

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: P214534

Luminaire Tested: **ARCH-AF24-50-D-U-5WQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214534  
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-AF24-50-D-U-5WQ-7050  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6766 lumens  
Efficiency: N/A  
Efficacy: 125.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G2

Input Watts (W): 54  
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

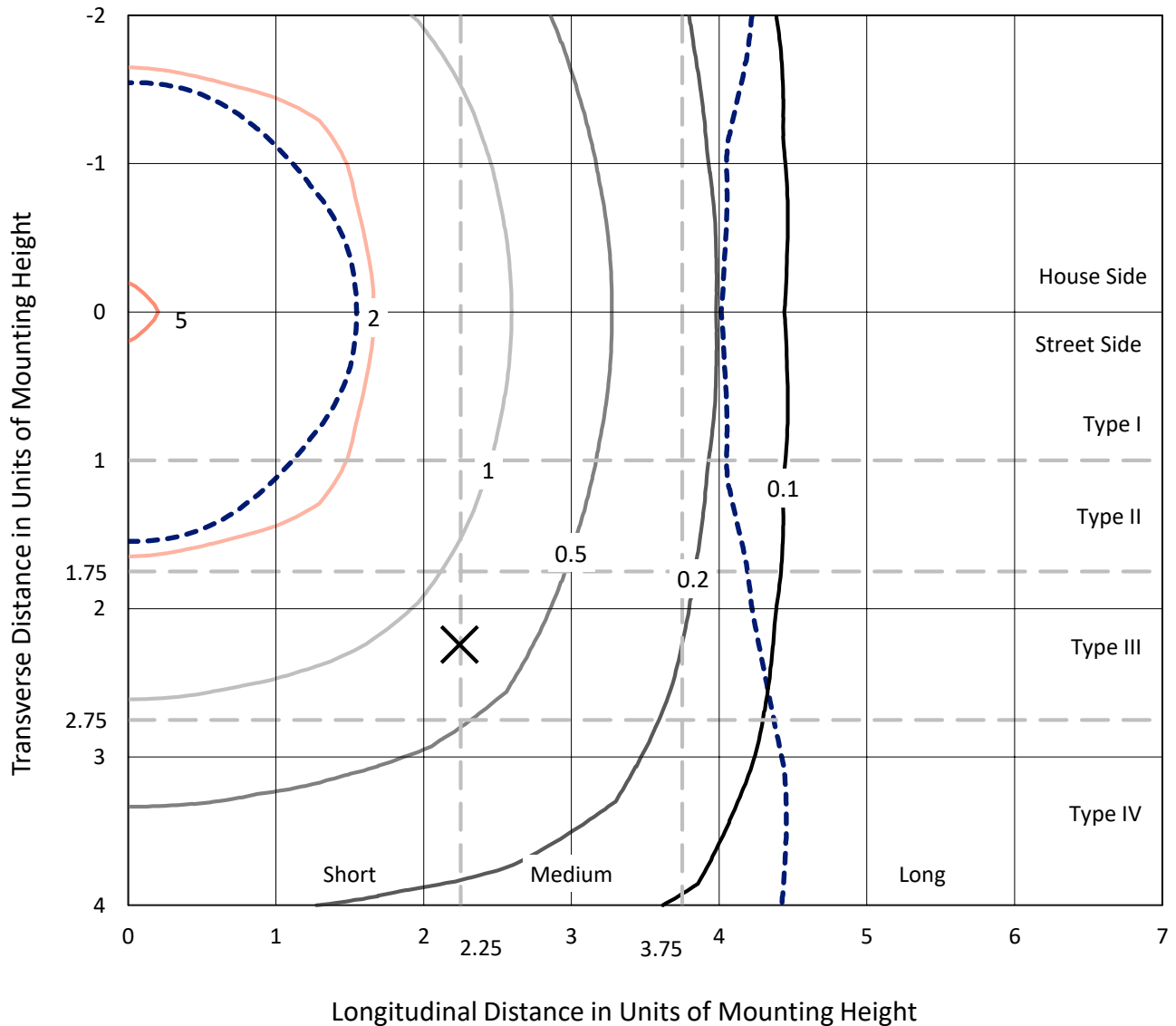


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

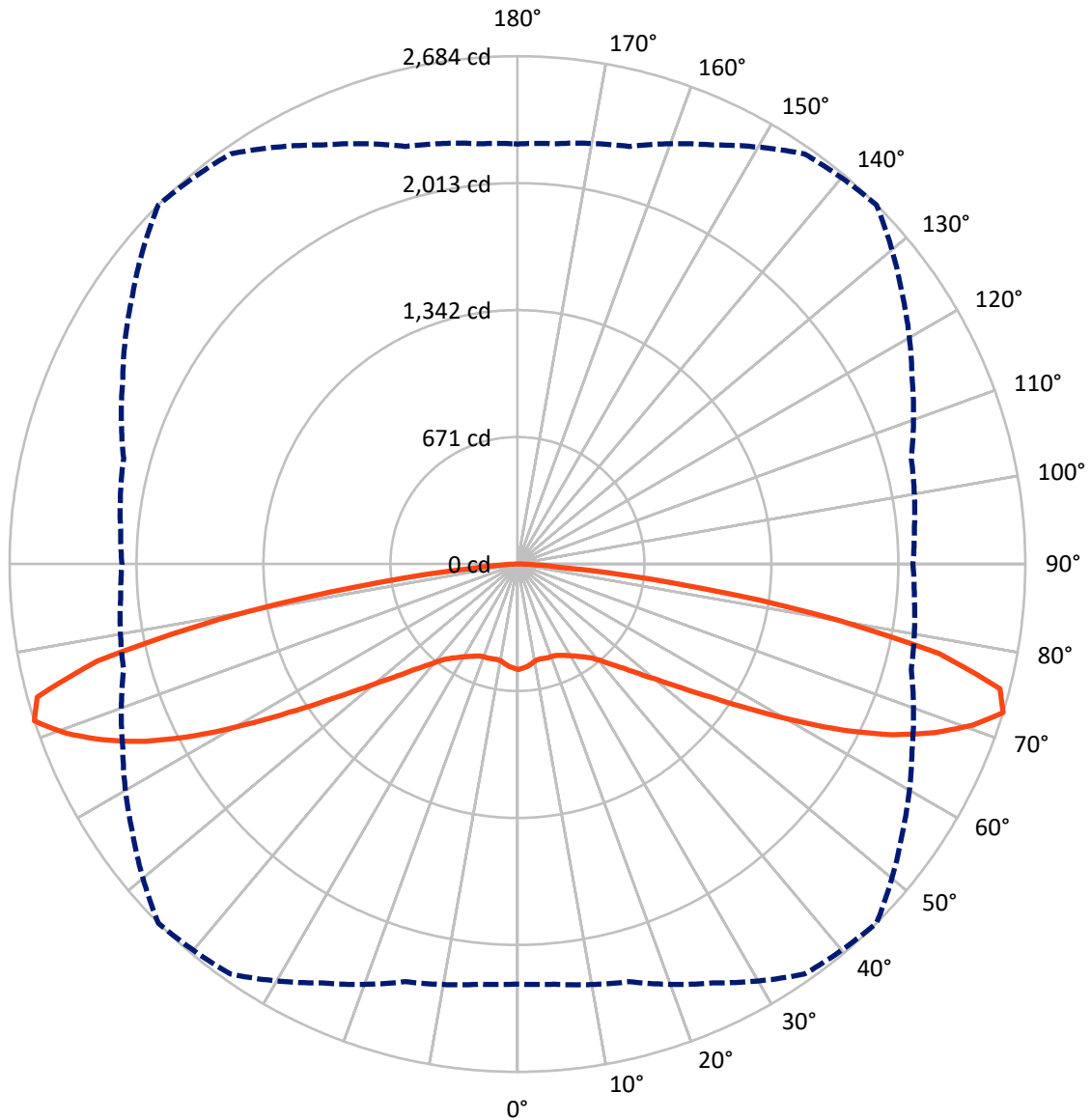


Based on 10 foot mounting height. Maximum calculated value = 5.6 fc  
 Type V - Short - Non-Cutoff

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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	3383.0	0.0	3383.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3383.0	0.0	3383.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	6766.0	0.0	6766.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.3	0.8
10°-20°	148.1	2.2
20°-30°	247.8	3.7
30°-40°	380.7	5.6
40°-50°	630.3	9.3
50°-60°	1120.6	16.6
60°-70°	1960.4	29.0
70°-80°	1994.6	29.5
80°-90°	232.3	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°	6766.0	100.0
0°-180°	6766.0	100.0



