

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: P234774

Luminaire Tested: **ARCH-M-AF48-120-D-U-5WQ-8027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234774  
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-AF48-120-D-U-5WQ-8027  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 785mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12190 lumens  
Efficiency: N/A  
Efficacy: 99.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B4 - U0 - G2

Input Watts (W): 122  
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

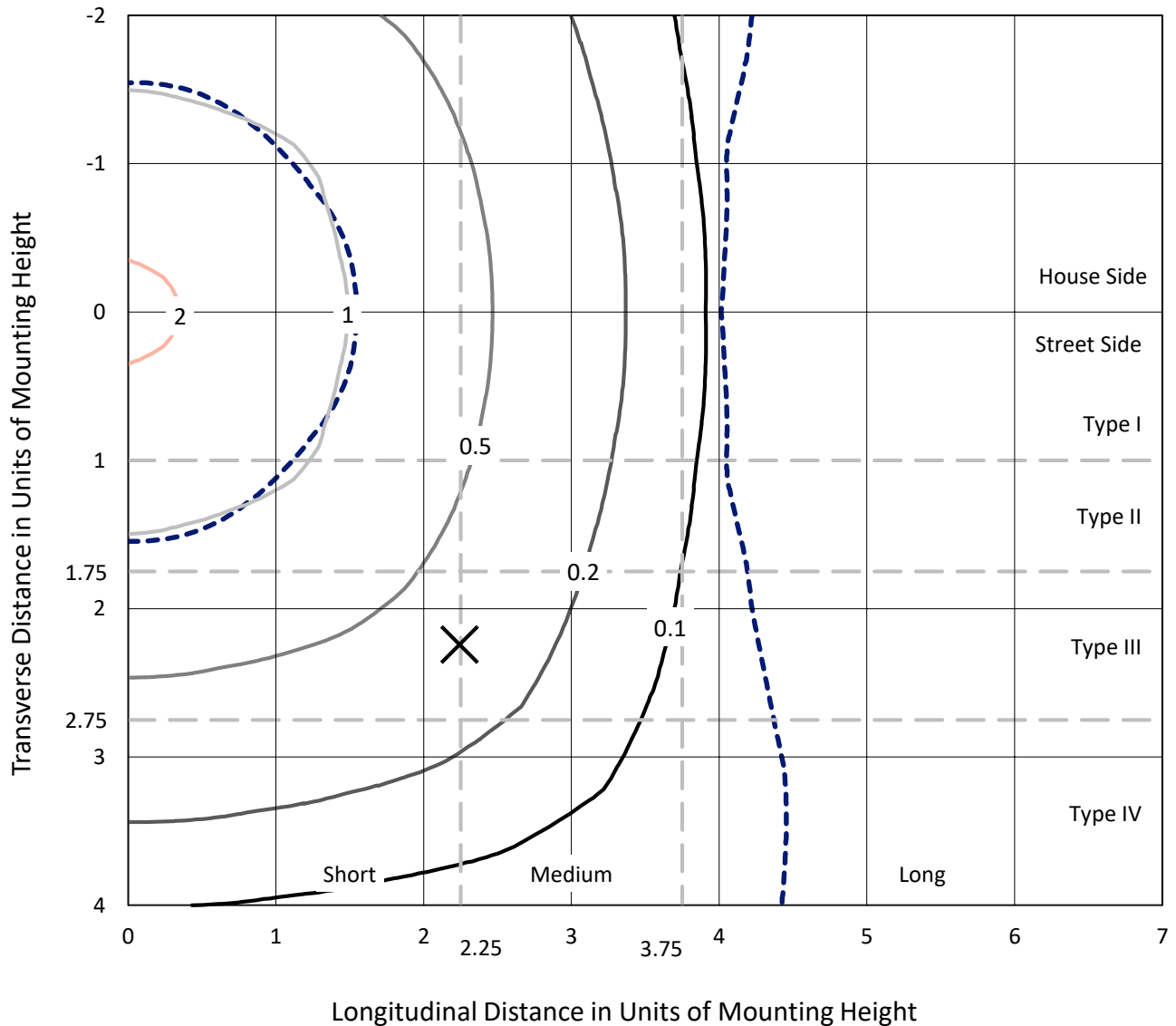


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

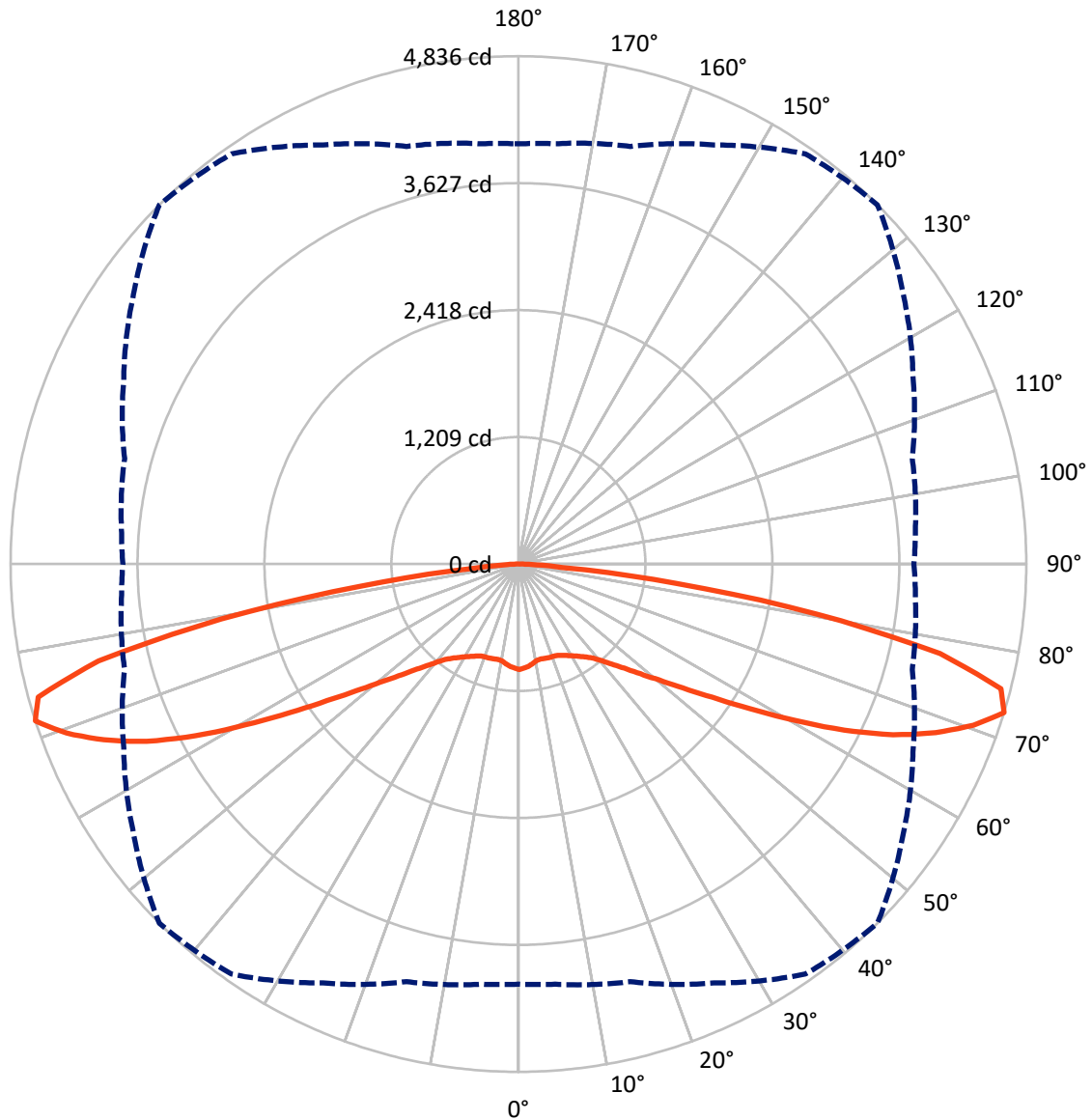


Based on 20 foot mounting height. Maximum calculated value = 2.5 fc  
 Type V - Short - Non-Cutoff

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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	6095.0	0.0	6095.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	6095.0	0.0	6095.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	12190.0	0.0	12190.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.5	0.8
10°-20°	266.7	2.2
20°-30°	446.4	3.7
30°-40°	685.9	5.6
40°-50°	1135.6	9.3
50°-60°	2018.9	16.6
60°-70°	3532.0	29.0
70°-80°	3593.6	29.5
80°-90°	418.4	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°	12190.0	100.0
0°-180°	12190.0	100.0



