

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: P232771

Luminaire Tested: **CTN-10-4-D-E1-T5N**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232771
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-22)
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-T5N
Description: CELESTEON HIGH MAST LUMINAIRE
(10) 70 CRI, 4000K LEDS AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47620 lumens
Efficiency: N/A
Efficacy: 154.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G4

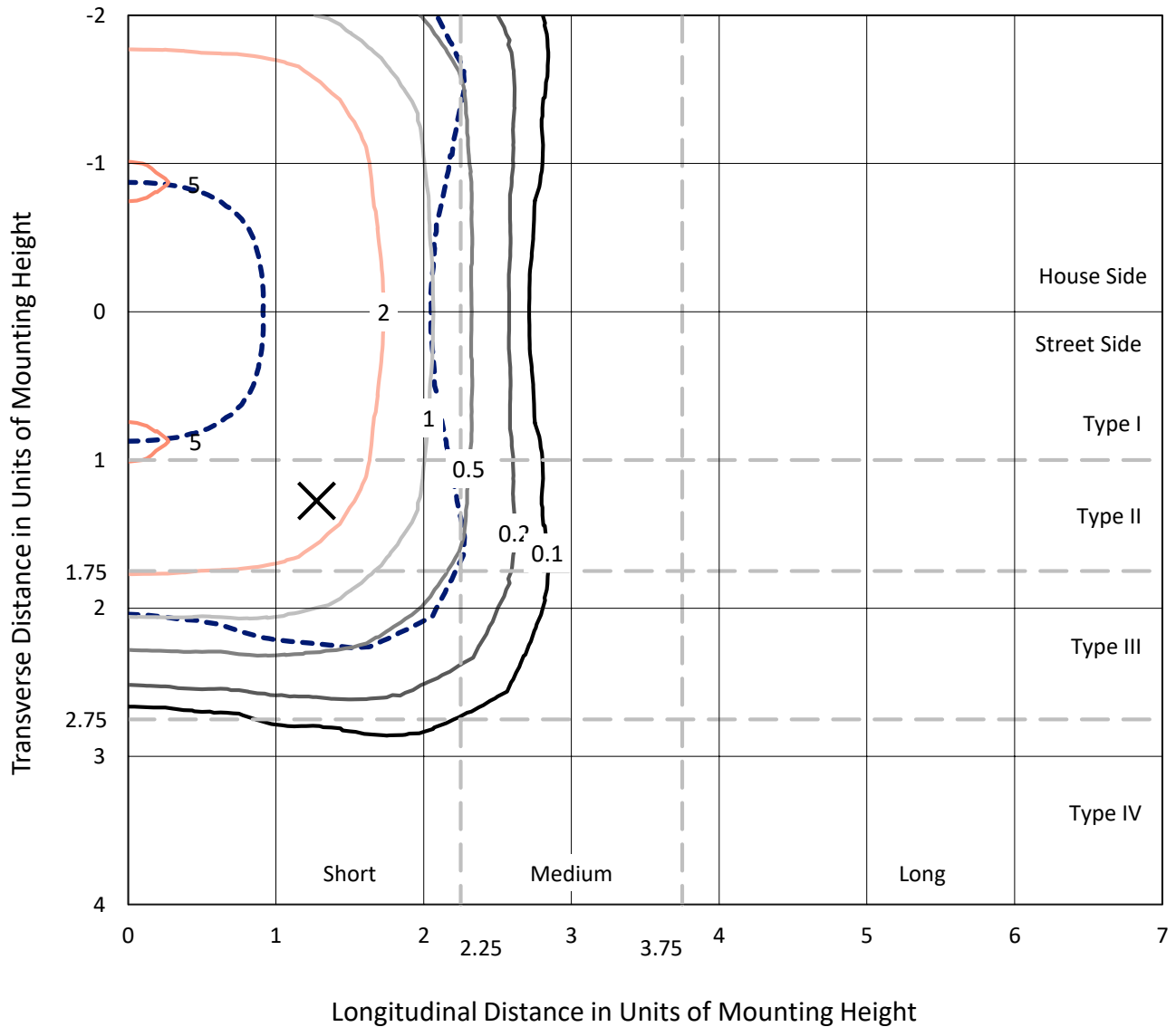
Input Watts (W): 308
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

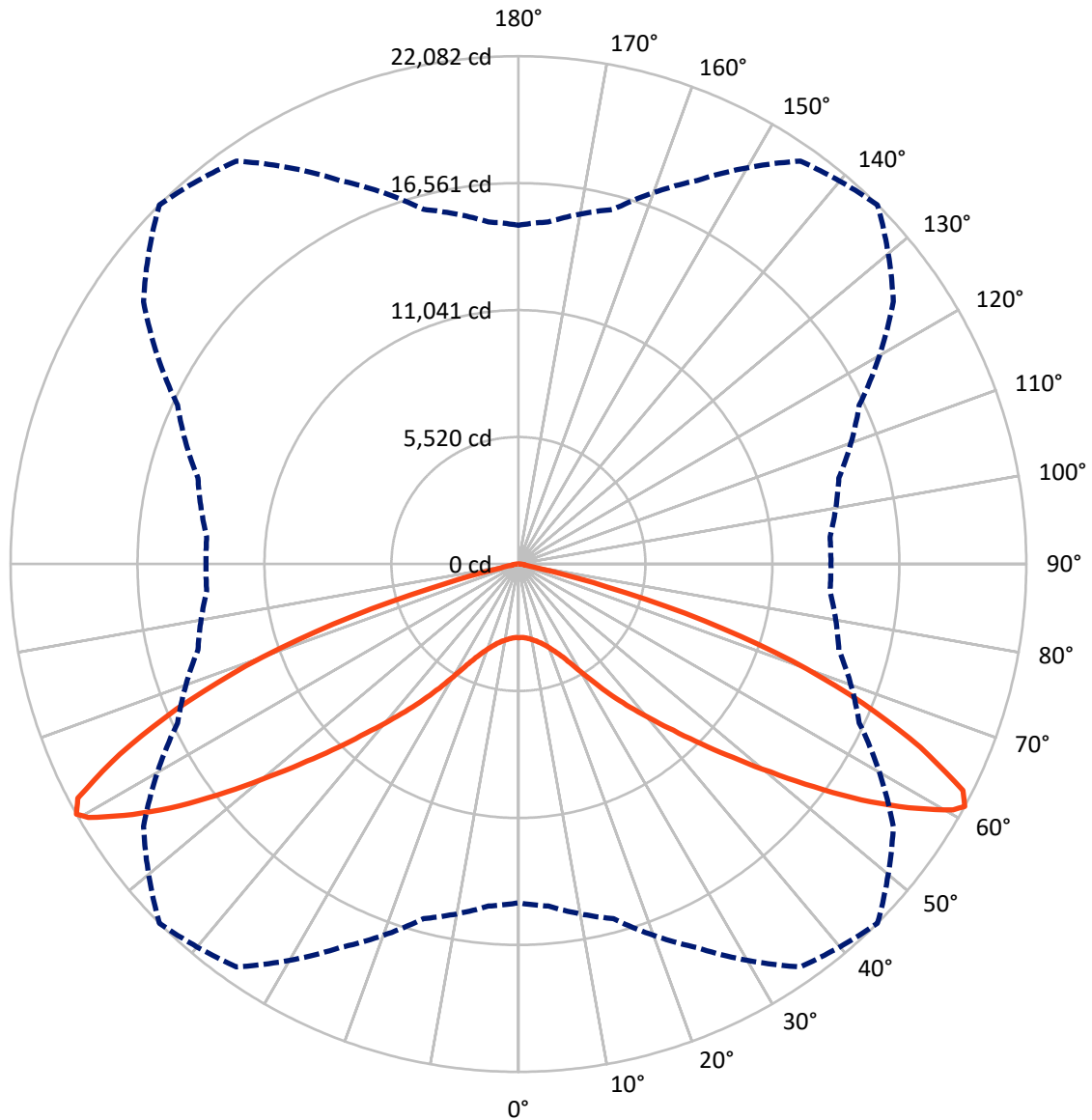
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.2 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 61-Deg Vertical

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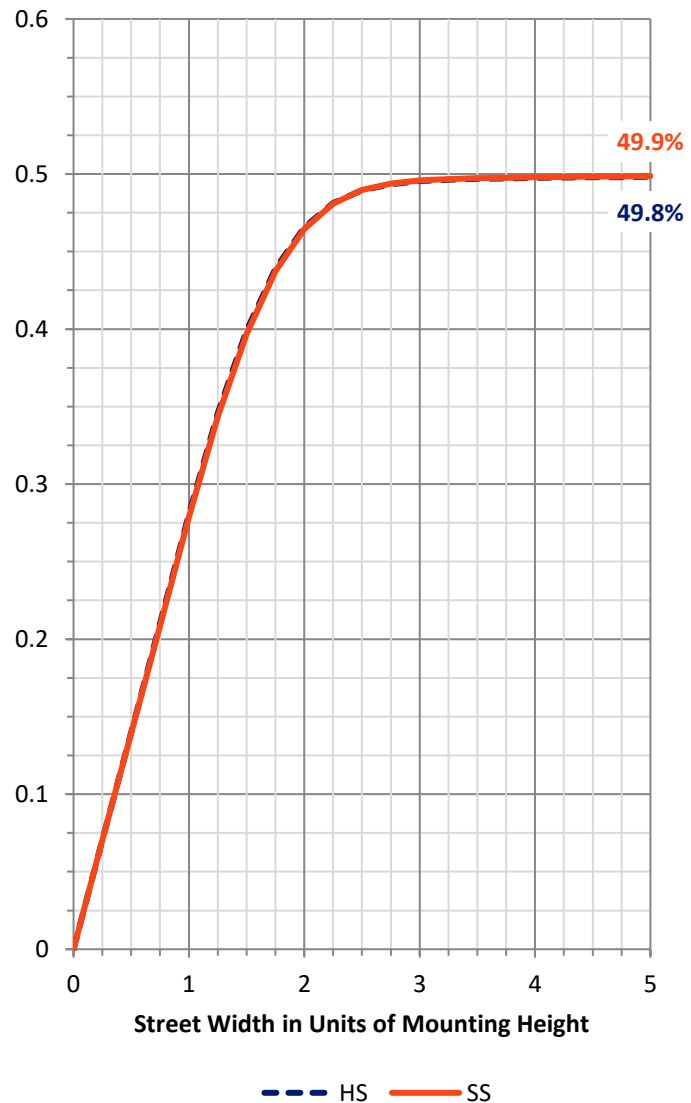
