

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: P232747

Luminaire Tested: **CTN-10-4-D-E1-T5**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232747
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-10-4-D-E1-T5
Description: CELESTEON HIGH MAST LUMINAIRE
(10) 70 CRI, 4000K LEDS AND TYPE V OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43845 lumens
Efficiency: N/A
Efficacy: 142.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U0 - G5

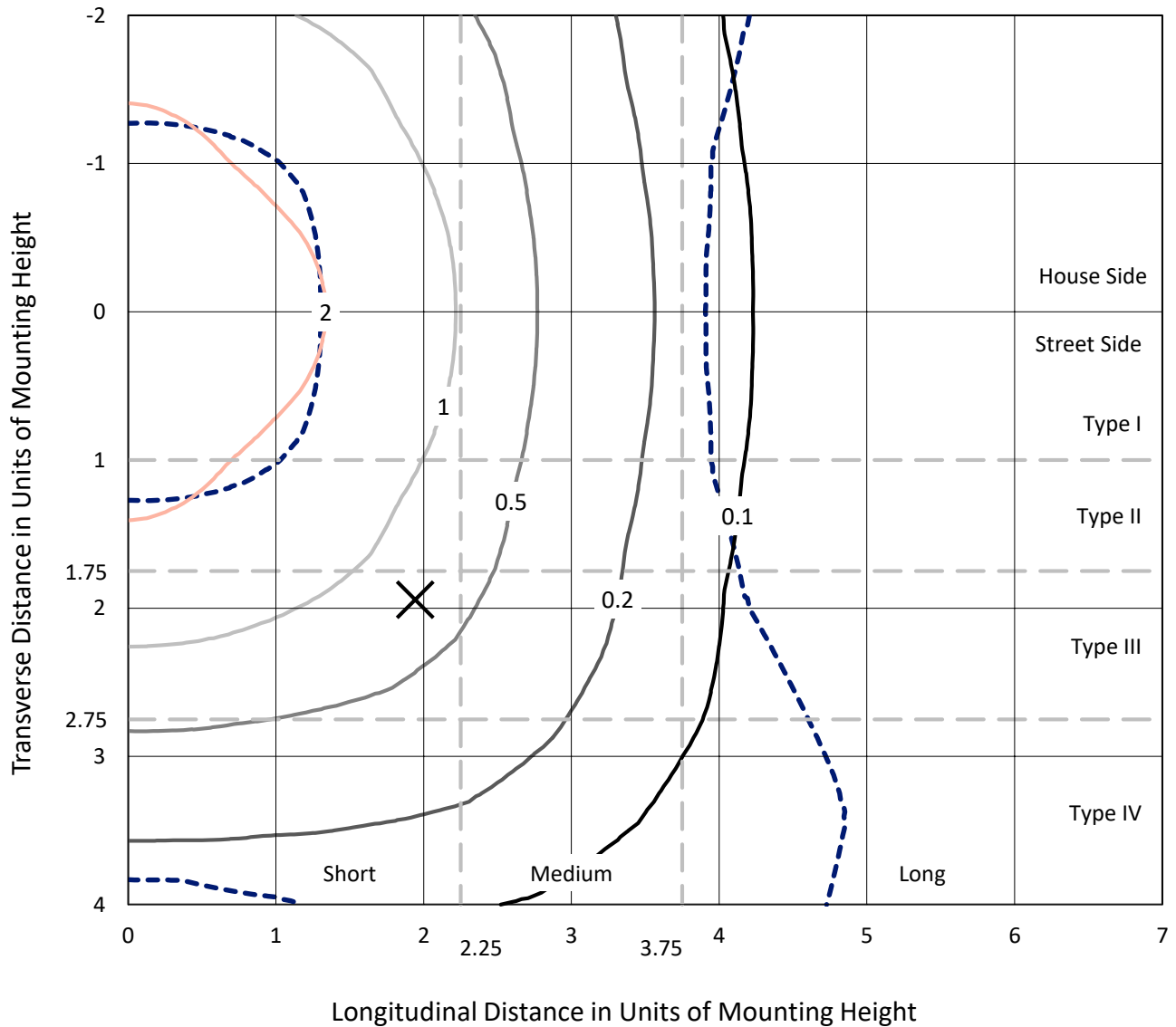
Input Watts (W): 308
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

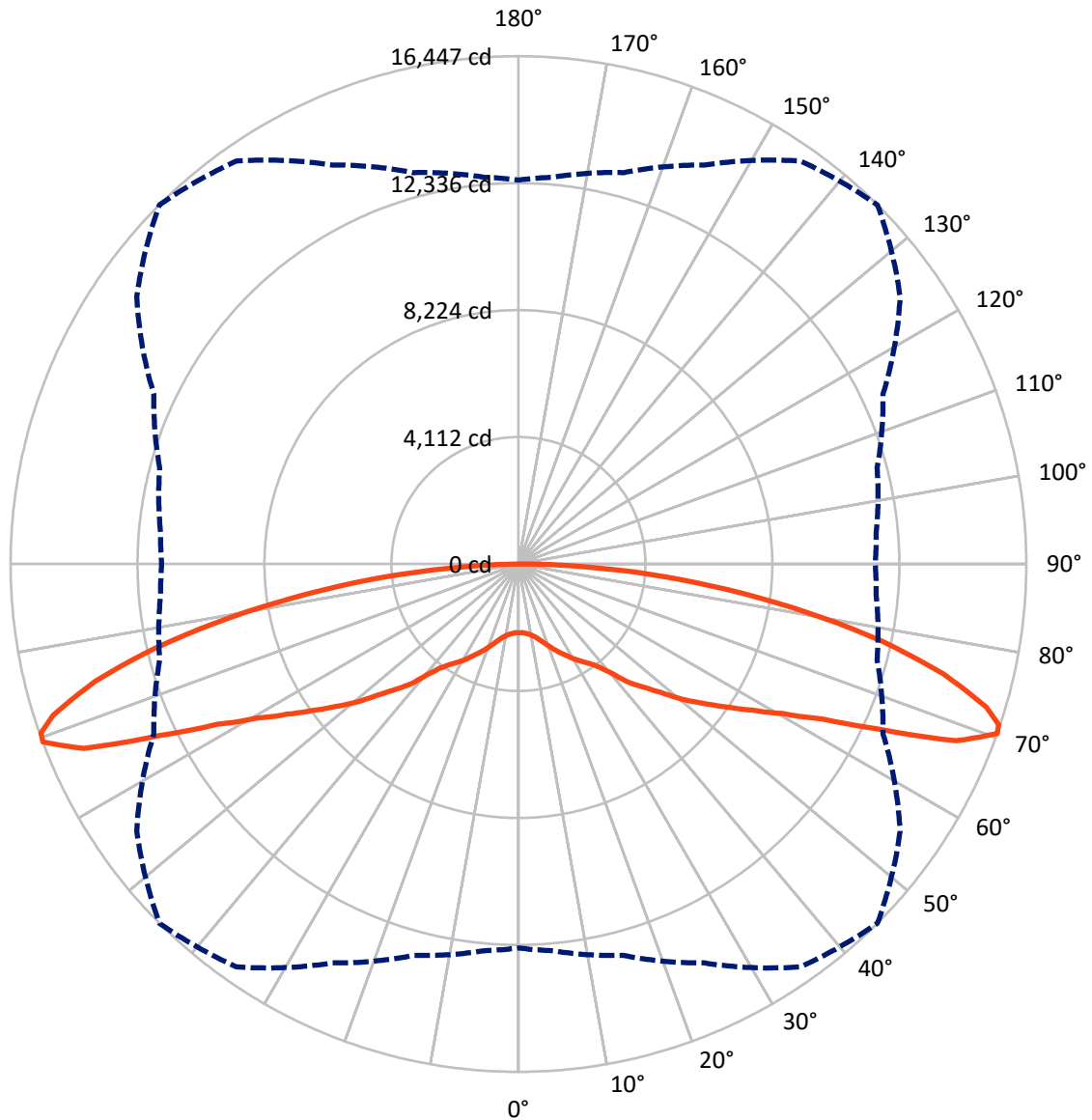
× Max cd
 - - - 1/2 Max cd



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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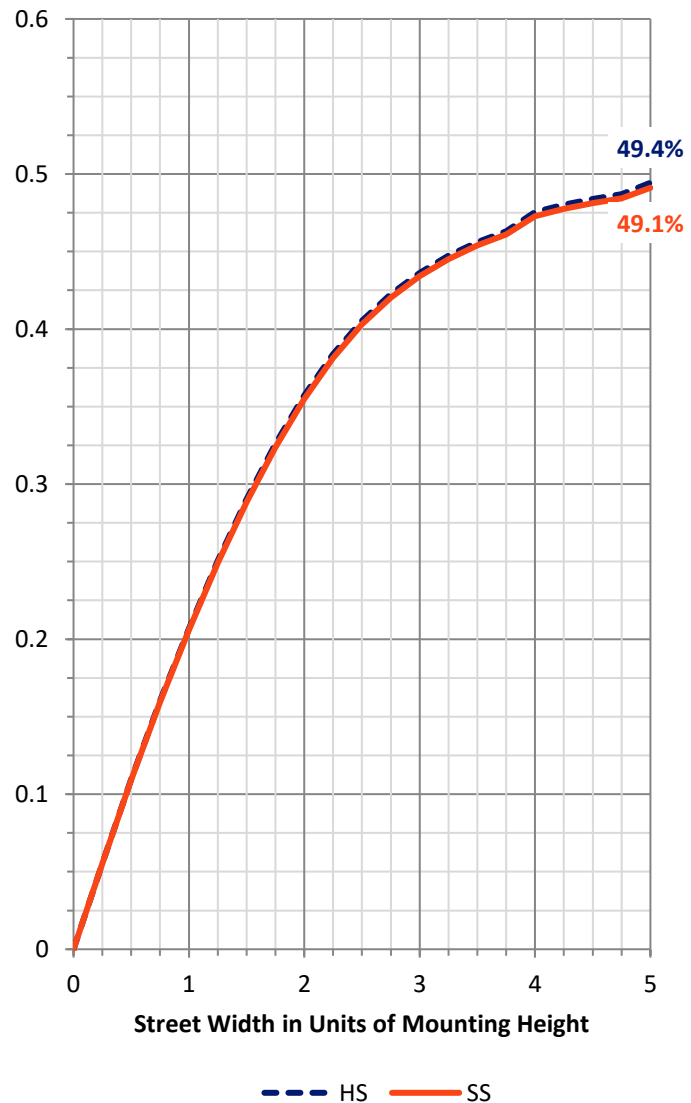
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21922.5	0.0	21922.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	21922.5	0.0	21922.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	43845.0	0.0	43845.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.4	0.5
