

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: P214520

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214520  
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  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 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: 6921.3 lumens  
Efficiency: N/A  
Efficacy: 128.2 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

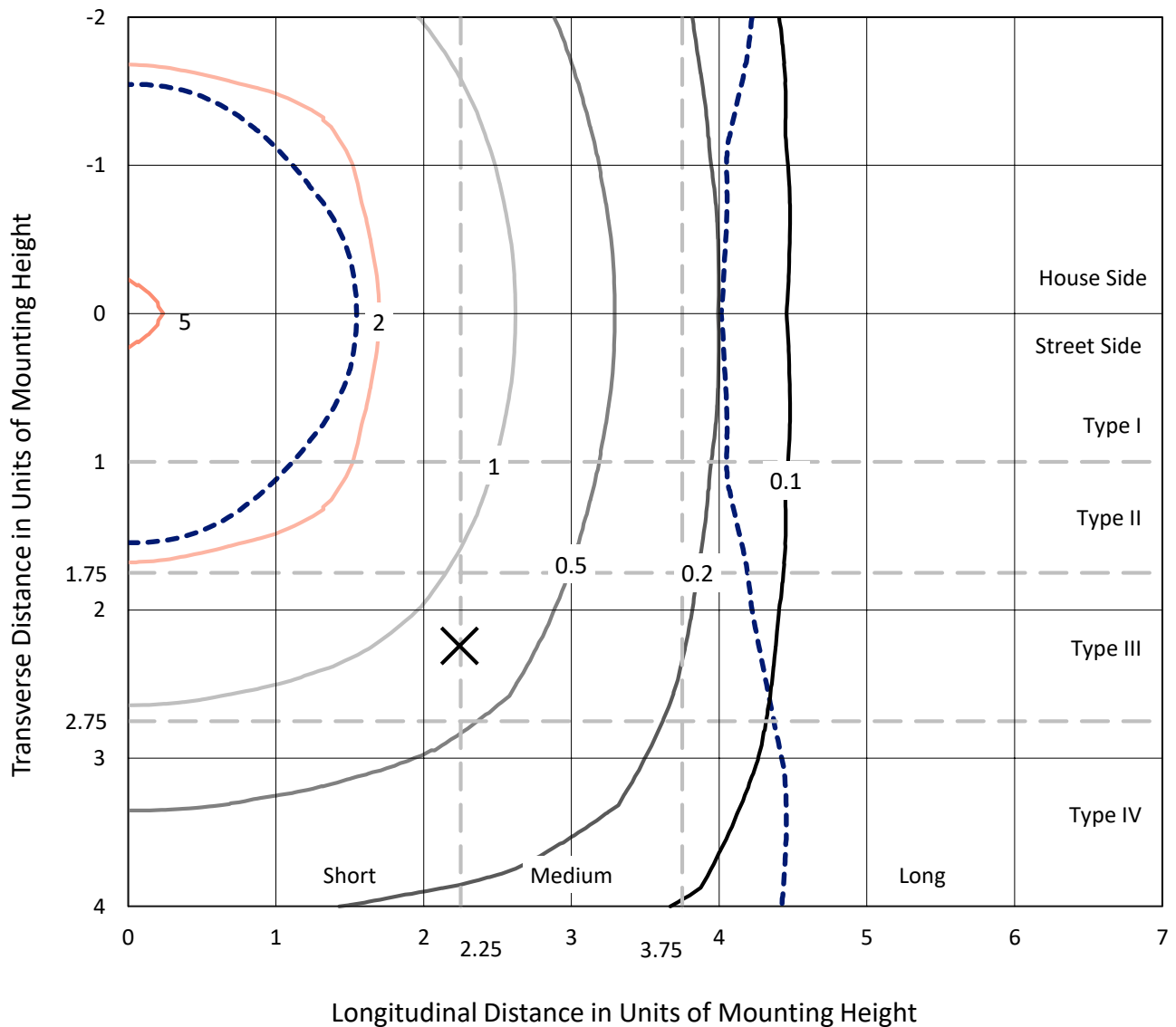


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

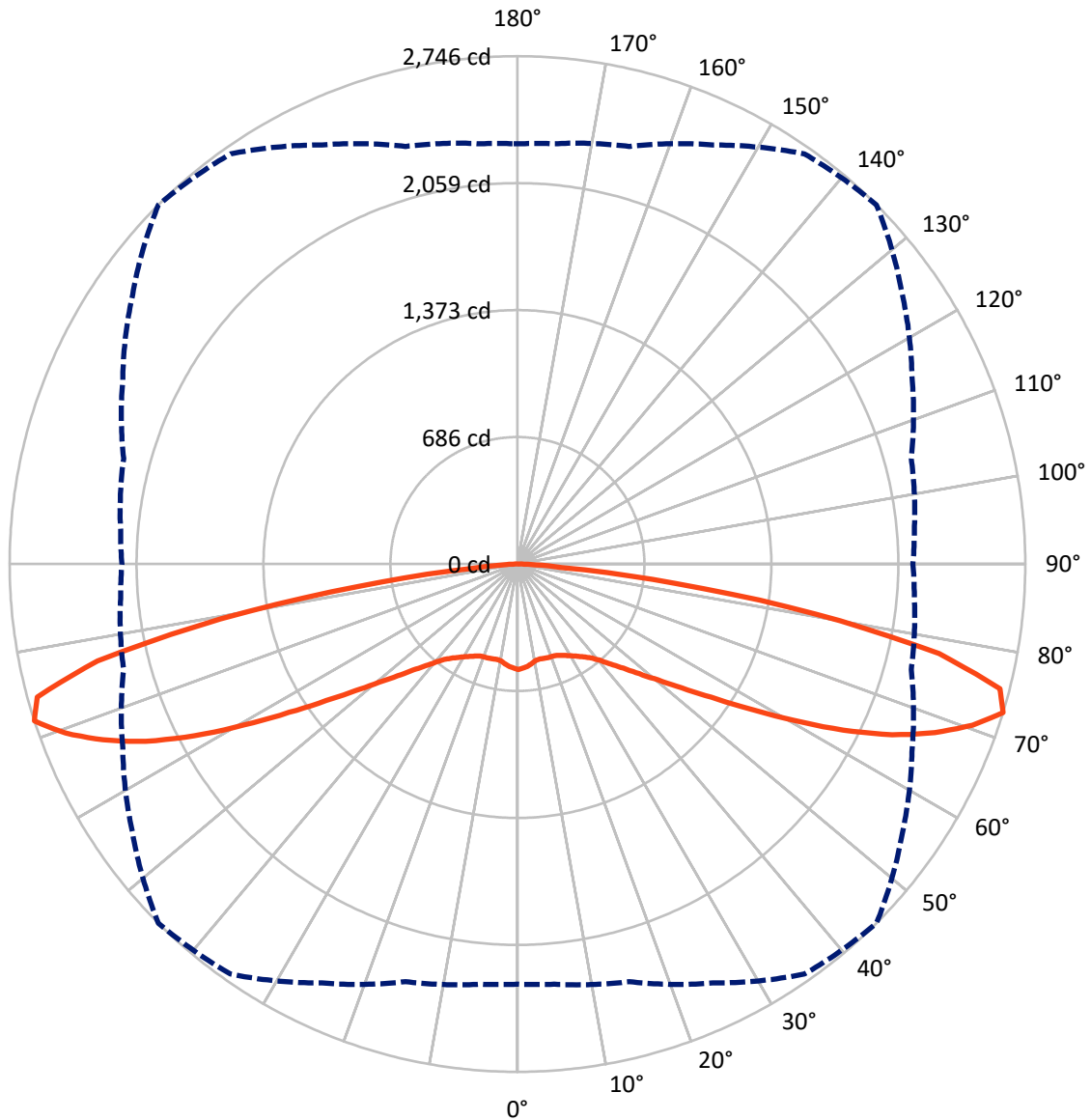


Based on 10 foot mounting height. Maximum calculated value = 5.7 fc  
 Type V - Short - Non-Cutoff

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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	3460.6	0.0	3460.6
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3460.6	0.0	3460.6
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	6921.3	0.0	6921.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.5	0.8
10°-20°	151.4	2.2
20°-30°	253.4	3.7
30°-40°	389.4	5.6
40°-50°	644.8	9.3
50°-60°	1146.3	16.6
60°-70°	2005.4	29.0
70°-80°	2040.4	29.5
80°-90°	237.6	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°	6921.3	100.0
0°-180°	6921.3	100.0



