

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: P510712

Luminaire Tested: **CST-CA8-230-727-U-T5**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510712  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-230-727-U-T5  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31314 lumens  
Efficiency: N/A  
Efficacy: 137.1 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G5

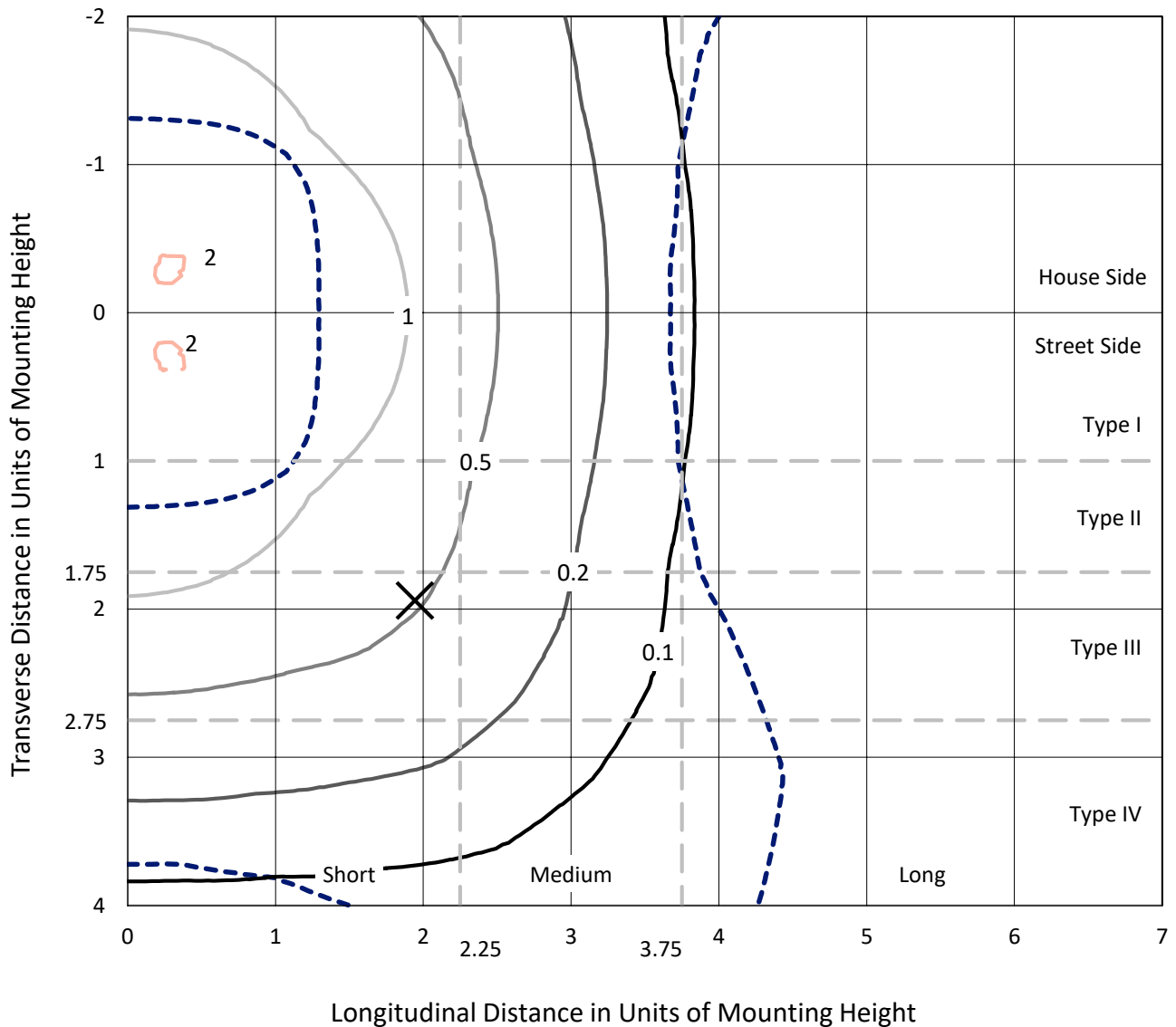
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

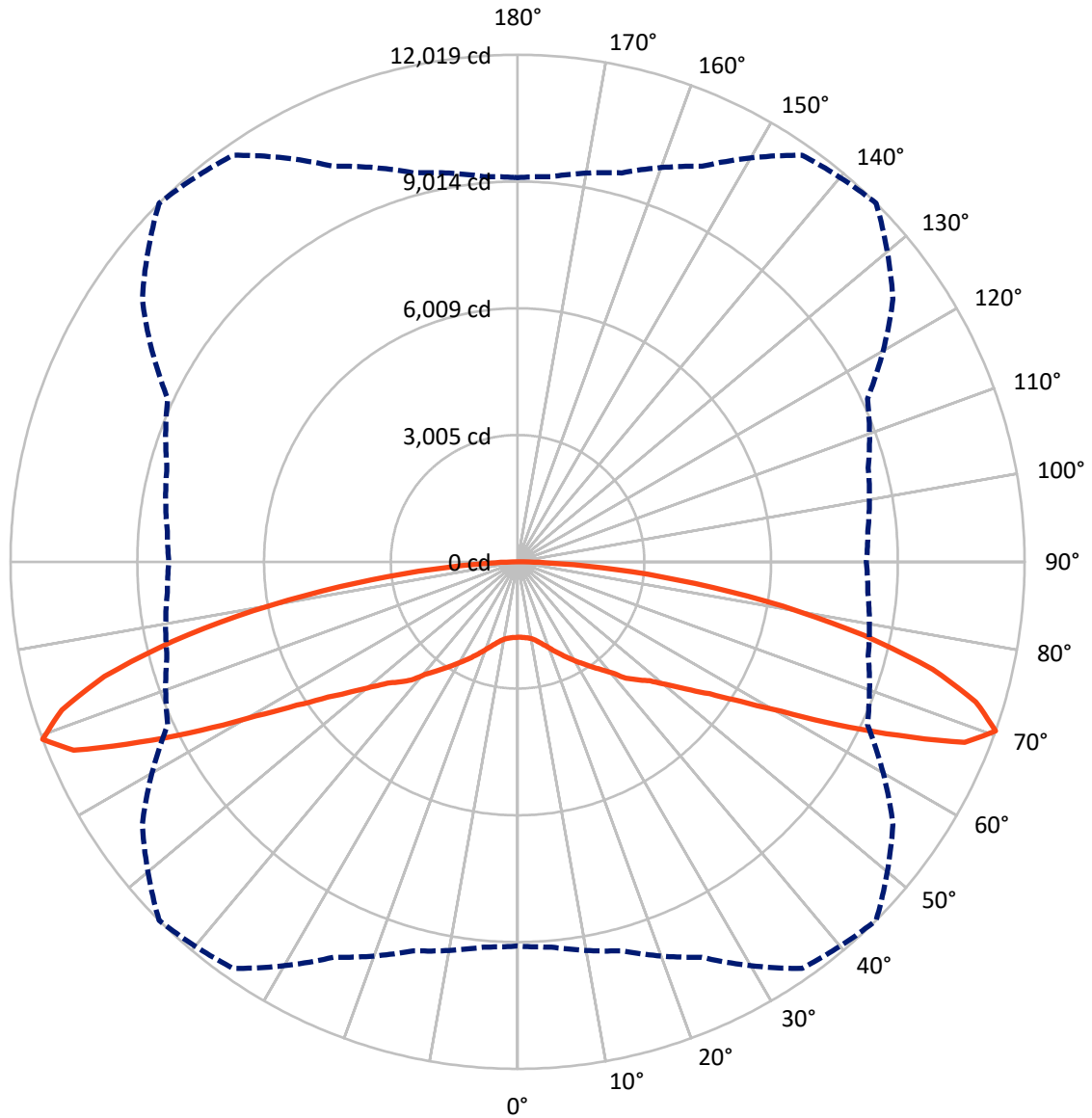
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 2 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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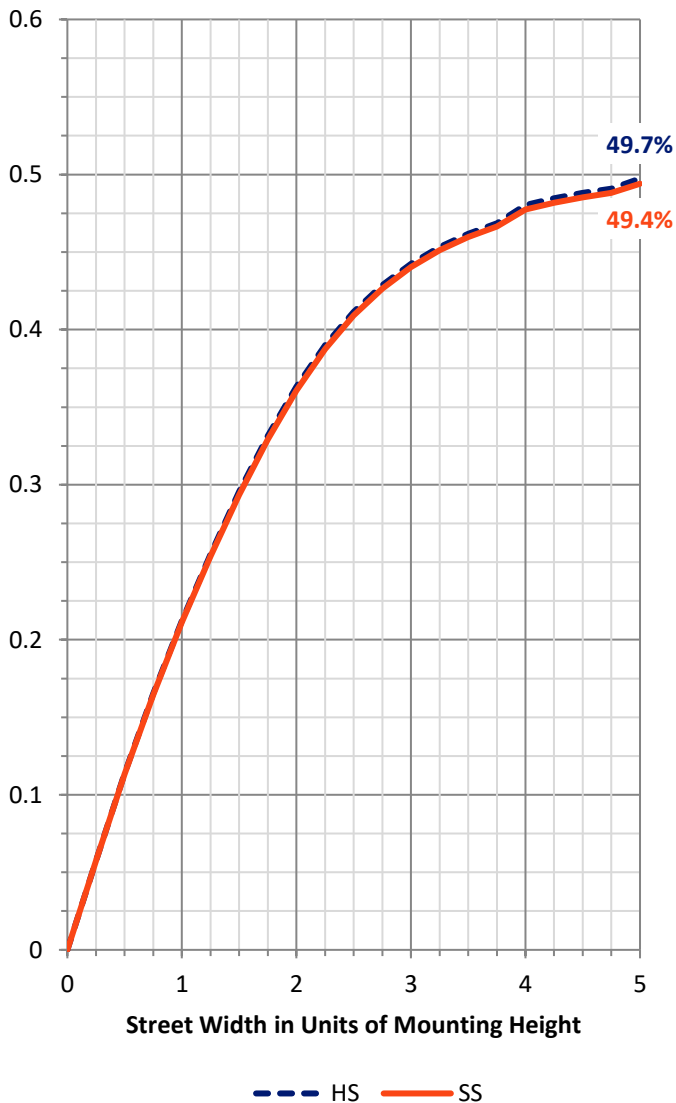
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	15657.0	0.0	15657.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	15657.0	0.0	15657.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	31314.0	0.0	31314.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.0	0.6
