

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: P721844

Luminaire Tested: **CST-CA8-400-727-U-T5**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721844
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-3)
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-T5
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53060 lumens
Efficiency: N/A
Efficacy: 132.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G5

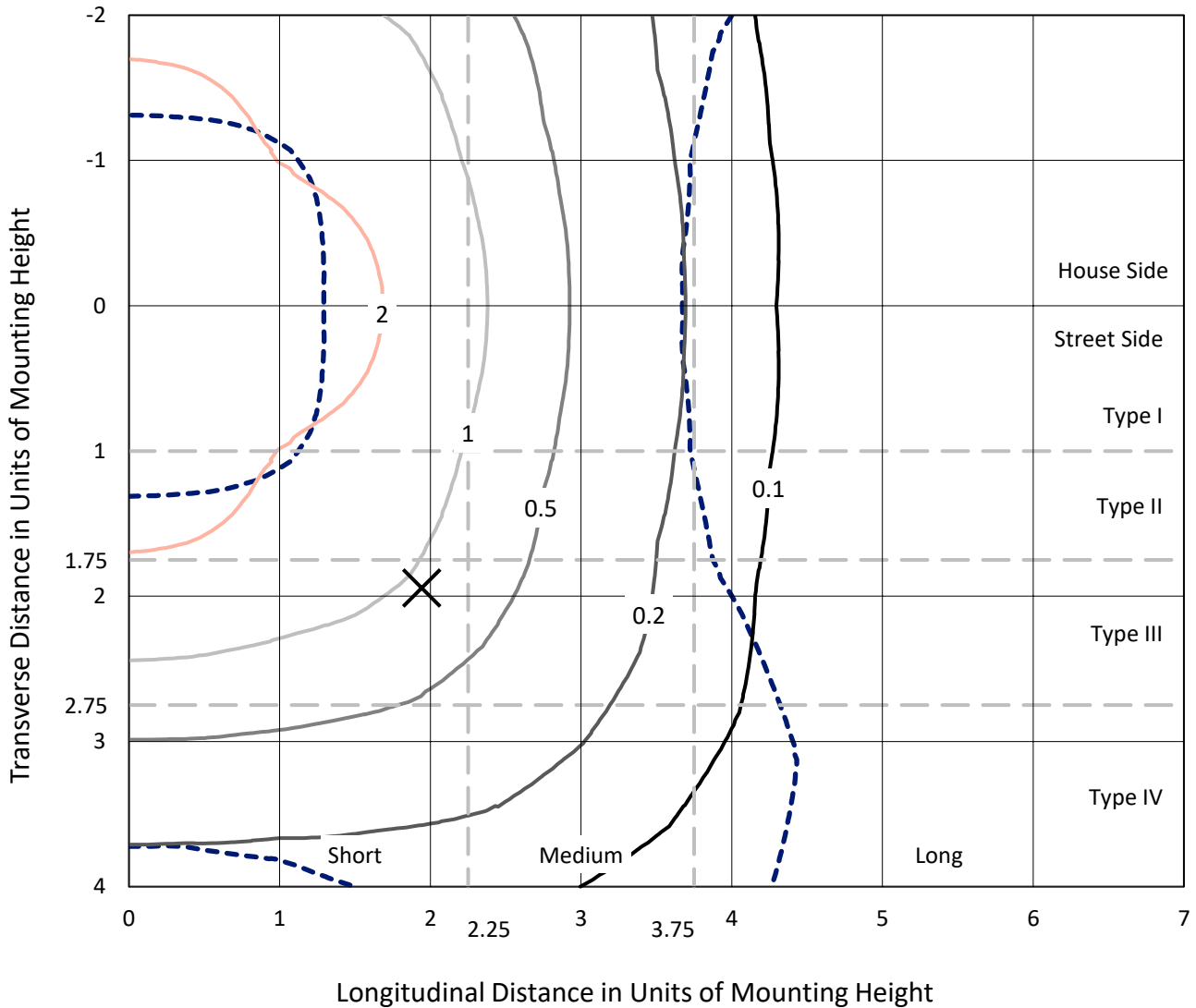
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

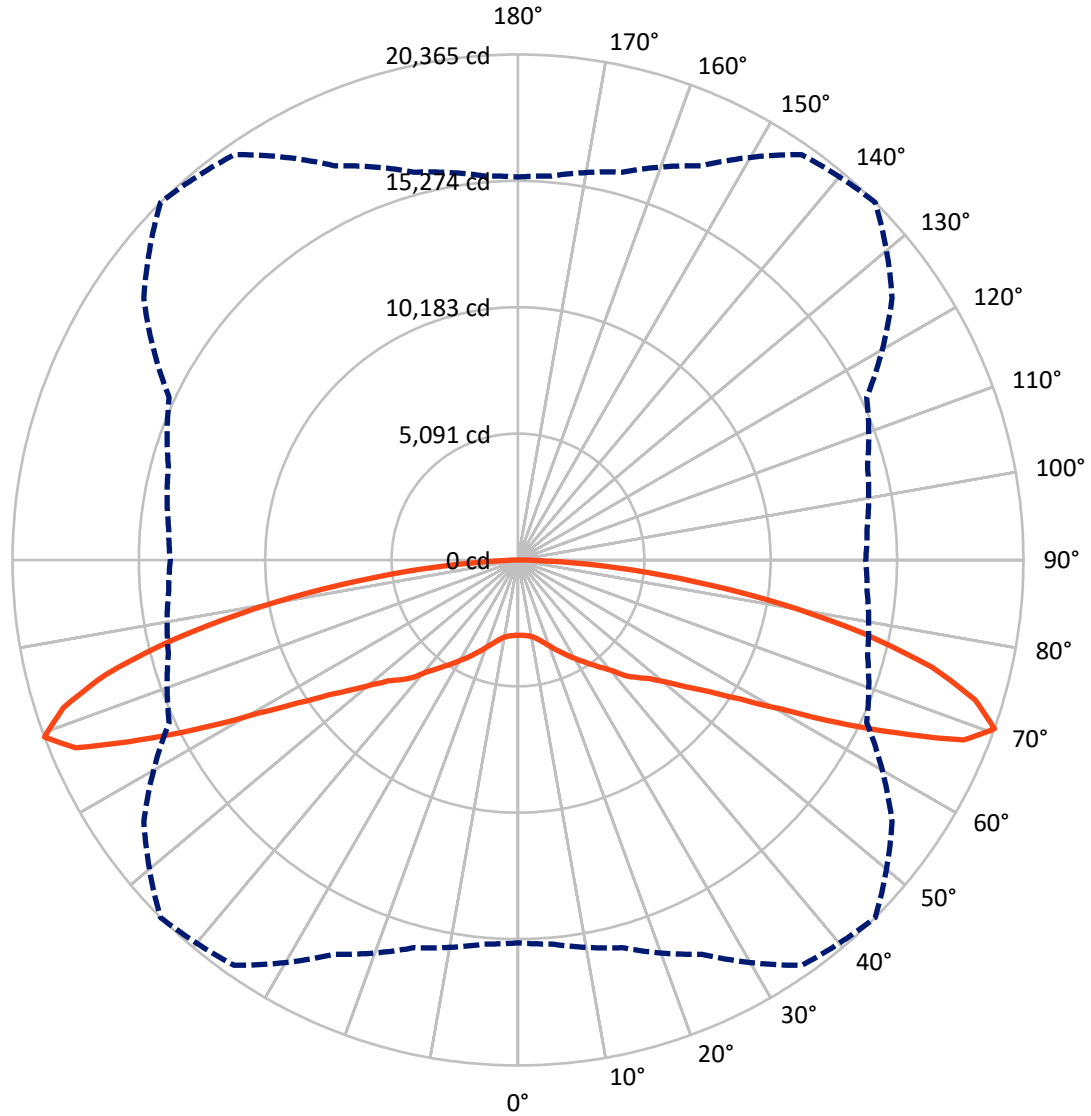
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.4 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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

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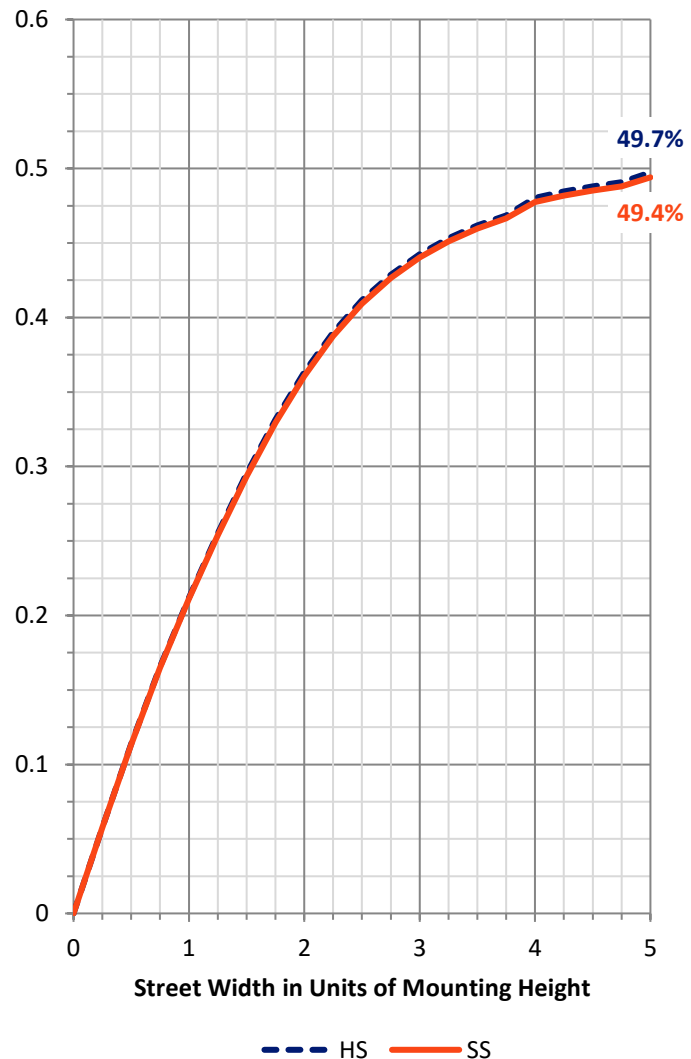
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	26530.0	0.0	26530.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	26530.0	0.0	26530.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	53060.0	0.0	53060.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.8	0.6