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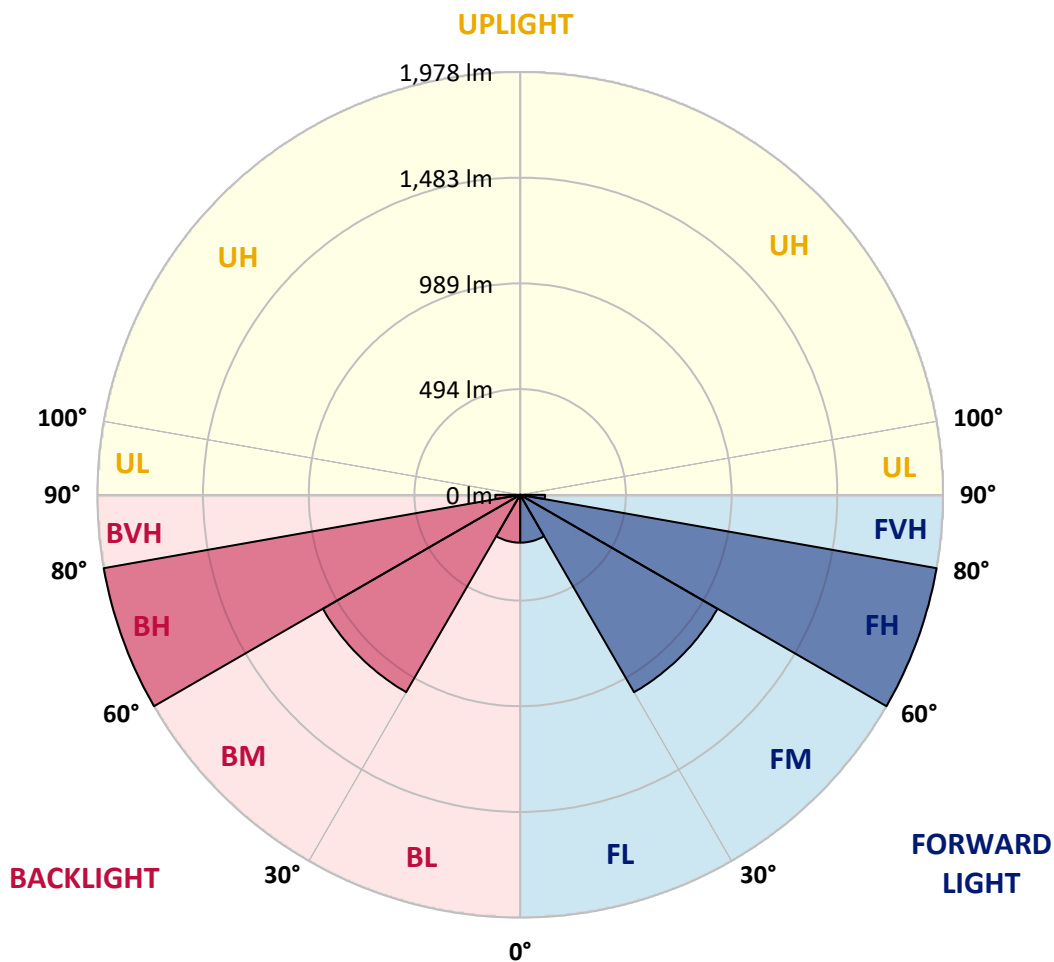
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	223.6	3.3			
FM	(30°-60°)	1065.8	15.8			
FH	(60°-80°)	1977.5	29.2			G2/5000
FVH	(80°-90°)	116.1	1.7			G2/225
BL	(0°-30°)	223.6	3.3	B1/500		
BM	(30°-60°)	1065.8	15.8	B2/2500		
BH	(60°-80°)	1977.5	29.2	B3/2500		G2/5000
BVH	(80°-90°)	116.1	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°	557.7	557.7	557.7	557.7	557.7	557.7	557.7	557.7	557.7	557.7	557.7
2.5°	552.5	553.8	551.2	551.2	551.2	549.9	551.2	549.9	551.2	552.5	552.5
5°	547.4	547.4	544.8	544.8	544.8	543.5	544.8	544.8	546.1	547.4	547.4
7.5°	535.8	535.8	534.5	533.2	531.9	531.9	533.2	533.2	534.5	535.8	535.8
10°	529.3	528.1	525.5	521.6	520.3	519.0	521.6	524.2	528.1	531.9	530.6
12.5°	526.8	525.5	520.3	516.5	513.9	515.2	517.7	520.3	526.8	530.6	529.3
15°	529.3	526.8	520.3	513.9	515.2	517.7	520.3	520.3	528.1	531.9	531.9
17.5°	529.3	528.1	520.3	515.2	516.5	520.3	521.6	520.3	526.8	533.2	533.2
20°	530.6	530.6	520.3	516.5	517.7	521.6	522.9	521.6	526.8	534.5	534.5
22.5°	533.2	531.9	521.6	519.0	521.6	524.2	525.5	524.2	529.3	535.8	537.1
25°	538.4	535.8	526.8	525.5	530.6	534.5	534.5	531.9	534.5	540.9	540.9
27.5°	544.8	543.5	533.2	533.2	539.6	547.4	543.5	538.4	540.9	547.4	547.4
30°	556.4	555.1	544.8	544.8	553.8	562.8	553.8	547.4	551.2	557.7	559.0
32.5°	573.1	573.1	564.1	561.5	577.0	580.9	577.0	564.1	566.7	575.7	575.7
35°	601.5	598.9	589.9	588.6	604.0	602.8	601.5	589.9	592.4	602.8	602.8
37.5°	638.8	637.5	629.8	625.9	633.7	628.5	631.1	625.9	632.4	640.1	641.4
