

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: P230955

Luminaire Tested: **ARCH-M-AF48-140-D-U-5WQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230955  
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-AF48-140-D-U-5WQ-7030  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 905mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15436 lumens  
Efficiency: N/A  
Efficacy: 109.5 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 - G3

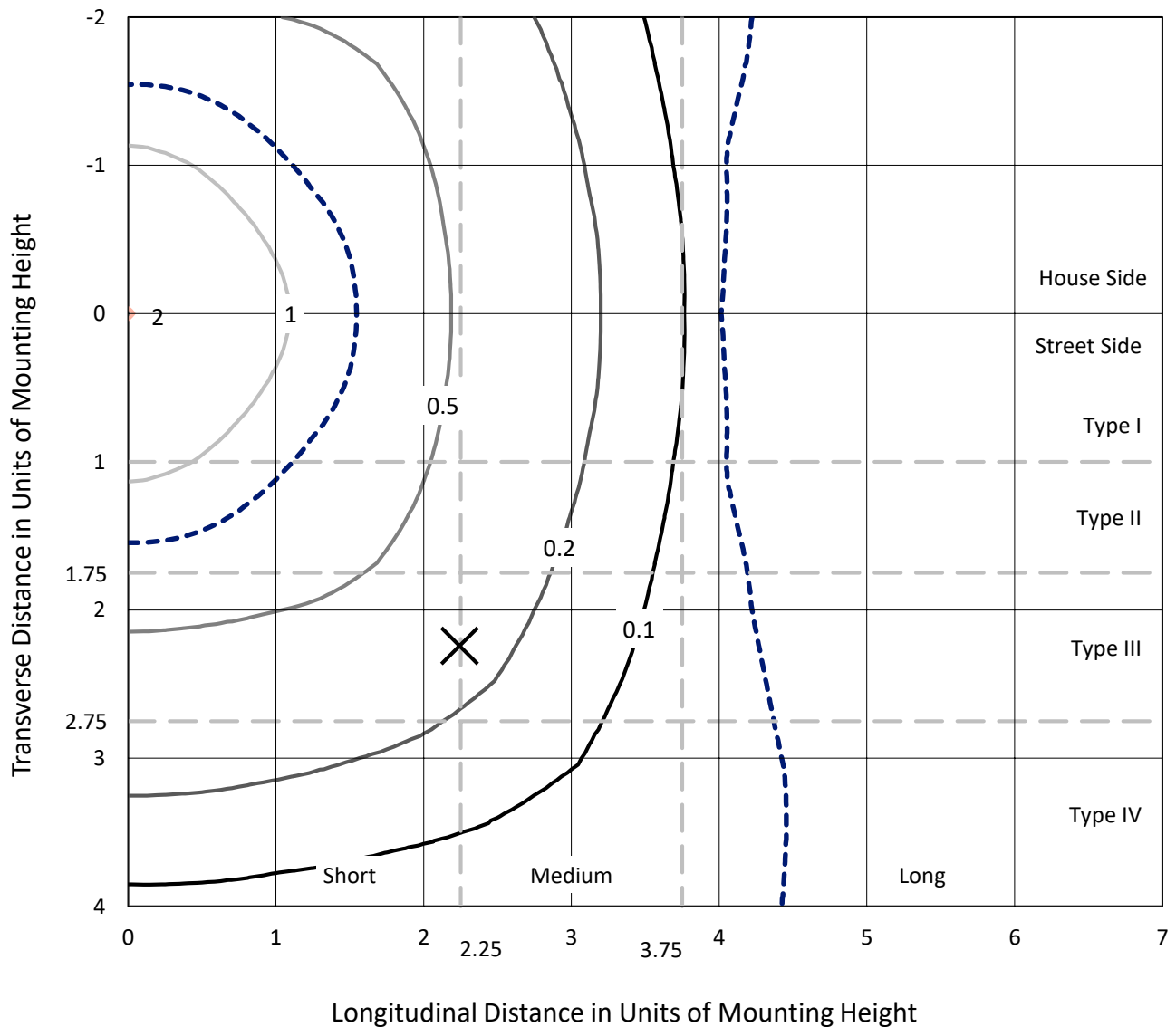
Input Watts (W): 141  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

