

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: P257945

Luminaire Tested: **ARCH-L-AF72-90-D-U-T2U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257945
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-AF72-90-D-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13335.2 lumens
Efficiency: N/A
Efficacy: 143.4 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

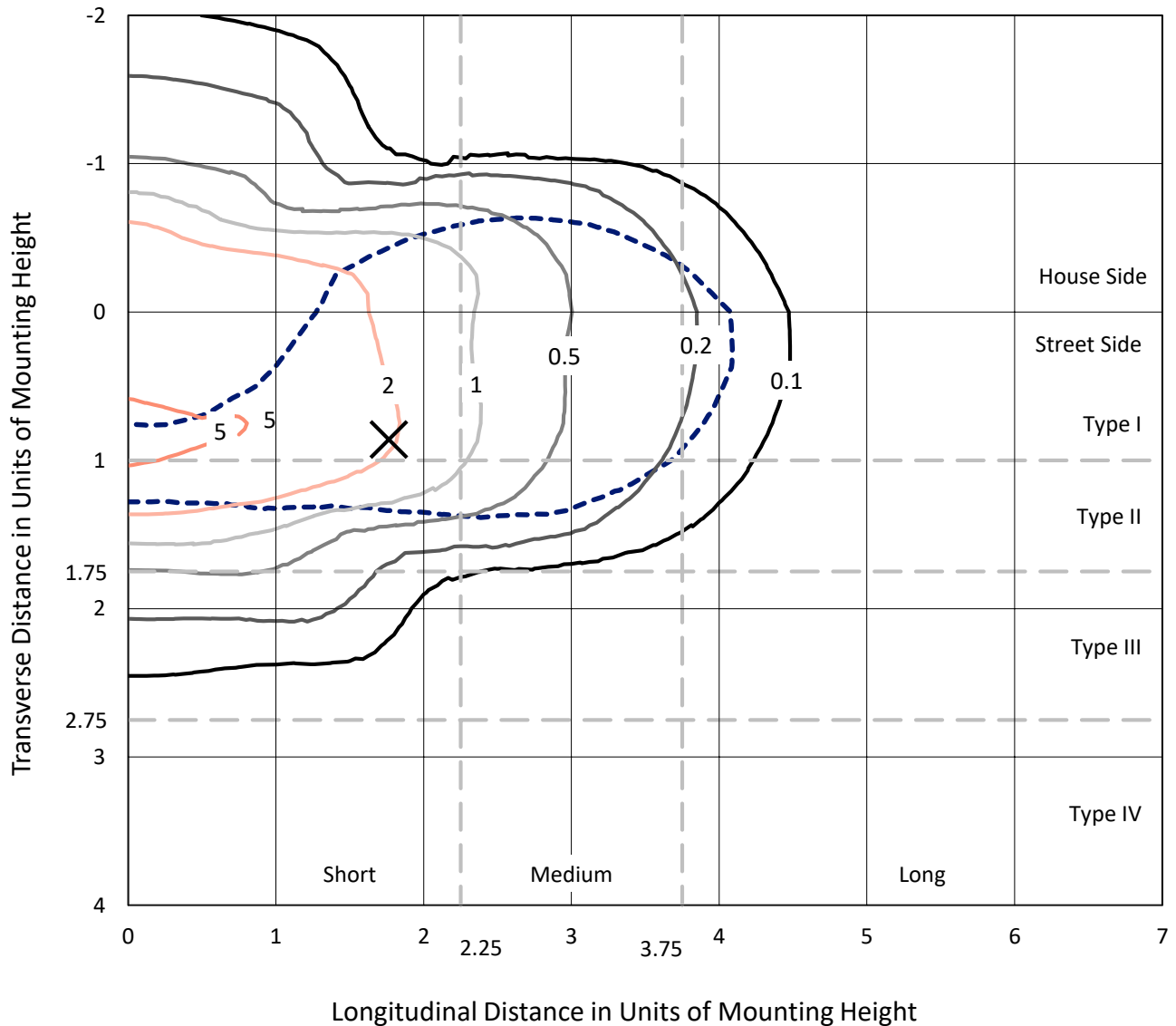
Input Watts (W): 93
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P257945
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

