

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: P332235-940

Luminaire Tested: **S123DIW-S1165D1535U940-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332235-940  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DIW-S1165D1535U940-4F0-1E-UDD-A1  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1535 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9113.5 lumens  
Efficiency: N/A  
Efficacy: 109.9 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: General Diffuse

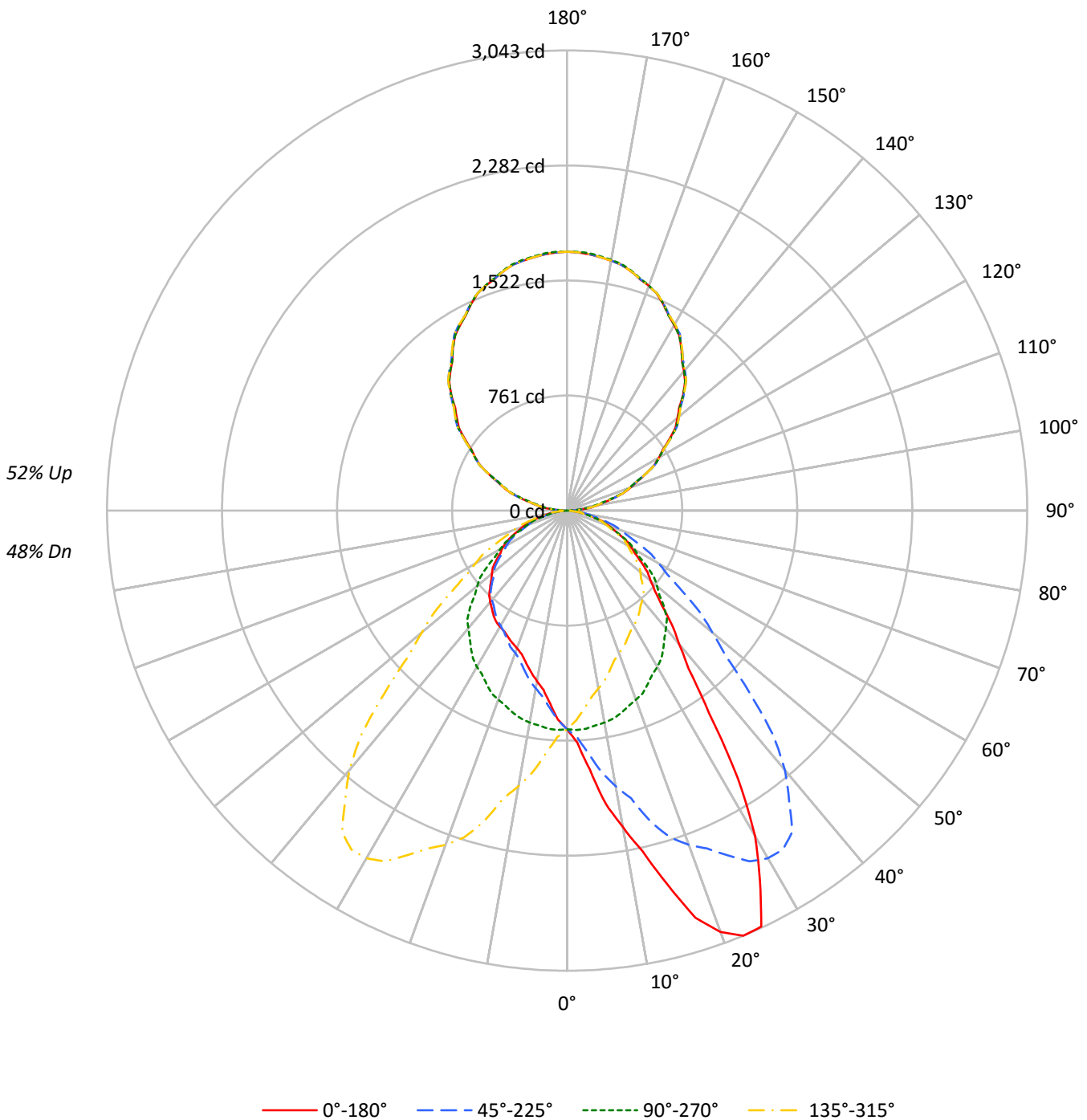
Input Watts (W): 82.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48	
1	98	93	90	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41	41	41	41	
2	89	82	76	71	82	76	70	66	64	60	57	53	50	48	43	41	39	35	35	35	35	
3	81	72	65	59	75	67	60	55	56	52	48	47	44	41	38	36	34	30	30	30	30	
4	75	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29	26	26	26	26	
5	68	57	49	43	63	53	46	41	45	40	35	38	34	30	31	28	26	22	22	22	22	
6	63	51	43	37	58	48	40	35	41	35	31	34	30	27	28	25	23	20	20	20	20	
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	22	20	17	17	17	17	
8	54	42	34	29	50	39	32	27	34	28	24	28	24	21	24	20	18	16	16	16	16	
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	19	16	14	14	14	14	
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15	13	13	13	13	

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

	0°	90°	180°	270°
0°	15569	15569	15569	15569
5°	18567	15637	13857	15637
10°	23240	15557	12516	15557
15°	28505	15432	11652	15432
20°	33956	15237	11094	15237
25°	36056	14998	10969	14998
30°	30904	14825	11028	14825
35°	21494	14578	11143	14578
40°	16190	14289	11108	14289
45°	13443	13857	10966	13857
50°	12042	12980	10868	12980
55°	11258	12033	10732	12033
60°	10559	11044	10622	11044
65°	9926	10068	10282	10068
70°	9309	8954	9791	8954
75°	8339	7839	8979	7839
80°	7296	6428	7736	6428
85°	5718	4668	5199	4668



