

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: P234770

Luminaire Tested: **ARCH-M-AF48-80-D-U-5WQ-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234770
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-M-AF48-80-D-U-5WQ-8027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 535mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8869 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 83
Input Voltage (V): NR
Input Current (A_{in}): 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

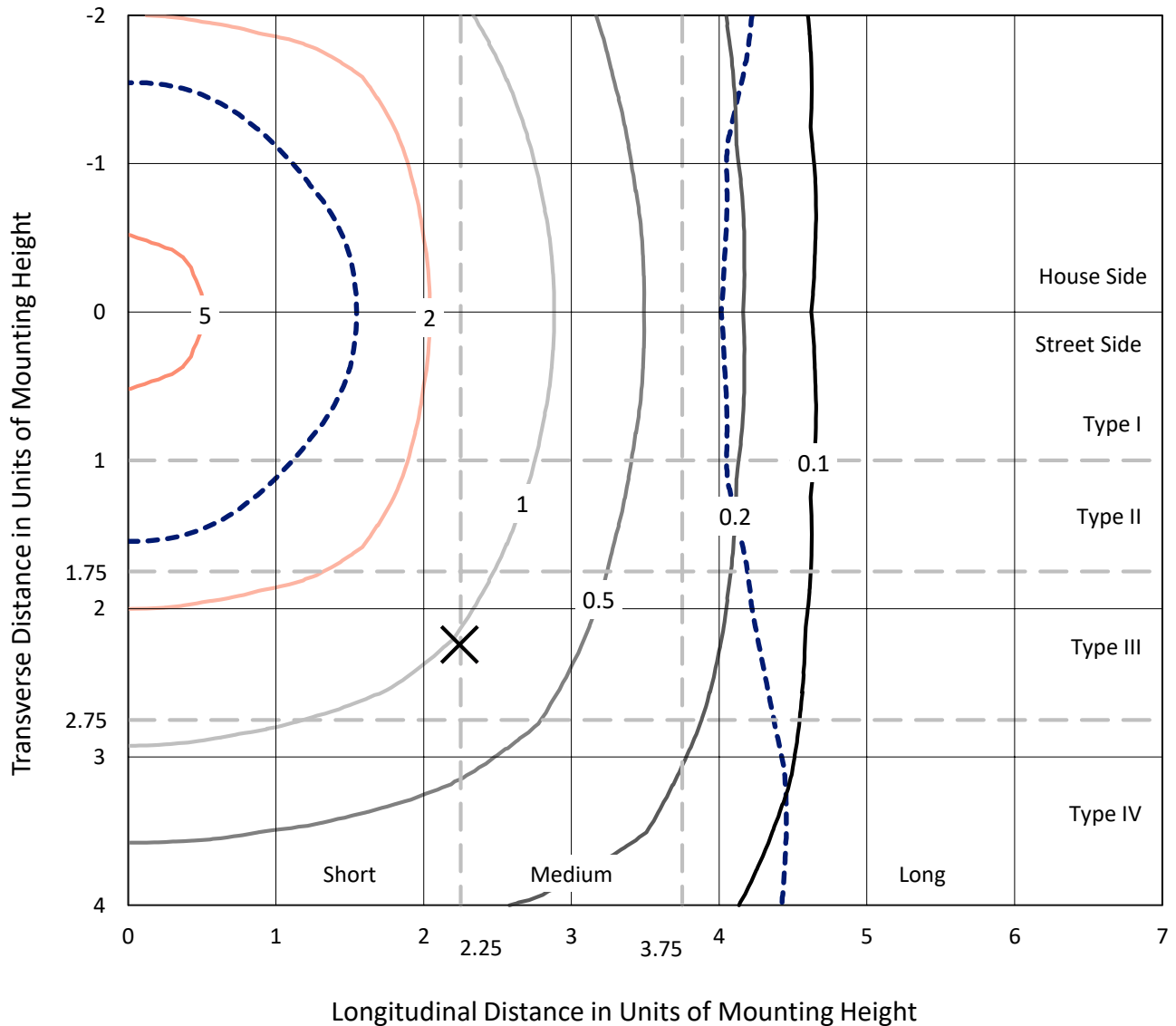


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

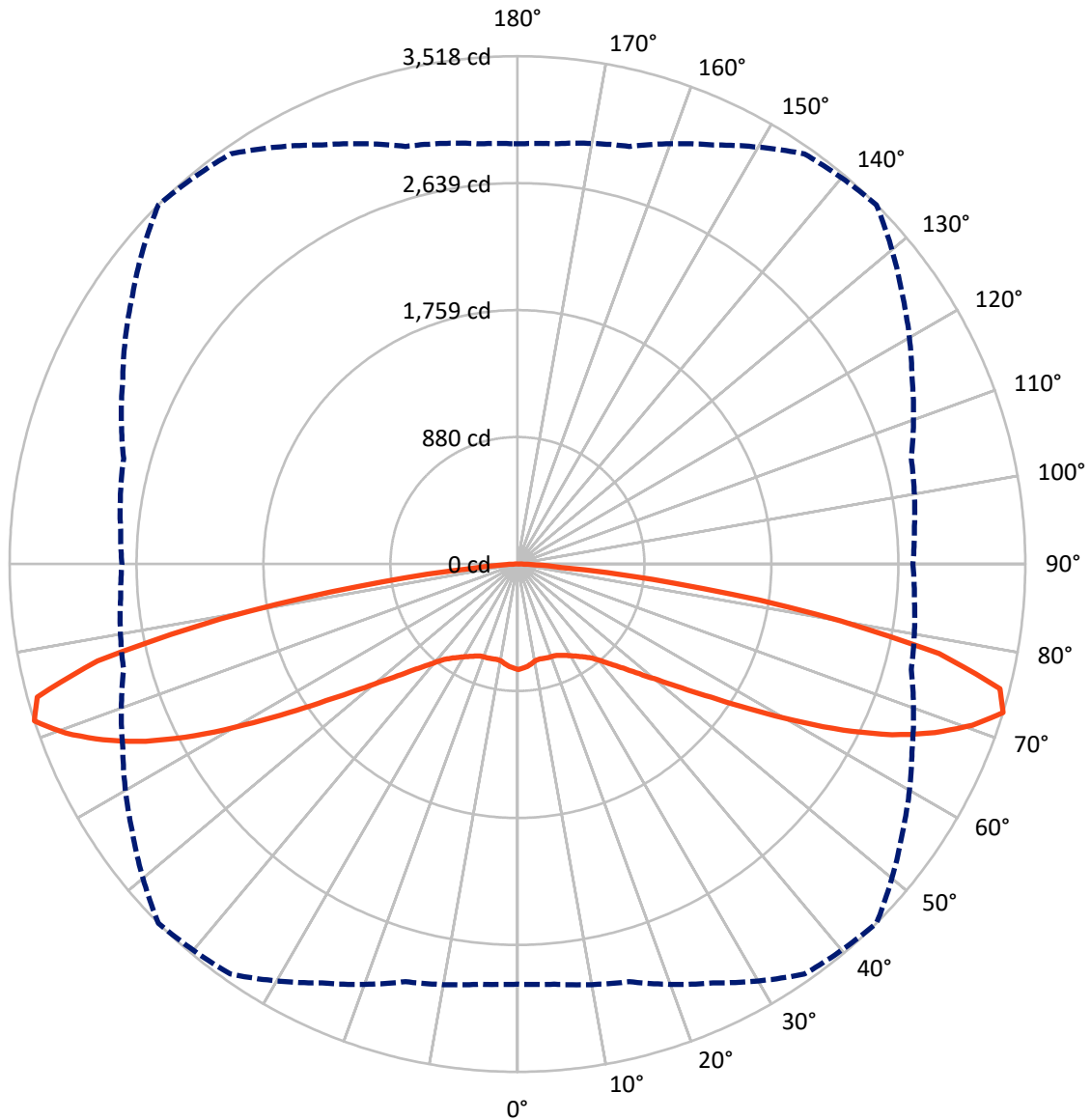


Based on 10 foot mounting height. Maximum calculated value = 7.3 fc
 Type V - Short - Non-Cutoff

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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
House Side	Lumens	4434.5	0.0	4434.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4434.5	0.0	4434.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	8869.0	0.0	8869.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.3	0.8
10°-20°	194.1	2.2
20°-30°	324.8	3.7
30°-40°	499.0	5.6
40°-50°	826.2	9.3
50°-60°	1468.9	16.6
60°-70°	2569.8	29.0
70°-80°	2614.5	29.5
80°-90°	304.4	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°	8869.0	100.0
0°-180°	8869.0	100.0



