

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: P230963

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230963  
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  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 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: 12918.8 lumens  
Efficiency: N/A  
Efficacy: 140.4 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

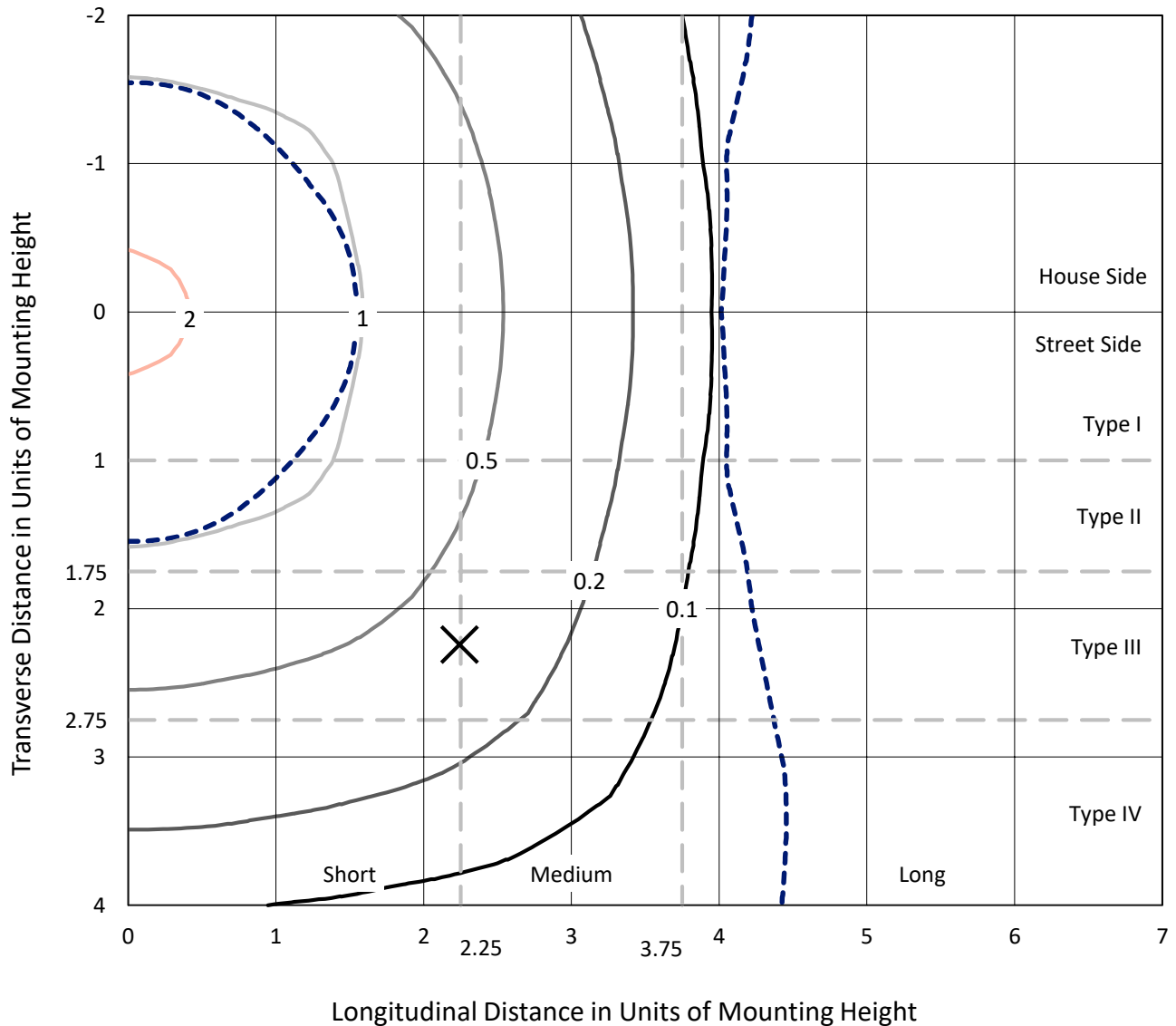


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

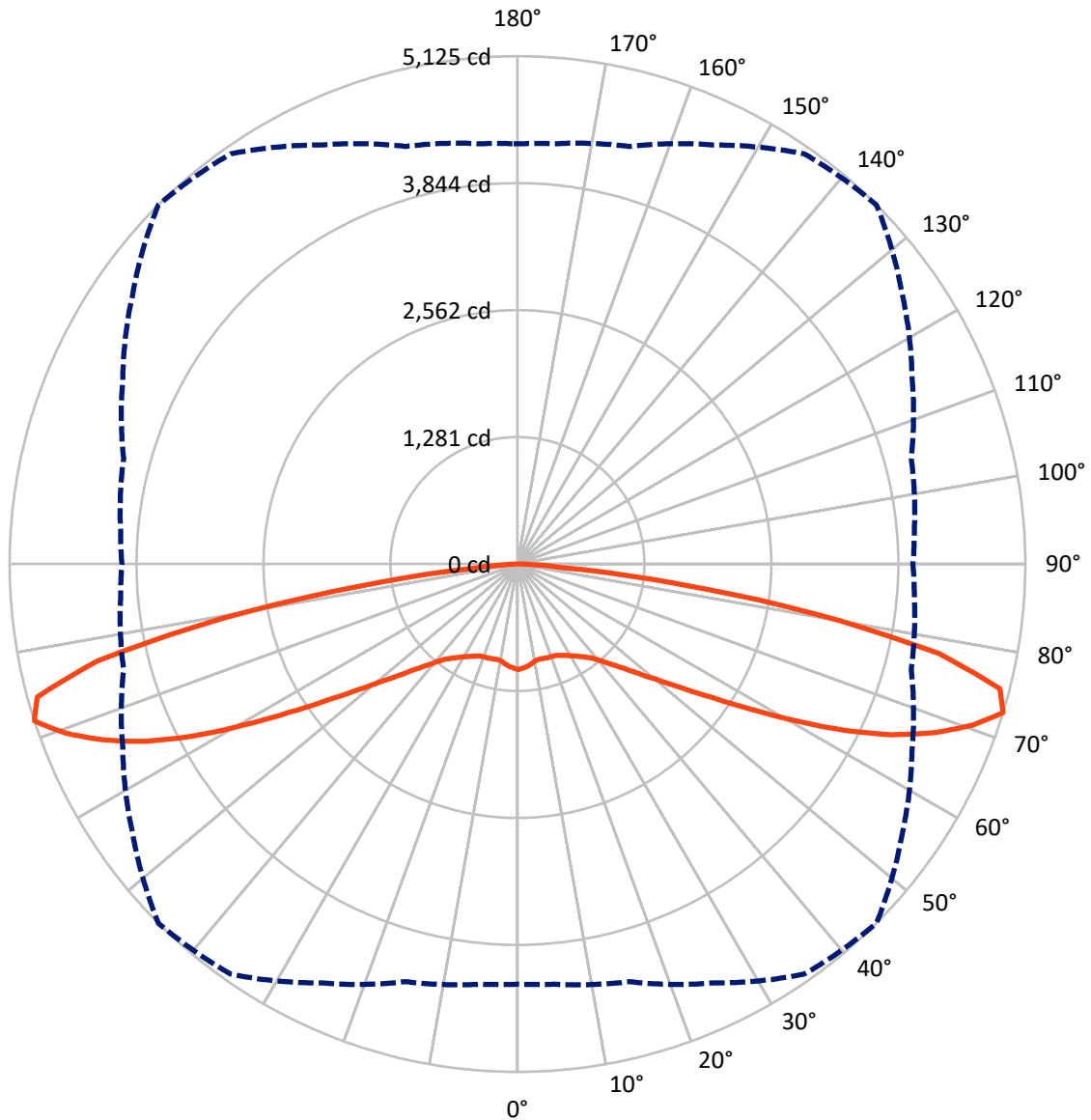


Based on 20 foot mounting height. Maximum calculated value = 2.7 fc  
 Type V - Short - Non-Cutoff

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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	6459.4	0.0	6459.4
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	6459.4	0.0	6459.4
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	12918.8	0.0	12918.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.0	0.8
10°-20°	282.7	2.2
20°-30°	473.1	3.7
30°-40°	726.9	5.6
40°-50°	1203.5	9.3
50°-60°	2139.6	16.6
60°-70°	3743.2	29.0
70°-80°	3808.4	29.5
80°-90°	443.5	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°	12918.8	100.0
0°-180°	12918.8	100.0



