

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: P841396

Luminaire Tested: **ARCH4-170-740-U-5WQ**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841396
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-170-740-U-5WQ
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1380mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28127 lumens
Efficiency: N/A
Efficacy: 165.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type V - Medium
BUG Rating: B5 - U0 - G3

Input Watts (W): 169.8
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: 24 FT

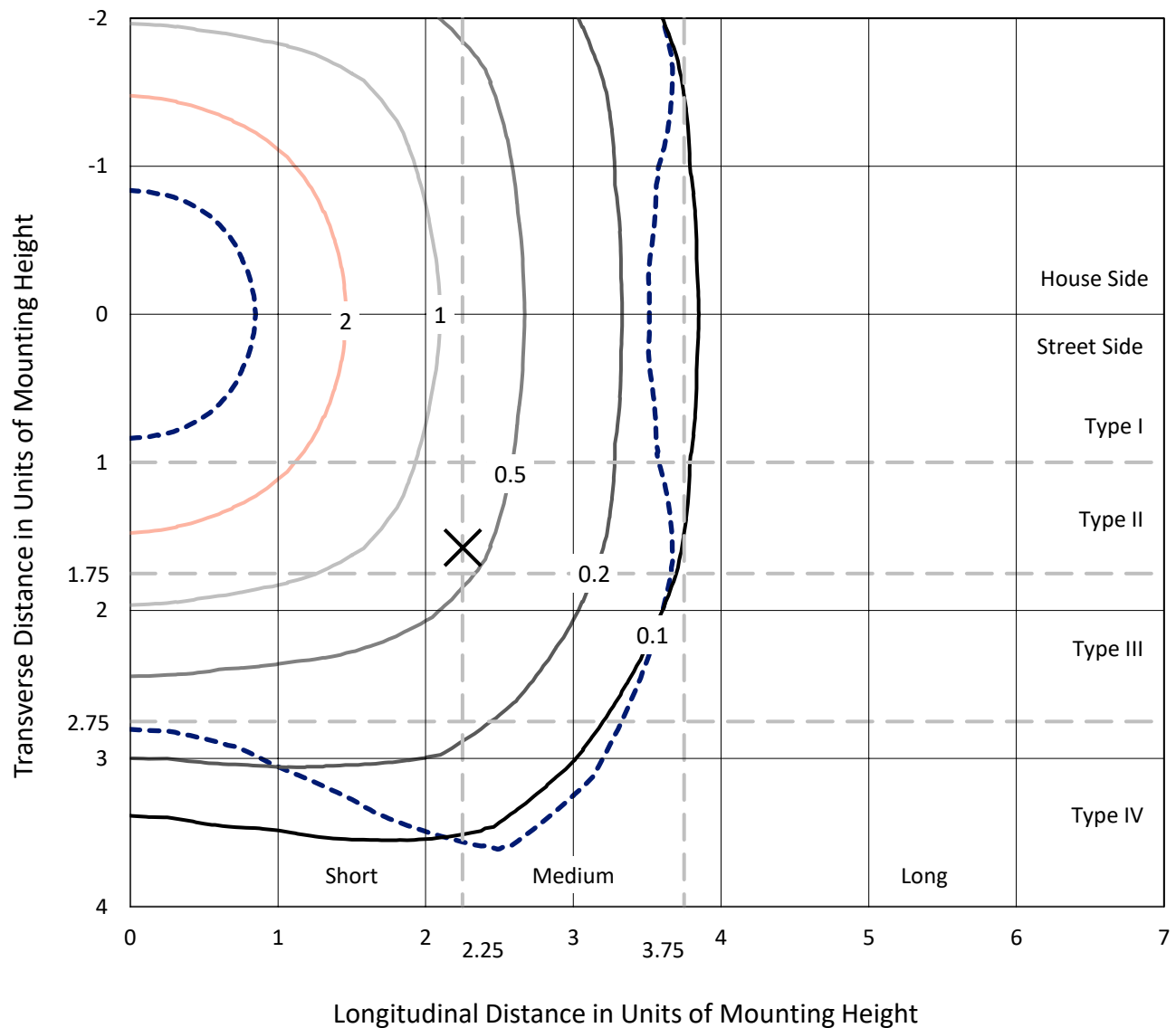


REPORT NUMBER: P841396

CATALOG NUMBER: ARCH4-170-740-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination

