

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: P214528

Luminaire Tested: **ARCH-AF16-40-D-U-5WQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214528
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-AF16-40-D-U-5WQ-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 740mA LIGHT ENGINE WITH 16 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4850 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U0 - G1

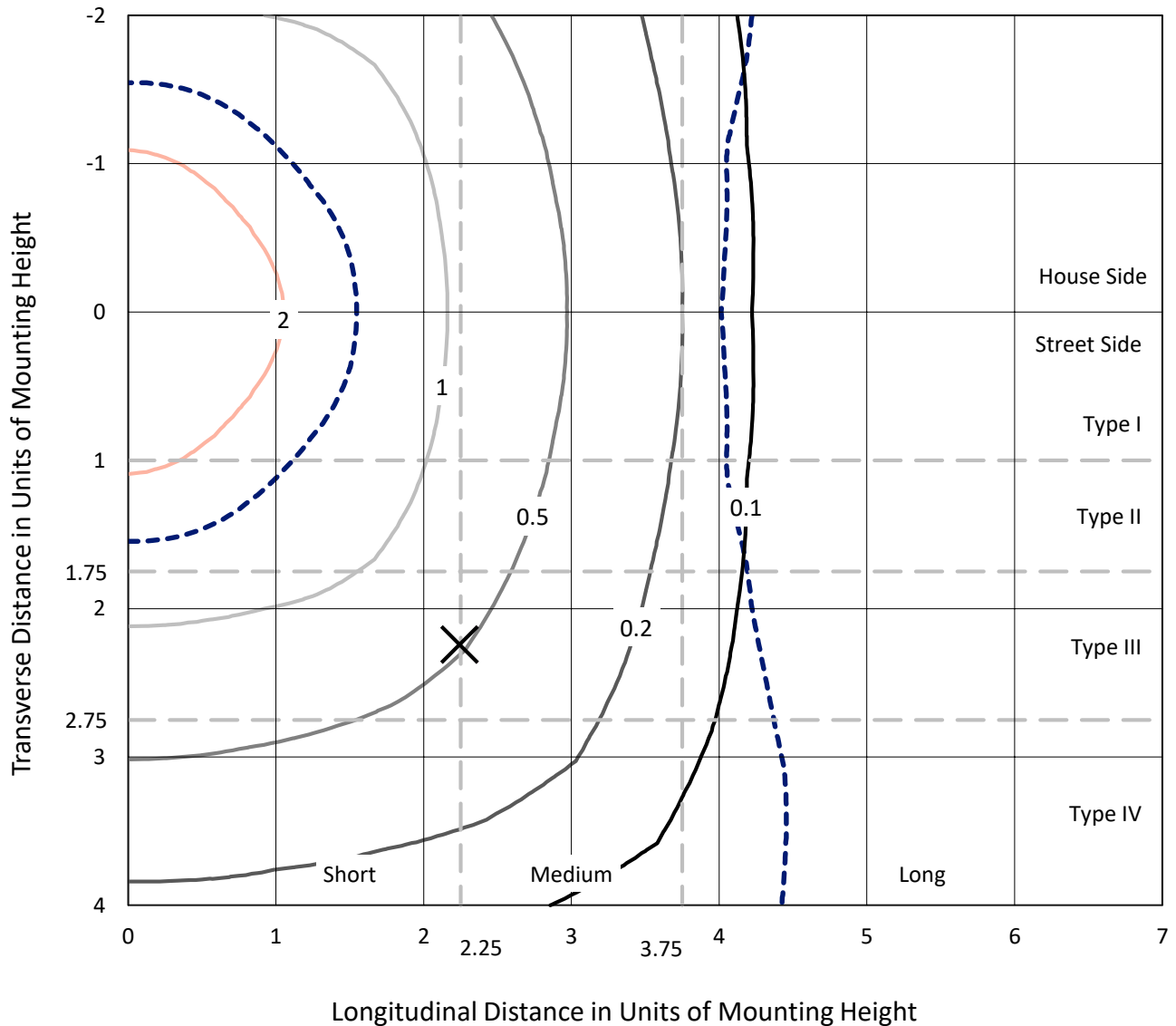
Input Watts (W): 42
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P214528
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

