

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: P230957

Luminaire Tested: **ARCH-M-AF48-160-D-U-5WQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230957
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-7030
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 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: 16858 lumens
Efficiency: N/A
Efficacy: 104.7 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): 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

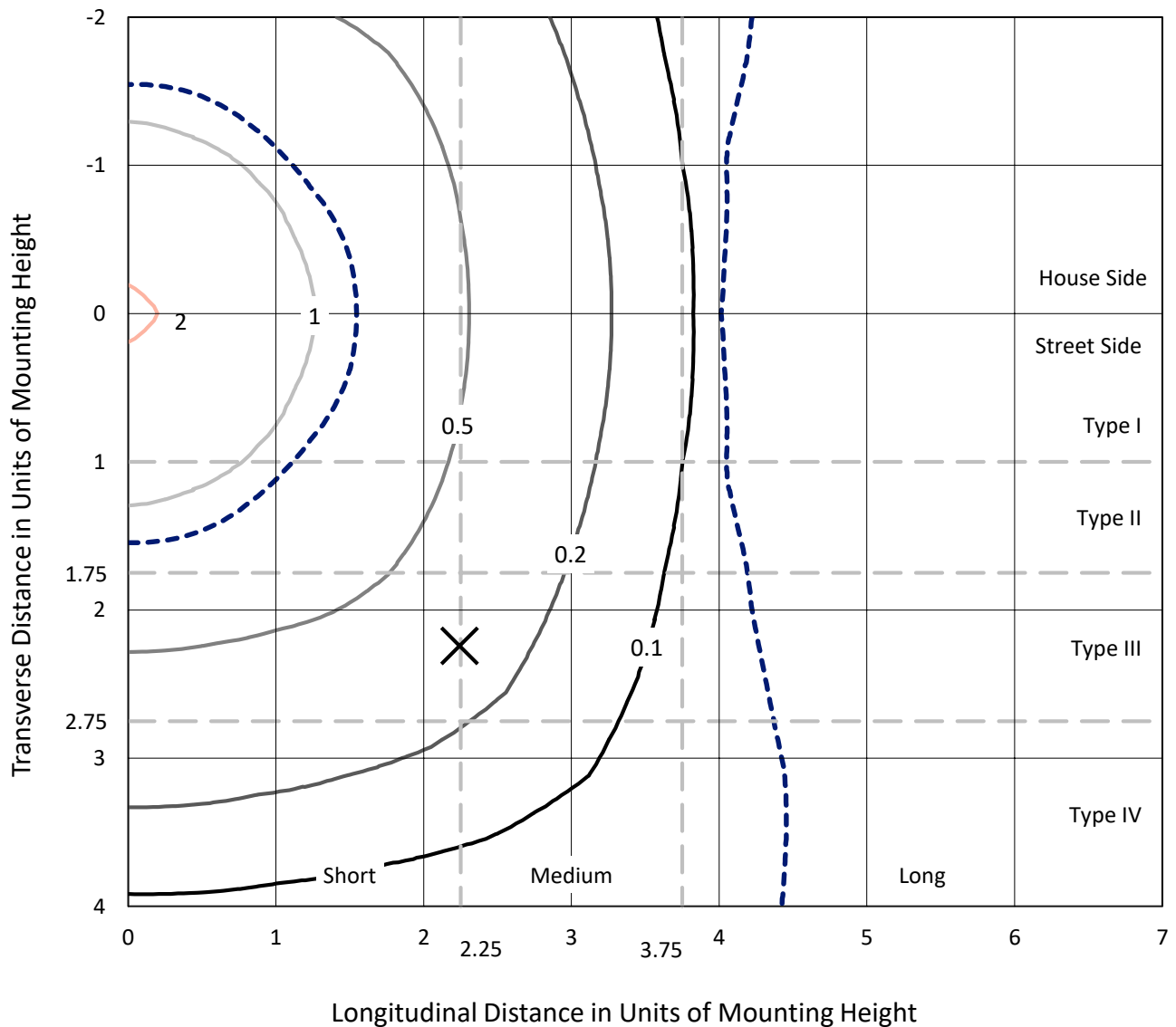


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

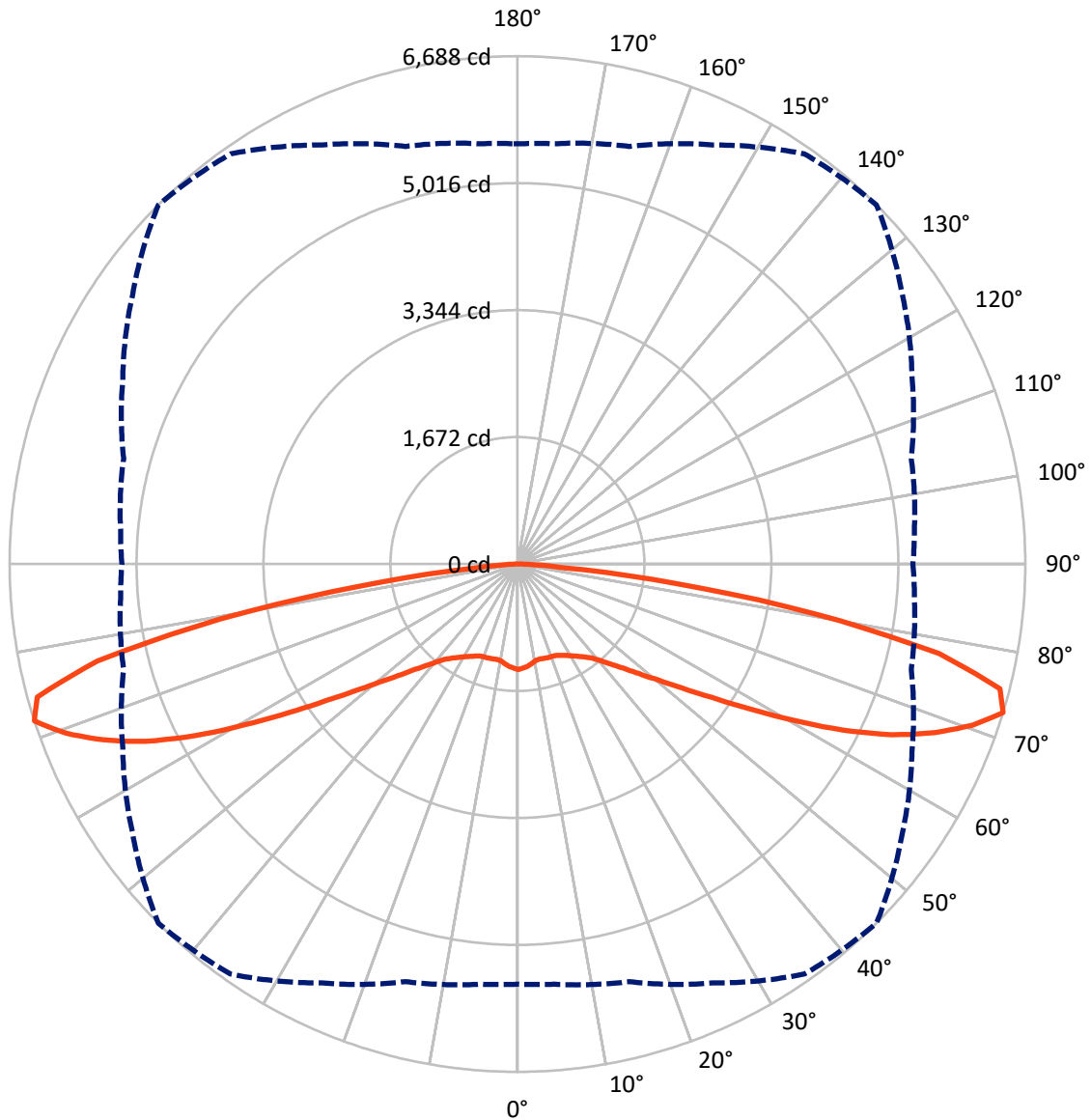


Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type V - Short - Non-Cutoff

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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	8429.0	0.0	8429.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8429.0	0.0	8429.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	16858.0	0.0	16858.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.9	0.8
10°-20°	368.9	2.2
20°-30°	617.3	3.7
30°-40°	948.5	5.6
40°-50°	1570.5	9.3
50°-60°	2792.0	16.6
60°-70°	4884.6	29.0
70°-80°	4969.7	29.5
80°-90°	578.7	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°	16858.0	100.0
0°-180°	16858.0	100.0



