

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: P230952

Luminaire Tested: **ARCH-M-AF48-110-D-U-5WQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230952
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-AF48-110-D-U-5WQ-7030
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 720mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12941 lumens
Efficiency: N/A
Efficacy: 116.6 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): 111
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

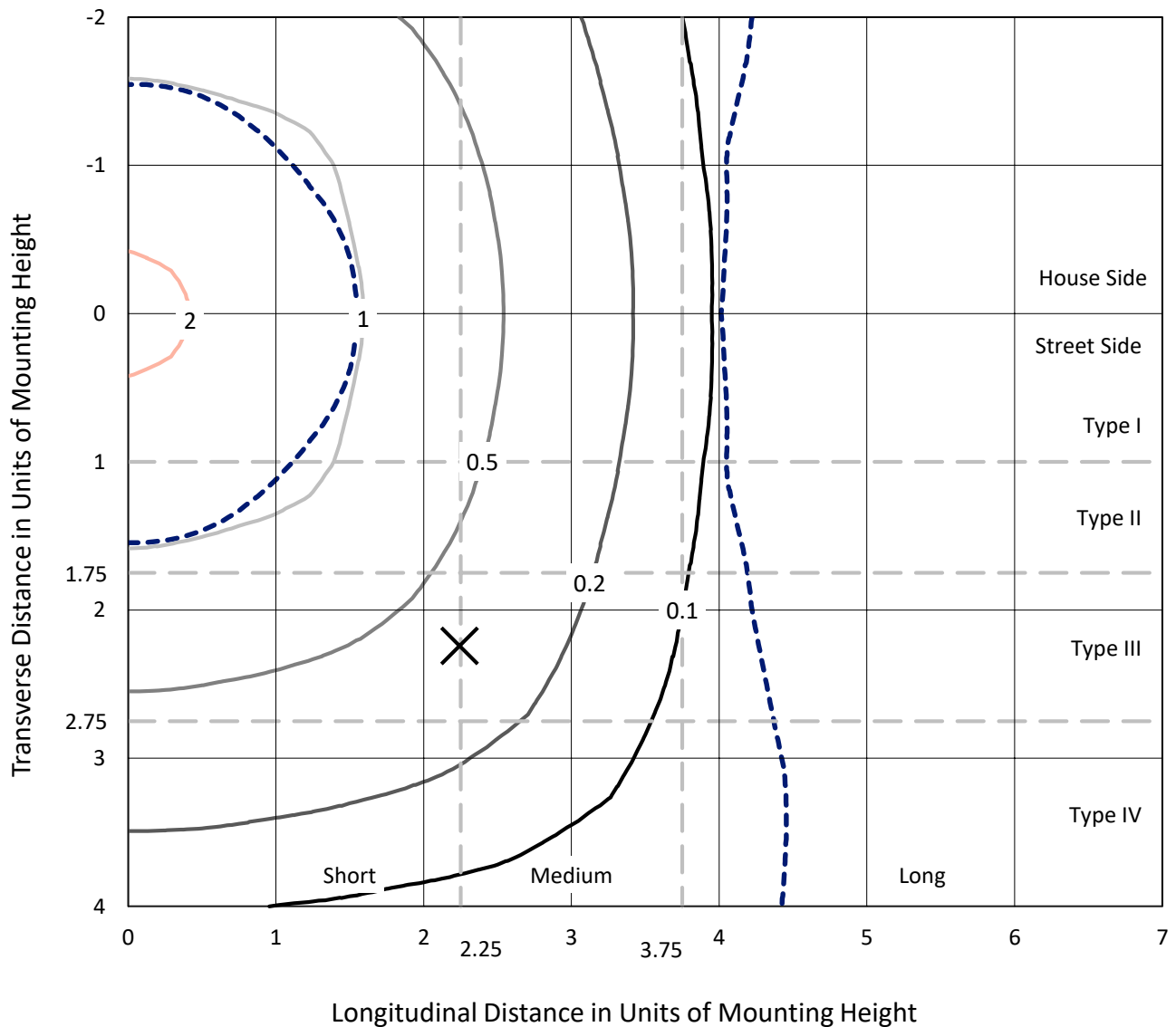


REPORT NUMBER: P230952

CATALOG NUMBER: ARCH-M-AF48-110-D-U-5WQ-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

