

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P232780

Luminaire Tested: **CTN-8-6-D-E1-T5N-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232780  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-22)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: CTN-8-6-D-E1-T5N-7050  
Description: CELESTEON HIGH MAST LUMINAIRE  
(8) 70 CRI, 5000K LEDS AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 70084 lumens  
Efficiency: N/A  
Efficacy: 146.9 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G4

Input Watts (W): 477  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

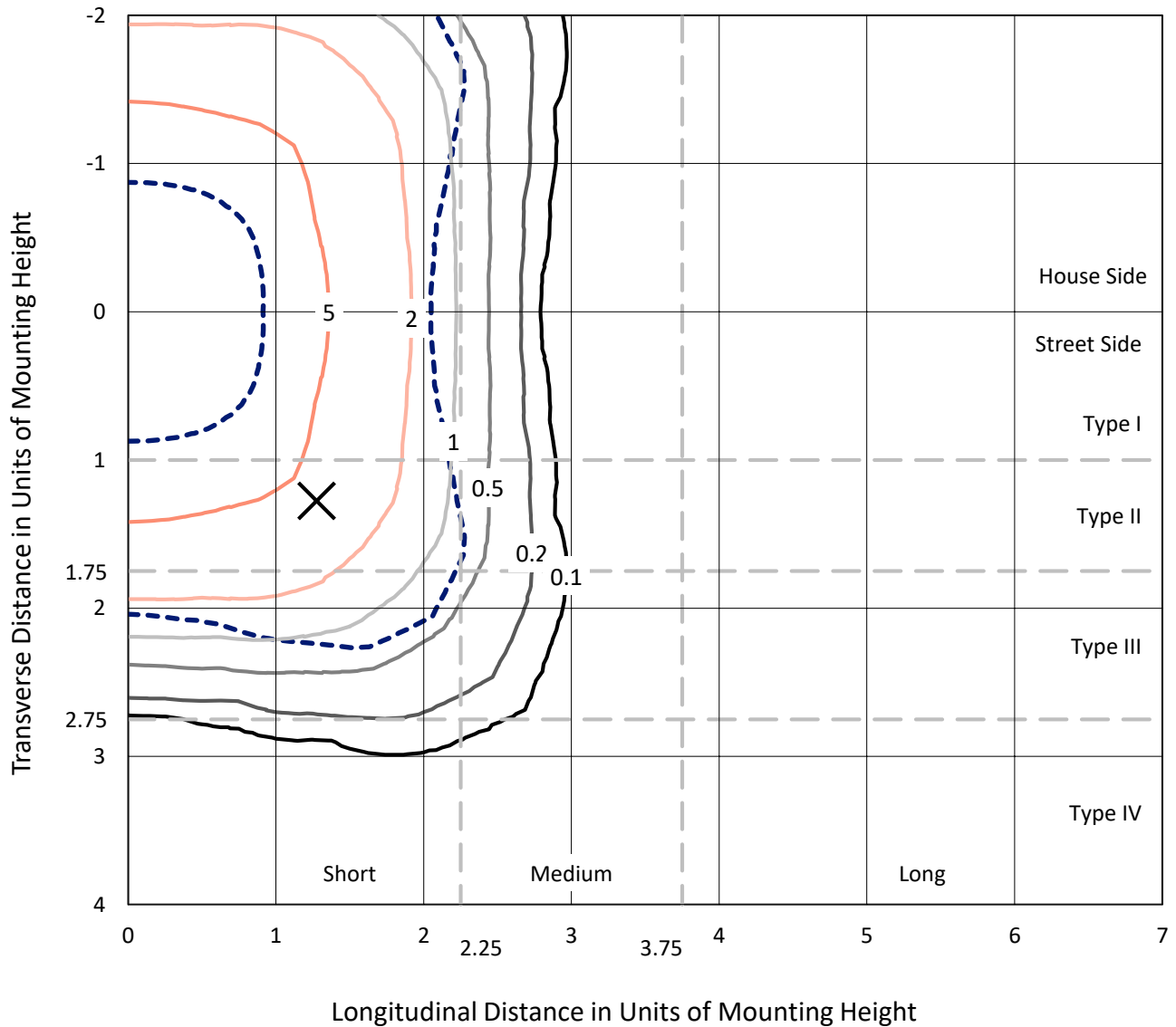


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

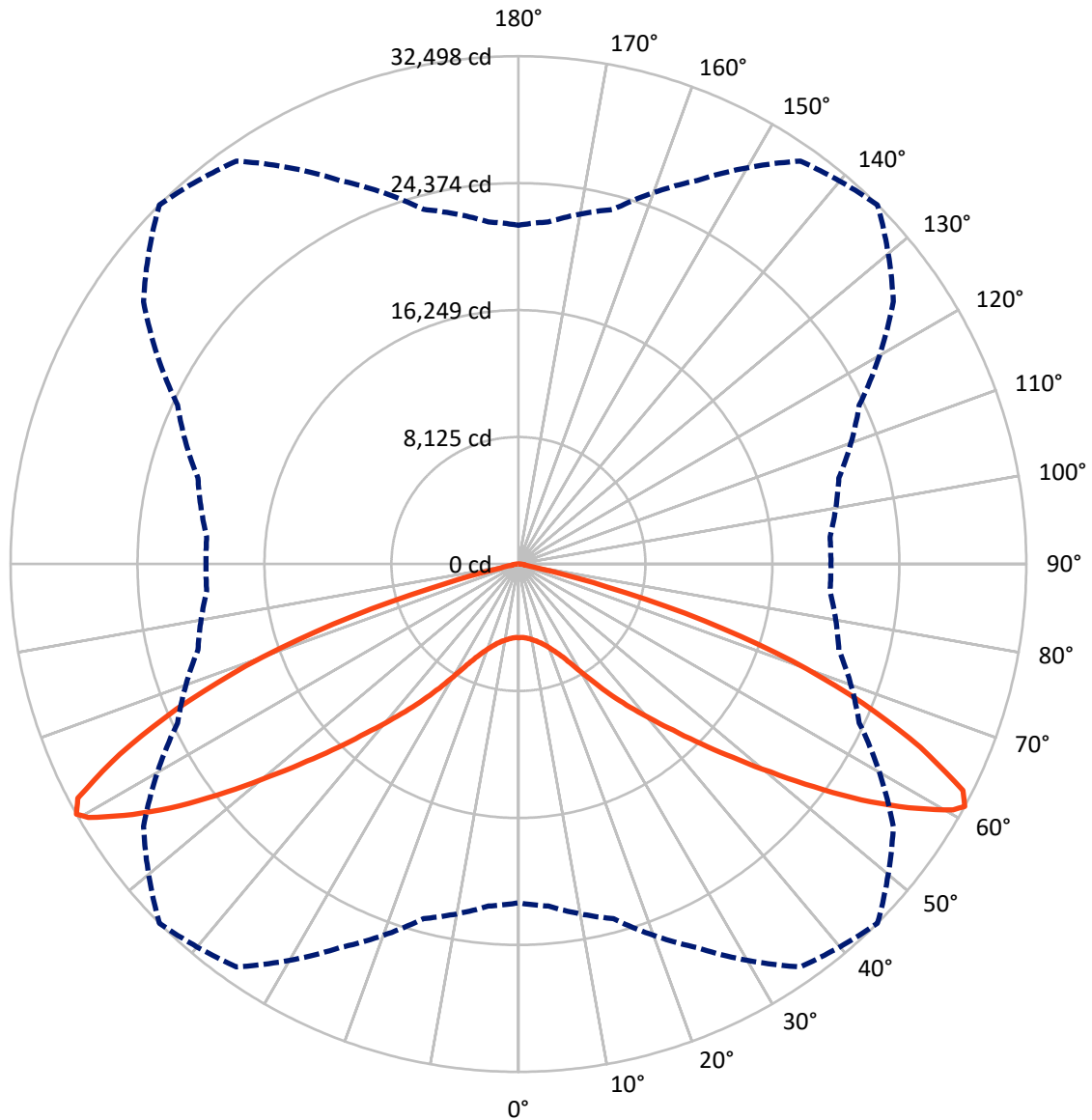


Based on 30 foot mounting height. Maximum calculated value = 7.6 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 61-Deg Vertical

