

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: P257932

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2U-7030**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P257932  
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-AF72-160-D-U-T2U-7030  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20225 lumens  
Efficiency: N/A  
Efficacy: 124.8 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

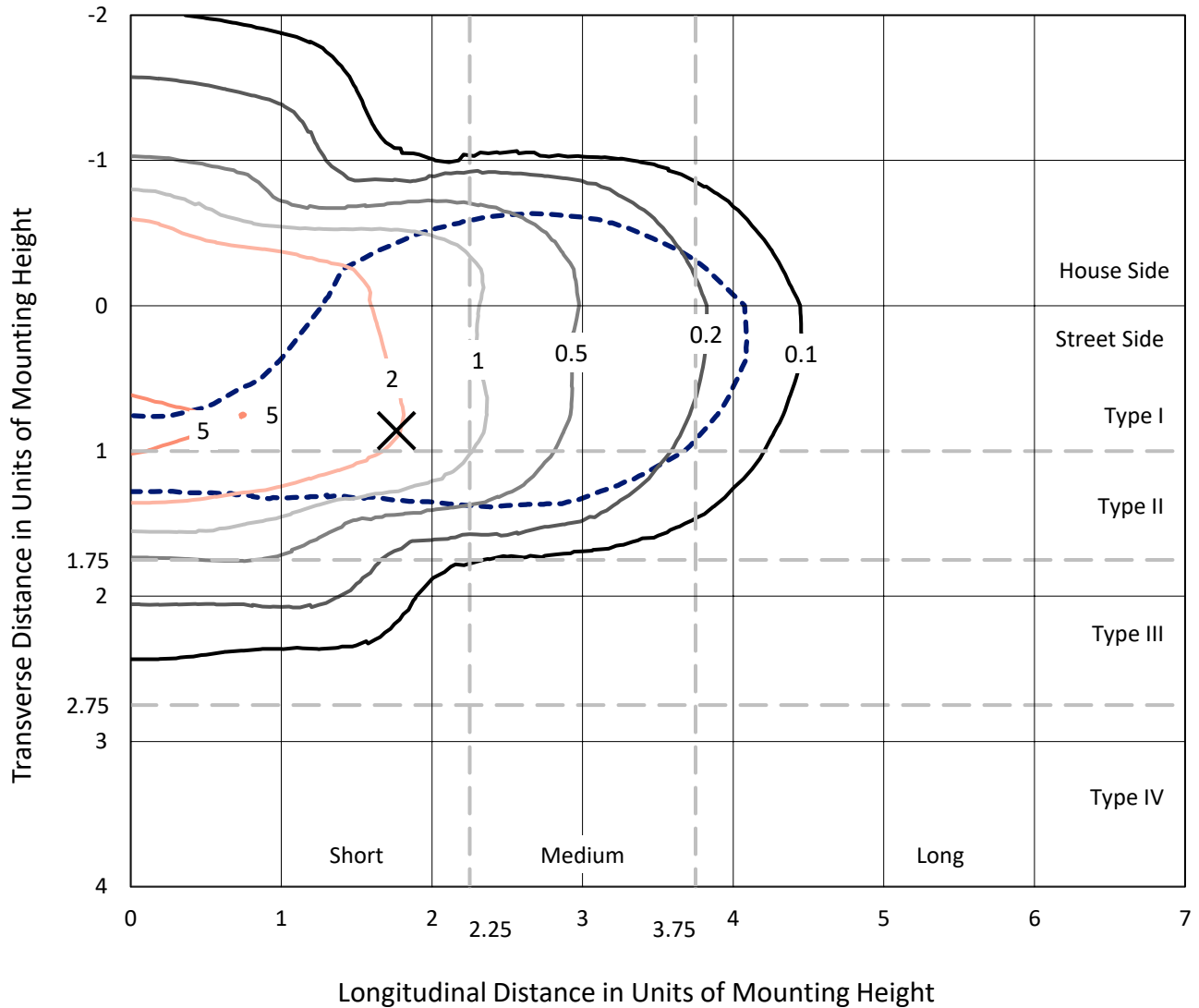
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P257932  
 CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7030

