

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: P842766

Luminaire Tested: **ARCH4-90-740-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842766
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-90-740-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 765mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16869 lumens
Efficiency: N/A
Efficacy: 181.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

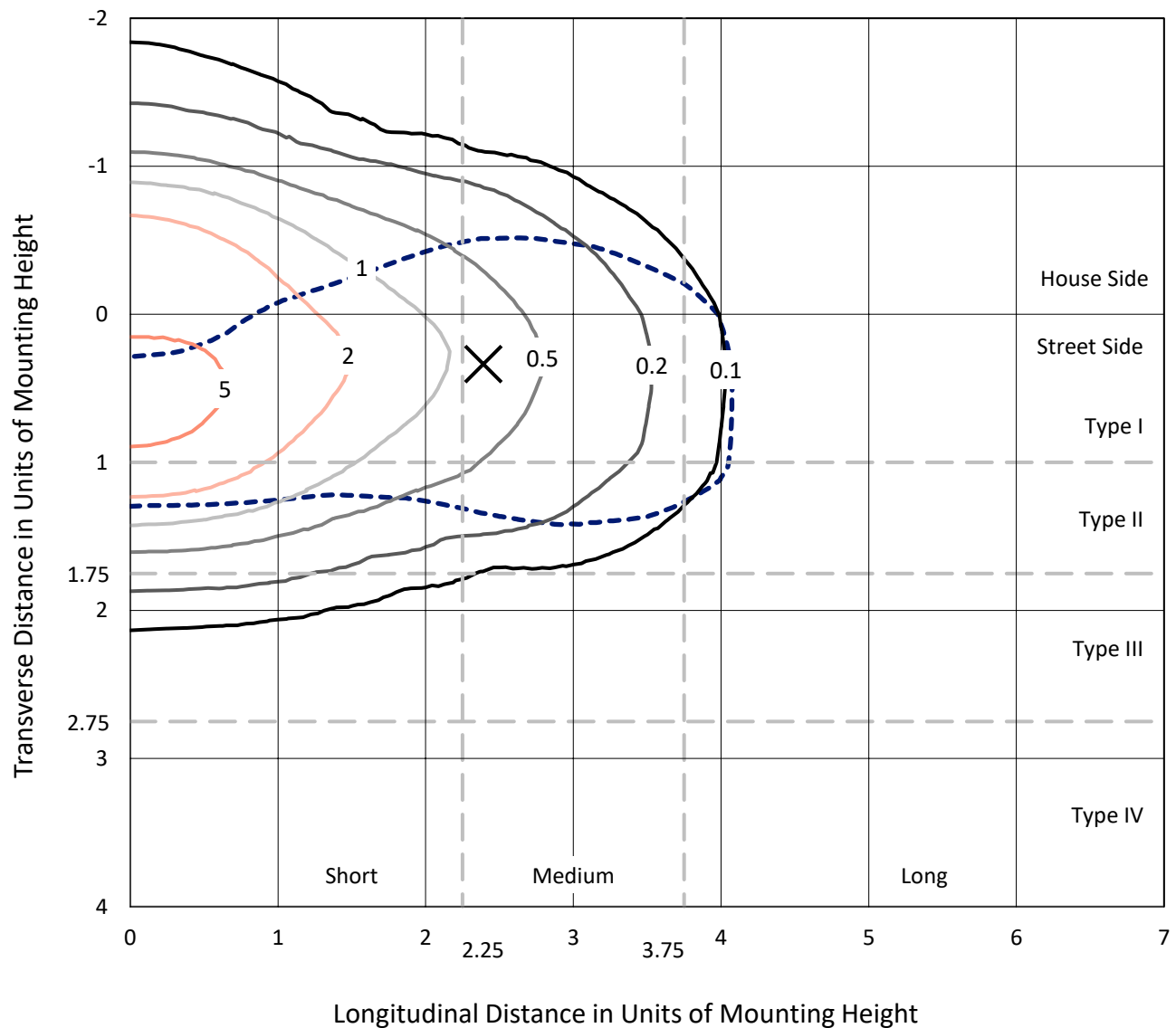
Input Watts (W): 93.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P842766
 CATALOG NUMBER: ARCH4-90-740-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

