

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: P333091-840

Luminaire Tested: **S124RDIW-S1020D1560U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333091-840  
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-S1020D1560U840-4F0-1E-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**

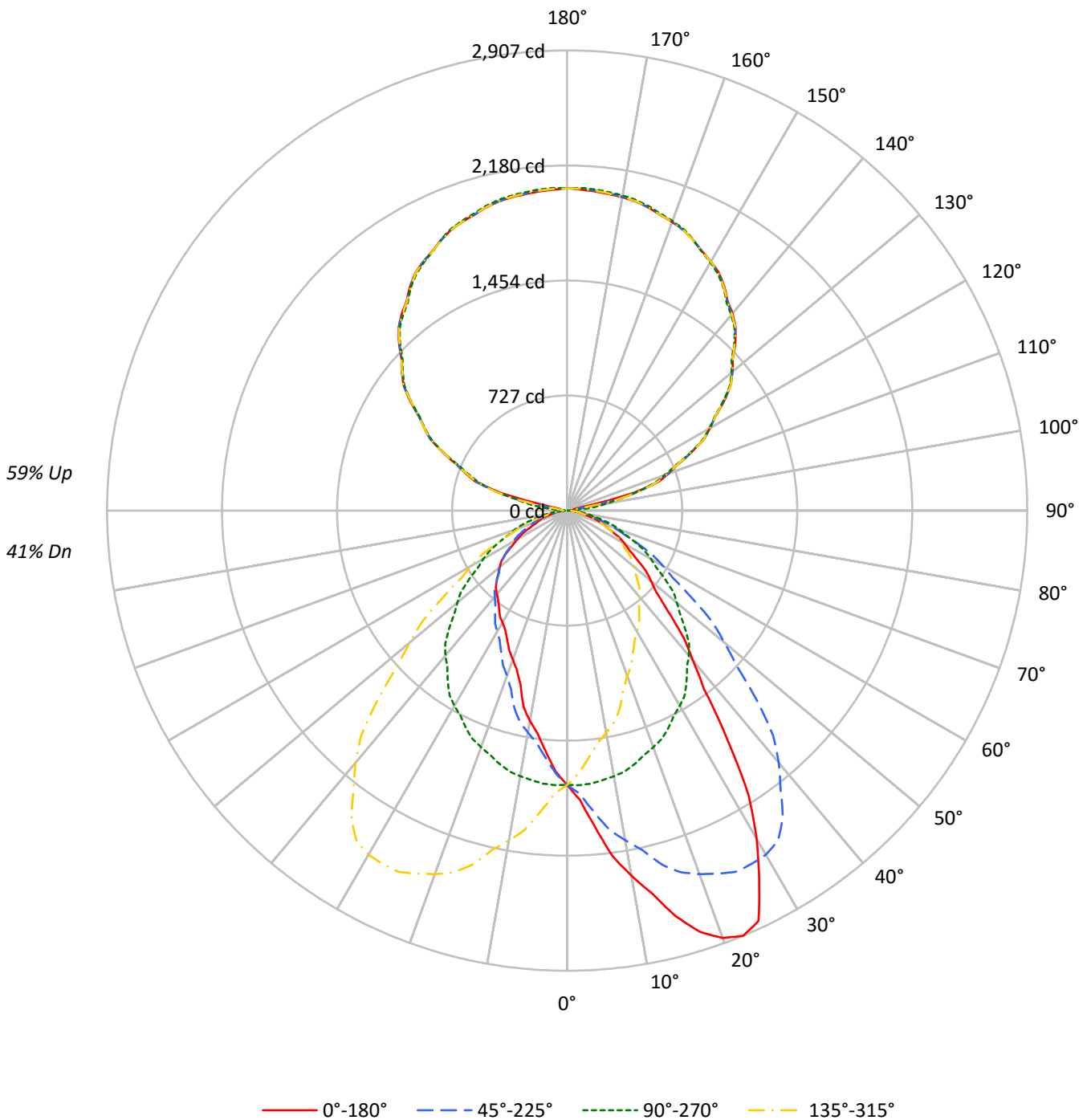
Lumens per Lamp: N/A  
Luminaire Lumens: 10684.3 lumens  
Efficiency: N/A  
Efficacy: 139.5 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 76.6  
Input Voltage (V): 120  
Input Current (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	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	48	48	48	48	48	48	41		
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	43	42	41	41	41	41	41	41	41	35		
2	88	81	75	70	80	74	69	65	61	57	54	49	47	45	38	37	35	35	35	35	35	35	35	30		
3	80	71	64	59	73	65	59	54	54	50	46	44	41	38	34	32	30	30	30	30	30	30	30	26		
4	74	63	56	50	67	58	51	46	48	43	40	39	36	33	31	28	26	26	26	26	26	26	26	23		
5	68	56	49	43	62	52	45	40	43	38	34	35	32	29	28	25	23	23	23	23	23	23	23	20		
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	25	23	21	21	21	21	21	21	21	18		
7	58	46	38	33	53	42	35	31	35	30	26	29	25	22	23	20	18	18	18	18	18	18	18	16		
8	53	42	34	29	49	38	32	27	32	27	24	27	23	20	21	19	16	16	16	16	16	16	16	14		
9	50	38	31	26	45	35	29	24	30	25	21	25	21	18	20	17	15	15	15	15	15	15	15	13		
10	46	35	28	23	42	32	26	22	27	22	19	23	19	16	18	16	14	14	14	14	14	14	14	12		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	13988	13988	13988	13988
5°	16226	14030	12400	14030
10°	19194	13969	11068	13969
15°	22172	13840	9510	13840
20°	24686	13662	8600	13662
25°	25483	13488	7985	13488
30°	22309	13276	7614	13276
35°	17366	12962	7389	12962
40°	13022	12603	7268	12603
45°	10282	12028	7205	12028
50°	8681	11362	6997	11362
55°	7567	10632	6622	10632
60°	6807	9875	5861	9875
65°	6002	9054	5041	9054
70°	5403	8207	4548	8207
75°	4529	7274	3877	7274
80°	3831	6197	3636	6197
85°	3233	4844	3233	4844



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.9	1.6
10°-20°	506.4	4.7
20°-30°	792.1	7.4
30°-40°	880.6	8.2
40°-50°	781.3	7.3
50°-60°	608.8	5.7
60°-70°	398.6	3.7
70°-80°	196.0	1.8
80°-90°	54.2	0.5
90°-100°	69.6	0.7
100°-110°	444.0	4.2
110°-120°	849.4	8.0
120°-130°	1078.3	10.1
130°-140°	1153.7	10.8
140°-150°	1078.8	10.1
150°-160°	870.0	8.1
160°-170°	561.1	5.3
170°-180°	193.4	1.8
0°-30°	1466.4	13.7
0°-40°	2347.0	22.0
0°-60°	3737.0	35.0
0°-90°	4385.9	41.0
90°-120°	1363.1	12.8
90°-150°	4673.9	43.7
90°-180°	6298.0	58.9
0°-180°	10684.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1733	1733	1733	1733	1733	
5°	2002	1731	1530	1731	2002	203
15°	2653	1656	1138	1656	2653	754
25°	2861	1514	896	1514	2861	1269
35°	1762	1315	750	1315	1762	1105
45°	901	1054	631	1054	901	713
55°	538	755	470	755	538	489
65°	314	474	264	474	314	316
75°	145	233	124	233	145	160
85°	35	52	35	52	35	41
90°	46	4	46	4	46	21
95°	44	84	44	84	44	35
105°	434	458	434	458	434	379
115°	862	856	862	856	862	853
125°	1212	1203	1212	1203	1212	1080
135°	1503	1492	1503	1492	1503	1157
145°	1730	1721	1730	1721	1730	1081
155°	1885	1887	1885	1887	1885	869
165°	1981	1990	1981	1990	1981	560
175°	2024	2036	2024	2036	2024	193
180°	2036	2036	2036	2036	2036	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1827.7	1832.7	1827.7	1827.1	1821.6	1819.9	1817.7	1810.4	1797.0	1789.2	1790.8
5°	2002.3	2019.6	2009.9	2008.5	1993.2	1977.8	1968.0	1945.7	1922.0	1905.9	1892.6
7.5°	2204.1	2214.1	2208.1	2198.3	2173.4	2159.3	2136.7	2107.2	2064.7	2032.1	2002.4
10°	2341.5	2349.9	2347.1	2329.0	2310.8	2273.8	2252.8	2211.7	2157.9	2115.4	2075.5
12.5°	2476.7	2485.6	2461.0	2461.8	2427.5	2398.3	2365.1	2313.3	2251.2	2196.3	2146.5
15°	2652.9	2641.7	2641.7	2627.8	2589.3	2548.9	2514.7	2460.2	2382.0	2316.3	2247.3
17.5°	2790.9	2794.7	2789.0	2756.0	2725.9	2684.0	2621.3	2557.8	2485.2	2397.1	2326.4
20°	2873.5	2873.5	2867.2	2844.9	2805.8	2761.1	2693.4	2624.2	2532.1	2443.5	2363.9
22.5°	2907.0	2909.2	2901.8	2883.4	2848.2	2804.6	2746.9	2676.7	2581.8	2481.9	2383.4
25°	2860.9	2874.2	2875.6	2870.6	2860.2	2833.7	2784.1	2712.2	2627.1	2518.8	2412.7
27.5°	2626.7	2643.4	2658.1	2682.2	2714.3	2731.1	2733.3	2696.7	2622.4	2518.3	2411.5
30°	2393.2	2407.1	2452.6	2511.8	2557.9	2599.8	2636.2	2645.8	2604.0	2510.4	2398.0
32.5°	2134.0	2153.0	2198.4	2262.2	2338.9	2409.9	2491.4	2533.0	2531.9	2475.8	2371.8
35°	1762.1	1776.0	1818.0	1884.9	1977.1	2082.5	2211.7	2312.2	2380.6	2375.7	2312.2
37.5°	1421.1	1436.8	1479.1	1534.8	1624.2	1754.6	1879.7	2018.1	2144.7	2215.7	2194.4
40°	1235.7	1236.4	1277.6	1334.8	1418.6	1532.4	1668.5	1822.1	1963.1	2078.3	2100.6
42.5°	1089.3	1089.4	1116.7	1178.4	1238.8	1345.8	1475.8	1628.3	1793.3	1926.4	1985.6
45°	900.6	906.9	929.2	966.2	1013.7	1104.4	1208.4	1350.2	1535.2	1692.9	1791.4
47.5°	762.7	771.8	786.1	816.3	854.0	914.5	1000.6	1127.9	1278.4	1452.0	1592.1
50°	691.2	692.6	710.6	727.4	760.2	808.4	883.8	990.0	1128.1	1295.1	1450.7
52.5°	629.8	629.4	640.4	661.6	688.2	725.8	786.7	883.2	1005.8	1155.4	1316.1
55°	537.6	541.1	549.5	566.1	586.4	613.0	661.2	733.8	830.1	957.9	1103.8