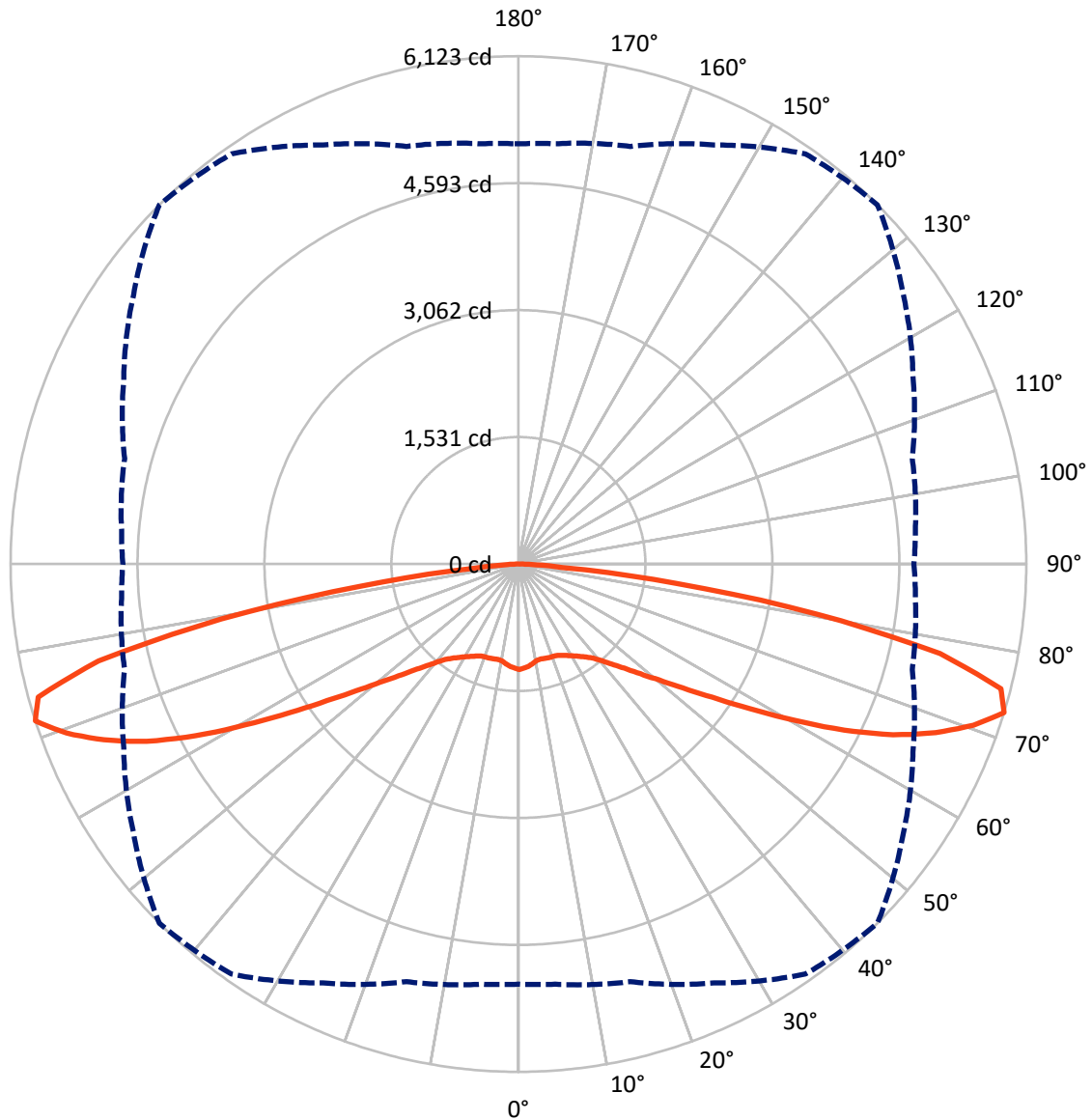


Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type V - Short - Non-Cutoff

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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	7718.0	0.0	7718.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	7718.0	0.0	7718.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	15436.0	0.0	15436.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.1	0.8
10°-20°	337.8	2.2
20°-30°	565.2	3.7
30°-40°	868.5	5.6
40°-50°	1438.0	9.3
50°-60°	2556.5	16.6
60°-70°	4472.6	29.0
70°-80°	4550.5	29.5
80°-90°	529.9	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°	15436.0	100.0
0°-180°	15436.0	100.0



