 lm
Operating Life	60,000 Hours (L70)
Fixture Efficacy	118.2 lm/W

Utilization of Lumens - Zonal Cavity Method

CC Wall	80				50			30			
RCR	70	50	30	10	50	30	10	50	30	10	
0	2840	2840	2840	2840	2597	2597	2597	2452	2452	2452	
1	2548	2414	2294	2186	2209	2120	2038	2086	2013	1947	
2	2303	2084	1904	1752	1911	1772	1653	1806	1692	1591	
3	2092	1820	1610	1443	1673	1508	1373	1584	1445	1328	
4	1912	1608	1385	1215	1482	1304	1163	1406	1253	1130	
5	1756	1433	1208	1042	1326	1143	1002	1261	1101	976	
6	1620	1289	1066	906	1196	1012	875	1140	978	854	
7	1502	1167	950	798	1087	905	773	1038	877	756	
8	1397	1064	854	710	994	816	689	952	792	675	
9	1305	976	774	638	915	742	620	877	721	608	
10	1223	900	706	577	846	678	562	813	660	552	

Zonal cavity method Effective floor reflectance = 20%

Candela PlotZonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-40	921	38.1
0-60	1630	67.5
0-90	2257	93.4
90-180	160	6.6

Average Luminance (cd/m²)

ANGLE	0	45	90
0	5553	5553	5553
45	4367	3870	3849
55	3874	3339	3509
65	3448	2910	3189
75	2928	2503	2903
85	2020	2172	2677

SC: 0-180: 1.19
90-270: 1.19

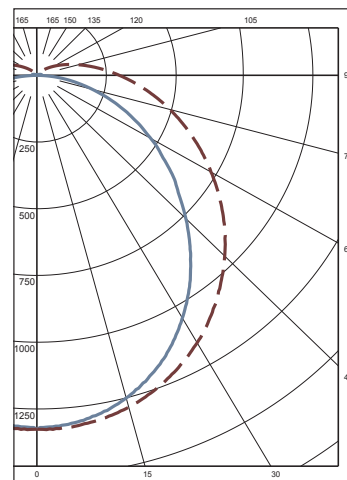
Photometric DataLuminaire Data

Catalog Number	LCH4FA5035U1
Lab Test#	UL1263058
(#) Power Supply	1 50W 1.4A Driver
(#) Boards	2 48 LED Boards
Color Temperature	3500K
Input Watts	36.50W
Delivered Lumens	4417 lm
Operating Life	60,000 Hours (L70)
Fixture Efficacy	121.1 lm/W

Utilization of Lumens - Zonal Cavity Method

CC Wall	80				50			30		
RCR	70	50	30	10	50	30	10	50	30	10
0	5186	5186	5186	5186	4739	4739	4739	4473	4473	4473
1	4651	4406	4187	3989	4028	3865	3715	3801	3669	3546
2	4203	3803	3472	3194	3483	3230	3012	3290	3081	2897
3	3818	3321	2936	2629	3049	2748	2500	2884	2631	2418
4	3488	2932	2525	2213	2700	2375	2117	2560	2281	2056
5	3204	2614	2202	1897	2416	2080	1823	2295	2004	1775
6	2956	2350	1942	1650	2179	1843	1592	2075	1779	1554
7	2739	2128	1731	1453	1980	1648	1406	1890	1595	1375
8	2549	1940	1556	1293	1811	1486	1254	1732	1441	1228
9	2381	1779	1410	1161	1666	1350	1128	1597	1311	1106
10	2231	1640	1286	1051	1541	1234	1022	1480	1201	1004

Zonal cavity method Effective floor reflectance = 20%

Candela PlotZonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-40	1673	37.9
0-60	2964	67.1
0-90	4114	93.1
90-180	303	6.9

Average Luminance (cd/m²)

ANGLE	0	45	90
0	10070	10070	10070
45	7996	7355	7604
55	7283	6639	7088
65	6564	5959	6632
75	5651	5401	6309
85	4094	5020	6217

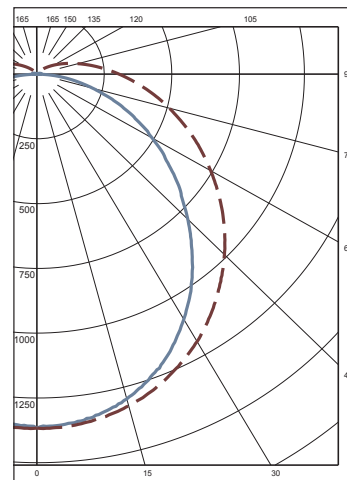
SC: 0-180: 1.19
90-270: 1.19**Photometric Data**Luminaire Data

Catalog Number	LCH4FA5040U1
Lab Test#	UL1263061
(#) Power Supply	1 50W 1.4A Driver
(#) Boards	2 48 LED Boards
Color Temperature	4000K
Input Watts	35.92W
Delivered Lumens	4536 lm
Operating Life	60,000 Hours (L70)
Fixture Efficacy	126.3 lm/W

Utilization of Lumens - Zonal Cavity Method

CC Wall	80				50			30			
RCR	70	50	30	10	50	30	10	50	30	10	
0	5327	5327	5327	5327	4869	4869	4869	4596	4596	4596	
1	4778	4527	4302	4099	4140	3972	3819	3907	3772	3646	
2	4318	3908	3569	3283	3580	3321	3097	3382	3168	2979	
3	3923	3413	3018	2703	3134	2825	2571	2966	2706	2487	
4	3585	3014	2596	2276	2776	2442	2178	2633	2347	2115	
5	3293	2687	2264	1951	2484	2140	1876	2361	2062	1827	
6	3038	2415	1997	1697	2241	1895	1638	2134	1831	1599	
7	2815	2187	1780	1495	2036	1695	1446	1944	1641	1415	
8	2620	1994	1601	1330	1863	1529	1290	1782	1483	1264	
9	2447	1829	1450	1195	1714	1389	1161	1643	1349	1139	
10	2293	1686	1323	1081	1585	1270	1052	1522	1236	1033	

Zonal cavity method Effective floor reflectance = 20%

Candela PlotZonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-40	1723	38.0
0-60	3050	67.2
0-90	4228	93.2
90-180	308	6.8

Average Luminance (cd/m²)

ANGLE	0	45	90
0	10380	10380	10380
45	8341	7536	7823
55	7595	6772	7294
65	6840	6046	6809
75	5891	5490	6459
85	4286	5064	6367

SC: 0-180: 1.20
90-270: 1.18

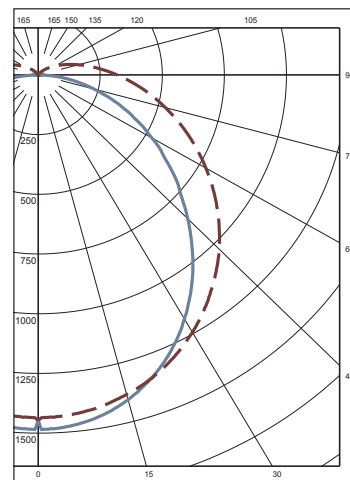
Photometric DataLuminaire Data

Catalog Number	LCH4FA5050U1
Lab Test#	UL1263062
(#) Power Supply	1 50W 1.4A Driver
(#) Boards	2 48 LED Boards
Color Temperature	5000K
Input Watts	36.81W
Delivered Lumens	4795 lm
Operating Life	60,000 Hours (L70)
Fixture Efficacy	130.3 lm/W

Utilization of Lumens - Zonal Cavity Method

CC Wall	80				50			30		
RCR	70	50	30	10	50	30	10	50	30	10
0	5628	5628	5628	5628	5141	5141	5141	4851	4851	4851
1	5049	4784	4546	4332	4371	4195	4033	4124	3981	3849
2	4563	4130	3772	3471	3781	3507	3271	3571	3345	3146
3	4146	3607	3190	2858	3311	2985	2716	3131	2857	2626
4	3788	3185	2744	2407	2933	2580	2301	2780	2478	2233
5	3480	2840	2393	2063	2624	2261	1982	2492	2177	1929
6	3211	2553	2112	1795	2367	2002	1730	2254	1933	1688
7	2975	2312	1882	1581	2151	1791	1528	2052	1733	1494
8	2769	2108	1692	1407	1968	1615	1363	1882	1566	1335
9	2586	1933	1533	1263	1810	1467	1227	1735	1425	1203
10	2424	1782	1398	1143	1674	1341	1112	1607	1305	1091

Zonal cavity method Effective floor reflectance = 20%

Candela Plot

Photometric Data

Luminaire Data

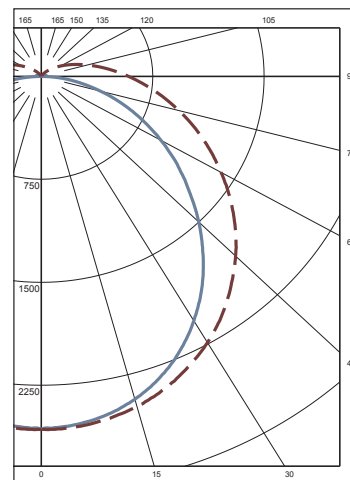
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Lab Test#	UL1263060
(#) Power Supply	2 50W 1.4A Drivers
(#) Boards	4 48 LED Boards
Color Temperature	3500K
Input Watts	72.81W
Delivered Lumens	8615 lm
Operating Life	60,000 Hours (L70)
Fixture Efficacy	118.3 lm/W

Utilization of Lumens - Zonal Cavity Method

CC Wall	80				50			30		
RCR	70	50	30	10	50	30	10	50	30	10
0	10097	10097	10097	10097	9201	9201	9201	8668	8668	8668
1	9055	8578	8150	7765	7819	7502	7211	7364	7108	6870
2	8184	7406	6763	6221	6763	6273	5849	6376	5971	5615
3	7436	6469	5721	5124	5922	5339	4858	5592	5101	4688
4	6795	5713	4921	4315	5247	4616	4116	4964	4425	3988
5	6242	5094	4292	3700	4695	4044	3545	4452	3888	3445
6	5759	4579	3787	3219	4236	3583	3096	4025	3453	3015
7	5337	4147	3375	2835	3849	3204	2734	3666	3095	2668
8	4966	3780	3035	2522	3521	2889	2439	3361	2797	2384
9	4638	3467	2749	2265	3239	2625	2194	3099	2545	2148
10	4347	3196	2507	2049	2996	2400	1989	2871	2331	1949

Zonal cavity method Effective floor reflectance = 20%

Candela Plot



Zonal Lumen Summary

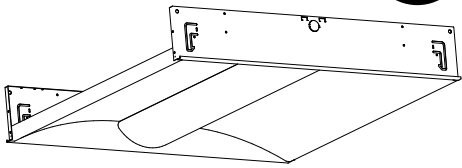
ZONE	LUMENS	% LUMINAIRE
0-40	3242	37.6
0-60	5730	66.5
0-90	7948	92.3
90-180	668	7.7

Average Luminance (cd/m²)

ANGLE	0	45	90
0	19540	19540	19540
45	15620	14170	14700
55	14170	12710	13670
65	12620	11380	12780
75	10760	10300	12150
85	8113	9929	12140

SC: 0-180: 1.19
90-270: 1.19

LED



createchange

FEATURES

- Attractive architectural center lens
- High efficiency acrylic center lens features linear prisms for high performance without pixelation
- Appropriate for offices, schools, medical, and public spaces
- High performance reflector with matte white paint standard
- 60,000 hour LEDs at L80 (up to 150,000 projected life) for reduced maintenance
- Four LED color choices and 80 CRI
- Six lumen packages
- Multiple driver options to satisfy different applications
- LED modules and electrical accessible from below
- QR code traceability
- Integral battery pack optional on most models
- Compatible with Dual-Lite inverters
- Recessed, surface or cable mount
- Air return option
- DesignLights Consortium® (DLC) qualified
- Five year warranty (Terms and Conditions apply)

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Luminaire housing, reflectors and end caps are die formed code gauge cold rolled steel. High transmission extruded acrylic enclosed lens features linear prisms with custom frost for high efficacy without pixelation.

SHIELDING

Removable lens for easy access to LED module and electrical components.

FINISH

All reflective surfaces are finished after fabrication with unique formula high reflectivity matte white paint for soft, uniform indirect illumination.

INSTALLATION

An access plate is furnished with each luminaire for fast wiring access without the necessity to open the fixture or wireway.

CEILING COMPATIBILITY

Luminaire fits recessed exposed Grid ceilings (G); four integral NEC compliant T-bar clips are standard. Can be placed in Slot Grid (SG) style ceiling with regress 3/8" above ceiling plane. A Flange Kit (FK) accessory is available for recessed hard ceiling applications. Surface Mount (SM) option allows placement below ceiling plane. Cable Mount (CM) option allows product suspension below ceiling plane.

CERTIFICATION

All luminaires are built to UL1598 and 2108 standards, and bear appropriate CSA labels. Damp location label standard. Emergency-equipped fixtures labeled UL 924 and Dry Location unless specified. Adheres to LM79, LM80, and TM21 industry standards. DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org.

IC RATING

IC label is standard for recessed products. Note that IC label is void if product is installed on site with a combination of both step-dimming (ESD) driver plus through wiring or for air return fixtures.

WARRANTY

Five year warranty (Terms and Conditions apply).

ORDERING INFORMATION

EXAMPLE LCAT22-35HLG-ESDU

LCAT		22	-	-	-	U	-	
MODEL		COLOR TEMPERATURE		CEILING TYPE	AIR FUNCTION	VOLTAGE	OPTIONS	
LCAT	LED Contemporary Architectural Troffer	30	3000K	G Grid Lay-in ¹	Blank Static	U 120V-277V	ELL14 Emergency Battery Pack Installed, 1400 Lumens ^{4,5}	
		35	3500K	SM Surface Mount ²	A Air Return Side Slots	347 347V	C388 3-Wire Flex	
		40	4000K	CM Cable Suspended Mount ^{2,3}	DRIVER		C488 4-Wire Flex	
		50	5000K		E Fixed Output		C588 5-Wire Flex	
					ESD Step Dimming ⁴		GLR Fast Blow Fuse	
SIZE		LUMEN OUTPUT						
22 2' x 2'		VW	Very Low Watt					
		MW	Medium Watt					
		LW	Low Watt					
		ML	Medium Lumen					
		HL	High Lumen					
		VL	Very High Lumen					
See Product Availability Table below.								
DRIVER AVAILABILITY TABLE								
	VW	MW	LW	ML	HL	VL		
E	X	X	X	X	X	X		
ED	X	X	X	X	X	X		
ED1	X	X	X	X	X	X		
ESD			X	X	X	X		
LUT5		X	X	X	X			
LUTH		X	X	X	X			
				PRODUCT AVAILABILITY				
SIZE	LUMEN PACKAGE	NOMINAL LUMENS	NOMINAL WATTS	LUMENS PER WATT				
22	VW	1600-1750	16	100-109				
22	MW	2150-2300	22	100-107				
22	LW	2650-3050	25	107-123				
22	ML	3200-3400	30	107-115				
22	HL	3550-4050	35	100-115				
22	VL	4000-4600	42	96-110				
Nominal lumen range represents 3000K through 5000K. Lumens vary according to color temperatures and other factors. See specific photometric test(s).								
				ACCESSORIES (ORDER SEPARATELY)				
				FK22 2' x 2' Single Flange Kit (Shipped separately)				
				CM48Y2SC3F-KIT 48" Cable Mount Kit for 2' wide Cable Mount fixtures, 3 Wire				
1 For drywall, order G with Flange Kit Accessory.								
2 Not available with Air Return (A) air function								
3 Order hanger accessories separately.								
4 Not available in 347V								
5 For compatibility with Dual-Lite LiteGear® inverters, contact Hubbell Lighting Representative.								
For questions about configuration options, contact Hubbell Representative								

See Product Availability Table below.

Nominal lumen range represents 3000K through 5000K. Lumens vary according to color temperatures and other factors. See specific photometric test(s).

¹ For drywall, order G with Flange Kit Accessory.

² Not available with Air Return (A) air function

³ Order hanger accessories separately.

⁴ Not available in 347V

⁵ For compatibility with Dual-Lite LiteGear® inverters, contact Hubbell Lighting Representative.

For questions about configuration options, contact Hubbell Representative

PHOTOMETRIC DATA

Test LCAT22-35LWG-EDU 15681 Test Date 1/9/2015

LUMINAIRE DATA

Luminaire	LCAT22-35LWG-EDU LCAT Led Architectural Troffer, Recessed Architectural 2 x 2 led with frosted linear prism lens
Ballast	XI040C110V054BPT1
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	2784
Watts	25.00
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.20 90° = 1.33
Luminous Opening in Feet	Length: 1.92 Width: 1.92 Height: 0.00

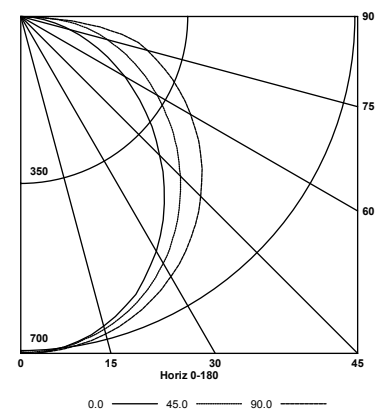
ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	706	25.4	25.4
0-40	1158	41.6	41.6
0-60	2067	74.2	74.2
0-90	2784	100.0	100.0
0-180	2784	100.0	100.0

ENERGY DATA

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	111
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.16 based on 3000 hrs. and \$0.08 per KWH

INDOOR CANDELA PLOT



LUMINAIRE DATA

Luminaire	LCAT22-35MLG-EDU LCAT Led Architectural Troffer, Recessed Architectural 2 x 2 led with frosted linear prism lens
Ballast	D10CC55UNVTZ-C
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	3261
Watts	30.20
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.20 90° = 1.32
Luminous Opening in Feet	Length: 1.92 Width: 1.90 Height: 0.00

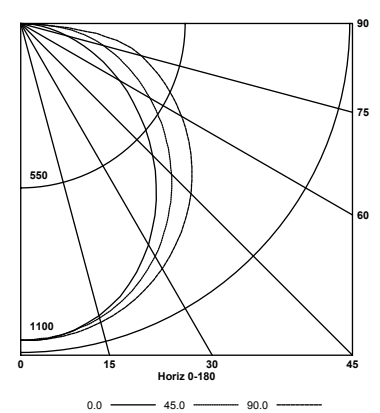
ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	825	25.3	25.3
0-40	1352	41.4	41.4
0-60	2415	74.0	74.0
0-90	3261	100.0	100.0
0-180	3261	100.0	100.0

ENERGY DATA

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	108
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.20 based on 3000 hrs. and \$0.08 per KWH

INDOOR CANDELA PLOT



Test LCAT22-35MLG-EDU Test Date 1/20/2015

LUMINAIRE DATA

Luminaire	LCAT22-35HLG-EDU LCAT Led Architectural Troffer, Recessed Architectural 2 x 2 led with frosted linear prism lens
Ballast	D10CC55UNVTZ-C
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	3685
Watts	35.40
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.20 90° = 1.32
Luminous Opening in Feet	Length: 1.90 Width: 1.90 Height: 0.00

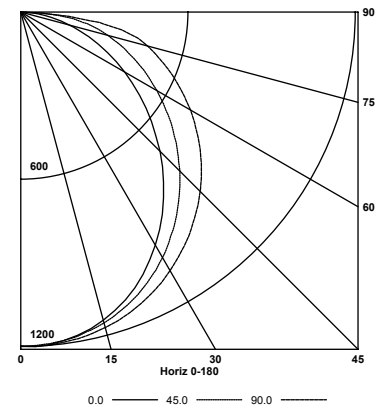
ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	934	25.3	25.3
0-40	1530	41.5	41.5
0-60	2732	74.1	74.1
0-90	3685	100.0	100.0
0-180	3685	100.0	100.0

ENERGY DATA

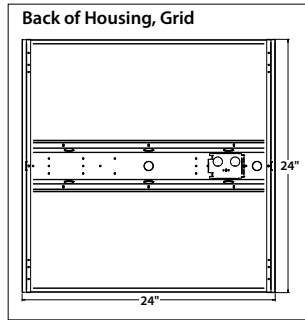
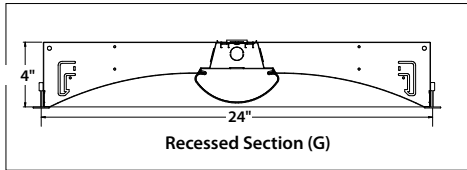
Total Luminaire Efficiency	100.0%
Total Lumens per Watt	104
ANSI/IESNA RP-1-2004 COMPLIANCE:	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.29 based on 3000 hrs. and \$0.08 per KWH

INDOOR CANDELA PLOT

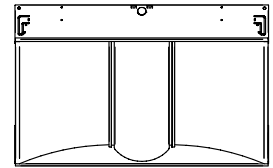
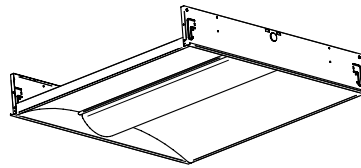


Test LCAT22-35HLG-EDU Test Date 2/13/2015

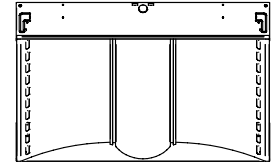
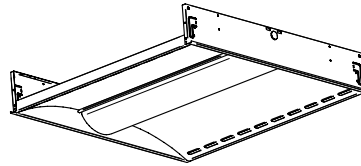
DIMENSIONAL DATA — GRID, STATIC



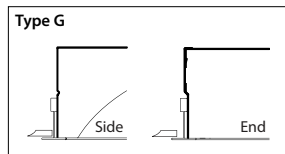
GRID, STATIC



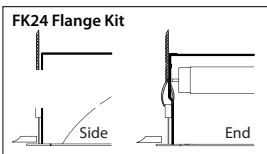
GRID, AIR RETURN



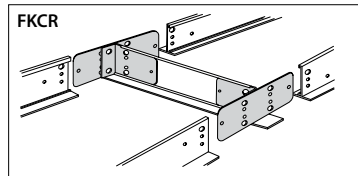
CEILING COMPATIBILITY



For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 2" allowed.



For hard ceiling applications, order FK22 flange kit. Flange kit wires directly into concealed ceiling opening for a clean, finished appearance.



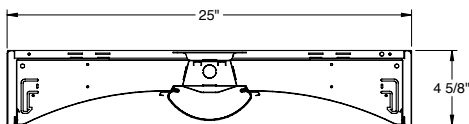
For flanged fixtures in row configurations, the FKCR adapter bracket kit is required in addition to the FK22 kit. Order one less FKCR than the total number of fixtures in row. (Example: Row of two, order (2) FK22 & (1) FKCR)

Row cut out dimensions using FK22s & FKCR adapters:
Width $24\frac{3}{8}"$, Length $[24" \times (\# \text{ in row})] + \frac{3}{8}"$.
Example: $(24" \times 2) + \frac{3}{8}" = 48\frac{3}{8}"$

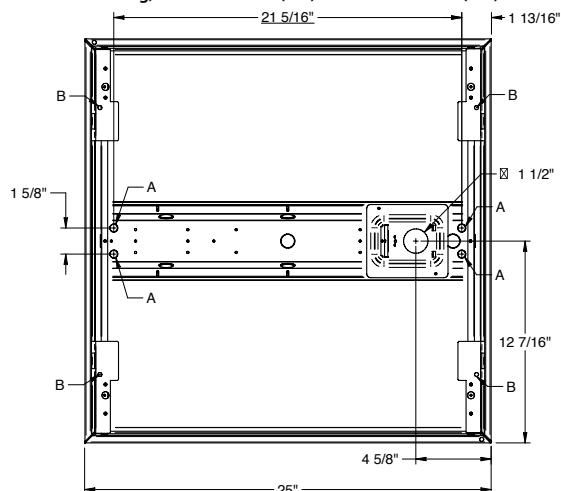
Flange kit cut out dimension for single unit only: $24\frac{3}{8}" \times 24\frac{3}{8}"$

DIMENSIONAL DATA — SURFACE MOUNT & CABLE MOUNT, STATIC ONLY

Surface Section (SM)



Back of Housing, Surface Mount (SM) and Cable Mount (CM)



Surface Mount:

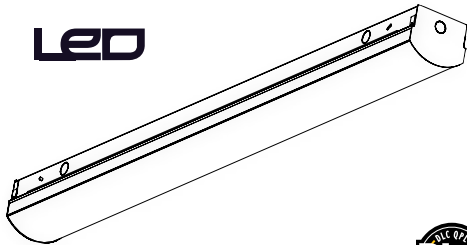
Order SM ceiling type. Mounting collar required for surface mounting. (4) Mounting knock-outs, $\frac{3}{8}"$, provided in center channel as indicated at left, marked A.

Cable Mount:

Order CM ceiling type. Use CM48Y2SC3F-KIT 48" Cable Mount Kit for 2' wide CM fixtures. Mounting holes are provided in diagonal straps shown at left, marked B.

* For Cable Mount a 2" x 3" access plate with (4) $\frac{7}{8}"$ KOs provided in place of Mounting Collar shown.

NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.



FEATURES

- LED technology in a lensed striplight
- Long life 50,000 hour LEDs at L80 for reduced maintenance
- Up to 110 lumens per watt
- Choice of four LED color temperatures
- Superior color consistency within a 3-step MacAdam ellipse and greater than 80 CRI
- Choice of four lumen packages per size
- Available in 2', 4' or 8' lengths
- Optional integral emergency battery pack
- Heavy die-formed steel channel with 100% acrylic formed diffuser
- Fully assembled fixture for quick installation
- LED boards and driver accessible for future maintenance or upgrades
- Modular replaceable LED components
- Surface mount, wall mount or suspended
- Maximum temperature 35°C on all lumen packages up to HL
- DesignLights Consortium® (DLC) qualified
- Five year warranty



PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Housing, wireway, and ends are formed from code-gauge steel. Housing components act as heat sink for LED heat dissipation. Knockouts are provided for electrical access and mounting. Shielded with 100% frosted prismatic acrylic lens.

FINISH

White painted parts are treated with a five-stage phosphate bonding process and finished with high reflectance baked enamel. For a post-painted housing finish select PAF option.

ELECTRICAL

Long-life LEDs are rated for 50,000 hours at L80 lumen maintenance. Driver options include fixed output for on/off function, step dimming (high/low/off) or continuous 0-10V dimming.

CERTIFICATION

All luminaires are built to UL 1598 and 2108 standards, and bear appropriate CSA c/US labels. Damp location labeling is standard. Emergency equipped fixtures labeled UL924. Adheres to LM70, LM80, and TM21 industry standards. DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org.

