

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: P234769

Luminaire Tested: **ARCH-M-AF48-70-D-U-5WQ-8027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234769  
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-8027  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 80 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: 7930 lumens  
Efficiency: N/A  
Efficacy: 108.6 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 - 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

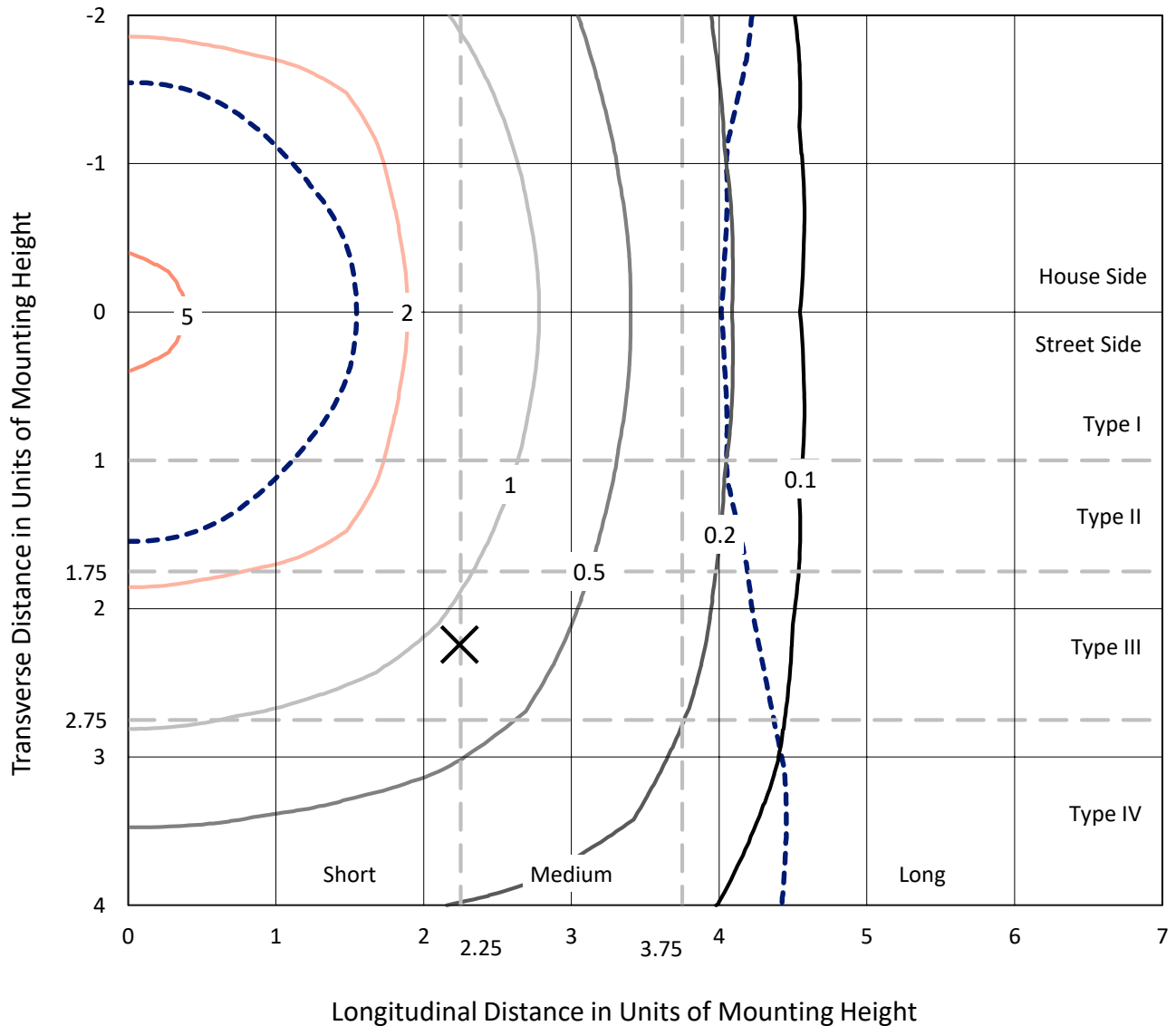


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

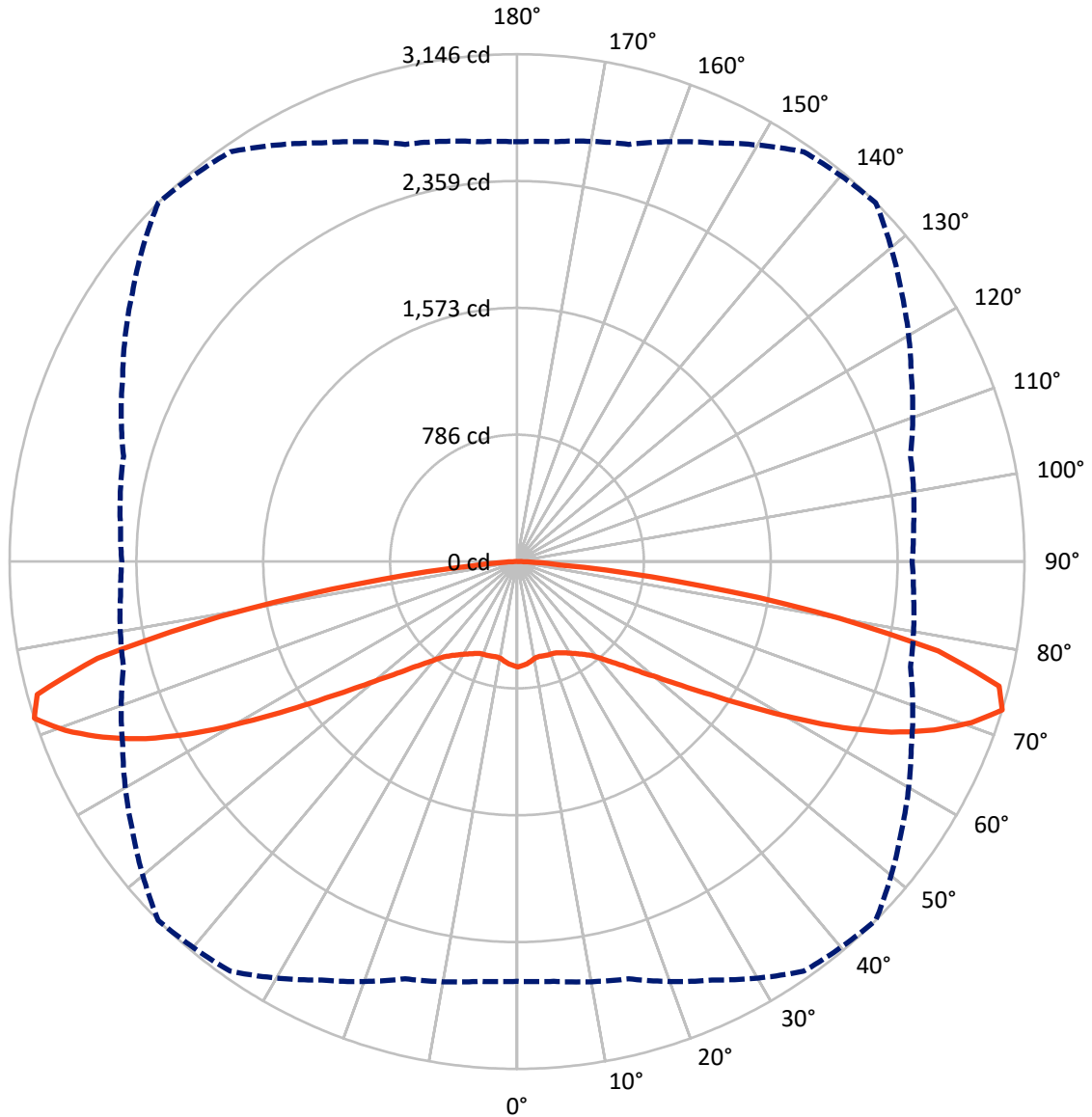


Based on 10 foot mounting height. Maximum calculated value = 6.5 fc  
 Type V - Short - Non-Cutoff

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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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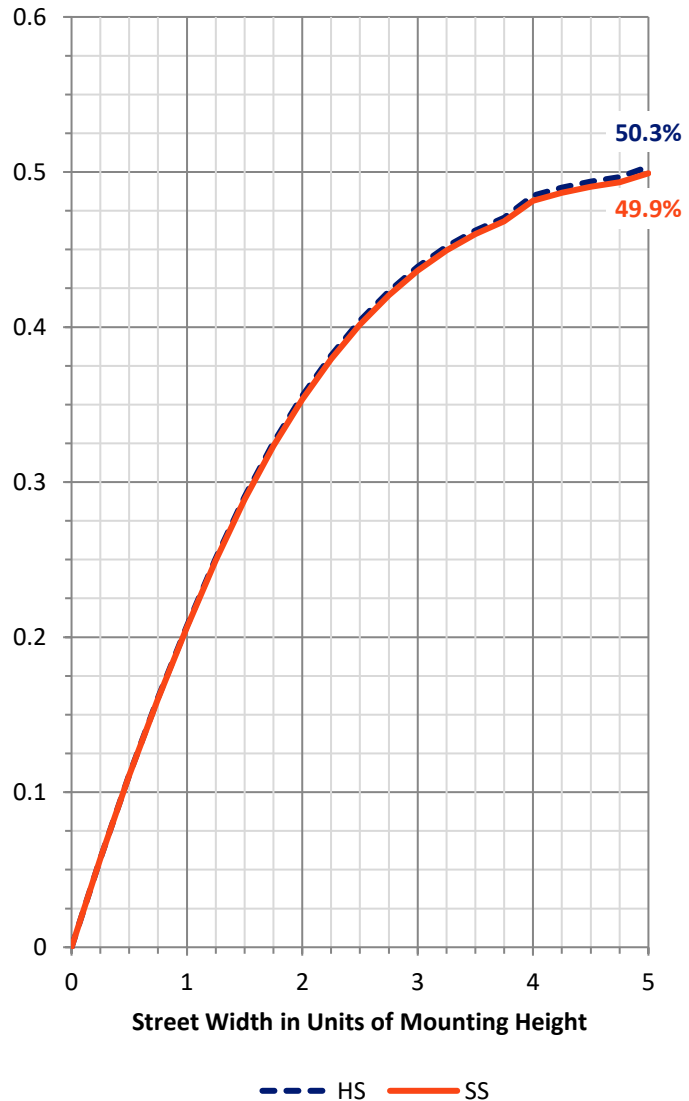
