

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: P265592

Luminaire Tested: **ARCH-L-AF72-110-D-U-T2U-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265592  
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-AF72-110-D-U-T2U-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 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: 13329.5 lumens  
Efficiency: N/A  
Efficacy: 118.0 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

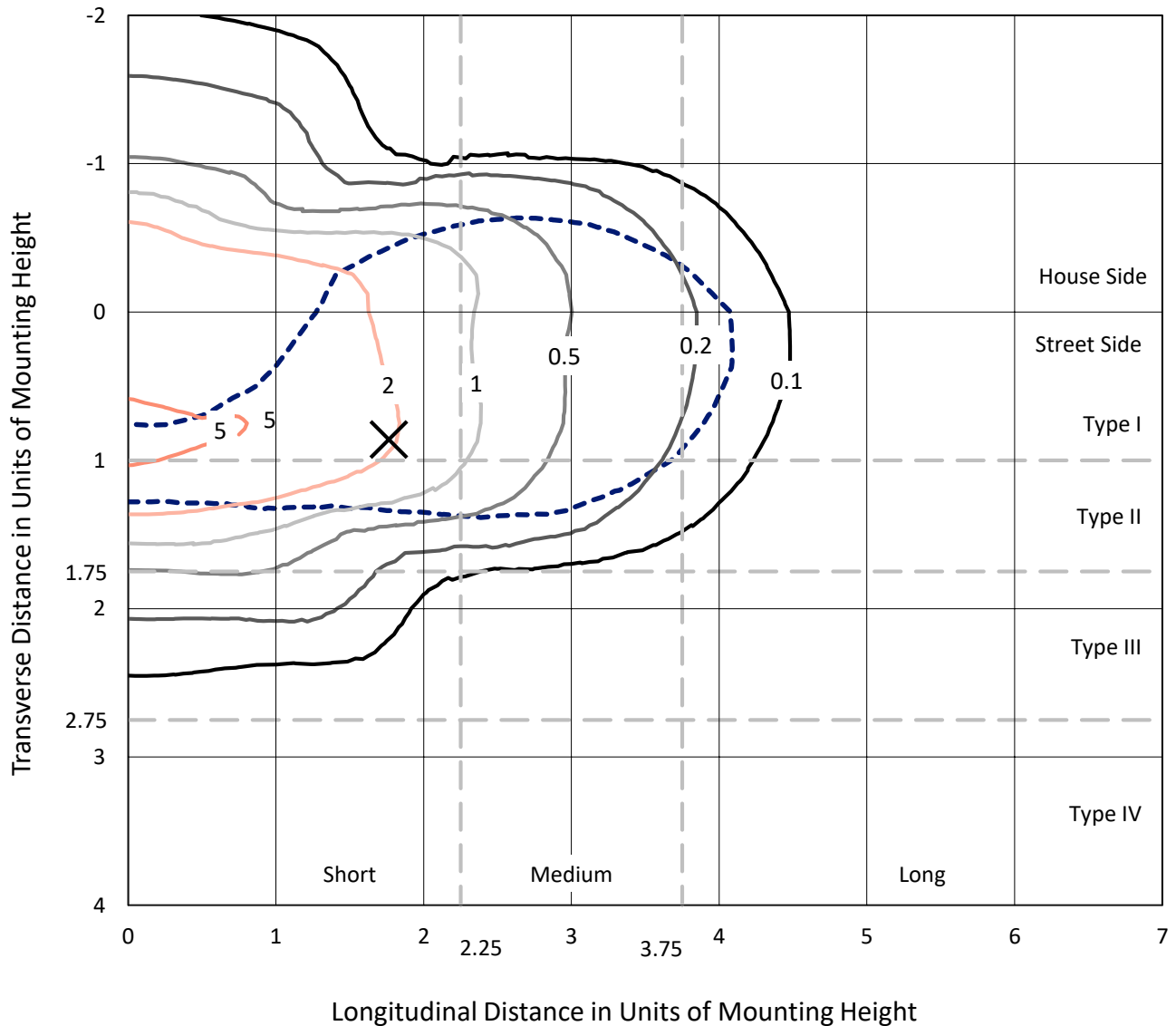
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

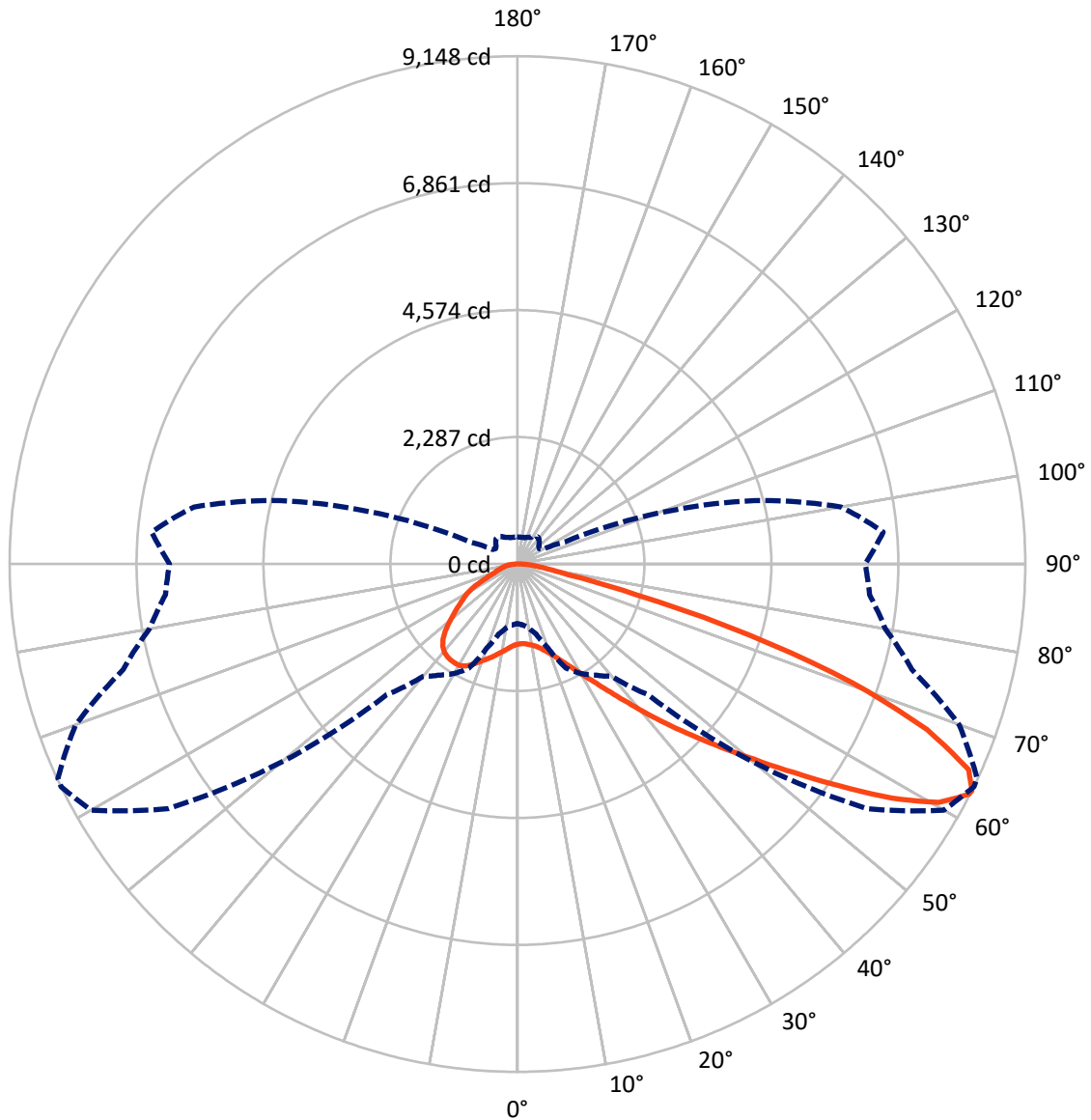


Based on 20 foot mounting height. Maximum calculated value = 5.9 fc  
 Type II - Short - Semi-Cutoff

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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	3918.4	0.0	3918.4
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	9411.1	0.0	9411.1
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	13329.5	0.0	13329.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.1	1.1
10°-20°	480.1	3.6
20°-30°	901.1	6.8
30°-40°	1510.4	11.3
40°-50°	2534.1	19.0
50°-60°	3212.5	24.1
60°-70°	2833.9	21.3
70°-80°	1462.9	11.0
80°-90°	250.3	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°	13329.5	100.0
0°-180°	13329.5	100.0



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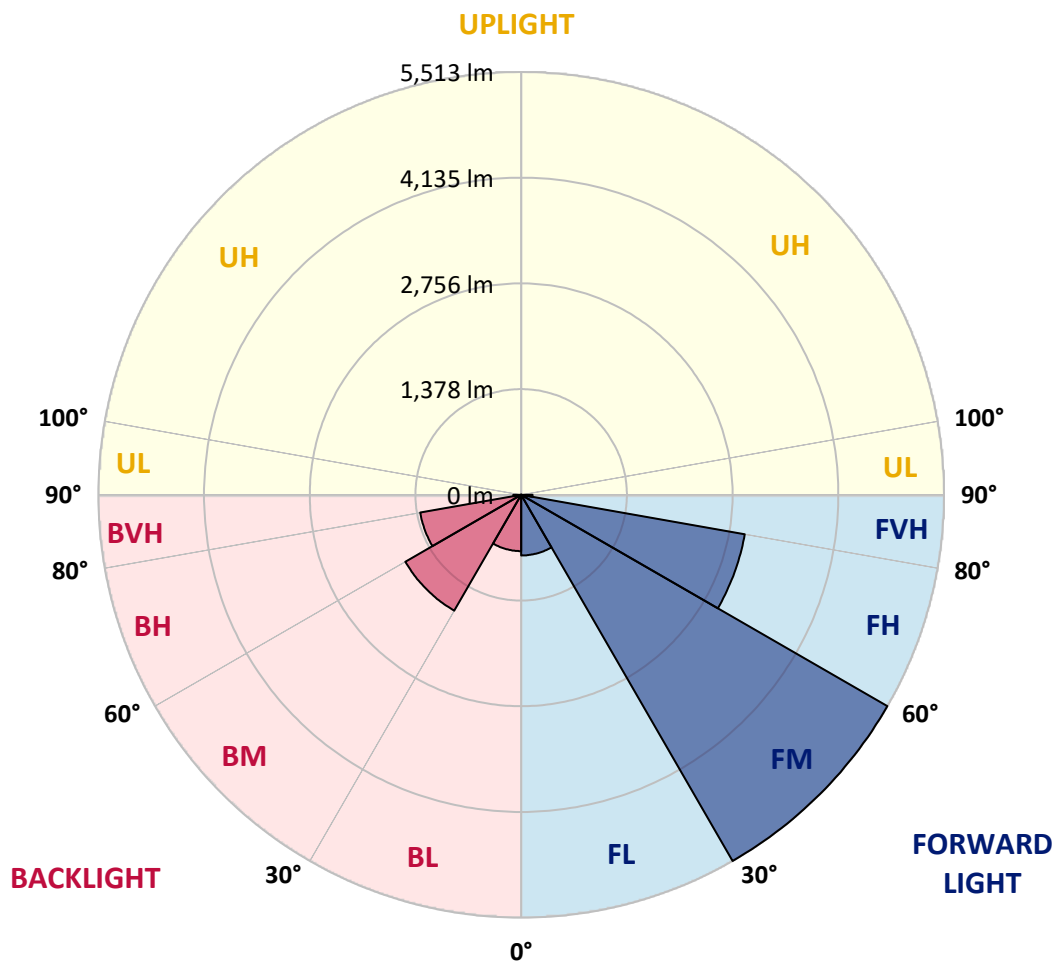
CATALOG NUMBER: ARCH-L-AF72-110-D-U-T2U-7027

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	791.2	5.9			
FM (30°-60°)	5512.7	41.4			
FH (60°-80°)	2959.9	22.2			G2/5000
FVH (80°-90°)	147.3	1.1			G2/225
BL (0°-30°)	734.2	5.5	B2/1000		
BM (30°-60°)	1744.3	13.1	B2/2500		
BH (60°-80°)	1336.9	10.0	B3/2500		G3/2500