10°-20°	727.1	1.7
20°-30°	1452.9	3.3
30°-40°	2498.5	5.7
40°-50°	4622.0	10.5
50°-60°	7856.0	17.9
60°-70°	12663.0	28.9
70°-80°	11191.9	25.5
80°-90°	2615.1	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°	43845.0	100.0
0°-180°	43845.0	100.0



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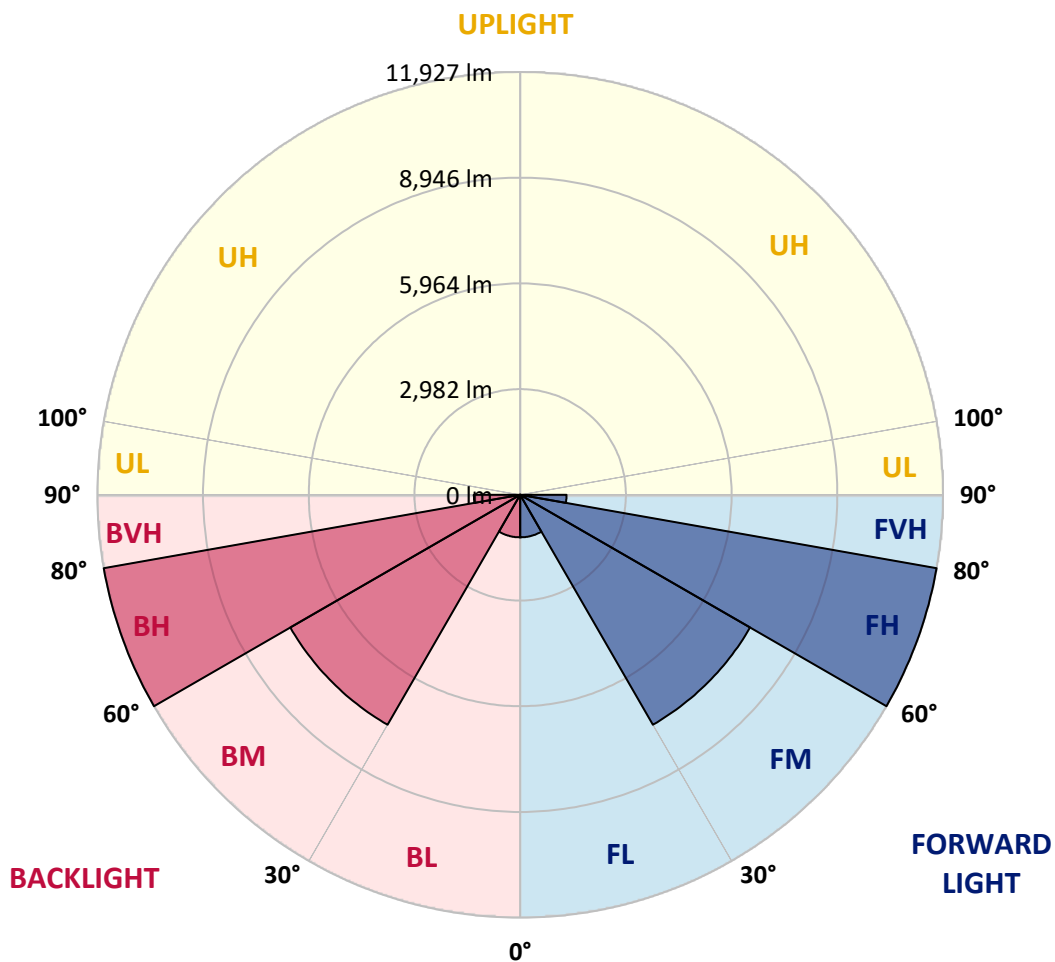
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1199.2	2.7			
FM (30°-60°)	7488.3	17.1			
FH (60°-80°)	11927.5	27.2			G4/12000
FVH (80°-90°)	1307.6	3.0			G5
BL (0°-30°)	1199.2	2.7	B3/2500		
BM (30°-60°)	7488.3	17.1	B4/8500		
BH (60°-80°)	11927.5	27.2	B5		G4/12000
BVH (80°-90°)	1307.6	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°	2227.7	2227.7	2227.7	2227.7	2227.7	2227.7	2227.7	2227.7	2227.7	2227.7	2227.7
2.5°	2247.0	2242.8	2244.2	2244.2	2219.4	2224.9	2226.3	2241.5	2241.5	2248.3	2249.7
5°	2269.0	2262.1	2263.5	2269.0	2245.6	2249.7	2249.7	2264.9	2262.1	2270.4	2274.6
