

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: P232750

Luminaire Tested: **CST-10-9-D-U-T5**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232750  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-21)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-10-9-D-U-T5  
Description: CELESTEON HIGH MAST LUMINAIRE  
(10) 70 CRI, 4000K LEDS AND TYPE V OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 94376 lumens  
Efficiency: N/A  
Efficacy: 124.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B5 - U0 - G5

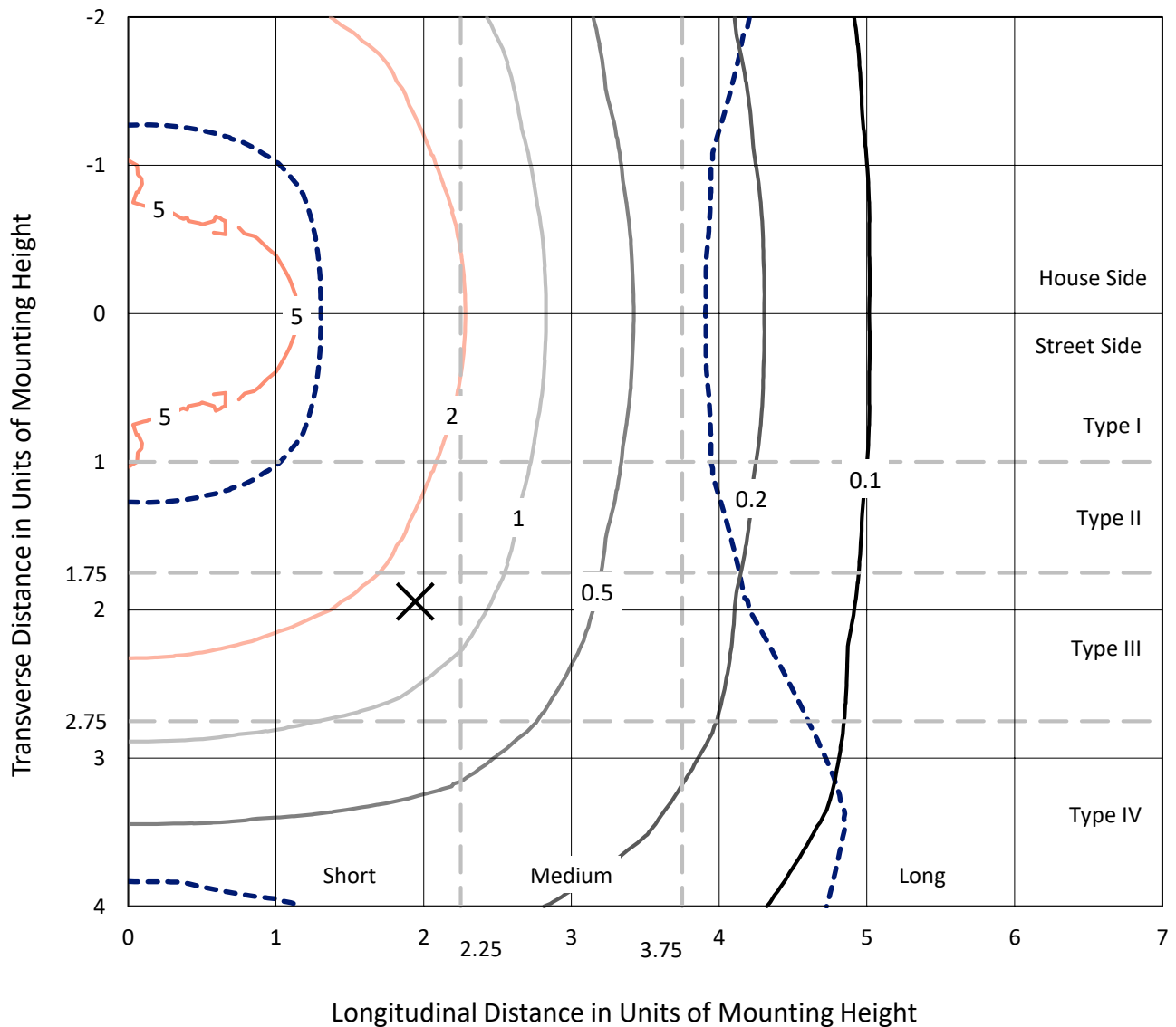
Input Watts (W): 760  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

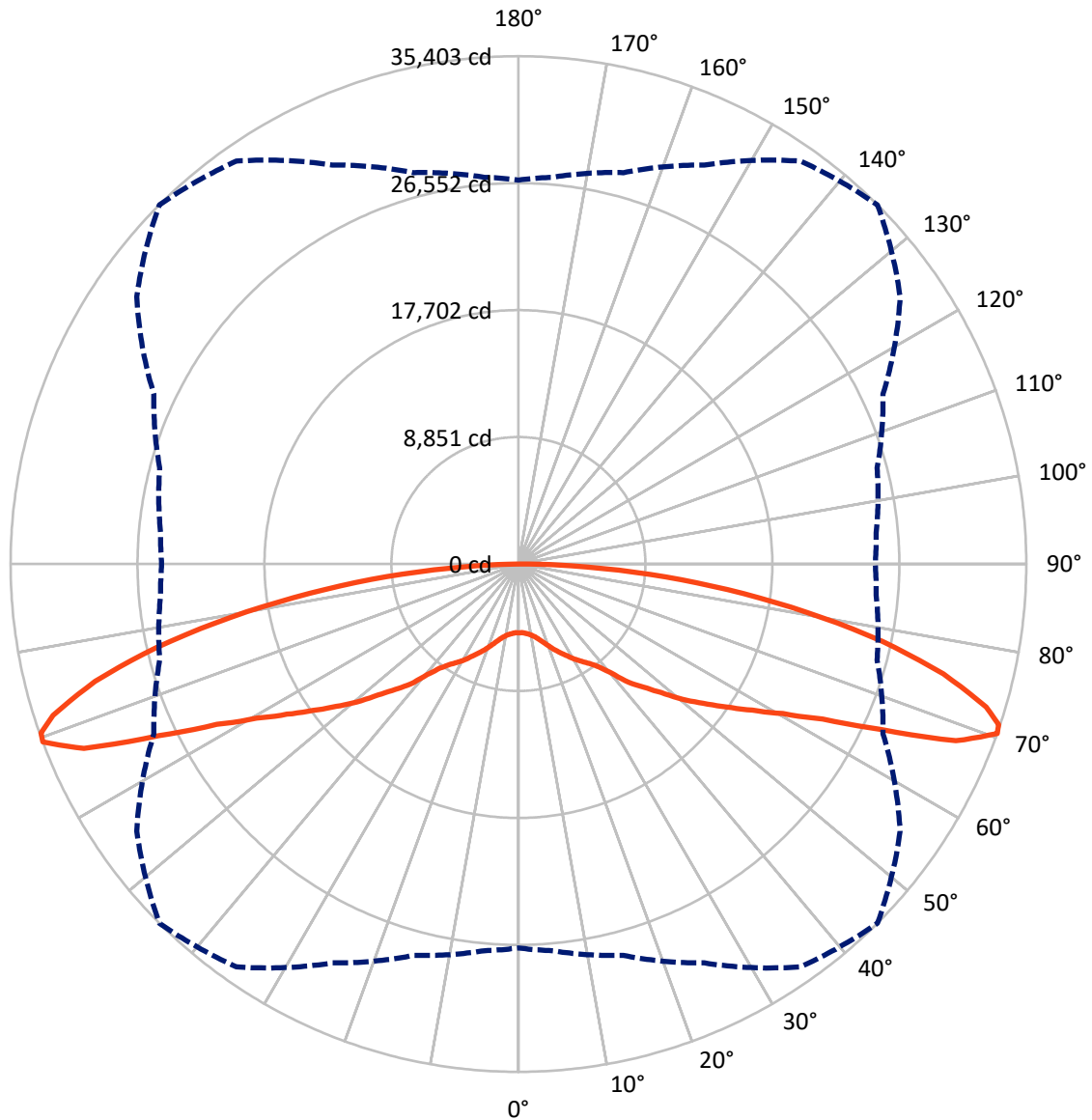
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.7 fc  
 Type V - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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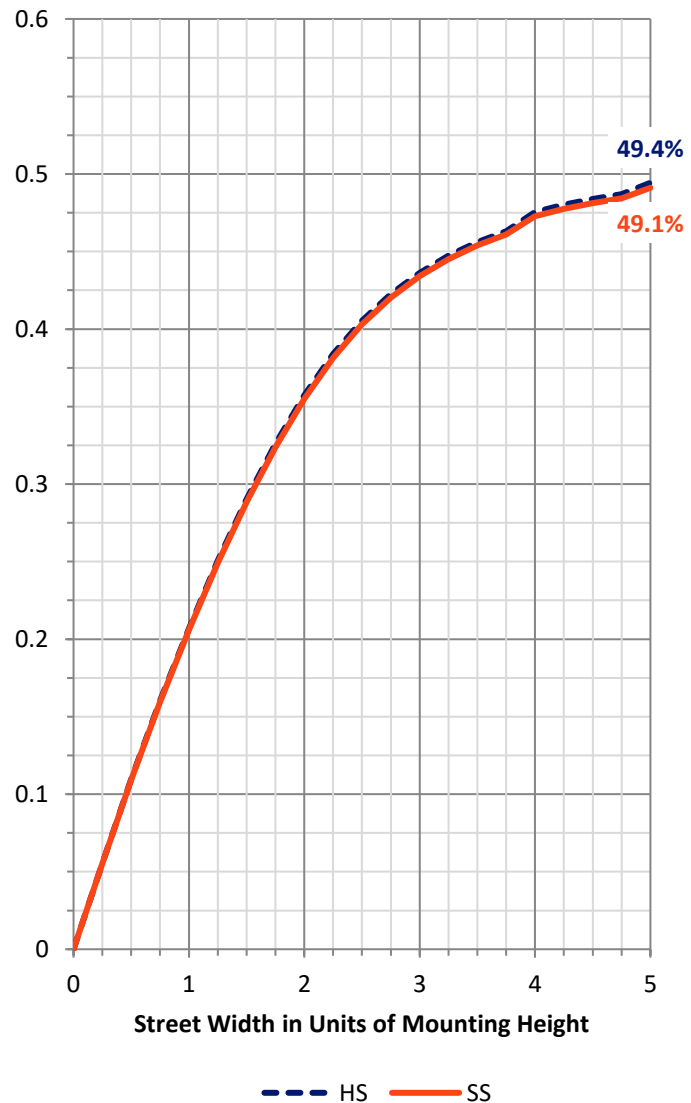
