

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: P265601

Luminaire Tested: **ARCH-L-AF72-120-D-U-T2U-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265601  
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-AF72-120-D-U-T2U-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14366.9 lumens  
Efficiency: N/A  
Efficacy: 116.8 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

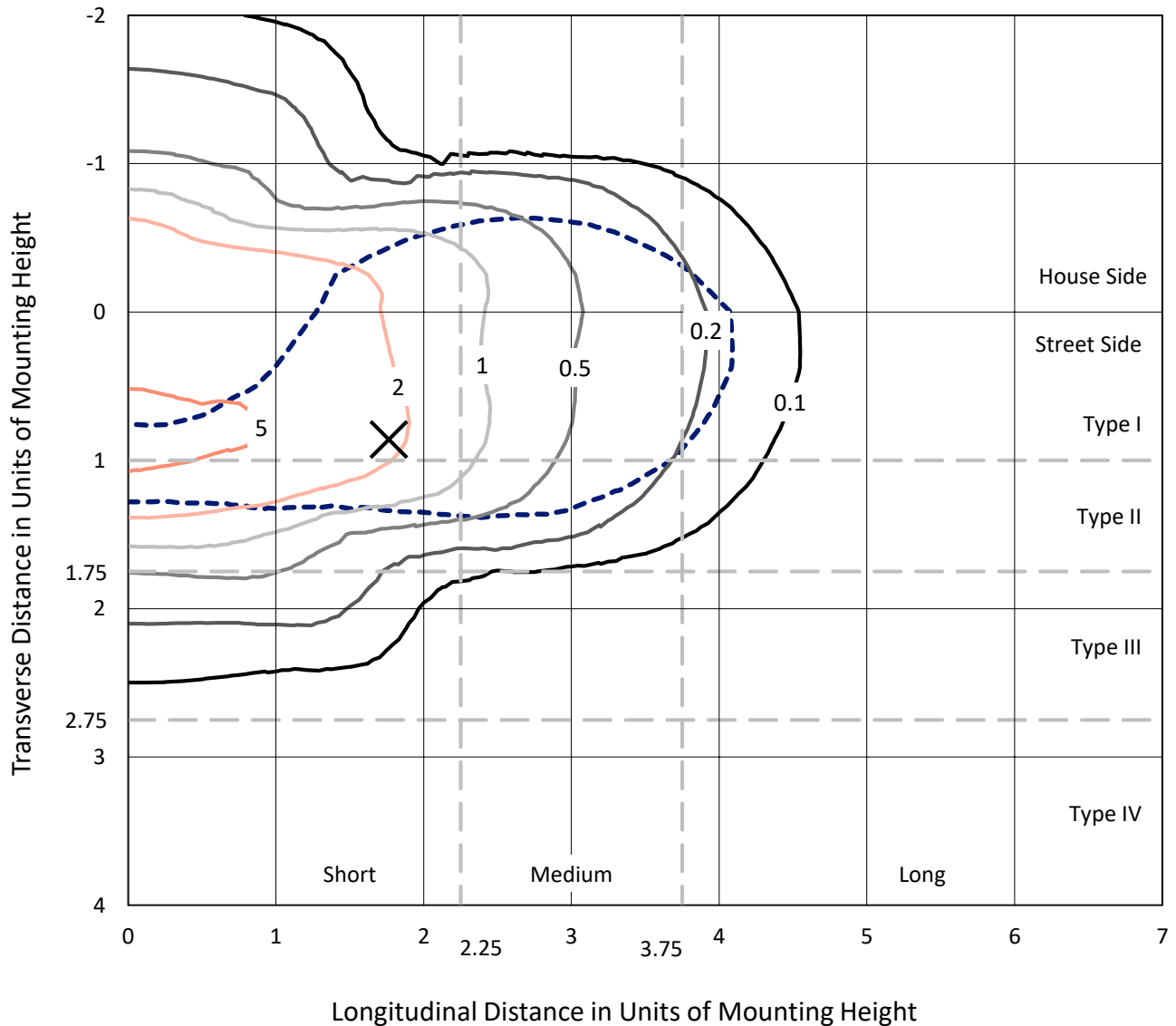
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P265601  
 CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2U-7027

