

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: P234772

Luminaire Tested: **ARCH-M-AF48-100-D-U-5WQ-8027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234772  
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-AF48-100-D-U-5WQ-8027  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 660mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10619 lumens  
Efficiency: N/A  
Efficacy: 105.1 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): 101  
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

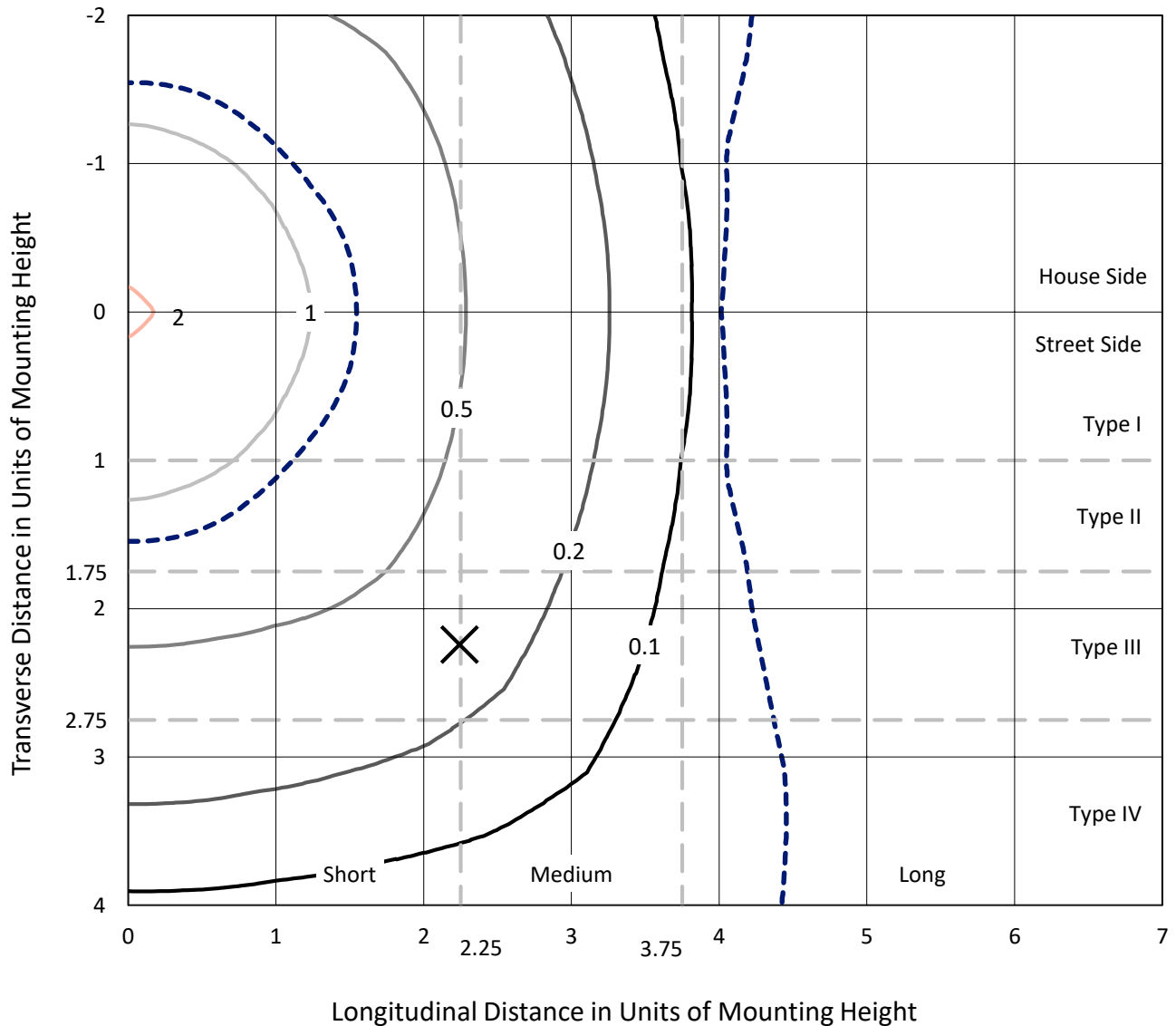


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

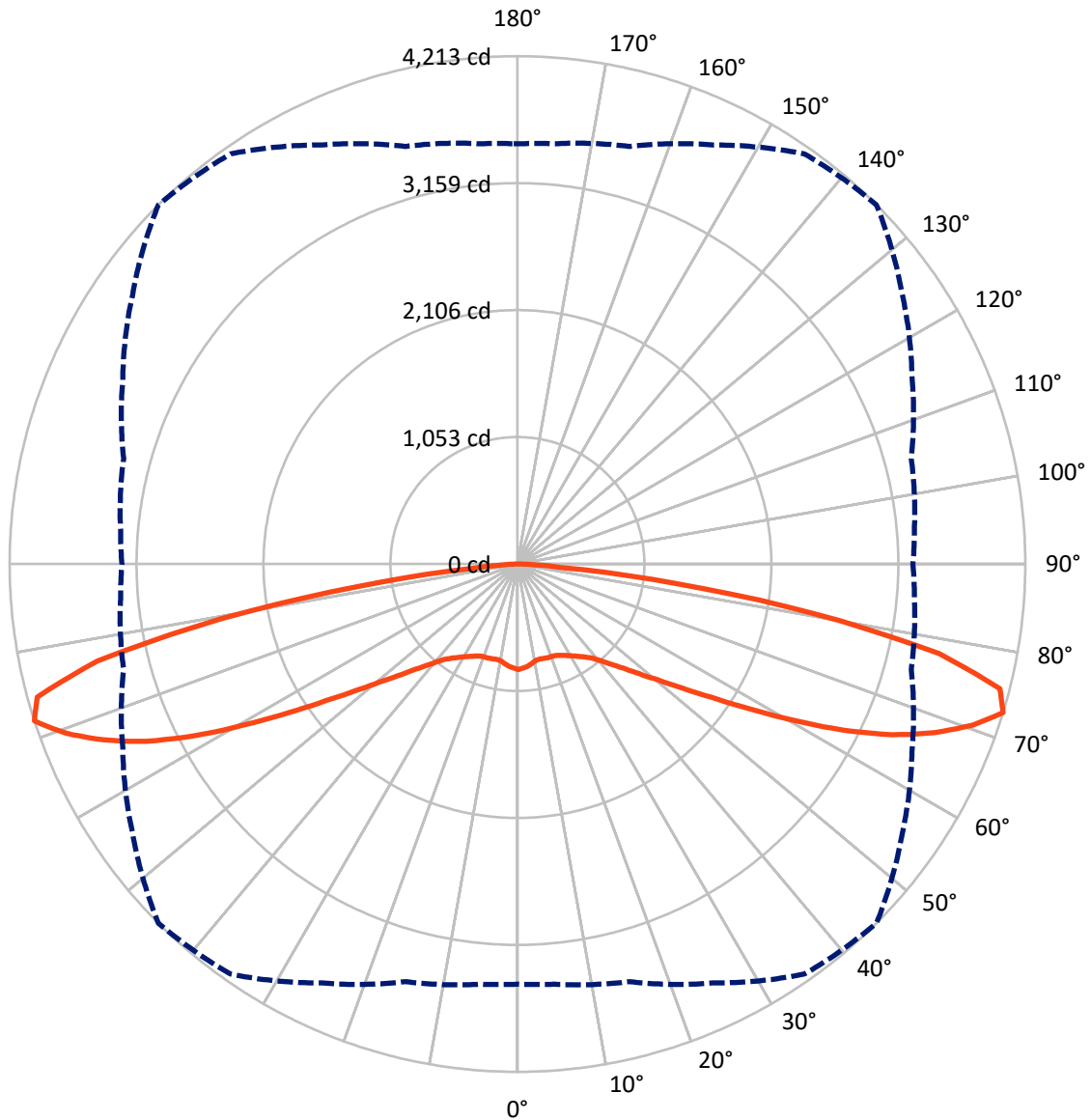


Based on 20 foot mounting height. Maximum calculated value = 2.2 fc  
 Type V - Short - Non-Cutoff

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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	5309.5	0.0	5309.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	5309.5	0.0	5309.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	10619.0	0.0	10619.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.5	0.8
10°-20°	232.4	2.2
20°-30°	388.8	3.7
30°-40°	597.5	5.6
40°-50°	989.3	9.3
50°-60°	1758.7	16.6
60°-70°	3076.8	29.0
70°-80°	3130.4	29.5
80°-90°	364.5	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°	10619.0	100.0
0°-180°	10619.0	100.0