10°-20°	960.0	1.8
20°-30°	1900.4	3.6
30°-40°	3287.5	6.2
40°-50°	5469.9	10.3
50°-60°	9540.5	18.0
60°-70°	15793.8	29.8
70°-80°	13236.4	24.9
80°-90°	2576.7	4.9
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°	53060.0	100.0
0°-180°	53060.0	100.0



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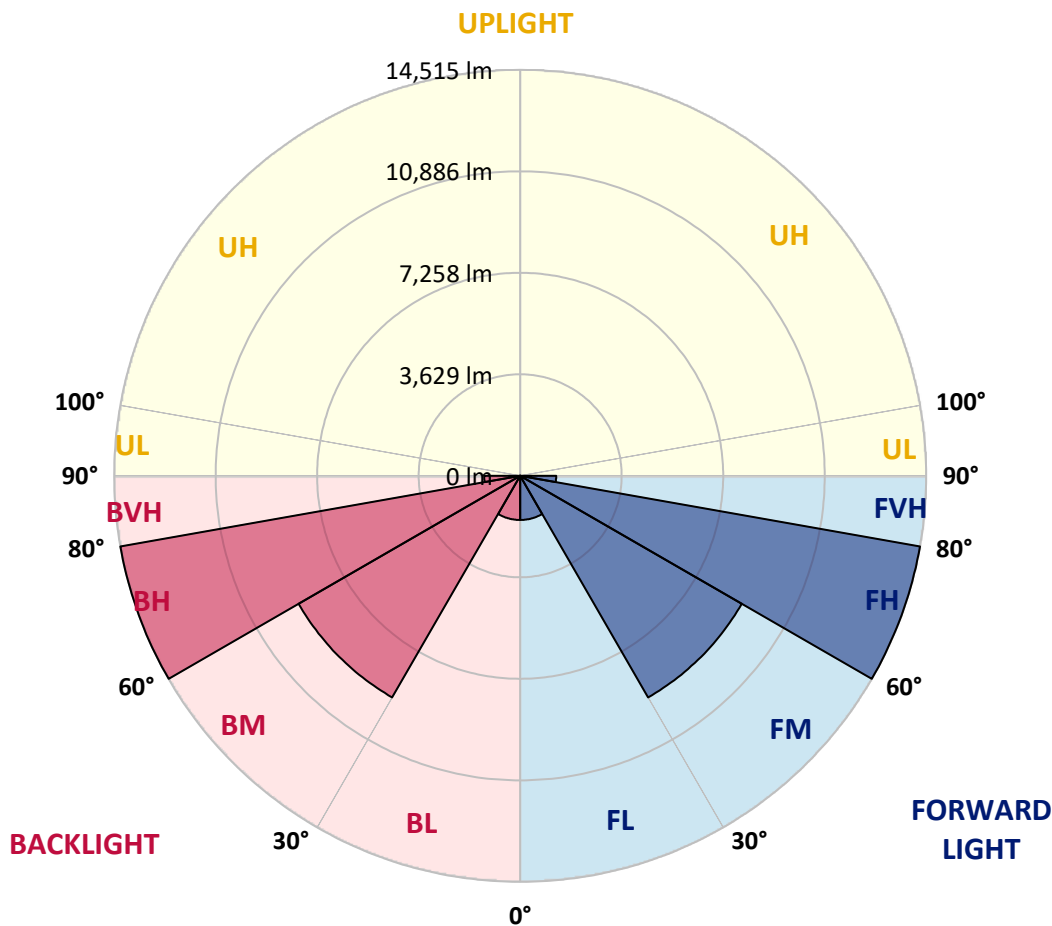
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1577.6	3.0			
FM (30°-60°)	9149.0	17.2			
FH (60°-80°)	14515.1	27.4			G5
FVH (80°-90°)	1288.3	2.4			G5
BL (0°-30°)	1577.6	3.0	B3/2500		
BM (30°-60°)	9149.0	17.2	B5		
BH (60°-80°)	14515.1	27.4	B5		G5
BVH (80°-90°)	1288.3	2.4			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°	3032.5	3032.5	3032.5	3032.5	3032.5	3032.5	3032.5	3032.5	3032.5	3032.5	3032.5
2.5°	3051.5	3042.0	3038.9	3035.7	3037.8	3036.8	3042.0	3044.1	3046.2	3055.7	3050.4
