Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P836429

Luminaire Tested: **ARCH3-180-750-U-T4W-HSS**

Issue Date: 5/16/2024

Report Generated By 670246001

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Test Information

Test Method:	LM-79-08
Report Number:	P836429
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab:	INNOVATION CENTER
Issue Date:	5/16/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	STREETWORKS
Catalog Number:	ARCH3-180-750-U-T4W-HSS
Description:	ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
	(1) 70 CRI, 5000K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	-

Summary

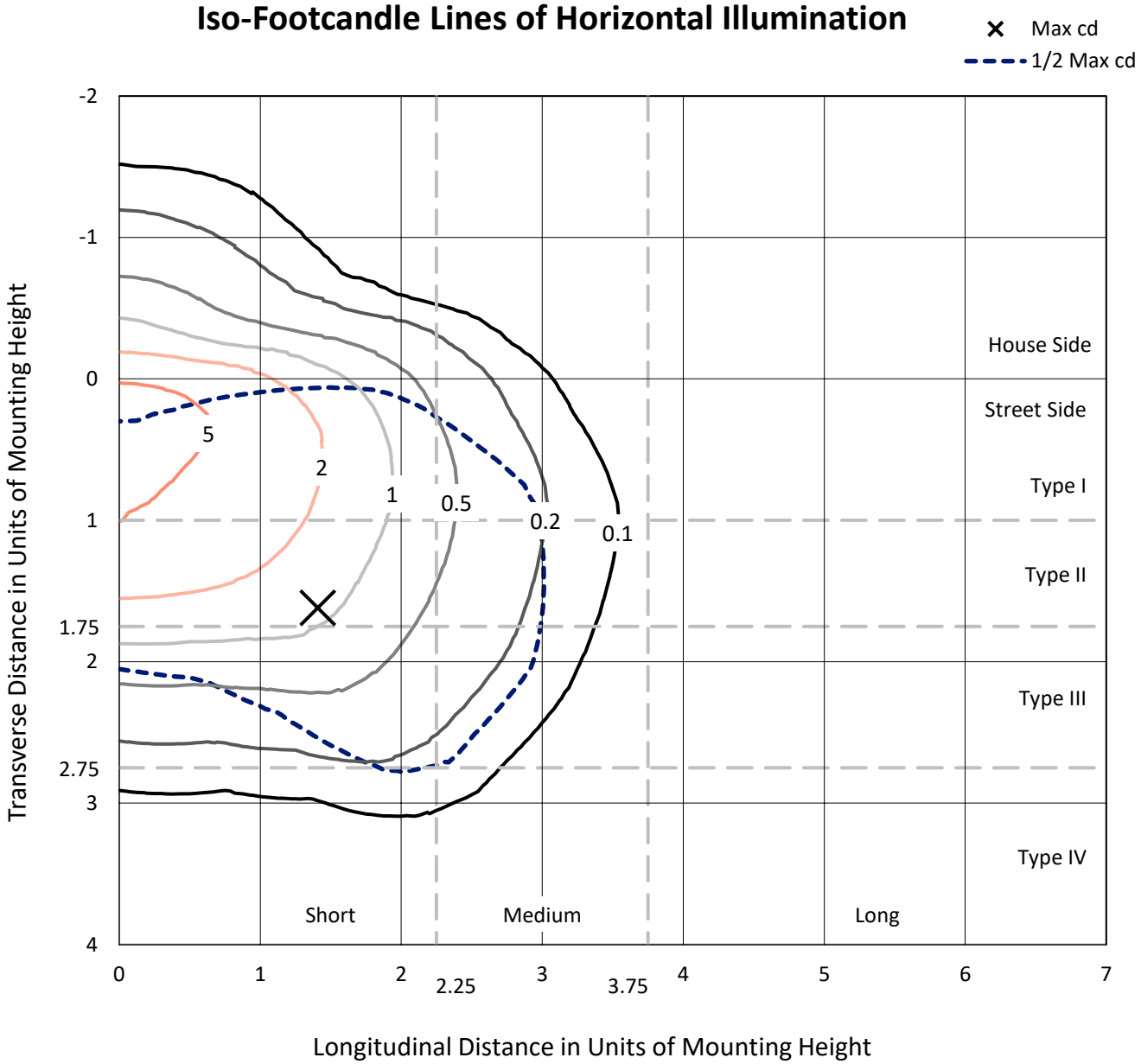
Lumens per Lamp:	N/A
Luminaire Lumens:	17142 lumens
Efficiency:	N/A
Efficacy:	95.0 lumens/watt
Luminous Opening:	Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B2 - U0 - G2

