

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: P232776

Luminaire Tested: **CST-8-3-D-U-T5N-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232776
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-8-3-D-U-T5N-7050
Description: CELESTEON HIGH MAST LUMINAIRE
(8) 70 CRI, 5000K LEDS AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34987 lumens
Efficiency: N/A
Efficacy: 154.8 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): 226
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

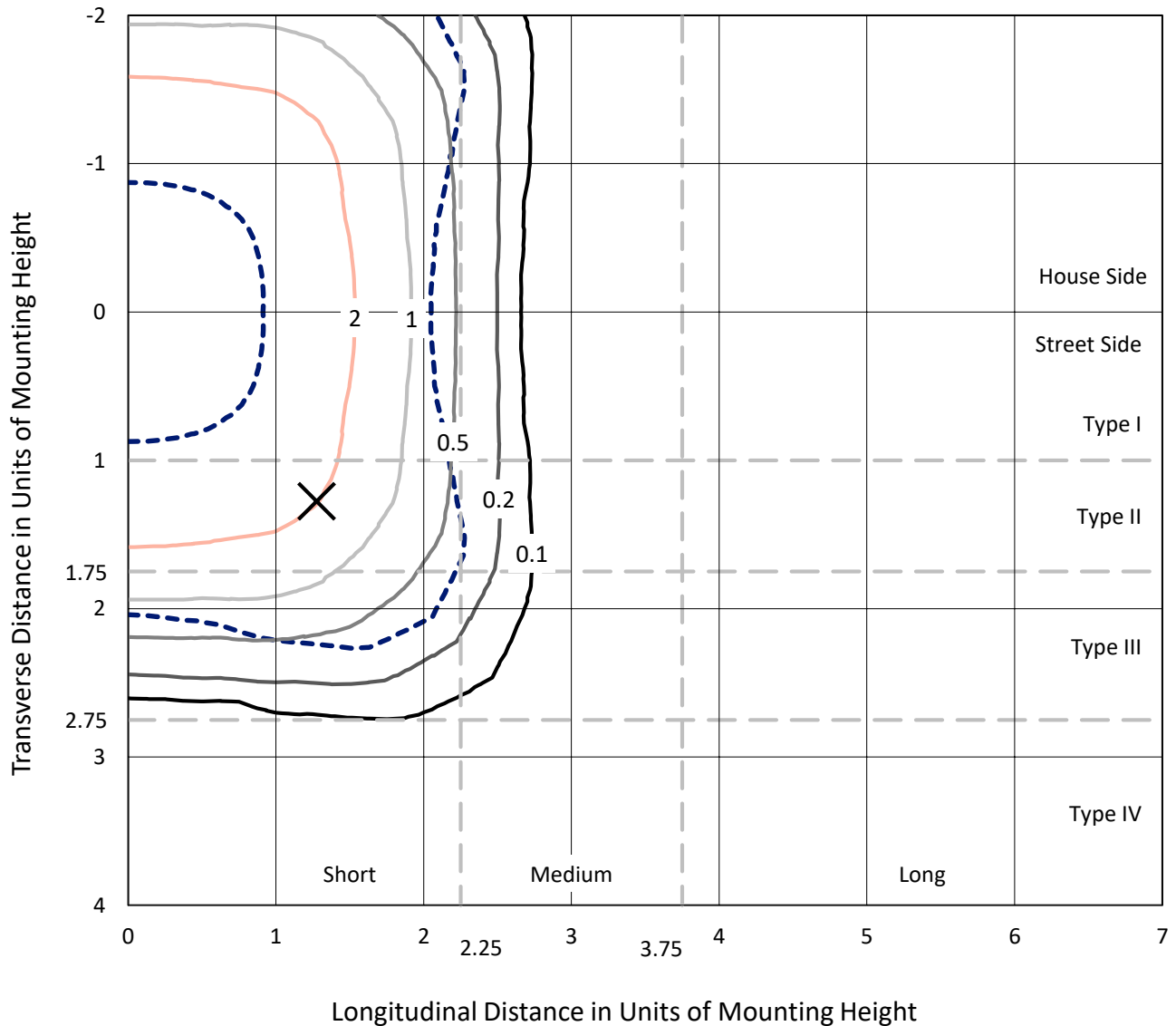


REPORT NUMBER: P232776

CATALOG NUMBER: CST-8-3-D-U-T5N-7050

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

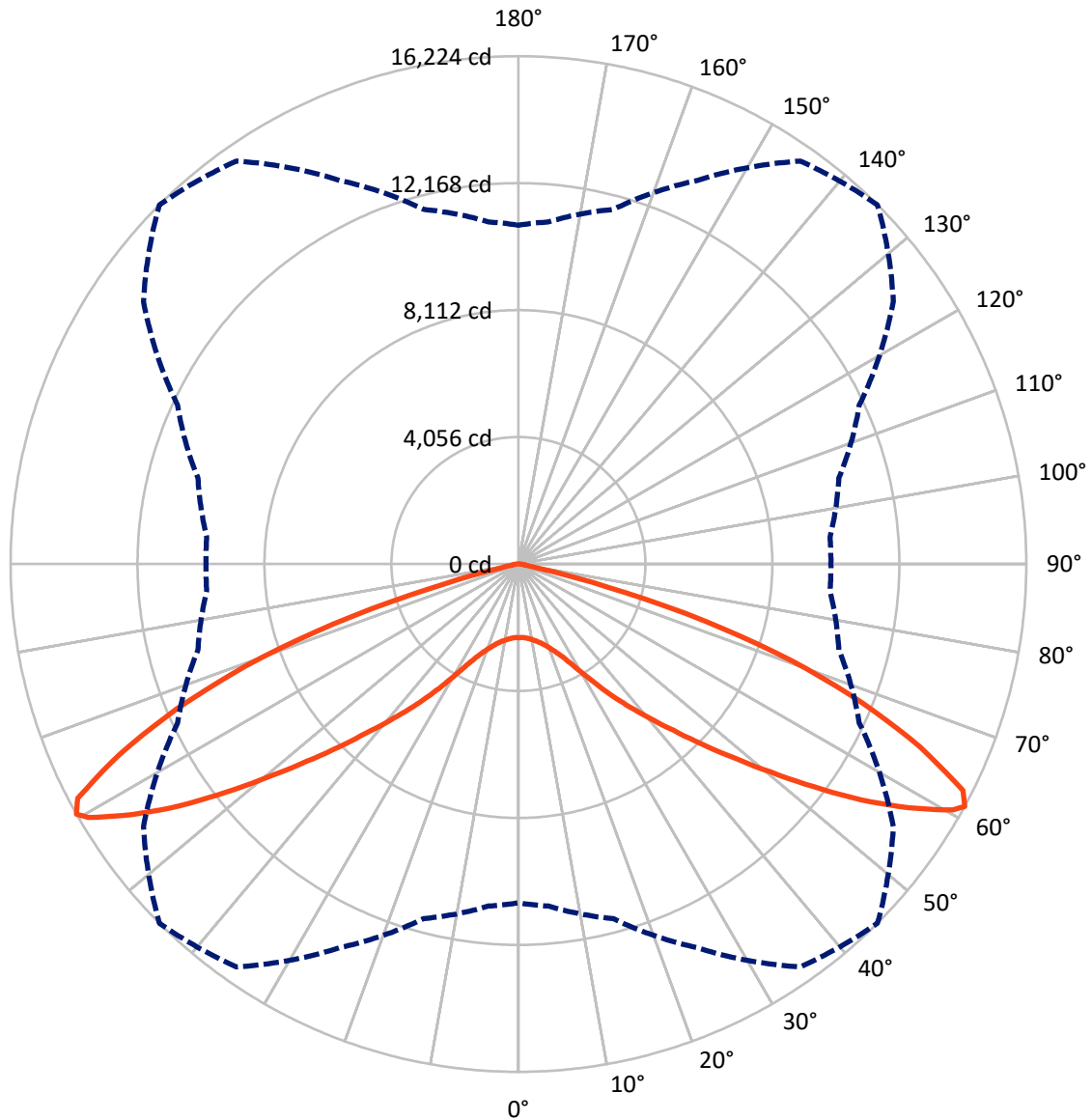


Based on 30 foot mounting height. Maximum calculated value = 3.8 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P232776