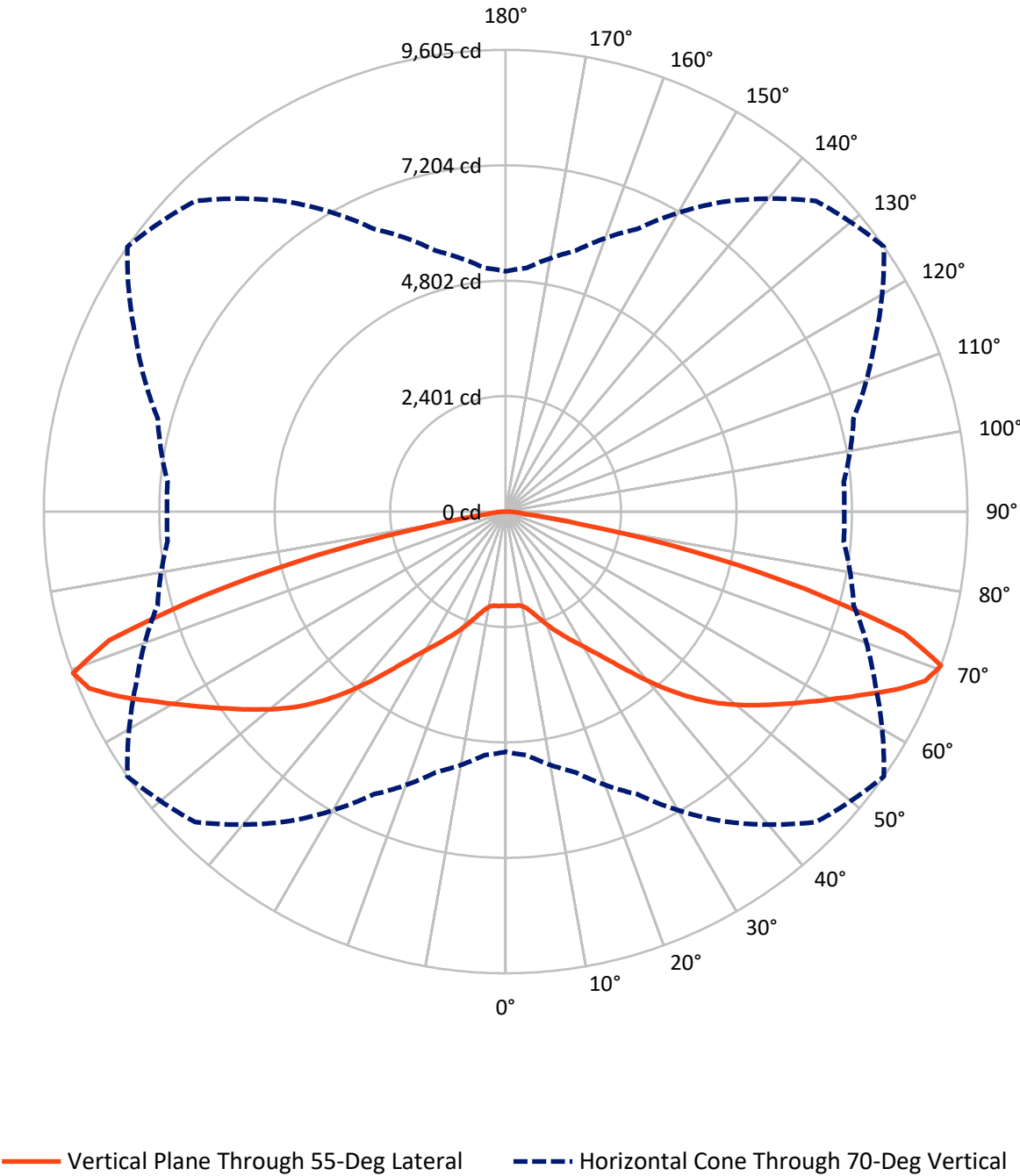
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
Type V - Medium - N/A

REPORT NUMBER: P841396
CATALOG NUMBER: ARCH4-170-740-U-5WQ

Luminous Intensity Polar Plot



REPORT NUMBER: P841396

CATALOG NUMBER: ARCH4-170-740-U-5WQ

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14063.5	0.0	14063.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	14063.5	0.0	14063.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	28127.0	0.0	28127.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.3	0.7
10°-20°	644.2	2.3
20°-30°	1338.6	4.8
30°-40°	2472.3	8.8
40°-50°	4343.3	15.4
50°-60°	6264.1	22.3
60°-70°	7666.6	27.3
70°-80°	4878.4	17.3
80°-90°	330.1	1.2
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°	28127.0	100.0
0°-180°	28127.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841396