57.5°	467.5	469.3	475.8	482.9	501.5	520.8	556.9	607.3	688.6	793.2	929.2
60°	421.6	422.3	424.4	434.9	449.6	467.8	492.2	534.7	603.2	698.8	806.4
62.5°	377.0	378.2	381.4	389.1	400.4	413.0	438.6	472.8	529.5	611.2	708.0
65°	314.2	314.9	319.7	322.6	331.6	342.7	361.6	384.7	423.7	492.2	565.5
67.5°	262.5	262.5	262.8	266.5	272.9	280.2	291.5	309.9	339.4	381.4	446.1
70°	228.9	228.9	230.4	232.5	236.0	242.3	248.5	262.5	284.2	318.3	367.9
72.5°	197.7	198.2	199.7	200.1	201.9	207.0	211.7	220.7	236.7	262.5	302.6
75°	145.2	147.3	150.8	153.6	157.0	156.4	161.3	166.8	171.8	187.1	210.2
77.5°	108.1	106.9	107.3	109.8	110.2	110.9	114.3	118.7	122.3	129.6	137.8
80°	82.4	82.4	84.4	85.1	84.4	85.1	88.7	90.8	92.2	94.9	102.6
82.5°	62.3	63.4	62.7	63.4	63.8	64.5	67.5	67.9	69.3	70.4	73.6
85°	34.9	35.6	36.3	34.9	34.9	34.9	36.3	37.0	38.4	37.7	39.1
87.5°	21.4	20.7	21.1	21.0	21.4	20.6	20.8	21.5	20.0	20.1	19.6
90°	45.6	45.0	44.3	43.6	43.0	41.6	39.6	37.6	35.5	33.5	30.8
92.5°	42.0	41.9	41.8	41.6	41.5	40.4	38.4	36.4	34.3	32.3	29.6
95°	44.1	43.8	43.5	43.1	42.8	41.6	39.6	37.6	35.5	33.5	33.1
97.5°	42.6	42.3	42.0	41.6	41.3	41.0	40.8	40.6	40.4	40.2	78.0
100°	42.6	42.3	42.0	41.6	41.3	44.0	49.8	55.5	61.3	67.1	113.7
102.5°	43.8	43.8	43.7	43.6	43.6	74.6	136.6	198.7	260.7	322.9	328.9
105°	434.0	446.3	458.4	470.6	482.7	487.4	484.3	481.2	478.2	475.1	473.4
107.5°	604.9	603.6	602.3	601.1	599.8	598.3	596.9	595.4	593.9	592.4	590.1
110°	679.2	678.2	677.2	676.2	675.2	674.3	673.7	673.0	672.3	671.6	669.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	753.6	752.2	750.9	749.7	748.4	747.8	747.9	748.1	748.2	748.4	747.4
115°	862.0	862.0	862.0	862.0	862.0	861.6	860.9	860.3	859.6	858.9	859.3
117.5°	972.2	972.4	972.5	972.6	972.8	972.9	973.0	973.2	973.3	973.4	972.7
120°	1041.7	1042.4	1043.0	1043.7	1044.4	1044.4	1043.7	1043.0	1042.4	1041.7	1042.0
122.5°	1109.9	1110.5	1111.3	1112.0	1112.6	1112.8	1112.4	1112.0	1111.6	1111.2	1110.6
125°	1212.2	1211.9	1211.5	1211.2	1210.9	1210.2	1209.2	1208.2	1207.2	1206.2	1206.8
127.5°	1302.1	1302.3	1302.6	1302.9	1303.1	1303.4	1303.6	1303.8	1304.0	1304.2	1302.6
130°	1363.0	1363.0	1363.0	1363.0	1363.0	1362.8	1362.5	1362.2	1361.8	1361.5	1360.5
132.5°	1419.1	1419.4	1419.6	1419.9	1420.2	1420.1	1419.8	1419.5	1419.1	1418.8	1417.4
135°	1503.1	1502.5	1501.8	1501.1	1500.5	1499.8	1499.0	1498.3	1497.7	1497.0	1495.7
137.5°	1575.0	1575.2	1575.4	1575.6	1575.8	1575.6	1574.8	1574.1	1573.3	1572.6	1571.0
140°	1625.0	1624.6	1624.3	1624.0	1623.6	1623.0	1621.9	1620.9	1619.9	1618.8	1618.2
142.5°	1666.4	1666.3	1666.3	1666.2	1666.1	1665.7	1665.0	1664.3	1663.4	1662.7	1662.3
145°	1730.0	1729.4	1728.7	1728.0	1727.4	1726.8	1726.5	1726.2	1725.8	1725.5	1725.5
147.5°	1782.7	1782.4	1782.0	1781.7	1781.4	1781.1	1780.8	1780.5	1780.3	1780.0	1780.3
150°	1816.8	1816.5	1816.1	1815.8	1815.5	1815.3	1815.3	1815.3	1815.3	1815.3	1815.6
152.5°	1846.0	1846.2	1846.4	1846.6	1846.8	1846.7	1846.1	1845.6	1845.1	1844.5	1845.1
155°	1885.4	1886.4	1887.4	1888.4	1889.5	1889.3	1887.9	1886.5	1885.2	1883.8	1884.9
157.5°	1918.2	1920.1	1921.8	1923.6	1925.3	1925.3	1923.6	1921.8	1920.1	1918.2	1919.5
160°	1940.2	1942.3	1944.3	1946.3	1948.3	1948.3	1946.3	1944.3	1942.3	1940.2	1940.6
162.5°	1957.2	1959.5	1961.9	1964.2	1966.4	1966.6	1964.6	1962.6	1960.5	1958.4	1958.8
165°	1981.4	1984.4	1987.4	1990.4	1993.5	1993.7	1990.9	1988.2	1985.5	1982.9	1982.9
167.5°	1999.3	2002.7	2006.1	2009.4	2012.9	2013.1	2010.0	2007.1	2004.1	2001.1	2001.4
170°	2010.2	2013.7	2017.0	2020.4	2023.8	2024.2	2021.4	2018.7	2016.0	2013.3	2013.0
172.5°	2016.3	2020.0	2023.7	2027.3	2030.9	2031.4	2028.7	2026.0	2023.3	2020.6	2020.2
175°	2024.0	2028.0	2032.1	2036.1	2040.2	2040.7	2037.7	2034.6	2031.5	2028.5	2028.2
177.5°	2028.8	2032.1	2035.3	2038.6	2041.8	2042.4	2040.2	2038.0	2035.9	2033.7	2033.2
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1785.2	1777.5	1773.5	1764.5	1753.9	1748.4	1743.3	1736.1	1726.6	1716.6	1709.3
5°	1875.8	1859.1	1838.2	1813.0	1790.7	1769.1	1750.2	1731.3	1709.7	1687.4	1665.1
7.5°	1968.8	1935.9	1900.3	1859.1	1819.1	1782.6	1749.1	1717.0	1680.6	1648.1	1618.5
10°	2033.7	1988.9	1939.3	1887.0	1834.6	1789.3	1744.6	1704.1	1659.4	1619.6	1586.1
12.5°	2086.2	2033.7	1974.0	1908.8	1845.8	1791.0	1739.6	1686.8	1636.0	1592.9	1548.1
15°	2173.2	2101.3	2021.0	1942.9	1861.2	1786.5	1717.4	1656.0	1598.0	1537.3	1494.7
17.5°	2233.1	2147.9	2050.2	1956.3	1859.8	1771.7	1691.9	1618.8	1552.0	1490.0	1439.3
20°	2268.9	2174.6	2066.5	1959.6	1851.4	1757.2	1671.3	1590.3	1521.3	1454.2	1401.8
22.5°	2289.0	2184.7	2066.5	1954.6	1842.5	1740.4	1646.2	1561.9	1486.6	1419.6	1361.6
25°	2295.4	2183.7	2063.0	1934.5	1811.6	1703.4	1605.7	1514.2	1430.5	1363.4	1302.0
27.5°	2286.5	2155.0	2031.2	1899.5	1772.7	1658.6	1556.0	1460.0	1376.0	1304.1	1241.1
30°	2273.1	2132.0	1999.4	1862.6	1734.1	1624.6	1516.3	1424.2	1336.9	1262.2	1198.7
32.5°	2244.0	2104.2	1961.5	1821.3	1691.1	1578.2	1475.5	1382.8	1297.3	1220.9	1153.5
35°	2186.6	2044.8	1889.9	1746.1	1618.2	1501.0	1404.6	1315.2	1233.6	1152.0	1080.7
37.5°	2110.7	1965.9	1811.8	1654.3	1526.4	1415.6	1327.3	1243.3	1163.7	1089.0	1010.2