CATALOG NUMBER: CST-8-3-D-U-T5N-7050

Luminous Intensity Polar Plot



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

REPORT NUMBER: P232776

CATALOG NUMBER: CST-8-3-D-U-T5N-7050

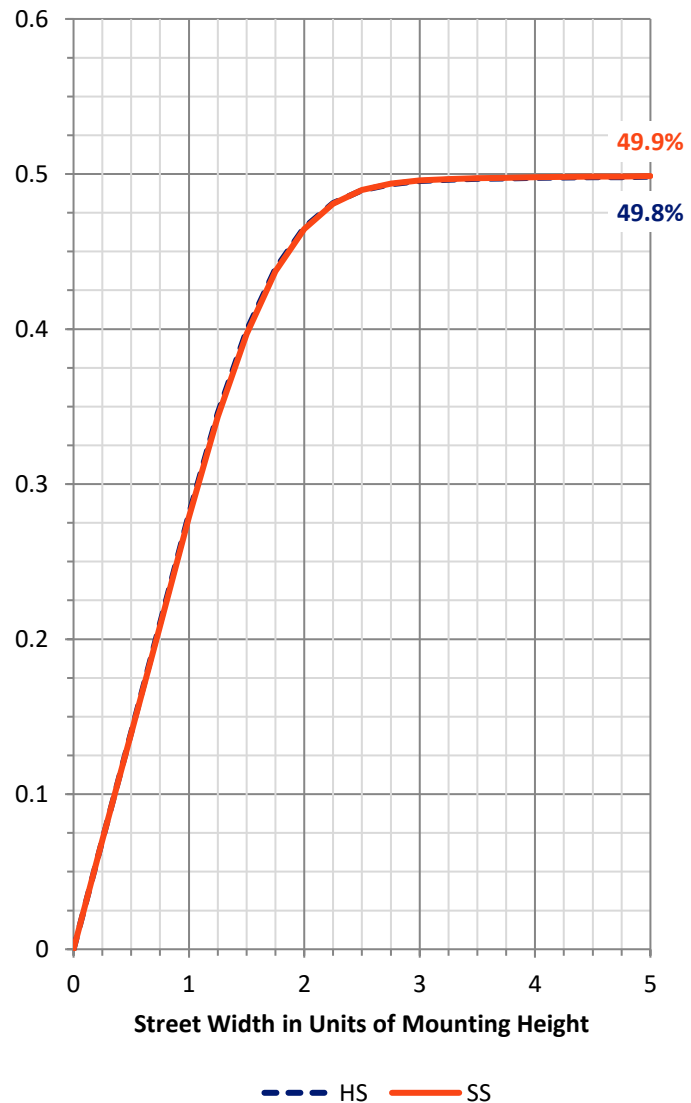
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17493.5	0.0	17493.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	17493.5	0.0	17493.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	34987.0	0.0	34987.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.1	0.7
10°-20°	753.9	2.2
20°-30°	1608.6	4.6
30°-40°	3503.7	10.0
40°-50°	6775.6	19.4
50°-60°	10759.8	30.8
60°-70°	9703.1	27.7
70°-80°	1518.7	4.3
80°-90°	133.5	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°	34987.0	100.0
0°-180°	34987.0	100.0

