

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: P234771

Luminaire Tested: **ARCH-M-AF48-90-D-U-5WQ-8027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234771  
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-M-AF48-90-D-U-5WQ-8027  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 600mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9813 lumens  
Efficiency: N/A  
Efficacy: 106.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B4 - U0 - G2

Input Watts (W): 92  
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

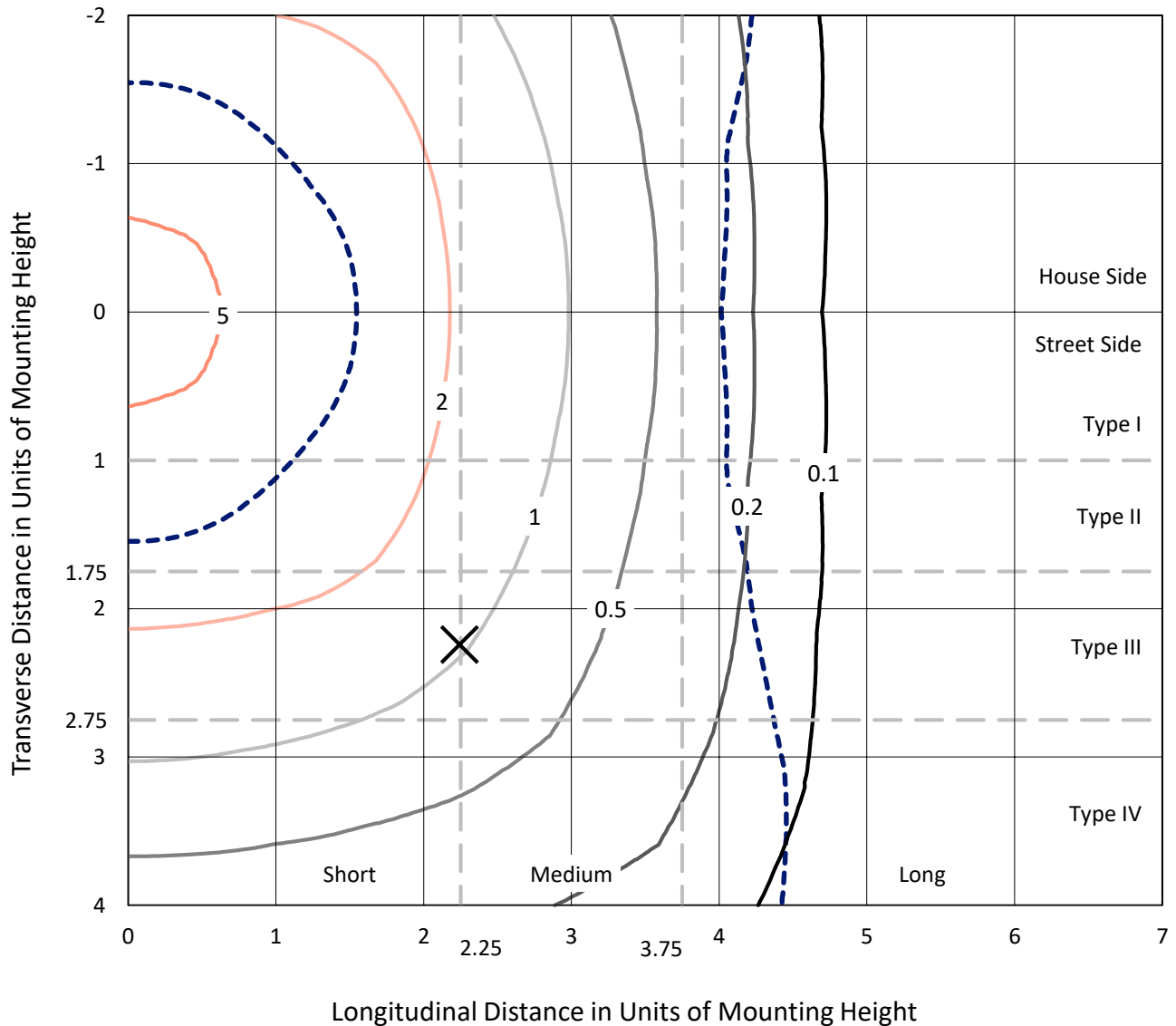


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

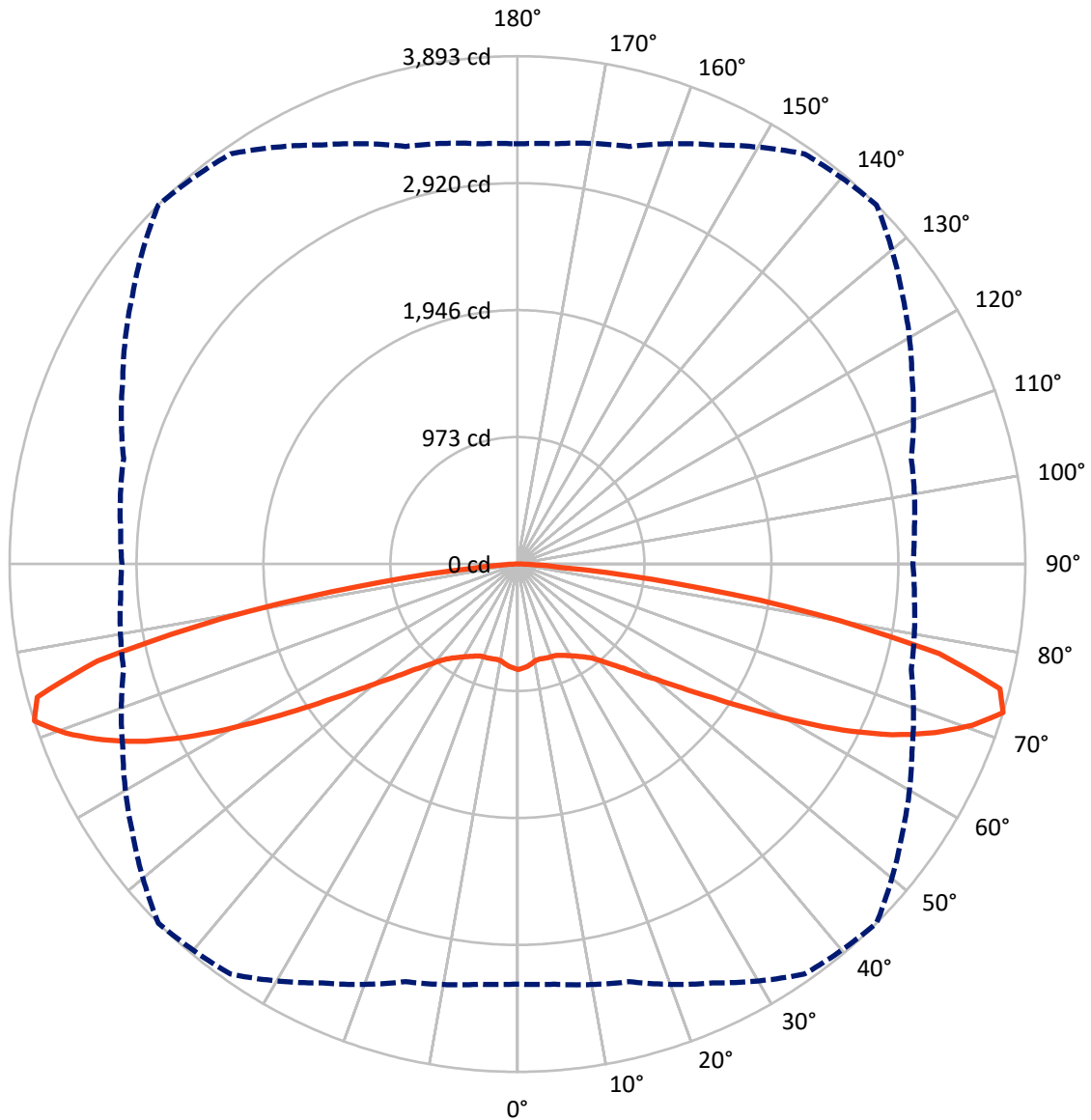


Based on 10 foot mounting height. Maximum calculated value = 8.1 fc  
 Type V - Short - Non-Cutoff

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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	4906.5	0.0	4906.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4906.5	0.0	4906.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	9813.0	0.0	9813.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.4	0.8
10°-20°	214.7	2.2
20°-30°	359.3	3.7
30°-40°	552.1	5.6
40°-50°	914.2	9.3
50°-60°	1625.2	16.6
60°-70°	2843.3	29.0
70°-80°	2892.8	29.5
80°-90°	336.8	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°	9813.0	100.0
0°-180°	9813.0	100.0