WARRANTY

Five year warranty (Terms and Conditions apply).

ORDERING INFORMATION

EXAMPLE LCL4-40HL-EU

LCL	SIZE	COLOR TEMP	LUMEN OUTPUT	DRIVER	VOLTAGE	OPTIONS
LCL LED Striplight	2 2'	30 3000K	LW Low Watt	E Fixed Output	U 120V-277V	ELL14 Emergency Battery Pack, 1400 Lumens ^{1,2,3}
	4 4'	35 3500K	ML Medium Lumen	ESD Step Dimming	347 347V (E,ED,ED1 only)	GLR Fast Blow Fuse
	8 8'	40 4000K	HL High Lumen	ED 0-10V Dimming		PAF Paint After Fabrication
		50 5000K	VL Very High Lumen	ED1 0-10V 1% Dimming		NYC NYC Compliant
			See Product Availability Table below.	LUTH Lutron H Series ³		
				LUT5 Lutron 5 Series ³		

ACCESSORIES (ORDER SEPARATELY)

S18	18" Stem, Canopy
SS18	18" Swivel Stem—45° Swivel
CSHC	Chain Hanger Assembly
LCLWG4	4' Wire Guard, 2 Required for 8' Fixture

PRODUCT AVAILABILITY

SIZE	LUMEN PACKAGE	NOMINAL LUMENS (4000K)	NOMINAL WATTS	EFFICACY
2'	ML	2,500	25	100
4'	LW	2,500	25	100
	ML	5,000	48	104
	HL	6,100	55	110
	VL	10,100	96	105
8'	LW	5,000	48	104
	ML	10,100	96	105
	HL	12,200	111	110
	VL	20,100	193	104

¹ For compatibility with Dual-Lite LiteGear™ inverters in lieu of installed battery pack, contact Hubbell Lighting representative.

² Not available in 2 ft size.

³ Not available in VL packages.

Lumens vary according to color temperature and other factors. See specific photometric test(s).

PHOTOMETRIC DATA

LUMINAIRE DATA

Luminaire	LCL4-40HL-ED LCL Led Lensed Utility Channel, Industrial 48" x 4½" x 3⅜" LED with acrylic formed lens
Ballast	D15CC55UNVTC
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	6078
Watts	54.70
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.24 90° = 1.28
Luminous Opening in Feet	Length: 4.00 Width: 0.40 Height: 0.00

ZONAL LUMEN SUMMARY

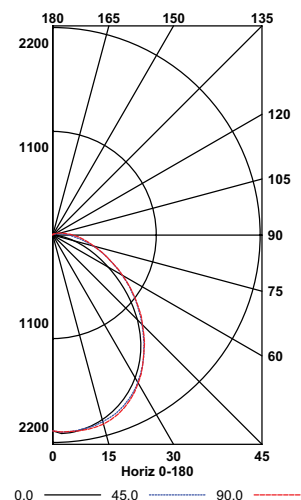
Zone	Lumens	Lamp	Fixt.
0-30	1649	27.1	27.1
0-40	2679	44.1	44.1
0-60	4574	75.2	75.2
0-90	5860	96.4	96.4
0-180	6078	100.0	100.0

ENERGY DATA

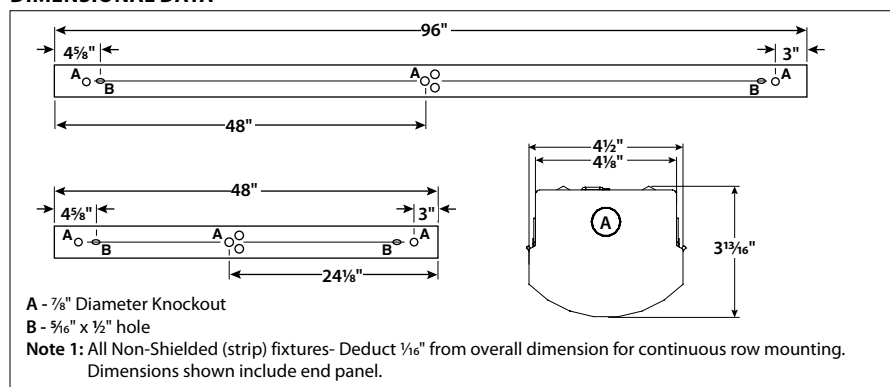
Total Luminaire Efficiency	100.0
Total Lumens per Watt	111
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.16 based on 3000 hrs. and \$0.08 per KWH

Test ITL15383 Test Date 7/14/14

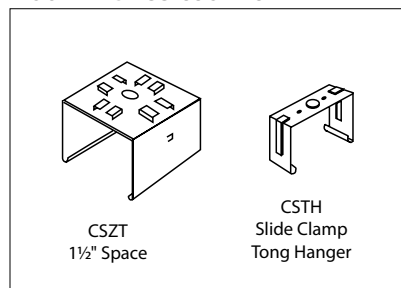
INDOOR CANDELA PLOT



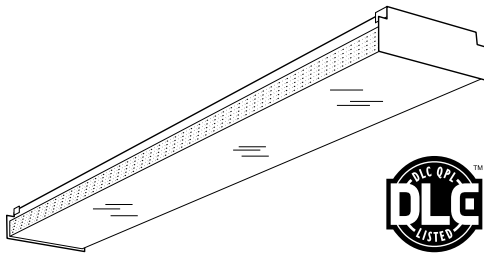
DIMENSIONAL DATA



MOUNTING ACCESSORIES



NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.



FEATURES

- LED Wraparound
- Long life 50,000 hour LEDs at L80 for reduced maintenance
- DesignLights Consortium® (DLC) qualified
- Four LED color choices and 80 CRI
- 4' Size offers three lumen packages
- 2' Size offers two lumen packages
- Optional integral emergency battery pack
- Heavy gauge steel housing, die embossed for maximum rigidity
- White steel end plates
- Diffuser features flat bottom and vertical sides
- Interior overlay for smooth appearance without pixelation
- Hinges from either side
- LED boards and driver accessible for future maintenance or upgrades
- Modular replaceability of LED components
- Surface mount or stem suspended
- Five Year Warranty

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Housing, end plates, and wireway are formed from code-gauge steel.

SHIELDING

100% acrylic prismatic with interior overlay for smooth appearance without pixelation.

FINISH

White painted parts are treated with a five-stage phosphate bonding process and finished with high reflectance baked enamel. For a post-painted housing finish select PAF option.

ELECTRICAL

Long-life LEDs are rated for 50,000 hours at L80 lumen maintenance. Driver options include fixed output for on/off function, step dimming (high/low/off), or continuous 0-10V dimming.

CERTIFICATION

All luminaires are built to UL 1598 and 2108 standards, and bear appropriate CSA labels. Damp location labeling is standard. Emergency equipped fixtures labeled UL924. Adheres to LM79, LM80, and TM21 industry standards. DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org.

WARRANTY

Five year warranty (Terms and Conditions apply).

ORDERING INFORMATION

EXAMPLE LAW4-35ML-EU

LAW	SIZE	COLOR TEMP	LUMEN OUTPUT	DRIVER	VOLTAGE	OPTIONS
MODEL	SIZE	COLOR TEMP	LUMEN OUTPUT	DRIVER	VOLTAGE	OPTIONS
LAW LED Wraparound	2 2'	30 3000K	LW Low Watt	E Fixed Output	U 120V-277V	ELL14 Emergency Battery Pack Installed, 1400 Lumens ^{1,2}
	4 4'	35 3500K	ML Medium Lumen	ESD Step Dimming	347 347V (E,ED,ED1 only)	GLR Fast Blow Fuse
		40 4000K	HL High Lumen	ED 0-10V Dimming		PAF Paint After Fabrication
		50 5000K		ED1 0-10V 1% Dimming		NYC NYC Compliant
				LUTH Lutron H Series		
				LUTS Lutron S Series		

ACCESSORIES (ORDER SEPARATELY)	
S18	18" Stem, Canopy
SS18	18" Swivel Stem - 45° Swivel

PRODUCT AVAILABILITY				
SIZE	OUTPUT	NOMINAL LUMENS (3500K)	NOMINAL WATTS	EFFICACY
2'	LW	2600	25	105
	ML	4300	49	88
4'	LW	2500	23	109
	ML	4700	48	98
	HL	5600	55	102

Actual lumens will vary according to color temperature and other factors. For exact lumens and watts see specific photometric test(s).

¹ For compatibility with Dual-Lite LiteGear® inverters in lieu of installed battery pack, contact Hubbell Lighting representative.

² Only available in 4 ft.

PHOTOMETRIC DATA

LUMINAIRE DATA

Luminaire	LAW2-40LW-EU LAW LED Low Profile Wraparound, Wraps 8" x 24" LED with acrylic prismed wraparound lens and frosted overlay
Ballast	D15CC55UNVTC
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	2647
Watts	25.20
Mounting	Surface
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.22 90° = 1.13
Luminous Opening in Feet	Length: 2.00 Width: 0.67 Height: 0.13

ZONAL LUMEN SUMMARY

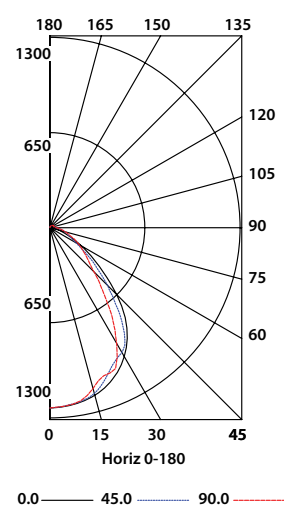
Zone	Lumens	Lamp	Fixt.
0-30	930	35.1	35.1
0-40	1456	55.0	55.0
0-60	2168	81.9	81.9
0-90	2521	95.2	95.2
0-180	2647	100.0	100.0

ENERGY DATA

Total Luminaire Efficiency	100.0
Total Lumens per Watt	105
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.26 based on 3000 hrs. and \$0.08 per KWH

Test 9114 Test Date 6/6/14

INDOOR CANDELA PLOT



LUMINAIRE DATA

Luminaire	LAW4-40ML-EU LAW LED Low Profile Wraparound, Wraps 8" x 48" LED with acrylic prismed wraparound lens and frosted overlay
Ballast	D15CC55UNVTC
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	4714
Watts	47.60
Mounting	Surface
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.23 90° = 1.09
Luminous Opening in Feet	Length: 4.00 Width: 0.67 Height: 0.12

ZONAL LUMEN SUMMARY

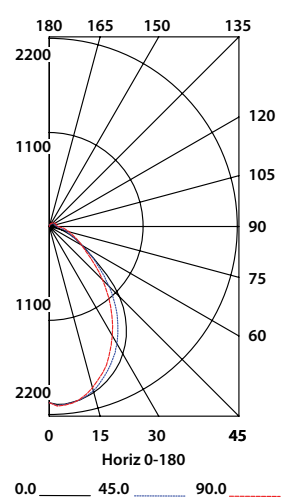
Zone	Lumens	Lamp	Fixt.
0-30	1558	33.1	33.1
0-40	2437	51.7	51.7
0-60	3744	79.4	79.4
0-90	4425	93.9	93.9
0-180	4714	100.0	100.0

ENERGY DATA

Total Luminaire Efficiency	100.0
Total Lumens per Watt	99
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.45 based on 3000 hrs. and \$0.08 per KWH

Test 15387 Test Date 7/18/14

INDOOR CANDELA PLOT



LUMINAIRE DATA

Luminaire	LAW4-40HL-EU LAW LED Low Profile Wraparound, Wraps 8" x 48" LED with acrylic prismed wraparound lens and frosted overlay
Ballast	D15CC55UNVTC
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	5602
Watts	54.80
Mounting	Surface
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.24 90° = 1.09
Luminous Opening in Feet	Length: 0.67 Width: 4.00 Height: 0.13

ZONAL LUMEN SUMMARY

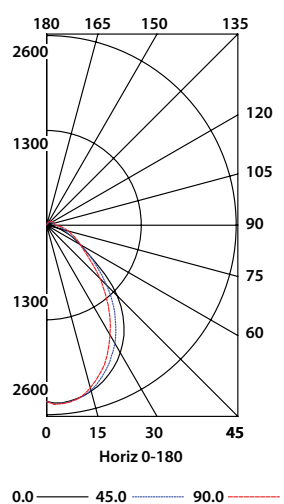
Zone	Lumens	Lamp	Fixt.
0-30	1837	32.8	32.8
0-40	2872	51.3	51.3
0-60	4415	78.8	78.8
0-90	5250	93.7	93.7
0-180	5602	100.0	100.0

ENERGY DATA

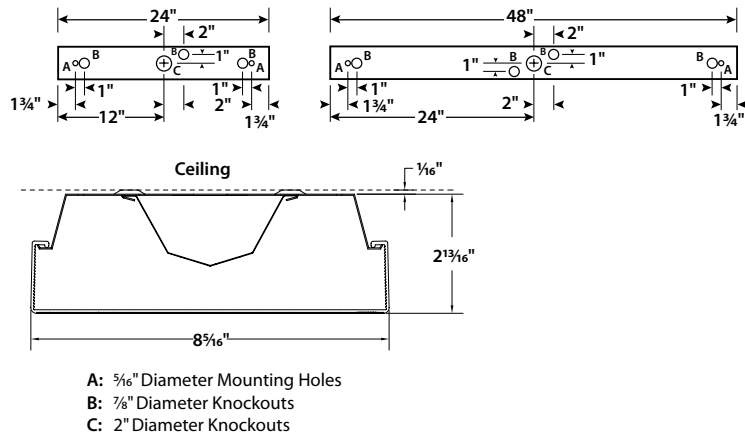
Total Luminaire Efficiency	100.0
Total Lumens per Watt	102
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.35 based on 3000 hrs. and \$0.08 per KWH

Test 15386 Test Date 7/21/14

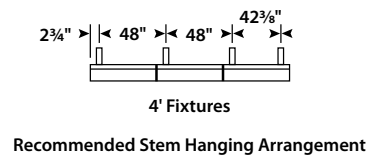
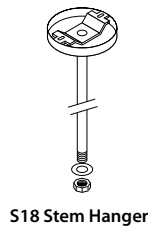
INDOOR CANDELA PLOT



DIMENSIONAL DATA

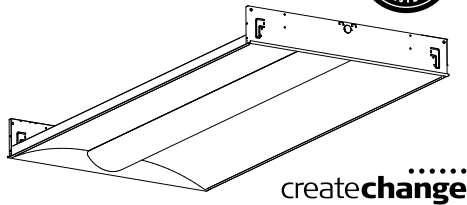


STEM MOUNTING



NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

LED



createchange

FEATURES

- Attractive architectural center lens
- High efficiency acrylic center lens features linear prisms for high performance without pixelation
- Appropriate for offices, schools, medical, and public spaces
- High performance reflector with matte white paint standard
- 60,000 hour LEDs at L80 (up to 150,000 projected life) for reduced maintenance
- Four LED color choices and 80 CRI
- Eight lumen packages
- Multiple driver options to satisfy different applications
- LED modules and electrical accessible from below
- QR code traceability
- Integral battery pack optional on most models
- Compatible with Dual-Lite inverters
- Recessed, surface or cable mount
- Air return option
- DesignLights Consortium® (DLC) qualified
- Five year warranty (Terms and Conditions apply)

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Luminaire housing, reflectors and end caps are die formed code gauge cold rolled steel. High transmission extruded acrylic enclosed lens features linear prisms with custom frost for high efficacy without pixelation.

SHIELDING

Removable lens for easy access to LED module and electrical components.

FINISH

All reflective surfaces are finished after fabrication with unique formula high reflectivity matte white paint for soft, uniform indirect illumination.

INSTALLATION

An access plate is furnished with each luminaire for fast wiring access without the necessity to open the fixture or wireway.

CEILING COMPATIBILITY

Luminaire fits recessed exposed Grid ceilings (G); four integral NEC compliant T-bar clips are standard. Can be placed in Slot Grid (SG) style ceiling with regress 3/8" above ceiling plane. A Flange Kit (FK) accessory is available for recessed hard ceiling applications. Surface Mount (SM) option allows placement below ceiling plane. Cable Mount (CM) option allows suspension below ceiling plane.

CERTIFICATION

All luminaires are built to UL1598 and 2108 standards, and bear appropriate CSA labels. Damp location is standard. Emergency-equipped fixtures labeled UL 924 and Dry Location unless specified. Adheres to LM79, LM80, and TM21 industry standards. DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org.

IC RATING

IC label is standard for recessed products. Note that IC label is void if product is installed on site with a combination of both step-dimming (ESD) driver plus through wiring or for air return fixtures.

WARRANTY

Five year warranty (Terms and Conditions apply).

ORDERING INFORMATION

EXAMPLE LCAT24-35MLG-ESDU

LCAT		24															
MODEL		COLOR TEMPERATURE		CEILING TYPE		AIR FUNCTION		VOLTAGE		OPTIONS							
LCAT	LED	30	3000K	G	Grid Lay-in ¹	Blank	Static	U	120V-277V	ELL14	Emergency Battery Pack Installed, 1400 Lumens ^{4,5}						
	Contemporary	35	3500K														
	Architectural	40	4000K														
	Troffer	50	5000K														
SIZE				LUMEN OUTPUT		DRIVER											
24		2' x 4'															
PRODUCT AVAILABILITY																	
LUMEN PACKAGE	NOMINAL LUMENS	NOMINAL WATTS	LUMENS PER WATT														
24	XW	2600-2800	24	110-119													
24	VW	3200-3450	30	107-116													
24	MW	3500-3800	33	107-116													
24	LW	4100-4700	40	103-117													
24	ML	4400-5150	40	110-129													
24	HL	5350-6200	47	114-132													
24	VL	6800-7800	65	105-121													
24	XL	7800-9250	80	92-110													
Nominal lumen range represents 3000K through 5000K. Lumens vary according to color temperatures and other factors. See specific photometric test(s).																	
				LUMEN OUTPUT		DRIVER											
				XW	Extra Low Watt	E		Fixed Output									
				VW	Very Low Watt	ESD		Step Dimming ⁴									
				MW	Medium Low Watt	ED		0-10V Dimming									
				LW	Low Watt	ED1		0-10V 1% Dimming									
				ML	Medium Lumen	LUTH		Lutron H Series 1% Dimming ^{4,5}									
				HL	High Lumen	LUTS		Lutron S Series 5% Dimming ^{4,5}									
				VL	Very High Lumen												
				XL	Extra High Lumen												
See Product Availability Table below.																	
2X4		DRIVER AVAILABILITY TABLE															
		XW	VW	MW	LW	ML	HL	VL	XL								
E	X	X	X	X	X	X	X	X	X								
ED	X	X	X	X	X	X	X	X	X								
ED1	X	X	X	X	X	X	X	X	X								
ESD					X	X	X	X	X								
LUTS	X	X	X	X	X	X											
LUTH	X	X	X	X	X	X											

ACCESSORIES
(ORDER SEPARATELY)

FK24 2' x 4' Single Flange Kit (Shipped separately)

CM48Y2SC3F-KIT 48" Cable Mount Kit for 2' wide Cable Mount fixtures, 3 Wire

¹ For drywall, order G with Flange Kit Accessory.

² Not available with Air Return (A) air function

³ Order hanger accessories separately

⁴ Not available in 347V

⁵ For compatibility with Dual-Lite LiteGear® inverters, contact Hubbell Lighting Representative

For questions about configuration options, contact Hubbell Representative.

LUTS and LUTH not available in 347V

ACCESSORIES (ORDER SEPARATELY)

FK24 2' x 4' Single Flange Kit (Shipped separately)

CM48Y2SC3F-KIT 48" Cable Mount Kit for 2' wide Cable Mount fixtures, 3 Wire

¹ For drywall, order G with Flange Kit Accessory.

² Not available with Air Return (A) air function

³ Order hanger accessories separately

⁴ Not available in 347V

⁵ For compatibility with Dual-Lite LiteGear® inverters, contact Hubbell Lighting Representative

For questions about configuration options, contact Hubbell Representative.

PHOTOMETRIC DATA

Test LCAT24-35LWG-EDU Test Date 12/15/2014

LUMINAIRE DATA

Luminaire	LCAT24-35LWG-EDU LCAT Led Architectural Troffer, Recessed Architectural 2 x 4 led with frosted linear prism lens
Ballast	D10CC55UNVTZ-C
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	4170
Watts	39.70
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.21 90° = 1.31
Luminous Opening in Feet	Length: 3.94 Width: 1.88 Height: 0.00

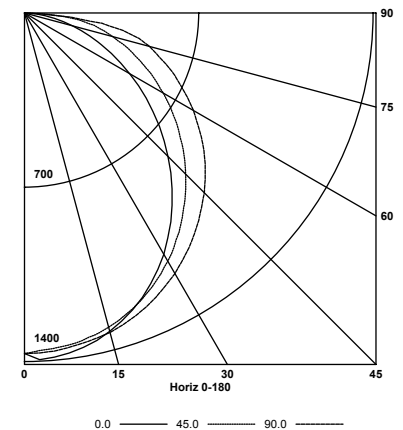
ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1062	25.5	25.5
0-40	1739	41.7	41.7
0-60	3100	74.4	74.4
0-90	4170	100.0	100.0
0-180	4170	100.0	100.0

ENERGY DATA

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	105
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.31 based on 3000 hrs. and \$0.08 per KWH

INDOOR CANDELA PLOT



LUMINAIRE DATA

Luminaire	LCAT24-35MLG-EDU LCAT Led Architectural Troffer, Recessed Architectural 2 x 4 led with frosted linear prism lens
Ballast	D10CC55UNVTZ-C
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	4790
Watts	39.80
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.21 90° = 1.33
Luminous Opening in Feet	Length: 3.92 Width: 1.90 Height: 0.00

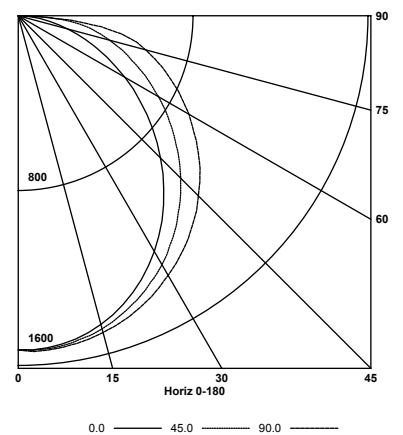
ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1198	25.0	25.0
0-40	1967	41.1	41.1
0-60	3526	73.6	73.6
0-90	4790	100.0	100.0
0-180	4790	100.0	100.0

ENERGY DATA

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	120
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.00 based on 3000 hrs. and \$0.08 per KWH

INDOOR CANDELA PLOT



Test LCAT24-35MLG-EDU Test Date 1/14/2015

LUMINAIRE DATA

Luminaire	LCAT24-35HLG-EDU LCAT Led Architectural Troffer, Recessed Architectural 2 x 4 led with frosted linear prism lens
Ballast	D10CC55UNVTZ-C
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	5587
Watts	47.20
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.21 90° = 1.33
Luminous Opening in Feet	Length: 3.92 Width: 1.90 Height: 0.00

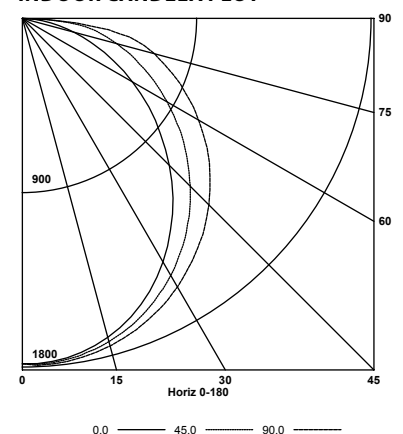
ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1397	25.0	25.0
0-40	2293	41.0	41.0
0-60	4112	73.6	73.6
0-90	5587	100.0	100.0
0-180	5587	100.0	100.0

ENERGY DATA

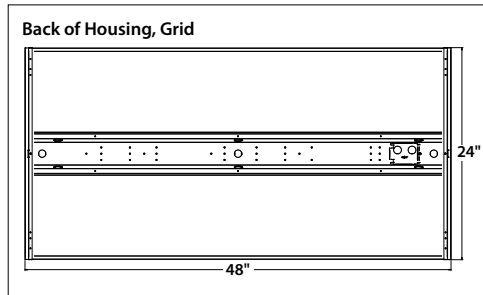
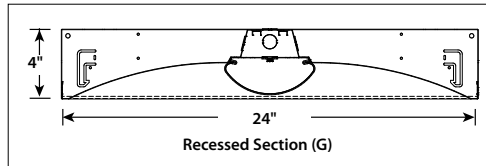
Total Luminaire Efficiency	100.0%
Total Lumens per Watt	118
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.02 based on 3000 hrs. and \$0.08 per KWH

INDOOR CANDELA PLOT

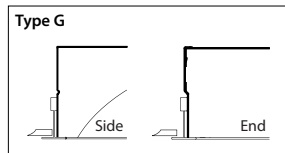


Test LCAT24-35HLG-EDU Test Date 1/14/2015

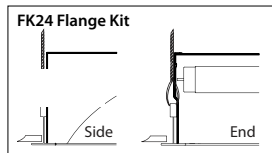
DIMENSIONAL DATA — GRID



CEILING COMPATIBILITY

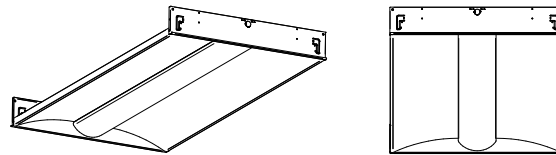


For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 2" allowed.

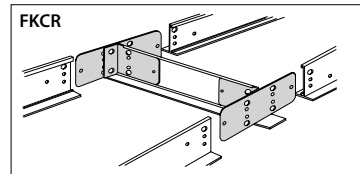
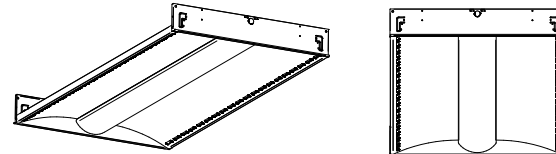


For hard ceiling applications, order FK24 flange kit. Flange kit wires directly into concealed ceiling opening for a clean, finished appearance.

