

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: P332486-840

Luminaire Tested: **S123RDIW-S1165D1535U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332486-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDIW-S1165D1535U840-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1535 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10819.1 lumens
Efficiency: N/A
Efficacy: 130.5 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

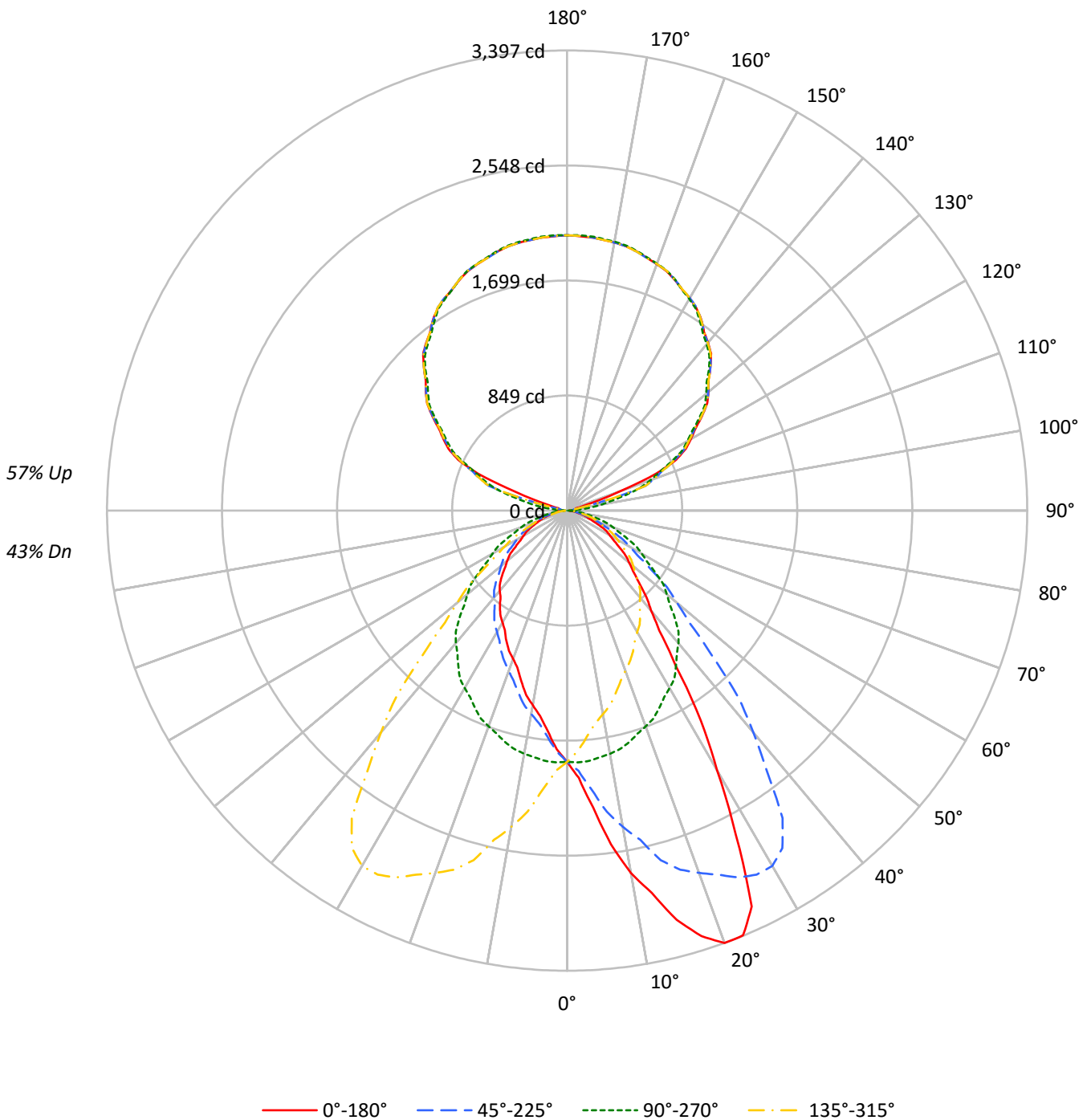
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	43
1	97	93	89	86	88	85	82	79	70	68	66	57	55	54	44	44	43	37
2	88	81	76	71	81	75	70	66	62	59	55	50	48	46	40	38	37	32
3	81	72	65	59	74	66	60	55	55	51	47	45	42	39	36	34	32	27
4	74	64	56	51	68	59	52	47	49	44	41	40	37	34	32	30	28	24
5	68	57	49	44	62	53	46	41	44	39	35	36	33	30	29	27	24	21
6	63	51	44	38	57	47	41	36	40	35	31	33	29	26	27	24	22	19
7	58	46	39	33	53	43	36	31	36	31	27	30	26	23	24	22	19	17
8	54	42	35	30	50	39	32	28	33	28	24	28	24	21	22	20	18	15
9	50	39	31	26	46	36	29	25	31	25	22	26	22	19	21	18	16	14
10	47	35	28	24	43	33	27	22	28	23	20	24	20	17	19	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	19957	19957	19957	19957
5°	23791	20042	17650	20042
10°	29704	19928	15946	19928
15°	34867	19724	14540	19724
20°	38913	19420	13347	19420
25°	38292	19099	12613	19099
30°	27524	18804	11857	18804
35°	18378	18419	11369	18419
40°	13540	17956	10863	17956
45°	11357	17145	10368	17145
50°	10021	16083	9676	16083
55°	8788	14865	8728	14865
60°	7828	13702	7995	13702
65°	6872	12455	7440	12455
70°	5397	11339	6795	11339
75°	4754	9902	6209	9902
80°	4135	8412	6106	8412
85°	3335	6756	6472	6756



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.3	1.7
10°-20°	569.6	5.3
20°-30°	894.9	8.3
30°-40°	933.7	8.6
40°-50°	799.0	7.4
50°-60°	609.0	5.6
60°-70°	390.4	3.6
70°-80°	187.8	1.7
80°-90°	55.4	0.5
90°-100°	73.9	0.7
100°-110°	352.1	3.3
110°-120°	845.8	7.8
120°-130°	1077.0	10.0
130°-140°	1150.8	10.6
140°-150°	1076.1	9.9
150°-160°	868.0	8.0
160°-170°	560.2	5.2
170°-180°	193.1	1.8
0°-30°	1646.9	15.2
0°-40°	2580.6	23.9
0°-60°	3988.6	36.9
0°-90°	4622.2	42.7
90°-120°	1271.8	11.8
90°-150°	4575.6	42.3
90°-180°	6197.0	57.3
0°-180°	10819.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1854	1854	1854	1854	1854	
5°	2202	1855	1634	1855	2202	227
15°	3129	1770	1305	1770	3129	887
25°	3224	1608	1062	1608	3224	1386
35°	1399	1402	865	1402	1399	917
45°	746	1126	681	1126	746	587
55°	468	792	465	792	468	423
65°	270	489	292	489	270	265
75°	114	238	149	238	114	123
85°	27	55	52	55	27	32
90°	45	2	45	2	45	21
95°	57	92	57	92	57	48
105°	66	450	66	450	66	152
115°	888	844	888	844	888	820
125°	1214	1190	1214	1190	1214	1084
135°	1496	1481	1496	1481	1496	1154
145°	1726	1709	1726	1709	1726	1077
155°	1880	1883	1880	1883	1880	867
165°	1981	1985	1981	1985	1981	559
175°	2025	2032	2025	2032	2025	193
180°	2032	2032	2032	2032	2032	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1974.8	1977.3	1969.0	1967.8	1958.2	1955.7	1955.7	1942.4	1934.1	1923.4	1917.0
5°	2201.8	2214.5	2208.2	2193.8	2170.0	2164.4	2149.4	2125.6	2098.6	2065.3	2049.4
7.5°	2485.3	2502.6	2496.0	2473.9	2448.9	2428.8	2386.2	2346.7	2291.3	2242.7	2201.1
10°	2717.7	2699.5	2685.1	2663.7	2640.7	2603.4	2559.0	2497.8	2427.2	2371.7	2309.8
12.5°	2891.6	2888.7	2870.5	2848.5	2816.0	2780.6	2725.9	2651.5	2569.4	2489.1	2418.3
15°	3128.9	3133.6	3121.7	3098.7	3052.6	2989.9	2907.4	2876.5	2759.0	2671.7	2584.3
17.5°	3293.0	3292.1	3290.4	3258.5	3211.6	3166.9	3090.4	3009.0	2902.7	2779.7	2662.0
20°	3397.1	3389.2	3390.8	3355.1	3320.1	3268.5	3193.9	3075.6	2988.4	2846.3	2724.8
22.5°	3394.6	3393.0	3399.0	3386.8	3361.4	3321.8	3263.2	3163.3	3051.9	2908.5	2771.9
25°	3224.1	3217.7	3255.1	3265.4	3305.9	3313.0	3295.5	3240.8	3135.2	2987.6	2818.5
27.5°	2698.4	2694.8	2764.1	2850.7	2960.6	3046.0	3128.6	3168.4	3135.2	3029.5	2860.1
30°	2214.5	2289.1	2324.0	2449.4	2589.1	2755.8	2901.8	3040.7	3074.8	3028.9	2889.9
32.5°	1838.6	1903.7	1932.9	2040.5	2170.7	2365.9	2585.0	2781.7	2920.6	2955.8	2872.2
35°	1398.6	1399.4	1466.0	1513.6	1634.3	1835.1	2047.8	2311.3	2573.2	2771.7	2792.3
37.5°	1116.0	1119.9	1160.2	1207.7	1298.2	1404.4	1591.7	1810.8	2113.3	2418.0	2596.6
40°	963.6	970.7	1000.9	1047.7	1112.8	1193.0	1339.0	1545.4	1797.8	2136.7	2413.7
42.5°	865.8	877.4	892.9	929.0	969.3	1044.4	1162.5	1321.9	1551.5	1871.9	2191.5
45°	746.1	752.5	764.4	781.0	817.5	869.9	949.3	1056.4	1247.0	1504.9	1824.7
47.5°	658.1	654.8	667.3	680.9	705.2	740.8	794.1	881.5	1017.4	1224.4	1495.7
50°	598.4	597.6	606.4	616.7	639.7	665.9	709.6	775.5	883.4	1054.9	1303.3
52.5°	542.6	545.6	551.8	564.6	581.3	602.5	641.7	689.1	781.8	929.8	1136.9
55°	468.3	470.7	479.4	486.6	498.5	519.9	544.5	584.2	647.7	750.8	921.5
57.5°	405.5	404.3	412.7	414.4	428.0	445.5	464.4	495.2	541.3	618.0	733.0
60°	363.6	361.1	368.3	373.9	381.0	395.3	411.1	441.3	477.9	534.2	632.6
62.5°	325.4	324.3	329.5	335.1	341.0	354.0	367.3	390.5	419.4	466.9	544.9
65°	269.8	272.3	274.6	277.0	280.1	288.1	300.8	316.7	336.6	369.9	426.3
67.5°	212.1	214.5	215.3	220.2	227.0	232.0	239.7	253.9	267.6	295.8	327.8
