

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: P333091

Luminaire Tested: **S124RDIW-S1020D1560U835-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333091
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124RDIW-S1020D1560U835-4F0-1E-UDD-A
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10579.9 lumens
Efficiency: N/A
Efficacy: 138.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: General Diffuse

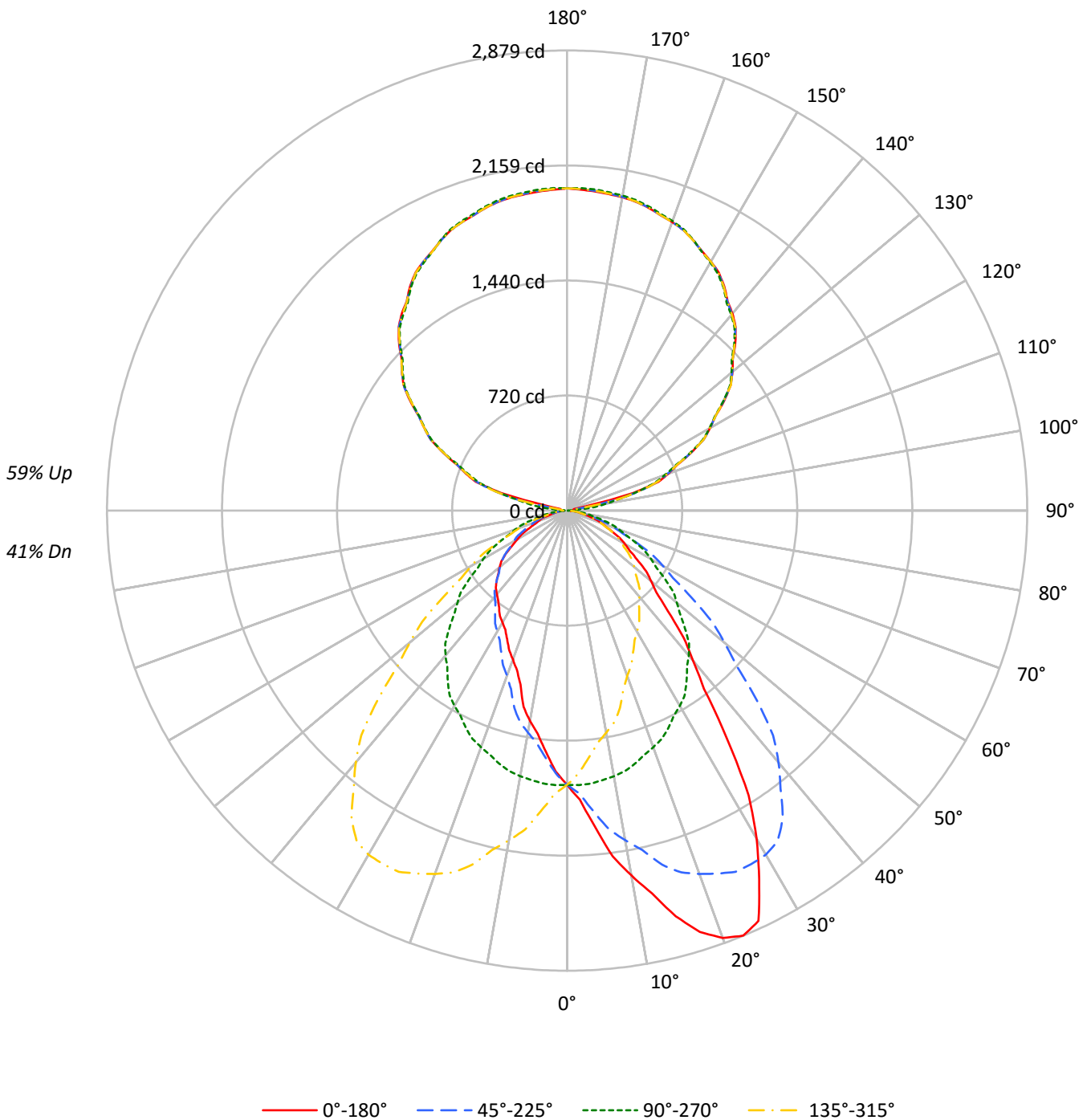
Input Watts (W): 76.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	78	78	78	62	62	62	48	48	48	41
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	43	42	41	35
2	88	81	75	70	80	74	69	65	61	57	54	49	47	45	38	37	35	30
3	80	71	64	59	73	65	59	54	54	50	46	44	41	38	34	32	30	26
4	74	63	56	50	67	58	51	46	48	43	40	39	36	33	31	28	26	23
5	68	56	49	43	62	52	45	40	43	38	34	35	32	29	28	25	23	20
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	25	23	21	18
7	58	46	38	33	53	42	35	31	35	30	26	29	25	22	23	20	18	16
8	53	42	34	29	49	38	32	27	32	27	24	27	23	20	21	19	16	14
9	50	38	31	26	45	35	29	24	30	25	21	25	21	18	20	17	15	13
10	46	35	28	23	42	32	26	22	27	22	19	23	19	16	18	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13852	13852	13852	13852
5°	16067	13893	12280	13893
10°	19007	13833	10960	13833
15°	21956	13705	9417	13705
20°	24445	13529	8516	13529
25°	25235	13356	7906	13356
30°	22091	13147	7539	13147
35°	17196	12835	7318	12835
40°	12895	12480	7198	12480
45°	10182	11910	7134	11910
50°	8596	11252	6929	11252
55°	7492	10528	6557	10528
60°	6741	9778	5804	9778
65°	5943	8967	4991	8967
70°	5351	8127	4504	8127
75°	4485	7202	3840	7202
80°	3794	6137	3598	6137
85°	3205	4798	3205	4798



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.3	1.6
10°-20°	501.5	4.7
20°-30°	784.4	7.4
30°-40°	872.0	8.2
40°-50°	773.6	7.3
50°-60°	602.8	5.7
60°-70°	394.7	3.7
70°-80°	194.1	1.8
80°-90°	53.7	0.5
90°-100°	69.0	0.7
100°-110°	439.7	4.2
110°-120°	841.1	8.0
120°-130°	1067.8	10.1
130°-140°	1142.4	10.8
140°-150°	1068.3	10.1
150°-160°	861.5	8.1
160°-170°	555.6	5.3
170°-180°	191.5	1.8
0°-30°	1452.1	13.7
0°-40°	2324.1	22.0
0°-60°	3700.5	35.0
0°-90°	4343.0	41.0
90°-120°	1349.8	12.8
90°-150°	4628.2	43.7
90°-180°	6237.0	59.0
0°-180°	10579.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1716	1716	1716	1716	1716	
5°	1983	1714	1515	1714	1983	201
15°	2627	1640	1127	1640	2627	747
25°	2833	1499	888	1499	2833	1257
35°	1745	1302	742	1302	1745	1094
45°	892	1043	625	1043	892	706
55°	532	748	466	748	532	484
65°	311	469	261	469	311	313
75°	144	231	123	231	144	158
85°	35	52	35	52	35	40
90°	45	4	45	4	45	21
95°	44	83	44	83	44	35
105°	430	454	430	454	430	375
115°	854	848	854	848	854	845
125°	1200	1191	1200	1191	1200	1069
135°	1488	1478	1488	1478	1488	1146
145°	1713	1704	1713	1704	1713	1071
155°	1867	1868	1867	1868	1867	861
165°	1962	1971	1962	1971	1962	554
175°	2004	2016	2004	2016	2004	191
180°	2016	2016	2016	2016	2016	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1809.8	1814.8	1809.8	1809.3	1803.8	1802.1	1799.9	1792.7	1779.4	1771.7	1773.3
5°	1982.7	1999.9	1990.3	1988.9	1973.7	1958.5	1948.8	1926.7	1903.2	1887.3	1874.1
7.5°	2182.6	2192.5	2186.5	2176.8	2152.2	2138.2	2115.8	2086.6	2044.5	2012.2	1982.8
10°	2318.6	2326.9	2324.2	2306.2	2288.2	2251.6	2230.8	2190.1	2136.8	2094.7	2055.2
12.5°	2452.5	2461.3	2437.0	2437.8	2403.8	2374.9	2342.0	2290.7	2229.2	2174.8	2125.5
15°	2627.0	2615.9	2615.9	2602.1	2564.0	2524.0	2490.1	2436.2	2358.7	2293.7	2225.3
17.5°	2763.6	2767.4	2761.8	2729.1	2699.3	2657.8	2595.7	2532.8	2460.9	2373.7	2303.7
20°	2845.4	2845.4	2839.2	2817.1	2778.4	2734.1	2667.1	2598.6	2507.4	2419.6	2340.8
22.5°	2878.6	2880.8	2873.5	2855.2	2820.4	2777.2	2720.1	2650.6	2556.6	2457.7	2360.1
25°	2833.0	2846.1	2847.5	2842.6	2832.3	2806.0	2756.9	2685.7	2601.4	2494.2	2389.1
27.5°	2601.0	2617.6	2632.1	2656.0	2687.8	2704.4	2706.6	2670.4	2596.8	2493.7	2387.9
30°	2369.8	2383.6	2428.6	2487.3	2532.9	2574.4	2610.4	2620.0	2578.6	2485.9	2374.6
32.5°	2113.2	2132.0	2176.9	2240.1	2316.1	2386.4	2467.1	2508.3	2507.2	2451.6	2348.6
35°	1744.9	1758.7	1800.2	1866.5	1957.8	2062.2	2190.1	2289.6	2357.3	2352.5	2289.6
37.5°	1407.2	1422.8	1464.7	1519.8	1608.3	1737.5	1861.3	1998.4	2123.7	2194.1	2173.0
40°	1223.6	1224.3	1265.1	1321.8	1404.7	1517.4	1652.2	1804.3	1943.9	2058.0	2080.1
42.5°	1078.7	1078.8	1105.8	1166.9	1226.7	1332.7	1461.4	1612.4	1775.8	1907.6	1966.2
45°	891.8	898.0	920.1	956.8	1003.8	1093.6	1196.6	1337.0	1520.2	1676.4	1773.9
47.5°	755.2	764.3	778.4	808.3	845.7	905.6	990.8	1116.9	1265.9	1437.8	1576.5
50°	684.4	685.8	703.7	720.3	752.8	800.5	875.2	980.3	1117.1	1282.4	1436.5
52.5°	623.6	623.3	634.1	655.1	681.5	718.7	779.0	874.6	996.0	1144.1	1303.2
55°	532.3	535.8	544.1	560.6	580.7	607.0	654.7	726.6	822.0	948.5	1093.0
57.5°	462.9	464.7	471.2	478.2	496.6	515.7	551.5	601.4	681.9	785.5	920.1
60°	417.5	418.2	420.3	430.7	445.2	463.2	487.4	529.5	597.3	692.0	798.5
62.5°	373.3	374.5	377.7	385.3	396.5	409.0	434.3	468.2	524.3	605.2	701.1
65°	311.1	311.8	316.6	319.4	328.4	339.4	358.1	380.9	419.6	487.4	560.0
