

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: P232773

Luminaire Tested: **CTN-10-8-D-E1-T5N**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232773  
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-10-8-D-E1-T5N  
Description: CELESTEON HIGH MAST LUMINAIRE  
(10) 70 CRI, 4000K LEDS AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 89270 lumens  
Efficiency: N/A  
Efficacy: 141.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G5

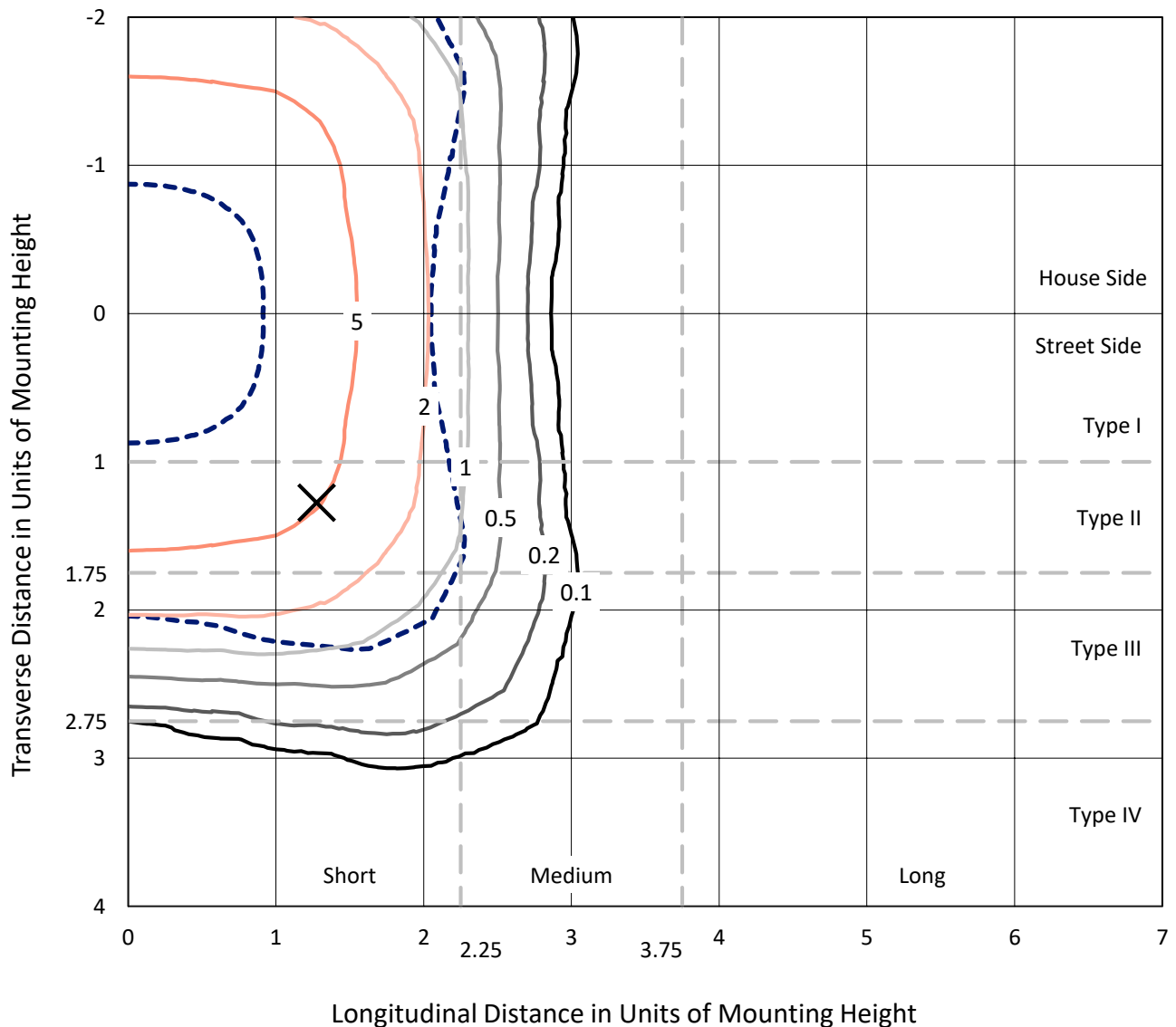
Input Watts (W): 631  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

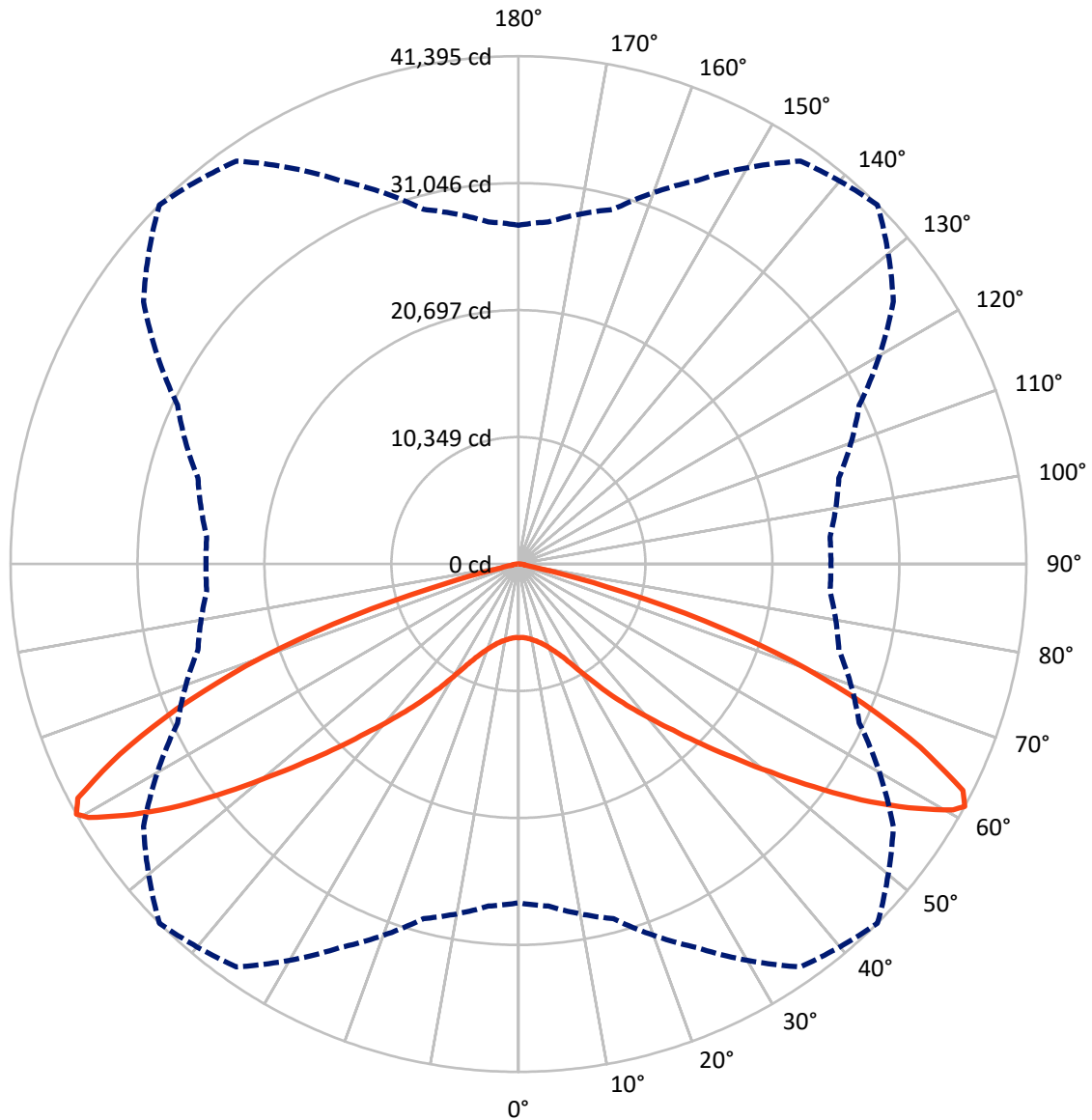
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.7 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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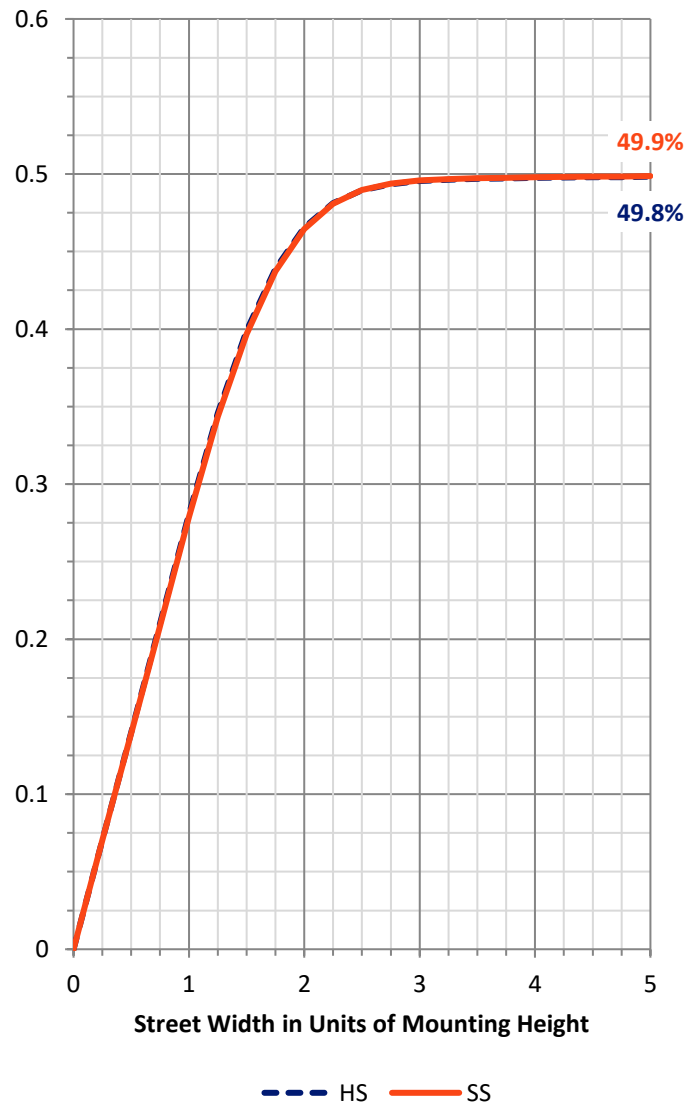
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	44635.0	0.0	44635.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	44635.0	0.0	44635.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	89270.0	0.0	89270.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	587.1	0.7
