

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: P233983

Luminaire Tested: **CTN-10-8-D-E1-T1-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233983
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-T1-7050
Description: CELESTEON HIGH MAST LUMINAIRE
(10) 70 CRI, 5000K LEDS AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 87171 lumens
Efficiency: N/A
Efficacy: 138.1 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

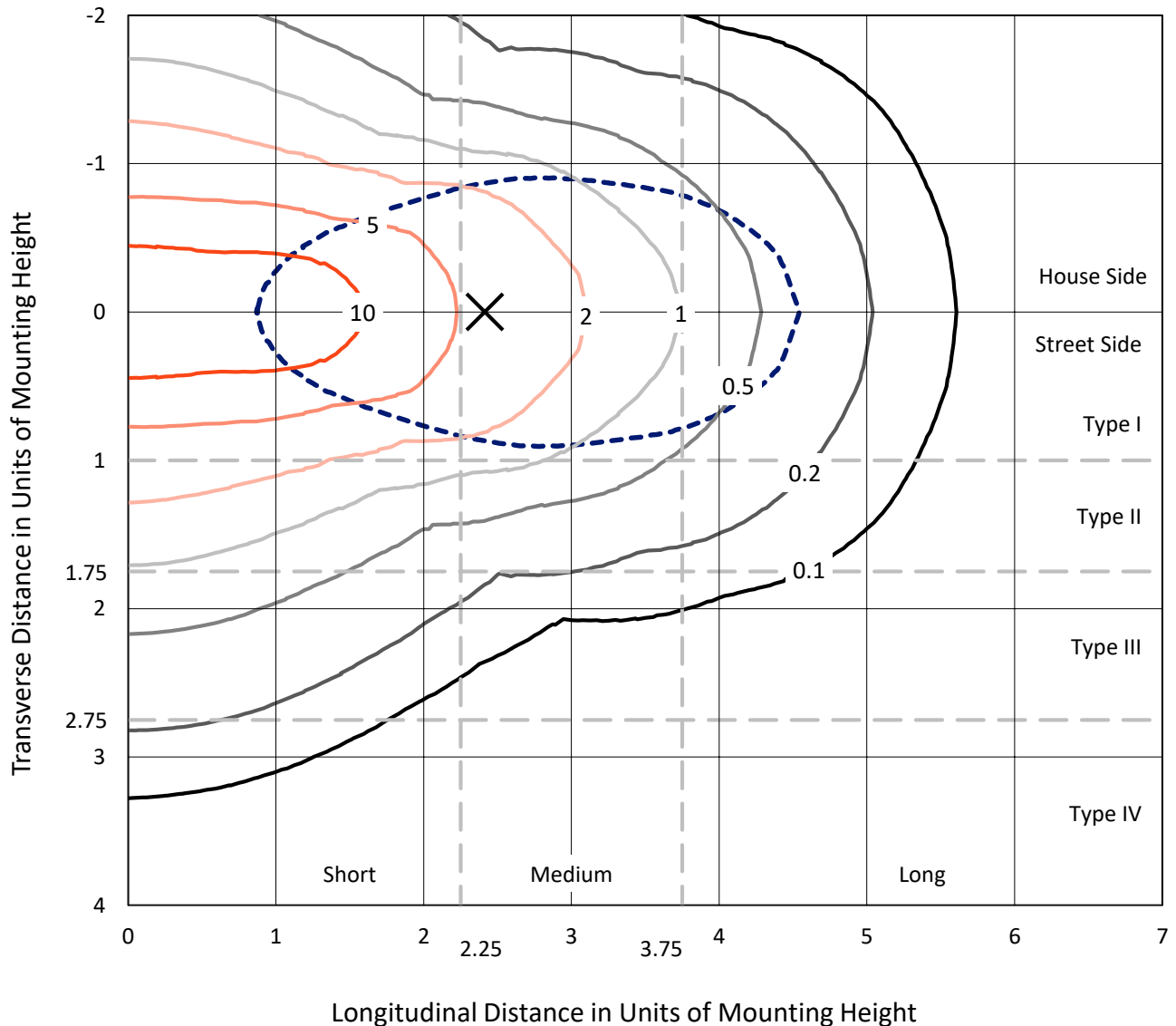


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Iso-Footcandle Lines of Horizontal Illumination

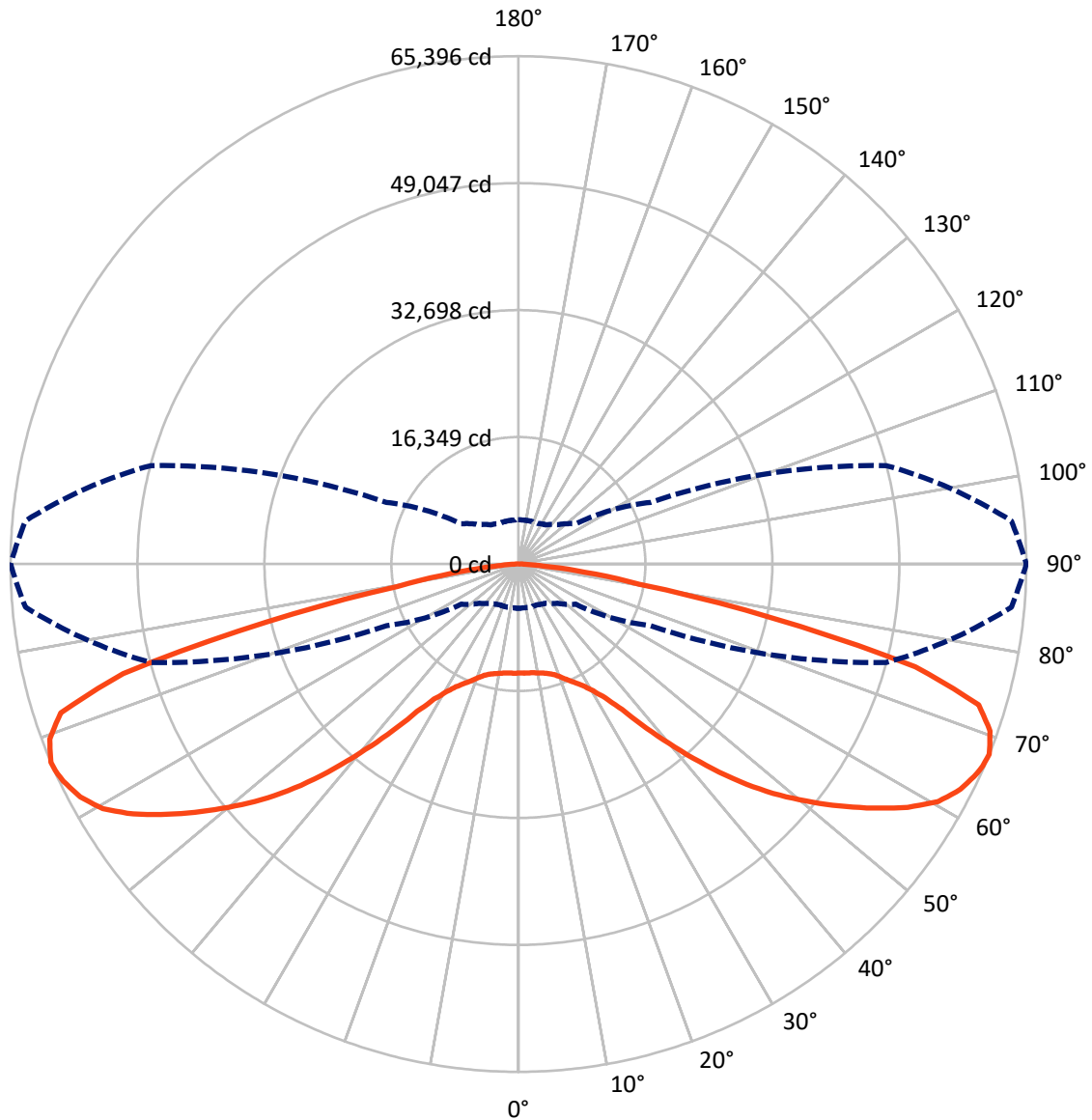
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 15.7 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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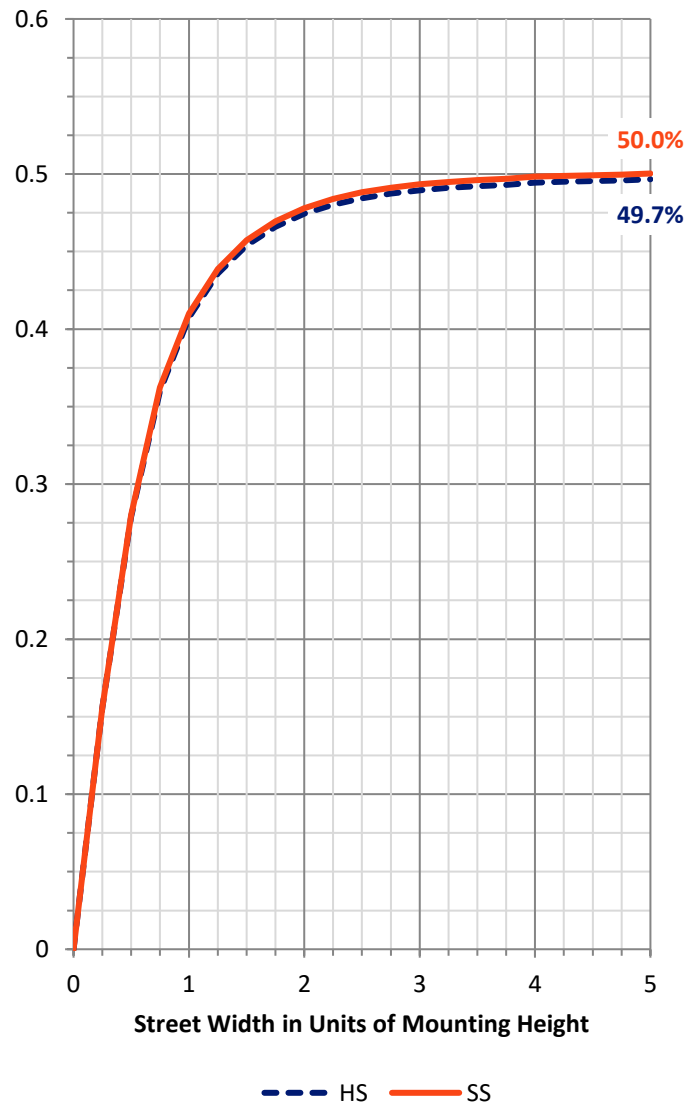
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	43585.5	0.0	43585.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	43585.5	0.0	43585.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	87171.0	0.0	87171.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1334.3	1.5
