

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: P233970

Luminaire Tested: **CTN-8-3-D-E1-T1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233970  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-24)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: CTN-8-3-D-E1-T1  
Description: CELESTEON HIGH MAST LUMINAIRE  
(8) 70 CRI, 4000K LEDS AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 33483 lumens  
Efficiency: N/A  
Efficacy: 148.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type I - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G5

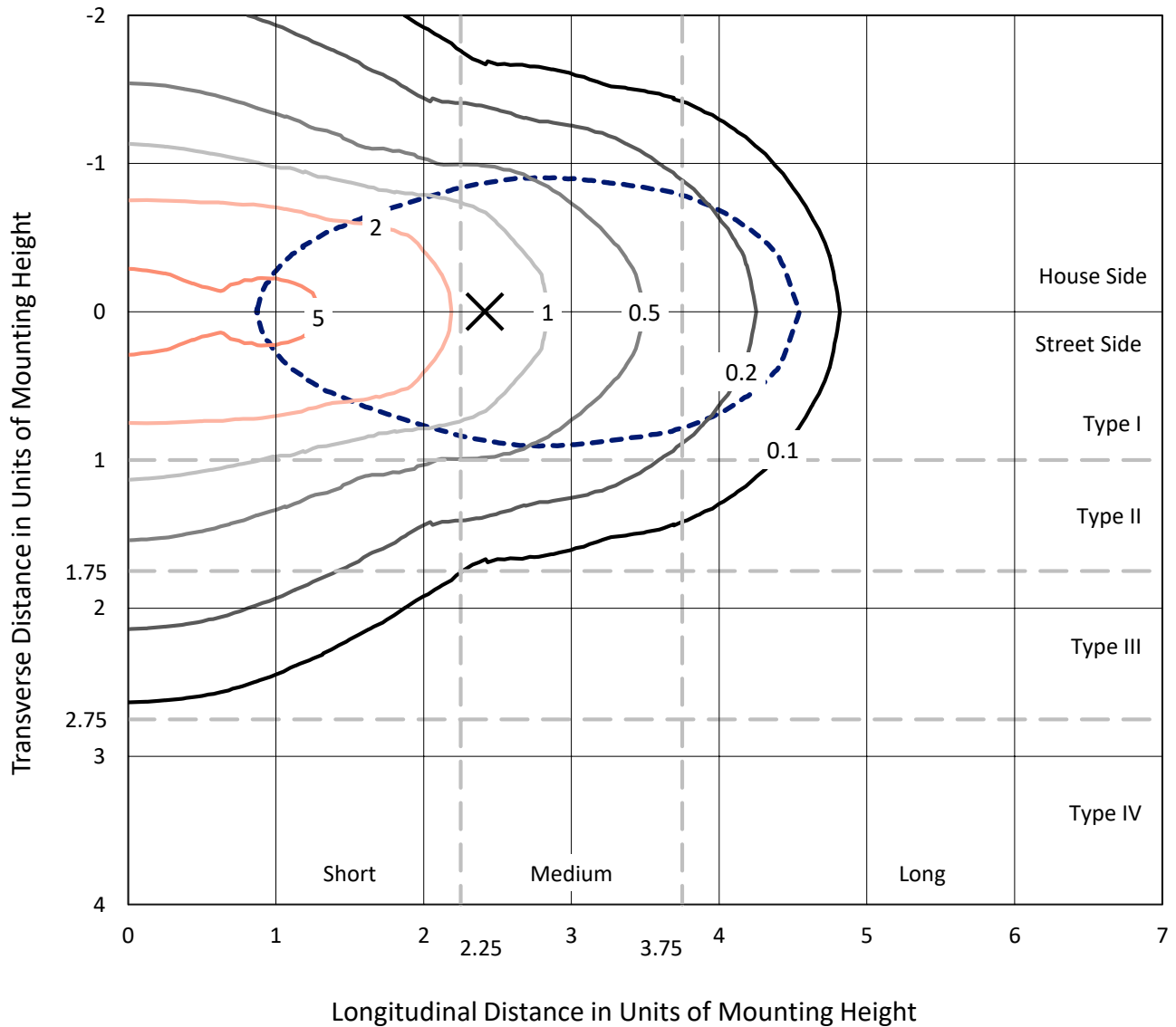
Input Watts (W): 226  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

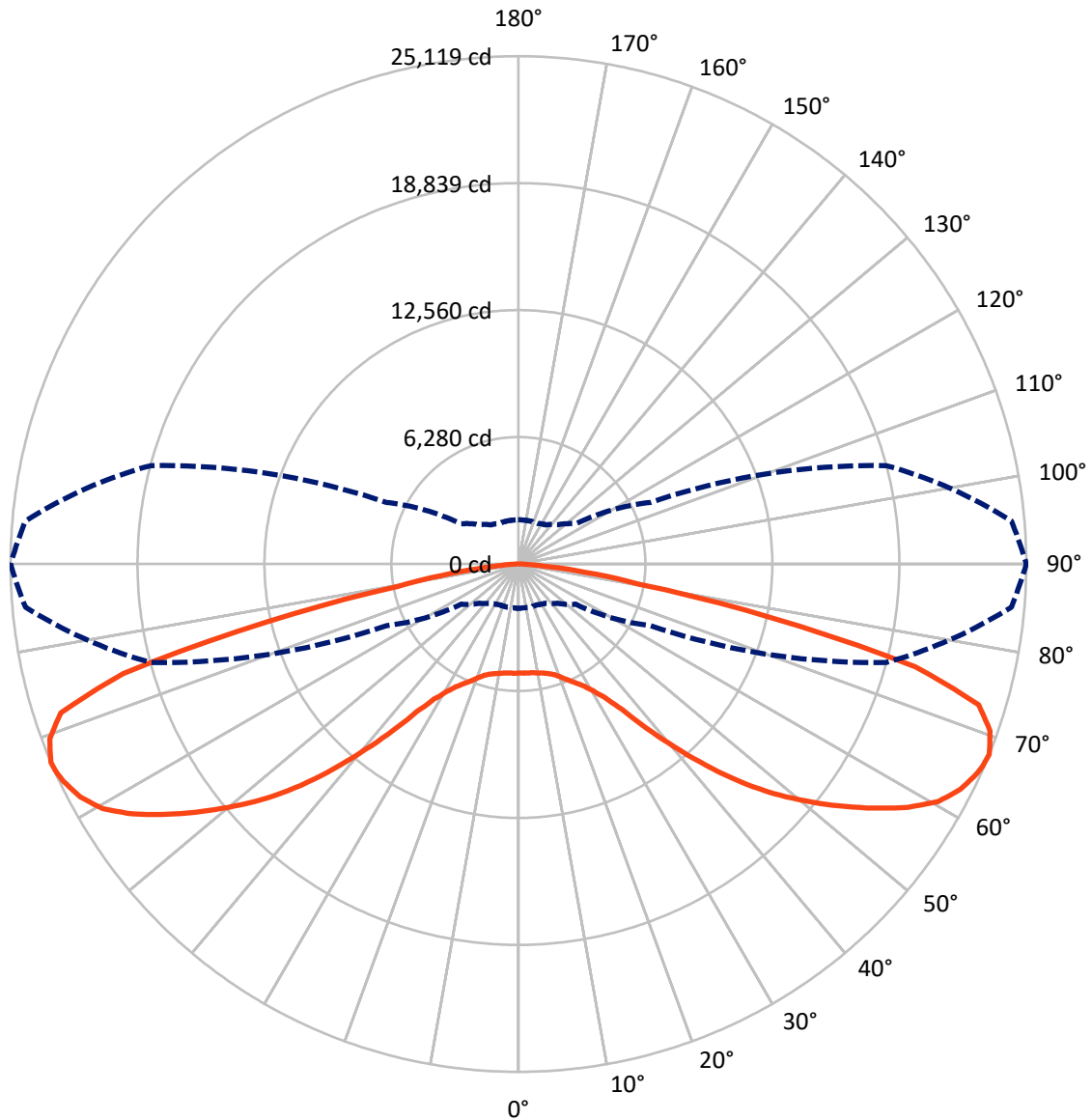
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6 fc  
 Type I - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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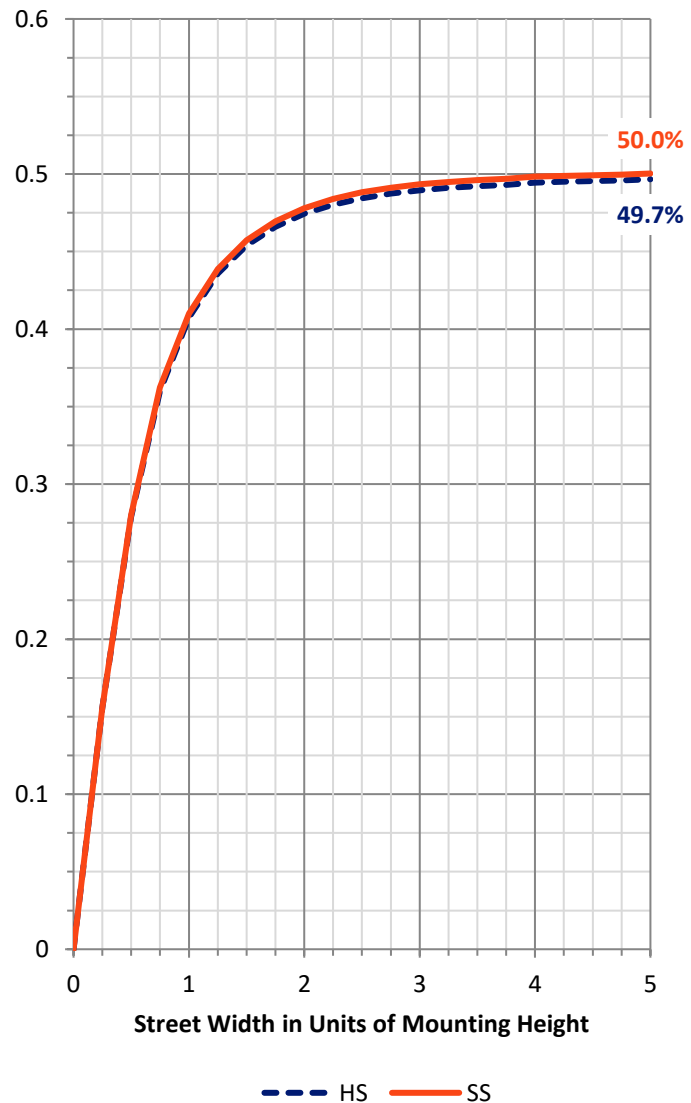
