

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: P332229-935

Luminaire Tested: **S123DIW-S1165D1320U935-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332229-935
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-S1165D1320U935-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1320 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

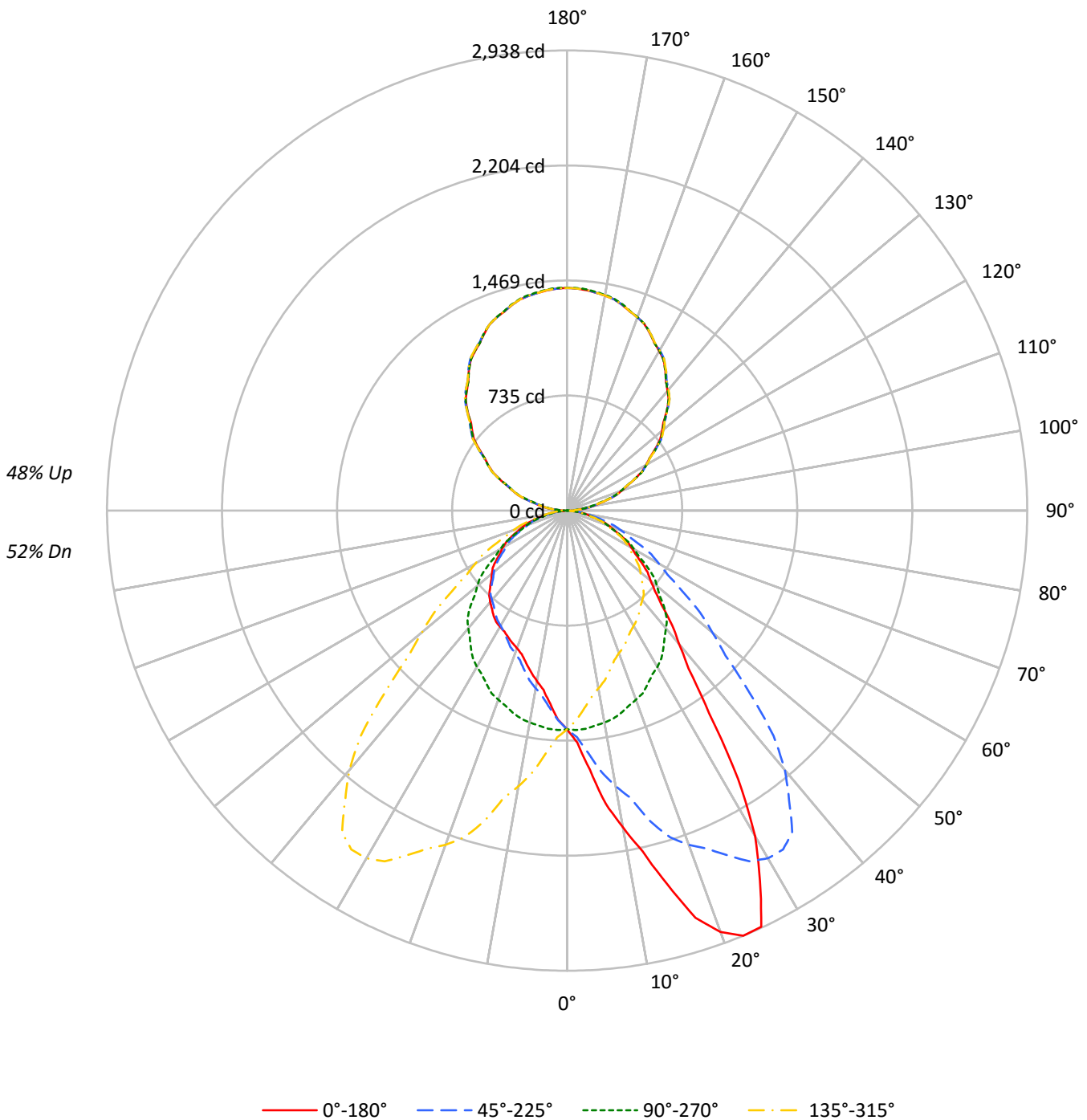
Lumens per Lamp: N/A
Luminaire Lumens: 8158.2 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52																				
1	98	94	90	87	91	87	84	81	74	72	70	62	61	59	51	50	49	44																				
2	90	83	77	72	83	77	71	67	65	62	58	55	52	50	46	44	42	37																				
3	82	73	66	60	76	68	61	56	58	53	49	49	45	42	41	38	36	32																				
4	75	65	57	51	69	60	53	48	52	46	42	44	40	37	36	34	31	28																				
5	69	58	50	44	64	54	47	41	46	41	36	39	35	32	33	30	27	24																				
6	64	52	44	38	59	48	41	36	42	36	32	36	31	28	30	27	24	21																				
7	59	47	39	33	54	44	37	32	38	32	28	32	28	25	27	24	21	19																				
8	55	42	35	29	51	40	33	28	35	29	25	30	25	22	25	22	19	17																				
9	51	39	31	26	47	36	30	25	32	26	22	27	23	20	23	20	17	15																				
10	48	36	28	24	44	33	27	22	29	24	20	25	21	18	21	18	16	14																				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15033	15033	15033	15033
5°	17928	15098	13380	15098
10°	22440	15021	12085	15021
15°	27524	14900	11251	14900
20°	32787	14712	10711	14712
25°	34815	14481	10592	14481
30°	29840	14315	10648	14315
35°	20752	14076	10759	14076
40°	15632	13797	10725	13797
45°	12979	13381	10589	13381
50°	11627	12532	10493	12532
55°	10869	11618	10363	11618
60°	10196	10663	10256	10663
65°	9584	9722	9928	9722
70°	8988	8645	9454	8645
75°	8052	7569	8667	7569
80°	7048	6205	7469	6205
85°	5521	4508	5014	4508



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.6	1.7
10°-20°	441.2	5.4
20°-30°	740.4	9.1
30°-40°	838.4	10.3
40°-50°	751.8	9.2
50°-60°	606.7	7.4
60°-70°	422.8	5.2
70°-80°	222.2	2.7
80°-90°	58.6	0.7
90°-100°	92.6	1.1
100°-110°	277.2	3.4
110°-120°	471.4	5.8
120°-130°	620.1	7.6
130°-140°	697.0	8.5
140°-150°	685.1	8.4
150°-160°	576.8	7.1
160°-170°	383.9	4.7
170°-180°	134.4	1.6
0°-30°	1319.2	16.2
0°-40°	2157.5	26.4
0°-60°	3516.1	43.1
0°-90°	4219.6	51.7
90°-120°	841.3	10.3
90°-150°	2843.5	34.9
90°-180°	3939.0	48.3
0°-180°	8158.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1397	1397	1397	1397	1397	
5°	1659	1397	1238	1397	1659	172
15°	2470	1337	1010	1337	2470	713
25°	2931	1219	892	1219	2931	1286
35°	1579	1071	819	1071	1579	1026
45°	853	879	696	879	853	675
55°	579	619	552	619	579	520
65°	376	382	390	382	376	375
75°	194	182	208	182	194	207
85°	45	36	41	36	45	54
90°	34	1	34	1	34	18
95°	87	66	87	66	87	89
105°	266	251	266	251	266	282
115°	476	475	476	475	476	471
125°	687	695	687	695	687	614
135°	900	901	900	901	900	692
145°	1093	1093	1093	1093	1093	682
155°	1250	1252	1250	1252	1250	575
165°	1359	1364	1359	1364	1359	383
175°	1413	1418	1413	1418	1413	134
180°	1422	1422	1422	1422	1422	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6
2.5°	1482.2	1481.1	1478.4	1480.6	1476.3	1470.2	1469.7	1464.3	1448.6	1447.5	1443.2
5°	1659.2	1653.8	1653.1	1652.4	1643.0	1630.1	1605.8	1603.7	1571.2	1555.0	1535.4
7.5°	1888.4	1891.3	1881.5	1872.8	1843.8	1824.7	1798.6	1765.2	1725.3	1684.8	1657.9
10°	2053.1	2075.4	2047.6	2028.7	2011.1	1977.9	1939.4	1891.3	1843.2	1787.1	1744.5
12.5°	2229.6	2240.5	2234.9	2217.1	2189.7	2139.2	2070.9	2018.0	1973.8	1880.3	1842.5
15°	2469.9	2511.2	2484.8	2423.9	2425.2	2377.1	2287.8	2189.7	2137.6	2055.7	1944.1
17.5°	2725.9	2731.1	2719.8	2669.1	2635.3	2569.2	2486.8	2392.7	2287.2	2188.1	2069.7
20°	2862.3	2858.3	2834.6	2808.2	2750.0	2698.6	2608.6	2503.7	2368.4	2271.0	2141.7
22.5°	2938.2	2931.4	2920.2	2898.0	2849.7	2794.4	2713.6	2599.0	2470.1	2335.9	2186.6
25°	2931.4	2940.1	2941.5	2935.4	2918.5	2885.4	2821.8	2730.4	2601.9	2429.3	2273.6
27.5°	2666.1	2678.6	2714.7	2746.8	2782.7	2819.2	2814.3	2769.0	2673.8	2524.8	2334.5
30°	2400.8	2373.8	2440.8	2525.4	2582.9	2684.3	2741.3	2744.6	2691.1	2563.3	2377.8
32.5°	2032.7	2062.5	2092.1	2196.2	2321.9	2435.9	2549.1	2640.2	2650.6	2565.4	2403.3
35°	1579.3	1616.6	1670.7	1724.8	1860.2	1976.6	2175.5	2348.7	2486.8	2505.1	2405.5
37.5°	1272.7	1291.1	1325.3	1379.6	1468.1	1606.2	1760.1	1979.0	2179.0	2327.8	2334.3
40°	1112.5	1117.8	1156.4	1197.7	1269.5	1383.1	1521.8	1715.4	1954.9	2162.7	2249.3
42.5°	992.3	1004.2	1020.5	1060.2	1117.3	1202.9	1331.9	1491.8	1711.3	1950.4	2119.9
45°	852.6	866.2	876.3	902.7	943.3	1000.8	1090.8	1237.0	1404.1	1651.1	1879.1
47.5°	760.3	761.4	769.0	788.8	816.5	859.6	923.3	1017.2	1170.6	1371.0	1605.1
50°	694.3	705.1	707.8	723.3	745.0	776.8	829.6	909.5	1035.4	1211.3	1426.4
52.5°	647.7	651.0	658.6	669.8	688.7	713.5	759.2	821.7	920.6	1070.5	1268.3
55°	579.2	579.2	586.7	595.5	606.3	628.6	659.1	705.1	780.2	896.6	1060.3
57.5°	515.9	519.3	524.5	527.3	536.5	551.2	576.7	611.6	667.6	757.2	887.4
