

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: P234681

Luminaire Tested: **ARCH-AF24-100-D-U-5WQ-8027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234681  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29597)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF24-100-D-U-5WQ-8027  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7874 lumens  
Efficiency: N/A  
Efficacy: 82.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G2

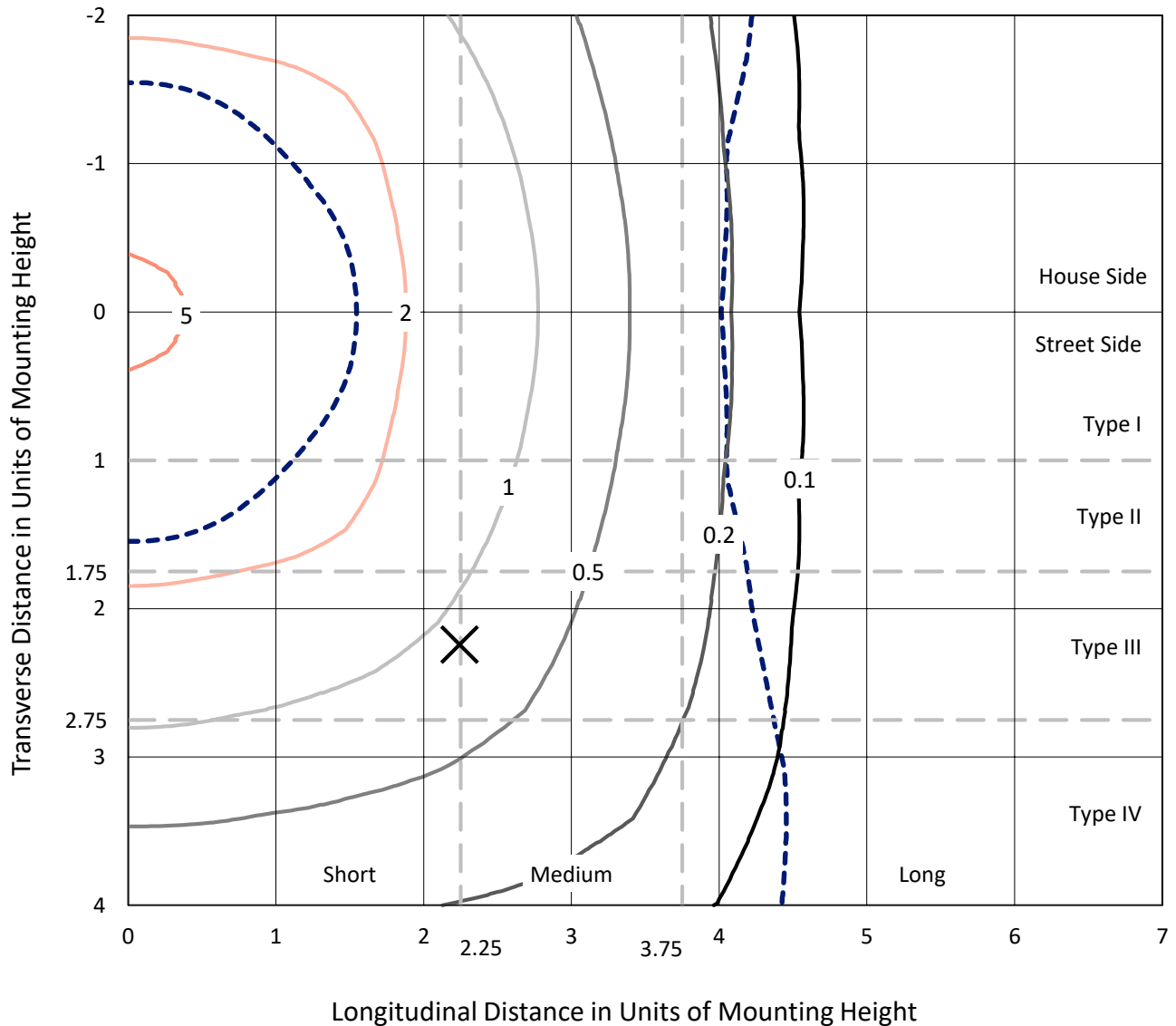
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

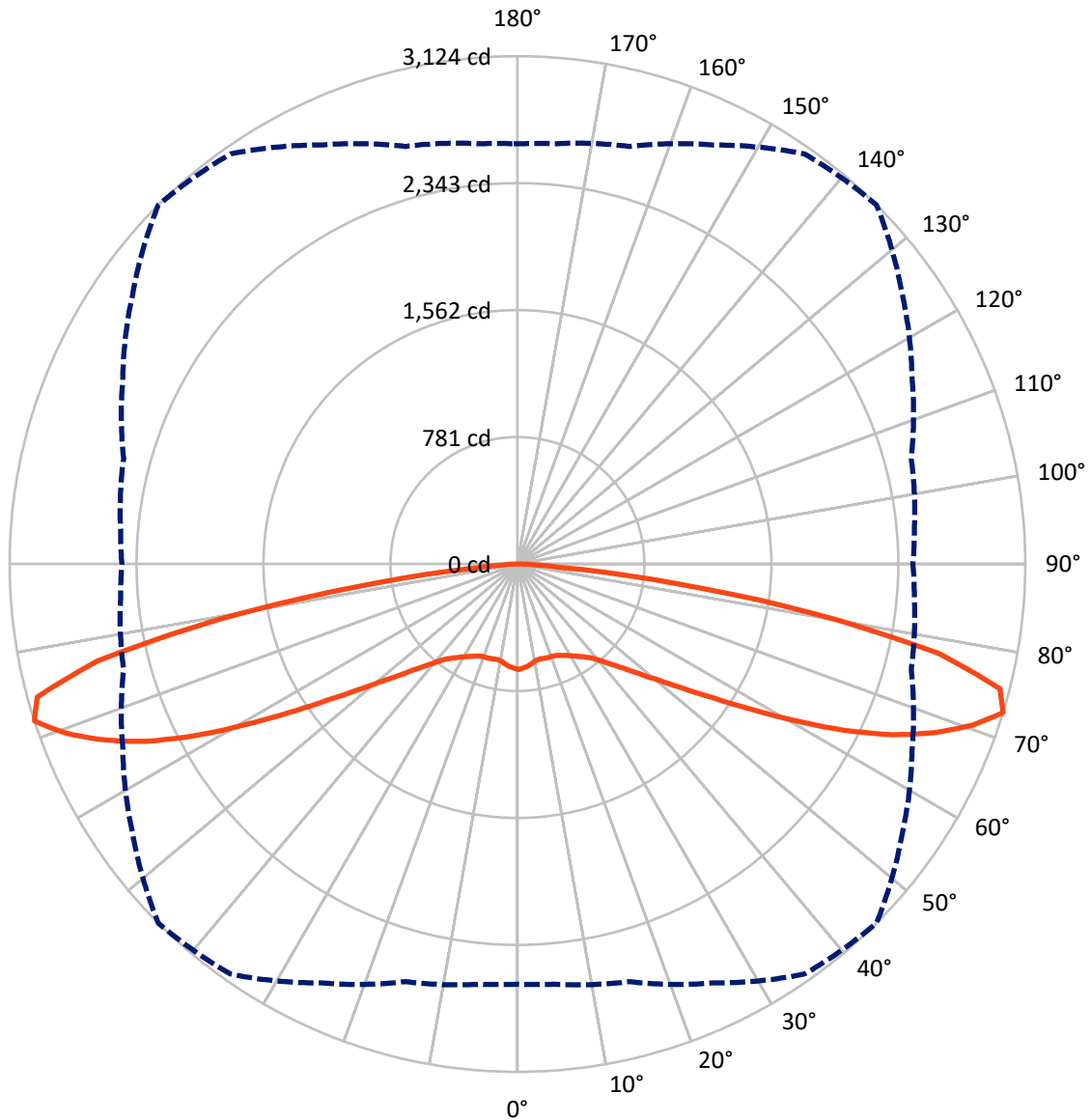
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.5 fc  
 Type V - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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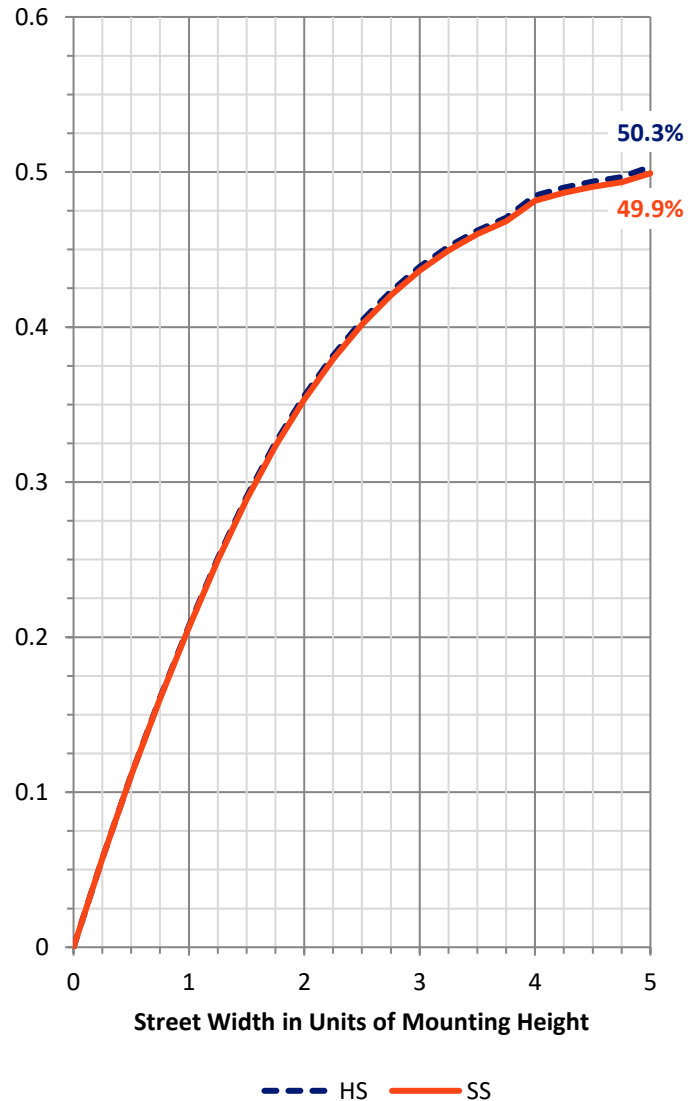
