

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: P233980

Luminaire Tested: **CTN-8-4-D-E1-T1-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233980  
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-8-4-D-E1-T1-7050  
Description: CELESTEON HIGH MAST LUMINAIRE  
(8) 70 CRI, 5000K LEDS AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 46690 lumens  
Efficiency: N/A  
Efficacy: 143.7 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): 325  
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

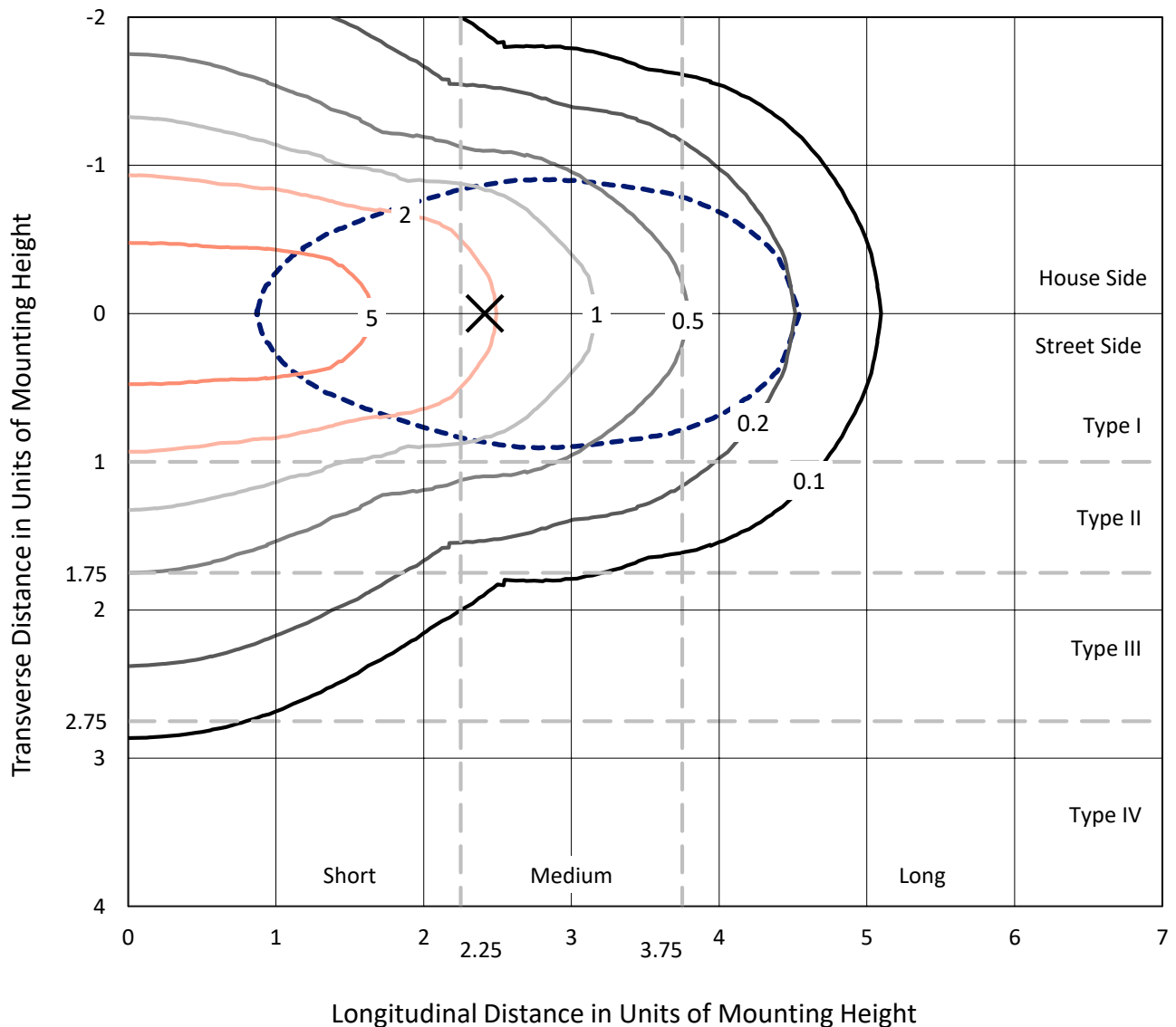


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### Iso-Footcandle Lines of Horizontal Illumination

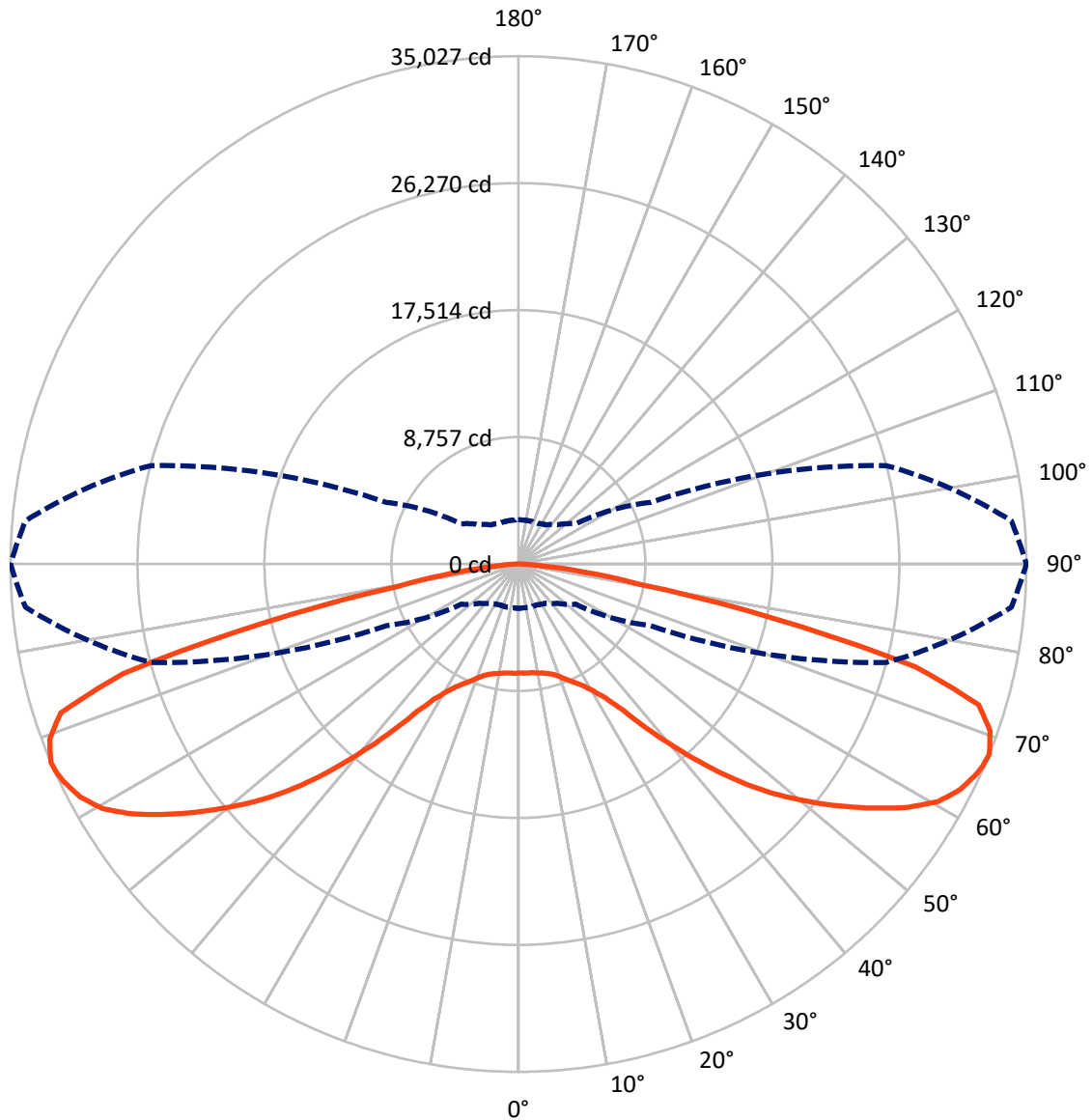
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.4 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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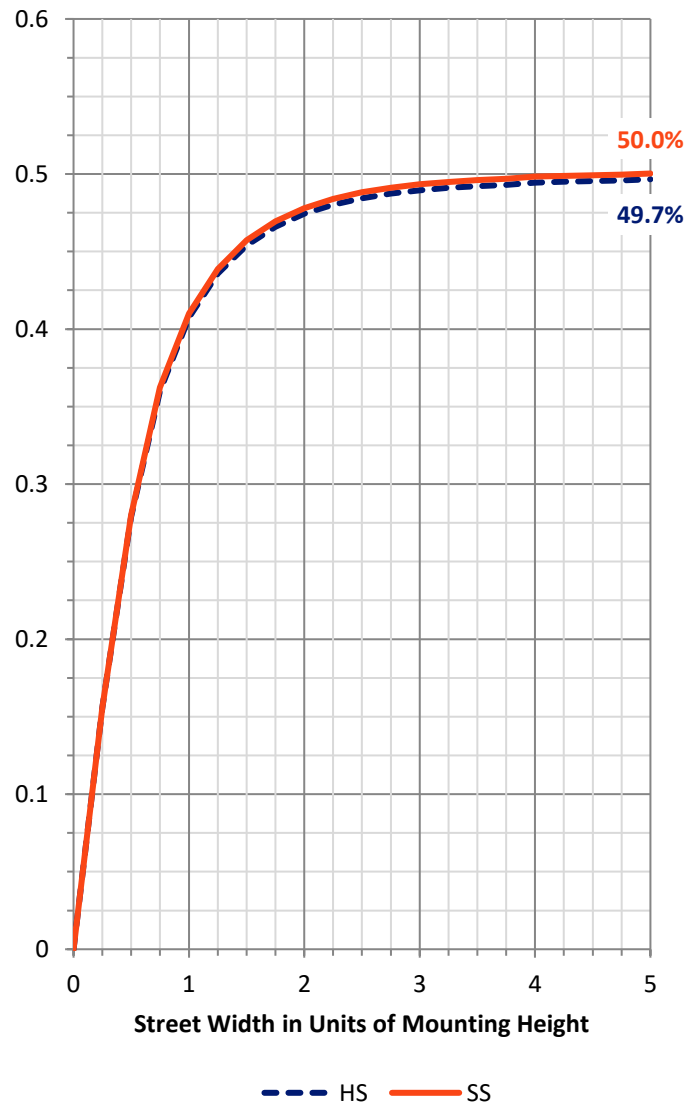
