

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: P214503

Luminaire Tested: **ARCH-AF24-20-D-U-5WQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214503  
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-AF24-20-D-U-5WQ-7030  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2572 lumens  
Efficiency: N/A  
Efficacy: 122.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G1

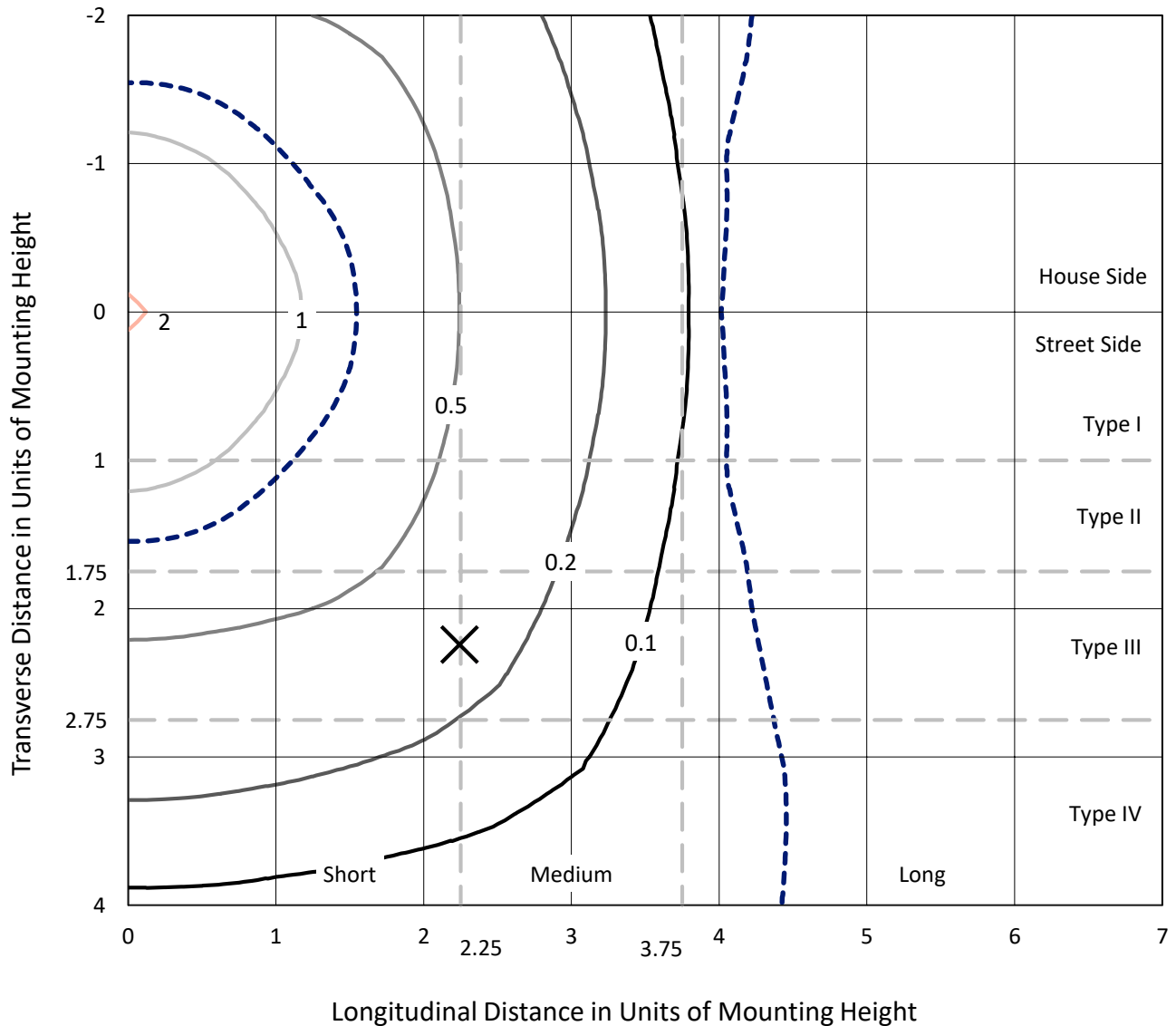
Input Watts (W): 21  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