70°	171.5	170.7	171.5	173.8	182.6	191.3	201.6	212.0	220.7	240.4	267.5
72.5°	147.3	145.9	147.9	148.5	152.7	155.1	161.6	171.3	182.6	196.0	215.4
75°	114.3	114.3	114.3	114.3	117.4	119.1	121.5	123.8	127.7	134.1	148.5
77.5°	84.4	84.6	85.7	86.5	87.2	88.1	89.6	91.9	93.3	96.6	102.9
80°	66.7	67.5	66.7	67.5	67.5	69.1	69.9	72.2	73.0	77.0	79.4
82.5°	50.2	49.7	50.2	51.0	51.0	52.5	52.7	54.4	54.6	56.7	59.1
85°	27.0	25.4	27.0	26.2	27.8	26.2	27.0	28.6	28.6	29.4	32.5
87.5°	15.5	16.6	15.1	15.7	15.6	16.0	15.7	15.5	16.4	15.5	15.2
90°	45.2	44.6	43.9	43.3	42.6	41.6	40.3	38.9	37.6	36.3	31.9
92.5°	50.1	49.7	49.3	48.9	48.5	47.3	45.1	42.9	40.8	38.7	35.3
95°	57.4	57.4	57.4	57.4	57.4	56.1	53.8	51.5	49.2	46.8	43.1
97.5°	62.2	61.9	61.5	61.2	60.9	59.4	56.7	54.0	51.3	48.6	42.8
100°	63.4	63.1	62.7	62.4	62.1	60.6	57.9	55.1	52.5	49.8	42.2
102.5°	64.6	64.0	63.4	62.8	62.2	66.0	74.4	82.7	91.0	99.4	156.5
105°	66.4	65.7	65.1	64.4	63.7	93.1	152.5	211.9	271.2	330.6	360.8
107.5°	208.6	253.4	298.1	343.0	387.7	431.8	475.3	518.9	562.5	606.0	601.3
110°	415.2	463.1	511.1	559.1	607.0	636.6	647.6	658.7	669.8	680.9	677.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	712.3	722.5	732.6	742.7	752.9	757.8	757.6	757.4	757.2	757.0	753.3
115°	887.8	886.4	885.0	883.7	882.3	880.0	876.7	873.3	869.9	866.6	863.5
117.5°	986.1	985.9	985.6	985.3	985.1	983.6	980.9	978.3	975.5	972.9	971.3
120°	1053.8	1053.8	1053.8	1053.8	1053.8	1052.5	1049.8	1047.1	1044.4	1041.7	1040.7
122.5°	1120.2	1119.9	1119.6	1119.4	1119.1	1118.1	1116.2	1114.3	1112.5	1110.5	1109.2
125°	1213.9	1213.2	1212.4	1211.8	1211.1	1210.4	1209.8	1209.1	1208.5	1207.8	1206.5
127.5°	1303.8	1304.4	1305.1	1305.9	1306.5	1306.3	1305.3	1304.1	1303.0	1302.0	1300.4
130°	1361.8	1362.4	1363.1	1363.8	1364.4	1364.1	1362.8	1361.4	1360.1	1358.8	1357.5
132.5°	1414.9	1415.8	1416.8	1417.7	1418.7	1418.5	1417.1	1415.8	1414.4	1413.1	1412.0
135°	1496.1	1497.1	1498.1	1499.1	1500.2	1500.2	1499.1	1498.1	1497.1	1496.1	1494.8
137.5°	1572.6	1573.2	1573.9	1574.6	1575.2	1574.8	1573.2	1571.6	1569.9	1568.3	1567.6
140°	1618.4	1619.1	1619.8	1620.4	1621.1	1620.7	1619.4	1618.1	1616.8	1615.4	1614.4
142.5°	1660.7	1661.6	1662.5	1663.6	1664.5	1664.4	1663.3	1662.2	1661.1	1660.1	1659.1
145°	1725.7	1725.7	1725.7	1725.7	1725.7	1725.3	1724.6	1723.9	1723.2	1722.6	1721.9
147.5°	1773.9	1775.4	1777.1	1778.6	1780.1	1780.6	1779.9	1779.2	1778.6	1777.9	1777.2
150°	1810.2	1811.2	1812.2	1813.2	1814.2	1814.3	1813.7	1813.0	1812.3	1811.7	1811.0
152.5°	1839.2	1840.7	1842.2	1843.8	1845.3	1845.5	1844.3	1843.1	1841.9	1840.7	1840.3
155°	1879.7	1881.6	1883.6	1885.6	1887.6	1887.8	1886.1	1884.5	1882.8	1881.1	1880.8
157.5°	1913.7	1916.3	1918.9	1921.6	1924.2	1924.5	1922.5	1920.5	1918.4	1916.4	1916.8
160°	1935.5	1937.8	1940.2	1942.5	1944.9	1945.0	1943.0	1941.1	1939.0	1937.0	1937.3
162.5°	1956.0	1958.1	1960.1	1962.3	1964.3	1964.2	1962.0	1959.6	1957.4	1955.1	1955.4
165°	1980.7	1983.1	1985.5	1987.8	1990.1	1990.0	1987.3	1984.6	1982.0	1979.2	1979.6
167.5°	1998.6	2001.2	2004.0	2006.6	2009.3	2009.3	2006.6	2004.0	2001.2	1998.6	1998.6
170°	2009.4	2012.2	2014.8	2017.5	2020.2	2020.2	2017.5	2014.8	2012.2	2009.4	2009.4
172.5°	2015.5	2018.4	2021.4	2024.4	2027.3	2027.4	2024.8	2022.1	2019.4	2016.7	2016.4
175°	2024.6	2027.2	2029.9	2032.6	2035.3	2035.5	2033.1	2030.7	2028.4	2026.1	2025.7
177.5°	2027.3	2029.9	2032.7	2035.3	2038.0	2038.3	2036.1	2034.0	2031.8	2029.7	2029.4
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1914.5	1912.6	1903.7	1893.5	1880.2	1871.3	1864.3	1860.5	1849.1	1835.1	1825.5
5°	2032.8	2008.9	1983.5	1952.6	1924.0	1894.6	1876.3	1854.9	1828.8	1799.4	1778.8
7.5°	2159.4	2112.7	2062.4	2010.5	1959.2	1913.2	1872.6	1837.8	1796.0	1753.9	1724.4
10°	2256.5	2188.3	2117.7	2045.4	1979.5	1917.6	1870.0	1823.2	1773.2	1724.7	1688.3
12.5°	2344.8	2254.9	2173.5	2084.8	2000.5	1926.5	1857.9	1802.8	1742.7	1691.1	1649.5
15°	2456.6	2364.5	2266.0	2131.1	2019.2	1925.6	1842.2	1770.0	1697.0	1633.5	1593.0
17.5°	2561.0	2422.5	2290.2	2177.7	2032.3	1915.2	1813.5	1727.2	1647.0	1579.6	1529.8
20°	2604.2	2470.0	2326.4	2182.7	2039.8	1908.9	1790.6	1695.4	1612.0	1535.8	1489.9
22.5°	2630.2	2478.3	2327.0	2172.6	2020.8	1884.8	1767.8	1663.0	1572.7	1500.3	1443.5
25°	2660.6	2479.6	2312.9	2160.5	2005.7	1858.2	1719.2	1608.1	1510.5	1433.5	1373.1
27.5°	2680.6	2467.7	2270.7	2101.3	1944.3	1797.3	1670.0	1552.2	1453.2	1371.7	1307.0
30°	2684.3	2458.1	2238.3	2055.0	1895.4	1760.5	1625.6	1512.9	1408.1	1321.5	1261.2
32.5°	2689.5	2434.7	2194.4	1999.7	1836.3	1702.7	1580.4	1472.8	1365.5	1280.3	1218.7
35°	2668.5	2421.7	2128.0	1904.1	1740.6	1611.2	1501.0	1401.7	1296.2	1213.6	1150.9
37.5°	2578.3	2370.1	2059.1	1796.5	1625.6	1505.7	1415.8	1329.3	1232.5	1143.5	1084.4
40°	2487.5	2319.3	2005.7	1731.1	1552.6	1429.5	1348.6	1277.9	1184.3	1100.9	1037.4
42.5°	2352.3	2250.1	1954.9	1662.5	1470.0	1351.4	1283.1	1216.9	1134.7	1050.1	990.4
45°	2104.2	2117.7	1851.0	1553.3	1355.6	1236.6	1172.4	1126.3	1053.3	983.4	922.3
47.5°	1793.0	1919.2	1728.9	1436.9	1235.2	1123.5	1067.2	1027.0	977.9	909.3	853.5