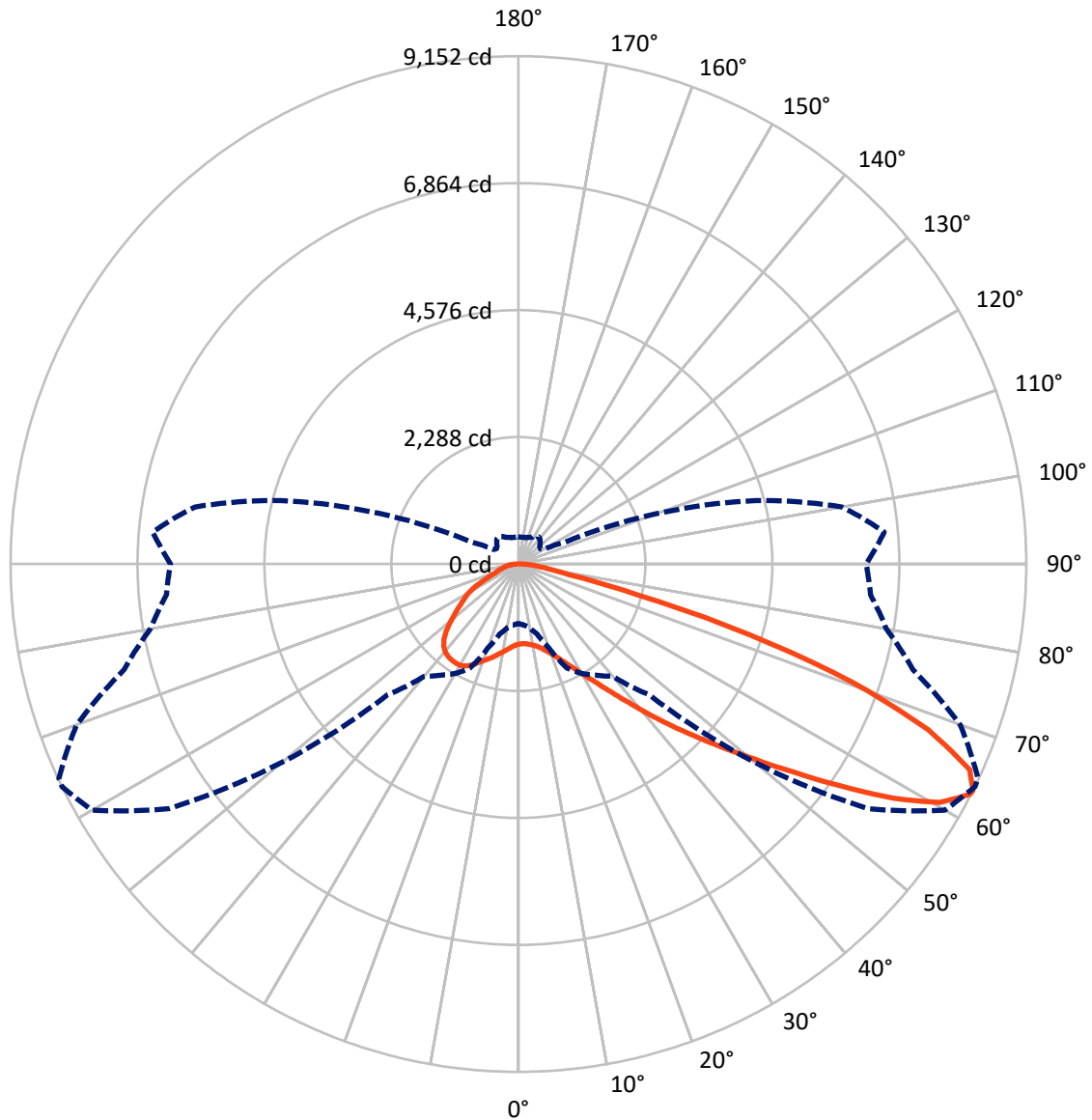


Based on 20 foot mounting height. Maximum calculated value = 5.9 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P257945

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2U

Luminous Intensity Polar Plot



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

REPORT NUMBER: P257945

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2U

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3920.1	0.0	3920.1
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	9415.1	0.0	9415.1
	% Fixture	70.6	0.0	70.6
Total	Lumens	13335.2	0.0	13335.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.2	1.1
10°-20°	480.3	3.6
20°-30°	901.5	6.8
30°-40°	1511.0	11.3
40°-50°	2535.2	19.0
50°-60°	3213.9	24.1
60°-70°	2835.1	21.3
70°-80°	1463.6	11.0
80°-90°	250.4	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°	13335.2	100.0
0°-180°	13335.2	100.0



