

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: STREETWORKS

Report Number: P232778

Luminaire Tested: **CST-8-4-D-U-T5N-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232778
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: STREETWORKS
Catalog Number: CST-8-4-D-U-T5N-7050
Description: CELESTEON HIGH MAST LUMINAIRE
(8) 70 CRI, 5000K LEDS AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48296 lumens
Efficiency: N/A
Efficacy: 148.6 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): 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: 28.75 FT

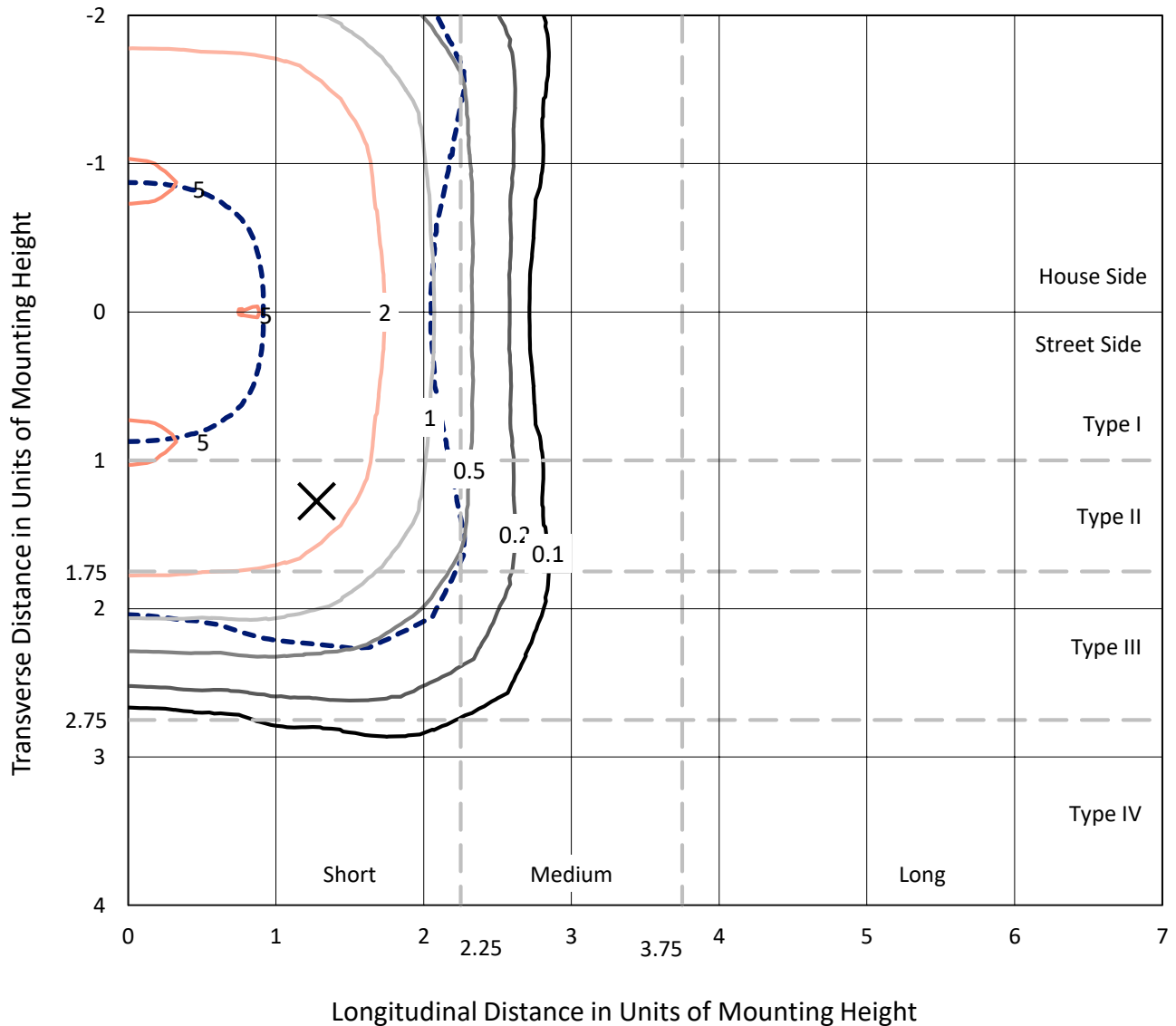


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

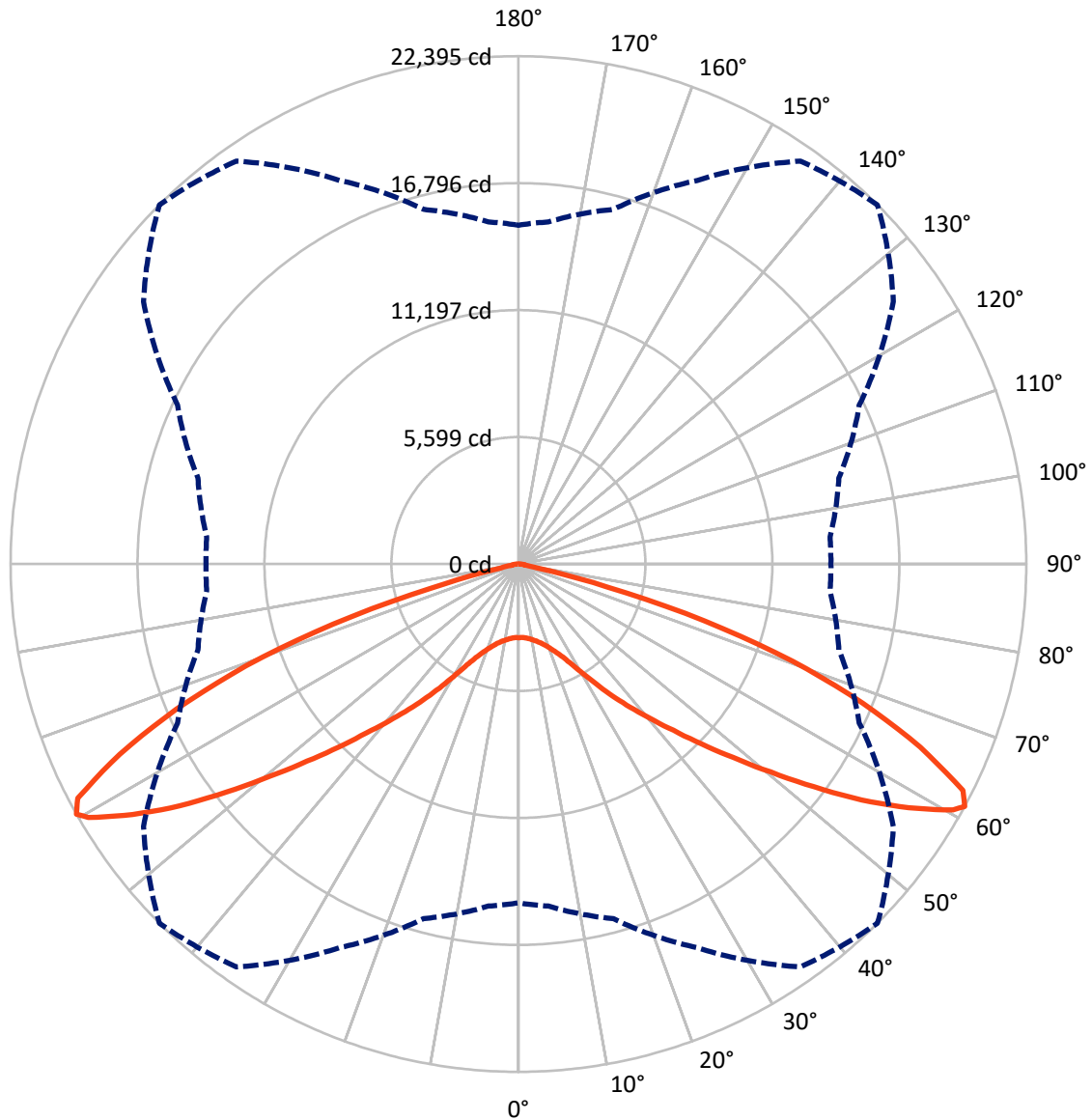


Based on 30 foot mounting height. Maximum calculated value = 5.3 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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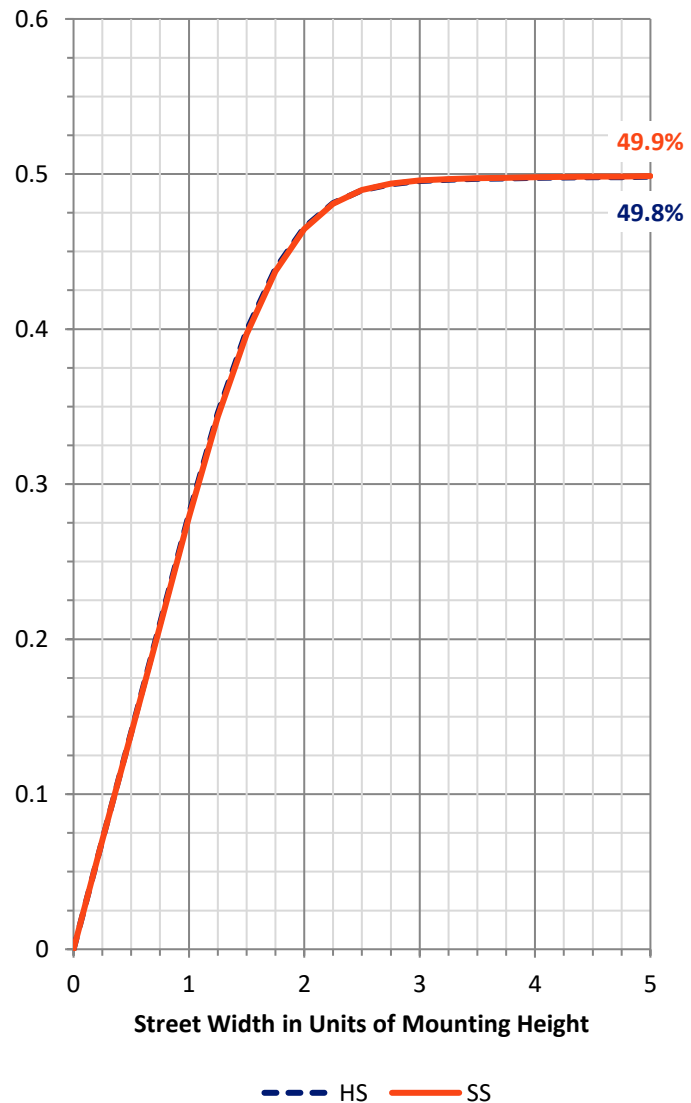