50°	1589.8	1770.0	1631.1	1358.9	1159.6	1048.5	992.9	960.4	917.6	863.5	810.4
52.5°	1402.5	1596.0	1513.0	1271.8	1077.7	976.1	921.8	895.0	861.0	810.2	762.1
55°	1143.8	1339.8	1320.8	1140.5	954.8	863.5	822.3	792.1	769.1	731.0	693.0
57.5°	925.1	1111.1	1120.8	994.5	846.6	756.4	720.8	698.1	683.1	654.4	619.1
60°	787.4	958.1	991.4	896.2	769.1	689.7	654.8	636.5	624.7	601.7	574.6
62.5°	673.1	818.3	856.1	787.5	694.8	620.6	593.2	575.6	567.5	547.6	523.8
65°	515.1	635.8	672.3	634.2	585.7	526.2	504.0	489.0	481.8	470.7	453.2
67.5°	387.4	475.2	515.3	488.5	471.0	433.3	419.2	411.1	404.8	397.2	382.5
70°	311.1	376.2	417.5	410.3	396.1	376.2	365.9	360.3	354.0	347.7	335.0
72.5°	250.1	295.0	333.7	337.3	325.6	321.6	312.6	310.2	306.4	298.7	291.8
75°	165.9	196.8	223.8	234.2	238.9	242.9	238.9	238.1	237.3	231.0	227.0
77.5°	108.8	125.4	142.4	160.1	167.4	172.9	174.1	177.0	174.9	171.6	169.7
80°	83.3	87.4	99.2	114.3	126.2	131.0	134.1	135.7	134.9	134.1	131.0
82.5°	60.5	63.8	69.4	80.0	90.0	98.0	99.9	99.6	101.3	101.8	99.2
85°	32.5	33.3	34.9	36.6	42.1	50.8	53.2	54.7	56.4	56.4	51.6
87.5°	15.7	14.1	14.5	13.7	15.0	14.9	18.1	20.6	21.9	20.1	20.7
90°	27.5	23.1	18.8	14.9	11.6	8.2	4.8	1.5	4.8	8.2	11.6
92.5°	32.1	28.8	25.4	24.3	25.2	26.2	27.2	28.1	27.2	26.2	25.2
95°	39.4	35.7	32.0	37.1	50.8	64.6	78.4	92.1	78.4	64.6	50.8
97.5°	96.9	121.1	145.2	160.4	166.5	172.8	178.9	185.1	178.9	172.8	166.5
100°	154.5	206.8	259.1	282.0	275.3	268.5	261.9	255.2	261.9	268.5	275.3
102.5°	213.7	270.8	328.0	354.2	349.3	344.6	339.7	334.9	339.7	344.6	349.3
105°	391.0	421.2	451.4	464.6	461.0	457.3	453.6	449.9	453.6	457.3	461.0
107.5°	596.5	591.7	586.9	583.1	580.2	577.1	574.2	571.3	574.2	577.1	580.2
110°	673.5	669.8	666.1	663.0	660.2	657.5	654.9	652.2	654.9	657.5	660.2



TEST NUMBER: P332486-840

CATALOG NUMBER: S123RDIW-S1165D1535U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	749.6	745.9	742.3	739.1	736.8	734.4	732.0	729.5	732.0	734.4	736.8
115°	860.5	857.6	854.5	852.0	850.0	848.0	846.0	843.9	846.0	848.0	850.0
117.5°	969.8	968.3	966.7	964.7	962.2	959.7	957.3	954.7	957.3	959.7	962.2
120°	1039.7	1038.6	1037.7	1035.7	1032.7	1029.7	1026.6	1023.6	1026.6	1029.7	1032.7
122.5°	1108.0	1106.7	1105.5	1103.6	1101.1	1098.6	1096.1	1093.7	1096.1	1098.6	1101.1
125°	1205.1	1203.8	1202.4	1200.4	1197.7	1195.1	1192.3	1189.6	1192.3	1195.1	1197.7
127.5°	1298.8	1297.2	1295.6	1293.4	1290.7	1288.1	1285.4	1282.6	1285.4	1288.1	1290.7
130°	1356.0	1354.7	1353.4	1351.4	1348.7	1346.0	1343.3	1340.6	1343.3	1346.0	1348.7
132.5°	1411.0	1409.9	1408.9	1406.9	1404.2	1401.6	1398.9	1396.2	1398.9	1401.6	1404.2
135°	1493.5	1492.1	1490.8	1489.1	1487.1	1485.1	1483.1	1481.1	1483.1	1485.1	1487.1
137.5°	1566.8	1566.1	1565.4	1563.7	1561.2	1558.6	1556.1	1553.5	1556.1	1558.6	1561.2
140°	1613.4	1612.4	1611.3	1609.9	1607.9	1605.9	1603.9	1601.8	1603.9	1605.9	1607.9
142.5°	1658.1	1657.1	1656.1	1654.6	1652.5	1650.5	1648.5	1646.5	1648.5	1650.5	1652.5
145°	1721.2	1720.6	1719.9	1718.4	1716.1	1713.7	1711.3	1709.0	1711.3	1713.7	1716.1
147.5°	1776.6	1775.8	1775.1	1774.0	1772.5	1771.0	1769.5	1767.9	1769.5	1771.0	1772.5
150°	1810.4	1809.7	1809.0	1808.2	1807.2	1806.1	1805.1	1804.1	1805.1	1806.1	1807.2
152.5°	1839.9	1839.5	1839.1	1838.7	1838.2	1837.7	1837.2	1836.7	1837.2	1837.7	1838.2
155°	1880.5	1880.2	1879.8	1880.0	1880.7	1881.3	1882.0	1882.6	1882.0	1881.3	1880.7
157.5°	1917.1	1917.4	1917.8	1918.0	1918.0	1918.1	1918.2	1918.2	1918.2	1918.1	1918.0
160°	1937.6	1938.0	1938.3	1938.6	1939.0	1939.3	1939.6	1940.1	1939.6	1939.3	1939.0
162.5°	1955.8	1956.1	1956.4	1957.0	1957.9	1958.8	1959.6	1960.6	1959.6	1958.8	1957.9
165°	1979.9	1980.2	1980.6	1981.3	1982.3	1983.3	1984.3	1985.3	1984.3	1983.3	1982.3
167.5°	1998.6	1998.6	1998.6	1999.2	2000.6	2002.0	2003.3	2004.6	2003.3	2002.0	2000.6
170°	2009.4	2009.4	2009.4	2010.1	2011.4	2012.8	2014.2	2015.5	2014.2	2012.8	2011.4
172.5°	2016.2	2015.9	2015.6	2016.3	2017.9	2019.5	2021.1	2022.8	2021.1	2019.5	2017.9
175°	2025.4	2025.1	2024.7	2025.4	2027.1	2028.7	2030.4	2032.1	2030.4	2028.7	2027.1
177.5°	2029.1	2028.9	2028.6	2029.1	2030.5	2031.8	2033.2	2034.5	2033.2	2031.8	2030.5
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1822.4	1814.1	1808.5	1795.7	1787.5	1778.6	1769.7	1775.4	1774.7	1774.1	1774.1
5°	1761.3	1743.0	1726.4	1705.0	1691.4	1674.8	1662.0	1660.4	1663.7	1652.5	1646.2
7.5°	1700.6	1675.7	1652.0	1628.4	1603.4	1583.4	1570.7	1564.9	1556.8	1549.9	1542.9
10°	1658.1	1628.7	1605.7	1576.3	1549.3	1525.5	1510.5	1500.2	1494.6	1489.0	1478.7
12.5°	1614.3	1585.6	1556.2	1523.0	1497.3	1469.7	1458.3	1446.8	1436.1	1430.0	1415.8
15°	1550.1	1512.9	1481.9	1446.9	1418.4	1391.4	1375.5	1352.5	1349.3	1341.4	1327.1
17.5°	1485.8	1445.3	1402.7	1376.7	1344.5	1316.5	1292.3	1284.5	1261.8	1253.2	1240.9
20°	1435.0	1397.8	1365.2	1331.1	1284.2	1258.1	1239.0	1228.7	1210.4	1199.3	1191.3
22.5°	1391.2	1353.3	1315.7	1275.9	1237.3	1207.9	1194.0	1177.9	1167.9	1152.4	1143.8
25°	1328.7	1287.4	1242.1	1199.3	1171.5	1149.3	1127.1	1112.8	1098.5	1091.4	1075.5
27.5°	1256.0	1212.8	1170.5	1138.0	1103.9	1082.0	1061.9	1049.1	1032.0	1020.0	1011.2
