

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: P232770

Luminaire Tested: **CTN-8-4-D-E1-T5N**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232770
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-8-4-D-E1-T5N
Description: CELESTEON HIGH MAST LUMINAIRE
(8) 70 CRI, 4000K LEDS AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47810 lumens
Efficiency: N/A
Efficacy: 147.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G4

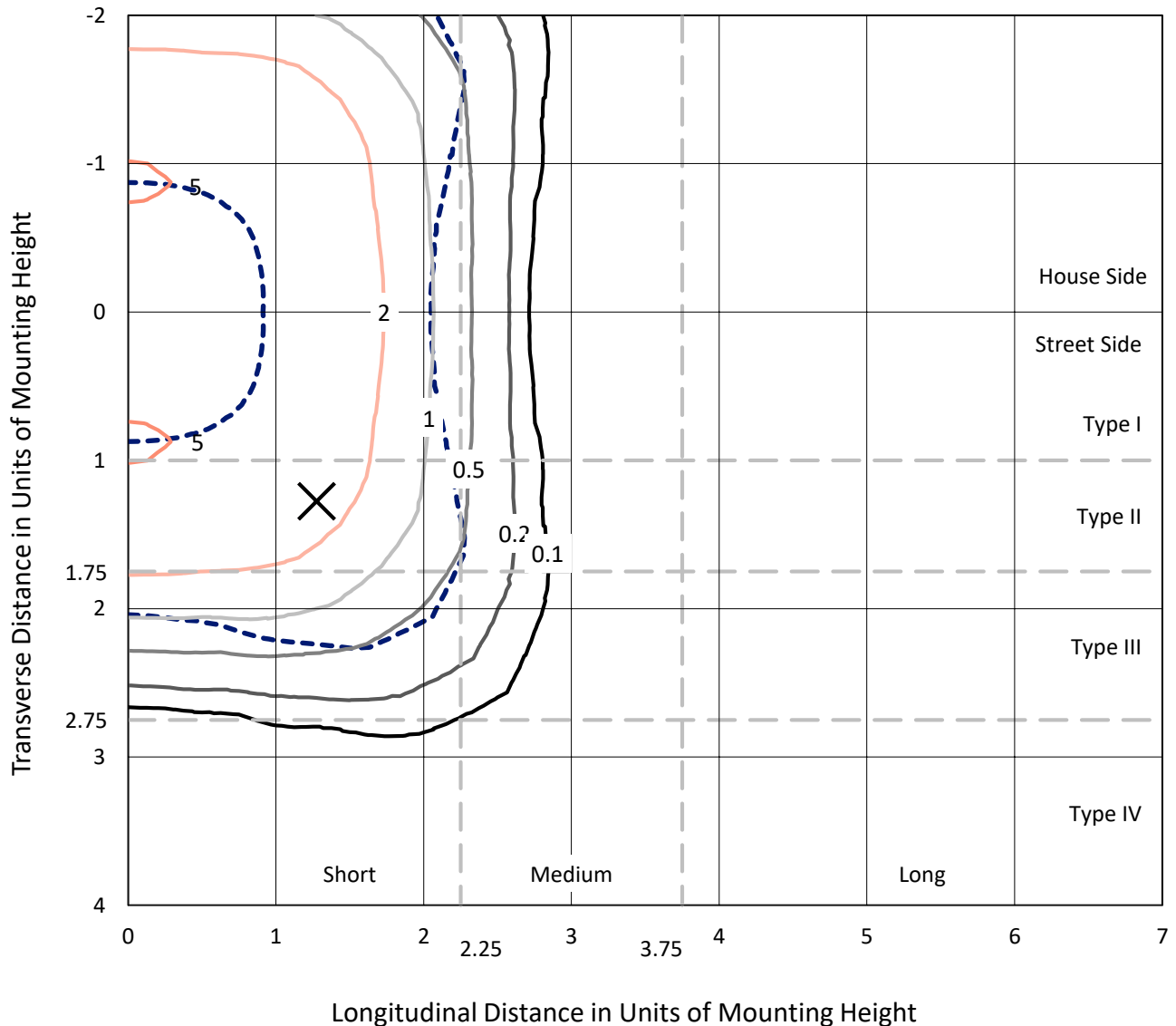
Input Watts (W): 325
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P232770
 CATALOG NUMBER: CTN-8-4-D-E1-T5N

