

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: P214537

Luminaire Tested: **ARCH-AF24-80-D-U-5WQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214537  
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-AF24-80-D-U-5WQ-7050  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9358 lumens  
Efficiency: N/A  
Efficacy: 112.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B4 - U0 - G2

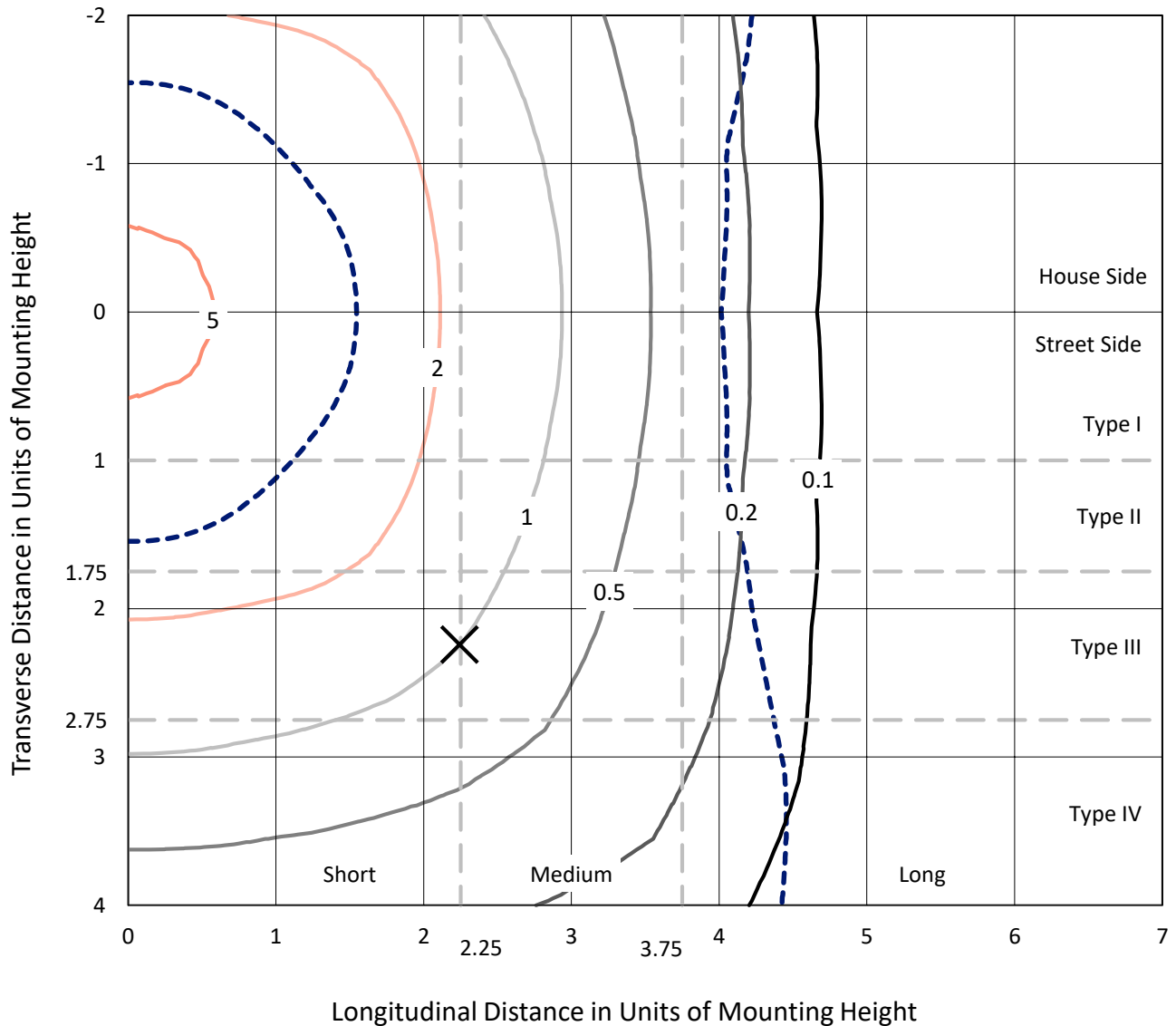
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