10°-20°	566.5	1.8
20°-30°	1121.5	3.6
30°-40°	1940.2	6.2
40°-50°	3228.1	10.3
50°-60°	5630.4	18.0
60°-70°	9320.9	29.8
70°-80°	7811.6	24.9
80°-90°	1520.7	4.9
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°	31314.0	100.0
0°-180°	31314.0	100.0

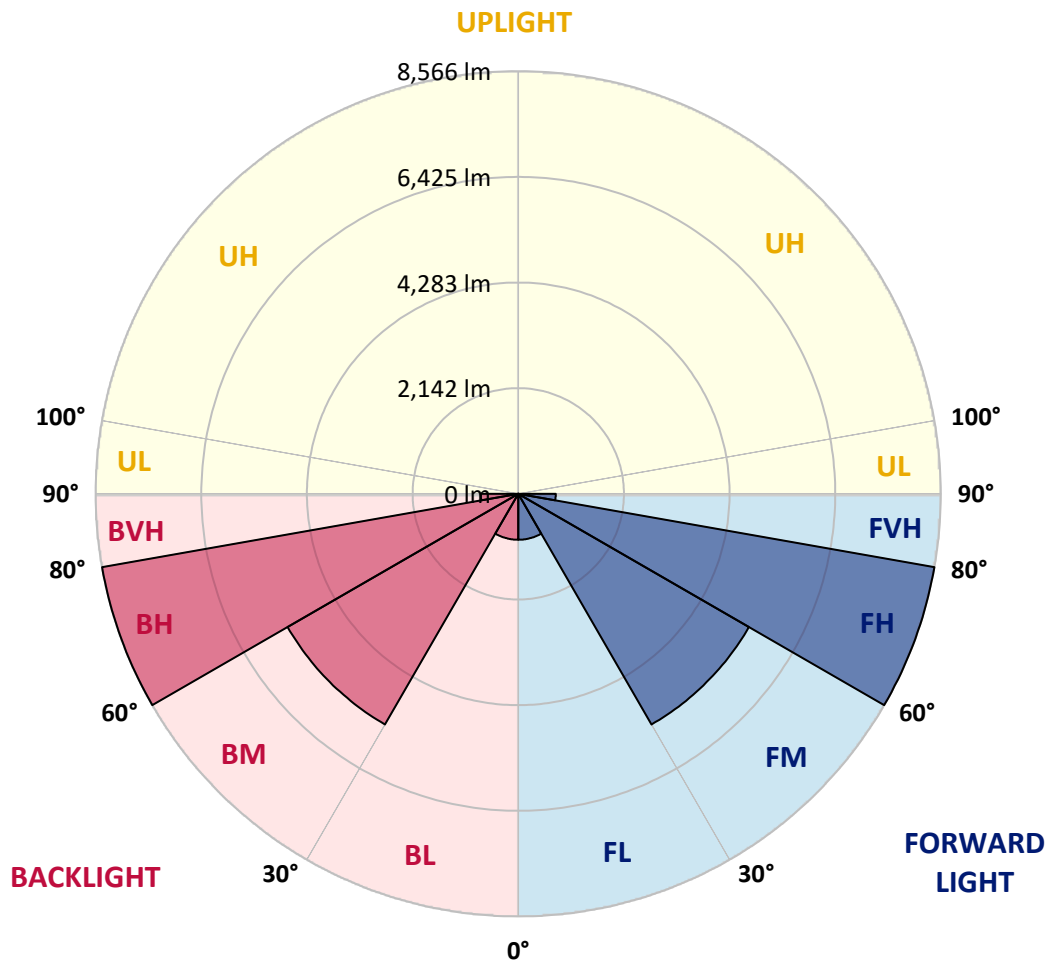


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	931.0	3.0			
FM (30°-60°)	5399.4	17.2			
FH (60°-80°)	8566.3	27.4			G4/12000
FVH (80°-90°)	760.3	2.4			G5
BL (0°-30°)	931.0	3.0	B2/1000		
BM (30°-60°)	5399.4	17.2	B4/8500		
BH (60°-80°)	8566.3	27.4	B5		G4/12000
BVH (80°-90°)	760.3	2.4			G5
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**  
 Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7
2.5°	1800.9	1795.3	1793.4	1791.6	1792.8	1792.2	1795.3	1796.5	1797.8	1803.3	1800.2
5°	1812.0	1807.7	1807.1	1804.6	1804.0	1804.0	1808.3	1808.9	1809.5	1813.3	1809.5