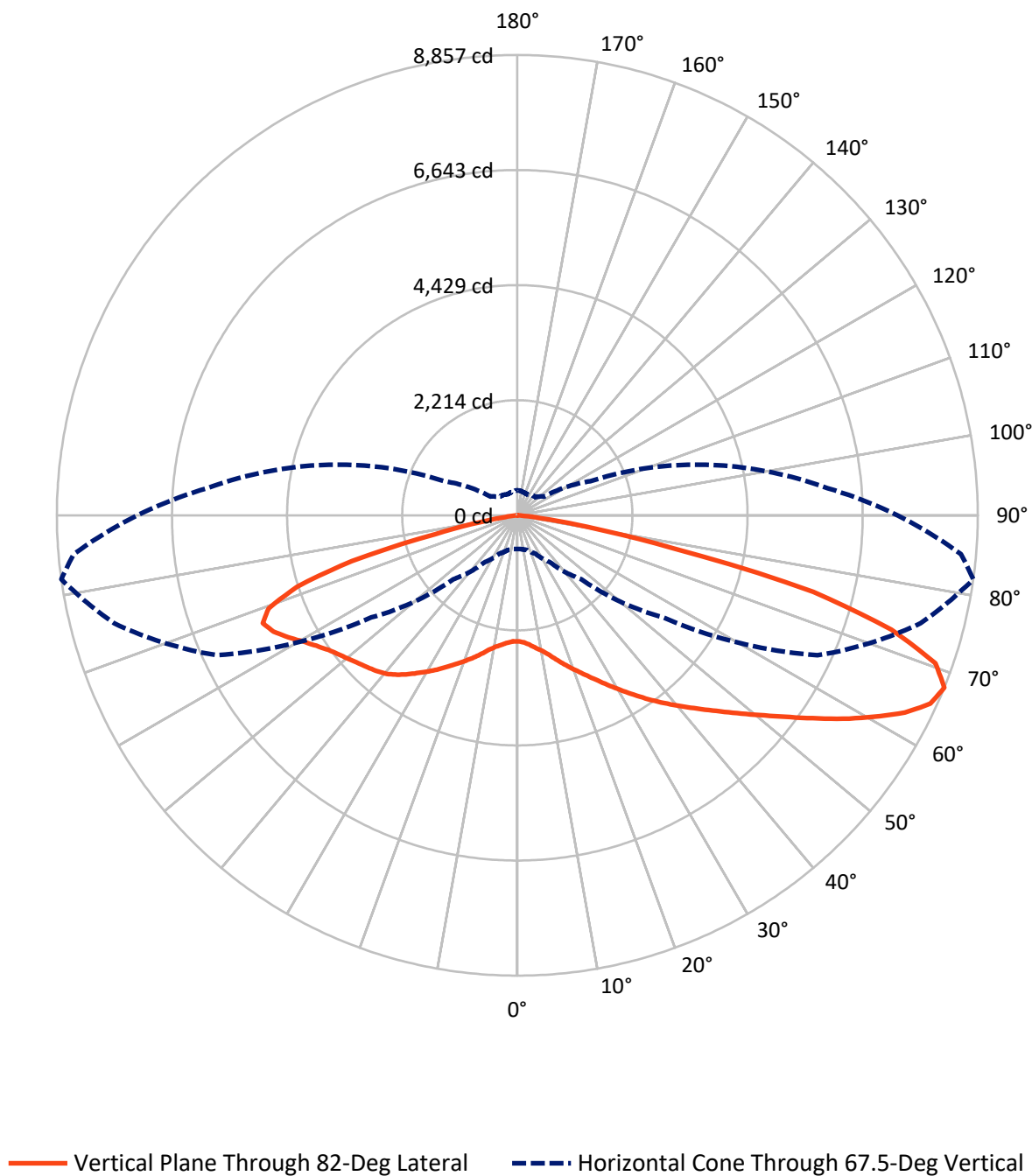
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type II - Medium - N/A

REPORT NUMBER: P842766
CATALOG NUMBER: ARCH4-90-740-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P842766