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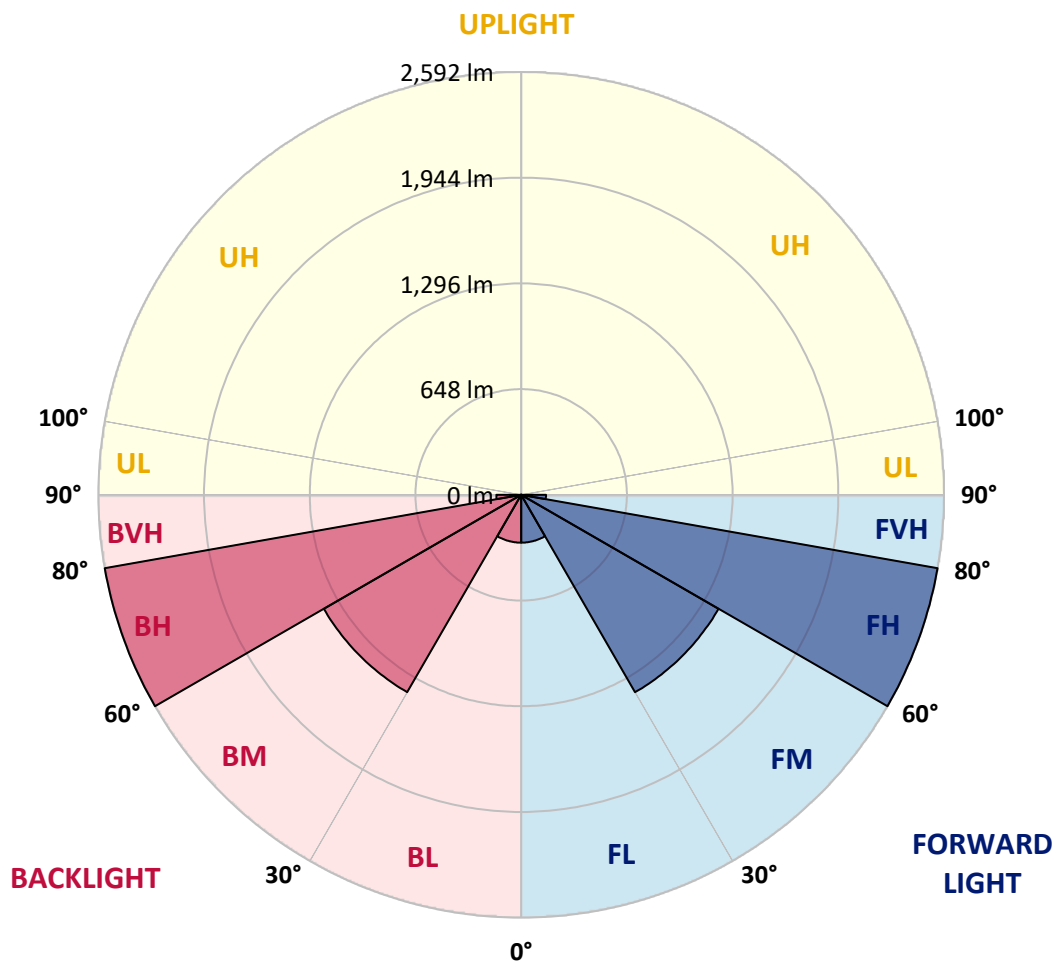
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	293.1	3.3			
FM	(30°-60°)	1397.1	15.8			
FH	(60°-80°)	2592.2	29.2			G2/5000
FVH	(80°-90°)	152.2	1.7			G2/225
BL	(0°-30°)	293.1	3.3	B1/500		
BM	(30°-60°)	1397.1	15.8	B2/2500		
BH	(60°-80°)	2592.2	29.2	B4/5000		G2/5000
BVH	(80°-90°)	152.2	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°	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0
2.5°	724.3	725.9	722.6	722.6	722.6	720.9	722.6	720.9	722.6	724.3	724.3
5°	717.5	717.5	714.1	714.1	714.1	712.4	714.1	714.1	715.8	717.5	717.5
7.5°	702.3	702.3	700.6	698.9	697.2	697.2	698.9	698.9	700.6	702.3	702.3
10°	693.9	692.2	688.8	683.7	682.1	680.4	683.7	687.1	692.2	697.2	695.6
12.5°	690.5	688.8	682.1	677.0	673.6	675.3	678.7	682.1	690.5	695.6	693.9
15°	693.9	690.5	682.1	673.6	675.3	678.7	682.1	682.1	692.2	697.2	697.2
17.5°	693.9	692.2	682.1	675.3	677.0	682.1	683.7	682.1	690.5	698.9	698.9
20°	695.6	695.6	682.1	677.0	678.7	683.7	685.4	683.7	690.5	700.6	700.6
22.5°	698.9	697.2	683.7	680.4	683.7	687.1	688.8	687.1	693.9	702.3	704.0
25°	705.7	702.3	690.5	688.8	695.6	700.6	700.6	697.2	700.6	709.1	709.1
27.5°	714.1	712.4	698.9	698.9	707.4	717.5	712.4	705.7	709.1	717.5	717.5
30°	729.3	727.6	714.1	714.1	725.9	737.8	725.9	717.5	722.6	731.0	732.7
32.5°	751.3	751.3	739.5	736.1	756.3	761.4	756.3	739.5	742.8	754.6	754.6
35°	788.4	785.0	773.2	771.5	791.8	790.1	788.4	773.2	776.6	790.1	790.1
37.5°	837.4	835.7	825.6	820.5	830.6	823.9	827.2	820.5	828.9	839.1	840.7