**Coefficient of Utilization**



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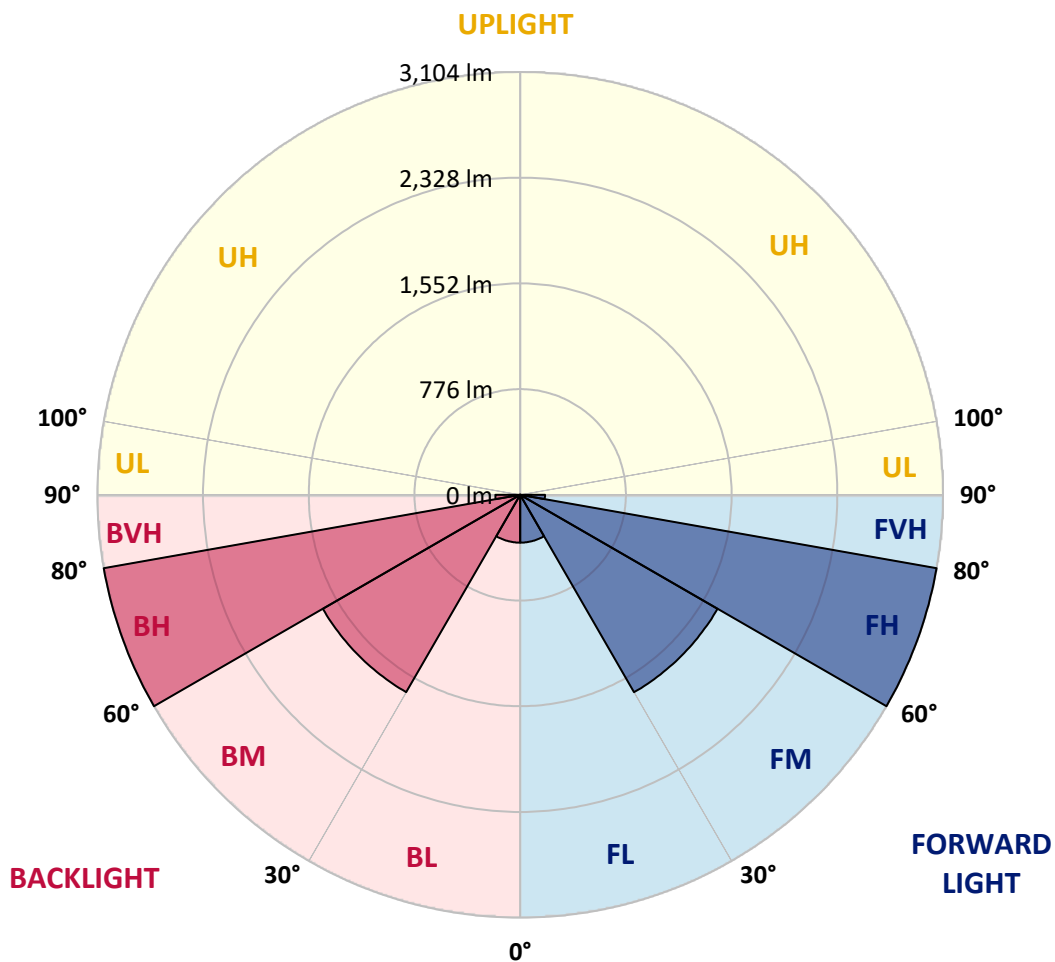
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	350.9	3.3			
FM	(30°-60°)	1672.7	15.8			
FH	(60°-80°)	3103.6	29.2			G2/5000
FVH	(80°-90°)	182.3	1.7			G2/225
BL	(0°-30°)	350.9	3.3	B1/500		
BM	(30°-60°)	1672.7	15.8	B2/2500		
BH	(60°-80°)	3103.6	29.2	B4/5000		G2/5000
BVH	(80°-90°)	182.3	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°	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3
2.5°	867.2	869.2	865.1	865.1	865.1	863.1	865.1	863.1	865.1	867.2	867.2
5°	859.1	859.1	855.0	855.0	855.0	853.0	855.0	855.0	857.1	859.1	859.1
7.5°	840.9	840.9	838.9	836.8	834.8	834.8	836.8	836.8	838.9	840.9	840.9
10°	830.8	828.8	824.7	818.7	816.6	814.6	818.7	822.7	828.8	834.8	832.8
12.5°	826.7	824.7	816.6	810.6	806.5	808.5	812.6	816.6	826.7	832.8	830.8
15°	830.8	826.7	816.6	806.5	808.5	812.6	816.6	816.6	828.8	834.8	834.8
17.5°	830.8	828.8	816.6	808.5	810.6	816.6	818.7	816.6	826.7	836.8	836.8
20°	832.8	832.8	816.6	810.6	812.6	818.7	820.7	818.7	826.7	838.9	838.9
22.5°	836.8	834.8	818.7	814.6	818.7	822.7	824.7	822.7	830.8	840.9	842.9
25°	844.9	840.9	826.7	824.7	832.8	838.9	838.9	834.8	838.9	849.0	849.0
27.5°	855.0	853.0	836.8	836.8	847.0	859.1	853.0	844.9	849.0	859.1	859.1
30°	873.2	871.2	855.0	855.0	869.2	883.3	869.2	859.1	865.1	875.3	877.3
32.5°	899.5	899.5	885.4	881.3	905.6	911.6	905.6	885.4	889.4	903.6	903.6
35°	944.0	939.9	925.8	923.8	948.0	946.0	944.0	925.8	929.8	946.0	946.0
37.5°	1002.6	1000.6	988.4	982.4	994.5	986.4	990.5	982.4	992.5	1004.6	1006.6
