

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: P230962

Luminaire Tested: **ARCH-M-AF48-80-D-U-5WQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230962  
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-AF48-80-D-U-5WQ  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 535mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11675.9 lumens  
Efficiency: N/A  
Efficacy: 140.7 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): 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

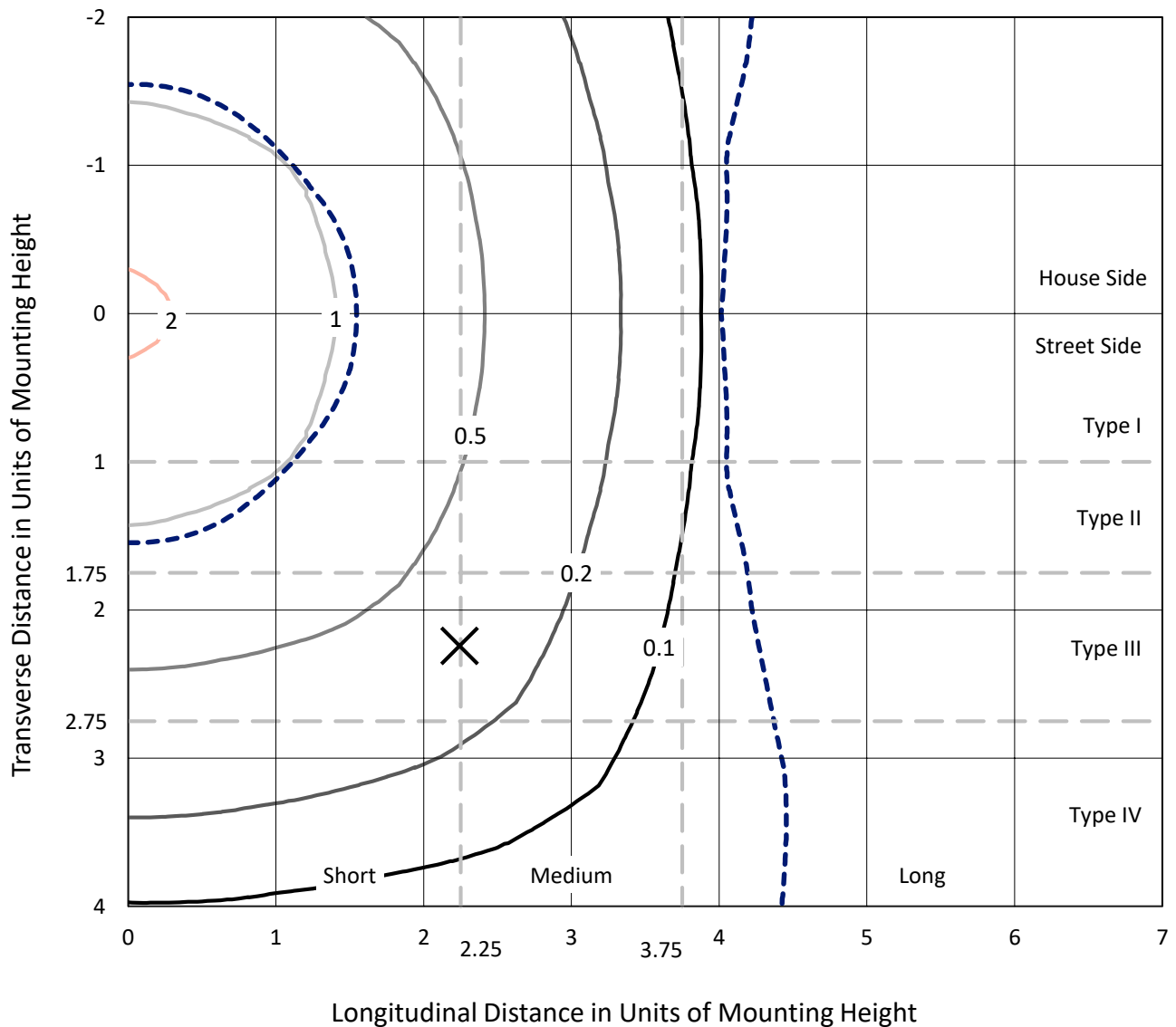


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

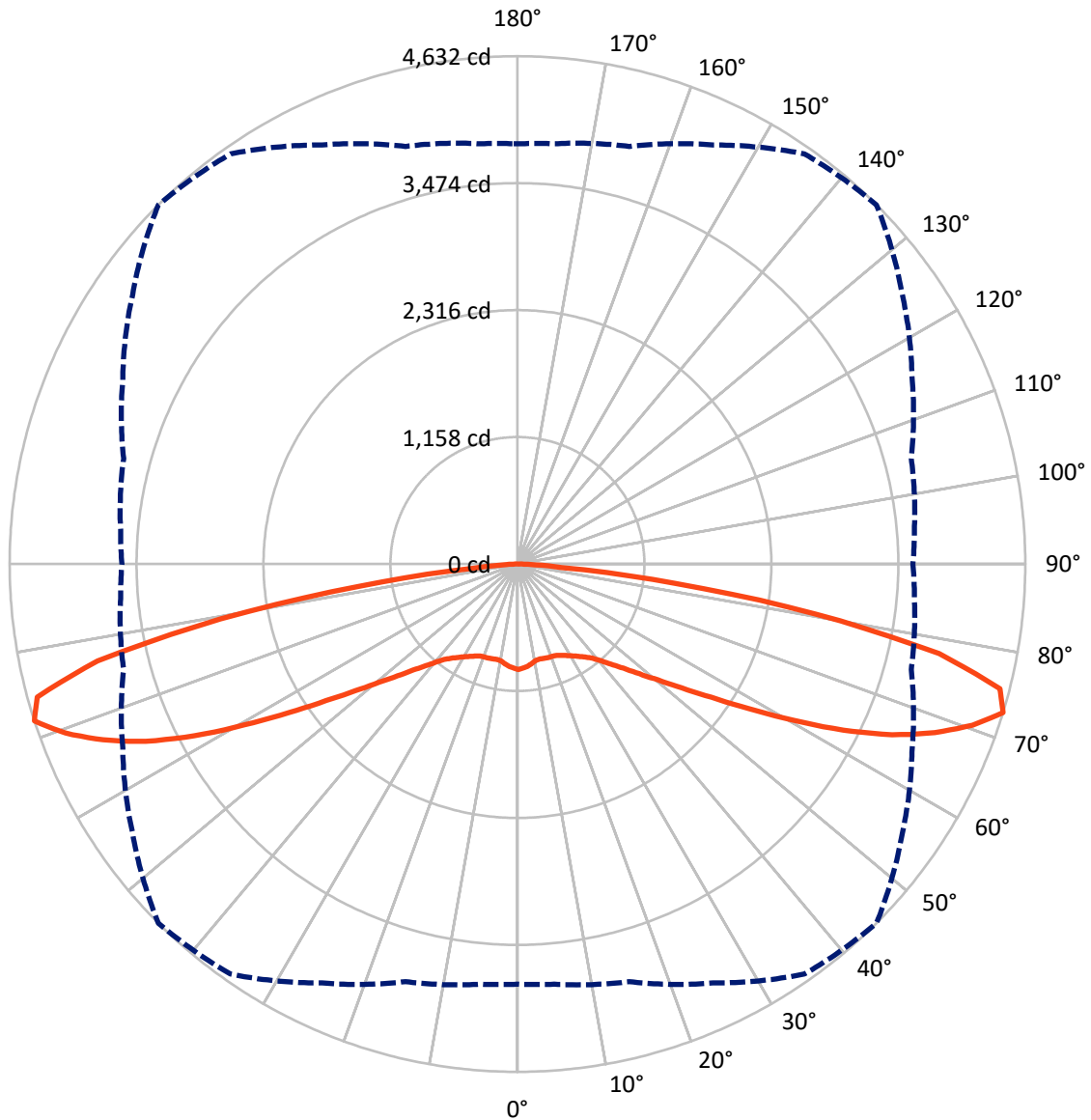


Based on 20 foot mounting height. Maximum calculated value = 2.4 fc  
 Type V - Short - Non-Cutoff

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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	5838.0	0.0	5838.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	5838.0	0.0	5838.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	11675.9	0.0	11675.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.6	0.8
10°-20°	255.5	2.2
20°-30°	427.5	3.7
30°-40°	656.9	5.6
40°-50°	1087.7	9.3
50°-60°	1933.8	16.6
60°-70°	3383.1	29.0
70°-80°	3442.0	29.5
80°-90°	400.8	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°	11675.9	100.0
0°-180°	11675.9	100.0