30°	1216.0	1165.2	1128.6	1099.3	1055.6	1035.0	1020.0	1004.1	991.4	978.7	970.0
32.5°	1169.6	1123.3	1088.6	1052.3	1018.9	996.2	976.7	962.8	952.0	939.9	931.2
35°	1096.9	1058.0	1022.3	985.8	961.2	938.2	915.1	903.2	892.9	881.8	873.9
37.5°	1031.2	994.8	960.9	926.2	895.8	877.1	858.5	849.4	835.5	828.0	819.9
40°	990.6	954.8	918.4	885.0	853.2	839.0	822.3	808.8	796.1	790.5	781.8
42.5°	946.1	910.4	879.6	843.7	817.7	798.3	782.9	768.2	758.6	750.5	745.6
45°	880.2	848.5	818.3	782.6	758.0	741.3	723.9	710.3	701.7	696.1	687.3
47.5°	816.3	784.6	753.9	722.8	698.9	679.9	662.5	653.1	641.5	634.7	628.7
50°	769.9	741.3	708.8	680.2	656.4	637.3	623.1	611.2	600.9	592.1	588.1
52.5°	727.4	696.9	668.8	642.1	617.0	595.4	582.4	569.9	562.1	552.1	547.5
55°	657.2	627.8	604.0	577.8	553.2	534.9	519.1	508.0	500.1	489.0	482.6
57.5°	591.3	565.0	536.5	513.8	488.5	473.0	459.9	444.8	435.2	426.4	420.2
60°	546.8	516.7	492.1	470.7	448.5	428.6	416.7	404.8	394.5	385.8	380.2
62.5°	500.5	474.1	450.8	427.5	407.2	389.9	376.1	366.1	357.0	351.4	345.9
65°	429.4	408.8	385.0	365.9	346.9	334.2	323.1	314.3	308.0	304.0	299.2
67.5°	364.0	344.0	323.2	304.5	291.8	282.1	274.8	267.3	264.2	259.0	255.9
70°	321.4	300.8	282.6	268.3	255.6	248.4	243.7	238.1	234.9	228.6	225.4
72.5°	275.1	260.1	247.0	235.3	225.1	218.6	212.6	205.7	200.7	193.7	190.5
75°	216.7	203.2	192.9	184.9	178.5	169.9	161.2	154.0	151.6	149.3	148.5
77.5°	160.5	151.9	144.4	137.7	129.9	123.5	121.6	120.0	119.6	118.3	118.3
80°	126.2	118.3	112.7	104.7	100.0	100.0	100.0	98.5	99.2	99.2	99.2
82.5°	93.8	86.5	83.5	80.7	79.7	80.3	80.3	80.7	80.2	81.4	80.8
85°	48.4	49.2	50.8	50.0	50.8	50.8	52.4	51.6	52.4	50.8	52.4
87.5°	20.8	23.4	24.9	26.5	28.0	28.2	29.1	29.4	30.3	30.5	30.7
90°	14.9	18.8	23.1	27.5	31.9	36.3	37.6	38.9	40.3	41.6	42.6
92.5°	24.3	25.4	28.8	32.1	35.3	38.7	40.8	42.9	45.1	47.3	48.5
95°	37.1	32.0	35.7	39.4	43.1	46.8	49.2	51.5	53.8	56.1	57.4
97.5°	160.4	145.2	121.1	96.9	72.8	48.6	51.3	54.0	56.7	59.4	60.9
100°	282.0	259.1	206.8	154.5	102.2	49.8	52.5	55.1	57.9	60.6	62.1
102.5°	354.2	328.0	270.8	213.7	156.5	99.4	91.0	82.7	74.4	66.0	62.2
105°	464.6	451.4	421.2	391.0	360.8	330.6	271.2	211.9	152.5	93.1	63.7
107.5°	583.1	586.9	591.7	596.5	601.3	606.0	562.5	518.9	475.3	431.8	387.7
110°	663.0	666.1	669.8	673.5	677.2	680.9	669.8	658.7	647.6	636.6	607.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	739.1	742.3	745.9	749.6	753.3	757.0	757.2	757.4	757.6	757.8	752.9
115°	852.0	854.5	857.6	860.5	863.5	866.6	869.9	873.3	876.7	880.0	882.3
117.5°	964.7	966.7	968.3	969.8	971.3	972.9	975.5	978.3	980.9	983.6	985.1
120°	1035.7	1037.7	1038.6	1039.7	1040.7	1041.7	1044.4	1047.1	1049.8	1052.5	1053.8
122.5°	1103.6	1105.5	1106.7	1108.0	1109.2	1110.5	1112.5	1114.3	1116.2	1118.1	1119.1
125°	1200.4	1202.4	1203.8	1205.1	1206.5	1207.8	1208.5	1209.1	1209.8	1210.4	1211.1
127.5°	1293.4	1295.6	1297.2	1298.8	1300.4	1302.0	1303.0	1304.1	1305.3	1306.3	1306.5
130°	1351.4	1353.4	1354.7	1356.0	1357.5	1358.8	1360.1	1361.4	1362.8	1364.1	1364.4
132.5°	1406.9	1408.9	1409.9	1411.0	1412.0	1413.1	1414.4	1415.8	1417.1	1418.5	1418.7
135°	1489.1	1490.8	1492.1	1493.5	1494.8	1496.1	1497.1	1498.1	1499.1	1500.2	1500.2
137.5°	1563.7	1565.4	1566.1	1566.8	1567.6	1568.3	1569.9	1571.6	1573.2	1574.8	1575.2
140°	1609.9	1611.3	1612.4	1613.4	1614.4	1615.4	1616.8	1618.1	1619.4	1620.7	1621.1
142.5°	1654.6	1656.1	1657.1	1658.1	1659.1	1660.1	1661.1	1662.2	1663.3	1664.4	1664.5
145°	1718.4	1719.9	1720.6	1721.2	1721.9	1722.6	1723.2	1723.9	1724.6	1725.3	1725.7
147.5°	1774.0	1775.1	1775.8	1776.6	1777.2	1777.9	1778.6	1779.2	1779.9	1780.6	1780.1
150°	1808.2	1809.0	1809.7	1810.4	1811.0	1811.7	1812.3	1813.0	1813.7	1814.3	1814.2
152.5°	1838.7	1839.1	1839.5	1839.9	1840.3	1840.7	1841.9	1843.1	1844.3	1845.5	1845.3
155°	1880.0	1879.8	1880.2	1880.5	1880.8	1881.1	1882.8	1884.5	1886.1	1887.8	1887.6
157.5°	1918.0	1917.8	1917.4	1917.1	1916.8	1916.4	1918.4	1920.5	1922.5	1924.5	1924.2
160°	1938.6	1938.3	1938.0	1937.6	1937.3	1937.0	1939.0	1941.1	1943.0	1945.0	1944.9
162.5°	1957.0	1956.4	1956.1	1955.8	1955.4	1955.1	1957.4	1959.6	1962.0	1964.2	1964.3
165°	1981.3	1980.6	1980.2	1979.9	1979.6	1979.2	1982.0	1984.6	1987.3	1990.0	1990.1
167.5°	1999.2	1998.6	1998.6	1998.6	1998.6	1998.6	2001.2	2004.0	2006.6	2009.3	2009.3
170°	2010.1	2009.4	2009.4	2009.4	2009.4	2009.4	2012.2	2014.8	2017.5	2020.2	2020.2
172.5°	2016.3	2015.6	2015.9	2016.2	2016.4	2016.7	2019.4	2022.1	2024.8	2027.4	2027.3
175°	2025.4	2024.7	2025.1	2025.4	2025.7	2026.1	2028.4	2030.7	2033.1	2035.5	2035.3
177.5°	2029.1	2028.6	2028.9	2029.1	2029.4	2029.7	2031.8	2034.0	2036.1	2038.3	2038.0
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1



TEST NUMBER: P332486-840

CATALOG NUMBER: S123RDIW-S1165D1535U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1766.6	1765.8	1766.6	1763.9	1766.6	1765.8	1766.6	1774.1	1774.1	1774.7	1775.4
5°	1643.8	1643.1	1640.6	1633.5	1640.6	1643.1	1643.8	1646.2	1652.5	1663.7	1660.4
7.5°	1536.6	1535.5	1528.5	1528.7	1528.5	1535.5	1536.6	1542.9	1549.9	1556.8	1564.9
10°	1473.2	1473.9	1464.4	1458.9	1464.4	1473.9	1473.2	1478.7	1489.0	1494.6	1500.2