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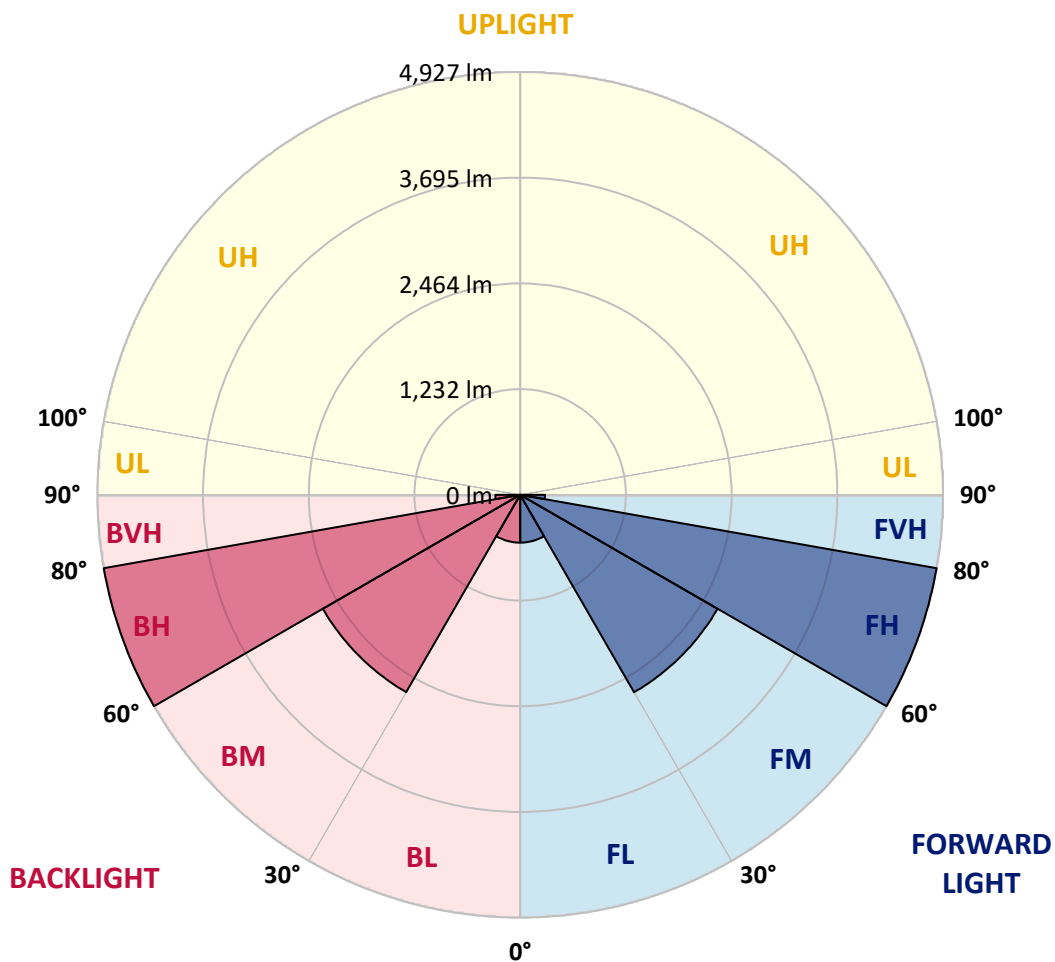
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	557.0	3.3			
FM	(30°-60°)	2655.5	15.8			
FH	(60°-80°)	4927.1	29.2			G2/5000
FVH	(80°-90°)	289.3	1.7			G3/500
BL	(0°-30°)	557.0	3.3	B2/1000		
BM	(30°-60°)	2655.5	15.8	B3/5000		
BH	(60°-80°)	4927.1	29.2	B4/5000		G2/5000
BVH	(80°-90°)	289.3	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°	1389.5	1389.5	1389.5	1389.5	1389.5	1389.5	1389.5	1389.5	1389.5	1389.5	1389.5
2.5°	1376.7	1379.9	1373.4	1373.4	1373.4	1370.2	1373.4	1370.2	1373.4	1376.7	1376.7
5°	1363.8	1363.8	1357.4	1357.4	1357.4	1354.2	1357.4	1357.4	1360.6	1363.8	1363.8
7.5°	1334.9	1334.9	1331.7	1328.5	1325.3	1325.3	1328.5	1328.5	1331.7	1334.9	1334.9
10°	1318.9	1315.7	1309.3	1299.6	1296.4	1293.2	1299.6	1306.1	1315.7	1325.3	1322.1
12.5°	1312.5	1309.3	1296.4	1286.8	1280.4	1283.6	1290.0	1296.4	1312.5	1322.1	1318.9
15°	1318.9	1312.5	1296.4	1280.4	1283.6	1290.0	1296.4	1296.4	1315.7	1325.3	1325.3
17.5°	1318.9	1315.7	1296.4	1283.6	1286.8	1296.4	1299.6	1296.4	1312.5	1328.5	1328.5
20°	1322.1	1322.1	1296.4	1286.8	1290.0	1299.6	1302.8	1299.6	1312.5	1331.7	1331.7
22.5°	1328.5	1325.3	1299.6	1293.2	1299.6	1306.1	1309.3	1306.1	1318.9	1334.9	1338.1
25°	1341.4	1334.9	1312.5	1309.3	1322.1	1331.7	1331.7	1325.3	1331.7	1347.8	1347.8
27.5°	1357.4	1354.2	1328.5	1328.5	1344.6	1363.8	1354.2	1341.4	1347.8	1363.8	1363.8
30°	1386.3	1383.1	1357.4	1357.4	1379.9	1402.3	1379.9	1363.8	1373.4	1389.5	1392.7
32.5°	1428.0	1428.0	1405.5	1399.1	1437.6	1447.3	1437.6	1405.5	1412.0	1434.4	1434.4
35°	1498.6	1492.2	1469.7	1466.5	1505.0	1501.8	1498.6	1469.7	1476.1	1501.8	1501.8