BVH (80°-90°)	103.0	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5
2.5°	1434.7	1432.4	1432.4	1432.4	1432.4	1430.2	1432.4	1436.8	1434.7	1432.4	1436.8
5°	1439.2	1436.8	1436.8	1436.8	1439.2	1436.8	1439.2	1445.8	1441.3	1441.3	1445.8
7.5°	1450.3	1448.1	1450.3	1448.1	1448.1	1448.1	1450.3	1457.1	1454.7	1457.1	1463.7
10°	1463.7	1463.7	1463.7	1463.7	1463.7	1463.7	1468.1	1472.6	1474.7	1477.1	1485.9
12.5°	1503.9	1503.9	1503.9	1501.5	1501.5	1494.9	1503.9	1508.3	1512.7	1517.1	1524.0
15°	1588.7	1588.7	1586.3	1577.5	1577.5	1564.0	1566.3	1568.5	1568.5	1573.0	1577.5
17.5°	1700.1	1697.9	1693.5	1686.7	1677.9	1662.3	1657.8	1653.3	1646.7	1644.3	1644.3
20°	1856.3	1854.1	1845.2	1827.3	1816.3	1791.6	1773.9	1755.9	1749.3	1738.1	1735.9
22.5°	2079.4	2079.4	2061.6	2034.8	2025.9	1974.7	1923.4	1885.4	1872.0	1856.3	1856.3
25°	2349.4	2347.2	2322.7	2291.4	2253.5	2199.9	2137.4	2086.1	2052.6	2017.1	2003.6
27.5°	2672.9	2666.3	2632.8	2594.8	2523.5	2456.5	2382.9	2329.3	2271.4	2226.7	2186.6
30°	3052.4	3045.6	2987.6	2916.2	2842.5	2775.7	2668.5	2603.7	2512.3	2458.8	2414.1
32.5°	3491.8	3485.2	3380.2	3311.2	3233.0	3150.4	3023.2	2920.6	2804.6	2728.7	2666.3
35°	4051.9	4025.0	3875.6	3779.6	3656.9	3574.4	3440.5	3302.2	3166.0	3059.0	2967.6
37.5°	4656.5	4625.3	4493.6	4350.9	4230.4	4130.0	3940.2	3766.2	3605.5	3458.4	3344.6
40°	5288.0	5205.4	5064.9	4959.9	4877.3	4781.5	4582.9	4399.9	4147.7	3982.6	3810.9
42.5°	5725.3	5644.9	5546.8	5477.5	5437.4	5363.8	5252.2	5093.7	4868.5	4872.9	4420.0
45°	6013.1	5894.8	5827.8	5832.3	5848.0	5848.0	5827.8	5803.3	5705.1	5772.1	5392.7
47.5°	5910.4	5832.3	5789.9	5879.1	5990.7	6102.2	6231.7	6372.2	6533.0	6722.6	6256.2
50°	5307.9	5337.0	5357.1	5546.8	5785.4	6039.8	6336.6	6720.3	7168.8	7255.8	7030.5
