

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: P836250

Luminaire Tested: **ARCH3-160-727-U-T4W**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836250
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: ARCH3-160-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20972 lumens
Efficiency: N/A
Efficacy: 130.3 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

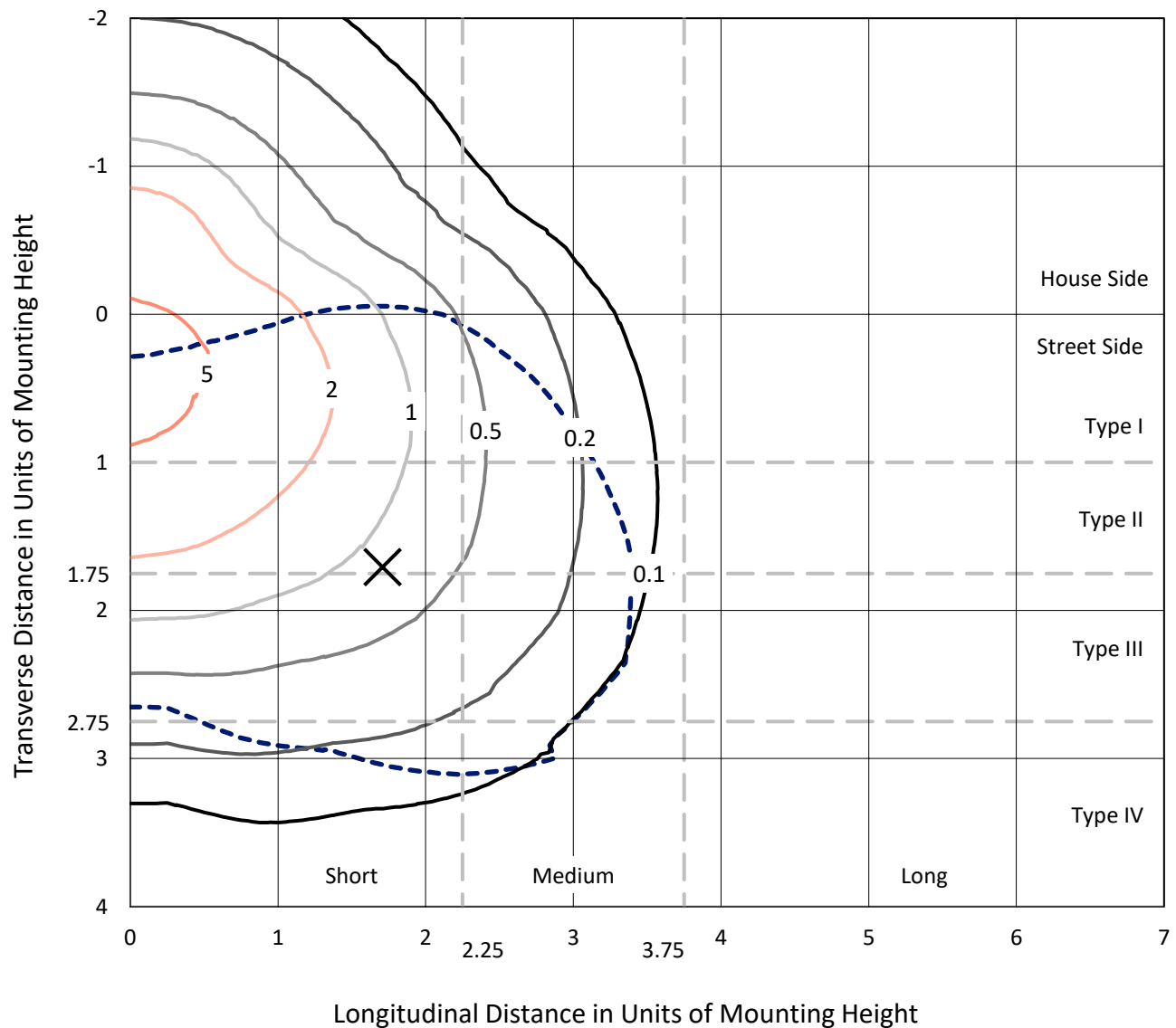


REPORT NUMBER: P836250

CATALOG NUMBER: ARCH3-160-727-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