7.5°	2307.7	2302.1	2302.1	2307.7	2280.1	2287.0	2282.8	2296.6	2291.1	2295.2	2303.5
10°	2369.7	2368.4	2364.2	2367.0	2336.6	2340.8	2332.5	2347.7	2336.6	2338.0	2353.2
12.5°	2441.5	2440.1	2440.1	2444.2	2418.0	2424.9	2411.1	2416.6	2397.3	2400.1	2412.5
15°	2529.7	2532.5	2535.3	2547.7	2531.1	2538.0	2517.3	2514.6	2492.5	2492.5	2507.7
17.5°	2651.1	2651.1	2652.5	2680.1	2670.4	2681.5	2652.5	2633.2	2611.1	2613.9	2616.6
20°	2802.8	2797.3	2800.1	2833.2	2836.0	2844.2	2798.7	2772.5	2749.1	2750.4	2747.7
22.5°	2964.2	2953.2	2951.8	2997.3	3016.6	3019.4	2956.0	2931.1	2900.8	2904.9	2902.2
25°	3118.7	3107.7	3102.2	3139.4	3190.4	3187.7	3118.7	3082.9	3069.1	3069.1	3071.8
27.5°	3271.8	3258.0	3252.5	3274.6	3354.6	3368.4	3277.3	3245.6	3231.8	3244.2	3249.8
30°	3426.3	3415.3	3412.5	3419.4	3510.5	3571.2	3430.5	3416.7	3415.3	3426.3	3438.7
32.5°	3613.9	3612.5	3601.5	3600.1	3667.7	3756.0	3613.9	3622.2	3644.3	3669.1	3685.6
35°	3855.3	3852.5	3822.2	3836.0	3869.1	3951.9	3870.5	3876.0	3935.3	3972.5	3993.2