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3965.0	0.0	3965.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3965.0	0.0	3965.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	7930.0	0.0	7930.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.1	0.8
10°-20°	173.5	2.2
20°-30°	290.4	3.7
30°-40°	446.2	5.6
40°-50°	738.8	9.3
50°-60°	1313.4	16.6
60°-70°	2297.7	29.0
70°-80°	2337.7	29.5
80°-90°	272.2	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°	7930.0	100.0
0°-180°	7930.0	100.0



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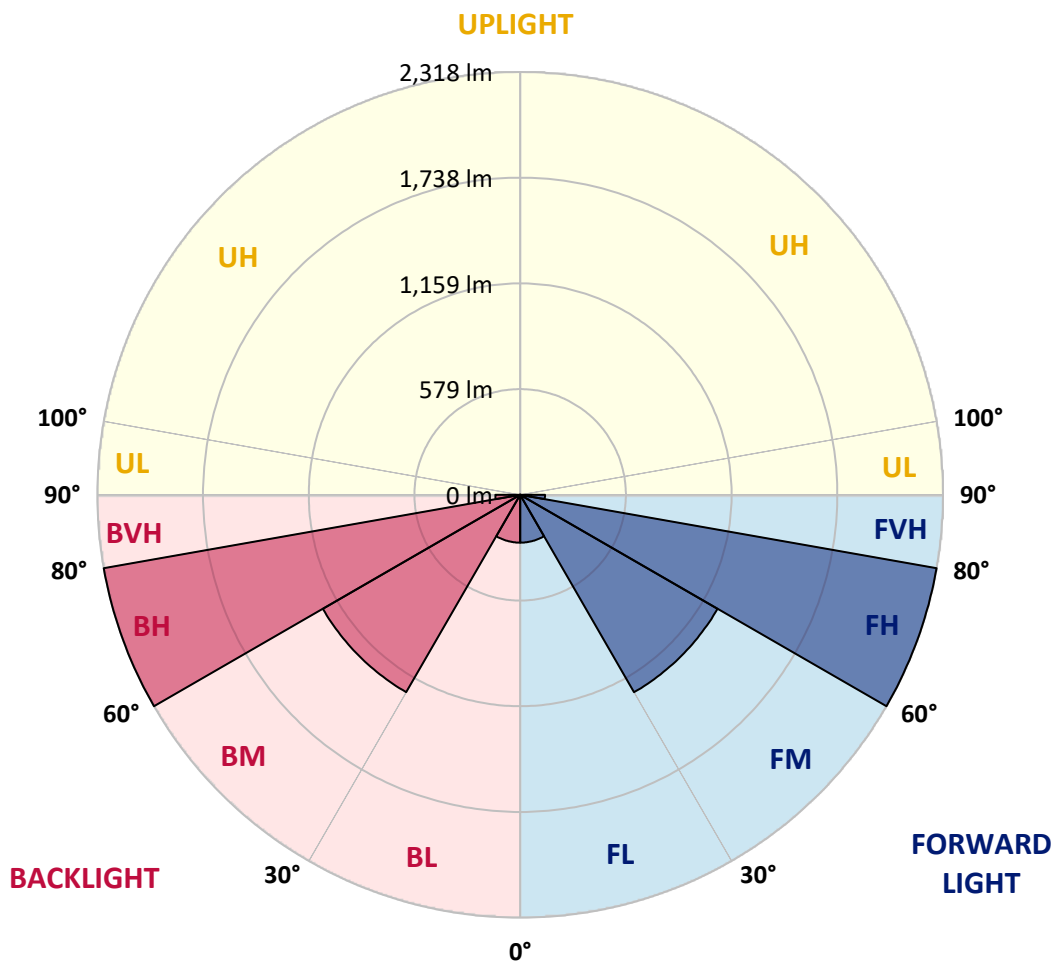
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	262.0	3.3			
FM	(30°-60°)	1249.1	15.8			
FH	(60°-80°)	2317.7	29.2			G2/5000
FVH	(80°-90°)	136.1	1.7			G2/225
BL	(0°-30°)	262.0	3.3	B1/500		
BM	(30°-60°)	1249.1	15.8	B2/2500		
BH	(60°-80°)	2317.7	29.2	B3/2500		G2/5000