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.5	1.6
10°-20°	456.9	5.0
20°-30°	766.8	8.4
30°-40°	868.3	9.5
40°-50°	778.6	8.5
50°-60°	628.3	6.9
60°-70°	437.9	4.8
70°-80°	230.1	2.5
80°-90°	61.4	0.7
90°-100°	111.5	1.2
100°-110°	333.8	3.7
110°-120°	567.7	6.2
120°-130°	746.7	8.2
130°-140°	839.3	9.2
140°-150°	825.0	9.1
150°-160°	694.5	7.6
160°-170°	462.3	5.1
170°-180°	161.9	1.8
0°-30°	1366.2	15.0
0°-40°	2234.5	24.5
0°-60°	3641.5	40.0
0°-90°	4370.8	48.0
90°-120°	1013.0	11.1
90°-150°	3423.9	37.6
90°-180°	4743.0	52.0
0°-180°	9113.5	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1446	1446	1446	1446	1446	
5°	1718	1447	1282	1447	1718	178
15°	2558	1385	1046	1385	2558	739
25°	3036	1263	924	1263	3036	1331
35°	1636	1109	848	1109	1636	1063
45°	883	910	720	910	883	699
55°	600	641	572	641	600	538
65°	390	395	404	395	390	388
75°	200	188	216	188	200	215
85°	46	38	42	38	46	56
90°	40	1	40	1	40	22
95°	105	79	105	79	105	108
105°	320	303	320	303	320	340
115°	573	572	573	572	573	567
125°	827	836	827	836	827	739
135°	1084	1085	1084	1085	1084	833
145°	1316	1316	1316	1316	1316	822
155°	1505	1507	1505	1507	1505	693
165°	1636	1642	1636	1642	1636	462
175°	1701	1708	1701	1708	1701	162
180°	1712	1712	1712	1712	1712	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1535.1	1533.9	1531.2	1533.4	1528.9	1522.7	1522.2	1516.5	1500.3	1499.1	1494.7
5°	1718.4	1712.8	1712.1	1711.4	1701.6	1688.3	1663.0	1660.9	1627.3	1610.4	1590.2
7.5°	1955.8	1958.7	1948.6	1939.6	1909.6	1889.8	1862.8	1828.2	1786.8	1744.9	1717.0
10°	2126.3	2149.4	2120.7	2101.0	2082.9	2048.4	2008.6	1958.7	1909.0	1850.8	1806.7
12.5°	2309.1	2320.4	2314.6	2296.2	2267.8	2215.5	2144.7	2090.0	2044.2	1947.3	1908.2
15°	2558.0	2600.8	2573.4	2510.3	2511.7	2461.9	2369.5	2267.8	2213.9	2129.0	2013.5
17.5°	2823.2	2828.5	2816.8	2764.3	2729.3	2660.9	2575.5	2478.1	2368.7	2266.2	2143.5
20°	2964.4	2960.2	2935.7	2908.4	2848.1	2794.9	2701.6	2593.0	2452.8	2352.0	2218.0
22.5°	3043.0	3035.9	3024.3	3001.4	2951.3	2894.0	2810.4	2691.7	2558.2	2419.2	2264.6
25°	3035.9	3045.0	3046.4	3040.1	3022.6	2988.3	2922.4	2827.8	2694.7	2516.0	2354.7
27.5°	2761.2	2774.1	2811.6	2844.7	2881.9	2919.7	2914.6	2867.7	2769.2	2614.9	2417.8
30°	2486.4	2458.4	2527.8	2615.5	2675.0	2780.1	2839.0	2842.5	2787.1	2654.7	2462.6
32.5°	2105.2	2136.1	2166.8	2274.6	2404.8	2522.8	2640.0	2734.3	2745.1	2656.9	2489.0
35°	1635.7	1674.3	1730.3	1786.4	1926.5	2047.1	2253.1	2432.5	2575.5	2594.4	2491.4
37.5°	1318.1	1337.1	1372.6	1428.8	1520.5	1663.5	1822.8	2049.6	2256.7	2410.8	2417.5
40°	1152.2	1157.7	1197.7	1240.5	1314.7	1432.4	1576.1	1776.6	2024.6	2239.8	2329.5
42.5°	1027.7	1040.0	1056.9	1098.1	1157.2	1245.8	1379.4	1545.0	1772.4	2020.0	2195.5
45°	883.1	897.1	907.6	934.9	977.0	1036.5	1129.7	1281.1	1454.2	1709.9	1946.2
47.5°	787.5	788.5	796.4	817.0	845.6	890.3	956.2	1053.5	1212.4	1419.9	1662.3
50°	719.1	730.2	733.1	749.1	771.6	804.5	859.2	941.9	1072.3	1254.5	1477.3
52.5°	670.8	674.2	682.1	693.7	713.3	739.0	786.3	851.0	953.4	1108.7	1313.6
55°	599.9	599.9	607.6	616.7	627.9	651.0	682.6	730.2	808.1	928.5	1098.1
57.5°	534.3	537.8	543.2	546.1	555.6	570.9	597.3	633.4	691.4	784.2	919.1
60°	490.5	496.9	496.1	501.8	510.2	522.1	544.6	574.0	625.8	700.1	813.7
62.5°	452.5	452.0	451.9	458.6	467.0	478.4	492.9	518.4	562.5	628.4	725.1
65°	389.7	388.3	393.2	397.3	400.2	408.6	419.8	442.2	471.6	520.7	595.7
67.5°	333.9	329.8	332.4	333.9	338.7	345.2	355.7	369.6	393.0	432.4	488.9
70°	295.8	292.2	291.5	292.9	297.1	302.0	309.8	323.1	344.8	376.3	417.7
72.5°	256.5	254.1	254.0	257.1	259.0	262.3	267.7	279.9	297.1	320.8	359.4
75°	200.5	200.5	200.5	201.2	203.2	206.1	210.3	216.5	229.9	246.6	272.6
77.5°	150.3	150.1	149.3	149.1	152.2	153.5	154.4	160.3	167.7	179.1	198.0
80°	117.7	114.2	115.7	117.7	119.1	119.8	122.0	123.3	129.7	136.0	149.3
82.5°	87.5	84.5	84.8	88.0	88.3	89.0	91.1	93.1	95.4	101.2	108.3
85°	46.3	46.3	47.0	47.0	47.6	47.0	49.0	49.8	49.8	53.2	57.4
87.5°	24.9	23.6	24.1	24.5	23.8	24.3	24.5	24.9	25.2	25.5	25.3
90°	40.3	39.8	39.1	38.5	38.0	37.1	35.8	34.7	33.4	32.3	28.4
92.5°	54.3	54.7	55.0	55.4	55.7	55.5	54.5	53.5	52.6	51.6	49.4
95°	104.9	104.9	104.9	104.9	104.9	104.2	103.1	101.9	100.7	99.5	97.1
97.5°	161.4	161.5	161.6	161.8	161.8	161.2	159.8	158.5	157.1	155.7	154.0
100°	204.4	203.8	203.2	202.6	202.0	201.3	200.4	199.5	198.6	197.7	196.2
102.5°	248.5	248.6	248.7	248.9	249.0	248.6	247.7	246.8	245.9	245.0	243.0
105°	320.0	319.4	318.9	318.3	317.6	317.4	317.4	317.4	317.4	317.4	314.7
107.5°	394.5	394.8	395.2	395.6	395.9	395.7	394.7	393.8	392.8	391.8	390.7
110°	445.1	445.7	446.3	446.8	447.5	447.2	445.9	444.8	443.6	442.4	441.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	498.8	499.0	499.1	499.3	499.4	498.6	497.2	495.8	494.4	492.9	492.8
115°	572.8	573.1	573.5	573.7	574.0	574.0	573.7	573.5	573.1	572.8	573.5
117.5°	647.8	648.7	649.5	650.3	651.2	651.7	651.8	651.8	651.8	651.9	652.6
120°	700.5	701.2	701.8	702.4	702.9	703.4	703.7	704.0	704.3	704.6	706.1
122.5°	751.1	752.0	752.8	753.7	754.5	755.3	756.1	756.8	757.6	758.4	759.2
125°	827.0	828.1	829.4	830.5	831.7	832.9	834.1	835.4	836.5	837.8	838.3