60°	473.6	479.7	479.1	484.5	492.7	504.1	525.8	554.2	604.2	676.0	785.7
62.5°	436.9	436.4	436.4	442.8	450.9	461.9	476.0	500.6	543.1	606.7	700.1
65°	376.3	374.9	379.6	383.7	386.4	394.5	405.4	427.0	455.4	502.7	575.1
67.5°	322.4	318.5	321.0	322.4	327.0	333.3	343.5	356.9	379.4	417.5	472.1
70°	285.6	282.1	281.5	282.8	286.9	291.6	299.1	311.9	332.9	363.3	403.3
72.5°	247.6	245.4	245.2	248.2	250.1	253.2	258.5	270.3	286.9	309.8	347.0
75°	193.6	193.6	193.6	194.2	196.2	199.0	203.0	209.1	222.0	238.2	263.2
77.5°	145.1	144.9	144.1	144.0	147.0	148.2	149.1	154.8	162.0	173.0	191.2
80°	113.7	110.3	111.7	113.7	115.0	115.7	117.8	119.1	125.2	131.3	144.1
82.5°	84.5	81.6	81.9	85.0	85.2	85.9	88.0	89.9	92.1	97.7	104.6
85°	44.7	44.7	45.4	45.4	46.0	45.4	47.4	48.0	48.0	51.4	55.4
87.5°	22.9	21.8	22.2	22.6	22.0	22.4	22.7	23.1	23.4	23.8	23.7
90°	33.5	33.0	32.5	32.0	31.5	30.7	29.8	28.8	27.8	26.8	23.6
92.5°	45.1	45.4	45.7	46.0	46.3	46.1	45.3	44.4	43.7	42.9	41.1
95°	87.1	87.1	87.1	87.1	87.1	86.6	85.6	84.6	83.6	82.7	80.7
97.5°	134.0	134.1	134.2	134.3	134.4	133.9	132.8	131.6	130.4	129.3	127.9
100°	169.7	169.3	168.8	168.2	167.7	167.1	166.3	165.7	164.9	164.2	162.9
102.5°	206.4	206.5	206.6	206.6	206.7	206.5	205.7	204.9	204.2	203.5	201.8
105°	265.8	265.3	264.8	264.3	263.8	263.6	263.6	263.6	263.6	263.6	261.3
107.5°	327.6	328.0	328.2	328.6	328.8	328.6	327.8	327.0	326.2	325.4	324.5
110°	369.6	370.1	370.7	371.1	371.6	371.3	370.4	369.4	368.4	367.4	366.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	414.3	414.4	414.5	414.6	414.7	414.1	412.9	411.7	410.6	409.4	409.3
115°	475.7	476.0	476.2	476.5	476.7	476.7	476.5	476.2	476.0	475.7	476.2
117.5°	538.0	538.7	539.4	540.1	540.8	541.1	541.2	541.3	541.3	541.4	542.0
120°	581.8	582.3	582.8	583.3	583.8	584.2	584.4	584.6	584.9	585.1	586.4
122.5°	623.8	624.5	625.2	625.9	626.5	627.2	627.8	628.5	629.1	629.8	630.4
125°	686.7	687.8	688.7	689.7	690.8	691.7	692.8	693.7	694.7	695.7	696.2
127.5°	749.5	750.7	751.8	752.9	754.1	755.4	756.7	758.1	759.5	761.0	761.5
130°	790.7	792.4	794.1	795.8	797.5	798.9	800.0	800.9	801.9	802.9	803.7
132.5°	833.5	834.8	836.2	837.5	838.9	840.2	841.3	842.5	843.7	844.9	845.4
135°	900.1	900.5	901.0	901.6	902.1	902.8	903.8	904.7	905.8	906.7	907.0
137.5°	958.8	959.8	960.7	961.7	962.6	963.5	964.6	965.6	966.6	967.8	967.1
140°	997.2	998.9	1000.7	1002.5	1004.2	1005.1	1005.4	1005.6	1005.9	1006.2	1005.9
142.5°	1036.6	1037.8	1039.2	1040.5	1041.9	1042.7	1042.9	1043.2	1043.4	1043.7	1043.2
145°	1093.2	1094.2	1095.2	1096.2	1097.3	1097.9	1098.1	1098.3	1098.5	1098.8	1098.1
147.5°	1143.8	1145.2	1146.7	1148.2	1149.7	1150.4	1150.4	1150.4	1150.4	1150.4	1149.7
150°	1175.9	1177.3	1178.9	1180.3	1181.8	1182.6	1182.6	1182.6	1182.6	1182.6	1182.1
152.5°	1207.1	1208.4	1209.7	1211.0	1212.3	1212.7	1212.4	1211.9	1211.6	1211.2	1210.9
155°	1249.6	1251.3	1253.1	1254.8	1256.5	1256.9	1255.9	1254.9	1254.0	1252.9	1252.7
157.5°	1288.2	1289.6	1291.0	1292.4	1293.7	1294.0	1292.9	1291.8	1290.8	1289.8	1289.6
160°	1313.2	1314.2	1315.3	1316.2	1317.2	1317.1	1315.9	1314.6	1313.4	1312.1	1312.1
162.5°	1332.0	1333.6	1335.2	1336.8	1338.3	1338.5	1337.3	1336.0	1334.8	1333.5	1333.3
165°	1359.0	1360.7	1362.5	1364.3	1366.0	1366.1	1364.6	1363.1	1361.6	1360.1	1360.1
167.5°	1382.0	1383.5	1385.1	1386.6	1388.2	1388.2	1386.6	1385.1	1383.5	1382.0	1381.8
170°	1393.6	1395.3	1397.1	1398.9	1400.6	1400.6	1398.9	1397.1	1395.3	1393.6	1393.6
172.5°	1402.6	1404.3	1406.0	1407.8	1409.5	1409.6	1408.1	1406.5	1405.0	1403.4	1403.4
175°	1412.6	1414.4	1416.1	1417.8	1419.5	1419.7	1418.2	1416.7	1415.2	1413.8	1413.8
177.5°	1418.0	1419.4	1420.7	1422.1	1423.6	1423.7	1422.5	1421.3	1420.0	1418.8	1418.8
180°	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6
2.5°	1439.9	1435.6	1431.3	1423.7	1417.2	1408.0	1405.3	1402.1	1392.3	1383.7	1377.2
5°	1527.9	1511.7	1488.0	1466.4	1448.8	1425.1	1411.5	1397.3	1377.0	1358.7	1343.8
7.5°	1620.0	1588.0	1551.2	1511.4	1474.4	1438.6	1409.8	1384.1	1355.6	1328.7	1307.8
10°	1693.1	1647.0	1595.6	1540.2	1492.7	1446.7	1408.2	1374.3	1337.8	1306.0	1279.6
12.5°	1776.4	1708.2	1637.3	1569.9	1513.9	1450.0	1403.3	1360.3	1318.9	1280.6	1250.9
15°	1875.1	1788.5	1704.5	1611.9	1526.6	1446.7	1391.3	1337.1	1289.1	1249.8	1211.9
17.5°	1965.0	1866.8	1756.3	1643.5	1540.7	1446.0	1368.2	1307.1	1247.0	1198.9	1161.1
20°	2015.9	1904.2	1779.0	1661.9	1548.3	1442.7	1357.5	1284.4	1219.3	1168.6	1126.0
22.5°	2059.7	1929.1	1799.6	1674.4	1547.7	1434.0	1337.4	1262.1	1191.8	1142.1	1096.7
25°	2105.1	1948.9	1818.9	1672.1	1530.7	1412.9	1304.7	1219.3	1149.0	1090.8	1044.1
27.5°	2144.1	1947.5	1793.3	1635.4	1503.8	1385.9	1270.2	1178.8	1104.1	1040.9	993.5
30°	2170.1	1950.2	1766.8	1610.5	1477.9	1356.1	1243.7	1151.7	1073.2	1008.9	964.2
32.5°	2186.3	1948.5	1742.4	1575.9	1436.8	1329.0	1215.0	1119.7	1039.1	975.9	932.9
35°	2195.8	1936.6	1700.5	1504.3	1370.3	1265.4	1170.0	1071.2	986.6	927.7	879.0
37.5°	2176.9	1911.6	1651.7	1435.2	1288.6	1185.3	1105.0	1020.8	939.9	875.1	833.1
40°	2147.1	1895.4	1613.9	1386.6	1232.3	1132.7	1064.5	981.9	902.0	840.4	801.2