5°	3070.4	3063.0	3062.0	3057.8	3056.7	3056.7	3064.1	3065.1	3066.2	3072.5	3066.2
7.5°	3105.1	3097.7	3095.6	3093.5	3092.4	3088.2	3093.5	3091.4	3093.5	3096.6	3089.3
10°	3159.7	3151.3	3149.2	3143.9	3147.1	3140.8	3145.0	3139.7	3130.3	3132.4	3121.9
12.5°	3234.3	3226.9	3230.1	3229.0	3241.7	3238.5	3230.1	3219.6	3203.8	3193.3	3181.8
15°	3344.6	3333.1	3341.5	3349.9	3362.5	3367.7	3361.4	3333.1	3310.0	3293.1	3283.7
17.5°	3479.1	3460.2	3477.0	3493.8	3521.2	3526.4	3503.3	3468.6	3443.4	3436.0	3420.3
20°	3635.7	3632.5	3633.6	3660.9	3702.9	3710.3	3679.8	3638.8	3613.6	3614.7	3596.8
22.5°	3824.8	3808.0	3813.3	3840.6	3900.5	3920.5	3870.0	3824.8	3809.1	3813.3	3811.2
25°	4041.3	4025.5	4018.2	4030.8	4108.5	4143.2	4094.9	4042.3	4035.0	4044.4	4029.7
27.5°	4278.8	4264.1	4255.7	4262.0	4322.9	4388.1	4334.5	4290.3	4289.3	4302.9	4294.5
30°	4548.8	4526.8	4517.3	4524.7	4566.7	4629.7	4586.6	4560.4	4582.4	4591.9	4588.8
32.5°	4822.0	4811.5	4808.4	4806.3	4857.8	4893.5	4872.5	4877.7	4895.6	4938.7	4925.0