127.5°	902.5	903.9	905.3	906.7	908.0	909.5	911.2	912.9	914.5	916.2	916.9
130°	952.0	954.1	956.2	958.3	960.4	962.1	963.2	964.4	965.6	966.8	967.7
132.5°	1003.6	1005.2	1006.9	1008.5	1010.1	1011.6	1013.1	1014.5	1015.9	1017.4	1018.0
135°	1083.8	1084.4	1084.9	1085.6	1086.2	1087.1	1088.2	1089.5	1090.7	1091.9	1092.2
137.5°	1154.5	1155.7	1156.8	1157.9	1159.0	1160.3	1161.5	1162.8	1164.0	1165.3	1164.5
140°	1200.8	1202.8	1205.0	1207.0	1209.2	1210.3	1210.7	1210.9	1211.2	1211.6	1211.2
142.5°	1248.1	1249.7	1251.3	1252.9	1254.5	1255.5	1255.8	1256.2	1256.4	1256.7	1256.2
145°	1316.4	1317.6	1318.8	1320.0	1321.2	1322.0	1322.2	1322.5	1322.9	1323.1	1322.2
147.5°	1377.2	1378.9	1380.8	1382.6	1384.4	1385.3	1385.3	1385.3	1385.3	1385.3	1384.4
150°	1415.9	1417.7	1419.5	1421.3	1423.1	1424.0	1424.0	1424.0	1424.0	1424.0	1423.3
152.5°	1453.6	1455.1	1456.7	1458.2	1459.8	1460.4	1459.8	1459.4	1458.9	1458.4	1458.0
155°	1504.7	1506.7	1508.9	1510.9	1513.1	1513.5	1512.3	1511.1	1509.9	1508.7	1508.4
157.5°	1551.2	1552.8	1554.5	1556.2	1557.9	1558.1	1556.8	1555.6	1554.3	1553.1	1552.8
160°	1581.3	1582.5	1583.7	1584.9	1586.1	1585.9	1584.5	1583.0	1581.4	1579.9	1579.9
162.5°	1603.9	1605.8	1607.8	1609.6	1611.6	1611.8	1610.3	1608.7	1607.3	1605.8	1605.5
165°	1636.5	1638.5	1640.7	1642.7	1644.8	1644.9	1643.2	1641.4	1639.6	1637.8	1637.8
167.5°	1664.1	1666.0	1667.9	1669.7	1671.5	1671.5	1669.7	1667.9	1666.0	1664.1	1663.9
170°	1678.1	1680.3	1682.3	1684.4	1686.5	1686.5	1684.4	1682.3	1680.3	1678.1	1678.1
172.5°	1688.9	1691.0	1693.1	1695.1	1697.3	1697.4	1695.5	1693.6	1691.8	1690.0	1690.0
175°	1701.0	1703.1	1705.1	1707.3	1709.3	1709.5	1707.7	1705.9	1704.1	1702.4	1702.4
177.5°	1707.4	1709.1	1710.7	1712.4	1714.1	1714.2	1712.8	1711.4	1709.9	1708.5	1708.5
180°	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1491.3	1486.8	1482.4	1474.5	1467.8	1458.2	1455.5	1452.1	1442.0	1433.1	1426.3
5°	1582.4	1565.6	1541.1	1518.7	1500.5	1476.0	1461.9	1447.2	1426.1	1407.2	1391.8
7.5°	1677.8	1644.7	1606.5	1565.3	1527.0	1490.0	1460.1	1433.4	1404.0	1376.1	1354.4
10°	1753.5	1705.8	1652.5	1595.1	1546.0	1498.3	1458.4	1423.3	1385.5	1352.5	1325.3
12.5°	1839.8	1769.2	1695.7	1625.9	1567.9	1501.7	1453.3	1408.8	1365.9	1326.2	1295.6
15°	1942.0	1852.3	1765.3	1669.4	1581.0	1498.3	1440.9	1384.8	1335.1	1294.4	1255.2
17.5°	2035.1	1933.4	1818.9	1702.1	1595.6	1497.5	1417.0	1353.7	1291.5	1241.7	1202.6
20°	2087.8	1972.1	1842.5	1721.2	1603.5	1494.2	1405.9	1330.2	1262.8	1210.3	1166.2
22.5°	2133.2	1997.9	1863.8	1734.1	1602.9	1485.1	1385.1	1307.2	1234.3	1182.9	1135.9
25°	2180.2	2018.4	1883.8	1731.7	1585.3	1463.3	1351.2	1262.8	1190.0	1129.7	1081.4
27.5°	2220.6	2017.0	1857.3	1693.7	1557.5	1435.3	1315.5	1220.8	1143.4	1078.0	1028.9
30°	2247.5	2019.7	1829.8	1667.9	1530.6	1404.4	1288.1	1192.8	1111.5	1044.9	998.6
32.5°	2264.3	2018.0	1804.6	1632.1	1488.0	1376.4	1258.4	1159.7	1076.2	1010.8	966.2
35°	2274.1	2005.7	1761.1	1557.9	1419.2	1310.5	1211.7	1109.4	1021.8	960.8	910.3
37.5°	2254.5	1979.8	1710.7	1486.4	1334.5	1227.5	1144.4	1057.2	973.4	906.3	862.8
40°	2223.7	1963.0	1671.4	1436.0	1276.2	1173.1	1102.4	1016.9	934.2	870.4	829.7
42.5°	2164.8	1928.8	1628.3	1379.9	1215.7	1112.6	1047.4	976.0	897.8	837.9	797.3
45°	2021.2	1854.3	1563.5	1295.8	1126.2	1019.7	962.2	910.3	839.5	781.4	746.4
47.5°	1821.9	1742.4	1469.9	1207.1	1032.9	930.4	870.7	828.9	777.2	730.2	696.6
50°	1683.4	1650.4	1406.5	1146.6	970.6	870.4	813.0	775.1	738.0	691.0	660.1
52.5°	1523.6	1543.9	1332.6	1083.7	907.3	808.8	754.7	724.6	690.9	652.3	625.4
55°	1298.6	1372.2	1204.7	978.3	813.0	719.1	667.9	641.2	621.6	592.9	569.8
57.5°	1088.0	1181.6	1066.5	869.7	720.3	639.3	590.2	561.2	548.6	533.6	515.4
60°	963.0	1055.4	967.9	796.8	658.1	580.9	537.5	513.0	500.3	489.9	474.5
62.5°	851.3	944.9	871.4	722.8	596.9	525.5	487.6	463.7	453.9	448.4	435.2
65°	698.0	778.6	729.5	607.6	509.5	446.4	412.1	395.3	386.1	384.1	375.7
67.5°	568.1	629.5	593.7	504.0	426.8	372.3	343.1	328.9	321.8	321.1	314.8
70°	482.9	540.3	513.0	431.7	365.2	322.4	297.1	284.5	280.4	279.6	276.2
72.5°	416.7	456.8	435.1	367.2	315.8	277.0	258.4	245.3	240.5	241.5	239.2
75°	308.4	338.5	325.9	278.9	237.6	212.3	196.9	188.5	184.3	186.5	183.6
77.5°	221.9	240.9	229.6	197.1	171.6	153.4	142.0	136.8	133.0	132.9	131.6
80°	167.5	178.7	172.4	152.8	131.8	116.4	107.2	103.7	101.7	100.9	100.2
82.5°	119.3	128.9	121.4	107.9	93.6	84.4	79.2	74.5	73.0	73.5	72.8
85°	60.3	63.8	61.0	52.5	47.0	42.7	39.9	37.8	36.5	37.2	35.8
87.5°	25.7	25.4	23.0	20.1	18.3	16.1	15.4	13.7	13.2	13.8	13.8
90°	24.5	20.6	16.8	13.3	10.3	7.3	4.4	1.3	4.4	7.3	10.3
92.5°	47.2	45.0	42.8	40.7	38.6	36.6	34.6	32.5	34.6	36.6	38.6
95°	94.7	92.3	90.0	87.7	85.6	83.6	81.4	79.4	81.4	83.6	85.6
97.5°	152.2	150.5	148.7	147.1	145.6	144.0	142.5	140.9	142.5	144.0	145.6
100°	194.7	193.1	191.7	190.0	188.2	186.5	184.7	182.9	184.7	186.5	188.2
102.5°	241.0	239.1	237.1	235.6	234.5	233.4	232.4	231.3	232.4	233.4	234.5
105°	311.9	309.2	306.6	305.0	304.3	303.7	303.2	302.6	303.2	303.7	304.3
107.5°	389.7	388.6	387.5	386.8	386.5	386.1	385.8	385.4	385.8	386.1	386.5
110°	441.2	440.6	440.0	439.4	438.8	438.2	437.7	437.0	437.7	438.2	438.8