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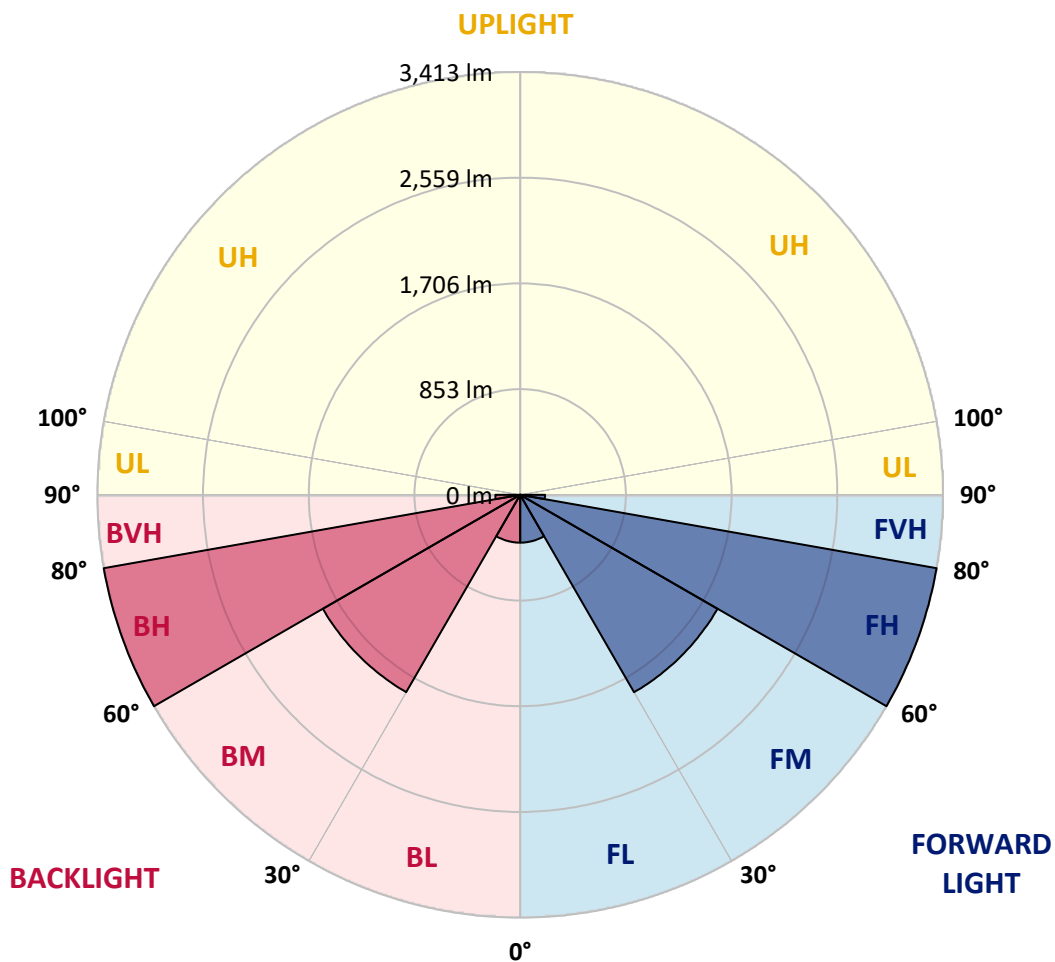
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	385.8	3.3			
FM	(30°-60°)	1839.2	15.8			
FH	(60°-80°)	3412.6	29.2			G2/5000
FVH	(80°-90°)	200.4	1.7			G2/225
BL	(0°-30°)	385.8	3.3	B1/500		
BM	(30°-60°)	1839.2	15.8	B2/2500		
BH	(60°-80°)	3412.6	29.2	B4/5000		G2/5000
BVH	(80°-90°)	200.4	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°	962.4	962.4	962.4	962.4	962.4	962.4	962.4	962.4	962.4	962.4	962.4
2.5°	953.5	955.7	951.2	951.2	951.2	949.0	951.2	949.0	951.2	953.5	953.5
5°	944.6	944.6	940.2	940.2	940.2	937.9	940.2	940.2	942.3	944.6	944.6
7.5°	924.5	924.5	922.4	920.1	917.9	917.9	920.1	920.1	922.4	924.5	924.5
10°	913.5	911.2	906.8	900.1	897.9	895.7	900.1	904.6	911.2	917.9	915.7
12.5°	909.0	906.8	897.9	891.3	886.8	889.0	893.4	897.9	909.0	915.7	913.5
15°	913.5	909.0	897.9	886.8	889.0	893.4	897.9	897.9	911.2	917.9	917.9
17.5°	913.5	911.2	897.9	889.0	891.3	897.9	900.1	897.9	909.0	920.1	920.1
20°	915.7	915.7	897.9	891.3	893.4	900.1	902.3	900.1	909.0	922.4	922.4
22.5°	920.1	917.9	900.1	895.7	900.1	904.6	906.8	904.6	913.5	924.5	926.8
25°	929.0	924.5	909.0	906.8	915.7	922.4	922.4	917.9	922.4	933.4	933.4
27.5°	940.2	937.9	920.1	920.1	931.3	944.6	937.9	929.0	933.4	944.6	944.6
30°	960.1	957.9	940.2	940.2	955.7	971.3	955.7	944.6	951.2	962.4	964.6
32.5°	989.1	989.1	973.4	969.0	995.7	1002.4	995.7	973.4	977.9	993.5	993.5
35°	1038.0	1033.5	1017.9	1015.7	1042.4	1040.1	1038.0	1017.9	1022.3	1040.1	1040.1
37.5°	1102.4	1100.2	1086.8	1080.1	1093.5	1084.6	1089.0	1080.1	1091.3	1104.6	1106.8