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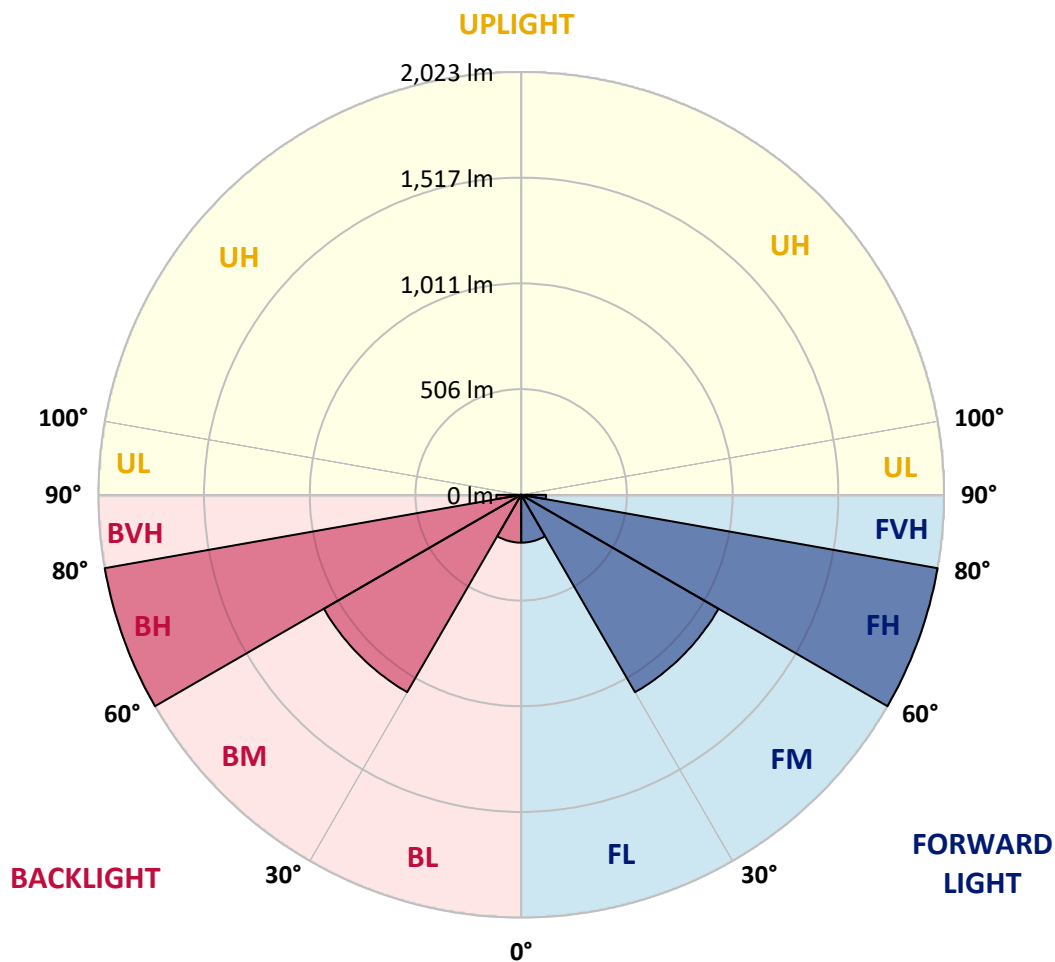
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	228.7	3.3			
FM	(30°-60°)	1090.3	15.8			
FH	(60°-80°)	2022.9	29.2			G2/5000
FVH	(80°-90°)	118.8	1.7			G2/225
BL	(0°-30°)	228.7	3.3	B1/500		
BM	(30°-60°)	1090.3	15.8	B2/2500		
BH	(60°-80°)	2022.9	29.2	B3/2500		G2/5000
BVH	(80°-90°)	118.8	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°	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5
2.5°	565.2	566.5	563.9	563.9	563.9	562.5	563.9	562.5	563.9	565.2	565.2
5°	560.0	560.0	557.3	557.3	557.3	556.0	557.3	557.3	558.6	560.0	560.0
7.5°	548.1	548.1	546.8	545.4	544.1	544.1	545.4	545.4	546.8	548.1	548.1
10°	541.4	540.2	537.6	533.6	532.2	530.9	533.6	536.2	540.2	544.1	542.8
12.5°	538.9	537.6	532.2	528.4	525.7	527.0	529.6	532.2	538.9	542.8	541.4
15°	541.4	538.9	532.2	525.7	527.0	529.6	532.2	532.2	540.2	544.1	544.1
17.5°	541.4	540.2	532.2	527.0	528.4	532.2	533.6	532.2	538.9	545.4	545.4
20°	542.8	542.8	532.2	528.4	529.6	533.6	534.9	533.6	538.9	546.8	546.8
22.5°	545.4	544.1	533.6	530.9	533.6	536.2	537.6	536.2	541.4	548.1	549.4
25°	550.8	548.1	538.9	537.6	542.8	546.8	546.8	544.1	546.8	553.3	553.3
27.5°	557.3	556.0	545.4	545.4	552.0	560.0	556.0	550.8	553.3	560.0	560.0
30°	569.2	567.8	557.3	557.3	566.5	575.7	566.5	560.0	563.9	570.5	571.8
32.5°	586.3	586.3	577.0	574.4	590.2	594.2	590.2	577.0	579.7	588.9	588.9
35°	615.3	612.6	603.4	602.1	617.9	616.6	615.3	603.4	606.0	616.6	616.6
37.5°	653.5	652.1	644.3	640.3	648.2	642.9	645.6	640.3	646.9	654.8	656.1