TEST NUMBER: P332235-940

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	492.7	492.6	492.5	492.2	491.9	491.5	491.2	490.8	491.2	491.5	491.9
115°	574.0	574.6	575.2	575.1	574.2	573.3	572.4	571.5	572.4	573.3	574.2
117.5°	653.4	654.2	655.0	655.1	654.5	653.9	653.3	652.7	653.3	653.9	654.5
120°	707.6	709.1	710.6	710.4	708.6	706.9	705.1	703.3	705.1	706.9	708.6
122.5°	759.9	760.7	761.5	761.3	759.9	758.6	757.2	756.0	757.2	758.6	759.9
125°	838.9	839.5	840.1	840.0	839.1	838.2	837.2	836.3	837.2	838.2	839.1
127.5°	917.6	918.2	918.9	918.3	916.3	914.4	912.5	910.6	912.5	914.4	916.3
130°	968.6	969.5	970.4	969.6	967.2	964.8	962.5	960.1	962.5	964.8	967.2
132.5°	1018.7	1019.3	1020.0	1019.1	1016.7	1014.3	1011.9	1009.6	1011.9	1014.3	1016.7
135°	1092.4	1092.8	1093.1	1092.3	1090.5	1088.7	1086.9	1085.1	1086.9	1088.7	1090.5
137.5°	1163.7	1163.0	1162.2	1161.0	1159.6	1158.1	1156.5	1155.0	1156.5	1158.1	1159.6
140°	1210.9	1210.7	1210.3	1209.4	1207.9	1206.5	1205.0	1203.5	1205.0	1206.5	1207.9
142.5°	1255.6	1255.1	1254.5	1253.6	1252.1	1250.5	1249.0	1247.6	1249.0	1250.5	1252.1
145°	1321.3	1320.4	1319.6	1318.8	1318.2	1317.6	1317.1	1316.4	1317.1	1317.6	1318.2
147.5°	1383.6	1382.8	1381.9	1381.0	1379.9	1378.8	1377.7	1376.6	1377.7	1378.8	1379.9
150°	1422.8	1422.2	1421.6	1421.0	1420.4	1419.8	1419.2	1418.6	1419.2	1419.8	1420.4
152.5°	1457.7	1457.3	1457.0	1456.3	1455.5	1454.7	1453.8	1453.0	1453.8	1454.7	1455.5
155°	1508.1	1507.8	1507.5	1507.3	1507.3	1507.3	1507.3	1507.3	1507.3	1507.3	1507.3
157.5°	1552.6	1552.4	1552.1	1552.2	1552.6	1552.9	1553.3	1553.6	1553.3	1552.9	1552.6
160°	1579.9	1579.9	1579.9	1580.3	1580.8	1581.4	1582.1	1582.7	1582.1	1581.4	1580.8
162.5°	1605.3	1605.1	1604.8	1605.2	1606.0	1606.8	1607.7	1608.5	1607.7	1606.8	1606.0
165°	1637.8	1637.8	1637.8	1638.3	1639.1	1640.0	1640.9	1641.8	1640.9	1640.0	1639.1
167.5°	1663.7	1663.4	1663.2	1663.7	1664.8	1666.1	1667.2	1668.5	1667.2	1666.1	1664.8
170°	1678.1	1678.1	1678.1	1678.7	1679.9	1681.1	1682.3	1683.5	1682.3	1681.1	1679.9
172.5°	1690.0	1690.0	1690.0	1690.6	1691.8	1692.9	1694.2	1695.3	1694.2	1692.9	1691.8
175°	1702.4	1702.4	1702.4	1702.9	1704.1	1705.3	1706.6	1707.7	1706.6	1705.3	1704.1
177.5°	1708.5	1708.5	1708.5	1709.0	1709.9	1710.9	1711.9	1712.8	1711.9	1710.9	1709.9
180°	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1422.4	1418.4	1412.8	1404.4	1397.7	1387.1	1387.1	1388.8	1388.8	1388.2	1387.1
5°	1379.2	1368.7	1356.1	1341.4	1326.0	1310.5	1307.7	1302.1	1297.9	1295.1	1291.6
7.5°	1333.6	1315.0	1296.6	1276.0	1257.2	1241.7	1230.9	1221.9	1216.2	1210.1	1205.5
10°	1302.8	1279.7	1257.9	1236.3	1212.4	1193.5	1181.6	1173.1	1166.9	1161.3	1158.4
12.5°	1266.4	1239.9	1215.9	1195.3	1169.2	1149.8	1138.4	1134.4	1127.0	1115.3	1109.1
15°	1213.1	1188.6	1159.8	1128.3	1115.7	1091.9	1078.5	1072.3	1068.0	1058.9	1056.1
17.5°	1167.5	1135.4	1103.2	1079.7	1056.2	1036.9	1029.5	1021.6	1016.0	1008.6	1006.4
20°	1131.1	1102.4	1072.9	1047.8	1023.1	1002.2	995.9	990.2	984.6	981.1	978.3
22.5°	1094.1	1065.4	1041.0	1017.4	991.2	977.5	970.6	964.5	960.6	958.1	955.4
25°	1042.1	1016.9	989.5	968.5	947.5	938.3	934.2	930.7	927.9	924.3	923.6
27.5°	995.6	968.1	945.9	926.3	911.2	903.7	899.6	897.9	898.5	899.7	900.5
30°	960.8	935.6	917.4	900.5	886.5	879.5	878.8	878.8	881.6	882.3	883.7
32.5°	928.9	908.1	889.9	873.6	863.0	858.2	860.9	860.9	863.1	865.0	867.5
35°	882.3	864.1	850.1	836.1	827.0	829.0	830.5	831.9	835.4	839.5	842.4
37.5°	837.9	822.1	807.4	796.6	792.4	796.1	799.5	802.5	806.5	809.8	812.5
40°	805.9	794.0	780.0	770.2	771.6	773.7	776.5	780.0	783.5	785.6	788.5
42.5°	776.2	763.8	753.1	744.9	746.9	749.6	751.3	753.1	757.2	761.0	762.6
45°	730.9	721.1	711.3	706.4	707.8	709.3	710.6	712.7	716.2	719.1	719.7
47.5°	680.1	673.2	666.6	661.8	664.1	663.5	665.4	669.9	670.9	672.6	676.5
50°	647.6	641.2	633.6	632.1	632.1	632.1	632.8	638.5	638.5	641.2	644.1
52.5°	611.7	607.6	602.7	600.2	599.1	599.1	602.0	604.8	605.9	609.8	612.7
55°	558.6	554.4	550.1	548.0	546.6	548.0	553.7	555.0	558.6	560.6	562.8
57.5°	503.2	500.0	496.6	495.4	495.2	497.0	500.1	504.3	505.2	511.6	514.8
60°	466.7	461.8	459.1	459.1	457.6	464.0	462.5	469.6	470.9	475.2	480.1
62.5°	429.2	422.6	421.5	421.5	423.5	425.3	427.2	430.3	433.9	439.3	443.1
65°	368.6	365.2	370.1	369.3	367.9	372.1	372.1	375.7	379.9	384.8	392.4
67.5°	311.3	309.5	309.9	309.9	312.0	314.4	316.4	319.4	324.5	329.7	334.7
70°	272.6	274.7	271.3	274.0	276.2	276.8	278.2	282.4	288.0	291.5	297.1
72.5°	235.1	234.9	235.3	236.5	238.5	239.8	241.2	246.0	252.2	255.1	259.6
75°	180.8	180.1	182.2	182.2	185.7	187.1	188.5	190.6	196.3	200.5	203.9
77.5°	132.1	132.9	132.4	134.8	133.8	134.1	138.5	140.6	141.2	149.5	151.2
80°	99.5	100.9	101.7	102.3	103.0	101.7	106.6	108.6	108.6	113.5	117.0
82.5°	71.5	72.3	74.2	74.8	75.0	76.4	76.8	78.4	80.1	82.1	86.8
85°	35.8	37.8	38.5	37.8	38.5	37.2	39.2	39.9	40.7	40.7	40.7
87.5°	13.9	15.2	15.3	16.7	16.9	18.2	18.5	17.6	17.8	19.7	17.7
90°	13.3	16.8	20.6	24.5	28.4	32.3	33.4	34.7	35.8	37.1	38.0
92.5°	40.7	42.8	45.0	47.2	49.4	51.6	52.6	53.5	54.5	55.5	55.7
95°	87.7	90.0	92.3	94.7	97.1	99.5	100.7	101.9	103.1	104.2	104.9
97.5°	147.1	148.7	150.5	152.2	154.0	155.7	157.1	158.5	159.8	161.2	161.8
100°	190.0	191.7	193.1	194.7	196.2	197.7	198.6	199.5	200.4	201.3	202.0
102.5°	235.6	237.1	239.1	241.0	243.0	245.0	245.9	246.8	247.7	248.6	249.0
105°	305.0	306.6	309.2	311.9	314.7	317.4	317.4	317.4	317.4	317.4	317.6
107.5°	386.8	387.5	388.6	389.7	390.7	391.8	392.8	393.8	394.7	395.7	395.9
110°	439.4	440.0	440.6	441.2	441.8	442.4	443.6	444.8	445.9	447.2	447.5