12.5°	1411.6	1408.0	1400.3	1394.1	1400.3	1408.0	1411.6	1415.8	1430.0	1436.1	1446.8
15°	1330.3	1322.3	1303.3	1304.8	1303.3	1322.3	1330.3	1327.1	1341.4	1349.3	1352.5
17.5°	1234.6	1228.7	1228.4	1217.3	1228.4	1228.7	1234.6	1240.9	1253.2	1261.8	1284.5
20°	1178.7	1174.7	1176.3	1165.2	1176.3	1174.7	1178.7	1191.3	1199.3	1210.4	1228.7
22.5°	1134.9	1130.8	1124.2	1120.7	1124.2	1130.8	1134.9	1143.8	1152.4	1167.9	1177.9
25°	1070.8	1064.4	1058.0	1062.0	1058.0	1064.4	1070.8	1075.5	1091.4	1098.5	1112.8
27.5°	1006.6	1001.9	995.5	994.7	995.5	1001.9	1006.6	1011.2	1020.0	1032.0	1049.1
30°	965.9	961.2	958.1	954.0	958.1	961.2	965.9	970.0	978.7	991.4	1004.1
32.5°	924.7	923.7	918.1	917.3	918.1	923.7	924.7	931.2	939.9	952.0	962.8
35°	870.7	866.0	864.3	865.2	864.3	866.0	870.7	873.9	881.8	892.9	903.2
37.5°	819.4	813.0	810.2	807.4	810.2	813.0	819.4	819.9	828.0	835.5	849.4
40°	782.6	776.3	774.7	773.1	774.7	776.3	782.6	781.8	790.5	796.1	808.8
42.5°	741.3	738.8	737.8	735.0	737.8	738.8	741.3	745.6	750.5	758.6	768.2
45°	685.0	684.2	679.4	681.1	679.4	684.2	685.0	687.3	696.1	701.7	710.3
47.5°	625.6	622.1	618.7	621.0	618.7	622.1	625.6	628.7	634.7	641.5	653.1
50°	585.0	583.4	576.2	577.8	576.2	583.4	585.0	588.1	592.1	600.9	611.2
52.5°	544.3	538.3	535.6	534.6	535.6	538.3	544.3	547.5	552.1	562.1	569.9
55°	477.1	469.9	466.7	465.1	466.7	469.9	477.1	482.6	489.0	500.1	508.0
57.5°	411.0	409.1	406.6	408.3	406.6	409.1	411.0	420.2	426.4	435.2	444.8
60°	372.2	372.2	372.2	371.4	372.2	372.2	372.2	380.2	385.8	394.5	404.8
62.5°	342.4	340.5	339.9	341.0	339.9	340.5	342.4	345.9	351.4	357.0	366.1
65°	296.9	296.1	292.9	292.1	292.9	296.1	296.9	299.2	304.0	308.0	314.3
67.5°	253.9	251.0	250.0	248.9	250.0	251.0	253.9	255.9	259.0	264.2	267.3
70°	221.5	219.8	215.1	215.9	215.1	219.8	221.5	225.4	228.6	234.9	238.1
72.5°	186.5	184.9	184.0	182.9	184.0	184.9	186.5	190.5	193.7	200.7	205.7
75°	147.6	146.8	146.0	149.3	146.0	146.8	147.6	148.5	149.3	151.6	154.0
77.5°	118.3	118.3	118.8	117.4	118.8	118.3	118.3	118.3	118.3	119.6	120.0
80°	99.2	99.2	98.5	98.5	98.5	99.2	99.2	99.2	99.2	99.2	98.5
82.5°	79.6	80.2	80.7	79.4	80.7	80.2	79.6	80.8	81.4	80.2	80.7
85°	52.4	51.6	53.2	52.4	53.2	51.6	52.4	52.4	50.8	52.4	51.6
87.5°	32.1	31.0	31.1	31.9	31.1	31.0	32.1	30.7	30.5	30.3	29.4
90°	43.3	43.9	44.6	45.2	44.6	43.9	43.3	42.6	41.6	40.3	38.9
92.5°	48.9	49.3	49.7	50.1	49.7	49.3	48.9	48.5	47.3	45.1	42.9
95°	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	56.1	53.8	51.5
97.5°	61.2	61.5	61.9	62.2	61.9	61.5	61.2	60.9	59.4	56.7	54.0
100°	62.4	62.7	63.1	63.4	63.1	62.7	62.4	62.1	60.6	57.9	55.1
102.5°	62.8	63.4	64.0	64.6	64.0	63.4	62.8	62.2	66.0	74.4	82.7
105°	64.4	65.1	65.7	66.4	65.7	65.1	64.4	63.7	93.1	152.5	211.9
107.5°	343.0	298.1	253.4	208.6	253.4	298.1	343.0	387.7	431.8	475.3	518.9
110°	559.1	511.1	463.1	415.2	463.1	511.1	559.1	607.0	636.6	647.6	658.7



TEST NUMBER: P332486-840

CATALOG NUMBER: S123RDIW-S1165D1535U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	742.7	732.6	722.5	712.3	722.5	732.6	742.7	752.9	757.8	757.6	757.4
115°	883.7	885.0	886.4	887.8	886.4	885.0	883.7	882.3	880.0	876.7	873.3
117.5°	985.3	985.6	985.9	986.1	985.9	985.6	985.3	985.1	983.6	980.9	978.3
120°	1053.8	1053.8	1053.8	1053.8	1053.8	1053.8	1053.8	1053.8	1052.5	1049.8	1047.1
122.5°	1119.4	1119.6	1119.9	1120.2	1119.9	1119.6	1119.4	1119.1	1118.1	1116.2	1114.3
125°	1211.8	1212.4	1213.2	1213.9	1213.2	1212.4	1211.8	1211.1	1210.4	1209.8	1209.1
127.5°	1305.9	1305.1	1304.4	1303.8	1304.4	1305.1	1305.9	1306.5	1306.3	1305.3	1304.1
130°	1363.8	1363.1	1362.4	1361.8	1362.4	1363.1	1363.8	1364.4	1364.1	1362.8	1361.4
132.5°	1417.7	1416.8	1415.8	1414.9	1415.8	1416.8	1417.7	1418.7	1418.5	1417.1	1415.8
135°	1499.1	1498.1	1497.1	1496.1	1497.1	1498.1	1499.1	1500.2	1500.2	1499.1	1498.1
137.5°	1574.6	1573.9	1573.2	1572.6	1573.2	1573.9	1574.6	1575.2	1574.8	1573.2	1571.6
140°	1620.4	1619.8	1619.1	1618.4	1619.1	1619.8	1620.4	1621.1	1620.7	1619.4	1618.1
142.5°	1663.6	1662.5	1661.6	1660.7	1661.6	1662.5	1663.6	1664.5	1664.4	1663.3	1662.2
145°	1725.7	1725.7	1725.7	1725.7	1725.7	1725.7	1725.7	1725.7	1725.3	1724.6	1723.9
147.5°	1778.6	1777.1	1775.4	1773.9	1775.4	1777.1	1778.6	1780.1	1780.6	1779.9	1779.2
150°	1813.2	1812.2	1811.2	1810.2	1811.2	1812.2	1813.2	1814.2	1814.3	1813.7	1813.0
152.5°	1843.8	1842.2	1840.7	1839.2	1840.7	1842.2	1843.8	1845.3	1845.5	1844.3	1843.1
155°	1885.6	1883.6	1881.6	1879.7	1881.6	1883.6	1885.6	1887.6	1887.8	1886.1	1884.5
157.5°	1921.6	1918.9	1916.3	1913.7	1916.3	1918.9	1921.6	1924.2	1924.5	1922.5	1920.5
160°	1942.5	1940.2	1937.8	1935.5	1937.8	1940.2	1942.5	1944.9	1945.0	1943.0	1941.1
162.5°	1962.3	1960.1	1958.1	1956.0	1958.1	1960.1	1962.3	1964.3	1964.2	1962.0	1959.6
165°	1987.8	1985.5	1983.1	1980.7	1983.1	1985.5	1987.8	1990.1	1990.0	1987.3	1984.6
167.5°	2006.6	2004.0	2001.2	1998.6	2001.2	2004.0	2006.6	2009.3	2009.3	2006.6	2004.0
170°	2017.5	2014.8	2012.2	2009.4	2012.2	2014.8	2017.5	2020.2	2020.2	2017.5	2014.8
172.5°	2024.4	2021.4	2018.4	2015.5	2018.4	2021.4	2024.4	2027.3	2027.4	2024.8	2022.1
