

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: P214500

Luminaire Tested: **ARCH-AF16-40-D-U-5WQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214500  
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-AF16-40-D-U-5WQ-7030  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 740mA LIGHT ENGINE WITH 16 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4690.5 lumens  
Efficiency: N/A  
Efficacy: 111.7 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

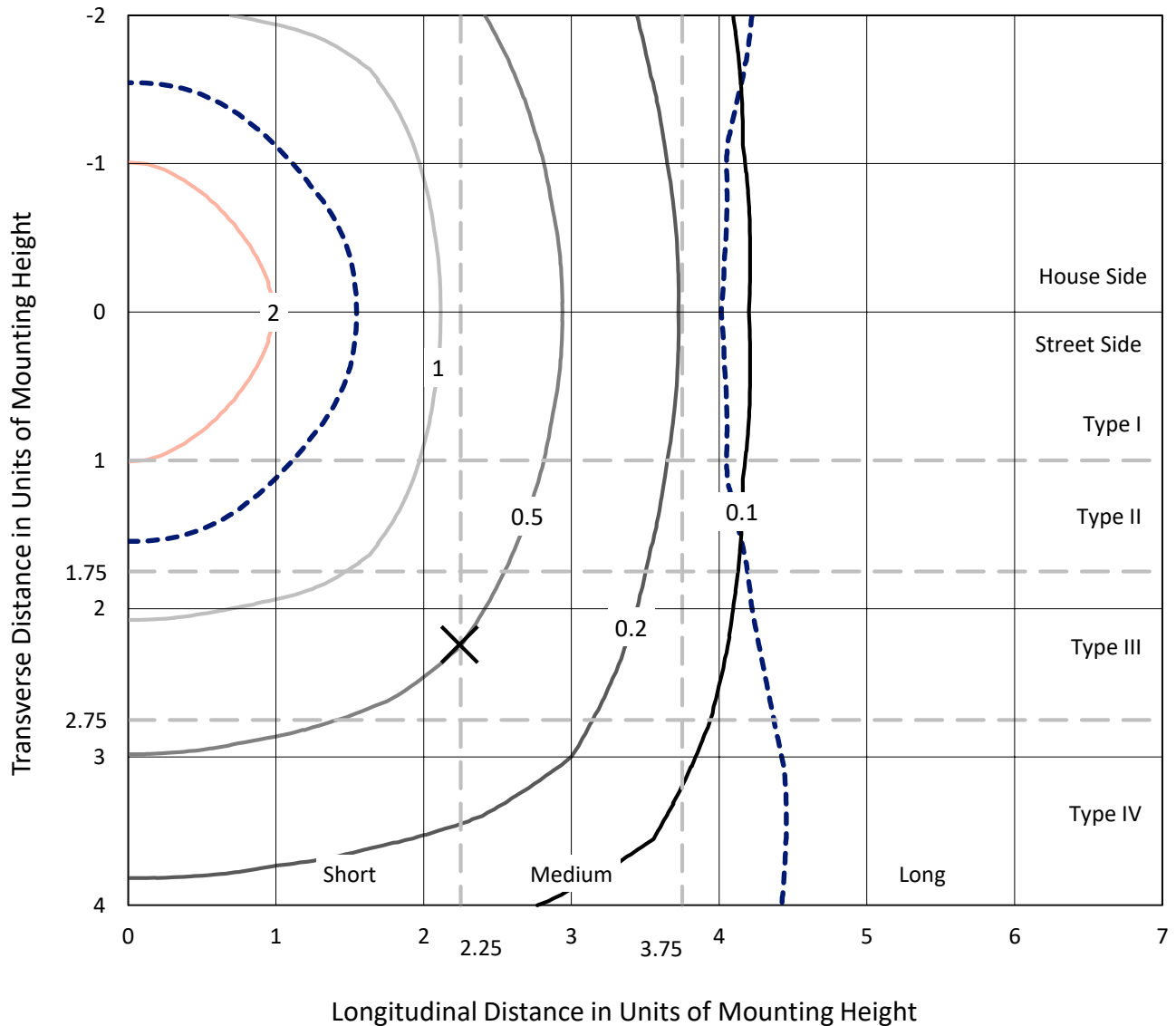
Input Watts (W): 42  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

