

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: P257934

Luminaire Tested: **ARCH-L-AF72-180-D-U-T2U-7030**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P257934
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-180-D-U-T2U-7030
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21701.1 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

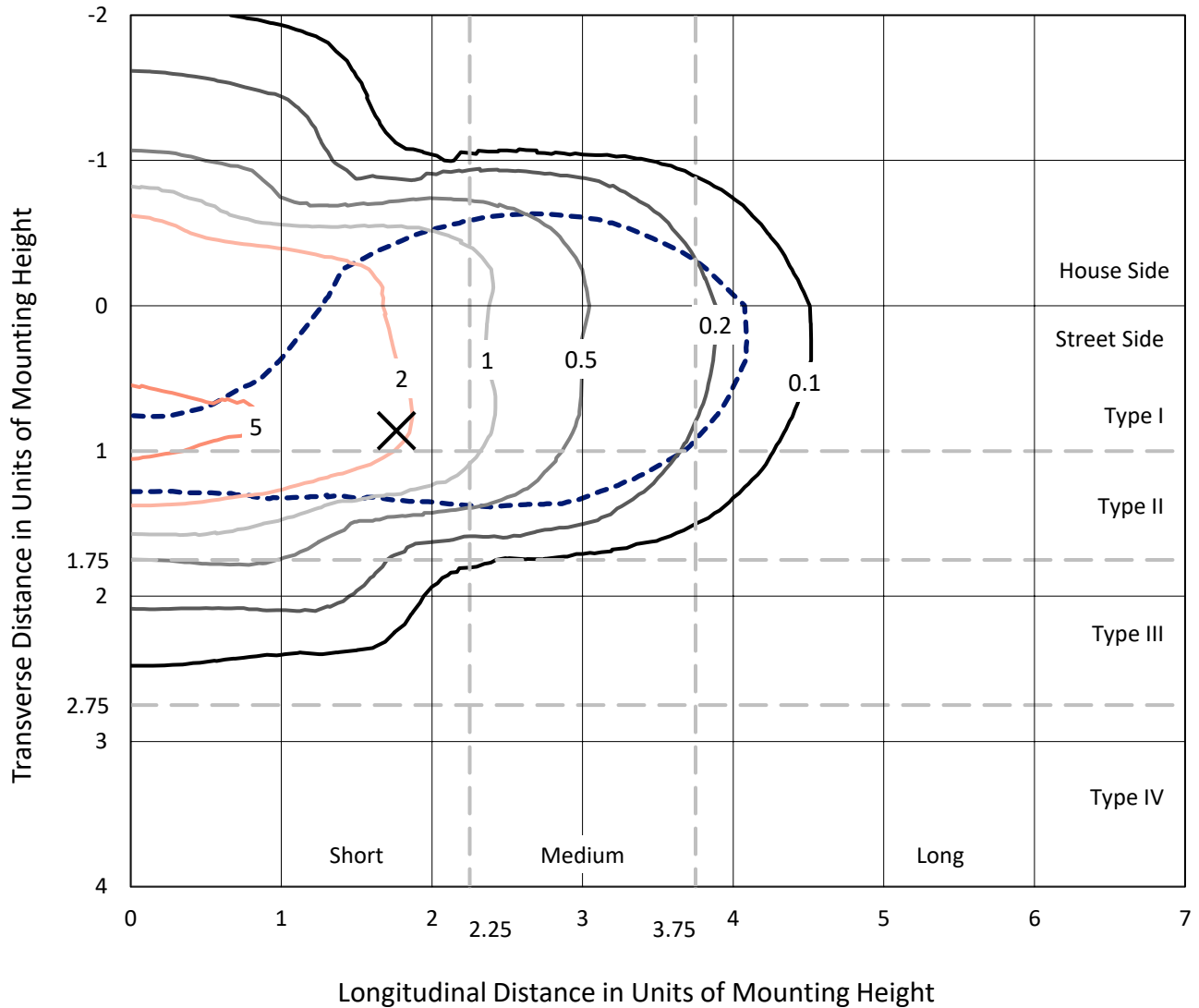
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P257934
 CATALOG NUMBER: ARCH-L-AF72-180-D-U-T2U-7030

