

# CPY Series - Version B

CPY250® LED Canopy/Soffit Luminaire

## 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 U.S.A. of U.S. and imported parts

**Initial Delivered Lumens:** Up to 20,080

**Efficacy:** Up to 151 LPW

**CRI:** Minimum 70 CRI

**CCT:** 3000K (+/- 300K), 4000K (+/- 300K), 5700K (+/- 500K)

**Limited Warranty†:** 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

IP66 Rated (Direct Mount only)

Class I, Division 2 Hazardous Location for select models

† See <http://lighting.cree.com/warranty> for warranty terms

## Accessories

| Field-Installed   |  |
|---|--|
| <b>Direct Mount Luminaires</b>  |  |
| <b>Canopy Upgrade Kits (18 ga. steel)</b>   |  |
| XA-BXCCMW – for use with Jet-Philips, 21.60" (549mm) square   |  |
| XA-BXCCNW – for use with ElSCO Franciscan, 22.06" (560mm) square  |  |
| XA-BXCCPW – for use with LSI Dakota or Masters, 22.50" (572mm) square   |  |
| XA-BXCCQW – for use with Whiteway Riviera or Rig-A-Lite, 20.60" (523mm) square  |  |
| XA-BXCCRW – for use with ElSCO Merrit, 18.06" (459mm) square  |  |
| XA-BXCCSW – for use with LSI Richmond or Whiteway Civic, 23.00" (584mm) L x 13.00" (330mm) W  |  |
| <b>Direct Mount Junction Box/Stem Kit</b>   |  |
| 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   |  |
| <b>Direct Mount Beauty Plates</b>   |  |
| XA-BXCCBPW – 26.17" (665mm) Beauty Plate Only (18 ga. steel)  |  |
| XA-BXCCBPB12W – 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-BXCCBPB16W – 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)    |  |
| <b>Pendant Mount Luminaires</b>   |  |
| <b>Pendant Mount Kits</b>   |  |
| 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  |  |
| <b>Hand-Held Remote</b>   |  |
| XA-SENSREM  |  |
| - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required   |  |

\* Must specify color

## Ordering Information

Example: CPY250-B-DM-D-A-UL-SV

| Product | Version | Mounting   | Optic  | Input Power Designator                                    | Voltage   | Color Options  | CCT  | Options   |
|---------|---------|--|--|---|---|--|--|---|
| CPY250  | B       | DM<br>Direct<br>HC<br>Hook & Cord<br>PD<br>Pendant | D<br>0.91" (23mm)<br>Drop Lens<br>F<br>Flat Lens | A<br>60W<br>B<br>96W<br>C<br>31W<br>E<br>145W<br>F<br>85W | UL<br>Universal<br>120-277V<br>UH<br>Universal<br>347-480V<br>- Available with B, E & F<br>input power designators only<br>34*<br>347V<br>- A & C input power<br>designators only<br>48*<br>480V<br>- A & C input power<br>designators only | BK<br>Black<br>BZ<br>Bronze<br>SV<br>Silver<br>WH<br>White | 30K<br>3000K<br>40K<br>4000K<br>57K<br>5700K | <b>DIM 0-10V Dimming</b><br>- Control by others<br>- Refer to Dimming spec sheet for details<br>- Can't exceed wattage of specified Input Power Designator<br><b>HZ Class I, Div. 2 Hazardous Location Certification</b><br>- Available with DM and PD mounts only<br>- A & C input power designators are available for DM and PD<br>mounts except PD mount with 34 & 48 voltages in Canada<br>- Not available with K or PML options<br><b>K NSF 2 Certification</b><br>- Luminaires include NSF certification mark<br>- Available with the DM mount only<br>- Not available with the HZ or PML options<br><b>PML Programmable Multi-Level</b><br>- Available with UL voltage only<br>- Refer to PML spec sheet for details |

\* 347 and 480V with A & C input power designators utilize a magnetic step-down transformer. For input power for 347 and 480V, refer to the Electrical Data table

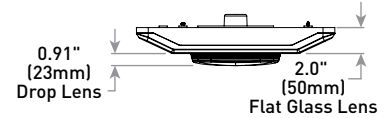
## DM Mount



Flat Lens

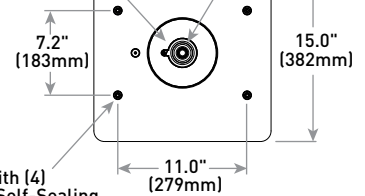


Drop Lens



Gasket to Seal up to 4.25" (108mm) Canopy Cutout

3/4" (19mm) NPT Conduit Entry



Mounts with (4) Supplied Self-Sealing Sheet Metal Screws

## Weight

12.5 lbs. (5.7kg)



Rev. Date: V13 10/03/2018



US: [lighting.cree.com](http://lighting.cree.com)

T (800) 236-6800 F (262) 504-5415

Canada: [www.cree.com/canada](http://www.cree.com/canada)

