

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: P230953

Luminaire Tested: **ARCH-M-AF48-120-D-U-5WQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230953
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-AF48-120-D-U-5WQ-7030
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 785mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13887 lumens
Efficiency: N/A
Efficacy: 113.8 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 - G3

Input Watts (W): 122
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

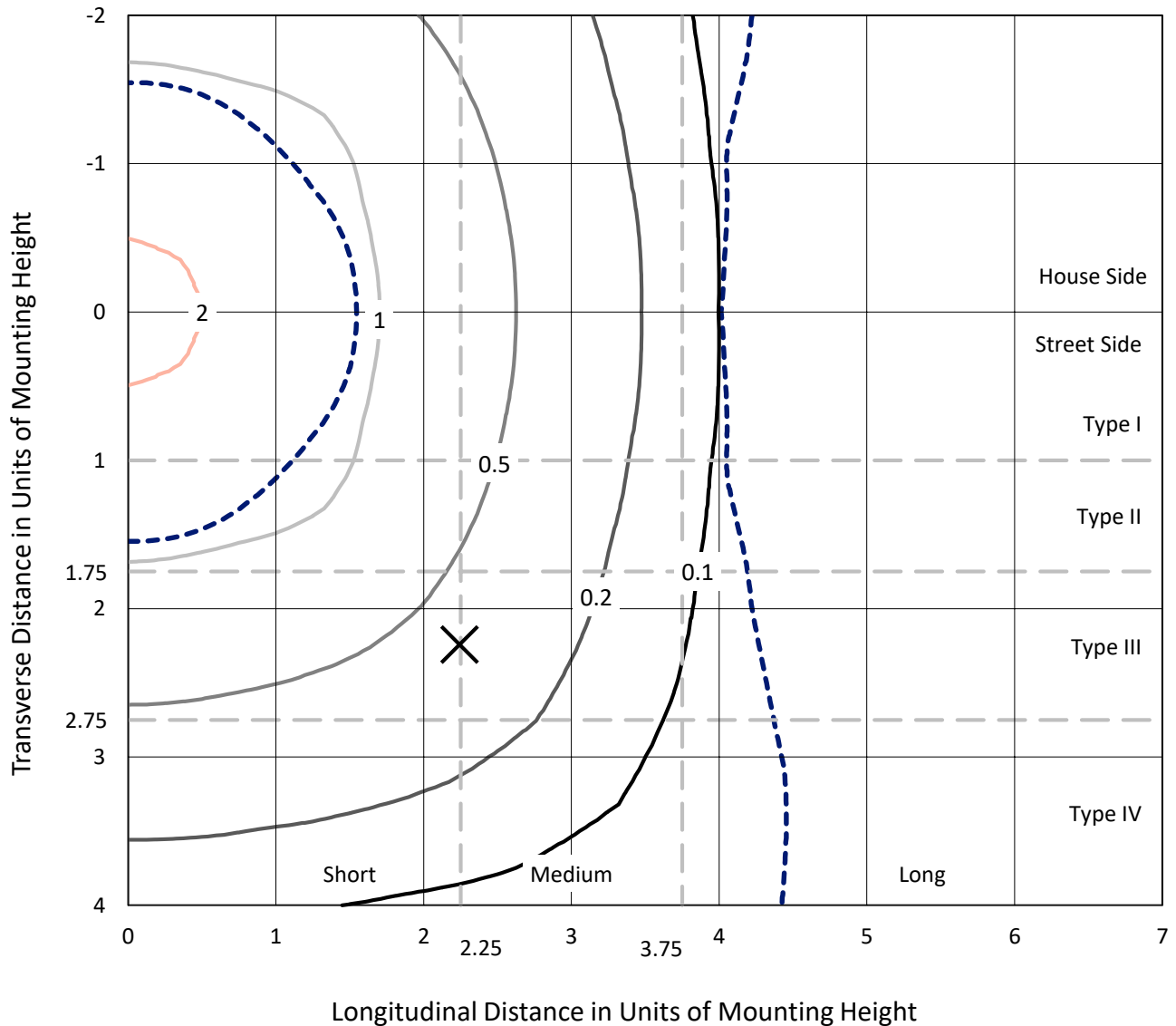


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

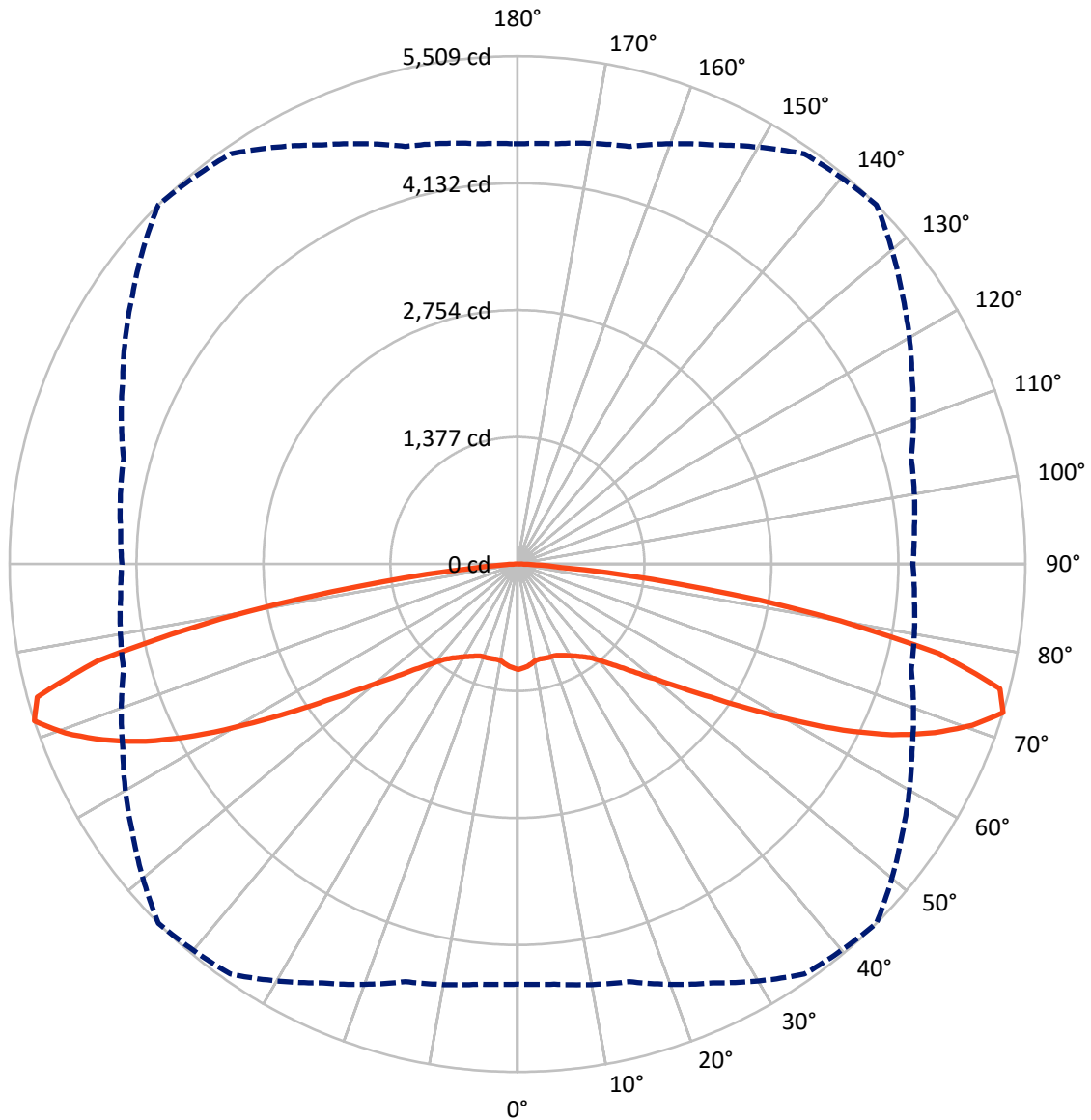


Based on 20 foot mounting height. Maximum calculated value = 2.9 fc
 Type V - Short - Non-Cutoff

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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	6943.5	0.0	6943.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6943.5	0.0	6943.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	13887.0	0.0	13887.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.3	0.8
10°-20°	303.9	2.2
20°-30°	508.5	3.7
30°-40°	781.3	5.6
40°-50°	1293.7	9.3
50°-60°	2300.0	16.6
60°-70°	4023.7	29.0
70°-80°	4093.8	29.5
80°-90°	476.7	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°	13887.0	100.0
0°-180°	13887.0	100.0



