

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: P257967

Luminaire Tested: **ARCH-L-AF72-110-D-U-T2U-7050**

Issue Date: 8/21/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P257967  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 8/21/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-110-D-U-T2U-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 485mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15343 lumens  
Efficiency: N/A  
Efficacy: 135.8 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

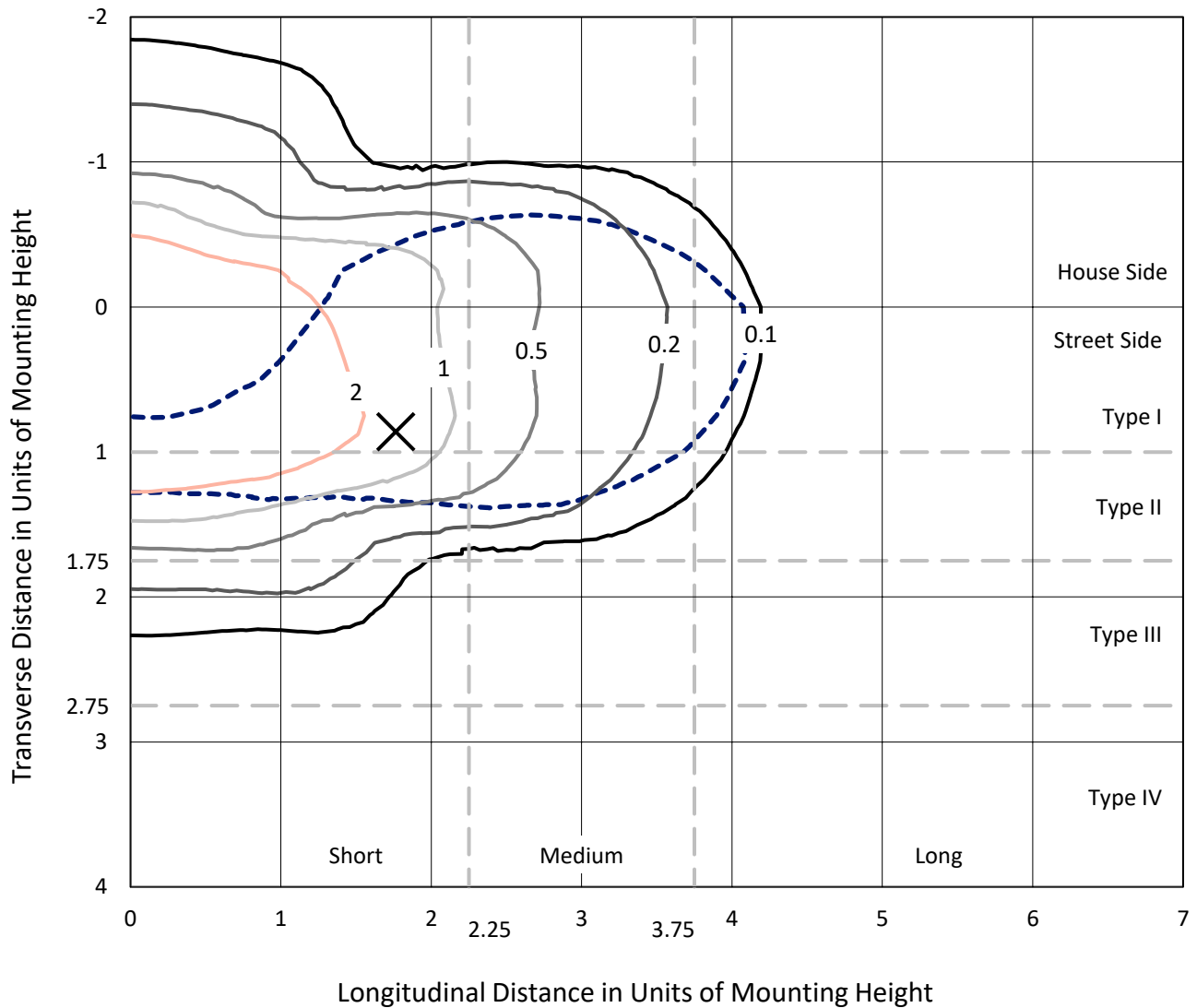
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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 CATALOG NUMBER: ARCH-L-AF72-110-D-U-T2U-7050

