

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: P232746

Luminaire Tested: **CTN-8-4-D-E1-T5**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232746
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-21)
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-T5
Description: CELESTEON HIGH MAST LUMINAIRE
(8) 70 CRI, 4000K LEDS AND TYPE V OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44020 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U0 - G5

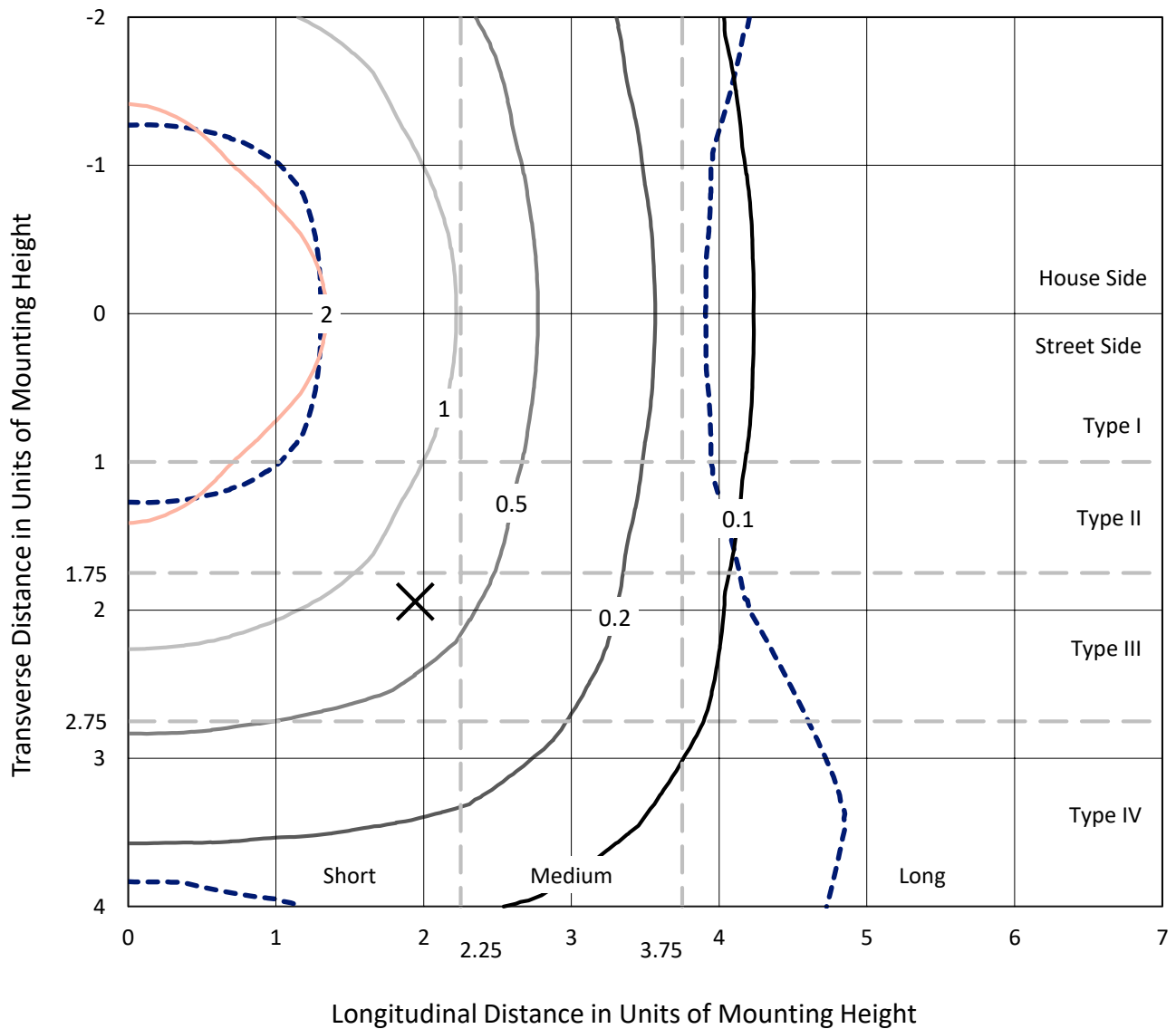
Input Watts (W): 325
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

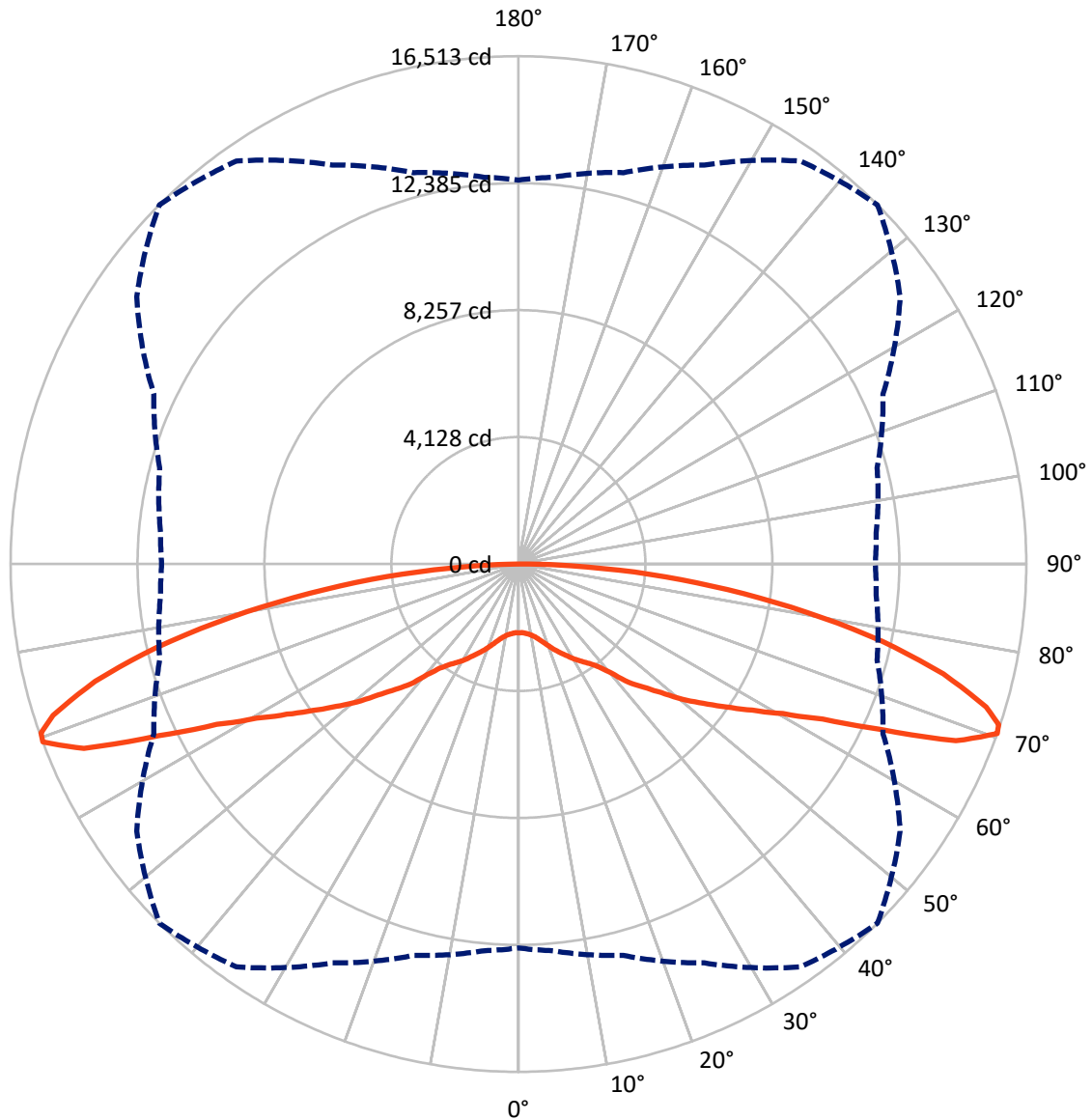
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 2.6 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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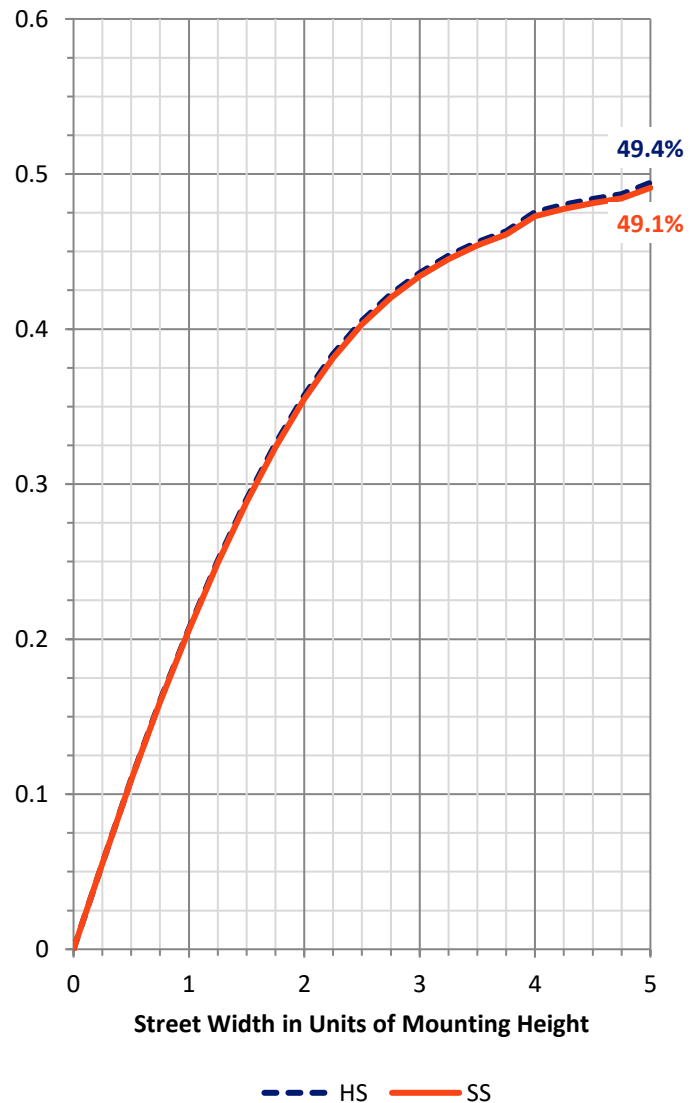
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	22010.0	0.0	22010.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	22010.0	0.0	22010.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	44020.0	0.0	44020.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.3	0.5