67.5°	259.9	259.9	260.2	263.9	270.2	277.5	288.7	306.9	336.1	377.7	441.7
70°	226.7	226.7	228.1	230.2	233.7	239.9	246.1	259.9	281.4	315.2	364.3
72.5°	195.8	196.3	197.7	198.1	199.9	205.0	209.6	218.5	234.4	259.9	299.6
75°	143.8	145.9	149.3	152.1	155.5	154.9	159.7	165.2	170.1	185.3	208.1
77.5°	107.0	105.9	106.3	108.7	109.1	109.8	113.2	117.5	121.1	128.3	136.5
80°	81.6	81.6	83.6	84.3	83.6	84.3	87.8	89.9	91.3	94.0	101.6
82.5°	61.7	62.8	62.1	62.8	63.2	63.9	66.8	67.2	68.6	69.7	72.9
85°	34.6	35.3	35.9	34.6	34.6	34.6	35.9	36.6	38.0	37.3	38.7
87.5°	21.2	20.5	20.9	20.8	21.2	20.4	20.6	21.3	19.8	19.9	19.4
90°	45.2	44.6	43.9	43.2	42.6	41.2	39.2	37.2	35.2	33.2	30.5
92.5°	41.6	41.5	41.4	41.2	41.1	40.0	38.0	36.0	34.0	32.0	29.3
95°	43.7	43.4	43.1	42.7	42.4	41.2	39.2	37.2	35.2	33.2	32.8
97.5°	42.2	41.9	41.6	41.2	40.9	40.6	40.4	40.2	40.0	39.8	77.2
100°	42.2	41.9	41.6	41.2	40.9	43.6	49.3	55.0	60.7	66.4	112.6
102.5°	43.4	43.4	43.3	43.2	43.2	73.9	135.3	196.8	258.2	319.7	325.7
105°	429.8	441.9	453.9	466.0	478.0	482.6	479.6	476.5	473.5	470.5	468.8
107.5°	599.0	597.7	596.4	595.2	593.9	592.5	591.1	589.6	588.1	586.6	584.3
110°	672.6	671.6	670.6	669.6	668.6	667.7	667.1	666.4	665.7	665.0	663.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	746.2	744.9	743.6	742.4	741.1	740.5	740.6	740.8	740.9	741.1	740.1
115°	853.6	853.6	853.6	853.6	853.6	853.2	852.5	851.9	851.2	850.5	850.9
117.5°	962.7	962.9	963.0	963.1	963.3	963.4	963.5	963.7	963.8	963.9	963.2
120°	1031.5	1032.2	1032.8	1033.5	1034.2	1034.2	1033.5	1032.8	1032.2	1031.5	1031.8
122.5°	1099.1	1099.7	1100.4	1101.1	1101.7	1101.9	1101.5	1101.1	1100.7	1100.3	1099.8
125°	1200.4	1200.1	1199.7	1199.4	1199.1	1198.4	1197.4	1196.4	1195.4	1194.4	1195.0
127.5°	1289.4	1289.6	1289.9	1290.2	1290.4	1290.7	1290.9	1291.1	1291.3	1291.5	1289.9
130°	1349.7	1349.7	1349.7	1349.7	1349.7	1349.5	1349.2	1348.9	1348.5	1348.2	1347.2
132.5°	1405.2	1405.5	1405.7	1406.0	1406.3	1406.2	1405.9	1405.6	1405.2	1404.9	1403.6
135°	1488.4	1487.8	1487.1	1486.4	1485.8	1485.1	1484.4	1483.7	1483.1	1482.4	1481.1
137.5°	1559.6	1559.8	1560.0	1560.2	1560.4	1560.2	1559.4	1558.7	1557.9	1557.2	1555.7
140°	1609.1	1608.7	1608.4	1608.1	1607.7	1607.1	1606.1	1605.1	1604.1	1603.0	1602.4
142.5°	1650.1	1650.0	1650.0	1649.9	1649.8	1649.4	1648.7	1648.0	1647.2	1646.5	1646.1
145°	1713.1	1712.5	1711.8	1711.1	1710.5	1709.9	1709.6	1709.3	1708.9	1708.6	1708.6
147.5°	1765.3	1765.0	1764.6	1764.3	1764.0	1763.7	1763.4	1763.1	1762.9	1762.6	1762.9
150°	1799.1	1798.8	1798.4	1798.1	1797.8	1797.6	1797.6	1797.6	1797.6	1797.6	1797.9
152.5°	1828.0	1828.2	1828.4	1828.6	1828.8	1828.7	1828.1	1827.6	1827.1	1826.5	1827.1
155°	1867.0	1868.0	1869.0	1870.0	1871.0	1870.8	1869.5	1868.1	1866.8	1865.4	1866.5
157.5°	1899.5	1901.3	1903.0	1904.8	1906.5	1906.5	1904.8	1903.0	1901.3	1899.5	1900.7
160°	1921.2	1923.3	1925.3	1927.3	1929.3	1929.3	1927.3	1925.3	1923.3	1921.2	1921.6
162.5°	1938.1	1940.4	1942.7	1945.0	1947.2	1947.4	1945.4	1943.4	1941.3	1939.3	1939.7
165°	1962.0	1965.0	1968.0	1971.0	1974.0	1974.2	1971.5	1968.8	1966.1	1963.5	1963.5
167.5°	1979.8	1983.1	1986.5	1989.8	1993.2	1993.4	1990.4	1987.5	1984.5	1981.6	1981.8
170°	1990.6	1994.0	1997.3	2000.7	2004.0	2004.4	2001.7	1999.0	1996.3	1993.6	1993.3
172.5°	1996.6	2000.3	2003.9	2007.5	2011.1	2011.6	2008.9	2006.2	2003.5	2000.9	2000.5
175°	2004.2	2008.2	2012.2	2016.2	2020.3	2020.8	2017.8	2014.7	2011.7	2008.7	2008.4
177.5°	2009.0	2012.2	2015.4	2018.7	2021.9	2022.4	2020.3	2018.1	2016.0	2013.8	2013.3
180°	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1767.8	1760.1	1756.2	1747.3	1736.8	1731.3	1726.3	1719.1	1709.7	1699.8	1692.6
5°	1857.5	1840.9	1820.2	1795.3	1773.2	1751.8	1733.1	1714.4	1693.0	1670.9	1648.8
7.5°	1949.6	1917.0	1881.7	1840.9	1801.3	1765.2	1732.0	1700.2	1664.2	1632.0	1602.7
10°	2013.8	1969.5	1920.4	1868.6	1816.7	1771.8	1727.6	1687.5	1643.2	1603.8	1570.6
12.5°	2065.8	2013.8	1954.7	1890.2	1827.8	1773.5	1722.6	1670.3	1620.0	1577.3	1533.0
15°	2152.0	2080.8	2001.3	1923.9	1843.0	1769.0	1700.6	1639.8	1582.4	1522.3	1480.1
17.5°	2211.3	2126.9	2030.2	1937.2	1841.6	1754.4	1675.4	1603.0	1536.8	1475.4	1425.2
20°	2246.7	2153.4	2046.3	1940.5	1833.3	1740.0	1655.0	1574.8	1506.4	1440.0	1388.1
22.5°	2266.6	2163.4	2046.3	1935.5	1824.5	1723.4	1630.1	1546.6	1472.1	1405.7	1348.3
25°	2273.0	2162.4	2042.8	1915.6	1793.9	1686.8	1590.0	1499.4	1416.5	1350.1	1289.3
27.5°	2264.2	2133.9	2011.4	1880.9	1755.4	1642.4	1540.8	1445.7	1362.6	1291.4	1229.0
30°	2250.9	2111.2	1979.9	1844.4	1717.2	1608.7	1501.5	1410.3	1323.8	1249.9	1187.0
32.5°	2222.1	2083.6	1942.3	1803.5	1674.6	1562.8	1461.1	1369.3	1284.6	1209.0	1142.2
35°	2165.2	2024.8	1871.4	1729.0	1602.4	1486.3	1390.9	1302.4	1221.5	1140.7	1070.1
37.5°	2090.1	1946.7	1794.1	1638.1	1511.5	1401.8	1314.3	1231.2	1152.3	1078.4	1000.3
40°	2019.3	1888.6	1731.0	1576.2	1446.2	1340.4	1259.6	1184.2	1104.7	1031.4	953.3
42.5°	1933.6	1822.3	1663.0	1507.6	1379.3	1277.4	1202.0	1128.3	1056.0	985.0	903.5
45°	1790.5	1706.1	1556.8	1407.5	1278.2	1177.3	1108.2	1043.2	979.6	911.8	835.1
47.5°	1626.5	1569.4	1440.5	1287.6	1168.0	1077.2	1010.4	957.3	903.5	835.8	768.5
