

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: P230968

Luminaire Tested: **ARCH-M-AF48-140-D-U-5WQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230968
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-AF48-140-D-U-5WQ
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 905mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17838.2 lumens
Efficiency: N/A
Efficacy: 126.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U0 - G3

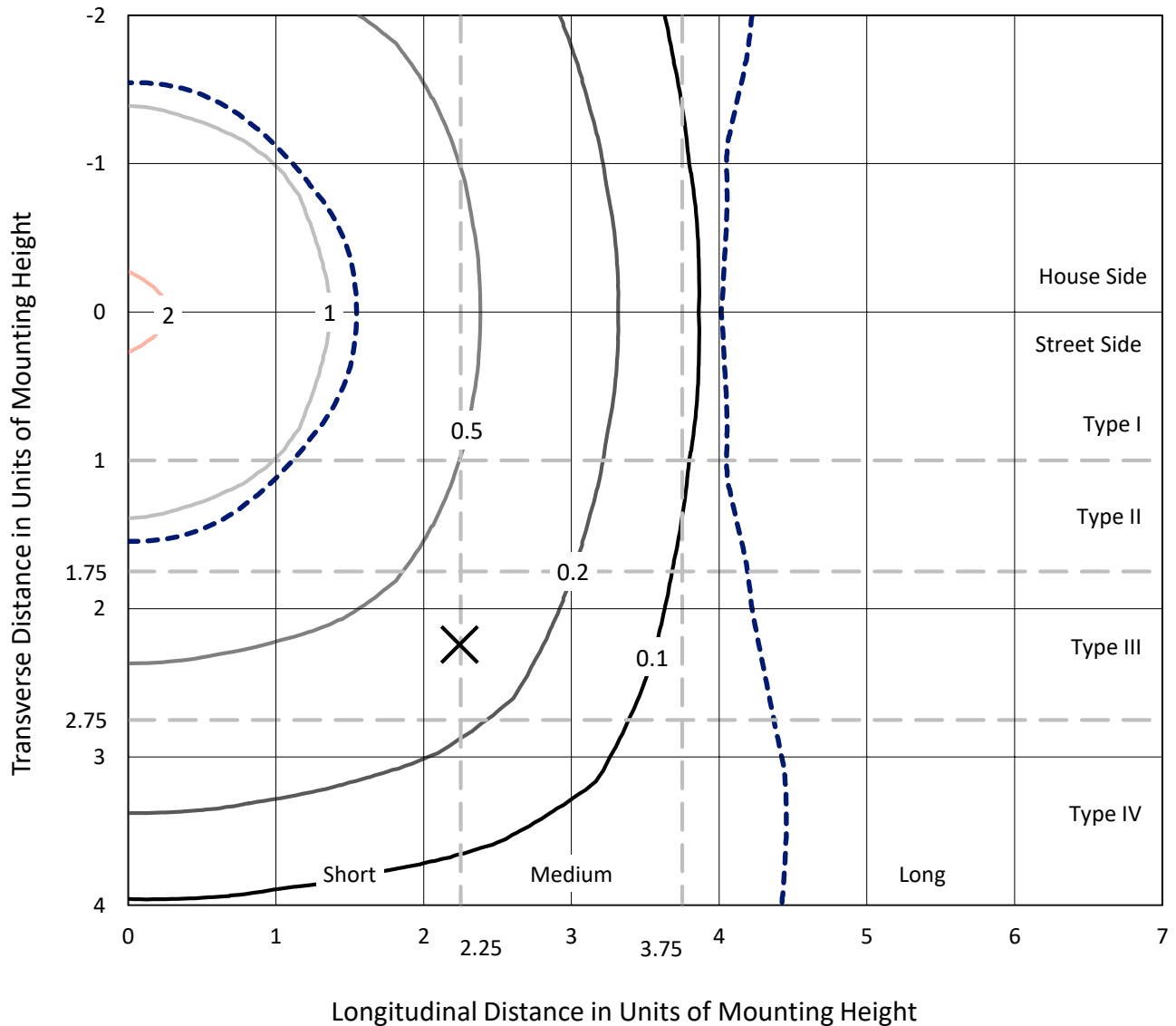
Input Watts (W): 141
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

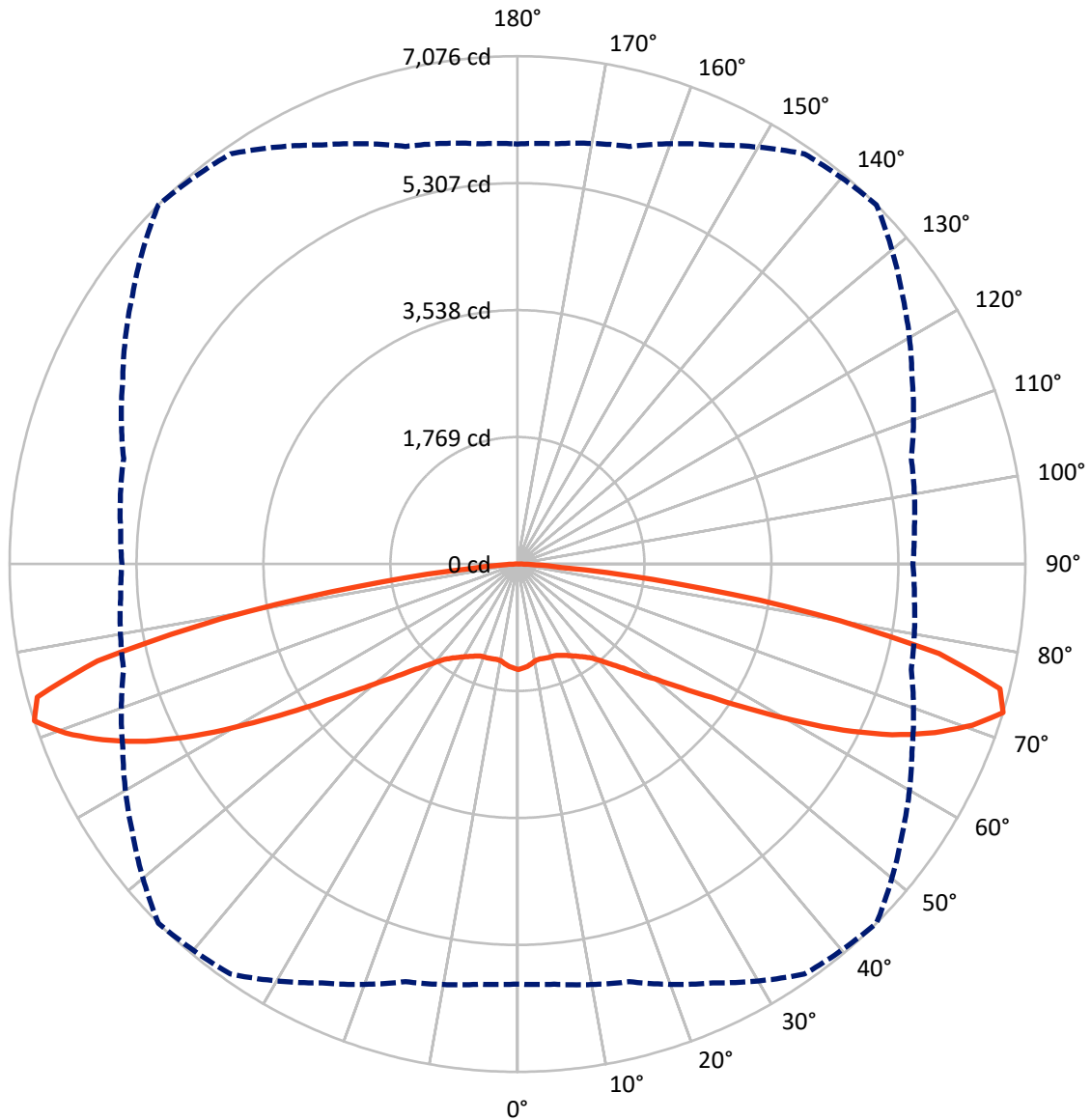
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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	8919.1	0.0	8919.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8919.1	0.0	8919.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	17838.2	0.0	17838.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.3	0.8
10°-20°	390.3	2.2
20°-30°	653.2	3.7
30°-40°	1003.6	5.6
40°-50°	1661.8	9.3
50°-60°	2954.4	16.6
60°-70°	5168.6	29.0
70°-80°	5258.6	29.5
80°-90°	612.3	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°	17838.2	100.0
