

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: P234670

Luminaire Tested: **ARCH-AF16-40-D-U-5WQ-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234670
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-8027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 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: 3768 lumens
Efficiency: N/A
Efficacy: 89.7 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

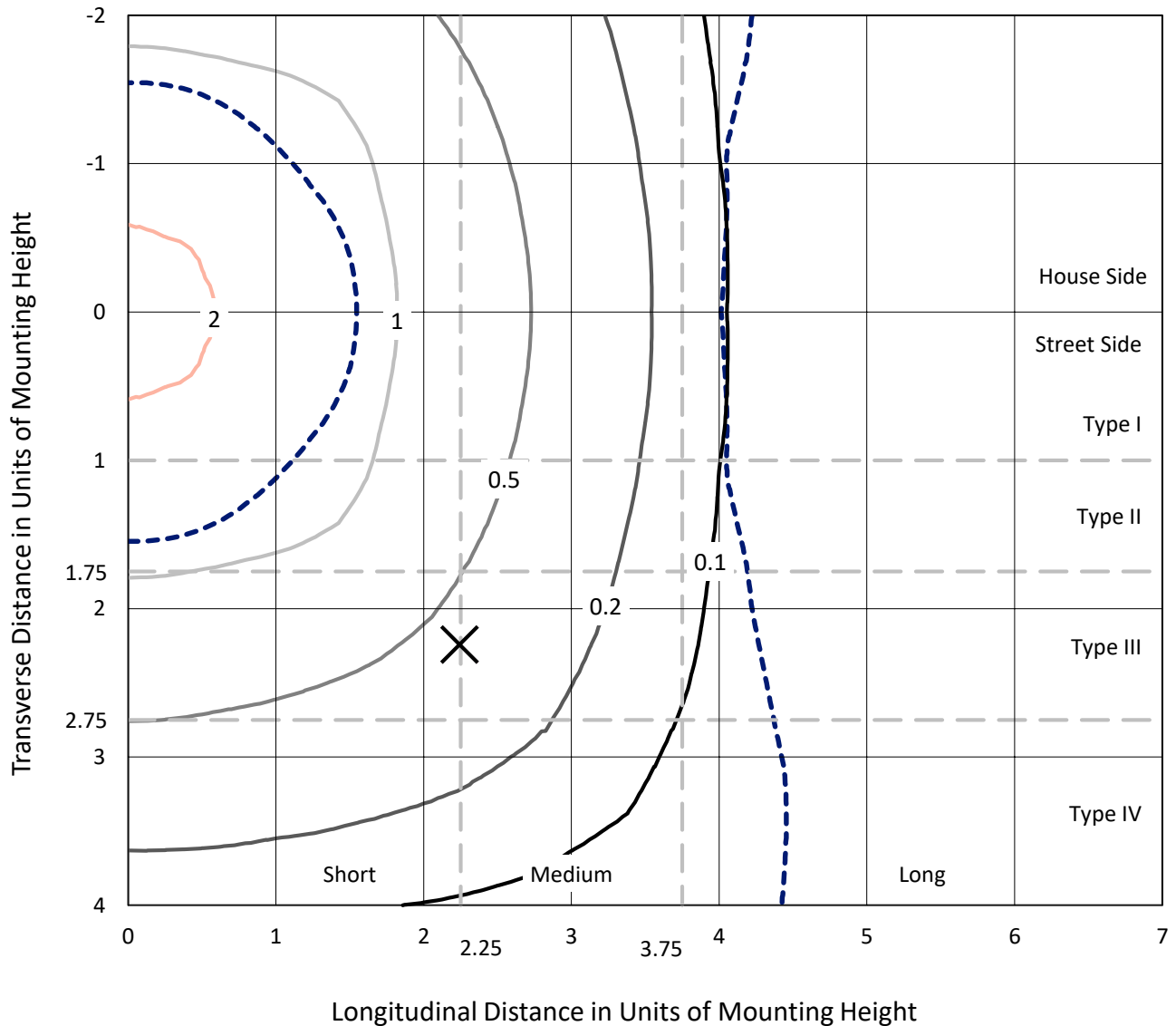


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

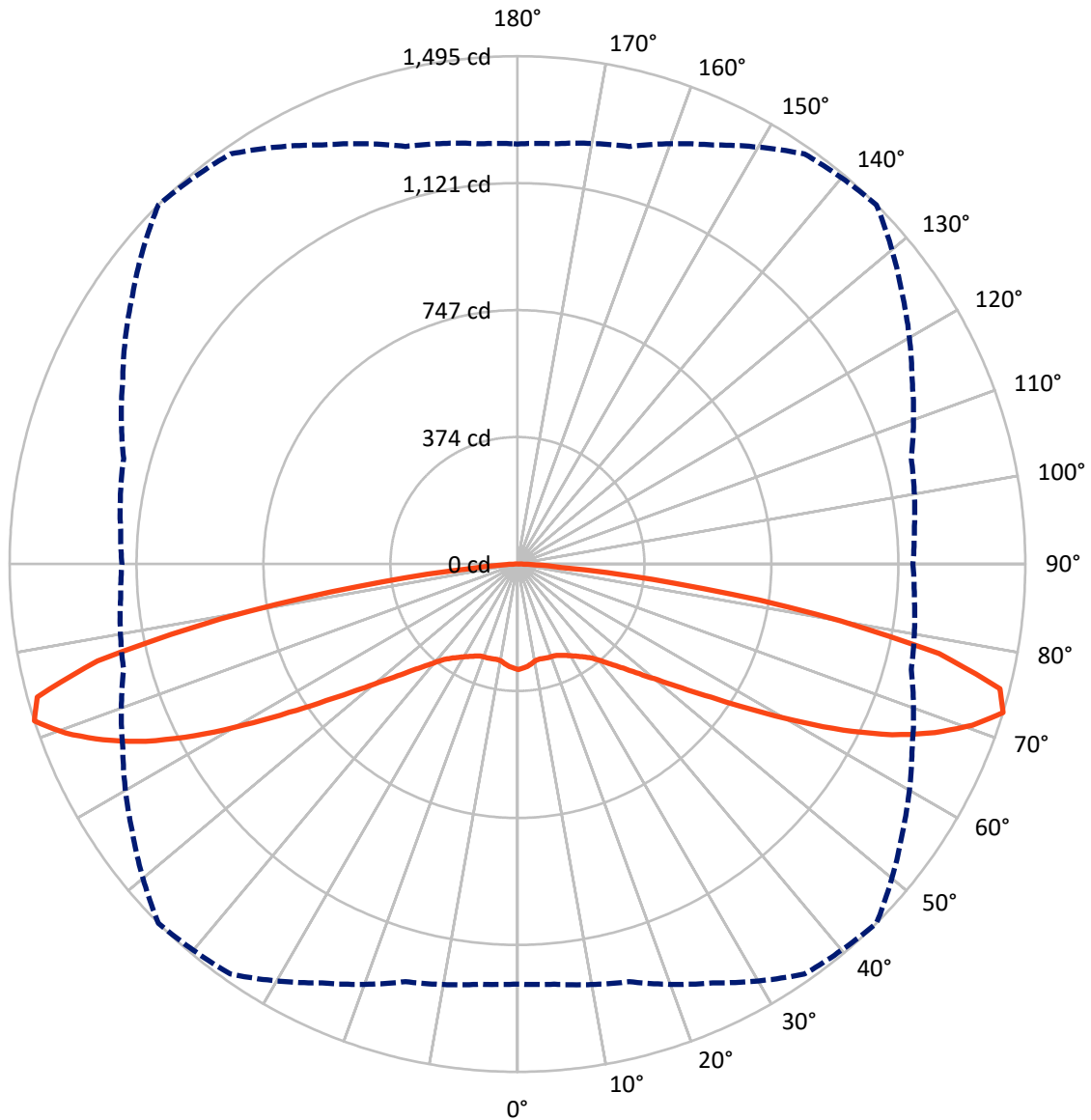


Based on 10 foot mounting height. Maximum calculated value = 3.1 fc
 Type V - Short - Non-Cutoff

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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	1884.0	0.0	1884.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1884.0	0.0	1884.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	3768.0	0.0	3768.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.6	0.8
10°-20°	82.5	2.2
20°-30°	138.0	3.7
30°-40°	212.0	5.6
40°-50°	351.0	9.3
50°-60°	624.1	16.6
60°-70°	1091.8	29.0
70°-80°	1110.8	29.5
80°-90°	129.3	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°	3768.0	100.0
0°-180°	3768.0	100.0



