

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: P233976

Luminaire Tested: **CTN-10-9-D-E1-T1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233976
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-10-9-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: 99094 lumens
Efficiency: N/A
Efficacy: 130.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type I - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G5

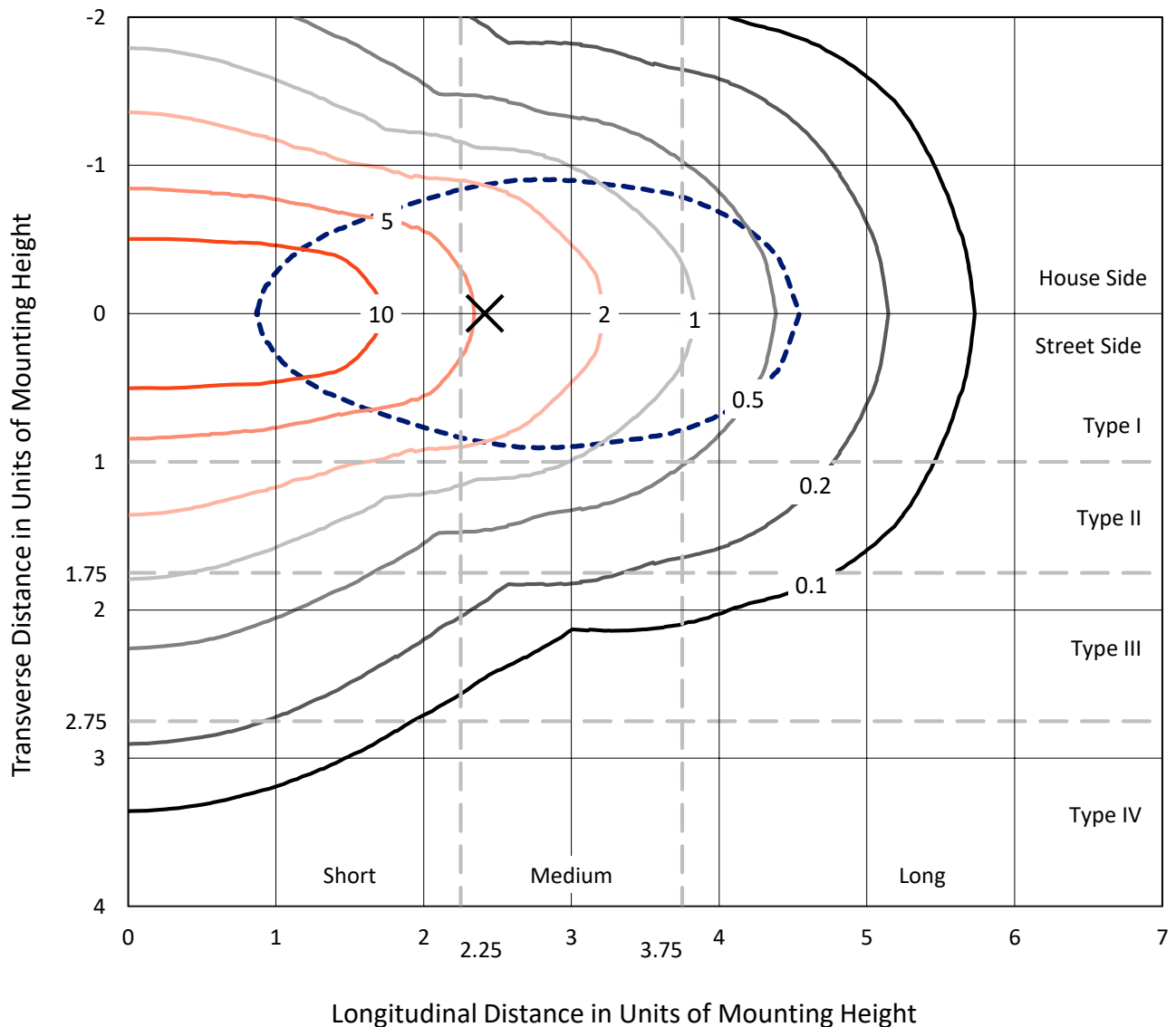
Input Watts (W): 760
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

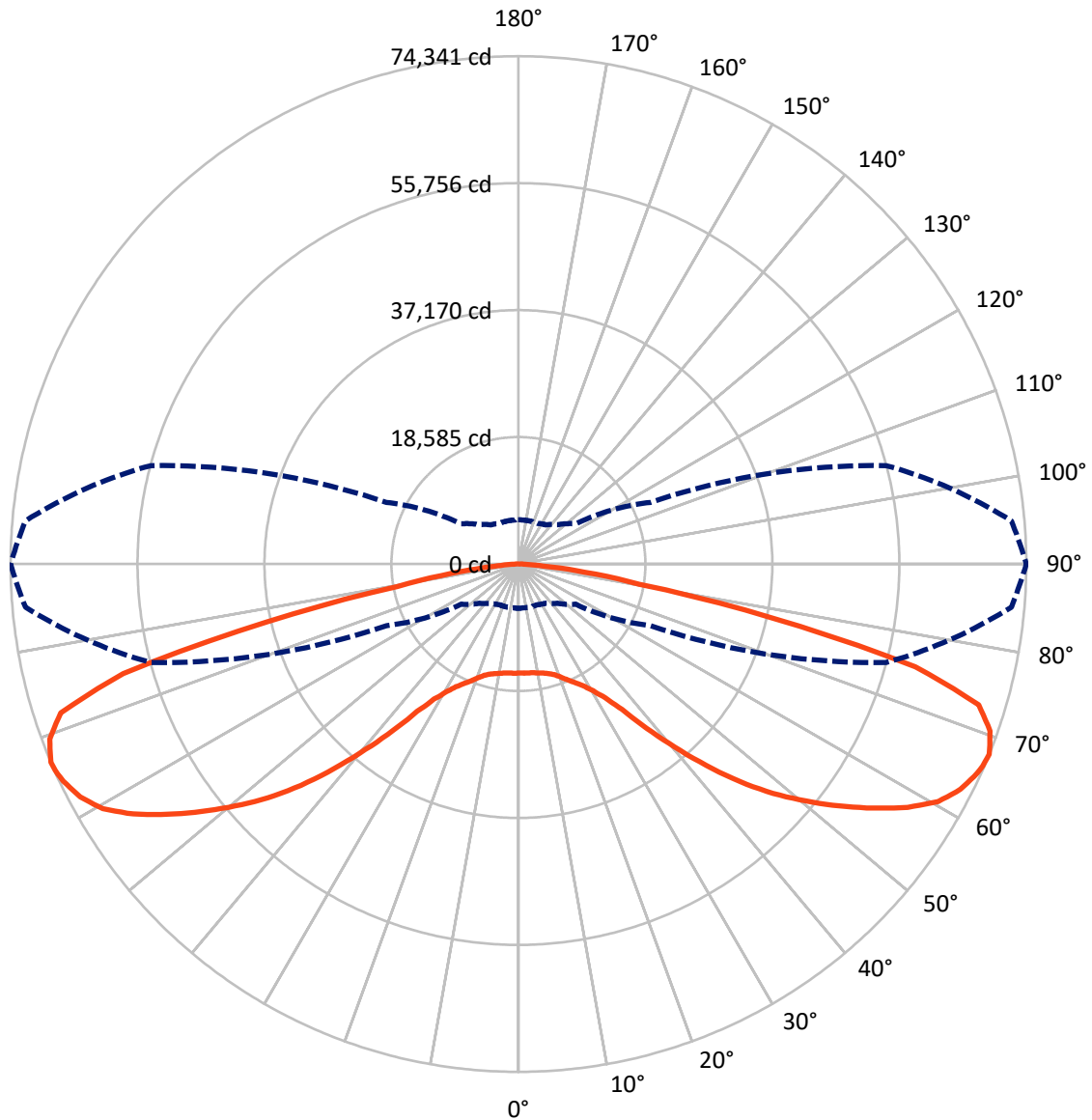
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17.8 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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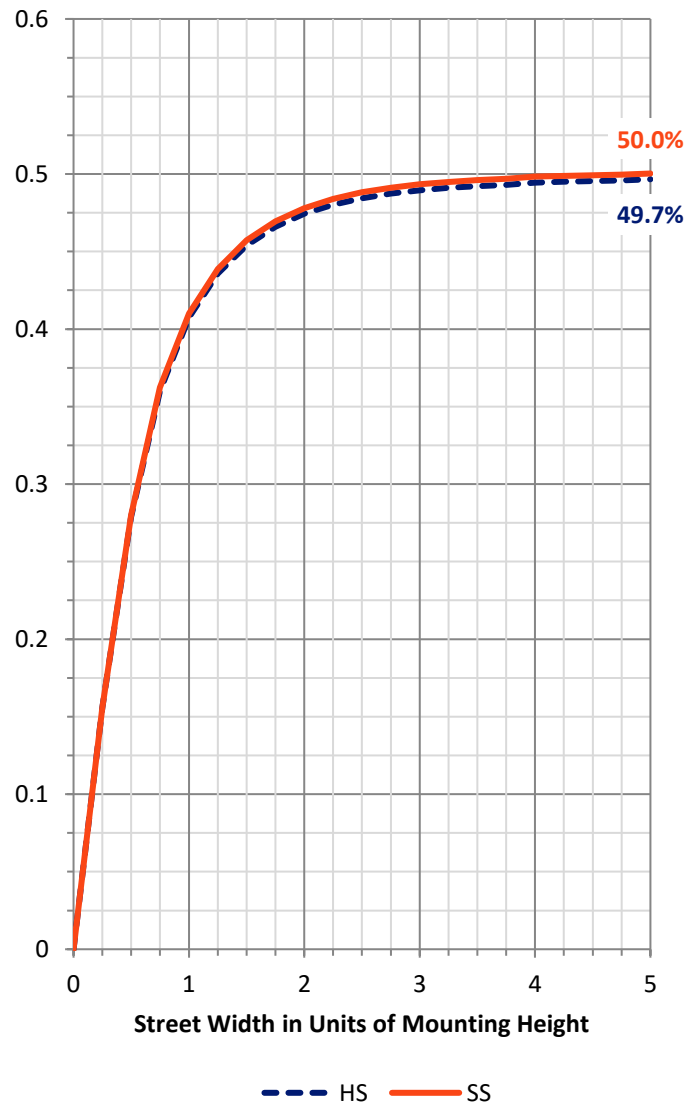
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	49547.0	0.0	49547.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	49547.0	0.0	49547.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	99094.0	0.0	99094.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1516.8	1.5