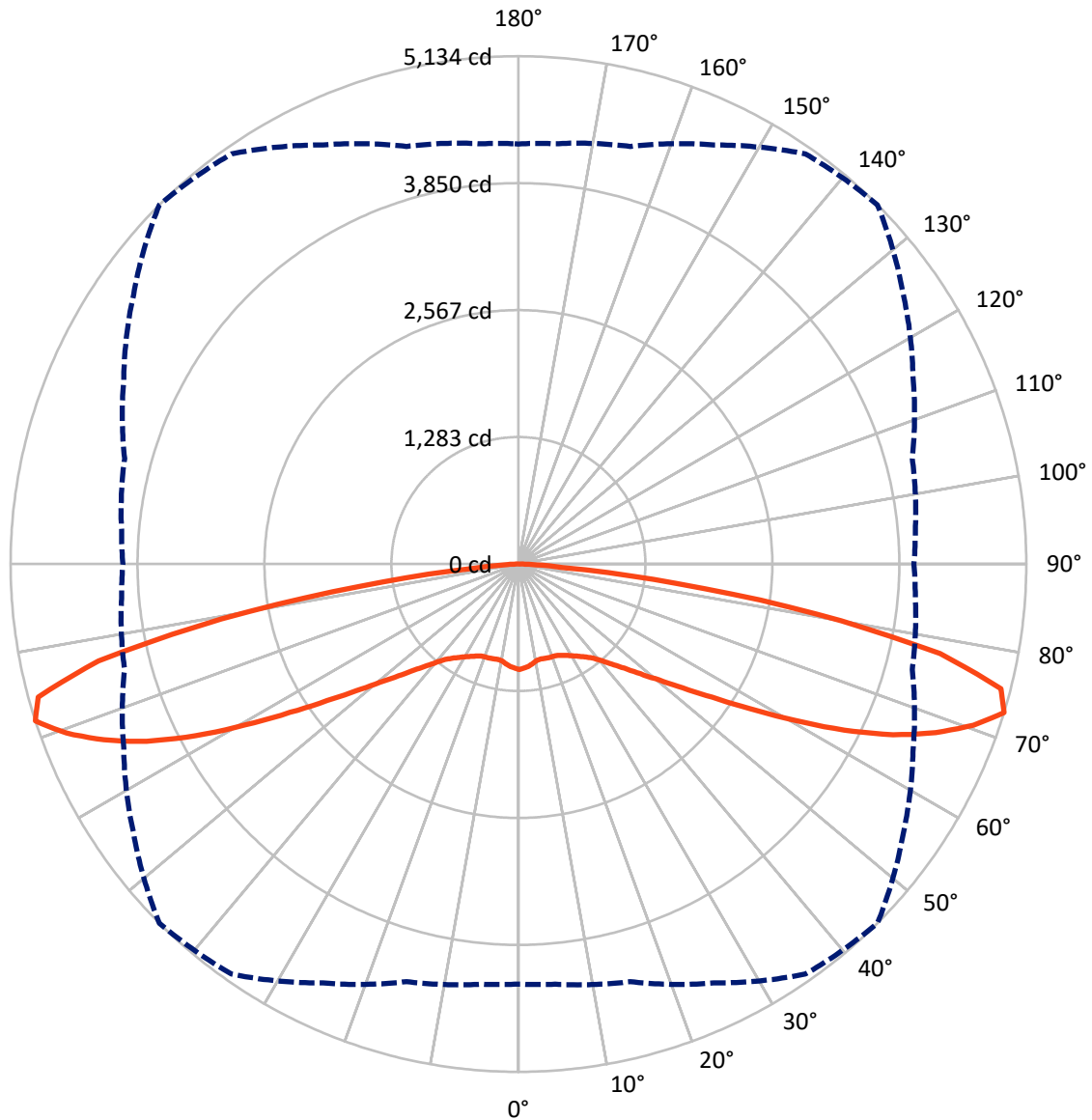


Based on 20 foot mounting height. Maximum calculated value = 2.7 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P230952

CATALOG NUMBER: ARCH-M-AF48-110-D-U-5WQ-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P230952

CATALOG NUMBER: ARCH-M-AF48-110-D-U-5WQ-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6470.5	0.0	6470.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6470.5	0.0	6470.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	12941.0	0.0	12941.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.2	0.8
10°-20°	283.2	2.2
20°-30°	473.9	3.7
30°-40°	728.1	5.6
40°-50°	1205.6	9.3
50°-60°	2143.3	16.6
60°-70°	3749.6	29.0
70°-80°	3814.9	29.5
80°-90°	444.2	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°	12941.0	100.0
0°-180°	12941.0	100.0