Iso-Footcandle Lines of Horizontal Illumination

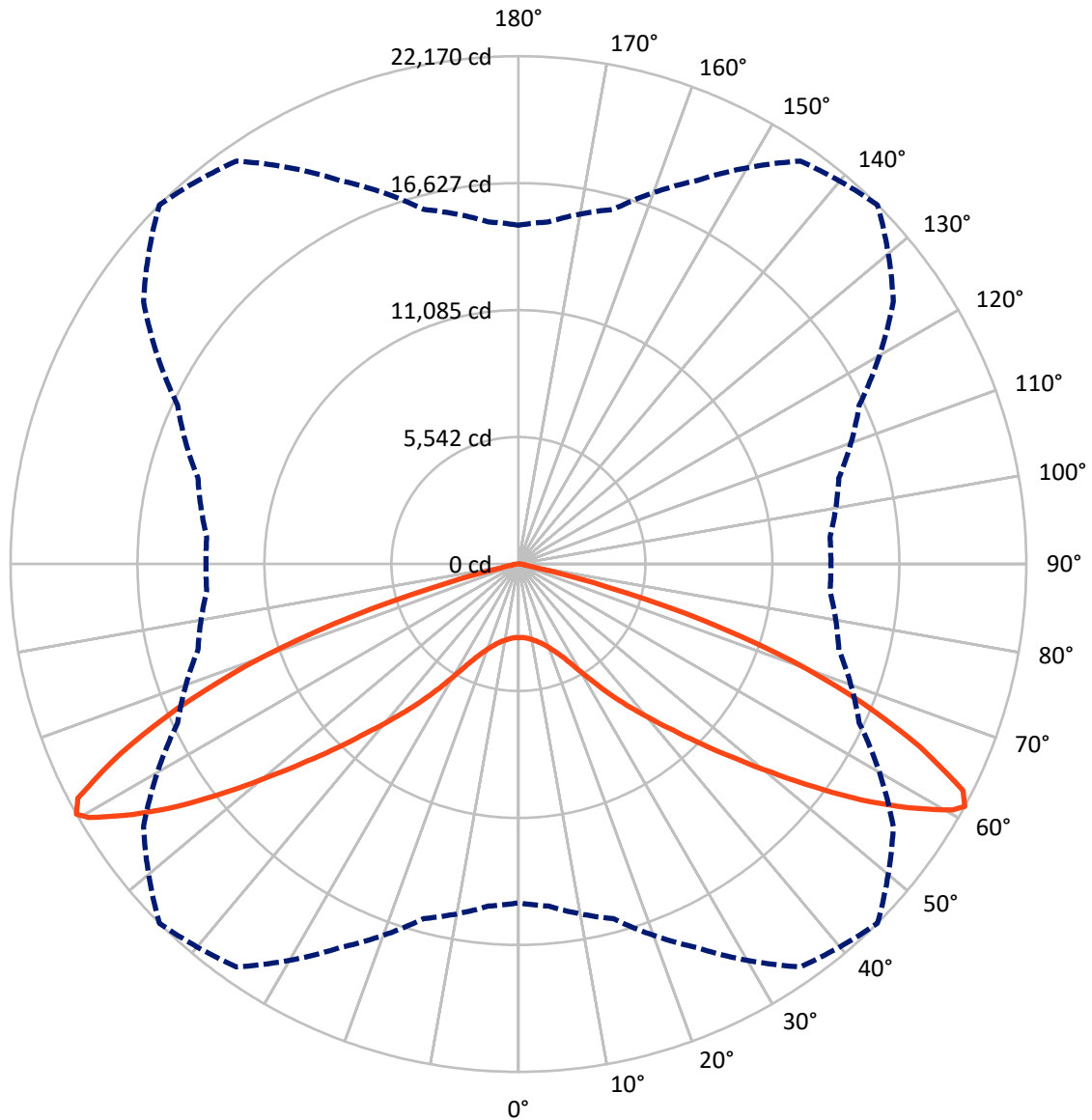
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P232770
CATALOG NUMBER: CTN-8-4-D-E1-T5N