GRID, STATIC



GRID, AIR RETURN



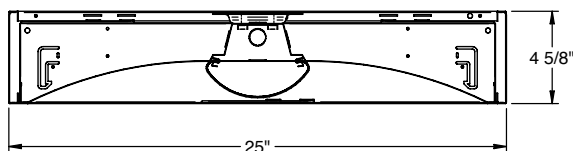
For flanged fixtures in row configurations, the FKCR adapter bracket kit is required in addition to the FK24 kit. Order one less FKCR than the total number of fixtures in row. (Example: Row of two, order (2) FK24 & (1) FKCR)

Row cut out dimensions using FK24s & FKCR adapters:
Width $24\frac{3}{8}"$, Length $[48" \times (\# \text{ in row})] + \frac{3}{8}"$.
Example: $(48" \times 2) + \frac{3}{8}" = 96\frac{3}{8}"$

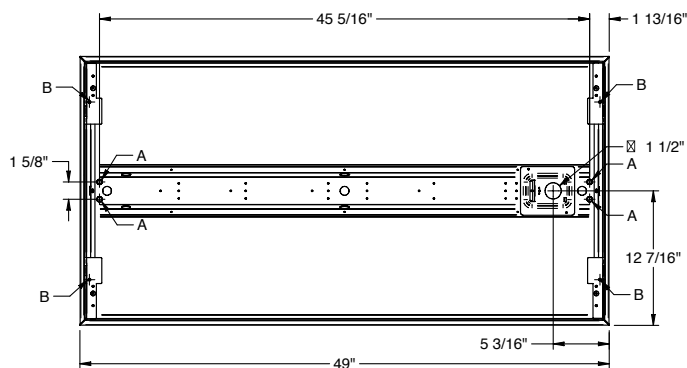
Flange kit cut out dimension for single unit only: $24\frac{3}{8}" \times 48\frac{3}{8}"$

DIMENSIONAL DATA — SURFACE MOUNT OR CABLE MOUNT, STATIC ONLY

Surface Section (SM)



Back of Housing, Surface Mount (SM) and Cable Mount (CM)



Surface Mount:

Order SM ceiling type. Mounting collar required for surface mounting. (4) Mounting knock-outs, $\frac{3}{8}"$, provided in center channel as indicated at left, marked A.

Cable Mount:

Order CM ceiling type. Use CM48Y2SC3F-KIT 48" Cable Mount Kit for 2' wide CM trim fixtures. Mounting holes are provided in diagonal straps shown at left, marked B.

* For Cable Mount a 2" x 3" access plate with (4) $\frac{7}{8}"$ KOs provided in place of Mounting Collar shown.

NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.



6" ECONOMY UNIVERSAL IC HOUSING

INCANDESCENT LAMPS

IC22

Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

PRODUCT DESCRIPTION

IC Air-Loc® Housing • Energy efficient, sealed housing • Can be completely covered with insulation • When used with Air-Loc Gasket (see accessories), stops infiltration and exfiltration of air, reducing heating and cooling costs • Trims shown with Air-Loc symbol **Air-Loc** do not require a gasket.

PRODUCT SPECIFICATIONS

Lamp Lamp ratings based on trim selected—see reverse.

Socket Medium base porcelain with nickel-plated copper screw shell • Adjustable socket plate and detachable socket with snap-in springs to accommodate various lamp and trim combinations • Socket plate secured at two points for consistent, straight lamp positioning.

Trims Trim selection shown on reverse.

Labels U.L. listed for through-branch wiring, damp locations and IP • Product thermally protected against improper use of lamps • UL Listed/CSA certified • Trims 239, 241 and 242 are wet location approved for covered ceiling applications • Trims 28, 29 are wet location approved for covered ceiling applications, **when used with outdoor rated lamps.**

Testing All reports are based on published industry procedures; field performance may differ from laboratory performance.

Product specifications subject to change without notice.

INSTALLATION

Real Nail 3 Bar Hangers Telescoping, Patented (US Patent D552,969) Real Nail 3 system permits quick placement of housing anywhere within 24" O.C. joists or suspended ceilings • Integral T-bar notch and clip secures housing in suspended ceiling grid – no accessory clips required • 24" expansion stop allows quick placement of fixture in standard grid spacing • Bars scored in two locations for fast, clean breaking, allowing housing installation in tight applications • Bars captive to mounting frame • Edge-mounted for extra strength • Captive bugle-headed ring shank nail for quick one-step installation and easy removal with claw hammer for fixture relocation • Quick-Loc slot (location identified on the mounting frame) and oversized locking set screw lock fixture in position • Bar hanger foot contoured to align to bottom of construction joist • Alternate mounting holes included.

Junction Box Pre-wired junction box provided with (5) ½" and (1) ¾" knockouts, (4) Non-metallic sheathed cable connectors and ground wire, U.L. listed/CSA certified for through-branch wiring, maximum 8 No. 12 AWG 90° C branch circuit conductors (4 in, 4 out) • Junction box provided with removable access plates • Knockouts equipped with pryout slots.

Mounting Frame 22-gauge die-formed galvanized steel mounting frame • Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation • Sight lines embossed on mounting frame to allow for easy viewing when aligning fixtures.

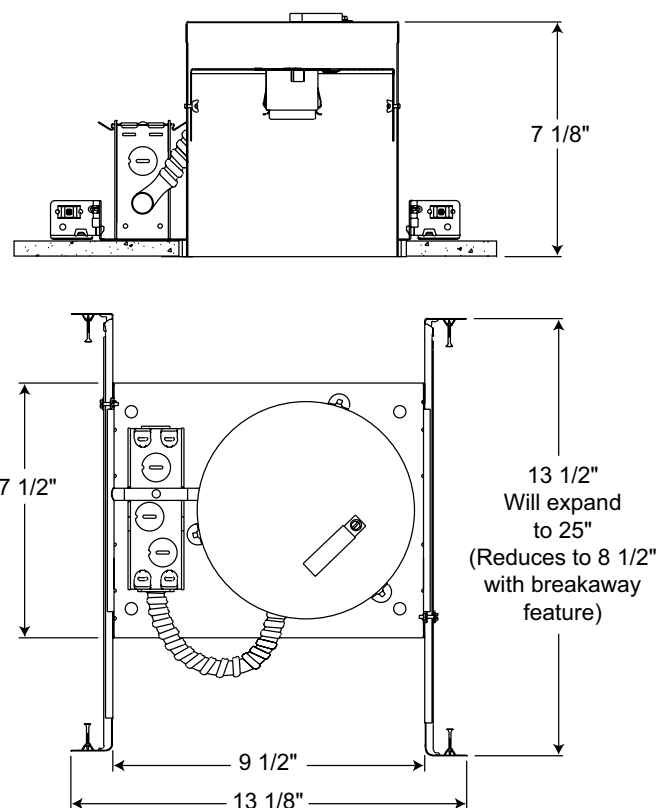
Housing IC housing, .032" aluminum sealed for Air-Loc Compliance • Housing is vertically adjustable to accommodate up to a 1" ceiling thickness.

PRODUCT CODES

Catalog Number	Input Voltage	Lamp Rating (max.)
IC22	120V	A19/BR30/BR40/PAR16/PAR20/PAR30/PAR30L/PAR38/R20 (See reverse for max. trim rating)

REV-5/15

DIMENSIONS



6 7/8" CEILING CUTOUT

ACCESSORIES

Catalog No.	Description
ALG6	Air-Loc Gasket


























To order, specify catalog number.

6" ECONOMY UNIVERSAL IC HOUSING

INCANDESCENT LAMPS

IC22

TRIMS/LAMPS

Cat. No.	Description	Max. Lamp Rating		Cat. No.	Description	Max. Lamp Rating
 ** 24B-WH 24B-SC 24B-ABZ 24B-BL 24W-WH	Conical Black Baffle Conical Black Baffle Conical Black Baffle Conical Black Baffle Conical White Baffle	50W PAR30, 75W PAR30L, 65W BR30		248W-WH	R20 Eyeball in White Baffle	50W PAR20/R20
 ** 25B-WH 25B-SC 25B-ABZ 25B-BL 25W-WH	Straight Black Baffle Straight Black Baffle Straight Black Baffle Straight Black Baffle Straight White Baffle	50W PAR30, 65W BR30		249B-WH 249W-WH	BR30 Eyeball in Black Baffle BR30 Eyeball in White Baffle	75W PAR30L, 65W BR30
 28B-WH ♦♦ 28W-WH ♦♦	Conical Black Baffle Conical White Baffle	60W A19, 65W BR30, 75W PAR30/30L, 90W PAR38, 90W BR40		264B-WH 264W-WH	PAR30 Adjustable - Black Baffle PAR30 Adjustable - White Baffle	50W PAR30
 29C-WH ♦♦ 29W-WH ♦♦	Deep Cone Clear Cone Deep Cone White Cone	60W A19, 65W BR30, 75W PAR30/30L, 90W PAR38, 90W BR40		267C-WH 267G-WH 267B-WH 267HZ-WH 267WHZ-WH	PAR30 Adjustable - Clear Alzak® PAR30 Adjustable - Gold Alzak® PAR30 Adjustable - Black Alzak® PAR30 Adjustable - Haze PAR30 Adjustable - Wheat Haze	50W PAR30
 ** 27C-WH 27G-WH 27B-WH 27PT-SC 27W-WH 27HZ-WH 27WHZ-WH 27WHZ-ABZ	Conical Cone in Clear Alzak® Conical Cone in Gold Alzak® Conical Cone in Black Alzak® Conical Cone in Pewter Alzak® Conical Cone in Gloss White Conical Cone in Haze Conical Cone in Wheat Haze Conical Cone in Wheat Haze	50W PAR30, 75W PAR30L, 65W BR30		XR30101WH XR30101BL XR30101GP XR30101SL	AVIO Square Gimbal Ring - White AVIO Square Gimbal Ring - Black AVIO Square Gimbal Ring - Graphite AVIO Square Gimbal Ring - Silver	75W PAR30
 ** 244B-WH 244W-WH	Conical Black Baffle Conical White Baffle	75W PAR30L, 60W PAR30, 65W BR30		239-WH ♦	Frosted Lens	40W A19
 ** 247C-WH 247G-WH 247B-WH 247HZ-WH 247WHZ-WH	Cone - Clear Alzak® Cone - Gold Alzak® Cone - Black Alzak® Cone - Haze Cone - Wheat Haze	75W PAR30L, 65W BR30, 75W PAR30		241-WH ♦ 241-PW ♦	Drop Opal with Reflector Shower/Closet Light	40W A19
 250-WH 250-SC 250-ABZ	Open Frame Open Frame Open Frame	65W BR30		242-WH ♦ 242-SC ♦ 242-ABZ ♦	Shower Trim, Frosted Lens with Clear Center	45W PAR38
 252-WH	Regressed Open Frame	75W R/BR30		9324-SC	Luminous Disc	50W PAR30, 65W BR30, 75W PAR30
 231C-WH 231G-WH 231W-WH	Multiplier - Clear Alzak® Multiplier - Gold Alzak® Multiplier - Gloss White	60W A19		9702	Luminous Collar	50W PAR30, 65W BR30, 75W PAR30L
 226B-WH 226W-WH	Black Cylinder w/Black Baffle White Cylinder w/White Baffle	60W PAR16		9024W-WH	White Octagonal w/White Baffle	50W PAR30, 65W BR30, 75W PAR30
 228-WH	R20 Regressed Eyeball	50W PAR20/R20		9524-SC	Chrome Band	65W BR30, 50W PAR30, 75W PAR30L
 229-WH 229-SC 229-ABZ 229-BL	BR30 Regressed Eyeball BR30 Regressed Eyeball BR30 Regressed Eyeball BR30 Regressed Eyeball	75W PAR30L, 65W BR30	Trim Size: 7 $\frac{5}{8}$ " O.D. (except Cat. Nos. 228, 229, 241, 9024, - 8" O.D., Cat. No. 9702 - 7 $\frac{3}{4}$ " O.D.). Trim Finish: ABZ - Classic Aged Bronze, BL - Black, GP - Graphite, PW - Plastic White (Polycarbonate material shower trim), SC - Satin Chrome, SL - Silver, WH - White. Alzak is a registered trademark of Alcoa Corp. Note: In Canada when insulation is present, Type IC fixtures must be used.			

Air-Loc JUNO IC housings meet IECC Energy Code requirements per ASTM E283.
Air-Loc® rated trims are pre-gasketed for minimum air leakage with IC housings.

♦ UL Listed for use in wet location.

♦♦ UL Listed for use in wet location with outdoor rated lamp.

** NOTE: TR6 Trim Ring compatible with 24, 25, 27, 244,
247, 264, 267 trims.



Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

PRODUCT DESCRIPTION

All-in-one 6" LED Retrofit eyeball trim installs into existing 6" incandescent housings with medium base sockets or Juno IC23-LEDT24 and IC23R-LEDT24 quick connect recessed housings • May be used in housings completely covered with insulation • Adjustable eyeball design allows for 30° vertical adjustment, rotates 358° • Field installable optic accessories available to provide different beam spread options • Dimmable with most standard incandescent or electronic low voltage dimmers • Designed to provide 50,000 hours of life • 5 year limited warranty on LED components.

ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- No harmful ultraviolet or infrared wavelengths
- No lead or mercury
- Comparable light output to 65W BR30 incandescent while consuming 11W

PRODUCT SPECIFICATIONS

LED Retrofit Eyeball Trim Aluminum eyeball trim with white finish

- All-in-one design where LED light engine mounts directly to trim
- Up to 30° vertical adjustment, rotates 358° • Provided with torsion springs as standard • Accessory kit available for use in housings that do not have torsion spring retaining brackets.

LED Light Engine LED array integrated to one piece high purity aluminum, thermally conductive eyeball housing provides uninterrupted heat transfer to ensure long life of the LED • Replaceable light engine mounts directly to eyeball housing and incorporates the latest generation, high lumen output LED array • LEDs are binned to standards that exceed ENERGY STAR® requirements yielding superior fixture to fixture color uniformity • 2700K, 3000K, 3500K or 4100K color temperature available • 90 CRI minimum.

LED Driver Dedicated 120 volt driver • Power factor > 0.9 at 120V input • Dimmable with the use of most incandescent, magnetic low voltage and electronic low voltage wall box dimmers • For a list of compatible dimmers, see [JUNOICLED-DIM](#) and reference dimmer list for dedicated 120V only housing.

Optical System Computer-optimized reflector design with high reflectance white finish coupled with a high transmission diffusing lens conceals the LEDs • Efficient system that can produce over 600 lumens while using 11W • Wide flood distribution shipped as standard with optional optic accessories available and sold separately.

Electrical Connections Trim features quick connect plug installed as standard for installation into IC23-LEDT24 and IC23R-LEDT24 housings with mating connector • Trim ships with a medium base socket adapter whip for installation into 6" incandescent housings with medium base sockets.

Life Rated for 50,000 hours at 70% lumen maintenance.

Labels ENERGY STAR® Qualified • Certified to the high efficacy requirements of California T24 • Suitable for damp locations • Union made • UL and cUL classified for use with 6" incandescent medium based housings and Juno IC23-LEDT24 or IC23R-LEDT24; see below for specific compatibility requirements.

Testing All reports are based on published industry procedures; field performance may differ from laboratory performance.

Product specifications subject to change without notice.

COMPATIBLE HOUSINGS

The J6RLEG4 retrofit module is compatible with most 6" recessed housings measuring at least 5-1/4" high with an inside diameter between 6" and 6-3/4". Removal of the housing socket plate or socket mounting bracket may be required in order for the trim to fit properly. If housing does not have torsion spring brackets, the V6RL-TRB accessory is required.

Compatible housings include, but not limited to:

Juno housings: IC2, IC22, IC23, IC21 and TC2 Series

Juno quick-connect LED housings: IC23-LEDT24 and IC23R-LEDT24

VuLite housings: V6IC and V6TC Series

Halo housings: H7 Series, H25 Series

Thomas housings: PS1 and PS3 Series

Capri housings: CR1, PR1, QL6 Series, P9ASIC Series

Lithonia housings: L7X and LC6 Series

REV-6/15

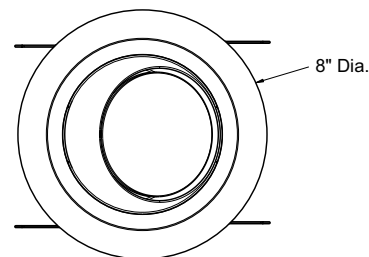
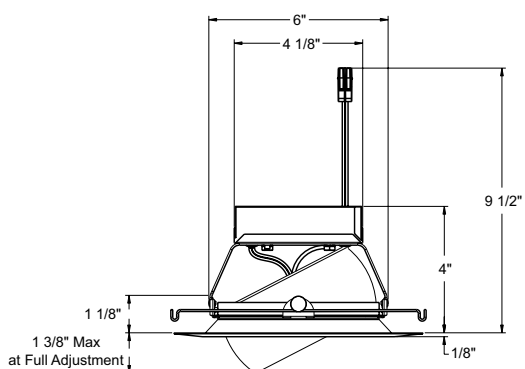
6" IC LED RETROFIT EYEBALL TRIM



600 LUMEN
J6RLEG4



DIMENSIONS



ELECTRICAL DATA

	120V
Input Power	11.4W (+/-5%)
Input Current - Max	0.10A
Frequency	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (consumer)
Minimum starting temp	-25°C
CRI	90 min.

MOUNTING ACCESSORIES

Catalog No.	Description
V6RL-TRB	Torsion receiver bracket kit to install trim into housings that do not have torsion receiver brackets

To order, specify catalog number.



6" IC LED RETROFIT EYEBALL TRIM

600 LUMEN

J6RLEG4

ORDERING INFORMATION: Retrofit and accessories each ordered separately.

Example: J6RLEG4-27K-6-WH

Eyeball Retrofit	Color Temperature	Lumen Package	Finish
J6RLEG4	27K 2700K 3K 3000K 35K 3500K 41K 4100K	6 600 Lumen	WH White

OPTIC ACCESSORIES

Catalog No.	Description
LEDOPTICG3-M	Medium Flood Optic (50°)
LEDOPTICG3-N	Narrow Flood Optic (37°)
LEDOPTICG3-S	Spot Optic (10°)

To order, specify catalog number.

PHOTOMETRIC REPORT

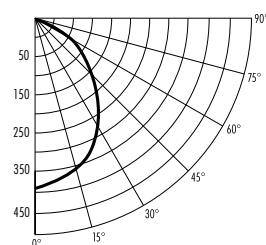
Test Report #: PT03151901R

Catalog No: J6RLEG4-27K-6-WH

with standard
wide beam optic

Luminaire Spacing Criterion: 1.08

Luminaire LPW: 61



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees	Vertical	0°
0	393	
5	389	
15	359	
25	306	
35	245	
45	166	
55	86	
65	40	
75	15	
85	3	
90	0	

Multiplier: 3K - 1.06
35K - 1.13
41K - 1.17

AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60"x60" room)

Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0'	47	38	31
5.0'	30	24	20
6.0'	21	17	14
7.0'	17	14	11
8.0'	13	11	9
9.0'	10	8	7
10.0'	7	6	5

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	278	N/A	39.9
0-40°	430	N/A	61.8
0-60°	636	N/A	91.4
0-90°	697	N/A	100.0

INITIAL FOOTCANDLES (One Unit, 11.4W, 82.7° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	24.5	7.0'
6	10.9	10.6'
8	6.1	14.1'
10	3.9	17.6'

LUMINANCE (Average cd/m²)

45	26232
55	16821
65	10473
75	6617
85	3322

Fixtures tested to IES recommended standard for solid state lighting per LM-79-08. Photometric performance on a single unit represents a baseline of performance for the fixture. Results may vary in the field.

CBCP • Centerbeam candlepower

FC • Footcandles at beam center (aim point)




In vertical aiming applications, aim point (X) is determined by dividing distance from the wall (D) by the tangent of the desired aim angle (A) (0.5774 for 30°).

Horizontal Aiming Angles



Vertical Aiming Angles



Fixture	Beam Type	Beam Spread°	Rated Life	CBCP	0°				30°			30°				
					MH	FC	L	W	FC	L	W	D	FC	X	L	W
J6RLEG4-27K-6-WH with LEDOPTICG3-M Medium Flood Optic	MFL	50° 	50000	689	3	77	2.8	2.8	50	4.0	3.2	1	86	1.7	10.7	1.9
					4	43	3.7	3.7	28	5.4	4.3	2	22	3.5	21.5	3.7
					5	28	4.7	4.7	18	6.7	5.4	3	10	5.2	32.2	5.6
					6	19	5.6	5.6	12	8.0	6.5	4	5	6.9	42.9	7.5
					7	14	6.5	6.5	9	9.4	7.5	5	3	8.7	53.6	9.3
J6RLEG4-27K-6-WH with LEDOPTICG3-N Narrow Flood Optic	NFL	37° 	50000	836	3	93	2.0	2.0	60	2.8	2.3	1	105	1.7	4.0	1.3
					4	52	2.7	2.7	34	3.7	3.1	2	26	3.5	8.1	2.7
					5	33	3.3	3.3	22	4.6	3.9	3	12	5.2	12.1	4.0
					6	23	4.0	4.0	15	5.6	4.6	4	7	6.9	16.1	5.4
					7	17	4.7	4.7	11	6.5	5.4	5	4	8.7	20.2	6.7
J6RLEG4-27K-6-WH with LEDOPTICG3-S Spot Optic	SP	10° 	50000	5503	4	344	0.7	0.7	223	0.9	0.8	2	172	3.5	1.4	0.7
					5	220	0.9	0.9	143	1.2	1.0	3	76	5.2	2.1	1.0
					6	153	1.0	1.0	99	1.4	1.2	4	43	6.9	2.9	1.4
					7	112	1.2	1.2	73	1.6	1.4	5	28	8.7	3.6	1.7
					8	86	1.4	1.4	56	1.9	1.6	6	19	10.4	4.3	2.1

For 3000K fixtures, use 1.06 multiplier; for 3500K fixtures, use 1.13 multiplier; for 4100K fixtures, use 1.17 multiplier.

LIGHTING

Short-term Lighting Systems, Accessories & Box & Wall Vaportite SLUL, SC, RS, VTB, VTW SERIES

TYPE S
WITH SATCO LED LAMP



SHORT-TERM LIGHTING SYSTEMS



*UL Listed.



CAT. NO	FIG. NO.	DESCRIPTION	STD. CTN. QTY.
SLUL100*	1	100 Ft. With Molded Sockets In 10 Ft. Intervals. 150 Watts. Osha And Nec Compliant. High Visibility Yellow.	1
SC200	2	Standard Cage	24
RS200	3	Rotatable Socket 200 Watt	24

BOX AND WALL VAPORTITE



- For well or pit lighting, indicators on docks, industrial and commercial lighting.
- Heavy duty die cast aluminum housing.
- One piece locking die cast aluminum guard with grey polyester powder coat finish.
- Screw in tempered glass globe.
- Listed for wet location use.
- 1/2" NPT knockouts.
- Lamp not included.



All dimensional data is listed in inches.

CAT. NO.	FIG. NO.	DESCRIPTION	HEIGHT	WIDTH	LAMP
VTB15012	1	Box 150 Watt 1/2" Vaportite	9	4.125	Incandescent
VTW15012	2	Wall 150 Watt 1/2" Vaportite	10	7.13	Incandescent
CG150	3	Clear Glass Globe for 150 Series Vaportite Fixtures	—	—	—

7016 LED

STANDARD SPECIFICATIONS

HOUSING

Die-cast aluminum housing designed for rugged applications. The hinged door is fastened over the continuous rubber seal with stainless steel hardware. Fixture mounts with a threaded, adjustable knuckle.

REFLECTOR

Formed aluminum, secured in position with hardware.

LENS

Clear, tempered glass fastened into the hinged door with a continuous seal.

LED PERFORMANCE - 3500K STANDARD

120-277V - 3500K, 82 CRI - L80 rating - 60,000 hrs - L70 rating (projected) - 100,000 hrs

Amperage rated @ 110V input

Operating ambient temperature: -20°C / -4°F - 40°C / 104°F

Standard 3500K source lumens noted. Consult Brownlee.com for performance of all CCTs.

B12LED - 12W nominal, .10 A input - 1422 lm - 120 lm/W

C9LED - 9W nominal, .10 A input - 1072 lm - 122 lm/W

C17LED - 17W nominal, .15 A input - 1829 lm - 111 lm/W

C24LED - 24W nominal, .20 A input - 2558 lm - 107 lm/W

MOUNTING

The 7016 is designed to be installed in a threaded collar, and the light can be aimed at the end user's preference.

FINISH

This series is available in a standard bronze polyester powder coat.

WARRANTY

5 year limited warranty on this LED product. Consult factory for details.

ORDERING INFORMATION

7016 -

Model

2.

3. (if required)

2. WATTAGE

B12LED 2-B Series boards

C9LED 1-C Series board

C17LED 2-C Series boards

C24LED 2-C Series boards

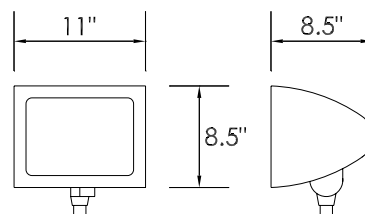
PROJECT:

MODEL #:

FIXTURE TYPE:



GSD option



WET

3. AVAILABLE OPTIONS

35K 3500K standard color temperature

27K 2700K color temperature

30K 3000K color temperature

40K 4000K color temperature

BAC Buy American Compliant

DIM Dimming driver (120-277V)
(0-10V dimming control required)

DTR Triac (Line Voltage) Dimming (120V) (All except C17LED)

ECW Extreme Cold Weather (-40°C / -40°F min.)

ES ENERGY STAR®

GSD Glare Shield

PO1 Photo Control (120V)

PO2 Photo Control (208, 240, 277V)

Specifications and dimensions subject to change without notice.

Consult your Brownlee Lighting representative for availability and ordering information.

P8222 Series

LED Flush Mount • Wet Location



Specifications:

Description:

The P8222 delivers a solution for flush mount, for both residential and commercial markets. In addition, the P8222 is wet located and is a cost effective solution for fire rated application. The P8222 features a 120V alternating current source and eliminates the need for a traditional LED driver. This modular approach results in an encapsulated luminaire that unites performance, cost and safety benefits.

Construction:

- Diffused polycarbonate lens controls direct glare from the LEDs
- Simple snap in installation for J-Box
- Die-cast aluminum construction with a powder coat paint finish
- Can be installed in a 4" J-Box
- Lumen output and distribution comparable to a 100W incandescent lamp
- Suitable for use in IC or NON-IC Applications with 25°C (77°F) continuous room side ambient temperature.