40°	899.8	898.1	889.7	883.0	886.3	876.2	879.6	883.0	891.4	898.1	899.8
42.5°	977.5	977.5	969.1	957.2	952.2	947.1	947.1	953.9	962.3	970.7	970.7
45°	1073.7	1073.7	1063.6	1051.8	1036.6	1028.1	1031.5	1038.3	1048.4	1058.5	1061.9
47.5°	1186.8	1186.8	1173.3	1161.5	1146.3	1136.2	1136.2	1139.6	1154.8	1163.2	1168.3
50°	1313.5	1308.4	1294.9	1283.1	1274.6	1261.1	1262.8	1261.1	1274.6	1286.4	1289.8
52.5°	1445.1	1443.5	1429.9	1426.6	1431.6	1424.9	1424.9	1408.0	1413.1	1419.8	1418.1
55°	1608.9	1603.8	1592.0	1598.8	1619.0	1629.2	1625.8	1598.8	1583.6	1587.0	1585.3
57.5°	1787.9	1782.8	1779.4	1799.7	1845.3	1887.5	1879.0	1816.6	1787.9	1789.5	1791.2
60°	1970.2	1970.2	1980.3	2031.0	2128.9	2198.1	2172.8	2068.1	2017.5	2007.3	2004.0
62.5°	2157.6	2162.6	2184.6	2269.0	2419.3	2534.1	2469.9	2321.3	2245.4	2225.1	2218.4
65°	2375.4	2380.4	2412.5	2517.2	2716.4	2853.1	2743.4	2603.3	2496.9	2454.7	2448.0
67.5°	2691.1	2694.4	2719.8	2821.1	3008.5	3118.2	3005.1	2880.2	2765.4	2716.4	2713.0
70°	2974.7	2978.1	3000.0	3133.4	3305.6	3344.4	3219.5	3060.8	2940.9	2902.1	2895.3
72.5°	2910.5	2922.4	2995.0	3202.6	3467.7	3518.3	3254.9	3016.9	2824.4	2760.3	2740.0
75°	2441.2	2459.8	2574.6	2886.9	3309.0	3452.5	3045.6	2608.3	2321.3	2198.1	2166.0
77.5°	1424.9	1494.1	1691.6	2091.7	2694.4	2986.5	2508.7	1909.4	1426.6	1224.0	1156.5
80°	390.0	427.1	570.6	962.3	1689.9	2091.7	1600.5	876.2	472.7	354.5	329.2
82.5°	123.2	163.8	207.7	276.9	663.5	1102.4	594.3	258.3	202.6	167.1	148.6
85°	65.8	70.9	116.5	135.1	199.2	308.9	184.0	135.1	121.6	89.5	84.4
87.5°	33.8	35.5	65.8	65.8	87.8	72.6	79.3	72.6	69.2	43.9	38.8
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)