

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: P721838

Luminaire Tested: **CST-CA8-400-727-U-T2-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721838
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-400-727-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 46812 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G5

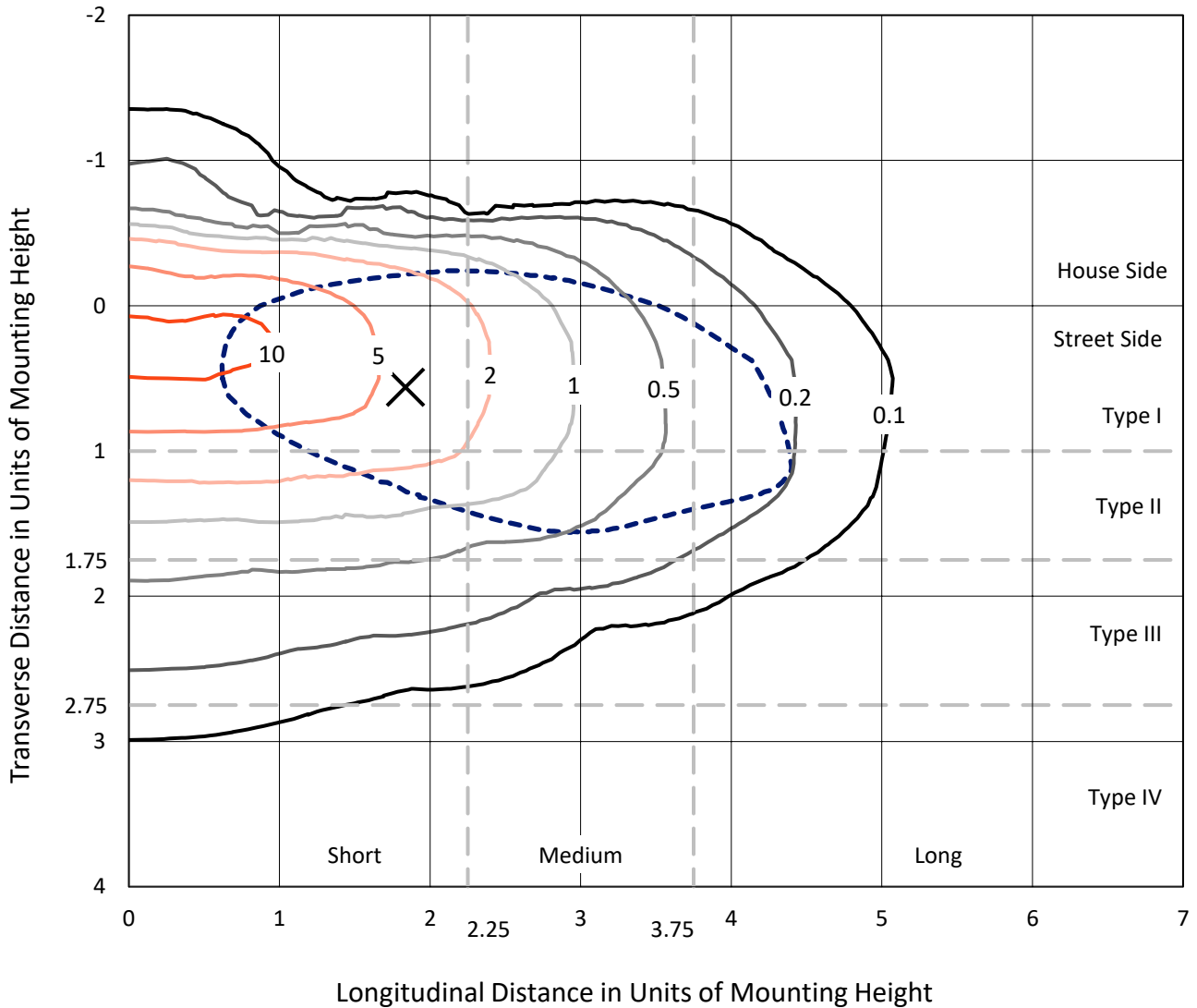
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

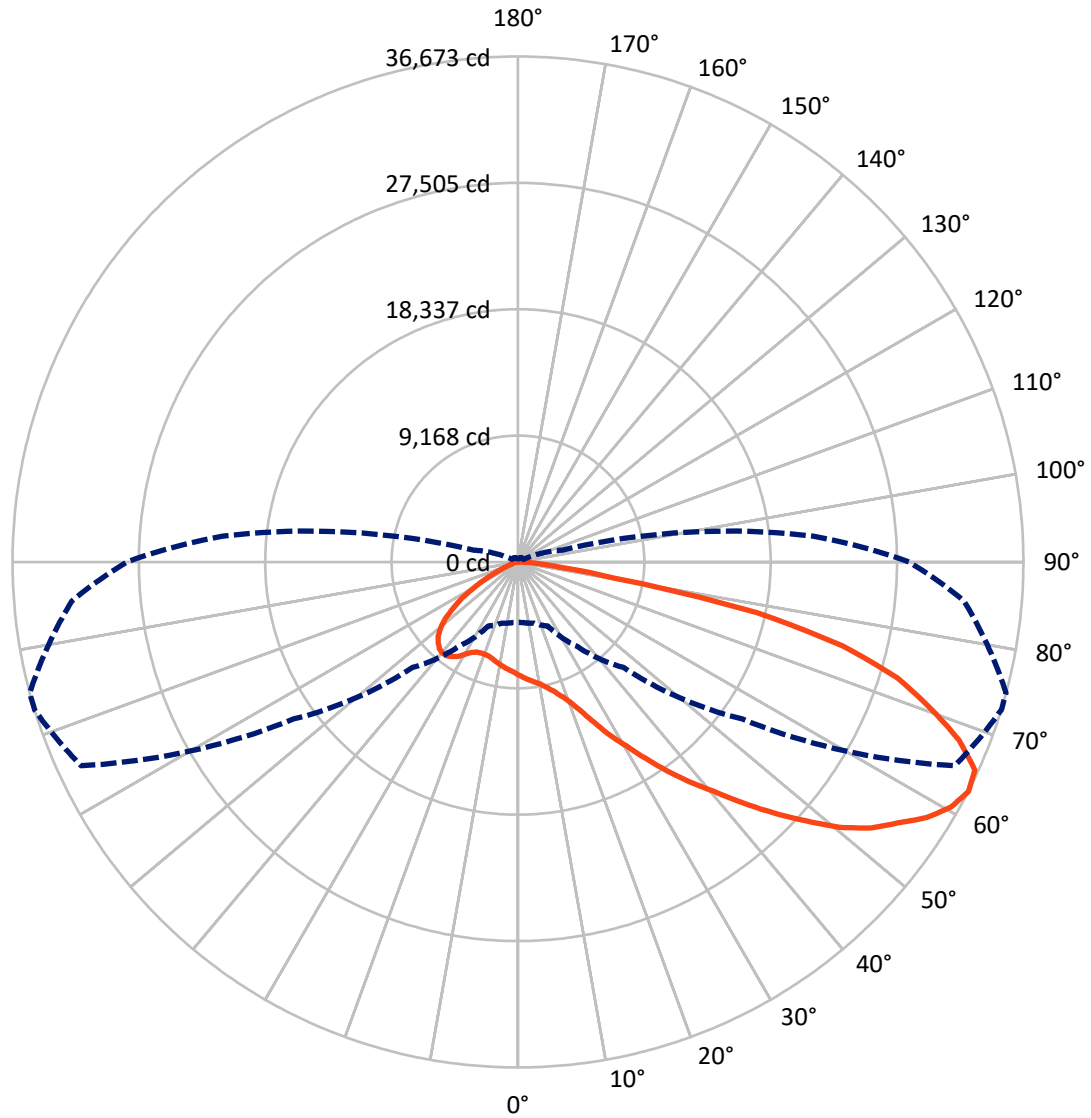
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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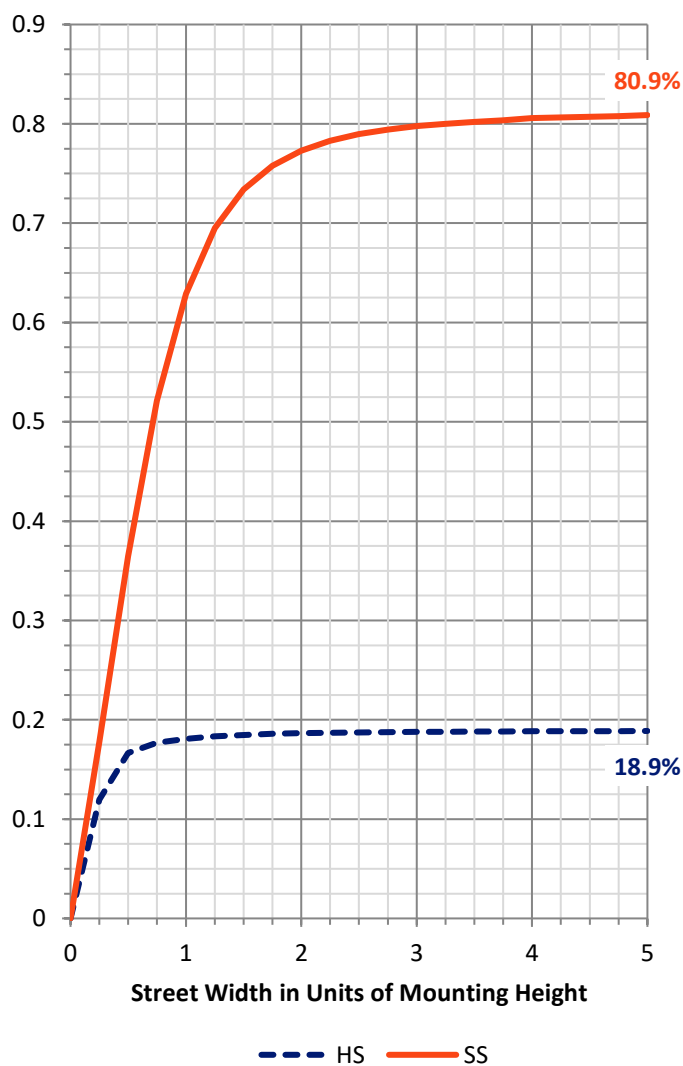
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8954.9	0.0	8954.9
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	37857.1	0.0	37857.1
	% Fixture	80.9	0.0	80.9
Total	Lumens	46812.0	0.0	46812.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	784.1	1.7
10°-20°	2358.5	5.0
20°-30°	4075.0	8.7
30°-40°	6127.8	13.1
40°-50°	8170.8	17.5
50°-60°	9622.8	20.6
60°-70°	9566.8	20.4
70°-80°	5492.5	11.7
80°-90°	613.6	1.3
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°	46812.0	100.0
0°-180°	46812.0	100.0

Coefficient of Utilization





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	8209.8	8209.8	8209.8	8209.8	8209.8	8209.8	8209.8	8209.8	8209.8	8209.8	8209.8
2.5°	8783.5	8805.6	8779.3	8767.7	8755.1	8673.2	8577.5	8479.8	8401.0	8388.4	8285.4
5°	9400.3	9411.9	9368.8	9319.4	9234.3	9098.7	8927.4	8758.3	8600.6	8558.6	8370.5