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

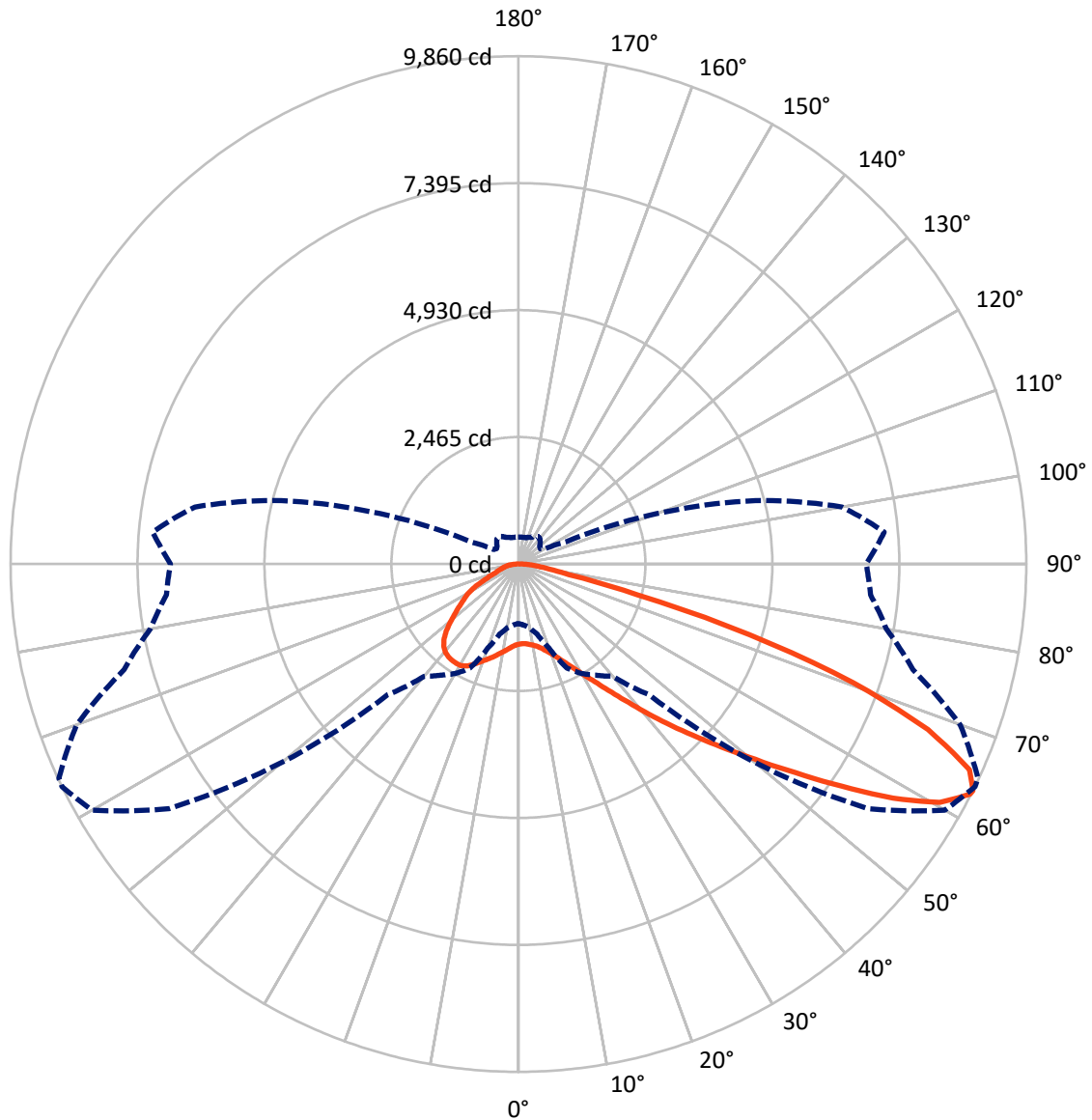


Based on 20 foot mounting height. Maximum calculated value = 6.3 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P265601

CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2U-7027

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P265601

CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2U-7027

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4223.4	0.0	4223.4
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	10143.6	0.0	10143.6
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	14366.9	0.0	14366.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.3	1.1
10°-20°	517.4	3.6
20°-30°	971.3	6.8
30°-40°	1628.0	11.3
40°-50°	2731.3	19.0
50°-60°	3462.5	24.1
60°-70°	3054.5	21.3
70°-80°	1576.8	11.0
80°-90°	269.8	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°	14366.9	100.0
0°-180°	14366.9	100.0



