

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: P230964

Luminaire Tested: **ARCH-M-AF48-100-D-U-5WQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230964
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-AF48-100-D-U-5WQ
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 660mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13980.7 lumens
Efficiency: N/A
Efficacy: 138.4 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

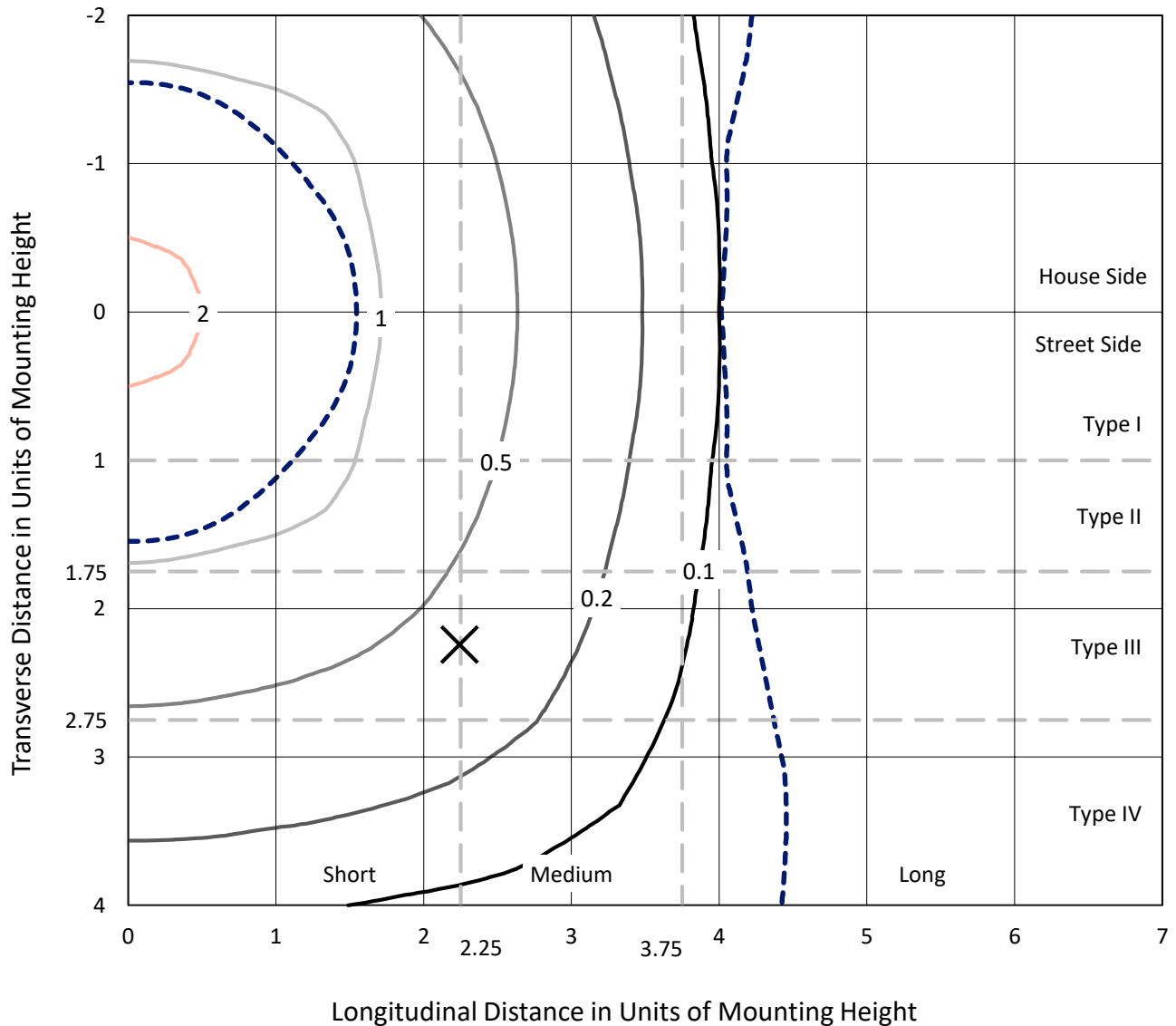
Input Watts (W): 101
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

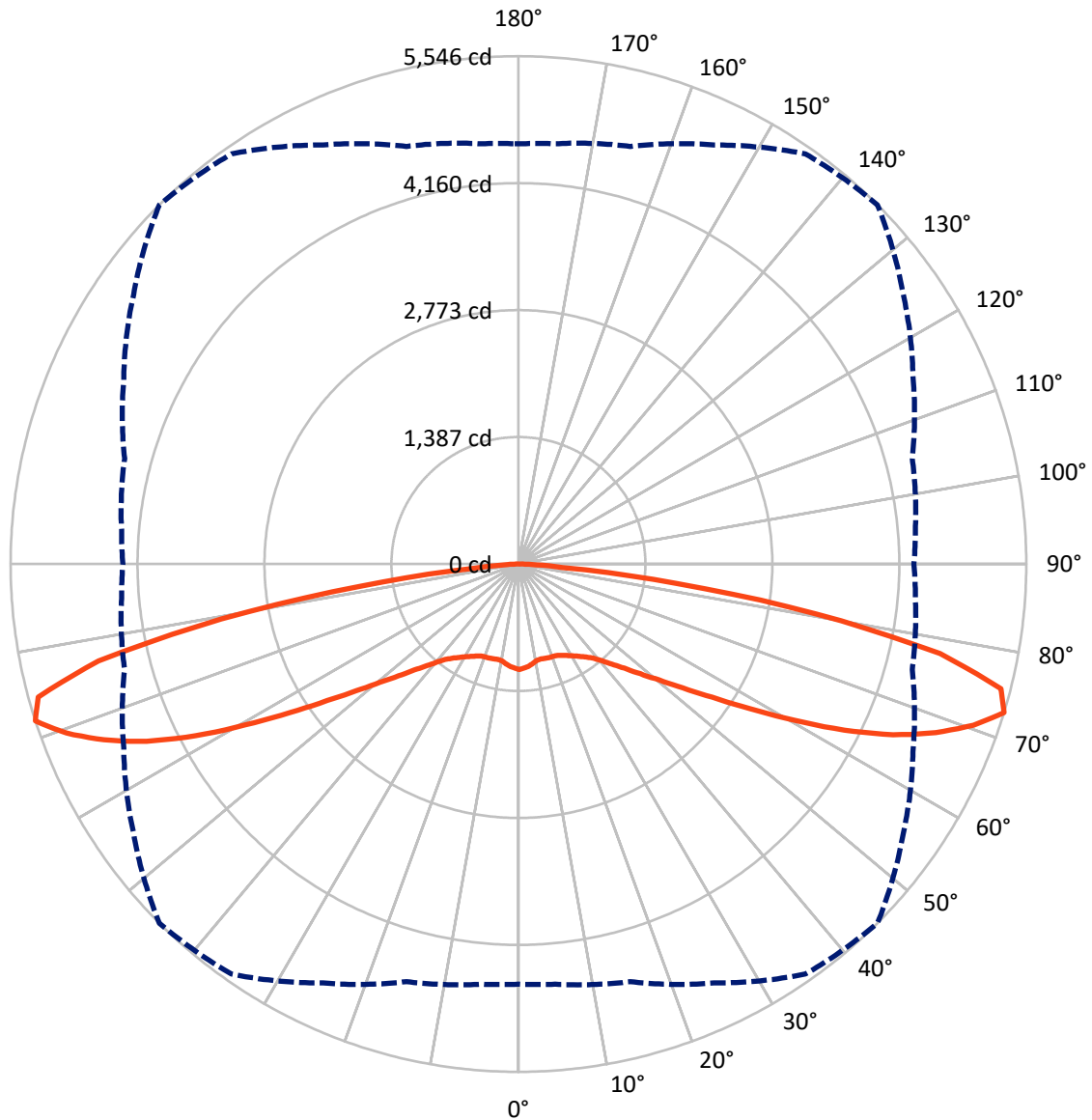
× Max cd
 - - - 1/2 Max cd



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	6990.3	0.0	6990.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6990.3	0.0	6990.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	13980.7	0.0	13980.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.0	0.8
10°-20°	305.9	2.2
20°-30°	512.0	3.7
30°-40°	786.6	5.6
40°-50°	1302.5	9.3
50°-60°	2315.5	16.6
60°-70°	4050.9	29.0
70°-80°	4121.4	29.5
80°-90°	479.9	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°	13980.7	100.0
