

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: P234671

Luminaire Tested: **ARCH-AF16-50-D-U-5WQ-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234671
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-AF16-50-D-U-5WQ-8027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 980mA LIGHT ENGINE WITH 16 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4733 lumens
Efficiency: N/A
Efficacy: 89.3 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): 53
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

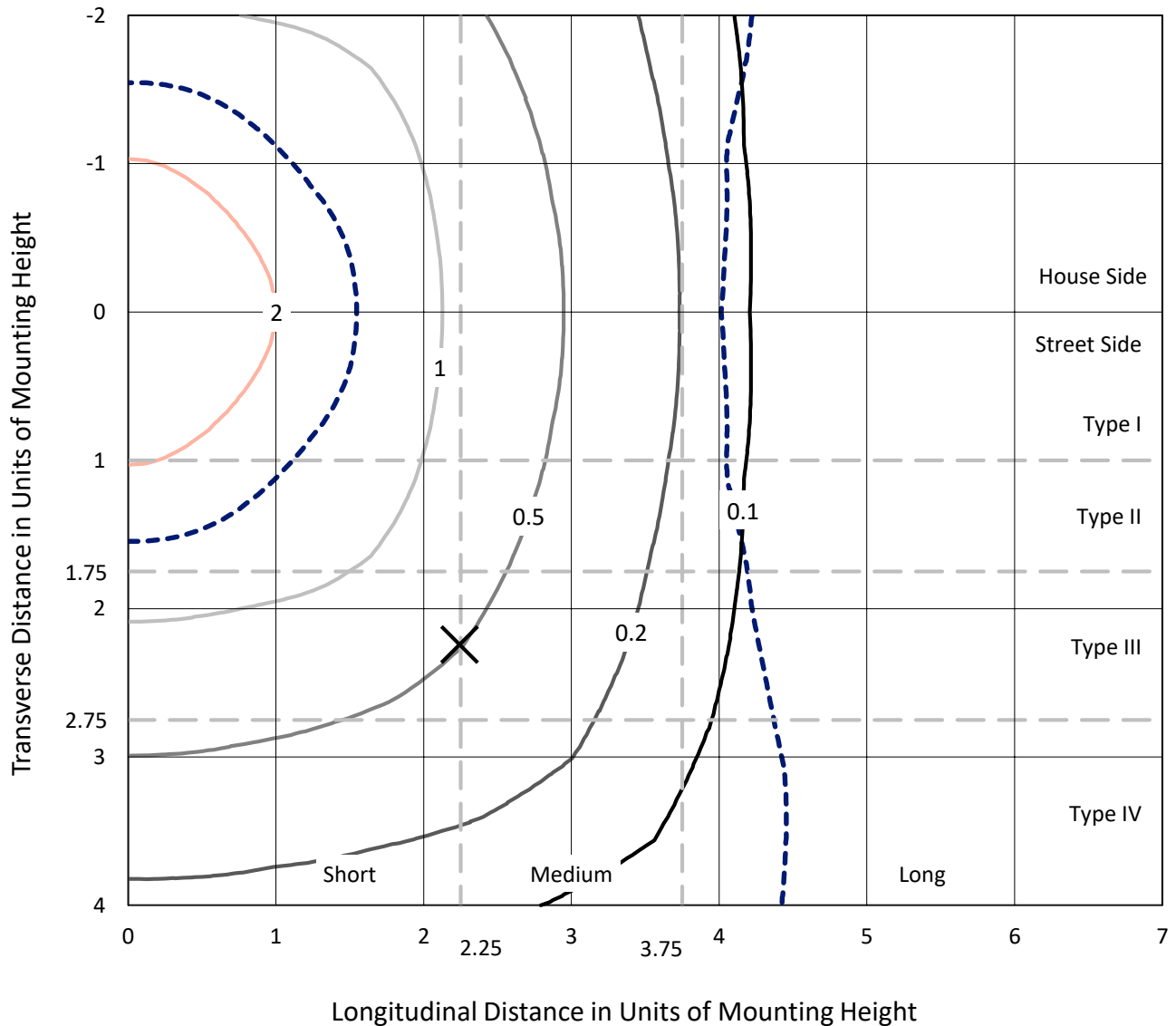


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

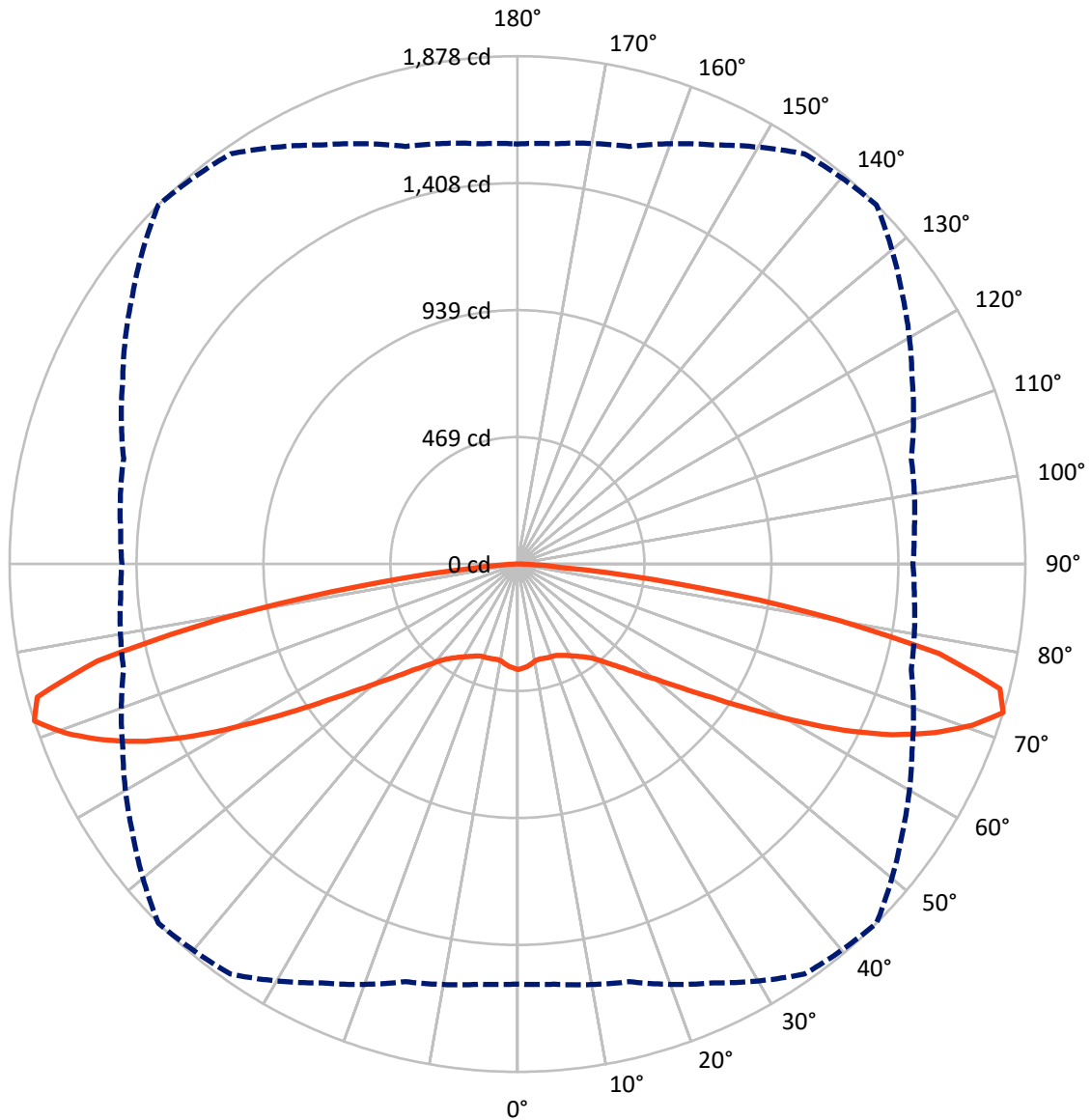


Based on 10 foot mounting height. Maximum calculated value = 3.9 fc
 Type V - Short - Non-Cutoff

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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	2366.5	0.0	2366.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2366.5	0.0	2366.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	4733.0	0.0	4733.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.9	0.8
10°-20°	103.6	2.2
20°-30°	173.3	3.7
30°-40°	266.3	5.6
40°-50°	440.9	9.3
50°-60°	783.9	16.6
60°-70°	1371.4	29.0
70°-80°	1395.3	29.5
80°-90°	162.5	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°	4733.0	100.0
0°-180°	4733.0	100.0