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3937.0	0.0	3937.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3937.0	0.0	3937.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	7874.0	0.0	7874.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.7	0.8
10°-20°	172.3	2.2
20°-30°	288.3	3.7
30°-40°	443.0	5.6
40°-50°	733.5	9.3
50°-60°	1304.1	16.6
60°-70°	2281.5	29.0
70°-80°	2321.2	29.5
80°-90°	270.3	3.4
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°	7874.0	100.0
0°-180°	7874.0	100.0



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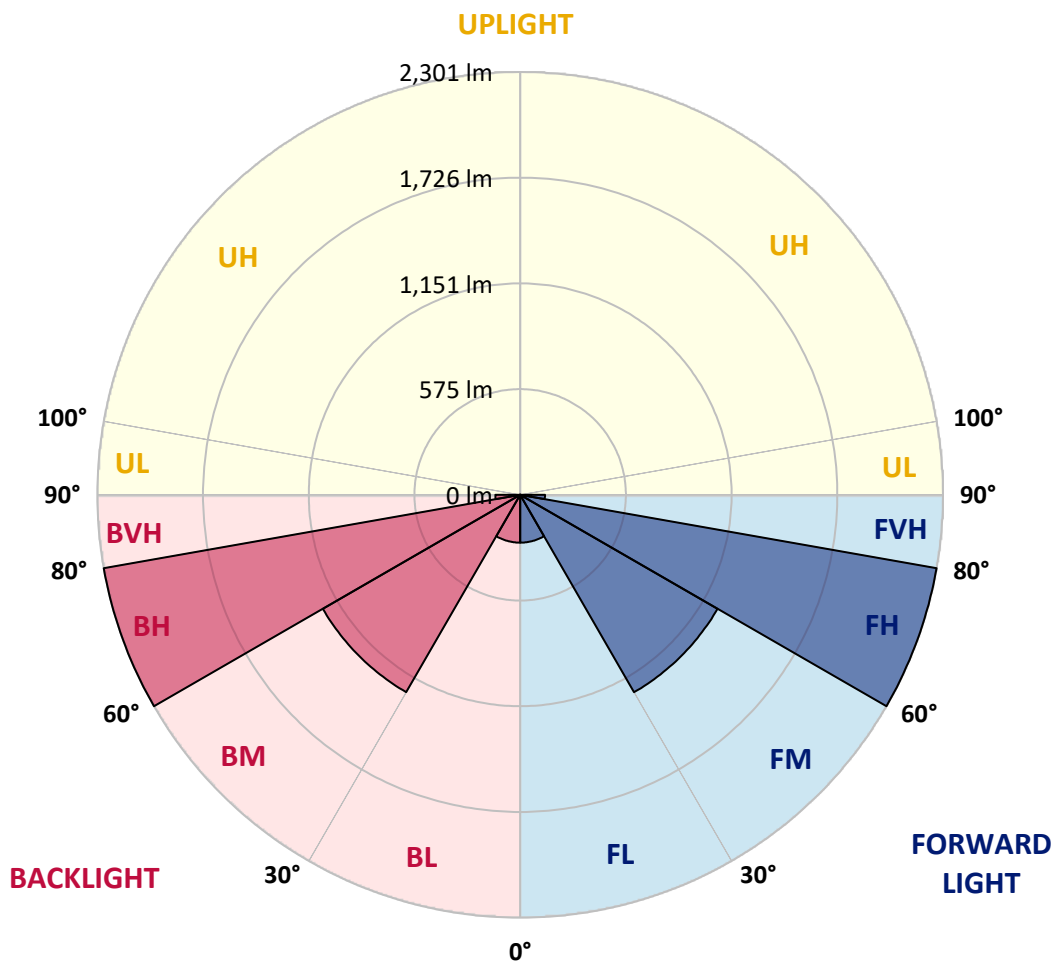
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	260.2	3.3			
FM	(30°-60°)	1240.3	15.8			
FH	(60°-80°)	2301.3	29.2			G2/5000
FVH	(80°-90°)	135.1	1.7			G2/225
BL	(0°-30°)	260.2	3.3	B1/500		
BM	(30°-60°)	1240.3	15.8	B2/2500		
BH	(60°-80°)	2301.3	29.2	B3/2500		G2/5000
BVH	(80°-90°)	135.1	1.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	649.0	649.0	649.0	649.0	649.0	649.0	649.0	649.0	649.0	649.0	649.0