40°	2039.2	1907.2	1748.1	1591.7	1460.5	1353.6	1272.0	1195.9	1115.6	1041.6	962.7
42.5°	1952.7	1840.3	1679.4	1522.5	1392.9	1290.0	1213.9	1139.4	1066.4	994.7	912.4
45°	1808.2	1722.9	1572.2	1421.4	1290.8	1188.9	1119.1	1053.5	989.3	920.8	843.3
47.5°	1642.5	1584.9	1454.7	1300.3	1179.5	1087.8	1020.4	966.7	912.4	844.0	776.1
50°	1527.5	1490.5	1364.8	1223.9	1108.6	1024.1	955.0	904.7	859.4	793.8	733.1
52.5°	1404.6	1384.9	1278.8	1144.0	1032.7	949.9	890.8	845.6	799.6	745.2	688.3
55°	1217.5	1228.0	1137.9	1021.4	916.7	846.9	793.0	755.4	716.3	670.2	626.2
57.5°	1026.2	1064.5	1004.0	901.7	803.5	739.0	698.5	666.8	634.0	595.8	558.3
60°	911.7	943.8	909.7	819.6	733.8	673.7	636.0	611.6	578.8	543.8	515.2
62.5°	800.0	834.4	814.2	741.4	661.7	610.1	576.8	554.0	529.6	499.2	469.4
65°	659.7	682.1	672.3	622.1	565.5	521.5	490.8	474.0	451.7	429.4	402.8
67.5°	505.3	548.5	542.7	516.0	467.2	432.8	412.7	397.9	377.6	360.9	343.0
70°	415.4	455.1	454.4	432.8	406.3	374.2	360.2	347.7	329.5	313.5	298.8
72.5°	340.0	376.5	381.8	365.3	347.1	322.9	309.4	300.7	283.2	272.2	260.2
75°	238.0	264.6	271.6	271.6	263.2	250.6	238.7	233.2	220.7	210.9	203.9
77.5°	156.1	172.9	183.8	186.2	187.5	183.3	173.6	169.7	160.0	156.5	149.9
80°	110.3	121.5	134.0	138.3	141.7	140.4	136.1	133.3	124.3	120.8	118.0
82.5°	76.2	82.4	92.7	101.9	101.0	104.6	101.0	98.8	91.9	90.6	87.9
85°	39.8	40.5	41.9	48.2	51.7	53.0	53.7	52.3	50.3	50.3	45.3
87.5°	19.0	17.9	18.5	17.9	17.7	19.2	20.1	19.9	19.0	18.1	17.1
90°	28.1	25.3	22.7	19.5	15.8	12.0	8.3	4.5	8.3	12.0	15.8
92.5°	26.9	24.1	21.4	20.0	19.8	19.6	19.4	19.2	19.4	19.6	19.8
95°	32.8	32.5	32.1	37.8	49.3	60.8	72.2	83.7	72.2	60.8	49.3
97.5°	115.7	153.5	191.3	206.6	199.4	192.2	185.0	177.8	185.0	192.2	199.4
100°	160.4	207.1	253.8	274.1	268.0	262.0	255.9	249.7	255.9	262.0	268.0
102.5°	335.1	341.1	347.2	348.0	343.6	339.1	334.7	330.1	334.7	339.1	343.6
105°	471.8	470.1	468.4	466.6	464.5	462.4	460.4	458.4	460.4	462.4	464.5
107.5°	587.8	585.5	583.2	581.6	580.6	579.6	578.6	577.4	578.6	579.6	580.6
110°	667.5	665.5	663.5	662.0	661.0	659.9	658.9	657.9	658.9	659.9	661.0





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	746.5	745.5	744.6	743.2	741.3	739.5	737.7	735.9	737.7	739.5	741.3
115°	859.6	859.9	860.3	859.9	858.9	857.9	856.9	855.9	856.9	857.9	858.9
117.5°	972.0	971.2	970.5	969.5	968.1	966.7	965.3	964.0	965.3	966.7	968.1
120°	1042.4	1042.7	1043.0	1042.5	1041.2	1039.9	1038.4	1037.1	1038.4	1039.9	1041.2
122.5°	1110.1	1109.7	1109.2	1108.6	1107.7	1106.9	1106.1	1105.3	1106.1	1106.9	1107.7
125°	1207.5	1208.2	1208.8	1208.5	1207.2	1205.8	1204.5	1203.2	1204.5	1205.8	1207.2
127.5°	1301.1	1299.6	1298.0	1297.1	1296.7	1296.4	1296.1	1295.7	1296.1	1296.4	1296.7
130°	1359.5	1358.5	1357.5	1356.8	1356.5	1356.0	1355.7	1355.4	1355.7	1356.0	1356.5
132.5°	1416.1	1414.9	1413.6	1412.7	1412.1	1411.5	1410.8	1410.2	1410.8	1411.5	1412.1
135°	1494.3	1493.0	1491.6	1491.1	1491.5	1491.8	1492.1	1492.5	1492.1	1491.8	1491.5
137.5°	1569.6	1568.1	1566.6	1565.8	1565.7	1565.5	1565.4	1565.3	1565.4	1565.5	1565.7
140°	1617.5	1616.8	1616.2	1615.5	1614.8	1614.2	1613.5	1612.8	1613.5	1614.2	1614.8
142.5°	1661.9	1661.5	1661.1	1660.3	1659.1	1657.9	1656.6	1655.4	1656.6	1657.9	1659.1
145°	1725.5	1725.5	1725.5	1725.0	1723.9	1722.9	1721.9	1720.9	1721.9	1722.9	1723.9
147.5°	1780.7	1781.0	1781.3	1780.6	1778.7	1776.8	1774.8	1773.0	1774.8	1776.8	1778.7
150°	1816.0	1816.3	1816.6	1816.1	1814.8	1813.4	1812.1	1810.8	1812.1	1813.4	1814.8
152.5°	1845.7	1846.3	1847.0	1846.7	1845.6	1844.6	1843.5	1842.4	1843.5	1844.6	1845.6
155°	1885.9	1886.9	1887.9	1888.2	1887.9	1887.5	1887.2	1886.9	1887.2	1887.5	1887.9
157.5°	1920.6	1921.7	1922.9	1923.6	1923.8	1924.0	1924.2	1924.4	1924.2	1924.0	1923.8
160°	1940.9	1941.2	1941.6	1942.3	1943.3	1944.3	1945.3	1946.3	1945.3	1944.3	1943.3
162.5°	1959.1	1959.4	1959.8	1960.7	1962.0	1963.2	1964.5	1965.8	1964.5	1963.2	1962.0
165°	1982.9	1982.9	1982.9	1983.7	1985.4	1987.1	1988.7	1990.4	1988.7	1987.1	1985.4
167.5°	2001.6	2001.8	2002.0	2002.9	2004.7	2006.4	2008.2	2009.9	2008.2	2006.4	2004.7
170°	2012.7	2012.3	2012.0	2012.8	2014.8	2016.8	2018.9	2020.9	2018.9	2016.8	2014.8
172.5°	2019.9	2019.6	2019.2	2020.1	2022.2	2024.2	2026.2	2028.2	2026.2	2024.2	2022.2
175°	2027.8	2027.5	2027.2	2028.0	2030.0	2032.1	2034.1	2036.1	2034.1	2032.1	2030.0
177.5°	2032.7	2032.1	2031.5	2032.3	2034.1	2036.0	2037.9	2039.8	2037.9	2036.0	2034.1
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1701.4	1695.9	1688.6	1680.2	1670.2	1661.2	1657.4	1660.7	1662.3	1657.9	1657.4
5°	1649.7	1632.2	1618.2	1597.3	1580.5	1566.6	1556.8	1552.7	1554.0	1542.9	1540.0
7.5°	1591.4	1570.7	1547.9	1523.0	1499.9	1479.4	1468.5	1462.7	1450.9	1445.8	1437.3
10°	1554.0	1526.1	1503.8	1474.4	1447.9	1423.5	1411.6	1401.8	1390.0	1384.4	1372.5
12.5°	1515.5	1483.1	1458.5	1428.1	1401.0	1371.5	1360.2	1342.1	1323.5	1311.8	1296.6
15°	1461.2	1422.1	1392.1	1355.7	1323.6	1290.1	1260.1	1226.6	1214.1	1187.5	1172.2
17.5°	1397.7	1358.0	1320.8	1272.1	1222.5	1180.9	1148.9	1116.8	1097.6	1080.7	1072.9
20°	1355.7	1319.5	1267.8	1211.2	1156.1	1110.0	1084.2	1063.3	1042.3	1030.5	1022.1
