

CPY Series - Version C

CPY250® LED Canopy/Soffit Luminaire

Rev. Date: V705/18/2023

Product Description

The CPY250® LED Canopy/Soffit Luminaire has an extremely thin profile constructed of rugged cast aluminum. It can be surface mounted easily from below the canopy deck and can be pendant mounted. Direct imaging of the LEDs is eliminated with a highly efficient patterned flat or 0.91" (23mm) drop glass lens.

Applications: Petroleum canopies, CNG fueling stations, soffits

Performance Summary

Assembled in the USA by Cree Lighting from US and imported parts

Initial Delivered Lumens: Up to 21,000

Efficacy: Up to 165 LPW

CRI: Minimum 70 CRI (40K, 50K, 57K); 80 CRI (30K); 90 CRI (40K, 50K)

CCT: 3000K, 4000K, 5000K, 5700K

Limited Warranty*: 10 years for luminaire/10 years for Colorfast DeltaGuard® finish/5 years for BML sensor/up to 5 years for Synapse® accessories/1 year for field-installed accessories

IP66 Rated (select models only)

Class I, Division 2 Hazardous Location for select models

* See <http://creelighting.com/warranty> for warranty terms. For Synapse accessories, consult Synapse spec sheets for details on warranty terms.

Accessories

Field-Installed	
Direct Mount Luminaires	
Canopy Upgrade Kits (18 ga. steel, except where noted)	
CPY-AP304* - for use with Cree Lighting CAN-304 luminaires, 16 ga. 5052 aluminum	
XA-BXCCM+ - for use with Jet-Philips, 21.60" [549mm] square	
XA-BXCCN+ - for use with ElSCO Franciscan, 22.06" [560mm] square	
XA-BXCCP+ - for use with LSI Dakota or Masters, 22.50" [572mm] square	
XA-BXCCQ+ - for use with Whiteway Riviera or Rig-A-Lite, 20.60" [523mm] square	
XA-BXCCR+ - for use with ElSCO Merrit, 18.06" [459mm] square	
XA-BXCCS+ - for use with LSI Richmond or Whiteway Civic, 23.00" [584mm] L x 13.00" [330mm] W	
Direct Mount Junction Box/Stem Kit	
XA-BXCCJBOX - 6.0" [152mm] H x 3/4" [19mm] NPT Stem	
- Watertight	
- Rated for feed through 8 (4 in, 4 out) #12 AWC conductors	
Direct Mount Beauty Plates	
XA-BXCCBP+ - 26.17" [665mm] Beauty Plate Only (18 ga. steel)	
XA-BXCCBPB12+ - 26.17" [665mm] Beauty Plate (18 ga. steel) w/12" [305mm] Backer Plate (16 ga. steel)	
- For use in canopies where deck opening is larger than what is required for mounting the CPY250 luminaire. Maximum deck opening 10.75" x 15" [183mm x 375mm]	
XA-BXCCBPB16+ - 26.17" [665mm] Beauty Plate (18 ga. steel) w/16" [406mm] Backer Plate (16 ga. steel)	
- For use in canopies where deck opening is larger than what is required for mounting the CPY250 luminaire. Maximum deck opening 12" x 15" [305mm x 375mm]	
Pendant Mount Luminaires	
Pendant Mount Kits	
XA-PS12KIT* - 5" [127mm] pendant	
XA-PS18KIT* - 11" [279mm] pendant	
XA-PS22KIT* - 15" [381mm] pendant	
- Includes two conduit fittings and 3/4-14 NPT pipe threaded on two ends	
Synapse® SimplySnap 10V Interface	
DIM10-220F	
- 120V-277V	
- Requires other Synapse components to complete system	
- Refer to DIM10-220F spec sheet for details	

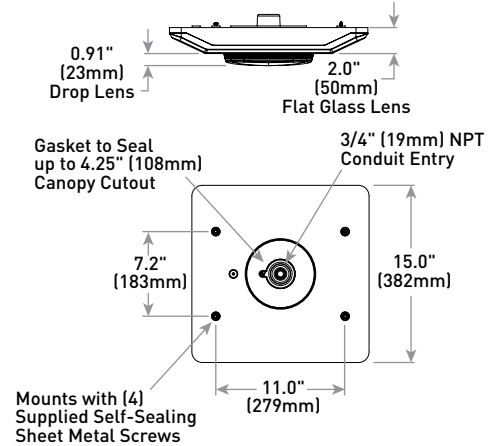
DM Mount / DM Mount with HZ Option



Flat Lens



Drop Lens



Weight
12.5 lbs. (5.7kg)

Refer to Page 4 for additional mounts.

