

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: P842772

Luminaire Tested: **ARCH4-90-740-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842772
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: ARCH4-90-740-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 765mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16427 lumens
Efficiency: N/A
Efficacy: 176.4 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): 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

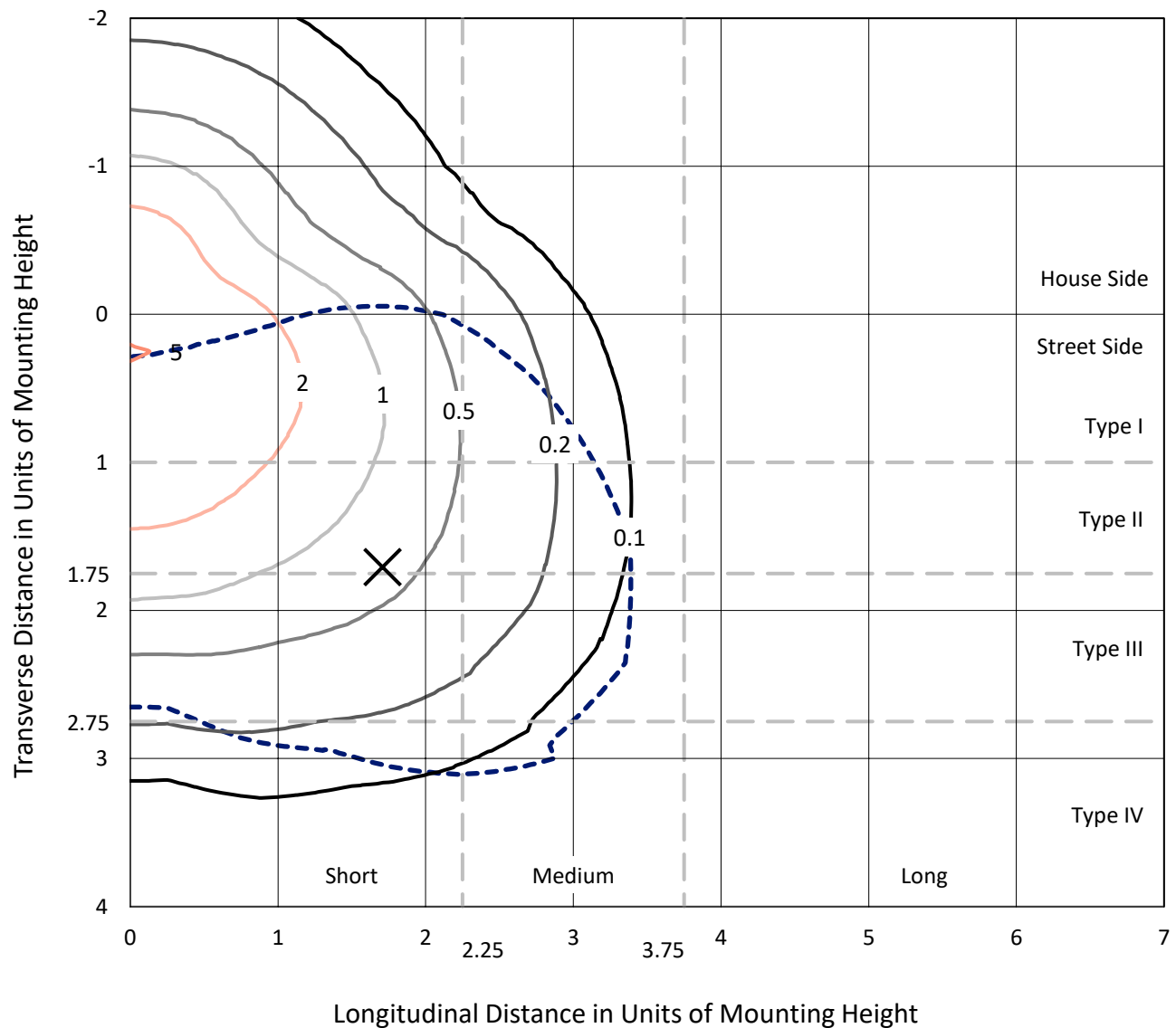


REPORT NUMBER: P842772

CATALOG NUMBER: ARCH4-90-740-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