50°	1512.6	1475.9	1351.5	1211.9	1097.8	1014.1	945.7	895.9	851.0	786.0	725.9
52.5°	1390.9	1371.4	1266.3	1132.8	1022.6	940.6	882.1	837.3	791.8	737.9	681.6
55°	1205.6	1216.0	1126.8	1011.4	907.7	838.6	785.3	748.0	709.3	663.7	620.1
57.5°	1016.2	1054.1	994.2	892.9	795.7	731.8	691.7	660.3	627.8	590.0	552.8
60°	902.8	934.6	900.8	811.6	726.6	667.1	629.8	605.6	573.1	538.5	510.2
62.5°	792.2	826.2	806.2	734.2	655.2	604.1	571.2	548.6	524.4	494.3	464.8
65°	653.3	675.4	665.7	616.0	560.0	516.4	486.0	469.4	447.3	425.2	398.9
67.5°	500.4	543.1	537.4	511.0	462.6	428.6	408.7	394.0	373.9	357.4	339.6
70°	411.3	450.7	450.0	428.6	402.3	370.5	356.7	344.3	326.3	310.4	295.9
72.5°	336.7	372.8	378.1	361.7	343.7	319.7	306.4	297.8	280.4	269.5	257.7
75°	235.7	262.0	268.9	268.9	260.6	248.2	236.4	230.9	218.5	208.8	201.9
77.5°	154.6	171.2	182.0	184.4	185.7	181.5	171.9	168.0	158.4	155.0	148.4
80°	109.2	120.3	132.7	136.9	140.3	139.0	134.8	132.0	123.1	119.6	116.8
82.5°	75.5	81.6	91.8	100.9	100.0	103.6	100.0	97.8	91.0	89.7	87.0
85°	39.4	40.1	41.5	47.7	51.2	52.5	53.2	51.8	49.8	49.8	44.9
87.5°	18.8	17.7	18.3	17.7	17.5	19.0	19.9	19.7	18.8	17.9	16.9
90°	27.8	25.1	22.5	19.3	15.6	11.9	8.2	4.5	8.2	11.9	15.6
92.5°	26.6	23.9	21.2	19.8	19.6	19.4	19.2	19.0	19.2	19.4	19.6
95°	32.5	32.2	31.8	37.4	48.8	60.2	71.5	82.9	71.5	60.2	48.8
97.5°	114.6	152.0	189.4	204.6	197.5	190.3	183.2	176.1	183.2	190.3	197.5
100°	158.8	205.1	251.3	271.4	265.4	259.4	253.4	247.3	253.4	259.4	265.4
102.5°	331.8	337.8	343.8	344.6	340.2	335.8	331.4	326.9	331.4	335.8	340.2
105°	467.2	465.5	463.8	462.0	460.0	457.9	455.9	453.9	455.9	457.9	460.0
107.5°	582.1	579.8	577.5	575.9	574.9	573.9	572.9	571.8	572.9	573.9	574.9
110°	661.0	659.0	657.0	655.5	654.5	653.5	652.5	651.5	652.5	653.5	654.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	739.2	738.2	737.3	735.9	734.1	732.3	730.5	728.7	730.5	732.3	734.1
115°	851.2	851.5	851.9	851.5	850.5	849.5	848.5	847.5	848.5	849.5	850.5
117.5°	962.5	961.7	961.0	960.0	958.6	957.3	955.9	954.6	955.9	957.3	958.6
120°	1032.2	1032.5	1032.8	1032.3	1031.0	1029.7	1028.3	1027.0	1028.3	1029.7	1031.0
122.5°	1099.3	1098.9	1098.4	1097.8	1096.9	1096.1	1095.3	1094.5	1095.3	1096.1	1096.9
125°	1195.7	1196.4	1197.0	1196.7	1195.4	1194.0	1192.7	1191.4	1192.7	1194.0	1195.4
127.5°	1288.4	1286.9	1285.3	1284.4	1284.0	1283.7	1283.4	1283.0	1283.4	1283.7	1284.0
130°	1346.2	1345.2	1344.2	1343.5	1343.2	1342.8	1342.5	1342.2	1342.5	1342.8	1343.2
132.5°	1402.3	1401.1	1399.8	1398.9	1398.3	1397.7	1397.0	1396.4	1397.0	1397.7	1398.3
135°	1479.7	1478.4	1477.0	1476.5	1476.9	1477.2	1477.5	1477.9	1477.5	1477.2	1476.9
137.5°	1554.3	1552.8	1551.3	1550.5	1550.4	1550.2	1550.1	1550.0	1550.1	1550.2	1550.4
140°	1601.7	1601.0	1600.4	1599.7	1599.0	1598.4	1597.7	1597.0	1597.7	1598.4	1599.0
142.5°	1645.7	1645.3	1644.9	1644.1	1642.9	1641.7	1640.4	1639.2	1640.4	1641.7	1642.9
145°	1708.6	1708.6	1708.6	1708.1	1707.1	1706.1	1705.1	1704.1	1705.1	1706.1	1707.1
147.5°	1763.3	1763.6	1763.9	1763.2	1761.3	1759.4	1757.5	1755.7	1757.5	1759.4	1761.3
150°	1798.3	1798.6	1798.9	1798.4	1797.1	1795.7	1794.4	1793.1	1794.4	1795.7	1797.1
152.5°	1827.7	1828.3	1829.0	1828.7	1827.6	1826.6	1825.5	1824.4	1825.5	1826.6	1827.6
155°	1867.5	1868.5	1869.5	1869.8	1869.5	1869.1	1868.8	1868.5	1868.8	1869.1	1869.5
157.5°	1901.8	1902.9	1904.1	1904.8	1905.0	1905.2	1905.4	1905.6	1905.4	1905.2	1905.0
160°	1921.9	1922.2	1922.6	1923.3	1924.3	1925.3	1926.3	1927.3	1926.3	1925.3	1924.3
162.5°	1940.0	1940.3	1940.7	1941.5	1942.8	1944.0	1945.3	1946.6	1945.3	1944.0	1942.8
165°	1963.5	1963.5	1963.5	1964.3	1966.0	1967.7	1969.3	1971.0	1969.3	1967.7	1966.0
167.5°	1982.0	1982.2	1982.4	1983.3	1985.1	1986.8	1988.6	1990.3	1988.6	1986.8	1985.1
170°	1993.0	1992.6	1992.3	1993.1	1995.1	1997.1	1999.2	2001.2	1999.2	1997.1	1995.1
172.5°	2000.2	1999.9	1999.5	2000.4	2002.4	2004.4	2006.4	2008.4	2006.4	2004.4	2002.4
175°	2008.0	2007.7	2007.4	2008.2	2010.2	2012.2	2014.2	2016.2	2014.2	2012.2	2010.2
177.5°	2012.8	2012.2	2011.7	2012.4	2014.2	2016.1	2018.0	2019.9	2018.0	2016.1	2014.2
180°	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1684.8	1679.3	1672.1	1663.8	1653.9	1645.0	1641.2	1644.5	1646.1	1641.7	1641.2
5°	1633.6	1616.3	1602.4	1581.7	1565.1	1551.3	1541.6	1537.5	1538.8	1527.8	1525.0
7.5°	1575.9	1555.4	1532.8	1508.1	1485.2	1464.9	1454.2	1448.4	1436.7	1431.7	1423.3
10°	1538.8	1511.2	1489.1	1460.0	1433.8	1409.6	1397.8	1388.1	1376.4	1370.9	1359.1
12.5°	1500.7	1468.6	1444.3	1414.1	1387.3	1358.1	1346.9	1329.0	1310.6	1299.0	1283.9
15°	1446.9	1408.2	1378.5	1342.5	1310.7	1277.5	1247.8	1214.6	1202.2	1175.9	1160.7
17.5°	1384.0	1344.7	1307.9	1259.7	1210.6	1169.4	1137.7	1105.9	1086.9	1070.1	1062.4
20°	1342.5	1306.6	1255.4	1199.4	1144.8	1099.2	1073.6	1052.9	1032.1	1020.4	1012.1
22.5°	1303.2	1257.3	1197.9	1137.5	1082.9	1047.2	1025.5	1004.2	987.3	976.1	965.1
25°	1237.4	1177.3	1114.4	1045.3	1007.9	976.8	953.3	936.0	925.7	911.1	905.6
27.5°	1169.8	1097.0	1027.6	981.1	942.2	913.8	893.3	880.3	867.2	857.9	850.7
30°	1117.8	1043.9	981.7	937.4	898.0	874.5	857.9	842.7	832.3	824.7	819.2