42.5°	2090.2	1862.3	1572.2	1332.4	1173.8	1074.3	1011.3	942.4	866.9	809.0	769.8
45°	1951.5	1790.4	1509.7	1251.2	1087.4	984.6	929.1	879.0	810.6	754.5	720.7
47.5°	1759.1	1682.4	1419.3	1165.5	997.3	898.4	840.7	800.4	750.4	705.1	672.6
50°	1625.4	1593.5	1358.1	1107.1	937.2	840.4	785.0	748.4	712.6	667.2	637.4
52.5°	1471.1	1490.7	1286.7	1046.4	876.1	780.9	728.7	699.6	667.1	629.8	603.9
55°	1253.9	1324.9	1163.2	944.6	785.0	694.3	644.9	619.1	600.2	572.5	550.2
57.5°	1050.5	1140.9	1029.8	839.7	695.5	617.3	569.9	541.9	529.7	515.2	497.7
60°	929.8	1019.1	934.5	769.4	635.4	560.9	519.0	495.3	483.1	473.0	458.1
62.5°	822.0	912.4	841.4	697.9	576.4	507.4	470.8	447.7	438.2	432.9	420.3
65°	674.0	751.8	704.4	586.7	492.0	431.0	397.9	381.7	372.8	370.8	362.7
67.5°	548.5	607.8	573.3	486.6	412.1	359.5	331.3	317.5	310.7	310.0	303.9
70°	466.2	521.7	495.3	416.8	352.6	311.3	286.9	274.7	270.7	270.0	266.7
72.5°	402.3	441.1	420.1	354.6	304.9	267.4	249.5	236.9	232.2	233.2	230.9
75°	297.7	326.8	314.7	269.3	229.4	205.0	190.1	182.0	178.0	180.0	177.3
77.5°	214.2	232.6	221.7	190.3	165.7	148.1	137.1	132.1	128.5	128.3	127.1
80°	161.7	172.5	166.4	147.5	127.3	112.4	103.5	100.1	98.2	97.5	96.8
82.5°	115.2	124.4	117.2	104.2	90.4	81.5	76.5	72.0	70.5	70.9	70.3
85°	58.2	61.6	58.9	50.7	45.4	41.2	38.6	36.5	35.2	35.9	34.5
87.5°	24.1	24.0	21.7	19.0	17.4	15.3	14.8	13.2	12.7	13.1	13.1
90°	20.3	17.1	13.9	11.0	8.5	6.1	3.6	1.1	3.6	6.1	8.5
92.5°	39.2	37.4	35.6	33.8	32.1	30.4	28.7	27.0	28.7	30.4	32.1
95°	78.7	76.7	74.7	72.8	71.1	69.4	67.6	65.9	67.6	69.4	71.1
97.5°	126.4	125.0	123.6	122.2	120.9	119.6	118.3	117.0	118.3	119.6	120.9
100°	161.7	160.4	159.2	157.8	156.4	154.8	153.3	151.9	153.3	154.8	156.4
102.5°	200.2	198.5	196.9	195.6	194.8	193.9	193.0	192.1	193.0	193.9	194.8
105°	259.1	256.8	254.6	253.2	252.7	252.3	251.8	251.2	251.8	252.3	252.7
107.5°	323.6	322.7	321.8	321.2	321.0	320.6	320.4	320.0	320.4	320.6	321.0
110°	366.4	365.9	365.4	364.9	364.4	363.9	363.4	362.9	363.4	363.9	364.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	409.1	409.1	409.0	408.8	408.5	408.2	407.9	407.6	407.9	408.2	408.5
115°	476.7	477.2	477.7	477.6	476.8	476.0	475.4	474.6	475.4	476.0	476.8
117.5°	542.7	543.3	544.0	544.1	543.5	543.0	542.5	542.1	542.5	543.0	543.5
120°	587.6	588.8	590.1	590.0	588.5	587.0	585.5	584.0	585.5	587.0	588.5
122.5°	631.1	631.7	632.4	632.1	631.1	630.0	628.9	627.8	628.9	630.0	631.1
125°	696.7	697.2	697.7	697.6	696.8	696.0	695.3	694.6	695.3	696.0	696.8
127.5°	762.0	762.6	763.1	762.6	761.0	759.4	757.9	756.2	757.9	759.4	761.0
130°	804.4	805.1	805.9	805.3	803.3	801.3	799.3	797.3	799.3	801.3	803.3
132.5°	846.0	846.5	847.1	846.4	844.4	842.4	840.4	838.4	840.4	842.4	844.4
135°	907.2	907.5	907.8	907.1	905.6	904.1	902.7	901.2	902.7	904.1	905.6
137.5°	966.5	965.8	965.2	964.2	962.9	961.7	960.4	959.2	960.4	961.7	962.9
140°	1005.6	1005.4	1005.1	1004.4	1003.2	1001.9	1000.7	999.4	1000.7	1001.9	1003.2
142.5°	1042.8	1042.3	1041.9	1041.0	1039.8	1038.5	1037.3	1036.0	1037.3	1038.5	1039.8
145°	1097.3	1096.6	1095.9	1095.2	1094.8	1094.2	1093.7	1093.2	1093.7	1094.2	1094.8
147.5°	1149.0	1148.3	1147.6	1146.9	1146.0	1145.0	1144.2	1143.2	1144.2	1145.0	1146.0
150°	1181.6	1181.1	1180.6	1180.1	1179.6	1179.1	1178.6	1178.1	1178.6	1179.1	1179.6
152.5°	1210.6	1210.3	1210.0	1209.4	1208.8	1208.1	1207.4	1206.7	1207.4	1208.1	1208.8
155°	1252.4	1252.2	1252.0	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8	1251.8
157.5°	1289.3	1289.2	1289.0	1289.0	1289.3	1289.6	1290.0	1290.2	1290.0	1289.6	1289.3
160°	1312.1	1312.1	1312.1	1312.3	1312.9	1313.4	1313.9	1314.3	1313.9	1313.4	1312.9
162.5°	1333.2	1333.0	1332.7	1333.0	1333.7	1334.4	1335.1	1335.8	1335.1	1334.4	1333.7
165°	1360.1	1360.1	1360.1	1360.6	1361.2	1362.0	1362.7	1363.5	1362.7	1362.0	1361.2
167.5°	1381.6	1381.4	1381.2	1381.6	1382.6	1383.6	1384.6	1385.6	1384.6	1383.6	1382.6
170°	1393.6	1393.6	1393.6	1394.1	1395.2	1396.1	1397.1	1398.1	1397.1	1396.1	1395.2
172.5°	1403.4	1403.4	1403.4	1403.9	1405.0	1405.9	1407.0	1407.9	1407.0	1405.9	1405.0
175°	1413.8	1413.8	1413.8	1414.2	1415.2	1416.3	1417.2	1418.2	1417.2	1416.3	1415.2
177.5°	1418.8	1418.8	1418.8	1419.3	1420.0	1420.8	1421.7	1422.5	1421.7	1420.8	1420.0
180°	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6
2.5°	1373.4	1369.6	1364.2	1356.1	1349.5	1339.3	1339.3	1340.9	1340.9	1340.4	1339.3
5°	1331.7	1321.5	1309.4	1295.2	1280.3	1265.4	1262.7	1257.2	1253.2	1250.5	1247.2
7.5°	1287.7	1269.7	1252.0	1232.1	1213.9	1198.9	1188.5	1179.8	1174.3	1168.4	1164.0
10°	1257.9	1235.6	1214.6	1193.7	1170.6	1152.4	1140.9	1132.7	1126.7	1121.3	1118.5
12.5°	1222.8	1197.2	1174.1	1154.2	1128.9	1110.2	1099.2	1095.4	1088.2	1076.9	1070.9
15°	1171.3	1147.6	1119.9	1089.4	1077.3	1054.3	1041.4	1035.4	1031.2	1022.4	1019.8
17.5°	1127.3	1096.3	1065.2	1042.5	1019.9	1001.2	994.0	986.4	981.0	973.9	971.7
20°	1092.2	1064.5	1036.0	1011.7	987.9	967.7	961.6	956.1	950.7	947.4	944.6
22.5°	1056.4	1028.7	1005.1	982.4	957.1	943.8	937.2	931.3	927.5	925.1	922.5