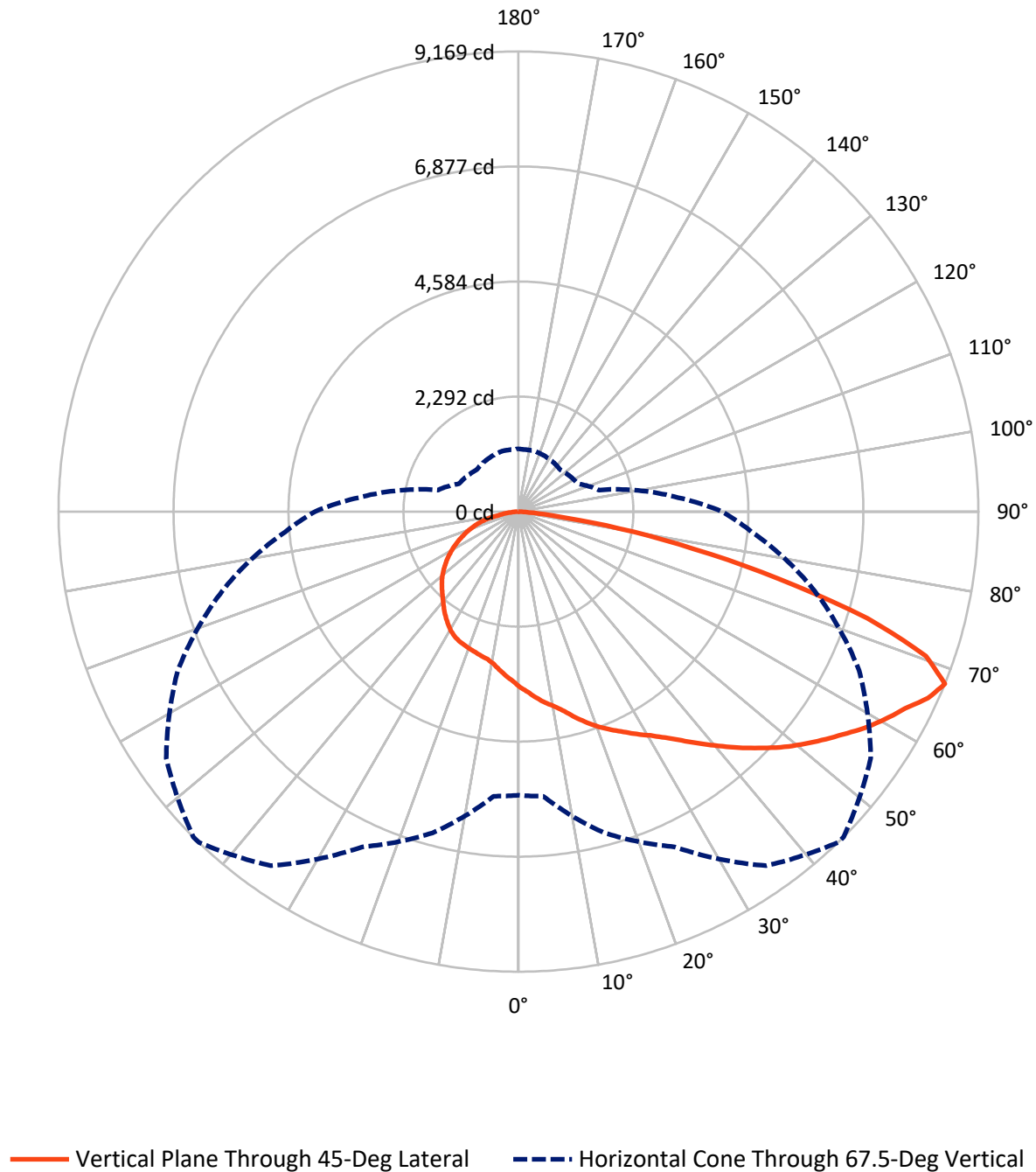
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
Type IV - Short - N/A

REPORT NUMBER: P836250
CATALOG NUMBER: ARCH3-160-727-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P836250

