

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: P232769

Luminaire Tested: **CST-10-3-D-U-T5N**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232769
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-10-3-D-U-T5N
Description: CELESTEON HIGH MAST LUMINAIRE
(10) 70 CRI, 4000K LEDS AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35021 lumens
Efficiency: N/A
Efficacy: 165.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 212
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



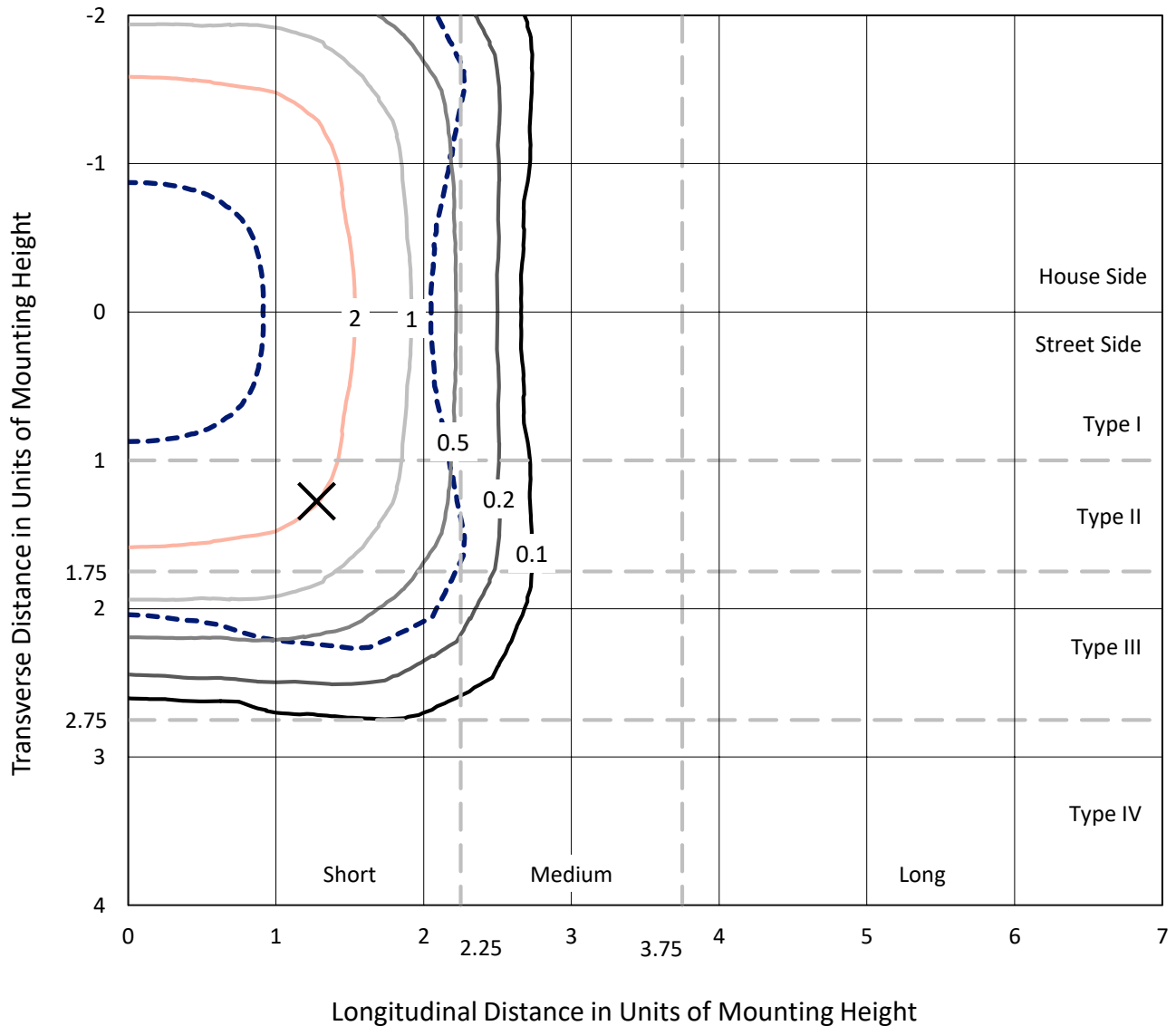


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

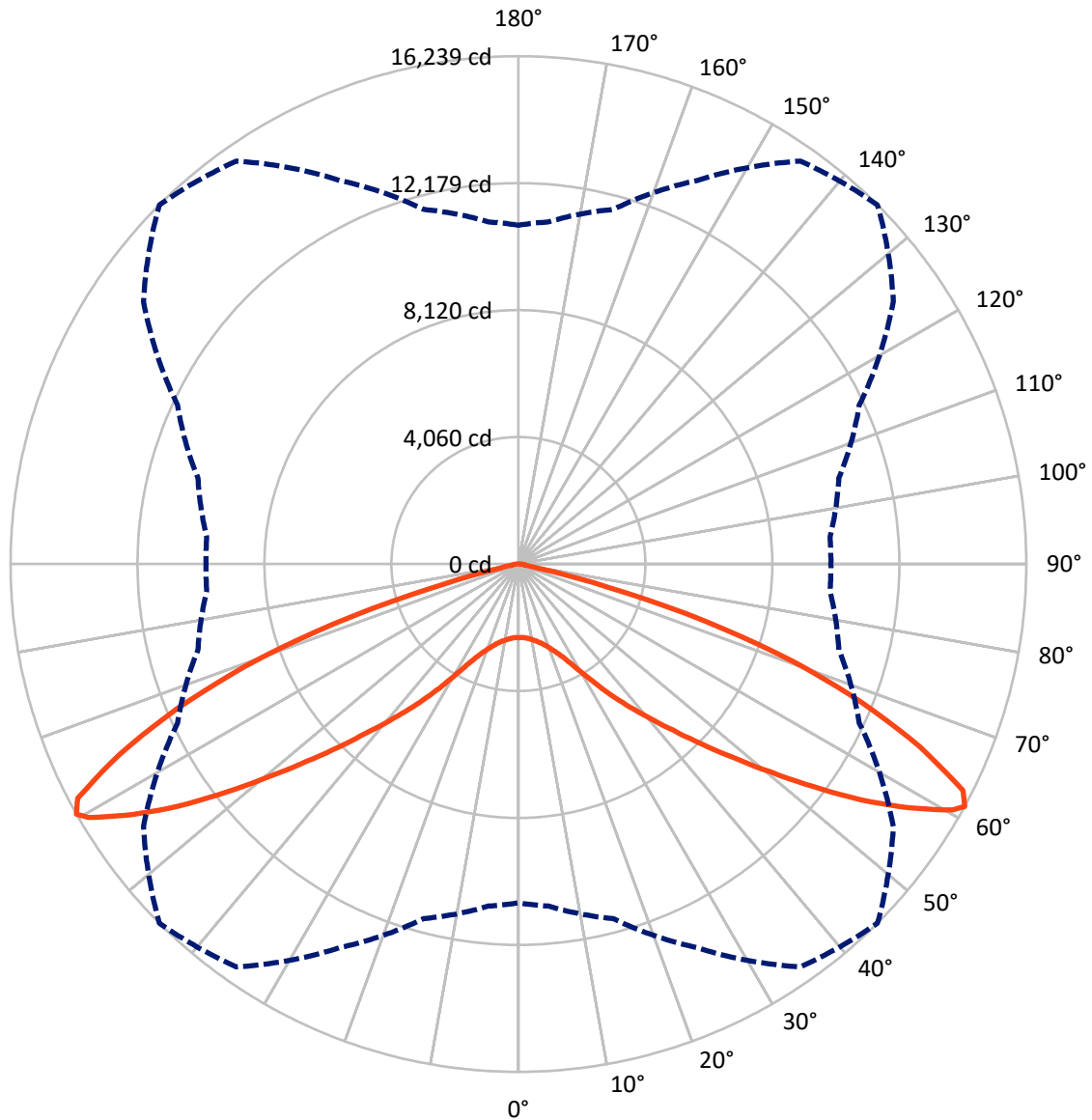


Based on 30 foot mounting height. Maximum calculated value = 3.8 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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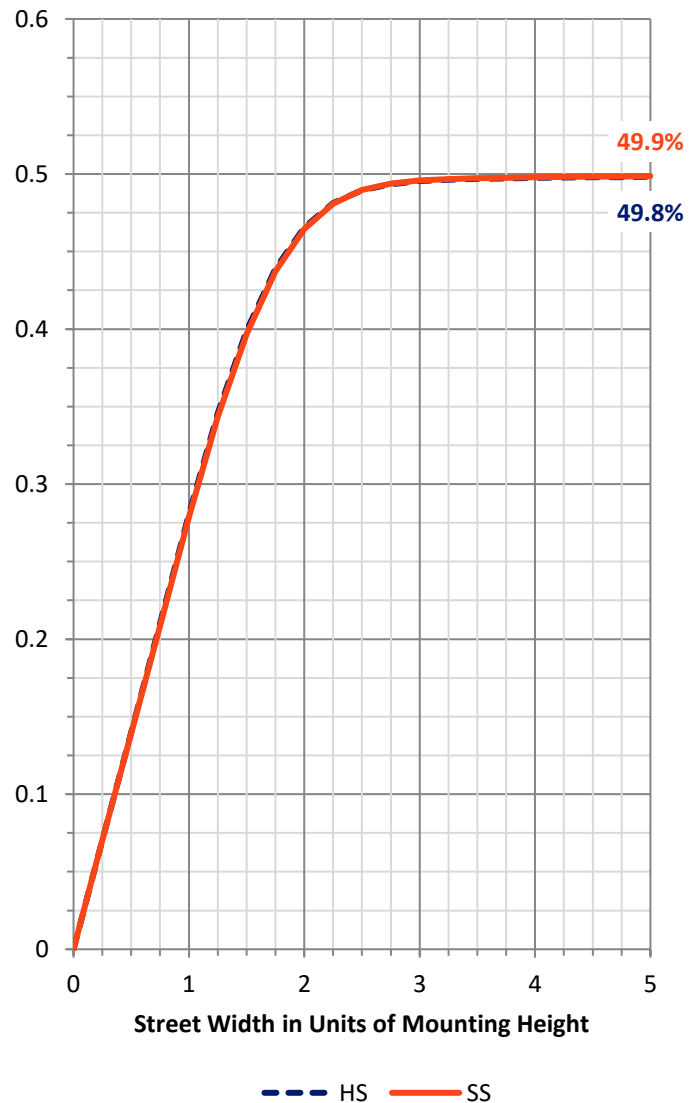
