

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: P234766

Luminaire Tested: **ARCH-M-AF48-40-D-U-5WQ-8027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234766  
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-8027  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 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: 4328 lumens  
Efficiency: N/A  
Efficacy: 113.9 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 (A<sub>in</sub>): 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

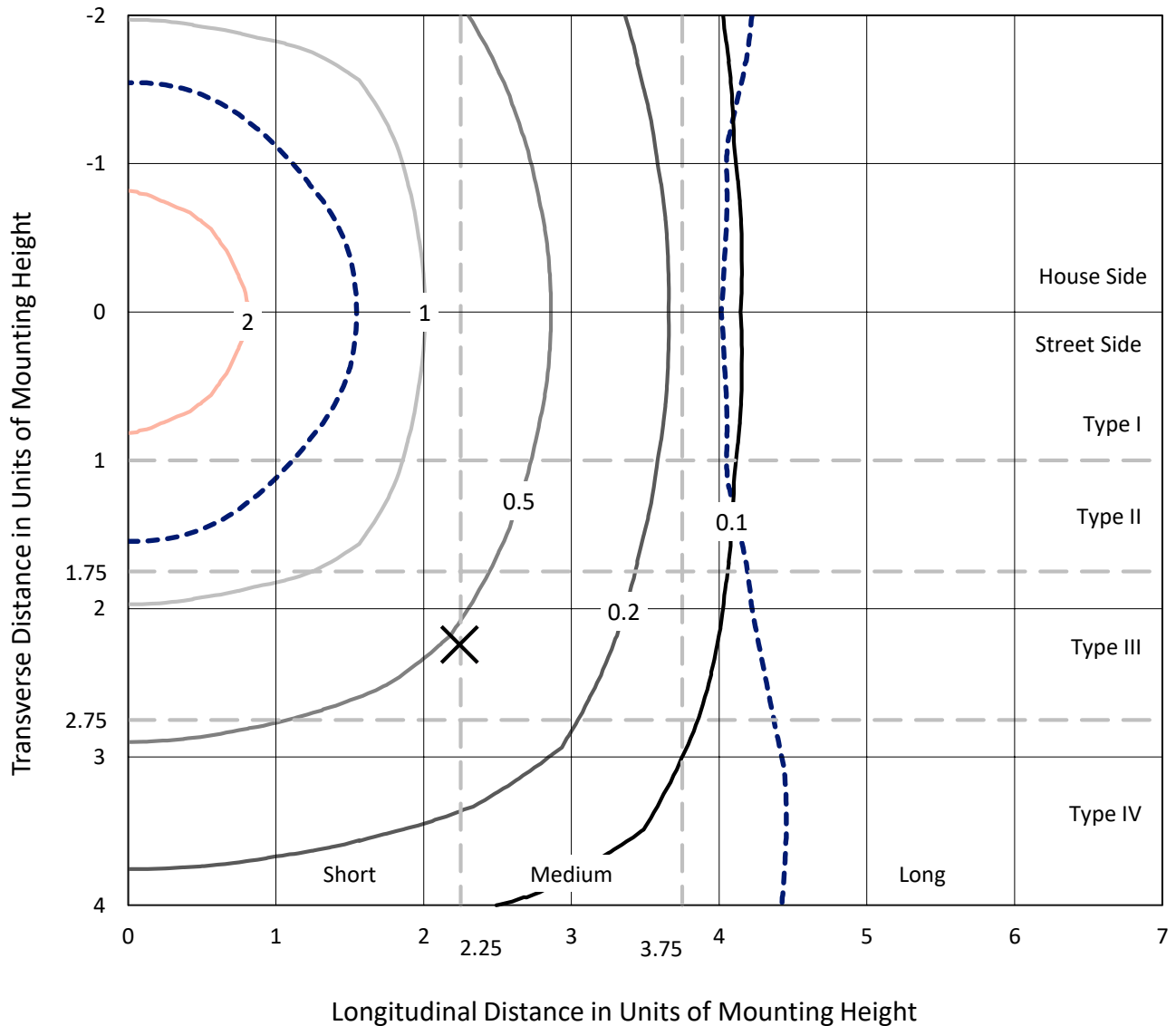


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

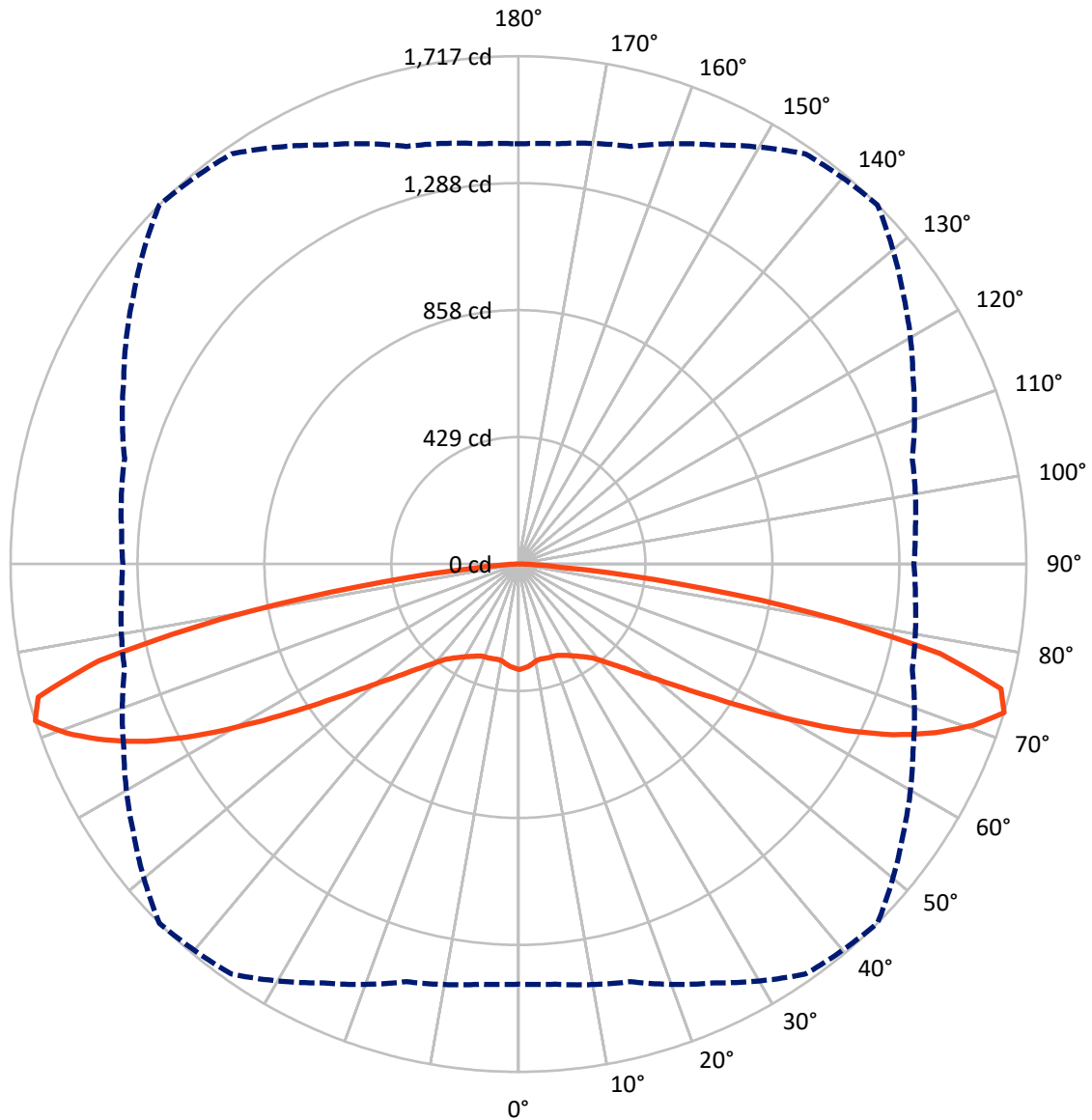


Based on 10 foot mounting height. Maximum calculated value = 3.6 fc  
 Type V - Short - Non-Cutoff

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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	2164.0	0.0	2164.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2164.0	0.0	2164.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	4328.0	0.0	4328.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.8	0.8
10°-20°	94.7	2.2
20°-30°	158.5	3.7
30°-40°	243.5	5.6
40°-50°	403.2	9.3
50°-60°	716.8	16.6
60°-70°	1254.0	29.0
70°-80°	1275.9	29.5
80°-90°	148.6	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°	4328.0	100.0
0°-180°	4328.0	100.0