### Iso-Footcandle Lines of Horizontal Illumination

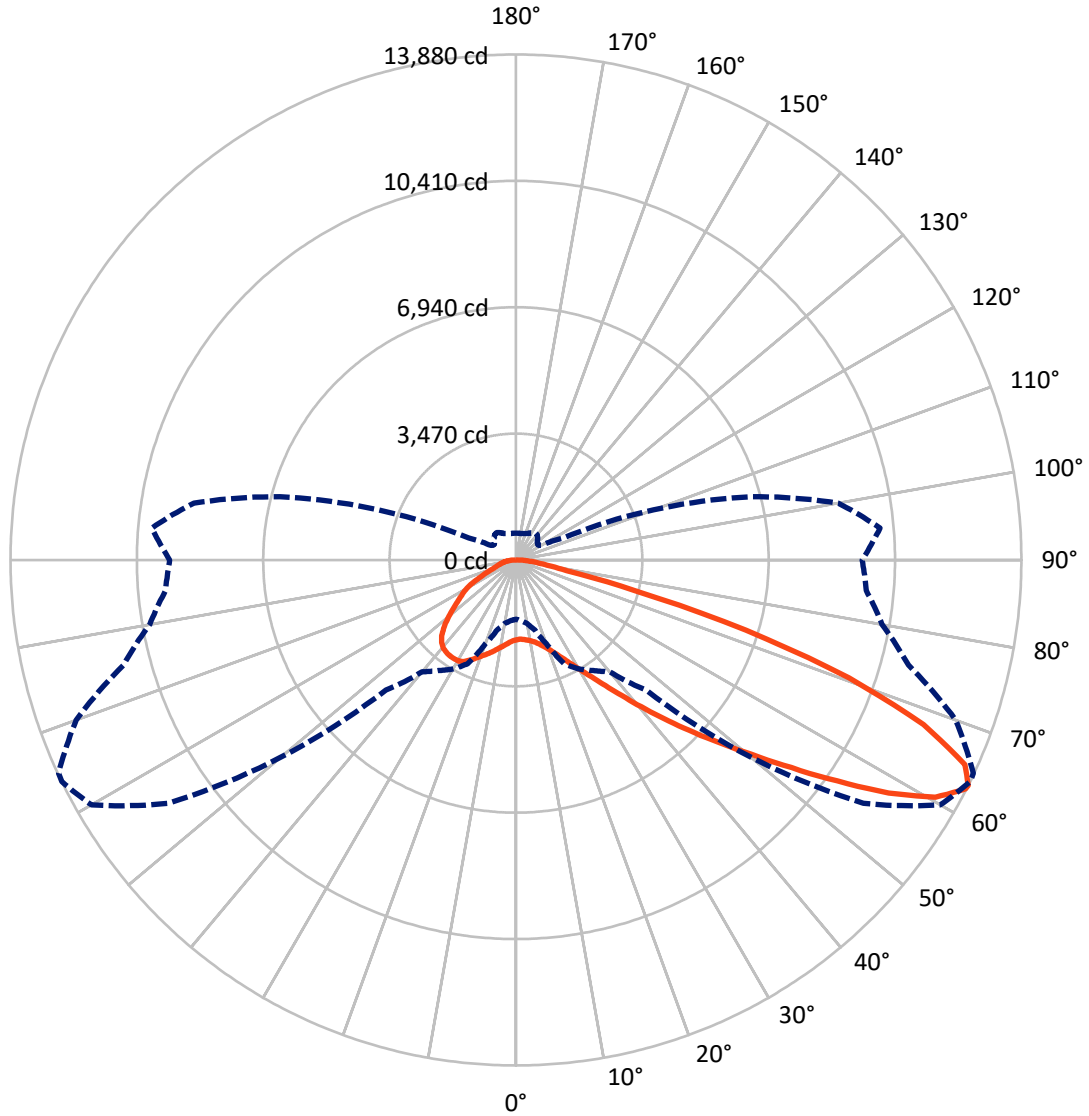
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc  
 Type II - Short - N/A

REPORT NUMBER: P257932  
CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7030

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P257932  
 CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7030