0°-180°	13980.7	100.0



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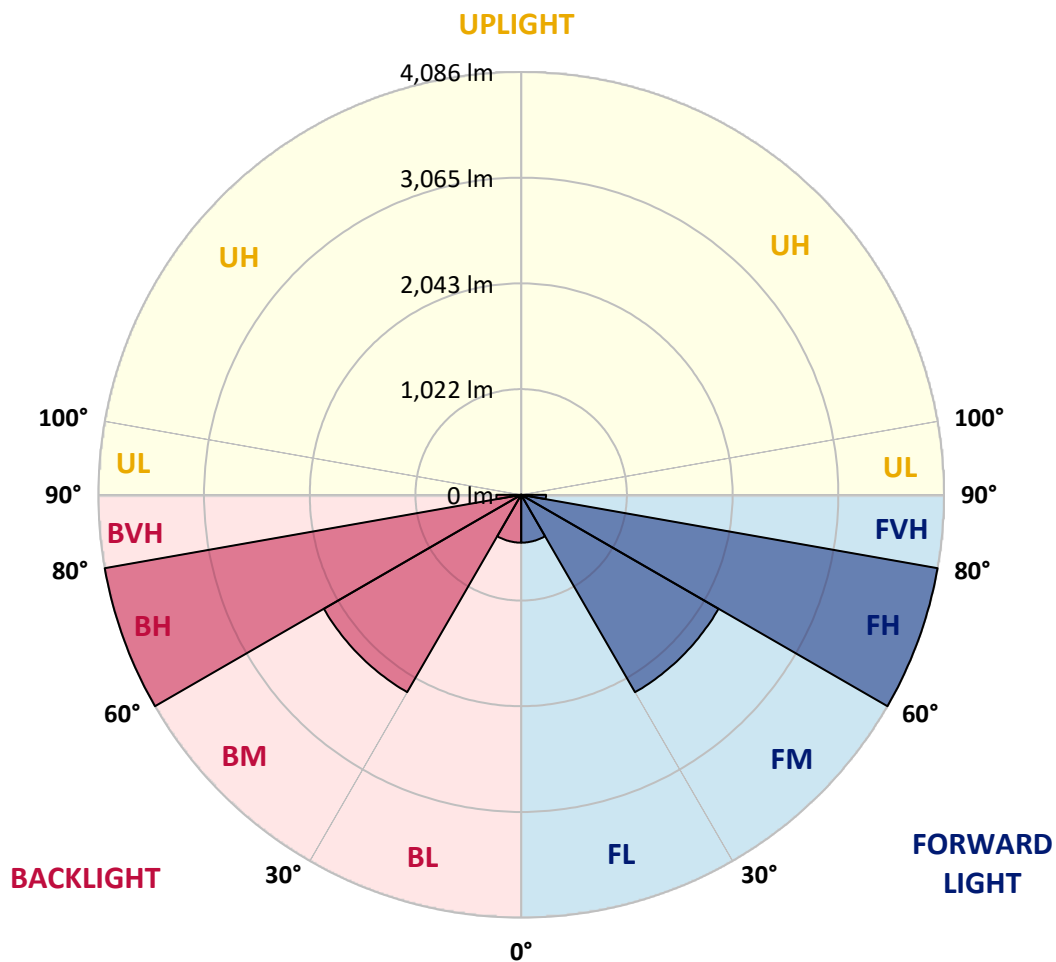
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	462.0	3.3			
FM	(30°-60°)	2202.3	15.8			
FH	(60°-80°)	4086.2	29.2			G2/5000
FVH	(80°-90°)	240.0	1.7			G3/500
BL	(0°-30°)	462.0	3.3	B1/500		
BM	(30°-60°)	2202.3	15.8	B2/2500		
BH	(60°-80°)	4086.2	29.2	B4/5000		G2/5000
BVH	(80°-90°)	240.0	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°	1152.4	1152.4	1152.4	1152.4	1152.4	1152.4	1152.4	1152.4	1152.4	1152.4	1152.4
2.5°	1141.7	1144.4	1139.1	1139.1	1139.1	1136.4	1139.1	1136.4	1139.1	1141.7	1141.7
5°	1131.1	1131.1	1125.8	1125.8	1125.8	1123.1	1125.8	1125.8	1128.4	1131.1	1131.1
7.5°	1107.1	1107.1	1104.5	1101.7	1099.1	1099.1	1101.7	1101.7	1104.5	1107.1	1107.1
10°	1093.7	1091.1	1085.8	1077.8	1075.1	1072.5	1077.8	1083.1	1091.1	1099.1	1096.4
12.5°	1088.4	1085.8	1075.1	1067.1	1061.8	1064.5	1069.8	1075.1	1088.4	1096.4	1093.7
15°	1093.7	1088.4	1075.1	1061.8	1064.5	1069.8	1075.1	1075.1	1091.1	1099.1	1099.1
17.5°	1093.7	1091.1	1075.1	1064.5	1067.1	1075.1	1077.8	1075.1	1088.4	1101.7	1101.7