### Iso-Footcandle Lines of Horizontal Illumination

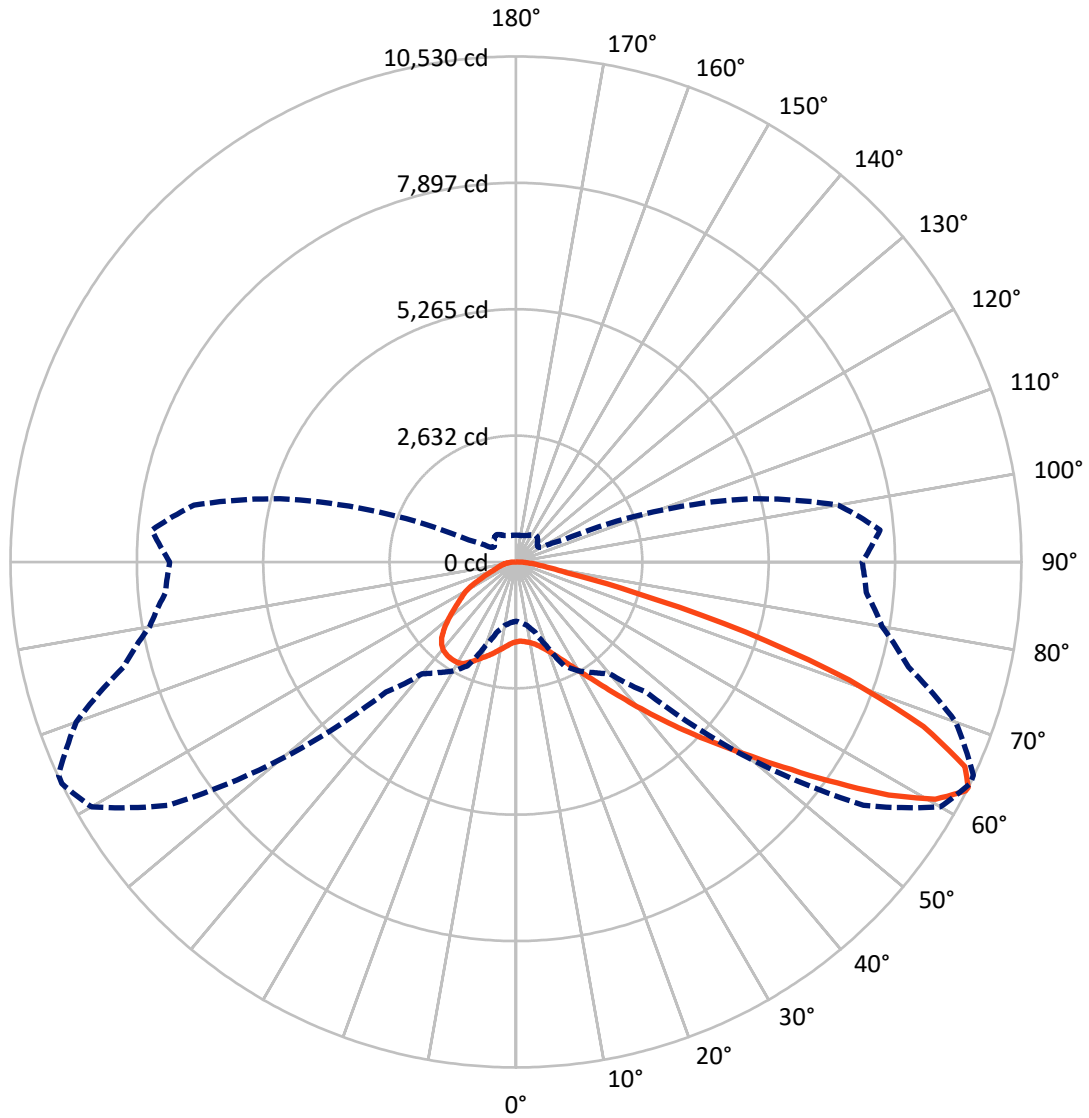
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



