

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: NEO-RAY

Report Number: P332483-830

Luminaire Tested: **S123RDIW-S1165D1320U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332483-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDIW-S1165D1320U830-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1320 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8625.0 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

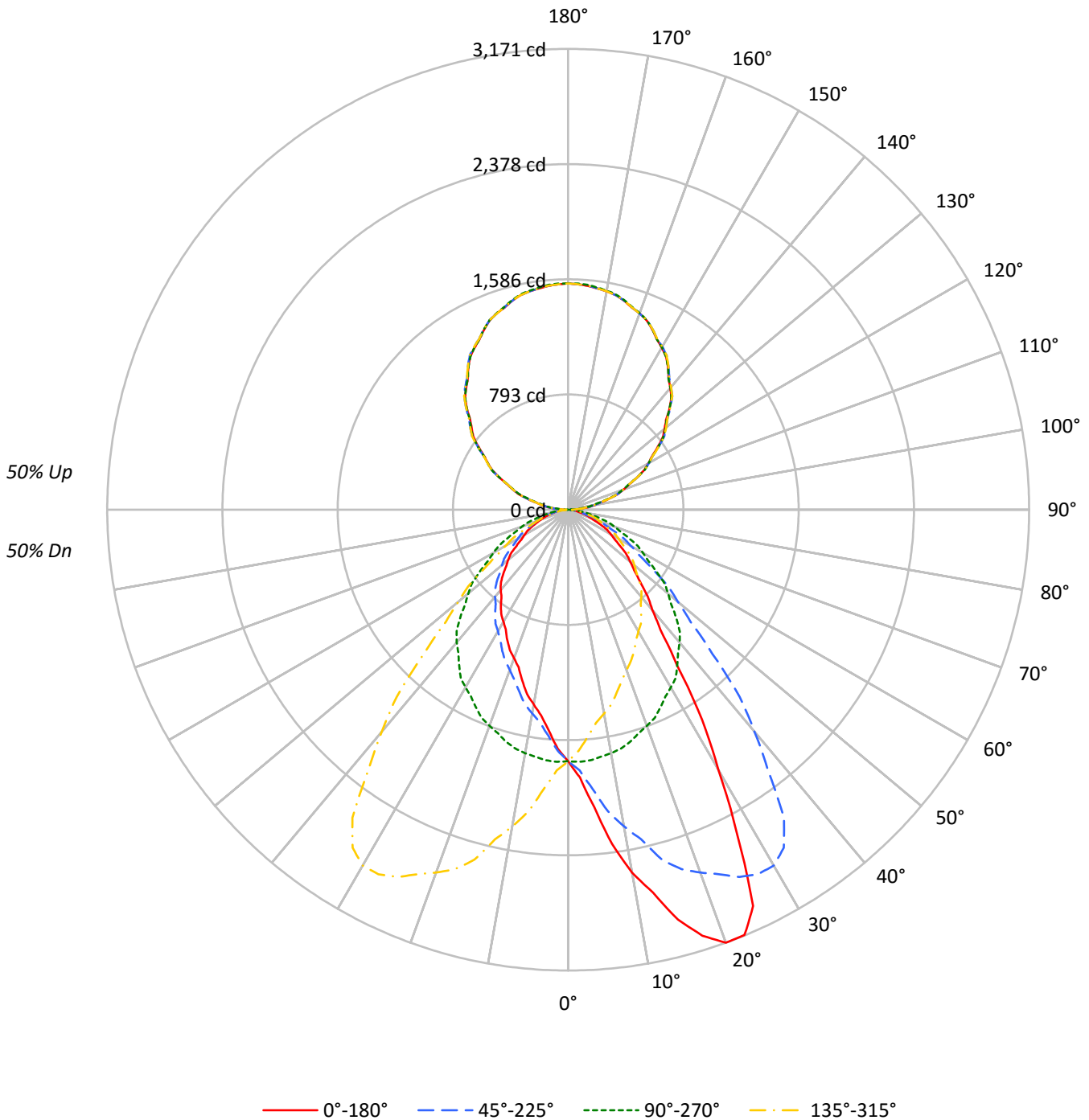
Input Watts (W): 76.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	94	91	87	91	87	84	81	74	72	70	62	60	59	51	49	49	43
2	90	83	77	72	83	77	72	68	65	62	59	55	52	50	45	43	42	37
3	83	73	66	61	76	68	62	57	58	54	50	49	46	43	41	38	36	32
4	76	65	58	52	70	61	54	49	52	47	43	44	40	37	37	34	32	28
5	70	59	51	45	64	54	48	42	47	42	37	40	36	33	33	30	28	25
6	64	53	45	39	59	49	42	37	42	37	33	36	32	29	30	27	25	22
7	60	48	40	35	55	45	38	33	39	33	29	33	29	26	28	25	22	20
8	55	43	36	31	51	41	34	29	35	30	26	30	26	23	26	22	20	18
9	52	40	32	27	48	37	31	26	32	27	23	28	24	21	24	21	18	16
10	48	37	29	25	45	34	28	24	30	25	21	26	22	19	22	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	18627	18627	18627	18627
5°	22204	18707	16473	18707
10°	27725	18600	14882	18600
15°	32543	18409	13572	18409
20°	36318	18125	12457	18125
25°	35739	17826	11772	17826
30°	25690	17550	11067	17550
35°	17152	17190	10611	17190
40°	12638	16759	10138	16759
45°	10601	16002	9677	16002
50°	9354	15011	9031	15011
55°	8203	13874	8146	13874
60°	7304	12790	7464	12790
65°	6413	11624	6943	11624
70°	5035	10584	6342	10584
75°	4438	9245	5793	9245
80°	3856	7854	5697	7854
85°	3112	6311	6039	6311