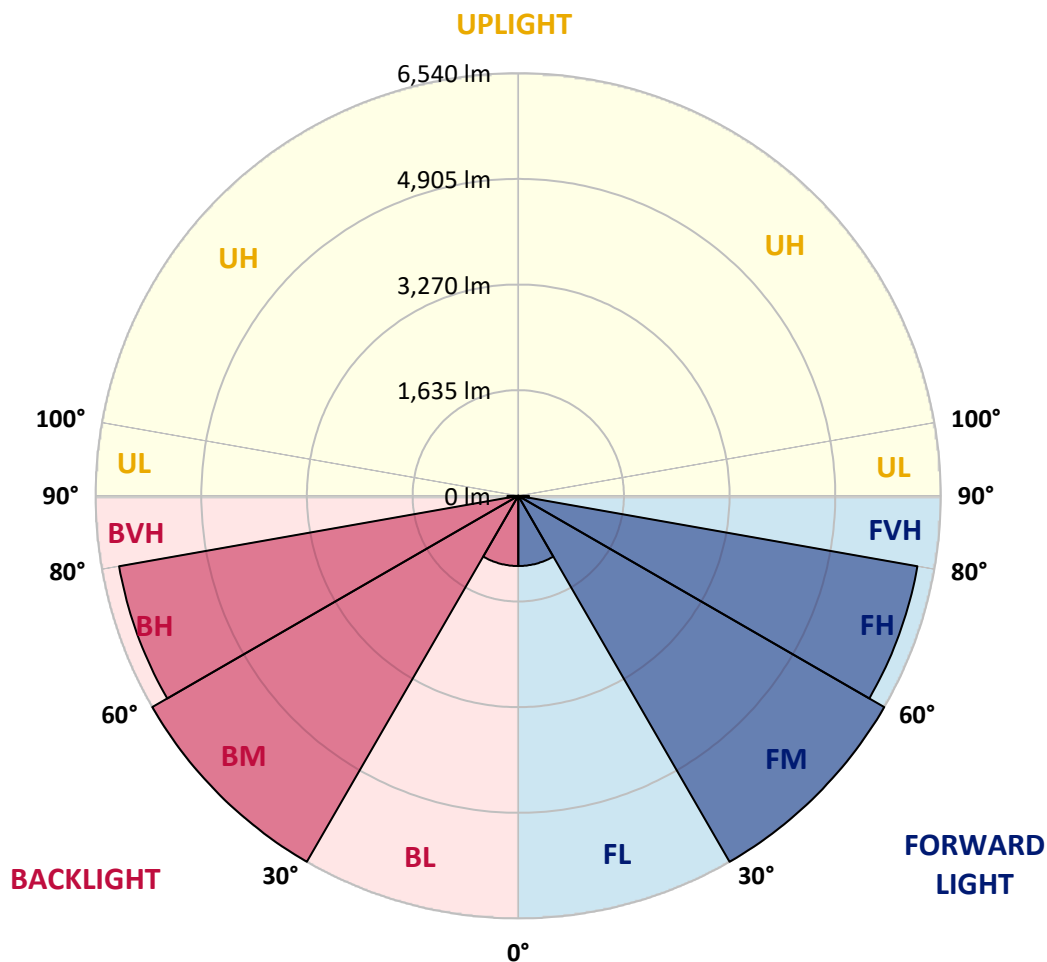
CATALOG NUMBER: ARCH4-170-740-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1086.1	3.9			
FM	(30°-60°)	6539.9	23.3			
FH	(60°-80°)	6272.5	22.3			G3/7500
FVH	(80°-90°)	165.0	0.6			G2/225
BL	(0°-30°)	1086.1	3.9	B3/2500		
BM	(30°-60°)	6539.9	23.3	B4/8500		
BH	(60°-80°)	6272.5	22.3	B5		G3/7500
BVH	(80°-90°)	165.0	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Medium