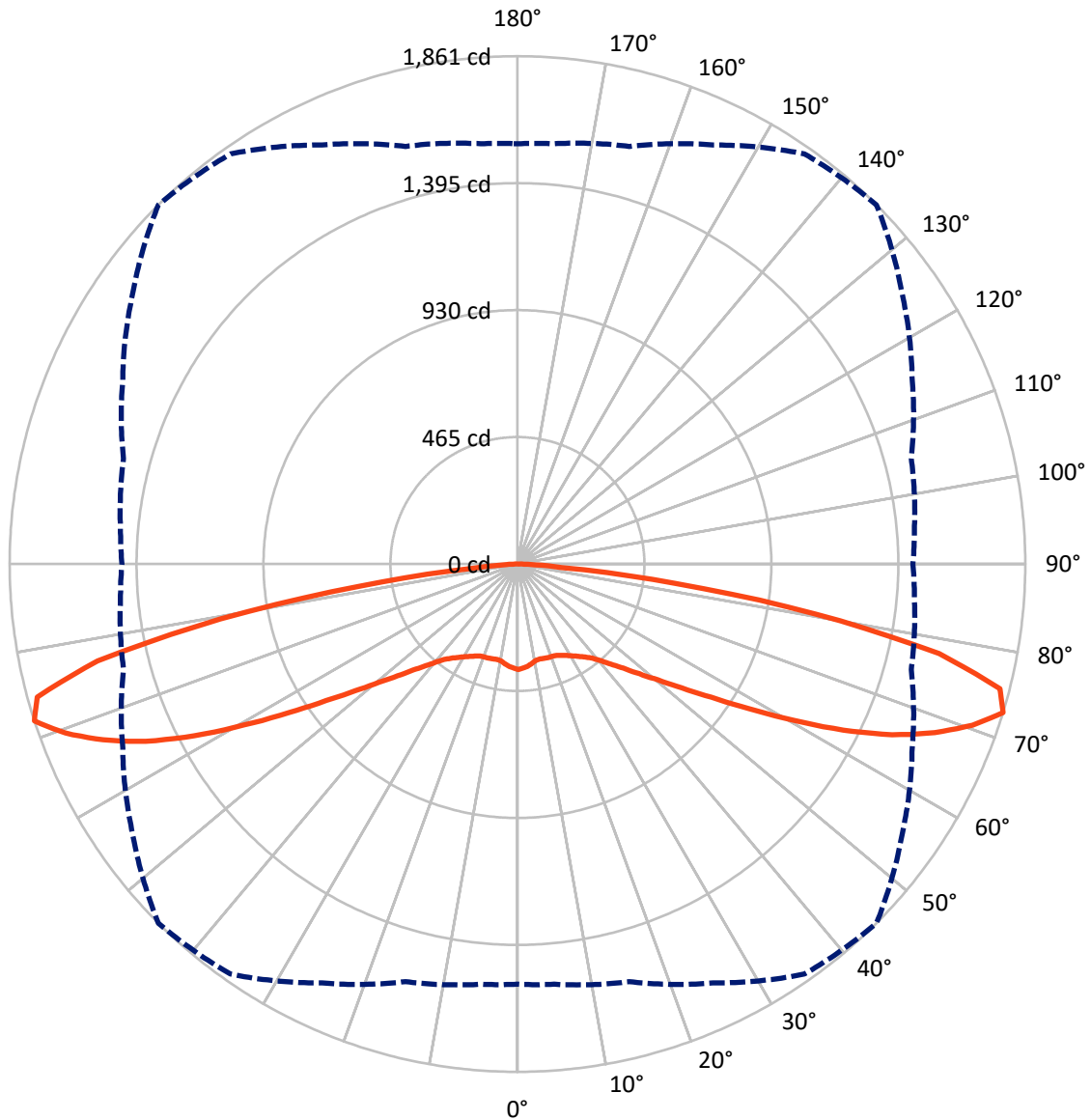


Based on 10 foot mounting height. Maximum calculated value = 3.9 fc  
 Type V - Short - Non-Cutoff