Input Watts (W):	180.5
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

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

REPORT NUMBER: P836429
CATALOG NUMBER: ARCH3-180-750-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

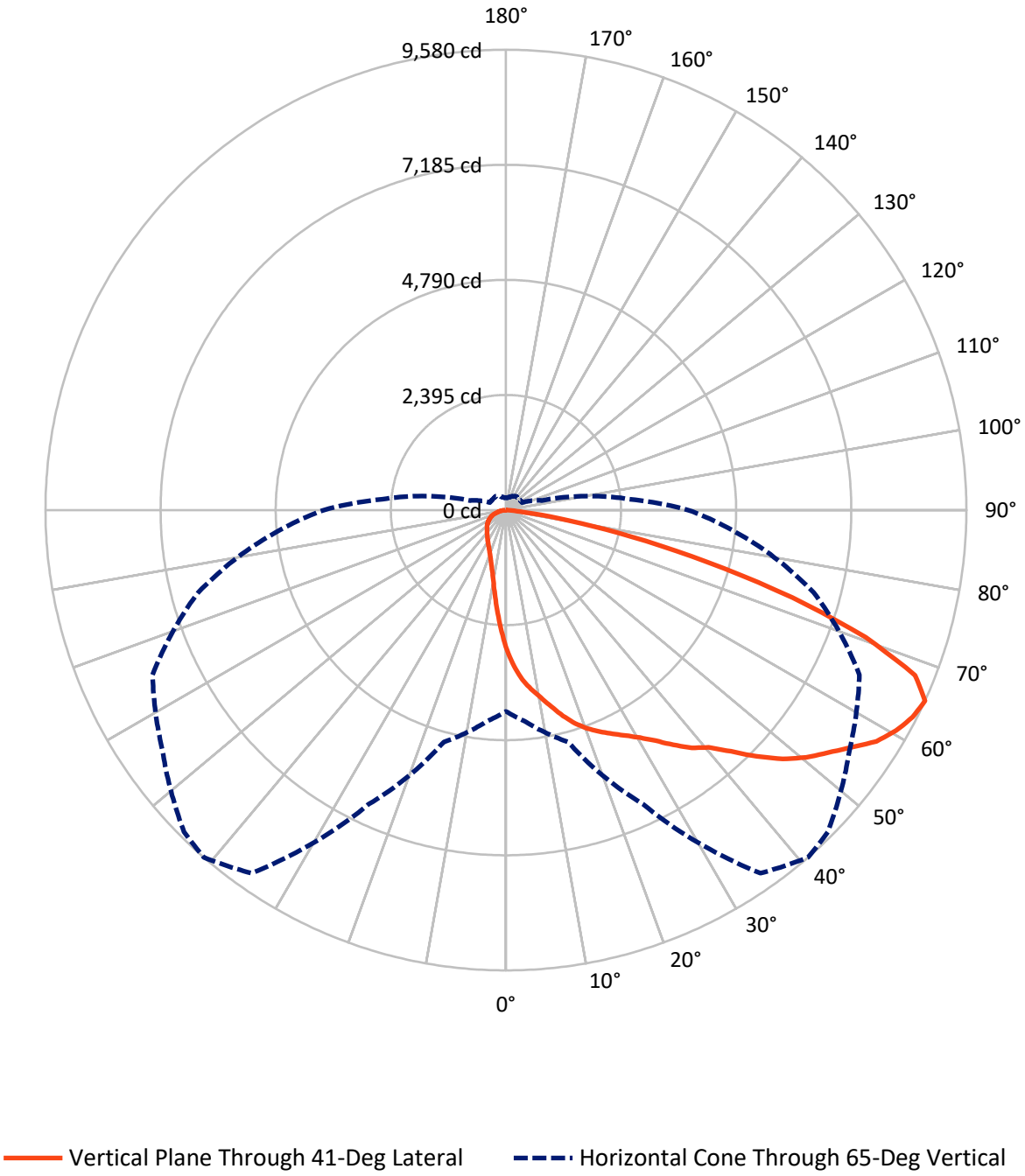


Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
Type III - Short - N/A

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

REPORT NUMBER: P836429
CATALOG NUMBER: ARCH3-180-750-U-T4W-HSS

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

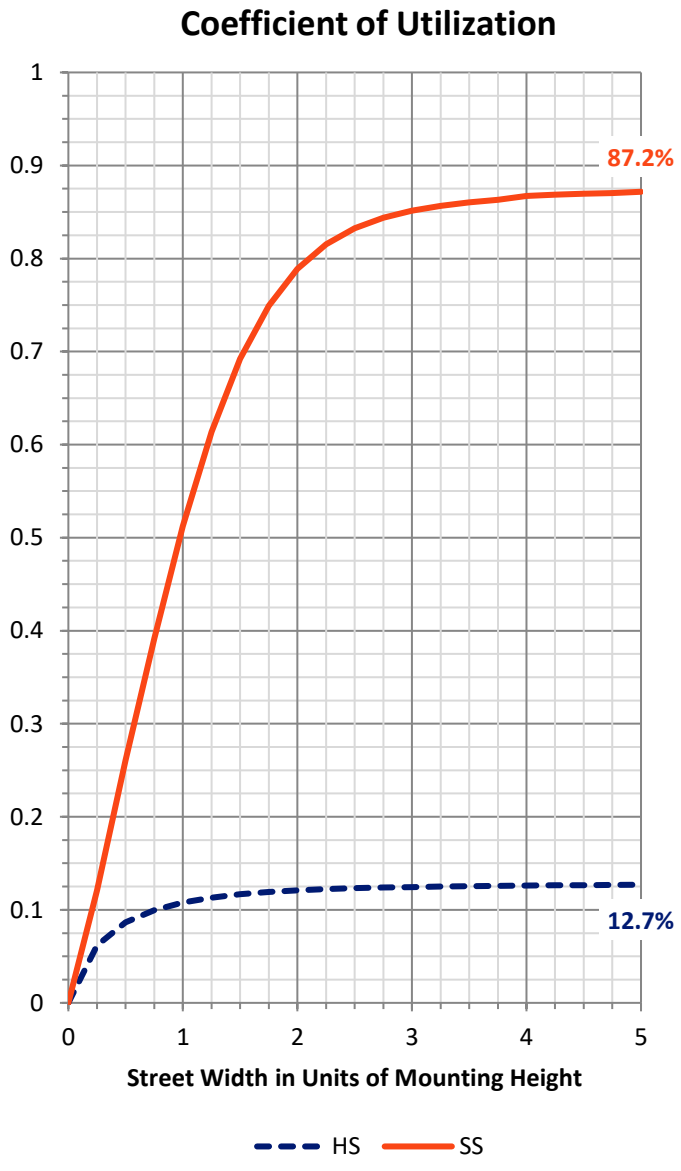
REPORT NUMBER: P836429
CATALOG NUMBER: ARCH3-180-750-U-T4W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2200.8	0.0	2200.8
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	14941.2	0.0	14941.2
	% Fixture	87.2	0.0	87.2
Total	Lumens	17142.0	0.0	17142.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.2	1.6
10°-20°	816.1	4.8
20°-30°	1403.9	8.2
30°-40°	2129.3	12.4
40°-50°	3119.4	18.2
50°-60°	3939.2	23.0
60°-70°	3693.7	21.5
70°-80°	1646.3	9.6
80°-90°	122.0	0.7
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°	17142.0	100.0
0°-180°	17142.0	100.0



