

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: P265868

Luminaire Tested: **ARCH-AF16-20-D-U-5WQ-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265868  
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-AF16-20-D-U-5WQ-7027  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 420mA LIGHT ENGINE WITH 16 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2638.2 lumens  
Efficiency: N/A  
Efficacy: 109.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G1

Input Watts (W): 24  
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

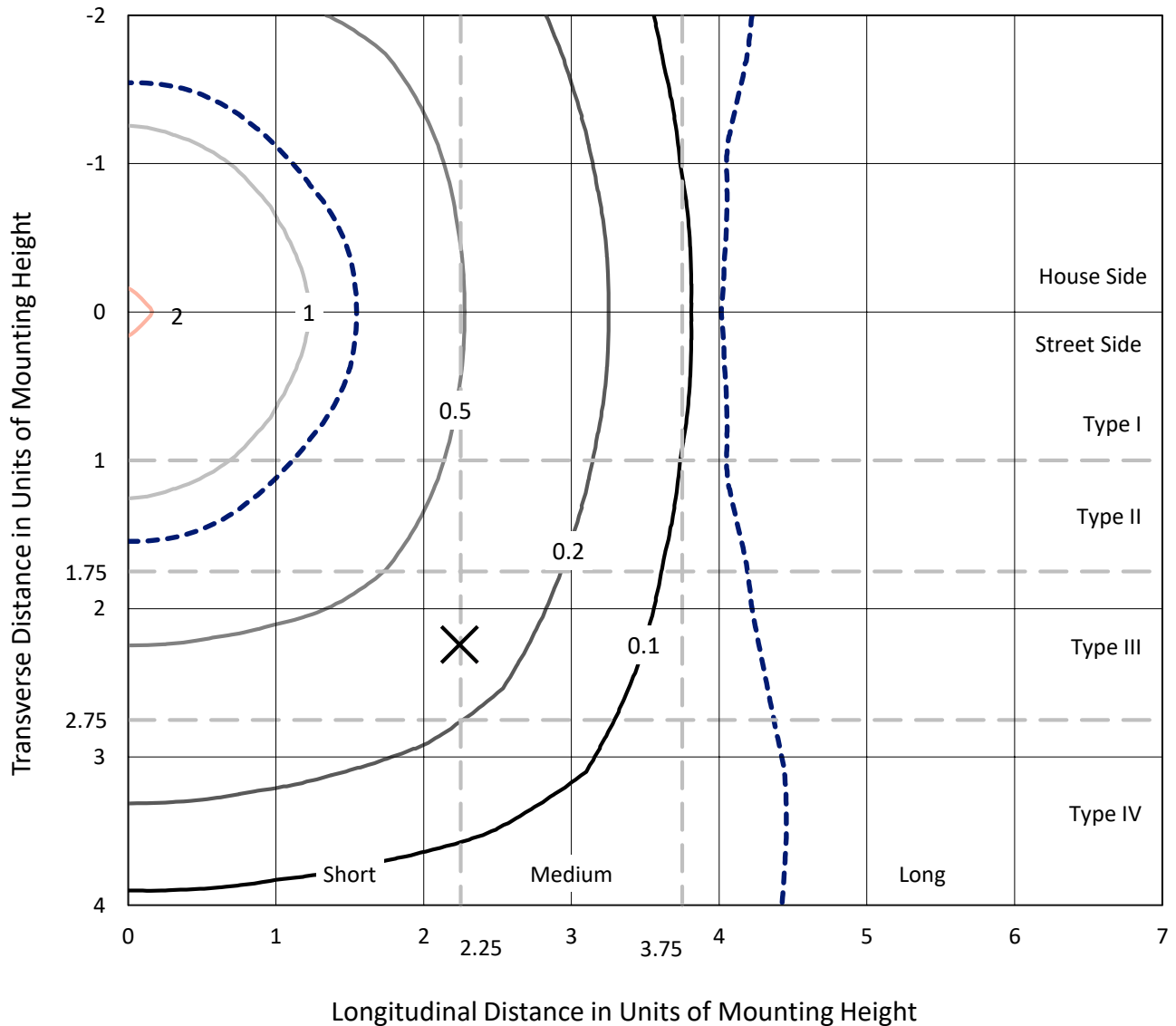


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

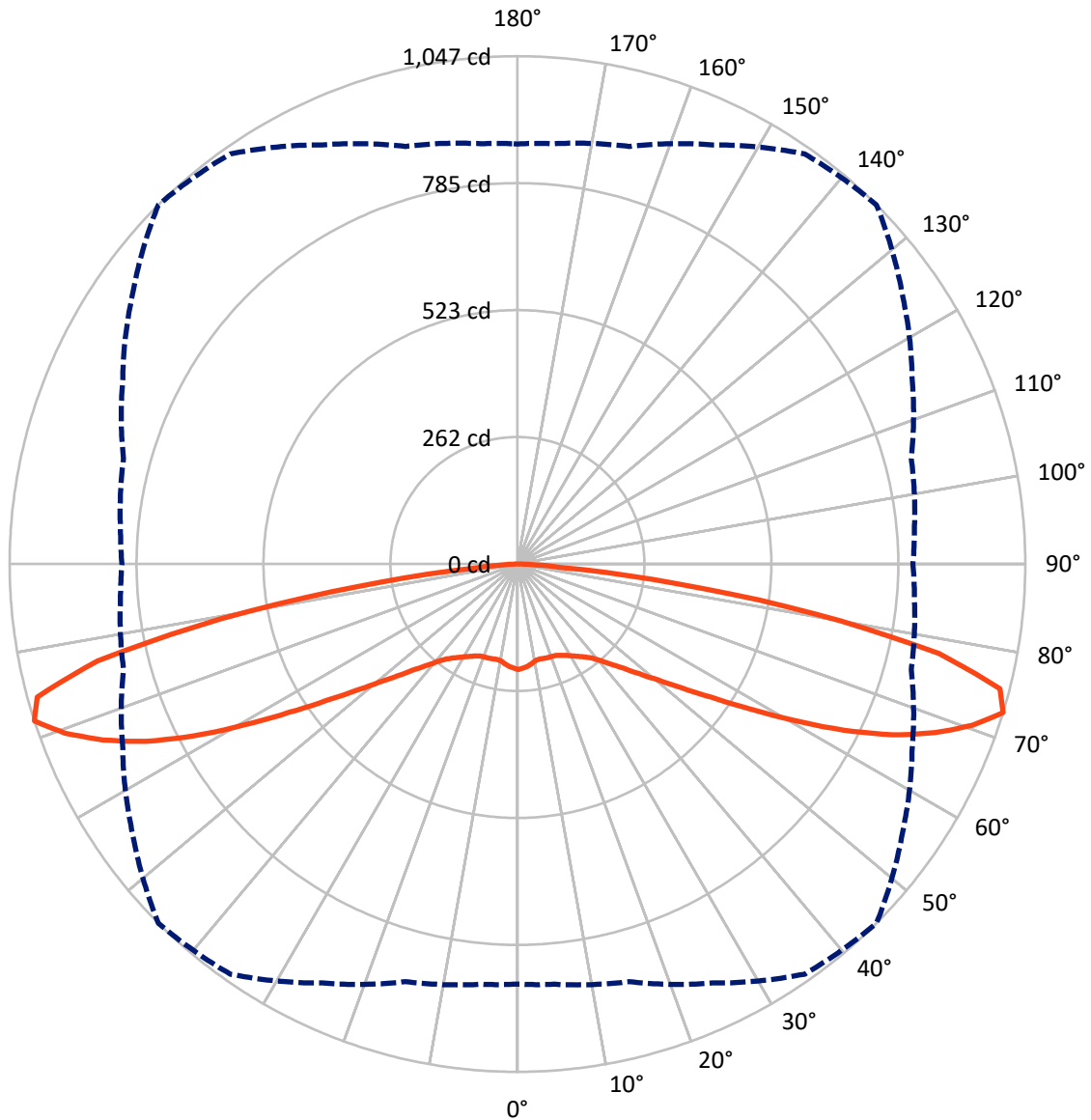


Based on 10 foot mounting height. Maximum calculated value = 2.2 fc  
 Type V - Short - Non-Cutoff