22.5°	1316.1	1269.7	1209.7	1148.7	1093.6	1057.5	1035.6	1014.1	997.0	985.7	974.6
25°	1249.6	1188.9	1125.4	1055.6	1017.8	986.4	962.7	945.2	934.8	920.1	914.5
27.5°	1181.3	1107.8	1037.7	990.8	951.5	922.8	902.1	889.0	875.8	866.4	859.1
30°	1128.8	1054.2	991.4	946.6	906.9	883.1	866.4	851.0	840.5	832.8	827.3
32.5°	1076.9	1002.2	949.5	901.4	870.0	846.9	829.0	817.5	809.3	799.3	796.0
35°	1001.8	935.4	889.4	846.2	814.1	793.0	779.1	767.2	760.2	757.5	755.4
37.5°	929.6	875.4	825.8	790.3	761.6	745.2	728.7	722.9	718.1	713.1	715.3
40°	883.8	832.8	788.9	751.1	728.1	710.0	700.2	693.3	689.0	689.0	689.0
42.5°	844.1	794.4	751.4	717.7	694.6	679.2	668.4	662.5	661.2	660.6	663.9
45°	782.6	736.5	693.3	665.3	645.8	630.4	624.1	619.2	619.2	622.1	622.7
47.5°	721.5	678.4	643.7	612.4	594.5	584.9	579.5	576.9	577.2	580.0	583.2
50°	684.2	641.6	607.3	579.5	562.7	553.6	548.8	547.3	548.8	548.8	553.6
52.5°	643.4	605.3	571.6	548.2	529.2	520.7	518.0	516.0	516.8	519.2	521.2
55°	583.6	549.5	517.4	494.9	481.0	475.4	469.2	469.8	468.5	469.8	469.8
57.5°	523.7	493.0	463.1	445.5	433.1	425.1	418.2	420.1	418.1	417.8	416.7
60°	485.2	451.7	428.0	411.9	397.9	390.9	384.7	386.1	384.0	382.5	379.8
62.5°	443.3	415.4	392.7	377.3	366.1	358.0	351.7	350.3	345.5	340.7	334.6
65°	382.5	359.5	339.3	324.7	314.2	307.9	303.0	298.8	288.3	277.1	271.6
67.5°	323.6	306.9	288.0	275.6	267.1	258.8	249.5	242.4	232.6	226.5	223.0
70°	285.5	269.4	253.4	241.6	232.5	224.8	214.3	209.4	202.5	199.7	196.2
72.5°	249.2	234.3	219.3	208.6	198.9	193.0	184.7	179.9	176.7	175.6	172.2
75°	194.1	182.2	171.1	161.3	153.6	149.4	145.9	142.4	141.0	134.7	131.3
77.5°	141.6	133.8	126.7	119.8	114.3	111.6	104.8	100.8	98.5	95.5	94.8
80°	110.3	104.7	97.8	93.5	85.8	83.1	80.3	79.6	78.9	78.2	77.5
82.5°	82.9	77.4	70.4	67.9	65.7	64.1	62.4	61.7	61.0	61.4	61.3
85°	41.9	39.1	39.1	38.4	37.7	37.0	36.3	36.3	35.6	36.3	35.6
87.5°	17.9	18.0	18.5	17.9	19.0	19.6	19.4	19.8	20.8	20.1	20.3
90°	19.5	22.7	25.3	28.1	30.8	33.5	35.5	37.6	39.6	41.6	43.0
92.5°	20.0	21.4	24.1	26.9	29.6	32.3	34.3	36.4	38.4	40.4	41.5
95°	37.8	32.1	32.5	32.8	33.1	33.5	35.5	37.6	39.6	41.6	42.8
97.5°	206.6	191.3	153.5	115.7	78.0	40.2	40.4	40.6	40.8	41.0	41.3
100°	274.1	253.8	207.1	160.4	113.7	67.1	61.3	55.5	49.8	44.0	41.3
102.5°	348.0	347.2	341.1	335.1	328.9	322.9	260.7	198.7	136.6	74.6	43.6
105°	466.6	468.4	470.1	471.8	473.4	475.1	478.2	481.2	484.3	487.4	482.7
107.5°	581.6	583.2	585.5	587.8	590.1	592.4	593.9	595.4	596.9	598.3	599.8
110°	662.0	663.5	665.5	667.5	669.5	671.6	672.3	673.0	673.7	674.3	675.2



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	743.2	744.6	745.5	746.5	747.4	748.4	748.2	748.1	747.9	747.8	748.4
115°	859.9	860.3	859.9	859.6	859.3	858.9	859.6	860.3	860.9	861.6	862.0
117.5°	969.5	970.5	971.2	972.0	972.7	973.4	973.3	973.2	973.0	972.9	972.8
120°	1042.5	1043.0	1042.7	1042.4	1042.0	1041.7	1042.4	1043.0	1043.7	1044.4	1044.4
122.5°	1108.6	1109.2	1109.7	1110.1	1110.6	1111.2	1111.6	1112.0	1112.4	1112.8	1112.6
125°	1208.5	1208.8	1208.2	1207.5	1206.8	1206.2	1207.2	1208.2	1209.2	1210.2	1210.9
127.5°	1297.1	1298.0	1299.6	1301.1	1302.6	1304.2	1304.0	1303.8	1303.6	1303.4	1303.1
130°	1356.8	1357.5	1358.5	1359.5	1360.5	1361.5	1361.8	1362.2	1362.5	1362.8	1363.0
132.5°	1412.7	1413.6	1414.9	1416.1	1417.4	1418.8	1419.1	1419.5	1419.8	1420.1	1420.2
135°	1491.1	1491.6	1493.0	1494.3	1495.7	1497.0	1497.7	1498.3	1499.0	1499.8	1500.5
137.5°	1565.8	1566.6	1568.1	1569.6	1571.0	1572.6	1573.3	1574.1	1574.8	1575.6	1575.8
140°	1615.5	1616.2	1616.8	1617.5	1618.2	1618.8	1619.9	1620.9	1621.9	1623.0	1623.6
142.5°	1660.3	1661.1	1661.5	1661.9	1662.3	1662.7	1663.4	1664.3	1665.0	1665.7	1666.1
145°	1725.0	1725.5	1725.5	1725.5	1725.5	1725.5	1725.8	1726.2	1726.5	1726.8	1727.4
147.5°	1780.6	1781.3	1781.0	1780.7	1780.3	1780.0	1780.3	1780.5	1780.8	1781.1	1781.4
150°	1816.1	1816.6	1816.3	1816.0	1815.6	1815.3	1815.3	1815.3	1815.3	1815.3	1815.5
152.5°	1846.7	1847.0	1846.3	1845.7	1845.1	1844.5	1845.1	1845.6	1846.1	1846.7	1846.8
155°	1888.2	1887.9	1886.9	1885.9	1884.9	1883.8	1885.2	1886.5	1887.9	1889.3	1889.5
157.5°	1923.6	1922.9	1921.7	1920.6	1919.5	1918.2	1920.1	1921.8	1923.6	1925.3	1925.3
160°	1942.3	1941.6	1941.2	1940.9	1940.6	1940.2	1942.3	1944.3	1946.3	1948.3	1948.3
162.5°	1960.7	1959.8	1959.4	1959.1	1958.8	1958.4	1960.5	1962.6	1964.6	1966.6	1966.4
165°	1983.7	1982.9	1982.9	1982.9	1982.9	1982.9	1985.5	1988.2	1990.9	1993.7	1993.5
167.5°	2002.9	2002.0	2001.8	2001.6	2001.4	2001.1	2004.1	2007.1	2010.0	2013.1	2012.9
170°	2012.8	2012.0	2012.3	2012.7	2013.0	2013.3	2016.0	2018.7	2021.4	2024.2	2023.8
172.5°	2020.1	2019.2	2019.6	2019.9	2020.2	2020.6	2023.3	2026.0	2028.7	2031.4	2030.9
175°	2028.0	2027.2	2027.5	2027.8	2028.2	2028.5	2031.5	2034.6	2037.7	2040.7	2040.2
177.5°	2032.3	2031.5	2032.1	2032.7	2033.2	2033.7	2035.9	2038.0	2040.2	2042.4	2041.8
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1654.0	1655.1	1651.2	1650.1	1651.2	1655.1	1654.0	1657.4	1657.9	1662.3	1660.7
5°	1534.5	1533.1	1529.5	1530.2	1529.5	1533.1	1534.5	1540.0	1542.9	1554.0	1552.7
7.5°	1432.3	1426.8	1428.4	1422.8	1428.4	1426.8	1432.3	1437.3	1445.8	1450.9	1462.7