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	24148.0	0.0	24148.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	24148.0	0.0	24148.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	48296.0	0.0	48296.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.6	0.7
10°-20°	1040.7	2.2
20°-30°	2220.5	4.6
30°-40°	4836.5	10.0
40°-50°	9353.0	19.4
50°-60°	14852.8	30.8
60°-70°	13394.1	27.7
70°-80°	2096.5	4.3
80°-90°	184.2	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°	48296.0	100.0
0°-180°	48296.0	100.0



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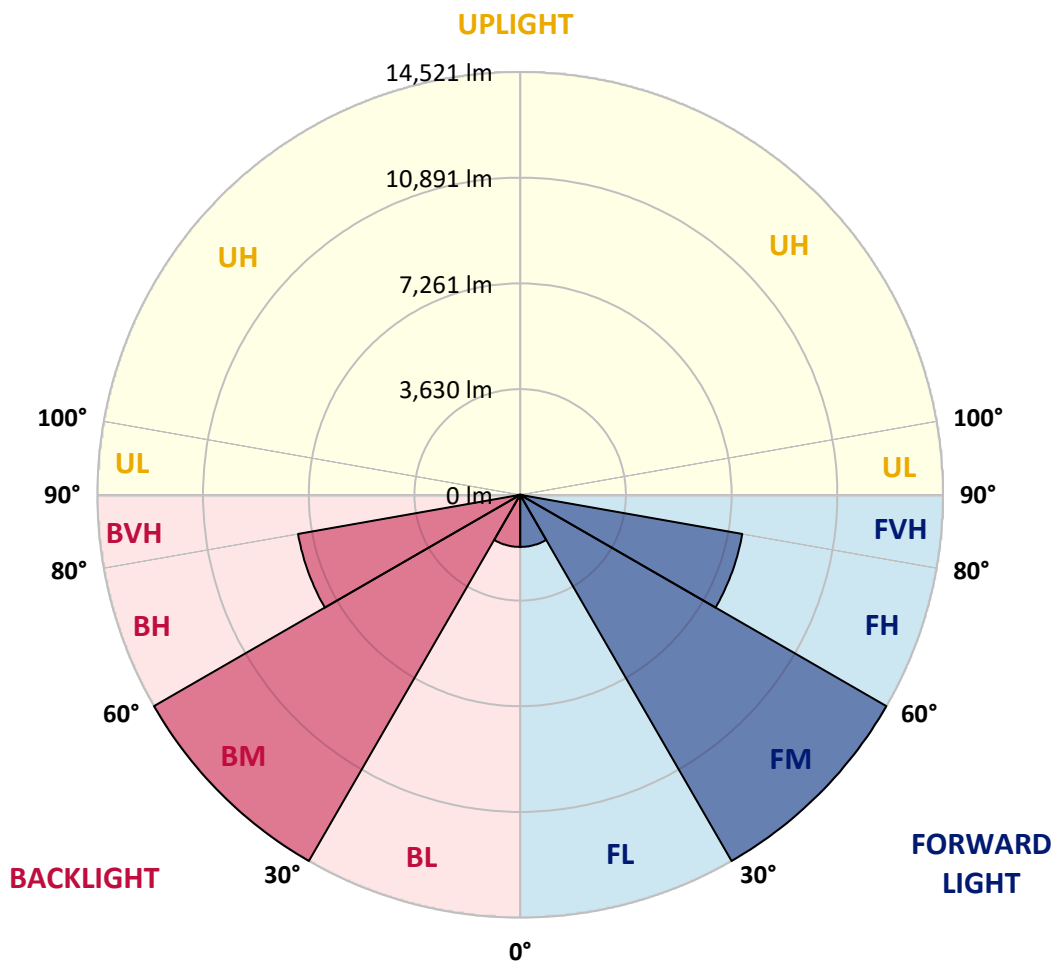
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1789.4	3.7			
FM (30°-60°)	14521.2	30.1			
FH (60°-80°)	7745.3	16.0			G4/12000
FVH (80°-90°)	92.1	0.2			G1/100
BL (0°-30°)	1789.4	3.7	B3/2500		
BM (30°-60°)	14521.2	30.1	B5		
BH (60°-80°)	7745.3	16.0	B5		G4/12000
BVH (80°-90°)	92.1	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°	3251.0	3251.0	3251.0	3251.0	3251.0	3251.0	3251.0	3251.0	3251.0	3251.0	3251.0
2.5°	3273.4	3266.4	3272.0	3276.2	3227.3	3239.8	3238.4	3272.0	3265.0	3280.4	3288.8