**Coefficient of Utilization**



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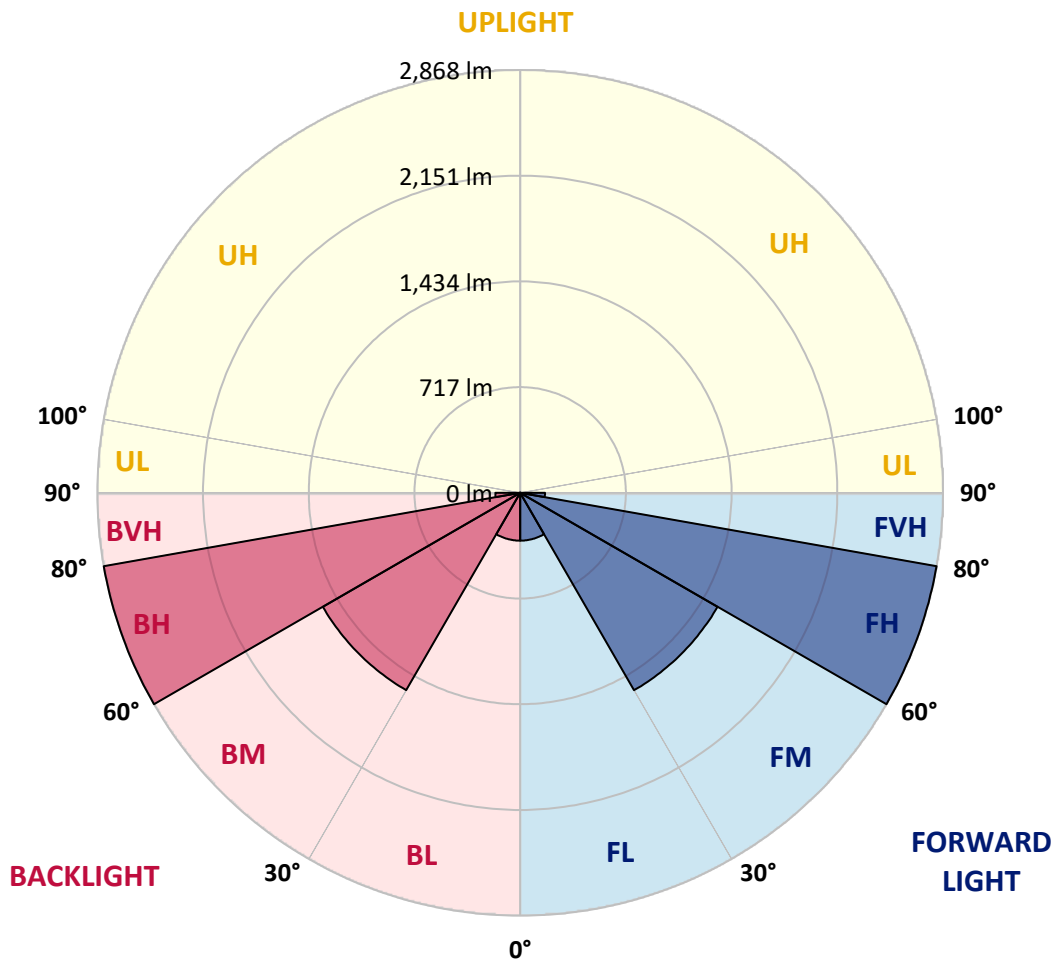
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	324.2	3.3			
FM	(30°-60°)	1545.8	15.8			
FH	(60°-80°)	2868.1	29.2			G2/5000
FVH	(80°-90°)	168.4	1.7			G2/225
BL	(0°-30°)	324.2	3.3	B1/500		
BM	(30°-60°)	1545.8	15.8	B2/2500		
BH	(60°-80°)	2868.1	29.2	B4/5000		G2/5000
BVH	(80°-90°)	168.4	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°	808.8	808.8	808.8	808.8	808.8	808.8	808.8	808.8	808.8	808.8	808.8
2.5°	801.3	803.2	799.5	799.5	799.5	797.6	799.5	797.6	799.5	801.3	801.3
5°	793.9	793.9	790.1	790.1	790.1	788.3	790.1	790.1	792.0	793.9	793.9
7.5°	777.1	777.1	775.2	773.3	771.5	771.5	773.3	773.3	775.2	777.1	777.1
10°	767.7	765.9	762.1	756.5	754.6	752.8	756.5	760.3	765.9	771.5	769.6
12.5°	764.0	762.1	754.6	749.0	745.3	747.2	750.9	754.6	764.0	769.6	767.7
15°	767.7	764.0	754.6	745.3	747.2	750.9	754.6	754.6	765.9	771.5	771.5
17.5°	767.7	765.9	754.6	747.2	749.0	754.6	756.5	754.6	764.0	773.3	773.3
20°	769.6	769.6	754.6	749.0	750.9	756.5	758.4	756.5	764.0	775.2	775.2
22.5°	773.3	771.5	756.5	752.8	756.5	760.3	762.1	760.3	767.7	777.1	778.9
25°	780.8	777.1	764.0	762.1	769.6	775.2	775.2	771.5	775.2	784.5	784.5
27.5°	790.1	788.3	773.3	773.3	782.7	793.9	788.3	780.8	784.5	793.9	793.9
30°	807.0	805.1	790.1	790.1	803.2	816.3	803.2	793.9	799.5	808.8	810.7
32.5°	831.2	831.2	818.2	814.4	836.8	842.4	836.8	818.2	821.9	835.0	835.0
35°	872.3	868.6	855.5	853.6	876.1	874.2	872.3	855.5	859.3	874.2	874.2
37.5°	926.5	924.6	913.4	907.8	919.0	911.6	915.3	907.8	917.2	928.4	930.2