32.5°	1066.4	992.4	940.2	892.6	861.5	838.6	820.9	809.5	801.4	791.5	788.2
35°	992.0	926.3	880.7	837.9	806.1	785.3	771.5	759.7	752.8	750.1	748.0
37.5°	920.5	866.8	817.7	782.6	754.2	737.9	721.6	715.8	711.1	706.1	708.3
40°	875.2	824.7	781.2	743.8	721.0	703.1	693.4	686.5	682.3	682.3	682.3
42.5°	835.9	786.6	744.1	710.7	687.8	672.6	661.9	656.0	654.7	654.1	657.4
45°	775.0	729.3	686.5	658.8	639.5	624.2	618.0	613.2	613.2	616.0	616.6
47.5°	714.5	671.8	637.4	606.4	588.7	579.2	573.8	571.3	571.6	574.3	577.5
50°	677.5	635.3	601.4	573.8	557.2	548.2	543.4	542.0	543.4	543.4	548.2
52.5°	637.1	599.4	566.0	542.8	524.0	515.6	512.9	511.0	511.8	514.1	516.1
55°	577.9	544.1	512.3	490.1	476.3	470.8	464.6	465.2	463.9	465.2	465.2
57.5°	518.6	488.2	458.6	441.1	428.9	420.9	414.1	416.0	414.0	413.7	412.6
60°	480.5	447.3	423.8	407.9	394.0	387.1	380.9	382.3	380.2	378.8	376.1
62.5°	439.0	411.3	388.9	373.6	362.5	354.5	348.3	346.9	342.1	337.4	331.3
65°	378.8	356.0	336.0	321.5	311.1	304.9	300.0	295.9	285.5	274.4	268.9
67.5°	320.4	303.9	285.2	272.9	264.5	256.3	247.1	240.0	230.3	224.3	220.8
70°	282.7	266.8	250.9	239.2	230.2	222.6	212.2	207.4	200.5	197.7	194.3
72.5°	246.8	232.0	217.2	206.6	197.0	191.1	182.9	178.1	175.0	173.9	170.5
75°	192.2	180.4	169.4	159.7	152.1	147.9	144.5	141.0	139.6	133.4	130.0
77.5°	140.2	132.5	125.5	118.6	113.2	110.5	103.8	99.8	97.5	94.6	93.9
80°	109.2	103.7	96.8	92.6	85.0	82.3	79.5	78.8	78.1	77.4	76.7
82.5°	82.1	76.6	69.7	67.2	65.1	63.5	61.8	61.1	60.4	60.8	60.7
85°	41.5	38.7	38.7	38.0	37.3	36.6	35.9	35.9	35.3	35.9	35.3
87.5°	17.7	17.8	18.3	17.7	18.8	19.4	19.2	19.6	20.6	19.9	20.1
90°	19.3	22.5	25.1	27.8	30.5	33.2	35.2	37.2	39.2	41.2	42.6
92.5°	19.8	21.2	23.9	26.6	29.3	32.0	34.0	36.0	38.0	40.0	41.1
95°	37.4	31.8	32.2	32.5	32.8	33.2	35.2	37.2	39.2	41.2	42.4
97.5°	204.6	189.4	152.0	114.6	77.2	39.8	40.0	40.2	40.4	40.6	40.9
100°	271.4	251.3	205.1	158.8	112.6	66.4	60.7	55.0	49.3	43.6	40.9
102.5°	344.6	343.8	337.8	331.8	325.7	319.7	258.2	196.8	135.3	73.9	43.2
105°	462.0	463.8	465.5	467.2	468.8	470.5	473.5	476.5	479.6	482.6	478.0
107.5°	575.9	577.5	579.8	582.1	584.3	586.6	588.1	589.6	591.1	592.5	593.9
110°	655.5	657.0	659.0	661.0	663.0	665.0	665.7	666.4	667.1	667.7	668.6



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	735.9	737.3	738.2	739.2	740.1	741.1	740.9	740.8	740.6	740.5	741.1
115°	851.5	851.9	851.5	851.2	850.9	850.5	851.2	851.9	852.5	853.2	853.6
117.5°	960.0	961.0	961.7	962.5	963.2	963.9	963.8	963.7	963.5	963.4	963.3
120°	1032.3	1032.8	1032.5	1032.2	1031.8	1031.5	1032.2	1032.8	1033.5	1034.2	1034.2
122.5°	1097.8	1098.4	1098.9	1099.3	1099.8	1100.3	1100.7	1101.1	1101.5	1101.9	1101.7
125°	1196.7	1197.0	1196.4	1195.7	1195.0	1194.4	1195.4	1196.4	1197.4	1198.4	1199.1
127.5°	1284.4	1285.3	1286.9	1288.4	1289.9	1291.5	1291.3	1291.1	1290.9	1290.7	1290.4
130°	1343.5	1344.2	1345.2	1346.2	1347.2	1348.2	1348.5	1348.9	1349.2	1349.5	1349.7
132.5°	1398.9	1399.8	1401.1	1402.3	1403.6	1404.9	1405.2	1405.6	1405.9	1406.2	1406.3
135°	1476.5	1477.0	1478.4	1479.7	1481.1	1482.4	1483.1	1483.7	1484.4	1485.1	1485.8
137.5°	1550.5	1551.3	1552.8	1554.3	1555.7	1557.2	1557.9	1558.7	1559.4	1560.2	1560.4
140°	1599.7	1600.4	1601.0	1601.7	1602.4	1603.0	1604.1	1605.1	1606.1	1607.1	1607.7
142.5°	1644.1	1644.9	1645.3	1645.7	1646.1	1646.5	1647.2	1648.0	1648.7	1649.4	1649.8
145°	1708.1	1708.6	1708.6	1708.6	1708.6	1708.6	1708.9	1709.3	1709.6	1709.9	1710.5
147.5°	1763.2	1763.9	1763.6	1763.3	1762.9	1762.6	1762.9	1763.1	1763.4	1763.7	1764.0
150°	1798.4	1798.9	1798.6	1798.3	1797.9	1797.6	1797.6	1797.6	1797.6	1797.6	1797.8
152.5°	1828.7	1829.0	1828.3	1827.7	1827.1	1826.5	1827.1	1827.6	1828.1	1828.7	1828.8
155°	1869.8	1869.5	1868.5	1867.5	1866.5	1865.4	1866.8	1868.1	1869.5	1870.8	1871.0
157.5°	1904.8	1904.1	1902.9	1901.8	1900.7	1899.5	1901.3	1903.0	1904.8	1906.5	1906.5
160°	1923.3	1922.6	1922.2	1921.9	1921.6	1921.2	1923.3	1925.3	1927.3	1929.3	1929.3
162.5°	1941.5	1940.7	1940.3	1940.0	1939.7	1939.3	1941.3	1943.4	1945.4	1947.4	1947.2
165°	1964.3	1963.5	1963.5	1963.5	1963.5	1963.5	1966.1	1968.8	1971.5	1974.2	1974.0
167.5°	1983.3	1982.4	1982.2	1982.0	1981.8	1981.6	1984.5	1987.5	1990.4	1993.4	1993.2
170°	1993.1	1992.3	1992.6	1993.0	1993.3	1993.6	1996.3	1999.0	2001.7	2004.4	2004.0
172.5°	2000.4	1999.5	1999.9	2000.2	2000.5	2000.9	2003.5	2006.2	2008.9	2011.6	2011.1
175°	2008.2	2007.4	2007.7	2008.0	2008.4	2008.7	2011.7	2014.7	2017.8	2020.8	2020.3
177.5°	2012.4	2011.7	2012.2	2012.8	2013.3	2013.8	2016.0	2018.1	2020.3	2022.4	2021.9
180°	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2



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CATALOG NUMBER: S124RDIW-S1020D1560U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1637.8	1638.9	1635.1	1634.0	1635.1	1638.9	1637.8	1641.2	1641.7	1646.1	1644.5
5°	1519.5	1518.1	1514.6	1515.3	1514.6	1518.1	1519.5	1525.0	1527.8	1538.8	1537.5
7.5°	1418.3	1412.9	1414.4	1408.9	1414.4	1412.9	1418.3	1423.3	1431.7	1436.7	1448.4
10°	1356.3	1348.7	1342.5	1337.0	1342.5	1348.7	1356.3	1359.1	1370.9	1376.4	1388.1
