

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: P840909

Luminaire Tested: **ARCH4-100-750-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840909
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-100-750-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18018 lumens
Efficiency: N/A
Efficacy: 174.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 103.1
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



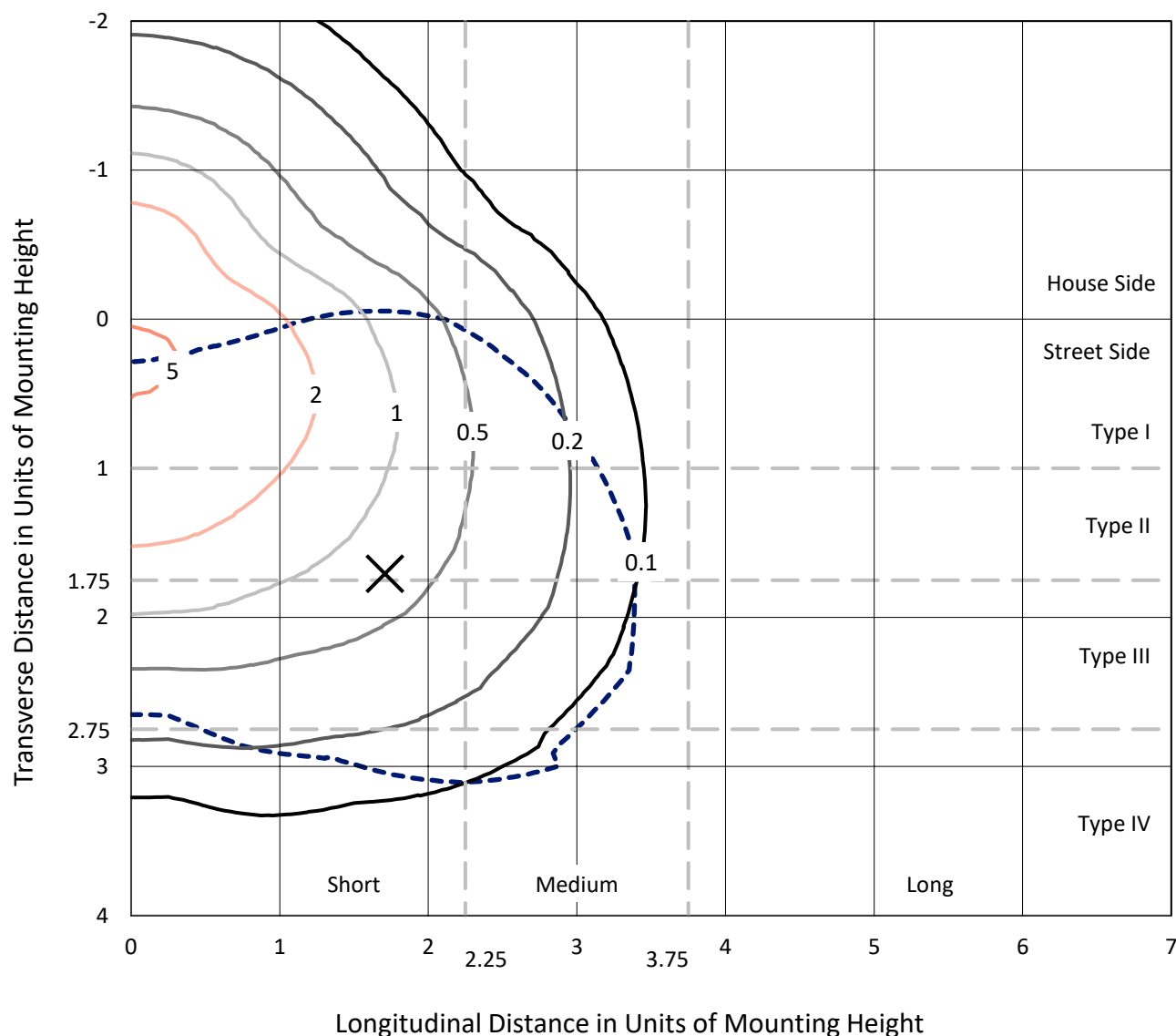
REPORT NUMBER: P840909

CATALOG NUMBER: ARCH4-100-750-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

