

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: P214505

Luminaire Tested: **ARCH-AF24-40-D-U-5WQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214505  
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-7030  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 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: 4645 lumens  
Efficiency: N/A  
Efficacy: 116.1 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

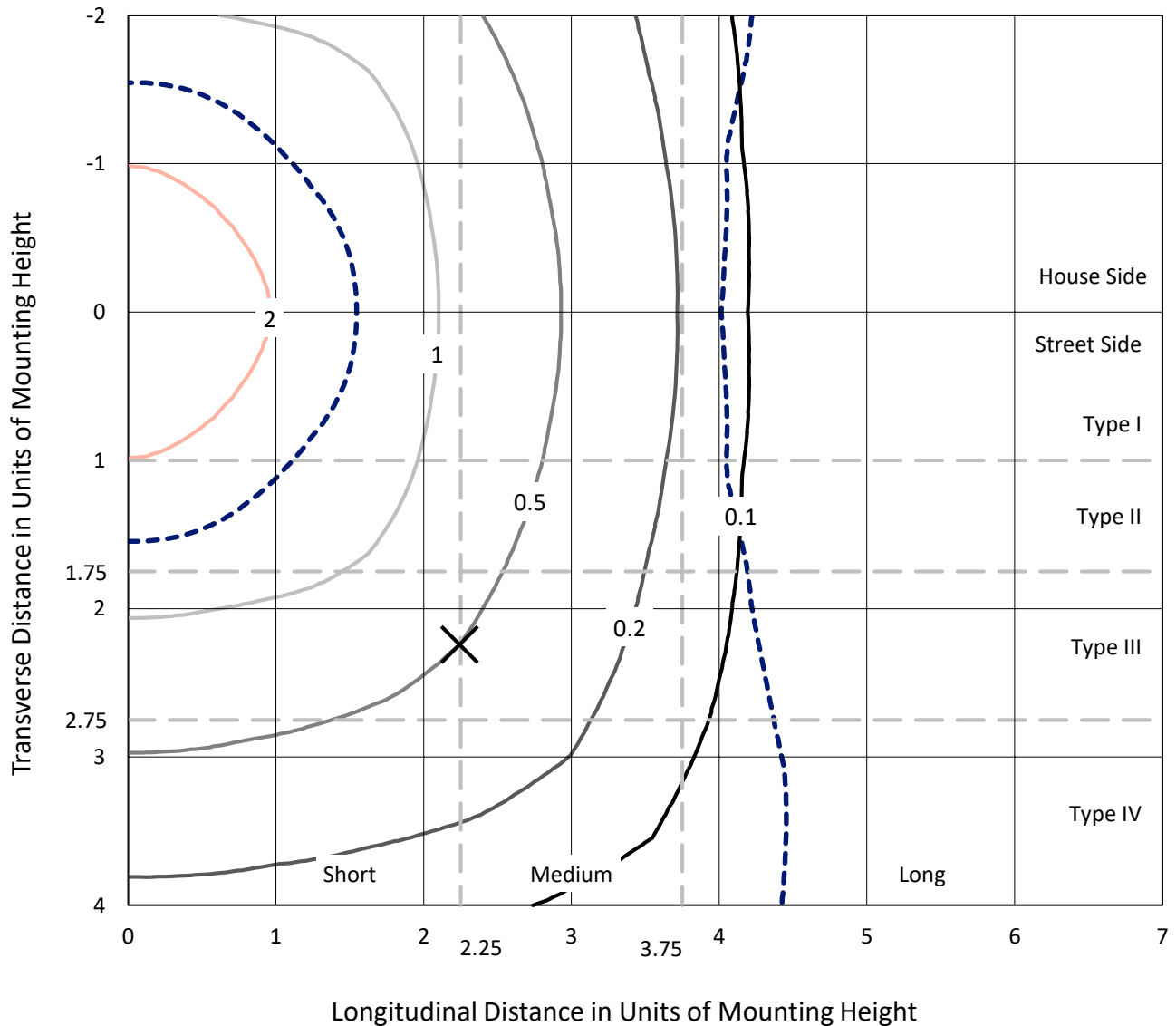
Input Watts (W): 40  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