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

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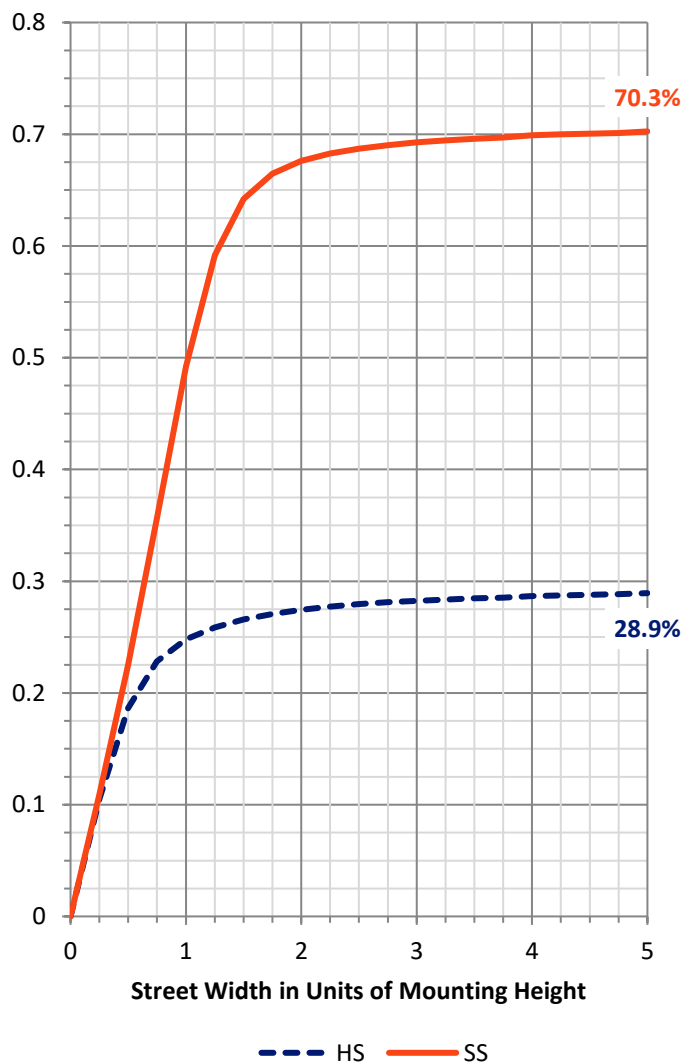
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4510.3	0.0	4510.3
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	10832.7	0.0	10832.7
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	15343.0	0.0	15343.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.9	1.1
10°-20°	552.6	3.6
20°-30°	1037.3	6.8
30°-40°	1738.6	11.3
40°-50°	2916.9	19.0
50°-60°	3697.8	24.1
60°-70°	3262.0	21.3
70°-80°	1683.9	11.0
80°-90°	288.1	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°	15343.0	100.0
0°-180°	15343.0	100.0