40°	995.6	993.7	984.4	976.9	980.7	969.5	973.2	976.9	986.3	993.7	995.6
42.5°	1081.5	1081.5	1072.2	1059.1	1053.5	1047.9	1047.9	1055.4	1064.7	1074.1	1074.1
45°	1188.0	1188.0	1176.8	1163.7	1146.9	1137.6	1141.3	1148.8	1160.0	1171.2	1174.9
47.5°	1313.2	1313.2	1298.2	1285.1	1268.3	1257.1	1257.1	1260.9	1277.7	1287.0	1292.6
50°	1453.3	1447.7	1432.7	1419.6	1410.3	1395.4	1397.2	1395.4	1410.3	1423.4	1427.1
52.5°	1599.0	1597.1	1582.1	1578.4	1584.0	1576.5	1576.5	1557.9	1563.5	1570.9	1569.1
55°	1780.1	1774.5	1761.5	1768.9	1791.4	1802.6	1798.8	1768.9	1752.1	1755.9	1754.0
57.5°	1978.2	1972.5	1968.8	1991.2	2041.7	2088.4	2079.0	2009.9	1978.2	1980.0	1981.9
60°	2179.9	2179.9	2191.1	2247.1	2355.5	2432.1	2404.0	2288.2	2232.2	2221.0	2217.2
62.5°	2387.2	2392.8	2417.1	2510.5	2676.8	2803.8	2732.8	2568.4	2484.4	2461.9	2454.5
65°	2628.2	2633.8	2669.3	2785.1	3005.5	3156.8	3035.4	2880.4	2762.7	2716.0	2708.5
67.5°	2977.5	2981.2	3009.3	3121.3	3328.7	3450.1	3324.9	3186.7	3059.7	3005.5	3001.8
70°	3291.3	3295.1	3319.3	3466.9	3657.4	3700.4	3562.2	3386.6	3254.0	3211.0	3203.5
72.5°	3220.3	3233.4	3313.7	3543.5	3836.8	3892.8	3601.4	3338.0	3125.1	3054.1	3031.7
75°	2701.0	2721.6	2848.6	3194.2	3661.2	3819.9	3369.8	2886.0	2568.4	2432.1	2396.6
77.5°	1576.5	1653.1	1871.7	2314.4	2981.2	3304.4	2775.8	2112.6	1578.4	1354.3	1279.5
80°	431.5	472.6	631.4	1064.7	1869.8	2314.4	1770.8	969.5	523.0	392.3	364.2
82.5°	136.4	181.2	229.8	306.3	734.1	1219.8	657.5	285.8	224.2	184.9	164.4
85°	72.8	78.5	128.9	149.4	220.4	341.8	203.6	149.4	134.5	99.0	93.4
87.5°	37.4	39.2	72.8	72.8	97.1	80.3	87.8	80.3	76.6	48.6	43.0
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)