

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: P265700

Luminaire Tested: **ARCH-L-AF72-230-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265700
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-AF72-230-D-U-T2U-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23128.6 lumens
Efficiency: N/A
Efficacy: 101.0 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): 229
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

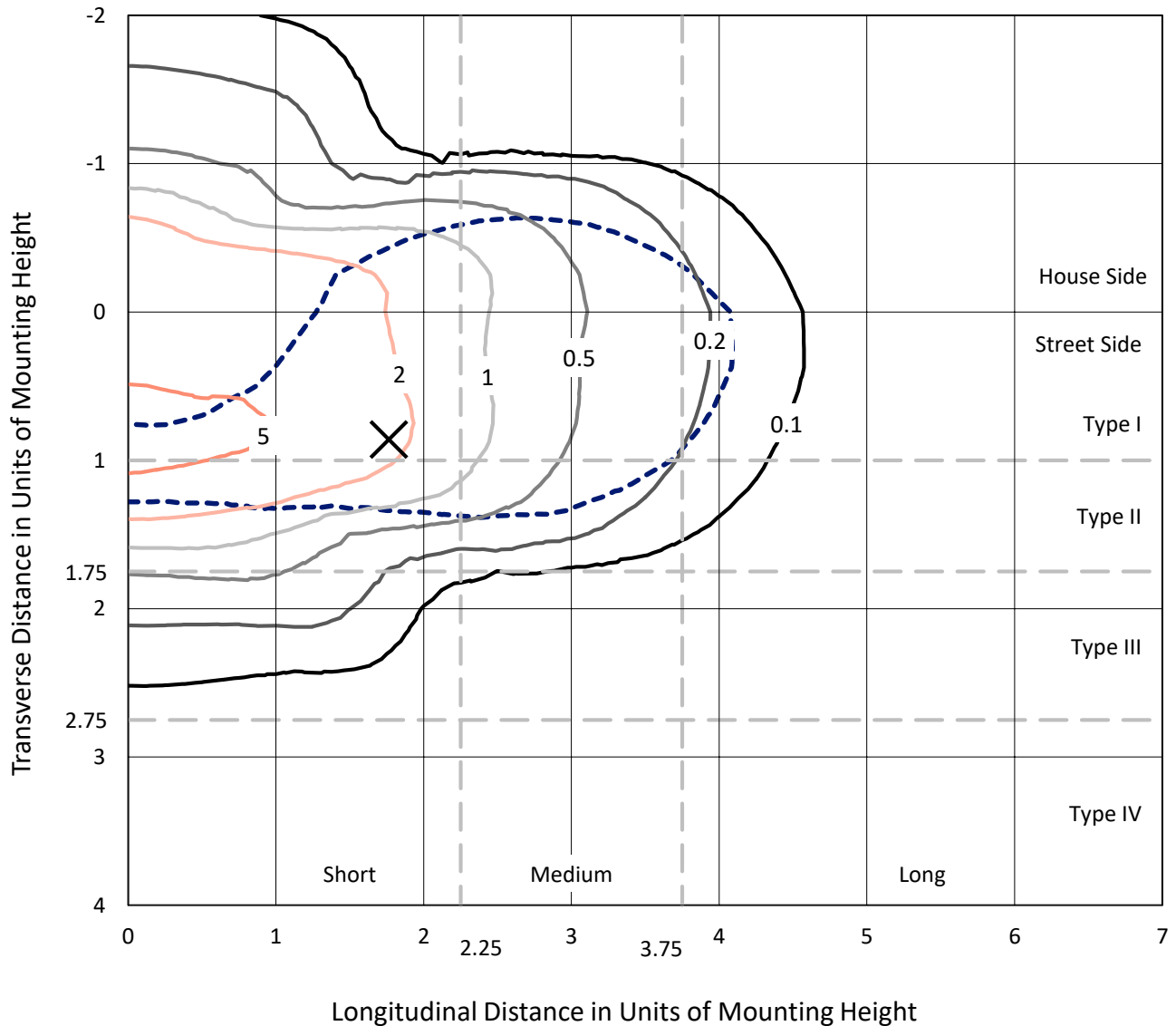


REPORT NUMBER: P265700

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2U-7027

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

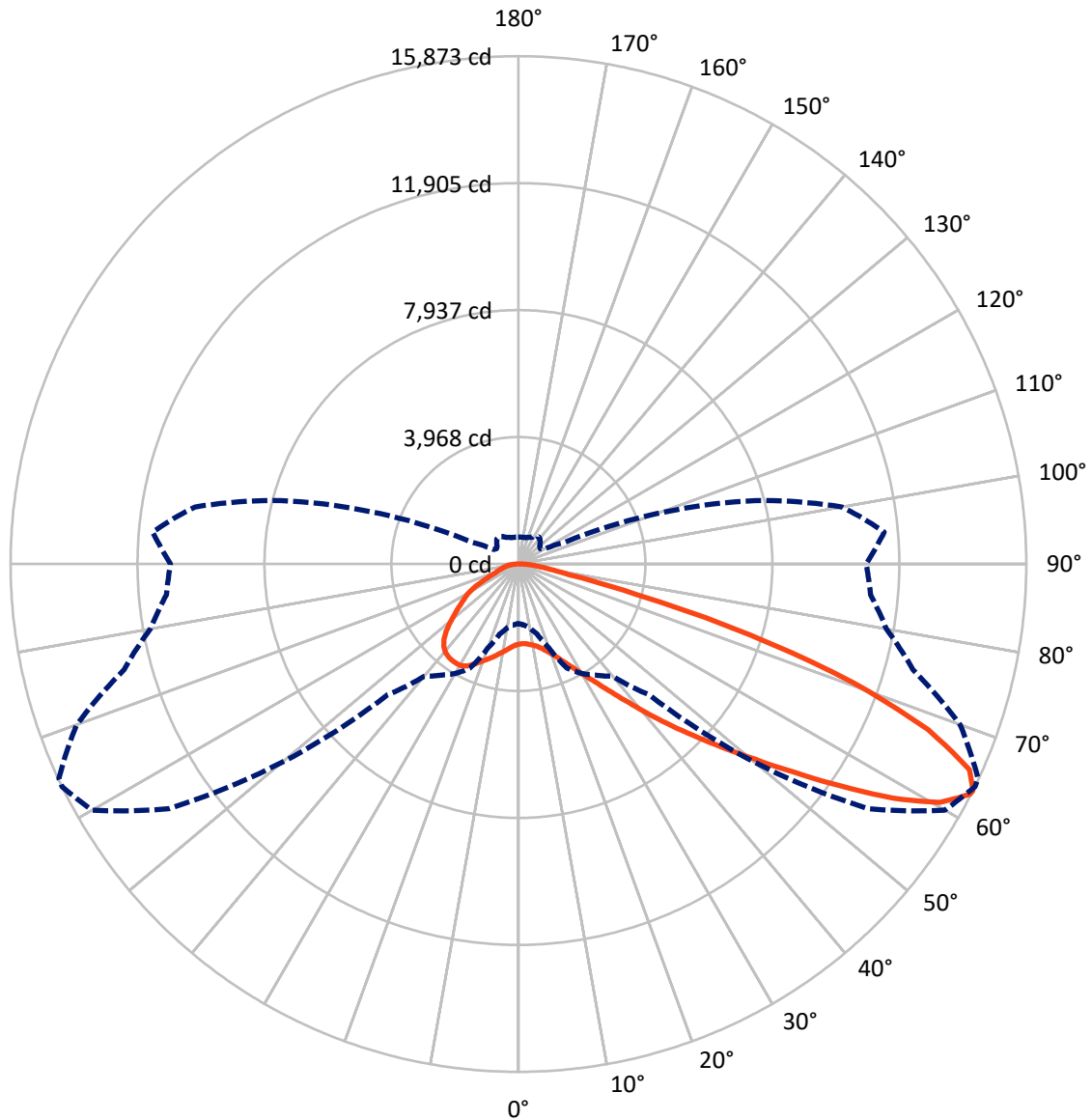


Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P265700

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2U-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P265700

