

DESCRIPTION

The Celesteon™ LED high mast luminaire combines high output and efficiency with easy install and affordability. Designed for new and retrofit high-lumen applications, the Celesteon LED high mast is ideal for highways, interchanges, ports, rail yards, container yards, parking lots, correctional facilities, security lighting, treatment plants and other facilities in need of high lumen packages with accurate optical control.

| | | |
|--------------------|--|-------------|
| Catalog # | | Type |
| Project | | |
| Comments | | Date |
| Prepared by | | |

SPECIFICATION FEATURES

Construction

Heavy-duty, die-cast aluminum housing and door. Optional tool-less entry, hinged removable door for additional easy maintenance. 3G vibration rated.

Optics

Customers can choose from six high efficiency optics available in Type I, II, III, IV, V, Type V narrow and Type V round. Each distribution is designed to maximize efficiency and application spacing. Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K, 5000K CCT. For the ultimate level of spill light control, an optional factory installed house side shield accessory is available.

Electrical

120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Standard 0-10V dimming with 10kV or 20kV surge protection available. Thermal management transfers heat away from the LED source for optimal efficiency, light output and lumen maintenance. Ambient operating temperature from -40°C to 40°C; 50°C HA, high ambient, capability available. Greater than 90% lumen maintenance expected at 60,000 hours.

Mounting

Four-bolt/two bracket slipfitter with cast-in pipe stop and 2.5° leveling steps. Fixed-in-place bird guard seals around 2" (2-3/8" O.D.) mounting arms.

Finish

Housing and cast parts finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Consult your lighting representative at Cooper Lighting Solutions for a complete selection of standard colors.

Warranty

Standard five-year warranty. Optional ten-year warranty, please see your Cooper Lighting Solutions Streetworks sales representative for more information.



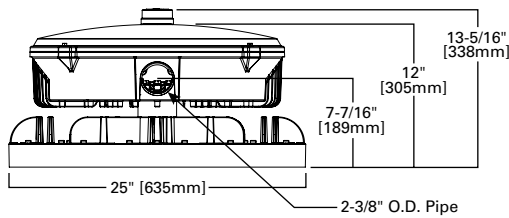
CST CELESTEON

Solid State LED

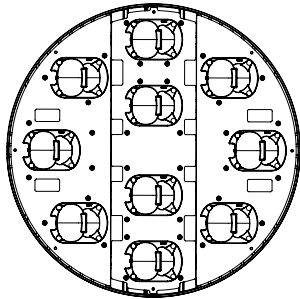
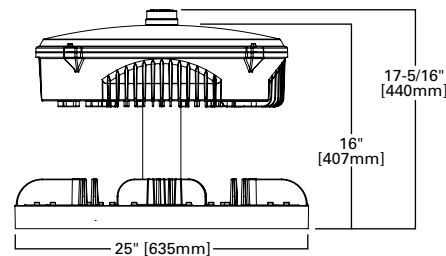
AREA / ROADWAY LUMINAIRE

DIMENSIONS

Short Extrusion: All lumen packages except 10-9



Long Extrusion: 10-9 lumen packages only



EPA DATA

| Configuration | Accessory | EPA |
|-----------------|--------------|------|
| Short Extrusion | None | 1.13 |
| Short Extrusion | Nature Guard | 1.20 |
| Short Extrusion | HSS-HM-EX90 | 2.82 |
| Short Extrusion | HSS-HM-EX120 | 3.21 |
| Short Extrusion | HSS-HM-EX180 | 3.57 |
| Long Extrusion | None | 1.25 |
| Long Extrusion | Nature Guard | 1.44 |
| Long Extrusion | HSS-HM-EX90 | 2.87 |
| Long Extrusion | HSS-HM-EX120 | 3.26 |
| Long Extrusion | HSS-HM-EX180 | 3.62 |



CERTIFICATION DATA

Dark Sky Approved (3000K and warmer CCTs only)
DesignLights Consortium® Qualified*
UL/cUL Wet Location Listed
IP66 Rated Optics (standard)
IP66 Rated Housing (optional)
3G Vibration Rated
ISO 9001

