

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: P836277

Luminaire Tested: **ARCH3-160-740-U-T4W**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836277
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-160-740-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22820 lumens
Efficiency: N/A
Efficacy: 141.7 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 161
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



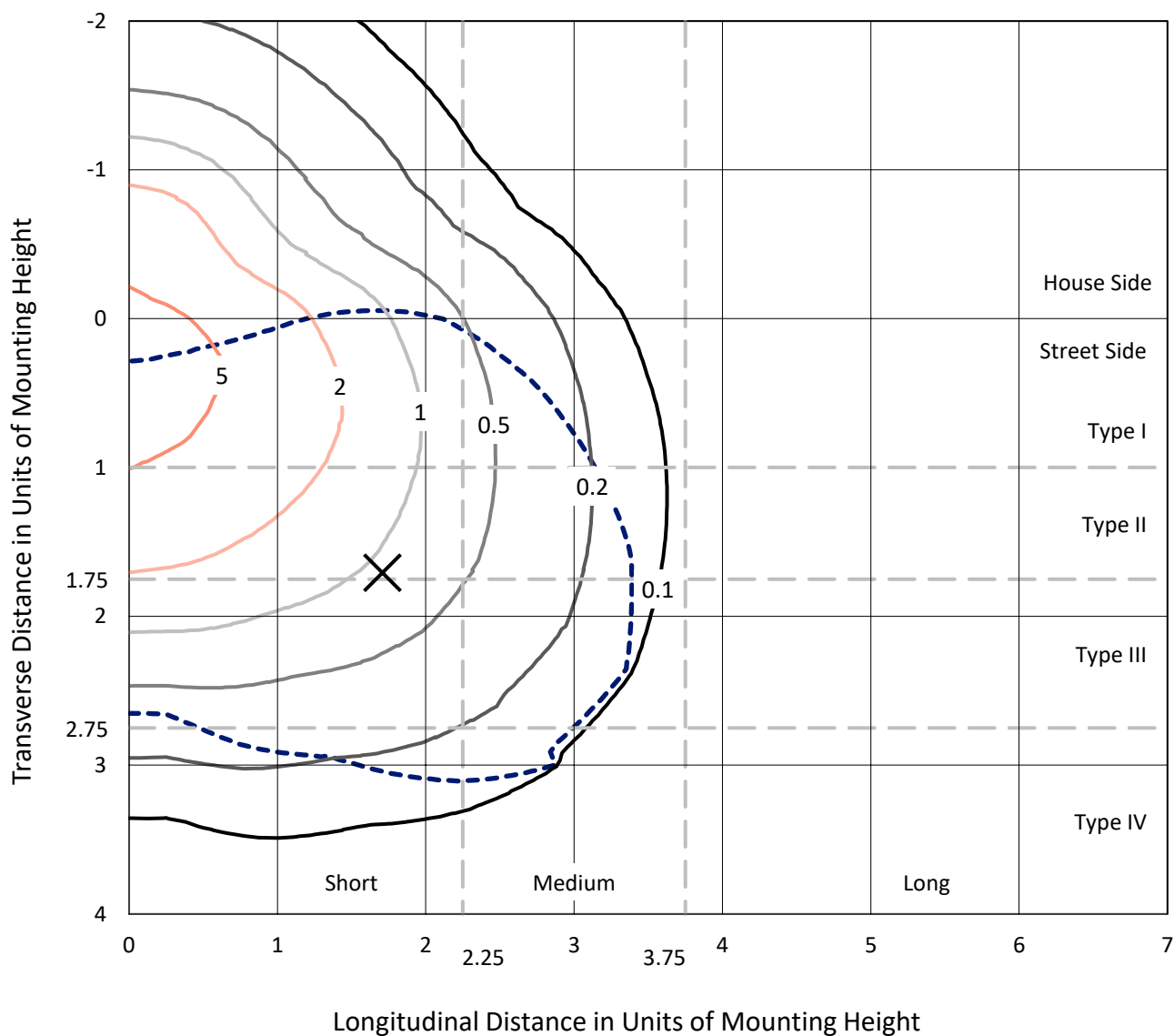
REPORT NUMBER: P836277

CATALOG NUMBER: ARCH3-160-740-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



