

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: P236731

Luminaire Tested: **ARCH-L-AF72-180-D-U-5WQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P236731  
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-L-AF72-180-D-U-5WQ  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23737.6 lumens  
Efficiency: N/A  
Efficacy: 131.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B5 - U0 - G3

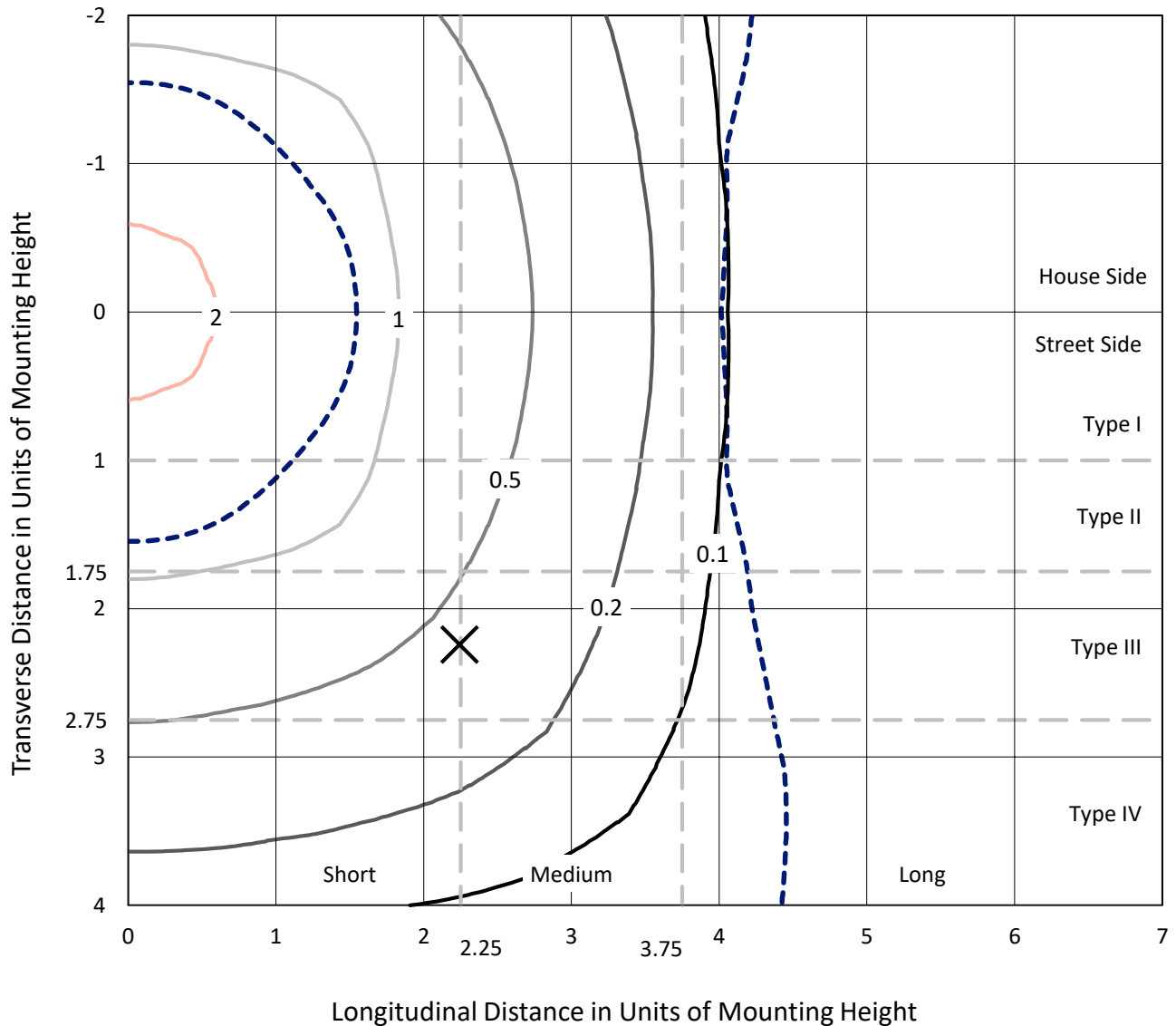
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