10°-20°	730.0	1.7
20°-30°	1458.7	3.3
30°-40°	2508.4	5.7
40°-50°	4640.5	10.5
50°-60°	7887.4	17.9
60°-70°	12713.6	28.9
70°-80°	11236.6	25.5
80°-90°	2625.6	6.0
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°	44020.0	100.0
0°-180°	44020.0	100.0



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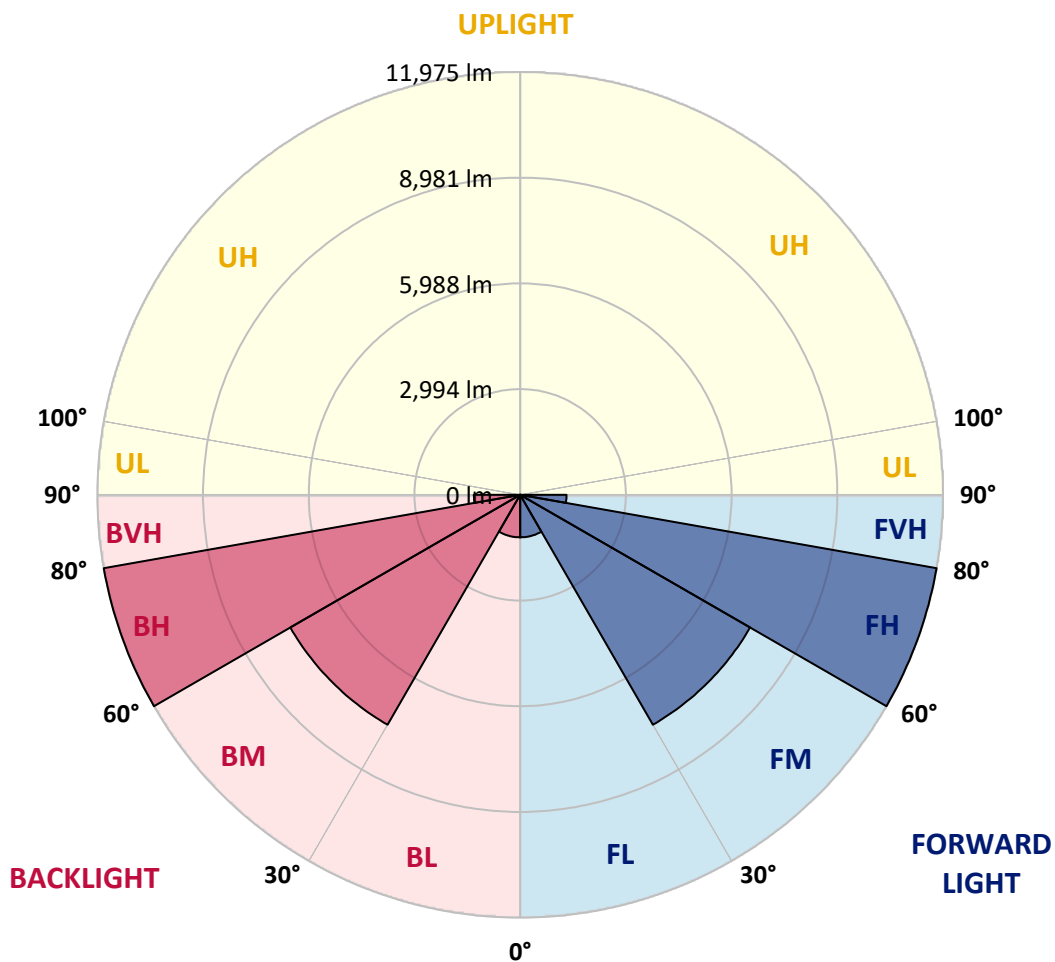
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1204.0	2.7			
FM	(30°-60°)	7518.1	17.1			
FH	(60°-80°)	11975.1	27.2			G4/12000
FVH	(80°-90°)	1312.8	3.0			G5
BL	(0°-30°)	1204.0	2.7	B3/2500		
BM	(30°-60°)	7518.1	17.1	B4/8500		
BH	(60°-80°)	11975.1	27.2	B5		G4/12000
BVH	(80°-90°)	1312.8	3.0			G5
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°	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5
2.5°	2255.9	2251.8	2253.2	2253.2	2228.2	2233.8	2235.2	2250.4	2250.4	2257.3	2258.7