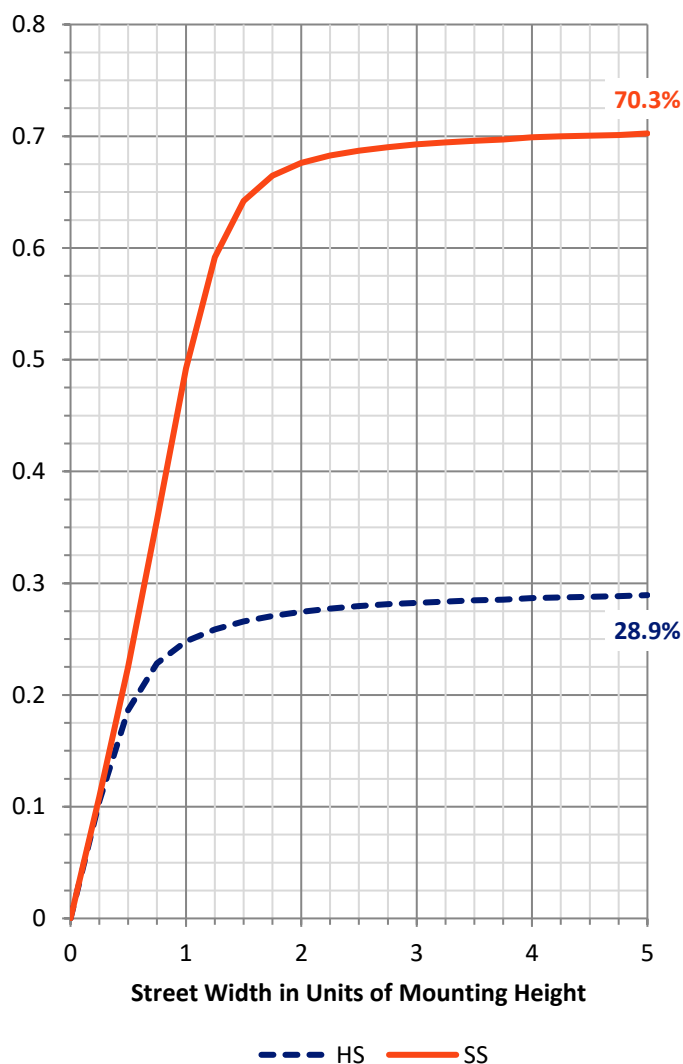
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5945.4	0.0	5945.4
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	14279.6	0.0	14279.6
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	20225.0	0.0	20225.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	218.7	1.1
10°-20°	728.4	3.6
20°-30°	1367.3	6.8
30°-40°	2291.8	11.3
40°-50°	3845.0	19.0
50°-60°	4874.4	24.1
60°-70°	4299.9	21.3
70°-80°	2219.7	11.0
80°-90°	379.8	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°	20225.0	100.0
0°-180°	20225.0	100.0