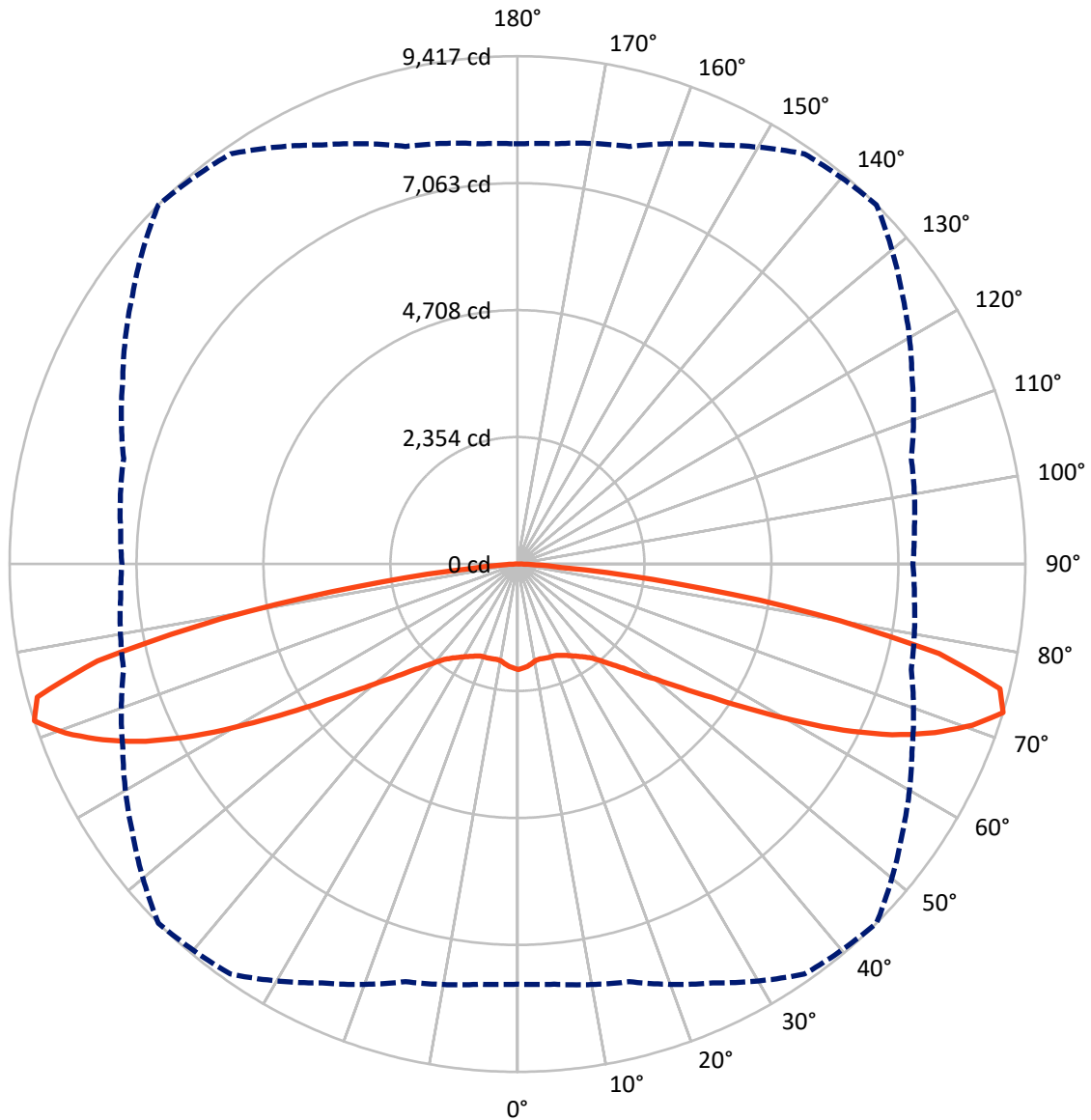


Based on 25 foot mounting height. Maximum calculated value = 3.1 fc  
 Type V - Short - Non-Cutoff

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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	11868.8	0.0	11868.8
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	11868.8	0.0	11868.8
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	23737.6	0.0	23737.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.0	0.8
10°-20°	519.4	2.2
20°-30°	869.2	3.7
30°-40°	1335.6	5.6
40°-50°	2211.4	9.3
50°-60°	3931.4	16.6
60°-70°	6877.9	29.0
70°-80°	6997.7	29.5
80°-90°	814.9	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°	23737.6	100.0
0°-180°	23737.6	100.0



