

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: P332223-935

Luminaire Tested: **S123DIW-S1165D1030U935-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332223-935
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-S1165D1030U935-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1030 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

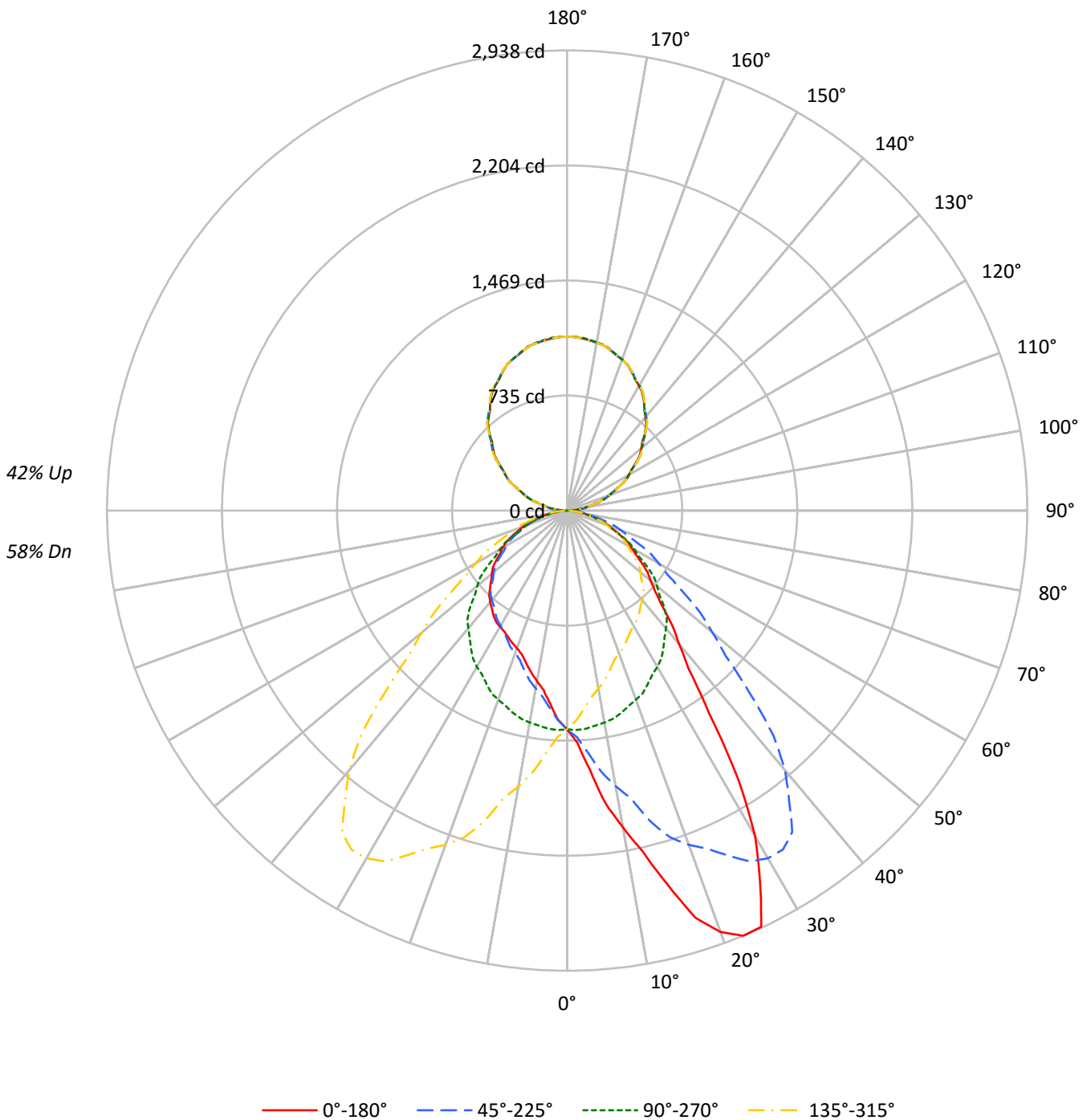
Lumens per Lamp: N/A
Luminaire Lumens: 7295.3 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 67.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	100	96	92	88	93	89	86	83	77	75	73	67	65	63	56	55	54	49
2	91	84	78	73	85	78	73	69	68	64	61	59	56	53	50	48	46	42
3	83	74	67	61	77	69	63	58	60	55	51	52	48	45	45	42	39	36
4	76	66	58	52	71	62	55	49	54	48	44	47	42	39	40	37	34	31
5	70	59	51	45	65	55	48	42	48	43	38	42	38	34	36	33	30	27
6	65	53	45	39	60	50	42	37	44	38	33	38	33	30	33	29	26	24
7	60	48	40	34	56	45	38	33	40	34	29	35	30	27	30	26	24	21
8	56	43	36	30	52	41	34	29	36	30	26	32	27	24	28	24	21	19
9	52	40	32	27	48	37	31	26	33	28	24	29	25	21	25	22	19	17
10	48	36	29	24	45	34	28	23	31	25	21	27	22	19	24	20	17	15