37.5°	4176.7	4156.0	4117.4	4118.8	4135.3	4219.4	4187.7	4230.5	4338.1	4407.0	4400.1
40°	4631.9	4598.8	4540.8	4524.3	4521.5	4641.5	4671.9	4768.4	4938.1	5040.2	5033.3
42.5°	5282.9	5248.4	5160.2	5136.7	5146.4	5240.2	5328.4	5481.6	5629.1	5747.8	5740.9
45°	5950.5	5906.4	5764.3	5684.3	5615.4	5687.1	5825.0	6065.0	6241.6	6397.4	6394.7
47.5°	6723.0	6654.0	6483.0	6329.9	6191.9	6218.1	6365.7	6640.2	6854.0	7009.9	7000.2
50°	7561.6	7492.7	7305.1	7074.7	6860.9	6878.8	6950.6	7240.2	7452.7	7604.4	7607.1
52.5°	8458.2	8408.5	8193.4	7888.5	7594.7	7494.0	7539.6	7807.2	8051.3	8194.7	8207.2
55°	9425.1	9376.9	9150.6	8798.9	8396.1	8169.9	8168.5	8437.5	8684.4	8809.9	8829.3
57.5°	10394.8	10368.6	10170.0	9786.5	9278.9	8932.7	8854.1	9134.1	9411.3	9541.0	9567.2
60°	11393.5	11357.6	11192.1	10870.7	10313.4	9838.9	9706.5	9986.5	10299.6	10433.4	10450.0
62.5°	12524.5	12488.7	12361.8	12022.5	11611.4	11062.4	10870.7	11128.6	11418.3	11632.1	11610.0