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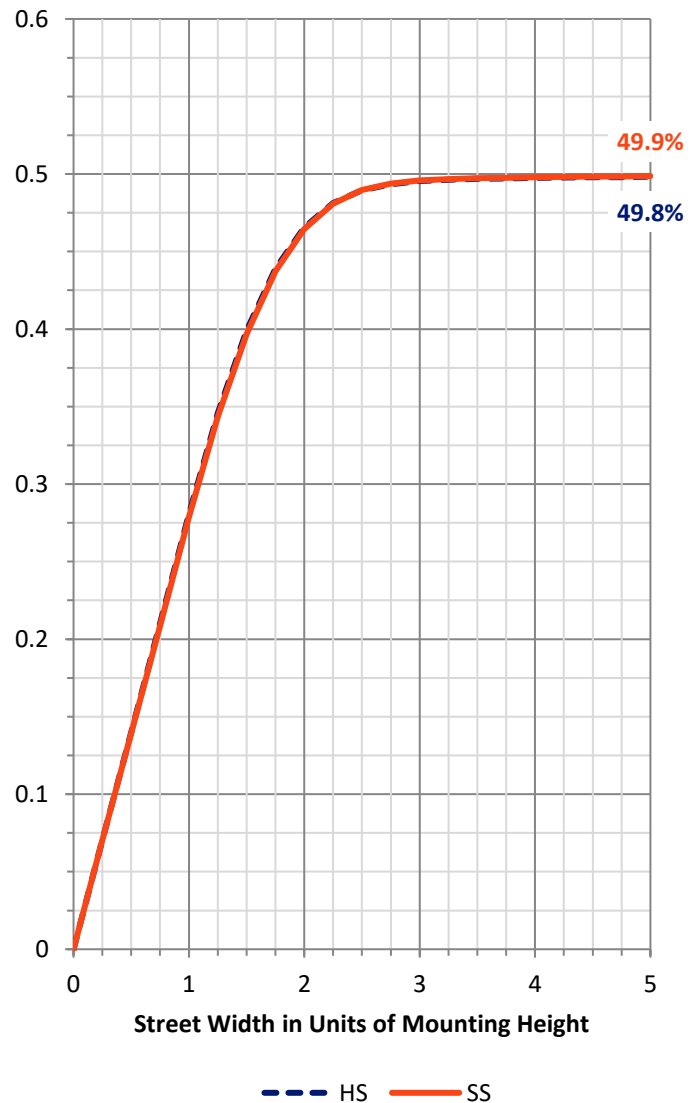
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	35042.0	0.0	35042.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	35042.0	0.0	35042.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	70084.0	0.0	70084.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	460.9	0.7
10°-20°	1510.2	2.2
20°-30°	3222.3	4.6
30°-40°	7018.5	10.0
40°-50°	13572.4	19.4
50°-60°	21553.4	30.8
60°-70°	19436.7	27.7
70°-80°	3042.2	4.3
80°-90°	267.3	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	70084.0	100.0
0°-180°	70084.0	100.0