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	1.9
10°-20°	441.2	6.0
20°-30°	740.4	10.1
30°-40°	838.4	11.5
40°-50°	751.8	10.3
50°-60°	606.7	8.3
60°-70°	422.8	5.8
70°-80°	222.2	3.0
80°-90°	57.6	0.8
90°-100°	72.4	1.0
100°-110°	216.5	3.0
110°-120°	368.3	5.0
120°-130°	484.4	6.6
130°-140°	544.4	7.5
140°-150°	535.2	7.3
150°-160°	450.5	6.2
160°-170°	299.9	4.1
170°-180°	105.0	1.4
0°-30°	1319.2	18.1
0°-40°	2157.5	29.6
0°-60°	3516.1	48.2
0°-90°	4218.7	57.8
90°-120°	657.1	9.0
90°-150°	2221.1	30.4
90°-180°	3077.0	42.2
0°-180°	7295.3	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	53
90°	26	1	26	1	26	15
95°	68	52	68	52	68	70
105°	208	196	208	196	208	220
115°	372	371	372	371	372	368
125°	536	543	536	543	536	480
135°	703	704	703	704	703	541
145°	854	854	854	854	854	533
155°	976	978	976	978	976	449
165°	1062	1065	1062	1065	1062	299
175°	1104	1108	1104	1108	1104	105
180°	1110	1110	1110	1110	1110	



