

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: P234672

Luminaire Tested: **ARCH-AF16-60-D-U-5WQ-8027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234672  
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-AF16-60-D-U-5WQ-8027  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5312 lumens  
Efficiency: N/A  
Efficacy: 84.3 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): 63  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

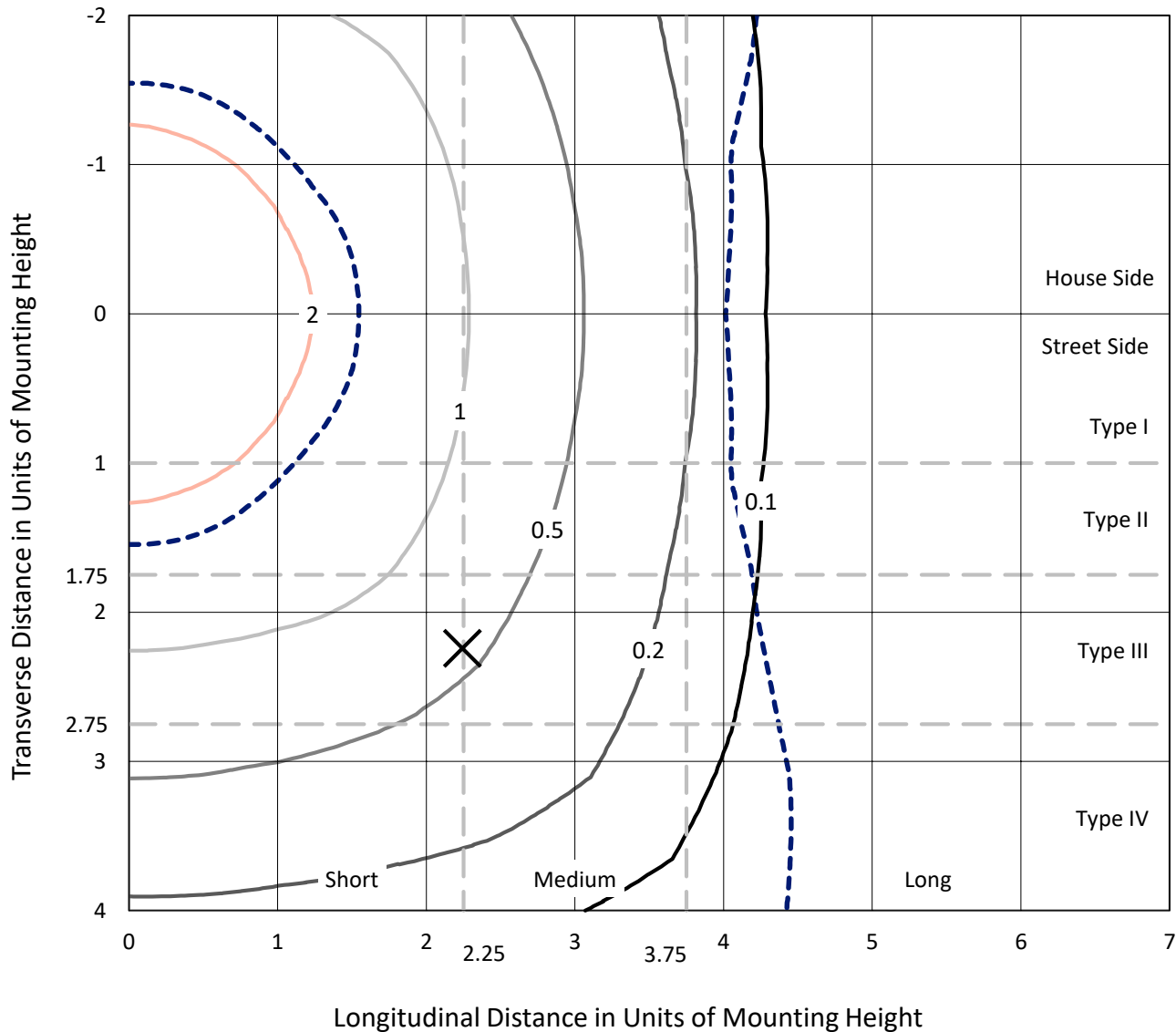


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

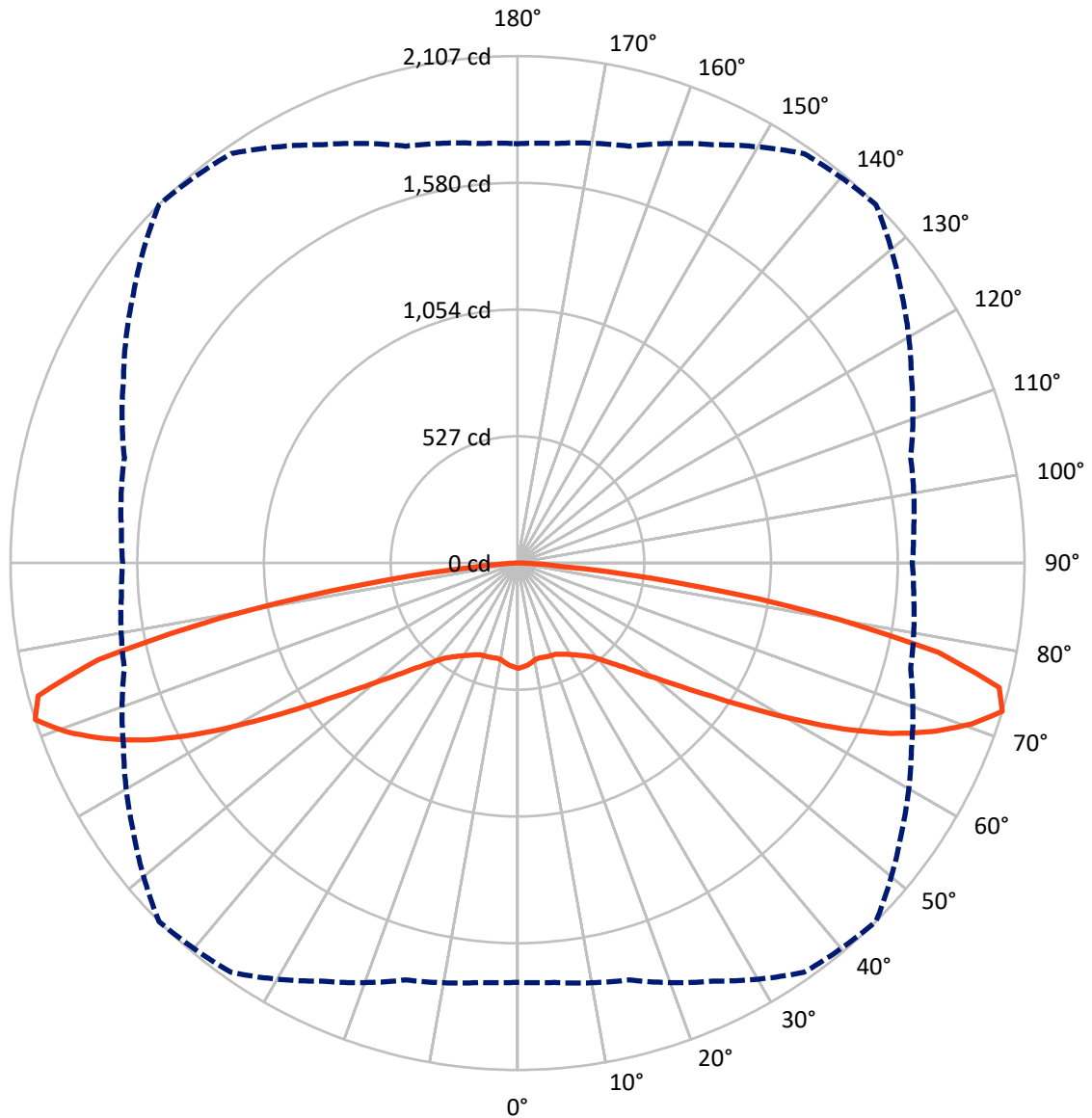


Based on 10 foot mounting height. Maximum calculated value = 4.4 fc  
 Type V - Short - Non-Cutoff

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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
<b>House Side</b>	Lumens	2656.0	0.0	2656.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2656.0	0.0	2656.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	5312.0	0.0	5312.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.3	0.8
10°-20°	116.2	2.2
20°-30°	194.5	3.7
30°-40°	298.9	5.6
40°-50°	494.9	9.3
50°-60°	879.8	16.6
60°-70°	1539.1	29.0
70°-80°	1565.9	29.5
80°-90°	182.3	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°	5312.0	100.0
0°-180°	5312.0	100.0