**Coefficient of Utilization**

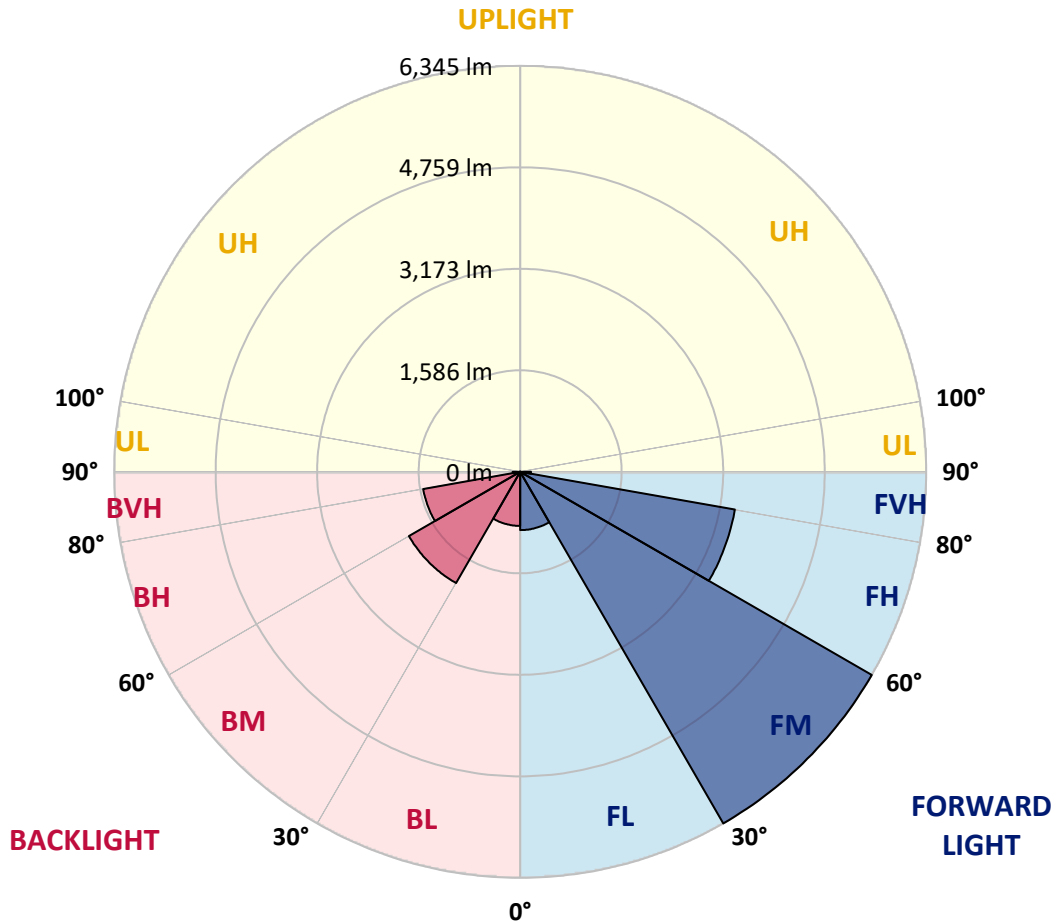


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	910.7	5.9			
FM (30°-60°)	6345.5	41.4			
FH (60°-80°)	3407.0	22.2			G2/5000
FVH (80°-90°)	169.6	1.1			G2/225
BL (0°-30°)	845.1	5.5	B2/1000		
BM (30°-60°)	2007.8	13.1	B2/2500		
BH (60°-80°)	1538.9	10.0	B3/2500		G3/2500
BVH (80°-90°)	118.6	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6
2.5°	1651.4	1648.8	1648.8	1648.8	1648.8	1646.2	1648.8	1653.9	1651.4	1648.8	1653.9
5°	1656.5	1653.9	1653.9	1653.9	1656.5	1653.9	1656.5	1664.2	1659.1	1659.1	1664.2
7.5°	1669.3	1666.8	1669.3	1666.8	1666.8	1666.8	1669.3	1677.0	1674.5	1677.0	1684.8
10°	1684.8	1684.8	1684.8	1684.8	1684.8	1684.8	1689.9	1695.0	1697.6	1700.2	1710.4
12.5°	1731.0	1731.0	1731.0	1728.4	1728.4	1720.7	1731.0	1736.1	1741.3	1746.4	1754.1
15°	1828.6	1828.6	1826.0	1815.7	1815.7	1800.3	1802.9	1805.5	1805.5	1810.6	1815.7
17.5°	1957.0	1954.4	1949.3	1941.6	1931.3	1913.3	1908.2	1903.1	1895.3	1892.8	1892.8
20°	2136.8	2134.2	2123.9	2103.4	2090.5	2062.3	2041.7	2021.2	2013.5	2000.6	1998.1
22.5°	2393.6	2393.6	2373.0	2342.2	2331.9	2272.9	2213.8	2170.1	2154.7	2136.8	2136.8
25°	2704.3	2701.8	2673.5	2637.6	2593.9	2532.3	2460.4	2401.3	2362.8	2321.7	2306.3
27.5°	3076.7	3069.0	3030.5	2986.8	2904.7	2827.6	2742.9	2681.2	2614.5	2563.1	2516.9
30°	3513.3	3505.6	3438.9	3356.7	3271.9	3194.9	3071.6	2997.1	2891.8	2830.2	2778.8
32.5°	4019.3	4011.6	3890.9	3811.2	3721.4	3626.3	3479.9	3361.8	3228.3	3140.9	3069.0
35°	4663.9	4633.1	4461.0	4350.6	4209.3	4114.3	3960.2	3801.0	3644.3	3521.0	3415.7
37.5°	5359.9	5323.9	5172.4	5008.0	4869.4	4753.8	4535.5	4335.2	4150.2	3980.7	3849.8