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	23810.0	0.0	23810.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	23810.0	0.0	23810.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	47620.0	0.0	47620.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.2	0.7
10°-20°	1026.1	2.2
20°-30°	2189.4	4.6
30°-40°	4768.8	10.0
40°-50°	9222.1	19.4
50°-60°	14644.9	30.8
60°-70°	13206.6	27.7
70°-80°	2067.1	4.3
80°-90°	181.6	0.4
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°	47620.0	100.0
0°-180°	47620.0	100.0



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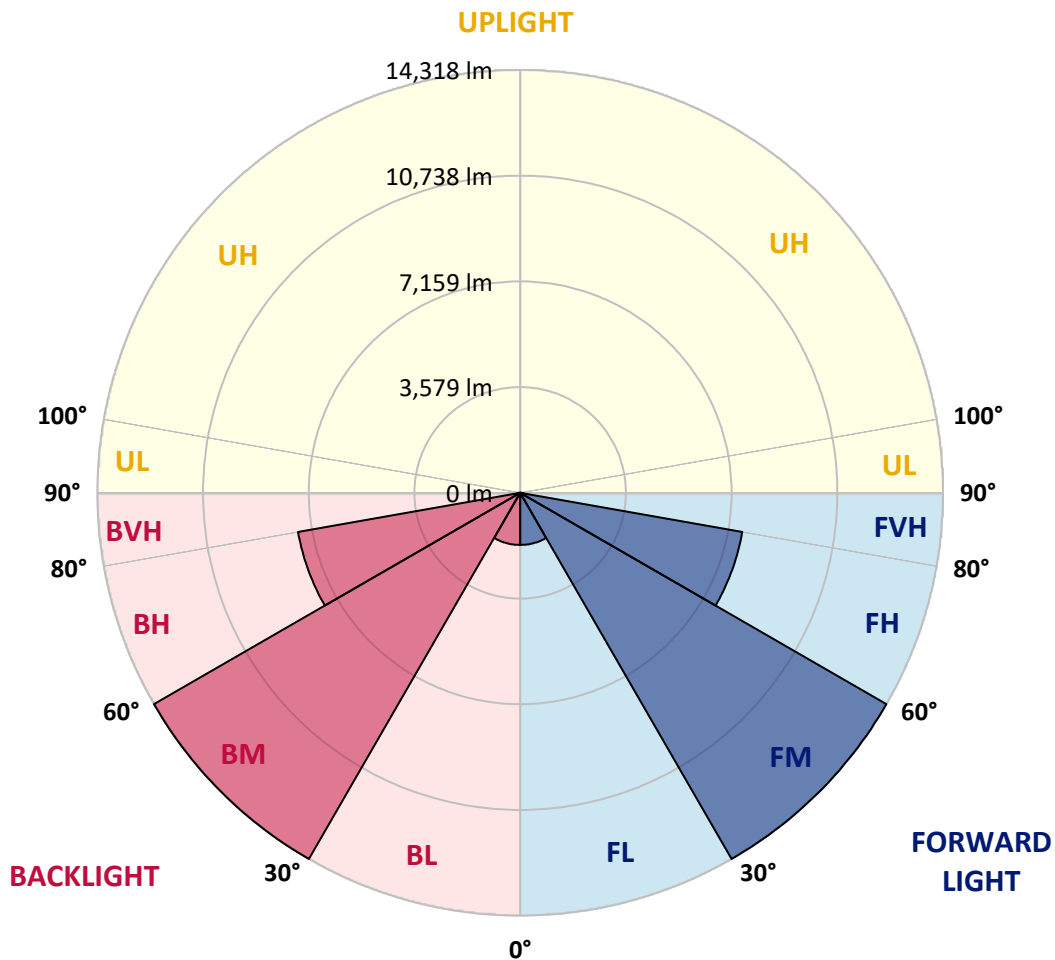
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1764.4	3.7			
FM	(30°-60°)	14317.9	30.1			
FH	(60°-80°)	7636.9	16.0			G4/12000
FVH	(80°-90°)	90.8	0.2			G1/100
BL	(0°-30°)	1764.4	3.7	B3/2500		
BM	(30°-60°)	14317.9	30.1	B5		
BH	(60°-80°)	7636.9	16.0	B5		G4/12000
BVH	(80°-90°)	90.8	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G4

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3205.5	3205.5	3205.5	3205.5	3205.5	3205.5	3205.5	3205.5	3205.5	3205.5	3205.5