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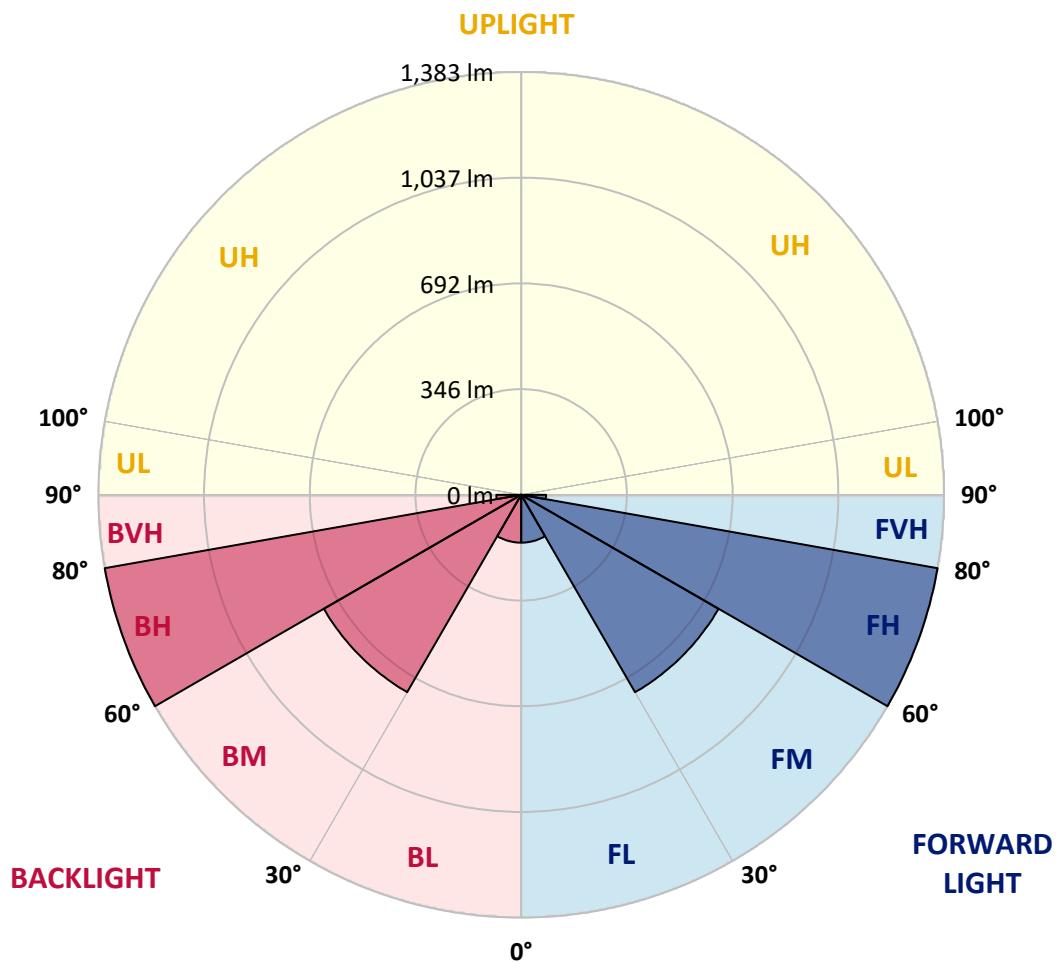
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	156.4	3.3			
FM	(30°-60°)	745.5	15.8			
FH	(60°-80°)	1383.3	29.2			G1/1800
FVH	(80°-90°)	81.2	1.7			G1/100
BL	(0°-30°)	156.4	3.3	B1/500		
BM	(30°-60°)	745.5	15.8	B1/1000		
BH	(60°-80°)	1383.3	29.2	B3/2500		G1/1800
BVH	(80°-90°)	81.2	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°	390.1	390.1	390.1	390.1	390.1	390.1	390.1	390.1	390.1	390.1	390.1
2.5°	386.5	387.4	385.6	385.6	385.6	384.7	385.6	384.7	385.6	386.5	386.5
5°	382.9	382.9	381.1	381.1	381.1	380.2	381.1	381.1	382.0	382.9	382.9
7.5°	374.8	374.8	373.9	373.0	372.1	372.1	373.0	373.0	373.9	374.8	374.8
10°	370.3	369.4	367.6	364.9	364.0	363.1	364.9	366.7	369.4	372.1	371.2
12.5°	368.5	367.6	364.0	361.3	359.5	360.4	362.2	364.0	368.5	371.2	370.3
15°	370.3	368.5	364.0	359.5	360.4	362.2	364.0	364.0	369.4	372.1	372.1
17.5°	370.3	369.4	364.0	360.4	361.3	364.0	364.9	364.0	368.5	373.0	373.0
20°	371.2	371.2	364.0	361.3	362.2	364.9	365.8	364.9	368.5	373.9	373.9
22.5°	373.0	372.1	364.9	363.1	364.9	366.7	367.6	366.7	370.3	374.8	375.7
25°	376.6	374.8	368.5	367.6	371.2	373.9	373.9	372.1	373.9	378.4	378.4
27.5°	381.1	380.2	373.0	373.0	377.5	382.9	380.2	376.6	378.4	382.9	382.9
30°	389.2	388.3	381.1	381.1	387.4	393.7	387.4	382.9	385.6	390.1	391.0
32.5°	400.9	400.9	394.6	392.8	403.6	406.3	403.6	394.6	396.4	402.7	402.7
35°	420.7	418.9	412.6	411.7	422.5	421.6	420.7	412.6	414.4	421.6	421.6
37.5°	446.9	446.0	440.6	437.9	443.3	439.7	441.5	437.9	442.4	447.8	448.7