CATALOG NUMBER: ARCH4-90-740-U-T2R

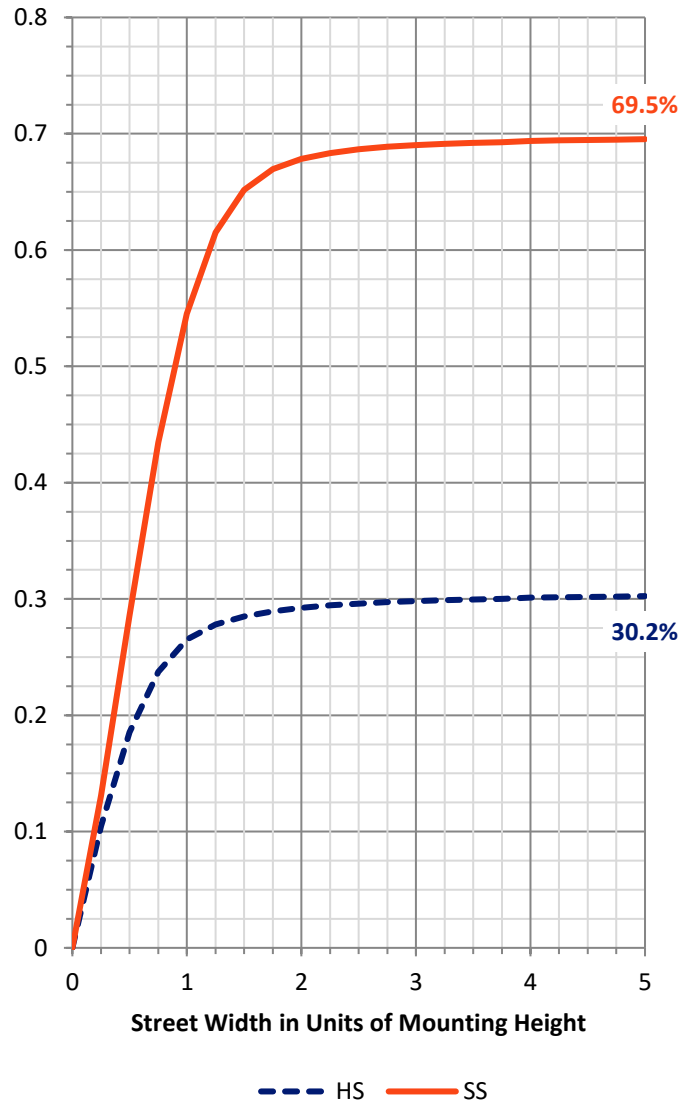
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5137.3	0.0	5137.3
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	11731.7	0.0	11731.7
	% Fixture	69.5	0.0	69.5
Total	Lumens	16869.0	0.0	16869.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.6	1.5
10°-20°	902.7	5.4
20°-30°	1814.2	10.8
30°-40°	2849.8	16.9
40°-50°	3471.7	20.6
50°-60°	3280.3	19.4
60°-70°	2708.8	16.1
70°-80°	1475.0	8.7
80°-90°	116.0	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°	16869.0	100.0
0°-180°	16869.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842766