CATALOG NUMBER: ARCH3-160-727-U-T4W

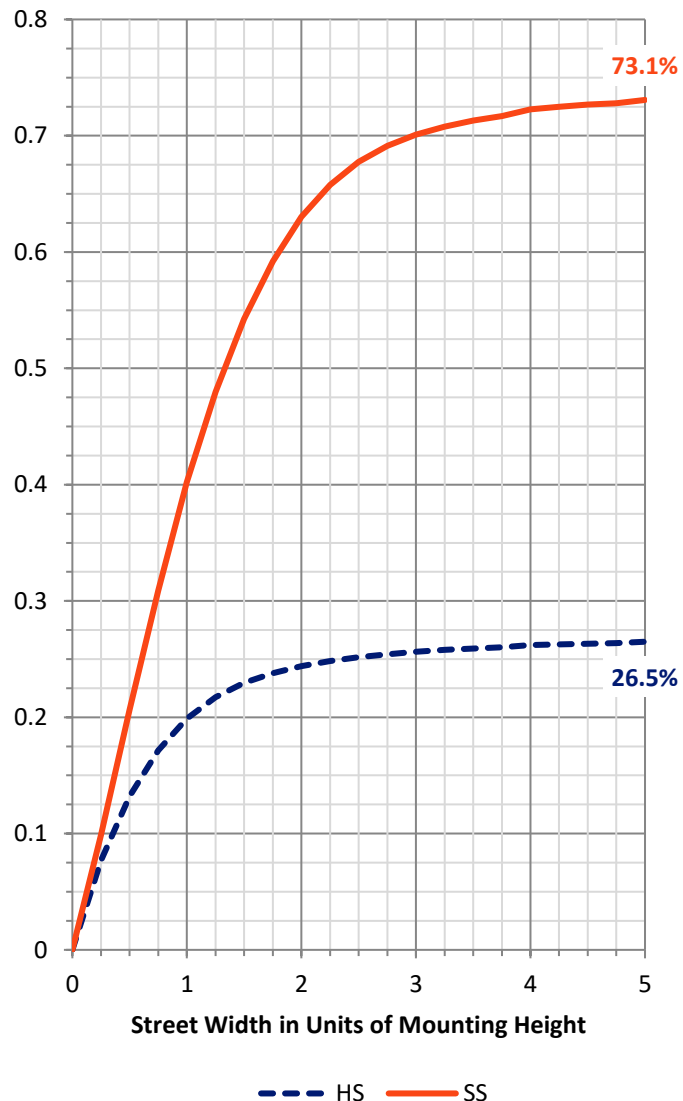
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5602.7	0.0	5602.7
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	15369.3	0.0	15369.3
	% Fixture	73.3	0.0	73.3
Total	Lumens	20972.0	0.0	20972.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	334.9	1.6
10°-20°	1034.5	4.9
20°-30°	1785.7	8.5
30°-40°	2633.3	12.6
40°-50°	3567.6	17.0
50°-60°	4360.4	20.8
60°-70°	4497.2	21.4
70°-80°	2463.2	11.7
80°-90°	295.2	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°	20972.0	100.0
0°-180°	20972.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836250