10°	1369.7	1362.0	1355.7	1350.2	1355.7	1362.0	1369.7	1372.5	1384.4	1390.0	1401.8
12.5°	1284.2	1277.7	1269.2	1270.9	1269.2	1277.7	1284.2	1296.6	1311.8	1323.5	1342.1
15°	1163.1	1152.6	1135.9	1137.9	1135.9	1152.6	1163.1	1172.2	1187.5	1214.1	1226.6
17.5°	1060.5	1060.6	1052.9	1054.7	1052.9	1060.6	1060.5	1072.9	1080.7	1097.6	1116.8
20°	1007.4	1002.5	1003.2	1001.1	1003.2	1002.5	1007.4	1022.1	1030.5	1042.3	1063.3
22.5°	970.6	964.5	959.7	955.3	959.7	964.5	970.6	974.6	985.7	997.0	1014.1
25°	908.3	904.0	897.8	896.4	897.8	904.0	908.3	914.5	920.1	934.8	945.2
27.5°	853.5	852.7	850.2	847.0	850.2	852.7	853.5	859.1	866.4	875.8	889.0
30°	821.7	820.3	818.9	816.8	818.9	820.3	821.7	827.3	832.8	840.5	851.0
32.5°	793.2	792.3	790.9	791.1	790.9	792.3	793.2	796.0	799.3	809.3	817.5
35°	752.6	751.8	750.5	749.8	750.5	751.8	752.6	755.4	757.5	760.2	767.2
37.5°	714.6	716.4	715.6	715.4	715.6	716.4	714.6	715.3	713.1	718.1	722.9
40°	688.3	689.0	690.4	689.7	690.4	689.0	688.3	689.0	689.0	689.0	693.3
42.5°	666.6	666.7	668.6	666.3	668.6	666.7	666.6	663.9	660.6	661.2	662.5
45°	627.6	631.8	631.1	631.1	631.1	631.8	627.6	622.7	622.1	619.2	619.2
47.5°	585.0	588.7	589.7	589.5	589.7	588.7	585.0	583.2	580.0	577.2	576.9
50°	557.1	555.7	557.8	557.1	557.8	555.7	557.1	553.6	548.8	548.8	547.3
52.5°	523.0	523.3	523.2	522.5	523.2	523.3	523.0	521.2	519.2	516.8	516.0
55°	470.5	471.2	469.8	470.5	469.8	471.2	470.5	469.8	469.8	468.5	469.8
57.5°	413.5	410.2	411.6	409.9	411.6	410.2	413.5	416.7	417.8	418.1	420.1
60°	372.8	367.2	365.8	363.0	365.8	367.2	372.8	379.8	382.5	384.0	386.1
62.5°	327.0	323.1	318.3	320.5	318.3	323.1	327.0	334.6	340.7	345.5	350.3
65°	266.0	263.2	261.1	263.9	261.1	263.2	266.0	271.6	277.1	288.3	298.8
67.5°	220.2	218.6	218.6	217.2	218.6	218.6	220.2	223.0	226.5	232.6	242.4
70°	196.2	194.1	194.1	192.7	194.1	194.1	196.2	196.2	199.7	202.5	209.4
72.5°	171.6	169.5	170.1	169.3	170.1	169.5	171.6	172.2	175.6	176.7	179.9
75°	127.0	123.6	123.6	124.3	123.6	123.6	127.0	131.3	134.7	141.0	142.4
77.5°	94.8	94.1	95.1	93.8	95.1	94.1	94.8	94.8	95.5	98.5	100.8
80°	77.5	76.7	76.1	78.2	76.1	76.7	77.5	77.5	78.2	78.9	79.6
82.5°	60.2	60.1	59.9	62.5	59.9	60.1	60.2	61.3	61.4	61.0	61.7
85°	36.3	34.9	36.3	34.9	36.3	34.9	36.3	35.6	36.3	35.6	36.3
87.5°	21.6	21.1	20.7	21.4	20.7	21.1	21.6	20.3	20.1	20.8	19.8
90°	43.6	44.3	45.0	45.6	45.0	44.3	43.6	43.0	41.6	39.6	37.6
92.5°	41.6	41.8	41.9	42.0	41.9	41.8	41.6	41.5	40.4	38.4	36.4
95°	43.1	43.5	43.8	44.1	43.8	43.5	43.1	42.8	41.6	39.6	37.6
97.5°	41.6	42.0	42.3	42.6	42.3	42.0	41.6	41.3	41.0	40.8	40.6
100°	41.6	42.0	42.3	42.6	42.3	42.0	41.6	41.3	44.0	49.8	55.5
102.5°	43.6	43.7	43.8	43.8	43.8	43.7	43.6	43.6	74.6	136.6	198.7
105°	470.6	458.4	446.3	434.0	446.3	458.4	470.6	482.7	487.4	484.3	481.2
107.5°	601.1	602.3	603.6	604.9	603.6	602.3	601.1	599.8	598.3	596.9	595.4
110°	676.2	677.2	678.2	679.2	678.2	677.2	676.2	675.2	674.3	673.7	673.0



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	749.7	750.9	752.2	753.6	752.2	750.9	749.7	748.4	747.8	747.9	748.1
115°	862.0	862.0	862.0	862.0	862.0	862.0	862.0	862.0	861.6	860.9	860.3
117.5°	972.6	972.5	972.4	972.2	972.4	972.5	972.6	972.8	972.9	973.0	973.2
120°	1043.7	1043.0	1042.4	1041.7	1042.4	1043.0	1043.7	1044.4	1044.4	1043.7	1043.0
122.5°	1112.0	1111.3	1110.5	1109.9	1110.5	1111.3	1112.0	1112.6	1112.8	1112.4	1112.0
125°	1211.2	1211.5	1211.9	1212.2	1211.9	1211.5	1211.2	1210.9	1210.2	1209.2	1208.2
127.5°	1302.9	1302.6	1302.3	1302.1	1302.3	1302.6	1302.9	1303.1	1303.4	1303.6	1303.8
130°	1363.0	1363.0	1363.0	1363.0	1363.0	1363.0	1363.0	1363.0	1362.8	1362.5	1362.2
132.5°	1419.9	1419.6	1419.4	1419.1	1419.4	1419.6	1419.9	1420.2	1420.1	1419.8	1419.5
135°	1501.1	1501.8	1502.5	1503.1	1502.5	1501.8	1501.1	1500.5	1499.8	1499.0	1498.3
137.5°	1575.6	1575.4	1575.2	1575.0	1575.2	1575.4	1575.6	1575.8	1575.6	1574.8	1574.1
140°	1624.0	1624.3	1624.6	1625.0	1624.6	1624.3	1624.0	1623.6	1623.0	1621.9	1620.9
142.5°	1666.2	1666.3	1666.3	1666.4	1666.3	1666.3	1666.2	1666.1	1665.7	1665.0	1664.3
145°	1728.0	1728.7	1729.4	1730.0	1729.4	1728.7	1728.0	1727.4	1726.8	1726.5	1726.2
147.5°	1781.7	1782.0	1782.4	1782.7	1782.4	1782.0	1781.7	1781.4	1781.1	1780.8	1780.5
150°	1815.8	1816.1	1816.5	1816.8	1816.5	1816.1	1815.8	1815.5	1815.3	1815.3	1815.3
152.5°	1846.6	1846.4	1846.2	1846.0	1846.2	1846.4	1846.6	1846.8	1846.7	1846.1	1845.6
155°	1888.4	1887.4	1886.4	1885.4	1886.4	1887.4	1888.4	1889.5	1889.3	1887.9	1886.5
157.5°	1923.6	1921.8	1920.1	1918.2	1920.1	1921.8	1923.6	1925.3	1925.3	1923.6	1921.8
160°	1946.3	1944.3	1942.3	1940.2	1942.3	1944.3	1946.3	1948.3	1948.3	1946.3	1944.3
162.5°	1964.2	1961.9	1959.5	1957.2	1959.5	1961.9	1964.2	1966.4	1966.6	1964.6	1962.6
165°	1990.4	1987.4	1984.4	1981.4	1984.4	1987.4	1990.4	1993.5	1993.7	1990.9	1988.2
167.5°	2009.4	2006.1	2002.7	1999.3	2002.7	2006.1	2009.4	2012.9	2013.1	2010.0	2007.1
170°	2020.4	2017.0	2013.7	2010.2	2013.7	2017.0	2020.4	2023.8	2024.2	2021.4	2018.7
172.5°	2027.3	2023.7	2020.0	2016.3	2020.0	2023.7	2027.3	2030.9	2031.4	2028.7	2026.0
175°	2036.1	2032.1	2028.0	2024.0	2028.0	2032.1	2036.1	2040.2	2040.7	2037.7	2034.6
