

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: P510473

Luminaire Tested: **CST-CA10-310-727-U-T5N**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510473
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-13)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-310-727-U-T5N
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43727 lumens
Efficiency: N/A
Efficacy: 140.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

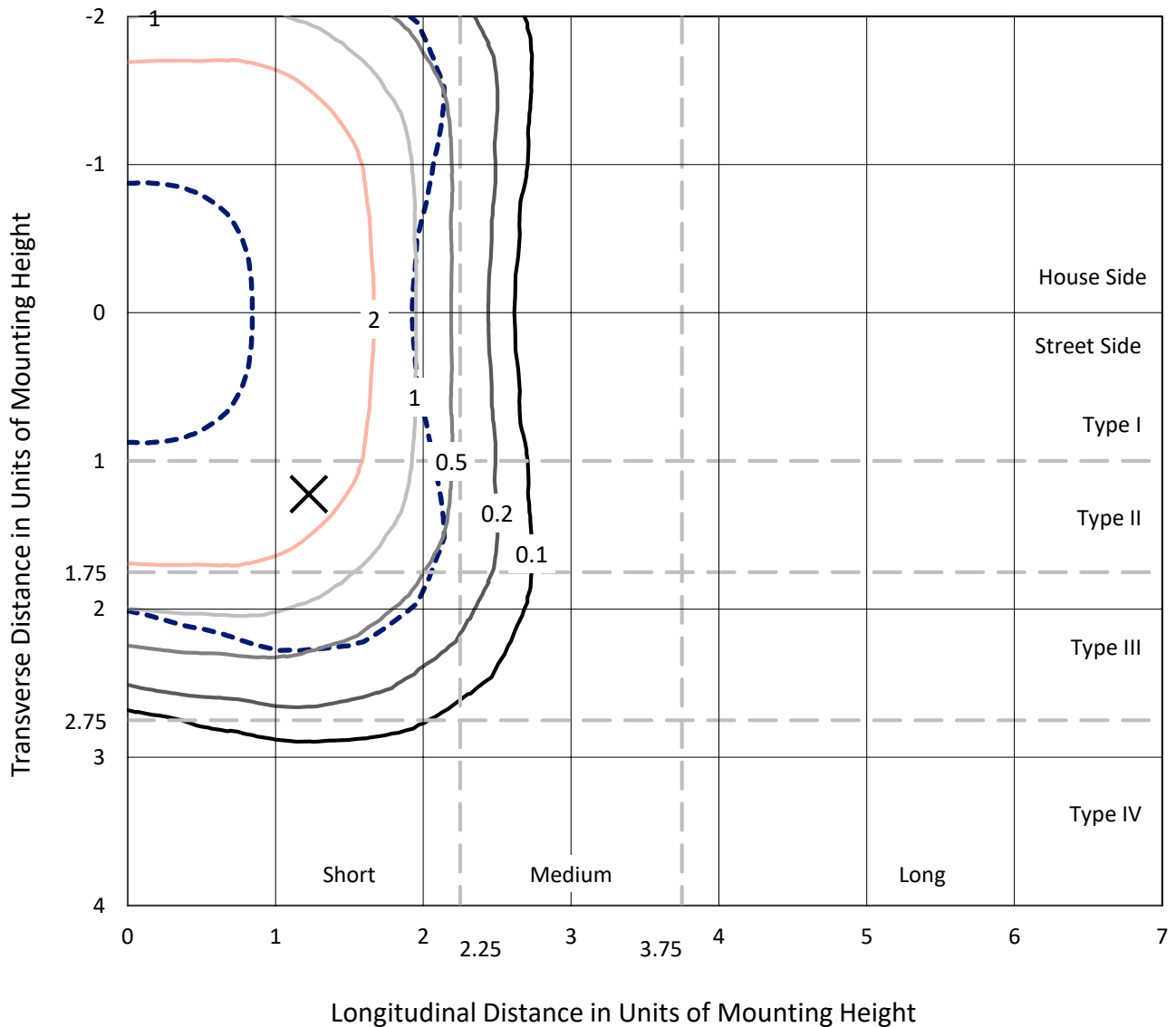
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

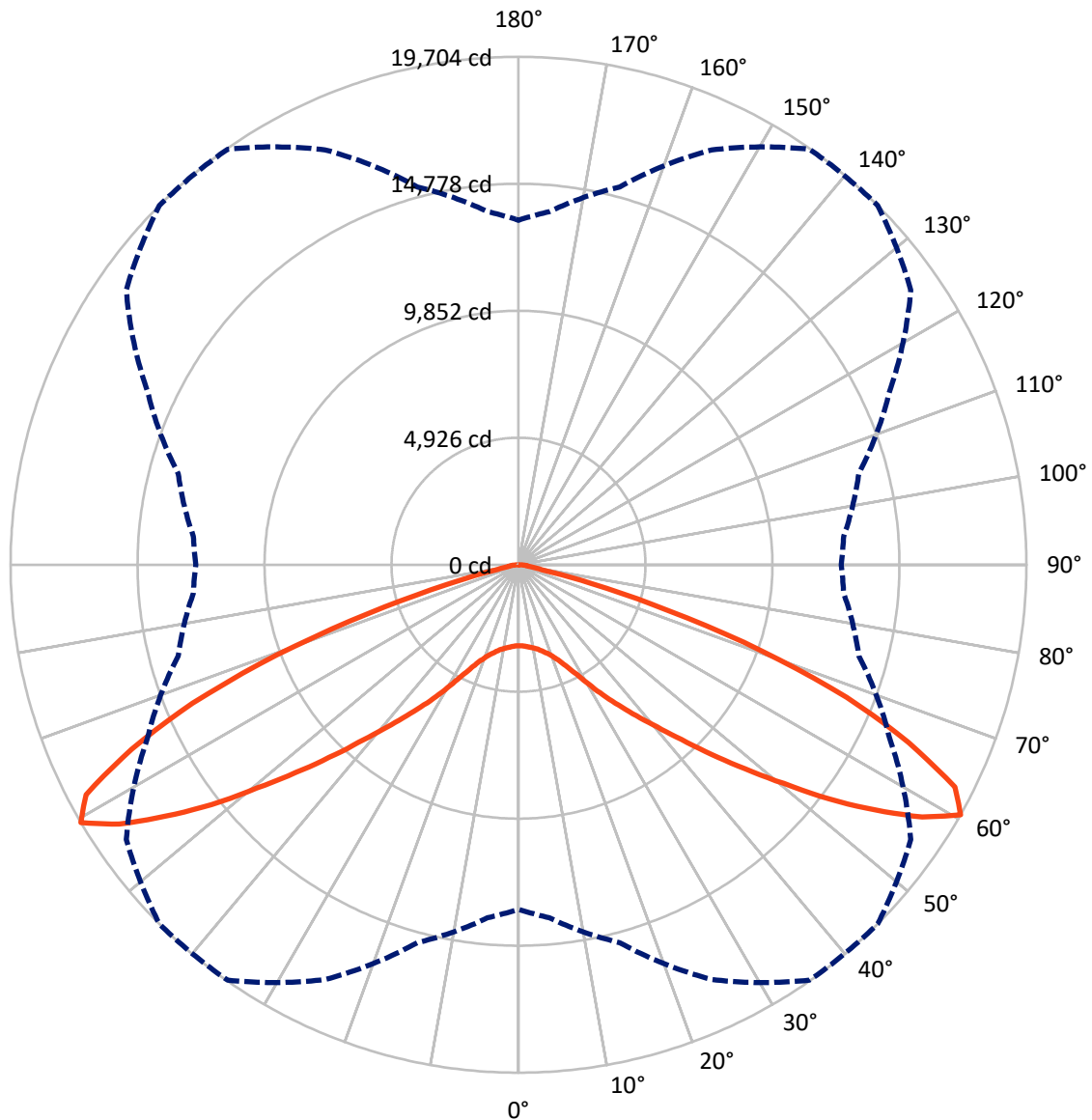
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.8 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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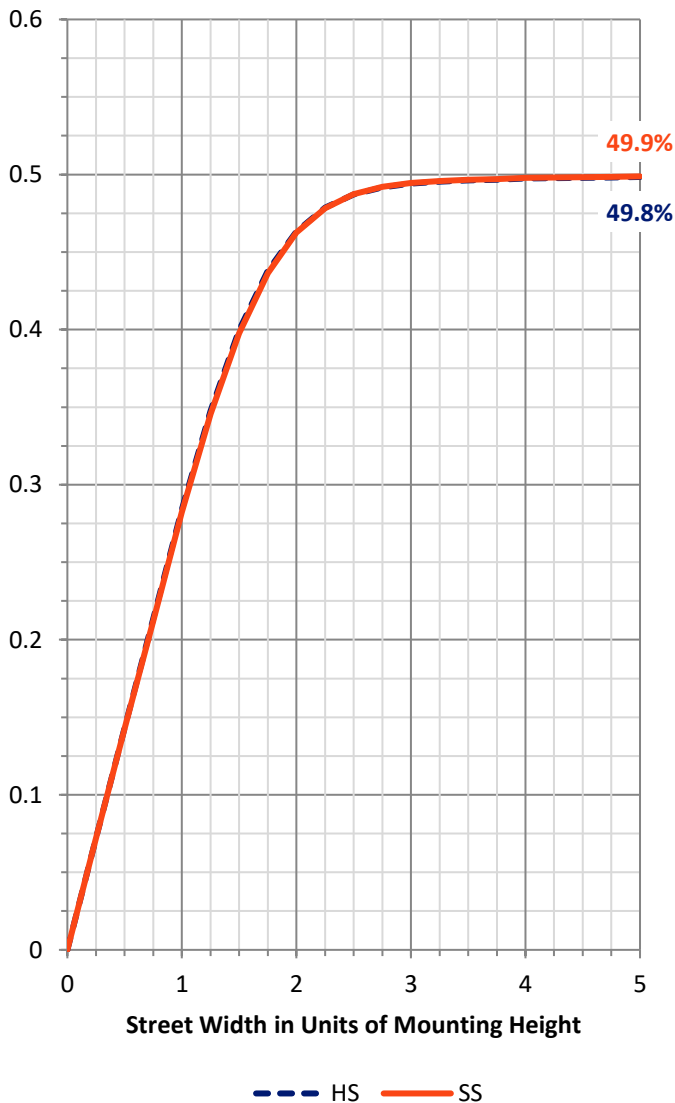
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21863.5	0.0	21863.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	21863.5	0.0	21863.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	43727.0	0.0	43727.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	307.3	0.7