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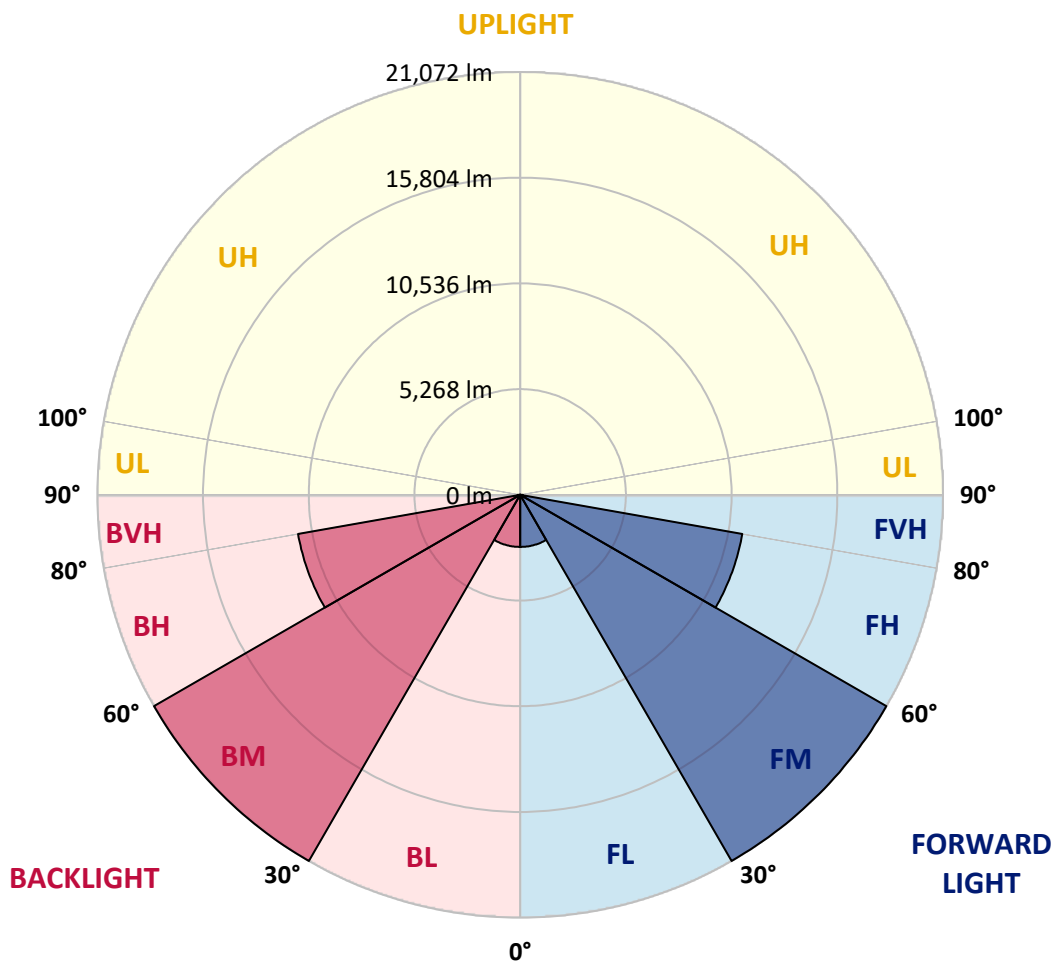
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2596.7	3.7			
FM (30°-60°)	21072.2	30.1			
FH (60°-80°)	11239.5	16.0			G4/12000
FVH (80°-90°)	133.7	0.2			G2/225
BL (0°-30°)	2596.7	3.7	B4/5000		
BM (30°-60°)	21072.2	30.1	B5		
BH (60°-80°)	11239.5	16.0	B5		G4/12000
BVH (80°-90°)	133.7	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G4**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4717.7	4717.7	4717.7	4717.7	4717.7	4717.7	4717.7	4717.7	4717.7	4717.7	4717.7
2.5°	4750.2	4740.0	4748.1	4754.2	4683.2	4701.5	4699.4	4748.1	4738.0	4760.3	4772.5
5°	4782.7	4766.4	4776.6	4792.8	4725.8	4750.2	4750.2	4794.8	4778.6	4800.9	4823.3
7.5°	4841.5	4825.3	4837.5	4857.8	4794.8	4821.2	4823.3	4876.0	4853.7	4872.0	4906.5
10°	4939.0	4928.8	4932.9	4951.1	4892.3	4924.8	4924.8	4981.6	4957.2	4977.5	5020.2
12.5°	5052.6	5048.6	5052.6	5077.0	5022.2	5054.7	5054.7	5109.5	5093.2	5117.6	5158.2
15°	5202.9	5198.8	5200.8	5233.3	5188.7	5219.1	5225.2	5282.0	5278.0	5304.4	5340.9
17.5°	5416.0	5416.0	5414.0	5442.4	5414.0	5444.4	5456.6	5517.5	5541.9	5574.3	5596.7
20°	5740.8	5722.5	5712.4	5726.6	5704.3	5736.7	5757.0	5856.5	5897.1	5947.9	5966.1
22.5°	6165.1	6140.7	6108.2	6094.0	6063.6	6106.2	6146.8	6288.9	6347.8	6431.0	6451.3
25°	6749.7	6709.1	6648.2	6591.4	6522.4	6583.3	6658.4	6853.2	6975.0	7084.7	7100.9
27.5°	7549.5	7488.6	7395.2	7285.6	7163.8	7238.9	7348.6	7632.8	7799.2	7973.8	8000.2
30°	8580.8	8570.6	8424.5	8229.6	8067.2	8109.8	8245.8	8597.0	8860.9	9041.6	9092.3
32.5°	9957.1	9946.9	9701.3	9372.5	9141.0	9169.5	9295.3	9685.1	10013.9	10308.3	10318.4
35°	11597.3	11564.8	11219.7	10765.0	10393.5	10361.1	10484.9	10872.6	11321.2	11664.3	11698.8
37.5°	13471.0	13418.2	13020.3	12332.2	11757.7	11623.7	11711.0	12198.2	12717.9	13105.6	13144.2