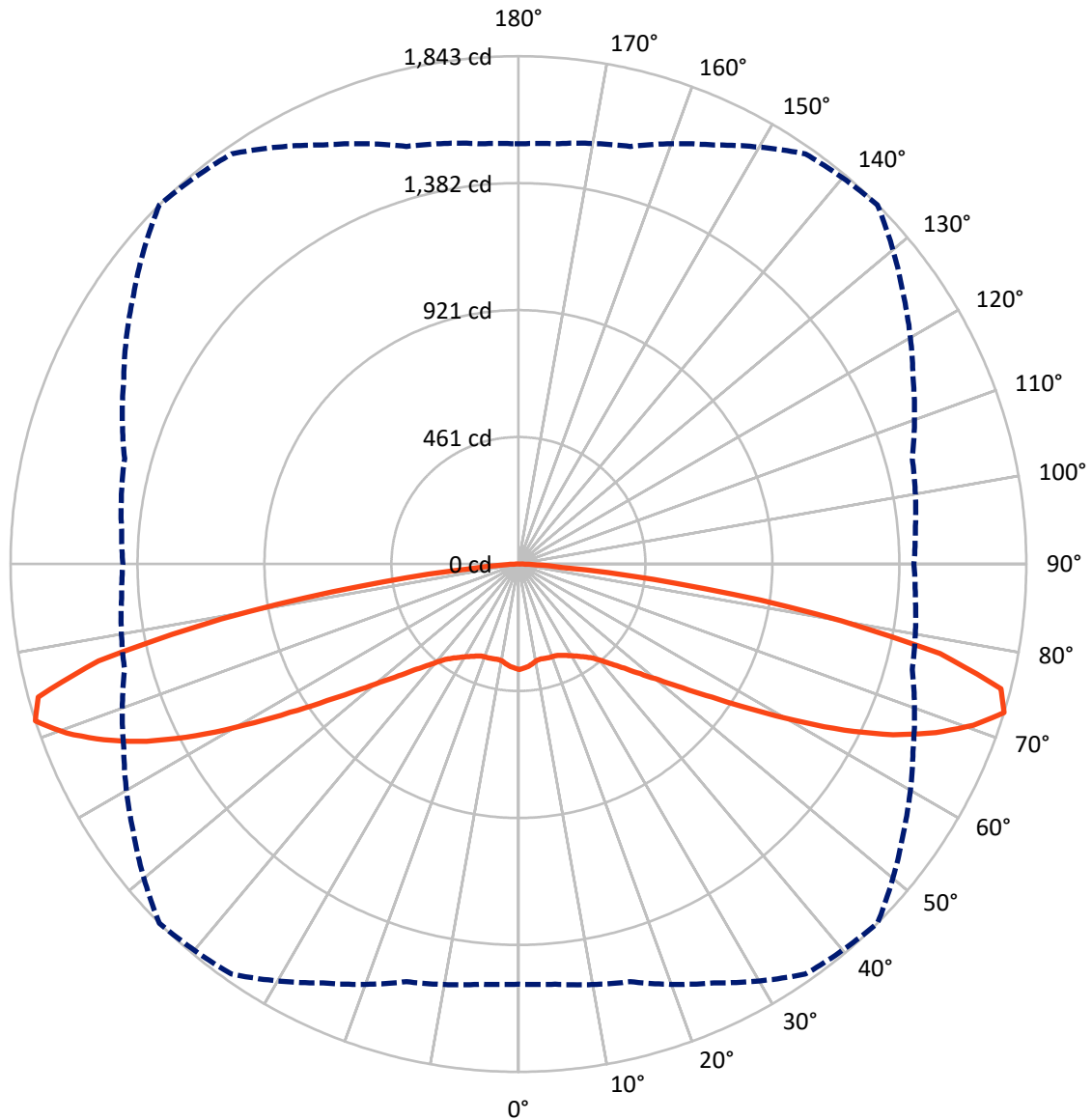
× Max cd  
 - - - 1/2 Max cd



Based on 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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CATALOG NUMBER: ARCH-AF24-40-D-U-5WQ-7030

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2322.5	0.0	2322.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2322.5	0.0	2322.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	4645.0	0.0	4645.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.2	0.8
10°-20°	101.6	2.2
20°-30°	170.1	3.7
30°-40°	261.3	5.6
40°-50°	432.7	9.3
50°-60°	769.3	16.6
60°-70°	1345.9	29.0
70°-80°	1369.3	29.5
80°-90°	159.5	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°	4645.0	100.0
0°-180°	4645.0	100.0