REPORT NUMBER: P257945

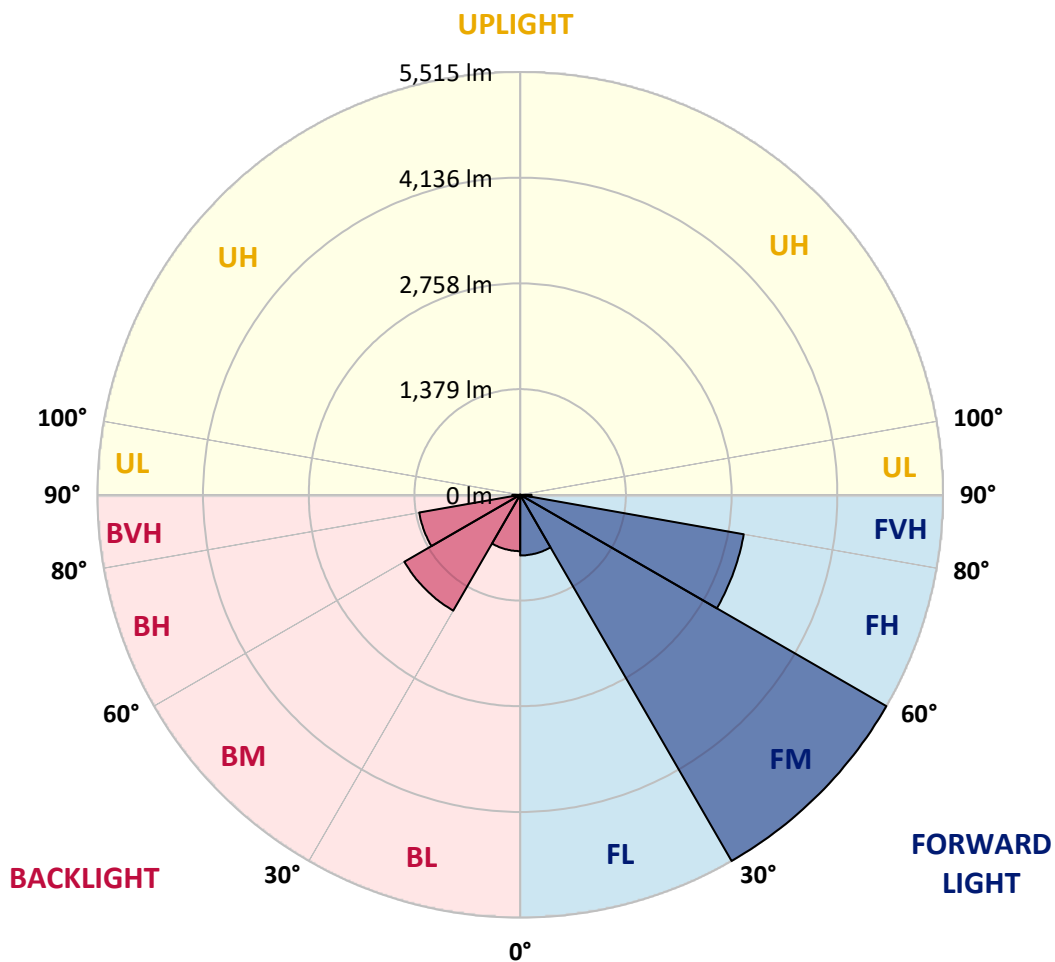
CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	791.5	5.9			
FM	(30°-60°)	5515.1	41.4			
FH	(60°-80°)	2961.2	22.2			G2/5000
FVH	(80°-90°)	147.4	1.1			G2/225
BL	(0°-30°)	734.5	5.5	B2/1000		
BM	(30°-60°)	1745.0	13.1	B2/2500		
BH	(60°-80°)	1337.5	10.0	B3/2500		G3/2500
BVH	(80°-90°)	103.1	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: P257945

