

DESCRIPTION

The IMPACT Elite family of cutoff wall luminaires is the ideal complement to site design. Incorporating modular LightBAR™ technology, Impact Elite provides outstanding uniformity and energy conscious illumination. Combined with a rugged construction, the Impact Elite is the ideal facade and security luminaire for zones surrounding schools, office complexes, apartments, and recreational facilities. UL/cUL listed for wet locations.

Catalog #	ISW B01 LED E1 BL2 BZ	Type	
Project		'WLA'	
Comments		Date	
Prepared by			

SPECIFICATION FEATURES

Construction

Heavy-wall, die-cast aluminum housing and removable hinged door frame for precise tolerance control and repeatability. Hinged door inset for clean mating with housing surface and secured via two (2) captive fasteners. Optional tamper resistant Torx™ -head fasteners offer vandal resistant access to the electrical chamber.

Optics

Choice of six (6) patented, high efficiency AccuLED Optics™ that maximize light collection and direction distribution onto the application region. Each optical lens is precision manufactured via injection-molding, then precisely arranged and sealed to the board media. BL optics offer backlight control to decrease wall brightness while the optional uplight glow provides soft illumination to highlight architectural surfaces. Offered standard in 4000K (+/- 275K) CCT and nominal 70 CRI.

Electrical

LED drivers mount to die-cast aluminum back casting for optimal heat sinking and operation efficiency. Impact Elite Wall Series LED operates from 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz. Shipped standard with Cooper Lighting proprietary circuit module designed to withstand 10kV of transient line surge. 50,000+ hour life with nominal 70% lumen maintenance. The Impact Elite Wall Series LED luminaire is suitable for operation in -30°C to 40°C ambient environments. LightBARs™ feature an IP66 enclosure rating. Emergency egress options for -20°C ambient environments and optional occupancy sensor available.

Mounting

Gasketed and zinc plated rigid steel mounting attachment fits directly to 4" j-box or wall with the Impact Elite "Hook-N-Lock" mechanism for quick installation. Secured with two (2) captive corrosion resistant black oxide coated allen head set screws concealed but accessible from bottom of fixture.

Finish

Cast components finished in a 5-stage Super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty

Impact Elite LED features a five-year limited warranty.



ISW IMPACT ELITE LED WEDGE

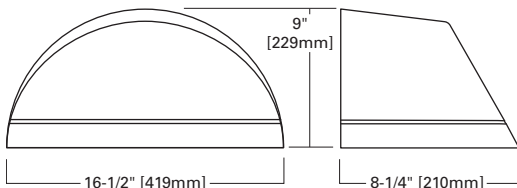
1 - 2 LightBARs
Solid State LED

WALL MOUNT LUMINAIRE

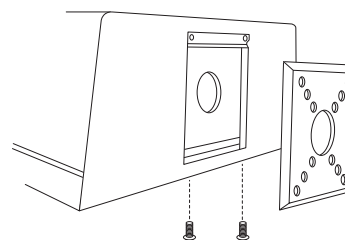
SustainableLEDesign™

STANDARD DIMENSIONS

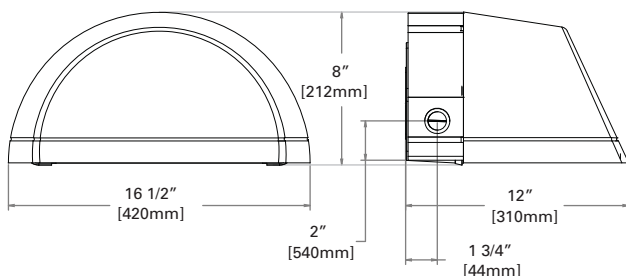
Wedge



HOOK-N-LOCK MOUNTING



STANDARD DIMENSIONS WITH BACK BOX



CERTIFICATION DATA

UL/cUL Listed
LM79 / LM80 Compliant
IP66 LightBARs
ARRA Compliant
ISO 9001

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60hz, 347V/60hz,
480V/60hz
-30°C Minimum Temperature
40°C Ambient Temperature Rating

SHIPPING DATA

Approximate Net Weight:
18 lbs. (8 kgs.)



POWER AND LUMENS BY BAR COUNT

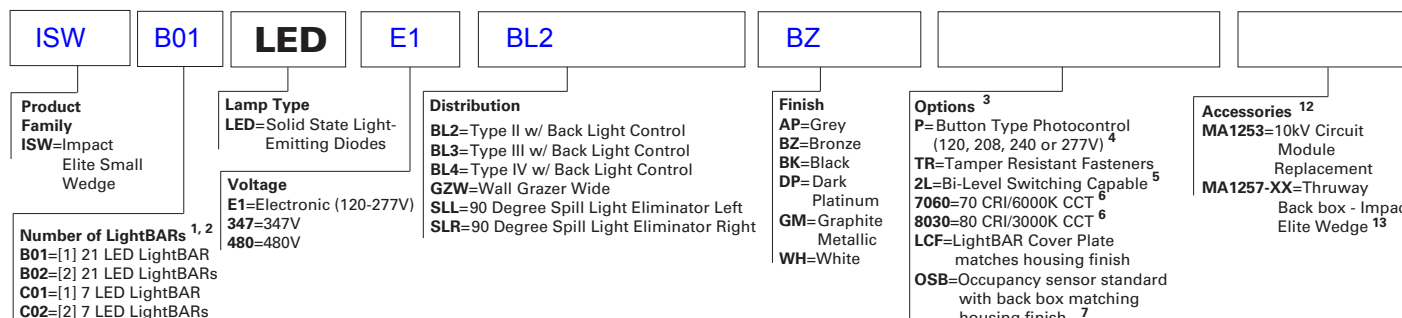
LUMEN MULTIPLIER

Number of LightBARs	DISTRIBUTION							
	Power [Watts]	Current @ 120V [A]	Current @ 277V [A]	BL2	BL3	BL4	GZW	SLR/ SLL
7 LED LIGHTBAR								
C01	27	0.23	0.13	1,704	1,615	1,686	1,688	1,550
C02	54	0.46	0.21	3,408	3,230	3,372	3,375	3,099
21 LED LIGHTBAR								
B01	27	0.23	0.13	1,770	1,625	1,720	1,725	1,571
B02	51	0.43	0.20	3,540	3,249	3,440	3,450	3,142

Ambient Temperature	Lumen Multiplier
10°C	1.04
15°C	1.03
25°C	1.00
40°C	0.96

ORDERING INFORMATION

SAMPLE NUMBER: ISW-B02-LED-E1-BL3-GM



NOTES:

- 1 Standard 4000K CCT and nominal 70 CRI.
- 2 21 LED LightBAR powered at 350mA, 7 LED LightBAR powered at 1A.
- 3 Add as suffix.
- 4 Must specify voltage.
- 5 Only available in 2 bar [B02 or C02] configurations.
- 6 Consult factory for lead times and lumen multiplier.
- 7 Only available in 2 BAR [B02 or C02] configuration; streetside LightBAR will be wired to sensor. Time delay factory setting is 15 minutes.
- 8 Not available with OSB.
- 9 Specify 120 or 277V, 0°C minimum temperature.
- 10 Consult factory for availability.
- 11 Specify 120 or 277V, -20°C minimum temperature.
- 12 Order separately.
- 13 Specify finish (color) in place of "XX".



Project:	
Type:	'WLA' ALT
Catalog #:	

Model WP40-C-LED LED Wall Pack

HOUSING

- Heavy duty die cast housing w/ powder coated bronze finish
- Corrosion resistant housing and hardware
- Silicone rubber gasket
- 1/2" coin plugs with O-rings for conduit and photocell

CODE COMPLIANCE

- UL Listed for Wet Location

WARRANTY

- 5 year warranty

ELECTRICAL

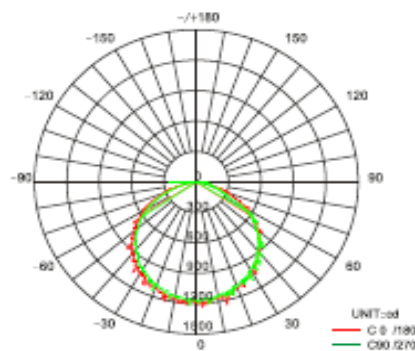
- Quad-tap (120/208/240/277V)

OPTICAL SYSTEM

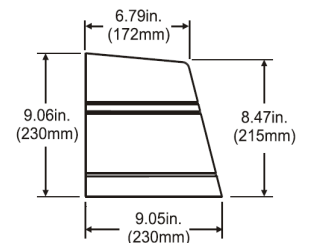
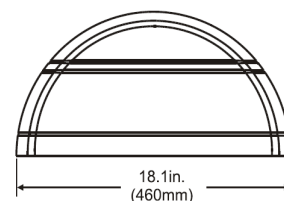
- Specular aluminum reflector
- Diffused polycarbonate glass lens
- Cree XP-E LED chips
- IC current controlled LED circuits
- High quality heat sinks for temperature control
- Approximately 90 lumens per LED
- 5K color temperature



PHOTOMETRICS



DIMENSIONS



MOUNTING

- Template cast for mounting over 4" recessed box, or use with 1/2" surface conduit

***LM-79 & LM-80 TESTED**

ORDERING INFORMATION

MODEL	WATTAGE	VOLTAGE	OPTIONS
WP40-C	30L 48L	QT	PC1 - 120V Photocell PC2 - 277V Photocell

MODEL	WATTAGE	VOLTAGE	OPTIONS
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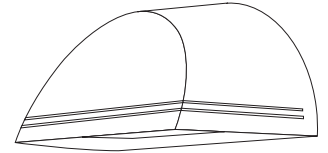
Specifications and dimensions subject to change without notice.

Job:
 Type:
 Notes:

100 Line LED

102 Performance Sconce LED

Philips Gardco 102 LED rounded wedge high performance sconce luminaires are designed to integrate naturally to wall surfaces. 102 LED luminaires are available with three (3) different distribution patterns, providing full cutoff performance (in the normal downlight position) and featuring LED arrays. Luminaires provide performance excellence and advanced Philips Gardco LED thermal management technology. High performance Class 1 LED systems offer potential energy savings of 50 % or more compared to HID systems. 102 LED luminaires are also available with Automatic Profile Dimming, increasing savings by an additional 33%.



PREFIX	DISTRIBUTION	LED WATTAGE	LED SELECTION	VOLTAGE	FINISH	OPTIONS
<input style="width:100%; height:20px;" type="text"/>	<input style="width:100%; height:20px;" type="text"/>	<input style="width:100%; height:20px;" type="text"/>	<input style="width:100%; height:20px;" type="text"/>	<input style="width:100%; height:20px;" type="text"/>	<input style="width:100%; height:20px;" type="text"/>	<input style="width:100%; height:20px;" type="text"/>

Enter the order code into the appropriate box above. Note: Philips Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

PREFIX

- 102L** Rounded Wedge LED - Constant Wattage / Full Light Output
- 102L-DCC** Rounded Wedge LED - Dual Arrays with Dual Circuit Control
- 102L-DIM** Rounded Wedge LED - 0 - 10V Dimming (Control system by others.)
- 102L-APD** Rounded Wedge LED with Automatic Profile Dimming

DISTRIBUTION

- 2** Type II Wide Throw Optic, featuring Maximized Lateral Throw
- 3** Type III Preferred Wide Throw Optic, featuring Improved Forward Throw
- 4** Type IV Maximized Forward Throw Optic

See page 3 for more detailed luminaire configuration information.

LED WATTAGE AND LUMEN VALUES

Ordering Code	Average System Watts ¹	LED Current (mA)	LED Selection	Luminaire Initial Absolute Lumens ^{2,3}			Basis of Lumen Data Photometric tests performed in compliance with IESNA LM-79.
				TYPE 2	TYPE 3	TYPE 4	
35LA	35	350	NW	2,883	2,974	2,821	
55LA	55	530	NW	3,948	4,158	3,904	

1. Wattage may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
 2. Tests are in process for luminaires with the DL option, CW and WW luminaires. CW values may be approximated by applying a 1.08 multiplier to NW values shown. Contact Gardco.applications@philips.com if any approximate estimates are required for design purposes.
 3. LED arrays feature LEDs that provide from 100 to 130 lumens per watt when operated at 350 mA. Lumen values based on tests performed in compliance with IESNA LM-79.

LED SELECTION

- CW** Cool White - 5700°K - 75 CRI
- NW** Neutral White - 4000°K - 75 CRI
- WW** Warm White - 3000°K - 75 CRI

VOLTAGE

- UNIV** 120V through 277V, 50hz or 60hz

1611 Clovis Barker Road, San Marcos, TX 78666
 (800) 227-0758 (512) 753-1000 FAX: (512) 753-7855 sitelighting.com

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Philips Gardco reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program.

G200-029/0911

PHILIPS



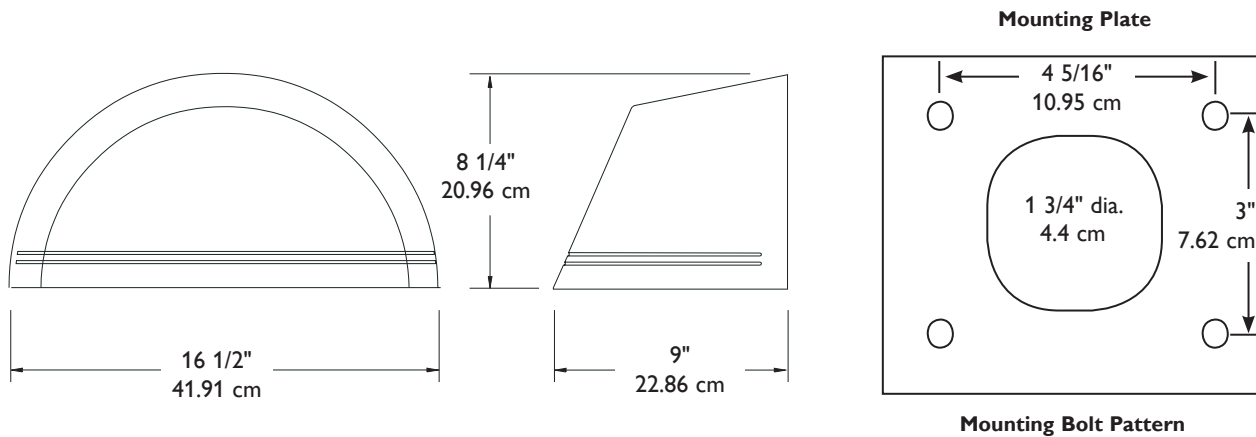
FINISH

BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
BGP	Beige Paint
OC	Optional Color Paint <i>Specify Optional Color or RAL ex: OC-LGP or OC-RAL7024.</i>
SC	Special Paint <i>Specify. Must supply color chip.</i>

OPTIONS

F	Fusing	
PCB	Button Type Photocontrol	4. Polycarbonate lenses carry a 1 year warranty only.
DL⁶	Diffusing Lens Reduces Performance Significantly	5. Rear entry permitted.
PSO^{4,7}	Offset Polycarbonate Flat Shield	6. Not available with PSO option and not available with the WG option.
UT	5° Uptilt	7. Not available with DL option and not available with the WG option.
WS⁵	Wall Mounted Box for Surface Conduit	8. Not available with DL option and not available with the PSO option.
WS/UT⁵	WS Option w/5° Uptilt	
WG⁸	Wire Guard	
SPRA	Surge Protection - 120V thru 277V - meeting ANSI C62.41.2	

DIMENSIONS



Note: Mounting plate center is located in the center of the luminaire width and 3.5" (8.89cm) above the luminaire bottom (lens down position). Splices must be made in the J-box (by others). Mounting plate must be secured by max. 5/16" (.79cm) diameter bolts (by others) structurally to the wall.

LUMINAIRE CONFIGURATION INFORMATION

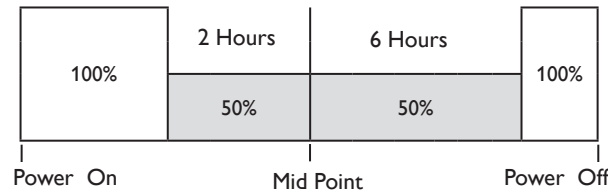
102L: Philips Gardco performance LED sconce providing constant wattage and constant light output when power to the luminaire is energized.

102L-DCC: Philips Gardco performance LED sconce provided with dual circuiting, and dual arrays, permitting separate switching of each led array.

102L-DIM: Philips Gardco performance LED sconce provided with 0 -10V dimming for connection to a control system provided by others.

102L-APD: Philips Gardco performance LED sconces with Automatic Profile Dimming are provided with a programmed LED Driver included. The LED driver is factory programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously calculated by the LED driver based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.

APD Dimming Profile:



SPECIFICATIONS

GENERAL: Philips Gardco 102 LED Rounded Wedge high performance sconce luminaires are designed to integrate naturally to wall surfaces. 102 LED luminaires are available with three (3) different distribution patterns, providing full cutoff performance (in the normal downlight position) and featuring LED arrays. Luminaires provide performance excellence and advanced Philips Gardco LED thermal management technology. High performance Class 1 LED systems offer potential energy savings of 50 % or more compared to HID systems.

THERMAL MANAGEMENT: Philips Gardco 102 LED luminaires utilize extruded aluminum integral thermal radiation fins to provide the excellent thermal management so critical to long LED system life.

LED RELIABILITY:

PREDICTED LUMEN DEPRECIATION DATA		
Ambient Temperature °C	LED Wattage / Driver mA	L ₇₀ Hours ⁹
25 °C	35LA / 350 mA	150,000
	55LA / 530 mA	100,000
40 °C	35LA / 350 mA	100,000
	55LA / 530 mA	70,000

9. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.

OPTICAL SYSTEMS: Philips Gardco 102 LED luminaires utilize lensed LED arrays set to achieve IES Type II, Type III, and Type IV distributions. Individual LED arrays are replaceable. Luminaires feature high performance Class 1 LED systems.

FULL CUTOFF PERFORMANCE: Full cutoff performance means a luminaire distribution where zero candela intensity occurs at an angle at or above 90° above nadir. Additionally, the candela per 1000 lamp lumens does not numerically exceed 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.

CUTOFF PERFORMANCE: Cutoff performance means a luminaire distribution where the candela per 1000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle at or above 90° above nadir, and 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.

HOUSING: Housings are die cast aluminum. A memory retentive gasket seals the housing to the door frame to exclude moisture, dust, insects and pollutants from the optical system. A black, die cast ribbed backplate dissipates heat for longer system life.

DOOR FRAME: A single-piece die cast aluminum door frame integrates to the housing form. The door frame is hinged closed and secured to the housing with captive stainless steel fasteners. The heat and impact resistant 1/8" (.32cm) tempered glass lens and one-piece gasket are mechanically secured to the door frame with galvanized steel retainers.

IP RATING: Luminaires are rated IP66.

FINISH: Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors are as listed. Consult factory for specs on custom colors.

LABELS: All luminaires bear UL or CUL (where applicable) labels. Lens down application is Wet Location and lens up is Damp Location.

WARRANTY: Philips Gardco LED luminaires feature a 5 year limited warranty, including a 5 year limited warranty covering the LED arrays. See Warranty Information on www.sitelighting.com for complete details and exclusions. Polycarbonate lenses carry a 1 year warranty only.

RTP RADIUS TRAPEZOID

ARCHITECTURAL WALLPACK

Cat.#		Approvals
Job	Type	
	'WLA' ALT	



APPLICATIONS

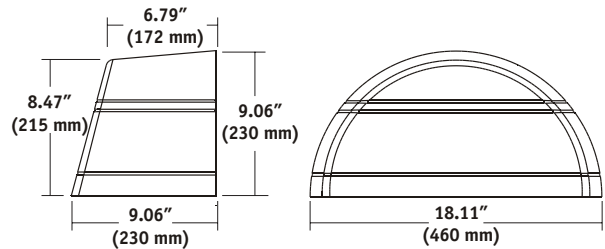
- Architectural wallpack stylish Radius trapezoid shape with molded lines to accentuate building architecture. Provides excellent illumination in three distributions as well as safety with Egress option

SPECIFICATIONS

- Full cut-off, dark sky, neighbor friendly
- Die cast aluminum housing and door
- Tempered, impact-resistant, clear glass lens
- Energy-saving LED, Pulse Start Metal Halide and Electronic Fluorescent systems
- Three distributions: (see below for restrictions) FT - forward throw for area lighting, WT - wide lateral throw for maximum spacing and UD - Up/Down accent distribution
- Five powder coat standard finishes
- Egress options for 120V or 12V remote power (by others)
- LED color temperature 5000K
- LED produces 2218 lumens
- CFL lamps color temperature 3500K
- HID lamps are medium base

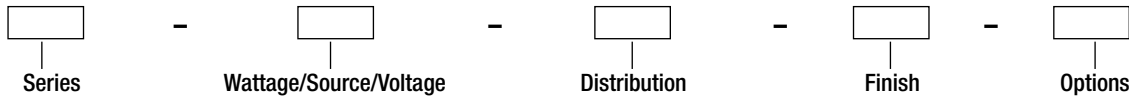
LISTINGS

- UL 1598 listed for use in wet locations



ORDERING INFORMATION

ORDERING EXAMPLE: RTP-150P8-FT-WH-EM



SERIES	WATTAGE/SOURCE/VOLTAGE	DISTRIBUTION	FINISH	OPTIONS
RTP Radius Trapezoid	LED	FT Forward Throw ²	BZ Bronze	QST ³ Time delay quartz standby system energizes quartz socket when main lamp does not strike (HID only)
	50L8-5K ^{3,6} 47.5w LED 120-277V	WT Wide Throw ²	BL Black	EM Double contact bayonet socket only for use with 120V remote power (generator by others)
	Pulse Start ¹	UD Up/Down	GR Gray	EM12 Two-pin 12V socket for MR11/MR16 lamps (backup power by others)
	150P8 150w PS Quad		WH White	PC(X) Button photocontrol. Specify voltage 1-120V, 2-208V, 3-240V, 4-277V
	100P8 100w PS Quad		PL Platinum	BOC(X) 0°C battery backup for one CFL lamp provides 90 minutes backup power specify 1-120V or 4-277V
	70P8 70w PS Quad			
	50P9 50w PS 120/277V			
	CFL ¹			
	26F8 42 CFL Quad			
	32F8 32 CFL Quad			
	42F8 42 CFL Quad			
	52F8 ³ 2x26 CFL Quad			
	64F8 ³ 2x32 CFL Quad			
	84F8 ³ 2x42 CFL Quad			

1 Lamp(s) included, all units are Quad-Tap® (120/208/240/277V)

2 IDA approved

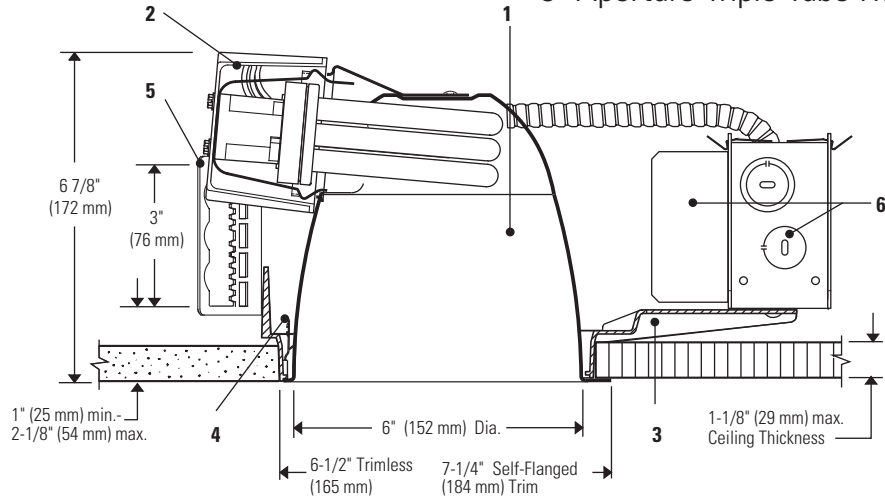
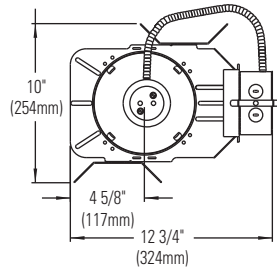
3 Available in WT distribution only

4 BOC option not available with UD, up/down distribution

5 100w D.C. bayonet lamp included

6 PC is only option

Color Temperature: CFL lamps 3500K, LED 5000K



Reflector Trim	Frame-In Kit
8031 CLW Clear Iridescence Free, White Flange 8031 CLP Clear Iridescence Free, Polished Flange 8031 CL Clear Iridescence Free, Molded Trim Ring 8031 <input type="checkbox"/> Add suffix. See options for other finishes.	S6132BU 6" aperture, 1 lamp 26/32W Triple Tube CFL (120/277V) 4-Pin (Amalgam) Dimming Options: S6132B <input type="checkbox"/> CU3 Lightolier PowerSpec 3% Dimming (120/277V) J1LD3 Lutron 5% Dimming (120V) J2LD3 Lutron 5% Dimming (277V) JUM7 Mark 7 Dimming (120/277V) J1MX Mark 10 Dimming (120V) J2MX Mark 10 Dimming (277V) Other dimming product available, please consult factory
	Remodeler Frame-In Kits
	6126BURM 6" aperture, 1 lamp 26W Triple Tube CFL (120/277V) 4-Pin (Amalgam) 6132BURM 6" aperture, 1 lamp 26/32W Triple Tube CFL (120/277V) 4-Pin (Amalgam)

Features

- 1. Reflector:** 16 ga. Specular Alzak® aluminium, 55° visual cutoff to lamp and lamp image, medium distribution. Iridescence Free finish. Self-flanged or molded white trim ring (field paintable).
- 2. Socket Cup:** Effectively dissipates heat and positions lamp holder. Snaps onto reflector neck to assure consistently correct optical alignment without tools.
- 3. Mounting Frame:** Galvanized steel for dry or plaster ceilings. Accepts other 6" Triple Tube reflectors (see S6132BU Spec Sheet).
- 4. Retaining Springs:** Precision-tooled steel friction springs secure reflector to mounting frame for quick, tool-less installation.
- 5. Mounting Brackets:** 16 ga. steel. Adjust from inside of fixture. Use 3/4" or 1 1/2" lathing channel, 1/2" EMT, or optional mounting bars.
- 6. Ballast/J-Box:** Electronic 120V-277V. UL listed for through branch circuit wiring with max of (8) No. 12AWG, 90°C supply conductors. Outboard mounted to reduce heat transfer and maintain lamp efficacy and life. Service from below without tools.

Electrical

Note: For ballast electrical data and latest lamp/ballast compatibility refer to "Ballast" specification sheet for complete electrical data.

UL Listed for through branch circuit wiring with max of (8) No 12 AWG, 90 degree C supply conductors.

Options and Accessories

Comfort Clear™ Finishes ¹	Other Finishes
Clear CCL	White WH
Diffuse CCD	
Champagne Bronze CCZ	
Multigroove MG	

¹Specify desired flange. **W** White, **P** Polished, Blank - Molded Ring

Options and Accessories (continued)

- Emergency Add suffix **EM***
- Chicago Plenum Use 6132BULC
- Existing/Thk. Ceiling **FA EC6***
- Emergency Ltg. Kit **FA EM3E***
FA EM4E*
- Fuse (Slow Blow) Add Suffix **F**
- *See Spec. Sheets: FAEC, FAEM
- Mounting Bars & Accessories; see Specification Sheet MBA.
- Sloped Ceiling Adapters; see Specification Sheet SCA.
- IC Frame available; see **C6CFL32** specification sheet.

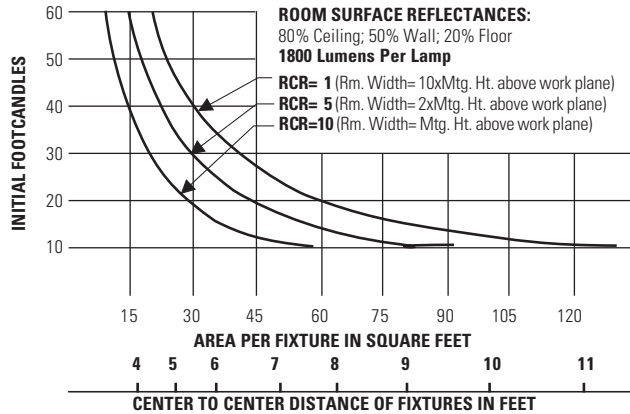
Labels

UL listed for damp locations.

Job Information	Type: DFD
Job Name:	
Cat. No.:	8031CCLW S6132BCU3
Lamp(s):	(1) 32W PLT CFL LAMP, GX24Q-4 BASE
Notes:	

631 Airport Road, Fall River, MA 02720 • (508) 679-8131 • Fax (508) 674-4710
 We reserve the right to change details of design, materials and finish.
 www.lightolier.com © 2009 Philips Group • B0209

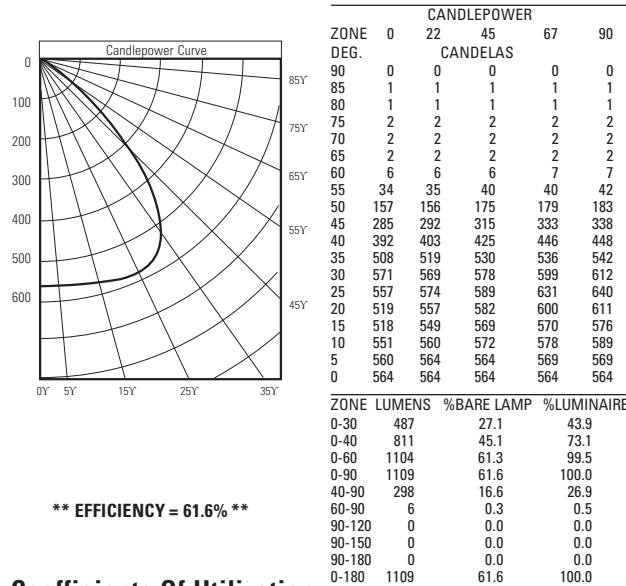
26W Quick Calculator



This quick calculator chart determines the number and spacing of 1 ft.- 26W PL-T units with clear reflector, for any level of illumination.

Spacing Ratio = 1.4

Report No.: LRL 796-1A
PREPARED BY: LIGHTING RESEARCH LABORATORY, INC.
PREPARED FOR: LIGHTOLIER
DESCRIP.: 6" dia. x 6" Ht. recessed downlight - open bottom spun semispecular reflector; tilted horizontal lamp
LAMPS: 1 PLT-26W rated at 1800 LUMENS.

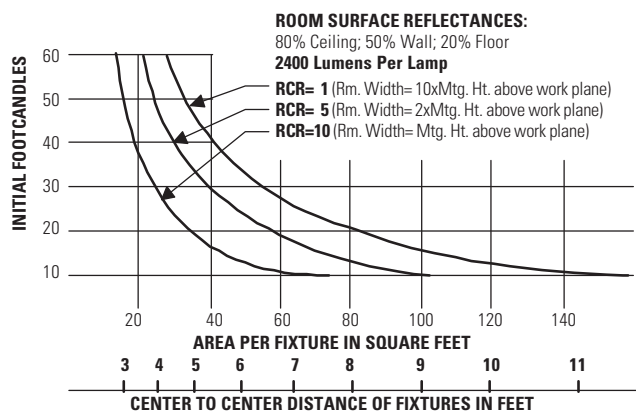


Coefficients Of Utilization

ROOM CAVITY RATIO	% EFFECTIVE CEILING CAVITY REFLECTANCE															
	80			70			50			30			10	0		
	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
1	.68	.66	.65	.67	.65	.64	.64	.63	.62	.62	.61	.60	.60	.59	.58	.57
2	.63	.61	.59	.62	.60	.58	.60	.58	.57	.58	.57	.55	.57	.55	.54	.53
3	.59	.56	.53	.58	.55	.53	.55	.54	.52	.55	.53	.51	.54	.52	.51	.50
4	.54	.51	.48	.54	.51	.48	.52	.50	.47	.51	.49	.47	.50	.48	.46	.45
5	.51	.47	.44	.50	.46	.44	.49	.46	.43	.48	.45	.43	.47	.45	.43	.42
6	.47	.43	.40	.46	.43	.40	.45	.42	.40	.45	.42	.39	.44	.41	.39	.38
7	.43	.39	.36	.43	.39	.36	.42	.39	.36	.41	.38	.36	.41	.38	.36	.35
8	.40	.36	.33	.39	.36	.33	.39	.35	.33	.38	.35	.33	.37	.35	.32	.31
9	.36	.32	.30	.36	.32	.30	.35	.32	.29	.35	.32	.29	.34	.31	.29	.28
10	.32	.28	.25	.31	.27	.25	.31	.27	.25	.30	.27	.24	.30	.27	.24	.23

20% FLOOR CAVITY REFLECTANCE

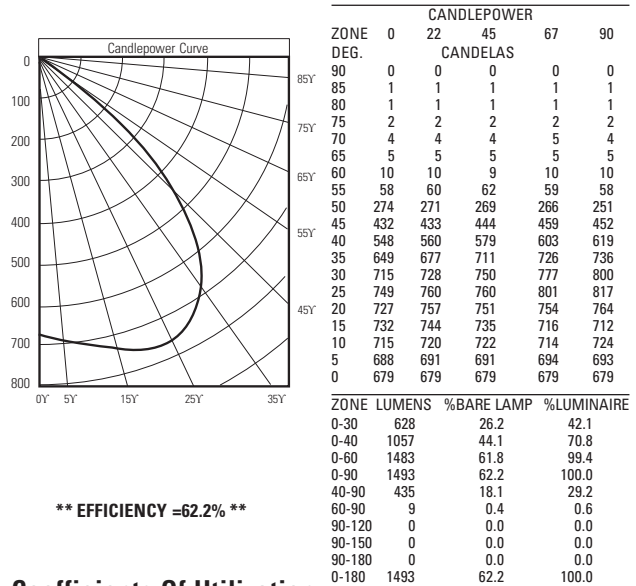
32W Quick Calculator



This quick calculator chart determines the number and spacing of 1 ft.- 32W PL-T units with clear reflector, for any level of illumination.

Spacing Ratio = 1.4

Report No.: LRL 796-1B
PREPARED BY: LIGHTING RESEARCH LABORATORY, INC.
PREPARED FOR: LIGHTOLIER
DESCRIP.: 6" dia. x 6" Ht. recessed downlight - open bottom spun semispecular reflector; tilted horizontal lamp
LAMPS: 1 PLT-32W rated at 2400 LUMENS.



Coefficients Of Utilization

ROOM CAVITY RATIO	% EFFECTIVE CEILING CAVITY REFLECTANCE															
	80			70			50			30			10	0		
	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
1	.68	.67	.65	.67	.66	.64	.65	.63	.62	.62	.61	.60	.60	.59	.59	.58
2	.64	.61	.59	.62	.60	.58	.60	.59	.57	.59	.57	.56	.57	.56	.54	.53
3	.59	.56	.53	.58	.55	.53	.57	.54	.52	.55	.53	.51	.54	.52	.50	.49
4	.55	.51	.48	.54	.50	.48	.52	.50	.47	.51	.49	.47	.50	.48	.46	.45
5	.50	.47	.44	.50	.46	.43	.49	.46	.43	.48	.45	.43	.47	.44	.42	.41
6	.47	.43	.40	.45	.42	.40	.45	.42	.39	.44	.41	.39	.43	.41	.39	.38
7	.43	.39	.36	.42	.39	.36	.42	.38	.36	.41	.38	.35	.40	.37	.35	.34
8	.39	.35	.32	.39	.35	.32	.38	.35	.32	.38	.34	.32	.37	.34	.32	.31
9	.36	.32	.29	.36	.32	.29	.35	.31	.29	.34	.31	.29	.34	.31	.28	.27
10	.31	.27	.24	.31	.27	.24	.30	.26	.24	.30	.26	.24	.29	.26	.24	.23

20% FLOOR CAVITY REFLECTANCE

Job Information

Type:

631 Airport Road, Fall River, MA 02720 • (508) 679-8131 • Fax (508) 674-4710
We reserve the right to change details of design, materials and finish.
www.lightolier.com © 2009 Philips Group • B0209

TRIPLES-H 126/6

recessed compact fluorescent downlight/wallwasher

TYPE 'DFA' ALT

#TRPH 126/6 277 VOL

COMPACT
FLUORESCENT
1-370

FEATURES

Triples-H 126/6 is an efficient 6" aperture low brightness downlight, for use with one 26-watt, 4-pin, triple tube compact fluorescent lamp by GE, Sylvania or Philips. Triples-H 126/6 provides shielding angles of 40° parallel to and 40° perpendicular to the lamps. Recess depth is only 6 1/2".

One housing allows interchangeable use of downlight and wallwash reflectors, permitting housings to be installed first and reflectors to be installed or changed at any time.


Triples-H 126/6 uses one 26-watt, 4-pin, triple tube lamp providing 1800 lumens (more than a 100-watt incandescent), a 10,000-hour life, a color rendering index (CRI) of 82, and color temperatures as warm as 2700°K (nearly duplicating the color qualities of incandescent).

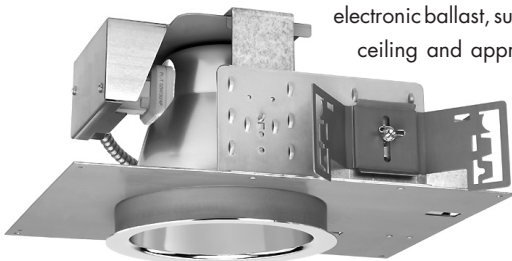
Reflectors are available in clear, natural aluminum in two finishes: **EvenTone**, our standard clear finish, partially diffuse, anti-iridescent and gently luminous in appearance; and **EasyTone**, diffuse and luminous. Additionally, reflectors are available in champagne gold, wheat, pewter, and bronze. Wallwash (120°) and double wallwash (2x120°) reflectors are also available.

Triples-H 126/6 includes a pair of mounting bars (3/4" x 27" C channel). Specialty bars for wood joist and T-bar installations are available as accessories.

APPLICATIONS

Fixture is recommended for downlighting or wallwashing in offices, corridors, shops, banks, schools, hospitals and airports, as well as lobbies and public areas. The shallow recess depth allows mounting in constricted plenum situations.

Fixture is  listed for Damp Location (may not be suitable for some outdoor environments). Fixture is prewired with high power factor Class P



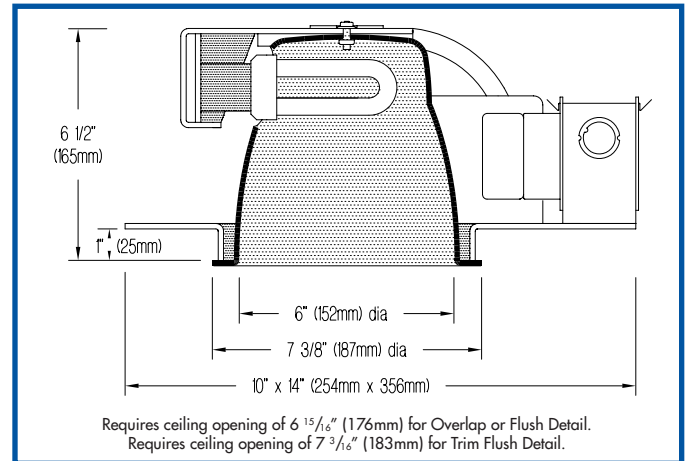
electronic ballast, suitable for use in a fire rated ceiling and approved for eight #12 wire 75°C branch circuit pull-through wiring. Removal of the reflector allows access to the ballast and junction box.

NOTE: Under certain conditions, such as installations where there is a pressure differential between the room and ceiling cavity, amalgam based fluorescent lamps may experience reduced lumen output.

MODIFICATIONS AVAILABLE

Contact factory with quantity for pricing; orders may require shop drawing approval.

- CHP-**: fixture suitable for **Chicago Plenum**; add CHP- as prefix to Product Code.
- CONC-**: fixture suitable for poured-in-place **concrete**; add CONC- as prefix to Product Code.
- EXP-**: 'European-style' **install-from-below** fixture; add EXP- as prefix to Product Code.
- +2"CLG**: fixture suitable for installation in **2" thick ceiling** material; add +2"CLG to Product Code.



PRODUCT CODE

For complete product code, list basic unit and select one item from each following box.

Basic UnitTRPH 126/6
Reflector Type	
Downlight	no suffix
Wallwash	WWW
Double Wallwash	DWW
Voltage	
120 volt service	120
277 volt service 277

Reflector Color and Detail	Overlap Flange	Flush	Trim Flush*
EvenTone Clear	VOL	VFL	VTF
EasyTone Clear	ECOL	ECFL	ECTF
Champagne Gold	GOL	GFL	GTF
Wheat	WHOL	WHFL	WHTF
Pewter	POL	PFL	PTF
Bronze	ZOL	ZFL	ZTF

Other reflector finishes available on special order.
Overlap Flange continues reflector finish. White painted flanges and custom painted flanges are available on special order. Add WF (white flange) or CCF (custom color flange).
*Trim Flush reflector trim requires the use of a **plaster ring** Accessory (see below).

OPTIONS

Specify by adding to the basic unit.

Dimmable 3-wire ballast	- DM
Emergency battery pack operates one lamp in event of power outage. Fixture footprint increases to 10 x 16 3/4" (254 x 425mm). Additional 1 1/4" (32mm) is required to remove EM pack through aperture. Not for outdoor application	- EM
1/8" (3mm) thick clear acrylic shield , spring-mounted within reflector	- PS

ACCESSORIES

Specify as a separate line item.

Plaster ring allows use of Trim Flush (-TF) reflector in sheetrock ceiling; 7 3/16" (183mm) dia hole is required.....	TF RING/6
--	-----------

- ▶ For combinations of the Options above, contact factory or Edison Price Lighting representative.
- ▶ A modified fixture suitable for 347-volt service is available on special order. Contact factory.
- ▶ Decorative reflector rings are available on special order. Contact factory.



TRIPLES-H 126/6



PHOTOMETRIC REPORT

LTL Luminaire Testing Laboratory Report No. 05265. Original test report furnished upon request.

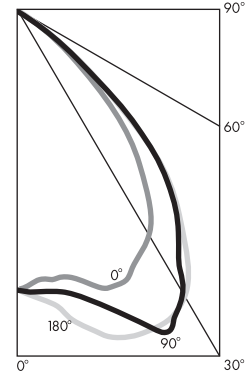
Luminaire recessed compact fluorescent downlight with spun aluminum reflector
 Lamp Philips 26-watt triple-tube compact fluorescent, 4-pin, GX24q-3 base, 1800 lumens
 Efficiency 59.4%
 Spacing Criteria.... 0°-1.3, 90°-1.5, 180°-1.5
 Axis orientation.... 0° plane is parallel to lamps, opposite sockets

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30°	509	28.3	47.6
0 - 40°	822	45.7	76.9
0 - 60°	1069	59.4	100.0
0 - 90°	1069	59.4	100.0
90 -180°	0	0.0	0.0
0 -180°	1069	59.4	100.0

CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0.0	45.0	90.0	135.0	180.0
0	531	531	531	531	531
5	516	528	539	552	552
15	542	567	577	629	639
25	530	599	677	661	654
35	424	462	531	520	557
45	241	281	334	316	329
55	5	6	8	7	8
65	0	0	0	0	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



LUMINANCE DATA (Candela/m²)

Vertical Angle	Average 0° Longitude	Average 90° Longitude	Average 180° Longitude
45	18683	21784	25895
55	478	573	765
65	0	0	0
75	0	0	0
85	0	0	0

To convert cd/m² to footlamberts, multiply by 0.2919.

COLOR MULTIPLIERS

EvenTone (V)	.95
EasyTone (EC)	.88
Champagne Gold (G)	.97
Wheat (WH)	.79
Pewter (P)	.81
Bronze (Z)	.58

BALLAST INFORMATION

Voltage	120	277
Input Watts	28	28
Line Current (A)	.25	.11
Power Factor (%)	>98	>98
THD (%)	<10	<10
Min. Starting Temp* (°F)	0	0

*Consult lamp manufacturers for specific temperatures.

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

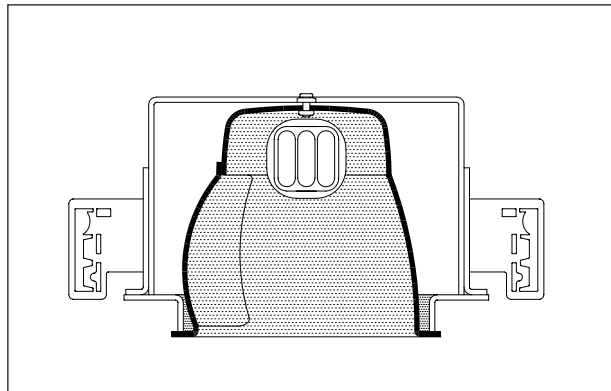
Effective Floor Cavity Reflectance 20%

Ceiling Reflectance (%)	80				70				50				30				10				0
Wall Reflectance (%)	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio																					
0	71	71	71	71	69	69	69	69	66	66	66	63	63	63	61	61	61	59			
1	67	65	64	62	66	64	63	61	62	61	60	60	59	58	57	57	56	55			
2	64	61	58	56	62	59	57	55	58	56	54	56	54	53	54	53	52	51			
3	60	56	53	50	59	55	52	50	53	51	49	52	50	48	51	49	47	46			
4	56	51	48	45	55	51	47	45	49	46	44	48	46	44	47	45	43	42			
5	53	47	43	40	52	47	43	40	46	42	40	44	42	40	44	41	39	38			
6	50	44	40	37	49	43	39	37	42	39	36	41	38	36	41	38	36	35			
7	46	40	36	33	45	40	36	33	39	35	33	38	35	33	37	34	32	31			
8	43	36	32	29	42	36	32	29	35	32	29	35	31	29	34	31	29	28			
9	40	33	29	26	39	33	29	26	32	28	26	31	28	26	31	28	26	25			
10	37	30	26	23	36	30	26	23	29	25	23	29	25	23	28	25	23	22			

TRIPLES-H 126/6 WW

WALLWASH INFORMATION

Distance From Ceiling (Feet)	2'6" From Wall; 2'6" O.C.		3' From Wall; 3' O.C.	
	Below Fixture	Between Fixtures	Below Fixture	Between Fixtures
1	8	7	5	4
2	11	10	7	7
3	15	15	9	9
4	16	16	11	11
5	14	14	11	11
6	12	12	10	10
7	10	9	9	9
8	8	7	7	7
9	6	6	6	6
10	5	5	5	5



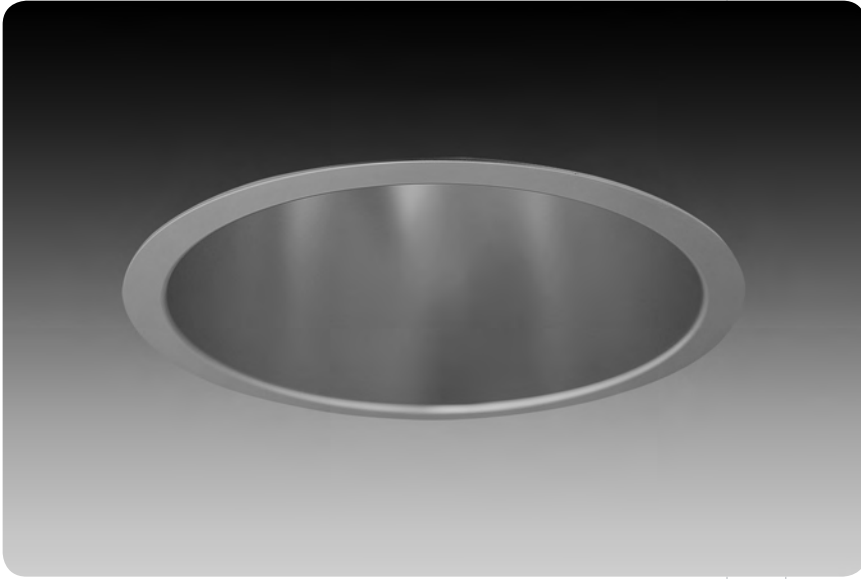
All vertical footcandles are initial values with no contribution from ceiling or floor reflectances. Computation performed with at least five wallwashers.

6" – downlight

id®



CFL



features

Unique SmartShell™ optical design maximizes efficiency.

Shallow housing with horizontal lamping.

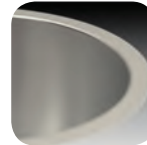
Self-flanged or painted trim provides a smooth transition to the ceiling.

Trim fits tightly to ceiling via torsion springs.

Accommodates ceilings up to 1" thick.

Diffuse reflectors offer glare control and 55-degree cut-off to lamp and its image.

reflector colors

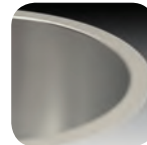


clear diffuse



warm diffuse

flange finish

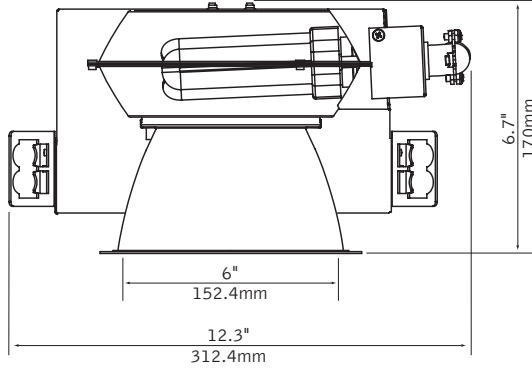


non-painted self-flanged

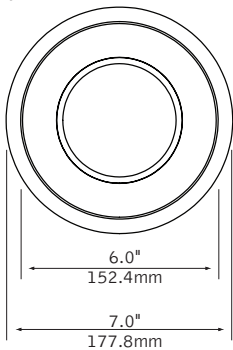


white painted

dimensional data

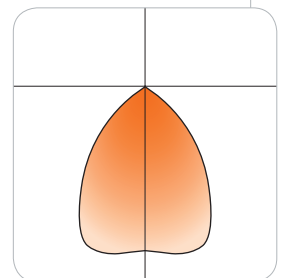


trim



performance

1-Lamp 32W Triple Tube
Downlight Optic, Clear Diffuse
58% Efficiency
890 cd @ 15°

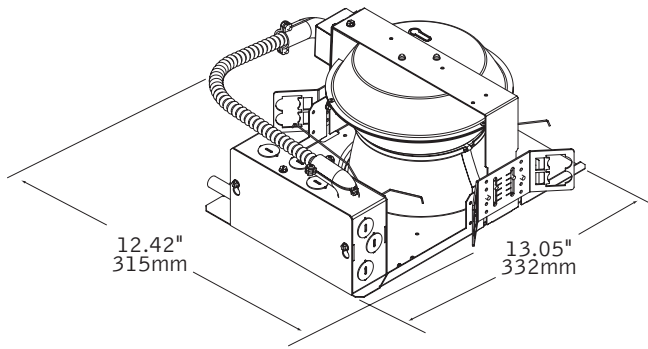


Visit focalpointlights.com for complete photometric data.

fixture:

project:

details



specifications

housing

Frame may be installed into ceiling thicknesses up to 1". For thicker ceiling consult factory.

Butterfly brackets allow mounting to ½ emt. Order bar hangers as an accessory. Galvanized steel frame includes large Junction box 7" x 3.5" with (10) 1/2" pry outs. UL listed for through branch wiring, four #12 90°C conductors.

Thermally protected housing for new construction applications without direct contact with insulation. Insulation to be kept 3" away from housing.

upper reflector

Upper reflector constructed of .05 spun aluminum. Keyhole slots on top of upper reflector allow reflector to shift to gain access to ballast from below ceiling. Reflector finished in High Reflectance White powder coat. Lamp tilted 5° for optimal thermal performance.

trim

.05 spun aluminum parabolic reflector cone ensures glare-free optics. Reflector provides 55-degree cut off to lamp and lamp image. Trim attaches to housing via torsion springs. Overlap trims are self-flanged, non-painted to match reflector finish. White painted flange may also be specified. Optional .125" thick micro-prismatic glass lens obscures lamp.

electrical

Luminaires are pre-wired for single circuit with thermally protected Class "P" program start <10% THD electronic ballast. Consult factory for dimming specifications and availability. UL Listed. One lamp triple tube compact fluorescent, 4-pin, 26W/32W -(Gx24q-3). Rotary lock socket allows for easy lamp removal and reduces lamp breakage. Integral emergency battery test switch and indicator light in optic.

finish

Upper reflector finished in polyester powder coat over a 5-stage pre-treatment.

housing ordering

housing series		<u>FC6D</u>
ID CFL Round Housing	FC6D	
lamp		
18W Triple Tube, Gx24q-2	18TT	
26W Triple Tube, Gx24q-3	26TT	
32W Triple Tube, Gx24q-3	32TT	
ballast		
Electronic Program Start <10% THD	S	
Electronic Dimming Ballast*	D	
voltage		
120V	120	
277V	277	
347V	347	
trim type		<u>R0</u>
Round Overlap	R0	
housing type		<u>T</u>
Thermally Protected, Non-IC	T	
factory options		
Chicago Plenum	CP	
Emergency Battery Pack*	EM	
HLR/GLR Fuse	FU	
Include 3000K Lamp	L830	
Include 3500K Lamp	L835	
Include 4100K Lamp	L841	

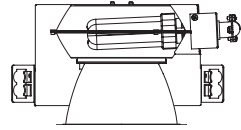
trim ordering

aperture		<u>D6</u>
6" Round Aperture	D6	
trim type		<u>R0</u>
Round Overlap	R0	
optic		
Downlight	DN	
Regress Lens	RL	
color		
Clear Diffuse	CD	
Warm Diffuse	WD	
flange finish		
Non-Painted, Self-flanged	NP	
White Painted	WP	

a complete unit consists of two line items, housing and trim
example: FC6D-26TT-S-120-R0-T
D6-R0-DN-CD-NP

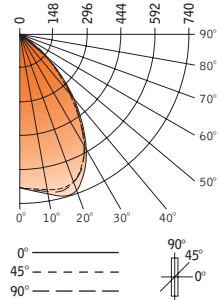
* for more information see Reference section.

6" – downlight
id[®]



Filename: D6DNCD26TT.IES
Catalog #: FC6D-26TT-S-120-R0-T, D6-R0-DN-CD-NP
Efficiency: 61%
Photometric Report #: 15283.0

CANDLEPOWER DISTRIBUTION



Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	
0°	676	676	676	676	676
5°	686	685	687	691	696
15°	707	716	718	735	740
25°	654	662	646	657	667
35°	442	451	462	460	474
45°	240	241	240	239	243
55°	53	50	52	60	49
65°	7	7	7	7	7
75°	1	1	1	2	2
85°	0	0	0	0	0
90°	0	0	0	0	0

Spacing Criteria
End: 1.2
Cross: 1.2

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt
0°-30°	575	31.9	52.0
0°-40°	862	47.9	78.1
0°-60°	1096	60.9	99.2
0°-90°	1104	61.4	100.0
Total Luminaire	1104	61.4	100.0

LUMINANCE DATA (CD/M²)

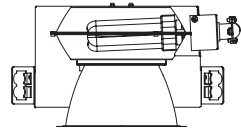
Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	14502	14502	14683
55°	3948	3873	3650
65°	708	708	708
75°	165	165	330
85°	0	0	0

CO-EFFICIENTS OF UTILIZATION

Floor	80		70		20		50		30		10		00	
Ceiling	70	50	30	10	70	50	10	50	10	50	10	50	10	00
Wall	70	50	30	10	71	71	71	68	68	65	65	63	63	61
RCR	0	73	73	73	73	73	73	71	71	71	68	68	65	65
1	69	68	66	64	68	66	63	64	62	61	60	59	58	57
2	66	62	60	58	64	61	57	59	56	58	54	56	53	52
3	62	58	54	52	61	57	51	55	51	54	50	52	49	48
4	58	53	49	47	57	52	46	51	46	50	445	49	45	44
5	55	49	45	42	54	48	42	47	42	46	41	45	41	40
6	51	45	41	38	50	45	38	44	38	43	38	42	37	36
7	48	42	38	35	47	41	35	41	34	40	34	39	34	33
8	45	38	34	31	44	38	31	37	31	36	31	36	31	30
9	42	35	31	28	41	35	28	34	28	33	28	33	27	27
10	39	32	28	25	38	32	25	31	25	31	25	30	25	24

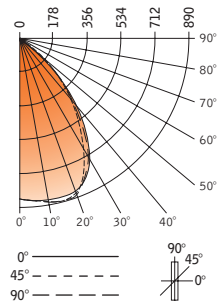
Go to www.focalpointlights.com for additional photometric data.

6" – downlight
id[®]



Filename: D6DNCD32TT.IES
Catalog #: FC6D-32TT-S-120-R0-T, D6-R0-DN-CD-NP
Efficiency: 58%
Photometric Report #: 15233.0

CANDLEPOWER DISTRIBUTION



Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	
0°	848	848	848	848	848
5°	858	855	857	860	861
15°	885	890	886	870	865
25°	788	788	803	820	819
35°	538	577	587	604	600
45°	308	317	319	320	321
55°	73	74	79	77	76
65°	9	9	9	9	9
75°	3	2	2	2	2
85°	1	0	1	1	1
90°	0	0	0	0	0

Spacing Criteria
End: 1.2
Cross: 1.2

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt
0°-30°	703	29.9	50.4
0°-40°	1070	44.6	76.6
0°-60°	1385	57.7	99.1
0°-90°	1397	58.2	100.0
Total Luminaire	1397	58.2	100.0

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	14502	14502	14683
55°	3948	3873	3650
65°	708	708	708
75°	165	165	330
85°	0	0	0

CO-EFFICIENTS OF UTILIZATION

Floor	80		70		20		50		30		10		00	
Ceiling	70	50	30	10	70	50	10	50	10	50	10	50	10	00
Wall	70	50	30	10	71	71	71	68	68	65	65	63	63	61
RCR	0	73	73	73	73	73	73	71	71	71	68	68	65	65
1	69	68	66	64	68	66	63	64	62	61	60	59	58	57
2	66	62	60	58	64	61	57	59	56	58	54	56	53	52
3	62	58	54	52	61	57	51	55	51	54	50	52	49	48
4	58	53	49	47	57	52	46	51	46	50	45	49	45	44
5	55	49	45	42	54	48	42	47	42	46	41	45	41	40
6	51	45	41	38	50	45	38	44	38	43	38	42	37	36
7	48	42	38	35	47	41	35	41	34	40	34	39	34	33
8	45	38	34	31	44	38	31	37	31	36	31	36	31	30
9	42	35	31	28	41	35	28	34	28	33	28	33	27	27
10	39	32	28	25	38	32	25	31	25	31	25	30	25	24

Go to www.focalpointlights.com for additional photometric data.

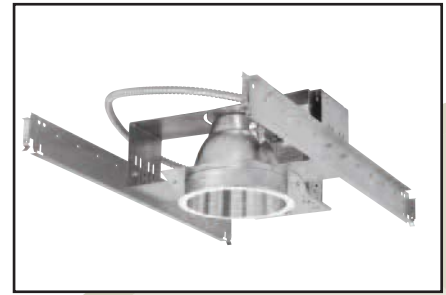
OM6 1H42PLT

6" Open Reflector Horizontal Downlights

CAT. NO: **OM6-1-H-26PLT-CS-120/277**

TYPE: **DFA (ALT)**

PROJECT:



PRODUCT INFORMATION

Applications

Small aperture open reflector downlight for use with long-life energy efficient compact fluorescent lamps. Provides medium, uniform light distribution with excellent color rendition. Ideal for areas requiring long hours of continuous operation such as lobbies, corridors, reception areas and offices.

Specifications

1. **Ballast** - One (1) Type 1 Class P, high power factor universal voltage electronic compact fluorescent ballast. Offers 1 lamp operation for 120 through 277 volt input voltage.

	18W 120V	18W 277V	26W 120V	26W 277V	32W 120V	32W 277V	42W 120V	42W 277V
Line current amps	.19	.08	.25	.11	.32	.14	.42	.18
Input watts including ballast loss	22	22	28	28	36	36	48	48
Ballast factor	1.00	1.00	.98+	.98+	1.00	1.00	.98+	.98+
Minimum starting temperature	0°F	0°F	0°F	0°F	0°F	0°F	0°F	0°F

2. **Mounting pan** - Precision die-stamped 16 gauge galvanized steel mounting pan and yoke assembly. Accommodates ceiling materials up to 1-3/8" thick.

3. **Installation** - Mounting pan has pre-installed C-channel with vertical and horizontal adjustments. Ballast, junction box and mounting brackets are accessible from below ceiling. For 27" flat bar hanger pair, specify Q1031 accessory, ordered separately.

4. **Reflector** - Precision spun .050 aluminum one piece reflector, self flanged with clear specular Alzak low iridescent finish. Reflector is screw mounted for positive attachment to socket assembly. Standard flat flange is painted white. Optional polished flange matching reflector finish available, add FF to catalog number.

5. **Baffle** - Precision machined .051 aluminum with deep grooves to minimize aperture glare, anodized matte black or matte white finish. Standard flat flange is painted white. Optional black flange available, add FF to catalog number.

6. **Sockets** - CFM42W/GX24q, CFM32W/GX24q, CFM26W/GX24q, CFM18W/GX24q, horizontally mounted 4 pin plug-in type. Socket assembly rotates 90° to allow for alignment of lamps and reflector within fixture, for design flexibility. (Lamps ordered separately.)

7. **Junction box** - Extra large 43.75-cubic inch 16 gauge galvanized steel with snap-on covers and ground wire riveted to frame. Approved for through wiring with up to 8 #12 AWG conductors.

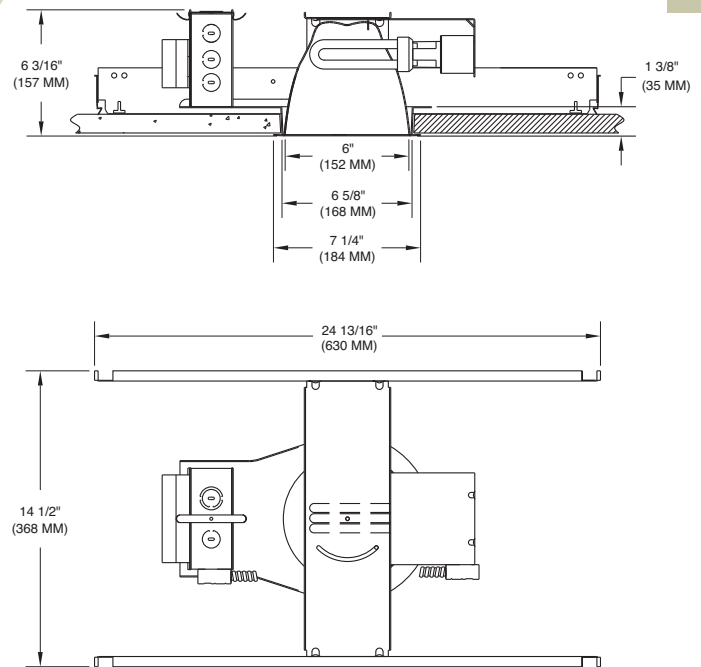
8. **Optional emergency system** - Emergency system includes battery, electronic circuitry, charger and test/monitor plate with test switch and charging indicator light. Test/monitor plate may be installed in the ceiling near fixture or other remote location. Operates appropriate lamp wattage for a minimum of 90 minutes following power failure. Emergency system complies with NFPA life safety code, OSHA and NEC. Suitable for dry locations.

9. **U.L. Listed** - For use in damp locations and approved for Through Branch Circuit Wiring. I.B.E.W. union made.

☼ Canadian Specifications may vary from these shown, consult Canadian Division.



6



CATALOG SYSTEM AND OPTIONS

EXAMPLE OF COMPLETE CATALOG NUMBER: **OM61H42PLT-CS-120/277**

OMEGA Apr.	No. of Lamps	Lamps Position	Lamp (by others)	Reflector Option	Finish	Options	Sloped Ceiling Adapter Angle	Supply Voltage
OM6	1	H Horizontal	26PLT 42 PLT Triple Tube CFL 32 PLT Triple Tube CFL 26 PLT Triple Tube CFL 18 PLT Triple Tube CFL	BB Black Baffle	CS CS Clear Specular CSS Clear Semi-Specular HZ Haze GS Gold Specular WT Wheat PW Pewter BK Black BZ Bronze WH White FCS Faceted Clear Specular FCSS Faceted Clear Semi Specular FF Finish Flange (as suffix to color)	EM Emergency IE Integral Emergency FZ120 Fusing FZ277 Fusing FZ347 Fusing CP Chicago Plenum Q1031 Flat Bar Hangers SA6 Sloped Ceiling Adpt. DL1 Dimming, Lutron Compact SE, 120v DL2 Dimming, Lutron Compact SE, 277v DX1 Dimming, Advance Mark X, 120v DX2 Dimming, Advance Mark X, 277v CL Clear Lens PL Prismatic Lens FL Fresnel Lens	5 10 15 20 25 30	120/277 347 *



FIVE YEAR
Warranty

OMEGA LIGHTING: 776 South Green St., Tupelo, MS 38804 Phone 662.842.7212 FAX 662.841.5501

Omega Lighting is a Philips group brand



OM61H42PLT-CS

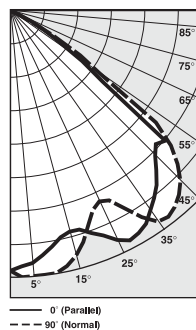
Photometric Data

Clear Specular Reflector

Report Number: 20716
 Lamp: (1)CFM42W
 Total Lumens: 3200
 Fixture Efficiency: = 53.9%
 IES File: F20716.IES
 S/MH Ratio = 1.4, 1.5
 Beam Angle: 106.85

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	23.0	14-10
10	12.4	20-3
12	7.7	25-7
14	5.3	30-12
16	3.8	36-5

DISTRIBUTION CURVE



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	
75	0	0	93
65	37	24	1155
55	235	292	7350
45	549	645	13509
35	654	690	
25	678	564	
15	613	680	
5	679	714	
0	697	697	

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20					
RC	80		70		50
	50	30	50	30	50
RW	50	30	50	30	50
0	64	64	63	63	59
1	57	56	56	55	55
2	54	48	51	48	48
3	46	42	46	42	44
4	41	38	40	36	40
5	38	33	36	33	35
6	34	29	34	28	33
7	30	27	30	26	29
8	28	23	28	23	27
9	26	22	26	22	25
10	23	20	23	20	23

OM61H32PLT-CS

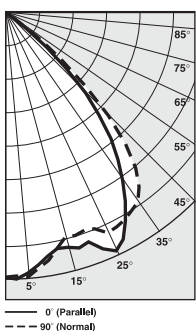
Photometric Data

Clear Specular Reflector

Report Number: 21516
 Lamp: (1)CFM32W
 Total Lumens: 2400
 Fixture Efficiency: = 55.9%
 IES File: F 21516.IES
 S/MH Ratio = 1.3, 1.3
 Beam Angle: 89.61

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	25.5	10-11
10	13.7	14-11
12	8.5	18-10
14	5.8	22-10
16	4.2	26-10

DISTRIBUTION CURVE



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	
75	0	0	0
65	0	0	0
55	30	53	837
45	332	426	7513
35	597	674	
25	766	708	
15	708	678	
5	762	773	
0	771	771	

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20					
RC	80		70		50
	50	30	50	30	50
RW	50	30	50	30	50
0	51	51	50	50	48
1	47	46	46	45	45
2	44	42	43	42	42
3	41	38	40	38	39
4	38	35	37	35	36
5	35	32	34	32	34
6	32	30	32	28	31
7	30	27	30	27	29
8	27	25	27	24	27
9	25	22	25	22	24
10	23	20	23	20	22

OM61H26PLT-CS

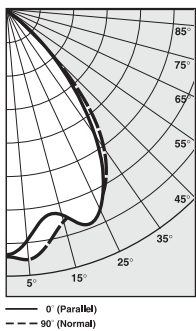
Photometric Data

Clear Specular Reflector

Report Number: 2762
 Lamp: (1)CFM26W
 Total Lumens: 1800
 Fixture Efficiency: = 47.5%
 IES File: EY3495.IES
 S/MH Ratio = 1.2, 1.2
 Beam Angle: 80.71

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	19.7	9-4
10	10.6	12-8
12	6.6	16-1
14	4.5	19-6
16	3.3	22-11

DISTRIBUTION CURVE



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	0
75	0	0	0
65	0	0	0
55	25	15	694
45	173	198	4483
35	378	411	
25	530	516	
15	495	512	
5	554	607	
0	595	595	

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20					
RC	80		70		50
	50	30	50	30	50
RW	50	30	50	30	50
0	56	56	55	55	52
1	52	51	51	50	49
2	48	46	47	45	46
3	44	42	44	41	43
4	41	38	40	38	39
5	38	35	37	34	36
6	35	32	35	32	34
7	32	29	32	29	31
8	29	26	29	26	29
9	27	24	27	23	26
10	25	21	24	21	24

OM61H18PLT-CS

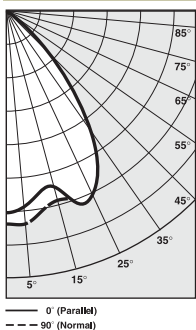
Photometric Data

Clear Specular Reflector

Report Number: 2771
 Lamp: (1)CFM18W
 Total Lumens: 1250
 Fixture Efficiency: = 51.4%
 IES File: EY3493.IES
 S/MH Ratio = 1.2, 1.2
 Beam Angle: 80.26

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	14.6	9-3
10	7.5	12-7
12	4.9	16-0
14	3.3	19-4
16	2.4	22-9

DISTRIBUTION CURVE



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	0
75	0	0	0
65	0	0	0
55	16	2	438
45	135	113	3053
35	314	293	
25	427	402	
15	365	404	
5	414	454	
0	441	441	

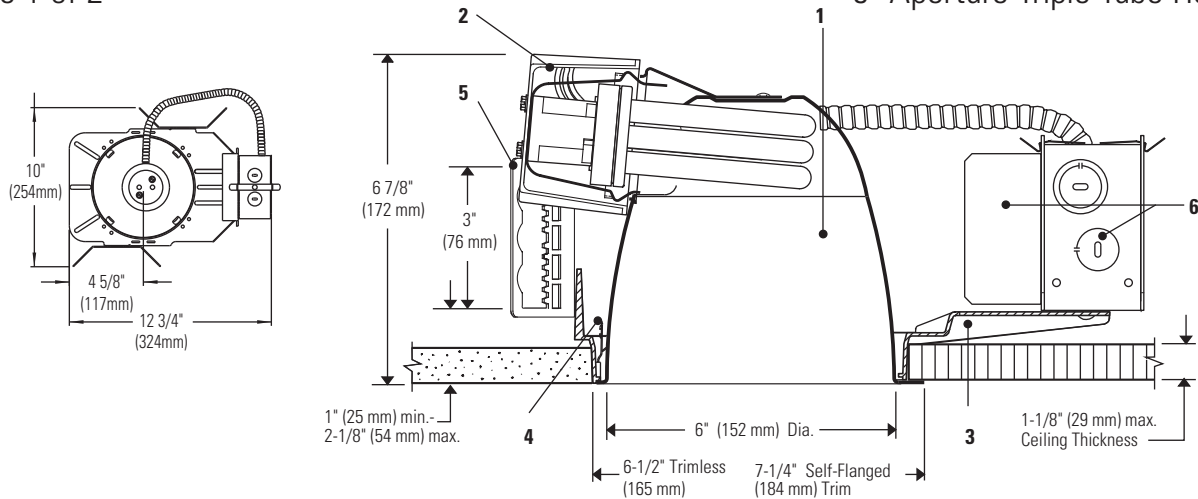
COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20					
RC	80		70		50
	50	30	50	30	50
RW	50	30	50	30	50
0	61	61	59	59	57
1	56	55	55	54	53
2	52	50	51	49	50
3	48	46	48	45	46
4	45	42	44	41	43
5	41	38	41	38	40
6	38	35	38	35	37
7	35	32	35	32	34
8	32	29	32	29	31
9	29	26	29	26	29
10	27	24	27	23	26

*Readings at working plane, 2'6" above floor. Beam Angle and Diameter Cutoff at 50% of max. Candlepower Coefficients used at effective reflectances of: 70% Ceiling, 50% Walls, 20% Floor

To convert values for optional reflector colors, multiply by:
 Gold .90 Bronze .82 Pewter .87

Additional photometric test files are available @ omegalighting.com



Reflector Trim	Frame-In Kit
<p>8031 CLW Clear Iridescence Free, White Flange</p> <p>8031 CLP Clear Iridescence Free, Polished Flange</p> <p>8031 CL Clear Iridescence Free, Molded Trim Ring</p> <p>8031 <input type="checkbox"/> Add suffix. See options for other finishes.</p>	<p>S6132BU 6" aperture, 1 lamp 26/32W Triple Tube CFL (120/277V) 4-Pin (Amalgam)</p> <p>Dimming Options:</p> <p>S6132B <input type="checkbox"/></p> <p>CU3 Lightolier PowerSpec 3% Dimming (120/277V) J1LD3 Lutron 5% Dimming (120V)</p> <p>J2LD3 Lutron 5% Dimming (277V) JUM7 Mark 7 Dimming (120/277V)</p> <p>J1MX Mark 10 Dimming (120V) J2MX Mark 10 Dimming (277V)</p> <p>Other dimming product available, please consult factory</p>
Remodeler Frame-In Kits	
<p>6126BURM 6" aperture, 1 lamp 26W Triple Tube CFL (120/277V) 4-Pin (Amalgam)</p> <p>6132BURM 6" aperture, 1 lamp 26/32W Triple Tube CFL (120/277V) 4-Pin (Amalgam)</p>	

Features

- 1. Reflector:** 16 ga. Specular Alzak® aluminium, 55° visual cutoff to lamp and lamp image, medium distribution. Iridescence Free finish. Self-flanged or molded white trim ring (field paintable).
- 2. Socket Cup:** Effectively dissipates heat and positions lamp holder. Snaps onto reflector neck to assure consistently correct optical alignment without tools.
- 3. Mounting Frame:** Galvanized steel for dry or plaster ceilings. Accepts other 6" Triple Tube reflectors (see S6132BU Spec Sheet).
- 4. Retaining Springs:** Precision-tooled steel friction springs secure reflector to mounting frame for quick, tool-less installation.
- 5. Mounting Brackets:** 16 ga. steel. Adjust from inside of fixture. Use 3/4" or 1 1/2" lathing channel, 1/2" EMT, or optional mounting bars.
- 6. Ballast/J-Box:** Electronic 120V-277V. UL listed for through branch circuit wiring with max of (8) No. 12AWG, 90°C supply conductors. Outboard mounted to reduce heat transfer and maintain lamp efficacy and life. Service from below without tools.

Electrical

Note: For ballast electrical data and latest lamp/ballast compatibility refer to "Ballast" specification sheet for complete electrical data.

UL Listed for through branch circuit wiring with max of (8) No 12 AWG, 90 degree C supply conductors.

Options and Accessories

Comfort Clear™ Finishes¹		Other Finishes	
Clear	CCL	White	WH
Diffuse	CCD		
Champagne Bronze	CCZ		
Multigroove	MG		

¹Specify desired flange. **W** White, **P** Polished, Blank - Molded Ring

Options and Accessories (continued)

- Emergency Add suffix **EM***
- Chicago Plenum Use 6132BULC
- Existing/Thk. Ceiling **FA EC6***
- Emergency Ltg. Kit **FA EM3E***
- FA EM4E***
- Fuse (Slow Blow) Add Suffix **F**
- *See Spec. Sheets: FAEC, FAEM
- Mounting Bars & Accessories; see Specification Sheet MBA.
- Sloped Ceiling Adapters; see Specification Sheet SCA.
- IC Frame available; see **C6CFL32** specification sheet.

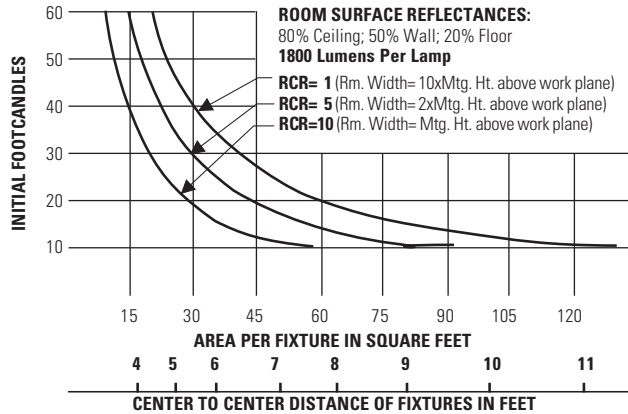
Labels

UL listed for damp locations.

Job Information	Type: DFA
Job Name:	
Cat. No.: 8031CLW	
Lamp(s): (1) 26W PLT CFL LAMP	
Notes:	

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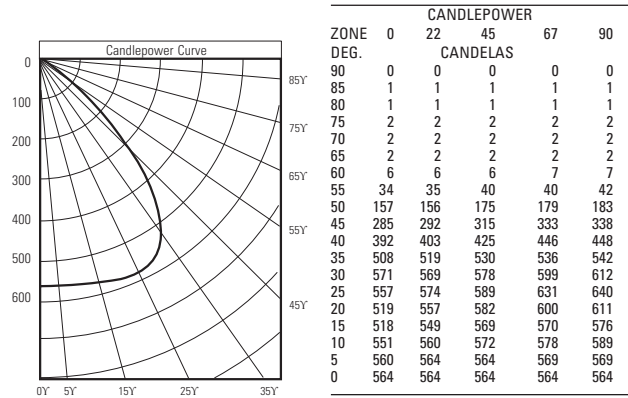
26W Quick Calculator



This quick calculator chart determines the number and spacing of 1 lt.- 26W PL-T units with clear reflector, for any level of illumination.

Spacing Ratio = 1.4

Report No.: LRL 796-1A
PREPARED BY: LIGHTING RESEARCH LABORATORY, INC.
PREPARED FOR: LIGHTOLIER
DESCRIP.: 6" dia. x 6" Ht. recessed downlight - open bottom spun semispecular reflector; tilted horizontal lamp
LAMPS: 1 PLT-26W rated at 1800 LUMENS.



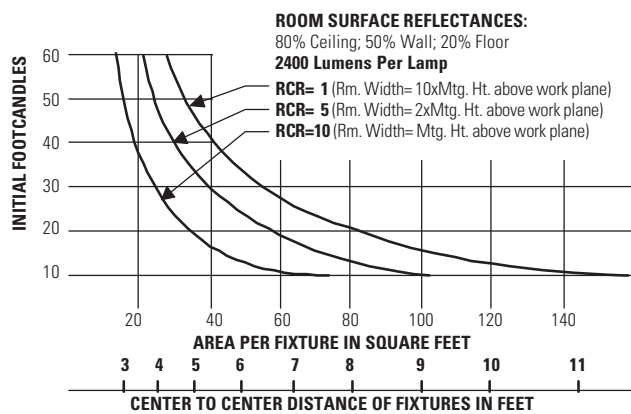
** EFFICIENCY = 61.6% **

Coefficients Of Utilization

ROOM CAVITY RATIO	% EFFECTIVE CEILING CAVITY REFLECTANCE																				
	80						70						50						30	10	0
	% WALL REFLECTANCE						50						30						10	0	
	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
1	.68	.66	.65	.67	.65	.64	.64	.63	.62	.62	.61	.60	.60	.59	.58	.57	.57	.57	.57		
2	.63	.61	.59	.62	.60	.58	.60	.58	.57	.58	.57	.55	.57	.55	.54	.53	.53	.53	.53		
3	.59	.56	.53	.58	.55	.53	.55	.54	.52	.55	.53	.51	.54	.52	.51	.50	.50	.50	.50		
4	.54	.51	.48	.54	.51	.48	.52	.50	.47	.51	.49	.47	.50	.48	.46	.45	.45	.45	.45		
5	.51	.47	.44	.50	.46	.44	.49	.46	.43	.48	.45	.43	.47	.45	.43	.42	.42	.42	.42		
6	.47	.43	.40	.46	.43	.40	.45	.42	.40	.45	.42	.39	.44	.41	.39	.38	.38	.38	.38		
7	.43	.39	.36	.43	.39	.36	.42	.39	.36	.41	.38	.36	.41	.38	.36	.35	.35	.35	.35		
8	.40	.36	.33	.39	.36	.33	.39	.35	.33	.38	.35	.33	.37	.35	.32	.31	.31	.31	.31		
9	.36	.32	.30	.36	.32	.30	.35	.32	.29	.35	.32	.29	.34	.31	.29	.28	.28	.28	.28		
10	.32	.28	.25	.31	.27	.25	.31	.27	.25	.30	.27	.24	.30	.27	.24	.23	.23	.23	.23		

20% FLOOR CAVITY REFLECTANCE

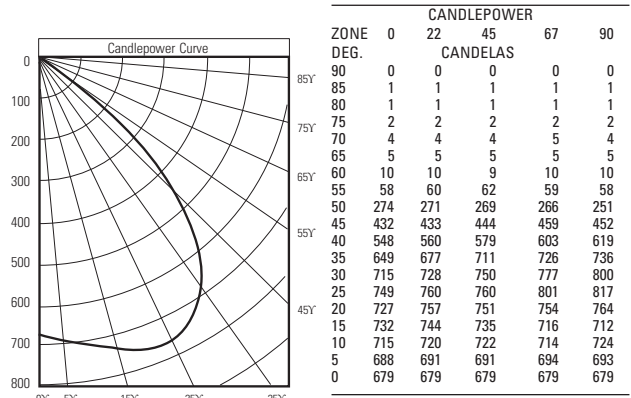
32W Quick Calculator



This quick calculator chart determines the number and spacing of 1 lt.- 32W PL-T units with clear reflector, for any level of illumination.

Spacing Ratio = 1.4

Report No.: LRL 796-1B
PREPARED BY: LIGHTING RESEARCH LABORATORY, INC.
PREPARED FOR: LIGHTOLIER
DESCRIP.: 6" dia. x 6" Ht. recessed downlight - open bottom spun semispecular reflector; tilted horizontal lamp
LAMPS: 1 PLT-32W rated at 2400 LUMENS.



** EFFICIENCY = 62.2% **

Coefficients Of Utilization

ROOM CAVITY RATIO	% EFFECTIVE CEILING CAVITY REFLECTANCE																				
	80						70						50						30	10	0
	% WALL REFLECTANCE						50						30						10	0	
	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
1	.68	.67	.65	.67	.66	.64	.65	.63	.62	.62	.61	.60	.60	.59	.59	.58	.58	.58	.58		
2	.64	.61	.59	.62	.60	.58	.60	.59	.57	.59	.57	.56	.57	.56	.54	.53	.53	.53	.53		
3	.59	.56	.53	.58	.55	.53	.57	.54	.52	.55	.53	.51	.54	.52	.51	.50	.50	.50	.50		
4	.55	.51	.48	.54	.50	.48	.52	.50	.47	.51	.49	.47	.50	.48	.46	.45	.45	.45	.45		
5	.50	.47	.44	.50	.46	.43	.49	.46	.43	.48	.45	.43	.47	.44	.42	.41	.41	.41	.41		
6	.47	.43	.40	.45	.42	.40	.45	.42	.39	.44	.41	.39	.43	.41	.39	.38	.38	.38	.38		
7	.43	.39	.36	.42	.39	.36	.42	.38	.36	.41	.38	.35	.40	.37	.35	.34	.34	.34	.34		
8	.39	.35	.32	.39	.35	.32	.38	.35	.32	.38	.34	.32	.37	.34	.32	.31	.31	.31	.31		
9	.36	.32	.29	.36	.32	.29	.35	.31	.29	.34	.31	.29	.34	.31	.28	.27	.27	.27	.27		
10	.31	.27	.24	.31	.27	.24	.30	.26	.24	.30	.26	.24	.29	.26	.24	.23	.23	.23	.23		

20% FLOOR CAVITY REFLECTANCE

Job Information Type: DFA

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TRIPLES-H 132/6

recessed compact fluorescent downlight/wallwasher

TYPE 'DFB' ALT

#TRPH 132/6 277 VOL

COMPACT
FLUORESCENT
1-372

FEATURES

Triples-H 132/6 is an efficient 6" aperture low brightness downlight, for use with one 32-watt, 4-pin, triple tube compact fluorescent lamp by GE, Sylvania or Philips. Triples-H 132/6 provides shielding angles of 40° parallel to and 40° perpendicular to the lamps. Recess depth is only 6 1/2".

One housing allows interchangeable use of downlight and wallwash reflectors, permitting housings to be installed first and reflectors to be installed or changed at any time.


Triples-H 132/6 uses one 32-watt, 4-pin, triple tube lamp providing 2400 lumens (more than a 100-watt incandescent), a 10,000-hour life, a color rendering index (CRI) of 82, and color temperatures as warm as 2700°K (nearly duplicating the color qualities of incandescent).

Reflectors are available in clear, natural aluminum in two finishes: **EvenTone**, our standard clear finish, partially diffuse, anti-iridescent and gently luminous in appearance; and **EasyTone**, diffuse and luminous. Additionally, reflectors are available in champagne gold, wheat, pewter, and bronze. Wallwash (120°) and double wallwash (2x120°) reflectors are also available.

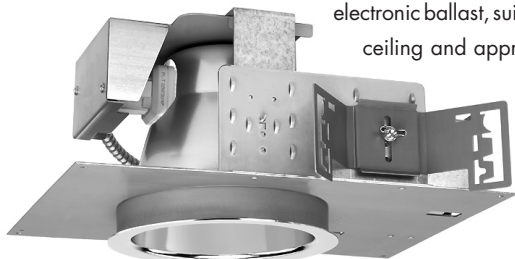
Triples-H 132/6 includes a pair of mounting bars (3/4" x 27" C channel). Specialty bars for wood joist and T-bar installations are available as accessories.

APPLICATIONS

Fixture is recommended for downlighting or wallwashing in offices, corridors, shops, banks, schools, hospitals and airports, as well as lobbies and public areas. The shallow recess depth allows mounting in constricted plenum situations.

Fixture is  listed for Damp Location (may not be suitable for some outdoor environments). Fixture is prewired with high power factor Class P

electronic ballast, suitable for use in a fire rated ceiling and approved for eight #12 wire 75°C branch circuit pull-through wiring. Removal of the reflector allows access to the ballast and junction box.

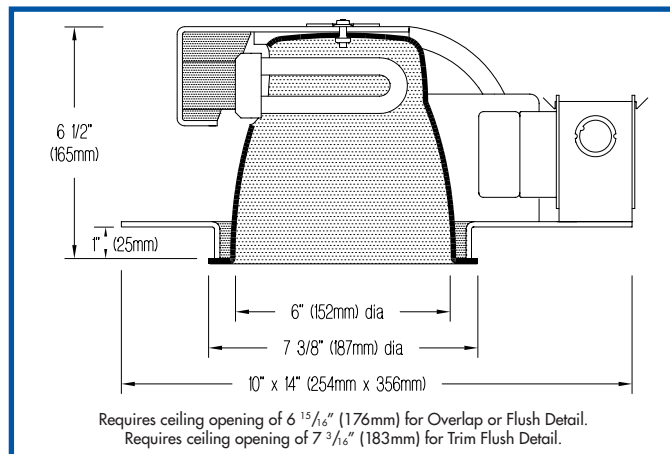


NOTE: Under certain conditions, such as installations where there is a pressure differential between the room and ceiling cavity, amalgam based fluorescent lamps may experience reduced lumen output.

MODIFICATIONS AVAILABLE

Contact factory with quantity for pricing; orders may require shop drawing approval.

- CHP-**: fixture suitable for **Chicago Plenum**; add CHP- as prefix to Product Code.
- CONC-**: fixture suitable for poured-in-place **concrete**; add CONC- as prefix to Product Code.
- EXP-**: "European-style" **install-from-below** fixture; add EXP- as prefix to Product Code.
- +2"CLG**: fixture suitable for installation in **2" thick ceiling** material; add +2"CLG to Product Code.



PRODUCT CODE

For complete product code, list basic unit and select one item from each following box.

Basic Unit **TRPH 132/6**

Reflector Type
Downlight **no suffix**
Wallwash **WW**
Double Wallwash **DWW**

Voltage
120 volt service 120 277 volt service **277**

Reflector Color and Detail	Overlap Flange	Flush	Trim Flush*
EvenTone Clear	VOL	VFL	VTF
EasyTone Clear	ECOL	ECFL	ECTF
Champagne Gold	GOL	GFL	GTF
Wheat	WHOL	WHFL	WHTF
Pewter	POL	PFL	PTF
Bronze	ZOL	ZFL	ZTF

Other reflector finishes available on special order.

Overlap Flange continues reflector finish. White painted flanges and custom painted flanges are available on special order. Add WF (white flange) or CCF (custom color flange).
*Trim Flush reflector trim requires the use of a **plaster ring Accessory** (see below).

OPTIONS

Specify by adding to the basic unit.

- Dimmable** 3-wire ballast - DM
- Emergency battery pack** operates one lamp in event of power outage. Fixture footprint increases to 10 x 16 3/4" (254 x 425mm). Additional 1 1/4" (32mm) is required to remove EM pack through aperture. Not for outdoor application - EM
- 1/8" (3mm) thick **clear acrylic shield**, spring-mounted within reflector - PS

ACCESSORIES

Specify as a separate line item.

Plaster ring allows use of Trim Flush (-TF) reflector in sheetrock ceiling; 7 3/16" (183mm) dia hole is required.....TF RING/6

- ▶ For combinations of the Options above, contact factory or Edison Price Lighting representative.
- ▶ A modified fixture suitable for 347-volt service is available on special order. Contact factory.
- ▶ Decorative reflector rings are available on special order. Contact factory.



PHOTOMETRIC REPORT

LTL Luminaire Testing Laboratory Report No. 05281. Original test report furnished upon request.

Luminaire recessed compact fluorescent downlight with spun aluminum reflector
 Lamp Philips 32-watt triple-tube compact fluorescent, 4-pin, GX24q-3 base, 2400 lumens
 Efficiency 54.4%
 Spacing Criteria.... 0°- 1.3, 90°-1.4, 180°-1.4
 Axis orientation.... 0° plane is parallel to lamps, opposite sockets

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30°	622	25.9	47.1
0 - 40°	998	41.6	76.5
0 - 60°	1301	54.2	99.8
0 - 90°	1304	54.4	100.0
90 -180°	0	0.0	0.0
0 -180°	1304	54.4	100.0

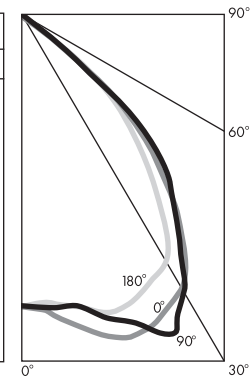
LUMINANCE DATA (Candela/m²)

Vertical Angle	Average 0° Longitude	Average 90° Longitude	Average 180° Longitude
45	24652	28063	31629
55	573	669	573
65	389	389	389
75	0	0	0
85	0	0	0

To convert cd/m² to footlamberts, multiply by 0.2919.

CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0.0	45.0	90.0	135.0	180.0
0	665	665	665	665	665
5	657	672	670	689	677
15	698	724	711	775	756
25	673	740	799	782	748
35	546	578	613	614	629
45	318	362	408	377	368
55	6	7	6	6	6
65	3	3	3	3	4
75	0	0	0	0	0
85	0	0	0	0	0
95	0	0	0	0	0



COLOR MULTIPLIERS

EvenTone (V)	.95
EasyTone (EC)	.88
Champagne Gold (G)	.97
Wheat (WH)	.79
Pewter (P)	.81
Bronze (Z)	.58

BALLAST INFORMATION

Voltage	120	277
Input Watts	37	36
Line Current (A)	.30	.13
Power Factor (%)	>98	>98
THD (%)	<10	<10
Min. Starting Temp* (°F)	0	0

*Consult lamp manufacturers for specific temperatures.

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

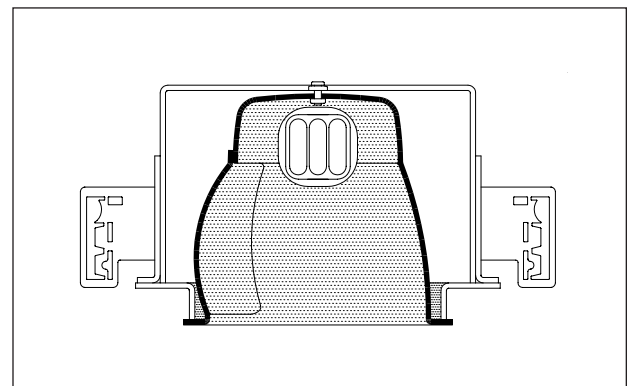
Ceiling Reflectance (%)	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio																		
0	65	65	65	65	63	63	63	63	60	60	60	58	58	58	55	55	55	54
1	61	60	58	57	60	59	57	56	56	55	54	54	54	53	53	52	51	50
2	58	55	53	51	57	54	52	50	53	51	49	51	50	48	49	48	47	46
3	55	51	48	46	54	50	48	45	49	47	45	47	46	44	46	45	43	42
4	52	47	44	41	50	46	43	41	45	42	40	44	42	40	43	41	39	39
5	48	43	40	37	47	43	39	37	42	39	36	41	38	36	40	38	36	35
6	45	40	36	34	44	39	36	34	39	36	33	38	35	33	37	35	33	32
7	42	37	33	30	42	36	33	30	35	32	30	35	32	30	34	32	30	29
8	39	33	29	27	39	33	29	27	32	29	27	32	29	27	31	28	26	26
9	36	30	26	24	36	30	26	24	29	26	24	29	26	23	28	25	23	23
10	34	27	24	21	33	27	24	21	27	23	21	26	23	21	26	23	21	20

TRIPLES-H 132/6 WW

WALLWASH INFORMATION

Distance From Ceiling (Feet)	2'6" From Wall; 2'6" O.C.		3' From Wall; 3' O.C.		3'6" From Wall; 3'6" O.C.	
	Below Fixture	Between Fixtures	Below Fixture	Between Fixtures	Below Fixture	Between Fixtures
1	12	10	7	6	4	4
2	16	16	11	10	7	7
3	23	24	14	15	9	9
4	25	25	17	17	12	12
5	21	22	17	17	13	13
6	18	17	15	15	12	13
7	14	14	13	13	11	11
8	11	11	11	10	10	10
9	9	8	9	9	8	8
10	7	7	7	7	7	7

All vertical footcandles are initial values with no contribution from ceiling or floor reflectances. Computation performed with at least five wallwashers.

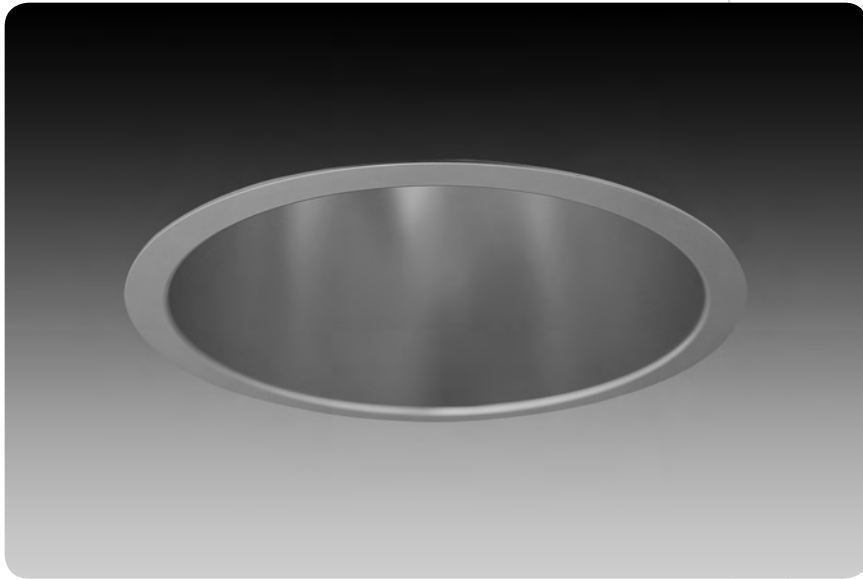


6" – downlight

id[®]



CFL



features

Unique SmartShell™ optical design maximizes efficiency.

Shallow housing with horizontal lamping.

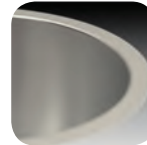
Self-flanged or painted trim provides a smooth transition to the ceiling.

Trim fits tightly to ceiling via torsion springs.

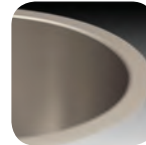
Accommodates ceilings up to 1" thick.

Diffuse reflectors offer glare control and 55-degree cut-off to lamp and its image.

reflector colors

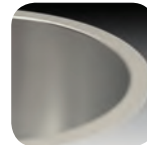


clear diffuse



warm diffuse

flange finish

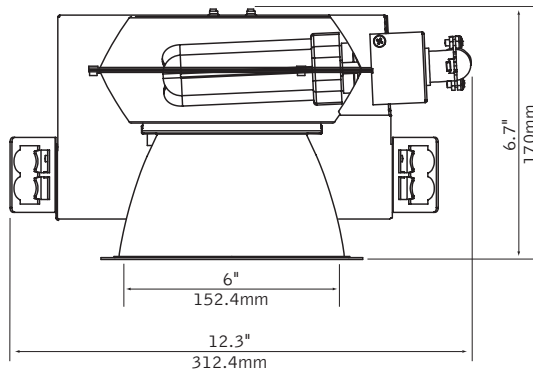


non-painted self-flanged

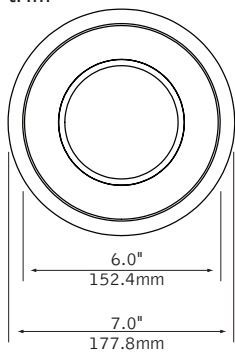


white painted

dimensional data

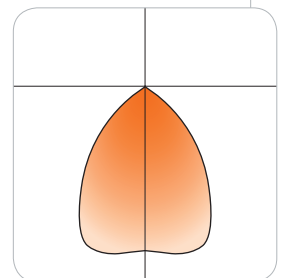


trim



performance

1-Lamp 32W Triple Tube
Downlight Optic, Clear Diffuse
58% Efficiency
890 cd @ 15°

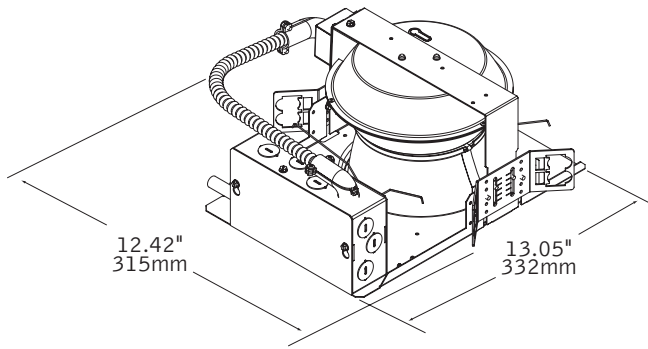


Visit focalpointlights.com for complete photometric data.

fixture:

project:

details



specifications

housing

Frame may be installed into ceiling thicknesses up to 1". For thicker ceiling consult factory.

Butterfly brackets allow mounting to ½ emt. Order bar hangers as an accessory. Galvanized steel frame includes large Junction box 7" x 3.5" with (10) 1/2" pry outs. UL listed for through branch wiring, four #12 90°C conductors.

