

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: P258173

Luminaire Tested: **ARCH-M-AF48-130-D-U-T2U-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258173  
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-M-AF48-130-D-U-T2U-7030  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 845mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15526.8 lumens  
Efficiency: N/A  
Efficacy: 118.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 131  
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

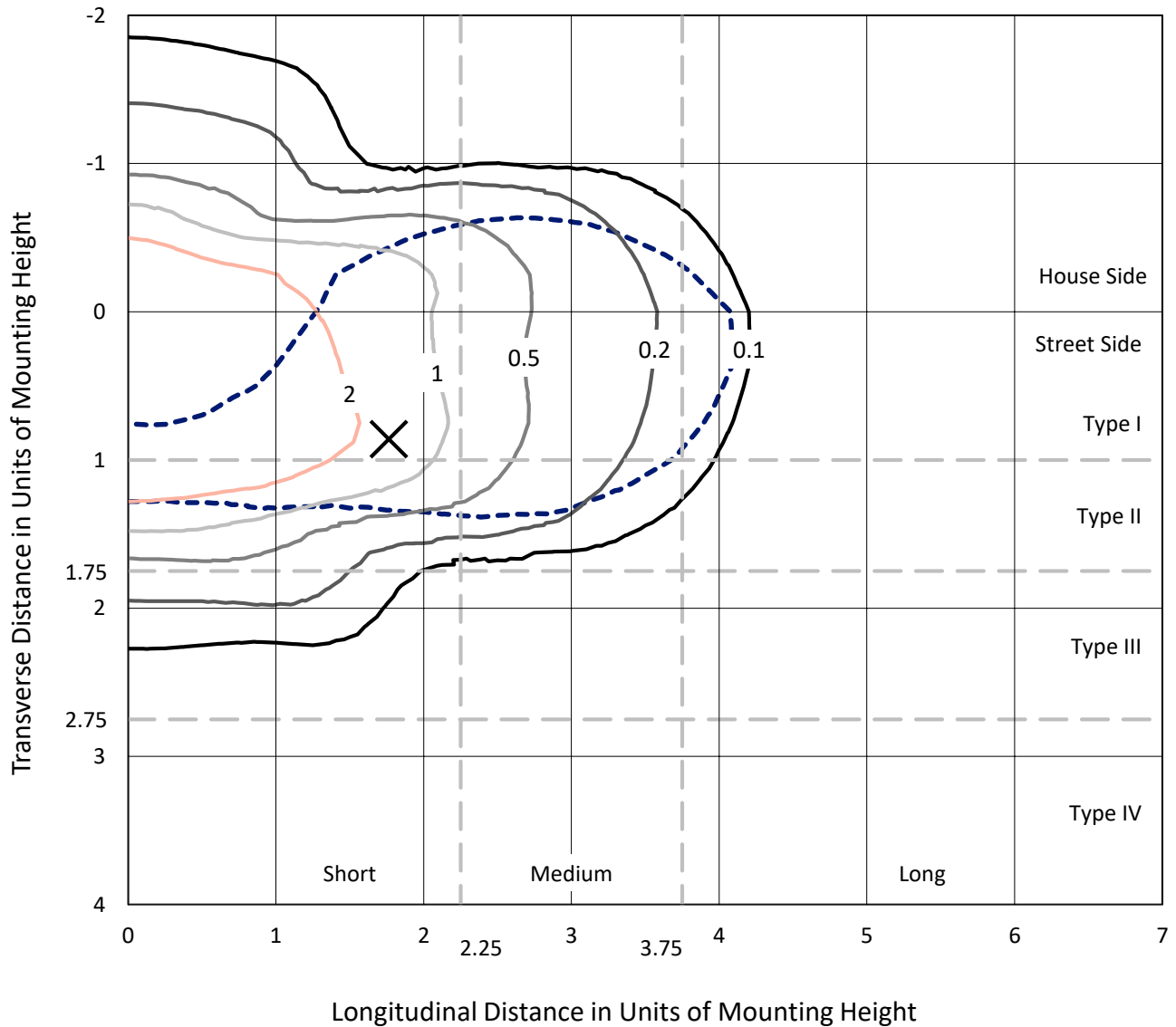


REPORT NUMBER: P258173

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-7030

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

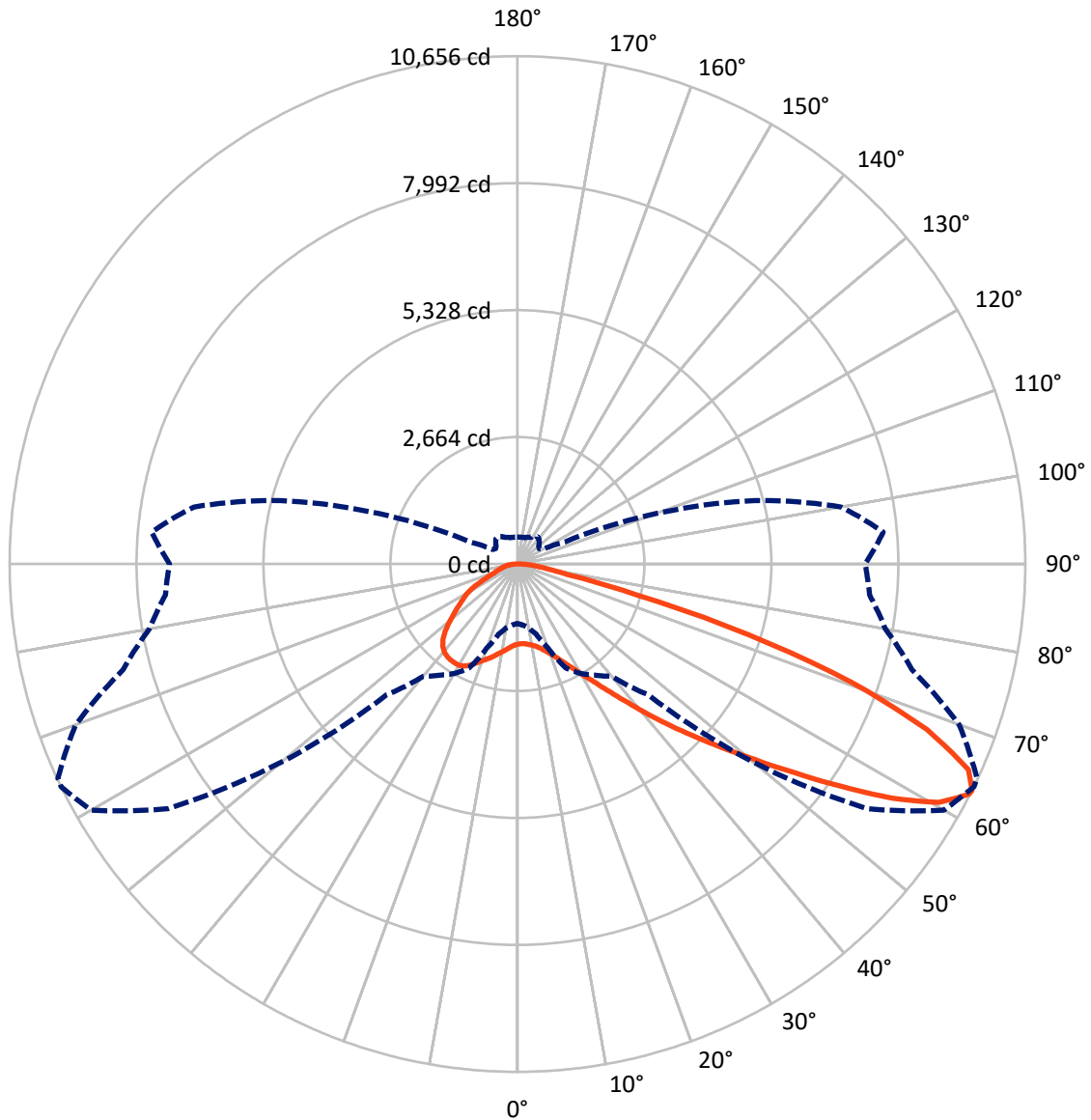


Based on 25 foot mounting height. Maximum calculated value = 4.4 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P258173