Iso-Footcandle Lines of Horizontal Illumination

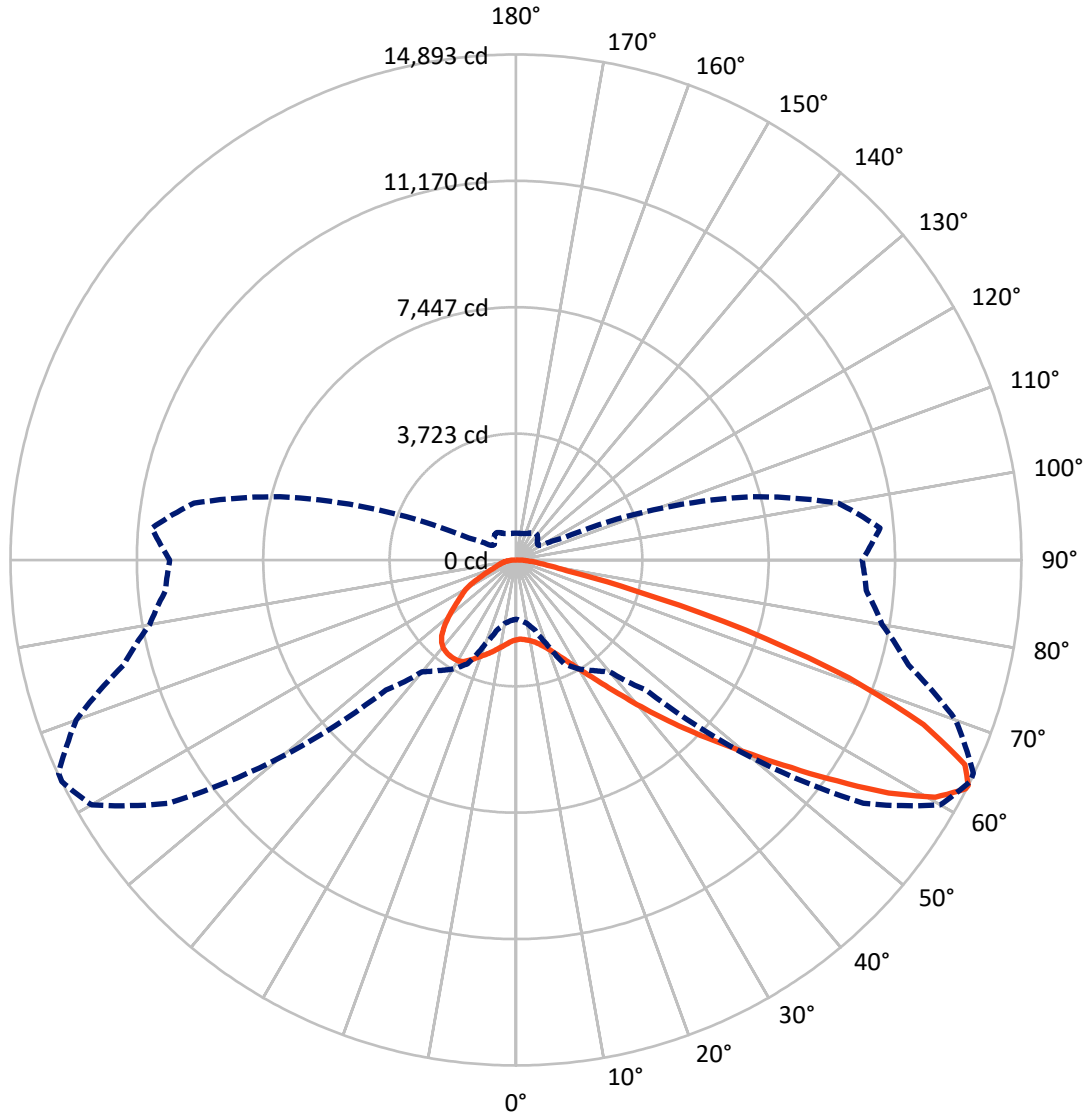
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
 Type II - Short - N/A