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2U-7027

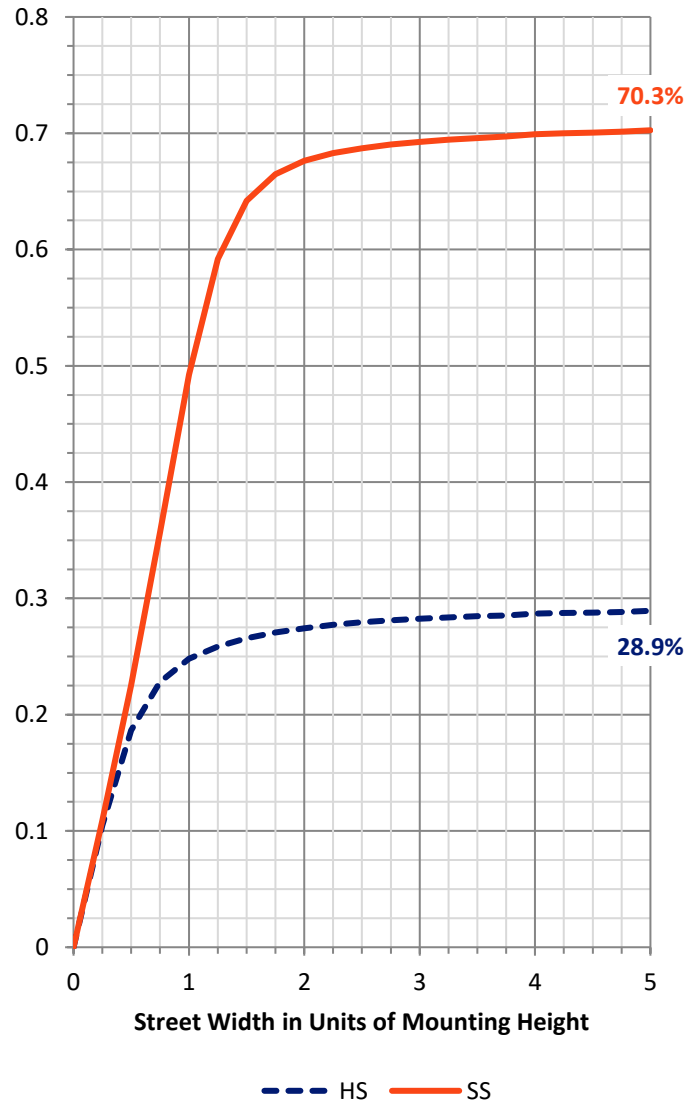
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6799.0	0.0	6799.0
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	16329.6	0.0	16329.6
	% Fixture	70.6	0.0	70.6
Total	Lumens	23128.6	0.0	23128.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.1	1.1
10°-20°	833.0	3.6
20°-30°	1563.6	6.8
30°-40°	2620.8	11.3
40°-50°	4397.1	19.0
50°-60°	5574.2	24.1
60°-70°	4917.2	21.3
70°-80°	2538.4	11.0
80°-90°	434.3	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°	23128.6	100.0
0°-180°	23128.6	100.0