**Coefficient of Utilization**

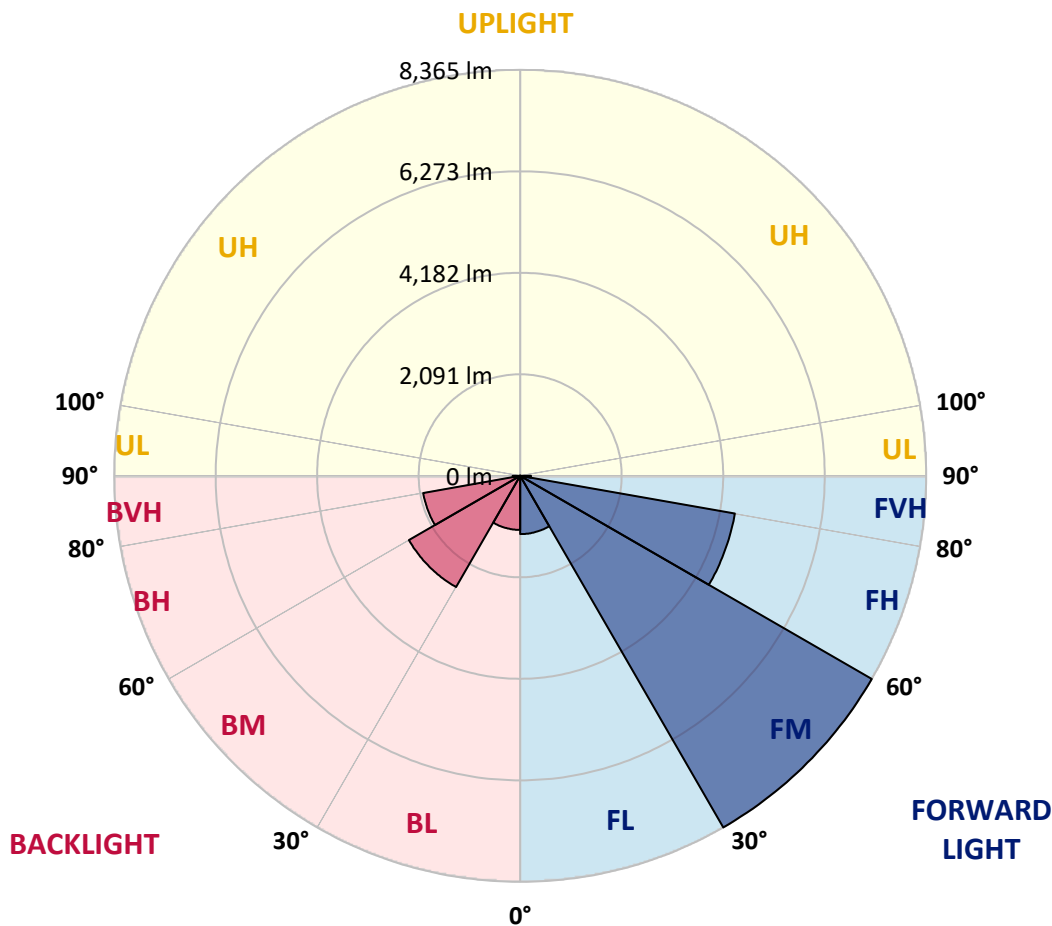


REPORT NUMBER: P257932  
 CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7030

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1200.4	5.9			
FM (30°-60°)	8364.5	41.4			
FH (60°-80°)	4491.1	22.2			G2/5000
FVH (80°-90°)	223.5	1.1			G2/225
BL (0°-30°)	1114.0	5.5	B3/2500		
BM (30°-60°)	2646.6	13.1	B3/5000		
BH (60°-80°)	2028.5	10.0	B3/2500		G3/2500
BVH (80°-90°)	156.3	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: P257932