10°-20°	3969.6	4.6
20°-30°	6568.4	7.5
30°-40°	9623.8	11.0
40°-50°	14158.5	16.2
50°-60°	18360.2	21.1
60°-70°	19513.0	22.4
70°-80°	12045.4	13.8
80°-90°	1597.8	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°	87171.0	100.0
0°-180°	87171.0	100.0



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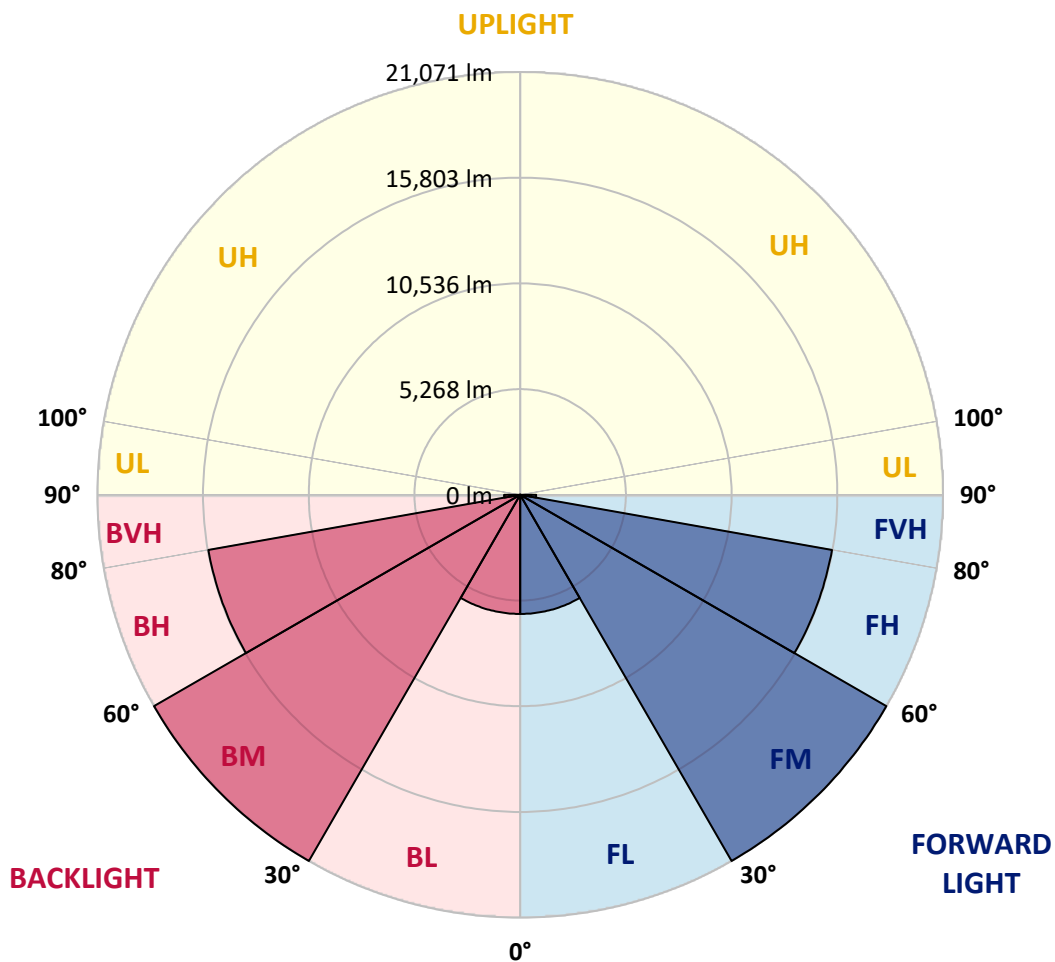
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5936.1	6.8			
FM	(30°-60°)	21071.2	24.2			
FH	(60°-80°)	15779.2	18.1			G5
FVH	(80°-90°)	798.9	0.9			G5
BL	(0°-30°)	5936.1	6.8	B5		
BM	(30°-60°)	21071.2	24.2	B5		
BH	(60°-80°)	15779.2	18.1	B5		G5
BVH	(80°-90°)	798.9	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°	14038.2	14038.2	14038.2	14038.2	14038.2	14038.2	14038.2	14038.2	14038.2	14038.2	14038.2
2.5°	14077.4	14033.0	14051.3	14116.6	13878.9	13996.5	13954.7	14059.1	14004.3	14051.3	14074.8
5°	13978.2	13923.3	13949.4	14072.2	13855.4	13975.6	13944.2	14061.7	13991.2	14056.5	14082.6