* Must specify color: BK (Black), BZ (Bronze), SV (Silver) or WH (White)

+ Must specify color: T (Black), Z (Bronze), S (Silver) or W (White)

Ordering Information

Example: CPY250-C-13L-57K7-D-UL-DM-SV

Product	Version	Lumen Package*	CCT/CRI	Optic	Voltage	Mounting	Color Options	Controls	Options
CPY250	C	2L 2,000 Lumens 4L 4,000 Lumens 8L 8,000 Lumens 13L 13,000 Lumens 21L 21,000 Lumens	30K8 3000K, 80 CRI 40K7 4000K, 70 CRI 40K9 4000K, 90 CRI 50K7 5000K, 70 CRI 50K9 5000K, 90 CRI 57K7 5700K, 70 CRI	D 0.91" (23mm) Drop Lens F Flat Lens	UL Universal 120-277V UH Universal 347-480V - Available only in 4L-21L lumen packages	DM Direct FM Flush Mount H6 Car Wash HC Hook & Cord PD Pendant	BK Black BZ Bronze SV Silver WH White	BLANK Non-Dimming 10V 0-10V Dimming - Control by others - Refer to Dimming spec sheet for details BML Bluetooth® Technology Enabled Multi-Level Sensor - Utilizes a multifunction sensor - Available only with UL voltage - Refer to BML spec sheet for details - 8-20' sensor lens installed on luminaire; 20-40' sensor lens and aisle shroud included - Not available with other controls	10KV 10kV/5kA Surge Suppression - Replaces standard 6kV/3kA surge suppression - Not for use with BML as BML option includes 10kV/5kA surge as standard HZ Class I, Div. 2 Hazardous Location Certification - Available with DM and PD mounts only - Not available with BML control or K option K NSF 2 Certification - Luminaires include NSF certification mark - Suitable for DM mount only - Not available with BML control or HZ option

* Lumen Package codes identify approximate light output only. Actual lumen output levels may vary depending on CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values.



CREE LIGHTING®

US: creelighting.com T (800) 236-6800

Canada: creelighting-canada.com T (800) 473-1234

CPY250® LED Canopy/Soffit Luminaire - Version C

Product Specifications

CONSTRUCTION & MATERIALS

- Slim, low profile design
- Easy mounting and servicing from below the deck
- Luminaire housing is constructed of rugged cast aluminum with integral heat sink specifically designed for LED
- Flat lens is 0.125" tempered Solite® glass
- Drop lens is 0.157" molded borosilicate glass
- Direct mount is suitable for use in single or double skin canopies with a minimum 4.0" (102mm) wide panels and a minimum 22 gauge, 0.030" (0.7mm) canopy thickness
- Direct mount luminaire mounts directly to the canopy deck with the drilling of a single 2" to 4" (51mm to 102mm) round hole, is secured in place with self-sealing screws that provide a weathertight seal and includes 3/4" (19mm) conduit entry for direct wire feed
- Hook and cord mount includes a 3' (0.91m) cord out of the luminaire and is intended to hang from the single hook
- Standard pendant mount includes a mounting bracket and a J-Box for customer wiring and is intended to be mounted by 3/4 IP pendant (by others)
- Hazardous location pendant mount has a threaded hub which accepts 3/4" NPT conduit (by others) and secures with a 1/4"-20 set screw
- H6 mount includes cable gland with 3' (0.91m) cord out of the luminaire and is intended to hang from the single hook
- Flush mount includes perimeter gasket, watertight cable gland and 6' (1.8m) flexible watertight conduit out of luminaire
- Flush mount attaches to ceiling with (4) self-drilling screws
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver and white are available
- **Weight:** 12.5 lbs. (5.7kg)

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 6kV/3kA surge suppression protection standard; 10kV/5kA surge suppression protection optional
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current

CONTROLS

- 10V option provides continuous dimming to 10% with 0-10V DC control protocol
- **Maximum 10V Source Current:** 1mA
- Use only lighting controls with neutral connection or controls intended for use with LED fixtures
- Reference [LED Dimming spec sheet](#) for additional dimming information