2.5°	3227.6	3220.7	3226.2	3230.4	3182.1	3194.5	3193.1	3226.2	3219.3	3234.5	3242.8
5°	3249.7	3238.6	3245.5	3256.6	3211.0	3227.6	3227.6	3257.9	3246.9	3262.1	3277.3
7.5°	3289.7	3278.6	3286.9	3300.7	3257.9	3275.9	3277.3	3313.1	3297.9	3310.4	3333.8
10°	3355.9	3349.0	3351.7	3364.2	3324.2	3346.2	3346.2	3384.8	3368.3	3382.1	3411.1
12.5°	3433.1	3430.4	3433.1	3449.7	3412.4	3434.5	3434.5	3471.7	3460.7	3477.3	3504.8
15°	3535.2	3532.4	3533.8	3555.9	3525.5	3546.2	3550.4	3589.0	3586.2	3604.2	3629.0
17.5°	3680.0	3680.0	3678.6	3697.9	3678.6	3699.3	3707.6	3749.0	3765.5	3787.6	3802.8
20°	3900.7	3888.3	3881.4	3891.1	3875.9	3897.9	3911.7	3979.3	4006.9	4041.4	4053.8
22.5°	4189.0	4172.4	4150.4	4140.7	4120.0	4149.0	4176.6	4273.1	4313.1	4369.7	4383.5
25°	4586.2	4558.6	4517.3	4478.6	4431.7	4473.1	4524.2	4656.6	4739.3	4813.8	4824.9
27.5°	5129.7	5088.3	5024.9	4950.4	4867.6	4918.6	4993.1	5186.2	5299.3	5418.0	5435.9
30°	5830.4	5823.5	5724.2	5591.8	5481.4	5510.4	5602.8	5841.4	6020.7	6143.5	6178.0
32.5°	6765.5	6758.7	6591.8	6368.3	6211.1	6230.4	6315.9	6580.7	6804.2	7004.2	7011.1