REPORT NUMBER: P265700

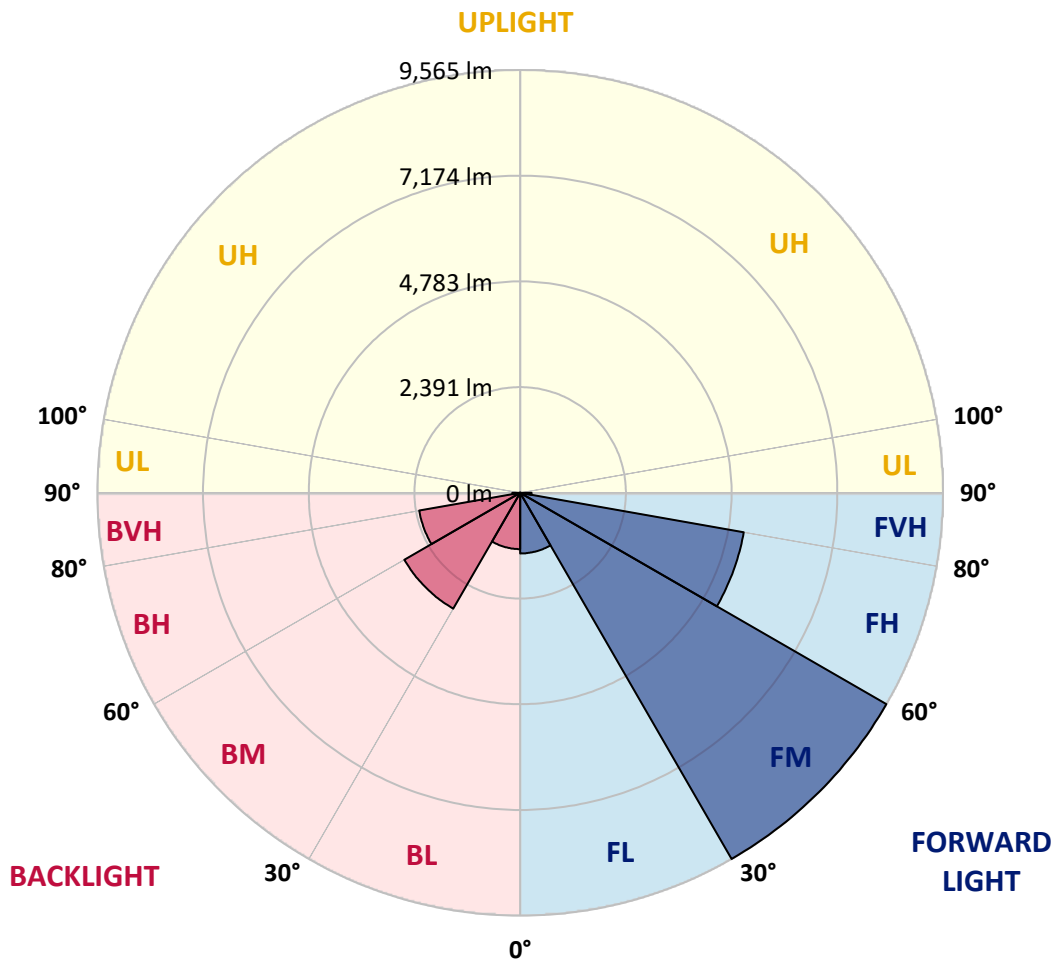
CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2U-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1372.8	5.9			
FM	(30°-60°)	9565.4	41.4			
FH	(60°-80°)	5135.9	22.2			G3/7500
FVH	(80°-90°)	255.6	1.1			G3/500
BL	(0°-30°)	1273.9	5.5	B3/2500		
BM	(30°-60°)	3026.6	13.1	B3/5000		
BH	(60°-80°)	2319.8	10.0	B3/2500		G3/2500
BVH	(80°-90°)	178.7	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: P265700