**Coefficient of Utilization**



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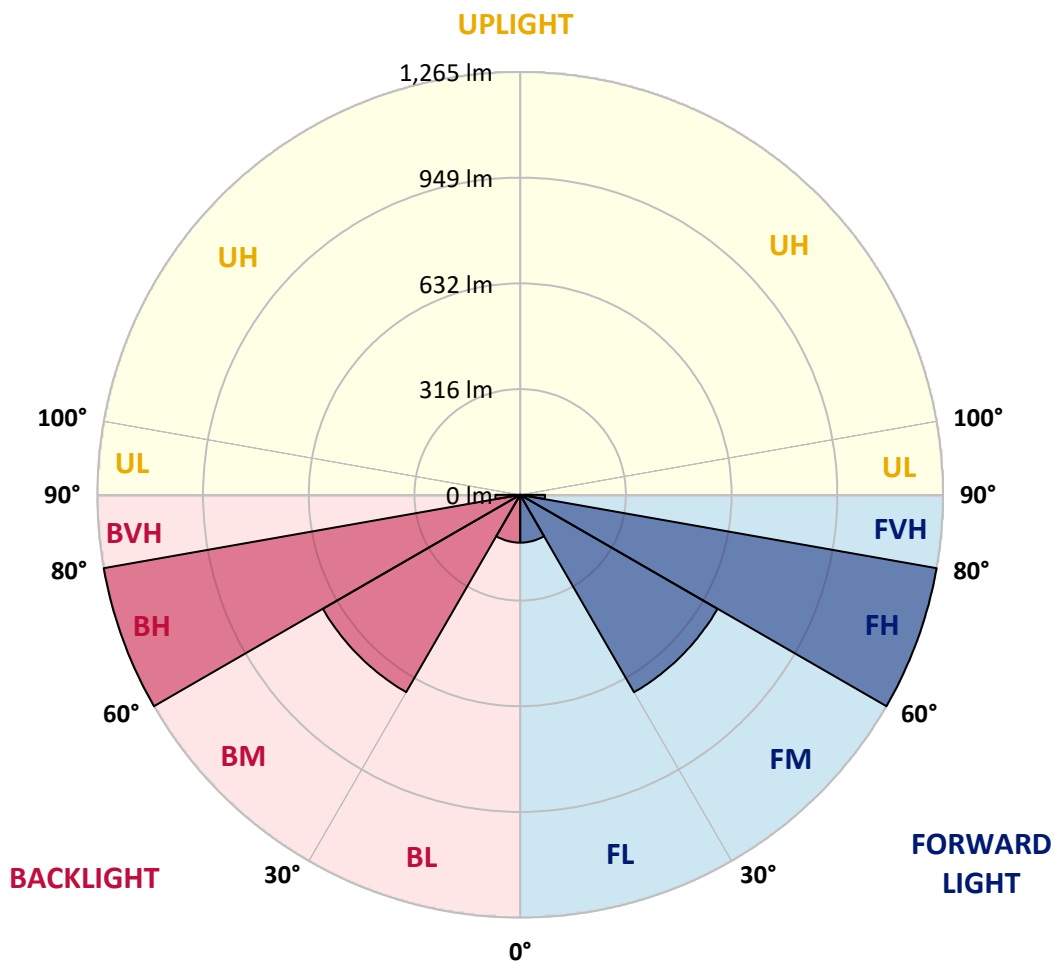
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	143.0	3.3			
FM (30°-60°)	681.8	15.8			
FH (60°-80°)	1265.0	29.2			G1/1800
FVH (80°-90°)	74.3	1.7			G1/100
BL (0°-30°)	143.0	3.3	B1/500		
BM (30°-60°)	681.8	15.8	B1/1000		
BH (60°-80°)	1265.0	29.2	B3/2500		G1/1800
BVH (80°-90°)	74.3	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°	356.7	356.7	356.7	356.7	356.7	356.7	356.7	356.7	356.7	356.7	356.7
2.5°	353.4	354.3	352.6	352.6	352.6	351.8	352.6	351.8	352.6	353.4	353.4
5°	350.1	350.1	348.5	348.5	348.5	347.7	348.5	348.5	349.3	350.1	350.1
7.5°	342.7	342.7	341.9	341.1	340.3	340.3	341.1	341.1	341.9	342.7	342.7
10°	338.6	337.8	336.1	333.7	332.8	332.0	333.7	335.3	337.8	340.3	339.4
12.5°	337.0	336.1	332.8	330.4	328.7	329.5	331.2	332.8	337.0	339.4	338.6
15°	338.6	337.0	332.8	328.7	329.5	331.2	332.8	332.8	337.8	340.3	340.3
17.5°	338.6	337.8	332.8	329.5	330.4	332.8	333.7	332.8	337.0	341.1	341.1
20°	339.4	339.4	332.8	330.4	331.2	333.7	334.5	333.7	337.0	341.9	341.9
22.5°	341.1	340.3	333.7	332.0	333.7	335.3	336.1	335.3	338.6	342.7	343.5
25°	344.4	342.7	337.0	336.1	339.4	341.9	341.9	340.3	341.9	346.0	346.0
27.5°	348.5	347.7	341.1	341.1	345.2	350.1	347.7	344.4	346.0	350.1	350.1
30°	355.9	355.1	348.5	348.5	354.3	360.0	354.3	350.1	352.6	356.7	357.6
32.5°	366.6	366.6	360.8	359.2	369.1	371.6	369.1	360.8	362.5	368.3	368.3
35°	384.7	383.1	377.3	376.5	386.4	385.6	384.7	377.3	379.0	385.6	385.6
