

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: P234777

Luminaire Tested: **ARCH-M-AF48-150-D-U-5WQ-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234777
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-AF48-150-D-U-5WQ-8027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 970mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14220 lumens
Efficiency: N/A
Efficacy: 94.2 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): 151
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

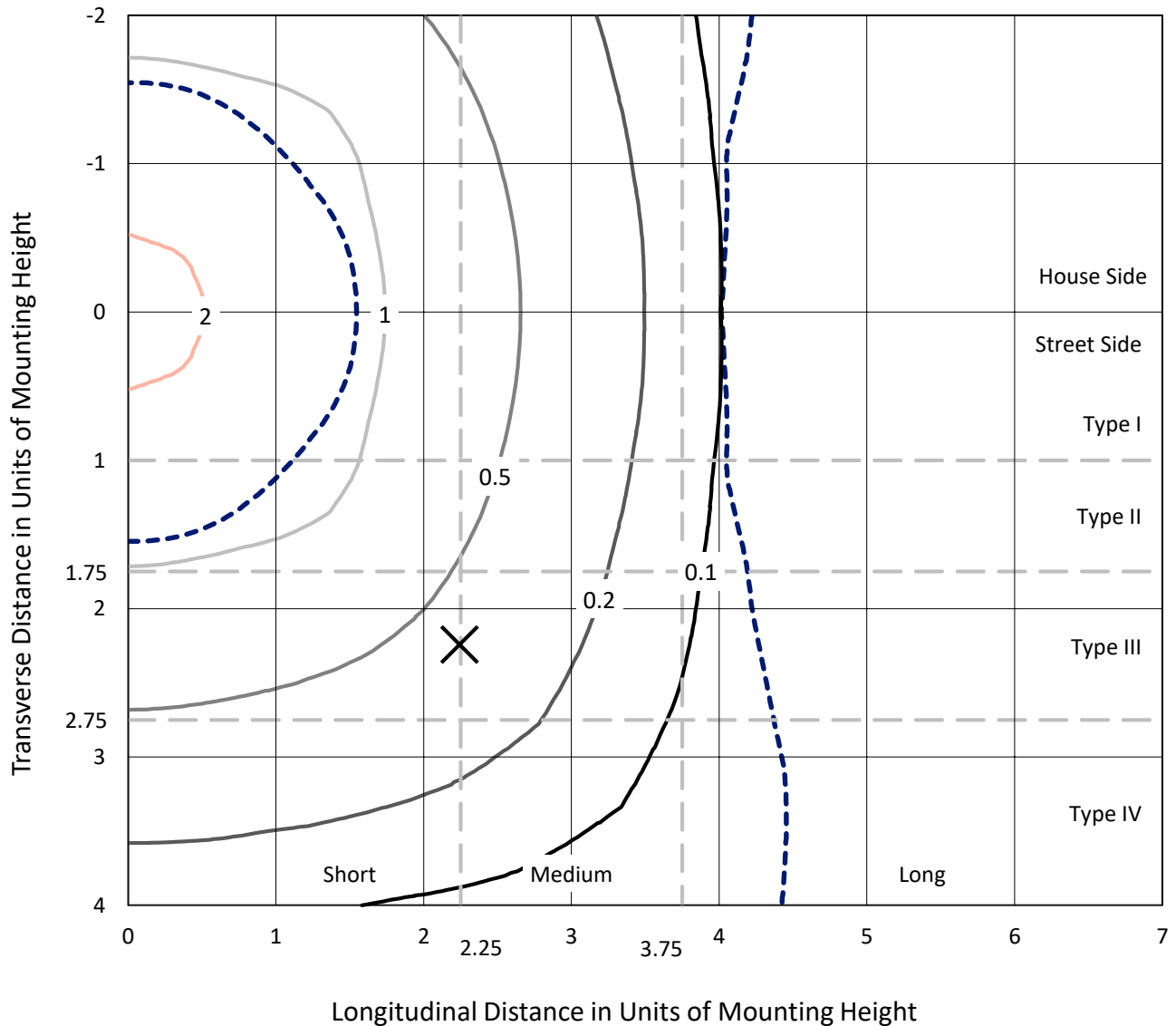


REPORT NUMBER: P234777

CATALOG NUMBER: ARCH-M-AF48-150-D-U-5WQ-8027

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

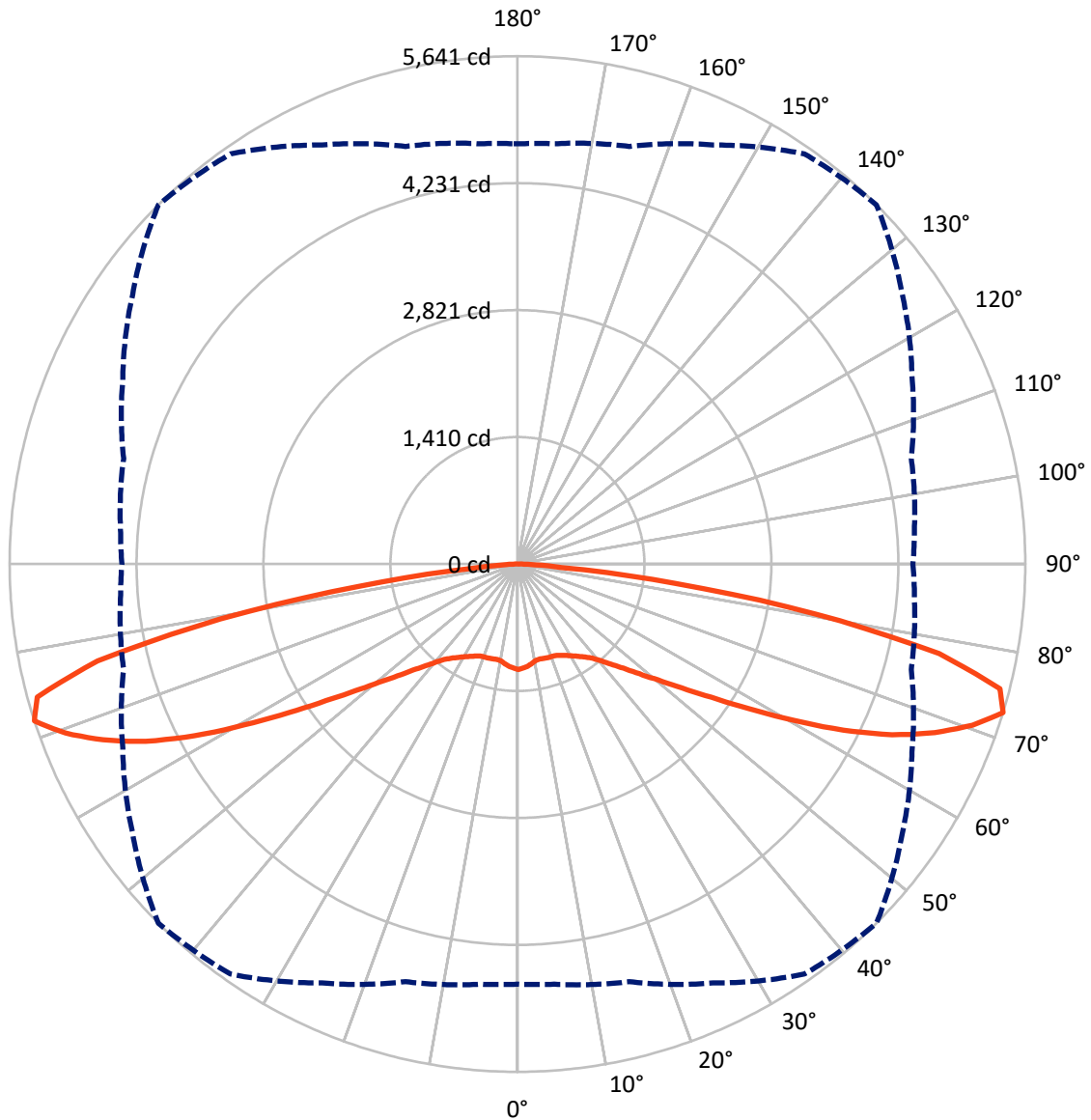


Based on 20 foot mounting height. Maximum calculated value = 2.9 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P234777

CATALOG NUMBER: ARCH-M-AF48-150-D-U-5WQ-8027

Luminous Intensity Polar Plot



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



REPORT NUMBER: P234777

CATALOG NUMBER: ARCH-M-AF48-150-D-U-5WQ-8027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7110.0	0.0	7110.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7110.0	0.0	7110.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	14220.0	0.0	14220.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.9	0.8
10°-20°	311.2	2.2
20°-30°	520.7	3.7
30°-40°	800.1	5.6
40°-50°	1324.7	9.3
50°-60°	2355.1	16.6
60°-70°	4120.2	29.0
70°-80°	4192.0	29.5
80°-90°	488.1	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°	14220.0	100.0
0°-180°	14220.0	100.0