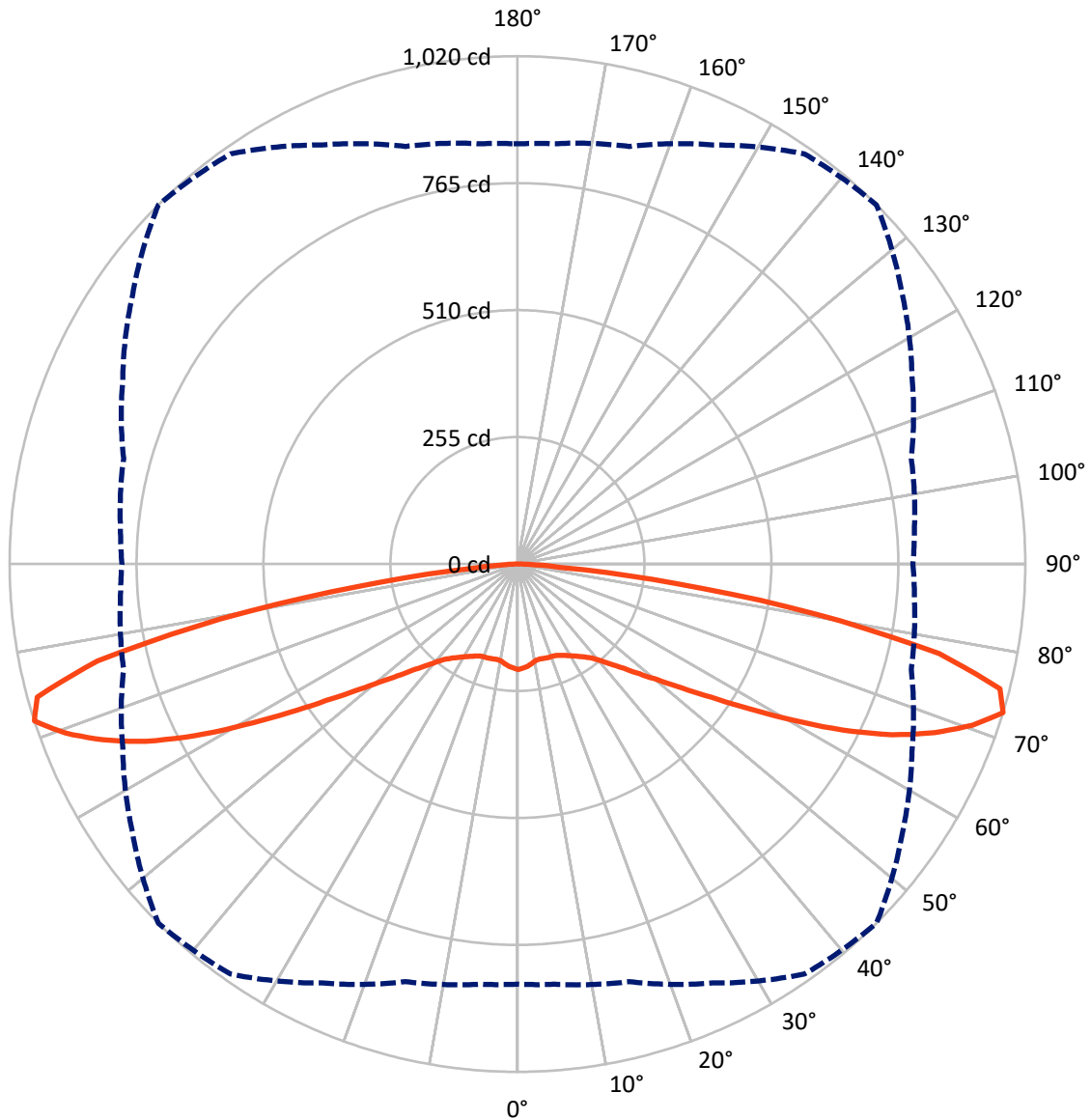


Based on 10 foot mounting height. Maximum calculated value = 2.1 fc  
 Type V - Short - Non-Cutoff