0°-180°	17838.2	100.0



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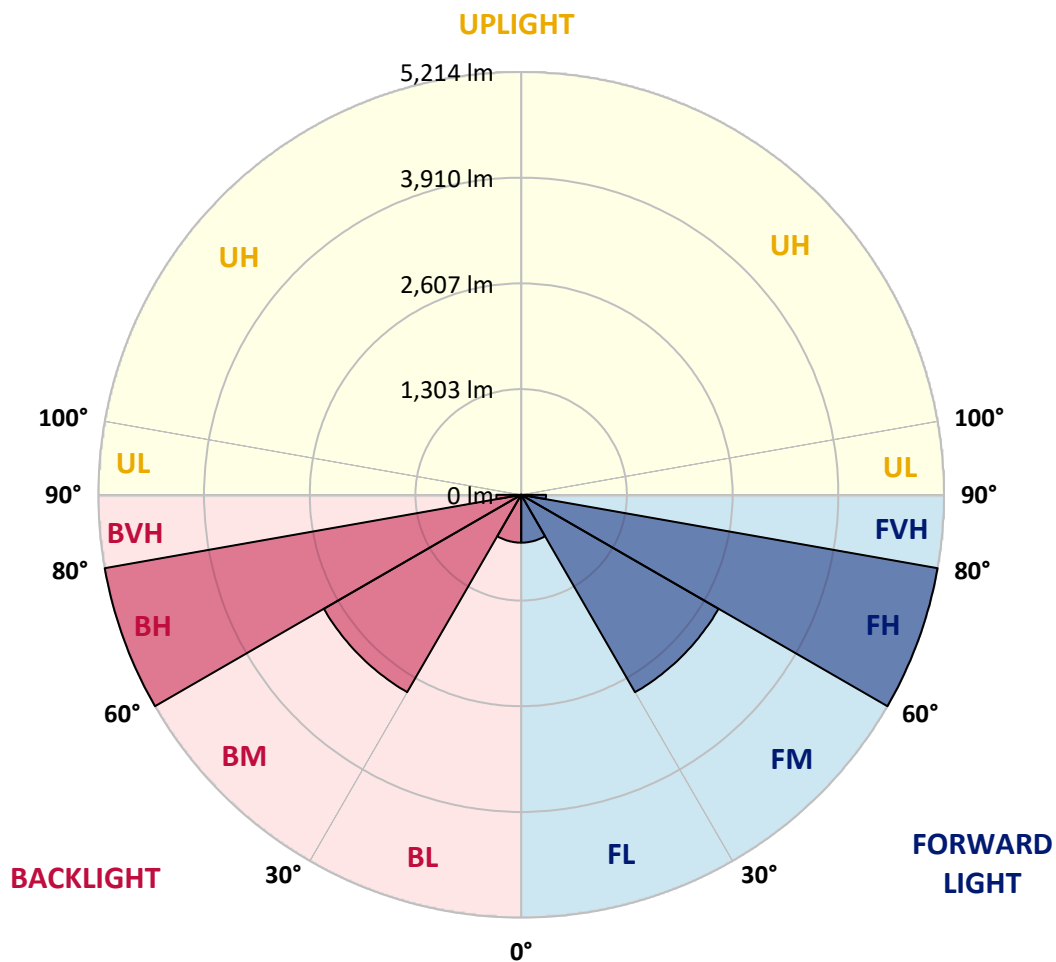
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	589.4	3.3			
FM	(30°-60°)	2809.9	15.8			
FH	(60°-80°)	5213.6	29.2			G3/7500
FVH	(80°-90°)	306.2	1.7			G3/500
BL	(0°-30°)	589.4	3.3	B2/1000		
BM	(30°-60°)	2809.9	15.8	B3/5000		
BH	(60°-80°)	5213.6	29.2	B5		G3/7500
BVH	(80°-90°)	306.2	1.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3
2.5°	1456.7	1460.1	1453.3	1453.3	1453.3	1449.9	1453.3	1449.9	1453.3	1456.7	1456.7
5°	1443.1	1443.1	1436.3	1436.3	1436.3	1432.9	1436.3	1436.3	1439.7	1443.1	1443.1
7.5°	1412.6	1412.6	1409.1	1405.7	1402.4	1402.4	1405.7	1405.7	1409.1	1412.6	1412.6
10°	1395.6	1392.2	1385.4	1375.3	1371.8	1368.4	1375.3	1382.0	1392.2	1402.4	1399.0
12.5°	1388.8	1385.4	1371.8	1361.6	1354.8	1358.3	1365.0	1371.8	1388.8	1399.0	1395.6
15°	1395.6	1388.8	1371.8	1354.8	1358.3	1365.0	1371.8	1371.8	1392.2	1402.4	1402.4
17.5°	1395.6	1392.2	1371.8	1358.3	1361.6	1371.8	1375.3	1371.8	1388.8	1405.7	1405.7
20°	1399.0	1399.0	1371.8	1361.6	1365.0	1375.3	1378.6	1375.3	1388.8	1409.1	1409.1
