

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: P233967

Luminaire Tested: **CTN-10-8-D-E1-T1-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233967  
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-T1-7030  
Description: CELESTEON HIGH MAST LUMINAIRE  
(10) 70 CRI, 3000K LEDS AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 83981 lumens  
Efficiency: N/A  
Efficacy: 133.1 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

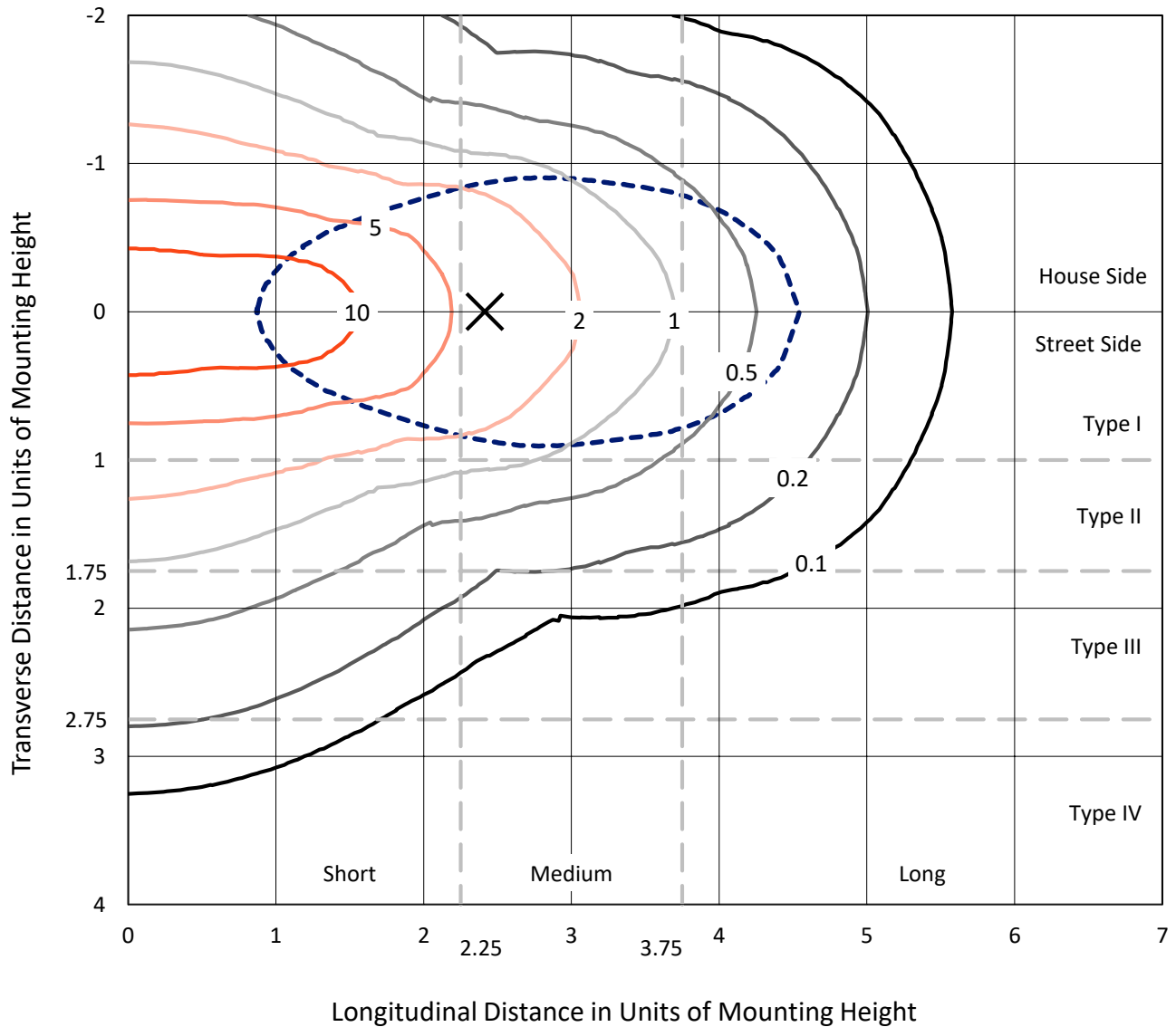


REPORT NUMBER: P233967

CATALOG NUMBER: CTN-10-8-D-E1-T1-7030

### Iso-Footcandle Lines of Horizontal Illumination

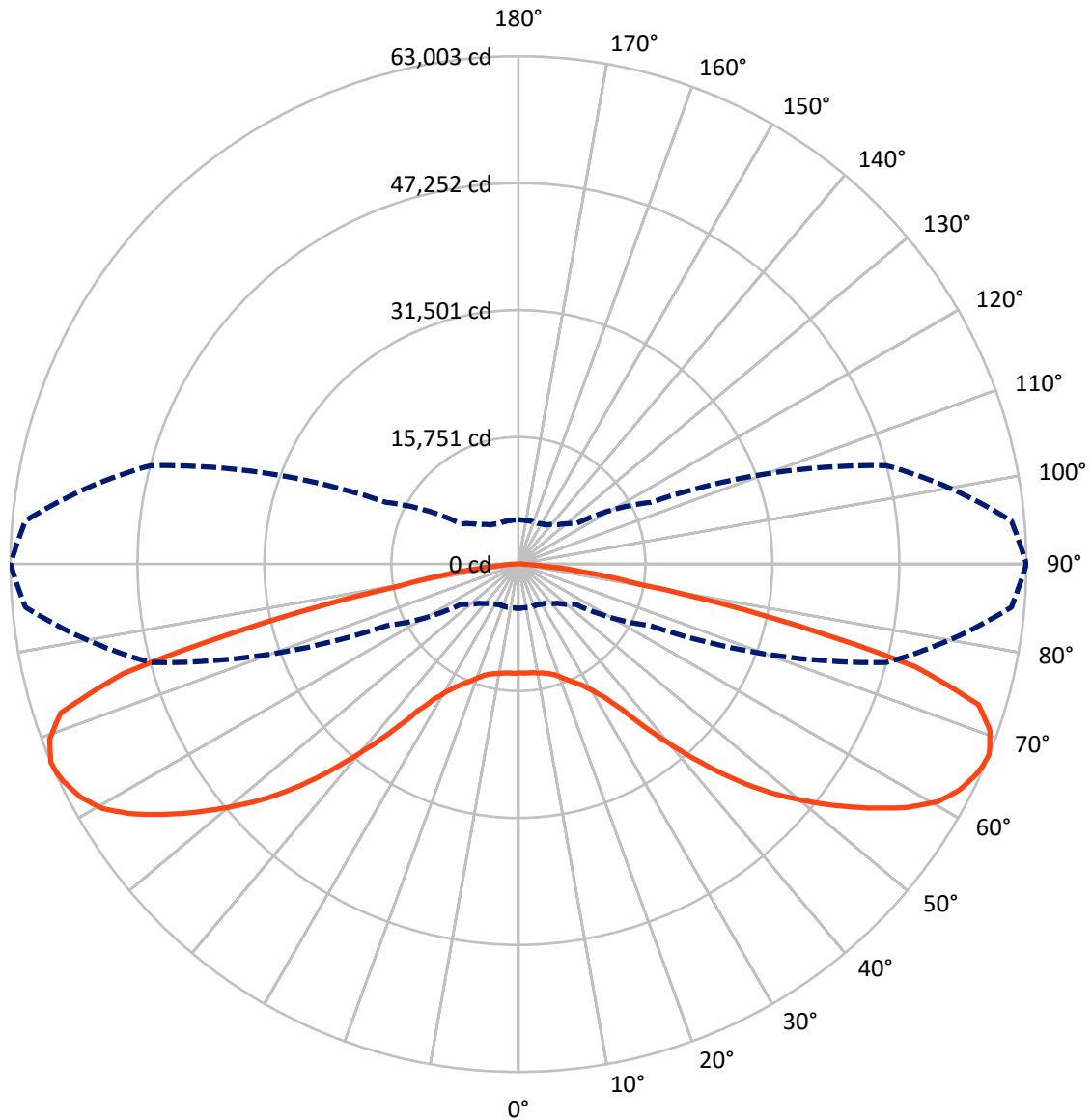
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 15.1 fc  
 Type I - Short - Semi-Cutoff

