

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: P233962

Luminaire Tested: **CTN-8-3-D-E1-T1-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233962  
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-T1-7030  
Description: CELESTEON HIGH MAST LUMINAIRE  
(8) 70 CRI, 3000K LEDS AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32583 lumens  
Efficiency: N/A  
Efficacy: 144.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type I - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G5

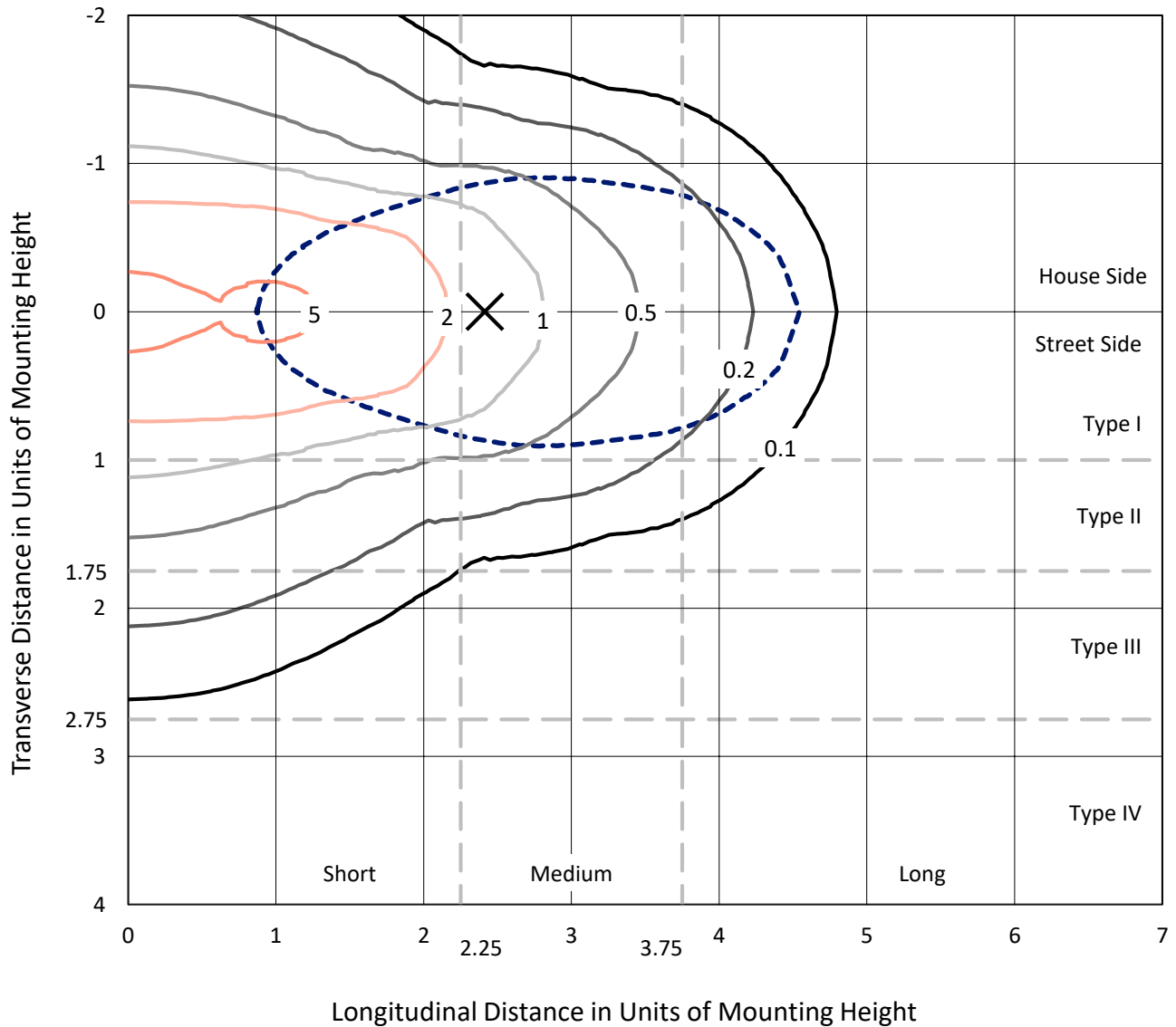
Input Watts (W): 226  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

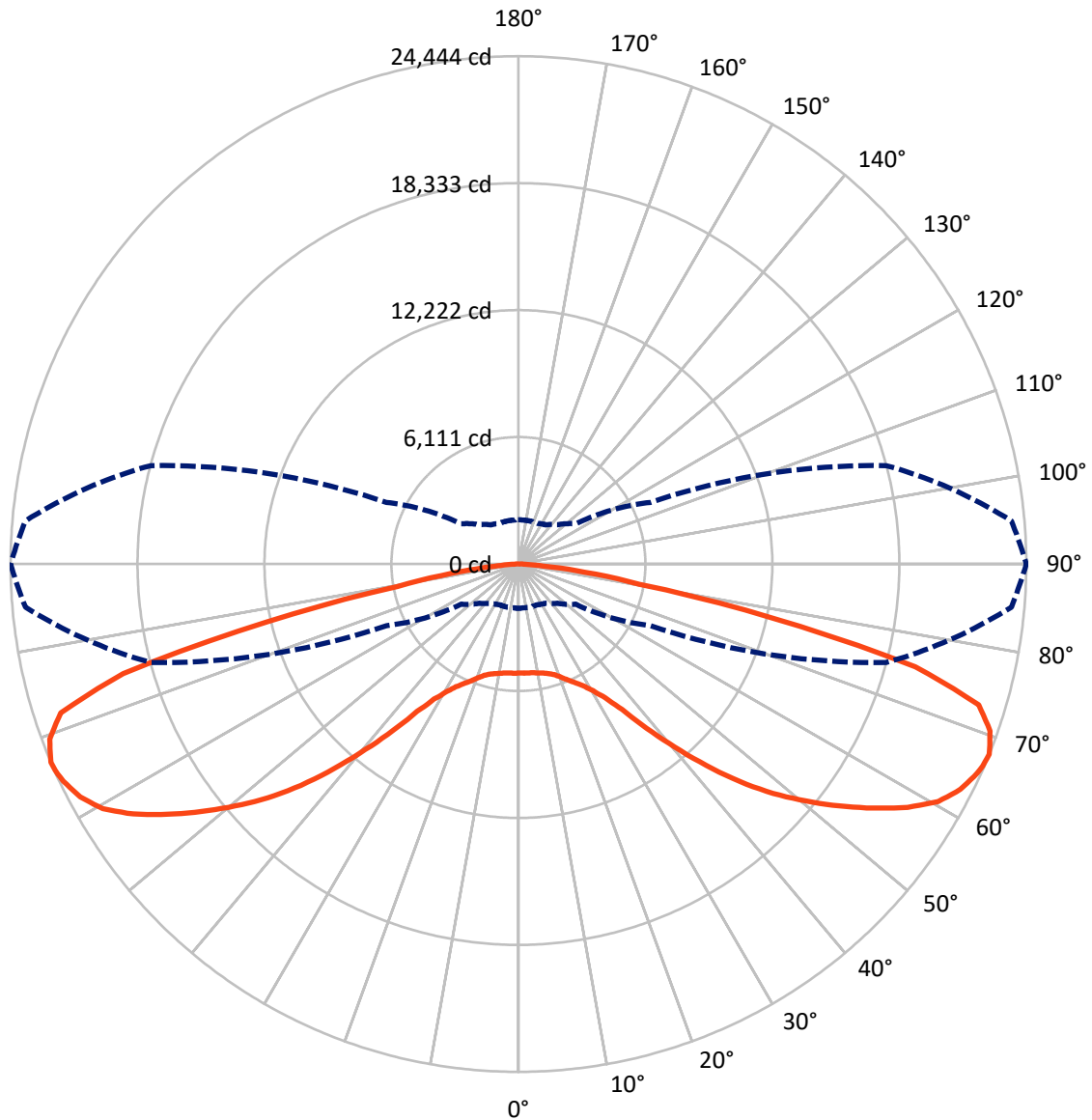
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.9 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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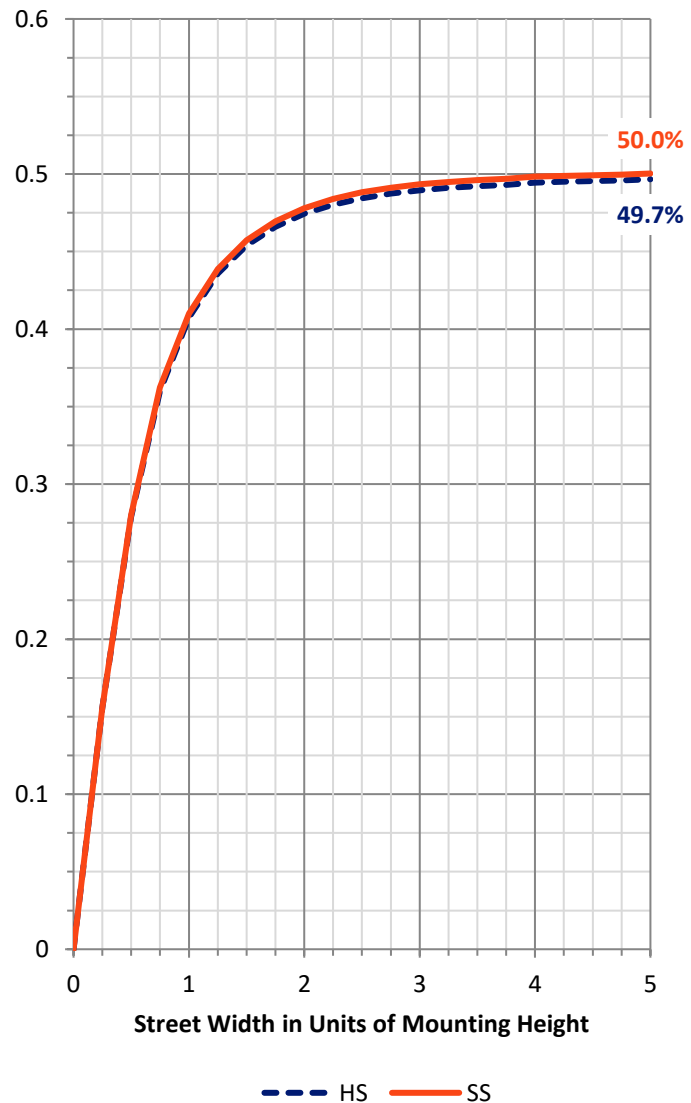
