

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: P230971

Luminaire Tested: **ARCH-M-AF48-40-D-U-5WQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230971  
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-AF48-40-D-U-5WQ  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 240mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5697.8 lumens  
Efficiency: N/A  
Efficacy: 149.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G1

Input Watts (W): 38  
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

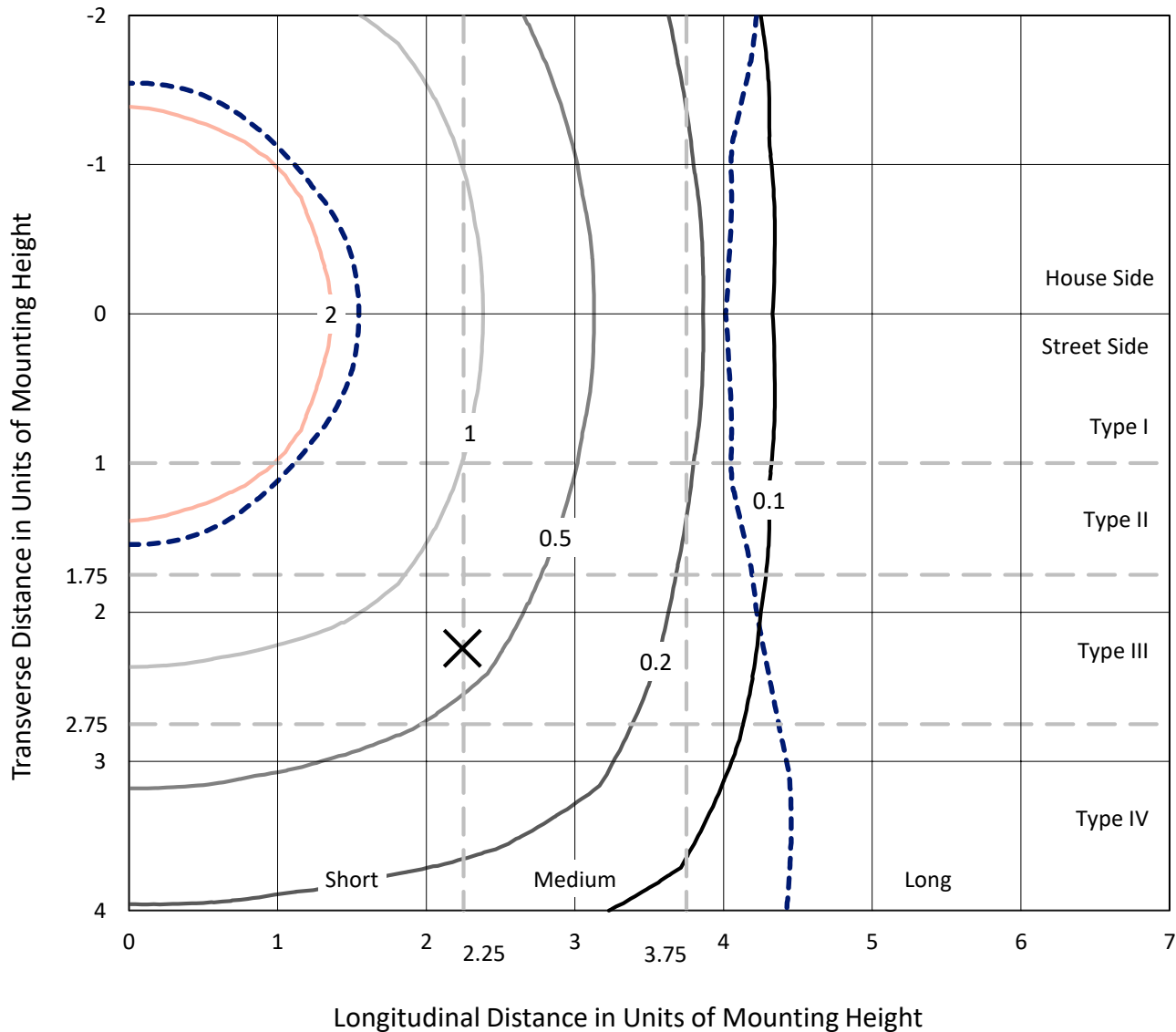


REPORT NUMBER: P230971

CATALOG NUMBER: ARCH-M-AF48-40-D-U-5WQ

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

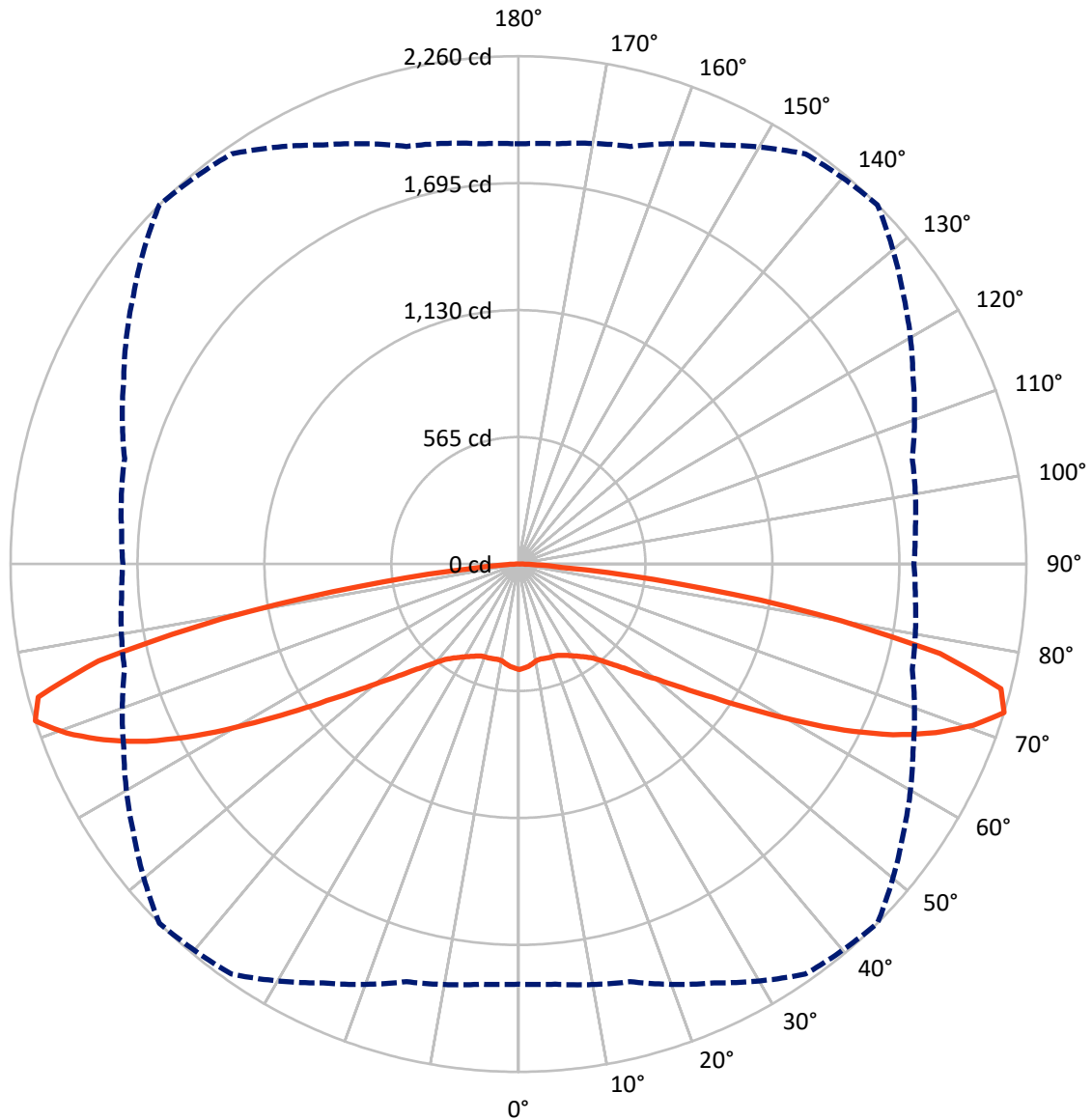


Based on 10 foot mounting height. Maximum calculated value = 4.7 fc  
 Type V - Short - Non-Cutoff

REPORT NUMBER: P230971

CATALOG NUMBER: ARCH-M-AF48-40-D-U-5WQ

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P230971

CATALOG NUMBER: ARCH-M-AF48-40-D-U-5WQ

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2848.9	0.0	2848.9
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2848.9	0.0	2848.9
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	5697.8	0.0	5697.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.2	0.8
10°-20°	124.7	2.2
20°-30°	208.6	3.7
30°-40°	320.6	5.6
40°-50°	530.8	9.3
50°-60°	943.7	16.6
60°-70°	1650.9	29.0
70°-80°	1679.7	29.5
80°-90°	195.6	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°	5697.8	100.0
0°-180°	5697.8	100.0