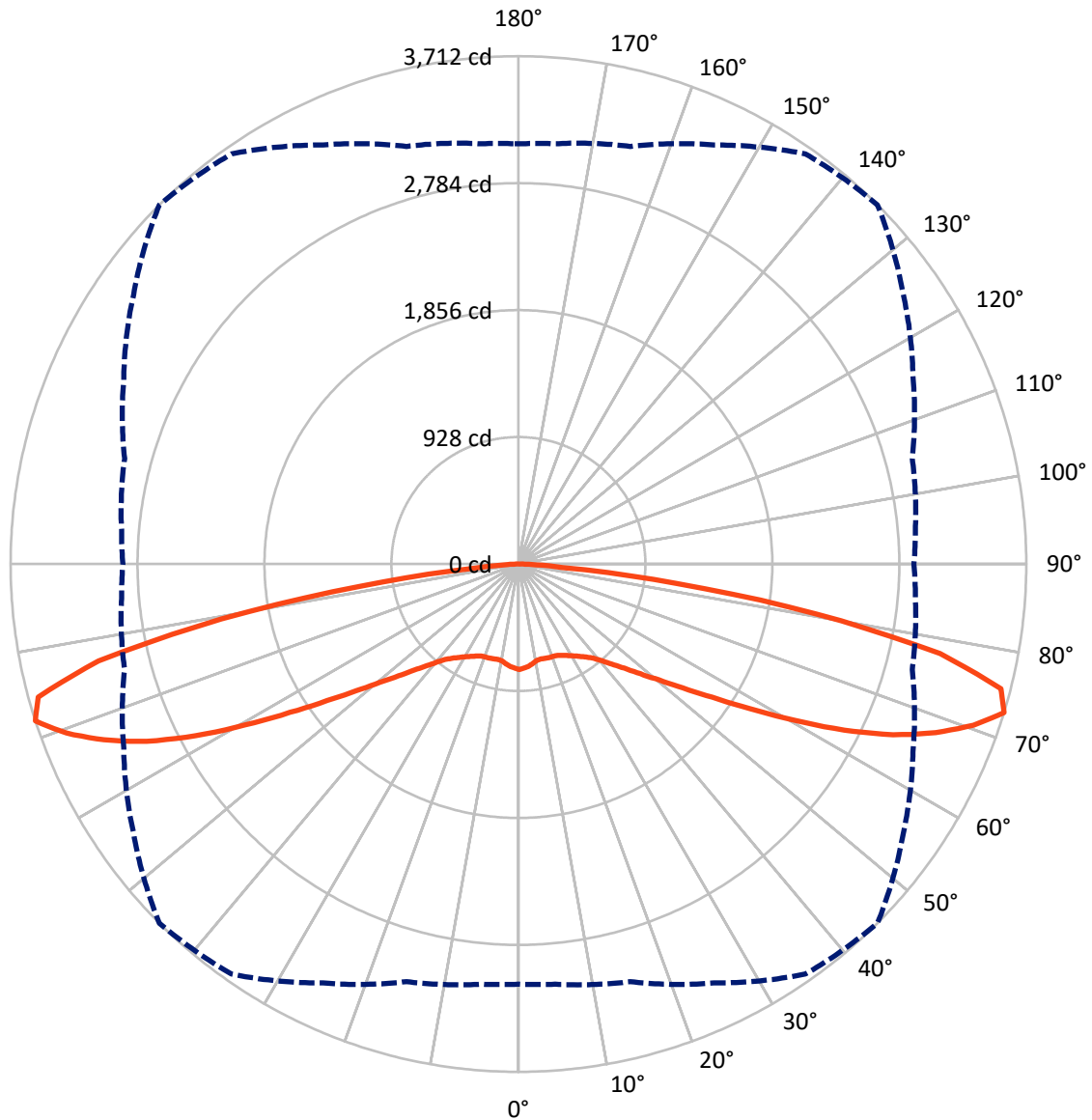


Based on 10 foot mounting height. Maximum calculated value = 7.7 fc  
 Type V - Short - Non-Cutoff

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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	4679.0	0.0	4679.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4679.0	0.0	4679.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	9358.0	0.0	9358.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.0	0.8
10°-20°	204.8	2.2
20°-30°	342.7	3.7
30°-40°	526.5	5.6
40°-50°	871.8	9.3
50°-60°	1549.9	16.6
60°-70°	2711.5	29.0
70°-80°	2758.7	29.5
80°-90°	321.2	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°	9358.0	100.0
0°-180°	9358.0	100.0