10°-20°	1923.6	2.2
20°-30°	4104.4	4.6
30°-40°	8939.8	10.0
40°-50°	17288.0	19.4
50°-60°	27453.8	30.8
60°-70°	24757.6	27.7
70°-80°	3875.1	4.3
80°-90°	340.5	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°	89270.0	100.0
0°-180°	89270.0	100.0

**Coefficient of Utilization**



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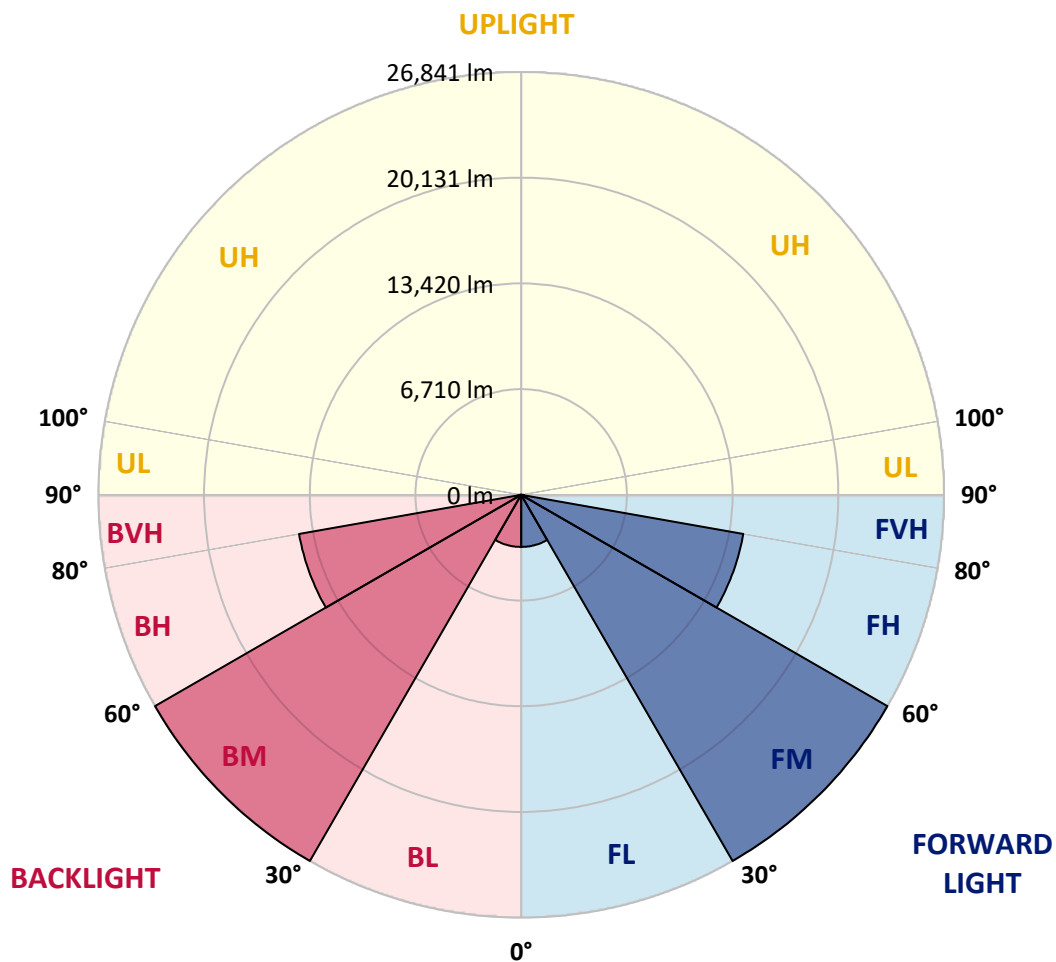
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3307.6	3.7			
FM	(30°-60°)	26840.8	30.1			
FH	(60°-80°)	14316.4	16.0			G5
FVH	(80°-90°)	170.3	0.2			G2/225
BL	(0°-30°)	3307.6	3.7	B4/5000		
BM	(30°-60°)	26840.8	30.1	B5		
BH	(60°-80°)	14316.4	16.0	B5		G5
BVH	(80°-90°)	170.3	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-G5**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6009.2	6009.2	6009.2	6009.2	6009.2	6009.2	6009.2	6009.2	6009.2	6009.2	6009.2
2.5°	6050.6	6037.6	6048.0	6055.7	5965.2	5988.5	5985.9	6048.0	6035.1	6063.5	6079.0