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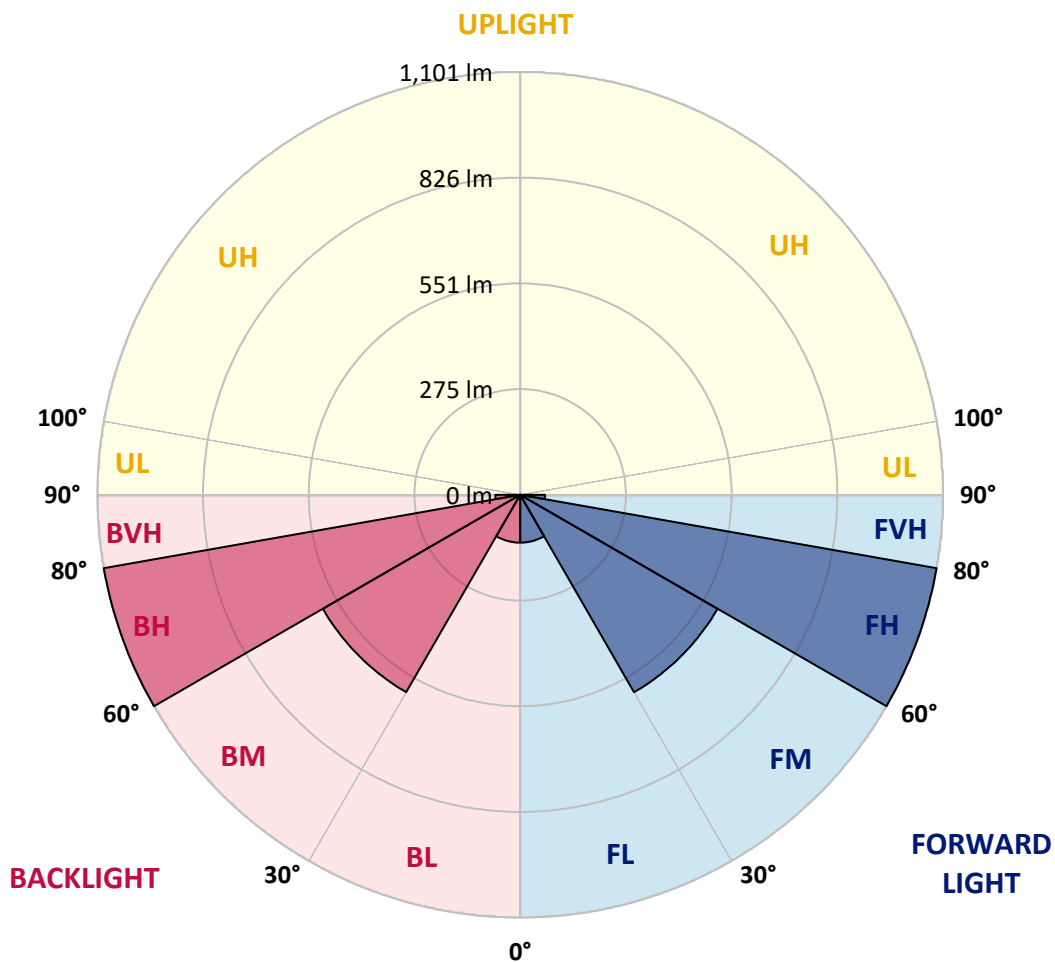
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	124.5	3.3			
FM (30°-60°)	593.5	15.8			
FH (60°-80°)	1101.3	29.2			G1/1800
FVH (80°-90°)	64.7	1.7			G1/100
BL (0°-30°)	124.5	3.3	B1/500		
BM (30°-60°)	593.5	15.8	B1/1000		
BH (60°-80°)	1101.3	29.2	B3/2500		G1/1800
BVH (80°-90°)	64.7	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°	310.6	310.6	310.6	310.6	310.6	310.6	310.6	310.6	310.6	310.6	310.6
2.5°	307.7	308.4	307.0	307.0	307.0	306.3	307.0	306.3	307.0	307.7	307.7
5°	304.8	304.8	303.4	303.4	303.4	302.7	303.4	303.4	304.1	304.8	304.8
7.5°	298.4	298.4	297.7	296.9	296.2	296.2	296.9	296.9	297.7	298.4	298.4
10°	294.8	294.1	292.6	290.5	289.8	289.1	290.5	291.9	294.1	296.2	295.5
12.5°	293.4	292.6	289.8	287.6	286.2	286.9	288.3	289.8	293.4	295.5	294.8
15°	294.8	293.4	289.8	286.2	286.9	288.3	289.8	289.8	294.1	296.2	296.2
17.5°	294.8	294.1	289.8	286.9	287.6	289.8	290.5	289.8	293.4	296.9	296.9
20°	295.5	295.5	289.8	287.6	288.3	290.5	291.2	290.5	293.4	297.7	297.7
22.5°	296.9	296.2	290.5	289.1	290.5	291.9	292.6	291.9	294.8	298.4	299.1
25°	299.8	298.4	293.4	292.6	295.5	297.7	297.7	296.2	297.7	301.2	301.2
27.5°	303.4	302.7	296.9	296.9	300.5	304.8	302.7	299.8	301.2	304.8	304.8
30°	309.9	309.1	303.4	303.4	308.4	313.4	308.4	304.8	307.0	310.6	311.3
32.5°	319.2	319.2	314.2	312.7	321.3	323.5	321.3	314.2	315.6	320.6	320.6
35°	335.0	333.5	328.5	327.8	336.4	335.7	335.0	328.5	329.9	335.7	335.7
37.5°	355.8	355.0	350.7	348.6	352.9	350.0	351.5	348.6	352.2	356.5	357.2