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.2	2.0
10°-20°	531.7	6.2
20°-30°	835.3	9.7
30°-40°	871.4	10.1
40°-50°	745.8	8.6
50°-60°	568.4	6.6
60°-70°	364.3	4.2
70°-80°	175.3	2.0
80°-90°	51.0	0.6
90°-100°	101.4	1.2
100°-110°	303.4	3.5
110°-120°	516.1	6.0
120°-130°	678.8	7.9
130°-140°	763.0	8.8
140°-150°	750.0	8.7
150°-160°	631.4	7.3
160°-170°	420.3	4.9
170°-180°	147.2	1.7
0°-30°	1537.1	17.8
0°-40°	2408.6	27.9
0°-60°	3722.7	43.2
0°-90°	4313.3	50.0
90°-120°	920.9	10.7
90°-150°	3112.8	36.1
90°-180°	4312.0	50.0
0°-180°	8625.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1730	1730	1730	1730	1730	
5°	2055	1731	1525	1731	2055	212
15°	2920	1652	1218	1652	2920	828
25°	3009	1501	991	1501	3009	1293
35°	1305	1308	808	1308	1305	856
45°	696	1051	636	1051	696	548
55°	437	739	434	739	437	395
65°	252	456	273	456	252	248
75°	107	222	139	222	107	114
85°	25	51	49	51	25	30
90°	37	1	37	1	37	19
95°	95	72	95	72	95	98
105°	291	275	291	275	291	309
115°	521	520	521	520	521	516
125°	752	760	752	760	752	672
135°	985	987	985	987	985	758
145°	1197	1197	1197	1197	1197	747
155°	1368	1370	1368	1370	1368	630
165°	1488	1493	1488	1493	1488	420
175°	1546	1553	1546	1553	1546	147
180°	1556	1556	1556	1556	1556	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1843.1	1845.5	1837.8	1836.6	1827.7	1825.3	1825.3	1812.9	1805.2	1795.2	1789.2
5°	2055.0	2066.9	2061.0	2047.6	2025.3	2020.2	2006.1	1983.9	1958.7	1927.6	1912.8
7.5°	2319.6	2335.8	2329.6	2308.9	2285.7	2266.9	2227.1	2190.3	2138.5	2093.2	2054.4
10°	2536.6	2519.5	2506.1	2486.1	2464.7	2429.9	2388.4	2331.3	2265.4	2213.6	2155.8
12.5°	2698.9	2696.1	2679.2	2658.6	2628.3	2595.2	2544.2	2474.7	2398.1	2323.2	2257.1
15°	2920.3	2924.7	2913.6	2892.1	2849.1	2790.6	2713.6	2684.7	2575.0	2493.6	2412.1
17.5°	3073.4	3072.6	3071.1	3041.3	2997.5	2955.8	2884.4	2808.4	2709.2	2594.3	2484.5
20°	3170.6	3163.3	3164.8	3131.4	3098.8	3050.6	2981.0	2870.6	2789.2	2656.6	2543.2
22.5°	3168.3	3166.8	3172.4	3161.0	3137.3	3100.4	3045.6	2952.4	2848.5	2714.6	2587.1
25°	3009.2	3003.2	3038.1	3047.7	3085.5	3092.1	3075.8	3024.7	2926.2	2788.4	2630.6
27.5°	2518.5	2515.2	2579.8	2660.7	2763.3	2842.9	2920.0	2957.1	2926.2	2827.5	2669.5
30°	2066.9	2136.5	2169.1	2286.1	2416.5	2572.1	2708.4	2838.0	2869.9	2827.0	2697.3
32.5°	1716.0	1776.8	1804.0	1904.5	2026.0	2208.2	2412.6	2596.2	2725.9	2758.7	2680.7
35°	1305.3	1306.1	1368.3	1412.7	1525.3	1712.8	1911.3	2157.2	2401.7	2586.9	2606.1
37.5°	1041.6	1045.3	1082.9	1127.2	1211.6	1310.8	1485.6	1690.1	1972.5	2256.8	2423.5
40°	899.4	906.0	934.2	977.9	1038.6	1113.4	1249.7	1442.4	1677.9	1994.2	2252.8
42.5°	808.0	818.9	833.4	867.0	904.7	974.8	1085.0	1233.8	1448.0	1747.1	2045.4
45°	696.4	702.3	713.4	729.0	763.0	811.9	886.0	986.0	1163.9	1404.6	1703.1
47.5°	614.3	611.1	622.8	635.5	658.2	691.4	741.1	822.7	949.6	1142.7	1396.0
50°	558.6	557.8	566.0	575.6	597.1	621.5	662.3	723.8	824.5	984.6	1216.4
52.5°	506.4	509.3	515.0	527.0	542.5	562.3	598.9	643.2	729.7	867.8	1061.1
55°	437.1	439.3	447.4	454.1	465.2	485.2	508.2	545.3	604.5	700.8	860.1
57.5°	378.4	377.4	385.2	386.8	399.4	415.8	433.5	462.2	505.2	576.8	684.1
60°	339.3	337.1	343.7	348.9	355.6	368.9	383.7	411.9	446.0	498.6	590.4
62.5°	303.7	302.7	307.6	312.7	318.3	330.4	342.8	364.5	391.4	435.7	508.6
65°	251.8	254.1	256.3	258.5	261.5	268.9	280.8	295.6	314.1	345.3	397.8
67.5°	197.9	200.2	201.0	205.5	211.9	216.5	223.8	237.0	249.8	276.1	305.9
70°	160.0	159.3	160.0	162.2	170.4	178.5	188.1	197.8	205.9	224.4	249.7
72.5°	137.5	136.2	138.1	138.6	142.5	144.8	150.8	159.9	170.4	182.9	201.0
75°	106.7	106.7	106.7	106.7	109.6	111.1	113.4	115.6	119.2	125.2	138.6
77.5°	78.8	79.0	80.0	80.8	81.3	82.2	83.6	85.8	87.1	90.2	96.0
80°	62.2	63.0	62.2	63.0	63.0	64.5	65.2	67.4	68.1	71.8	74.1
82.5°	46.8	46.4	46.8	47.6	47.6	49.0	49.2	50.8	51.0	52.9	55.1
85°	25.2	23.8	25.2	24.4	25.9	24.4	25.2	26.7	26.7	27.4	30.3
87.5°	13.3	14.3	13.0	13.6	13.4	13.9	13.7	13.4	14.4	13.6	13.5
90°	36.7	36.1	35.6	35.1	34.5	33.6	32.6	31.5	30.4	29.3	25.8
92.5°	49.4	49.7	50.0	50.3	50.7	50.4	49.6	48.6	47.8	46.9	45.0
95°	95.4	95.4	95.4	95.4	95.4	94.8	93.7	92.7	91.5	90.5	88.3
97.5°	146.7	146.8	146.9	147.0	147.1	146.6	145.3	144.0	142.8	141.6	140.0
100°	185.8	185.3	184.7	184.2	183.6	182.9	182.1	181.3	180.5	179.7	178.3
102.5°	225.9	226.0	226.1	226.2	226.3	226.0	225.2	224.3	223.6	222.7	220.9
105°	291.0	290.4	289.8	289.4	288.8	288.5	288.5	288.5	288.5	288.5	286.1
107.5°	358.6	359.0	359.3	359.7	360.0	359.7	358.8	358.0	357.1	356.2	355.2
110°	404.6	405.2	405.8	406.2	406.8	406.5	405.5	404.4	403.3	402.2	401.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	453.6	453.6	453.7	453.8	453.9	453.4	452.0	450.7	449.5	448.2	448.1
115°	520.8	521.0	521.3	521.6	521.9	521.9	521.6	521.3	521.0	520.8	521.3
117.5°	589.0	589.7	590.5	591.3	592.0	592.4	592.5	592.6	592.6	592.7	593.3
120°	636.9	637.4	638.0	638.6	639.0	639.5	639.8	640.0	640.3	640.6	642.0
122.5°	682.9	683.6	684.4	685.1	685.9	686.6	687.3	688.1	688.7	689.5	690.1
125°	751.8	752.9	753.9	755.1	756.2	757.2	758.4	759.4	760.5	761.6	762.1
127.5°	820.5	821.8	823.0	824.3	825.5	826.9	828.4	829.9	831.4	833.0	833.6
130°	865.5	867.4	869.3	871.2	873.1	874.6	875.7	876.8	877.9	878.9	879.8
132.5°	912.5	913.9	915.4	916.8	918.3	919.7	921.0	922.3	923.6	924.9	925.5
135°	985.3	985.8	986.4	986.9	987.5	988.3	989.4	990.4	991.6	992.6	992.9
137.5°	1049.6	1050.7	1051.7	1052.7	1053.8	1054.8	1055.9	1057.1	1058.2	1059.4	1058.7
140°	1091.7	1093.5	1095.4	1097.4	1099.3	1100.3	1100.6	1100.9	1101.2	1101.5	1101.2
142.5°	1134.7	1136.1	1137.6	1139.1	1140.6	1141.4	1141.7	1142.0	1142.3	1142.6	1142.0
145°	1196.7	1197.9	1198.9	1200.0	1201.2	1201.8	1202.1	1202.3	1202.6	1202.9	1202.1
147.5°	1252.1	1253.7	1255.3	1257.0	1258.6	1259.3	1259.3	1259.3	1259.3	1259.3	1258.6
150°	1287.2	1288.8	1290.5	1292.1	1293.7	1294.6	1294.6	1294.6	1294.6	1294.6	1294.0
152.5°	1321.4	1322.9	1324.3	1325.7	1327.1	1327.6	1327.2	1326.7	1326.3	1325.9	1325.6
155°	1367.9	1369.8	1371.8	1373.7	1375.5	1375.9	1374.9	1373.8	1372.7	1371.6	1371.3
157.5°	1410.2	1411.7	1413.2	1414.8	1416.3	1416.5	1415.3	1414.2	1413.1	1411.9	1411.7
160°	1437.6	1438.7	1439.8	1440.9	1442.0	1441.8	1440.5	1439.1	1437.8	1436.3	1436.3
162.5°	1458.1	1459.9	1461.6	1463.4	1465.1	1465.3	1464.0	1462.5	1461.2	1459.8	1459.6
165°	1487.7	1489.6	1491.6	1493.5	1495.3	1495.4	1493.8	1492.2	1490.5	1488.9	1488.9
167.5°	1512.9	1514.6	1516.3	1518.0	1519.7	1519.7	1518.0	1516.3	1514.6	1512.9	1512.7
170°	1525.6	1527.5	1529.5	1531.3	1533.2	1533.2	1531.3	1529.5	1527.5	1525.6	1525.6
172.5°	1535.4	1537.3	1539.2	1541.2	1543.0	1543.1	1541.4	1539.7	1538.0	1536.3	1536.3
175°	1546.4	1548.3	1550.2	1552.1	1554.0	1554.2	1552.6	1550.9	1549.3	1547.7	1547.7
177.5°	1552.3	1553.8	1555.3	1556.8	1558.4	1558.5	1557.2	1555.9	1554.5	1553.2	1553.2
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1786.9	1785.1	1776.8	1767.3	1754.8	1746.5	1740.0	1736.4	1725.8	1712.8	1703.8
5°	1897.2	1875.0	1851.2	1822.4	1795.7	1768.3	1751.2	1731.3	1706.9	1679.4	1660.2
7.5°	2015.4	1971.9	1925.0	1876.5	1828.6	1785.6	1747.8	1715.2	1676.3	1637.0	1609.5
10°	2106.1	2042.4	1976.5	1909.0	1847.6	1789.8	1745.3	1701.7	1655.0	1609.8	1575.7
12.5°	2188.5	2104.6	2028.6	1945.8	1867.2	1798.1	1734.1	1682.6	1626.5	1578.4	1539.5
15°	2292.8	2206.9	2115.0	1989.0	1884.6	1797.2	1719.4	1652.0	1583.8	1524.6	1486.8
17.5°	2390.3	2261.0	2137.5	2032.5	1896.8	1787.5	1692.6	1612.0	1537.2	1474.3	1427.9
20°	2430.6	2305.4	2171.3	2037.2	1903.8	1781.7	1671.2	1582.3	1504.6	1433.4	1390.5
22.5°	2454.9	2313.1	2171.9	2027.8	1886.1	1759.2	1649.9	1552.2	1467.8	1400.2	1347.3
25°	2483.2	2314.3	2158.7	2016.5	1872.0	1734.3	1604.6	1500.9	1409.8	1337.9	1281.6
27.5°	2501.9	2303.2	2119.3	1961.2	1814.7	1677.4	1558.7	1448.7	1356.3	1280.3	1219.8
30°	2505.4	2294.2	2089.1	1918.0	1769.1	1643.1	1517.2	1412.0	1314.2	1233.4	1177.1
32.5°	2510.2	2272.4	2048.1	1866.4	1713.9	1589.2	1475.1	1374.6	1274.5	1195.0	1137.5
35°	2490.6	2260.2	1986.1	1777.2	1624.6	1503.8	1400.9	1308.2	1209.8	1132.7	1074.2
37.5°	2406.4	2212.1	1921.8	1676.8	1517.2	1405.3	1321.4	1240.7	1150.4	1067.2	1012.1
40°	2321.7	2164.6	1872.0	1615.7	1449.1	1334.2	1258.7	1192.7	1105.3	1027.5	968.3
42.5°	2195.5	2100.1	1824.6	1551.7	1372.0	1261.3	1197.6	1135.8	1059.0	980.1	924.4
45°	1963.9	1976.5	1727.6	1449.7	1265.3	1154.1	1094.2	1051.2	983.1	917.8	860.8
47.5°	1673.5	1791.3	1613.6	1341.1	1152.8	1048.6	996.1	958.6	912.7	848.7	796.6
50°	1483.8	1652.0	1522.4	1268.3	1082.3	978.6	926.7	896.4	856.4	806.0	756.4
52.5°	1309.0	1489.6	1412.1	1187.0	1005.9	911.1	860.4	835.4	803.6	756.2	711.3
55°	1067.5	1250.5	1232.8	1064.5	891.2	806.0	767.5	739.3	717.8	682.3	646.8
57.5°	863.5	1037.0	1046.1	928.2	790.1	706.0	672.8	651.6	637.5	610.8	577.9
60°	734.9	894.2	925.3	836.4	717.8	643.8	611.1	594.1	583.1	561.6	536.3
62.5°	628.2	763.7	799.0	735.0	648.5	579.2	553.6	537.2	529.7	511.1	488.9
65°	480.8	593.4	627.5	591.9	546.7	491.2	470.4	456.4	449.7	439.3	423.0
67.5°	361.6	443.6	481.0	455.9	439.6	404.4	391.2	383.7	377.8	370.7	357.0
70°	290.4	351.1	389.6	383.0	369.7	351.1	341.5	336.3	330.4	324.5	312.6
72.5°	233.5	275.3	311.4	314.8	303.9	300.2	291.7	289.5	286.0	278.8	272.3
75°	154.9	183.7	208.9	218.6	223.0	226.7	223.0	222.3	221.5	215.6	211.9
77.5°	101.5	117.1	132.9	149.4	156.3	161.4	162.5	165.2	163.2	160.1	158.3
80°	77.8	81.5	92.6	106.7	117.8	122.2	125.2	126.7	125.9	125.2	122.2
82.5°	56.5	59.6	64.8	74.6	84.0	91.4	93.2	92.9	94.5	95.0	92.6
85°	30.3	31.1	32.6	34.1	39.3	47.4	49.7	51.1	52.6	52.6	48.2
87.5°	13.9	12.6	13.1	12.5	13.8	13.8	16.8	19.2	20.4	18.5	19.0
90°	22.2	18.8	15.2	12.1	9.3	6.7	4.0	1.2	4.0	6.7	9.3
92.5°	42.9	40.9	38.9	36.9	35.2	33.3	31.4	29.6	31.4	33.3	35.2
95°	86.1	84.0	81.8	79.7	77.9	76.0	74.0	72.1	74.0	76.0	77.9
97.5°	138.4	136.9	135.3	133.7	132.3	130.9	129.5	128.1	129.5	130.9	132.3
100°	177.0	175.6	174.3	172.8	171.2	169.5	167.9	166.3	167.9	169.5	171.2
102.5°	219.1	217.4	215.6	214.1	213.2	212.3	211.2	210.3	211.2	212.3	213.2
105°	283.6	281.2	278.7	277.2	276.6	276.2	275.6	275.0	275.6	276.2	276.6
107.5°	354.3	353.3	352.3	351.7	351.4	351.0	350.7	350.3	350.7	351.0	351.4
110°	401.1	400.6	400.0	399.4	398.9	398.4	397.8	397.3	397.8	398.4	398.9



