

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: P234767

Luminaire Tested: **ARCH-M-AF48-50-D-U-5WQ-8027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234767  
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-AF48-50-D-U-5WQ-8027  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 305mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5377 lumens  
Efficiency: N/A  
Efficacy: 112.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G1

Input Watts (W): 48  
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

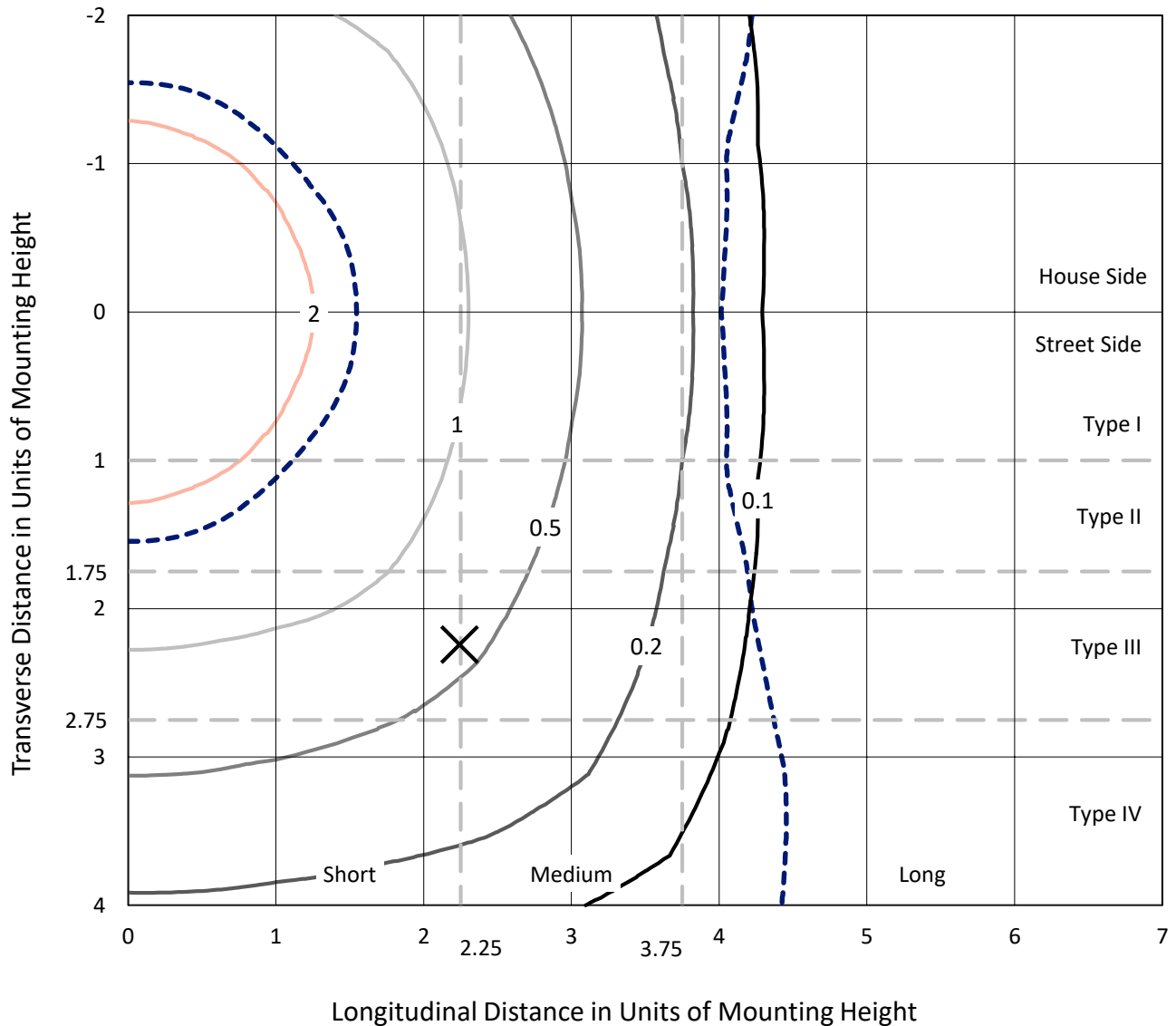


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

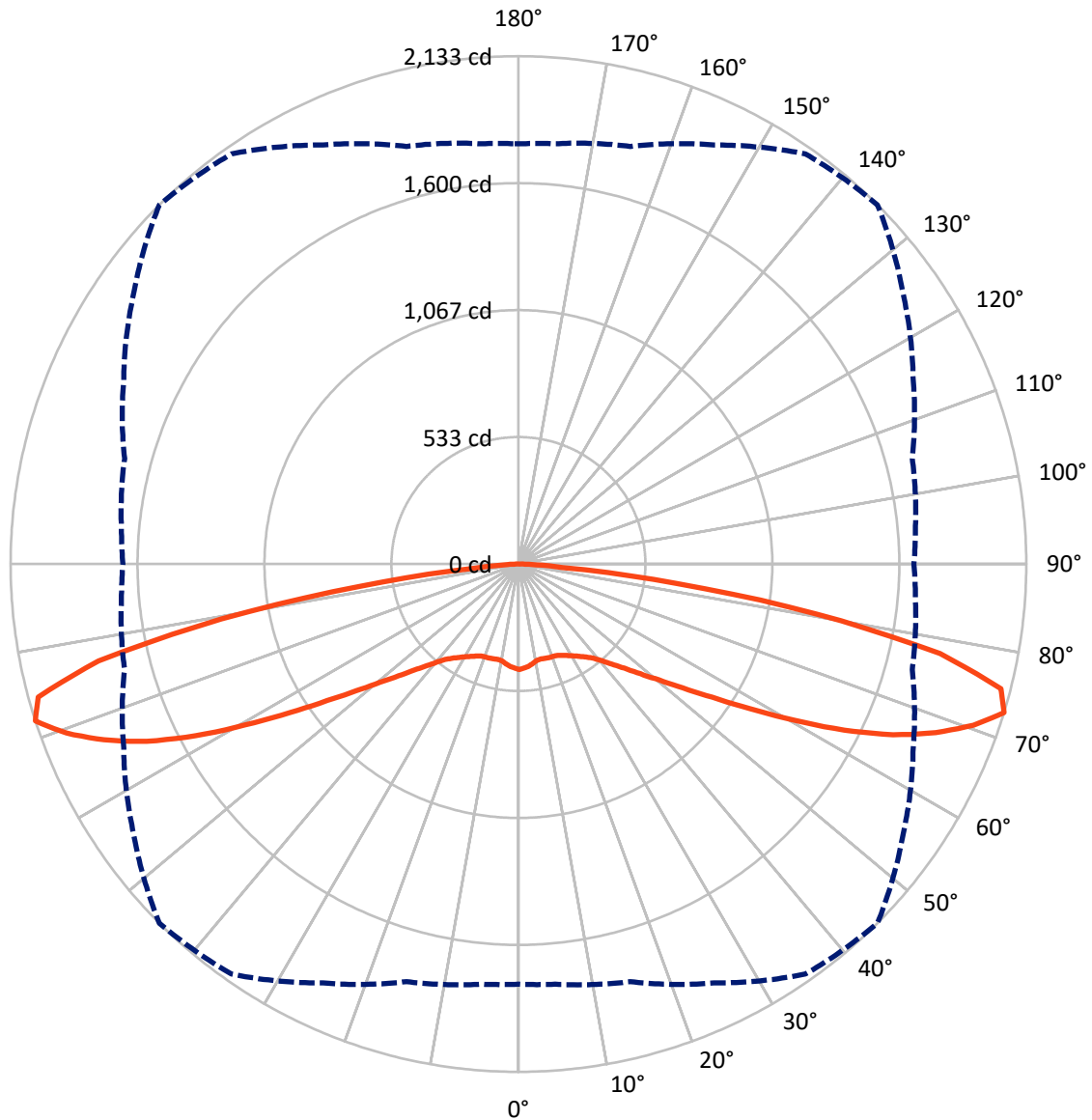


Based on 10 foot mounting height. Maximum calculated value = 4.4 fc  
 Type V - Short - Non-Cutoff

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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	2688.5	0.0	2688.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2688.5	0.0	2688.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	5377.0	0.0	5377.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.8	0.8
10°-20°	117.7	2.2
20°-30°	196.9	3.7
30°-40°	302.5	5.6
40°-50°	500.9	9.3
50°-60°	890.5	16.6
60°-70°	1558.0	29.0
70°-80°	1585.1	29.5
80°-90°	184.6	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°	5377.0	100.0
0°-180°	5377.0	100.0