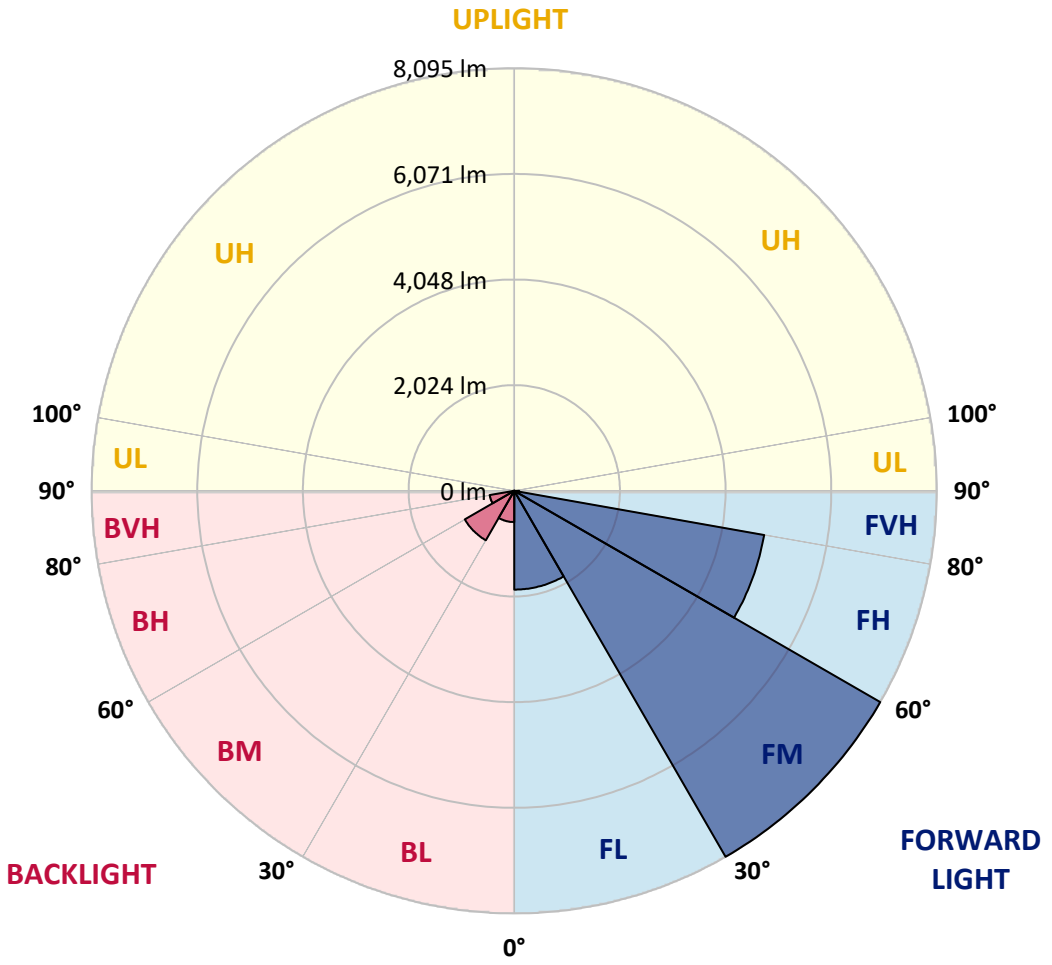
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

REPORT NUMBER: P836429
CATALOG NUMBER: ARCH3-180-750-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1893.1	11.0			
FM	(30°-60°)	8095.1	47.2			
FH	(60°-80°)	4861.9	28.4			G2/5000
FVH	(80°-90°)	91.1	0.5			G1/100
BL	(0°-30°)	599.0	3.5	B2/1000		
BM	(30°-60°)	1092.8	6.4	B2/2500		
BH	(60°-80°)	478.1	2.8	B1/500		G1/500
BVH	(80°-90°)	30.9	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
Type III Short