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	16741.5	0.0	16741.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	16741.5	0.0	16741.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	33483.0	0.0	33483.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	512.5	1.5
10°-20°	1524.8	4.6
20°-30°	2523.0	7.5
30°-40°	3696.6	11.0
40°-50°	5438.4	16.2
50°-60°	7052.3	21.1
60°-70°	7495.1	22.4
70°-80°	4626.7	13.8
80°-90°	613.7	1.8
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°	33483.0	100.0
0°-180°	33483.0	100.0



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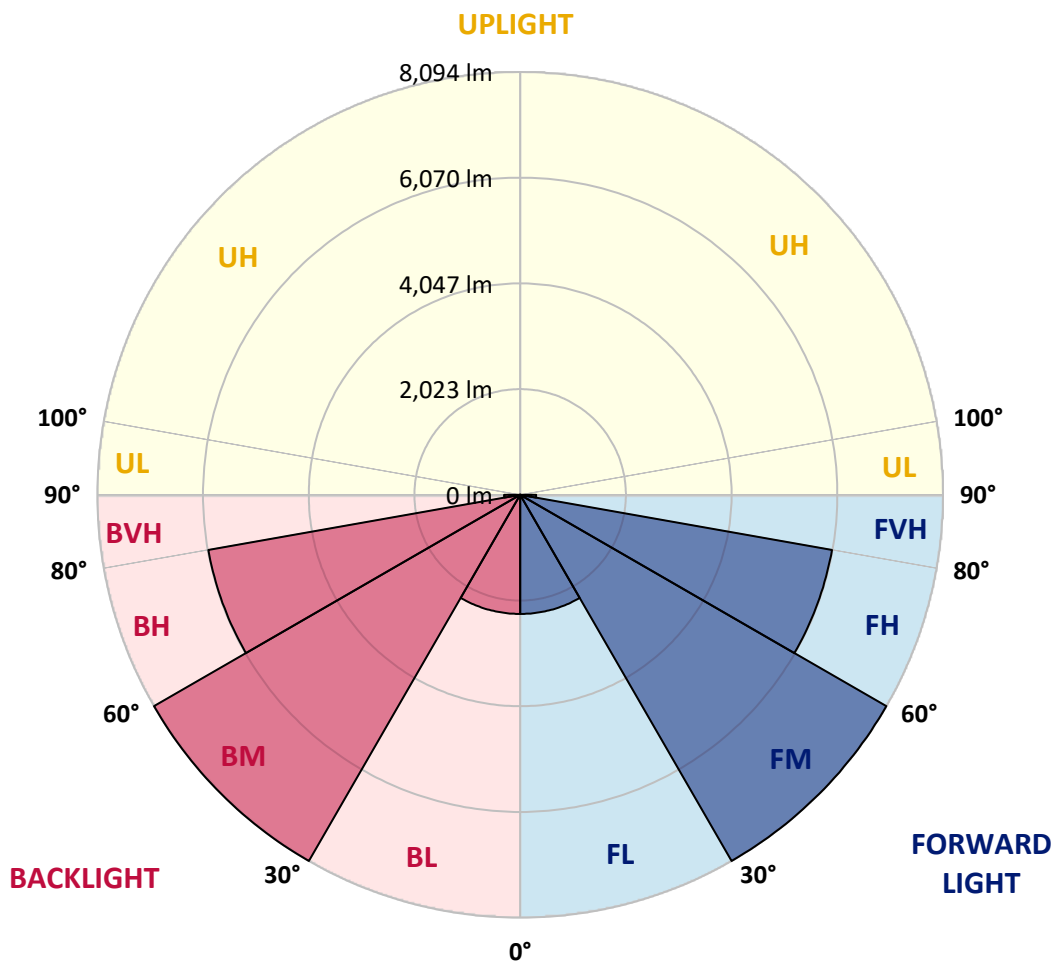
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2280.1	6.8			
FM	(30°-60°)	8093.6	24.2			
FH	(60°-80°)	6060.9	18.1			G3/7500
FVH	(80°-90°)	306.9	0.9			G3/500
BL	(0°-30°)	2280.1	6.8	B3/2500		
BM	(30°-60°)	8093.6	24.2	B4/8500		
BH	(60°-80°)	6060.9	18.1	B5		G5
BVH	(80°-90°)	306.9	0.9			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5392.2	5392.2	5392.2	5392.2	5392.2	5392.2	5392.2	5392.2	5392.2	5392.2	5392.2