TEST NUMBER: P332483-830

CATALOG NUMBER: S123RDIW-S1165D1320U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	447.9	447.8	447.7	447.5	447.1	446.9	446.5	446.2	446.5	446.9	447.1
115°	521.9	522.4	522.9	522.8	522.0	521.1	520.4	519.5	520.4	521.1	522.0
117.5°	594.1	594.7	595.5	595.6	595.0	594.5	593.9	593.4	593.9	594.5	595.0
120°	643.3	644.6	646.0	645.8	644.2	642.6	640.9	639.3	640.9	642.6	644.2
122.5°	690.9	691.5	692.3	692.0	690.9	689.7	688.4	687.3	688.4	689.7	690.9
125°	762.7	763.2	763.7	763.6	762.8	762.0	761.2	760.3	761.2	762.0	762.8
127.5°	834.2	834.8	835.4	834.8	833.0	831.3	829.6	827.8	829.6	831.3	833.0
130°	880.6	881.4	882.2	881.6	879.4	877.2	875.0	872.8	875.0	877.2	879.4
132.5°	926.1	926.7	927.3	926.5	924.4	922.2	920.0	917.8	920.0	922.2	924.4
135°	993.2	993.4	993.7	993.1	991.4	989.8	988.2	986.6	988.2	989.8	991.4
137.5°	1058.0	1057.2	1056.6	1055.6	1054.1	1052.8	1051.4	1050.1	1051.4	1052.8	1054.1
140°	1100.9	1100.6	1100.3	1099.6	1098.2	1096.8	1095.4	1094.1	1095.4	1096.8	1098.2
142.5°	1141.5	1141.0	1140.6	1139.6	1138.3	1136.9	1135.6	1134.2	1135.6	1136.9	1138.3
145°	1201.3	1200.4	1199.7	1198.9	1198.4	1197.9	1197.3	1196.7	1197.3	1197.9	1198.4
147.5°	1257.8	1257.1	1256.3	1255.5	1254.5	1253.5	1252.5	1251.5	1252.5	1253.5	1254.5
150°	1293.5	1293.0	1292.4	1291.8	1291.3	1290.8	1290.2	1289.7	1290.2	1290.8	1291.3
152.5°	1325.2	1324.9	1324.6	1324.0	1323.2	1322.5	1321.7	1321.0	1321.7	1322.5	1323.2
155°	1371.0	1370.7	1370.6	1370.4	1370.4	1370.4	1370.4	1370.4	1370.4	1370.4	1370.4
157.5°	1411.5	1411.3	1411.1	1411.1	1411.5	1411.7	1412.1	1412.4	1412.1	1411.7	1411.5
160°	1436.3	1436.3	1436.3	1436.6	1437.2	1437.8	1438.3	1438.8	1438.3	1437.8	1437.2
162.5°	1459.4	1459.2	1459.0	1459.2	1460.0	1460.8	1461.5	1462.3	1461.5	1460.8	1460.0
165°	1488.9	1488.9	1488.9	1489.4	1490.2	1491.0	1491.8	1492.6	1491.8	1491.0	1490.2
167.5°	1512.5	1512.2	1512.0	1512.5	1513.5	1514.7	1515.7	1516.8	1515.7	1514.7	1513.5
170°	1525.6	1525.6	1525.6	1526.2	1527.3	1528.3	1529.5	1530.5	1529.5	1528.3	1527.3
172.5°	1536.3	1536.3	1536.3	1536.9	1538.0	1539.1	1540.2	1541.2	1540.2	1539.1	1538.0
175°	1547.7	1547.7	1547.7	1548.1	1549.3	1550.4	1551.4	1552.6	1551.4	1550.4	1549.3
177.5°	1553.2	1553.2	1553.2	1553.7	1554.5	1555.4	1556.3	1557.2	1556.3	1555.4	1554.5
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