12.5°	1271.7	1265.2	1256.8	1258.5	1256.8	1265.2	1271.7	1283.9	1299.0	1310.6	1329.0
15°	1151.7	1141.3	1124.8	1126.8	1124.8	1141.3	1151.7	1160.7	1175.9	1202.2	1214.6
17.5°	1050.1	1050.2	1042.6	1044.4	1042.6	1050.2	1050.1	1062.4	1070.1	1086.9	1105.9
20°	997.6	992.7	993.4	991.3	993.4	992.7	997.6	1012.1	1020.4	1032.1	1052.9
22.5°	961.1	955.1	950.3	946.0	950.3	955.1	961.1	965.1	976.1	987.3	1004.2
25°	899.4	895.2	889.0	887.6	889.0	895.2	899.4	905.6	911.1	925.7	936.0
27.5°	845.2	844.4	841.9	838.7	841.9	844.4	845.2	850.7	857.9	867.2	880.3
30°	813.7	812.3	810.9	808.8	810.9	812.3	813.7	819.2	824.7	832.3	842.7
32.5°	785.5	784.6	783.2	783.4	783.2	784.6	785.5	788.2	791.5	801.4	809.5
35°	745.2	744.5	743.2	742.5	743.2	744.5	745.2	748.0	750.1	752.8	759.7
37.5°	707.6	709.4	708.6	708.4	708.6	709.4	707.6	708.3	706.1	711.1	715.8
40°	681.6	682.3	683.7	683.0	683.7	682.3	681.6	682.3	682.3	682.3	686.5
42.5°	660.1	660.2	662.1	659.8	662.1	660.2	660.1	657.4	654.1	654.7	656.0
45°	621.5	625.6	624.9	624.9	624.9	625.6	621.5	616.6	616.0	613.2	613.2
47.5°	579.3	582.9	583.9	583.7	583.9	582.9	579.3	577.5	574.3	571.6	571.3
50°	551.7	550.3	552.4	551.7	552.4	550.3	551.7	548.2	543.4	543.4	542.0
52.5°	517.9	518.2	518.1	517.4	518.1	518.2	517.9	516.1	514.1	511.8	511.0
55°	465.9	466.6	465.2	465.9	465.2	466.6	465.9	465.2	465.2	463.9	465.2
57.5°	409.5	406.2	407.6	405.9	407.6	406.2	409.5	412.6	413.7	414.0	416.0
60°	369.2	363.6	362.2	359.5	362.2	363.6	369.2	376.1	378.8	380.2	382.3
62.5°	323.8	319.9	315.2	317.4	315.2	319.9	323.8	331.3	337.4	342.1	346.9
65°	263.4	260.6	258.5	261.3	258.5	260.6	263.4	268.9	274.4	285.5	295.9
67.5°	218.0	216.5	216.5	215.1	216.5	216.5	218.0	220.8	224.3	230.3	240.0
70°	194.3	192.2	192.2	190.8	192.2	192.2	194.3	194.3	197.7	200.5	207.4
72.5°	169.9	167.8	168.4	167.6	168.4	167.8	169.9	170.5	173.9	175.0	178.1
75°	125.8	122.4	122.4	123.1	122.4	122.4	125.8	130.0	133.4	139.6	141.0
77.5°	93.9	93.2	94.2	92.9	94.2	93.2	93.9	93.9	94.6	97.5	99.8
80°	76.7	76.0	75.4	77.4	75.4	76.0	76.7	76.7	77.4	78.1	78.8
82.5°	59.6	59.5	59.3	61.9	59.3	59.5	59.6	60.7	60.8	60.4	61.1
85°	35.9	34.6	35.9	34.6	35.9	34.6	35.9	35.3	35.9	35.3	35.9
87.5°	21.4	20.9	20.5	21.2	20.5	20.9	21.4	20.1	19.9	20.6	19.6
90°	43.2	43.9	44.6	45.2	44.6	43.9	43.2	42.6	41.2	39.2	37.2
92.5°	41.2	41.4	41.5	41.6	41.5	41.4	41.2	41.1	40.0	38.0	36.0
95°	42.7	43.1	43.4	43.7	43.4	43.1	42.7	42.4	41.2	39.2	37.2
97.5°	41.2	41.6	41.9	42.2	41.9	41.6	41.2	40.9	40.6	40.4	40.2
100°	41.2	41.6	41.9	42.2	41.9	41.6	41.2	40.9	43.6	49.3	55.0
102.5°	43.2	43.3	43.4	43.4	43.4	43.3	43.2	43.2	73.9	135.3	196.8
105°	466.0	453.9	441.9	429.8	441.9	453.9	466.0	478.0	482.6	479.6	476.5
107.5°	595.2	596.4	597.7	599.0	597.7	596.4	595.2	593.9	592.5	591.1	589.6
110°	669.6	670.6	671.6	672.6	671.6	670.6	669.6	668.6	667.7	667.1	666.4



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CATALOG NUMBER: S124RDIW-S1020D1560U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	742.4	743.6	744.9	746.2	744.9	743.6	742.4	741.1	740.5	740.6	740.8
115°	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.2	852.5	851.9
117.5°	963.1	963.0	962.9	962.7	962.9	963.0	963.1	963.3	963.4	963.5	963.7
120°	1033.5	1032.8	1032.2	1031.5	1032.2	1032.8	1033.5	1034.2	1034.2	1033.5	1032.8
122.5°	1101.1	1100.4	1099.7	1099.1	1099.7	1100.4	1101.1	1101.7	1101.9	1101.5	1101.1
125°	1199.4	1199.7	1200.1	1200.4	1200.1	1199.7	1199.4	1199.1	1198.4	1197.4	1196.4
127.5°	1290.2	1289.9	1289.6	1289.4	1289.6	1289.9	1290.2	1290.4	1290.7	1290.9	1291.1
130°	1349.7	1349.7	1349.7	1349.7	1349.7	1349.7	1349.7	1349.7	1349.5	1349.2	1348.9
132.5°	1406.0	1405.7	1405.5	1405.2	1405.5	1405.7	1406.0	1406.3	1406.2	1405.9	1405.6
135°	1486.4	1487.1	1487.8	1488.4	1487.8	1487.1	1486.4	1485.8	1485.1	1484.4	1483.7
137.5°	1560.2	1560.0	1559.8	1559.6	1559.8	1560.0	1560.2	1560.4	1560.2	1559.4	1558.7
140°	1608.1	1608.4	1608.7	1609.1	1608.7	1608.4	1608.1	1607.7	1607.1	1606.1	1605.1
142.5°	1649.9	1650.0	1650.0	1650.1	1650.0	1650.0	1649.9	1649.8	1649.4	1648.7	1648.0
145°	1711.1	1711.8	1712.5	1713.1	1712.5	1711.8	1711.1	1710.5	1709.9	1709.6	1709.3
147.5°	1764.3	1764.6	1765.0	1765.3	1765.0	1764.6	1764.3	1764.0	1763.7	1763.4	1763.1
150°	1798.1	1798.4	1798.8	1799.1	1798.8	1798.4	1798.1	1797.8	1797.6	1797.6	1797.6
152.5°	1828.6	1828.4	1828.2	1828.0	1828.2	1828.4	1828.6	1828.8	1828.7	1828.1	1827.6
155°	1870.0	1869.0	1868.0	1867.0	1868.0	1869.0	1870.0	1871.0	1870.8	1869.5	1868.1
157.5°	1904.8	1903.0	1901.3	1899.5	1901.3	1903.0	1904.8	1906.5	1906.5	1904.8	1903.0
160°	1927.3	1925.3	1923.3	1921.2	1923.3	1925.3	1927.3	1929.3	1929.3	1927.3	1925.3
162.5°	1945.0	1942.7	1940.4	1938.1	1940.4	1942.7	1945.0	1947.2	1947.4	1945.4	1943.4
165°	1971.0	1968.0	1965.0	1962.0	1965.0	1968.0	1971.0	1974.0	1974.2	1971.5	1968.8
167.5°	1989.8	1986.5	1983.1	1979.8	1983.1	1986.5	1989.8	1993.2	1993.4	1990.4	1987.5
170°	2000.7	1997.3	1994.0	1990.6	1994.0	1997.3	2000.7	2004.0	2004.4	2001.7	1999.0
172.5°	2007.5	2003.9	2000.3	1996.6	2000.3	2003.9	2007.5	2011.1	2011.6	2008.9	2006.2
175°	2016.2	2012.2	2008.2	2004.2	2008.2	2012.2	2016.2	2020.3	2020.8	2017.8	2014.7