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations when ordered with DM, DM mount w/HZ option, PD mount w/HZ option, FM and H6 mounts. Covered ceiling required only when not used with cULus Listed, wet location junction box or XA-BXCCJBX accessory
- Suitable for damp locations when ordered with HC and PD mounts. Designed for indoor use only
- Enclosure meets IP66 requirements per IEC 60529 when ordered with DM, FM and H6 mounts
- ANSI C136.2 6kV/3kA (standard) and 10kV/5kA (optional) surge protection, tested in accordance with IEEE/ANSI C62.41.2. BML option includes 10kV surge protection
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Assembled in the USA by Cree Lighting from US and imported parts
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details
- Class I, Division 2 Hazardous Location rated when ordered with the DM or PD mount and the HZ option. Not available with K or BML options. Rated for Groups A, B, C & D. Bears a T3C (160°C) temperature classification within a 25°C ambient
- NSF Certified when ordered with DM mount and K option. Not available with HZ or BML options. Refer to <http://info.nsf.org/Certified/Food/> for additional details
- Dark Sky Friendly, IDA Approved when ordered with 30K CCT and Flat Lens (F). Please refer to <https://www.darksky.org/our-work/lighting-for-industry/fsa/fsa-products/> for most current information
- DLC Premium qualified for Fuel Pump Canopies. DLC Standard qualified for High-Bay/Low Bay luminaires when ordered with 8L and 30K8, 40K9 and 50K9 CCTs, 13L or 21L lumen packages with all CCTs. Please refer to <https://qpl.designlights.org/solid-state-lighting> for most current information
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm - www.p65warnings.ca.gov

Electrical Data*							
Lumen Package	System Watts 120-480V**	Total Current (A)					
		120V	208V	240V	277V	347V	480V
2L	14	0.11	0.07	0.06	0.05	N/A	N/A
4L	29	0.24	0.14	0.12	0.10	0.08	0.06
8L	53	0.45	0.26	0.22	0.19	0.15	0.11
13L	86	0.73	0.42	0.36	0.32	0.25	0.19
21L	132	1.13	0.64	0.56	0.49	0.38	0.28

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/- 10%.
 ** 2L not available in 347-480V.

CPY Series (Version C) Ambient Adjusted Lumen Maintenance ¹						
Ambient	Luminaire Mounting Surface	Initial LMF	25K hr Reported ² LMF	50K hr Reported ² LMF	75K hr Reported ² LMF	100K hr Reported ² LMF
5°C (41°F)	2L-21L Plywood/ 2L-21L Metal	1.02	0.99	0.93	0.88	0.83
10°C (50°F)	2L-21L Plywood/ 2L-21L Metal	1.02	0.98	0.93	0.87	0.82
15°C (59°F)	2L-21L Plywood/ 2L-21L Metal	1.01	0.98	0.92	0.87	0.82
20°C (68°F)	2L-21L Plywood/ 2L-21L Metal	1.01	0.97	0.92	0.86	0.81
25°C (77°F)	2L-21L Plywood/ 2L-21L Metal	1.00	0.97	0.91	0.86	0.81
30°C (86°F)	2L-13L Plywood/ 2L-21L Metal	0.99	0.96	0.90	0.85	0.80
	21L Plywood	0.99	0.95	0.89	0.84	0.79
35°C (95°F)	2L-13L Plywood/ 2L-21L Metal	0.99	0.95	0.90	0.85	0.80
	21L Plywood	0.99	0.94	0.87	0.82	0.76
40°C (104°F)	2L-13L Plywood/ 2L-21L Metal	0.98	0.95	0.89	0.84	0.79
45°C (113°F)	2L-4L Plywood/ 2L-13L Metal	0.98	0.94	0.89	0.84	0.79
50°C (122°F)	2L-4L Metal	0.97	0.92	0.87	0.81	0.76

¹ Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime ambient conditions.

² In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.

³ Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

Operating Temperature Range				
Lumen Package	Direct Mount to Plywood	Direct Mount to Sheet Metal/Suspended	Class 1, Division 2 Hazardous Location	
			Direct Mount to Plywood	Direct Mount to Sheet Metal/Suspended
2L	-40°C to +45°C	-40°C to +50°C	-40°C to +25°C	
4L	-40°C to +45°C	-40°C to +50°C		
8L	-40°C to +40°C	-40°C to +45°C		
13L	-40°C to +40°C	-40°C to +45°C		
21L	-40°C to +35°C	-40°C to +40°C		

NOTE: Standard luminaires are UL rated at 40°C, and hazardous location luminaires are UL rated at 25°C, but will operate in the ambients listed above

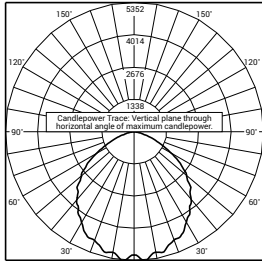
WARNING: Exceeding maximum operating temperature may result in thermal foldback

Photometry

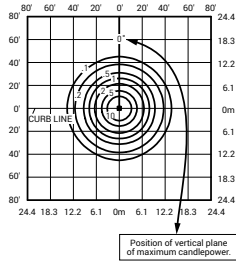
All published luminaire photometric testing performed to IES LM-79 standards.

To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/canopy-and-soffit/cpy250-series>

DROP LENS



RESTL Test Report #: PL16573-001A
 CPY250-C-13L-57K7-D-UL-**-**-***
 Initial Delivered Lumens: 13,260



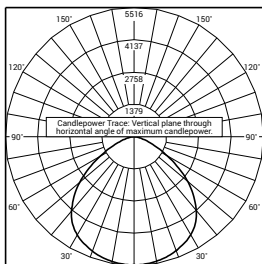
CPY250-C-13L-57K7-D-UL-**-**-***
 Mounting Height: 15' (4.6m) A.F.G.
 Initial Delivered Lumens: 13,750
 Initial FC at grade

Drop Lens Distribution						
Lumen Package	3000K		4000K/5000K		4000K/5000K/5700K	
	80 CRI		90 CRI		70 CRI	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
2L	2,100	B1 U1 G1	1,730	B1 U1 G1	2,310	B1 U1 G1
4L	4,160	B2 U1 G1	3,440	B2 U1 G1	4,590	B2 U2 G1
8L	7,675	B3 U2 G1	6,325	B2 U2 G1	8,475	B3 U2 G1
13L	12,450	B3 U2 G1	10,225	B3 U2 G1	13,750	B3 U2 G1
21L	19,200	B4 U2 G2	15,700	B3 U2 G2	21,300	B4 U2 G2

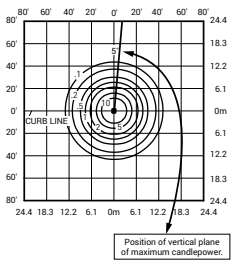
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

FLAT LENS



RESTL Test Report #: PL16548-004A
 CPY250-C-13L-57K7-F-UL-**-**-***
 Initial Delivered Lumens: 14,015



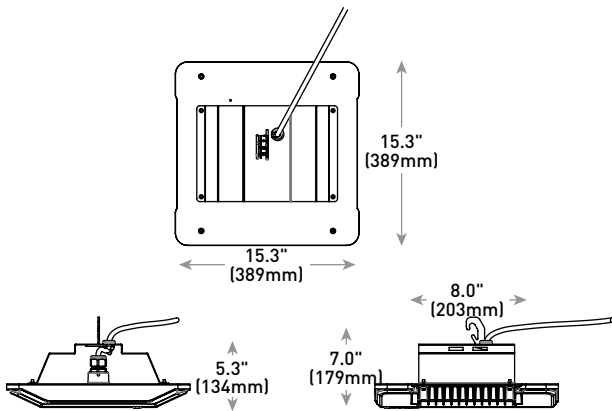
CPY250-C-13L-57K7-F-UL-**-**-***
 Mounting Height: 15' (4.6m) A.F.G.
 Initial Delivered Lumens: 14,015
 Initial FC at grade

Flat Lens Distribution						
Lumen Package	3000K		4000K/5000K		4000K/5000K/5700K	
	80 CRI		90 CRI		70 CRI	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
2L	2,100	B1 U0 G0	1,730	B1 U0 G0	2,310	B1 U0 G0
4L	4,160	B2 U0 G1	3,440	B2 U0 G1	4,590	B2 U0 G1
8L	7,675	B3 U0 G1	6,325	B2 U0 G1	8,475	B3 U0 G1
13L	12,450	B3 U0 G1	10,225	B3 U0 G1	13,750	B3 U0 G1
21L	19,200	B4 U0 G1	15,700	B3 U0 G1	21,300	B4 U0 G1