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2U-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8
2.5°	2489.4	2485.5	2485.5	2485.5	2485.5	2481.6	2485.5	2493.2	2489.4	2485.5	2493.2
5°	2497.1	2493.2	2493.2	2493.2	2497.1	2493.2	2497.1	2508.6	2500.9	2500.9	2508.6
7.5°	2516.4	2512.6	2516.4	2512.6	2512.6	2512.6	2516.4	2528.0	2524.1	2528.0	2539.7
10°	2539.7	2539.7	2539.7	2539.7	2539.7	2539.7	2547.5	2555.1	2559.0	2562.9	2578.3
12.5°	2609.3	2609.3	2609.3	2605.4	2605.4	2593.9	2609.3	2617.1	2624.8	2632.6	2644.3
15°	2756.4	2756.4	2752.5	2737.0	2737.0	2713.9	2717.7	2721.7	2721.7	2729.4	2737.0
17.5°	2950.0	2946.3	2938.4	2926.8	2911.3	2884.2	2876.5	2868.7	2857.1	2853.2	2853.2
20°	3221.1	3217.2	3201.6	3170.7	3151.3	3108.8	3077.9	3046.8	3035.3	3015.9	3011.9
22.5°	3608.2	3608.2	3577.2	3530.8	3515.2	3426.2	3337.2	3271.4	3248.1	3221.1	3221.1
25°	4076.6	4072.7	4030.2	3976.0	3910.1	3817.3	3708.8	3619.8	3561.7	3499.7	3476.5
27.5°	4637.9	4626.5	4568.3	4502.5	4378.6	4262.5	4134.7	4041.7	3941.1	3863.7	3794.0
30°	5296.1	5284.5	5183.8	5060.0	4932.2	4816.1	4630.3	4517.9	4359.3	4266.3	4188.8
32.5°	6058.8	6047.2	5865.3	5745.2	5609.7	5466.5	5245.8	5067.7	4866.4	4734.7	4626.5
35°	7030.6	6984.1	6724.7	6558.3	6345.3	6202.1	5969.7	5729.7	5493.6	5307.7	5149.1
37.5°	8079.6	8025.5	7797.1	7549.3	7340.2	7166.0	6837.0	6535.0	6256.2	6000.7	5803.3
40°	9175.3	9032.1	8788.2	8606.2	8462.9	8296.4	7951.9	7634.4	7197.0	6910.5	6612.5
42.5°	9934.0	9794.7	9624.4	9504.3	9434.7	9306.9	9113.3	8838.6	8447.5	8455.1	7669.3
45°	10433.5	10228.3	10112.2	10119.9	10147.1	10147.1	10112.2	10069.6	9899.2	10015.5	9357.3
47.5°	10255.4	10119.9	10046.4	10201.2	10394.7	10588.4	10812.9	11056.8	11335.5	11664.6	10855.5
50°	9210.1	9260.4	9295.3	9624.4	10038.6	10479.9	10994.9	11660.8	12438.9	12589.9	12199.0
52.5°	7541.6	7650.0	7766.0	8269.3	8815.2	9577.9	10479.9	11579.4	12624.8	13240.3	13201.6
55°	5857.5	5993.0	6240.7	6616.2	7049.9	7770.0	8885.0	10580.6	12210.5	13190.0	13786.2
57.5°	4169.6	4367.0	4692.1	5214.8	5598.1	6004.6	6829.3	8710.8	10495.4	12318.8	13689.5
60°	2771.9	2864.9	3077.9	3728.1	4374.7	4800.6	5385.2	6066.6	7526.1	10038.6	12690.5
62.5°	1966.7	2028.6	2160.2	2454.4	3039.1	3809.5	4161.8	4475.4	4943.8	6457.6	10189.7
63°	1858.4	1912.5	2020.8	2268.7	2795.2	3592.7	3952.7	4239.2	4579.9	5776.2	9639.9
65°	1540.9	1564.0	1622.1	1742.2	2024.8	2686.8	3275.2	3449.4	3507.5	3712.8	6039.5
67.5°	1300.7	1316.2	1335.6	1370.5	1482.7	1788.6	2442.9	2663.6	2597.7	2458.3	2984.9
70°	1130.4	1142.0	1173.0	1215.6	1254.4	1331.7	1680.2	2009.2	1935.7	1746.0	1827.3
72.5°	902.1	921.4	956.2	1029.7	1107.3	1208.0	1293.1	1498.3	1451.8	1269.8	1289.2
75°	712.4	723.9	754.9	809.2	882.7	998.8	1165.3	1235.0	1107.3	936.9	936.9
77.5°	565.3	576.8	603.9	646.5	693.0	774.2	890.4	1072.3	995.0	704.6	700.8
80°	425.8	437.5	464.6	503.3	549.8	607.9	677.5	758.8	913.7	658.2	526.4
82.5°	313.6	317.5	364.0	391.0	406.6	452.9	511.0	557.5	627.1	607.9	468.5
85°	236.2	232.3	263.3	282.5	286.5	298.1	332.9	379.4	410.3	394.9	364.0
87.5°	131.6	116.2	135.6	154.9	154.9	158.7	166.5	193.6	220.7	212.9	193.6
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: P265700

