

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: P233975

Luminaire Tested: **CTN-10-8-D-E1-T1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233975
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-10-8-D-E1-T1
Description: CELESTEON HIGH MAST LUMINAIRE
(10) 70 CRI, 4000K LEDS AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 86301 lumens
Efficiency: N/A
Efficacy: 136.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type I - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G5

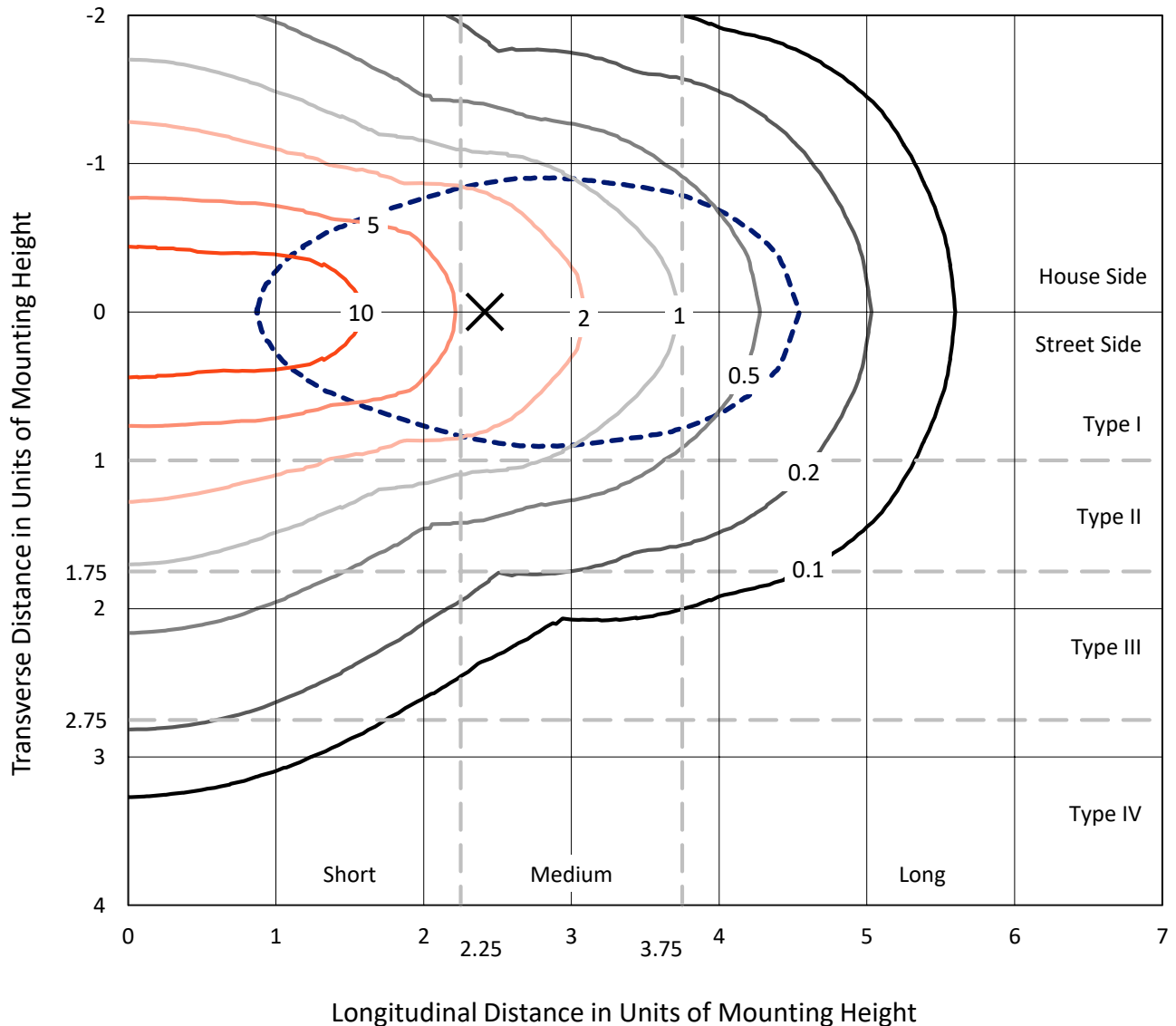
Input Watts (W): 631
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

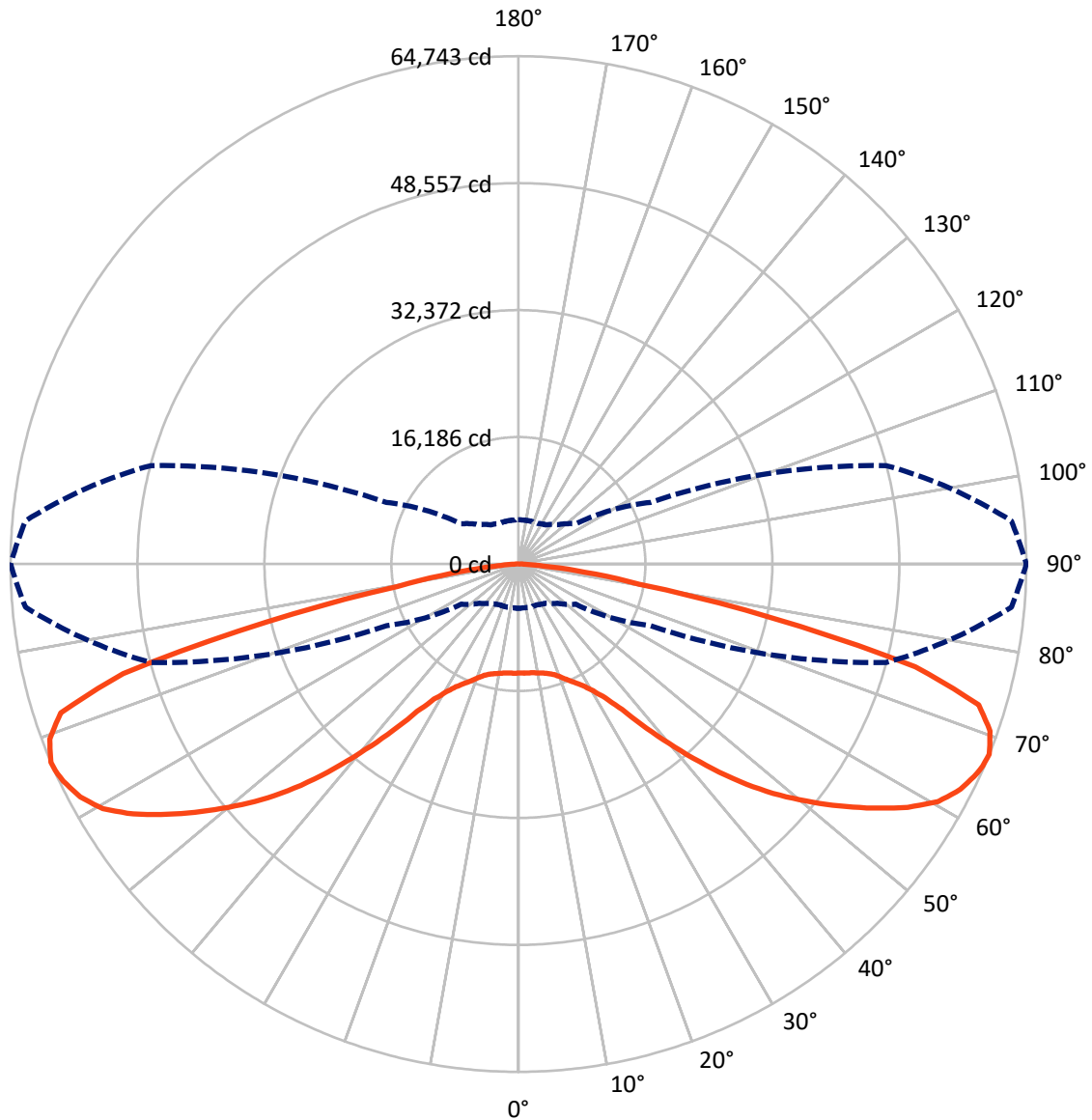
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 15.5 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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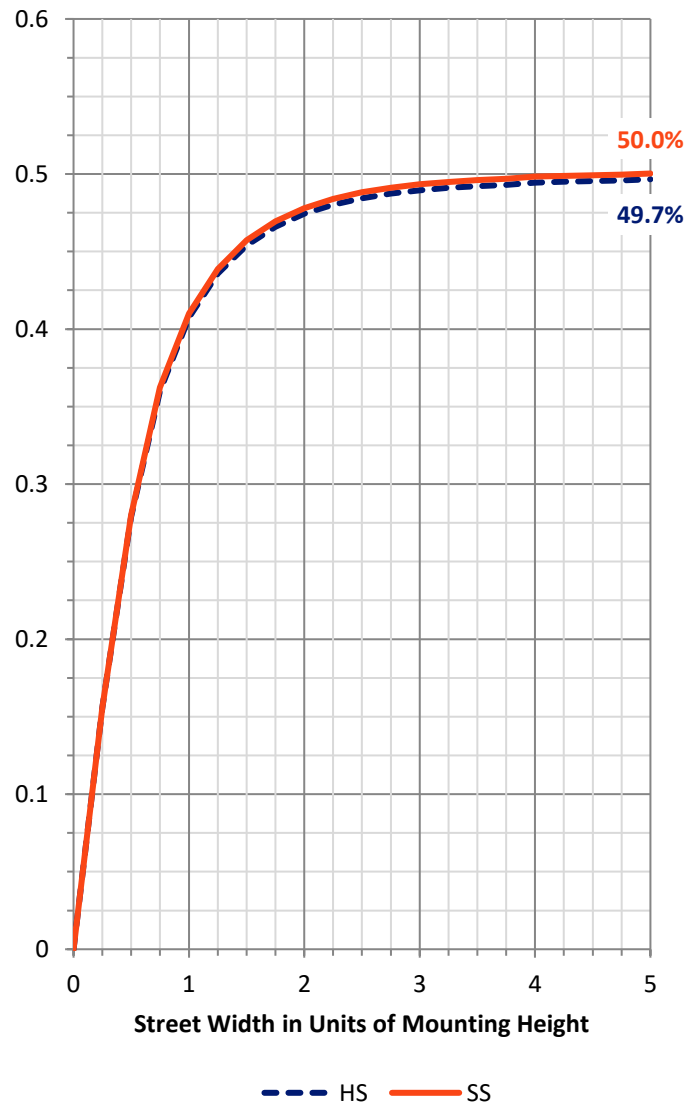
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	43150.5	0.0	43150.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	43150.5	0.0	43150.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	86301.0	0.0	86301.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1320.9	1.5