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	23345.0	0.0	23345.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	23345.0	0.0	23345.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	46690.0	0.0	46690.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	714.6	1.5
10°-20°	2126.2	4.6
20°-30°	3518.1	7.5
30°-40°	5154.6	11.0
40°-50°	7583.5	16.2
50°-60°	9834.0	21.1
60°-70°	10451.5	22.4
70°-80°	6451.7	13.8
80°-90°	855.8	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°	46690.0	100.0
0°-180°	46690.0	100.0



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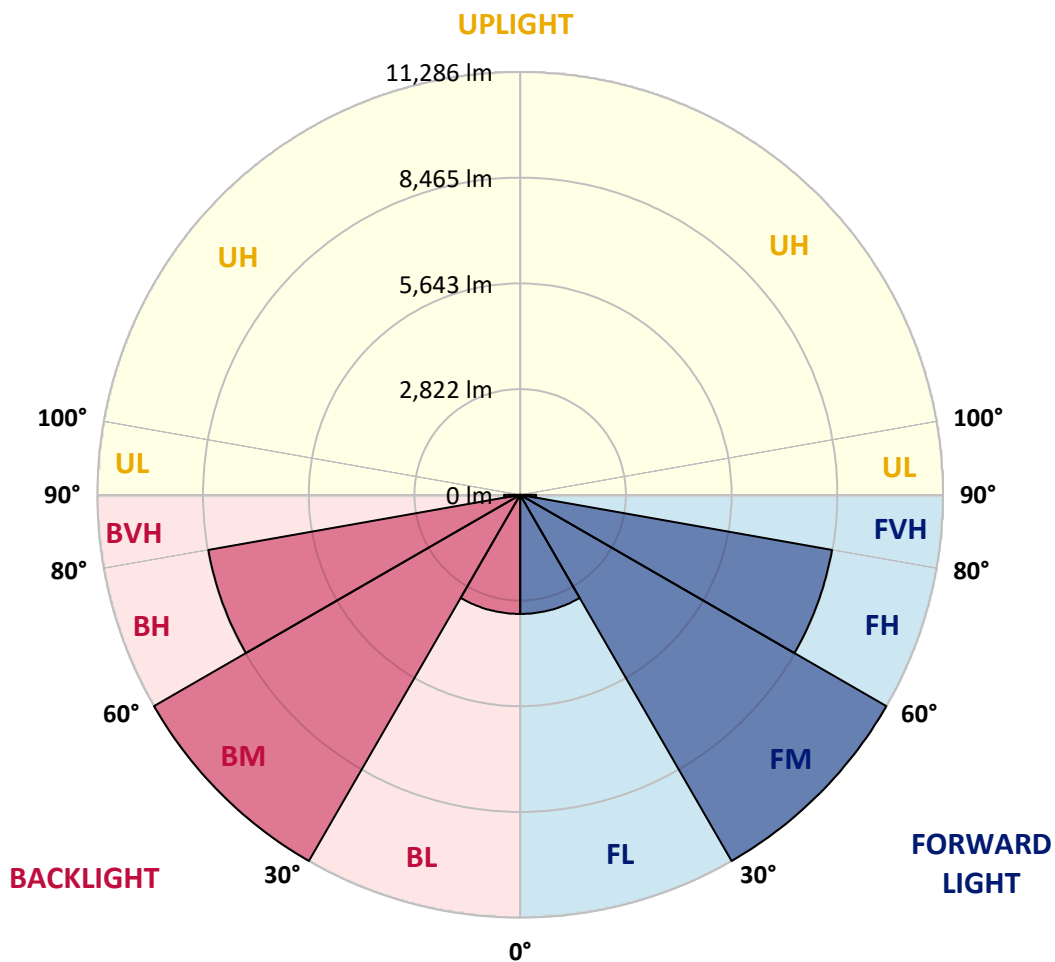
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3179.5	6.8			
FM	(30°-60°)	11286.1	24.2			
FH	(60°-80°)	8451.6	18.1			G4/12000
FVH	(80°-90°)	427.9	0.9			G3/500
BL	(0°-30°)	3179.5	6.8	B4/5000		
BM	(30°-60°)	11286.1	24.2	B5		
BH	(60°-80°)	8451.6	18.1	B5		G5
BVH	(80°-90°)	427.9	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°	7519.1	7519.1	7519.1	7519.1	7519.1	7519.1	7519.1	7519.1	7519.1	7519.1	7519.1
2.5°	7540.1	7516.3	7526.1	7561.0	7433.7	7496.7	7474.3	7530.3	7500.9	7526.1	7538.7
