

## 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.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

## 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 and Type V narrow. 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

Five-year warranty. Optional ten-year warranty available.



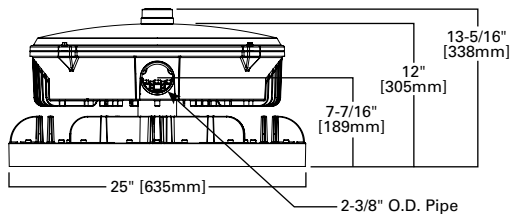
## CTN CELESTEON

Solid State LED

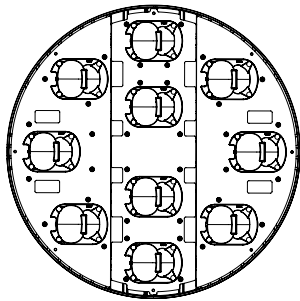
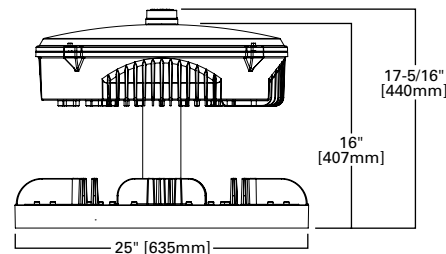
AREA/SITE LUMINAIRE

## 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

UL/cUL Wet Location Listed  
 IP66 Rated Optics (standard)  
 IP66 Rated Housing (optional)  
 3G Vibration Rated  
 ISO 9001  
 DesignLights Consortium® Qualified\*

## 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:  
 70 lbs. (31.8kgs.)

**POWER AND LUMENS**

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

**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

**ORDERING INFORMATION**

Sample Number: CTN-8-6-D-E1-T4-AP

Product Family	Light Engine	Driver	Voltage	Distribution	Color
CTN=Celesteon High Mast	6-3 8-3 8-4 8-6 10-3 10-4 10-8 10-9	D=Dimming 5LTD=DALI <sup>1</sup> DURAQ=DuraQ High Performance Driver <sup>15, 16, 17</sup>	E1=120-277V 120=120V 208=208V 240=240V 277=277V 480=480V <sup>14</sup> 347=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
<b>Options (Add as Suffix)</b>		<b>Color</b>	<b>Accessories (Order Separately)</b>		
7030=70 CRI / 3000K 7050=70 CRI / 5000K R=NEMA Twistlock Photocontrol Receptacle PER7=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 <sup>2</sup> HA=50°C High Ambient <sup>3,4</sup> K=Level Indicator HSS=Factory Installed House Side Shield (One per LED) <sup>5</sup> NG-HM=Factory Installed Nature Guard TH=Tool-less Door Hardware (Wingnut) <sup>6,7</sup> 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 <sup>8</sup> TS=Tool-less Surge Protector Mounting Bracket (10K Only) <sup>9,10</sup> CE=CE Marking <sup>11</sup>		AP=Grey (Standard) BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White	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) <sup>5</sup> 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 <sup>12</sup> NG-HM-FLD-LONG=Field Installed Nature Guard <sup>13</sup>		

- 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.)



Cooper Lighting Solutions  
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Specifications and dimensions subject to change without notice.