

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: P230965

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230965
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
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 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: 14954.5 lumens
Efficiency: N/A
Efficacy: 134.7 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

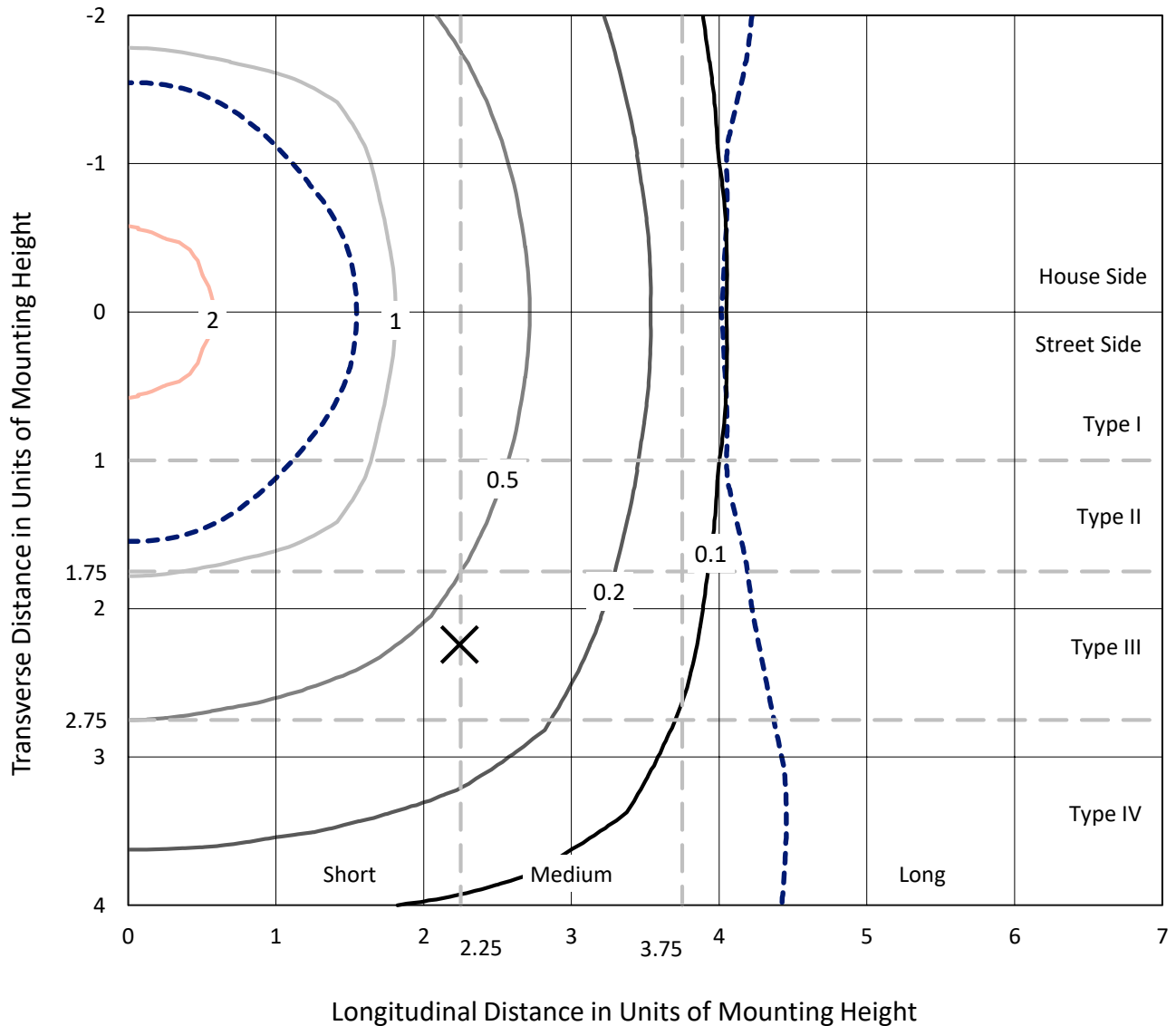
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

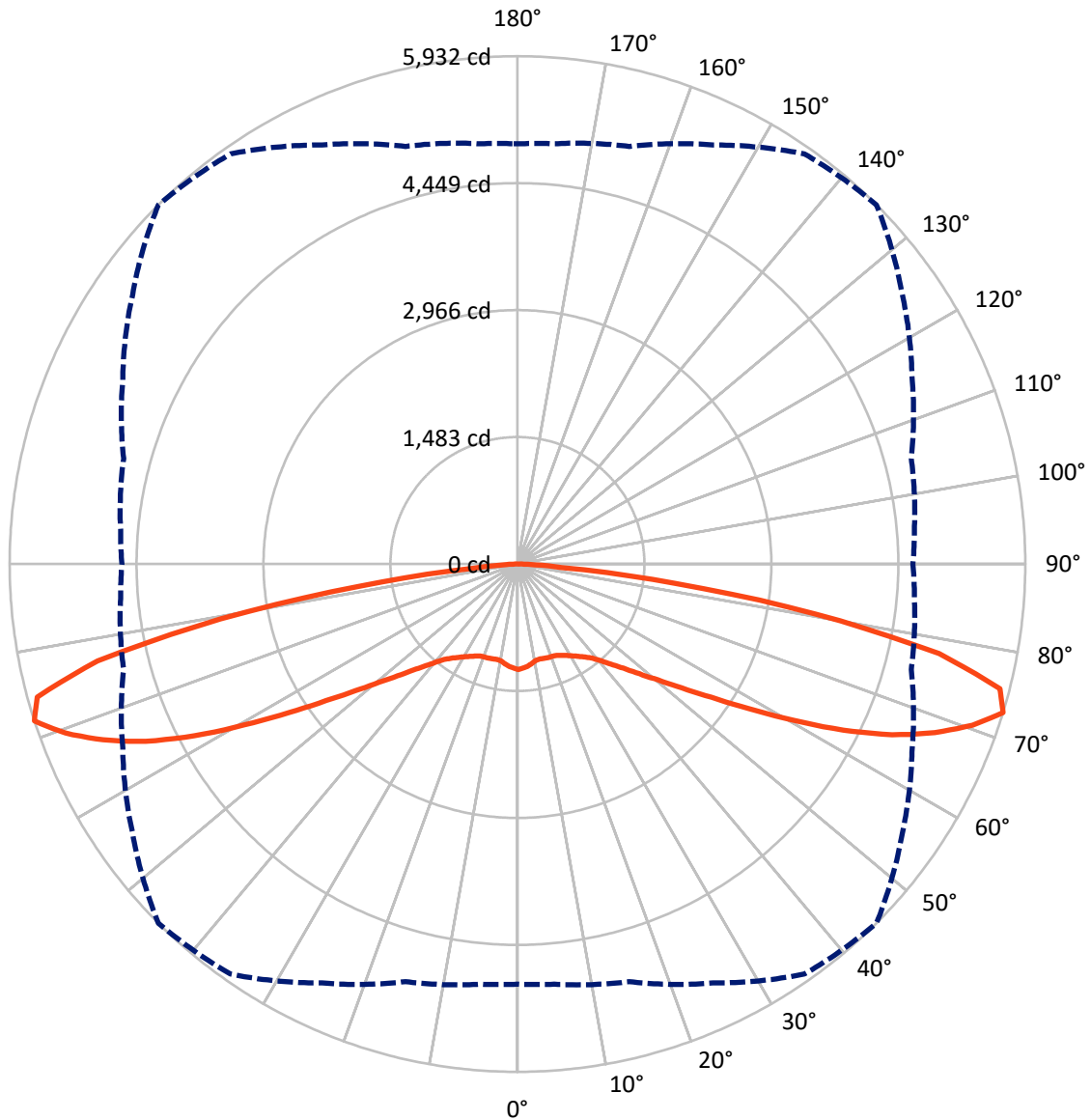
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.1 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	7477.3	0.0	7477.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7477.3	0.0	7477.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	14954.5	0.0	14954.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.4	0.8
10°-20°	327.2	2.2
20°-30°	547.6	3.7
30°-40°	841.4	5.6
40°-50°	1393.2	9.3
50°-60°	2476.8	16.6
60°-70°	4333.0	29.0
70°-80°	4408.5	29.5
80°-90°	513.3	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°	14954.5	100.0
0°-180°	14954.5	100.0