REPORT NUMBER: P265601

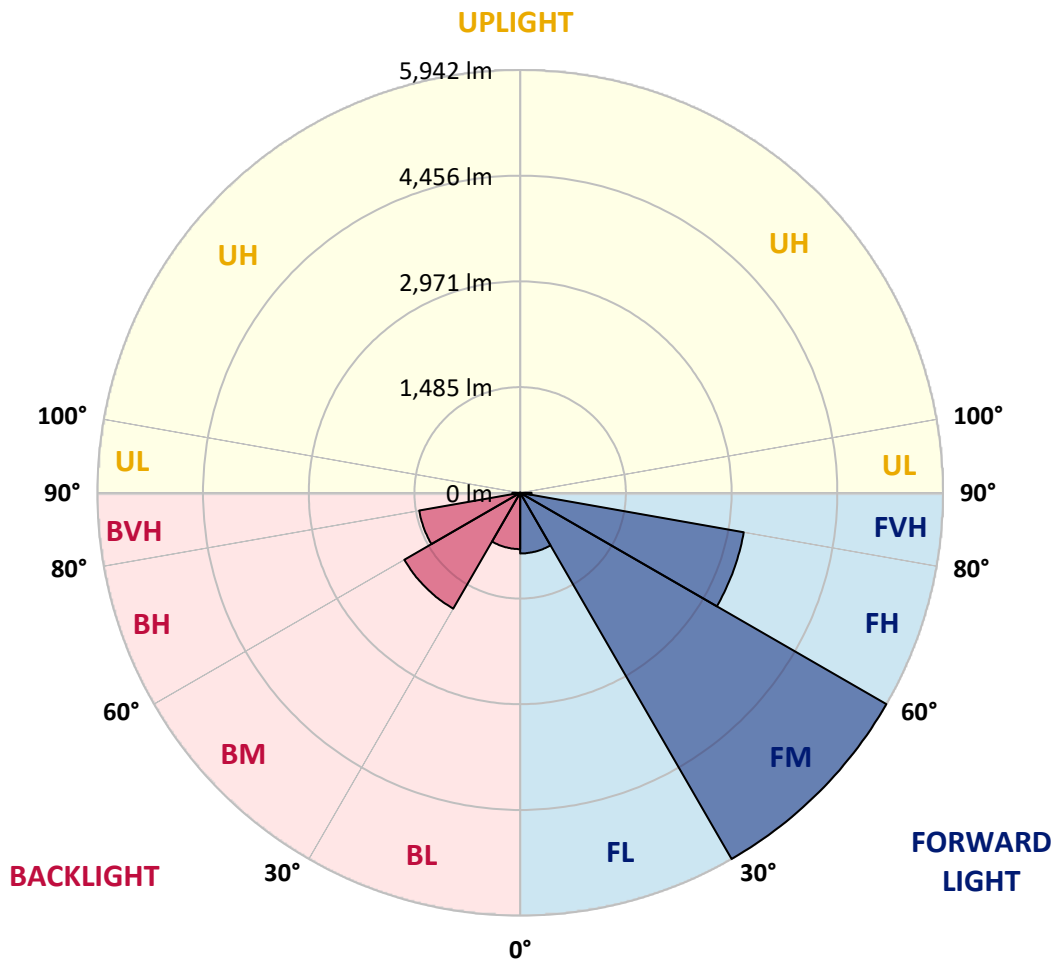
CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2U-7027

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	852.7	5.9			
FM	(30°-60°)	5941.8	41.4			
FH	(60°-80°)	3190.3	22.2			G2/5000
FVH	(80°-90°)	158.8	1.1			G2/225
BL	(0°-30°)	791.3	5.5	B2/1000		
BM	(30°-60°)	1880.0	13.1	B2/2500		
BH	(60°-80°)	1441.0	10.0	B3/2500		G3/2500
BVH	(80°-90°)	111.0	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: P265601

CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2U-7027

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0
2.5°	1546.3	1543.8	1543.8	1543.8	1543.8	1541.5	1543.8	1548.7	1546.3	1543.8	1548.7
5°	1551.2	1548.7	1548.7	1548.7	1551.2	1548.7	1551.2	1558.3	1553.4	1553.4	1558.3
7.5°	1563.1	1560.7	1563.1	1560.7	1560.7	1560.7	1563.1	1570.3	1567.9	1570.3	1577.6
10°	1577.6	1577.6	1577.6	1577.6	1577.6	1577.6	1582.4	1587.1	1589.6	1591.9	1601.6
12.5°	1620.8	1620.8	1620.8	1618.4	1618.4	1611.2	1620.8	1625.7	1630.5	1635.3	1642.6
15°	1712.3	1712.3	1709.8	1700.2	1700.2	1685.8	1688.3	1690.6	1690.6	1695.5	1700.2
17.5°	1832.5	1830.0	1825.3	1818.1	1808.5	1791.6	1786.8	1782.0	1774.8	1772.4	1772.4
20°	2000.9	1998.4	1988.8	1969.5	1957.5	1931.0	1911.9	1892.5	1885.5	1873.3	1871.0
22.5°	2241.4	2241.4	2222.0	2193.2	2183.6	2128.3	2073.0	2032.1	2017.7	2000.9	2000.9
25°	2532.3	2529.8	2503.4	2469.8	2428.8	2371.2	2303.9	2248.5	2212.4	2174.0	2159.5
27.5°	2881.0	2873.8	2837.7	2796.9	2719.9	2647.8	2568.3	2510.7	2448.2	2400.0	2356.8
30°	3289.9	3282.5	3220.1	3143.1	3063.8	2991.6	2876.3	2806.5	2707.9	2650.1	2602.0
32.5°	3763.5	3756.4	3643.3	3568.7	3484.6	3395.7	3258.5	3147.9	3022.8	2941.1	2873.8
35°	4367.2	4338.4	4177.2	4073.9	3941.6	3852.6	3708.3	3559.2	3412.5	3297.0	3198.4
37.5°	5018.9	4985.2	4843.3	4689.4	4559.5	4451.3	4246.9	4059.4	3886.2	3727.4	3604.9
40°	5699.4	5610.5	5459.0	5346.0	5257.1	5153.5	4939.5	4742.3	4470.7	4292.6	4107.5
42.5°	6170.8	6084.2	5978.4	5903.9	5860.6	5781.2	5660.9	5490.3	5247.4	5252.2	4764.0
45°	6481.0	6353.6	6281.5	6286.2	6303.0	6303.0	6281.5	6255.0	6149.2	6221.3	5812.6
47.5°	6370.4	6286.2	6240.5	6336.7	6456.9	6577.2	6716.7	6868.3	7041.4	7245.8	6743.1
50°	5721.1	5752.3	5774.0	5978.4	6235.8	6509.8	6829.8	7243.4	7726.7	7820.6	7577.7
52.5°	4684.7	4751.9	4824.1	5136.8	5475.8	5949.6	6509.8	7192.9	7842.3	8224.5	8200.4
55°	3638.6	3722.7	3876.5	4109.8	4379.1	4826.6	5519.0	6572.4	7584.8	8193.4	8563.6
57.5°	2590.1	2712.6	2914.7	3239.3	3477.3	3729.9	4242.2	5410.9	6519.4	7652.2	8503.5
60°	1722.0	1779.6	1911.9	2315.9	2717.5	2982.1	3345.1	3768.4	4675.0	6235.8	7883.0
62.5°	1221.7	1260.1	1341.9	1524.7	1887.8	2366.3	2585.2	2780.0	3070.9	4011.3	6329.5
63°	1154.3	1188.0	1255.3	1409.3	1736.3	2231.7	2455.3	2633.3	2844.9	3588.0	5988.0
65°	957.1	971.5	1007.5	1082.2	1257.7	1669.0	2034.5	2142.6	2178.7	2306.3	3751.5
67.5°	808.0	817.6	829.7	851.4	921.0	1111.1	1517.4	1654.5	1613.6	1527.1	1854.1
70°	702.2	709.4	728.6	755.1	779.2	827.2	1043.7	1248.1	1202.4	1084.6	1135.1
72.5°	560.4	572.4	594.0	639.8	687.8	750.4	803.3	930.6	901.8	788.8	800.7
75°	442.4	449.7	468.9	502.6	548.2	620.5	723.9	767.2	687.8	582.0	582.0
77.5°	351.1	358.3	375.1	401.6	430.5	481.0	553.0	666.2	618.0	437.7	435.3
80°	264.6	271.7	288.5	312.6	341.4	377.6	420.9	471.3	567.5	408.8	327.1
82.5°	194.8	197.2	226.1	242.9	252.6	281.3	317.5	346.2	389.5	377.6	291.1
85°	146.8	144.3	163.5	175.6	178.0	185.2	206.8	235.6	254.8	245.2	226.1
87.5°	81.7	72.1	84.3	96.2	96.2	98.6	103.5	120.3	137.1	132.3	120.3
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: P265601  
 CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2U-7027