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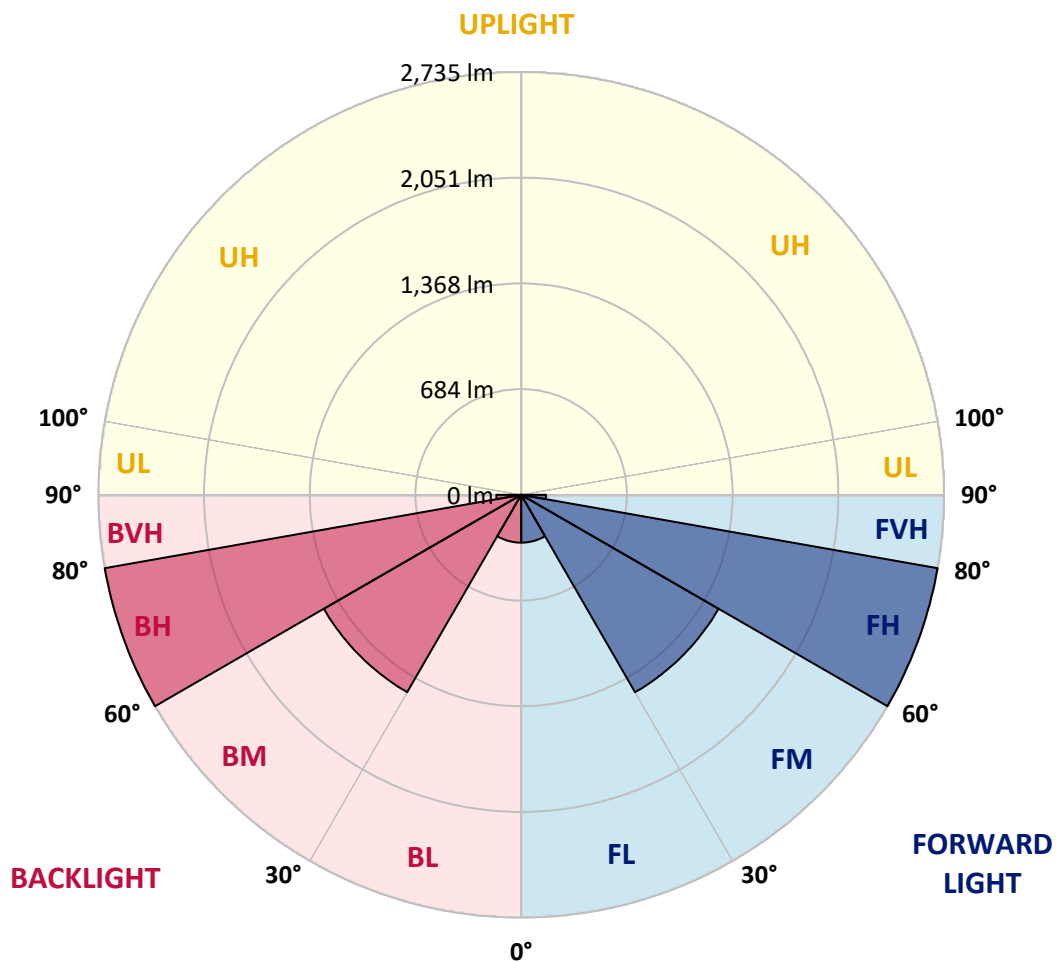
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	309.2	3.3			
FM (30°-60°)	1474.1	15.8			
FH (60°-80°)	2735.1	29.2			G2/5000
FVH (80°-90°)	160.6	1.7			G2/225
BL (0°-30°)	309.2	3.3	B1/500		
BM (30°-60°)	1474.1	15.8	B2/2500		
BH (60°-80°)	2735.1	29.2	B4/5000		G2/5000
BVH (80°-90°)	160.6	1.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	771.3	771.3	771.3	771.3	771.3	771.3	771.3	771.3	771.3	771.3	771.3
2.5°	764.2	766.0	762.4	762.4	762.4	760.6	762.4	760.6	762.4	764.2	764.2
5°	757.1	757.1	753.5	753.5	753.5	751.7	753.5	753.5	755.3	757.1	757.1
7.5°	741.0	741.0	739.3	737.5	735.7	735.7	737.5	737.5	739.3	741.0	741.0
10°	732.1	730.3	726.8	721.4	719.7	717.9	721.4	725.0	730.3	735.7	733.9
12.5°	728.6	726.8	719.7	714.3	710.8	712.5	716.1	719.7	728.6	733.9	732.1
15°	732.1	728.6	719.7	710.8	712.5	716.1	719.7	719.7	730.3	735.7	735.7
17.5°	732.1	730.3	719.7	712.5	714.3	719.7	721.4	719.7	728.6	737.5	737.5
20°	733.9	733.9	719.7	714.3	716.1	721.4	723.2	721.4	728.6	739.3	739.3
22.5°	737.5	735.7	721.4	717.9	721.4	725.0	726.8	725.0	732.1	741.0	742.8
25°	744.6	741.0	728.6	726.8	733.9	739.3	739.3	735.7	739.3	748.2	748.2
27.5°	753.5	751.7	737.5	737.5	746.4	757.1	751.7	744.6	748.2	757.1	757.1
30°	769.5	767.8	753.5	753.5	766.0	778.4	766.0	757.1	762.4	771.3	773.1
32.5°	792.7	792.7	780.2	776.7	798.0	803.4	798.0	780.2	783.8	796.3	796.3
35°	831.9	828.3	815.8	814.1	835.4	833.7	831.9	815.8	819.4	833.7	833.7
37.5°	883.5	881.8	871.1	865.7	876.4	869.3	872.9	865.7	874.6	885.3	887.1