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3
2.5°	2176.8	2173.3	2173.3	2173.3	2173.3	2170.0	2173.3	2180.2	2176.8	2173.3	2180.2
5°	2183.5	2180.2	2180.2	2180.2	2183.5	2180.2	2183.5	2193.7	2187.0	2187.0	2193.7
7.5°	2200.5	2197.1	2200.5	2197.1	2197.1	2197.1	2200.5	2210.7	2207.2	2210.7	2220.8
10°	2220.8	2220.8	2220.8	2220.8	2220.8	2220.8	2227.6	2234.4	2237.7	2241.1	2254.7
12.5°	2281.8	2281.8	2281.8	2278.4	2278.4	2268.2	2281.8	2288.6	2295.3	2302.1	2312.3
15°	2410.4	2410.4	2407.0	2393.5	2393.5	2373.2	2376.6	2379.8	2379.8	2386.7	2393.5
17.5°	2579.7	2576.4	2569.6	2559.4	2545.8	2522.1	2515.3	2508.6	2498.4	2495.1	2495.1
20°	2816.7	2813.3	2799.8	2772.7	2755.7	2718.5	2691.4	2664.3	2654.1	2637.2	2633.8
22.5°	3155.2	3155.2	3128.1	3087.4	3073.9	2996.1	2918.2	2860.6	2840.3	2816.7	2816.7
25°	3564.8	3561.5	3524.1	3476.8	3419.3	3338.0	3243.3	3165.3	3114.6	3060.4	3040.1
27.5°	4055.7	4045.6	3994.7	3937.2	3828.9	3727.4	3615.6	3534.3	3446.4	3378.7	3317.6
30°	4631.3	4621.1	4533.0	4424.7	4313.0	4211.4	4048.9	3950.9	3811.9	3730.7	3663.0
32.5°	5298.2	5288.0	5128.8	5024.0	4905.4	4780.2	4587.2	4431.4	4255.4	4140.4	4045.6
35°	6147.9	6107.3	5880.5	5734.9	5548.7	5423.4	5220.3	5010.4	4803.9	4641.5	4502.6
37.5°	7065.4	7017.9	6818.3	6601.6	6418.8	6266.3	5978.6	5714.6	5470.8	5247.4	5074.8
40°	8023.5	7898.2	7684.9	7525.8	7400.4	7255.0	6953.6	6676.1	6293.5	6042.9	5782.2
42.5°	8686.9	8565.1	8416.1	8311.2	8250.2	8138.5	7969.3	7728.9	7386.9	7393.7	6706.5
45°	9123.7	8944.3	8842.7	8849.5	8873.2	8873.2	8842.7	8805.4	8656.5	8758.0	8182.5
47.5°	8967.9	8849.5	8785.1	8920.6	9089.9	9259.0	9455.4	9668.7	9912.4	10200.2	9492.7
50°	8053.8	8097.9	8128.4	8416.1	8778.3	9164.3	9614.6	10196.8	10877.3	11009.3	10667.4
52.5°	6594.8	6689.5	6791.1	7231.3	7708.6	8375.5	9164.3	10125.7	11039.8	11578.1	11544.3
55°	5122.1	5240.6	5457.3	5785.6	6164.9	6794.5	7769.5	9252.3	10677.6	11534.1	12055.4
57.5°	3646.1	3818.7	4103.1	4560.2	4895.3	5250.8	5971.9	7617.1	9177.9	10772.3	11970.8
60°	2423.9	2505.2	2691.4	3260.2	3825.5	4197.8	4709.1	5305.0	6581.2	8778.3	11097.4
62.5°	1719.7	1774.0	1889.1	2146.4	2657.5	3331.2	3639.3	3913.5	4323.2	5646.8	8910.4
63°	1625.0	1672.4	1767.2	1983.8	2444.2	3141.6	3456.5	3707.0	4004.9	5051.0	8429.7
65°	1347.3	1367.7	1418.5	1523.4	1770.5	2349.5	2864.0	3016.4	3067.1	3246.6	5281.3
67.5°	1137.5	1151.0	1168.0	1198.5	1296.6	1564.0	2136.2	2329.2	2271.6	2149.7	2610.1
70°	988.6	998.7	1025.7	1063.0	1096.9	1164.6	1469.3	1757.0	1692.8	1526.8	1597.9
72.5°	788.9	805.7	836.2	900.6	968.2	1056.2	1130.8	1310.1	1269.5	1110.4	1127.3
75°	622.9	633.0	660.2	707.6	771.9	873.4	1019.1	1079.9	968.2	819.2	819.2
77.5°	494.3	504.4	528.2	565.4	606.0	677.1	778.7	937.8	870.0	616.1	612.7
80°	372.3	382.5	406.2	440.1	480.7	531.5	592.4	663.5	798.9	575.5	460.4
82.5°	274.2	277.6	318.3	341.9	355.4	396.1	446.9	487.6	548.5	531.5	409.6
85°	206.5	203.1	230.2	247.2	250.5	260.7	291.1	331.8	358.8	345.3	318.3
87.5°	115.0	101.6	118.4	135.4	135.4	138.8	145.6	169.3	193.0	186.2	169.3
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: P257932