BVH	(80°-90°)	136.1	1.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	653.6	653.6	653.6	653.6	653.6	653.6	653.6	653.6	653.6	653.6	653.6
2.5°	647.6	649.1	646.1	646.1	646.1	644.6	646.1	644.6	646.1	647.6	647.6
5°	641.5	641.5	638.5	638.5	638.5	637.0	638.5	638.5	640.0	641.5	641.5
7.5°	628.0	628.0	626.4	624.9	623.4	623.4	624.9	624.9	626.4	628.0	628.0
10°	620.4	618.9	615.9	611.4	609.8	608.3	611.4	614.4	618.9	623.4	621.9
12.5°	617.4	615.9	609.8	605.3	602.3	603.8	606.8	609.8	617.4	621.9	620.4
15°	620.4	617.4	609.8	602.3	603.8	606.8	609.8	609.8	618.9	623.4	623.4
17.5°	620.4	618.9	609.8	603.8	605.3	609.8	611.4	609.8	617.4	624.9	624.9
20°	621.9	621.9	609.8	605.3	606.8	611.4	612.9	611.4	617.4	626.4	626.4
22.5°	624.9	623.4	611.4	608.3	611.4	614.4	615.9	614.4	620.4	628.0	629.5
25°	631.0	628.0	617.4	615.9	621.9	626.4	626.4	623.4	626.4	634.0	634.0
27.5°	638.5	637.0	624.9	624.9	632.5	641.5	637.0	631.0	634.0	641.5	641.5
30°	652.1	650.6	638.5	638.5	649.1	659.7	649.1	641.5	646.1	653.6	655.1