5°	7486.9	7457.5	7471.5	7537.3	7421.2	7485.5	7468.7	7531.7	7493.9	7528.9	7542.9
7.5°	7440.7	7410.0	7435.1	7489.7	7401.6	7472.9	7458.9	7544.3	7513.5	7558.2	7572.2
10°	7411.4	7377.8	7401.6	7461.7	7368.0	7479.9	7467.3	7580.6	7565.2	7626.8	7643.6
12.5°	7338.6	7303.6	7320.4	7400.2	7358.2	7474.3	7505.1	7635.2	7631.0	7705.1	7723.3
15°	7208.5	7173.6	7195.9	7302.2	7317.6	7478.5	7573.6	7727.5	7752.7	7826.8	7842.2
17.5°	7044.9	7019.7	7053.2	7194.5	7291.1	7535.9	7673.0	7868.8	7930.4	8005.9	8026.9
20°	6821.0	6807.0	6867.2	7060.2	7244.9	7577.8	7791.9	8067.4	8179.4	8302.5	8317.8
22.5°	6516.1	6499.3	6625.2	6896.6	7162.4	7587.6	7908.0	8273.1	8480.1	8638.2	8678.8
25°	6173.3	6167.7	6339.8	6696.5	7050.4	7580.6	8021.3	8492.7	8808.9	9017.3	9062.1
27.5°	5836.2	5853.0	6061.4	6482.5	6958.1	7596.0	8151.4	8773.9	9220.1	9480.3	9499.9
30°	5549.4	5563.4	5788.6	6271.3	6870.0	7614.2	8312.3	9109.6	9732.1	10083.3	10140.6
32.5°	5279.4	5311.6	5541.0	6041.8	6772.1	7649.2	8520.7	9547.5	10360.2	10914.2	10985.5