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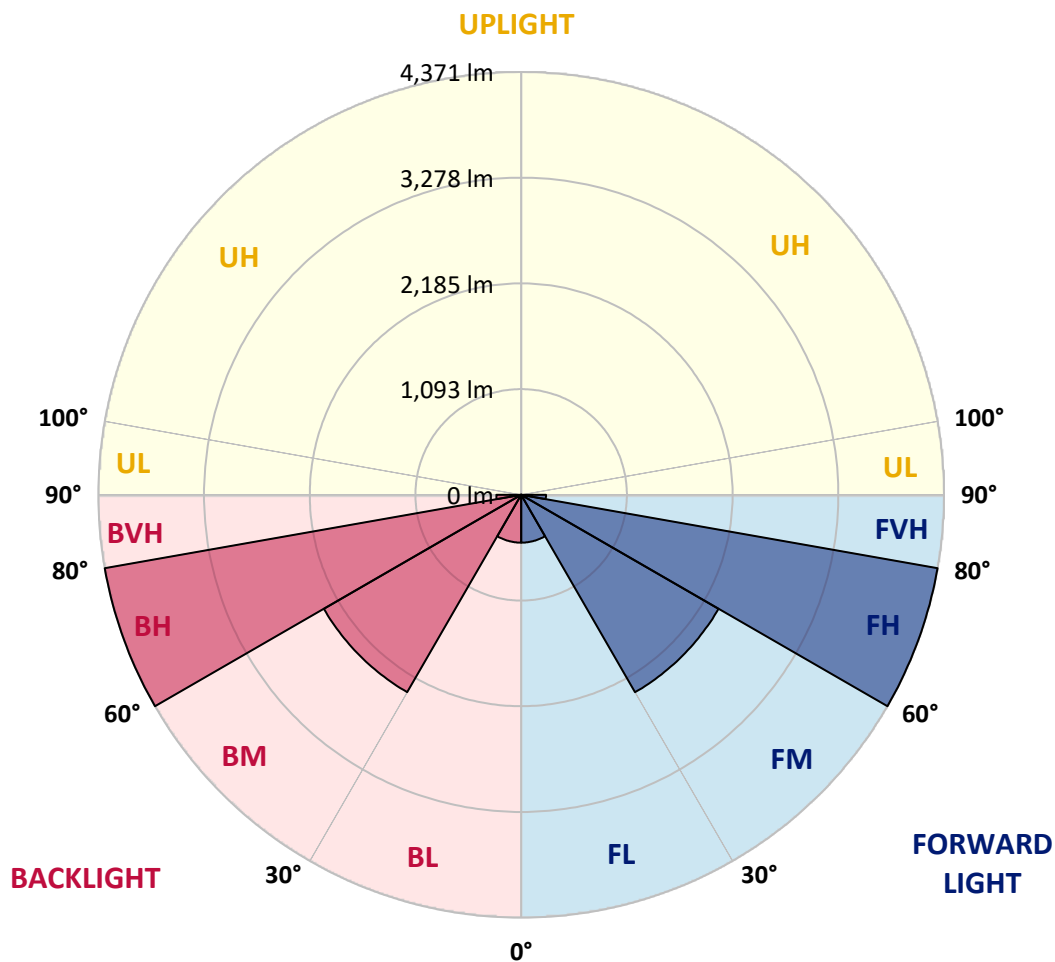
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	494.1	3.3			
FM	(30°-60°)	2355.7	15.8			
FH	(60°-80°)	4370.8	29.2			G2/5000
FVH	(80°-90°)	256.7	1.7			G3/500
BL	(0°-30°)	494.1	3.3	B1/500		
BM	(30°-60°)	2355.7	15.8	B2/2500		
BH	(60°-80°)	4370.8	29.2	B4/5000		G2/5000
BVH	(80°-90°)	256.7	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°	1232.6	1232.6	1232.6	1232.6	1232.6	1232.6	1232.6	1232.6	1232.6	1232.6	1232.6
2.5°	1221.2	1224.1	1218.3	1218.3	1218.3	1215.5	1218.3	1215.5	1218.3	1221.2	1221.2
5°	1209.8	1209.8	1204.1	1204.1	1204.1	1201.3	1204.1	1204.1	1207.0	1209.8	1209.8
7.5°	1184.2	1184.2	1181.4	1178.5	1175.7	1175.7	1178.5	1178.5	1181.4	1184.2	1184.2
10°	1169.9	1167.1	1161.5	1152.9	1150.0	1147.2	1152.9	1158.6	1167.1	1175.7	1172.8
12.5°	1164.3	1161.5	1150.0	1141.5	1135.8	1138.6	1144.4	1150.0	1164.3	1172.8	1169.9
15°	1169.9	1164.3	1150.0	1135.8	1138.6	1144.4	1150.0	1150.0	1167.1	1175.7	1175.7
17.5°	1169.9	1167.1	1150.0	1138.6	1141.5	1150.0	1152.9	1150.0	1164.3	1178.5	1178.5
20°	1172.8	1172.8	1150.0	1141.5	1144.4	1152.9	1155.7	1152.9	1164.3	1181.4	1181.4