T (800) 473-1234 F (800) 890-7507

# CPY250® LED Canopy/Soffit Luminaire - Version B

## 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
- 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, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 6kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- **Operating Temperature Range:** Applications Requiring Class I, Division 2 Hazardous Location Ratings: -40°C to +25°C; A Input Power Designator: -40°C to +40°C (direct mount to plywood), -40°C to +45°C (direct mount to sheet metal/suspended); B & E Input Power Designators: -40°C to +35°C (plywood), -40°C to +40°C (sheet metal/suspended); C Input Power Designator: -40°C to +45°C (plywood), -40°C to +50°C (sheet metal/suspended); F Input Power Designator: -40°C to +40°C (plywood), -40°C to +45°C (sheet metal/suspended)
- **WARNING:** Exceeding maximum operating temperature may result in thermal foldback

### CONTROLS

- Continuous dimming to 10% with 0-10V DC control protocol
- **10V Source Current:** 0.15mA
- 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 mount
- Suitable for damp locations when ordered with HC and PD mounts
- Suitable for wet locations when ordered with PD mount and HZ option
- Enclosure rated IP66 per IEC 60529 when ordered with DM mount
- Consult factory for CE Certified products
- 6kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A standards 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
- 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. A & C input power designators are available for DM and PD mounts except PD mount with 34 & 48 voltages in Canada. Not available with K or PML 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 PML options. Refer to <http://info.nsf.org/Certified/Food/> for additional details
- DLC and DLC Premium qualified versions available. Please refer to <https://www.designlights.org/search/> for most current information
- Dark Sky Friendly, IDA Approved when ordered with 30K CCT and Flat Lens (F)
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

| Electrical Data*       |                       |                                 |                   |      |      |      |      |      |
|------------------------|-----------------------|---------------------------------|-------------------|------|------|------|------|------|
| Input Power Designator | System Watts 120-277V | System Watts 347-480V; 347/480V | Total Current (A) |      |      |      |      |      |
|                        |                       |                                 | 120V              | 208V | 240V | 277V | 347V | 480V |
| A                      | 60                    | 68                              | 0.51              | 0.29 | 0.25 | 0.22 | 0.20 | 0.14 |
| B                      | 96                    | 96                              | 0.82              | 0.47 | 0.40 | 0.35 | 0.28 | 0.20 |
| C                      | 31                    | 33                              | 0.26              | 0.15 | 0.13 | 0.11 | 0.10 | 0.07 |
| E                      | 145                   | 145                             | 1.22              | 0.70 | 0.61 | 0.53 | 0.42 | 0.30 |
| F                      | 85                    | 85                              | 0.72              | 0.41 | 0.36 | 0.31 | 0.24 | 0.18 |

\* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-480V +/- 10%

| CPY Series - Version B Ambient Adjusted Lumen Maintenance <sup>1</sup> |             |                                   |                                   |                                    |                                     |
|--|-------------|-----------------------------------|-----------------------------------|------------------------------------|-------------------------------------|
| Ambient  | Initial LMF | 25K hr Projected <sup>2</sup> LMF | 50K hr Projected <sup>2</sup> LMF | 75K hr Calculated <sup>3</sup> LMF | 100K hr Calculated <sup>3</sup> LMF |
| 5°C (41°F)   | 1.03        | 1.00                              | 0.96                              | 0.93                               | 0.90                                |
| 10°C (50°F)  | 1.02        | 0.99                              | 0.95                              | 0.92                               | 0.89                                |
| 15°C (59°F)  | 1.02        | 0.99                              | 0.95                              | 0.92                               | 0.89                                |
| 20°C (68°F)  | 1.01        | 0.98                              | 0.95                              | 0.91                               | 0.88                                |
| 25°C (77°F)  | 1.00        | 0.97                              | 0.94                              | 0.90                               | 0.87                                |
| 30°C (86°F)  | 0.99        | 0.96                              | 0.93                              | 0.90                               | 0.87                                |

<sup>1</sup>Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing on sheet metal. 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

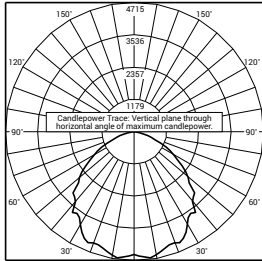
<sup>2</sup>In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

<sup>3</sup>In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

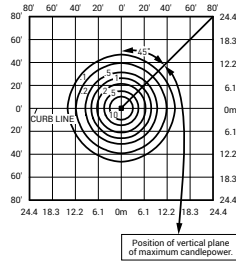
### Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/canopy-and-soffit/cpy-series>

#### DROP LENS



CESTL Test Report #: PL08412-001A  
 CPY250-B-\*\*-D-B-UL-\*\*-57K  
 Initial Delivered Lumens: 12,403



CPY250-B-\*\*-D-B-UL-\*\*-57K  
 Mounting Height: 15' (4.6m) A.F.G.  
 Initial Delivered Lumens: 12,860  
 Initial FC at grade

