

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: P214510

Luminaire Tested: **ARCH-AF24-90-D-U-5WQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214510  
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-AF24-90-D-U-5WQ-7030  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8879 lumens  
Efficiency: N/A  
Efficacy: 94.5 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): 94  
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

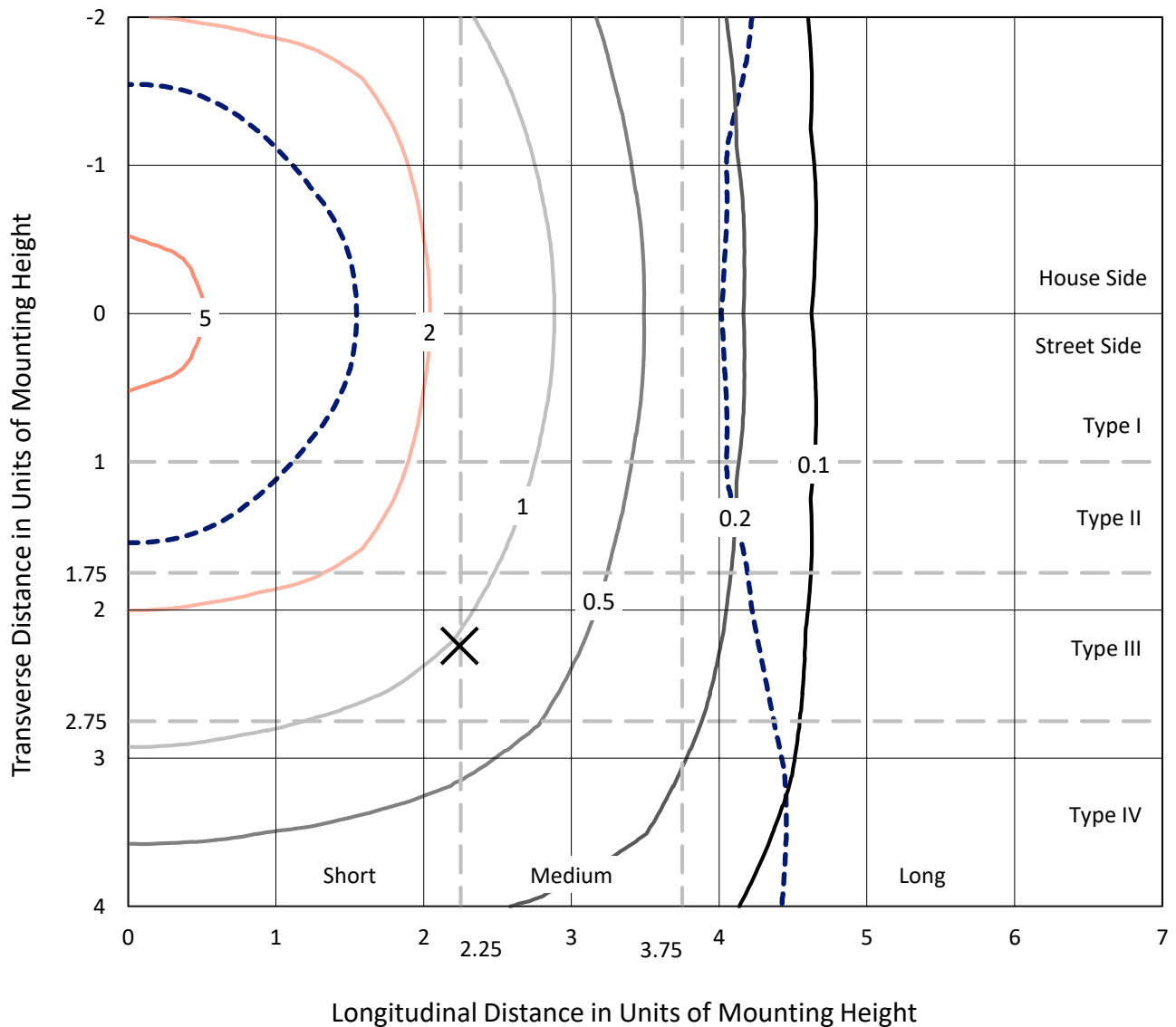


REPORT NUMBER: P214510

CATALOG NUMBER: ARCH-AF24-90-D-U-5WQ-7030