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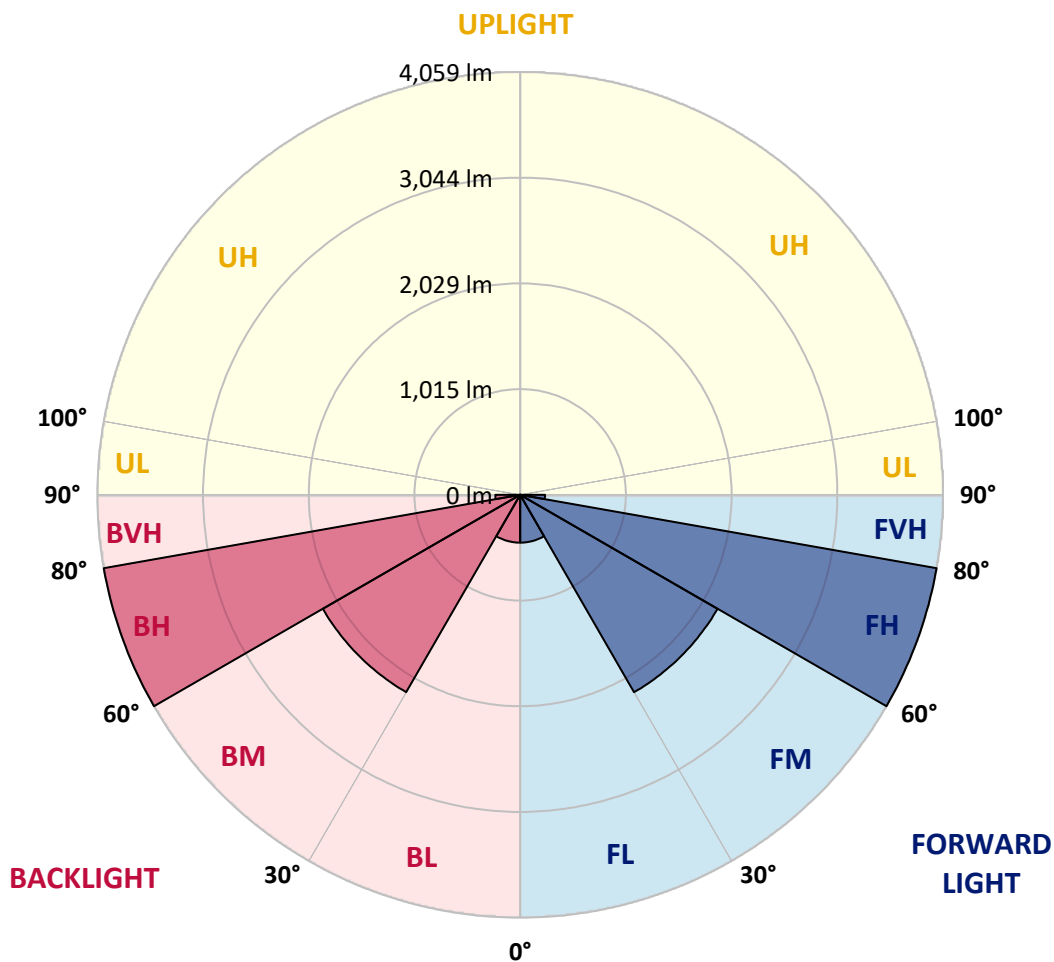
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	458.9	3.3			
FM	(30°-60°)	2187.5	15.8			
FH	(60°-80°)	4058.8	29.2			G2/5000
FVH	(80°-90°)	238.4	1.7			G3/500
BL	(0°-30°)	458.9	3.3	B1/500		
BM	(30°-60°)	2187.5	15.8	B2/2500		
BH	(60°-80°)	4058.8	29.2	B4/5000		G2/5000
BVH	(80°-90°)	238.4	1.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6	1144.6
2.5°	1134.0	1136.7	1131.4	1131.4	1131.4	1128.8	1131.4	1128.8	1131.4	1134.0	1134.0
5°	1123.5	1123.5	1118.2	1118.2	1118.2	1115.5	1118.2	1118.2	1120.8	1123.5	1123.5
7.5°	1099.7	1099.7	1097.0	1094.4	1091.7	1091.7	1094.4	1094.4	1097.0	1099.7	1099.7
10°	1086.5	1083.8	1078.5	1070.6	1068.0	1065.3	1070.6	1075.9	1083.8	1091.7	1089.1
12.5°	1081.2	1078.5	1068.0	1060.0	1054.7	1057.4	1062.7	1068.0	1081.2	1089.1	1086.5
15°	1086.5	1081.2	1068.0	1054.7	1057.4	1062.7	1068.0	1068.0	1083.8	1091.7	1091.7
17.5°	1086.5	1083.8	1068.0	1057.4	1060.0	1068.0	1070.6	1068.0	1081.2	1094.4	1094.4
20°	1089.1	1089.1	1068.0	1060.0	1062.7	1070.6	1073.2	1070.6	1081.2	1097.0	1097.0
22.5°	1094.4	1091.7	1070.6	1065.3	1070.6	1075.9	1078.5	1075.9	1086.5	1099.7	1102.3
25°	1105.0	1099.7	1081.2	1078.5	1089.1	1097.0	1097.0	1091.7	1097.0	1110.2	1110.2
27.5°	1118.2	1115.5	1094.4	1094.4	1107.6	1123.5	1115.5	1105.0	1110.2	1123.5	1123.5
30°	1142.0	1139.3	1118.2	1118.2	1136.7	1155.2	1136.7	1123.5	1131.4	1144.6	1147.3
32.5°	1176.3	1176.3	1157.8	1152.5	1184.3	1192.2	1184.3	1157.8	1163.1	1181.6	1181.6
35°	1234.5	1229.2	1210.7	1208.1	1239.8	1237.1	1234.5	1210.7	1216.0	1237.1	1237.1
37.5°	1311.1	1308.5	1292.6	1284.7	1300.6	1290.0	1295.3	1284.7	1297.9	1313.8	1316.4