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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	1319.1	0.0	1319.1
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	1319.1	0.0	1319.1
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	2638.2	0.0	2638.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.0	0.8
10°-20°	57.7	2.2
20°-30°	96.6	3.7
30°-40°	148.4	5.6
40°-50°	245.8	9.3
50°-60°	436.9	16.6
60°-70°	764.4	29.0
70°-80°	777.8	29.5
80°-90°	90.6	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°	2638.2	100.0
0°-180°	2638.2	100.0



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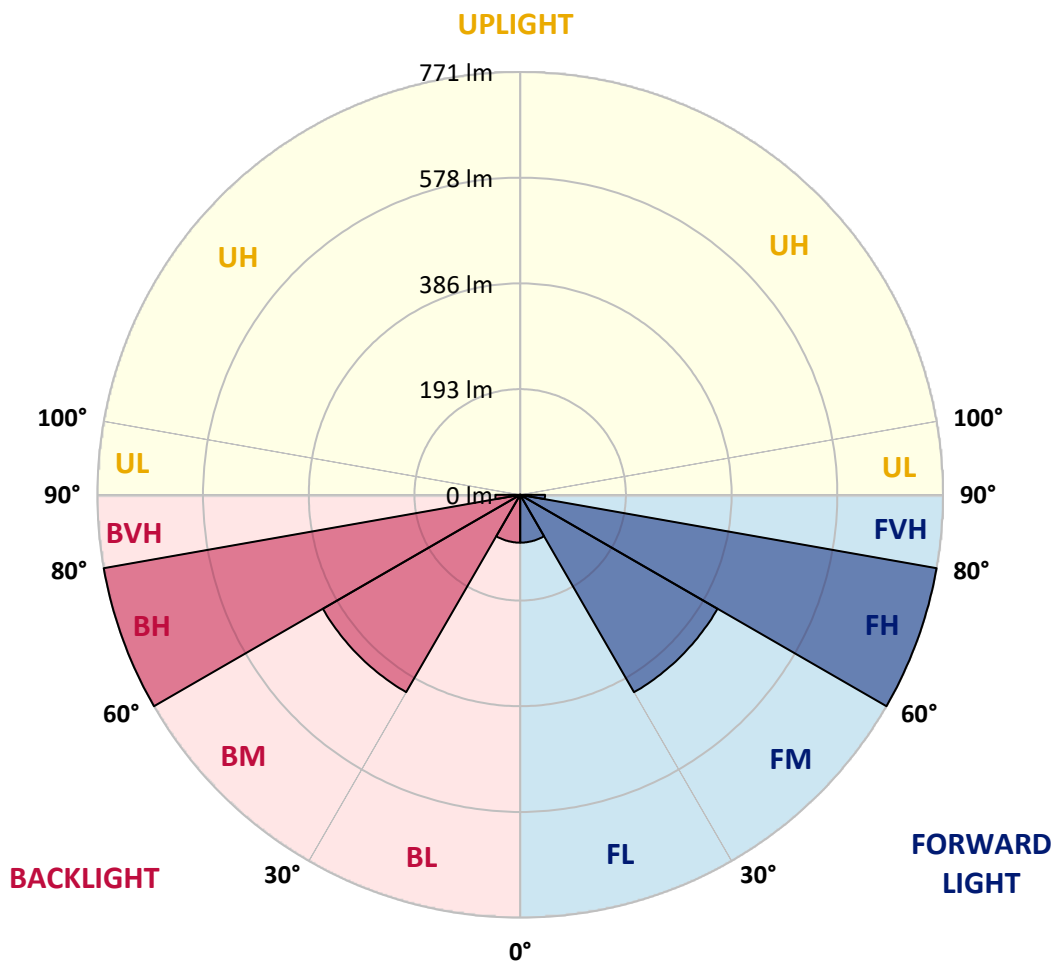
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	87.2	3.3			
FM	(30°-60°)	415.6	15.8			
FH	(60°-80°)	771.1	29.2			G1/1800
FVH	(80°-90°)	45.3	1.7			G1/100
BL	(0°-30°)	87.2	3.3	B0/110		
BM	(30°-60°)	415.6	15.8	B1/1000		
BH	(60°-80°)	771.1	29.2	B2/1000		G1/1800
BVH	(80°-90°)	45.3	1.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	217.5	217.5	217.5	217.5	217.5	217.5	217.5	217.5	217.5	217.5	217.5
2.5°	215.5	216.0	215.0	215.0	215.0	214.4	215.0	214.4	215.0	215.5	215.5
5°	213.4	213.4	212.4	212.4	212.4	211.9	212.4	212.4	212.9	213.4	213.4
7.5°	208.9	208.9	208.3	207.9	207.4	207.4	207.9	207.9	208.3	208.9	208.9
10°	206.4	205.9	205.0	203.3	202.8	202.4	203.3	204.5	205.9	207.4	206.9
12.5°	205.4	205.0	202.8	201.4	200.4	201.0	201.8	202.8	205.4	206.9	206.4
15°	206.4	205.4	202.8	200.4	201.0	201.8	202.8	202.8	205.9	207.4	207.4
17.5°	206.4	205.9	202.8	201.0	201.4	202.8	203.3	202.8	205.4	207.9	207.9
20°	206.9	206.9	202.8	201.4	201.8	203.3	203.8	203.3	205.4	208.3	208.3
22.5°	207.9	207.4	203.3	202.4	203.3	204.5	205.0	204.5	206.4	208.9	209.5
25°	209.9	208.9	205.4	205.0	206.9	208.3	208.3	207.4	208.3	210.9	210.9