REPORT NUMBER: P257934
CATALOG NUMBER: ARCH-L-AF72-180-D-U-T2U-7030

Luminous Intensity Polar Plot



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

REPORT NUMBER: P257934
 CATALOG NUMBER: ARCH-L-AF72-180-D-U-T2U-7030

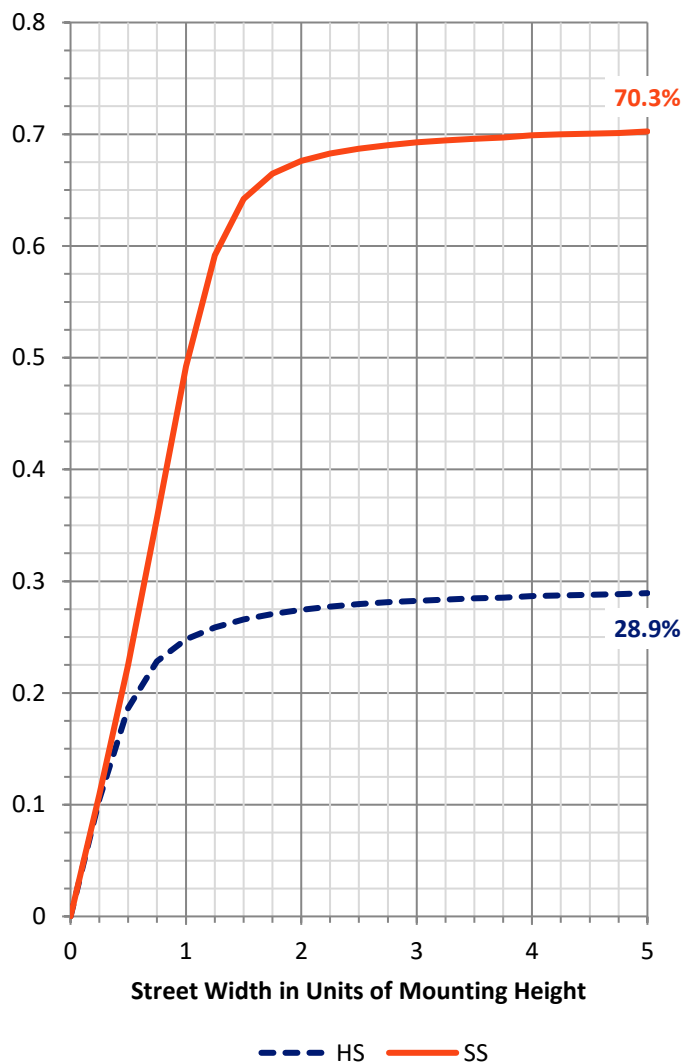
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6379.3	0.0	6379.3
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	15321.7	0.0	15321.7
	% Fixture	70.6	0.0	70.6
Total	Lumens	21701.1	0.0	21701.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.6	1.1
10°-20°	781.6	3.6
20°-30°	1467.1	6.8
30°-40°	2459.0	11.3
40°-50°	4125.7	19.0
50°-60°	5230.1	24.1
60°-70°	4613.7	21.3
70°-80°	2381.7	11.0
80°-90°	407.5	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°	21701.1	100.0
0°-180°	21701.1	100.0

