

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: P214524

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214524  
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  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 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: 10260.2 lumens  
Efficiency: N/A  
Efficacy: 109.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B4 - U0 - G2

Input Watts (W): 94  
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

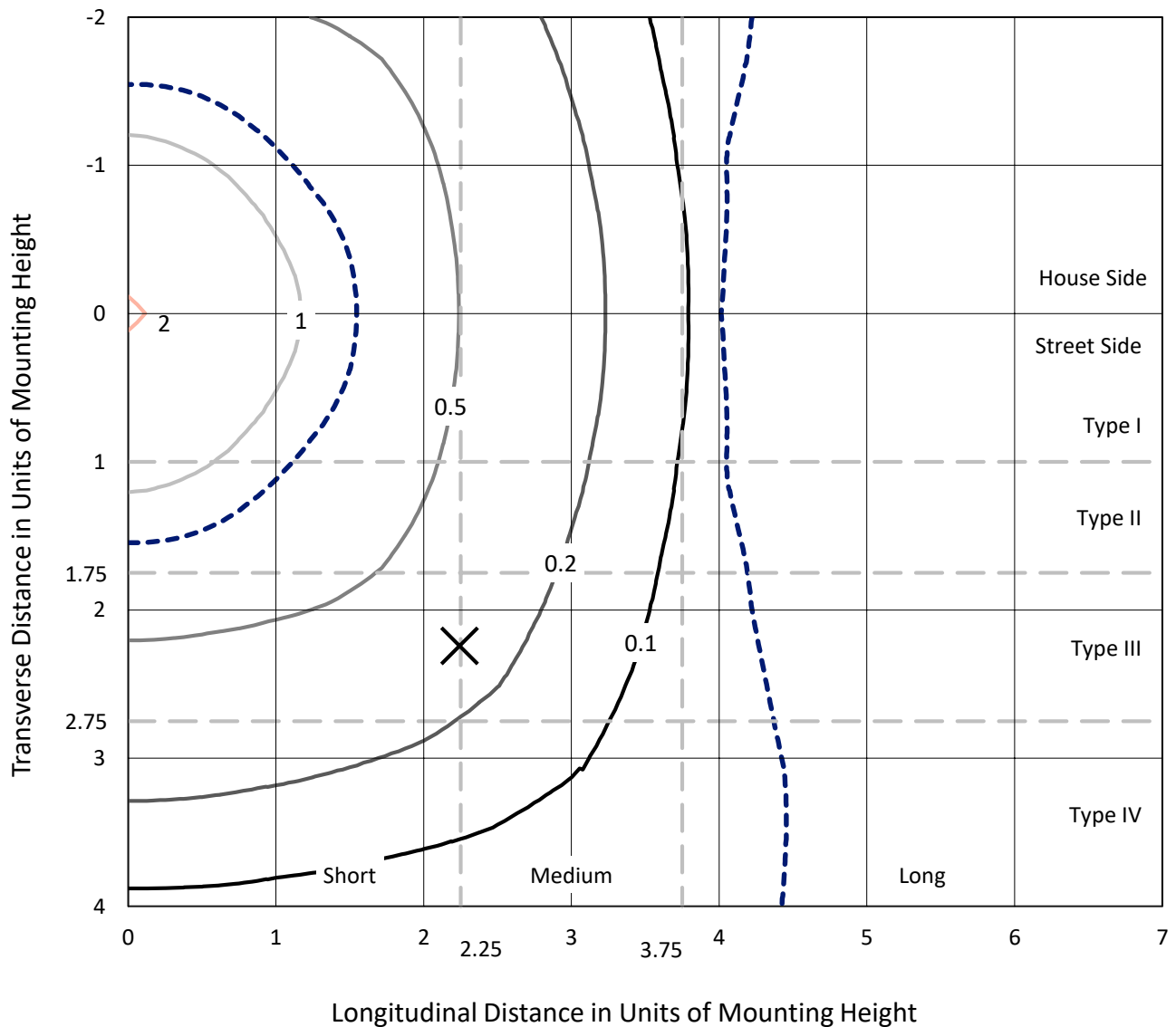


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

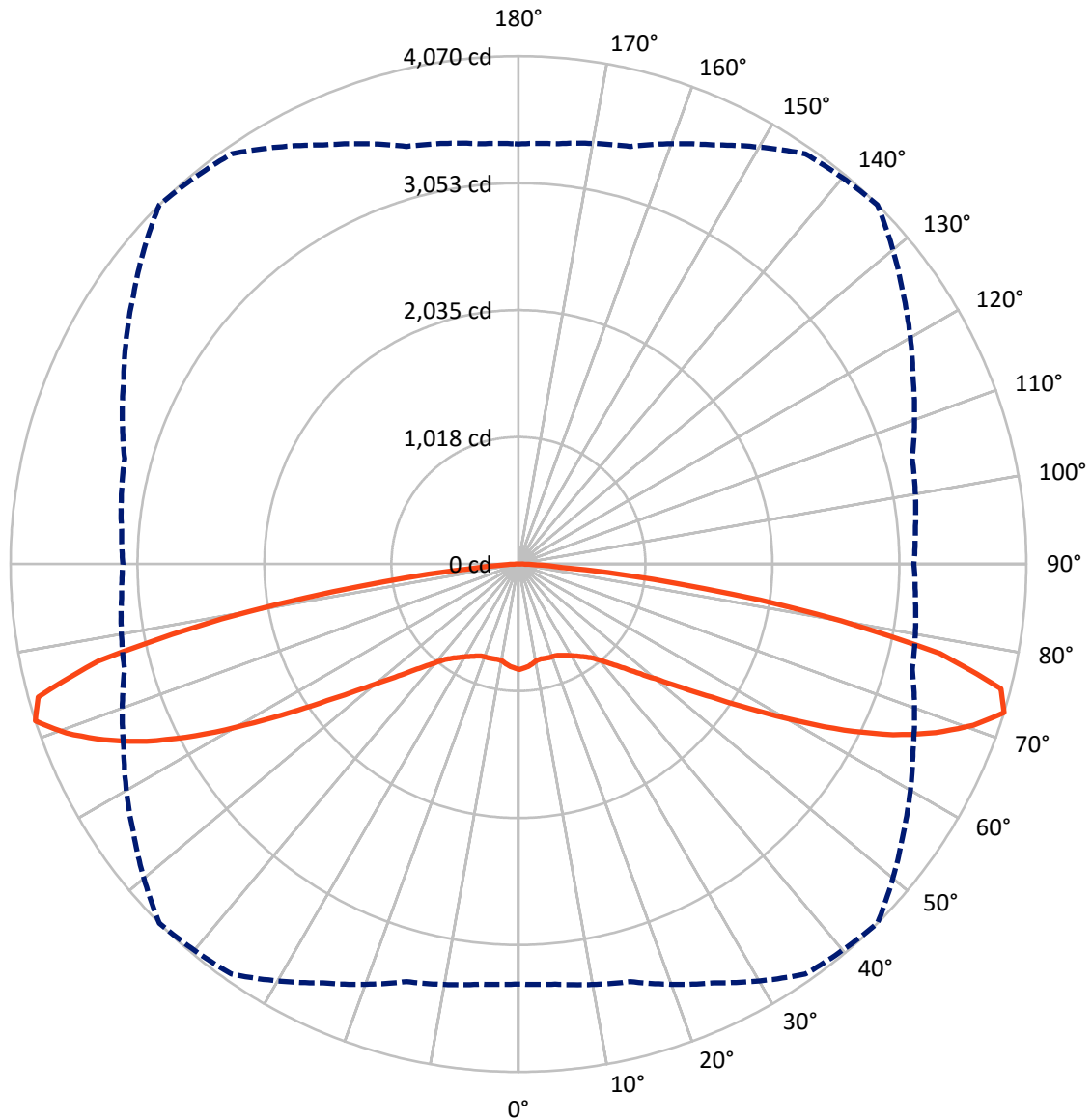


Based on 20 foot mounting height. Maximum calculated value = 2.1 fc  
 Type V - Short - Non-Cutoff

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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	5130.1	0.0	5130.1
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	5130.1	0.0	5130.1
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	10260.2	0.0	10260.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.8	0.8
10°-20°	224.5	2.2
20°-30°	375.7	3.7
30°-40°	577.3	5.6
40°-50°	955.8	9.3
50°-60°	1699.3	16.6
60°-70°	2972.9	29.0
70°-80°	3024.7	29.5
80°-90°	352.2	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°	10260.2	100.0
0°-180°	10260.2	100.0



