

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: P234668

Luminaire Tested: **ARCH-AF16-20-D-U-5WQ-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234668
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-8027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 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: 2360 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: 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

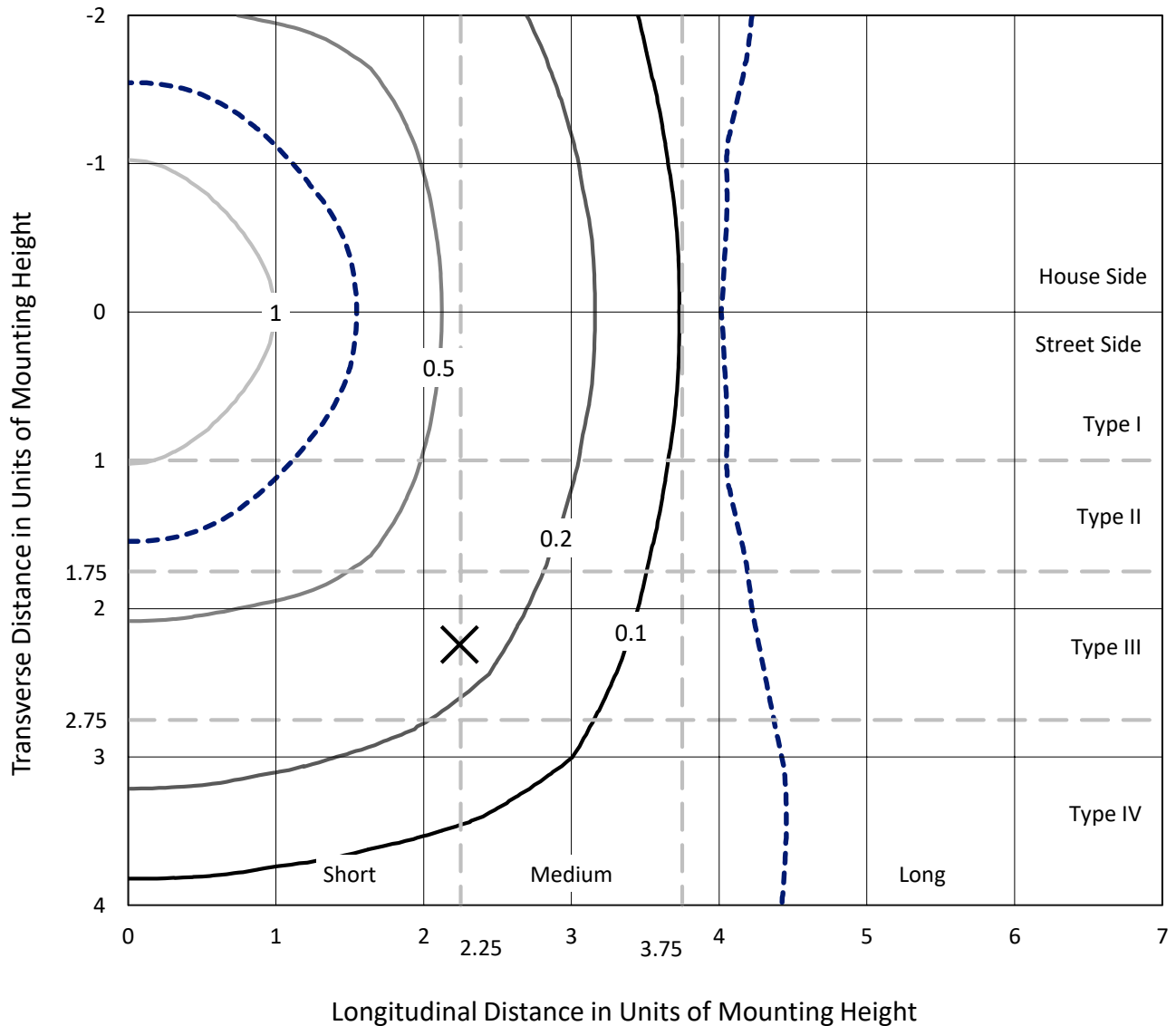


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

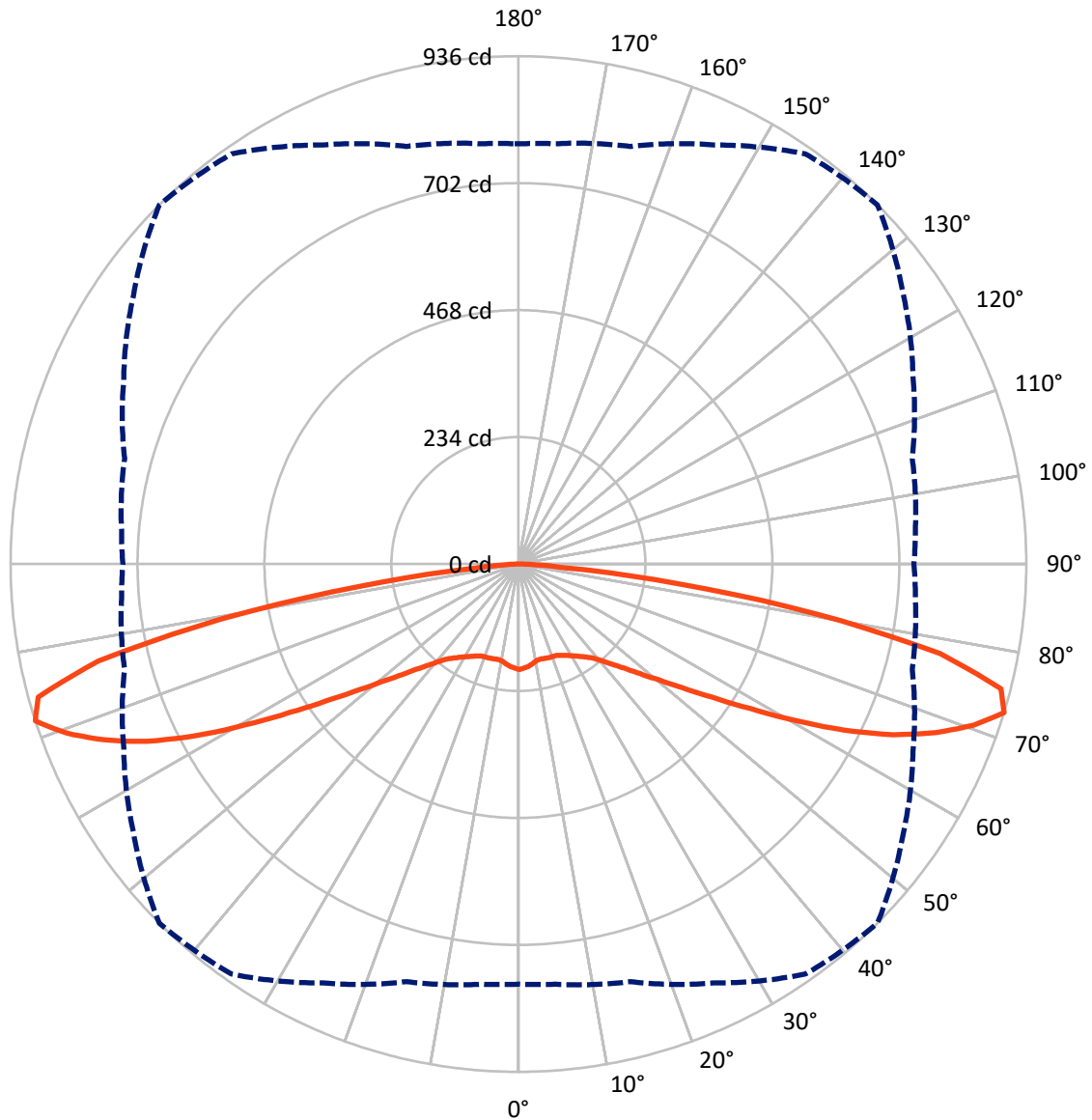


Based on 10 foot mounting height. Maximum calculated value = 1.9 fc
 Type V - Short - Non-Cutoff

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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
House Side	Lumens	1180.0	0.0	1180.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1180.0	0.0	1180.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	2360.0	0.0	2360.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.9	0.8
10°-20°	51.6	2.2
20°-30°	86.4	3.7
30°-40°	132.8	5.6
40°-50°	219.9	9.3
50°-60°	390.9	16.6
60°-70°	683.8	29.0
70°-80°	695.7	29.5
80°-90°	81.0	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°	2360.0	100.0
0°-180°	2360.0	100.0