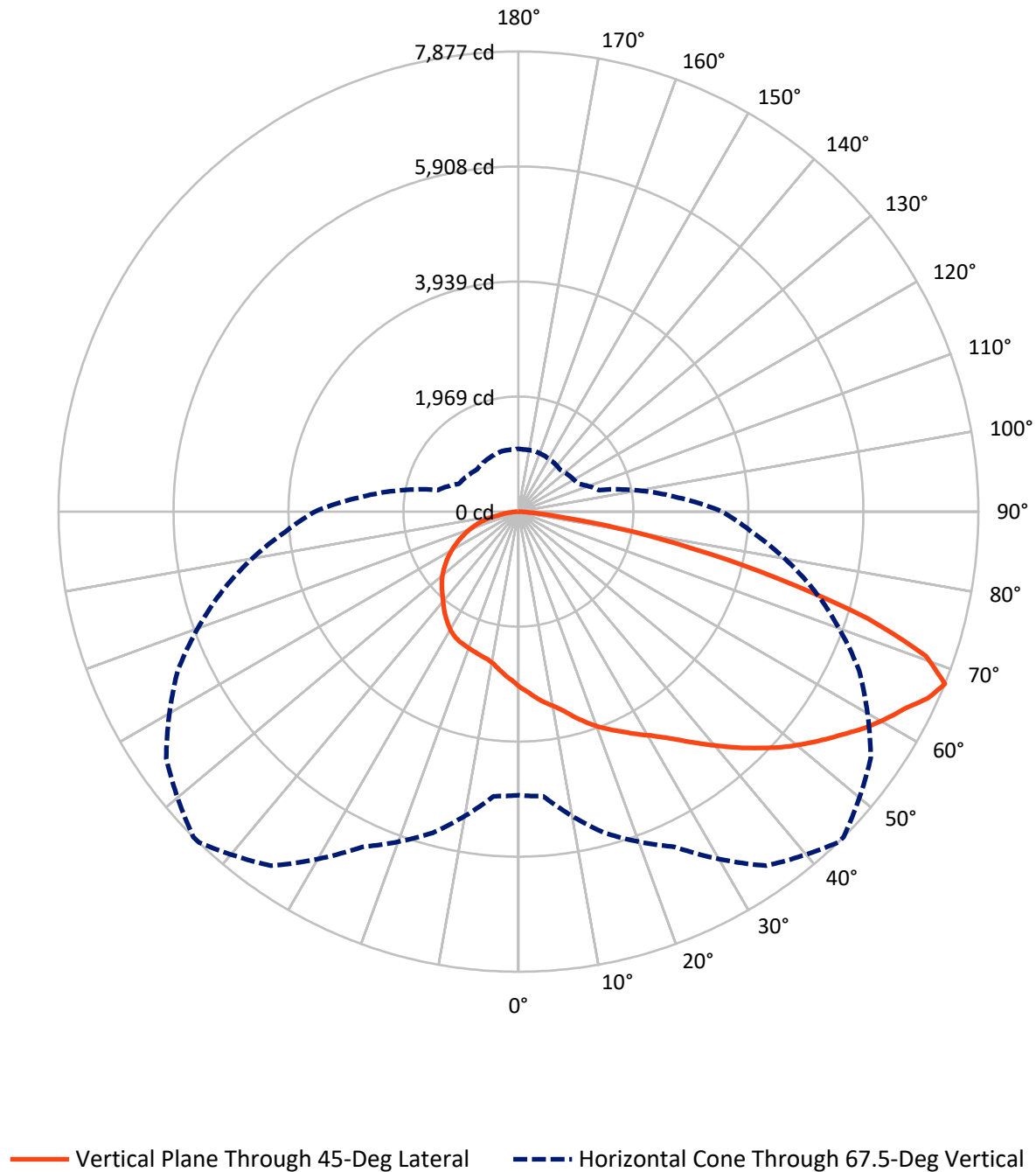


Based on 25 foot mounting height. Maximum calculated value = 5.6 fc

Type IV - Short - N/A

REPORT NUMBER: P840909
CATALOG NUMBER: ARCH4-100-750-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P840909

