

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: P265823

Luminaire Tested: **ARCH-M-AF48-120-D-U-5WQ-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265823
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-7027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 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: 13629.8 lumens
Efficiency: N/A
Efficacy: 111.7 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

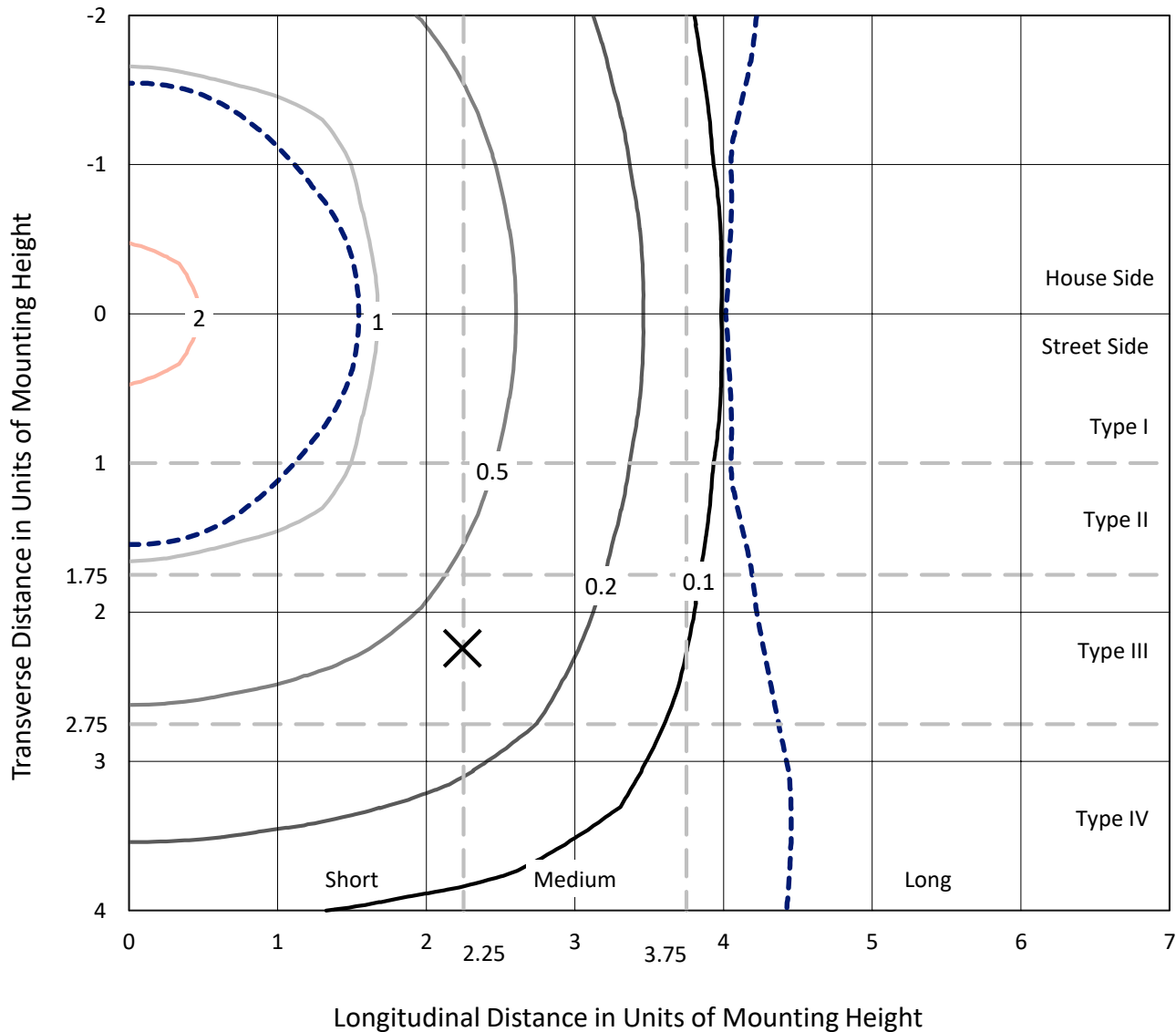


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

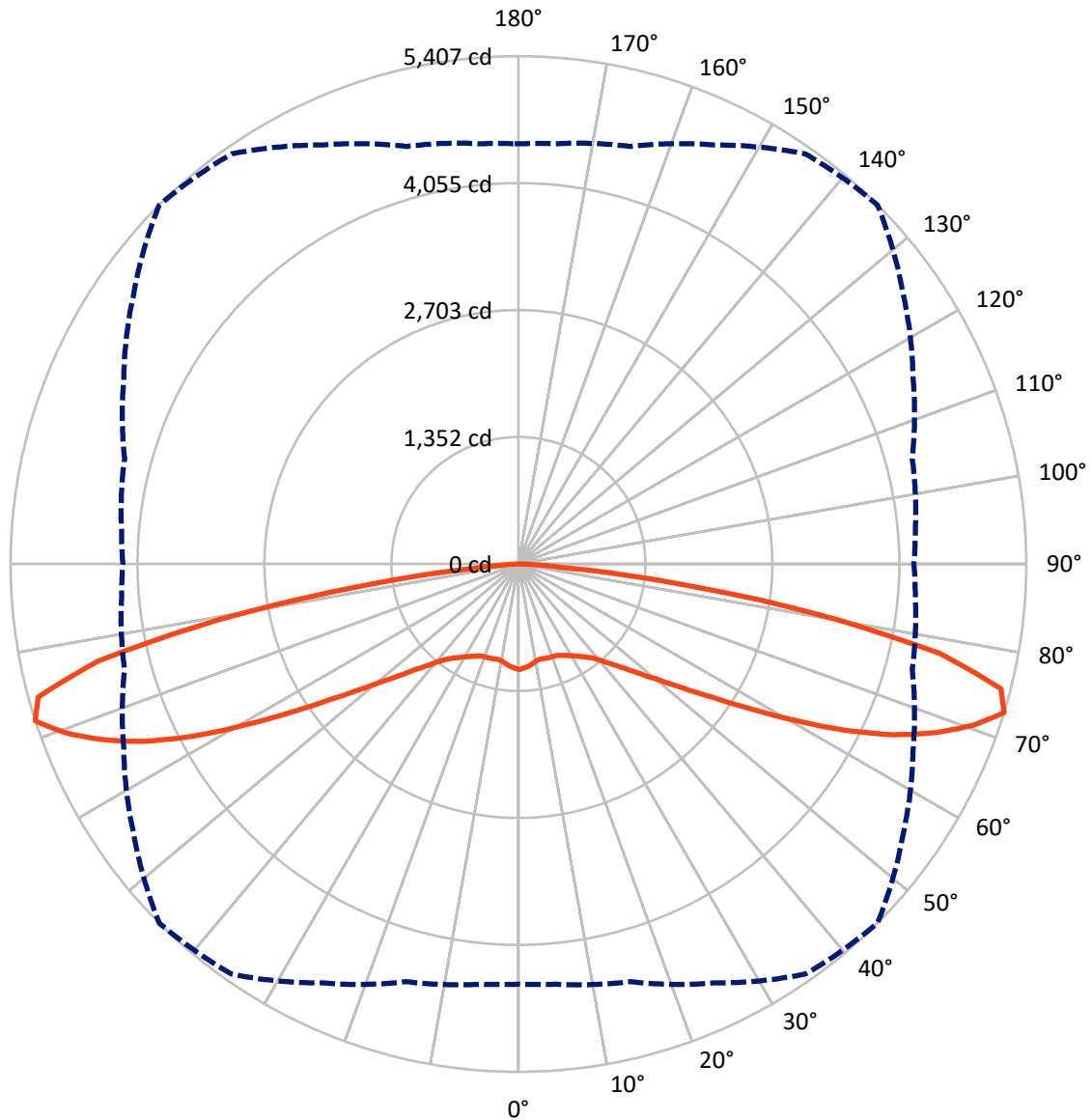


Based on 20 foot mounting height. Maximum calculated value = 2.8 fc
 Type V - Short - Non-Cutoff

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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	6814.9	0.0	6814.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6814.9	0.0	6814.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	13629.8	0.0	13629.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.4	0.8
10°-20°	298.2	2.2
20°-30°	499.1	3.7
30°-40°	766.9	5.6
40°-50°	1269.7	9.3
50°-60°	2257.4	16.6
60°-70°	3949.2	29.0
70°-80°	4018.0	29.5
80°-90°	467.9	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°	13629.8	100.0
0°-180°	13629.8	100.0