40°	382.3	381.6	378.0	375.1	376.6	372.3	373.7	375.1	378.7	381.6	382.3
42.5°	415.3	415.3	411.7	406.7	404.5	402.4	402.4	405.2	408.8	412.4	412.4
45°	456.2	456.2	451.9	446.8	440.4	436.8	438.2	441.1	445.4	449.7	451.2
47.5°	504.2	504.2	498.5	493.5	487.0	482.7	482.7	484.1	490.6	494.2	496.3
50°	558.0	555.9	550.1	545.1	541.5	535.8	536.5	535.8	541.5	546.5	548.0
52.5°	614.0	613.3	607.5	606.1	608.2	605.4	605.4	598.2	600.3	603.2	602.5
55°	683.5	681.4	676.4	679.2	687.8	692.1	690.7	679.2	672.8	674.2	673.5
57.5°	759.6	757.4	756.0	764.6	784.0	801.9	798.3	771.8	759.6	760.3	761.0
60°	837.0	837.0	841.3	862.9	904.5	933.9	923.1	878.6	857.1	852.8	851.4
62.5°	916.6	918.8	928.1	964.0	1027.8	1076.6	1049.3	986.2	953.9	945.3	942.5
65°	1009.2	1011.3	1025.0	1069.4	1154.1	1212.2	1165.5	1106.0	1060.8	1042.9	1040.0
67.5°	1143.3	1144.7	1155.5	1198.5	1278.1	1324.8	1276.7	1223.6	1174.9	1154.1	1152.6
70°	1263.8	1265.2	1274.6	1331.2	1404.4	1420.9	1367.8	1300.4	1249.5	1233.0	1230.1
72.5°	1236.5	1241.6	1272.4	1360.6	1473.2	1494.8	1382.9	1281.7	1200.0	1172.7	1164.1
75°	1037.1	1045.0	1093.8	1226.5	1405.8	1466.8	1293.9	1108.2	986.2	933.9	920.2
77.5°	605.4	634.8	718.7	888.7	1144.7	1268.8	1065.8	811.2	606.1	520.0	491.3
80°	165.7	181.5	242.4	408.8	718.0	888.7	680.0	372.3	200.8	150.6	139.9
82.5°	52.4	69.6	88.2	117.6	281.9	468.4	252.5	109.7	86.1	71.0	63.1
85°	28.0	30.1	49.5	57.4	84.6	131.3	78.2	57.4	51.6	38.0	35.9
87.5°	14.3	15.1	28.0	28.0	37.3	30.8	33.7	30.8	29.4	18.6	16.5
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)