

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: P265931

Luminaire Tested: **ARCH-AF24-40-D-U-5WQ-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265931  
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-AF24-40-D-U-5WQ-7027  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4559 lumens  
Efficiency: N/A  
Efficacy: 114.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G1

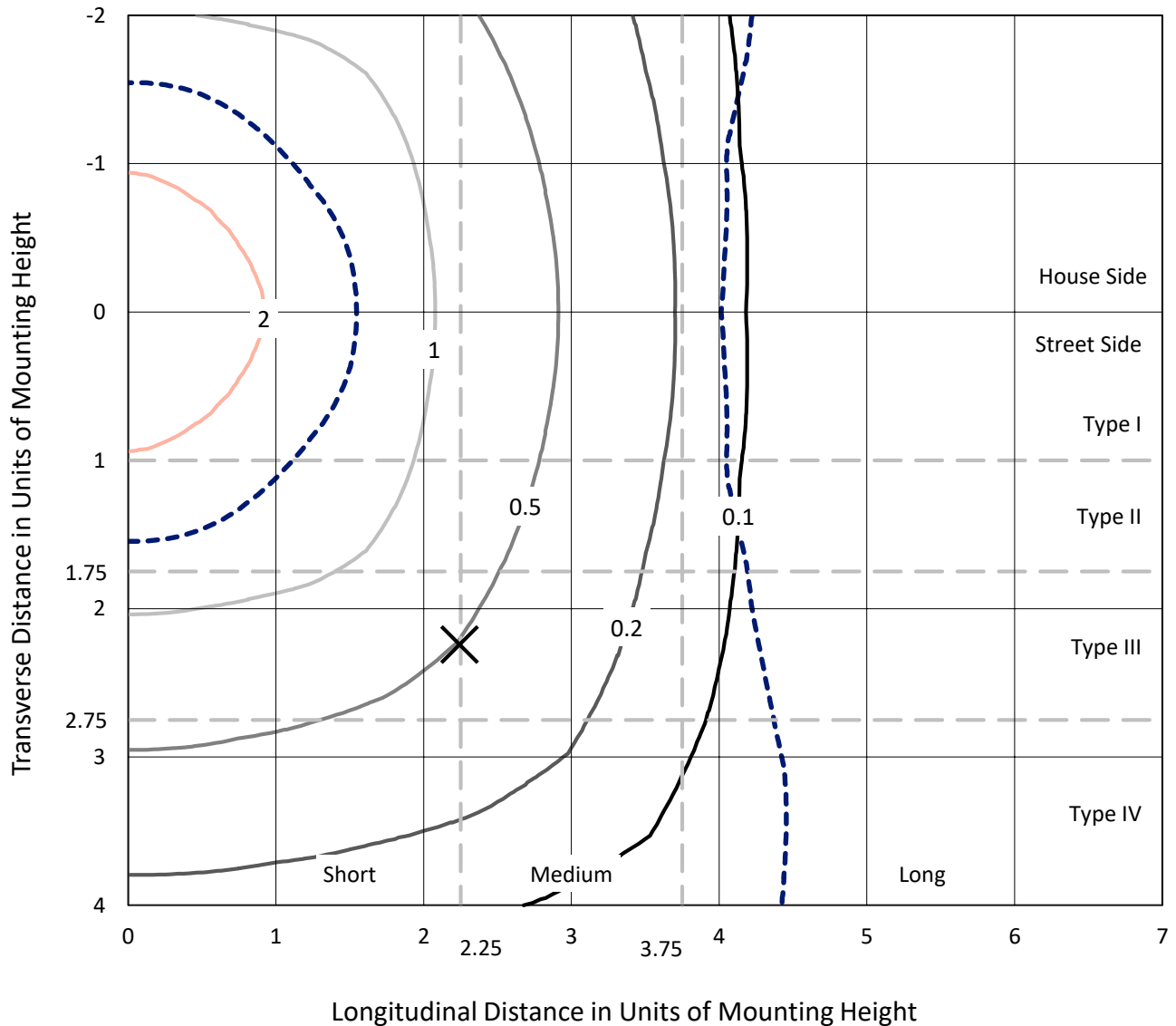
Input Watts (W): 40  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