Coefficient of Utilization



REPORT NUMBER: P232776

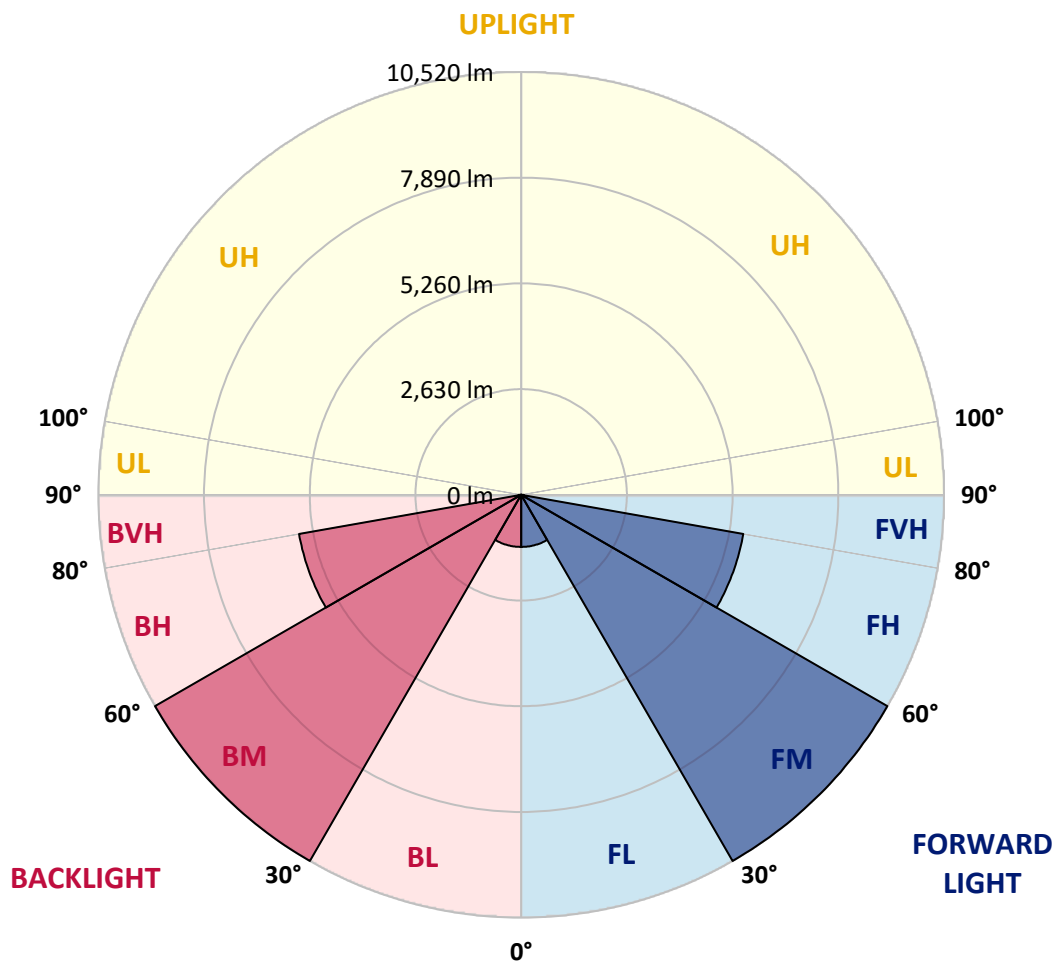
CATALOG NUMBER: CST-8-3-D-U-T5N-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1296.3	3.7			
FM	(30°-60°)	10519.5	30.1			
FH	(60°-80°)	5610.9	16.0			G3/7500
FVH	(80°-90°)	66.7	0.2			G1/100
BL	(0°-30°)	1296.3	3.7	B3/2500		
BM	(30°-60°)	10519.5	30.1	B5		
BH	(60°-80°)	5610.9	16.0	B5		G3/7500
BVH	(80°-90°)	66.7	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