40°	6086.7	5991.7	5829.9	5709.2	5614.1	5503.7	5275.1	5064.5	4774.3	4584.3	4386.5
42.5°	6590.1	6497.6	6384.6	6305.0	6258.8	6174.0	6045.6	5863.3	5603.9	5609.0	5087.7
45°	6921.4	6785.2	6708.2	6713.3	6731.3	6731.3	6708.2	6679.9	6566.9	6644.0	6207.4
47.5°	6803.2	6713.3	6664.5	6767.3	6895.7	7024.1	7173.0	7334.8	7519.8	7738.1	7201.3
50°	6109.8	6143.2	6166.3	6384.6	6659.4	6952.2	7293.8	7735.5	8251.7	8351.9	8092.5
52.5°	5002.9	5074.8	5151.9	5485.7	5847.8	6353.8	6952.2	7681.6	8375.0	8783.3	8757.6
55°	3885.7	3975.6	4140.0	4389.1	4676.7	5154.4	5894.1	7019.0	8100.2	8749.9	9145.4
57.5°	2766.0	2897.0	3112.7	3459.4	3713.7	3983.3	4530.3	5778.5	6962.5	8172.1	9081.2
60°	1838.8	1900.5	2041.7	2473.2	2902.1	3184.6	3572.4	4024.4	4992.6	6659.4	8418.6
62.5°	1304.7	1345.7	1433.1	1628.3	2016.1	2527.1	2760.8	2968.9	3279.6	4283.8	6759.6
63°	1232.7	1268.7	1340.6	1505.0	1854.3	2383.3	2622.2	2812.2	3038.2	3831.8	6394.9
65°	1022.2	1037.6	1076.1	1155.7	1343.2	1782.3	2172.7	2288.3	2326.8	2462.9	4006.4
67.5°	862.9	873.2	886.0	909.2	983.6	1186.5	1620.5	1766.9	1723.3	1630.8	1980.1
70°	749.9	757.6	778.2	806.4	832.1	883.5	1114.6	1332.9	1284.1	1158.3	1212.2
72.5°	598.4	611.2	634.4	683.1	734.5	801.3	857.8	993.9	963.1	842.4	855.2
75°	472.6	480.3	500.8	536.8	585.6	662.6	773.0	819.3	734.5	621.5	621.5
77.5°	375.0	382.7	400.6	428.9	459.7	513.6	590.7	711.4	660.0	467.4	464.8
80°	282.5	290.2	308.2	333.9	364.7	403.2	449.4	503.4	606.1	436.6	349.3
82.5°	208.0	210.6	241.4	259.4	269.7	300.5	339.0	369.8	416.1	403.2	310.8
85°	156.7	154.1	174.6	187.5	190.0	197.8	220.9	251.7	272.2	262.0	241.4
87.5°	87.3	77.0	89.9	102.7	102.7	105.3	110.4	128.4	146.4	141.3	128.4
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: P257967