25°	1006.3	981.9	955.5	935.1	914.9	906.0	902.0	898.6	896.0	892.5	891.8
27.5°	961.3	934.8	913.3	894.4	879.9	872.5	868.6	866.9	867.5	868.7	869.5
30°	927.7	903.4	885.8	869.5	856.0	849.2	848.5	848.5	851.3	852.0	853.3
32.5°	896.9	876.8	859.3	843.5	833.3	828.6	831.2	831.2	833.4	835.2	837.6
35°	852.0	834.3	820.8	807.3	798.5	800.5	801.8	803.2	806.6	810.6	813.4
37.5°	809.0	793.8	779.6	769.1	765.1	768.7	772.0	774.8	778.7	781.9	784.5
40°	778.2	766.6	753.1	743.6	745.0	747.1	749.8	753.1	756.6	758.5	761.3
42.5°	749.5	737.4	727.2	719.3	721.2	723.8	725.4	727.2	731.1	734.8	736.3
45°	705.8	696.3	686.8	682.1	683.5	684.8	686.1	688.2	691.6	694.3	694.9
47.5°	656.7	650.1	643.7	639.0	641.2	640.7	642.5	646.8	647.8	649.5	653.2
50°	625.3	619.1	611.7	610.4	610.4	610.4	611.1	616.5	616.5	619.1	621.9
52.5°	590.6	586.7	581.9	579.5	578.4	578.4	581.3	584.0	585.0	588.8	591.6
55°	539.3	535.3	531.2	529.2	527.8	529.2	534.6	535.9	539.3	541.3	543.4
57.5°	485.9	482.8	479.5	478.4	478.1	479.9	482.8	486.9	487.8	494.0	497.1
60°	450.6	445.9	443.2	443.2	441.9	448.0	446.6	453.4	454.7	458.8	463.6
62.5°	414.4	408.0	407.0	407.0	408.9	410.6	412.5	415.5	419.0	424.1	427.8
65°	355.9	352.6	357.3	356.6	355.2	359.3	359.3	362.7	366.8	371.5	378.9
67.5°	300.6	298.9	299.2	299.2	301.3	303.6	305.5	308.4	313.3	318.3	323.2
70°	263.2	265.3	261.9	264.6	266.7	267.3	268.6	272.7	278.1	281.5	286.9
72.5°	227.0	226.8	227.2	228.3	230.3	231.5	232.9	237.5	243.5	246.3	250.6
75°	174.6	173.9	175.9	175.9	179.3	180.6	182.0	184.1	189.5	193.6	196.9
77.5°	127.5	128.3	127.9	130.2	129.2	129.5	133.7	135.8	136.3	144.3	146.0
80°	96.1	97.5	98.2	98.8	99.4	98.2	102.9	104.9	104.9	109.6	113.0
82.5°	69.1	69.8	71.6	72.2	72.4	73.8	74.1	75.7	77.3	79.3	83.8
85°	34.5	36.5	37.2	36.5	37.2	35.9	37.9	38.6	39.3	39.3	39.3
87.5°	13.0	14.1	14.3	15.4	15.6	16.7	17.0	16.0	16.3	18.1	16.0
90°	11.0	13.9	17.1	20.3	23.6	26.8	27.8	28.8	29.8	30.7	31.5
92.5°	33.8	35.6	37.4	39.2	41.1	42.9	43.7	44.4	45.3	46.1	46.3
95°	72.8	74.7	76.7	78.7	80.7	82.7	83.6	84.6	85.6	86.6	87.1
97.5°	122.2	123.6	125.0	126.4	127.9	129.3	130.4	131.6	132.8	133.9	134.4
100°	157.8	159.2	160.4	161.7	162.9	164.2	164.9	165.7	166.3	167.1	167.7
102.5°	195.6	196.9	198.5	200.2	201.8	203.5	204.2	204.9	205.7	206.5	206.7
105°	253.2	254.6	256.8	259.1	261.3	263.6	263.6	263.6	263.6	263.6	263.8
107.5°	321.2	321.8	322.7	323.6	324.5	325.4	326.2	327.0	327.8	328.6	328.8
110°	364.9	365.4	365.9	366.4	366.9	367.4	368.4	369.4	370.4	371.3	371.6



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	408.8	409.0	409.1	409.1	409.3	409.4	410.6	411.7	412.9	414.1	414.7
115°	477.6	477.7	477.2	476.7	476.2	475.7	476.0	476.2	476.5	476.7	476.7
117.5°	544.1	544.0	543.3	542.7	542.0	541.4	541.3	541.3	541.2	541.1	540.8
120°	590.0	590.1	588.8	587.6	586.4	585.1	584.9	584.6	584.4	584.2	583.8
122.5°	632.1	632.4	631.7	631.1	630.4	629.8	629.1	628.5	627.8	627.2	626.5
125°	697.6	697.7	697.2	696.7	696.2	695.7	694.7	693.7	692.8	691.7	690.8
127.5°	762.6	763.1	762.6	762.0	761.5	761.0	759.5	758.1	756.7	755.4	754.1
130°	805.3	805.9	805.1	804.4	803.7	802.9	801.9	800.9	800.0	798.9	797.5
132.5°	846.4	847.1	846.5	846.0	845.4	844.9	843.7	842.5	841.3	840.2	838.9
135°	907.1	907.8	907.5	907.2	907.0	906.7	905.8	904.7	903.8	902.8	902.1
137.5°	964.2	965.2	965.8	966.5	967.1	967.8	966.6	965.6	964.6	963.5	962.6
140°	1004.4	1005.1	1005.4	1005.6	1005.9	1006.2	1005.9	1005.6	1005.4	1005.1	1004.2
142.5°	1041.0	1041.9	1042.3	1042.8	1043.2	1043.7	1043.4	1043.2	1042.9	1042.7	1041.9
145°	1095.2	1095.9	1096.6	1097.3	1098.1	1098.8	1098.5	1098.3	1098.1	1097.9	1097.3
147.5°	1146.9	1147.6	1148.3	1149.0	1149.7	1150.4	1150.4	1150.4	1150.4	1150.4	1149.7
150°	1180.1	1180.6	1181.1	1181.6	1182.1	1182.6	1182.6	1182.6	1182.6	1182.6	1181.8
152.5°	1209.4	1210.0	1210.3	1210.6	1210.9	1211.2	1211.6	1211.9	1212.4	1212.7	1212.3
155°	1251.8	1252.0	1252.2	1252.4	1252.7	1252.9	1254.0	1254.9	1255.9	1256.9	1256.5
157.5°	1289.0	1289.0	1289.2	1289.3	1289.6	1289.8	1290.8	1291.8	1292.9	1294.0	1293.7
160°	1312.3	1312.1	1312.1	1312.1	1312.1	1312.1	1313.4	1314.6	1315.9	1317.1	1317.2
162.5°	1333.0	1332.7	1333.0	1333.2	1333.3	1333.5	1334.8	1336.0	1337.3	1338.5	1338.3
165°	1360.6	1360.1	1360.1	1360.1	1360.1	1360.1	1361.6	1363.1	1364.6	1366.1	1366.0
167.5°	1381.6	1381.2	1381.4	1381.6	1381.8	1382.0	1383.5	1385.1	1386.6	1388.2	1388.2
170°	1394.1	1393.6	1393.6	1393.6	1393.6	1393.6	1395.3	1397.1	1398.9	1400.6	1400.6
172.5°	1403.9	1403.4	1403.4	1403.4	1403.4	1403.4	1405.0	1406.5	1408.1	1409.6	1409.5
175°	1414.2	1413.8	1413.8	1413.8	1413.8	1413.8	1415.2	1416.7	1418.2	1419.7	1419.5
177.5°	1419.3	1418.8	1418.8	1418.8	1418.8	1418.8	1420.0	1421.3	1422.5	1423.7	1423.6
180°	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6
2.5°	1335.5	1335.0	1338.8	1336.0	1338.8	1335.0	1335.5	1339.3	1340.4	1340.9	1340.9
5°	1243.0	1245.1	1238.3	1238.3	1238.3	1245.1	1243.0	1247.2	1250.5	1253.2	1257.2
7.5°	1160.8	1157.8	1158.0	1154.4	1158.0	1157.8	1160.8	1164.0	1168.4	1174.3	1179.8