40°	1184.6	1182.4	1171.3	1162.4	1166.9	1153.5	1158.0	1162.4	1173.5	1182.4	1184.6
42.5°	1286.9	1286.9	1275.7	1260.2	1253.5	1246.9	1246.9	1255.8	1266.8	1278.0	1278.0
45°	1413.5	1413.5	1400.2	1384.7	1364.6	1353.6	1358.0	1366.9	1380.2	1393.6	1398.0
47.5°	1562.5	1562.5	1544.7	1529.1	1509.2	1495.8	1495.8	1500.3	1520.2	1531.4	1538.0
50°	1729.2	1722.4	1704.7	1689.2	1678.0	1660.2	1662.5	1660.2	1678.0	1693.6	1698.0
52.5°	1902.5	1900.3	1882.5	1878.0	1884.7	1875.9	1875.9	1853.6	1860.2	1869.1	1867.0
55°	2118.1	2111.5	2095.9	2104.7	2131.4	2144.8	2140.3	2104.7	2084.8	2089.2	2087.0
57.5°	2353.7	2347.1	2342.6	2369.3	2429.3	2484.8	2473.7	2391.5	2353.7	2356.0	2358.1
60°	2593.7	2593.7	2607.1	2673.8	2802.7	2893.8	2860.5	2722.7	2656.0	2642.6	2638.2
62.5°	2840.4	2847.1	2876.0	2987.1	3185.0	3336.0	3251.7	3056.1	2956.0	2929.3	2920.4
65°	3127.2	3133.8	3176.1	3313.8	3576.1	3756.2	3611.6	3427.2	3287.2	3231.6	3222.7
67.5°	3542.8	3547.2	3580.5	3713.9	3960.7	4105.1	3956.2	3791.7	3640.6	3576.1	3571.6
70°	3916.2	3920.6	3949.5	4125.0	4351.7	4402.9	4238.4	4029.5	3871.7	3820.6	3811.7
72.5°	3831.7	3847.2	3942.9	4216.2	4565.1	4631.8	4285.1	3971.7	3718.3	3633.9	3607.2
75°	3213.8	3238.3	3389.4	3800.6	4356.2	4545.2	4009.5	3433.8	3056.1	2893.8	2851.6
77.5°	1875.9	1966.9	2227.0	2753.8	3547.2	3931.7	3302.7	2513.7	1878.0	1611.4	1522.5
80°	513.4	562.3	751.3	1266.8	2224.8	2753.8	2107.0	1153.5	622.4	466.8	433.4
82.5°	162.2	215.6	273.3	364.5	873.5	1451.4	782.4	340.0	266.7	220.0	195.6
85°	86.6	93.4	153.3	177.8	262.3	406.7	242.2	177.8	160.0	117.8	111.1
87.5°	44.5	46.6	86.6	86.6	115.6	95.5	104.4	95.5	91.1	57.8	51.1
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)