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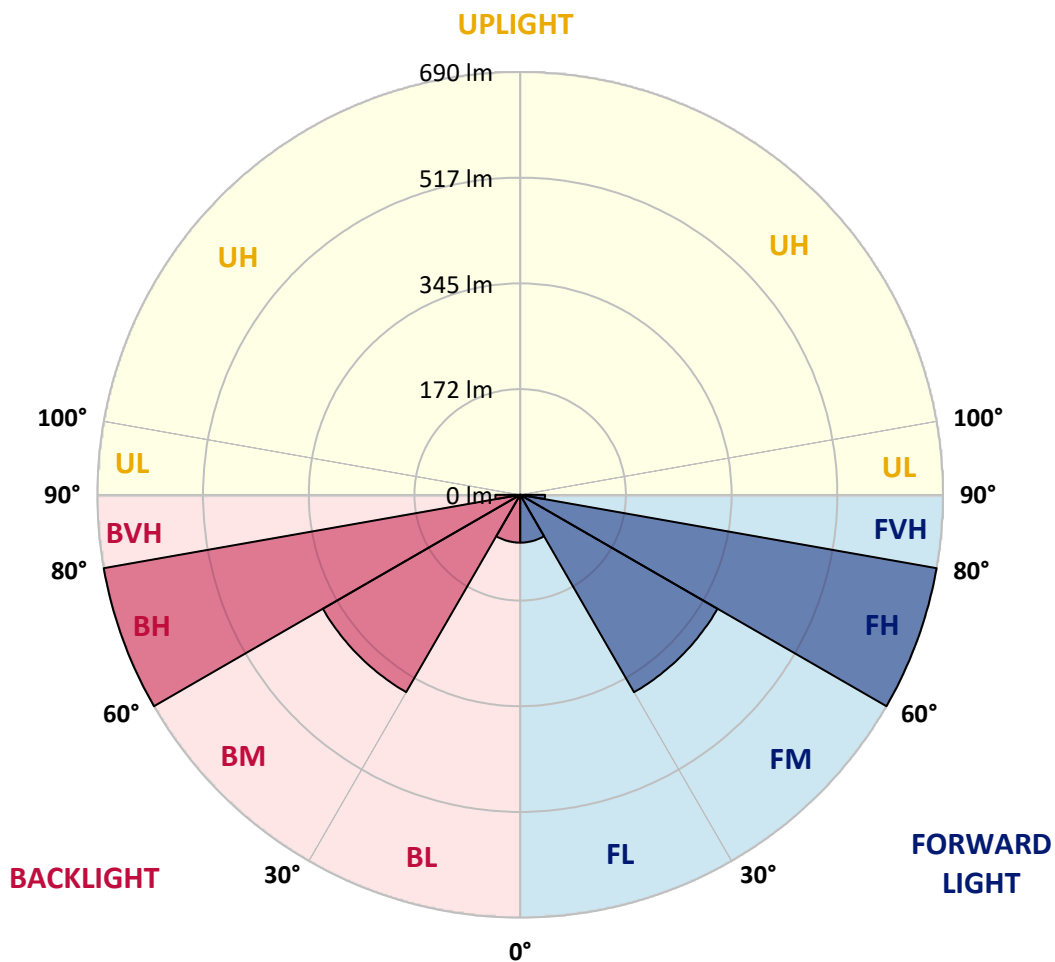
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	78.0	3.3			
FM	(30°-60°)	371.8	15.8			
FH	(60°-80°)	689.8	29.2			G1/1800
FVH	(80°-90°)	40.5	1.7			G1/100
BL	(0°-30°)	78.0	3.3	B0/110		
BM	(30°-60°)	371.8	15.8	B1/1000		
BH	(60°-80°)	689.8	29.2	B2/1000		G1/1800
BVH	(80°-90°)	40.5	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°	194.5	194.5	194.5	194.5	194.5	194.5	194.5	194.5	194.5	194.5	194.5
2.5°	192.7	193.2	192.3	192.3	192.3	191.8	192.3	191.8	192.3	192.7	192.7
5°	190.9	190.9	190.0	190.0	190.0	189.6	190.0	190.0	190.5	190.9	190.9
7.5°	186.9	186.9	186.4	186.0	185.5	185.5	186.0	186.0	186.4	186.9	186.9
10°	184.6	184.2	183.3	181.9	181.5	181.0	181.9	182.8	184.2	185.5	185.1
12.5°	183.7	183.3	181.5	180.1	179.2	179.7	180.6	181.5	183.7	185.1	184.6
15°	184.6	183.7	181.5	179.2	179.7	180.6	181.5	181.5	184.2	185.5	185.5
17.5°	184.6	184.2	181.5	179.7	180.1	181.5	181.9	181.5	183.7	186.0	186.0
20°	185.1	185.1	181.5	180.1	180.6	181.9	182.4	181.9	183.7	186.4	186.4
22.5°	186.0	185.5	181.9	181.0	181.9	182.8	183.3	182.8	184.6	186.9	187.3
25°	187.8	186.9	183.7	183.3	185.1	186.4	186.4	185.5	186.4	188.7	188.7
27.5°	190.0	189.6	186.0	186.0	188.2	190.9	189.6	187.8	188.7	190.9	190.9
30°	194.1	193.6	190.0	190.0	193.2	196.3	193.2	190.9	192.3	194.5	195.0
32.5°	199.9	199.9	196.8	195.9	201.3	202.6	201.3	196.8	197.7	200.8	200.8
35°	209.8	208.9	205.7	205.3	210.7	210.2	209.8	205.7	206.6	210.2	210.2