10°-20°	3930.0	4.6
20°-30°	6502.9	7.5
30°-40°	9527.7	11.0
40°-50°	14017.2	16.2
50°-60°	18177.0	21.1
60°-70°	19318.3	22.4
70°-80°	11925.2	13.8
80°-90°	1581.8	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°	86301.0	100.0
0°-180°	86301.0	100.0



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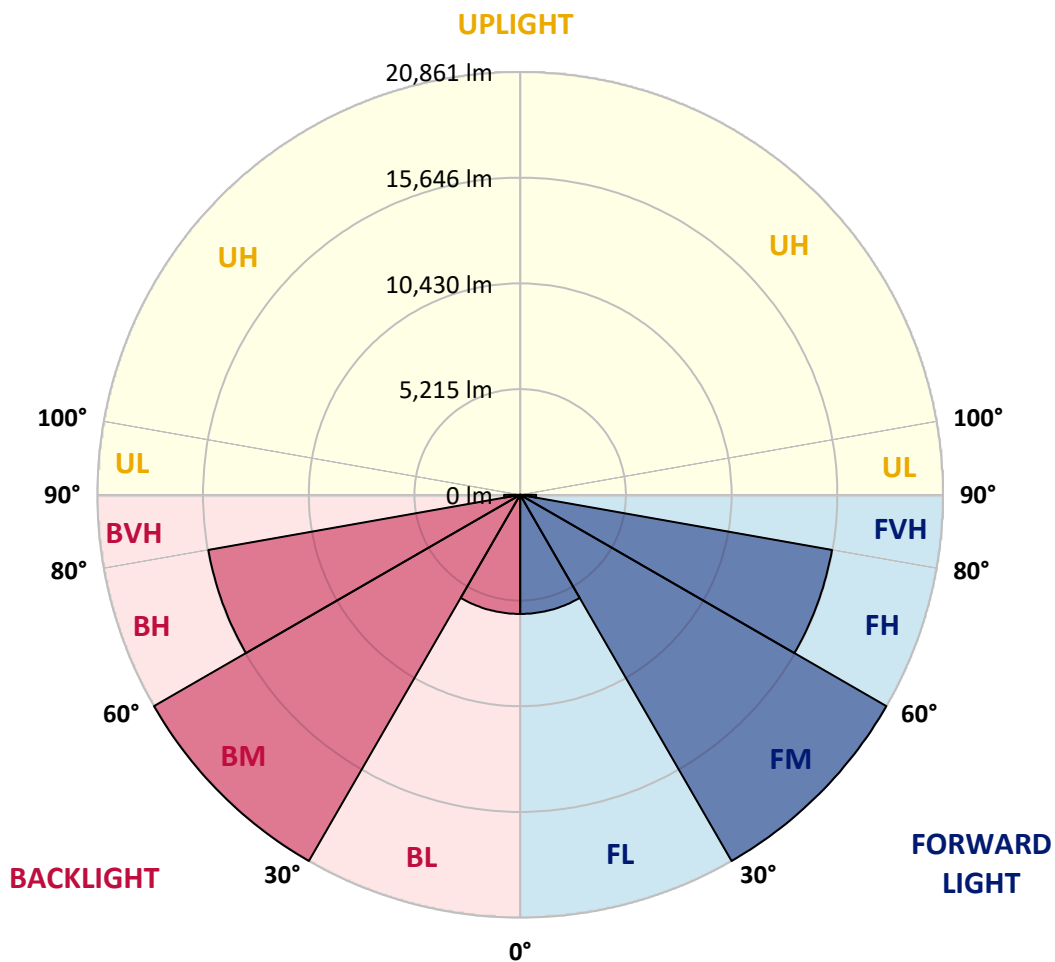
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5876.9	6.8			
FM	(30°-60°)	20860.9	24.2			
FH	(60°-80°)	15621.8	18.1			G5
FVH	(80°-90°)	790.9	0.9			G5
BL	(0°-30°)	5876.9	6.8	B5		
BM	(30°-60°)	20860.9	24.2	B5		
BH	(60°-80°)	15621.8	18.1	B5		G5
BVH	(80°-90°)	790.9	0.9			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 I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	13898.1	13898.1	13898.1	13898.1	13898.1	13898.1	13898.1	13898.1	13898.1	13898.1	13898.1
2.5°	13936.9	13893.0	13911.1	13975.7	13740.4	13856.8	13815.4	13918.8	13864.5	13911.1	13934.3