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	47188.0	0.0	47188.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	47188.0	0.0	47188.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	94376.0	0.0	94376.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	470.2	0.5
10°-20°	1565.0	1.7
20°-30°	3127.3	3.3
30°-40°	5377.9	5.7
40°-50°	9948.9	10.5
50°-60°	16910.1	17.9
60°-70°	27257.1	28.9
70°-80°	24090.6	25.5
80°-90°	5629.1	6.0
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°	94376.0	100.0
0°-180°	94376.0	100.0



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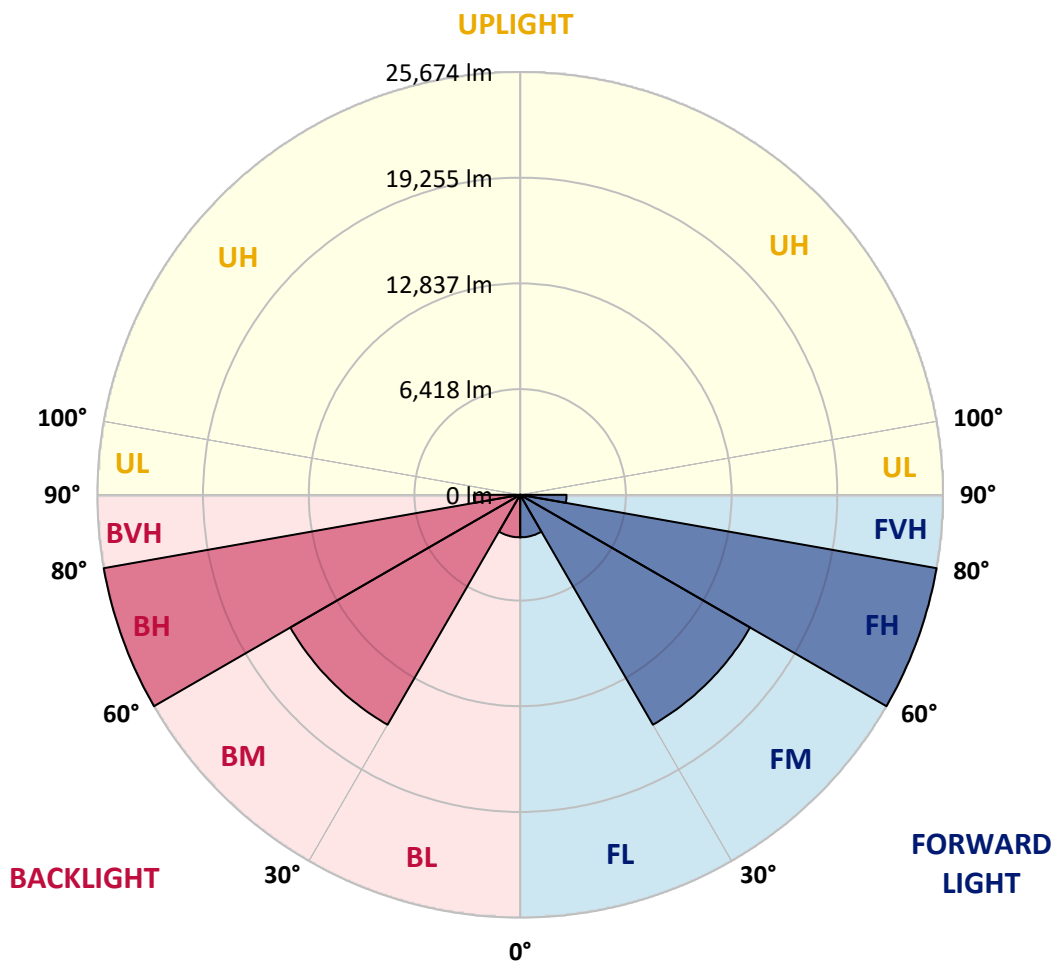
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2581.2	2.7			
FM	(30°-60°)	16118.4	17.1			
FH	(60°-80°)	25673.8	27.2			G5
FVH	(80°-90°)	2814.5	3.0			G5
BL	(0°-30°)	2581.2	2.7	B4/5000		
BM	(30°-60°)	16118.4	17.1	B5		
BH	(60°-80°)	25673.8	27.2	B5		G5
BVH	(80°-90°)	2814.5	3.0			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°	4795.0	4795.0	4795.0	4795.0	4795.0	4795.0	4795.0	4795.0	4795.0	4795.0	4795.0
2.5°	4836.6	4827.7	4830.6	4830.6	4777.2	4789.1	4792.0	4824.7	4824.7	4839.6	4842.5