32.5°	671.7	671.7	661.2	658.1	676.3	680.8	676.3	661.2	664.2	674.7	674.7
35°	704.9	701.9	691.4	689.8	708.0	706.4	704.9	691.4	694.4	706.4	706.4
37.5°	748.7	747.2	738.1	733.6	742.7	736.6	739.7	733.6	741.2	750.2	751.7
40°	804.6	803.1	795.5	789.5	792.5	783.4	786.5	789.5	797.0	803.1	804.6
42.5°	874.0	874.0	866.5	855.9	851.4	846.8	846.8	852.9	860.4	868.0	868.0
45°	960.0	960.0	951.0	940.4	926.8	919.3	922.3	928.3	937.4	946.5	949.5
47.5°	1061.2	1061.2	1049.1	1038.5	1025.0	1015.9	1015.9	1018.9	1032.5	1040.0	1044.6
50°	1174.4	1169.9	1157.8	1147.2	1139.7	1127.6	1129.1	1127.6	1139.7	1150.2	1153.3
52.5°	1292.1	1290.6	1278.6	1275.5	1280.1	1274.0	1274.0	1258.9	1263.5	1269.5	1268.0
55°	1438.6	1434.0	1423.5	1429.5	1447.6	1456.7	1453.7	1429.5	1415.9	1418.9	1417.4
57.5°	1598.6	1594.0	1591.0	1609.1	1649.9	1687.6	1680.1	1624.2	1598.6	1600.1	1601.6
60°	1761.6	1761.6	1770.7	1815.9	1903.5	1965.4	1942.7	1849.1	1803.9	1794.8	1791.8