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-7030

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P258173

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-7030

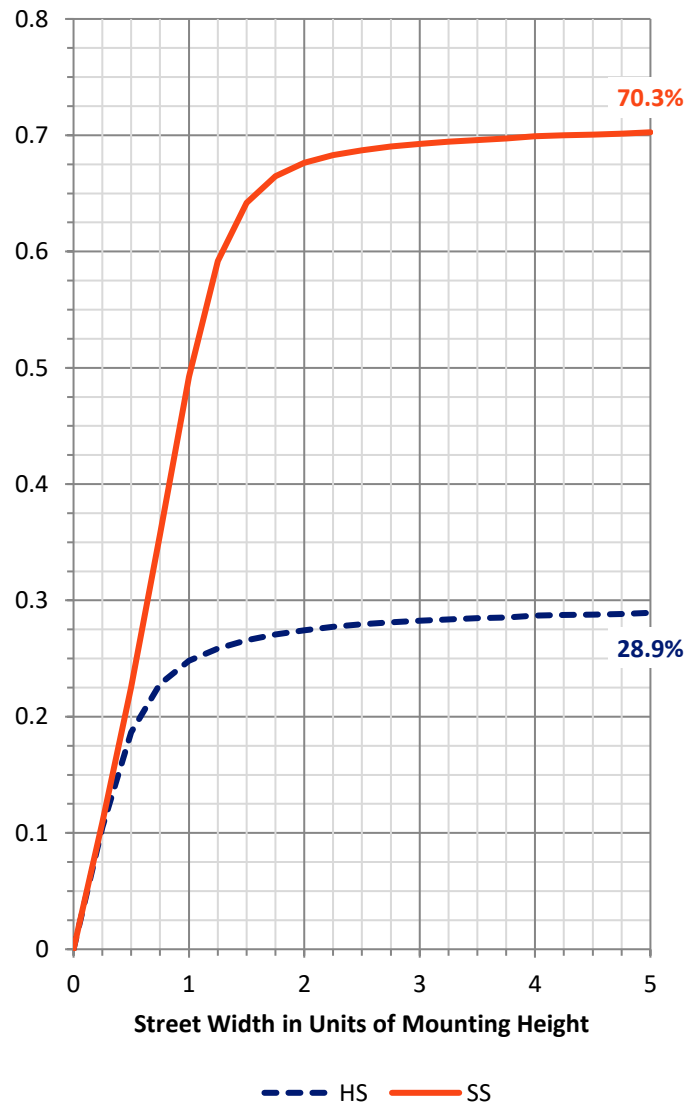
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4564.3	0.0	4564.3
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	10962.5	0.0	10962.5
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	15526.8	0.0	15526.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.9	1.1
10°-20°	559.2	3.6
20°-30°	1049.7	6.8
30°-40°	1759.4	11.3
40°-50°	2951.9	19.0
50°-60°	3742.1	24.1
60°-70°	3301.1	21.3
70°-80°	1704.1	11.0
80°-90°	291.6	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°	15526.8	100.0
0°-180°	15526.8	100.0



