

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: P265709

Luminaire Tested: **ARCH-L-AF72-240-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-240-D-U-T2U-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23910.9 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 242
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: 28.75 FT

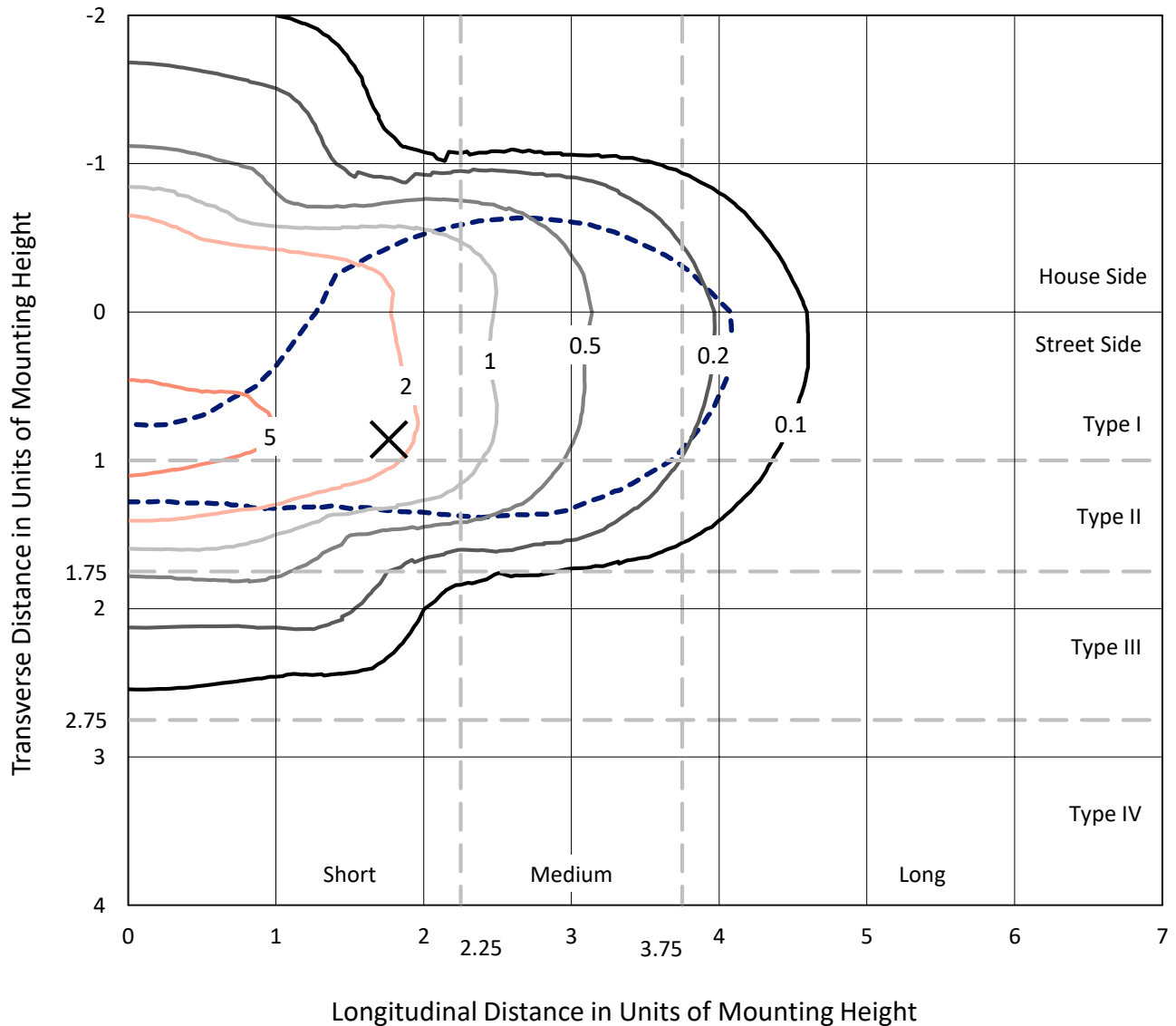


REPORT NUMBER: P265709

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7027

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

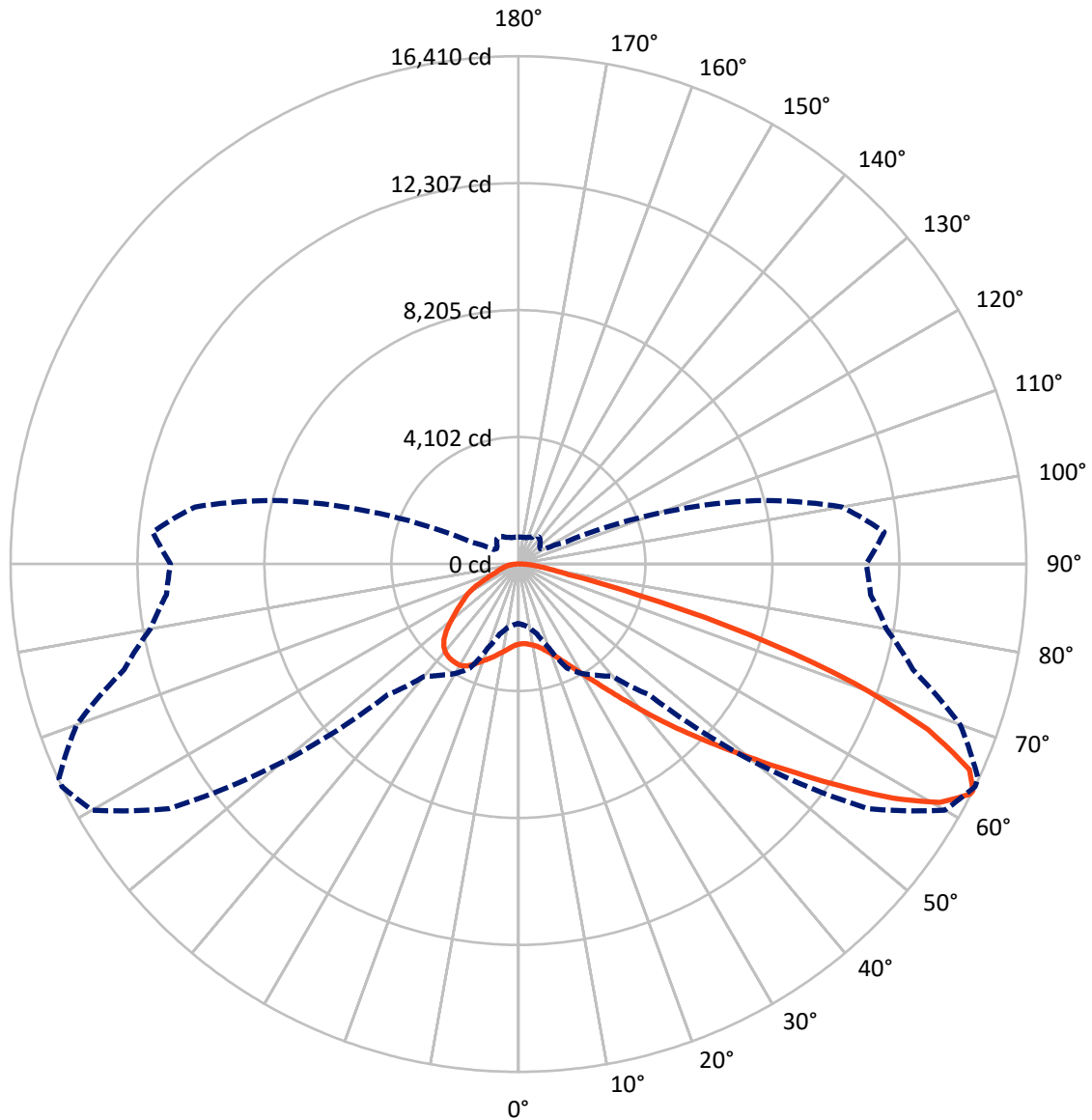


Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P265709

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P265709

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7028.9	0.0	7028.9
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	16881.9	0.0	16881.9
	% Fixture	70.6	0.0	70.6
Total	Lumens	23910.9	0.0	23910.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.5	1.1
10°-20°	861.2	3.6
20°-30°	1616.5	6.8
30°-40°	2709.4	11.3
40°-50°	4545.8	19.0
50°-60°	5762.7	24.1
60°-70°	5083.6	21.3
70°-80°	2624.2	11.0
80°-90°	449.0	1.9
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°	23910.9	100.0
0°-180°	23910.9	100.0