37.5°	408.6	407.8	402.9	400.4	405.3	402.0	403.7	400.4	404.5	409.5	410.3
40°	439.1	438.3	434.2	430.9	432.5	427.6	429.2	430.9	435.0	438.3	439.1
42.5°	477.0	477.0	472.9	467.1	464.7	462.2	462.2	465.5	469.6	473.7	473.7
45°	524.0	524.0	519.0	513.3	505.8	501.7	503.4	506.7	511.6	516.6	518.2
47.5°	579.2	579.2	572.6	566.8	559.4	554.5	554.5	556.1	563.5	567.6	570.1
50°	641.0	638.5	631.9	626.1	622.0	615.4	616.2	615.4	622.0	627.8	629.4
52.5°	705.2	704.4	697.8	696.2	698.6	695.3	695.3	687.1	689.6	692.9	692.0
55°	785.1	782.7	776.9	780.2	790.1	795.0	793.4	780.2	772.8	774.4	773.6
57.5°	872.5	870.0	868.3	878.2	900.5	921.1	916.9	886.5	872.5	873.3	874.1
60°	961.4	961.4	966.4	991.1	1038.9	1072.7	1060.3	1009.2	984.5	979.6	977.9
62.5°	1052.9	1055.4	1066.1	1107.3	1180.6	1236.6	1205.3	1132.8	1095.7	1085.8	1082.5
65°	1159.2	1161.6	1177.3	1228.4	1325.6	1392.3	1338.8	1270.4	1218.5	1197.9	1194.6
67.5°	1313.2	1314.9	1327.2	1376.7	1468.1	1521.7	1466.5	1405.5	1349.5	1325.6	1323.9
70°	1451.6	1453.3	1464.0	1529.1	1613.1	1632.1	1571.1	1493.6	1435.1	1416.2	1412.9
72.5°	1420.3	1426.1	1461.5	1562.8	1692.2	1716.9	1588.4	1472.2	1378.3	1347.0	1337.1
75°	1191.3	1200.4	1256.4	1408.8	1614.7	1684.8	1486.2	1272.9	1132.8	1072.7	1057.0
77.5°	695.3	729.1	825.5	1020.8	1314.9	1457.4	1224.2	931.8	696.2	597.3	564.3
80°	190.3	208.4	278.5	469.6	824.7	1020.8	781.0	427.6	230.7	173.0	160.7
82.5°	60.1	79.9	101.3	135.1	323.8	538.0	290.0	126.0	98.9	81.6	72.5
85°	32.1	34.6	56.8	65.9	97.2	150.8	89.8	65.9	59.3	43.7	41.2
87.5°	16.5	17.3	32.1	32.1	42.8	35.4	38.7	35.4	33.8	21.4	18.9
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)