2.5°	5407.2	5390.2	5397.2	5422.3	5331.0	5376.1	5360.1	5400.2	5379.1	5397.2	5406.2
5°	5369.1	5348.0	5358.1	5405.2	5322.0	5368.1	5356.1	5401.2	5374.1	5399.2	5409.2
7.5°	5336.0	5313.9	5332.0	5371.1	5307.9	5359.1	5349.1	5410.2	5388.2	5420.3	5430.3
10°	5314.9	5290.9	5307.9	5351.1	5283.8	5364.1	5355.1	5436.3	5425.3	5469.4	5481.5
12.5°	5262.8	5237.7	5249.7	5306.9	5276.8	5360.1	5382.2	5475.5	5472.4	5525.6	5538.7
15°	5169.5	5144.4	5160.4	5236.7	5247.7	5363.1	5431.3	5541.7	5559.7	5612.9	5623.9
17.5°	5052.1	5034.0	5058.1	5159.4	5228.7	5404.2	5502.5	5643.0	5687.1	5741.3	5756.3
20°	4891.6	4881.6	4924.7	5063.1	5195.6	5434.3	5587.8	5785.4	5865.7	5954.0	5965.0
22.5°	4672.9	4660.9	4751.1	4945.8	5136.4	5441.3	5671.1	5932.9	6081.4	6194.7	6223.8
25°	4427.1	4423.1	4546.5	4802.3	5056.1	5436.3	5752.3	6090.4	6317.1	6466.6	6498.7
27.5°	4185.3	4197.4	4346.9	4648.8	4989.9	5447.4	5845.6	6292.1	6612.1	6798.7	6812.7
30°	3979.7	3989.7	4151.2	4497.3	4926.7	5460.4	5961.0	6532.8	6979.2	7231.1	7272.2
