

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: P233972

Luminaire Tested: **CST-8-4-D-U-T1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233972  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-24)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-8-4-D-U-T1  
Description: CELESTEON HIGH MAST LUMINAIRE  
(8) 70 CRI, 4000K LEDS AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 46220 lumens  
Efficiency: N/A  
Efficacy: 142.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type V - Medium - Semi-Cutoff  
BUG Rating: B5 - U0 - G4

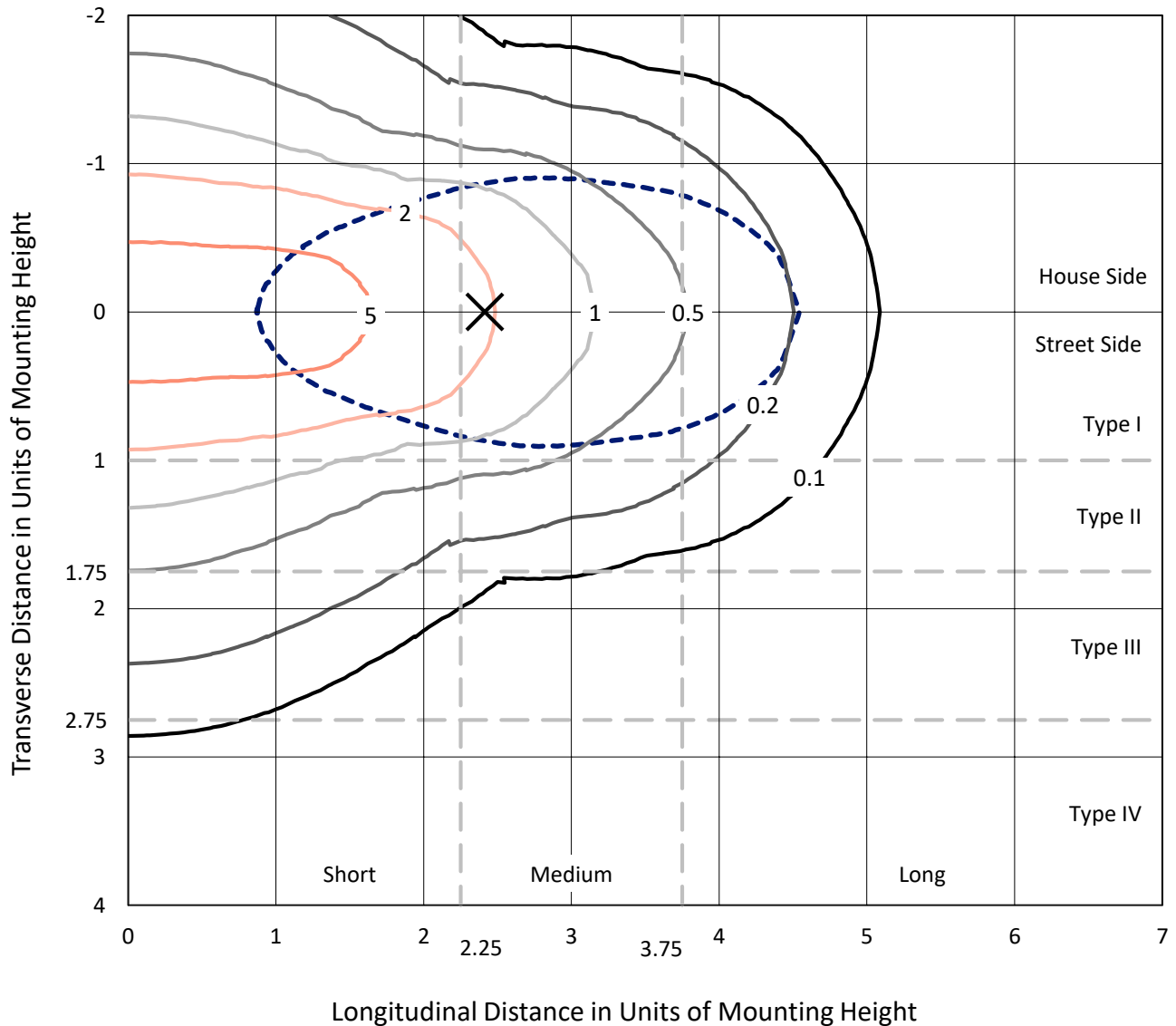
Input Watts (W): 325  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P233972  
 CATALOG NUMBER: CST-8-4-D-U-T1