REPORT NUMBER: P234777

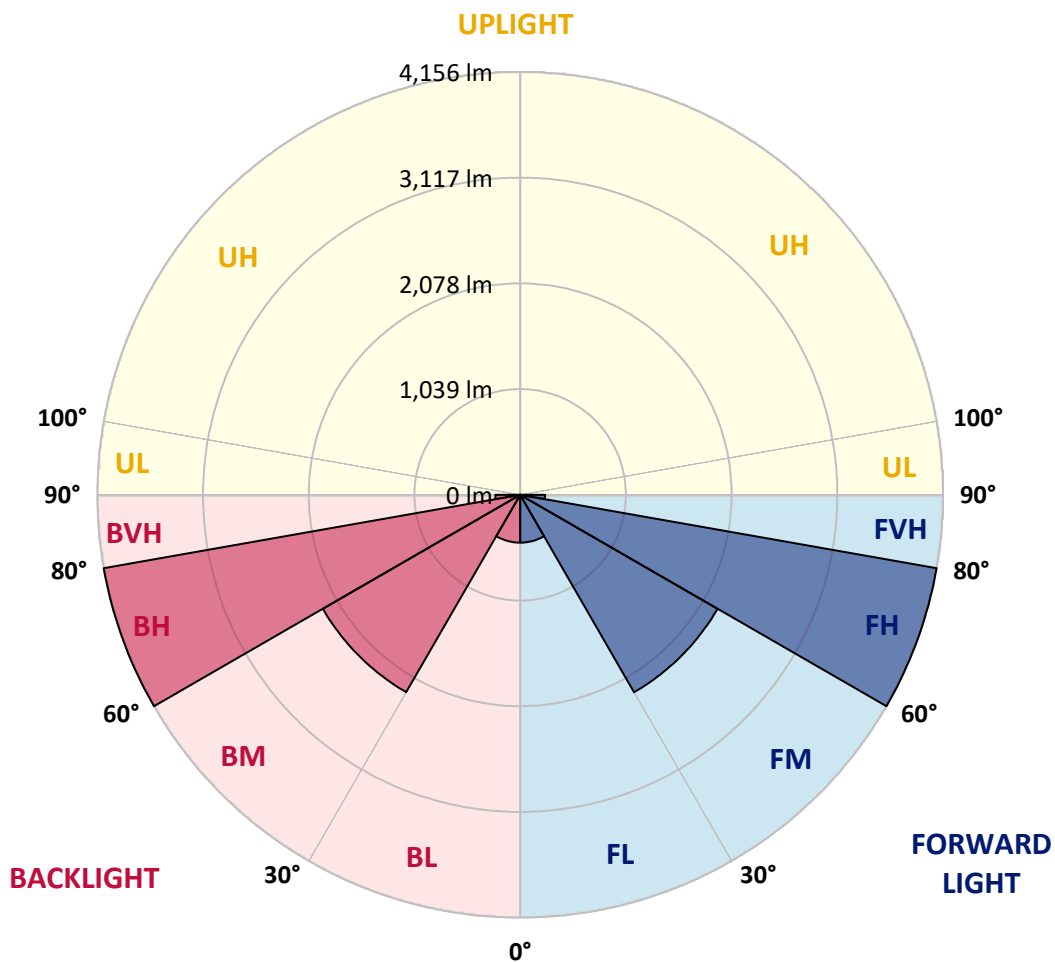
CATALOG NUMBER: ARCH-M-AF48-150-D-U-5WQ-8027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	469.9	3.3			
FM	(30°-60°)	2240.0	15.8			
FH	(60°-80°)	4156.1	29.2			G2/5000
FVH	(80°-90°)	244.1	1.7			G3/500
BL	(0°-30°)	469.9	3.3	B1/500		
BM	(30°-60°)	2240.0	15.8	B2/2500		
BH	(60°-80°)	4156.1	29.2	B4/5000		G2/5000
BVH	(80°-90°)	244.1	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





