

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: P214514

Luminaire Tested: **ARCH-AF16-40-D-U-5WQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214514
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-AF16-40-D-U-5WQ
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 740mA LIGHT ENGINE WITH 16 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4961.3 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U0 - G1

Input Watts (W): 42
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

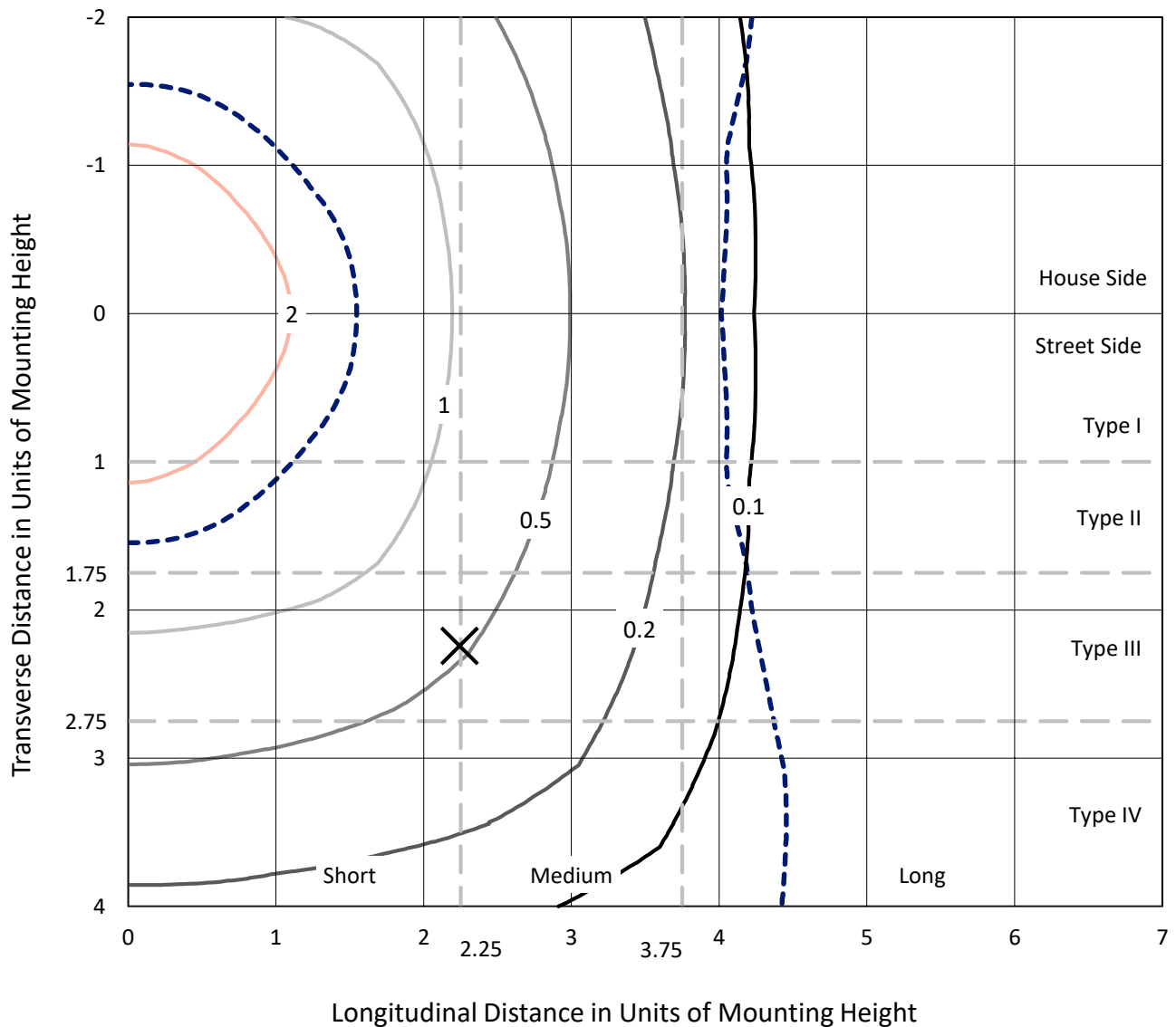


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

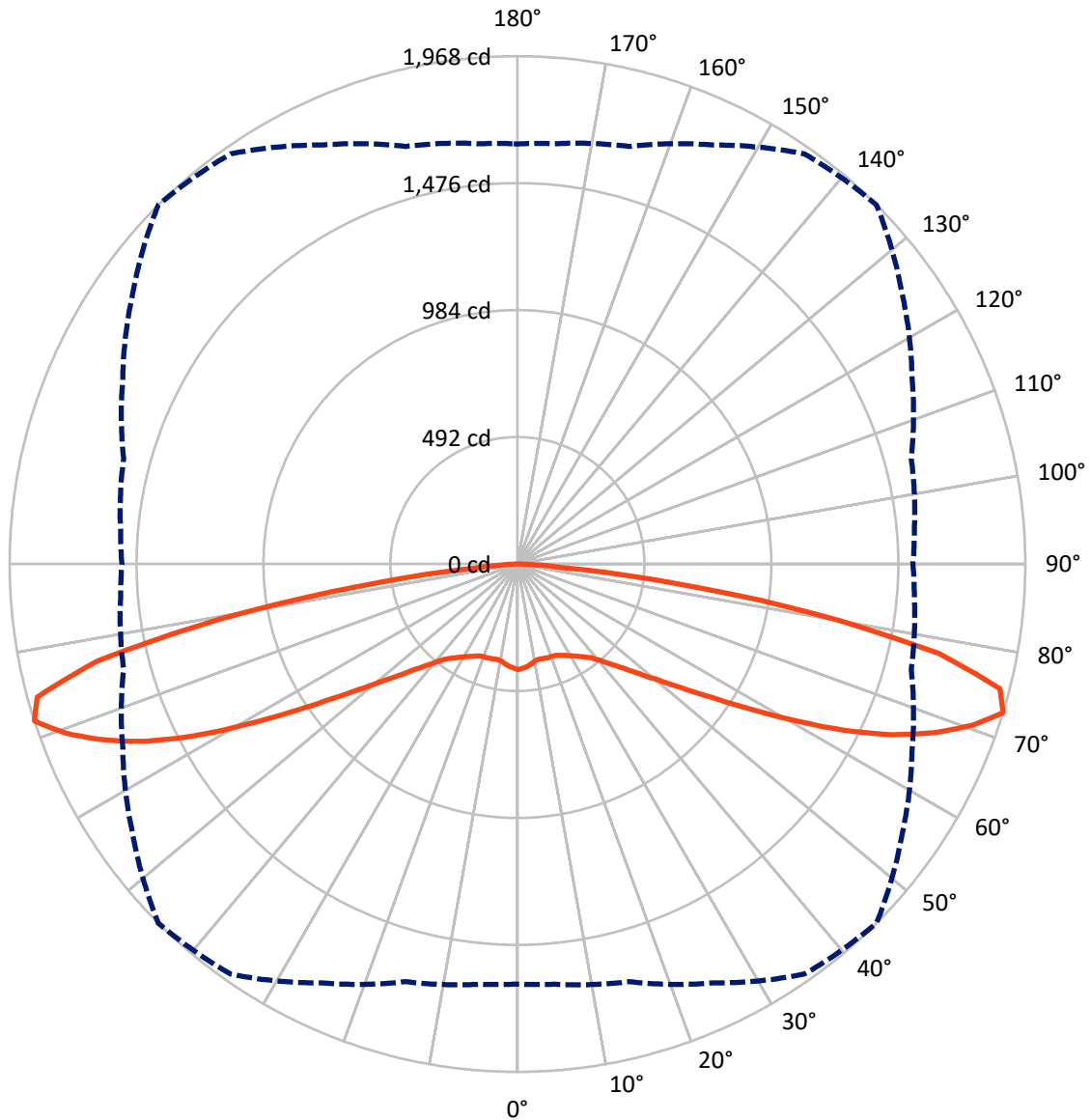


Based on 10 foot mounting height. Maximum calculated value = 4.1 fc
 Type V - Short - Non-Cutoff