10°-20°	4512.6	4.6
20°-30°	7466.8	7.5
30°-40°	10940.1	11.0
40°-50°	16095.1	16.2
50°-60°	20871.5	21.1
60°-70°	22182.0	22.4
70°-80°	13693.0	13.8
80°-90°	1816.3	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°	99094.0	100.0
0°-180°	99094.0	100.0



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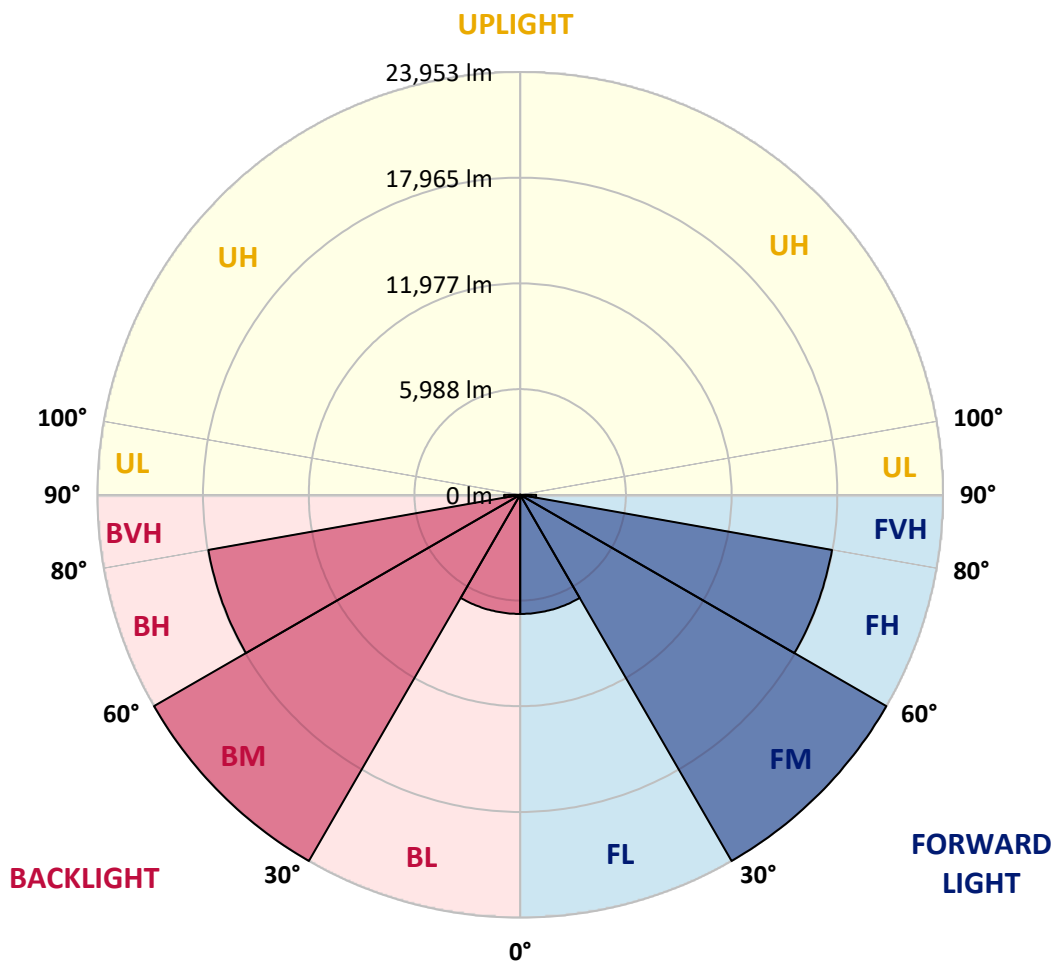
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6748.1	6.8			
FM	(30°-60°)	23953.3	24.2			
FH	(60°-80°)	17937.5	18.1			G5
FVH	(80°-90°)	908.1	0.9			G5
BL	(0°-30°)	6748.1	6.8	B5		
BM	(30°-60°)	23953.3	24.2	B5		
BH	(60°-80°)	17937.5	18.1	B5		G5
BVH	(80°-90°)	908.1	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°	15958.4	15958.4	15958.4	15958.4	15958.4	15958.4	15958.4	15958.4	15958.4	15958.4	15958.4
2.5°	16002.9	15952.4	15973.2	16047.4	15777.2	15910.8	15863.3	15982.1	15919.8	15973.2	15999.9
5°	15890.1	15827.7	15857.4	15997.0	15750.5	15887.1	15851.5	15985.1	15904.9	15979.1	16008.8