**Coefficient of Utilization**



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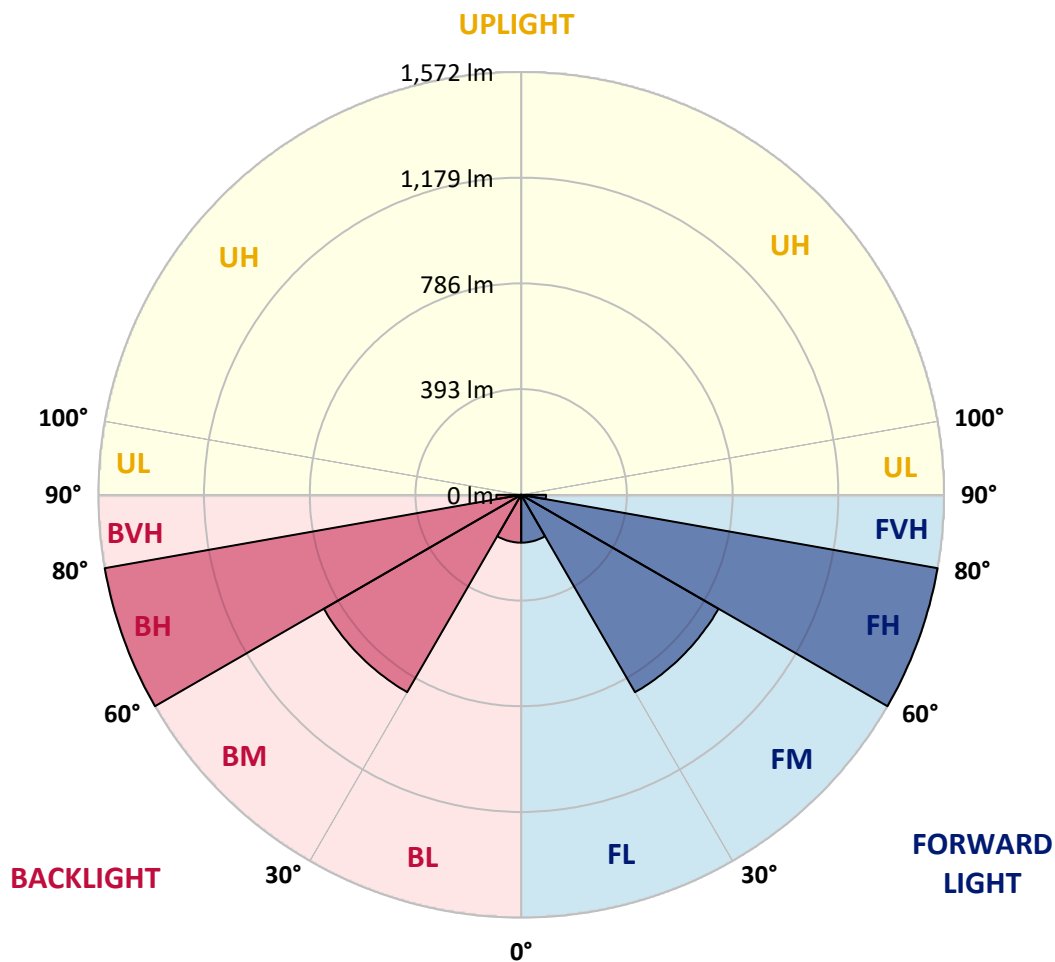
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	177.7	3.3			
FM	(30°-60°)	847.0	15.8			
FH	(60°-80°)	1571.5	29.2			G1/1800
FVH	(80°-90°)	92.3	1.7			G1/100
BL	(0°-30°)	177.7	3.3	B1/500		
BM	(30°-60°)	847.0	15.8	B1/1000		
BH	(60°-80°)	1571.5	29.2	B3/2500		G1/1800
BVH	(80°-90°)	92.3	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°	443.2	443.2	443.2	443.2	443.2	443.2	443.2	443.2	443.2	443.2	443.2
2.5°	439.1	440.1	438.1	438.1	438.1	437.0	438.1	437.0	438.1	439.1	439.1
5°	435.0	435.0	433.0	433.0	433.0	431.9	433.0	433.0	434.0	435.0	435.0
7.5°	425.8	425.8	424.8	423.7	422.7	422.7	423.7	423.7	424.8	425.8	425.8
10°	420.7	419.6	417.6	414.5	413.5	412.5	414.5	416.6	419.6	422.7	421.7
12.5°	418.6	417.6	413.5	410.4	408.4	409.4	411.5	413.5	418.6	421.7	420.7
15°	420.7	418.6	413.5	408.4	409.4	411.5	413.5	413.5	419.6	422.7	422.7
17.5°	420.7	419.6	413.5	409.4	410.4	413.5	414.5	413.5	418.6	423.7	423.7
20°	421.7	421.7	413.5	410.4	411.5	414.5	415.6	414.5	418.6	424.8	424.8
22.5°	423.7	422.7	414.5	412.5	414.5	416.6	417.6	416.6	420.7	425.8	426.8
25°	427.8	425.8	418.6	417.6	421.7	424.8	424.8	422.7	424.8	429.9	429.9
27.5°	433.0	431.9	423.7	423.7	428.9	435.0	431.9	427.8	429.9	435.0	435.0
30°	442.2	441.1	433.0	433.0	440.1	447.3	440.1	435.0	438.1	443.2	444.2
32.5°	455.5	455.5	448.3	446.3	458.5	461.6	458.5	448.3	450.4	457.5	457.5
35°	478.0	475.9	468.8	467.8	480.0	479.0	478.0	468.8	470.8	479.0	479.0
37.5°	507.7	506.6	500.5	497.4	503.6	499.5	501.5	497.4	502.6	508.7	509.7