REPORT NUMBER: P233967  
CATALOG NUMBER: CTN-10-8-D-E1-T1-7030

### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P233967

CATALOG NUMBER: CTN-10-8-D-E1-T1-7030

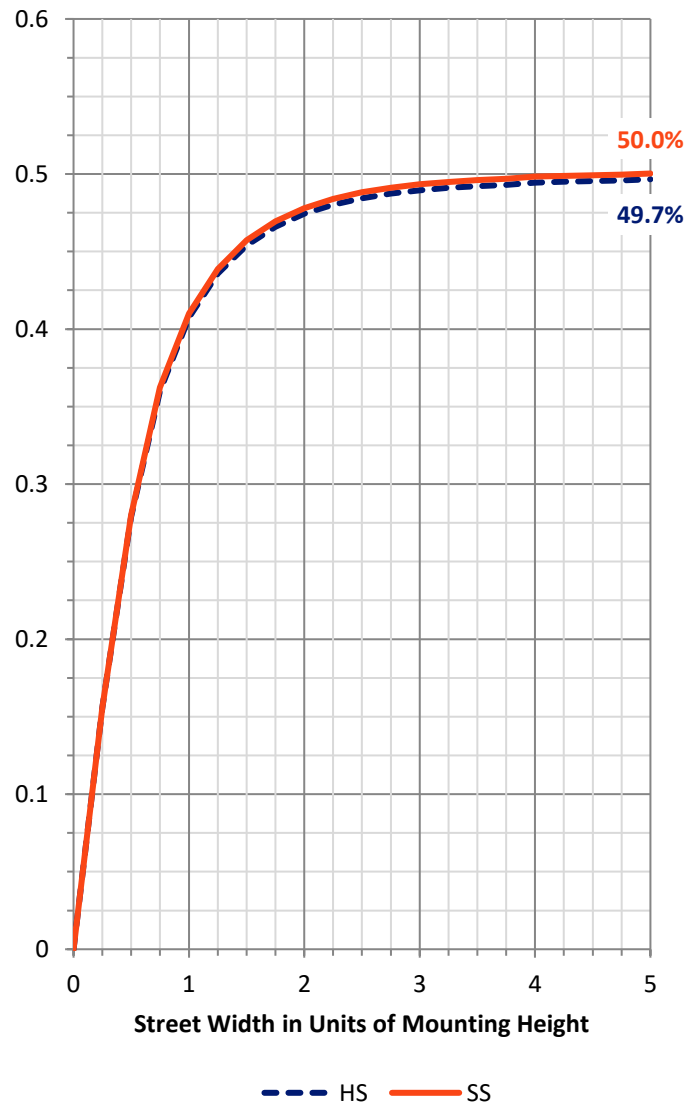
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	41990.5	0.0	41990.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	41990.5	0.0	41990.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	83981.0	0.0	83981.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1285.4	1.5
10°-20°	3824.3	4.6
20°-30°	6328.0	7.5
30°-40°	9271.6	11.0
40°-50°	13640.4	16.2
50°-60°	17688.3	21.1
60°-70°	18799.0	22.4
70°-80°	11604.6	13.8
80°-90°	1539.3	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°	83981.0	100.0
0°-180°	83981.0	100.0