7.5°	15792.1	15726.8	15780.2	15896.0	15709.0	15860.4	15830.7	16011.8	15946.5	16041.5	16071.2
10°	15729.7	15658.5	15709.0	15836.6	15637.7	15875.2	15848.5	16089.0	16056.3	16187.0	16222.6
12.5°	15575.4	15501.1	15536.8	15706.0	15616.9	15863.3	15928.7	16204.8	16195.9	16353.2	16391.8
15°	15299.2	15225.0	15272.5	15498.2	15530.8	15872.3	16074.1	16400.7	16454.2	16611.5	16644.2
17.5°	14951.9	14898.4	14969.7	15269.5	15474.4	15994.0	16284.9	16700.6	16831.2	16991.6	17036.1
20°	14476.8	14447.1	14574.8	14984.5	15376.4	16083.1	16537.3	17122.2	17359.7	17621.0	17653.6
22.5°	13829.6	13794.0	14061.2	14637.1	15201.3	16103.8	16783.7	17558.6	17998.1	18333.5	18419.7
25°	13102.2	13090.3	13455.5	14212.6	14963.7	16089.0	17024.2	18024.8	18695.8	19138.1	19233.2
27.5°	12386.7	12422.3	12864.7	13758.3	14767.8	16121.6	17300.3	18621.5	19568.7	20120.9	20162.5
30°	11778.0	11807.7	12285.7	13310.0	14580.7	16160.2	17641.8	19334.1	20655.3	21400.5	21522.3
32.5°	11205.0	11273.3	11760.2	12823.1	14372.9	16234.5	18084.2	20263.4	21988.4	23164.1	23315.5