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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°	21.4	20.3	20.8	21.3	20.7	21.0	21.4	21.8	22.2	22.6	22.6
90°	26.2	25.7	25.4	25.0	24.6	24.0	23.2	22.5	21.7	20.9	18.4
92.5°	35.2	35.5	35.7	35.9	36.2	36.0	35.4	34.7	34.1	33.5	32.0
95°	68.0	68.0	68.0	68.0	68.0	67.7	66.9	66.1	65.3	64.6	63.0
97.5°	104.7	104.8	104.9	104.9	105.0	104.6	103.7	102.8	101.9	101.0	99.9
100°	132.6	132.2	131.8	131.4	131.0	130.5	130.0	129.4	128.8	128.2	127.3
102.5°	161.2	161.3	161.4	161.4	161.5	161.3	160.7	160.1	159.5	158.9	157.6
105°	207.6	207.2	206.8	206.5	206.0	205.9	205.9	205.9	205.9	205.9	204.1
107.5°	255.9	256.1	256.4	256.7	256.8	256.7	256.1	255.5	254.8	254.2	253.5
110°	288.7	289.1	289.5	289.9	290.2	290.1	289.3	288.5	287.7	287.0	286.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	323.6	323.7	323.7	323.8	323.9	323.5	322.5	321.7	320.7	319.8	319.7
115°	371.6	371.8	372.0	372.2	372.4	372.4	372.2	372.0	371.8	371.6	372.0
117.5°	420.3	420.8	421.4	421.9	422.4	422.8	422.8	422.8	422.8	422.9	423.4
120°	454.4	454.9	455.2	455.6	456.0	456.3	456.5	456.7	456.8	457.1	458.1
122.5°	487.2	487.8	488.4	488.9	489.4	490.0	490.4	490.9	491.5	492.0	492.5
125°	536.5	537.3	538.0	538.8	539.6	540.4	541.1	541.9	542.7	543.5	543.8
127.5°	585.5	586.3	587.3	588.1	589.0	590.0	591.2	592.2	593.3	594.3	594.8
130°	617.6	619.0	620.3	621.6	623.0	624.1	624.8	625.6	626.4	627.2	627.8
132.5°	651.1	652.1	653.2	654.2	655.3	656.3	657.2	658.1	659.0	660.0	660.4
135°	703.1	703.4	703.9	704.2	704.6	705.2	705.9	706.7	707.5	708.3	708.5
137.5°	749.0	749.7	750.4	751.1	751.9	752.7	753.5	754.3	755.1	756.0	755.4
140°	778.9	780.3	781.7	783.0	784.4	785.1	785.3	785.6	785.7	785.9	785.7
142.5°	809.7	810.7	811.8	812.8	813.8	814.5	814.7	814.9	815.0	815.3	814.9
145°	853.9	854.7	855.5	856.3	857.0	857.6	857.7	858.0	858.2	858.3	857.7
147.5°	893.4	894.6	895.7	896.9	898.0	898.6	898.6	898.6	898.6	898.6	898.1
150°	918.5	919.7	920.8	922.0	923.2	923.8	923.8	923.8	923.8	923.8	923.3
152.5°	943.0	943.9	944.9	946.0	947.0	947.4	947.0	946.7	946.4	946.1	945.9
155°	976.1	977.5	978.8	980.2	981.5	981.8	981.0	980.2	979.5	978.7	978.5
157.5°	1006.3	1007.4	1008.5	1009.5	1010.6	1010.7	1010.0	1009.1	1008.3	1007.5	1007.4
160°	1025.8	1026.6	1027.3	1028.1	1028.9	1028.8	1027.9	1026.9	1025.9	1024.9	1024.9
162.5°	1040.4	1041.7	1042.9	1044.2	1045.4	1045.6	1044.6	1043.6	1042.7	1041.7	1041.6
165°	1061.6	1062.9	1064.3	1065.7	1067.0	1067.1	1065.9	1064.8	1063.6	1062.5	1062.5
167.5°	1079.5	1080.7	1081.9	1083.1	1084.3	1084.3	1083.1	1081.9	1080.7	1079.5	1079.4
170°	1088.6	1089.9	1091.3	1092.7	1094.1	1094.1	1092.7	1091.3	1089.9	1088.6	1088.6
172.5°	1095.6	1096.9	1098.3	1099.7	1101.0	1101.1	1099.9	1098.7	1097.5	1096.3	1096.3
175°	1103.5	1104.8	1106.1	1107.5	1108.9	1109.0	1107.8	1106.6	1105.5	1104.3	1104.3
177.5°	1107.7	1108.7	1109.8	1110.9	1112.0	1112.1	1111.1	1110.2	1109.2	1108.4	1108.4
180°	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4