Thermally protected housing for new construction applications without direct contact with insulation. Insulation to be kept 3" away from housing.

upper reflector

Upper reflector constructed of .05 spun aluminum. Keyhole slots on top of upper reflector allow reflector to shift to gain access to ballast from below ceiling. Reflector finished in High Reflectance White powder coat. Lamp tilted 5° for optimal thermal performance.

trim

.05 spun aluminum parabolic reflector cone ensures glare-free optics. Reflector provides 55-degree cut off to lamp and lamp image. Trim attaches to housing via torsion springs. Overlap trims are self-flanged, non-painted to match reflector finish. White painted flange may also be specified. Optional .125" thick micro-prismatic glass lens obscures lamp.

electrical

Luminaires are pre-wired for single circuit with thermally protected Class "P" program start <10% THD electronic ballast. Consult factory for dimming specifications and availability. UL Listed. One lamp triple tube compact fluorescent, 4-pin, 26W/32W -(Gx24q-3). Rotary lock socket allows for easy lamp removal and reduces lamp breakage. Integral emergency battery test switch and indicator light in optic.

finish

Upper reflector finished in polyester powder coat over a 5-stage pre-treatment.

housing ordering

housing series		<u>FC6D</u>
ID CFL Round Housing	FC6D	
lamp		
18W Triple Tube, Gx24q-2	18TT	
26W Triple Tube, Gx24q-3	26TT	
32W Triple Tube, Gx24q-3	32TT	
ballast		
Electronic Program Start <10% THD	S	
Electronic Dimming Ballast*	D	
voltage		
120V	120	
277V	277	
347V	347	
trim type		<u>R0</u>
Round Overlap	R0	
housing type		<u>T</u>
Thermally Protected, Non-IC	T	
factory options		
Chicago Plenum	CP	
Emergency Battery Pack*	EM	
HLR/GLR Fuse	FU	
Include 3000K Lamp	L830	
Include 3500K Lamp	L835	
Include 4100K Lamp	L841	

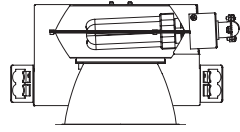
trim ordering

aperture		<u>D6</u>
6" Round Aperture	D6	
trim type		<u>R0</u>
Round Overlap	R0	
optic		
Downlight	DN	
Regress Lens	RL	
color		
Clear Diffuse	CD	
Warm Diffuse	WD	
flange finish		
Non-Painted, Self-flanged	NP	
White Painted	WP	

a complete unit consists of two line items, housing and trim
example: FC6D-26TT-S-120-R0-T
D6-R0-DN-CD-NP

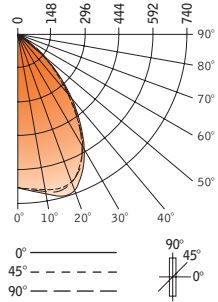
* for more information see Reference section.

6" – downlight
id®



Filename: D6DNCD26TT.IES
Catalog #: FC6D-26TT-S-120-R0-T, D6-R0-DN-CD-NP
Efficiency: 61%
Photometric Report #: 15283.0

CANDLEPOWER DISTRIBUTION



Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	
0°	676	676	676	676	676
5°	686	685	687	691	696
15°	707	716	718	735	740
25°	654	662	646	657	667
35°	442	451	462	460	474
45°	240	241	240	239	243
55°	53	50	52	60	49
65°	7	7	7	7	7
75°	1	1	1	2	2
85°	0	0	0	0	0
90°	0	0	0	0	0

Spacing Criteria
End: 1.2
Cross: 1.2

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt
0°-30°	575	31.9	52.0
0°-40°	862	47.9	78.1
0°-60°	1096	60.9	99.2
0°-90°	1104	61.4	100.0
Total Luminaire	1104	61.4	100.0

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	14502	14502	14683
55°	3948	3873	3650
65°	708	708	708
75°	165	165	330
85°	0	0	0

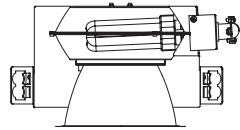
CO-EFFICIENTS OF UTILIZATION

Floor	80			70			20					
Ceiling	80			70			50					
Wall	70	50	30	10	70	50	10	50	10	30	10	00
RCR 0	73	73	73	73	71	71	71	68	68	65	65	63
1	69	68	66	64	68	66	63	64	62	61	60	59
2	66	62	60	58	64	61	57	59	56	58	54	56
3	62	58	54	52	61	57	51	55	51	54	50	52
4	58	53	49	47	57	52	46	51	46	50	44	49
5	55	49	45	42	54	48	42	47	42	46	41	45
6	51	45	41	38	50	45	38	44	38	43	38	42
7	48	42	38	35	47	41	35	41	34	40	34	39
8	45	38	34	31	44	38	31	37	31	36	31	36
9	42	35	31	28	41	35	28	34	28	33	28	33
10	39	32	28	25	38	32	25	31	25	31	25	30

Numbers indicate percentage values of reflectivity.

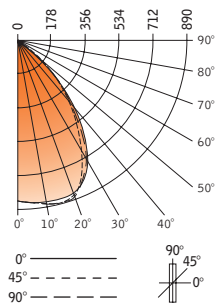
Go to www.focalpointlights.com for additional photometric data.

6" – downlight
id®



Filename: D6DNCD32TT.IES
Catalog #: FC6D-32TT-S-120-R0-T, D6-R0-DN-CD-NP
Efficiency: 58%
Photometric Report #: 15233.0

CANDLEPOWER DISTRIBUTION



Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	
0°	848	848	848	848	848
5°	858	855	857	860	861
15°	885	890	886	870	865
25°	788	788	803	820	819
35°	538	577	587	604	600
45°	308	317	319	320	321
55°	73	74	79	77	76
65°	9	9	9	9	9
75°	3	2	2	2	2
85°	1	0	1	1	1
90°	0	0	0	0	0

Spacing Criteria
End: 1.2
Cross: 1.2

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt
0°-30°	703	29.9	50.4
0°-40°	1070	44.6	76.6
0°-60°	1385	57.7	99.1
0°-90°	1397	58.2	100.0
Total Luminaire	1397	58.2	100.0

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	14502	14502	14683
55°	3948	3873	3650
65°	708	708	708
75°	165	165	330
85°	0	0	0

CO-EFFICIENTS OF UTILIZATION

Floor	80			70			20					
Ceiling	80			70			50					
Wall	70	50	30	10	70	50	10	50	10	30	10	00
RCR 0	73	73	73	73	71	71	71	68	68	65	65	63
1	69	68	66	64	68	66	63	64	62	61	60	59
2	66	62	60	58	64	61	57	59	56	58	54	56
3	62	58	54	52	61	57	51	55	51	54	50	52
4	58	53	49	47	57	52	46	51	46	50	44	49
5	55	49	45	42	54	48	42	47	42	46	41	45
6	51	45	41	38	50	45	38	44	38	43	38	42
7	48	42	38	35	47	41	35	41	34	40	34	39
8	45	38	34	31	44	38	31	37	31	36	31	36
9	42	35	31	28	41	35	28	34	28	33	28	33
10	39	32	28	25	38	32	25	31	25	31	25	30

Numbers indicate percentage values of reflectivity.

Go to www.focalpointlights.com for additional photometric data.

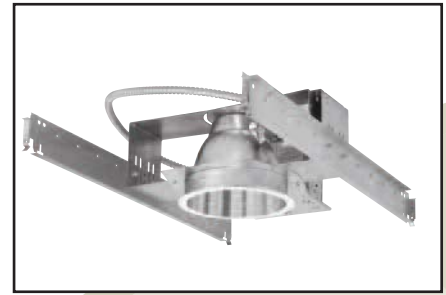
OM6 1H42PLT

6" Open Reflector Horizontal Downlights

CAT. NO: **OM6-1-H-32PLT-CS-120/277**

TYPE: **DFB (ALT)**

PROJECT:



PRODUCT INFORMATION

Applications

Small aperture open reflector downlight for use with long-life energy efficient compact fluorescent lamps. Provides medium, uniform light distribution with excellent color rendition. Ideal for areas requiring long hours of continuous operation such as lobbies, corridors, reception areas and offices.

Specifications

1. **Ballast** - One (1) Type 1 Class P, high power factor universal voltage electronic compact fluorescent ballast. Offers 1 lamp operation for 120 through 277 volt input voltage.

	18W 120V	18W 277V	26W 120V	26W 277V	32W 120V	32W 277V	42W 120V	42W 277V
Line current amps	.19	.08	.25	.11	.32	.14	.42	.18
Input watts including ballast loss	22	22	28	28	36	36	48	48
Ballast factor	1.00	1.00	.98+	.98+	1.00	1.00	.98+	.98+
Minimum starting temperature	0°F	0°F	0°F	0°F	0°F	0°F	0°F	0°F

2. **Mounting pan** - Precision die-stamped 16 gauge galvanized steel mounting pan and yoke assembly. Accommodates ceiling materials up to 1-3/8" thick.

3. **Installation** - Mounting pan has pre-installed C-channel with vertical and horizontal adjustments. Ballast, junction box and mounting brackets are accessible from below ceiling. For 27" flat bar hanger pair, specify Q1031 accessory, ordered separately.

4. **Reflector** - Precision spun .050 aluminum one piece reflector, self flanged with clear specular Alzak low iridescent finish. Reflector is screw mounted for positive attachment to socket assembly. Standard flat flange is painted white. Optional polished flange matching reflector finish available, add FF to catalog number.

5. **Baffle** - Precision machined .051 aluminum with deep grooves to minimize aperture glare, anodized matte black or matte white finish. Standard flat flange is painted white. Optional black flange available, add FF to catalog number.

6. **Sockets** - CFM42W/GX24q, CFM32W/GX24q, CFM26W/GX24q, CFM18W/GX24q, horizontally mounted 4 pin plug-in type. Socket assembly rotates 90° to allow for alignment of lamps and reflector within fixture, for design flexibility. (Lamps ordered separately.)

7. **Junction box** - Extra large 43.75-cubic inch 16 gauge galvanized steel with snap-on covers and ground wire riveted to frame. Approved for through wiring with up to 8 #12 AWG conductors.

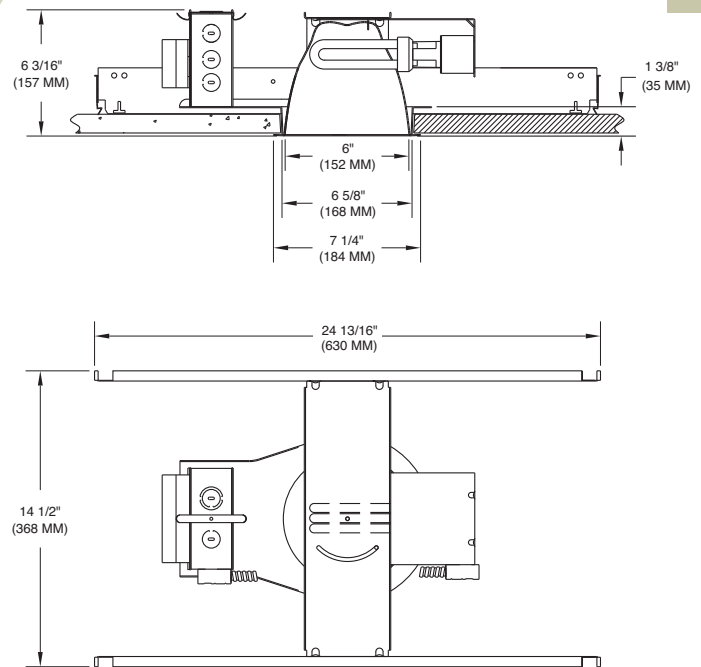
8. **Optional emergency system** - Emergency system includes battery, electronic circuitry, charger and test/monitor plate with test switch and charging indicator light. Test/monitor plate may be installed in the ceiling near fixture or other remote location. Operates appropriate lamp wattage for a minimum of 90 minutes following power failure. Emergency system complies with NFPA life safety code, OSHA and NEC. Suitable for dry locations.

9. **U.L. Listed** - For use in damp locations and approved for Through Branch Circuit Wiring. I.B.E.W. union made.

✦ Canadian Specifications may vary from these shown, consult Canadian Division.



6



CATALOG SYSTEM AND OPTIONS

EXAMPLE OF COMPLETE CATALOG NUMBER: **OM61H42PLT-CS-120/277**

OMEGA Apr.	No. of Lamps	Lamps Position	Lamp (by others)	Reflector Option	Finish	Options	Sloped Ceiling Adapter Angle	Supply Voltage
OM6	1	H	32PLT Horizontal	BB Black Baffle	CS Clear Specular	EM Emergency IE Integral Emergency FZ120 Fusing FZ277 Fusing FZ347 Fusing CP Chicago Plenum Q1031 Flat Bar Hangers SA6 Sloped Ceiling Adpt. DL1 Dimming, Lutron Compact SE, 120v DL2 Dimming, Lutron Compact SE, 277v DX1 Dimming, Advance Mark X, 120v DX2 Dimming, Advance Mark X, 277v CL Clear Lens PL Prismatic Lens FL Fresnel Lens	5 10 15 20 25 30	120/277 347 ✦
			42 PLT Triple Tube CFL 32 PLT Triple Tube CFL 26 PLT Triple Tube CFL 18 PLT Triple Tube CFL		CS Clear Specular CSS Clear Semi-Specular HZ Haze GS Gold Specular WT Wheat PW Pewter BK Black BZ Bronze WH White FCS Faceted Clear Specular FCSS Faceted Clear Semi Specular FF Finish Flange (as suffix to color)			



FIVE YEAR
Warranty

OMEGA LIGHTING: 776 South Green St., Tupelo, MS 38804 Phone 662.842.7212 FAX 662.841.5501

Omega Lighting is a Philips group brand



OM61H42PLT-CS

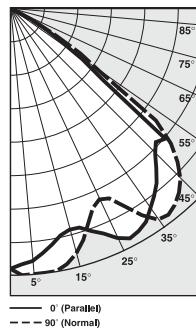
Photometric Data

Clear Specular Reflector

Report Number: 20716
 Lamp: (1)CFM42W
 Total Lumens: 3200
 Fixture Efficiency: = 53.9%
 IES File: F20716.IES
 S/MH Ratio = 1.4, 1.5
 Beam Angle: 106.85

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	23.0	14-10
10	12.4	20-3
12	7.7	25-7
14	5.3	30-12
16	3.8	36-5

DISTRIBUTION CURVE



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	
75	0	0	93
65	37	24	1155
55	235	292	7350
45	549	645	13509
35	654	690	
25	678	564	
15	613	680	
5	679	714	
0	697	697	

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20					
RC	80		70		50
	50	30	50	30	50
RW	50	30	50	30	50
0	64	64	63	63	59
1	57	56	56	55	55
2	54	48	51	48	48
3	46	42	46	42	44
4	41	38	40	36	40
5	38	33	36	33	35
6	34	29	34	28	33
7	30	27	30	26	29
8	28	23	28	23	27
9	26	22	26	22	25
10	23	20	23	20	23

OM61H32PLT-CS

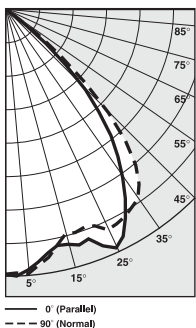
Photometric Data

Clear Specular Reflector

Report Number: 21516
 Lamp: (1)CFM32W
 Total Lumens: 2400
 Fixture Efficiency: = 55.9%
 IES File: F 21516.IES
 S/MH Ratio = 1.3, 1.3
 Beam Angle: 89.61

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	25.5	10-11
10	13.7	14-11
12	8.5	18-10
14	5.8	22-10
16	4.2	26-10

DISTRIBUTION CURVE



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	
75	0	0	0
65	0	0	0
55	30	53	837
45	332	426	7513
35	597	674	
25	766	708	
15	708	678	
5	762	773	
0	771	771	

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20					
RC	80		70		50
	50	30	50	30	50
RW	50	30	50	30	50
0	51	51	50	50	48
1	47	46	46	45	45
2	44	42	43	42	42
3	41	38	40	38	39
4	38	35	37	35	36
5	35	32	34	32	34
6	32	30	32	28	31
7	30	27	30	27	29
8	27	25	27	24	27
9	25	22	25	22	24
10	23	20	23	20	22

OM61H26PLT-CS

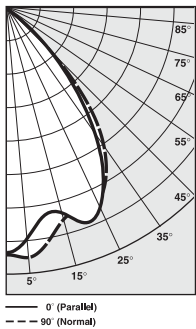
Photometric Data

Clear Specular Reflector

Report Number: 2762
 Lamp: (1)CFM26W
 Total Lumens: 1800
 Fixture Efficiency: = 47.5%
 IES File: EY3495.IES
 S/MH Ratio = 1.2, 1.2
 Beam Angle: 80.71

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	19.7	9-4
10	10.6	12-8
12	6.6	16-1
14	4.5	19-6
16	3.3	22-11

DISTRIBUTION CURVE



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	0
75	0	0	0
65	0	0	0
55	25	15	694
45	173	198	4483
35	378	411	
25	530	516	
15	495	512	
5	554	607	
0	595	595	

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20					
RC	80		70		50
	50	30	50	30	50
RW	50	30	50	30	50
0	56	56	55	55	52
1	52	51	51	50	49
2	48	46	47	45	46
3	44	42	44	41	43
4	41	38	40	38	39
5	38	35	37	34	36
6	35	32	35	32	34
7	32	29	32	29	31
8	29	26	29	26	29
9	27	24	27	23	26
10	25	21	24	21	24

OM61H18PLT-CS

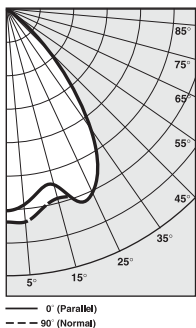
Photometric Data

Clear Specular Reflector

Report Number: 2771
 Lamp: (1)CFM18W
 Total Lumens: 1250
 Fixture Efficiency: = 51.4%
 IES File: EY3493.IES
 S/MH Ratio = 1.2, 1.2
 Beam Angle: 80.26

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	14.6	9-3
10	7.5	12-7
12	4.9	16-0
14	3.3	19-4
16	2.4	22-9

DISTRIBUTION CURVE



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	0
75	0	0	0
65	0	0	0
55	16	2	438
45	135	113	3053
35	314	293	
25	427	402	
15	365	404	
5	414	454	
0	441	441	

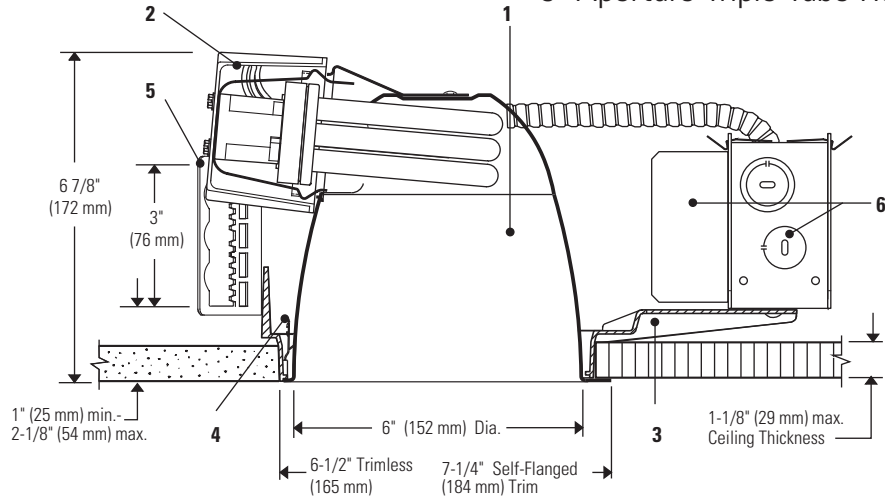
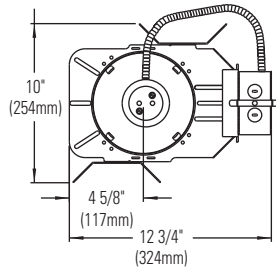
COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20					
RC	80		70		50
	50	30	50	30	50
RW	50	30	50	30	50
0	61	61	59	59	57
1	56	55	55	54	53
2	52	50	51	49	50
3	48	46	48	45	46
4	45	42	44	41	43
5	41	38	41	38	40
6	38	35	38	35	37
7	35	32	35	32	34
8	32	29	32	29	31
9	29	26	29	26	29
10	27	24	27	23	26

*Readings at working plane, 2'6" above floor. Beam Angle and Diameter Cutoff at 50% of max. Candlepower Coefficients used at effective reflectances of: 70% Ceiling, 50% Walls, 20% Floor

To convert values for optional reflector colors, multiply by:
 Gold .90 Bronze .82 Pewter .87

Additional photometric test files are available @ omegalighting.com



Reflector Trim

- 8031 CLW** Clear Iridescence Free, White Flange
- 8031 CLP** Clear Iridescence Free, Polished Flange
- 8031 CL** Clear Iridescence Free, Molded Trim Ring
- 8031** Add suffix. See options for other finishes.

Frame-In Kit

- S6132BU** 6" aperture, 1 lamp 26/32W Triple Tube CFL (120/277V) 4-Pin (Amalgam)
 - Dimming Options:**
 - S6132B**
 - CU3** Lightolier PowerSpec 3% Dimming (120/277V)
 - J2LD3** Lutron 5% Dimming (277V)
 - J1MX** Mark 10 Dimming (120V)
 - J1LD3** Lutron 5% Dimming (120V)
 - JUM7** Mark 7 Dimming (120/277V)
 - J2MX** Mark 10 Dimming (277V)
- Other dimming product available, please consult factory

Remodeler Frame-In Kits

- 6126BURM** 6" aperture, 1 lamp 26W Triple Tube CFL (120/277V) 4-Pin (Amalgam)
- 6132BURM** 6" aperture, 1 lamp 26/32W Triple Tube CFL (120/277V) 4-Pin (Amalgam)

Features

- 1. Reflector:** 16 ga. Specular Alzak® aluminium, 55° visual cutoff to lamp and lamp image, medium distribution. Iridescence Free finish. Self-flanged or molded white trim ring (field paintable).
- 2. Socket Cup:** Effectively dissipates heat and positions lamp holder. Snaps onto reflector neck to assure consistently correct optical alignment without tools.
- 3. Mounting Frame:** Galvanized steel for dry or plaster ceilings. Accepts other 6" Triple Tube reflectors (see S6132BU Spec Sheet).
- 4. Retaining Springs:** Precision-tooled steel friction springs secure reflector to mounting frame for quick, tool-less installation.
- 5. Mounting Brackets:** 16 ga. steel. Adjust from inside of fixture. Use 3/4" or 1 1/2" lathing channel, 1/2" EMT, or optional mounting bars.
- 6. Ballast/J-Box:** Electronic 120V-277V. UL listed for through branch circuit wiring with max of (8) No. 12AWG, 90°C supply conductors. Outboard mounted to reduce heat transfer and maintain lamp efficacy and life. Service from below without tools.

Electrical

Note: For ballast electrical data and latest lamp/ballast compatibility refer to "Ballast" specification sheet for complete electrical data.

UL Listed for through branch circuit wiring with max of (8) No 12 AWG, 90 degree C supply conductors.

Options and Accessories

Comfort Clear™ Finishes ¹		Other Finishes	
Clear	CCL	White	WH
Diffuse	CCD		
Champagne Bronze	CCZ		
Multigroove	MG		

¹Specify desired flange. **W** White, **P** Polished, Blank - Molded Ring

Options and Accessories (continued)

- Emergency Add suffix **EM***
 - Chicago Plenum Use 6132BULC
 - Existing/Thk. Ceiling **FA EC6***
 - Emergency Ltg. Kit **FA EM3E***
 - FA EM4E***
 - Fuse (Slow Blow) Add Suffix **F**
- *See Spec. Sheets: FAEC, FAEM
 Mounting Bars & Accessories; see Specification Sheet MBA.
 Sloped Ceiling Adapters; see Specification Sheet SCA.
 IC Frame available; see **C6CFL32** specification sheet.

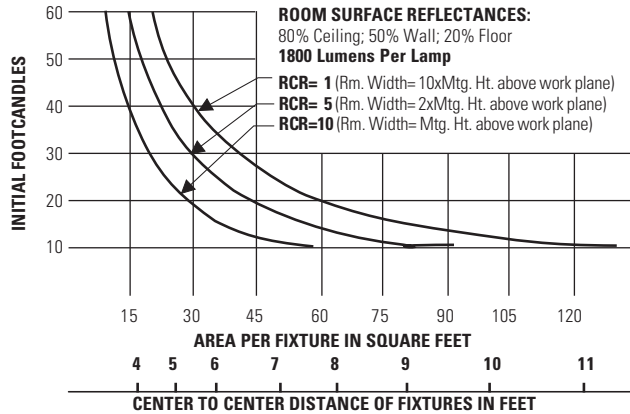
Labels

UL listed for damp locations.

Job Information	Type: DFA
Job Name:	
Cat. No.:	8031CCLW
Lamp(s):	(1) 32W PLT CFL LAMP, GX24Q-4 BASE
Notes:	

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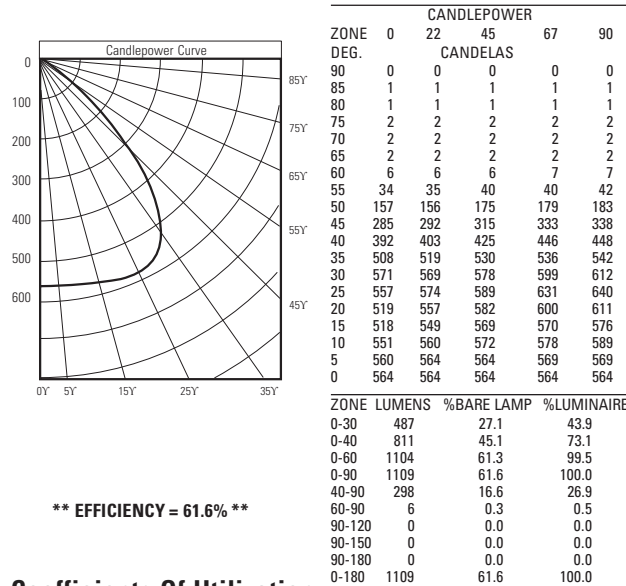
26W Quick Calculator



This quick calculator chart determines the number and spacing of 1 ft.- 26W PL-T units with clear reflector, for any level of illumination.

Spacing Ratio = 1.4

Report No.: LRL 796-1A
PREPARED BY: LIGHTING RESEARCH LABORATORY, INC.
PREPARED FOR: LIGHTOLIER
DESCRIP.: 6" dia. x 6" Ht. recessed downlight - open bottom spun semispecular reflector; tilted horizontal lamp
LAMPS: 1 PLT-26W rated at 1800 LUMENS.

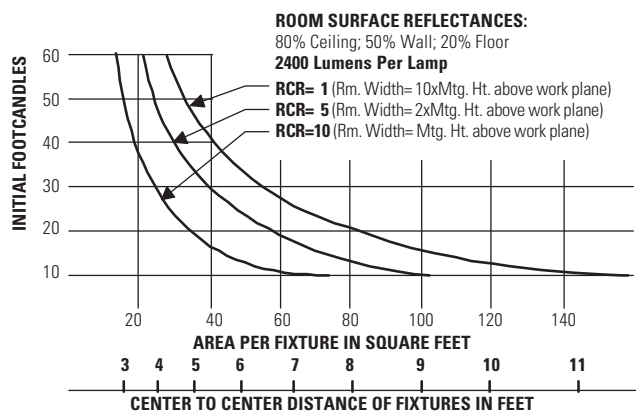


Coefficients Of Utilization

ROOM CAVITY RATIO	% EFFECTIVE CEILING CAVITY REFLECTANCE															
	80			70			50			30			0			
	50	30	10	50	30	10	50	30	10	50	30	10	0			
1	.68	.66	.65	.67	.65	.64	.64	.63	.62	.62	.61	.60	.60	.59	.58	.57
2	.63	.61	.59	.62	.60	.58	.60	.58	.57	.58	.57	.55	.57	.55	.54	.53
3	.59	.56	.53	.58	.55	.53	.55	.54	.52	.55	.53	.51	.54	.52	.51	.50
4	.54	.51	.48	.54	.51	.48	.52	.50	.47	.51	.49	.47	.50	.48	.46	.45
5	.51	.47	.44	.50	.46	.44	.49	.46	.43	.48	.45	.43	.47	.45	.43	.42
6	.47	.43	.40	.46	.43	.40	.45	.42	.40	.45	.42	.39	.44	.41	.39	.38
7	.43	.39	.36	.43	.39	.36	.42	.39	.36	.41	.38	.36	.41	.38	.36	.35
8	.40	.36	.33	.39	.36	.33	.39	.35	.33	.38	.35	.33	.37	.35	.32	.31
9	.36	.32	.30	.36	.32	.30	.35	.32	.29	.35	.32	.29	.34	.31	.29	.28
10	.32	.28	.25	.31	.27	.25	.31	.27	.25	.30	.27	.24	.30	.27	.24	.23

20% FLOOR CAVITY REFLECTANCE

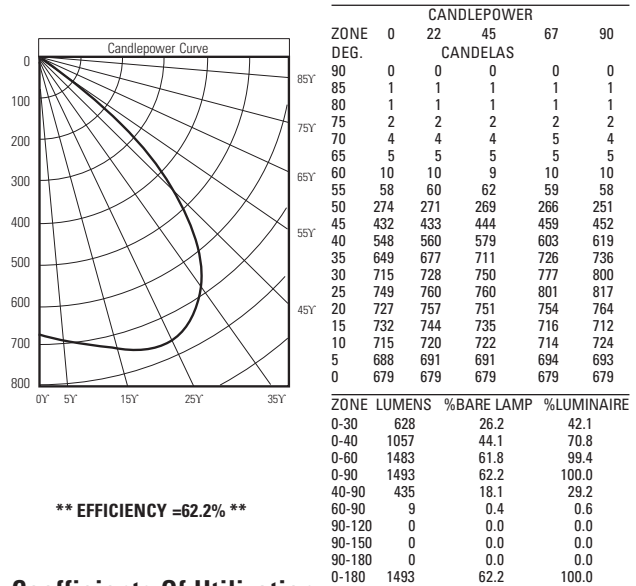
32W Quick Calculator



This quick calculator chart determines the number and spacing of 1 ft.- 32W PL-T units with clear reflector, for any level of illumination.

Spacing Ratio = 1.4

Report No.: LRL 796-1B
PREPARED BY: LIGHTING RESEARCH LABORATORY, INC.
PREPARED FOR: LIGHTOLIER
DESCRIP.: 6" dia. x 6" Ht. recessed downlight - open bottom spun semispecular reflector; tilted horizontal lamp
LAMPS: 1 PLT-32W rated at 2400 LUMENS.



Coefficients Of Utilization

ROOM CAVITY RATIO	% EFFECTIVE CEILING CAVITY REFLECTANCE															
	80			70			50			30			0			
	50	30	10	50	30	10	50	30	10	50	30	10	0			
1	.68	.67	.65	.67	.66	.64	.65	.63	.62	.62	.61	.60	.60	.59	.59	.58
2	.64	.61	.59	.62	.60	.58	.60	.59	.57	.59	.57	.56	.57	.56	.54	.53
3	.59	.56	.53	.58	.55	.53	.57	.54	.52	.55	.53	.51	.54	.52	.50	.49
4	.55	.51	.48	.54	.50	.48	.52	.50	.47	.51	.49	.47	.50	.48	.46	.45
5	.50	.47	.44	.50	.46	.43	.49	.46	.43	.48	.45	.43	.47	.44	.42	.41
6	.47	.43	.40	.45	.42	.40	.45	.42	.39	.44	.41	.39	.43	.41	.39	.38
7	.43	.39	.36	.42	.39	.36	.42	.38	.36	.41	.38	.35	.40	.37	.35	.34
8	.39	.35	.32	.39	.35	.32	.38	.35	.32	.38	.34	.32	.37	.34	.32	.31
9	.36	.32	.29	.36	.32	.29	.35	.31	.29	.34	.31	.29	.34	.31	.28	.27
10	.31	.27	.24	.31	.27	.24	.30	.26	.24	.30	.26	.24	.29	.26	.24	.23

20% FLOOR CAVITY REFLECTANCE

Job Information

Type:

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TRIPLES-H 132/6

TYPE 'DFD' ALT

#TRPH 132/6 277 VOL DIM

COMPACT
FLUORESCENT
1-372

recessed compact fluorescent downlight/wallwasher

FEATURES

Triples-H 132/6 is an efficient 6" aperture low brightness downlight, for use with one 32-watt, 4-pin, triple tube compact fluorescent lamp by GE, Sylvania or Philips. Triples-H 132/6 provides shielding angles of 40° parallel to and 40° perpendicular to the lamps. Recess depth is only 6 1/2".

One housing allows interchangeable use of downlight and wallwash reflectors, permitting housings to be installed first and reflectors to be installed or changed at any time.


Triples-H 132/6 uses one 32-watt, 4-pin, triple tube lamp providing 2400 lumens (more than a 100-watt incandescent), a 10,000-hour life, a color rendering index (CRI) of 82, and color temperatures as warm as 2700°K (nearly duplicating the color qualities of incandescent).

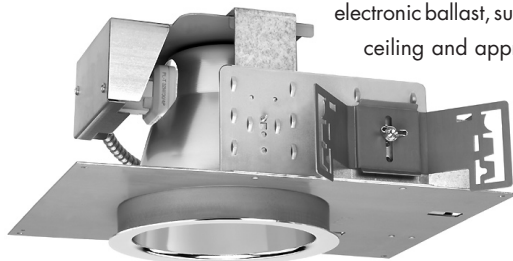
Reflectors are available in clear, natural aluminum in two finishes: **EvenTone**, our standard clear finish, partially diffuse, anti-iridescent and gently luminous in appearance; and **EasyTone**, diffuse and luminous. Additionally, reflectors are available in champagne gold, wheat, pewter, and bronze. Wallwash (120°) and double wallwash (2x120°) reflectors are also available.

Triples-H 132/6 includes a pair of mounting bars (3/4" x 27" C channel). Specialty bars for wood joist and T-bar installations are available as accessories.

APPLICATIONS

Fixture is recommended for downlighting or wallwashing in offices, corridors, shops, banks, schools, hospitals and airports, as well as lobbies and public areas. The shallow recess depth allows mounting in constricted plenum situations.

Fixture is  listed for Damp Location (may not be suitable for some outdoor environments). Fixture is prewired with high power factor Class P



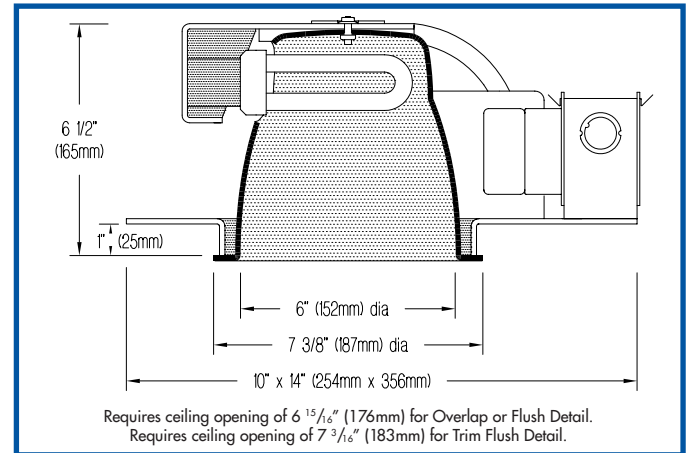
electronic ballast, suitable for use in a fire rated ceiling and approved for eight #12 wire 75°C branch circuit pull-through wiring. Removal of the reflector allows access to the ballast and junction box.

NOTE: Under certain conditions, such as installations where there is a pressure differential between the room and ceiling cavity, amalgam based fluorescent lamps may experience reduced lumen output.

MODIFICATIONS AVAILABLE

Contact factory with quantity for pricing; orders may require shop drawing approval.

- CHP-**: fixture suitable for **Chicago Plenum**; add CHP- as prefix to Product Code.
- CONC-**: fixture suitable for poured-in-place **concrete**; add CONC- as prefix to Product Code.
- EXP-**: "European-style" **install-from-below** fixture; add EXP- as prefix to Product Code.
- +2"CLG**: fixture suitable for installation in **2" thick ceiling** material; add +2"CLG to Product Code.



PRODUCT CODE

For complete product code, list basic unit and select one item from each following box.

Basic Unit	TRPH 132/6		
Reflector Type			
Downlight	no suffix		
Wallwash	WW		
Double Wallwash	DWW		
Voltage			
120 volt service	120		
277 volt service	277		
Reflector Color and Detail			
	<i>Overlap Flange</i>	<i>Flush</i>	<i>Trim Flush*</i>
EvenTone Clear	VOL	VFL	VTF
EasyTone Clear	ECOL	ECFL	ECTF
Champagne Gold	GOL	GFL	GTF
Wheat	WHOL	WHFL	WHTF
Pewter	POL	PFL	PTF
Bronze	ZOL	ZFL	ZTF
Other reflector finishes available on special order.			
Overlap Flange continues reflector finish. White painted flanges and custom painted flanges are available on special order. Add WF (white flange) or CCF (custom color flange).			
*Trim Flush reflector trim requires the use of a plaster ring Accessory (see below).			

OPTIONS

Specify by adding to the basic unit.

Dimmable 3-wire ballast	- DM
Emergency battery pack operates one lamp in event of power outage. Fixture footprint increases to 10 x 16 3/4" (254 x 425mm). Additional 1 1/4" (32mm) is required to remove EM pack through aperture. Not for outdoor application	
1/8" (3mm) thick clear acrylic shield , spring-mounted within reflector	- PS

ACCESSORIES

Specify as a separate line item.

Plaster ring allows use of Trim Flush (-TF) reflector in sheetrock ceiling; 7 3/16" (183mm) dia hole is required.....	TF RING/6
--	------------------

- ▶ For combinations of the Options above, contact factory or Edison Price Lighting representative.
- ▶ A modified fixture suitable for 347-volt service is available on special order. Contact factory.
- ▶ Decorative reflector rings are available on special order. Contact factory.



PHOTOMETRIC REPORT

LTL Luminaire Testing Laboratory Report No. 05281. Original test report furnished upon request.

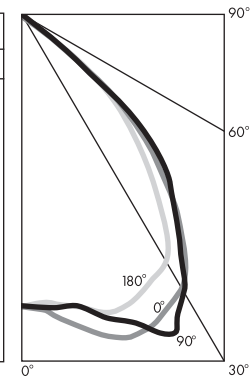
Luminaire recessed compact fluorescent downlight with spun aluminum reflector
 Lamp Philips 32-watt triple-tube compact fluorescent, 4-pin, GX24q-3 base, 2400 lumens
 Efficiency 54.4%
 Spacing Criteria.... 0°- 1.3, 90°-1.4, 180°-1.4
 Axis orientation.... 0° plane is parallel to lamps, opposite sockets

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30°	622	25.9	47.1
0 - 40°	998	41.6	76.5
0 - 60°	1301	54.2	99.8
0 - 90°	1304	54.4	100.0
90 -180°	0	0.0	0.0
0 -180°	1304	54.4	100.0

CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0.0	45.0	90.0	135.0	180.0
0	665	665	665	665	665
5	657	672	670	689	677
15	698	724	711	775	756
25	673	740	799	782	748
35	546	578	613	614	629
45	318	362	408	377	368
55	6	7	6	6	6
65	3	3	3	3	4
75	0	0	0	0	0
85	0	0	0	0	0
95	0	0	0	0	0



LUMINANCE DATA (Candela/m²)

Vertical Angle	Average 0° Longitude	Average 90° Longitude	Average 180° Longitude
45	24652	28063	31629
55	573	669	573
65	389	389	389
75	0	0	0
85	0	0	0

To convert cd/m² to footlamberts, multiply by 0.2919.

COLOR MULTIPLIERS

EvenTone (V)	.95
EasyTone (EC)	.88
Champagne Gold (G)	.97
Wheat (WH)	.79
Pewter (P)	.81
Bronze (Z)	.58

BALLAST INFORMATION

Voltage	120	277
Input Watts	37	36
Line Current (A)	.30	.13
Power Factor (%)	>98	>98
THD (%)	<10	<10
Min. Starting Temp* (°F)	0	0

*Consult lamp manufacturers for specific temperatures.

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

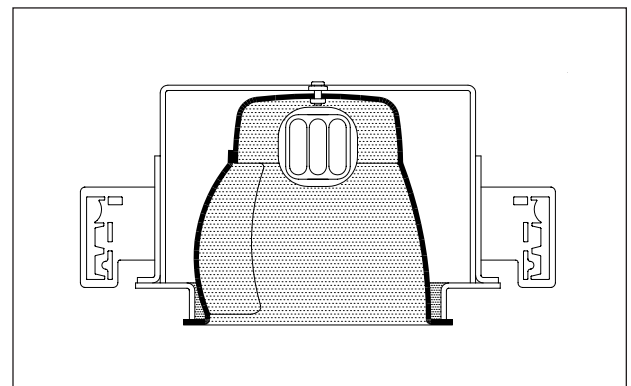
Ceiling Reflectance (%)	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio																		
0	65	65	65	65	63	63	63	63	60	60	60	58	58	58	55	55	55	54
1	61	60	58	57	60	59	57	56	56	55	54	54	54	53	53	52	51	50
2	58	55	53	51	57	54	52	50	53	51	49	51	50	48	49	48	47	46
3	55	51	48	46	54	50	48	45	49	47	45	47	46	44	46	45	43	42
4	52	47	44	41	50	46	43	41	45	42	40	44	42	40	43	41	39	39
5	48	43	40	37	47	43	39	37	42	39	36	41	38	36	40	38	36	35
6	45	40	36	34	44	39	36	34	39	36	33	38	35	33	37	35	33	32
7	42	37	33	30	42	36	33	30	35	32	30	35	32	30	34	32	30	29
8	39	33	29	27	39	33	29	27	32	29	27	32	29	27	31	28	26	26
9	36	30	26	24	36	30	26	24	29	26	24	29	26	23	28	25	23	23
10	34	27	24	21	33	27	24	21	27	23	21	26	23	21	26	23	21	20

TRIPLES-H 132/6 WW

WALLWASH INFORMATION

Distance From Ceiling (Feet)	2'6" From Wall; 2'6" O.C.		3' From Wall; 3' O.C.		3'6" From Wall; 3'6" O.C.	
	Below Fixture	Between Fixtures	Below Fixture	Between Fixtures	Below Fixture	Between Fixtures
1	12	10	7	6	4	4
2	16	16	11	10	7	7
3	23	24	14	15	9	9
4	25	25	17	17	12	12
5	21	22	17	17	13	13
6	18	17	15	15	12	13
7	14	14	13	13	11	11
8	11	11	11	10	10	10
9	9	8	9	9	8	8
10	7	7	7	7	7	7

All vertical footcandles are initial values with no contribution from ceiling or floor reflectances. Computation performed with at least five wallwashers.

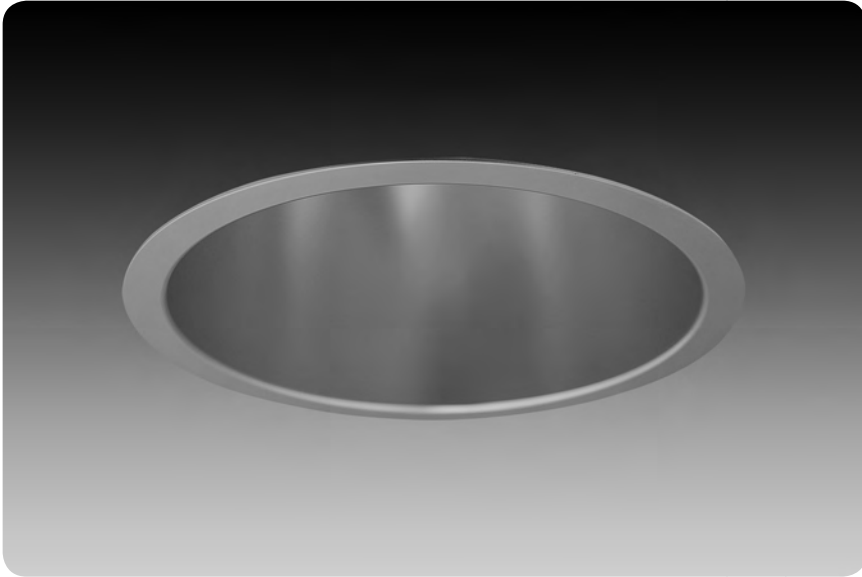


6" – downlight

id[®]



CFL



features

Unique SmartShell™ optical design maximizes efficiency.

Shallow housing with horizontal lamping.

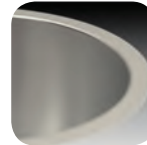
Self-flanged or painted trim provides a smooth transition to the ceiling.

Trim fits tightly to ceiling via torsion springs.

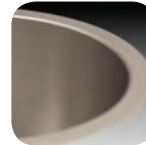
Accommodates ceilings up to 1" thick.

Diffuse reflectors offer glare control and 55-degree cut-off to lamp and its image.

reflector colors



clear diffuse



warm diffuse

flange finish

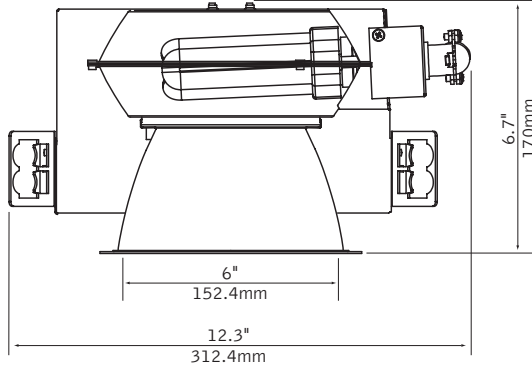


non-painted self-flanged

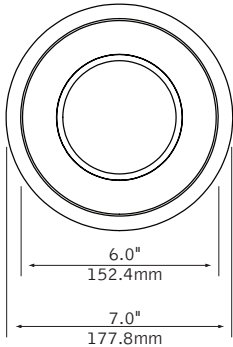


white painted

dimensional data

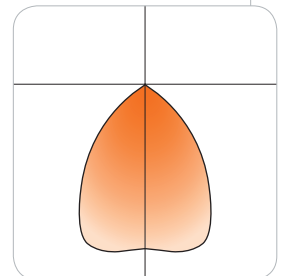


trim



performance

1-Lamp 32W Triple Tube
Downlight Optic, Clear Diffuse
58% Efficiency
890 cd @ 15°

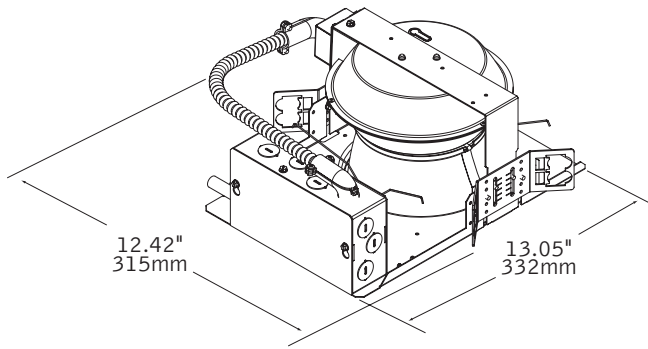


Visit focalpointlights.com for complete photometric data.

fixture:

project:

details



specifications

housing

Frame may be installed into ceiling thicknesses up to 1". For thicker ceiling consult factory.
 Butterfly brackets allow mounting to ½ emt. Order bar hangers as an accessory.
 Galvanized steel frame includes large Junction box 7" x 3.5" with (10) 1/2" pry outs. UL listed for through branch wiring, four #12 90°C conductors.
 Thermally protected housing for new construction applications without direct contact with insulation. Insulation to be kept 3" away from housing.

upper reflector

Upper reflector constructed of .05 spun aluminum. Keyhole slots on top of upper reflector allow reflector to shift to gain access to ballast from below ceiling.
 Reflector finished in High Reflectance White powder coat.
 Lamp tilted 5° for optimal thermal performance.

trim

.05 spun aluminum parabolic reflector cone ensures glare-free optics.
 Reflector provides 55-degree cut off to lamp and lamp image.
 Trim attaches to housing via torsion springs.
 Overlap trims are self-flanged, non-painted to match reflector finish. White painted flange may also be specified.
 Optional .125" thick micro-prismatic glass lens obscures lamp.

electrical

Luminaires are pre-wired for single circuit with thermally protected Class "P" program start <10% THD electronic ballast.
 Consult factory for dimming specifications and availability.
 UL Listed.
 One lamp triple tube compact fluorescent, 4-pin, 26W/32W -(Gx24q-3). Rotary lock socket allows for easy lamp removal and reduces lamp breakage.
 Integral emergency battery test switch and indicator light in optic.

finish

Upper reflector finished in polyester powder coat over a 5-stage pre-treatment.

housing ordering

housing series		<u>FC6D</u>
ID CFL Round Housing	FC6D	
lamp		
18W Triple Tube, Gx24q-2	18TT	
26W Triple Tube, Gx24q-3	26TT	
32W Triple Tube, Gx24q-3	32TT	
ballast		
Electronic Program Start <10% THD	S	
Electronic Dimming Ballast*	D	
voltage		
120V	120	
277V	277	
347V	347	
trim type		<u>R0</u>
Round Overlap	R0	
housing type		<u>T</u>
Thermally Protected, Non-IC	T	
factory options		
Chicago Plenum	CP	
Emergency Battery Pack*	EM	
HLR/GLR Fuse	FU	
Include 3000K Lamp	L830	
Include 3500K Lamp	L835	
Include 4100K Lamp	L841	

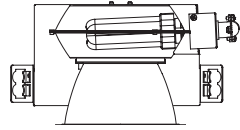
trim ordering

aperture		<u>D6</u>
6" Round Aperture	D6	
trim type		<u>R0</u>
Round Overlap	R0	
optic		
Downlight	DN	
Regress Lens	RL	
color		
Clear Diffuse	CD	
Warm Diffuse	WD	
flange finish		
Non-Painted, Self-flanged	NP	
White Painted	WP	

a complete unit consists of two line items, housing and trim
 example: FC6D-26TT-S-120-R0-T
 D6-R0-DN-CD-NP

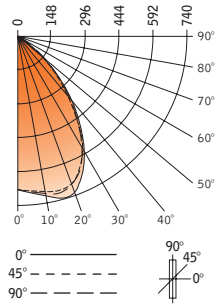
* for more information see Reference section.

6" – downlight
id®



Filename: D6DNCD26TT.IES
Catalog #: FC6D-26TT-S-120-R0-T, D6-R0-DN-CD-NP
Efficiency: 61%
Photometric Report #: 15283.0

CANDLEPOWER DISTRIBUTION



Vertical Angle	Horizontal Angle				Zonal Lumens	
	0°	22.5°	45°	67.5°		90°
0°	676	676	676	676	676	
5°	686	685	687	691	696	66
15°	707	716	718	735	740	205
25°	654	662	646	657	667	604
35°	442	451	462	460	474	288
45°	240	241	240	239	243	186
55°	53	50	52	60	49	48
65°	7	7	7	7	7	7
75°	1	1	1	2	2	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0

Spacing Criteria
End: 1.2
Cross: 1.2

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt
0°-30°	575	31.9	52.0
0°-40°	862	47.9	78.1
0°-60°	1096	60.9	99.2
0°-90°	1104	61.4	100.0
Total Luminaire	0°-180° 1104	61.4	100.0

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
0°	14502	14502	14683
45°	3948	3873	3650
55°	708	708	708
75°	165	165	330
85°	0	0	0

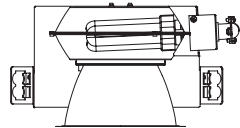
CO-EFFICIENTS OF UTILIZATION

Floor	80			70			20			50			30			10			00											
Ceiling	70	50	30	10	70	50	30	10	50	10	50	10	50	10	50	10	00	70	50	30	10	70	50	30	10	00				
Wall	73	73	73	73	71	71	71	71	68	68	65	65	63	63	61	61	61	65	65	63	63	61	61	61	61	61				
RCR 0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
1	69	68	66	64	68	66	63	64	62	61	60	59	58	57																
2	66	62	60	58	64	61	57	59	56	58	54	56	53	52																
3	62	58	54	52	61	57	51	55	51	54	50	52	49	48																
4	58	53	49	47	57	52	46	51	46	50	44	49	45	44																
5	55	49	45	42	54	48	42	47	42	46	41	45	41	40																
6	51	45	41	38	50	45	38	44	38	43	38	42	37	36																
7	48	42	38	35	47	41	35	41	34	40	34	39	34	33																
8	45	38	34	31	44	38	31	37	31	36	31	36	31	30																
9	42	35	31	28	41	35	28	34	28	33	28	33	27	27																
10	39	32	28	25	38	32	25	31	25	31	25	30	25	24																

Go to www.focalpointlights.com for additional photometric data.

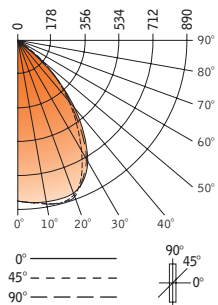
Numbers indicate percentage values of reflectivity.

6" – downlight
id®



Filename: D6DNCD32TT.IES
Catalog #: FC6D-32TT-S-120-R0-T, D6-R0-DN-CD-NP
Efficiency: 58%
Photometric Report #: 15233.0

CANDLEPOWER DISTRIBUTION



Vertical Angle	Horizontal Angle				Zonal Lumens	
	0°	22.5°	45°	67.5°		90°
0°	848	848	848	848	848	
5°	858	855	857	860	861	82
15°	885	890	886	870	865	250
25°	788	788	803	820	819	372
35°	538	577	587	604	600	367
45°	308	317	319	320	321	246
55°	73	74	79	77	76	68
65°	9	9	9	9	9	9
75°	3	2	2	2	2	2
85°	1	0	1	1	1	1
90°	0	0	0	0	0	0

Spacing Criteria
End: 1.2
Cross: 1.2

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt
0°-30°	703	29.9	50.4
0°-40°	1070	44.6	76.6
0°-60°	1385	57.7	99.1
0°-90°	1397	58.2	100.0
Total Luminaire	0°-180° 1397	58.2	100.0

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
0°	14502	14502	14683
45°	3948	3873	3650
55°	708	708	708
75°	165	165	330
85°	0	0	0

CO-EFFICIENTS OF UTILIZATION

Floor	80			70			20			50			30			10			00											
Ceiling	70	50	30	10	70	50	30	10	50	10	50	10	50	10	50	10	00	70	50	30	10	70	50	30	10	00				
Wall	73	73	73	73	71	71	71	71	68	68	65	65	63	63	61	61	61	65	65	63	63	61	61	61	61	61				
RCR 0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
1	69	68	66	64	68	66	63	64	62	61	60	59	58	57																
2	66	62	60	58	64	61	57	59	56	58	54	56	53	52																
3	62	58	54	52	61	57	51	55	51	54	50	52	49	48																
4	58	53	49	47	57	52	46	51	46	50	44	49	45	44																
5	55	49	45	42	54	48	42	47	42	46	41	45	41	40																
6	51	45	41	38	50	45	38	44	38	43	38	42	37	36																
7	48	42	38	35	47	41	35	41	34	40	34	39	34	33																
8	45	38	34	31	44	38	31	37	31	36	31	36	31	30																
9	42	35	31	28	41	35	28	34	28	33	28	33	27	27																
10	39	32	28	25	38	32	25	31	25	31	25	30	25	24																

Go to www.focalpointlights.com for additional photometric data.

Numbers indicate percentage values of reflectivity.

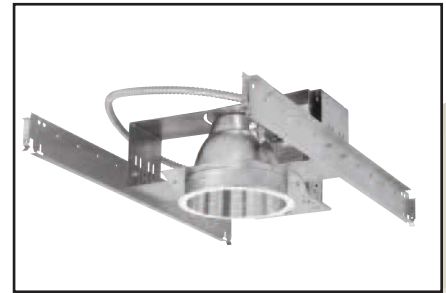
OM6 1H42PLT

6" Open Reflector Horizontal Downlights

CAT. NO: **OM6-1-H-32PLT-CS-120/277**

TYPE: **DFD (ALT)**

PROJECT:



PRODUCT INFORMATION

Applications

Small aperture open reflector downlight for use with long-life energy efficient compact fluorescent lamps. Provides medium, uniform light distribution with excellent color rendition. Ideal for areas requiring long hours of continuous operation such as lobbies, corridors, reception areas and offices.

Specifications

1. **Ballast** - One (1) Type 1 Class P, high power factor universal voltage electronic compact fluorescent ballast. Offers 1 lamp operation for 120 through 277 volt input voltage.

	18W 120V	18W 277V	26W 120V	26W 277V	32W 120V	32W 277V	42W 120V	42W 277V
Line current amps	.19	.08	.25	.11	.32	.14	.42	.18
Input watts including ballast loss	22	22	28	28	36	36	48	48
Ballast factor	1.00	1.00	.98+	.98+	1.00	1.00	.98+	.98+
Minimum starting temperature	0°F	0°F	0°F	0°F	0°F	0°F	0°F	0°F

2. **Mounting pan** - Precision die-stamped 16 gauge galvanized steel mounting pan and yoke assembly. Accommodates ceiling materials up to 1-3/8" thick.

3. **Installation** - Mounting pan has pre-installed C-channel with vertical and horizontal adjustments. Ballast, junction box and mounting brackets are accessible from below ceiling. For 27" flat bar hanger pair, specify Q1031 accessory, ordered separately.

4. **Reflector** - Precision spun .050 aluminum one piece reflector, self flanged with clear specular Alzak low iridescent finish. Reflector is screw mounted for positive attachment to socket assembly. Standard flat flange is painted white. Optional polished flange matching reflector finish available, add FF to catalog number.

5. **Baffle** - Precision machined .051 aluminum with deep grooves to minimize aperture glare, anodized matte black or matte white finish. Standard flat flange is painted white. Optional black flange available, add FF to catalog number.

6. **Sockets** - CFM42W/GX24q, CFM32W/GX24q, CFM26W/GX24q, CFM18W/GX24q, horizontally mounted 4 pin plug-in type. Socket assembly rotates 90° to allow for alignment of lamps and reflector within fixture, for design flexibility. (Lamps ordered separately.)

7. **Junction box** - Extra large 43.75-cubic inch 16 gauge galvanized steel with snap-on covers and ground wire riveted to frame. Approved for through wiring with up to 8 #12 AWG conductors.

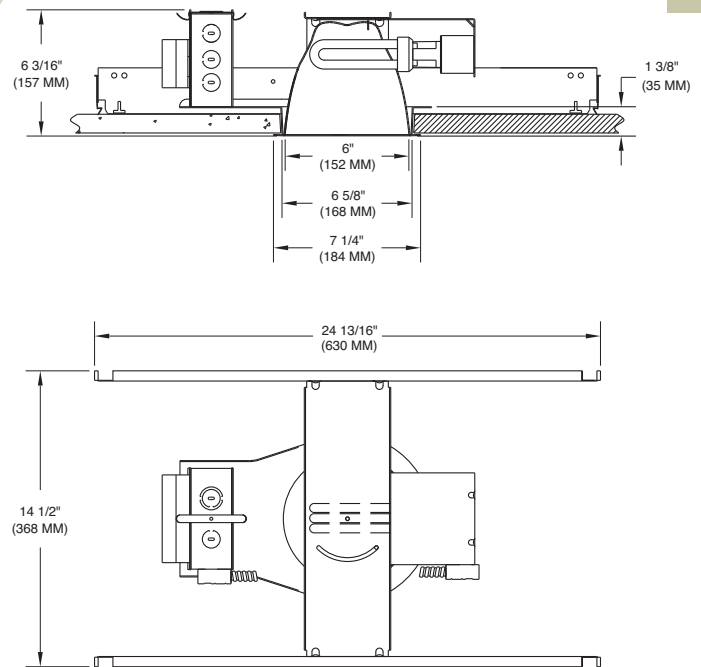
8. **Optional emergency system** - Emergency system includes battery, electronic circuitry, charger and test/monitor plate with test switch and charging indicator light. Test/monitor plate may be installed in the ceiling near fixture or other remote location. Operates appropriate lamp wattage for a minimum of 90 minutes following power failure. Emergency system complies with NFPA life safety code, OSHA and NEC. Suitable for dry locations.

9. **U.L. Listed** - For use in damp locations and approved for Through Branch Circuit Wiring. I.B.E.W. union made.

☼ Canadian Specifications may vary from these shown, consult Canadian Division.



6



CATALOG SYSTEM AND OPTIONS

EXAMPLE OF COMPLETE CATALOG NUMBER: **OM61H42PLT-CS-120/277**

OMEGA Apr.	No. of Lamps	Lamps Position	Lamp (by others)	Reflector Option	Finish	Options	Sloped Ceiling Adapter Angle	Supply Voltage
OM6	1	H	32PLT Horizontal 42 PLT Triple Tube CFL 32 PLT Triple Tube CFL 26 PLT Triple Tube CFL 18 PLT Triple Tube CFL	BB Black Baffle	CS Clear Specular CSS Clear Semi-Specular HZ Haze GS Gold Specular WT Wheat PW Pewter BK Black BZ Bronze WH White FCS Faceted Clear Specular FCSS Faceted Clear Semi Specular FF Finish Flange (as suffix to color)	DX2 EM Emergency IE Integral Emergency FZ120 Fusing FZ277 Fusing FZ347 Fusing CP Chicago Plenum Q1031 Flat Bar Hangers SA6 Sloped Ceiling Adpt. DL1 Dimming, Lutron Compact SE, 120v DL2 Dimming, Lutron Compact SE, 277v DX1 Dimming, Advance Mark X, 120v DX2 Dimming, Advance Mark X, 277v CL Clear Lens PL Prismatic Lens FL Fresnel Lens	5 10 15 20 25 30	120/277 120/277 347 *



FIVE YEAR
Warranty

OMEGA LIGHTING: 776 South Green St., Tupelo, MS 38804 Phone 662.842.7212 FAX 662.841.5501

Omega Lighting is a Philips group brand



OM61H42PLT-CS

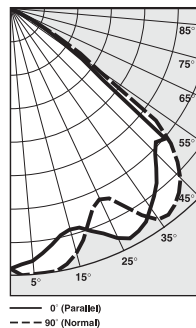
Photometric Data

Clear Specular Reflector

Report Number: 20716
 Lamp: (1)CFM42W
 Total Lumens: 3200
 Fixture Efficiency: = 53.9%
 IES File: F20716.IES
 S/MH Ratio = 1.4, 1.5
 Beam Angle: 106.85

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	23.0	14-10
10	12.4	20-3
12	7.7	25-7
14	5.3	30-12
16	3.8	36-5

DISTRIBUTION CURVE



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	
75	0	0	93
65	37	24	1155
55	235	292	7350
45	549	645	13509
35	654	690	
25	678	564	
15	613	680	
5	679	714	
0	697	697	

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80			70			50		
	50	30	50	30	50	30	50	30	50
0	64	64	63	63	59	59			
1	57	56	56	55	55	53			
2	54	48	51	48	48	46			
3	46	42	46	42	44	41			
4	41	38	40	36	40	36			
5	38	33	36	33	35	33			
6	34	29	34	28	33	28			
7	30	27	30	26	29	26			
8	28	23	28	23	27	23			
9	26	22	26	22	25	20			
10	23	20	23	20	23	20			

OM61H32PLT-CS

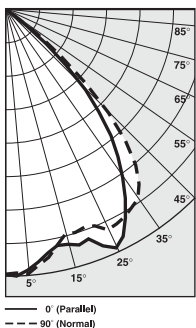
Photometric Data

Clear Specular Reflector

Report Number: 21516
 Lamp: (1)CFM32W
 Total Lumens: 2400
 Fixture Efficiency: = 55.9%
 IES File: F 21516.IES
 S/MH Ratio = 1.3, 1.3
 Beam Angle: 89.61

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	25.5	10-11
10	13.7	14-11
12	8.5	18-10
14	5.8	22-10
16	4.2	26-10

DISTRIBUTION CURVE



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	
75	0	0	0
65	0	0	0
55	30	53	837
45	332	426	7513
35	597	674	
25	766	708	
15	708	678	
5	762	773	
0	771	771	

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80			70			50		
	50	30	50	30	50	30	50	30	50
0	51	51	50	50	48	48			
1	47	46	46	45	45	44			
2	44	42	43	42	42	40			
3	41	38	40	38	39	37			
4	38	35	37	35	36	34			
5	35	32	34	32	34	31			
6	32	30	32	28	31	29			
7	30	27	30	27	29	27			
8	27	25	27	24	27	24			
9	25	22	25	22	24	22			
10	23	20	23	20	22	20			

OM61H26PLT-CS

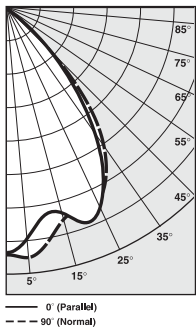
Photometric Data

Clear Specular Reflector

Report Number: 2762
 Lamp: (1)CFM26W
 Total Lumens: 1800
 Fixture Efficiency: = 47.5%
 IES File: EY3495.IES
 S/MH Ratio = 1.2, 1.2
 Beam Angle: 80.71

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	19.7	9-4
10	10.6	12-8
12	6.6	16-1
14	4.5	19-6
16	3.3	22-11

DISTRIBUTION CURVE



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	0
75	0	0	0
65	0	0	0
55	25	15	694
45	173	198	4483
35	378	411	
25	530	516	
15	495	512	
5	554	607	
0	595	595	

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80			70			50		
	50	30	50	30	50	30	50	30	50
0	56	56	55	55	52	52			
1	52	51	51	50	49	48			
2	48	46	47	45	46	44			
3	44	42	44	41	43	41			
4	41	38	40	38	39	37			
5	38	35	37	34	36	34			
6	35	32	35	32	34	31			
7	32	29	32	29	31	29			
8	29	26	29	26	29	26			
9	27	24	27	23	26	23			
10	25	21	24	21	24	21			

OM61H18PLT-CS

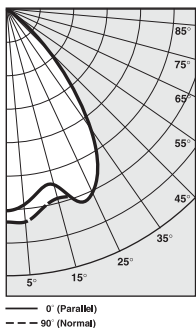
Photometric Data

Clear Specular Reflector

Report Number: 2771
 Lamp: (1)CFM18W
 Total Lumens: 1250
 Fixture Efficiency: = 51.4%
 IES File: EY3493.IES
 S/MH Ratio = 1.2, 1.2
 Beam Angle: 80.26

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	14.6	9-3
10	7.5	12-7
12	4.9	16-0
14	3.3	19-4
16	2.4	22-9

DISTRIBUTION CURVE



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	0
75	0	0	0
65	0	0	0
55	16	2	438
45	135	113	3053
35	314	293	
25	427	402	
15	365	404	
5	414	454	
0	441	441	

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80			70			50		
	50	30	50	30	50	30	50	30	50
0	61	61	59	59	57	57			
1	56	55	55	54	53	52			
2	52	50	51	49	50	48			
3	48	46	48	45	46	44			
4	45	42	44	41	43	40			
5	41	38	41	38	40	37			
6	38	35	38	35	37	34			
7	35	32	35	32	34	31			
8	32	29	32	29	31	28			
9	29	26	29	26	29	26			
10	27	24	27	23	26	23			

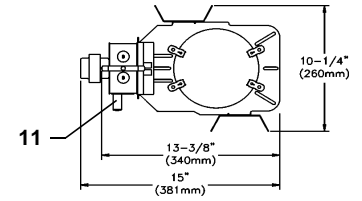
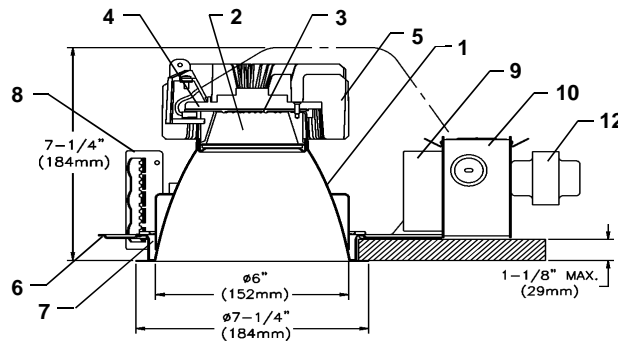
*Readings at working plane, 2'6" above floor. Beam Angle and Diameter Cutoff at 50% of max. Candlepower Coefficients used at effective reflectances of: 70% Ceiling, 50% Walls, 20% Floor

To convert values for optional reflector colors, multiply by:
 Gold .90 Bronze .82 Pewter .87

Additional photometric test files are available @ omegalighting.com

Downlight

Ceiling Opening: 6-5/8" (168mm)



For complete fixture order: Trim Kit + Frame-In Kit. Sold Separately.

Light Engine	Lumen	CCT	Basic Finish	Frame-in Kit	Wattage	Input Voltage
C6L1520DL27KM	1500/2000lm	2700K	CCLW Comfort Clear /	C6L15N1	28W	120V
C6L1520DL30KM	1500/2000lm	3000K	White Painted Integral Flange	C6L15N2	28W	277V
C6L1520DL35KM	1500/2000lm	3500K	CCLP Comfort Clear /	C6L15N1-347*	28W	347V*
C6L1520DL40KM	1500/2000lm	4000K	Polished Integral Flange	C6L20N1	39W	120V
			See Options for other finish	C6L20N2	39W	277V
				C6L20N1-347*	39W	347V*
ex: C6L1520DL30KMCCLP	1500/2000lm	3000K	Comfort Clear /	Note: Remodeler or Retrofit see specification sheet: C6L1520R, CUL1520J, CUL1520S.		
			Polished Integral Flange	* With Step-Down transformer		

Features

- Aperture Cone:** Provides 50° visual cutoff to source and image.
- Optical Mixing Chamber:** Remote phosphor technology provides increased efficiency and color stability. Phosphor lens assembly positioned in front of LED array converts blue light to white and produces a wide even pattern of diffused light without bright spots created by individual LEDs. Uniform phosphor coating provides consistent, stable color with a shift of no more than +/- 100K over life. Mixing chamber redirects scattered light back out through the emitting aperture.
- LED Board:** Array of high brightness royal blue LEDs.
- Power connection:** Attaches to LED array via push-in connector. Removable cover provides access.
- Thermal Management:** Proprietary heat sink design maintains junction temperature for consistent, reliable performance.
- Mounting Frame:** Galvanized steel.
- Retaining Springs:** Rust resistant springs simplify reflector/housing removal for inspection and maintenance.
- Mounting Brackets:** 16 ga. steel. Use 18" (457mm) mounting bars (optional) or with standard 3/4" (19mm), 1-1/2" (38mm) lathing channels (by others) or 1/2" (13mm) tubing (by others). Adjust vertically from inside of fixture.
- Electronic Driver:** 120V or 277V 50/60 Hz.; overload and short circuit protected; thermal regulation to protect against overheating; sound rating "A", -20°C minimum starting temperature. Maximum operating temperature 70°C. **Dimmable with 0-10V dimmer.**
- Junction Box:** 0.059" (16 ga) galvanized steel. UL listed for 8 No. 12 AWG, 90° C through branch circuit conductors. Allows inspection from below.
- Thermal Protector:** Protect against unauthorized use of insulation.
- Step down:** From 347V to 120V.

Options

For availability, consult your Lightolier representative.

- CCLFT+ Comfort Clear / Flangeless
 - CCDFT+ Comfort Clear Diffuse / Flangeless
 - CCDP Comfort Clear Diffuse / Polished Integral Flange
 - CCDW Comfort Clear Diffuse / White Painted Integral Flange
 - CCZFT+ Comfort Champagne Bronze / Flangeless
 - CCZP Comfort Champagne Bronze / Polished Integral Flange
 - CCZW Comfort Champagne Bronze / White Painted Integral Flange
 - WHFT+ White / Flangeless
 - WHW White / White Painted Integral Flange
- + Accessory Ring CA6FMR recommended.

Accessories

- 1950 set of 2 Mounting bars 18" (457 mm)
- 1951 set of 2 Mounting bars 30" (762 mm)
- 1956 set of 4 T-Bar Anchor Clips
- 7927 Slope Ceiling Adaptor ; see sheet 7920

Nominal Wattage	Input Voltage	Input Frequency	Input Current	LED drive Current	Input Power	THD	Power Factor
28W	120V	50/60Hz	0.25A	350mA	28W	<1%	>0.9
	277V		0.11A		33W		>0.9
	347V		0.10A				>0.9
39W	120V	50/60Hz	0.36A	520mA	39W	<1%	>0.9
	277V		0.17A		49W		>0.9
	347V		0.15A				>0.9

Dimming

See LED-DIM specification sheet

Rated Life

1500lm - 60,000 hours at 70% lumen maintenance (L70)
 2000lm - 57,000 hours at 70% lumen maintenance (L70)

Markings

cULus Listed, suitable for wet locations. 5 years warranty.

Canlyte

www.canlyte.com
 3015 Louis-Amos, Lachine, Québec H8T 1C4 • (514) 636-0670 • (514) 636-0460

Job Information

Type:

Job Name:

Cat. No.:

Lamp(s):

Notes:

1500 LM, 3000K, CL FINISH TRIM

Candlepower Distribution	ANGLE	MEAN CP	LUMENS
	0	1672	
	5	1625	153
	10	1551	
	15	1477	417
	20	1405	
	25	1182	501
	30	612	
	35	313	205
	40	139	
	45	32	35
	50	3	
	55	1	1
	60	1	
	65	0	0
	70	0	
	75	0	0
	80	0	
	85	0	0
	90	0	

Trim/Frame:
C6L1520DL30KMCLW/C6L15N1

Output lumens: 1312 lm

Correlated Color Temp¹: 3000K

Input Watts²: 26.6 w

Efficacy³: 49.3 lm/w

CRI⁴: 78

Spacing Criterion: 0.8

CEILING	80%				70%				50%				30%				0%
	WALL	70	50	30	10	50	10	50	10	50	10	50	10	50	10	0	
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%																
0	119	119	119	119	116	116	111	111	106	106	100						
1	114	111	109	107	109	105	105	102	101	99	94						
2	109	104	100	97	102	96	99	94	96	92	89						
3	104	98	93	89	96	89	94	87	91	86	83						
4	99	92	87	83	91	82	89	81	87	80	78						
5	94	87	81	77	86	77	84	76	82	76	73						
6	90	82	76	72	81	72	80	71	78	71	69						
7	86	77	72	68	77	68	75	67	74	67	65						
8	82	73	68	64	73	64	72	63	71	63	62						
9	78	69	64	60	69	60	68	60	67	60	58						
10	75	66	60	57	66	57	65	57	64	56	55						

ZONAL LUMENS AND PERCENTAGES		
ZONE	LUMENS	%LUMINAIRE
0-30	1071	81.6%
0-40	1275	97.2%
0-60	1312	100.0%
0-90	1312	100.0%

Single Unit Data		
Height to Lighted Plane	Initial Footcandles	Beam Diameter
5'	67	5'
6'	46	6'
7'	34	7'
8'	26	8'
9'	21	10'

Multiple Unit Data - RCR 2		
Spacing	Initial Footcandles	Watts/Sq. Ft.
5'	60.5	1.18
6'	39.7	0.77
7'	28.4	0.55
8'	23.6	0.46
9'	18.9	0.37

38'x38'x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

CERTIFIED TEST REPORT NO. F10018³

2000 LM, 3000K, CL FINISH TRIM

Candlepower Distribution	ANGLE	MEAN CP	LUMENS
	0	2298	
	5	2233	210
	10	2130	
	15	2028	573
	20	1931	
	25	1630	690
	30	843	
	35	431	282
	40	191	
	45	44	48
	50	4	
	55	2	2
	60	1	
	65	1	1
	70	0	
	75	0	0
	80	0	
	85	0	0
	90	0	

Trim/Frame:
C6L1520DL30KMCLW/C6L20N1

Output lumens: 1805 lm

Correlated Color Temp¹: 3000K

Input Watts²: 39.5 w

Efficacy³: 45.7 lm/w

CRI⁴: 78

Spacing Criterion: 0.8

CEILING	80%				70%				50%				30%				0%
	WALL	70	50	30	10	50	10	50	10	50	10	50	10	50	10	0	
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%																
0	119	119	119	119	116	116	111	111	106	106	100						
1	114	111	109	107	109	105	105	102	101	99	94						
2	109	104	100	97	103	96	99	94	96	92	89						
3	104	98	93	89	96	89	94	87	91	86	83						
4	99	92	87	83	91	82	89	81	87	80	78						
5	94	87	81	77	86	77	84	76	82	75	73						
6	90	82	76	72	81	72	80	71	78	71	69						
7	86	77	72	68	77	68	75	67	74	67	65						
8	82	73	68	64	73	64	72	63	71	63	62						
9	78	69	64	60	69	60	68	60	67	60	58						
10	75	66	60	57	65	57	65	57	64	56	55						

ZONAL LUMENS AND PERCENTAGES		
ZONE	LUMENS	%LUMINAIRE
0-30	1472	81.5%
0-40	1754	97.2%
0-60	1805	100.0%
0-90	1805	100.0%

Single Unit Data		
Height to Lighted Plane	Initial Footcandles	Beam Diameter
5'	92	5'
6'	64	6'
7'	47	7'
8'	36	8'
9'	28	10'

Multiple Unit Data - RCR 2		
Spacing	Initial Footcandles	Watts/Sq. Ft.
5'	83.2	1.75
6'	54.6	1.15
7'	39.0	0.82
8'	32.5	0.68
9'	26.0	0.55

38'x38'x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

CERTIFIED TEST REPORT NO. F10019³

¹Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
²Wattage controlled to within 65%.
³Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.
⁴Color Rendering Index within +/- 2%.



Canlyte www.canlyte.com
 3015 Louis-Amos, Lachine, Québec H8T 1C4
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LED FTD DL/5

recessed LED downlight

TYPE 'DLA' (ALT)

#LED-FTD-DL/5-1100-4000-277-VOL

LED
0-070

FEATURES

LED FTD DL/5 is a 5" aperture downlight employing LED technology. Fixture is only 7" deep. Precise reflector design yields an optical efficiency of 90%, minimizes aperture brightness and provides a shielding angle of 40°.

Fixture is powered by an integral Philips Fortimo DLM remote phosphor LED module, dimmable to 10% with a 0-10 volt dimmer, with a CRI of 80 and a 5-year warranty from Philips. Fixture may be specified with modules of 1100, 1300 or 2000 lumen light output and with 3000K, 3500K or 4000K color. Refer to the performance tables on the reverse for system wattages and luminaire efficacies.

Other features include:

- life: 50,000 hours at 70% of initial light output (IESNA LM80-2008)
- operational range: tolerates temperatures as low as -20° C (-4°F)
- UV free: no UV emissions to jeopardize fabrics, paper or paintings
- environmentally safe: no mercury disposal problems


LED FTD DL/5 modules include an integral plastic shield, making the fixture suitable for food service areas and other applications requiring protection from lamp failure.

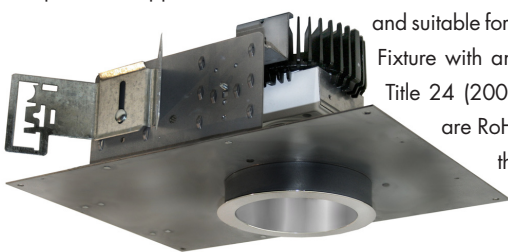
Reflector is available in two clear natural aluminum finishes – semi-specular Alzak (C) or slightly diffuse (V) – as well as champagne gold and black. Other reflector finishes are available on special order.

LED FTD DL/5 includes a pair of mounting bars (3/4" x 27" C channel). Specialty bars for wood joist and T-bar installations are also available.

APPLICATIONS

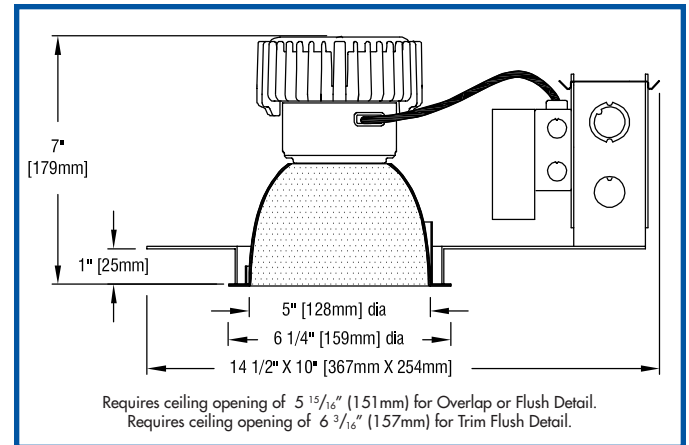
Fixture is recommended for downlighting in commercial, retail and residential spaces.

Fixture is  listed for Damp Location. Fixture is prewired with thermal protector, approved for ten #12 wire 90° branch circuit pull-through wiring and suitable for use in a fire rated ceiling. Fixture with an 1100 lumen module is Title 24 (2008) compliant. All fixtures are RoHS compliant. Removal of the reflector allows access to the junction box.



FULLY SUSTAINABLE

LED FTD DL/5 is fully sustainable. Both critical components – the LED module (diode array) and the driver (power conditioner) – can be replaced through the aperture with a screwdriver. Both components are, and will remain, available from Edison Price Lighting.



PRODUCT CODE

For complete product code, list basic unit and select one item from each following box.

Basic Unit LED-FTD-DL/5

NOTE: Standard driver is dimmable to 10% with a 0-10 volt dimmer.

Light Output	
1100 lumens	1100
1300 lumens	1300
2000 lumens	2000

Light Engine Color	
3000K (CRI 80)	3000
3500K (CRI 80)	3500
4000K (CRI 80)	4000

Voltage	
120 volt service	120
277 volt service	277

Reflector Color and Detail	Overlap Flange	Flush	Trim Flush*
Semi-specular Clear	COL	CFL	CTF
Slightly diffuse Clear	VOL	VFL	VTF
Champagne Gold	GOL	GFL	GTF
Black	BOL	BFL	BTF

Other reflector finishes available on special order.
Overlap Flange continues reflector finish. White painted flanges and custom painted flanges are available on special order. Add WF (white flange) or CCF (custom color flange).

*Trim Flush reflector trim requires the use of a plaster ring Accessory (see below).

OPTIONS

Specify by adding to the basic unit.

Dimmable ..standard driver is dimmable to 10% with a 0-10 volt dimmer.

Emergency battery pack operates light engine in event of power outage. Fixture footprint increases to 16 5/8" x 10" (422 x 254mm). 11" (279mm) depth required to remove EM pack through aperture. – EM

ACCESSORIES

Specify as a separate line item.

Plaster ring allows use of Trim Flush (-TF) reflector in sheetrock ceiling; 6 3/16" (157mm) dia hole is required.....TF RING/5

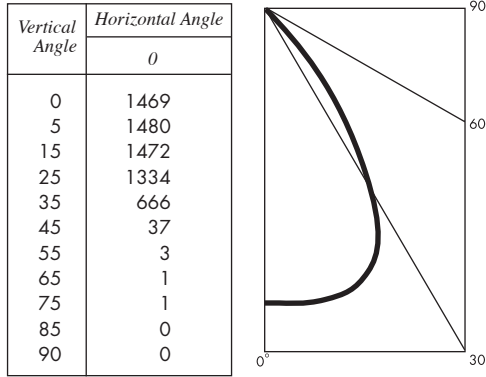


PHOTOMETRIC REPORT (tested per IESNA LM-79-2008)

(LTL) Report No. 21228 and 21291. Original Luminaire Testing Laboratories, Inc. (LTL) test report furnished upon request.

Luminaire recessed LED round downlight with aluminum reflector
 Lamp Philips LED Fortimo DLM 2000-38W/830UL, 3000K CCT
 Spacing Criteria 1.0
 Luminaire light output 1631 lumens
 Luminaire efficacy 42.6 lumens per watt

CANDLEPOWER DISTRIBUTION (Candela)



LUMINAIRE LIGHT OUTPUT AND EFFICACY

Color	1100 lumens light engine			1300 lumens light engine			2000 lumens light engine		
	Luminaire Light Output	Luminaire Efficacy	System Wattage	Luminaire Light Output	Luminaire Efficacy	System Wattage	Luminaire Light Output	Luminaire Efficacy	System Wattage
3000K	995*	52.3	19	1165*	48.5	24	1631	42.6	38
3500K	995*	55.3	18	1165*	50.7	23	1631	45.3	36
4000K	995*	58.5	17	1165*	53.0	22	1631	46.6	35

*estimated values

LIGHT OUTPUT MULTIPLIER

1100 lumens light engine	1300 lumens light engine	2000 lumens light engine
.61 (estimated)	.71 (estimated)	1

DRIVER INFORMATION *UL Class 2, dry and damp location*

Voltage	120	277
Input Watts (1100/1300/2000 lumens), 3000K	19/24/38	19/24/38
Input Current (A) (1100/1300/2000 lumens)	.16/.20/.32	.07/.09/.14
Output Current (mA)	200-700	200-700
Output Voltage (Vdc)	25-56	25-56
Min. Power Factor	>0.9	>0.9
Operating Temperature Range (F)	-4 to 131	-4 to 131

DIMMING INFORMATION

Dimming Method	Dimming Range (%)	Min. Output Power
0 - 10V	10% -100%	15

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0 - 30°	1155	70.8
0 - 40°	1566	96.0
0 - 60°	1629	99.9
0 - 90°	1631	100.0
90 -180°	0	0.0
0 -180°	1631	100.0

LUMINANCE DATA

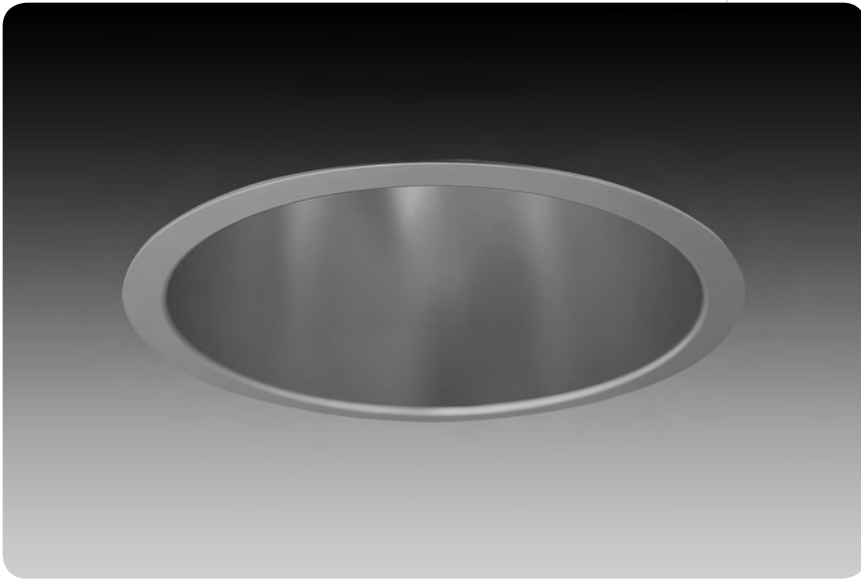
Vertical Angle	Candelam ²
45	4200
55	386
65	246
75	230
85	246

COMPATIBLE DIMMERS *Please verify with vendors*

CONTROL MANUFACTURER	WALLBOX DIMMER	POWER BOOSTER AVAILABLE
DOUGLAS LIGHTING CONTROLS	WPC-5721	
ENTERTAINMENT TECHNOLOGY	Tap Glide TG600FAM120(120V) Tap Glide Heatsink TGH1500FAM120 (120V) Oasis OA2000FAMU (120/277V)	
HONEYWELL, INC.	EL7315A1019 and EL7315A1009	EL7305A1010 (optional)
HUNT DIMMING	Preset slide: PS-010-IV-120V and PS-010-WH-120V Preset slide: PS-010-3W-IV-120V and PS-010-3W-WH-120V Preset slide: PS-010-IV-277V and PS-010-WH-277V Preset slide: PS-010-3W-IV-277V and PS-010-3W-WH-277V Preset slide, controls FD-010: PS-IFC-010-IV and PS-IFC-010-WH-120/277V Preset slide, controls FD-010: PS-IFC-010-3W-IV and PS-IFC-010-3W-WH-120/277V Remote mounted unit: FD-010-120V and FD-010-277V	
LEHIGH ELECTRIC PRODUCTS CO.	Solitaire	PBX
LEVITON LIGHTING CONTROLS DIV.	Leviton Centura Fluorescent Control System IllumaTech™ IP7 Series	CN100 PE300
LIGHTOLIER CONTROLS	Sunrise Preset slider ZP600FAM-120 (120V) Momentum Preset slider MP1500FAM-120 (120V) Vega Slider V2000FAMU (120-277V)	
LITHONIA CONTROLS	ISD BC SLD LPCS Digital Equinox (DEQ BC)	RDM FC
LUTRON ELECTRONICS CO., INC.	Visit www.lutron.com/advance for the latest control information and selection	
PDM ELECTRICAL PRODUCTS	WPC-5721	
STARFIELD CONTROLS	TR61 with DALI interface port	RT03 DALI.net Routers
THE WATT STOPPER, INC.	LS-4 used with LCD-101 and LCD-103	

6" – led downlight

id®



features

LED module features remote phosphor technology enabling a high system efficacy and minimum 80 CRI

Future-proof LED system design maintains form factor, lumen output, and thermal characteristics of module and driver as technology advances, allows for easy replacement and upgrades

1100, 1300 & 2000 lumen LED modules available.

Rated life is 50,000 hours at 70% lumen maintenance (L70)

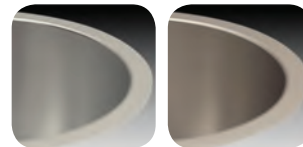
5 year limited warranty.

Constant current driver senses LED module characteristics and delivers the designed output regardless of color temperature

Flicker-free 0-10V analog dimming capability standard

Self-flanged Clear Diffuse reflector cone features superior brightness control and 50 degree cutoff to light source and its image

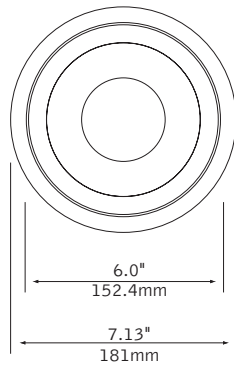
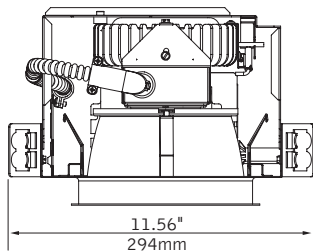
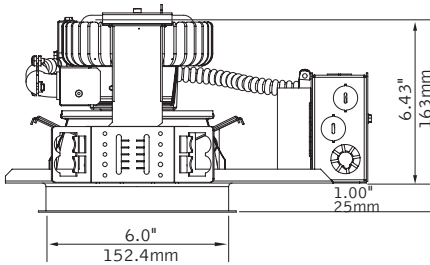
reflector options



clear diffuse

warm diffuse

dimensional data

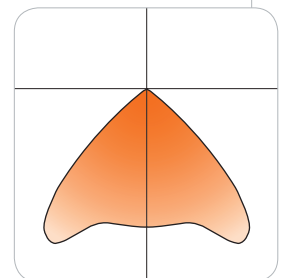


performance

38W, 3000K, 2000 Lumen LED Module
 Clear Diffuse Reflector
 Total Luminaire Output: 1684lms
 Photometric performance is measured in accordance with IESNA LM-79.



Use 1300 lumen LED downlight in place of a 6" 32W compact fluorescent

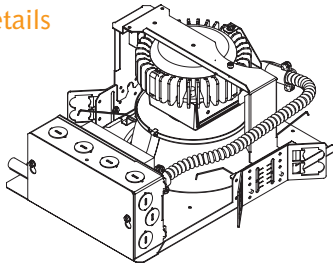


Visit focalpointlights.com for complete photometric data.

fixture:

project:

details



housing specifications

led system

Powered by Philips' Fortimo™ LED DLM, Advance Xitanium LED driver and communication cable. Aluminum heat sink provides appropriate thermal management. System is future-proof, allowing for easy replacement and upgrades as LED technology advances. LED system rated for 50,000 hours at 70% lumen output (L70).



led module

Philips' Fortimo™ LED DLM features patented remote phosphor technology for superior efficacy and color consistency. Module may be specified in 3000K, 3500K or 4000K, CRI>80.

construction

Thermally protected housing for new construction applications. Insulation to be kept 3" away from housing. Butterfly brackets allow mounting to 1/2 emt. Order bar hangers as an accessory. Die-cast aluminum heat sink designed for maximum thermal dissipation. Die-formed housing and integral junction box with (7) 1/2" pry outs. Accommodates ceiling thicknesses up to 1". For thicker ceiling consult factory. Fixture will not exceed 5 lb.

electrical

Advance Xitanium multi-volt 120V-277V constant current driver includes standard 0-10V analog dimming. Power factor >.9 typical, 50/60Hz., 200-700mA, input power range, 19.9—37.7w. 120-277v<15% THD @ 100% power <20% THD when dimming. "Thermal Guard" offers protection from overheating in abnormal conditions; driver will dim DLM if necessary. Voltage specific thermal protectors included standard. 2000 lumen versions integrate fanless active cooling solution designed for operation by the Fortimo LED system.

Lamp	Temp	System Watts	Module Output	Delivered Lumens	Watt
11LED	3000K	19.9	1100	947	48
13LED	3000K	23.7	1300	1114	47
20LED	3000K	37.7	2000	1684	45

*Lumen rating based on Clear Diffuse reflector cone

*Lumen output may vary +/- 5%

*20LED system watts include active cooling.

*Module output is identical for all available color temperatures.

dimming

0-10V DC low voltage dimming capability is included with the standard Advance Xitanium driver. Dimming range is to 10% light output, some dimmers may require high and/or low end trim adjustment for proper function. Consult the [ID LED Technical Guide](#) for compatible dimmers and control systems.

labels

UL and cUL Listed. Lensed trims suitable for Wet Location.

trim specifications

aesthetics

Parabolic reflector cone ensures glare free optics. Reflector is .050 spun aluminum. Torsion springs pull trim tight to the ceiling with no visible fasteners within the trim.

Overlap trims are self-flanged. Non-painted trim matches reflector finish. White painted flange may also be specified.

optics

50-degree cut-off to light source and its image.

housing ordering

housing series	FL6D	<u>FL6D</u>
ID LED Module	FL6D	
lamp		
1100 Lumen LED Module	11LED	
1300 Lumen LED Module	13LED	
2000 Lumen LED Module	20LED	

lamp temperature

Include 3000K Module	L30	
Include 3500K Module	L35	
Include 4000K Module	L40	

voltage

120V	120	
277V	277	

trim type

Round Overlap	RO	<u>RO</u>
---------------	----	-----------

housing type

Thermally Protected, Non-IC	T	<u>T</u>
-----------------------------	---	----------

factory options

Chicago Plenum	CP	
(not available with 2000 Lumen Module)		

trim ordering

aperture

6" Round Aperture	L6	<u>L6</u>
-------------------	----	-----------

trim type

Round Overlap	RO	<u>RO</u>
---------------	----	-----------

optic

Downlight	DN	
Regress Frosted Lens (wet location)	RL	

color

Clear Diffuse	CD	
Warm Diffuse	WD	

flange finish

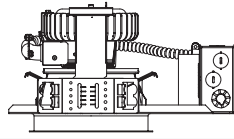
Non-Painted	NP	
White Painted	WP	

a complete unit consists of two line items, housing and trim

example:

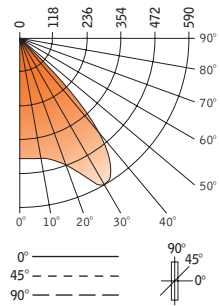
FL6D-13LED-L30-120-RO-T
L6-RO-DN-CD-NP

6" – led downlight
id®



Filename: FL6DNCD11LEDL30.IES
Catalog #: FL6D-11LED-L30-R0-T, L6-R0-DN-CD
Photometric Report #: 15865

CANDLEPOWER DISTRIBUTION



Vertical Angle	0°	Zonal Lumens
0°	417	
5°	420	40
15°	436	124
25°	533	247
35°	551	346
45°	208	161
55°	24	21
65°	6	6
75°	2	2
85°	0	0
90°	0	0

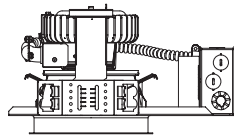
LUMEN SUMMARY

Zone	Lumens	% Fixt
0°-30°	411	43.4
0°-40°	756	79.9
0°-60°	938	99.1
0°-90°	947	100.0
Total Luminaire	0°-90° 947	100.0

Spacing Criteria:
1.6

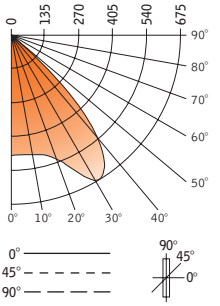
Go to www.focalpointlights.com for additional photometric data.

6" – led downlight
id®



Filename: FL6DNCD13LEDL30.IES
Catalog #: FL6D-13LED-L30-R0-T, L6-R0-DN-CD
Photometric Report #: 15866

CANDLEPOWER DISTRIBUTION



Vertical Angle	0°	Zonal Lumens
0°	483	
5°	483	46
15°	498	141
25°	599	277
35°	649	408
45°	267	206
55°	28	25
65°	8	8
75°	2	3
85°	0	0
90°	0	0

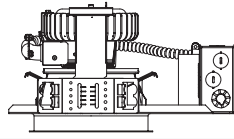
LUMEN SUMMARY

Zone	Lumens	% Fixt
0°-30°	464	41.7
0°-40°	872	78.3
0°-60°	1104	99.1
0°-90°	1114	100.0
Total Luminaire	0°-90° 1114	100.0

Spacing Criteria:
1.7

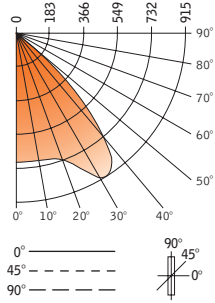
Go to www.focalpointlights.com for additional photometric data.

6" – led downlight
id®



Filename: FL6DNCD20LEDL30.IES
Catalog #: FL6D-20LED-L30-R0-T, L6-R0-DN-CD
Photometric Report #: 21561

CANDLEPOWER DISTRIBUTION

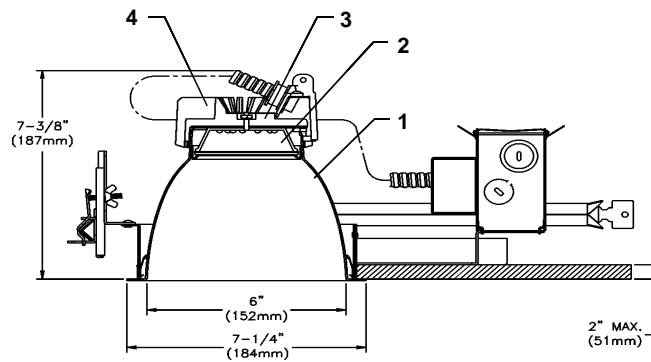


Vertical Angle	Zonal Lumens
0°	714
5°	714 68
15°	721 206
25°	820 385
35°	917 561
45°	492 371
55°	69 72
65°	17 17
75°	4 5
85°	0 0
90°	0

LUMEN SUMMARY

Zone	Lumens	% Fixt
0°-30°	686	39.1
0°-40°	1219	72.4
0°-60°	1662	98.7
0°-90°	1684	100.0
Total Luminaire	0°-90° 1684	100.0

Spacing Criteria:
1.4



For complete fixture order: Trim Kit + Frame-In Kit. Sold Separately.

Light Engine	Lumen*	CCT	Basic Finish	Frame-in Kit	Wattage	Input Voltage
C6L05DL27KW	500lm	2700K	CCLW Comfort Clear /	C6L05N1	10W	120V
C6L05DL30KW	500lm	3000K	White Painted Integral Flange	C6L05N2	10W	277V
C6L05DL35KW	500lm	3500K	CCLP Comfort Clear /	C6L05N1-347*	10W	347V*
C6L05DL40KW	500lm	4000K	Polished Integral Flange	C6L10N1	20W	120V
C6L10DL27KW	1000lm	2700K	See Options for other finish	C6L10N2	20W	277V
C6L10DL30KW	1000lm	3000K		C6L10N1-347*	20W	347V*
C6L10DL35KW	1000lm	3500K				
C6L10DL40KW	1000lm	4000K				
ex: C6L10DL30KWCCLP	1000lm	3000K	Comfort Clear / Polished Integral Flange			

Add "LD" for Lutron dimming available only for 20W frame
ex: C6L10N1LD
Add "Z10V" for 0-10V dimming **ex: C6L05N1Z10V**

Note: Remodeler or Retrofit see specification sheet: C6LR, CULJ, CULS.

*** With Step-Down transformer**

Note: Select Frame-in Kit and Light engine of the same wattage.

Features

- 1. Aperture Cone:** Provides 50° visual cutoff to source and image. Self-flanged in painted white, aperture-matching polished.
- 2. Optical Mixing Chamber:** Patented remote phosphor technology provides increased efficiency and color stability. Phosphor lens assembly positioned in front of LED array converts blue light to white and produces a wide even pattern of diffused light without bright spots created by individual LEDs. Uniform phosphor coating provides consistent, stable color with a shift of no more than +/- 100K over life. Mixing chamber redirects scattered light back out through the emitting aperture.
- 3. LED Board:** Array of 16 high brightness royal blue LEDs 20W or 8 for 10W.
- 4. Thermal Management:** Proprietary heat sink design maintains junction temperature for consistent, reliable performance and 50,000 hour lifetime at 70% lumen maintenance.