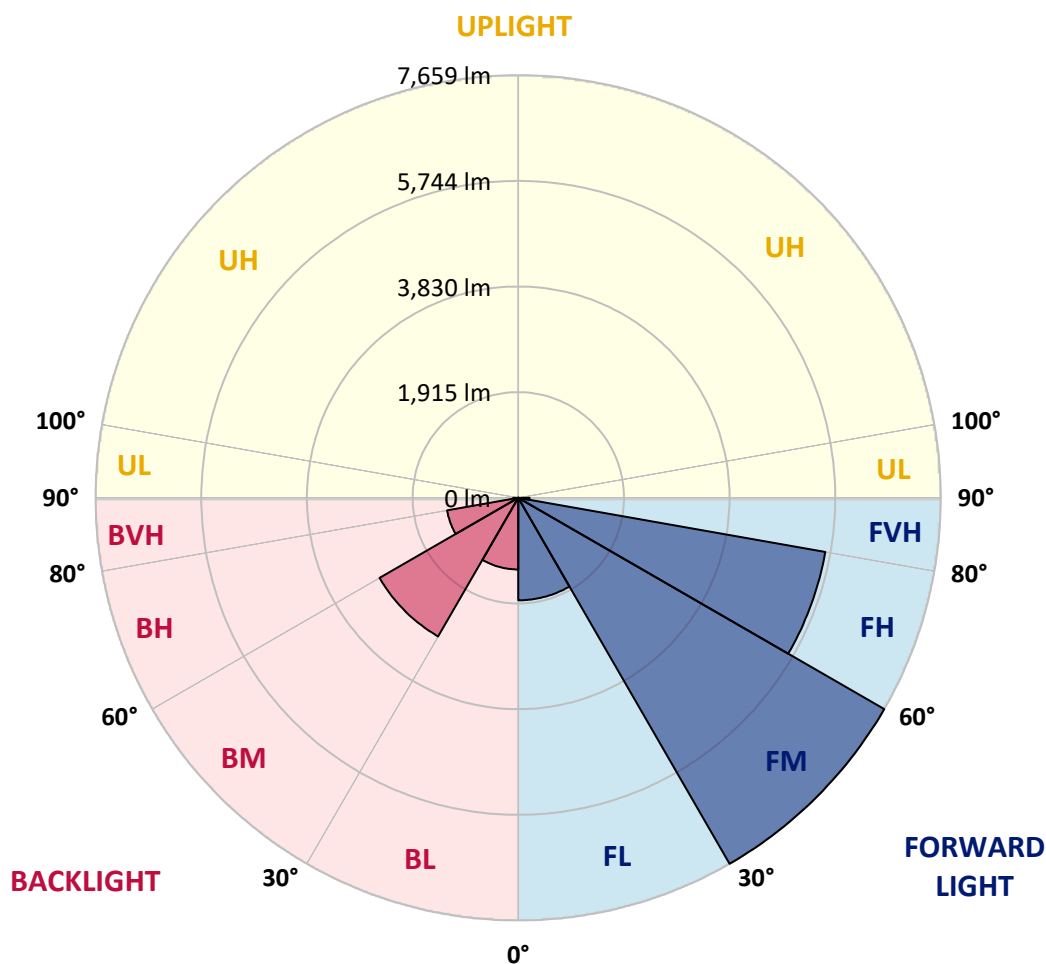
CATALOG NUMBER: ARCH3-160-727-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1856.6	8.9			
FM	(30°-60°)	7659.2	36.5			
FH	(60°-80°)	5650.2	26.9			G3/7500
FVH	(80°-90°)	203.4	1.0			G2/225
BL	(0°-30°)	1298.5	6.2	B3/2500		
BM	(30°-60°)	2902.1	13.8	B3/5000		
BH	(60°-80°)	1310.2	6.2	B3/2500		G3/2500
BVH	(80°-90°)	91.8	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: P836250