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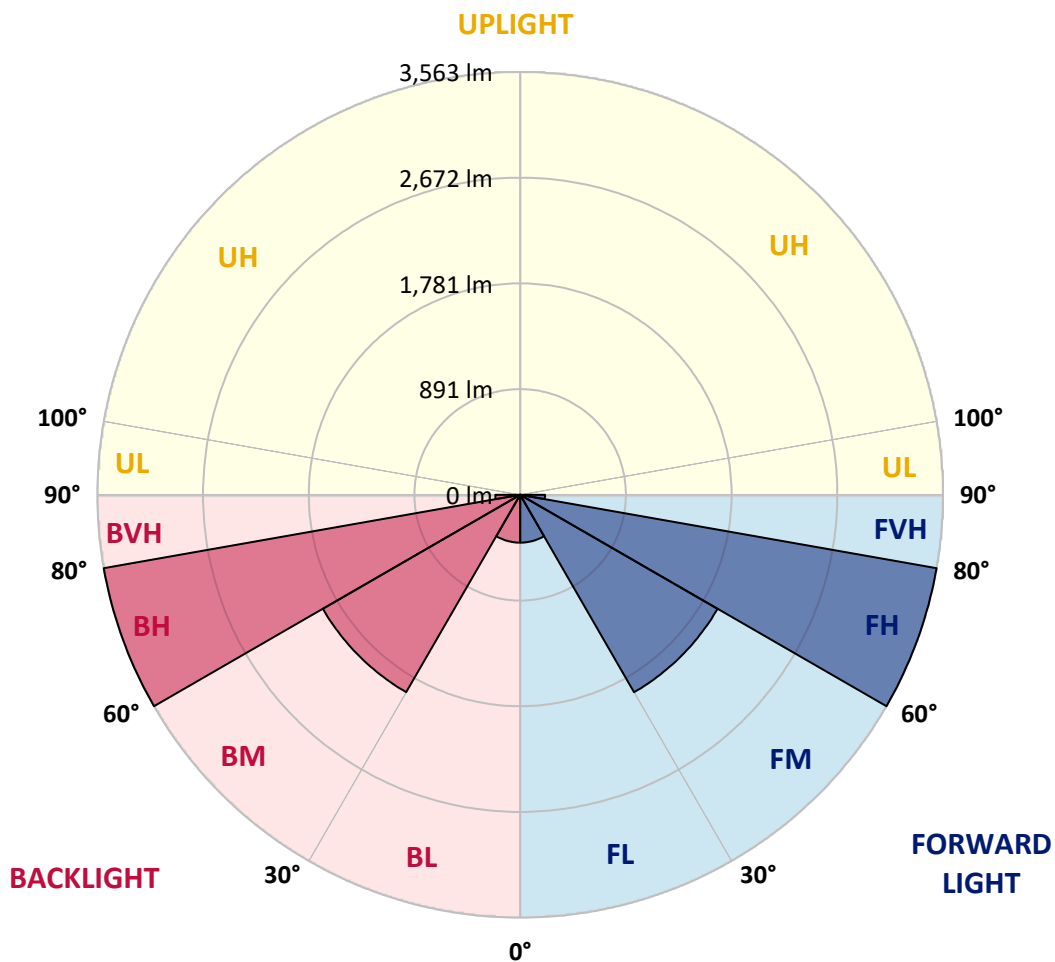
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	402.8	3.3			
FM	(30°-60°)	1920.2	15.8			
FH	(60°-80°)	3562.8	29.2			G2/5000
FVH	(80°-90°)	209.2	1.7			G2/225
BL	(0°-30°)	402.8	3.3	B1/500		
BM	(30°-60°)	1920.2	15.8	B2/2500		
BH	(60°-80°)	3562.8	29.2	B4/5000		G2/5000
BVH	(80°-90°)	209.2	1.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1004.7	1004.7	1004.7	1004.7	1004.7	1004.7	1004.7	1004.7	1004.7	1004.7	1004.7
2.5°	995.5	997.8	993.1	993.1	993.1	990.8	993.1	990.8	993.1	995.5	995.5
5°	986.2	986.2	981.5	981.5	981.5	979.2	981.5	981.5	983.9	986.2	986.2
7.5°	965.3	965.3	963.0	960.7	958.3	958.3	960.7	960.7	963.0	965.3	965.3
10°	953.7	951.4	946.7	939.8	937.4	935.1	939.8	944.4	951.4	958.3	956.0
12.5°	949.0	946.7	937.4	930.5	925.8	928.2	932.8	937.4	949.0	956.0	953.7
15°	953.7	949.0	937.4	925.8	928.2	932.8	937.4	937.4	951.4	958.3	958.3
17.5°	953.7	951.4	937.4	928.2	930.5	937.4	939.8	937.4	949.0	960.7	960.7
20°	956.0	956.0	937.4	930.5	932.8	939.8	942.1	939.8	949.0	963.0	963.0
22.5°	960.7	958.3	939.8	935.1	939.8	944.4	946.7	944.4	953.7	965.3	967.6
25°	969.9	965.3	949.0	946.7	956.0	963.0	963.0	958.3	963.0	974.6	974.6
27.5°	981.5	979.2	960.7	960.7	972.3	986.2	979.2	969.9	974.6	986.2	986.2
30°	1002.4	1000.1	981.5	981.5	997.8	1014.0	997.8	986.2	993.1	1004.7	1007.1
32.5°	1032.6	1032.6	1016.3	1011.7	1039.5	1046.5	1039.5	1016.3	1021.0	1037.2	1037.2
35°	1083.6	1079.0	1062.7	1060.4	1088.3	1086.0	1083.6	1062.7	1067.4	1086.0	1086.0
37.5°	1150.9	1148.6	1134.7	1127.7	1141.6	1132.4	1137.0	1127.7	1139.3	1153.2	1155.6