7.5°	9874.2	9852.1	9841.6	9799.6	9725.0	9575.8	9316.2	9038.8	8795.0	8736.2	8450.4
10°	10318.7	10309.2	10229.4	10176.8	10058.1	9920.4	9707.1	9355.1	9011.5	8916.9	8519.7
12.5°	10799.9	10778.9	10746.3	10632.9	10536.2	10304.0	10046.5	9726.0	9343.6	9217.5	8638.5
15°	11232.9	11176.1	11158.3	11039.5	10941.8	10764.2	10505.7	10133.7	9725.0	9616.8	8864.4
17.5°	11644.8	11618.5	11578.6	11497.7	11388.4	11251.8	11044.8	10646.5	10224.1	10066.5	9247.9
20°	11994.7	11962.1	11927.4	11949.5	11925.3	11838.1	11707.8	11368.4	10852.5	10700.1	9714.5
22.5°	12238.5	12237.4	12376.1	12457.0	12503.3	12500.1	12468.6	12276.3	11757.2	11602.7	10412.2
25°	12441.3	12457.0	12632.5	12940.4	13215.7	13240.9	13463.7	13372.3	12930.9	12770.2	11461.9
27.5°	12501.2	12532.7	12851.1	13335.5	13753.7	14155.1	14481.9	14649.0	14240.2	14047.9	12590.5
30°	12544.2	12556.8	12868.9	13449.0	14330.6	14966.3	15550.5	15833.2	15481.2	15340.4	13848.3
32.5°	12240.6	12244.8	12722.9	13601.3	14754.0	15856.3	16547.7	17080.5	16988.0	16802.0	15223.7
35°	11822.3	11900.1	12448.6	13454.2	15102.9	16673.8	17615.3	18409.7	18594.6	18461.2	16598.2
37.5°	11305.4	11366.3	11953.7	13235.6	15179.6	17236.0	18445.4	19761.0	20244.4	20222.3	18257.3
40°	10669.6	10744.2	11447.2	12764.9	15141.8	17644.7	19419.5	21257.3	21871.0	21801.6	19902.9
42.5°	9918.3	10027.6	10709.6	12159.6	14865.4	17894.8	20217.0	22781.0	23885.3	23840.1	21359.2
45°	9175.4	9234.3	9856.3	11316.9	14356.8	17975.7	20967.3	24880.4	25951.2	25900.7	23114.0