**CANDELA DISTRIBUTION (continued):**

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0
2.5°	1548.7	1548.7	1546.3	1546.3	1548.7	1548.7	1546.3	1553.4	1558.3	1558.3	1560.7
5°	1556.0	1558.3	1556.0	1556.0	1558.3	1558.3	1560.7	1567.9	1575.2	1579.9	1587.1
7.5°	1577.6	1579.9	1577.6	1577.6	1579.9	1582.4	1587.1	1596.7	1601.6	1611.2	1623.2
10°	1601.6	1604.1	1601.6	1604.1	1606.3	1608.9	1616.1	1623.2	1630.5	1640.0	1659.3
12.5°	1644.8	1647.3	1642.6	1644.8	1652.2	1652.2	1657.0	1661.8	1673.7	1685.8	1705.1
15°	1705.1	1705.1	1700.2	1702.6	1709.8	1709.8	1712.3	1717.1	1731.6	1745.9	1765.2
17.5°	1774.8	1779.6	1777.1	1779.6	1784.5	1786.8	1786.8	1791.6	1801.2	1810.9	1830.0
20°	1868.6	1871.0	1866.1	1871.0	1875.8	1871.0	1866.1	1863.8	1868.6	1873.3	1895.1
22.5°	1996.0	1993.6	1981.7	1981.7	1981.7	1972.0	1959.9	1945.5	1945.5	1938.4	1955.2
25°	2147.5	2140.3	2123.5	2125.8	2109.0	2094.6	2073.0	2051.3	2032.1	2024.9	2027.3
27.5°	2325.5	2311.1	2294.2	2289.4	2272.6	2246.1	2210.0	2169.1	2137.8	2113.8	2109.0
30°	2549.1	2517.9	2489.1	2484.3	2457.8	2414.5	2356.8	2301.5	2248.5	2207.7	2193.2
32.5°	2813.8	2765.5	2719.9	2715.0	2671.7	2614.1	2544.3	2467.4	2390.4	2325.5	2294.2
35°	3123.9	3051.7	3008.5	2996.4	2934.0	2861.8	2784.7	2686.2	2578.0	2486.6	2428.8
37.5°	3501.5	3426.9	3352.4	3354.8	3268.2	3184.0	3080.6	2960.4	2823.4	2695.9	2614.1
40°	3968.1	3862.2	3766.0	3744.3	3669.8	3552.0	3438.9	3299.5	3131.1	2962.8	2844.9
42.5°	4533.1	4360.0	4227.8	4208.5	4109.8	3965.6	3828.4	3643.3	3472.6	3268.2	3126.3
45°	5175.2	4898.6	4739.9	4711.2	4552.4	4405.6	4239.7	4042.6	3833.2	3602.5	3434.1
47.5°	5973.5	5579.3	5309.9	5261.8	5042.9	4850.6	4677.5	4458.6	4208.5	3951.1	3766.0
50°	6904.4	6322.4	5959.1	5884.6	5591.3	5365.1	5144.0	4869.8	4602.8	4333.6	4119.4
52.5°	7837.4	7212.1	6728.8	6637.3	6204.6	5901.4	5610.5	5336.3	5021.3	4754.4	4511.5
55°	8587.6	8171.6	7611.2	7483.9	6863.4	6452.2	6069.8	5757.1	5444.5	5232.9	4946.7
57.5°	9039.9	9018.2	8575.7	8400.1	7551.2	6942.8	6517.2	6161.2	5858.1	5769.3	5389.2
60°	9027.7	9588.1	9398.1	9265.8	8246.3	7445.4	6892.2	6507.5	6257.5	6358.5	5834.1
62.5°	8477.0	9612.1	9840.7	9804.6	8987.0	7849.4	7200.1	6803.4	6671.1	6971.7	6296.0
63°	8277.4	9556.9	9859.8	9845.5	9128.8	7926.4	7252.9	6861.1	6752.7	7128.0	6380.0
65°	6995.7	9073.5	9626.5	9691.5	9434.2	8190.8	7375.7	7007.7	6995.7	7476.7	6579.6
67.5°	4263.7	7666.7	8575.7	8700.8	9003.7	8275.0	7305.9	6957.3	7130.3	7527.2	6519.4
70°	1822.9	5059.9	6892.2	7094.3	7834.9	7856.7	7106.3	6750.5	7099.0	7132.7	6091.4
72.5°	1079.8	2385.5	4691.8	5131.9	6199.7	6760.0	6649.3	6389.6	6687.8	6264.6	5187.3
75°	764.7	1115.9	2383.3	2852.2	4316.6	5160.9	5586.5	5706.8	5694.6	4968.3	3893.4
77.5°	548.2	716.7	1005.3	1185.7	2409.7	3313.8	3833.2	4184.5	4071.4	3325.9	2400.0
80°	382.4	495.3	615.7	654.1	1118.3	1702.6	2020.1	2174.0	2106.6	1661.8	1074.9
82.5°	276.6	324.6	396.8	420.9	562.8	786.3	935.5	824.9	791.1	613.3	464.2
85°	214.1	209.2	247.8	257.4	329.5	411.2	420.9	327.1	286.2	254.8	259.7
87.5°	151.5	129.8	132.3	137.1	170.8	218.8	214.1	134.7	115.4	122.7	139.4
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: P265601

CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2U-7027

**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0	1556.0
2.5°	1565.6	1567.9	1572.8	1575.2	1579.9	1579.9	1584.8	1587.1	1591.9	1596.7	1599.3
5°	1594.4	1601.6	1611.2	1616.1	1625.7	1632.8	1642.6	1647.3	1657.0	1664.1	1673.7
7.5°	1637.7	1649.6	1661.8	1676.1	1690.6	1702.6	1712.3	1724.2	1741.2	1753.1	1760.4
10°	1678.7	1695.5	1717.1	1733.9	1755.6	1772.4	1786.8	1808.5	1827.7	1844.5	1854.1
12.5°	1731.6	1753.1	1774.8	1801.2	1830.0	1851.8	1873.3	1902.3	1928.8	1948.0	1957.5
15°	1794.1	1820.4	1844.5	1875.8	1909.4	1938.4	1969.5	2000.9	2020.1	2020.1	2015.3
17.5°	1859.0	1880.6	1909.4	1945.5	1991.3	2027.3	2044.2	2048.9	2041.7	2024.9	2012.8
20°	1923.9	1943.2	1974.4	2017.7	2065.7	2073.0	2056.1	2034.5	2012.8	1983.9	1964.8
22.5°	1976.8	2003.2	2051.3	2101.9	2104.2	2063.3	2017.7	1981.7	1948.0	1914.3	1878.1
25°	2039.3	2075.4	2140.3	2159.5	2097.1	2020.1	1955.2	1902.3	1846.9	1791.6	1750.7
27.5°	2116.2	2169.1	2234.1	2178.7	2056.1	1948.0	1859.0	1779.6	1707.5	1630.5	1584.8
30°	2198.1	2279.8	2294.2	2150.0	1986.4	1846.9	1726.7	1606.3	1515.0	1445.4	1418.9
32.5°	2296.6	2402.4	2315.9	2099.3	1892.5	1709.8	1548.7	1404.4	1327.4	1284.1	1272.2
35°	2445.7	2532.3	2327.9	2046.5	1784.5	1546.3	1344.4	1228.9	1180.8	1151.9	1137.6
37.5°	2659.7	2657.4	2325.5	1981.7	1659.3	1368.4	1180.8	1098.9	1060.4	1036.5	1010.1
40°	2909.9	2753.6	2311.1	1887.8	1490.9	1197.6	1067.7	990.8	954.7	925.9	894.6
42.5°	3157.5	2818.5	2270.1	1748.3	1281.8	1074.9	986.0	916.2	877.7	846.6	803.3
45°	3371.6	2844.9	2190.7	1556.0	1094.1	978.8	933.1	873.0	827.2	779.2	745.6
47.5°	3540.0	2840.1	2063.3	1329.9	969.1	911.4	889.9	848.9	793.7	733.5	690.2
50°	3681.9	2804.1	1890.3	1130.2	885.0	851.4	844.0	832.1	743.1	692.7	666.2
52.5°	3811.7	2751.1	1705.1	995.6	812.8	784.0	798.5	786.3	723.9	680.6	654.1
55°	3989.6	2715.0	1522.3	892.1	728.6	721.5	733.5	750.4	711.8	670.9	642.1
57.5°	4198.9	2734.4	1382.9	776.8	649.4	654.1	695.0	719.1	699.8	656.5	627.6
60°	4439.3	2792.0	1260.1	666.2	584.3	596.5	656.5	690.2	687.8	637.3	603.7
62.5°	4708.6	2852.2	1065.3	582.0	529.0	548.2	610.8	654.1	661.3	618.0	577.3
63°	4761.6	2857.0	1014.8	565.2	519.4	541.0	598.8	644.5	654.1	613.3	572.4
65°	4891.5	2813.8	817.6	519.4	481.0	504.9	562.8	603.7	622.9	586.9	553.0
67.5°	4783.3	2460.2	615.7	464.2	449.7	466.5	517.1	555.5	572.4	555.5	521.8
70°	4374.3	1789.2	481.0	413.6	416.1	428.0	466.5	502.6	521.8	517.1	485.8
72.5°	3523.2	1014.8	401.6	370.3	377.6	392.0	418.4	452.0	468.9	466.5	444.9
75°	2320.7	519.4	339.1	331.8	336.7	348.7	367.9	394.4	413.6	411.2	401.6
77.5°	1149.6	360.7	291.1	293.3	295.8	305.5	319.8	344.0	355.9	358.3	355.9
80°	473.8	281.3	250.1	252.6	254.8	262.1	271.7	293.3	300.7	305.5	307.8
82.5°	283.8	214.1	199.7	204.5	206.8	214.1	221.3	240.4	247.8	254.8	254.8
85°	187.6	149.1	144.3	149.1	153.9	158.7	161.2	173.2	185.2	194.8	199.7
87.5°	101.0	89.0	86.5	89.0	89.0	93.9	98.6	110.6	125.0	134.7	139.4
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: P265601

CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2U-7027

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	1556.0	1556.0	1556.0	1556.0	1556.0
2.5°	1594.4	1596.7	1594.4	1596.7	1599.3
5°	1673.7	1678.7	1676.1	1676.1	1685.8
7.5°	1765.2	1774.8	1774.8	1779.6	1784.5
10°	1863.8	1873.3	1880.6	1880.6	1887.8
12.5°	1962.3	1967.2	1974.4	1974.4	1974.4
15°	2012.8	2010.4	2008.0	2005.6	2005.6
17.5°	2005.6	1996.0	1991.3	1986.4	1988.8
20°	1952.7	1935.8	1931.0	1923.9	1928.8
22.5°	1861.4	1837.4	1827.7	1815.7	1820.4
25°	1724.2	1695.5	1690.6	1676.1	1683.5
27.5°	1565.6	1551.2	1548.7	1546.3	1558.3
30°	1416.4	1421.3	1423.6	1428.5	1440.5
32.5°	1279.4	1289.0	1291.5	1293.7	1310.6
35°	1144.7	1132.8	1144.7	1139.9	1154.3
37.5°	997.9	988.3	978.8	966.8	976.4
40°	875.4	858.5	829.7	815.2	817.6
42.5°	779.2	757.5	733.5	719.1	719.1
45°	716.7	690.2	668.6	658.9	658.9
47.5°	668.6	656.5	644.5	637.3	637.3
50°	649.4	634.9	627.6	622.9	622.9
52.5°	634.9	620.5	613.3	608.4	603.7
55°	622.9	601.2	594.0	591.7	591.7
57.5°	606.0	586.9	577.3	574.7	574.7
60°	579.5	565.2	555.5	553.0	553.0
62.5°	553.0	538.7	529.0	529.0	529.0
63°	548.2	531.4	524.3	524.3	524.3
65°	526.6	509.8	502.6	502.6	500.1
67.5°	497.8	481.0	476.1	476.1	471.3
70°	464.2	449.7	444.9	447.3	437.7
72.5°	430.5	416.1	408.8	408.8	399.1
75°	392.0	377.6	367.9	365.5	355.9
77.5°	348.7	336.7	327.1	317.5	312.6
80°	303.0	293.3	281.3	274.2	266.9
82.5°	254.8	245.2	238.1	247.8	211.6
85°	199.7	190.0	180.4	194.8	151.5
87.5°	146.8	141.9	132.3	115.4	101.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)