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2U-7027

CANDELA DISTRIBUTION (continued):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8
2.5°	2493.2	2493.2	2489.4	2489.4	2493.2	2493.2	2489.4	2500.9	2508.6	2508.6	2512.6
5°	2504.8	2508.6	2504.8	2504.8	2508.6	2508.6	2512.6	2524.1	2535.7	2543.6	2555.1
7.5°	2539.7	2543.6	2539.7	2539.7	2543.6	2547.5	2555.1	2570.6	2578.3	2593.9	2613.2
10°	2578.3	2582.3	2578.3	2582.3	2586.1	2590.1	2601.6	2613.2	2624.8	2640.3	2671.3
12.5°	2648.1	2651.9	2644.3	2648.1	2659.7	2659.7	2667.3	2675.2	2694.6	2713.9	2744.9
15°	2744.9	2744.9	2737.0	2741.0	2752.5	2752.5	2756.4	2764.3	2787.4	2810.6	2841.6
17.5°	2857.1	2864.9	2861.0	2864.9	2872.6	2876.5	2876.5	2884.2	2899.6	2915.2	2946.3
20°	3008.2	3011.9	3004.2	3011.9	3019.7	3011.9	3004.2	3000.3	3008.2	3015.9	3050.7
22.5°	3213.2	3209.5	3190.2	3190.2	3190.2	3174.6	3155.2	3132.0	3132.0	3120.4	3147.5
25°	3457.1	3445.5	3418.5	3422.4	3395.2	3372.0	3337.2	3302.3	3271.4	3259.8	3263.6
27.5°	3743.6	3720.4	3693.3	3685.6	3658.4	3615.9	3557.8	3492.0	3441.6	3403.0	3395.2
30°	4103.7	4053.4	4006.9	3999.2	3956.7	3887.0	3794.0	3705.0	3619.8	3554.0	3530.8
32.5°	4529.6	4452.2	4378.6	4370.9	4301.2	4208.3	4096.0	3972.0	3848.2	3743.6	3693.3
35°	5029.0	4912.8	4843.1	4823.8	4723.2	4607.0	4483.1	4324.4	4150.2	4003.0	3910.1
37.5°	5636.9	5516.9	5396.7	5400.7	5261.4	5125.8	4959.4	4765.8	4545.1	4339.9	4208.3
40°	6387.8	6217.4	6062.8	6027.8	5907.9	5718.2	5536.2	5311.6	5040.6	4769.6	4579.9
42.5°	7297.7	7018.8	6806.0	6774.9	6616.2	6384.1	6163.4	5865.3	5590.3	5261.4	5032.8
45°	8331.3	7886.1	7630.7	7584.1	7328.6	7092.5	6825.3	6508.0	6171.0	5799.4	5528.3
47.5°	9616.6	8981.8	8548.1	8470.7	8118.4	7808.6	7530.0	7177.6	6774.9	6360.8	6062.8
50°	11114.9	10177.9	9593.4	9473.3	9001.0	8637.2	8280.9	7839.7	7409.8	6976.3	6631.7
52.5°	12617.1	11610.5	10832.3	10685.2	9988.3	9500.6	9032.1	8590.8	8083.6	7653.7	7262.7
55°	13824.8	13155.0	12253.2	12047.9	11049.2	10387.0	9771.6	9268.3	8764.9	8424.2	7963.6
57.5°	14552.7	14517.9	13805.5	13522.9	12156.4	11176.8	10491.6	9918.6	9430.9	9287.5	8675.9
60°	14533.4	15435.3	15129.6	14916.6	13275.2	11985.9	11095.5	10476.2	10073.5	10236.0	9392.0
62.5°	13646.8	15474.2	15841.9	15783.8	14467.6	12636.4	11591.1	10952.2	10739.3	11223.3	10135.4
63°	13325.5	15385.1	15873.0	15849.7	14696.0	12760.2	11676.3	11045.2	10871.0	11474.9	10271.0
65°	11262.1	14606.9	15497.4	15601.9	15187.6	13186.1	11873.6	11281.4	11262.1	12036.3	10592.3
67.5°	6864.0	12342.2	13805.5	14006.8	14494.6	13321.7	11761.4	11200.1	11478.8	12117.5	10495.4
70°	2934.6	8145.6	11095.5	11420.7	12613.1	12648.0	11440.0	10867.2	11428.4	11482.7	9806.3
72.5°	1738.3	3840.4	7553.2	8261.6	9980.6	10882.5	10704.6	10286.4	10766.5	10085.1	8350.6
75°	1231.0	1796.3	3836.7	4591.5	6949.2	8308.2	8993.3	9187.0	9167.6	7998.4	6267.8
77.5°	882.7	1153.8	1618.2	1908.5	3879.2	5334.9	6171.0	6736.3	6554.4	5354.2	3863.7
80°	615.6	797.5	991.1	1053.1	1800.3	2741.0	3252.0	3499.7	3391.5	2675.2	1730.6
82.5°	445.2	522.6	638.8	677.5	905.9	1265.9	1506.0	1328.0	1273.6	987.1	747.2
85°	344.6	336.9	398.8	414.3	530.4	662.1	677.5	526.4	460.7	410.3	418.2
87.5°	243.9	209.0	212.9	220.7	274.9	352.2	344.6	216.9	185.8	197.4	224.5
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: P265700