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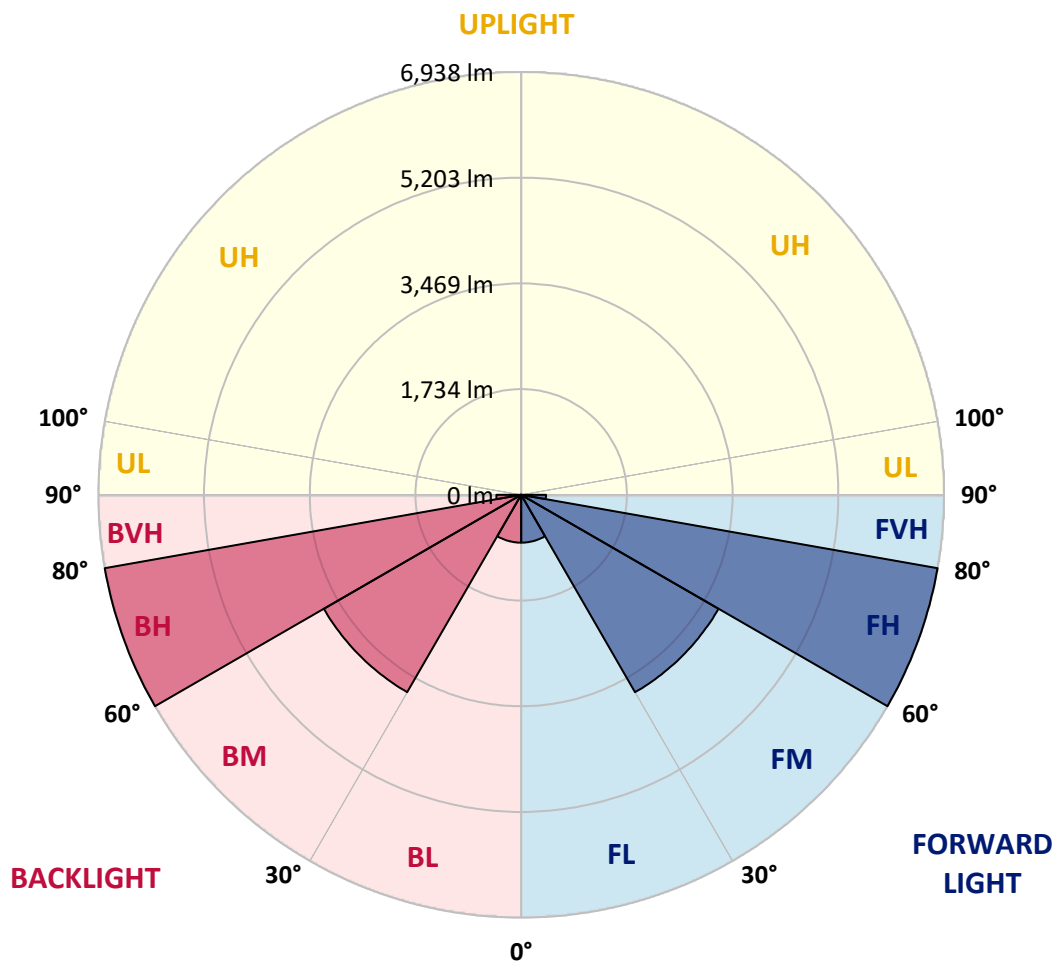
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	784.4	3.3			
FM	(30°-60°)	3739.2	15.8			
FH	(60°-80°)	6937.8	29.2			G3/7500
FVH	(80°-90°)	407.4	1.7			G3/500
BL	(0°-30°)	784.4	3.3	B2/1000		
BM	(30°-60°)	3739.2	15.8	B3/5000		
BH	(60°-80°)	6937.8	29.2	B5		G3/7500
BVH	(80°-90°)	407.4	1.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5	1956.5
2.5°	1938.5	1943.0	1933.9	1933.9	1933.9	1929.4	1933.9	1929.4	1933.9	1938.5	1938.5
5°	1920.4	1920.4	1911.4	1911.4	1911.4	1906.8	1911.4	1911.4	1915.9	1920.4	1920.4
7.5°	1879.7	1879.7	1875.2	1870.7	1866.2	1866.2	1870.7	1870.7	1875.2	1879.7	1879.7
10°	1857.2	1852.6	1843.6	1830.1	1825.5	1821.0	1830.1	1839.1	1852.6	1866.2	1861.7
12.5°	1848.1	1843.6	1825.5	1812.0	1802.8	1807.5	1816.5	1825.5	1848.1	1861.7	1857.2
15°	1857.2	1848.1	1825.5	1802.8	1807.5	1816.5	1825.5	1825.5	1852.6	1866.2	1866.2
17.5°	1857.2	1852.6	1825.5	1807.5	1812.0	1825.5	1830.1	1825.5	1848.1	1870.7	1870.7
20°	1861.7	1861.7	1825.5	1812.0	1816.5	1830.1	1834.6	1830.1	1848.1	1875.2	1875.2
22.5°	1870.7	1866.2	1830.1	1821.0	1830.1	1839.1	1843.6	1839.1	1857.2	1879.7	1884.3
25°	1888.8	1879.7	1848.1	1843.6	1861.7	1875.2	1875.2	1866.2	1875.2	1897.8	1897.8
27.5°	1911.4	1906.8	1870.7	1870.7	1893.3	1920.4	1906.8	1888.8	1897.8	1920.4	1920.4
30°	1952.0	1947.5	1911.4	1911.4	1943.0	1974.6	1943.0	1920.4	1933.9	1956.5	1961.0
32.5°	2010.7	2010.7	1979.1	1970.1	2024.3	2037.8	2024.3	1979.1	1988.2	2019.8	2019.8
35°	2110.1	2101.1	2069.5	2064.9	2119.1	2114.6	2110.1	2069.5	2078.5	2114.6	2114.6
37.5°	2241.2	2236.7	2209.6	2196.0	2223.1	2205.1	2214.1	2196.0	2218.6	2245.7	2250.2