REPORT NUMBER: P265709

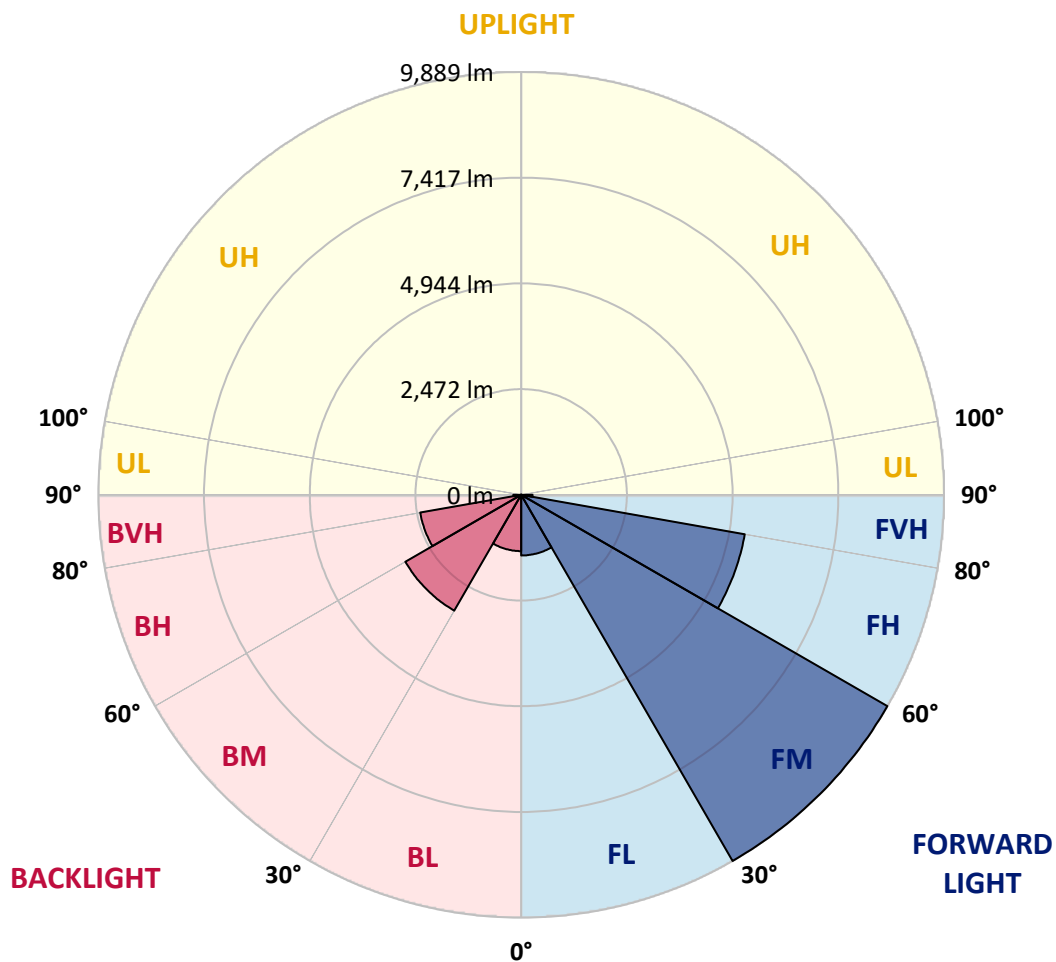
CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1419.2	5.9			
FM	(30°-60°)	9888.9	41.4			
FH	(60°-80°)	5309.6	22.2			G3/7500
FVH	(80°-90°)	264.3	1.1			G3/500
BL	(0°-30°)	1317.0	5.5	B3/2500		
BM	(30°-60°)	3128.9	13.1	B3/5000		
BH	(60°-80°)	2398.2	10.0	B3/2500		G3/2500
BVH	(80°-90°)	184.8	0.8			G2/225
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 Short