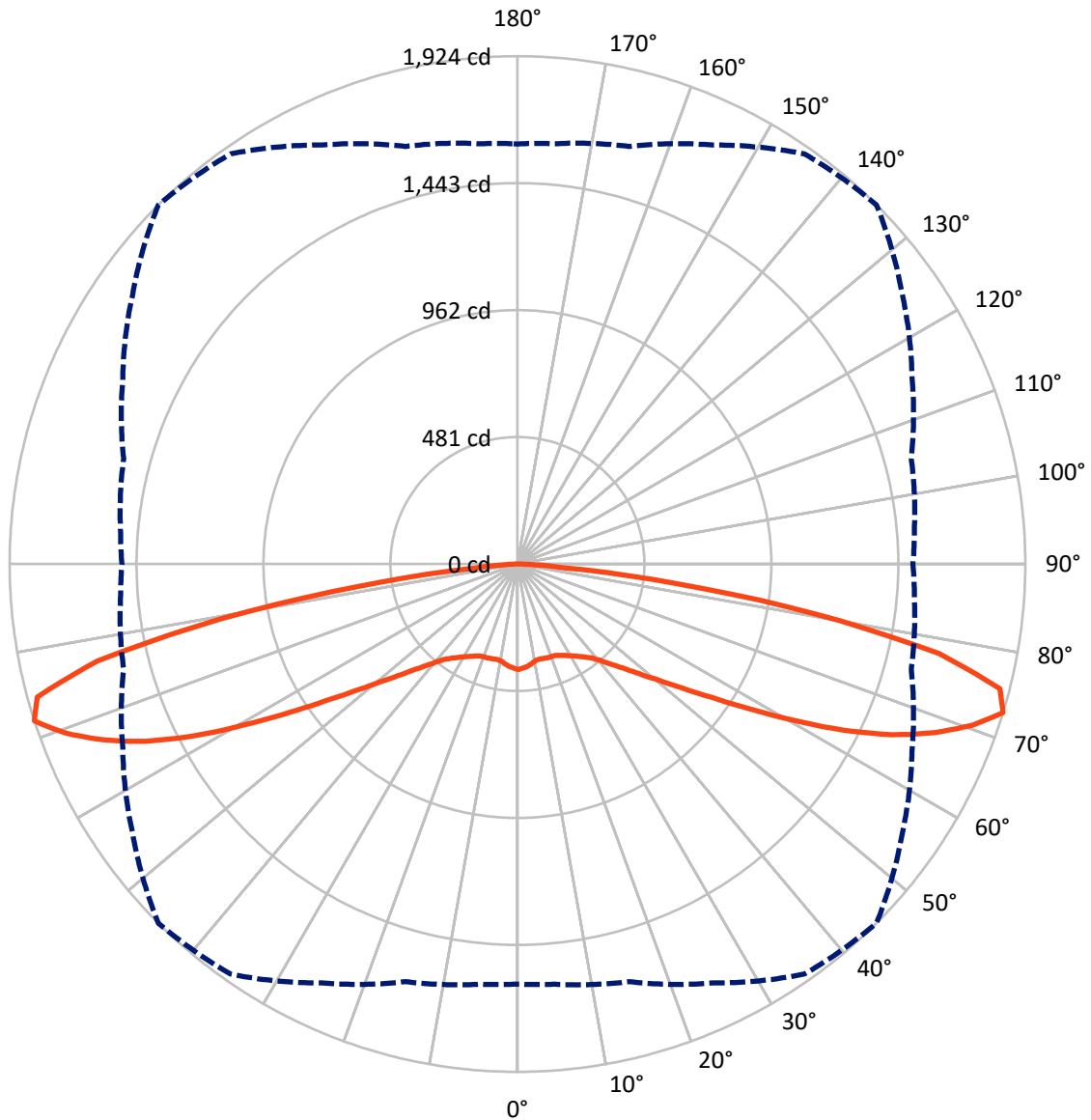


Based on 10 foot mounting height. Maximum calculated value = 4 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P214528

CATALOG NUMBER: ARCH-AF16-40-D-U-5WQ-7050

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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CATALOG NUMBER: ARCH-AF16-40-D-U-5WQ-7050

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2425.0	0.0	2425.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2425.0	0.0	2425.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	4850.0	0.0	4850.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.8	0.8
10°-20°	106.1	2.2
20°-30°	177.6	3.7
30°-40°	272.9	5.6
40°-50°	451.8	9.3
50°-60°	803.3	16.6
60°-70°	1405.3	29.0
70°-80°	1429.8	29.5
80°-90°	166.5	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°	4850.0	100.0
0°-180°	4850.0	100.0