5°	2278.1	2271.2	2272.6	2278.1	2254.6	2258.7	2258.7	2273.9	2271.2	2279.5	2283.6
7.5°	2316.9	2311.3	2311.3	2316.9	2289.2	2296.1	2291.9	2305.8	2300.3	2304.4	2312.7
10°	2379.2	2377.8	2373.7	2376.4	2346.0	2350.1	2341.8	2357.0	2346.0	2347.3	2362.6
12.5°	2451.2	2449.8	2449.8	2454.0	2427.7	2434.6	2420.7	2426.3	2406.9	2409.7	2422.1
15°	2539.8	2542.6	2545.4	2557.8	2541.2	2548.1	2527.4	2524.6	2502.4	2502.4	2517.7
17.5°	2661.7	2661.7	2663.1	2690.8	2681.1	2692.2	2663.1	2643.7	2621.5	2624.3	2627.1
20°	2814.0	2808.5	2811.3	2844.5	2847.3	2855.6	2809.9	2783.6	2760.0	2761.4	2758.6
22.5°	2976.1	2965.0	2963.6	3009.3	3028.7	3031.5	2967.8	2942.8	2912.4	2916.5	2913.7
25°	3131.2	3120.1	3114.6	3151.9	3203.2	3200.4	3131.2	3095.2	3081.3	3081.3	3084.1
27.5°	3284.9	3271.0	3265.5	3287.7	3368.0	3381.8	3290.4	3258.6	3244.7	3257.2	3262.7
30°	3440.0	3428.9	3426.1	3433.1	3524.5	3585.4	3444.1	3430.3	3428.9	3440.0	3452.5
32.5°	3628.3	3626.9	3615.9	3614.5	3682.3	3771.0	3628.3	3636.6	3658.8	3683.7	3700.3