7.5°	1832.5	1828.1	1826.9	1825.7	1825.0	1822.6	1825.7	1824.4	1825.7	1827.5	1823.2
10°	1864.7	1859.8	1858.5	1855.4	1857.3	1853.6	1856.0	1852.9	1847.4	1848.6	1842.4
12.5°	1908.8	1904.4	1906.3	1905.7	1913.1	1911.2	1906.3	1900.1	1890.8	1884.6	1877.8
15°	1973.9	1967.1	1972.0	1977.0	1984.4	1987.5	1983.8	1967.1	1953.4	1943.5	1937.9
17.5°	2053.2	2042.1	2052.0	2061.9	2078.1	2081.2	2067.5	2047.0	2032.2	2027.8	2018.5
20°	2145.6	2143.8	2144.4	2160.5	2185.3	2189.7	2171.7	2147.5	2132.6	2133.2	2122.7
22.5°	2257.3	2247.4	2250.5	2266.6	2301.9	2313.7	2283.9	2257.3	2248.0	2250.5	2249.2
25°	2385.0	2375.7	2371.4	2378.8	2424.7	2445.2	2416.6	2385.6	2381.3	2386.9	2378.2
27.5°	2525.2	2516.5	2511.5	2515.2	2551.2	2589.7	2558.0	2532.0	2531.4	2539.4	2534.5
30°	2684.5	2671.5	2665.9	2670.3	2695.1	2732.3	2706.9	2691.4	2704.4	2710.0	2708.1
32.5°	2845.8	2839.6	2837.7	2836.5	2866.9	2887.9	2875.5	2878.6	2889.2	2914.6	2906.5