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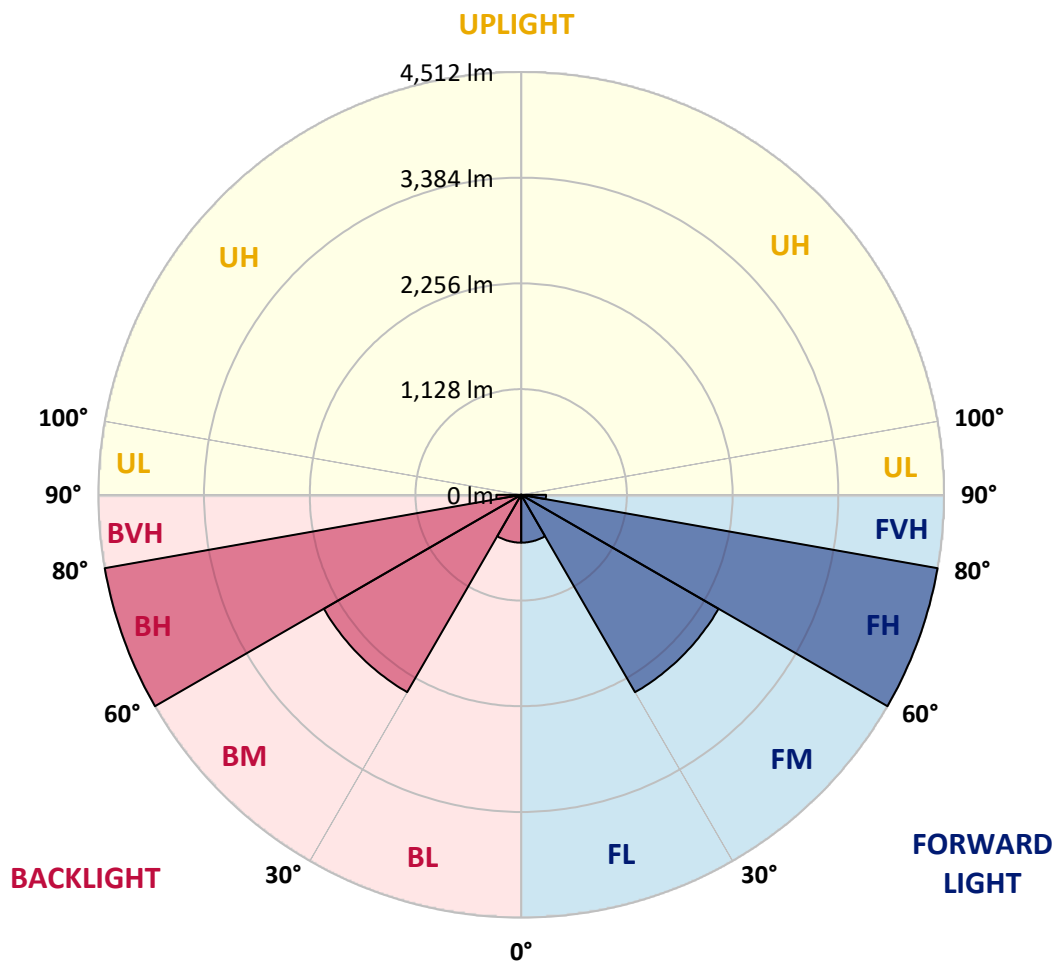
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	510.0	3.3			
FM (30°-60°)	2431.5	15.8			
FH (60°-80°)	4511.5	29.2			G2/5000
FVH (80°-90°)	264.9	1.7			G3/500
BL (0°-30°)	510.0	3.3	B2/1000		
BM (30°-60°)	2431.5	15.8	B2/2500		
BH (60°-80°)	4511.5	29.2	B4/5000		G2/5000
BVH (80°-90°)	264.9	1.7			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1272.3	1272.3	1272.3	1272.3	1272.3	1272.3	1272.3	1272.3	1272.3	1272.3	1272.3
2.5°	1260.5	1263.5	1257.6	1257.6	1257.6	1254.7	1257.6	1254.7	1257.6	1260.5	1260.5
5°	1248.8	1248.8	1242.9	1242.9	1242.9	1240.0	1242.9	1242.9	1245.8	1248.8	1248.8
7.5°	1222.3	1222.3	1219.4	1216.5	1213.5	1213.5	1216.5	1216.5	1219.4	1222.3	1222.3
10°	1207.6	1204.7	1198.8	1190.0	1187.1	1184.1	1190.0	1195.9	1204.7	1213.5	1210.6
12.5°	1201.8	1198.8	1187.1	1178.3	1172.4	1175.3	1181.2	1187.1	1201.8	1210.6	1207.6
15°	1207.6	1201.8	1187.1	1172.4	1175.3	1181.2	1187.1	1187.1	1204.7	1213.5	1213.5
17.5°	1207.6	1204.7	1187.1	1175.3	1178.3	1187.1	1190.0	1187.1	1201.8	1216.5	1216.5
20°	1210.6	1210.6	1187.1	1178.3	1181.2	1190.0	1193.0	1190.0	1201.8	1219.4	1219.4
22.5°	1216.5	1213.5	1190.0	1184.1	1190.0	1195.9	1198.8	1195.9	1207.6	1222.3	1225.3
25°	1228.2	1222.3	1201.8	1198.8	1210.6	1219.4	1219.4	1213.5	1219.4	1234.1	1234.1
27.5°	1242.9	1240.0	1216.5	1216.5	1231.1	1248.8	1240.0	1228.2	1234.1	1248.8	1248.8
30°	1269.3	1266.4	1242.9	1242.9	1263.5	1284.0	1263.5	1248.8	1257.6	1272.3	1275.2
32.5°	1307.5	1307.5	1287.0	1281.1	1316.4	1325.2	1316.4	1287.0	1292.9	1313.4	1313.4
35°	1372.2	1366.3	1345.7	1342.8	1378.1	1375.1	1372.2	1345.7	1351.6	1375.1	1375.1