52.5°	4346.4	4408.8	4475.7	4765.8	5080.5	5519.9	6039.8	6673.5	7275.9	7630.7	7608.4
55°	3375.8	3453.9	3596.6	3813.0	4063.0	4478.1	5120.6	6097.9	7037.1	7601.6	7945.2
57.5°	2403.0	2516.8	2704.2	3005.4	3226.4	3460.6	3935.8	5020.2	6048.7	7099.7	7889.5
60°	1597.5	1651.1	1773.9	2148.7	2521.3	2766.7	3103.6	3496.3	4337.5	5785.4	7313.8
62.5°	1133.4	1169.1	1245.1	1414.7	1751.4	2195.5	2398.6	2579.3	2849.2	3721.6	5872.5
63°	1071.0	1102.2	1164.7	1307.5	1610.9	2070.6	2278.0	2443.1	2639.5	3328.8	5555.7
65°	888.1	901.4	934.9	1004.0	1166.9	1548.5	1887.6	1987.9	2021.5	2139.8	3480.7
67.5°	749.6	758.6	769.8	789.8	854.6	1030.8	1407.9	1535.1	1497.1	1416.7	1720.3
70°	651.5	658.2	676.1	700.6	722.9	767.5	968.4	1157.9	1115.5	1006.3	1053.2
72.5°	519.8	531.0	551.1	593.5	638.2	696.1	745.2	863.5	836.7	731.8	743.0
75°	410.5	417.3	435.0	466.3	508.7	575.6	671.7	711.7	638.2	539.9	539.9
77.5°	325.7	332.5	348.1	372.5	399.3	446.3	513.2	618.0	573.4	406.0	403.9
80°	245.4	252.2	267.8	290.1	316.8	350.2	390.5	437.4	526.5	379.4	303.4
82.5°	180.6	183.0	209.8	225.4	234.3	261.0	294.6	321.4	361.5	350.2	270.0
85°	136.2	133.8	151.8	162.9	165.1	171.8	191.9	218.6	236.6	227.6	209.8
87.5°	75.8	67.0	78.2	89.2	89.2	91.4	95.9	111.6	127.2	122.7	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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5
2.5°	1436.8	1436.8	1434.7	1434.7	1436.8	1436.8	1434.7	1441.3	1445.8	1445.8	1448.1
5°	1443.5	1445.8	1443.5	1443.5	1445.8	1445.8	1448.1	1454.7	1461.5	1465.9	1472.6
7.5°	1463.7	1465.9	1463.7	1463.7	1465.9	1468.1	1472.6	1481.6	1485.9	1494.9	1506.1
10°	1485.9	1488.2	1485.9	1488.2	1490.5	1492.7	1499.4	1506.1	1512.7	1521.6	1539.5
12.5°	1526.1	1528.3	1524.0	1526.1	1532.8	1532.8	1537.3	1541.8	1552.9	1564.0	1581.9
