

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: P234778

Luminaire Tested: **ARCH-M-AF48-160-D-U-5WQ-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234778
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-AF48-160-D-U-5WQ-8027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14796.9 lumens
Efficiency: N/A
Efficacy: 91.9 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 - G3

Input Watts (W): 161
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

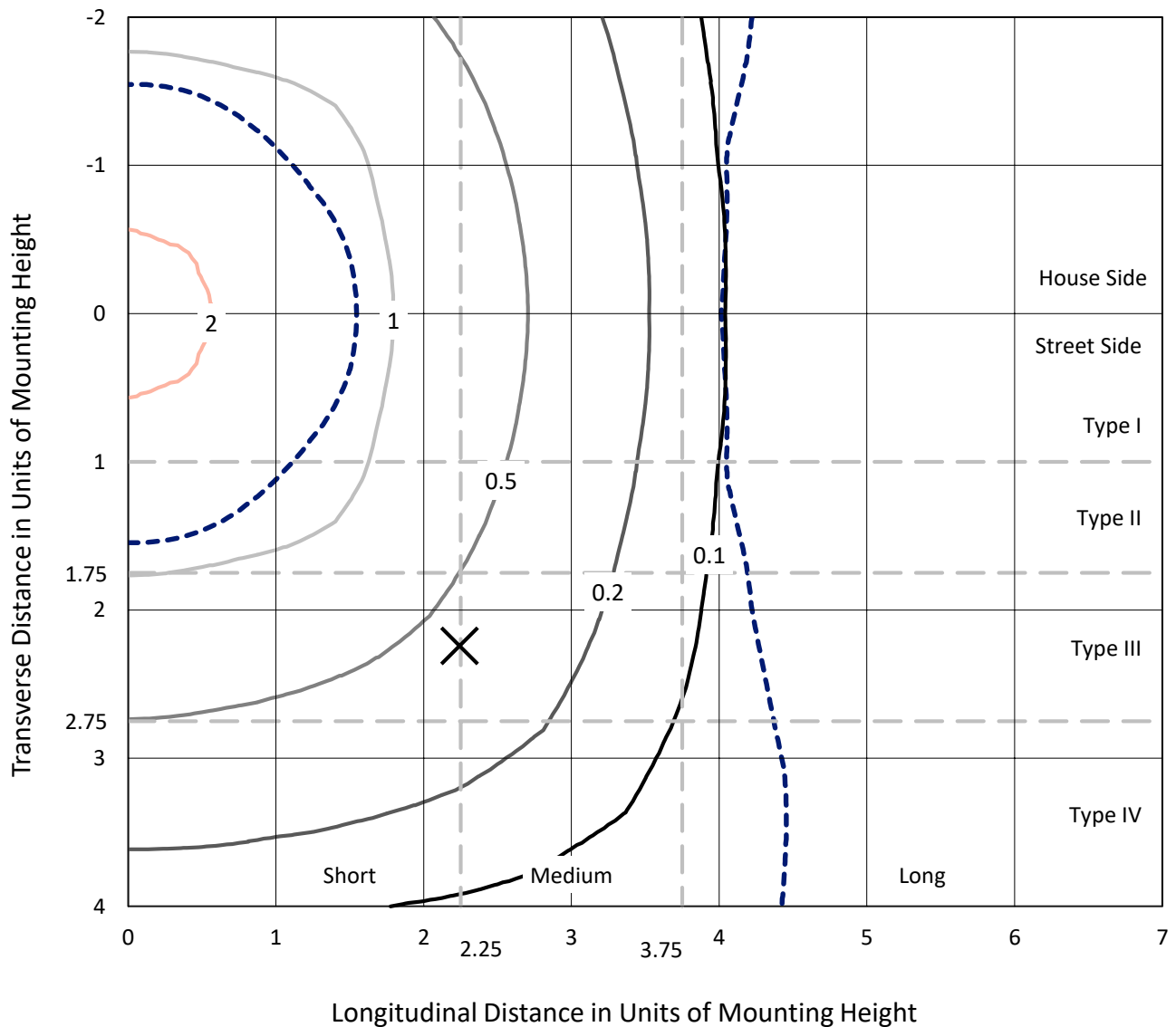


REPORT NUMBER: P234778

CATALOG NUMBER: ARCH-M-AF48-160-D-U-5WQ-8027

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

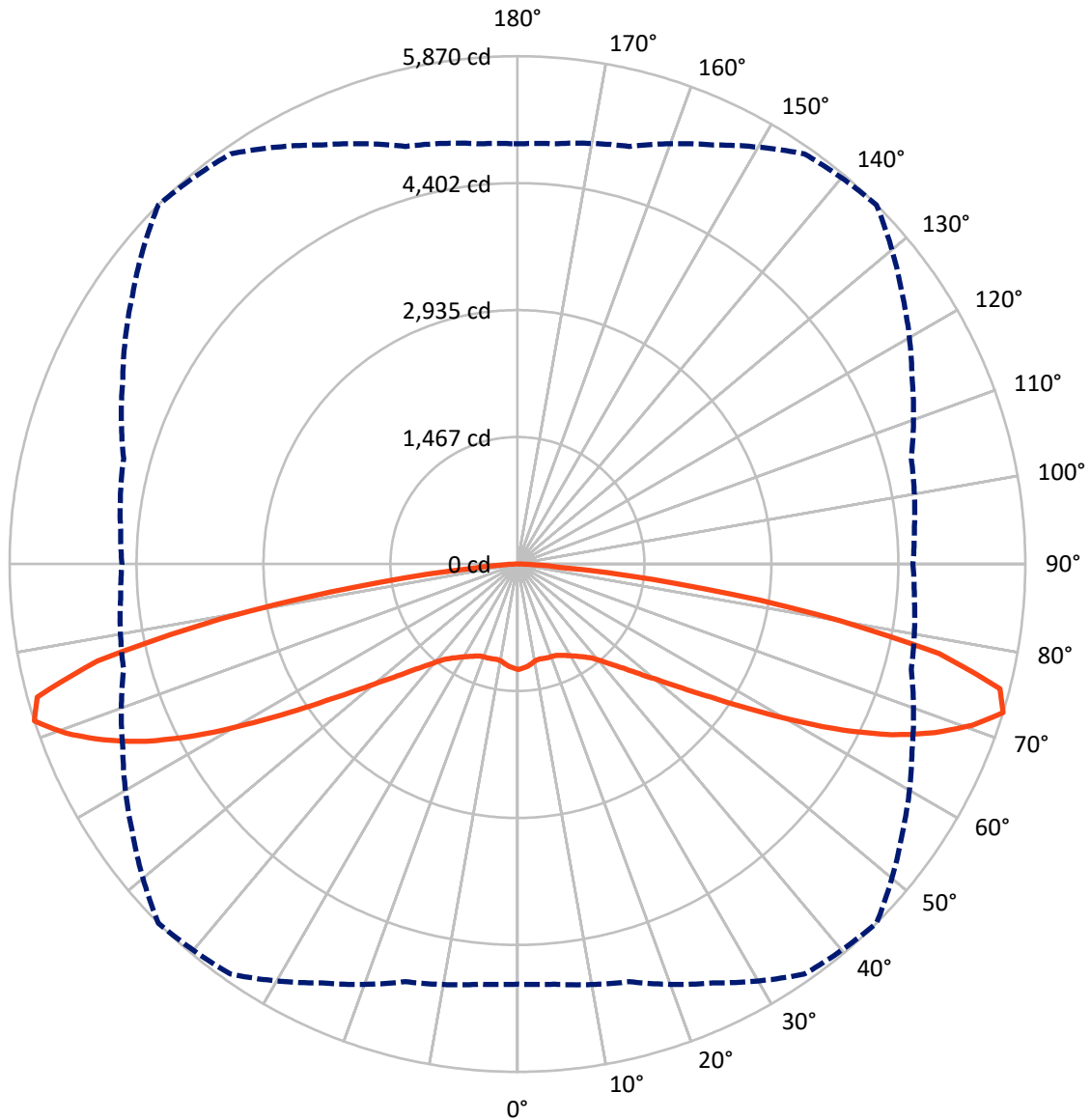


Based on 20 foot mounting height. Maximum calculated value = 3 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P234778

CATALOG NUMBER: ARCH-M-AF48-160-D-U-5WQ-8027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P234778

CATALOG NUMBER: ARCH-M-AF48-160-D-U-5WQ-8027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7398.5	0.0	7398.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7398.5	0.0	7398.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	14796.9	0.0	14796.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.2	0.8
10°-20°	323.8	2.2
20°-30°	541.8	3.7
30°-40°	832.5	5.6
40°-50°	1378.5	9.3
50°-60°	2450.7	16.6
60°-70°	4287.4	29.0
70°-80°	4362.1	29.5
80°-90°	507.9	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°	14796.9	100.0
0°-180°	14796.9	100.0