5°	4884.1	4869.2	4872.2	4884.1	4833.6	4842.5	4842.5	4875.2	4869.2	4887.1	4896.0
7.5°	4967.2	4955.3	4955.3	4967.2	4907.8	4922.7	4913.8	4943.5	4931.6	4940.5	4958.3
10°	5100.8	5097.9	5089.0	5094.9	5029.6	5038.5	5020.7	5053.3	5029.6	5032.5	5065.2
12.5°	5255.2	5252.3	5252.3	5261.2	5204.7	5219.6	5189.9	5201.8	5160.2	5166.1	5192.9
15°	5445.2	5451.2	5457.1	5483.8	5448.2	5463.1	5418.5	5412.6	5365.1	5365.1	5397.7
17.5°	5706.5	5706.5	5709.5	5768.9	5748.1	5771.8	5709.5	5667.9	5620.4	5626.4	5632.3
20°	6033.1	6021.2	6027.2	6098.4	6104.4	6122.2	6024.2	5967.8	5917.3	5920.3	5914.3
22.5°	6380.5	6356.7	6353.8	6451.7	6493.3	6499.3	6362.7	6309.2	6243.9	6252.8	6246.9
25°	6713.0	6689.3	6677.4	6757.6	6867.4	6861.5	6713.0	6635.8	6606.1	6606.1	6612.1
27.5°	7042.6	7012.9	7001.0	7048.5	7220.7	7250.4	7054.5	6986.2	6956.5	6983.2	6995.1
30°	7375.1	7351.4	7345.4	7360.3	7556.2	7686.9	7384.0	7354.3	7351.4	7375.1	7401.8
32.5°	7778.9	7775.9	7752.2	7749.2	7894.7	8084.7	7778.9	7796.7	7844.2	7897.7	7933.3
35°	8298.5	8292.6	8227.2	8256.9	8328.2	8506.3	8331.2	8343.0	8470.7	8550.9	8595.4
