

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: P214536

Luminaire Tested: **ARCH-AF24-70-D-U-5WQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214536  
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-AF24-70-D-U-5WQ-7050  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8660 lumens  
Efficiency: N/A  
Efficacy: 117.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B4 - U0 - G2

Input Watts (W): 74  
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

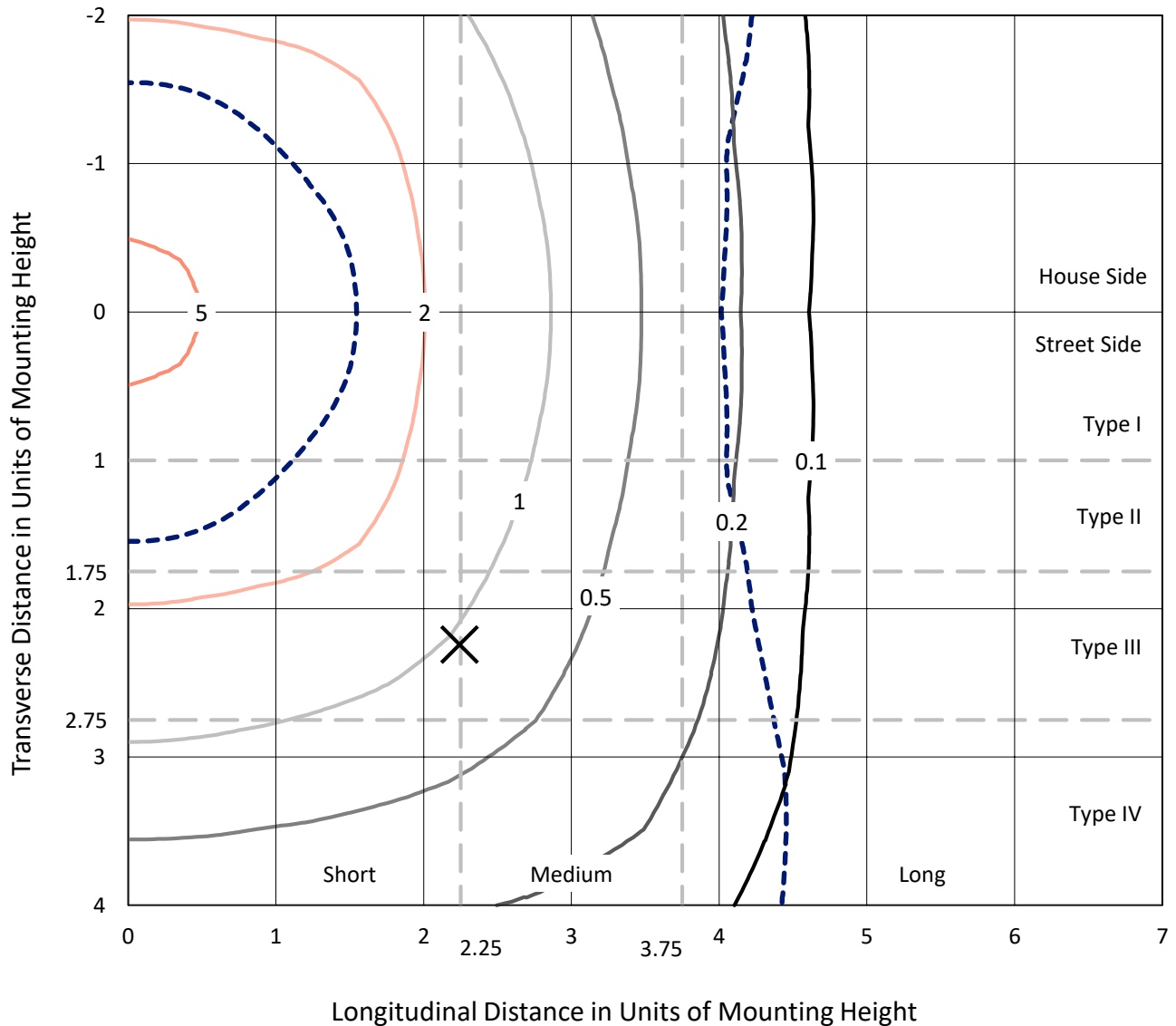


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

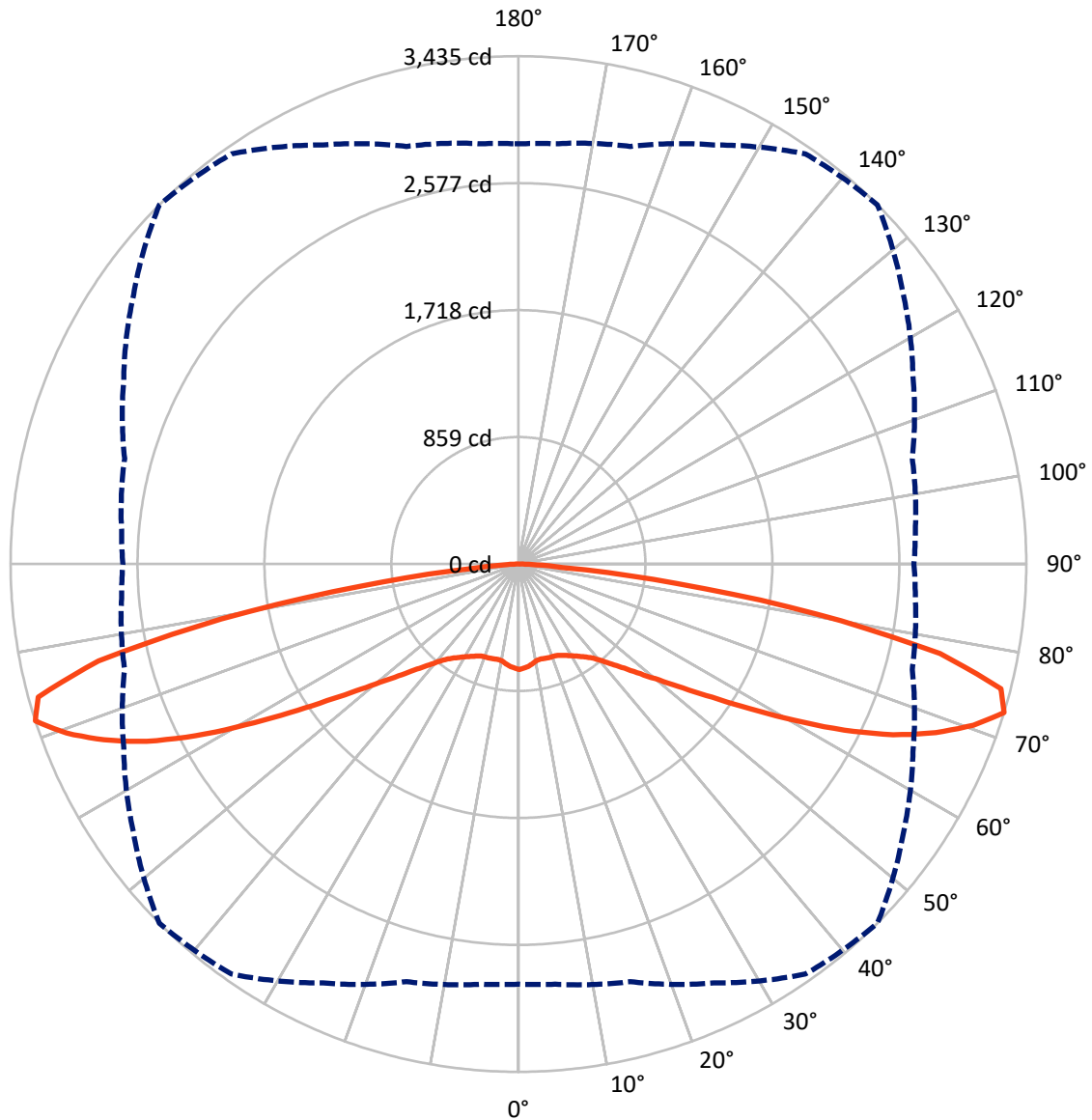


Based on 10 foot mounting height. Maximum calculated value = 7.1 fc  
 Type V - Short - Non-Cutoff

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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	4330.0	0.0	4330.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4330.0	0.0	4330.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	8660.0	0.0	8660.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.7	0.8
10°-20°	189.5	2.2
20°-30°	317.1	3.7
30°-40°	487.2	5.6
40°-50°	806.8	9.3
50°-60°	1434.3	16.6
60°-70°	2509.2	29.0
70°-80°	2552.9	29.5
80°-90°	297.3	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°	8660.0	100.0
0°-180°	8660.0	100.0