175°	2032.6	2029.9	2027.2	2024.6	2027.2	2029.9	2032.6	2035.3	2035.5	2033.1	2030.7
177.5°	2035.3	2032.7	2029.9	2027.3	2029.9	2032.7	2035.3	2038.0	2038.3	2036.1	2034.0
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1769.7	1778.6	1787.5	1795.7	1808.5	1814.1	1822.4	1825.5	1835.1	1849.1	1860.5
5°	1662.0	1674.8	1691.4	1705.0	1726.4	1743.0	1761.3	1778.8	1799.4	1828.8	1854.9
7.5°	1570.7	1583.4	1603.4	1628.4	1652.0	1675.7	1700.6	1724.4	1753.9	1796.0	1837.8
10°	1510.5	1525.5	1549.3	1576.3	1605.7	1628.7	1658.1	1688.3	1724.7	1773.2	1823.2
12.5°	1458.3	1469.7	1497.3	1523.0	1556.2	1585.6	1614.3	1649.5	1691.1	1742.7	1802.8
15°	1375.5	1391.4	1418.4	1446.9	1481.9	1512.9	1550.1	1593.0	1633.5	1697.0	1770.0
17.5°	1292.3	1316.5	1344.5	1376.7	1402.7	1445.3	1485.8	1529.8	1579.6	1647.0	1727.2
20°	1239.0	1258.1	1284.2	1331.1	1365.2	1397.8	1435.0	1489.9	1535.8	1612.0	1695.4
22.5°	1194.0	1207.9	1237.3	1275.9	1315.7	1353.3	1391.2	1443.5	1500.3	1572.7	1663.0
25°	1127.1	1149.3	1171.5	1199.3	1242.1	1287.4	1328.7	1373.1	1433.5	1510.5	1608.1
27.5°	1061.9	1082.0	1103.9	1138.0	1170.5	1212.8	1256.0	1307.0	1371.7	1453.2	1552.2
30°	1020.0	1035.0	1055.6	1099.3	1128.6	1165.2	1216.0	1261.2	1321.5	1408.1	1512.9
32.5°	976.7	996.2	1018.9	1052.3	1088.6	1123.3	1169.6	1218.7	1280.3	1365.5	1472.8
35°	915.1	938.2	961.2	985.8	1022.3	1058.0	1096.9	1150.9	1213.6	1296.2	1401.7
37.5°	858.5	877.1	895.8	926.2	960.9	994.8	1031.2	1084.4	1143.5	1232.5	1329.3
40°	822.3	839.0	853.2	885.0	918.4	954.8	990.6	1037.4	1100.9	1184.3	1277.9
42.5°	782.9	798.3	817.7	843.7	879.6	910.4	946.1	990.4	1050.1	1134.7	1216.9
45°	723.9	741.3	758.0	782.6	818.3	848.5	880.2	922.3	983.4	1053.3	1126.3
47.5°	662.5	679.9	698.9	722.8	753.9	784.6	816.3	853.5	909.3	977.9	1027.0
50°	623.1	637.3	656.4	680.2	708.8	741.3	769.9	810.4	863.5	917.6	960.4
52.5°	582.4	595.4	617.0	642.1	668.8	696.9	727.4	762.1	810.2	861.0	895.0
55°	519.1	534.9	553.2	577.8	604.0	627.8	657.2	693.0	731.0	769.1	792.1
57.5°	459.9	473.0	488.5	513.8	536.5	565.0	591.3	619.1	654.4	683.1	698.1
60°	416.7	428.6	448.5	470.7	492.1	516.7	546.8	574.6	601.7	624.7	636.5
62.5°	376.1	389.9	407.2	427.5	450.8	474.1	500.5	523.8	547.6	567.5	575.6
65°	323.1	334.2	346.9	365.9	385.0	408.8	429.4	453.2	470.7	481.8	489.0
67.5°	274.8	282.1	291.8	304.5	323.2	344.0	364.0	382.5	397.2	404.8	411.1
70°	243.7	248.4	255.6	268.3	282.6	300.8	321.4	335.0	347.7	354.0	360.3
72.5°	212.6	218.6	225.1	235.3	247.0	260.1	275.1	291.8	298.7	306.4	310.2
75°	161.2	169.9	178.5	184.9	192.9	203.2	216.7	227.0	231.0	237.3	238.1
77.5°	121.6	123.5	129.9	137.7	144.4	151.9	160.5	169.7	171.6	174.9	177.0
80°	100.0	100.0	100.0	104.7	112.7	118.3	126.2	131.0	134.1	134.9	135.7
82.5°	80.3	80.3	79.7	80.7	83.5	86.5	93.8	99.2	101.8	101.3	99.6
85°	52.4	50.8	50.8	50.0	50.8	49.2	48.4	51.6	56.4	56.4	54.7
87.5°	29.1	28.2	28.0	26.5	24.9	23.4	20.8	20.7	20.1	21.9	20.6
90°	37.6	36.3	31.9	27.5	23.1	18.8	14.9	11.6	8.2	4.8	1.5
92.5°	40.8	38.7	35.3	32.1	28.8	25.4	24.3	25.2	26.2	27.2	28.1
95°	49.2	46.8	43.1	39.4	35.7	32.0	37.1	50.8	64.6	78.4	92.1
97.5°	51.3	48.6	72.8	96.9	121.1	145.2	160.4	166.5	172.8	178.9	185.1
100°	52.5	49.8	102.2	154.5	206.8	259.1	282.0	275.3	268.5	261.9	255.2
102.5°	91.0	99.4	156.5	213.7	270.8	328.0	354.2	349.3	344.6	339.7	334.9
105°	271.2	330.6	360.8	391.0	421.2	451.4	464.6	461.0	457.3	453.6	449.9
107.5°	562.5	606.0	601.3	596.5	591.7	586.9	583.1	580.2	577.1	574.2	571.3
110°	669.8	680.9	677.2	673.5	669.8	666.1	663.0	660.2	657.5	654.9	652.2



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	757.2	757.0	753.3	749.6	745.9	742.3	739.1	736.8	734.4	732.0	729.5
115°	869.9	866.6	863.5	860.5	857.6	854.5	852.0	850.0	848.0	846.0	843.9
117.5°	975.5	972.9	971.3	969.8	968.3	966.7	964.7	962.2	959.7	957.3	954.7
120°	1044.4	1041.7	1040.7	1039.7	1038.6	1037.7	1035.7	1032.7	1029.7	1026.6	1023.6
122.5°	1112.5	1110.5	1109.2	1108.0	1106.7	1105.5	1103.6	1101.1	1098.6	1096.1	1093.7
125°	1208.5	1207.8	1206.5	1205.1	1203.8	1202.4	1200.4	1197.7	1195.1	1192.3	1189.6
127.5°	1303.0	1302.0	1300.4	1298.8	1297.2	1295.6	1293.4	1290.7	1288.1	1285.4	1282.6
130°	1360.1	1358.8	1357.5	1356.0	1354.7	1353.4	1351.4	1348.7	1346.0	1343.3	1340.6
132.5°	1414.4	1413.1	1412.0	1411.0	1409.9	1408.9	1406.9	1404.2	1401.6	1398.9	1396.2
135°	1497.1	1496.1	1494.8	1493.5	1492.1	1490.8	1489.1	1487.1	1485.1	1483.1	1481.1
137.5°	1569.9	1568.3	1567.6	1566.8	1566.1	1565.4	1563.7	1561.2	1558.6	1556.1	1553.5
140°	1616.8	1615.4	1614.4	1613.4	1612.4	1611.3	1609.9	1607.9	1605.9	1603.9	1601.8
142.5°	1661.1	1660.1	1659.1	1658.1	1657.1	1656.1	1654.6	1652.5	1650.5	1648.5	1646.5
145°	1723.2	1722.6	1721.9	1721.2	1720.6	1719.9	1718.4	1716.1	1713.7	1711.3	1709.0
147.5°	1778.6	1777.9	1777.2	1776.6	1775.8	1775.1	1774.0	1772.5	1771.0	1769.5	1767.9
150°	1812.3	1811.7	1811.0	1810.4	1809.7	1809.0	1808.2	1807.2	1806.1	1805.1	1804.1
152.5°	1841.9	1840.7	1840.3	1839.9	1839.5	1839.1	1838.7	1838.2	1837.7	1837.2	1836.7
155°	1882.8	1881.1	1880.8	1880.5	1880.2	1879.8	1880.0	1880.7	1881.3	1882.0	1882.6
157.5°	1918.4	1916.4	1916.8	1917.1	1917.4	1917.8	1918.0	1918.0	1918.1	1918.2	1918.2