REPORT NUMBER: P258173

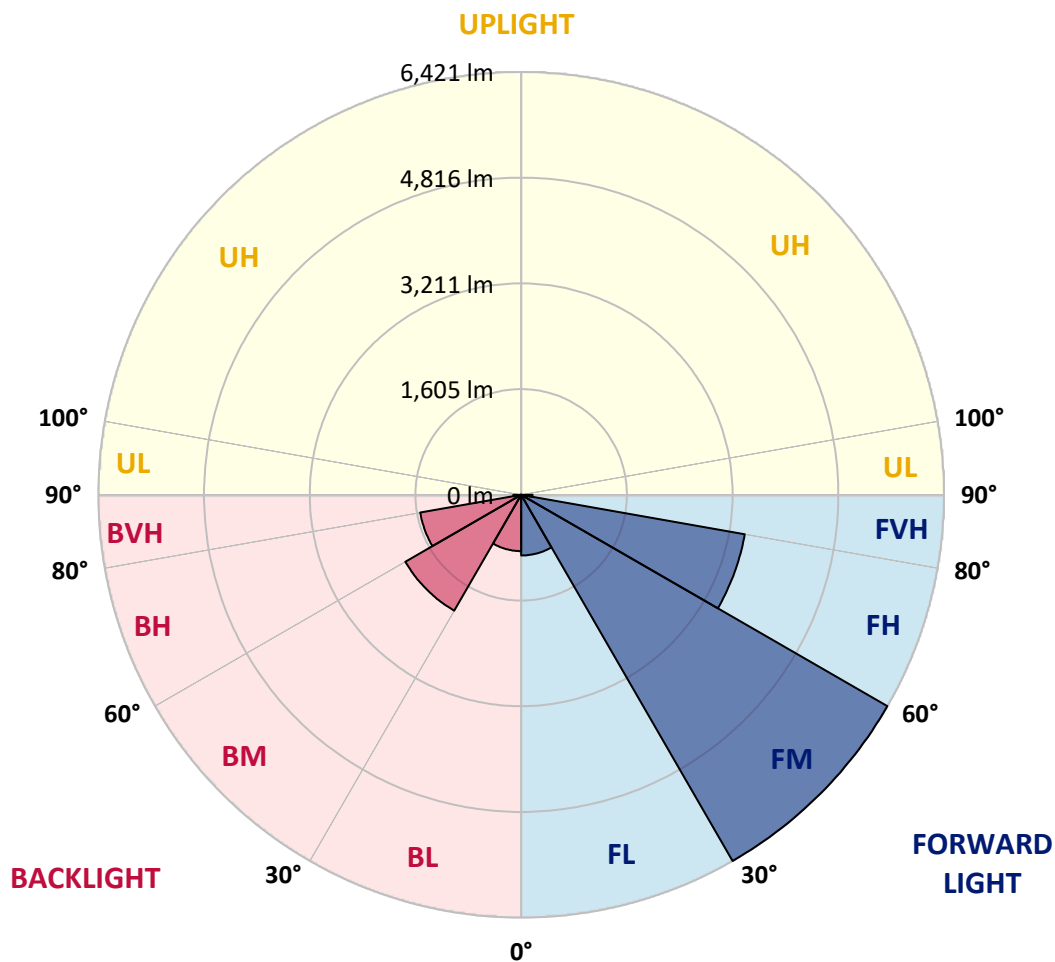
CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-7030

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	921.6	5.9			
FM	(30°-60°)	6421.5	41.4			
FH	(60°-80°)	3447.8	22.2			G2/5000
FVH	(80°-90°)	171.6	1.1			G2/225
BL	(0°-30°)	855.2	5.5	B2/1000		
BM	(30°-60°)	2031.8	13.1	B2/2500		
BH	(60°-80°)	1557.3	10.0	B3/2500		G3/2500
BVH	(80°-90°)	120.0	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: P258173