22.5°	1405.7	1402.4	1375.3	1368.4	1375.3	1382.0	1385.4	1382.0	1395.6	1412.6	1416.0
25°	1419.3	1412.6	1388.8	1385.4	1399.0	1409.1	1409.1	1402.4	1409.1	1426.1	1426.1
27.5°	1436.3	1432.9	1405.7	1405.7	1422.7	1443.1	1432.9	1419.3	1426.1	1443.1	1443.1
30°	1466.9	1463.5	1436.3	1436.3	1460.1	1483.9	1460.1	1443.1	1453.3	1470.3	1473.7
32.5°	1511.0	1511.0	1487.3	1480.5	1521.2	1531.4	1521.2	1487.3	1494.0	1517.9	1517.9
35°	1585.8	1578.9	1555.2	1551.8	1592.5	1589.2	1585.8	1555.2	1561.9	1589.2	1589.2
37.5°	1684.2	1680.8	1660.5	1650.2	1670.6	1657.1	1663.8	1650.2	1667.2	1687.6	1691.0
40°	1809.8	1806.4	1789.4	1775.8	1782.7	1762.3	1769.1	1775.8	1792.8	1806.4	1809.8
42.5°	1966.0	1966.0	1949.0	1925.3	1915.1	1904.9	1904.9	1918.5	1935.5	1952.4	1952.4
45°	2159.6	2159.6	2139.2	2115.5	2084.9	2067.9	2074.6	2088.3	2108.6	2129.1	2135.8
47.5°	2387.1	2387.1	2359.9	2336.1	2305.6	2285.3	2285.3	2292.0	2322.6	2339.6	2349.7
50°	2641.8	2631.5	2604.4	2580.6	2563.6	2536.5	2539.9	2536.5	2563.6	2587.5	2594.2
52.5°	2906.6	2903.2	2876.0	2869.3	2879.4	2865.9	2865.9	2831.9	2842.1	2855.7	2852.3
