

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

CTN CELESTEON

Solid State LED
Area / Roadway Luminaire

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Product Certifications

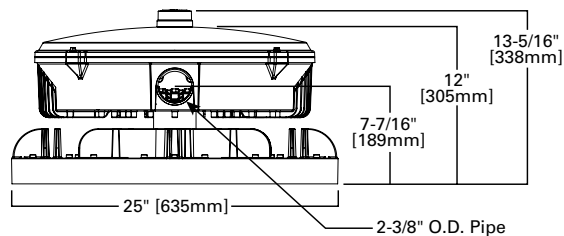


Quick Facts

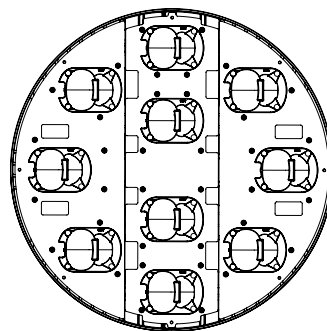
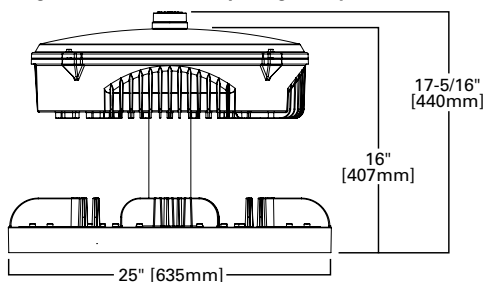
- Up to 175 lumens per watt
- 7 optical distributions: Type I, II, III, IV, V, V narrow and V round
- 8 lumen packages ranging up to 116,100 delivered lumens
- Offered in 70CRI 2200K, 2700K, 3000K, 4000K, 5000K, 5700K CCTs
- 10kV, 20kV, 10MSP, or 20MSP surge protection options

Dimensional and Mounting Details

Short Extrusion: All lumen packages except 760 watts



Long Extrusion: 760 watts packages only



Ordering Information

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

Product Family	Configuration	Wattage Bucket	Color Temperature	Voltage	Distribution	Color
CTN=Celestion High Mast	CA6=6 COB Light Engine	230=230W	740=70CRI, 4000K 727=70CRI, 2700K 722=70CRI, 2200K 730=70CRI, 3000K 750=70CRI, 5000K 760=70CRI, 5700K	U=Universal 120-277V 1=120V 2=208V 3=240V 4=277V 8=480V ¹⁴ 9=347V DV=277-480V DuraVolt Drivers ^{14,18}	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 BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White
	CA8=8 COB Light Engine	230=230W 330=230W 480=230W				
	CA10=10 COB Light Engine	210=210W 310=310W 630=630W 760=760W				
Options (Add as Suffix)			Controls		Accessories (Order Separately)	
F=Single Fused (120, 277 or 347V. Must Specify Voltage) FF=Double Fused (208, 240 or 480V. Must Specify Voltage) 10MSP=Parallel 10kV MOV Surge Protection Device 20MSP=Parallel 20kV MOV Surge Protection Device 10K=Series 10kV UL 1449 Surge Protective Device 20K=Series 20kV UL 1449 Surge Protective Device ² 20KI=Series 20kV UL 1449 Surge Protective Device with light indicator ² 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} SS=Stainless Steel External Hardware ⁶ DH=Door Hinge HA=50°C High Ambient ^{3,4} IP66=IP66 Rated Housing DURAQ=DuraQ High Performance Driver ^{15,16,17} 5LTD=DALI ¹ CC=Coastal Construction ^{7,8} TS=Tool-less Surge Protector Mounting Bracket (10K Only) ^{9,10} CE=CE Marking ¹¹			PSC=Photocontrol Shorting Cap NPC=NEMA Photocontrol - Multi-Tap LLPC=Longlife Photocontrol Included PR=NEMA 3-PIN Twistlock Photocontrol Receptacle PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle		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: 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 T5N 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. 480V not to be used with ungrounded or impedance grounded systems. 15. Additional surge protection devices (10K, 10MSP, and 20K) and/or fuse options (F and FF) are not required with DuraQ High Performance Driver. 16. A specific voltage option must be specified (120V, 208V, 240V, 277V, 347V, or 480V). 17. Available with "CA8-480" light engine only. Increases total weight of luminaire to 71lbs. (32.21kgs.) 18. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/duravolt for more information. Not available with any control option except SPB.						