REPORT NUMBER: P234778

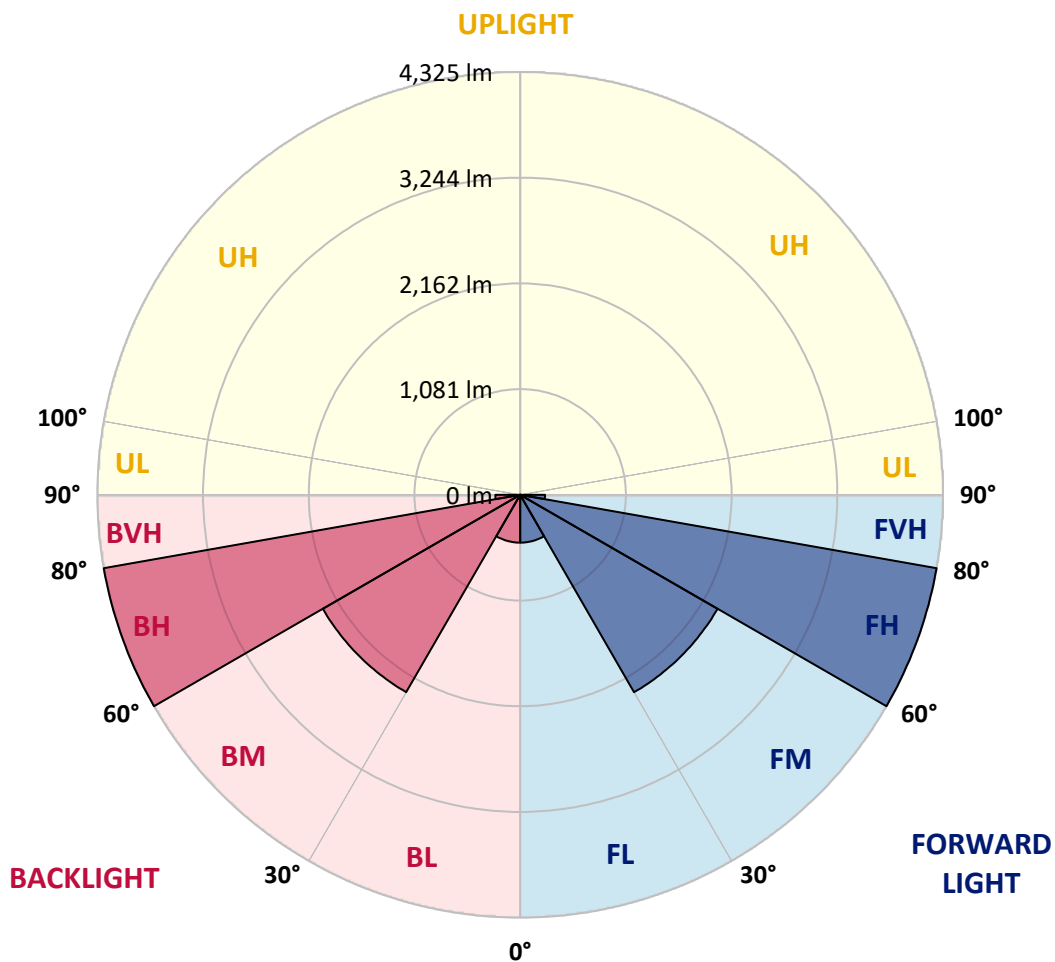
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	488.9	3.3			
FM	(30°-60°)	2330.8	15.8			
FH	(60°-80°)	4324.7	29.2			G2/5000
FVH	(80°-90°)	254.0	1.7			G3/500
BL	(0°-30°)	488.9	3.3	B1/500		
BM	(30°-60°)	2330.8	15.8	B2/2500		
BH	(60°-80°)	4324.7	29.2	B4/5000		G2/5000
BVH	(80°-90°)	254.0	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