27.5°	212.4	211.9	207.9	207.9	210.5	213.4	211.9	209.9	210.9	213.4	213.4
30°	216.9	216.4	212.4	212.4	216.0	219.5	216.0	213.4	215.0	217.5	218.0
32.5°	223.5	223.5	219.9	218.9	224.9	226.6	224.9	219.9	221.0	224.4	224.4
35°	234.5	233.5	230.0	229.4	235.5	235.0	234.5	230.0	231.0	235.0	235.0
37.5°	249.1	248.7	245.5	244.1	247.0	245.1	246.0	244.1	246.6	249.5	250.1
40°	267.6	267.2	264.7	262.7	263.7	260.7	261.6	262.7	265.2	267.2	267.6
42.5°	290.8	290.8	288.3	284.8	283.2	281.7	281.7	283.8	286.3	288.7	288.7
45°	319.3	319.3	316.5	312.9	308.4	305.9	306.9	308.8	311.8	314.9	315.8
47.5°	353.0	353.0	349.0	345.5	340.9	338.0	338.0	339.0	343.5	345.9	347.6
50°	390.8	389.1	385.3	381.7	379.2	375.1	375.6	375.1	379.2	382.7	383.7
52.5°	429.8	429.4	425.3	424.4	425.8	423.9	423.9	418.8	420.3	422.4	421.8
55°	478.5	477.1	473.5	475.7	481.6	484.6	483.6	475.7	471.0	472.1	471.6
57.5°	531.8	530.3	529.3	535.3	549.0	561.4	558.9	540.4	531.8	532.3	532.9
60°	586.1	586.1	589.1	604.1	633.2	653.8	646.3	615.2	600.1	597.2	596.1
62.5°	641.7	643.4	649.8	674.9	719.6	753.8	734.8	690.4	667.9	662.0	659.9
65°	706.5	708.1	717.7	748.7	808.0	848.7	816.1	774.3	742.8	730.2	728.2
67.5°	800.5	801.5	809.1	839.1	894.9	927.6	894.0	856.8	822.6	808.0	807.0
70°	884.9	885.9	892.3	932.1	983.4	994.9	957.8	910.5	874.8	863.4	861.2
72.5°	865.7	869.3	890.8	952.7	1031.6	1046.5	968.3	897.4	840.2	821.1	815.0
75°	726.2	731.7	765.9	858.8	984.4	1027.0	906.0	775.9	690.4	653.8	644.4
77.5°	423.9	444.4	503.2	622.3	801.5	888.3	746.2	568.0	424.4	364.2	344.1
80°	116.1	127.1	169.7	286.3	502.7	622.3	476.1	260.7	140.7	105.6	97.9
82.5°	36.7	48.7	61.8	82.4	197.4	327.9	176.7	76.8	60.2	49.8	44.1
85°	19.7	21.1	34.7	40.2	59.3	91.8	54.7	40.2	36.1	26.6	25.2
87.5°	10.1	10.5	19.7	19.7	26.1	21.6	23.5	21.6	20.7	13.0	11.6
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)