10°-20°	1001.7	2.3
20°-30°	2127.5	4.9
30°-40°	4511.1	10.3
40°-50°	8578.9	19.6
50°-60°	13609.9	31.1
60°-70°	11504.0	26.3
70°-80°	1892.6	4.3
80°-90°	194.1	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°	43727.0	100.0
0°-180°	43727.0	100.0



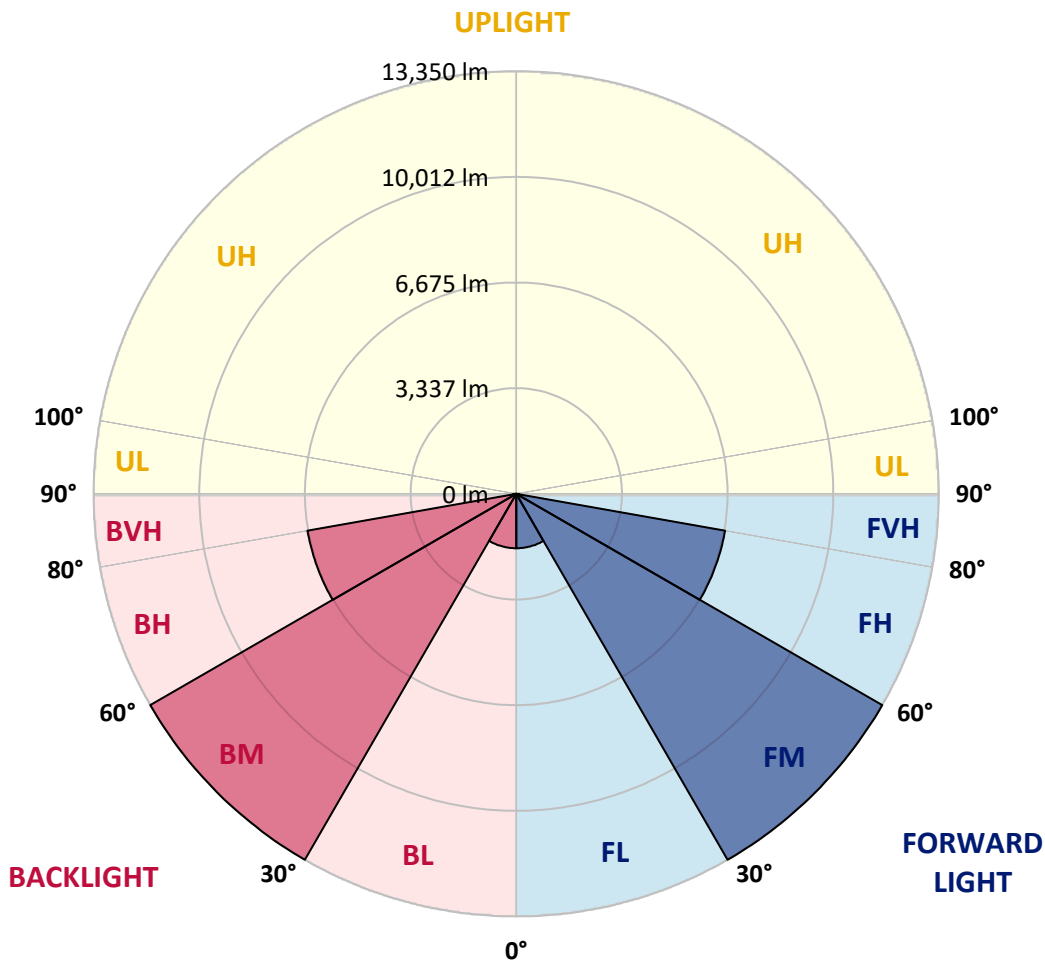
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1718.3	3.9			
FM (30°-60°)	13349.9	30.5			
FH (60°-80°)	6698.3	15.3			G3/7500
FVH (80°-90°)	97.0	0.2			G1/100
BL (0°-30°)	1718.3	3.9	B3/2500		
BM (30°-60°)	13349.9	30.5	B5		
BH (60°-80°)	6698.3	15.3	B5		G3/7500
BVH (80°-90°)	97.0	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-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3139.4	3139.4	3139.4	3139.4	3139.4	3139.4	3139.4	3139.4	3139.4	3139.4	3139.4
2.5°	3162.1	3154.3	3151.8	3148.5	3150.2	3151.0	3155.5	3155.9	3155.9	3160.0	3167.1