REPORT NUMBER: P214505

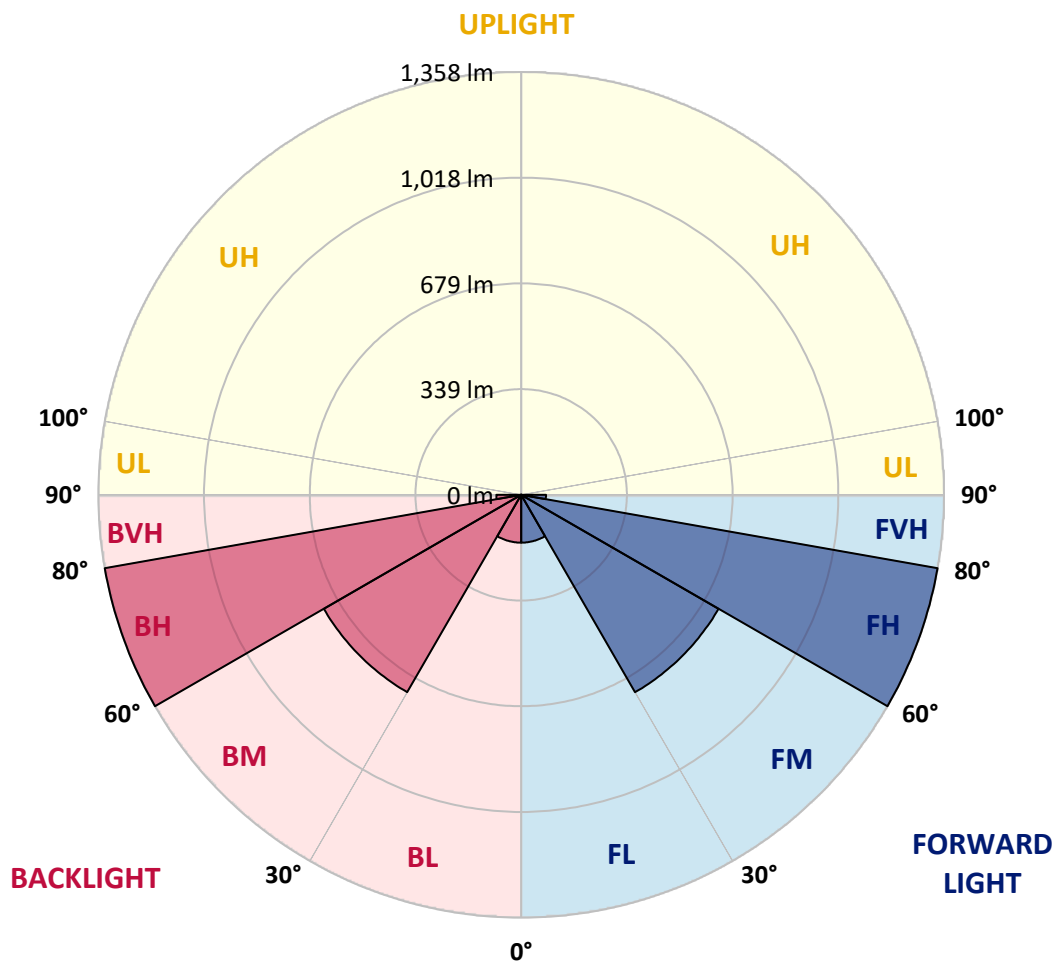
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	153.5	3.3			
FM	(30°-60°)	731.7	15.8			
FH	(60°-80°)	1357.6	29.2			G1/1800
FVH	(80°-90°)	79.7	1.7			G1/100
BL	(0°-30°)	153.5	3.3	B1/500		
BM	(30°-60°)	731.7	15.8	B1/1000		
BH	(60°-80°)	1357.6	29.2	B3/2500		G1/1800
BVH	(80°-90°)	79.7	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°	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9
2.5°	379.3	380.2	378.4	378.4	378.4	377.6	378.4	377.6	378.4	379.3	379.3
5°	375.8	375.8	374.0	374.0	374.0	373.1	374.0	374.0	374.9	375.8	375.8
7.5°	367.8	367.8	366.9	366.1	365.2	365.2	366.1	366.1	366.9	367.8	367.8
10°	363.4	362.5	360.8	358.1	357.2	356.3	358.1	359.9	362.5	365.2	364.3
12.5°	361.6	360.8	357.2	354.6	352.8	353.7	355.4	357.2	361.6	364.3	363.4
15°	363.4	361.6	357.2	352.8	353.7	355.4	357.2	357.2	362.5	365.2	365.2
17.5°	363.4	362.5	357.2	353.7	354.6	357.2	358.1	357.2	361.6	366.1	366.1
20°	364.3	364.3	357.2	354.6	355.4	358.1	359.0	358.1	361.6	366.9	366.9
22.5°	366.1	365.2	358.1	356.3	358.1	359.9	360.8	359.9	363.4	367.8	368.7
25°	369.6	367.8	361.6	360.8	364.3	366.9	366.9	365.2	366.9	371.4	371.4
27.5°	374.0	373.1	366.1	366.1	370.5	375.8	373.1	369.6	371.4	375.8	375.8
30°	382.0	381.1	374.0	374.0	380.2	386.4	380.2	375.8	378.4	382.9	383.7
32.5°	393.5	393.5	387.3	385.5	396.1	398.8	396.1	387.3	389.0	395.2	395.2
35°	412.9	411.2	405.0	404.1	414.7	413.8	412.9	405.0	406.7	413.8	413.8
37.5°	438.6	437.7	432.4	429.7	435.0	431.5	433.3	429.7	434.1	439.4	440.3