REPORT NUMBER: P230971

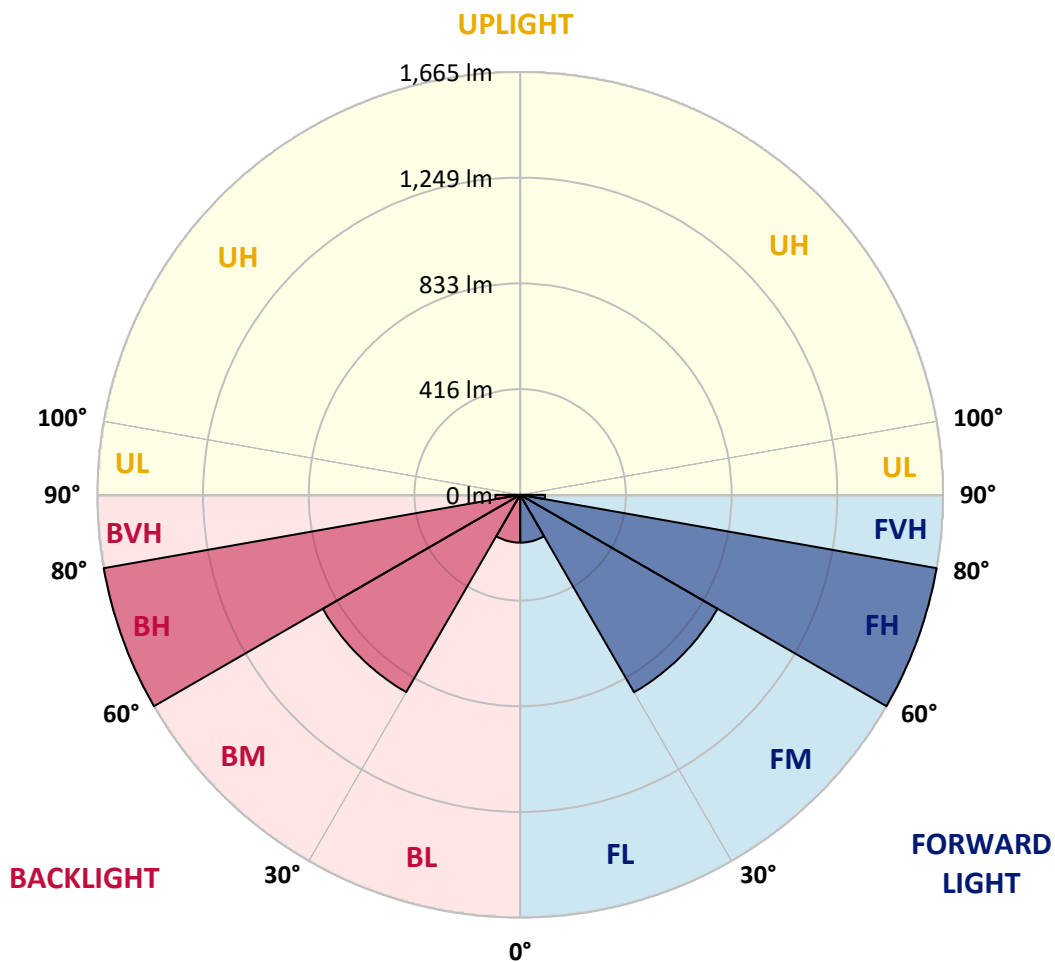
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	188.3	3.3			
FM (30°-60°)	897.5	15.8			
FH (60°-80°)	1665.3	29.2			G1/1800
FVH (80°-90°)	97.8	1.7			G1/100
BL (0°-30°)	188.3	3.3	B1/500		
BM (30°-60°)	897.5	15.8	B1/1000		
BH (60°-80°)	1665.3	29.2	B3/2500		G1/1800
BVH (80°-90°)	97.8	1.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	469.6	469.6	469.6	469.6	469.6	469.6	469.6	469.6	469.6	469.6	469.6
2.5°	465.3	466.4	464.2	464.2	464.2	463.1	464.2	463.1	464.2	465.3	465.3
5°	460.9	460.9	458.8	458.8	458.8	457.7	458.8	458.8	459.9	460.9	460.9
7.5°	451.2	451.2	450.1	449.1	448.0	448.0	449.1	449.1	450.1	451.2	451.2
10°	445.8	444.7	442.5	439.3	438.1	437.1	439.3	441.4	444.7	448.0	446.8
12.5°	443.7	442.5	438.1	435.0	432.7	433.8	436.0	438.1	443.7	446.8	445.8
15°	445.8	443.7	438.1	432.7	433.8	436.0	438.1	438.1	444.7	448.0	448.0
17.5°	445.8	444.7	438.1	433.8	435.0	438.1	439.3	438.1	443.7	449.1	449.1
20°	446.8	446.8	438.1	435.0	436.0	439.3	440.4	439.3	443.7	450.1	450.1
22.5°	449.1	448.0	439.3	437.1	439.3	441.4	442.5	441.4	445.8	451.2	452.2
25°	453.4	451.2	443.7	442.5	446.8	450.1	450.1	448.0	450.1	455.5	455.5
27.5°	458.8	457.7	449.1	449.1	454.5	460.9	457.7	453.4	455.5	460.9	460.9
30°	468.5	467.5	458.8	458.8	466.4	473.9	466.4	460.9	464.2	469.6	470.8
32.5°	482.6	482.6	475.1	472.9	485.9	489.2	485.9	475.1	477.2	484.8	484.8
35°	506.5	504.3	496.7	495.6	508.7	507.6	506.5	496.7	498.9	507.6	507.6
37.5°	538.0	536.8	530.4	527.1	533.7	529.3	531.4	527.1	532.5	539.1	540.1