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5
2.5°	1671.1	1668.6	1668.6	1668.6	1668.6	1665.9	1668.6	1673.8	1671.1	1668.6	1673.8
5°	1676.4	1673.8	1673.8	1673.8	1676.4	1673.8	1676.4	1684.1	1679.0	1679.0	1684.1
7.5°	1689.3	1686.8	1689.3	1686.8	1686.8	1686.8	1689.3	1697.2	1694.5	1697.2	1705.0
10°	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1710.1	1715.4	1717.9	1720.5	1730.8
12.5°	1751.8	1751.8	1751.8	1749.1	1749.1	1741.4	1751.8	1756.9	1762.2	1767.3	1775.1
15°	1850.6	1850.6	1847.9	1837.5	1837.5	1821.9	1824.5	1827.2	1827.2	1832.3	1837.5
17.5°	1980.5	1977.8	1972.6	1964.8	1954.4	1936.3	1931.0	1925.8	1918.0	1915.5	1915.5
20°	2162.3	2159.7	2149.3	2128.6	2115.6	2087.0	2066.2	2045.5	2037.5	2024.6	2022.1
22.5°	2422.3	2422.3	2401.5	2370.3	2359.9	2300.1	2240.4	2196.1	2180.6	2162.3	2162.3
25°	2736.7	2734.1	2705.6	2669.2	2625.0	2562.5	2489.8	2430.0	2391.0	2349.5	2333.9
27.5°	3113.6	3105.8	3066.8	3022.6	2939.5	2861.5	2775.7	2713.4	2645.8	2593.9	2547.1
30°	3555.4	3547.6	3480.0	3396.9	3311.1	3233.2	3108.4	3033.0	2926.5	2864.1	2812.2
32.5°	4067.4	4059.6	3937.4	3857.0	3765.9	3669.8	3521.7	3402.2	3267.0	3178.6	3105.8
35°	4719.8	4688.6	4514.5	4402.7	4259.8	4163.6	4007.6	3846.5	3687.9	3563.3	3456.6
37.5°	5424.0	5387.7	5234.4	5068.0	4927.7	4810.6	4589.9	4387.1	4199.9	4028.4	3895.8
40°	6159.6	6063.5	5899.7	5777.5	5681.4	5569.6	5338.3	5125.3	4831.6	4639.2	4439.1
42.5°	6668.9	6575.4	6461.0	6380.5	6333.8	6248.0	6118.1	5933.6	5671.0	5676.2	5148.7
45°	7004.3	6866.5	6788.6	6793.7	6812.0	6812.0	6788.6	6760.0	6645.5	6723.6	6281.8
47.5°	6884.8	6793.7	6744.3	6848.4	6978.3	7108.3	7258.9	7422.7	7609.9	7830.7	7287.6
50°	6183.0	6216.8	6240.3	6461.0	6739.2	7035.5	7381.1	7828.2	8350.5	8452.0	8189.4
52.5°	5062.8	5135.6	5213.7	5551.5	5917.9	6429.9	7035.5	7773.6	8475.4	8888.6	8862.6
55°	3932.2	4023.3	4189.5	4441.7	4732.8	5216.1	5964.7	7103.1	8197.1	8854.8	9255.1
57.5°	2799.1	2931.7	3150.0	3500.8	3758.2	4031.0	4584.6	5847.8	7045.9	8270.1	9190.1
60°	1860.9	1923.3	2066.2	2502.8	2936.9	3222.7	3615.2	4072.6	5052.4	6739.2	8519.5
62.5°	1320.3	1361.9	1450.2	1647.7	2040.2	2557.4	2793.9	3004.4	3319.0	4335.1	6840.5
63°	1247.5	1283.9	1356.7	1523.0	1876.5	2411.9	2653.6	2845.8	3074.7	3877.7	6471.5
65°	1034.3	1050.0	1089.0	1169.5	1359.3	1803.7	2198.8	2315.8	2354.6	2492.4	4054.4
67.5°	873.3	883.7	896.7	920.1	995.5	1200.8	1640.0	1788.1	1743.9	1650.4	2003.9
70°	759.0	766.7	787.5	816.0	842.1	894.1	1128.0	1349.0	1299.5	1172.2	1226.8
72.5°	605.6	618.5	641.9	691.3	743.3	810.9	868.1	1005.8	974.6	852.4	865.5
75°	478.2	485.9	506.9	543.2	592.6	670.6	782.3	829.1	743.3	629.0	629.0
77.5°	379.4	387.3	405.5	434.0	465.2	519.7	597.7	719.9	667.9	473.0	470.5
80°	285.9	293.7	311.8	337.8	369.1	408.1	454.8	509.3	613.4	441.9	353.5
82.5°	210.6	213.2	244.3	262.6	272.9	304.1	343.1	374.2	421.0	408.1	314.4
85°	158.5	155.9	176.8	189.7	192.3	200.2	223.6	254.7	275.5	265.1	244.3
87.5°	88.4	78.0	91.0	103.9	103.9	106.5	111.8	129.9	148.1	142.9	129.9
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: P258173