TEST NUMBER: P332483-830

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1700.9	1693.2	1687.9	1676.0	1668.3	1660.0	1651.7	1657.1	1656.4	1655.9	1655.9
5°	1643.9	1626.8	1611.3	1591.3	1578.7	1563.1	1551.2	1549.7	1552.7	1542.4	1536.4
7.5°	1587.2	1564.0	1541.9	1519.8	1496.5	1477.8	1466.0	1460.6	1453.0	1446.6	1440.0
10°	1547.6	1520.1	1498.6	1471.2	1446.0	1423.8	1409.8	1400.1	1395.0	1389.8	1380.2
12.5°	1506.7	1479.9	1452.5	1421.4	1397.5	1371.7	1361.1	1350.4	1340.4	1334.6	1321.4
15°	1446.8	1412.0	1383.1	1350.5	1323.8	1298.6	1283.8	1262.3	1259.3	1252.0	1238.6
17.5°	1386.8	1349.0	1309.2	1285.0	1254.9	1228.7	1206.2	1198.9	1177.7	1169.7	1158.2
20°	1339.4	1304.6	1274.2	1242.4	1198.6	1174.2	1156.4	1146.8	1129.7	1119.4	1111.9
22.5°	1298.4	1263.1	1227.9	1190.8	1154.8	1127.4	1114.4	1099.4	1090.1	1075.5	1067.5
25°	1240.1	1201.6	1159.3	1119.4	1093.4	1072.7	1052.0	1038.6	1025.3	1018.6	1003.8
27.5°	1172.2	1132.0	1092.5	1062.2	1030.3	1009.8	991.1	979.2	963.2	952.0	943.8
30°	1134.9	1087.5	1053.4	1026.1	985.2	966.0	952.0	937.2	925.3	913.4	905.3
32.5°	1091.7	1048.4	1016.1	982.1	950.9	929.8	911.6	898.6	888.5	877.2	869.1
35°	1023.8	987.5	954.1	920.1	897.1	875.6	854.1	843.0	833.4	823.0	815.7
37.5°	962.4	928.5	896.8	864.5	836.0	818.6	801.3	792.8	779.8	772.8	765.3
40°	924.5	891.2	857.1	826.0	796.4	783.1	767.5	754.9	743.0	737.8	729.7
42.5°	883.1	849.7	821.0	787.5	763.2	745.1	730.8	717.0	708.0	700.5	695.9
45°	821.5	791.9	763.7	730.5	707.5	691.9	675.6	663.0	654.9	649.7	641.5
47.5°	761.9	732.3	703.6	674.6	652.3	634.6	618.3	609.5	598.7	592.4	586.8
50°	718.6	691.9	661.6	634.9	612.7	594.8	581.5	570.4	560.8	552.6	548.9
52.5°	678.9	650.4	624.2	599.3	575.9	555.7	543.6	531.9	524.6	515.3	511.0
55°	613.4	586.0	563.7	539.3	516.3	499.3	484.5	474.1	466.7	456.4	450.4
57.5°	551.9	527.4	500.8	479.6	455.9	441.5	429.2	415.2	406.1	397.9	392.2
60°	510.4	482.3	459.3	439.3	418.6	400.0	388.9	377.8	368.2	360.1	354.9
62.5°	467.1	442.5	420.8	399.0	380.0	363.9	351.0	341.7	333.2	328.0	322.8
65°	400.8	381.5	359.3	341.5	323.8	311.9	301.5	293.3	287.5	283.7	279.3
67.5°	339.7	321.0	301.6	284.2	272.3	263.3	256.5	249.5	246.6	241.8	238.8
70°	300.0	280.8	263.7	250.4	238.6	231.9	227.4	222.3	219.2	213.4	210.4
72.5°	256.7	242.8	230.5	219.6	210.1	204.1	198.4	192.0	187.3	180.8	177.8
75°	202.3	189.6	180.0	172.6	166.6	158.5	150.4	143.7	141.5	139.3	138.6
77.5°	149.8	141.8	134.8	128.6	121.2	115.3	113.5	112.0	111.6	110.4	110.4
80°	117.8	110.4	105.2	97.7	93.3	93.3	93.3	91.9	92.6	92.6	92.6
82.5°	87.6	80.8	77.9	75.3	74.4	74.9	74.9	75.3	74.8	76.0	75.4
85°	45.1	45.9	47.4	46.7	47.4	47.4	48.9	48.2	48.9	47.4	48.9
87.5°	19.0	21.4	22.7	24.0	25.4	25.4	26.2	26.5	27.2	27.5	27.6
90°	12.1	15.2	18.8	22.2	25.8	29.3	30.4	31.5	32.6	33.6	34.5
92.5°	36.9	38.9	40.9	42.9	45.0	46.9	47.8	48.6	49.6	50.4	50.7
95°	79.7	81.8	84.0	86.1	88.3	90.5	91.5	92.7	93.7	94.8	95.4
97.5°	133.7	135.3	136.9	138.4	140.0	141.6	142.8	144.0	145.3	146.6	147.1
100°	172.8	174.3	175.6	177.0	178.3	179.7	180.5	181.3	182.1	182.9	183.6
102.5°	214.1	215.6	217.4	219.1	220.9	222.7	223.6	224.3	225.2	226.0	226.3
105°	277.2	278.7	281.2	283.6	286.1	288.5	288.5	288.5	288.5	288.5	288.8
107.5°	351.7	352.3	353.3	354.3	355.2	356.2	357.1	358.0	358.8	359.7	360.0
110°	399.4	400.0	400.6	401.1	401.6	402.2	403.3	404.4	405.5	406.5	406.8



TEST NUMBER: P332483-830

CATALOG NUMBER: S123RDIW-S1165D1320U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	447.5	447.7	447.8	447.9	448.1	448.2	449.5	450.7	452.0	453.4	453.9
115°	522.8	522.9	522.4	521.9	521.3	520.8	521.0	521.3	521.6	521.9	521.9
117.5°	595.6	595.5	594.7	594.1	593.3	592.7	592.6	592.6	592.5	592.4	592.0
120°	645.8	646.0	644.6	643.3	642.0	640.6	640.3	640.0	639.8	639.5	639.0
122.5°	692.0	692.3	691.5	690.9	690.1	689.5	688.7	688.1	687.3	686.6	685.9
125°	763.6	763.7	763.2	762.7	762.1	761.6	760.5	759.4	758.4	757.2	756.2
127.5°	834.8	835.4	834.8	834.2	833.6	833.0	831.4	829.9	828.4	826.9	825.5
130°	881.6	882.2	881.4	880.6	879.8	878.9	877.9	876.8	875.7	874.6	873.1
132.5°	926.5	927.3	926.7	926.1	925.5	924.9	923.6	922.3	921.0	919.7	918.3
135°	993.1	993.7	993.4	993.2	992.9	992.6	991.6	990.4	989.4	988.3	987.5
137.5°	1055.6	1056.6	1057.2	1058.0	1058.7	1059.4	1058.2	1057.1	1055.9	1054.8	1053.8
140°	1099.6	1100.3	1100.6	1100.9	1101.2	1101.5	1101.2	1100.9	1100.6	1100.3	1099.3
142.5°	1139.6	1140.6	1141.0	1141.5	1142.0	1142.6	1142.3	1142.0	1141.7	1141.4	1140.6
145°	1198.9	1199.7	1200.4	1201.3	1202.1	1202.9	1202.6	1202.3	1202.1	1201.8	1201.2
147.5°	1255.5	1256.3	1257.1	1257.8	1258.6	1259.3	1259.3	1259.3	1259.3	1259.3	1258.6
150°	1291.8	1292.4	1293.0	1293.5	1294.0	1294.6	1294.6	1294.6	1294.6	1294.6	1293.7
152.5°	1324.0	1324.6	1324.9	1325.2	1325.6	1325.9	1326.3	1326.7	1327.2	1327.6	1327.1
155°	1370.4	1370.6	1370.7	1371.0	1371.3	1371.6	1372.7	1373.8	1374.9	1375.9	1375.5
157.5°	1411.1	1411.1	1411.3	1411.5	1411.7	1411.9	1413.1	1414.2	1415.3	1416.5	1416.3
160°	1436.6	1436.3	1436.3	1436.3	1436.3	1436.3	1437.8	1439.1	1440.5	1441.8	1442.0
162.5°	1459.2	1459.0	1459.2	1459.4	1459.6	1459.8	1461.2	1462.5	1464.0	1465.3	1465.1
165°	1489.4	1488.9	1488.9	1488.9	1488.9	1488.9	1490.5	1492.2	1493.8	1495.4	1495.3
167.5°	1512.5	1512.0	1512.2	1512.5	1512.7	1512.9	1514.6	1516.3	1518.0	1519.7	1519.7
170°	1526.2	1525.6	1525.6	1525.6	1525.6	1525.6	1527.5	1529.5	1531.3	1533.2	1533.2
172.5°	1536.9	1536.3	1536.3	1536.3	1536.3	1536.3	1538.0	1539.7	1541.4	1543.1	1543.0
175°	1548.1	1547.7	1547.7	1547.7	1547.7	1547.7	1549.3	1550.9	1552.6	1554.2	1554.0
177.5°	1553.7	1553.2	1553.2	1553.2	1553.2	1553.2	1554.5	1555.9	1557.2	1558.5	1558.4
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