20°	1096.4	1096.4	1075.1	1067.1	1069.8	1077.8	1080.4	1077.8	1088.4	1104.5	1104.5
22.5°	1101.7	1099.1	1077.8	1072.5	1077.8	1083.1	1085.8	1083.1	1093.7	1107.1	1109.8
25°	1112.5	1107.1	1088.4	1085.8	1096.4	1104.5	1104.5	1099.1	1104.5	1117.8	1117.8
27.5°	1125.8	1123.1	1101.7	1101.7	1115.1	1131.1	1123.1	1112.5	1117.8	1131.1	1131.1
30°	1149.7	1147.0	1125.8	1125.8	1144.4	1163.0	1144.4	1131.1	1139.1	1152.4	1155.0
32.5°	1184.3	1184.3	1165.7	1160.3	1192.2	1200.2	1192.2	1165.7	1171.0	1189.6	1189.6
35°	1242.8	1237.5	1218.8	1216.2	1248.1	1245.4	1242.8	1218.8	1224.2	1245.4	1245.4
37.5°	1320.0	1317.4	1301.4	1293.4	1309.4	1298.7	1304.1	1293.4	1306.7	1322.7	1325.3
40°	1418.4	1415.8	1402.5	1391.8	1397.1	1381.2	1386.5	1391.8	1405.1	1415.8	1418.4
42.5°	1540.9	1540.9	1527.6	1509.0	1501.0	1493.0	1493.0	1503.6	1516.9	1530.2	1530.2
45°	1692.6	1692.6	1676.6	1658.0	1634.1	1620.8	1626.1	1636.7	1652.7	1668.6	1674.0
47.5°	1870.9	1870.9	1849.6	1831.0	1807.0	1791.1	1791.1	1796.4	1820.3	1833.6	1841.6
50°	2070.5	2062.5	2041.2	2022.6	2009.3	1988.0	1990.7	1988.0	2009.3	2027.9	2033.2
52.5°	2278.0	2275.3	2254.1	2248.8	2256.7	2246.1	2246.1	2219.5	2227.5	2238.1	2235.5