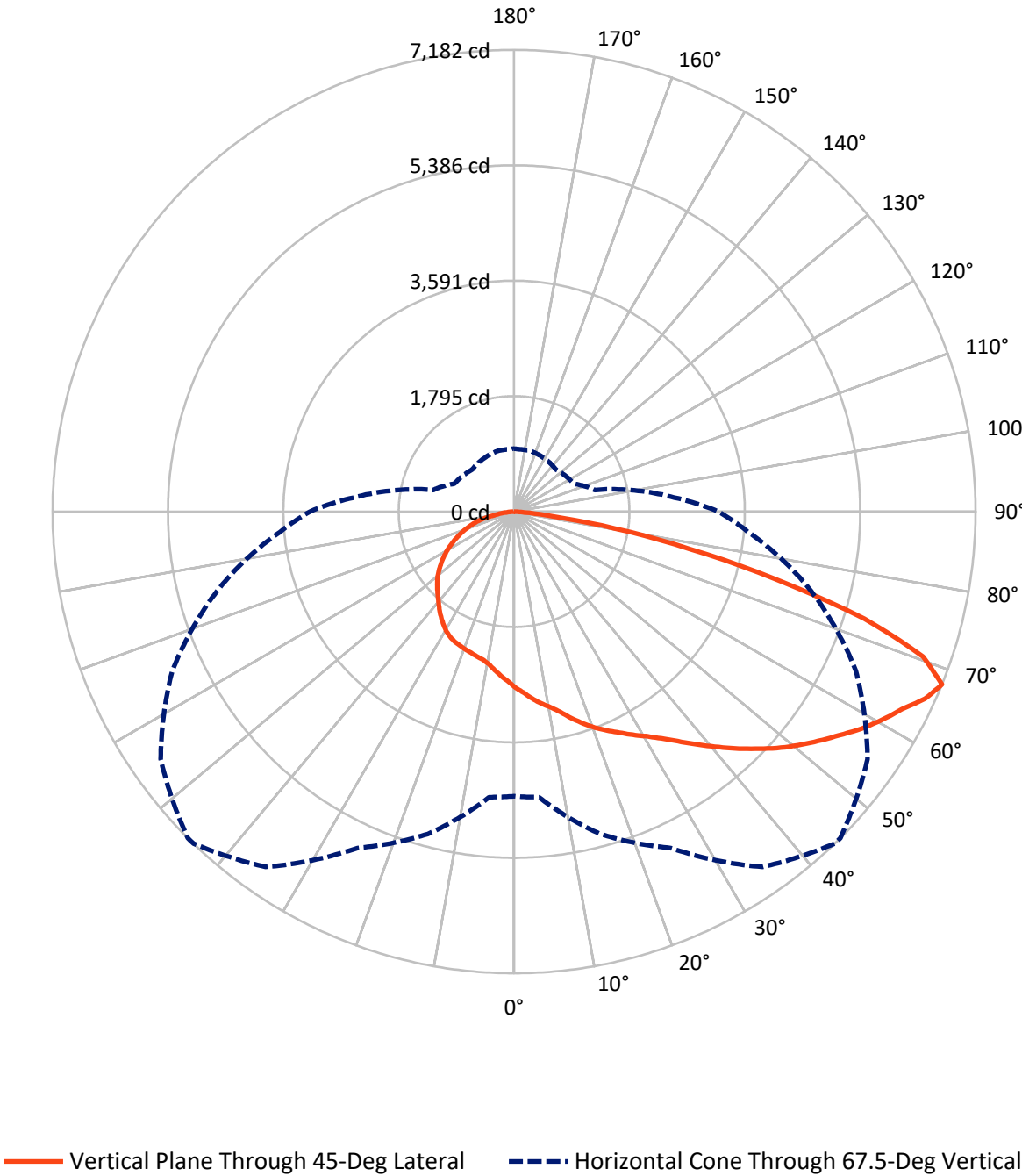
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
Type IV - Short - N/A

REPORT NUMBER: P842772
CATALOG NUMBER: ARCH4-90-740-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P842772