35°	5133.1	5102.6	5111.0	5117.3	5184.5	5187.7	5189.8	5199.3	5246.5	5307.5	5271.8
37.5°	5456.7	5449.3	5454.6	5436.7	5486.1	5506.1	5535.5	5567.0	5641.6	5712.0	5697.3
40°	5857.0	5843.4	5848.6	5827.6	5851.8	5867.5	5927.4	5995.7	6091.4	6167.0	6132.3
42.5°	6387.7	6353.0	6353.0	6359.3	6409.8	6392.9	6521.1	6540.0	6658.8	6722.9	6702.9
45°	7011.8	6999.2	6933.0	6821.7	6758.6	6757.6	6860.5	7013.9	7210.4	7343.9	7342.8
47.5°	7805.2	7766.3	7607.6	7339.7	7180.0	7141.1	7249.3	7547.7	7909.2	8117.3	8114.1
50°	8845.5	8796.1	8555.4	8139.3	7828.3	7732.7	7906.1	8292.7	8779.3	9056.7	9079.8
52.5°	10009.7	10013.9	9741.8	9112.4	8652.1	8479.8	8663.7	9216.4	9822.7	10203.1	10248.2
55°	11362.1	11329.5	11072.1	10358.6	9725.0	9355.1	9633.5	10365.9	11062.6	11352.6	11432.5
57.5°	12770.1	12643.0	12445.4	11778.2	11037.4	10564.5	10898.7	11615.3	12282.6	12652.4	12639.8
60°	14018.4	13934.4	13820.9	13289.2	12720.7	12180.6	12438.1	13044.4	13616.0	13839.8	13849.3