15°	1581.9	1581.9	1577.5	1579.7	1586.3	1586.3	1588.7	1593.1	1606.4	1619.9	1637.7
17.5°	1646.7	1651.1	1648.8	1651.1	1655.5	1657.8	1657.8	1662.3	1671.1	1680.1	1697.9
20°	1733.5	1735.9	1731.5	1735.9	1740.3	1735.9	1731.5	1729.1	1733.5	1738.1	1758.3
22.5°	1851.9	1849.7	1838.6	1838.6	1838.6	1829.6	1818.3	1805.1	1805.1	1798.3	1813.9
25°	1992.4	1985.8	1970.2	1972.4	1956.8	1943.4	1923.4	1903.1	1885.4	1878.6	1881.0
27.5°	2157.5	2144.2	2128.5	2124.1	2108.5	2083.9	2050.6	2012.6	1983.5	1961.2	1956.8
30°	2365.1	2336.0	2309.4	2304.8	2280.3	2240.2	2186.6	2135.2	2086.1	2048.2	2034.8
32.5°	2610.5	2565.9	2523.5	2518.9	2478.9	2425.3	2360.6	2289.2	2217.7	2157.5	2128.5
35°	2898.3	2831.4	2791.3	2780.1	2722.0	2655.1	2583.7	2492.3	2391.8	2307.0	2253.5
37.5°	3248.6	3179.5	3110.3	3112.4	3032.1	2954.0	2858.1	2746.6	2619.4	2501.2	2425.3
40°	3681.4	3583.2	3494.0	3473.9	3404.8	3295.4	3190.6	3061.2	2904.9	2748.9	2639.5
42.5°	4205.8	4045.2	3922.4	3904.7	3813.0	3679.3	3552.1	3380.2	3221.9	3032.1	2900.5
45°	4801.5	4545.0	4397.7	4371.0	4223.7	4087.6	3933.6	3750.7	3556.5	3342.4	3186.2
47.5°	5542.3	5176.4	4926.5	4881.8	4678.8	4500.2	4339.6	4136.6	3904.7	3665.9	3494.0
50°	6405.8	5865.8	5528.9	5459.7	5187.5	4977.8	4772.5	4518.1	4270.5	4020.6	3822.0
52.5°	7271.4	6691.4	6243.0	6158.2	5756.5	5475.3	5205.4	4951.0	4658.7	4411.0	4185.7
55°	7967.5	7581.5	7061.8	6943.4	6367.8	5986.2	5631.6	5341.4	5051.3	4855.1	4589.6
57.5°	8387.0	8367.0	7956.4	7793.5	7005.9	6441.4	6046.5	5716.4	5435.1	5352.6	5000.1
60°	8375.8	8895.7	8719.5	8596.8	7650.8	6907.7	6394.6	6037.6	5805.6	5899.3	5412.8
62.5°	7864.9	8918.1	9130.1	9096.5	8338.0	7282.6	6680.2	6312.0	6189.3	6468.2	5841.3
63°	7679.8	8866.7	9147.9	9134.4	8469.6	7354.1	6729.3	6365.6	6265.1	6613.2	5919.3