CATALOG NUMBER: ARCH4-90-740-U-T4W

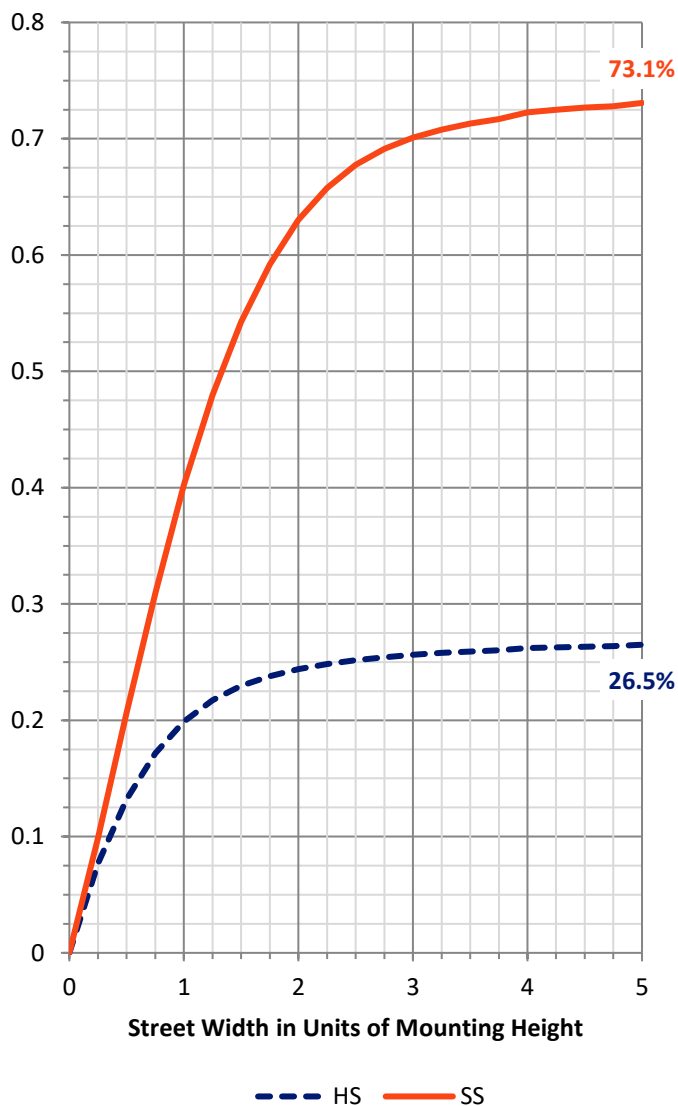
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4388.5	0.0	4388.5
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	12038.5	0.0	12038.5
	% Fixture	73.3	0.0	73.3
Total	Lumens	16427.0	0.0	16427.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.3	1.6
10°-20°	810.3	4.9
20°-30°	1398.7	8.5
30°-40°	2062.6	12.6
40°-50°	2794.4	17.0
50°-60°	3415.4	20.8
60°-70°	3522.6	21.4
70°-80°	1929.4	11.7
80°-90°	231.3	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°	16427.0	100.0
0°-180°	16427.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842772