REPORT NUMBER: P233967

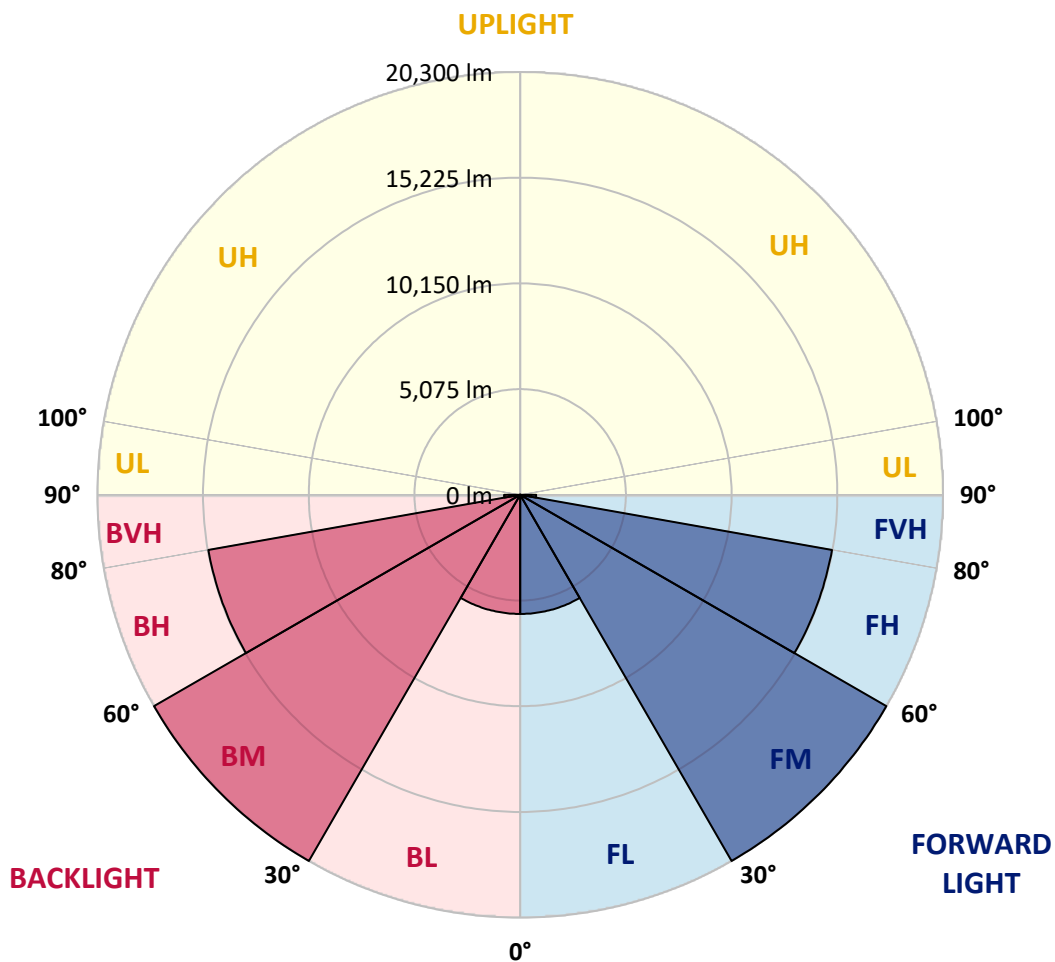
CATALOG NUMBER: CTN-10-8-D-E1-T1-7030

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5718.9	6.8			
FM	(30°-60°)	20300.1	24.2			
FH	(60°-80°)	15201.8	18.1			G5
FVH	(80°-90°)	769.6	0.9			G5
BL	(0°-30°)	5718.9	6.8	B5		
BM	(30°-60°)	20300.1	24.2	B5		
BH	(60°-80°)	15201.8	18.1	B5		G5
BVH	(80°-90°)	769.6	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