REPORT NUMBER: P841396

CATALOG NUMBER: ARCH4-170-740-U-5WQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1960.7	1960.7	1960.7	1960.7	1960.7	1960.7	1960.7	1960.7	1960.7	1960.7	1960.7
2.5°	1986.9	1986.9	1981.6	1981.6	1971.2	1965.9	1960.7	1960.7	1955.5	1955.5	1950.3
5°	1997.3	1997.3	1997.3	1992.1	1986.9	1981.6	1971.2	1960.7	1955.5	1950.3	1945.0
7.5°	2002.5	2002.5	1997.3	1997.3	1992.1	1986.9	1971.2	1955.5	1950.3	1945.0	1945.0
10°	2044.4	2039.1	2033.9	2023.5	2023.5	2023.5	2002.5	1986.9	1981.6	1981.6	1981.6
12.5°	2143.7	2138.5	2128.0	2112.3	2112.3	2117.6	2086.2	2065.3	2065.3	2060.1	2060.1
15°	2290.1	2284.9	2274.4	2248.3	2243.1	2253.5	2206.5	2185.5	2185.5	2185.5	2180.3
17.5°	2452.2	2441.7	2426.1	2405.1	2405.1	2405.1	2358.1	2331.9	2316.3	2316.3	2311.0
20°	2588.1	2582.9	2582.9	2577.7	2593.4	2593.4	2530.6	2488.8	2452.2	2431.3	2426.1
22.5°	2708.4	2703.2	2713.6	2734.5	2765.9	2776.4	2703.2	2640.4	2582.9	2541.1	2530.6
25°	2870.5	2865.3	2860.0	2891.4	2943.7	2959.4	2880.9	2802.5	2745.0	2724.1	2713.6
27.5°	3043.0	3048.3	3053.5	3084.9	3126.7	3152.8	3074.4	3001.2	2954.1	2922.8	2912.3
30°	3236.5	3246.9	3262.6	3309.7	3341.1	3351.5	3283.5	3231.3	3189.4	3163.3	3147.6
32.5°	3482.2	3503.1	3524.1	3565.9	3581.6	3571.1	3539.7	3503.1	3471.8	3435.2	3429.9
35°	3848.2	3869.1	3863.9	3879.6	3884.8	3874.4	3858.7	3837.8	3822.1	3775.0	3769.8
37.5°	4308.3	4329.3	4297.9	4282.2	4245.6	4250.8	4245.6	4261.3	4266.5	4219.5	4214.2
40°	4773.7	4794.6	4752.8	4710.9	4674.3	4658.7	4684.8	4737.1	4737.1	4705.7	4705.7
42.5°	5270.4	5286.1	5218.1	5165.8	5118.8	5108.3	5124.0	5186.8	5202.4	5197.2	5197.2
45°	5767.1	5756.7	5667.8	5615.5	5573.7	5547.5	5552.8	5599.8	5631.2	5646.9	5646.9
47.5°	6148.8	6133.1	6059.9	6018.1	5992.0	5955.4	5955.4	5981.5	5997.2	6002.4	6002.4
50°	6452.1	6436.4	6363.2	6358.0	6358.0	6342.3	6326.6	6321.4	6310.9	6316.1	6316.1
52.5°	6713.5	6692.6	6640.3	6650.8	6697.8	6708.3	6687.4	6645.5	6603.7	6588.0	6593.2
55°	6995.8	6964.5	6922.6	6954.0	7048.1	7090.0	7058.6	6974.9	6901.7	6854.7	6854.7
57.5°	7220.7	7184.1	7184.1	7273.0	7445.5	7529.2	7461.2	7304.3	7178.8	7126.6	7131.8
60°	7063.8	7032.4	7157.9	7550.1	7874.2	8015.4	7900.4	7623.3	7419.4	7356.6	7367.1
62.5°	6755.3	6734.4	6891.3	7497.8	8261.2	8554.0	8381.4	7984.0	7680.8	7607.6	7607.6
65°	6300.4	6295.2	6514.8	7262.5	8350.0	9071.6	8925.2	8376.2	7984.0	7884.7	7905.6
67.5°	5829.9	5829.9	6028.6	6859.9	8245.5	9291.2	9406.2	8731.7	8130.4	7884.7	7889.9
70°	4998.5	5087.4	5615.5	6488.7	7863.8	9134.3	9604.9	8480.8	7492.6	7058.6	7042.9
72.5°	3294.0	3409.0	4460.0	5840.3	7487.3	8564.4	8669.0	7450.7	6222.0	5714.8	5688.7
75°	1986.9	2086.2	2891.4	4559.3	6582.8	6896.5	6436.4	5840.3	4648.2	4250.8	4250.8
77.5°	585.6	653.6	1333.3	2891.4	4554.1	4533.2	3968.5	3440.4	2750.2	2337.2	2368.5
80°	345.1	355.5	434.0	1317.6	1887.5	1986.9	1532.0	956.8	956.8	711.1	690.2
82.5°	266.7	266.7	277.1	329.4	454.9	507.2	386.9	329.4	376.5	318.9	303.3
85°	188.2	188.2	188.2	193.5	198.7	203.9	214.4	219.6	240.5	198.7	188.2
87.5°	57.5	62.7	68.0	78.4	94.1	99.3	104.6	94.1	94.1	88.9	83.7
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)