37.5°	222.8	222.4	219.7	218.3	221.0	219.2	220.1	218.3	220.6	223.3	223.7
40°	239.4	239.0	236.7	234.9	235.8	233.2	234.1	234.9	237.2	239.0	239.4
42.5°	260.1	260.1	257.9	254.7	253.4	252.0	252.0	253.8	256.1	258.3	258.3
45°	285.7	285.7	283.0	279.9	275.8	273.6	274.5	276.3	279.0	281.7	282.6
47.5°	315.8	315.8	312.2	309.1	305.0	302.3	302.3	303.2	307.3	309.5	310.9
50°	349.5	348.2	344.6	341.4	339.2	335.6	336.0	335.6	339.2	342.3	343.2
52.5°	384.5	384.1	380.5	379.6	381.0	379.2	379.2	374.7	376.0	377.8	377.4
55°	428.1	426.8	423.6	425.4	430.8	433.5	432.6	425.4	421.4	422.3	421.8
57.5°	475.7	474.4	473.5	478.9	491.0	502.2	500.0	483.4	475.7	476.2	476.6
60°	524.3	524.3	527.0	540.4	566.5	584.9	578.2	550.3	536.8	534.1	533.2
62.5°	574.1	575.5	581.3	603.8	643.8	674.3	657.2	617.7	597.5	592.1	590.3
65°	632.1	633.4	642.0	669.8	722.8	759.2	730.0	692.7	664.4	653.2	651.4
67.5°	716.1	717.0	723.7	750.7	800.5	829.7	799.6	766.4	735.8	722.8	721.9
70°	791.6	792.5	798.3	833.8	879.6	889.9	856.7	814.5	782.6	772.2	770.4
72.5°	774.5	777.6	796.9	852.2	922.7	936.2	866.1	802.8	751.6	734.5	729.1
75°	649.6	654.5	685.1	768.2	880.5	918.7	810.4	694.1	617.7	584.9	576.4
77.5°	379.2	397.6	450.1	556.6	717.0	794.7	667.6	508.1	379.6	325.7	307.7
80°	103.8	113.7	151.8	256.1	449.7	556.6	425.9	233.2	125.8	94.3	87.6
82.5°	32.8	43.6	55.3	73.7	176.5	293.4	158.1	68.7	53.9	44.5	39.5
85°	17.5	18.9	31.0	35.9	53.0	82.2	49.0	35.9	32.3	23.8	22.5
87.5°	9.0	9.4	17.5	17.5	23.4	19.3	21.1	19.3	18.4	11.7	10.3
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)