5°	6091.9	6071.3	6084.2	6104.9	6019.5	6050.6	6050.6	6107.5	6086.8	6115.2	6143.7
7.5°	6166.9	6146.2	6161.8	6187.6	6107.5	6141.1	6143.7	6210.9	6182.4	6205.7	6249.7
10°	6291.0	6278.1	6283.3	6306.6	6231.6	6272.9	6272.9	6345.3	6314.3	6340.2	6394.5
12.5°	6435.8	6430.7	6435.8	6466.9	6397.1	6438.4	6438.4	6508.2	6487.6	6518.6	6570.3
15°	6627.2	6622.0	6624.6	6666.0	6609.1	6647.9	6655.6	6728.0	6722.9	6756.5	6803.0
17.5°	6898.7	6898.7	6896.1	6932.3	6896.1	6934.9	6950.4	7028.0	7059.0	7100.4	7128.8
20°	7312.4	7289.1	7276.2	7294.3	7265.9	7307.2	7333.1	7459.8	7511.5	7576.1	7599.4
22.5°	7852.8	7821.8	7780.4	7762.3	7723.5	7777.8	7829.5	8010.5	8085.5	8191.5	8217.4
25°	8597.5	8545.8	8468.2	8395.8	8307.9	8385.5	8481.1	8729.4	8884.5	9024.1	9044.8
27.5°	9616.3	9538.7	9419.7	9280.1	9125.0	9220.6	9360.3	9722.3	9934.3	10156.7	10190.3
30°	10929.8	10916.9	10730.7	10482.5	10275.6	10329.9	10503.2	10950.5	11286.6	11516.8	11581.4
32.5°	12682.9	12670.0	12357.1	11938.2	11643.5	11679.7	11840.0	12336.4	12755.3	13130.2	13143.2