Product Specifications

Construction

- Heavy-duty, die-cast aluminum housing and door
- Optional toolless 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 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

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

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 limited warranty, consult website for details. www.cooperlighting.com/legal
- Optional ten-year warranty, please see your Cooper Lighting Solutions Streetworks sales representative for more information.

Energy and Performance Data

[View CTN CELESTION IES files](#)

Power and Lumens

Light Engine	CA6	CA8	CA8	CA8	CA10	CA10	CA10	CA10
Wattage Bucket	230	230	330	480	210	310	630	760
Nominal Power (Watts)	228	228	332	481	213	312	631	762
Current @ 120V (A)	1.02	0.78	1.12	1.10	1.20	0.86	1.15	1.37
Current @ 277V (A)	0.85	0.86	1.28	1.85	0.80	1.22	2.38	
Current @ 347V (A)	0.67	0.67	0.99	1.45	0.63	0.93	1.90	
Current @ 480V (A)	0.49	0.49	0.72	1.03	0.46	0.68	1.35	

Optics

T1	5000K	36,458	37,930	51,795	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
	4000K	35,802	37,247	50,862	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
	3000K	35,153	36,573	49,941	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
T2	5000K	34,828	36,234	49,479	71,837	35,280	48,977	93,270	107,685
	BUG Rating	B3-U0-G4	B3-U0-G4	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	70,544	34,645	48,095	91,590	105,745
	BUG Rating	B3-U0-G4	B3-U0-G4	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	69,267	34,017	47,225	89,932	103,831
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G4	B5-U0-G5	B5-U0-G5
T3	5000K	35,158	36,577	49,947	72,518	35,614	49,441	94,153	108,704
	BUG Rating	B3-U0-G4	B3-U0-G4	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	71,212	34,973	48,551	92,457	106,747
	BUG Rating	B3-U0-G4	B3-U0-G4	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	69,922	34,339	47,672	90,783	104,814
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G5	B5-U0-G5	B5-U0-G5
T4	5000K	34,620	36,017	49,183	71,407	35,069	48,684	92,711	107,040
	BUG Rating	B3-U0-G5	B3-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	70,121	32,237	47,807	91,042	105,112
	BUG Rating	B3-U0-G5	B3-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	68,852	33,814	46,942	89,393	103,209
	BUG Rating	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5
T5	5000K	36,196	37,657	51,422	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
	4000K	35,544	36,979	50,496	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
	3000K	34,900	36,309	49,582	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

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Power and Lumens

Light Engine		CA6	CA8	CA8	CA8	CA10	CA10	CA10	CA10
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Current @ 347V (A)		0.67	0.67	0.99	1.45	0.63	0.93	1.90	
Current @ 480V (A)		0.49	0.49	0.72	1.03	0.46	0.68	1.35	
Optics									
T5N	5000K	37,394	38,903	53,124	77,129	37,879	52,585	100,140	115,617
	BUG Rating	B5-U0-G3	B5-U0-G3	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	75,740	37,196	51,638	98,337	113,535
	BUG Rating	B5-U0-G3	B5-U0-G3	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	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-G3	B5-U0-G4	B5-U0-G5	B5-U0-G5
T5R	5000K	37,550	39,066	53,346	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-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	4000K	36,874	38,362	52,385	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-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	3000K	36,206	37,668	51,437	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-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
CA8-480W	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