5°	13838.7	13784.4	13810.2	13931.7	13717.1	13836.1	13805.1	13921.4	13851.6	13916.2	13942.1
7.5°	13753.3	13696.5	13743.0	13843.8	13680.9	13812.8	13787.0	13944.7	13887.8	13970.5	13996.4
10°	13699.0	13637.0	13680.9	13792.1	13618.9	13825.7	13802.5	14011.9	13983.5	14097.2	14128.3
12.5°	13564.6	13499.9	13531.0	13678.4	13600.8	13815.4	13872.3	14112.7	14105.0	14242.0	14275.6
15°	13324.1	13259.5	13300.8	13497.4	13525.8	13823.2	13999.0	14283.4	14329.9	14467.0	14495.4
17.5°	13021.6	12975.0	13037.1	13298.3	13476.7	13929.2	14182.6	14544.6	14658.3	14798.0	14836.7
20°	12607.9	12582.0	12693.2	13050.0	13391.3	14006.7	14402.3	14911.7	15118.6	15346.1	15374.6
22.5°	12044.2	12013.2	12245.9	12747.5	13238.8	14024.8	14617.0	15291.8	15674.5	15966.7	16041.7
25°	11410.7	11400.3	11718.4	12377.7	13031.9	14011.9	14826.4	15697.8	16282.2	16667.4	16750.2
27.5°	10787.5	10818.6	11203.8	11982.1	12861.3	14040.3	15066.9	16217.5	17042.3	17523.3	17559.5
30°	10257.5	10283.3	10699.6	11591.7	12698.4	14074.0	15364.2	16838.1	17988.7	18637.7	18743.7