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2
2.5°	1435.3	1433.1	1433.1	1433.1	1433.1	1430.8	1433.1	1437.5	1435.3	1433.1	1437.5
5°	1439.7	1437.5	1437.5	1437.5	1439.7	1437.5	1439.7	1446.5	1442.0	1442.0	1446.5
7.5°	1450.9	1448.7	1450.9	1448.7	1448.7	1448.7	1450.9	1457.6	1455.4	1457.6	1464.3
10°	1464.3	1464.3	1464.3	1464.3	1464.3	1464.3	1468.8	1473.3	1475.4	1477.7	1486.7
12.5°	1504.5	1504.5	1504.5	1502.2	1502.2	1495.6	1504.5	1509.0	1513.4	1517.9	1524.5
15°	1589.3	1589.3	1587.0	1578.1	1578.1	1564.7	1567.0	1569.2	1569.2	1573.7	1578.1
17.5°	1700.9	1698.6	1694.2	1687.5	1678.6	1662.9	1658.5	1654.0	1647.4	1645.1	1645.1
20°	1857.2	1854.9	1846.0	1828.1	1817.0	1792.4	1774.5	1756.7	1750.0	1738.8	1736.6
22.5°	2080.4	2080.4	2062.5	2035.7	2026.8	1975.4	1924.1	1886.1	1872.7	1857.2	1857.2
25°	2350.4	2348.2	2323.6	2292.4	2254.5	2200.9	2138.4	2087.0	2053.6	2017.9	2004.5
27.5°	2674.1	2667.4	2633.9	2595.9	2524.5	2457.5	2383.9	2330.4	2272.3	2227.7	2187.5
30°	3053.6	3046.9	2988.9	2917.5	2843.7	2776.8	2669.6	2604.9	2513.4	2459.8	2415.2
32.5°	3493.3	3486.6	3381.7	3312.5	3234.4	3151.8	3024.6	2921.9	2805.9	2729.9	2667.4
35°	4053.5	4026.7	3877.2	3781.2	3658.5	3575.9	3441.9	3303.5	3167.4	3060.3	2968.7
37.5°	4658.5	4627.2	4495.6	4352.7	4232.2	4131.7	3941.9	3767.8	3607.1	3459.8	3346.0
40°	5290.2	5207.5	5067.0	4962.0	4879.5	4783.5	4584.9	4401.8	4149.6	3984.4	3812.5
42.5°	5727.7	5647.3	5549.1	5479.9	5439.7	5366.1	5254.5	5095.9	4870.6	4875.0	4421.9
45°	6015.7	5897.3	5830.3	5834.8	5850.5	5850.5	5830.3	5805.8	5707.6	5774.6	5395.0
47.5°	5913.0	5834.8	5792.4	5881.7	5993.3	6104.9	6234.4	6375.0	6535.7	6725.4	6258.9
50°	5310.2	5339.3	5359.3	5549.1	5788.0	6042.4	6339.3	6723.2	7171.9	7259.0	7033.5
52.5°	4348.3	4410.8	4477.7	4767.9	5082.6	5522.3	6042.4	6676.3	7279.0	7633.9	7611.6
55°	3377.3	3455.3	3598.2	3814.7	4064.7	4479.9	5122.7	6100.5	7040.2	7604.9	7948.6
57.5°	2404.0	2517.9	2705.4	3006.7	3227.7	3462.1	3937.5	5022.3	6051.4	7102.7	7892.9
60°	1598.3	1651.8	1774.5	2149.5	2522.3	2767.9	3104.9	3497.8	4339.3	5788.0	7317.0
62.5°	1133.9	1169.6	1245.5	1415.2	1752.2	2196.4	2399.5	2580.4	2850.5	3723.2	5875.0
63°	1071.4	1102.6	1165.1	1308.0	1611.6	2071.5	2279.0	2444.2	2640.6	3330.3	5558.0
65°	888.4	901.8	935.3	1004.4	1167.4	1549.2	1888.4	1988.8	2022.3	2140.6	3482.1
67.5°	750.0	758.9	770.1	790.1	854.9	1031.2	1408.5	1535.8	1497.8	1417.4	1721.0
70°	651.8	658.5	676.4	700.9	723.2	767.8	968.7	1158.5	1116.0	1006.7	1053.5
72.5°	520.1	531.2	551.4	593.7	638.4	696.4	745.5	863.9	837.1	732.1	743.3
75°	410.7	417.4	435.3	466.6	508.9	575.9	671.9	712.1	638.4	540.2	540.2
77.5°	325.9	332.6	348.2	372.8	399.6	446.4	513.4	618.3	573.7	406.2	404.1
80°	245.5	252.3	267.8	290.2	317.0	350.5	390.7	437.5	526.8	379.5	303.6
82.5°	180.8	183.0	209.8	225.5	234.4	261.2	294.6	321.4	361.6	350.5	270.1
85°	136.2	133.9	151.8	163.0	165.2	171.9	192.0	218.7	236.6	227.7	209.8
87.5°	75.9	67.0	78.2	89.3	89.3	91.6	96.0	111.6	127.3	122.8	111.6
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: P257945