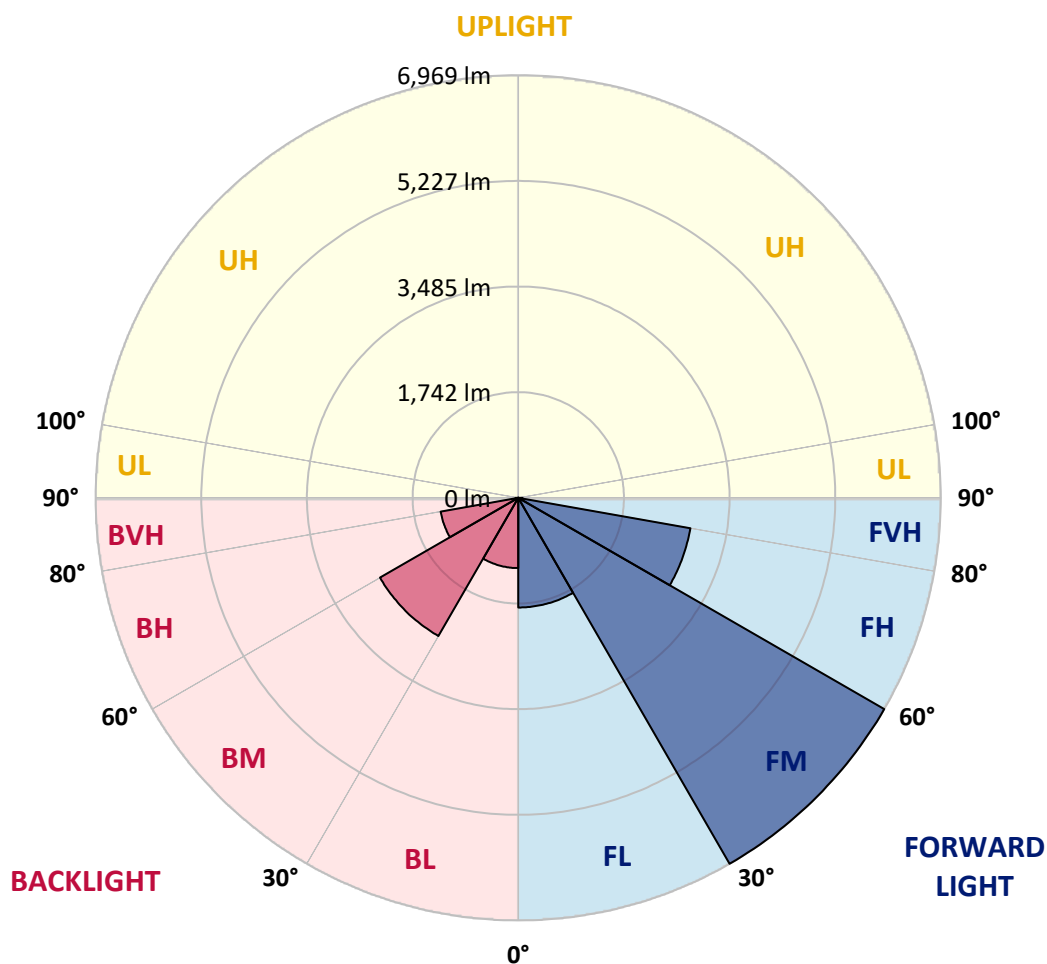
CATALOG NUMBER: ARCH4-90-740-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1809.0	10.7			
FM	(30°-60°)	6969.3	41.3			
FH	(60°-80°)	2883.5	17.1			G2/5000
FVH	(80°-90°)	69.9	0.4			G1/100
BL	(0°-30°)	1158.5	6.9	B3/2500		
BM	(30°-60°)	2632.5	15.6	B3/5000		
BH	(60°-80°)	1300.3	7.7	B3/2500		G3/2500
BVH	(80°-90°)	46.1	0.3			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 II Medium