TEST NUMBER: P332483-830

CATALOG NUMBER: S123RDIW-S1165D1320U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1648.8	1648.1	1648.8	1646.3	1648.8	1648.1	1648.8	1655.9	1655.9	1656.4	1657.1
5°	1534.2	1533.5	1531.3	1524.6	1531.3	1533.5	1534.2	1536.4	1542.4	1552.7	1549.7
7.5°	1434.2	1433.1	1426.6	1426.8	1426.6	1433.1	1434.2	1440.0	1446.6	1453.0	1460.6
10°	1375.0	1375.6	1366.8	1361.6	1366.8	1375.6	1375.0	1380.2	1389.8	1395.0	1400.1
12.5°	1317.5	1314.1	1306.9	1301.2	1306.9	1314.1	1317.5	1321.4	1334.6	1340.4	1350.4
15°	1241.6	1234.2	1216.4	1217.9	1216.4	1234.2	1241.6	1238.6	1252.0	1259.3	1262.3
17.5°	1152.3	1146.8	1146.5	1136.1	1146.5	1146.8	1152.3	1158.2	1169.7	1177.7	1198.9
20°	1100.1	1096.4	1097.9	1087.5	1097.9	1096.4	1100.1	1111.9	1119.4	1129.7	1146.8
22.5°	1059.2	1055.5	1049.2	1046.0	1049.2	1055.5	1059.2	1067.5	1075.5	1090.1	1099.4
25°	999.4	993.4	987.5	991.2	987.5	993.4	999.4	1003.8	1018.6	1025.3	1038.6
27.5°	939.5	935.1	929.2	928.4	929.2	935.1	939.5	943.8	952.0	963.2	979.2
30°	901.5	897.1	894.2	890.4	894.2	897.1	901.5	905.3	913.4	925.3	937.2
32.5°	863.1	862.1	856.9	856.1	856.9	862.1	863.1	869.1	877.2	888.5	898.6
35°	812.7	808.2	806.7	807.5	806.7	808.2	812.7	815.7	823.0	833.4	843.0
37.5°	764.8	758.8	756.2	753.6	756.2	758.8	764.8	765.3	772.8	779.8	792.8
40°	730.5	724.5	723.0	721.5	723.0	724.5	730.5	729.7	737.8	743.0	754.9
42.5°	691.9	689.6	688.6	686.0	688.6	689.6	691.9	695.9	700.5	708.0	717.0
45°	639.3	638.6	634.1	635.7	634.1	638.6	639.3	641.5	649.7	654.9	663.0
47.5°	583.9	580.6	577.5	579.6	577.5	580.6	583.9	586.8	592.4	598.7	609.5
50°	546.0	544.5	537.8	539.3	537.8	544.5	546.0	548.9	552.6	560.8	570.4
52.5°	508.0	502.4	499.9	499.0	499.9	502.4	508.0	511.0	515.3	524.6	531.9
55°	445.3	438.6	435.5	434.1	435.5	438.6	445.3	450.4	456.4	466.7	474.1
57.5°	383.6	381.8	379.5	381.1	379.5	381.8	383.6	392.2	397.9	406.1	415.2
60°	347.4	347.4	347.4	346.7	347.4	347.4	347.4	354.9	360.1	368.2	377.8
62.5°	319.6	317.8	317.3	318.3	317.3	317.8	319.6	322.8	328.0	333.2	341.7
65°	277.1	276.4	273.3	272.6	273.3	276.4	277.1	279.3	283.7	287.5	293.3
67.5°	237.0	234.2	233.4	232.3	233.4	234.2	237.0	238.8	241.8	246.6	249.5
70°	206.7	205.2	200.8	201.5	200.8	205.2	206.7	210.4	213.4	219.2	222.3
72.5°	174.1	172.6	171.7	170.7	171.7	172.6	174.1	177.8	180.8	187.3	192.0
75°	137.8	137.0	136.3	139.3	136.3	137.0	137.8	138.6	139.3	141.5	143.7
77.5°	110.4	110.4	110.8	109.6	110.8	110.4	110.4	110.4	110.4	111.6	112.0
80°	92.6	92.6	91.9	91.9	91.9	92.6	92.6	92.6	92.6	92.6	91.9
82.5°	74.3	74.8	75.3	74.1	75.3	74.8	74.3	75.4	76.0	74.8	75.3
85°	48.9	48.2	49.7	48.9	49.7	48.2	48.9	48.9	47.4	48.9	48.2
87.5°	28.9	27.9	28.0	28.7	28.0	27.9	28.9	27.6	27.5	27.2	26.5
90°	35.1	35.6	36.1	36.7	36.1	35.6	35.1	34.5	33.6	32.6	31.5
92.5°	50.3	50.0	49.7	49.4	49.7	50.0	50.3	50.7	50.4	49.6	48.6
95°	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	94.8	93.7	92.7
97.5°	147.0	146.9	146.8	146.7	146.8	146.9	147.0	147.1	146.6	145.3	144.0
100°	184.2	184.7	185.3	185.8	185.3	184.7	184.2	183.6	182.9	182.1	181.3
102.5°	226.2	226.1	226.0	225.9	226.0	226.1	226.2	226.3	226.0	225.2	224.3
105°	289.4	289.8	290.4	291.0	290.4	289.8	289.4	288.8	288.5	288.5	288.5
107.5°	359.7	359.3	359.0	358.6	359.0	359.3	359.7	360.0	359.7	358.8	358.0
110°	406.2	405.8	405.2	404.6	405.2	405.8	406.2	406.8	406.5	405.5	404.4