65°	13655.6	13647.3	13701.1	13548.0	13233.5	12919.0	12541.1	12823.9	13037.7	13017.0	13010.1
67.5°	13474.9	13527.3	13899.8	14430.8	15094.3	15281.9	14408.7	13617.0	13150.8	12880.4	12794.9
70°	12434.9	12570.1	13121.8	14254.3	15927.4	16447.4	15090.1	13026.6	12025.2	11630.7	11554.9
71°	11861.1	11967.3	12603.2	13986.7	15932.9	16401.9	14928.8	12582.5	11564.5	11023.8	10971.4
72.5°	10743.8	10907.9	11610.0	13254.2	15448.8	15843.3	14225.3	11754.9	10688.6	10161.7	10132.7
75°	8589.2	8638.9	9545.1	11412.8	13910.8	14223.9	12628.0	10200.3	9101.0	8741.0	8720.3
77.5°	6062.3	6063.6	6932.6	8896.8	11532.8	12040.4	10936.9	8409.9	7299.5	6847.1	6746.4
80°	3211.1	3342.2	4204.3	6114.7	8638.9	9474.8	8691.3	6358.8	5132.6	4471.9	4379.5
82.5°	1463.5	1557.3	2115.9	3466.3	5681.6	6823.7	5963.0	4128.4	2750.4	2037.3	1978.0
85°	568.3	582.1	873.1	1647.0	3176.7	4280.1	3471.8	1935.2	957.3	584.8	542.1
87.5°	186.2	198.6	284.1	634.5	1351.8	1709.0	1342.1	582.1	186.2	115.9	111.7
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)