32.5°	9758.4	9817.9	10242.0	11167.6	12517.4	14138.6	15749.5	17647.4	19149.7	20173.6	20305.5
35°	9347.3	9399.0	9812.7	10735.8	12230.4	14190.3	16258.9	18671.3	20879.5	22583.5	22787.8
37.5°	8982.7	9044.8	9401.6	10337.6	11889.0	14208.4	16765.7	19933.2	23222.2	25934.6	26570.6
40°	8719.0	8768.1	9075.8	9939.4	11521.9	14125.7	17344.9	21345.0	25854.4	29934.6	30632.8
42.5°	8501.8	8543.2	8796.6	9549.0	11108.2	13962.8	17885.3	22751.6	28636.6	34172.6	35082.8
45°	8282.0	8292.3	8535.4	9212.8	10689.3	13704.2	18291.2	24098.7	31566.2	38495.9	39561.2
47.5°	8085.5	8072.6	8263.9	8881.9	10239.4	13269.8	18449.0	25215.7	34413.1	42547.7	43711.3
50°	7901.9	7847.6	8013.1	8566.4	9802.4	12646.7	18249.9	25988.9	37407.3	46462.4	47494.1
52.5°	7627.8	7602.0	7759.7	8256.1	9365.4	11902.0	17593.1	26397.4	40600.7	50170.3	51248.6
55°	7382.2	7364.1	7527.0	7940.7	8936.2	11144.4	16460.6	26286.2	43747.5	53746.4	54940.9
57.5°	7110.7	7097.7	7250.3	7596.8	8463.0	10441.1	15059.1	25567.4	46558.1	56833.7	58522.1
60°	6844.3	6852.1	6950.4	7247.7	7982.1	9665.3	13461.2	24315.9	48799.9	59628.8	61472.4