40°	471.3	470.4	466.0	462.4	464.2	458.9	460.7	462.4	466.9	470.4	471.3
42.5°	511.9	511.9	507.5	501.3	498.7	496.0	496.0	499.6	504.0	508.4	508.4
45°	562.3	562.3	557.0	550.9	542.9	538.5	540.2	543.8	549.1	554.4	556.2
47.5°	621.6	621.6	614.5	608.3	600.4	595.1	595.1	596.8	604.8	609.2	611.9
50°	687.9	685.3	678.2	672.0	667.6	660.5	661.4	660.5	667.6	673.8	675.5
52.5°	756.9	756.0	748.9	747.1	749.8	746.3	746.3	737.4	740.1	743.6	742.7
55°	842.6	840.0	833.8	837.3	847.9	853.2	851.5	837.3	829.4	831.1	830.3
57.5°	936.4	933.7	931.9	942.6	966.4	988.5	984.1	951.4	936.4	937.2	938.1
60°	1031.9	1031.9	1037.2	1063.7	1115.0	1151.2	1138.0	1083.1	1056.6	1051.3	1049.5
62.5°	1130.0	1132.7	1144.1	1188.4	1267.0	1327.2	1293.6	1215.8	1176.0	1165.4	1161.8
65°	1244.1	1246.7	1263.5	1318.3	1422.7	1494.3	1436.8	1363.4	1307.7	1285.6	1282.1
67.5°	1409.4	1411.2	1424.4	1477.5	1575.6	1633.1	1573.9	1508.4	1448.3	1422.7	1420.9
70°	1557.9	1559.7	1571.2	1641.1	1731.3	1751.6	1686.2	1603.0	1540.3	1519.9	1516.4
72.5°	1524.4	1530.5	1568.6	1677.3	1816.1	1842.7	1704.7	1580.1	1479.3	1445.7	1435.0
75°	1278.5	1288.3	1348.4	1512.0	1733.0	1808.2	1595.1	1366.1	1215.8	1151.2	1134.4
77.5°	746.3	782.5	886.0	1095.5	1411.2	1564.1	1313.9	1000.0	747.1	641.0	605.7
80°	204.2	223.7	298.9	504.0	885.1	1095.5	838.2	458.9	247.6	185.7	172.4
82.5°	64.5	85.8	108.8	145.0	347.5	577.4	311.2	135.3	106.1	87.5	77.8
85°	34.5	37.1	61.0	70.7	104.3	161.8	96.4	70.7	63.7	46.9	44.2
87.5°	17.7	18.6	34.5	34.5	46.0	38.0	41.6	38.0	36.3	23.0	20.3
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)