REPORT NUMBER: P230952

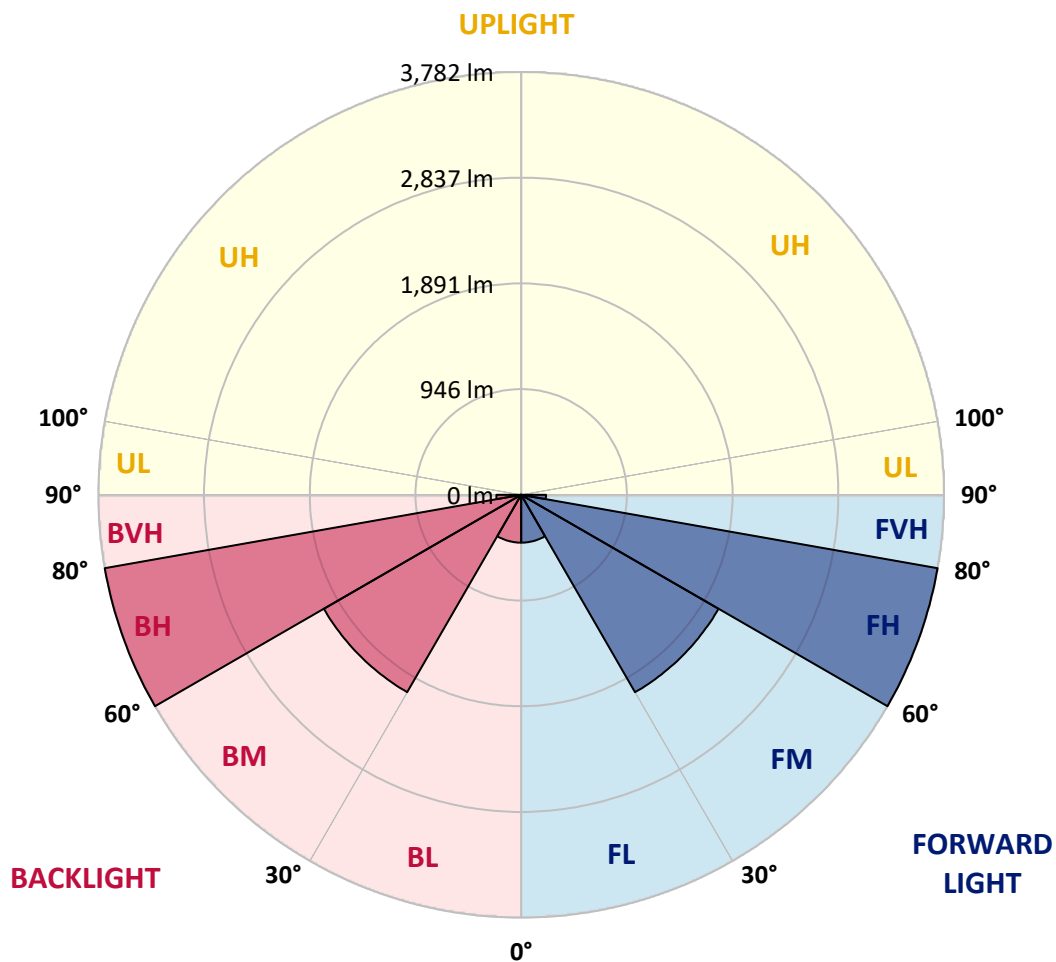
CATALOG NUMBER: ARCH-M-AF48-110-D-U-5WQ-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	427.6	3.3			
FM	(30°-60°)	2038.5	15.8			
FH	(60°-80°)	3782.3	29.2			G2/5000
FVH	(80°-90°)	222.1	1.7			G2/225
BL	(0°-30°)	427.6	3.3	B1/500		
BM	(30°-60°)	2038.5	15.8	B2/2500		
BH	(60°-80°)	3782.3	29.2	B4/5000		G2/5000
BVH	(80°-90°)	222.1	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