10°	1110.4	1106.4	1105.0	1105.7	1105.0	1106.4	1110.4	1118.5	1121.3	1126.7	1132.7
12.5°	1068.8	1067.9	1059.0	1059.1	1059.0	1067.9	1068.8	1070.9	1076.9	1088.2	1095.4
15°	1019.8	1006.9	1005.6	1009.6	1005.6	1006.9	1019.8	1019.8	1022.4	1031.2	1035.4
17.5°	970.6	963.9	964.2	962.3	964.2	963.9	970.6	971.7	973.9	981.0	986.4
20°	944.6	940.6	939.9	935.1	939.9	940.6	944.6	944.6	947.4	950.7	956.1
22.5°	920.8	919.5	919.9	914.6	919.9	919.5	920.8	922.5	925.1	927.5	931.3
25°	891.2	894.6	891.8	891.8	891.8	894.6	891.2	891.8	892.5	896.0	898.6
27.5°	871.2	871.0	869.7	869.7	869.7	871.0	871.2	869.5	868.7	867.5	866.9
30°	856.0	855.3	856.7	856.7	856.7	855.3	856.0	853.3	852.0	851.3	848.5
32.5°	840.9	841.8	842.1	842.6	842.1	841.8	840.9	837.6	835.2	833.4	831.2
35°	817.4	818.1	820.1	818.8	820.1	818.1	817.4	813.4	810.6	806.6	803.2
37.5°	785.7	788.8	788.2	789.3	788.2	788.8	785.7	784.5	781.9	778.7	774.8
40°	761.9	764.0	763.3	763.3	763.3	764.0	761.9	761.3	758.5	756.6	753.1
42.5°	737.6	739.1	737.3	736.2	737.3	739.1	737.6	736.3	734.8	731.1	727.2
45°	697.7	696.3	698.4	695.6	698.4	696.3	697.7	694.9	694.3	691.6	688.2
47.5°	653.0	654.4	654.9	656.9	654.9	654.4	653.0	653.2	649.5	647.8	646.8
50°	623.2	627.2	627.2	626.6	627.2	627.2	623.2	621.9	619.1	616.5	616.5
52.5°	594.0	595.9	598.6	598.5	598.6	595.9	594.0	591.6	588.8	585.0	584.0
55°	548.8	550.2	551.5	552.2	551.5	550.2	548.8	543.4	541.3	539.3	535.9
57.5°	502.0	501.4	504.6	505.6	504.6	501.4	502.0	497.1	494.0	487.8	486.9
60°	468.9	468.9	474.3	476.4	474.3	468.9	468.9	463.6	458.8	454.7	453.4
62.5°	433.8	435.9	441.3	438.5	441.3	435.9	433.8	427.8	424.1	419.0	415.5
65°	382.3	387.7	387.0	389.8	387.0	387.7	382.3	378.9	371.5	366.8	362.7
67.5°	328.6	332.0	336.8	337.3	336.8	332.0	328.6	323.2	318.3	313.3	308.4
70°	292.3	295.7	298.4	300.4	298.4	295.7	292.3	286.9	281.5	278.1	272.7
72.5°	257.2	258.9	265.4	262.5	265.4	258.9	257.2	250.6	246.3	243.5	237.5
75°	201.6	206.4	210.4	208.4	210.4	206.4	201.6	196.9	193.6	189.5	184.1
77.5°	149.1	153.9	155.8	154.0	155.8	153.9	149.1	146.0	144.3	136.3	135.8
80°	117.8	117.1	121.1	120.5	121.1	117.1	117.8	113.0	109.6	104.9	104.9
82.5°	86.4	85.7	87.6	88.0	87.6	85.7	86.4	83.8	79.3	77.3	75.7
85°	41.9	44.0	41.2	40.6	41.2	44.0	41.9	39.3	39.3	39.3	38.6
87.5°	16.2	16.3	15.8	15.3	15.8	16.3	16.2	16.0	18.1	16.3	16.0
90°	32.0	32.5	33.0	33.5	33.0	32.5	32.0	31.5	30.7	29.8	28.8
92.5°	46.0	45.7	45.4	45.1	45.4	45.7	46.0	46.3	46.1	45.3	44.4
95°	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	86.6	85.6	84.6
97.5°	134.3	134.2	134.1	134.0	134.1	134.2	134.3	134.4	133.9	132.8	131.6
100°	168.2	168.8	169.3	169.7	169.3	168.8	168.2	167.7	167.1	166.3	165.7
102.5°	206.6	206.6	206.5	206.4	206.5	206.6	206.6	206.7	206.5	205.7	204.9
105°	264.3	264.8	265.3	265.8	265.3	264.8	264.3	263.8	263.6	263.6	263.6
107.5°	328.6	328.2	328.0	327.6	328.0	328.2	328.6	328.8	328.6	327.8	327.0
110°	371.1	370.7	370.1	369.6	370.1	370.7	371.1	371.6	371.3	370.4	369.4



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	414.6	414.5	414.4	414.3	414.4	414.5	414.6	414.7	414.1	412.9	411.7
115°	476.5	476.2	476.0	475.7	476.0	476.2	476.5	476.7	476.7	476.5	476.2
117.5°	540.1	539.4	538.7	538.0	538.7	539.4	540.1	540.8	541.1	541.2	541.3
120°	583.3	582.8	582.3	581.8	582.3	582.8	583.3	583.8	584.2	584.4	584.6
122.5°	625.9	625.2	624.5	623.8	624.5	625.2	625.9	626.5	627.2	627.8	628.5
125°	689.7	688.7	687.8	686.7	687.8	688.7	689.7	690.8	691.7	692.8	693.7
127.5°	752.9	751.8	750.7	749.5	750.7	751.8	752.9	754.1	755.4	756.7	758.1
130°	795.8	794.1	792.4	790.7	792.4	794.1	795.8	797.5	798.9	800.0	800.9
132.5°	837.5	836.2	834.8	833.5	834.8	836.2	837.5	838.9	840.2	841.3	842.5
135°	901.6	901.0	900.5	900.1	900.5	901.0	901.6	902.1	902.8	903.8	904.7
137.5°	961.7	960.7	959.8	958.8	959.8	960.7	961.7	962.6	963.5	964.6	965.6
140°	1002.5	1000.7	998.9	997.2	998.9	1000.7	1002.5	1004.2	1005.1	1005.4	1005.6
142.5°	1040.5	1039.2	1037.8	1036.6	1037.8	1039.2	1040.5	1041.9	1042.7	1042.9	1043.2
145°	1096.2	1095.2	1094.2	1093.2	1094.2	1095.2	1096.2	1097.3	1097.9	1098.1	1098.3
147.5°	1148.2	1146.7	1145.2	1143.8	1145.2	1146.7	1148.2	1149.7	1150.4	1150.4	1150.4
150°	1180.3	1178.9	1177.3	1175.9	1177.3	1178.9	1180.3	1181.8	1182.6	1182.6	1182.6
152.5°	1211.0	1209.7	1208.4	1207.1	1208.4	1209.7	1211.0	1212.3	1212.7	1212.4	1211.9
155°	1254.8	1253.1	1251.3	1249.6	1251.3	1253.1	1254.8	1256.5	1256.9	1255.9	1254.9
157.5°	1292.4	1291.0	1289.6	1288.2	1289.6	1291.0	1292.4	1293.7	1294.0	1292.9	1291.8
160°	1316.2	1315.3	1314.2	1313.2	1314.2	1315.3	1316.2	1317.2	1317.1	1315.9	1314.6
162.5°	1336.8	1335.2	1333.6	1332.0	1333.6	1335.2	1336.8	1338.3	1338.5	1337.3	1336.0
165°	1364.3	1362.5	1360.7	1359.0	1360.7	1362.5	1364.3	1366.0	1366.1	1364.6	1363.1
167.5°	1386.6	1385.1	1383.5	1382.0	1383.5	1385.1	1386.6	1388.2	1388.2	1386.6	1385.1
170°	1398.9	1397.1	1395.3	1393.6	1395.3	1397.1	1398.9	1400.6	1400.6	1398.9	1397.1
172.5°	1407.8	1406.0	1404.3	1402.6	1404.3	1406.0	1407.8	1409.5	1409.6	1408.1	1406.5
175°	1417.8	1416.1	1414.4	1412.6	1414.4	1416.1	1417.8	1419.5	1419.7	1418.2	1416.7