62.5°	15382.4	15311.9	15210.0	14919.0	14605.8	14405.1	14171.9	14452.4	14899.0	15143.8	15223.7
65°	16721.0	16695.8	16754.7	16710.5	16842.9	16813.5	16254.5	16078.0	16085.3	16016.0	15980.2
67.5°	16642.2	16632.8	16979.5	17670.9	18990.7	19364.8	17930.5	16333.3	15613.5	15430.7	15404.4
70°	15428.6	15530.5	16172.5	17525.9	19934.3	20365.1	18401.2	15502.1	14581.7	14123.5	14010.0
72.5°	13093.8	13293.4	14278.0	16271.3	19150.4	19249.2	17218.1	14251.7	12896.2	12349.8	12268.9
75°	10103.2	10128.5	11136.2	13669.6	17090.9	17214.9	15359.2	11953.7	10620.2	9940.4	9919.4
77.5°	6153.4	6511.7	7981.7	10249.3	13586.6	14231.7	12845.8	9521.1	7935.5	7333.4	6997.1
80°	3018.9	3182.8	4242.0	6480.2	9711.3	10792.5	9532.7	6585.2	4894.5	4130.6	4046.5
82.5°	1374.4	1461.6	2007.0	3387.7	5860.2	7199.9	5883.3	3771.2	2613.3	2043.8	2024.9
85°	533.8	530.6	812.3	1421.7	2805.6	3986.7	2979.0	1798.9	1195.8	889.0	838.5
87.5°	155.5	166.0	238.5	466.5	831.2	1120.1	918.4	622.1	367.8	236.4	217.5
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)