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CATALOG NUMBER: S123RDIW-S1165D1320U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	453.8	453.7	453.6	453.6	453.6	453.7	453.8	453.9	453.4	452.0	450.7
115°	521.6	521.3	521.0	520.8	521.0	521.3	521.6	521.9	521.9	521.6	521.3
117.5°	591.3	590.5	589.7	589.0	589.7	590.5	591.3	592.0	592.4	592.5	592.6
120°	638.6	638.0	637.4	636.9	637.4	638.0	638.6	639.0	639.5	639.8	640.0
122.5°	685.1	684.4	683.6	682.9	683.6	684.4	685.1	685.9	686.6	687.3	688.1
125°	755.1	753.9	752.9	751.8	752.9	753.9	755.1	756.2	757.2	758.4	759.4
127.5°	824.3	823.0	821.8	820.5	821.8	823.0	824.3	825.5	826.9	828.4	829.9
130°	871.2	869.3	867.4	865.5	867.4	869.3	871.2	873.1	874.6	875.7	876.8
132.5°	916.8	915.4	913.9	912.5	913.9	915.4	916.8	918.3	919.7	921.0	922.3
135°	986.9	986.4	985.8	985.3	985.8	986.4	986.9	987.5	988.3	989.4	990.4
137.5°	1052.7	1051.7	1050.7	1049.6	1050.7	1051.7	1052.7	1053.8	1054.8	1055.9	1057.1
140°	1097.4	1095.4	1093.5	1091.7	1093.5	1095.4	1097.4	1099.3	1100.3	1100.6	1100.9
142.5°	1139.1	1137.6	1136.1	1134.7	1136.1	1137.6	1139.1	1140.6	1141.4	1141.7	1142.0
145°	1200.0	1198.9	1197.9	1196.7	1197.9	1198.9	1200.0	1201.2	1201.8	1202.1	1202.3
147.5°	1257.0	1255.3	1253.7	1252.1	1253.7	1255.3	1257.0	1258.6	1259.3	1259.3	1259.3
150°	1292.1	1290.5	1288.8	1287.2	1288.8	1290.5	1292.1	1293.7	1294.6	1294.6	1294.6
152.5°	1325.7	1324.3	1322.9	1321.4	1322.9	1324.3	1325.7	1327.1	1327.6	1327.2	1326.7
155°	1373.7	1371.8	1369.8	1367.9	1369.8	1371.8	1373.7	1375.5	1375.9	1374.9	1373.8
157.5°	1414.8	1413.2	1411.7	1410.2	1411.7	1413.2	1414.8	1416.3	1416.5	1415.3	1414.2
160°	1440.9	1439.8	1438.7	1437.6	1438.7	1439.8	1440.9	1442.0	1441.8	1440.5	1439.1
162.5°	1463.4	1461.6	1459.9	1458.1	1459.9	1461.6	1463.4	1465.1	1465.3	1464.0	1462.5
165°	1493.5	1491.6	1489.6	1487.7	1489.6	1491.6	1493.5	1495.3	1495.4	1493.8	1492.2
167.5°	1518.0	1516.3	1514.6	1512.9	1514.6	1516.3	1518.0	1519.7	1519.7	1518.0	1516.3
170°	1531.3	1529.5	1527.5	1525.6	1527.5	1529.5	1531.3	1533.2	1533.2	1531.3	1529.5
172.5°	1541.2	1539.2	1537.3	1535.4	1537.3	1539.2	1541.2	1543.0	1543.1	1541.4	1539.7
175°	1552.1	1550.2	1548.3	1546.4	1548.3	1550.2	1552.1	1554.0	1554.2	1552.6	1550.9
177.5°	1556.8	1555.3	1553.8	1552.3	1553.8	1555.3	1556.8	1558.4	1558.5	1557.2	1555.9
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1651.7	1660.0	1668.3	1676.0	1687.9	1693.2	1700.9	1703.8	1712.8	1725.8	1736.4
5°	1551.2	1563.1	1578.7	1591.3	1611.3	1626.8	1643.9	1660.2	1679.4	1706.9	1731.3
7.5°	1466.0	1477.8	1496.5	1519.8	1541.9	1564.0	1587.2	1609.5	1637.0	1676.3	1715.2
10°	1409.8	1423.8	1446.0	1471.2	1498.6	1520.1	1547.6	1575.7	1609.8	1655.0	1701.7
12.5°	1361.1	1371.7	1397.5	1421.4	1452.5	1479.9	1506.7	1539.5	1578.4	1626.5	1682.6
15°	1283.8	1298.6	1323.8	1350.5	1383.1	1412.0	1446.8	1486.8	1524.6	1583.8	1652.0
17.5°	1206.2	1228.7	1254.9	1285.0	1309.2	1349.0	1386.8	1427.9	1474.3	1537.2	1612.0
20°	1156.4	1174.2	1198.6	1242.4	1274.2	1304.6	1339.4	1390.5	1433.4	1504.6	1582.3
22.5°	1114.4	1127.4	1154.8	1190.8	1227.9	1263.1	1298.4	1347.3	1400.2	1467.8	1552.2
25°	1052.0	1072.7	1093.4	1119.4	1159.3	1201.6	1240.1	1281.6	1337.9	1409.8	1500.9
27.5°	991.1	1009.8	1030.3	1062.2	1092.5	1132.0	1172.2	1219.8	1280.3	1356.3	1448.7
30°	952.0	966.0	985.2	1026.1	1053.4	1087.5	1134.9	1177.1	1233.4	1314.2	1412.0
32.5°	911.6	929.8	950.9	982.1	1016.1	1048.4	1091.7	1137.5	1195.0	1274.5	1374.6
35°	854.1	875.6	897.1	920.1	954.1	987.5	1023.8	1074.2	1132.7	1209.8	1308.2
37.5°	801.3	818.6	836.0	864.5	896.8	928.5	962.4	1012.1	1067.2	1150.4	1240.7
40°	767.5	783.1	796.4	826.0	857.1	891.2	924.5	968.3	1027.5	1105.3	1192.7
42.5°	730.8	745.1	763.2	787.5	821.0	849.7	883.1	924.4	980.1	1059.0	1135.8
45°	675.6	691.9	707.5	730.5	763.7	791.9	821.5	860.8	917.8	983.1	1051.2
47.5°	618.3	634.6	652.3	674.6	703.6	732.3	761.9	796.6	848.7	912.7	958.6
50°	581.5	594.8	612.7	634.9	661.6	691.9	718.6	756.4	806.0	856.4	896.4
52.5°	543.6	555.7	575.9	599.3	624.2	650.4	678.9	711.3	756.2	803.6	835.4
55°	484.5	499.3	516.3	539.3	563.7	586.0	613.4	646.8	682.3	717.8	739.3
57.5°	429.2	441.5	455.9	479.6	500.8	527.4	551.9	577.9	610.8	637.5	651.6
60°	388.9	400.0	418.6	439.3	459.3	482.3	510.4	536.3	561.6	583.1	594.1
62.5°	351.0	363.9	380.0	399.0	420.8	442.5	467.1	488.9	511.1	529.7	537.2
65°	301.5	311.9	323.8	341.5	359.3	381.5	400.8	423.0	439.3	449.7	456.4
67.5°	256.5	263.3	272.3	284.2	301.6	321.0	339.7	357.0	370.7	377.8	383.7
70°	227.4	231.9	238.6	250.4	263.7	280.8	300.0	312.6	324.5	330.4	336.3
72.5°	198.4	204.1	210.1	219.6	230.5	242.8	256.7	272.3	278.8	286.0	289.5
75°	150.4	158.5	166.6	172.6	180.0	189.6	202.3	211.9	215.6	221.5	222.3
77.5°	113.5	115.3	121.2	128.6	134.8	141.8	149.8	158.3	160.1	163.2	165.2
80°	93.3	93.3	93.3	97.7	105.2	110.4	117.8	122.2	125.2	125.9	126.7
82.5°	74.9	74.9	74.4	75.3	77.9	80.8	87.6	92.6	95.0	94.5	92.9
85°	48.9	47.4	47.4	46.7	47.4	45.9	45.1	48.2	52.6	52.6	51.1
87.5°	26.2	25.4	25.4	24.0	22.7	21.4	19.0	19.0	18.5	20.4	19.2
90°	30.4	29.3	25.8	22.2	18.8	15.2	12.1	9.3	6.7	4.0	1.2
92.5°	47.8	46.9	45.0	42.9	40.9	38.9	36.9	35.2	33.3	31.4	29.6
95°	91.5	90.5	88.3	86.1	84.0	81.8	79.7	77.9	76.0	74.0	72.1
97.5°	142.8	141.6	140.0	138.4	136.9	135.3	133.7	132.3	130.9	129.5	128.1
100°	180.5	179.7	178.3	177.0	175.6	174.3	172.8	171.2	169.5	167.9	166.3
102.5°	223.6	222.7	220.9	219.1	217.4	215.6	214.1	213.2	212.3	211.2	210.3
105°	288.5	288.5	286.1	283.6	281.2	278.7	277.2	276.6	276.2	275.6	275.0
107.5°	357.1	356.2	355.2	354.3	353.3	352.3	351.7	351.4	351.0	350.7	350.3
110°	403.3	402.2	401.6	401.1	400.6	400.0	399.4	398.9	398.4	397.8	397.3