40°	686.5	685.2	678.7	673.6	676.2	668.4	671.0	673.6	680.0	685.2	686.5
42.5°	745.7	745.7	739.3	730.3	726.4	722.5	722.5	727.7	734.1	740.6	740.6
45°	819.1	819.1	811.4	802.4	790.8	784.4	786.9	792.1	799.8	807.5	810.1
47.5°	905.4	905.4	895.1	886.1	874.5	866.8	866.8	869.4	880.9	887.4	891.3
50°	1002.0	998.1	987.8	978.8	972.4	962.1	963.4	962.1	972.4	981.4	984.0
52.5°	1102.5	1101.2	1090.9	1088.3	1092.2	1087.0	1087.0	1074.1	1078.0	1083.2	1081.9
55°	1227.4	1223.5	1214.5	1219.7	1235.1	1242.9	1240.3	1219.7	1208.1	1210.7	1209.4
57.5°	1363.9	1360.1	1357.5	1372.9	1407.7	1439.9	1433.5	1385.8	1363.9	1365.2	1366.5
60°	1503.0	1503.0	1510.7	1549.4	1624.1	1676.9	1657.6	1577.7	1539.1	1531.4	1528.8
62.5°	1646.0	1649.8	1666.6	1731.0	1845.6	1933.2	1884.2	1770.9	1713.0	1697.5	1692.3
65°	1812.1	1816.0	1840.5	1920.3	2072.3	2176.6	2092.9	1986.0	1904.9	1872.7	1867.5
67.5°	2053.0	2055.5	2074.9	2152.1	2295.1	2378.8	2292.5	2197.2	2109.6	2072.3	2069.7
70°	2269.3	2271.9	2288.7	2390.4	2521.8	2551.4	2456.1	2335.0	2243.6	2214.0	2208.8
72.5°	2220.4	2229.4	2284.8	2443.2	2645.4	2684.1	2483.1	2301.5	2154.7	2105.8	2090.3
75°	1862.4	1876.5	1964.1	2202.4	2524.4	2633.8	2323.4	1989.9	1770.9	1676.9	1652.4
77.5°	1087.0	1139.8	1290.5	1595.8	2055.5	2278.4	1913.9	1456.7	1088.3	933.8	882.2
80°	297.5	325.8	435.3	734.1	1289.2	1595.8	1221.0	668.4	360.6	270.5	251.1
82.5°	94.0	124.9	158.4	211.2	506.2	841.0	453.4	197.1	154.6	127.5	113.3
85°	50.2	54.1	88.9	103.0	152.0	235.7	140.4	103.0	92.7	68.3	64.4
87.5°	25.8	27.0	50.2	50.2	67.0	55.4	60.5	55.4	52.8	33.5	29.6
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)