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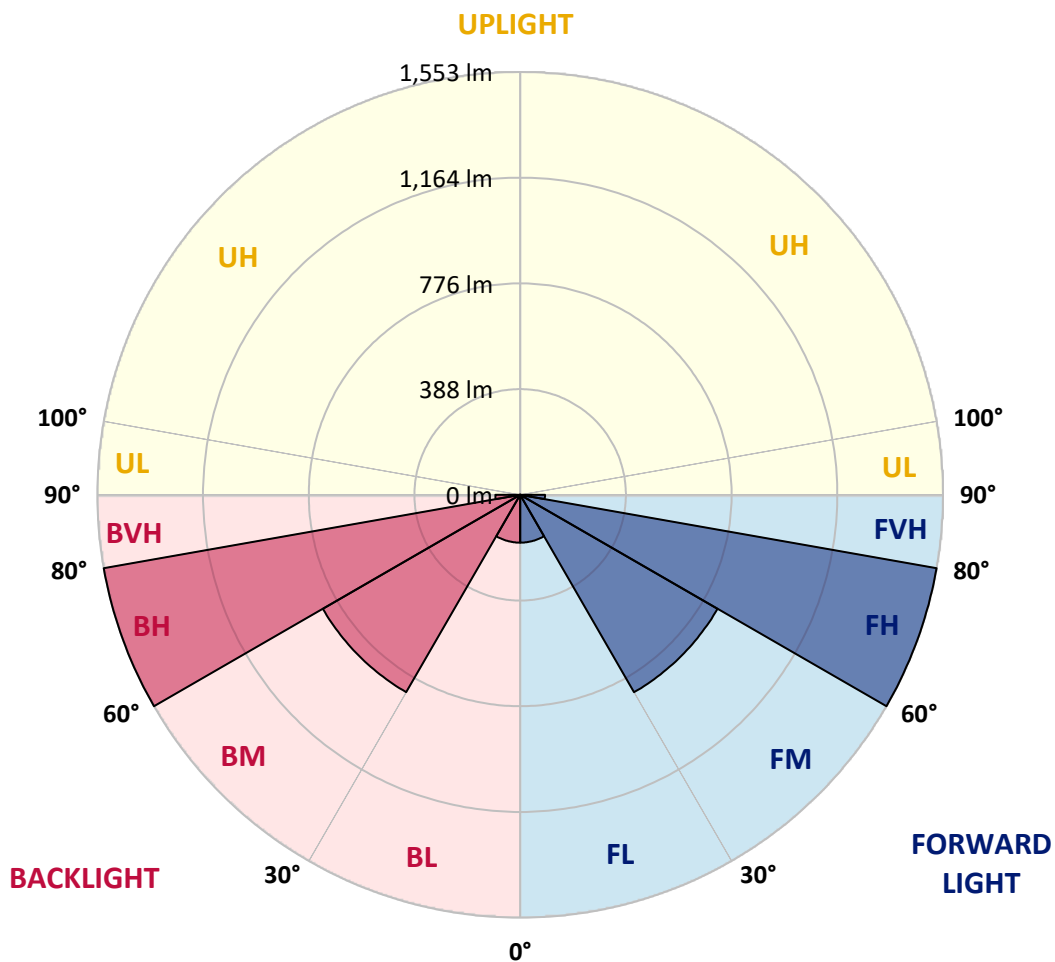
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	175.5	3.3			
FM	(30°-60°)	836.8	15.8			
FH	(60°-80°)	1552.5	29.2			G1/1800
FVH	(80°-90°)	91.2	1.7			G1/100
BL	(0°-30°)	175.5	3.3	B1/500		
BM	(30°-60°)	836.8	15.8	B1/1000		
BH	(60°-80°)	1552.5	29.2	B3/2500		G1/1800
BVH	(80°-90°)	91.2	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°	437.8	437.8	437.8	437.8	437.8	437.8	437.8	437.8	437.8	437.8	437.8
2.5°	433.8	434.8	432.8	432.8	432.8	431.8	432.8	431.8	432.8	433.8	433.8
5°	429.7	429.7	427.7	427.7	427.7	426.7	427.7	427.7	428.7	429.7	429.7
7.5°	420.6	420.6	419.6	418.6	417.6	417.6	418.6	418.6	419.6	420.6	420.6
10°	415.6	414.6	412.6	409.5	408.5	407.5	409.5	411.5	414.6	417.6	416.6
12.5°	413.6	412.6	408.5	405.5	403.5	404.5	406.5	408.5	413.6	416.6	415.6
15°	415.6	413.6	408.5	403.5	404.5	406.5	408.5	408.5	414.6	417.6	417.6
17.5°	415.6	414.6	408.5	404.5	405.5	408.5	409.5	408.5	413.6	418.6	418.6
20°	416.6	416.6	408.5	405.5	406.5	409.5	410.5	409.5	413.6	419.6	419.6
22.5°	418.6	417.6	409.5	407.5	409.5	411.5	412.6	411.5	415.6	420.6	421.7
25°	422.7	420.6	413.6	412.6	416.6	419.6	419.6	417.6	419.6	424.7	424.7
27.5°	427.7	426.7	418.6	418.6	423.7	429.7	426.7	422.7	424.7	429.7	429.7
30°	436.8	435.8	427.7	427.7	434.8	441.9	434.8	429.7	432.8	437.8	438.8
32.5°	450.0	450.0	442.9	440.9	453.0	456.0	453.0	442.9	444.9	452.0	452.0
35°	472.2	470.2	463.1	462.1	474.2	473.2	472.2	463.1	465.1	473.2	473.2
37.5°	501.5	500.5	494.5	491.4	497.5	493.4	495.5	491.4	496.5	502.5	503.6