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	492.2	492.5	492.6	492.7	492.8	492.9	494.4	495.8	497.2	498.6	499.4
115°	575.1	575.2	574.6	574.0	573.5	572.8	573.1	573.5	573.7	574.0	574.0
117.5°	655.1	655.0	654.2	653.4	652.6	651.9	651.8	651.8	651.8	651.7	651.2
120°	710.4	710.6	709.1	707.6	706.1	704.6	704.3	704.0	703.7	703.4	702.9
122.5°	761.3	761.5	760.7	759.9	759.2	758.4	757.6	756.8	756.1	755.3	754.5
125°	840.0	840.1	839.5	838.9	838.3	837.8	836.5	835.4	834.1	832.9	831.7
127.5°	918.3	918.9	918.2	917.6	916.9	916.2	914.5	912.9	911.2	909.5	908.0
130°	969.6	970.4	969.5	968.6	967.7	966.8	965.6	964.4	963.2	962.1	960.4
132.5°	1019.1	1020.0	1019.3	1018.7	1018.0	1017.4	1015.9	1014.5	1013.1	1011.6	1010.1
135°	1092.3	1093.1	1092.8	1092.4	1092.2	1091.9	1090.7	1089.5	1088.2	1087.1	1086.2
137.5°	1161.0	1162.2	1163.0	1163.7	1164.5	1165.3	1164.0	1162.8	1161.5	1160.3	1159.0
140°	1209.4	1210.3	1210.7	1210.9	1211.2	1211.6	1211.2	1210.9	1210.7	1210.3	1209.2
142.5°	1253.6	1254.5	1255.1	1255.6	1256.2	1256.7	1256.4	1256.2	1255.8	1255.5	1254.5
145°	1318.8	1319.6	1320.4	1321.3	1322.2	1323.1	1322.9	1322.5	1322.2	1322.0	1321.2
147.5°	1381.0	1381.9	1382.8	1383.6	1384.4	1385.3	1385.3	1385.3	1385.3	1385.3	1384.4
150°	1421.0	1421.6	1422.2	1422.8	1423.3	1424.0	1424.0	1424.0	1424.0	1424.0	1423.1
152.5°	1456.3	1457.0	1457.3	1457.7	1458.0	1458.4	1458.9	1459.4	1459.8	1460.4	1459.8
155°	1507.3	1507.5	1507.8	1508.1	1508.4	1508.7	1509.9	1511.1	1512.3	1513.5	1513.1
157.5°	1552.2	1552.1	1552.4	1552.6	1552.8	1553.1	1554.3	1555.6	1556.8	1558.1	1557.9
160°	1580.3	1579.9	1579.9	1579.9	1579.9	1579.9	1581.4	1583.0	1584.5	1585.9	1586.1
162.5°	1605.2	1604.8	1605.1	1605.3	1605.5	1605.8	1607.3	1608.7	1610.3	1611.8	1611.6
165°	1638.3	1637.8	1637.8	1637.8	1637.8	1637.8	1639.6	1641.4	1643.2	1644.9	1644.8
167.5°	1663.7	1663.2	1663.4	1663.7	1663.9	1664.1	1666.0	1667.9	1669.7	1671.5	1671.5
170°	1678.7	1678.1	1678.1	1678.1	1678.1	1678.1	1680.3	1682.3	1684.4	1686.5	1686.5
172.5°	1690.6	1690.0	1690.0	1690.0	1690.0	1690.0	1691.8	1693.6	1695.5	1697.4	1697.3
175°	1702.9	1702.4	1702.4	1702.4	1702.4	1702.4	1704.1	1705.9	1707.7	1709.5	1709.3
177.5°	1709.0	1708.5	1708.5	1708.5	1708.5	1708.5	1709.9	1711.4	1712.8	1714.2	1714.1
180°	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1383.1	1382.6	1386.5	1383.7	1386.5	1382.6	1383.1	1387.1	1388.2	1388.8	1388.8
5°	1287.4	1289.5	1282.5	1282.5	1282.5	1289.5	1287.4	1291.6	1295.1	1297.9	1302.1
7.5°	1202.2	1199.1	1199.4	1195.6	1199.4	1199.1	1202.2	1205.5	1210.1	1216.2	1221.9
10°	1150.0	1145.8	1144.4	1145.1	1144.4	1145.8	1150.0	1158.4	1161.3	1166.9	1173.1
12.5°	1106.9	1106.0	1096.8	1096.9	1096.8	1106.0	1106.9	1109.1	1115.3	1127.0	1134.4
15°	1056.1	1042.9	1041.4	1045.6	1041.4	1042.9	1056.1	1056.1	1058.9	1068.0	1072.3
17.5°	1005.2	998.3	998.6	996.6	998.6	998.3	1005.2	1006.4	1008.6	1016.0	1021.6
20°	978.3	974.1	973.4	968.5	973.4	974.1	978.3	978.3	981.1	984.6	990.2
22.5°	953.7	952.3	952.7	947.3	952.7	952.3	953.7	955.4	958.1	960.6	964.5
25°	923.0	926.5	923.6	923.6	923.6	926.5	923.0	923.6	924.3	927.9	930.7
27.5°	902.2	902.1	900.7	900.7	900.7	902.1	902.2	900.5	899.7	898.5	897.9
30°	886.5	885.8	887.3	887.3	887.3	885.8	886.5	883.7	882.3	881.6	878.8
32.5°	870.8	871.8	872.1	872.6	872.1	871.8	870.8	867.5	865.0	863.1	860.9
35°	846.6	847.3	849.4	848.0	849.4	847.3	846.6	842.4	839.5	835.4	831.9
37.5°	813.8	817.0	816.3	817.4	816.3	817.0	813.8	812.5	809.8	806.5	802.5
40°	789.1	791.2	790.5	790.5	790.5	791.2	789.1	788.5	785.6	783.5	780.0
42.5°	763.9	765.4	763.6	762.5	763.6	765.4	763.9	762.6	761.0	757.2	753.1
45°	722.6	721.1	723.3	720.4	723.3	721.1	722.6	719.7	719.1	716.2	712.7
47.5°	676.3	677.7	678.2	680.4	678.2	677.7	676.3	676.5	672.6	670.9	669.9
50°	645.4	649.6	649.6	649.0	649.6	649.6	645.4	644.1	641.2	638.5	638.5
52.5°	615.2	617.2	619.9	619.8	619.9	617.2	615.2	612.7	609.8	605.9	604.8
55°	568.4	569.8	571.1	571.9	571.1	569.8	568.4	562.8	560.6	558.6	555.0
57.5°	519.9	519.3	522.6	523.6	522.6	519.3	519.9	514.8	511.6	505.2	504.3
60°	485.6	485.6	491.2	493.4	491.2	485.6	485.6	480.1	475.2	470.9	469.6
62.5°	449.2	451.5	457.1	454.1	457.1	451.5	449.2	443.1	439.3	433.9	430.3
65°	395.9	401.5	400.8	403.7	400.8	401.5	395.9	392.4	384.8	379.9	375.7
67.5°	340.3	343.8	348.8	349.3	348.8	343.8	340.3	334.7	329.7	324.5	319.4
70°	302.7	306.2	309.1	311.1	309.1	306.2	302.7	297.1	291.5	288.0	282.4
72.5°	266.4	268.1	274.8	271.9	274.8	268.1	266.4	259.6	255.1	252.2	246.0
75°	208.8	213.7	217.9	215.9	217.9	213.7	208.8	203.9	200.5	196.3	190.6
77.5°	154.4	159.3	161.3	159.5	161.3	159.3	154.4	151.2	149.5	141.2	140.6
80°	122.0	121.3	125.5	124.8	125.5	121.3	122.0	117.0	113.5	108.6	108.6
82.5°	89.4	88.7	90.7	91.1	90.7	88.7	89.4	86.8	82.1	80.1	78.4
85°	43.4	45.6	42.7	42.1	42.7	45.6	43.4	40.7	40.7	40.7	39.9
87.5°	17.8	17.9	17.5	17.0	17.5	17.9	17.8	17.7	19.7	17.8	17.6
90°	38.5	39.1	39.8	40.3	39.8	39.1	38.5	38.0	37.1	35.8	34.7
92.5°	55.4	55.0	54.7	54.3	54.7	55.0	55.4	55.7	55.5	54.5	53.5
95°	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.2	103.1	101.9
97.5°	161.8	161.6	161.5	161.4	161.5	161.6	161.8	161.8	161.2	159.8	158.5
100°	202.6	203.2	203.8	204.4	203.8	203.2	202.6	202.0	201.3	200.4	199.5
102.5°	248.9	248.7	248.6	248.5	248.6	248.7	248.9	249.0	248.6	247.7	246.8
105°	318.3	318.9	319.4	320.0	319.4	318.9	318.3	317.6	317.4	317.4	317.4
107.5°	395.6	395.2	394.8	394.5	394.8	395.2	395.6	395.9	395.7	394.7	393.8
110°	446.8	446.3	445.7	445.1	445.7	446.3	446.8	447.5	447.2	445.9	444.8