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2U

CANDELA DISTRIBUTION (continued):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2
2.5°	1437.5	1437.5	1435.3	1435.3	1437.5	1437.5	1435.3	1442.0	1446.5	1446.5	1448.7
5°	1444.2	1446.5	1444.2	1444.2	1446.5	1446.5	1448.7	1455.4	1462.0	1466.5	1473.3
7.5°	1464.3	1466.5	1464.3	1464.3	1466.5	1468.8	1473.3	1482.2	1486.7	1495.6	1506.7
10°	1486.7	1488.8	1486.7	1488.8	1491.1	1493.3	1500.0	1506.7	1513.4	1522.4	1540.2
12.5°	1526.8	1529.0	1524.5	1526.8	1533.5	1533.5	1537.9	1542.4	1553.6	1564.7	1582.6
15°	1582.6	1582.6	1578.1	1580.4	1587.0	1587.0	1589.3	1593.8	1607.2	1620.6	1638.4
17.5°	1647.4	1651.8	1649.5	1651.8	1656.3	1658.5	1658.5	1662.9	1671.9	1680.8	1698.6
20°	1734.4	1736.6	1732.2	1736.6	1741.1	1736.6	1732.2	1729.9	1734.4	1738.8	1759.0
22.5°	1852.7	1850.4	1839.3	1839.3	1839.3	1830.4	1819.2	1805.8	1805.8	1799.1	1814.7
25°	1993.3	1986.6	1971.0	1973.2	1957.6	1944.2	1924.1	1904.0	1886.1	1879.5	1881.7
27.5°	2158.5	2145.1	2129.5	2125.0	2109.3	2084.8	2051.3	2013.4	1984.4	1962.0	1957.6
30°	2366.1	2337.0	2310.2	2305.8	2281.3	2241.1	2187.5	2136.1	2087.0	2049.1	2035.7
32.5°	2611.6	2567.0	2524.5	2520.0	2479.9	2426.3	2361.6	2290.2	2218.8	2158.5	2129.5
35°	2899.6	2832.6	2792.5	2781.2	2723.2	2656.3	2584.8	2493.3	2392.9	2308.1	2254.5
37.5°	3250.0	3180.8	3111.6	3113.9	3033.5	2955.3	2859.4	2747.7	2620.5	2502.2	2426.3
40°	3683.0	3584.8	3495.5	3475.5	3406.2	3296.9	3191.9	3062.5	2906.2	2750.0	2640.6
42.5°	4207.6	4046.9	3924.1	3906.2	3814.7	3680.8	3553.5	3381.7	3223.2	3033.5	2901.8
45°	4803.6	4546.9	4399.5	4372.8	4225.4	4089.2	3935.3	3752.2	3558.0	3343.7	3187.5
47.5°	5544.6	5178.6	4928.6	4883.9	4680.8	4502.2	4341.5	4138.3	3906.2	3667.4	3495.5
50°	6408.5	5868.3	5531.2	5462.0	5189.7	4979.9	4774.5	4520.1	4272.4	4022.3	3823.7
52.5°	7274.5	6694.2	6245.5	6160.7	5758.9	5477.7	5207.5	4953.1	4660.7	4412.9	4187.4
55°	7970.9	7584.8	7064.7	6946.4	6370.5	5988.9	5633.9	5343.8	5053.6	4857.2	4591.5
57.5°	8390.7	8370.5	7959.8	7796.8	7009.0	6444.2	6049.1	5718.7	5437.5	5354.9	5002.2
60°	8379.5	8899.6	8723.2	8600.5	7654.0	6910.7	6397.3	6040.2	5808.0	5901.8	5415.2
62.5°	7868.3	8921.9	9133.9	9100.5	8341.6	7285.7	6683.0	6314.8	6191.9	6471.0	5843.7
63°	7683.1	8870.5	9151.7	9138.4	8473.2	7357.2	6732.1	6368.3	6267.8	6616.0	5921.9
65°	6493.3	8421.9	8935.3	8995.5	8756.7	7602.7	6846.0	6504.4	6493.3	6939.7	6107.1
67.5°	3957.6	7116.1	7959.8	8075.9	8357.1	7680.8	6781.2	6457.6	6618.3	6986.7	6051.4
70°	1692.0	4696.5	6397.3	6584.8	7272.4	7292.4	6596.0	6265.6	6589.2	6620.5	5654.1
72.5°	1002.2	2214.3	4354.9	4763.4	5754.5	6274.6	6171.9	5930.8	6207.6	5814.8	4814.7
75°	709.8	1035.7	2212.0	2647.3	4006.7	4790.2	5185.2	5296.8	5285.7	4611.6	3613.9
77.5°	508.9	665.2	933.0	1100.5	2236.6	3075.9	3558.0	3883.9	3779.0	3087.1	2227.7
80°	354.9	459.8	571.4	607.1	1038.0	1580.4	1875.0	2017.9	1955.4	1542.4	997.8
82.5°	256.7	301.4	368.3	390.7	522.3	729.9	868.3	765.6	734.4	569.2	430.8
85°	198.7	194.2	230.0	238.9	305.8	381.7	390.7	303.6	265.7	236.6	241.1
87.5°	140.7	120.5	122.8	127.3	158.5	203.2	198.7	125.0	107.1	113.9	129.5
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: P257945