40°	545.5	544.5	539.4	535.3	537.4	531.2	533.3	535.3	540.4	544.5	545.5
42.5°	592.6	592.6	587.5	580.3	577.3	574.2	574.2	578.3	583.4	588.5	588.5
45°	651.0	651.0	644.8	637.7	628.4	623.3	625.4	629.5	635.6	641.8	643.8
47.5°	719.5	719.5	711.4	704.2	695.0	688.8	688.8	690.9	700.1	705.2	708.3
50°	796.3	793.2	785.0	777.9	772.8	764.6	765.6	764.6	772.8	779.9	782.0
52.5°	876.1	875.1	866.9	864.9	868.0	863.9	863.9	853.6	856.7	860.8	859.8
55°	975.4	972.4	965.2	969.3	981.6	987.7	985.7	969.3	960.1	962.1	961.1
57.5°	1083.9	1080.9	1078.8	1091.1	1118.7	1144.3	1139.2	1101.3	1083.9	1084.9	1086.0
60°	1194.5	1194.5	1200.6	1231.3	1290.7	1332.6	1317.3	1253.8	1223.1	1217.0	1214.9
62.5°	1308.1	1311.1	1324.5	1375.6	1466.7	1536.3	1497.4	1407.4	1361.3	1349.0	1344.9
65°	1440.1	1443.2	1462.6	1526.1	1646.9	1729.8	1663.2	1578.3	1513.8	1488.2	1484.1
67.5°	1631.5	1633.6	1648.9	1710.3	1823.9	1890.5	1821.9	1746.1	1676.5	1646.9	1644.8
70°	1803.5	1805.5	1818.8	1899.7	2004.1	2027.6	1951.9	1855.7	1783.0	1759.5	1755.4
72.5°	1764.6	1771.7	1815.7	1941.6	2102.3	2133.0	1973.4	1829.1	1712.4	1673.5	1661.2
75°	1480.0	1491.3	1560.9	1750.2	2006.1	2093.1	1846.5	1581.4	1407.4	1332.6	1313.2
77.5°	863.9	905.8	1025.6	1268.2	1633.6	1810.6	1521.0	1157.6	864.9	742.1	701.1
80°	236.4	259.0	346.0	583.4	1024.6	1268.2	970.3	531.2	286.6	214.9	199.6
82.5°	74.7	99.3	125.9	167.9	402.2	668.4	360.3	156.6	122.8	101.3	90.1
85°	39.9	43.0	70.6	81.9	120.8	187.3	111.6	81.9	73.7	54.2	51.2
87.5°	20.5	21.5	39.9	39.9	53.2	44.0	48.1	44.0	42.0	26.6	23.5
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)