Electronic Driver: 120V or 277V 50/60 Hz.; overload and short circuit protected; thermal regulation to protect against overheating; sound rating "A"; -20°C (-4°F).

Nominal Wattage	Input Voltage	Input Frequency	Input Current	LED drive Current	Input Power ± 5%	THD	Power Factor
10W	120V	50/60Hz	0.083	350mA	10W	<5%	>0.9
	277V	50/60Hz	0.036	350mA	10W	<10%	>0.8
	347V*	60Hz	0.050	350mA	13W	<5%	>0.7
20W	120V	50/60Hz	0.167	350mA	20W	<5%	>0.9
	277V	50/60Hz	0.072	350mA	20W	<10%	>0.8
	347V*	60Hz	0.080	350mA	24W	<5%	>0.8

Options

Dimming- Capacity: See LED-DIM specification sheet.

For availability, consult your Lightolier representative.

- CCLFT+** Comfort Clear / Flangeless
- CCDFT+** Comfort Clear Diffuse / Flangeless
- CCDP** Comfort Clear Diffuse / Polished Integral Flange
- CCDW** Comfort Clear Diffuse / White Painted Integral Flange
- CCZFT+** Comfort Champagne Bronze / Flangeless
- CCZP** Comfort Champagne Bronze / Polished Integral Flange
- CCZW** Comfort Champagne Bronze / White Painted Integral Flange
- WHFT+** White / Flangeless
- WHW** White / White Painted Integral Flange

+ Accessory Ring CA6FMR recommended.

Markings

cULus Listed, suitable for wet locations. 5 years warranty.

Job Information	Type:
Job Name:	
Cat. No.:	
Lamp(s):	
Notes:	



6" LED Downlight

LF6LED

120V-277V
0-10V Dimming

DATE: _____ TYPE: DLA

FIRM NAME: _____

PROJECT: _____

LiteFrame®

Ceiling Cutout: 6 1/4"
Maximum Ceiling Thickness 1 1/4"
For conversion to millimeters,
multiply inches by 25.4
Not to Scale

APPLICATIONS:

Liteframe LF6LED is a 6" commercial grade LED downlight that utilizes remote phosphor technology to obtain color consistency, energy savings, and low maintenance costs. 50,000 hours minimum life up to 40°C (104° F) in open plenum applications.

HOUSING:

One-piece 22 gauge non-corrosive steel platform. Pre-wired J-box with snap-on cover for easy access. Snap-in connection from driver compartment allows easy installation of light engine/trim assembly without tools above or below the ceiling and can be upgraded to accommodate technology improvements. Approved for 8 (4 in/4 out) No. 12 AWG conductors rated for 90°C through wiring.

REFLECTOR:

High purity aluminum, Alzak, iridescence suppressed, semi-diffuse reflector. Self-trim standard. Painted white self-trim (WT) available as option.

LED LIGHT ENGINE:

The LF6LED uses the Philips Fortimo DLM LED Module with remote phosphor technology. This technology provides controlled color consistency from fixture to fixture. The system is designed for optimal life and lumen maintenance (50,000 hours at 70% lumen maintenance). Both reflector and light engine assembly are mechanically retained to housing. The light engine comes standard with 80 CRI in all Kelvin temperatures.

LED DRIVER:

The LF6LED utilizes the Philips Fortimo LED Driver specifically designed to optimize efficiency of the Fortimo DLM Module. Driver is designed to match the 50,000 hour minimum life expectancy of the system. Meets UL Class 2, inherent short circuit protection, self limited, overload protected. If critical temperatures are reached on driver or LED module, integrated thermal feedback loop will gradually reduce current to protect system life. Driver is universal 120V-277V.

DIMMING:

Comes standard with 0-10V dimming capability. Flicker-free dimming to 10%. See list of compatible dimmers on pg. 4.

INSTALLATION:

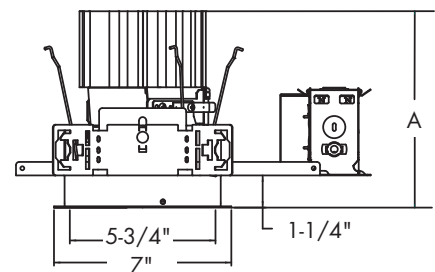
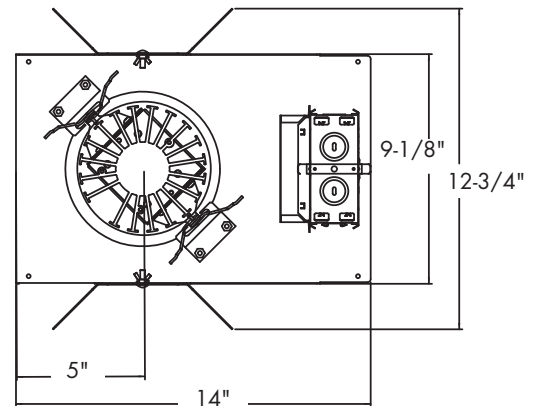
Light commercial bar hangers included. Universal adjustable mounting brackets also accept 1/2" EMT conduit or 1 1/2" or 3/4" lathing channel (by others) or Prescolite 24" bar hangers (B24 or B6). Wall wash orientation may be field adjusted in 90° increments to housing.

CERTIFICATIONS:

CSA certified to US and Canadian safety standards. Suitable for wet locations. EM is damp locations CSA US only. Approved for through wiring. Non-IC rated.

WARRANTY:

5 year warranty. See www.prescolite.com for details. Warranty for EM Battery handled directly through battery manufacturer.



	A
6LFLED5	6-3/4"
6LFLED7	7-3/4"

*See page 4 for WW line art

*See page 5 for EM line art

Order housing, reflector, and accessories separately

CATALOG NUMBER:

EXAMPLE: LF6LED - 6LFLED5 30K

HOUSING	VOLTAGE	OPTIONS	TRIM	LED COLOR TEMP	REF. FINISH	REF. COLOR	REF. OPTIONS	ACCESSORIES
<input type="checkbox"/> LF6LED 6" High Efficacy LED Housing with 0-10V Dimming to 10%	<input type="checkbox"/> Blank 120V-277V	<input type="checkbox"/> WW^{2,7} Wall Wash <input type="checkbox"/> EM^{3,6} Bodine BSL17C-C2 Battery Pack with integral test switch and indicator light	<input type="checkbox"/> 6LFLED5⁴ 6" Open Reflector/ Light Engine Assembly, 1100 lumen module <input type="checkbox"/> 6LFLED7⁵ 6" Open Reflector/ Light Engine Assembly, 2000 lumen module	<input type="checkbox"/> 30K 3000 Kelvin, 80 CRI <input type="checkbox"/> 35K 3500 Kelvin, 80 CRI <input type="checkbox"/> 40K 4000 Kelvin, 80 CRI	<input type="checkbox"/> Blank Alzak Semi-Diffuse	<input type="checkbox"/> Blank <input type="checkbox"/> CG Champagne Gold Alzak <input type="checkbox"/> BL Black Alzak <input type="checkbox"/> WE Wheat Alzak <input type="checkbox"/> LW Light Wheat Alzak <input type="checkbox"/> PW Pewter Alzak <input type="checkbox"/> WH¹ White Paint	<input type="checkbox"/> WT White Trim <input type="checkbox"/> TRG Trim Ring Gasket (factory installed) <input type="checkbox"/> WW^{2,7} Wall Wash <input type="checkbox"/> EM^{3,6} Bodine BSL17C-C2 Battery Pack with integral test switch and indicator light	<input type="checkbox"/> B24 Set of two(2) 24" bar hangers for T-bar ceilings <input type="checkbox"/> B6 Set of two (2) bar hangers for ceiling joist up to 24" centers <input type="checkbox"/> LFSC6^{3,7} 6" reflector screw cover <input type="checkbox"/> LFSC6 EM³ 6" reflector screw cover for EM <input type="checkbox"/> LG15^{7,8} Dual-Lite100VA Surface Wall Mount LiteGear Emergency Lighting Inverter <input type="checkbox"/> LG1R^{7,8} Dual-Lite100VA Recessed Wall Mount LiteGear Emergency Lighting Inverter <input type="checkbox"/> LG1T^{7,8} Dual-Lite100VA Recessed Ceiling T-Grid LiteGear Emergency Lighting Inverter <input type="checkbox"/> LG25^{7,8} Dual-Lite 250 VA Surface Wall Mount LiteGear Emergency Lighting Inverter

¹ Requires WT option
² WW option must be selected on both the housing and trim
³ Not compatible with WW
⁴ Phillips Fortimo 1100 Lm LED module
⁵ Phillips Fortimo 2000 Lm LED module
⁶ EM must be selected on both the housing and trim.
⁷ Not compatible with EM
⁸ See LFLED & LiteGear compatibility Matrix on page 5

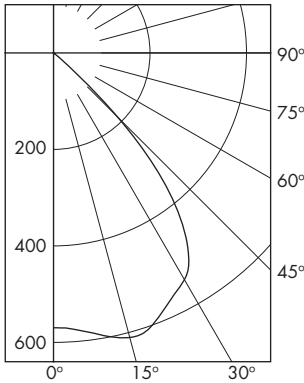
PHOTOMETRIC DATA

LiteFrame - 6" LF6LED Downlight

DRIVER DATA	LF6LED5 30K	LF6LED5 35K	LF6LED5 40K	LF6LED7 30K	LF6LED7 35K	LF6LED7 40K
Input Voltage	120-277V	120-277V	120-277V	120-277V	120-277V	120-277V
Input Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Input Current	0.146A (120v) 0.063 (277v)	0.156A (120v) 0.067 (277v)	0.137A (120v) 0.059 (277v)	0.30A (120v) 0.13 (277v)	0.28A (120v) 0.12 (277v)	0.28A (120v) 0.12 (277v)
Input Power	17.3W	18.5W	16.3W	36W	34W	33W
Constant Current Output	200-700mA	200-700mA	200-700mA	200-700mA	200-700mA	200-700mA
Power Factor	≥0.90	≥0.90	≥0.90	≥0.90	≥0.90	≥0.90
THD	<20%	<20%	<20%	<20%	<20%	<20%
EMI Filtering	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A
Operating Temperature	-20°C to 55°C	-20°C to 55°C	-20°C to 55°C	-20°C to 55°C	-20°C to 55°C	-20°C to 55°C
Dimming	0-10V	0-10V	0-10V	0-10V	0-10V	0-10V
Over-voltage, over-current, short-circuit protected						

LF6LED 6LFLED5 30K

LED Light Engine: 3000K, 80 CRI
System Wattage: 17.3W
Fixture Delivered Lumens: 890
Fixture Efficacy: 51
Spacing Criteria: 1.2



CANDELA DISTRIBUTION

DEG	CANDELA	LUMENS
0	541	
5	548	53
15	580	164
25	540	250
35	459	283
45	177	134
55	3	5
65	0	1
75	0	0
85	0	0
90	0	0

Test No. 3264

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

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	466	52.4
0-40	749	84.2
0-60	889	99.9
0-90	890	100.0
90-180	0	0.0
0-180	890	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average - 0°
45°	14936
55°	312
65°	0
75°	0
85°	0

COEFFICIENTS OF UTILIZATION Zonal Cavity Method

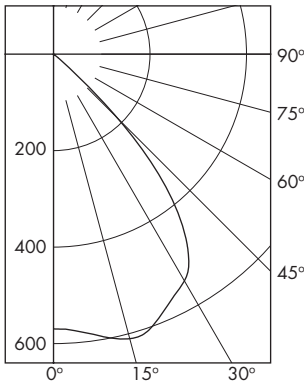
Room Cavity Ratio	% Effective Floor Cavity Reflectance																
	80%			70%			50%			30%			10%				
	20% Effective Floor Cavity Reflectance																
													% Wall Reflectance				
	70	50	30	10	70	50	30	10	50	30	10	50	30	10			
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94
2	107	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86
3	100	93	88	83	98	92	87	82	89	85	81	87	83	80	84	81	79
4	94	86	80	75	92	85	79	74	82	77	74	80	76	73	78	75	72
5	89	79	73	68	87	78	72	67	76	71	67	75	70	66	73	69	66
6	83	73	66	62	82	72	66	61	71	65	61	69	64	61	68	64	60
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51
9	69	59	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47
10	66	55	48	44	64	54	48	44	53	48	44	52	47	43	52	47	43

LF6LED 6LFLED5 30K

Test No. 3264

LF6LED 6LFLED5 35K

LED Light Engine: 3500K, 80 CRI
System Wattage: 18.5W
Fixture Delivered Lumens: 916
Fixture Efficacy: 50
Spacing Criteria: 1.2



CANDELA DISTRIBUTION

DEG	CANDELA	LUMENS
0	573	
5	584	56
15	606	170
25	562	259
35	469	289
45	179	136
55	3	4
65	1	1
75	0	0
85	0	0
90	0	0

Test No. 3332

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

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	486	53.0
0-40	775	84.6
0-60	915	99.9
0-90	916	100.0
90-180	0	0.0
0-180	916	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average -
45°	15105
55°	312
65°	141
75°	0
85°	0

COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Floor Cavity Reflectance																
	80%			70%			50%			30%			10%				
	20% Effective Floor Cavity Reflectance																
													% Wall Reflectance				
	70	50	30	10	70	50	30	10	50	30	10	50	30	10			
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94
2	107	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86
3	100	93	88	83	98	92	87	83	89	85	81	87	83	80	84	81	79
4	94	86	80	75	92	85	79	75	83	78	74	80	76	73	79	75	72
5	89	79	73	68	87	78	72	68	77	71	67	75	70	66	73	69	66
6	83	73	67	62	82	73	66	62	71	65	61	70	65	61	68	64	60
7	78	68	61	57	77	67	61	56	66	60	56	65	60	56	64	59	55
8	74	63	56	52	73	63	56	52	61	56	51	60	55	51	59	55	51
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44

LF6LED 6LFLED5 35K

Test No. 3332

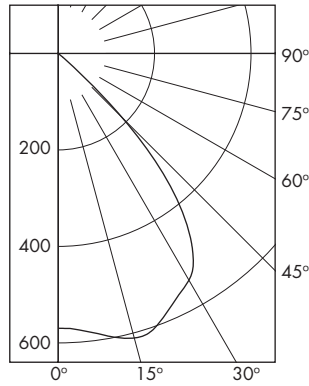


PHOTOMETRIC DATA

LiteFrame - 6" LF6LED Downlight

LF6LED 6LFLED5 40K

LED Light Engine: 4000K, 80 CRI
System Wattage: 16.3W
Fixture Delivered Lumens: 911
Fixture Efficacy: 55
Spacing Criteria: 1.2



CANDELA DISTRIBUTION

DEG	CANDELA	LUMENS
0	569	
5	580	56
15	602	169
25	560	258
35	467	288
45	178	135
55	3	4
65	1	0
75	0	0
85	0	0
90	0	0

Test No. 3333

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

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	483	53.0
0-40	771	84.6
0-60	911	99.9
0-90	911	100.0
90-180	0	0.0
0-180	911	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average -
45°	15021
55°	312
65°	141
75°	0
85°	0

COEFFICIENTS OF UTILIZATION Zonal Cavity Method

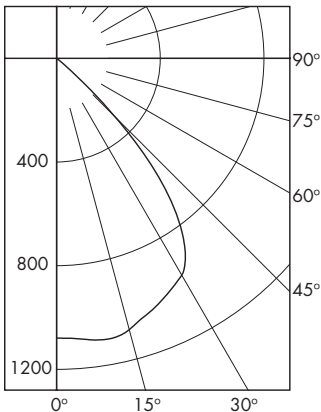
Room Cavity Ratio	% Effective Floor Cavity Reflectance																
	80%		70%		50%		30%		10%								
	20% Effective Floor Cavity Reflectance																
% Wall Reflectance																	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10			
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94
2	107	101	97	93	104	100	95	92	96	93	90	93	90	88	90	88	86
3	100	93	88	83	98	92	87	83	89	85	81	87	83	80	84	81	79
4	94	86	80	75	93	85	79	75	83	78	74	81	76	73	79	75	72
5	89	79	73	68	87	78	72	68	77	71	67	75	70	67	73	69	66
6	83	73	67	62	82	73	66	62	71	65	61	70	65	61	68	64	60
7	78	68	61	57	77	67	61	56	66	60	56	65	60	56	64	59	55
8	74	63	57	52	73	63	56	52	61	56	52	60	55	51	59	55	51
9	70	59	52	48	68	58	52	48	57	52	48	56	51	47	55	51	47
10	66	55	48	44	65	54	48	44	54	48	44	53	48	44	52	47	44

LF6LED 6LFLED5 40K

Test No. 3333

LF6LED 6LFLED7 35K

LED Light Engine: 3500K, 80 CRI
System Wattage: 32.4W
Fixture Delivered Lumens: 1656
Fixture Efficacy: 50
Spacing Criteria: 1.2



CANDELA DISTRIBUTION

DEG	CANDELA	LUMENS
0	1079	
5	1087	104
15	1084	305
25	1006	465
35	855	526
45	322	246
55	6	8
65	2	1
75	0	1
85	0	0
90	0	0

Test No. 3678

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

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	874	52.8
0-40	1401	84.6
0-60	1654	99.9
0-90	1656	100.0
90-180	0	0.0
0-180	1656	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average - 0°
45°	24955
55°	573
65°	259
75°	0
85°	0

COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Floor Cavity Reflectance																
	80%		70%		50%		30%		10%								
	20% Effective Floor Cavity Reflectance																
% Wall Reflectance																	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10			
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94
2	107	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86
3	100	93	88	83	98	92	87	83	89	85	81	87	83	80	84	81	79
4	94	86	80	75	92	85	79	75	83	78	74	80	76	73	79	75	72
5	89	79	73	68	87	78	72	68	76	71	67	75	70	66	73	69	66
6	83	73	67	62	82	73	66	62	71	65	61	70	65	61	68	64	60
7	78	68	61	57	77	67	61	56	66	60	56	65	60	56	64	59	55
8	74	63	56	52	73	63	56	52	61	56	52	60	55	51	59	55	51
9	70	59	52	48	68	58	52	48	57	51	47	56	51	47	55	51	47
10	66	55	48	44	65	54	48	44	54	48	44	53	48	44	52	47	44

LF6LED 6LFLED7 35K

Test No. 3678

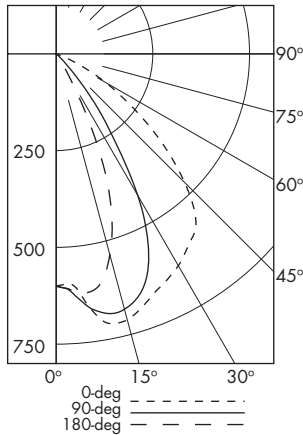


PHOTOMETRIC DATA

LiteFrame - 6" LF6LED Wall Wash Downlight

LF6LEDWW 6LFLED5 35K WW

LED Light Engine: 3500K, 80 CRI
System Wattage: 18.5W
Fixture Delivered Lumens: 830
Fixture Efficacy: 46



CANDELA DISTRIBUTION

DEG	0.0	90.0	180.0
0	600	600	600
5	608	632	619
15	711	683	537
25	656	566	235
35	599	243	19
45	470	35	4
55	243	4	1
65	65	1	0
75	1	1	0
85	0	0	0
90	0	0	0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	0 DEG	90 DEG	180 DEG
45°	34598	675	338
55°	19974	104	0
65°	3530	0	0
75°	0	0	0
85°	0	0	0

MULTIPLE UNITS	
UNITS ON 3" CENTER	UNITS ON 4" CENTER
1' 2' 3' 4'	1' 2' 3' 4'

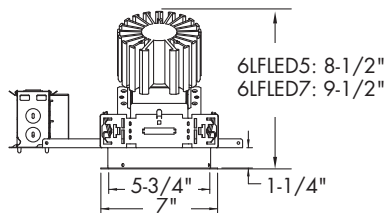
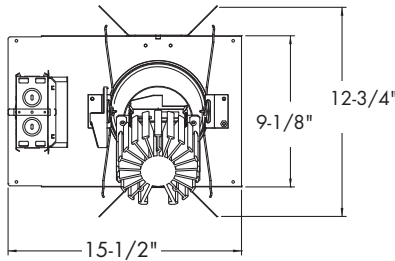
3' DISTANCE FIXTURE MOUNTED OUT FROM WALLS FOOTCANDLE DISTRIBUTION ON WALL SURFACE

DISTANCE FROM CEILING IN FEET	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
1	1	0	0	0	0	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1
2	14	10	2	0	0	14	11	14	14	4	14	14	4	14	14	4	14	14	4	14	14	4	14	14	4	14	14
3	19	15	8	2	0	20	23	20	19	15	19	19	15	19	19	15	19	19	15	19	19	15	19	19	15	19	19
4	14	13	9	4	1	18	22	18	15	17	15	15	17	15	15	17	15	15	17	15	15	17	15	15	17	15	15
5	10	9	7	5	2	14	17	14	12	15	12	12	15	12	12	15	12	12	15	12	12	15	12	12	15	12	12
6	6	6	6	4	3	11	12	11	9	11	9	9	11	9	9	11	9	9	11	9	9	11	9	9	11	9	9
7	5	4	4	3	3	8	9	8	7	8	7	7	8	7	7	8	7	7	8	7	7	8	7	7	8	7	7
8	3	3	3	3	2	6	6	6	5	6	5	5	6	5	5	6	5	5	6	5	5	6	5	5	6	5	5
9	2	2	2	2	2	5	5	5	4	5	4	4	5	4	4	5	4	4	5	4	4	5	4	4	5	4	4

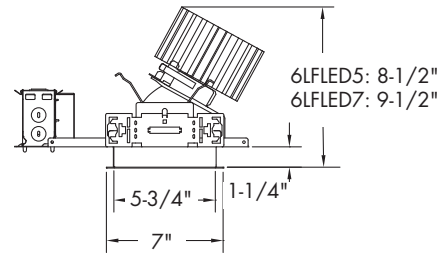
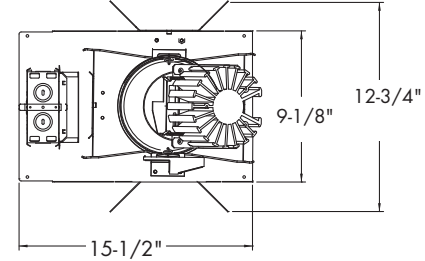
Test No. 3483

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

STANDARD WALL WASH ORIENTATION



FIELD CONFIGURABLE WALL WASH ORIENTATION



DIMMING COMPATIBILITY TABLE

Control Manufacturer	Wallbox Dimmer	Power Booster Available
Douglas Lighting Controls	WPC 5721	
Entertainment Technology	Tap Glide TG600FAM120 (120V) Tap Glide Heatsink TGH1500fam120 (120V) Oasis DA2000FAMU (120/277V)	
Honeywell, Inc.	EL731A1019 and EL7315A1009	EL7305A1010
HUNT Dimming	Preset Slide: PS-010-IV-120V and PS-010-WH-120V Preset Slide: PS-010-3W-IV-120V and PS-010-3W-WH-120V Preset Slide: PS-010-IV-277V and PS-010-WH-277V Preset Slide: PS-010-3W-IV-277V and PS-010-3W-WH-277V Preset Slide, controls FD-010; PS-1FC-010-IV- and PS-1FC-010-32-WH-120/277V Preset Slide, controls FD-010; PS-1FC-010-32-IV- and PS-1FC-010-3W-WH-120/277V Remoted mounted unit: FD-010120V and FD-010-277V	
Lehigh Electric Products Co.	Solitaire	PBX
Leviton Lighting Controls Div.	Leviton Centura Fluorescent Control System IllumaTech™ IP7 Series	CN100 PE300
Lutron Electronics Co., Inc.	Visit www.lutron.com/advance for the latest control information and selection	
PDM Electrical products	WPC-5721	
Starfield Controls	TR61 with DALI Interface port	RT03 DALInet Router
The Watt Stopper, Inc.	LS-4 used with LCD-101 and LCD-103	



Web: www.prescolite.com • Tech Support: (888) 777-4832
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Hubbell Lighting, Inc.

PHOTOMETRIC DATA

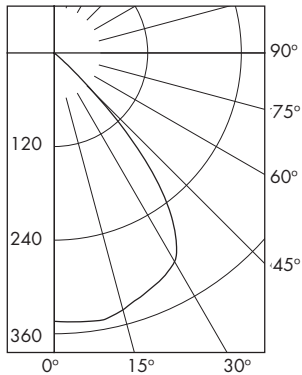
LiteFrame - 6" LF6LED Downlight Integral EM & Central Inverters

Integral EM

Prescolite provides photometric performance of the LiteFrame LED when operating on integral EM back up power as a tool to approximate light levels in back-up battery operation. This should not be deemed a guarantee of performance. The LiteFrame LED is CSA listed as an emergency fixture for applications not to exceed 16ft.

LF6LEDEM 6LFLED5 35K EM

LED Light Engine: 3500K, 80 CRI
Fixture Delivered Lumens: 505



CANDELA DISTRIBUTION

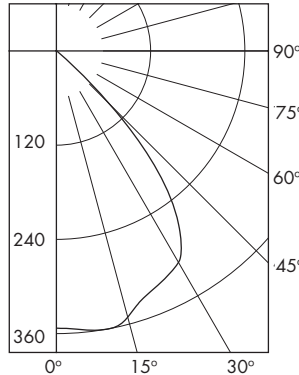
DEG	CANDELA	LUMENS
0	344	
5	346	33
15	341	96
25	322	148
35	266	163
45	73	62
55	2	2
65	0	0
75	0	0
85	0	0
90	0	0

Test No. 3912

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

LF6LEDEM 6LFLED7 35K EM

LED Light Engine: 3500K, 80 CRI
Fixture Delivered Lumens: 527



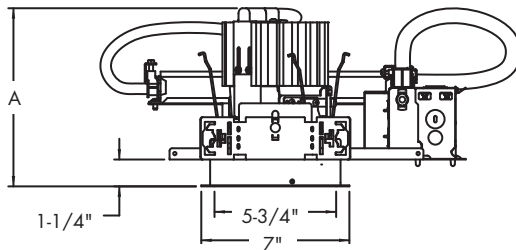
CANDELA DISTRIBUTION

DEG	CANDELA	LUMENS
0	353	
5	356	34
15	351	99
25	322	149
35	272	168
45	97	74
55	2	3
65	1	0
75	1	0
85	0	0
90	0	0

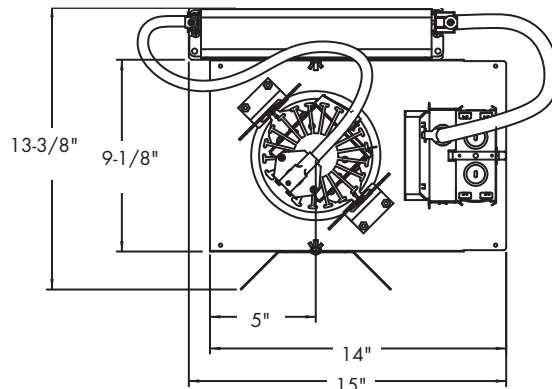
Test No. 3913

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

EM DIMENSIONS



LIGHT ENGINE	A
6LFLED5EM	7-1/2"
6LFLED7EM	8-1/2"



Central Inverters

For fixture full light output in back-up mode, Prescolite and Dual-lite have jointly tested the LiteFrame LED with the 100 (LG1) and 250 (LG2) VA LiteGear inverters. Below is a chart that shows the maximum number of LiteFrame LED products that can be wired to a single LiteGear. (Note: Not for use with integral EM option). For more information on LiteGear go to www.dual-lite.com

LiteFrame LED & Dual-Lite LiteGear Compatibility Matrix		
Maximum Number of LiteFrame LED Downlights that can be wired to a single LiteGear Inverter.		
	LED5	LED7
LG1	3	2
LG2	8	5



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Hubbell Lighting, Inc.

Architectural Downlighting

OM6LED 1500

6" LED

1400-1750 Lumen Downlight



application

- Philips Omega Revelation LED combines MesoOptics® diffusion with the proprietary remote phosphor technology to produce one of the most efficient and advanced LED systems available for general illumination.

light engine

- Philips Omega mixing chamber/optical assembly: Remote phosphor technology provides increased efficiency and color stability by redirecting back reflected light. Phosphor lens assembly converts high brightness blue light into white light for an even, diffused pattern, eliminating bright spots often created by individual LEDs. This technology provides consistent, stable color with CCT color control of +/- 100K over the life of the light engine and provides 20% higher efficiency.
- LED Array: The LED Array consists of a metal core circuit board with 22 high brightness royal blue LEDs.
- Color: Available in three CCT options, 3000K, 3500K or 4000K with 80CRI +/-2%.
- Electrical: The power supply/driver features Advance Intelli-volt 120-277VAC 50/60Hz, with 0-10V analog dimming capability. The power supply is overload and short circuit protected as well as thermally regulated to prevent overheating. Sound rating A. Refer to dimming compatibility spec sheet for complete details. Driver has rated lifetime of 50,000 hours.
- Lifetime/Lumen Maintenance: 60,000 hour lifetime at 70% lumen maintenance light engine.

construction

- Thermal Management: A proprietary die-cast aluminum heat sink allows for easy and tool-less installation to the housing yoke. The heat sink is designed to properly maintain junction temperatures in recessed Non-IC applications to provide reliable performance over the life of the light engine. The heat sink incorporates alignment tabs to properly position the heat sink with the housing and rust resistant springs to secure the heat sink and reflector.

- Housing: Precision die stamped 18ga galvanized steel mounting pan and yoke assembly. Allows for ceiling thickness up to 1-3/8". Yoke supports weight of heat sink and light engine assembly to prevent stress on finished reflector.
- Reflector: The lower trim is die-formed of 0.40 low iridescent aluminum and is self-flanged with a variety of finishes available. White flange is standard. Optional polished flange matching trim finish is available, add FF to the catalog number.
- C Channels: Philips Omega Revelation C-Channels are included and provide vertical and horizontal adjustments. These allow for fast and adjustment free installation in T-bar ceilings with 1/2" tile. C-Channels simply snap on grid for proper alignment in 24" O.C. grid systems.
- Junction Box: 16 ga galvanized steel. UL listed for 8 No. 12 AWG, 90C through branch circuit conductors. Allows inspection below ceiling.
- Service: Modular construction allows for easy maintenance of complete system below ceiling. Removing reflector provides easy access to heat sink and light engine assembly. This assembly may be removed by de-pressing the springs which attach to the yoke and then simply opening protective cover and unplugging the push in connector from the LED board.

listings & warranty

- ETL, cUL Listed. (Suitable for wet location applications.)
- Photometric testing performed using IESNA - LM79 procedures. LED lifetime testing performed using IESNA - LM80 procedures.
- 5 year Warranty

Specifier's Reference

Project	
Type	DLB
Model No.	
Comments	

Green Choice: OM6LED27120-R6LED30KMDCS

HOUSING

LIGHT ENGINE - REFLECTOR

OM6LED

27

Family

OM6LED
6 inch Housing

Voltage

120 – 120 VAC
50/60Hz
277 – 277 VAC
50/60Hz
347 – Stepdown
(347:120/277)

Wattage

27 – 27 Input Watts

Option

EM – Bodine BSL17C
Emergency Back-up¹

R6LED

Omega Reflector

R6LED – 6" Reflector

Distribution

MD – Medium
WD – Wide

CCT

30K – 3000K
35K – 3500K
40K – 4000K

Reflector Finish

CS – Clear Specular
CSS – Clear Semi-Specular
HZ – Haze
GS – Gold Specular
WT – Wheat
PW – Pewter
BZ – Bronze
WH – White, Paint
FF – Finish Flange
(as suffix to color)

Footnotes

1. Delivered lumen output ranges from 500-550lm.

General Notes

Lumen output varies depending on CCT and distribution, refer to specific IES files for details

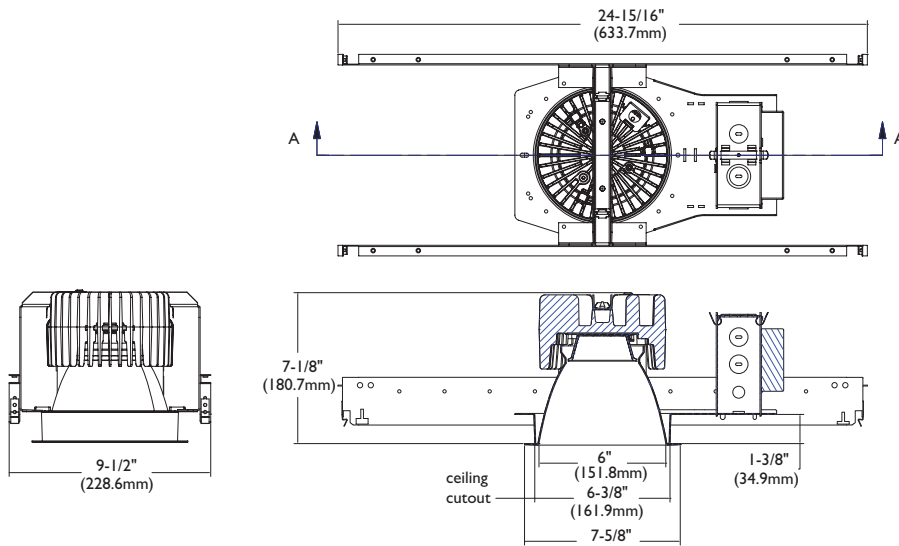
Accessories (ordered separately)

- SA6** - Slope ceiling adapter (specify in 5° increments up to 30°)
- OMTCA6** - Thick ceiling adapter (specify finish to match reflector, ie. CS)

energy data

Input Voltage	Input Current	Drive Current	Input Power	LED Power	THD %	Power Factor
120	0.25	350mA	27	23.1	<10%	>0.9
277	0.11	350mA	27	23.1	<10%	>0.9

dimensions



photometrics

OM6LED27120-R6LED35KMDCS

Tested to LM-79 standards.

<p>Clear Specular Reflector</p> <p>Test No. 19271</p> <p>S/MH (0 degree plane) .84</p> <p>Lamp Type (1) 22 Royal Blue LEDs</p> <p>Total Fixture Lumens 1522</p> <p>IES File LTL19271</p> <p>Input Watts 27</p> <p>Beam Angle 59.31</p> <p>Luminaire Efficacy 56.6 LPW</p>	<p>Candela</p> <table border="1"> <thead> <tr> <th>Degrees</th> <th>At 0°</th> <th>At 90°</th> <th>Foot Lamberts</th> </tr> </thead> <tbody> <tr><td>90</td><td>0</td><td>0</td><td></td></tr> <tr><td>85</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>75</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>65</td><td>1</td><td>1</td><td>38</td></tr> <tr><td>55</td><td>2</td><td>2</td><td>56</td></tr> <tr><td>45</td><td>56</td><td>56</td><td>1267</td></tr> <tr><td>35</td><td>377</td><td>377</td><td></td></tr> <tr><td>25</td><td>1432</td><td>1432</td><td></td></tr> <tr><td>15</td><td>1589</td><td>1589</td><td></td></tr> <tr><td>5</td><td>1677</td><td>1677</td><td></td></tr> <tr><td>0</td><td>1701</td><td>1701</td><td></td></tr> </tbody> </table>	Degrees	At 0°	At 90°	Foot Lamberts	90	0	0		85	0	0	0	75	0	0	0	65	1	1	38	55	2	2	56	45	56	56	1267	35	377	377		25	1432	1432		15	1589	1589		5	1677	1677		0	1701	1701		<p>Lighting Performance Data</p> <table border="1"> <thead> <tr> <th>Ceiling Height (feet)</th> <th>Initial Footcandles</th> <th>Beam Diameter (Ft/In)</th> </tr> </thead> <tbody> <tr><td>8</td><td>56.2</td><td>6 - 3</td></tr> <tr><td>10</td><td>30.2</td><td>8 - 6</td></tr> <tr><td>12</td><td>18.8</td><td>10 - 10</td></tr> <tr><td>14</td><td>12.9</td><td>13 - 1</td></tr> <tr><td>16</td><td>9.3</td><td>15 - 4</td></tr> </tbody> </table> <p>Coefficients of Utilization</p> <table border="1"> <thead> <tr> <th rowspan="2">pcc</th> <th colspan="2">80</th> <th colspan="2">70</th> <th colspan="2">50</th> </tr> <tr> <th>50</th> <th>30</th> <th>50</th> <th>30</th> <th>50</th> <th>30</th> </tr> </thead> <tbody> <tr><td>0</td><td>118</td><td>118</td><td>118</td><td>118</td><td>115</td><td>115</td></tr> <tr><td>1</td><td>113</td><td>111</td><td>109</td><td>107</td><td>111</td><td>109</td></tr> <tr><td>2</td><td>109</td><td>104</td><td>100</td><td>96</td><td>106</td><td>102</td></tr> <tr><td>3</td><td>103</td><td>96</td><td>93</td><td>89</td><td>101</td><td>95</td></tr> <tr><td>4</td><td>97</td><td>91</td><td>85</td><td>81</td><td>96</td><td>90</td></tr> <tr><td>5</td><td>93</td><td>85</td><td>80</td><td>76</td><td>92</td><td>84</td></tr> <tr><td>6</td><td>89</td><td>81</td><td>75</td><td>70</td><td>88</td><td>80</td></tr> <tr><td>7</td><td>84</td><td>76</td><td>70</td><td>66</td><td>83</td><td>76</td></tr> <tr><td>8</td><td>81</td><td>71</td><td>66</td><td>61</td><td>80</td><td>70</td></tr> <tr><td>9</td><td>77</td><td>68</td><td>61</td><td>58</td><td>76</td><td>68</td></tr> <tr><td>10</td><td>73</td><td>65</td><td>58</td><td>55</td><td>72</td><td>64</td></tr> </tbody> </table>	Ceiling Height (feet)	Initial Footcandles	Beam Diameter (Ft/In)	8	56.2	6 - 3	10	30.2	8 - 6	12	18.8	10 - 10	14	12.9	13 - 1	16	9.3	15 - 4	pcc	80		70		50		50	30	50	30	50	30	0	118	118	118	118	115	115	1	113	111	109	107	111	109	2	109	104	100	96	106	102	3	103	96	93	89	101	95	4	97	91	85	81	96	90	5	93	85	80	76	92	84	6	89	81	75	70	88	80	7	84	76	70	66	83	76	8	81	71	66	61	80	70	9	77	68	61	58	76	68	10	73	65	58	55	72	64
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OM6LED27120-R6LED35KWDCS

Tested to LM-79 standards.

<p>Clear Specular Reflector</p> <p>Test No. 19275</p> <p>S/MH (0 degree plane) 1.2</p> <p>Lamp Type (1) 22 Royal Blue LEDs</p> <p>Total Fixture Lumens 1731</p> <p>IES File LTL19275</p> <p>Input Watts 27</p> <p>Beam Angle 82.84</p> <p>Luminaire Efficacy 64.7 LPW</p>	<p>Candela</p> <table border="1"> <thead> <tr> <th>Degrees</th> <th>At 0°</th> <th>At 90°</th> <th>Foot Lamberts</th> </tr> </thead> <tbody> <tr><td>90</td><td>0</td><td>0</td><td></td></tr> <tr><td>85</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>75</td><td>1</td><td>1</td><td>62</td></tr> <tr><td>65</td><td>2</td><td>2</td><td>76</td></tr> <tr><td>55</td><td>6</td><td>6</td><td>167</td></tr> <tr><td>45</td><td>223</td><td>223</td><td>5046</td></tr> <tr><td>35</td><td>900</td><td>900</td><td></td></tr> <tr><td>25</td><td>1159</td><td>1159</td><td></td></tr> <tr><td>15</td><td>1173</td><td>1173</td><td></td></tr> <tr><td>5</td><td>1087</td><td>1087</td><td></td></tr> <tr><td>0</td><td>1087</td><td>1087</td><td></td></tr> </tbody> </table>	Degrees	At 0°	At 90°	Foot Lamberts	90	0	0		85	0	0	0	75	1	1	62	65	2	2	76	55	6	6	167	45	223	223	5046	35	900	900		25	1159	1159		15	1173	1173		5	1087	1087		0	1087	1087		<p>Lighting Performance Data</p> <table border="1"> <thead> <tr> <th>Ceiling Height (feet)</th> <th>Initial Footcandles</th> <th>Beam Diameter (Ft/In)</th> </tr> </thead> <tbody> <tr><td>8</td><td>35.9</td><td>9 - 7</td></tr> <tr><td>10</td><td>19.3</td><td>13 - 1</td></tr> <tr><td>12</td><td>12.0</td><td>16 - 7</td></tr> <tr><td>14</td><td>8.2</td><td>20 - 1</td></tr> <tr><td>16</td><td>6.0</td><td>23 - 7</td></tr> </tbody> </table> <p>Coefficients of Utilization</p> <table border="1"> <thead> <tr> <th rowspan="2">pcc</th> <th colspan="2">80</th> <th colspan="2">70</th> <th colspan="2">50</th> </tr> <tr> <th>50</th> <th>30</th> <th>50</th> <th>30</th> <th>50</th> <th>30</th> </tr> </thead> <tbody> <tr><td>0</td><td>118</td><td>118</td><td>118</td><td>118</td><td>115</td><td>115</td></tr> <tr><td>1</td><td>112</td><td>110</td><td>107</td><td>105</td><td>111</td><td>108</td></tr> <tr><td>2</td><td>107</td><td>101</td><td>96</td><td>93</td><td>105</td><td>100</td></tr> <tr><td>3</td><td>101</td><td>93</td><td>88</td><td>83</td><td>98</td><td>92</td></tr> <tr><td>4</td><td>94</td><td>85</td><td>80</td><td>76</td><td>93</td><td>84</td></tr> <tr><td>5</td><td>89</td><td>80</td><td>73</td><td>68</td><td>86</td><td>79</td></tr> <tr><td>6</td><td>83</td><td>73</td><td>68</td><td>63</td><td>81</td><td>72</td></tr> <tr><td>7</td><td>79</td><td>68</td><td>61</td><td>57</td><td>78</td><td>68</td></tr> <tr><td>8</td><td>75</td><td>64</td><td>56</td><td>53</td><td>72</td><td>63</td></tr> <tr><td>9</td><td>69</td><td>59</td><td>53</td><td>48</td><td>68</td><td>58</td></tr> <tr><td>10</td><td>66</td><td>56</td><td>48</td><td>45</td><td>65</td><td>55</td></tr> </tbody> </table>	Ceiling Height (feet)	Initial Footcandles	Beam Diameter (Ft/In)	8	35.9	9 - 7	10	19.3	13 - 1	12	12.0	16 - 7	14	8.2	20 - 1	16	6.0	23 - 7	pcc	80		70		50		50	30	50	30	50	30	0	118	118	118	118	115	115	1	112	110	107	105	111	108	2	107	101	96	93	105	100	3	101	93	88	83	98	92	4	94	85	80	76	93	84	5	89	80	73	68	86	79	6	83	73	68	63	81	72	7	79	68	61	57	78	68	8	75	64	56	53	72	63	9	69	59	53	48	68	58	10	66	56	48	45	65	55
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 776 South Green Street • Tupelo, MS 38804
 p. 800.234.1890 • f. 662.841.5501
 www.omegalighting.com
 Canadian Division
 189 Bullock Drive • Markham, Ontario L3P 1W4
 p. 905.294.9570 • f. 905.294.9811

Contact Factory for Additional Configurations.

Specifications are subject to change without notice.

Some luminaires use fluorescent or high intensity discharge (HID) lamps that contain small amounts of mercury. Such lamps are labeled, "Contain Mercury" and/or the symbol "HG". Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycling and disposal can be found at www.lamprecycle.org



LED FTD DL/5

recessed LED downlight

TYPE 'DLB' (ALT)

#LED-FTD-DL/5-1300-4000-277-VOL

LED
0-070

FEATURES

LED FTD DL/5 is a 5" aperture downlight employing LED technology. Fixture is only 7" deep. Precise reflector design yields an optical efficiency of 90%, minimizes aperture brightness and provides a shielding angle of 40°.

Fixture is powered by an integral Philips Fortimo DLM remote phosphor LED module, dimmable to 10% with a 0-10 volt dimmer, with a CRI of 80 and a 5-year warranty from Philips. Fixture may be specified with modules of 1100, 1300 or 2000 lumen light output and with 3000K, 3500K or 4000K color. Refer to the performance tables on the reverse for system wattages and luminaire efficacies.

Other features include:

- life: 50,000 hours at 70% of initial light output (IESNA LM80-2008)
- operational range: tolerates temperatures as low as -20° C (-4°F)
- UV free: no UV emissions to jeopardize fabrics, paper or paintings
- environmentally safe: no mercury disposal problems


LED FTD DL/5 modules include an integral plastic shield, making the fixture suitable for food service areas and other applications requiring protection from lamp failure.

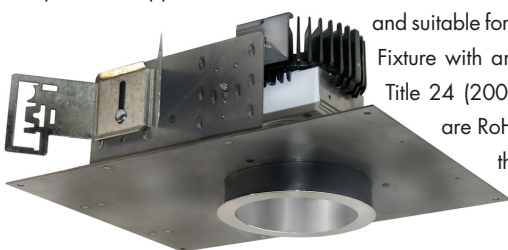
Reflector is available in two clear natural aluminum finishes – semi-specular Alzak (C) or slightly diffuse (V) – as well as champagne gold and black. Other reflector finishes are available on special order.

LED FTD DL/5 includes a pair of mounting bars (3/4" x 27" C channel). Specialty bars for wood joist and T-bar installations are also available.

APPLICATIONS

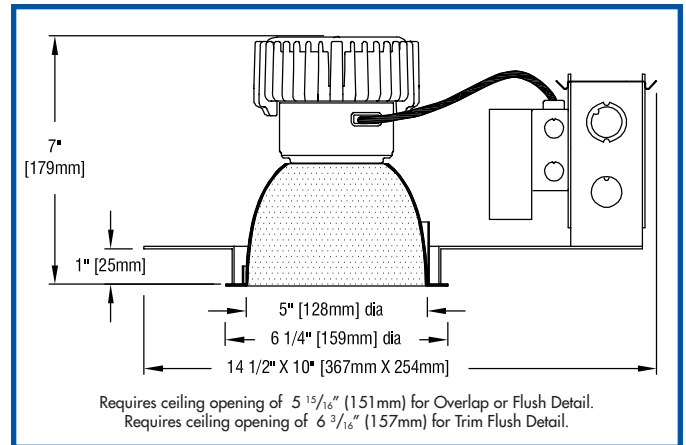
Fixture is recommended for downlighting in commercial, retail and residential spaces.

Fixture is  listed for Damp Location. Fixture is prewired with thermal protector, approved for ten #12 wire 90° branch circuit pull-through wiring and suitable for use in a fire rated ceiling. Fixture with an 1100 lumen module is Title 24 (2008) compliant. All fixtures are RoHS compliant. Removal of the reflector allows access to the junction box.



FULLY SUSTAINABLE

LED FTD DL/5 is fully sustainable. Both critical components – the LED module (diode array) and the driver (power conditioner) – can be replaced through the aperture with a screwdriver. Both components are, and will remain, available from Edison Price Lighting.



PRODUCT CODE

For complete product code, list basic unit and select one item from each following box.

Basic Unit LED-FTD-DL/5

NOTE: Standard driver is dimmable to 10% with a 0-10 volt dimmer.

Light Output	
1100 lumens	1100
1300 lumens	1300
2000 lumens	2000

Light Engine Color	
3000K (CRI 80)	3000
3500K (CRI 80)	3500
4000K (CRI 80)	4000

Voltage	
120 volt service	120
277 volt service	277

Reflector Color and Detail	Overlap Flange	Flush	Trim Flush*
Semi-specular Clear	COL	CFL	CTF
Slightly diffuse Clear	VOL	VFL	VTF
Champagne Gold	GOL	GFL	GTF
Black	BOL	BFL	BTF

Other reflector finishes available on special order.
Overlap Flange continues reflector finish. White painted flanges and custom painted flanges are available on special order. Add WF (white flange) or CCF (custom color flange).

*Trim Flush reflector trim requires the use of a plaster ring Accessory (see below).

OPTIONS

Specify by adding to the basic unit.

Dimmable ..standard driver is dimmable to 10% with a 0-10 volt dimmer.

Emergency battery pack operates light engine in event of power outage. Fixture footprint increases to 16 5/8" x 10" (422 x 254mm). 11" (279mm) depth required to remove EM pack through aperture. – EM

ACCESSORIES

Specify as a separate line item.

Plaster ring allows use of Trim Flush (TF) reflector in sheetrock ceiling; 6 3/16" (157mm) dia hole is required.....TF RING/5

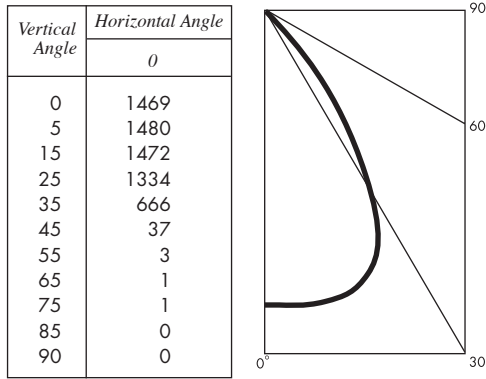


PHOTOMETRIC REPORT (tested per IESNA LM-79-2008)

(LTL) Report No. 21228 and 21291. Original Luminaire Testing Laboratories, Inc. (LTL) test report furnished upon request.

Luminaire recessed LED round downlight with aluminum reflector
 Lamp Philips LED Fortimo DLM 2000-38W/830UL, 3000K CCT
 Spacing Criteria 1.0
 Luminaire light output 1631 lumens
 Luminaire efficacy 42.6 lumens per watt

CANDLEPOWER DISTRIBUTION (Candela)



LUMINAIRE LIGHT OUTPUT AND EFFICACY

Color	1100 lumens light engine			1300 lumens light engine			2000 lumens light engine		
	Luminaire Light Output	Luminaire Efficacy	System Wattage	Luminaire Light Output	Luminaire Efficacy	System Wattage	Luminaire Light Output	Luminaire Efficacy	System Wattage
3000K	995*	52.3	19	1165*	48.5	24	1631	42.6	38
3500K	995*	55.3	18	1165*	50.7	23	1631	45.3	36
4000K	995*	58.5	17	1165*	53.0	22	1631	46.6	35

*estimated values

LIGHT OUTPUT MULTIPLIER

1100 lumens light engine	1300 lumens light engine	2000 lumens light engine
.61 (estimated)	.71 (estimated)	1

DRIVER INFORMATION *UL Class 2, dry and damp location*

Voltage	120	277
Input Watts (1100/1300/2000 lumens), 3000K	19/24/38	19/24/38
Input Current (A) (1100/1300/2000 lumens)	.16/.20/.32	.07/.09/.14
Output Current (mA)	200-700	200-700
Output Voltage (Vdc)	25-56	25-56
Min. Power Factor	>0.9	>0.9
Operating Temperature Range (F)	-4 to 131	-4 to 131

DIMMING INFORMATION

Dimming Method	Dimming Range (%)	Min. Output Power
0 - 10V	10% -100%	15

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0 - 30°	1155	70.8
0 - 40°	1566	96.0
0 - 60°	1629	99.9
0 - 90°	1631	100.0
90 -180°	0	0.0
0 -180°	1631	100.0

LUMINANCE DATA

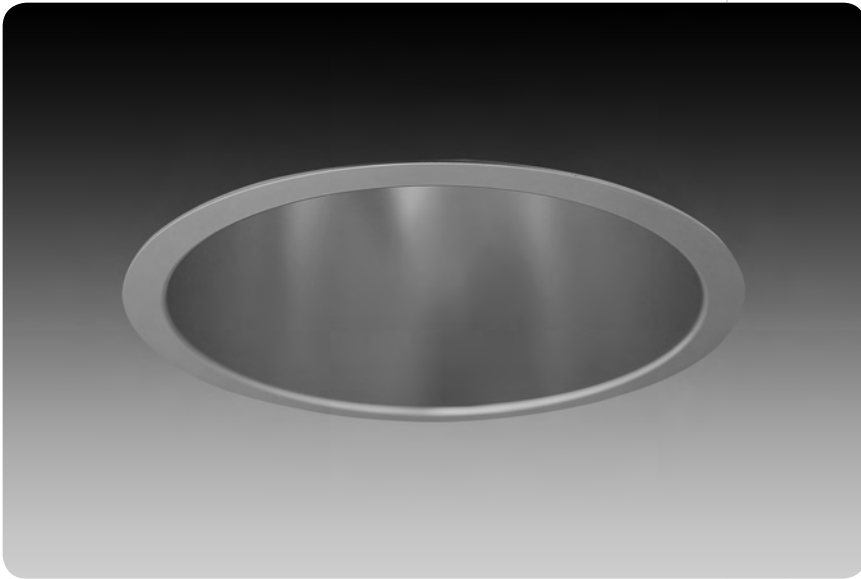
Vertical Angle	Candela/m²
45	4200
55	386
65	246
75	230
85	246

COMPATIBLE DIMMERS *Please verify with vendors*

CONTROL MANUFACTURER	WALLBOX DIMMER	POWER BOOSTER AVAILABLE
DOUGLAS LIGHTING CONTROLS	WPC-5721	
ENTERTAINMENT TECHNOLOGY	Tap Glide TG600FAM120(120V) Tap Glide Heatsink TGH1500FAM120 (120V) Oasis OA2000FAMU (120/277V)	
HONEYWELL, INC.	EL7315A1019 and EL7315A1009	EL7305A1010 (optional)
HUNT DIMMING	Preset slide: PS-010-IV-120V and PS-010-WH-120V Preset slide: PS-010-3W-IV-120V and PS-010-3W-WH-120V Preset slide: PS-010-IV-277V and PS-010-WH-277V Preset slide: PS-010-3W-IV-277V and PS-010-3W-WH-277V Preset slide, controls FD-010: PS-IFC-010-IV and PS-IFC-010-WH-120/277V Preset slide, controls FD-010: PS-IFC-010-3W-IV and PS-IFC-010-3W-WH-120/277V Remote mounted unit: FD-010-120V and FD-010-277V	
LEHIGH ELECTRIC PRODUCTS CO.	Solitaire	PBX
LEVITON LIGHTING CONTROLS DIV.	Leviton Centura Fluorescent Control System IllumaTech™ IP7 Series	CN100 PE300
LIGHTOLIER CONTROLS	Sunrise Preset slider ZP600FAM-120 (120V) Momentum Preset slider MP1500FAM-120 (120V) Vega Slider V2000FAMU (120-277V)	
LITHONIA CONTROLS	ISD BC SLD LPCS Digital Equinox (DEQ BC)	RDM FC
LUTRON ELECTRONICS CO., INC.	Visit www.lutron.com/advance for the latest control information and selection	
PDM ELECTRICAL PRODUCTS	WPC-5721	
STARFIELD CONTROLS	TR61 with DALI interface port	RT03 DALI.net Routers
THE WATT STOPPER, INC.	LS-4 used with LCD-101 and LCD-103	

6" – led downlight

id[®]



features

LED module features remote phosphor technology enabling a high system efficacy and minimum 80 CRI

Future-proof LED system design maintains form factor, lumen output, and thermal characteristics of module and driver as technology advances, allows for easy replacement and upgrades

1100, 1300 & 2000 lumen LED modules available.

Rated life is 50,000 hours at 70% lumen maintenance (L70)

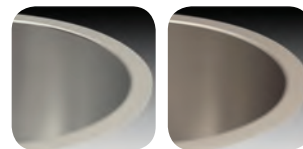
5 year limited warranty.

Constant current driver senses LED module characteristics and delivers the designed output regardless of color temperature

Flicker-free 0-10V analog dimming capability standard

Self-flanged Clear Diffuse reflector cone features superior brightness control and 50 degree cutoff to light source and its image

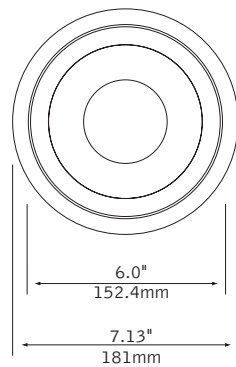
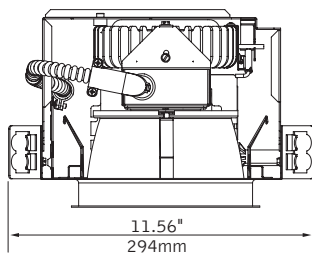
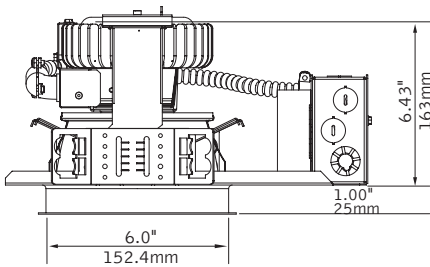
reflector options



clear diffuse

warm diffuse

dimensional data



performance

38W, 3000K, 2000 Lumen LED Module

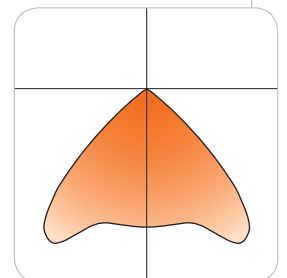
Clear Diffuse Reflector

Total Luminaire Output: 1684lms

Photometric performance is measured in accordance with IESNA LM-79.



Use 1300 lumen LED downlight in place of a 6" 32W compact fluorescent

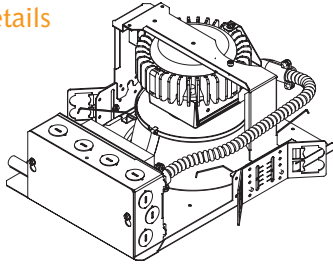


Visit focalpointlights.com for complete photometric data.

fixture:

project:

details



housing specifications

led system

Powered by Philips' Fortimo™ LED DLM, Advance Xitanium LED driver and communication cable. Aluminum heat sink provides appropriate thermal management. System is future-proof, allowing for easy replacement and upgrades as LED technology advances. LED system rated for 50,000 hours at 70% lumen output (L70).



led module

Philips' Fortimo™ LED DLM features patented remote phosphor technology for superior efficacy and color consistency. Module may be specified in 3000K, 3500K or 4000K, CRI>80.

construction

Thermally protected housing for new construction applications. Insulation to be kept 3" away from housing. Butterfly brackets allow mounting to 1/2 emt. Order bar hangers as an accessory. Die-cast aluminum heat sink designed for maximum thermal dissipation. Die-formed housing and integral junction box with (7) 1/2" pry outs. Accommodates ceiling thicknesses up to 1". For thicker ceiling consult factory. Fixture will not exceed 5 lb.

electrical

Advance Xitanium multi-volt 120V-277V constant current driver includes standard 0-10V analog dimming. Power factor >.9 typical, 50/60Hz., 200-700mA, input power range, 19.9—37.7w. 120-277v<15% THD @ 100% power <20% THD when dimming. "Thermal Guard" offers protection from overheating in abnormal conditions; driver will dim DLM if necessary. Voltage specific thermal protectors included standard. 2000 lumen versions integrate fanless active cooling solution designed for operation by the Fortimo LED system.

Lamp	Temp	System Watts	Module Output	Delivered Lumens	Watt
11LED	3000K	19.9	1100	947	48
13LED	3000K	23.7	1300	1114	47
20LED	3000K	37.7	2000	1684	45

*Lumen rating based on Clear Diffuse reflector cone

*Lumen output may vary +/- 5%

*20LED system watts include active cooling.

*Module output is identical for all available color temperatures.

dimming

0-10V DC low voltage dimming capability is included with the standard Advance Xitanium driver. Dimming range is to 10% light output, some dimmers may require high and/or low end trim adjustment for proper function. Consult the ID LED Technical Guide for compatible dimmers and control systems.

labels

UL and cUL Listed. Lensed trims suitable for Wet Location.

trim specifications

aesthetics

Parabolic reflector cone ensures glare free optics. Reflector is .050 spun aluminum. Torsion springs pull trim tight to the ceiling with no visible fasteners within the trim.

Overlap trims are self-flanged. Non-painted trim matches reflector finish. White painted flange may also be specified.

optics

50-degree cut-off to light source and its image.

housing ordering

housing series	FL6D	<u>FL6D</u>
ID LED Module	FL6D	
lamp		
1100 Lumen LED Module	11LED	
1300 Lumen LED Module	13LED	
2000 Lumen LED Module	20LED	

lamp temperature

Include 3000K Module	L30	
Include 3500K Module	L35	
Include 4000K Module	L40	

voltage

120V	120	
277V	277	

trim type

Round Overlap	RO	<u>RO</u>
---------------	----	-----------

housing type

Thermally Protected, Non-IC	T	<u>T</u>
-----------------------------	---	----------

factory options

Chicago Plenum	CP	
(not available with 2000 Lumen Module)		

trim ordering

aperture

6" Round Aperture	L6	<u>L6</u>
-------------------	----	-----------

trim type

Round Overlap	RO	<u>RO</u>
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optic

Downlight	DN	
Regress Frosted Lens (wet location)	RL	

color

Clear Diffuse	CD	
Warm Diffuse	WD	

flange finish

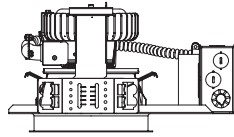
Non-Painted	NP	
White Painted	WP	

a complete unit consists of two line items, housing and trim

example:

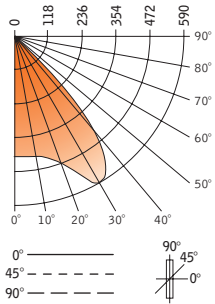
FL6D-13LED-L30-120-RO-T
L6-RO-DN-CD-NP

6" – led downlight
id®



Filename: FL6DNCD11LEDL30.IES
Catalog #: FL6D-11LED-L30-R0-T, L6-R0-DN-CD
Photometric Report #: 15865

CANDLEPOWER DISTRIBUTION



Vertical Angle	0°	Zonal Lumens
0°	417	
5°	420	40
15°	436	124
25°	533	247
35°	551	346
45°	208	161
55°	24	21
65°	6	6
75°	2	2
85°	0	0
90°	0	0

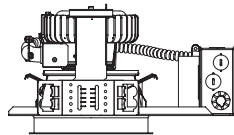
LUMEN SUMMARY

	Zone Lumens	% Fixt
0°-30°	411	43.4
0°-40°	756	79.9
0°-60°	938	99.1
0°-90°	947	100.0
Total Luminaire	0°-90° 947	100.0

Spacing Criteria:
1.6

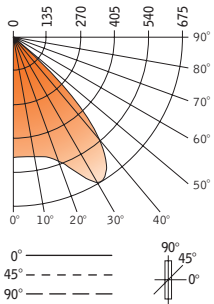
Go to www.focalpointlights.com for additional photometric data.

6" – led downlight
id®



Filename: FL6DNCD13LEDL30.IES
Catalog #: FL6D-13LED-L30-R0-T, L6-R0-DN-CD
Photometric Report #: 15866

CANDLEPOWER DISTRIBUTION



Vertical Angle	0°	Zonal Lumens
0°	483	
5°	483	46
15°	498	141
25°	599	277
35°	649	408
45°	267	206
55°	28	25
65°	8	8
75°	2	3
85°	0	0
90°	0	0

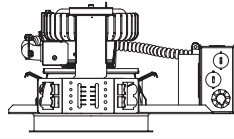
LUMEN SUMMARY

	Zone Lumens	% Fixt
0°-30°	464	41.7
0°-40°	872	78.3
0°-60°	1104	99.1
0°-90°	1114	100.0
Total Luminaire	0°-90° 1114	100.0

Spacing Criteria:
1.7

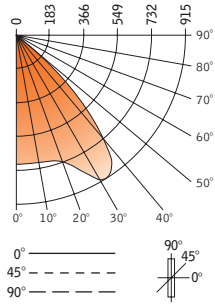
Go to www.focalpointlights.com for additional photometric data.

6" – led downlight
id®



Filename: FL6DNCD20LEDL30.IES
Catalog #: FL6D-20LED-L30-R0-T, L6-R0-DN-CD
Photometric Report #: 21561

CANDLEPOWER DISTRIBUTION



Vertical Angle	Zonal Lumens
0°	714
5°	714 68
15°	721 206
25°	820 385
35°	917 561
45°	492 371
55°	69 72
65°	17 17
75°	4 5
85°	0 0
90°	0

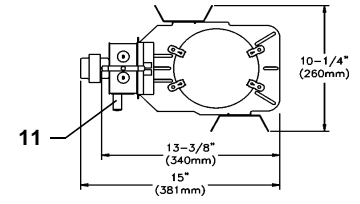
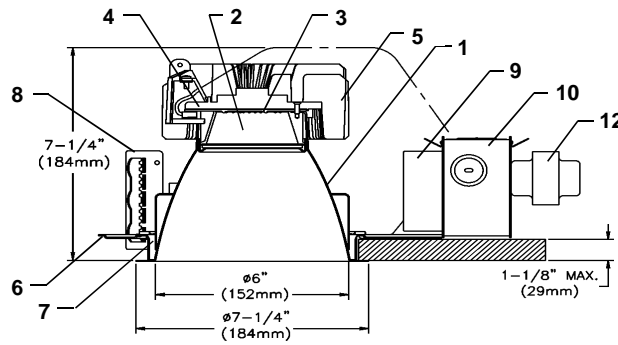
LUMEN SUMMARY

Zone	Lumens	% Fixt
0°-30°	686	39.1
0°-40°	1219	72.4
0°-60°	1662	98.7
0°-90°	1684	100.0
Total Luminaire	0°-90° 1684	100.0

Spacing Criteria:
1.4

Downlight

Ceiling Opening: 6-5/8" (168mm)



For complete fixture order: Trim Kit + Frame-In Kit. Sold Separately.

Light Engine	Lumen	CCT	Basic Finish	Frame-in Kit	Wattage	Input Voltage
C6L1520DL27KM	1500/2000lm	2700K	CCLW Comfort Clear /	C6L15N1	28W	120V
C6L1520DL30KM	1500/2000lm	3000K	White Painted Integral Flange	C6L15N2	28W	277V
C6L1520DL35KM	1500/2000lm	3500K	CCLP Comfort Clear /	C6L15N1-347*	28W	347V*
C6L1520DL40KM	1500/2000lm	4000K	Polished Integral Flange	C6L20N1	39W	120V
			See Options for other finish	C6L20N2	39W	277V
				C6L20N1-347*	39W	347V*
ex: C6L1520DL30KMCCLP	1500/2000lm	3000K	Comfort Clear /	Note: Remodeler or Retrofit see specification sheet: C6L1520R, CUL1520J, CUL1520S.		
			Polished Integral Flange	* With Step-Down transformer		

Features

- Aperture Cone:** Provides 50° visual cutoff to source and image.
- Optical Mixing Chamber:** Remote phosphor technology provides increased efficiency and color stability. Phosphor lens assembly positioned in front of LED array converts blue light to white and produces a wide even pattern of diffused light without bright spots created by individual LEDs. Uniform phosphor coating provides consistent, stable color with a shift of no more than +/- 100K over life. Mixing chamber redirects scattered light back out through the emitting aperture.
- LED Board:** Array of high brightness royal blue LEDs.
- Power connection:** Attaches to LED array via push-in connector. Removable cover provides access.
- Thermal Management:** Proprietary heat sink design maintains junction temperature for consistent, reliable performance.
- Mounting Frame:** Galvanized steel.
- Retaining Springs:** Rust resistant springs simplify reflector/housing removal for inspection and maintenance.
- Mounting Brackets:** 16 ga. steel. Use 18" (457mm) mounting bars (optional) or with standard 3/4" (19mm), 1-1/2" (38mm) lathing channels (by others) or 1/2" (13mm) tubing (by others). Adjust vertically from inside of fixture.
- Electronic Driver:** 120V or 277V 50/60 Hz.; overload and short circuit protected; thermal regulation to protect against overheating; sound rating "A", -20°C minimum starting temperature. Maximum operating temperature 70°C. Dimmable with 0-10V dimmer.
- Junction Box:** 0.059" (16 ga) galvanized steel. UL listed for 8 No. 12 AWG, 90° C through branch circuit conductors. Allows inspection from below.
- Thermal Protector:** Protect against unauthorized use of insulation.
- Step down:** From 347V to 120V.

Options

For availability, consult your Lightolier representative.

- CCLFT+ Comfort Clear / Flangeless
 - CCDFT+ Comfort Clear Diffuse / Flangeless
 - CCDP Comfort Clear Diffuse / Polished Integral Flange
 - CCDW Comfort Clear Diffuse / White Painted Integral Flange
 - CCZFT+ Comfort Champagne Bronze / Flangeless
 - CCZP Comfort Champagne Bronze / Polished Integral Flange
 - CCZW Comfort Champagne Bronze / White Painted Integral Flange
 - WHFT+ White / Flangeless
 - WHW White / White Painted Integral Flange
- + Accessory Ring CA6FMR recommended.

Accessories

- 1950 set of 2 Mounting bars 18" (457 mm)
- 1951 set of 2 Mounting bars 30" (762 mm)
- 1956 set of 4 T-Bar Anchor Clips
- 7927 Slope Ceiling Adaptor ; see sheet 7920

Nominal Wattage	Input Voltage	Input Frequency	Input Current	LED drive Current	Input Power	THD	Power Factor
28W	120V	50/60Hz	0.25A	350mA	28W	<1%	>0.9
	277V		0.11A		33W		>0.9
	347V		0.10A				>0.9
39W	120V	50/60Hz	0.36A	520mA	39W	<1%	>0.9
	277V		0.17A		49W		>0.9
	347V		0.15A				>0.9

Dimming

See LED-DIM specification sheet

Rated Life

1500lm - 60,000 hours at 70% lumen maintenance (L70)
 2000lm - 57,000 hours at 70% lumen maintenance (L70)

Markings

cULus Listed, suitable for wet locations. 5 years warranty.

Canlyte

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Job Information

Type:

Job Name:

Cat. No.:

Lamp(s):

Notes:

1500 LM, 3000K, CL FINISH TRIM

Candlepower Distribution	ANGLE	MEAN CP	LUMENS
	0	1672	
	5	1625	153
	10	1551	
	15	1477	417
	20	1405	
	25	1182	501
	30	612	
	35	313	205
	40	139	
	45	32	35
	50	3	
	55	1	1
	60	1	
	65	0	0
	70	0	
	75	0	0
	80	0	
	85	0	0
	90	0	

Trim/Frame:
C6L1520DL30KMCLW/C6L15N1

Output lumens: 1312 lm

Correlated Color Temp¹: 3000K

Input Watts²: 26.6 w

Efficacy³: 49.3 lm/w

CRI⁴: 78

Spacing Criterion: 0.8

CEILING	80%				70%				50%				30%				0%
	WALL	70	50	30	10	50	10	50	10	50	10	50	10	50	10	0	
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%																
0	119	119	119	119	116	116	111	111	106	106	100						
1	114	111	109	107	109	105	105	102	101	99	94						
2	109	104	100	97	102	96	99	94	96	92	89						
3	104	98	93	89	96	89	94	87	91	86	83						
4	99	92	87	83	91	82	89	81	87	80	78						
5	94	87	81	77	86	77	84	76	82	76	73						
6	90	82	76	72	81	72	80	71	78	71	69						
7	86	77	72	68	77	68	75	67	74	67	65						
8	82	73	68	64	73	64	72	63	71	63	62						
9	78	69	64	60	69	60	68	60	67	60	58						
10	75	66	60	57	66	57	65	57	64	56	55						

ZONAL LUMENS AND PERCENTAGES		
ZONE	LUMENS	%LUMINAIRE
0-30	1071	81.6%
0-40	1275	97.2%
0-60	1312	100.0%
0-90	1312	100.0%

Single Unit Data		
Height to Lighted Plane	Initial Footcandles	Beam Diameter
5'	67	5'
6'	46	6'
7'	34	7'
8'	26	8'
9'	21	10'

Multiple Unit Data - RCR 2		
Spacing	Initial Footcandles	Watts/Sq. Ft.
5'	60.5	1.18
6'	39.7	0.77
7'	28.4	0.55
8'	23.6	0.46
9'	18.9	0.37

38'x38'x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

CERTIFIED TEST REPORT NO. F10018³

2000 LM, 3000K, CL FINISH TRIM

Candlepower Distribution	ANGLE	MEAN CP	LUMENS
	0	2298	
	5	2233	210
	10	2130	
	15	2028	573
	20	1931	
	25	1630	690
	30	843	
	35	431	282
	40	191	
	45	44	48
	50	4	
	55	2	2
	60	1	
	65	1	1
	70	0	
	75	0	0
	80	0	
	85	0	0
	90	0	

Trim/Frame:
C6L1520DL30KMCLW/C6L20N1

Output lumens: 1805 lm

Correlated Color Temp¹: 3000K

Input Watts²: 39.5 w

Efficacy³: 45.7 lm/w

CRI⁴: 78

Spacing Criterion: 0.8

CEILING	80%				70%				50%				30%				0%
	WALL	70	50	30	10	50	10	50	10	50	10	50	10	50	10	0	
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%																
0	119	119	119	119	116	116	111	111	106	106	100						
1	114	111	109	107	109	105	105	102	101	99	94						
2	109	104	100	97	103	96	99	94	96	92	89						
3	104	98	93	89	96	89	94	87	91	86	83						
4	99	92	87	83	91	82	89	81	87	80	78						
5	94	87	81	77	86	77	84	76	82	75	73						
6	90	82	76	72	81	72	80	71	78	71	69						
7	86	77	72	68	77	68	75	67	74	67	65						
8	82	73	68	64	73	64	72	63	71	63	62						
9	78	69	64	60	69	60	68	60	67	60	58						
10	75	66	60	57	65	57	65	57	64	56	55						

ZONAL LUMENS AND PERCENTAGES		
ZONE	LUMENS	%LUMINAIRE
0-30	1472	81.5%
0-40	1754	97.2%
0-60	1805	100.0%
0-90	1805	100.0%

Single Unit Data		
Height to Lighted Plane	Initial Footcandles	Beam Diameter
5'	92	5'
6'	64	6'
7'	47	7'
8'	36	8'
9'	28	10'

Multiple Unit Data - RCR 2		
Spacing	Initial Footcandles	Watts/Sq. Ft.
5'	83.2	1.75
6'	54.6	1.15
7'	39.0	0.82
8'	32.5	0.68
9'	26.0	0.55

38'x38'x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

CERTIFIED TEST REPORT NO. F10019³

¹Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
²Wattage controlled to within 65%.
³Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.
⁴Color Rendering Index within +/- 2%.



Canlyte www.canlyte.com
 3015 Louis-Amos, Lachine, Québec H8T 1C4
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Architectural Downlighting

OM6LED 1500
6" LED

1400-1750 Lumen Downlight



application

- Philips Omega Revelation LED combines MesoOptics® diffusion with the proprietary remote phosphor technology to produce one of the most efficient and advanced LED systems available for general illumination.

light engine

- Philips Omega mixing chamber/optical assembly: Remote phosphor technology provides increased efficiency and color stability by redirecting back reflected light. Phosphor lens assembly converts high brightness blue light into white light for an even, diffused pattern, eliminating bright spots often created by individual LEDs. This technology provides consistent, stable color with CCT color control of +/- 100K over the life of the light engine and provides 20% higher efficiency.
- LED Array: The LED Array consists of a metal core circuit board with 22 high brightness royal blue LEDs.
- Color: Available in three CCT options, 3000K, 3500K or 4000K with 80CRI +/-2%.
- Electrical: The power supply/driver features Advance Intelli-volt 120-277VAC 50/60Hz, with 0-10V analog dimming capability. The power supply is overload and short circuit protected as well as thermally regulated to prevent overheating. Sound rating A. Refer to dimming compatibility spec sheet for complete details. Driver has rated lifetime of 50,000 hours.
- Lifetime/Lumen Maintenance: 60,000 hour lifetime at 70% lumen maintenance light engine.

construction

- Thermal Management: A proprietary die-cast aluminum heat sink allows for easy and tool-less installation to the housing yoke. The heat sink is designed to properly maintain junction temperatures in recessed Non-IC applications to provide reliable performance over the life of the light engine. The heat sink incorporates alignment tabs to properly position the heat sink with the housing and rust resistant springs to secure the heat sink and reflector.

- Housing: Precision die stamped 18ga galvanized steel mounting pan and yoke assembly. Allows for ceiling thickness up to 1-3/8". Yoke supports weight of heat sink and light engine assembly to prevent stress on finished reflector.
- Reflector: The lower trim is die-formed of 0.40 low iridescent aluminum and is self-flanged with a variety of finishes available. White flange is standard. Optional polished flange matching trim finish is available, add FF to the catalog number.
- C Channels: Philips Omega Revelation C-Channels are included and provide vertical and horizontal adjustments. These allow for fast and adjustment free installation in T-bar ceilings with 1/2" tile. C-Channels simply snap on grid for proper alignment in 24" O.C. grid systems.
- Junction Box: 16 ga galvanized steel. UL listed for 8 No. 12 AWG, 90C through branch circuit conductors. Allows inspection below ceiling.
- Service: Modular construction allows for easy maintenance of complete system below ceiling. Removing reflector provides easy access to heat sink and light engine assembly. This assembly may be removed by de-pressing the springs which attach to the yoke and then simply opening protective cover and unplugging the push in connector from the LED board.

listings & warranty

- ETL, cUL Listed. (Suitable for wet location applications.)
- Photometric testing performed using IESNA - LM79 procedures. LED lifetime testing performed using IESNA - LM80 procedures.
- 5 year Warranty

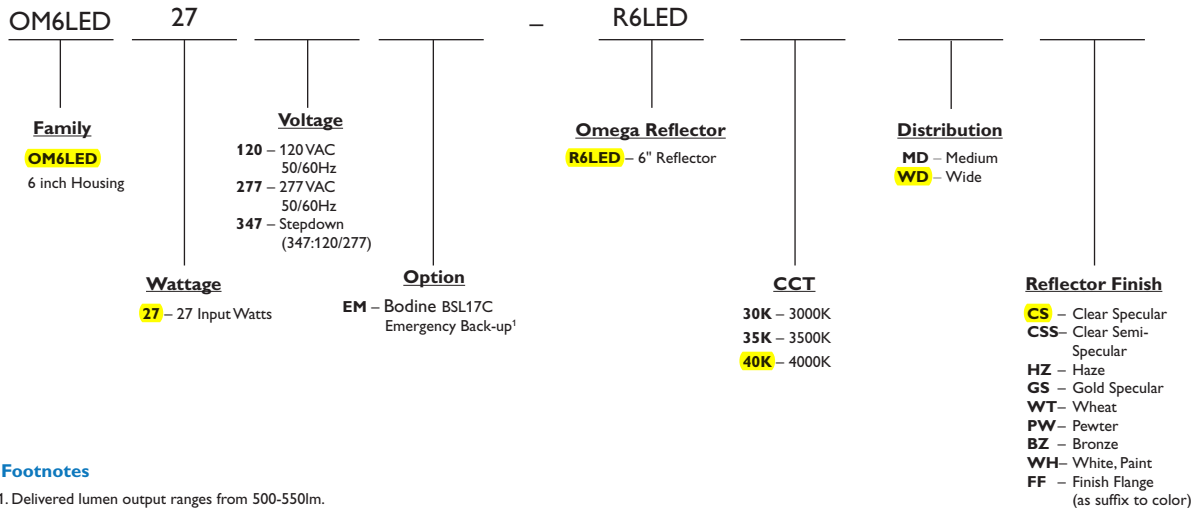
Specifier's Reference

Project	
Type	DLD
Model No.	
Comments	

Green Choice: OM6LED27120-R6LED30KMDCS

HOUSING

LIGHT ENGINE - REFLECTOR



Footnotes

1. Delivered lumen output ranges from 500-550lm.

General Notes

Lumen output varies depending on CCT and distribution, refer to specific IES files for details

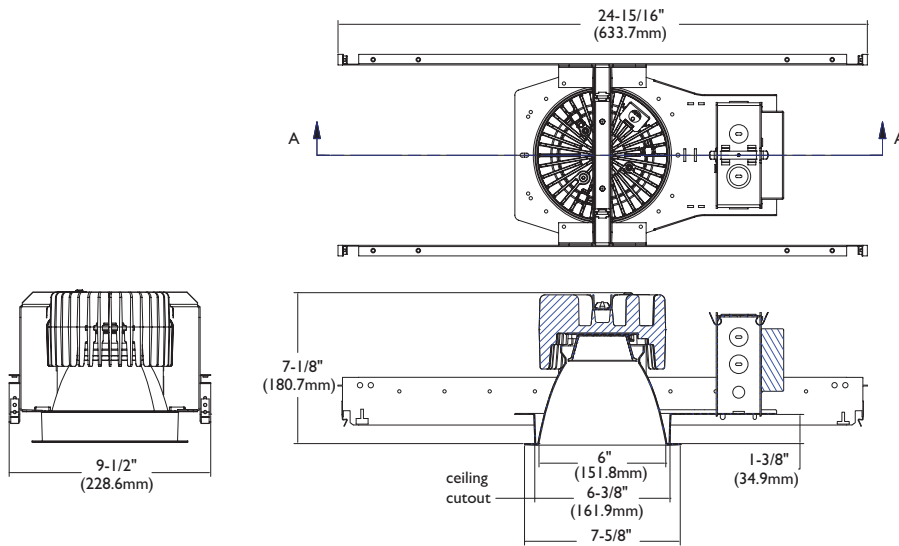
Accessories (ordered separately)

- SA6** - Slope ceiling adapter (specify in 5° increments up to 30°)
- OMTCA6** - Thick ceiling adapter (specify finish to match reflector, ie. CS)

energy data

Input Voltage	Input Current	Drive Current	Input Power	LED Power	THD %	Power Factor
120	0.25	350mA	27	23.1	<10%	>0.9
277	0.11	350mA	27	23.1	<10%	>0.9

dimensions



photometrics

OM6LED27120-R6LED35KMDCS

Tested to LM-79 standards.

Clear Specular Reflector Test No. 19271 S/MH (0 degree plane) .84 Lamp Type (1) 22 Royal Blue LEDs Total Fixture Lumens 1522 IES File LTL19271 Input Watts 27 Beam Angle 59.31 Luminaire Efficacy 56.6 LPW		Candela			
		Degrees	At 0°	At 90°	Foot Lamberts
		90	0	0	0
		85	0	0	0
		75	0	0	0
		65	1	1	38
		55	2	2	56
		45	56	56	1267
		35	377	377	
		25	1432	1432	
		15	1589	1589	
		5	1677	1677	
		0	1701	1701	

Lighting Performance Data				
Ceiling Height (feet)	Initial Footcandles	Beam Diameter (Ft/In)		
8	56.2	6 - 3		
10	30.2	8 - 6		
12	18.8	10 - 10		
14	12.9	13 - 1		
16	9.3	15 - 4		

Coefficients of Utilization						
pcc	80		70		50	
	50	30	50	30	50	30
RCR						
0	118	118	118	118	115	115
1	113	111	109	107	111	109
2	109	104	100	96	106	102
3	103	96	93	89	101	95
4	97	91	85	81	96	90
5	93	85	80	76	92	84
6	89	81	75	70	88	80
7	84	76	70	66	83	76
8	81	71	66	61	80	70
9	77	68	61	58	76	68
10	73	65	58	55	72	64

OM6LED27120-R6LED35KWDCS

Tested to LM-79 standards.

Clear Specular Reflector Test No. 19275 S/MH (0 degree plane) 1.2 Lamp Type (1) 22 Royal Blue LEDs Total Fixture Lumens 1731 IES File LTL19275 Input Watts 27 Beam Angle 82.84 Luminaire Efficacy 64.7 LPW		Candela			
		Degrees	At 0°	At 90°	Foot Lamberts
		90	0	0	0
		85	0	0	0
		75	1	1	62
		65	2	2	76
		55	6	6	167
		45	223	223	5046
		35	900	900	
		25	1159	1159	
		15	1173	1173	
		5	1087	1087	
		0	1087	1087	

Lighting Performance Data				
Ceiling Height (feet)	Initial Footcandles	Beam Diameter (Ft/In)		
8	35.9	9 - 7		
10	19.3	13 - 1		
12	12.0	16 - 7		
14	8.2	20 - 1		
16	6.0	23 - 7		

Coefficients of Utilization						
pcc	80		70		50	
	50	30	50	30	50	30
RCR						
0	118	118	118	118	115	115
1	112	110	107	105	111	108
2	107	101	96	93	105	100
3	101	93	88	83	98	92
4	94	85	80	76	93	84
5	89	80	73	68	86	79
6	83	73	68	63	81	72
7	79	68	61	57	78	68
8	75	64	56	53	72	63
9	69	59	53	48	68	58
10	66	56	48	45	65	55



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776 South Green Street • Tupelo, MS 38804
 p. 800.234.1890 • f. 662.841.5501
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 Canadian Division
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 p. 905.294.9570 • f. 905.294.9811

Contact Factory for Additional Configurations.

Specifications are subject to change without notice.

Some luminaires use fluorescent or high intensity discharge (HID) lamps that contain small amounts of mercury. Such lamps are labeled, "Contain Mercury" and/or the symbol "HG". Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycling and disposal can be found at www.lamprecycle.org



LED FTD DL/5

recessed LED downlight

TYPE 'DLD' (ALT)

LED
0-070

FEATURES

LED FTD DL/5 is a 5" aperture downlight employing LED technology. Fixture is only 7" deep. Precise reflector design yields an optical efficiency of 90%, minimizes aperture brightness and provides a shielding angle of 40°.

Fixture is powered by an integral Philips Fortimo DLM remote phosphor LED module, dimmable to 10% with a 0-10 volt dimmer, with a CRI of 80 and a 5-year warranty from Philips. Fixture may be specified with modules of 1100, 1300 or 2000 lumen light output and with 3000K, 3500K or 4000K color. Refer to the performance tables on the reverse for system wattages and luminaire efficacies.

Other features include:

- life: 50,000 hours at 70% of initial light output (IESNA LM80-2008)
- operational range: tolerates temperatures as low as -20° C (-4°F)
- UV free: no UV emissions to jeopardize fabrics, paper or paintings
- environmentally safe: no mercury disposal problems


LED FTD DL/5 modules include an integral plastic shield, making the fixture suitable for food service areas and other applications requiring protection from lamp failure.

Reflector is available in two clear natural aluminum finishes – semi-specular Alzak (C) or slightly diffuse (V) – as well as champagne gold and black. Other reflector finishes are available on special order.

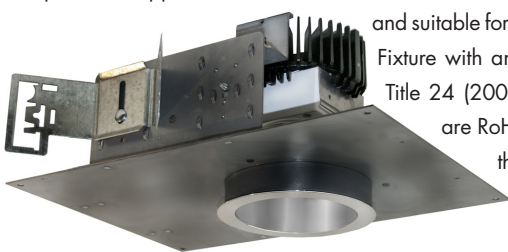
LED FTD DL/5 includes a pair of mounting bars (3/4" x 27" C channel). Specialty bars for wood joist and T-bar installations are also available.

APPLICATIONS

Fixture is recommended for downlighting in commercial, retail and residential spaces.

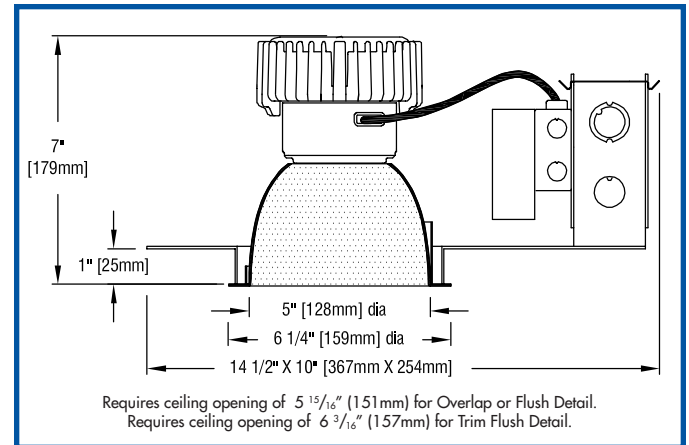
Fixture is  listed for Damp Location. Fixture is prewired with thermal protector, approved for ten #12 wire 90° branch circuit pull-through wiring and suitable for use in a fire rated ceiling.

Fixture with an 1100 lumen module is Title 24 (2008) compliant. All fixtures are RoHS compliant. Removal of the reflector allows access to the junction box.



FULLY SUSTAINABLE

LED FTD DL/5 is fully sustainable. Both critical components – the LED module (diode array) and the driver (power conditioner) – can be replaced through the aperture with a screwdriver. Both components are, and will remain, available from Edison Price Lighting.



PRODUCT CODE

For complete product code, list basic unit and select one item from each following box.

Basic Unit LED-FTD-DL/5

NOTE: Standard driver is dimmable to 10% with a 0-10 volt dimmer.

Light Output	
1100 lumens	1100
1300 lumens	1300
2000 lumens	2000

Light Engine Color	
3000K (CRI 80)	3000
3500K (CRI 80)	3500
4000K (CRI 80)	4000

Voltage	
120 volt service	120
277 volt service	277

Reflector Color and Detail	Overlap Flange	Flush	Trim Flush*
Semi-specular Clear	COL	CFL	CTF
Slightly diffuse Clear	VOL	VFL	VTF
Champagne Gold	GOL	GFL	GTF
Black	BOL	BFL	BTF

Other reflector finishes available on special order.
Overlap Flange continues reflector finish. White painted flanges and custom painted flanges are available on special order. Add WF (white flange) or CCF (custom color flange).

*Trim Flush reflector trim requires the use of a plaster ring Accessory (see below).

OPTIONS

Specify by adding to the basic unit.

Dimmable ..standard driver is dimmable to 10% with a 0-10 volt dimmer.

Emergency battery pack operates light engine in event of power outage. Fixture footprint increases to 16 5/8" x 10" (422 x 254mm). 11" (279mm) depth required to remove EM pack through aperture. – EM

ACCESSORIES

Specify as a separate line item.

Plaster ring allows use of Trim Flush (-TF) reflector in sheetrock ceiling; 6 3/16" (157mm) dia hole is required.....TF RING/5

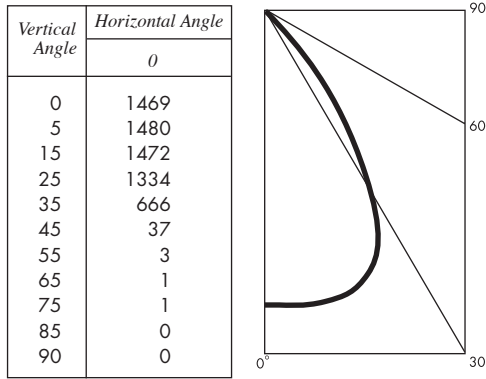


PHOTOMETRIC REPORT (tested per IESNA LM-79-2008)

(LTL) Report No. 21228 and 21291. Original Luminaire Testing Laboratories, Inc. (LTL) test report furnished upon request.

Luminaire recessed LED round downlight with aluminum reflector
 Lamp Philips LED Fortimo DLM 2000-38W/830UL, 3000K CCT
 Spacing Criteria 1.0
 Luminaire light output 1631 lumens
 Luminaire efficacy 42.6 lumens per watt

CANDLEPOWER DISTRIBUTION (Candela)



LUMINAIRE LIGHT OUTPUT AND EFFICACY

Color	1100 lumens light engine			1300 lumens light engine			2000 lumens light engine		
	Luminaire Light Output	Luminaire Efficacy	System Wattage	Luminaire Light Output	Luminaire Efficacy	System Wattage	Luminaire Light Output	Luminaire Efficacy	System Wattage
3000K	995*	52.3	19	1165*	48.5	24	1631	42.6	38
3500K	995*	55.3	18	1165*	50.7	23	1631	45.3	36
4000K	995*	58.5	17	1165*	53.0	22	1631	46.6	35

*estimated values

LIGHT OUTPUT MULTIPLIER

1100 lumens light engine	1300 lumens light engine	2000 lumens light engine
.61 (estimated)	.71 (estimated)	1

DRIVER INFORMATION *UL Class 2, dry and damp location*

Voltage	120	277
Input Watts (1100/1300/2000 lumens), 3000K	19/24/38	19/24/38
Input Current (A) (1100/1300/2000 lumens)	.16/.20/.32	.07/.09/.14
Output Current (mA)	200-700	200-700
Output Voltage (Vdc)	25-56	25-56
Min. Power Factor	>0.9	>0.9
Operating Temperature Range (F)	-4 to 131	-4 to 131

DIMMING INFORMATION

Dimming Method	Dimming Range (%)	Min. Output Power
0 - 10V	10% -100%	15

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0 - 30°	1155	70.8
0 - 40°	1566	96.0
0 - 60°	1629	99.9
0 - 90°	1631	100.0
90 -180°	0	0.0
0 -180°	1631	100.0

LUMINANCE DATA

Vertical Angle	Candelam ²
45	4200
55	386
65	246
75	230
85	246

COMPATIBLE DIMMERS *Please verify with vendors*

CONTROL MANUFACTURER	WALLBOX DIMMER	POWER BOOSTER AVAILABLE
DOUGLAS LIGHTING CONTROLS	WPC-5721	
ENTERTAINMENT TECHNOLOGY	Tap Glide TG600FAM120(120V) Tap Glide Heatsink TGH1500FAM120 (120V) Oasis OA2000FAMU (120/277V)	
HONEYWELL, INC.	EL7315A1019 and EL7315A1009	EL7305A1010 (optional)
HUNT DIMMING	Preset slide: PS-010-IV-120V and PS-010-WH-120V Preset slide: PS-010-3W-IV-120V and PS-010-3W-WH-120V Preset slide: PS-010-IV-277V and PS-010-WH-277V Preset slide: PS-010-3W-IV-277V and PS-010-3W-WH-277V Preset slide, controls FD-010: PS-IFC-010-IV and PS-IFC-010-WH-120/277V Preset slide, controls FD-010: PS-IFC-010-3W-IV and PS-IFC-010-3W-WH-120/277V Remote mounted unit: FD-010-120V and FD-010-277V	
LEHIGH ELECTRIC PRODUCTS CO.	Solitaire	PBX
LEVITON LIGHTING CONTROLS DIV.	Leviton Centura Fluorescent Control System IllumaTech™ IP7 Series	CN100 PE300
LIGHTOLIER CONTROLS	Sunrise Preset slider ZP600FAM-120 (120V) Momentum Preset slider MP1500FAM-120 (120V) Vega Slider V2000FAMU (120-277V)	
LITHONIA CONTROLS	ISD BC SLD LPCS Digital Equinox (DEQ BC)	RDM FC
LUTRON ELECTRONICS CO., INC.	Visit www.lutron.com/advance for the latest control information and selection	
PDM ELECTRICAL PRODUCTS	WPC-5721	
STARFIELD CONTROLS	TR61 with DALI interface port	RT03 DALI.net Routers
THE WATT STOPPER, INC.	LS-4 used with LCD-101 and LCD-103	

Parking Garage Luminaire

PGL4

TYPE 'GHA' ALT

PGL4



FEATURES

- A contemporary, direct and indirect parking garage luminaire
- Pulse start metal halide or high pressure sodium up to 150 watts, and 85-watt induction technology
- Narrow Downlight or Wide Downlight optical options
- 'Egress' emergency options for safety and security

ORDERING INFORMATION

PGL4

100PMH240

CC

DL-N

FIXTURE

PGL4 Contemporary

FIXTURE FINISH

PS Platinum Silver

CC Custom Color*

*Consult representative

FIXTURE OPTIONS

DL-N Narrow Downlight Optics

DL-W Wide Downlight Optics

LS Polycarbonate Downlight Lens²

PSH Painted Optical Housing

QS Quartz Standby³

TS Tamper-Resistant Lens Screws

PB2 Balanced Pendant Junction Box and Bird Shroud

SF 120 Volt Single Fuse

DF 208 Volt Double Fuse

DF 240 Volt Single Fuse

SF 277 Volt Single Fuse

SF 347 Volt Single Fuse

DF 480 Volt Single Fuse

Lamp Included Lamp Included⁴

ELECTRICAL MODULE

100PMH 100W PMH

100HPS 100W HPS

85IF 85W IF

150PMH 150W PMH

150HPS 150W HPS

Voltages

Voltages

120 120V

208 208V⁵

240 240V⁵

277 277V

347 347V

480 480V¹

Voltages

120 120V

208 208V⁵

240 240V⁵

277 277V

347 347V

480 480V¹

120 120V

208 208V⁵

240 240V⁵

277 277V

HPS = High Pressure Sodium
PMH = Pulse Start Metal Halide
IF = Induction Fluorescent

¹ 480V with medium base sockets may require approval of local building code authority.

² Use only when fixture vandalism is anticipated. Service life is reduced by UV discoloration from Pulse Start Metal Halide lamps. High Pressure Sodium lamps are recommended.

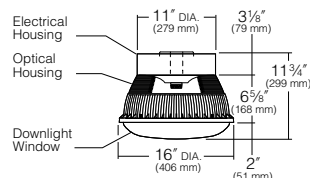
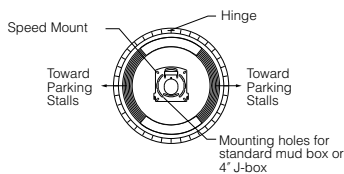
³ Input amps will increase by .80 with this option. Not available on 85IF.

⁴ Includes lamp and installed with fixture, including QS lamp when option is specified.

⁵ Constant wattage isolated ballast is required on all 208V and 240V Canadian orders.

NOTE: Due to the Energy Independence and Security Act (EISA) of 2007, Kim Lighting can no longer supply probe start Metal Halide ballasts with its luminaires, effective January 1, 2009. Contact Kim Lighting for availability of replacement ballasts for warranty service claims. (Visit www.aboutlightingcontrols.org or the Library of Congress website for more details).