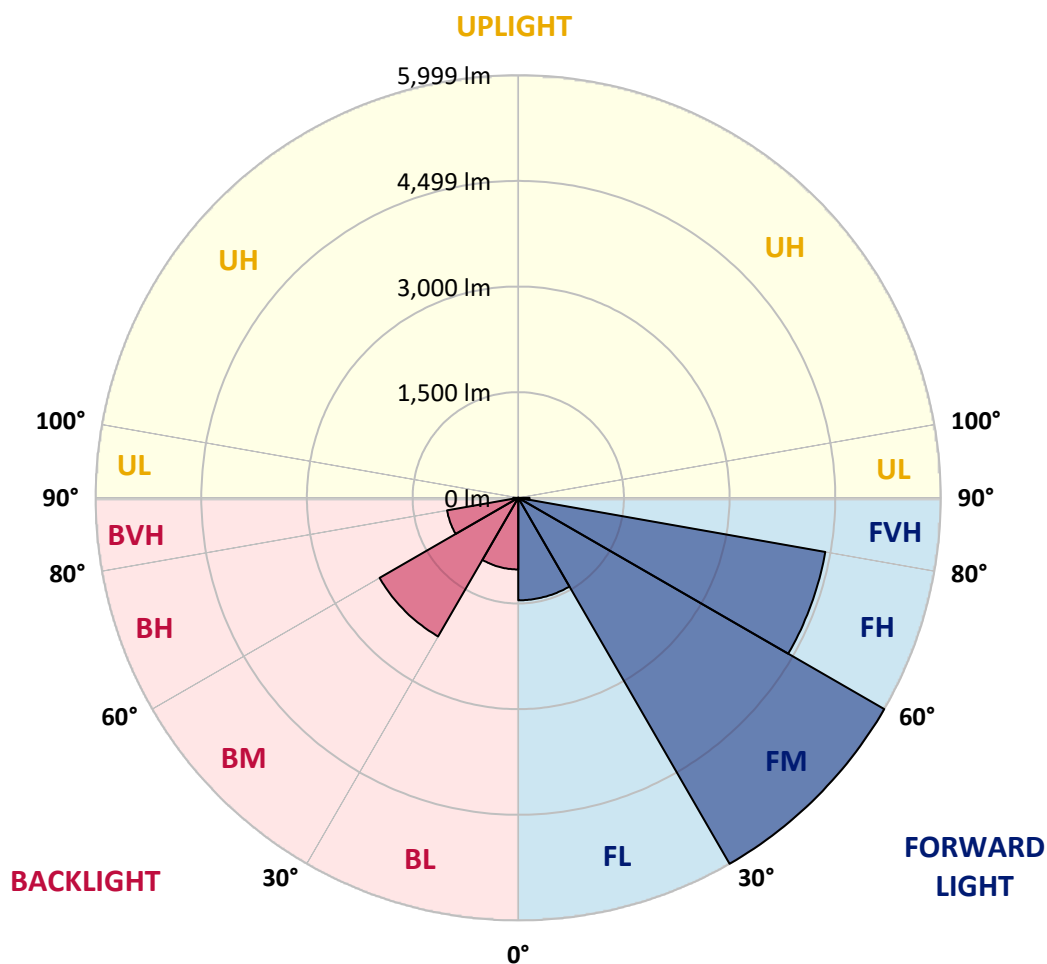
CATALOG NUMBER: ARCH4-90-740-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1454.2	8.9			
FM	(30°-60°)	5999.3	36.5			
FH	(60°-80°)	4425.7	26.9			G2/5000
FVH	(80°-90°)	159.3	1.0			G2/225
BL	(0°-30°)	1017.1	6.2	B3/2500		
BM	(30°-60°)	2273.2	13.8	B2/2500		
BH	(60°-80°)	1026.3	6.2	B3/2500		G3/2500
BVH	(80°-90°)	72.0	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: P842772