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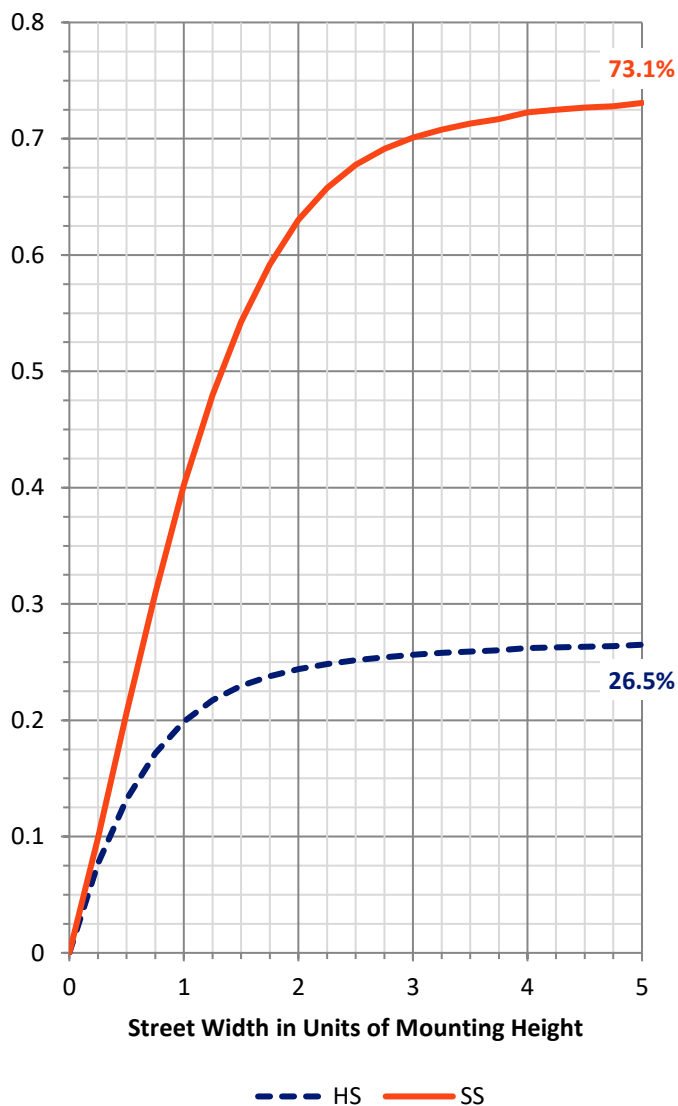
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4813.5	0.0	4813.5
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	13204.5	0.0	13204.5
	% Fixture	73.3	0.0	73.3
Total	Lumens	18018.0	0.0	18018.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.7	1.6
10°-20°	888.8	4.9
20°-30°	1534.2	8.5
30°-40°	2262.4	12.6
40°-50°	3065.1	17.0
50°-60°	3746.2	20.8
60°-70°	3863.7	21.4
70°-80°	2116.3	11.7
80°-90°	253.6	1.4
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°	18018.0	100.0
0°-180°	18018.0	100.0