PGL4

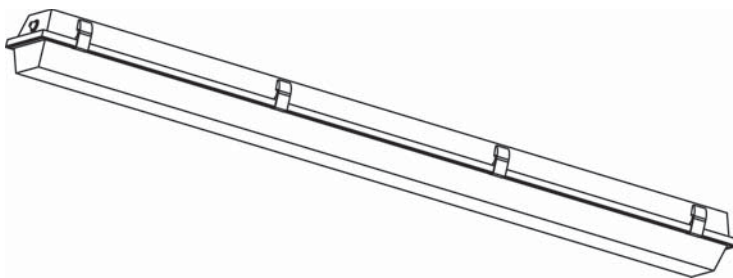


Sealatron Enclosed Low Profile IP Series

TYPE 'GFA' ALT

Features

- IP65 rating for ribbed lenses and IP67 rating for prismatic lens.
- Acceptable for outdoor as well as indoor installations.
- Wet Location-Areas of high humidity, water vapor, rain, incidental water spray, or other non-corrosive or nonflammable liquid.
- Also suitable for damp locations.
- Non-conductive, non-corrosive housing.
- Smooth exterior surface for easy cleaning.
- Molded fiberglass 5V-A housing.
- Choice of ribbed or injection molded prismatic diffusers.
- Continuous poured gasket.
- Polycarbonate cam action latches are standard.
- Ballast is retained by a snap-on gear tray in lieu of channel, reducing weight.
- Two snap-on stainless steel mounting brackets included, can be installed anywhere along housing (except at latches)



Dimensions



A (OVERALL LENGTH)

2' models	27-11/16"	(703mm)
4' models	51-9/16"	(1310mm)
8' models	100"	(2540mm)

3 Lamp, 2 Lamp & 8' One Lamp
Wide Housing



7-1/4" (184mm)

Ribbed Lenses (R, A)

4-1/4" (108mm)

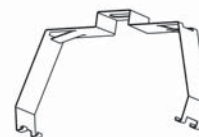
One Lamp (EXCEPT 8')
Narrow Housing



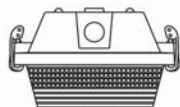
4-1/2" (114mm)

4-1/4" (108mm)

Mounting Bracket (INCLUDED)



Prismatic Injection Molded Lenses (P)



7-1/4" (184mm)

4-1/4" (108mm)



4-1/2" (114mm)

4-1/4" (108mm)

Job Information Type:

Job Name:

Cat. No.:

Lamp(s):

Volts/Ballast:

Sealatron Enclosed Low Profile IP Series

Industrial Fluorescent, Wet /Damp Locations, 2', 4' or 8' Lengths 1, 2 or 3 Lamp T5, T5HO or T8

Model No. IP4WP232UNVHI

LER = FP - 66 IW - 55 BF - 0.88
Comparative yearly lighting energy cost per
1000 lumens = \$3.64

Report Number: 23312
Catalog Number: IP4WP232UNVHI
Lamps: F32T8
Luminaire: Sealatron, enclosed industrial
with 25% high impact DR acrylic lens for
wet/damp locations.
Ballast: Electronic
Report is based on 2850 Lumens per lamp.
Efficiency: 66.9%
CIE Type-Direct-Indirect
Plane: 0-Deg 90-Deg
Spacing Criteria: 1.3 1.5

CANDELA DISTRIBUTION

	0.0	45.0	90.0
0	1065	1065	1065
5	1058	1061	1061
15	1007	983	941
25	914	884	960
35	752	851	919
45	513	812	903
55	332	775	811
65	207	615	713
75	92	467	593
85	26	282	327
95	11	153	170
105	12	79	103
115	8	48	83
125	3	29	55
135	3	11	34
145	3	3	12
155	4	4	4
165	5	4	5
175	5	5	5

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD. EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80	70	50	30
RW	70	50	30	70
1	75	67	68	65
2	68	60	58	53
3	60	52	46	42
4	56	46	39	35
5	51	40	34	32
6	46	35	29	28
7	42	33	26	25
8	40	29	23	22
9	38	27	20	20
10	34	25	19	17

ZONAL LUMEN SUMMARY

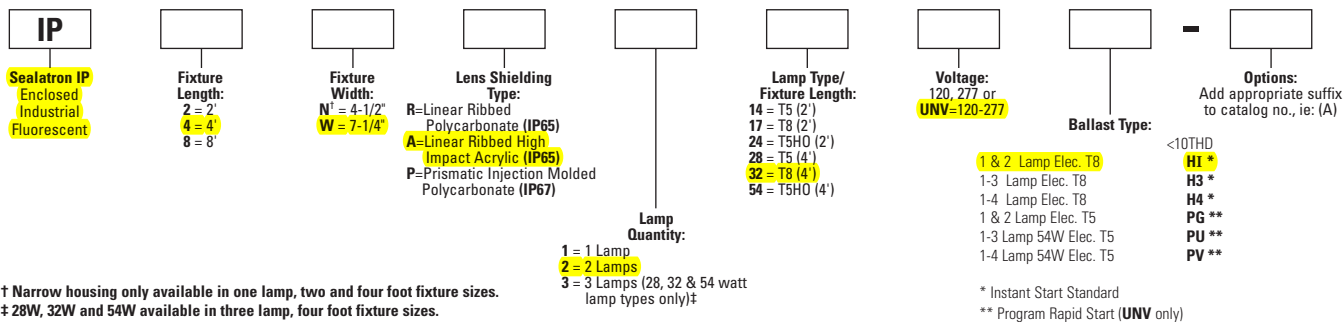
ZONE	LUMENS	% LAMP	% FIXT
0- 30	802	14.1	19.5
0- 40	1330	23.3	32.2
0- 60	2542	44.6	61.6
0- 90	3812	66.9	92.4
90-180	312	5.5	7.6
0-180	4124	72.3	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

AVERAGE IN DEG.	AVERAGE 0-DEG.	AVERAGE 45-DEG.	AVERAGE 90-DEG.
45	3779.	4883.	5134.
55	2966.	5260.	5119.
65	2443.	4964.	5236.
75	1675.	4830.	5402.
85	1108.	4239.	4086.

Ordering Information

Explanation of Catalog Number. Example: IP4WP232UNVHI



† Narrow housing only available in one lamp, two and four foot fixture sizes.
‡ 28W, 32W and 54W available in three lamp, four foot fixture sizes.
28W and 32W available in three lamp, eight foot fixture sizes.

* Instant Start Standard
** Program Rapid Start (UNV only)

Options/Accessories

Special Lenses: Choice of ribbed or injection molded prismatic diffusers.

Radio Interference Filter: To order one RIF per fixture; SUFFIX: **R**.
To order one RIF per ballast; SUFFIX: **B**.

Fusing: Internal fast-blow fusing. SUFFIX: **A**.
Internal slow-blow fusing. SUFFIX: **C**.

Electrical Wiring Options: Consult factory.

Specifications

Materials: Chassis parts ~ Molded fiberglass 5V-A housing. Continuous poured gasket. Polycarbonate cam action latches are standard. Ballast is retained by a snap-on gear tray in lieu of channel, reducing weight.

Finish: Chassis exterior ~ Non-conductive, non-corrosive housing. Smooth exterior surface for easy cleaning.

Lenses: IP65 rating for ribbed lenses and IP67 rating for injection molded prismatic lens.

Electrical: Class P, HPF certified ballasts comply with Federal Ballast Law (Public Law 100-357, 1988). Self-contained fluorescent emergency ballasts available: Wet location only, use BDL600 or BDL500 for T8 applications. Consult factory for T5 applications.

Labels: UL/cUL listed. Wet Location UL 1570/cUL C22.2 No. 9.

This product may have a mercury containing lamp.
Manage in accord with Disposal Laws. See: www.lamprecycle.org

Size	Family	Lamps	Lamp X Section	Lamp Fixture	Available Lenses	Lamp Type	Length in. (mm)	Width in. (mm)	Height in. (mm)
2'	IP	1	1	1	R, P	14, 17, 24HO	27 11/16" (703)	4 1/2" (114)	4 1/4" (108)
		2	2	2	R, P	14, 17, 24HO	27 11/16" (703)	7 1/4" (184)	4 1/4" (108)
4'	IP	1	1	1	R, P	28, 32, 54HO	51 9/16" (1310)	4 1/2" (114)	4 1/4" (108)
		2	2	2	A, R, P	28, 32, 54HO	51 9/16" (1310)	7 1/4" (184)	4 1/4" (108)
		3	3	3	A, R, P	28, 32, 54HO	51 9/16" (1310)	7 1/4" (184)	4 1/4" (108)
8'	IP	1	2	2	A	28, 32, 54HO	100" (2540)	7 1/4" (184)	4 1/4" (108)
		2	4	4	A	28, 32, 54HO	100" (2540)	7 1/4" (184)	4 1/4" (108)
		3	6	6	A	28, 32	100" (2540)	7 1/4" (184)	4 1/4" (108)

Job Information Type:

DESCRIPTION

The VT3 Series is a contemporary looking energy efficient industrial Vaportite fixture that features rugged and durable construction. The VT3 incorporates a full metal gear tray inside a reinforced fiberglass housing with a high impact diffuser. This Vaportite series is suitable for interior and exterior applications and can be surface or chain mounted.

The VT3 Series has been designed for maximum operation in commercial institutional and industrial environments where weathering, high temperature, humidity and dust or corrosive fumes are present.

Catalog #		Type
Project		'GFA' ALT
Comments		Date
Prepared by		

SPECIFICATION FEATURES

A... Construction

Fiberglass housing is reinforced polyester and self-extinguishing (ASTM-D635-74) plastic of a permanent pearl gray color. Top of housing has five embossments (2' unit), nine embossments (4' unit) and thirteen embossments (8' unit), providing mounting flexibility on uneven surfaces. A watertite hub for 1/2" conduit entry is provided at each end of housing (standard) for continuous feed. Polyurethane gasketing is formed in the housing providing a continuous seamless seal for the diffuser. Six sturdy cam latches clamp diffuser tightly for a positive seal between housing, gasketing and diffuser.

B... Electrical*

Unit has full metal gear tray secured by internal fasteners and tethers providing maximum protection and rigidity. Ballasts are CBM/ETL Class "P" certified suitable to 70°F. (Cold temperature ballasts are available for less than 0°F starting with EHT (T5HO only), EB/PLUS and ER/PLUS ballasts). Rotor lock lampholders. Electrical components and fixture are UL/CUL listed for Wet Locations.**

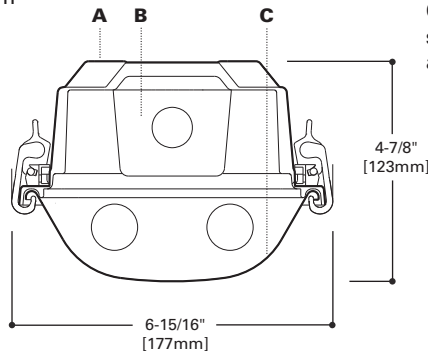
IP65 approved with optional IP67 rating (4' only) with 8 latches.

C... Shielding

New contemporary styled lens clear acrylic w/impact resistant additives and linear prisms. "DR" - Clear low brightness pattern acrylic with 15% high impact additive. "DR-100" - Clear low brightness pattern acrylic with 100% high impact additive. Example: VT3-232DR-100

D... Mounting

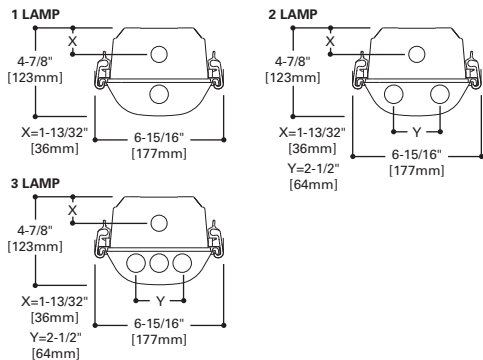
Surface mount fixture using two (2) galvanized brackets (included per 4' section). Optional chain mount hanging set or snap-on brackets are also available.



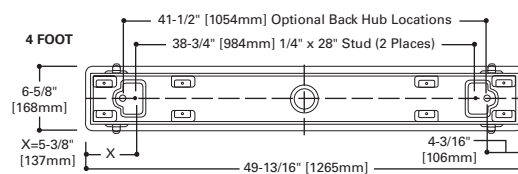
VT3
132
232
332
154T5
254T5
354T5

4' OR 8' INDUSTRIAL
1, 2 OR 3 LAMP
Vaportite Industrial

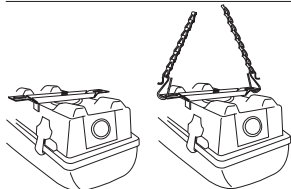
LAMP CONFIGURATIONS



MOUNTING DATA



INSTALLATION DATA



MOUNTING BRACKETS

Furnished
Two per 4' Unit
Four per 8' Unit

OPTIONAL CHAIN HANGING SET (VT2-CHAIN/SET-U)

Includes 6 ft. of chain, 4 large S-Hooks and 4 small S-Hooks
Order Two (2) Kits for each 8' Fixture

Relative Light Output Factors

To accurately predict how luminaires will perform in cold temperatures, Cooper Lighting individually tested each configuration in the different ambient environments. The relative light output factor should be applied as an additional light loss factor component.

VT3 Series	-15°F (-26°C)	0°F (-18°C)	20°F (-6°C)	33°F (0°C)	50°F (10°C)
VT3-232	n/a	n/a	0.67	0.97	0.99
VT3-254	0.73	0.76	0.86	0.90	0.94
VT3-332	n/a	n/a	0.96	0.98	0.98
VT3-354	0.91	0.93	n/a	n/a	n/a

ENERGY DATA

Input Watts:
EB Ballast & STD Lamps
132 (30), 232 (61), 332 (80)
154T5 (54), 254T5 (106), 354T5 (185)

Luminaire Efficacy Rating
LER = FL-73
Catalog Number: VT3-232DR

Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$3.29

*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

**Not Suitable for Wet Locations if EL4 Option is added. Consult Pre Sales Technical Support.

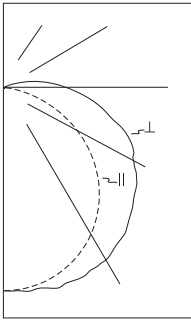
LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

LINEAR DISCONNECT

Safe and convenient means of disconnecting power.



PHOTOMETRICS



VT3-232DR-UNV-EB81-WL-U
 (1) Electronic Ballasts
 (2) 32WT8 lamps
 2850 lumens
 Spacing criterion:
 (II) 1.3 x mounting
 height, (L) 1.5 x
 mounting height
 Efficiency 77.4%
 Test Report:
 LTL10864.IES
 LER =FL72
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$3.34

Candela			
Angle	Along II	45°	Across L
0	1103	1103	1103
5	1097	1108	1107
10	1083	1107	1106
15	1059	1091	1127
20	1025	1089	1113
25	983	1058	1098
30	932	1035	1088
35	870	991	1052
40	801	952	1024
45	725	892	971
50	640	831	920
55	548	753	878
60	451	683	814
65	352	611	771
70	251	550	698
75	155	471	592
80	77	367	513
85	28	290	427
90	6	217	342

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance 20%																	
	80%			70%			50%			30%			10%			0%		
	70	50	30	70	50	30	50	30	10	50	30	10	50	30	10	0		
0	91	91	91	91	89	89	89	89	84	84	84	79	79	79	75	75	75	73
1	82	78	74	70	79	75	72	69	71	68	66	67	65	63	64	62	60	58
2	74	67	61	56	71	65	60	55	61	57	53	58	54	51	55	52	49	47
3	67	58	52	46	65	57	51	46	54	49	44	51	47	43	49	45	42	40
4	61	51	44	39	59	50	43	38	48	42	37	45	40	36	43	39	35	33
5	56	45	38	32	54	44	37	32	42	36	31	40	34	30	38	33	30	28
6	51	40	33	28	49	39	32	27	37	31	27	36	30	26	34	29	26	24
7	47	36	29	24	45	35	28	23	33	27	23	32	27	23	30	26	22	20
8	43	32	25	20	42	31	25	20	30	24	20	29	23	19	27	23	19	17
9	40	29	22	17	38	28	22	17	27	21	17	26	20	17	25	20	16	15
10	37	26	20	15	36	26	19	15	24	19	15	23	18	15	22	18	14	13

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	899	15.8	20.4
0-40	1512	26.5	34.3
0-60	2847	49.9	64.5
0-90	4169	73.1	94.5
0-180	4413	77.4	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	5519	7213	7212
55	5083	6756	7098
65	4347	6377	7074
75	3001	6097	6510
85	1349	5151	6092

ORDERING INFORMATION

SAMPLE NUMBER: VT3-232DR-UNV-EB81-WL-U

Tandem
 Blank= 4' Length
 8T=8' Length

Series
 VT3=Vaportite (Gasketed Enclosure)

Number of Lamps⁽³⁾
 1=1 Lamp
 2=2 Lamps
 3=3 Lamps
 (Lamps not included)

Wattage (Length)
 32=32W T8 (48")
 28T5=28WT5 (48")
 54T5=54WT5HO (48")⁽³⁾

Lens
 DR=Internal Prismatic Lens/15% DR High Impact Additive (Standard)
 DR-50=50% High Impact Additive
 DR-100=100% High Impact Additive (Extreme)

Voltage⁽¹⁾
 120V=120 Volt
 277V=277 Volt
 347V=347 Volt
 UNV=Universal Voltage 120/277⁽²⁾
 UNC=Universal Voltage 347/480⁽⁶⁾

GL=Single Element Fuse
GM=Double Element Fuse
EL=Emergency Installed⁽⁴⁾

Ballast Type⁽¹⁾
 EB8 =T8 Electronic Start.
 Total Harmonic Distortion < 10%
 EB8_/PLUS=T8 Electronic Start. ⁽⁶⁾
 Total Harmonic Distortion < 10%. High Ballast Factor > 1.13.
 ER8 =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%
 ER8_/PLUS=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. High Ballast Factor > 1.15.
 EBT =T5/T5HO Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Standard Ballast Factor=1.0
 EHT =T5HO Linear Electronic ⁽⁷⁾
 Start High Ambient. Total Harmonic Distortion < 10%

WL=Wet Location Label

Packaging
 U=Unit Pack
 PALC=Job Pack in Carton

Options
 8L=8 Latches (IP67 Rating), (4' only)
 RIF1=Radio Interference Suppressor
 TH=(2) Top Watertite Hubs⁽⁵⁾
 TEH=(2) Top & (2) End Watertite Hubs (all Watertite Hubs have 1/2" Conduit Entry)⁽⁵⁾
 BKS=(2) Snap-on Brackets for Chain or Surface Mount
 M4=Specular Reflector
 SSL=Stainless Steel Latches
 VRS=Vandal Resistant Screws for Latches
 GT4=Stock product only⁽⁸⁾

Accessories (order separately)
 VT2 Stem Bushing=1/2" - 3/8" (Required when using Stem/Sets, Requires (1) per (Stem/Set)
 VT2-Chain/Set-U=Chain Hanging Set Includes 6 ft. of chain, 4 large S-Hooks and 4 small S-Hooks. ⁽⁹⁾
 VT2-SS-MBK=Stainless Steel Mounting Brackets. ⁽⁹⁾
 VT3-BKS2-PK=(2) Snap-on Brackets for Surface or Chain Mount. Adjustable along length of fixture.
 VT3-4FT-M4 PK=4' Specular Interior Reflector Pack for VT3 (stock product)

NOTES: ⁽¹⁾Ballast type used only if ballast & voltage is chosen. ⁽²⁾Not available when specifying emergency ballasts, voltage must be specific. ⁽³⁾EHT2 ballasts are recommended for ambient temperatures above 102°F (40°C) 3 Lamp 54WT5HO configurations. ⁽⁴⁾Test switch mounted inside luminaire for all lamp types. ⁽⁵⁾Top Hub required when stem mounting. ⁽⁶⁾2/3 lamp ballast configurations in EB8/PLUS only for T8 UNC version. ⁽⁷⁾Use EHT1 ballast in ambient temperatures below 0°F (-18°C) on 3 Lamp 54WT5HO configurations. ⁽⁸⁾Example: VT3-232DR-UNV-EB81-WL-GT4-U. See stock guide online for stock items. ⁽⁹⁾Order one (1) kit for 4ft. fixture, or two (2) kits for 8ft. fixture.

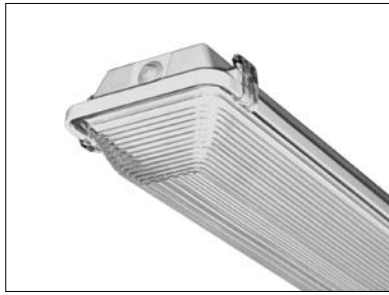
Number of Ballasts
 1=1 Ballast
 2=2 Ballasts

SHIPPING INFORMATION

Catalog No.	Wt.
VT3-132 DR-WL	16 lbs.
VT3-232 DR-WL	16 lbs.
VT3-154T5	16 lbs.
VT3-254T5	16 lbs.

Visit our web site at www.cooperlighting.com





Project Name:	
Type: 'GFA' ALT	Date:
Catalog #:	

Description:

The Nulite INT is an ideal solution for lighting cold storage, food processing, parking garages, open exterior structures, commercial and industrial applications. The luminaire housing is NSF certified.

Specifications:

Construction: Rugged corrosion resistant white housing is comprised of fiberglass, continuous closed cell gasket, ribbed acrylic diffuser, toggle latches and end plugs.

Diffuser: Ribbed 85/15 DR acrylic. Optional polycarbonate ribbed lens (not recommended for food processing).

Reflector / Ballast: Ballast cover/reflector is formed of 20 gauge cold rolled steel with a white powder coat finish. Optional Miro®4 specular anodized aluminum performance reflector. Standard electronic, Class P, ballast. Universal (UNV) voltage ballast is from 120 to 277V.

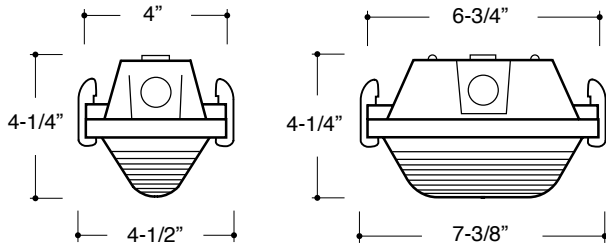
Lamping: 1 and 2 lamp cross-section T5, T5HO or T8; 3 lamp cross-section T5 or T8. Luminaire can be ordered with lamps, consult factory.

Mounting: Pair of stainless steel mounting brackets included.

Labels: UL / cUL listed for Wet Location, IP67, NSF/ANSI Standard 2 certified.

Narrow Body Option
(1 lamp, Nom. 4' Only)

1, 2 or 3 Lamp End View



Length	Wattage
28"	14T5, 24T5HO, 17T8
52"	28T5, 54T5HO, 32T8
100"	28T5-8, 54T5HO-8, 32T8-8, 59T8

Ordering Information

Sample: INT-254T5HO-277-PSN-RM1-OS65

Series	Lamp	Wattage	Voltage	Ballast	Options			
INT	1 2 3 ¹	14T5	UNV	T8 Options	EM ⁴ Emergency Battery Pack	NB Narrow Body (1 lamp, 4' only)	POLY ⁶ Polycarbonate Lens	
		24T5HO		IS (Standard)				N Normal
		17T8	120	PS	L Low	SJT/6 ³ 6' SJT Cord	-20 ⁵ -20°F Start Temp. Ballast	OS65 Occupancy Sensor IP65 (Refer to technical page for distribution)
		28T5	277	HEIS	H High	CP3/6 ³ 6' SJT Cord Plug	MLS Multi-level Switching	SSL Optional Stainless Steel Latches
54T5HO	347 ²	HEPS		CP3/6 (NEMA) ³ 6' SJT Cord - (NEMA Plug Designation) ie. CP3/6-(L7-20)	RM1 Performance Reflector			
32T8	480 ²	T5/T5HO	Ballast Factor					
28T5-8		PS (Standard)	N Normal	GLR Fusing	HE (1) 1/2" End Hub Entry (Factory Installed)			
54T5HO-8	HEPS ²	All Lamp Dimming Options						
32T8-8	DIM ² Dimming							
59T8 (F96T8)	SD ² Step Dimming							

Notes:

- Maximum ambient operating temperature is 45°F for T5HO.
- Consult factory.
- Luminaire is listed for Damp Location for this option. Consult factory for Wet Location with cord.
- Specific voltage must be ordered for this option. Consult factory for nom. 2' units.
- Not available for 59W T8.
- Not available for 8' unit.

Specifications and dimensions are subject to change without notification. Specification sheets on our website supersede all other versions. 2011 Rev. C Nulite reserves the right to bulk package any order.

FEATURES & SPECIFICATIONS

INTENDED USE

An attractive and energy-efficient surface-mounted or suspended linear fluorescent luminaire, suitable for wet, damp and/or cold locations. For challenging situations where relatively low fixture mounting heights and wide fixture spacings are common — such as parking garages, industrial facilities, retail malls, multi-purpose centers and airports. **Certain airborne contaminants can diminish integrity of acrylic.** [Click here for Acrylic Environmental Compatibility table, for suitable uses.](#)

CONSTRUCTION

Shallow 4" depth overall and attractively contoured diffuser obscure lamp while maintaining high transmission of light. One-piece fiberglass housing with integral perimeter channel utilizing continuous poured-in-place closed cell gasket. Tool-less ballast and wiring access. Stainless steel latches are standard.

Power connection is easily accommodated through pre-drilled holes at each end, with wet location fittings provided for maximum flexibility. Easily mounted to ceilings and structure, or suspended with chain, cable or rod, using mounting brackets (included).

OPTICS

Precision-formed, high-performance, 95% total reflectance optics utilizing premium specular aluminum warranted for 25 years. White ballast cover has 93+% total reflectance and is finished with an in-house polyester powder coating system.

Factory-installed lamps are available in various CRI ratings, temperature colors and rated life. Lamps are secured with rotary locking lamp sockets for ease of relamping and to reduce lamps disconnecting due to vibration or incidental contact.

ELECTRICAL

All standard ballasts are electronic, energy saving, thermally protected, Class-P, HPF, non-PCB, Sound Rated A, UL/CSA certified where applicable and comply with 4 Federal Ballast Law (Public Law 100-357, 1988). Default ballast configuration is for two-lamp ballasts except for one-lamp fixtures.

UL listed wire, rated for required temperatures, used throughout.

INSTALLATION

May be surface mounted or suspended by chain or cable. Stainless steel mounting brackets included (two per luminaire), pre-punched for easy field-attachment of bolts, screws and other mounting hardware.

LISTINGS

UL Listed for wet locations up to 40°C ambient temperature. IP65, IP66 and IP67 rated.

WARRANTY

Standard one-year warranty for the fixture. Ballasts carry manufacturer warranties of three to five years, depending on the application.

Catalog Number	FEM4 2 32 BMPCL MVOLT GEB10IS LP841
Notes	
Type	'GFA'

Low-Profile Enclosed and Gasketed Industrial

FEM

T5, T5HO or T8 Lamps



CONFIGURATIONS					
All dimensions are shown in inches (centimeters) unless otherwise noted.					
SERIES	# OF LAMPS	LAMP TYPE	WIDTH	DEPTH	LENGTH
FEM2	1, 2	17, 14T5, 24T5HO	7 (17.8)	4 (10.2)	25-7/8 (65.7)
FEM2	3	17	7 (17.8)	4 (10.2)	25-7/8 (65.7)
FEM4	1, 2	28T5, 54T5HO	7 (17.8)	4 (10.2)	51-3/4 (131.4)
FEM8	1, 2, 3	32	7 (17.8)	4 (10.2)	100 (254.0)

ORDERING INFORMATION

For shortest lead times, configure product using **bolded options**.

Example: FEM4 2 54T5HO X32 BMPCL MVOLT GEB10PS90 LP841

Series	Number of lamps ¹	Lamp type ¹	Distribution/Reflector	Shielding
FEM2 7" x 2'	1	17 17W T8 (24")	Distribution	BMPCL Polycarbonate, lineal ribbed lens ⁴
FEM4 7" x 4'	2	14T5 14W T5 (22")	(blank) Flat ballast cover	IMACL Acrylic, lineal ribbed lens
FEM8 7" x 8'	3	24T5HO 24W T5HO (22")	T1 Task beam, (0.9 ≤ SC < 1.2) ²	IMACD Acrylic, clear deep lens
		32 32W T8 (48")	S2 Enhanced spread beam, (1.4 ≤ SC < 1.8) ²	
		28T5 28W T5 (46")		
		54T5HO 54W T5HO (46")		
Voltage	Ballast configuration	Ballast	Lamp color	Options
MVOLT 120-277V, 60 Hz	(blank) All 1-lamp or 2-lamp ballasts	GEB10ISH T8 electronic ballast, ≤10% THD, instant start, high BF	(blank) No lamps	EL14DW Wet location battery pack (1400 nominal lumens)
HVOLT 347-480V, 60 Hz ^{3,5}	1/3 One 3-lamp ballast 1/4 One 4-lamp ballast	GEB10IS T8 electronic ballast, ≤10% THD, instant start, normal BF	LP830 85 CRI, 3000°K, standard life	GLR Internal fast-blow fuse ⁶
		GEB10ISL T8 electronic ballast, ≤10% THD, instant start, low BF	LP835 85 CRI, 3500°K, standard life	
		GEB10PS T5 electronic ballast, ≤10% THD, programmed rapid start	LP841 85 CRI, 4100°K, standard life	
		GEB10PS90 T5HO 90° electronic ballast, ≤10% THD, instant start, normal BF	LP850 85 CRI, 5000°K, standard life	

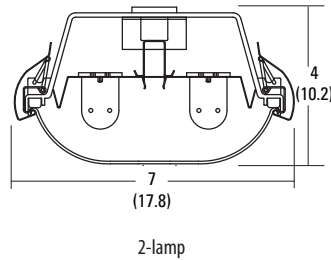
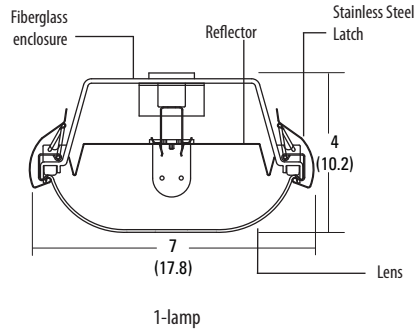
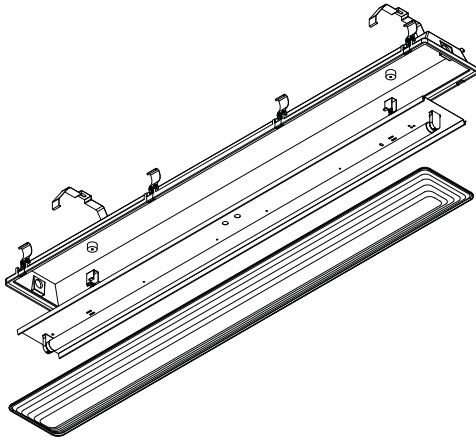
Notes

- 1 See Configurations table for lamp compatibility.
- 2 Available with IMACD shielding only.
- 3 Available with T5HO lamps.
- 4 Available only in 4' length.
- 5 Available only with two or three T8 lamps and GEB10ISH.
- 6 Must specify voltage.

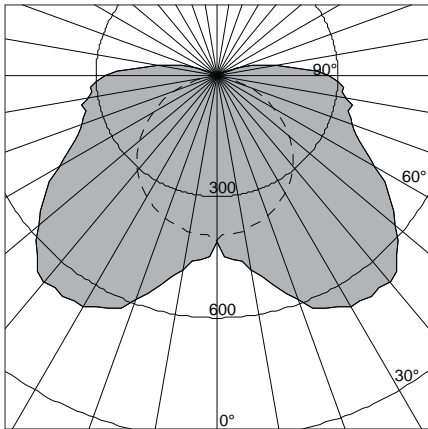
FEM Low-Profile Enclosed and Gasketed Specular

DIMENSIONS

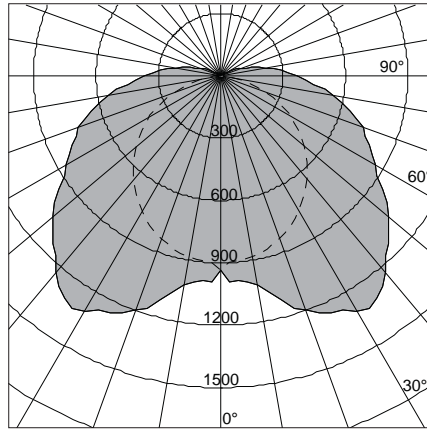
All dimensions are shown in inches (centimeters) unless otherwise noted.
Specifications subject to change without notice.



PHOTOMETRICS



FEM4 1 32 X32
Test #ALP200431_S
Fixture Efficiency: 84.1%
SC Across: 2.1, SC Along: 1.2



FEM4 2 32 X32
Test #ALP200503_S
Fixture Efficiency: 79.7%
SC Across: 1.8, SC Along: 1.2

FEATURES & SPECIFICATIONS

INTENDED USE — Use for parking garage applications. Certain airborne contaminants can diminish integrity of acrylic. [Click here for Acrylic Environmental Compatibility table for suitable uses.](#)

CONSTRUCTION — Upper housing: Rugged, die-cast aluminum housing with one-piece silicone gasketing. Lower assembly: Precision injection-molded, UV stabilized, acrylic. Hinged and secured with four stainless steel screws. Polycarbonate available.

US Patent no. D402,075. Canada Patent No. 86779.

Finish: Standard finish is white corrosion-resistant polyester powder-paint; other finishes include dark bronze, black, natural aluminum and charcoal gray.

OPTICS — Lower: Semi-specular faceted vacuum metalized aluminum reflector.

Upper: Precision injection-molded, prismatic acrylic refractor. Polycarbonate refractor and downlight focused options available.

ELECTRICAL — Ballast: Metal halide electronic ballast enables operation at any input voltage 120-277V, +/-10%, 50/60 Hz. Ballast is Class P, high power factor, <15% THD with starting temperature of -22°F (-30°C).

Socket: Medium-base porcelain socket with copper alloy, nickel-plated screw shell and center contact. UL listed 660W, 600V, 4KV pulse-rated.

INSTALLATION — Quick-mount plate is galvanized steel with full pad gasket, and has integral mounting support that allows fixture to hinge down for easy electrical connections. Mounts to recessed or surface mount outlet box. Fixture secures in place with twist-lock motion. Mounting options include yoke mount and offset junction box for use with rigid or free-swinging 3/4" NPT (by others). See Installation Instructions for details.

LISTINGS — UL listed 25°C ambient operation and wet locations. 40°C ambient option available. Listed and labeled to UL standards. Listed and labeled to CSA Standards (see Options).

Note: Specifications subject to change without notice.

Catalog Number	PGR 70MHC MVOLT HEB LPI
Notes	
Type	'GHA'



Parking Garage Lighting

PGR

Electronic Ballast
Metal Halide: 50-70W

8' to 15' Mounting

Specifications

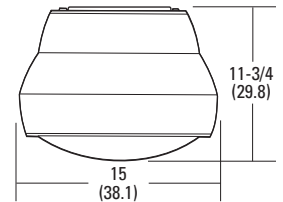
Height: 11-3/4 (29.8)

Width: 15 (38.1)

*Weight: 20 lbs (9.0 kg)

*Weight as configured in example below.

All dimensions are inches (centimeters) unless otherwise specified.



ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Example: PGR 50MHC MVOLT HEB LPI

PGR			HEB					
Series	Wattage	Voltage	Ballast	Mounting	Options	Finish		Lamp ¹²
PGR	Metal halide	120	HEB	Shipped installed	Shipped installed in fixture	(blank) White		LPI Lamp included
	50M	208 ²		(blank) Surface mount	SF Single fuse ⁶	DDB Dark bronze		L/LP Less lamp
	70M	240 ²		Shipped separately ⁴	DF Double fuse ⁶	DBL Black		LP Lamp factory installed
	Ceramic metal halide	277		OJBHK Offset junction box ⁵	EC Emergency circuit ⁷	DNA Natural aluminum		
	50MHC ¹	MVOLT³		YK Yoke mount	DN Downlight focused ⁸	DGC Charcoal gray		
	70MHC¹				FLR Frosted lower lens	CR Enhanced corrosion resistance		
					HS House side glare shield ⁹	CRT Non-stick protective coating ¹¹		
					HSR House side glare shield ready ⁹			
					HA 40°C ambient ^{9,10}			
					TP Tamper-resistant lens screws			
					PC Polycarbonate refractor/lower housing/lens			
					CSA Listed and labeled to comply with Canadian standards			
					Shipped separately ⁴			
					BDS Bird deterrent shroud (for use with rigid conduit, OJBHK, BDSYK for yoke)			

Notes

- Ceramic arc tube consistent-color lamp. Philips Master Color or GE Constant Color. Not available with L/LP.
- Consult factory for availability in Canada.
- Optional multi-volt electronic ballast capable of operating on any line voltage from 120-277V.
- May be ordered as an accessory. Must specify finish. Prefix with PGR (ie PGR YKU).
- Required when pendant is free-swinging. OJBHK accepts 3/4" pipe thread.
- Must specify voltage. Not available with MVOLT.
- Maximum allowable wattage lamp included.
- Not available with HA or HS option.
- Not available with DN option.
- 50W only.
- Black finish only.
- Must specify.

PGR Parking Garage Lighting

Consult factory for photometric data.

Notes

- 1 Photometric data for other distributions can be accessed from the Lithonia Lighting website (www.Lithonia.com).
- 2 For electrical characteristics, consult outdoor technical data specification sheets on www.Lithonia.com.
- 3 Tested to current IES and NEMA standards under stabilized laboratory conditions. Various operating factors can cause differences between laboratory and actual field measurements. Dimensions and specifications are based on the most current available data and are subject to change.

DESCRIPTION

The McGraw Edison Envoy (EPL) is a unique presentation of form, function and unmatched versatility, making it the right choice for complex garage lighting applications. A toolless accessible housing, lens and electrical access is standard. Envoy offers solutions addressing primary and egress lighting needs for garages, canopies and other installations where maintenance, performance and longevity are required. UL and C-UL US listed for wet locations under UL1598. IP66 Rated.

SPECIFICATION FEATURES

Construction

Low copper, one-piece aluminum die-cast electrical housing features heavy cast walls designed for effective heat dissipation and resistance to corrosion. Toolless aluminum die-cast latches securely hold lens in place and aid in efficient installation and maintenance. A tamper resistant option is available to prevent unauthorized access. Envoy is IP66 rated, promoting long term optical efficiency and allowing for fast, efficient cleaning by power washing. All gaskets contained within Envoy are silicone material including lens gasket and housing wire grommet.

Electrical

Each fixture includes all electrical components hard mounted to electrical housing for efficient operation. All HID units use medium-base type lamps with standard magnetic, high power factor ballasts (minimum starting -30°C (-22°F) MH-MP/-40°C (-40°F) HPS). Metal Halide provided with open rated socket. Compact Fluorescent (CF) units use 4-pin lamp sockets with standard high power factor electronic ballast (minimum starting -18°C (0°F)). Induction lamp features a high frequency, high power factor generator (available in 100-120V or 200-277V, minimum starting -25°C (-13°F)) The electrical reflector cover is keyed and accessed via two (2) toolless thumbscrews.

Optical

LENS: Lens employs a 2 part system [upper and lower] by which the reflector is accurately located and securely locked in place. Injection molded, virgin Acrylic material is standard due to its ability to resist radiation from UV and for its superior clarity [polycarbonate is available]. Lens is attached via two (2) toolless die-cast latches. When released, lens will hinge off housing and remain captive to allow for easy, obstruction free lamp placement or electrical access. Lens perimeter is completely sealed at housing junction using a one-piece extruded, vulcanized silicone gasket. **REFLECTORS:** Envoy reflectors use premium materials and a durable finish process to ensure longevity of optical performance. The 3-part reflector system employs a bright specular Alzak® anodized aluminum hydro-formed main reflector, a diffuse anodized aluminum hydro-formed upper reflector and die-formed premium 95% reflective, specular preanodized sheet aluminum inserts. A choice of three (3) different optical distributions with a variety of light controlling media may be used to optimize your lighting layout and comply with lighting ordinances. **EGRESS OPTIONS:** Envoy offers multiple egress lamp sources including quartz halogen, compact fluorescent and MR16, available in multiple circuit options. Compact

Catalog #		Type
Project		
Comments		Date
Prepared by		

fluorescent battery packs are available integral within fixture or remote mount in various wattage configurations.

Mounting

Standard fixture mounts to a square or octagonal 4" surface or recessed mounted j-box via electro-zinc plated, heavy-gauge "quick mount" bracket system, complete with stainless steel hanger which allows for "handsfree" wiring connection. Enables efficient fixture mounting, wiring connection inspection and fixture removal. Quick mount plate features stainless steel springs that help absorb vibration and aid fixture to slide and lock in place. A variety of other mounting options and accessories including free swinging balanced pendant box/bird guard, trunnion mount and wall mount arm are available.

Finish

Housing is finished in 5 stage premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Envoy is supplied standard in grey and available in black, white and bronze. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.



**EPL
ENVOY**

- 70 - 175W**
 - Pulse Start Metal Halide**
 - High Pressure Sodium**
 - Metal Halide**
 - 84 - 168W**
 - Compact Fluorescent**
 - 85W**
 - Induction**
-
- PARKING GARAGE
LUMINAIRE**

CERTIFICATIONS

IP66 Rated
U.L. 1598 (Wet Locations)
C-UL (Wet Locations)
2G Vibration Tested
40°C Ambient *
Note: Varies by model.

ENERGY DATA

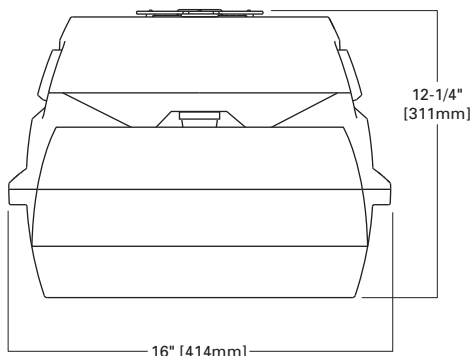
Hi-Reactance Ballast Input Watts
70W HPS HPF (95 Watts)
70W MP HPF (90 Watts)
100W HPS HPF (130 Watts)
100W MP HPF (129 Watts)
150W HPS HPF (190 Watts)
150W MP HPF (185 Watts)

CWA Ballast Input Watts
175W MP HPF (208 Watts) ©

Electronic CF Ballast Input Watts
84W CF HPF (93 Watts)
114W CF HPF (127 Watts)
126W CF HPF (139 Watts)
140W CF HPF (154 Watts)
168W CF HPF (186 Watts)

SHIPPING DATA
Approximate Net Weight:
21.5 lbs. (9.8 kgs.)

DIMENSIONS



WATTAGE TABLE

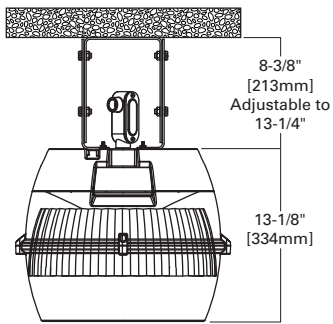
LAMP TYPE	WATTAGE
Metal Halide	175W
Pulse Start Metal Halide	70, 100, 150, 175W
High Pressure Sodium	70, 100, 150W
Compact Fluorescent	(2) 42, (2) 57, (3) 42, (2) 70, (4) 42W
Induction	85W

CERTIFICATIONS	
IP66 Rated	2G Vibration Tested
U.L. 1598 (Wet Locations)	40°C Ambient *
C-UL (Wet Locations)	

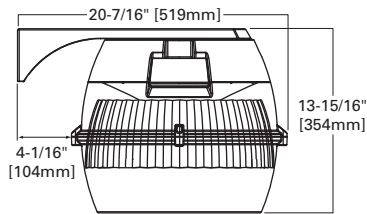
NOTES: * Varies by model.



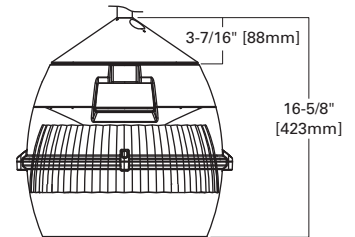
MOUNTING OPTIONS



TRUNNION-MOUNT (TMB)



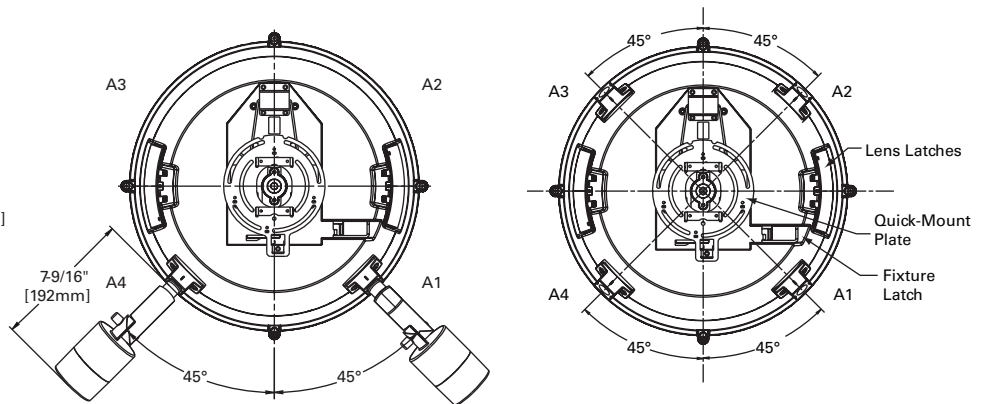
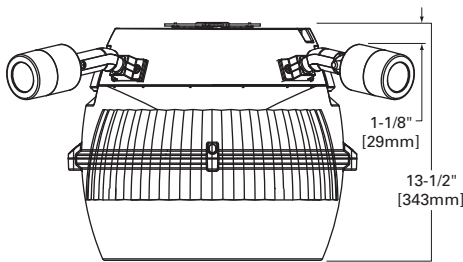
WALL MOUNT (WM)



PENDANT BOX/BIRD GUARD (PBG)

TASK LIGHT (TL) DIMENSIONS

TASK LIGHT MOUNTING DIAGRAM

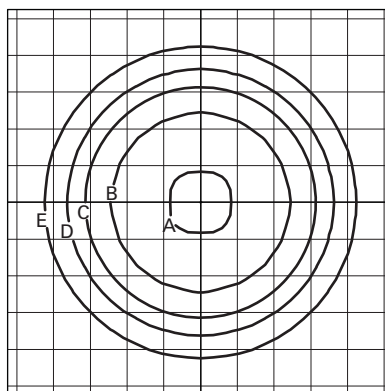
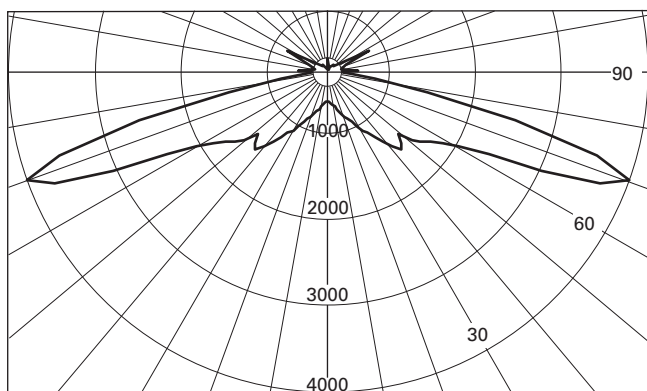


STANDBY / EGRESS OPTIONS (SUMMARY)

Primary Lamp	Option	Egress Lamp(s)	Description/Circuit Application
70-175w HID	Q	100w T4 Quartz DCB	Quartz Restrike, operates through relay and HID ballast within fixture
70-175w HID	EM	100w T4 Quartz DCB	Quartz Time Delay, operates through relay and HID ballast within fixture
70-175w HID	EM/SC	100w T4 Quartz DCB	Emergency Separate Circuit, operates through connection to separate circuit
70-175w HID	CFSC	(2) 26-(2) 42w CFL 4PIN	Separate Circuit, operates through connection to separate circuit
70-175w HID	CFRB	(2) 26-(2) 42w CFL 4PIN	CF Remote Battery Pack, operates through remote mounted CF battery pack
70-150w HID	36CFIB	(2) 18w CFL 4PIN	CF Integral Battery Pack, operates through integrally mounted CF battery pack
84, 126 or 168w CF	RBP	42w CFL 4PIN	CF Remote Battery Pack, operates through remote mounted CF battery pack
84, 126 or 168w CF	42IBP	42w CFL 4PIN	Integral Battery Pack, operates through integrally mounted CF battery pack
84, 126 or 168w CF	42ICB	42w CFL 4PIN	Integral Cold Weather Battery Pack, operates through integrally mounted CF battery pack
168w CF	4CF3	42w CFL 4PIN	4 CF lamps wired as 3 independent circuits, operates through connection to separate circuit
168w CF	4CF2	42w CFL 4PIN	4 CF lamps wired as 2 independent circuits, operates through connection to separate circuit
126w CF	3CF2	42w CFL 4PIN	3 CF lamps wired as 2 independent circuits, operates through connection to separate circuit
84, 114 or 170w CF	2CF2	42, 57 or 70w CFL 4PIN	2 CF lamps wired as 2 independent circuits, operates through connection to separate circuit
70-175w HID/84-168w CF/85 QL	TL_	50w MR16 120v, GU10 Base	Task Light, operates through connection to separate circuit
70-175w HID/84-168w CF/85 QL	2TL_	(2) 50w MR16 120v, GU10 Base	Task Light, operates through connection to separate circuit
70-175w HID	TLQ_	50w MR16 120v, GU10 Base	Task Light Restrike, operates through relay and HID ballast within fixture
70-175w HID	2TLQ_	(2) 50w MR16 120v, GU10 Base	Task Light Restrike, operates through relay and HID ballast within fixture
70-175w HID	TLEM_	50w MR16 120v, GU10 Base	Task Light Time Delay, operates through relay and HID ballast within fixture
70-175w HID	2TLEM_	(2) 50w MR16 120v, GU10 Base	Task Light Time Delay, operates through relay and HID ballast within fixture
70-175w HID/84-168w CF/85 QL	TL12V_	35-50w MR16 12v, GU5.3 Base	Task Light, operates through connection to 12v separate circuit
70-175w HID/84-168w CF/85 QL	2TL12V_	(2) 35-50w MR16 12v, GU5.3 Base	Task Light, operates through connection to 12v separate circuit
70-175w HID/84-168w CF/85 QL	TL_MR_	50 or 75w MR16 12, GU5.3 Base	Task Light, operates through integral dedicated magnetic transformer

PHOTOMETRICS

Test #: EPL-150-MP-RD / 150-Watt Pulse Start Metal Halide / 14,000-Lumen Clear Lamp

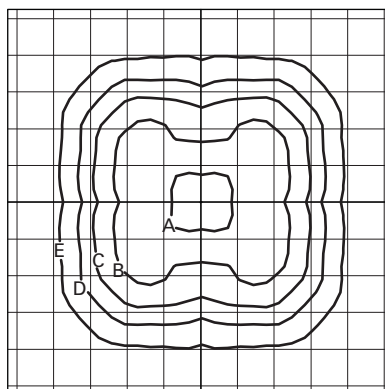
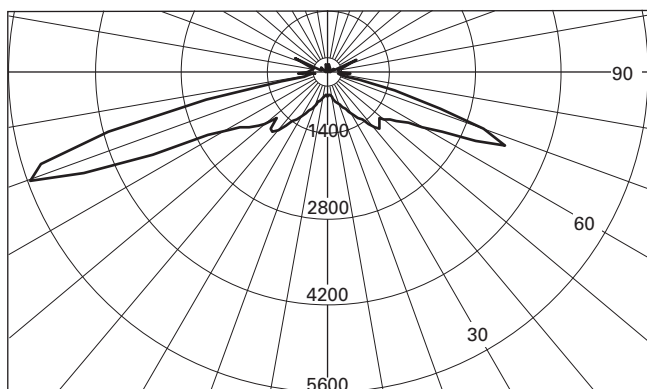


Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
10'	5.0	2.0	1.0	0.5	0.2
9'	6.2	2.5	1.2	0.6	0.2
8'	7.8	3.1	1.6	0.8	0.3

Test #: EPL-150-MP-SQ / 150-Watt Pulse Start Metal Halide / 14,000-Lumen Clear Lamp

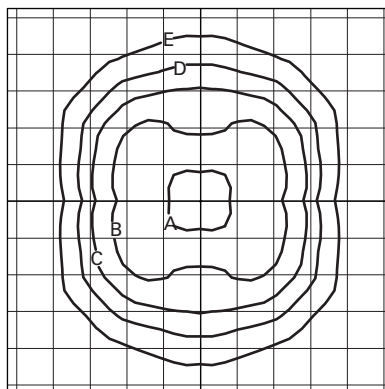
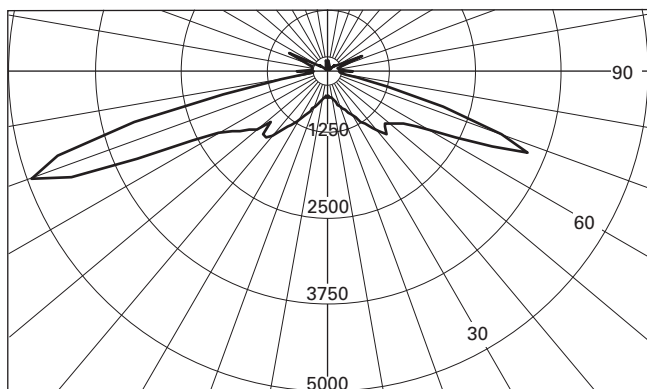


Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
10'	5.0	2.0	1.0	0.5	0.2
9'	6.2	2.5	1.2	0.6	0.2
8'	7.8	3.1	1.6	0.8	0.3

Test #: EPL-150-MP-TG / 150-Watt Pulse Start Metal Halide / 14,000-Lumen Clear Lamp



Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
10'	5.0	2.0	1.0	0.5	0.2
9'	6.2	2.5	1.2	0.6	0.2
8'	7.8	3.1	1.6	0.8	0.3

(60' Wide Bays, 8.5' LC mounting height) (150W Pulse Start Metal Halide, 14,000 lumens) (Reflectance: 20% Floor, 0% Walls, 20% Ceiling)

Fixture type	Layout	Spacing	Horizontal		Vertical		
			Ave. fc	Min.fc		Max./Min.	Min.fc @ 5'
	EPL-150-MP-RD	Single Row	18' down driving lane / centered across driving lane	5.89	0.91	12.77	0.68
	EPL-150-MP-RD	Double Row	36' down driving lane / 26' centered across driving lane	5.4	0.95	8.92	0.97
	EPL-150-MP-SQ	Single Row	18' down driving lane / centered across driving lane	5.94	1.16	10.09	0.68
	EPL-150-MP-SQ	Double Row	36' down driving lane / 26' centered across driving lane	5.45	1.37	7.16	1.15
	EPL-150-MP-TG	Single Row	18' down driving lane / centered across driving lane	5.96	1.11	10.48	0.78
	EPL-150-MP-TG	Double Row	36' down driving lane / 26' centered across driving lane	5.47	1.19	7.48	1.11

*Values are based on entire garage

ORDERING INFORMATION

SAMPLE NUMBER: EPL-175-MP-MB-MT-TG-AP-L-EM/SC

EPL							
Product Family EPL=Envoy Parking Garage Luminaire							
Lamp Wattage ¹ MH ² CF 175=175W 84= (2) 42W MP 114= (2) 57W 70=70W 126= (3) 42W 100=100W 140= (2) 70W 150=150W 168= (4) 42W 175=175W Induction HPS 85= 85W 70=70W 100=100W 150=150W	Voltage ⁴ 120=120V 208=208V 240=240V 277=277V 480=480V DT=Dual-Tap ⁶ MT=Multi-Tap ⁴ TT=Triple-Tap ⁴						
Lamp Type MH =Metal Halide MP=Pulse Start Metal Halide HPS =High Pressure Sodium CF =Compact Fluorescent QL =Induction	Distribution RD =Round SQ=Square TG =Rectangular						
Ballast Type MB =Magnetic ³ EB =Electronic ⁴	Colors (add as suffix/must specify) AP=Grey BZ =Bronze BK =Black WH =White						
				Options (add as suffix) ⁷ CD =Concentrated Downlight (Restricts Uplight 360°) ⁸ CT =Conduit Taps (Qty 2) 3/4" NPSM) ⁹ F =Single Fuse (Specify 120, 277 OR 347 in "Voltage" column). FF =Double Fuse (Specify 208, 240 OR 480 in "Voltage" column) HA =40° C Ambient ¹⁰ HL =Hi/Low Dimming ¹¹ L =Lamp Included, (HPS & QL) LOR=Lamp Included Open Rated (MP, MH) ²⁰ LQ =Lamp Included, Quartz Halogen DCB PL =Lower Polycarbonate Lens QD =Quick Disconnect(s) (between reflector cover/electrical housing) TMB =Trunnion Mount with Connection Box (some assembly required) TMC =Trunnion Mount with Power Cord (some assembly required) TR =Tamper Resistant (Torx T15 CPR) WL =24" Lead Wires SEE BELOW FOR ADDITIONAL OPTIONS	Standby + Egress Options (See Below)	Accessories ²⁵ (order separately/replace XX with color designation) EPL/PBG-XX =Balanced Pendant Box/Bird Guard EPL/WM-XX =Wall Mount Arm ²⁶ EPL/HS =House Side Shield Up and Downlight 120° Coverage (HID Lamps Only) ²⁷ EPL/HSCF =House Side Shield Up and Downlight 120° Coverage (CF Lamps Only) ²⁷ EPL/DLS =Drive Lane Shield ²⁸ VRBT15 =T15 Torx CPR Tamper Resistant Driver Bit VRST15 =T15 Torx CPR Tamper Resistant Screwdriver EPL/TL =Task Light Field Install Kit for 120V MR16 lamp (GU10 Base) EPL/TL12V =Task Light Field Install Kit for 12V MR16 lamp (GU5.3 Base)	

Standby + Egress Lamp Options

T4 Quartz Halogen + Compact Fluorescent Egress Options (For use with HID as primary lamp source)

Q=Quartz Restrike (hot restrike only, 120vT4 DCB quartz lamp)¹²
EM=Quartz Time Delay (hot and cold restrike, 120vT4 DCB quartz lamp)¹²
EM/SC=Emergency Separate Circuit (120vT4 DCB quartz lamp)¹²
CFSC=CF (1) Separate Circuit (Specify 52, 64 or 84, supplied with
120-277v electronic ballast)¹³
CFRB=CF Remote Battery Pack, sockets accommodate 26-42w CF lamps (Battery Pack
specified/supplied/wired by Others)¹³
36CFIB=CF Integral Battery Pack operates (2) 18w CFL¹⁴
Compact Fluorescent Egress Options (For use with CF as primary lamp source)
RBP=Remote Battery Pack¹⁵
42IBP=Integral Battery Pack, (1) 42w CF lamp standby¹⁶
42ICB=Integral Cold Weather Battery Pack, (1) 42w CF lamp standby¹⁷
4CF3=4 CF lamps wired as 3 independent circuits, 3 electronic ballasts (2 lamps/1 lamp/1
lamp)¹⁸

NOTES: 1 Standard with medium-base socket. 2 175W available for non-US markets only. 3 HID lamps only. 4 Must specify voltage. EB standard on CF. Available integrally in HID 100W MP (max) and 85w QL. HID availability may vary by lamp source, wattage and voltage. For HID wattages higher than 100W, remote mount ballast possible within 5 feet of unit. Consult customer service. 5 Product also available in non-US voltages and 50Hz for international markets. Must specify voltages for battery packs. Consult your customer service representative for availability and ordering information. 6 Dual tap ballast is 120/277v wired 277V. Multi-tap ballast is 120/208/240/277V wired 277V. Triple tap ballast is 120/277/347 wired 347V. 7 Add as suffix in order shown. 8 Requires option PL for use in 40°C application with HID lamps 175-200W. 9 CT option required for through branch wiring. Through branch wiring is not available with specific configurations including HID CF egress options and fixtures with integral battery pack. 10 Not available with 85W QL, options using CF lamp sources, and 200-175W HID. 11 Available in 150-175W MP, 175W MH and 70-150w HPS. Operates on 24VDC type output control module. Circuit relay board is mounted internal to fixture housing with leads exiting back. Requires low voltage wires to control module to be routed in conduit. 12 For use with HID primary lamp only. Quartz lamp 100w maximum. 13 For use with 175W (max) or less HID primary lamp only. Uses (2) 4 pin CF lamps. CF minimum starting temperature 0°F (-18°C). Remote battery option requires "CT" option. 14 For use with 150w (max) or less HID primary lamp only. Uses (2) 18W 4 pin CF lamps. Battery rated minimum 32°F/0°C. Specify 120 or 277V in "VOLTAGE" column. 15 For use with CF units only. Requires "CT" option. Battery supplied and wired by others. 16 For use with 168, 126, 84 CF units only. Battery rated minimum 32°F/0°C. Specify 120 or 277V in "VOLTAGE" column. 17 For use with 168, 126, 84 CF units only. Battery rated minimum -4°F/-20°C. Specify 120 or 277V in "VOLTAGE" column. 18 For use with 126 CF only. 19 For use with 126 CF only. 20 For use with 84, 114, or 140 CF only. 21 Task Light(s) with separate leads through back of fixture. Specify TL location by adding to back of option logic (ex.2TLA1A2)-see diagram. Some assembly required, order lamps separately. 22 For use with HID lamps only. Task Light(s) supplied wired to relay. Specify TL location by adding to back of option logic (ex.2TLA1A2)-see diagram. Some assembly required, order lamps separately. 23 Task Light(s) supplied with separate leads through back of fixture for connection to 12V circuit or battery system. Specify TL location by adding to back of option logic (ex.2TLA1A2)-see diagram. Some assembly required, order lamps separately. 24 Task Light max quantity (1), supplied with transformer. Specify TL location by adding to back of option logic (ex.2TLA1A2)-see diagram. Some assembly required, order lamps separately. 25 Order separately, replace XX with color suffix 26 Luminaires require option (WL), 24" Lead Wires. 27 Order additional shield set for more coverage (ex. 2 sets for 180° shielding) Maximum of 2 sets total. 28 Placed towards side of oncoming traffic for 60° shielding coverage. Order (2) for 2-Way traffic lanes. 29 Some options and accessories are not available in all configurations. Consult your customer service representative for ordering information. 29 Supplied as Open Rated Lamp.

4CF2=4 CF lamps wired as 2 independent circuits, 2 electronic ballasts (2 lamps/2 lamps)¹⁸
3CF2=3 CF lamps wired as 2 independent circuits, 2 electronic ballasts (2 lamps/1 lamp)¹⁹
2CF2=2 CF lamps wired as 2 independent circuits, 2 electronic ballasts (1 lamp/1 lamp)²⁰
MR16 Quartz Halogen Egress Options (For use with HID or CF as primary lamp source)
TL__=Task Light 120v MR16 (GU10 Twist Lock Base)²¹
2TL__=(2) Task Lights 120v MR16 (GU10 Twist Lock Base)²¹
TLQ__=Task Light 120v MR16 wired to Hot Restrike Relay (GU10 Twist Lock Base)²²
2TLQ__=(2) Task Lights 120v MR16 wired to Hot Restrike Relay (GU10 Twist Lock Base)²²
TLEM__=Task Light, 120v MR16 wired to Time Delay Relay (GU10 Twist Lock Base)²²
2TLEM__=(2) Task Lights, 120v MR16 wired to Time Delay Relay (GU10 Twist Lock Base)²²
TL12V__=Task Light, 12v MR16 (GU5.3 Bi-Pin Base)²³
2TL12V__=(2) Task Lights, 12v MR16 (GU5.3 Bi-Pin Base)²³
TL__MR__=Task light with transformer (GU5.3 Bi-Pin Base, specify 50 or 75w lamp, specify 120 or 277v transformer)²⁴

Parking Garages
Under Canopy
Lowbay



Specifications



RATED SYSTEM LIFE (LED life per L70)	LEDs and driver: QLP-32G2 @ 700 mA = 100,000 hours @ 25° to 40°C (77° to 104°F). QLP-48G2 @ 530 mA = 75,000 hours @ 25° to 40°C (77° to 104°F).
CONSTRUCTION	Die-cast aluminum alloy construction shall ensure durability within parking structures. Construction and finish of the housing and all exterior hardware shall ensure fixture is resistant to the effects of corrosives and contaminants such as exhaust fumes. Easy Hanger Plate shall be fabricated from galvanized steel. Standard unit is IP65 rated ('PX10' and 'OC15' occupancy detectors are currently damp location only).
DRIVER	Driver efficiency (>90% standard). Constant current (G2): 530/700 mA. 120-480 V. Temp range: -30°C (-22°F) to 40°C (104°F). Open/short circuit protection. Optional 0-10V pulse width modulation dimming to 10% power. RoHS compliant.
LED AND BOARD ARRAY	32 and 48 Cree XPGs. Neutral white 4125 K +/- 175 K. CRI is 76. LEDs only: Minimum 122 lms/W System only: QLP-32G2: 66-75 lms/W. QLP-48G2: 68-81 lms/W. Employs LEDGINE technology - Philips global LED-based optical system.
DISTRIBUTION	Symmetrical and downlight specific optics available.
MOUNTING	Standard mounting shall include a galvanized steel Easy Hanger Plate with universal provisions for 4" junction boxes. An external set screw allows the fixture to be locked or removed without fixture disassembly. Optional tamperproof screws available. Pendant mount to rigid conduit (by others) and thru wire mount also available.
OCCUPANCY DETECTOR	Optional 'PX10' and 'OC15' occupancy detectors are suitable for damp locations only. Sheet metal housing.
FINISH	Standard finish option shall be Textured Satin Aluminum (TSA). Polyester powder coat, electrostatically applied, which is preceded by a pre-treatment process for superior coating adhesion. This process meets or exceeds all ASTM testing requirements, including those for 1,000 hour salt spray endurance testing.
CRADLE TO CRADLE RECYCLING	To minimize environmental impact at end of product life cycle, the C2C product recycling assistance program is available.
WARRANTY	Mechanical, finish and LED engine & components shall be covered by a limited 5-year warranty. See terms and conditions for details.
LISTINGS	The fixture shall be ETL and cETL Listed, per UL 1598, suitable for wet locations. Suitable for use in ambients from -30° to 40°C (-22° to 104°F). Units with 'PX10' rated to 40°C (104°F). Units with 'OC15' rated to 30°C (86°F). Units with 'S' optics are DLC certified.

PROJECT
FIXTURE TYPE
CATALOG#

1611 Clovis R. Barker Road
 San Marcos, Texas 78666
 Toll Free Phone: (800) 545-1326
 Fax: (512) 753-1122
 www.qualitylighting.com
 e-mail: WQE.Info@philips.com

QLP G2

ORDERING EXAMPLE QLP-32G2-700-S-120-EZ-F1-DD-TSA

ORDERING INFORMATION

SERIES	# of LEDs	DRIVER	DISTRIBUTION	VOLTAGE	MOUNTING	OPTIONS	FINISH	ACCESSORIES
QLP	32G2	700	S	UNV	EZ		TSA	
QLP	32G2 ¹ → 48G2 ¹ →	700 530	S ² D ²	120 208 240 277 347 480 UNV ³	EZ EZBP PND-RC ^{4,5} PND-RC-24LDS ^{4,5} TW2	F1 ⁶ F2 ⁶ F3 ⁶ DD ⁷ OC15 ⁸ PX10 ⁸ TS	TSA	F1-KIT ⁶ F2-KIT ⁶ F3-KIT ⁶ PND-OJB ^{4,5} QLP-BG ⁵ C2C

SERIES	# of LEDs	DRIVER	DISTRIBUTION	VOLTAGE	MOUNTING	OPTIONS
<input type="checkbox"/> QLP	<input type="checkbox"/> 32G2 ¹ <input type="checkbox"/> 48G2 ¹	<input type="checkbox"/> 700 32G2 only <input type="checkbox"/> 530 48G2 only	<input type="checkbox"/> S ² Symmetrical <input type="checkbox"/> D ² Downlight	<input type="checkbox"/> 120 <input type="checkbox"/> 208 <input type="checkbox"/> 240 <input type="checkbox"/> 277 <input type="checkbox"/> 347 <input type="checkbox"/> 480 <input type="checkbox"/> UNV ³	<input type="checkbox"/> EZ Easy Hanger Plate (Standard) <input type="checkbox"/> EZBP Bulk Pack Easy Hanger Plate <input type="checkbox"/> PND-RC ^{4,5} Pendant Mount to Rigid Conduit <input type="checkbox"/> PND-RC-24LDS ^{4,5} Pendant Mount with 24" Leads <input type="checkbox"/> TW2 Thru-Wire Provision	<input type="checkbox"/> F1 ⁶ Single Fusing 120, 277, 347 V <input type="checkbox"/> F2 ⁶ Double Fusing 208, 240, 480 V <input type="checkbox"/> F3 ⁶ Double Fusing 208, 240, 480 V Canadian Double Pull <input type="checkbox"/> DD ⁷ Dimming Driver
						<input type="checkbox"/> OC15 ⁸ Non Programmable Occupancy Detector <input type="checkbox"/> PX10 ⁸ Proximo Programmable Occupancy Detector <input type="checkbox"/> TS Tamperproof Screws

Notes:

- '32G2' is specified with a 700mA Driver; '48G2' is specified with a 530mA Driver.
- 'S' optic uses a clear lens. 'D' optic uses a diffuse lens.
- 'UNV' includes 120-277V.
- Pendant mount to rigid conduit is 12" max. For mounting to conduit lengths greater than 12", 'EZ' hanger plate mount is required along with separately ordered 'PND-OJB' accessory.
- 'QLP-BG' bird guard accessory requires pendant mount or offset junction box.
- Specify voltage. Fusing not available with 'UNV' voltage option.
- 0-10V leads exiting top of luminaire supplied for connection to external controls.
- Available in 120, 277, and 347V only. 'OC15' and 'PX10' are damp location listed. 'OC15' is rated to 30°C. 'PX10' rated to 40°C. Includes 'DD' dimming driver standard.

FINISH

- TSA Textured Satin Aluminum

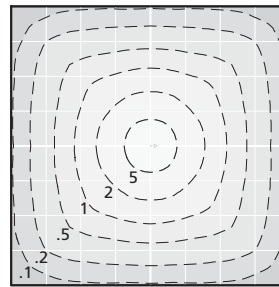
ACCESSORIES

Must be ordered separately

- F1-KIT⁶ Single Fuse Kit 120, 277, 347 V
- F2-KIT⁶ Double Fuse Kit 208, 240, 480 V
- F3-KIT⁶ Double Fuse Kit 208, 240, 480 V Canadian Double Pull
- PND-OJB^{4,5} Pendant Mount Offset Junction Box
- QLP-BG⁵ Bird Guard
- C2C Cradle to Cradle Recycling Assistance Program

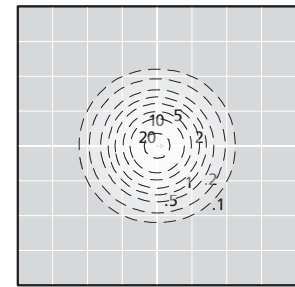
DISTRIBUTION PATTERNS

Symmetrical



QLP-48G2-530-S

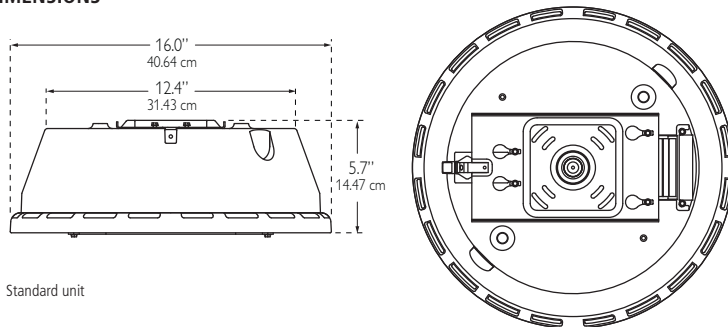
Downlight



QLP-32G2-700-D

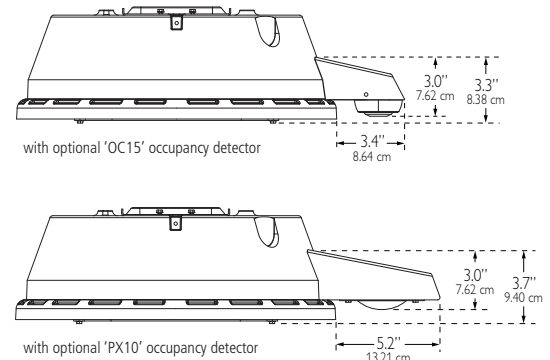
Always download the latest photometrics on the website.

DIMENSIONS



Standard unit

Weight: 17 Lbs 7.7 kgs



with optional 'OC15' occupancy detector

with optional 'PX10' occupancy detector

PROJECT
FIXTURE TYPE
CATALOG#

1611 Clovis R. Barker Road
 San Marcos, Texas 78666
 Toll Free Phone: (800) 545-1326
 Fax: (512) 753-1122
 www.qualitylighting.com
 e-mail: WQE.Info@philips.com

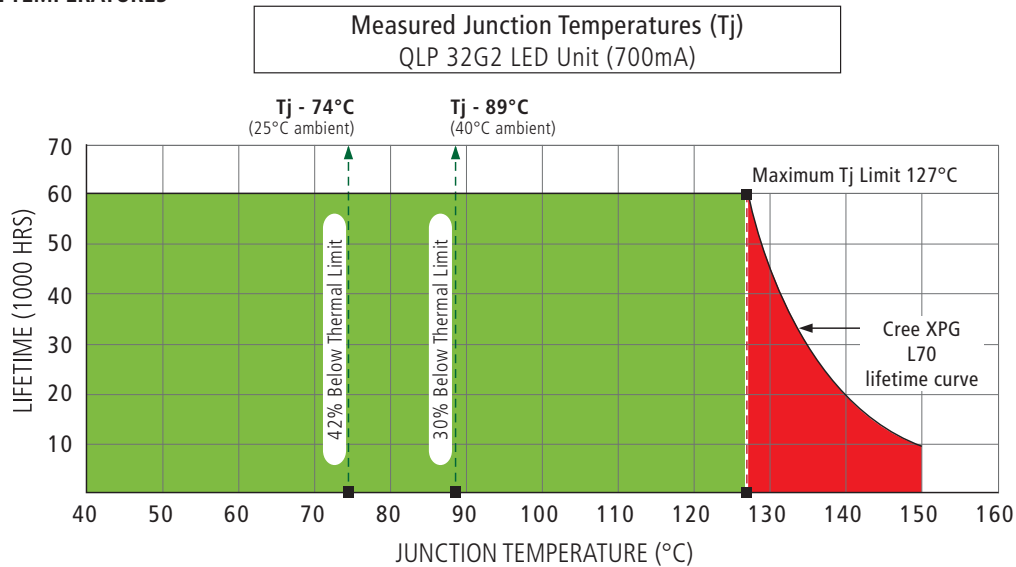
TECHNICAL DATA

QLP 32G2 @ 700 mA¹ ('S' distribution, 4125K +/-175K CCT standard)

Input Watts	72.4 ²
Initial Lumens @ 25°C Ambient	5063
Lumens per Watt @ 25°C Ambient	70
Initial Lumens @ 40°C Ambient	4778
Lumens per Watt @ 40°C Ambient	66

- Notes: 1. Technical data and performance are subject to change.
 2. Due to LED forward voltage variations and driver efficiency, total system watts could vary +/-4%.

JUNCTION TEMPERATURES



Green shaded portion represents junction temperatures below LED manufacturer's recommended limit to ensure a minimum of 60,000 hours of rated life.

LIFE EXPECTANCY

Potential Life Expectancy Table Above the minimum 60,000 Rated LED Life at Multiple Ambient Temperatures QLP 32G2 LED Unit (700mA, L70)

Note: LED rated life per the L70 curve above is 60,000 hrs. The tables below showing potential LED life expectancy are based on QLP's superior thermal management, actual junction temperature (Tj) and projected L70 curves. The projected life in years may be extended even further if used with 'DD', 'OC15' or 'PX10' dimming options.

QLP 32G2 LED (700mA)

Average Outdoor Ambient Temp	Fixture Junction Temp (Tj)	Potential LED Life Expectancy L70 (Hrs)	Fixture Efficacy (Lumens/Watt)	Potential LED Life Expectancy @ 10 Hrs/Day (Yrs)	Potential LED Life Expectancy @ 24 Hrs/Day (Yrs)
-30°C / -22°F	19	251,282	75	69	29
-20°C / -4°F	29	233,341	74	64	27
-10°C / 14°F	39	215,399	74	59	25
0°C / 32°F	49	197,457	72	54	23
10°C / 50°F	59	179,515	71	49	20
25°C / 77°F	74	164,265	70	45	19
35°C / 95°F	84	134,660	66	37	15
40°C / 104°F	89	125,690	66	34	14

PROJECT
FIXTURE TYPE
CATALOG#

1611 Clovis R. Barker Road
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 Toll Free Phone: (800) 545-1326
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 www.qualitylighting.com
 e-mail: WQE.Info@philips.com

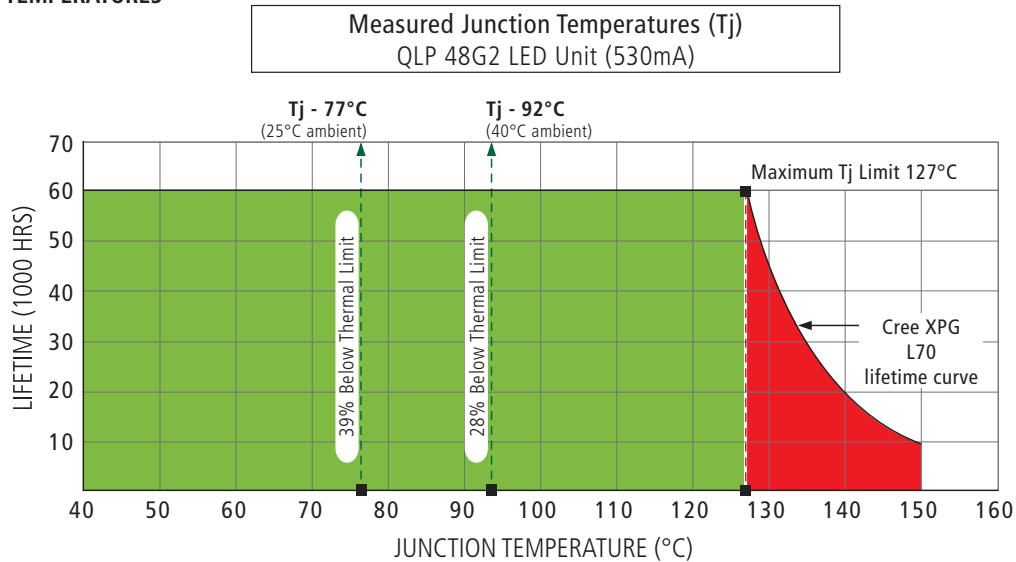
TECHNICAL DATA

QLP 48G2 @ 530 mA ('S' distribution, 4125K +/-175K CCT standard)

Input Watts	78.8 ²
Initial Lumens @ 25°C Ambient	5911
Lumens per Watt @ 25°C Ambient	75
Initial Lumens @ 40°C Ambient	5358
Lumens per Watt @ 40°C Ambient	68

- Notes: 1. Technical data and performance are subject to change.
 2. Due to LED forward voltage variations and driver efficiency, total system watts could vary +/-4%.

JUNCTION TEMPERATURES



Green shaded portion represents junction temperatures below LED manufacturer's recommended limit to ensure a minimum of 60,000 hours of rated life.

LIFE EXPECTANCY

Potential Life Expectancy Table Above the minimum 60,000 Rated LED Life at Multiple Ambient Temperatures QLP 48G2 LED Unit (530mA, L70)

Note: LED rated life per the L70 curve above is 60,000 hrs. The tables below showing potential LED life expectancy are based on QLP's superior thermal management, actual junction temperature (Tj) and projected L70 curves. The projected life in years may be extended even further if used with 'DD', 'OC15' or 'PX10' dimming options.

QLP 48G2 LED (530mA)

Average Outdoor Ambient Temp	Fixture Junction Temp (Tj)	Potential LED Life Expectancy L70 (Hrs)	Fixture Efficacy (Lumens/Watt)	Potential LED Life Expectancy @ 10 Hrs/Day (Yrs)	Potential LED Life Expectancy @ 24 Hrs/Day (Yrs)
-30°C / -22°F	22	324,572	81	89	37
-20°C / -4°F	32	297,873	79	82	34
-10°C / 14°F	42	271,175	77	74	31
0°C / 32°F	52	244,477	76	67	28
10°C / 50°F	62	211,104	73	58	24
25°C / 77°F	77	177,731	75	49	20
35°C / 95°F	87	151,033	69	41	17
40°C / 104°F	92	137,684	68	38	16

CATALOG NO. _____

TYPE NO. 'GLA' ALT

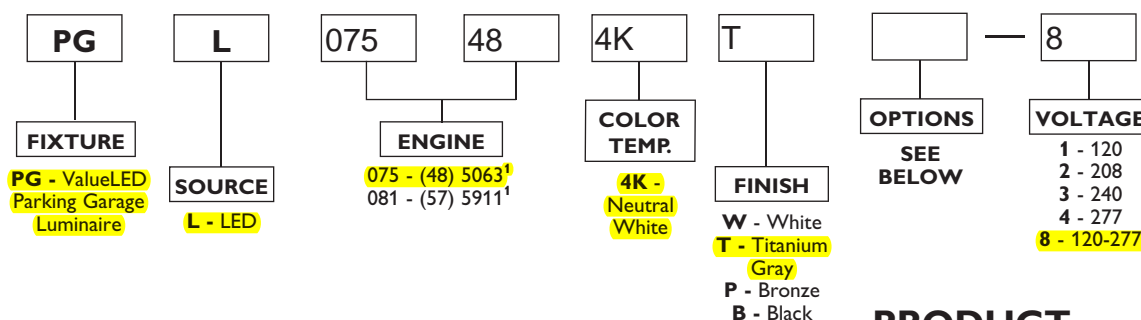
JOB NAME _____

PGL ValueLED Low-Profile Parking Garage Luminaire



ORDERING INFORMATION

Catalog Number: Example: PGL075484KT-8



ACCESSORIES

- BG** = Bird Guard Shroud
- F1-KIT** = Single Fuse Kit 120, 277V
- F2-KIT** = Double Fuse Kit 208, 240V

OPTIONS

- F1** = Single Fusing 120, 277V
- F2** = Double Fusing 208, 240V
- OC15**^{3,4,5} = Non-Programmable Occupancy Sensor
- P** = Pendant
- PX10**^{3,4,5} = Proximos Programmable occupancy sensor
- TS** = Tamperproof Screws
- TW** = Thru-wire

PRODUCT SPECIFICATIONS

- The ValueLED PGL series luminaires is recommended for applications specifically where ceiling mounting height does not exceed 15 feet
- Typical applications include parking garages, freezers, storage areas, corridors and locker rooms
- 32 or 48 high-output LEDs with individual lenses for symmetrical Type V distribution with a LED life of 60,000 hours (L70)
- Available in 4000K (neutral) color temperature
- Initial lumens per system: 72.4W - 5063; 78.8W - 5911
- 72 CRI
- Functions in environments with temperature ranges from -30c to 40c
- Computer designed precision die-cast aluminum housing for strength and thermal management
- Finished in Duraplex II wrinkle polyester as standard bronze, and available in white, titanium gray and black
- Electronic Class I LED driver accepts 120-277V, 50/60hz input (constant current)
- Quick-Mount plate permits hands-free mounting over junction boxes without opening fixture and can also be pendant mounted
- DLC Compliant
- 5 year/60,000 hour Warranty; ETL Listed for Wet Locations

NOTES

- 1.) 075 = 75W and 081 = 81W, represent watts and 48 = 5063 and 57 = 5911, represent lumen output.
- 2.) 0-10V leads existing top of luminaire supplied for connection to external controls.
- 3.) OC15 and PX10 are damp location listed.
- 4.) OC15 is rated to 30°C. PX10 rated to 40°C.
- 5.) OC15 and PX10 are only available in 120 or 277V.
- 6.) Includes DD dimming driver standard.

TECHNICAL DATA INFORMATION

	PGL07548*	PGL08157*
Input Watts	72.4**	78.8**
Initial Lumens @25°C Ambient	5063	5911
Lumens per Watt @ 25°C Ambient	70	75
Initial Lumens @ 40°C Ambient	4778	5358
Lumens per Watt @ 40°C Ambient	66	68

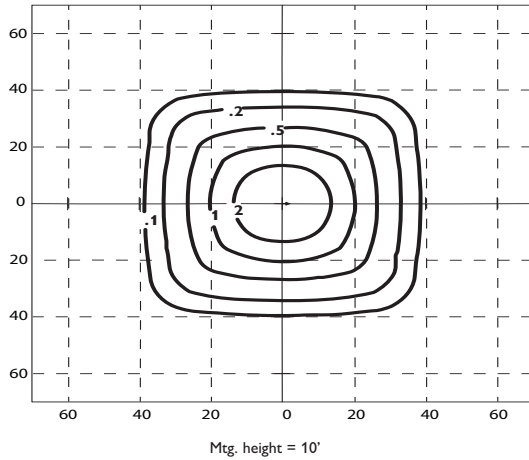
Notes: * Technical data and performance are subject to change.

**Due to LED forward voltage variations and driver efficiency, total system watts could vary +/-4%.



PGL ValueLED Low-Profile Parking Garage Luminaire

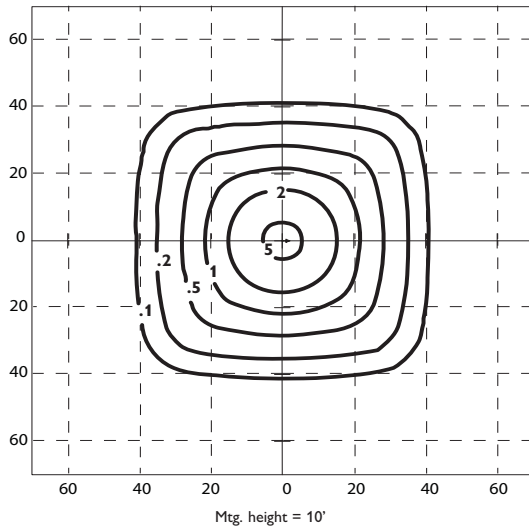
PHOTOMETRICS



Stonco Lighting LED Parking Garage Light
 Photometric Filename: PGL075484K.IES
 LEDGINE 32 NW CREE XPG

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5063
Total Luminaire Efficiency	N.A.
Luminaire Efficiency Rating (LER)	70
Total Luminaire Watts	72.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criteria (0-180)	2.30
Spacing Criteria (90-270)	2.28
Spacing Criteria (Diagonal)	2.60



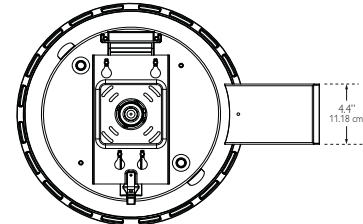
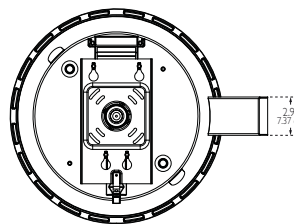
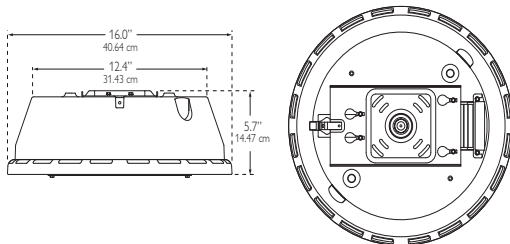
Stonco Lighting LED Parking Garage Light
 Photometric Filename: PGL08157.IES
 LEDGINE 48 NW CREE XPG

CHARACTERISTICS

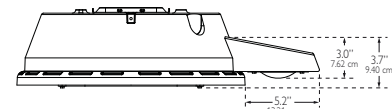
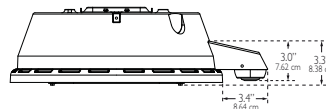
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5911
Total Luminaire Efficiency	N.A.
Luminaire Efficiency Rating (LER)	75
Total Luminaire Watts	78.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criteria (0-180)	2.24
Spacing Criteria (90-270)	2.24
Spacing Criteria (Diagonal)	2.48

OC15 in painted sheetmetal enclosure
 with Wattstopper's currently released sensor & powerpack
 (FS-305 & FS-PPV2)

PX10 in painted sheetmetal enclosure
 with SensorSwitch's currently released sensor
 (RMR 10)



Weight 17Lbs 7.7kgs



Stonco Lighting reserves the right to change specifications and dimensions without notice. Light sources and electrical specifications / availability subject to change by manufacturer without notice. Please refer to detailed specifications sheets for additional information and spec details.

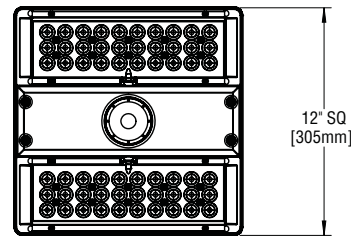
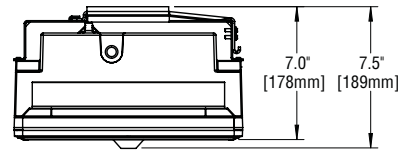
Crescent/Stonco • 2345 Vauxhall Rd. • Union, NJ 07083 • 908-964-7000 • www.stoncolighting.com 08/11

Stonco is a Philips group brand

PKG-304-5M-DM 304 Series LED Parking Structure – Type V Medium

Rev. Date: 9/30/11

BetaLED Catalog #: PKG - 304 - 5M - DM - - D - - - - -



Notes:

Product	Family	Optic	Mounting	# of LEDs (x 10)	LED Series	Voltage	Color Options	Drive Current	Factory-Installed Options
PKG	304	5M ¹	DM ²	<input type="checkbox"/> 04 <input type="checkbox"/> 06	D	<input type="checkbox"/> UL Universal 120–277V <input type="checkbox"/> UH Universal 347–480V	<input type="checkbox"/> SV Silver <input type="checkbox"/> BZ Bronze <input type="checkbox"/> BK Black <input type="checkbox"/> WH White <input type="checkbox"/> PB Platinum Bronze	<input type="checkbox"/> 700 700mA (Standard) <input type="checkbox"/> 525 525mA <input type="checkbox"/> 350 350mA	Please type additional options in manually on the lines provided above. <input type="checkbox"/> 43K 4300K Color Temperature ³ <input type="checkbox"/> DIM 0–10V Dimming ⁴⁻⁶ <input type="checkbox"/> F Fuse ^{7,8} <input type="checkbox"/> ML 75/525mA Multi-Level Option ⁹ <input type="checkbox"/> J Alternate Junction Box mounting

Footnotes

1. IESNA Type V Medium distribution
2. Direct mount
3. Color temperature per full fixture; 6000K standard; minimum 70 CRI
4. Control by others
5. Can't exceed specified drive current; consult factory if exceeding drive current is necessary
6. Refer to 304 series dimming spec sheet for availability and additional information
7. When code dictates fusing use time delay fuse
8. Not available with all multi-level options; refer to 304 series multi-level spec sheet for availability
9. Refer to 304 series multi level spec sheet for availability and additional information

LED PERFORMANCE SPECS

# of LEDs	Initial Delivered Lumens – Type V Medium @ 6000K	Rating**			Initial Delivered Lumens – Type V Medium @ 4300K	Rating**			System Watts 120–480V	Total Current @ 120V	Total Current @ 230V	Total Current @ 277V	Total Current @ 347V	Total Current @ 480V	L ₇₀ Hours* @ 25° C (77° F)	50K Hours Lumen Maintenance Factor @ 15° C (59° F)
		B	U	G		B	U	G								
350mA Fixture Operating at 25° C (77° F)																
40	4,113 (04)	2	1	1	3,791 (04)	2	1	1	47	0.39	0.23	0.19	0.15	0.11	>150,000	94%
60	6,126 (06)	3	1	1	5,646 (06)	3	1	1	68	0.59	0.33	0.27	0.20	0.15	>150,000	
525mA Fixture Operating at 25° C (77° F)																
40	5,758 (04)	3	1	1	5,307 (04)	3	1	1	68	0.58	0.33	0.27	0.21	0.16	148,000	93%
60	8,576 (06)	3	2	2	7,904 (06)	3	2	2	105	0.91	0.48	0.40	0.33	0.22	144,000	
700mA (Standard) Fixture Operating at 25° C (77° F)																
40	6,992 (04)	3	2	2	6,444 (04)	3	1	1	94	0.81	0.44	0.36	0.28	0.20	128,000	91%
60	10,414 (06)	3	2	2	9,598 (06)	3	2	2	141	1.26	0.66	0.54	0.39	0.28	122,000	

* For recommended lumen depreciation data see [TD-13](#)

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit www.iesna.org/PDF/Erratas/TM-15-07BugRatingsAddendum.pdf



General Description

Slim, low profile design. Fixture is constructed from rugged die-cast and extruded aluminum components. LED driver is mounted in a sealed weather-tight center chamber that allows for access from below the fixture. High performance aluminum heatsinks specifically designed for LED parking structure application. Mounting bracket designed to mount directly over existing single gang and octagonal junction boxes for direct mount. Five year limited warranty on fixture.

Electrical

Modular design accommodates varied lighting output from high power, white, 6000K 347-480V (+/- 500K per full fixture), minimum 70 CRI, long life LED sources. Optional 4300K (+/-300K per full fixture) also available. 120-277V 50/60 Hz, Class 1 LED drivers are standard. LED drivers have power factor >90% and THD <20% of full load. Units provided with integral 10kV surge suppression protection standard. Surge protection tested in accordance with IEEE/ANSI standard 62.41.2.

Finish

Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable silver powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Bronze, black, white and platinum bronze powder topcoats are also available. The finish is covered by our 10 year limited warranty.

Fixture and finish are endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117.

Patents

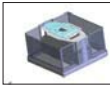
U.S. and international patents granted and pending. BetaLED is a division of Ruud Lighting, Inc. For a listing of Ruud Lighting, Inc. patents, visit www.uspto.gov.

Testing & Compliance

UL listed in the US and Canada for wet locations and enclosure classified IP66 per IEC 529 when ordered without the ML options. Consult factory for CE Certified products. IP66 rated. Dark Sky Friendly. IDA Approved. RoHS Compliant.

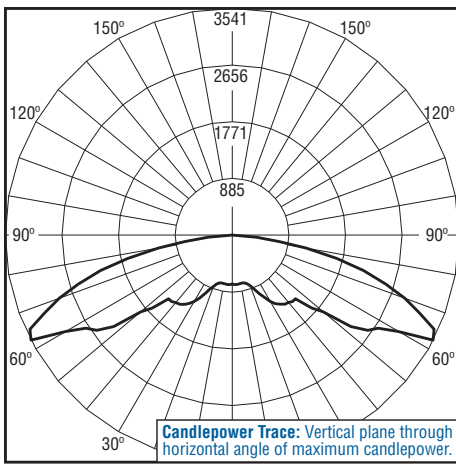


Field-Installed Accessories

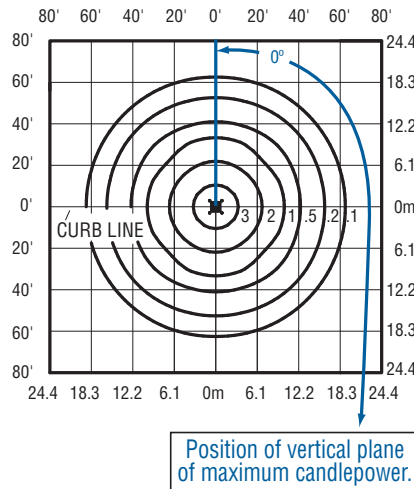


- Bird Valence
- XA-XCPVLNC

Photometrics



Independent Testing Laboratories certified test. Report No. ITL66638. Candlepower trace of 6000K, 60 LED Type V Medium luminaire with 10,893 initial delivered lumens operating at 700mA. All published luminaire photometric testing performed to IESNA LM-79-08 standards.



Isofootcandle plot of 6000K, 60 LED Type V Medium 304 series parking structure luminaire at 15' A.F.G. Luminaire with 10,414 initial delivered lumens operating at 700mA. Initial FC at grade.



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Made in the U.S.A. of U.S. and imported parts. Meets Buy American requirements within the [ARRA](http://www.arra.gov).

DESCRIPTION

The Valet™ LED luminaire features a rugged and low-profile housing construction incorporating patented, modular LED LightBAR™ technology. Through superior optical control, Valet delivers uniform and energy-conscious illumination optimized to improve vehicular movement and pedestrian safety in parking structure applications. UL/cUL listed for wet locations.

Catalog #		Type
Project		'GLA' ALT
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

One-piece, low copper die-cast aluminum housing features heavy wall construction for superior heat transfer and resistance to corrosion. Formed aluminum faceplate is secured via four (4) stainless steel fasteners, and is recessed for clean mating of door and housing. Optional tamper-proof Torx™-head fasteners offer vandal resistant access to the electrical compartment.

Optics

Choice of eight (8) patented, high-efficiency AccuLED Optics™ manufactured from injection-molded acrylic. Optics are precisely designed to shape the distribution, maximizing efficiency and application spacing. Optional GL optics internally shield the drive lane and pedestrians from direct source viewing. **Offered standard in 4000K (+/- 275K) CCT and nominal 70 CRI.**

Electrical

LED drivers mount to die-cast aluminum back casting for optimal heat sinking and operation efficiency. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Shipped standard with Cooper Lighting proprietary circuit module designed to withstand 10kV of transient line surge. 50,000 + hour life with >70% lumen maintenance. The Valet LED luminaire is suitable for operation in -30°C to 40°C ambient environments. LightBARs feature an IP66 enclosure rating.

Mounting

Standard fixture mounts to a square or octagonal 4" surface or recessed j-box via heavy gauge painted quick mount box complete with tool-less removable cable allowing for hands-free fixture wiring. Single carton packaging of housing and quick mounting box for contractor friendly arrival of product to site. Optional mounting

methods include rigid or free-swinging 3/4" pendant including bird guard, trunnion mount, wall mount and direct lag surface mount.

Finish

Cast components and mounting box finished in a Super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic. RAL and custom color matches available.

Warranty

Valet features a five-year limited warranty.



VPL VALET LED

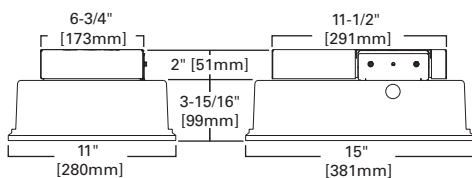
1 - 4 LightBARs
Solid State LED

PARKING GARAGE LUMINAIRE

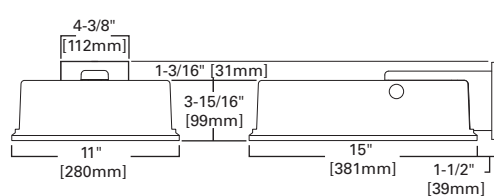
Sustainable Design

MOUNTING METHODS

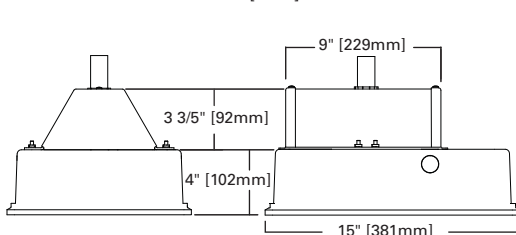
J-Box Mount [Standard]



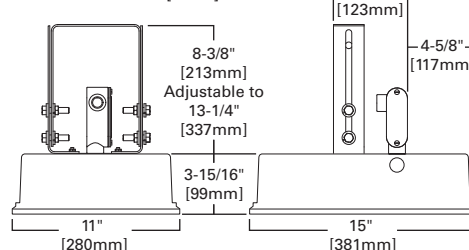
Wall Mount [WM]



Pendant Box / Bird Guard [PBG]



Trunnion Mount [TMB]



CERTIFICATION DATA

UL/cUL Listed
LM79 / LM80 Compliant
IP65 Fixture Rating, IP66 LightBARs
ARRA Compliant
ISO 9001

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60hz, 347V/60hz, 480V/60hz
-30°C Minimum Temperature
40°C Ambient Temperature Rating
50°C (Optional) Ambient Temperature Rating

SHIPPING DATA

Approximate Net Weight:
16 lbs. (8 kgs.)