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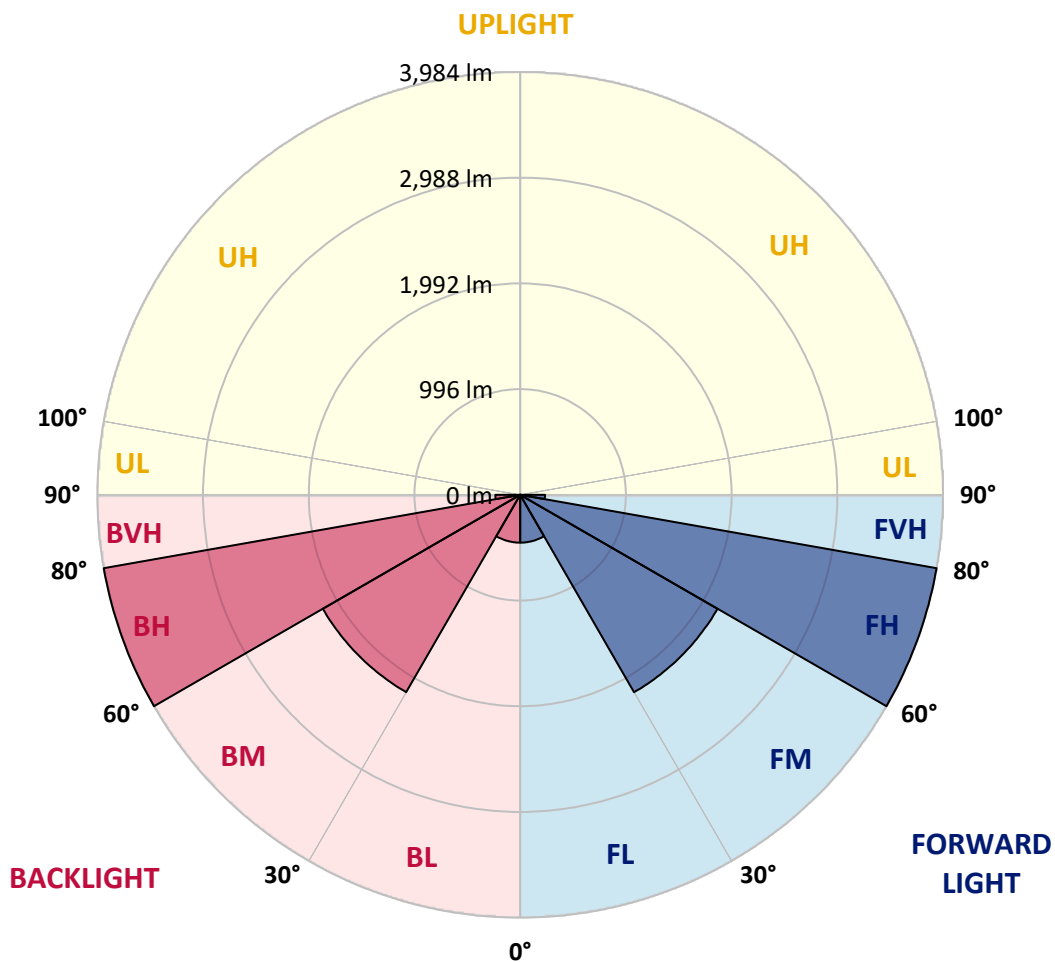
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	450.4	3.3			
FM	(30°-60°)	2147.0	15.8			
FH	(60°-80°)	3983.6	29.2			G2/5000
FVH	(80°-90°)	233.9	1.7			G3/500
BL	(0°-30°)	450.4	3.3	B1/500		
BM	(30°-60°)	2147.0	15.8	B2/2500		
BH	(60°-80°)	3983.6	29.2	B4/5000		G2/5000
BVH	(80°-90°)	233.9	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°	1123.4	1123.4	1123.4	1123.4	1123.4	1123.4	1123.4	1123.4	1123.4	1123.4	1123.4
2.5°	1113.0	1115.7	1110.5	1110.5	1110.5	1107.9	1110.5	1107.9	1110.5	1113.0	1113.0
5°	1102.7	1102.7	1097.5	1097.5	1097.5	1094.9	1097.5	1097.5	1100.1	1102.7	1102.7
7.5°	1079.4	1079.4	1076.7	1074.2	1071.5	1071.5	1074.2	1074.2	1076.7	1079.4	1079.4
10°	1066.4	1063.8	1058.6	1050.7	1048.2	1045.5	1050.7	1056.0	1063.8	1071.5	1069.0
12.5°	1061.2	1058.6	1048.2	1040.3	1035.1	1037.8	1043.0	1048.2	1061.2	1069.0	1066.4
15°	1066.4	1061.2	1048.2	1035.1	1037.8	1043.0	1048.2	1048.2	1063.8	1071.5	1071.5
17.5°	1066.4	1063.8	1048.2	1037.8	1040.3	1048.2	1050.7	1048.2	1061.2	1074.2	1074.2
20°	1069.0	1069.0	1048.2	1040.3	1043.0	1050.7	1053.4	1050.7	1061.2	1076.7	1076.7
22.5°	1074.2	1071.5	1050.7	1045.5	1050.7	1056.0	1058.6	1056.0	1066.4	1079.4	1081.9
25°	1084.6	1079.4	1061.2	1058.6	1069.0	1076.7	1076.7	1071.5	1076.7	1089.6	1089.6
27.5°	1097.5	1094.9	1074.2	1074.2	1087.0	1102.7	1094.9	1084.6	1089.6	1102.7	1102.7
30°	1120.8	1118.2	1097.5	1097.5	1115.7	1133.8	1115.7	1102.7	1110.5	1123.4	1126.0
32.5°	1154.5	1154.5	1136.4	1131.1	1162.3	1170.1	1162.3	1136.4	1141.6	1159.7	1159.7
35°	1211.6	1206.5	1188.3	1185.8	1216.8	1214.1	1211.6	1188.3	1193.5	1214.1	1214.1