177.5°	2038.6	2035.3	2032.1	2028.8	2032.1	2035.3	2038.6	2041.8	2042.4	2040.2	2038.0
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1657.4	1661.2	1670.2	1680.2	1688.6	1695.9	1701.4	1709.3	1716.6	1726.6	1736.1
5°	1556.8	1566.6	1580.5	1597.3	1618.2	1632.2	1649.7	1665.1	1687.4	1709.7	1731.3
7.5°	1468.5	1479.4	1499.9	1523.0	1547.9	1570.7	1591.4	1618.5	1648.1	1680.6	1717.0
10°	1411.6	1423.5	1447.9	1474.4	1503.8	1526.1	1554.0	1586.1	1619.6	1659.4	1704.1
12.5°	1360.2	1371.5	1401.0	1428.1	1458.5	1483.1	1515.5	1548.1	1592.9	1636.0	1686.8
15°	1260.1	1290.1	1323.6	1355.7	1392.1	1422.1	1461.2	1494.7	1537.3	1598.0	1656.0
17.5°	1148.9	1180.9	1222.5	1272.1	1320.8	1358.0	1397.7	1439.3	1490.0	1552.0	1618.8
20°	1084.2	1110.0	1156.1	1211.2	1267.8	1319.5	1355.7	1401.8	1454.2	1521.3	1590.3
22.5°	1035.6	1057.5	1093.6	1148.7	1209.7	1269.7	1316.1	1361.6	1419.6	1486.6	1561.9
25°	962.7	986.4	1017.8	1055.6	1125.4	1188.9	1249.6	1302.0	1363.4	1430.5	1514.2
27.5°	902.1	922.8	951.5	990.8	1037.7	1107.8	1181.3	1241.1	1304.1	1376.0	1460.0
30°	866.4	883.1	906.9	946.6	991.4	1054.2	1128.8	1198.7	1262.2	1336.9	1424.2
32.5°	829.0	846.9	870.0	901.4	949.5	1002.2	1076.9	1153.5	1220.9	1297.3	1382.8
35°	779.1	793.0	814.1	846.2	889.4	935.4	1001.8	1080.7	1152.0	1233.6	1315.2
37.5°	728.7	745.2	761.6	790.3	825.8	875.4	929.6	1010.2	1089.0	1163.7	1243.3
40°	700.2	710.0	728.1	751.1	788.9	832.8	883.8	962.7	1041.6	1115.6	1195.9
42.5°	668.4	679.2	694.6	717.7	751.4	794.4	844.1	912.4	994.7	1066.4	1139.4
45°	624.1	630.4	645.8	665.3	693.3	736.5	782.6	843.3	920.8	989.3	1053.5
47.5°	579.5	584.9	594.5	612.4	643.7	678.4	721.5	776.1	844.0	912.4	966.7
50°	548.8	553.6	562.7	579.5	607.3	641.6	684.2	733.1	793.8	859.4	904.7
52.5°	518.0	520.7	529.2	548.2	571.6	605.3	643.4	688.3	745.2	799.6	845.6
55°	469.2	475.4	481.0	494.9	517.4	549.5	583.6	626.2	670.2	716.3	755.4
57.5°	418.2	425.1	433.1	445.5	463.1	493.0	523.7	558.3	595.8	634.0	666.8
60°	384.7	390.9	397.9	411.9	428.0	451.7	485.2	515.2	543.8	578.8	611.6
62.5°	351.7	358.0	366.1	377.3	392.7	415.4	443.3	469.4	499.2	529.6	554.0
65°	303.0	307.9	314.2	324.7	339.3	359.5	382.5	402.8	429.4	451.7	474.0
67.5°	249.5	258.8	267.1	275.6	288.0	306.9	323.6	343.0	360.9	377.6	397.9
70°	214.3	224.8	232.5	241.6	253.4	269.4	285.5	298.8	313.5	329.5	347.7
72.5°	184.7	193.0	198.9	208.6	219.3	234.3	249.2	260.2	272.2	283.2	300.7
75°	145.9	149.4	153.6	161.3	171.1	182.2	194.1	203.9	210.9	220.7	233.2
77.5°	104.8	111.6	114.3	119.8	126.7	133.8	141.6	149.9	156.5	160.0	169.7
80°	80.3	83.1	85.8	93.5	97.8	104.7	110.3	118.0	120.8	124.3	133.3
82.5°	62.4	64.1	65.7	67.9	70.4	77.4	82.9	87.9	90.6	91.9	98.8
85°	36.3	37.0	37.7	38.4	39.1	39.1	41.9	45.3	50.3	50.3	52.3
87.5°	19.4	19.6	19.0	17.9	18.5	18.0	17.9	17.1	18.1	19.0	19.9
90°	35.5	33.5	30.8	28.1	25.3	22.7	19.5	15.8	12.0	8.3	4.5
92.5°	34.3	32.3	29.6	26.9	24.1	21.4	20.0	19.8	19.6	19.4	19.2
95°	35.5	33.5	33.1	32.8	32.5	32.1	37.8	49.3	60.8	72.2	83.7
97.5°	40.4	40.2	78.0	115.7	153.5	191.3	206.6	199.4	192.2	185.0	177.8
100°	61.3	67.1	113.7	160.4	207.1	253.8	274.1	268.0	262.0	255.9	249.7
102.5°	260.7	322.9	328.9	335.1	341.1	347.2	348.0	343.6	339.1	334.7	330.1
105°	478.2	475.1	473.4	471.8	470.1	468.4	466.6	464.5	462.4	460.4	458.4
107.5°	593.9	592.4	590.1	587.8	585.5	583.2	581.6	580.6	579.6	578.6	577.4
110°	672.3	671.6	669.5	667.5	665.5	663.5	662.0	661.0	659.9	658.9	657.9



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	748.2	748.4	747.4	746.5	745.5	744.6	743.2	741.3	739.5	737.7	735.9
115°	859.6	858.9	859.3	859.6	859.9	860.3	859.9	858.9	857.9	856.9	855.9
117.5°	973.3	973.4	972.7	972.0	971.2	970.5	969.5	968.1	966.7	965.3	964.0
120°	1042.4	1041.7	1042.0	1042.4	1042.7	1043.0	1042.5	1041.2	1039.9	1038.4	1037.1
122.5°	1111.6	1111.2	1110.6	1110.1	1109.7	1109.2	1108.6	1107.7	1106.9	1106.1	1105.3
125°	1207.2	1206.2	1206.8	1207.5	1208.2	1208.8	1208.5	1207.2	1205.8	1204.5	1203.2
127.5°	1304.0	1304.2	1302.6	1301.1	1299.6	1298.0	1297.1	1296.7	1296.4	1296.1	1295.7
130°	1361.8	1361.5	1360.5	1359.5	1358.5	1357.5	1356.8	1356.5	1356.0	1355.7	1355.4
132.5°	1419.1	1418.8	1417.4	1416.1	1414.9	1413.6	1412.7	1412.1	1411.5	1410.8	1410.2
135°	1497.7	1497.0	1495.7	1494.3	1493.0	1491.6	1491.1	1491.5	1491.8	1492.1	1492.5
137.5°	1573.3	1572.6	1571.0	1569.6	1568.1	1566.6	1565.8	1565.7	1565.5	1565.4	1565.3
140°	1619.9	1618.8	1618.2	1617.5	1616.8	1616.2	1615.5	1614.8	1614.2	1613.5	1612.8
142.5°	1663.4	1662.7	1662.3	1661.9	1661.5	1661.1	1660.3	1659.1	1657.9	1656.6	1655.4
145°	1725.8	1725.5	1725.5	1725.5	1725.5	1725.5	1725.0	1723.9	1722.9	1721.9	1720.9
147.5°	1780.3	1780.0	1780.3	1780.7	1781.0	1781.3	1780.6	1778.7	1776.8	1774.8	1773.0
150°	1815.3	1815.3	1815.6	1816.0	1816.3	1816.6	1816.1	1814.8	1813.4	1812.1	1810.8
152.5°	1845.1	1844.5	1845.1	1845.7	1846.3	1847.0	1846.7	1845.6	1844.6	1843.5	1842.4
155°	1885.2	1883.8	1884.9	1885.9	1886.9	1887.9	1888.2	1887.9	1887.5	1887.2	1886.9
157.5°	1920.1	1918.2	1919.5	1920.6	1921.7	1922.9	1923.6	1923.8	1924.0	1924.2	1924.4
160°	1942.3	1940.2	1940.6	1940.9	1941.2	1941.6	1942.3	1943.3	1944.3	1945.3	1946.3