POWER AND LUMENS BY BAR COUNT

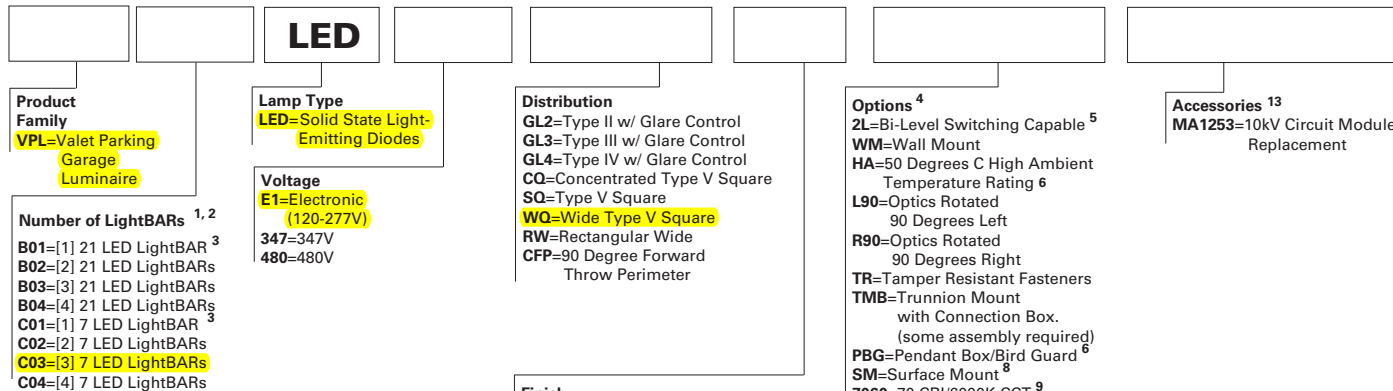
LUMEN MULTIPLIER

Number of LightBARs	DISTRIBUTION										
	Power [Watts]	Current @ 120V [A]	Current @ 277V [A]	GL2	GL3	GL4	CQ	SQ	WQ	RW	CFP
7 LED LIGHTBAR											
C01	27	0.23	0.13	1,869	1,895	1,842	1,959	1,929	1,965	1,866	1,742
C02	54	0.46	0.21	3,708	3,761	3,655	3,886	3,827	3,899	3,702	3,457
C03	77	0.65	0.29	5,463	5,540	5,384	5,725	5,638	5,744	5,454	5,093
C04	101	0.86	0.37	7,266	7,369	7,161	7,615	7,499	7,640	7,254	6,774
21 LED LIGHTBAR											
B01	27	0.23	0.13	2,299	2,331	2,266	2,409	2,373	2,417	2,295	2,143
B02	51	0.43	0.20	4,561	4,625	4,495	4,780	4,707	4,796	4,554	4,252
B03	73	0.62	0.28	6,719	6,814	6,622	7,042	6,935	7,065	6,708	6,264
B04	95	0.81	0.35	8,938	9,064	8,808	9,366	9,224	9,397	8,923	8,332

Ambient Temperature	Lumen Multiplier
10°C	1.04
15°C	1.03
25°C	1.00
40°C	0.96
50°C	0.92

ORDERING INFORMATION

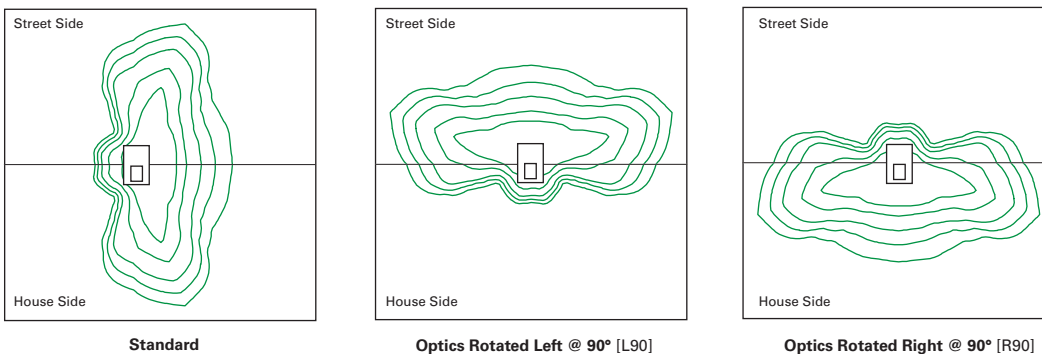
SAMPLE NUMBER: VPL-B02-LED-E1-SQ-AP



NOTES:

- 1 Standard 4000K CCT and nominal 70CRI.
- 2 21 LED LightBAR powered at 350mA, 7 LED LightBAR powered at 1A.
- 3 Not available w/ 2L Bi-level switching option.
- 4 Add as suffix.
- 5 Available in models with B02 or C02, B03 or C03, and B04 or C04. Low-Level output varies by bar count specified. Consult Factory.
- 6 Not available in models with B04 or C04.
- 7 Adjustable to accept a rigid or free-swinging pendant configuration.
- 8 Surface mount configuration limited to 25 degrees C ambient conditions.
- 9 Consult Factory for lead times and lumen multiplier.
- 10 Available with B01 and C01 configurations only. Rated for 25 degrees C ambient operating temperature.
- 11 Must specify voltage.
- 12 Housed in external box mounted to the luminaire. Available in B02-B04 and C02-C04 configurations. Replace X with number of BARs (OS2). Default time delay setting is 15 minutes. Standard lens covers up to 12' mounting height, 360 degrees and maximum 20' diameter. Not available with HA option. For other configurations, consult customer service.
- 13 Order separately.

OPTIC ORIENTATION



TYPE 'GLA' ALT
**LED GARAGE
FIXTURE SERIES**



**Brute Simplicity.
Remarkable Performance.**

The GR-52



Designing a good looking, highly efficient and reliable LED luminaire is not difficult if you play by the rules—properly placed high quality LED's, superior optics, low drive current, a substantial heat sink and Keep it simple!

Forward Thinking Solution:

The Sportlite modular LED emitter panel allows for replacement of a ¼ section in the event of a premature LED failure. Each LED section can be replaced from the low voltage side of the fixture. There is no need to access the high voltage section. As LED technology becomes more efficient the entire emitter panel can be updated. Sportlite brings you the upmost in sustainable technology.

Technology

The Sportlite GR-52 Optics are specifically designed to give a very accurate type "V" square lighting pattern. Their extreme transparency allows for maximum light output, contributing to our high lumen to watt ratio.

P: 623.930.0074 F: 623.930.0045 www.sportlite.com

**PHILIPS
SPORTLITE**



Thermal Management System

The Sportlite thermal management system keeps LED junction temperatures well below specified maximums in all applications. Our thermal technology uses both conduction and convection for removing heat from the LED's. The high thermal transfer aluminum clad LED board is completely surface mounted to the casting. This allows the entire 11 pound aluminum cast housing to dissipate the heat. The cool running LED's are evident in our superior lumen to watt ratio.

Innovative Mounting Design

Our new surface mounting system allows you to remove the fixture without disassembly. While the luminaire removes easily, it is also tamper resistant due to our unique design. To take down the fixture simply remove two screws on each side and pull out the locking spring. You can then twist the fixture ¼ of a turn to release it.

Reliability

Reliability is essentially a factor of two components—drive current and LED Junction temperature. As drive currents increase (above 350ma) so do junction temperatures, unless heat sinking is adjusted to accommodate them. Junction temperatures above 150°C (other LED's may vary) will shorten the life of the LED. Sportlite's straightforward design with extensive "Direct Contact" heat sinking keeps the LED's junction temperatures 60% below maximum, while drive current remains at 350^{ma}

Delivered Absolute Lumens

Lumen ratings are based on "absolute" measurements not "relative".

L-70 Rating

70% lumen maintenance @82,000 hrs. This indicates that after 82,000 hrs. of use there will still be 70% lumen maintenance. This is based on the LED's LM-80 rating when it is compared to the GR52 drive current, and LED junction temperature.

LM-79 Photometric Reports & IES Files

All applicable data provided in this document is based on LM-79 testing standards and reports.

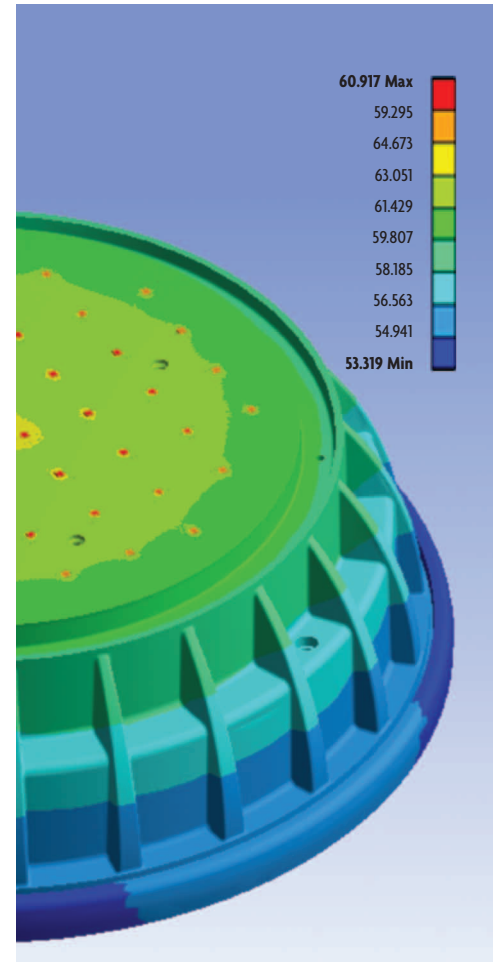
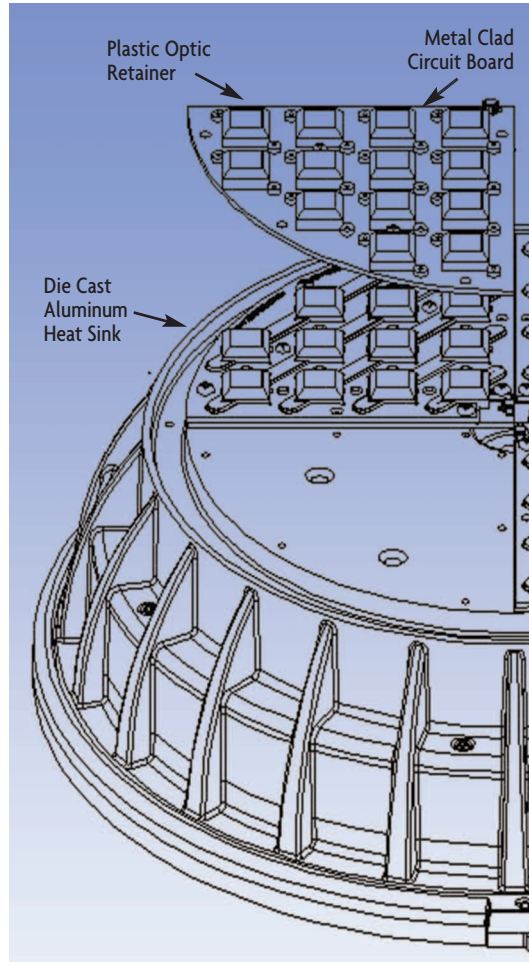
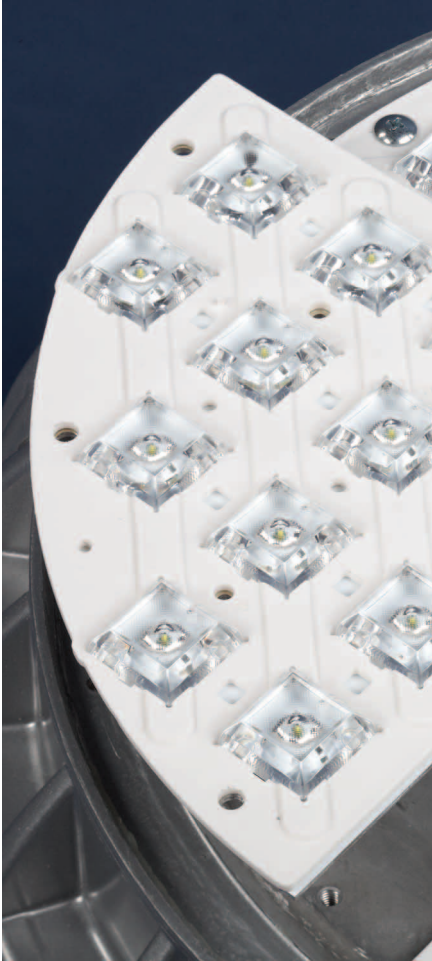
LM-80 Rating

The LED's LM-80 rating is based on Junction Temp, Air Temp & Drive Current which is adhered to in the GR52.

Input Power

Total power consumption is 60 watts at full power. The GR-52 can be ordered with one driver for all-on/off, or 2 drivers for 50/50 switching. There is also an option for a 0-10 volt dimming driver

Massive but Uncomplicated Heat Sinking



THERMAL MANAGEMENT SYSTEM

All LED's are mounted to our eleven pound casting via an aluminum clad LED board. Fewer connections means maximum transfer of heat from the LED's to the casting. It seems so simple, but simple works.

REPLACEABLE BOARD SECTIONS

Our LED board is divided into 4 replaceable sections that are accessible from the low voltage side of the unit. In the rare case of a premature failure any given section can be easily replaced

THERMAL MODELING

Thermal modeling performed by CRE indicates LED junction temperatures at the warmest point to be only 60°C. Maximum Junction Temperature allowed is 150°C. These temperatures were replicated through actual physical testing. Low Junction Temperatures means longer life LED's.





Philips Sportlite

lighting facts^{CM}

A Program of the U.S. DOE

Light Output (Lumens)	5228
Watts	59.8
Lumens per Watt (Efficacy)	87

Color Accuracy Color Rendering Index (CRI)	74
--	-----------

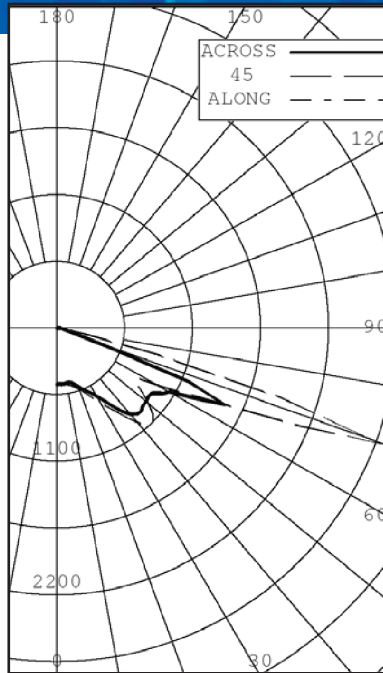
Light Color Correlated Color Temperature (CCT)	5238 (Daylight)
--	------------------------

2700K 3000K Bright White 4500K Daylight 6500K

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

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

Registration Number: 7BX1-TXTDV4
Model Number: GR-52
Type: Parking garage fixture



Specifications (G Model Only)

- 87 lm/w
- 60 Input Watts
- 5228 Absolute Lumens
- 70° Peak Intensity
- 5000k Color to Maximize Visibility
- CRI = 74
- Wet Listed
- RoHS Compliant
- LED Junction Temp = 60.0° C
- Thermally Protected LED Driver
- Five Year Warranty

Typical Photometrics

- 30' X 30' X 9' Spacing
- Max FC 8.1
- Min FC 2.3
- Avg. FC 5.7
- Max/Min 3.5:1

Dimensions

17 1/16" X 6 1/2"

Lighting Facts Label

The U.S. Department of Energy (DOE) has developed the Lighting Facts Program to assure decision makers that the performance of LED-based lighting products is represented accurately. You can check the website (www.lightingfacts.com) to confirm this product is listed and that it performs to the specifications on the label. These figures come from the LM-79 testing report.

5yr. Warranty

Specification Information

EXAMPLE:

GR52-E 50 FL 120 ST 1SL

Model #	LED CCT	Mounting	Voltage	Color	Options	Accessories
GR52-E ---	50 - -5000K	FL - Flush Mount SLB - Slide Box	120 240 277 347	ST Standard Silver gray CC Custom Color (must specify RAL#)	1SL All on/off 2SL 50/50 Switching Dim 0-10v Dimming	BR Bird Shroud OCC Occupancy Sensor PEC Photo Cell
GR52-G ---	50 - -5000K	FL - Flush Mount SLB - Slide Box	120 240 277 347	ST Standard Silver gray CC Custom Color (must specify RAL#)	1SL All on/off 2SL 50/50 Switching Dim 0-10v Dimming	BR Bird Shroud OCC Occupancy Sensor PEC Photo Cell

R11/10

P: 623.930.0074 F: 623.930.0045 www.sportlite.com

application

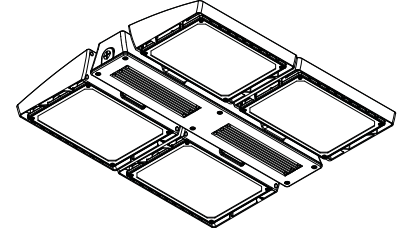
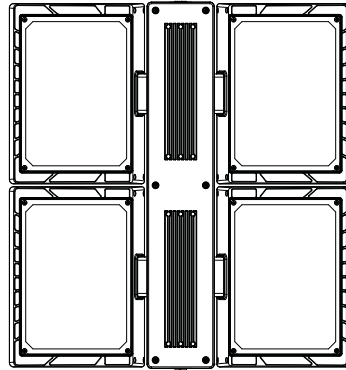
- This luminaire can be used to illuminate manufacturing, warehousing, gymnasiums, arenas and many other large indoor spaces with control and precision.

construction & features

- Die cast aluminum driver housing.
- Die cast aluminum heat sinks for light engines provide excellent thermal transfer to extend component life.
- Tempered glass lens with molded silicone rubber gasket seals the optical compartment.
- Polyester powder finish on all die cast parts for excellent impact, corrosion and UV resistance.
- LED light engines and drivers are field replaceable.
- 5 Year Limited Warranty
- Components are RoHS compliant.

electrical

- Listed by ETL to meet UL 1598 standards for damp location and 45° C ambient.
- Dimming drivers are standard. Control is 0-10V DC. (See wiring notes below)
- Furnished with surge protector.



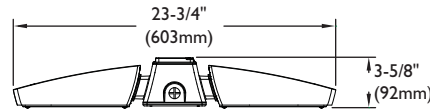
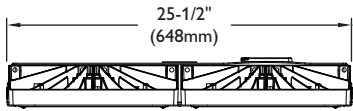
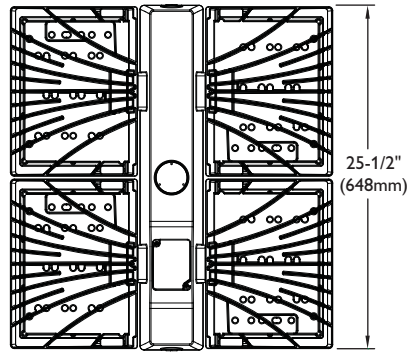
Specifier's Reference

Project	
Type	HLA
Model No.	HBL128GL70NW-UNV-MC-WT
Comments	

Green Choice: HBL128GL70NW-UNV-MC-WT

HBL	128GL	70	NW	UNV	M	C	WT	
Family HBL	Driver Current 35 – 350 mA 53 – 530 mA 70 – 700 mA	No. of LEDs 128GL	CCT WW – 3000K NW – 4000K CW – 5700K	Voltage UNV – 120-277 120 – 120 208 – 208 240 – 240 277 – 277 HRV – 347-480 347 – 347 480 – 480	Optics N – Narrow M – Medium W – Wide A – Aisle	Mounting C – Cable P – Pendant stem or hook S – Surface Mount (Requires OB or OBD - Order Separately)	Paint Colors BZ – Dark Bronze WT – White BK – Black AL – Silver Aluminum (Consult factory for other colors)	Options WHP6 – Wired Hook, 6' Cord & NEMA Plug ^{1,2,56} WP6 – Wired 6' Cord & NEMA Plug ^{1,2,56} WC6 – Wired 6' Cord ¹ WHP6D – Wired Hook, 6' Cord & NEMA plug for Line Voltage; Wired 6' Cord & Plug for Dimming Control ^{1,2,56} WP6D – Wired 6' Cord & NEMA plug for Line Voltage; Wired 6' Cord & Plug for Dimming Control ^{1,2,56} WC6D – Wired 6' Cord for Line Voltage; Wired 6' Cord for Dimming Control ¹ MD360 – 360 Motion Detector ^{56,1,2,3} MD180 – 180 Motion Detector ^{56,1,2,3} WL – Wet location IP65 – IP65 (Cable mount version Only) EM – Emergency Lampholder (Wiring & Lamp by others) ¹ IND – Indirect ² WSF – Wired Single Fuse ⁴⁶ WDF – Wired Double Fuse ⁴⁵ SL – Solite Lens
Accessories (Order Separately) CH – Cover Half for Power Hook (use with PB) PB – Power Box for Power Hook (use with CH) HMR – Suspension Hook Male LMR – Suspension Loop Male HP12-6 – Hook-Cord-Plug Assembly 120V (P mounting only) HP25-6 – Hook-Cord-Plug Assembly 208-240V (P mounting only) HP27-6 – Hook-Cord-Plug Assembly 277V (P mounting only) HP48-6 – Hook-Cord-Plug Assembly 480V (P mounting only) SCB3 – Ballast Retainer Chain 3' OB – Thru-wire outlet box OBD – Thru-wire outlet box with disconnect OBD4 – Thru-wire outlet box with 4 wire disconnect OBD5 – Thru-wire outlet box with 5 wire disconnect (Refer to Section 18000 for additional accessories.)	Wiring Notes Standard cords or cord and plug assemblies have 3 wires. Consult factory for cord or cord and plug options for dimming.	General Notes All options factory installed. All accessories are field installed. Ambient is 40°C for surface mount or for unit hung 12" or less from the ceiling.	Predicted L₇₀ Lifetime 25°C Ambient - > 100,000 hours 45°C Ambient - = 100,000 hours (based upon LED manufacturer's supplied LM-80 data and in-situ laboratory testing)	Footnotes ¹ Not available with IP65 option. ² Not available with WL option. ³ Motion detector is on/off only. ⁴⁵ Use with 208, 240 and 480 volt. ⁴⁶ Use with 120, 277 and 347 volt. ⁵⁶ Must specify voltage.	Weight = 36 lbs. (max.)			

dimensions



photometry

LEDs: 4x32 Cree XPG

Distribution – Medium CCT: NW

Catalog No. HBL128GL70NW-UNV-M Test No. 29362 S/MH 1.4 Current 700mA Input Watts 287 Lumens 22,234 Efficacy 77.5 lm/W The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology. Photometric data based on tests performed in compliance with LM-79	Candlepower <table border="1"> <thead> <tr> <th>Angle</th> <th>Avg. Candela</th> </tr> </thead> <tbody> <tr><td>0</td><td>10479</td></tr> <tr><td>5</td><td>10405</td></tr> <tr><td>10</td><td>10241</td></tr> <tr><td>15</td><td>10239</td></tr> <tr><td>20</td><td>10596</td></tr> <tr><td>25</td><td>11308</td></tr> <tr><td>30</td><td>10790</td></tr> <tr><td>35</td><td>9817</td></tr> <tr><td>40</td><td>8000</td></tr> <tr><td>45</td><td>4926</td></tr> <tr><td>50</td><td>1882</td></tr> <tr><td>55</td><td>769</td></tr> <tr><td>60</td><td>538</td></tr> <tr><td>65</td><td>390</td></tr> <tr><td>70</td><td>264</td></tr> <tr><td>75</td><td>144</td></tr> <tr><td>80</td><td>59</td></tr> <tr><td>85</td><td>10</td></tr> </tbody> </table>	Angle	Avg. Candela	0	10479	5	10405	10	10241	15	10239	20	10596	25	11308	30	10790	35	9817	40	8000	45	4926	50	1882	55	769	60	538	65	390	70	264	75	144	80	59	85	10	Light Distribution <table border="1"> <thead> <tr> <th>Degrees</th> <th>Lumens</th> <th>% Lamp</th> <th>% Luminaire</th> </tr> </thead> <tbody> <tr><td>0-30</td><td>9070</td><td>40.8</td><td>40.8</td></tr> <tr><td>0-40</td><td>15502</td><td>69.7</td><td>69.7</td></tr> <tr><td>0-60</td><td>21523</td><td>96.8</td><td>96.8</td></tr> <tr><td>0-90</td><td>22234</td><td>100.0</td><td>100.0</td></tr> </tbody> </table>	Degrees	Lumens	% Lamp	% Luminaire	0-30	9070	40.8	40.8	0-40	15502	69.7	69.7	0-60	21523	96.8	96.8	0-90	22234	100.0	100.0	Average Luminance <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45°</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>45</td><td>27805</td><td>19966</td><td>20149</td></tr> <tr><td>55</td><td>4923</td><td>3989</td><td>3732</td></tr> <tr><td>65</td><td>3483</td><td>2675</td><td>2552</td></tr> <tr><td>75</td><td>2293</td><td>1648</td><td>1353</td></tr> <tr><td>85</td><td>688</td><td>224</td><td>172</td></tr> </tbody> </table>	Angle	End	45°	Cross	45	27805	19966	20149	55	4923	3989	3732	65	3483	2675	2552	75	2293	1648	1353	85	688	224	172																																																																																																																																																																												
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LEDs: 4x32 Cree XPG

Distribution – Wide CCT: NW

Catalog No. HBL128GL70NW-UNV-W Test No. 29363 S/MH 2.7 Current 700mA Input Watts 287 Lumens 22,435 Efficacy 78.2 lm/W The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology. Photometric data based on tests performed in compliance with LM-79	Candlepower <table border="1"> <thead> <tr> <th>Angle</th> <th>Avg. Candela</th> </tr> </thead> <tbody> <tr><td>0</td><td>3277</td></tr> <tr><td>5</td><td>3378</td></tr> <tr><td>10</td><td>3581</td></tr> <tr><td>15</td><td>3841</td></tr> <tr><td>20</td><td>4201</td></tr> <tr><td>25</td><td>4700</td></tr> <tr><td>30</td><td>5300</td></tr> <tr><td>35</td><td>5973</td></tr> <tr><td>40</td><td>6698</td></tr> <tr><td>45</td><td>7510</td></tr> <tr><td>50</td><td>8043</td></tr> <tr><td>55</td><td>7584</td></tr> <tr><td>60</td><td>4679</td></tr> <tr><td>65</td><td>789</td></tr> <tr><td>70</td><td>298</td></tr> <tr><td>75</td><td>158</td></tr> <tr><td>80</td><td>67</td></tr> <tr><td>85</td><td>18</td></tr> </tbody> </table>	Angle	Avg. Candela	0	3277	5	3378	10	3581	15	3841	20	4201	25	4700	30	5300	35	5973	40	6698	45	7510	50	8043	55	7584	60	4679	65	789	70	298	75	158	80	67	85	18	Light Distribution <table border="1"> <thead> <tr> <th>Degrees</th> <th>Lumens</th> <th>% Lamp</th> <th>% Luminaire</th> </tr> </thead> <tbody> <tr><td>0-30</td><td>3624</td><td>16.1</td><td>16.1</td></tr> <tr><td>0-40</td><td>7366</td><td>32.8</td><td>32.8</td></tr> <tr><td>0-60</td><td>19747</td><td>88.0</td><td>88.0</td></tr> <tr><td>0-90</td><td>22435</td><td>100.0</td><td>100.0</td></tr> </tbody> </table>	Degrees	Lumens	% Lamp	% Luminaire	0-30	3624	16.1	16.1	0-40	7366	32.8	32.8	0-60	19747	88.0	88.0	0-90	22435	100.0	100.0	Average Luminance <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45°</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>45</td><td>31294</td><td>31931</td><td>32268</td></tr> <tr><td>55</td><td>40895</td><td>40678</td><td>38128</td></tr> <tr><td>65</td><td>9094</td><td>5222</td><td>4046</td></tr> <tr><td>75</td><td>2131</td><td>1905</td><td>1512</td></tr> <tr><td>85</td><td>825</td><td>555</td><td>600</td></tr> </tbody> </table>	Angle	End	45°	Cross	45	31294	31931	32268	55	40895	40678	38128	65	9094	5222	4046	75	2131	1905	1512	85	825	555	600																																																																																																																																																																												
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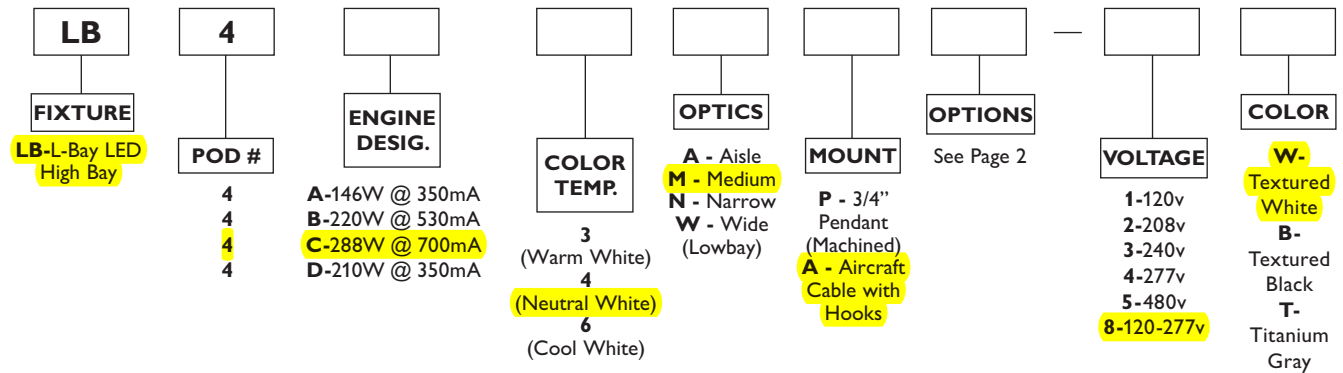
Contact Factory for Additional Configurations.
 Specifications are subject to change without notice.
 Consult website for latest version of this spec sheet.

L-Bay 4-Pod LED Low-Profile High-Bay Luminaire

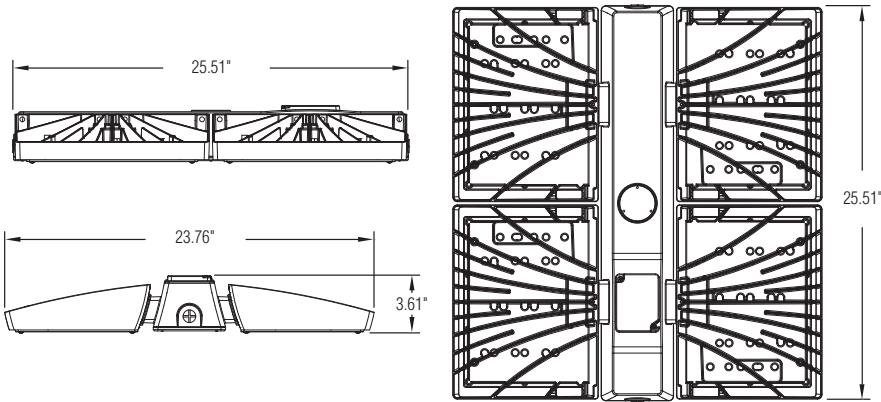


ORDERING INFORMATION

Catalog Number: Example: LB4C3APF1-1W



TECHNICAL



Engine Designator Details*

Board Size	Current	System Wattage	Lumen Output	Efficacy (L/W)
4 x 48	350mA	210	19,000	90
	700mA	288	22,500	78
4 x 32	530mA	220	18,500	84
	350mA	146	13,500	92

* Lumens mentioned are averaged between aisle through wide distribution and lumen output will vary by color temperature options.

Predicted L70 Lifetime

25°C Ambient - > 100,000 hours

45°C Ambient - = 100,000 hours

(based upon LED manufacturer's supplied LM-80 data and in-situ laboratory testing)



PRODUCT SPECIFICATIONS

- The L-Bay is an LED highbay luminaire available in two and four pod configurations. Its low profile architectural design make it available for a wide variety of applications including manufacturing, warehousing, large retail, home centers, cold storage and gymnasiums.
- The LED pods and driver housings are made from precision die-cast aluminum for strength and include computer designed heat sinks using venturi principle for controlled air flow and excellent heat management.
- The standard finish is a corrosion resistant polyester powder coating in gloss white.
- High power factor electronic integral LED driver(s) (350ma/530mA and 700mA) available in 120-277V or 480V
- High output LEDs with 32 or 48 per pod and each LED having its own optical lens for precise optical control in for wide, medium narrow or aisle distributions.
- Mounting choices include single pendant/stem or aircraft cable hangers. Aircraft cable hangers supplied standard with base product.
- Dimming driver standard (control 0 – 10V DC).
- Components RoHS compliant.
- Driver is field-replaceable.
- Tempered glass lens with molded silicone rubber gasket seals the optical compartment.
- Published 5 year warranty.

PHOTOMETRICS*

OPTIONS

Candlepower		Distribution – Medium				CCT: NW	CREE XPG LEDs			
Angle	A vg. Candela	Light Distribution				Average Luminance				
		Degrees	Lumens	% Lamp	% Luminaire	Angle	End	45°	Cross	
0	5307	0-30	4559	40.4	40.4	45	31195	31629	33345	
5	5304	0-40	7821	69.4	69.4	55	4969	5919	5563	
10	5221	0-60	10934	97.0	97.0	65	3258	3367	3759	
15	5185	0-90	11274	100.0	100.0	75	2227	2495	2489	
20	5202					85	661	839	833	
25	5543									
30	5762									
35	5145									
40	4778									
45	3498									
50	1705									
55	489									
60	311									
65	222									
70	160									
75	99									
80	46									
85	13									

- Blank-Glass Lens**
- F1-** Single Fuse (specify voltage)
 - F2-** Double Fuse (specify voltage)
 - 3C-** 3' Cord, no Plug
 - 3CD-** 3' Cord, no Plug for use when using Dimming Option
 - 6C-** 6' Cord, no Plug
 - 6CD-** 6' Cord, no Plug for use when using Dimming Option
 - 3P-** 3' Cord and Twist-Lock Plug (specify voltage)
 - 3PD-** 3' Cord/Plug when using dimming option
 - 6P-** 6' Cord and Twist-Lock Plug (specify voltage)
 - 6PD-** 6' Cord/Plug when using Dimming Option
 - H-** Hook
 - N-** Indirect Mounting
 - P-** Protection - IP65 Rating (with cable mounting only)
 - L-** Prismatic Lens
 - E-** Emergency Lampholder (lamp by others)
 - MC-** 360° Motion Sensor with Control 0 – 10V
 - MA-** 360° Motion Sensor with Adjustable Day

Candlepower		Distribution – Wide				CCT: NW	CREE XPG LEDs			
Angle	A vg. Candela	Light Distribution				Average Luminance				
		Degrees	Lumens	% Lamp	% Luminaire	Angle	End	45°	Cross	
0	1618	0-30	1807	16.1	16.1	45	33088	33934	33465	
5	1670	0-40	3673	32.7	32.7	55	43728	44673	42873	
10	1783	0-60	9955	88.6	88.6	65	8229	6465	5595	
15	1908	0-90	11240	100.0	100.0	75	2227	2405	1947	
20	2090					85	1175	979	671	
25	2346									
30	2639									
35	2957									
40	3304									
45	3694									
50	4017									
55	3901									
60	2844									
65	420									
70	164									
75	90									
80	42									
85	13									

ACCESSORIES

- WG-HBL4-** Wire Guard

* Photometric data based on test performed in compliance with LM79.

Type No. _____

Catalog No. _____

Job. Name _____

BayLyter Series LED

Four-Pod Industrial High-Bay Luminaire

APPLICATIONS

- Wide variety of high ceiling applications
- Applications including manufacturing, warehousing, large retail, home centers, cold storage and gymnasiums

CONSTRUCTION

- Low profile architectural design
- LED pods and driver housings are made from precision die-cast aluminum for strength
- Computer designed heat sinks
- Venturi principle for controlled air flow
- Corrosion resistant polyester powder finish in textured white standard
- Other colors include textured black and titanium gray

ELECTRICAL

- High power factor electronic integral LED driver(s) (350ma/530mA and 700mA)
- Available in 120-277V or 480V
- Dimming driver standard (control 0 – 10V DC)
- Components RoHS compliant
- Driver is field-replaceable

OPTICS

- High output LEDs with 32 or 48 per pod
- LEDs include individual optical lens for precise optical control
- Wide, medium narrow or aisle distributions
- Tempered glass lens with molded silicone gasket seals the optical compartment

MOUNTING

- Mounting choices include single pendant/stem or aircraft cable hangers (Aircraft cable hangers supplied standard with base product)

WARRANTY/LISTINGS

- Published 5 year warranty
- ETL approved for damp locations (IP65 rating as option)

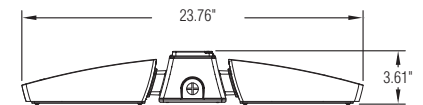
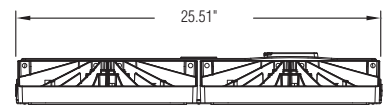
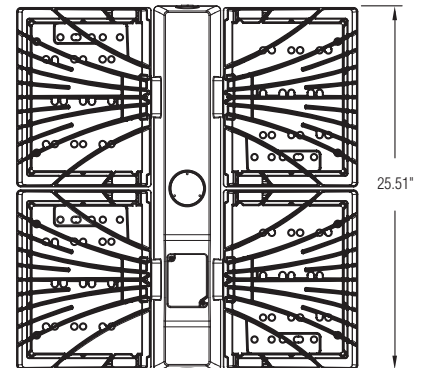


Predicted L70 Lifetime

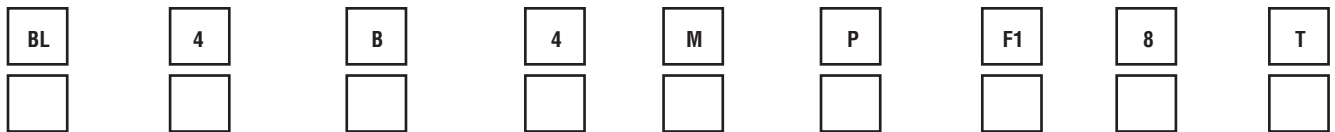
25°C Ambient - > 100,000 hours

45°C Ambient - = 100,000 hours

(based upon LED manufacturer's supplied LM-80 data and in-situ laboratory testing)



Ordering Guide Example: BL4B4MPT



Series	Pod Qty.	Engine Designator	Color Temp.	Optics	Mounting	Options	Voltage	Color
BL - BayLyter Series	4	A-146W @ 350mA	3-Warm White	A-Aisle	P-3/4" Pendant Stem	See Page 2	1-(120v)	W-Textured White
	4	B-220W @ 530mA	4-Neutral White	M-Medium	A-Aircraft Cable		2-(208v)	B-Textured Black
	4	C-288W @ 700mA	6-Cool White	N-Narrow	H-Hook		3-(240v)	T-Titanium Gray
	4	D-210W @ 350mA		W-Wide (Lowbay)			4-(277v)	
							5-(480v)	
							8-(120-277v)	



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 San Marcos, TX 78666
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BayLyter Series LED

Four-Pod Industrial High-Bay Luminaire

ENGINE DESIGNATOR DETAILS

Board Size	Current	System Wattage	Lumen Output	Efficacy (L/W)
4 x 48	350mA	210	19,000	90
4 x 32	700mA	288	22,500	78
	530mA	220	18,500	84
	350mA	146	13,500	92

* Lumens mentioned are averaged between aisle through wide distribution and lumen output will vary by color temperature options.

PHOTOMETRIC DATA

Distribution – Medium CCT: NW CREE XPG LEDs

Candlepower		Light Distribution				Average Luminance			
Angle	A vg. Candela	Degrees	Lumens	% Lamp	% Luminaire	Angle	End	45°	Cross
0	10479	0-30	9070	40.8	40.8	45	27805	19966	20149
5	10405	0-40	15502	69.7	69.7	55	4923	3989	3732
10	10241	0-60	21523	96.8	96.8	65	3483	2675	2552
15	10239	0-90	22234	100.0	100.0	75	2293	1648	1353
20	10596					85	688	224	172
25	11308								
30	10790								
35	9817								
40	8000								
45	4926								
50	1882								
55	769								
60	538								
65	390								
70	264								
75	144								
80	59								
85	10								

Coefficients of Utilization																				
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)																				
Ceil	80				70				50				30				10			
Wall	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10			
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102			
1	113	109	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93			
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	86			
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78			
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71			
5	88	78	71	67	86	77	71	66	75	70	66	74	69	65	72	68	64			
6	82	72	65	60	80	71	64	60	69	64	59	68	63	59	66	62	58			
7	76	65	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52			
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47			
9	66	55	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42			
10	61	50	42	38	60	49	42	38	48	42	38	47	41	37	46	41	3			

Distribution – Wide CCT: NW CREE XPG LEDs

Candlepower		Light Distribution				Average Luminance			
Angle	A vg. Candela	Degrees	Lumens	% Lamp	% Luminaire	Angle	End	45°	Cross
0	3277	0-30	3624	16.1	16.1	45	31294	31931	32268
5	3378	0-40	7366	32.8	32.8	55	40895	40678	38128
10	3581	0-60	19747	88.0	88.0	65	9094	5222	4046
15	3841	0-90	22435	100.0	100.0	75	2131	1905	1512
20	4201					85	825	555	600
25	4700								
30	5300								
35	5973								
40	6698								
45	7510								
50	8043								
55	7584								
60	4679								
65	789								
70	298								
75	158								
80	67								
85	18								

Coefficients of Utilization																				
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)																				
Ceil	80				70				50				30				10			
Wall	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10			
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102			
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89			
2	101	94	88	83	99	92	86	82	88	84	80	85	82	78	82	79	76			
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64			
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55			
5	76	63	54	47	74	62	53	47	60	52	47	58	51	46	56	50	46			
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37			
7	61	47	38	31	60	46	37	31	44	36	31	43	36	30	42	35	30			
8	56	41	32	26	54	40	32	26	39	31	26	38	31	25	36	30	25			
9	51	36	27	21	49	36	27	21	34	27	21	33	26	21	32	26	21			
10	46	32	23	18	45	31	23	18	30	23	18	29	22	17	29	22	17			

* Photometric data based on test performed in compliance with LM79.



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OPTIONS

- Blank-** Glass Lens
- F1-** Single Fuse (specify voltage)
- F2-** Double Fuse (specify voltage)
- 3C-** 3' Cord, no Plug
- 3CD-** 3' Cord, no Plug for use when using Dimming Option
- 6C-** 6' Cord, no Plug
- 6CD-** 6' Cord, no Plug for use when using Dimming Option
- 3P-** 3' Cord and Twist-Lock Plug (specify voltage)
- 3PD-** 3' Cord/Plug when using dimming option
- 6P-** 6' Cord and Twist-Lock Plug (specify voltage)
- 6PD-** 6' Cord/Plug when using Dimming Option
- N-** Indirect Mounting
- H-** Hook
- P-** Protection - IP65 Rating (with cable mounting only)
- L-** Prismatic Lens
- E-** Emergency Lampholder (lamp by others)
- M-** 360° Motion Detector (ON/OFF)
- MC-** 360° Motion Sensor with Control 0 – 10V
- MA-** 360° Motion Sensor with Adjustable Day Lighting Control

ACCESSORIES

- WG-** Wire Guard

FEATURES & SPECIFICATIONS

INTENDED USE—Use in high-mounting heights that require high efficiencies and horizontal illumination. Ideal for general manufacturing areas, storage areas and warehouse aisles where color is critical.

CONSTRUCTION—Housing—Heavy-duty, die-cast aluminum halves. Ballast and electrical components are heat-sinked and horizontally opposed. Integral splice box mounting flange ensures structural integrity.

FINISH—Electrostatically applied white polyester powder paint.

OPTICAL SYSTEM—High-efficiency, anodized, spun aluminum reflector features exclusive fluted design that minimizes color shift. Optical system is adjustable and accommodates the full range of light distributions. Gasketed, hinged and latched, tempered glass lens meets UL containment requirements.

ELECTRICAL SYSTEM—Ballast: All ballasts are 100% factory tested. HPS: Constant wattage autotransformer; MH: Super CWA Pulse Start ballasts, 88% efficient and EISA legislation compliant, are required for 250-450W (must order SCWA option) for US shipments only. CSA, NOM or INTL required for probe start shipments outside the US.

Socket: Vertically oriented mogul base PROTECTED EXCLUSIONARY base "PINK" socket with copper alloy nickel plated screw shell and center contact. For use with "O" rated protected metal halide lamps only.

INSTALLATION—Pendant Splice Box—Removable cast-aluminum box slides on integral die-cast aluminum housing mounting flange and mounts to 3/4" pendant conduit prior to ballast housing installation. Matching wire access cover accepts RELOC® modular wiring. Complete assembly meets or exceeds UL 50-pound pull test.

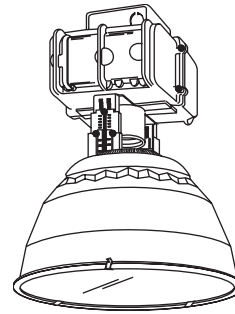
Optic Mounting—Adjustable reflector mounting brackets are progressively die-formed of 18-gauge galvanized steel.

LISTINGS—UL listed -30°C to 55°C ambient operations & damp locations. High ambient (HA option) of 65°C available. UL Listed to US and Canadian safety standards (see Options). NOM certified (see Options).

Catalog Number	
Notes	Type

High Bay Industrial Lighting

TH A16GL



GLASS ENCLOSED

Protected Metal Halide
175W - 450W

High Pressure Sodium
70W - 400W

18' to 30' mounting

Specifications

Overall height: 17-1/4 to 20 (43.8 to 50.8)

Width: 17-1/4 (43.8)

Weight: 25 lbs (11 kg)

All dimensions are inches (centimeters) unless otherwise specified.

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: TH 400MP A16GL 277 SCWA

TH	A16GL			
Series	Reflector	Voltage	Ballast ⁶	Options
TH	A16GL	120	Pulse Start <small>HID BALLASTING SYSTEM</small>	Shipped installed in fixture
Wattage/lamp		208 ^{1,2}	NOTE: For shipments to U.S. Territories, SCWA must be specified to comply with EISA.	SF Single fuse (120, 277, 347V) ⁷
High pressure sodium		240 ^{1,2,3}	SCWA Super constant wattage autotransformer	DF Double fuse (208, 240, 480V) ⁷
70S 150S 250S		277	RLB Regulated lag ballast ⁵	EC Emergency circuit ^{8,9}
100S 200S 400S		347	SCWI Isolated SCWA ⁵	QRS Quartz restrike system^{8,9}
Protected metal halide		480 ^{1,2}	(blank) Standard magnetic ballast⁵	QRSTD QRS time delay ^{8,9}
175MP ^{5,13} 250MP ¹³ 400MP¹³		TB ⁴	CWI Constant wattage isolated ⁵	HA 65°C ambient operation
200MP 320MP 450MP ¹³			MRB Magnetic regulator ballast	CR Corrosion-resistant finish
350MP ¹³				TOB Through-wire outlet box
Protected metal halide - Title 20 ¹⁴				TOBP Through-wire outlet box plug-in ⁷
200MP 320MP				PBP Pendant box plug-in ⁷
				LCPP Loop, cord, plug requires TPH, PPH ⁷
				LC3P Loop, 3' cord, 15A NEMA twistlock plug ^{7,10}
				HC3P Hook, 3' cord, 15A NEMA twistlock plug ^{7,10}
				LOCS Loop, 5' white cord, RELOC OCS ^{7,11}
				HOCS Hook, 5' white cord, RELOC OCS ^{7,11}
				LOCU Loop, 5' white cord, RELOC OCU ^{6,7,10,11,12}
				HOCU Hook, 5' white cord, RELOC OCU ^{6,7,10,11,12}
				TR Remote ballast ⁶
				RC3NP TR with prewired 3' cord ⁷
				ENC Encapsulated CWA ballast (120, 277, 347V)
				KW1 KiloWatch® 120V control relay ⁶
				KW4 KiloWatch 277V control relay ⁶
				KW150 KiloWatch 120V control relay-50% light output ⁶
				KW450 KiloWatch 277V control relay-50% light output ⁶
				KW1S KiloWatch II with integral sensor
				WG Wire guard
				CSA Listed and labeled to comply with Canadian Standards
				NOM NOM Certified (Consult factory)

Accessories

- Order as separate catalog number.
- HKF Fixture hook female
- LPF Fixture loop female
- SCK 60" safety chain kit
- TMB Twin-mounting bar (consult factory)
- HKM Fixture hook male
- HKMG Grommeted fixture hook male
- LPM Fixture loop male
- LPMG Grommeted fixture loop male
- TPH Through-wire power hook
- PPH Pendant power hook
- DCY Cylinder shade
- DSQ Square shade
- DHX Hexagonal shade

NOTES:

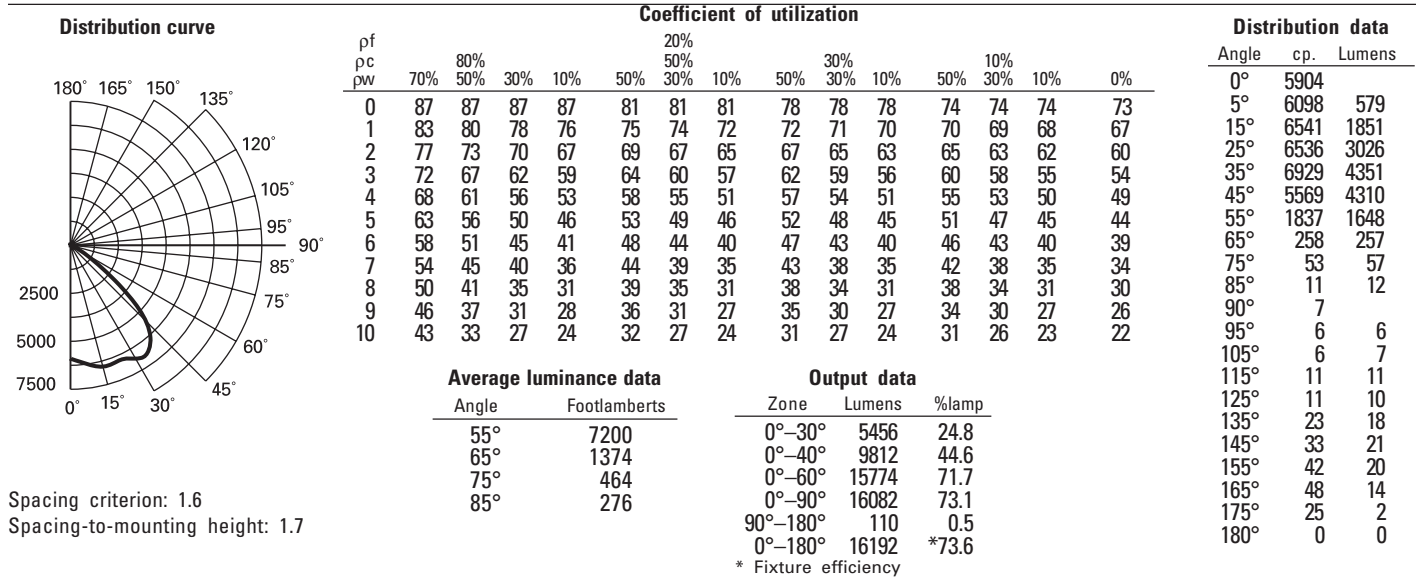
- 1 Requires CWI or RLB option in Canada for MH. Available in 175-400W.
- 2 Requires CWI or MRB option in Canada for HPS. Available in 70-400W.
- 3 220V and 240V 50Hz and 60Hz ballasts available for use with U.S. metal halide lamps.
- 4 Optional multi-tap ballast (120, 208, 240, 277V). For voltage specific options specify tap position (TB1=120V, TB2=208V, TB3=240V, TB4=277V).
- 5 Available for shipments outside of U.S. only.
- 6 For specific ordering information, see Product Selection Guide.
- 7 Must specify voltage or tap position.
- 8 Lamp not included.
- 9 See Product Selection Guide (QRS Lamp Wattage Table)

for maximum lamp wattage.

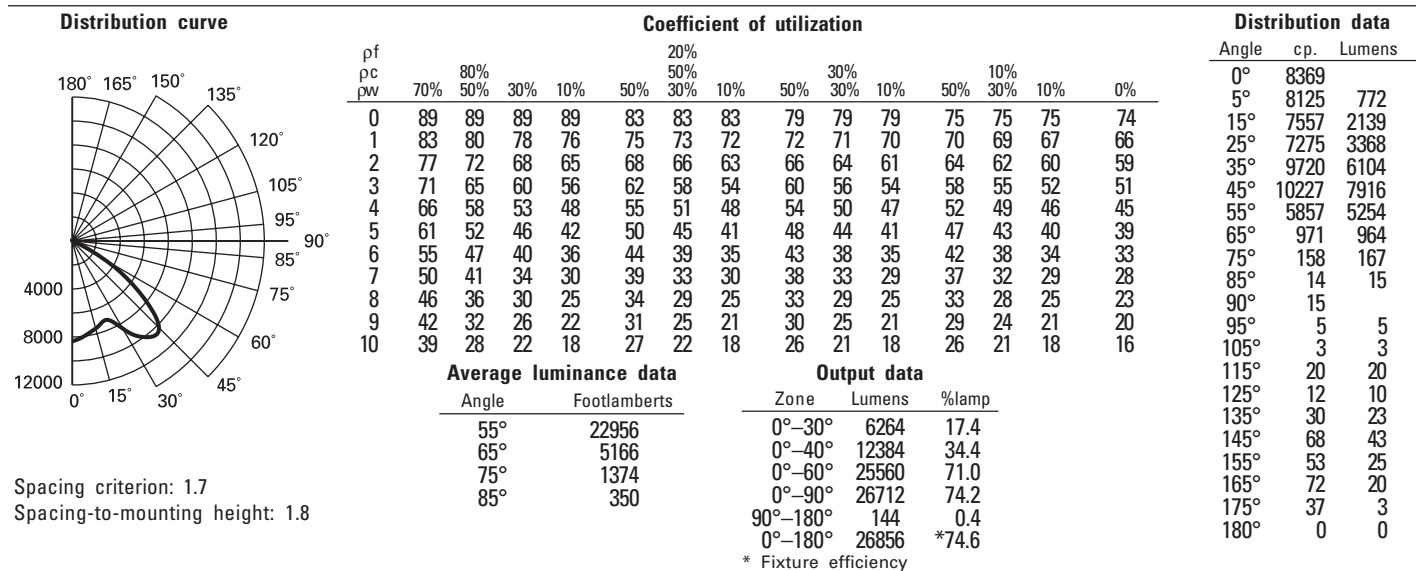
- 10 20A standard 480V.
- 11 May be ordered with 10', 15' and 20' cords. For black cord, specify **BK** (i.e. **HOCBSBK**).
- 12 When using RELOC with KiloWatch, LOCU or HOCU option must be used with TAP1KW, TAP3KW or TAP13KW. Consult factory for 208, 240, 480V.
- 13 In order to comply with California Title 20 regulations for metal halide fixtures, these metal halide wattages must be ordered with KW1S option for sale to California.
- 14 These wattages comply with California Title 20.

TH A16GL High Bay

TH 250MP A16GL SCWA, leg position 5, 250W, clear metal halide lamp, 22,000 rated lumens with tempered glass lens. Test No.1194111708.



TH 400MP A16GL SCWA, leg position 3, 400W, clear metal halide lamp, 36,000 rated lumens with tempered glass lens. Test No. 1194062901.



Other distributions are available. Consult factory.



Lithonia Lighting
High Bay and Special Applications
One Lithonia Way, Conyers, GA 30012
Phone: 770-922-9000, 800-315-4963, Fax: 770-929-8789
www.lithonia.com

Type No. 'HMA' ALT.

Catalog No. _____

Job. Name _____

BayLyter HighBay 17

17" Aluminum Reflector HighBay

APPLICATIONS

- Manufacturing, Warehouses, Gymnasiums, Distribution Centers, Sports Facilities, Convention Centers, Retail Outlets.

CONSTRUCTION

- Heavy duty, precision die-cast aluminum ballast housing.
- Heavy duty steel socket plate.
- Separate ballast and capacitor/ignitor compartments.
- Corrosion resistant Duraplex II gray polyester powder coated finish standard.
- Optional designer finishes available. (Consult factory)

OPTICS

- Faceted 17" diameter highbay reflector is spun from heavy gauge, anodized aluminum.
- Clear heat-tempered glass lens (Shielded and Enclosed units).
- Formed steel dust cap (Enclosed units only).
- Adjustable reflector support brackets.

ELECTRICAL

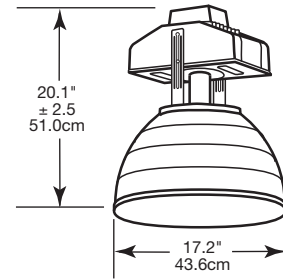
- Porcelain spring-loaded 4KV pulse rated socket-mogul base.
- HPF CWA, Super CWA, or Linear Reactor ballast.
- Starting temperature: LX(HPS)-40°F/-40°C, MA(MH)-20°F/-30°C.
- Rated for 55°C.
- All metal halide fixtures are pulse start with open-rated sockets.

MOUNTING

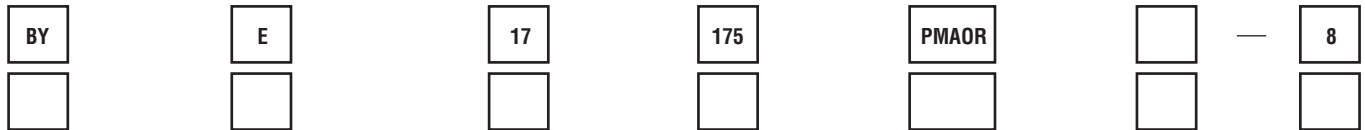
- Mounting plate encloses integral splice chamber.
- Mounting plate has a 3/4" threaded hub for conduit or ExcelLine hooks.

WARRANTY/LISTINGS

- UL 1598 listed for damp locations.
- Published one year limited warranty.



Ordering Guide Example: BYE17175PMA-8



Prefix	Lens	Reflector	Wattage	Source	Options	Voltage
BY	E=Enclosed (Lens and Dust Cap) H=Open S=Shielded (Lens Only)	17	175 (E/BT28) 200 (E/BT28) 250 (E/BT28) 320 (E/BT28) 350 (E/BT37) 400 (E/BT37) 450 (E/BT37)	PMA PMAOR or LROR ¹ PMAOR or LROR ¹ PMAOR or LROR ¹ PMAOR or LROR ¹ PMAOR or LROR ¹ PMAOR or LROR ¹		1=120 2=208 3=240 4=277 5=480 8=120-277
			150 (E23.5) 250 (E18) 400 (E18)	LX		

ExcelLine[®]
 1611 Clovis R. Barker Road
 San Marcos, TX 78666
 800.545.1326 • 512.392.5821 • Fax: 512.753.1122
 www.exceline.com

¹ Voltage is 4(277). Linear reactor

ExcelLine is a Philips group brand

Product information is subject to change without notice

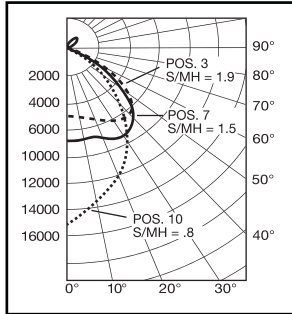


BayLyter HighBay 17

17" Aluminum Reflector HighBay

Wide Setting — Reflector Pos. 5 (Efficiency 78.3%)

RC	80	50	30	10	0
RW	70 50 30 10	50 30 10	50 30 10	50 30 10	0
1	87 84 81 79	78 76 75	75 73 72	72 71 70	68
2	81 76 72 68	71 68 65	68 66 64	66 64 62	60
3	75 68 63 59	64 60 57	62 59 56	60 57 55	53
4	69 62 56 51	58 54 50	56 52 49	54 51 48	47
5	64 55 49 45	52 48 44	51 46 43	49 45 42	41
6	59 49 43 39	47 42 38	46 41 37	44 40 37	35
7	54 44 37 33	42 36 32	40 36 32	39 35 32	30
8	49 39 33 29	37 32 28	36 31 28	35 31 28	26
9	45 35 29 25	33 28 24	32 27 24	31 27 24	22
10	42 31 25 21	30 25 21	29 24 21	28 24 20	19



BYH17350PMA
Lamp: 350W Pulse Start, Clear
Lumens: 34,000
I.T.L. Report #'s 26376, 26377, 26378

CANDLEPOWER DISTRIBUTION

Deg.	Reflect. Post. #5		Reflect. Pos. #7		Reflect. Pos. #10	
	CP	Lumens	CP	Lumens	CP	Lumens
0	6757	162	9340		16240	390
5	6751	485	9280		16060	1130
15	7306	1275	9820		15010	2400
25	9510	2560	11400		12590	2940
35	10247	3379	10160		8450	2520
45	8378	3055	7350		5660	2090
55	5209	1607	3480		1480	500
65	1122	441	840		500	190
75	287	103	210		150	60
85	42	12	40		40	20
90	12	13	10		30	20
95	53	51	70		130	140
105	153	65	210		320	140
115	69	27	110		160	60
125	30	13	50		110	50
135	52	22	80		590	380
145	260	123	990		1650	350
155	532	65	480		600	80
165	51	6	60		70	10
175	0	0	0		0	0
180	0	0	0		0	0

Narrow Setting — Reflector Pos. 10 (Efficiency 76.2%)

RC	80	50	30	10	0
RW	70 50 30 10	50 30 10	50 30 10	50 30 10	0
1	84 82 80 78	75 74 72	71 70 69	67 66 66	64
2	80 75 72 69	70 67 65	66 65 63	63 62 60	59
3	75 69 65 62	65 62 59	62 59 57	59 57 56	54
4	71 64 60 56	60 57 54	58 55 53	56 53 51	50
5	66 59 54 51	56 52 49	54 51 44	52 49 47	46
6	62 55 50 46	52 48 45	50 47 44	48 45 43	42
7	58 50 45 42	48 44 41	46 43 40	45 42 39	38
8	55 47 41 38	44 40 37	43 39 36	42 38 36	35
9	51 43 38 34	41 37 34	40 36 33	38 35 33	31
10	48 40 35 31	38 34 31	37 33 30	36 32 30	29

Medium Setting — Reflector Pos. 7 (Efficiency 77.6%)

RC	80	50	30	10	0
RW	70 50 30 10	50 30 10	50 30 10	50 30 10	0
1	86 83 81 79	78 76 74	74 73 71	71 70 69	67
2	81 76 72 69	71 68 66	68 66 64	66 64 62	61
3	75 69 64 61	65 61 58	63 60 57	60 58 56	54
4	70 63 58 54	60 55 52	58 54 51	56 53 50	49
5	65 57 52 48	54 50 46	53 49 46	51 48 45	43
6	60 52 46 42	49 45 41	48 44 40	46 43 40	38
7	56 47 41 37	45 40 36	43 39 36	42 38 35	34
8	52 42 37 32	40 35 32	39 35 32	38 34 31	30
9	48 38 32 29	37 32 28	36 31 28	35 30 27	26
10	44 35 29 25	33 28 25	32 28 25	31 27 24	23

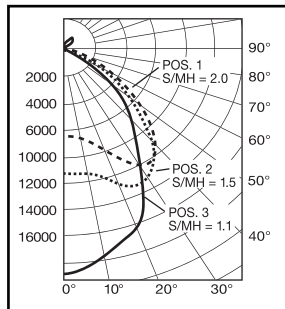
BYH17250LX
Lamp: 250W H.P. Sodium, Clear
Lumens: 30,000
I.T.L. Report #'s 26614, 26615, 26616

CANDLEPOWER DISTRIBUTION

Deg.	Reflect. Post. #1		Reflect. Pos. #2		Reflect. Pos. #3	
	CP	Lumens	CP	Lumens	CP	Lumens
0	5120	120	7980	190	12270	300
5	5090	370	7890	560	12220	830
15	5970	1060	8400	1430	10930	1770
25	7760	2060	9150	2320	9840	2400
35	8340	2720	8340	2610	7810	2400
45	7110	2660	6160	2260	5390	1980
55	4430	1570	2980	940	2000	540
65	950	340	630	230	460	180
75	220	90	170	60	140	60
85	40	20	50	20	40	20
90	30	20	30	20	30	20
95	40	30	70	60	80	70
105	90	50	120	60	170	80
115	60	20	70	30	100	40
125	40	20	50	200	140	120
135	40	30	310	180	780	350
145	370	140	590	200	880	230
155	160	60	180	50	190	70
165	60	10	70	10	80	10
175	0	0	0	0	0	0
180	0	0	0	0	0	0

Wide Setting — Reflector Pos. 1 (Efficiency 75.0%)

RC	80	50	30	10	0
RW	70 50 30 10	50 30 10	50 30 10	50 30 10	0
1	83 80 78 75	75 73 71	72 70 69	69 67 66	65
2	77 72 68 65	68 65 62	65 63 61	63 61 59	57
3	71 65 60 56	61 57 54	59 56 53	57 54 52	50
4	66 58 53 48	55 51 47	53 49 46	51 48 46	44
5	61 52 46 42	50 45 41	48 44 40	46 43 40	38
6	56 47 40 36	44 39 35	43 38 35	41 38 34	33
7	51 41 35 31	39 34 30	38 33 30	37 33 29	28
8	47 37 31 26	35 30 26	34 29 26	31 29 25	24
9	43 33 27 23	31 26 22	30 25 22	29 25 22	20
10	39 29 23 19	28 23 19	27 22 19	26 22 19	17



Medium Setting — Reflector Pos. 2 (Efficiency 73.1%)

RC	80	50	30	10	0
RW	70 50 30 10	50 30 10	50 30 10	50 30 10	0
1	81 78 76 74	73 71 70	69 68 67	66 65 64	63
2	76 72 68 65	67 64 62	64 62 60	62 60 58	57
3	71 65 60 57	61 58 55	59 56 53	57 54 52	51
4	66 59 54 50	56 52 49	54 51 48	52 49 47	46
5	61 54 48 45	51 47 43	49 46 43	48 44 42	41
6	57 49 43 39	46 42 38	45 41 38	43 40 37	36
7	52 44 38 34	42 37 34	40 36 33	39 36 33	31
8	48 40 34 30	38 33 30	37 33 29	36 32 29	28
9	45 36 30 27	34 30 26	33 29 26	32 28 26	24
10	41 33 27 24	31 26 23	30 26 23	29 25 23	21

Narrow Setting — Reflector Pos. 3 (Efficiency 74.0%)

RC	80	50	30	10	0
RW	70 50 30 10	50 30 10	50 30 10	50 30 10	0
1	82 79 77 75	73 71 70	69 68 67	66 65 64	62
2	77 73 69 66	67 65 63	64 62 61	61 60 58	57
3	72 67 62 59	62 59 56	60 57 55	57 55 53	52
4	68 61 57 53	57 54 51	55 52 50	53 51 48	47
5	63 56 51 47	53 49 46	51 48 45	49 46 44	43
6	59 51 46 43	49 45 41	47 43 41	45 42 40	39
7	55 47 42 38	45 40 37	43 39 36	42 38 36	35
8	51 43 38 34	41 37 33	40 36 33	38 35 32	31
9	48 39 34 31	37 33 30	36 32 30	35 32 30	28
10	45 36 31 28	34 30 27	33 29 27	32 29 26	25



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www.exceline.com

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Product information is subject to change without notice



DESCRIPTION

The BenchMark HB utilizes a durable heavy-duty, die-cast aluminum ballast housing and computer aided designed reflector system for specification-level performance at higher mounting heights. U.L. listed and CSA certified. Damp location standard. The BenchMark HB is perfect for high-bay applications such as gymnasiums, hangars, manufacturing, assembly and auto service areas.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

HOUSING: Durable heavy-duty die-cast aluminum housing for lasting performance in the harshest environments. Integrally hinged for ease of maintenance with optional toolless entry. Finished in a white polyester powder coat.

Electrical

BALLAST: High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HPS and -30°C (-20°F)

for MH. **SOCKET:** Mogul-base socket standard for HPS. For Metal Halide, protected socket standard, for use with "O" (open) rated protected Metal Halide lamps only.

Optical

REFLECTOR: Computer aided designed, field-adjustable reflector mounts easily and allows multiple distribution patterns for precise control. Special contours and unique system of facets minimizes arc tube voltage rise.

Mounting

Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit. **UNIVERSAL BRACKETS:** Universal ladder brackets allow for the flexibility to change out with other reflectors available in acrylic or glass.



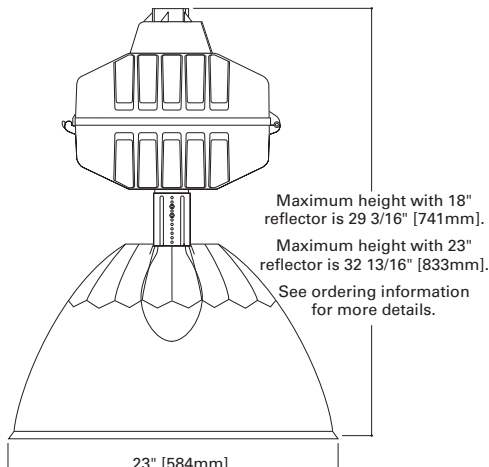
HB BENCHMARK

175 - 1000W

**High Pressure Sodium
Pulse Start Metal Halide
Metal Halide**

ALUMINUM HIGH-BAY

DIMENSIONS



TECHNICAL DATA

EISA Compliant ©
65° Ambient Environment (Up to 400W)
55° Ambient Environment (450W and up)
105° Supply Wire Rating

ENERGY DATA

CWI Ballast Input Watts
250W HPS HPF (300 Watts)
250W MH HPF (300 Watts)
400W HPS HPF (465 Watts)
400W MH HPF (475 Watts)

CWA Ballast Input Watts

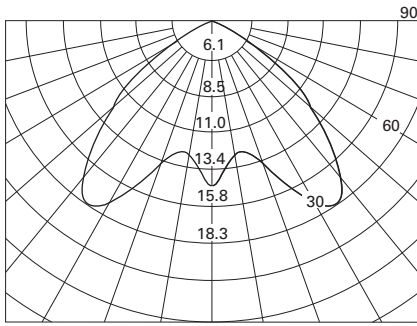
200W MP HPF (227 Watts) ©
250W MP HPF (283 Watts) ©
320W MP HPF (365 Watts) ©
350W MP HPF (400 Watts) ©
400W MP HPF (452 Watts) ©
400W HPS HPF (465 Watts)
450W MP HPF (508 Watts) ©
600W HPS HPF (665 Watts)
750W HPS HPF (850 Watts)
750W MP HPF (820 Watts)
1000W HPS HPF (1100 Watts)
1000W MH HPF (1085 Watts)
1000W MP HPF (1070 Watts)

SHIPPING DATA

Approximate Net Weight:
35 lbs. (15 kgs.)



PHOTOMETRICS



MPHB-SA18-W-400-120V
400-Watt MP
44,000-Lumen Clear Lamp

Coefficients Of Utilization

rc	Effective floor cavity reflectance																		
	80%		70%		50%														
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR	1	93	90	88	85	91	88	86	84	84	82	80	80	78	77	76	75	74	72
	2	87	82	78	74	85	80	76	73	77	73	71	73	71	68	70	68	66	65
	3	81	74	69	64	79	72	67	63	69	65	62	67	63	60	64	61	59	57
	4	75	67	61	56	73	66	60	56	63	58	54	61	57	53	58	55	52	51
	5	69	60	54	49	67	59	53	49	57	52	48	55	50	47	53	49	46	44
	6	64	54	47	43	62	53	47	42	51	46	42	49	44	41	48	43	40	39
	7	58	48	41	36	57	47	41	36	45	40	36	44	39	35	42	38	35	33
	8	54	43	36	32	52	42	36	31	41	35	31	39	34	30	38	33	30	28
	9	49	38	32	28	48	38	31	27	36	31	27	35	30	26	34	29	26	24
	10	45	34	28	23	44	34	27	23	32	27	23	31	26	22	30	26	22	21

Spacing Criterion 1.6

Zone	%Lamp	Zone	%Lamp
0-30	22.60	0-90	80.10
0-40	44.70	90-180	4.40
0-60	77.10	Total	84.40

Candlepower

Degree	CP
0	11865
5	10899
15	9920
25	13027
35	15770
45	11392
55	6349
65	1030
75	133
85	12
90	1
95	2
105	7
115	13
125	37
135	104
145	1581
155	1569
165	161
175	43
180	40

ORDERING INFORMATION

Sample Number: MPH-B-SA15-C-250-120V-OR

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Lamp Type

MP=Pulse Start Metal Halide
MH=Metal Halide^{1, 2}
HP=High Pressure³ Sodium
ML= Pulse Start MH^{1, 4} (Linear Reactor)

Series

HB= High-Bay Benchmark

Reflector Type

SA=Anodized Spun Aluminum

Reflector Diameter

15= 15" Diameter
18= 18" Diameter
23= 23" Diameter

Distribution⁵

C: Concentrated
M: Medium
W: Wide

Lamp Wattage

MP
175=175W
200=200W
250=250W
320= 320W
350= 350W
400= 400W
450= 450W
750= 750W
1000= 1000W⁶
MH²
175= 175W
250= 250W
400= 400W
1000= 1000W⁷
HP
250= 250W
400= 400W
600= 600W⁸
1000=1000W

Voltage⁹

120V=120V
208V=208V
240V=240V
277V=277V
347V= 347V
480V= 480V
MT= Multi-Tap, wired¹⁰ 277V
TT= Triple-Tap, wired¹¹ 347V
5T= 5-Tap¹²

Socket

OR= Open¹³ Rated Socket for Metal Halide Lamps
 = Non Applicable (HPS or Not compatible with OR Socket)

Options

VI=Visual Indicator system, externally mounted LED Signal
C3=3' Cord with no plug (Specify Voltage)
PC3=3' Cord with NEMA Plug (120V-L5-15P, 208V-L6-15P, 347V-L37-20P, AND 480V-L8-20P) Other cord lengths are available by specifying length (PC6 for 6' Cord) Requires FH-1 or FL-1, or SHK. Example: PC3-120V Use with TPPH-NEMA. Specify Voltage.
PHC= Power Cord and Plug (18" Power Cord and Non-NEMA plug configuration. Must be used with FL-1 and TPPH (Thru-Way Pendant Power Hook). Must specify single voltage.
PHC-NEMA= Power Cord and NEMA Plug (18" Power Cord and 20 AMP NEMA plug configuration). Must be used with FL-1 and TPPH-NEMA (Thru-Way Pendant Power Hook).
PS= Protective Starter (Available in 1000W HPS only. For other wattages consult factory).
P= Pre-set Socket Position from the factory
FH-1=Die-cast Aluminum Fixture Hook (with 3/4" threads for easy installation)
FL-1=Malleable Iron Plated Fixture Loop (with 3/4" threads for easy installation)
SHK=Die-cast Aluminum Fixture Hook (with safety screw and 3/4" threads for easy installation)
SS=Space Saver Feature
QB=Quiet Ballast
HSW=Integral LumaWatt Sensor and Control¹⁴ w/ Wide Distribution
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
SCF=3' Aircraft Safety Cable secures Housing to Ceiling (Alternative lengths available. Example: SCF6 = 6' Cable)
Q=Quartz Restrike (Hot Strike Only)
EM=Quartz Restrike with "Delay Relay" (Quartz lamp strikes at both hot and cold starts)
EM/SC=Emergency Separate Circuit¹⁵
L/TCB=Less Top Connector Box (Housing shipped less top connector box. (Specify when using TWMB accessory)
LL=Lamp Included¹⁶
QD=Quick Disconnect Die-Cast Pendant Mount Box (Specify Single Voltage, Not Compatible with PC3, PHC, C3, MWS, RM or HC)
DL100=100% Downlight (Available on SA18 or SA23 aluminum reflectors only).
SCR=Aircraft Safety Cable-Housing to Reflector
TE=Toolless Entry
RM=Remote Mount¹⁷
WMWS= MWS Industrial components attached to the fixture at the factory. (Standard cord length is 3 ft. 6 ft. and 11 ft. also available. Please refer to MWS Modular Wiring System section for additional information).
HC= LumaWatt Fixture Control Module^{14, 18} (Low voltage leads pulled out of top connection box for areas requiring all wiring to be installed in conduit)
HL= LumaWatt Fixture Control Module¹⁴ (Allows low voltage control wire to be daisy-chained between fixtures outside AC conduit run similar to low voltage intercom's, fire alarms and phone systems)
QLL= Quartz Lamp Included (Lamp is Cooper designated product based on luminaire requirements. Lamp is shipped separate from luminaire unless otherwise noted)

Accessories¹⁹

C3=3' Cord-No Plug - Requires FH-1, FL-1, or SHK
PC3=3' Cord with NEMA Plug - (120V-L5, 208V-L6-15P, 347V-L37-20P and 480V-L8-20P) Other cord lengths are available by specifying length (PC6 for 6' cord). Requires FH-1 or FL-1, or SHK. Use with
PHC= Power Hook Cord and Non-NEMA plug configuration. Must be used with FL-1 and TPPH (Thru-Way Pendant Power Hook)
PHC-NEMA= Power Cord and NEMA plug - 18" Power Cord and 20 Amp NEMA plug configuration. Must be used with FL-1 and TPPH-NEMA (Thru-Way Pendant Power Hook)
SGB15= Safety Glass Bottom (Not Compatible with "WG15")
SGB18= Safety Glass Bottom
SGB23= Safety Glass Bottom
WG15=Wire Guard (Not Compatible with "SGB15")
WG18=Wire Guard
WG23=Wire Guard
WG15/GLC=Gym Wireguard w/ Safety Glass
WG18/GLC=Gym Wireguard w/ Safety Glass
WG23/GLC=Gym Wireguard w/ Safety Glass
MBT=Twin Mount Bracket (Fixtures must be same voltage and without hooks, loops or plugs.)
TPPH=Thru-Way Pendant Power Hook. Requires FL-1 and PHC. Specify Voltage.
TPPH-F=Thru-Way Pendant Power Hook Single Fuse, 120, 277 or 347 Volt. Requires FL-1 and PHC. Specify Voltage.
TPPH-F2=Thru-Way Pendant Power Hook - Double Fused, 208, 240, or 480 Volt. Requires FL-1 and PHC. Specify Voltage.
TPPH-F-QD=Thru-Way Pendant Power Hook Single Fuse, Quick Disconnect. Requires FL-1 and PHC. Specify Voltage (120, 277, or 347V)
TPPH-F2-QD=Thru-Way Pendant Power Hook Double Fuse, Quick Disconnect. Requires FL-1 and PHC. Specify Voltage (208, 240, or 480V)
TPPH-NEMA=Thru-Way Pendant Power Hook. Requires FL-1 and PHC-XXXV-NEMA. (Specify Voltage).
FH-1= Fixture Hook
FL-1= Fixture Loop
SHK= Hook with Safety Screw
TW= Thru-Way Mounting Box²⁰

- Notes:**
- Open Rated socket and lamp must be used.
 - MH available in non-U.S. markets only.
 - Not available in 175, 200, 320, 350, 450 and 750W.
 - 277V only, not available with HSW, Q, EM, HL or HC options.
 - Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise fixture is shipped in medium setting.
 - MP 1000W uses standard socket and SGB is required.
 - Available with open-rate socket only.
 - High Pressure Sodium only.
 - Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Representative for availability and ordering information. 88% Efficient EISA Compliant MP Fixtures not available in 347V and TT Voltages.
 - Multi-Tap ballast 120/208/240/277V wired 277V.
 - Triple-Tap ballast 120/277/347V wired 347V.
 - 5-Tap ballast 120/208/240/277/480V wired 277V. 400W Metal Halide only. 88% efficient EISA Compliant MP fixtures not available in 5-Tap Voltages.
 - Not applicable for HPS.
 - 30 second time delay when switching from bright to dim. Consult individual lamp manufacturers recommendations for compatible lamps. For use with CWA ballast only.
 - Not available with HL or HC options.
 - Lamp is shipped separately.
 - Not available with QD, W or WL options.
 - Not available with QD, PC3, C3, PHC or MWS. Not available with single circuit MWS special order.
 - Order separately.
 - Specify L/TCB when using thru-way mounting box (TWMB) accessory.

LAMP TYPE	WATTAGE
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 450, 750, 1000W
Metal Halide (MH)	175, 250, 400, 1000W
High Pressure Sodium (HP)	250, 400, 600, 750W

VOLTAGE CHART	
MT= Multi-Tap	120/208/240/277V (wired 277V)
TT= Triple-Tap	120/277/347V (wired 347V)
5T= 5-Tap ¹⁰	120/208/240/277/480V (wired 277V)

TLM TALON MEDIUM

Type 'PHA2' ALT.

ORDERING INFORMATION

SAMPLE NUMBER: TLM-400-MH-MT-3F-FG-BK-HS

PRODUCT FAMILY ¹	LAMP WATTAGE ²	LAMP TYPE	VOLTAGE ⁵	DISTRIBUTION	LENS TYPE	COLOR ⁹	OPTIONS + ACCESSORIES
TLM=Talon	70=70W	MH=Metal Halide	120=120V	Horizontal Lamp	FG=Flat Glass	[add as suffix/ must specify]	[See Below]
Site	100=100W	MP=Pulse Start	208=208V	2F=Type II Formed	SG=Sag Glass	BK=Black	
Medium	150=150W	Metal Halide	240=240V	2S=Type II Segmented		AP=Grey	
	175=175W	HPS=High Pressure Sodium	277=277V	3F=Type III Formed		BZ=Bronze	
	250=250W		347=347V	3S=Type III Segmented		WH=White	
	320=320W ^{3,4}		480=480V	4F=Type IV Formed		DP=Dark Platinum	
	350=350W ^{3,4}		DT=Dual-Tap ⁶	4S=Type IV Segmented		GM=Graphite Metallic	
	400=400W ⁴		MT=Multi-Tap ⁶	5F=Type V Formed			
			TT=Triple-Tap ⁶	5S=Type V Segmented			
			5T=5-Tap ^{6,7}	SL=Spill Light Eliminator			
				AF=Automotive Front Row			
				Vertical Lamp			
				3V=Type III Vertical ⁸			
				4V=Type IV Automotive Perimeter ⁸			
				AR=Area Round ⁸			
				AS=Area Square ⁸			

OPTIONS + ACCESSORIES [Must be listed in the order shown and separated by a dash]

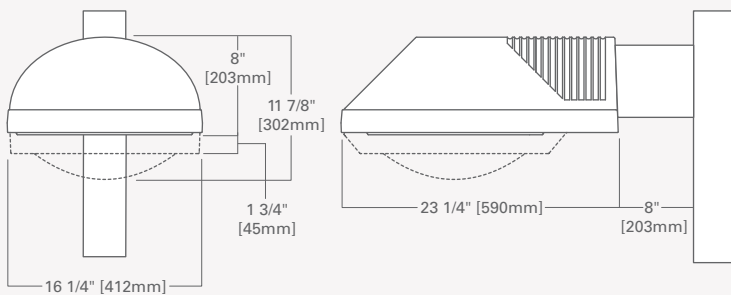
OPTIONS [add as suffix]

- F=Single Fuse [120, 277 or 347V]¹⁰
- FF=Double Fuse [208, 240 or 480V]¹⁰
- Q=Quartz Restrike¹¹
- EM=Quartz Restrike w/Delay [Also Strikes at Cold Start]¹¹
- EM/SC=Quartz Emergency Separate Circuit¹¹
- PT=Electrical Power Tray
- P=Button Type Photocontrol [120, 208, 240 or 277V]¹⁰
- R=NEMA Twistlock Photocontrol Receptacle
- HS=Internal House-side Shield¹²
- VS=Polycarbonate Vandal Shield
- DD=Deep Door
- WM=Wall Mount with 8" Arm
- DM=Direct Mount for Round or Square Pole
- DW=Direct Wall Mount
- MS=External Mast Adapter
- HL=Hi/Low Dimming¹³
- L=Lamp Included

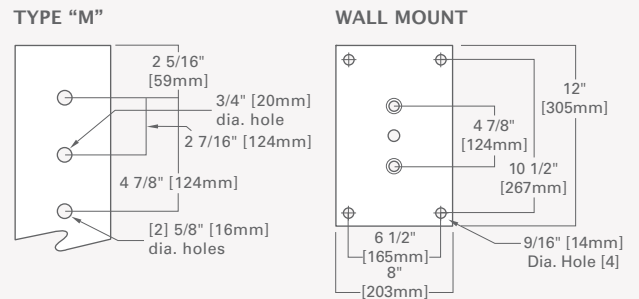
ACCESSORIES [order separately/replace XX with color designation]

- OA/RA1016=NEMA Photocontrol [105-285V]
- OA/RA1027=NEMA Photocontrol [480V]
- OA/RA1201=NEMA Photocontrol [347V]
- OA/RA1013=Shorting Cap
- MA1010-XX=Single Tenon Adapter for 3 1/2" O.D. Tenon
- MA1011-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon**
- MA1012-XX=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
- MA1013-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
- MA1014-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
- MA1015-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
- MA1016-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
- MA1017-XX=Single Tenon Adapter for 2 3/8" O.D. Tenon
- MA1018-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
- MA1019-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
- MA1045-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
- MA1048-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
- MA1049-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
- MA1213-XX=External House-side Shield Kit [EPA=0.38]

DIMENSIONS



DRILLING PATTERNS



CERTIFICATIONS

IP65 Rated	CSA Listed
25° C Ambient Temperature	ISO 9001
U.L. 1598 Listed	FCO [Full Cutoff] Flat Glass Only

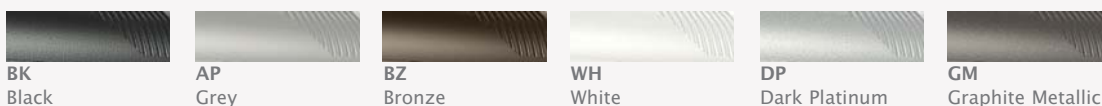
WATTAGE TABLE

Lamp Type	Wattage
Metal Halide	175, 250, 400W
High Pressure Sodium	70, 100, 150, 250, 400W
Pulse Start Metal Halide	70, 100, 150, 250, 320, 350, 400W

EPA

Effective Projected Area
Recessed Door w/o Arm: 0.79
Deep Door w/o Arm: 1.02
8" Arm: 0.43

STANDARD COLORS



SHIPPING DATA

Approximate Net Weight
Recessed Door 47 lbs. [21.79 kgs.]
Deep Door 52 lbs. [23.63 kgs.]

NOTES: 1 8" arm and round pole adapter included with fixture. 2 Standard with mogul-base socket for HPS and 175-400W MH. Standard with medium-base socket for 150W MH and below. 3 320/350W Pulse Start Metal Halide lamps only. 4 Requires reduced envelope lamp. 5 Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information. 6 Dual-Tap is 120/277V wired 277V. Multi-Tap is 120/208/240/277V wired 277V. Triple-Tap ballast is 120/277/347V wired 347V. 5-Tap is 120/208/240/277/480V wired 480V. 7 Available for 250-400W only. 8 Vertical lamp optics ship standard with deep door. 250-400W vertically lamped optics not available with flat glass. 9 Custom and RAL color matching available upon request. Consult Cooper Lighting Representative for further information. 10 Must specify voltage. 11 Quartz options not available with SL and AF optics. 12 House-side shield not available on 5S, 5F, AS, AR, and SL optics. 13 Requires vertical lamp orientation. Provides 24V low voltage leads used in dimming controls. 14 Specifications and dimensions subject to change without notice.

Luminaire Specifications

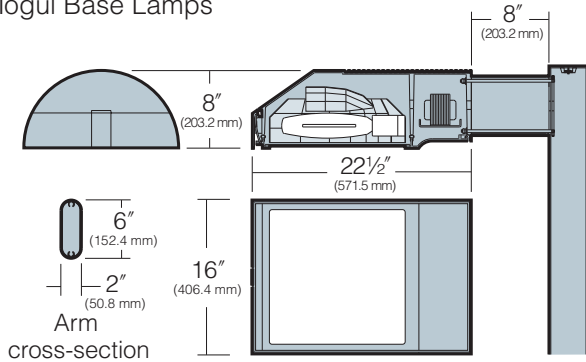
Type 'PHA'

Cat. # 1SA SAR2 100PMH DB

AR and SAR Models

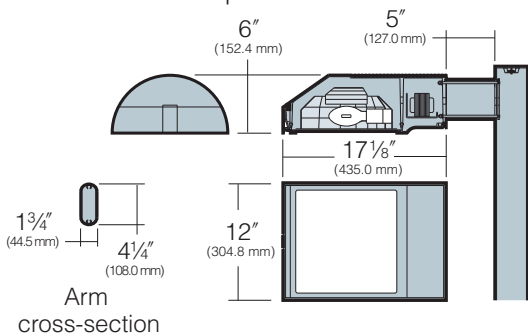
Dimensions

AR Model
150 to 400 watt
Mogul Base Lamps



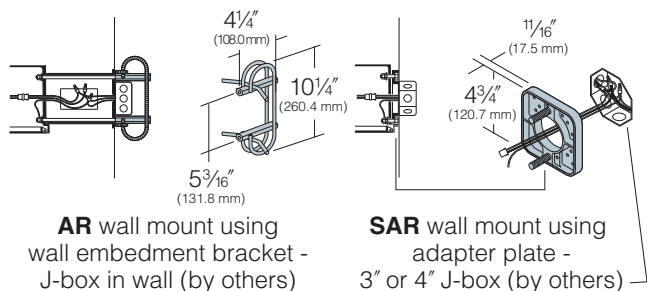
Maximum Fixture weight (400HPS) = 45 lb

SAR Model
70 to 175 watt
Medium Base Lamps



Maximum Fixture weight (150HPS) = 25 lb

Optional Wall Mounts



Housing: One-piece, die-cast low copper (<0.6% Cu) aluminum alloy with integral cooling ribs over the optical chamber and electrical compartment. Solid barrier wall separates optical and electrical compartments. Double-thick wall with gussets on the support-arm mounting end. For the large AR model, housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail. For the small SAR model, housing forms a half cylinder with 58° front face plane providing a recess to allow a flush single-latch detail. All hardware is stainless steel or electro-zinc plated steel.

Lens Frame: One-piece, die-cast low copper (<0.6% Cu) aluminum alloy lens frame with 1" minimum depth around the gasket flange. Integral hinges with stainless steel pins provide no-tool mounting and removal from housing. Single die-cast aluminum cam-latch provides positive locking and sealing of the optical chamber by a one-piece extruded and vulcanized silicone gasket. Clear 3/16" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimeter.

Reflector Module: Specular Alzak® optical segments are rigidly mounted within a one-piece, die-cast low copper (<0.6% Cu) aluminum alloy enclosure that attaches to the housing as a one-piece module. Reflector module is field rotatable in 90° increments. AR model HPS and PMH sockets are porcelain 4KV pulse rated mogul base, MH sockets are porcelain mogul base, pin-oriented, with molded silicone lamp stabilizer. SAR model MH and HPS sockets are porcelain 4KV pulse rated medium base. All reflector modules are factory prewired with quick-disconnect plug and include silicone seal at the penetration of the internal barrier wall in the luminaire housing.

Electrical Module: All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Electrical module attaches to housing with no-tool hinges and latches, accessible by opening the lens frame only. All ballasts are high power factor rated -20°F. starting. On Induction Fluorescent, a complete HF generator is furnished mounted to the aluminum plate inside housing. Induction lamp system is high power factor rated for -40°F. starting.

Support Arm: One-piece extruded aluminum with internal bolt guides and fully radiussed top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut for specified round pole.

Optional Wall Mounting: Large AR model mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket is provided to accept draw bolts, and a trim plate covers the wall-embedded junction box. All wall mount components are finished to match the fixture. Small SAR model mounts to 3" or 4" junction boxes by a cast aluminum adapter plate with fixture mounting bolts.

NOTE: Junction box in wall must provide adequate fixture support. See NEC sections 370-13, 17 and 410-14, 16. Quick-disconnect plug and wiring are provided to allow field connections prior to SAR fixture mounting.

Finish/color: Finish is Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a titanated zirconium conversion coating; A.S.T.M. 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Platinum Silver, or White. Custom colors are available.

CAUTION: Fixtures must be grounded in accordance with national, state, and/or local codes. Failure to do so may result in serious personal injury.

Listings and Ratings

UL cUL 1598	4G Vibration ¹	25C Ambient
IP66 Rated	CE	ISO 9001:2000
Full-Cutoff ² with flat glass lens; Cutoff ² with convex glass lens		

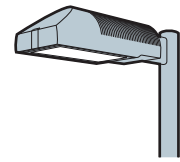
¹5K Cycle Tested

²Dark Sky Legislation Compliant

Ordering Information

The Small Archetype®

SAR
Medium Base
70 to 175 Watt



	Mounting	Fixture	Electrical Module	Finish	Options	Pole	VSF Option
Ordering Example: For Standard Fixture and Pole	1SA / SAR2 / 175MH120 / BL-P / A-30 / PSA16-4125SA / BL-P / VSF-1SA						
	1	2	3	4	5-12	13	14
	See separate Kim Pole Catalog. Omit for 1W Wall Mount.						
1 Mounting: 3SY configuration is available for round poles only.	Plan View: 						
	EPA: Cat. No.:	0.7 1SA	1.4 2SB	1.2 2SL	1.9 3ST	1.9 3SY	2.5 4SC n/a 1W
2 Fixture: Cat. No. designates SAR fixture and light distribution. See the Kim Site/Roadway Optical Systems Catalog for detailed information on reflector design and application.	Horizontal Lamp 						
	Flat Lens Light Distribution:						
	Cat. No.:		Full Cutoff SAR2	Full Cutoff SAR3	Forward Throw Full Cutoff SAR4	Square Full Cutoff SAR5	
3 Electrical Module: HPS = High Pressure Sodium MH = Metal Halide	High Pressure Sodium						
	Lamp Watts	Lamp Type	Line Volts				
	150	HPS	120				
	70HPS120		100HPS120	150HPS120			
	70HPS208		100HPS208	150HPS208			
	70HPS240		100HPS240	150HPS240			
	70HPS277		100HPS277	150HPS277			
	70HPS347		100HPS347	150HPS347			
	<div style="display: flex; align-items: center;"> <div style="background-color: yellow; padding: 5px;"> <p>KimNOW! Available Configurations: KN-SAR3/100PMH/DB*, KN-SAR5/100PMH/DB*, KN-SAR3/150PMH/DB*, KN-SAR5/150PMH/DB* Accessories: KN-SAR/HS, KN-1W/SAR/DB *Multi-tap ballast (120, 208, 240, or 277 volts)</p> </div> </div>						
	Pulse Start Metal Halide			Induction Fluorescent			
	70PMH120		100PMH120	150PMH120	55IF120		
	70PMH208		100PMH208	150PMH208	55IF208		
	70PMH240		100PMH240	150PMH240	55IF240		
	70PMH277		100PMH277	150PMH277	55IF277		
	70PMH347		100PMH347	150PMH347			
	NOTE: Due to the Energy Independence and Security Act (EISA) of 2007, Kim Lighting can no longer supply probe start metal halide ballasts with its luminaires, effective January 1, 2009. Contact Kim Lighting for availability of replacement ballasts for warranty service claims. (Visit www.aboutlightingcontrols.org or the Library of Congress website for more details).						
4 Finish: Super TGIC powder coat paint over titanated zirconium conversion coating.	Color:	Black	Dark Bronze	Light Gray	Platinum Silver	White	Custom Colors ¹
	Cat. No.:	BL	DB	LG	PS	WH	CC
	¹ Consult representative for custom colors.						
5 Optional Photocell Control: Not available for 1W Wall Mount.		Cat. No. and Line Volts:		A-30 120V A-31 208V A-32 240V A-33 277V A-35 347V	Mounting Configuration		
	Photocell Sensor				* – Fixture with Photocell Sensor S – slave unit(s)		
					No fixture wattage limit.		1SA 2SL 3ST, 3SY 4SC

CHALLENGER® II MEDIUM

TYPE 'PHA' ALT

LUMINAIRE ORDERING INFORMATION



TYPICAL ORDER EXAMPLE: **CH2VM 5 400 PSMVR CT MT PLP PCR**

Luminaire Prefix	Distribution	Lamp Wattage	Light Source	Lens	Line Voltage	Luminaire Finish	Options
Vertical Burn CH2VM	FP – Forward Throw Perimeter 5 – Type V	100 150 175 250 320 400	PSMV – Pulse-Start Metal Halide 175, 250, 320 Watt PSMVR – Pulse-Start Metal Halide Reduced Envelope 400 Watt CMH – Ceramic Metal Halide 150 Watt HPS – High Pressure Sodium 100, 150 Watt	CT – Contoured Clear Impact-resistant Glass	480 MT – Multi Tap TT – Tri-Tap	BRZ – Bronze BLK – Black PLP – Platinum Plus BUF – Buff WHT – White SVG – Satin Verde Green GPT – Graphite MSV – Metallic Silver	PCR - Photoelectric Control Receptacle ² QCP - Quick Connect Package ³ TE - Tool-less Entry GR - Ground Relamp (includes Tool-less Entry) ⁴ TB - Terminal Block ⁵ LL - Less Lamp
Horizontal Burn CH2HM	2 – Type II 3 – Type III FT – Forward Throw 5 – Type V		PSMH – Pulse-Start Metal Halide 175, 250, 320 Watt PSMHR – Pulse-Start Metal Halide Reduced Envelope 400 Watt CMH – Ceramic Metal Halide 150 Watt HPS – High Pressure Sodium 100, 150, 250, 400 Watt	F – Flat Clear Tempered Glass CT – Contoured Clear Impact-resistant Glass ¹	<p>MT – Multi Tap consists of 120V, 208V, 240V and 277V and is prepared for highest voltage. Alternate voltages will require field adjustment.</p> <p>TT – Tri-Tap consists of 120V, 277V and 347V and is shipped standard for Canadian applications and is prepared for highest voltage. Alternate voltages will require field adjustment.</p> <p>Consult Factory for International Voltages and Light Sources</p>		

FOOTNOTES:

- 1- Use to match vertical appearance.
- 2- PCR factory installed and prewired to highest voltage. Alternate voltages will require field re-wiring. Photocell must be ordered separately, see Accessories.
- 3- Quick connect package includes removable ballast tray, modular plugs and sealing grommet. Not compatible with TB - Terminal Block option.
- 4- Ground relamping option available on CH2VM only. Maximum tool length 15 ft. See Accessories for Ground Lamp Changer.
- 5- Not compatible with QCP- Quick Connect Package option.

ACCESSORY ORDERING INFORMATION		(Accessories are field installed)	
Description	Order Number	Description	Order Number
PC120 – Photocell	122514+	DFK480 - Double Fusing	DFK480
PC208-277 – Photocell for 208V, 240V or 277V	122515+	FK347 - Single Fusing	FK347
PC347 – Photocell	159516+	CH2VM FP / CH2HM FT HSS – External House Side Shield	290383BLK++
PC480 – Photocell	1225180+	RPP2 – Round Pole Plate	162914CLR
FK120 - Single Fusing	FK120	BKS-BO-WM-* -CLR Wall Mount Plate	123111CLR
FK277 - Single Fusing	FK277	Ground Lamp Changer	132678A+++
DFK208, 240 - Double Fusing	DFK208, 240	+ Factory installed PCR option required. ++Black Only +++For use with 175, 250, 320, & 400 Watt Reduced Envelope PSMV lamps	

HOUSE SIDE SHIELD
<p>FORWARD THROW (FP) (290383BLK)</p>

TLM TALON MEDIUM

Type 'PHA'

ORDERING INFORMATION

SAMPLE NUMBER: TLM-400-MH-MT-3F-FG-BK-HS

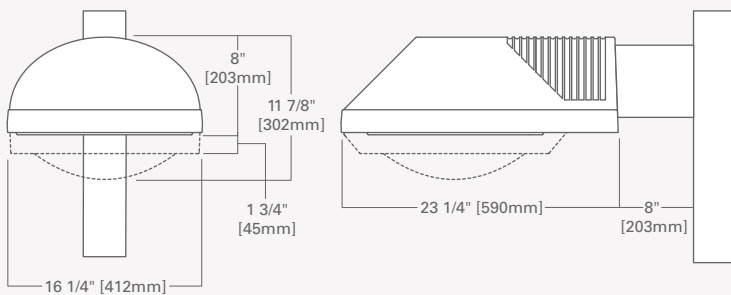
PRODUCT FAMILY ¹	LAMP WATTAGE ²	LAMP TYPE	VOLTAGE ⁵	DISTRIBUTION	LENS TYPE	COLOR ⁹	OPTIONS + ACCESSORIES
TLM=Talon	70=70W	MH=Metal Halide	120=120V	Horizontal Lamp	FG=Flat Glass	[add as suffix/ must specify]	[See Below]
Site Medium	100=100W	MP=Pulse Start Metal Halide	208=208V	2F=Type II Formed	SG=Sag Glass	BK=Black	
	150=150W	HPS=High Pressure Sodium	240=240V	2S=Type II Segmented		AP=Grey	
	175=175W		277=277V	3F=Type III Formed		BZ=Bronze	
	250=250W		347=347V	3S=Type III Segmented		WH=White	
	320=320W ^{3,4}		480=480V	4F=Type IV Formed		DP=Dark Platinum	
	350=350W ^{3,4}		DT=Dual-Tap ⁶	4S=Type IV Segmented		GM=Graphite Metallic	
	400=400W ⁴		MT=Multi-Tap ⁶	5F=Type V Formed			
			TT=Triple-Tap ⁶	5S=Type V Segmented			
			5T=5-Tap ^{6,7}	SL=Spill Light Eliminator			
				AF=Automotive Front Row			
				Vertical Lamp			
				3V=Type III Vertical ⁸			
				4V=Type IV Automotive Perimeter ⁸			
				AR=Area Round ⁸			
				AS=Area Square ⁸			

OPTIONS + ACCESSORIES [Must be listed in the order shown and separated by a dash]

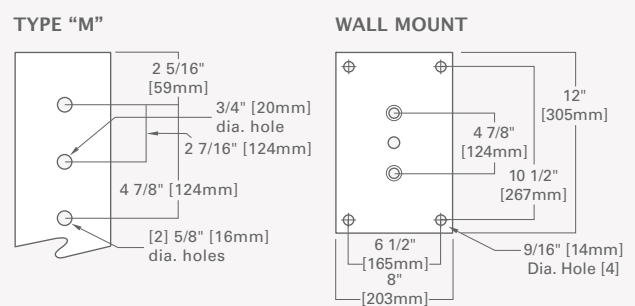
OPTIONS [add as suffix]
 F=Single Fuse [120, 277 or 347V]¹⁰
 FF=Double Fuse [208, 240 or 480V]¹⁰
 Q=Quartz Restrike¹¹
 EM=Quartz Restrike w/Delay [Also Strikes at Cold Start]¹¹
 EM/SC=Quartz Emergency Separate Circuit¹¹
 PT=Electrical Power Tray
 P=Button Type Photocontrol [120, 208, 240 or 277V]¹⁰
 R=NEMA Twistlock Photocontrol Receptacle
 HS=Internal House-side Shield¹²
 VS=Polycarbonate Vandal Shield
 DD=Deep Door
 WM=Wall Mount with 8" Arm
 DM=Direct Mount for Round or Square Pole
 DW=Direct Wall Mount
 MS=External Mast Adapter
 HL=Hi/Low Dimming¹³
 L=Lamp Included

ACCESSORIES [order separately/replace XX with color designation]
 OA/RA1016=NEMA Photocontrol [105-285V]
 OA/RA1027=NEMA Photocontrol [480V]
 OA/RA1201=NEMA Photocontrol [347V]
 OA/RA1013=Shorting Cap
 MA1010-XX=Single Tenon Adapter for 3 1/2" O.D. Tenon
 MA1011-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1012-XX=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1013-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1014-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1015-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1016-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
 MA1017-XX=Single Tenon Adapter for 2 3/8" O.D. Tenon
 MA1018-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1019-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1045-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1048-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1049-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
 MA1213-XX=External House-side Shield Kit [EPA=0.38]

DIMENSIONS



DRILLING PATTERNS



CERTIFICATIONS

IP65 Rated	CSA Listed
25° C Ambient Temperature	ISO 9001
U.L. 1598 Listed	FCO [Full Cutoff] Flat Glass Only

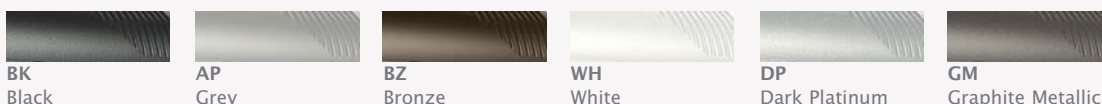
WATTAGE TABLE

Lamp Type	Wattage
Metal Halide	175, 250, 400W
High Pressure Sodium	70, 100, 150, 250, 400W
Pulse Start Metal Halide	70, 100, 150, 250, 320, 350, 400W

EPA

Effective Projected Area
Recessed Door w/o Arm: 0.79
Deep Door w/o Arm: 1.02
8" Arm: 0.43

STANDARD COLORS



SHIPPING DATA

Approximate Net Weight
Recessed Door 47 lbs. [21.79 kgs.]
Deep Door 52 lbs. [23.63 kgs.]