37.5°	1286.8	1284.2	1268.6	1261.0	1276.5	1266.2	1271.3	1261.0	1273.8	1289.4	1292.0
40°	1382.9	1380.2	1367.3	1356.9	1362.1	1346.5	1351.7	1356.9	1369.8	1380.2	1382.9
42.5°	1502.2	1502.2	1489.2	1471.1	1463.2	1455.6	1455.6	1465.9	1478.9	1491.8	1491.8
45°	1650.0	1650.0	1634.6	1616.4	1593.1	1580.1	1585.1	1595.6	1611.2	1626.7	1632.0
47.5°	1823.9	1823.9	1803.2	1785.0	1761.7	1746.0	1746.0	1751.2	1774.6	1787.5	1795.4
50°	2018.5	2010.8	1989.9	1971.8	1958.8	1938.2	1940.7	1938.2	1958.8	1977.0	1982.2
52.5°	2220.9	2218.3	2197.6	2192.4	2200.0	2189.8	2189.8	2163.7	2171.7	2182.0	2179.4
55°	2472.6	2464.8	2446.7	2457.0	2488.1	2503.7	2498.5	2457.0	2433.7	2438.8	2436.3
57.5°	2747.6	2739.8	2734.6	2765.7	2835.8	2900.6	2887.7	2791.7	2747.6	2750.3	2752.8
60°	3027.7	3027.7	3043.4	3121.3	3271.6	3378.0	3339.1	3178.3	3100.4	3084.9	3079.7
62.5°	3315.7	3323.5	3357.2	3487.0	3717.9	3894.3	3795.8	3567.3	3450.7	3419.6	3409.2
65°	3650.4	3658.3	3707.6	3868.5	4174.6	4384.6	4216.0	4000.7	3837.3	3772.4	3762.0
67.5°	4135.6	4140.7	4179.8	4335.4	4623.3	4792.0	4618.1	4426.2	4249.8	4174.6	4169.4
70°	4571.5	4576.7	4610.5	4815.4	5080.1	5139.7	4947.7	4703.9	4519.6	4459.9	4449.6
72.5°	4472.9	4491.0	4602.6	4921.8	5329.0	5406.9	5002.2	4636.3	4340.6	4241.9	4210.9
75°	3751.6	3780.2	3956.7	4436.5	5085.2	5305.7	4680.4	4008.4	3567.3	3378.0	3328.7
77.5°	2189.8	2296.1	2599.7	3214.6	4140.7	4589.7	3855.4	2934.4	2192.4	1881.1	1777.2
80°	599.3	656.4	876.9	1478.9	2597.1	3214.6	2459.6	1346.5	726.5	544.8	505.9
82.5°	189.5	251.6	319.1	425.4	1019.7	1694.3	913.2	397.0	311.4	256.8	228.3
85°	101.1	109.0	179.0	207.6	306.1	474.8	282.7	207.6	186.8	137.5	129.7
87.5°	51.9	54.4	101.1	101.1	134.9	111.6	121.9	111.6	106.4	67.5	59.6
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)