35°	7880.0	7858.0	7623.5	7314.5	7062.1	7040.0	7124.2	7387.6	7692.5	7925.6	7949.0
37.5°	9153.1	9117.3	8846.9	8379.4	7989.0	7898.0	7957.3	8288.3	8641.4	8904.9	8931.1
40°	10400.0	10372.5	10071.8	9633.1	9062.1	8831.8	8835.9	9259.4	9646.9	9891.1	9944.9
42.5°	11601.4	11623.5	11335.2	10888.3	10291.1	9880.0	9885.6	10296.6	10698.0	10951.8	11022.1
45°	12834.5	12815.2	12544.9	12161.4	11611.1	11155.9	11001.4	11412.5	11811.1	12019.4	12095.2
47.5°	13844.2	13809.7	13627.7	13424.9	13016.6	12568.3	12296.6	12582.1	12856.6	12997.3	13074.5
50°	14724.2	14696.6	14678.7	14593.2	14502.1	14212.5	13765.6	13747.7	13807.0	13837.3	13907.7
52.5°	15469.0	15467.7	15564.2	15773.9	15998.7	16099.4	15325.6	14824.9	14620.8	14470.4	14496.6
55°	16030.4	16023.5	16298.0	16859.4	17653.9	18109.1	16967.0	15757.3	15219.4	14928.3	14925.6
57.5°	16318.7	16331.1	16888.4	17904.9	19378.0	19998.7	18544.9	16613.9	15692.5	15249.7	15244.2
60°	15557.3	15609.7	16702.1	18553.2	20902.2	21713.2	19837.3	16791.8	15179.4	14435.9	14416.6