37.5°	8990.3	8945.7	8862.6	8865.6	8901.2	9082.3	9014.0	9106.1	9337.7	9486.1	9471.3
40°	9970.1	9898.8	9774.1	9738.5	9732.5	9990.9	10056.2	10264.0	10629.2	10848.9	10834.1
42.5°	11371.5	11297.2	11107.2	11056.7	11077.5	11279.4	11469.4	11799.0	12116.7	12372.0	12357.2
45°	12808.5	12713.5	12407.7	12235.5	12087.0	12241.4	12538.3	13054.9	13435.0	13770.5	13764.5
47.5°	14471.2	14322.7	13954.5	13625.0	13328.1	13384.5	13702.2	14293.0	14753.2	15088.7	15067.9
50°	16276.3	16127.9	15724.1	15228.3	14768.1	14806.7	14961.0	15584.5	16041.8	16368.4	16374.3
52.5°	18206.2	18099.3	17636.2	16980.0	16347.6	16130.9	16228.8	16804.8	17330.3	17639.1	17665.9
55°	20287.5	20183.6	19696.7	18939.6	18072.6	17585.7	17582.7	18161.7	18693.1	18963.3	19004.9
57.5°	22374.8	22318.4	21890.8	21065.4	19972.8	19227.6	19058.3	19661.1	20257.8	20536.9	20593.3
60°	24524.4	24447.2	24090.9	23399.1	22199.6	21178.2	20893.2	21495.9	22169.9	22457.9	22493.5
62.5°	26959.0	26881.8	26608.6	25878.2	24993.5	23811.8	23399.1	23954.3	24577.8	25038.0	24990.5