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-7030

**CANDELA DISTRIBUTION (continued):**

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5
2.5°	1673.8	1673.8	1671.1	1671.1	1673.8	1673.8	1671.1	1679.0	1684.1	1684.1	1686.8
5°	1681.5	1684.1	1681.5	1681.5	1684.1	1684.1	1686.8	1694.5	1702.4	1707.5	1715.4
7.5°	1705.0	1707.5	1705.0	1705.0	1707.5	1710.1	1715.4	1725.7	1730.8	1741.4	1754.3
10°	1730.8	1733.5	1730.8	1733.5	1736.1	1738.8	1746.5	1754.3	1762.2	1772.5	1793.3
12.5°	1777.7	1780.3	1775.1	1777.7	1785.6	1785.6	1790.8	1795.9	1808.9	1821.9	1842.6
15°	1842.6	1842.6	1837.5	1840.0	1847.9	1847.9	1850.6	1855.7	1871.3	1886.9	1907.6
17.5°	1918.0	1923.3	1920.7	1923.3	1928.4	1931.0	1931.0	1936.3	1946.7	1957.1	1977.8
20°	2019.4	2022.1	2016.8	2022.1	2027.2	2022.1	2016.8	2014.2	2019.4	2024.6	2047.9
22.5°	2157.3	2154.6	2141.6	2141.6	2141.6	2131.2	2118.2	2102.5	2102.5	2094.8	2113.0
25°	2320.8	2313.1	2294.9	2297.5	2279.3	2263.8	2240.4	2217.0	2196.1	2188.4	2190.9
27.5°	2513.2	2497.6	2479.4	2474.2	2456.0	2427.4	2388.5	2344.2	2310.5	2284.5	2279.3
30°	2755.0	2721.1	2690.0	2684.7	2656.2	2609.4	2547.1	2487.3	2430.0	2385.9	2370.3
32.5°	3040.8	2988.9	2939.5	2934.2	2887.5	2825.1	2749.7	2666.6	2583.4	2513.2	2479.4
35°	3376.1	3298.1	3251.3	3238.3	3170.8	3092.8	3009.6	2903.1	2786.1	2687.3	2625.0
37.5°	3784.0	3703.6	3623.0	3625.6	3532.1	3441.1	3329.3	3199.3	3051.2	2913.5	2825.1
40°	4288.3	4174.0	4070.0	4046.6	3966.1	3838.8	3716.6	3565.7	3383.9	3202.0	3074.7
42.5°	4899.0	4712.1	4569.0	4548.3	4441.7	4285.7	4137.6	3937.4	3752.9	3532.1	3378.8
45°	5593.1	5294.1	5122.6	5091.5	4920.0	4761.4	4582.0	4368.9	4142.8	3893.4	3711.3
47.5°	6455.9	6029.7	5738.7	5686.6	5450.1	5242.2	5055.1	4818.6	4548.3	4270.2	4070.0
50°	7461.8	6832.7	6440.3	6359.8	6042.7	5798.4	5559.2	5263.0	4974.5	4683.4	4452.1
52.5°	8470.1	7794.3	7272.0	7173.2	6705.5	6377.9	6063.5	5767.1	5426.7	5138.3	4875.7
55°	9281.0	8831.4	8225.8	8088.0	7417.5	6973.2	6559.8	6222.0	5884.1	5655.4	5346.2
57.5°	9769.6	9746.3	9268.0	9078.3	8160.8	7503.3	7043.3	6658.6	6331.1	6235.0	5824.4
60°	9756.7	10362.1	10156.8	10013.9	8911.9	8046.5	7448.7	7032.9	6762.6	6871.8	6305.2
62.5°	9161.5	10388.2	10635.1	10596.1	9712.5	8483.1	7781.5	7352.6	7209.6	7534.5	6804.1
63°	8945.7	10328.4	10655.8	10640.3	9865.8	8566.3	7838.6	7414.9	7298.0	7703.5	6895.2
65°	7560.5	9806.0	10403.7	10473.9	10195.8	8852.1	7971.1	7573.6	7560.5	8080.3	7110.8
67.5°	4608.0	8285.5	9268.0	9403.2	9730.6	8943.1	7895.7	7518.9	7706.0	8134.9	7045.9
70°	1970.1	5468.3	7448.7	7667.0	8467.5	8490.9	7680.1	7295.4	7672.1	7708.6	6583.3
72.5°	1167.0	2578.2	5070.6	5546.2	6700.3	7305.7	7186.2	6905.5	7227.8	6770.4	5606.0
75°	826.4	1205.9	2575.6	3082.4	4665.2	5577.4	6037.4	6167.4	6154.5	5369.5	4207.8
77.5°	592.6	774.5	1086.4	1281.3	2604.2	3581.4	4142.8	4522.2	4400.1	3594.4	2593.9
80°	413.2	535.4	665.4	706.9	1208.5	1840.0	2183.1	2349.5	2276.8	1795.9	1161.8
82.5°	299.0	350.8	428.9	454.8	608.1	849.8	1010.9	891.4	855.1	662.7	501.6
85°	231.3	226.1	267.6	278.1	356.0	444.4	454.8	353.5	309.3	275.5	280.7
87.5°	163.8	140.4	142.9	148.1	184.5	236.5	231.3	145.6	124.8	132.5	150.8
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: P258173