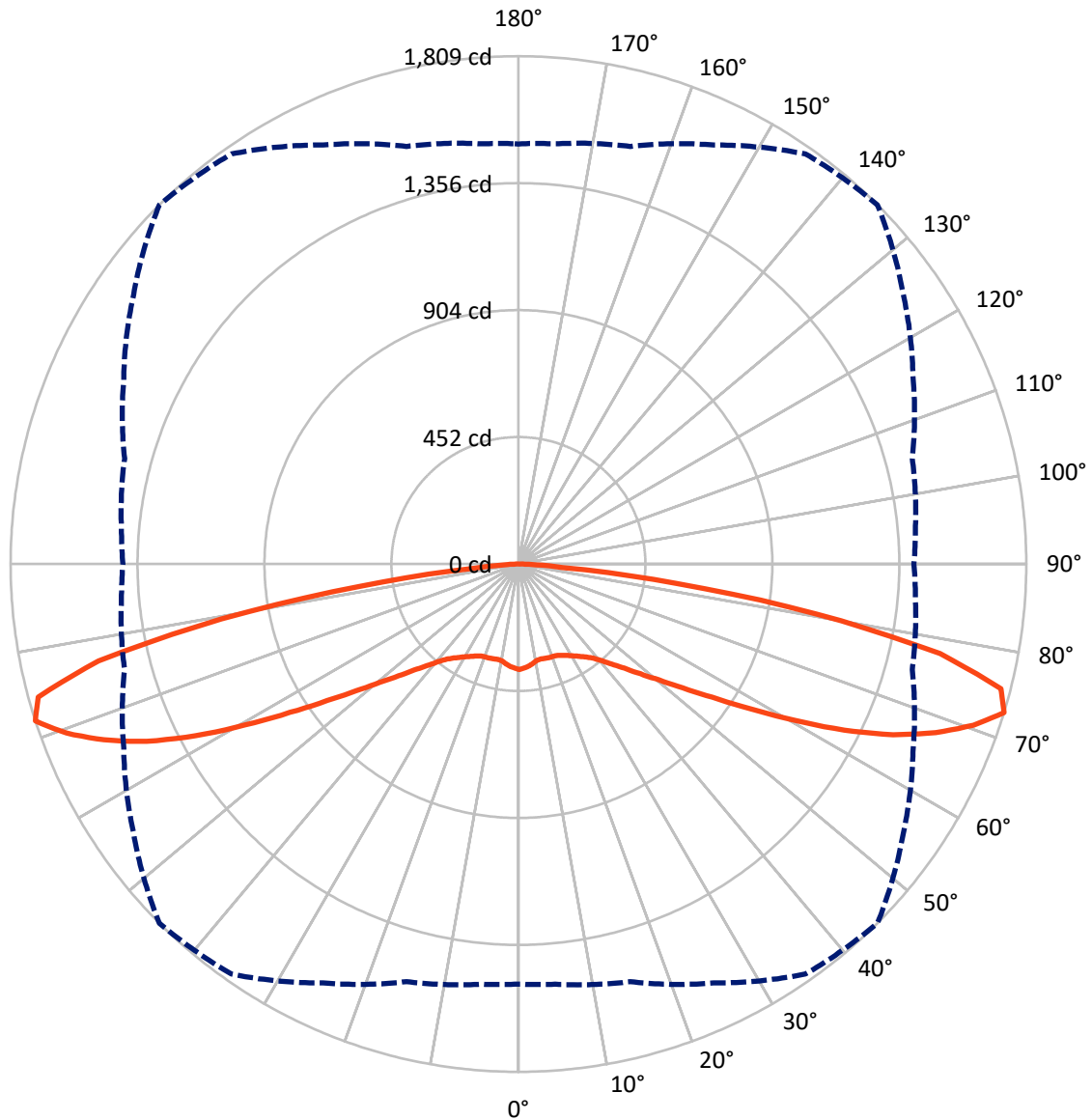


Based on 10 foot mounting height. Maximum calculated value = 3.8 fc  
 Type V - Short - Non-Cutoff

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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	2279.5	0.0	2279.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2279.5	0.0	2279.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	4559.0	0.0	4559.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.6	0.8
10°-20°	99.8	2.2
20°-30°	166.9	3.7
30°-40°	256.5	5.6
40°-50°	424.7	9.3
50°-60°	755.1	16.6
60°-70°	1321.0	29.0
70°-80°	1344.0	29.5
80°-90°	156.5	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°	4559.0	100.0
0°-180°	4559.0	100.0