Coefficient of Utilization



REPORT NUMBER: P257934

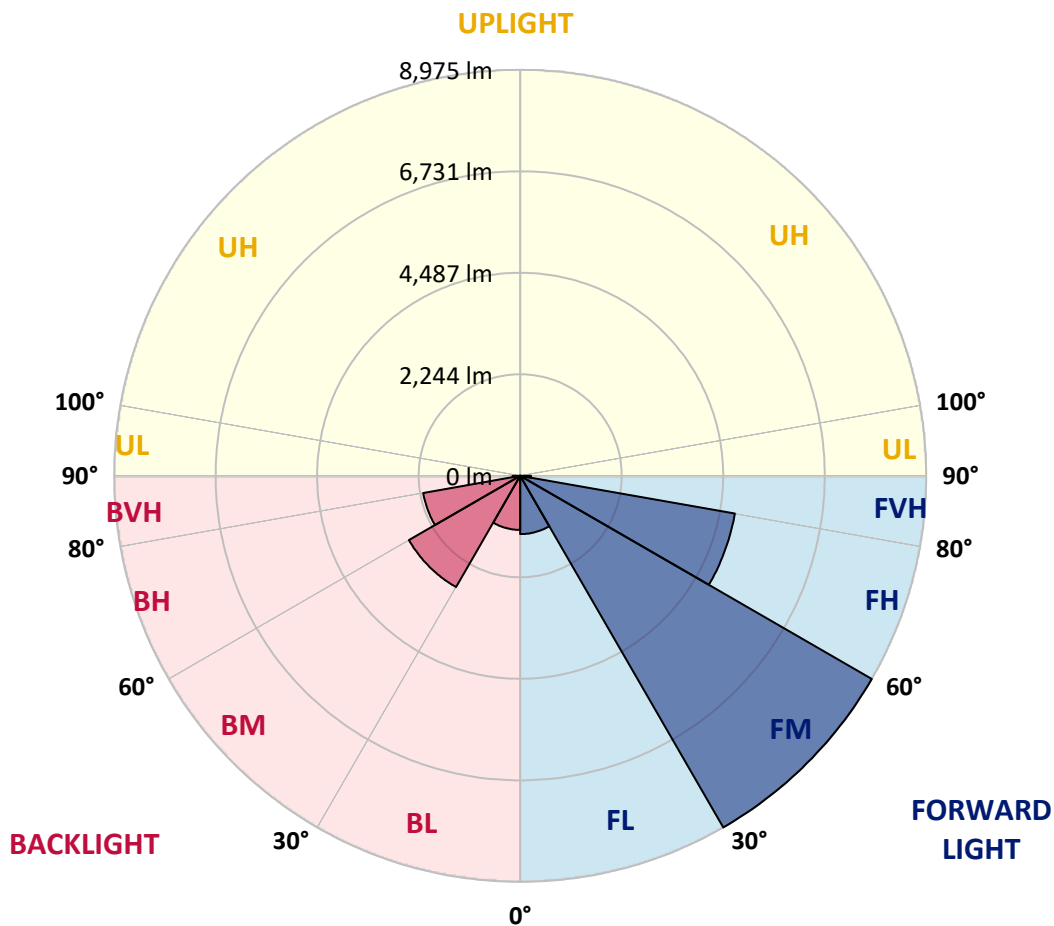
CATALOG NUMBER: ARCH-L-AF72-180-D-U-T2U-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1288.0	5.9			
FM (30°-60°)	8975.0	41.4			
FH (60°-80°)	4818.9	22.2			G2/5000
FVH (80°-90°)	239.8	1.1			G3/500
BL (0°-30°)	1195.3	5.5	B3/2500		
BM (30°-60°)	2839.8	13.1	B3/5000		
BH (60°-80°)	2176.6	10.0	B3/2500		G3/2500
BVH (80°-90°)	167.7	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: P257934