Performance:

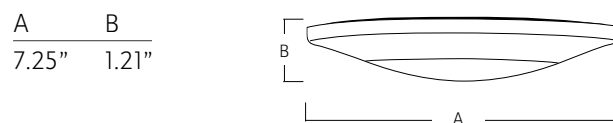
Input Power	17W
Input Voltage	120V
Input Frequency	60Hz
Lumens	1032 (LM-79)
CCT	3000K
CRI	90+
LPW	60
Life	42,000 (L70/TM-21)
EMI/RFI	FCC Title 47, Part 15, Class B
Min. Start Temp	-30° C
Max. Operating Temp	30° C
Warranty	5 yrs.
Labels	cCSAus classified for wet locations ENERGY STAR® qualified

P8222-28/30K9-AC1-L10

Images:



Dimensions:



Included Mounting Options:

J-Box Mount



J-Box
Adapter



Catalog number:

Base	Finish	Color Temp	Voltage	Lumen Package
P8222	28 - White	30K9 - 3000K 90 CRI	AC1 - 120V	L10 - 1032 Lumens

Photometrics:

P8222-28/30K9-AC1-L10

ELECTRICAL DATA

P8222-28/30K9-AC1-L10

Input Voltage	120V
Input Frequency	60 Hz
Constant Current Output	700mA
Power Factor	≥0.90
THD	<20%
EMI Filtering	FCC 47CFR Part 15, Class B
Operating Temperature	-30°C to 30°C
Dimming	Yes*

Over-voltage, over-current, short-circuit protected

*See Dimming Notes for more information

PERFORMANCE DATA CHART

Single Unit, Initial Footcandles, 30" Work Plane						Ceiling to Floor Height (ft)	Multiple Units, Initial Footcandles, 30" Work Plane				
Nadir		10°		20°			Spacing is Maximum Over Work Plane, SMH= 1.2				
FC	FC	Dia (ft)	FC	Dia (ft)	FC		Dia (ft)	Fixture Spacing (ft)	RCR 2	RCR 5	RCR 7
32	30	1	24	3	17		4	6	4.0	53	37
13	12	2	10	4	7	6	8	7.0	21	15	12
6	6	3	5	6	3	9	10.5	10.0	10	7	6
4	4	3	3	7	2	11	12	11.0	7	5	4

P8222-28/30K9-AC1-L10

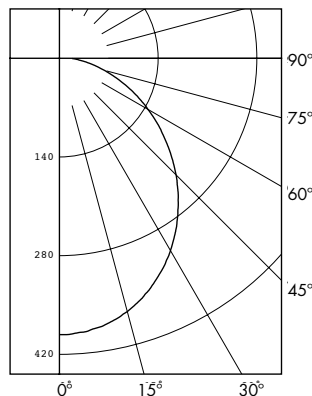
LED Light Engine: 3000K, 90 CRI

System Wattage: 16.4

Fixture delivered lumens: 1032

Fixture Efficacy: 63.0

Spacing Criteria: 1.2



CANDELA DISTRIBUTION

DEG CANDELA

0	392
5	390
15	372
25	337
35	290
45	234
45	175
55	117
65	66
75	28
90	16

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	297	28.8
0-40	478	46.3
0-60	814	78.9
0-90	1032	100.0

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance															
	80%				70%				50%				30%			
	20% Effective Floor Cavity Reflectance															
	% Wall Reflectance															
	70	50	30	10	70	10	50	30	50	30	50	30				
1	108	104	99	95	106	94	97	94	93	90						
3	90	80	71	65	88	64	75	69	72	67						
5	76	63	54	48	74	47	60	53	58	53						
7	65	52	43	37	64	37	50	42	48	44						
9	57	44	35	30	56	30	42	35	41	34						

Test No. 14.00618 2768255-4

Tested at 25° Ambient in accordance to IESNA LM-79-2008

P8027-28/30K9-AC1-L10

Test No. 14.00618 2768255-4

P8222 Series

LED Flush Mount • Wet Location



Dimming Notes:

P8222-28/30K9-AC1-L10

P8222 is designed to be compatible with many Electronic Low Voltage (ELV-Reverse Phase) controls. LED rated dimmer controls may offer favorable dimming performance.

The following is a partial list of known compatible dimmer controls:

Electronic Low Voltage ELV Reverse Phase Controls

Leviton	Renoir II	AWRMG-EAW
Lutron	Diva Series	(Part Number DVELV-300)
Lutron	Maestro Series	(Part Number MAELV-600)
Lutron	Nova T Series	(Part Number NTELV-300)
Lutron	Spacer Series	(Part Number SPSELV-600)
Lutron	Vierti Series	(Part Number VTELV-600)

LED Rated Controls

Pass & Seymour	(Part Number DCL453PTCCCV6)
----------------	-----------------------------

Incandescent Digital type dimmers are not recommended.

Dimming capabilities will vary depending on the dimmer control, load, and circuit installation.
Always refer to dimmer manufacturer instructions or a controls specialist for specific requirements.

Dimmer control brand names where identified above are trade names or registered trademarks of each respective company.

DESCRIPTION

The CE Series offers quality and value with a compact and attractive LED based emergency exit. The white or black housing is made of high impact UL flame rated thermoplastic. Snap together canopy, housing and removable chevrons for quick and easy installation. Universal single or double-face. Remote capacity option will run 4 CIR/COR Series single remote lamp-heads or 2 double CIR/COR remotes.

APPLICATION

The CE Series can be applied in stair-wells, hallways, offices and other commercial applications.

COMPLIANCES

UL924 Listed for Damp Location
NFPA 101 and NFPA 70
OSHA

WARRANTY

2 year full unit warranty



FEATURES

- LED life-cycle of more than 10 years
- Molded-in template for Quick installation
- Dual-voltage 120 or 277V AC input
- Includes long-life Nickel Cadmium battery for UL recognized 90 minute emergency lighting
- Remote capacity or extended runtime option
- Damp Location Listed 20°C to 30°C (68°F to 86°F)
- Provided with test switch and AC-On indicator
- Canopy included

ENERGY CONSUMPTION

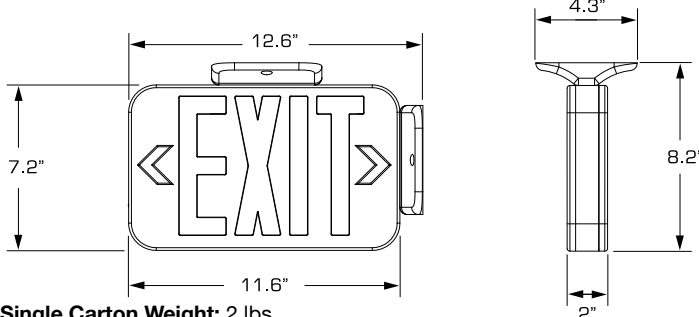
	120 VAC	277 VAC
CER	1.78 W	1.88 W
CEG	1.49 W	1.57 W
CERRC	3.60 W	4.14 W
CEGRC	3.28 W	3.81 W

ORDERING GUIDE

Catalog Number	Description
CER	White Thermoplastic Exit, Universal Face, Red LED Emergency Exit
CERB	Black Thermoplastic Exit, Universal Face, Red LED Emergency Exit
CEG	White Thermoplastic Exit, Universal Face, Green LED Emergency Exit
CEGB	Black Thermoplastic Exit, Universal Face, Green LED Emergency Exit
CERRC	White Thermoplastic Exit, Universal Face, Red LED Emergency Exit, Remote Capacity
CERRCB	Black Thermoplastic Exit, Universal Face, Red LED Emergency Exit, Remote Capacity
CEGRC	White Thermoplastic Exit, Universal Face, Green LED Emergency Exit, Remote Capacity

Note: Remote Capacity Exit will only power the Compass Indoor and Outdoor Remote (CIR and COR Series)

DIMENSIONS



Single Carton Weight: 2 lbs.
Master Carton Quantity: 6 each

ACCESSORIES

WGLX Wireguard - 10" H X 14" W X 2 1/4" D
CIR Series - Matching LED Indoor Remote Heads
COR Series - Matching LED Outdoor Remote Heads



DESCRIPTION

The CU2 Series offers quality and value with a compact and attractive LED based emergency light. The white or black housing and lamp-heads are made of high impact UL flame rated thermoplastic. Lamp-heads are fully adjustable and glare-free. Snap together design for quick and easy installation with option of Wall or Ceiling mount. Remote capacity unit will run a double-head remote or 2 single-head remotes of either the Compass CIR or COR Series.

APPLICATION

The CU2 Series can be applied in stair-wells, hallways, offices and other commercial applications.

COMPLIANCES

UL924 Listed for Damp Location
NFPA 101 and NFPA 70
OSHA

WARRANTY

2 year full unit warranty



FEATURES

- LED life-cycle of more than 10 years
- Quick installation
- Dual-voltage 120 or 277V AC input
- Includes long-life Nickel Cadmium battery for UL recognized 90 minute emergency lighting
- Remote capacity or extended runtime option
- Damp Location Listed 20°C to 30°C (68°F to 86°F)
- Fully adjustable lamp-heads
- Provided with test switch and AC-On indicator
- Wall or Ceiling mount

ENERGY CONSUMPTION

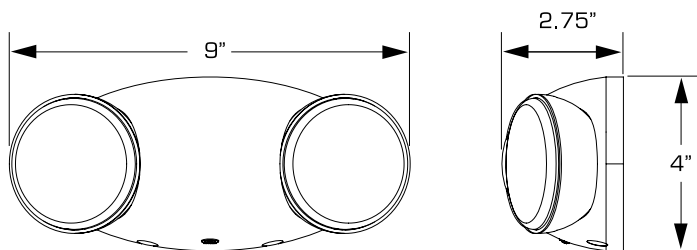
	120 VAC	277 VAC
CU2	.56 W	.54 W
CU2RC	.92 W	1.62 W

ORDERING GUIDE

Catalog Number	Description
CU2	White Thermoplastic, Dual-Head LED Emergency Light, 120/277 Input, Damp Location Listed, 3 VDC, 1 Watt
CU2B	Black Thermoplastic, Dual-Head LED Emergency Light, 120/277 Input, Damp Location Listed, 3 VDC, 1 Watt
CU2RC	White Thermoplastic, Dual-Head LED Emergency Light, 120/277 Input, Damp Location Listed, Remote Capacity, 3VDC, 1Watt
CU2RCB	Black Thermoplastic, Dual-Head LED Emergency Light, 120/277 Input, Damp Location Listed, Remote Capacity, 3VDC, 1Watt

Note: Remote Capacity Unit will only power the Compass Indoor and Outdoor Remote(CIR and COR Series)

DIMENSIONS






Single Carton Weight: 1 lbs.
Master Carton Quantity: 12 each

ACCESSORIES

WGLZ Wireguard - 6.25" H X 14" W X 4" D
CIR Series - Matching LED Indoor Remote Heads
COR Series - Matching LED Outdoor Remote Heads

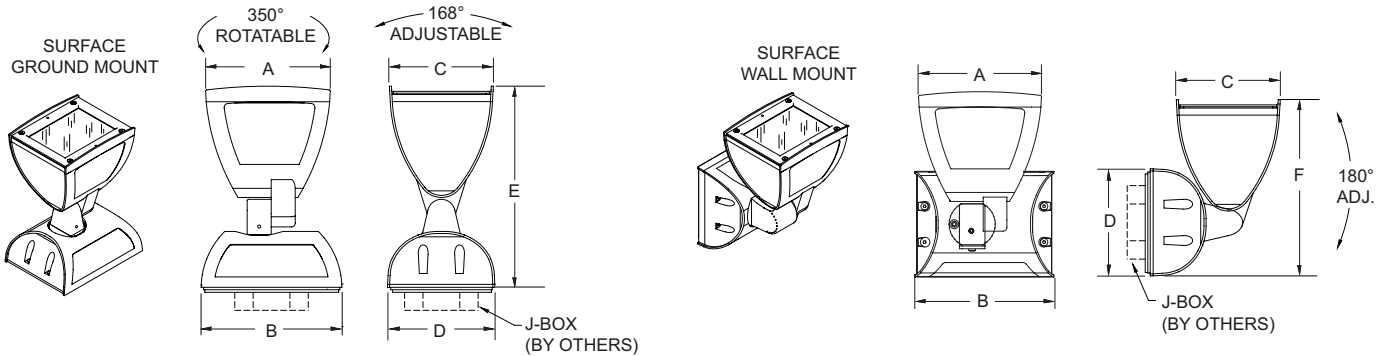




ITEM	SPECIFICATION				
LIGHT SOURCE	15W, 30W, 50W, 120W, 135W				
OPTICS	<div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div>7°15°30°45°100°HSL(10° x 60°)</div></div>				
COLOR TEMPERATURES	2700K, 3000K, 3500K, 4000K, Static Red, Static Green, Static Blue, Static Amber				
CRI	82				
PERFORMANCE	WHITE (4000K)				
	FIXTURE WATTAGE (TOTAL WATTAGE)	OPTICS	LUMENS	EFFICACY lm/W	PEAK CANDELA (CD / m²)
	30W	7°	2325 lm	63.69 lm/W	107,338 cd/m²
	30W	15°	2064 lm	56.50 lm/W	33,310 cd/m²
	30W	30°	2190 lm	60.00 lm/W	9,672 cd/m²
	30W	45°	2131 lm	58.30 lm/W	3,812 cd/m²
	30W	HSL	2052 lm	56.20 lm/W	8,408 cd/m²
	50W	7°	3280 lm	58.90 lm/W	160,295 cd/m²
	50W	15°	2912 lm	52.37 lm/W	47,005 cd/m²
	50W	30°	3002 lm	53.99 lm/W	13,257 cd/m²
	50W	45°	2727 lm	49.00 lm/W	5,374 cd/m²
	50W	HSL	3167 lm	56.90 lm/W	12,973 cd/m²
	120W	7°	7954 lm	63.17 lm/W	353,362 cd/m²
	120W	15°	6885 lm	54.44 lm/W	111,131 cd/m²
	120W	30°	7306 lm	58.03 lm/W	32,270 cd/m²
	120W	45°	7111 lm	56.21 lm/W	12,720 cd/m²
	120W	HSL	7145 lm	56.40 lm/W	29,299 cd/m²
	Lumen measurement tested in accordance with IES LM-79-08				
LUMEN MAINTENANCE	WHITE & RGB: L70 AT 25° C, MINIMUM	75,000 hours			
ELECTRICAL	AC LINE VOLTAGE	120V to 277V			
	POWER SUPPLY	INTEGRAL TO THE LUMINAIRE			
	POWER CONSUMPTION	30W: 36.5W	50W: 55.6W	120W: 125.9W	135W: 146.9W
CONTROL	DIMMING	0-10V			
PHYSICAL	HOUSING	Heavy duty die-cast aluminum, powder-coated finish			
	LENS	Tempered glass			
	DIMENSIONS (H X W X D)	MASQUE 1 - SM Mounting: 9-5/8" x 5-1/8" X 6-3/4" MASQUE 2 - SM Mounting: 12-3/4" x 5-3/4" X 7-1/8" MASQUE 4 - SM Mounting: 21" x 9-1/2" X 13-1/8"			
	WEIGHT	MASQUE 1 - SM Mounting: 7 lbs (3 kg) MASQUE 2 - SM Mounting: 12 lbs (5 kg) MASQUE 4 - SM Mounting: 47 lbs (21 kg)			
	EPA	MASQUE 1: 0.551 FT²		MASQUE 2: 0.891 FT²	MASQUE 4: 2.269 FT
	OPERATING TEMPERATURE	-25° C to 40° C			
CERTIFICATIONS		ETL Wet Location <div><div>US Intertek</div><div>COMPLIANT</div><div>made in USA</div></div>			
WARRANTY	LIMITED	5 Year			

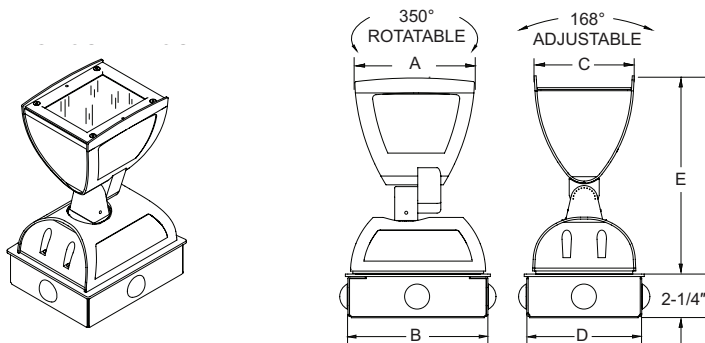
MQ__	30	35	100	SM	INT	TN	
ORDERING INFORMATION							
Prefix	Wattage	LED Color/CCT	Optics	Mounting	Voltage/ Wiring Method	Finish	Accessories
MQ1 MasqueLED 1 Series	WHITE			MASQUE 1 MOUNTING OPTIONS SM = Surface Mount, Wall or Ground CM = Conduit Mount EX-X = Extended Arm, X = Arm length WM2-X = Twin Fixture, Wall Mount Direct & Indirect X = Arm length ST-X = Stanchion X = Stanchion height	INT = 120V - 277V integral power supply IDIM = 120V - 277V integral dimming power supply (0-10V) ① ① Dimming controls are required. Order separately.	TW = Textured White TBL = Textured Black TBR = Textured Bronze TLB = Textured Light Bronze TN = Textured Natural TS = Textured Sandstone CC = Custom Color ② ② Contact factory for custom color. Additional charges will apply.	EXTERNAL SHIELDS ECB = Cross Baffle EHB = Horizontal Baffle EVB = Vertical Baffle BD = Barn Doors VS = Cutoff Visor SN = Snoot (Contact factory for Masque 4 Snoot availability) FS = Adjustable Snoot WG = Wire Guard OPTIONS TP = Tamper Proof Fasteners CRF = Corrosion Resistant Finish ③ ③ CRF is recommended for coastal or extreme exterior environments. ④ Contact factory for available finishes.
	15	27K 30K 35K 40K	7° 15° 30° 45° 100° HSL (10° X 60°)				
	STATIC COLORS						
15	R = Red G = Green B = Blue A = Amber	7° 15° 30° 45° 100° HSL (10° X 60°)					
MQ2 MasqueLED 2 Series	WHITE			MASQUE 2 MOUNTING OPTIONS SM = Surface Mount, Wall or Ground CM = Conduit Mount EX-X = Extended Arm, X = Arm length WM2-X = Twin Fixture, Wall Mount Direct & Indirect X = Arm length ST-X = Stanchion X = Stanchion height			
	30 50	27K 30K 35K 40K	7° 15° 30° 45° 100° HSL (10° X 60°)				
	STATIC COLORS						
30 50	R = Red G = Green B = Blue A = Amber	7° 15° 30° 45° 100° HSL (10° X 60°)					
MQ4 MasqueLED 4 Series	WHITE			MASQUE 4 MOUNTING OPTIONS SM = Surface Mount, Wall or Ground CM = Conduit Mount EX-X = Extended Arm, X = Arm length ST-X = Stanchion X = Stanchion height			
	120	27K 30K 35K 40K	7° 15° 30° 45° 100° HSL (10° X 60°)				
	STATIC COLORS						
120	R = Red G = Green B = Blue A = Amber	7° 15° 30° 45° 100° HSL (10° X 60°)					

SM - SURFACE, WALL, GROUND



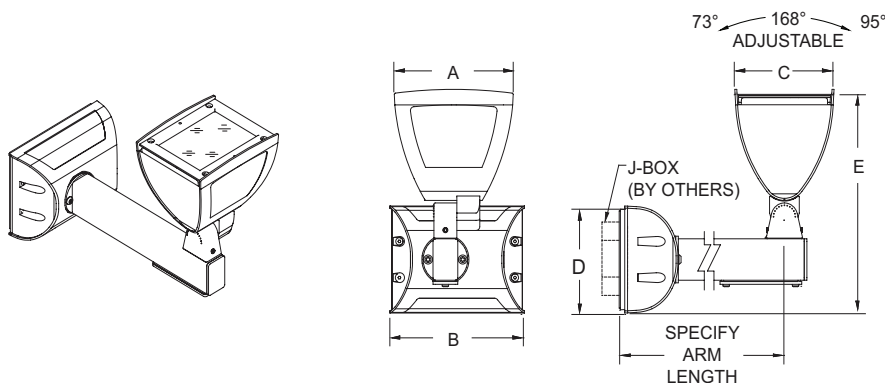
PRODUCT	DIM A	DIM B	DIM C	DIM D	DIM E	DIM F
MASQUE 1	6"	6-3/4"	5"	5-1/8"	9-5/8"	8-5/8"
MASQUE 2	7-1/4"	7-1/8"	6-7/8"	5-3/4"	12-3/4"	11-1/2"
MASQUE 4	14-7/8"	13-1/8"	12-3/4"	9-1/2"	21"	18-1/8"

CM - CONDUIT MOUNT



PRODUCT	DIM A	DIM B	DIM C	DIM D	DIM E
MASQUE 1	6"	7-1/4"	5"	6"	9-5/8"
MASQUE 2	7-1/4"	7-1/4"	6-7/8"	6"	12-3/4"
MASQUE 4	14-7/8"	13-3/8"	12-3/4"	9-13/16"	21"

EX - EXTENDED ARM



Specify Arm Length:

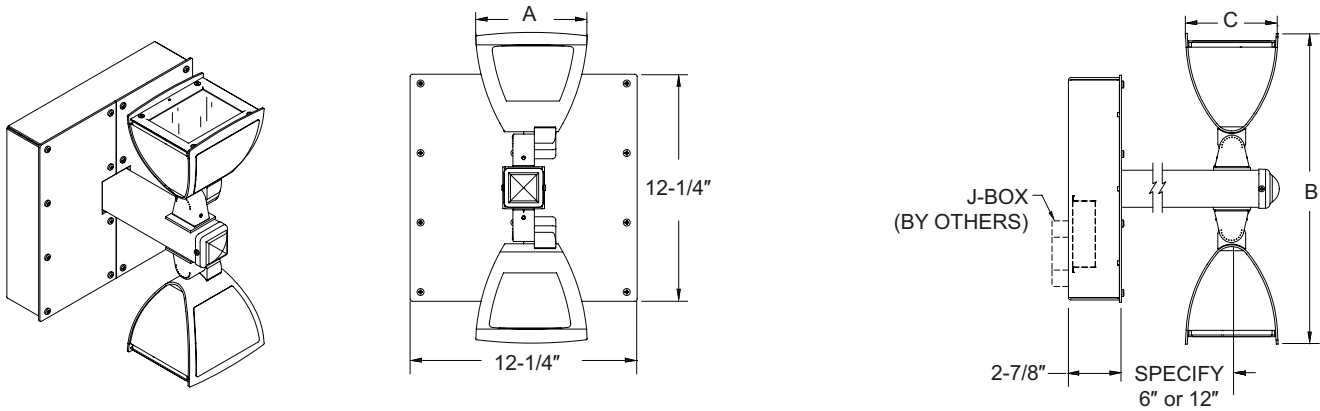
Masque I: Specify 6", 12", 18" or 24"

Masque II: Specify 8", 12", 18" or 24"

Masque IV: Specify 12", 18" or 24"

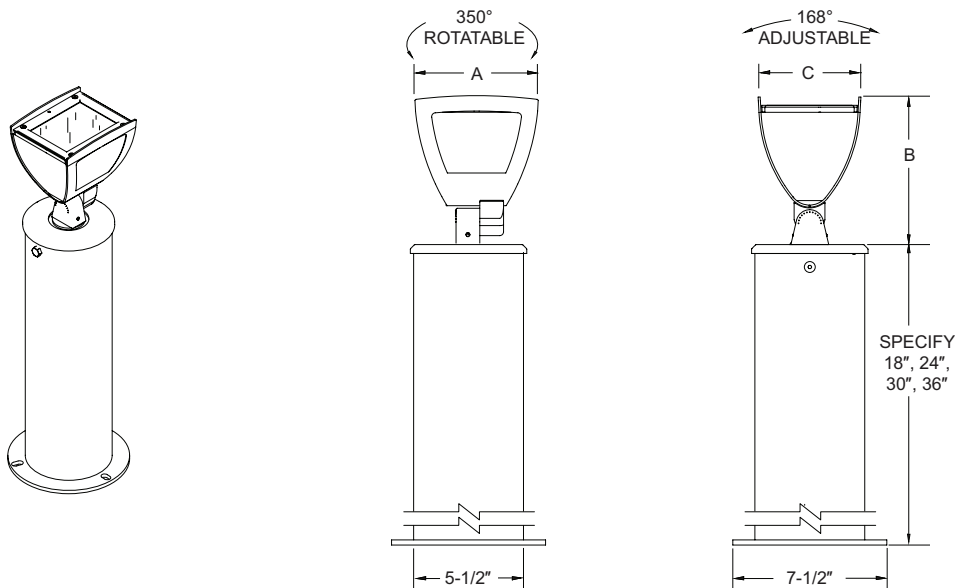
PRODUCT	DIM A	DIM B	DIM C	DIM D	DIM E
MASQUE 1	6"	6-3/4"	5"	5-1/8"	11"
MASQUE 2	7-1/4"	7-1/8"	6-7/8"	5-3/4"	13-7/8"
MASQUE 4	14-7/8"	13-1/8"	12-3/4"	9-1/2"	21-3/4"

WM2-X - WALL, TWIN FIXTURE, UPLIGHT & DOWNLIGHT



PRODUCT	DIM A	DIM B	DIM C
MASQUE I	6"	16-5/8"	5"
MASQUE II	7-1/4"	22"	6-7/8"

ST-X - STANCHION



PRODUCT	DIM A	DIM B	DIM C
MASQUE I	6"	7-1/8"	5"
MASQUE II	7-1/4"	10"	6-7/8"
MASQUE IV	14-7/8"	15-1/4"	12-3/4"

DESCRIPTION

Rio architectural step lights provide beauty, performance and durability. Transitional styling, low profile design and no visible fasteners provide seamless integration with architectural styles of all kinds. Logical, modular design elements facilitate fast and foolproof installation in all types of wall surfaces including drywall, concrete pour or brick/masonry. All models include IP68 rated outdoor protection, but are also suitable for indoor wall-mounted applications. All models are ADA compliant.

SPECIFICATION FEATURES

A ... Construction

Back box and painted fascia are die-cast from corrosion-resistant Type 383 aluminum alloy. Back box is painted white. Natural metal fascia is precision-machined from solid brass or stainless steel.

B ... Finish

Back box and fascia are double protected by a chromate conversion undercoating and polyester powdercoat paint finish. Machined, natural finish brass or stainless steel fascia is unpainted to reveal the natural beauty of the material. Brass will patina naturally over time in outdoor environments.

C ... Electrical

Fixture includes integral, electronic ballast, transformer or LED driver mounted to Lumiere's factory-assembled POWER-TRAY(TM) optical/electrical module. The POWER-TRAY(TM) module plugs directly into the back box providing fast, easy installation.

D ... Mounting

Back box is available to ship in advance for rough-in purposes. Back box includes four (4) 3/4" conduit entry ports, concrete pour cover, UP arrow and two level vials to facilitate proper alignment. Fixture also includes the patent pending FASCIAlign(TM) fascia alignment system which provides rotation of the fascia +/- 10 degrees (total of 20 degrees), insuring proper alignment.