160°	1939.0	1937.0	1937.3	1937.6	1938.0	1938.3	1938.6	1939.0	1939.3	1939.6	1940.1
162.5°	1957.4	1955.1	1955.4	1955.8	1956.1	1956.4	1957.0	1957.9	1958.8	1959.6	1960.6
165°	1982.0	1979.2	1979.6	1979.9	1980.2	1980.6	1981.3	1982.3	1983.3	1984.3	1985.3
167.5°	2001.2	1998.6	1998.6	1998.6	1998.6	1998.6	1999.2	2000.6	2002.0	2003.3	2004.6
170°	2012.2	2009.4	2009.4	2009.4	2009.4	2009.4	2010.1	2011.4	2012.8	2014.2	2015.5
172.5°	2019.4	2016.7	2016.4	2016.2	2015.9	2015.6	2016.3	2017.9	2019.5	2021.1	2022.8
175°	2028.4	2026.1	2025.7	2025.4	2025.1	2024.7	2025.4	2027.1	2028.7	2030.4	2032.1
177.5°	2031.8	2029.7	2029.4	2029.1	2028.9	2028.6	2029.1	2030.5	2031.8	2033.2	2034.5
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1864.3	1871.3	1880.2	1893.5	1903.7	1912.6	1914.5	1917.0	1923.4	1934.1	1942.4
5°	1876.3	1894.6	1924.0	1952.6	1983.5	2008.9	2032.8	2049.4	2065.3	2098.6	2125.6
7.5°	1872.6	1913.2	1959.2	2010.5	2062.4	2112.7	2159.4	2201.1	2242.7	2291.3	2346.7
10°	1870.0	1917.6	1979.5	2045.4	2117.7	2188.3	2256.5	2309.8	2371.7	2427.2	2497.8
12.5°	1857.9	1926.5	2000.5	2084.8	2173.5	2254.9	2344.8	2418.3	2489.1	2569.4	2651.5
15°	1842.2	1925.6	2019.2	2131.1	2266.0	2364.5	2456.6	2584.3	2671.7	2759.0	2876.5
17.5°	1813.5	1915.2	2032.3	2177.7	2290.2	2422.5	2561.0	2662.0	2779.7	2902.7	3009.0
20°	1790.6	1908.9	2039.8	2182.7	2326.4	2470.0	2604.2	2724.8	2846.3	2988.4	3075.6
22.5°	1767.8	1884.8	2020.8	2172.6	2327.0	2478.3	2630.2	2771.9	2908.5	3051.9	3163.3
25°	1719.2	1858.2	2005.7	2160.5	2312.9	2479.6	2660.6	2818.5	2987.6	3135.2	3240.8
27.5°	1670.0	1797.3	1944.3	2101.3	2270.7	2467.7	2680.6	2860.1	3029.5	3135.2	3168.4
30°	1625.6	1760.5	1895.4	2055.0	2238.3	2458.1	2684.3	2889.9	3028.9	3074.8	3040.7
32.5°	1580.4	1702.7	1836.3	1999.7	2194.4	2434.7	2689.5	2872.2	2955.8	2920.6	2781.7
35°	1501.0	1611.2	1740.6	1904.1	2128.0	2421.7	2668.5	2792.3	2771.7	2573.2	2311.3
37.5°	1415.8	1505.7	1625.6	1796.5	2059.1	2370.1	2578.3	2596.6	2418.0	2113.3	1810.8
40°	1348.6	1429.5	1552.6	1731.1	2005.7	2319.3	2487.5	2413.7	2136.7	1797.8	1545.4
42.5°	1283.1	1351.4	1470.0	1662.5	1954.9	2250.1	2352.3	2191.5	1871.9	1551.5	1321.9
45°	1172.4	1236.6	1355.6	1553.3	1851.0	2117.7	2104.2	1824.7	1504.9	1247.0	1056.4
47.5°	1067.2	1123.5	1235.2	1436.9	1728.9	1919.2	1793.0	1495.7	1224.4	1017.4	881.5
50°	992.9	1048.5	1159.6	1358.9	1631.1	1770.0	1589.8	1303.3	1054.9	883.4	775.5
52.5°	921.8	976.1	1077.7	1271.8	1513.0	1596.0	1402.5	1136.9	929.8	781.8	689.1
55°	822.3	863.5	954.8	1140.5	1320.8	1339.8	1143.8	921.5	750.8	647.7	584.2
57.5°	720.8	756.4	846.6	994.5	1120.8	1111.1	925.1	733.0	618.0	541.3	495.2
60°	654.8	689.7	769.1	896.2	991.4	958.1	787.4	632.6	534.2	477.9	441.3
62.5°	593.2	620.6	694.8	787.5	856.1	818.3	673.1	544.9	466.9	419.4	390.5
65°	504.0	526.2	585.7	634.2	672.3	635.8	515.1	426.3	369.9	336.6	316.7
67.5°	419.2	433.3	471.0	488.5	515.3	475.2	387.4	327.8	295.8	267.6	253.9
70°	365.9	376.2	396.1	410.3	417.5	376.2	311.1	267.5	240.4	220.7	212.0
72.5°	312.6	321.6	325.6	337.3	333.7	295.0	250.1	215.4	196.0	182.6	171.3
75°	238.9	242.9	238.9	234.2	223.8	196.8	165.9	148.5	134.1	127.7	123.8
77.5°	174.1	172.9	167.4	160.1	142.4	125.4	108.8	102.9	96.6	93.3	91.9
80°	134.1	131.0	126.2	114.3	99.2	87.4	83.3	79.4	77.0	73.0	72.2
82.5°	99.9	98.0	90.0	80.0	69.4	63.8	60.5	59.1	56.7	54.6	54.4
85°	53.2	50.8	42.1	36.6	34.9	33.3	32.5	32.5	29.4	28.6	28.6
87.5°	18.1	14.9	15.0	13.7	14.5	14.1	15.7	15.2	15.5	16.4	15.5
90°	4.8	8.2	11.6	14.9	18.8	23.1	27.5	31.9	36.3	37.6	38.9
92.5°	27.2	26.2	25.2	24.3	25.4	28.8	32.1	35.3	38.7	40.8	42.9
95°	78.4	64.6	50.8	37.1	32.0	35.7	39.4	43.1	46.8	49.2	51.5
97.5°	178.9	172.8	166.5	160.4	145.2	121.1	96.9	72.8	48.6	51.3	54.0
100°	261.9	268.5	275.3	282.0	259.1	206.8	154.5	102.2	49.8	52.5	55.1
102.5°	339.7	344.6	349.3	354.2	328.0	270.8	213.7	156.5	99.4	91.0	82.7
105°	453.6	457.3	461.0	464.6	451.4	421.2	391.0	360.8	330.6	271.2	211.9
107.5°	574.2	577.1	580.2	583.1	586.9	591.7	596.5	601.3	606.0	562.5	518.9
110°	654.9	657.5	660.2	663.0	666.1	669.8	673.5	677.2	680.9	669.8	658.7



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	732.0	734.4	736.8	739.1	742.3	745.9	749.6	753.3	757.0	757.2	757.4
115°	846.0	848.0	850.0	852.0	854.5	857.6	860.5	863.5	866.6	869.9	873.3
117.5°	957.3	959.7	962.2	964.7	966.7	968.3	969.8	971.3	972.9	975.5	978.3
120°	1026.6	1029.7	1032.7	1035.7	1037.7	1038.6	1039.7	1040.7	1041.7	1044.4	1047.1
122.5°	1096.1	1098.6	1101.1	1103.6	1105.5	1106.7	1108.0	1109.2	1110.5	1112.5	1114.3
125°	1192.3	1195.1	1197.7	1200.4	1202.4	1203.8	1205.1	1206.5	1207.8	1208.5	1209.1
127.5°	1285.4	1288.1	1290.7	1293.4	1295.6	1297.2	1298.8	1300.4	1302.0	1303.0	1304.1
130°	1343.3	1346.0	1348.7	1351.4	1353.4	1354.7	1356.0	1357.5	1358.8	1360.1	1361.4
132.5°	1398.9	1401.6	1404.2	1406.9	1408.9	1409.9	1411.0	1412.0	1413.1	1414.4	1415.8
135°	1483.1	1485.1	1487.1	1489.1	1490.8	1492.1	1493.5	1494.8	1496.1	1497.1	1498.1
137.5°	1556.1	1558.6	1561.2	1563.7	1565.4	1566.1	1566.8	1567.6	1568.3	1569.9	1571.6
140°	1603.9	1605.9	1607.9	1609.9	1611.3	1612.4	1613.4	1614.4	1615.4	1616.8	1618.1