162.5°	1960.5	1958.4	1958.8	1959.1	1959.4	1959.8	1960.7	1962.0	1963.2	1964.5	1965.8
165°	1985.5	1982.9	1982.9	1982.9	1982.9	1982.9	1983.7	1985.4	1987.1	1988.7	1990.4
167.5°	2004.1	2001.1	2001.4	2001.6	2001.8	2002.0	2002.9	2004.7	2006.4	2008.2	2009.9
170°	2016.0	2013.3	2013.0	2012.7	2012.3	2012.0	2012.8	2014.8	2016.8	2018.9	2020.9
172.5°	2023.3	2020.6	2020.2	2019.9	2019.6	2019.2	2020.1	2022.2	2024.2	2026.2	2028.2
175°	2031.5	2028.5	2028.2	2027.8	2027.5	2027.2	2028.0	2030.0	2032.1	2034.1	2036.1
177.5°	2035.9	2033.7	2033.2	2032.7	2032.1	2031.5	2032.3	2034.1	2036.0	2037.9	2039.8
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1



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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1743.3	1748.4	1753.9	1764.5	1773.5	1777.5	1785.2	1790.8	1789.2	1797.0	1810.4
5°	1750.2	1769.1	1790.7	1813.0	1838.2	1859.1	1875.8	1892.6	1905.9	1922.0	1945.7
7.5°	1749.1	1782.6	1819.1	1859.1	1900.3	1935.9	1968.8	2002.4	2032.1	2064.7	2107.2
10°	1744.6	1789.3	1834.6	1887.0	1939.3	1988.9	2033.7	2075.5	2115.4	2157.9	2211.7
12.5°	1739.6	1791.0	1845.8	1908.8	1974.0	2033.7	2086.2	2146.5	2196.3	2251.2	2313.3
15°	1717.4	1786.5	1861.2	1942.9	2021.0	2101.3	2173.2	2247.3	2316.3	2382.0	2460.2
17.5°	1691.9	1771.7	1859.8	1956.3	2050.2	2147.9	2233.1	2326.4	2397.1	2485.2	2557.8
20°	1671.3	1757.2	1851.4	1959.6	2066.5	2174.6	2268.9	2363.9	2443.5	2532.1	2624.2
22.5°	1646.2	1740.4	1842.5	1954.6	2066.5	2184.7	2289.0	2383.4	2481.9	2581.8	2676.7
25°	1605.7	1703.4	1811.6	1934.5	2063.0	2183.7	2295.4	2412.7	2518.8	2627.1	2712.2
27.5°	1556.0	1658.6	1772.7	1899.5	2031.2	2155.0	2286.5	2411.5	2518.3	2622.4	2696.7
30°	1516.3	1624.6	1734.1	1862.6	1999.4	2132.0	2273.1	2398.0	2510.4	2604.0	2645.8
32.5°	1475.5	1578.2	1691.1	1821.3	1961.5	2104.2	2244.0	2371.8	2475.8	2531.9	2533.0
35°	1404.6	1501.0	1618.2	1746.1	1889.9	2044.8	2186.6	2312.2	2375.7	2380.6	2312.2
37.5°	1327.3	1415.6	1526.4	1654.3	1811.8	1965.9	2110.7	2194.4	2215.7	2144.7	2018.1
40°	1272.0	1353.6	1460.5	1591.7	1748.1	1907.2	2039.2	2100.6	2078.3	1963.1	1822.1
42.5°	1213.9	1290.0	1392.9	1522.5	1679.4	1840.3	1952.7	1985.6	1926.4	1793.3	1628.3
45°	1119.1	1188.9	1290.8	1421.4	1572.2	1722.9	1808.2	1791.4	1692.9	1535.2	1350.2
47.5°	1020.4	1087.8	1179.5	1300.3	1454.7	1584.9	1642.5	1592.1	1452.0	1278.4	1127.9
50°	955.0	1024.1	1108.6	1223.9	1364.8	1490.5	1527.5	1450.7	1295.1	1128.1	990.0
52.5°	890.8	949.9	1032.7	1144.0	1278.8	1384.9	1404.6	1316.1	1155.4	1005.8	883.2
55°	793.0	846.9	916.7	1021.4	1137.9	1228.0	1217.5	1103.8	957.9	830.1	733.8
57.5°	698.5	739.0	803.5	901.7	1004.0	1064.5	1026.2	929.2	793.2	688.6	607.3
60°	636.0	673.7	733.8	819.6	909.7	943.8	911.7	806.4	698.8	603.2	534.7
62.5°	576.8	610.1	661.7	741.4	814.2	834.4	800.0	708.0	611.2	529.5	472.8
65°	490.8	521.5	565.5	622.1	672.3	682.1	659.7	565.5	492.2	423.7	384.7
67.5°	412.7	432.8	467.2	516.0	542.7	548.5	505.3	446.1	381.4	339.4	309.9
70°	360.2	374.2	406.3	432.8	454.4	455.1	415.4	367.9	318.3	284.2	262.5
72.5°	309.4	322.9	347.1	365.3	381.8	376.5	340.0	302.6	262.5	236.7	220.7
75°	238.7	250.6	263.2	271.6	271.6	264.6	238.0	210.2	187.1	171.8	166.8
77.5°	173.6	183.3	187.5	186.2	183.8	172.9	156.1	137.8	129.6	122.3	118.7
80°	136.1	140.4	141.7	138.3	134.0	121.5	110.3	102.6	94.9	92.2	90.8
82.5°	101.0	104.6	101.0	101.9	92.7	82.4	76.2	73.6	70.4	69.3	67.9
85°	53.7	53.0	51.7	48.2	41.9	40.5	39.8	39.1	37.7	38.4	37.0
87.5°	20.1	19.2	17.7	17.9	18.5	17.9	19.0	19.6	20.1	20.0	21.5
90°	8.3	12.0	15.8	19.5	22.7	25.3	28.1	30.8	33.5	35.5	37.6
92.5°	19.4	19.6	19.8	20.0	21.4	24.1	26.9	29.6	32.3	34.3	36.4
95°	72.2	60.8	49.3	37.8	32.1	32.5	32.8	33.1	33.5	35.5	37.6
97.5°	185.0	192.2	199.4	206.6	191.3	153.5	115.7	78.0	40.2	40.4	40.6
100°	255.9	262.0	268.0	274.1	253.8	207.1	160.4	113.7	67.1	61.3	55.5
102.5°	334.7	339.1	343.6	348.0	347.2	341.1	335.1	328.9	322.9	260.7	198.7
105°	460.4	462.4	464.5	466.6	468.4	470.1	471.8	473.4	475.1	478.2	481.2
107.5°	578.6	579.6	580.6	581.6	583.2	585.5	587.8	590.1	592.4	593.9	595.4
110°	658.9	659.9	661.0	662.0	663.5	665.5	667.5	669.5	671.6	672.3	673.0





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	737.7	739.5	741.3	743.2	744.6	745.5	746.5	747.4	748.4	748.2	748.1
115°	856.9	857.9	858.9	859.9	860.3	859.9	859.6	859.3	858.9	859.6	860.3
117.5°	965.3	966.7	968.1	969.5	970.5	971.2	972.0	972.7	973.4	973.3	973.2
120°	1038.4	1039.9	1041.2	1042.5	1043.0	1042.7	1042.4	1042.0	1041.7	1042.4	1043.0
122.5°	1106.1	1106.9	1107.7	1108.6	1109.2	1109.7	1110.1	1110.6	1111.2	1111.6	1112.0
125°	1204.5	1205.8	1207.2	1208.5	1208.8	1208.2	1207.5	1206.8	1206.2	1207.2	1208.2
127.5°	1296.1	1296.4	1296.7	1297.1	1298.0	1299.6	1301.1	1302.6	1304.2	1304.0	1303.8
130°	1355.7	1356.0	1356.5	1356.8	1357.5	1358.5	1359.5	1360.5	1361.5	1361.8	1362.2
132.5°	1410.8	1411.5	1412.1	1412.7	1413.6	1414.9	1416.1	1417.4	1418.8	1419.1	1419.5
135°	1492.1	1491.8	1491.5	1491.1	1491.6	1493.0	1494.3	1495.7	1497.0	1497.7	1498.3
137.5°	1565.4	1565.5	1565.7	1565.8	1566.6	1568.1	1569.6	1571.0	1572.6	1573.3	1574.1
140°	1613.5	1614.2	1614.8	1615.5	1616.2	1616.8	1617.5	1618.2	1618.8	1619.9	1620.9