E ... Classification / Code Compliance

UL and cUL listed, standard wet label. IP68 rated. Also suitable for indoor recessed wall-mount applications, 4W LED source is IC-rated for direct insulation contact. Manufactured to ISO 9001-2000 Quality Systems Standard. IBEW union made.

F ... Lamp

Lamp for LED source included as standard. Lamps for other sources not included (available from Lumiere as an accessory - order separately).

G ... Warranty

Lumiere warrants its fixtures against defects in materials and workmanship for three (3) years. Auxiliary equipment such as transformers, ballasts and lamps carry the original manufacturer's warranty.

Recessed Housing

Recessed housing is available to ship in advance of complete fixture for rough-in purposes. Specify option -LBB and order separately accompanying recessed housing from below:

1235-BB-C

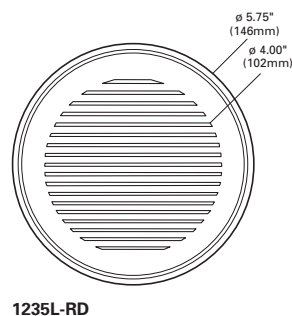
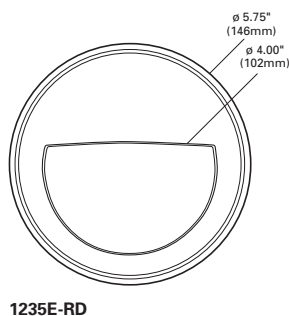
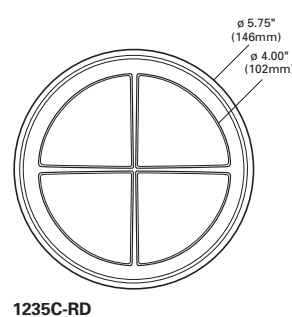
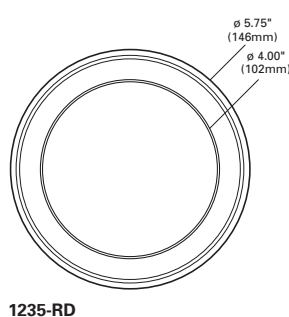
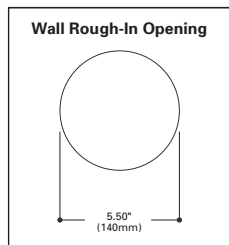
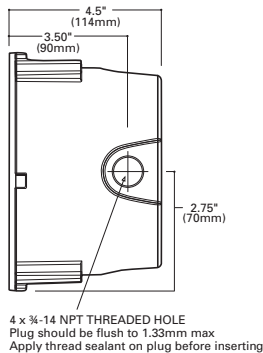
5" back box and pour cover for concrete pour wall

1235-BB-D

5" back box and pour cover for drywall/frame construction wall

1235-BB-M

5" back box and pour cover for masonry wall



RIO
1235-RD
1235C-RD
1235E-RD
1235L-RD

4W (max.) LED
20W (max.) T3 Halogen
Low Voltage
STEP LIGHT

ADA IP68

ORDERING INFORMATION

Model 1235-RD =5" round, open fascia w/ clear, diffused lens 1235C-RD =5" round, cross/guard fascia w/ clear, diffused lens 1235E-RD = 5" round, eyelid fascia w/ clear, diffused lens 1235L-RD = 5" round, louvered fascia w/ clear lens	Wall Type C =Concrete Pour D =Drywall M =Masonry	Source ¹ 12V Halogen or LED 20T3 =20W / T3 / G4 4LED =4W / LED (LED lamps included) ²	Finish Painted BK =black BZ =bronze CS =city silver VE = verde WT = white Metal NBR = brass NSS = stainless steel	Options LBB =Housing and Pour Cover Shipped in Advance (select LBB option and order recessed housing separately) Recessed Housing (order separately) Select housing from Recessed Housing section on previous page		
		Volts 12V Halogen 120/12 = 120/12V electronic transformer 277/12 = 277/12V electronic transformer LED 120/12 = 120V electronic LED driver				

Notes: **1** Unless noted otherwise, lamps not included.
2 4W LED source is IC-rated for direct insulation contact.

NUVO 65-062

13W LED Wall Pack Fixture with Photocell



Fixture Type Outdoor Wall Light	Collection No
Finish Bronze	Width 6.89"
Height 11.02"	Shade Material Prismatic Lens
Extension 6.49"	Light Source LED
Lumen Output 770	Max Wattage 13 Watts
Wattage 13 Watts	Lamp Type Wall Pack
Bulb Type LED	Bulb Included Yes
Replaceable Light Source No	Certification UL Listed
Safety Rated Wet Location	Energy Saver Yes
Energy Star No	UPC 045923630620
Warranty 3-Year Warranty Light Source	Voltage 120 volt
Average Rated Hours 55000	RoHS Compliant Yes
UL or ETL Listed Yes	Kelvin Temp 5000K
CRI 75+	Photocell Yes

JOB **HOME2 FLOWOOD**

 TYPE **OD**

NOTES

APPROVALS

FEATURES

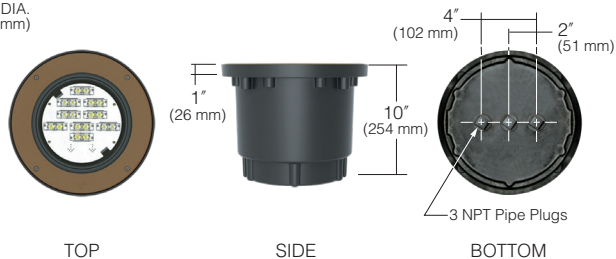
- Sealed IP68 LED light engine
- Bluetooth connectivity for remote control aiming and dimming
- Free Mobile App for Android and iOS
- Easy to install and pair devices
- Advanced thermal management provides long life in excess of 100,000+ hours
- Runs cool to the touch - less than 40°C

Certifications

IK09
SPECIFICATIONS

Pour Box rough-in housing ships separately and as a quick-ship if requested.


LTV81FF

 13" DIA.
(332 mm)

LTV82FF

 10 3/8" DIA.
(263 mm)

LTV83FF

 7 15/16" DIA.
(202 mm)

DEBRIS SHIELDS


LTV81



LTV82



LTV83

LIGHT DISTRIBUTIONS:

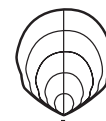
LTV81FF, LTV82FF, LTV83FF



Spot (SP)



Narrow Flood (NF)



Wall Wash (WW)

ORDERING CODE

Fixture Size			Distribution*		Source		Electrical Module		Lens Options ¹		Rebar Cage Anchor	
LTV8xFF			NF		18L		4K		UV			
LTV81FF	13" Dia.		SP, NF, WW		36L	36 LEDs	Color Temperature	Voltages	SR Slip-Resistant Lens		RCA81	for LTV81
LTV82FF	10-3/8" Dia.		SP, NF		18L	18 LEDs	3K 3000K	UV 120-277V	PL Prismatic Lens		RCA82	for LTV82
LTV82FF	10-3/8" Dia.		WW		16L	16 LEDs	4K 4000K				RCA83	for LTV83
LTV83FF	7-15/16" Dia.		SP, NF, WW		12L	12 LEDs	5K 5000K					

* SP = Spot, NF = Narrow Flood, WW = Wall Wash

Kim Lighting reserves the right to change specifications without notice.

LTV81FF

Optical Module	Source	Color Temperature	Absolute Lumens	Center Beam Candle Power*	Voltage	Total System Watts	Max. Amps	Beam Angle (50%) H x V	Field Angle (10%) H x V	NEMA Type
SP	36L	3K	2426	29469	UV	44W	.367 for 120V .212 for 208V .183 for 240V .159 for 277V	12.9 x 12.9	27.3 x 27.3	2H X 2V
		4K	3041	36773						
		5K	3324	41827						
NF	36L	3K	2171	2422	UV	44W	.367 for 120V .212 for 208V .183 for 240V .159 for 277V	46.1 x 54.7	79.9 x 83.7	5H X 5V
		4K	2726	3022						
		5K	2745	3071						
WW	36L	3K	2574	4188	UV	44W	.367 for 120V .212 for 208V .183 for 240V .159 for 277V	53.1 x 28.2	102.5 x 61.1	6H X 4V
		4K	3209	5220						
		5K	3526	5736						

LTV82FF

Optical Module	Source	Color Temperature	Absolute Lumens	Center Beam Candle Power*	Voltage	Total System Watts	Max. Amps	Beam Angle (50%) H x V	Field Angle (10%) H x V	NEMA Type
SP	18L	3K	1285	16787	UV	23W	.192 for 120V .111 for 208V .096 for 240V .083 for 277V	13.4 x 13.4	26.9 x 26.9	2H X 2V
		4K	1633	20282						
		5K	1705	22899						
NF	18L	3K	1049	1272	UV	23W	.192 for 120V .111 for 208V .096 for 240V .083 for 277V	43.9 x 52.8	76.4 x 81.3	5H X 5V
		4K	1410	1687						
		5K	1470	1758						
WW	16L	3K	1083	2336	UV	20W	.167 for 120V .091 for 208V .079 for 240V .069 for 277V	58.9x21.3	93.3 x 53.9	5H X 4V
		4K	1389	2992						
		5K	1549	3336						

LTV83FF

Optical Module	Source	Color Temperature	Absolute Lumens	Center Beam Candle Power*	Voltage	Total System Watts	Max. Amps	Beam Angle (50%) H x V	Field Angle (10%) H x V	NEMA Type
SP	12L	3K	825	10750	UV	14W	.117 for 120V .067 for 208V .058 for 240V .051 for 277V	12.7 x 12.7	26.3 x 26.3	2H X 2V
		4K	998	13008						
		5K	1085	14144						
NF	12L	3K	709	863	UV	14W	.117 for 120V .067 for 208V .058 for 240V .051 for 277V	50.3 x 50.3	81.2 x 81.2	5H X 5V
		4K	888	1082						
		5K	932	1136						
WW	12L	3K	806	1724	UV	14W	.117 for 120V .067 for 208V .058 for 240V .051 for 277V	52.3 x 20.8	93 x 53.6	5H X 4V
		4K	1034	2210						
		5K	1152	2463						

KEY: FF = Flat Frame, SP = Spot, NF = Narrow Flood, WW = Wall Wash (PicoPrism™), 36L = 36 LEDs, 18L = 18 LEDs, 16L = 16 LEDs, 12L = 12 LEDs, 3K = 2800K to 3175K, 4K = 3800K to 4600K, 5K = 4600K to 5600K, UV = Universal Voltage shall range from 120V-277V with a ±10% tolerance.

* The SP and NF are based on Candela exiting unit straight up. The WW is for highest candela angle.

Spectroradiometric

	3K	4K	5K
Correlated Color Temp. CCT (K)	2800K to 3175K	3800K to 4600K	4600K to 5600K
Color Rendering Index (CRI)	≤80	≤80	≤70
Power Factor	>.90	>.90	>.90

Kim Lighting reserves the right to change specifications without notice.

L70 Data

	Calculated	Reported*
350 mA	100,000	60,000

*Based on test duration.

SPECIFICATIONS

Housing:

- Pour Box rough-in housing for installation below grade.
- High temperature UV resistant thermal plastic, 1/2" minimum wall, black.
- Includes a splice box with molded plastic splice cover and silicone gasket.
- Three 1" NPT in bottom for through wiring on LTV81 and LTV82.
- Two 1" NPT in bottom for through wiring on LTV83. 107 cu. in. splice area for LTV81.
- 52 cu. in. splice area for LTV82. 24 cu. in. splice area for LTV83.
- Supplied with protective aluminum debris shield mask with orientation label for proper installation alignment for clean and easy installation in concrete pad or soil. Ships separately and as a quick-ship if requested.

Component Module:

- One-piece impregnated cast bronze, fully sealed component module secured to the face trims from the underside.
- A high temperature, anti-siphon, IP67 sealed cable extends from the component module to the splice box inside the housing.
- The fully assembled component module is secured to the housing with (4) 1/4-20 tamper-resistant high grade stainless steel fasteners.

Face Trim:

- One-piece cast bronze lens ring fastened to the component module from the underside shall provide a flat surface.

Optical Modules:

- Spot (SP), Narrow Flood (NF), and Wall Wash (WW) optical modules are adjustable up to 15° utilizing a Bluetooth enabled motor assembly.

Bluetooth:

- Integral Bluetooth module used to adjust optics and dim fixture to desired setting when paired with KIM LTV8 Remote App via cellular/tablet device.
- Fully qualified Bluetooth 1.1, 1.2, 2.0, 2.1. Bluetooth v2.0+EDR compatible with Android devices running Android Gingerbread API level 9 forward. Bluetooth 4.0 LE compatible with iOS devices - iPhone 4S and later, 5th generation iPod touch, the iPad Mini and the 3rd generation and later of the full size iPad with iOS 5 or later.
- Bluetooth Apps are available for Apple iOS and Google Android mobile devices and are downloadable via the internet at Apple App Store or Google Play.

Lens:

- Clear 5/16" thick tempered glass lens and silicone gasket is retained securely within the component module.

Options:

- Slip Resistant Lens (SR), Prismatic Lens (PL), Rebar Cage Anchor (RCA8x).

Electrical Equipment:

- All electronic components are UL and CSA recognized and mounted directly to the component module for maximum heat dissipation and modularity. Driver is IP67 with -30°C minimum temperature rating.

Drive-Over Durability:

- When installed in concrete, fixture will withstand drive-over by vehicles weighing up to 4,500 lbs.

Certification:

- (UL1598, UL8750). 25°C ambient operation.
- SASO Certified for LTV82/83.
- IEC 66262 Mechanical Impact Code IK09.

Warranty:

- For full warranty see <http://www.hubbellighting.com/resources/warranty>
- Opening of Component Module on site will void warranty.



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COMMERCIAL GRADE LIGHT STRING

Commercial grade light string in reels or kits, with three socket size/spacing combinations for decorative/event/festive lighting applications. Suitable for outdoor year-round use.

Performance

- 330ft bulk reels available in E26/24", E17/15" and E12/12" socket size/spacing combinations
- Medium base versions are offered with suspended and non-suspended sockets, also in 48ft and 100ft kits
- Up to 1800 watts can be run from a single power source for medium base reels, and up to 1200 watts for intermediate and candelabra base reels

Construction

- Formulated PVC sockets form a tight seal around the bulb to preclude the entrance of water and moisture
- Cable gauge and type varies - see individual product

Installation

- For spans up to 20 feet, use eyebolts and plastic ties to anchor ends
- For longer spans, use catenary cable (guy wire) with plastic ties at each socket
- Suspended E26 sockets have T-mold with mounting hole; all non-suspended sockets have mounting ears built into the socket bases
- Do not exceed maximum allowed load in any single run or leave any sockets empty

Specifications

Series	COMMERCIAL GRADE LS
Input voltage	120V AC, 60Hz
Color temperature	Depends on lamps used
CRI	Depends on lamps used
Wattage	See individual product
Lumens	Depends on lamps used
Maximum run	See individual product
Beam angle	Depends on lamps used
Dimming	Depends of lamps used
Material	PVC sockets, 2-C cable
Rating	N/A
Dimensions	As noted
Switching	Wall control or branch circuit
Mounting	Catenary wire (optional)
Linking	N/A
Rated life	Depends on lamps used

*Photos are for representational purposes and do not display actual socket spacing



Medium Base Light String



Medium Base - Black

LS-M-24-48-BK

48ft (24 sockets); 600W max per string

LS-M-24-100-BK

100ft (50 sockets); 1250W max per string

Medium Base - Green

LS-M-24-48-GR

48ft (24 sockets); 600W max per string

Medium Base Light String, 24" socket spacing (25W max/socket), 14AWG SJTW wire, 120V plugs and terminated ends

Suspended Medium Base Light String



Suspended Medium Base - Black

LS-MS-24-48-BK

48ft (24 sockets); 600W max per string

LS-MS-24-100-BK

100ft (50 sockets); 1250W max per string

Suspended Medium Base - Green

LS-MS-24-48-GR

48ft (24 sockets); 600W max per string

Suspended Medium Base - White

LS-MS-24-48-WH

48ft (24 sockets); 600W max per string

LS-MS-24-100-WH

100ft (50 sockets); 1250W max per string

Suspended Medium Base Light String, 24" socket spacing (25W max/socket), 14AWG SJTW wire, 120V plugs and terminated ends

Medium Base Light String Bulk Reels

Medium Base Light String 330ft Reel
24" socket spacing (25W max/socket)
14AWG SJTW wire, 1800W max
No plug or terminated end

LS-M-24-BK Black

LS-M-24-GR Green

Suspended Medium Base Light String 330ft Reel
24" socket spacing (25W max/socket)
14AWG SJTW wire, 1800W max
No plug or terminated end

LS-MS-24-BK Black

LS-MS-24-GR Green

LS-MS-24-WH White

Intermediate Base Light String Bulk Reels



Intermediate Base Light String
330ft reel, 15" spacing
16AWG SPT-2 wire, 1200W max
No plug or terminated end

LS-I-15-BK Black

LS-I-15-GR Green

LS-I-15-WH White

Candelabra Base Light String
330ft reel, 12" spacing
16AWG SPT-2 wire, 1200W max
No plug or terminated end

LS-C-12-BK Black

LS-C-12-GR Green

LS-C-12-WH White



SPT-2 Male Plugs
Slide-on, two prong plugs for
SPT-2 wire only
(bags of 25 only)

M-PLUG-BK-SPT2-B Black

M-PLUG-WH-SPT2-B White

PRO DECORATIVE S14

An array of LED S14 lamps for direct replacement of 11W incandescent versions, saving 87% in running costs.

Performance

- Four color temperatures available (5500K Bright White to 1900K Deluxe Warm White) and four color options with clear and opaque glass bulbs
- IP65 rated for wet location use
- c/UL/us Listed for indoor and outdoor use
- Dimmable with CFL/LED dimmers (minimum loads will apply)

Construction

- Transparent glass bulbs enhance sparkle and opaque white glass bulbs illuminate evenly
- Nickel base resists corrosion
- SMD LED is powered by driver on board for 120V AC use in medium base sockets



Specifications

Series	PS14
Input voltage	120V, 60Hz AC
Color temperature	5500K / 2700K / 2400K / 1900K
Lumens	See individual product
Wattage	1.4W
Dimming	Yes
Lens	Transparent or opaque glass
Rating	c/UL/us Listed for wet locations
Dimensions	3-5/16" M.O.L. x 1-3/4" Dia.
Base	E26
Rated life	25,000 hrs



**PS14F-E26-WH**

Bright White (5500K)
Opaque white glass bulb
1.4W / 60Lm / E26 base

**PS14F-E26-WW**

Warm White (2700K)
Opaque white glass bulb
1.4W / 45Lm / E26 base

**PS14-E26-WH**

Bright White (5500K)
Transparent glass bulb
1.4W / 48Lm / E26 base

**PS14-E26-WW**

Warm White (2700K)
Transparent glass bulb
1.4W / 36Lm / E26 base

**PS14-E26-UWW**

Ultra Warm White (2400K)
Transparent glass bulb
1.4W / 30Lm / E26 base

**PS14-E26-XWW**

Deluxe Warm White (1900K)
Transparent glass bulb
1.4W / 22Lm / E26 base

**PS14-E26-BL**

Blue LED
Transparent glass bulb
1.4W / E26 base

**PS14-E26-GR**

Green LED
Transparent glass bulb
1.4W / E26 base

**PS14-E26-RE**

Red LED
Transparent glass bulb
1.4W / E26 base

**PS14-E26-YE**

Yellow LED
Transparent glass bulb
1.4W / E26 base

**PS14F-E26-BL**

Blue LED
Opaque blue glass bulb
1.4W / E26 base

**PS14F-E26-GR**

Green LED
Opaque green glass bulb
1.4W / E26 base

**PS14F-E26-RE**

Red LED
Opaque red glass bulb
1.4W / E26 base

**PS14F-E26-YE**

Yellow LED
Opaque yellow glass bulb
1.4W / E26 base



SSP Square Non-Tapered Steel Poles



SSP

Pole Shaft

The pole shaft is one piece construction, being fabricated from a weldable grade carbon steel structural tubing which has a uniform wall thickness of 11 gauge (0.1196"). The pole shaft material shall conform to ASTM A-500 Grade C with a minimum yield strength of 50,000 psi. The pole shaft has a full length longitudinal resistance weld and is uniformly square in cross-section with flat sides, small corner radii and excellent torsional properties.

Base Plate

The anchor base is fabricated from a structural quality hot rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base telescopes the pole shaft and is circumferentially welded top and bottom. All welds are performed in accordance with the American Welding Society specification AWS D1.1, latest edition.

Bolt Circle: 8.00" **Sq. Dim. :** 8.00" **Thickness:** 0.75" **Conduit Opening:** 3"

Consult KW representative for non-standard dimensions.

Anchor Bolts

Anchor bolts are fabricated from commercial quality hot rolled carbon steel bar that meets or exceeds a minimum yield strength of 55,000 psi. Four properly sized anchor bolts, each with two regular hex nuts and washers, are furnished and shipped with all poles unless otherwise specified. Anchor bolts shall have the threaded end galvanized a minimum of 8 inches in accordance with ASTM A-153. Fully galvanized anchor bolts are available upon request.

Handhole

An oval reinforced gasketed handhole, having a nominal 3" x 5" inside opening, located 1' - 6" above base, is standard on all poles. A grounding provision is located inside the handhole ring.

Finish

Standard - The exterior surface is cleaned with an alkaline rinse to remove surface contaminants and shot blasted to specifications as published by the Steel Structures Painting Council Standards SSPC-SP10 (near white). The exterior surface is chemically pretreated with an iron phosphate conversion coating then rinsed with ambient fresh water containing special surfactants and sealers forming a dry tight micro-crystalline coating. A polyester thermosetting powder coating applied to the surface of the substrate to a minimum of 3 mils is standard on all color finishes. The internal surface including the powder coated area at the base-end is coated with **K-SEAL**, a thermoplastic hydrocarbon resin system specially formulated for application over untreated steel surfaces, to a thickness of 3 mils. The internal coating shall contain special corrosion inhibitors and is capable of passing 1000 hours of salt spray exposure (ASTM B-117).

Series: **SSP** - Square Non-Tapered Steel Poles

Nominal Height: **25'** Base Diameter: **4.0"** Gauge: **11**

Finish: **BRZ** - Standard - Bronze

Height (ft.)	Pole Shaft (in.) x (ft.)	Gauge	Handhole Size (in.)	Anchor Bolt (in.) x (in.) x (in.)	Bolt Circle (in.)	80 MPH (ft. ²)	90 MPH (ft. ²)	100 MPH (ft. ²)	Ship WT. (lbs.)
25	4 x 25.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182

SSP25-4.0-11-BRZ

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[Generate New SSP Logic](#) [Choose Different Pole Type](#) [Main Menu](#)



Terms and Conditions of Sale

TERMS

Net 30 days from the date of Company's invoice unless otherwise specified. A 1-1/2% per month late charge will be added to accounts past due.

PRICES

Published prices are subject to change without notice. Possession of price sheets in no way obligates Company to sell to the Purchaser possessing such price sheet. All orders are subject to final approval and acceptance by the Company. Once accepted and approved, orders will be billed at prices currently in effect at the time of invoicing, or at prices quoted by the Company and accepted by the Purchaser if the order involves an item or items covered by special quotation. THE MINIMUM INVOICE CHARGE SHALL BE \$50.00 NET.

DELIVERY

All goods sold are deliverable F.O.B. KW Industries, Inc., Sugar Land, Texas 77478.

TAXES

The Company's prices do not include Federal, State or municipal sales, use, excise, or similar taxes. Consequently, the Company reserves the right to add to the sales price of its product any present or future sales, use, excise or other similar tax which shall be paid by the Purchaser, or in lieu thereof, the Purchaser shall provide the Company with a tax exemption certificate acceptable to the taxing authorities.

FREIGHT

All of the Company's products are priced and sold F.O.B. KW Industries, Inc., Sugar Land, Texas 77478. Transportation charges will be prepaid by the Company and added to the net sales price unless specified by the Purchaser.

ROUTING

The Company will specify the method and routing of all products to ensure the most efficient and economical shipment in behalf of the Purchaser. The Purchaser will assume charges for special services such as cartage, air freight, express or multiple deliveries on one order.

CANCELLATION

The written consent of the Company shall be obtained prior to a cancellation of any order. Cancellation of an order may subject the Purchaser to a cancellation charge based upon expenses already incurred and commitments made by the Company.

RETURNED GOODS

Specific written request and arrangements must be made in advance for Purchaser to obtain credit or replacement on material returned. On material accepted for return, Purchaser must prepay return shipment and pay minimum restocking charge of 40% plus any charge necessary to rework goods to a resaleable condition. Custom fabricated products by special order are not subject to return.

DELAYS, DAMAGE OR LOSS

The Company is not and shall not be liable for delays in shipment or delivery of its products when caused by strikes, riots, hurricanes, civil disorder, fires, material shortage, breakdown in manufacturing facilities or any other cause beyond its reasonable control. Any claims for damages, loss or shortage in transit must be made by the Purchaser to the delivering carrier. The risk of loss passes to the Purchaser upon delivery to the carrier.

LIMITED WARRANTY

The Company warrants to Purchaser that its products will be free from defects in material and workmanship for a period of one year from the date of shipment by the Company (*the "Warranty Period"*). This Warranty specifically excludes fatigue failure or similar phenomena resulting from induced vibration, harmonic oscillation or resonance associated with the movement of air currents around the product. If during the Warranty period, the product proves defective in material or workmanship, the Company shall correct any defect, at its option, either by repairing any defective parts or by making available at the Company's plant a repaired or replacement part at no charge to the Purchaser, if the Purchaser promptly notifies the Company and furnishes proof of Purchase. The liability of the Company under this Warranty, or for any loss or damage arising out of, or connected with, the design, manufacturing, sale or use of its products, whether the claim is based on contract or negligence, shall not exceed the price allocable to the value of the product or part which gives rise to the claim and upon expiration of the Warranty Period all such liability shall terminate. The Company shall not be liable for special or consequential damages including, but not limited to, loss of profits or revenue, loss of use of the product, cost of substitute products or labor charges to remove or reinstall the defective product, nor any product transportation expenses to and from the Company's plant if factory repair or replacement is necessary. No warranty is made with respect to parts or auxiliary equipment not manufactured by the Company. The foregoing Warranty is exclusive and in lieu of all other warranties whether written, oral, express or implied and shall constitute the sole and exclusive remedy of the Purchaser and liability of the Company. NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY. The Company's products are not sold as a "consumer product" under 15 U.S.C. 62301.