65°	29393.6	29375.8	29491.6	29162.0	28485.1	27808.1	26994.6	27603.3	28063.5	28018.9	28004.1
67.5°	29004.7	29117.5	29919.1	31062.2	32490.3	32894.1	31014.7	29310.5	28306.9	27725.0	27540.9
70°	26766.0	27057.0	28244.6	30682.2	34283.6	35403.0	32481.4	28039.7	25884.2	25035.0	24871.7
71°	25530.9	25759.5	27128.2	30106.2	34295.5	35305.0	32134.0	27083.7	24892.5	23728.7	23615.8
72.5°	23125.9	23479.3	24990.5	28529.6	33253.4	34102.5	30619.8	25302.2	23007.2	21873.0	21810.6
75°	18488.3	18595.2	20545.8	24565.9	29942.9	30616.8	27181.7	21956.1	19589.8	18814.9	18770.3
77.5°	13049.0	13051.9	14922.4	19150.4	24824.2	25916.8	23541.6	18102.3	15712.2	14738.4	14521.6
80°	6911.9	7194.0	9049.7	13161.8	18595.2	20394.4	18708.0	13687.3	11047.8	9625.7	9426.7
82.5°	3150.2	3352.1	4554.5	7461.2	12229.5	14687.9	12835.2	8886.4	5920.3	4385.3	4257.6
85°	1223.2	1252.9	1879.4	3545.0	6837.7	9213.0	7473.1	4165.6	2060.5	1258.9	1166.8
87.5°	400.8	427.5	611.6	1365.8	2909.7	3678.7	2888.9	1252.9	400.8	249.4	240.5
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)