2.5°	643.0	644.5	641.5	641.5	641.5	640.0	641.5	640.0	641.5	643.0	643.0
5°	637.0	637.0	634.0	634.0	634.0	632.5	634.0	634.0	635.5	637.0	637.0
7.5°	623.5	623.5	622.0	620.5	619.0	619.0	620.5	620.5	622.0	623.5	623.5
10°	616.0	614.5	611.5	607.0	605.5	604.0	607.0	610.0	614.5	619.0	617.5
12.5°	613.0	611.5	605.5	601.0	598.0	599.5	602.5	605.5	613.0	617.5	616.0
15°	616.0	613.0	605.5	598.0	599.5	602.5	605.5	605.5	614.5	619.0	619.0
17.5°	616.0	614.5	605.5	599.5	601.0	605.5	607.0	605.5	613.0	620.5	620.5
20°	617.5	617.5	605.5	601.0	602.5	607.0	608.5	607.0	613.0	622.0	622.0
22.5°	620.5	619.0	607.0	604.0	607.0	610.0	611.5	610.0	616.0	623.5	625.0
25°	626.5	623.5	613.0	611.5	617.5	622.0	622.0	619.0	622.0	629.5	629.5
27.5°	634.0	632.5	620.5	620.5	628.0	637.0	632.5	626.5	629.5	637.0	637.0
30°	647.5	646.0	634.0	634.0	644.5	655.0	644.5	637.0	641.5	649.0	650.5