40°	702.3	700.9	694.3	689.1	691.7	683.7	686.4	689.1	695.6	700.9	702.3
42.5°	762.8	762.8	756.3	747.1	743.1	739.1	739.1	744.4	750.9	757.6	757.6
45°	837.9	837.9	830.0	820.8	808.9	802.4	805.0	810.3	818.2	826.0	828.7
47.5°	926.2	926.2	915.6	906.4	894.6	886.7	886.7	889.4	901.1	907.8	911.8
50°	1025.0	1021.0	1010.5	1001.3	994.7	984.2	985.5	984.2	994.7	1003.9	1006.6
52.5°	1127.8	1126.5	1115.9	1113.3	1117.3	1111.9	1111.9	1098.8	1102.7	1108.1	1106.7
55°	1255.6	1251.6	1242.4	1247.7	1263.4	1271.4	1268.8	1247.7	1235.8	1238.5	1237.2
57.5°	1395.2	1391.3	1388.7	1404.4	1440.0	1472.9	1466.4	1417.6	1395.2	1396.5	1397.9
60°	1537.5	1537.5	1545.4	1585.0	1661.4	1715.4	1695.6	1613.9	1574.4	1566.5	1563.9
62.5°	1683.8	1687.7	1704.8	1770.7	1888.0	1977.6	1927.4	1811.5	1752.3	1736.5	1731.1
65°	1853.7	1857.7	1882.7	1964.4	2119.9	2226.6	2140.9	2031.6	1948.6	1915.7	1910.4
67.5°	2100.1	2102.7	2122.5	2201.5	2347.8	2433.4	2345.1	2247.6	2158.0	2119.9	2117.2
70°	2321.4	2324.0	2341.2	2445.3	2579.7	2610.0	2512.5	2388.6	2295.1	2264.8	2259.5
72.5°	2271.4	2280.6	2337.2	2499.3	2706.1	2745.7	2540.1	2354.3	2204.2	2154.1	2138.3
75°	1905.1	1919.6	2009.2	2252.9	2582.3	2694.2	2376.7	2035.6	1811.5	1715.4	1690.3
77.5°	1111.9	1166.0	1320.1	1632.4	2102.7	2330.7	1957.8	1490.1	1113.3	955.2	902.4
80°	304.3	333.3	445.3	750.9	1318.8	1632.4	1249.0	683.7	368.9	276.7	256.9
82.5°	96.2	127.8	162.0	216.0	517.8	860.3	463.8	201.6	158.1	130.4	115.9
85°	51.4	55.3	90.9	105.4	155.5	241.1	143.6	105.4	94.8	69.9	65.9
87.5°	26.4	27.6	51.4	51.4	68.5	56.7	61.9	56.7	54.0	34.3	30.3
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)