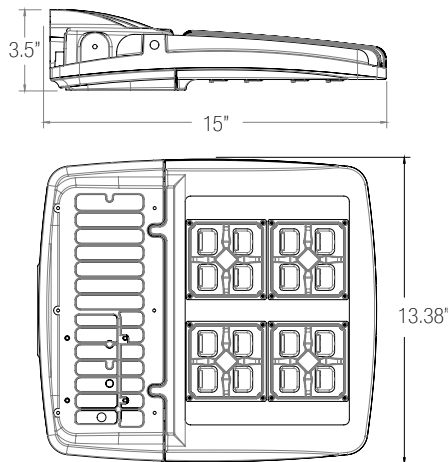
GENERAL

KW Industries, Inc. reserves the right to change any feature of its published specifications without notice to promote product improvement and/or allow for material availability. The contract for the sale of goods by KW shall be performable in Fort Bend County, Texas.

Prices subject to change without notice

D824-LED

Low Profile Gladetino Luminaire



Job Information

Type:

Catalog #:

Project:

Comments:

Prepared by:

Length with Mount (L):

Pole Mount (PM):	19.3"
Wall Bracket (WB):	15.81"
Large Yoke (LYM):	18"
Yoke (YM):	20.81"
Slip Fitter (SF):	22.43"
Pole Mount Arm (PMA):	19.1"

Description

Style combined with elegance. The Gladetino luminaire provides an aesthetically pleasing addition to any roadway or parking lot with its smooth, defined curves and highly functional optics that provide maximum lumen output while ensuring beam uniformity. The combination of form and function blend together to make Gladetino the premier outdoor lighting fixture.

Ordering Information

Example: (D824-LED-120-40-UNV-LP-T5-PM-BZ-MS)

D824-LED

Series	Wattage Lumens	Color Temp.	Voltage	Body	Optics	Mounting	Finish	Option
Gladetino Area Luminaire	20 22W* 3121 ¹ 30 28W* 3986 ¹ 40 38W* 5203 ¹ 60 56W* 7621 ¹ 80 75W* 10041 ^{1,2} 100 104W* 14131 ¹ 120 113W* 15383 ^{1,2} 150 149W* 17934 ^{1,2}	30 3000K 35 3500K 40 4000K 50 5000K ⁴	UNV 120-277V 347 347V 480 480V ⁶	LP Low Profile	T2 Type II T3 Type III T4 Type IV T4A Front Row T5 Type V 30 30° Narrow Flood 55 55° Medium Flood 80 80° Wide Flood	PM Pole Mount WB Wall Bracket RPMA Round Pole Mount Adapter LYM Heavy Duty Large Yoke Mount YM Yoke Mount SF Slip Fitter PMA Pole Mounting Arm Adapter 2-3/8	BZ Bronze ¹ BL Black WH White SL Silver CU Custom ²	PC Photocell WSF Wired Single Fuse WDF Wired Double Fuse MS Motion Sensor (with Dimming) ⁵ SP Surge Protection BI Bi-Level motion sensing 95 95 CRI HSS House Side Shield 7P NEMA 7-Pin Receptacle 7R NEMA 7-Pin Receptacle & Photocell

¹ Standard for fixture

² Contact factory for custom finish

³ Delivered Lumens (T3 5000K)

⁴ Standard Color Temp.

⁵ 20ft mounting height lens standard. Contact factory for higher mounting.

⁶ 480V option only available on models 60W and higher.

⁷ DLC Listed Wattages (View DLC Matrix on Page 6 for Optics currently listed)

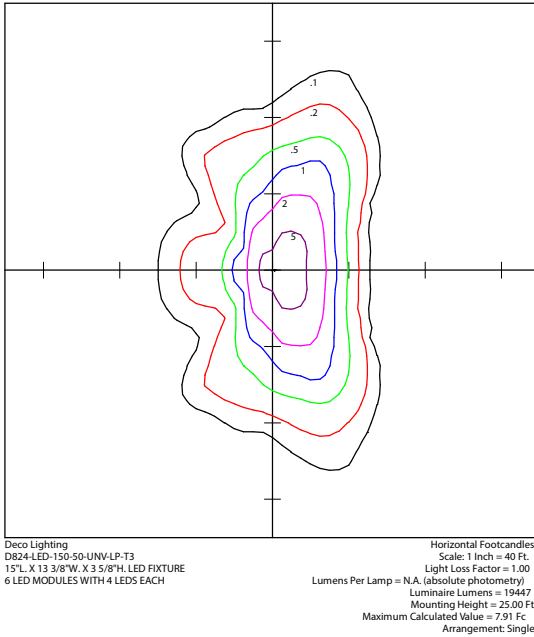
*System wattages are from 5000K test data

Features

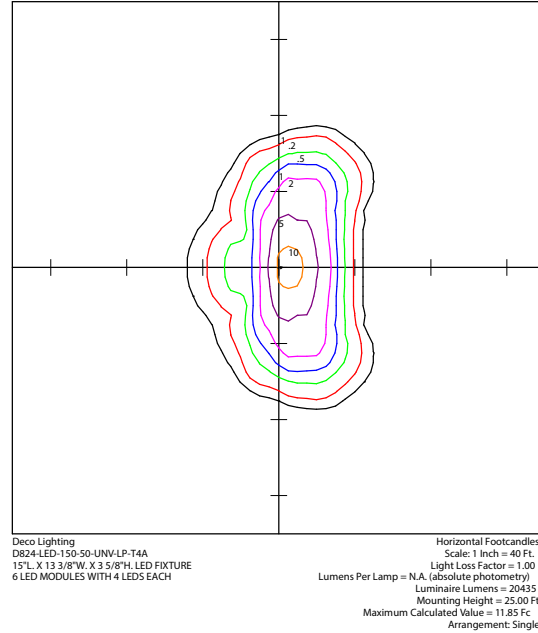
- Die cast aluminum housing and front frame, integral heat sinking and driver compartment.
- Powder coat finish over a chromatic conversion coating.
- Photocell adaptable.
- Mounts with two-piece bracket, yoke, adjustable slip fitter, or 2-3/8" diameter mounting arm adapter.
- Weight: 15lbs.
- EPA: 1.01ft².
- Type V Wide, and 15° flood optics coming soon.
- DLC Listed for Utility Rebates (Please view DLC matrix on Page 6)
- CSA Listed for wet locations, IP67.

Photometric Data

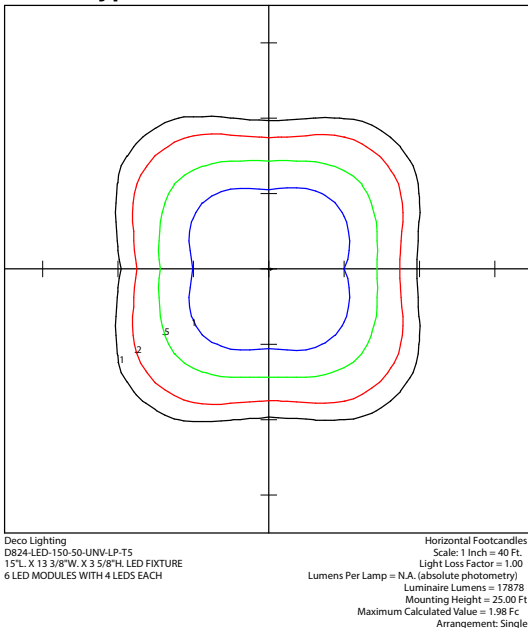
150W Type 3 5000K



150W Type 4A 5000K



150W Type 5 5000K



Performance Data

CRI:	70+, 95 Optional
CCT:	3000K, 3500K, 4000K, 5000K
Warranty:	10 yr. Limited Warranty
Dimming:	Available with 0-10V inputs dimming down to 10%
Operating Temperature:	-30° to +55°C Ambient
L70 Rating (at 25°C Ambient Temp):	286,000 Hours
L80 Rating (at 25°C Ambient Temp):	181,000 Hours
IP Rating:	IP66
Drive Current:	700mA
Vibration:	3G Vibration Rated

Operating Hours	0	25,000	50,000	75,000	100,000
Lumen Maintenance Factor	25°C 75°F Ambient Temp				
	1.0	0.97	0.95	0.92	0.89
	50°C 122°F Ambient Temp				
	1.0	0.93	0.88	0.83	0.79

Lumen Chart

GLADETINO 5000K				
Model Number	System Watts	T3	T4A	T5
D824-LED-20-50-UNV-LP	22W	3121	3128	3146
D824-LED-30-50-UNV-LP	28W	3986	3996	4019
D824-LED-40-50-UNV-LP	38W	5203	5215	5245
D824-LED-60-50-UNV-LP	56W	7621	7638	7683
D824-LED-80-50-UNV-LP	75W	10041	10064	10123
D824-LED-120-50-UNV-LP	113W	15383	15046	15086
D824-LED-150-50-UNV-LP	149W	17934	17605	18739

*To scale to other color temperatures, multiply 5000K values by 0.98 for 4000K, 0.95 for 3500K, or 0.93 for 3000K

Photocell

*Pencil photocell only when ordered without motion sensor. Customer must specify input voltage. Pencil photocell input ranges are (120-130 VAC) and (208-277 VAC). When paired with a motion sensor, the FSP-211 sensor (FSP-201 for 347V or 480V) is used for both motion sensing and photo sensing capabilities.

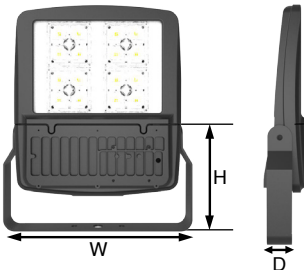


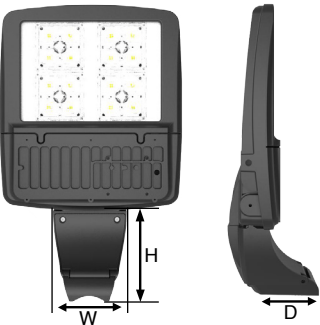

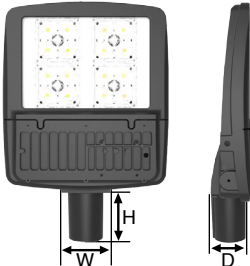
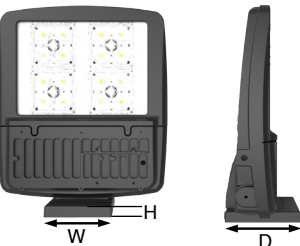


Delivered Light Output & Equivalency Chart

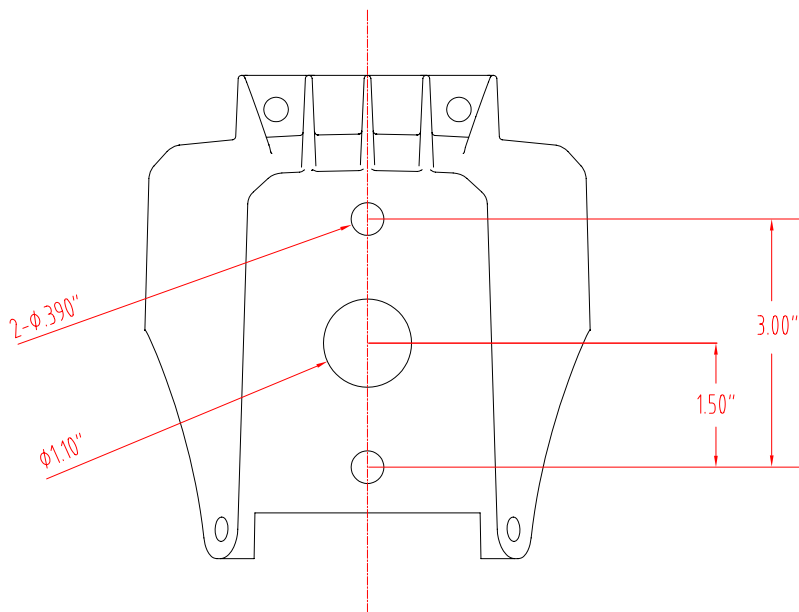
HID to LED Replacement		
DELIVERED LUMENS	HID	LED Replacement
1300lm	50W	10W
2600lm	70W	20W
3900lm	100W	30W
5200lm	150W	40W
7800lm	175W	60W
11700lm	250W	80W
15600lm	400W	120W
26000lm	750W	200W
31200lm	1000W	240W

Interested in upgrading from HID to LED lighting? Use the conversion table above to get a general idea of what wattage LED fixture will replace your current lighting system. Lumen output and overall performance will vary by fixture, so please contact our factory or your nearest sales rep regarding specific questions on what wattage will best suit your desired space and application.

Mounting Options

Large Yoke Mount	Slip Fitter	Pole Mount
 <p>H=8.524" W=15.232" D=1.772"</p>	 <p>H=6.595" W=3.455" D=2.8"</p>	 <p>H=4.331" W=5.368" D=5.827"</p>
Round Pole Mount Adapter	Yoke Mount	Pole Mounting Arm Adapter
 <p>H=5.331" W=5.368" D=5.827"</p>	 <p>H=5.701" W=5.335" D=2.520"</p>	 <p>H=4.094" W=3.937" D=3.653"</p>
Wall Bracket		
 <p>H=.827" W=4.855" D=5.603"</p>		

Mounting Hole Spacing



Motion Sensor & Bi-Level

FSP-211

The FSP-211 mounts in an outdoor lighting fixture and provides multi-level control based on motion. The sensor also includes a photocell to measure the ambient light level. It controls 0-10 VDC LED drivers and with an SFP-LX Lens, is rated for wet and cold locations. All control parameters are adjustable via a wireless configuration tool capable of storing and transmitting sensor profiles.

Key Factors:

- Full adjustable high and low dimmed light levels.
- Designed for LED fixtures; rated for extreme temperatures and up to 200,000 on/off cycles
- Hold off set point with automatic calibration option for convenience and added energy savings
- Adjustable via hand-held wireless configuration tool
- IP66 rated with choice of lenses for wet and outdoor locations and mounting heights from 8'
- Adjustable time delay and cut off delay
- 120-277V Standard (347V or 480V with FSP-201 model)



Other Views



DLC Listed

	80W			120W			150W		
	T3	T4A	T5	T3	T4A	T5	T3	T4A	T5
3000K	X	X	X	X	X	X	X	X	X
3500K	X	X	X	X	X	X	X	X	X
4000K	X	X	X	X	X	X	X	X	X
5000K	X	X	X	X	X	X	X	X	X



SSP Square Non-Tapered Steel Poles



SSP

Pole Shaft

The pole shaft is one piece construction, being fabricated from a weldable grade carbon steel structural tubing which has a uniform wall thickness of 11 gauge (0.1196"). The pole shaft material shall conform to ASTM A-500 Grade C with a minimum yield strength of 50,000 psi. The pole shaft has a full length longitudinal resistance weld and is uniformly square in cross-section with flat sides, small corner radii and excellent torsional properties.

Base Plate

The anchor base is fabricated from a structural quality hot rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base telescopes the pole shaft and is circumferentially welded top and bottom. All welds are performed in accordance with the American Welding Society specification AWS D1.1, latest edition.

Bolt Circle: 8.00" **Sq. Dim. :** 8.00" **Thickness:** 0.75" **Conduit Opening:** 3"

Consult KW representative for non-standard dimensions.

Anchor Bolts

Anchor bolts are fabricated from commercial quality hot rolled carbon steel bar that meets or exceeds a minimum yield strength of 55,000 psi. Four properly sized anchor bolts, each with two regular hex nuts and washers, are furnished and shipped with all poles unless otherwise specified. Anchor bolts shall have the threaded end galvanized a minimum of 8 inches in accordance with ASTM A-153. Fully galvanized anchor bolts are available upon request.

Handhole

An oval reinforced gasketed handhole, having a nominal 3" x 5" inside opening, located 1' - 6" above base, is standard on all poles. A grounding provision is located inside the handhole ring.

Finish

Standard - The exterior surface is cleaned with an alkaline rinse to remove surface contaminants and shot blasted to specifications as published by the Steel Structures Painting Council Standards SSPC-SP10 (near white). The exterior surface is chemically pretreated with an iron phosphate conversion coating then rinsed with ambient fresh water containing special surfactants and sealers forming a dry tight micro-crystalline coating. A polyester thermosetting powder coating applied to the surface of the substrate to a minimum of 3 mils is standard on all color finishes. The internal surface including the powder coated area at the base-end is coated with **K-SEAL**, a thermoplastic hydrocarbon resin system specially formulated for application over untreated steel surfaces, to a thickness of 3 mils. The internal coating shall contain special corrosion inhibitors and is capable of passing 1000 hours of salt spray exposure (ASTM B-117).

Series: **SSP** - Square Non-Tapered Steel Poles

Nominal Height: **25'** Base Diameter: **4.0"** Gauge: **11**

Finish: **BRZ** - Standard - Bronze

Height (ft.)	Pole Shaft (in.) x (ft.)	Gauge	Handhole Size (in.)	Anchor Bolt (in.) x (in.) x (in.)	Bolt Circle (in.)	80 MPH (ft. ²)	90 MPH (ft. ²)	100 MPH (ft. ²)	Ship WT. (lbs.)
25	4 x 25.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182

SSP25-4.0-11-BRZ

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The Company warrants to Purchaser that its products will be free from defects in material and workmanship for a period of one year from the date of shipment by the Company (*the "Warranty Period"*). This Warranty specifically excludes fatigue failure or similar phenomena resulting from induced vibration, harmonic oscillation or resonance associated with the movement of air currents around the product. If during the Warranty period, the product proves defective in material or workmanship, the Company shall correct any defect, at its option, either by repairing any defective parts or by making available at the Company's plant a repaired or replacement part at no charge to the Purchaser, if the Purchaser promptly notifies the Company and furnishes proof of Purchase. The liability of the Company under this Warranty, or for any loss or damage arising out of, or connected with, the design, manufacturing, sale or use of its products, whether the claim is based on contract or negligence, shall not exceed the price allocable to the value of the product or part which gives rise to the claim and upon expiration of the Warranty Period all such liability shall terminate. The Company shall not be liable for special or consequential damages including, but not limited to, loss of profits or revenue, loss of use of the product, cost of substitute products or labor charges to remove or reinstall the defective product, nor any product transportation expenses to and from the Company's plant if factory repair or replacement is necessary. No warranty is made with respect to parts or auxiliary equipment not manufactured by the Company. The foregoing Warranty is exclusive and in lieu of all other warranties whether written, oral, express or implied and shall constitute the sole and exclusive remedy of the Purchaser and liability of the Company. NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY. The Company's products are not sold as a "consumer product" under 15 U.S.C. 62301.

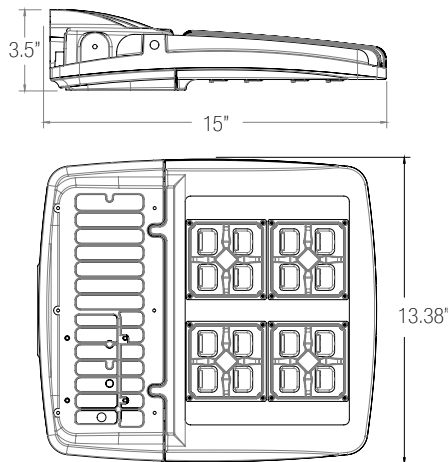
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Prices subject to change without notice

D824-LED

Low Profile Gladetino Luminaire



Job Information

Type:

Catalog #:

Project:

Comments:

Prepared by:

Length with Mount (L):

Pole Mount (PM):	19.3"
Wall Bracket (WB):	15.81"
Large Yoke (LYM):	18"
Yoke (YM):	20.81"
Slip Fitter (SF):	22.43"
Pole Mount Arm (PMA):	19.1"

Description

Style combined with elegance. The Gladetino luminaire provides an aesthetically pleasing addition to any roadway or parking lot with its smooth, defined curves and highly functional optics that provide maximum lumen output while ensuring beam uniformity. The combination of form and function blend together to make Gladetino the premier outdoor lighting fixture.

Ordering Information

Example: (D824-LED-120-40-UNV-LP-T5-PM-BZ-MS)

D824-LED

Series	Wattage Lumens	Color Temp.	Voltage	Body	Optics	Mounting	Finish	Option
Gladetino Area Luminaire	20 22W* 3121 ¹ 30 28W* 3986 ¹ 40 38W* 5203 ¹ 60 56W* 7621 ¹ 80 75W* 10041 ^{1,2} 100 104W* 14131 ¹ 120 113W* 15383 ^{1,2} 150 149W* 17934 ^{1,2}	30 3000K 35 3500K 40 4000K 50 5000K ⁴	UNV 120-277V 347 347V 480 480V ⁶	LP Low Profile	T2 Type II T3 Type III T4 Type IV T4A Front Row T5 Type V 30 30° Narrow Flood 55 55° Medium Flood 80 80° Wide Flood	PM Pole Mount WB Wall Bracket RPMA Round Pole Mount Adapter LYM Heavy Duty Large Yoke Mount YM Yoke Mount SF Slip Fitter PMA Pole Mounting Arm Adapter 2-3/8	BZ Bronze ¹ BL Black WH White SL Silver CU Custom ²	PC Photocell WSF Wired Single Fuse WDF Wired Double Fuse MS Motion Sensor (with Dimming) ⁵ SP Surge Protection BI Bi-Level motion sensing 95 95 CRI HSS House Side Shield 7P NEMA 7-Pin Receptacle 7R NEMA 7-Pin Receptacle & Photocell

¹ Standard for fixture

² Contact factory for custom finish

³ Delivered Lumens (T3 5000K)

⁴ Standard Color Temp.

⁵ 20ft mounting height lens standard. Contact factory for higher mounting.

⁶ 480V option only available on models 60W and higher.

⁷ DLC Listed Wattages (View DLC Matrix on Page 6 for Optics currently listed)

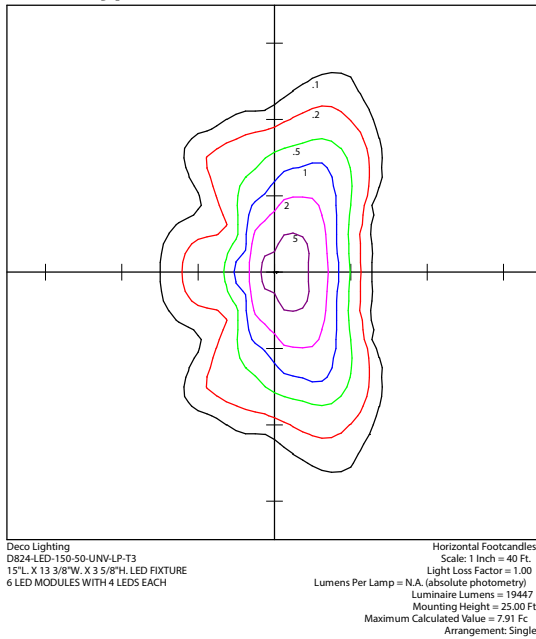
*System wattages are from 5000K test data

Features

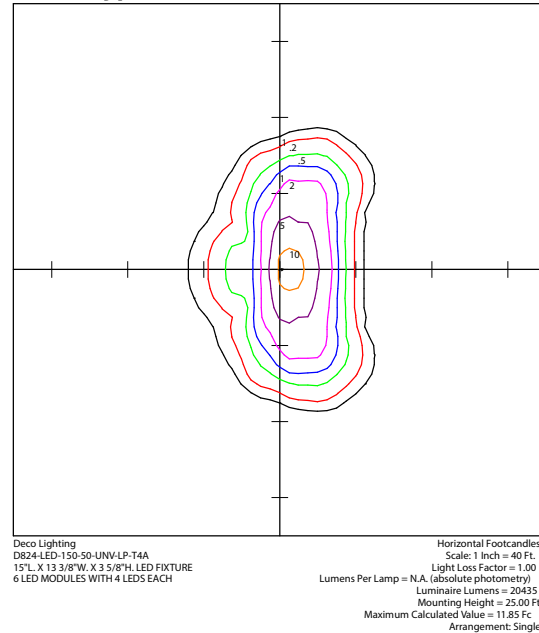
- Die cast aluminum housing and front frame, integral heat sinking and driver compartment.
- Powder coat finish over a chromatic conversion coating.
- Photocell adaptable.
- Mounts with two-piece bracket, yoke, adjustable slip fitter, or 2-3/8" diameter mounting arm adapter.
- Weight: 15lbs.
- EPA: 1.01ft².
- Type V Wide, and 15° flood optics coming soon.
- DLC Listed for Utility Rebates (Please view DLC matrix on Page 6)
- CSA Listed for wet locations, IP67.

Photometric Data

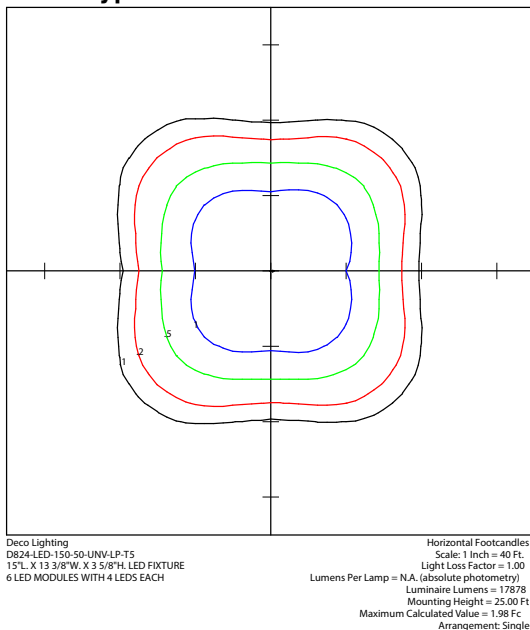
150W Type 3 5000K



150W Type 4A 5000K



150W Type 5 5000K



Performance Data

CRI:	70+, 95 Optional
CCT:	3000K, 3500K, 4000K, 5000K
Warranty:	10 yr. Limited Warranty
Dimming:	Available with 0-10V inputs dimming down to 10%
Operating Temperature:	-30° to +55°C Ambient
L70 Rating (at 25°C Ambient Temp):	286,000 Hours
L80 Rating (at 25°C Ambient Temp):	181,000 Hours
IP Rating:	IP66
Drive Current:	700mA
Vibration:	3G Vibration Rated

Operating Hours	0	25,000	50,000	75,000	100,000
Lumen Maintenance Factor	25°C 75°F Ambient Temp				
	1.0	0.97	0.95	0.92	0.89
	50°C 122°F Ambient Temp				
	1.0	0.93	0.88	0.83	0.79

Lumen Chart

GLADETINO 5000K				
Model Number	System Watts	T3	T4A	T5
D824-LED-20-50-UNV-LP	22W	3121	3128	3146
D824-LED-30-50-UNV-LP	28W	3986	3996	4019
D824-LED-40-50-UNV-LP	38W	5203	5215	5245
D824-LED-60-50-UNV-LP	56W	7621	7638	7683
D824-LED-80-50-UNV-LP	75W	10041	10064	10123
D824-LED-120-50-UNV-LP	113W	15383	15046	15086
D824-LED-150-50-UNV-LP	149W	17934	17605	18739

*To scale to other color temperatures, multiply 5000K values by 0.98 for 4000K, 0.95 for 3500K, or 0.93 for 3000K

Photocell

*Pencil photocell only when ordered without motion sensor. Customer must specify input voltage. Pencil photocell input ranges are (120-130 VAC) and (208-277 VAC). When paired with a motion sensor, the FSP-211 sensor (FSP-201 for 347V or 480V) is used for both motion sensing and photo sensing capabilities.