142.5°	1656.6	1657.9	1659.1	1660.3	1661.1	1661.5	1661.9	1662.3	1662.7	1663.4	1664.3
145°	1721.9	1722.9	1723.9	1725.0	1725.5	1725.5	1725.5	1725.5	1725.5	1725.8	1726.2
147.5°	1774.8	1776.8	1778.7	1780.6	1781.3	1781.0	1780.7	1780.3	1780.0	1780.3	1780.5
150°	1812.1	1813.4	1814.8	1816.1	1816.6	1816.3	1816.0	1815.6	1815.3	1815.3	1815.3
152.5°	1843.5	1844.6	1845.6	1846.7	1847.0	1846.3	1845.7	1845.1	1844.5	1845.1	1845.6
155°	1887.2	1887.5	1887.9	1888.2	1887.9	1886.9	1885.9	1884.9	1883.8	1885.2	1886.5
157.5°	1924.2	1924.0	1923.8	1923.6	1922.9	1921.7	1920.6	1919.5	1918.2	1920.1	1921.8
160°	1945.3	1944.3	1943.3	1942.3	1941.6	1941.2	1940.9	1940.6	1940.2	1942.3	1944.3
162.5°	1964.5	1963.2	1962.0	1960.7	1959.8	1959.4	1959.1	1958.8	1958.4	1960.5	1962.6
165°	1988.7	1987.1	1985.4	1983.7	1982.9	1982.9	1982.9	1982.9	1982.9	1985.5	1988.2
167.5°	2008.2	2006.4	2004.7	2002.9	2002.0	2001.8	2001.6	2001.4	2001.1	2004.1	2007.1
170°	2018.9	2016.8	2014.8	2012.8	2012.0	2012.3	2012.7	2013.0	2013.3	2016.0	2018.7
172.5°	2026.2	2024.2	2022.2	2020.1	2019.2	2019.6	2019.9	2020.2	2020.6	2023.3	2026.0
175°	2034.1	2032.1	2030.0	2028.0	2027.2	2027.5	2027.8	2028.2	2028.5	2031.5	2034.6
177.5°	2037.9	2036.0	2034.1	2032.3	2031.5	2032.1	2032.7	2033.2	2033.7	2035.9	2038.0
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1817.7	1819.9	1821.6	1827.1	1827.7	1832.7	1827.7
5°	1968.0	1977.8	1993.2	2008.5	2009.9	2019.6	2002.3
7.5°	2136.7	2159.3	2173.4	2198.3	2208.1	2214.1	2204.1
10°	2252.8	2273.8	2310.8	2329.0	2347.1	2349.9	2341.5
12.5°	2365.1	2398.3	2427.5	2461.8	2461.0	2485.6	2476.7
15°	2514.7	2548.9	2589.3	2627.8	2641.7	2641.7	2652.9
17.5°	2621.3	2684.0	2725.9	2756.0	2789.0	2794.7	2790.9
20°	2693.4	2761.1	2805.8	2844.9	2867.2	2873.5	2873.5
22.5°	2746.9	2804.6	2848.2	2883.4	2901.8	2909.2	2907.0
25°	2784.1	2833.7	2860.2	2870.6	2875.6	2874.2	2860.9
27.5°	2733.3	2731.1	2714.3	2682.2	2658.1	2643.4	2626.7
30°	2636.2	2599.8	2557.9	2511.8	2452.6	2407.1	2393.2
32.5°	2491.4	2409.9	2338.9	2262.2	2198.4	2153.0	2134.0
35°	2211.7	2082.5	1977.1	1884.9	1818.0	1776.0	1762.1
37.5°	1879.7	1754.6	1624.2	1534.8	1479.1	1436.8	1421.1
40°	1668.5	1532.4	1418.6	1334.8	1277.6	1236.4	1235.7
42.5°	1475.8	1345.8	1238.8	1178.4	1116.7	1089.4	1089.3
45°	1208.4	1104.4	1013.7	966.2	929.2	906.9	900.6
47.5°	1000.6	914.5	854.0	816.3	786.1	771.8	762.7
50°	883.8	808.4	760.2	727.4	710.6	692.6	691.2
52.5°	786.7	725.8	688.2	661.6	640.4	629.4	629.8
55°	661.2	613.0	586.4	566.1	549.5	541.1	537.6
57.5°	556.9	520.8	501.5	482.9	475.8	469.3	467.5
60°	492.2	467.8	449.6	434.9	424.4	422.3	421.6
62.5°	438.6	413.0	400.4	389.1	381.4	378.2	377.0
65°	361.6	342.7	331.6	322.6	319.7	314.9	314.2
67.5°	291.5	280.2	272.9	266.5	262.8	262.5	262.5
70°	248.5	242.3	236.0	232.5	230.4	228.9	228.9
72.5°	211.7	207.0	201.9	200.1	199.7	198.2	197.7
75°	161.3	156.4	157.0	153.6	150.8	147.3	145.2
77.5°	114.3	110.9	110.2	109.8	107.3	106.9	108.1
80°	88.7	85.1	84.4	85.1	84.4	82.4	82.4
82.5°	67.5	64.5	63.8	63.4	62.7	63.4	62.3
85°	36.3	34.9	34.9	34.9	36.3	35.6	34.9
87.5°	20.8	20.6	21.4	21.0	21.1	20.7	21.4
90°	39.6	41.6	43.0	43.6	44.3	45.0	45.6
92.5°	38.4	40.4	41.5	41.6	41.8	41.9	42.0
95°	39.6	41.6	42.8	43.1	43.5	43.8	44.1
97.5°	40.8	41.0	41.3	41.6	42.0	42.3	42.6
100°	49.8	44.0	41.3	41.6	42.0	42.3	42.6
102.5°	136.6	74.6	43.6	43.6	43.7	43.8	43.8
105°	484.3	487.4	482.7	470.6	458.4	446.3	434.0
107.5°	596.9	598.3	599.8	601.1	602.3	603.6	604.9
110°	673.7	674.3	675.2	676.2	677.2	678.2	679.2



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	747.9	747.8	748.4	749.7	750.9	752.2	753.6
115°	860.9	861.6	862.0	862.0	862.0	862.0	862.0
117.5°	973.0	972.9	972.8	972.6	972.5	972.4	972.2
120°	1043.7	1044.4	1044.4	1043.7	1043.0	1042.4	1041.7
122.5°	1112.4	1112.8	1112.6	1112.0	1111.3	1110.5	1109.9
125°	1209.2	1210.2	1210.9	1211.2	1211.5	1211.9	1212.2
127.5°	1303.6	1303.4	1303.1	1302.9	1302.6	1302.3	1302.1
130°	1362.5	1362.8	1363.0	1363.0	1363.0	1363.0	1363.0
132.5°	1419.8	1420.1	1420.2	1419.9	1419.6	1419.4	1419.1
135°	1499.0	1499.8	1500.5	1501.1	1501.8	1502.5	1503.1
137.5°	1574.8	1575.6	1575.8	1575.6	1575.4	1575.2	1575.0
140°	1621.9	1623.0	1623.6	1624.0	1624.3	1624.6	1625.0
142.5°	1665.0	1665.7	1666.1	1666.2	1666.3	1666.3	1666.4
145°	1726.5	1726.8	1727.4	1728.0	1728.7	1729.4	1730.0
147.5°	1780.8	1781.1	1781.4	1781.7	1782.0	1782.4	1782.7
150°	1815.3	1815.3	1815.5	1815.8	1816.1	1816.5	1816.8
152.5°	1846.1	1846.7	1846.8	1846.6	1846.4	1846.2	1846.0
155°	1887.9	1889.3	1889.5	1888.4	1887.4	1886.4	1885.4
157.5°	1923.6	1925.3	1925.3	1923.6	1921.8	1920.1	1918.2
160°	1946.3	1948.3	1948.3	1946.3	1944.3	1942.3	1940.2
162.5°	1964.6	1966.6	1966.4	1964.2	1961.9	1959.5	1957.2
165°	1990.9	1993.7	1993.5	1990.4	1987.4	1984.4	1981.4
167.5°	2010.0	2013.1	2012.9	2009.4	2006.1	2002.7	1999.3
170°	2021.4	2024.2	2023.8	2020.4	2017.0	2013.7	2010.2
172.5°	2028.7	2031.4	2030.9	2027.3	2023.7	2020.0	2016.3
175°	2037.7	2040.7	2040.2	2036.1	2032.1	2028.0	2024.0
177.5°	2040.2	2042.4	2041.8	2038.6	2035.3	2032.1	2028.8
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1

(END OF REPORT)