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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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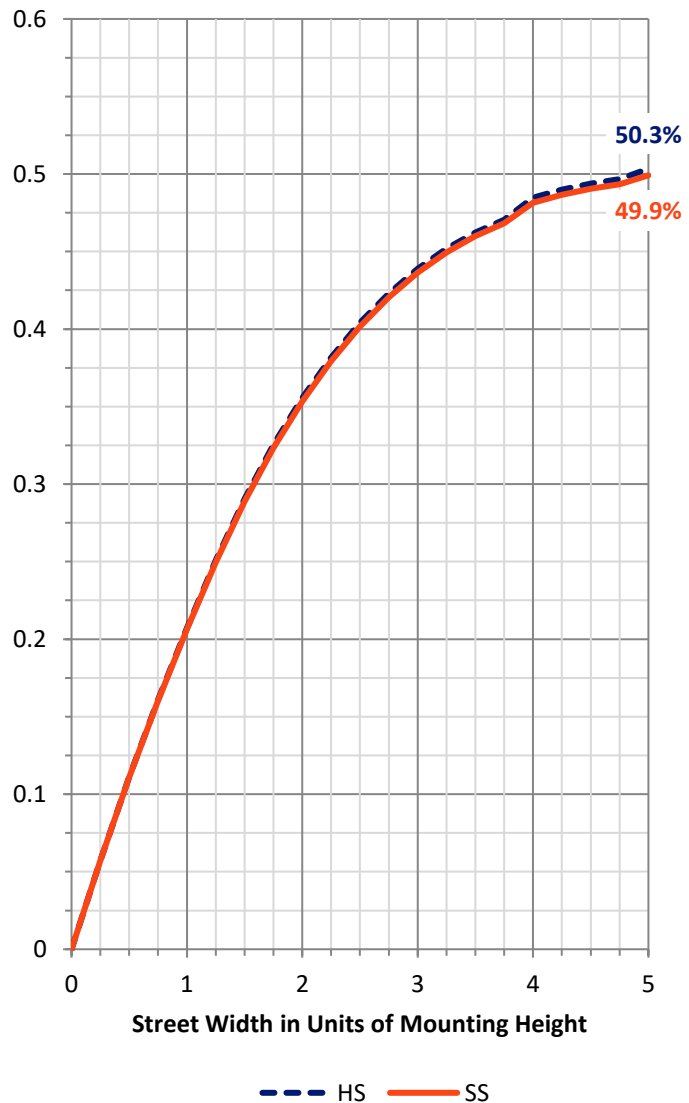
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2480.7	0.0	2480.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2480.7	0.0	2480.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	4961.3	0.0	4961.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.6	0.8
10°-20°	108.6	2.2
20°-30°	181.7	3.7
30°-40°	279.1	5.6
40°-50°	462.2	9.3
50°-60°	821.7	16.6
60°-70°	1437.5	29.0
70°-80°	1462.6	29.5
80°-90°	170.3	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°	4961.3	100.0
0°-180°	4961.3	100.0