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7030

**CANDELA DISTRIBUTION (continued):**

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3
2.5°	2180.2	2180.2	2176.8	2176.8	2180.2	2180.2	2176.8	2187.0	2193.7	2193.7	2197.1
5°	2190.3	2193.7	2190.3	2190.3	2193.7	2193.7	2197.1	2207.2	2217.4	2224.2	2234.4
7.5°	2220.8	2224.2	2220.8	2220.8	2224.2	2227.6	2234.4	2247.9	2254.7	2268.2	2285.1
10°	2254.7	2258.1	2254.7	2258.1	2261.4	2264.8	2275.0	2285.1	2295.3	2308.8	2336.0
12.5°	2315.6	2319.0	2312.3	2315.6	2325.8	2325.8	2332.5	2339.3	2356.2	2373.2	2400.2
15°	2400.2	2400.2	2393.5	2396.8	2407.0	2407.0	2410.4	2417.2	2437.5	2457.8	2484.9
17.5°	2498.4	2505.2	2501.8	2505.2	2512.0	2515.3	2515.3	2522.1	2535.7	2549.2	2576.4
20°	2630.4	2633.8	2627.0	2633.8	2640.6	2633.8	2627.0	2623.7	2630.4	2637.2	2667.7
22.5°	2809.9	2806.6	2789.6	2789.6	2789.6	2776.1	2759.2	2738.8	2738.8	2728.6	2752.3
25°	3023.2	3013.1	2989.4	2992.7	2969.0	2948.7	2918.2	2887.7	2860.6	2850.5	2853.9
27.5°	3273.7	3253.4	3229.7	3222.9	3199.2	3162.0	3111.1	3053.7	3009.6	2975.7	2969.0
30°	3588.5	3544.5	3504.0	3497.2	3459.9	3398.9	3317.6	3239.9	3165.3	3107.8	3087.4
32.5°	3960.9	3893.2	3828.9	3822.1	3761.1	3680.0	3581.7	3473.5	3365.0	3273.7	3229.7
35°	4397.6	4296.1	4235.1	4218.2	4130.2	4028.6	3920.3	3781.5	3629.1	3500.5	3419.3
37.5°	4929.1	4824.3	4719.2	4722.6	4600.8	4482.3	4336.7	4167.4	3974.5	3795.0	3680.0
40°	5585.9	5437.0	5301.6	5271.1	5166.1	5000.2	4841.2	4644.8	4407.8	4170.9	4004.9
42.5°	6381.5	6137.7	5951.6	5924.5	5785.6	5582.5	5389.5	5128.8	4888.5	4600.8	4401.1
45°	7285.4	6896.1	6672.7	6632.0	6408.6	6202.1	5968.5	5690.9	5396.4	5071.4	4834.4
47.5°	8409.3	7854.1	7475.0	7407.2	7099.2	6828.3	6584.6	6276.5	5924.5	5562.2	5301.6
50°	9719.4	8900.3	8389.0	8284.0	7871.0	7552.9	7241.3	6855.5	6479.6	6100.5	5799.2
52.5°	11033.0	10152.8	9472.3	9343.8	8734.3	8307.7	7898.2	7512.2	7068.7	6692.9	6351.0
55°	12089.3	11503.6	10714.8	10535.5	9661.9	9083.0	8544.7	8104.7	7664.5	7366.6	6963.7
57.5°	12725.8	12695.3	12072.4	11825.2	10630.2	9773.7	9174.5	8673.4	8246.9	8121.6	7586.8
60°	12708.8	13497.6	13230.2	13043.9	11608.6	10481.2	9702.6	9161.0	8808.8	8951.1	8213.0
62.5°	11933.6	13531.4	13853.1	13802.2	12651.2	11049.9	10135.9	9577.3	9391.2	9814.3	8863.0
63°	11652.6	13453.6	13880.2	13859.9	12851.0	11158.3	10210.4	9658.5	9506.2	10034.4	8981.4
65°	9848.2	12773.2	13551.8	13643.2	13280.9	11530.6	10383.0	9865.0	9848.2	10525.3	9262.5
67.5°	6002.3	10792.6	12072.4	12248.4	12674.9	11649.2	10284.9	9794.0	10037.7	10596.3	9177.9
70°	2566.2	7122.9	9702.6	9987.0	11029.6	11060.1	10003.9	9502.9	9993.7	10041.2	8575.2
72.5°	1520.1	3358.3	6604.9	7224.4	8727.5	9516.4	9360.7	8995.0	9414.8	8819.0	7302.4
75°	1076.5	1570.8	3355.0	4015.1	6076.8	7265.0	7864.3	8033.7	8016.7	6994.2	5481.0
77.5°	771.9	1008.9	1415.1	1669.1	3392.2	4665.1	5396.4	5890.6	5731.5	4682.0	3378.7
80°	538.3	697.4	866.7	920.8	1574.2	2396.8	2843.7	3060.4	2965.7	2339.3	1513.2
82.5°	389.3	457.0	558.7	592.4	792.2	1107.1	1316.9	1161.2	1113.8	863.2	653.4
85°	301.3	294.6	348.6	362.2	463.8	578.8	592.4	460.4	402.8	358.8	365.6
87.5°	213.3	182.8	186.2	193.0	240.4	308.1	301.3	189.6	162.5	172.6	196.3
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: P257932