177.5°	2018.7	2015.4	2012.2	2009.0	2012.2	2015.4	2018.7	2021.9	2022.4	2020.3	2018.1
180°	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1641.2	1645.0	1653.9	1663.8	1672.1	1679.3	1684.8	1692.6	1699.8	1709.7	1719.1
5°	1541.6	1551.3	1565.1	1581.7	1602.4	1616.3	1633.6	1648.8	1670.9	1693.0	1714.4
7.5°	1454.2	1464.9	1485.2	1508.1	1532.8	1555.4	1575.9	1602.7	1632.0	1664.2	1700.2
10°	1397.8	1409.6	1433.8	1460.0	1489.1	1511.2	1538.8	1570.6	1603.8	1643.2	1687.5
12.5°	1346.9	1358.1	1387.3	1414.1	1444.3	1468.6	1500.7	1533.0	1577.3	1620.0	1670.3
15°	1247.8	1277.5	1310.7	1342.5	1378.5	1408.2	1446.9	1480.1	1522.3	1582.4	1639.8
17.5°	1137.7	1169.4	1210.6	1259.7	1307.9	1344.7	1384.0	1425.2	1475.4	1536.8	1603.0
20°	1073.6	1099.2	1144.8	1199.4	1255.4	1306.6	1342.5	1388.1	1440.0	1506.4	1574.8
22.5°	1025.5	1047.2	1082.9	1137.5	1197.9	1257.3	1303.2	1348.3	1405.7	1472.1	1546.6
25°	953.3	976.8	1007.9	1045.3	1114.4	1177.3	1237.4	1289.3	1350.1	1416.5	1499.4
27.5°	893.3	913.8	942.2	981.1	1027.6	1097.0	1169.8	1229.0	1291.4	1362.6	1445.7
30°	857.9	874.5	898.0	937.4	981.7	1043.9	1117.8	1187.0	1249.9	1323.8	1410.3
32.5°	820.9	838.6	861.5	892.6	940.2	992.4	1066.4	1142.2	1209.0	1284.6	1369.3
35°	771.5	785.3	806.1	837.9	880.7	926.3	992.0	1070.1	1140.7	1221.5	1302.4
37.5°	721.6	737.9	754.2	782.6	817.7	866.8	920.5	1000.3	1078.4	1152.3	1231.2
40°	693.4	703.1	721.0	743.8	781.2	824.7	875.2	953.3	1031.4	1104.7	1184.2
42.5°	661.9	672.6	687.8	710.7	744.1	786.6	835.9	903.5	985.0	1056.0	1128.3
45°	618.0	624.2	639.5	658.8	686.5	729.3	775.0	835.1	911.8	979.6	1043.2
47.5°	573.8	579.2	588.7	606.4	637.4	671.8	714.5	768.5	835.8	903.5	957.3
50°	543.4	548.2	557.2	573.8	601.4	635.3	677.5	725.9	786.0	851.0	895.9
52.5°	512.9	515.6	524.0	542.8	566.0	599.4	637.1	681.6	737.9	791.8	837.3
55°	464.6	470.8	476.3	490.1	512.3	544.1	577.9	620.1	663.7	709.3	748.0
57.5°	414.1	420.9	428.9	441.1	458.6	488.2	518.6	552.8	590.0	627.8	660.3
60°	380.9	387.1	394.0	407.9	423.8	447.3	480.5	510.2	538.5	573.1	605.6
62.5°	348.3	354.5	362.5	373.6	388.9	411.3	439.0	464.8	494.3	524.4	548.6
65°	300.0	304.9	311.1	321.5	336.0	356.0	378.8	398.9	425.2	447.3	469.4
67.5°	247.1	256.3	264.5	272.9	285.2	303.9	320.4	339.6	357.4	373.9	394.0
70°	212.2	222.6	230.2	239.2	250.9	266.8	282.7	295.9	310.4	326.3	344.3
72.5°	182.9	191.1	197.0	206.6	217.2	232.0	246.8	257.7	269.5	280.4	297.8
75°	144.5	147.9	152.1	159.7	169.4	180.4	192.2	201.9	208.8	218.5	230.9
77.5°	103.8	110.5	113.2	118.6	125.5	132.5	140.2	148.4	155.0	158.4	168.0
80°	79.5	82.3	85.0	92.6	96.8	103.7	109.2	116.8	119.6	123.1	132.0
82.5°	61.8	63.5	65.1	67.2	69.7	76.6	82.1	87.0	89.7	91.0	97.8
85°	35.9	36.6	37.3	38.0	38.7	38.7	41.5	44.9	49.8	49.8	51.8
87.5°	19.2	19.4	18.8	17.7	18.3	17.8	17.7	16.9	17.9	18.8	19.7
90°	35.2	33.2	30.5	27.8	25.1	22.5	19.3	15.6	11.9	8.2	4.5
92.5°	34.0	32.0	29.3	26.6	23.9	21.2	19.8	19.6	19.4	19.2	19.0
95°	35.2	33.2	32.8	32.5	32.2	31.8	37.4	48.8	60.2	71.5	82.9
97.5°	40.0	39.8	77.2	114.6	152.0	189.4	204.6	197.5	190.3	183.2	176.1
100°	60.7	66.4	112.6	158.8	205.1	251.3	271.4	265.4	259.4	253.4	247.3
102.5°	258.2	319.7	325.7	331.8	337.8	343.8	344.6	340.2	335.8	331.4	326.9
105°	473.5	470.5	468.8	467.2	465.5	463.8	462.0	460.0	457.9	455.9	453.9
107.5°	588.1	586.6	584.3	582.1	579.8	577.5	575.9	574.9	573.9	572.9	571.8
110°	665.7	665.0	663.0	661.0	659.0	657.0	655.5	654.5	653.5	652.5	651.5



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	740.9	741.1	740.1	739.2	738.2	737.3	735.9	734.1	732.3	730.5	728.7
115°	851.2	850.5	850.9	851.2	851.5	851.9	851.5	850.5	849.5	848.5	847.5
117.5°	963.8	963.9	963.2	962.5	961.7	961.0	960.0	958.6	957.3	955.9	954.6
120°	1032.2	1031.5	1031.8	1032.2	1032.5	1032.8	1032.3	1031.0	1029.7	1028.3	1027.0
122.5°	1100.7	1100.3	1099.8	1099.3	1098.9	1098.4	1097.8	1096.9	1096.1	1095.3	1094.5
125°	1195.4	1194.4	1195.0	1195.7	1196.4	1197.0	1196.7	1195.4	1194.0	1192.7	1191.4
127.5°	1291.3	1291.5	1289.9	1288.4	1286.9	1285.3	1284.4	1284.0	1283.7	1283.4	1283.0
130°	1348.5	1348.2	1347.2	1346.2	1345.2	1344.2	1343.5	1343.2	1342.8	1342.5	1342.2
132.5°	1405.2	1404.9	1403.6	1402.3	1401.1	1399.8	1398.9	1398.3	1397.7	1397.0	1396.4
135°	1483.1	1482.4	1481.1	1479.7	1478.4	1477.0	1476.5	1476.9	1477.2	1477.5	1477.9
137.5°	1557.9	1557.2	1555.7	1554.3	1552.8	1551.3	1550.5	1550.4	1550.2	1550.1	1550.0
140°	1604.1	1603.0	1602.4	1601.7	1601.0	1600.4	1599.7	1599.0	1598.4	1597.7	1597.0
142.5°	1647.2	1646.5	1646.1	1645.7	1645.3	1644.9	1644.1	1642.9	1641.7	1640.4	1639.2
145°	1708.9	1708.6	1708.6	1708.6	1708.6	1708.6	1708.1	1707.1	1706.1	1705.1	1704.1
147.5°	1762.9	1762.6	1762.9	1763.3	1763.6	1763.9	1763.2	1761.3	1759.4	1757.5	1755.7
150°	1797.6	1797.6	1797.9	1798.3	1798.6	1798.9	1798.4	1797.1	1795.7	1794.4	1793.1
152.5°	1827.1	1826.5	1827.1	1827.7	1828.3	1829.0	1828.7	1827.6	1826.6	1825.5	1824.4
155°	1866.8	1865.4	1866.5	1867.5	1868.5	1869.5	1869.8	1869.5	1869.1	1868.8	1868.5
157.5°	1901.3	1899.5	1900.7	1901.8	1902.9	1904.1	1904.8	1905.0	1905.2	1905.4	1905.6
