

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: P232749

Luminaire Tested: **CST-10-8-D-U-T5**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232749
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-21)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-10-8-D-U-T5
Description: CELESTEON HIGH MAST LUMINAIRE
(10) 70 CRI, 4000K LEDS AND TYPE V OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 82193 lumens
Efficiency: N/A
Efficacy: 130.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U0 - G5

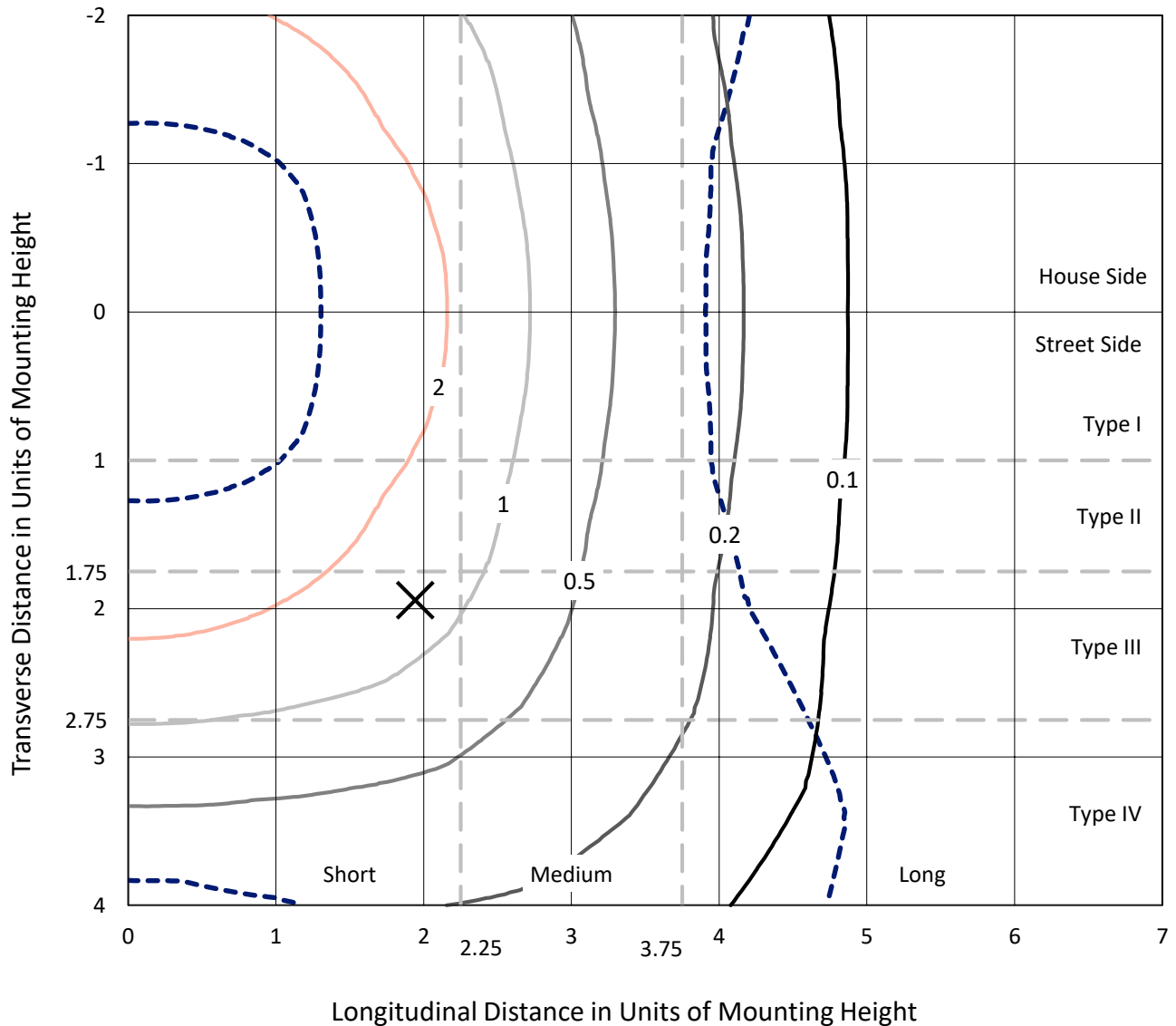
Input Watts (W): 631
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

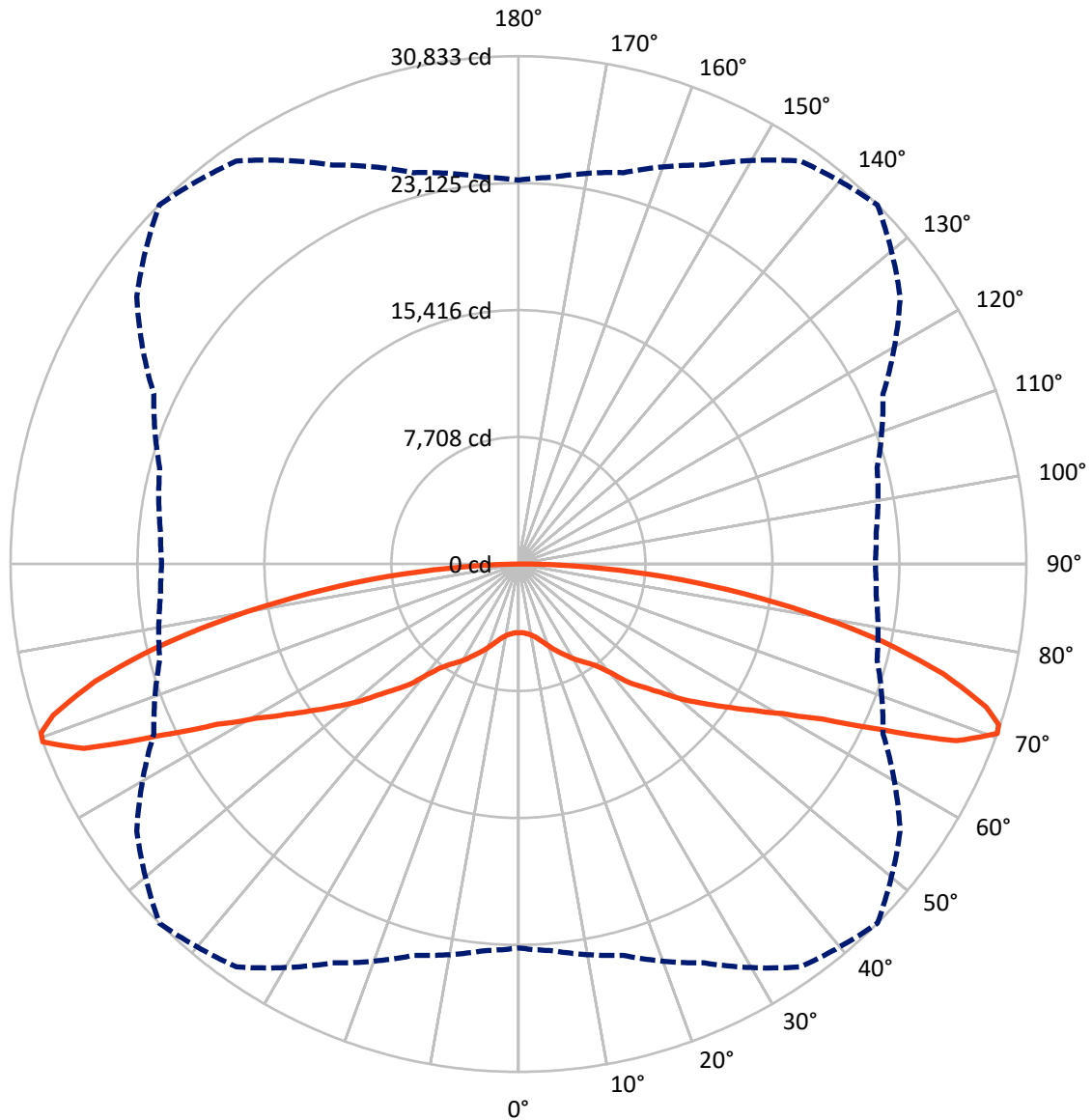
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.9 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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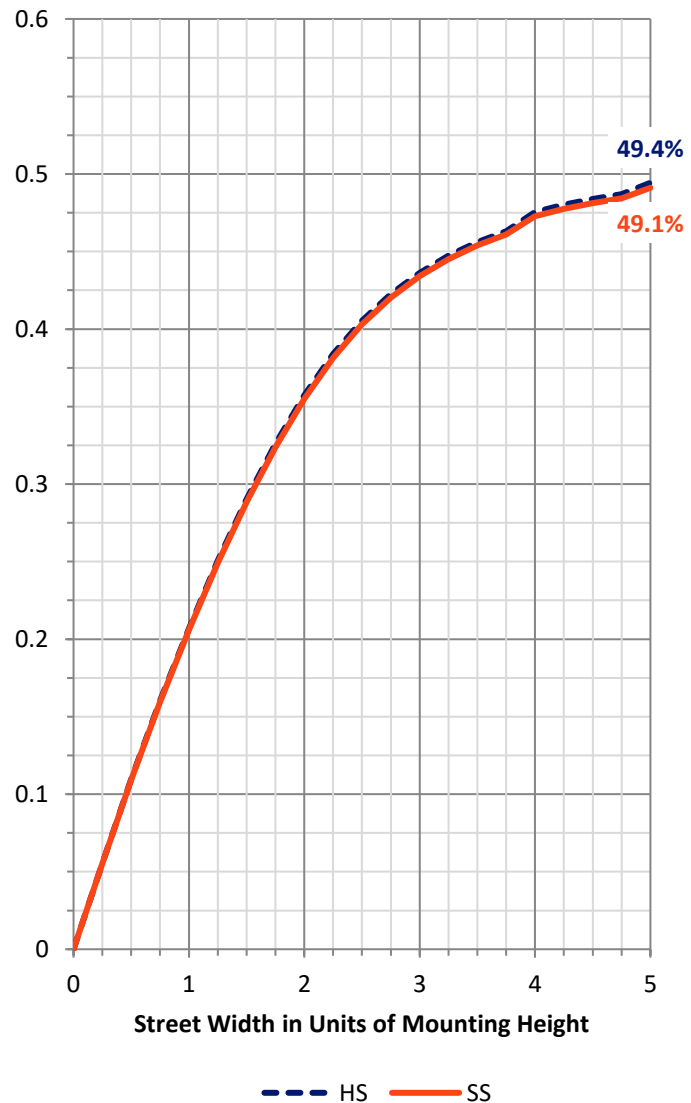
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	41096.5	0.0	41096.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	41096.5	0.0	41096.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	82193.0	0.0	82193.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	409.5	0.5