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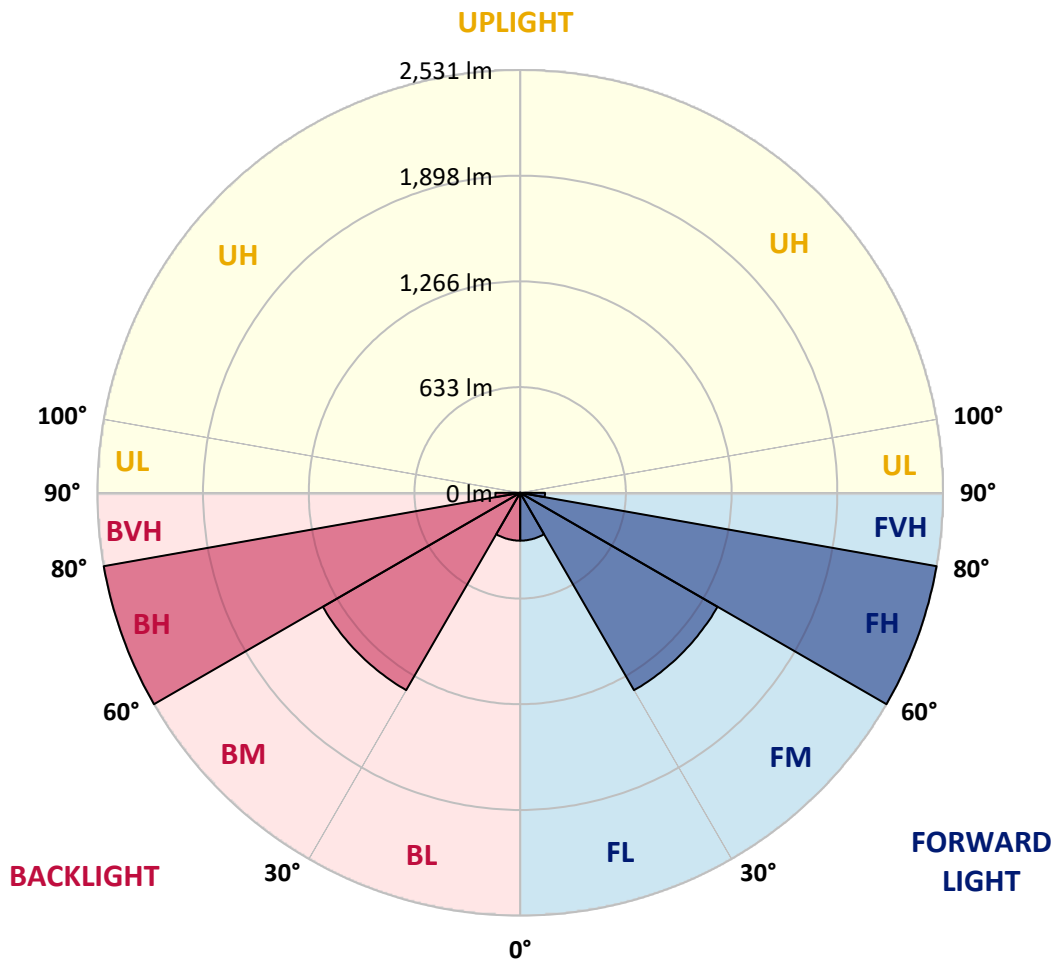
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	286.1	3.3			
FM	(30°-60°)	1364.1	15.8			
FH	(60°-80°)	2531.1	29.2			G2/5000
FVH	(80°-90°)	148.6	1.7			G2/225
BL	(0°-30°)	286.1	3.3	B1/500		
BM	(30°-60°)	1364.1	15.8	B2/2500		
BH	(60°-80°)	2531.1	29.2	B4/5000		G2/5000
BVH	(80°-90°)	148.6	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°	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8
2.5°	707.2	708.8	705.5	705.5	705.5	703.9	705.5	703.9	705.5	707.2	707.2
5°	700.6	700.6	697.3	697.3	697.3	695.7	697.3	697.3	698.9	700.6	700.6
7.5°	685.8	685.8	684.1	682.5	680.8	680.8	682.5	682.5	684.1	685.8	685.8
10°	677.5	675.9	672.6	667.6	666.0	664.3	667.6	670.9	675.9	680.8	679.2
12.5°	674.2	672.6	666.0	661.0	657.7	659.4	662.7	666.0	674.2	679.2	677.5
15°	677.5	674.2	666.0	657.7	659.4	662.7	666.0	666.0	675.9	680.8	680.8
17.5°	677.5	675.9	666.0	659.4	661.0	666.0	667.6	666.0	674.2	682.5	682.5
20°	679.2	679.2	666.0	661.0	662.7	667.6	669.3	667.6	674.2	684.1	684.1
22.5°	682.5	680.8	667.6	664.3	667.6	670.9	672.6	670.9	677.5	685.8	687.4
25°	689.1	685.8	674.2	672.6	679.2	684.1	684.1	680.8	684.1	692.4	692.4
27.5°	697.3	695.7	682.5	682.5	690.7	700.6	695.7	689.1	692.4	700.6	700.6
30°	712.1	710.5	697.3	697.3	708.8	720.4	708.8	700.6	705.5	713.8	715.4
32.5°	733.6	733.6	722.0	718.7	738.5	743.5	738.5	722.0	725.3	736.9	736.9
35°	769.8	766.5	755.0	753.3	773.1	771.5	769.8	755.0	758.3	771.5	771.5
37.5°	817.6	816.0	806.1	801.2	811.0	804.5	807.7	801.2	809.4	819.3	820.9