5°	3197.6	3187.2	3183.5	3179.4	3181.5	3183.5	3187.7	3190.1	3189.7	3192.2	3198.4
7.5°	3235.9	3232.2	3227.6	3225.2	3225.2	3230.9	3228.0	3232.6	3232.2	3235.1	3238.8
10°	3292.7	3284.5	3284.1	3279.6	3281.6	3286.6	3287.4	3286.6	3287.4	3289.0	3297.7
12.5°	3364.9	3362.8	3364.0	3360.3	3359.1	3364.5	3365.7	3371.0	3372.7	3377.6	3383.0
15°	3481.1	3467.9	3466.2	3465.8	3468.3	3476.5	3479.0	3488.9	3493.4	3500.5	3512.4
17.5°	3612.5	3617.1	3608.8	3608.0	3607.6	3614.2	3620.8	3642.6	3649.6	3665.7	3676.0
20°	3822.3	3814.1	3809.1	3789.3	3784.4	3795.9	3819.8	3848.7	3862.3	3887.8	3907.2
22.5°	4102.5	4088.5	4054.7	4031.2	4021.4	4041.1	4067.1	4113.3	4168.1	4199.8	4208.5
25°	4507.6	4452.4	4410.4	4368.8	4353.9	4383.2	4425.2	4498.6	4567.4	4630.9	4660.1
27.5°	5000.9	4965.9	4882.3	4816.7	4790.8	4815.5	4902.9	5006.3	5132.4	5198.3	5208.2
30°	5627.3	5609.2	5502.5	5379.7	5333.5	5376.4	5479.4	5620.3	5795.9	5931.5	5955.4
32.5°	6402.9	6311.0	6162.7	6022.1	5972.7	6025.0	6128.5	6330.8	6567.4	6717.4	6768.5