177.5°	1422.1	1420.7	1419.4	1418.0	1419.4	1420.7	1422.1	1423.6	1423.7	1422.5	1421.3
180°	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6
2.5°	1339.3	1339.3	1349.5	1356.1	1364.2	1369.6	1373.4	1377.2	1383.7	1392.3	1402.1
5°	1262.7	1265.4	1280.3	1295.2	1309.4	1321.5	1331.7	1343.8	1358.7	1377.0	1397.3
7.5°	1188.5	1198.9	1213.9	1232.1	1252.0	1269.7	1287.7	1307.8	1328.7	1355.6	1384.1
10°	1140.9	1152.4	1170.6	1193.7	1214.6	1235.6	1257.9	1279.6	1306.0	1337.8	1374.3
12.5°	1099.2	1110.2	1128.9	1154.2	1174.1	1197.2	1222.8	1250.9	1280.6	1318.9	1360.3
15°	1041.4	1054.3	1077.3	1089.4	1119.9	1147.6	1171.3	1211.9	1249.8	1289.1	1337.1
17.5°	994.0	1001.2	1019.9	1042.5	1065.2	1096.3	1127.3	1161.1	1198.9	1247.0	1307.1
20°	961.6	967.7	987.9	1011.7	1036.0	1064.5	1092.2	1126.0	1168.6	1219.3	1284.4
22.5°	937.2	943.8	957.1	982.4	1005.1	1028.7	1056.4	1096.7	1142.1	1191.8	1262.1
25°	902.0	906.0	914.9	935.1	955.5	981.9	1006.3	1044.1	1090.8	1149.0	1219.3
27.5°	868.6	872.5	879.9	894.4	913.3	934.8	961.3	993.5	1040.9	1104.1	1178.8
30°	848.5	849.2	856.0	869.5	885.8	903.4	927.7	964.2	1008.9	1073.2	1151.7
32.5°	831.2	828.6	833.3	843.5	859.3	876.8	896.9	932.9	975.9	1039.1	1119.7
35°	801.8	800.5	798.5	807.3	820.8	834.3	852.0	879.0	927.7	986.6	1071.2
37.5°	772.0	768.7	765.1	769.1	779.6	793.8	809.0	833.1	875.1	939.9	1020.8
40°	749.8	747.1	745.0	743.6	753.1	766.6	778.2	801.2	840.4	902.0	981.9
42.5°	725.4	723.8	721.2	719.3	727.2	737.4	749.5	769.8	809.0	866.9	942.4
45°	686.1	684.8	683.5	682.1	686.8	696.3	705.8	720.7	754.5	810.6	879.0
47.5°	642.5	640.7	641.2	639.0	643.7	650.1	656.7	672.6	705.1	750.4	800.4
50°	611.1	610.4	610.4	610.4	611.7	619.1	625.3	637.4	667.2	712.6	748.4
52.5°	581.3	578.4	578.4	579.5	581.9	586.7	590.6	603.9	629.8	667.1	699.6
55°	534.6	529.2	527.8	529.2	531.2	535.3	539.3	550.2	572.5	600.2	619.1
57.5°	482.8	479.9	478.1	478.4	479.5	482.8	485.9	497.7	515.2	529.7	541.9
60°	446.6	448.0	441.9	443.2	443.2	445.9	450.6	458.1	473.0	483.1	495.3
62.5°	412.5	410.6	408.9	407.0	407.0	408.0	414.4	420.3	432.9	438.2	447.7
65°	359.3	359.3	355.2	356.6	357.3	352.6	355.9	362.7	370.8	372.8	381.7
67.5°	305.5	303.6	301.3	299.2	299.2	298.9	300.6	303.9	310.0	310.7	317.5
70°	268.6	267.3	266.7	264.6	261.9	265.3	263.2	266.7	270.0	270.7	274.7
72.5°	232.9	231.5	230.3	228.3	227.2	226.8	227.0	230.9	233.2	232.2	236.9
75°	182.0	180.6	179.3	175.9	175.9	173.9	174.6	177.3	180.0	178.0	182.0
77.5°	133.7	129.5	129.2	130.2	127.9	128.3	127.5	127.1	128.3	128.5	132.1
80°	102.9	98.2	99.4	98.8	98.2	97.5	96.1	96.8	97.5	98.2	100.1
82.5°	74.1	73.8	72.4	72.2	71.6	69.8	69.1	70.3	70.9	70.5	72.0
85°	37.9	35.9	37.2	36.5	37.2	36.5	34.5	34.5	35.9	35.2	36.5
87.5°	17.0	16.7	15.6	15.4	14.3	14.1	13.0	13.1	13.1	12.7	13.2
90°	27.8	26.8	23.6	20.3	17.1	13.9	11.0	8.5	6.1	3.6	1.1
92.5°	43.7	42.9	41.1	39.2	37.4	35.6	33.8	32.1	30.4	28.7	27.0
95°	83.6	82.7	80.7	78.7	76.7	74.7	72.8	71.1	69.4	67.6	65.9
97.5°	130.4	129.3	127.9	126.4	125.0	123.6	122.2	120.9	119.6	118.3	117.0
100°	164.9	164.2	162.9	161.7	160.4	159.2	157.8	156.4	154.8	153.3	151.9
102.5°	204.2	203.5	201.8	200.2	198.5	196.9	195.6	194.8	193.9	193.0	192.1
105°	263.6	263.6	261.3	259.1	256.8	254.6	253.2	252.7	252.3	251.8	251.2
107.5°	326.2	325.4	324.5	323.6	322.7	321.8	321.2	321.0	320.6	320.4	320.0
110°	368.4	367.4	366.9	366.4	365.9	365.4	364.9	364.4	363.9	363.4	362.9



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	410.6	409.4	409.3	409.1	409.1	409.0	408.8	408.5	408.2	407.9	407.6
115°	476.0	475.7	476.2	476.7	477.2	477.7	477.6	476.8	476.0	475.4	474.6
117.5°	541.3	541.4	542.0	542.7	543.3	544.0	544.1	543.5	543.0	542.5	542.1
120°	584.9	585.1	586.4	587.6	588.8	590.1	590.0	588.5	587.0	585.5	584.0
122.5°	629.1	629.8	630.4	631.1	631.7	632.4	632.1	631.1	630.0	628.9	627.8
125°	694.7	695.7	696.2	696.7	697.2	697.7	697.6	696.8	696.0	695.3	694.6
127.5°	759.5	761.0	761.5	762.0	762.6	763.1	762.6	761.0	759.4	757.9	756.2
130°	801.9	802.9	803.7	804.4	805.1	805.9	805.3	803.3	801.3	799.3	797.3
132.5°	843.7	844.9	845.4	846.0	846.5	847.1	846.4	844.4	842.4	840.4	838.4
135°	905.8	906.7	907.0	907.2	907.5	907.8	907.1	905.6	904.1	902.7	901.2
137.5°	966.6	967.8	967.1	966.5	965.8	965.2	964.2	962.9	961.7	960.4	959.2
140°	1005.9	1006.2	1005.9	1005.6	1005.4	1005.1	1004.4	1003.2	1001.9	1000.7	999.4
142.5°	1043.4	1043.7	1043.2	1042.8	1042.3	1041.9	1041.0	1039.8	1038.5	1037.3	1036.0
145°	1098.5	1098.8	1098.1	1097.3	1096.6	1095.9	1095.2	1094.8	1094.2	1093.7	1093.2
147.5°	1150.4	1150.4	1149.7	1149.0	1148.3	1147.6	1146.9	1146.0	1145.0	1144.2	1143.2
150°	1182.6	1182.6	1182.1	1181.6	1181.1	1180.6	1180.1	1179.6	1179.1	1178.6	1178.1
152.5°	1211.6	1211.2	1210.9	1210.6	1210.3	1210.0	1209.4	1208.8	1208.1	1207.4	1206.7
155°	1254.0	1252.9	1252.7	1252.4	1252.2	1252.0	1251.8	1251.8	1251.8	1251.8	1251.8
157.5°	1290.8	1289.8	1289.6	1289.3	1289.2	1289.0	1289.0	1289.3	1289.6	1290.0	1290.2
160°	1313.4	1312.1	1312.1	1312.1	1312.1	1312.1	1312.3	1312.9	1313.4	1313.9	1314.3