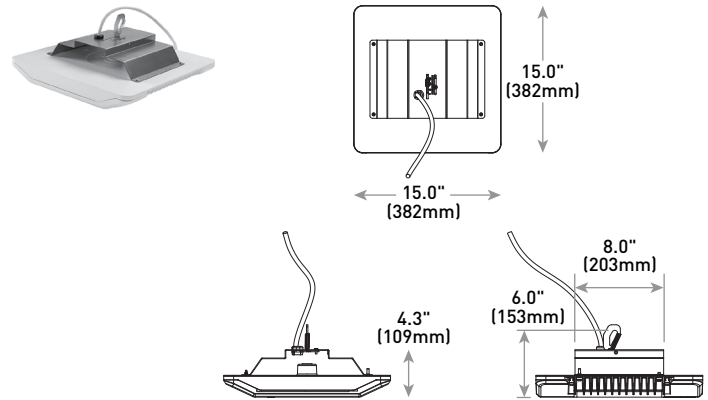
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

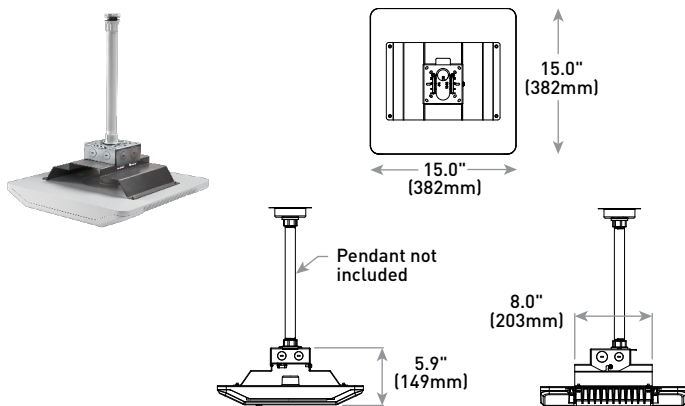
H6 Mount



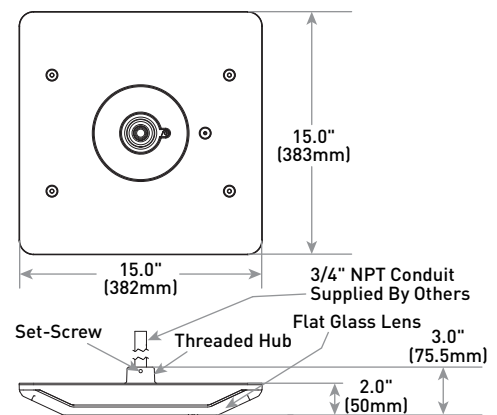
HC Mount



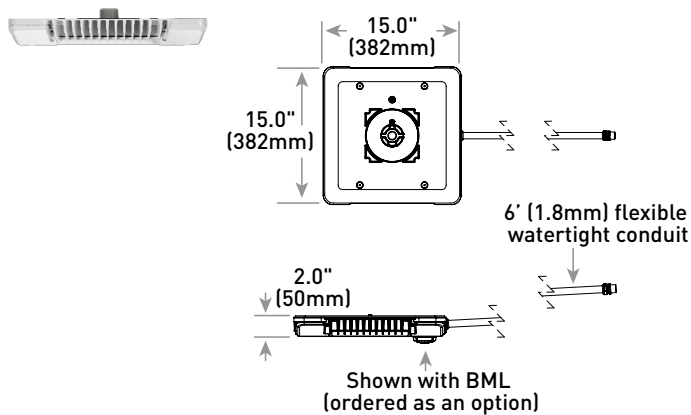
PD Mount



PD Mount w/HZ Option



FM Mount



© 2023 Cree Lighting, A company of IDEAL INDUSTRIES. All rights reserved. For informational purposes only. Content is subject to change. Patent www.creelighting.com/patents. Colorfast DeltaGuard® and CPY250® are registered trademarks, and the CPY250 design is a trademark of Cree Lighting, A company of IDEAL INDUSTRIES. Cree® and the Cree Lighting logo are registered trademarks of Cree, Inc. The UL logo is a registered trademark of UL LLC. The NSF logo is a registered trademark of NSF International. Synapse® is a registered trademark of Synapse Wireless, Inc. The DLC QPL, DLC QPL Premium and the DLC LUNA Logos are the registered and unregistered trademarks of Efficiency Forward, Inc. The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks is under license. Other trademarks, service marks, and trade names are those of their respective owners. IOS is a registered trademark or trademark of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries. Android is a trademark of Google, Inc.