REPORT NUMBER: P233967

CATALOG NUMBER: CTN-10-8-D-E1-T1-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	13524.5	13524.5	13524.5	13524.5	13524.5	13524.5	13524.5	13524.5	13524.5	13524.5	13524.5
2.5°	13562.3	13519.5	13537.1	13600.0	13371.0	13484.3	13444.0	13544.6	13491.8	13537.1	13559.7
5°	13466.6	13413.8	13439.0	13557.2	13348.4	13464.1	13433.9	13547.2	13479.2	13542.1	13567.3
7.5°	13383.6	13328.3	13373.5	13471.7	13313.2	13441.5	13416.3	13569.8	13514.5	13595.0	13620.1
10°	13330.8	13270.4	13313.2	13421.4	13252.8	13454.1	13431.4	13635.2	13607.6	13718.3	13748.5
12.5°	13199.9	13137.0	13167.2	13310.6	13235.2	13444.0	13499.4	13733.4	13725.8	13859.2	13891.9
15°	12965.9	12903.0	12943.3	13134.5	13162.2	13451.5	13622.6	13899.4	13944.7	14078.1	14105.8
17.5°	12671.5	12626.2	12686.6	12940.8	13114.4	13554.7	13801.3	14153.6	14264.3	14400.2	14437.9
20°	12268.9	12243.8	12352.0	12699.2	13031.3	13630.2	14015.2	14510.9	14712.2	14933.6	14961.3
22.5°	11720.4	11690.2	11916.7	12404.8	12882.9	13647.8	14224.0	14880.7	15253.1	15537.5	15610.4
25°	11103.9	11093.9	11403.4	12045.0	12681.6	13635.2	14427.8	15275.8	15844.4	16219.4	16299.9
27.5°	10497.5	10527.7	10902.6	11660.0	12515.5	13662.9	14661.8	15781.5	16584.2	17052.2	17087.4
30°	9981.7	10006.9	10412.0	11280.1	12357.0	13695.6	14951.2	16385.4	17505.1	18136.7	18239.9
32.5°	9496.1	9554.0	9966.6	10867.4	12180.9	13758.5	15326.1	17173.0	18634.9	19631.3	19759.6
35°	9096.0	9146.3	9548.9	10447.2	11901.6	13808.8	15821.8	18169.4	20318.2	21976.4	22175.2
37.5°	8741.2	8801.6	9148.9	10059.7	11569.4	13826.5	16315.0	19397.3	22597.9	25237.4	25856.4
40°	8484.6	8532.4	8831.8	9672.2	11212.1	13745.9	16878.6	20771.1	25159.4	29129.9	29809.3
42.5°	8273.2	8313.5	8560.1	9292.3	10809.5	13587.4	17404.5	22139.9	27866.8	33254.0	34139.7
45°	8059.4	8069.4	8305.9	8965.2	10401.9	13335.8	17799.5	23450.9	30717.6	37461.0	38497.7
47.5°	7868.1	7855.5	8041.7	8643.1	9964.1	12913.1	17953.0	24537.9	33488.0	41403.9	42536.2
50°	7689.5	7636.6	7797.7	8336.1	9538.9	12306.7	17759.3	25290.2	36401.7	45213.4	46217.4
52.5°	7422.8	7397.6	7551.1	8034.2	9113.6	11582.0	17120.2	25687.8	39509.2	48821.6	49870.9
55°	7183.7	7166.1	7324.6	7727.2	8695.9	10844.8	16018.1	25579.6	42571.4	52301.5	53464.0
57.5°	6919.5	6906.9	7055.4	7392.6	8235.5	10160.4	14654.3	24880.1	45306.5	55305.8	56948.9
60°	6660.4	6667.9	6763.5	7052.9	7767.5	9405.5	13099.3	23662.2	47488.0	58025.8	59819.9
62.5°	6358.4	6350.9	6421.3	6662.9	7231.5	8590.3	11566.9	21973.9	48766.3	60401.1	61548.5
65°	5950.8	5923.1	6003.6	6157.1	6582.4	7754.9	10057.2	19930.7	48799.0	61581.2	62557.5
66°	5777.2	5747.0	5819.9	5928.1	6328.2	7417.7	9501.1	19065.2	48298.3	61616.4	62829.2
67.5°	5507.9	5472.7	5520.5	5570.8	5930.7	6879.3	8685.9	18083.9	47201.2	61395.0	63002.9
70°	4838.6	4843.7	4894.0	4876.4	5060.1	5681.6	7173.7	16262.1	41909.6	60499.3	62071.9
72.5°	3766.7	3724.0	3651.0	3580.5	3668.6	4214.6	5432.5	13647.8	34318.3	56636.9	59694.1
75°	2430.6	2423.1	2420.6	2506.1	2518.7	2888.6	4197.0	11010.8	26752.1	46479.0	50879.9
77.5°	1519.8	1507.2	1615.4	1824.2	1856.9	1867.0	2752.7	8368.8	19339.4	29741.4	32048.7
80°	1089.5	1089.5	1097.1	1124.7	1300.9	1328.5	1902.2	5253.8	10998.3	14498.3	15233.0
82.5°	825.3	812.7	815.2	827.8	842.9	905.8	1144.9	2332.5	4393.3	7347.3	8313.5
85°	596.3	614.0	644.1	621.5	561.1	568.7	649.2	802.7	1688.4	2845.8	3077.3
87.5°	216.4	249.1	256.7	266.7	256.7	259.2	266.7	251.6	342.2	702.0	810.2
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)