40°	1077.4	1075.4	1065.3	1057.2	1061.2	1049.1	1053.1	1057.2	1067.3	1075.4	1077.4
42.5°	1170.4	1170.4	1160.3	1146.1	1140.1	1134.0	1134.0	1142.1	1152.2	1162.3	1162.3
45°	1285.6	1285.6	1273.5	1259.3	1241.1	1231.0	1235.1	1243.1	1255.3	1267.4	1271.4
47.5°	1421.0	1421.0	1404.9	1390.7	1372.5	1360.4	1360.4	1364.4	1382.6	1392.7	1398.8
50°	1572.6	1566.6	1550.4	1536.2	1526.1	1510.0	1512.0	1510.0	1526.1	1540.3	1544.3
52.5°	1730.3	1728.3	1712.1	1708.1	1714.1	1706.0	1706.0	1685.8	1691.9	1700.0	1697.9
55°	1926.4	1920.3	1906.1	1914.2	1938.5	1950.6	1946.6	1914.2	1896.0	1900.1	1898.1
57.5°	2140.6	2134.6	2130.5	2154.8	2209.4	2259.9	2249.8	2175.0	2140.6	2142.7	2144.7
60°	2358.9	2358.9	2371.1	2431.7	2548.9	2631.8	2601.5	2476.2	2415.5	2403.4	2399.4
62.5°	2583.3	2589.4	2615.7	2716.7	2896.6	3034.1	2957.3	2779.4	2688.4	2664.2	2656.1
65°	2844.1	2850.1	2888.5	3013.9	3252.4	3416.1	3284.7	3116.9	2989.6	2939.1	2931.0
67.5°	3222.1	3226.1	3256.4	3377.7	3602.1	3733.5	3598.0	3448.5	3311.0	3252.4	3248.3
70°	3561.7	3565.7	3592.0	3751.7	3957.8	4004.3	3854.7	3664.7	3521.2	3474.7	3466.6
72.5°	3484.8	3499.0	3585.9	3834.5	4151.9	4212.5	3897.2	3612.2	3381.7	3304.9	3280.7
75°	2922.9	2945.1	3082.6	3456.5	3961.9	4133.7	3646.5	3123.0	2779.4	2631.8	2593.4
77.5°	1706.0	1788.9	2025.4	2504.5	3226.1	3575.8	3003.8	2286.2	1708.1	1465.5	1384.6
80°	466.9	511.4	683.2	1152.2	2023.4	2504.5	1916.3	1049.1	566.0	424.5	394.2
82.5°	147.6	196.1	248.6	331.5	794.4	1320.0	711.5	309.3	242.6	200.1	177.9
85°	78.8	84.9	139.5	161.7	238.5	369.9	220.3	161.7	145.5	107.1	101.1
87.5°	40.4	42.4	78.8	78.8	105.1	86.9	95.0	86.9	82.9	52.6	46.5
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)