

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: P265742

Luminaire Tested: **ARCH-L-AF72-280-D-U-5WQ-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265742  
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-AF72-280-D-U-5WQ-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27000.5 lumens  
Efficiency: N/A  
Efficacy: 96.8 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 - G4

Input Watts (W): 279  
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

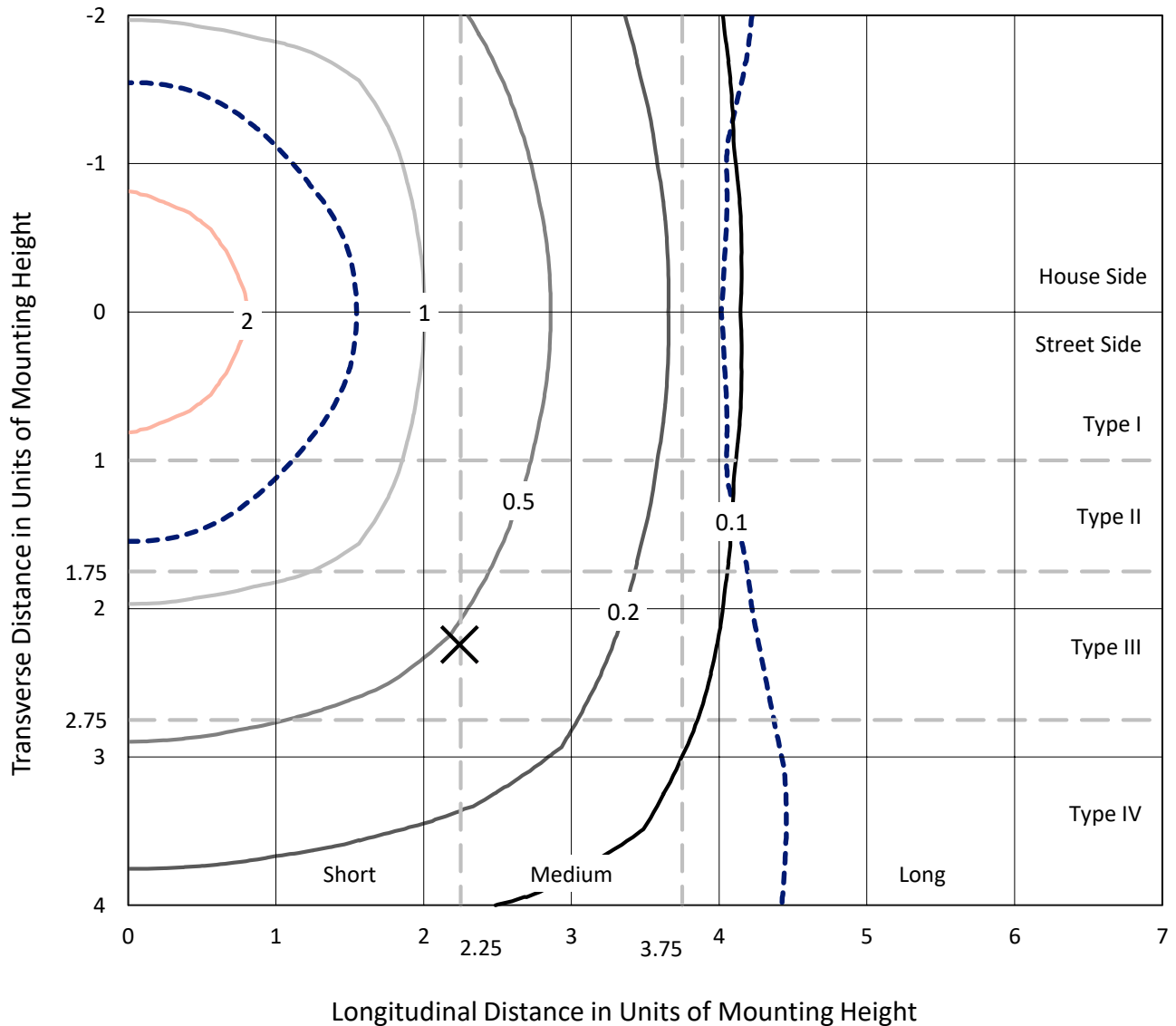


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

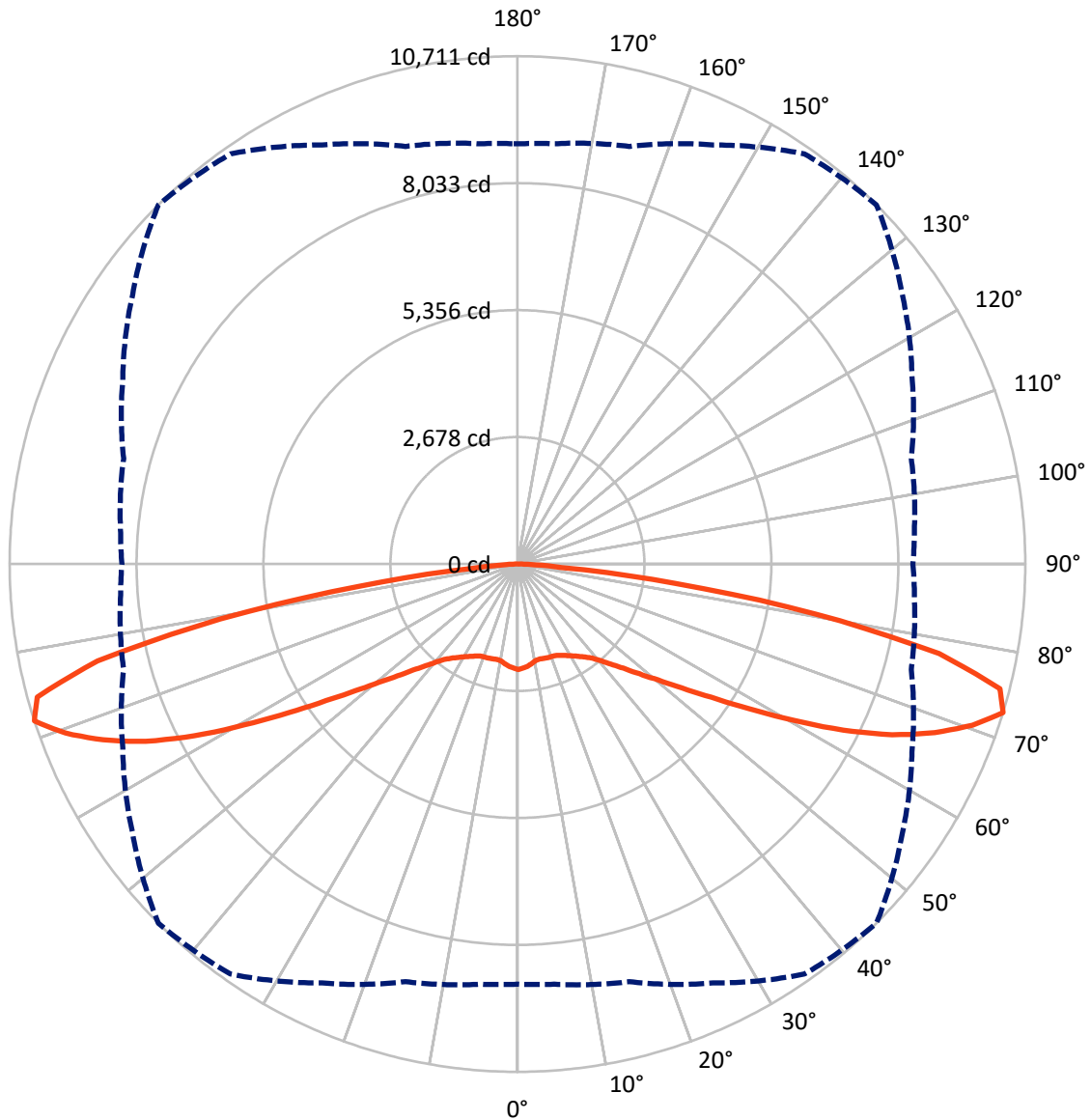


Based on 25 foot mounting height. Maximum calculated value = 3.6 fc  
 Type V - Short - Non-Cutoff

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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	13500.3	0.0	13500.3
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	13500.3	0.0	13500.3
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	27000.5	0.0	27000.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.8	0.8
10°-20°	590.8	2.2
20°-30°	988.7	3.7
30°-40°	1519.2	5.6
40°-50°	2515.4	9.3
50°-60°	4471.8	16.6
60°-70°	7823.4	29.0
70°-80°	7959.7	29.5
80°-90°	926.8	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°	27000.5	100.0
0°-180°	27000.5	100.0