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17510.5	0.0	17510.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	17510.5	0.0	17510.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	35021.0	0.0	35021.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.3	0.7
10°-20°	754.7	2.2
20°-30°	1610.2	4.6
30°-40°	3507.1	10.0
40°-50°	6782.1	19.4
50°-60°	10770.3	30.8
60°-70°	9712.5	27.7
70°-80°	1520.2	4.3
80°-90°	133.6	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°	35021.0	100.0
0°-180°	35021.0	100.0



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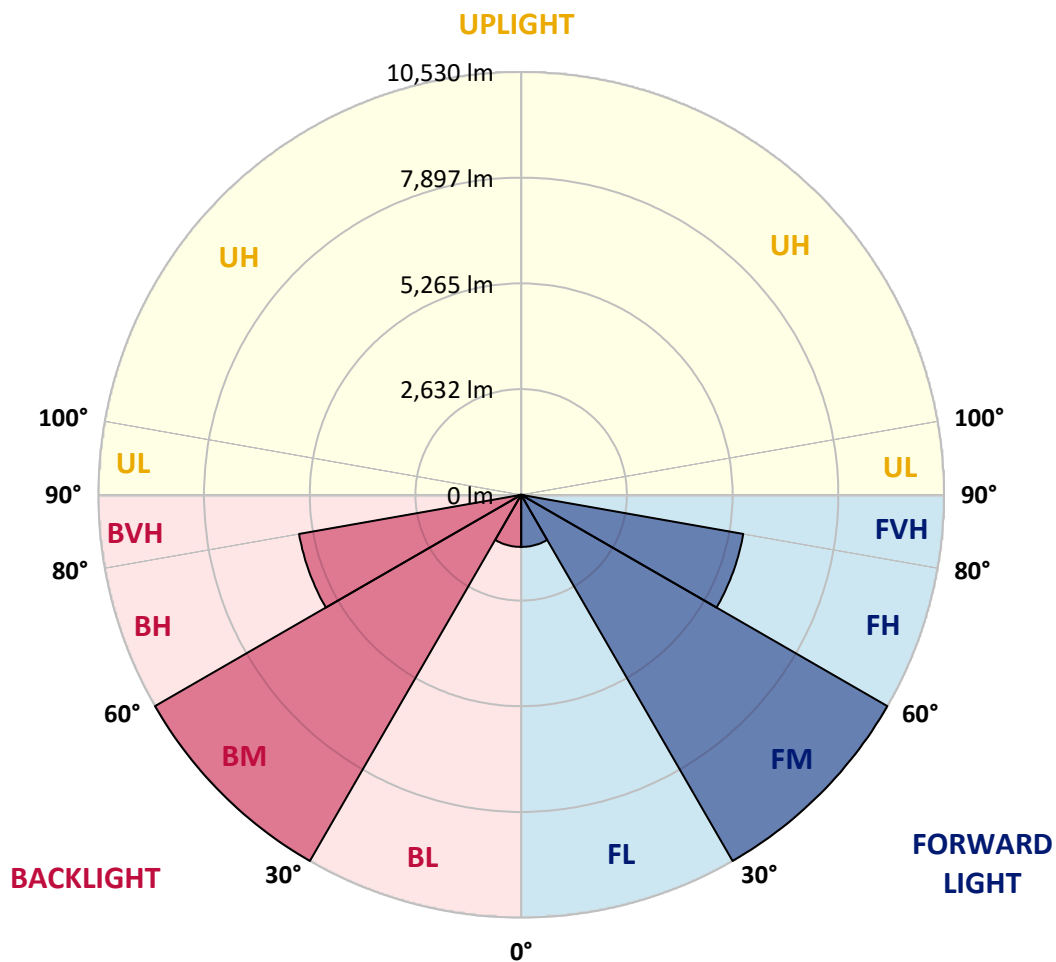
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1297.6	3.7			
FM	(30°-60°)	10529.8	30.1			
FH	(60°-80°)	5616.4	16.0			G3/7500
FVH	(80°-90°)	66.8	0.2			G1/100
BL	(0°-30°)	1297.6	3.7	B3/2500		
BM	(30°-60°)	10529.8	30.1	B5		
BH	(60°-80°)	5616.4	16.0	B5		G3/7500
BVH	(80°-90°)	66.8	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°	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4
2.5°	2373.7	2368.6	2372.6	2375.7	2340.2	2349.3	2348.3	2372.6	2367.6	2378.7	2384.8