CATALOG NUMBER: ARCH4-90-740-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2739.7	2739.7	2739.7	2739.7	2739.7	2739.7	2739.7	2739.7	2739.7	2739.7	2739.7
2.5°	2859.7	2857.2	2862.2	2844.7	2822.2	2819.7	2819.7	2804.7	2787.2	2752.2	2724.7
5°	2994.7	2989.7	2992.2	2967.2	2937.2	2922.2	2919.7	2887.2	2847.2	2792.2	2742.2
7.5°	3119.7	3114.7	3112.2	3084.7	3039.7	3014.7	3012.2	2964.7	2917.2	2832.2	2759.7
10°	3237.2	3232.2	3227.2	3189.7	3134.7	3097.2	3092.2	3032.2	2972.2	2867.2	2774.7
12.5°	3387.1	3377.1	3372.1	3327.2	3247.2	3207.2	3199.7	3119.7	3044.7	2917.2	2804.7
15°	3544.6	3537.1	3529.6	3487.1	3397.1	3344.6	3332.1	3232.2	3129.7	2982.2	2849.7
17.5°	3662.1	3654.6	3654.6	3617.1	3534.6	3474.6	3464.6	3344.6	3217.2	3042.2	2884.7
20°	3734.6	3727.1	3734.6	3712.1	3649.6	3599.6	3589.6	3457.1	3304.7	3097.2	2914.7
22.5°	3787.1	3779.6	3792.1	3782.1	3737.1	3707.1	3699.6	3569.6	3394.6	3154.7	2944.7
25°	3879.6	3879.6	3879.6	3862.1	3819.6	3809.6	3809.6	3697.1	3509.6	3229.7	2989.7
27.5°	4064.6	4054.6	4042.1	3992.1	3919.6	3917.1	3932.1	3827.1	3642.1	3327.2	3044.7
30°	4337.0	4332.0	4284.5	4179.6	4057.1	4044.6	4054.6	3967.1	3784.6	3429.6	3107.2
32.5°	4689.5	4672.0	4574.5	4417.0	4242.1	4184.6	4204.6	4112.1	3934.6	3534.6	3167.2
35°	4939.5	4944.5	4874.5	4732.0	4524.5	4372.0	4387.0	4274.6	4097.1	3652.1	3242.2
37.5°	5227.0	5244.4	5139.5	5032.0	4839.5	4579.5	4594.5	4442.0	4259.6	3799.6	3322.2
40°	5624.4	5589.4	5411.9	5284.4	5072.0	4797.0	4809.5	4629.5	4447.0	3939.6	3414.6
42.5°	5956.9	5894.4	5679.4	5516.9	5261.9	5027.0	5039.5	4832.0	4637.0	4094.6	3517.1
45°	6434.3	6261.8	5951.9	5871.9	5456.9	5251.9	5264.4	5047.0	4837.0	4259.6	3627.1
47.5°	6711.8	6436.8	6239.3	6196.8	5671.9	5484.4	5499.4	5274.4	5052.0	4447.0	3742.1
50°	6694.3	6516.8	6459.3	6354.3	5861.9	5701.9	5716.9	5509.4	5269.4	4632.0	3852.1
52.5°	6579.3	6611.8	6581.8	6406.8	6051.9	5911.9	5929.4	5741.9	5491.9	4804.5	3954.6
55°	6756.8	6779.3	6721.8	6491.8	6261.8	6121.9	6141.9	5986.9	5711.9	4957.0	4042.1
57.5°	6969.3	6889.3	6831.8	6641.8	6479.3	6349.3	6371.8	6236.8	5901.9	5079.5	4109.6
60°	6959.3	6791.8	6849.3	6651.8	6626.8	6559.3	6579.3	6441.8	6046.9	5169.5	4137.1
62.5°	6446.8	6356.8	6646.8	6579.3	6746.8	6746.8	6771.8	6566.8	6134.4	5207.0	4122.1
65°	5556.9	5561.9	6071.9	6351.8	6889.3	7004.3	7024.3	6644.3	6084.4	5097.0	3982.1
67.5°	4427.0	4459.5	5192.0	5774.4	6746.8	7179.2	7181.7	6714.3	5869.4	4787.0	3657.1
70°	3239.7	3264.7	4129.6	4837.0	6074.4	6791.8	6751.8	6516.8	5401.9	4247.1	3149.7
72.5°	2189.8	2212.3	3102.2	3714.6	4984.5	5784.4	5696.9	5759.4	4604.5	3489.6	2532.2
75°	1472.3	1499.8	2207.3	2657.2	3667.1	4392.0	4197.1	4362.0	3562.1	2642.2	1847.3
77.5°	927.4	944.9	1402.4	1742.3	2504.7	2989.7	2794.7	2797.2	2052.3	1422.4	992.4
80°	589.9	594.9	849.9	1004.9	1449.8	1797.3	1589.8	1292.4	924.9	754.9	592.4
82.5°	342.5	335.0	507.4	567.4	689.9	682.4	564.9	534.9	405.0	377.5	302.5
85°	137.5	127.5	222.5	207.5	210.0	222.5	165.0	165.0	132.5	102.5	75.0
87.5°	27.5	27.5	30.0	27.5	27.5	30.0	22.5	22.5	20.0	20.0	20.0
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: P842772

