

Project		Catalog #		Type	
Prepared by		Notes		Date	



# Streetworks

## CST Celesteon

Solid State LED  
Area / Roadway Luminaire

### Product Certifications & Features



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## Product Specifications

### 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 in 70CRI 2200K, 2700K, 3000K, 4000K, 5000K, and 5700K CCTs
- For the ultimate level of spill light control, an optional factory installed house side shield accessory is available
- IDA certified for 3000K CCT and below
- Optics are IP66 enclosure rated

### ELECTRICAL

- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation
- Standard 0-10V dimming with parallel and series (10kV, 20kV, 10MSP, 20MSP) 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 83% lumen maintenance expected at 60,000 hours

### PHYSICAL CHARACTERISTICS

- Heavy-duty, die-cast aluminum housing and door
- Optional toolless entry, hinged removable door for additional easy maintenance
- 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
- Housing and cast parts finished in five-stage super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117.
- Consult your lighting representative at Cooper Lighting Solutions for a complete selection of standard colors

### CONTROLS

- Optional Field Adjustable Dimming Control (FADC) module allows for manual adjustment of lumen output and power usage; factory preset to highest output level. Enables a single SKU to cover multiple field applications

### COMPLIANCE

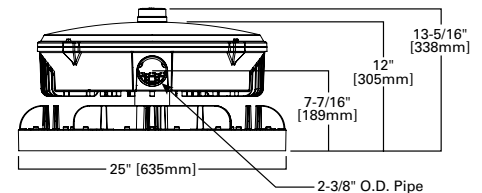
- Meets ANSI C136.25 for IP66 Optical enclosure rating
- Meets ANSI C136.31 for 3G luminaire vibration. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications.
- Meets ANSI C136.15 for luminaire field identification label standard
- Meets ANSI C136.22 internal label standard
- DarkSky approved for 3000K CCT and warmer
- Products that meet BABA Domestic Preference Requirements - This Cooper product is manufactured in the US and meets the BABA cost of components rule. To verify a configured product with specific accessories and options meets BABA Domestic Preference Requirements; submit this catalog number to Cooper Lighting Quotation team for validation by our Engineering and Manufacturing teams. Our BABA designation is based on the minimum compliance requirement for BABA. Individual Government Agencies may have more stringent compliance standards.
- Products that meet BABA through Exemption - Allows any product to satisfy BABA requirements regardless of domestic content manufacturing for projects funded by FHWA through Oct 1st 2025. See notes portion in Ordering Information section for more detail.
- Products that meet BABA through BAA Exemption - FHWA and FTA agencies are utilizing their BAA rules for BABA compliance. Cooper's products with a BAA designation are manufactured in the US and utilize a BAA COTS exemption rule for compliance. To verify a configured product with specific accessories and options meet BABA Domestic Preference Requirements; submit this catalog number to Cooper Lighting Quotation team for validation by our Engineering and Manufacturing teams. See notes portion in Ordering Information section for more detail.
- Please refer to the [DOMESTIC PREFERENCES](#) website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

### WARRANTY

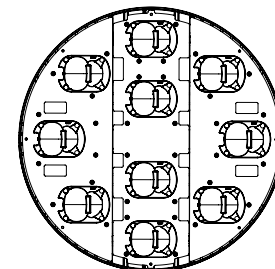
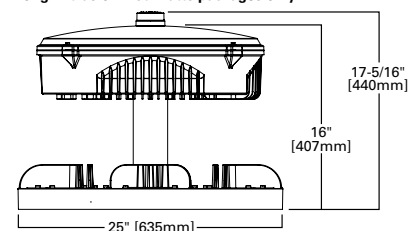
- Five year limited warranty, consult website for details. [www.cooperlighting.com/legal](http://www.cooperlighting.com/legal)