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7030

**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3	2190.3
2.5°	2203.9	2207.2	2214.0	2217.4	2224.2	2224.2	2231.0	2234.4	2241.1	2247.9	2251.3
5°	2244.5	2254.7	2268.2	2275.0	2288.6	2298.7	2312.3	2319.0	2332.5	2342.7	2356.2
7.5°	2305.5	2322.5	2339.3	2359.7	2379.8	2396.8	2410.4	2427.3	2451.0	2467.9	2478.1
10°	2363.1	2386.7	2417.2	2440.9	2471.3	2495.1	2515.3	2545.8	2572.9	2596.6	2610.1
12.5°	2437.5	2467.9	2498.4	2535.7	2576.4	2606.7	2637.2	2677.8	2715.1	2742.2	2755.7
15°	2525.5	2562.7	2596.6	2640.6	2688.0	2728.6	2772.7	2816.7	2843.7	2843.7	2836.9
17.5°	2616.9	2647.4	2688.0	2738.8	2803.1	2853.9	2877.6	2884.3	2874.2	2850.5	2833.5
20°	2708.3	2735.5	2779.4	2840.3	2908.1	2918.2	2894.5	2864.0	2833.5	2793.0	2765.9
22.5°	2782.9	2820.1	2887.7	2958.8	2962.2	2904.6	2840.3	2789.6	2742.2	2694.8	2644.0
25°	2870.8	2921.6	3013.1	3040.1	2952.0	2843.7	2752.3	2677.8	2600.1	2522.1	2464.6
27.5°	2979.2	3053.7	3145.0	3067.1	2894.5	2742.2	2616.9	2505.2	2403.6	2295.3	2231.0
30°	3094.2	3209.4	3229.7	3026.6	2796.4	2600.1	2430.7	2261.4	2132.8	2034.6	1997.4
32.5°	3233.1	3382.0	3260.2	2955.5	2664.3	2407.0	2180.2	1977.0	1868.8	1807.8	1790.9
35°	3443.0	3564.8	3277.1	2880.9	2512.0	2176.8	1892.5	1729.9	1662.3	1621.6	1601.3
37.5°	3744.2	3740.8	3273.7	2789.6	2336.0	1926.4	1662.3	1547.1	1492.9	1459.1	1421.9
40°	4096.3	3876.3	3253.4	2657.5	2099.0	1686.0	1503.1	1394.8	1344.0	1303.4	1259.3
42.5°	4445.0	3967.6	3195.9	2461.2	1804.4	1513.2	1388.0	1289.8	1235.7	1191.7	1130.8
45°	4746.3	4004.9	3084.1	2190.3	1540.3	1377.9	1313.6	1228.9	1164.6	1096.9	1049.4
47.5°	4983.4	3998.2	2904.6	1872.1	1364.3	1283.0	1252.5	1195.1	1117.1	1032.5	971.7
50°	5183.0	3947.4	2660.9	1591.2	1245.9	1198.5	1188.3	1171.4	1046.0	975.0	937.8
52.5°	5365.8	3872.9	2400.2	1401.6	1144.3	1103.6	1124.0	1107.1	1019.1	958.1	920.8
55°	5616.4	3822.1	2143.0	1255.9	1025.7	1015.7	1032.5	1056.2	1002.1	944.5	903.9
57.5°	5910.9	3849.2	1946.6	1093.4	914.1	920.8	978.4	1012.3	985.2	924.3	883.6
60°	6249.4	3930.5	1774.0	937.8	822.6	839.5	924.3	971.7	968.2	897.1	849.7
62.5°	6628.6	4015.1	1499.7	819.2	744.8	771.9	859.9	920.8	931.0	870.0	812.5
63°	6703.0	4021.9	1428.7	795.5	731.3	761.7	842.9	907.3	920.8	863.2	805.7
65°	6885.9	3960.9	1151.0	731.3	677.1	710.9	792.2	849.7	876.8	826.0	778.7
67.5°	6733.5	3463.3	866.7	653.4	633.0	656.7	727.8	782.1	805.7	782.1	734.7
70°	6158.1	2518.8	677.1	582.3	585.6	602.6	656.7	707.6	734.7	727.8	683.9
72.5°	4959.6	1428.7	565.4	521.3	531.5	551.9	589.0	636.4	660.2	656.7	626.3
75°	3267.0	731.3	477.4	467.2	473.9	490.9	518.0	555.2	582.3	578.8	565.4
77.5°	1618.2	507.8	409.6	413.0	416.4	429.9	450.2	484.1	501.1	504.4	501.1
80°	666.9	396.1	352.1	355.4	358.8	369.0	382.5	413.0	423.2	429.9	433.3
82.5°	399.5	301.3	281.1	287.8	291.1	301.3	311.5	338.6	348.6	358.8	358.8
85°	264.1	209.9	203.1	209.9	216.7	223.4	226.8	243.7	260.7	274.2	281.1
87.5°	142.1	125.2	121.9	125.2	125.2	131.9	138.8	155.7	176.0	189.6	196.3
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: P257932