37.5°	1457.4	1454.5	1436.8	1428.0	1445.6	1433.9	1439.8	1428.0	1442.7	1460.3	1463.3
40°	1566.1	1563.2	1548.5	1536.7	1542.6	1525.0	1530.9	1536.7	1551.4	1563.2	1566.1
42.5°	1701.3	1701.3	1686.6	1666.0	1657.2	1648.4	1648.4	1660.1	1674.8	1689.5	1689.5
45°	1868.8	1868.8	1851.1	1830.6	1804.1	1789.4	1795.3	1807.1	1824.7	1842.3	1848.2
47.5°	2065.6	2065.6	2042.1	2021.6	1995.1	1977.5	1977.5	1983.4	2009.8	2024.5	2033.3
50°	2286.0	2277.2	2253.7	2233.1	2218.4	2194.9	2197.9	2194.9	2218.4	2239.0	2244.9
52.5°	2515.2	2512.2	2488.7	2482.9	2491.7	2479.9	2479.9	2450.5	2459.4	2471.1	2468.2
55°	2800.2	2791.4	2770.8	2782.6	2817.8	2835.5	2829.6	2782.6	2756.1	2762.0	2759.1
57.5°	3111.7	3102.8	3097.0	3132.2	3211.6	3285.0	3270.3	3161.6	3111.7	3114.6	3117.5
60°	3429.0	3429.0	3446.6	3534.8	3705.2	3825.7	3781.6	3599.4	3511.3	3493.6	3487.8
62.5°	3755.2	3764.0	3802.2	3949.1	4210.6	4410.4	4298.7	4040.2	3907.9	3872.7	3860.9
65°	4134.2	4143.0	4198.8	4381.0	4727.7	4965.7	4774.7	4530.9	4345.7	4272.3	4260.5
67.5°	4683.7	4689.5	4733.6	4909.9	5236.1	5427.0	5230.2	5012.7	4812.9	4727.7	4721.9
70°	5177.3	5183.2	5221.4	5453.5	5753.2	5820.8	5603.3	5327.1	5118.5	5050.9	5039.2
72.5°	5065.6	5086.2	5212.5	5574.0	6035.3	6123.4	5665.0	5250.7	4915.8	4804.1	4768.9
75°	4248.8	4281.1	4480.9	5024.5	5759.1	6008.8	5300.7	4539.7	4040.2	3825.7	3769.8
77.5°	2479.9	2600.4	2944.2	3640.6	4689.5	5197.9	4366.3	3323.2	2482.9	2130.3	2012.7
80°	678.7	743.4	993.1	1674.8	2941.2	3640.6	2785.5	1525.0	822.7	617.0	573.0
82.5°	214.5	285.0	361.4	481.9	1154.8	1918.7	1034.3	449.6	352.6	290.9	258.6
85°	114.6	123.4	202.7	235.1	346.7	537.7	320.3	235.1	211.6	155.7	146.9
87.5°	58.8	61.7	114.6	114.6	152.8	126.3	138.1	126.3	120.5	76.4	67.6
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)