7.5°	13892.0	13834.5	13881.5	13983.4	13818.9	13952.1	13925.9	14085.3	14027.8	14111.4	14137.5
10°	13837.1	13774.5	13818.9	13931.2	13756.2	13965.1	13941.6	14153.2	14124.4	14239.3	14270.7
12.5°	13701.3	13636.0	13667.4	13816.2	13737.9	13954.7	14012.1	14255.0	14247.2	14385.6	14419.6
15°	13458.4	13393.1	13434.9	13633.4	13662.1	13962.5	14140.1	14427.4	14474.4	14612.8	14641.6
17.5°	13152.9	13105.8	13168.5	13432.3	13612.5	14069.6	14325.5	14691.2	14806.1	14947.1	14986.3
20°	12735.0	12708.9	12821.2	13181.6	13526.3	14147.9	14547.5	15062.1	15271.0	15500.8	15529.6
22.5°	12165.6	12134.3	12369.3	12876.0	13372.2	14166.2	14764.3	15446.0	15832.5	16127.7	16203.4
25°	11525.7	11515.3	11836.5	12502.5	13163.3	14153.2	14975.9	15856.0	16446.3	16835.4	16919.0
27.5°	10896.3	10927.6	11316.8	12102.9	12990.9	14181.9	15218.8	16381.0	17214.2	17699.9	17736.5
30°	10360.9	10387.0	10807.5	11708.5	12826.4	14215.8	15519.1	17007.8	18170.1	18825.6	18932.7
32.5°	9856.8	9916.9	10345.2	11280.2	12643.6	14281.1	15908.3	17825.3	19342.7	20377.0	20510.2