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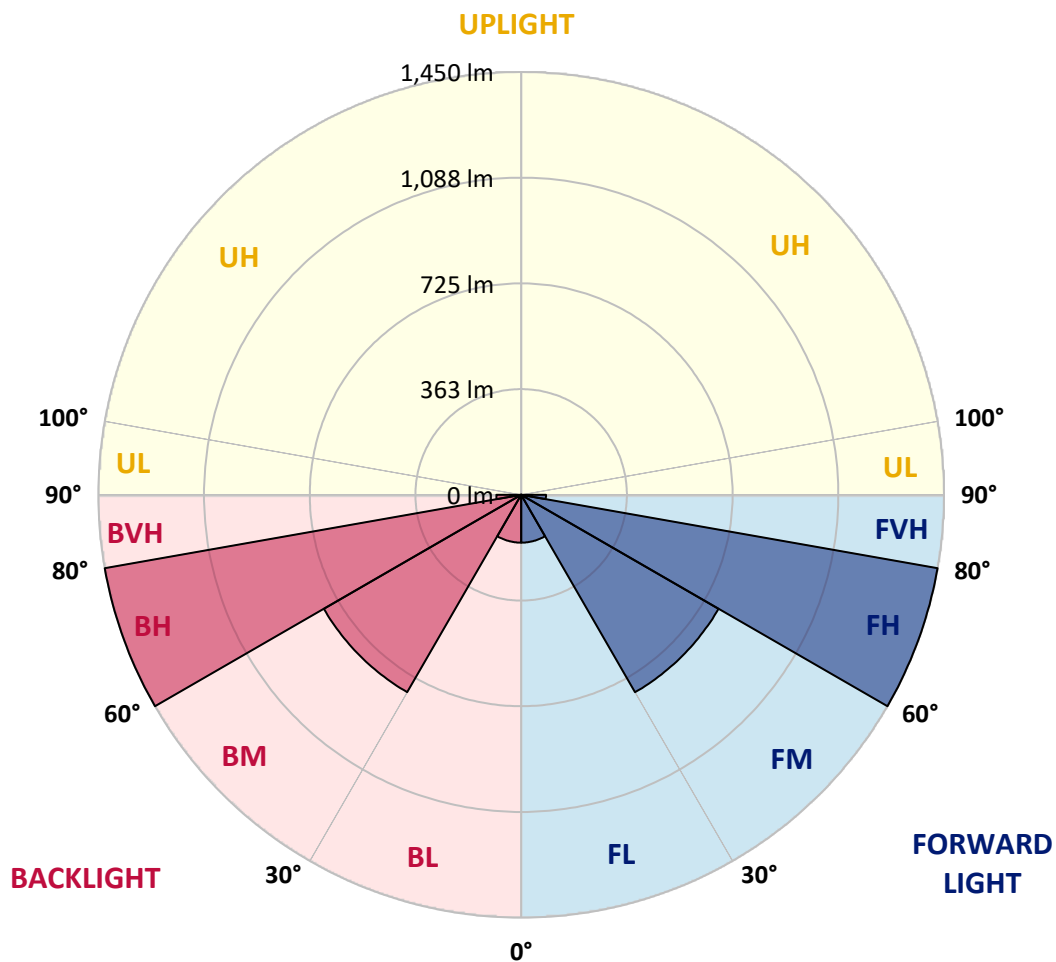
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	163.9	3.3			
FM (30°-60°)	781.5	15.8			
FH (60°-80°)	1450.1	29.2			G1/1800
FVH (80°-90°)	85.2	1.7			G1/100
BL (0°-30°)	163.9	3.3	B1/500		
BM (30°-60°)	781.5	15.8	B1/1000		
BH (60°-80°)	1450.1	29.2	B3/2500		G1/1800
BVH (80°-90°)	85.2	1.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	409.0	409.0	409.0	409.0	409.0	409.0	409.0	409.0	409.0	409.0	409.0
2.5°	405.2	406.1	404.2	404.2	404.2	403.2	404.2	403.2	404.2	405.2	405.2
5°	401.4	401.4	399.5	399.5	399.5	398.5	399.5	399.5	400.4	401.4	401.4
7.5°	392.9	392.9	391.9	391.0	390.1	390.1	391.0	391.0	391.9	392.9	392.9
10°	388.1	387.2	385.3	382.5	381.6	380.6	382.5	384.3	387.2	390.1	389.1
12.5°	386.3	385.3	381.6	378.7	376.9	377.8	379.6	381.6	386.3	389.1	388.1
15°	388.1	386.3	381.6	376.9	377.8	379.6	381.6	381.6	387.2	390.1	390.1
17.5°	388.1	387.2	381.6	377.8	378.7	381.6	382.5	381.6	386.3	391.0	391.0
20°	389.1	389.1	381.6	378.7	379.6	382.5	383.4	382.5	386.3	391.9	391.9
22.5°	391.0	390.1	382.5	380.6	382.5	384.3	385.3	384.3	388.1	392.9	393.8
25°	394.8	392.9	386.3	385.3	389.1	391.9	391.9	390.1	391.9	396.7	396.7
27.5°	399.5	398.5	391.0	391.0	395.7	401.4	398.5	394.8	396.7	401.4	401.4
30°	408.0	407.0	399.5	399.5	406.1	412.7	406.1	401.4	404.2	409.0	409.9
32.5°	420.2	420.2	413.7	411.7	423.1	426.0	423.1	413.7	415.5	422.2	422.2
35°	441.0	439.2	432.5	431.6	442.9	442.0	441.0	432.5	434.4	442.0	442.0
37.5°	468.4	467.5	461.9	459.0	464.6	460.8	462.8	459.0	463.7	469.3	470.4