40°	15306.1	15265.5	14823.0	14177.4	13337.0	12998.0	13004.1	13627.3	14197.7	14557.0	14636.2
42.5°	17074.2	17106.7	16682.4	16024.7	15145.7	14540.8	14548.9	15153.9	15744.6	16118.1	16221.6
45°	18889.0	18860.6	18462.7	17898.4	17088.4	16418.5	16191.2	16796.1	17382.8	17689.3	17801.0
47.5°	20375.0	20324.2	20056.3	19757.9	19157.0	18497.3	18097.3	18517.6	18921.5	19128.6	19242.3
50°	21670.1	21629.5	21603.1	21477.3	21343.3	20917.0	20259.3	20232.9	20320.2	20364.8	20468.4
52.5°	22766.3	22764.3	22906.4	23214.9	23545.8	23694.0	22555.2	21818.3	21517.9	21296.6	21335.2
55°	23592.5	23582.4	23986.3	24812.5	25981.8	26651.7	24970.9	23190.6	22398.9	21970.6	21966.5
57.5°	24016.8	24035.1	24855.2	26351.3	28519.3	29432.8	27293.2	24451.2	23095.2	22443.6	22435.4
60°	22896.2	22973.4	24581.1	27305.4	30762.4	31956.1	29195.3	24713.1	22340.0	21245.9	21217.4
61°	21682.3	21972.6	23493.1	27088.2	31472.9	32498.1	29286.6	24063.5	21227.6	20019.7	19993.4
62.5°	19012.9	19284.9	21611.3	26546.2	31424.2	31929.7	28767.0	22896.2	19481.8	18135.9	18081.1
65°	13795.8	14116.5	16621.5	23519.4	28566.0	28265.6	26166.5	20216.7	16337.3	14823.0	14754.0
67.5°	6936.5	7346.5	10158.1	17068.1	23208.9	23779.3	22340.0	16006.5	11579.1	8743.2	8735.0
70°	1792.5	1967.1	3662.1	8976.6	16737.3	18625.1	17033.6	9273.0	4502.5	2716.1	2547.6
72.5°	501.4	525.8	994.7	3270.3	9518.6	12478.3	9234.4	3241.9	1015.0	578.5	529.8
75°	353.2	359.3	395.8	828.2	3595.1	5824.0	2976.0	700.3	406.0	383.7	383.7
77.5°	314.6	318.7	343.1	446.6	753.1	1309.3	570.4	452.7	357.3	345.1	341.0
80°	332.9	337.0	351.2	432.4	442.5	471.0	395.8	391.8	355.2	363.4	359.3
82.5°	357.3	365.4	383.7	442.5	379.6	381.6	324.8	322.8	314.6	357.3	359.3
85°	316.7	330.9	345.1	387.7	312.6	255.8	265.9	211.1	225.3	268.0	257.8
87.5°	176.6	174.6	168.5	176.6	158.3	127.9	107.6	97.4	89.3	101.5	99.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)