REPORT NUMBER: P265709

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5
2.5°	2573.6	2569.5	2569.5	2569.5	2569.5	2565.5	2569.5	2577.5	2573.6	2569.5	2577.5
5°	2581.5	2577.5	2577.5	2577.5	2581.5	2577.5	2581.5	2593.5	2585.5	2585.5	2593.5
7.5°	2601.5	2597.5	2601.5	2597.5	2597.5	2597.5	2601.5	2613.6	2609.5	2613.6	2625.6
10°	2625.6	2625.6	2625.6	2625.6	2625.6	2625.6	2633.7	2641.6	2645.6	2649.6	2665.6
12.5°	2697.6	2697.6	2697.6	2693.6	2693.6	2681.6	2697.6	2705.7	2713.6	2721.7	2733.6
15°	2849.8	2849.8	2845.7	2829.8	2829.8	2805.6	2809.7	2813.8	2813.8	2821.7	2829.8
17.5°	3049.8	3045.9	3037.8	3025.9	3009.9	2981.7	2973.7	2965.8	2953.7	2949.8	2949.8
20°	3329.9	3326.0	3310.0	3277.9	3258.0	3213.9	3181.8	3149.8	3137.9	3117.8	3113.9
22.5°	3730.2	3730.2	3698.2	3650.2	3634.2	3542.0	3450.0	3381.9	3358.0	3329.9	3329.9
25°	4214.5	4210.4	4166.5	4110.5	4042.5	3946.3	3834.2	3742.2	3682.2	3618.2	3594.1
27.5°	4794.9	4782.8	4722.7	4654.7	4526.6	4406.6	4274.6	4178.5	4074.4	3994.4	3922.3
30°	5475.3	5463.2	5359.2	5231.1	5099.0	4978.9	4786.9	4670.7	4506.6	4410.6	4330.5
32.5°	6263.7	6251.8	6063.6	5939.6	5799.5	5651.3	5423.2	5239.2	5031.0	4895.0	4782.8
35°	7268.2	7220.2	6952.2	6780.0	6560.0	6411.8	6171.6	5923.6	5679.4	5487.2	5323.1
37.5°	8353.0	8296.9	8060.9	7804.7	7588.5	7408.4	7068.3	6756.1	6467.8	6203.6	5999.6
40°	9485.7	9337.5	9085.4	8897.3	8749.2	8577.0	8220.8	7892.7	7440.4	7144.2	6836.0
42.5°	10270.1	10126.1	9949.8	9825.8	9753.7	9621.7	9421.7	9137.4	8733.2	8741.1	7928.7
45°	10786.4	10574.3	10454.1	10462.2	10490.1	10490.1	10454.1	10410.2	10234.1	10354.1	9673.8
47.5°	10602.2	10462.2	10386.2	10546.2	10746.3	10946.4	11178.6	11430.8	11719.0	12059.1	11222.6
50°	9521.7	9573.6	9609.7	9949.8	10378.2	10834.4	11366.8	12055.2	12859.6	13015.7	12611.5
52.5°	7796.6	7908.7	8028.7	8549.1	9113.5	9901.8	10834.4	11971.2	13051.7	13688.2	13648.0
55°	6055.6	6195.7	6451.8	6840.1	7288.3	8032.7	9185.4	10938.5	12623.5	13636.1	14252.5
57.5°	4310.5	4514.7	4850.8	5391.2	5787.4	6207.6	7060.1	9005.4	10850.4	12735.5	14152.3
60°	2865.8	2961.7	3181.8	3854.3	4522.6	4963.0	5567.2	6271.7	7780.6	10378.2	13119.7
62.5°	2033.3	2097.3	2233.4	2537.5	3141.8	3938.3	4302.5	4626.7	5111.0	6675.9	10534.2
63°	1921.1	1977.2	2089.3	2345.4	2889.7	3714.2	4086.4	4382.7	4734.7	5971.6	9965.8
65°	1593.0	1616.9	1677.0	1801.1	2093.2	2777.6	3386.0	3566.1	3626.2	3838.3	6243.7
67.5°	1344.9	1360.8	1380.9	1416.8	1532.9	1849.2	2525.4	2753.7	2685.7	2541.6	3085.9
70°	1168.7	1180.7	1212.7	1256.8	1296.8	1376.8	1737.1	2077.2	2001.2	1805.1	1889.1
72.5°	932.5	952.6	988.6	1064.6	1144.7	1248.7	1336.8	1548.9	1500.9	1312.8	1332.7
75°	736.4	748.5	780.4	836.5	912.6	1032.6	1204.6	1276.8	1144.7	968.6	968.6
77.5°	584.3	596.4	624.4	668.3	716.4	800.5	920.6	1108.7	1028.6	728.4	724.5
80°	440.3	452.2	480.2	520.3	568.4	628.4	700.4	784.5	944.6	680.3	544.4
82.5°	324.2	328.2	376.2	404.2	420.2	468.2	528.4	576.4	648.3	628.4	484.2
85°	244.2	240.1	272.1	292.2	296.3	308.2	344.2	392.2	424.3	408.2	376.2
87.5°	136.1	120.1	140.0	160.1	160.1	164.1	172.0	200.1	228.1	220.2	200.1
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: P265709