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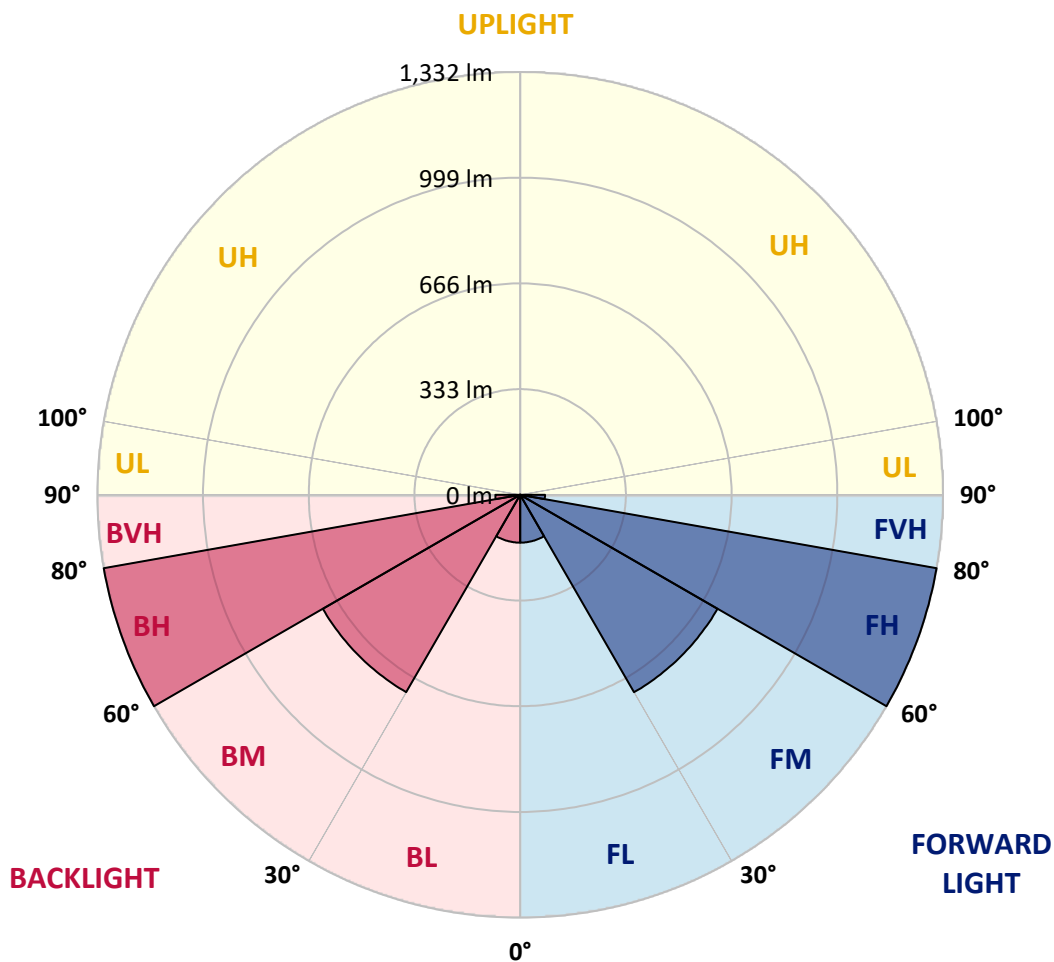
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	150.6	3.3			
FM	(30°-60°)	718.2	15.8			
FH	(60°-80°)	1332.5	29.2			G1/1800
FVH	(80°-90°)	78.3	1.7			G1/100
BL	(0°-30°)	150.6	3.3	B1/500		
BM	(30°-60°)	718.2	15.8	B1/1000		
BH	(60°-80°)	1332.5	29.2	B3/2500		G1/1800
BVH	(80°-90°)	78.3	1.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	375.9	375.9	375.9	375.9	375.9	375.9	375.9	375.9	375.9	375.9	375.9
2.5°	372.3	373.2	371.4	371.4	371.4	370.6	371.4	370.6	371.4	372.3	372.3
5°	368.8	368.8	367.0	367.0	367.0	366.1	367.0	367.0	367.9	368.8	368.8
7.5°	360.9	360.9	360.1	359.3	358.5	358.5	359.3	359.3	360.1	360.9	360.9
10°	356.6	355.8	354.1	351.4	350.6	349.7	351.4	353.3	355.8	358.5	357.5
12.5°	354.9	354.1	350.6	348.1	346.2	347.1	348.8	350.6	354.9	357.5	356.6
15°	356.6	354.9	350.6	346.2	347.1	348.8	350.6	350.6	355.8	358.5	358.5
17.5°	356.6	355.8	350.6	347.1	348.1	350.6	351.4	350.6	354.9	359.3	359.3
20°	357.5	357.5	350.6	348.1	348.8	351.4	352.3	351.4	354.9	360.1	360.1
22.5°	359.3	358.5	351.4	349.7	351.4	353.3	354.1	353.3	356.6	360.9	361.8
25°	362.7	360.9	354.9	354.1	357.5	360.1	360.1	358.5	360.1	364.5	364.5
27.5°	367.0	366.1	359.3	359.3	363.6	368.8	366.1	362.7	364.5	368.8	368.8
30°	375.0	374.1	367.0	367.0	373.2	379.3	373.2	368.8	371.4	375.9	376.6
32.5°	386.2	386.2	380.2	378.4	388.7	391.4	388.7	380.2	381.8	387.9	387.9
35°	405.2	403.6	397.5	396.6	407.0	406.2	405.2	397.5	399.1	406.2	406.2
37.5°	430.5	429.6	424.4	421.8	427.0	423.6	425.3	421.8	426.1	431.2	432.2