35°	3029.3	3011.4	3016.3	3020.0	3059.7	3061.6	3062.8	3068.4	3096.3	3132.3	3111.2
37.5°	3220.3	3216.0	3219.1	3208.6	3237.7	3249.5	3266.8	3285.4	3329.5	3371.0	3362.3
40°	3456.6	3448.5	3451.6	3439.2	3453.5	3462.8	3498.2	3538.5	3594.9	3639.5	3619.1
42.5°	3769.8	3749.3	3749.3	3753.0	3782.8	3772.9	3848.5	3859.7	3929.8	3967.6	3955.8
45°	4138.1	4130.7	4091.6	4025.9	3988.7	3988.1	4048.8	4139.4	4255.3	4334.1	4333.5
47.5°	4606.3	4583.4	4489.7	4331.6	4237.3	4214.4	4278.3	4454.4	4667.7	4790.5	4788.6
50°	5220.3	5191.1	5049.1	4803.5	4620.0	4563.5	4665.9	4894.1	5181.2	5344.9	5358.5
52.5°	5907.4	5909.8	5749.2	5377.8	5106.1	5004.4	5113.0	5439.2	5797.0	6021.5	6048.1
55°	6705.5	6686.2	6534.3	6113.2	5739.3	5521.0	5685.4	6117.6	6528.7	6699.9	6747.0
57.5°	7536.4	7461.4	7344.8	6951.0	6513.8	6234.8	6432.0	6854.9	7248.7	7467.0	7459.5
60°	8273.2	8223.5	8156.6	7842.8	7507.3	7188.5	7340.5	7698.3	8035.6	8167.7	8173.3