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T2U-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1
2.5°	2335.6	2332.0	2332.0	2332.0	2332.0	2328.5	2332.0	2339.3	2335.6	2332.0	2339.3
5°	2342.9	2339.3	2339.3	2339.3	2342.9	2339.3	2342.9	2353.9	2346.6	2346.6	2353.9
7.5°	2361.1	2357.5	2361.1	2357.5	2357.5	2357.5	2361.1	2372.0	2368.4	2372.0	2383.0
10°	2383.0	2383.0	2383.0	2383.0	2383.0	2383.0	2390.1	2397.4	2401.1	2404.7	2419.2
12.5°	2448.3	2448.3	2448.3	2444.6	2444.6	2433.8	2448.3	2455.6	2462.8	2470.2	2481.0
15°	2586.2	2586.2	2582.7	2568.1	2568.1	2546.4	2550.0	2553.6	2553.6	2560.9	2568.1
17.5°	2768.0	2764.4	2757.0	2746.1	2731.6	2706.3	2698.9	2691.7	2680.7	2677.2	2677.2
20°	3022.2	3018.7	3004.1	2975.0	2956.9	2916.9	2887.8	2858.8	2847.9	2829.7	2826.1
22.5°	3385.5	3385.5	3356.5	3312.8	3298.3	3214.7	3131.2	3069.4	3047.7	3022.2	3022.2
25°	3825.0	3821.4	3781.5	3730.5	3668.8	3581.6	3479.9	3396.4	3341.9	3283.8	3261.9
27.5°	4351.7	4340.9	4286.3	4224.6	4108.3	3999.3	3879.5	3792.3	3697.9	3625.2	3559.8
30°	4969.2	4958.3	4863.9	4747.7	4627.7	4518.9	4344.4	4239.2	4090.2	4003.0	3930.4
32.5°	5684.9	5674.0	5503.2	5390.7	5263.4	5129.0	4922.0	4755.0	4566.1	4442.5	4340.9
35°	6596.6	6553.1	6309.6	6153.5	5953.6	5819.2	5601.2	5376.1	5154.6	4980.1	4831.2
37.5°	7581.0	7530.1	7315.8	7083.4	6887.1	6723.7	6414.9	6131.6	5870.1	5630.3	5445.1
40°	8609.0	8474.5	8245.7	8075.1	7940.6	7784.4	7461.1	7163.2	6752.8	6484.0	6204.3
42.5°	9320.9	9190.3	9030.4	8917.7	8852.4	8732.5	8550.8	8293.0	7926.1	7933.4	7196.0
45°	9789.5	9597.0	9488.1	9495.2	9520.8	9520.8	9488.1	9448.0	9288.2	9397.3	8779.7
47.5°	9622.5	9495.2	9426.4	9571.5	9753.2	9934.8	10145.5	10374.3	10636.0	10944.7	10185.4
50°	8641.7	8689.0	8721.6	9030.4	9419.0	9833.2	10316.3	10941.0	11671.2	11812.9	11446.0
52.5°	7076.0	7177.8	7286.7	7758.9	8271.2	8986.8	9833.2	10864.7	11845.6	12423.1	12386.7
55°	5496.0	5623.1	5855.5	6207.9	6614.8	7290.5	8336.6	9927.7	11456.8	12375.9	12935.3
57.5°	3912.1	4097.4	4402.6	4892.9	5252.5	5634.0	6407.7	8173.1	9847.6	11558.5	12844.5
60°	2600.8	2688.0	2887.8	3498.1	4104.8	4504.3	5052.8	5692.1	7061.5	9419.0	11907.3
62.5°	1845.3	1903.4	2027.0	2302.9	2851.4	3574.4	3904.9	4199.2	4638.7	6059.0	9560.7
63°	1743.6	1794.5	1896.2	2128.6	2622.7	3370.9	3708.8	3977.6	4297.2	5419.7	9044.9
65°	1445.7	1467.6	1522.0	1634.6	1899.8	2520.9	3073.1	3236.6	3291.0	3483.5	5666.6
67.5°	1220.5	1235.0	1253.2	1285.9	1391.2	1678.2	2292.2	2499.2	2437.3	2306.7	2800.7
70°	1060.7	1071.7	1100.7	1140.5	1176.9	1249.6	1576.5	1885.3	1816.2	1638.3	1714.5
72.5°	846.3	864.6	897.2	966.3	1038.8	1133.3	1213.3	1405.7	1362.1	1191.5	1209.6
75°	668.3	679.3	708.3	759.3	828.1	937.2	1093.3	1158.8	1038.8	879.1	879.1
77.5°	530.4	541.3	566.6	606.6	650.2	726.5	835.5	1006.2	933.5	661.1	657.5
80°	399.6	410.5	436.0	472.2	515.8	570.4	635.7	712.0	857.2	617.6	494.1
82.5°	294.2	297.8	341.4	366.9	381.5	425.0	479.5	523.1	588.5	570.4	439.6
85°	221.6	218.0	247.0	265.2	268.8	279.7	312.4	355.9	385.0	370.5	341.4
87.5°	123.5	108.9	127.2	145.4	145.4	148.9	156.2	181.6	207.0	199.8	181.6
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: P257934

