

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: P232768

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232768  
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  
Description: CELESTEON HIGH MAST LUMINAIRE  
(8) 70 CRI, 4000K LEDS AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 34635 lumens  
Efficiency: N/A  
Efficacy: 153.3 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G3

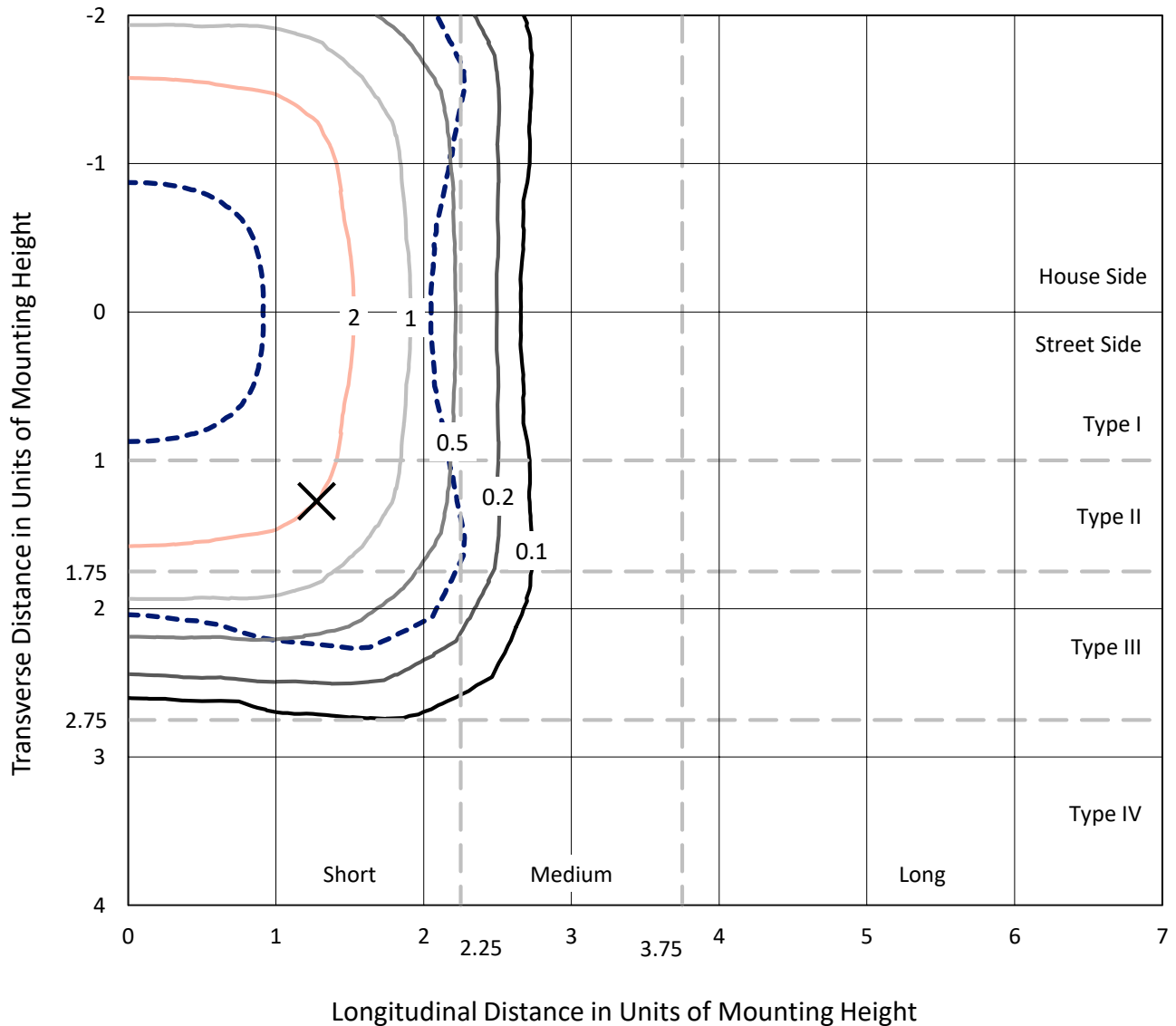
Input Watts (W): 226  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P232768  
 CATALOG NUMBER: CST-8-3-D-U-T5N