REPORT NUMBER: P234778

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1219.6	1219.6	1219.6	1219.6	1219.6	1219.6	1219.6	1219.6	1219.6	1219.6	1219.6
2.5°	1208.3	1211.2	1205.5	1205.5	1205.5	1202.7	1205.5	1202.7	1205.5	1208.3	1208.3
5°	1197.1	1197.1	1191.4	1191.4	1191.4	1188.6	1191.4	1191.4	1194.3	1197.1	1197.1
7.5°	1171.7	1171.7	1168.9	1166.1	1163.3	1163.3	1166.1	1166.1	1168.9	1171.7	1171.7
10°	1157.6	1154.8	1149.2	1140.7	1137.9	1135.1	1140.7	1146.4	1154.8	1163.3	1160.5
12.5°	1152.0	1149.2	1137.9	1129.5	1123.8	1126.7	1132.3	1137.9	1152.0	1160.5	1157.6
15°	1157.6	1152.0	1137.9	1123.8	1126.7	1132.3	1137.9	1137.9	1154.8	1163.3	1163.3
17.5°	1157.6	1154.8	1137.9	1126.7	1129.5	1137.9	1140.7	1137.9	1152.0	1166.1	1166.1
20°	1160.5	1160.5	1137.9	1129.5	1132.3	1140.7	1143.6	1140.7	1152.0	1168.9	1168.9
22.5°	1166.1	1163.3	1140.7	1135.1	1140.7	1146.4	1149.2	1146.4	1157.6	1171.7	1174.5
25°	1177.4	1171.7	1152.0	1149.2	1160.5	1168.9	1168.9	1163.3	1168.9	1183.0	1183.0
27.5°	1191.4	1188.6	1166.1	1166.1	1180.2	1197.1	1188.6	1177.4	1183.0	1197.1	1197.1
30°	1216.8	1214.0	1191.4	1191.4	1211.2	1230.9	1211.2	1197.1	1205.5	1219.6	1222.4
32.5°	1253.4	1253.4	1233.7	1228.1	1261.9	1270.3	1261.9	1233.7	1239.3	1259.0	1259.0
35°	1315.4	1309.7	1290.0	1287.2	1321.0	1318.2	1315.4	1290.0	1295.7	1318.2	1318.2
37.5°	1397.1	1394.2	1377.3	1368.9	1385.8	1374.5	1380.2	1368.9	1383.0	1399.9	1402.7
40°	1501.3	1498.5	1484.4	1473.1	1478.7	1461.8	1467.5	1473.1	1487.2	1498.5	1501.3
42.5°	1630.8	1630.8	1616.8	1597.0	1588.6	1580.1	1580.1	1591.4	1605.5	1619.6	1619.6
45°	1791.4	1791.4	1774.5	1754.8	1729.4	1715.3	1721.0	1732.2	1749.1	1766.0	1771.7
47.5°	1980.1	1980.1	1957.6	1937.9	1912.5	1895.6	1895.6	1901.2	1926.6	1940.7	1949.1
50°	2191.4	2182.9	2160.4	2140.7	2126.6	2104.0	2106.9	2104.0	2126.6	2146.3	2151.9
52.5°	2411.1	2408.2	2385.7	2380.1	2388.5	2377.3	2377.3	2349.1	2357.5	2368.8	2366.0
55°	2684.3	2675.8	2656.1	2667.4	2701.2	2718.1	2712.4	2667.4	2642.0	2647.7	2644.8
57.5°	2982.8	2974.4	2968.8	3002.6	3078.6	3149.0	3134.9	3030.7	2982.8	2985.7	2988.5
60°	3287.0	3287.0	3303.9	3388.4	3551.8	3667.3	3625.0	3450.4	3365.9	3349.0	3343.4
62.5°	3599.7	3608.1	3644.8	3785.6	4036.3	4227.8	4120.8	3872.9	3746.2	3712.4	3701.1
65°	3963.0	3971.5	4025.0	4199.6	4532.0	4760.2	4577.1	4343.3	4165.8	4095.4	4084.2
67.5°	4489.8	4495.4	4537.6	4706.6	5019.3	5202.4	5013.7	4805.2	4613.7	4532.0	4526.4
70°	4963.0	4968.6	5005.2	5227.7	5515.0	5579.8	5371.4	5106.6	4906.6	4841.8	4830.6
72.5°	4855.9	4875.6	4996.8	5343.2	5785.4	5869.9	5430.5	5033.4	4712.3	4605.2	4571.4
75°	4072.9	4103.9	4295.4	4816.5	5520.7	5760.1	5081.3	4351.7	3872.9	3667.3	3613.8
77.5°	2377.3	2492.7	2822.3	3489.8	4495.4	4982.7	4185.6	3185.6	2380.1	2042.1	1929.4
80°	650.6	712.6	952.0	1605.5	2819.5	3489.8	2670.2	1461.8	788.7	591.5	549.2
82.5°	205.6	273.2	346.4	461.9	1106.9	1839.3	991.5	430.9	338.0	278.8	247.9
85°	109.8	118.3	194.3	225.3	332.4	515.4	307.0	225.3	202.8	149.3	140.8
87.5°	56.3	59.1	109.8	109.8	146.5	121.1	132.4	121.1	115.5	73.2	64.8
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)