35°	5057.0	5085.0	5308.8	5808.2	6616.8	7677.2	8796.3	10101.4	11296.1	12218.0	12328.5
37.5°	4859.8	4893.3	5086.4	5592.8	6432.1	7686.9	9070.5	10784.1	12563.5	14030.9	14375.1
40°	4717.1	4743.7	4910.1	5377.4	6233.5	7642.2	9383.8	11547.9	13987.6	16195.0	16572.7
42.5°	4599.6	4622.0	4759.1	5166.1	6009.7	7554.1	9676.2	12308.9	15492.8	18487.8	18980.3
45°	4480.7	4486.3	4617.8	4984.3	5783.0	7414.2	9895.8	13037.7	17077.7	20826.8	21403.1
47.5°	4374.4	4367.4	4470.9	4805.2	5539.6	7179.1	9981.1	13642.1	18617.9	23018.9	23648.4
50°	4275.0	4245.7	4335.2	4634.5	5303.2	6842.0	9873.4	14060.3	20237.9	25136.8	25695.0
52.5°	4126.7	4112.8	4198.1	4466.7	5066.8	6439.1	9518.1	14281.4	21965.5	27142.8	27726.2
55°	3993.9	3984.1	4072.2	4296.0	4834.6	6029.3	8905.4	14221.2	23668.0	29077.5	29723.8
57.5°	3847.0	3840.0	3922.5	4110.0	4578.6	5648.8	8147.2	13832.3	25188.6	30747.8	31661.3
60°	3702.9	3707.1	3760.2	3921.1	4318.4	5229.1	7282.7	13155.2	26401.4	32260.0	33257.4