35°	10732.9	10792.3	11267.3	12327.3	14043.4	16293.8	18669.0	21439.1	23974.6	25931.2	26165.8
37.5°	10314.3	10385.5	10795.3	11870.0	13651.4	16314.6	19251.0	22888.0	26664.6	29779.0	30509.4
40°	10011.5	10067.9	10421.2	11412.8	13229.8	16219.6	19916.0	24509.1	29687.0	34372.1	35173.7
42.5°	9762.1	9809.6	10100.5	10964.5	12754.8	16032.6	20536.5	26124.2	32881.6	39238.3	40283.3
45°	9509.7	9521.6	9800.7	10578.5	12273.8	15735.7	21002.7	27671.0	36245.5	44202.4	45425.6
47.5°	9284.1	9269.2	9488.9	10198.5	11757.2	15236.9	21183.8	28953.6	39514.4	48854.8	50190.9
50°	9073.3	9010.9	9200.9	9836.3	11255.5	14521.4	20955.2	29841.4	42952.5	53349.9	54534.5
52.5°	8758.5	8728.8	8910.0	9480.0	10753.7	13666.3	20201.0	30310.5	46619.2	57607.4	58845.5
55°	8476.5	8455.7	8642.7	9117.8	10260.8	12796.4	18900.6	30182.8	50232.4	61713.5	63085.2
57.5°	8164.7	8149.9	8325.1	8722.9	9717.5	11988.8	17291.4	29357.4	53459.7	65258.5	67197.3
60°	7858.9	7867.8	7980.7	8322.1	9165.3	11098.1	15456.6	27920.4	56033.9	68468.0	70584.9