35°	3870.7	3867.9	3837.4	3851.3	3884.5	3967.6	3885.9	3891.5	3951.0	3988.4	4009.2
37.5°	4193.4	4172.6	4133.8	4135.2	4151.8	4236.3	4204.4	4247.4	4355.4	4424.6	4417.7
40°	4650.4	4617.1	4559.0	4542.3	4539.6	4660.1	4690.5	4787.5	4957.8	5060.3	5053.4
42.5°	5304.0	5269.4	5180.8	5157.2	5166.9	5261.1	5349.7	5503.4	5651.6	5770.7	5763.8
45°	5974.3	5930.0	5787.3	5707.0	5637.8	5709.8	5848.3	6089.2	6266.5	6423.0	6420.2
47.5°	6749.8	6680.6	6508.8	6355.1	6216.6	6243.0	6391.1	6666.7	6881.4	7037.9	7028.2
50°	7591.8	7522.6	7334.2	7103.0	6888.3	6906.3	6978.3	7269.1	7482.4	7634.7	7637.5
52.5°	8492.0	8442.1	8226.1	7920.0	7625.0	7523.9	7569.6	7838.3	8083.4	8227.5	8239.9
55°	9462.8	9414.3	9187.2	8834.0	8429.6	8202.5	8201.1	8471.2	8719.1	8845.1	8864.5
57.5°	10436.3	10410.0	10210.6	9825.6	9316.0	8968.4	8889.4	9170.5	9448.9	9579.1	9605.4
60°	11438.9	11402.9	11236.8	10914.1	10354.6	9878.2	9745.3	10026.4	10340.8	10475.1	10491.7
62.5°	12574.5	12538.5	12411.1	12070.4	11657.8	11106.6	10914.1	11173.1	11463.9	11678.5	11656.4