5°	3295.8	3284.6	3291.6	3302.8	3256.6	3273.4	3273.4	3304.2	3293.0	3308.4	3323.8
7.5°	3336.4	3325.2	3333.6	3347.6	3304.2	3322.4	3323.8	3360.2	3344.8	3357.4	3381.1
10°	3403.5	3396.5	3399.3	3411.9	3371.3	3393.7	3393.7	3432.9	3416.1	3430.1	3459.5
12.5°	3481.9	3479.1	3481.9	3498.6	3460.9	3483.3	3483.3	3521.0	3509.8	3526.6	3554.6
15°	3585.4	3582.6	3584.0	3606.4	3575.6	3596.6	3600.8	3639.9	3637.1	3655.3	3680.5
17.5°	3732.3	3732.3	3730.9	3750.4	3730.9	3751.8	3760.2	3802.2	3819.0	3841.4	3856.8
20°	3956.1	3943.5	3936.5	3946.3	3930.9	3953.3	3967.3	4035.8	4063.8	4098.8	4111.4
22.5°	4248.5	4231.7	4209.3	4199.5	4178.5	4207.9	4235.9	4333.8	4374.4	4431.7	4445.7
25°	4651.3	4623.4	4581.4	4542.2	4494.7	4536.6	4588.4	4722.7	4806.6	4882.2	4893.3
27.5°	5202.5	5160.5	5096.2	5020.6	4936.7	4988.5	5064.0	5259.9	5374.6	5494.9	5513.1
30°	5913.1	5906.1	5805.4	5671.1	5559.2	5588.6	5682.3	5924.3	6106.2	6230.7	6265.7
32.5°	6861.6	6854.6	6685.3	6458.7	6299.2	6318.8	6405.6	6674.1	6900.8	7103.6	7110.6