REPORT NUMBER: P842766

CATALOG NUMBER: ARCH4-90-740-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2424.9	2424.9	2424.9	2424.9	2424.9	2424.9	2424.9	2424.9	2424.9	2424.9	2424.9
2.5°	2535.1	2535.1	2554.7	2554.7	2537.6	2510.6	2503.3	2473.9	2447.0	2447.0	2449.4
5°	2777.6	2775.2	2789.9	2770.3	2728.6	2674.7	2638.0	2574.3	2520.4	2503.3	2500.8
7.5°	3074.0	3071.6	3078.9	3047.1	2968.7	2880.5	2807.0	2704.1	2616.0	2579.2	2569.4
10°	3404.7	3402.2	3394.9	3341.0	3235.7	3098.5	2988.3	2846.2	2713.9	2655.2	2642.9
12.5°	3784.3	3779.4	3762.3	3683.9	3539.4	3363.0	3203.8	3020.1	2843.8	2762.9	2736.0
15°	4208.1	4200.7	4168.9	4073.4	3879.9	3657.0	3451.2	3216.1	3000.5	2895.2	2858.5
17.5°	4653.9	4653.9	4604.9	4462.8	4247.3	3970.5	3715.7	3416.9	3164.6	3034.8	2990.7
20°	5107.0	5104.6	5043.3	4871.9	4617.1	4298.7	3975.4	3647.2	3333.6	3176.9	3123.0
22.5°	5584.6	5579.7	5503.8	5307.9	5004.1	4644.1	4266.9	3875.0	3519.8	3331.2	3262.6
25°	6133.3	6126.0	6032.9	5792.8	5432.8	5026.2	4595.1	4141.9	3732.9	3502.6	3421.8
27.5°	6716.3	6706.5	6596.2	6317.0	5922.7	5432.8	4957.6	4450.6	3968.0	3693.7	3603.1
30°	7235.5	7228.2	7108.2	6821.6	6368.5	5836.9	5303.0	4759.2	4215.4	3897.0	3784.3
32.5°	7627.4	7627.4	7519.7	7238.0	6767.7	6223.9	5650.8	5050.7	4472.6	4115.0	3982.7
35°	7865.0	7872.4	7779.3	7554.0	7110.6	6588.9	6010.8	5393.6	4746.9	4347.7	4205.6
37.5°	7899.3	7923.8	7869.9	7718.1	7348.2	6892.6	6363.6	5724.3	5031.1	4582.8	4423.6
40°	7740.1	7757.3	7759.7	7700.9	7446.2	7110.6	6674.6	6074.5	5332.4	4830.2	4646.5
42.5°	7421.7	7433.9	7456.0	7473.1	7375.2	7206.1	6912.2	6400.3	5653.2	5082.5	4867.0
45°	7010.2	7007.7	7044.5	7118.0	7113.1	7152.3	7044.5	6696.7	5986.3	5369.1	5111.9
47.5°	6395.4	6383.1	6513.0	6679.5	6762.8	6946.5	7046.9	6929.4	6348.9	5685.1	5391.1
50°	5432.8	5420.5	5704.7	6096.6	6341.5	6620.7	6912.2	7069.0	6728.5	6040.2	5694.9
52.5°	4262.0	4249.7	4609.8	5295.6	5829.6	6236.2	6640.3	7100.8	7088.6	6437.0	6037.8
55°	3169.5	3159.7	3510.0	4252.2	5116.8	5790.4	6307.2	7017.5	7426.6	6892.6	6454.2
57.5°	2233.9	2229.0	2532.7	3147.5	4200.7	5246.6	5986.3	6855.9	7737.7	7387.4	6924.5
60°	1567.6	1560.3	1780.7	2255.9	3176.9	4426.1	5667.9	6640.3	7970.4	7874.8	7424.1
62.5°	1055.7	1050.8	1207.6	1604.4	2255.9	3407.1	5185.4	6495.8	8102.6	8364.7	7928.7
65°	801.0	798.5	869.5	1087.5	1597.0	2447.0	4418.7	6478.7	8119.8	8732.1	8357.4
67.5°	646.6	649.1	688.3	813.2	1104.7	1739.1	3426.7	6370.9	8029.1	8857.0	8565.6
70°	529.1	529.1	546.2	629.5	815.7	1173.3	2393.1	5881.0	7776.9	8531.3	8318.2
72.5°	404.2	406.6	460.5	509.5	614.8	823.0	1533.3	4867.0	7181.7	7522.1	7360.5
75°	320.9	318.4	350.3	418.8	477.6	587.9	940.6	3490.4	6111.3	5878.6	5775.7
77.5°	230.2	227.8	252.3	311.1	362.5	416.4	560.9	1761.1	3323.8	3054.4	2978.5
80°	156.8	151.9	173.9	215.5	240.0	244.9	274.3	676.0	1450.0	1366.8	1349.6
82.5°	80.8	80.8	93.1	122.5	124.9	127.4	122.5	218.0	480.1	448.2	428.6
85°	31.8	31.8	34.3	41.6	41.6	44.1	44.1	56.3	51.4	49.0	46.5
87.5°	2.4	2.4	4.9	4.9	7.3	7.3	7.3	9.8	12.2	12.2	12.2
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: P842766