22.5°	1178.5	1175.7	1152.9	1147.2	1152.9	1158.6	1161.5	1158.6	1169.9	1184.2	1187.0
25°	1189.9	1184.2	1164.3	1161.5	1172.8	1181.4	1181.4	1175.7	1181.4	1195.6	1195.6
27.5°	1204.1	1201.3	1178.5	1178.5	1192.8	1209.8	1201.3	1189.9	1195.6	1209.8	1209.8
30°	1229.8	1226.9	1204.1	1204.1	1224.1	1244.0	1224.1	1209.8	1218.3	1232.6	1235.4
32.5°	1266.7	1266.7	1246.9	1241.1	1275.3	1283.8	1275.3	1246.9	1252.5	1272.4	1272.4
35°	1329.4	1323.7	1303.8	1300.9	1335.1	1332.2	1329.4	1303.8	1309.5	1332.2	1332.2
37.5°	1412.0	1409.1	1392.0	1383.4	1400.5	1389.2	1394.9	1383.4	1397.7	1414.7	1417.6
40°	1517.2	1514.4	1500.2	1488.8	1494.5	1477.4	1483.1	1488.8	1503.0	1514.4	1517.2
42.5°	1648.2	1648.2	1634.0	1614.0	1605.5	1596.9	1596.9	1608.4	1622.6	1636.8	1636.8
45°	1810.5	1810.5	1793.4	1773.5	1747.8	1733.6	1739.3	1750.7	1767.8	1784.8	1790.6
47.5°	2001.2	2001.2	1978.4	1958.5	1932.9	1915.8	1915.8	1921.5	1947.1	1961.3	1969.9
50°	2214.7	2206.2	2183.4	2163.4	2149.2	2126.4	2129.3	2126.4	2149.2	2169.2	2174.8
52.5°	2436.8	2433.9	2411.1	2405.5	2414.0	2402.6	2402.6	2374.1	2382.7	2394.0	2391.1