REPORT NUMBER: P232776

CATALOG NUMBER: CST-8-3-D-U-T5N-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2355.1	2355.1	2355.1	2355.1	2355.1	2355.1	2355.1	2355.1	2355.1	2355.1	2355.1
2.5°	2371.4	2366.3	2370.3	2373.4	2337.9	2347.0	2346.0	2370.3	2365.3	2376.4	2382.5
5°	2387.6	2379.5	2384.5	2392.6	2359.2	2371.4	2371.4	2393.7	2385.5	2396.7	2407.8
7.5°	2417.0	2408.9	2414.9	2425.1	2393.7	2406.8	2407.8	2434.2	2423.0	2432.2	2449.4
10°	2465.6	2460.5	2462.6	2471.7	2442.3	2458.5	2458.5	2486.9	2474.7	2484.9	2506.1
12.5°	2522.4	2520.3	2522.4	2534.5	2507.2	2523.4	2523.4	2550.7	2542.6	2554.8	2575.1
15°	2597.3	2595.3	2596.3	2612.5	2590.3	2605.5	2608.5	2636.9	2634.8	2648.0	2666.3
17.5°	2703.8	2703.8	2702.7	2716.9	2702.7	2717.9	2724.0	2754.4	2766.6	2782.8	2793.9
20°	2865.9	2856.8	2851.7	2858.8	2847.7	2863.9	2874.0	2923.7	2943.9	2969.3	2978.4
22.5°	3077.7	3065.5	3049.3	3042.2	3027.0	3048.3	3068.6	3139.5	3168.9	3210.5	3220.6
25°	3369.6	3349.3	3318.9	3290.5	3256.1	3286.5	3324.0	3421.2	3482.0	3536.8	3544.9
27.5°	3768.8	3738.4	3691.8	3637.1	3576.3	3613.8	3668.5	3810.4	3893.5	3980.6	3993.8
30°	4283.6	4278.6	4205.6	4108.3	4027.3	4048.5	4116.4	4291.8	4423.5	4513.7	4539.0
32.5°	4970.7	4965.7	4843.0	4678.9	4563.3	4577.5	4640.4	4834.9	4999.1	5146.1	5151.1
35°	5789.6	5773.3	5601.1	5374.1	5188.6	5172.4	5234.2	5427.8	5651.7	5823.0	5840.2
37.5°	6724.9	6698.6	6500.0	6156.4	5869.6	5802.7	5846.3	6089.5	6349.0	6542.5	6561.8
40°	7641.0	7620.8	7399.9	7077.6	6658.0	6488.8	6491.8	6803.0	7087.7	7267.1	7306.6
42.5°	8523.7	8539.9	8328.1	7999.8	7561.0	7259.0	7263.0	7565.0	7859.9	8046.4	8098.1
45°	9429.7	9415.5	9216.9	8935.2	8530.8	8196.4	8082.9	8384.9	8677.8	8830.8	8886.5
47.5°	10171.5	10146.2	10012.4	9863.4	9563.5	9234.1	9034.5	9244.2	9445.9	9549.3	9606.0
50°	10818.1	10797.8	10784.6	10721.8	10654.9	10442.1	10113.7	10100.6	10144.1	10166.4	10218.1
52.5°	11365.3	11364.3	11435.2	11589.3	11754.4	11828.4	11259.9	10892.0	10742.1	10631.6	10650.8
55°	11777.7	11772.7	11974.3	12386.8	12970.5	13304.9	12465.8	11577.1	11181.9	10968.0	10966.0
57.5°	11989.5	11998.7	12408.1	13155.0	14237.3	14693.3	13625.2	12206.4	11529.5	11204.2	11200.1
60°	11430.2	11468.7	12271.3	13631.3	15357.1	15953.0	14574.7	12337.1	11152.5	10606.3	10592.1
61°	10824.1	10969.1	11728.1	13522.8	15711.8	16223.5	14620.3	12012.9	10597.1	9994.2	9981.0
62.5°	9491.5	9627.3	10788.7	13252.2	15687.4	15939.8	14360.9	11430.2	9725.6	9053.7	9026.4
65°	6887.1	7047.2	8297.7	11741.3	14260.6	14110.6	13062.7	10092.5	8155.9	7399.9	7365.4
67.5°	3462.8	3667.5	5071.1	8520.7	11586.2	11871.0	11152.5	7990.7	5780.4	4364.7	4360.7
70°	894.8	982.0	1828.2	4481.3	8355.5	9298.0	8503.4	4629.2	2247.7	1355.9	1271.8
72.5°	250.3	262.5	496.6	1632.6	4751.8	6229.4	4610.0	1618.4	506.7	288.8	264.5
75°	176.3	179.4	197.6	413.5	1794.7	2907.4	1485.6	349.6	202.7	191.5	191.5
77.5°	157.1	159.1	171.3	222.9	376.0	653.6	284.8	226.0	178.4	172.3	170.3
80°	166.2	168.2	175.3	215.9	220.9	235.1	197.6	195.6	177.3	181.4	179.4
82.5°	178.4	182.4	191.5	220.9	189.5	190.5	162.1	161.1	157.1	178.4	179.4
85°	158.1	165.2	172.3	193.6	156.1	127.7	132.8	105.4	112.5	133.8	128.7
87.5°	88.2	87.2	84.1	88.2	79.0	63.8	53.7	48.6	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)