61°	14732.5	14929.7	15962.8	18405.6	21384.9	22081.5	19899.4	16350.4	14423.5	13602.8	13584.9
62.5°	12918.7	13103.5	14684.2	18037.3	21351.8	21695.3	19546.3	15557.3	13237.3	12322.8	12285.6
65°	9373.8	9591.8	11293.8	15980.8	19409.7	19205.6	17779.4	13736.6	11100.7	10071.8	10024.9
67.5°	4713.1	4991.7	6902.1	11597.3	15769.7	16157.3	15179.4	10875.9	7867.6	5940.7	5935.2
70°	1217.9	1336.6	2488.3	6099.3	11372.5	12655.2	11573.8	6300.7	3059.3	1845.5	1731.0
72.5°	340.7	357.2	675.9	2222.1	6467.6	8478.7	6274.5	2202.8	689.7	393.1	360.0
75°	240.0	244.1	269.0	562.8	2442.8	3957.3	2022.1	475.9	275.9	260.7	260.7
77.5°	213.8	216.6	233.1	303.4	511.7	889.7	387.6	307.6	242.8	234.5	231.7
80°	226.2	229.0	238.6	293.8	300.7	320.0	269.0	266.2	241.4	246.9	244.1
82.5°	242.8	248.3	260.7	300.7	257.9	259.3	220.7	219.3	213.8	242.8	244.1
85°	215.2	224.8	234.5	263.4	212.4	173.8	180.7	143.4	153.1	182.1	175.2
87.5°	120.0	118.6	114.5	120.0	107.6	86.9	73.1	66.2	60.7	69.0	67.6
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)