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	499.3	499.1	499.0	498.8	499.0	499.1	499.3	499.4	498.6	497.2	495.8
115°	573.7	573.5	573.1	572.8	573.1	573.5	573.7	574.0	574.0	573.7	573.5
117.5°	650.3	649.5	648.7	647.8	648.7	649.5	650.3	651.2	651.7	651.8	651.8
120°	702.4	701.8	701.2	700.5	701.2	701.8	702.4	702.9	703.4	703.7	704.0
122.5°	753.7	752.8	752.0	751.1	752.0	752.8	753.7	754.5	755.3	756.1	756.8
125°	830.5	829.4	828.1	827.0	828.1	829.4	830.5	831.7	832.9	834.1	835.4
127.5°	906.7	905.3	903.9	902.5	903.9	905.3	906.7	908.0	909.5	911.2	912.9
130°	958.3	956.2	954.1	952.0	954.1	956.2	958.3	960.4	962.1	963.2	964.4
132.5°	1008.5	1006.9	1005.2	1003.6	1005.2	1006.9	1008.5	1010.1	1011.6	1013.1	1014.5
135°	1085.6	1084.9	1084.4	1083.8	1084.4	1084.9	1085.6	1086.2	1087.1	1088.2	1089.5
137.5°	1157.9	1156.8	1155.7	1154.5	1155.7	1156.8	1157.9	1159.0	1160.3	1161.5	1162.8
140°	1207.0	1205.0	1202.8	1200.8	1202.8	1205.0	1207.0	1209.2	1210.3	1210.7	1210.9
142.5°	1252.9	1251.3	1249.7	1248.1	1249.7	1251.3	1252.9	1254.5	1255.5	1255.8	1256.2
145°	1320.0	1318.8	1317.6	1316.4	1317.6	1318.8	1320.0	1321.2	1322.0	1322.2	1322.5
147.5°	1382.6	1380.8	1378.9	1377.2	1378.9	1380.8	1382.6	1384.4	1385.3	1385.3	1385.3
150°	1421.3	1419.5	1417.7	1415.9	1417.7	1419.5	1421.3	1423.1	1424.0	1424.0	1424.0
152.5°	1458.2	1456.7	1455.1	1453.6	1455.1	1456.7	1458.2	1459.8	1460.4	1459.8	1459.4
155°	1510.9	1508.9	1506.7	1504.7	1506.7	1508.9	1510.9	1513.1	1513.5	1512.3	1511.1
157.5°	1556.2	1554.5	1552.8	1551.2	1552.8	1554.5	1556.2	1557.9	1558.1	1556.8	1555.6
160°	1584.9	1583.7	1582.5	1581.3	1582.5	1583.7	1584.9	1586.1	1585.9	1584.5	1583.0
162.5°	1609.6	1607.8	1605.8	1603.9	1605.8	1607.8	1609.6	1611.6	1611.8	1610.3	1608.7
165°	1642.7	1640.7	1638.5	1636.5	1638.5	1640.7	1642.7	1644.8	1644.9	1643.2	1641.4
167.5°	1669.7	1667.9	1666.0	1664.1	1666.0	1667.9	1669.7	1671.5	1671.5	1669.7	1667.9
170°	1684.4	1682.3	1680.3	1678.1	1680.3	1682.3	1684.4	1686.5	1686.5	1684.4	1682.3
172.5°	1695.1	1693.1	1691.0	1688.9	1691.0	1693.1	1695.1	1697.3	1697.4	1695.5	1693.6
175°	1707.3	1705.1	1703.1	1701.0	1703.1	1705.1	1707.3	1709.3	1709.5	1707.7	1705.9
177.5°	1712.4	1710.7	1709.1	1707.4	1709.1	1710.7	1712.4	1714.1	1714.2	1712.8	1711.4
180°	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1387.1	1387.1	1397.7	1404.4	1412.8	1418.4	1422.4	1426.3	1433.1	1442.0	1452.1
5°	1307.7	1310.5	1326.0	1341.4	1356.1	1368.7	1379.2	1391.8	1407.2	1426.1	1447.2
7.5°	1230.9	1241.7	1257.2	1276.0	1296.6	1315.0	1333.6	1354.4	1376.1	1404.0	1433.4
10°	1181.6	1193.5	1212.4	1236.3	1257.9	1279.7	1302.8	1325.3	1352.5	1385.5	1423.3
12.5°	1138.4	1149.8	1169.2	1195.3	1215.9	1239.9	1266.4	1295.6	1326.2	1365.9	1408.8
15°	1078.5	1091.9	1115.7	1128.3	1159.8	1188.6	1213.1	1255.2	1294.4	1335.1	1384.8
17.5°	1029.5	1036.9	1056.2	1079.7	1103.2	1135.4	1167.5	1202.6	1241.7	1291.5	1353.7
20°	995.9	1002.2	1023.1	1047.8	1072.9	1102.4	1131.1	1166.2	1210.3	1262.8	1330.2
22.5°	970.6	977.5	991.2	1017.4	1041.0	1065.4	1094.1	1135.9	1182.9	1234.3	1307.2
25°	934.2	938.3	947.5	968.5	989.5	1016.9	1042.1	1081.4	1129.7	1190.0	1262.8
27.5°	899.6	903.7	911.2	926.3	945.9	968.1	995.6	1028.9	1078.0	1143.4	1220.8
30°	878.8	879.5	886.5	900.5	917.4	935.6	960.8	998.6	1044.9	1111.5	1192.8
32.5°	860.9	858.2	863.0	873.6	889.9	908.1	928.9	966.2	1010.8	1076.2	1159.7
35°	830.5	829.0	827.0	836.1	850.1	864.1	882.3	910.3	960.8	1021.8	1109.4
37.5°	799.5	796.1	792.4	796.6	807.4	822.1	837.9	862.8	906.3	973.4	1057.2
40°	776.5	773.7	771.6	770.2	780.0	794.0	805.9	829.7	870.4	934.2	1016.9
42.5°	751.3	749.6	746.9	744.9	753.1	763.8	776.2	797.3	837.9	897.8	976.0
45°	710.6	709.3	707.8	706.4	711.3	721.1	730.9	746.4	781.4	839.5	910.3
47.5°	665.4	663.5	664.1	661.8	666.6	673.2	680.1	696.6	730.2	777.2	828.9
50°	632.8	632.1	632.1	632.1	633.6	641.2	647.6	660.1	691.0	738.0	775.1
52.5°	602.0	599.1	599.1	600.2	602.7	607.6	611.7	625.4	652.3	690.9	724.6
55°	553.7	548.0	546.6	548.0	550.1	554.4	558.6	569.8	592.9	621.6	641.2
57.5°	500.1	497.0	495.2	495.4	496.6	500.0	503.2	515.4	533.6	548.6	561.2
60°	462.5	464.0	457.6	459.1	459.1	461.8	466.7	474.5	489.9	500.3	513.0
62.5°	427.2	425.3	423.5	421.5	421.5	422.6	429.2	435.2	448.4	453.9	463.7
65°	372.1	372.1	367.9	369.3	370.1	365.2	368.6	375.7	384.1	386.1	395.3
67.5°	316.4	314.4	312.0	309.9	309.9	309.5	311.3	314.8	321.1	321.8	328.9
70°	278.2	276.8	276.2	274.0	271.3	274.7	272.6	276.2	279.6	280.4	284.5
72.5°	241.2	239.8	238.5	236.5	235.3	234.9	235.1	239.2	241.5	240.5	245.3
75°	188.5	187.1	185.7	182.2	182.2	180.1	180.8	183.6	186.5	184.3	188.5
77.5°	138.5	134.1	133.8	134.8	132.4	132.9	132.1	131.6	132.9	133.0	136.8
80°	106.6	101.7	103.0	102.3	101.7	100.9	99.5	100.2	100.9	101.7	103.7
82.5°	76.8	76.4	75.0	74.8	74.2	72.3	71.5	72.8	73.5	73.0	74.5
85°	39.2	37.2	38.5	37.8	38.5	37.8	35.8	35.8	37.2	36.5	37.8
87.5°	18.5	18.2	16.9	16.7	15.3	15.2	13.9	13.8	13.8	13.2	13.7
90°	33.4	32.3	28.4	24.5	20.6	16.8	13.3	10.3	7.3	4.4	1.3
92.5°	52.6	51.6	49.4	47.2	45.0	42.8	40.7	38.6	36.6	34.6	32.5
95°	100.7	99.5	97.1	94.7	92.3	90.0	87.7	85.6	83.6	81.4	79.4
97.5°	157.1	155.7	154.0	152.2	150.5	148.7	147.1	145.6	144.0	142.5	140.9
100°	198.6	197.7	196.2	194.7	193.1	191.7	190.0	188.2	186.5	184.7	182.9
102.5°	245.9	245.0	243.0	241.0	239.1	237.1	235.6	234.5	233.4	232.4	231.3
105°	317.4	317.4	314.7	311.9	309.2	306.6	305.0	304.3	303.7	303.2	302.6
107.5°	392.8	391.8	390.7	389.7	388.6	387.5	386.8	386.5	386.1	385.8	385.4
110°	443.6	442.4	441.8	441.2	440.6	440.0	439.4	438.8	438.2	437.7	437.0



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	494.4	492.9	492.8	492.7	492.6	492.5	492.2	491.9	491.5	491.2	490.8
115°	573.1	572.8	573.5	574.0	574.6	575.2	575.1	574.2	573.3	572.4	571.5
117.5°	651.8	651.9	652.6	653.4	654.2	655.0	655.1	654.5	653.9	653.3	652.7
120°	704.3	704.6	706.1	707.6	709.1	710.6	710.4	708.6	706.9	705.1	703.3
122.5°	757.6	758.4	759.2	759.9	760.7	761.5	761.3	759.9	758.6	757.2	756.0
125°	836.5	837.8	838.3	838.9	839.5	840.1	840.0	839.1	838.2	837.2	836.3
127.5°	914.5	916.2	916.9	917.6	918.2	918.9	918.3	916.3	914.4	912.5	910.6
130°	965.6	966.8	967.7	968.6	969.5	970.4	969.6	967.2	964.8	962.5	960.1
132.5°	1015.9	1017.4	1018.0	1018.7	1019.3	1020.0	1019.1	1016.7	1014.3	1011.9	1009.6
135°	1090.7	1091.9	1092.2	1092.4	1092.8	1093.1	1092.3	1090.5	1088.7	1086.9	1085.1
137.5°	1164.0	1165.3	1164.5	1163.7	1163.0	1162.2	1161.0	1159.6	1158.1	1156.5	1155.0
140°	1211.2	1211.6	1211.2	1210.9	1210.7	1210.3	1209.4	1207.9	1206.5	1205.0	1203.5
142.5°	1256.4	1256.7	1256.2	1255.6	1255.1	1254.5	1253.6	1252.1	1250.5	1249.0	1247.6
145°	1322.9	1323.1	1322.2	1321.3	1320.4	1319.6	1318.8	1318.2	1317.6	1317.1	1316.4
147.5°	1385.3	1385.3	1384.4	1383.6	1382.8	1381.9	1381.0	1379.9	1378.8	1377.7	1376.6
150°	1424.0	1424.0	1423.3	1422.8	1422.2	1421.6	1421.0	1420.4	1419.8	1419.2	1418.6
152.5°	1458.9	1458.4	1458.0	1457.7	1457.3	1457.0	1456.3	1455.5	1454.7	1453.8	1453.0
155°	1509.9	1508.7	1508.4	1508.1	1507.8	1507.5	1507.3	1507.3	1507.3	1507.3	1507.3
157.5°	1554.3	1553.1	1552.8	1552.6	1552.4	1552.1	1552.2	1552.6	1552.9	1553.3	1553.6
160°	1581.4	1579.9	1579.9	1579.9	1579.9	1579.9	1580.3	1580.8	1581.4	1582.1	1582.7
162.5°	1607.3	1605.8	1605.5	1605.3	1605.1	1604.8	1605.2	1606.0	1606.8	1607.7	1608.5
165°	1639.6	1637.8	1637.8	1637.8	1637.8	1637.8	1638.3	1639.1	1640.0	1640.9	1641.8
167.5°	1666.0	1664.1	1663.9	1663.7	1663.4	1663.2	1663.7	1664.8	1666.1	1667.2	1668.5
170°	1680.3	1678.1	1678.1	1678.1	1678.1	1678.1	1678.7	1679.9	1681.1	1682.3	1683.5
172.5°	1691.8	1690.0	1690.0	1690.0	1690.0	1690.0	1690.6	1691.8	1692.9	1694.2	1695.3
175°	1704.1	1702.4	1702.4	1702.4	1702.4	1702.4	1702.9	1704.1	1705.3	1706.6	1707.7
177.5°	1709.9	1708.5	1708.5	1708.5	1708.5	1708.5	1709.0	1709.9	1710.9	1711.9	1712.8
180°	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7



