

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: P265778

Luminaire Tested: **ARCH-M-AF48-70-D-U-5WQ-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265778  
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-AF48-70-D-U-5WQ-7027  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 470mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8866.7 lumens  
Efficiency: N/A  
Efficacy: 121.5 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): 73  
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

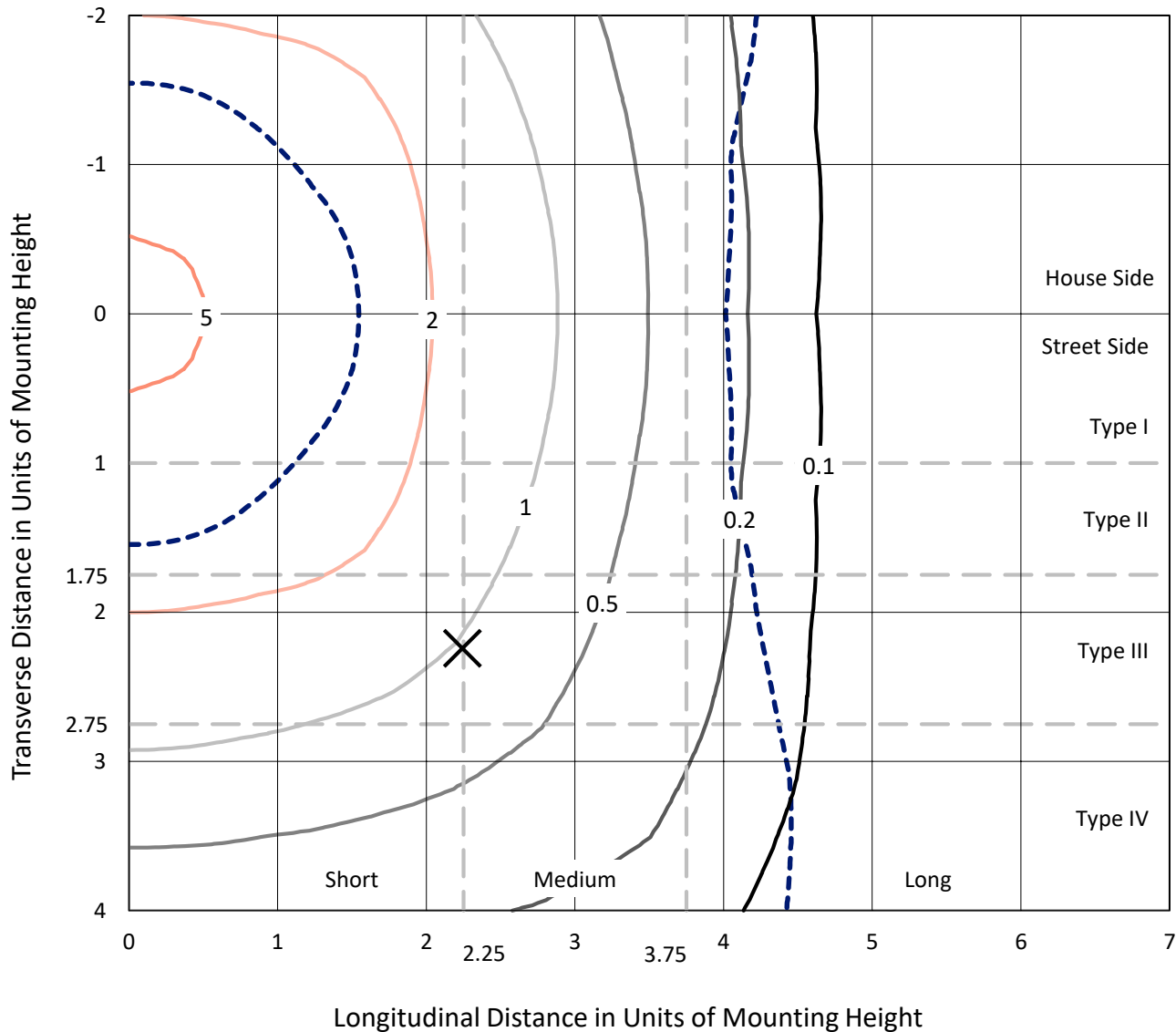


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

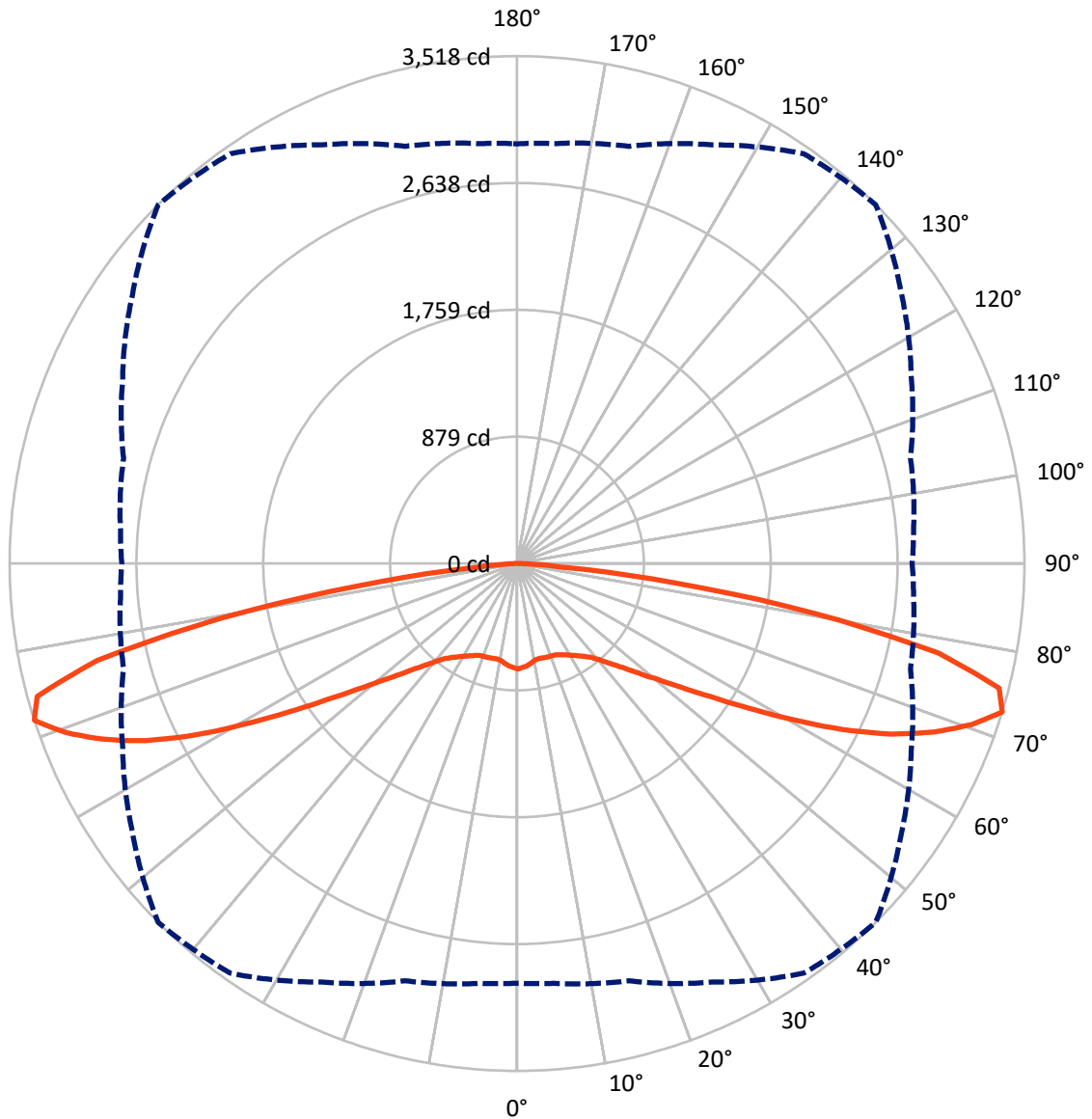


Based on 10 foot mounting height. Maximum calculated value = 7.3 fc  
 Type V - Short - Non-Cutoff

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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	4433.4	0.0	4433.4
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4433.4	0.0	4433.4
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	8866.7	0.0	8866.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.2	0.8
10°-20°	194.0	2.2
20°-30°	324.7	3.7
30°-40°	498.9	5.6
40°-50°	826.0	9.3
50°-60°	1468.5	16.6
60°-70°	2569.1	29.0
70°-80°	2613.9	29.5
80°-90°	304.4	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°	8866.7	100.0
0°-180°	8866.7	100.0