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T2U-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1
2.5°	2339.3	2339.3	2335.6	2335.6	2339.3	2339.3	2335.6	2346.6	2353.9	2353.9	2357.5
5°	2350.1	2353.9	2350.1	2350.1	2353.9	2353.9	2357.5	2368.4	2379.2	2386.5	2397.4
7.5°	2383.0	2386.5	2383.0	2383.0	2386.5	2390.1	2397.4	2412.0	2419.2	2433.8	2451.9
10°	2419.2	2422.9	2419.2	2422.9	2426.5	2430.2	2441.1	2451.9	2462.8	2477.4	2506.4
12.5°	2484.7	2488.3	2481.0	2484.7	2495.5	2495.5	2502.8	2510.0	2528.3	2546.4	2575.5
15°	2575.5	2575.5	2568.1	2571.8	2582.7	2582.7	2586.2	2593.6	2615.3	2637.2	2666.3
17.5°	2680.7	2688.0	2684.4	2688.0	2695.3	2698.9	2698.9	2706.3	2720.8	2735.3	2764.4
20°	2822.5	2826.1	2818.8	2826.1	2833.3	2826.1	2818.8	2815.2	2822.5	2829.7	2862.4
22.5°	3015.0	3011.3	2993.1	2993.1	2993.1	2978.6	2960.5	2938.6	2938.6	2927.8	2953.2
25°	3243.8	3232.9	3207.6	3211.1	3185.7	3163.9	3131.2	3098.5	3069.4	3058.6	3062.2
27.5°	3512.5	3490.9	3465.3	3458.2	3432.7	3392.7	3338.3	3276.4	3229.2	3193.0	3185.7
30°	3850.4	3803.2	3759.6	3752.4	3712.4	3647.0	3559.8	3476.3	3396.4	3334.6	3312.8
32.5°	4249.9	4177.3	4108.3	4101.0	4035.7	3948.5	3843.2	3727.0	3610.7	3512.5	3465.3
35°	4718.6	4609.6	4544.2	4526.1	4431.7	4322.7	4206.4	4057.5	3894.0	3756.0	3668.8
37.5°	5288.9	5176.2	5063.7	5067.3	4936.6	4809.4	4653.3	4471.6	4264.5	4072.0	3948.5
40°	5993.6	5833.8	5688.5	5655.8	5543.2	5365.1	5194.4	4983.8	4729.5	4475.3	4297.2
42.5°	6847.3	6585.7	6385.8	6356.8	6207.9	5989.9	5782.9	5503.2	5245.3	4936.6	4722.1
45°	7817.1	7399.4	7159.6	7116.0	6876.3	6654.8	6404.1	6106.2	5790.2	5441.4	5187.2
47.5°	9023.0	8427.3	8020.5	7947.8	7617.3	7326.7	7065.1	6734.6	6356.8	5968.2	5688.5
50°	10428.9	9549.8	9001.4	8888.7	8445.5	8104.1	7769.9	7355.8	6952.6	6545.7	6222.5
52.5°	11838.2	10893.8	10163.8	10025.6	9371.8	8914.1	8474.5	8060.5	7584.7	7181.4	6814.5
55°	12971.6	12343.1	11496.8	11304.3	10367.1	9745.9	9168.4	8696.2	8224.0	7904.3	7472.0
57.5°	13654.4	13621.8	12953.4	12688.3	11406.0	10487.0	9844.0	9306.3	8848.7	8714.3	8140.4
60°	13636.3	14482.8	14195.7	13996.0	12455.8	11246.2	10410.7	9829.5	9451.7	9604.3	8812.5
62.5°	12804.5	14519.0	14864.1	14809.6	13574.6	11856.4	10875.6	10276.3	10076.6	10530.6	9509.8
63°	12503.0	14435.5	14893.2	14871.4	13788.9	11972.6	10955.5	10363.5	10200.0	10766.7	9637.0
65°	10566.9	13705.4	14540.9	14638.9	14250.2	12372.2	11140.8	10585.0	10566.9	11293.4	9938.4
67.5°	6440.4	11580.4	12953.4	13142.4	13600.0	12499.4	11035.5	10508.8	10770.3	11369.6	9847.6
70°	2753.5	7642.8	10410.7	10715.8	11834.6	11867.3	10733.9	10196.4	10723.1	10773.9	9201.0
72.5°	1631.0	3603.4	7087.0	7751.7	9364.5	10211.0	10043.7	9651.5	10101.9	9462.6	7835.3
75°	1155.1	1685.5	3599.8	4308.1	6520.3	7795.3	8438.3	8619.9	8601.8	7504.7	5881.0
77.5°	828.1	1082.4	1518.3	1790.9	3639.8	5005.6	5790.2	6320.5	6149.7	5023.7	3625.2
80°	577.6	748.3	929.9	988.0	1689.1	2571.8	3051.3	3283.8	3182.0	2510.0	1623.7
82.5°	417.7	490.3	599.4	635.7	850.0	1187.8	1413.0	1246.0	1195.1	926.3	701.1
85°	323.3	316.0	374.1	388.6	497.6	621.1	635.7	494.1	432.2	385.0	392.3
87.5°	228.9	196.1	199.8	207.0	257.9	330.5	323.3	203.4	174.4	185.3	210.7
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: P257934