CATALOG NUMBER: ARCH4-90-740-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2739.7	2739.7	2739.7	2739.7	2739.7	2739.7	2739.7	2739.7	2739.7	2739.7	2739.7
2.5°	2719.7	2714.7	2702.2	2669.7	2652.2	2642.2	2627.2	2622.2	2619.7	2622.2	2629.7
5°	2727.2	2709.7	2674.7	2622.2	2587.2	2564.7	2539.7	2529.7	2522.2	2522.2	2529.7
7.5°	2732.2	2704.7	2644.7	2567.2	2517.2	2482.2	2452.2	2439.7	2437.2	2444.7	2447.2
10°	2734.7	2694.7	2609.7	2512.2	2447.2	2402.2	2372.3	2364.8	2372.3	2387.2	2389.7
12.5°	2752.2	2697.2	2589.7	2474.7	2397.2	2352.3	2329.8	2329.8	2349.8	2377.3	2379.7
15°	2782.2	2714.7	2579.7	2444.7	2364.8	2324.8	2317.3	2329.8	2359.8	2402.2	2407.2
17.5°	2804.7	2724.7	2557.2	2404.7	2322.3	2297.3	2309.8	2339.8	2382.2	2439.7	2444.7
20°	2819.7	2724.7	2524.7	2357.3	2279.8	2274.8	2309.8	2357.3	2402.2	2469.7	2477.2
22.5°	2834.7	2719.7	2487.2	2299.8	2232.3	2247.3	2312.3	2372.3	2417.2	2489.7	2502.2
25°	2862.2	2727.2	2449.7	2242.3	2182.3	2224.8	2309.8	2382.2	2429.7	2504.7	2524.7
27.5°	2899.7	2744.7	2422.2	2189.8	2132.3	2189.8	2292.3	2379.7	2429.7	2502.2	2524.7
30°	2939.7	2764.7	2389.7	2132.3	2074.8	2139.8	2254.8	2352.3	2409.7	2477.2	2504.7
32.5°	2982.2	2787.2	2362.3	2069.8	2004.8	2072.3	2199.8	2309.8	2372.3	2434.7	2464.7
35°	3039.7	2827.2	2347.3	2019.8	1942.3	2002.3	2129.8	2254.8	2322.3	2379.7	2414.7
37.5°	3109.7	2877.2	2339.8	1969.8	1874.8	1924.8	2054.8	2187.3	2259.8	2307.3	2339.8
40°	3189.7	2939.7	2337.3	1922.3	1807.3	1844.8	1977.3	2109.8	2179.8	2217.3	2244.8
42.5°	3279.7	3009.7	2332.3	1874.8	1739.8	1769.8	1902.3	2032.3	2092.3	2124.8	2149.8
45°	3374.6	3079.7	2322.3	1817.3	1667.3	1702.3	1824.8	1939.8	2002.3	2029.8	2057.3
47.5°	3469.6	3149.7	2302.3	1752.3	1602.3	1634.8	1742.3	1842.3	1892.3	1917.3	1944.8
50°	3562.1	3212.2	2254.8	1677.3	1534.8	1564.8	1647.3	1714.8	1752.3	1772.3	1799.8
52.5°	3644.6	3254.7	2187.3	1589.8	1467.3	1482.3	1537.3	1594.8	1624.8	1627.3	1652.3
55°	3714.6	3277.2	2089.8	1499.8	1394.9	1397.4	1427.3	1472.3	1484.8	1474.8	1492.3
57.5°	3754.6	3264.7	1982.3	1407.4	1319.9	1309.9	1332.4	1354.9	1357.4	1332.4	1349.9
60°	3764.6	3207.2	1842.3	1314.9	1244.9	1217.4	1224.9	1219.9	1214.9	1204.9	1219.9
62.5°	3714.6	3084.7	1687.3	1224.9	1164.9	1122.4	1119.9	1117.4	1124.9	1127.4	1129.9
65°	3532.1	2854.7	1502.3	1132.4	1079.9	1022.4	1019.9	1049.9	1059.9	1044.9	1049.9
67.5°	3179.7	2502.2	1299.9	1024.9	972.4	922.4	942.4	959.9	977.4	972.4	977.4
70°	2679.7	2054.8	1114.9	904.9	854.9	827.4	849.9	864.9	867.4	862.4	867.4
72.5°	2107.3	1604.8	942.4	782.4	737.4	724.9	752.4	764.9	787.4	797.4	799.9
75°	1522.3	1184.9	772.4	649.9	612.4	612.4	637.4	659.9	679.9	667.4	659.9
77.5°	849.9	707.4	554.9	447.5	455.0	489.9	499.9	524.9	544.9	542.4	537.4
80°	514.9	442.5	375.0	290.0	287.5	315.0	380.0	422.5	432.5	410.0	407.5
82.5°	267.5	232.5	200.0	162.5	180.0	210.0	220.0	265.0	292.5	282.5	295.0
85°	67.5	65.0	72.5	75.0	92.5	102.5	112.5	132.5	87.5	42.5	42.5
87.5°	20.0	20.0	25.0	25.0	32.5	40.0	37.5	37.5	20.0	2.5	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)