Luminous Intensity Polar Plot



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

REPORT NUMBER: P232770

CATALOG NUMBER: CTN-8-4-D-E1-T5N

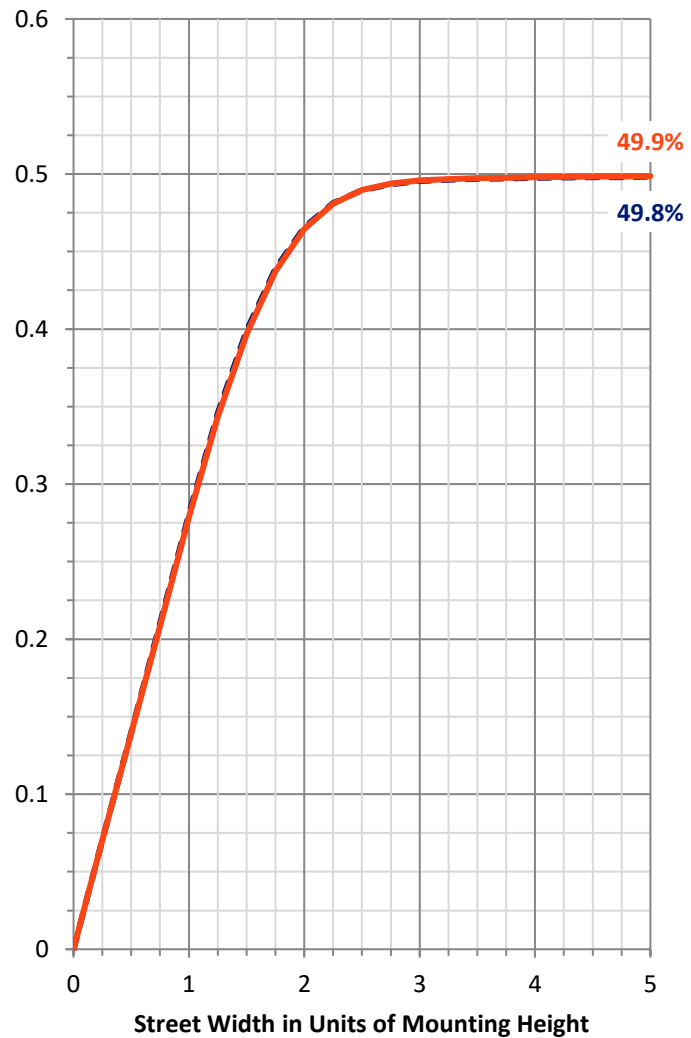
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	23905.0	0.0	23905.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	23905.0	0.0	23905.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	47810.0	0.0	47810.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.4	0.7
10°-20°	1030.2	2.2
20°-30°	2198.2	4.6
30°-40°	4787.9	10.0
40°-50°	9258.9	19.4
50°-60°	14703.4	30.8
60°-70°	13259.3	27.7
70°-80°	2075.4	4.3
80°-90°	182.4	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°	47810.0	100.0
0°-180°	47810.0	100.0