REPORT NUMBER: P234777

CATALOG NUMBER: ARCH-M-AF48-150-D-U-5WQ-8027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1172.1	1172.1	1172.1	1172.1	1172.1	1172.1	1172.1	1172.1	1172.1	1172.1	1172.1
2.5°	1161.2	1163.9	1158.5	1158.5	1158.5	1155.8	1158.5	1155.8	1158.5	1161.2	1161.2
5°	1150.4	1150.4	1145.0	1145.0	1145.0	1142.3	1145.0	1145.0	1147.7	1150.4	1150.4
7.5°	1126.0	1126.0	1123.3	1120.6	1117.9	1117.9	1120.6	1120.6	1123.3	1126.0	1126.0
10°	1112.5	1109.8	1104.4	1096.3	1093.6	1090.9	1096.3	1101.7	1109.8	1117.9	1115.2
12.5°	1107.1	1104.4	1093.6	1085.4	1080.0	1082.7	1088.1	1093.6	1107.1	1115.2	1112.5
15°	1112.5	1107.1	1093.6	1080.0	1082.7	1088.1	1093.6	1093.6	1109.8	1117.9	1117.9
17.5°	1112.5	1109.8	1093.6	1082.7	1085.4	1093.6	1096.3	1093.6	1107.1	1120.6	1120.6
20°	1115.2	1115.2	1093.6	1085.4	1088.1	1096.3	1099.0	1096.3	1107.1	1123.3	1123.3
22.5°	1120.6	1117.9	1096.3	1090.9	1096.3	1101.7	1104.4	1101.7	1112.5	1126.0	1128.7
25°	1131.5	1126.0	1107.1	1104.4	1115.2	1123.3	1123.3	1117.9	1123.3	1136.9	1136.9
27.5°	1145.0	1142.3	1120.6	1120.6	1134.2	1150.4	1142.3	1131.5	1136.9	1150.4	1150.4
30°	1169.4	1166.6	1145.0	1145.0	1163.9	1182.9	1163.9	1150.4	1158.5	1172.1	1174.8
32.5°	1204.5	1204.5	1185.6	1180.2	1212.7	1220.8	1212.7	1185.6	1191.0	1210.0	1210.0
35°	1264.1	1258.7	1239.7	1237.0	1269.5	1266.8	1264.1	1239.7	1245.1	1266.8	1266.8
37.5°	1342.6	1339.9	1323.6	1315.5	1331.8	1320.9	1326.3	1315.5	1329.1	1345.3	1348.0
40°	1442.7	1440.0	1426.5	1415.7	1421.1	1404.8	1410.3	1415.7	1429.2	1440.0	1442.7
42.5°	1567.3	1567.3	1553.7	1534.8	1526.7	1518.5	1518.5	1529.4	1542.9	1556.4	1556.4
45°	1721.5	1721.5	1705.3	1686.4	1662.0	1648.5	1653.9	1664.7	1680.9	1697.2	1702.6
47.5°	1902.9	1902.9	1881.2	1862.3	1837.9	1821.7	1821.7	1827.1	1851.5	1865.0	1873.1
50°	2105.9	2097.8	2076.1	2057.2	2043.7	2022.0	2024.7	2022.0	2043.7	2062.6	2068.0
52.5°	2317.0	2314.3	2292.7	2287.3	2295.4	2284.6	2284.6	2257.5	2265.6	2276.4	2273.7
55°	2579.6	2571.5	2552.5	2563.4	2595.9	2612.1	2606.7	2563.4	2539.0	2544.4	2541.7
57.5°	2866.5	2858.4	2853.0	2885.5	2958.6	3026.2	3012.7	2912.6	2866.5	2869.2	2871.9
60°	3158.9	3158.9	3175.1	3256.3	3413.3	3524.3	3483.7	3315.9	3234.7	3218.4	3213.0
62.5°	3459.3	3467.5	3502.6	3638.0	3878.9	4063.0	3960.1	3721.9	3600.1	3567.6	3556.8
65°	3808.5	3816.6	3868.1	4035.9	4355.3	4574.5	4398.6	4173.9	4003.4	3935.7	3924.9
67.5°	4314.7	4320.1	4360.7	4523.1	4823.6	4999.5	4818.2	4617.9	4433.8	4355.3	4349.9
70°	4769.4	4774.9	4810.0	5023.9	5300.0	5362.2	5161.9	4907.5	4715.3	4653.0	4642.2
72.5°	4666.6	4685.5	4801.9	5134.9	5559.8	5641.0	5218.8	4837.1	4528.5	4425.7	4393.2
75°	3914.1	3943.9	4127.9	4628.7	5305.4	5535.5	4883.1	4182.1	3721.9	3524.3	3472.9
77.5°	2284.6	2395.5	2712.2	3353.8	4320.1	4788.4	4022.4	3061.4	2287.3	1962.5	1854.2
80°	625.3	684.8	914.9	1542.9	2709.5	3353.8	2566.1	1404.8	757.9	568.4	527.8
82.5°	197.6	262.6	332.9	443.9	1063.8	1767.6	952.8	414.1	324.8	268.0	238.2
85°	105.6	113.7	186.8	216.5	319.4	495.4	295.0	216.5	194.9	143.5	135.3
87.5°	54.1	56.8	105.6	105.6	140.8	116.4	127.2	116.4	111.0	70.4	62.3
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)