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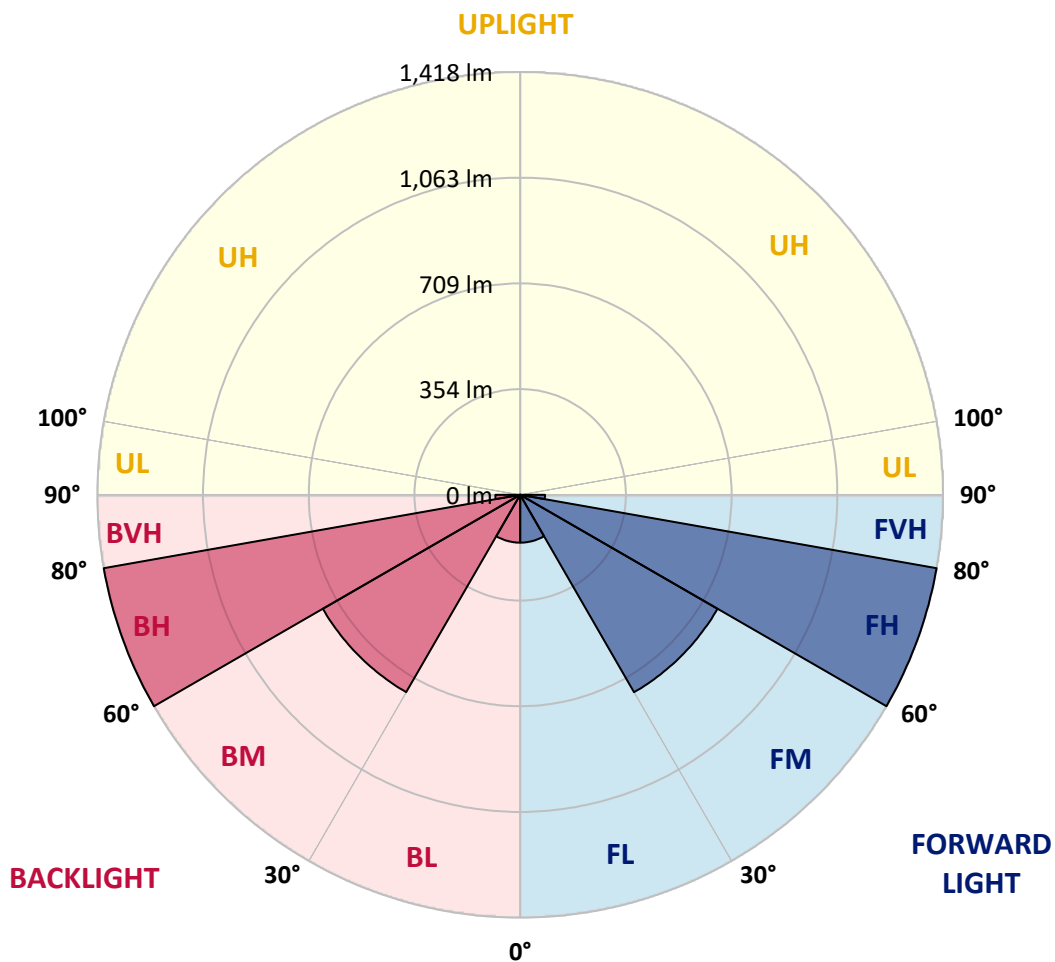
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	160.3	3.3			
FM	(30°-60°)	764.0	15.8			
FH	(60°-80°)	1417.5	29.2			G1/1800
FVH	(80°-90°)	83.2	1.7			G1/100
BL	(0°-30°)	160.3	3.3	B1/500		
BM	(30°-60°)	764.0	15.8	B1/1000		
BH	(60°-80°)	1417.5	29.2	B3/2500		G1/1800
BVH	(80°-90°)	83.2	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°	399.8	399.8	399.8	399.8	399.8	399.8	399.8	399.8	399.8	399.8	399.8
2.5°	396.1	397.0	395.1	395.1	395.1	394.2	395.1	394.2	395.1	396.1	396.1
5°	392.4	392.4	390.5	390.5	390.5	389.6	390.5	390.5	391.4	392.4	392.4
7.5°	384.1	384.1	383.1	382.2	381.3	381.3	382.2	382.2	383.1	384.1	384.1
10°	379.4	378.5	376.7	373.9	373.0	372.1	373.9	375.7	378.5	381.3	380.4
12.5°	377.6	376.7	373.0	370.2	368.4	369.3	371.1	373.0	377.6	380.4	379.4
15°	379.4	377.6	373.0	368.4	369.3	371.1	373.0	373.0	378.5	381.3	381.3
17.5°	379.4	378.5	373.0	369.3	370.2	373.0	373.9	373.0	377.6	382.2	382.2
20°	380.4	380.4	373.0	370.2	371.1	373.9	374.8	373.9	377.6	383.1	383.1
22.5°	382.2	381.3	373.9	372.1	373.9	375.7	376.7	375.7	379.4	384.1	385.0
25°	385.9	384.1	377.6	376.7	380.4	383.1	383.1	381.3	383.1	387.8	387.8
27.5°	390.5	389.6	382.2	382.2	386.8	392.4	389.6	385.9	387.8	392.4	392.4
30°	398.8	397.9	390.5	390.5	397.0	403.4	397.0	392.4	395.1	399.8	400.7
32.5°	410.8	410.8	404.4	402.5	413.6	416.4	413.6	404.4	406.2	412.7	412.7
35°	431.1	429.3	422.8	421.9	433.0	432.1	431.1	422.8	424.7	432.1	432.1
37.5°	457.9	457.0	451.5	448.7	454.2	450.5	452.4	448.7	453.3	458.8	459.8