5°	2389.9	2381.8	2386.9	2395.0	2361.5	2373.7	2373.7	2396.0	2387.9	2399.0	2410.2
7.5°	2419.3	2411.2	2417.3	2427.4	2396.0	2409.2	2410.2	2436.6	2425.4	2434.5	2451.8
10°	2468.0	2462.9	2465.0	2474.1	2444.7	2460.9	2460.9	2489.3	2477.1	2487.3	2508.6
12.5°	2524.8	2522.8	2524.8	2537.0	2509.6	2525.8	2525.8	2553.2	2545.1	2557.3	2577.6
15°	2599.9	2597.8	2598.9	2615.1	2592.8	2608.0	2611.0	2639.4	2637.4	2650.6	2668.8
17.5°	2706.4	2706.4	2705.4	2719.6	2705.4	2720.6	2726.7	2757.1	2769.3	2785.5	2796.7
20°	2868.7	2859.6	2854.5	2861.6	2850.4	2866.7	2876.8	2926.5	2946.8	2972.2	2981.3
22.5°	3080.7	3068.5	3052.3	3045.2	3030.0	3051.3	3071.6	3142.6	3172.0	3213.6	3223.7
25°	3372.8	3352.5	3322.1	3293.7	3259.2	3289.7	3327.2	3424.6	3485.4	3540.2	3548.3
27.5°	3772.5	3742.1	3695.4	3640.6	3579.8	3617.3	3672.1	3814.1	3897.3	3984.5	3997.7
30°	4287.8	4282.7	4209.7	4112.3	4031.2	4052.5	4120.4	4295.9	4427.8	4518.1	4543.4
32.5°	4975.6	4970.5	4847.8	4683.4	4567.8	4582.0	4644.9	4839.6	5004.0	5151.1	5156.1