### Iso-Footcandle Lines of Horizontal Illumination

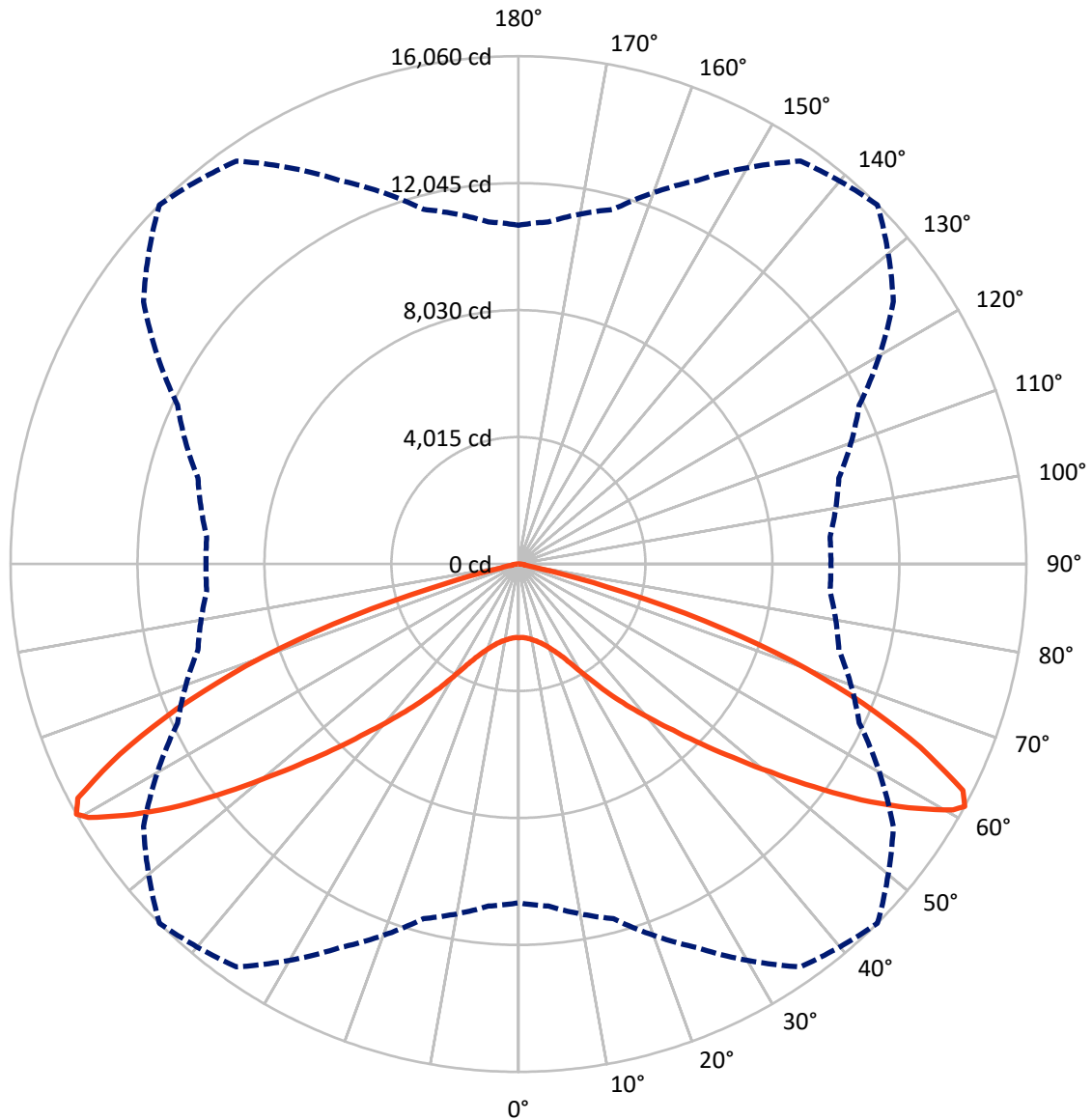
× Max cd  
 - - - 1/2 Max cd



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

REPORT NUMBER: P232768  
CATALOG NUMBER: CST-8-3-D-U-T5N

### Luminous Intensity Polar Plot



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



REPORT NUMBER: P232768

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

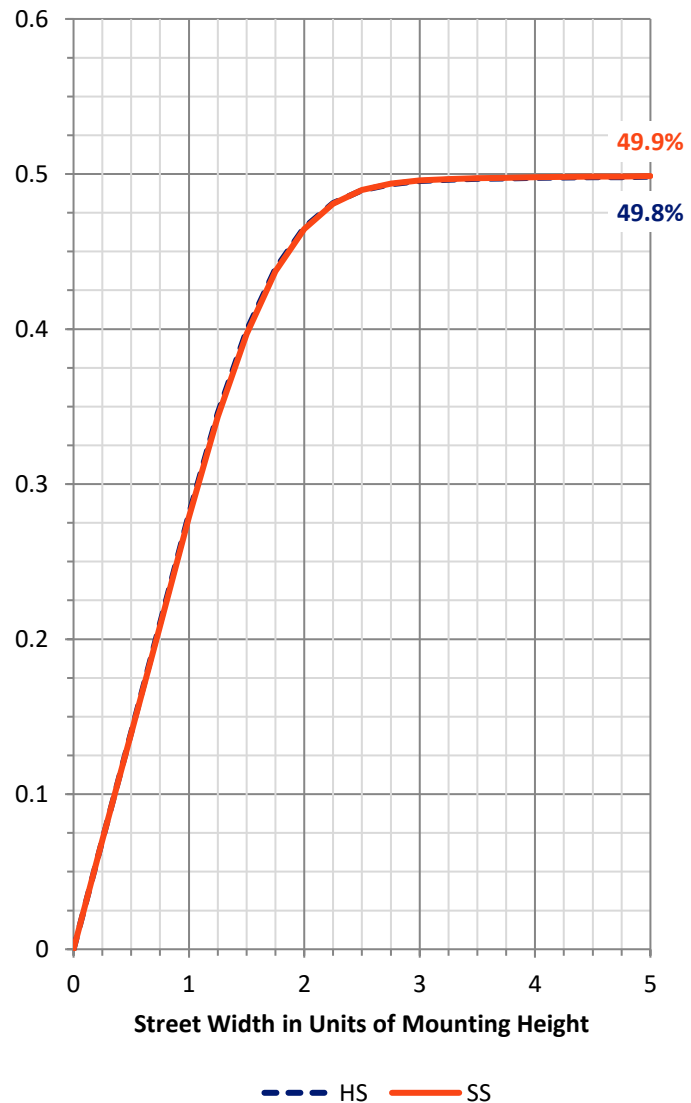
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17317.5	0.0	17317.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	17317.5	0.0	17317.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	34635.0	0.0	34635.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.8	0.7
10°-20°	746.3	2.2
20°-30°	1592.4	4.6
30°-40°	3468.5	10.0
40°-50°	6707.4	19.4
50°-60°	10651.6	30.8
60°-70°	9605.5	27.7
70°-80°	1503.5	4.3
80°-90°	132.1	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°	34635.0	100.0
0°-180°	34635.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P232768