37.5°	1591.7	1588.4	1569.2	1559.6	1578.8	1566.0	1572.4	1559.6	1575.6	1594.9	1598.1
40°	1710.4	1707.2	1691.1	1678.3	1684.7	1665.5	1671.9	1678.3	1694.3	1707.2	1710.4
42.5°	1858.0	1858.0	1842.0	1819.5	1809.9	1800.2	1800.2	1813.1	1829.1	1845.2	1845.2
45°	2040.9	2040.9	2021.7	1999.2	1970.3	1954.3	1960.7	1973.5	1992.8	2012.0	2018.5
47.5°	2255.9	2255.9	2230.2	2207.8	2178.9	2159.6	2159.6	2166.1	2194.9	2211.0	2220.6
50°	2496.6	2487.0	2461.3	2438.8	2422.8	2397.1	2400.3	2397.1	2422.8	2445.2	2451.7
52.5°	2746.9	2743.7	2718.0	2711.6	2721.2	2708.4	2708.4	2676.3	2685.9	2698.8	2695.5
55°	3058.2	3048.5	3026.1	3038.9	3077.4	3096.7	3090.3	3038.9	3010.0	3016.4	3013.2
57.5°	3398.3	3388.7	3382.3	3420.8	3507.4	3587.6	3571.6	3452.9	3398.3	3401.5	3404.7
60°	3744.9	3744.9	3764.1	3860.4	4046.5	4178.1	4130.0	3931.0	3834.7	3815.5	3809.1
62.5°	4101.1	4110.7	4152.4	4312.9	4598.5	4816.7	4694.7	4412.4	4268.0	4229.4	4216.6
65°	4515.0	4524.7	4585.6	4784.6	5163.3	5423.2	5214.6	4948.3	4746.1	4665.9	4653.0
67.5°	5115.1	5121.5	5169.7	5362.2	5718.4	5927.0	5712.0	5474.5	5256.3	5163.3	5156.8
70°	5654.2	5660.7	5702.4	5955.9	6283.2	6357.0	6119.5	5817.9	5590.1	5516.2	5503.4
72.5°	5532.3	5554.8	5692.7	6087.4	6591.3	6687.5	6186.9	5734.5	5368.6	5246.7	5208.2
75°	4640.2	4675.5	4893.7	5487.4	6289.6	6562.4	5789.0	4957.9	4412.4	4178.1	4117.1
77.5°	2708.4	2840.0	3215.4	3975.9	5121.5	5676.7	4768.6	3629.4	2711.6	2326.5	2198.2
80°	741.3	811.9	1084.6	1829.1	3212.2	3975.9	3042.1	1665.5	898.5	673.9	625.8
82.5°	234.3	311.3	394.7	526.3	1261.1	2095.5	1129.6	491.0	385.1	317.7	282.4
85°	125.2	134.8	221.4	256.7	378.7	587.2	349.8	256.7	231.0	170.1	160.4
87.5°	64.2	67.4	125.2	125.2	166.9	138.0	150.8	138.0	131.6	83.4	73.8
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)