62.5°	1929.1	1933.7	1953.3	2028.8	2163.1	2265.8	2208.4	2075.6	2007.6	1989.5	1983.5
65°	2123.9	2128.4	2157.1	2250.7	2428.8	2551.1	2452.9	2327.7	2232.6	2194.8	2188.8
67.5°	2406.2	2409.2	2431.8	2522.4	2689.9	2788.1	2686.9	2575.2	2472.6	2428.8	2425.8
70°	2659.8	2662.8	2682.4	2801.6	2955.6	2990.3	2878.6	2736.7	2629.6	2594.8	2588.8
72.5°	2602.4	2613.0	2677.9	2863.5	3100.5	3145.8	2910.3	2697.5	2525.4	2468.0	2449.9
75°	2182.7	2199.4	2302.0	2581.3	2958.6	3086.9	2723.1	2332.2	2075.6	1965.4	1936.7
77.5°	1274.0	1335.9	1512.5	1870.3	2409.2	2670.3	2243.1	1707.3	1275.5	1094.4	1034.0
80°	348.7	381.9	510.2	860.4	1511.0	1870.3	1431.0	783.4	422.7	317.0	294.4
82.5°	110.2	146.4	185.7	247.6	593.2	985.7	531.3	231.0	181.1	149.4	132.8
85°	58.9	63.4	104.2	120.8	178.1	276.2	164.5	120.8	108.7	80.0	75.5
87.5°	30.2	31.7	58.9	58.9	78.5	64.9	70.9	64.9	61.9	39.2	34.7
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)