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	16291.5	0.0	16291.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	16291.5	0.0	16291.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	32583.0	0.0	32583.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	498.7	1.5
10°-20°	1483.8	4.6
20°-30°	2455.2	7.5
30°-40°	3597.2	11.0
40°-50°	5292.2	16.2
50°-60°	6862.7	21.1
60°-70°	7293.6	22.4
70°-80°	4502.4	13.8
80°-90°	597.2	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°	32583.0	100.0
0°-180°	32583.0	100.0



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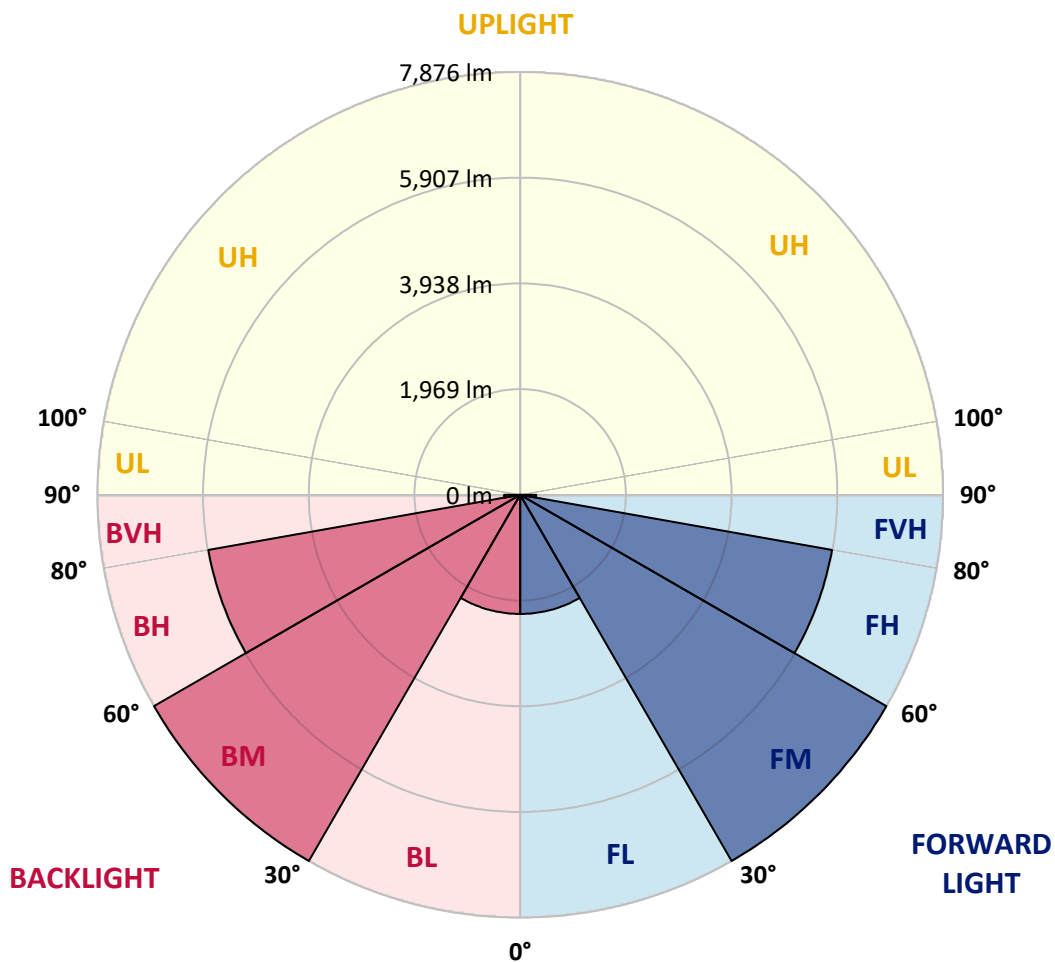
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2218.8	6.8			
FM	(30°-60°)	7876.1	24.2			
FH	(60°-80°)	5898.0	18.1			G3/7500
FVH	(80°-90°)	298.6	0.9			G3/500
BL	(0°-30°)	2218.8	6.8	B3/2500		
BM	(30°-60°)	7876.1	24.2	B4/8500		
BH	(60°-80°)	5898.0	18.1	B5		G5
BVH	(80°-90°)	298.6	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°	5247.3	5247.3	5247.3	5247.3	5247.3	5247.3	5247.3	5247.3	5247.3	5247.3	5247.3
2.5°	5261.9	5245.3	5252.1	5276.5	5187.7	5231.6	5216.0	5255.1	5234.6	5252.1	5260.9