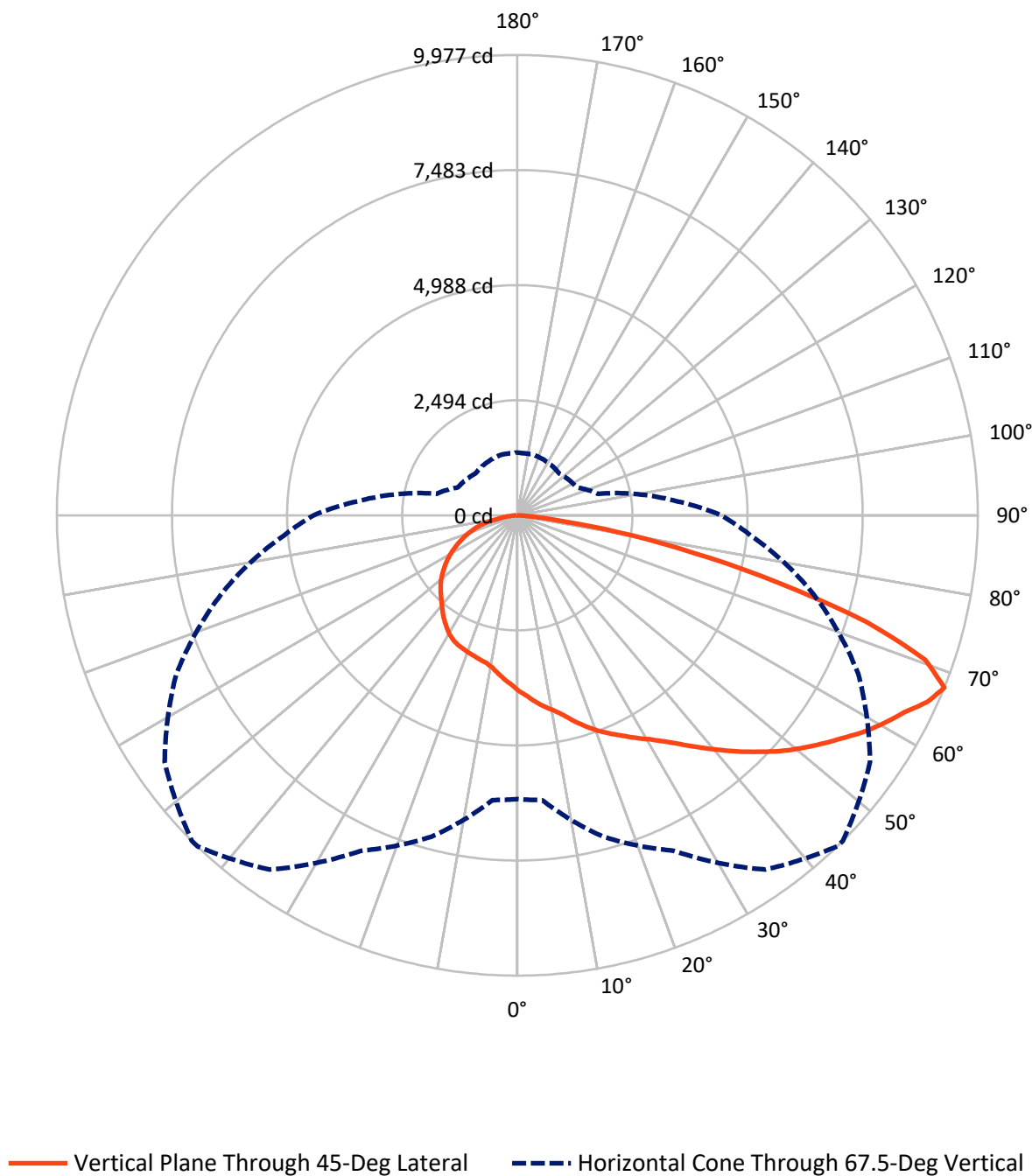
Based on 25 foot mounting height. Maximum calculated value = 7.1 fc

Type IV - Short - N/A

REPORT NUMBER: P836277

CATALOG NUMBER: ARCH3-160-740-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P836277