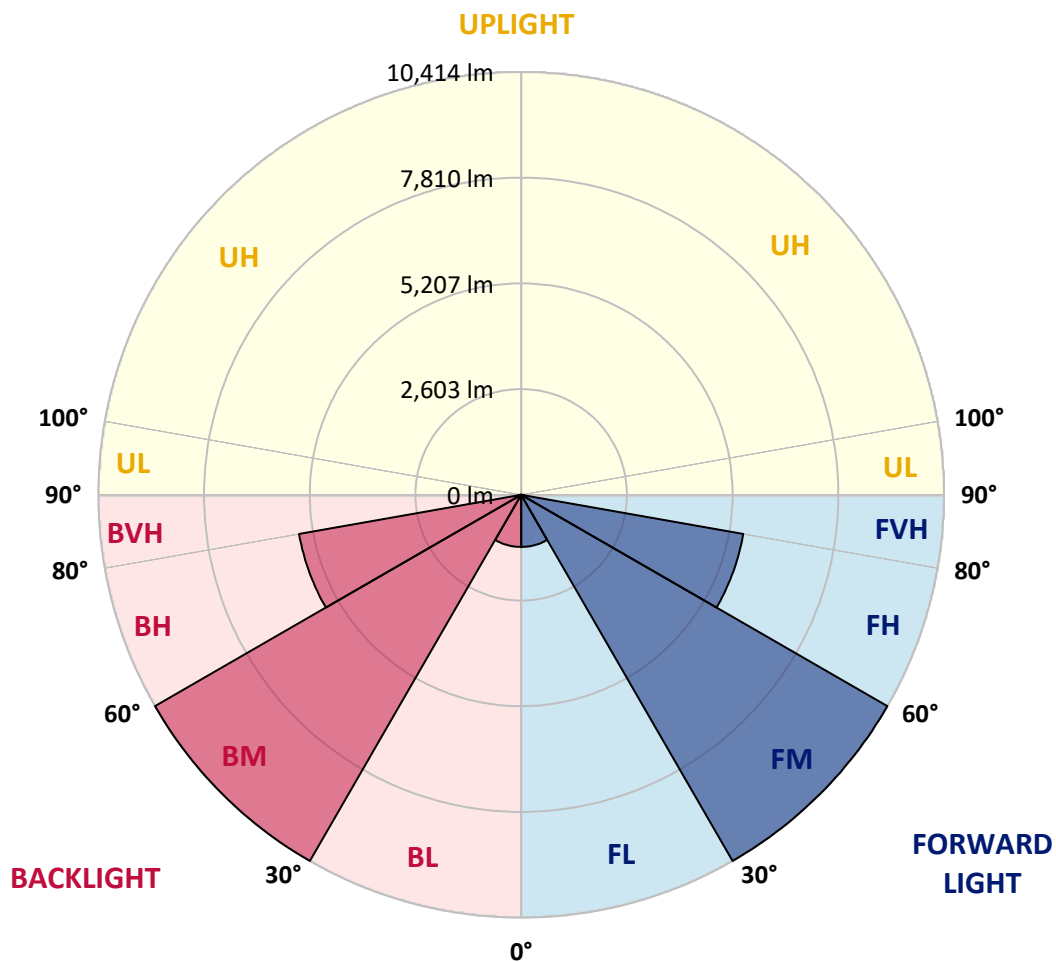
CATALOG NUMBER: CST-8-3-D-U-T5N

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1283.3	3.7			
FM	(30°-60°)	10413.7	30.1			
FH	(60°-80°)	5554.5	16.0			G3/7500
FVH	(80°-90°)	66.1	0.2			G1/100
BL	(0°-30°)	1283.3	3.7	B3/2500		
BM	(30°-60°)	10413.7	30.1	B5		
BH	(60°-80°)	5554.5	16.0	B5		G3/7500
BVH	(80°-90°)	66.1	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: P232768