65°	6490.6	8418.2	8931.5	8991.7	8752.9	7599.4	6843.1	6501.8	6490.6	6936.7	6104.5
67.5°	3955.9	7113.0	7956.4	8072.4	8353.6	7677.5	6778.3	6454.9	6615.5	6983.7	6048.7
70°	1691.2	4694.5	6394.6	6582.1	7269.3	7289.2	6593.2	6263.0	6586.5	6617.8	5651.5
72.5°	1001.8	2213.3	4353.0	4761.3	5751.9	6271.8	6169.2	5928.3	6205.0	5812.3	4812.7
75°	709.5	1035.2	2211.1	2646.1	4005.0	4788.1	5183.0	5294.6	5283.4	4609.7	3612.4
77.5°	508.7	664.8	932.6	1100.0	2235.6	3074.5	3556.5	3882.3	3777.5	3085.8	2226.7
80°	354.8	459.7	571.2	606.9	1037.5	1579.7	1874.3	2017.1	1954.5	1541.8	997.4
82.5°	256.6	301.2	368.1	390.5	522.0	729.7	867.9	765.3	734.0	568.9	430.6
85°	198.5	194.2	229.7	238.7	305.7	381.5	390.5	303.4	265.4	236.6	240.9
87.5°	140.6	120.6	122.7	127.2	158.5	203.0	198.5	125.0	107.1	113.7	129.4
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°	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5
2.5°	1452.5	1454.7	1459.1	1461.5	1465.9	1465.9	1470.3	1472.6	1477.1	1481.6	1483.7
5°	1479.2	1485.9	1494.9	1499.4	1508.3	1515.0	1524.0	1528.3	1537.3	1543.9	1552.9
7.5°	1519.5	1530.6	1541.8	1555.1	1568.5	1579.7	1588.7	1599.7	1615.4	1626.6	1633.2
10°	1557.4	1573.0	1593.1	1608.7	1628.7	1644.3	1657.8	1677.9	1695.7	1711.4	1720.3
12.5°	1606.4	1626.6	1646.7	1671.1	1697.9	1718.0	1738.1	1764.9	1789.5	1807.3	1816.3
15°	1664.5	1689.1	1711.4	1740.3	1771.5	1798.3	1827.3	1856.3	1874.3	1874.3	1869.7
17.5°	1724.7	1744.8	1771.5	1805.1	1847.5	1881.0	1896.5	1901.0	1894.3	1878.6	1867.4
20°	1784.9	1802.8	1831.9	1872.0	1916.7	1923.4	1907.7	1887.6	1867.4	1840.7	1822.9
22.5°	1834.0	1858.6	1903.1	1950.1	1952.2	1914.4	1872.0	1838.6	1807.3	1775.9	1742.5
25°	1892.0	1925.4	1985.8	2003.6	1945.5	1874.3	1813.9	1764.9	1713.5	1662.3	1624.3