## Dimensional and Mounting Details

Short Extrusion: All lumen packages except 760 watts



Long Extrusion: 760 watts packages only



## Ordering Information

SAMPLE NUMBER: **CST-CA8-230-740-U-T5-AP-10K-PR7**

Product Family	Configuration	Wattage Bucket	Color Temperature	Voltage	Distribution	Color
<b>CST</b> =Celestion High Mast <b>BAA-CST</b> =Celestion High Mast, Buy American Act Compliant <sup>17</sup> <b>TAA-CST</b> =Celestion High Mast, Trade Agreements Act Compliant <sup>17</sup> <b>BABAE-CST</b> =Build America Buy America Act (FHWA Exception, for projects funded by Oct 1, 2025) <sup>17</sup> <b>BABAF-CST</b> =Build America Buy America Act (FHWA Exception, for projects funded between Oct 1, 2025 and Oct 1, 2026, and FTA Buy America) <sup>17</sup>	<b>CA6</b> =6 COB Light Engine	<b>230</b> =230W	<b>740</b> =70CRI, 4000K <b>727</b> =70CRI, 2700K <b>722</b> =70CRI, 2200K <b>730</b> =70CRI, 3000K <b>750</b> =70CRI, 5000K <b>760</b> =70CRI, 5700K	<b>U</b> =Universal 120-277V <b>1</b> =120V <b>2</b> =208V <b>3</b> =240V <b>4</b> =277V <b>8</b> =480V <sup>14</sup> <b>9</b> =347V <b>DV</b> =277-480V DuraVolt Drivers <sup>19,20</sup>	<b>T1</b> =Type I <b>T2</b> =Type II <b>T3</b> =Type III <b>T4</b> =Type IV <b>T5</b> =Type V <b>T5N</b> =Type V Narrow <b>T5R</b> =Type V Round	<b>AP</b> =Grey <b>BZ</b> =Bronze <b>BK</b> =Black <b>DP</b> =Dark Platinum <b>GM</b> =Graphite Metallic <b>WH</b> =White
	<b>CA8</b> =8 COB Light Engine	<b>230</b> =230W <b>330</b> =330W <b>400</b> =400W <b>430</b> =430W <b>480</b> =480W				
	<b>CA10</b> =10 COB Light Engine	<b>210</b> =210W <b>310</b> =310W <b>630</b> =630W <b>760</b> =760W				
Options (Add as Suffix)			Controls		Accessories (Order Separately) <sup>18</sup>	
<b>F</b> =Single Fused (120, 277 or 347V. Must Specify Voltage) <b>FF</b> =Double Fused (208, 240 or 480V. Must Specify Voltage) <b>10MSP</b> =Parallel 10kV MOV Surge Protection Device <b>20MSP</b> =Parallel 20kV MOV Surge Protection Device <b>10K</b> =Series 10kV UL 1449 Surge Protective Device <b>20K</b> =Series 20kV UL 1449 Surge Protective Device <sup>2</sup> <b>20KI</b> =Series 20kV UL 1449 Surge Protective Device with light indicator <sup>2</sup> <b>K</b> =Level Indicator <b>HSS</b> =Factory Installed House Side Shield (One per LED) <sup>5</sup> <b>NG-HM</b> =Factory Installed Nature Guard <b>TH</b> =Tool-less Door Hardware (Wingnut) <sup>6,7</sup> <b>SS</b> =Stainless Steel External Hardware <sup>6</sup> <b>DH</b> =Door Hinge <b>HA</b> =50°C High Ambient <sup>3,4</sup> <b>IP66</b> =IP66 Rated Housing <b>5LTD</b> =DALI <sup>1</sup> <b>CC</b> =Coastal Construction <sup>7,8</sup> <b>TS</b> =Tool-less Surge Protector Mounting Bracket (10K Only) <sup>9,10</sup> <b>CE</b> =CE Marking <sup>11</sup> <b>CXXXX</b> =Cord Type <sup>15</sup> <b>DXXXXX</b> =Department of Transportation - Customer specific details <sup>16</sup> <b>UXXXXX</b> =Utility - Customer specific details <sup>16</sup>			<b>PSC</b> =Photocontrol Shorting Cap <b>NPC</b> =NEMA Photocontrol - Multi-Tap <b>LLPC</b> =Longlife Photocontrol Included <b>PR</b> =NEMA 3-PIN Twistlock Photocontrol Receptacle <b>PR7</b> =NEMA 7-PIN Twistlock Photocontrol Receptacle		<b>OA/RA1013</b> =Photocontrol Shorting Cap <b>OA/RA1016</b> =NEMA Photocontrol - Multi-Tap 105-285V <b>OA/RA1201</b> =NEMA Photocontrol - 347V <b>OA/RA1027</b> =NEMA Photocontrol - 480V <b>OA1223</b> =10kV Surge Module Replacement <b>FSP3-277-20kA</b> =20kA Surge Module Replacement (120-277V Input Voltage) <b>FSP3-480-20kA</b> =20kA Surge Module Replacement (480V Input Voltage) <b>HSS-HM</b> =Field Installed House Side Shield - Black (One per LED) <sup>5</sup> <b>HSS-HM-EX90</b> =External Field Installed 90° Shield - Black <b>HSS-HM-EX120</b> =External Field Installed 120° Shield - Black <b>HSS-HM-EX180</b> =External Field Installed 180° Shield - Black <b>NG-HM-FLD-SHORT</b> =Field Installed Nature Guard <sup>12</sup> <b>NG-HM-FLD-LONG</b> =Field Installed Nature Guard <sup>13</sup>	
<b>NOTES:</b> 1. 5LTD not available with 347V or 480V. 2. 20kV surge protection available with 347V as PDR with extended lead time. 3. HA not available with CA10-630 lumen packages that has HSS or NG. 4. HA not available with CA10-760 lumen package. 5. HSS not compatible with T1, T5 or TSN distributions. 6. TH and SS are mutually exclusive options. Only one can be selected. 7. TH wingnuts and CC are mutually exclusive options. Only one can be selected. 8. CC includes casting pretreatment and stainless steel external hardware. 9. TS is a bracket only and surge module should be ordered if needed. 10. TS not available with 20kV or 10MSP surge protection device. 11. CE only available with 5LTD. 12. Compatible with all but CA10-760 lumen packages. 13. Only compatible with CA10-760 lumen packages. 14. Only for use with 480V Wye systems. 15. 3-conductor cord available in 12, 14, and 16 gauge with lengths of 5, 8, 10, 15, 20, and 25 feet. Specify cord gauge with the first 2 digits and cord length with the last 2 digits (ex: C1605 = 16-gauge, 5 feet length cord). Standard cord is 16-gauge with length of 3.5 ft if not specified. 16. Customer specific specifications utilizes standard products with small adjustments to meet unique requirements such as packaging, labels, wattage adjustments, etc. 17. Only product configurations with these prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or the Build America Buy America Act (BABA). BABA is the minimum Government compliance requirement for the Build America Buy America standards which is part of the Infrastructure and Investment Jobs Act (IIJA). Individual Government Agencies may have more stringent compliance standards. BABAE designates the product will meet the standards set for FHWA. As noted these projects must receive Government Funding by October 1, 2025. BABAF designates the product will meet the standards set for FHWA and FTA. As noted these projects must receive Government Funding by October 1, 2026. Please refer to the <a href="#">DOMESTIC PREFERENCES</a> website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 18. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 19. 480V not to be used with ungrounded or impedance grounded systems. 20. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit <a href="http://www.signify.com/duravolt">www.signify.com/duravolt</a> for more information. Not available in 70W or below. Not available with any control option except SPB.						