32.5°	3786.1	3809.1	3973.7	4332.8	4856.5	5485.5	6110.5	6846.8	7429.7	7826.9	7878.1
35°	3626.6	3646.6	3807.1	4165.3	4745.1	5505.5	6308.1	7244.1	8100.8	8761.9	8841.2
37.5°	3485.1	3509.2	3647.6	4010.8	4612.7	5512.6	6504.7	7733.7	9009.7	10062.1	10308.9
40°	3382.8	3401.8	3521.2	3856.3	4470.2	5480.5	6729.5	8281.4	10031.0	11614.0	11884.9
42.5°	3298.5	3314.6	3412.9	3704.8	4309.7	5417.3	6939.1	8827.1	11110.4	13258.3	13611.4
45°	3213.2	3217.3	3311.6	3574.4	4147.2	5316.9	7096.6	9349.8	12247.0	14935.6	15348.9
47.5°	3137.0	3132.0	3206.2	3446.0	3972.7	5148.4	7157.8	9783.2	13351.6	16507.6	16959.1
50°	3065.8	3044.7	3108.9	3323.6	3803.1	4906.6	7080.6	10083.1	14513.3	18026.5	18426.7
52.5°	2959.4	2949.4	3010.6	3203.2	3633.6	4617.7	6825.8	10241.6	15752.2	19465.0	19883.4
55°	2864.1	2857.1	2920.3	3080.8	3467.1	4323.8	6386.4	10198.5	16973.1	20852.5	21315.9
57.5°	2758.8	2753.8	2813.0	2947.4	3283.5	4050.9	5842.6	9919.6	18063.6	22050.3	22705.4
60°	2655.5	2658.5	2696.6	2812.0	3096.9	3750.0	5222.6	9434.1	18933.4	23134.7	23850.0