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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1455.5	1458.2	1467.8	1474.5	1482.4	1486.8	1491.3	1494.7	1499.1	1500.3	1516.5
5°	1461.9	1476.0	1500.5	1518.7	1541.1	1565.6	1582.4	1590.2	1610.4	1627.3	1660.9
7.5°	1460.1	1490.0	1527.0	1565.3	1606.5	1644.7	1677.8	1717.0	1744.9	1786.8	1828.2
10°	1458.4	1498.3	1546.0	1595.1	1652.5	1705.8	1753.5	1806.7	1850.8	1909.0	1958.7
12.5°	1453.3	1501.7	1567.9	1625.9	1695.7	1769.2	1839.8	1908.2	1947.3	2044.2	2090.0
15°	1440.9	1498.3	1581.0	1669.4	1765.3	1852.3	1942.0	2013.5	2129.0	2213.9	2267.8
17.5°	1417.0	1497.5	1595.6	1702.1	1818.9	1933.4	2035.1	2143.5	2266.2	2368.7	2478.1
20°	1405.9	1494.2	1603.5	1721.2	1842.5	1972.1	2087.8	2218.0	2352.0	2452.8	2593.0
22.5°	1385.1	1485.1	1602.9	1734.1	1863.8	1997.9	2133.2	2264.6	2419.2	2558.2	2691.7
25°	1351.2	1463.3	1585.3	1731.7	1883.8	2018.4	2180.2	2354.7	2516.0	2694.7	2827.8
27.5°	1315.5	1435.3	1557.5	1693.7	1857.3	2017.0	2220.6	2417.8	2614.9	2769.2	2867.7
30°	1288.1	1404.4	1530.6	1667.9	1829.8	2019.7	2247.5	2462.6	2654.7	2787.1	2842.5
32.5°	1258.4	1376.4	1488.0	1632.1	1804.6	2018.0	2264.3	2489.0	2656.9	2745.1	2734.3
35°	1211.7	1310.5	1419.2	1557.9	1761.1	2005.7	2274.1	2491.4	2594.4	2575.5	2432.5
37.5°	1144.4	1227.5	1334.5	1486.4	1710.7	1979.8	2254.5	2417.5	2410.8	2256.7	2049.6
40°	1102.4	1173.1	1276.2	1436.0	1671.4	1963.0	2223.7	2329.5	2239.8	2024.6	1776.6
42.5°	1047.4	1112.6	1215.7	1379.9	1628.3	1928.8	2164.8	2195.5	2020.0	1772.4	1545.0
45°	962.2	1019.7	1126.2	1295.8	1563.5	1854.3	2021.2	1946.2	1709.9	1454.2	1281.1
47.5°	870.7	930.4	1032.9	1207.1	1469.9	1742.4	1821.9	1662.3	1419.9	1212.4	1053.5
50°	813.0	870.4	970.6	1146.6	1406.5	1650.4	1683.4	1477.3	1254.5	1072.3	941.9
52.5°	754.7	808.8	907.3	1083.7	1332.6	1543.9	1523.6	1313.6	1108.7	953.4	851.0
55°	667.9	719.1	813.0	978.3	1204.7	1372.2	1298.6	1098.1	928.5	808.1	730.2
57.5°	590.2	639.3	720.3	869.7	1066.5	1181.6	1088.0	919.1	784.2	691.4	633.4
60°	537.5	580.9	658.1	796.8	967.9	1055.4	963.0	813.7	700.1	625.8	574.0
62.5°	487.6	525.5	596.9	722.8	871.4	944.9	851.3	725.1	628.4	562.5	518.4
65°	412.1	446.4	509.5	607.6	729.5	778.6	698.0	595.7	520.7	471.6	442.2
67.5°	343.1	372.3	426.8	504.0	593.7	629.5	568.1	488.9	432.4	393.0	369.6
70°	297.1	322.4	365.2	431.7	513.0	540.3	482.9	417.7	376.3	344.8	323.1
72.5°	258.4	277.0	315.8	367.2	435.1	456.8	416.7	359.4	320.8	297.1	279.9
75°	196.9	212.3	237.6	278.9	325.9	338.5	308.4	272.6	246.6	229.9	216.5
77.5°	142.0	153.4	171.6	197.1	229.6	240.9	221.9	198.0	179.1	167.7	160.3
80°	107.2	116.4	131.8	152.8	172.4	178.7	167.5	149.3	136.0	129.7	123.3
82.5°	79.2	84.4	93.6	107.9	121.4	128.9	119.3	108.3	101.2	95.4	93.1
85°	39.9	42.7	47.0	52.5	61.0	63.8	60.3	57.4	53.2	49.8	49.8
87.5°	15.4	16.1	18.3	20.1	23.0	25.4	25.7	25.3	25.5	25.2	24.9
90°	4.4	7.3	10.3	13.3	16.8	20.6	24.5	28.4	32.3	33.4	34.7
92.5°	34.6	36.6	38.6	40.7	42.8	45.0	47.2	49.4	51.6	52.6	53.5
95°	81.4	83.6	85.6	87.7	90.0	92.3	94.7	97.1	99.5	100.7	101.9
97.5°	142.5	144.0	145.6	147.1	148.7	150.5	152.2	154.0	155.7	157.1	158.5
100°	184.7	186.5	188.2	190.0	191.7	193.1	194.7	196.2	197.7	198.6	199.5
102.5°	232.4	233.4	234.5	235.6	237.1	239.1	241.0	243.0	245.0	245.9	246.8
105°	303.2	303.7	304.3	305.0	306.6	309.2	311.9	314.7	317.4	317.4	317.4
107.5°	385.8	386.1	386.5	386.8	387.5	388.6	389.7	390.7	391.8	392.8	393.8
110°	437.7	438.2	438.8	439.4	440.0	440.6	441.2	441.8	442.4	443.6	444.8