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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	1286.0	0.0	1286.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	1286.0	0.0	1286.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	2572.0	0.0	2572.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	19.5	0.8
10°-20°	56.3	2.2
20°-30°	94.2	3.7
30°-40°	144.7	5.6
40°-50°	239.6	9.3
50°-60°	426.0	16.6
60°-70°	745.2	29.0
70°-80°	758.2	29.5
80°-90°	88.3	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°	2572.0	100.0
0°-180°	2572.0	100.0



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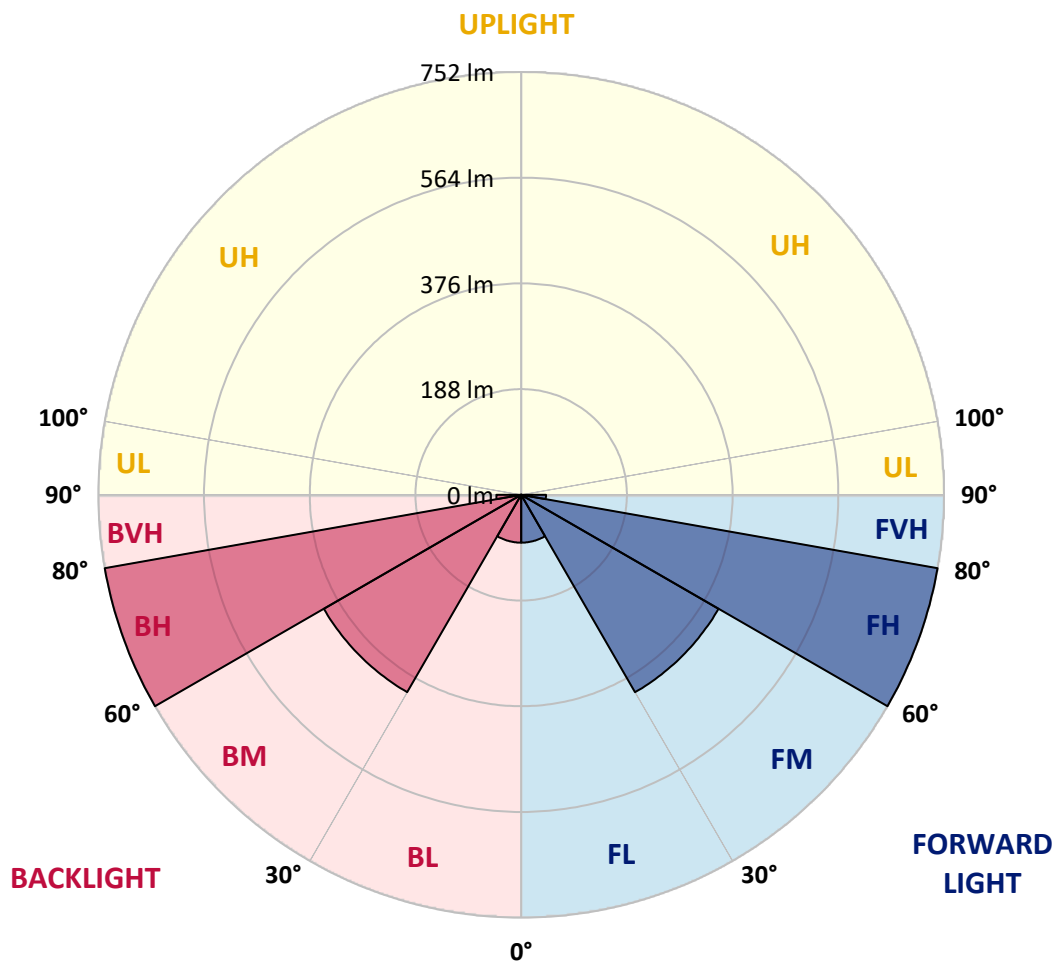
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	85.0	3.3			
FM	(30°-60°)	405.1	15.8			
FH	(60°-80°)	751.7	29.2			G1/1800
FVH	(80°-90°)	44.2	1.7			G1/100
BL	(0°-30°)	85.0	3.3	B0/110		
BM	(30°-60°)	405.1	15.8	B1/1000		
BH	(60°-80°)	751.7	29.2	B2/1000		G1/1800
BVH	(80°-90°)	44.2	1.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	212.0	212.0	212.0	212.0	212.0	212.0	212.0	212.0	212.0	212.0	212.0
2.5°	210.0	210.5	209.5	209.5	209.5	209.1	209.5	209.1	209.5	210.0	210.0
5°	208.1	208.1	207.1	207.1	207.1	206.6	207.1	207.1	207.6	208.1	208.1
7.5°	203.7	203.7	203.2	202.7	202.2	202.2	202.7	202.7	203.2	203.7	203.7
10°	201.2	200.7	199.8	198.3	197.8	197.3	198.3	199.3	200.7	202.2	201.7
12.5°	200.2	199.8	197.8	196.3	195.3	195.8	196.8	197.8	200.2	201.7	201.2
15°	201.2	200.2	197.8	195.3	195.8	196.8	197.8	197.8	200.7	202.2	202.2
17.5°	201.2	200.7	197.8	195.8	196.3	197.8	198.3	197.8	200.2	202.7	202.7
20°	201.7	201.7	197.8	196.3	196.8	198.3	198.8	198.3	200.2	203.2	203.2
22.5°	202.7	202.2	198.3	197.3	198.3	199.3	199.8	199.3	201.2	203.7	204.2
25°	204.6	203.7	200.2	199.8	201.7	203.2	203.2	202.2	203.2	205.6	205.6