162.5°	1334.8	1333.5	1333.3	1333.2	1333.0	1332.7	1333.0	1333.7	1334.4	1335.1	1335.8
165°	1361.6	1360.1	1360.1	1360.1	1360.1	1360.1	1360.6	1361.2	1362.0	1362.7	1363.5
167.5°	1383.5	1382.0	1381.8	1381.6	1381.4	1381.2	1381.6	1382.6	1383.6	1384.6	1385.6
170°	1395.3	1393.6	1393.6	1393.6	1393.6	1393.6	1394.1	1395.2	1396.1	1397.1	1398.1
172.5°	1405.0	1403.4	1403.4	1403.4	1403.4	1403.4	1403.9	1405.0	1405.9	1407.0	1407.9
175°	1415.2	1413.8	1413.8	1413.8	1413.8	1413.8	1414.2	1415.2	1416.3	1417.2	1418.2
177.5°	1420.0	1418.8	1418.8	1418.8	1418.8	1418.8	1419.3	1420.0	1420.8	1421.7	1422.5
180°	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6
2.5°	1405.3	1408.0	1417.2	1423.7	1431.3	1435.6	1439.9	1443.2	1447.5	1448.6	1464.3
5°	1411.5	1425.1	1448.8	1466.4	1488.0	1511.7	1527.9	1535.4	1555.0	1571.2	1603.7
7.5°	1409.8	1438.6	1474.4	1511.4	1551.2	1588.0	1620.0	1657.9	1684.8	1725.3	1765.2
10°	1408.2	1446.7	1492.7	1540.2	1595.6	1647.0	1693.1	1744.5	1787.1	1843.2	1891.3
12.5°	1403.3	1450.0	1513.9	1569.9	1637.3	1708.2	1776.4	1842.5	1880.3	1973.8	2018.0
15°	1391.3	1446.7	1526.6	1611.9	1704.5	1788.5	1875.1	1944.1	2055.7	2137.6	2189.7
17.5°	1368.2	1446.0	1540.7	1643.5	1756.3	1866.8	1965.0	2069.7	2188.1	2287.2	2392.7
20°	1357.5	1442.7	1548.3	1661.9	1779.0	1904.2	2015.9	2141.7	2271.0	2368.4	2503.7
22.5°	1337.4	1434.0	1547.7	1674.4	1799.6	1929.1	2059.7	2186.6	2335.9	2470.1	2599.0
25°	1304.7	1412.9	1530.7	1672.1	1818.9	1948.9	2105.1	2273.6	2429.3	2601.9	2730.4
27.5°	1270.2	1385.9	1503.8	1635.4	1793.3	1947.5	2144.1	2334.5	2524.8	2673.8	2769.0
30°	1243.7	1356.1	1477.9	1610.5	1766.8	1950.2	2170.1	2377.8	2563.3	2691.1	2744.6
32.5°	1215.0	1329.0	1436.8	1575.9	1742.4	1948.5	2186.3	2403.3	2565.4	2650.6	2640.2
35°	1170.0	1265.4	1370.3	1504.3	1700.5	1936.6	2195.8	2405.5	2505.1	2486.8	2348.7
37.5°	1105.0	1185.3	1288.6	1435.2	1651.7	1911.6	2176.9	2334.3	2327.8	2179.0	1979.0
40°	1064.5	1132.7	1232.3	1386.6	1613.9	1895.4	2147.1	2249.3	2162.7	1954.9	1715.4
42.5°	1011.3	1074.3	1173.8	1332.4	1572.2	1862.3	2090.2	2119.9	1950.4	1711.3	1491.8
45°	929.1	984.6	1087.4	1251.2	1509.7	1790.4	1951.5	1879.1	1651.1	1404.1	1237.0
47.5°	840.7	898.4	997.3	1165.5	1419.3	1682.4	1759.1	1605.1	1371.0	1170.6	1017.2
50°	785.0	840.4	937.2	1107.1	1358.1	1593.5	1625.4	1426.4	1211.3	1035.4	909.5
52.5°	728.7	780.9	876.1	1046.4	1286.7	1490.7	1471.1	1268.3	1070.5	920.6	821.7
55°	644.9	694.3	785.0	944.6	1163.2	1324.9	1253.9	1060.3	896.6	780.2	705.1
57.5°	569.9	617.3	695.5	839.7	1029.8	1140.9	1050.5	887.4	757.2	667.6	611.6
60°	519.0	560.9	635.4	769.4	934.5	1019.1	929.8	785.7	676.0	604.2	554.2
62.5°	470.8	507.4	576.4	697.9	841.4	912.4	822.0	700.1	606.7	543.1	500.6
65°	397.9	431.0	492.0	586.7	704.4	751.8	674.0	575.1	502.7	455.4	427.0
67.5°	331.3	359.5	412.1	486.6	573.3	607.8	548.5	472.1	417.5	379.4	356.9
70°	286.9	311.3	352.6	416.8	495.3	521.7	466.2	403.3	363.3	332.9	311.9
72.5°	249.5	267.4	304.9	354.6	420.1	441.1	402.3	347.0	309.8	286.9	270.3
75°	190.1	205.0	229.4	269.3	314.7	326.8	297.7	263.2	238.2	222.0	209.1
77.5°	137.1	148.1	165.7	190.3	221.7	232.6	214.2	191.2	173.0	162.0	154.8
80°	103.5	112.4	127.3	147.5	166.4	172.5	161.7	144.1	131.3	125.2	119.1
82.5°	76.5	81.5	90.4	104.2	117.2	124.4	115.2	104.6	97.7	92.1	89.9
85°	38.6	41.2	45.4	50.7	58.9	61.6	58.2	55.4	51.4	48.0	48.0
87.5°	14.8	15.3	17.4	19.0	21.7	24.0	24.1	23.7	23.8	23.4	23.1
90°	3.6	6.1	8.5	11.0	13.9	17.1	20.3	23.6	26.8	27.8	28.8
92.5°	28.7	30.4	32.1	33.8	35.6	37.4	39.2	41.1	42.9	43.7	44.4
95°	67.6	69.4	71.1	72.8	74.7	76.7	78.7	80.7	82.7	83.6	84.6
97.5°	118.3	119.6	120.9	122.2	123.6	125.0	126.4	127.9	129.3	130.4	131.6
100°	153.3	154.8	156.4	157.8	159.2	160.4	161.7	162.9	164.2	164.9	165.7
102.5°	193.0	193.9	194.8	195.6	196.9	198.5	200.2	201.8	203.5	204.2	204.9
105°	251.8	252.3	252.7	253.2	254.6	256.8	259.1	261.3	263.6	263.6	263.6
107.5°	320.4	320.6	321.0	321.2	321.8	322.7	323.6	324.5	325.4	326.2	327.0
110°	363.4	363.9	364.4	364.9	365.4	365.9	366.4	366.9	367.4	368.4	369.4



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	407.9	408.2	408.5	408.8	409.0	409.1	409.1	409.3	409.4	410.6	411.7
115°	475.4	476.0	476.8	477.6	477.7	477.2	476.7	476.2	475.7	476.0	476.2
117.5°	542.5	543.0	543.5	544.1	544.0	543.3	542.7	542.0	541.4	541.3	541.3
120°	585.5	587.0	588.5	590.0	590.1	588.8	587.6	586.4	585.1	584.9	584.6
122.5°	628.9	630.0	631.1	632.1	632.4	631.7	631.1	630.4	629.8	629.1	628.5
125°	695.3	696.0	696.8	697.6	697.7	697.2	696.7	696.2	695.7	694.7	693.7
127.5°	757.9	759.4	761.0	762.6	763.1	762.6	762.0	761.5	761.0	759.5	758.1
130°	799.3	801.3	803.3	805.3	805.9	805.1	804.4	803.7	802.9	801.9	800.9
132.5°	840.4	842.4	844.4	846.4	847.1	846.5	846.0	845.4	844.9	843.7	842.5
135°	902.7	904.1	905.6	907.1	907.8	907.5	907.2	907.0	906.7	905.8	904.7
137.5°	960.4	961.7	962.9	964.2	965.2	965.8	966.5	967.1	967.8	966.6	965.6
140°	1000.7	1001.9	1003.2	1004.4	1005.1	1005.4	1005.6	1005.9	1006.2	1005.9	1005.6
142.5°	1037.3	1038.5	1039.8	1041.0	1041.9	1042.3	1042.8	1043.2	1043.7	1043.4	1043.2