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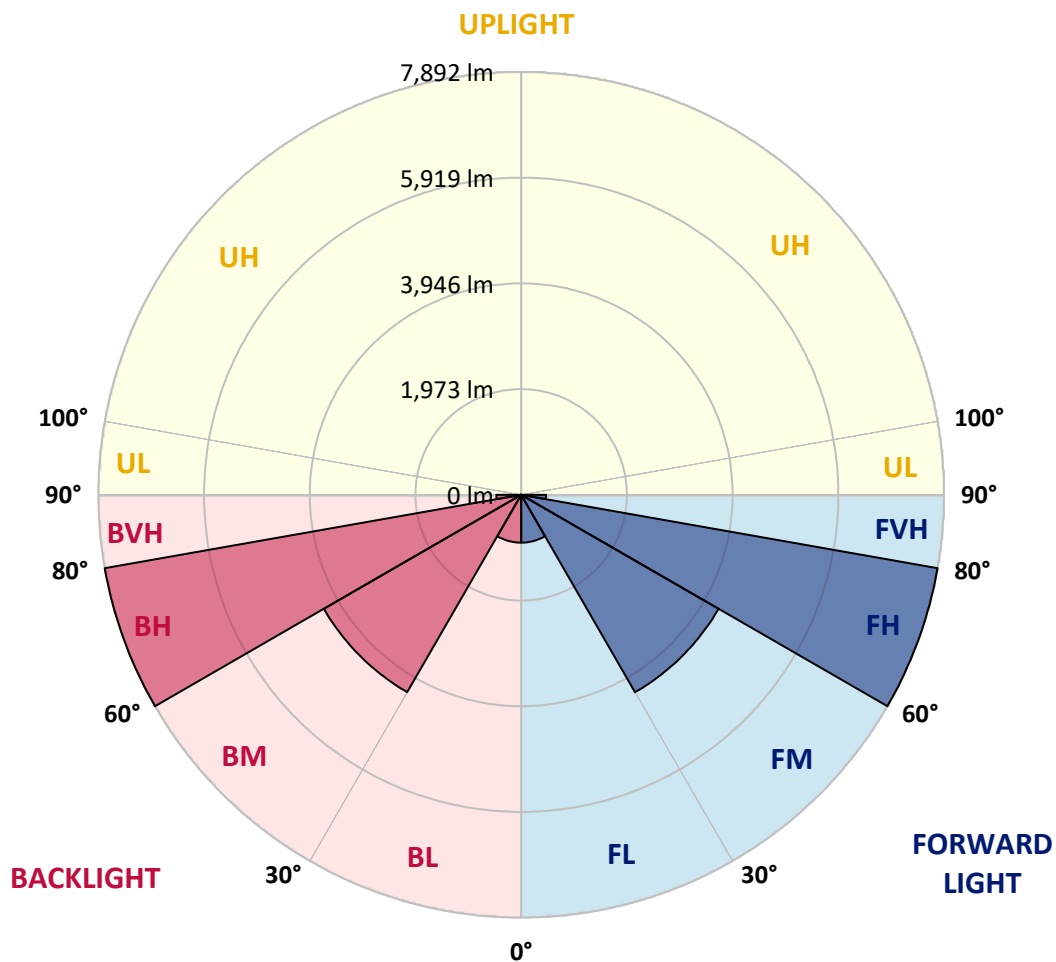
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	892.2	3.3			
FM	(30°-60°)	4253.2	15.8			
FH	(60°-80°)	7891.5	29.2			G4/12000
FVH	(80°-90°)	463.4	1.7			G3/500
BL	(0°-30°)	892.2	3.3	B2/1000		
BM	(30°-60°)	4253.2	15.8	B3/5000		
BH	(60°-80°)	7891.5	29.2	B5		G4/12000
BVH	(80°-90°)	463.4	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-G4**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2225.6	2225.6	2225.6	2225.6	2225.6	2225.6	2225.6	2225.6	2225.6	2225.6	2225.6
2.5°	2204.9	2210.1	2199.8	2199.8	2199.8	2194.6	2199.8	2194.6	2199.8	2204.9	2204.9
5°	2184.4	2184.4	2174.1	2174.1	2174.1	2169.0	2174.1	2174.1	2179.2	2184.4	2184.4
7.5°	2138.1	2138.1	2132.9	2127.8	2122.7	2122.7	2127.8	2127.8	2132.9	2138.1	2138.1
10°	2112.5	2107.2	2097.0	2081.6	2076.4	2071.3	2081.6	2091.9	2107.2	2122.7	2117.6
12.5°	2102.2	2097.0	2076.4	2061.0	2050.7	2056.0	2066.1	2076.4	2102.2	2117.6	2112.5
15°	2112.5	2102.2	2076.4	2050.7	2056.0	2066.1	2076.4	2076.4	2107.2	2122.7	2122.7
17.5°	2112.5	2107.2	2076.4	2056.0	2061.0	2076.4	2081.6	2076.4	2102.2	2127.8	2127.8
20°	2117.6	2117.6	2076.4	2061.0	2066.1	2081.6	2086.8	2081.6	2102.2	2132.9	2132.9
22.5°	2127.8	2122.7	2081.6	2071.3	2081.6	2091.9	2097.0	2091.9	2112.5	2138.1	2143.3
25°	2148.3	2138.1	2102.2	2097.0	2117.6	2132.9	2132.9	2122.7	2132.9	2158.6	2158.6
27.5°	2174.1	2169.0	2127.8	2127.8	2153.5	2184.4	2169.0	2148.3	2158.6	2184.4	2184.4
30°	2220.3	2215.2	2174.1	2174.1	2210.1	2246.0	2210.1	2184.4	2199.8	2225.6	2230.6
32.5°	2287.2	2287.2	2251.2	2240.9	2302.5	2317.9	2302.5	2251.2	2261.5	2297.4	2297.4
35°	2400.2	2389.9	2354.0	2348.8	2410.5	2405.3	2400.2	2354.0	2364.2	2405.3	2405.3