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2U

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2	1444.2
2.5°	1453.1	1455.4	1459.9	1462.0	1466.5	1466.5	1471.0	1473.3	1477.7	1482.2	1484.4
5°	1479.9	1486.7	1495.6	1500.0	1509.0	1515.6	1524.5	1529.0	1537.9	1544.7	1553.6
7.5°	1520.1	1531.3	1542.4	1555.8	1569.2	1580.4	1589.3	1600.4	1616.1	1627.2	1634.0
10°	1558.1	1573.7	1593.8	1609.4	1629.5	1645.1	1658.5	1678.6	1696.5	1712.0	1721.0
12.5°	1607.2	1627.2	1647.4	1671.9	1698.6	1718.8	1738.8	1765.6	1790.2	1808.1	1817.0
15°	1665.2	1689.7	1712.0	1741.1	1772.4	1799.1	1828.1	1857.2	1875.0	1875.0	1870.6
17.5°	1725.4	1745.6	1772.4	1805.8	1848.2	1881.7	1897.4	1901.8	1895.1	1879.5	1868.3
20°	1785.7	1803.6	1832.6	1872.7	1917.4	1924.1	1908.5	1888.4	1868.3	1841.5	1823.6
22.5°	1834.9	1859.4	1904.0	1950.9	1953.1	1915.2	1872.7	1839.3	1808.1	1776.8	1743.3
25°	1892.9	1926.3	1986.6	2004.5	1946.5	1875.0	1814.7	1765.6	1714.3	1662.9	1625.0
27.5°	1964.3	2013.4	2073.6	2022.3	1908.5	1808.1	1725.4	1651.8	1584.9	1513.4	1471.0
30°	2040.2	2116.1	2129.5	1995.6	1843.8	1714.3	1602.7	1491.1	1406.3	1341.5	1316.9
32.5°	2131.7	2229.9	2149.5	1948.6	1756.7	1587.0	1437.5	1303.5	1232.1	1191.9	1180.8
35°	2270.1	2350.4	2160.7	1899.5	1656.3	1435.3	1247.8	1140.6	1096.0	1069.2	1055.8
37.5°	2468.8	2466.5	2158.5	1839.3	1540.2	1270.1	1096.0	1020.1	984.4	962.1	937.5
40°	2700.9	2555.8	2145.1	1752.2	1384.0	1111.6	991.0	919.6	886.2	859.4	830.3
42.5°	2930.8	2616.1	2107.2	1622.8	1189.7	997.8	915.1	850.5	814.8	785.7	745.5
45°	3129.4	2640.6	2033.5	1444.2	1015.6	908.5	866.0	810.3	767.8	723.2	691.9
47.5°	3285.7	2636.1	1915.2	1234.4	899.6	846.0	825.9	788.0	736.6	680.8	640.7
50°	3417.4	2602.7	1754.5	1049.1	821.4	790.1	783.5	772.3	689.8	642.8	618.3
52.5°	3538.0	2553.6	1582.6	924.1	754.4	727.7	741.0	729.9	671.9	631.7	607.1
55°	3703.1	2520.0	1412.9	828.1	676.4	669.6	680.8	696.4	660.7	622.8	596.0
57.5°	3897.3	2537.9	1283.5	721.0	602.7	607.1	645.1	667.4	649.6	609.4	582.6
60°	4120.5	2591.5	1169.6	618.3	542.4	553.6	609.4	640.7	638.4	591.5	560.3
62.5°	4370.6	2647.3	988.9	540.2	491.1	508.9	566.9	607.1	613.9	573.7	535.7
63°	4419.7	2651.8	941.9	524.6	482.1	502.3	555.8	598.2	607.1	569.2	531.2
65°	4540.2	2611.6	758.9	482.1	446.4	468.7	522.3	560.3	578.2	544.6	513.4
67.5°	4439.7	2283.4	571.4	430.8	417.4	433.0	479.9	515.7	531.2	515.7	484.4
70°	4060.3	1660.8	446.4	383.9	386.2	397.3	433.0	466.6	484.4	479.9	450.9
72.5°	3270.1	941.9	372.8	343.7	350.5	363.9	388.4	419.6	435.3	433.0	413.0
75°	2154.0	482.1	314.8	308.0	312.5	323.7	341.6	366.1	383.9	381.7	372.8
77.5°	1066.9	334.8	270.1	272.3	274.6	283.5	296.9	319.2	330.3	332.6	330.3
80°	439.8	261.2	232.1	234.4	236.6	243.3	252.3	272.3	279.1	283.5	285.7
82.5°	263.4	198.7	185.3	189.8	192.0	198.7	205.3	223.2	230.0	236.6	236.6
85°	174.1	138.4	133.9	138.4	142.9	147.3	149.6	160.7	171.9	180.8	185.3
87.5°	93.7	82.6	80.4	82.6	82.6	87.1	91.6	102.7	116.1	125.0	129.5
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: P257945