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-7030

**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5	1681.5
2.5°	1692.0	1694.5	1699.7	1702.4	1707.5	1707.5	1712.7	1715.4	1720.5	1725.7	1728.4
5°	1723.1	1730.8	1741.4	1746.5	1756.9	1764.7	1775.1	1780.3	1790.8	1798.5	1808.9
7.5°	1769.9	1782.9	1795.9	1811.5	1827.2	1840.0	1850.6	1863.5	1881.7	1894.7	1902.4
10°	1814.1	1832.3	1855.7	1873.9	1897.3	1915.5	1931.0	1954.4	1975.2	1993.4	2003.9
12.5°	1871.3	1894.7	1918.0	1946.7	1977.8	2001.2	2024.6	2055.8	2084.4	2105.2	2115.6
15°	1938.8	1967.4	1993.4	2027.2	2063.6	2094.8	2128.6	2162.3	2183.1	2183.1	2178.0
17.5°	2009.1	2032.4	2063.6	2102.5	2152.0	2190.9	2209.1	2214.3	2206.6	2188.4	2175.4
20°	2079.2	2100.0	2133.8	2180.6	2232.5	2240.4	2222.2	2198.8	2175.4	2144.2	2123.4
22.5°	2136.3	2165.0	2217.0	2271.5	2274.1	2230.0	2180.6	2141.6	2105.2	2068.9	2029.8
25°	2204.0	2243.0	2313.1	2333.9	2266.4	2183.1	2113.0	2055.8	1996.0	1936.3	1892.1
27.5°	2287.2	2344.2	2414.5	2354.6	2222.2	2105.2	2009.1	1923.3	1845.3	1762.2	1712.7
30°	2375.6	2463.8	2479.4	2323.5	2146.7	1996.0	1866.0	1736.1	1637.4	1562.0	1533.5
32.5°	2482.1	2596.4	2502.8	2268.9	2045.5	1847.9	1673.8	1517.8	1434.7	1387.8	1374.9
35°	2643.2	2736.7	2515.8	2211.7	1928.4	1671.1	1452.8	1328.0	1276.1	1244.9	1229.2
37.5°	2874.5	2871.9	2513.2	2141.6	1793.3	1478.9	1276.1	1187.7	1146.1	1120.1	1091.6
40°	3144.8	2975.9	2497.6	2040.2	1611.3	1294.2	1154.0	1070.7	1031.9	1000.6	966.8
42.5°	3412.5	3046.0	2453.4	1889.4	1385.3	1161.8	1065.6	990.2	948.6	914.8	868.1
45°	3643.8	3074.7	2367.6	1681.5	1182.5	1057.7	1008.5	943.5	894.1	842.1	805.7
47.5°	3825.7	3069.4	2230.0	1437.2	1047.4	985.0	961.6	917.4	857.6	792.6	745.9
50°	3979.1	3030.5	2042.8	1221.5	956.4	920.1	912.2	899.2	803.0	748.5	719.9
52.5°	4119.4	2973.3	1842.6	1075.9	878.5	847.3	862.8	849.8	782.3	735.6	706.9
55°	4311.7	2934.2	1645.1	964.2	787.5	779.7	792.6	810.9	769.3	725.2	693.9
57.5°	4537.9	2955.0	1494.4	839.4	701.8	706.9	751.1	777.1	756.3	709.5	678.4
60°	4797.8	3017.4	1361.9	719.9	631.5	644.5	709.5	745.9	743.3	688.8	652.4
62.5°	5088.9	3082.4	1151.4	629.0	571.8	592.6	660.2	706.9	714.8	667.9	623.8
63°	5146.0	3087.5	1096.8	610.8	561.4	584.7	647.2	696.5	706.9	662.7	618.5
65°	5286.4	3040.8	883.7	561.4	519.7	545.8	608.1	652.4	673.1	634.1	597.7
67.5°	5169.4	2658.9	665.4	501.6	485.9	504.2	558.8	600.4	618.5	600.4	564.0
70°	4727.5	1933.7	519.7	447.0	449.6	462.6	504.2	543.2	564.0	558.8	525.0
72.5°	3807.5	1096.8	434.0	400.2	408.1	423.6	452.3	488.6	506.9	504.2	480.8
75°	2508.0	561.4	366.4	358.7	363.9	376.8	397.6	426.2	447.0	444.4	434.0
77.5°	1242.3	389.8	314.4	317.1	319.7	330.1	345.7	371.7	384.7	387.3	384.7
80°	512.0	304.1	270.3	272.9	275.5	283.3	293.7	317.1	324.8	330.1	332.7
82.5°	306.7	231.3	215.7	220.9	223.6	231.3	239.1	259.9	267.6	275.5	275.5
85°	202.6	161.1	155.9	161.1	166.3	171.5	174.2	187.2	200.2	210.6	215.7
87.5°	109.2	96.1	93.5	96.1	96.1	101.4	106.5	119.5	135.2	145.6	150.8
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: P258173