27.5°	1963.4	2012.6	2072.7	2021.5	1907.7	1807.3	1724.7	1651.1	1584.2	1512.7	1470.3
30°	2039.3	2115.1	2128.5	1994.6	1843.0	1713.5	1601.9	1490.5	1405.7	1340.9	1316.3
32.5°	2130.8	2229.0	2148.7	1947.9	1755.9	1586.3	1436.8	1303.0	1231.7	1191.4	1180.4
35°	2269.1	2349.4	2159.7	1898.7	1655.5	1434.7	1247.2	1140.0	1095.6	1068.8	1055.4
37.5°	2467.7	2465.5	2157.5	1838.6	1539.5	1269.6	1095.6	1019.7	984.0	961.6	937.1
40°	2699.8	2554.7	2144.2	1751.4	1383.3	1111.2	990.7	919.2	885.8	859.0	830.0
42.5°	2929.6	2615.0	2106.3	1622.1	1189.3	997.4	914.7	850.1	814.4	785.4	745.2
45°	3128.1	2639.5	2032.7	1443.5	1015.2	908.0	865.6	809.9	767.5	722.9	691.6
47.5°	3284.4	2635.1	1914.4	1233.8	899.2	845.7	825.5	787.6	736.3	680.6	640.3
50°	3416.0	2601.6	1753.8	1048.6	821.1	789.8	783.1	772.1	689.4	642.6	618.0
52.5°	3536.4	2552.4	1581.9	923.6	754.1	727.4	740.7	729.7	671.7	631.4	606.9
55°	3701.6	2518.9	1412.3	827.8	676.1	669.3	680.6	696.1	660.4	622.4	595.8
57.5°	3895.7	2536.9	1282.9	720.7	602.5	606.9	644.9	667.1	649.3	609.1	582.3
60°	4118.8	2590.4	1169.1	618.0	542.1	553.4	609.1	640.3	638.2	591.3	560.1
62.5°	4368.6	2646.1	988.5	539.9	490.8	508.7	566.7	606.9	613.6	573.4	535.5
63°	4417.8	2650.7	941.6	524.3	481.9	502.1	555.5	597.9	606.9	568.9	531.0
65°	4538.2	2610.5	758.6	481.9	446.3	468.6	522.0	560.1	577.9	544.5	513.2
67.5°	4437.8	2282.6	571.2	430.6	417.3	432.9	479.8	515.4	531.0	515.4	484.1
70°	4058.5	1660.0	446.3	383.8	386.0	397.1	432.9	466.3	484.1	479.8	450.7
72.5°	3268.8	941.6	372.5	343.6	350.2	363.6	388.2	419.5	435.0	432.9	412.9
75°	2153.1	481.9	314.5	307.8	312.4	323.5	341.4	365.9	383.8	381.5	372.5
77.5°	1066.5	334.7	270.0	272.1	274.4	283.3	296.7	319.1	330.1	332.5	330.1
80°	439.5	261.0	232.0	234.3	236.6	243.3	252.2	272.1	279.0	283.3	285.7