35°	7991.9	7969.5	7731.7	7418.4	7162.4	7140.0	7225.3	7492.5	7801.7	8038.1	8061.8
37.5°	9283.1	9246.7	8972.5	8498.3	8102.4	8010.1	8070.2	8406.0	8764.1	9031.3	9057.9
40°	10547.7	10519.7	10214.7	9769.9	9190.8	8957.1	8961.3	9390.8	9783.9	10031.5	10086.0
42.5°	11766.1	11788.5	11496.1	11042.9	10437.2	10020.3	10025.9	10442.8	10849.8	11107.2	11178.6
45°	13016.7	12997.2	12723.0	12334.1	11775.9	11314.3	11157.6	11574.5	11978.8	12190.0	12266.9
47.5°	14040.7	14005.8	13821.1	13615.5	13201.4	12746.8	12471.2	12760.7	13039.1	13181.8	13260.1
50°	14933.2	14905.3	14887.1	14800.3	14708.0	14414.2	13961.0	13942.8	14003.0	14033.7	14105.1
52.5°	15688.6	15687.2	15785.2	15997.8	16225.8	16327.9	15543.1	15035.3	14828.3	14675.8	14702.4
55°	16258.0	16251.0	16529.4	17098.7	17904.5	18366.1	17207.8	15981.0	15435.4	15140.3	15137.5
57.5°	16550.4	16562.9	17128.1	18159.1	19653.1	20282.6	18808.2	16849.7	15915.3	15466.2	15460.6
60°	15778.2	15831.3	16939.2	18816.6	21198.9	22021.4	20118.9	17030.2	15394.9	14640.9	14621.3