Coefficient of Utilization



REPORT NUMBER: P840909

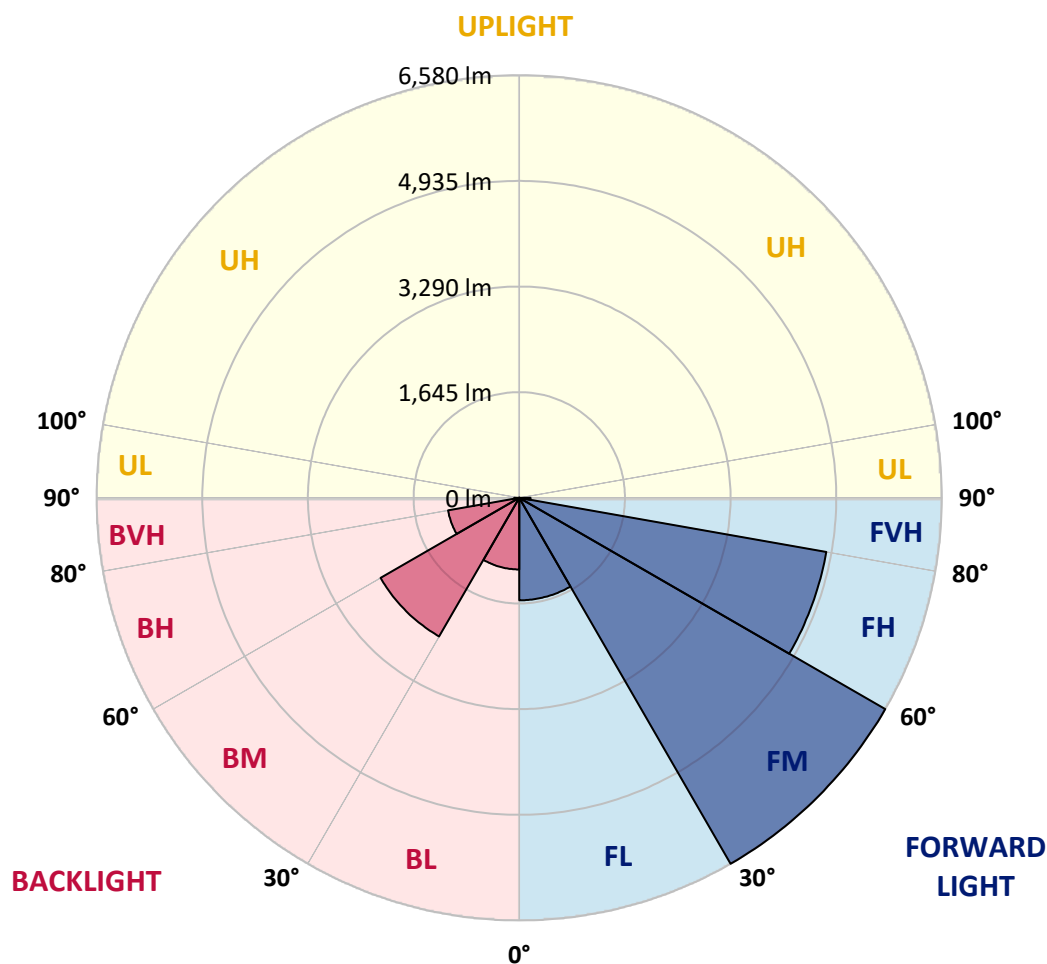
CATALOG NUMBER: ARCH4-100-750-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1595.1	8.9			
FM	(30°-60°)	6580.3	36.5			
FH	(60°-80°)	4854.3	26.9			G2/5000
FVH	(80°-90°)	174.7	1.0			G2/225
BL	(0°-30°)	1115.6	6.2	B3/2500		
BM	(30°-60°)	2493.3	13.8	B2/2500		
BH	(60°-80°)	1125.7	6.2	B3/2500		G3/2500
BVH	(80°-90°)	78.9	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type IV Short