35°	7292.3	7188.4	6965.5	6749.5	6685.6	6692.2	6857.9	7143.1	7466.6	7675.9	7733.2
37.5°	8273.1	8167.2	7904.2	7569.2	7421.3	7432.4	7649.1	8020.0	8463.5	8691.8	8767.6
40°	9319.8	9210.2	8939.0	8561.6	8318.4	8269.0	8558.7	9010.3	9460.8	9736.1	9765.3
42.5°	10343.1	10213.3	9995.3	9617.8	9396.1	9263.4	9613.3	10022.5	10476.6	10724.7	10744.1
45°	11257.2	11232.0	11056.9	10783.2	10600.7	10483.2	10733.0	11139.3	11456.6	11613.6	11670.9
47.5°	12140.7	12125.1	12069.0	11973.4	12018.7	11823.4	11943.3	12127.5	12301.9	12417.2	12461.8
50°	12915.1	12931.6	13041.6	13204.4	13532.4	13334.6	13297.1	13098.9	13103.8	13112.9	13159.0
52.5°	13554.7	13642.0	13919.0	14410.2	15118.6	15114.1	14546.6	14023.2	13786.7	13681.6	13691.1
55°	14112.2	14261.8	14719.3	15733.5	16747.3	16798.0	16026.1	14866.8	14423.4	14199.2	14228.5
57.5°	14420.1	14648.0	15422.3	16962.0	18406.8	18467.8	17608.2	15801.1	14785.6	14218.2	14242.5