10°-20°	1362.9	1.7
20°-30°	2723.6	3.3
30°-40°	4683.7	5.7
40°-50°	8664.6	10.5
50°-60°	14727.2	17.9
60°-70°	23738.5	28.9
70°-80°	20980.7	25.5
80°-90°	4902.4	6.0
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°	82193.0	100.0
0°-180°	82193.0	100.0



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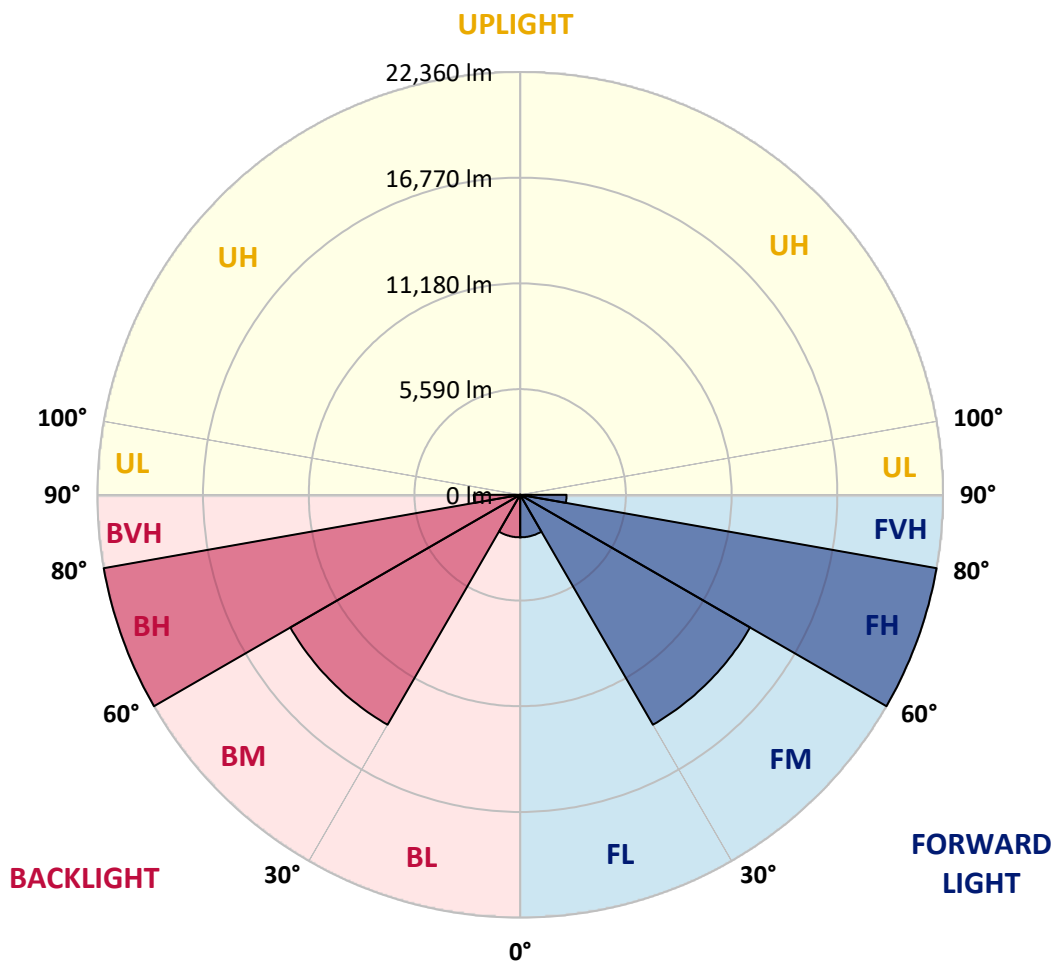
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2248.0	2.7			
FM	(30°-60°)	14037.7	17.1			
FH	(60°-80°)	22359.6	27.2			G5
FVH	(80°-90°)	2451.2	3.0			G5
BL	(0°-30°)	2248.0	2.7	B3/2500		
BM	(30°-60°)	14037.7	17.1	B5		
BH	(60°-80°)	22359.6	27.2	B5		G5
BVH	(80°-90°)	2451.2	3.0			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 V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4176.0	4176.0	4176.0	4176.0	4176.0	4176.0	4176.0	4176.0	4176.0	4176.0	4176.0
2.5°	4212.2	4204.5	4207.1	4207.1	4160.5	4170.9	4173.4	4201.9	4201.9	4214.8	4217.4