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T2U-7030

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1	2350.1
2.5°	2364.7	2368.4	2375.7	2379.2	2386.5	2386.5	2393.8	2397.4	2404.7	2412.0	2415.6
5°	2408.3	2419.2	2433.8	2441.1	2455.6	2466.4	2481.0	2488.3	2502.8	2513.7	2528.3
7.5°	2473.7	2491.8	2510.0	2531.9	2553.6	2571.8	2586.2	2604.5	2629.9	2648.1	2659.0
10°	2535.5	2560.9	2593.6	2619.1	2651.7	2677.2	2698.9	2731.6	2760.7	2786.1	2800.7
12.5°	2615.3	2648.1	2680.7	2720.8	2764.4	2797.0	2829.7	2873.3	2913.3	2942.4	2956.9
15°	2709.8	2749.8	2786.1	2833.3	2884.2	2927.8	2975.0	3022.2	3051.3	3051.3	3044.1
17.5°	2808.0	2840.6	2884.2	2938.6	3007.7	3062.2	3087.5	3094.9	3084.0	3058.6	3040.3
20°	2906.0	2935.0	2982.2	3047.7	3120.3	3131.2	3105.8	3073.1	3040.3	2996.8	2967.7
22.5°	2985.9	3025.8	3098.5	3174.7	3178.5	3116.6	3047.7	2993.1	2942.4	2891.4	2836.9
25°	3080.3	3134.8	3232.9	3261.9	3167.5	3051.3	2953.2	2873.3	2789.7	2706.3	2644.4
27.5°	3196.6	3276.4	3374.6	3291.0	3105.8	2942.4	2808.0	2688.0	2579.1	2462.8	2393.8
30°	3320.1	3443.7	3465.3	3247.4	3000.5	2789.7	2608.1	2426.5	2288.4	2183.1	2143.1
32.5°	3469.0	3628.8	3498.1	3171.1	2858.8	2582.7	2339.3	2121.4	2005.1	1939.8	1921.6
35°	3694.3	3825.0	3516.3	3091.3	2695.3	2335.6	2030.6	1856.2	1783.5	1740.0	1718.2
37.5°	4017.6	4013.8	3512.5	2993.1	2506.4	2066.8	1783.5	1660.0	1602.0	1565.5	1525.7
40°	4395.3	4159.2	3490.9	2851.4	2252.2	1809.0	1612.7	1496.7	1442.1	1398.5	1351.3
42.5°	4769.5	4257.3	3429.1	2640.8	1936.1	1623.7	1489.3	1384.0	1325.9	1278.7	1213.3
45°	5092.8	4297.2	3309.3	2350.1	1652.8	1478.4	1409.5	1318.5	1249.6	1176.9	1126.0
47.5°	5347.0	4289.9	3116.6	2008.7	1463.8	1376.6	1344.0	1282.2	1198.7	1107.9	1042.6
50°	5561.3	4235.4	2855.2	1707.2	1336.8	1285.9	1275.0	1256.8	1122.4	1046.1	1006.2
52.5°	5757.5	4155.5	2575.5	1503.9	1227.7	1184.2	1206.0	1187.8	1093.3	1028.0	988.0
55°	6026.3	4101.0	2299.4	1347.6	1100.7	1089.8	1107.9	1133.3	1075.2	1013.5	969.9
57.5°	6342.3	4130.1	2088.7	1173.3	980.8	988.0	1049.8	1086.1	1057.1	991.6	948.1
60°	6705.6	4217.3	1903.4	1006.2	882.7	900.9	991.6	1042.6	1038.8	962.6	911.8
62.5°	7112.4	4308.1	1609.2	879.1	799.1	828.1	922.7	988.0	998.9	933.5	871.8
63°	7192.3	4315.4	1532.9	853.7	784.6	817.3	904.4	973.5	988.0	926.3	864.6
65°	7388.4	4249.9	1235.0	784.6	726.5	762.8	850.0	911.8	940.8	886.3	835.5
67.5°	7225.0	3716.0	929.9	701.1	679.3	704.7	780.9	839.1	864.6	839.1	788.2
70°	6607.5	2702.5	726.5	624.8	628.5	646.6	704.7	759.3	788.2	780.9	733.7
72.5°	5321.6	1532.9	606.6	559.4	570.4	592.0	632.1	682.9	708.3	704.7	672.1
75°	3505.4	784.6	512.2	501.3	508.6	526.7	555.8	595.7	624.8	621.1	606.6
77.5°	1736.3	544.8	439.6	443.1	446.8	461.3	483.2	519.4	537.5	541.3	537.5
80°	715.6	425.0	377.8	381.5	385.0	395.9	410.5	443.1	454.1	461.3	465.0
82.5°	428.7	323.3	301.4	308.7	312.4	323.3	334.3	363.3	374.1	385.0	385.0
85°	283.3	225.2	218.0	225.2	232.5	239.8	243.4	261.5	279.7	294.2	301.4
87.5°	152.5	134.4	130.8	134.4	134.4	141.7	148.9	167.0	188.9	203.4	210.7
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: P257934