CATALOG NUMBER: ARCH4-90-740-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2424.9	2424.9	2424.9	2424.9	2424.9	2424.9	2424.9	2424.9	2424.9	2424.9	2424.9
2.5°	2444.5	2434.7	2402.9	2395.5	2390.6	2383.3	2385.7	2368.6	2361.2	2363.7	2353.9
5°	2488.6	2471.4	2432.3	2415.1	2410.2	2402.9	2410.2	2398.0	2385.7	2390.6	2385.7
7.5°	2549.8	2525.3	2476.3	2459.2	2456.8	2449.4	2459.2	2449.4	2439.6	2444.5	2434.7
10°	2613.5	2581.7	2527.8	2510.6	2510.6	2508.2	2518.0	2503.3	2493.5	2495.9	2491.0
12.5°	2706.6	2665.0	2606.2	2591.5	2584.1	2591.5	2593.9	2574.3	2557.2	2559.6	2552.3
15°	2819.3	2772.7	2709.0	2687.0	2682.1	2679.6	2669.9	2645.4	2623.3	2620.9	2613.5
17.5°	2941.7	2882.9	2807.0	2785.0	2762.9	2755.6	2731.1	2699.2	2665.0	2665.0	2655.2
20°	3059.3	2993.2	2902.5	2870.7	2838.9	2809.5	2767.8	2716.4	2672.3	2665.0	2655.2
22.5°	3186.7	3108.3	3003.0	2956.4	2900.1	2841.3	2770.3	2701.7	2645.4	2633.1	2625.8
25°	3328.7	3230.8	3105.8	3037.3	2946.6	2856.0	2750.7	2662.5	2596.4	2576.8	2571.9
27.5°	3485.5	3367.9	3216.1	3115.6	2983.4	2841.3	2706.6	2601.3	2520.4	2495.9	2488.6
30°	3644.7	3505.1	3316.5	3169.5	2983.4	2794.8	2625.8	2503.3	2410.2	2375.9	2371.0
32.5°	3803.9	3647.2	3407.1	3198.9	2954.0	2716.4	2520.4	2375.9	2270.6	2229.0	2238.8
35°	3995.0	3803.9	3490.4	3211.2	2905.0	2620.9	2400.4	2231.4	2123.6	2086.9	2094.2
37.5°	4193.4	3960.7	3556.5	3201.4	2836.4	2513.1	2265.7	2101.6	1966.9	1903.2	1910.5
40°	4364.8	4102.8	3603.1	3167.1	2748.2	2390.6	2133.4	1917.9	1731.7	1670.5	1663.1
42.5°	4526.5	4208.1	3627.6	3115.6	2647.8	2248.6	1944.8	1668.0	1481.9	1406.0	1408.4
45°	4695.5	4311.0	3617.8	3047.1	2522.9	2082.0	1702.3	1423.1	1259.0	1190.4	1192.9
47.5°	4889.0	4421.2	3608.0	2973.6	2371.0	1866.4	1469.6	1207.6	1065.5	1016.5	1011.6
50°	5094.8	4543.6	3595.7	2882.9	2202.0	1626.4	1239.4	1006.7	886.7	854.8	847.5
52.5°	5327.5	4675.9	3588.4	2775.2	1998.7	1371.7	1033.6	830.3	749.5	727.5	725.0
55°	5606.7	4830.2	3598.2	2645.4	1753.8	1131.6	859.7	715.2	661.3	649.1	646.6
57.5°	5947.2	5028.6	3627.6	2493.5	1496.6	923.4	732.4	644.2	609.9	600.1	600.1
60°	6317.0	5254.0	3681.5	2322.0	1239.4	761.8	649.1	587.9	573.2	585.4	585.4
62.5°	6716.3	5518.5	3777.0	2113.8	999.4	644.2	583.0	541.3	531.5	556.0	558.5
65°	7086.1	5775.7	3838.2	1864.0	793.6	558.5	531.5	494.8	499.7	524.2	521.7
67.5°	7313.9	5988.8	3752.5	1550.5	629.5	494.8	477.6	445.8	458.0	477.6	480.1
70°	7174.3	5868.8	3328.7	1170.8	492.3	431.1	418.8	399.3	409.1	433.5	443.3
72.5°	6490.9	5256.4	2589.0	791.2	396.8	362.5	367.4	357.6	369.9	391.9	413.9
75°	5268.7	3972.9	1736.6	507.0	313.5	308.6	316.0	308.6	313.5	335.6	347.8
77.5°	2750.7	1937.5	864.6	316.0	232.7	240.0	252.3	254.7	269.4	274.3	279.2
80°	1283.5	872.0	360.1	176.4	154.3	169.0	193.5	196.0	200.9	208.2	210.6
82.5°	418.8	262.1	166.6	95.5	88.2	95.5	124.9	149.4	151.9	166.6	166.6
85°	44.1	26.9	36.7	39.2	34.3	41.6	56.3	53.9	24.5	14.7	14.7
87.5°	12.2	9.8	12.2	12.2	9.8	9.8	7.3	2.4	0.0	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)