CATALOG NUMBER: ARCH3-160-740-U-T4W

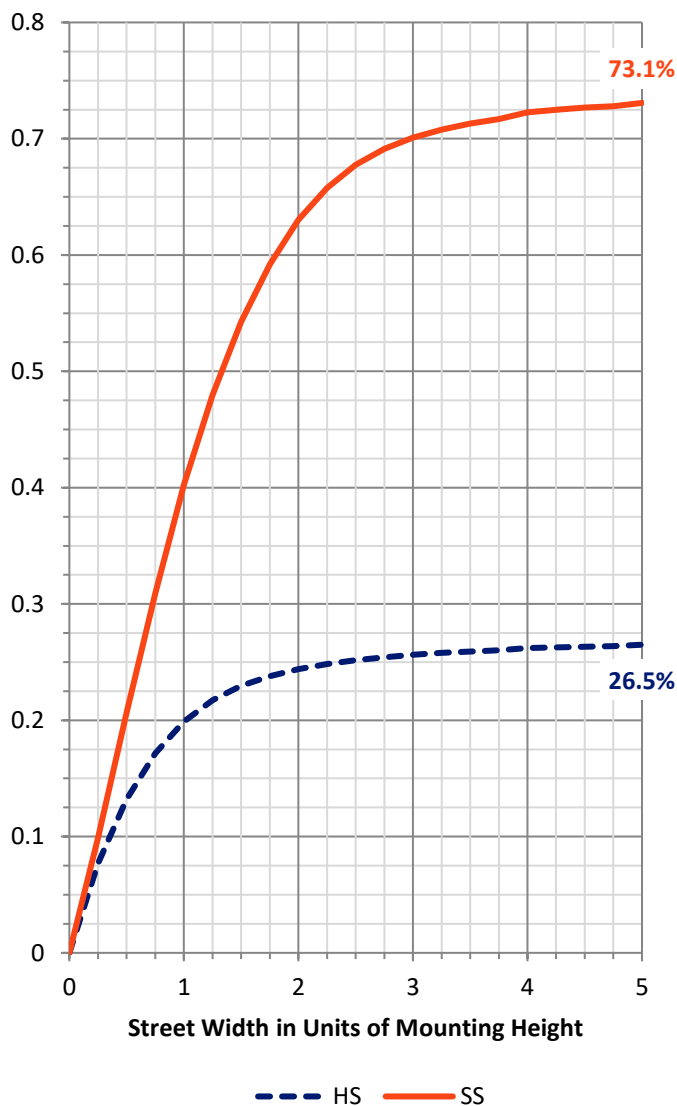
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6096.4	0.0	6096.4
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	16723.6	0.0	16723.6
	% Fixture	73.3	0.0	73.3
Total	Lumens	22820.0	0.0	22820.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	364.4	1.6
10°-20°	1125.7	4.9
20°-30°	1943.0	8.5
30°-40°	2865.3	12.6
40°-50°	3881.9	17.0
50°-60°	4744.6	20.8
60°-70°	4893.4	21.4
70°-80°	2680.3	11.7
80°-90°	321.3	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°	22820.0	100.0
0°-180°	22820.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836277