160°	1923.3	1921.2	1921.6	1921.9	1922.2	1922.6	1923.3	1924.3	1925.3	1926.3	1927.3
162.5°	1941.3	1939.3	1939.7	1940.0	1940.3	1940.7	1941.5	1942.8	1944.0	1945.3	1946.6
165°	1966.1	1963.5	1963.5	1963.5	1963.5	1963.5	1964.3	1966.0	1967.7	1969.3	1971.0
167.5°	1984.5	1981.6	1981.8	1982.0	1982.2	1982.4	1983.3	1985.1	1986.8	1988.6	1990.3
170°	1996.3	1993.6	1993.3	1993.0	1992.6	1992.3	1993.1	1995.1	1997.1	1999.2	2001.2
172.5°	2003.5	2000.9	2000.5	2000.2	1999.9	1999.5	2000.4	2002.4	2004.4	2006.4	2008.4
175°	2011.7	2008.7	2008.4	2008.0	2007.7	2007.4	2008.2	2010.2	2012.2	2014.2	2016.2
177.5°	2016.0	2013.8	2013.3	2012.8	2012.2	2011.7	2012.4	2014.2	2016.1	2018.0	2019.9
180°	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1726.3	1731.3	1736.8	1747.3	1756.2	1760.1	1767.8	1773.3	1771.7	1779.4	1792.7
5°	1733.1	1751.8	1773.2	1795.3	1820.2	1840.9	1857.5	1874.1	1887.3	1903.2	1926.7
7.5°	1732.0	1765.2	1801.3	1840.9	1881.7	1917.0	1949.6	1982.8	2012.2	2044.5	2086.6
10°	1727.6	1771.8	1816.7	1868.6	1920.4	1969.5	2013.8	2055.2	2094.7	2136.8	2190.1
12.5°	1722.6	1773.5	1827.8	1890.2	1954.7	2013.8	2065.8	2125.5	2174.8	2229.2	2290.7
15°	1700.6	1769.0	1843.0	1923.9	2001.3	2080.8	2152.0	2225.3	2293.7	2358.7	2436.2
17.5°	1675.4	1754.4	1841.6	1937.2	2030.2	2126.9	2211.3	2303.7	2373.7	2460.9	2532.8
20°	1655.0	1740.0	1833.3	1940.5	2046.3	2153.4	2246.7	2340.8	2419.6	2507.4	2598.6
22.5°	1630.1	1723.4	1824.5	1935.5	2046.3	2163.4	2266.6	2360.1	2457.7	2556.6	2650.6
25°	1590.0	1686.8	1793.9	1915.6	2042.8	2162.4	2273.0	2389.1	2494.2	2601.4	2685.7
27.5°	1540.8	1642.4	1755.4	1880.9	2011.4	2133.9	2264.2	2387.9	2493.7	2596.8	2670.4
30°	1501.5	1608.7	1717.2	1844.4	1979.9	2111.2	2250.9	2374.6	2485.9	2578.6	2620.0
32.5°	1461.1	1562.8	1674.6	1803.5	1942.3	2083.6	2222.1	2348.6	2451.6	2507.2	2508.3
35°	1390.9	1486.3	1602.4	1729.0	1871.4	2024.8	2165.2	2289.6	2352.5	2357.3	2289.6
37.5°	1314.3	1401.8	1511.5	1638.1	1794.1	1946.7	2090.1	2173.0	2194.1	2123.7	1998.4
40°	1259.6	1340.4	1446.2	1576.2	1731.0	1888.6	2019.3	2080.1	2058.0	1943.9	1804.3
42.5°	1202.0	1277.4	1379.3	1507.6	1663.0	1822.3	1933.6	1966.2	1907.6	1775.8	1612.4
45°	1108.2	1177.3	1278.2	1407.5	1556.8	1706.1	1790.5	1773.9	1676.4	1520.2	1337.0
47.5°	1010.4	1077.2	1168.0	1287.6	1440.5	1569.4	1626.5	1576.5	1437.8	1265.9	1116.9
50°	945.7	1014.1	1097.8	1211.9	1351.5	1475.9	1512.6	1436.5	1282.4	1117.1	980.3
52.5°	882.1	940.6	1022.6	1132.8	1266.3	1371.4	1390.9	1303.2	1144.1	996.0	874.6
55°	785.3	838.6	907.7	1011.4	1126.8	1216.0	1205.6	1093.0	948.5	822.0	726.6
57.5°	691.7	731.8	795.7	892.9	994.2	1054.1	1016.2	920.1	785.5	681.9	601.4
60°	629.8	667.1	726.6	811.6	900.8	934.6	902.8	798.5	692.0	597.3	529.5
62.5°	571.2	604.1	655.2	734.2	806.2	826.2	792.2	701.1	605.2	524.3	468.2
65°	486.0	516.4	560.0	616.0	665.7	675.4	653.3	560.0	487.4	419.6	380.9
67.5°	408.7	428.6	462.6	511.0	537.4	543.1	500.4	441.7	377.7	336.1	306.9
70°	356.7	370.5	402.3	428.6	450.0	450.7	411.3	364.3	315.2	281.4	259.9
72.5°	306.4	319.7	343.7	361.7	378.1	372.8	336.7	299.6	259.9	234.4	218.5
75°	236.4	248.2	260.6	268.9	268.9	262.0	235.7	208.1	185.3	170.1	165.2
77.5°	171.9	181.5	185.7	184.4	182.0	171.2	154.6	136.5	128.3	121.1	117.5
80°	134.8	139.0	140.3	136.9	132.7	120.3	109.2	101.6	94.0	91.3	89.9
82.5°	100.0	103.6	100.0	100.9	91.8	81.6	75.5	72.9	69.7	68.6	67.2
85°	53.2	52.5	51.2	47.7	41.5	40.1	39.4	38.7	37.3	38.0	36.6
87.5°	19.9	19.0	17.5	17.7	18.3	17.7	18.8	19.4	19.9	19.8	21.3
90°	8.2	11.9	15.6	19.3	22.5	25.1	27.8	30.5	33.2	35.2	37.2
92.5°	19.2	19.4	19.6	19.8	21.2	23.9	26.6	29.3	32.0	34.0	36.0
95°	71.5	60.2	48.8	37.4	31.8	32.2	32.5	32.8	33.2	35.2	37.2
97.5°	183.2	190.3	197.5	204.6	189.4	152.0	114.6	77.2	39.8	40.0	40.2
100°	253.4	259.4	265.4	271.4	251.3	205.1	158.8	112.6	66.4	60.7	55.0
102.5°	331.4	335.8	340.2	344.6	343.8	337.8	331.8	325.7	319.7	258.2	196.8
105°	455.9	457.9	460.0	462.0	463.8	465.5	467.2	468.8	470.5	473.5	476.5
107.5°	572.9	573.9	574.9	575.9	577.5	579.8	582.1	584.3	586.6	588.1	589.6
110°	652.5	653.5	654.5	655.5	657.0	659.0	661.0	663.0	665.0	665.7	666.4



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	730.5	732.3	734.1	735.9	737.3	738.2	739.2	740.1	741.1	740.9	740.8
115°	848.5	849.5	850.5	851.5	851.9	851.5	851.2	850.9	850.5	851.2	851.9
117.5°	955.9	957.3	958.6	960.0	961.0	961.7	962.5	963.2	963.9	963.8	963.7
120°	1028.3	1029.7	1031.0	1032.3	1032.8	1032.5	1032.2	1031.8	1031.5	1032.2	1032.8
122.5°	1095.3	1096.1	1096.9	1097.8	1098.4	1098.9	1099.3	1099.8	1100.3	1100.7	1101.1
125°	1192.7	1194.0	1195.4	1196.7	1197.0	1196.4	1195.7	1195.0	1194.4	1195.4	1196.4
127.5°	1283.4	1283.7	1284.0	1284.4	1285.3	1286.9	1288.4	1289.9	1291.5	1291.3	1291.1
130°	1342.5	1342.8	1343.2	1343.5	1344.2	1345.2	1346.2	1347.2	1348.2	1348.5	1348.9
132.5°	1397.0	1397.7	1398.3	1398.9	1399.8	1401.1	1402.3	1403.6	1404.9	1405.2	1405.6
135°	1477.5	1477.2	1476.9	1476.5	1477.0	1478.4	1479.7	1481.1	1482.4	1483.1	1483.7
137.5°	1550.1	1550.2	1550.4	1550.5	1551.3	1552.8	1554.3	1555.7	1557.2	1557.9	1558.7
140°	1597.7	1598.4	1599.0	1599.7	1600.4	1601.0	1601.7	1602.4	1603.0	1604.1	1605.1