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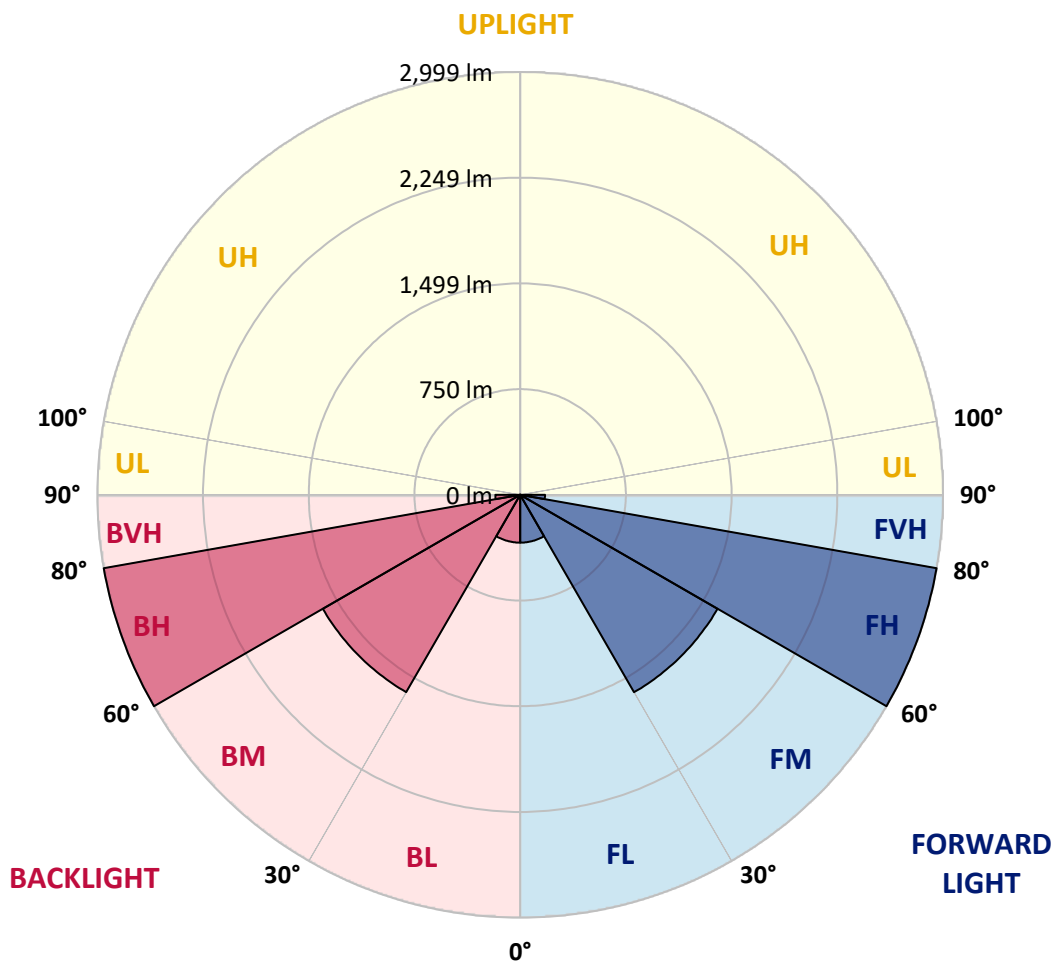
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	339.0	3.3			
FM (30°-60°)	1616.2	15.8			
FH (60°-80°)	2998.8	29.2			G2/5000
FVH (80°-90°)	176.1	1.7			G2/225
BL (0°-30°)	339.0	3.3	B1/500		
BM (30°-60°)	1616.2	15.8	B2/2500		
BH (60°-80°)	2998.8	29.2	B4/5000		G2/5000
BVH (80°-90°)	176.1	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°	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7
2.5°	837.9	839.8	836.0	836.0	836.0	833.9	836.0	833.9	836.0	837.9	837.9
5°	830.0	830.0	826.1	826.1	826.1	824.2	826.1	826.1	828.1	830.0	830.0
7.5°	812.4	812.4	810.5	808.5	806.6	806.6	808.5	808.5	810.5	812.4	812.4
10°	802.7	800.8	796.9	790.9	789.0	787.1	790.9	794.9	800.8	806.6	804.7
12.5°	798.8	796.9	789.0	783.2	779.3	781.2	785.1	789.0	798.8	804.7	802.7
15°	802.7	798.8	789.0	779.3	781.2	785.1	789.0	789.0	800.8	806.6	806.6
17.5°	802.7	800.8	789.0	781.2	783.2	789.0	790.9	789.0	798.8	808.5	808.5
20°	804.7	804.7	789.0	783.2	785.1	790.9	793.0	790.9	798.8	810.5	810.5
22.5°	808.5	806.6	790.9	787.1	790.9	794.9	796.9	794.9	802.7	812.4	814.5
25°	816.4	812.4	798.8	796.9	804.7	810.5	810.5	806.6	810.5	820.3	820.3
27.5°	826.1	824.2	808.5	808.5	818.4	830.0	824.2	816.4	820.3	830.0	830.0
30°	843.7	841.8	826.1	826.1	839.8	853.4	839.8	830.0	836.0	845.7	847.6
32.5°	869.1	869.1	855.5	851.5	874.9	880.9	874.9	855.5	859.4	873.0	873.0
35°	912.1	908.2	894.5	892.5	916.0	914.0	912.1	894.5	898.5	914.0	914.0
37.5°	968.7	966.8	955.0	949.2	961.0	953.1	957.0	949.2	958.9	970.7	972.6
40°	1041.0	1039.0	1029.3	1021.4	1025.4	1013.6	1017.5	1021.4	1031.2	1039.0	1041.0