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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	2345.2	0.0	2345.2
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2345.2	0.0	2345.2
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	4690.5	0.0	4690.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.6	0.8
10°-20°	102.6	2.2
20°-30°	171.8	3.7
30°-40°	263.9	5.6
40°-50°	437.0	9.3
50°-60°	776.8	16.6
60°-70°	1359.1	29.0
70°-80°	1382.7	29.5
80°-90°	161.0	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°	4690.5	100.0
0°-180°	4690.5	100.0



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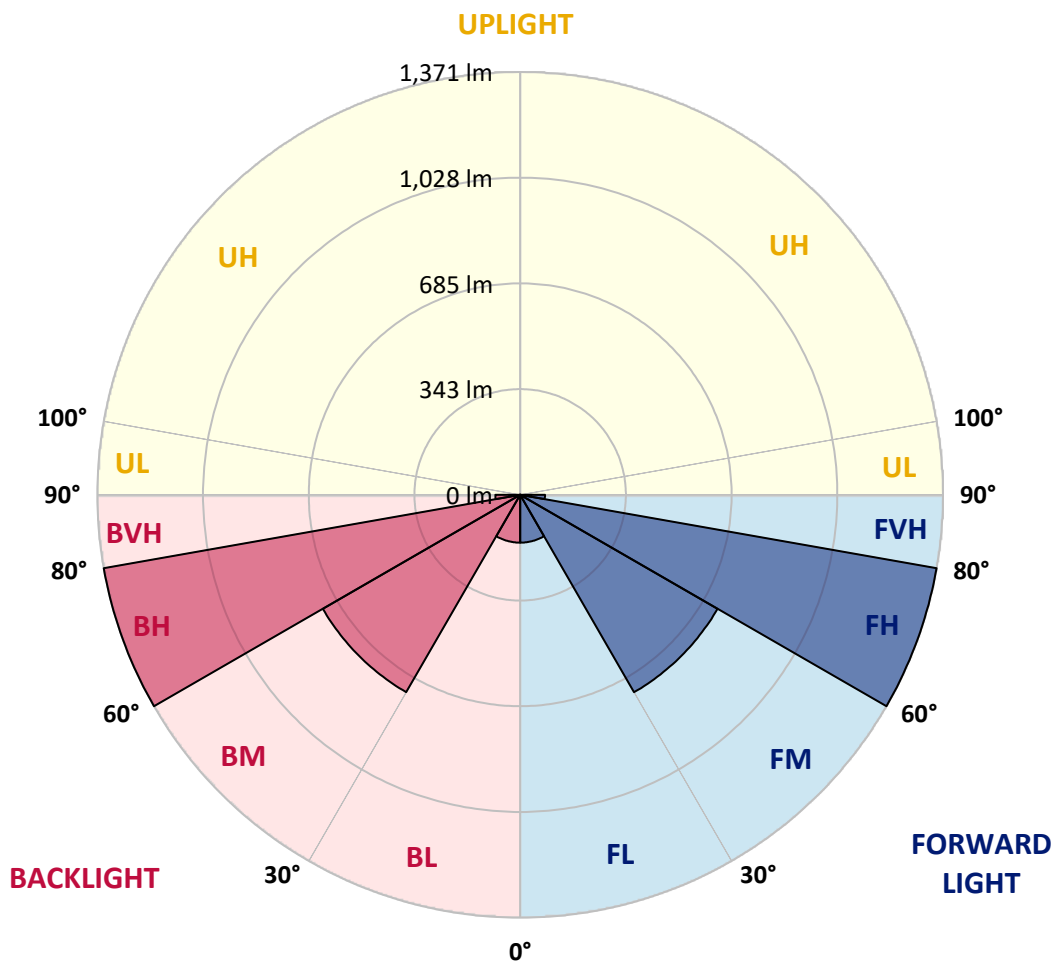
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	155.0	3.3			
FM	(30°-60°)	738.9	15.8			
FH	(60°-80°)	1370.9	29.2			G1/1800
FVH	(80°-90°)	80.5	1.7			G1/100
BL	(0°-30°)	155.0	3.3	B1/500		
BM	(30°-60°)	738.9	15.8	B1/1000		
BH	(60°-80°)	1370.9	29.2	B3/2500		G1/1800
BVH	(80°-90°)	80.5	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°	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
2.5°	383.1	383.9	382.2	382.2	382.2	381.2	382.2	381.2	382.2	383.1	383.1
5°	379.4	379.4	377.7	377.7	377.7	376.8	377.7	377.7	378.6	379.4	379.4
7.5°	371.5	371.5	370.5	369.7	368.8	368.8	369.7	369.7	370.5	371.5	371.5
10°	367.0	366.0	364.3	361.6	360.7	359.8	361.6	363.4	366.0	368.8	367.8
12.5°	365.2	364.3	360.7	358.1	356.3	357.2	358.9	360.7	365.2	367.8	367.0
15°	367.0	365.2	360.7	356.3	357.2	358.9	360.7	360.7	366.0	368.8	368.8
17.5°	367.0	366.0	360.7	357.2	358.1	360.7	361.6	360.7	365.2	369.7	369.7
20°	367.8	367.8	360.7	358.1	358.9	361.6	362.5	361.6	365.2	370.5	370.5
22.5°	369.7	368.8	361.6	359.8	361.6	363.4	364.3	363.4	367.0	371.5	372.3
25°	373.2	371.5	365.2	364.3	367.8	370.5	370.5	368.8	370.5	375.0	375.0
27.5°	377.7	376.8	369.7	369.7	374.1	379.4	376.8	373.2	375.0	379.4	379.4