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2U-7030

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	2190.3	2190.3	2190.3	2190.3	2190.3
2.5°	2244.5	2247.9	2244.5	2247.9	2251.3
5°	2356.2	2363.1	2359.7	2359.7	2373.2
7.5°	2484.9	2498.4	2498.4	2505.2	2512.0
10°	2623.7	2637.2	2647.4	2647.4	2657.5
12.5°	2762.5	2769.2	2779.4	2779.4	2779.4
15°	2833.5	2830.3	2826.9	2823.5	2823.5
17.5°	2823.5	2809.9	2803.1	2796.4	2799.8
20°	2749.0	2725.3	2718.5	2708.3	2715.1
22.5°	2620.2	2586.5	2572.9	2556.0	2562.7
25°	2427.3	2386.7	2379.8	2359.7	2369.9
27.5°	2203.9	2183.5	2180.2	2176.8	2193.7
30°	1994.0	2000.7	2004.2	2010.9	2027.9
32.5°	1801.0	1814.6	1818.0	1821.4	1845.1
35°	1611.5	1594.5	1611.5	1604.7	1625.0
37.5°	1405.0	1391.4	1377.9	1361.0	1374.5
40°	1232.3	1208.6	1168.0	1147.7	1151.0
42.5°	1096.9	1066.4	1032.5	1012.3	1012.3
45°	1008.9	971.7	941.2	927.6	927.6
47.5°	941.2	924.3	907.3	897.1	897.1
50°	914.1	893.7	883.6	876.8	876.8
52.5°	893.7	873.4	863.2	856.5	849.7
55°	876.8	846.3	836.2	832.8	832.8
57.5°	853.1	826.0	812.5	809.1	809.1
60°	815.8	795.5	782.1	778.7	778.7
62.5°	778.7	758.4	744.8	744.8	744.8
63°	771.9	748.2	738.0	738.0	738.0
65°	741.5	717.8	707.6	707.6	704.1
67.5°	700.8	677.1	670.3	670.3	663.5
70°	653.4	633.0	626.3	629.7	616.1
72.5°	606.0	585.6	575.5	575.5	562.0
75°	551.9	531.5	518.0	514.6	501.1
77.5°	490.9	473.9	460.4	446.9	440.1
80°	426.5	413.0	396.1	385.9	375.8
82.5°	358.8	345.3	335.2	348.6	297.9
85°	281.1	267.4	253.9	274.2	213.3
87.5°	206.5	199.7	186.2	162.5	142.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)