37.5°	2549.3	2544.1	2513.3	2497.8	2528.6	2508.2	2518.5	2497.8	2523.6	2554.4	2559.5
40°	2739.4	2734.4	2708.6	2688.1	2698.2	2667.4	2677.8	2688.1	2713.7	2734.4	2739.4
42.5°	2975.8	2975.8	2950.2	2914.2	2898.8	2883.4	2883.4	2904.0	2929.6	2955.3	2955.3
45°	3268.8	3268.8	3238.0	3202.0	3155.7	3130.1	3140.4	3160.9	3191.8	3222.6	3232.8
47.5°	3613.3	3613.3	3572.1	3536.1	3489.8	3459.1	3459.1	3469.3	3515.5	3541.2	3556.7
50°	3998.6	3983.3	3942.1	3906.1	3880.5	3839.4	3844.4	3839.4	3880.5	3916.4	3926.8
52.5°	4399.5	4394.4	4353.2	4343.0	4358.4	4337.8	4337.8	4286.5	4302.0	4322.5	4317.3
55°	4898.1	4882.6	4846.6	4867.2	4928.9	4959.8	4949.5	4867.2	4821.1	4831.3	4826.1
57.5°	5442.9	5427.5	5417.1	5478.9	5617.6	5746.2	5720.4	5530.2	5442.9	5448.0	5453.3
60°	5998.1	5998.1	6028.9	6183.0	6481.1	6691.8	6614.7	6296.1	6141.9	6111.1	6100.7
62.5°	6568.4	6583.9	6650.7	6907.6	7365.2	7714.6	7519.4	7067.1	6835.7	6774.1	6753.5
65°	7231.4	7246.9	7344.6	7663.3	8269.6	8686.0	8351.9	7925.3	7601.5	7473.1	7452.5
67.5°	8192.6	8203.0	8279.9	8588.3	9158.8	9493.0	9148.6	8768.3	8418.7	8269.6	8259.5
70°	9056.2	9066.4	9133.2	9539.2	10063.4	10181.7	9801.3	9318.2	8953.2	8835.1	8814.4
72.5°	8860.8	8896.8	9117.7	9749.9	10556.8	10711.0	9909.3	9184.6	8598.7	8403.4	8341.8
75°	7431.9	7488.5	7838.0	8788.7	10073.8	10510.6	9271.9	7940.7	7067.1	6691.8	6594.2
77.5°	4337.8	4548.6	5150.0	6368.1	8203.0	9092.0	7637.5	5812.9	4343.0	3726.3	3520.6
80°	1187.3	1300.3	1737.2	2929.6	5144.9	6368.1	4872.3	2667.4	1439.2	1079.4	1002.1
82.5°	375.2	498.6	632.1	842.9	2019.8	3356.2	1809.1	786.3	616.7	508.8	452.2
85°	200.4	215.9	354.7	411.2	606.4	940.5	560.3	411.2	370.0	272.4	256.9
87.5°	102.8	107.9	200.4	200.4	267.2	221.1	241.6	221.1	210.7	133.7	118.1
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)