### Iso-Footcandle Lines of Horizontal Illumination

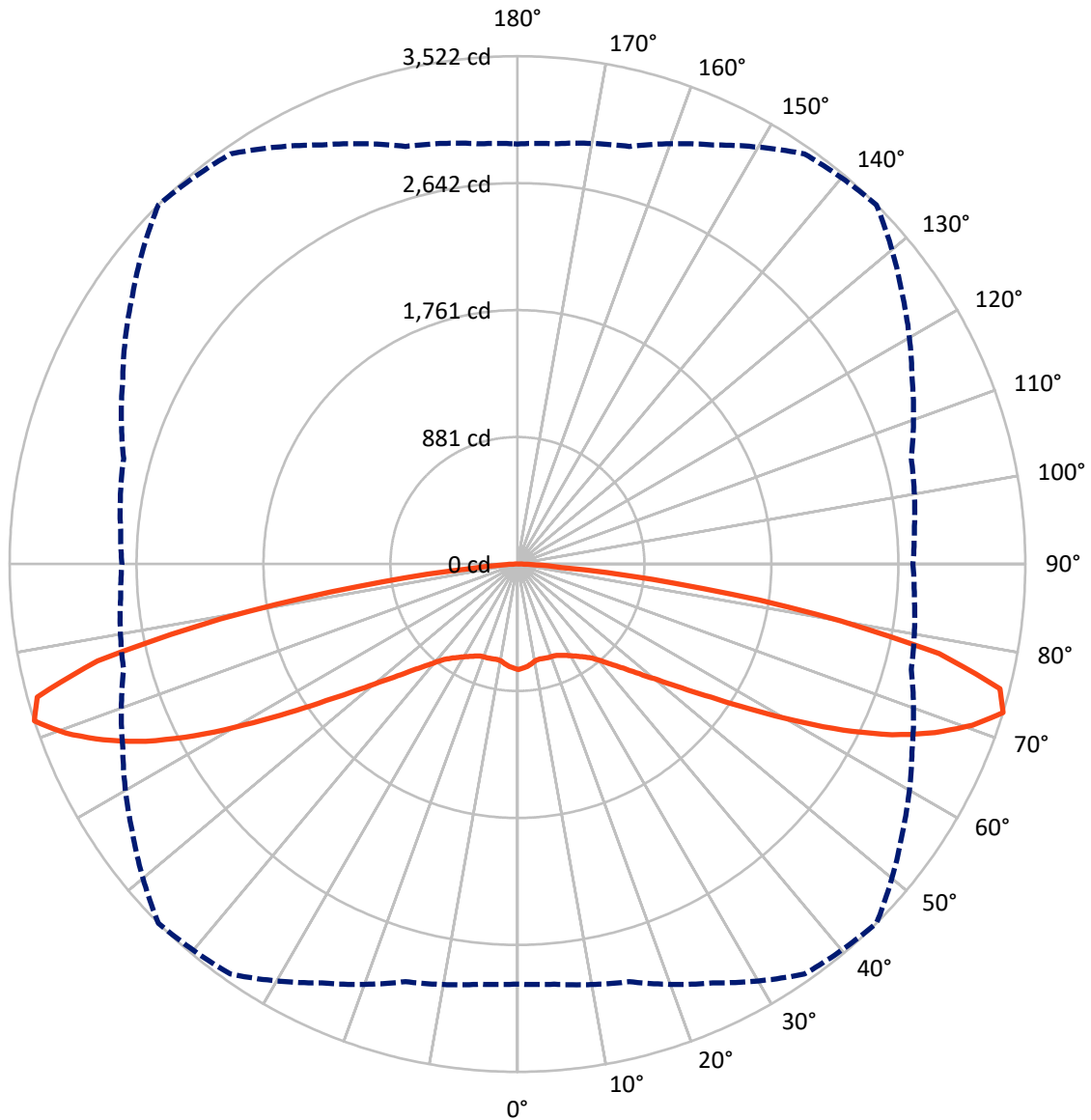
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.3 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	4439.5	0.0	4439.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4439.5	0.0	4439.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	8879.0	0.0	8879.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.3	0.8
10°-20°	194.3	2.2
20°-30°	325.1	3.7
30°-40°	499.6	5.6
40°-50°	827.2	9.3
50°-60°	1470.5	16.6
60°-70°	2572.7	29.0
70°-80°	2617.5	29.5
80°-90°	304.8	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°	8879.0	100.0
0°-180°	8879.0	100.0