5°	4253.6	4240.7	4243.3	4253.6	4209.6	4217.4	4217.4	4245.8	4240.7	4256.2	4263.9
7.5°	4326.0	4315.7	4315.7	4326.0	4274.3	4287.2	4279.5	4305.3	4295.0	4302.7	4318.2
10°	4442.4	4439.8	4432.0	4437.2	4380.3	4388.1	4372.5	4401.0	4380.3	4382.9	4411.3
12.5°	4576.8	4574.2	4574.2	4582.0	4532.9	4545.8	4519.9	4530.3	4494.1	4499.2	4522.5
15°	4742.3	4747.5	4752.7	4775.9	4744.9	4757.8	4719.0	4713.9	4672.5	4672.5	4700.9
17.5°	4969.9	4969.9	4972.4	5024.2	5006.1	5026.7	4972.4	4936.2	4894.9	4900.0	4905.2
20°	5254.3	5244.0	5249.1	5311.2	5316.4	5331.9	5246.5	5197.4	5153.5	5156.0	5150.9
22.5°	5556.8	5536.1	5533.6	5618.9	5655.1	5660.3	5541.3	5494.8	5437.9	5445.6	5440.5
25°	5846.4	5825.8	5815.4	5885.2	5980.9	5975.7	5846.4	5779.2	5753.4	5753.4	5758.5
27.5°	6133.5	6107.6	6097.3	6138.6	6288.6	6314.5	6143.8	6084.3	6058.5	6081.7	6092.1
30°	6423.1	6402.4	6397.2	6410.1	6580.8	6694.6	6430.8	6405.0	6402.4	6423.1	6446.3
32.5°	6774.7	6772.1	6751.5	6748.9	6875.6	7041.1	6774.7	6790.2	6831.6	6878.2	6909.2
35°	7227.2	7222.1	7165.2	7191.0	7253.1	7408.2	7255.7	7266.0	7377.2	7447.0	7485.8