CATALOG NUMBER: ARCH-L-AF72-110-D-U-T2U-7050

**CANDELA DISTRIBUTION (continued):**

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6
2.5°	1653.9	1653.9	1651.4	1651.4	1653.9	1653.9	1651.4	1659.1	1664.2	1664.2	1666.8
5°	1661.6	1664.2	1661.6	1661.6	1664.2	1664.2	1666.8	1674.5	1682.2	1687.3	1695.0
7.5°	1684.8	1687.3	1684.8	1684.8	1687.3	1689.9	1695.0	1705.3	1710.4	1720.7	1733.6
10°	1710.4	1713.0	1710.4	1713.0	1715.6	1718.1	1725.8	1733.6	1741.3	1751.5	1772.1
12.5°	1756.7	1759.2	1754.1	1756.7	1764.4	1764.4	1769.5	1774.6	1787.5	1800.3	1820.9
15°	1820.9	1820.9	1815.7	1818.3	1826.0	1826.0	1828.6	1833.7	1849.1	1864.5	1885.1
17.5°	1895.3	1900.5	1897.9	1900.5	1905.6	1908.2	1908.2	1913.3	1923.6	1933.9	1954.4
20°	1995.5	1998.1	1992.9	1998.1	2003.2	1998.1	1992.9	1990.4	1995.5	2000.6	2023.8
22.5°	2131.6	2129.1	2116.2	2116.2	2116.2	2105.9	2093.1	2077.7	2077.7	2070.0	2088.0
25°	2293.4	2285.7	2267.7	2270.3	2252.3	2236.9	2213.8	2190.7	2170.1	2162.4	2165.0
27.5°	2483.5	2468.1	2450.1	2444.9	2427.0	2398.7	2360.2	2316.5	2283.2	2257.5	2252.3
30°	2722.3	2688.9	2658.1	2653.0	2624.7	2578.5	2516.9	2457.8	2401.3	2357.6	2342.2
32.5°	3004.8	2953.5	2904.7	2899.5	2853.3	2791.7	2717.2	2635.0	2552.8	2483.5	2450.1
35°	3336.1	3259.1	3212.8	3200.0	3133.2	3056.2	2974.0	2868.7	2753.1	2655.5	2593.9
37.5°	3739.3	3659.7	3580.1	3582.7	3490.2	3400.3	3289.9	3161.5	3015.1	2879.0	2791.7
40°	4237.6	4124.6	4021.8	3998.7	3919.1	3793.3	3672.6	3523.6	3343.8	3164.1	3038.2
42.5°	4841.1	4656.2	4514.9	4494.4	4389.1	4235.0	4088.6	3890.9	3708.5	3490.2	3338.7
45°	5526.8	5231.5	5062.0	5031.1	4861.6	4705.0	4527.8	4317.2	4093.7	3847.2	3667.4
47.5°	6379.5	5958.3	5670.6	5619.3	5385.6	5180.1	4995.2	4761.5	4494.4	4219.6	4021.8
50°	7373.4	6751.9	6364.1	6284.4	5971.1	5729.7	5493.4	5200.7	4915.6	4627.9	4399.4
52.5°	8369.8	7702.1	7185.9	7088.3	6626.0	6302.4	5991.7	5698.9	5362.5	5077.4	4818.0
55°	9171.1	8726.8	8128.4	7992.3	7329.7	6890.5	6482.2	6148.3	5814.5	5588.5	5282.8
57.5°	9654.0	9630.8	9158.3	8970.8	8064.2	7414.5	6959.9	6579.8	6256.2	6161.2	5755.4
60°	9641.1	10239.5	10036.6	9895.4	8806.4	7951.2	7360.5	6949.6	6682.5	6790.4	6230.5
62.5°	9053.0	10265.2	10509.2	10470.6	9597.5	8382.7	7689.3	7265.5	7124.3	7445.3	6723.6
63°	8839.8	10206.1	10529.7	10514.3	9749.0	8464.9	7745.8	7327.1	7211.6	7612.2	6813.5
65°	7471.0	9689.9	10280.6	10349.9	10075.1	8747.4	7876.7	7483.8	7471.0	7984.6	7026.7
67.5°	4553.5	8187.5	9158.3	9291.8	9615.4	8837.3	7802.3	7429.9	7614.8	8038.5	6962.5
70°	1946.7	5403.5	7360.5	7576.3	8367.3	8390.4	7589.1	7209.0	7581.4	7617.4	6505.3
72.5°	1153.1	2547.7	5010.6	5480.6	6620.9	7219.3	7101.1	6823.8	7142.2	6690.2	5539.7
75°	816.7	1191.7	2545.1	3045.9	4610.0	5511.4	5966.0	6094.4	6081.6	5305.9	4158.0
77.5°	585.6	765.3	1073.5	1266.1	2573.4	3539.0	4093.7	4468.7	4348.0	3551.9	2563.1
80°	408.3	529.1	657.5	698.6	1194.2	1818.3	2157.3	2321.7	2249.8	1774.6	1148.0
82.5°	295.3	346.7	423.8	449.4	601.0	839.8	999.0	880.9	844.9	654.9	495.7
85°	228.6	223.4	264.5	274.8	351.8	439.2	449.4	349.3	305.6	272.2	277.4