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	449.5	448.2	448.1	447.9	447.8	447.7	447.5	447.1	446.9	446.5	446.2
115°	521.0	520.8	521.3	521.9	522.4	522.9	522.8	522.0	521.1	520.4	519.5
117.5°	592.6	592.7	593.3	594.1	594.7	595.5	595.6	595.0	594.5	593.9	593.4
120°	640.3	640.6	642.0	643.3	644.6	646.0	645.8	644.2	642.6	640.9	639.3
122.5°	688.7	689.5	690.1	690.9	691.5	692.3	692.0	690.9	689.7	688.4	687.3
125°	760.5	761.6	762.1	762.7	763.2	763.7	763.6	762.8	762.0	761.2	760.3
127.5°	831.4	833.0	833.6	834.2	834.8	835.4	834.8	833.0	831.3	829.6	827.8
130°	877.9	878.9	879.8	880.6	881.4	882.2	881.6	879.4	877.2	875.0	872.8
132.5°	923.6	924.9	925.5	926.1	926.7	927.3	926.5	924.4	922.2	920.0	917.8
135°	991.6	992.6	992.9	993.2	993.4	993.7	993.1	991.4	989.8	988.2	986.6
137.5°	1058.2	1059.4	1058.7	1058.0	1057.2	1056.6	1055.6	1054.1	1052.8	1051.4	1050.1
140°	1101.2	1101.5	1101.2	1100.9	1100.6	1100.3	1099.6	1098.2	1096.8	1095.4	1094.1
142.5°	1142.3	1142.6	1142.0	1141.5	1141.0	1140.6	1139.6	1138.3	1136.9	1135.6	1134.2
145°	1202.6	1202.9	1202.1	1201.3	1200.4	1199.7	1198.9	1198.4	1197.9	1197.3	1196.7
147.5°	1259.3	1259.3	1258.6	1257.8	1257.1	1256.3	1255.5	1254.5	1253.5	1252.5	1251.5
150°	1294.6	1294.6	1294.0	1293.5	1293.0	1292.4	1291.8	1291.3	1290.8	1290.2	1289.7
152.5°	1326.3	1325.9	1325.6	1325.2	1324.9	1324.6	1324.0	1323.2	1322.5	1321.7	1321.0
155°	1372.7	1371.6	1371.3	1371.0	1370.7	1370.6	1370.4	1370.4	1370.4	1370.4	1370.4
157.5°	1413.1	1411.9	1411.7	1411.5	1411.3	1411.1	1411.1	1411.5	1411.7	1412.1	1412.4
160°	1437.8	1436.3	1436.3	1436.3	1436.3	1436.3	1436.6	1437.2	1437.8	1438.3	1438.8
162.5°	1461.2	1459.8	1459.6	1459.4	1459.2	1459.0	1459.2	1460.0	1460.8	1461.5	1462.3
165°	1490.5	1488.9	1488.9	1488.9	1488.9	1488.9	1489.4	1490.2	1491.0	1491.8	1492.6
167.5°	1514.6	1512.9	1512.7	1512.5	1512.2	1512.0	1512.5	1513.5	1514.7	1515.7	1516.8
170°	1527.5	1525.6	1525.6	1525.6	1525.6	1525.6	1526.2	1527.3	1528.3	1529.5	1530.5
172.5°	1538.0	1536.3	1536.3	1536.3	1536.3	1536.3	1536.9	1538.0	1539.1	1540.2	1541.2
175°	1549.3	1547.7	1547.7	1547.7	1547.7	1547.7	1548.1	1549.3	1550.4	1551.4	1552.6
177.5°	1554.5	1553.2	1553.2	1553.2	1553.2	1553.2	1553.7	1554.5	1555.4	1556.3	1557.2
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1740.0	1746.5	1754.8	1767.3	1776.8	1785.1	1786.9	1789.2	1795.2	1805.2	1812.9
5°	1751.2	1768.3	1795.7	1822.4	1851.2	1875.0	1897.2	1912.8	1927.6	1958.7	1983.9
7.5°	1747.8	1785.6	1828.6	1876.5	1925.0	1971.9	2015.4	2054.4	2093.2	2138.5	2190.3
10°	1745.3	1789.8	1847.6	1909.0	1976.5	2042.4	2106.1	2155.8	2213.6	2265.4	2331.3
12.5°	1734.1	1798.1	1867.2	1945.8	2028.6	2104.6	2188.5	2257.1	2323.2	2398.1	2474.7
15°	1719.4	1797.2	1884.6	1989.0	2115.0	2206.9	2292.8	2412.1	2493.6	2575.0	2684.7
17.5°	1692.6	1787.5	1896.8	2032.5	2137.5	2261.0	2390.3	2484.5	2594.3	2709.2	2808.4
20°	1671.2	1781.7	1903.8	2037.2	2171.3	2305.4	2430.6	2543.2	2656.6	2789.2	2870.6
22.5°	1649.9	1759.2	1886.1	2027.8	2171.9	2313.1	2454.9	2587.1	2714.6	2848.5	2952.4
25°	1604.6	1734.3	1872.0	2016.5	2158.7	2314.3	2483.2	2630.6	2788.4	2926.2	3024.7
27.5°	1558.7	1677.4	1814.7	1961.2	2119.3	2303.2	2501.9	2669.5	2827.5	2926.2	2957.1
30°	1517.2	1643.1	1769.1	1918.0	2089.1	2294.2	2505.4	2697.3	2827.0	2869.9	2838.0
32.5°	1475.1	1589.2	1713.9	1866.4	2048.1	2272.4	2510.2	2680.7	2758.7	2725.9	2596.2
35°	1400.9	1503.8	1624.6	1777.2	1986.1	2260.2	2490.6	2606.1	2586.9	2401.7	2157.2
37.5°	1321.4	1405.3	1517.2	1676.8	1921.8	2212.1	2406.4	2423.5	2256.8	1972.5	1690.1
40°	1258.7	1334.2	1449.1	1615.7	1872.0	2164.6	2321.7	2252.8	1994.2	1677.9	1442.4
42.5°	1197.6	1261.3	1372.0	1551.7	1824.6	2100.1	2195.5	2045.4	1747.1	1448.0	1233.8
45°	1094.2	1154.1	1265.3	1449.7	1727.6	1976.5	1963.9	1703.1	1404.6	1163.9	986.0
47.5°	996.1	1048.6	1152.8	1341.1	1613.6	1791.3	1673.5	1396.0	1142.7	949.6	822.7
50°	926.7	978.6	1082.3	1268.3	1522.4	1652.0	1483.8	1216.4	984.6	824.5	723.8
52.5°	860.4	911.1	1005.9	1187.0	1412.1	1489.6	1309.0	1061.1	867.8	729.7	643.2
55°	767.5	806.0	891.2	1064.5	1232.8	1250.5	1067.5	860.1	700.8	604.5	545.3
57.5°	672.8	706.0	790.1	928.2	1046.1	1037.0	863.5	684.1	576.8	505.2	462.2
60°	611.1	643.8	717.8	836.4	925.3	894.2	734.9	590.4	498.6	446.0	411.9
62.5°	553.6	579.2	648.5	735.0	799.0	763.7	628.2	508.6	435.7	391.4	364.5
65°	470.4	491.2	546.7	591.9	627.5	593.4	480.8	397.8	345.3	314.1	295.6
67.5°	391.2	404.4	439.6	455.9	481.0	443.6	361.6	305.9	276.1	249.8	237.0
70°	341.5	351.1	369.7	383.0	389.6	351.1	290.4	249.7	224.4	205.9	197.8
72.5°	291.7	300.2	303.9	314.8	311.4	275.3	233.5	201.0	182.9	170.4	159.9
75°	223.0	226.7	223.0	218.6	208.9	183.7	154.9	138.6	125.2	119.2	115.6
77.5°	162.5	161.4	156.3	149.4	132.9	117.1	101.5	96.0	90.2	87.1	85.8
80°	125.2	122.2	117.8	106.7	92.6	81.5	77.8	74.1	71.8	68.1	67.4
82.5°	93.2	91.4	84.0	74.6	64.8	59.6	56.5	55.1	52.9	51.0	50.8
85°	49.7	47.4	39.3	34.1	32.6	31.1	30.3	30.3	27.4	26.7	26.7
87.5°	16.8	13.8	13.8	12.5	13.1	12.6	13.9	13.5	13.6	14.4	13.4
90°	4.0	6.7	9.3	12.1	15.2	18.8	22.2	25.8	29.3	30.4	31.5
92.5°	31.4	33.3	35.2	36.9	38.9	40.9	42.9	45.0	46.9	47.8	48.6
95°	74.0	76.0	77.9	79.7	81.8	84.0	86.1	88.3	90.5	91.5	92.7
97.5°	129.5	130.9	132.3	133.7	135.3	136.9	138.4	140.0	141.6	142.8	144.0
100°	167.9	169.5	171.2	172.8	174.3	175.6	177.0	178.3	179.7	180.5	181.3
102.5°	211.2	212.3	213.2	214.1	215.6	217.4	219.1	220.9	222.7	223.6	224.3
105°	275.6	276.2	276.6	277.2	278.7	281.2	283.6	286.1	288.5	288.5	288.5
107.5°	350.7	351.0	351.4	351.7	352.3	353.3	354.3	355.2	356.2	357.1	358.0
110°	397.8	398.4	398.9	399.4	400.0	400.6	401.1	401.6	402.2	403.3	404.4