27.5°	207.1	206.6	202.7	202.7	205.1	208.1	206.6	204.6	205.6	208.1	208.1
30°	211.5	211.0	207.1	207.1	210.5	214.0	210.5	208.1	209.5	212.0	212.5
32.5°	217.9	217.9	214.4	213.5	219.3	220.8	219.3	214.4	215.4	218.8	218.8
35°	228.6	227.7	224.2	223.7	229.6	229.1	228.6	224.2	225.2	229.1	229.1
37.5°	242.8	242.3	239.4	237.9	240.9	238.9	239.9	237.9	240.4	243.3	243.8
40°	261.0	260.5	258.0	256.1	257.0	254.1	255.1	256.1	258.5	260.5	261.0
42.5°	283.5	283.5	281.0	277.6	276.1	274.7	274.7	276.6	279.1	281.5	281.5
45°	311.4	311.4	308.4	305.0	300.6	298.2	299.1	301.1	304.0	307.0	308.0
47.5°	344.2	344.2	340.3	336.8	332.4	329.5	329.5	330.5	334.9	337.3	338.8
50°	380.9	379.4	375.5	372.1	369.6	365.7	366.2	365.7	369.6	373.1	374.0
52.5°	419.1	418.6	414.7	413.7	415.2	413.2	413.2	408.3	409.8	411.7	411.3
55°	466.6	465.1	461.7	463.6	469.5	472.5	471.5	463.6	459.2	460.2	459.7
57.5°	518.5	517.0	516.0	521.9	535.1	547.4	544.9	526.8	518.5	519.0	519.5
60°	571.4	571.4	574.3	589.0	617.4	637.4	630.1	599.7	585.1	582.1	581.1
62.5°	625.7	627.2	633.5	658.0	701.6	734.9	716.3	673.2	651.2	645.3	643.3
65°	688.9	690.3	699.6	730.0	787.8	827.4	795.6	754.9	724.1	711.9	709.9
67.5°	780.4	781.4	788.7	818.1	872.4	904.3	871.5	835.2	801.9	787.8	786.8
70°	862.7	863.6	870.0	908.7	958.6	969.9	933.6	887.6	852.9	841.6	839.6
72.5°	844.1	847.5	868.5	928.8	1005.6	1020.3	943.9	874.9	819.1	800.5	794.6
75°	707.9	713.3	746.6	837.2	959.6	1001.2	883.2	756.4	673.2	637.4	628.1
77.5°	413.2	433.3	490.6	606.6	781.4	866.1	727.5	553.7	413.7	355.0	335.4
80°	113.1	123.9	165.5	279.1	490.1	606.6	464.1	254.1	137.1	102.8	95.5
82.5°	35.7	47.5	60.2	80.3	192.4	319.7	172.3	74.9	58.8	48.5	43.1
85°	19.1	20.6	33.8	39.2	57.8	89.6	53.4	39.2	35.3	25.9	24.5
87.5°	9.8	10.3	19.1	19.1	25.5	21.1	23.0	21.1	20.1	12.7	11.3
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)