5°	5224.8	5204.3	5214.1	5259.9	5178.9	5223.8	5212.1	5256.0	5229.7	5254.1	5263.8
7.5°	5192.6	5171.1	5188.7	5226.7	5165.2	5215.0	5205.3	5264.8	5243.3	5274.6	5284.3
10°	5172.1	5148.7	5165.2	5207.2	5141.8	5219.9	5211.1	5290.2	5279.5	5322.4	5334.1
12.5°	5121.3	5096.9	5108.6	5164.3	5135.0	5216.0	5237.5	5328.3	5325.3	5377.1	5389.8
15°	5030.5	5006.1	5021.7	5095.9	5106.7	5218.9	5285.3	5392.7	5410.3	5462.0	5472.8
17.5°	4916.3	4898.7	4922.2	5020.8	5088.1	5259.0	5354.6	5491.3	5534.3	5587.0	5601.6
20°	4760.1	4750.3	4792.3	4927.0	5055.9	5288.3	5437.6	5629.9	5708.0	5793.9	5804.7
22.5°	4547.3	4535.6	4623.4	4812.8	4998.3	5295.1	5518.6	5773.4	5917.9	6028.2	6056.5
25°	4308.1	4304.2	4424.3	4673.2	4920.2	5290.2	5597.7	5926.7	6147.3	6292.8	6324.0
27.5°	4072.8	4084.6	4230.0	4523.9	4855.8	5300.9	5688.5	6122.9	6434.3	6615.9	6629.6
30°	3872.7	3882.5	4039.7	4376.5	4794.3	5313.6	5800.8	6357.2	6791.7	7036.7	7076.7
32.5°	3684.3	3706.8	3866.9	4216.3	4725.9	5338.0	5946.2	6662.8	7230.0	7616.6	7666.4