60°	13363.4	13747.1	15174.7	17754.5	19676.1	19704.1	18575.4	15874.4	13665.5	12661.2	12514.1
62.5°	10935.7	11467.3	13481.3	17140.4	19088.0	19001.1	17970.0	14500.0	11225.8	10007.6	9884.0
65°	8214.6	8714.4	10823.2	14676.4	16748.5	16633.9	15583.9	11459.9	8230.2	6937.0	6785.0
67.5°	4445.8	5200.8	7174.0	11211.0	13351.5	13740.1	12285.4	7987.5	4789.5	3472.4	3338.9
70°	1535.5	1984.3	3657.9	7037.6	9630.2	10020.0	8377.8	4283.9	2096.0	1310.5	1176.6
72.5°	545.2	628.5	1375.2	3398.7	5482.7	6074.9	4520.4	1723.0	668.0	486.7	476.8
75°	384.9	397.3	488.8	1108.2	2373.7	2907.4	1782.4	572.0	416.6	389.4	387.0
77.5°	343.7	350.7	396.0	451.3	725.3	928.5	548.5	415.0	361.8	346.6	341.2
80°	326.8	332.2	345.3	370.1	411.3	427.8	370.1	354.8	329.3	322.7	320.6
82.5°	285.6	284.4	288.1	298.4	316.9	321.0	297.1	278.2	278.6	270.8	267.0
85°	193.3	204.8	196.2	185.4	230.0	231.2	215.5	161.5	183.4	179.7	164.4
87.5°	58.5	65.9	52.3	36.3	49.9	38.7	35.0	36.3	34.6	30.1	27.2
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)