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2U

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	1444.2	1444.2	1444.2	1444.2	1444.2
2.5°	1479.9	1482.2	1479.9	1482.2	1484.4
5°	1553.6	1558.1	1555.8	1555.8	1564.7
7.5°	1638.4	1647.4	1647.4	1651.8	1656.3
10°	1729.9	1738.8	1745.6	1745.6	1752.2
12.5°	1821.5	1825.9	1832.6	1832.6	1832.6
15°	1868.3	1866.1	1863.8	1861.6	1861.6
17.5°	1861.6	1852.7	1848.2	1843.8	1846.0
20°	1812.5	1796.9	1792.4	1785.7	1790.2
22.5°	1727.7	1705.4	1696.5	1685.3	1689.7
25°	1600.4	1573.7	1569.2	1555.8	1562.5
27.5°	1453.1	1439.7	1437.5	1435.3	1446.5
30°	1314.7	1319.2	1321.4	1325.8	1337.1
32.5°	1187.5	1196.4	1198.7	1200.8	1216.5
35°	1062.5	1051.4	1062.5	1058.0	1071.4
37.5°	926.4	917.4	908.5	897.3	906.2
40°	812.5	796.9	770.1	756.7	758.9
42.5°	723.2	703.1	680.8	667.4	667.4
45°	665.2	640.7	620.5	611.6	611.6
47.5°	620.5	609.4	598.2	591.5	591.5
50°	602.7	589.3	582.6	578.2	578.2
52.5°	589.3	575.9	569.2	564.8	560.3
55°	578.2	558.0	551.4	549.1	549.1
57.5°	562.5	544.6	535.7	533.5	533.5
60°	538.0	524.6	515.7	513.4	513.4
62.5°	513.4	500.0	491.1	491.1	491.1
63°	508.9	493.3	486.6	486.6	486.6
65°	488.9	473.2	466.6	466.6	464.3
67.5°	462.1	446.4	441.9	441.9	437.5
70°	430.8	417.4	413.0	415.2	406.2
72.5°	399.6	386.2	379.5	379.5	370.5
75°	363.9	350.5	341.6	339.3	330.3
77.5°	323.7	312.5	303.6	294.6	290.2
80°	281.2	272.3	261.2	254.5	247.8
82.5°	236.6	227.7	221.0	230.0	196.4
85°	185.3	176.4	167.5	180.8	140.7
87.5°	136.2	131.7	122.8	107.1	93.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)