## Energy and Performance Data

[View CST CELESTION IES files](#)

### Power and Lumens

Light Engine	CA6	CA8	CA8	CA8	CA8	CA8	CA8	CA10	CA10	CA10	CA10
<b>Wattage Bucket</b>	230	230	330	400	430	480	210	310	630	760	
<b>Nominal Power (Watts)</b>	228	228	332	401	434	481	213	312	631	762	
<b>Current @ 120V (A)</b>	1.93	1.93	2.81	3.34	3.62	4.09	1.79	2.64	5.43	6.52	
<b>Current @ 277V (A)</b>	0.85	0.86	1.28	1.45	1.57	1.85	0.80	1.22	2.38	2.75	
<b>Current @ 347V (A)</b>	0.67	0.67	0.99	1.16	1.25	1.45	0.63	0.93	1.90	2.20	
<b>Current @ 480V (A)</b>	0.49	0.49	0.72	0.84	0.90	1.03	0.46	0.68	1.35	1.59	
<b>Optics</b>											
<b>T1</b>	5000K	36,458	37,930	51,795	64,271	69,004	75,200	36,931	51,270	97,635	112,724
	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	B5-U0-G5	B5-U0-G5
	4000K	35,802	37,247	50,862	63,114	67,760	73,845	36,266	50,346	95,877	110,695
	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	B5-U0-G5	B5-U0-G5
	3000K	35,153	36,573	49,941	61,971	66,534	72,508	35,609	49,435	94,141	108,690
	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	B5-U0-G5	B5-U0-G5
<b>T2</b>	5000K	34,828	36,234	49,479	61,398	65,918	71,837	35,280	48,977	93,270	107,685
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G5	B5-U0-G5	B5-U0-G5
	4000K	34,201	35,582	48,588	60,292	64,731	70,544	34,645	48,095	91,590	105,745
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G5	B5-U0-G5	B5-U0-G5
	3000K	33,582	34,938	47,708	59,200	63,559	69,267	34,017	47,225	89,932	103,831
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G4	B5-U0-G5	B5-U0-G5
<b>T3</b>	5000K	35,158	36,577	49,947	61,978	66,543	72,518	35,614	49,441	94,153	108,704
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G5	B5-U0-G5	B5-U0-G5
	4000K	34,525	35,919	49,048	60,863	65,344	71,212	34,973	48,551	92,457	106,747
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G5	B5-U0-G5	B5-U0-G5
	3000K	33,900	35,268	48,160	59,760	64,161	69,922	34,339	47,672	90,783	104,814
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G5	B5-U0-G5	B5-U0-G5
<b>T4</b>	5000K	34,620	36,017	49,183	61,030	65,524	71,407	35,069	48,684	92,711	107,040
	BUG Rating	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B3-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5
	4000K	33,996	35,369	48,297	59,931	64,343	70,121	32,237	47,807	91,042	105,112
	BUG Rating	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5
	3000K	33,381	34,728	47,423	58,846	63,179	68,852	33,814	46,942	89,393	103,209
	BUG Rating	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5
<b>T5</b>	5000K	36,196	37,657	51,422	63,809	68,507	74,658	36,665	50,901	96,933	111,913
	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	B5-U0-G5	B5-U0-G5
	4000K	35,544	36,979	50,496	62,660	67,272	73,314	36,005	49,984	95,187	109,898
	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	B5-U0-G5	B5-U0-G5
	3000K	34,900	36,309	49,582	61,524	66,055	71,987	35,353	49,079	93,464	107,908
	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	B5-U0-G5	B5-U0-G5

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## Power and Lumens

Light Engine		CA6	CA8	CA8	CA8	CA8	CA8	CA10	CA10	CA10	CA10
<b>Wattage Bucket</b>		230	230	330	400	430	480	210	310	630	760
<b>Nominal Power (Watts)</b>		228	228	332	401	434	481	213	312	631	762
<b>Current @ 120V (A)</b>		1.93	1.93	2.81	3.34	3.62	4.09	1.79	2.64	5.43	6.52
<b>Current @ 277V (A)</b>		0.85	0.86	1.28	1.45	1.57	1.85	0.80	1.22	2.38	2.75
<b>Current @ 347V (A)</b>		0.67	0.67	0.99	1.16	1.25	1.45	0.63	0.93	1.90	2.20
<b>Current @ 480V (A)</b>		0.49	0.49	0.72	0.84	0.90	1.03	0.46	0.68	1.35	1.59
Optics											
<b>T5N</b>	5000K	37,394	38,903	53,124	65,920	70,774	77,129	37,879	52,585	100,140	115,617
	BUG Rating	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G3	B5-U0-G4	B5-U0-G5	B5-U0-G5
	4000K	36,720	38,203	52,167	64,732	69,499	75,740	37,196	51,638	98,337	113,535
	BUG Rating	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G3	B5-U0-G4	B5-U0-G5	B5-U0-G5
	3000K	36,055	37,511	51,222	63,560	68,241	74,369	36,523	50,703	96,556	111,479
	BUG Rating	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G3	B5-U0-G4	B5-U0-G5	B5-U0-G5
<b>T5R</b>	5000K	37,550	39,066	53,346	66,195	71,069	77,451	38,037	52,805	100,559	116,100
	BUG Rating	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	4000K	36,874	38,362	52,385	65,004	69,790	76,057	37,352	51,854	98,748	114,009
	BUG Rating	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	3000K	36,206	37,668	51,437	63,827	68,526	74,680	36,676	50,915	96,960	111,945
	BUG Rating	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5

## Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Projected L70 (Hours)
Up to 40°C	> 83%	125,000

## 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)
CA4-230W	58	26.11
CA8-230W	58	26.31
CA8-330W	57	25.89
CA8-400W	61	27.49
CA8-430W	61	27.49
CA8-480W	61	27.49
CA10-210W	61	27.69
CA10-310W	61	27.49
CA10-630W	65	29.48
CA10-760W	66	30.06

## Energy Data

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

## Shipping Data

Approximate Net Weight:
See Highmast Weights chart

## 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