37.5°	7829.7	7790.9	7718.5	7721.1	7752.2	7909.9	7850.4	7930.6	8132.3	8261.6	8248.6
40°	8683.0	8621.0	8512.4	8481.3	8476.2	8701.1	8758.0	8939.0	9257.1	9448.4	9435.5
42.5°	9903.5	9838.9	9673.4	9629.4	9647.5	9823.4	9988.9	10275.9	10552.6	10774.9	10762.0
45°	11155.0	11072.3	10806.0	10656.0	10526.7	10661.2	10919.7	11369.7	11700.6	11992.8	11987.7
47.5°	12603.1	12473.8	12153.1	11866.1	11607.5	11656.7	11933.4	12447.9	12848.7	13140.9	13122.8
50°	14175.2	14045.9	13694.3	13262.4	12861.6	12895.3	13029.7	13572.7	13970.9	14255.4	14260.6
52.5°	15856.0	15762.9	15359.5	14788.1	14237.3	14048.5	14133.9	14635.5	15093.2	15362.1	15385.4
55°	17668.6	17578.1	17154.0	16494.7	15739.6	15315.5	15313.0	15817.2	16280.0	16515.3	16551.6
57.5°	19486.4	19437.3	19064.9	18346.1	17394.5	16745.5	16598.1	17123.0	17642.7	17885.8	17934.9
60°	21358.5	21291.3	20981.0	20378.5	19333.8	18444.3	18196.1	18721.0	19308.0	19558.8	19589.8
62.5°	23478.8	23411.6	23173.7	22537.6	21767.1	20737.9	20378.5	20862.0	21405.1	21805.8	21764.5