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2U-7027

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8	2504.8
2.5°	2520.4	2524.1	2532.0	2535.7	2543.6	2543.6	2551.2	2555.1	2562.9	2570.6	2574.5
5°	2566.7	2578.3	2593.9	2601.6	2617.1	2628.7	2644.3	2651.9	2667.3	2679.0	2694.6
7.5°	2636.4	2655.7	2675.2	2698.4	2721.7	2741.0	2756.4	2775.9	2802.9	2822.2	2834.0
10°	2702.2	2729.4	2764.3	2791.4	2826.2	2853.2	2876.5	2911.3	2942.3	2969.3	2984.9
12.5°	2787.4	2822.2	2857.1	2899.6	2946.3	2981.0	3015.9	3062.3	3104.9	3135.9	3151.3
15°	2888.1	2930.7	2969.3	3019.7	3073.9	3120.4	3170.7	3221.1	3252.0	3252.0	3244.3
17.5°	2992.7	3027.5	3073.9	3132.0	3205.5	3263.6	3290.8	3298.4	3286.9	3259.8	3240.4
20°	3097.1	3128.1	3178.5	3248.1	3325.5	3337.2	3310.1	3275.2	3240.4	3194.0	3162.9
22.5°	3182.3	3224.9	3302.3	3383.6	3387.5	3321.8	3248.1	3190.2	3135.9	3081.6	3023.5
25°	3282.9	3341.1	3445.5	3476.5	3375.9	3252.0	3147.5	3062.3	2973.3	2884.2	2818.4
27.5°	3406.8	3492.0	3596.5	3507.5	3310.1	3135.9	2992.7	2864.9	2748.8	2624.8	2551.2
30°	3538.6	3670.1	3693.3	3461.1	3197.7	2973.3	2779.6	2586.1	2439.0	2326.7	2284.1
32.5°	3697.2	3867.6	3728.1	3379.8	3046.8	2752.5	2493.2	2260.9	2137.1	2067.4	2048.0
35°	3937.2	4076.6	3747.5	3294.7	2872.6	2489.4	2164.1	1978.2	1900.9	1854.5	1831.1
37.5°	4281.9	4278.0	3743.6	3190.2	2671.3	2202.9	1900.9	1769.2	1707.3	1668.6	1626.0
40°	4684.4	4432.7	3720.4	3039.1	2400.4	1928.0	1718.8	1595.0	1537.0	1490.5	1440.2
42.5°	5083.1	4537.2	3654.7	2814.5	2063.4	1730.6	1587.2	1474.9	1413.0	1362.8	1293.1
45°	5427.7	4579.9	3526.8	2504.8	1761.4	1575.6	1502.1	1405.3	1331.7	1254.4	1200.1
47.5°	5698.8	4572.2	3321.8	2140.9	1560.1	1467.3	1432.4	1366.6	1277.6	1180.8	1111.2
50°	5927.1	4514.2	3043.0	1819.5	1424.7	1370.5	1358.9	1339.6	1196.3	1114.9	1072.3
52.5°	6136.2	4429.0	2744.9	1602.8	1308.6	1262.1	1285.4	1265.9	1165.3	1095.7	1053.1
55°	6422.7	4370.9	2450.7	1436.3	1173.0	1161.4	1180.8	1208.0	1146.0	1080.1	1033.7
57.5°	6759.6	4401.9	2226.1	1250.5	1045.3	1053.1	1118.8	1157.6	1126.6	1056.9	1010.5
60°	7146.6	4494.7	2028.6	1072.3	940.7	960.1	1056.9	1111.2	1107.3	1026.0	971.7
62.5°	7580.3	4591.5	1715.0	936.9	851.8	882.7	983.4	1053.1	1064.6	995.0	929.1
63°	7665.4	4599.2	1633.7	909.9	836.2	871.0	964.1	1037.5	1053.1	987.1	921.4
65°	7874.5	4529.6	1316.2	836.2	774.2	813.0	905.9	971.7	1002.7	944.7	890.4
67.5°	7700.4	3960.4	991.1	747.2	723.9	751.1	832.4	894.4	921.4	894.4	840.2
70°	7042.2	2880.3	774.2	666.0	669.7	689.1	751.1	809.2	840.2	832.4	782.1
72.5°	5671.7	1633.7	646.5	596.3	607.9	631.1	673.5	727.8	754.9	751.1	716.2
75°	3736.0	836.2	545.9	534.2	541.9	561.4	592.3	634.9	666.0	662.1	646.5
77.5°	1850.6	580.8	468.5	472.2	476.2	491.6	514.9	553.6	572.9	576.8	572.9
80°	762.8	452.9	402.6	406.6	410.3	421.9	437.5	472.2	483.9	491.6	495.5
82.5°	456.8	344.6	321.4	329.0	332.9	344.6	356.2	387.1	398.8	410.3	410.3
85°	302.0	240.0	232.3	240.0	247.8	255.5	259.4	278.7	298.1	313.6	321.4
87.5°	162.7	143.2	139.3	143.2	143.2	150.9	158.7	178.0	201.3	216.9	224.5
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: P265700