47.5°	8409.4	8460.9	9110.3	10429.0	13474.2	17812.9	21561.0	26683.6	28055.9	28005.4	24857.3
50°	6627.3	6821.7	8153.0	9648.3	12468.6	17351.6	22121.1	28930.1	30258.3	30044.0	26384.1
52.5°	5670.0	5740.4	6430.8	8861.2	11465.1	16564.5	22495.1	31011.7	32069.9	31760.9	27945.5
55°	5300.1	5347.4	5685.8	7410.1	10522.5	15374.0	22935.4	33098.6	33428.5	33349.7	29219.1
57.5°	5019.6	5072.1	5313.8	6189.1	9529.5	13705.3	22797.8	34566.5	34979.5	34727.3	30571.4
60°	4622.4	4686.5	5007.0	5556.5	8401.0	12011.5	21586.2	35167.6	36107.0	35823.3	31600.2
62.5°	4372.3	4414.3	4598.2	5131.0	7465.8	10819.9	19861.9	34974.2	36673.3	36662.8	32492.3
65°	4032.9	4094.9	4291.4	4723.3	6633.6	9896.3	18235.3	34019.1	36429.6	36439.0	32676.2
67.5°	3677.7	3703.0	3908.9	4255.7	5653.2	9050.4	16130.6	32385.1	34530.8	34747.3	31403.7
70°	3234.3	3221.7	3444.5	3697.7	4620.3	7684.4	12983.5	29478.6	31725.2	31814.5	28830.3
72.5°	2545.0	2556.6	2618.5	2794.0	3507.5	6047.2	9421.3	24905.6	28792.5	28951.1	25541.4
75°	1710.7	1729.6	2018.6	2189.8	2522.9	4346.0	5924.3	16811.5	24340.3	24787.9	20904.3
77.5°	1305.1	1316.6	1400.7	1587.7	1825.2	3097.7	3211.2	9160.7	17720.4	18782.7	16353.3
80°	924.7	928.9	845.9	752.4	972.0	2101.6	1896.7	3901.6	7061.3	8344.3	9605.2
82.5°	414.0	407.7	480.2	399.3	560.1	813.3	895.3	1893.5	2932.7	3152.3	3431.9
85°	192.3	215.4	246.9	207.0	333.1	314.2	348.9	807.0	1374.4	1517.3	1508.9