35°	3529.1	3548.6	3704.8	4053.3	4617.6	5357.6	6138.6	7049.4	7883.1	8526.4	8603.5
37.5°	3391.4	3414.9	3549.6	3903.0	4488.7	5364.4	6329.9	7525.8	8767.5	9791.6	10031.8
40°	3291.9	3310.4	3426.6	3752.6	4350.1	5333.2	6548.6	8058.8	9761.3	11301.8	11565.4
42.5°	3209.9	3225.5	3321.1	3605.2	4193.9	5271.7	6752.6	8589.9	10811.8	12901.9	13245.5
45°	3126.9	3130.8	3222.5	3478.3	4035.7	5174.0	6905.9	9098.5	11917.8	14534.2	14936.4
47.5°	3052.7	3047.8	3120.0	3353.4	3865.9	5010.0	6965.4	9520.2	12992.7	16063.9	16503.2
50°	2983.4	2962.9	3025.3	3234.3	3700.9	4774.8	6890.2	9812.1	14123.2	17541.9	17931.4
52.5°	2879.9	2870.1	2929.7	3117.1	3535.9	4493.6	6642.3	9966.4	15328.8	18941.8	19348.9
55°	2787.1	2780.3	2841.8	2998.0	3373.9	4207.6	6214.7	9924.4	16516.9	20292.0	20743.0
57.5°	2684.6	2679.8	2737.4	2868.2	3195.2	3942.0	5685.6	9653.0	17578.0	21457.6	22095.1
60°	2584.1	2587.0	2624.1	2736.4	3013.6	3649.2	5082.3	9180.5	18424.4	22512.9	23209.0