142.5°	1648.5	1650.5	1652.5	1654.6	1656.1	1657.1	1658.1	1659.1	1660.1	1661.1	1662.2
145°	1711.3	1713.7	1716.1	1718.4	1719.9	1720.6	1721.2	1721.9	1722.6	1723.2	1723.9
147.5°	1769.5	1771.0	1772.5	1774.0	1775.1	1775.8	1776.6	1777.2	1777.9	1778.6	1779.2
150°	1805.1	1806.1	1807.2	1808.2	1809.0	1809.7	1810.4	1811.0	1811.7	1812.3	1813.0
152.5°	1837.2	1837.7	1838.2	1838.7	1839.1	1839.5	1839.9	1840.3	1840.7	1841.9	1843.1
155°	1882.0	1881.3	1880.7	1880.0	1879.8	1880.2	1880.5	1880.8	1881.1	1882.8	1884.5
157.5°	1918.2	1918.1	1918.0	1918.0	1917.8	1917.4	1917.1	1916.8	1916.4	1918.4	1920.5
160°	1939.6	1939.3	1939.0	1938.6	1938.3	1938.0	1937.6	1937.3	1937.0	1939.0	1941.1
162.5°	1959.6	1958.8	1957.9	1957.0	1956.4	1956.1	1955.8	1955.4	1955.1	1957.4	1959.6
165°	1984.3	1983.3	1982.3	1981.3	1980.6	1980.2	1979.9	1979.6	1979.2	1982.0	1984.6
167.5°	2003.3	2002.0	2000.6	1999.2	1998.6	1998.6	1998.6	1998.6	1998.6	2001.2	2004.0
170°	2014.2	2012.8	2011.4	2010.1	2009.4	2009.4	2009.4	2009.4	2009.4	2012.2	2014.8
172.5°	2021.1	2019.5	2017.9	2016.3	2015.6	2015.9	2016.2	2016.4	2016.7	2019.4	2022.1
175°	2030.4	2028.7	2027.1	2025.4	2024.7	2025.1	2025.4	2025.7	2026.1	2028.4	2030.7
177.5°	2033.2	2031.8	2030.5	2029.1	2028.6	2028.9	2029.1	2029.4	2029.7	2031.8	2034.0
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1955.7	1955.7	1958.2	1967.8	1969.0	1977.3	1974.8
5°	2149.4	2164.4	2170.0	2193.8	2208.2	2214.5	2201.8
7.5°	2386.2	2428.8	2448.9	2473.9	2496.0	2502.6	2485.3
10°	2559.0	2603.4	2640.7	2663.7	2685.1	2699.5	2717.7
12.5°	2725.9	2780.6	2816.0	2848.5	2870.5	2888.7	2891.6
15°	2907.4	2989.9	3052.6	3098.7	3121.7	3133.6	3128.9
17.5°	3090.4	3166.9	3211.6	3258.5	3290.4	3292.1	3293.0
20°	3193.9	3268.5	3320.1	3355.1	3390.8	3389.2	3397.1
22.5°	3263.2	3321.8	3361.4	3386.8	3399.0	3393.0	3394.6
25°	3295.5	3313.0	3305.9	3265.4	3255.1	3217.7	3224.1
27.5°	3128.6	3046.0	2960.6	2850.7	2764.1	2694.8	2698.4
30°	2901.8	2755.8	2589.1	2449.4	2324.0	2289.1	2214.5
32.5°	2585.0	2365.9	2170.7	2040.5	1932.9	1903.7	1838.6
35°	2047.8	1835.1	1634.3	1513.6	1466.0	1399.4	1398.6
37.5°	1591.7	1404.4	1298.2	1207.7	1160.2	1119.9	1116.0
40°	1339.0	1193.0	1112.8	1047.7	1000.9	970.7	963.6
42.5°	1162.5	1044.4	969.3	929.0	892.9	877.4	865.8
45°	949.3	869.9	817.5	781.0	764.4	752.5	746.1
47.5°	794.1	740.8	705.2	680.9	667.3	654.8	658.1
50°	709.6	665.9	639.7	616.7	606.4	597.6	598.4
52.5°	641.7	602.5	581.3	564.6	551.8	545.6	542.6
55°	544.5	519.9	498.5	486.6	479.4	470.7	468.3
57.5°	464.4	445.5	428.0	414.4	412.7	404.3	405.5
60°	411.1	395.3	381.0	373.9	368.3	361.1	363.6
62.5°	367.3	354.0	341.0	335.1	329.5	324.3	325.4
65°	300.8	288.1	280.1	277.0	274.6	272.3	269.8
67.5°	239.7	232.0	227.0	220.2	215.3	214.5	212.1
70°	201.6	191.3	182.6	173.8	171.5	170.7	171.5
72.5°	161.6	155.1	152.7	148.5	147.9	145.9	147.3
75°	121.5	119.1	117.4	114.3	114.3	114.3	114.3
77.5°	89.6	88.1	87.2	86.5	85.7	84.6	84.4
80°	69.9	69.1	67.5	67.5	66.7	67.5	66.7
82.5°	52.7	52.5	51.0	51.0	50.2	49.7	50.2
85°	27.0	26.2	27.8	26.2	27.0	25.4	27.0
87.5°	15.7	16.0	15.6	15.7	15.1	16.6	15.5
90°	40.3	41.6	42.6	43.3	43.9	44.6	45.2
92.5°	45.1	47.3	48.5	48.9	49.3	49.7	50.1
95°	53.8	56.1	57.4	57.4	57.4	57.4	57.4
97.5°	56.7	59.4	60.9	61.2	61.5	61.9	62.2
100°	57.9	60.6	62.1	62.4	62.7	63.1	63.4
102.5°	74.4	66.0	62.2	62.8	63.4	64.0	64.6
105°	152.5	93.1	63.7	64.4	65.1	65.7	66.4
107.5°	475.3	431.8	387.7	343.0	298.1	253.4	208.6
110°	647.6	636.6	607.0	559.1	511.1	463.1	415.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	757.6	757.8	752.9	742.7	732.6	722.5	712.3
115°	876.7	880.0	882.3	883.7	885.0	886.4	887.8
117.5°	980.9	983.6	985.1	985.3	985.6	985.9	986.1
120°	1049.8	1052.5	1053.8	1053.8	1053.8	1053.8	1053.8
122.5°	1116.2	1118.1	1119.1	1119.4	1119.6	1119.9	1120.2
125°	1209.8	1210.4	1211.1	1211.8	1212.4	1213.2	1213.9
127.5°	1305.3	1306.3	1306.5	1305.9	1305.1	1304.4	1303.8
130°	1362.8	1364.1	1364.4	1363.8	1363.1	1362.4	1361.8
132.5°	1417.1	1418.5	1418.7	1417.7	1416.8	1415.8	1414.9
135°	1499.1	1500.2	1500.2	1499.1	1498.1	1497.1	1496.1
137.5°	1573.2	1574.8	1575.2	1574.6	1573.9	1573.2	1572.6
140°	1619.4	1620.7	1621.1	1620.4	1619.8	1619.1	1618.4
142.5°	1663.3	1664.4	1664.5	1663.6	1662.5	1661.6	1660.7
145°	1724.6	1725.3	1725.7	1725.7	1725.7	1725.7	1725.7
147.5°	1779.9	1780.6	1780.1	1778.6	1777.1	1775.4	1773.9
150°	1813.7	1814.3	1814.2	1813.2	1812.2	1811.2	1810.2
152.5°	1844.3	1845.5	1845.3	1843.8	1842.2	1840.7	1839.2
155°	1886.1	1887.8	1887.6	1885.6	1883.6	1881.6	1879.7
157.5°	1922.5	1924.5	1924.2	1921.6	1918.9	1916.3	1913.7
160°	1943.0	1945.0	1944.9	1942.5	1940.2	1937.8	1935.5
162.5°	1962.0	1964.2	1964.3	1962.3	1960.1	1958.1	1956.0
165°	1987.3	1990.0	1990.1	1987.8	1985.5	1983.1	1980.7
167.5°	2006.6	2009.3	2009.3	2006.6	2004.0	2001.2	1998.6
170°	2017.5	2020.2	2020.2	2017.5	2014.8	2012.2	2009.4
172.5°	2024.8	2027.4	2027.3	2024.4	2021.4	2018.4	2015.5
175°	2033.1	2035.5	2035.3	2032.6	2029.9	2027.2	2024.6
177.5°	2036.1	2038.3	2038.0	2035.3	2032.7	2029.9	2027.3
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1

(END OF REPORT)