REPORT NUMBER: P840909

CATALOG NUMBER: ARCH4-100-750-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1
2.5°	3136.7	3133.9	3139.4	3120.2	3095.5	3092.8	3092.8	3076.3	3057.2	3018.8	2988.6
5°	3284.7	3279.2	3282.0	3254.6	3221.7	3205.2	3202.5	3166.8	3123.0	3062.6	3007.8
7.5°	3421.8	3416.3	3413.6	3383.4	3334.1	3306.7	3303.9	3251.8	3199.7	3106.5	3027.0
10°	3550.7	3545.2	3539.7	3498.6	3438.3	3397.1	3391.7	3325.9	3260.1	3144.9	3043.4
12.5°	3715.2	3704.2	3698.7	3649.4	3561.7	3517.8	3509.6	3421.8	3339.6	3199.7	3076.3
15°	3887.9	3879.7	3871.5	3824.9	3726.2	3668.6	3654.9	3545.2	3432.8	3271.0	3125.7
17.5°	4016.8	4008.6	4008.6	3967.4	3877.0	3811.2	3800.2	3668.6	3528.8	3336.8	3164.1
20°	4096.3	4088.1	4096.3	4071.6	4003.1	3948.3	3937.3	3792.0	3624.7	3397.1	3197.0
22.5°	4153.9	4145.7	4159.4	4148.4	4099.1	4066.2	4057.9	3915.4	3723.4	3460.2	3229.9
25°	4255.3	4255.3	4255.3	4236.1	4189.5	4178.6	4178.6	4055.2	3849.5	3542.5	3279.2
27.5°	4458.2	4447.3	4433.6	4378.7	4299.2	4296.5	4312.9	4197.8	3994.9	3649.4	3339.6
30°	4757.1	4751.6	4699.5	4584.4	4450.0	4436.3	4447.3	4351.3	4151.2	3761.8	3408.1
32.5°	5143.7	5124.5	5017.6	4844.8	4652.9	4589.8	4611.8	4510.3	4315.7	3877.0	3473.9
35°	5417.9	5423.4	5346.6	5190.3	4962.7	4795.5	4811.9	4688.6	4493.9	4005.8	3556.2
37.5°	5733.2	5752.4	5637.2	5519.3	5308.2	5023.1	5039.5	4872.3	4672.1	4167.6	3643.9
40°	6169.1	6130.8	5936.1	5796.3	5563.2	5261.6	5275.3	5077.9	4877.7	4321.1	3745.4
42.5°	6533.8	6465.3	6229.5	6051.2	5771.6	5513.8	5527.6	5300.0	5086.1	4491.1	3857.8
45°	7057.5	6868.3	6528.3	6440.6	5985.4	5760.6	5774.3	5535.8	5305.5	4672.1	3978.4
47.5°	7361.9	7060.2	6843.6	6797.0	6221.2	6015.6	6032.1	5785.3	5541.3	4877.7	4104.5
50°	7342.7	7148.0	7084.9	6969.8	6429.6	6254.1	6270.6	6043.0	5779.8	5080.6	4225.2
52.5°	7216.5	7252.2	7219.3	7027.3	6638.0	6484.5	6503.7	6298.0	6023.8	5269.8	4337.6
55°	7411.2	7435.9	7372.8	7120.6	6868.3	6714.8	6736.7	6566.7	6265.1	5437.1	4433.6
57.5°	7644.3	7556.5	7493.5	7285.1	7106.9	6964.3	6989.0	6840.9	6473.5	5571.4	4507.6
60°	7633.3	7449.6	7512.7	7296.0	7268.6	7194.6	7216.5	7065.7	6632.5	5670.1	4537.8
62.5°	7071.2	6972.5	7290.6	7216.5	7400.2	7400.2	7427.7	7202.8	6728.5	5711.3	4521.3
65°	6095.1	6100.6	6659.9	6967.0	7556.5	7682.6	7704.6	7287.8	6673.6	5590.6	4367.8
67.5°	4855.8	4891.4	5694.8	6333.7	7400.2	7874.6	7877.3	7364.6	6437.8	5250.6	4011.3
70°	3553.4	3580.8	4529.5	5305.5	6662.7	7449.6	7405.7	7148.0	5925.1	4658.4	3454.7
72.5°	2401.9	2426.5	3402.6	4074.4	5467.2	6344.6	6248.7	6317.2	5050.5	3827.6	2777.5
75°	1614.9	1645.1	2421.0	2914.6	4022.3	4817.4	4603.6	4784.5	3907.1	2898.1	2026.2
77.5°	1017.2	1036.4	1538.2	1911.1	2747.3	3279.2	3065.4	3068.1	2251.1	1560.1	1088.5
80°	647.1	652.6	932.2	1102.2	1590.3	1971.4	1743.8	1417.5	1014.5	828.0	649.8
82.5°	375.6	367.4	556.6	622.4	756.7	748.5	619.7	586.8	444.2	414.0	331.8
85°	150.8	139.8	244.0	227.6	230.3	244.0	181.0	181.0	145.3	112.4	82.3
87.5°	30.2	30.2	32.9	30.2	30.2	32.9	24.7	24.7	21.9	21.9	21.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P840909