REPORT NUMBER: P230952

CATALOG NUMBER: ARCH-M-AF48-110-D-U-5WQ-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1066.6	1066.6	1066.6	1066.6	1066.6	1066.6	1066.6	1066.6	1066.6	1066.6	1066.6
2.5°	1056.8	1059.2	1054.3	1054.3	1054.3	1051.9	1054.3	1051.9	1054.3	1056.8	1056.8
5°	1046.9	1046.9	1042.0	1042.0	1042.0	1039.5	1042.0	1042.0	1044.5	1046.9	1046.9
7.5°	1024.8	1024.8	1022.3	1019.8	1017.4	1017.4	1019.8	1019.8	1022.3	1024.8	1024.8
10°	1012.4	1010.0	1005.1	997.7	995.2	992.7	997.7	1002.6	1010.0	1017.4	1014.9
12.5°	1007.5	1005.1	995.2	987.8	982.9	985.3	990.3	995.2	1007.5	1014.9	1012.4
15°	1012.4	1007.5	995.2	982.9	985.3	990.3	995.2	995.2	1010.0	1017.4	1017.4
17.5°	1012.4	1010.0	995.2	985.3	987.8	995.2	997.7	995.2	1007.5	1019.8	1019.8
20°	1014.9	1014.9	995.2	987.8	990.3	997.7	1000.1	997.7	1007.5	1022.3	1022.3
22.5°	1019.8	1017.4	997.7	992.7	997.7	1002.6	1005.1	1002.6	1012.4	1024.8	1027.2
25°	1029.7	1024.8	1007.5	1005.1	1014.9	1022.3	1022.3	1017.4	1022.3	1034.6	1034.6
27.5°	1042.0	1039.5	1019.8	1019.8	1032.2	1046.9	1039.5	1029.7	1034.6	1046.9	1046.9
30°	1064.2	1061.7	1042.0	1042.0	1059.2	1076.5	1059.2	1046.9	1054.3	1066.6	1069.1
32.5°	1096.2	1096.2	1079.0	1074.0	1103.6	1111.0	1103.6	1079.0	1083.9	1101.1	1101.1
35°	1150.4	1145.5	1128.2	1125.8	1155.3	1152.9	1150.4	1128.2	1133.2	1152.9	1152.9
37.5°	1221.8	1219.4	1204.6	1197.2	1212.0	1202.1	1207.1	1197.2	1209.5	1224.3	1226.8
40°	1313.0	1310.5	1298.2	1288.3	1293.3	1278.5	1283.4	1288.3	1300.7	1310.5	1313.0
42.5°	1426.3	1426.3	1414.0	1396.7	1389.3	1382.0	1382.0	1391.8	1404.1	1416.4	1416.4
45°	1566.7	1566.7	1551.9	1534.7	1512.5	1500.2	1505.1	1515.0	1529.8	1544.5	1549.5
47.5°	1731.7	1731.7	1712.0	1694.8	1672.6	1657.8	1657.8	1662.8	1684.9	1697.3	1704.7
50°	1916.5	1909.1	1889.4	1872.2	1859.8	1840.1	1842.6	1840.1	1859.8	1877.1	1882.0
52.5°	2108.6	2106.2	2086.5	2081.5	2088.9	2079.1	2079.1	2054.5	2061.8	2071.7	2069.2
55°	2347.6	2340.2	2323.0	2332.8	2362.4	2377.2	2372.2	2332.8	2310.6	2315.6	2313.1
57.5°	2608.7	2601.3	2596.4	2626.0	2692.5	2754.0	2741.7	2650.6	2608.7	2611.2	2613.6
60°	2874.8	2874.8	2889.5	2963.4	3106.3	3207.3	3170.4	3017.6	2943.7	2928.9	2924.0
62.5°	3148.2	3155.6	3187.6	3310.8	3530.0	3697.5	3603.9	3387.1	3276.3	3246.7	3236.9
65°	3466.0	3473.4	3520.2	3672.9	3963.6	4163.1	4003.0	3798.5	3643.3	3581.7	3571.9
67.5°	3926.6	3931.5	3968.5	4116.3	4389.7	4549.8	4384.8	4202.5	4035.0	3963.6	3958.6
70°	4340.5	4345.4	4377.4	4572.0	4823.3	4879.9	4697.6	4466.1	4291.2	4234.5	4224.7
72.5°	4246.8	4264.1	4370.0	4673.0	5059.8	5133.7	4749.4	4402.0	4121.2	4027.6	3998.0
75°	3562.0	3589.1	3756.6	4212.4	4828.2	5037.6	4443.9	3805.9	3387.1	3207.3	3160.5
77.5°	2079.1	2180.1	2468.3	3052.1	3931.5	4357.7	3660.6	2786.1	2081.5	1785.9	1687.4
80°	569.0	623.2	832.6	1404.1	2465.8	3052.1	2335.3	1278.5	689.7	517.3	480.4
82.5°	179.8	238.9	303.0	404.0	968.1	1608.6	867.1	376.9	295.6	243.9	216.8
85°	96.1	103.5	170.0	197.1	290.7	450.8	268.5	197.1	177.4	130.6	123.2
87.5°	49.3	51.7	96.1	96.1	128.1	105.9	115.8	105.9	101.0	64.0	56.7
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)