87.5°	161.8	138.7	141.3	146.4	182.3	233.7	228.6	143.8	123.3	131.0	149.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6	1661.6
2.5°	1671.9	1674.5	1679.6	1682.2	1687.3	1687.3	1692.5	1695.0	1700.2	1705.3	1707.9
5°	1702.7	1710.4	1720.7	1725.8	1736.1	1743.8	1754.1	1759.2	1769.5	1777.2	1787.5
7.5°	1749.0	1761.8	1774.6	1790.1	1805.5	1818.3	1828.6	1841.4	1859.4	1872.2	1879.9
10°	1792.6	1810.6	1833.7	1851.7	1874.8	1892.8	1908.2	1931.3	1951.8	1969.8	1980.1
12.5°	1849.1	1872.2	1895.3	1923.6	1954.4	1977.5	2000.6	2031.5	2059.7	2080.3	2090.5
15°	1915.9	1944.1	1969.8	2003.2	2039.2	2070.0	2103.4	2136.8	2157.3	2157.3	2152.2
17.5°	1985.2	2008.4	2039.2	2077.7	2126.5	2165.0	2183.0	2188.1	2180.4	2162.4	2149.6
20°	2054.6	2075.1	2108.5	2154.7	2206.1	2213.8	2195.8	2172.7	2149.6	2118.8	2098.2
22.5°	2111.1	2139.3	2190.7	2244.6	2247.2	2203.5	2154.7	2116.2	2080.3	2044.3	2005.8
25°	2177.9	2216.4	2285.7	2306.3	2239.5	2157.3	2088.0	2031.5	1972.4	1913.3	1869.7
27.5°	2260.0	2316.5	2385.9	2326.8	2195.8	2080.3	1985.2	1900.5	1823.4	1741.3	1692.5
30°	2347.4	2434.7	2450.1	2296.0	2121.4	1972.4	1844.0	1715.6	1618.0	1543.5	1515.3
32.5°	2452.7	2565.7	2473.2	2242.1	2021.2	1826.0	1653.9	1499.8	1417.7	1371.4	1358.6
35°	2611.9	2704.3	2486.0	2185.6	1905.6	1651.4	1435.6	1312.4	1261.0	1230.2	1214.8
37.5°	2840.5	2837.9	2483.5	2116.2	1772.1	1461.3	1261.0	1173.7	1132.6	1106.9	1078.7
40°	3107.6	2940.6	2468.1	2016.1	1592.3	1279.0	1140.3	1058.1	1019.6	988.8	955.4
42.5°	3372.1	3010.0	2424.4	1867.1	1368.9	1148.0	1053.0	978.5	937.4	904.0	857.8
45°	3600.6	3038.2	2339.7	1661.6	1168.5	1045.3	996.5	932.3	883.5	832.1	796.1
47.5°	3780.4	3033.1	2203.5	1420.2	1035.0	973.4	950.2	906.6	847.5	783.3	737.1
50°	3931.9	2994.5	2018.6	1207.1	945.1	909.2	901.4	888.6	793.6	739.6	711.4
52.5°	4070.6	2938.0	1820.9	1063.2	868.1	837.2	852.7	839.8	773.0	726.8	698.6
55°	4260.7	2899.5	1625.7	952.8	778.2	770.5	783.3	801.3	760.2	716.5	685.7
57.5°	4484.1	2920.1	1476.7	829.5	693.4	698.6	742.2	767.9	747.4	701.1	670.3
60°	4740.9	2981.7	1345.7	711.4	624.1	636.9	701.1	737.1	734.5	680.6	644.6
62.5°	5028.6	3045.9	1137.7	621.5	565.0	585.6	652.3	698.6	706.3	660.0	616.4
63°	5085.1	3051.0	1083.8	603.5	554.7	577.9	639.5	688.3	698.6	654.9	611.2
65°	5223.8	3004.8	873.2	554.7	513.6	539.3	601.0	644.6	665.2	626.6	590.7
67.5°	5108.2	2627.3	657.5	495.7	480.3	498.2	552.2	593.3	611.2	593.3	557.3
70°	4671.6	1910.8	513.6	441.7	444.3	457.1	498.2	536.8	557.3	552.2	518.8
72.5°	3762.4	1083.8	428.9	395.5	403.2	418.6	446.9	482.8	500.8	498.2	475.1
75°	2478.3	554.7	362.1	354.4	359.6	372.4	392.9	421.2	441.7	439.2	428.9
77.5°	1227.6	385.2	310.8	313.3	315.9	326.2	341.6	367.3	380.1	382.7	380.1
80°	505.9	300.5	267.1	269.7	272.2	279.9	290.2	313.3	321.0	326.2	328.7
82.5°	303.1	228.6	213.2	218.3	220.9	228.6	236.3	256.8	264.5	272.2	272.2
85°	200.3	159.2	154.1	159.2	164.4	169.5	172.1	184.9	197.8	208.0	213.2
87.5°	107.9	95.0	92.5	95.0	95.0	100.2	105.3	118.1	133.5	143.8	149.0
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: P257967