ENERGY DATA

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

SHIPPING DATA

Approximate Net Weight:
See weight chart on page 3

POWER AND LUMENS

| Light Engine | | 6-3 | 8-3 | 10-3 | 8-4 | 10-4 | 8-6 | 10-8 | 10-9 |
|------------------------------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Nominal Power (Watts) | | 234 | 226 | 212 | 325 | 308 | 477 | 631 | 760 |
| Current @ 120V (A) | | 1.95 | 1.89 | 1.77 | 2.73 | 2.59 | 3.98 | 5.28 | 6.36 |
| Current @ 277V (A) | | 0.87 | 0.84 | 0.79 | 1.24 | 1.20 | 1.75 | 2.35 | 2.77 |
| Current @ 347V (A) | | 0.70 | 0.69 | 0.62 | 0.94 | 0.90 | 1.36 | 1.82 | 2.18 |
| Current @ 480V (A) | | 0.54 | 0.53 | 0.44 | 0.68 | 0.65 | 0.98 | 1.32 | 1.57 |
| Optics | | | | | | | | | |
| T1 | 5000K | 33,715 | 33,824 | 34,201 | 46,690 | 46,505 | 67,753 | 87,171 | 100,093 |
| | BUG Rating | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 4000K | 33,376 | 33,483 | 33,856 | 46,220 | 46,037 | 67,077 | 86,301 | 99,094 |
| | BUG Rating | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 3000K | 32,479 | 32,583 | 32,946 | 44,977 | 44,799 | 65,274 | 83,981 | 96,430 |
| | BUG Rating | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 | B5-U0-G5 |
| T2 | 5000K | 31,436 | 31,537 | 31,889 | 43,534 | 43,361 | 63,174 | 81,279 | 93,328 |
| | BUG Rating | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B4-U0-G4 | B4-U0-G4 | B4-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 4000K | 31,120 | 31,220 | 31,568 | 43,096 | 42,925 | 62,543 | 80,468 | 92,396 |
| | BUG Rating | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B4-U0-G4 | B4-U0-G4 | B4-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 3000K | 30,283 | 30,381 | 30,719 | 41,937 | 41,771 | 60,862 | 78,305 | 89,912 |
| | BUG Rating | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B4-U0-G4 | B4-U0-G4 | B4-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| T3 | 5000K | 31,559 | 31,660 | 32,013 | 43,703 | 43,530 | 63,419 | 81,595 | 93,690 |
| | BUG Rating | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B4-U0-G5 | B4-U0-G5 | B4-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 4000K | 31,241 | 31,341 | 31,691 | 43,264 | 43,092 | 62,786 | 80,781 | 92,755 |
| | BUG Rating | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B4-U0-G5 | B4-U0-G5 | B4-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 3000K | 30,401 | 30,499 | 30,839 | 42,100 | 41,933 | 61,098 | 78,609 | 90,262 |
| | BUG Rating | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B4-U0-G5 | B4-U0-G5 | B4-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| T4 | 5000K | 31,094 | 31,194 | 31,542 | 43,060 | 42,889 | 62,485 | 80,394 | 92,311 |
| | BUG Rating | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B4-U0-G5 | B4-U0-G5 | B4-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 4000K | 30,781 | 30,880 | 31,224 | 42,627 | 42,457 | 61,862 | 79,591 | 91,390 |
| | BUG Rating | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B4-U0-G5 | B4-U0-G5 | B4-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 3000K | 29,953 | 30,050 | 30,385 | 41,480 | 41,316 | 60,199 | 77,452 | 88,933 |
| | BUG Rating | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B4-U0-G5 | B4-U0-G5 | B4-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| T5 | 5000K | 32,110 | 32,213 | 32,572 | 44,467 | 44,291 | 64,528 | 83,021 | 95,328 |
| | BUG Rating | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 4000K | 31,787 | 31,889 | 32,245 | 44,020 | 43,845 | 63,883 | 82,193 | 94,376 |
| | BUG Rating | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 3000K | 30,932 | 31,032 | 31,378 | 42,836 | 42,666 | 62,166 | 79,983 | 91,839 |
| | BUG Rating | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| T5N | 5000K | 34,875 | 34,987 | 35,377 | 48,296 | 48,104 | 70,084 | 90,170 | 103,536 |
| | BUG Rating | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 | B5-U0-G5 |
| | 4000K | 34,524 | 34,635 | 35,021 | 47,810 | 47,620 | 69,384 | 89,270 | 102,503 |
| | BUG Rating | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 | B5-U0-G5 |
| | 3000K | 33,596 | 33,704 | 34,079 | 46,524 | 46,340 | 67,519 | 86,870 | 99,747 |
| | BUG Rating | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 | B5-U0-G5 |
| T5R | 5000K | 33,931 | 34,040 | 34,420 | 46,989 | 46,803 | 68,187 | 87,730 | 100,735 |
| | BUG Rating | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 4000K | 33,590 | 33,698 | 34,074 | 46,517 | 46,332 | 67,507 | 86,855 | 99,729 |
| | BUG Rating | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 3000K | 32,687 | 32,792 | 33,157 | 45,266 | 45,086 | 65,692 | 84,520 | 97,047 |
| | BUG Rating | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 |



Cooper Lighting Solutions
 1121 Highway 74 South
 Peachtree City, GA 30269
 P: 770-486-4800
 www.cooperlighting.com

Specifications and dimensions subject to change without notice.