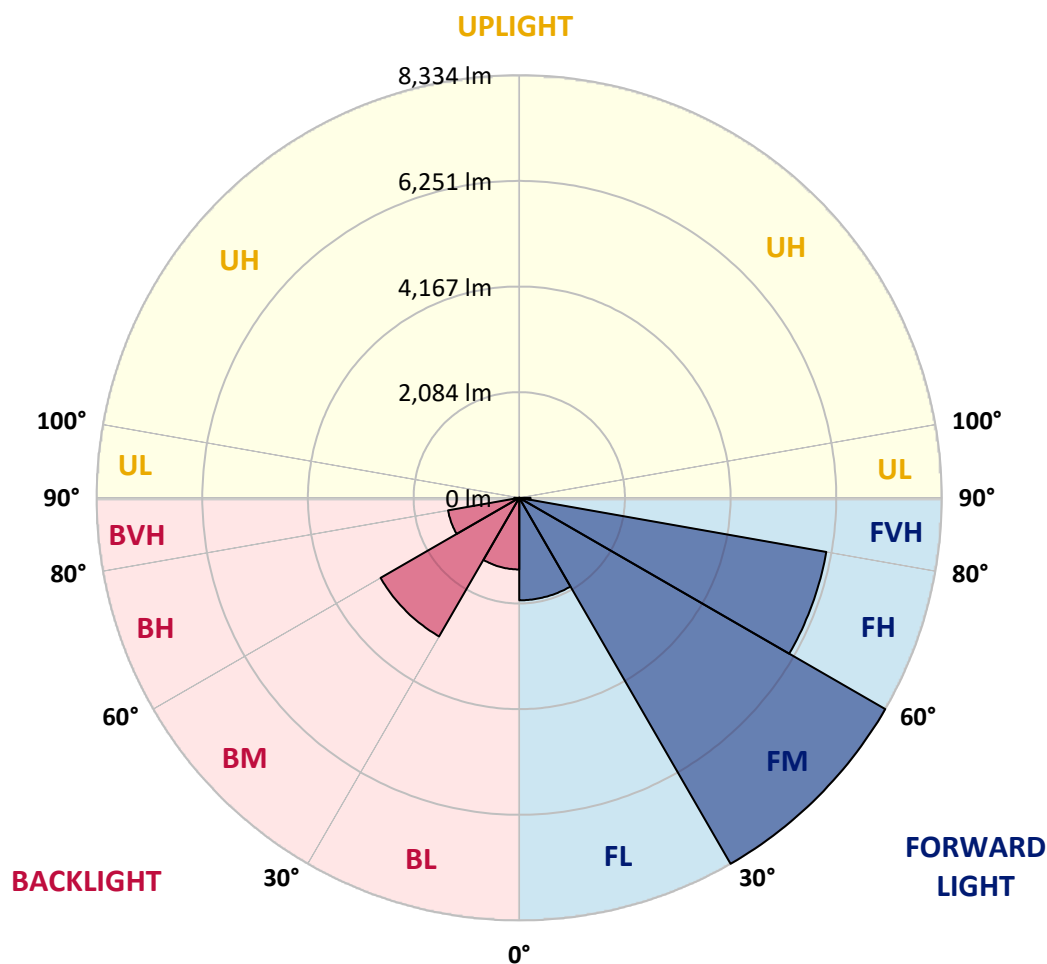
CATALOG NUMBER: ARCH3-160-740-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2020.2	8.9			
FM	(30°-60°)	8334.1	36.5			
FH	(60°-80°)	6148.0	26.9			G3/7500
FVH	(80°-90°)	221.3	1.0			G2/225
BL	(0°-30°)	1412.9	6.2	B3/2500		
BM	(30°-60°)	3157.8	13.8	B3/5000		
BH	(60°-80°)	1425.7	6.2	B3/2500		G3/2500
BVH	(80°-90°)	99.9	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: P836277