CATALOG NUMBER: ARCH-L-AF72-110-D-U-T2U-7050

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	1661.6	1661.6	1661.6	1661.6	1661.6
2.5°	1702.7	1705.3	1702.7	1705.3	1707.9
5°	1787.5	1792.6	1790.1	1790.1	1800.3
7.5°	1885.1	1895.3	1895.3	1900.5	1905.6
10°	1990.4	2000.6	2008.4	2008.4	2016.1
12.5°	2095.7	2100.8	2108.5	2108.5	2108.5
15°	2149.6	2147.0	2144.5	2141.9	2141.9
17.5°	2141.9	2131.6	2126.5	2121.4	2123.9
20°	2085.4	2067.4	2062.3	2054.6	2059.7
22.5°	1987.8	1962.1	1951.8	1939.0	1944.1
25°	1841.4	1810.6	1805.5	1790.1	1797.8
27.5°	1671.9	1656.5	1653.9	1651.4	1664.2
30°	1512.7	1517.8	1520.4	1525.5	1538.4
32.5°	1366.3	1376.6	1379.1	1381.7	1399.7
35°	1222.5	1209.6	1222.5	1217.3	1232.7
37.5°	1065.8	1055.5	1045.3	1032.4	1042.7
40°	934.8	916.9	886.0	870.6	873.2
42.5°	832.1	809.0	783.3	767.9	767.9
45°	765.3	737.1	714.0	703.7	703.7
47.5°	714.0	701.1	688.3	680.6	680.6
50°	693.4	678.0	670.3	665.2	665.2
52.5°	678.0	662.6	654.9	649.8	644.6
55°	665.2	642.1	634.4	631.8	631.8
57.5°	647.2	626.6	616.4	613.8	613.8
60°	618.9	603.5	593.3	590.7	590.7
62.5°	590.7	575.3	565.0	565.0	565.0
63°	585.6	567.6	559.9	559.9	559.9
65°	562.4	544.5	536.8	536.8	534.2
67.5°	531.6	513.6	508.5	508.5	503.4
70°	495.7	480.3	475.1	477.7	467.4
72.5°	459.7	444.3	436.6	436.6	426.3
75°	418.6	403.2	392.9	390.4	380.1
77.5°	372.4	359.6	349.3	339.0	333.9
80°	323.6	313.3	300.5	292.8	285.1
82.5°	272.2	262.0	254.3	264.5	226.0
85°	213.2	202.9	192.6	208.0	161.8
87.5°	156.7	151.5	141.3	123.3	107.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)