REPORT NUMBER: P214510

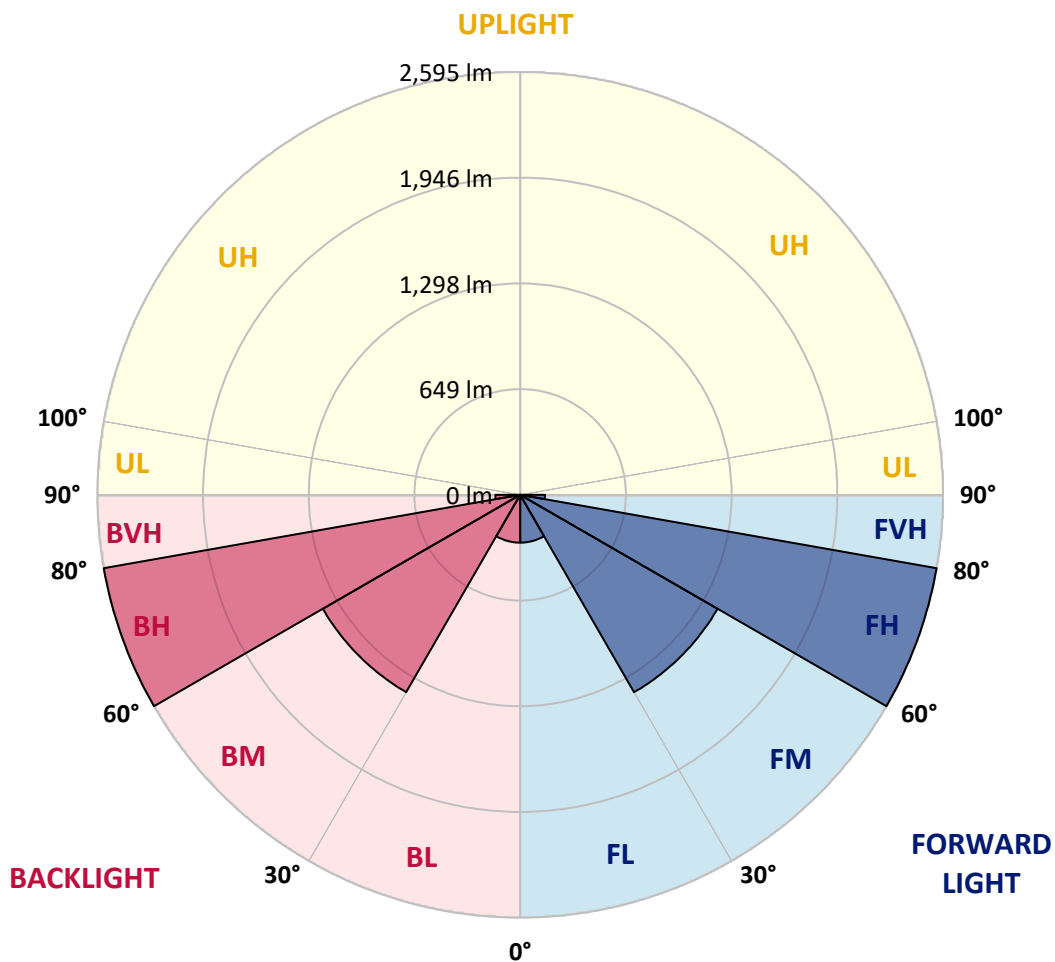
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	293.4	3.3			
FM	(30°-60°)	1398.6	15.8			
FH	(60°-80°)	2595.1	29.2			G2/5000
FVH	(80°-90°)	152.4	1.7			G2/225
BL	(0°-30°)	293.4	3.3	B1/500		
BM	(30°-60°)	1398.6	15.8	B2/2500		
BH	(60°-80°)	2595.1	29.2	B4/5000		G2/5000
BVH	(80°-90°)	152.4	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°	731.8	731.8	731.8	731.8	731.8	731.8	731.8	731.8	731.8	731.8	731.8
2.5°	725.1	726.8	723.4	723.4	723.4	721.7	723.4	721.7	723.4	725.1	725.1
5°	718.3	718.3	714.9	714.9	714.9	713.2	714.9	714.9	716.6	718.3	718.3
7.5°	703.1	703.1	701.4	699.7	698.0	698.0	699.7	699.7	701.4	703.1	703.1
10°	694.7	693.0	689.6	684.5	682.8	681.1	684.5	687.9	693.0	698.0	696.3
12.5°	691.3	689.6	682.8	677.8	674.4	676.1	679.4	682.8	691.3	696.3	694.7
15°	694.7	691.3	682.8	674.4	676.1	679.4	682.8	682.8	693.0	698.0	698.0
17.5°	694.7	693.0	682.8	676.1	677.8	682.8	684.5	682.8	691.3	699.7	699.7
20°	696.3	696.3	682.8	677.8	679.4	684.5	686.2	684.5	691.3	701.4	701.4
22.5°	699.7	698.0	684.5	681.1	684.5	687.9	689.6	687.9	694.7	703.1	704.8
25°	706.5	703.1	691.3	689.6	696.3	701.4	701.4	698.0	701.4	709.9	709.9
27.5°	714.9	713.2	699.7	699.7	708.2	718.3	713.2	706.5	709.9	718.3	718.3
30°	730.1	728.5	714.9	714.9	726.8	738.6	726.8	718.3	723.4	731.8	733.5
32.5°	752.1	752.1	740.3	736.9	757.2	762.3	757.2	740.3	743.7	755.5	755.5
35°	789.3	785.9	774.1	772.4	792.7	791.0	789.3	774.1	777.5	791.0	791.0
37.5°	838.3	836.6	826.5	821.4	831.6	824.8	828.2	821.4	829.9	840.0	841.7
40°	900.9	899.2	890.7	883.9	887.3	877.2	880.6	883.9	892.4	899.2	900.9