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	491.2	491.5	491.9	492.2	492.5	492.6	492.7	492.8	492.9	494.4	495.8
115°	572.4	573.3	574.2	575.1	575.2	574.6	574.0	573.5	572.8	573.1	573.5
117.5°	653.3	653.9	654.5	655.1	655.0	654.2	653.4	652.6	651.9	651.8	651.8
120°	705.1	706.9	708.6	710.4	710.6	709.1	707.6	706.1	704.6	704.3	704.0
122.5°	757.2	758.6	759.9	761.3	761.5	760.7	759.9	759.2	758.4	757.6	756.8
125°	837.2	838.2	839.1	840.0	840.1	839.5	838.9	838.3	837.8	836.5	835.4
127.5°	912.5	914.4	916.3	918.3	918.9	918.2	917.6	916.9	916.2	914.5	912.9
130°	962.5	964.8	967.2	969.6	970.4	969.5	968.6	967.7	966.8	965.6	964.4
132.5°	1011.9	1014.3	1016.7	1019.1	1020.0	1019.3	1018.7	1018.0	1017.4	1015.9	1014.5
135°	1086.9	1088.7	1090.5	1092.3	1093.1	1092.8	1092.4	1092.2	1091.9	1090.7	1089.5
137.5°	1156.5	1158.1	1159.6	1161.0	1162.2	1163.0	1163.7	1164.5	1165.3	1164.0	1162.8
140°	1205.0	1206.5	1207.9	1209.4	1210.3	1210.7	1210.9	1211.2	1211.6	1211.2	1210.9
142.5°	1249.0	1250.5	1252.1	1253.6	1254.5	1255.1	1255.6	1256.2	1256.7	1256.4	1256.2
145°	1317.1	1317.6	1318.2	1318.8	1319.6	1320.4	1321.3	1322.2	1323.1	1322.9	1322.5
147.5°	1377.7	1378.8	1379.9	1381.0	1381.9	1382.8	1383.6	1384.4	1385.3	1385.3	1385.3
150°	1419.2	1419.8	1420.4	1421.0	1421.6	1422.2	1422.8	1423.3	1424.0	1424.0	1424.0
152.5°	1453.8	1454.7	1455.5	1456.3	1457.0	1457.3	1457.7	1458.0	1458.4	1458.9	1459.4
155°	1507.3	1507.3	1507.3	1507.3	1507.5	1507.8	1508.1	1508.4	1508.7	1509.9	1511.1
157.5°	1553.3	1552.9	1552.6	1552.2	1552.1	1552.4	1552.6	1552.8	1553.1	1554.3	1555.6
160°	1582.1	1581.4	1580.8	1580.3	1579.9	1579.9	1579.9	1579.9	1579.9	1581.4	1583.0
162.5°	1607.7	1606.8	1606.0	1605.2	1604.8	1605.1	1605.3	1605.5	1605.8	1607.3	1608.7
165°	1640.9	1640.0	1639.1	1638.3	1637.8	1637.8	1637.8	1637.8	1637.8	1639.6	1641.4
167.5°	1667.2	1666.1	1664.8	1663.7	1663.2	1663.4	1663.7	1663.9	1664.1	1666.0	1667.9
170°	1682.3	1681.1	1679.9	1678.7	1678.1	1678.1	1678.1	1678.1	1678.1	1680.3	1682.3
172.5°	1694.2	1692.9	1691.8	1690.6	1690.0	1690.0	1690.0	1690.0	1690.0	1691.8	1693.6
175°	1706.6	1705.3	1704.1	1702.9	1702.4	1702.4	1702.4	1702.4	1702.4	1704.1	1705.9
177.5°	1711.9	1710.9	1709.9	1709.0	1708.5	1708.5	1708.5	1708.5	1708.5	1709.9	1711.4
180°	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1522.2	1522.7	1528.9	1533.4	1531.2	1533.9	1535.1
5°	1663.0	1688.3	1701.6	1711.4	1712.1	1712.8	1718.4
7.5°	1862.8	1889.8	1909.6	1939.6	1948.6	1958.7	1955.8
10°	2008.6	2048.4	2082.9	2101.0	2120.7	2149.4	2126.3
12.5°	2144.7	2215.5	2267.8	2296.2	2314.6	2320.4	2309.1
15°	2369.5	2461.9	2511.7	2510.3	2573.4	2600.8	2558.0
17.5°	2575.5	2660.9	2729.3	2764.3	2816.8	2828.5	2823.2
20°	2701.6	2794.9	2848.1	2908.4	2935.7	2960.2	2964.4
22.5°	2810.4	2894.0	2951.3	3001.4	3024.3	3035.9	3043.0
25°	2922.4	2988.3	3022.6	3040.1	3046.4	3045.0	3035.9
27.5°	2914.6	2919.7	2881.9	2844.7	2811.6	2774.1	2761.2
30°	2839.0	2780.1	2675.0	2615.5	2527.8	2458.4	2486.4
32.5°	2640.0	2522.8	2404.8	2274.6	2166.8	2136.1	2105.2
35°	2253.1	2047.1	1926.5	1786.4	1730.3	1674.3	1635.7
37.5°	1822.8	1663.5	1520.5	1428.8	1372.6	1337.1	1318.1
40°	1576.1	1432.4	1314.7	1240.5	1197.7	1157.7	1152.2
42.5°	1379.4	1245.8	1157.2	1098.1	1056.9	1040.0	1027.7
45°	1129.7	1036.5	977.0	934.9	907.6	897.1	883.1
47.5°	956.2	890.3	845.6	817.0	796.4	788.5	787.5
50°	859.2	804.5	771.6	749.1	733.1	730.2	719.1
52.5°	786.3	739.0	713.3	693.7	682.1	674.2	670.8
55°	682.6	651.0	627.9	616.7	607.6	599.9	599.9
57.5°	597.3	570.9	555.6	546.1	543.2	537.8	534.3
60°	544.6	522.1	510.2	501.8	496.1	496.9	490.5
62.5°	492.9	478.4	467.0	458.6	451.9	452.0	452.5
65°	419.8	408.6	400.2	397.3	393.2	388.3	389.7
67.5°	355.7	345.2	338.7	333.9	332.4	329.8	333.9
70°	309.8	302.0	297.1	292.9	291.5	292.2	295.8
72.5°	267.7	262.3	259.0	257.1	254.0	254.1	256.5
75°	210.3	206.1	203.2	201.2	200.5	200.5	200.5
77.5°	154.4	153.5	152.2	149.1	149.3	150.1	150.3
80°	122.0	119.8	119.1	117.7	115.7	114.2	117.7
82.5°	91.1	89.0	88.3	88.0	84.8	84.5	87.5
85°	49.0	47.0	47.6	47.0	47.0	46.3	46.3
87.5°	24.5	24.3	23.8	24.5	24.1	23.6	24.9
90°	35.8	37.1	38.0	38.5	39.1	39.8	40.3
92.5°	54.5	55.5	55.7	55.4	55.0	54.7	54.3
95°	103.1	104.2	104.9	104.9	104.9	104.9	104.9
97.5°	159.8	161.2	161.8	161.8	161.6	161.5	161.4
100°	200.4	201.3	202.0	202.6	203.2	203.8	204.4
102.5°	247.7	248.6	249.0	248.9	248.7	248.6	248.5
105°	317.4	317.4	317.6	318.3	318.9	319.4	320.0
107.5°	394.7	395.7	395.9	395.6	395.2	394.8	394.5
110°	445.9	447.2	447.5	446.8	446.3	445.7	445.1



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	497.2	498.6	499.4	499.3	499.1	499.0	498.8
115°	573.7	574.0	574.0	573.7	573.5	573.1	572.8
117.5°	651.8	651.7	651.2	650.3	649.5	648.7	647.8
120°	703.7	703.4	702.9	702.4	701.8	701.2	700.5
122.5°	756.1	755.3	754.5	753.7	752.8	752.0	751.1
125°	834.1	832.9	831.7	830.5	829.4	828.1	827.0
127.5°	911.2	909.5	908.0	906.7	905.3	903.9	902.5
130°	963.2	962.1	960.4	958.3	956.2	954.1	952.0
132.5°	1013.1	1011.6	1010.1	1008.5	1006.9	1005.2	1003.6
135°	1088.2	1087.1	1086.2	1085.6	1084.9	1084.4	1083.8
137.5°	1161.5	1160.3	1159.0	1157.9	1156.8	1155.7	1154.5
140°	1210.7	1210.3	1209.2	1207.0	1205.0	1202.8	1200.8
142.5°	1255.8	1255.5	1254.5	1252.9	1251.3	1249.7	1248.1
145°	1322.2	1322.0	1321.2	1320.0	1318.8	1317.6	1316.4
147.5°	1385.3	1385.3	1384.4	1382.6	1380.8	1378.9	1377.2
150°	1424.0	1424.0	1423.1	1421.3	1419.5	1417.7	1415.9
152.5°	1459.8	1460.4	1459.8	1458.2	1456.7	1455.1	1453.6
155°	1512.3	1513.5	1513.1	1510.9	1508.9	1506.7	1504.7
157.5°	1556.8	1558.1	1557.9	1556.2	1554.5	1552.8	1551.2
160°	1584.5	1585.9	1586.1	1584.9	1583.7	1582.5	1581.3
162.5°	1610.3	1611.8	1611.6	1609.6	1607.8	1605.8	1603.9
165°	1643.2	1644.9	1644.8	1642.7	1640.7	1638.5	1636.5
167.5°	1669.7	1671.5	1671.5	1669.7	1667.9	1666.0	1664.1
170°	1684.4	1686.5	1686.5	1684.4	1682.3	1680.3	1678.1
172.5°	1695.5	1697.4	1697.3	1695.1	1693.1	1691.0	1688.9
175°	1707.7	1709.5	1709.3	1707.3	1705.1	1703.1	1701.0
177.5°	1712.8	1714.2	1714.1	1712.4	1710.7	1709.1	1707.4
180°	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7	1711.7

(END OF REPORT)