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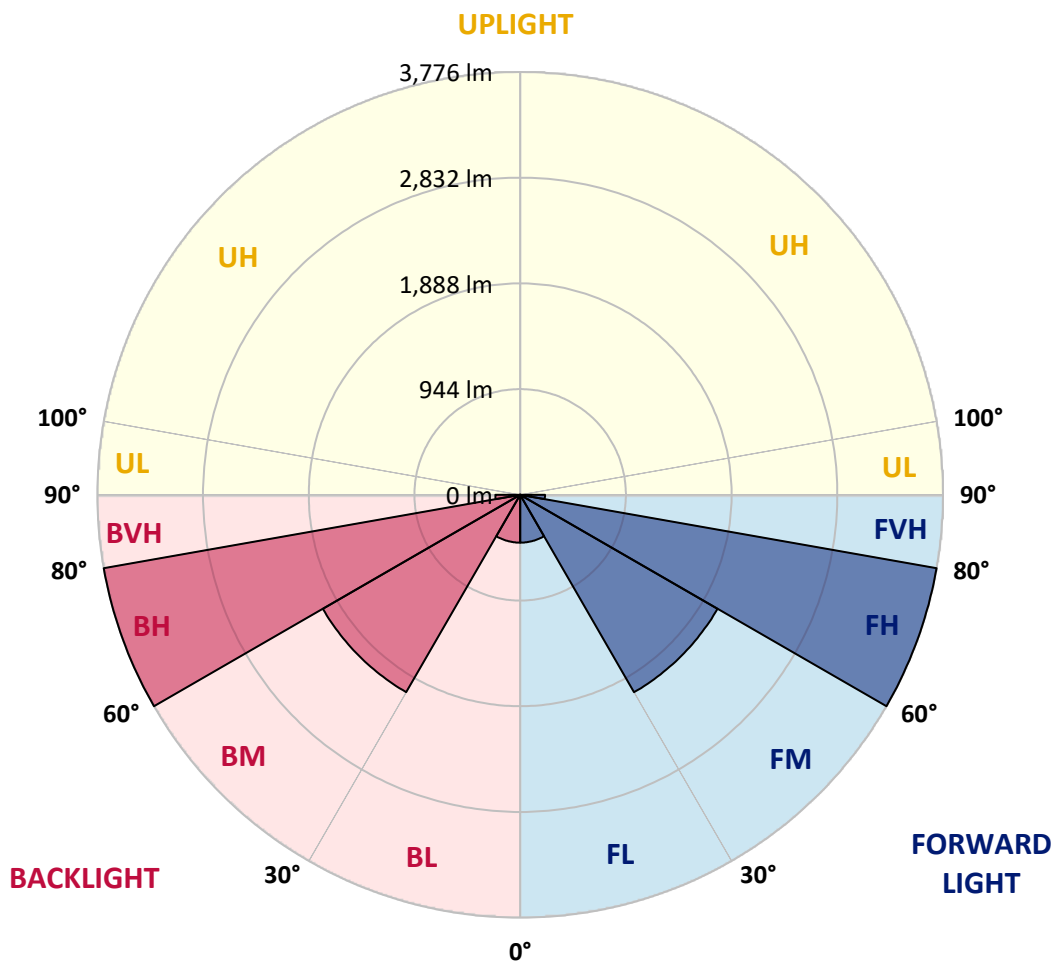
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	426.9	3.3			
FM (30°-60°)	2035.0	15.8			
FH (60°-80°)	3775.8	29.2			G2/5000
FVH (80°-90°)	221.7	1.7			G2/225
BL (0°-30°)	426.9	3.3	B1/500		
BM (30°-60°)	2035.0	15.8	B2/2500		
BH (60°-80°)	3775.8	29.2	B4/5000		G2/5000
BVH (80°-90°)	221.7	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°	1064.8	1064.8	1064.8	1064.8	1064.8	1064.8	1064.8	1064.8	1064.8	1064.8	1064.8
2.5°	1055.0	1057.4	1052.5	1052.5	1052.5	1050.1	1052.5	1050.1	1052.5	1055.0	1055.0
5°	1045.1	1045.1	1040.2	1040.2	1040.2	1037.8	1040.2	1040.2	1042.7	1045.1	1045.1
7.5°	1023.1	1023.1	1020.6	1018.0	1015.6	1015.6	1018.0	1018.0	1020.6	1023.1	1023.1
10°	1010.7	1008.2	1003.3	995.9	993.5	991.0	995.9	1000.9	1008.2	1015.6	1013.1
12.5°	1005.8	1003.3	993.5	986.1	981.2	983.7	988.6	993.5	1005.8	1013.1	1010.7
15°	1010.7	1005.8	993.5	981.2	983.7	988.6	993.5	993.5	1008.2	1015.6	1015.6
17.5°	1010.7	1008.2	993.5	983.7	986.1	993.5	995.9	993.5	1005.8	1018.0	1018.0
20°	1013.1	1013.1	993.5	986.1	988.6	995.9	998.4	995.9	1005.8	1020.6	1020.6
22.5°	1018.0	1015.6	995.9	991.0	995.9	1000.9	1003.3	1000.9	1010.7	1023.1	1025.5
25°	1028.0	1023.1	1005.8	1003.3	1013.1	1020.6	1020.6	1015.6	1020.6	1032.9	1032.9
27.5°	1040.2	1037.8	1018.0	1018.0	1030.4	1045.1	1037.8	1028.0	1032.9	1045.1	1045.1
30°	1062.3	1059.9	1040.2	1040.2	1057.4	1074.6	1057.4	1045.1	1052.5	1064.8	1067.2
32.5°	1094.4	1094.4	1077.1	1072.2	1101.7	1109.1	1101.7	1077.1	1082.1	1099.3	1099.3
35°	1148.5	1143.6	1126.3	1123.8	1153.4	1150.9	1148.5	1126.3	1131.2	1150.9	1150.9
37.5°	1219.8	1217.3	1202.5	1195.1	1209.9	1200.0	1204.9	1195.1	1207.5	1222.2	1224.7