**Coefficient of Utilization**



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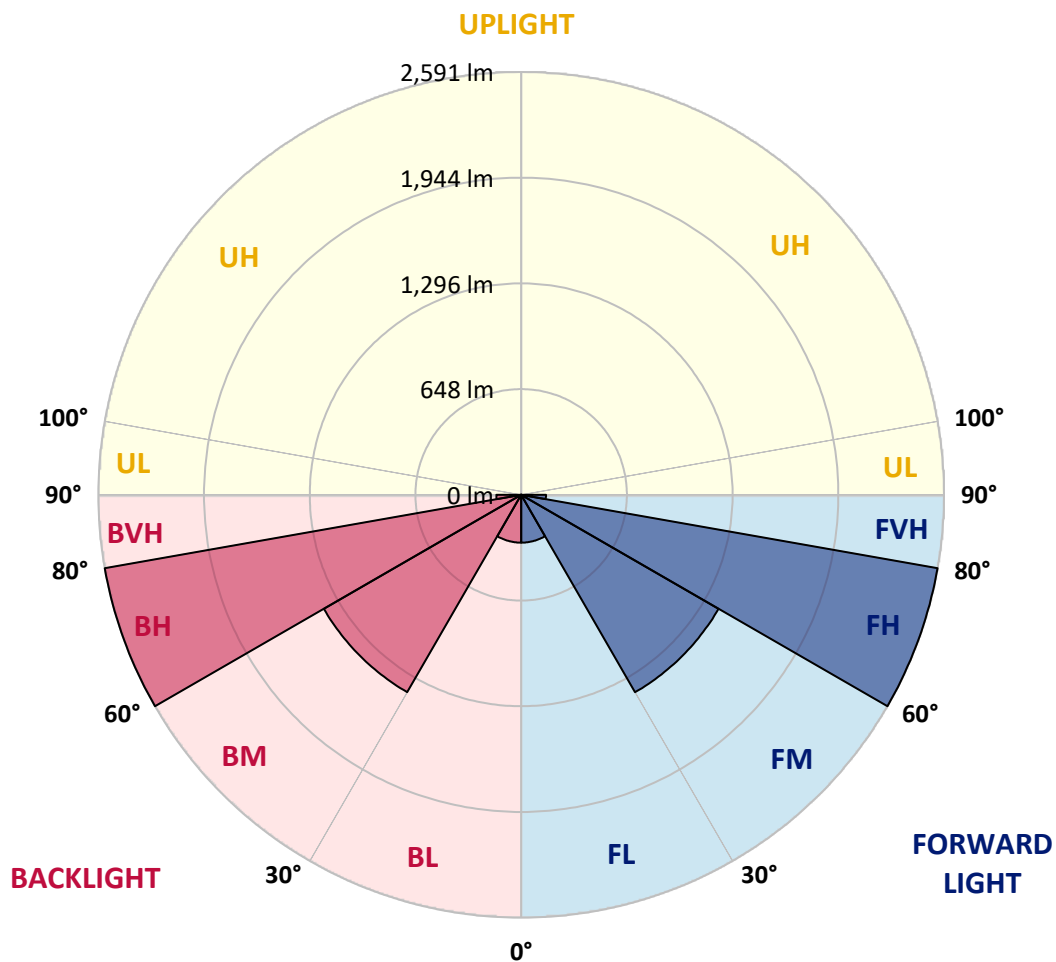
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	293.0	3.3			
FM	(30°-60°)	1396.7	15.8			
FH	(60°-80°)	2591.5	29.2			G2/5000
FVH	(80°-90°)	152.2	1.7			G2/225
BL	(0°-30°)	293.0	3.3	B1/500		
BM	(30°-60°)	1396.7	15.8	B2/2500		
BH	(60°-80°)	2591.5	29.2	B4/5000		G2/5000
BVH	(80°-90°)	152.2	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°	730.9	730.9	730.9	730.9	730.9	730.9	730.9	730.9	730.9	730.9	730.9
2.5°	724.0	725.8	722.3	722.3	722.3	720.7	722.3	720.7	722.3	724.0	724.0
5°	717.3	717.3	714.0	714.0	714.0	712.3	714.0	714.0	715.6	717.3	717.3
7.5°	702.1	702.1	700.5	698.7	697.1	697.1	698.7	698.7	700.5	702.1	702.1
10°	693.8	692.1	688.6	683.6	681.9	680.1	683.6	686.9	692.1	697.1	695.4
12.5°	690.3	688.6	681.9	676.9	673.4	675.2	678.5	681.9	690.3	695.4	693.8
15°	693.8	690.3	681.9	673.4	675.2	678.5	681.9	681.9	692.1	697.1	697.1
17.5°	693.8	692.1	681.9	675.2	676.9	681.9	683.6	681.9	690.3	698.7	698.7
20°	695.4	695.4	681.9	676.9	678.5	683.6	685.2	683.6	690.3	700.5	700.5
22.5°	698.7	697.1	683.6	680.1	683.6	686.9	688.6	686.9	693.8	702.1	703.8
25°	705.4	702.1	690.3	688.6	695.4	700.5	700.5	697.1	700.5	708.9	708.9
27.5°	714.0	712.3	698.7	698.7	707.1	717.3	712.3	705.4	708.9	717.3	717.3
30°	729.2	727.4	714.0	714.0	725.8	737.6	725.8	717.3	722.3	730.9	732.5
32.5°	751.1	751.1	739.2	735.9	756.2	761.3	756.2	739.2	742.5	754.4	754.4
35°	788.3	784.8	773.0	771.4	791.5	789.9	788.3	773.0	776.3	789.9	789.9
37.5°	837.1	835.5	825.4	820.3	830.5	823.7	827.0	820.3	828.7	838.8	840.5