62.5°	2535.1	2532.1	2560.2	2656.5	2883.2	3424.9	4611.7	8760.9	19443.0	24081.8	24539.2
65°	2372.6	2361.5	2393.6	2454.8	2624.4	3091.9	4009.8	7946.3	19456.0	24552.3	24941.5
66°	2303.3	2291.3	2320.4	2363.5	2523.0	2957.4	3788.1	7601.2	19256.4	24566.3	25049.9
67.5°	2196.0	2182.0	2201.0	2221.1	2364.5	2742.7	3463.0	7210.0	18819.0	24478.0	25119.1
70°	1929.1	1931.2	1951.2	1944.2	2017.4	2265.2	2860.1	6483.7	16709.3	24120.9	24747.9
72.5°	1501.8	1484.7	1455.6	1427.6	1462.7	1680.4	2165.9	5441.3	13682.6	22581.0	23799.9
75°	969.1	966.1	965.1	999.2	1004.2	1151.7	1673.3	4390.0	10666.0	18531.1	20285.7
77.5°	605.9	600.9	644.1	727.3	740.4	744.4	1097.5	3336.6	7710.6	11857.8	12777.7
80°	434.4	434.4	437.4	448.4	518.7	529.7	758.4	2094.7	4385.0	5780.4	6073.4
82.5°	329.0	324.0	325.0	330.1	336.1	361.2	456.5	930.0	1751.6	2929.3	3314.6
85°	237.8	244.8	256.8	247.8	223.7	226.7	258.8	320.0	673.1	1134.6	1226.9
87.5°	86.3	99.3	102.3	106.3	102.3	103.3	106.3	100.3	136.4	279.9	323.0
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)