42.5°	1130.9	1130.9	1121.1	1107.3	1101.5	1095.7	1095.7	1103.5	1113.3	1123.0	1123.0
45°	1242.2	1242.2	1230.4	1216.8	1199.2	1189.4	1193.4	1201.1	1212.8	1224.6	1228.5
47.5°	1373.0	1373.0	1357.4	1343.7	1326.2	1314.4	1314.4	1318.3	1335.9	1345.7	1351.5
50°	1519.5	1513.7	1498.0	1484.3	1474.6	1458.9	1460.9	1458.9	1474.6	1488.2	1492.2
52.5°	1671.8	1669.9	1654.2	1650.3	1656.2	1648.4	1648.4	1628.8	1634.7	1642.6	1640.6
55°	1861.3	1855.4	1841.7	1849.6	1873.0	1884.7	1880.8	1849.6	1832.0	1835.9	1833.9
57.5°	2068.3	2062.5	2058.5	2082.0	2134.7	2183.5	2173.8	2101.6	2068.3	2070.2	2072.2
60°	2279.2	2279.2	2290.9	2349.5	2462.9	2542.9	2513.6	2392.5	2334.0	2322.2	2318.3
62.5°	2496.0	2501.8	2527.3	2624.9	2798.8	2931.6	2857.3	2685.5	2597.6	2574.2	2566.4
65°	2748.0	2753.8	2790.9	2912.0	3142.5	3300.7	3173.7	3011.7	2888.6	2839.7	2831.9
67.5°	3113.1	3117.1	3146.4	3263.6	3480.4	3607.3	3476.5	3332.0	3199.2	3142.5	3138.6
70°	3441.3	3445.2	3470.6	3624.9	3824.1	3869.0	3724.5	3540.9	3402.2	3357.3	3349.6
72.5°	3367.0	3380.8	3464.7	3704.9	4011.6	4070.2	3765.5	3490.1	3267.5	3193.2	3169.8
75°	2824.2	2845.6	2978.4	3339.7	3828.0	3994.0	3523.3	3017.5	2685.5	2542.9	2505.8
77.5°	1648.4	1728.5	1957.0	2419.9	3117.1	3455.0	2902.2	2209.0	1650.3	1416.0	1337.8
80°	451.1	494.1	660.1	1113.3	1955.1	2419.9	1851.5	1013.6	546.9	410.1	380.8
82.5°	142.6	189.5	240.2	320.3	767.5	1275.3	687.5	298.8	234.4	193.3	171.9
85°	76.2	82.0	134.7	156.2	230.5	357.4	212.9	156.2	140.7	103.5	97.7
87.5°	39.1	41.0	76.2	76.2	101.6	84.0	91.8	84.0	80.1	50.7	44.9
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)