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7027

CANDELA DISTRIBUTION (continued):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5
2.5°	2577.5	2577.5	2573.6	2573.6	2577.5	2577.5	2573.6	2585.5	2593.5	2593.5	2597.5
5°	2589.5	2593.5	2589.5	2589.5	2593.5	2593.5	2597.5	2609.5	2621.6	2629.6	2641.6
7.5°	2625.6	2629.6	2625.6	2625.6	2629.6	2633.7	2641.6	2657.5	2665.6	2681.6	2701.7
10°	2665.6	2669.7	2665.6	2669.7	2673.5	2677.6	2689.5	2701.7	2713.6	2729.6	2761.6
12.5°	2737.7	2741.6	2733.6	2737.7	2749.6	2749.6	2757.6	2765.6	2785.6	2805.6	2837.7
15°	2837.7	2837.7	2829.8	2833.7	2845.7	2845.7	2849.8	2857.7	2881.8	2905.7	2937.7
17.5°	2953.7	2961.7	2957.8	2961.7	2969.7	2973.7	2973.7	2981.7	2997.7	3013.9	3045.9
20°	3109.8	3113.9	3105.8	3113.9	3121.9	3113.9	3105.8	3101.8	3109.8	3117.8	3153.9
22.5°	3321.9	3318.0	3297.9	3297.9	3297.9	3282.0	3261.9	3237.9	3237.9	3226.0	3253.9
25°	3574.1	3562.0	3534.1	3538.2	3510.0	3486.1	3450.0	3414.0	3381.9	3370.0	3374.0
27.5°	3870.3	3846.4	3818.2	3810.3	3782.3	3738.1	3678.2	3610.2	3558.0	3518.1	3510.0
30°	4242.5	4190.6	4142.4	4134.4	4090.4	4018.4	3922.3	3830.3	3742.2	3674.2	3650.2
32.5°	4682.8	4602.7	4526.6	4518.7	4446.6	4350.6	4234.5	4106.4	3978.4	3870.3	3818.2
35°	5199.1	5078.9	5007.0	4987.0	4882.8	4762.9	4634.7	4470.7	4290.6	4138.4	4042.5
37.5°	5827.5	5703.3	5579.4	5583.3	5439.2	5299.1	5127.0	4926.9	4698.8	4486.7	4350.6
40°	6603.9	6427.8	6267.7	6231.7	6107.7	5911.4	5723.5	5491.2	5211.1	4930.9	4734.7
42.5°	7544.4	7256.2	7036.2	7004.2	6840.1	6599.8	6371.8	6063.6	5779.4	5439.2	5203.2
45°	8613.0	8152.8	7888.6	7840.6	7576.5	7332.3	7056.1	6727.9	6379.9	5995.6	5715.3
47.5°	9941.9	9285.5	8837.3	8757.1	8393.0	8072.8	7784.6	7420.4	7004.2	6576.0	6267.7
50°	11490.8	10522.2	9917.8	9793.9	9305.5	8929.3	8561.0	8104.8	7660.6	7212.3	6856.0
52.5°	13043.7	12003.2	11198.6	11046.5	10326.1	9821.8	9337.5	8881.3	8356.9	7912.7	7508.5
55°	14292.5	13600.1	12667.4	12455.4	11422.8	10738.3	10102.0	9581.7	9061.4	8709.2	8232.8
57.5°	15045.0	15008.9	14272.5	13980.3	12567.5	11554.9	10846.5	10254.2	9749.8	9601.8	8969.2
60°	15025.0	15957.4	15641.3	15421.2	13724.1	12391.3	11470.7	10830.4	10414.2	10582.3	9709.8
62.5°	14108.4	15997.5	16377.7	16317.7	14956.9	13063.7	11983.1	11322.6	11102.6	11602.9	10478.2
63°	13776.1	15905.4	16409.7	16385.8	15193.0	13191.8	12071.2	11418.7	11238.6	11863.0	10618.2
65°	11642.9	15101.0	16021.5	16129.5	15701.4	13632.0	12275.2	11663.0	11642.9	12443.4	10950.5
67.5°	7096.3	12759.5	14272.5	14480.6	14984.8	13772.2	12159.2	11578.9	11867.0	12527.5	10850.4
70°	3033.8	8421.0	11470.7	11807.1	13039.7	13075.8	11827.1	11234.7	11815.0	11871.0	10138.0
72.5°	1797.1	3970.4	7808.6	8541.1	10318.1	11250.6	11066.6	10634.3	11130.5	10426.2	8633.2
75°	1272.8	1857.1	3966.3	4746.9	7184.3	8589.1	9297.5	9497.6	9477.6	8268.9	6479.8
77.5°	912.6	1192.7	1673.1	1973.1	4010.4	5515.2	6379.9	6964.1	6776.1	5535.3	3994.4
80°	636.4	824.5	1024.5	1088.7	1861.1	2833.7	3361.9	3618.2	3506.1	2765.6	1789.1
82.5°	460.3	540.3	660.4	700.4	936.6	1308.8	1556.9	1372.8	1316.7	1020.7	772.5
85°	356.2	348.3	412.2	428.2	548.3	684.4	700.4	544.4	476.3	424.3	432.3
87.5°	252.2	216.1	220.2	228.1	284.1	364.3	356.2	224.1	192.1	204.2	232.1
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: P265709