61°	14941.6	15141.7	16189.4	18666.9	21688.5	22394.9	20181.9	16582.5	14628.3	13795.9	13777.7
62.5°	13102.1	13289.5	14892.7	18293.4	21654.9	22003.3	19823.8	15778.2	13425.2	12497.7	12460.0
65°	9506.9	9727.9	11454.2	16207.6	19685.3	19478.2	18031.8	13931.6	11258.3	10214.7	10167.2
67.5°	4780.0	5062.6	7000.1	11761.9	15993.6	16386.7	15394.9	11030.3	7979.3	6025.1	6019.5
70°	1235.2	1355.5	2523.6	6185.9	11533.9	12834.9	11738.1	6390.2	3102.8	1871.7	1755.6
72.5°	345.5	362.3	685.5	2253.6	6559.4	8599.0	6363.6	2234.0	699.4	398.7	365.1
75°	243.4	247.6	272.8	570.8	2477.4	4013.4	2050.8	482.6	279.8	264.4	264.4
77.5°	216.8	219.6	236.4	307.8	519.0	902.3	393.1	312.0	246.2	237.8	235.0
80°	229.4	232.2	242.0	298.0	305.0	324.5	272.8	270.0	244.8	250.4	247.6
82.5°	246.2	251.8	264.4	305.0	261.6	263.0	223.8	222.4	216.8	246.2	247.6
85°	218.2	228.0	237.8	267.2	215.4	176.3	183.3	145.5	155.3	184.7	177.7
87.5°	121.7	120.3	116.1	121.7	109.1	88.1	74.1	67.1	61.6	69.9	68.5
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)