LUMEN MAINTENANCE

| Ambient Temperature | TM-21 Lumen Maintenance (100,000 Hours) | Projected L70 (Hours) |
|---------------------|---|-----------------------|
| Up to 40°C | > 86% | 242,000 |

LUMEN MULTIPLIER

| Ambient Temperature | Lumen Multiplier |
|---------------------|------------------|
| 10°C | 1.02 |
| 15°C | 1.01 |
| 25°C | 1.00 |
| 40°C | 0.99 |

HIGHMAST WEIGHTS

| Catalog Logic | Weight (lbs) | Weight (kgs) |
|---------------|--------------|--------------|
| CST-6-3 | 58 | 26.11 |
| CST-8-3 | 58 | 26.31 |
| CST-10-3 | 57 | 25.89 |
| CST-8-4 | 61 | 27.49 |
| CST-10-4 | 61 | 27.69 |
| CST-8-6 | 61 | 27.49 |
| CST-10-8 | 65 | 29.48 |
| CST-10-9 | 66 | 30.06 |

ORDERING INFORMATION

Sample Number: CST-8-6-D-U-T4-AP

| Product Family | Light Engine | Driver | Voltage | Distribution | Color |
|---|--|--|--|--|---|
| CST=Celesteon High Mast | 6-3 8-3 8-4 8-6 10-3 10-4 10-8 10-9 | D=Dimming 5LTD=DALI ¹ DURAQ=DuraQ High Performance Driver ^{15, 16, 17} | U=Universal 120-277V 1=120V 2=208V 3=240V 4=277V 8=480V ¹⁴ 9=347V | T1=Type I T2=Type II T3=Type III T4=Type IV T5=Type V T5N=Type V Narrow T5R=Type V Round | AP=Grey (Standard) BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White |
| Options (Add as Suffix) | | | Accessories (Order Separately) | | |
| 7030=70 CRI / 3000K 7050=70 CRI / 5000K 4=NEMA Twistlock Photocontrol Receptacle 4N7=NEMA 7-PIN Twistlock Photocontrol Receptacle 10K=10kV UL 1449 Surge Protection Device 10MSP=10kV MOV Surge Protection Device 20K=20kV UL 1449 Surge Protection Device ² HA=50°C High Ambient ^{3, 4} K=Level Indicator HSS=Factory Installed House Side Shield (One per LED) ⁵ NG-HM=Factory Installed Nature Guard TH=Tool-less Door Hardware (Wingnut) ^{6, 7} F=Single Fused (120, 277 or 347V. Must Specify Voltage) FF=Double Fused (208, 240 or 480V. Must Specify Voltage) SS=Stainless Steel External Hardware DH=Door Hinge IP66=IP66 Rated Housing CC=Coastal Construction ⁸ TS=Tool-less Surge Protector Mounting Bracket (10K Only) ^{9, 10} CE=CE Marking ¹¹ | | | OA/RA1013=Photocontrol Shorting Cap OA/RA1016=NEMA Photocontrol - Multi-Tap 105-285V OA/RA1201=NEMA Photocontrol - 347V OA/RA1027=NEMA Photocontrol - 480V OA1223=10kV Surge Module Replacement FSP3-277-20kA=20kA Surge Module Replacement (120-277V Input Voltage) FSP3-480-20kA=20kA Surge Module Replacement (480V Input Voltage) HSS-HM=Field Installed House Side Shield - Black (One per LED) ⁵ HSS-HM-EX90=External Field Installed 90° Shield - Black HSS-HM-EX120=External Field Installed 120° Shield - Black HSS-HM-EX180=External Field Installed 180° Shield - Black NG-HM-FLD-SHORT=Field Installed Nature Guard ¹² NG-HM-FLD-LONG=Field Installed Nature Guard ¹³ | | |

NOTES:

- 5LTD not available with 347V or 480V.
- 20kV surge protection available with 347V as PDR with extended lead time.
- HA not available with 10-8 lumen packages that has HSS or NG.
- HA not available with 10-9 lumen package.
- HSS not compatible with T1, T5 or T5N distributions
- TH and SS are mutually exclusive options. Only one can be selected.
- TH wingnuts and CC are mutually exclusive options. Only one can be selected.
- CC includes casting pretreatment and stainless steel external hardware.
- TS is a bracket only and surge module should be ordered if needed.
- TS not available with 20kV or 10MSP surge protection device.
- CE only available with 5LTD.
- Compatible with all but 10-9 lumen packages.
- Only compatible with 10-9 lumen packages.
- Only for use with 480V Wye systems.
- Additional surge protection devices (10K, 10MSP, and 20K) and/or fuse options (F and FF) are not required with DuraQ High Performance Driver.
- A specific voltage option must be specified (120V, 208V, 240V, 277V, 347V, or 480V).
- Available with "8-6" light engine only. Increases total weight of luminaire to 71lbs. (32.21kgs.)