30°	385.6	384.8	377.7	377.7	383.9	390.2	383.9	379.4	382.2	386.6	387.6
32.5°	397.2	397.2	391.0	389.3	400.0	402.7	400.0	391.0	392.9	399.2	399.2
35°	417.0	415.1	408.9	408.1	418.8	417.8	417.0	408.9	410.7	417.8	417.8
37.5°	442.8	442.0	436.6	434.0	439.3	435.7	437.5	434.0	438.3	443.7	444.6
40°	476.0	474.9	470.6	467.0	468.7	463.4	465.2	467.0	471.5	474.9	476.0
42.5°	517.1	517.1	512.5	506.2	503.5	500.9	500.9	504.4	508.9	513.4	513.4
45°	567.8	567.8	562.4	556.2	548.3	543.8	545.5	549.1	554.5	559.9	561.6
47.5°	627.7	627.7	620.5	614.2	606.3	600.9	600.9	602.7	610.8	615.1	617.9
50°	694.7	691.9	684.8	678.6	674.1	666.9	667.9	666.9	674.1	680.3	682.1
52.5°	764.3	763.4	756.3	754.4	757.1	753.6	753.6	744.6	747.4	750.9	749.9
55°	850.9	848.2	842.0	845.5	856.3	861.6	859.9	845.5	837.5	839.3	838.3
57.5°	945.5	942.9	941.0	951.7	975.9	998.2	993.7	960.7	945.5	946.4	947.3
60°	1042.0	1042.0	1047.4	1074.1	1125.9	1162.5	1149.1	1093.8	1066.9	1061.6	1059.9
62.5°	1141.1	1143.7	1155.3	1200.0	1279.4	1340.2	1306.2	1227.6	1187.5	1176.8	1173.2
65°	1256.3	1258.8	1275.9	1331.3	1436.6	1508.9	1450.9	1376.7	1320.5	1298.2	1294.6
67.5°	1423.2	1425.0	1438.4	1491.9	1591.1	1649.0	1589.2	1523.2	1462.6	1436.6	1434.8
70°	1573.3	1575.0	1586.6	1657.1	1748.2	1768.8	1702.7	1618.7	1555.3	1534.8	1531.3
72.5°	1539.3	1545.6	1583.9	1693.7	1833.9	1860.6	1721.4	1595.5	1493.8	1459.8	1449.1
75°	1291.1	1300.8	1361.6	1526.8	1750.0	1825.9	1610.7	1379.5	1227.6	1162.5	1145.6
77.5°	753.6	790.2	894.7	1106.2	1425.0	1579.5	1326.7	1009.8	754.4	647.4	611.7
80°	206.3	225.8	301.8	508.9	893.7	1106.2	846.4	463.4	249.9	187.5	174.2
82.5°	65.2	86.7	109.8	146.4	350.9	583.0	314.3	136.6	107.2	88.4	78.5
85°	34.9	37.4	61.6	71.4	105.3	163.4	97.4	71.4	64.3	47.3	44.7
87.5°	17.8	18.8	34.9	34.9	46.4	38.4	41.9	38.4	36.6	23.2	20.5
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)