40°	949.4	947.7	938.8	931.6	935.2	924.5	928.1	931.6	940.5	947.7	949.4
42.5°	1031.4	1031.4	1022.5	1010.0	1004.7	999.3	999.3	1006.5	1015.4	1024.3	1024.3
45°	1132.9	1132.9	1122.2	1109.8	1093.7	1084.8	1088.4	1095.5	1106.2	1116.9	1120.5
47.5°	1252.3	1252.3	1238.0	1225.6	1209.5	1198.8	1198.8	1202.4	1218.4	1227.3	1232.7
50°	1385.9	1380.5	1366.3	1353.8	1344.9	1330.7	1332.4	1330.7	1344.9	1357.4	1360.9
52.5°	1524.8	1523.0	1508.8	1505.2	1510.6	1503.4	1503.4	1485.6	1491.0	1498.1	1496.3
55°	1697.6	1692.3	1679.8	1686.9	1708.3	1719.0	1715.4	1686.9	1670.9	1674.5	1672.7
57.5°	1886.4	1881.1	1877.5	1898.9	1947.0	1991.5	1982.6	1916.7	1886.4	1888.2	1890.0
60°	2078.8	2078.8	2089.5	2142.9	2246.3	2319.3	2292.6	2182.1	2128.7	2118.0	2114.4
62.5°	2276.5	2281.9	2305.0	2394.1	2552.6	2673.8	2606.1	2449.3	2369.2	2347.8	2340.7
65°	2506.3	2511.7	2545.5	2656.0	2866.2	3010.5	2894.7	2746.8	2634.6	2590.1	2582.9
67.5°	2839.4	2843.0	2869.7	2976.6	3174.3	3290.1	3170.8	3039.0	2917.8	2866.2	2862.6
70°	3138.7	3142.3	3165.4	3306.2	3487.8	3528.8	3397.0	3229.6	3103.1	3062.1	3055.0
72.5°	3071.0	3083.5	3160.1	3379.2	3658.9	3712.3	3434.4	3183.2	2980.2	2912.5	2891.1
75°	2575.8	2595.4	2716.5	3046.1	3491.4	3642.8	3213.5	2752.2	2449.3	2319.3	2285.4
77.5°	1503.4	1576.5	1784.9	2207.1	2843.0	3151.2	2647.1	2014.7	1505.2	1291.5	1220.2
80°	411.5	450.7	602.1	1015.4	1783.1	2207.1	1688.7	924.5	498.8	374.1	347.4
82.5°	130.0	172.8	219.1	292.1	700.1	1163.2	627.0	272.5	213.8	176.4	156.8
85°	69.5	74.8	122.9	142.5	210.2	326.0	194.2	142.5	128.3	94.4	89.1
87.5°	35.6	37.4	69.5	69.5	92.6	76.6	83.7	76.6	73.0	46.3	41.0
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)