62.5°	6534.1	6526.3	6598.7	6846.9	7431.3	8827.6	11886.5	22580.9	50113.4	62069.7	63248.8
65°	6115.2	6086.7	6169.5	6327.2	6764.2	7969.1	10335.0	20481.3	50147.1	63282.4	64285.7
66°	5936.8	5905.7	5980.7	6091.9	6503.0	7622.6	9763.6	19591.8	49632.5	63318.6	64564.9
67.5°	5660.1	5623.9	5673.0	5724.7	6094.5	7069.3	8925.8	18583.4	48505.1	63091.1	64743.3
70°	4972.3	4977.5	5029.2	5011.1	5199.8	5838.5	7371.8	16711.4	43067.4	62170.6	63786.6
72.5°	3870.8	3826.8	3751.9	3679.5	3770.0	4331.0	5582.5	14024.8	35266.4	58201.5	61343.1
75°	2497.8	2490.0	2487.4	2575.4	2588.3	2968.4	4312.9	11315.0	27491.2	47763.0	52285.4
77.5°	1561.8	1548.8	1660.0	1874.6	1908.2	1918.6	2828.8	8600.0	19873.7	30563.0	32934.1
80°	1119.6	1119.6	1127.4	1155.8	1336.8	1365.2	1954.8	5398.9	11302.1	14898.8	15653.8
82.5°	848.1	835.2	837.8	850.7	866.2	930.9	1176.5	2396.9	4514.6	7550.2	8543.2
85°	612.8	630.9	661.9	638.7	576.6	584.4	667.1	824.8	1735.0	2924.4	3162.3
87.5°	222.4	256.0	263.7	274.1	263.7	266.3	274.1	258.6	351.7	721.4	832.6
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)