62.5°	3535.0	3530.8	3570.0	3704.3	4020.4	4775.8	6430.7	12216.6	27112.0	33580.6	34218.4
65°	3308.4	3293.0	3337.8	3423.1	3659.5	4311.4	5591.4	11080.7	27130.2	34236.6	34779.4
66°	3211.9	3195.1	3235.7	3295.8	3518.2	4124.0	5282.2	10599.5	26851.9	34256.2	34930.5
67.5°	3062.2	3042.6	3069.2	3097.2	3297.2	3824.6	4829.0	10053.9	26241.9	34133.1	35027.0
70°	2690.1	2692.9	2720.9	2711.1	2813.2	3158.7	3988.3	9041.1	23300.0	33635.1	34509.4
72.5°	2094.2	2070.4	2029.8	1990.6	2039.6	2343.2	3020.2	7587.6	19079.6	31487.8	33187.5
75°	1351.3	1347.1	1345.7	1393.3	1400.3	1605.9	2333.4	6121.6	14873.1	25840.4	28287.1
77.5°	844.9	837.9	898.1	1014.2	1032.4	1038.0	1530.4	4652.7	10751.9	16535.0	17817.8
80°	605.7	605.7	609.9	625.3	723.2	738.6	1057.6	2920.9	6114.6	8060.5	8468.9
82.5°	458.8	451.8	453.2	460.2	468.6	503.6	636.5	1296.8	2442.5	4084.8	4622.0
85°	331.5	341.3	358.1	345.5	312.0	316.2	360.9	446.2	938.7	1582.2	1710.9
87.5°	120.3	138.5	142.7	148.3	142.7	144.1	148.3	139.9	190.3	390.3	450.4
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)