40°	1236.8	1234.5	1222.9	1213.6	1218.2	1204.3	1208.9	1213.6	1225.2	1234.5	1236.8
42.5°	1343.5	1343.5	1331.9	1315.7	1308.7	1301.8	1301.8	1311.0	1322.6	1334.2	1334.2
45°	1475.8	1475.8	1461.9	1445.6	1424.7	1413.1	1417.8	1427.1	1441.0	1454.9	1459.5
47.5°	1631.3	1631.3	1612.7	1596.4	1575.6	1561.6	1561.6	1566.3	1587.2	1598.8	1605.7
50°	1805.3	1798.3	1779.8	1763.5	1751.9	1733.3	1735.7	1733.3	1751.9	1768.2	1772.8
52.5°	1986.3	1984.0	1965.4	1960.7	1967.7	1958.4	1958.4	1935.2	1942.2	1951.5	1949.1
55°	2211.4	2204.4	2188.2	2197.4	2225.3	2239.2	2234.6	2197.4	2176.5	2181.2	2178.9
57.5°	2457.3	2450.4	2445.7	2473.6	2536.2	2594.2	2582.6	2496.8	2457.3	2459.6	2462.0
60°	2707.9	2707.9	2721.8	2791.5	2926.0	3021.2	2986.4	2842.5	2772.9	2759.0	2754.3
62.5°	2965.5	2972.5	3002.6	3118.6	3325.2	3482.9	3394.8	3190.6	3086.2	3058.3	3049.0
65°	3264.8	3271.8	3315.9	3459.7	3733.5	3921.5	3770.7	3578.1	3431.9	3373.9	3364.6
67.5°	3698.7	3703.4	3738.2	3877.4	4135.0	4285.8	4130.3	3958.6	3800.8	3733.5	3728.9
70°	4088.6	4093.2	4123.4	4306.7	4543.4	4596.7	4425.0	4206.9	4042.2	3988.8	3979.5
72.5°	4000.4	4016.6	4116.4	4401.8	4766.1	4835.7	4473.8	4146.6	3882.1	3793.9	3766.0
75°	3355.3	3380.8	3538.6	3967.9	4548.0	4745.2	4186.0	3585.0	3190.6	3021.2	2977.1
77.5°	1958.4	2053.6	2325.1	2875.0	3703.4	4104.8	3448.1	2624.4	1960.7	1682.3	1589.5
80°	536.0	587.1	784.3	1322.6	2322.7	2875.0	2199.8	1204.3	649.7	487.3	452.5
82.5°	169.4	225.1	285.4	380.5	911.9	1515.2	816.8	355.0	278.4	229.7	204.2
85°	90.5	97.5	160.1	185.6	273.8	424.6	252.9	185.6	167.1	123.0	116.0
87.5°	46.4	48.7	90.5	90.5	120.7	99.8	109.1	99.8	95.1	60.3	53.4
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)