40°	1409.0	1406.3	1393.1	1382.5	1387.8	1371.9	1377.2	1382.5	1395.7	1406.3	1409.0
42.5°	1530.6	1530.6	1517.3	1498.8	1490.9	1483.0	1483.0	1493.5	1506.8	1520.0	1520.0
45°	1681.2	1681.2	1665.4	1646.9	1623.1	1609.9	1615.1	1625.7	1641.6	1657.4	1662.7
47.5°	1858.3	1858.3	1837.2	1818.7	1794.9	1779.0	1779.0	1784.3	1808.1	1821.3	1829.3
50°	2056.6	2048.7	2027.5	2009.0	1995.8	1974.7	1977.3	1974.7	1995.8	2014.3	2019.6
52.5°	2262.8	2260.1	2239.0	2233.7	2241.6	2231.1	2231.1	2204.6	2212.6	2223.1	2220.5
55°	2519.2	2511.3	2492.8	2503.3	2535.1	2550.9	2545.6	2503.3	2479.6	2484.8	2482.2
57.5°	2799.4	2791.5	2786.2	2817.9	2889.3	2955.4	2942.2	2844.3	2799.4	2802.1	2804.7
60°	3084.9	3084.9	3100.8	3180.1	3333.4	3441.8	3402.1	3238.2	3158.9	3143.1	3137.8
62.5°	3378.3	3386.3	3420.6	3552.8	3788.1	3967.8	3867.4	3634.7	3515.8	3484.1	3473.5
65°	3719.3	3727.3	3777.5	3941.4	4253.3	4467.4	4295.6	4076.2	3909.7	3843.6	3833.0
67.5°	4213.7	4218.9	4258.6	4417.2	4710.6	4882.4	4705.3	4509.7	4330.0	4253.3	4248.0
70°	4657.7	4663.0	4697.4	4906.2	5175.9	5236.7	5041.0	4792.6	4604.9	4544.1	4533.5
72.5°	4557.3	4575.8	4689.5	5014.6	5429.6	5508.9	5096.6	4723.8	4422.5	4322.0	4290.3
75°	3822.4	3851.5	4031.3	4520.3	5181.2	5405.8	4768.8	4084.1	3634.7	3441.8	3391.5
77.5°	2231.1	2339.4	2648.7	3275.2	4218.9	4676.3	3928.2	2989.7	2233.7	1916.5	1810.8
80°	610.6	668.8	893.5	1506.8	2646.1	3275.2	2506.0	1371.9	740.2	555.1	515.5
82.5°	193.0	256.4	325.1	433.5	1038.9	1726.2	930.5	404.4	317.2	261.7	232.6
85°	103.1	111.0	182.4	211.5	311.9	483.8	288.1	211.5	190.3	140.1	132.2
87.5°	52.9	55.5	103.1	103.1	137.5	113.7	124.2	113.7	108.4	68.7	60.8
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)