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-7030

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	1681.5	1681.5	1681.5	1681.5	1681.5
2.5°	1723.1	1725.7	1723.1	1725.7	1728.4
5°	1808.9	1814.1	1811.5	1811.5	1821.9
7.5°	1907.6	1918.0	1918.0	1923.3	1928.4
10°	2014.2	2024.6	2032.4	2032.4	2040.2
12.5°	2120.8	2125.9	2133.8	2133.8	2133.8
15°	2175.4	2172.7	2170.1	2167.6	2167.6
17.5°	2167.6	2157.3	2152.0	2146.7	2149.3
20°	2110.4	2092.2	2087.0	2079.2	2084.4
22.5°	2011.6	1985.7	1975.2	1962.2	1967.4
25°	1863.5	1832.3	1827.2	1811.5	1819.2
27.5°	1692.0	1676.4	1673.8	1671.1	1684.1
30°	1530.8	1535.9	1538.6	1543.9	1556.8
32.5°	1382.6	1393.0	1395.7	1398.3	1416.4
35°	1237.2	1224.1	1237.2	1231.9	1247.5
37.5°	1078.6	1068.2	1057.7	1044.8	1055.2
40°	946.0	927.8	896.7	881.0	883.7
42.5°	842.1	818.7	792.6	777.1	777.1
45°	774.5	745.9	722.5	712.2	712.2
47.5°	722.5	709.5	696.5	688.8	688.8
50°	701.8	686.1	678.4	673.1	673.1
52.5°	686.1	670.6	662.7	657.5	652.4
55°	673.1	649.8	641.9	639.3	639.3
57.5°	654.9	634.1	623.8	621.1	621.1
60°	626.4	610.8	600.4	597.7	597.7
62.5°	597.7	582.2	571.8	571.8	571.8
63°	592.6	574.3	566.6	566.6	566.6
65°	569.1	551.0	543.2	543.2	540.7
67.5°	538.0	519.7	514.6	514.6	509.3
70°	501.6	485.9	480.8	483.4	473.0
72.5°	465.2	449.6	441.9	441.9	431.5
75°	423.6	408.1	397.6	395.1	384.7
77.5°	376.8	363.9	353.5	343.1	337.8
80°	327.4	317.1	304.1	296.3	288.5
82.5°	275.5	265.1	257.3	267.6	228.7
85°	215.7	205.3	194.9	210.6	163.8
87.5°	158.5	153.3	142.9	124.8	109.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)