87.5°	47.3	51.5	65.1	83.0	120.8	107.2	105.1	237.5	306.8	305.8	469.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8209.8	8209.8	8209.8	8209.8	8209.8	8209.8	8209.8	8209.8	8209.8	8209.8	8209.8
2.5°	8215.0	8160.4	8031.1	7906.1	7787.3	7708.5	7620.3	7527.8	7472.1	7445.8	7502.6
5°	8256.0	8152.0	7905.0	7657.0	7446.9	7267.2	7141.1	7033.9	6976.1	6981.4	6984.5
7.5°	8290.7	8144.6	7798.9	7449.0	7121.1	6898.4	6733.4	6617.8	6551.6	6501.2	6539.0
10°	8321.1	8114.1	7674.9	7208.4	6852.1	6522.2	6298.4	6158.6	6036.7	5968.4	6022.0
12.5°	8353.7	8102.6	7536.2	6993.0	6531.7	6162.8	5856.0	5717.3	5597.5	5546.0	5578.6
15°	8495.6	8146.7	7407.0	6739.7	6215.4	5738.3	5407.3	5237.1	5142.5	5080.5	5094.2
17.5°	8739.4	8263.3	7323.9	6474.9	5862.3	5357.9	4929.2	4730.6	4574.1	4529.9	4518.4
20°	9086.1	8485.1	7323.9	6251.1	5462.0	4935.5	4441.7	4106.5	3862.7	3771.3	3841.7
22.5°	9668.2	8862.3	7396.5	6048.3	5117.3	4497.3	3908.9	3397.2	3068.3	2934.8	3012.6
25°	10482.6	9445.5	7514.1	5870.7	4803.1	3993.0	3233.3	2644.8	2282.3	2123.6	2121.5
27.5°	11546.0	10337.6	7751.6	5725.7	4426.9	3340.4	2528.2	1961.8	1621.4	1525.7	1539.4
30°	12725.0	11304.3	8200.3	5515.6	3969.9	2610.1	1841.0	1441.7	1202.1	1076.0	1078.1
32.5°	13861.9	12305.7	8733.0	5379.0	3376.2	1968.1	1312.4	1028.7	879.5	804.9	816.5
35°	15080.8	13169.4	9129.2	5149.9	2679.5	1422.8	927.8	771.3	709.3	670.4	672.5
37.5°	16397.5	14119.4	9454.9	4843.1	2025.9	977.2	685.1	660.9	634.7	585.3	581.1
40°	17772.9	15219.5	9649.3	4347.1	1408.0	676.7	582.1	609.5	594.7	530.6	525.4