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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5
2.5°	2605.5	2609.5	2617.5	2621.6	2629.6	2629.6	2637.6	2641.6	2649.6	2657.5	2661.6
5°	2653.6	2665.6	2681.6	2689.5	2705.7	2717.6	2733.6	2741.6	2757.6	2769.7	2785.6
7.5°	2725.5	2745.6	2765.6	2789.6	2813.8	2833.7	2849.8	2869.6	2897.8	2917.8	2929.7
10°	2793.6	2821.7	2857.7	2885.7	2921.7	2949.8	2973.7	3009.9	3041.8	3069.8	3085.9
12.5°	2881.8	2917.8	2953.7	2997.7	3045.9	3081.8	3117.8	3165.8	3210.0	3242.0	3258.0
15°	2985.7	3029.9	3069.8	3121.9	3177.8	3226.0	3277.9	3329.9	3361.9	3361.9	3354.0
17.5°	3093.9	3129.9	3177.8	3237.9	3313.9	3374.0	3402.1	3410.1	3398.0	3370.0	3350.0
20°	3201.9	3233.9	3285.9	3358.0	3438.1	3450.0	3422.1	3386.0	3350.0	3302.0	3269.9
22.5°	3290.0	3334.0	3414.0	3498.1	3502.1	3434.0	3358.0	3297.9	3242.0	3185.8	3125.8
25°	3394.1	3454.1	3562.0	3594.1	3490.1	3361.9	3253.9	3165.8	3073.8	2981.7	2913.7
27.5°	3522.1	3610.2	3718.3	3626.2	3422.1	3242.0	3093.9	2961.7	2841.7	2713.6	2637.6
30°	3658.2	3794.3	3818.2	3578.0	3305.9	3073.8	2873.7	2673.5	2521.5	2405.4	2361.5
32.5°	3822.3	3998.4	3854.3	3494.0	3149.8	2845.7	2577.5	2337.4	2209.3	2137.2	2117.2
35°	4070.4	4214.5	3874.3	3406.1	2969.7	2573.6	2237.3	2045.3	1965.1	1917.2	1893.1
37.5°	4426.6	4422.6	3870.3	3297.9	2761.6	2277.4	1965.1	1829.0	1765.0	1725.0	1681.0
40°	4842.9	4582.8	3846.4	3141.8	2481.5	1993.2	1777.0	1649.0	1588.9	1541.0	1488.9
42.5°	5255.2	4690.8	3778.2	2909.7	2133.3	1789.1	1640.9	1525.0	1460.9	1408.8	1336.8
45°	5611.4	4734.7	3646.2	2589.5	1821.0	1628.9	1552.9	1452.9	1376.8	1296.8	1240.6
47.5°	5891.5	4726.8	3434.0	2213.3	1612.9	1516.9	1480.9	1412.9	1320.8	1220.7	1148.8
50°	6127.6	4666.8	3145.9	1881.1	1473.0	1416.8	1404.8	1384.7	1236.7	1152.6	1108.7
52.5°	6343.8	4578.8	2837.7	1657.0	1352.8	1304.8	1328.9	1308.8	1204.6	1132.7	1088.7
55°	6639.9	4518.7	2533.5	1484.9	1212.7	1200.8	1220.7	1248.7	1184.8	1116.7	1068.7
57.5°	6988.2	4550.8	2301.4	1292.8	1080.7	1088.7	1156.7	1196.7	1164.7	1092.7	1044.5
60°	7388.4	4646.8	2097.3	1108.7	972.5	992.5	1092.7	1148.8	1144.7	1060.5	1004.7
62.5°	7836.6	4746.9	1773.1	968.6	880.5	912.6	1016.6	1088.7	1100.7	1028.6	960.6
63°	7924.7	4754.8	1689.1	940.5	864.4	900.6	996.6	1072.7	1088.7	1020.7	952.6
65°	8140.8	4682.8	1360.8	864.4	800.5	840.5	936.6	1004.7	1036.6	976.5	920.6
67.5°	7960.7	4094.5	1024.5	772.5	748.5	776.5	860.4	924.5	952.6	924.5	868.5
70°	7280.4	2977.7	800.5	688.5	692.5	712.4	776.5	836.5	868.5	860.4	808.5
72.5°	5863.4	1689.1	668.3	616.3	628.4	652.3	696.5	752.4	780.4	776.5	740.5
75°	3862.4	864.4	564.3	552.3	560.4	580.3	612.4	656.4	688.5	684.4	668.3
77.5°	1913.1	600.3	484.2	488.3	492.4	508.4	532.3	572.3	592.3	596.4	592.3
80°	788.4	468.2	416.3	420.2	424.3	436.2	452.2	488.3	500.3	508.4	512.4
82.5°	472.2	356.2	332.3	340.2	344.2	356.2	368.2	400.3	412.2	424.3	424.3
85°	312.3	248.1	240.1	248.1	256.1	264.1	268.1	288.1	308.2	324.2	332.3
87.5°	168.2	148.1	144.1	148.1	148.1	156.0	164.1	184.2	208.1	224.1	232.1
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: P265709