40°	899.7	897.9	889.5	882.8	886.1	875.9	879.4	882.8	891.2	897.9	899.7
42.5°	977.3	977.3	968.8	957.0	951.9	946.9	946.9	953.6	962.1	970.4	970.4
45°	1073.5	1073.5	1063.4	1051.5	1036.4	1027.9	1031.3	1038.0	1048.1	1058.3	1061.6
47.5°	1186.5	1186.5	1173.0	1161.1	1146.0	1135.8	1135.8	1139.3	1154.4	1162.9	1167.9
50°	1313.1	1308.0	1294.5	1282.7	1274.2	1260.9	1262.5	1260.9	1274.2	1286.2	1289.4
52.5°	1444.7	1443.0	1429.6	1426.1	1431.3	1424.5	1424.5	1407.6	1412.8	1419.4	1417.7
55°	1608.4	1603.5	1591.5	1598.4	1618.7	1628.7	1625.4	1598.4	1583.2	1586.5	1584.9
57.5°	1787.4	1782.3	1779.0	1799.2	1844.8	1887.0	1878.5	1816.2	1787.4	1789.1	1790.9
60°	1969.7	1969.7	1979.9	2030.3	2128.4	2197.6	2172.2	2067.5	2017.0	2006.9	2003.4
62.5°	2157.0	2162.1	2184.0	2268.4	2418.6	2533.4	2469.4	2320.7	2244.8	2224.6	2217.7
65°	2374.8	2379.8	2411.9	2516.5	2715.7	2852.4	2742.6	2602.6	2496.3	2454.1	2447.3
67.5°	2690.3	2693.7	2719.1	2820.3	3007.6	3117.4	3004.3	2879.3	2764.7	2715.7	2712.3
70°	2973.8	2977.3	2999.3	3132.6	3304.8	3343.5	3218.6	3059.9	2940.2	2901.3	2894.6
72.5°	2909.8	2921.6	2994.2	3201.7	3466.7	3517.5	3254.1	3016.1	2823.7	2759.6	2739.3
75°	2440.5	2459.1	2574.0	2886.2	3308.1	3451.6	3044.9	2607.7	2320.7	2197.6	2165.5
77.5°	1424.5	1493.7	1691.1	2091.3	2693.7	2985.7	2508.1	1908.9	1426.1	1223.8	1156.2
80°	389.9	427.1	570.5	962.1	1689.5	2091.3	1600.1	875.9	472.6	354.4	329.0
82.5°	123.2	163.8	207.6	276.8	663.3	1102.1	594.0	258.3	202.6	167.1	148.5
85°	65.8	70.8	116.5	135.0	199.2	308.8	184.0	135.0	121.5	89.4	84.4
87.5°	33.7	35.5	65.8	65.8	87.8	72.6	79.3	72.6	69.2	43.8	38.8
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)