35°	9441.5	9493.8	9911.7	10844.1	12353.7	14333.4	16422.8	18859.6	21090.0	22811.2	23017.5
37.5°	9073.3	9136.0	9496.4	10441.8	12008.9	14351.7	16934.7	20134.1	23456.3	26196.0	26838.5
40°	8806.9	8856.5	9167.3	10039.6	11638.0	14268.1	17519.7	21560.1	26115.0	30236.4	30941.6
42.5°	8587.5	8629.3	8885.2	9645.3	11220.1	14103.5	18065.6	22980.9	28925.3	34517.1	35436.4
45°	8365.5	8375.9	8621.4	9305.7	10797.0	13842.4	18475.6	24341.7	31884.4	38884.0	39960.0
47.5°	8167.0	8153.9	8347.2	8971.4	10342.6	13403.6	18635.0	25469.9	34760.0	42976.6	44151.9
50°	7981.6	7926.7	8093.9	8652.8	9901.2	12774.1	18433.8	26250.9	37784.4	46930.8	47972.9
52.5°	7704.7	7678.6	7837.9	8339.4	9459.8	12022.0	17770.5	26663.5	41010.0	50676.1	51765.2
55°	7456.6	7438.3	7602.9	8020.7	9026.3	11256.7	16626.5	26551.2	44188.5	54288.2	55494.8
57.5°	7182.4	7169.3	7323.4	7673.4	8548.3	10546.3	15210.9	25825.1	47027.5	57406.6	59112.1
60°	6913.3	6921.2	7020.4	7320.8	8062.5	9762.8	13596.9	24561.0	49291.9	60229.9	62092.1