CATALOG NUMBER: ARCH3-160-727-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	3497.7	3497.7	3497.7	3497.7	3497.7	3497.7	3497.7	3497.7	3497.7	3497.7	3497.7
2.5°	3650.9	3647.7	3654.1	3631.8	3603.0	3599.9	3599.9	3580.7	3558.4	3513.7	3478.6
5°	3823.3	3816.9	3820.1	3788.1	3749.8	3730.7	3727.5	3686.0	3635.0	3564.8	3500.9
7.5°	3982.8	3976.4	3973.2	3938.1	3880.7	3848.8	3845.6	3785.0	3724.3	3615.8	3523.3
10°	4132.8	4126.4	4120.0	4072.2	4002.0	3954.1	3947.7	3871.1	3794.5	3660.5	3542.4
12.5°	4324.3	4311.5	4305.1	4247.7	4145.6	4094.5	4084.9	3982.8	3887.1	3724.3	3580.7
15°	4525.4	4515.8	4506.2	4451.9	4337.1	4270.0	4254.1	4126.4	3995.6	3807.3	3638.2
17.5°	4675.3	4665.8	4665.8	4617.9	4512.6	4436.0	4423.2	4270.0	4107.3	3883.9	3682.8
20°	4767.9	4758.3	4767.9	4739.2	4659.4	4595.6	4582.8	4413.7	4219.0	3954.1	3721.1
22.5°	4834.9	4825.3	4841.3	4828.5	4771.1	4732.8	4723.2	4557.3	4333.9	4027.5	3759.4
25°	4953.0	4953.0	4953.0	4930.7	4876.4	4863.6	4863.6	4720.0	4480.7	4123.2	3816.9
27.5°	5189.2	5176.4	5160.4	5096.6	5004.1	5000.9	5020.0	4886.0	4649.8	4247.7	3887.1
30°	5537.0	5530.6	5470.0	5336.0	5179.6	5163.6	5176.4	5064.7	4831.7	4378.5	3966.9
32.5°	5987.0	5964.7	5840.2	5639.1	5415.7	5342.3	5367.9	5249.8	5023.2	4512.6	4043.5
35°	6306.1	6312.5	6223.2	6041.2	5776.4	5581.7	5600.8	5457.2	5230.6	4662.6	4139.2
37.5°	6673.1	6695.5	6561.4	6424.2	6178.5	5846.6	5865.7	5671.0	5438.1	4850.9	4241.3
40°	7180.6	7135.9	6909.3	6746.5	6475.3	6124.2	6140.2	5910.4	5677.4	5029.6	4359.4
42.5°	7605.0	7525.2	7250.8	7043.3	6717.8	6417.8	6433.8	6168.9	5920.0	5227.4	4490.2
45°	8214.6	7994.4	7598.6	7496.5	6966.7	6705.0	6721.0	6443.4	6175.3	5438.1	4630.7
47.5°	8568.8	8217.8	7965.6	7911.4	7241.2	7001.8	7021.0	6733.8	6449.7	5677.4	4777.5
50°	8546.5	8319.9	8246.5	8112.4	7483.7	7279.5	7298.6	7033.8	6727.4	5913.6	4917.9
52.5°	8399.7	8441.2	8402.9	8179.5	7726.3	7547.6	7569.9	7330.6	7011.4	6133.8	5048.7
55°	8626.2	8655.0	8581.6	8288.0	7994.4	7815.6	7841.2	7643.3	7292.3	6328.5	5160.4
57.5°	8897.5	8795.4	8722.0	8479.4	8272.0	8106.1	8134.8	7962.4	7534.8	6484.8	5246.6
60°	8884.7	8670.9	8744.3	8492.2	8460.3	8374.1	8399.7	8224.1	7719.9	6599.7	5281.7
62.5°	8230.5	8115.6	8485.8	8399.7	8613.5	8613.5	8645.4	8383.7	7831.6	6647.6	5262.6
65°	7094.4	7100.8	7751.8	8109.2	8795.4	8942.2	8967.7	8482.6	7767.8	6507.2	5083.8
67.5°	5651.9	5693.4	6628.5	7372.0	8613.5	9165.6	9168.8	8572.0	7493.3	6111.5	4669.0
70°	4136.0	4167.9	5272.1	6175.3	7755.0	8670.9	8619.9	8319.9	6896.5	5422.1	4021.1
72.5°	2795.6	2824.4	3960.5	4742.4	6363.6	7384.8	7273.1	7352.9	5878.5	4455.1	3232.8
75°	1879.7	1914.8	2818.0	3392.4	4681.7	5607.2	5358.3	5568.9	4547.7	3373.3	2358.4
77.5°	1184.0	1206.3	1790.4	2224.4	3197.7	3816.9	3567.9	3571.1	2620.1	1815.9	1267.0
80°	753.2	759.5	1085.1	1282.9	1851.0	2294.6	2029.7	1649.9	1180.8	963.8	756.4
82.5°	437.2	427.6	647.8	724.4	880.8	871.2	721.2	683.0	517.0	481.9	386.2
85°	175.5	162.8	284.0	264.9	268.1	284.0	210.6	210.6	169.1	130.8	95.7
87.5°	35.1	35.1	38.3	35.1	35.1	38.3	28.7	28.7	25.5	25.5	25.5
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: P836250