CATALOG NUMBER: ARCH3-160-740-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	3805.9	3805.9	3805.9	3805.9	3805.9	3805.9	3805.9	3805.9	3805.9	3805.9	3805.9
2.5°	3972.6	3969.2	3976.1	3951.8	3920.5	3917.1	3917.1	3896.2	3871.9	3823.3	3785.1
5°	4160.1	4153.2	4156.7	4121.9	4080.3	4059.4	4056.0	4010.8	3955.3	3878.9	3809.4
7.5°	4333.8	4326.8	4323.4	4285.2	4222.7	4187.9	4184.5	4118.5	4052.5	3934.4	3833.7
10°	4497.0	4490.0	4483.1	4431.0	4354.6	4302.5	4295.6	4212.2	4128.9	3983.0	3854.6
12.5°	4705.3	4691.5	4684.5	4622.0	4510.9	4455.3	4444.9	4333.8	4229.6	4052.5	3896.2
15°	4924.1	4913.7	4903.3	4844.2	4719.2	4646.3	4628.9	4490.0	4347.7	4142.8	3958.7
17.5°	5087.3	5076.9	5076.9	5024.8	4910.2	4826.9	4813.0	4646.3	4469.2	4226.1	4007.4
20°	5188.0	5177.6	5188.0	5156.8	5070.0	5000.5	4986.6	4802.6	4590.7	4302.5	4049.0
22.5°	5261.0	5250.5	5267.9	5254.0	5191.5	5149.8	5139.4	4958.8	4715.8	4382.4	4090.7
25°	5389.4	5389.4	5389.4	5365.1	5306.1	5292.2	5292.2	5135.9	4875.5	4486.6	4153.2
27.5°	5646.4	5632.5	5615.2	5545.7	5445.0	5441.5	5462.4	5316.5	5059.5	4622.0	4229.6
30°	6024.9	6018.0	5952.0	5806.1	5636.0	5618.6	5632.5	5511.0	5257.5	4764.4	4316.4
32.5°	6514.6	6490.2	6354.8	6136.0	5893.0	5813.1	5840.9	5712.4	5465.8	4910.2	4399.8
35°	6861.8	6868.8	6771.5	6573.6	6285.4	6073.5	6094.4	5938.1	5691.6	5073.4	4503.9
37.5°	7261.2	7285.5	7139.6	6990.3	6722.9	6361.8	6382.6	6170.8	5917.3	5278.3	4615.1
40°	7813.3	7764.7	7518.1	7341.0	7045.9	6663.9	6681.2	6431.2	6177.7	5472.8	4743.5
42.5°	8275.1	8188.3	7889.7	7664.0	7309.8	6983.4	7000.7	6712.5	6441.6	5688.1	4885.9
45°	8938.4	8698.8	8268.2	8157.1	7580.6	7295.9	7313.2	7011.1	6719.4	5917.3	5038.7
47.5°	9323.9	8941.9	8667.5	8608.5	7879.3	7618.8	7639.7	7327.1	7018.1	6177.7	5198.4
50°	9299.6	9053.0	8973.1	8827.3	8143.2	7920.9	7941.8	7653.6	7320.2	6434.7	5351.2
52.5°	9139.8	9185.0	9143.3	8900.2	8407.1	8212.6	8237.0	7976.5	7629.2	6674.3	5493.6
55°	9386.4	9417.6	9337.8	9018.3	8698.8	8504.3	8532.1	8316.8	7934.8	6886.1	5615.2
57.5°	9681.5	9570.4	9490.5	9226.6	9000.9	8820.3	8851.6	8664.1	8198.8	7056.3	5708.9
60°	9667.7	9435.0	9514.9	9240.5	9205.8	9112.0	9139.8	8948.8	8400.2	7181.3	5747.1
62.5°	8955.8	8830.8	9233.6	9139.8	9372.5	9372.5	9407.2	9122.5	8521.7	7233.4	5726.3
65°	7719.5	7726.5	8434.9	8823.8	9570.4	9730.2	9757.9	9230.1	8452.2	7080.6	5531.8
67.5°	6149.9	6195.1	7212.5	8021.7	9372.5	9973.2	9976.7	9327.3	8153.6	6650.0	5080.4
70°	4500.5	4535.2	5736.7	6719.4	8438.4	9435.0	9379.4	9053.0	7504.2	5899.9	4375.4
72.5°	3042.0	3073.2	4309.5	5160.2	6924.3	8035.5	7914.0	8000.8	6396.5	4847.7	3517.7
75°	2045.3	2083.5	3066.3	3691.3	5094.3	6101.3	5830.5	6059.6	4948.4	3670.5	2566.2
77.5°	1288.3	1312.6	1948.1	2420.4	3479.5	4153.2	3882.3	3885.8	2851.0	1975.9	1378.6
80°	819.5	826.5	1180.7	1396.0	2014.1	2496.8	2208.6	1795.3	1284.9	1048.7	823.0
82.5°	475.7	465.3	704.9	788.3	958.4	948.0	784.8	743.1	562.6	524.4	420.2
85°	191.0	177.1	309.1	288.2	291.7	309.1	229.2	229.2	184.0	142.4	104.2
87.5°	38.2	38.2	41.7	38.2	38.2	41.7	31.3	31.3	27.8	27.8	27.8
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: P836277