55°	3236.0	3225.8	3202.0	3215.6	3256.4	3276.7	3270.0	3215.6	3185.1	3191.8	3188.4
57.5°	3595.9	3585.7	3578.9	3619.7	3711.4	3796.3	3779.3	3653.7	3595.9	3599.4	3602.7
60°	3962.6	3962.6	3983.0	4084.8	4281.9	4421.0	4370.1	4159.6	4057.7	4037.4	4030.5
62.5°	4339.6	4349.7	4393.9	4563.7	4865.9	5096.8	4967.8	4669.0	4516.1	4475.4	4461.8
65°	4777.6	4787.7	4852.3	5062.8	5463.5	5738.5	5517.8	5236.0	5022.1	4937.2	4923.6
67.5°	5412.5	5419.3	5470.2	5674.0	6051.0	6271.6	6044.1	5792.9	5562.0	5463.5	5456.7
70°	5983.0	5989.8	6034.0	6302.2	6648.6	6726.6	6475.4	6156.2	5915.1	5837.0	5823.5
72.5°	5853.9	5877.8	6023.7	6441.4	6974.5	7076.4	6546.7	6067.9	5680.8	5551.8	5511.0
75°	4910.0	4947.4	5178.3	5806.5	6655.3	6944.0	6125.6	5246.2	4669.0	4421.0	4356.5
77.5°	2865.9	3005.1	3402.3	4207.1	5419.3	6006.8	5045.8	3840.4	2869.3	2461.8	2326.0
80°	784.4	859.1	1147.8	1935.5	3399.0	4207.1	3219.0	1762.3	950.7	713.1	662.2
82.5°	247.9	329.4	417.7	556.9	1334.4	2217.3	1195.2	519.6	407.4	336.1	298.8
85°	132.5	142.6	234.3	271.7	400.7	621.3	370.1	271.7	244.5	179.9	169.8
87.5°	67.9	71.3	132.5	132.5	176.6	146.0	159.6	146.0	139.2	88.3	78.1
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)