35°	14772.2	14730.8	14291.2	13712.0	13238.8	13197.5	13355.2	13849.1	14420.5	14857.5	14901.5
37.5°	17158.8	17091.6	16584.8	15708.2	14976.4	14805.8	14917.0	15537.5	16199.5	16693.4	16742.5
40°	19496.3	19444.6	18880.9	18058.6	16988.1	16556.3	16564.1	17357.9	18084.5	18542.1	18643.0
42.5°	21748.4	21789.8	21249.4	20411.6	19292.0	18521.5	18531.8	19302.3	20054.8	20530.6	20662.4
45°	24060.1	24023.9	23517.1	22798.2	21766.5	20913.2	20623.6	21394.2	22141.5	22531.9	22674.1
47.5°	25952.8	25888.2	25546.8	25166.7	24401.4	23561.0	23051.6	23586.9	24101.4	24365.2	24510.0
50°	27602.5	27550.8	27517.2	27356.8	27186.2	26643.2	25805.4	25771.8	25883.0	25939.9	26071.7
52.5°	28998.8	28996.2	29177.2	29570.2	29991.7	30180.4	28729.8	27791.2	27408.6	27126.7	27175.8
55°	30051.1	30038.2	30552.8	31605.2	33094.5	33947.8	31806.8	29539.2	28530.7	27985.2	27980.0
57.5°	30591.6	30614.8	31659.5	33565.1	36326.7	37490.2	34764.9	31144.9	29417.6	28587.6	28577.3
60°	29164.2	29262.5	31310.4	34780.4	39183.9	40704.3	37187.7	31478.5	28455.8	27062.1	27025.9