32.5°	667.0	667.0	656.5	653.5	671.5	676.0	671.5	656.5	659.5	670.0	670.0
35°	700.0	697.0	686.5	685.0	703.0	701.5	700.0	686.5	689.5	701.5	701.5
37.5°	743.4	741.9	732.9	728.4	737.4	731.4	734.4	728.4	735.9	744.9	746.4
40°	798.9	797.4	789.9	783.9	786.9	777.9	780.9	783.9	791.4	797.4	798.9
42.5°	867.8	867.8	860.3	849.8	845.3	840.9	840.9	846.8	854.3	861.8	861.8
45°	953.3	953.3	944.3	933.8	920.3	912.8	915.8	921.8	930.8	939.8	942.8
47.5°	1053.7	1053.7	1041.7	1031.2	1017.7	1008.7	1008.7	1011.7	1025.2	1032.7	1037.2
50°	1166.1	1161.6	1149.6	1139.1	1131.6	1119.6	1121.1	1119.6	1131.6	1142.1	1145.1
52.5°	1283.0	1281.5	1269.5	1266.5	1271.0	1265.0	1265.0	1250.0	1254.5	1260.5	1259.0
55°	1428.4	1423.9	1413.4	1419.4	1437.4	1446.4	1443.4	1419.4	1405.9	1408.9	1407.4
57.5°	1587.3	1582.8	1579.8	1597.8	1638.2	1675.7	1668.2	1612.8	1587.3	1588.8	1590.3
60°	1749.2	1749.2	1758.1	1803.1	1890.0	1951.5	1929.0	1836.1	1791.1	1782.1	1779.1