65°	13710.1	13701.8	13755.8	13602.1	13286.4	12970.6	12591.2	12875.0	13089.7	13068.9	13062.0
67.5°	13528.7	13581.3	13955.2	14488.4	15154.5	15342.9	14466.3	13671.3	13203.3	12931.8	12846.0
70°	12484.5	12620.2	13174.2	14311.1	15991.0	16513.1	15150.4	13078.6	12073.2	11677.1	11601.0
71°	11908.4	12015.1	12653.5	14042.5	15996.5	16467.4	14988.3	12632.7	11610.7	11067.8	11015.2
72.5°	10786.7	10951.5	11656.4	13307.1	15510.4	15906.5	14282.1	11801.8	10731.3	10202.3	10173.2
75°	8623.5	8673.4	9583.2	11458.3	13966.3	14280.7	12678.4	10241.0	9137.3	8775.9	8755.1
77.5°	6086.5	6087.8	6960.3	8932.4	11578.8	12088.4	10980.6	8443.5	7328.7	6874.4	6773.4
80°	3224.0	3355.5	4221.1	6139.1	8673.4	9512.6	8726.0	6384.2	5153.1	4489.7	4396.9
82.5°	1469.3	1563.5	2124.4	3480.2	5704.2	6850.9	5986.8	4144.9	2761.4	2045.4	1985.9
85°	570.6	584.4	876.6	1653.5	3189.3	4297.2	3485.7	1943.0	961.1	587.2	544.3
87.5°	187.0	199.4	285.3	637.0	1357.2	1715.8	1347.5	584.4	187.0	116.3	112.2
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)