40°	462.5	461.6	457.3	453.9	455.6	450.4	452.1	453.9	458.2	461.6	462.5
42.5°	502.4	502.4	498.1	492.0	489.4	486.8	486.8	490.4	494.6	499.0	499.0
45°	551.9	551.9	546.7	540.7	532.9	528.6	530.2	533.8	539.0	544.2	545.9
47.5°	610.0	610.0	603.1	597.1	589.3	584.1	584.1	585.8	593.6	597.9	600.5
50°	675.2	672.7	665.6	659.5	655.3	648.2	649.1	648.2	655.3	661.3	662.9
52.5°	742.9	742.0	735.1	733.2	735.9	732.5	732.5	723.8	726.4	729.9	729.0
55°	827.0	824.5	818.4	821.8	832.2	837.4	835.8	821.8	814.0	815.8	814.9
57.5°	919.1	916.5	914.7	925.2	948.5	970.2	965.9	933.8	919.1	919.9	920.8
60°	1012.7	1012.7	1018.0	1044.0	1094.3	1129.9	1117.0	1063.1	1037.1	1031.9	1030.0
62.5°	1109.0	1111.7	1122.9	1166.4	1243.6	1302.6	1269.7	1193.3	1154.2	1143.8	1140.3
65°	1221.1	1223.6	1240.1	1293.9	1396.3	1466.7	1410.2	1338.1	1283.5	1261.8	1258.3
67.5°	1383.3	1385.0	1398.0	1450.1	1546.4	1602.8	1544.7	1480.4	1421.5	1396.3	1394.6
70°	1529.1	1530.8	1542.1	1610.8	1699.2	1719.1	1654.9	1573.3	1511.8	1491.7	1488.3
72.5°	1496.1	1502.1	1539.5	1646.2	1782.4	1808.6	1673.2	1550.8	1451.9	1419.0	1408.5
75°	1254.8	1264.5	1323.5	1484.0	1700.9	1774.7	1565.6	1340.8	1193.3	1129.9	1113.4
77.5°	732.5	768.1	869.6	1075.2	1385.0	1535.2	1289.5	981.5	733.2	629.2	594.5
80°	200.4	219.5	293.3	494.6	868.8	1075.2	822.7	450.4	243.0	182.3	169.2
82.5°	63.3	84.3	106.8	142.3	341.0	566.7	305.5	132.8	104.2	85.9	76.4
85°	33.9	36.4	59.8	69.3	102.3	158.8	94.6	69.3	62.5	46.1	43.4
87.5°	17.3	18.2	33.9	33.9	45.2	37.3	40.9	37.3	35.7	22.5	19.9
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)