62.5°	9078.1	9036.5	8976.4	8804.6	8619.8	8501.4	8363.7	8529.3	8792.8	8937.3	8984.4
65°	9868.1	9853.2	9888.0	9861.9	9940.1	9922.7	9592.8	9488.6	9492.9	9452.0	9430.9
67.5°	9821.6	9816.0	10020.7	10428.7	11207.6	11428.4	10581.9	9639.3	9214.5	9106.6	9091.1
70°	9105.4	9165.5	9544.4	10343.1	11764.5	12018.7	10859.7	9148.8	8605.5	8335.2	8268.2
72.5°	7727.4	7845.3	8426.3	9602.7	11301.9	11360.2	10161.4	8410.8	7610.9	7288.4	7240.6
75°	5962.5	5977.4	6572.1	8067.3	10086.4	10159.6	9064.4	7054.6	6267.7	5866.4	5854.0
77.5°	3631.5	3842.9	4710.5	6048.7	8018.3	8399.0	7581.1	5619.0	4683.2	4327.9	4129.4
80°	1781.6	1878.4	2503.5	3824.3	5731.2	6369.4	5625.8	3886.4	2888.6	2437.7	2388.1
82.5°	811.1	862.6	1184.4	1999.3	3458.5	4249.1	3472.1	2225.6	1542.3	1206.2	1195.0
85°	315.0	313.2	479.4	839.0	1655.7	2352.8	1758.1	1061.7	705.7	524.6	494.9
87.5°	91.8	98.0	140.8	275.3	490.5	661.1	542.0	367.1	217.0	139.5	128.4
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)