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2U-7027

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	2504.8	2504.8	2504.8	2504.8	2504.8
2.5°	2566.7	2570.6	2566.7	2570.6	2574.5
5°	2694.6	2702.2	2698.4	2698.4	2713.9
7.5°	2841.6	2857.1	2857.1	2864.9	2872.6
10°	3000.3	3015.9	3027.5	3027.5	3039.1
12.5°	3159.1	3166.9	3178.5	3178.5	3178.5
15°	3240.4	3236.6	3232.6	3228.8	3228.8
17.5°	3228.8	3213.2	3205.5	3197.7	3201.6
20°	3143.6	3116.5	3108.8	3097.1	3104.9
22.5°	2996.4	2957.8	2942.3	2922.9	2930.7
25°	2775.9	2729.4	2721.7	2698.4	2709.9
27.5°	2520.4	2497.1	2493.2	2489.4	2508.6
30°	2280.3	2288.1	2291.8	2299.7	2319.0
32.5°	2059.6	2075.1	2078.9	2082.8	2109.8
35°	1842.9	1823.5	1842.9	1835.1	1858.4
37.5°	1606.7	1591.2	1575.6	1556.4	1571.9
40°	1409.3	1382.1	1335.6	1312.5	1316.2
42.5°	1254.4	1219.4	1180.8	1157.6	1157.6
45°	1153.8	1111.2	1076.3	1060.8	1060.8
47.5°	1076.3	1056.9	1037.5	1026.0	1026.0
50°	1045.3	1022.0	1010.5	1002.7	1002.7
52.5°	1022.0	998.8	987.1	979.5	971.7
55°	1002.7	967.8	956.2	952.4	952.4
57.5°	975.6	944.7	929.1	925.3	925.3
60°	933.0	909.9	894.4	890.4	890.4
62.5°	890.4	867.3	851.8	851.8	851.8
63°	882.7	855.5	844.0	844.0	844.0
65°	847.8	820.7	809.2	809.2	805.3
67.5°	801.4	774.2	766.6	766.6	758.8
70°	747.2	723.9	716.2	720.1	704.6
72.5°	693.0	669.7	658.2	658.2	642.6
75°	631.1	607.9	592.3	588.5	572.9
77.5°	561.4	541.9	526.4	511.0	503.3
80°	487.8	472.2	452.9	441.3	429.7
82.5°	410.3	394.9	383.2	398.8	340.6
85°	321.4	305.9	290.3	313.6	243.9
87.5°	236.2	228.3	212.9	185.8	162.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)