CATALOG NUMBER: ARCH3-160-727-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3497.7	3497.7	3497.7	3497.7	3497.7	3497.7	3497.7	3497.7	3497.7	3497.7	3497.7
2.5°	3472.2	3465.8	3449.9	3408.4	3386.0	3373.3	3354.1	3347.7	3344.5	3347.7	3357.3
5°	3481.8	3459.4	3414.8	3347.7	3303.1	3274.3	3242.4	3229.7	3220.1	3220.1	3229.7
7.5°	3488.2	3453.1	3376.5	3277.5	3213.7	3169.0	3130.7	3114.8	3111.6	3121.2	3124.3
10°	3491.3	3440.3	3331.8	3207.3	3124.3	3066.9	3028.6	3019.0	3028.6	3047.7	3050.9
12.5°	3513.7	3443.5	3306.3	3159.4	3060.5	3003.1	2974.3	2974.3	2999.9	3035.0	3038.2
15°	3552.0	3465.8	3293.5	3121.2	3019.0	2968.0	2958.4	2974.3	3012.6	3066.9	3073.3
17.5°	3580.7	3478.6	3264.8	3070.1	2964.8	2932.9	2948.8	2987.1	3041.4	3114.8	3121.2
20°	3599.9	3478.6	3223.3	3009.5	2910.5	2904.1	2948.8	3009.5	3066.9	3153.1	3162.6
22.5°	3619.0	3472.2	3175.4	2936.1	2849.9	2869.0	2952.0	3028.6	3086.0	3178.6	3194.6
25°	3654.1	3481.8	3127.5	2862.7	2786.1	2840.3	2948.8	3041.4	3102.0	3197.7	3223.3
27.5°	3702.0	3504.1	3092.4	2795.6	2722.2	2795.6	2926.5	3038.2	3102.0	3194.6	3223.3
30°	3753.0	3529.6	3050.9	2722.2	2648.8	2731.8	2878.6	3003.1	3076.5	3162.6	3197.7
32.5°	3807.3	3558.4	3015.8	2642.4	2559.5	2645.6	2808.4	2948.8	3028.6	3108.4	3146.7
35°	3880.7	3609.4	2996.7	2578.6	2479.7	2556.3	2719.0	2878.6	2964.8	3038.2	3082.9
37.5°	3970.1	3673.3	2987.1	2514.8	2393.5	2457.3	2623.3	2792.4	2885.0	2945.6	2987.1
40°	4072.2	3753.0	2983.9	2454.2	2307.4	2355.2	2524.4	2693.5	2782.9	2830.7	2865.8
42.5°	4187.1	3842.4	2977.5	2393.5	2221.2	2259.5	2428.6	2594.6	2671.2	2712.7	2744.6
45°	4308.3	3931.8	2964.8	2320.1	2128.6	2173.3	2329.7	2476.5	2556.3	2591.4	2626.5
47.5°	4429.6	4021.1	2939.2	2237.1	2045.7	2087.2	2224.4	2352.0	2415.9	2447.8	2482.9
50°	4547.7	4100.9	2878.6	2141.4	1959.5	1997.8	2103.1	2189.3	2237.1	2262.7	2297.8
52.5°	4653.0	4155.2	2792.4	2029.7	1873.3	1892.5	1962.7	2036.1	2074.4	2077.6	2109.5
55°	4742.4	4183.9	2668.0	1914.8	1780.8	1784.0	1822.3	1879.7	1895.7	1882.9	1905.2
57.5°	4793.4	4167.9	2530.7	1796.7	1685.0	1672.3	1701.0	1729.7	1732.9	1701.0	1723.3
60°	4806.2	4094.5	2352.0	1678.7	1589.3	1554.2	1563.8	1557.4	1551.0	1538.2	1557.4
62.5°	4742.4	3938.1	2154.2	1563.8	1487.2	1432.9	1429.7	1426.5	1436.1	1439.3	1442.5
65°	4509.4	3644.5	1918.0	1445.7	1378.7	1305.3	1302.1	1340.4	1353.1	1334.0	1340.4
67.5°	4059.4	3194.6	1659.5	1308.5	1241.4	1177.6	1203.1	1225.5	1247.8	1241.4	1247.8
70°	3421.1	2623.3	1423.3	1155.3	1091.4	1056.3	1085.1	1104.2	1107.4	1101.0	1107.4
72.5°	2690.3	2048.9	1203.1	998.9	941.5	925.5	960.6	976.6	1005.3	1018.0	1021.2
75°	1943.5	1512.7	986.1	829.8	781.9	781.9	813.8	842.5	868.1	852.1	842.5
77.5°	1085.1	903.2	708.5	571.3	580.8	625.5	638.3	670.2	695.7	692.5	686.1
80°	657.4	564.9	478.7	370.2	367.0	402.1	485.1	539.3	552.1	523.4	520.2
82.5°	341.5	296.8	255.3	207.4	229.8	268.1	280.8	338.3	373.4	360.6	376.6
85°	86.2	83.0	92.5	95.7	118.1	130.8	143.6	169.1	111.7	54.3	54.3
87.5°	25.5	25.5	31.9	31.9	41.5	51.1	47.9	47.9	25.5	3.2	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)