62.5°	6599.9	6592.1	6665.2	6916.0	7506.2	8916.6	12006.3	22808.6	50618.6	62695.4	63886.4
65°	6176.8	6148.1	6231.7	6391.0	6832.4	8049.5	10439.2	20687.8	50652.6	63920.4	64933.7
66°	5996.6	5965.3	6041.0	6153.3	6568.6	7699.5	9862.0	19789.4	50132.8	63956.9	65215.8
67.5°	5717.2	5680.6	5730.2	5782.5	6155.9	7140.6	9015.8	18770.8	48994.1	63727.1	65396.0
70°	5022.4	5027.6	5079.9	5061.6	5252.3	5897.4	7446.1	16879.8	43501.6	62797.3	64429.7
72.5°	3909.8	3865.4	3789.7	3716.5	3808.0	4374.7	5638.8	14166.2	35621.9	58788.2	61961.5
75°	2523.0	2515.1	2512.5	2601.3	2614.4	2998.3	4356.4	11429.1	27768.3	48244.5	52812.5
77.5°	1577.5	1564.4	1676.8	1893.5	1927.5	1937.9	2857.3	8686.7	20074.0	30871.1	33266.1
80°	1130.9	1130.9	1138.7	1167.5	1350.3	1379.0	1974.5	5453.4	11416.0	15049.0	15811.6
82.5°	856.7	843.6	846.2	859.3	874.9	940.2	1188.4	2421.1	4560.1	7626.4	8629.3
85°	619.0	637.3	668.6	645.1	582.4	590.3	673.8	833.2	1752.5	2953.9	3194.2
87.5°	224.6	258.6	266.4	276.8	266.4	269.0	276.8	261.2	355.2	728.7	841.0
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)