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

REPORT NUMBER: P836429
CATALOG NUMBER: ARCH3-180-750-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9
2.5°	3369.2	3358.3	3351.1	3311.3	3311.3	3257.1	3260.7	3210.1	3148.7	3051.0	2946.2
5°	3687.3	3672.8	3654.7	3615.0	3600.5	3546.3	3539.1	3466.8	3361.9	3192.0	3004.1
7.5°	3965.6	3951.2	3925.9	3868.0	3828.3	3763.2	3745.1	3651.1	3535.5	3325.8	3061.9
10°	4218.7	4207.8	4175.3	4103.0	4048.8	3969.3	3936.7	3810.2	3665.6	3434.2	3108.9
12.5°	4475.4	4460.9	4417.5	4356.1	4291.0	4197.0	4157.2	3994.6	3810.2	3553.5	3177.6
15°	4713.9	4692.2	4659.7	4594.6	4536.8	4446.4	4403.1	4211.5	3987.3	3687.3	3267.9
17.5°	4869.4	4851.3	4822.4	4786.2	4739.2	4670.6	4627.2	4439.2	4164.5	3817.4	3361.9
20°	4963.4	4956.1	4945.3	4923.6	4901.9	4854.9	4822.4	4645.3	4356.1	3943.9	3452.3
22.5°	5035.7	5028.4	5024.8	5024.8	5028.4	5010.4	4988.7	4836.8	4540.4	4077.7	3535.5
25°	5147.7	5144.1	5136.9	5129.7	5155.0	5158.6	5151.4	5046.5	4771.8	4254.8	3640.3
27.5°	5303.2	5292.3	5277.9	5270.6	5296.0	5314.0	5328.5	5256.2	5017.6	4435.6	3759.6
30°	5541.8	5509.2	5473.1	5447.8	5465.9	5494.8	5527.3	5483.9	5270.6	4659.7	3882.5
32.5°	5823.7	5784.0	5700.8	5653.8	5700.8	5722.5	5747.8	5726.1	5534.5	4901.9	4005.4
35°	6167.2	6120.2	6033.4	5964.7	6047.9	6000.9	5990.0	5968.3	5784.0	5140.5	4142.8
37.5°	6738.3	6669.6	6532.3	6380.4	6380.4	6279.2	6239.5	6174.4	6008.1	5353.8	4276.5
40°	7399.9	7309.5	7132.4	6908.2	6702.2	6492.5	6467.2	6420.2	6272.0	5599.6	4428.4
42.5°	8126.5	7953.0	7707.1	7436.0	7103.4	6864.9	6807.0	6673.3	6528.7	5849.0	4580.2
45°	8932.6	8571.1	8213.2	8075.9	7526.4	7309.5	7201.0	6958.8	6796.2	6109.3	4739.2
47.5°	9062.8	8780.8	8542.2	8520.5	7920.4	7739.7	7616.8	7269.7	7085.4	6387.7	4905.5
50°	8990.5	8820.6	8845.9	8759.1	8209.6	8090.3	7996.3	7602.3	7371.0	6655.2	5057.4
52.5°	8686.8	8780.8	8925.4	8766.3	8484.4	8386.8	8339.8	7960.2	7638.5	6901.0	5194.7
55°	8325.3	8390.4	8701.3	8896.5	8802.5	8715.7	8672.3	8375.9	7902.4	7107.1	5321.3
57.5°	7797.5	7768.6	8112.0	8874.8	9135.1	9084.5	9037.5	8784.4	8148.2	7255.3	5400.8
60°	7005.8	6944.4	7378.2	8441.0	9243.5	9323.0	9301.4	9055.5	8336.2	7251.7	5368.3
62.5°	5635.8	5787.6	6387.7	7732.5	9290.5	9492.9	9453.2	9077.2	8397.6	7042.0	5162.2
65°	4189.8	4406.7	4995.9	6756.4	9225.4	9579.7	9471.3	8723.0	8112.0	6626.3	4710.3
67.5°	3018.5	3210.1	3640.3	5559.8	8600.0	9182.1	9055.5	8144.6	7454.1	6037.0	4084.9
70°	2064.2	2201.5	2494.3	4048.8	7342.0	7938.5	7859.0	7280.6	6416.6	5335.7	3318.6
72.5°	1456.8	1514.7	1702.7	2671.5	5577.9	6228.6	6134.6	5990.0	5155.0	4435.6	2581.1
75°	1091.7	1127.9	1229.1	1728.0	3763.2	4316.3	4229.5	4312.7	3850.0	3358.3	1879.8
77.5°	412.1	448.3	697.7	1102.6	2226.8	2649.8	2563.0	2613.6	2140.1	1695.4	936.3
80°	112.1	119.3	231.4	524.2	1012.2	1319.5	1200.2	1030.3	795.3	780.8	495.3
82.5°	47.0	54.2	104.8	282.0	361.5	361.5	303.7	376.0	303.7	365.1	238.6
85°	18.1	21.7	25.3	72.3	47.0	50.6	54.2	72.3	61.5	75.9	54.2
87.5°	0.0	0.0	0.0	3.6	3.6	7.2	3.6	7.2	10.8	10.8	10.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