62.5°	7502.7	7493.7	7576.9	7861.9	8532.9	10136.2	13648.5	25928.2	57542.1	71270.7	72624.6
65°	7021.7	6989.0	7084.0	7265.1	7766.9	9150.4	11867.1	23517.4	57580.7	72663.2	73815.2
66°	6816.8	6781.2	6867.3	6995.0	7467.0	8752.6	11210.9	22496.1	56989.9	72704.8	74135.8
67.5°	6499.1	6457.6	6514.0	6573.4	6997.9	8117.2	10249.0	21338.2	55695.4	72443.5	74340.7
70°	5709.4	5715.3	5774.7	5753.9	5970.7	6704.0	8464.6	19188.6	49451.6	71386.5	73242.2
72.5°	4444.6	4394.1	4308.0	4224.9	4328.8	4973.1	6410.1	16103.8	40494.1	66829.1	70436.5
75°	2868.1	2859.1	2856.2	2957.1	2972.0	3408.4	4952.3	12992.3	31566.4	54843.3	60036.1
77.5°	1793.3	1778.4	1906.1	2152.5	2191.1	2203.0	3248.1	9874.9	22819.7	35093.5	37816.1
80°	1285.6	1285.6	1294.5	1327.1	1535.0	1567.6	2244.6	6199.3	12977.5	17107.4	17974.3
82.5°	973.8	959.0	962.0	976.8	994.6	1068.8	1350.9	2752.3	5183.9	8669.5	9809.6
85°	703.7	724.4	760.1	733.3	662.1	671.0	766.0	947.1	1992.2	3357.9	3631.1
87.5°	255.3	293.9	302.8	314.7	302.8	305.8	314.7	296.9	403.8	828.3	956.0
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)