### Iso-Footcandle Lines of Horizontal Illumination

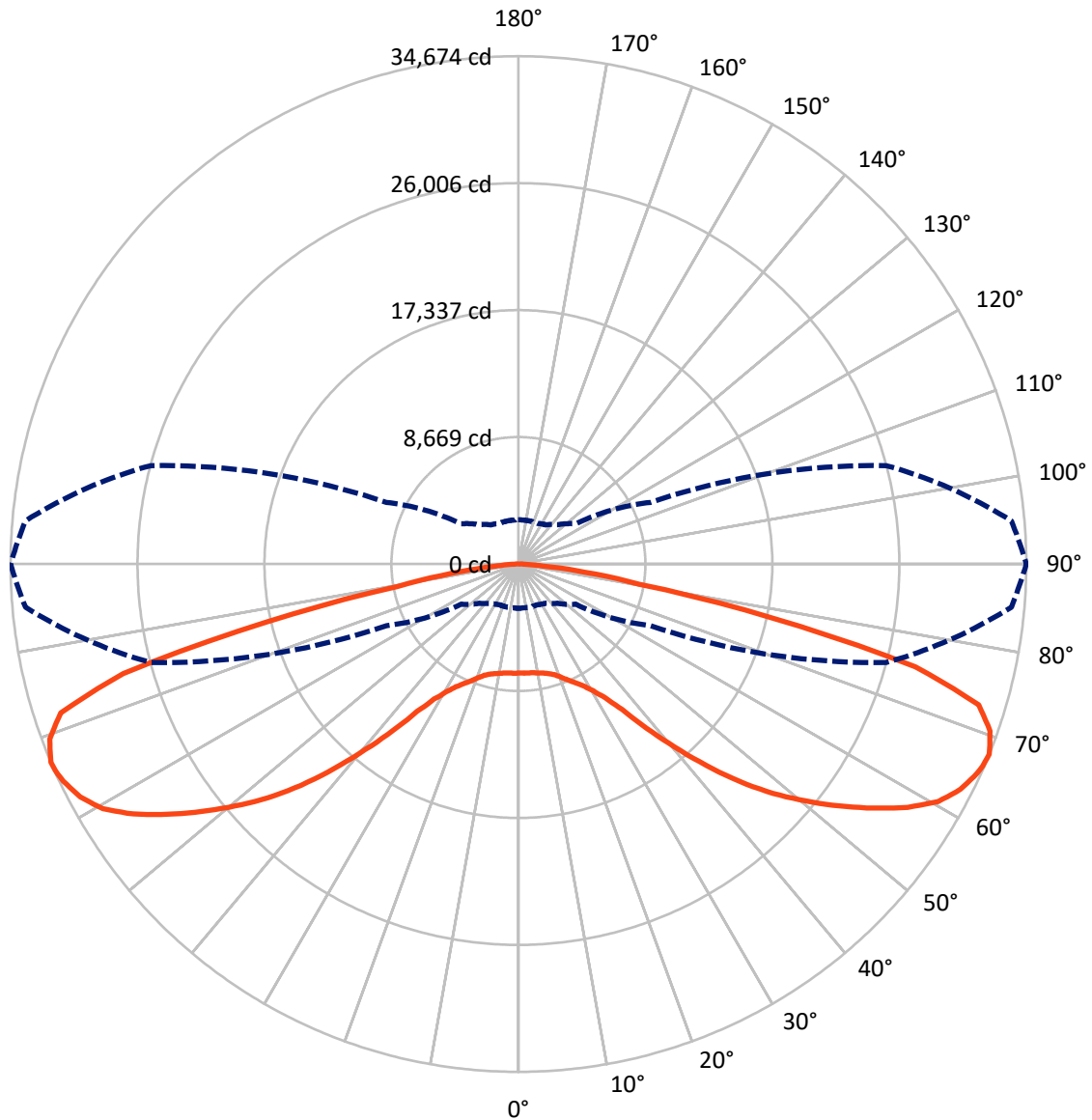
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.3 fc  
 Type V - Medium - Semi-Cutoff