82.5°	263.3	198.5	185.2	189.6	191.9	198.5	205.3	223.0	229.7	236.6	236.6
85°	174.0	138.2	133.8	138.2	142.8	147.2	149.5	160.6	171.8	180.6	185.2
87.5°	93.8	82.6	80.3	82.6	82.6	87.0	91.4	102.6	116.1	125.0	129.4
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):**

	160°	165°	170°	175°	180°
0°	1443.5	1443.5	1443.5	1443.5	1443.5
2.5°	1479.2	1481.6	1479.2	1481.6	1483.7
5°	1552.9	1557.4	1555.1	1555.1	1564.0
7.5°	1637.7	1646.7	1646.7	1651.1	1655.5
10°	1729.1	1738.1	1744.8	1744.8	1751.4
12.5°	1820.7	1825.0	1831.9	1831.9	1831.9
15°	1867.4	1865.3	1863.1	1860.7	1860.7
17.5°	1860.7	1851.9	1847.5	1843.0	1845.2
20°	1811.7	1796.2	1791.6	1784.9	1789.5
22.5°	1726.9	1704.7	1695.7	1684.5	1689.1
25°	1599.7	1573.0	1568.5	1555.1	1561.9
27.5°	1452.5	1439.2	1436.8	1434.7	1445.8
30°	1314.2	1318.6	1320.9	1325.3	1336.5
32.5°	1187.0	1196.0	1198.2	1200.3	1215.9
35°	1062.1	1050.8	1062.1	1057.6	1071.0
37.5°	926.0	917.0	908.0	897.0	905.9
40°	812.2	796.5	769.8	756.4	758.6
42.5°	722.9	702.8	680.6	667.1	667.1
45°	664.8	640.3	620.3	611.3	611.3
47.5°	620.3	609.1	597.9	591.3	591.3
50°	602.5	589.0	582.3	577.9	577.9
52.5°	589.0	575.6	568.9	564.5	560.1
55°	577.9	557.8	551.1	548.9	548.9
57.5°	562.2	544.5	535.5	533.2	533.2
60°	537.7	524.3	515.4	513.2	513.2
62.5°	513.2	499.7	490.8	490.8	490.8
63°	508.7	493.1	486.4	486.4	486.4
65°	488.6	473.0	466.3	466.3	464.1
67.5°	461.9	446.3	441.7	441.7	437.4
70°	430.6	417.3	412.9	414.9	406.0
72.5°	399.3	386.0	379.4	379.4	370.5
75°	363.6	350.2	341.4	339.1	330.1
77.5°	323.5	312.4	303.4	294.6	290.1
80°	281.1	272.1	261.0	254.4	247.7
82.5°	236.6	227.6	221.0	229.7	196.3
85°	185.2	176.2	167.4	180.6	140.6
87.5°	136.2	131.6	122.7	107.1	93.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)