CATALOG NUMBER: ARCH3-160-740-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3805.9	3805.9	3805.9	3805.9	3805.9	3805.9	3805.9	3805.9	3805.9	3805.9	3805.9
2.5°	3778.2	3771.2	3753.9	3708.7	3684.4	3670.5	3649.7	3642.7	3639.3	3642.7	3653.1
5°	3788.6	3764.3	3715.7	3642.7	3594.1	3562.9	3528.1	3514.2	3503.8	3503.8	3514.2
7.5°	3795.5	3757.3	3674.0	3566.3	3496.9	3448.3	3406.6	3389.2	3385.8	3396.2	3399.7
10°	3799.0	3743.4	3625.4	3489.9	3399.7	3337.1	3295.5	3285.1	3295.5	3316.3	3319.8
12.5°	3823.3	3746.9	3597.6	3437.9	3330.2	3267.7	3236.4	3236.4	3264.2	3302.4	3305.9
15°	3865.0	3771.2	3583.7	3396.2	3285.1	3229.5	3219.1	3236.4	3278.1	3337.1	3344.1
17.5°	3896.2	3785.1	3552.4	3340.6	3226.0	3191.3	3208.7	3250.3	3309.4	3389.2	3396.2
20°	3917.1	3785.1	3507.3	3274.6	3167.0	3160.0	3208.7	3274.6	3337.1	3430.9	3441.3
22.5°	3937.9	3778.2	3455.2	3194.8	3101.0	3121.8	3212.1	3295.5	3358.0	3458.7	3476.0
25°	3976.1	3788.6	3403.1	3114.9	3031.6	3090.6	3208.7	3309.4	3375.3	3479.5	3507.3
27.5°	4028.2	3812.9	3364.9	3042.0	2962.1	3042.0	3184.4	3305.9	3375.3	3476.0	3507.3
30°	4083.7	3840.7	3319.8	2962.1	2882.2	2972.5	3132.3	3267.7	3347.6	3441.3	3479.5
32.5°	4142.8	3871.9	3281.6	2875.3	2785.0	2878.8	3055.9	3208.7	3295.5	3382.3	3424.0
35°	4222.7	3927.5	3260.7	2805.8	2698.2	2781.5	2958.6	3132.3	3226.0	3305.9	3354.5
37.5°	4319.9	3996.9	3250.3	2736.4	2604.4	2673.9	2854.5	3038.5	3139.2	3205.2	3250.3
40°	4431.0	4083.7	3246.9	2670.4	2510.7	2562.8	2746.8	2930.9	3028.1	3080.2	3118.4
42.5°	4556.0	4181.0	3239.9	2604.4	2416.9	2458.6	2642.6	2823.2	2906.5	2951.7	2986.4
45°	4688.0	4278.2	3226.0	2524.6	2316.2	2364.8	2535.0	2694.7	2781.5	2819.7	2857.9
47.5°	4819.9	4375.4	3198.2	2434.3	2225.9	2271.1	2420.4	2559.3	2628.7	2663.5	2701.7
50°	4948.4	4462.3	3132.3	2330.1	2132.2	2173.8	2288.4	2382.2	2434.3	2462.1	2500.3
52.5°	5063.0	4521.3	3038.5	2208.6	2038.4	2059.2	2135.6	2215.5	2257.2	2260.6	2295.4
55°	5160.2	4552.5	2903.1	2083.5	1937.7	1941.2	1982.8	2045.3	2062.7	2048.8	2073.1
57.5°	5215.8	4535.2	2753.8	1955.1	1833.5	1819.6	1850.9	1882.1	1885.6	1850.9	1875.2
60°	5229.7	4455.3	2559.3	1826.6	1729.3	1691.1	1701.6	1694.6	1687.7	1673.8	1694.6
62.5°	5160.2	4285.2	2344.0	1701.6	1618.2	1559.2	1555.7	1552.2	1562.7	1566.1	1569.6
65°	4906.7	3965.7	2087.0	1573.1	1500.2	1420.3	1416.8	1458.5	1472.4	1451.5	1458.5
67.5°	4417.1	3476.0	1805.7	1423.8	1350.8	1281.4	1309.2	1333.5	1357.8	1350.8	1357.8
70°	3722.6	2854.5	1548.8	1257.1	1187.6	1149.4	1180.7	1201.5	1205.0	1198.0	1205.0
72.5°	2927.4	2229.4	1309.2	1086.9	1024.4	1007.0	1045.2	1062.6	1093.9	1107.8	1111.2
75°	2114.8	1646.0	1073.0	902.9	850.8	850.8	885.5	916.8	944.5	927.2	916.8
77.5°	1180.7	982.7	770.9	621.6	632.0	680.6	694.5	729.2	757.0	753.5	746.6
80°	715.4	614.6	520.9	402.8	399.3	437.5	527.8	586.9	600.8	569.5	566.0
82.5°	371.6	322.9	277.8	225.7	250.0	291.7	305.6	368.1	406.3	392.4	409.8
85°	93.8	90.3	100.7	104.2	128.5	142.4	156.3	184.0	121.5	59.0	59.0
87.5°	27.8	27.8	34.7	34.7	45.1	55.6	52.1	52.1	27.8	3.5	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)