142.5°	1640.4	1641.7	1642.9	1644.1	1644.9	1645.3	1645.7	1646.1	1646.5	1647.2	1648.0
145°	1705.1	1706.1	1707.1	1708.1	1708.6	1708.6	1708.6	1708.6	1708.6	1708.9	1709.3
147.5°	1757.5	1759.4	1761.3	1763.2	1763.9	1763.6	1763.3	1762.9	1762.6	1762.9	1763.1
150°	1794.4	1795.7	1797.1	1798.4	1798.9	1798.6	1798.3	1797.9	1797.6	1797.6	1797.6
152.5°	1825.5	1826.6	1827.6	1828.7	1829.0	1828.3	1827.7	1827.1	1826.5	1827.1	1827.6
155°	1868.8	1869.1	1869.5	1869.8	1869.5	1868.5	1867.5	1866.5	1865.4	1866.8	1868.1
157.5°	1905.4	1905.2	1905.0	1904.8	1904.1	1902.9	1901.8	1900.7	1899.5	1901.3	1903.0
160°	1926.3	1925.3	1924.3	1923.3	1922.6	1922.2	1921.9	1921.6	1921.2	1923.3	1925.3
162.5°	1945.3	1944.0	1942.8	1941.5	1940.7	1940.3	1940.0	1939.7	1939.3	1941.3	1943.4
165°	1969.3	1967.7	1966.0	1964.3	1963.5	1963.5	1963.5	1963.5	1963.5	1966.1	1968.8
167.5°	1988.6	1986.8	1985.1	1983.3	1982.4	1982.2	1982.0	1981.8	1981.6	1984.5	1987.5
170°	1999.2	1997.1	1995.1	1993.1	1992.3	1992.6	1993.0	1993.3	1993.6	1996.3	1999.0
172.5°	2006.4	2004.4	2002.4	2000.4	1999.5	1999.9	2000.2	2000.5	2000.9	2003.5	2006.2
175°	2014.2	2012.2	2010.2	2008.2	2007.4	2007.7	2008.0	2008.4	2008.7	2011.7	2014.7
177.5°	2018.0	2016.1	2014.2	2012.4	2011.7	2012.2	2012.8	2013.3	2013.8	2016.0	2018.1
180°	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1799.9	1802.1	1803.8	1809.3	1809.8	1814.8	1809.8
5°	1948.8	1958.5	1973.7	1988.9	1990.3	1999.9	1982.7
7.5°	2115.8	2138.2	2152.2	2176.8	2186.5	2192.5	2182.6
10°	2230.8	2251.6	2288.2	2306.2	2324.2	2326.9	2318.6
12.5°	2342.0	2374.9	2403.8	2437.8	2437.0	2461.3	2452.5
15°	2490.1	2524.0	2564.0	2602.1	2615.9	2615.9	2627.0
17.5°	2595.7	2657.8	2699.3	2729.1	2761.8	2767.4	2763.6
20°	2667.1	2734.1	2778.4	2817.1	2839.2	2845.4	2845.4
22.5°	2720.1	2777.2	2820.4	2855.2	2873.5	2880.8	2878.6
25°	2756.9	2806.0	2832.3	2842.6	2847.5	2846.1	2833.0
27.5°	2706.6	2704.4	2687.8	2656.0	2632.1	2617.6	2601.0
30°	2610.4	2574.4	2532.9	2487.3	2428.6	2383.6	2369.8
32.5°	2467.1	2386.4	2316.1	2240.1	2176.9	2132.0	2113.2
35°	2190.1	2062.2	1957.8	1866.5	1800.2	1758.7	1744.9
37.5°	1861.3	1737.5	1608.3	1519.8	1464.7	1422.8	1407.2
40°	1652.2	1517.4	1404.7	1321.8	1265.1	1224.3	1223.6
42.5°	1461.4	1332.7	1226.7	1166.9	1105.8	1078.8	1078.7
45°	1196.6	1093.6	1003.8	956.8	920.1	898.0	891.8
47.5°	990.8	905.6	845.7	808.3	778.4	764.3	755.2
50°	875.2	800.5	752.8	720.3	703.7	685.8	684.4
52.5°	779.0	718.7	681.5	655.1	634.1	623.3	623.6
55°	654.7	607.0	580.7	560.6	544.1	535.8	532.3
57.5°	551.5	515.7	496.6	478.2	471.2	464.7	462.9
60°	487.4	463.2	445.2	430.7	420.3	418.2	417.5
62.5°	434.3	409.0	396.5	385.3	377.7	374.5	373.3
65°	358.1	339.4	328.4	319.4	316.6	311.8	311.1
67.5°	288.7	277.5	270.2	263.9	260.2	259.9	259.9
70°	246.1	239.9	233.7	230.2	228.1	226.7	226.7
72.5°	209.6	205.0	199.9	198.1	197.7	196.3	195.8
75°	159.7	154.9	155.5	152.1	149.3	145.9	143.8
77.5°	113.2	109.8	109.1	108.7	106.3	105.9	107.0
80°	87.8	84.3	83.6	84.3	83.6	81.6	81.6
82.5°	66.8	63.9	63.2	62.8	62.1	62.8	61.7
85°	35.9	34.6	34.6	34.6	35.9	35.3	34.6
87.5°	20.6	20.4	21.2	20.8	20.9	20.5	21.2
90°	39.2	41.2	42.6	43.2	43.9	44.6	45.2
92.5°	38.0	40.0	41.1	41.2	41.4	41.5	41.6
95°	39.2	41.2	42.4	42.7	43.1	43.4	43.7
97.5°	40.4	40.6	40.9	41.2	41.6	41.9	42.2
100°	49.3	43.6	40.9	41.2	41.6	41.9	42.2
102.5°	135.3	73.9	43.2	43.2	43.3	43.4	43.4
105°	479.6	482.6	478.0	466.0	453.9	441.9	429.8
107.5°	591.1	592.5	593.9	595.2	596.4	597.7	599.0
110°	667.1	667.7	668.6	669.6	670.6	671.6	672.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	740.6	740.5	741.1	742.4	743.6	744.9	746.2
115°	852.5	853.2	853.6	853.6	853.6	853.6	853.6
117.5°	963.5	963.4	963.3	963.1	963.0	962.9	962.7
120°	1033.5	1034.2	1034.2	1033.5	1032.8	1032.2	1031.5
122.5°	1101.5	1101.9	1101.7	1101.1	1100.4	1099.7	1099.1
125°	1197.4	1198.4	1199.1	1199.4	1199.7	1200.1	1200.4
127.5°	1290.9	1290.7	1290.4	1290.2	1289.9	1289.6	1289.4
130°	1349.2	1349.5	1349.7	1349.7	1349.7	1349.7	1349.7
132.5°	1405.9	1406.2	1406.3	1406.0	1405.7	1405.5	1405.2
135°	1484.4	1485.1	1485.8	1486.4	1487.1	1487.8	1488.4
137.5°	1559.4	1560.2	1560.4	1560.2	1560.0	1559.8	1559.6
140°	1606.1	1607.1	1607.7	1608.1	1608.4	1608.7	1609.1
142.5°	1648.7	1649.4	1649.8	1649.9	1650.0	1650.0	1650.1
145°	1709.6	1709.9	1710.5	1711.1	1711.8	1712.5	1713.1
147.5°	1763.4	1763.7	1764.0	1764.3	1764.6	1765.0	1765.3
150°	1797.6	1797.6	1797.8	1798.1	1798.4	1798.8	1799.1
152.5°	1828.1	1828.7	1828.8	1828.6	1828.4	1828.2	1828.0
155°	1869.5	1870.8	1871.0	1870.0	1869.0	1868.0	1867.0
157.5°	1904.8	1906.5	1906.5	1904.8	1903.0	1901.3	1899.5
160°	1927.3	1929.3	1929.3	1927.3	1925.3	1923.3	1921.2
162.5°	1945.4	1947.4	1947.2	1945.0	1942.7	1940.4	1938.1
165°	1971.5	1974.2	1974.0	1971.0	1968.0	1965.0	1962.0
167.5°	1990.4	1993.4	1993.2	1989.8	1986.5	1983.1	1979.8
170°	2001.7	2004.4	2004.0	2000.7	1997.3	1994.0	1990.6
172.5°	2008.9	2011.6	2011.1	2007.5	2003.9	2000.3	1996.6
175°	2017.8	2020.8	2020.3	2016.2	2012.2	2008.2	2004.2
177.5°	2020.3	2022.4	2021.9	2018.7	2015.4	2012.2	2009.0
180°	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2	2016.2

(END OF REPORT)