NOTES: 1 8" arm and round pole adapter included with fixture. 2 Standard with mogul-base socket for HPS and 175-400W MH. Standard with medium-base socket for 150W MH and below. 3 320/350W Pulse Start Metal Halide lamps only. 4 Requires reduced envelope lamp. 5 Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information. 6 Dual-Tap is 120/277V wired 277V. Multi-Tap is 120/208/240/277V wired 277V. Triple-Tap ballast is 120/277/347V wired 347V. 5-Tap is 120/208/240/277/480V wired 480V. 7 Available for 250-400W only. 8 Vertical lamp optics ship standard with deep door. 250-400W vertically lamped optics not available with flat glass. 9 Custom and RAL color matching available upon request. Consult Cooper Lighting Representative for further information. 10 Must specify voltage. 11 Quartz options not available with SL and AF optics. 12 House-side shield not available on 5S, 5F, AS, AR, and SL optics. 13 Requires vertical lamp orientation. Provides 24V low voltage leads used in dimming controls. 14 Specifications and dimensions subject to change without notice.

Luminaire Specifications

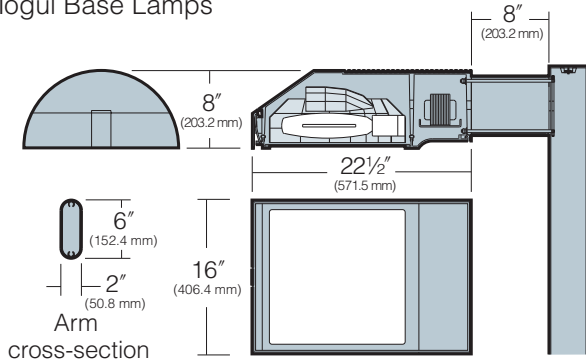
Type 'PHA2'

Cat. # 2SB SAR2 100PMH DB

AR and SAR Models

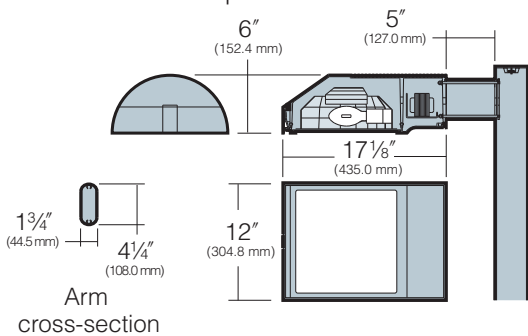
Dimensions

AR Model
150 to 400 watt
Mogul Base Lamps



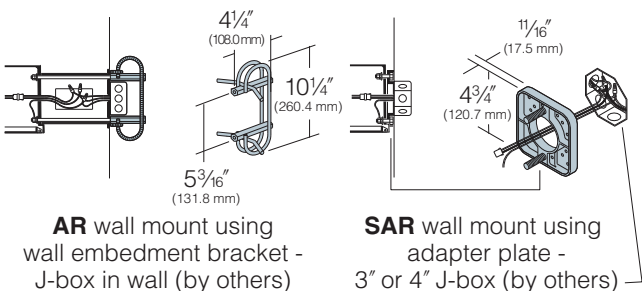
Maximum Fixture weight (400HPS) = 45 lb

SAR Model
70 to 175 watt
Medium Base Lamps



Maximum Fixture weight (150HPS) = 25 lb

Optional Wall Mounts



Housing: One-piece, die-cast low copper (<0.6% Cu) aluminum alloy with integral cooling ribs over the optical chamber and electrical compartment. Solid barrier wall separates optical and electrical compartments. Double-thick wall with gussets on the support-arm mounting end. For the large AR model, housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail. For the small SAR model, housing forms a half cylinder with 58° front face plane providing a recess to allow a flush single-latch detail. All hardware is stainless steel or electro-zinc plated steel.

Lens Frame: One-piece, die-cast low copper (<0.6% Cu) aluminum alloy lens frame with 1" minimum depth around the gasket flange. Integral hinges with stainless steel pins provide no-tool mounting and removal from housing. Single die-cast aluminum cam-latch provides positive locking and sealing of the optical chamber by a one-piece extruded and vulcanized silicone gasket. Clear 3/16" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimeter.

Reflector Module: Specular Alzak® optical segments are rigidly mounted within a one-piece, die-cast low copper (<0.6% Cu) aluminum alloy enclosure that attaches to the housing as a one-piece module. Reflector module is field rotatable in 90° increments. AR model HPS and PMH sockets are porcelain 4KV pulse rated mogul base, MH sockets are porcelain mogul base, pin-oriented, with molded silicone lamp stabilizer. SAR model MH and HPS sockets are porcelain 4KV pulse rated medium base. All reflector modules are factory prewired with quick-disconnect plug and include silicone seal at the penetration of the internal barrier wall in the luminaire housing.

Electrical Module: All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Electrical module attaches to housing with no-tool hinges and latches, accessible by opening the lens frame only. All ballasts are high power factor rated -20°F. starting. On Induction Fluorescent, a complete HF generator is furnished mounted to the aluminum plate inside housing. Induction lamp system is high power factor rated for -40°F. starting.

Support Arm: One-piece extruded aluminum with internal bolt guides and fully radiussed top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut for specified round pole.

Optional Wall Mounting: Large AR model mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket is provided to accept draw bolts, and a trim plate covers the wall-embedded junction box. All wall mount components are finished to match the fixture. Small SAR model mounts to 3" or 4" junction boxes by a cast aluminum adapter plate with fixture mounting bolts.

NOTE: Junction box in wall must provide adequate fixture support. See NEC sections 370-13, 17 and 410-14, 16. Quick-disconnect plug and wiring are provided to allow field connections prior to SAR fixture mounting.

Finish/color: Finish is Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a titanated zirconium conversion coating; A.S.T.M. 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Platinum Silver, or White. Custom colors are available.

CAUTION: Fixtures must be grounded in accordance with national, state, and/or local codes. Failure to do so may result in serious personal injury.

Listings and Ratings		
UL cUL 1598	4G Vibration ¹	25C Ambient
IP66 Rated	CE	ISO 9001:2000
Full-Cutoff ² with flat glass lens; Cutoff ² with convex glass lens		

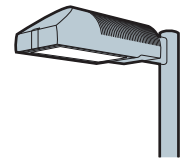
¹5K Cycle Tested

²Dark Sky Legislation Compliant

Ordering Information

The Small Archetype®

SAR
Medium Base
70 to 175 Watt



	Mounting	Fixture	Electrical Module	Finish	Options	Pole	VSF Option																																				
Ordering Example: For Standard Fixture and Pole	1SA / SAR2 / 175MH120 / BL-P / A-30 / PSA16-4125SA / BL-P / VSF-1SA																																										
	1	2	3	4	5-12	13	14																																				
	See separate Kim Pole Catalog. Omit for 1W Wall Mount.																																										
1 Mounting: 3SY configuration is available for round poles only.	Plan View: 	EPA: Cat. No.:	0.7 1SA	1.4 2SB	1.2 2SL	1.9 3ST	1.9 3SY	2.5 4SC	n/a 1W																																		
2 Fixture: Cat. No. designates SAR fixture and light distribution. See the Kim Site/Roadway Optical Systems Catalog for detailed information on reflector design and application.	Horizontal Lamp 	Flat Lens 	Light Distribution:	Type II Full Cutoff SAR2	Type III Full Cutoff SAR3	Type IV Forward Throw Full Cutoff SAR4	Type V Square Full Cutoff SAR5																																				
3 Electrical Module: HPS = High Pressure Sodium MH = Metal Halide <table border="1"> <thead> <tr> <th>Lamp Watts</th> <th>Lamp Type</th> <th>Line Volts</th> </tr> </thead> <tbody> <tr> <td>150</td> <td>HPS</td> <td>120</td> </tr> </tbody> </table>	Lamp Watts	Lamp Type	Line Volts	150	HPS	120	High Pressure Sodium <table border="1"> <tbody> <tr> <td>70HPS120</td> <td>100HPS120</td> <td>150HPS120</td> </tr> <tr> <td>70HPS208</td> <td>100HPS208</td> <td>150HPS208</td> </tr> <tr> <td>70HPS240</td> <td>100HPS240</td> <td>150HPS240</td> </tr> <tr> <td>70HPS277</td> <td>100HPS277</td> <td>150HPS277</td> </tr> <tr> <td>70HPS347</td> <td>100HPS347</td> <td>150HPS347</td> </tr> </tbody> </table> KimNOW! Available Configurations: KN-SAR3/100PMH/DB*, KN-SAR5/100PMH/DB*, KN-SAR3/150PMH/DB*, KN-SAR5/150PMH/DB* Accessories: KN-SAR/HS, KN-1W/SAR/DB *Multi-tap ballast (120, 208, 240, or 277 volts)	70HPS120	100HPS120	150HPS120	70HPS208	100HPS208	150HPS208	70HPS240	100HPS240	150HPS240	70HPS277	100HPS277	150HPS277	70HPS347	100HPS347	150HPS347	Pulse Start Metal Halide <table border="1"> <tbody> <tr> <td>70PMH120</td> <td>100PMH120</td> <td>150PMH120</td> </tr> <tr> <td>70PMH208</td> <td>100PMH208</td> <td>150PMH208</td> </tr> <tr> <td>70PMH240</td> <td>100PMH240</td> <td>150PMH240</td> </tr> <tr> <td>70PMH277</td> <td>100PMH277</td> <td>150PMH277</td> </tr> <tr> <td>70PMH347</td> <td>100PMH347</td> <td>150PMH347</td> </tr> </tbody> </table> Induction Fluorescent <table border="1"> <tbody> <tr> <td>55IF120</td> </tr> <tr> <td>55IF208</td> </tr> <tr> <td>55IF240</td> </tr> <tr> <td>55IF277</td> </tr> </tbody> </table>	70PMH120	100PMH120	150PMH120	70PMH208	100PMH208	150PMH208	70PMH240	100PMH240	150PMH240	70PMH277	100PMH277	150PMH277	70PMH347	100PMH347	150PMH347	55IF120	55IF208	55IF240	55IF277	NOTE: Due to the Energy Independence and Security Act (EISA) of 2007, Kim Lighting can no longer supply probe start metal halide ballasts with its luminaires, effective January 1, 2009. Contact Kim Lighting for availability of replacement ballasts for warranty service claims. (Visit www.aboutlightingcontrols.org or the Library of Congress website for more details).
Lamp Watts	Lamp Type	Line Volts																																									
150	HPS	120																																									
70HPS120	100HPS120	150HPS120																																									
70HPS208	100HPS208	150HPS208																																									
70HPS240	100HPS240	150HPS240																																									
70HPS277	100HPS277	150HPS277																																									
70HPS347	100HPS347	150HPS347																																									
70PMH120	100PMH120	150PMH120																																									
70PMH208	100PMH208	150PMH208																																									
70PMH240	100PMH240	150PMH240																																									
70PMH277	100PMH277	150PMH277																																									
70PMH347	100PMH347	150PMH347																																									
55IF120																																											
55IF208																																											
55IF240																																											
55IF277																																											
4 Finish: Super TGIC powder coat paint over titanated zirconium conversion coating.	Color: Cat. No.:	Black BL	Dark Bronze DB	Light Gray LG	Platinum Silver PS	White WH	Custom Colors¹ CC																																				
	¹Consult representative for custom colors.																																										
5 Optional Photocell Control: Not available for 1W Wall Mount.		Cat. No. and Line Volts:	A-30 120V A-31 208V A-32 240V A-33 277V A-35 347V	Mounting Configuration * – Fixture with Photocell Sensor S – slave unit(s) No fixture wattage limit.																																							

CHALLENGER® II MEDIUM

TYPE 'PHA2' ALT

LUMINAIRE ORDERING INFORMATION



TYPICAL ORDER EXAMPLE: **CH2VM 5 400 PSMVR CT MT PLP PCR**

Luminaire Prefix	Distribution	Lamp Wattage	Light Source	Lens	Line Voltage	Luminaire Finish	Options
Vertical Burn CH2VM	FP – Forward Throw Perimeter 5 – Type V	100 150 175 250 320 400	PSMV – Pulse-Start Metal Halide 175, 250, 320 Watt PSMVR – Pulse-Start Metal Halide Reduced Envelope 400 Watt CMH – Ceramic Metal Halide 150 Watt HPS – High Pressure Sodium 100, 150 Watt	CT – Contoured Clear Impact-resistant Glass	480 MT – Multi Tap TT – Tri-Tap	BRZ – Bronze BLK – Black PLP – Platinum Plus BUF – Buff WHT – White SVG – Satin Verde Green GPT – Graphite MSV – Metallic Silver	PCR - Photoelectric Control Receptacle ² QCP - Quick Connect Package ³ TE - Tool-less Entry GR - Ground Relamp (includes Tool-less Entry) ⁴ TB - Terminal Block ⁵ LL - Less Lamp
Horizontal Burn CH2HM	2 – Type II 3 – Type III FT – Forward Throw 5 – Type V		PSMH – Pulse-Start Metal Halide 175, 250, 320 Watt PSMHR – Pulse-Start Metal Halide Reduced Envelope 400 Watt CMH – Ceramic Metal Halide 150 Watt HPS – High Pressure Sodium 100, 150, 250, 400 Watt	F – Flat Clear Tempered Glass CT – Contoured Clear Impact-resistant Glass ¹	<p>MT – Multi Tap consists of 120V, 208V, 240V and 277V and is prepared for highest voltage. Alternate voltages will require field adjustment.</p> <p>TT – Tri-Tap consists of 120V, 277V and 347V and is shipped standard for Canadian applications and is prepared for highest voltage. Alternate voltages will require field adjustment.</p> <p>Consult Factory for International Voltages and Light Sources</p>		

FOOTNOTES:

- 1- Use to match vertical appearance.
- 2- PCR factory installed and prewired to highest voltage. Alternate voltages will require field re-wiring. Photocell must be ordered separately, see Accessories.
- 3- Quick connect package includes removable ballast tray, modular plugs and sealing grommet. Not compatible with TB - Terminal Block option.
- 4- Ground relamping option available on CH2VM only. Maximum tool length 15 ft. See Accessories for Ground Lamp Changer.
- 5- Not compatible with QCP- Quick Connect Package option.

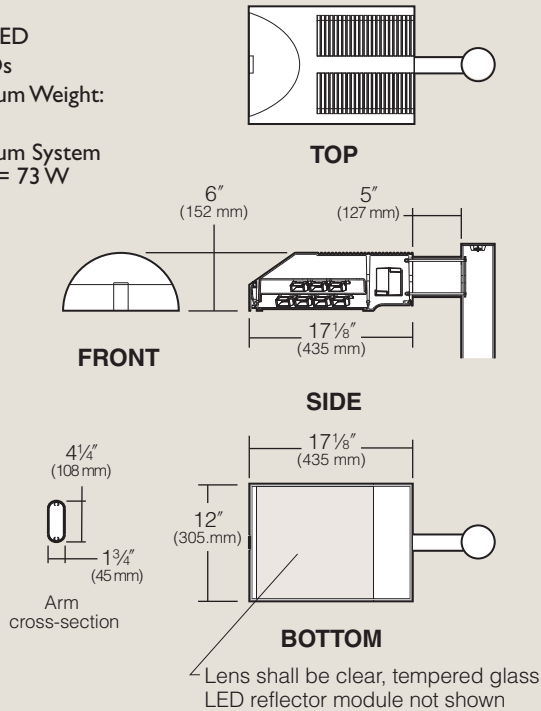
ACCESSORY ORDERING INFORMATION		(Accessories are field installed)	
Description	Order Number	Description	Order Number
PC120 – Photocell	122514+	DFK480 - Double Fusing	DFK480
PC208-277 – Photocell for 208V, 240V or 277V	122515+	FK347 - Single Fusing	FK347
PC347 – Photocell	159516+	CH2VM FP / CH2HM FT HSS – External House Side Shield	290383BLK++
PC480 – Photocell	1225180+	RPP2 – Round Pole Plate	162914CLR
FK120 - Single Fusing	FK120	BKS-BO-WM-* -CLR Wall Mount Plate	123111CLR
FK277 - Single Fusing	FK277	Ground Lamp Changer	132678A+++
DFK208, 240 - Double Fusing	DFK208, 240	+ Factory installed PCR option required. ++Black Only +++For use with 175, 250, 320, & 400 Watt Reduced Envelope PSMV lamps	

HOUSE SIDE SHIELD
<p>FORWARD THROW (FP) (290383BLK)</p>

Specifications

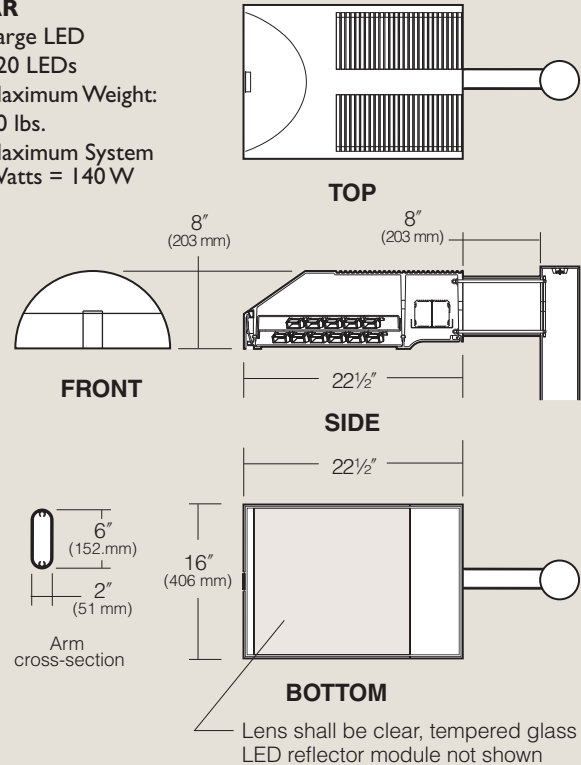
SAR

Small LED
60 LEDs
Maximum Weight:
30 lbs.
Maximum System
Watts = 73 W



AR

Large LED
120 LEDs
Maximum Weight:
50 lbs.
Maximum System
Watts = 140 W



HOUSING: One-piece die-cast, low copper (<0.6% Cu) aluminum alloy with integral cooling ribs over the optical chamber and electrical compartment. Solid barrier wall separates optical and electrical compartments. Double-thick wall with gussets on the support-arm mounting end. Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail. All hardware is stainless steel or electro-zinc plated steel.

LENS FRAME: One-piece die-cast, low copper (<0.6% Cu) aluminum alloy lens frame with 1" minimum depth around the gasket flange. Integral hinges with stainless steel pins provide no-tool mounting and removal from housing. Single die-cast aluminum cam-latch provides positive locking and sealing of the optical chamber by a one-piece extruded and vulcanized silicone gasket. Clear F' thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimeter.

ELECTRONIC MODULE: All electrical components are UL recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Modules include a driver, thermal control device and surge protector. Drivers is rated for -40°F starting and has a 0-10V dimming interface. Electrical module attaches to housing with no-tool hinges and latches, accessible by opening the lens frame only.

OPTICAL MODULE: Precision, replaceable MicroEmitters are positioned to achieve directional control toward desired task. The entire EmitterDeck fastens to the housing as a one-piece module.

SUPPORT ARM: One-piece extruded aluminum with internal bolt guides and fully radiussed top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut for specified round pole.

OPTIONAL WALL MOUNTING: Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket is provided to accept draw bolts, and a trim plate covers the wall-embedded junction box. All wall mount components are finished to match the fixture.

FINISH: Super-TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a titanated zirconium conversion coating; 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Stealth Gray™, Platinum Silver, or White. Custom colors are available.

CAUTION: Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

LISTINGS AND RATINGS		
ETL listed to UL 1598 standards ¹	IP66 Rated	25°C Ambient

¹Suitable for wet locations

Kim Lighting reserves the right to change specifications without notice.

The Archetype LED

Ordering Example:

1SA / SAR3 / 60L5K120 / DB / A-25 / PRA20-4188SA/WH

1 2 3 4 5-14 15

1 Mounting
3SY configuration is available for round poles only.

Plan View:								Wall Mount
SAR EPA:	0.7	1.4	1.2	1.9	1.9	2.5	-	
Cat. No.:	1SA	2SB	2SL	3ST	3SY	4SC	1W	
AR EPA:	1.2	2.4	2.0	3.2	3.2	3.9	-	
Cat. No.:	1A	2B	2L	3T	3Y	4C	1W	

2 Fixture
Catalog no. designates fixture and light distribution.

HOUSING
SAR = Small, 60 LEDs, 73W
AR = Large, 120 LEDs, 140W

DISTRIBUTION
2 = Type II Full Cutoff
3 = Type III Full Cutoff
4 = Type IV Full Cutoff
5 = Type V Square Full Cutoff
R = Type R Right Full Cutoff
L = Type L Left Full Cutoff

Light Distribution

3 Electrical Module

SOURCE
60 = 60 LEDs (Small)
120 = 120 LEDs (Large)

COLOR TEMPERATURE
L3K = 3500K
L5K = 5100K
L2K = 580nm Amber

VOLTAGE
120 = 120V
208 = 208V
240 = 240V
277 = 277V
347 = 347V²
480 = 480V²

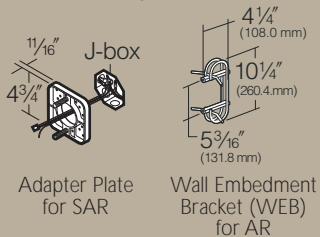
² Due to current unavailability of 347V and 480V drivers, specification of these voltages shall feature an integral step-down transformer. For SAR models only.

¹ 4300K and 6500K are also available on an "Engineered to Order" basis

4 Finish
Super TGIC powder coat paint over titanated zirconium conversion coating.

Color:	Stealth Gray	Light Gray	Platinum Silver	White	Black	Dark Bronze	Custom Colors	Consult your Kim Lighting representative for custom colors.
Cat. No.:	SG	LG	PS	WH	BL	DB	CC	

5 Wall Mounting:



Cat. No.: **1W**

SAR Fixture mounts to 3" or 4" junction boxes by a cast aluminum adapter plate with fixture mounting bolts.

NOTE: Junction box in wall must provide adequate fixture support. See NEC sections 370-13, 17 and 410-14, 16. Quick-disconnect plug and wiring are provided to allow field connections prior to fixture mounting.

AR Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket (**WEB**) is provided to accept draw bolts, and a trim plate covers the wall-embedded junction box. All wall mount components are finished to match the fixture.

6 Optional Photocell Sensor or Receptacle:
Receptacle provided for NEMA base photocells (by others).

Cat. No.:

- A-30 120V
- A-31 208V
- A-32 240V
- A-33 277V
- A-35 347V
- A-34 480V
- A-25

Mounting Configuration

- * - Fixture with Photocell Receptacle
- s - slave unit(s)

7 Optional Dimming Controls:

The Archetype LED driver is a 0-10V dimming interface, allowing 0-100% illumination output when synchronized with a control and dimming system, provided by others. Kim Lighting is working with several control system manufacturers to develop a variety of proven turnkey solutions to meet any application's need. Kim Lighting will advise availability of complete control packages, and even two-way monitoring systems, once they have been tested and exceed Kim's high quality standards.

DESCRIPTION

The Talon is the most versatile, functionally designed, universally adaptable outdoor luminaire available. Incorporating modular LED LightBAR™ technology, Talon brings outstanding uniformity and energy-conscious illumination to walkways, parking lots, roadways, building areas, and any security lighting application. UL/ cUL listed for wet locations.

Catalog #	TLM B03 LED E1 T2 BZ	Type
Project		'PLA'
Comments	ARM MOUNT SINGLE	Date
Prepared by		

SPECIFICATION FEATURES

Construction

One-piece heavy-wall, die-cast aluminum construction with integral reveal channels along top surface of housing. Optimized for reliable operation from 40°C down to -30°C, internal cast-in wall separates optical and electrical chambers allowing components to operate cooler. Stainless steel latches and hinges allow for tool-less opening and removal of door frame.

Optics

Choice of thirteen (13) patented, high-efficiency AccuLED Optics™ manufactured from injection-molded acrylic. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED optics create consistent distributions with the scalability to meet customized application requirements. Talon optics feature quick disconnect wiring plugs and are field-rotatable in 90° increments allowing manipulation of distribution independent of fixture position. Offered standard in 4000K (+/- 275K) CCT and nominal 70 CRI.

Electrical

Offered standard with LED drivers and related electrical componentry hard mounted to die-cast housing details for optimal heat transfer and operating efficiency. Talon operates from 120-277V 50/60Hz, 347V 60Hz, 480V 60Hz. Optional galvanized steel swing-down power tray with integral handle allow tray to be removed from housing providing ample hand and tool room for attachment of fixture during installation. Offered standard with the Cooper Lighting proprietary circuit module designed to withstand 10kV transient line surge. 50,000+ hour life with >70% lumen maintenance. LightBARs™ feature an IP66 enclosure rating.

Mounting

Extruded 8" aluminum arm includes internal bolt guides allowing for easy positioning of fixture during installation to pole or wall surface. Standard single carton packaging of housing, square pole arm and round pole adapter for contractor-friendly arrival of product on site. Optional mounting methods include a wall

mount plate, an external mast arm that accepts 2-3/8" O.D. horizontal tenons and direct mounting to pole or wall surfaces. Tenon adapters available to slipfit over poles equipped with 2-3/8" or 3-1/2" O.D. tenon. 3G vibration rated.

Finish

Housing and arm finished in a 5-stage Super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty

Talon LED features a five-year limited warranty.



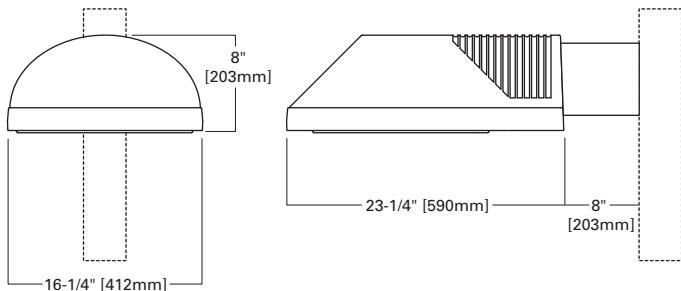
**TLM
TALON MEDIUM
LED**

**2 - 6 LightBARs
Solid State LED**

**ARCHITECTURAL AREA
LUMINAIRE**

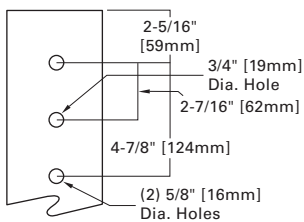
SustainableLEDesign™

DIMENSIONS

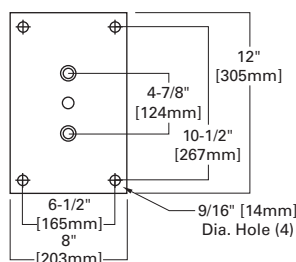


ARM DRILLING

TYPE "M"



WALL MOUNT



CERTIFICATION DATA

UL/cUL Listed
LM79 / LM80 Compliant
IP66 LightBARs
3G Vibration Rated
ARRA Compliant
ISO 9001

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60hz, 347V/60hz,
480V/60hz
-30°C Minimum Temperature
40°C Ambient Temperature Rating

EPA

Effective Projected Area: (Sq. Ft.)
Luminaire w/o Arm: 0.79
8" Arm: 0.43

SHIPPING DATA

Approximate Net Weight:
42 lbs. (25.91 kgs.)



POWER AND LUMENS BY BAR COUNT

Number of LightBARs	DISTRIBUTION														
	Power [Watts]	Current @ 120V [A]	Current @ 277V [A]	T2	T3	T3S	T4	SL2	SL3	SL4	5MQ	5WQ	5XQ	RW	SLR/SL
7 LED LIGHTBAR															
C02	54	0.46	0.21	3,509	3,469	3,391	3,495	3,484	3,368	3,347	3,711	3,724	3,605	3,540	3,203
C03	77	0.65	0.29	5,291	5,230	5,112	5,269	5,252	5,078	5,046	5,594	5,614	5,436	5,337	4,829
C04	101	0.86	0.37	6,983	6,902	6,747	6,954	6,932	6,703	6,660	7,383	7,410	7,174	7,043	6,373
C05	131	1.11	0.50	8,362	8,265	8,079	8,327	8,300	8,026	7,975	8,841	8,872	8,590	8,434	7,631
C06	154	1.30	0.58	10,119	10,002	9,777	10,077	10,045	9,712	9,651	10,699	10,737	10,396	10,206	9,235
21 LED LIGHTBAR															
B02	51	0.43	0.20	4,317	4,267	4,171	4,299	4,285	4,143	4,117	4,564	4,580	4,435	4,354	3,940
B03	73	0.62	0.28	6,508	6,433	6,288	6,481	6,460	6,246	6,207	6,881	6,906	6,686	6,564	5,939
B04	95	0.81	0.35	8,589	8,490	8,299	8,554	8,526	8,244	8,192	9,081	9,114	8,824	8,663	7,839
B05	124	1.05	0.48	10,285	10,166	9,938	10,242	10,209	9,871	9,809	10,874	10,913	10,566	10,373	9,386
B06	146	1.24	0.56	12,446	12,302	12,026	12,395	12,355	11,946	11,871	13,159	13,207	12,786	12,554	11,359

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.04
15°C	1.03
25°C	1.00
40°C	0.96




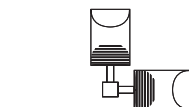
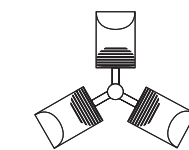

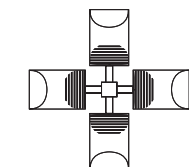
ORDERING INFORMATION

SAMPLE NUMBER: TLM-B03-LED-E1-T3-BK

		LED				
Product Family ¹ TLM=Talon Site Medium	Lamp Type LED=Solid State Light-Emitting Diodes		Distribution T2=Type II T3=Type III T3S=Type III Short T4=Type IV 5MQ=Type V Square Medium 5WQ=Type V Square Wide 5XQ=Type V Square Extra Wide SL2=Type II w/Spill Control SL3=Type III w/Spill Control SL4=Type IV w/Spill Control RW=Rectangular Wide SLL=90 Degree Spill Light Eliminator Left SLR=90 Degree Spill Light Eliminator Right		Options ⁵ P=Button Type Photocontrol (120V, 208, 240, or 277V) ⁶ R=NEMA Twistlock Photocontrol Receptacle PT=Electrical Power Tray ZL=Bi-Level Switching Capable ⁷ 7060=70 CRI/6000K CCT ⁸ 8030=80 CRI/3000K CCT ⁸ LCF=LightBAR Cover Plate Matches Housing Finish WM=Wall Mount with Arm DM=Direct Mount for Round or Square Pole DW=Direct Wall Mount MS=External Mast Arm Adapter ICP=Integral Cold Weather Battery Pack (Specify 120V or 277V) ^{6,9}	Accessories ¹⁰ MA1010-XX=Single Tenon Adapter for 3 1/2" O.D. Tenon MA1011-XX=2@180° Tenon Adapter for 3 1/2" O.D. Tenon MA1012-XX=3@120° Tenon Adapter for 3 1/2" O.D. Tenon MA1013-XX=4@90° Tenon Adapter for 3 1/2" O.D. Tenon MA1014-XX=2@90° Tenon Adapter for 3 1/2" O.D. Tenon MA1015-XX=2@120° Tenon Adapter for 3 1/2" O.D. Tenon MA1016-XX=3@90° Tenon Adapter for 3 1/2" O.D. Tenon MA1017-XX=Single Tenon Adapter for 2 3/8" O.D. Tenon MA1018-XX=2@180° Tenon Adapter for 2 3/8" O.D. Tenon MA1019-XX=3@120° Tenon Adapter for 2 3/8" O.D. Tenon MA1045-XX=4@90° Tenon Adapter for 2 3/8" O.D. Tenon MA1048-XX=2@90° Tenon Adapter for 2 3/8" O.D. Tenon MA1049-XX=3@90° Tenon Adapter for 2 3/8" O.D. Tenon OA/RA1016=NEMA Twistlock Photocontrol - Multi-Tap OA/RA1027=NEMA Twistlock Photocontrol - 480V OA/RA1201=NEMA Twistlock Photocontrol - 347V OA/RA1013=Shorting Cap MA1253=10kV Circuit Module Replacement
Number of LightBARs ^{2,3} B02=[2] 21 LED LightBARs B03=[3] 21 LED LightBARs B04=[4] 21 LED LightBARs B05=[5] 21 LED LightBARs B06=[6] 21 LED LightBARs C02=[2] 7 LED LightBARs C03=[3] 7 LED LightBARs C04=[4] 7 LED LightBARs C05=[5] 7 LED LightBARs C06=[6] 7 LED LightBARs	Voltage E1=Electronic (120-277V) 347=347V 480=480V		Color ⁴ AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White			

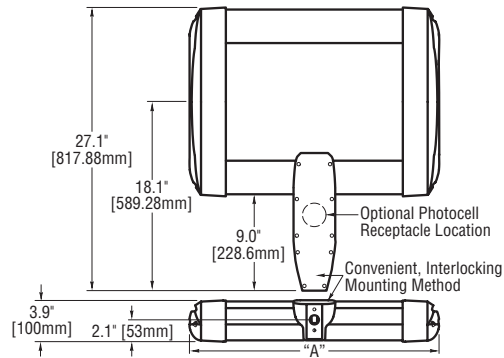
- NOTES:
- 8" arm and round pole adapter included with fixture.
 - 21 LED LightBAR powered at 350mA, 7 LED LightBAR powered at 1A.
 - Standard 4000K CCT and nominal 70CRI.
 - Custom and RAL color matching available upon request. Consult Cooper Lighting Representative for further information.
 - Add as suffix.
 - Must specify voltage.
 - Low-Level output varies by bar count specified. Consult Factory.
 - Consult Factory for lead times and lumen multiplier.
 - Available with B02 or C02, B03 or C03, and B04 or C04 configurations only. Rated for 25 Degrees C ambient.
 - Order separately, replace XX with color suffix.

MOUNTING CONFIGURATIONS

Wall Mount	Arm Mount Single EPA 1.22	Arm Mount 2 @ 180° EPA 2.44	Arm Mount 2 @ 90° EPA 2.44	Arm Mount 3 @ 120° (Round Pole Only) EPA 3.23	Arm Mount 3 @ 90° EPA 3.23	Arm Mount 4 @ 90° EPA 3.63
						



Notes:



# of LEDs	Dim. "A"
20	12.06" [306mm]
40	12.06" [306mm]
60	14.06" [357mm]
80	16.06" [408mm]
100	18.06" [459mm]
120	20.06" [510mm]
140	22.06" [560mm]
160	24.06" [611mm]
200	28.06" [713mm]
240	32.06" [814mm]

Product	Family	Optic	Mounting	# of LEDs (x 10)	LED Series	Voltage	Color Options	Drive Current	Factory-Installed Options
ARE	EDG	2M ¹ 2MB ²	DA ³	02 04 06 08 10 12 14 16 20 24	D	UL Universal 120-277V UH Universal 347-480V 34 347V	SV Silver BK Black BZ Bronze PB Platinum Bronze WH White	350 350mA 525 ⁴ 525mA 700 ⁵ 700mA	43K 4300K Color Temperature ⁶ DIM 0-10V Dimming ^{7,8,9} F Fuse ^{10,11,12} HL Hi/Low (175/350/525, dual circuit input) ¹³ P Photocell ^{12,14} R NEMA Photocell Receptacle ^{12,15,16} ML Multi-Level (75/525) ¹³

Footnotes

- IESNA Type II Medium distribution
- IESNA Type II Medium distribution with backlight control
- Direct mounting arm for use with 3-6" (76-152mm) square or round pole
- Available on fixtures with 20-160 LEDs
- Available on fixtures with 20-60 LEDs
- Color temperature per fixture; 6000K standard; minimum 70 CRI
- Control by others
- Refer to dimming spec sheet for availability and additional information
- Can't exceed specified drive current. Consult factory if exceeding drive current is necessary
- Not available when UH voltage is selected
- When code dictates fusing use time delay fuse
- Not available with all multi-level options. Refer to the multi-level spec sheet for availability and additional information
- Refer to multi-level spec sheet for availability and additional information
- Must specify voltage other than UH
- Intended for horizontal mounting
- Photocell by others

LED PERFORMANCE SPECS

# of LEDs	Initial Delivered Lumens – Type II Medium @ 6000K	B U G			Initial Delivered Lumens – Type II Medium w/ Backlight Control @ 6000K	B U G			Initial Delivered Lumens – Type II Medium @ 4300K	B U G			System Watts 120-277V	Total Current @ 120V	Total Current @ 240V	Total Current @ 277V	Total Current @ 347V	Total Current @ 480V	L ₇₀ Hours* @ 25° C (77° F)	50K Hours Lumen Maintenance Factor** @ 15° C (59° F)				
		Rating**	Rating**	Rating**		Rating**	Rating**	Rating**																
350mA Fixture Operating at 25° C (77° F)																								
20	1,913 (02)	1	1	1	1,441 (02)	0	1	1	1,763 (02)	1	1	1	1,328 (02)	0	1	1	26	0.20	0.11	0.10	0.09	0.07	>150,000	93%
40	3,826 (04)	1	1	1	2,882 (04)	1	1	1	3,526 (04)	1	1	1	2,656 (04)	1	1	1	47	0.40	0.21	0.19	0.15	0.12	>150,000	
60	5,665 (06)	2	1	2	4,267 (06)	1	1	1	5,221 (06)	1	1	1	3,933 (06)	1	1	1	68	0.58	0.30	0.26	0.20	0.16	>150,000	
80	7,554 (08)	2	2	2	5,690 (08)	1	2	1	6,962 (08)	2	2	2	5,244 (08)	1	2	1	90	0.77	0.38	0.34	0.26	0.20	>150,000	
100	9,419 (10)	2	2	2	7,095 (10)	1	2	2	8,681 (10)	2	2	2	6,539 (10)	1	2	1	111	0.95	0.47	0.42	0.32	0.24	>150,000	
120	11,302 (12)	3	2	3	8,513 (12)	1	2	2	10,417 (12)	2	2	2	7,846 (12)	1	2	2	132	1.15	0.56	0.50	0.38	0.28	>150,000	
140	13,126 (14)	3	3	3	9,887 (14)	1	3	2	12,098 (14)	3	3	3	9,113 (14)	1	2	2	157	1.34	0.67	0.61	0.47	0.35	149,000	
160	15,001 (16)	3	3	3	11,300 (16)	1	3	2	13,826 (16)	3	3	3	10,414 (16)	1	3	2	179	1.54	0.76	0.68	0.53	0.39	149,000	
200	18,752 (20)	3	3	3	14,125 (20)	2	3	2	17,282 (20)	3	3	3	13,018 (20)	2	3	2	221	1.92	0.95	0.84	0.65	0.48	149,000	
240	22,502 (24)	3	3	3	16,950 (24)	2	3	2	20,739 (24)	3	3	3	15,621 (24)	2	3	2	264	2.30	1.12	1.00	0.77	0.56	149,000	
525mA Fixture Operating at 25° C (77° F)																								
20	2,678 (02)	1	1	1	2,017 (02)	0	1	1	2,469 (02)	1	1	1	1,859 (02)	0	1	1	37	0.31	0.17	0.16	0.12	0.10	136,000	92%
40	5,357 (04)	2	1	2	4,035 (04)	1	1	1	4,937 (04)	1	1	1	3,719 (04)	1	1	1	70	0.57	0.29	0.26	0.21	0.16	136,000	
60	7,932 (06)	2	2	2	5,974 (06)	1	2	1	7,310 (06)	2	2	2	5,506 (06)	1	2	1	102	0.87	0.44	0.39	0.30	0.22	129,000	
80	10,575 (08)	2	2	2	7,966 (08)	1	2	2	9,747 (08)	2	2	2	7,342 (08)	1	2	2	133	1.14	0.56	0.49	0.39	0.29	129,000	
100	13,186 (10)	3	3	3	9,932 (10)	1	3	2	12,153 (10)	3	3	3	9,154 (10)	1	2	2	172	1.47	0.75	0.67	0.51	0.38	128,000	
120	15,823 (12)	3	3	3	11,919 (12)	2	3	2	14,583 (12)	3	3	3	10,985 (12)	1	3	2	204	1.76	0.88	0.78	0.60	0.44	128,000	
140	18,377 (14)	3	3	3	13,842 (14)	2	3	2	16,937 (14)	3	3	3	12,758 (14)	2	3	2	233	2.01	0.99	0.87	0.69	0.51	123,000	
160	21,002 (16)	3	3	3	15,850 (16)	2	3	2	19,356 (16)	3	3	3	14,580 (16)	2	3	2	265	2.29	1.11	0.98	0.78	0.57	123,000	
700mA Fixture Operating at 25° C (77° F)																								
20	3,271 (02)	1	1	1	2,450 (02)	0	1	1	3,015 (02)	1	1	1	2,258 (02)	0	1	1	50	0.42	0.22	0.20	0.15	0.12	111,000	90%
40	6,543 (04)	2	2	2	4,900 (04)	1	2	1	6,030 (04)	2	2	2	4,516 (04)	1	1	1	93	0.79	0.40	0.35	0.27	0.20	111,000	
60	9,688 (06)	2	2	2	7,255 (06)	1	2	2	8,929 (06)	2	2	2	6,686 (06)	1	2	1	137	1.18	0.59	0.51	0.39	0.29	111,000	

* For recommended lumen maintenance factor data see TD-13 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit www.iesna.org/PDF/Erratas/TM-15-07BugRatingsAddendum.pdf

NOTE: All data subject to change without notice.



General Description

Slim, low profile design minimizes wind load requirements. Fixture sides are rugged cast aluminum with integral, weather-tight LED driver compartments and high performance aluminum heatsinks. Convenient, interlocking mounting method. Mounting housing is rugged die cast aluminum and mounts to 3–6" (76–152mm) square or round pole. Fixture is secured by two (2) 5/16-18 UNC bolts spaced on 2" (51mm) centers. Includes leaf/debris guard. Five year limited warranty on fixture.

Electrical

Modular design accommodates varied lighting output from high power, white, 6000K (+/- 500K per full fixture), minimum 70 CRI, long life LED sources. Optional 4300K (+/- 300K per full fixture) also available. 120–277V 50/60 Hz, Class 1 LED drivers are standard. 347–480V 50/60 Hz driver is optional. LED drivers have power factor >90% and THD <20% at full load. Units provided with integral 10kV surge suppression protection standard. Integral weather-tight electrical box with terminal strips (12Ga - 20Ga) for easy power hook-up. Surge protection tested in accordance with IEEE/ANSI C62.41.2.

Testing & Compliance

UL listed in the U.S. and Canada for wet locations and enclosure rated IP66 per IEC 60529 when ordered without P or R options. Consult factory for CE Certified products. Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards. Dark Sky Friendly. IDA Approved. RoHS Compliant.



Product qualified on the Design Lights Consortium ("DLC") Qualified Products List ("QPL") when ordered without backlight control shield.

Finish

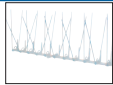
Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable silver powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Bronze, black, white and platinum bronze powder topcoats are also available. The finish is covered by our 10 year limited warranty.

Fixture and finish are endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117.

Patents

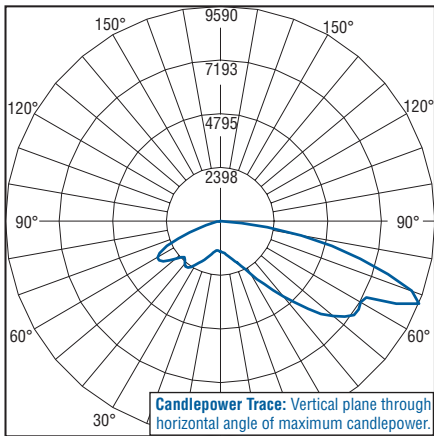
U.S. and international patents granted and pending. BetaLED is a division of Ruud Lighting, Inc. For a listing of Ruud Lighting, Inc. patents, visit www.uspto.gov.

Field-Installed Accessories

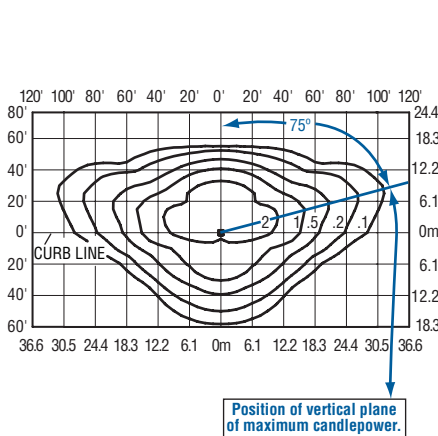


Bird Spikes
XA-BRDSPK

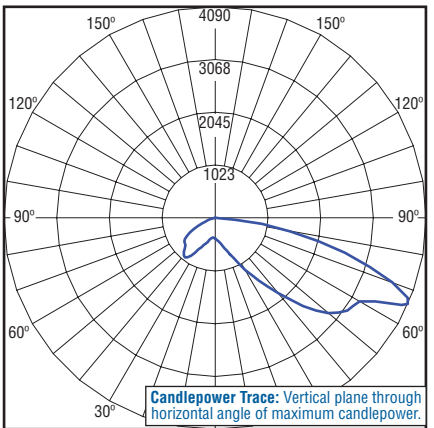
Photometrics



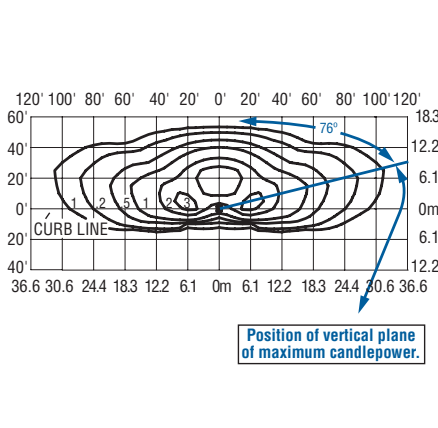
Independent Testing Laboratories certified test. Report No. ITL68360. Candlepower trace of 4300K, 120 LED Type II Medium area luminaire with 14,303 initial delivered lumens operating at 525mA. All published luminaire photometric testing performed to IESNA LM-79-08 standards.



Isofootcandle plot of 4300K, 120 LED Type II Medium area luminaire at 25' (7.6m) A.F.G. Luminaire with 14,583 initial delivered lumens operating at 525mA. Initial FC at grade.



Independent Testing Laboratories certified test. Report No. ITL68358. Candlepower trace of 4300K, 40 LED Type II Medium area w/ backlight control luminaire with 5,373 initial delivered lumens operating at 525mA. All published luminaire photometric testing performed to IESNA LM-79-08 standards.



Isofootcandle plot of 4300K, 120 LED Type II Medium w/ backlight control area luminaire at 25' (7.6m) A.F.G. Luminaire with 10,985 initial delivered lumens operating at 525mA. Initial FC at grade.

THE EDGE® EPA & Weight Calculations

# of LEDs	Approximate Weight 120–480V ¹	Mounting Options				
		Single	2@ 180°	2@ 90°	3@ 90°	4@ 90°
Fixed Arm Mount						
20	21.0 lbs. (9.5kg)	0.60	1.20	0.87	1.47	1.75
40	23.7 lbs. (10.8kg)	0.60	1.20	0.87	1.47	1.75
60	27.0 lbs. (12.3kg)	0.60	1.20	0.92	1.51	1.83
80	28.1 lbs. (12.8kg)	0.60	1.20	0.96	1.55	1.91
100	32.3 lbs. (14.7kg)	0.60	1.20	1.00	1.60	2.00
120	33.5 lbs. (15.2kg)	0.60	1.20	1.04	1.64	2.08
140	36.9 lbs. (16.7kg)	0.60	1.20	1.08	1.68	2.16
160	41.4 lbs. (18.8kg)	0.60	1.20	1.12	1.72	2.24
200	43.3 lbs. (19.6kg)	0.61	1.21	n/a ²	n/a ²	n/a ²
240	47.8 lbs. (21.7kg)	0.69	1.38	n/a ²	n/a ²	n/a ²

1. Add 5 lbs. (2.3kg) for transformer in 347–480V fixtures when multi-level options are selected.
2. For applications requiring 200 or more LEDs at 90 degrees refer to the DL mount version of our spec sheet.

NOTE: All data subject to change without notice.

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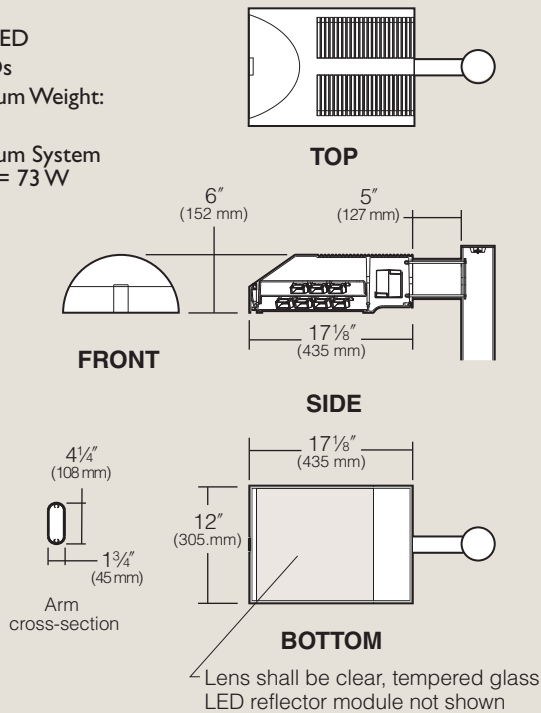
Made in the U.S.A. of U.S. and imported parts.
Meets Buy American requirements within the ARRA.



Specifications

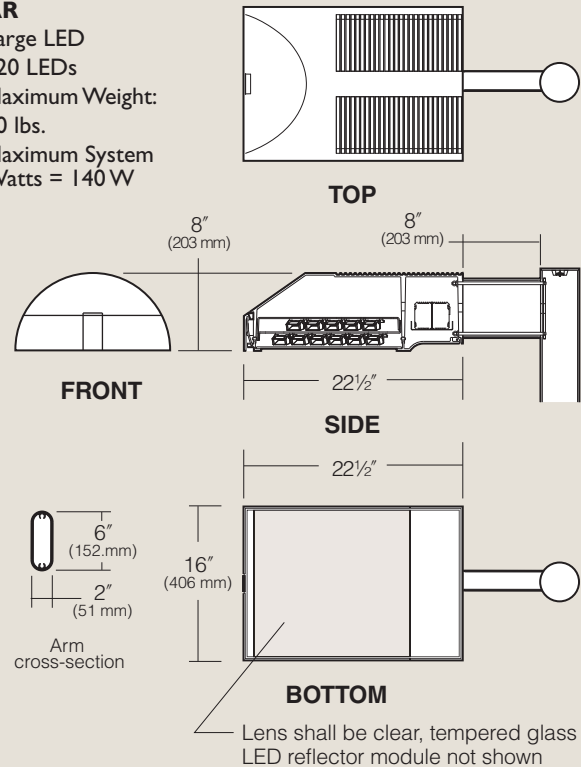
SAR

Small LED
60 LEDs
Maximum Weight:
30 lbs.
Maximum System
Watts = 73 W



AR

Large LED
120 LEDs
Maximum Weight:
50 lbs.
Maximum System
Watts = 140 W



HOUSING: One-piece die-cast, low copper (<0.6% Cu) aluminum alloy with integral cooling ribs over the optical chamber and electrical compartment. Solid barrier wall separates optical and electrical compartments. Double-thick wall with gussets on the support-arm mounting end. Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail. All hardware is stainless steel or electro-zinc plated steel.

LENS FRAME: One-piece die-cast, low copper (<0.6% Cu) aluminum alloy lens frame with 1" minimum depth around the gasket flange. Integral hinges with stainless steel pins provide no-tool mounting and removal from housing. Single die-cast aluminum cam-latch provides positive locking and sealing of the optical chamber by a one-piece extruded and vulcanized silicone gasket. Clear F' thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimeter.

ELECTRONIC MODULE: All electrical components are UL recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Modules include a driver; thermal control device and surge protector. Drivers is rated for -40°F starting and has a 0-10V dimming interface. Electrical module attaches to housing with no-tool hinges and latches, accessible by opening the lens frame only.

OPTICAL MODULE: Precision, replaceable MicroEmitters are positioned to achieve directional control toward desired task. The entire EmitterDeck fastens to the housing as a one-piece module.

SUPPORT ARM: One-piece extruded aluminum with internal bolt guides and fully radiussed top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut for specified round pole.

OPTIONAL WALL MOUNTING: Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket is provided to accept draw bolts, and a trim plate covers the wall-embedded junction box. All wall mount components are finished to match the fixture.

FINISH: Super-TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a titanated zirconium conversion coating; 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Stealth Gray™, Platinum Silver, or White. Custom colors are available.

CAUTION: Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

LISTINGS AND RATINGS		
ETL listed to UL 1598 standards ¹	IP66 Rated	25°C Ambient

¹Suitable for wet locations

Kim Lighting reserves the right to change specifications without notice.

The Archetype LED

Ordering Example:

1SA / SAR3 / 60L5K120 / DB / A-25 / PRA20-4188SA/WH

1 2 3 4 5-14 15

1 Mounting
3SY configuration is available for round poles only.

Plan View:								Wall Mount
SAR EPA:	0.7	1.4	1.2	1.9	1.9	2.5	-	
Cat. No.:	1SA	2SB	2SL	3ST	3SY	4SC	1W	
AR EPA:	1.2	2.4	2.0	3.2	3.2	3.9	-	
Cat. No.:	1A	2B	2L	3T	3Y	4C	1W	

2 Fixture
Catalog no. designates fixture and light distribution.

HOUSING
SAR = Small, 60 LEDs, 73W
AR = Large, 120 LEDs, 140W

DISTRIBUTION
2 = Type II Full Cutoff
3 = Type III Full Cutoff
4 = Type IV Full Cutoff
5 = Type V Square Full Cutoff
R = Type R Right Full Cutoff
L = Type L Left Full Cutoff

Light Distribution

3 Electrical Module

SOURCE
60 = 60 LEDs (Small)
120 = 120 LEDs (Large)

COLOR TEMPERATURE
L3K = 3500K
L5K = 5100K
L2K = 580nm Amber

VOLTAGE
120 = 120V
208 = 208V
240 = 240V
277 = 277V
347 = 347V²
480 = 480V²

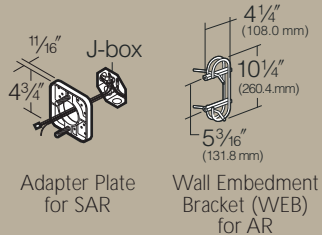
² Due to current unavailability of 347V and 480V drivers, specification of these voltages shall feature an integral step-down transformer. For SAR models only.

¹ 4300K and 6500K are also available on an "Engineered to Order" basis

4 Finish
Super TGIC powder coat paint over titanated zirconium conversion coating.

Color:	Stealth Gray	Light Gray	Platinum Silver	White	Black	Dark Bronze	Custom Colors	Consult your Kim Lighting representative for custom colors.
Cat. No.:	SG	LG	PS	WH	BL	DB	CC	

5 Wall Mounting:



Cat. No.: **1W**

SAR Fixture mounts to 3" or 4" junction boxes by a cast aluminum adapter plate with fixture mounting bolts.

NOTE: Junction box in wall must provide adequate fixture support. See NEC sections 370-13, 17 and 410-14, 16. Quick-disconnect plug and wiring are provided to allow field connections prior to fixture mounting.

AR Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket (**WEB**) is provided to accept draw bolts, and a trim plate covers the wall-embedded junction box. All wall mount components are finished to match the fixture.

6 Optional Photocell Sensor or Receptacle:
Receptacle provided for NEMA base photocells (by others).

A-30 to A-35 Sensor for SAR only

A25 Receptacle for AR only

Cat. No.:

A-30	120V
A-31	208V
A-32	240V
A-33	277V
A-35	347V
A-34	480V
A-25	

Mounting Configuration

* - Fixture with Photocell Receptacle
s - slave unit(s)

7 Optional Dimming Controls:

The Archetype LED driver is a 0-10V dimming interface, allowing 0-100% illumination output when synchronized with a control and dimming system, provided by others. Kim Lighting is working with several control system manufacturers to develop a variety of proven turnkey solutions to meet any application's need. Kim Lighting will advise availability of complete control packages, and even two-way monitoring systems, once they have been tested and exceed Kim's high quality standards.

DESCRIPTION

The Talon is the most versatile, functionally designed, universally adaptable outdoor luminaire available. Incorporating modular LED LightBAR™ technology, Talon brings outstanding uniformity and energy-conscious illumination to walkways, parking lots, roadways, building areas, and any security lighting application. UL/ cUL listed for wet locations.

Catalog #	TLM B03 LED E1 T2 BZ	Type	'PLA2'
Project		Date	
Comments	ARM MOUNT 2 @ 180		
Prepared by			

SPECIFICATION FEATURES

Construction

One-piece heavy-wall, die-cast aluminum construction with integral reveal channels along top surface of housing. Optimized for reliable operation from 40°C down to -30°C, internal cast-in wall separates optical and electrical chambers allowing components to operate cooler. Stainless steel latches and hinges allow for tool-less opening and removal of door frame.

Optics

Choice of thirteen (13) patented, high-efficiency AccuLED Optics™ manufactured from injection-molded acrylic. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED optics create consistent distributions with the scalability to meet customized application requirements. Talon optics feature quick disconnect wiring plugs and are field-rotatable in 90° increments allowing manipulation of distribution independent of fixture position. Offered standard in 4000K (+/- 275K) CCT and nominal 70 CRI.

Electrical

Offered standard with LED drivers and related electrical componentry hard mounted to die-cast housing details for optimal heat transfer and operating efficiency. Talon operates from 120-277V 50/60Hz, 347V 60Hz, 480V 60Hz. Optional galvanized steel swing-down power tray with integral handle allow tray to be removed from housing providing ample hand and tool room for attachment of fixture during installation. Offered standard with the Cooper Lighting proprietary circuit module designed to withstand 10kV transient line surge. 50,000+ hour life with >70% lumen maintenance. LightBARs™ feature an IP66 enclosure rating.

Mounting

Extruded 8" aluminum arm includes internal bolt guides allowing for easy positioning of fixture during installation to pole or wall surface. Standard single carton packaging of housing, square pole arm and round pole adapter for contractor-friendly arrival of product on site. Optional mounting methods include a wall

mount plate, an external mast arm that accepts 2-3/8" O.D. horizontal tenons and direct mounting to pole or wall surfaces. Tenon adapters available to slipfit over poles equipped with 2-3/8" or 3-1/2" O.D. tenon. 3G vibration rated.

Finish

Housing and arm finished in a 5-stage Super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty

Talon LED features a five-year limited warranty.



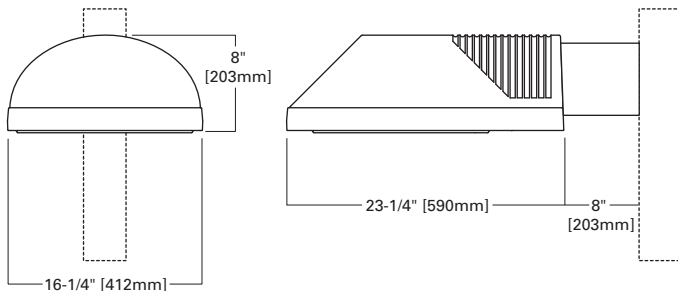
**TLM
TALON MEDIUM
LED**

**2 - 6 LightBARs
Solid State LED**

**ARCHITECTURAL AREA
LUMINAIRE**

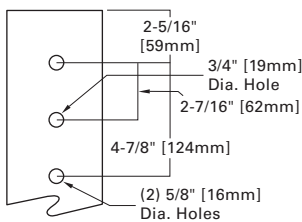
SustainableLEDesign™

DIMENSIONS

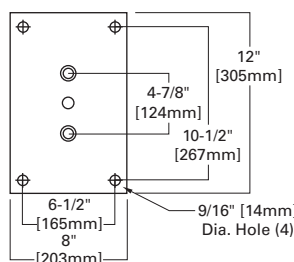


ARM DRILLING

TYPE "M"



WALL MOUNT



CERTIFICATION DATA

UL/cUL Listed
LM79 / LM80 Compliant
IP66 LightBARs
3G Vibration Rated
ARRA Compliant
ISO 9001

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60hz, 347V/60hz,
480V/60hz
-30°C Minimum Temperature
40°C Ambient Temperature Rating

EPA

Effective Projected Area: (Sq. Ft.)
Luminaire w/o Arm: 0.79
8" Arm: 0.43

SHIPPING DATA

Approximate Net Weight:
42 lbs. (25.91 kgs.)



POWER AND LUMENS BY BAR COUNT

Number of LightBARs	DISTRIBUTION														
	Power [Watts]	Current @ 120V [A]	Current @ 277V [A]	T2	T3	T3S	T4	SL2	SL3	SL4	5MQ	5WQ	5XQ	RW	SLR/SL
7 LED LIGHTBAR															
C02	54	0.46	0.21	3,509	3,469	3,391	3,495	3,484	3,368	3,347	3,711	3,724	3,605	3,540	3,203
C03	77	0.65	0.29	5,291	5,230	5,112	5,269	5,252	5,078	5,046	5,594	5,614	5,436	5,337	4,829
C04	101	0.86	0.37	6,983	6,902	6,747	6,954	6,932	6,703	6,660	7,383	7,410	7,174	7,043	6,373
C05	131	1.11	0.50	8,362	8,265	8,079	8,327	8,300	8,026	7,975	8,841	8,872	8,590	8,434	7,631
C06	154	1.30	0.58	10,119	10,002	9,777	10,077	10,045	9,712	9,651	10,699	10,737	10,396	10,206	9,235
21 LED LIGHTBAR															
B02	51	0.43	0.20	4,317	4,267	4,171	4,299	4,285	4,143	4,117	4,564	4,580	4,435	4,354	3,940
B03	73	0.62	0.28	6,508	6,433	6,288	6,481	6,460	6,246	6,207	6,881	6,906	6,686	6,564	5,939
B04	95	0.81	0.35	8,589	8,490	8,299	8,554	8,526	8,244	8,192	9,081	9,114	8,824	8,663	7,839
B05	124	1.05	0.48	10,285	10,166	9,938	10,242	10,209	9,871	9,809	10,874	10,913	10,566	10,373	9,386
B06	146	1.24	0.56	12,446	12,302	12,026	12,395	12,355	11,946	11,871	13,159	13,207	12,786	12,554	11,359

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.04
15°C	1.03
25°C	1.00
40°C	0.96



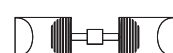
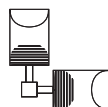
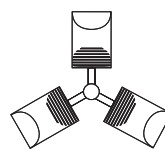
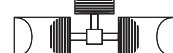
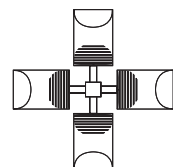
ORDERING INFORMATION

SAMPLE NUMBER: TLM-B03-LED-E1-T3-BK

		LED				
Product Family ¹ TLM=Talon Site Medium	Lamp Type LED=Solid State Light-Emitting Diodes		Distribution T2=Type II T3=Type III T3S=Type III Short T4=Type IV 5MQ=Type V Square Medium 5WQ=Type V Square Wide 5XQ=Type V Square Extra Wide SL2=Type II w/Spill Control SL3=Type III w/Spill Control SL4=Type IV w/Spill Control RW=Rectangular Wide SLL=90 Degree Spill Light Eliminator Left SLR=90 Degree Spill Light Eliminator Right		Options ⁵ P=Button Type Photocontrol (120V, 208, 240, or 277V) ⁶ R=NEMA Twistlock Photocontrol Receptacle PT=Electrical Power Tray ZL=Bi-Level Switching Capable ⁷ 7060=70 CRI/6000K CCT ⁸ 8030=80 CRI/3000K CCT ⁸ LCF=LightBAR Cover Plate Matches Housing Finish WM=Wall Mount with Arm DM=Direct Mount for Round or Square Pole DW=Direct Wall Mount MS=External Mast Arm Adapter ICP=Integral Cold Weather Battery Pack (Specify 120V or 277V) ^{6,9}	Accessories ¹⁰ MA1010-XX=Single Tenon Adapter for 3 1/2" O.D. Tenon MA1011-XX=2@180° Tenon Adapter for 3 1/2" O.D. Tenon MA1012-XX=3@120° Tenon Adapter for 3 1/2" O.D. Tenon MA1013-XX=4@90° Tenon Adapter for 3 1/2" O.D. Tenon MA1014-XX=2@90° Tenon Adapter for 3 1/2" O.D. Tenon MA1015-XX=2@120° Tenon Adapter for 3 1/2" O.D. Tenon MA1016-XX=3@90° Tenon Adapter for 3 1/2" O.D. Tenon MA1017-XX=Single Tenon Adapter for 2 3/8" O.D. Tenon MA1018-XX=2@180° Tenon Adapter for 2 3/8" O.D. Tenon MA1019-XX=3@120° Tenon Adapter for 2 3/8" O.D. Tenon MA1045-XX=4@90° Tenon Adapter for 2 3/8" O.D. Tenon MA1048-XX=2@90° Tenon Adapter for 2 3/8" O.D. Tenon MA1049-XX=3@90° Tenon Adapter for 2 3/8" O.D. Tenon OA/RA1016=NEMA Twistlock Photocontrol - Multi-Tap OA/RA1027=NEMA Twistlock Photocontrol - 480V OA/RA1201=NEMA Twistlock Photocontrol - 347V OA/RA1013=Shorting Cap MA1253=10kV Circuit Module Replacement
Number of LightBARs ^{2,3} B02=[2] 21 LED LightBARs B03=[3] 21 LED LightBARs B04=[4] 21 LED LightBARs B05=[5] 21 LED LightBARs B06=[6] 21 LED LightBARs C02=[2] 7 LED LightBARs C03=[3] 7 LED LightBARs C04=[4] 7 LED LightBARs C05=[5] 7 LED LightBARs C06=[6] 7 LED LightBARs	Voltage E1=Electronic (120-277V) 347=347V 480=480V		Color ⁴ AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White			

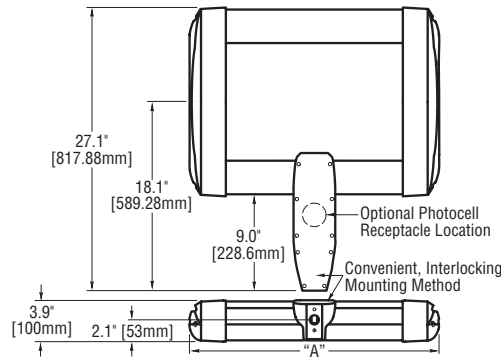
- NOTES:
- 8" arm and round pole adapter included with fixture.
 - 21 LED LightBAR powered at 350mA, 7 LED LightBAR powered at 1A.
 - Standard 4000K CCT and nominal 70CRI.
 - Custom and RAL color matching available upon request. Consult Cooper Lighting Representative for further information.
 - Add as suffix.
 - Must specify voltage.
 - Low-Level output varies by bar count specified. Consult Factory.
 - Consult Factory for lead times and lumen multiplier.
 - Available with B02 or C02, B03 or C03, and B04 or C04 configurations only. Rated for 25 Degrees C ambient.
 - Order separately, replace XX with color suffix.

MOUNTING CONFIGURATIONS

Wall Mount	Arm Mount Single EPA 1.22	Arm Mount 2 @ 180° EPA 2.44	Arm Mount 2 @ 90° EPA 2.44	Arm Mount 3 @ 120° (Round Pole Only) EPA 3.23	Arm Mount 3 @ 90° EPA 3.23	Arm Mount 4 @ 90° EPA 3.63
						



Notes:



# of LEDs	Dim. "A"
20	12.06" [306mm]
40	12.06" [306mm]
60	14.06" [357mm]
80	16.06" [408mm]
100	18.06" [459mm]
120	20.06" [510mm]
140	22.06" [560mm]
160	24.06" [611mm]
200	28.06" [713mm]
240	32.06" [814mm]

Product	Family	Optic	Mounting	# of LEDs (x 10)	LED Series	Voltage	Color Options	Drive Current	Factory-Installed Options
ARE	EDG	2M ¹ 2MB ²	DA ³	02 04 06 08 10 12 14 16 20 24	D	UL Universal 120-277V UH Universal 347-480V 34 347V	SV Silver BK Black BZ Bronze PB Platinum Bronze WH White	350 350mA 525 ⁴ 525mA 700 ⁵ 700mA	43K 4300K Color Temperature ⁶ DIM 0-10V Dimming ^{7,8,9} F Fuse ^{10,11,12} HL Hi/Low (175/350/525, dual circuit input) ¹³ P Photocell ^{12,14} R NEMA Photocell Receptacle ^{12,15,16} ML Multi-Level (75/525) ¹³

Footnotes

- IESNA Type II Medium distribution
- IESNA Type II Medium distribution with backlight control
- Direct mounting arm for use with 3-6" (76-152mm) square or round pole
- Available on fixtures with 20-160 LEDs
- Available on fixtures with 20-60 LEDs
- Color temperature per fixture: 6000K standard; minimum 70 CRI
- Control by others
- Refer to dimming spec sheet for availability and additional information
- Can't exceed specified drive current. Consult factory if exceeding drive current is necessary
- Not available when UH voltage is selected
- When code dictates fusing use time delay fuse
- Not available with all multi-level options. Refer to the multi-level spec sheet for availability and additional information
- Refer to multi-level spec sheet for availability and additional information
- Must specify voltage other than UH
- Intended for horizontal mounting
- Photocell by others

LED PERFORMANCE SPECS

# of LEDs	Initial Delivered Lumens – Type II Medium @ 6000K	B U G		Initial Delivered Lumens – Type II Medium w/ Backlight Control @ 6000K	B U G		Initial Delivered Lumens – Type II Medium @ 4300K	B U G		Initial Delivered Lumens – Type II Medium w/ Backlight Control @ 4300K	B U G		System Watts 120-277V	Total Current @ 120V	Total Current @ 240V	Total Current @ 277V	Total Current @ 347V	Total Current @ 480V	L ₇₀ Hours* @ 25° C (77° F)	50K Hours Lumen Maintenance Factor* @ 15° C (59° F)				
		Rating**	Rating**		Rating**	Rating**		Rating**	Rating**															
350mA Fixture Operating at 25° C (77° F)																								
20	1,913 (02)	1	1	1	1,441 (02)	0	1	1	1,763 (02)	1	1	1	1,328 (02)	0	1	1	26	0.20	0.11	0.10	0.09	0.07	>150,000	93%
40	3,826 (04)	1	1	1	2,882 (04)	1	1	1	3,526 (04)	1	1	1	2,656 (04)	1	1	1	47	0.40	0.21	0.19	0.15	0.12	>150,000	
60	5,665 (06)	2	1	2	4,267 (06)	1	1	1	5,221 (06)	1	1	1	3,933 (06)	1	1	1	68	0.58	0.30	0.26	0.20	0.16	>150,000	
80	7,554 (08)	2	2	2	5,690 (08)	1	2	1	6,962 (08)	2	2	2	5,244 (08)	1	2	1	90	0.77	0.38	0.34	0.26	0.20	>150,000	
100	9,419 (10)	2	2	2	7,095 (10)	1	2	2	8,681 (10)	2	2	2	6,539 (10)	1	2	1	111	0.95	0.47	0.42	0.32	0.24	>150,000	
120	11,302 (12)	3	2	3	8,513 (12)	1	2	2	10,417 (12)	2	2	2	7,846 (12)	1	2	2	132	1.15	0.56	0.50	0.38	0.28	>150,000	
140	13,126 (14)	3	3	3	9,887 (14)	1	3	2	12,098 (14)	3	3	3	9,113 (14)	1	2	2	157	1.34	0.67	0.61	0.47	0.35	149,000	
160	15,001 (16)	3	3	3	11,300 (16)	1	3	2	13,826 (16)	3	3	3	10,414 (16)	1	3	2	179	1.54	0.76	0.68	0.53	0.39	149,000	
200	18,752 (20)	3	3	3	14,125 (20)	2	3	2	17,282 (20)	3	3	3	13,018 (20)	2	3	2	221	1.92	0.95	0.84	0.65	0.48	149,000	
240	22,502 (24)	3	3	3	16,950 (24)	2	3	2	20,739 (24)	3	3	3	15,621 (24)	2	3	2	264	2.30	1.12	1.00	0.77	0.56	149,000	
525mA Fixture Operating at 25° C (77° F)																								
20	2,678 (02)	1	1	1	2,017 (02)	0	1	1	2,469 (02)	1	1	1	1,859 (02)	0	1	1	37	0.31	0.17	0.16	0.12	0.10	136,000	92%
40	5,357 (04)	2	1	2	4,035 (04)	1	1	1	4,937 (04)	1	1	1	3,719 (04)	1	1	1	70	0.57	0.29	0.26	0.21	0.16	136,000	
60	7,932 (06)	2	2	2	5,974 (06)	1	2	1	7,310 (06)	2	2	2	5,506 (06)	1	2	1	102	0.87	0.44	0.39	0.30	0.22	129,000	
80	10,575 (08)	2	2	2	7,966 (08)	1	2	2	9,747 (08)	2	2	2	7,342 (08)	1	2	2	133	1.14	0.56	0.49	0.39	0.29	129,000	
100	13,186 (10)	3	3	3	9,932 (10)	1	3	2	12,153 (10)	3	3	3	9,154 (10)	1	2	2	172	1.47	0.75	0.67	0.51	0.38	128,000	
120	15,823 (12)	3	3	3	11,919 (12)	2	3	2	14,583 (12)	3	3	3	10,985 (12)	1	3	2	204	1.76	0.88	0.78	0.60	0.44	128,000	
140	18,377 (14)	3	3	3	13,842 (14)	2	3	2	16,937 (14)	3	3	3	12,758 (14)	2	3	2	233	2.01	0.99	0.87	0.69	0.51	123,000	
160	21,002 (16)	3	3	3	15,850 (16)	2	3	2	19,356 (16)	3	3	3	14,580 (16)	2	3	2	265	2.29	1.11	0.98	0.78	0.57	123,000	
700mA Fixture Operating at 25° C (77° F)																								
20	3,271 (02)	1	1	1	2,450 (02)	0	1	1	3,015 (02)	1	1	1	2,258 (02)	0	1	1	50	0.42	0.22	0.20	0.15	0.12	111,000	90%
40	6,543 (04)	2	2	2	4,900 (04)	1	2	1	6,030 (04)	2	2	2	4,516 (04)	1	1	1	93	0.79	0.40	0.35	0.27	0.20	111,000	
60	9,688 (06)	2	2	2	7,255 (06)	1	2	2	8,929 (06)	2	2	2	6,686 (06)	1	2	1	137	1.18	0.59	0.51	0.39	0.29	111,000	

* For recommended lumen maintenance factor data see TD-13 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit www.iesna.org/PDF/Erratas/TM-15-07BugRatingsAddendum.pdf

NOTE: All data subject to change without notice.



General Description

Slim, low profile design minimizes wind load requirements. Fixture sides are rugged cast aluminum with integral, weather-tight LED driver compartments and high performance aluminum heatsinks. Convenient, interlocking mounting method. Mounting housing is rugged die cast aluminum and mounts to 3–6" (76–152mm) square or round pole. Fixture is secured by two (2) 5/16-18 UNC bolts spaced on 2" (51mm) centers. Includes leaf/debris guard. Five year limited warranty on fixture.

Electrical

Modular design accommodates varied lighting output from high power, white, 6000K (+/- 500K per full fixture), minimum 70 CRI, long life LED sources. Optional 4300K (+/- 300K per full fixture) also available. 120–277V 50/60 Hz, Class 1 LED drivers are standard. 347–480V 50/60 Hz driver is optional. LED drivers have power factor >90% and THD <20% at full load. Units provided with integral 10kV surge suppression protection standard. Integral weather-tight electrical box with terminal strips (12Ga - 20Ga) for easy power hook-up. Surge protection tested in accordance with IEEE/ANSI C62.41.2.

Testing & Compliance

UL listed in the U.S. and Canada for wet locations and enclosure rated IP66 per IEC 60529 when ordered without P or R options. Consult factory for CE Certified products. Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards. Dark Sky Friendly. IDA Approved. RoHS Compliant.



Product qualified on the Design Lights Consortium ("DLC") Qualified Products List ("QPL") when ordered without backlight control shield.

Finish

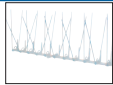
Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable silver powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Bronze, black, white and platinum bronze powder topcoats are also available. The finish is covered by our 10 year limited warranty.

Fixture and finish are endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117.

Patents

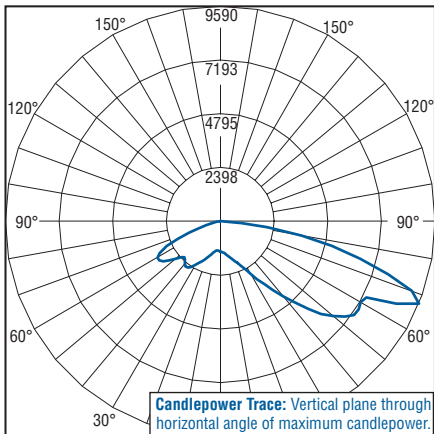
U.S. and international patents granted and pending. BetaLED is a division of Ruud Lighting, Inc. For a listing of Ruud Lighting, Inc. patents, visit www.uspto.gov.

Field-Installed Accessories

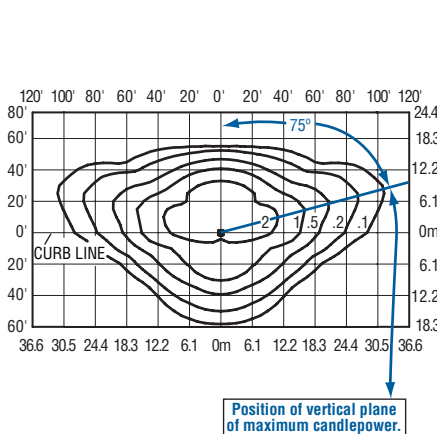


Bird Spikes
XA-BRDSPK

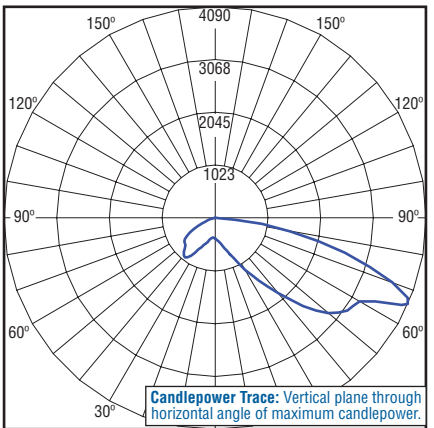
Photometrics



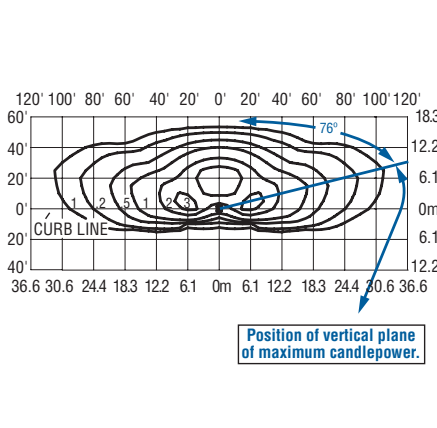
Independent Testing Laboratories certified test. Report No. ITL68360. Candlepower trace of 4300K, 120 LED Type II Medium area luminaire with 14,303 initial delivered lumens operating at 525mA. All published luminaire photometric testing performed to IESNA LM-79-08 standards.



Isofootcandle plot of 4300K, 120 LED Type II Medium area luminaire at 25' (7.6m) A.F.G. Luminaire with 14,583 initial delivered lumens operating at 525mA. Initial FC at grade.



Independent Testing Laboratories certified test. Report No. ITL68358. Candlepower trace of 4300K, 40 LED Type II Medium area w/ backlight control luminaire with 5,373 initial delivered lumens operating at 525mA. All published luminaire photometric testing performed to IESNA LM-79-08 standards.



Isofootcandle plot of 4300K, 120 LED Type II Medium w/ backlight control area luminaire at 25' (7.6m) A.F.G. Luminaire with 10,985 initial delivered lumens operating at 525mA. Initial FC at grade.

THE EDGE® EPA & Weight Calculations

# of LEDs	Approximate Weight 120–480V ¹					
		Single	2@ 180°	2@ 90°	3@ 90°	4@ 90°
Fixed Arm Mount						
20	21.0 lbs. (9.5kg)	0.60	1.20	0.87	1.47	1.75
40	23.7 lbs. (10.8kg)	0.60	1.20	0.87	1.47	1.75
60	27.0 lbs. (12.3kg)	0.60	1.20	0.92	1.51	1.83
80	28.1 lbs. (12.8kg)	0.60	1.20	0.96	1.55	1.91
100	32.3 lbs. (14.7kg)	0.60	1.20	1.00	1.60	2.00
120	33.5 lbs. (15.2kg)	0.60	1.20	1.04	1.64	2.08
140	36.9 lbs. (16.7kg)	0.60	1.20	1.08	1.68	2.16
160	41.4 lbs. (18.8kg)	0.60	1.20	1.12	1.72	2.24
200	43.3 lbs. (19.6kg)	0.61	1.21	n/a ²	n/a ²	n/a ²
240	47.8 lbs. (21.7kg)	0.69	1.38	n/a ²	n/a ²	n/a ²

1. Add 5 lbs. (2.3kg) for transformer in 347–480V fixtures when multi-level options are selected.
2. For applications requiring 200 or more LEDs at 90 degrees refer to the DL mount version of our spec sheet.

NOTE: All data subject to change without notice.

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Made in the U.S.A. of U.S. and imported parts.
Meets Buy American requirements within the ARRA.



DESCRIPTION

The accord™ redefines fluorescent lighting by improving on aesthetics, comfort and energy savings. The accord™ provides the right amount of light while eliminating surface shadows commonly found in parabolics. Therefore, accord™ increases the comfort level while providing significant energy savings.

The accord™ is the ideal solution for offices, schools, hospitals, retail and other applications.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

A... Construction

Shallow 3-1/4" deep housing is die formed of code gauge, prime cold rolled steel. Heavy gauge end plates are securely attached with screws for strength and rigidity and the elimination of gaps. Four auxiliary fixture end suspension points are provided. KOs for continuous row wiring. Large access plate for supply connection.

B... Electrical*

Ballasts are Class "P" and are positively secured. Rotor-lock lampholders ensure positive lamp retention. UL/CUL listed. Suitable for damp locations.

C... Ballast Access

Ballast can be removed from below without tools.

D... Finish

Durable cold rolled steel with multistage, iron phosphate pre-treatment and white enamel finish to ensure maximum bonding and rust inhibition.

E... Reflectors

Reflector has high reflectance baked matte white enamel finish for luminous uniformity.

F... Shielding

Positively retained frosted acrylic profile lenses provide a soft but effective distribution of light.

G... Air Return

Optional Air Return model provides air flow through air slots in the housing.

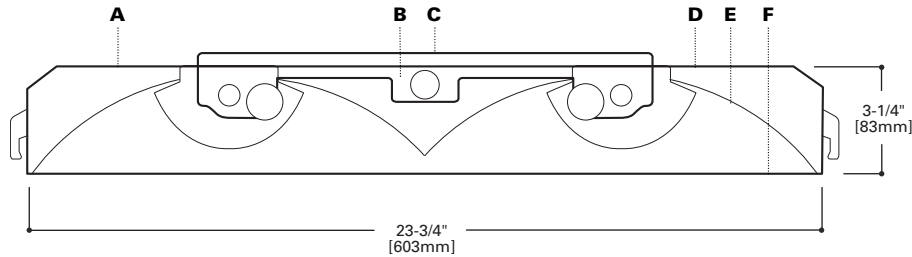


2AC
232T8

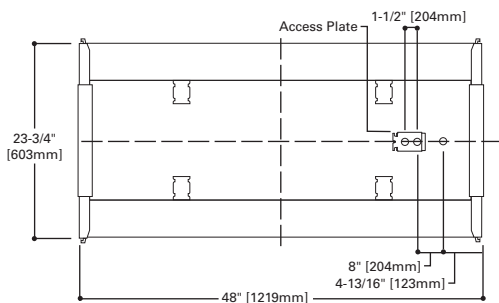
T8 LAMPS

2' x 4' Recessed
Troffer Series

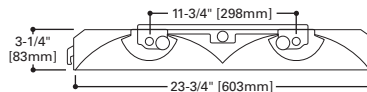
accord™
T5/T8 Enhanced Lighting Series



MOUNTING DATA



LAMP CONFIGURATIONS



ENERGY DATA

Input Watts:

EB Ballast & STD Lamps @ 277V
232 (58)

Luminaire Efficacy Rating

LER = FL83 LPW

Catalog Number: 2AC-232

Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$2.89

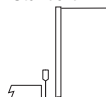
*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

**Consult Pre Sales Technical Support.

***See Drywall Frame Kit Accessory

CEILING COMPATIBILITY

G
Grid/Lay-in
Standard



F
Drywall Frame
Kit



**Ceiling
Type****

Exposed Grid
Concealed T
Slot Grid
Flange

**Trim
Type**

G
G or T
G or T

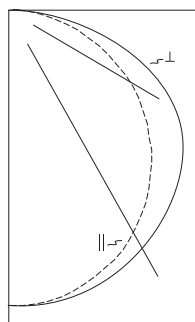
LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO
LOCAL, STATE OR FEDERAL LAWS

LINEAR DISCONNECT

Safe and convenient means of
disconnecting power.



PHOTOMETRICS



2AC-232-UNV-EB81

Electronic Ballast
 (2) F32T8/835 Lamps
 3100 Lumens each
 Spacing criterion:
 (II) 1.3 x mounting
 height, (⊥) 1.5 x
 mounting height
 Efficiency 85%
 Test Report:
 241P14200
 LER = FL83 LPW
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$2.89

Candlepower

Angle	Along II	45°	Across ⊥
0	1614	1614	1614
5	1607	1612	1618
10	1587	1596	1605
15	1551	1569	1587
20	1502	1531	1558
25	1440	1483	1521
30	1366	1425	1477
35	1280	1358	1425
40	1184	1282	1366
45	1080	1198	1298
50	967	1107	1221
55	848	1007	1134
60	723	899	1022
65	589	783	857
70	452	635	664
75	315	456	465
80	187	280	277
85	81	118	113
90	0	0	0

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance																							
	80%				70%				50%				30%				10%				0%			
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
0	101	101	101	101	99	99	99	99	94	94	94	90	90	90	87	87	87	85						
1	92	87	83	80	89	85	82	79	82	79	76	78	76	74	75	73	72	70						
2	83	75	69	64	81	74	68	63	71	66	62	68	64	60	65	62	59	57						
3	75	66	58	53	73	64	58	52	62	56	51	59	54	50	57	53	49	47						
4	69	58	50	44	67	57	49	44	55	48	43	53	47	42	51	46	42	40						
5	63	51	43	38	61	50	43	37	49	42	37	47	41	36	45	40	36	34						
6	58	46	38	33	56	45	38	32	44	37	32	42	36	32	41	36	31	30						
7	54	42	34	29	52	41	34	28	40	33	28	38	32	28	37	32	28	26						
8	50	38	30	25	48	37	30	25	36	30	25	35	29	25	34	29	25	23						
9	46	35	28	23	45	34	27	23	33	27	22	32	27	22	31	26	22	21						
10	44	32	25	21	42	32	25	20	31	25	20	30	24	20	29	24	20	19						

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1280	20.6	24.3
0-40	2129	34.3	40.4
0-60	3945	63.6	74.9
0-90	5271	85.0	100.0
0-180	5271	85.0	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	2188	2427	2630
55	2118	2515	2832
65	1996	2654	2905
75	1743	2524	2574
85	1331	1939	1857

ORDERING INFORMATION

SAMPLE NUMBER: 2AC-232-UNV-EB82-U

<p>Rating Blank= Standard NY=New York Rated ATW-SW4= Chicago Rated</p> <p>Width 2=2' Width</p> <p>Series AC=Accord Series</p> <p>Type A=Air (optional)</p>	<p>Number of Lamps (Not included) 2=2 Lamp</p> <p>Wattage (Length) 32=32WT8 (48")</p>	<p>Shielding Blank=Frosted Acrylic SQP=Lens with Square Pattern Insert RDP=Lens with Round Pattern Insert</p> <p>Voltage⁽¹⁾ UNV=Universal Voltage 120-277</p> <p>Options GL=Single Element Fuse GM=Double Element Fuse Flex=Flex installed EL=Emergency Installed</p>	<p>Lamps L8835=T8 Lamp, 17W and 32W, 3500K L8841=T8 Lamp, 17W and 32W, 4100K L8835HL=T8 Lamp, 32W, 3500K, 3100 Lumens L8841HL=T8 Lamp, 32W, 4100K, 3100 Lumens</p>	<p>Ballast Type EB8 =T8 Electronic Instant Start, Total Harmonic Distortion < 10% No. of Ballast 1 or 2 EB8_/PLUS=T8 Electronic Instant Start. High Ballast Factor >1.13. Total Harmonic Distortion < 20% No. of Ballast 1 or 2 ER8 =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10% No. of Ballast 1 or 2</p> <p>HPT8 Ballast Ballast HB8_L=T8 Electronic Instant Start. Low Ballast Factor .77 HB8_=T8 Electronic Instant Start. Ballast Factor .88 HB8_N=T8 Electronic Instant Start. Normal Ballast Factor 1.0 HB8_H=T8 Electronic Instant Start. High Ballast Factor 1.15-1.2 HR8_DIM=T8 Electronic Program Start Step Dimming. Ballast Factor .88 HR8_L=T8 Electronic Program Start. Low Ballast Factor .77 HR8_=T8 Electronic Program Start. Ballast Factor .88 HR8_H=T8 Electronic Program Start. High Ballast Factor 1.15-1.2</p>	<p>Packaging U=Unit Pack PALC=Job Pack, in carton</p>
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NOTES: ⁽¹⁾ Products also available in non-US voltages and frequencies for international markets. For complete product data, reference the Fluorescent Specification binder. Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

ACCESSORIES

T3A END E.Q. BRACKET PARTS BAG

SHIPPING INFORMATION

Catalog No.	Wt.
2AC-232	28 lbs.



FEATURES & SPECIFICATIONS

INTENDED USE

Specification premium, high performance, static T8 luminaires provide general illumination for recessed applications; ideal for restricted plenum spaces.

ATTRIBUTES

Designed exclusively for use with T8 lamps, electronic ballasts and sockets.

CONSTRUCTION

Smooth hemmed sides and smooth, inward formed end flanges for safe handling. Lighter weight fixture allows safe, easy installation.

Standard steel door frame has superior structural integrity with premium extruded appearance and precision flush mitered corners. Steel door allows easy lens replacement without frame disassembly (for lenses up to .156" thick). Powder-painted, steel latches provide easy, secure door closure.

Superior mechanical light seal requires no foam gasketing. Integral T-bar clips secure fixture to T-bar system. Housing formed from cold-rolled steel. Acrylic shielding material 100% UV stabilized. No asbestos is used in this product.

US PATENTS: 6,210,025; 6,231,213; 6,213,625; 2,288,471.

FINISH

Five-stage iron-phosphate pretreatment ensures superior paint adhesion and rust resistance. Painted parts finished with highly reflective matte white enamel.

OPTICAL

A12 lens features reverse apex technology for superior lamp obscuration and improved visual comfort.

ELECTRICAL SYSTEM

Standard ballast is electronic, thermally protected, resetting, Class P, HPF, non-PCB, UL Listed, CSA certified ballast, universal voltage and sound rated A.

Luminaire is suitable for damp locations. AWM, TFN or THHN wire used throughout, rated for required temperatures.

LISTING

Standard: UL. Optional: Canada — CSA or cUL; Mexico — NOM.

WARRANTY

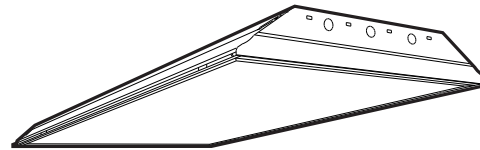
Guaranteed for one year against mechanical defects in manufacture.

Specifications subject to change without notice.

Catalog Number	
Notes	Type

Specification Premium T8 Troffer

SP8 2'x4'



2, 3, 4 or 6 Lamps
T8



Specifications

Length: 48 (1218)
Width: 24 (609)
Depth: 3-11/16 (94)
Weight: 22 lbs (9.9 kg)



All dimensions are inches (millimeters).

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: 2SP8 G 3 32 A12 MVOLT 1/3 GEB10IS

2SP8							
Series	Number of lamps	Door frame		Voltage	Options ¹		
2SP8 2' wide	2 3 4 6 Not included.	(blank) Flush steel, white		120	1/4 One 4-lamp ballast		
		FN Flush aluminum, natural		277	1/3 One 3-lamp ballast		
		FM Flush aluminum, matte black		347	GEB10IS Electronic ballast, ≤10% THD, instant start		
		FW Flush aluminum, white		MVOLT	GEB10RS Electronic ballast, ≤10% THD, rapid start		
		RN Regressed aluminum, natural		Others available.	EL Emergency battery pack (nominal 300 lumens)		
		RM Regressed aluminum, matte black			EL14 Emergency battery pack (nominal 1400 lumens)		
		RW Regressed aluminum, white			GLR Internal fast-blow fuse		
					GMF Internal slow-blow fuse		
					LST Tandem-wired fixture pairs (shared ballasts)		
					PWS1836 6' prewire, 3/8" dia., 18-gauge, 1 circuit		
					PWS1846 6' prewire, 3/8" dia., 18-gauge, 2 circuits		
					LP735 Lamped, 700-series, 3500K		
					LP__ Lamped; specify lamp type and color		
					JP Palletized and stretch-wrapped without individual cartons		
					CSA CSA Certified		
					NOM NOM Certified		
Trim type	Lamp type	Diffuser type					
G Grid F Overlapping flanged	32 32W T8 (48")	A12 #12 pattern acrylic, reverse apex					
		A12125 #12 pattern acrylic, .125" thick					
		RA125 #12 pattern acrylic, .125" thick, reverse apex					
		A19 #19 pattern acrylic, .156" thick					
		A15 #15 pattern acrylic, .2" thick					
		PC1S 1/2" x 1/2" x 1/2" plastic cube louver, silver					
		PC2S 1-1/2" x 1-1/2" x 1" plastic cube louver, silver w/ flange					
		PC3S 3/4" x 3/4" x 1/2" plastic cube louver, silver					

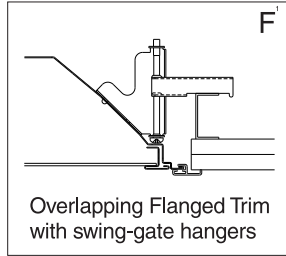
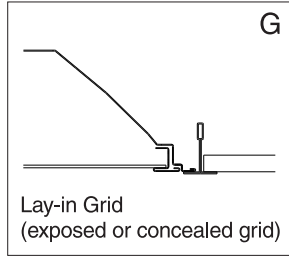
NOTE:

¹ MVOLT standard for 120-277V applications, 50-60 hz operation. Some options require voltage specified.

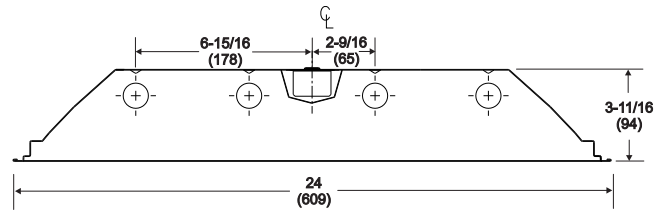
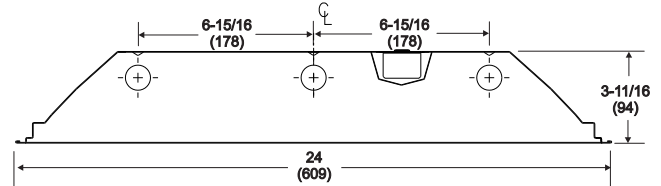
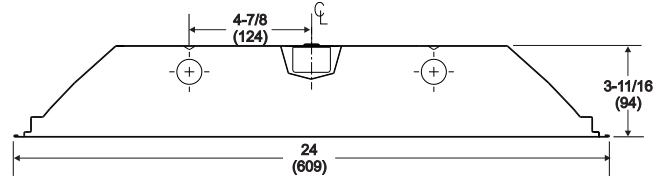
SP8 2'x4' Static T8 Troffer

MOUNTING DATA

Continuous row mounting of flanged units requires CRE and CRM trim options (see Options).



DIMENSIONS



NOTE:

- 1 Recommended rough-in dimensions for F-trim fixtures 24"x48". (Tolerance is +1/4"-0".) Swing-gate range 1-3/16" to 3-15/16". Swing-gate span 23-3/8" to 26-11/16". Fixture swing-gate points require additional 9/16" over nominal fixture height.

PHOTOMETRICS

Calculated using the zonal cavity method in accordance with IESNA LM41 procedure. Floor reflectances are 20%. Lamp configurations shown are typical. Full photometric data on these and other configurations available upon request.