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

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2331.4	2331.4	2331.4	2331.4	2331.4	2331.4	2331.4	2331.4	2331.4	2331.4	2331.4
2.5°	2347.5	2342.5	2346.5	2349.5	2314.4	2323.4	2322.4	2346.5	2341.5	2352.5	2358.5
5°	2363.6	2355.5	2360.5	2368.6	2335.5	2347.5	2347.5	2369.6	2361.5	2372.6	2383.6
7.5°	2392.6	2384.6	2390.6	2400.7	2369.6	2382.6	2383.6	2409.7	2398.7	2407.7	2424.7
10°	2440.8	2435.8	2437.8	2446.8	2417.7	2433.8	2433.8	2461.9	2449.8	2459.9	2480.9
12.5°	2497.0	2495.0	2497.0	2509.0	2481.9	2498.0	2498.0	2525.1	2517.0	2529.1	2549.1
15°	2571.2	2569.2	2570.2	2586.3	2564.2	2579.2	2582.3	2610.3	2608.3	2621.4	2639.4
17.5°	2676.6	2676.6	2675.5	2689.6	2675.5	2690.6	2696.6	2726.7	2738.8	2754.8	2765.8
20°	2837.1	2828.0	2823.0	2830.0	2819.0	2835.1	2845.1	2894.2	2914.3	2939.4	2948.4
22.5°	3046.7	3034.7	3018.6	3011.6	2996.6	3017.6	3037.7	3107.9	3137.0	3178.2	3188.2
25°	3335.7	3315.6	3285.5	3257.4	3223.3	3253.4	3290.5	3386.8	3447.0	3501.2	3509.2
27.5°	3730.9	3700.8	3654.7	3600.5	3540.3	3577.4	3631.6	3772.1	3854.3	3940.6	3953.6
30°	4240.5	4235.5	4163.3	4067.0	3986.7	4007.8	4075.0	4248.6	4379.0	4468.3	4493.4
32.5°	4920.7	4915.7	4794.3	4631.8	4517.4	4531.5	4593.7	4786.3	4948.8	5094.3	5099.3
35°	5731.3	5715.3	5544.7	5320.0	5136.4	5120.4	5181.6	5373.2	5594.9	5764.4	5781.5
37.5°	6657.3	6631.2	6434.6	6094.5	5810.6	5744.4	5787.5	6028.3	6285.1	6476.7	6495.8
40°	7564.2	7544.1	7325.4	7006.4	6591.1	6423.5	6426.5	6734.5	7016.4	7194.0	7233.1
42.5°	8438.0	8454.0	8244.3	7919.3	7484.9	7186.0	7190.0	7488.9	7780.9	7965.5	8016.6
45°	9334.8	9320.8	9124.2	8845.3	8445.0	8113.9	8001.6	8300.5	8590.4	8741.9	8797.1
47.5°	10069.2	10044.1	9911.7	9764.2	9467.2	9141.2	8943.6	9151.2	9350.9	9453.2	9509.4
50°	10709.2	10689.2	10676.1	10613.9	10547.7	10337.0	10012.0	9998.9	10042.1	10064.2	10115.3
52.5°	11250.9	11249.9	11320.2	11472.7	11636.2	11709.4	11146.6	10782.5	10634.0	10524.6	10543.7
55°	11659.3	11654.2	11853.9	12262.2	12840.0	13171.1	12340.4	11460.6	11069.4	10857.7	10855.7
57.5°	11868.9	11878.0	12283.2	13022.6	14094.0	14545.5	13488.1	12083.6	11413.5	11091.4	11087.4
60°	11315.2	11353.3	12147.8	13494.1	15202.6	15792.5	14428.1	12213.0	11040.3	10499.5	10485.5
61°	10715.2	10858.7	11610.1	13386.8	15553.7	16060.3	14473.2	11892.0	10490.5	9893.6	9880.6
62.5°	9396.0	9530.5	10680.1	13118.9	15529.6	15779.4	14216.4	11315.2	9627.8	8962.6	8935.6
65°	6817.8	6976.3	8214.2	11623.1	14117.1	13968.6	12931.3	9990.9	8073.8	7325.4	7291.3
67.5°	3428.0	3630.6	5020.0	8435.0	11469.6	11751.5	11040.3	7910.3	5722.3	4320.8	4316.8
70°	885.8	972.1	1809.8	4436.2	8271.4	9204.4	8417.9	4582.6	2225.1	1342.3	1259.0
72.5°	247.8	259.8	491.6	1616.2	4704.0	6166.7	4563.6	1602.1	501.6	285.9	261.8
75°	174.6	177.6	195.6	409.3	1776.7	2878.2	1470.7	346.1	200.6	189.6	189.6
77.5°	155.5	157.5	169.5	220.7	372.2	647.1	281.9	223.7	176.6	170.5	168.5
80°	164.5	166.5	173.6	213.7	218.7	232.7	195.6	193.6	175.6	179.6	177.6
82.5°	176.6	180.6	189.6	218.7	187.6	188.6	160.5	159.5	155.5	176.6	177.6
85°	156.5	163.5	170.5	191.6	154.5	126.4	131.4	104.3	111.4	132.4	127.4
87.5°	87.3	86.3	83.3	87.3	78.3	63.2	53.2	48.2	44.1	50.2	49.2
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)