65°	25599.2	25583.7	25684.5	25397.5	24807.9	24218.4	23509.9	24040.0	24440.8	24402.0	24389.0
67.5°	25260.4	25358.7	26056.9	27052.4	28296.1	28647.8	27011.0	25526.8	24652.8	24146.0	23985.7
70°	23310.8	23564.2	24598.5	26721.4	29858.0	30832.8	28288.4	24420.1	22542.8	21803.3	21661.0
71°	22235.1	22434.2	23626.2	26219.8	29868.3	30747.5	27985.9	23587.4	21679.1	20665.5	20567.3
72.5°	20140.6	20448.3	21764.5	24846.7	28960.7	29700.2	26667.1	22036.0	20037.2	19049.4	18995.1
75°	16101.6	16194.7	17893.6	21394.7	26077.5	26664.5	23672.8	19121.8	17060.9	16386.1	16347.3
77.5°	11364.5	11367.1	12996.1	16678.3	21619.7	22571.2	20502.6	15765.5	13683.9	12835.8	12647.0
80°	6019.7	6265.3	7881.4	11462.7	16194.7	17761.7	16293.0	11920.4	9621.7	8383.1	8209.8
82.5°	2743.5	2919.3	3966.6	6498.1	10650.8	12791.8	11178.3	7739.2	5156.0	3819.2	3708.0
85°	1065.3	1091.2	1636.8	3087.4	5955.0	8023.7	6508.4	3627.8	1794.5	1096.4	1016.2
87.5°	349.1	372.4	532.7	1189.5	2534.1	3203.8	2516.0	1091.2	349.1	217.2	209.4
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)