42.5°	18939.3	16068.6	9697.7	3690.3	911.0	548.5	527.5	569.5	572.7	507.5	499.1
45°	20059.4	16825.1	9603.1	2825.6	631.5	515.9	493.9	551.7	555.9	497.0	483.4
47.5°	21313.0	17860.1	9431.8	1885.1	522.2	487.6	482.3	522.2	536.9	488.6	471.8
50°	22835.6	18701.8	8924.3	1158.0	492.8	469.7	469.7	493.9	513.8	471.8	463.4
52.5°	24397.1	19435.3	8173.0	794.4	475.0	450.8	464.4	475.0	482.3	444.5	451.8
55°	25516.1	20085.7	7052.8	638.9	464.4	438.2	470.8	449.7	439.2	406.7	399.3
57.5°	26758.2	20859.1	5907.5	566.4	450.8	445.5	449.7	409.8	380.4	346.8	339.4
60°	27625.1	21275.2	4505.8	532.7	435.0	438.2	415.1	361.5	307.9	283.7	278.5
62.5°	28381.6	21512.7	3302.6	489.7	420.3	419.3	376.2	308.9	253.2	227.0	222.8
65°	28267.1	21141.7	2140.4	455.0	408.8	395.1	337.3	264.8	211.2	191.2	189.1
67.5°	27007.2	19500.4	1348.2	419.3	388.8	364.6	302.6	236.4	194.4	171.3	169.2
70°	24362.4	17233.9	824.9	373.0	345.7	322.6	267.9	221.7	183.9	156.6	151.3
72.5°	20706.7	14760.3	583.2	328.9	301.6	274.3	227.0	211.2	175.5	140.8	136.6
75°	17012.2	10872.4	488.6	286.9	257.4	220.7	193.3	196.5	165.0	128.2	125.0
77.5°	11980.0	6778.6	455.0	234.3	202.8	175.5	167.1	179.7	151.3	117.7	114.5
80°	6991.9	3807.0	376.2	184.9	152.4	135.6	139.8	152.4	132.4	106.1	101.9
82.5°	2822.4	1506.8	264.8	144.0	111.4	108.2	114.5	124.0	109.3	89.3	87.2
85°	1007.7	470.8	150.3	94.6	71.5	74.6	73.6	88.3	78.8	65.1	64.1
87.5°	264.8	93.5	67.3	37.8	30.5	30.5	28.4	41.0	37.8	29.4	32.6
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)