55°	2536.2	2528.2	2509.6	2520.2	2552.2	2568.1	2562.8	2520.2	2496.3	2501.6	2499.0
57.5°	2818.3	2810.4	2805.0	2836.9	2908.8	2975.4	2962.0	2863.5	2818.3	2821.0	2823.7
60°	3105.7	3105.7	3121.6	3201.5	3355.9	3464.9	3425.0	3260.0	3180.3	3164.3	3159.0
62.5°	3401.1	3409.1	3443.7	3576.7	3813.6	3994.6	3893.5	3659.3	3539.5	3507.6	3497.0
65°	3744.4	3752.4	3802.9	3967.9	4282.0	4497.5	4324.5	4103.7	3936.0	3869.5	3858.9
67.5°	4242.1	4247.4	4287.3	4447.0	4742.4	4915.4	4737.1	4540.2	4359.2	4282.0	4276.7
70°	4689.2	4694.5	4729.1	4939.3	5210.8	5272.0	5075.1	4824.8	4635.9	4574.7	4564.1
72.5°	4588.0	4606.7	4721.1	5048.5	5466.2	5546.1	5130.9	4755.7	4452.3	4351.2	4319.2
75°	3848.2	3877.5	4058.5	4550.8	5216.1	5442.3	4800.9	4111.6	3659.3	3464.9	3414.4
77.5°	2246.1	2355.2	2666.6	3297.3	4247.4	4707.8	3954.6	3009.9	2248.8	1929.4	1823.0
80°	614.8	673.3	899.5	1516.9	2664.0	3297.3	2522.9	1381.2	745.1	558.8	518.9
82.5°	194.3	258.2	327.3	436.5	1045.9	1737.8	936.8	407.1	319.4	263.5	234.2
85°	103.8	111.8	183.6	212.9	314.0	487.0	290.1	212.9	191.6	141.1	133.1
87.5°	53.2	55.9	103.8	103.8	138.4	114.5	125.1	114.5	109.1	69.2	61.2
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)