40°	1310.7	1308.3	1296.0	1286.2	1291.1	1276.3	1281.2	1286.2	1298.4	1308.3	1310.7
42.5°	1423.8	1423.8	1411.6	1394.4	1386.9	1379.6	1379.6	1389.4	1401.7	1414.0	1414.0
45°	1564.0	1564.0	1549.3	1532.1	1509.9	1497.6	1502.5	1512.3	1527.2	1541.9	1546.8
47.5°	1728.8	1728.8	1709.1	1691.9	1669.8	1655.0	1655.0	1659.9	1682.0	1694.3	1701.8
50°	1913.2	1905.9	1886.2	1868.9	1856.7	1837.0	1839.5	1837.0	1856.7	1873.8	1878.8
52.5°	2105.0	2102.6	2082.9	2078.0	2085.4	2075.6	2075.6	2050.9	2058.3	2068.1	2065.6
55°	2343.6	2336.2	2319.0	2328.8	2358.3	2373.0	2368.1	2328.8	2306.7	2311.6	2309.1
57.5°	2604.2	2596.9	2592.0	2621.4	2687.8	2749.3	2737.0	2646.1	2604.2	2606.7	2609.1
60°	2869.8	2869.8	2884.6	2958.4	3101.0	3201.8	3164.9	3012.5	2938.7	2923.9	2919.0
62.5°	3142.8	3150.2	3182.1	3305.1	3524.0	3691.2	3597.7	3381.4	3270.7	3241.1	3231.3
65°	3460.0	3467.4	3514.1	3666.6	3956.8	4155.9	3996.2	3792.0	3637.1	3575.6	3565.8
67.5°	3919.8	3924.9	3961.7	4109.2	4382.2	4542.0	4377.3	4195.3	4028.1	3956.8	3951.9
70°	4333.0	4337.9	4369.9	4564.2	4815.0	4871.6	4689.6	4458.4	4283.8	4227.2	4217.4
72.5°	4239.6	4256.8	4362.6	4665.0	5051.1	5124.9	4741.3	4394.5	4114.2	4020.7	3991.2
75°	3556.0	3583.0	3750.2	4205.1	4819.9	5028.9	4436.3	3799.3	3381.4	3201.8	3155.1
77.5°	2075.6	2176.3	2464.1	3046.9	3924.9	4350.2	3654.3	2781.3	2078.0	1782.9	1684.5
80°	568.0	622.2	831.1	1401.7	2461.6	3046.9	2331.3	1276.3	688.5	516.4	479.6
82.5°	179.5	238.6	302.5	403.3	966.5	1605.8	865.6	376.2	295.1	243.5	216.5
85°	96.0	103.3	169.7	196.7	290.2	450.0	268.0	196.7	177.1	130.3	123.0
87.5°	49.2	51.7	96.0	96.0	127.9	105.8	115.6	105.8	100.9	63.9	56.6
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)