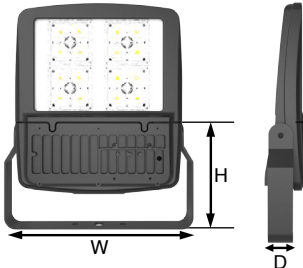
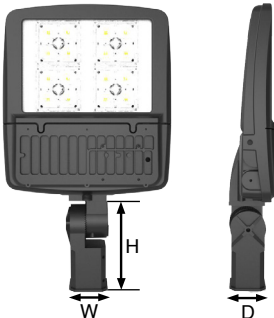



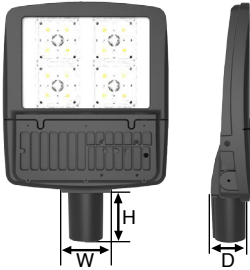
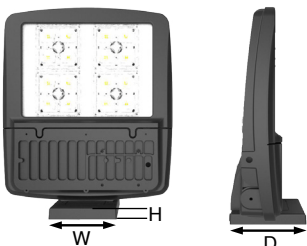


Delivered Light Output & Equivalency Chart

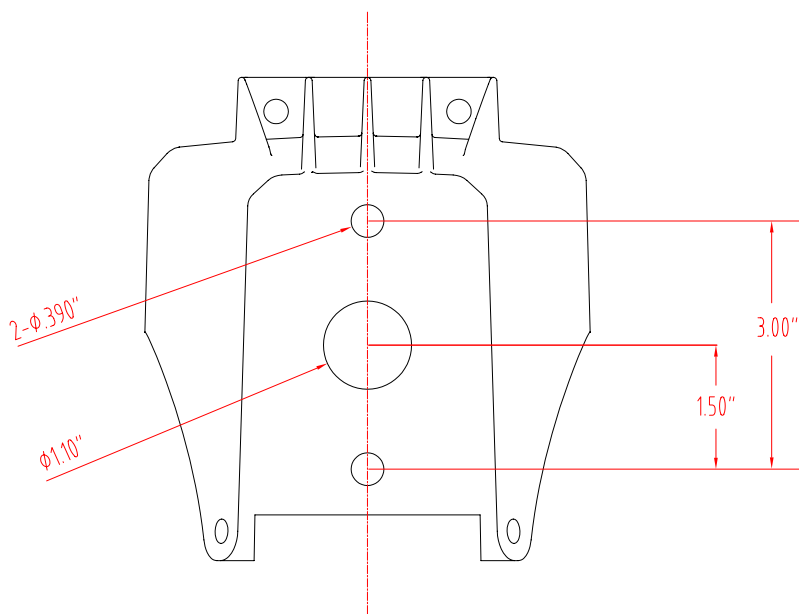
HID to LED Replacement		
DELIVERED LUMENS	HID	LED Replacement
1300lm	50W	10W
2600lm	70W	20W
3900lm	100W	30W
5200lm	150W	40W
7800lm	175W	60W
11700lm	250W	80W
15600lm	400W	120W
26000lm	750W	200W
31200lm	1000W	240W

Interested in upgrading from HID to LED lighting? Use the conversion table above to get a general idea of what wattage LED fixture will replace your current lighting system. Lumen output and overall performance will vary by fixture, so please contact our factory or your nearest sales rep regarding specific questions on what wattage will best suit your desired space and application.

Mounting Options

Large Yoke Mount	Slip Fitter	Pole Mount
 <p>H=8.524" W=15.232" D=1.772"</p>	 <p>H=6.595" W=3.455" D=2.8"</p>	 <p>H=4.331" W=5.368" D=5.827"</p>
Round Pole Mount Adapter	Yoke Mount	Pole Mounting Arm Adapter
 <p>H=5.331" W=5.368" D=5.827"</p>	 <p>H=5.701" W=5.335" D=2.520"</p>	 <p>H=4.094" W=3.937" D=3.653"</p>
Wall Bracket		
 <p>H=.827" W=4.855" D=5.603"</p>		

Mounting Hole Spacing



Motion Sensor & Bi-Level

FSP-211

The FSP-211 mounts in an outdoor lighting fixture and provides multi-level control based on motion. The sensor also includes a photocell to measure the ambient light level. It controls 0-10 VDC LED drivers and with an SFP-LX Lens, is rated for wet and cold locations. All control parameters are adjustable via a wireless configuration tool capable of storing and transmitting sensor profiles.

Key Factors:

- Full adjustable high and low dimmed light levels.
- Designed for LED fixtures; rated for extreme temperatures and up to 200,000 on/off cycles
- Hold off set point with automatic calibration option for convenience and added energy savings
- Adjustable via hand-held wireless configuration tool
- IP66 rated with choice of lenses for wet and outdoor locations and mounting heights from 8'
- Adjustable time delay and cut off delay
- 120-277V Standard (347V or 480V with FSP-201 model)



Other Views



DLC Listed

	80W			120W			150W		
	T3	T4A	T5	T3	T4A	T5	T3	T4A	T5
3000K	X	X	X	X	X	X	X	X	X
3500K	X	X	X	X	X	X	X	X	X
4000K	X	X	X	X	X	X	X	X	X
5000K	X	X	X	X	X	X	X	X	X

ASW1 LED

LED Wall Luminaire



AERIS™

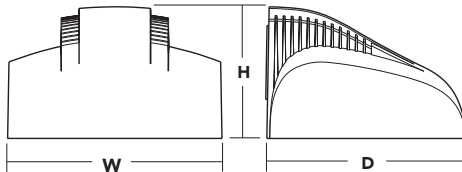
Specifications

Width: 15"
(38.1 cm)

Depth: 13-3/4"
(34.9 cm)

Height: 9-1/4"
(25.5 cm)

Weight (max): 34 lbs
(15.4 kg)

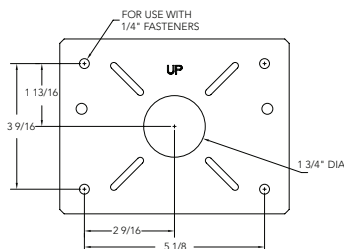


Ordering Information

EXAMPLE: ASW1 LED 42C 700 40K SR4 MVOLT DDBTXD

ASW1 LED											
Series	LEDs	Drive Current		Color temperature		Distribution		Voltage	Mounting		
ASW1 LED	42C 42 LEDs (one engine)	350	350mA	30K	3000 K	SR2	Type II	MVOLT ¹	277 ¹	Shipped included (blank) Surface mount Shipped separately BBW Surface-mounted back box (for conduit entry) ²	
		530	530mA	40K	4000 K	SR3	Type III	120 ¹	347		
		700	700mA	50K	5000 K	SR4	Type IV	208 ¹	480		
								240 ¹			
Control Options									Other Options	Finish <i>(required)</i>	
Shipped installed									Shipped installed	DDBXD Dark bronze	
PE	Photoelectric cell, button type ³			PNMT5D3	Part night, dim 5 hrs ⁵		SF	Single fuse (120, 277, 347V) ¹		DBLXD	Black
BL30	Bi-level switched dimming, 30% ^{4,5}			PNMT6D3	Part night, dim 6 hrs ⁵		DF	Double fuse (208, 240, 480V) ¹		DNAXD	Natural aluminum
BL50	Bi-level switched dimming, 50% ^{4,5}			PNMT7D3	Part night, dim 7 hrs ⁵		DFL	Diffusing lens		DWHXD	White
PNMTDD3	Part night, dim till dawn ⁵			DMG	0-10V dimming driver (no controls) ⁶		Shipped separately²			DDBTXD	Textured dark bronze
							VG	Vandal guard		DBLBXD	Textured black
							WG	Wire guard		DNATXD	Textured natural aluminum
										DWHGXD	Textured white

Drilling



Accessories

Ordered and shipped separately.

ASW1BBW DDBXD U	Back box accessory (specify finish)
ASW1WG U	Wire guard accessory
ASW1VG U	Vandal guard accessory

NOTES

- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Single fuse (SF) requires 120 or 277 voltage option. Double fuse (DF) requires 208 or 240 voltage option.
- Also available as a separate accessory; see Accessories information at left.
- Photocontrol (PE) requires 120, 208, 240, 277 or 347 voltage option. Must be ordered with fixture; cannot be field installed.
- Requires an additional switched line.
- Dimming driver standard. Not available with 347V or 480V.
- Not available with 347V, 480V, BL30, BL50 or PNMT options.



Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Light Engines	Drive Current (mA)	System Watts	Dist. Type	40 K (4000 K, 70 CRI)				
				Nominal Lumens	B	U	G	LPW
42C (42 LEDs)	350	49W	SR2	4,013	1	0	1	82
			SR3	3,998	1	0	1	82
			SR4	3,971	1	0	1	81
	530	75W	SR2	7,140	2	0	2	95
			SR3	7,114	1	0	2	95
			SR4	7,066	1	0	1	94
	700	98W	SR2	8,564	2	0	2	87
			SR3	8,533	2	0	2	87
			SR4	8,476	2	0	2	86

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.06
10°C	50°F	1.04
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.96

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **ASW1 LED 42C 700** platform in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

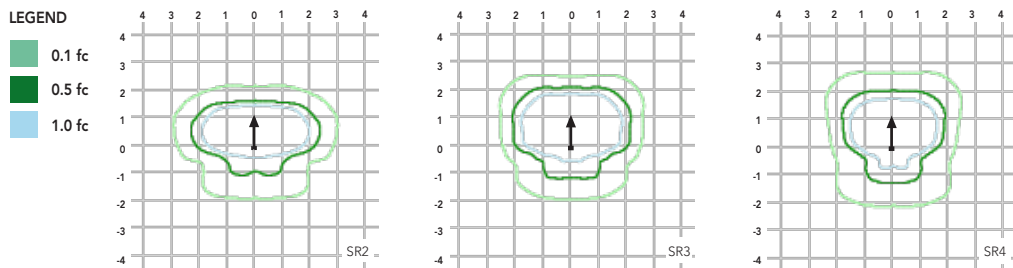
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	0.96	0.92	0.85

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [ASW1 LED homepage](#).

Isofootcandle plots are considered to be representative of available optical distributions.



FEATURES & SPECIFICATIONS

INTENDED USE

The ASW1 LED is a high performance, high efficacy, long life luminaire that is ideally suited for lighting building entries, walk ways and surrounding areas adjacent to commercial exteriors.

CONSTRUCTION

Single-piece, die-cast aluminum housing. Die-cast doorframe has impact-resistant, tempered glass lens. Doorframe is fully sealed with a closed-cell silicone gasket.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

OPTICS

Precision-molded refractive acrylic lenses housed behind the door frame lens are available in three distributions. Light engines are available in standard 4000 K or optional 3000 K or 5000 K (70 CRI) configurations.

ELECTRICAL

Light engine consists of 42 high-efficacy LEDs mounted to a metal-core circuit board and aluminum heat sink, ensuring optimal thermal management and long life. Class 1 electronic driver has a power factor >90%, THD <20%, and has an expected life of 100,000 hours with <1% failure rate. Easily-serviceable surge protection device meets a minimum Category C Low (per ANSI/IEEE C62.41.2).

INSTALLATION

Universal mounting plate with integral mounting bolts supports the fixture for easy, one-person installation. Suitable for downward orientation only.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. **US. Patent No. D500,569. Canada Patent No. 107561.**

WARRANTY

Five year limited warranty. Full warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice..





SSP Square Non-Tapered Steel Poles



SSP

Pole Shaft

The pole shaft is one piece construction, being fabricated from a weldable grade carbon steel structural tubing which has a uniform wall thickness of 11 gauge (0.1196"). The pole shaft material shall conform to ASTM A-500 Grade C with a minimum yield strength of 50,000 psi. The pole shaft has a full length longitudinal resistance weld and is uniformly square in cross-section with flat sides, small corner radii and excellent torsional properties.

Base Plate

The anchor base is fabricated from a structural quality hot rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base telescopes the pole shaft and is circumferentially welded top and bottom. All welds are performed in accordance with the American Welding Society specification AWS D1.1, latest edition.

Bolt Circle: 8.00" **Sq. Dim. :** 8.00" **Thickness:** 0.75" **Conduit Opening:** 3"

Consult KW representative for non-standard dimensions.

Anchor Bolts

Anchor bolts are fabricated from commercial quality hot rolled carbon steel bar that meets or exceeds a minimum yield strength of 55,000 psi. Four properly sized anchor bolts, each with two regular hex nuts and washers, are furnished and shipped with all poles unless otherwise specified. Anchor bolts shall have the threaded end galvanized a minimum of 8 inches in accordance with ASTM A-153. Fully galvanized anchor bolts are available upon request.

Handhole

An oval reinforced gasketed handhole, having a nominal 3" x 5" inside opening, located 1' - 6" above base, is standard on all poles. A grounding provision is located inside the handhole ring.

Finish

Standard - The exterior surface is cleaned with an alkaline rinse to remove surface contaminants and shot blasted to specifications as published by the Steel Structures Painting Council Standards SSPC-SP10 (near white). The exterior surface is chemically pretreated with an iron phosphate conversion coating then rinsed with ambient fresh water containing special surfactants and sealers forming a dry tight micro-crystalline coating. A polyester thermosetting powder coating applied to the surface of the substrate to a minimum of 3 mils is standard on all color finishes. The internal surface including the powder coated area at the base-end is coated with **K-SEAL**, a thermoplastic hydrocarbon resin system specially formulated for application over untreated steel surfaces, to a thickness of 3 mils. The internal coating shall contain special corrosion inhibitors and is capable of passing 1000 hours of salt spray exposure (ASTM B-117).

Series: **SSP** - Square Non-Tapered Steel Poles

Nominal Height: **25'** Base Diameter: **4.0"** Gauge: **11**

Finish: **BRZ** - Standard - Bronze

Height (ft.)	Pole Shaft (in.) x (ft.)	Gauge	Handhole Size (in.)	Anchor Bolt (in.) x (in.) x (in.)	Bolt Circle (in.)	80 MPH (ft. ²)	90 MPH (ft. ²)	100 MPH (ft. ²)	Ship WT. (lbs.)
25	4 x 25.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182

SSP25-4.0-11-BRZ

[Print This Page](#) [Email This Page](#) [View PDF Version](#)

[Generate New SSP Logic](#) [Choose Different Pole Type](#) [Main Menu](#)



Terms and Conditions of Sale

TERMS

Net 30 days from the date of Company's invoice unless otherwise specified. A 1-1/2% per month late charge will be added to accounts past due.

PRICES

Published prices are subject to change without notice. Possession of price sheets in no way obligates Company to sell to the Purchaser possessing such price sheet. All orders are subject to final approval and acceptance by the Company. Once accepted and approved, orders will be billed at prices currently in effect at the time of invoicing, or at prices quoted by the Company and accepted by the Purchaser if the order involves an item or items covered by special quotation. THE MINIMUM INVOICE CHARGE SHALL BE \$50.00 NET.

DELIVERY

All goods sold are deliverable F.O.B. KW Industries, Inc., Sugar Land, Texas 77478.

TAXES

The Company's prices do not include Federal, State or municipal sales, use, excise, or similar taxes. Consequently, the Company reserves the right to add to the sales price of its product any present or future sales, use, excise or other similar tax which shall be paid by the Purchaser, or in lieu thereof, the Purchaser shall provide the Company with a tax exemption certificate acceptable to the taxing authorities.

FREIGHT

All of the Company's products are priced and sold F.O.B. KW Industries, Inc., Sugar Land, Texas 77478. Transportation charges will be prepaid by the Company and added to the net sales price unless specified by the Purchaser.

ROUTING

The Company will specify the method and routing of all products to ensure the most efficient and economical shipment in behalf of the Purchaser. The Purchaser will assume charges for special services such as cartage, air freight, express or multiple deliveries on one order.

CANCELLATION

The written consent of the Company shall be obtained prior to a cancellation of any order. Cancellation of an order may subject the Purchaser to a cancellation charge based upon expenses already incurred and commitments made by the Company.

RETURNED GOODS

Specific written request and arrangements must be made in advance for Purchaser to obtain credit or replacement on material returned. On material accepted for return, Purchaser must prepay return shipment and pay minimum restocking charge of 40% plus any charge necessary to rework goods to a resaleable condition. Custom fabricated products by special order are not subject to return.

DELAYS, DAMAGE OR LOSS

The Company is not and shall not be liable for delays in shipment or delivery of its products when caused by strikes, riots, hurricanes, civil disorder, fires, material shortage, breakdown in manufacturing facilities or any other cause beyond its reasonable control. Any claims for damages, loss or shortage in transit must be made by the Purchaser to the delivering carrier. The risk of loss passes to the Purchaser upon delivery to the carrier.

LIMITED WARRANTY

The Company warrants to Purchaser that its products will be free from defects in material and workmanship for a period of one year from the date of shipment by the Company (*the "Warranty Period"*). This Warranty specifically excludes fatigue failure or similar phenomena resulting from induced vibration, harmonic oscillation or resonance associated with the movement of air currents around the product. If during the Warranty period, the product proves defective in material or workmanship, the Company shall correct any defect, at its option, either by repairing any defective parts or by making available at the Company's plant a repaired or replacement part at no charge to the Purchaser, if the Purchaser promptly notifies the Company and furnishes proof of Purchase. The liability of the Company under this Warranty, or for any loss or damage arising out of, or connected with, the design, manufacturing, sale or use of its products, whether the claim is based on contract or negligence, shall not exceed the price allocable to the value of the product or part which gives rise to the claim and upon expiration of the Warranty Period all such liability shall terminate. The Company shall not be liable for special or consequential damages including, but not limited to, loss of profits or revenue, loss of use of the product, cost of substitute products or labor charges to remove or reinstall the defective product, nor any product transportation expenses to and from the Company's plant if factory repair or replacement is necessary. No warranty is made with respect to parts or auxiliary equipment not manufactured by the Company. The foregoing Warranty is exclusive and in lieu of all other warranties whether written, oral, express or implied and shall constitute the sole and exclusive remedy of the Purchaser and liability of the Company. NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY. The Company's products are not sold as a "consumer product" under 15 U.S.C. 62301.

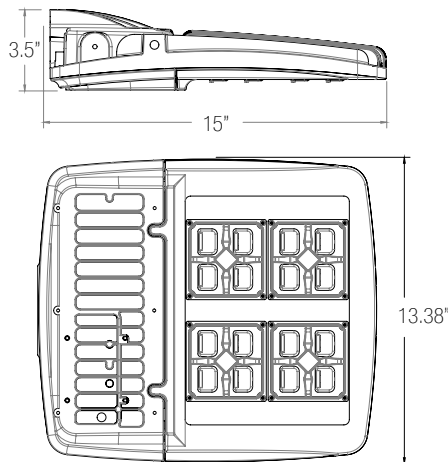
GENERAL

KW Industries, Inc. reserves the right to change any feature of its published specifications without notice to promote product improvement and/or allow for material availability. The contract for the sale of goods by KW shall be performable in Fort Bend County, Texas.

Prices subject to change without notice

D824-LED

Low Profile Gladetino Luminaire



Job Information

Type:

Catalog #:

Project:

Comments:

Prepared by:

Length with Mount (L):

Pole Mount (PM):	19.3"
Wall Bracket (WB):	15.81"
Large Yoke (LYM):	18"
Yoke (YM):	20.81"
Slip Fitter (SF):	22.43"
Pole Mount Arm (PMA):	19.1"

Description

Style combined with elegance. The Gladetino luminaire provides an aesthetically pleasing addition to any roadway or parking lot with its smooth, defined curves and highly functional optics that provide maximum lumen output while ensuring beam uniformity. The combination of form and function blend together to make Gladetino the premier outdoor lighting fixture.

Ordering Information

Example: (D824-LED-120-40-UNV-LP-T5-PM-BZ-MS)

D824-LED

Series	Wattage Lumens		Color Temp.		Voltage		Body		Optics		Mounting		Finish		Option	
Gladetino Area Luminaire	20	22W* 3121 ³	30	3000K	UNV	120-277V	LP	Low Profile	T2	Type II	PM	Pole Mount	BZ	Bronze ¹	PC	Photocell
	30	28W* 3986 ³	35	3500K	347	347V			T3	Type III	WB	Wall Bracket	BL	Black	WSF	Wired Single Fuse
	40	38W* 5203 ³	40	4000K	480	480V ⁶			T4	Type IV	RPMA	Round Pole Mount	WH	White	WDF	Wired Double Fuse
	60	56W* 7621 ³	50	5000K ⁴					T4A	Front Row		Adapter	SL	Silver	MS	Motion Sensor (with Dimming) ⁵
	80	75W* 10041 ^{3,7}							T5	Type V	LYM	Heavy Duty	CU	Custom ²	SP	Surge Protection
	100	104W* 14131 ³										Large Yoke Mount			BI	Bi-Level motion sensing
	120	113W* 15383 ^{3,7}							30	30° Narrow Flood	YM	Yoke Mount			95	95 CRI
	150	149W* 17934 ^{3,7}							55	55° Medium Flood	SF	Slip Fitter			HSS	House Side Shield
									80	80° Wide Flood	PMA	Pole Mounting Arm			7P	NEMA 7-Pin Receptacle
												Adapter 2-3/8			7R	NEMA 7-Pin Receptacle & Photocell

¹ Standard for fixture

² Contact factory for custom finish

³ Delivered Lumens (T3 5000K)

⁴ Standard Color Temp.

⁵ 20ft mounting height lens standard. Contact factory for higher mounting.

⁶ 480V option only available on models 60W and higher.

⁷ DLC Listed Wattages (View DLC Matrix on Page 6 for Optics currently listed)

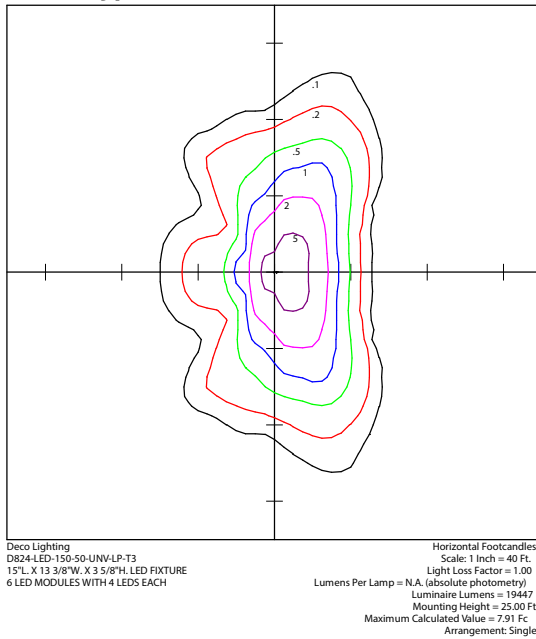
*System wattages are from 5000K test data

Features

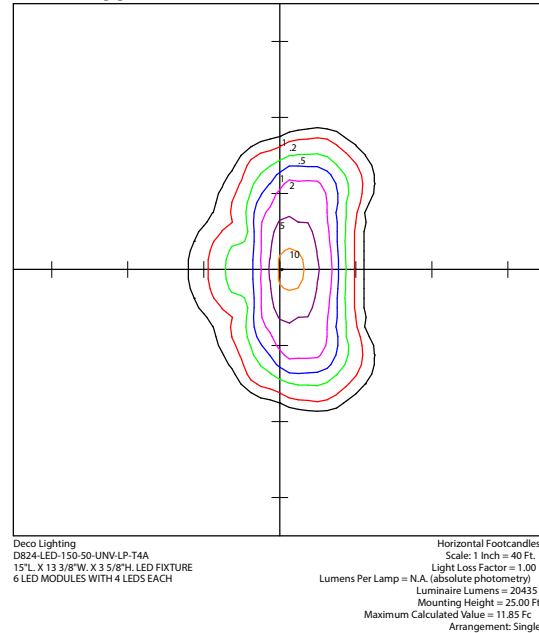
- Die cast aluminum housing and front frame, integral heat sinking and driver compartment.
- Powder coat finish over a chromatic conversion coating.
- Photocell adaptable.
- Mounts with two-piece bracket, yoke, adjustable slip fitter, or 2-3/8" diameter mounting arm adapter.
- Weight: 15lbs.
- EPA: 1.01ft².
- Type V Wide, and 15° flood optics coming soon.
- DLC Listed for Utility Rebates (Please view DLC matrix on Page 6)
- CSA Listed for wet locations, IP67.

Photometric Data

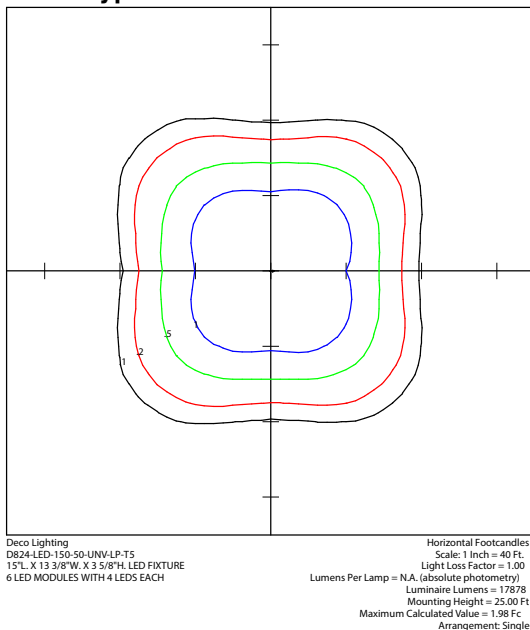
150W Type 3 5000K



150W Type 4A 5000K



150W Type 5 5000K



Performance Data

CRI:	70+, 95 Optional
CCT:	3000K, 3500K, 4000K, 5000K
Warranty:	10 yr. Limited Warranty
Dimming:	Available with 0-10V inputs dimming down to 10%
Operating Temperature:	-30° to +55°C Ambient
L70 Rating (at 25°C Ambient Temp):	286,000 Hours
L80 Rating (at 25°C Ambient Temp):	181,000 Hours
IP Rating:	IP66
Drive Current:	700mA
Vibration:	3G Vibration Rated

Operating Hours	0	25,000	50,000	75,000	100,000
Lumen Maintenance Factor	25°C 75°F Ambient Temp				
	1.0	0.97	0.95	0.92	0.89
	50°C 122°F Ambient Temp				
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Lumen Chart

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D824-LED-80-50-UNV-LP	75W	10041	10064	10123
D824-LED-120-50-UNV-LP	113W	15383	15046	15086
D824-LED-150-50-UNV-LP	149W	17934	17605	18739

*To scale to other color temperatures, multiply 5000K values by 0.98 for 4000K, 0.95 for 3500K, or 0.93 for 3000K

Photocell

*Pencil photocell only when ordered without motion sensor. Customer must specify input voltage. Pencil photocell input ranges are (120-130 VAC) and (208-277 VAC). When paired with a motion sensor, the FSP-211 sensor (FSP-201 for 347V or 480V) is used for both motion sensing and photo sensing capabilities.