55°	2712.9	2704.3	2684.4	2695.8	2729.9	2747.0	2741.3	2695.8	2670.2	2675.8	2673.0
57.5°	3014.6	3006.0	3000.4	3034.5	3111.4	3182.6	3168.3	3063.0	3014.6	3017.5	3020.3
60°	3322.0	3322.0	3339.1	3424.5	3589.6	3706.4	3663.6	3487.1	3401.7	3384.6	3379.0
62.5°	3638.0	3646.5	3683.5	3825.9	4079.2	4272.9	4164.6	3914.1	3786.0	3751.9	3740.5
65°	4005.3	4013.8	4067.9	4244.3	4580.3	4810.8	4625.8	4389.6	4210.2	4139.1	4127.6
67.5°	4537.6	4543.2	4586.0	4756.7	5072.7	5257.8	5067.1	4856.4	4662.8	4580.3	4574.5
70°	5015.8	5021.5	5058.5	5283.3	5573.8	5639.2	5428.6	5161.0	4958.9	4893.4	4882.0
72.5°	4907.6	4927.6	5050.0	5400.1	5847.0	5932.4	5488.3	5086.9	4762.4	4654.3	4620.2
75°	4116.3	4147.6	4341.1	4867.8	5579.5	5821.4	5135.3	4398.1	3914.1	3706.4	3652.2
77.5°	2402.6	2519.3	2852.3	3527.0	4543.2	5035.7	4230.1	3219.5	2405.5	2063.8	1949.9
80°	657.6	720.2	962.2	1622.6	2849.5	3527.0	2698.6	1477.4	797.1	597.8	555.1
82.5°	207.8	276.1	350.2	466.9	1118.7	1858.9	1002.0	435.6	341.6	281.8	250.5
85°	111.0	119.6	196.4	227.7	335.9	520.9	310.3	227.7	205.0	150.9	142.3
87.5°	57.0	59.7	111.0	111.0	148.0	122.4	133.8	122.4	116.7	74.1	65.5
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)