--- HS — SS

REPORT NUMBER: P232770

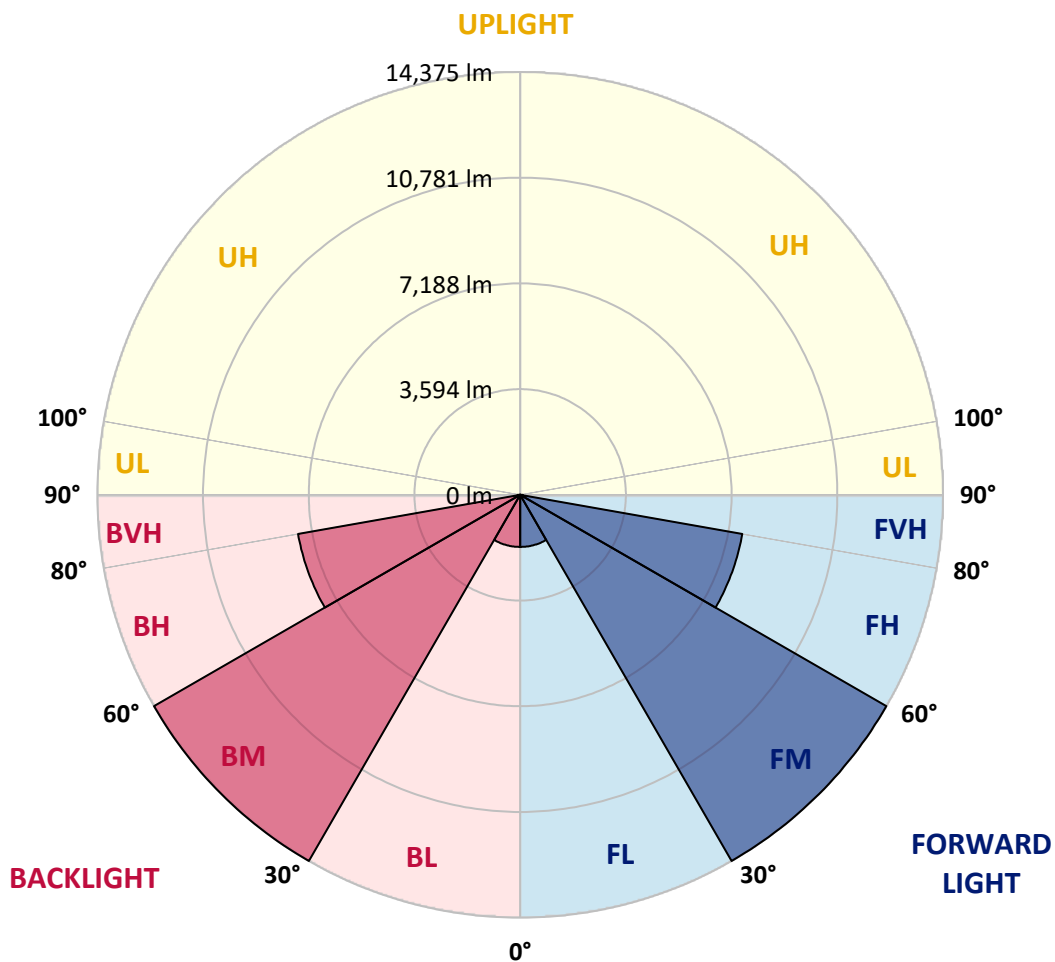
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1771.4	3.7			
FM (30°-60°)	14375.0	30.1			
FH (60°-80°)	7667.3	16.0			G4/12000
FVH (80°-90°)	91.2	0.2			G1/100
BL (0°-30°)	1771.4	3.7	B3/2500		
BM (30°-60°)	14375.0	30.1	B5		
BH (60°-80°)	7667.3	16.0	B5		G4/12000
BVH (80°-90°)	91.2	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