35°	5795.2	5779.0	5606.5	5379.3	5193.7	5177.4	5239.3	5433.1	5657.2	5828.7	5845.9
37.5°	6731.5	6705.1	6506.3	6162.4	5875.3	5808.4	5852.0	6095.4	6355.1	6548.9	6568.1
40°	7648.5	7628.2	7407.0	7084.5	6664.5	6495.1	6498.2	6809.6	7094.6	7274.2	7313.7
42.5°	8532.0	8548.2	8336.2	8007.6	7568.3	7266.0	7270.1	7572.4	7867.6	8054.2	8106.0
45°	9438.9	9424.7	9225.8	8943.8	8539.1	8204.4	8090.7	8393.0	8686.2	8839.4	8895.1
47.5°	10181.4	10156.0	10022.1	9873.0	9572.8	9243.1	9043.3	9253.2	9455.1	9558.6	9615.4
50°	10828.6	10808.3	10795.1	10732.2	10665.3	10452.2	10123.6	10110.4	10154.0	10176.3	10228.1
52.5°	11376.3	11375.3	11446.3	11600.5	11765.9	11839.9	11270.8	10902.6	10752.5	10641.9	10661.2
55°	11789.2	11784.1	11986.0	12398.8	12983.1	13317.9	12478.0	11588.3	11192.7	10978.7	10976.7
57.5°	12001.2	12010.3	12420.1	13167.7	14251.1	14707.6	13638.4	12218.3	11540.7	11215.1	11211.0
60°	11441.3	11479.8	12283.2	13644.5	15372.0	15968.5	14588.9	12349.1	11163.3	10616.6	10602.4