2SP8 2 32 A12*

Report LTL 7525

Lumens per lamp - 2850 – Lum. eff. - 85.5%

S/MH (along) 1.3 (across) 1.4

Coefficient of Utilization

Ceiling Wall	80%			70%			50%		
	70%	50%	30%	70%	50%	30%	50%	30%	10%
0	102	102	102	99	99	99	95	95	95
1	94	90	87	92	88	85	85	82	80
2	86	80	74	84	78	73	75	71	68
3	79	71	64	77	70	64	67	62	58
4	73	63	56	71	62	56	60	55	50
5	67	57	50	66	56	49	54	48	44
6	62	52	44	61	51	44	49	43	39
7	58	47	40	57	46	40	45	39	34
8	54	43	36	53	42	36	41	35	31
9	51	39	33	49	39	33	38	32	28
10	47	36	30	46	36	30	35	29	25

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1541	27.0	31.6
0-40	2571	45.1	52.7
0-60	4192	73.5	86.0
0-90	4874	85.5	100.0
90-180	0	0	0
0-180	4874	85.5	100.0

2SP8 3 32 A12*

Report LTL 7492

Lumens per lamp - 2850 – Lum. eff. - 83.6%

S/MH (along) 1.3 (across) 1.4

Coefficient of Utilization

Ceiling Wall	80%			70%			50%		
	70%	50%	30%	70%	50%	30%	50%	30%	10%
0	100	100	100	97	97	97	93	93	93
1	92	88	85	90	86	83	83	80	78
2	84	78	73	82	77	72	74	70	66
3	78	70	63	76	68	62	66	61	57
4	72	62	55	70	61	55	59	54	49
5	66	56	49	64	55	49	53	48	43
6	61	51	44	60	50	43	49	43	38
7	57	46	39	56	46	39	44	38	34
8	53	42	36	52	42	35	41	35	31
9	50	39	32	49	38	32	38	32	28
10	47	36	30	46	36	29	35	29	25

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	2319	27.1	32.4
0-40	3833	44.8	53.6
0-60	6164	72.1	86.2
0-90	7147	83.6	100.0
90-180	0	0	0
0-180	7147	83.6	100.0

2SP8 4 32 A12*

Report LTL 7526

Lumens per lamp - 2850 – Lum. eff. - 81.5%

S/MH (along) 1.2 (across) 1.4

Coefficient of Utilization

Ceiling Wall	80%			70%			50%		
	70%	50%	30%	70%	50%	30%	50%	30%	10%
0	97	97	97	95	95	95	91	91	91
1	90	86	83	87	84	81	81	78	76
2	82	76	71	80	75	70	72	68	65
3	76	68	62	74	67	61	64	59	55
4	70	61	54	68	60	53	58	52	48
5	64	55	48	63	54	47	52	46	42
6	60	50	43	58	49	42	47	42	37
7	56	45	38	54	44	38	43	37	33
8	52	41	35	51	41	34	40	34	30
9	48	38	32	47	38	31	37	31	27
10	46	35	29	44	35	29	34	28	25

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	3029	26.6	32.6
0-40	4999	43.8	53.8
0-60	8017	70.3	86.3
0-90	9292	81.5	100.0
90-180	0	0	0
0-180	9292	81.5	100.0

* With reverse apex lens

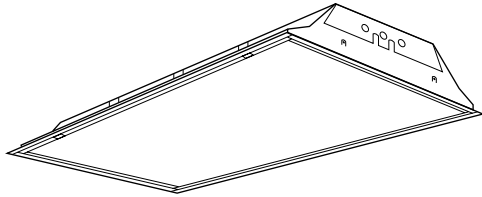
Energy (Calculated in accordance with NEMA standard LE-5)

LER.FL	ANNUAL ENERGY COST**	LAMP DESCRIPTION	LAMP LUMENS	BALLAST FACTOR	WATTS
77	\$3.12	(2) 32W T8	2850	.90	57
74	\$3.24	(3) 32W T8	2850	.87	85
77	\$3.12	(4) 32W T8	2850	.88	107

** Comparative yearly lighting energy cost per 1000 lumens



An AcuityBrands Company



PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

FEATURES

- Optical performance designed for T8 and T5 lamp technology
- 2½" minimum spacing from bottom of lamp to bottom of lens
- Mechanical light seal
- Mitered corners on door present a clean uninterrupted appearance
- Spring loaded latches optional
- Rolled fixture edges reduce risk of injury during fixture handling and installation
- Integral T-Bar clips quickly secure fixture to grid system without the need for time consuming loose parts
- Snap-on ballast covers can be removed with lamps installed
- Corner hinging for easy insertion and removal of door frame from either side
- Optional flush or regressed aluminum shielding frames available with positive action or spring loaded latches
- Housing ends secured by unique corner interlock and screws

HOUSING

Heavy gauge steel. Die formed for extra rigidity. Grid housings are designed for installation in standard 1½" T-Bar ceilings. Integral T-Bar clips are located in the end of the housing. Flanged housings for hard ceilings feature overlap flange trim and wing hangers.

BALLASTS

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, sound rated A, magnetic or electronic ballasts. CEE NEMA Premium compliant.

ELECTRICAL

Standard class "P," thermally protected, autoresetting HPF ballast, sound rated A. CEE NEMA Premium compliant. All ballast leads extend a minimum of 6" through access location. NEC/CEC-compliant ballast disconnect is standard.

FINISH

All parts are pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pretreatment for maximum adhesion and resistance.

SHIELDING

100% clear prismatic acrylic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

CERTIFICATION

All luminaires are built to UL 1598 standards and bear appropriate UL and cUL or CSA labels. Damp location labeling is standard. Emergency-equipped fixtures labeled UL 924.

ORDERING INFORMATION

EXAMPLE ST824-232G-FSA12-EU-F0735-C388

ST8		24		-		-		-		-												
MODEL	NO. OF LAMPS	CEILING TYPE	SHIELDING	VOLTAGE	OPTIONS	SIZE	LAMP TYPE	DOOR STYLE	BALLAST	GLR	EL	PAF	SLL	MS9	C388	C384	C488	C424	M4R	SAR	NYC	NYCU
ST8 Shallow Specification Troffer	2 Two 3 Three	G Inverted T-Bar (Std.) F Overlap Flange (4½" overall fixture height)	A12 Pattern 12 Acrylic 0.100" Nominal (Standard) A12.125 Pattern 12 Acrylic 0.125" Nominal A19 Pattern 19 Acrylic 0.15" Male Prism PC1 Silver Parabolic Louver ½" x ½" x ½" PC2 Silver Parabolic Louver 1½" x ½" x 1" <small>For more shielding see Options and Accessories.</small>	U 120V-277V 347 347V	F0730 T8, 70CRI, 3000K Lamps, Furnished/Installed F0735 T8, 70CRI, 3500K Lamps, Furnished/Installed F0741 T8, 70CRI, 4100K Lamps, Furnished/Installed	24 2' x 4'	28 4', T5: 28 Watt 32 4', T8: 32, 30, 28 or 25 Watt 54 4', T5HO: 54 or 51 Watt	FS Flush Steel FA Flush Aluminum RA Regressed Aluminum PS Premium Steel	E Electronic T8, Instant Start ELW 2-Lamp Electronic T8, 0.77 Ballast Factor, Low Wattage, Instant Start 3E 3-Lamp Electronic T8, Instant Start 3ELW 3-Lamp Electronic T8, 0.77 Ballast Factor, Low Wattage, Instant Start EP Electronic T5HO or T8, Programmed Start 3EP 3-Lamp Electronic T5HO or T8, Programmed Start <small>For specific ballast vendor, show as option.</small>	Fast Blow Fuse Emergency Battery Pack Paint After Fabrication Spring Loaded Latches Master/Satellite Pair w/9' Harness				¾" Flex with 3 No. 18 Wires ¾" Flex with 3 No. 14 Wires ¾" Flex with 4 No. 18 Wires ½" Flex with 4 No. 14 Wires				Miro®-4 Aluminum Reflector Low Iridescent Specular Alum Reflector	NYC NYC Compliant NYCU NYC Compliant, Union Label	<small>For a complete set of options, see Options and Accessories.</small>		

PHOTOMETRIC DATA

Test 12581 Test Date 1/08/03

LUMINAIRE DATA

Luminaire	ST824-332G-FSA12 ST8 Lensed Troffer 2' x 4' 3-Lamp with A12 Lens
Ballast	B332I120RH
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Total Input Watts	84
Mounting	Recessed
Shielding Angle	N/A
Spacing Criterion	0° = 1.24 90° = 1.35

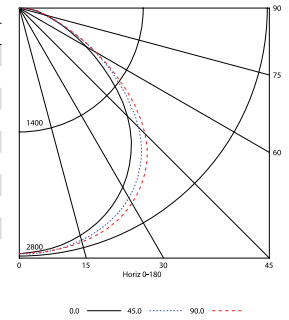
AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	4282	4282	4282	4282	4282
30	4165	4260	4415	4515	4538
40	3967	4106	4326	4471	4523
45	3767	3920	4154	4322	4387
50	3462	3637	3851	4009	4084
55	3075	3282	3478	3559	3616
60	2696	2863	3045	3079	3098
65	2338	2412	2528	2565	2572
70	2036	2005	1987	2122	2140
75	1838	1784	1659	1921	1909
80	1841	1761	1770	1903	1956
85	1967	1825	2002	1967	2038

COEFFICIENTS OF UTILIZATION (%)

RCR	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	93	89	86	83	91	87	84	81	84	81	79	72	
2	85	78	73	69	83	77	72	68	74	70	66	61	
3	78	69	63	58	76	68	62	57	66	60	56	53	
4	72	62	55	49	70	61	54	49	59	53	48	45	
5	66	55	48	43	64	55	48	43	53	47	42	39	
6	61	50	43	37	59	49	42	37	48	42	37	35	
7	57	45	38	33	55	45	38	33	44	37	33	31	
8	53	42	35	30	51	41	34	30	40	34	29	27	
9	49	38	31	27	48	38	31	27	37	31	27	25	
10	46	35	29	24	45	35	28	24	34	28	24	22	

INDOOR CANDELA PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	2213	25.4	30.0
0-40	3657	42.0	49.6
0-60	6242	71.7	84.7
0-90	7373	84.7	100.0
0-180	7373	84.7	100.0

ENERGY DATA

Total Luminaire Efficiency	84.7%
Luminaire Efficacy Rating (LER)	77
IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.12 based on 3000 hrs. and \$0.08 per KWH

LUMINAIRE DATA

Luminaire	ST824-232G-FSA12 ST8 Lensed Troffer 2' x 4' 2-Lamp with A12 Lens
Ballast	REL-2P32-SC
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Total Input Watts	58
Shielding Angle	N/A
Spacing Criterion	0° = 1.22 90° = 1.35

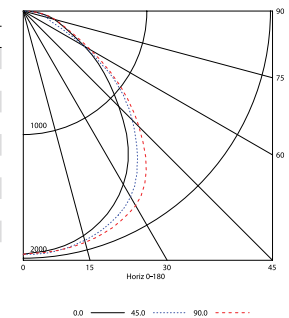
AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	3037	3037	3037	3037	3037
30	2885	2962	3095	3208	3240
40	2619	2711	2877	3058	3104
45	2387	2524	2723	2878	2891
50	2184	2318	2537	2631	2643
55	1995	2062	2202	2261	2318
60	1767	1739	1745	1838	1952
65	1553	1418	1297	1494	1666
70	1485	1242	1047	1341	1540
75	1545	1259	1175	1354	1587
80	1601	1378	1352	1432	1699
85	1683	1559	1400	1577	1736

COEFFICIENTS OF UTILIZATION (%)

RCR	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	94	90	87	84	92	88	85	82	85	82	80	73	
2	86	79	74	70	84	78	73	69	75	71	67	62	
3	79	71	64	59	77	69	63	58	67	62	57	54	
4	73	63	56	51	71	62	55	50	60	54	49	46	
5	67	57	49	44	65	56	49	44	54	48	43	41	
6	62	51	44	39	61	50	44	39	49	43	38	36	
7	58	47	39	34	56	46	39	34	45	38	34	32	
8	54	43	36	31	53	42	35	31	41	35	31	29	
9	50	39	32	28	49	39	32	28	38	32	28	26	
10	47	36	30	25	46	36	29	25	35	29	25	23	

Test 12583 Test Date 1/8/03



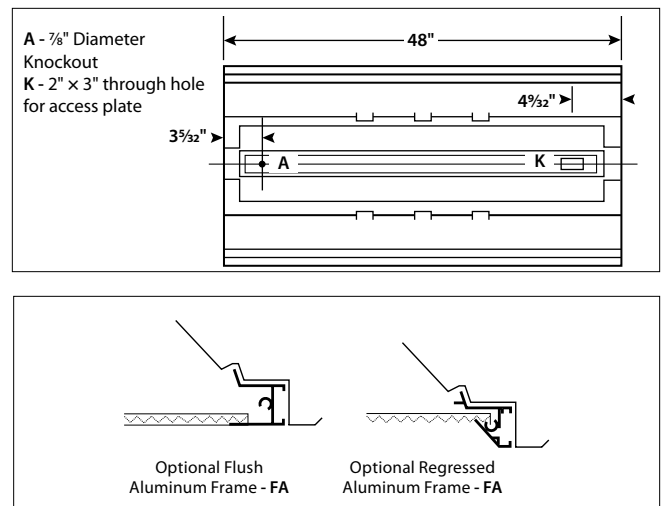
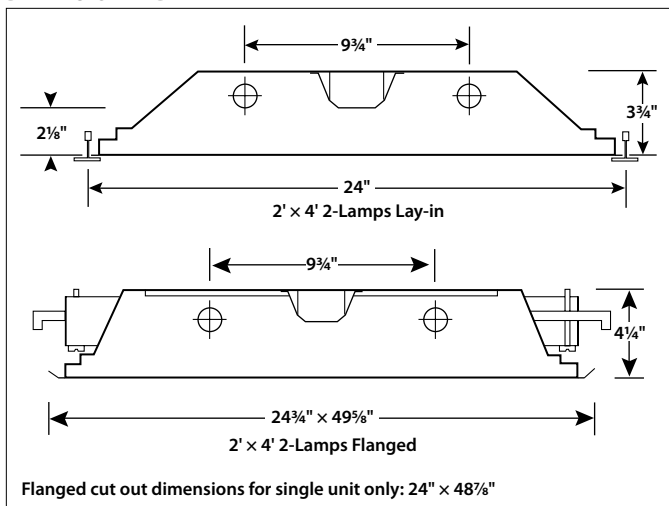
ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1563	27.0	31.5
0-40	2561	44.2	51.6
0-60	4231	72.9	85.2
0-90	4967	85.6	100.0
0-180	4967	85.6	100.0

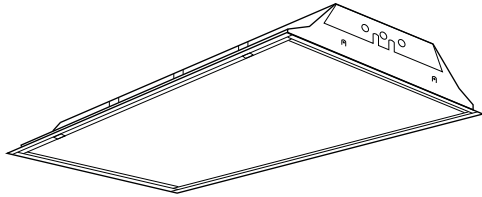
ENERGY DATA

Total Luminaire Efficiency	85.6%
Luminaire Efficacy Rating (LER)	75
IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.20 based on 3000 hrs. and \$0.08 per KWH

DIMENSIONAL DATA



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



PROJECT INFORMATION

Project Name _____

Catalog No. _____

'SFA' ALT

Type _____

Date _____

FEATURES

- Optical performance designed for T8 and T5 lamp technology
- 2 1/8" minimum spacing from bottom of lamp to bottom of lens
- Mechanical light seal
- Mitered corners on door present a clean uninterrupted appearance
- Spring loaded latches optional
- Rolled fixture edges reduce risk of injury during fixture handling and installation
- Integral T-Bar clips quickly secure fixture to grid system without the need for time consuming loose parts
- Snap-on ballast covers can be removed with lamps installed
- Corner hinging for easy insertion and removal of door frame from either side
- Optional flush or regressed aluminum shielding frames available with positive action or spring loaded latches
- Housing ends secured by unique corner interlock and screws

HOUSING

Heavy gauge steel. Die formed for extra rigidity. Grid housings are designed for installation in standard 1 1/2" T-Bar ceilings. Integral T-Bar clips are located in the end of the housing. Flanged housings for hard ceilings feature overlap flange trim and wing hangers.

BALLASTS

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, sound rated A, magnetic or electronic ballasts. CEE NEMA Premium compliant.

ELECTRICAL

Standard class "P," thermally protected, autoresetting HPF ballast, sound rated A. CEE NEMA Premium compliant. All ballast leads extend a minimum of 6" through access location. NEC/CEC-compliant ballast disconnect is standard.

FINISH

All parts are pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pretreatment for maximum adhesion and resistance.

SHIELDING

100% clear prismatic acrylic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

CERTIFICATION

All luminaires are built to UL 1598 standards and bear appropriate UL and cUL or CSA labels. Damp location labeling is standard. Emergency-equipped fixtures labeled UL 924.

ORDERING INFORMATION

EXAMPLE ST824-232G-FSA12-EU-F0735-C388

MODEL	NO. OF LAMPS	CEILING TYPE	SHIELDING	VOLTAGE	OPTIONS
ST8 Shallow Specification Troffer	2 Two 3 Three	G Inverted T-Bar (Std.) F Overlap Flange (4 1/2" overall fixture height)	A12 Pattern 12 Acrylic 0.100" Nominal (Standard) A12.125 Pattern 12 Acrylic 0.125" Nominal A19 Pattern 19 Acrylic 0.15" Male Prism	U 120V-277V 347 347V	F0730 T8, 70CRI, 3000K Lamps, Furnished/Installed F0735 T8, 70CRI, 3500K Lamps, Furnished/Installed F0741 T8, 70CRI, 4100K Lamps, Furnished/Installed
SIZE 24 2' x 4'	LAMP TYPE 28 4', T5: 28 Watt 32 4', T8: 32, 30, 28 or 25 Watt 54 4', T5HO: 54 or 51 Watt	DOOR STYLE FS Flush Steel FA Flush Aluminum RA Regressed Aluminum PS Premium Steel	PC1 Silver Parabolic Louver 1/2" x 1/2" x 1/2" PC2 Silver Parabolic Louver 1 1/2" x 1/2" x 1" For more shielding see Options and Accessories.	BALLAST E Electronic T8, Instant Start ELW 2-Lamp Electronic T8, 0.77 Ballast Factor, Low Wattage, Instant Start 3E 3-Lamp Electronic T8, Instant Start 3ELW 3-Lamp Electronic T8, 0.77 Ballast Factor, Low Wattage, Instant Start EP Electronic T5HO or T8, Programmed Start 3EP 3-Lamp Electronic T5HO or T8, Programmed Start For specific ballast vendor, show as option.	GLR Fast Blow Fuse EL Emergency Battery Pack PAF Paint After Fabrication SLL Spring Loaded Latches MS9 Master/Satellite Pair w/9' Harness C388 3/8" Flex with 3 No. 18 Wires C384 3/8" Flex with 3 No. 14 Wires C488 3/8" Flex with 4 No. 18 Wires C424 1/2" Flex with 4 No. 14 Wires M4R Miro®-4 Aluminum Reflector SAR Low Iridescent Specular Alum Reflector NYC NYC Compliant NYCU NYC Compliant, Union Label For a complete set of options, see Options and Accessories.

PHOTOMETRIC DATA

Test 12581 Test Date 1/08/03

LUMINAIRE DATA

Luminaire	ST824-332G-FSA12 ST8 Lensed Troffer 2' x 4' 3-Lamp with A12 Lens
Ballast	B332I120RH
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Total Input Watts	84
Mounting	Recessed
Shielding Angle	N/A
Spacing Criterion	0° = 1.24 90° = 1.35

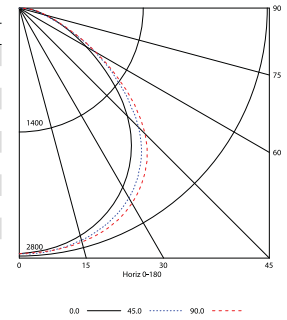
AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	4282	4282	4282	4282	4282
30	4165	4260	4415	4515	4538
40	3967	4106	4326	4471	4523
45	3767	3920	4154	4322	4387
50	3462	3637	3851	4009	4084
55	3075	3282	3478	3559	3616
60	2696	2863	3045	3079	3098
65	2338	2412	2528	2565	2572
70	2036	2005	1987	2122	2140
75	1838	1784	1659	1921	1909
80	1841	1761	1770	1903	1956
85	1967	1825	2002	1967	2038

COEFFICIENTS OF UTILIZATION (%)

RCR	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	93	89	86	83	91	87	84	81	84	81	79	72	
2	85	78	73	69	83	77	72	68	74	70	66	61	
3	78	69	63	58	76	68	62	57	66	60	56	53	
4	72	62	55	49	70	61	54	49	59	53	48	45	
5	66	55	48	43	64	55	48	43	53	47	42	39	
6	61	50	43	37	59	49	42	37	48	42	37	35	
7	57	45	38	33	55	45	38	33	44	37	33	31	
8	53	42	35	30	51	41	34	30	40	34	29	27	
9	49	38	31	27	48	38	31	27	37	31	27	25	
10	46	35	29	24	45	35	28	24	34	28	24	22	

INDOOR CANDELA PLOT



RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

ENERGY DATA

Total Luminaire Efficiency	84.7%
Luminaire Efficacy Rating (LER)	77
IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.12 based on 3000 hrs. and \$0.08 per KWH

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	2213	25.4	30.0
0-40	3657	42.0	49.6
0-60	6242	71.7	84.7
0-90	7373	84.7	100.0
0-180	7373	84.7	100.0

LUMINAIRE DATA

Luminaire	ST824-232G-FSA12 ST8 Lensed Troffer 2' x 4' 2-Lamp with A12 Lens
Ballast	REL-2P32-SC
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Total Input Watts	58
Shielding Angle	N/A
Spacing Criterion	0° = 1.22 90° = 1.35

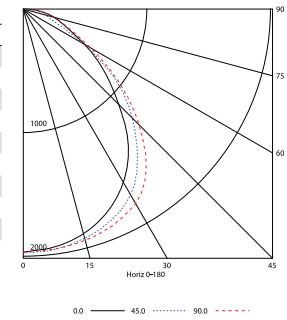
AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	3037	3037	3037	3037	3037
30	2885	2962	3095	3208	3240
40	2619	2711	2877	3058	3104
45	2387	2524	2723	2878	2891
50	2184	2318	2537	2631	2643
55	1995	2062	2202	2261	2318
60	1767	1739	1745	1838	1952
65	1553	1418	1297	1494	1666
70	1485	1242	1047	1341	1540
75	1545	1259	1175	1354	1587
80	1601	1378	1352	1432	1699
85	1683	1559	1400	1577	1736

COEFFICIENTS OF UTILIZATION (%)

RCR	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	94	90	87	84	92	88	85	82	85	82	80	73	
2	86	79	74	70	84	78	73	69	75	71	67	62	
3	79	71	64	59	77	69	63	58	67	62	57	54	
4	73	63	56	51	71	62	55	50	60	54	49	46	
5	67	57	49	44	65	56	49	44	54	48	43	41	
6	62	51	44	39	61	50	44	39	49	43	38	36	
7	58	47	39	34	56	46	39	34	45	38	34	32	
8	54	43	36	31	53	42	35	31	41	35	31	29	
9	50	39	32	28	49	39	32	28	38	32	28	26	
10	47	36	30	25	46	36	29	25	35	29	25	23	

INDOOR CANDELA PLOT



RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

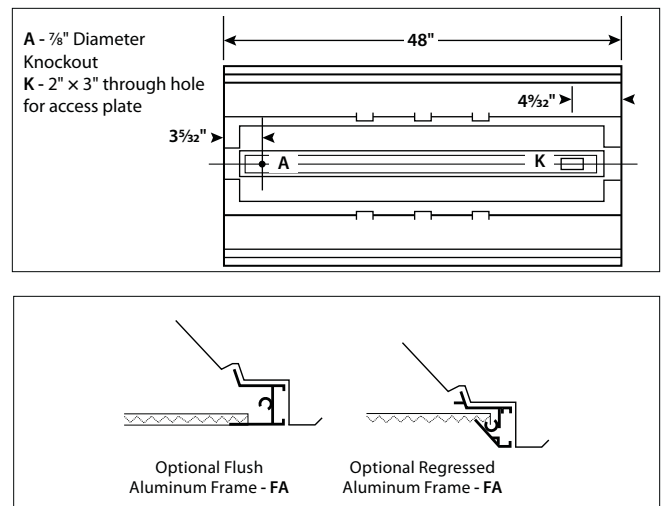
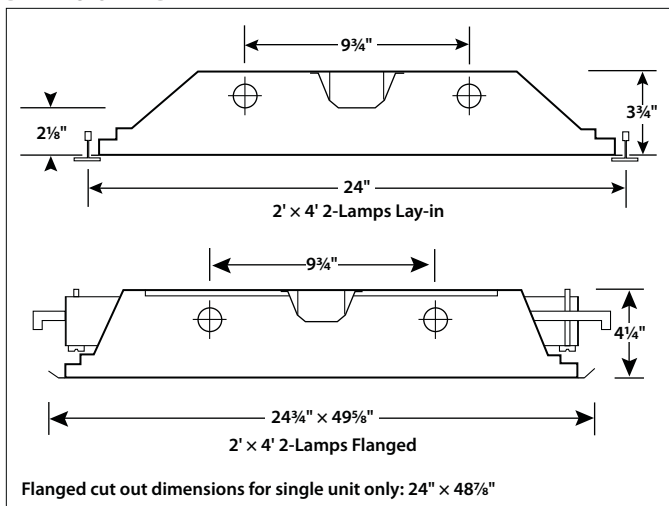
ENERGY DATA

Total Luminaire Efficiency	85.6%
Luminaire Efficacy Rating (LER)	75
IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.20 based on 3000 hrs. and \$0.08 per KWH

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1563	27.0	31.5
0-40	2561	44.2	51.6
0-60	4231	72.9	85.2
0-90	4967	85.6	100.0
0-180	4967	85.6	100.0

DIMENSIONAL DATA



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

DESCRIPTION

GC8 is a premium grade specification lensed troffer series. This innovative, high quality luminaire is dedicated to the latest T8 lamp and micro electronic ballast technology for optimal performance and energy efficiency. The GC8 is compatible with all of today's popular ceiling systems and is available with a number of options and accessories for application versatility.

The GC8 series features efficiency, quality and performance. The series is an excellent choice for commercial office spaces, schools, hospitals or retail merchandising areas.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Rigid housing is die formed of code gauge prime cold rolled steel and features full length die-formed stiffeners and unibody endplate for added strength. Side flanges are hemmed. Innovative design provides superior lens brightness uniformity and visual comfort. Micro ballast cover*** reduces ballast shadow for superior lens brightness uniformity and is easily removed without tools. Die formed captive lampholder brackets fully enclose lampholder wiring permitting easy lampholder replacement. Unibody endplates are securely attached with interlocking tabs and screws. Four auxiliary fixture end suspension points provided. KOs for continuous row wiring. Endplates have integral Grid-lock feature for safety and convenience.

Electrical

Ballasts are CBM/ETL Class "P" and are positively secured by mounting bolts. Rotor lock lampholders. UL/CUL listed. Suitable for damp locations.**

Finish

Multistage, iron phosphate pretreatment ensures maximum bonding and rust inhibition. Housing and ballast cover finished with new 90% reflective white enamel for superior performance. "PAF" Painted After Fabrication option also available.

Hinging/Latching

Positive spring loaded steel latches with baked white enamel finish. Safety-lock T-hinges allow hinging and latching either side.

Frame/Shielding

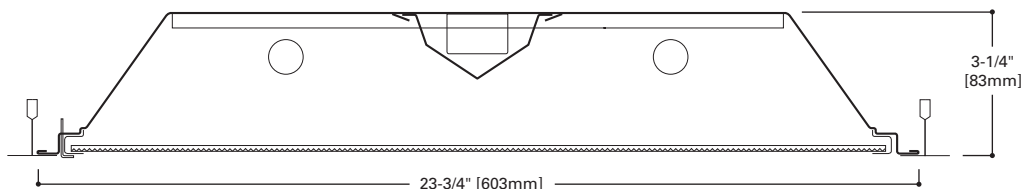
Die formed, heavy gauge, flat steel door with reinforced mitered corners and baked white enamel finish. Flat and regressed aluminum doors also available. Positive light seals. Light stabilized, acrylic prismatic lens. Standard #12 pattern. Numerous additional shielding options available.



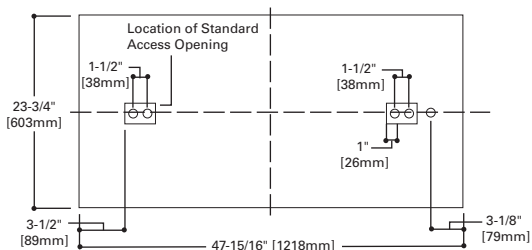
2GC8
228T8
232
428T8
432

2' X 4' TROFFER
2 OR 4 LAMP

Specification T8 Troffer



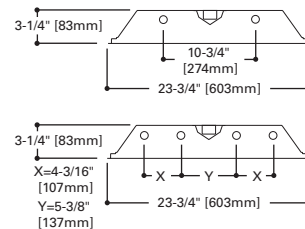
MOUNTING DATA



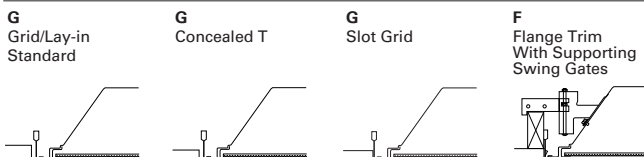
DOOR FRAMES



LAMP CONFIGURATIONS



CEILING COMPATIBILITY



Ceiling Type	Trim Type
Exposed Grid	G
Concealed T	G
Slot Grid	G
Flange	F

(Verify compatibility/ consult factory.)

ENERGY DATA

Input Watts:
HB Ballast & STD Lamps
228T8 (48), 232 (53)
428T8 (96), 432 (107)

Luminaire Efficacy Rating
LER = FL-80
Catalog Number: 2GC8-232A

Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$3.00

*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

**Consult Pre Sales Technical Support.

***Full sized ballast cover for biaxial lamps and emergency option may apply.

****When ordering Flange Kit for installation in drywall ceilings, see options and accessories compatibility section and ordering logic.

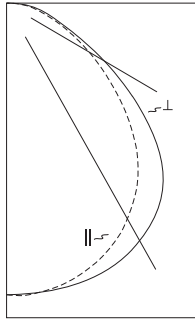
LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

LINEAR DISCONNECT

Safe and convenient means of disconnecting power.

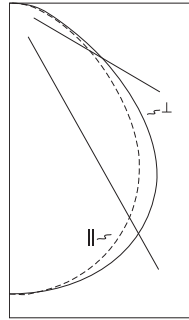


PHOTOMETRICS



2GC8-232A
 Electronic Ballast
 (2) F032/35K
 T8 lamps
 3100 lumens
 Spacing criterion:
 (H) 1.2 x mounting
 height, (L) 1.4 x
 mounting height
 Efficiency 84.7%
 Test Report:
 2GC8-232A.IES
 LER = FL-80
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$3.00

Candela			
Angle	Along H	45°	Across L
0	1963	1963	1963
5	1966	1957	1962
10	1940	1941	1956
15	1895	1914	1944
20	1834	1876	1924
25	1753	1820	1883
30	1646	1741	1822
35	1525	1640	1745
40	1373	1502	1635
45	1186	1323	1463
50	986	1131	1235
55	795	917	974
60	623	677	734
65	471	460	528
70	347	295	383
75	247	198	288
80	175	151	212
85	93	92	118
90	7	16	23



2GC8-432A
 Electronic Ballast
 (4) F032/35K
 T8 lamps
 3100 lumens
 Spacing criterion:
 (H) 1.2 x mounting
 height, (L) 1.3 x
 mounting height
 Efficiency 81.6%
 Test Report:
 2GC8-432A.IES
 LER = FL-85
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$2.82

Candela			
Angle	Along H	45°	Across L
0	3892	3892	3892
5	3891	3875	3885
10	3838	3839	3865
15	3750	3777	3826
20	3626	3687	3758
25	3460	3561	3654
30	3256	3388	3510
35	3001	3164	3321
40	2700	2878	3071
45	2329	2520	2728
50	1924	2136	2295
55	1543	1724	1825
60	1203	1288	1386
65	907	877	1004
70	669	563	729
75	472	378	547
80	335	287	405
85	182	175	228
90	15	32	48

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance																									
	80%				70%				50%				30%				10%				0%					
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
0	101	101	101	101	99	99	99	99	94	94	94	90	90	90	86	86	86	85								
1	93	89	85	82	90	87	84	81	83	81	78	80	78	76	77	75	74	72								
2	85	78	73	68	83	77	71	67	74	69	66	71	67	64	68	65	63	61								
3	78	69	63	57	76	68	62	57	65	60	56	63	59	55	61	57	54	52								
4	71	62	54	49	69	60	54	49	58	53	48	56	51	47	55	50	47	45								
5	66	55	48	42	64	54	47	42	52	46	42	51	45	41	49	45	41	39								
6	61	50	42	37	59	49	42	37	48	41	37	46	41	36	45	40	36	34								
7	56	45	38	33	55	45	38	33	43	37	33	42	37	32	41	36	32	30								
8	53	41	34	29	51	41	34	29	40	34	29	39	33	29	38	33	29	27								
9	49	38	31	27	48	37	31	26	37	31	26	36	30	26	35	30	26	25								
10	46	35	28	24	45	35	28	24	34	28	24	33	28	24	32	27	24	22								

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance																									
	80%				70%				50%				30%				10%				0%					
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
0	97	97	97	97	95	95	95	95	91	91	91	87	87	87	83	83	83	82								
1	89	86	82	79	87	84	81	78	80	78	76	77	75	73	74	73	71	69								
2	82	75	70	66	80	74	69	65	71	67	63	68	65	62	66	63	61	59								
3	75	67	60	55	73	65	60	55	63	58	54	61	57	53	59	55	52	50								
4	69	59	53	47	67	58	52	47	56	51	46	55	50	46	53	49	45	43								
5	64	53	46	41	62	53	46	41	51	45	40	49	44	40	48	43	40	38								
6	59	48	41	36	57	47	41	36	46	40	36	45	39	35	43	39	35	33								
7	55	44	37	32	53	43	37	32	42	36	32	41	35	31	40	35	31	30								
8	51	40	33	29	50	40	33	29	38	33	28	37	32	28	36	32	28	27								
9	48	37	30	26	46	36	30	26	35	30	26	35	29	26	34	29	25	24								
10	45	34	28	23	44	34	28	23	33	27	23	32	27	23	31	27	23	22								

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1565	25.2	29.8
0-40	2585	41.7	49.2
0-60	4403	71.0	83.8
0-90	5254	84.7	100.0
0-180	5254	84.7	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	2690	3001	3319
55	2223	2564	2724
65	1788	1746	2004
75	1531	1227	1785
85	1712	1693	2172

Zonal Lumen Summary

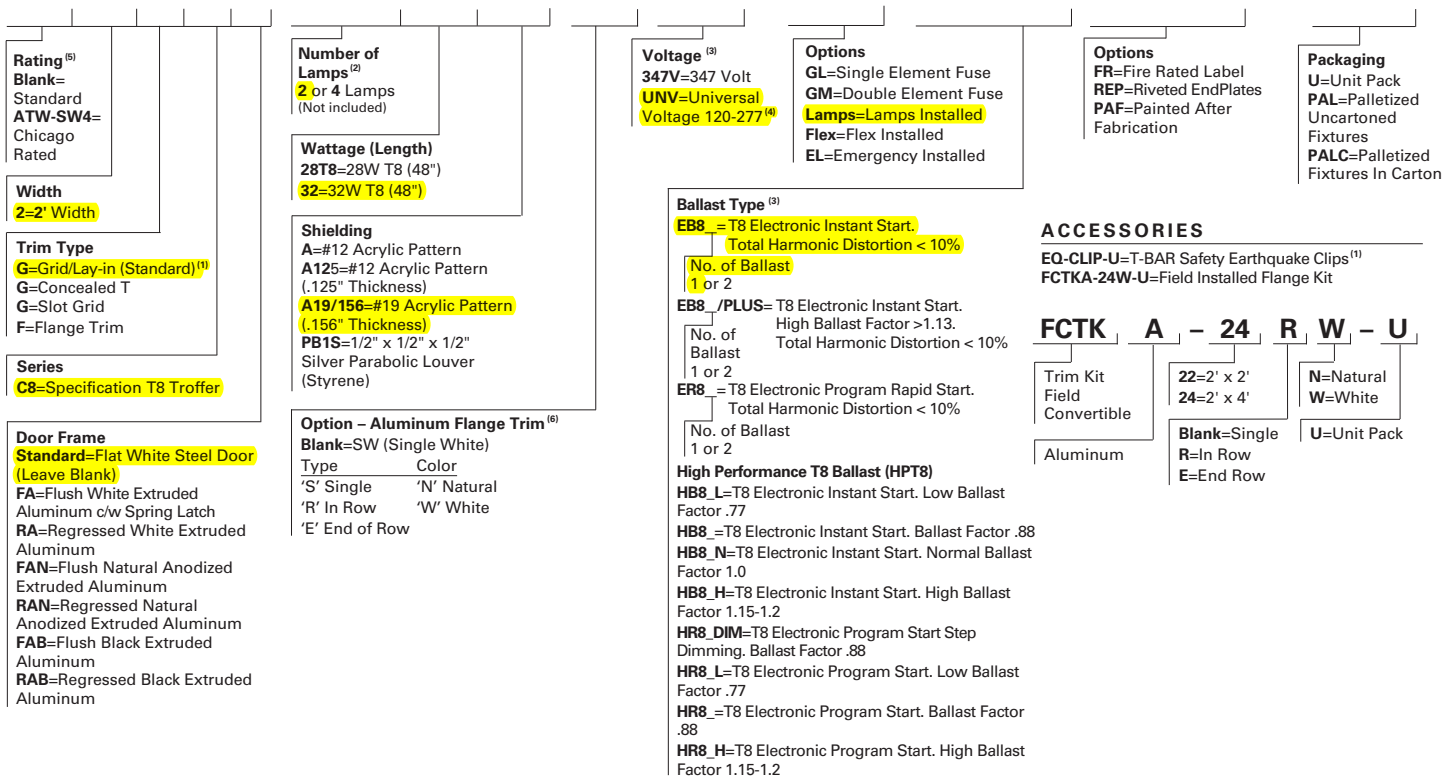
Zone	Lumens	%Lamp	%Fixture
0-30	3075	24.8	30.4
0-40	5048	40.7	49.9
0-60	8502	68.6	84.0
0-90	10124	81.6	100.0
0-180	10124	81.6	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	5283	5716	6188
55	4315	4821	5104
65	3442	3329	3811
75	2925	2343	3390
85	3349	3221	4196

ORDERING INFORMATION

SAMPLE NUMBER: 2GC8-232A-UNV-HB81-U



NOTES: ⁽¹⁾An EQ Grid Clip is recommended for all 9/16" ceiling systems. ⁽²⁾Standard off-center ballast on 3-lamp fixtures. ⁽³⁾Products also available in non-US voltages and frequencies for international markets. ⁽⁴⁾Not available when specifying emergencies, voltage must be specific. ⁽⁵⁾For NYC rated product, see separate specification sheets. ⁽⁶⁾Specify row configuration, type in catalog number when ordering complete fixture.

Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

SHIPPING INFORMATION

Catalog No.	Wt.
2GC8-228T8A	20 lbs.
2GC8-232A	20 lbs.
2GC8-428T8A	20 lbs.
2GC8-432A	20 lbs.

FEATURES & SPECIFICATIONS

INTENDED USE

Specification premium, high performance, static T8 luminaires provide general illumination for recessed applications; ideal for restricted plenum spaces.

ATTRIBUTES

Designed exclusively for use with T8 lamps, electronic ballasts and sockets.

CONSTRUCTION

Smooth hemmed sides and smooth, inward formed end flanges for safe handling. Lighter weight fixture allows safe, easy installation.

Standard steel door frame has superior structural integrity with premium extruded appearance and precision flush mitered corners. Steel door allows easy lens replacement without frame disassembly (for lenses up to .156" thick). Powder-painted, steel latches provide easy, secure door closure.

Superior mechanical light seal requires no foam gasketing. Integral T-bar clips secure fixture to T-bar system. Housing formed from cold-rolled steel. Acrylic shielding material 100% UV stabilized. No asbestos is used in this product.

US PATENTS: 6,210,025; 6,231,213; 6,213,625; 2,288,471.

FINISH

Five-stage iron-phosphate pretreatment ensures superior paint adhesion and rust resistance. Painted parts finished with highly reflective matte white enamel.

OPTICAL

A12 lens features reverse apex technology for superior lamp obscuration and improved visual comfort.

ELECTRICAL SYSTEM

Standard ballast is electronic, thermally protected, resetting, Class P, HPF, non-PCB, UL Listed, CSA certified ballast, universal voltage and sound rated A.

Luminaire is suitable for damp locations. AWM, TFN or THHN wire used throughout, rated for required temperatures.

LISTING

Standard: UL. Optional: Canada — CSA or cUL; Mexico — NOM.

WARRANTY

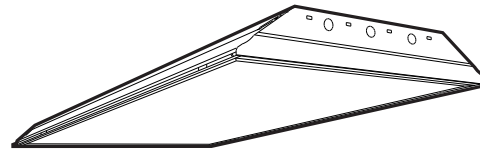
Guaranteed for one year against mechanical defects in manufacture.

Specifications subject to change without notice.

Catalog Number	
Notes	Type

Specification Premium T8 Troffer

SP8 2'x4'



2, 3, 4 or 6 Lamps
T8



Specifications

Length: 48 (1218)
Width: 24 (609)
Depth: 3-11/16 (94)
Weight: 22 lbs (9.9 kg)



All dimensions are inches (millimeters).

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: 2SP8 G 3 32 A12 MVOLT 1/3 GEB10IS

2SP8							
Series	Number of lamps	Door frame		Voltage	Options ¹		
2SP8 2' wide	2 3 4 6 Not included.	(blank) Flush steel, white		120	1/4 One 4-lamp ballast		
		FN Flush aluminum, natural		277	1/3 One 3-lamp ballast		
		FM Flush aluminum, matte black		347	GEB10IS Electronic ballast, ≤10% THD, instant start		
		FW Flush aluminum, white		MVOLT	GEB10RS Electronic ballast, ≤10% THD, rapid start		
		RN Regressed aluminum, natural		Others available.	EL Emergency battery pack (nominal 300 lumens)		
		RM Regressed aluminum, matte black			EL14 Emergency battery pack (nominal 1400 lumens)		
		RW Regressed aluminum, white			GLR Internal fast-blow fuse		
Trim type	Lamp type	Diffuser type			GMF Internal slow-blow fuse		
G Grid	32 32W T8 (48")	A12 #12 pattern acrylic, reverse apex			LST Tandem-wired fixture pairs (shared ballasts)		
F Overlapping flanged		A12125 #12 pattern acrylic, .125" thick			PWS1836 6' prewire, 3/8" dia., 18-gauge, 1 circuit		
		RA125 #12 pattern acrylic, .125" thick, reverse apex			PWS1846 6' prewire, 3/8" dia., 18-gauge, 2 circuits		
		A19 #19 pattern acrylic, .156" thick			LP735 Lamped, 700-series, 3500K		
		A15 #15 pattern acrylic, .2" thick			LP__ Lamped; specify lamp type and color		
		PC1S 1/2" x 1/2" x 1/2" plastic cube louver, silver			JP Palletized and stretch-wrapped without individual cartons		
		PC2S 1-1/2" x 1-1/2" x 1" plastic cube louver, silver w/ flange			CSA CSA Certified		
		PC3S 3/4" x 3/4" x 1/2" plastic cube louver, silver			NOM NOM Certified		

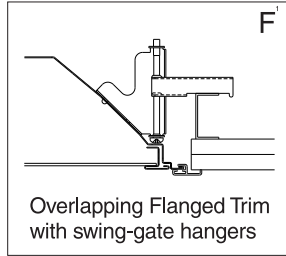
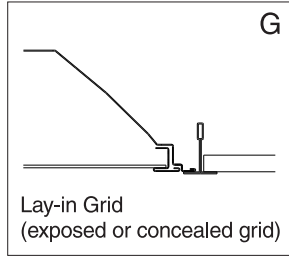
NOTE:

¹ MVOLT standard for 120-277V applications, 50-60 hz operation. Some options require voltage specified.

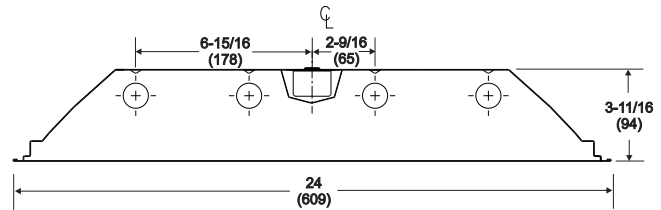
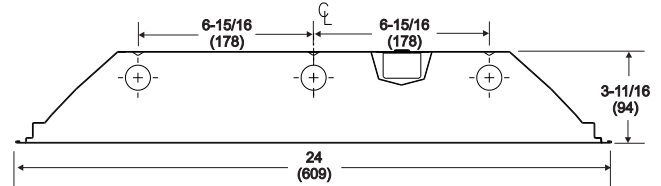
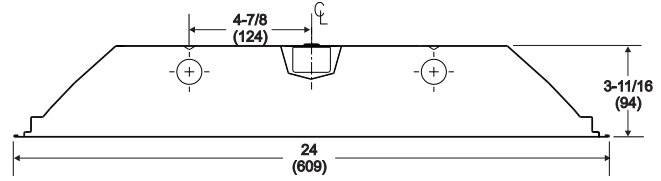
SP8 2'x4' Static T8 Troffer

MOUNTING DATA

Continuous row mounting of flanged units requires CRE and CRM trim options (see Options).



DIMENSIONS



NOTE:

- 1 Recommended rough-in dimensions for F-trim fixtures 24"x48". (Tolerance is +1/4"-0".) Swing-gate range 1-3/16" to 3-15/16". Swing-gate span 23-3/8" to 26-11/16". Fixture swing-gate points require additional 9/16" over nominal fixture height.

PHOTOMETRICS

Calculated using the zonal cavity method in accordance with IESNA LM41 procedure. Floor reflectances are 20%. Lamp configurations shown are typical. Full photometric data on these and other configurations available upon request.

2SP8 2 32 A12*

Report LTL 7525

Lumens per lamp - 2850 – Lum. eff. - 85.5%

S/MH (along) 1.3 (across) 1.4

Coefficient of Utilization

Ceiling Wall	80%			70%			50%		
	70%	50%	30%	70%	50%	30%	50%	30%	10%
0	102	102	102	99	99	99	95	95	95
1	94	90	87	92	88	85	85	82	80
2	86	80	74	84	78	73	75	71	68
3	79	71	64	77	70	64	67	62	58
4	73	63	56	71	62	56	60	55	50
5	67	57	50	66	56	49	54	48	44
6	62	52	44	61	51	44	49	43	39
7	58	47	40	57	46	40	45	39	34
8	54	43	36	53	42	36	41	35	31
9	51	39	33	49	39	33	38	32	28
10	47	36	30	46	36	30	35	29	25

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1541	27.0	31.6
0-40	2571	45.1	52.7
0-60	4192	73.5	86.0
0-90	4874	85.5	100.0
90-180	0	0	0
0-180	4874	85.5	100.0

2SP8 3 32 A12*

Report LTL 7492

Lumens per lamp - 2850 – Lum. eff. - 83.6%

S/MH (along) 1.3 (across) 1.4

Coefficient of Utilization

Ceiling Wall	80%			70%			50%		
	70%	50%	30%	70%	50%	30%	50%	30%	10%
0	100	100	100	97	97	97	93	93	93
1	92	88	85	90	86	83	83	80	78
2	84	78	73	82	77	72	74	70	66
3	78	70	63	76	68	62	66	61	57
4	72	62	55	70	61	55	59	54	49
5	66	56	49	64	55	49	53	48	43
6	61	51	44	60	50	43	49	43	38
7	57	46	39	56	46	39	44	38	34
8	53	42	36	52	42	35	41	35	31
9	50	39	32	49	38	32	38	32	28
10	47	36	30	46	36	29	35	29	25

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	2319	27.1	32.4
0-40	3833	44.8	53.6
0-60	6164	72.1	86.2
0-90	7147	83.6	100.0
90-180	0	0	0
0-180	7147	83.6	100.0

2SP8 4 32 A12*

Report LTL 7526

Lumens per lamp - 2850 – Lum. eff. - 81.5%

S/MH (along) 1.2 (across) 1.4

Coefficient of Utilization

Ceiling Wall	80%			70%			50%		
	70%	50%	30%	70%	50%	30%	50%	30%	10%
0	97	97	97	95	95	95	91	91	91
1	90	86	83	87	84	81	81	78	76
2	82	76	71	80	75	70	72	68	65
3	76	68	62	74	67	61	64	59	55
4	70	61	54	68	60	53	58	52	48
5	64	55	48	63	54	47	52	46	42
6	60	50	43	58	49	42	47	42	37
7	56	45	38	54	44	38	43	37	33
8	52	41	35	51	41	34	40	34	30
9	48	38	32	47	38	31	37	31	27
10	46	35	29	44	35	29	34	28	25

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	3029	26.6	32.6
0-40	4999	43.8	53.8
0-60	8017	70.3	86.3
0-90	9292	81.5	100.0
90-180	0	0	0
0-180	9292	81.5	100.0

* With reverse apex lens

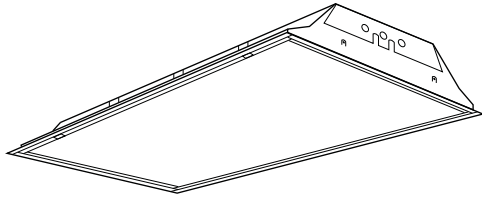
Energy (Calculated in accordance with NEMA standard LE-5)

LER.FL	ANNUAL ENERGY COST**	LAMP DESCRIPTION	LAMP LUMENS	BALLAST FACTOR	WATTS
77	\$3.12	(2) 32W T8	2850	.90	57
74	\$3.24	(3) 32W T8	2850	.87	85
77	\$3.12	(4) 32W T8	2850	.88	107

** Comparative yearly lighting energy cost per 1000 lumens



An AcuityBrands Company



PROJECT INFORMATION

Project Name _____

Catalog No. _____

'SFB' ALT

Type _____

Date _____

FEATURES

- Optical performance designed for T8 and T5 lamp technology
- 2/8" minimum spacing from bottom of lamp to bottom of lens
- Mechanical light seal
- Mitered corners on door present a clean uninterrupted appearance
- Spring loaded latches optional
- Rolled fixture edges reduce risk of injury during fixture handling and installation
- Integral T-Bar clips quickly secure fixture to grid system without the need for time consuming loose parts
- Snap-on ballast covers can be removed with lamps installed
- Corner hinging for easy insertion and removal of door frame from either side
- Optional flush or regressed aluminum shielding frames available with positive action or spring loaded latches
- Housing ends secured by unique corner interlock and screws

HOUSING

Heavy gauge steel. Die formed for extra rigidity. Grid housings are designed for installation in standard 1 5/8" T-Bar ceilings. Integral T-Bar clips are located in the end of the housing. Flanged housings for hard ceilings feature overlap flange trim and wing hangers.

BALLASTS

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, sound rated A, magnetic or electronic ballasts. CEE NEMA Premium compliant.

ELECTRICAL

Standard class "P," thermally protected, autoresetting HPF ballast, sound rated A. CEE NEMA Premium compliant. All ballast leads extend a minimum of 6" through access location. NEC/CEC-compliant ballast disconnect is standard.

FINISH

All parts are pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pretreatment for maximum adhesion and resistance.

SHIELDING

100% clear prismatic acrylic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

CERTIFICATION

All luminaires are built to UL 1598 standards and bear appropriate UL and cUL or CSA labels. Damp location labeling is standard. Emergency-equipped fixtures labeled UL 924.

ORDERING INFORMATION

EXAMPLE ST824-232G-FSA12-EU-F0735-C388

ST8		24		-		-		-	
MODEL	NO. OF LAMPS	CEILING TYPE	SHIELDING	VOLTAGE	OPTIONS	SIZE	LAMP TYPE	DOOR STYLE	BALLAST
ST8 Shallow Specification Troffer	2 Two 3 Three	G Inverted T-Bar (Std.) F Overlap Flange (4 1/2" overall fixture height)	A12 Pattern 12 Acrylic 0.100" Nominal (Standard) A12.125 Pattern 12 Acrylic 0.125" Nominal A19 Pattern 19 Acrylic 0.15" Male Prism	U 120V-277V 347 347V	F0730 T8, 70CRI, 3000K Lamps, Furnished/Installed F0735 T8, 70CRI, 3500K Lamps, Furnished/Installed F0741 T8, 70CRI, 4100K Lamps, Furnished/Installed	24 2' x 4'	28 4', T5: 28 Watt 32 4', T8: 32, 30, 28 or 25 Watt 54 4', T5HO: 54 or 51 Watt	FS Flush Steel FA Flush Aluminum RA Regressed Aluminum PS Premium Steel	E Electronic T8, Instant Start ELW 2-Lamp Electronic T8, 0.77 Ballast Factor, Low Wattage, Instant Start 3E 3-Lamp Electronic T8, Instant Start 3ELW 3-Lamp Electronic T8, 0.77 Ballast Factor, Low Wattage, Instant Start EP Electronic T5HO or T8, Programmed Start 3EP 3-Lamp Electronic T5HO or T8, Programmed Start
<p>For more shielding see Options and Accessories.</p> <p>For specific ballast vendor, show as option.</p> <p>For a complete set of options, see Options and Accessories.</p>									

PHOTOMETRIC DATA

Test 12581 Test Date 1/08/03

LUMINAIRE DATA

Luminaire	ST824-332G-FSA12 ST8 Lensed Troffer 2' x 4' 3-Lamp with A12 Lens
Ballast	B332I120RH
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Total Input Watts	84
Mounting	Recessed
Shielding Angle	N/A
Spacing Criterion	0° = 1.24 90° = 1.35

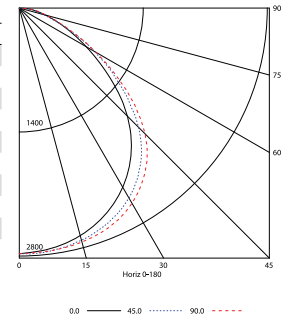
AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	4282	4282	4282	4282	4282
30	4165	4260	4415	4515	4538
40	3967	4106	4326	4471	4523
45	3767	3920	4154	4322	4387
50	3462	3637	3851	4009	4084
55	3075	3282	3478	3559	3616
60	2696	2863	3045	3079	3098
65	2338	2412	2528	2565	2572
70	2036	2005	1987	2122	2140
75	1838	1784	1659	1921	1909
80	1841	1761	1770	1903	1956
85	1967	1825	2002	1967	2038

COEFFICIENTS OF UTILIZATION (%)

RCR	80				70				50				0				
	RW	70	50	30	10	70	50	30	10	50	30	10	0	50	30	10	0
1	93	89	86	83	91	87	84	81	84	81	79	72	72	79	72	66	61
2	85	78	73	69	83	77	72	68	74	70	66	61	53	48	45	45	45
3	78	69	63	58	76	68	62	57	66	60	56	53	45	45	45	45	45
4	72	62	55	49	70	61	54	49	59	53	48	45	45	45	45	45	45
5	66	55	48	43	64	55	48	43	53	47	42	39	35	35	35	35	35
6	61	50	43	37	59	49	42	37	48	42	37	35	31	31	31	31	31
7	57	45	38	33	55	45	38	33	44	37	33	31	27	27	27	27	27
8	53	42	35	30	51	41	34	30	40	34	29	27	23	23	23	23	23
9	49	38	31	27	48	38	31	27	37	31	27	25	21	21	21	21	21
10	46	35	29	24	45	35	28	24	34	28	24	22	19	19	19	19	19

INDOOR CANDELA PLOT



RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

ENERGY DATA

Total Luminaire Efficiency	84.7%
Luminaire Efficacy Rating (LER)	77
IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.12 based on 3000 hrs. and \$0.08 per KWH

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	2213	25.4	30.0
0-40	3657	42.0	49.6
0-60	6242	71.7	84.7
0-90	7373	84.7	100.0
0-180	7373	84.7	100.0

LUMINAIRE DATA

Luminaire	ST824-232G-FSA12 ST8 Lensed Troffer 2' x 4' 2-Lamp with A12 Lens
Ballast	REL-2P32-SC
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Total Input Watts	58
Shielding Angle	N/A
Spacing Criterion	0° = 1.22 90° = 1.35

AVG. LUMINANCE (Candela/Sq. M.)

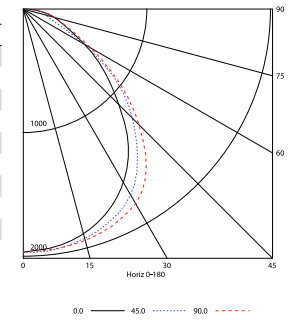
	0.0	22.5	45.0	67.5	90.0
0	3037	3037	3037	3037	3037
30	2885	2962	3095	3208	3240
40	2619	2711	2877	3058	3104
45	2387	2524	2723	2878	2891
50	2184	2318	2537	2631	2643
55	1995	2062	2202	2261	2318
60	1767	1739	1745	1838	1952
65	1553	1418	1297	1494	1666
70	1485	1242	1047	1341	1540
75	1545	1259	1175	1354	1587
80	1601	1378	1352	1432	1699
85	1683	1559	1400	1577	1736

COEFFICIENTS OF UTILIZATION (%)

RCR	80				70				50				0				
	RW	70	50	30	10	70	50	30	10	50	30	10	0	50	30	10	0
1	94	90	87	84	92	88	85	82	85	82	80	73	73	80	73	67	62
2	86	79	74	70	84	78	73	69	75	71	67	62	54	49	46	46	46
3	79	71	64	59	77	69	63	58	67	62	57	54	46	46	46	46	46
4	73	63	56	51	71	62	55	50	60	54	49	46	41	41	41	41	41
5	67	57	49	44	65	56	49	44	54	48	43	41	36	36	36	36	36
6	62	51	44	39	61	50	44	39	49	43	38	36	31	31	31	31	31
7	58	47	39	34	56	46	39	34	45	38	34	32	27	27	27	27	27
8	54	43	36	31	53	42	35	31	41	35	31	29	23	23	23	23	23
9	50	39	32	28	49	39	32	28	38	32	28	26	21	21	21	21	21
10	47	36	30	25	46	36	29	25	35	29	25	23	19	19	19	19	19

Test 12583 Test Date 1/8/03

INDOOR CANDELA PLOT



RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

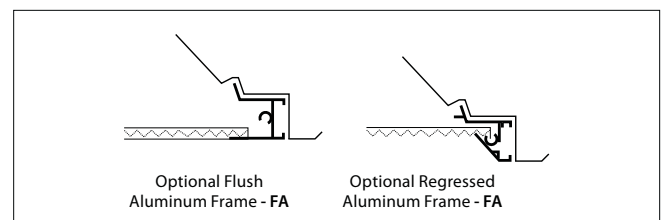
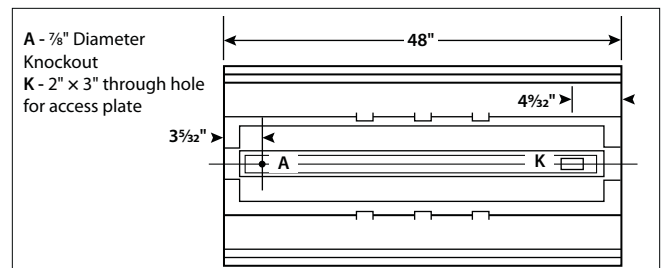
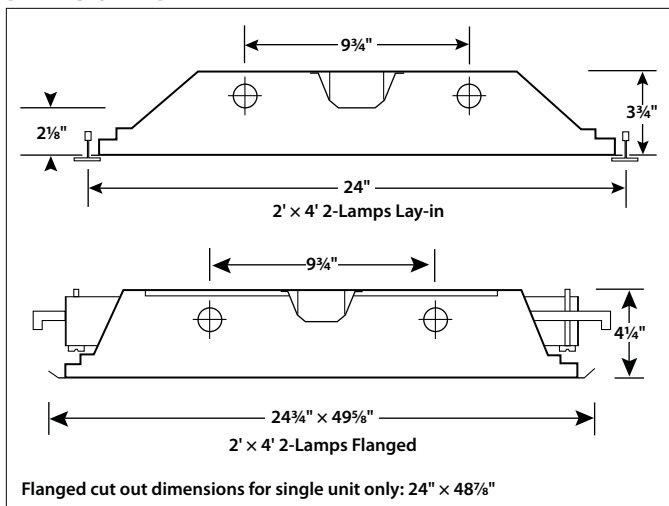
ENERGY DATA

Total Luminaire Efficiency	85.6%
Luminaire Efficacy Rating (LER)	75
IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.20 based on 3000 hrs. and \$0.08 per KWH

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1563	27.0	31.5
0-40	2561	44.2	51.6
0-60	4231	72.9	85.2
0-90	4967	85.6	100.0
0-180	4967	85.6	100.0

DIMENSIONAL DATA



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

DESCRIPTION

GC8 is a premium grade specification lensed troffer series. This innovative, high quality luminaire is dedicated to the latest T8 lamp and micro electronic ballast technology for optimal performance and energy efficiency. The GC8 is compatible with all of today's popular ceiling systems and is available with a number of options and accessories for application versatility.

The GC8 Series features efficiency, quality and performance. The series is an excellent choice for commercial office spaces, schools, hospitals or retail merchandising areas.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Rigid housing is die formed of code gauge prime cold rolled steel and features full length die-formed stiffeners and unibody endplate for added strength. Side flanges are hemmed. Innovative design provides superior lens brightness uniformity and visual comfort. Micro ballast cover*** reduces ballast shadow for superior lens brightness uniformity and is easily removed without tools. Die formed captive lampholder brackets fully enclose lampholder wiring permitting easy lampholder replacement. Unibody endplates are securely attached with interlocking tabs and screws. Four auxiliary fixture end suspension points provided. Ample KOs are provided for continuous row wiring. Endplates have integral Grid-lock feature for safety and convenience.

Electrical

Ballasts are CBM/ETL Class "P" and are positively secured by mounting bolts. Roto-lock lampholders ensure positive lamp retention. UL/CUL listed. Suitable for damp locations.**

Finish

Multistage, iron phosphate pretreatment ensures maximum bonding and rust inhibition. Housing and ballast cover finished with new 90% reflective white enamel for superior performance. "PAF" Painted After Fabrication option also available.

Hinging/Latching

Positive spring loaded steel latches with baked white enamel finish. Safety-lock T-hinges allow hinging and latching either side.

Frame/Shielding

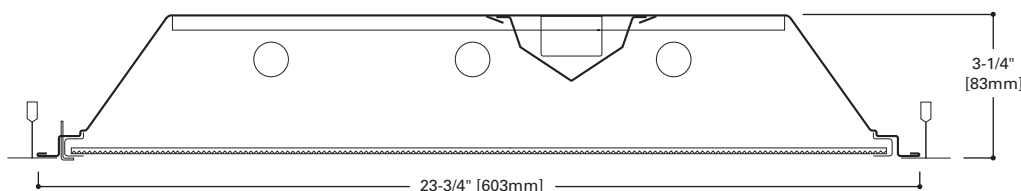
Die formed, heavy gauge, flat steel door with reinforced mitered corners and baked white enamel finish. Flat and regressed aluminum doors also available. Positive light seals. Light stabilized, acrylic prismatic lens. Standard #12 pattern. Numerous additional shielding options available.



2GC8
328T8
332

2' X 4' TROFFER
3 T8 LAMPS

Specification T8 Troffer



ENERGY DATA

Input Watts:
EB Ballast & STD Lamps
328T8 (67)
332 (91)

Luminaire Efficacy Rating

LER = FL-83

Catalog Number: 2GC8-332A

Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$2.89

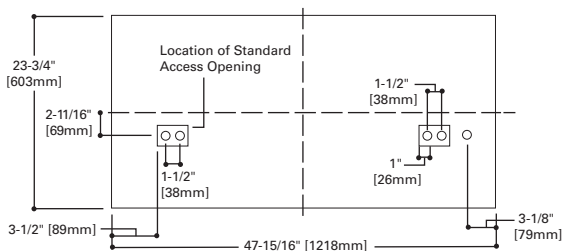
*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

**Consult Pre Sales Technical Support.

***Full sized ballast cover for biaxial lamps and emergency option may apply.

****When ordering Flange Kit for installation in drywall ceilings, see options and accessories compatibility section and ordering logic.

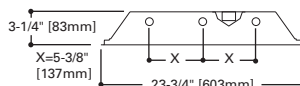
MOUNTING DATA



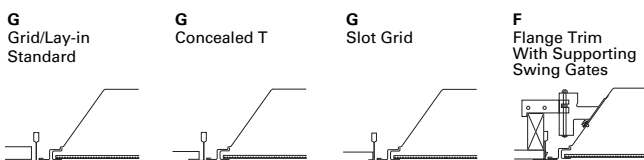
DOOR FRAMES



LAMP CONFIGURATIONS



CEILING COMPATIBILITY



Ceiling Type	Trim Type
Exposed Grid	G
Concealed T	G
Slot Grid	G
Flange	F

(Verify compatibility/ consult factory.)

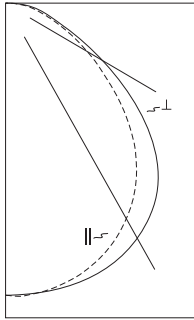
LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

LINEAR DISCONNECT

Safe and convenient means of disconnecting power.

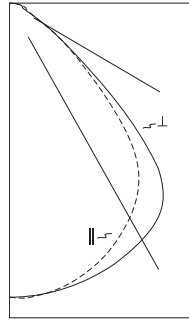


PHOTOMETRICS



2GC8-332A
 Electronic Ballast
 (3) F32T8 lamps
 3100 lumens
 Spacing criterion:
 (II) 1.2 x mounting
 height, (L) 1.4 x
 mounting height
 Efficiency 85%
 Test Report:
 2GC8-332A.IES
 LER = FL-83
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$2.89

Candela			
Angle	Along II	45°	Across
0	2985	2985	2985
5	2987	2971	2981
10	2947	2946	2971
15	2881	2906	2950
20	2785	2840	2907
25	2659	2753	2837
30	2500	2628	2737
35	2309	2470	2603
40	2074	2253	2424
45	1797	1979	2166
50	1491	1683	1839
55	1194	1368	1471
60	935	1023	1109
65	711	692	800
70	520	441	576
75	370	296	433
80	263	227	319
85	141	139	184
90	11	26	37



2GC8-332A156
 Electronic Ballast
 (3) F32T8 lamps
 3100 lumens
 Spacing criterion:
 (II) 1.2 x mounting
 height, (L) 1.4 x
 mounting height
 Efficiency 82.5%
 Test Report:
 2GC8-
 332A19_156.IES
 LER = FL-80
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$3.00

Candela			
Angle	Along II	45°	Across 0
0	3509	3509	3509
5	3509	3490	3501
10	3454	3451	3474
15	3362	3388	3433
20	3241	3301	3379
25	3086	3189	3306
30	2908	3045	3223
35	2683	2848	3105
40	2321	2496	2839
45	1704	1907	2163
50	1126	1373	1281
55	734	1028	742
60	408	697	422
65	271	448	235
70	212	284	170
75	196	146	159
80	150	79	132
85	77	73	81
90	5	17	16

Coefficients of Utilization

rc	Effective floor cavity reflectance 20%																	
	80%			70%			50%			30%			10%			0%		
	70	50	30	70	50	30	70	50	30	70	50	30	70	50	30	70	50	30
0	101	101	101	101	99	99	99	99	94	94	94	90	90	90	87	87	87	85
1	93	89	86	83	91	87	84	81	84	81	79	80	78	76	77	76	74	72
2	85	78	73	68	83	77	72	67	74	70	66	71	68	64	69	66	63	61
3	78	69	63	57	76	68	62	57	66	60	56	63	59	55	61	57	54	52
4	72	62	55	49	70	61	54	49	59	53	48	57	52	48	55	50	47	45
5	66	55	48	43	64	55	48	42	53	47	42	51	46	41	50	45	41	39
6	61	50	43	37	59	49	42	37	48	42	37	46	41	37	45	40	36	35
7	57	45	38	33	55	45	38	33	44	37	33	42	37	33	41	36	32	31
8	53	42	34	30	51	41	34	30	40	34	29	39	33	29	38	33	29	27
9	49	38	31	27	48	38	31	27	37	31	27	36	30	26	35	30	26	25
10	46	35	29	24	45	35	28	24	34	28	24	33	28	24	32	27	24	22

Coefficients of Utilization

rc	Effective floor cavity reflectance 20%																	
	80%			70%			50%			30%			10%			0%		
	70	50	30	70	50	30	70	50	30	70	50	30	70	50	30	70	50	30
0	98	98	98	98	96	96	96	96	92	92	92	88	88	88	84	84	84	82
1	91	88	85	82	89	86	83	81	83	80	78	79	78	76	77	75	74	72
2	84	79	74	70	82	77	73	69	74	70	67	72	68	66	69	67	64	63
3	78	70	65	60	76	69	64	59	67	62	58	65	61	57	63	59	56	55
4	72	63	57	52	70	62	56	52	60	55	51	59	54	50	57	53	50	48
5	67	57	51	46	65	57	50	46	55	49	45	53	48	45	52	48	44	43
6	62	52	46	41	61	51	45	41	50	44	40	49	44	40	47	43	40	38
7	58	48	41	36	57	47	41	36	46	40	36	45	40	36	44	39	36	34
8	54	44	37	33	53	43	37	33	42	37	33	41	36	32	40	36	32	31
9	51	40	34	30	50	40	34	30	39	33	30	38	33	29	37	33	29	28
10	48	37	31	27	47	37	31	27	36	31	27	35	30	27	35	30	27	25

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	2371	25.5	30.0
0-40	3907	42.0	49.4
0-60	6627	71.3	83.8
0-90	7909	85.0	99.9
0-180	7909	85.0	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	4706	4489	4913
55	3339	3826	4114
65	2698	2626	3036
75	2293	1834	2683
85	2595	2558	3386

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	2762	29.7	36.0
0-40	4546	48.9	59.3
0-60	6894	74.1	89.9
0-90	7671	82.5	100.0
0-180	7671	82.5	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	3865	4326	4906
55	2053	2875	2075
65	1029	1700	892
75	1215	905	985
85	1417	1343	1491

ORDERING INFORMATION

SAMPLE NUMBER: 2GC8-332A-UNV0V-EB81-U

<p>Rating⁽⁵⁾ Blank= Standard ATW-SW4= Chicago Rated</p>	<p>Number of Lamps⁽²⁾ 3 Lamps (Not included)</p> <p>Wattage (Length) 28T8=28W T8 (48") 32=32W T8 (48")</p>	<p>Voltage⁽³⁾ 120V=120 Volt 277V=277 Volt 347V=347 Volt UNV=Universal Voltage 120-277⁽⁴⁾</p>	<p>Options GL=Single Element Fuse GM=Double Element Fuse Lamps=Lamps Installed Flex=Flex Installed EL=Emergency Installed</p>	<p>Options FR=Fire Rated Label REP=Riveted End Plates PAF=Painted After Fabrication</p>	<p>Packaging U=Unit Pack PAL=Job Pack, out of carton PALC=Job Pack, in carton</p>
<p>Width 2=2' Width</p>	<p>A=#12 Pattern Acrylic A125=#12 Pattern Acrylic (.125" Thick) A19/156=#19 Pattern Acrylic (.156" Thick) PB1S=Silver Parabolic Louver (1/2" x 1/2" x 1/2")</p>	<p>Ballast Type⁽³⁾ EB8 = T8 Electronic Instant Start. Total Harmonic Distortion < 10% No. of Ballast 1, 2 or 3 EB8_/PLUS= T8 Electronic Instant Start. High Ballast Factor >1.13. Total Harmonic Distortion < 10% No. of Ballast 1, 2 or 3 ER8 = T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10% No. of Ballast 1, 2 or 3</p>	<p>ACCESSORIES EQ-CLIP-U=T-BAR Safety Earthquake Clips⁽¹⁾ FCTKA-24W-U=Field Installed Flange Kit</p>		
<p>Trim Type G=Grid/Lay-in (Standard)⁽¹⁾ G=Concealed T G=Slot Grid F=Flange Trim</p>	<p>Option - Aluminum Flange Trim⁽⁶⁾ Blank=SW (Single White) Type Color 'S' Single 'N' Natural 'R' In Row 'W' White 'E' End of Row</p>	<p>High Performance T8 Ballast (HPT8) HB8_L=T8 Electronic Instant Start. Low Ballast Factor .77 HB8 =T8 Electronic Instant Start. Ballast Factor .88 HB8_N=T8 Electronic Instant Start. Normal Ballast Factor 1.0 HB8_H=T8 Electronic Instant Start. High Ballast Factor 1.15-1.2 HR8_DIM=T8 Electronic Program Start Step Dimming. Ballast Factor .88 HR8_L=T8 Electronic Program Start. Low Ballast Factor .77 HR8 =T8 Electronic Program Start. Ballast Factor .88 HR8_H=T8 Electronic Program Start. High Ballast Factor 1.15-1.2</p>	<p>FCTK A - 24 R W - U</p> <p>Trim Kit Field Convertible Aluminum</p> <p>22=2' x 2' 24=2' x 4'</p> <p>Blank=Single R=In Row E=End Row</p> <p>N=Natural W=White U=Unit Pack</p>		
<p>Series C8=Specification T8 Troffer</p> <p>Door Frame Standard=Flat White Steel Door (Leave Blank) FA=Flush White Extruded Aluminum c/w Spring Latch RA=Regressed White Extruded Aluminum FAN=Flush Natural Anodized Extruded Aluminum RAN=Regressed Natural Anodized Extruded Aluminum FAB=Flush Black Extruded Aluminum RAB=Regressed Black Extruded Aluminum</p>					

NOTES: ⁽¹⁾An EQ Grid Clip is recommended for all 9/16" ceiling systems. ⁽²⁾Standard off-center ballast compartment on 3-lamp fixtures. ⁽³⁾Products also available in non-US voltages and frequencies for international markets. ⁽⁴⁾Not available when specifying emergencies, voltage must be specific. ⁽⁵⁾For NYC rated product, see separate specification sheets. ⁽⁶⁾Specify row configuration, type in catalog number when ordering complete fixture.

Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

SHIPPING INFORMATION	
Catalog No.	Wt.
2GC8-328T8A	20 lbs.
2GC8-332A	20 lbs.



FEATURES & SPECIFICATIONS

INTENDED USE — RT8S is designed for applications that require the extremely energy efficient delivery of comfortable volumetric light from a lay-in fixture that is appealing and shallow in depth and where room-side ballast access is required. Ideal for offices, schools, hospitals and numerous other commercial applications. **Certain airborne contaminants can diminish integrity of acrylic.** [Click here for Acrylic Environmental Compatibility table for suitable uses.](#)

OPTICAL SYSTEM — Delivers volumetric lighting by filling the entire volume of space with light, providing the ideal amount to walls, cubicles, work surfaces and people.

Luminous characteristics are carefully managed at high angles, distributing just enough intensity to deliver the volumetric effect.

98% reflective Alanod MIRO® silver optical assembly efficiently redirects lamp output to the refractor.

Regressed refractive system obscures and softens the lamp and smoothly washes the reflector with light.

Linear faceted reflector softens and distributes light into the space and minimizes the luminance ratio between the fixture and the ceiling.

Mechanical cut-off across the reflector and fresnel refraction along the refractor provide high angle shielding and a quiet ceiling.

Sloped endplates provide a balanced fixture to ceiling ratio while enhancing the perception of fixture depth.

CONSTRUCTION — Rugged, steel reflector with embossed facets. Painted after fabrication.

Fixtures may be mounted end-to-end.

ELECTRICAL SYSTEM — High-efficiency, CEE qualified, instant-start, ≤ 10% THD, universal voltage and sound rated A are available as quick-ship items.

Optional program-start and step-dimming ballasts available.

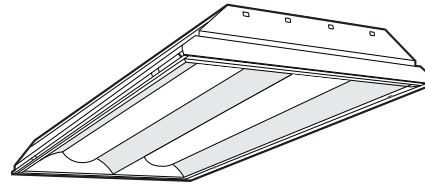
Designed and optimized for use with CEE (Consortium for Energy Efficiency) qualified, high-lumen, long life T8 lamps and energy-efficient electronic ballasts.

MAINTENANCE — Lamps accessed by unlatching trim and allowing it to hinge open for easy maintenance. Ballast is accessed from below by removing channel cover.

Catalog Number	
Notes	Type



2RT8S



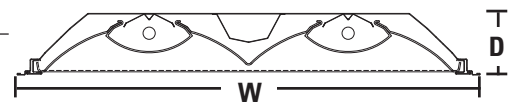
2'x4'
2 Lamps T8

Specifications

Length: 48 (1218)

Width: 24 (610)

Depth: 3-3/16 (81)



All dimensions are inches (millimeters) unless otherwise specified.

LISTING — UL Listed to U.S. and Canadian standards.

WARRANTY — Fixture guaranteed for one year against mechanical defects in manufacture. Lamp and ballast system warranty (36 months for lamp, 60 months for ballast) by lamp and ballast manufacturer.

Protected by one or more of US Patents Nos. 7,229,192; D541,467; D541,468; D544,633; D544,634; D544,992; D544,933 and additional patent pending.

NOTE: Specifications subject to change without notice.

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: 2RT8S 2 32 MVOLT BINP L835HT8

2RT8S	2	32				
Series	Number of lamps	Voltage	Ballast	Lamp ³	Options	
2RT8S	2	347 MVOLT ¹	BILP IS, high efficiency, .78 bf (low)²	L835HT8 3100 lumen, long life, 3500°K	GLR	Fast-blow fuse ⁴
Trim type		Wattage	BINP IS, high efficiency, .88 bf (normal)²	LP735 2800 lumen, 3500°K	EL	Emergency battery pack (see Life Safety section)
(blank) Lay-in grid		32 32W T8 (48")	GEB10IS IS, .88 ballast factor	LP841 85CRI 4100K	EL14	Emergency battery pack (see Life Safety section)
F Over-lapping flanged			BIHP IS, high efficiency, 1.20 bf (high) ²		PWS1836	6' prewire, 3/8" diameter, 18-gauge, 3-wires ⁵
			BSNP PS, step-dimming, high efficiency, .88 bf (normal) ^{2,3}		PWS1846	6' prewire, 3/8" diameter, 18-gauge, 4-wires ⁶
					QFC_	Quick-flex fixture cable, factory installed prewired cable (RELOC®) ⁴

NOTES:

1 MVOLT standard for 120V-277V applications.

2 CEE qualified HPT8, NEMA premium ballast to qualify for many utility rebates.

3 Not available with 347 volt.

4 Must specify voltage, 120 or 277.

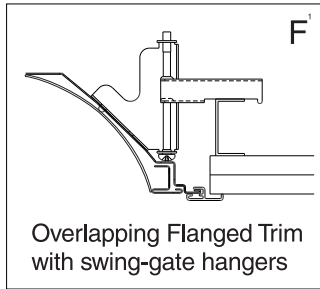
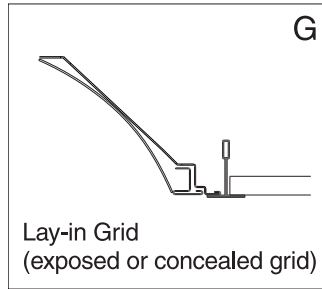
5 For use with standard ballast.

6 For use with step-dimming ballast.

2RT8S Volumetric Recessed Lighting 2' x 4'

MOUNTING DATA

Continuous row mounting of flanged units requires CRE and CRM trim options (see Options).



NOTES:

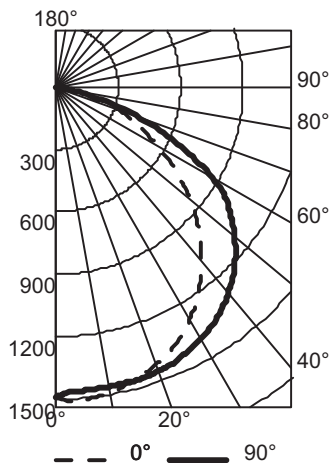
1 Recommended rough-in dimensions for F-trim fixtures 24"x48" (Tolerance is +1/4"-0").
Swing-gate range 1-3/16" to 3-15/16". Swing-gate span 23-3/8" to 26-11/16". Fixture swing-gate points require additional 1-1/16" over nominal fixture height.

T8 Energy Comparison

System	Lamp Type	Ballast Factor	Input Watts	Watts Saved Compared to 3 lamp T8
3-lamp T8 Parabolic	F32T8	0.88	85	-
2RT8S 2-lamp BINP T8	F32T8	0.88	55	30
2RT8S 2-lamp BILP T8	F32T8	0.78	48	37

PHOTOMETRICS

2RT8S 2 32, (3) F032 lamps, 2800 lumens per lamp, s/m 1.28 (along) 1.4 (across), test no. LTL18481



Coefficients of Utilization

CP Summary	0°	90	pf	80%									20%								
				pc	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%							
0°	1490	1490	0	96	96	96	94	94	94	90	90	90	90	90	90	90	90	90	90		
5°	1507	1464	1	88	84	81	82	79	77	79	77	74	79	77	74	74	74	74	74		
15°	1459	1461	2	80	73	68	72	67	63	69	65	61	69	65	61	61	61	61	61		
25°	1362	1430	3	73	64	58	63	57	52	61	56	51	61	56	51	51	51	51	51		
35°	1198	1352	4	67	57	50	56	49	44	54	48	44	54	48	44	44	44	44	44		
45°	975	1215	5	61	51	43	50	43	38	48	42	37	48	42	37	37	37	37	37		
55°	707	1017	6	56	46	38	45	38	33	43	37	33	43	37	33	33	33	33	33		
65°	438	648	7	52	41	34	41	34	29	39	33	29	39	33	29	29	29	29	29		
75°	205	208	8	49	38	31	37	30	26	36	30	26	36	30	26	26	26	26	26		
85°	35	20	9	45	34	28	34	28	23	33	27	23	33	27	23	23	23	23	23		
90	0	0	10	42	32	25	31	25	21	30	25	21	30	25	21	21	21	21	21		

Zonal Lumen Summary

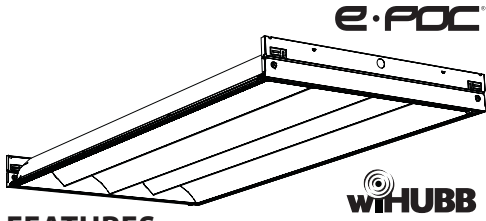
Zone	Lumens	% Lamp	% Fixture
0° - 30°	1198	21.4	26.5
0° - 40°	1997	35.7	44.2
0° - 60°	3630	64.8	80.4
0° - 90°	4515	80.6	100.0
90° - 180°	0	0.0	0.0
0° - 180°	4515	80.6	100.0

Efficiency: 80.6%

*The LER (Luminaire Efficacy Rating) is the lumens per watt rating for this fixture. It is used to compare the energy efficiency of various products. This photometric report is based upon IES testing procedures, as stated in LM-41-1998.



An Acuity Brands Company



FEATURES

- Both T5 and T8 optical systems available
- Full distribution provides controlled high angle light for visual comfort
- Advanced optical design produces high efficiencies
- Exclusive T8 EnergyMax® tuned 1.04 ballast factor ballast
- Step dimming options available for both T5 and T8 expand energy savings opportunities
- Low W/ft² ratio meets the most restrictive lighting power density codes
- Typically qualifies for EPC Act tax deductions
- Unique frameless optics system allows easy access to lamps and electrical from below the ceiling
- Lens styles provide aesthetic alternatives
- Low profile housing fits in tight plenum spaces
- Available with exclusive wiHUBB technology preinstalled
 - Peer to peer, self-healing wireless mesh network
 - Integrated control system for 0-10VDC or step dimming, or On/Off

PROJECT INFORMATION

Project Name _____

Catalog No. _____

'VLA' ALT

Type _____

Date _____

CONSTRUCTION

Luminaire housing, end caps, and reflectors are die-formed code-gauge cold-rolled steel. Frameless optics system hinges from either side for easy access to lamps and electrical components. Mechanical light trap prevents light leaks. Latches are spring loaded.

FINISH

All visible parts are custom formulated soft, non-glare high-reflectance white powder coat finish, painted after fabrication.

SHIELDING

Lenses are high transmission extruded acrylic.

INSTALLATION

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

BALLASTS

Energy efficient, thermally protected, automatic

resetting, Class P, high power factor, sound rated A, magnetic or electronic ballasts. CEE NEMA Premium compliant.

ELECTRICAL

Standard class "P", thermally protected, autoresetting HPF ballast, sound rated A. CEE NEMA Premium compliant. All ballast leads extend a minimum of 6" through access location. NEC/CEC-compliant ballast disconnect is standard.

EMERGENCY

Field installation of battery packs requires use of remote test switch.

CEILING COMPATIBILITY

Luminaire is available to fit exposed grid ceilings, or hard ceilings when a flange kit is ordered. Some options may increase fixture depth. For information on compatibility with specific ceilings, or where plenum depth is a problem, contact your Columbia Lighting representative. Four integral T-bar clips are standard.

ORDERING INFORMATION

EXAMPLE EPC24-232G-DL-E104U-PLUS35

EPC 24 - 2									
MODEL	NO. OF LAMPS	CEILING TYPE	SHIELDING	AIR FUNCTION	VOLTAGE	OPTIONS			
EPC e-poc® Full Distribution Luminaire	2 Two	G Grid SM Surface Mount For hard ceilings use flange kit.	DL Delta Profile SH Shield Profile	Blank Static A Air Return Side Slots	U 120V-277V 347 347V²	C388 3-Wire Flex	C488 4-Wire Flex	C588 5-Wire Flex	EL Emergency Battery Pack
						GLR Fast Blow Fuse	GMF Slow Blow Fuse	NYC NYC Compliant	NYCU NYC Compliant, Union Label
						WIH wiHUBB Enabled ⁵			
SIZE	LAMP TYPE	BALLAST			LAMPS				
24 2' x 4'	28 4', T5: 28 Watt 32 4', T8: 32, 30, 28, or 25 Watt 54 4', T5HO: 54 or 51 Watt	E Electronic T8, 0.88 Ballast Factor, Instant Start			F0730 30K 75CRI T8 Lamps Installed				
		ED Electronic T8, T5, T5HO Dimming, Programmed Start ²	ESD Electronic T8, 0.88 Ballast Factor, Step Dimming, Programmed Start ¹	ELW Electronic T8, 0.77 Ballast Factor, Low Wattage, Instant Start	F0735 35K 75CRI T8 Lamps Installed				
		EHL Electronic T8, 1.18 Ballast Factor, High Wattage, Instant Start	E104 Electronic T8, 1.04 Ballast Factor, Instant Start (N/A 1-Lamp) ⁴	E104 Electronic T8, 1.04 Ballast Factor, Instant Start (N/A 1-Lamp) ⁴	F0741 41K 75CRI T8 Lamps Installed				
		ESD104 Electronic T8, 1.04 Ballast Factor, Step Dimming, Programmed Start ^{1,4}	EP104 Electronic T8, 1.04 Ballast Factor, Programmed Start ⁴	EP Electronic T5, T5HO, 1.0 Ballast Factor or T8, 0.88 Ballast Factor, Programmed Start	F0830 30K 82CRI T8 Lamps Installed				
		EP95 Electronic T5, 0.95 Ballast Factor, Programmed Start (N/A T5HO, 1-Lamp)	EP95 Electronic T5, 0.95 Ballast Factor, Programmed Start (N/A T5HO, 1-Lamp)	ESD95 Electronic T5, 0.95 Ballast Factor, Step Dimming, Programmed Start (N/A T5HO, 1-Lamp)	F0835 35K 82CRI T8 Lamps Installed				
		EP115 Electronic T5, 1.15 Ballast Factor, Programmed Start (N/A T5HO, 1-Lamp)	EP115 Electronic T5, 1.15 Ballast Factor, Programmed Start (N/A T5HO, 1-Lamp)	ESD115 Electronic T5, 1.15 Ballast Factor, Step Dimming, Programmed Start (N/A T5HO, 1-Lamp)	F0841 41K 82CRI T8 Lamps Installed				
		ESD80 Electronic T5HO, 0.80 Ballast Factor, Step Dimming, Programmed Start (2-Lamp 54W only)	ESD80 Electronic T5HO, 0.80 Ballast Factor, Step Dimming, Programmed Start (2-Lamp 54W only)		PLUS30 30K 82CRI 28W T8 Lamps Installed ³	PLUS35 35K 82CRI 28W T8 Lamps Installed ³	PLUS41 41K 82CRI 28W T8 Lamps Installed ³	FOH830 30K High Lumen T8 Lamps Installed	FOH835 35K High Lumen T8 Lamps Installed
					FOH841 41K High Lumen T8 Lamps Installed	F5830 30K 85CRI T5 or T5HO Lamps Installed	F5835 35K 85CRI T5 or T5HO Lamps Installed	F5841 41K 85CRI T5 or T5HO Lamps Installed	F5H830 30K High Lumen T5 Lamps Installed
					F5H835 35K High Lumen T5 Lamps Installed	F5H841 41K High Lumen T5 Lamps Installed			

ACCESSORIES (ORDER SEPARATELY)

- FK24** 2' x 4' Single Flange Kit
- FKCR** Flange Kit Row Adaptor

Damp Label - standard
¹ Not compatible with T8 25, 28, or 30 watt energy savings lamps.
² Where available.
³ Not recommended for use with step or full dimming.
⁴ For e-poc Plus, order "-PlusXX" lamps under "Options."
⁵ Not available with Surface Mount Ceiling Types

Protected by US Patents D603,999; D604,446. Additional US and Canada Patents Pending. Specifications subject to change without notice. Page 1/2 Rev. 08/31/11

RECESSED ARCHITECTURAL / EPC24-2



PHOTOMETRIC DATA

LUMINAIRE DATA

Luminaire	EPC24-228G-DL e-poc™ Troffer Recessed 2' x 4' 2-lamp with two opal delta lenses
Ballast	B228PU95S50D
Ballast Factor	0.95
Lamp	F28T5
Lumens per Lamp	2600
Watts	60
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.27 90° = 1.34
Luminous Opening in Feet	Length: 3.86 Width: 1.88 Height: 0.00

AVG. LUMINANCE (Candela/Sq. M.)

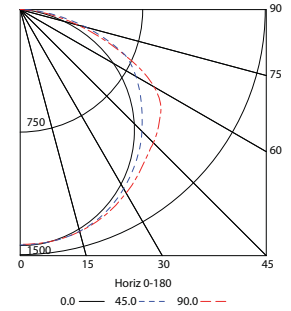
	0.0	22.5	45.0	67.5	90.0
0	2142	2142	2142	2142	2142
30	2114	2136	2175	2206	2220
40	2089	2120	2192	2279	2312
45	2073	2108	2211	2352	2417
50	2045	2095	2243	2476	2557
55	2004	2079	2325	2620	2723
60	1952	2068	2444	2753	2792
65	1874	2064	2587	2692	2671
70	1756	2116	2550	2468	2411
75	1582	2212	2321	2161	2103
80	1315	2093	1965	1811	1760
85	970	1583	1430	1259	1208

COEFFICIENTS OF UTILIZATION (%)

RC	80					70					50					0				
	RW	70	50	30	10	70	50	30	10	50	30	10	0	70	50	30	10	0		
1	98	93	89	85	95	91	87	84	87	84	81	74								
2	88	80	74	68	86	79	73	67	75	70	66	61								
3	80	70	62	56	78	68	61	55	66	60	54	51								
4	73	62	53	47	71	60	53	47	58	51	46	43								
5	67	55	46	40	65	54	46	40	52	45	39	36								
6	62	49	41	35	60	48	40	34	47	39	34	32								
7	57	44	36	30	55	44	36	30	42	35	30	28								
8	53	40	32	27	51	40	32	27	38	32	27	25								
9	49	37	29	24	48	36	29	24	35	29	24	22								
10	46	34	27	22	45	34	27	22	33	26	22	20								

Test 14980 Test Date 5/2/08

INDOOR CANDELA PLOT



RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1143	22.0	24.4
0-40	1898	36.5	40.4
0-60	3529	67.9	75.2
0-90	4693	90.3	100.0
0-180	4693	90.3	100.0

ENERGY DATA

Total Luminaire Efficiency	90.3%
Luminaire Efficacy Rating (LER)	74
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.24 based on 3000 hrs. and \$0.08 per KWH

LUMINAIRE DATA

Luminaire	EPC24-232G-DL e-poc™ Troffer Recessed 2' x 4' 2-lamp with two opal shield lenses
Ballast	B232IUNV104-A
Ballast Factor	1.04
Lamp	F28T8
Lumens per Lamp	2750
Watts	56
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.24 90° = 1.37
Luminous Opening in Feet	Length: 3.86 Width: 1.88 Height: 0.00

AVG. LUMINANCE (Candela/Sq. M.)

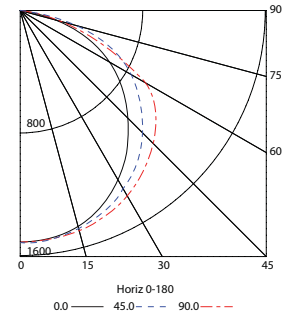
	0.0	22.5	45.0	67.5	90.0
0	2235	2235	2235	2235	2235
30	2165	2209	2290	2360	2376
40	2109	2184	2327	2453	2490
45	2073	2167	2352	2511	2559
50	2028	2148	2381	2580	2644
55	1978	2128	2423	2666	2752
60	1910	2109	2474	2756	2789
65	1832	2095	2555	2601	2534
70	1722	2099	2450	2246	2155
75	1565	2126	2132	1914	1840
80	1341	1999	1811	1649	1597
85	1055	1600	1430	1276	1225

COEFFICIENTS OF UTILIZATION (%)

RC	80					70					50					0				
	RW	70	50	30	10	70	50	30	10	50	30	10	0	70	50	30	10	0		
1	95	90	86	83	92	88	85	82	85	82	79	72								
2	86	78	72	67	83	76	71	66	73	69	64	60								
3	78	68	61	55	76	67	60	54	64	58	53	50								
4	71	60	52	46	69	59	52	46	57	50	45	42								
5	65	53	45	39	63	52	45	39	51	44	39	36								
6	60	48	40	34	58	47	40	34	46	39	34	31								
7	56	43	36	30	54	43	35	30	41	35	30	27								
8	52	39	32	27	50	39	32	27	38	31	26	24								
9	48	36	29	24	47	36	29	24	35	28	24	22								
10	45	33	26	22	44	33	26	21	32	26	21	20								

Test 15035 Test Date 6/19/08

INDOOR CANDELA PLOT



RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

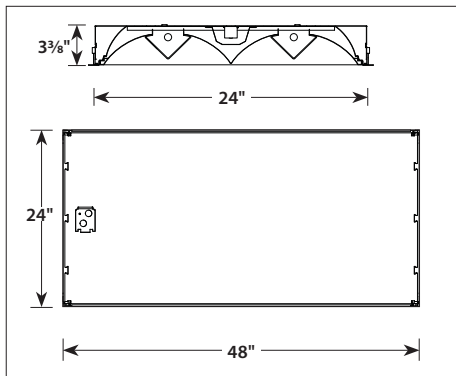
ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1198	21.8	24.9
0-40	1993	36.2	41.5
0-60	3680	66.9	76.6
0-90	4803	87.3	100.0
0-180	4803	87.3	100.0

ENERGY DATA

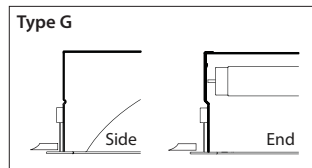
Total Luminaire Efficiency	87.3%
Luminaire Efficacy Rating (LER)	89
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.70 based on 3000 hrs. and \$0.08 per KWH

DIMENSIONAL DATA

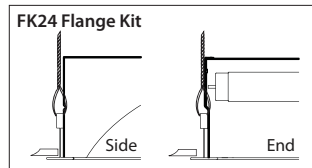


NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

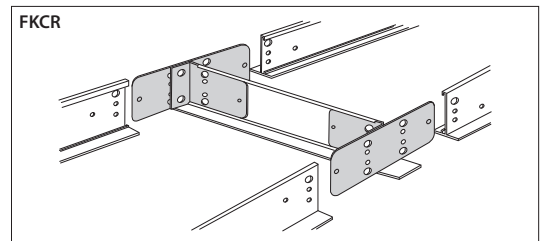
CEILING COMPATIBILITY



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.



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 3/8", Length [48" x (# in row)] + 3/8". Example: (48" x 2) + 3/8" = 96 3/8"

Flange kit cut out dimension for single unit only: 24 3/8" x 48 3/8"

DESCRIPTION

The Accord™ redefines lighting by improving on aesthetics, comfort and energy savings. The Accord provides the right amount of light while eliminating surface shadows commonly found in parabolics. Therefore, Accord increases the comfort level while providing significant energy savings.

The Accord is the ideal solution for offices, schools, hospitals, retail and other applications. It is designed for installations when the housing will be in direct contact with insulation.

Catalog #		Type	
Project		'VLA' ALT	
Comments		Date	
Prepared by			

SPECIFICATION FEATURES

Construction

Shallow 3-1/4" deep housing is die formed of code gauge, prime cold rolled steel. Heavy gauge end plates are securely attached with screws for strength and rigidity and the elimination of gaps. Four auxiliary fixture end suspension points are provided. KOs for continuous row wiring. Large access plate for supply connection.

Electrical

Long-Life LED system coupled with electrical driver to deliver optimal performance. LED's available in 3500 or 4000k with a CRI ≥ 85. Projected life is 50,000 hours at 70% lumen output. cULus listed. Electronic drivers are available for 120-277V applications. A 0-10V dimming control is available (standard).

Driver Access

Drivers can be removed from below without tools.

Finish

Durable cold rolled steel with multistage, iron phosphate pretreatment and white enamel finish to ensure maximum bonding and rust inhibition.

Reflectors

Reflector has high reflectance baked matte white enamel finish for luminous uniformity.

Shielding

Positively retained frosted acrylic profile lenses provide a soft but effective distribution of light.



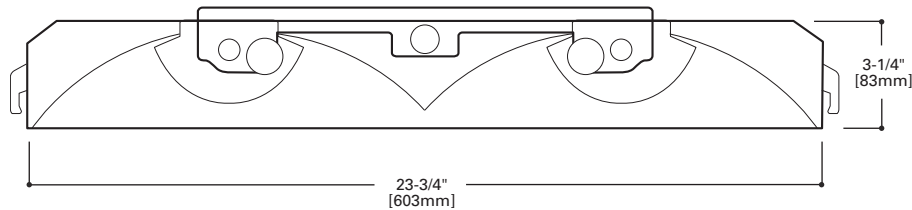
**2AC
LED**

LED LAMPS

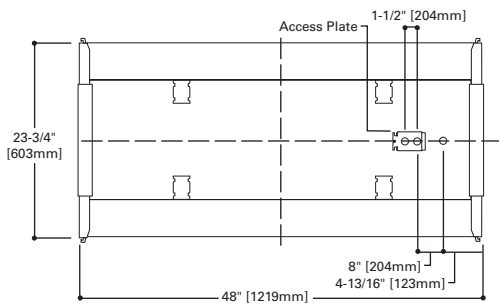
2' x 4' Recessed Series
For Use in Insulated Ceilings

accord
Enhanced Lighting Series

LINEAR LED
PLATFORM

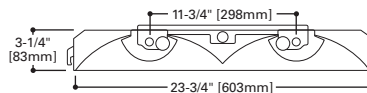


MOUNTING DATA

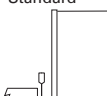
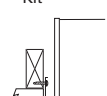


NOTE: 2' x 2' and 2' x 4' allow for row mounting
(1' x 4' does not support feature)

LAMP CONFIGURATIONS



CEILING COMPATIBILITY

G	F	Ceiling Type**	Trim Type
Grid/Lay-in Standard	Drywall Frame Kit	Exposed Grid	G
		Concealed T	G or T
		Slot Grid	G or T
		Flange	***

ENERGY DATA

Input Watts:
42=52 Watts
43=62 Watts

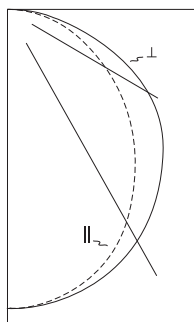
***See Drywall Frame Kit Accessory

LINEAR DISCONNECT

Safe and convenient means of disconnecting power.