40°	2408.3	2403.8	2381.2	2363.2	2372.2	2345.1	2354.1	2363.2	2385.8	2403.8	2408.3
42.5°	2616.2	2616.2	2593.7	2562.0	2548.5	2534.9	2534.9	2553.0	2575.6	2598.2	2598.2
45°	2873.8	2873.8	2846.7	2815.1	2774.3	2751.8	2760.8	2778.9	2806.1	2833.2	2842.2
47.5°	3176.6	3176.6	3140.4	3108.7	3068.1	3041.0	3041.0	3050.0	3090.6	3113.2	3126.9
50°	3515.5	3501.9	3465.8	3434.0	3411.5	3375.3	3379.8	3375.3	3411.5	3443.2	3452.2
52.5°	3867.9	3863.4	3827.2	3818.2	3831.8	3813.7	3813.7	3768.4	3782.1	3800.1	3795.6
55°	4306.2	4292.6	4261.0	4279.1	4333.3	4360.4	4351.3	4279.1	4238.4	4247.4	4242.9
57.5°	4785.2	4771.6	4762.6	4816.8	4938.8	5051.7	5029.1	4862.0	4785.2	4789.7	4794.2
60°	5273.1	5273.1	5300.2	5435.8	5697.8	5883.1	5815.4	5535.2	5399.6	5372.5	5363.5
62.5°	5774.7	5788.3	5847.0	6073.0	6475.1	6782.4	6610.6	6213.0	6009.6	5955.4	5937.4
65°	6357.5	6371.1	6457.0	6737.2	7270.3	7636.3	7342.6	6967.6	6682.9	6570.0	6551.9
67.5°	7202.6	7211.6	7279.3	7550.5	8052.1	8345.7	8043.0	7708.7	7401.4	7270.3	7261.3
70°	7961.6	7970.7	8029.4	8386.5	8847.3	8951.2	8616.8	8192.1	7871.3	7767.4	7749.3
72.5°	7790.0	7821.6	8015.8	8571.7	9281.1	9416.7	8711.8	8074.7	7559.5	7387.9	7333.6
75°	6533.8	6583.5	6890.8	7726.7	8856.3	9240.4	8151.5	6981.1	6213.0	5883.1	5797.3
77.5°	3813.7	3998.9	4527.6	5598.5	7211.6	7993.3	6714.5	5110.5	3818.2	3275.9	3095.2
80°	1043.8	1143.1	1527.3	2575.6	4523.1	5598.5	4283.6	2345.1	1265.2	948.9	881.1
82.5°	329.9	438.3	555.8	741.0	1775.7	2950.6	1590.5	691.3	542.3	447.3	397.6
85°	176.3	189.8	311.8	361.5	533.2	826.9	492.6	361.5	325.3	239.5	226.0
87.5°	90.3	94.9	176.3	176.3	235.0	194.3	212.4	194.3	185.3	117.4	103.9
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)