61°	10834.7	10979.7	11739.5	13536.0	15727.0	16239.3	14634.5	12024.5	10607.4	10003.9	9990.7
62.5°	9500.7	9636.7	10799.2	13265.1	15702.7	15955.3	14374.9	11441.3	9735.1	9062.5	9035.1
65°	6893.8	7054.0	8305.8	11752.7	14274.4	14124.3	13075.4	10102.3	8163.8	7407.0	7372.6
67.5°	3466.2	3671.1	5076.0	8529.0	11597.5	11882.5	11163.3	7998.4	5786.1	4369.0	4364.9
70°	895.7	982.9	1830.0	4485.6	8363.6	9307.0	8511.7	4633.7	2249.9	1357.2	1273.1
72.5°	250.6	262.7	497.0	1634.2	4756.5	6235.4	4614.4	1620.0	507.2	289.1	264.8
75°	176.5	179.5	197.8	413.9	1796.5	2910.3	1487.1	350.0	202.9	191.7	191.7
77.5°	157.2	159.3	171.4	223.2	376.3	654.3	285.0	226.2	178.5	172.4	170.4
80°	166.4	168.4	175.5	216.1	221.1	235.3	197.8	195.8	177.5	181.6	179.5
82.5°	178.5	182.6	191.7	221.1	189.7	190.7	162.3	161.3	157.2	178.5	179.5
85°	158.2	165.3	172.4	193.7	156.2	127.8	132.9	105.5	112.6	133.9	128.8
87.5°	88.3	87.2	84.2	88.3	79.1	63.9	53.8	48.7	44.6	50.7	49.7
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)