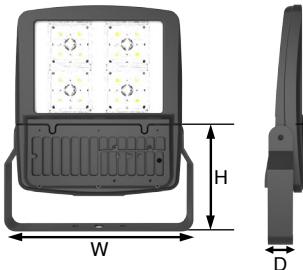




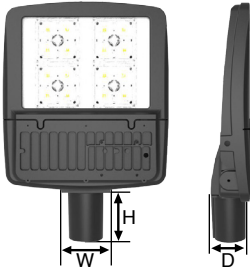
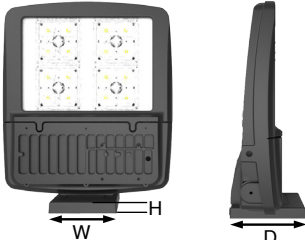


Delivered Light Output & Equivalency Chart

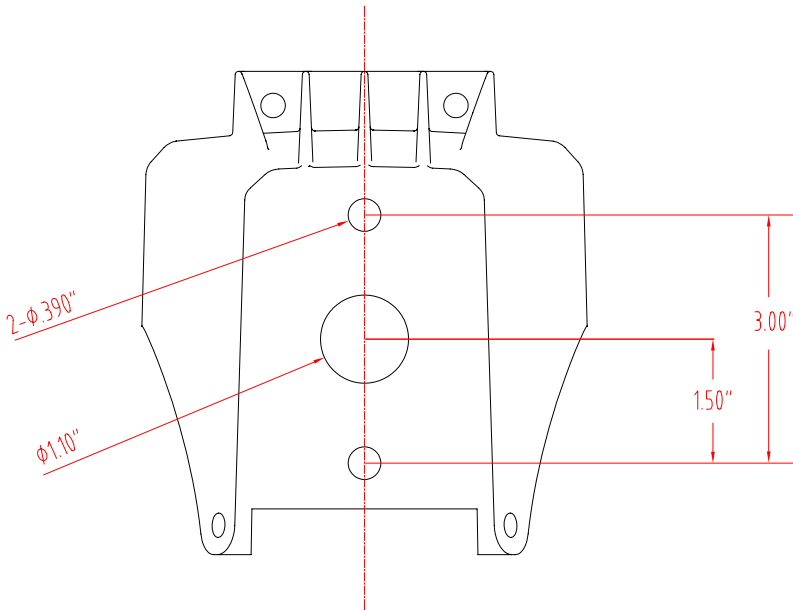
HID to LED Replacement		
DELIVERED LUMENS	HID	LED Replacement
1300lm	50W	10W
2600lm	70W	20W
3900lm	100W	30W
5200lm	150W	40W
7800lm	175W	60W
11700lm	250W	80W
15600lm	400W	120W
26000lm	750W	200W
31200lm	1000W	240W

Interested in upgrading from HID to LED lighting? Use the conversion table above to get a general idea of what wattage LED fixture will replace your current lighting system. Lumen output and overall performance will vary by fixture, so please contact our factory or your nearest sales rep regarding specific questions on what wattage will best suit your desired space and application.

Mounting Options

Large Yoke Mount	Slip Fitter	Pole Mount
 <p>H=8.524" W=15.232" D=1.772"</p>	 <p>H=6.595" W=3.455" D=2.8"</p>	 <p>H=4.331" W=5.368" D=5.827"</p>
Round Pole Mount Adapter	Yoke Mount	Pole Mounting Arm Adapter
 <p>H=5.331" W=5.368" D=5.827"</p>	 <p>H=5.701" W=5.335" D=2.520"</p>	 <p>H=4.094" W=3.937" D=3.653"</p>
Wall Bracket		
 <p>H=.827" W=4.855" D=5.603"</p>		

Mounting Hole Spacing



Motion Sensor & Bi-Level

FSP-211

The FSP-211 mounts in an outdoor lighting fixture and provides multi-level control based on motion. The sensor also includes a photocell to measure the ambient light level. It controls 0-10 VDC LED drivers and with an SFP-LX Lens, is rated for wet and cold locations. All control parameters are adjustable via a wireless configuration tool capable of storing and transmitting sensor profiles.

Key Factors:

- Full adjustable high and low dimmed light levels.
- Designed for LED fixtures; rated for extreme temperatures and up to 200,000 on/off cycles
- Hold off set point with automatic calibration option for convenience and added energy savings
- Adjustable via hand-held wireless configuration tool
- IP66 rated with choice of lenses for wet and outdoor locations and mounting heights from 8'
- Adjustable time delay and cut off delay
- 120-277V Standard (347V or 480V with FSP-201 model)



Other Views



DLC Listed

	80W			120W			150W		
	T3	T4A	T5	T3	T4A	T5	T3	T4A	T5
3000K	X	X	X	X	X	X	X	X	X
3500K	X	X	X	X	X	X	X	X	X
4000K	X	X	X	X	X	X	X	X	X
5000K	X	X	X	X	X	X	X	X	X



OSSMT-GDW

Occupancy and Vacancy Sensors

Brand Features

Leviton's OSSMT Multi-Technology Decora Wall Switch Occupancy Sensor is used to provide automatic light-ing control for energy savings and convenience in a variety of commercial applications.

Item Description

Product Line: OSSMT, Technology: Multi-Technology PIR/Ultrasonic, Switch Type: Single-Pole, Mounting: Wall Switch, Device Type: Occupancy Sensor, Coverage (Sq.Ft.): 2400 Sq. Ft., Pattern: 180°, Color: White, Warranty: 5-Year Limited

Technical Information

Product Features

Product Line: OSSMT

Technology: Multi-Technology PIR/Ultrasonic

Switch Type: Single-Pole

Mounting: Wall Switch

Device Type: Occupancy Sensor

Grade: Commercial

Coverage (Sq.Ft.): 2400 Sq. Ft.

Pattern: 180°

Mounting Height (Ft.): 4 Ft.

Adjustment: Self-Adjusting

Time Delay: 30s-30m

Voltage: 120-277 Volt AC, 50/60Hz

Load Rating: 800W@120V INC
1200VA@120V 2700VA@277V FL

Motor: 1/4 HP @ 120V

Power Pack: External Power Pack Not Required

Consumption (mA): N/A

Photocell: Internal

HVAC Relay: N/A

Operating Temperature: 0C to 50C

Storage Temperature Range: -10°C to 85°C

Relative Humidity: 20% to 90% non-condensing

Neutral Wire Connection: Not Required

Color: White

LED Color: Green and Red

Wallplate: Order Separately

Standards and Certifications: UL/cUL

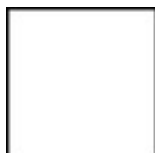
Code Compliance: California Title 24

Size: 4.06" H x 1.75" W x 1.85" D
(103.2mm x 44.4mm x 47.2mm)

Warranty: 5-Year Limited



Color:



White

UPC Code: 07847740696

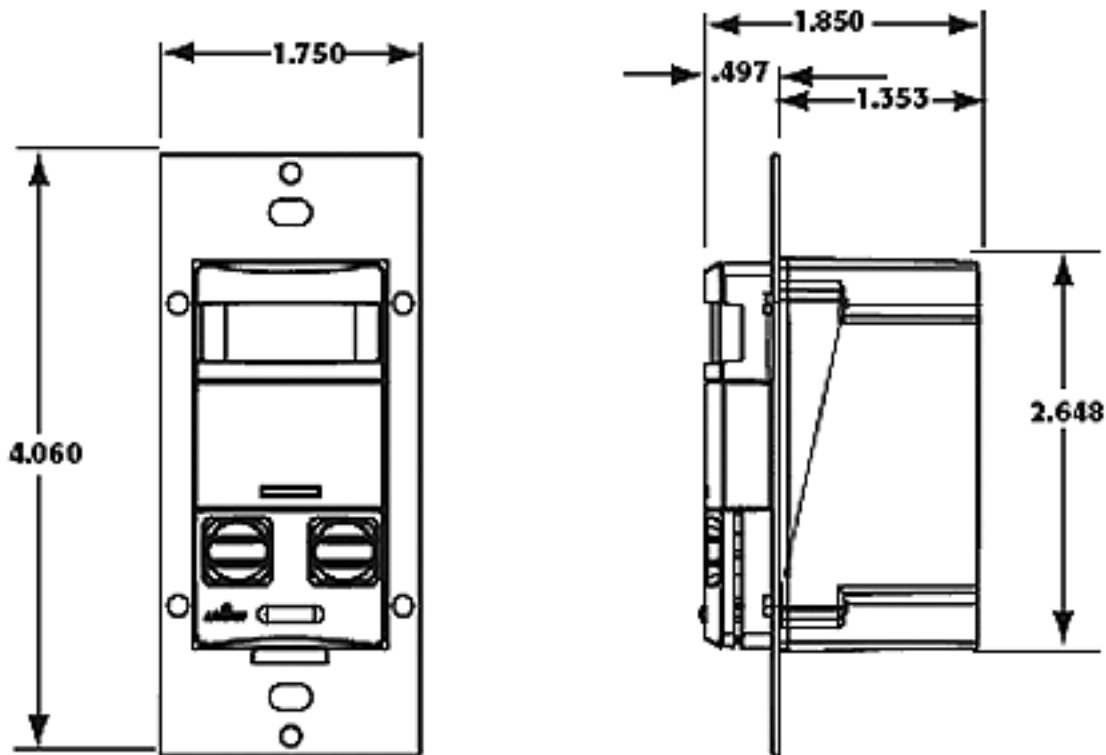
Country of Origin: Mexico - *Eligible for
ARRA funded projects > \$7,443,000



Features and Benefits

- Fast, simple Installation: Fits in a standard wall box and replaces a single-pole wall-switch; neutral and no neutral options available. Sensor can be ganged together with other units in a multiple-switch wall plate.
- Low-profile design eliminates obtrusive "scanning-device" look. Elegant Decora wallplates complement any interior for sleek aesthetics; uses Decora wallplates and coordinates with Leviton's popular line of Decora wiring devices.

- Convenient Pushbutton provides manual-ON/OFF light switching at any time.
- Segmented Fresnel lens provides optimum sensitivity and performance. Designed with an extensive “minor motion” area where even slight body movements will be detected.
- Vandal resistant PIR lens.
- Adjustable horizontal field-of-view (PIR may be adjusted between 180° and 60° of arc by using integral blinders located on either side of the lens). No masking required.
- Manual-ON/auto-OFF mode for installations where manual-ON switching is required but auto-OFF switching is still desired for CEC Title 24 energy savings.
- To comply with CED Title 24, LED indicator light flashes when sensor detects motion to verify detection is active. Green flashes for ultrasonic, red flashes for PIR.
- Time: The delayed OFF time is preset at 30 minutes in the Auto Adapting mode. A choice of four delayed-OFF time settings are available: 30-seconds (for walking test purposes only), 10, 20, and 30 minutes for fixed time and auto adapting. The LED will flash when the adjusting knob is set to the indicated time value.
- Ambient Light Recognition: Integrated light sensor prevents lights from turning on when the room is adequately illuminated by natural light.
- Self-Adaptive Technology: Callbacks for adjustment are eliminated. Time delay and sensitivity settings are continually adjusted to occupant patterns of use in auto adapt mode.
- Exclusive Walk-through Feature provides increased energy savings by not leaving the lights ON for an extended period after only momentary occupancy.
- Vacancy Confirmation: When the time out expires and the relays turn OFF, a 30 second (OSSMT-G) or 40 second (OSSMT-M) vacancy confirmation exists to turn the relays back on.
- False detection circuitry.
- Small Motion Sensitivity (U/S): Ultrasonic technology provides excellent minor motion sensitivity.
- Ability to disable U/S (OSSMT-M). For added flexibility, OSSMT-G has the ability to disable both PIR and U/S.
- Presentation Mode feature: For slide or film presentations, allows pushbuttons to turn lights OFF and keep them OFF while the room is occupied.
- Exclusive Leviton H.I.S. Circuitry. Specifically designed to handle today's high inrush electronic ballast loads and offer unmatched durability and service.
- True Zero-Cross Relay switches at the zero crossing point of the AC power curve to ensure maximum contactor life and compatibility with electronic ballasts.



SPECIFICATION SUBMITTAL

JOB NAME:	CATALOG NUMBERS:	
<input type="text"/>	<input type="text"/>	<input type="text"/>
JOB NUMBER:	<input type="text"/>	<input type="text"/>

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PASSIVE INFRARED CEILING SENSORS

CI-200 SERIES

360° coverage

User-adjustable time delay
and sensitivity

Low-profile design

Built-in light level sensor



Isolated relay for use with HVAC or other control systems

ASIC enhances reliability and helps eliminate false triggers

Automatic or manual-on operation when used with a BZ-150 Power Pack

Description

Wattstopper's CI-200 Series Passive Infrared (PIR) Ceiling Sensors provide 360° coverage to detect occupancy in the controlled area. These low-profile sensors reliably control lighting in a variety of applications.

Operation

The CI-200 Series Sensors are 24 VDC and control lighting through Wattstopper power packs. Utilizing the latest PIR technology, they turn lighting on when a difference is detected between the infrared energy from a human being in motion and the background space within the controlled area. After the area is vacated for a user-adjustable time delay, lighting automatically turns off.

Features

- ASIC technology reduces components and enhances reliability
- Pulse Count Processing eliminates false off without reducing sensitivity
- Detection Signature Analysis eliminates false triggers and provides immunity to RFI and EMI
- Low-profile design ensures a clean and uncluttered ceiling appearance
- User-adjustable time delay from 15 seconds to 30 minutes by two-minute increments
- Sensitivity is programmed through a DIP switch which has four settings ranging from minimum to maximum
- Light-level output can create bi-level lighting for added convenience and energy savings
- Isolated relay can be used to interface with HVAC, EMS or an additional lighting load
- LED indicates occupancy detection
- BAA/TAA-compliant models available

Coverage

Coverage from the CI-200 Series Sensors can reach up to 1200 square feet using the Extended Range Lens, and 500 square feet using the High Density Lens (circular pattern) for walking motion. For typical desktop-level activity, coverage can reach up to 300 square feet.

Applications

Applications include open office spaces, computer rooms, conference rooms, classrooms and warehouses. Areas with high ceilings or with two-level lighting can also be controlled. Due to low initial cost and the great energy saving potential, the sensors offer fast paybacks.

PROJECT

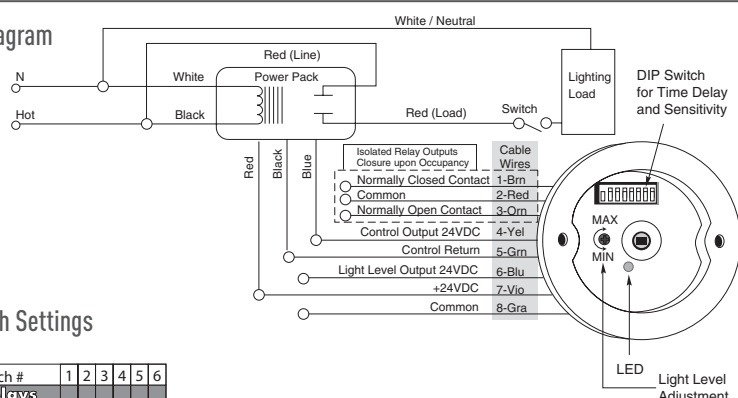
LOCATION/
TYPE

Specifications

- Dual-element, temperature compensated pyroelectric sensor
- CI-200 contains isolated relay with N/O and N/C outputs; rated for 1 Amp at 24 VDC/VAC
- Adjustable digital time delay: 15 seconds to 30 minutes with $\pm 2\%$ tolerance
- Integrated light level sensor: 4-190 footcandles (43-2,045 lux)
- Mounting options: ceiling tile, round mud ring
- Max. CI-200s per power pack: B = 5, BZ = 7
- Max. CI-205s per power pack: B = 10, BZ = 13
- Dimensions: 3.3" x 2.2" (84mm x 56mm) diameter x depth; extends approximately .36" (9.1mm) from ceiling
- UL and cUL listed
- Five year warranty

Wiring, Mounting & Settings

Wiring Diagram



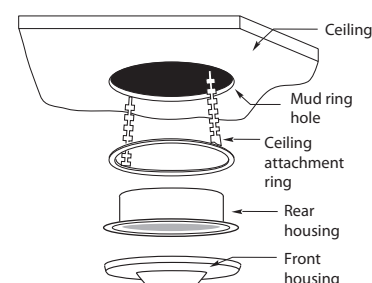
DIP Switch Settings

DIP Switch #	1	2	3	4	5	6
Time Delays						
15 seconds	●	●	●	●	●	●
2 minutes	-	●	●	●	●	●
4 minutes	-	-	●	●	●	●
6 minutes	-	-	-	●	●	●
8 minutes	-	-	-	-	●	●
10 minutes	-	-	-	-	-	●
12 minutes	-	-	-	-	-	-
14 minutes	-	-	-	-	-	-
16 minutes	-	-	-	-	-	-
18 minutes	-	-	-	-	-	-
20 minutes	-	-	-	-	-	-
22 minutes	-	-	-	-	-	-
24 minutes	-	-	-	-	-	-
26 minutes	-	-	-	-	-	-
28 minutes	-	-	-	-	-	-
30 minutes	-	-	-	-	-	-
Override						

DIP Switch #	7	8
Sensitivity		
Minimum	-	-
Medium Low	-	-
Medium High	-	-
Maximum	-	-

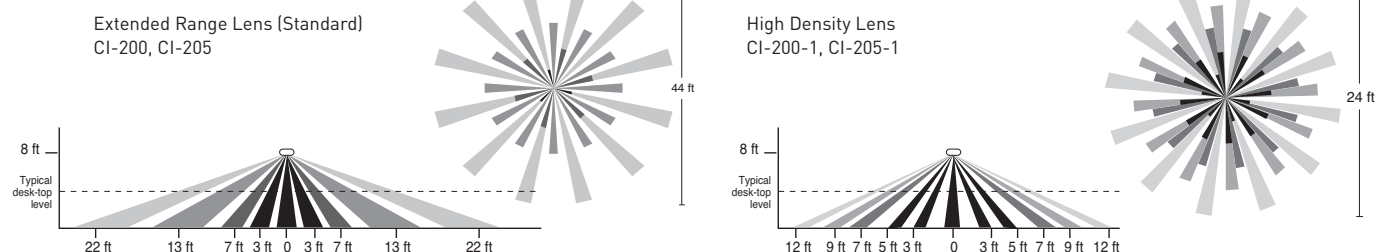
● = ON - = OFF
 ▶ = Factory Presets

Mounting



Coverage

Coverage Patterns



Ordering Information

Catalog #	Voltage	Current	Coverage	Features
<input type="checkbox"/> CI-200	24 VDC	20 mA	360°; up to 1200 ft ² (111.5 m ²)	Isolated relay, light level
<input type="checkbox"/> CI-200-U				
<input type="checkbox"/> CI-200-1	24 VDC	20 mA	360°; up to 500 ft ² (46.5 m ²)	Isolated relay, light level
<input type="checkbox"/> CI-205	24 VDC	11 mA	360°; up to 1200 ft ² (111.5 m ²)	
<input type="checkbox"/> CI-205-U				
<input type="checkbox"/> CI-205-1	24 VDC	11 mA	360°; up to 500 ft ² (46.5 m ²)	
<input type="checkbox"/> MB-1	Industrial Mounting Bracket			
<input type="checkbox"/> MB-2	Industrial Mounting Bracket for HID fixtures			

All units are white and use Wattstopper power packs. Current consumption can be slightly higher when only one sensor per power pack is used.
 -U = BAA/TAA compliant; product is compliant with Buy American Act and Trade Agreement Act.

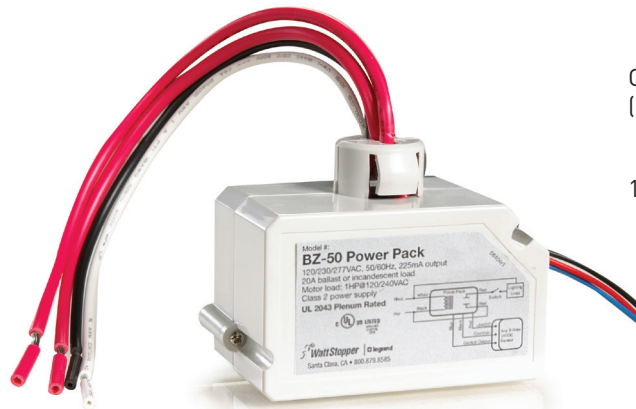
UNIVERSAL VOLTAGE POWER PACK

| BZ-50

High-efficiency switching
power supply

Plenum rated

Zero crossing for reliability
and increased product life



Overcurrent protection
(low-voltage)

120/277VAC, 50/60Hz



Description

The BZ-50 Universal Voltage Power Pack provides 24 VDC operating voltage to Wattstopper's low-voltage occupancy sensors. This device is constructed with environmentally friendly materials and is RoHS-compliant.

Operation

The BZ-50 consists of a high-efficiency switching power supply and a high-current relay. It has an input of 120/277 VAC, 50/60Hz, and an output of 24VDC, 225mA. It turns the connected load on and off automatically based on occupancy sensor input.

Features

- Self-contained power supply relay system
- Efficient switching power supply providing optimized current output based on number of sensors
- LED indicates status of relay or if there is a low-voltage overcurrent
- The product meets the materials restrictions of RoHS
- Zero crossing circuitry for reliability and increased product life

Plenum Rated

The BZ-50 Power Pack is comprised of Teflon-coated low-voltage leads and an ABS, UL 2043 and 94V-0 plastic resin enclosure that is plenum-rated. As a result, the BZ-50 does not require installation into the junction box, but can be cost-effectively installed directly into the plenum.

Applications

The BZ-50 Power Pack is designed to be flexible enough to control almost any lighting or HVAC load, such as lighting circuits, self-contained air conditioners, pumps, fans, motors, VAV systems, motorized damper controls and setback thermostats. The BZ-50 is well-suited for any application which requires high-voltage switching through low-voltage controls. By linking power packs and sensors, an almost unlimited number of configurations can be obtained.

- UL 2043 plenum rated for cost-effective installation
- 1/2" snap-in nipple attaches to standard electrical enclosures through 1/2" knockouts
- 14 AWG wires on the relay for 20A operation
- BAA/TAA-compliant models available

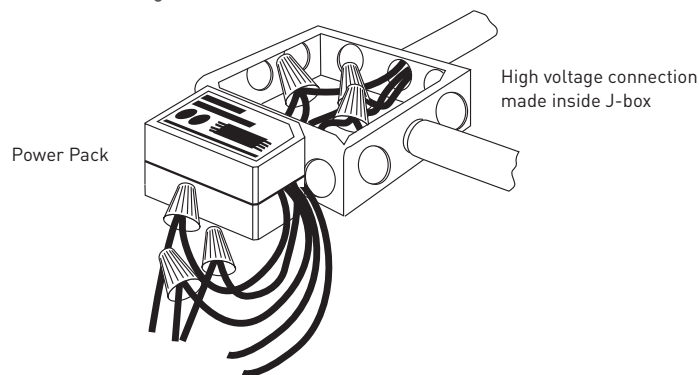
PROJECT		LOCATION/ TYPE	
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Specifications

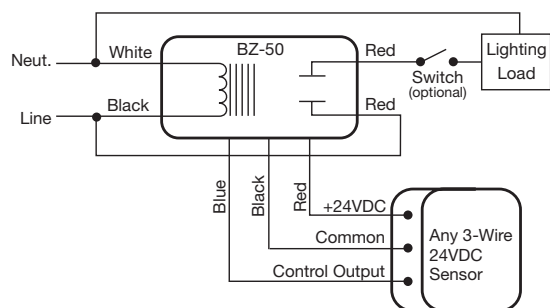
- 120/277VAC, 50/60Hz voltage input
- Secondary voltage of 24 VDC
- Secondary output of 225 mA (with relay connected)
- Low-voltage leads are rated for 300 volts
- UL-rated 94 V-0 grey plastic enclosure
- Dimensions: 1.6" x 2.75" x 1.6" (40.6mm x 69.9mm x 40.6mm) H x W x D with a 1/2" (12.7mm) snap-in nipple
- UL and cUL listed
- Five year warranty

Installation and Wiring

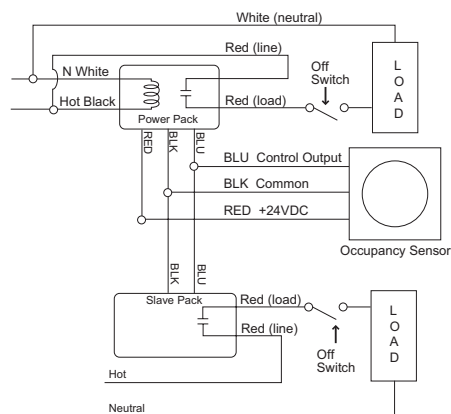
Installation Diagram



Wiring with Occupancy Sensor



Auxiliary Relay Pack with Sensor



Ordering Information

Catalog #	Input Voltage	Load Ratings			Output
		Ballast(A)	Incan(A)	Motor(HP)	
<input type="checkbox"/> BZ-50	120/277VAC; 50/60Hz	20	20	1*	24 VDC; 225 mA**
<input type="checkbox"/> BZ-50-U					

*1 Hp rated at 120/250 VAC. **Output is 225 mA with relay connected.

-U = BAA/TAA compliant. Product is compliant with Buy American Act and Trade Agreement Act

1. All Wattstopper power packs should be installed in accordance with state, local, and national electrical codes and requirements.

2. Power packs are designed to attach to existing or new electrical enclosures with .5" 125.40mmJ knockout (check electrical codes in your area).

3. Most applications require UL-listed, 18-22 AWG, 3-conductor, Class 2 cables for low-voltage wiring. For plenum return ceilings use UL-listed plenum-approved cables.