40°	578.1	577.0	571.6	567.2	569.4	562.9	565.1	567.2	572.6	577.0	578.1
42.5°	628.0	628.0	622.6	615.0	611.7	608.5	608.5	612.8	618.3	623.7	623.7
45°	689.8	689.8	683.3	675.7	665.9	660.5	662.7	667.1	673.5	680.1	682.2
47.5°	762.5	762.5	753.8	746.2	736.4	730.0	730.0	732.1	741.8	747.3	750.5
50°	843.8	840.6	831.9	824.3	818.9	810.2	811.3	810.2	818.9	826.4	828.6
52.5°	928.4	927.3	918.6	916.5	919.7	915.4	915.4	904.6	907.8	912.2	911.0
55°	1033.6	1030.4	1022.7	1027.1	1040.1	1046.7	1044.4	1027.1	1017.3	1019.6	1018.4
57.5°	1148.6	1145.3	1143.1	1156.1	1185.5	1212.6	1207.2	1167.1	1148.6	1149.7	1150.7
60°	1265.7	1265.7	1272.2	1304.8	1367.7	1412.2	1395.9	1328.6	1296.1	1289.6	1287.4
62.5°	1386.1	1389.4	1403.5	1457.7	1554.3	1628.0	1586.8	1491.4	1442.6	1429.5	1425.2
65°	1526.0	1529.3	1549.9	1617.2	1745.2	1833.0	1762.4	1672.4	1604.1	1577.0	1572.7
67.5°	1728.9	1731.0	1747.3	1812.4	1932.8	2003.2	1930.6	1850.3	1776.6	1745.2	1743.0
70°	1911.1	1913.2	1927.3	2013.1	2123.6	2148.6	2068.3	1966.4	1889.4	1864.4	1860.1
72.5°	1869.9	1877.4	1924.1	2057.5	2227.8	2260.3	2091.1	1938.2	1814.5	1773.3	1760.3
75°	1568.4	1580.3	1654.0	1854.7	2125.8	2218.1	1956.6	1675.7	1491.4	1412.2	1391.5
77.5°	915.4	959.8	1086.8	1343.9	1731.0	1918.6	1611.8	1226.7	916.5	786.3	743.0
80°	250.5	274.4	366.6	618.3	1085.7	1343.9	1028.2	562.9	303.7	227.8	211.5
82.5°	79.2	105.2	133.4	177.9	426.3	708.3	381.8	165.9	130.1	107.4	95.4
85°	42.4	45.5	74.9	86.7	128.0	198.5	118.3	86.7	78.1	57.5	54.2
87.5°	21.7	22.8	42.4	42.4	56.4	46.6	50.9	46.6	44.5	28.2	25.0
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)