40°	503.4	502.5	497.7	493.9	495.8	490.1	492.0	493.9	498.7	502.5	503.4
42.5°	546.8	546.8	542.1	535.5	532.7	529.8	529.8	533.6	538.3	543.0	543.0
45°	600.7	600.7	594.9	588.4	579.9	575.1	577.0	580.8	586.5	592.2	594.0
47.5°	663.9	663.9	656.3	649.8	641.3	635.6	635.6	637.5	646.0	650.7	653.6
50°	734.8	731.9	724.4	717.7	713.0	705.4	706.4	705.4	713.0	719.6	721.5
52.5°	808.4	807.4	799.9	798.0	800.9	797.1	797.1	787.7	790.4	794.2	793.3
55°	900.0	897.2	890.6	894.4	905.7	911.3	909.5	894.4	885.9	887.7	886.8
57.5°	1000.1	997.3	995.4	1006.7	1032.3	1055.9	1051.1	1016.2	1000.1	1001.1	1002.0
60°	1102.1	1102.1	1107.8	1136.1	1190.9	1229.6	1215.5	1156.9	1128.5	1122.9	1121.1
62.5°	1207.0	1209.7	1222.0	1269.3	1353.4	1417.5	1381.7	1298.5	1256.1	1244.7	1240.9
65°	1328.8	1331.6	1349.6	1408.1	1519.6	1596.0	1534.6	1456.3	1396.7	1373.2	1369.4
67.5°	1505.4	1507.3	1521.4	1578.1	1683.0	1744.3	1681.0	1611.1	1546.9	1519.6	1517.6
70°	1664.0	1666.0	1678.3	1752.8	1849.2	1870.9	1801.0	1712.2	1645.1	1623.4	1619.6
72.5°	1628.1	1634.8	1675.4	1791.5	1939.8	1968.2	1820.9	1687.7	1579.9	1544.1	1532.8
75°	1365.6	1376.0	1440.2	1614.9	1851.0	1931.3	1703.7	1459.1	1298.5	1229.6	1211.7
77.5°	797.1	835.8	946.3	1170.2	1507.3	1670.7	1403.4	1068.2	798.0	684.7	646.9
80°	218.2	239.0	319.2	538.3	945.3	1170.2	895.3	490.1	264.4	198.4	184.1
82.5°	68.9	91.7	116.2	154.9	371.1	616.7	332.5	144.5	113.3	93.5	83.1
85°	36.8	39.7	65.2	75.6	111.4	172.8	102.9	75.6	68.0	50.0	47.3
87.5°	18.9	19.8	36.8	36.8	49.1	40.6	44.4	40.6	38.8	24.6	21.7
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)