REPORT NUMBER: P233972  
CATALOG NUMBER: CST-8-4-D-U-T1

### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P233972

CATALOG NUMBER: CST-8-4-D-U-T1

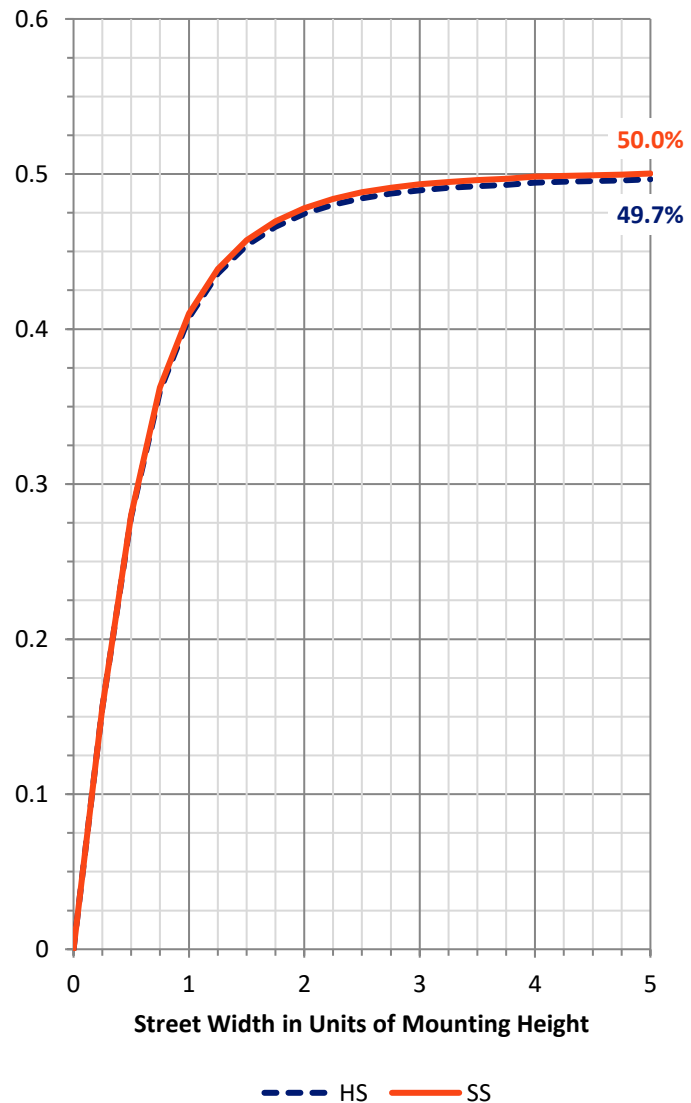
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	23110.0	0.0	23110.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	23110.0	0.0	23110.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	46220.0	0.0	46220.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	707.5	1.5
10°-20°	2104.8	4.6
20°-30°	3482.7	7.5
30°-40°	5102.7	11.0
40°-50°	7507.1	16.2
50°-60°	9735.0	21.1
60°-70°	10346.3	22.4
70°-80°	6386.8	13.8
80°-90°	847.2	1.8
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°	46220.0	100.0
0°-180°	46220.0	100.0