145°	1093.7	1094.2	1094.8	1095.2	1095.9	1096.6	1097.3	1098.1	1098.8	1098.5	1098.3
147.5°	1144.2	1145.0	1146.0	1146.9	1147.6	1148.3	1149.0	1149.7	1150.4	1150.4	1150.4
150°	1178.6	1179.1	1179.6	1180.1	1180.6	1181.1	1181.6	1182.1	1182.6	1182.6	1182.6
152.5°	1207.4	1208.1	1208.8	1209.4	1210.0	1210.3	1210.6	1210.9	1211.2	1211.6	1211.9
155°	1251.8	1251.8	1251.8	1251.8	1252.0	1252.2	1252.4	1252.7	1252.9	1254.0	1254.9
157.5°	1290.0	1289.6	1289.3	1289.0	1289.0	1289.2	1289.3	1289.6	1289.8	1290.8	1291.8
160°	1313.9	1313.4	1312.9	1312.3	1312.1	1312.1	1312.1	1312.1	1312.1	1313.4	1314.6
162.5°	1335.1	1334.4	1333.7	1333.0	1332.7	1333.0	1333.2	1333.3	1333.5	1334.8	1336.0
165°	1362.7	1362.0	1361.2	1360.6	1360.1	1360.1	1360.1	1360.1	1360.1	1361.6	1363.1
167.5°	1384.6	1383.6	1382.6	1381.6	1381.2	1381.4	1381.6	1381.8	1382.0	1383.5	1385.1
170°	1397.1	1396.1	1395.2	1394.1	1393.6	1393.6	1393.6	1393.6	1393.6	1395.3	1397.1
172.5°	1407.0	1405.9	1405.0	1403.9	1403.4	1403.4	1403.4	1403.4	1403.4	1405.0	1406.5
175°	1417.2	1416.3	1415.2	1414.2	1413.8	1413.8	1413.8	1413.8	1413.8	1415.2	1416.7
177.5°	1421.7	1420.8	1420.0	1419.3	1418.8	1418.8	1418.8	1418.8	1418.8	1420.0	1421.3
180°	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6
2.5°	1469.7	1470.2	1476.3	1480.6	1478.4	1481.1	1482.2
5°	1605.8	1630.1	1643.0	1652.4	1653.1	1653.8	1659.2
7.5°	1798.6	1824.7	1843.8	1872.8	1881.5	1891.3	1888.4
10°	1939.4	1977.9	2011.1	2028.7	2047.6	2075.4	2053.1
12.5°	2070.9	2139.2	2189.7	2217.1	2234.9	2240.5	2229.6
15°	2287.8	2377.1	2425.2	2423.9	2484.8	2511.2	2469.9
17.5°	2486.8	2569.2	2635.3	2669.1	2719.8	2731.1	2725.9
20°	2608.6	2698.6	2750.0	2808.2	2834.6	2858.3	2862.3
22.5°	2713.6	2794.4	2849.7	2898.0	2920.2	2931.4	2938.2
25°	2821.8	2885.4	2918.5	2935.4	2941.5	2940.1	2931.4
27.5°	2814.3	2819.2	2782.7	2746.8	2714.7	2678.6	2666.1
30°	2741.3	2684.3	2582.9	2525.4	2440.8	2373.8	2400.8
32.5°	2549.1	2435.9	2321.9	2196.2	2092.1	2062.5	2032.7
35°	2175.5	1976.6	1860.2	1724.8	1670.7	1616.6	1579.3
37.5°	1760.1	1606.2	1468.1	1379.6	1325.3	1291.1	1272.7
40°	1521.8	1383.1	1269.5	1197.7	1156.4	1117.8	1112.5
42.5°	1331.9	1202.9	1117.3	1060.2	1020.5	1004.2	992.3
45°	1090.8	1000.8	943.3	902.7	876.3	866.2	852.6
47.5°	923.3	859.6	816.5	788.8	769.0	761.4	760.3
50°	829.6	776.8	745.0	723.3	707.8	705.1	694.3
52.5°	759.2	713.5	688.7	669.8	658.6	651.0	647.7
55°	659.1	628.6	606.3	595.5	586.7	579.2	579.2
57.5°	576.7	551.2	536.5	527.3	524.5	519.3	515.9
60°	525.8	504.1	492.7	484.5	479.1	479.7	473.6
62.5°	476.0	461.9	450.9	442.8	436.4	436.4	436.9
65°	405.4	394.5	386.4	383.7	379.6	374.9	376.3
67.5°	343.5	333.3	327.0	322.4	321.0	318.5	322.4
70°	299.1	291.6	286.9	282.8	281.5	282.1	285.6
72.5°	258.5	253.2	250.1	248.2	245.2	245.4	247.6
75°	203.0	199.0	196.2	194.2	193.6	193.6	193.6
77.5°	149.1	148.2	147.0	144.0	144.1	144.9	145.1
80°	117.8	115.7	115.0	113.7	111.7	110.3	113.7
82.5°	88.0	85.9	85.2	85.0	81.9	81.6	84.5
85°	47.4	45.4	46.0	45.4	45.4	44.7	44.7
87.5°	22.7	22.4	22.0	22.6	22.2	21.8	22.9
90°	29.8	30.7	31.5	32.0	32.5	33.0	33.5
92.5°	45.3	46.1	46.3	46.0	45.7	45.4	45.1
95°	85.6	86.6	87.1	87.1	87.1	87.1	87.1
97.5°	132.8	133.9	134.4	134.3	134.2	134.1	134.0
100°	166.3	167.1	167.7	168.2	168.8	169.3	169.7
102.5°	205.7	206.5	206.7	206.6	206.6	206.5	206.4
105°	263.6	263.6	263.8	264.3	264.8	265.3	265.8
107.5°	327.8	328.6	328.8	328.6	328.2	328.0	327.6
110°	370.4	371.3	371.6	371.1	370.7	370.1	369.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	412.9	414.1	414.7	414.6	414.5	414.4	414.3
115°	476.5	476.7	476.7	476.5	476.2	476.0	475.7
117.5°	541.2	541.1	540.8	540.1	539.4	538.7	538.0
120°	584.4	584.2	583.8	583.3	582.8	582.3	581.8
122.5°	627.8	627.2	626.5	625.9	625.2	624.5	623.8
125°	692.8	691.7	690.8	689.7	688.7	687.8	686.7
127.5°	756.7	755.4	754.1	752.9	751.8	750.7	749.5
130°	800.0	798.9	797.5	795.8	794.1	792.4	790.7
132.5°	841.3	840.2	838.9	837.5	836.2	834.8	833.5
135°	903.8	902.8	902.1	901.6	901.0	900.5	900.1
137.5°	964.6	963.5	962.6	961.7	960.7	959.8	958.8
140°	1005.4	1005.1	1004.2	1002.5	1000.7	998.9	997.2
142.5°	1042.9	1042.7	1041.9	1040.5	1039.2	1037.8	1036.6
145°	1098.1	1097.9	1097.3	1096.2	1095.2	1094.2	1093.2
147.5°	1150.4	1150.4	1149.7	1148.2	1146.7	1145.2	1143.8
150°	1182.6	1182.6	1181.8	1180.3	1178.9	1177.3	1175.9
152.5°	1212.4	1212.7	1212.3	1211.0	1209.7	1208.4	1207.1
155°	1255.9	1256.9	1256.5	1254.8	1253.1	1251.3	1249.6
157.5°	1292.9	1294.0	1293.7	1292.4	1291.0	1289.6	1288.2
160°	1315.9	1317.1	1317.2	1316.2	1315.3	1314.2	1313.2
162.5°	1337.3	1338.5	1338.3	1336.8	1335.2	1333.6	1332.0
165°	1364.6	1366.1	1366.0	1364.3	1362.5	1360.7	1359.0
167.5°	1386.6	1388.2	1388.2	1386.6	1385.1	1383.5	1382.0
170°	1398.9	1400.6	1400.6	1398.9	1397.1	1395.3	1393.6
172.5°	1408.1	1409.6	1409.5	1407.8	1406.0	1404.3	1402.6
175°	1418.2	1419.7	1419.5	1417.8	1416.1	1414.4	1412.6
177.5°	1422.5	1423.7	1423.6	1422.1	1420.7	1419.4	1418.0
180°	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6

(END OF REPORT)