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7027

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	2589.5	2589.5	2589.5	2589.5	2589.5
2.5°	2653.6	2657.5	2653.6	2657.5	2661.6
5°	2785.6	2793.6	2789.6	2789.6	2805.6
7.5°	2937.7	2953.7	2953.7	2961.7	2969.7
10°	3101.8	3117.8	3129.9	3129.9	3141.8
12.5°	3266.0	3274.0	3285.9	3285.9	3285.9
15°	3350.0	3345.9	3342.0	3338.0	3338.0
17.5°	3338.0	3321.9	3313.9	3305.9	3310.0
20°	3249.9	3222.0	3213.9	3201.9	3210.0
22.5°	3097.9	3057.8	3041.8	3021.8	3029.9
25°	2869.6	2821.7	2813.8	2789.6	2801.6
27.5°	2605.5	2581.5	2577.5	2573.6	2593.5
30°	2357.4	2365.3	2369.4	2377.5	2397.4
32.5°	2129.3	2145.2	2149.3	2153.2	2181.3
35°	1905.1	1885.2	1905.1	1897.1	1921.1
37.5°	1661.0	1644.9	1628.9	1609.0	1624.9
40°	1457.0	1428.8	1380.9	1356.8	1360.8
42.5°	1296.8	1260.7	1220.7	1196.7	1196.7
45°	1192.7	1148.8	1112.7	1096.7	1096.7
47.5°	1112.7	1092.7	1072.7	1060.5	1060.5
50°	1080.7	1056.6	1044.5	1036.6	1036.6
52.5°	1056.6	1032.6	1020.7	1012.6	1004.7
55°	1036.6	1000.6	988.6	984.6	984.6
57.5°	1008.5	976.5	960.6	956.5	956.5
60°	964.6	940.5	924.5	920.6	920.6
62.5°	920.6	896.5	880.5	880.5	880.5
63°	912.6	884.6	872.6	872.6	872.6
65°	876.6	848.4	836.5	836.5	832.5
67.5°	828.4	800.5	792.5	792.5	784.5
70°	772.5	748.5	740.5	744.4	728.4
72.5°	716.4	692.5	680.3	680.3	664.3
75°	652.3	628.4	612.4	608.3	592.3
77.5°	580.3	560.4	544.4	528.4	520.3
80°	504.3	488.3	468.2	456.2	444.2
82.5°	424.3	408.2	396.2	412.2	352.2
85°	332.3	316.3	300.2	324.2	252.2
87.5°	244.2	236.2	220.2	192.1	168.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)