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T2U-7030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	2350.1	2350.1	2350.1	2350.1	2350.1
2.5°	2408.3	2412.0	2408.3	2412.0	2415.6
5°	2528.3	2535.5	2531.9	2531.9	2546.4
7.5°	2666.3	2680.7	2680.7	2688.0	2695.3
10°	2815.2	2829.7	2840.6	2840.6	2851.4
12.5°	2964.1	2971.5	2982.2	2982.2	2982.2
15°	3040.3	3036.8	3033.1	3029.5	3029.5
17.5°	3029.5	3015.0	3007.7	3000.5	3004.1
20°	2949.6	2924.1	2916.9	2906.0	2913.3
22.5°	2811.6	2775.1	2760.7	2742.5	2749.8
25°	2604.5	2560.9	2553.6	2531.9	2542.8
27.5°	2364.7	2342.9	2339.3	2335.6	2353.9
30°	2139.6	2146.8	2150.4	2157.7	2175.9
32.5°	1932.5	1947.0	1950.6	1954.3	1979.7
35°	1729.0	1710.9	1729.0	1721.8	1743.6
37.5°	1507.4	1492.9	1478.4	1460.2	1474.8
40°	1322.2	1296.8	1253.2	1231.5	1235.0
42.5°	1176.9	1144.3	1107.9	1086.1	1086.1
45°	1082.4	1042.6	1009.9	995.4	995.4
47.5°	1009.9	991.6	973.5	962.6	962.6
50°	980.8	959.0	948.1	940.8	940.8
52.5°	959.0	937.2	926.3	919.0	911.8
55°	940.8	908.2	897.2	893.6	893.6
57.5°	915.4	886.3	871.8	868.2	868.2
60°	875.3	853.7	839.1	835.5	835.5
62.5°	835.5	813.7	799.1	799.1	799.1
63°	828.1	802.7	791.9	791.9	791.9
65°	795.5	770.1	759.3	759.3	755.5
67.5°	751.9	726.5	719.3	719.3	712.0
70°	701.1	679.3	672.1	675.7	661.1
72.5°	650.2	628.5	617.6	617.6	603.0
75°	592.0	570.4	555.8	552.1	537.5
77.5°	526.7	508.6	494.1	479.5	472.2
80°	457.7	443.1	425.0	414.1	403.1
82.5°	385.0	370.5	359.6	374.1	319.7
85°	301.4	287.0	272.4	294.2	228.9
87.5°	221.6	214.3	199.8	174.4	152.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)