42.5°	978.6	978.6	970.1	958.3	953.2	948.2	948.2	954.9	963.4	971.8	971.8
45°	1074.9	1074.9	1064.8	1053.0	1037.8	1029.3	1032.7	1039.4	1049.6	1059.7	1063.1
47.5°	1188.2	1188.2	1174.7	1162.8	1147.6	1137.5	1137.5	1140.9	1156.1	1164.5	1169.6
50°	1314.9	1309.9	1296.3	1284.5	1276.1	1262.5	1264.2	1262.5	1276.1	1287.9	1291.3
52.5°	1446.8	1445.1	1431.6	1428.2	1433.2	1426.5	1426.5	1409.6	1414.7	1421.4	1419.7
55°	1610.7	1605.6	1593.8	1600.6	1620.9	1631.0	1627.6	1600.6	1585.4	1588.7	1587.1
57.5°	1789.9	1784.8	1781.4	1801.7	1847.3	1889.6	1881.1	1818.6	1789.9	1791.6	1793.3
60°	1972.4	1972.4	1982.5	2033.3	2131.3	2200.6	2175.2	2070.4	2019.7	2009.6	2006.2
62.5°	2160.0	2165.1	2187.1	2271.6	2422.0	2536.9	2472.7	2324.0	2247.9	2227.6	2220.9
65°	2378.0	2383.1	2415.2	2520.0	2719.5	2856.4	2746.5	2606.2	2499.7	2457.5	2450.7
67.5°	2694.1	2697.5	2722.8	2824.2	3011.9	3121.7	3008.5	2883.4	2768.5	2719.5	2716.1
70°	2978.0	2981.4	3003.4	3136.9	3309.3	3348.2	3223.1	3064.2	2944.2	2905.4	2898.6
72.5°	2913.8	2925.7	2998.3	3206.2	3471.6	3522.3	3258.6	3020.3	2827.6	2763.4	2743.1
75°	2444.0	2462.6	2577.5	2890.2	3312.7	3456.4	3049.0	2611.3	2324.0	2200.6	2168.5
77.5°	1426.5	1495.8	1693.5	2094.1	2697.5	2989.9	2511.6	1911.6	1428.2	1225.4	1157.8
80°	390.4	427.6	571.3	963.4	1691.8	2094.1	1602.3	877.2	473.2	354.9	329.6
82.5°	123.4	163.9	207.9	277.2	664.2	1103.7	594.9	258.6	202.8	167.3	148.7
85°	65.9	71.0	116.6	135.2	199.4	309.3	184.2	135.2	121.7	89.6	84.5
87.5°	33.8	35.5	65.9	65.9	87.9	72.7	79.4	72.7	69.3	43.9	38.9
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)