40°	878.6	877.0	868.7	862.1	865.4	855.6	858.9	862.1	870.4	877.0	878.6
42.5°	954.5	954.5	946.2	934.7	929.7	924.8	924.8	931.4	939.6	947.9	947.9
45°	1048.4	1048.4	1038.5	1027.0	1012.2	1003.9	1007.2	1013.8	1023.7	1033.6	1036.9
47.5°	1158.9	1158.9	1145.7	1134.1	1119.3	1109.4	1109.4	1112.7	1127.5	1135.8	1140.7
50°	1282.5	1277.6	1264.4	1252.8	1244.6	1231.4	1233.1	1231.4	1244.6	1256.1	1259.4
52.5°	1411.1	1409.4	1396.2	1393.0	1397.9	1391.3	1391.3	1374.8	1379.8	1386.4	1384.7
55°	1571.0	1566.0	1554.5	1561.1	1580.9	1590.8	1587.5	1561.1	1546.3	1549.6	1547.9
57.5°	1745.7	1740.8	1737.5	1757.3	1801.8	1843.0	1834.7	1773.7	1745.7	1747.4	1749.0
60°	1923.8	1923.8	1933.6	1983.1	2078.7	2146.3	2121.6	2019.4	1969.9	1960.0	1956.7
62.5°	2106.7	2111.7	2133.1	2215.5	2362.2	2474.3	2411.7	2266.6	2192.5	2172.7	2166.1
65°	2319.4	2324.3	2355.7	2457.9	2652.4	2785.9	2678.8	2541.9	2438.1	2396.9	2390.3
67.5°	2627.7	2630.9	2655.7	2754.6	2937.6	3044.7	2934.3	2812.3	2700.2	2652.4	2649.1
70°	2904.6	2907.9	2929.3	3059.6	3227.7	3265.6	3143.6	2988.7	2871.6	2833.7	2827.1
72.5°	2842.0	2853.5	2924.4	3127.1	3385.9	3435.4	3178.2	2945.8	2757.9	2695.2	2675.5
75°	2383.7	2401.8	2513.9	2818.9	3231.0	3371.1	2973.8	2546.9	2266.6	2146.3	2115.0
77.5°	1391.3	1458.9	1651.8	2042.4	2630.9	2916.1	2449.6	1864.4	1393.0	1195.1	1129.2
80°	380.8	417.1	557.2	939.6	1650.1	2042.4	1562.7	855.6	461.6	346.2	321.5
82.5°	120.3	159.9	202.8	270.3	647.8	1076.4	580.3	252.2	197.8	163.2	145.1
85°	64.3	69.2	113.7	131.9	194.5	301.7	179.7	131.9	118.7	87.4	82.4
87.5°	33.0	34.6	64.3	64.3	85.7	70.9	77.5	70.9	67.6	42.9	37.9
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)