61°	27618.0	27987.7	29924.4	34503.7	40088.9	41394.7	37304.1	30651.0	27038.8	25500.3	25466.7
62.5°	24217.8	24564.3	27527.5	33813.4	40026.8	40670.7	36642.1	29164.2	24815.1	23100.8	23030.9
65°	17572.5	17981.0	21171.8	29958.1	36386.1	36003.5	33329.8	25751.1	20809.8	18880.9	18793.0
67.5°	8835.4	9357.7	12938.9	21740.7	29562.4	30289.0	28455.8	20388.3	14748.9	11136.7	11126.3
70°	2283.2	2505.6	4664.6	11434.0	21319.2	23723.9	21696.7	11811.5	5735.1	3459.7	3245.1
72.5°	638.7	669.7	1267.0	4165.6	12124.4	15894.4	11762.4	4129.4	1292.9	736.9	674.9
75°	449.9	457.7	504.2	1055.0	4579.3	7418.4	3790.7	892.1	517.1	488.7	488.7
77.5°	400.8	406.0	437.0	568.9	959.3	1667.8	726.6	576.6	455.1	439.6	434.4
80°	424.1	429.2	447.3	550.8	563.7	599.9	504.2	499.0	452.5	462.8	457.7
82.5°	455.1	465.4	488.7	563.7	483.5	486.1	413.7	411.1	400.8	455.1	457.7
85°	403.4	421.5	439.6	493.9	398.2	325.8	338.7	268.9	287.0	341.3	328.4
87.5°	225.0	222.4	214.6	225.0	201.7	162.9	137.0	124.1	113.8	129.3	126.7
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)