40°	492.1	491.2	486.5	482.8	484.7	479.1	481.0	482.8	487.5	491.2	492.1
42.5°	534.5	534.5	529.9	523.5	520.7	517.9	517.9	521.6	526.2	530.8	530.8
45°	587.2	587.2	581.6	575.2	566.9	562.2	564.1	567.8	573.3	578.9	580.7
47.5°	649.0	649.0	641.6	635.2	626.9	621.3	621.3	623.2	631.5	636.1	638.9
50°	718.3	715.5	708.1	701.6	697.0	689.6	690.6	689.6	697.0	703.5	705.3
52.5°	790.3	789.3	782.0	780.1	782.9	779.2	779.2	770.0	772.7	776.4	775.5
55°	879.8	877.1	870.6	874.3	885.4	890.9	889.1	874.3	866.0	867.8	866.9
57.5°	977.7	974.9	973.1	984.1	1009.1	1032.2	1027.5	993.4	977.7	978.6	979.5
60°	1077.4	1077.4	1082.9	1110.6	1164.2	1202.0	1188.2	1130.9	1103.2	1097.7	1095.9
62.5°	1179.9	1182.6	1194.6	1240.8	1323.0	1385.7	1350.7	1269.4	1227.9	1216.8	1213.1
65°	1299.0	1301.7	1319.3	1376.5	1485.5	1560.2	1500.2	1423.6	1365.4	1342.4	1338.7
67.5°	1471.6	1473.5	1487.3	1542.7	1645.2	1705.2	1643.3	1575.0	1512.2	1485.5	1483.6
70°	1626.7	1628.6	1640.6	1713.5	1807.7	1828.9	1760.6	1673.8	1608.2	1587.0	1583.3
72.5°	1591.6	1598.1	1637.8	1751.3	1896.3	1924.0	1780.0	1649.8	1544.5	1509.5	1498.4
75°	1335.0	1345.1	1407.9	1578.7	1809.5	1888.0	1665.5	1426.4	1269.4	1202.0	1184.5
77.5°	779.2	817.0	925.1	1143.9	1473.5	1633.2	1371.9	1044.2	780.1	669.3	632.4
80°	213.3	233.6	312.0	526.2	924.1	1143.9	875.2	479.1	258.5	193.9	180.0
82.5°	67.4	89.6	113.6	151.4	362.8	602.9	325.0	141.3	110.8	91.4	81.2
85°	36.0	38.8	63.7	73.9	108.9	168.9	100.6	73.9	66.5	48.9	46.2
87.5°	18.5	19.4	36.0	36.0	48.0	39.7	43.4	39.7	37.9	24.0	21.2
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)