62.5°	2466.9	2464.0	2491.3	2585.1	2805.7	3332.9	4487.7	8525.4	18920.4	23434.5	23879.6
65°	2308.8	2298.1	2329.3	2388.8	2553.8	3008.7	3902.0	7732.7	18933.1	23892.3	24271.1
66°	2241.4	2229.7	2258.0	2300.0	2455.2	2877.9	3686.3	7396.9	18738.8	23906.0	24376.5
67.5°	2137.0	2123.3	2141.9	2161.4	2301.0	2669.0	3370.0	7016.2	18313.1	23820.1	24443.9
70°	1877.3	1879.2	1898.8	1891.9	1963.2	2204.3	2783.2	6309.4	16260.1	23472.5	24082.7
72.5°	1461.4	1444.8	1416.5	1389.2	1423.3	1635.2	2107.7	5295.1	13314.8	21974.0	23160.1
75°	943.0	940.1	939.1	972.3	977.2	1120.7	1628.4	4272.0	10379.3	18033.0	19740.4
77.5°	589.6	584.8	626.7	707.8	720.5	724.4	1068.0	3246.9	7503.3	11539.1	12434.3
80°	422.7	422.7	425.6	436.4	504.7	515.5	738.0	2038.4	4267.1	5625.1	5910.1
82.5°	320.2	315.3	316.3	321.2	327.0	351.4	444.2	905.0	1704.5	2850.6	3225.5
85°	231.4	238.2	249.9	241.1	217.7	220.6	251.9	311.4	655.1	1104.1	1193.9
87.5°	84.0	96.6	99.6	103.5	99.6	100.6	103.5	97.6	132.8	272.4	314.3
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)