PHOTOMETRICS



2AC-42-UNV-L835-CD2-U
 Dimming Drivers
 Linear LED 3500K
 Spacing criterion:
 (II) 1.2 x mounting
 height, (⊥) 1.3 x
 mounting height
 Test Report:
 P30784

Candlepower

Angle	Along II	45°	Across ⊥
0	1607	1607	1607
5	1609	1599	1602
10	1579	1576	1586
15	1531	1538	1557
20	1464	1486	1518
25	1380	1422	1467
30	1285	1345	1405
35	1178	1258	1334
40	1065	1163	1255
45	946	1061	1167
50	824	957	1072
55	703	846	972
60	590	736	858
65	473	623	718
70	359	503	535
75	254	366	357
80	150	218	200
85	63	84	79
90	1	1	1

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance																	
	80%			70%			50%			30%			10%			0%		
	70	50	30	70	50	30	10	50	30	10	50	30	10	50	30	0		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	55	42	34	28	41	33	28	40	33	28	39	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

Zonal Lumen Summary

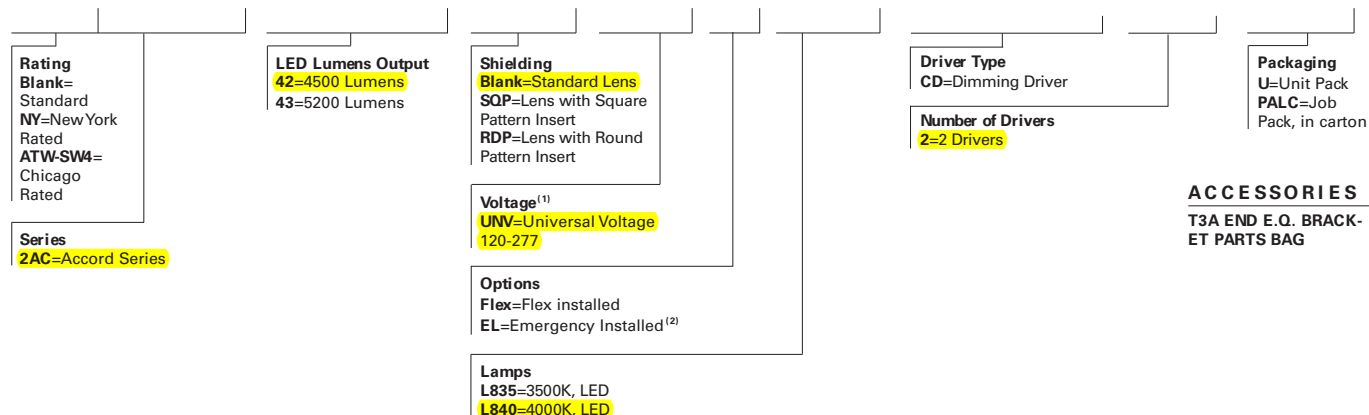
Zone	Lumens	%Fixture
0-30	1241	26.7
0-40	2026	43.6
0-60	3597	77.4
0-90	4645	100.0
0-180	4645	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	1799	2018	2220
55	1648	1984	2279
65	1505	1983	2285
75	1320	1902	1855
85	972	1296	1219

ORDERING INFORMATION

SAMPLE NUMBER: 2AC-43-UNV-L835-CD2-U



NOTES: ⁽¹⁾ Products also available in non-US voltages and frequencies for international markets. ⁽²⁾ Must specify voltage (120V or 277V) when selecting EL option.

Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

SHIPPING INFORMATION

Catalog No.	Wt.
2AC-42	28 lbs.
2AC-43	28 lbs.

PROJECT	CATALOG NO. 1200 DR W 4000 MV 050 SS IN 3500 AA	TYPE SLC
FIRM	SPECIFIER	QUANTITY

LUNERA 1200 SERIES

GEN 1



GRID LAY-IN LED LUMINAIRE WITH REPLACEABLE LEDES
4000K CCT (24" X 24" X 4")

INTENDED USE

The Lunera® 1200 SERIES is a grid lay-in luminaire for office, school, hospital, retail, and other commercial applications. The uniform luminance across the lens generates a soft, voluminous light, making it an ideal replacement for standard fluorescent fixtures. The 1200 SERIES fixture features replaceable LED modules making it ideal for field service or upgrades over the fixture's life.

Lunera uses the Lunera truLITE™ Color Consistency Process to bin, select, and blend superior quality LEDs, achieving a greater output and efficiency, while producing high color rendering and extended lifetime performance. Each fixture is tested and serialized to ensure color consistency.

The fixtures are designed in California, manufactured in the U.S., and are UL listed, LM-79 tested, RoHS compliant, and backed by a 5-year warranty.

KEY FEATURES

LIGHT QUALITY

Color Temperature (CCT)	4000K
Lumens	3,490
Fixture Output Efficacy	70
CRI	85
Measured R9	54
Directional	Direct

POWER AND ELECTRICAL SYSTEM

Watts	50
Watts/Sq Ft (typ)	0.50
High Efficiency PSU	Multi-voltage, Remotable to 100'
Dimming	Yes, 0-10V continuous

RELIABILITY

LM-79 Tested	Yes, independent lab tests are available online
UL Listed	Yes, UL listing certification is available online
Environment	Dry Rated
Warranty	5-years
L70 Lumen Maintenance	50,000 hours

VALIDATIONS



POWER CONSUMPTION

50 watts

LIGHT OUTPUT

3,490 lumens

FIXTURE EFFICACY

70 lumens/watt

DESIGN



Visit the product page online for views of the interior replaceable LED modules.

LUNERA 1200 SERIES

4000K CCT, GRID LAY-IN LED LUMINAIRE WITH REPLACEABLE LEDS
1st Generation



SPECIFICATIONS

Item	Specification	
	Spacing Criteria	1.3
	Color Temperature	4000K
	Lumens	3490
	Efficacy (lm/w)	70
	Color Consistency	Proprietary Algorithm
	Lumen Maint (L70)	50,000 Hours
	Electrical	Power Factor
Input Voltage		100V - 277V, 50/60Hz
Power Consumption		50W
Control		Dimming, 0-10V, IEC 60969 Annex E
Physical	Dimensions (HxWxD)	24" x 24" x 4"
	Weight	11 lbs
	Housing	Pressed Steel
	Optics	Optical Acrylic Diffusion
	Mounting	Fits standard size drop ceiling grid (15/16, 9/16, Chicago Plenum)
	Operating Temperature	-4°F to 122°F (-20°C to 50°C)
	Humidity	20%-85% RH, non-condensing
Certification & Safety	Fixture Run Lengths	15' nominal, 100' available
	Certification	UL 2108 & CUL
	Material Usage	No mercury or lead used, RoHS compliant
	Environment	Dry
	LED Class	L70 Rated to 50,000+ hrs @ T _c ≤125C° (257°F)

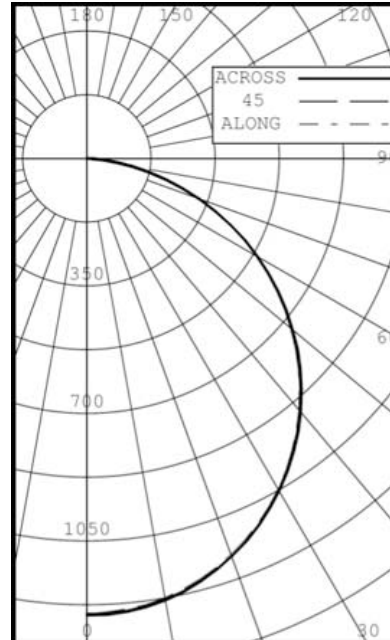
PHOTOMETRICS*

ZONAL LUMEN SUMMARY

Zone	Lumens	% LAMP	% FIXT
0-30°	967	27.71	27.71
0-40°	1578	45.23	45.23
0-60°	2772	79.46	79.46
0-90°	3488	100.0	100.0

INTENSITY (CANDLEPOWER) SUMMARY

Angle	0°	45°
0°	1252	1252
5°	1248	1243
15°	1199	1196
25°	1109	1105
35°	980	977
45°	819	817
55°	631	632
65°	430	428
75°	223	223
85°	46	47
90°	0	0

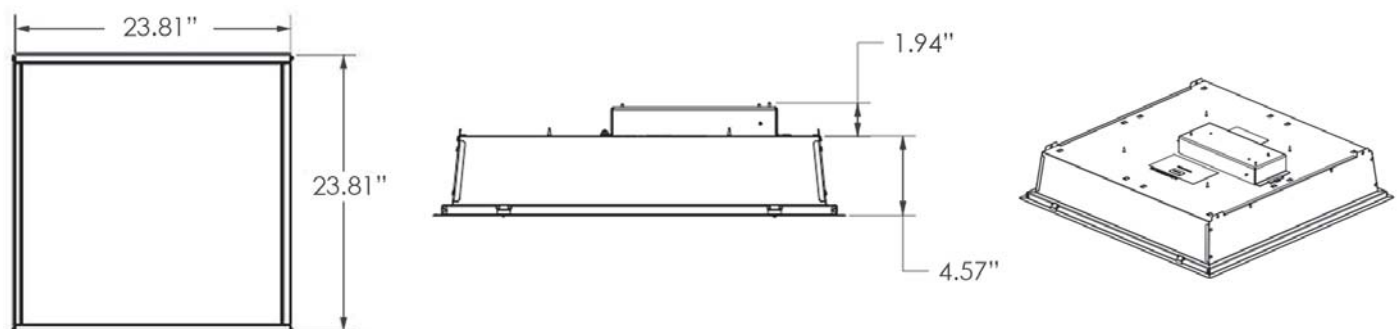


* LM-79-09 Testing Procedure completed for this product.
Results may vary per actual order. Contact Lunera for more information.

CONSTRUCTION

Solid design, precision tooling and exacting quality control create a commercial LED fixture that meets the industry's needs and requirements. Pressed steel extrusion with acrylic layers, tested and proven LEDs and a high-reliability power supply.

DIMENSIONS



LUNERA 1200 SERIES



4000K CCT, GRID LAY-IN LED LUMINAIRE WITH REPLACEABLE LEDS
1st Generation

INSTALLATION GUIDES

Installation guides for this product are available at www.lunera.com Installation accessories include:

Grid Industrial
Lay-In Surface
(included) Mounted



LUMINAIRE ORDERING INFORMATION

When ordering this product, select from the available configurations.

Example: 1200-DR-W-4000-MV-050-SS-IN-3500-AA

1	2	3	4	5	6	7	8	9	10
1200	DR	W	4000	MV	050	XX	IN	3500	AA
FAMILY	DIRECTIONAL	FEATURE	CCT	VOLTAGE	WATTAGE	CONTROL	PSU	LUMENS	GENERATION

1 – FAMILY

1200: Lunera 1200 SERIES Grid Lay-In Luminaire

2 – DIRECTIONAL

DR: Direct

3 – FEATURE

W: White Finish over Steel Housing

4 – COLOR TEMPERATURE (CCT)

4000: 4000K

5 – VOLTAGE

MV: Multi-voltage (100V - 277V, 50/60Hz)

6 – FIXTURE WATTAGE

050: 50 Watts

7 – CONTROL OPTIONS

SS: Non-Dimming

DM: 0-10V Continuous Dimming

8 – POWER SUPPLY UNIT

IN: Integrated

9 – LUMENS

3500: 3,490 Lumens

10 – GENERATION

AA: 1st Generation

ACCESSORY ORDERING INFORMATION

The following accessories are available for this product:

Parking Garage/Industrial Environment Mount Kit (part number GM2)

Refer to the website for installation guides and information.

MORE INFORMATION

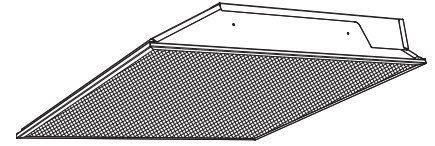
www.lunera.com

E: info@lunera.com

T: 650-241-3875

F: 650-362-1987

Lunera Lighting, Inc.
3696 Haven Avenue, Ste A
Redwood City, CA 94063



Specifier's Reference

Project
Type
Model No.
Comments

application

- High efficacy long life solid state lighting platform.
- General lighting distribution is excellent for ambient lighting.
- Lumen packages range from 2,300 to 3,800 lumens, providing flexibility to optimize light levels for a specific application.
- High CRI source provides excellent color rendering.
- LEDs are an excellent source for use with controls since frequent switching does not affect the life of the light source.
- Lighting power densities of 0.75 Watts/square foot or less are possible while maintaining recommended light levels.

construction/finish

- Lower housing includes smooth edges for safe, easy handling.
- Housing is multi-stage phosphate treated for maximum corrosion resistance and finish coat is high reflectance baked white enamel.
- Sealed housing prevents the entry of dirt and bugs into the luminaire which eliminates the need for internal cleaning and reduces maintenance.
- T-bar clips are included.

electrical

- Driver and LED boards are accessible from above. LED boards are individually replaceable if required.
- ETL listed to UL standards, suitable for damp locations.
- Five-year luminaire warranty including LED boards and driver.
- High efficiency LEDs have 50,000 hour rated life (defined as 70% lumen maintenance.)
- Combinations are available providing nearly 90 delivered lumens per Watt

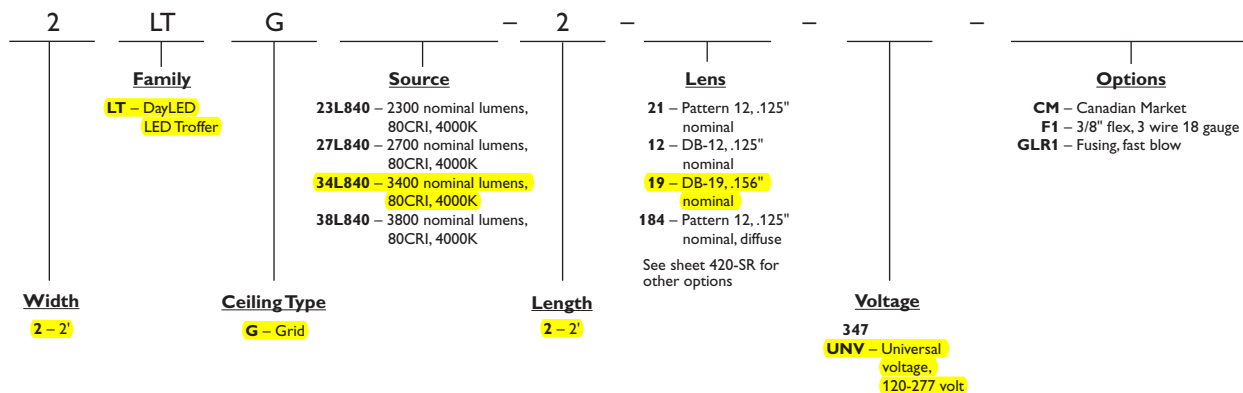
enclosures

- Standard sealed configuration does not include a door frame since cleaning and relamping are not required.
- Frameless design maximizes luminous aperture and provides a clean appearance.
- A variety of lenses are available to tailor the luminaire to the application.
- Contact factory for applications requiring a door frame.

accessories

- **FMA22** – 2'x2' "F" mounting frame for NEMA "F" mounting.
- **FMA24** – 2'x4' "F" mounting frame for NEMA "F" mounting.

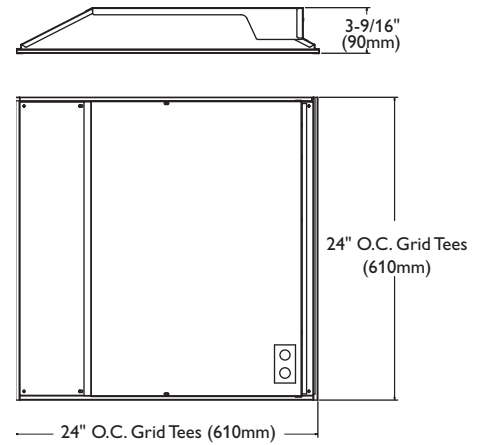
Green Choice: 2LTG27L840-2-21-UNV



energy data

Model	Initial Delivered Lumens at 25°C Ambient	Input Power	Lumens Per Watt
2LTG23L840-2-21	2253	26W	87LPW
2LTG23L840-2-184	2203	26W	85LPW
2LTG27L840-2-21	2665	30W	89LPW
2LTG27L840-2-184	2615	31W	84LPW
2LTG34L840-2-21	3368	40W	84LPW
2LTG34L840-2-184	3288	40W	82LPW
2LTG38L840-2-21	3796	46W	83LPW
2LTG38L840-2-184	3697	45W	82LPW

dimensions



Fluorescent Configuration	Approx. Total Delivered Lumens	DayLED Equivalent*
2 lamp T8 31U6	3,500	2LTG34L840
2 lamp T8 31U1	3,900	2LTG38L840
3 lamp T8 31U1	5,500	n/a max. lumens would be 2LTG38L840
2 lamp T12 40U6	2,800	2LTG27L840
3 lamp T12 40U3	3,800	2LTG38L840

Fluorescent Configuration	Approx. Total Delivered Lumens	DayLED Equivalent
2 lamp T8 17W	2,000	2LTG23L840
3 lamp T8 17W	2,850	2LTG27L840
4 lamp T8 17W	3,650	2LTG34L840
2 lamp CF40	4,800	n/a, max. lumens would be 2LTG38L840
3 lamp CF40	6,900	n/a, max. lumens would be 2LTG38L840

*DayLED equivalent will provide similar delivered lumens and light levels. Analysis to determine appropriate light levels for the space is highly recommended.

photometry

2x2 DayLED LED Troffer, 2300 nominal lumens, standard lens

LER – 87

Catalog No.	2LTG23L840-2-21	Candlepower				Light Distribution			Average Luminance						
		Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross			
Test No.	29485	0	993	993	993	0-30	755	33.5	45	1806	1730	1901			
S/MH	1.2	5	988	985	989	0-40	1208	53.6	55	1357	1270	1393			
Lamp Type	25WLED	10	972	967	976	0-60	1929	85.6	65	949	766	939			
Lumens/Lamp	2253	15	945	944	953	0-90	2253	100.0	75	688	526	815			
Input Watts	26	20	905	908	918				85	445	286	547			
		25	856	856	870	Coefficients of Utilization									
		30	792	794	814	EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
		35	719	723	744	pcc	80			70			50		
		40	633	635	657	pw	70	50	30	70	50	30	50	30	
		45	534	535	562	RCR									
		50	434	439	457	0	118	118	118	115	115	115	111	111	
		55	341	339	350	1	110	105	102	107	103	100	98	95	
		60	259	242	257	2	101	93	86	97	91	85	88	82	
		65	189	166	187	3	93	82	76	90	81	75	79	72	
		70	136	111	144	4	84	73	66	82	72	65	70	64	
		75	97	84	115	5	79	67	58	77	66	57	64	56	
		80	68	62	86	6	72	60	52	70	59	52	57	51	
		85	35	28	43	7	68	55	46	67	55	46	53	46	
						8	64	51	42	61	50	41	48	41	
						9	59	46	39	57	46	39	45	38	
						10	56	42	35	55	42	35	41	34	

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

2x2 DayLED LED Troffer, 2300 nominal lumens, diffuse lens

LER – 85

Catalog No.	2LTG23L840-2-184	Candlepower				Light Distribution			Average Luminance						
		Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross			
Test No.	29486	0	967	967	967	0-30	724	32.8	45	1671	1617	1756			
S/MH	1.2	5	962	960	961	0-40	1146	52.0	55	1322	1247	1381			
Lamp Type	25WLED	10	943	941	945	0-60	1838	83.4	65	1029	928	1049			
Lumens/Lamp	2203	15	909	910	918	0-90	2203	100.0	75	844	683	808			
Input Watts	26	20	866	871	880				85	521	327	445			
		25	807	814	829	Coefficients of Utilization									
		30	740	749	764	EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
		35	666	675	694	pcc	80			70			50		
		40	581	589	608	pw	70	50	30	70	50	30	50	30	
		45	494	500	519	RCR									
		50	414	419	432	0	118	118	118	115	115	115	111	111	
		55	332	333	347	1	109	105	101	107	103	98	97	94	
		60	263	261	273	2	100	93	85	97	91	84	86	81	
		65	205	201	209	3	92	81	73	90	81	72	78	71	
		70	159	149	157	4	84	72	65	82	71	64	69	63	
		75	119	109	114	5	78	66	57	76	65	56	63	56	
		80	82	72	77	6	72	59	51	70	58	51	56	50	
		85	41	32	35	7	68	55	46	66	54	46	52	45	
						8	63	50	41	61	48	41	47	40	
						9	58	46	38	57	46	38	44	38	
						10	56	42	34	54	41	34	40	34	

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

photometry

2x2 DayLED LED Troffer, 2700 nominal lumens, standard lens

LER – 89

Catalog No. 2LTG27L840-2-21 Test No. 29479 S/MH 1.2 Lamp Type 30WLED Lumens/Lamp 2665 Input Watts 30 Comparative yearly lighting energy cost per 1000 lumens – \$2.70 based on 3000 hrs. and \$.08 pwr KWH. The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology. Photometric values based on test performed in compliance with LM-79.	Candlepower <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>0</td><td>1170</td><td>1170</td><td>1170</td></tr> <tr><td>5</td><td>1166</td><td>1164</td><td>1167</td></tr> <tr><td>10</td><td>1145</td><td>1144</td><td>1152</td></tr> <tr><td>15</td><td>1111</td><td>1115</td><td>1125</td></tr> <tr><td>20</td><td>1065</td><td>1071</td><td>1088</td></tr> <tr><td>25</td><td>998</td><td>1013</td><td>1037</td></tr> <tr><td>30</td><td>927</td><td>939</td><td>967</td></tr> <tr><td>35</td><td>841</td><td>851</td><td>887</td></tr> <tr><td>40</td><td>735</td><td>744</td><td>784</td></tr> <tr><td>45</td><td>624</td><td>635</td><td>665</td></tr> <tr><td>50</td><td>510</td><td>523</td><td>550</td></tr> <tr><td>55</td><td>394</td><td>406</td><td>428</td></tr> <tr><td>60</td><td>296</td><td>299</td><td>316</td></tr> <tr><td>65</td><td>221</td><td>202</td><td>228</td></tr> <tr><td>70</td><td>169</td><td>133</td><td>163</td></tr> <tr><td>75</td><td>133</td><td>89</td><td>119</td></tr> <tr><td>80</td><td>97</td><td>66</td><td>80</td></tr> <tr><td>85</td><td>49</td><td>40</td><td>40</td></tr> </tbody> </table>				Angle	End	45	Cross	0	1170	1170	1170	5	1166	1164	1167	10	1145	1144	1152	15	1111	1115	1125	20	1065	1071	1088	25	998	1013	1037	30	927	939	967	35	841	851	887	40	735	744	784	45	624	635	665	50	510	523	550	55	394	406	428	60	296	299	316	65	221	202	228	70	169	133	163	75	133	89	119	80	97	66	80	85	49	40	40	Light Distribution <table border="1"> <thead> <tr> <th>Degrees</th> <th>Lumens</th> <th>% Luminaires</th> </tr> </thead> <tbody> <tr><td>0-30</td><td>829</td><td>33.5</td></tr> <tr><td>0-40</td><td>1426</td><td>53.5</td></tr> <tr><td>0-60</td><td>2283</td><td>85.7</td></tr> <tr><td>0-90</td><td>2665</td><td>100.0</td></tr> </tbody> </table>			Degrees	Lumens	% Luminaires	0-30	829	33.5	0-40	1426	53.5	0-60	2283	85.7	0-90	2665	100.0	Average Luminance <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45°</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>45</td><td>2111</td><td>2054</td><td>2250</td></tr> <tr><td>55</td><td>1568</td><td>1521</td><td>1704</td></tr> <tr><td>65</td><td>1110</td><td>933</td><td>1145</td></tr> <tr><td>75</td><td>943</td><td>558</td><td>844</td></tr> <tr><td>85</td><td>623</td><td>409</td><td>508</td></tr> </tbody> </table>				Angle	End	45°	Cross	45	2111	2054	2250	55	1568	1521	1704	65	1110	933	1145	75	943	558	844	85	623	409	508				
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2x2 DayLED LED Troffer, 2700 nominal lumens, diffuse lens

LER – 84

Catalog No. 2LTG27L840-2-184 Test No. 29478 S/MH 1.2 Lamp Type 30WLED Lumens/Lamp 2615 Input Watts 31 Comparative yearly lighting energy cost per 1000 lumens – \$2.86 based on 3000 hrs. and \$.08 pwr KWH. The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology. Photometric values based on test performed in compliance with LM-79.	Candlepower <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>0</td><td>1144</td><td>1144</td><td>1144</td></tr> <tr><td>5</td><td>1138</td><td>1136</td><td>1139</td></tr> <tr><td>10</td><td>1115</td><td>1113</td><td>1121</td></tr> <tr><td>15</td><td>1076</td><td>1079</td><td>1087</td></tr> <tr><td>20</td><td>1026</td><td>1031</td><td>1042</td></tr> <tr><td>25</td><td>955</td><td>968</td><td>981</td></tr> <tr><td>30</td><td>876</td><td>886</td><td>905</td></tr> <tr><td>35</td><td>787</td><td>804</td><td>820</td></tr> <tr><td>40</td><td>691</td><td>699</td><td>721</td></tr> <tr><td>45</td><td>584</td><td>599</td><td>615</td></tr> <tr><td>50</td><td>491</td><td>495</td><td>511</td></tr> <tr><td>55</td><td>395</td><td>394</td><td>409</td></tr> <tr><td>60</td><td>314</td><td>310</td><td>322</td></tr> <tr><td>65</td><td>244</td><td>238</td><td>245</td></tr> <tr><td>70</td><td>186</td><td>178</td><td>183</td></tr> <tr><td>75</td><td>142</td><td>128</td><td>134</td></tr> <tr><td>80</td><td>96</td><td>85</td><td>90</td></tr> <tr><td>85</td><td>48</td><td>40</td><td>44</td></tr> </tbody> </table>				Angle	End	45	Cross	0	1144	1144	1144	5	1138	1136	1139	10	1115	1113	1121	15	1076	1079	1087	20	1026	1031	1042	25	955	968	981	30	876	886	905	35	787	804	820	40	691	699	721	45	584	599	615	50	491	495	511	55	395	394	409	60	314	310	322	65	244	238	245	70	186	178	183	75	142	128	134	80	96	85	90	85	48	40	44	Light Distribution <table border="1"> <thead> <tr> <th>Degrees</th> <th>Lumens</th> <th>% Luminaires</th> </tr> </thead> <tbody> <tr><td>0-30</td><td>858</td><td>32.8</td></tr> <tr><td>0-40</td><td>1359</td><td>52.0</td></tr> <tr><td>0-60</td><td>2181</td><td>83.4</td></tr> <tr><td>0-90</td><td>2615</td><td>100.0</td></tr> </tbody> </table>			Degrees	Lumens	% Luminaires	0-30	858	32.8	0-40	1359	52.0	0-60	2181	83.4	0-90	2615	100.0	Average Luminance <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45°</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>45</td><td>1976</td><td>1937</td><td>2080</td></tr> <tr><td>55</td><td>1572</td><td>1476</td><td>1628</td></tr> <tr><td>65</td><td>1225</td><td>1099</td><td>1230</td></tr> <tr><td>75</td><td>1007</td><td>802</td><td>950</td></tr> <tr><td>85</td><td>610</td><td>409</td><td>559</td></tr> </tbody> </table>				Angle	End	45°	Cross	45	1976	1937	2080	55	1572	1476	1628	65	1225	1099	1230	75	1007	802	950	85	610	409	559				
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2x2 DayLED LED Troffer, 3400 nominal lumens, standard lens

LER – 84

Catalog No. 2LTG34L840-2-21 Test No. 29481 S/MH 1.2 Lamp Type 38WLED Lumens/Lamp 3368 Input Watts 40 Comparative yearly lighting energy cost per 1000 lumens – \$2.86 based on 3000 hrs. and \$.08 pwr KWH. The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology. Photometric values based on test performed in compliance with LM-79.	Candlepower <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>0</td><td>1484</td><td>1484</td><td>1484</td></tr> <tr><td>5</td><td>1475</td><td>1474</td><td>1482</td></tr> <tr><td>10</td><td>1450</td><td>1448</td><td>1463</td></tr> <tr><td>15</td><td>1412</td><td>1410</td><td>1428</td></tr> <tr><td>20</td><td>1349</td><td>1356</td><td>1377</td></tr> <tr><td>25</td><td>1277</td><td>1282</td><td>1301</td></tr> <tr><td>30</td><td>1183</td><td>1188</td><td>1215</td></tr> <tr><td>35</td><td>1074</td><td>1078</td><td>1116</td></tr> <tr><td>40</td><td>938</td><td>939</td><td>987</td></tr> <tr><td>45</td><td>793</td><td>803</td><td>840</td></tr> <tr><td>50</td><td>656</td><td>658</td><td>684</td></tr> <tr><td>55</td><td>521</td><td>507</td><td>516</td></tr> <tr><td>60</td><td>392</td><td>372</td><td>379</td></tr> <tr><td>65</td><td>284</td><td>252</td><td>283</td></tr> <tr><td>70</td><td>204</td><td>165</td><td>217</td></tr> <tr><td>75</td><td>142</td><td>112</td><td>172</td></tr> <tr><td>80</td><td>98</td><td>83</td><td>127</td></tr> <tr><td>85</td><td>51</td><td>50</td><td>66</td></tr> </tbody> </table>				Angle	End	45	Cross	0	1484	1484	1484	5	1475	1474	1482	10	1450	1448	1463	15	1412	1410	1428	20	1349	1356	1377	25	1277	1282	1301	30	1183	1188	1215	35	1074	1078	1116	40	938	939	987	45	793	803	840	50	656	658	684	55	521	507	516	60	392	372	379	65	284	252	283	70	204	165	217	75	142	112	172	80	98	83	127	85	51	50	66	Light Distribution <table border="1"> <thead> <tr> <th>Degrees</th> <th>Lumens</th> <th>% Luminaires</th> </tr> </thead> <tbody> <tr><td>0-30</td><td>1130</td><td>33.5</td></tr> <tr><td>0-40</td><td>1805</td><td>53.6</td></tr> <tr><td>0-60</td><td>2887</td><td>85.7</td></tr> <tr><td>0-90</td><td>3368</td><td>100.0</td></tr> </tbody> </table>			Degrees	Lumens	% Luminaires	0-30	1130	33.5	0-40	1805	53.6	0-60	2887	85.7	0-90	3368	100.0	Average Luminance <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45°</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>45</td><td>2683</td><td>2597</td><td>2842</td></tr> <tr><td>55</td><td>2074</td><td>1899</td><td>2054</td></tr> <tr><td>65</td><td>1426</td><td>1164</td><td>1421</td></tr> <tr><td>75</td><td>1007</td><td>702</td><td>1219</td></tr> <tr><td>85</td><td>648</td><td>511</td><td>839</td></tr> </tbody> </table>				Angle	End	45°	Cross	45	2683	2597	2842	55	2074	1899	2054	65	1426	1164	1421	75	1007	702	1219	85	648	511	839				
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photometry

2x2 DayLED LED Troffer, 3400 nominal lumens, diffuse lens

LER – 82

Catalog No. 2LTG34L840-2-184 Test No. 29480 S/MH 1.2 Lamp Type 38WLED Lumens/Lamp 3288 Input Watts 40 Comparative yearly lighting energy cost per 1000 lumens – \$2.93 based on 3000 hrs. and \$.08 pwr KWH. The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology. Photometric values based on test performed in compliance with LM-79.	Candlepower				Light Distribution			Average Luminance			
	Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
0	1443	1443	1443	0-30	1080	32.8	45	2534	2438	2608	
5	1437	1431	1435	0-40	1709	52.0	55	1986	1869	2050	
10	1408	1405	1410	0-60	2742	83.4	65	1521	1376	1572	
15	1360	1359	1367	0-90	3288	100.0	75	1184	1009	1297	
20	1296	1297	1310				85	712	521	801	
25	1211	1220	1233	Coefficients of Utilization EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)							
30	1117	1119	1135	pcc	80		70		50		
35	998	1007	1028	pw	70	50	30	70	50	30	
40	877	884	899	RCR							
45	749	754	771	0	118	118	118	115	115	115	
50	616	621	645	1	109	105	101	107	103	98	
55	499	499	515	2	100	93	85	97	91	84	
60	394	392	408	3	92	81	73	90	81	72	
65	303	298	313	4	84	72	65	82	71	64	
70	230	223	241	5	78	66	57	76	65	56	
75	167	161	183	6	72	59	51	70	58	51	
80	109	110	128	7	68	55	46	66	54	46	
85	56	51	63	8	63	50	41	61	48	41	
				9	58	46	38	57	46	38	
				10	56	42	34	54	41	34	

2x2 DayLED LED Troffer, 3800 nominal lumens, standard lens

LER – 83

Catalog No. 2LTG38L840-2-21 Test No. 29483 S/MH 1.2 Lamp Type 45WLED Lumens/Lamp 3796 Input Watts 46 Comparative yearly lighting energy cost per 1000 lumens – \$2.89 based on 3000 hrs. and \$.08 pwr KWH. The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology. Photometric values based on test performed in compliance with LM-79.	Candlepower				Light Distribution			Average Luminance			
	Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
0	1664	1664	1664	0-30	1267	33.4	45	2997	2917	3203	
5	1660	1653	1657	0-40	2026	53.4	55	2253	2180	2400	
10	1632	1628	1636	0-60	3247	85.5	65	1567	1353	1652	
15	1584	1584	1596	0-90	3796	100.0	75	1326	833	1191	
20	1513	1519	1545				85	915	603	814	
25	1426	1437	1471	Coefficients of Utilization EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)							
30	1316	1330	1375	pcc	80		70		50		
35	1198	1208	1261	pw	70	50	30	70	50	30	
40	1053	1061	1116	RCR							
45	886	902	947	0	118	118	118	115	115	115	
50	718	745	785	1	110	105	102	107	103	100	
55	566	582	603	2	101	93	86	97	91	85	
60	422	424	454	3	93	82	75	90	81	73	
65	312	293	329	4	84	73	66	82	72	65	
70	242	191	233	5	79	67	58	77	66	57	
75	187	133	168	6	72	60	52	70	59	52	
80	136	98	115	7	68	55	46	66	55	46	
85	72	59	64	8	64	51	42	61	50	41	
				9	59	46	39	57	46	39	
				10	56	42	35	55	42	34	

2x2 DayLED LED Troffer, 3800 nominal lumens, diffuse lens

LER – 82

Catalog No. 2LTG38L840-2-184 Test No. 29482 S/MH 1.2 Lamp Type 45WLED Lumens/Lamp 3697 Input Watts 45 Comparative yearly lighting energy cost per 1000 lumens – \$2.93 based on 3000 hrs. and \$.08 pwr KWH. The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology. Photometric values based on test performed in compliance with LM-79.	Candlepower				Light Distribution			Average Luminance			
	Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
0	1618	1618	1618	0-30	1212	32.8	45	2811	2726	2953	
5	1610	1605	1609	0-40	1919	51.9	55	2213	2098	2313	
10	1579	1576	1583	0-60	3080	83.3	65	1742	1537	1762	
15	1525	1525	1537	0-90	3697	100.0	75	1418	1140	1354	
20	1452	1455	1471				85	915	654	814	
25	1354	1368	1390	Coefficients of Utilization EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)							
30	1242	1256	1280	pcc	80		70		50		
35	1117	1126	1157	pw	70	50	30	70	50	30	
40	975	993	1025	RCR							
45	831	843	873	0	118	118	118	115	115	115	
50	689	695	722	1	109	105	101	107	103	98	
55	556	560	581	2	100	92	85	97	91	84	
60	444	436	458	3	92	81	73	90	81	72	
65	347	333	351	4	84	72	65	82	71	64	
70	265	252	263	5	78	66	57	76	65	56	
75	200	182	191	6	72	59	51	70	58	51	
80	137	119	129	7	68	55	46	66	54	46	
85	72	64	64	8	63	50	41	61	48	41	
				9	58	46	38	57	46	38	
				10	55	42	34	54	41	34	



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 776 South Green Street • Tupelo, MS 38804
 p. 800.234.1890 • f. 662.841.5501 • www.daybrite.com
 Canadian Division
 189 Bullock Drive • Markham, Ontario L3P 1W4
 p. 905.294.9570 • f. 905.294.9811

Contact Factory for Additional Configurations.
 Specifications are subject to change without notice.
 Consult website for latest version of this spec sheet.

Some luminaires use fluorescent or high intensity discharge (HID) lamps that contain small amounts of mercury. Such lamps are labeled, "Contain Mercury" and/or the symbol "HG". Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycling and disposal can be found at www.lamprecycle.org

Catalog Number	2TL2 33L FW A19 D41 LP840
Notes	
Type	SLC

FEATURES & SPECIFICATIONS

INTENDED USE — The TLED combines digital lighting and control technologies with a high-performance optical system to deliver general ambient lighting for many applications such as schools, offices and hospitals. High-efficacy light engine delivers long life and excellent color, ensuring a superior quality light installation that is highly efficient and sustainable. **Certain airborne contaminants can diminish integrity of acrylic.** [Click here for Acrylic Environmental Compatibility table for suitable uses.](#)

CONSTRUCTION — Housing formed from cold-rolled steel. Housing is painted after fabrication for superior finish.

Smooth hemmed sides and smooth inward-formed end flanges, for easy handling.

Standard extruded aluminum door frame has superior structural integrity with premium appearance and mitered corners. Door frame is painted after fabrication, standard. Powder-painted rotary cam latches provide easy, secure door closure. Integral T-bar clips are standard. Acrylic shielding material is 100% UV stabilized.

OPTICS — Standard pattern #19 lens, 0.156" thick with highly transmissive overlay, is standard for superior brightness control. Overlay is 0.040" thick. Other lenses are available.

ELECTRICAL — Long-life LEDs, coupled with high-efficiency drivers, provide superior level and quality of illumination for extended service life. TLED is rated to deliver L80 performance for 50,000 hours.

Standard nLight™ embedded controls continuously monitor system performance, allow for constant lumen management/compensation function, facilitate simple "plug-and-play" network and controls upgrading via Cat-5 cable.

LED Accudrive™ driver, delivers full-range dimming from 0-10V control signal.

Ballast disconnect is provided where required to comply with U.S. and Canadian codes.

INSTALLATION — Drivers and internal components are accessible from floor. LED boards include plug-in connectors for easy replacement or servicing. Suitable for direct insulation contact.

LISTING — CSA certified to U.S. and Canadian standards.

WARRANTY — Five-year warranty coverage of luminaires includes fixture construction, LED light engine, driver and nLight control device. Terms and conditions apply.

Note: Specifications subject to change without notice.

TLED

2TLED

2' x 4'
LED

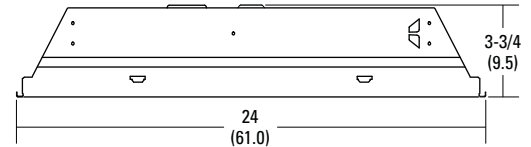


Specifications

Length: 24 (61.0)

Width: 24 (61.0)

Depth: 3-3/4 (9.5)



All dimensions are inches (centimeters) unless otherwise indicated.

ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Example: 2TL2 33L FW A19 D41 LP835 N100

2TL2	33L	FW	A19		D41	LP840	
Series	Lamp type	Door	Lens	Voltage	Driver	Lamp color	Control
2TL2 Recessed LED	33L ¹	FW Flush aluminum, white RW Regressed aluminum, white	A19 #19 pattern acrylic, 0.156" thick MWS Matte white .040 thick MPL Micro Prism SWL Satin white SBSQ Shadow box square	(blank) MVOLT (120-277V)	D41 41W ²	LP835 82 CRI, 3500 Kelvin LP840 82 CRI, 4000 Kelvin	N100 nLight without lumen management N80 nLight with 80% (L80) lumen management N100EMG nLight without lumen management for use with generator supply EM power N80EMG nLight with 80% (L80) lumen management for use with generator supply EM power

Accessories: Order as separate catalog number.	
DGA22	Drywall grid adapter for 2x2 recessed fixture.

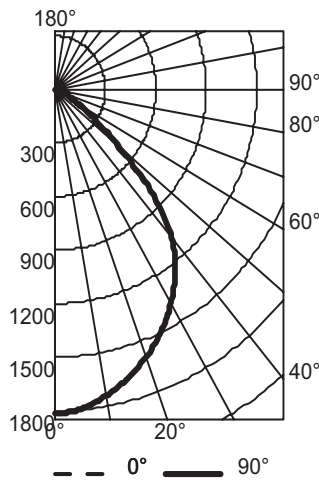
Notes

- Nominal lumens.
- Nominal wattage.

2TLED Recessed LED Lighting

PHOTOMETRICS

2TLED 3300L RW A19 D41 LP835 N100, 3,291 delivered lumens, test no. LTL19829, tested in accordance to IESNA LM-79.



CP Summary			Coefficients of Utilization									Zonal Lumen Summary				
			pc	80%			70%			50%						
0°	90		pw	70%	50%	30%	50%	30%	10%	50%	30%	10%	Zone	Lumens	% Lamp	% Fixture
0°	1812	1812	0	119	119	119	116	116	116	111	111	111	0° - 30°	1325	40.3	40.3
5°	1794	1796	1	111	107	104	105	102	99	101	98	96	0° - 40°	2090	63.5	63.5
15°	1675	1675	2	103	96	91	94	89	85	91	87	83	0° - 60°	3010	91.5	91.5
25°	1496	1494	3	96	87	80	85	79	74	82	77	73	0° - 90°	3291	100.0	100.0
35°	1247	1246	4	89	79	71	77	70	65	75	69	64	90° - 180°	0	0.0	0.0
45°	772	804	5	83	71	64	70	63	58	68	62	57	0° - 180°	3291	100.0	100.0
55°	243	290	6	77	65	58	64	57	52	63	56	51				
65°	82	89	7	72	60	52	59	52	47	58	51	46				
75°	74	76	8	67	55	48	55	47	42	53	47	42				
85°	28	28	9	63	51	44	51	43	39	49	43	38				
90	0	0	10	60	47	40	47	40	35	46	40	35				

T8 Fluorescent Performance Comparison				
		Typical 2x2 Fluorescent Troffer		
	TLED	(2) F32T8U	(3) F17	(4) F17
Delivered Lumens	3,291	3,380	2,700	3,700
Wattage	41	58	45	64
Lumens per watt	80	58	60	58
% of Light Output	BASELINE	103%	82%	112%
Energy Savings using LED	BASELINE	17	4	23
Energy Savings % using LED	BASELINE	29%	9%	36%



2TLED

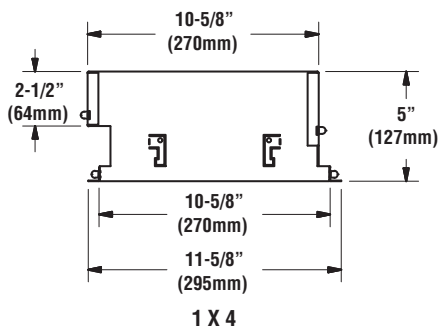
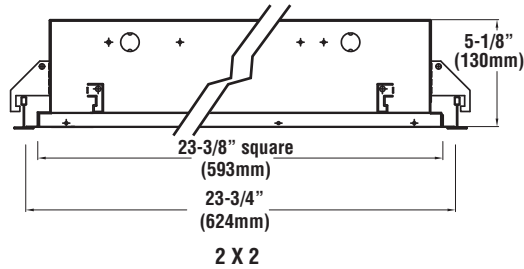
LED RECESSED TROFFER (XRT)



PRODUCT HIGHLIGHTS

- Long life, high brightness LEDs virtually eliminate maintenance.
- RoHS compliant, recyclable “green” design contains no mercury or other hazardous materials.
- Cooler running electronic components allow for improved lumen performance.
- Unique door and housing design allows for improved fixture maintenance, lens replacement and accessibility to power source from below ceiling.
- High angle distribution throws light on walls near ceiling to fill the space with light

DIMENSIONS



LIGHT OUTPUT - XRT	Lumens (Nominal)	
	2X2	1X4
300mA	3850	3500
400mA	4700	4350

LEDS - 48 high-brightness LEDs are intimately attached to housing for cool operation and long life. Available in cool white (CW - 5000°K). CRI > 70. (All values nominal.)

DRIVER - 70-watt Class II driver is mounted inside housing (no external driver box). Case temperature - 80°C max. Power factor > 0.9 THD < 20%.

LENS - Proprietary, high-diffusion opal lens eliminates bright spots from individual LEDs and provides high vertical illumination while still providing high visual comfort. Made from impact-resistant acrylic.

DOOR - Die-formed post-painted steel door with positive cam latches (painted after fabrication) provides easy access to LEDs, driver and wiring connections.

HOUSING - Formed code-gauge steel housing, painted after fabrication. Integral NEC-compliant earthquake clips are standard. 5" deep housing eliminates diode shadowing.

INSTALLATION - Unit simply lifts through grid ceiling and rests on T-bars. Wiring access/strain relief plate attaches with one screw, allowing connections to be made from below the ceiling.

FINISH - All metal parts painted after fabrication following treatment with phosphate rust inhibitor. Finish coating of housing reflecting surfaces is with high-reflectance (minimum 92%) polyester powder.

OPERATING TEMPERATURE - -40°C to +40°C (-40°F to +104°F)

ELECTRICAL - 120 thru 240 VAC, 60 Hz input.

INPUT POWER - 66 watts @120V, 400mA; 50 watts @120V, 300mA. Power factor > 0.9.

SHIPPING WEIGHT - 15.2 lbs.

EXPECTED LIFE - Minimum 60,000 hours.

WARRANTY - Limited 5-year warranty.

PHOTOMETRICS - LM-79 and LM-80 reports, as well as application layout assistance are available on request. Contact LSI Applications Group or lighting.apps@lsi-industries.com.

LISTING - Listed to UL1598 and other U.S. and Canadian safety standards.

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.



ACCESSORY ORDERING INFORMATION (Accessories are field installed)	
Description	Order Number
Flange Kit - 2x2	FK22

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **XRT22 LED 48 400 NW 120**

Prefix	Light Source	# of LEDs	Drive Current	Color Temperature	Input Voltage
XRT22 - 2X2 LED Recessed Troffer	LED	48	300 - 300mA 400 - 400mA	CW - Cool White	120 - 240V
XRT14 - 1X4 LED Recessed Troffer					

FEATURES & SPECIFICATIONS

INTENDED USE

The RTLED combines digital LED lighting and controls technologies with patented high-performance optical design to offer the most advanced luminaire for general-ambient lighting applications. High-efficacy light engine delivers long life and excellent color, ensuring a superior quality lighting installation that is highly efficient and sustainable.

CONSTRUCTION

Rugged, one-piece cold-rolled steel reflector assembly with embossed facets. Coated polyester powder-paint after fabrication.

Rigid structure with ballast box and end plates. End plates include integral T-bar clips.

Impact-modified acrylic prismatic refractor with polymer light-diffusing film.

Luminaires may be mounted end-to-end and continuously wired.

OPTICS

Volumetric illumination is delivered by creating an optimal mix of light to walls, partitions, vertical and horizontal work surfaces — rendering the interior space, objects and occupants in a more balanced, complementary luminous environment.

Light distribution is carefully controlled at high angles, providing just enough luminous flux to create the volumetric effect.

Linear faceted reflector cavity softens and distributes light into the space while minimizing luminous contrast between the fixture and ceiling.

Regressed two-piece refractor system obscures and integrates individual LED images and uniformly washes the reflector cavity with light.

Sloped end plates provide a smooth, luminous transition between fixture and ceiling while enhancing the perception of fixture depth.

ELECTRICAL

Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. RTLED is rated to deliver L80 performance for 50,000 hours.

Standard nLight™ embedded controls continuously monitor system performance, allow for constant lumen management / compensation function, facilitate simple “plug-and-play” network and controls upgrading via Cat-5 cable.

LED AccuDrive™ driver delivers full-range dimming from 0-10V control signal.

Driver disconnect provided where required to comply with US and Canadian codes.

INSTALLATION

Drivers and internal components accessed via plenum. Driver tray may be removed from fixture during service.

Maintenance: LED boards include plug-in connectors for easy replacement or servicing.

Catalog Number
Notes
Type



Volumetric Lighting

2RTLED



2' X 4'
LED

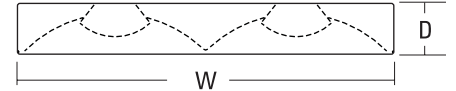
Specifications

Length: 48 (121.9)

Width: 24 (61.0)

Depth: 3-1/8 (7.9)

All dimensions are inches (centimeters).



LISTING

CSA Certified to meet U.S. and Canadian standards.

Protected by one or more of US Patent Nos. 7,229,192; D541,467; D541,468; D544,633; D544,634; D544,992. D544,933 and additional patents pending.

WARRANTY

Five-year warranty coverage of luminaires includes fixture construction, LED light engine, driver and nLight control device. Terms and conditions apply.

ORDERING INFORMATION

For shortest lead times, configure products using **bolded options**.

Example: 2RTL4 46L D50 LP835 N80

2RTL4		46L		D50		
Series	Air function	Lumens	Voltage	Driver	Lamp	Control
2RTL4 Recessed 2X4 LED	(blank) No air CAS Center air slots (air removal)	46L¹	(blank) MVOLT (120 - 277V)	D50 50W ²	LP835 82 CRI, 3500 Kelvin LP840 82 CRI, 4000 Kelvin	N80 nLight with 80% (L80) lumen management N80EMG nLight with 80% (L80) lumen management for use with generator supply EM power N100 nLight without lumen management N100EMG nLight without lumen management for use with generator supply EM power

Notes

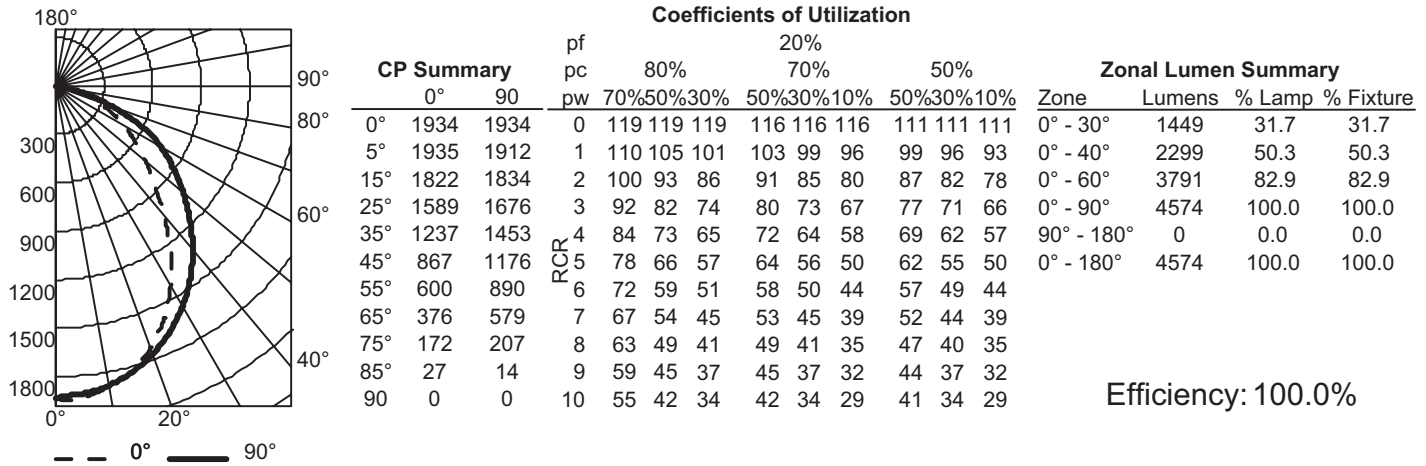
1 Approximate lumen output.

2 Approximate input power (watts).

2RTLLED Volumetric Recessed Lighting 2'x4'

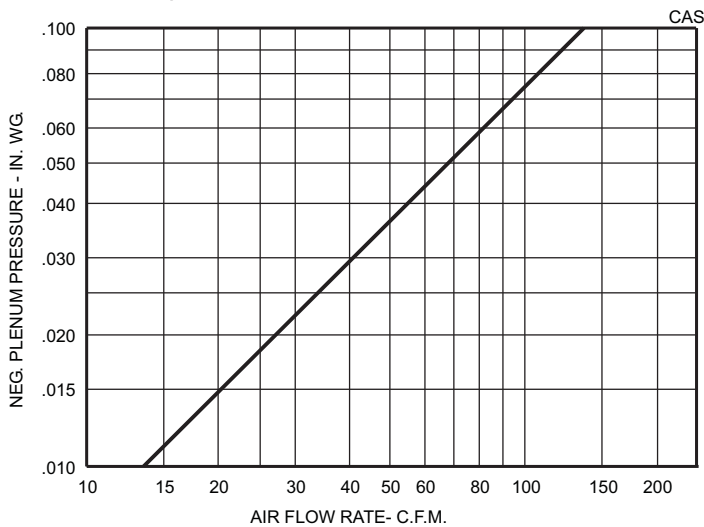
PHOTOMETRICS

2RTLLED 4600L LP835, 4,574 delivered lumens, test no. LTL19341, tested in accordance to IESNA LM-79.



LED Energy Comparison to T5/T8				
System	Lamp type	Ballast factor	Input watts	Watts saved by using LED
LED-N100	LED	1.0	50	--
LED-N80'	LED	1.0	40	--
Two-lamp T8	F32T8	0.88	55	5
Two-lamp T5	F28T5	1.0	58	8

RTLLED with CAS Option

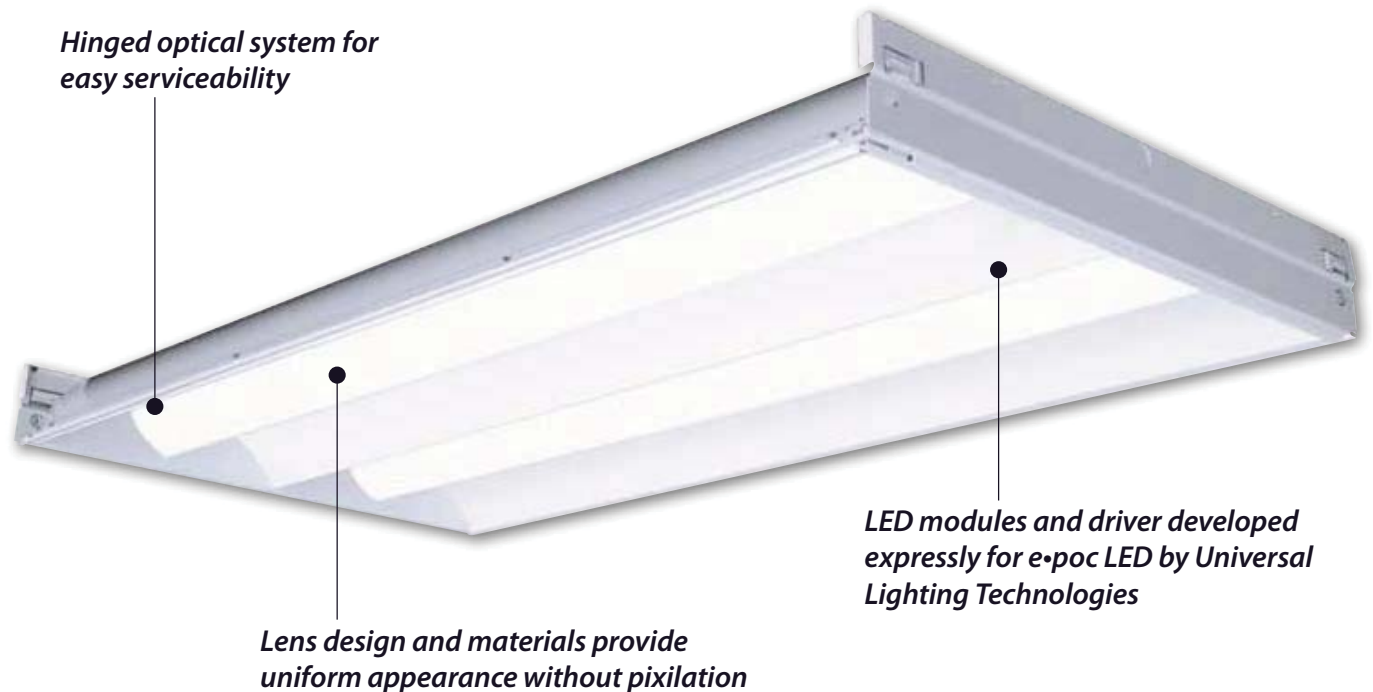


Note

1 With nlight 80% lumen management input watts start at 40 and gradually increasing to 50 at 50,000 hrs.

e·PDC® LED FULL DISTRIBUTION LUMINAIRE

e·poc® LED combines the highly popular e·poc® full distribution luminaire with advanced solid state electronics from Universal Lighting Technologies. Its high-efficacy, energy savings, long life, and sustainability make it a great choice for the general illumination market.



FEATURES

PERFORMANCE

At 3,360 lumens and 43 watts, the e·poc LED 2x2 delivers an impressive 78 lumens per watt—over 20% higher than the best performing 2x2 fluorescent fixtures in the same category.

ENERGY SAVINGS

Advanced solid state technology produces a low-watt, high-efficacy package with energy usage of just 43 watts for a 2x2, generating significant energy savings on new installations or relighting projects.

LUMEN OUTPUT CHOICES

Four lumen packages across three fixture sizes: 2200 or 3300 lumens for 1x4s and 2x2s, and 4400 or 6600 lumens for 2x4s.

SERVICEABILITY

Upgrading the driver is as easy as changing a ballast. Removing and upgrading the plug-and-play LED modules takes mere minutes.

CONTROLLABILITY

Compatible with occupancy and daylight sensors, drivers are available in either fixed output/step dimming or 0-10V dimming.

CODE COMPLIANCE

e·poc LED's low energy footprint and high efficacy deliver low watts per square foot without sacrificing light levels.

e.poc[®] LED ENERGY SAVINGS AND SUSTAINABILITY

Hubbell Inc. established its *Hubbell Sustainability Initiative (HSI)* to achieve an ongoing culture of environmental responsibility with its employees, customers, suppliers, community, and industry by implementing educational programs and sustainable practices. Hubbell's vision is to be a recognized leader in conserving natural resources to sustain our environment. e.poc[®] LED embodies the HSI philosophy through environmentally responsible design.



- Mercury and lead free
- 70% recycled steel
- Low energy and carbon footprint
- 50,000 hour life
- Manufactured from recyclable materials
- Components easily replaceable at end of life
- Easily upgradable to capitalize on improvements in solid state technology

ORDERING GUIDE

EXAMPLE LEPC22-3533G-LL-EDU

LEPC				- LL -				U	
MODEL	COLOR TEMP	CEILING TYPE	AIR FUNCTION	DRIVER	VOLTAGE	OPTIONS	SIZE	LUMEN OUTPUT	SHIELDING
LEPC e.poc [®] LED Full Distribution Luminaire	35 3500K 40 4000K	G Grid SM Surface Mount For hard ceilings use flange kit accessory.	Blank Static A Air Return Side Slots	ESD Fixed Output / Step Dimming ¹ ED 0-10V Dimming	U 120V/277V	C388 3-Wire Flex C488 4-Wire Flex C588 5-Wire Flex GLR Fast Blow Fuse GMF Slow Blow Fuse NYC NYC Compliant NYCU NYC Compliant, Union Label EL Emergency Battery Pack ²	14 1' x 4' ³ 22 2' x 2' 24 2' x 4' ³	1x4, 2x2 22 2200 Lumens (nominal) 33 3300 Lumens (nominal) 2x4 44 4400 Lumens (nominal) 66 6600 Lumens (nominal)	LL Low Lamp Image

ACCESSORIES	
FK14	1' x 4' Single Flange Kit
FK22	2' x 2' Single Flange Kit
FK24	2' x 4' Single Flange Kit
FKCR	Flange Kit Row Adaptor

¹Can be converted to fixed output by tying the hot leads together.
²Contact factory for specific model compatibility.
³Available 4th Quarter 2011



701 Millennium Blvd. Greenville, SC 29607
 Tel 864.678.1000 Fax 866.898.0131
 www.columbialighting.com

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Printed on mixed fiber paper (20% well-managed forests, 80% post consumer).

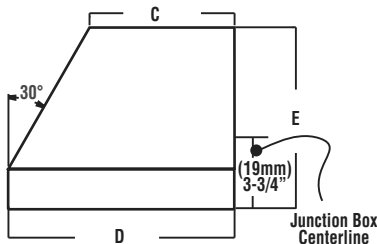
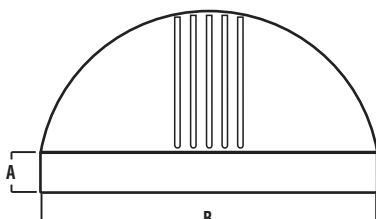


CHALLENGER® WALL SCNCE (Various reflectors are protected by U.S. Patent No. 6,464,378.)

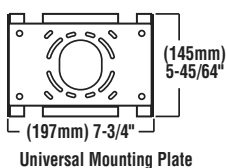


Flat-lensed fixtures meet IESNA full cutoff classification
COMMUNITY FRIENDLY

DIMENSIONS



	A	B	C	D	E
Small	(48mm) 1-7/8"	(448mm) 17-5/8"	(144mm) 5-21/32"	(244mm) 9-5/8"	(222mm) 8-3/4"
Medium	(60mm) 2-3/8"	(508mm) 20"	(219mm) 8-5/8"	(341mm) 13-7/16"	(273mm) 10-3/4"



SHIPPING WEIGHTS - Challenger Wall Sconce				
Catalog Number	Est. Weight (kg/lbs.)	Length (mm/in.)	Width (mm/in.)	Height (mm/in.)
CHWS-HID	10 / 22	616 / 24.25	394 / 15.5	343 / 13.5
CHWM-HID	15 / 32	616 / 24.25	394 / 15.5	419 / 16.5
CHWS-CFL	8 / 17	616 / 24.25	394 / 15.5	343 / 13.5
CHWM-CFL	11 / 24	616 / 24.25	394 / 15.5	419 / 16.5

UL LISTED
 wet location (Downlight only)
E
 damp location (Uplight - covered locations only)

HOUSING - The aerodynamic aluminum housing is a rectangular shape. All mounting hardware is stainless steel or electro-zinc plated steel.

WALL MOUNT - A galvanized-steel universal wall mounting plate easily mounts directly to a 4" octagonal or square junction box. An EPDM gasket is supplied to be installed between the mounting plate and junction box, sealing the junction box from entrance of water. The galvanized-steel universal plate allows the fixture to securely attach to the mounting plate using a unique clamping design which is locked into place with two hex-head screws. The universal plate permits the fixture to be mounted in the uplighting position (listed for damp locations) or downlighting position (listed for wet locations).

DOOR FRAME - The aluminum door frame with two stainless steel captive fasteners allows easy access into the fixture. A one piece extruded silicone gasket seals the door frame against the housing. The door swings open and is held in place by a retainer.

LENS/GASKET - A flat clear tempered glass lens, which is sealed to the door frame with EPDM gasketing, is standard. An optional polycarbonate lens is available on most Compact Fluorescent fixtures.

SOCKETS - HID lampholders are glazed porcelain, medium base for the Small fixture and mogul base for the Medium fixture, 4KV pulse rated. The Compact Fluorescent fixtures feature a one-piece thermoplastic socket.

LIGHT SOURCES - The fixture is designed to operate with horizontal Pulse-Start Metal Halide, Pulse-Start Metal Halide Reduced, Ceramic Metal Halide, Metal Halide, High Pressure Sodium, and single, double or triple Compact Fluorescent lamps. Lamps supplied as standard – HID (clear, shipped installed), and Compact Fluorescent (coated, 4100K).

BALLASTS/ELECTRICAL COMPONENTS - Electrical components are factory-mounted in housing and prewired with voltage specific leads which extend out the back of the unit through a rubber grommet. This grommet prevents the entry of insects, dust, and moisture

into the fixture. The need to open the fixture to make wiring connections is eliminated, thus making installation quick and easy. UL listed HID components with high-power factor ballasts rated for -20° F starting. Compact Fluorescent ballasts are Electronic Universal Voltage (120-277V, 50/60Hz) or 347V (60Hz), 0° F starting. Compact Fluorescent fixtures with UE (Universal Electronic) voltage are available with an optional dimming ballast for multiple types of controls such as building lighting controls and occupancy sensors. Available battery back-up of BB (32° starting temperature) and CWBB (0° starting temperature) are 120 or 277 voltage specific for U.S. applications for 26 watt through 70 watt lamps. Consult factory for available wattages and voltages for use in Canada.

EMERGENCY OPERATION - A variety of integral emergency options are available to comply with Life Safety Codes which require emergency lighting along the path of egress on the building's exterior, so building occupants can exit safely. Integral Emergency Battery Back-up options are available on Compact Fluorescent units. Emergency Quartz options are offered on HID units. Options for one or two 12 volt separate circuit(s), for use with up to 35 watt Halogen lamp(s) are available on both Compact Fluorescent and HID units.

REFLECTORS/DISTRIBUTION PATTERNS - Forward Throw (FTM, FT) and Type III (3) reflectors are available on small and medium. Wall Wash (WW) reflectors are also available on small. All are high performance, full cut-off distribution as defined by the IESNA (downlight position only). Photometric data is tested in accordance with IESNA guidelines.

FINISHES - Each fixture is finished with LSI's DuraGrip® polyester-powder finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling and is guaranteed for five full years. Standard colors include bronze, black, platinum plus, buff, white, satin verde green, metallic silver, and graphite.

PHOTOMETRICS - Please visit our web site at www.lsi-industries.com for detailed photometric data.

CHALLENGER® WALL SCNCE

LUMINAIRE ORDERING INFORMATION



TYPICAL ORDER EXAMPLE: **CHWM FT 400 PSMHR F 120 BRZ SQT**

Luminaire Prefix	Distribution	Lamp Wattage	Light Source	Lens	Line Voltage	Luminaire Finish	Options
CHWS (Small)	3 - Type III FT - Forward Throw WW - Wall Wash	50	CMH - Ceramic Metal Halide 150 Watt ¹	F- Flat Clear Tempered Glass	120 208 240 277 347	BRZ - Bronze BLK - Black PLP - Platinum Plus BUF - Buff WHT - White SVG - Satin Verde Green GPT - Graphite MSV - Metallic Silver	PCI120 - Button-Type Photocell PCI208 - Button-Type Photocell PCI240 - Button-Type Photocell PCI277 - Button Type-Photocell PCI347 - Button Type-Photocell TP - Tamper Proof ⁷ PMA - Pole Mount Adaptor for use with square poles (for S or D180 mounting configurations only) Not compatible with EM1, EM2, EQ or EQ2 options PMAR - Pole Mount Adaptor for use with round poles (for S or D180 mounting configurations only) Not compatible with EM1, EM2, EQ or EQ2 options DIM - CFL Control Voltage Dimming Ballast ⁸ C - Coated MH or PSMH Lamp except 250 PSMH SQT - Standby Quartz (Time Delay) ⁹ SQN - Standby Quartz (Non-Time Delay) ⁹ EQ - Emergency Quartz (separate 120V circuit - HID only) ⁹ EQ2 - Two Emergency Quartz (2 separate 120V circuits - HID only) ¹⁰ BB - CFL Battery Back-up ¹¹ CWBB - Cold Weather Battery Back-up ¹¹ EM1 - One Emergency 12V Circuit Provision with 35 Watt Halogen Lamp ¹² EM1LL - One Emergency 12V Circuit Provision - Less Halogen Lamp ¹² EM2 - Two Emergency 12V Circuit Provisions with (2) 35 Watt Halogen Lamps ¹² EM2LL - Two Emergency 12V Circuit Provisions - Less Halogen Lamps ¹² LL - Less Lamp
		70 100 150	MH - Metal Halide 50, 70, 100 ² , 150 ¹ Watt HPS - High Pressure Sodium 50 ³ , 70, 100, 150 Watt				
	FTM - Forward Throw Medium	26 32 42	CFL - Compact Fluorescent Single 26, 32, 42 Watt CFL2 - Compact Fluorescent Double 26, 32, 42 Watt	F- Flat Clear Tempered Glass FPC - Flat Clear Polycarbonate ⁴	UE - Universal Electronic (120-277V 50/60Hz) 347 ⁶		
CHWM (Medium)	3 - Type III FT - Forward Throw	250	PSMH - Pulse Start Metal Halide 250, 320 Watt	F- Flat Clear Tempered Glass	120 208 240 277 347 480		
		320 400	PSMHR - Pulse Start Metal Halide Reduced 400 Watt HPS - High Pressure Sodium 250, 400 Watt				
		26 32 42 57 70	CFL - Compact Fluorescent Single 57, 70 Watt CFL2 - Compact Fluorescent Double 57, 70 Watt CFL3 - Compact Fluorescent Triple 26, 32, 42 Watt				

**Consult Factory for
International Voltages
and Light Sources**

FOOTNOTES:

- 1- 150 MH must be used for downlight only.
- 2- Supplied with a HX-HPF transformer as standard. Also available with a 120/277 volt CWA transformer. Consult factory.
- 3- 50 Watt HPS is not available in TT or 347V.
- 4- FPC lens is not available with EM options.
- 5- If a polycarbonate lens is required on an Uplight Medium fixture in 70 CFL2 or 42 CFL3, the glass lens with Polycarbonate Shield (CHWM PLS) accessory must be ordered.
- 6- 347V CFL is not available with dimming ballast (DIM) option. Consult factory for battery back-up (BB) options.
- 7- Tamper-proof Screwdriver must be ordered separately. (See Accessory Ordering Information)
- 8- CFL Dimming Control by others.
- 9- HID lamp wattages 50 and 70 are supplied with a 50 watt, 120V quartz lamp. HID lamp wattages 100 through 250 are supplied with a 100 watt, 120V quartz lamp. HID lamp wattages of 320 & 400 are supplied with a 250 watt, 120V quartz lamp. EQ option is not compatible with PMA or PMAR options.
- 10- Available on 100 watt minimum HID fixtures. HID lamp wattages 100 through 175 are supplied with two 50 watt, 120V quartz lamps. 250 through 400 watt HID fixtures are supplied with two 100 watt, 120V quartz lamps. EQ2 option is not compatible with PMA or PMAR options.
- 11- Battery Back-up available on single, double and triple 120 or 277 voltage specific units for U.S. applications. Please change Line Voltage of UE to 120 or 277 when ordering this option. On double and triple units, one lamp will be energized by Battery Back-up (BB) option. Consult factory for specific Means of Egress job application compliance.
- 12- Utilizes GY6.35 socket(s). 12 volt separate circuit(s) required. Not compatible with PMA or PMAR option or FPC lens.

ACCESSORY ORDERING INFORMATION (Accessories are field installed)			
Description	Order Number	Description	Order Number
FK120 - Single Fusing	FK120+	CHWS PLS - Polycarbonate Shield for Small	172786
FK277 - Single Fusing	FK277+	CHWM PLS - Polycarbonate Shield for Medium	172787
DFK208, 240 - Double Fusing	DFK208, 240+	SW BLK - Surface Wiring Box	173156BLK+++
DFK480 - Double Fusing	DFK480++	SCD - Tamper-proof Screwdriver	36449
FK347 - Single Fusing	FK347+		

+ Available on HID fixtures only. Fusing to be installed in a compatible junction box supplied by contractor.
 ++ Available on HID Medium fixture only. Fusing to be installed in a compatible junction box supplied by contractor.
 +++SW BLK not compatible with PMA or PMAR option.

04/09/10

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LSI INDUSTRIES INC.

Project Name _____ Fixture Type _____
 Catalog # _____



DESCRIPTION

The IMPACT Elite family of cutoff wall luminaire makes an ideal complement to site design. Rugged construction and full cutoff classified optics provide facade and security lighting for light restricted zones surrounding schools, office complexes, apartments, and recreational facilities. U.L. and cUL Listed for wet locations in down mount applications and damp locations in up mounted applications.

Catalog #	ISW 32CF E1 2S BZ L	Type	'WFA'
Project		Date	
Comments			
Prepared by			

SPECIFICATION FEATURES

Construction

Two-piece die-cast aluminum housing and removable hinged door frame nests securely for precise tolerance control and repeatability. Hinged door frame inset for clean mating with housing surface and secured via two [2] captive stainless steel fasteners. Optional tamper resistant torx head fasteners [TR] offer vandal resistant access to the electrical compartment. 1/8" clear, heat and impact resistant tempered flat glass lens combined with molded silicone gasket to seal the integrated optical assembly while ensuring peak optical performance.

Electrical

Integral hard mount electrical components are secured and grounded within the die-cast aluminum housing for optimal heat sinking and extended component life. Minimum starting temperatures are -40°C (-40°F) for

HPS and -30°C (-22°F) for MP. Compact fluorescent luminaires feature electronic universal 120-277V high efficiency 50/60Hz ballast with -18°C (-0°F) minimum starting temperature. Available in 50-175W HID or 26-84W CF. Emergency power pack available for 26-64W CF.

Optical

Premium anodized 95% reflective aluminum optical assemblies provide high efficiency Type II distribution. Optional silk screened house side flat glass shield provides decreased wall brightness. All Impact Elite Wall Series luminaires classify as IESNA full cutoff in downlight applications.

Mounting

Gasketed and zinc plated rigid steel mounting attachment fits directly to 4" j-box or wall with the Impact Elite "Hook-N-Lock" system for fast

installation and mounting in both traditional downlighting [wet location] or inverted uplighting [damp location] mounting positions. Secured via two [2] captive corrosion resistant allen head set screws concealed from view, but accessible from bottom of fixture.

Finish

Housing and door are protected with 5-stage premium TGIC polyester powder coat paint. Premium TGIC powder coat finishes withstand extreme climate changes while providing optimal color and gloss retention over the fixture's installed life. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult McGraw-Edison Architectural Colors Brochure for complete selection.



ISW IMPACT ELITE WEDGE

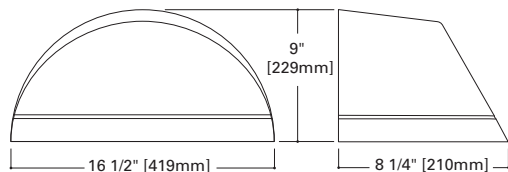
50 - 175W
Pulse Start Metal Halide
Metal Halide
High Pressure Sodium
26 - 84W
Compact Fluorescent

FULL CUTOFF
WALL MOUNT LUMINAIRE



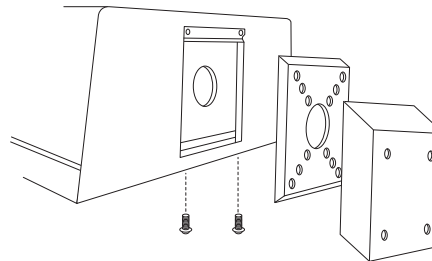
NOTE: In downlight applications only.

STANDARD DIMENSIONS

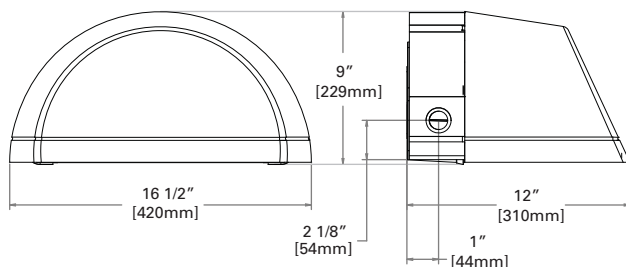


HOOK-N-LOCK MOUNTING

(Mounting attachment included. J-Box not included.)



DIMENSIONS WITH BACK BOX



TECHNICAL DATA

UL1598 Listed, CUL Listed
25°C Maximum Ambient Temperature
External Supply Wiring 90°C Minimum
Down Mounted—Wet Location
Up Mounted—Damp Location

ENERGY DATA

High Reactance Ballast Input Watts

50W HPS HPF (66 Watts)
50W MP HPF (72 Watts)
70W HPS HPF (91 Watts)
70W MP HPF (90 Watts)
100W HPS HPF (130 Watts)
100W MP HPF (129 Watts)
150W HPS HPF (190 Watts)
150W MP HPF (185 Watts)

CWA Ballast Input Watts

175W MH HPF (210 Watts)

Electronic Ballast Input Watts

26W CF HPF (29 Watts)
32W CF HPF (36 Watts)
42W CF HPF (46 Watts)
52W CF HPF (55 Watts)

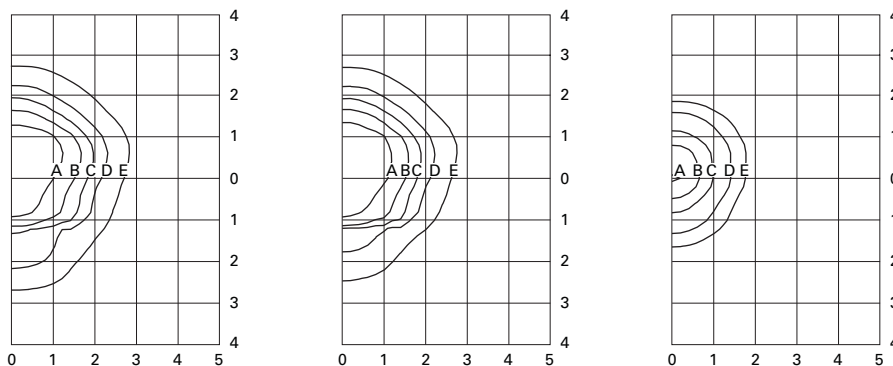
SHIPPING DATA

Approximate Net Weight:

18 lbs. (8 kgs.)

IMPACT™

PHOTOMETRICS (Complete IES files available at www.cooperlighting.com)



ISW-150-MP-XX-2S
150—Watt MP
14,000—Lumen Clear Lamp

ISW-150-HPS-XX-2S
150—Watt HP
16,000—Lumen Clear Lamp

ISW-42-CF-XX-2S
42—Watt CF
3,200—Lumen Lamp

Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
150-MP / 150-HPS					
10'	7.20	2.88	1.44	0.72	0.29
12'	5.00	2.00	1.00	0.50	0.20
14'	3.65	1.46	0.73	0.37	0.07
42-CF					
18'	2.46	1.23	0.62	0.25	0.12
20'	2.00	1.00	0.50	0.20	0.10
25'	1.28	0.64	0.32	0.13	0.06

ORDERING INFORMATION

Sample Number: ISW-100-MP-MT-2S-BZ

ISW **32** **CF** **E1** **2S** **BZ** **L**

Product Family
ISW= Impact
Elite
Small
Wedge

Lamp Wattage ¹
MP
50=50W ²
70=70W ²
100=100W
150=150W
HPS
50=50W ²
70=70W ²
100=100W
150=150W
MH
175=175W ¹
CF
26=(1)26W
32=(1) 32W
42=(1) 42W
52=(2) 26W
64=(2) 32W
84=(2) 42W

Lamp Type
MP=Pulse Start
Metal
Halide
HPS=High Pressure
Sodium
MH=Metal Halide ¹
CF=Compact
Fluorescent

Voltage ³
120=120V
208=208V
240=240V
277=277V
347=347V
480=480V
DT=Dual-Tap ⁴
MT=Multi-Tap ⁴
TT=Triple-Tap ⁴
E1=Electronic
(120-277V) ⁵

Distribution
2S=Type II
Segmented

Colors [add as suffix]
AP=Grey
BZ=Bronze
BK=Black
DP=Dark Platinum
GM=Graphite Metallic
WH=White

Options
F=Single Fuse, Specify Voltage (120, 277, or 347V) ⁶
FF=Double Fuse, Specify Voltage (208, 240 or 277V) ⁶
P=Button Photocontrol (120, 208, 240 or 277V) ⁶
L=Lamp Included
TR=Tamper Resistant Fasteners
HS=House Side Shield Glass ⁵
PL=Polycarbonate Lens ^{5, 7}
Q=Quartz Restrike (1) T4 Lamp ⁸
EM=Emergency Quartz Restrike (1) T4 Lamp with Time
Delay Relay ⁸
EM/SC=Emergency Separate Circuit (1) T4 Lamp ^{8, 9}
QMR=Quartz Restrike (1) MR16 Lamp ^{10, 11}
2QMR=Quartz Restrike (2) MR16 Lamps ^{10, 11}
2QMR/SC=Quartz Restrike (1) MR16 Lamp and (1)
Emergency Separate Circuit MR16 Lamp ^{9, 10, 11}
EMMR=Emergency Quartz Restrike (1) MR16 Lamp with
Time Delay Relay ^{10, 11}
2EMMR=Emergency Quartz Restrike (2) MR16 Lamps
with Time Delay Relay ^{10, 11}
EM/SC/MR=Emergency Separate Circuit (1) MR16
Lamp ^{9, 11, 12}
2EM/SC/MR=Emergency Separate Circuit (2) MR16
Lamps ^{9, 11, 12}
2EMMR/SC=Emergency Quartz Restrike with Time
Delay Relay (1) MR16 and (1) MR16
Emergency Separate Circuit Lamp ^{9, 10, 11}
EM/SC/12V=Emergency Separate Circuit 12V Low
Voltage (1) MR16 Lamp ^{9, 13}
2EM/SC/12V=Emergency Separate Circuit 12V Low
Voltage (2) MR16 Lamps ^{9, 13}
EMI40-XXX=Emergency Cold Temperature (UL924 Listed)
Power Pack -18°C/0°F,
(1) CF Lamp ¹⁴
CFEM-XXX=Emergency CF Power Pack (UL924 Listed)
(1) CF Lamp. 0°C/32°F ¹⁵
2EMI40-XXX=Emergency Cold Temperature
power pack (UL924 listed), -18°C/0°F, (2) CF Lamps
with Back Box matching housing finish ^{14, 16}
2CFEM-XXX=Emergency CF power pack (UL924 listed)
0°C/32°F, (2) CF Lamps, with Back Box matching
housing finish ^{14, 17}

Accessories ¹⁸
MA1257-XX=Thruway
back box - Impact
Elite Wedge ⁶

Notes:

- HID lamps are medium base. 175W MH is available for non-U.S. markets only.
- Not available with 480V.
- Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Representative for availability and ordering information.
- Dual-tap ballast is 120/277V wired 277V. Multi-tap is 120/208/240/277V wired 277V. Triple-tap ballast is 120/277/347V wired 347V.
- Available with CF Option only. In cold temperatures, compact fluorescent lamps produce lower illumination levels.
- Must specify voltage.
- Down lighting position only.
- (1) 120V Lamp, 100W maximum quartz lamp. Utility power may need to cycle to allow HID lamp to cool in warm climates. Not available with CF Option. Lamp supplied by others.
- Leads out of the back of the unit to auxiliary power.
- Not available with CF lamps.
- (1) or (2) 120V Lamps. GU10 base, 50W maximum each. Lamps supplied by others.
- Not Available with 52, 64, 84 CF wattages.
- (1) or (2) 12V bi-pin lamp, socket GU5.3 base, 35W maximum. Power supplied by low voltage DC source (supplied by others). Lamps supplied by others.
- Specify 120 or 277V, (-18°C) minimum temperature.
- Specify 120 or 277V, (0°C) minimum temperature. Not available with UPL10 or UPL50.
- Not available in 84CF configuration.
- Available in 52CF only.
- Order separately. Replace "XX" with color designation.

RTP RADIUS TRAPEZOID

ARCHITECTURAL WALLPACK

Cat.#		Approvals
Job	Type	
	'WFA' ALT	



APPLICATIONS

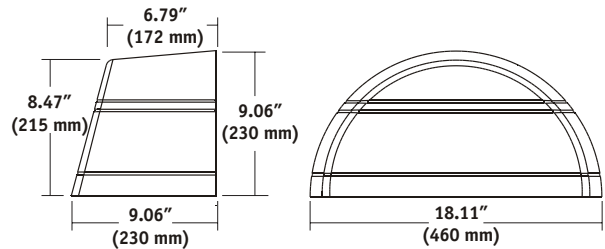
- Architectural wallpack stylish Radius trapezoid shape with molded lines to accentuate building architecture. Provides excellent illumination in three distributions as well as safety with Egress option

SPECIFICATIONS

- Full cut-off, dark sky, neighbor friendly
- Die cast aluminum housing and door
- Tempered, impact-resistant, clear glass lens
- Energy-saving LED, Pulse Start Metal Halide and Electronic Fluorescent systems
- Three distributions: (see below for restrictions) FT - forward throw for area lighting, WT - wide lateral throw for maximum spacing and UD - Up/Down accent distribution
- Five powder coat standard finishes
- Egress options for 120V or 12V remote power (by others)
- LED color temperature 5000K
- LED produces 2218 lumens
- CFL lamps color temperature 3500K
- HID lamps are medium base

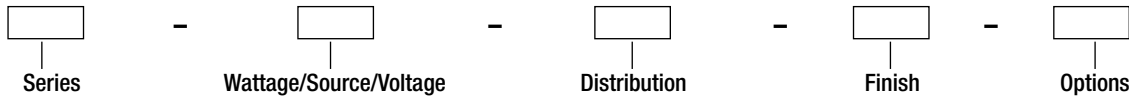
LISTINGS

- UL 1598 listed for use in wet locations



ORDERING INFORMATION

ORDERING EXAMPLE: RTP-150P8-FT-WH-EM



SERIES	WATTAGE/SOURCE/VOLTAGE	DISTRIBUTION	FINISH	OPTIONS
RTP Radius Trapezoid	LED	FT Forward Throw ²	BZ Bronze	QST ³ Time delay quartz standby system energizes quartz socket when main lamp does not strike (HID only)
	50L8-5K ^{3,6} 47.5w LED 120-277V	WT Wide Throw ²	BL Black	EM Double contact bayonet socket only for use with 120V remote power (generator by others)
	Pulse Start ¹	UD Up/Down	GR Gray	EM12 Two-pin 12V socket for MR11/MR16 lamps (backup power by others)
	150P8 150w PS Quad		WH White	PC(X) Button photocontrol. Specify voltage 1-120V, 2-208V, 3-240V, 4-277V
	100P8 100w PS Quad		PL Platinum	BOC(X) 0°C battery backup for one CFL lamp provides 90 minutes backup power specify 1-120V or 4-277V
	70P8 70w PS Quad			LP41 With lamp
	50P9 50w PS 120/277V			
	CFL ¹			
	26F8 42 CFL Quad			
	32F8 32 CFL Quad			
	42F8 42 CFL Quad			
	52F8 ³ 2x26 CFL Quad			
	64F8 ³ 2x32 CFL Quad			
	84F8 ³ 2x42 CFL Quad			

1 Lamp(s) included, all units are Quad-Tap® (120/208/240/277V)

2 IDA approved

3 Available in WT distribution only

4 BOC option not available with UD, up/down distribution

5 100w D.C. bayonet lamp included

6 PC is only option

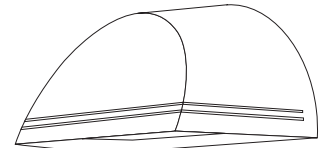
Color Temperature: CFL lamps 3500K, LED 5000K

Job:
 Type:
 Notes:

100 Line

102 Performance Sconce

The Philips Gardco 102 Rounded Wedge high performance sconce offers an excellent alternative to unsightly wall mounted fixtures. These architecturally refined luminaires are designed to integrate naturally to wall surfaces. 102 luminaires are available with three (3) different distribution patterns - a wide throw, a medium throw and a forward throw. Each luminaire is designed to accept HID sources up to 175MH, and Compact Fluorescent sources up to 42 watt. Housings are sealed throughout, completely excluding moisture, dust, insects and contaminants.



102 luminaires installed in the normal downlight position, with a flat glass lens, provide full cutoff performance.

PREFIX	DISTRIBUTION	WATTAGE	VOLTAGE	FINISH	OPTIONS

Enter the order code into the appropriate box above. Note: Philips Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

PREFIX

- 102** Trapezoidal Wedge (Standard Luminaire)
- 102EM** Emergency Sconce
- 102EMR** Remote Emergency Sconce

DISTRIBUTION

- FT** Forward Throw *Not Available with Fluorescent or LPS sources.*
- WT** Wide Throw *Not Available with Fluorescent or LPS sources.*
- MT** Medium Throw

Refer to configuration chart below for available combinations.

WATTAGE AND VOLTAGE

LAMP / VOLTAGE CHART - 102

HID*	Voltage					
	120	208	240	277	347	480
50MH	•			•		
70MH	•	•	•	•	•	
100MH	•	•	•	•	•	•
150MH	•	•	•	•	•	•
175MH**	•	•	•	•	•	•
50CMHE ¹	UNIV					
70CMHE ¹	UNIV					
100CMHE ¹	UNIV					
35HPS	•					
50HPS	•			•		
70HPS	•	•	•	•	•	•
100HPS	•	•	•	•	•	•
150HPS	•	•	•	•	•	•
Fluorescent						
26QF ¹	UNIV					
226QF ¹	UNIV					
32TRF ¹	UNIV					
42TRF ¹	UNIV					

* MH, CMHE and HPS types require medium based E17 lamps. All MH 150W and below are pulse start by design, including CMHE types.

** 175MH not available for sale in the United States.

MH - Metal Halide
 CMHE - Ceramic Metal Halide with Electronic Ballast
 HPS - High Pressure Sodium
 TRF - Triple Tube Fluorescent
 QF - Quad Fluorescent

Combinations marked with a dot, or shown with "UNIV" are available for ordering.

CONFIGURATION CHART - 102EM⁵

Fluorescent	Distribution			Voltage					
	FT	WT	MT	120	208	240	277	347	480
226QF ²			•	•			•		
32TRF			•	•			•		
42TRF			•	•			•		

CONFIGURATION CHART - 101EMR⁵

Fluorescent	Distribution			Voltage					
	FT	WT	MT	120	208	240	277	347	480
226QF ^{2,3,4}			•	•			•		
32TRF			•	•			•		
42TRF			•	•			•		

1. Fluorescent and CMHE luminaires feature electronic ballasts that accept 120V through 277V, 50hz to 60hz, input. Specify "UNIV" voltage for 120V through 277V.
2. One (1) lamp is powered in emergency mode with EM and EMR types with the B84CG option.
3. Available with ICE420 option, which powers two (2) lamps in emergency mode. ICE420 option only available with 226QF. CAUTION: Maximum battery pack input power for EMR units with ICE420 option is 100 watts (.83 amps) when heating element is on. This is in addition to the normal input power for luminaire lamps and ballast.
4. Available with I162 option, which powers two (2) lamps in emergency mode. Lamps are wired in parallel. In emergency mode, should one lamp become inoperable, the remaining lamp will operate with a minimum total initial output of 2,250 lumens.
5. Refer to "102 Emergency Sconce Table" on page 3 for additional information.

1611 Clovis Barker Road, San Marcos, TX 78666
 (800) 227-0758 (512) 753-1000 FAX: (512) 753-7855 sitelighting.com

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Philips Gardco reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program.

79115-125/0911

PHILIPS



FINISH

BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
BGP	Beige Paint
OC	Optional Color Paint Specify Optional Color or RAL ex: OC-LGP or OC-RAL7024.
SC	Special Paint Specify. Must supply color chip.

OPTIONS

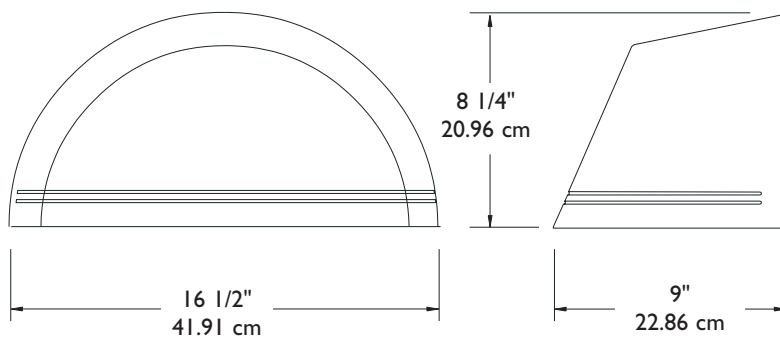
F⁶	Fusing
PCB⁷	Button Type Photocontrol
QS⁸	Quartz Standby
QST⁸	Quartz Standby - Timed Delay
Q924⁹	Quartz Emergency
QT924⁹	Quartz Emergency - Timed Delay
Q12V^{9,19}	Quartz 12V Emergency
Q20MR^{10,19}	(2)MR16 12V Emergency - 20 Watt
Q35MR^{10,19}	(2)MR16 12V Emergency - 35 Watt
ELED^{18,19}	(2)LED 12V Emergency Modules - 6.2 Watt
SL	Solite [®] Diffusing Lens
UT	5° Uptilt
WLU¹¹	Wet Location Door for Inverted Mount
WS¹²	Wall Mounted Box for Surface Conduit
WS/UT¹²	WS Option w/5° Uptilt
WG¹³	Wire Guard
POLY^{13,14}	Polycarbonate Sag Lens

6. 120V through 277V only
7. Not available with 480V.
8. HID only, Not available with CMHE Ballasts, FT Optics or in 480V. 100 watt Quartz maximum.
9. WT Optic only. 150w HID maximum, 100w Quartz maximum.
10. WT Optic only. 50CMHE or 70CMHE only. Supplied with two (2) 20W MR16 or two (2) 35W MR16 Flood (40° beam) lamps.
11. Not available with WG or POLY options. Not available with EM or EMR types.
12. Rear entry permitted.
13. Not Available with WLU option. 14. 100 watt HID maximum. Polycarbonate lenses carry a 1 year warranty only.
15. All Emergency Battery Packs for EMR types MUST be ordered with luminaires and supplied by Philips Gardco.
16. CAUTION: Maximum battery pack input power for EMR units with ICE420 option is 100 watts (.83 amps) when heating element is on. This is in addition to the normal input power for luminaire lamps and ballast.
17. Lamps are wired in parallel. In emergency mode, should one lamp become inoperable, the remaining lamp will operate with a minimum total initial output of 2,250 lumens.
18. WT Optic only. 50CMHE or 70CMHE only. Supplied with two (2) 6.2 watt, 300 lumen LED modules.
19. Requires a separate source of 12V power by others.

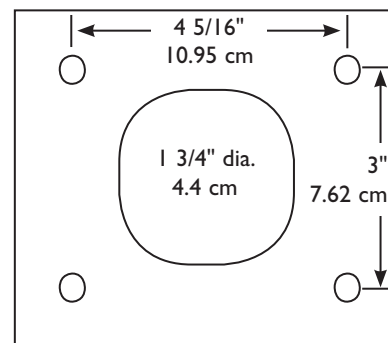
EMR LUMINAIRES ONLY¹⁵

B84CG	Bodine Remote Emergency Pack
ICE420¹⁶	IOTA Remote Emergency Battery Pack 226QF only.
I162¹⁷	IOTA Remote Emergency Battery Pack 226QF only.

DIMENSIONS



Mounting Plate



Mounting Bolt Pattern

Note: Mounting plate center is located in the center of the luminaire width and 3.5" (8.89cm) above the luminaire bottom (lens down position). Splices must be made in the J-box (by others). Mounting plate must be secured by max. 5/16" (.79cm) diameter bolts (by others) structurally to the wall.

SPECIFICATIONS

GENERAL: Each Philips Gardco I02 luminaire is a wall mounted cutoff luminaire for high intensity discharge or compact fluorescent lamps. Internal components are totally enclosed in a rain-tight, dust-tight and corrosion resistant housing. The housing, back plate and door frame are diecast aluminum. A choice of three (3) optical systems is available. Luminaires are suitable for wet locations (damp locations if inverted).

HOUSING: Single-piece housings are die cast aluminum. A memory retentive gasket seals the housing with the doorframe to exclude moisture, dust, insects and pollutants from the optical system. A black, die cast ribbed backplate dissipates heat for longer lamp and ballast life.

DOOR FRAME: A single-piece die cast aluminum door frame integrates to the housing form. The door frame is hinged closed and secured to the housing with two (2) captive stainless steel fasteners. The heat and impact resistant 1/8" (.32cm) tempered glass lens and one-piece gasket are mechanically secured to the door frame with four (4) galvanized steel retainers.

OPTICAL SYSTEMS: Reflectors are composed of specular extruded and faceted components, electropolished, anodized and sealed. Reflector segments are set in arc tube image duplicating patterns to achieve the wide throw, forward throw or medium throw downlight distributions.

ELECTRICAL:

STANDARD LUMINAIRES: Each high power factor HID core and coil ballast is the separate component type, capable of providing reliable lamp starting down to -20°F/-29°C. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 302°F/150°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher.

Standard fluorescent units have a starting temperature of 0°F/-18°C. Standard fluorescent ballasts are high power factor electronic solid state.

LUMINAIRES FOR USE OUTSIDE NORTH AMERICA: Philips Gardco has capability to provide luminaires meeting requirements world wide. Consult the factory for specifications for projects outside North America.

LUMINAIRES with Q924 / G12V / QMR20 / QMR35 / ELED OPTIONS: Luminaires with the Q924 option require a separate source of 120V power (by others.) Luminaires with Q12V, Q20MR, Q35MR or ELED options require a separate source of 12V power (by others.)

EMERGENCY LUMINAIRES: All emergency luminaires feature an indicator light visible through the lens and a test switch accessible through the door assembly. Minimum battery pack ambient temperatures are as indicated in the I02 Emergency Sconce Table. In the event of a power interruption, emergency luminaires will power compact fluorescent lamps as indicated in the I02 Emergency Sconce Table at reduced light levels for a minimum of 90 minutes.

EMR LUMINAIRES include a 7.5'/2.29m, 12 wire, quick disconnect assembly for wiring through conduit (by others) to a B84CG, 1162 or ICE420 fluorescent emergency battery pack. *The fluorescent emergency battery pack MUST be supplied by Philips Gardco. The B84CG option, the 1162 option or the ICE420 option is required on the order to the factory.*

CAUTION: Maximum battery pack input power for EMR units with ICE420 option is 100 watts (.83 amps) when heating element is on. This is in addition to the normal input power for luminaire lamps and ballast.

I02 Emergency Luminaire	Battery Pack Min. Ambient Temperature	Lamps Powered in Emergency Mode
I02EM (Integral)	32°F / 0°C	(1) 26, (1) 32, or (1) 42 Watt Compact Fluorescent Lamp
I02EMR (Remote) with B84CG Option	32° F/ 0°C	
I02EMR (Remote) with 1162 Option ²¹	32° F/ 0°C	(2) 26 Watt Compact Fluorescent Lamps
I02EMR (Remote) with ICE420 Option ²²	0°F / -18°C	(2) 26 Watt Compact Fluorescent Lamps

Notes:

- 20. See Philips Gardco Emergency Light Output Information (79115-155) for emergency lumen output data.
- 21. Lamps are wired in parallel. In emergency mode, should one lamp become inoperable, the remaining lamp will operate with a minimum total initial output of 2,250 lumens.
- 22. CAUTION: Maximum battery pack input power for EMR units with ICE420 option is 100 watts (.83 amps) when heating element is on. This is in addition to the normal input power for luminaire lamps and ballast.

LAMPHOLDER: Pulse rated medium base sockets are glazed porcelain with nickel plated screw shell. Fluorescent sockets are high temperature (PBT) with brass contacts.

FINISH: Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors are as listed. Consult factory for specs on custom colors.

LABELS: All luminaires bear UL or CUL (where applicable) labels, except as noted. Lens down application is Wet Location and lens up is Damp Location. Emergency luminaires do not bear CUL label.

WARRANTY: Philips Gardco luminaires feature a 5 year limited warranty. See Warranty Information on sitelighting.com for complete details and exclusions. Polycarbonate lenses carry a 1 year warranty only.

FULL CUTOFF PERFORMANCE: Full cutoff performance means a luminaire distribution where zero candela intensity occurs at an angle at or above 90° above nadir. Additionally, the candela per 1000 lamp lumens does not numerically exceed 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.

CUTOFF PERFORMANCE: Cutoff performance means a luminaire distribution where the candela per 1000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle at or above 90° above nadir, and 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.