REPORT NUMBER: P232770

CATALOG NUMBER: CTN-8-4-D-E1-T5N

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3218.3	3218.3	3218.3	3218.3	3218.3	3218.3	3218.3	3218.3	3218.3	3218.3	3218.3
2.5°	3240.5	3233.6	3239.1	3243.2	3194.8	3207.2	3205.9	3239.1	3232.2	3247.4	3255.7
5°	3262.6	3251.6	3258.5	3269.6	3223.9	3240.5	3240.5	3270.9	3259.9	3275.1	3290.3
7.5°	3302.8	3291.7	3300.0	3313.9	3270.9	3288.9	3290.3	3326.3	3311.1	3323.6	3347.1
10°	3369.3	3362.3	3365.1	3377.6	3337.4	3359.6	3359.6	3398.3	3381.7	3395.6	3424.7
12.5°	3446.8	3444.0	3446.8	3463.4	3426.0	3448.2	3448.2	3485.6	3474.5	3491.1	3518.8
15°	3549.3	3546.5	3547.9	3570.1	3539.6	3560.4	3564.5	3603.3	3600.5	3618.5	3643.5
17.5°	3694.7	3694.7	3693.3	3712.7	3693.3	3714.1	3722.4	3763.9	3780.6	3802.7	3817.9
20°	3916.3	3903.8	3896.9	3906.6	3891.3	3913.5	3927.4	3995.2	4022.9	4057.5	4070.0
22.5°	4205.7	4189.1	4166.9	4157.2	4136.5	4165.5	4193.2	4290.2	4330.3	4387.1	4401.0
25°	4604.5	4576.8	4535.3	4496.5	4449.4	4491.0	4542.2	4675.2	4758.2	4833.0	4844.1
27.5°	5150.1	5108.6	5044.9	4970.1	4887.0	4938.3	5013.0	5206.9	5320.5	5439.6	5457.6
30°	5853.6	5846.7	5747.0	5614.1	5503.3	5532.4	5625.1	5864.7	6044.7	6168.0	6202.6
32.5°	6792.5	6785.6	6618.1	6393.7	6235.8	6255.2	6341.1	6607.0	6831.3	7032.1	7039.0
35°	7911.5	7889.3	7653.9	7343.7	7090.3	7068.1	7152.6	7417.1	7723.1	7957.2	7980.7
37.5°	9189.7	9153.7	8882.2	8412.8	8020.9	7929.5	7989.0	8321.4	8675.9	8940.4	8966.7
40°	10441.5	10413.8	10112.0	9671.6	9098.3	8867.0	8871.2	9296.3	9685.4	9930.5	9984.6
42.5°	11647.7	11669.9	11380.5	10931.8	10332.1	9919.5	9925.0	10337.7	10740.7	10995.5	11066.1
45°	12885.8	12866.4	12594.9	12210.0	11657.4	11200.4	11045.3	11458.0	11858.2	12067.3	12143.5
47.5°	13899.4	13864.8	13682.0	13478.5	13068.5	12618.5	12345.7	12632.3	12907.9	13049.2	13126.7
50°	14783.0	14755.3	14737.3	14651.4	14560.0	14269.2	13820.5	13802.5	13862.1	13892.5	13963.1
52.5°	15530.8	15529.4	15626.3	15836.8	16062.5	16163.6	15386.7	14884.0	14679.1	14528.1	14554.5
55°	16094.4	16087.5	16363.0	16926.7	17724.3	18181.3	17034.7	15820.2	15280.1	14987.9	14985.1
57.5°	16383.8	16396.3	16955.7	17976.4	19455.3	20078.5	18618.9	16680.2	15755.1	15310.6	15305.0
60°	15619.4	15672.0	16768.8	18627.2	20985.6	21799.8	19916.5	16858.8	15239.9	14493.5	14474.1
61°	14791.3	14989.3	16026.5	18479.0	21470.3	22169.6	19978.8	16415.7	14481.1	13657.1	13639.1
62.5°	12970.2	13155.8	14742.8	18109.3	21437.0	21781.8	19624.3	15619.4	13290.1	12372.0	12334.6
65°	9411.2	9630.0	11338.9	16044.5	19487.2	19282.2	17850.3	13791.4	11145.0	10112.0	10064.9
67.5°	4731.9	5011.7	6929.6	11643.6	15832.6	16221.8	15239.9	10919.3	7899.0	5964.4	5958.9
70°	1222.8	1341.9	2498.2	6123.7	11417.8	12705.7	11620.0	6325.9	3071.5	1852.9	1737.9
72.5°	342.1	358.7	678.6	2230.9	6493.4	8512.5	6299.5	2211.6	692.4	394.7	361.4
75°	241.0	245.1	270.0	565.0	2452.5	3973.0	2030.1	477.8	277.0	261.7	261.7
77.5°	214.6	217.4	234.0	304.7	513.8	893.2	389.1	308.8	243.7	235.4	232.6
80°	227.1	229.9	239.6	295.0	301.9	321.3	270.0	267.3	242.3	247.9	245.1
82.5°	243.7	249.3	261.7	301.9	259.0	260.3	221.6	220.2	214.6	243.7	245.1
85°	216.0	225.7	235.4	264.5	213.3	174.5	181.4	144.0	153.7	182.8	175.9
87.5°	120.5	119.1	114.9	120.5	108.0	87.2	73.4	66.5	60.9	69.2	67.9
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)