62.5°	1915.5	1920.0	1939.5	2014.4	2147.8	2249.8	2192.8	2060.9	1993.5	1975.5	1969.5
65°	2108.9	2113.4	2141.9	2234.8	2411.6	2533.1	2435.6	2311.2	2216.8	2179.3	2173.3
67.5°	2389.2	2392.2	2414.6	2504.6	2670.9	2768.4	2667.9	2557.0	2455.1	2411.6	2408.6
70°	2641.0	2644.0	2663.5	2781.9	2934.7	2969.2	2858.3	2717.4	2611.0	2576.5	2570.5
72.5°	2584.0	2594.5	2659.0	2843.3	3078.6	3123.6	2889.8	2678.4	2507.6	2450.6	2432.6
75°	2167.3	2183.8	2285.7	2563.0	2937.7	3065.1	2703.9	2315.7	2060.9	1951.5	1923.0
77.5°	1265.0	1326.5	1501.8	1857.1	2392.2	2651.5	2227.3	1695.2	1266.5	1086.7	1026.7
80°	346.2	379.2	506.6	854.3	1500.3	1857.1	1420.9	777.9	419.7	314.8	292.3
82.5°	109.4	145.4	184.4	245.8	589.0	978.7	527.6	229.3	179.9	148.4	131.9
85°	58.5	63.0	103.4	119.9	176.9	274.3	163.4	119.9	107.9	79.4	74.9
87.5°	30.0	31.5	58.5	58.5	77.9	64.5	70.4	64.5	61.5	39.0	34.5
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)