40°	538.9	537.9	532.9	528.8	530.9	524.8	526.8	528.8	533.9	537.9	538.9
42.5°	585.5	585.5	580.4	573.3	570.3	567.3	567.3	571.3	576.4	581.4	581.4
45°	643.1	643.1	637.0	630.0	620.9	615.8	617.8	621.9	627.9	634.0	636.0
47.5°	710.8	710.8	702.8	695.7	686.6	680.5	680.5	682.5	691.6	696.7	699.7
50°	786.7	783.6	775.6	768.5	763.4	755.3	756.3	755.3	763.4	770.5	772.5
52.5°	865.6	864.5	856.5	854.4	857.5	853.4	853.4	843.3	846.3	850.4	849.4
55°	963.6	960.6	953.5	957.6	969.7	975.8	973.7	957.6	948.5	950.5	949.5
57.5°	1070.8	1067.8	1065.8	1077.9	1105.2	1130.5	1125.4	1088.0	1070.8	1071.8	1072.8
60°	1180.0	1180.0	1186.1	1216.4	1275.1	1316.5	1301.4	1238.7	1208.3	1202.3	1200.2
62.5°	1292.3	1295.3	1308.4	1359.0	1449.0	1517.8	1479.3	1390.3	1344.8	1332.7	1328.7
65°	1422.7	1425.7	1444.9	1507.6	1627.0	1708.9	1643.1	1559.2	1495.5	1470.2	1466.2
67.5°	1611.8	1613.8	1629.0	1689.6	1801.9	1867.6	1799.9	1725.0	1656.3	1627.0	1624.9
70°	1781.7	1783.7	1796.8	1876.7	1979.9	2003.1	1928.3	1833.2	1761.4	1738.2	1734.1
72.5°	1743.2	1750.3	1793.8	1918.2	2076.9	2107.3	1949.5	1806.9	1691.7	1653.2	1641.1
75°	1462.1	1473.3	1542.0	1729.1	1981.9	2067.8	1824.1	1562.2	1390.3	1316.5	1297.3
77.5°	853.4	894.9	1013.2	1252.8	1613.8	1788.7	1502.6	1143.6	854.4	733.1	692.6
80°	233.6	255.8	341.8	576.4	1012.2	1252.8	958.6	524.8	283.1	212.3	197.2
82.5°	73.8	98.1	124.4	165.8	397.4	660.3	355.9	154.7	121.3	100.1	89.0
85°	39.4	42.5	69.8	80.9	119.3	185.0	110.2	80.9	72.8	53.6	50.6
87.5°	20.2	21.2	39.4	39.4	52.6	43.5	47.5	43.5	41.5	26.3	23.3
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)