REPORT NUMBER: P233972

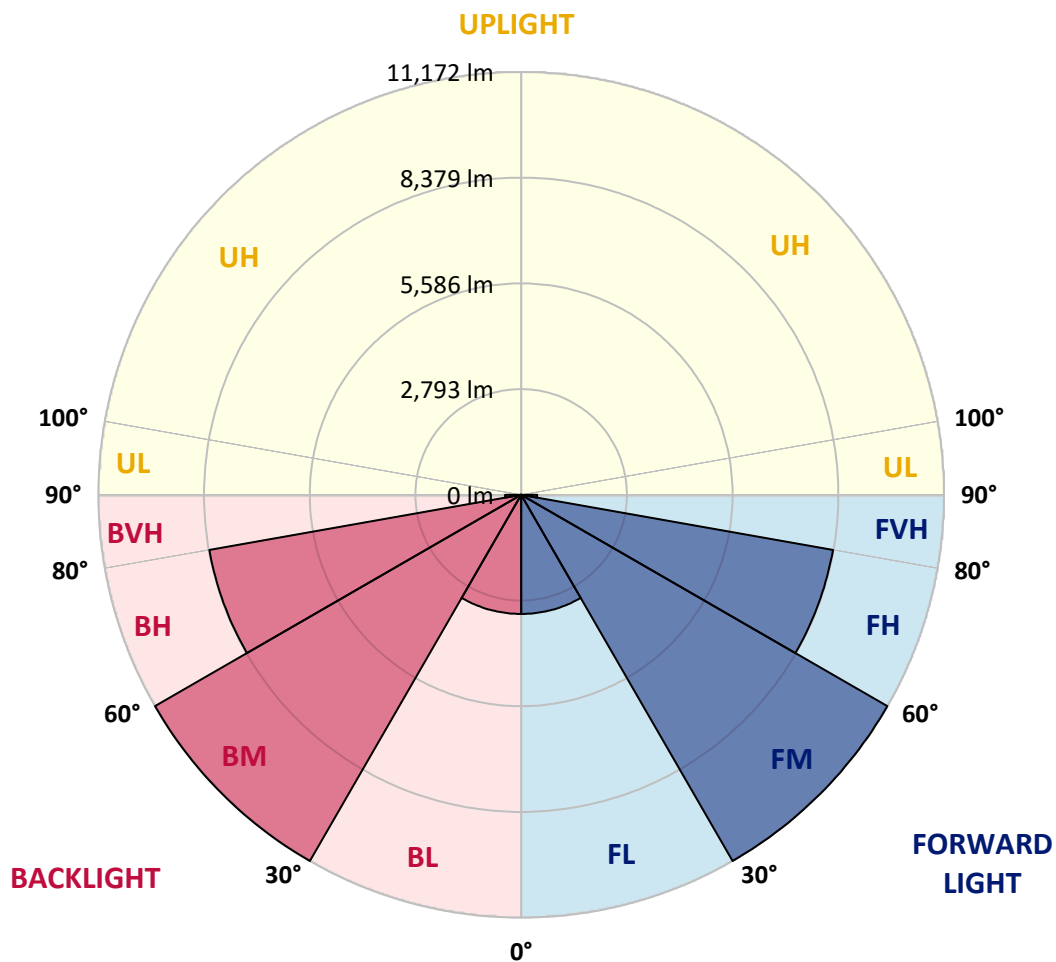
CATALOG NUMBER: CST-8-4-D-U-T1

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3147.5	6.8			
FM	(30°-60°)	11172.4	24.2			
FH	(60°-80°)	8366.5	18.1			G4/12000
FVH	(80°-90°)	423.6	0.9			G3/500
BL	(0°-30°)	3147.5	6.8	B4/5000		
BM	(30°-60°)	11172.4	24.2	B5		
BH	(60°-80°)	8366.5	18.1	B5		G4/12000
BVH	(80°-90°)	423.6	0.9			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G4**