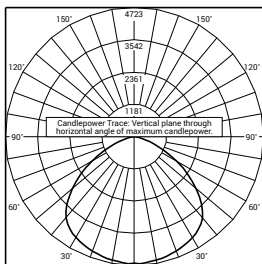
#### Drop Lens Distribution

| Input Power Designator | 3000K                     |                            | 4000K                     |                            | 5700K                     |                            |
|------------------------|---------------------------|----------------------------|---------------------------|----------------------------|---------------------------|----------------------------|
|                        | Initial Delivered Lumens* | BUG Ratings** Per TM-15-11 | Initial Delivered Lumens* | BUG Ratings** Per TM-15-11 | Initial Delivered Lumens* | BUG Ratings** Per TM-15-11 |
| A                      | 7,250                     | B3 U2 G1                   | 7,600                     | B3 U2 G1                   | 7,720                     | B3 U2 G1                   |
| B                      | 11,850                    | B3 U2 G1                   | 12,380                    | B3 U2 G1                   | 12,860                    | B3 U2 G1                   |
| C                      | 4,210                     | B2 U2 G1                   | 4,420                     | B2 U2 G1                   | 4,520                     | B2 U2 G1                   |
| E                      | 19,100                    | B4 U3 G2                   | 19,600                    | B4 U3 G2                   | 20,080                    | B4 U3 G2                   |
| F                      | 11,850                    | B3 U2 G1                   | 12,380                    | B3 U2 G1                   | 12,860                    | B3 U2 G1                   |

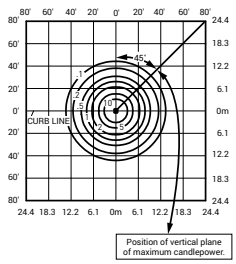
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* 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>

#### FLAT LENS



CESTL Test Report #: PL08165-001C  
 CPY250-B-\*\*-F-B-UL-\*\*-57K  
 Initial Delivered Lumens: 13,040



CPY250-B-\*\*-F-B-UL-\*\*-57K  
 Mounting Height: 15' (4.6m) A.F.G.  
 Initial Delivered Lumens: 12,860  
 Initial FC at grade

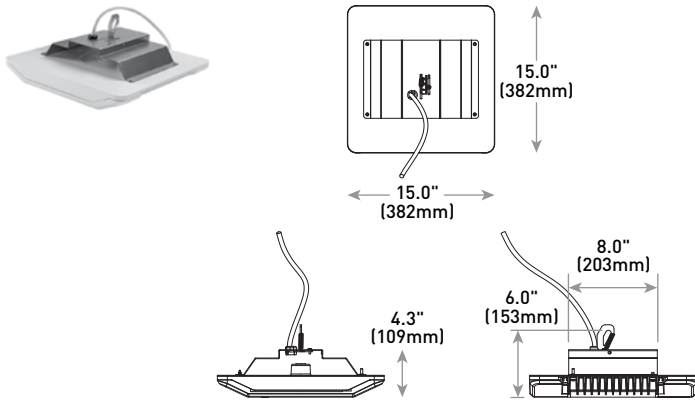
#### Flat Lens Distribution

| Input Power Designator | 3000K                     |                            | 4000K                     |                            | 5700K                     |                            |
|------------------------|---------------------------|----------------------------|---------------------------|----------------------------|---------------------------|----------------------------|
|                        | Initial Delivered Lumens* | BUG Ratings** Per TM-15-11 | Initial Delivered Lumens* | BUG Ratings** Per TM-15-11 | Initial Delivered Lumens* | BUG Ratings** Per TM-15-11 |
| A                      | 7,250                     | B3 U0 G1                   | 7,600                     | B3 U0 G1                   | 7,720                     | B3 U0 G1                   |
| B                      | 11,850                    | B3 U0 G1                   | 12,380                    | B3 U0 G1                   | 12,860                    | B3 U0 G1                   |
| C                      | 4,210                     | B2 U0 G1                   | 4,420                     | B2 U0 G1                   | 4,520                     | B2 U0 G1                   |
| E                      | 19,100                    | B4 U0 G1                   | 19,600                    | B4 U0 G1                   | 20,080                    | B4 U0 G1                   |
| F                      | 11,850                    | B3 U0 G1                   | 12,380                    | B3 U0 G1                   | 12,860                    | B3 U0 G1                   |

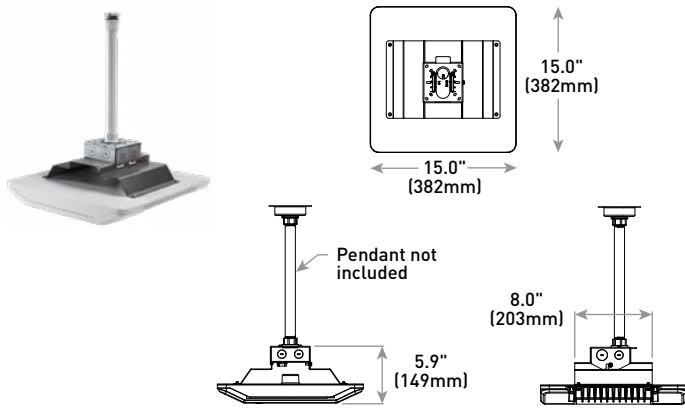
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* 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>

**HC Mount**



**PD Mount**



**PD Mount w/HZ Option**