CATALOG NUMBER: ARCH4-100-750-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1
2.5°	2983.1	2977.6	2963.9	2928.3	2909.1	2898.1	2881.7	2876.2	2873.5	2876.2	2884.4
5°	2991.4	2972.2	2933.8	2876.2	2837.8	2813.1	2785.7	2774.7	2766.5	2766.5	2774.7
7.5°	2996.8	2966.7	2900.9	2815.9	2761.0	2722.7	2689.7	2676.0	2673.3	2681.5	2684.3
10°	2999.6	2955.7	2862.5	2755.6	2684.3	2634.9	2602.0	2593.8	2602.0	2618.5	2621.2
12.5°	3018.8	2958.4	2840.6	2714.4	2629.4	2580.1	2555.4	2555.4	2577.3	2607.5	2610.2
15°	3051.7	2977.6	2829.6	2681.5	2593.8	2549.9	2541.7	2555.4	2588.3	2634.9	2640.4
17.5°	3076.3	2988.6	2804.9	2637.7	2547.2	2519.8	2533.5	2566.4	2613.0	2676.0	2681.5
20°	3092.8	2988.6	2769.3	2585.6	2500.6	2495.1	2533.5	2585.6	2634.9	2708.9	2717.2
22.5°	3109.3	2983.1	2728.1	2522.5	2448.5	2464.9	2536.2	2602.0	2651.4	2730.9	2744.6
25°	3139.4	2991.4	2687.0	2459.4	2393.6	2440.2	2533.5	2613.0	2665.1	2747.3	2769.3
27.5°	3180.5	3010.5	2656.8	2401.9	2338.8	2401.9	2514.3	2610.2	2665.1	2744.6	2769.3
30°	3224.4	3032.5	2621.2	2338.8	2275.7	2347.0	2473.1	2580.1	2643.1	2717.2	2747.3
32.5°	3271.0	3057.2	2591.0	2270.2	2199.0	2273.0	2412.8	2533.5	2602.0	2670.6	2703.5
35°	3334.1	3101.0	2574.6	2215.4	2130.4	2196.2	2336.1	2473.1	2547.2	2610.2	2648.6
37.5°	3410.9	3155.9	2566.4	2160.6	2056.4	2111.2	2253.8	2399.1	2478.6	2530.7	2566.4
40°	3498.6	3224.4	2563.6	2108.5	1982.4	2023.5	2168.8	2314.1	2390.9	2432.0	2462.2
42.5°	3597.3	3301.2	2558.1	2056.4	1908.3	1941.2	2086.5	2229.1	2294.9	2330.6	2358.0
45°	3701.5	3378.0	2547.2	1993.3	1828.8	1867.2	2001.5	2127.7	2196.2	2226.4	2256.5
47.5°	3805.7	3454.7	2525.2	1922.0	1757.5	1793.2	1911.1	2020.7	2075.6	2103.0	2133.2
50°	3907.1	3523.3	2473.1	1839.8	1683.5	1716.4	1806.9	1880.9	1922.0	1944.0	1974.1
52.5°	3997.6	3569.9	2399.1	1743.8	1609.5	1625.9	1686.2	1749.3	1782.2	1784.9	1812.4
55°	4074.4	3594.6	2292.2	1645.1	1529.9	1532.7	1565.6	1614.9	1628.7	1617.7	1636.9
57.5°	4118.2	3580.8	2174.3	1543.7	1447.7	1436.7	1461.4	1486.1	1488.8	1461.4	1480.6
60°	4129.2	3517.8	2020.7	1442.2	1365.4	1335.3	1343.5	1338.0	1332.5	1321.6	1338.0
62.5°	4074.4	3383.4	1850.7	1343.5	1277.7	1231.1	1228.3	1225.6	1233.8	1236.6	1239.3
65°	3874.2	3131.2	1647.8	1242.1	1184.5	1121.4	1118.7	1151.6	1162.5	1146.1	1151.6
67.5°	3487.6	2744.6	1425.8	1124.2	1066.6	1011.7	1033.7	1052.9	1072.1	1066.6	1072.1
70°	2939.3	2253.8	1222.9	992.5	937.7	907.6	932.2	948.7	951.4	945.9	951.4
72.5°	2311.4	1760.3	1033.7	858.2	808.8	795.1	825.3	839.0	863.7	874.6	877.4
75°	1669.8	1299.6	847.2	712.9	671.8	671.8	699.2	723.8	745.8	732.1	723.8
77.5°	932.2	775.9	608.7	490.8	499.0	537.4	548.4	575.8	597.7	595.0	589.5
80°	564.8	485.3	411.3	318.1	315.3	345.5	416.8	463.4	474.3	449.7	446.9
82.5°	293.4	255.0	219.3	178.2	197.4	230.3	241.3	290.6	320.8	309.8	323.5
85°	74.0	71.3	79.5	82.3	101.4	112.4	123.4	145.3	96.0	46.6	46.6
87.5°	21.9	21.9	27.4	27.4	35.6	43.9	41.1	41.1	21.9	2.7	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)