Type V Medium





REPORT NUMBER: P233972

CATALOG NUMBER: CST-8-4-D-U-T1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7443.4	7443.4	7443.4	7443.4	7443.4	7443.4	7443.4	7443.4	7443.4	7443.4	7443.4
2.5°	7464.2	7440.6	7450.3	7484.9	7358.9	7421.2	7399.1	7454.5	7425.4	7450.3	7462.8
5°	7411.5	7382.5	7396.3	7461.4	7346.5	7410.2	7393.5	7455.9	7418.5	7453.1	7466.9
7.5°	7365.8	7335.4	7360.3	7414.3	7327.1	7397.7	7383.8	7468.3	7437.8	7482.2	7496.0
10°	7336.8	7303.5	7327.1	7386.6	7293.8	7404.6	7392.1	7504.3	7489.1	7550.0	7566.6
12.5°	7264.7	7230.1	7246.7	7325.7	7284.1	7399.1	7429.5	7558.3	7554.2	7627.6	7645.6
15°	7136.0	7101.3	7123.5	7228.7	7244.0	7403.2	7497.4	7649.7	7674.7	7748.0	7763.3
17.5°	6973.9	6949.0	6982.2	7122.1	7217.7	7460.0	7595.7	7789.6	7850.5	7925.3	7946.1
20°	6752.4	6738.5	6798.1	6989.2	7172.0	7501.6	7713.4	7986.2	8097.0	8218.9	8234.1
22.5°	6450.5	6433.9	6558.5	6827.1	7090.3	7511.2	7828.4	8189.8	8394.8	8551.2	8591.4
25°	6111.2	6105.7	6276.0	6629.1	6979.5	7504.3	7940.5	8407.2	8720.2	8926.5	8970.8
27.5°	5777.5	5794.1	6000.4	6417.2	6888.1	7519.6	8069.3	8685.6	9127.3	9384.9	9404.3
30°	5493.6	5507.4	5730.4	6208.1	6800.8	7537.6	8228.6	9017.9	9634.2	9981.8	10038.5
32.5°	5226.3	5258.1	5485.3	5981.0	6703.9	7572.2	8434.9	9451.4	10255.9	10804.3	10875.0
35°	5006.1	5033.8	5255.4	5749.8	6550.2	7599.9	8707.7	9999.8	11182.4	12095.0	12204.4
37.5°	4810.9	4844.1	5035.2	5536.5	6367.4	7609.6	8979.1	10675.5	12437.0	13889.7	14230.4
40°	4669.6	4695.9	4860.7	5323.2	6170.7	7565.3	9289.3	11431.7	13846.8	16032.0	16405.9
42.5°	4553.3	4575.4	4711.1	5114.1	5949.2	7478.0	9578.8	12185.0	15336.8	18301.7	18789.2
45°	4435.6	4441.1	4571.3	4934.1	5724.8	7339.5	9796.2	12906.5	16905.8	20617.1	21187.7
47.5°	4330.3	4323.4	4425.9	4756.8	5483.9	7106.9	9880.7	13504.7	18430.5	22787.2	23410.3
50°	4232.0	4202.9	4291.5	4587.9	5249.8	6773.1	9774.0	13918.8	20034.1	24883.8	25436.3
52.5°	4085.2	4071.4	4155.8	4421.7	5015.8	6374.3	9422.3	14137.6	21744.4	26869.6	27447.1
55°	3953.7	3944.0	4031.2	4252.8	4785.9	5968.6	8815.7	14078.0	23429.7	28784.8	29424.6
57.5°	3808.2	3801.3	3883.0	4068.6	4532.5	5591.9	8065.2	13693.1	24935.0	30438.3	31342.5
60°	3665.6	3669.8	3722.4	3881.6	4274.9	5176.4	7209.4	13022.8	26135.6	31935.3	32922.6
62.5°	3499.4	3495.3	3534.1	3667.0	3980.0	4727.8	6366.0	12093.6	26839.1	33242.5	33874.0
65°	3275.1	3259.9	3304.2	3388.6	3622.7	4268.0	5535.1	10969.1	26857.1	33892.0	34429.3
66°	3179.5	3162.9	3203.1	3262.6	3482.8	4082.4	5229.1	10492.8	26581.6	33911.4	34578.9
67.5°	3031.4	3012.0	3038.3	3066.0	3264.0	3786.1	4780.4	9952.7	25977.8	33789.5	34674.4
70°	2663.0	2665.8	2693.5	2683.8	2784.9	3126.9	3948.1	8950.1	23065.5	33296.5	34162.0
72.5°	2073.1	2049.5	2009.4	1970.6	2019.1	2319.6	2989.8	7511.2	18887.5	31170.8	32853.4
75°	1337.7	1333.6	1332.2	1379.3	1386.2	1589.8	2309.9	6060.0	14723.4	25580.3	28002.4
77.5°	836.4	829.5	889.1	1004.0	1022.0	1027.5	1515.0	4605.9	10643.7	16368.5	17638.4
80°	599.6	599.6	603.8	619.0	716.0	731.2	1046.9	2891.5	6053.0	7979.3	8383.7
82.5°	454.2	447.3	448.7	455.6	463.9	498.5	630.1	1283.7	2417.9	4043.7	4575.4
85°	328.2	337.9	354.5	342.0	308.8	313.0	357.3	441.8	929.2	1566.2	1693.6
87.5°	119.1	137.1	141.3	146.8	141.3	142.6	146.8	138.5	188.3	386.4	445.9
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)