40°	480.2	479.3	474.8	471.2	473.0	467.6	469.4	471.2	475.7	479.3	480.2
42.5°	521.6	521.6	517.1	510.8	508.1	505.4	505.4	509.0	513.5	518.0	518.0
45°	573.0	573.0	567.6	561.3	553.2	548.7	550.5	554.1	559.5	564.9	566.7
47.5°	633.4	633.4	626.2	619.9	611.7	606.3	606.3	608.1	616.2	620.8	623.5
50°	700.9	698.2	691.0	684.7	680.2	673.0	673.9	673.0	680.2	686.5	688.3
52.5°	771.2	770.3	763.1	761.3	764.0	760.4	760.4	751.4	754.1	757.7	756.8
55°	858.6	855.9	849.6	853.2	864.0	869.4	867.6	853.2	845.1	846.9	846.0
57.5°	954.1	951.4	949.6	960.4	984.7	1007.3	1002.8	969.4	954.1	955.0	955.9
60°	1051.4	1051.4	1056.8	1083.8	1136.1	1173.0	1159.5	1103.7	1076.6	1071.2	1069.4
62.5°	1151.4	1154.1	1165.8	1210.9	1291.1	1352.3	1318.1	1238.8	1198.3	1187.4	1183.8
65°	1267.6	1270.3	1287.5	1343.3	1449.6	1522.6	1464.0	1389.3	1332.5	1310.0	1306.4
67.5°	1436.1	1437.9	1451.4	1505.5	1605.5	1664.0	1603.7	1537.0	1475.7	1449.6	1447.8
70°	1587.5	1589.3	1601.0	1672.2	1764.1	1784.8	1718.1	1633.4	1569.4	1548.7	1545.1
72.5°	1553.2	1559.5	1598.3	1709.1	1850.5	1877.6	1737.0	1610.0	1507.3	1473.0	1462.2
75°	1302.8	1312.7	1373.9	1540.6	1765.9	1842.4	1625.3	1392.0	1238.8	1173.0	1155.9
77.5°	760.4	797.3	902.7	1116.3	1437.9	1593.8	1338.8	1019.0	761.3	653.2	617.1
80°	208.1	227.9	304.5	513.5	901.8	1116.3	854.1	467.6	252.3	189.2	175.7
82.5°	65.8	87.4	110.8	147.8	354.1	588.3	317.1	137.8	108.1	89.2	79.3
85°	35.1	37.8	62.2	72.1	106.3	164.9	98.2	72.1	64.9	47.8	45.0
87.5°	18.0	18.9	35.1	35.1	46.8	38.7	42.3	38.7	36.9	23.4	20.7
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)