REPORT NUMBER: P836429
CATALOG NUMBER: ARCH3-180-750-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9
2.5°	2902.8	2863.1	2805.2	2711.2	2613.6	2559.4	2490.7	2479.9	2407.6	2400.3	2371.4
5°	2920.9	2837.8	2689.5	2508.8	2331.7	2194.3	2093.1	2038.9	1934.0	1934.0	1905.1
7.5°	2935.4	2805.2	2566.6	2299.1	2056.9	1872.6	1735.2	1677.4	1583.4	1576.1	1554.4
10°	2939.0	2765.5	2432.9	2085.8	1789.4	1601.4	1467.7	1402.6	1319.5	1312.2	1297.8
12.5°	2967.9	2743.8	2313.6	1901.5	1597.8	1395.4	1265.2	1211.0	1145.9	1138.7	1124.3
15°	3014.9	2743.8	2212.4	1746.0	1427.9	1239.9	1127.9	1077.3	1030.3	1023.0	1015.8
17.5°	3061.9	2736.5	2111.2	1601.4	1286.9	1117.0	1019.4	979.7	943.5	939.9	932.7
20°	3105.3	2732.9	2009.9	1478.5	1178.5	1015.8	939.9	903.7	874.8	874.8	871.2
22.5°	3148.7	2725.7	1912.3	1362.8	1084.5	939.9	874.8	835.1	813.4	813.4	809.8
25°	3213.7	2725.7	1822.0	1265.2	1008.6	882.1	817.0	788.1	770.0	766.4	766.4
27.5°	3289.6	2747.4	1742.4	1178.5	943.5	824.2	773.6	744.7	723.0	715.8	719.4
30°	3372.8	2765.5	1670.1	1102.6	882.1	780.8	726.6	697.7	676.0	668.8	672.4
32.5°	3455.9	2787.2	1605.1	1033.9	820.6	741.1	686.8	654.3	632.6	629.0	629.0
35°	3546.3	2808.8	1540.0	976.0	770.0	701.3	650.7	614.5	600.1	592.9	596.5
37.5°	3636.7	2845.0	1478.5	921.8	733.8	665.2	618.2	582.0	571.2	567.6	567.6
40°	3745.1	2899.2	1453.2	885.7	701.3	632.6	592.9	556.7	545.9	545.9	545.9
42.5°	3835.5	2942.6	1431.5	845.9	676.0	603.7	567.6	538.6	531.4	527.8	531.4
45°	3925.9	2982.4	1402.6	809.8	643.5	574.8	545.9	516.9	509.7	509.7	509.7
47.5°	4016.2	3004.1	1362.8	773.6	614.5	549.5	524.2	498.9	491.6	491.6	491.6
50°	4088.5	3022.1	1305.0	733.8	582.0	527.8	502.5	477.2	469.9	469.9	469.9
52.5°	4160.8	3025.7	1243.6	686.8	549.5	502.5	480.8	455.5	448.3	444.6	444.6
55°	4225.9	3022.1	1171.3	632.6	513.3	473.6	455.5	433.8	419.3	404.9	412.1
57.5°	4272.9	3018.5	1088.1	578.4	477.2	444.6	437.4	408.5	379.6	343.4	350.7
60°	4254.8	2978.7	997.7	509.7	437.4	415.7	415.7	376.0	325.3	307.3	310.9
62.5°	4139.2	2866.7	903.7	437.4	397.6	386.8	383.2	339.8	300.0	282.0	285.6
65°	*3792.1*	*2584.7*	*766.4*	*372.3*	*357.9*	*354.3*	*354.3*	*314.5*	*278.4*	*256.7*	*260.3*
67.5°	3264.3	2169.0	625.4	314.5	318.1	325.3	325.3	289.2	253.0	231.4	235.0
70°	2617.2	1695.4	498.9	271.1	274.7	285.6	292.8	260.3	227.7	206.1	206.1
72.5°	1970.2	1286.9	401.3	227.7	245.8	245.8	256.7	231.4	198.8	177.1	180.7
75°	1427.9	921.8	318.1	191.6	213.3	209.7	209.7	195.2	169.9	155.4	155.4
77.5°	676.0	484.4	253.0	137.4	166.3	162.7	166.3	155.4	144.6	130.1	133.8
80°	332.6	238.6	162.7	97.6	115.7	119.3	130.1	122.9	119.3	108.4	108.4
82.5°	159.1	94.0	75.9	68.7	79.5	83.1	90.4	90.4	94.0	86.8	86.8
85°	43.4	25.3	32.5	43.4	50.6	54.2	61.5	65.1	65.1	61.5	65.1
87.5°	10.8	10.8	14.5	21.7	25.3	28.9	32.5	32.5	14.5	0.0	0.0
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)