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	446.5	446.9	447.1	447.5	447.7	447.8	447.9	448.1	448.2	449.5	450.7
115°	520.4	521.1	522.0	522.8	522.9	522.4	521.9	521.3	520.8	521.0	521.3
117.5°	593.9	594.5	595.0	595.6	595.5	594.7	594.1	593.3	592.7	592.6	592.6
120°	640.9	642.6	644.2	645.8	646.0	644.6	643.3	642.0	640.6	640.3	640.0
122.5°	688.4	689.7	690.9	692.0	692.3	691.5	690.9	690.1	689.5	688.7	688.1
125°	761.2	762.0	762.8	763.6	763.7	763.2	762.7	762.1	761.6	760.5	759.4
127.5°	829.6	831.3	833.0	834.8	835.4	834.8	834.2	833.6	833.0	831.4	829.9
130°	875.0	877.2	879.4	881.6	882.2	881.4	880.6	879.8	878.9	877.9	876.8
132.5°	920.0	922.2	924.4	926.5	927.3	926.7	926.1	925.5	924.9	923.6	922.3
135°	988.2	989.8	991.4	993.1	993.7	993.4	993.2	992.9	992.6	991.6	990.4
137.5°	1051.4	1052.8	1054.1	1055.6	1056.6	1057.2	1058.0	1058.7	1059.4	1058.2	1057.1
140°	1095.4	1096.8	1098.2	1099.6	1100.3	1100.6	1100.9	1101.2	1101.5	1101.2	1100.9
142.5°	1135.6	1136.9	1138.3	1139.6	1140.6	1141.0	1141.5	1142.0	1142.6	1142.3	1142.0
145°	1197.3	1197.9	1198.4	1198.9	1199.7	1200.4	1201.3	1202.1	1202.9	1202.6	1202.3
147.5°	1252.5	1253.5	1254.5	1255.5	1256.3	1257.1	1257.8	1258.6	1259.3	1259.3	1259.3
150°	1290.2	1290.8	1291.3	1291.8	1292.4	1293.0	1293.5	1294.0	1294.6	1294.6	1294.6
152.5°	1321.7	1322.5	1323.2	1324.0	1324.6	1324.9	1325.2	1325.6	1325.9	1326.3	1326.7
155°	1370.4	1370.4	1370.4	1370.4	1370.6	1370.7	1371.0	1371.3	1371.6	1372.7	1373.8
157.5°	1412.1	1411.7	1411.5	1411.1	1411.1	1411.3	1411.5	1411.7	1411.9	1413.1	1414.2
160°	1438.3	1437.8	1437.2	1436.6	1436.3	1436.3	1436.3	1436.3	1436.3	1437.8	1439.1
162.5°	1461.5	1460.8	1460.0	1459.2	1459.0	1459.2	1459.4	1459.6	1459.8	1461.2	1462.5
165°	1491.8	1491.0	1490.2	1489.4	1488.9	1488.9	1488.9	1488.9	1488.9	1490.5	1492.2
167.5°	1515.7	1514.7	1513.5	1512.5	1512.0	1512.2	1512.5	1512.7	1512.9	1514.6	1516.3
170°	1529.5	1528.3	1527.3	1526.2	1525.6	1525.6	1525.6	1525.6	1525.6	1527.5	1529.5
172.5°	1540.2	1539.1	1538.0	1536.9	1536.3	1536.3	1536.3	1536.3	1536.3	1538.0	1539.7
175°	1551.4	1550.4	1549.3	1548.1	1547.7	1547.7	1547.7	1547.7	1547.7	1549.3	1550.9
177.5°	1556.3	1555.4	1554.5	1553.7	1553.2	1553.2	1553.2	1553.2	1553.2	1554.5	1555.9
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1825.3	1825.3	1827.7	1836.6	1837.8	1845.5	1843.1
5°	2006.1	2020.2	2025.3	2047.6	2061.0	2066.9	2055.0
7.5°	2227.1	2266.9	2285.7	2308.9	2329.6	2335.8	2319.6
10°	2388.4	2429.9	2464.7	2486.1	2506.1	2519.5	2536.6
12.5°	2544.2	2595.2	2628.3	2658.6	2679.2	2696.1	2698.9
15°	2713.6	2790.6	2849.1	2892.1	2913.6	2924.7	2920.3
17.5°	2884.4	2955.8	2997.5	3041.3	3071.1	3072.6	3073.4
20°	2981.0	3050.6	3098.8	3131.4	3164.8	3163.3	3170.6
22.5°	3045.6	3100.4	3137.3	3161.0	3172.4	3166.8	3168.3
25°	3075.8	3092.1	3085.5	3047.7	3038.1	3003.2	3009.2
27.5°	2920.0	2842.9	2763.3	2660.7	2579.8	2515.2	2518.5
30°	2708.4	2572.1	2416.5	2286.1	2169.1	2136.5	2066.9
32.5°	2412.6	2208.2	2026.0	1904.5	1804.0	1776.8	1716.0
35°	1911.3	1712.8	1525.3	1412.7	1368.3	1306.1	1305.3
37.5°	1485.6	1310.8	1211.6	1127.2	1082.9	1045.3	1041.6
40°	1249.7	1113.4	1038.6	977.9	934.2	906.0	899.4
42.5°	1085.0	974.8	904.7	867.0	833.4	818.9	808.0
45°	886.0	811.9	763.0	729.0	713.4	702.3	696.4
47.5°	741.1	691.4	658.2	635.5	622.8	611.1	614.3
50°	662.3	621.5	597.1	575.6	566.0	557.8	558.6
52.5°	598.9	562.3	542.5	527.0	515.0	509.3	506.4
55°	508.2	485.2	465.2	454.1	447.4	439.3	437.1
57.5°	433.5	415.8	399.4	386.8	385.2	377.4	378.4
60°	383.7	368.9	355.6	348.9	343.7	337.1	339.3
62.5°	342.8	330.4	318.3	312.7	307.6	302.7	303.7
65°	280.8	268.9	261.5	258.5	256.3	254.1	251.8
67.5°	223.8	216.5	211.9	205.5	201.0	200.2	197.9
70°	188.1	178.5	170.4	162.2	160.0	159.3	160.0
72.5°	150.8	144.8	142.5	138.6	138.1	136.2	137.5
75°	113.4	111.1	109.6	106.7	106.7	106.7	106.7
77.5°	83.6	82.2	81.3	80.8	80.0	79.0	78.8
80°	65.2	64.5	63.0	63.0	62.2	63.0	62.2
82.5°	49.2	49.0	47.6	47.6	46.8	46.4	46.8
85°	25.2	24.4	25.9	24.4	25.2	23.8	25.2
87.5°	13.7	13.9	13.4	13.6	13.0	14.3	13.3
90°	32.6	33.6	34.5	35.1	35.6	36.1	36.7
92.5°	49.6	50.4	50.7	50.3	50.0	49.7	49.4
95°	93.7	94.8	95.4	95.4	95.4	95.4	95.4
97.5°	145.3	146.6	147.1	147.0	146.9	146.8	146.7
100°	182.1	182.9	183.6	184.2	184.7	185.3	185.8
102.5°	225.2	226.0	226.3	226.2	226.1	226.0	225.9
105°	288.5	288.5	288.8	289.4	289.8	290.4	291.0
107.5°	358.8	359.7	360.0	359.7	359.3	359.0	358.6
110°	405.5	406.5	406.8	406.2	405.8	405.2	404.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	452.0	453.4	453.9	453.8	453.7	453.6	453.6
115°	521.6	521.9	521.9	521.6	521.3	521.0	520.8
117.5°	592.5	592.4	592.0	591.3	590.5	589.7	589.0
120°	639.8	639.5	639.0	638.6	638.0	637.4	636.9
122.5°	687.3	686.6	685.9	685.1	684.4	683.6	682.9
125°	758.4	757.2	756.2	755.1	753.9	752.9	751.8
127.5°	828.4	826.9	825.5	824.3	823.0	821.8	820.5
130°	875.7	874.6	873.1	871.2	869.3	867.4	865.5
132.5°	921.0	919.7	918.3	916.8	915.4	913.9	912.5
135°	989.4	988.3	987.5	986.9	986.4	985.8	985.3
137.5°	1055.9	1054.8	1053.8	1052.7	1051.7	1050.7	1049.6
140°	1100.6	1100.3	1099.3	1097.4	1095.4	1093.5	1091.7
142.5°	1141.7	1141.4	1140.6	1139.1	1137.6	1136.1	1134.7
145°	1202.1	1201.8	1201.2	1200.0	1198.9	1197.9	1196.7
147.5°	1259.3	1259.3	1258.6	1257.0	1255.3	1253.7	1252.1
150°	1294.6	1294.6	1293.7	1292.1	1290.5	1288.8	1287.2
152.5°	1327.2	1327.6	1327.1	1325.7	1324.3	1322.9	1321.4
155°	1374.9	1375.9	1375.5	1373.7	1371.8	1369.8	1367.9
157.5°	1415.3	1416.5	1416.3	1414.8	1413.2	1411.7	1410.2
160°	1440.5	1441.8	1442.0	1440.9	1439.8	1438.7	1437.6
162.5°	1464.0	1465.3	1465.1	1463.4	1461.6	1459.9	1458.1
165°	1493.8	1495.4	1495.3	1493.5	1491.6	1489.6	1487.7
167.5°	1518.0	1519.7	1519.7	1518.0	1516.3	1514.6	1512.9
170°	1531.3	1533.2	1533.2	1531.3	1529.5	1527.5	1525.6
172.5°	1541.4	1543.1	1543.0	1541.2	1539.2	1537.3	1535.4
175°	1552.6	1554.2	1554.0	1552.1	1550.2	1548.3	1546.4
177.5°	1557.2	1558.5	1558.4	1556.8	1555.3	1553.8	1552.3
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2

(END OF REPORT)