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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°	23.2	23.2	21.1	18.5	17.0	15.1	14.6	13.2	12.5	12.8	12.7
90°	15.9	13.3	10.8	8.6	6.7	4.7	2.8	0.9	2.8	4.7	6.7
92.5°	30.7	29.2	27.7	26.3	25.1	23.8	22.4	21.1	22.4	23.8	25.1
95°	61.5	59.9	58.4	56.9	55.5	54.2	52.8	51.5	52.8	54.2	55.5
97.5°	98.8	97.6	96.5	95.5	94.5	93.4	92.4	91.4	92.4	93.4	94.5
100°	126.3	125.4	124.3	123.3	122.1	121.0	119.8	118.6	119.8	121.0	122.1
102.5°	156.4	155.1	153.8	152.8	152.1	151.4	150.8	150.1	150.8	151.4	152.1
105°	202.3	200.6	198.9	197.9	197.4	197.1	196.7	196.3	196.7	197.1	197.4
107.5°	252.8	252.1	251.4	250.9	250.7	250.5	250.2	250.0	250.2	250.5	250.7
110°	286.2	285.9	285.4	285.1	284.6	284.3	283.9	283.5	283.9	284.3	284.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	319.6	319.5	319.4	319.3	319.1	318.8	318.7	318.4	318.7	318.8	319.1
115°	372.4	372.7	373.2	373.1	372.5	371.9	371.3	370.7	371.3	371.9	372.5
117.5°	423.9	424.4	424.9	425.0	424.6	424.2	423.8	423.4	423.8	424.2	424.6
120°	459.0	459.9	461.0	460.9	459.7	458.6	457.4	456.2	457.4	458.6	459.7
122.5°	493.0	493.5	494.0	493.8	492.9	492.1	491.3	490.4	491.3	492.1	492.9
125°	544.2	544.6	545.0	544.9	544.3	543.7	543.1	542.6	543.1	543.7	544.3
127.5°	595.2	595.6	596.1	595.6	594.4	593.2	591.9	590.7	591.9	593.2	594.4
130°	628.4	629.0	629.5	629.0	627.5	625.9	624.4	622.8	624.4	625.9	627.5
132.5°	660.8	661.2	661.7	661.2	659.6	658.0	656.4	654.9	656.4	658.0	659.6
135°	708.7	708.9	709.0	708.6	707.4	706.3	705.1	704.0	705.1	706.3	707.4
137.5°	754.9	754.4	753.9	753.2	752.2	751.2	750.3	749.3	750.3	751.2	752.2
140°	785.6	785.3	785.1	784.5	783.6	782.6	781.7	780.7	781.7	782.6	783.6
142.5°	814.5	814.2	813.8	813.2	812.2	811.2	810.3	809.3	810.3	811.2	812.2
145°	857.2	856.6	856.0	855.5	855.1	854.7	854.4	853.9	854.4	854.7	855.1
147.5°	897.6	897.0	896.5	895.9	895.2	894.4	893.7	893.0	893.7	894.4	895.2
150°	923.0	922.6	922.2	921.8	921.4	921.0	920.7	920.2	920.7	921.0	921.4
152.5°	945.6	945.4	945.1	944.8	944.3	943.7	943.1	942.6	943.1	943.7	944.3
155°	978.4	978.1	977.9	977.8	977.8	977.8	977.8	977.8	977.8	977.8	977.8
157.5°	1007.2	1007.0	1006.9	1006.9	1007.1	1007.4	1007.6	1007.9	1007.6	1007.4	1007.1
160°	1024.9	1024.9	1024.9	1025.1	1025.5	1025.9	1026.3	1026.7	1026.3	1025.9	1025.5
162.5°	1041.4	1041.2	1041.0	1041.3	1041.8	1042.3	1042.9	1043.4	1042.9	1042.3	1041.8
165°	1062.5	1062.5	1062.5	1062.7	1063.3	1063.9	1064.5	1065.1	1064.5	1063.9	1063.3
167.5°	1079.3	1079.1	1078.9	1079.3	1080.0	1080.8	1081.6	1082.4	1081.6	1080.8	1080.0
170°	1088.6	1088.6	1088.6	1089.0	1089.8	1090.5	1091.3	1092.1	1091.3	1090.5	1089.8
172.5°	1096.3	1096.3	1096.3	1096.7	1097.4	1098.2	1099.0	1099.8	1099.0	1098.2	1097.4
175°	1104.3	1104.3	1104.3	1104.7	1105.5	1106.3	1107.1	1107.8	1107.1	1106.3	1105.5
177.5°	1108.4	1108.4	1108.4	1108.6	1109.2	1109.9	1110.5	1111.1	1110.5	1109.9	1109.2
180°	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4



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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°	12.6	13.5	13.5	14.6	14.6	15.6	15.7	14.8	14.9	16.7	14.6
90°	8.6	10.8	13.3	15.9	18.4	20.9	21.7	22.5	23.2	24.0	24.6
92.5°	26.3	27.7	29.2	30.7	32.0	33.5	34.1	34.7	35.4	36.0	36.2
95°	56.9	58.4	59.9	61.5	63.0	64.6	65.3	66.1	66.9	67.7	68.0
97.5°	95.5	96.5	97.6	98.8	99.9	101.0	101.9	102.8	103.7	104.6	105.0
100°	123.3	124.3	125.4	126.3	127.3	128.2	128.8	129.4	130.0	130.5	131.0
102.5°	152.8	153.8	155.1	156.4	157.6	158.9	159.5	160.1	160.7	161.3	161.5
105°	197.9	198.9	200.6	202.3	204.1	205.9	205.9	205.9	205.9	205.9	206.0
107.5°	250.9	251.4	252.1	252.8	253.5	254.2	254.8	255.5	256.1	256.7	256.8
110°	285.1	285.4	285.9	286.2	286.6	287.0	287.7	288.5	289.3	290.1	290.2



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	319.3	319.4	319.5	319.6	319.7	319.8	320.7	321.7	322.5	323.5	323.9
115°	373.1	373.2	372.7	372.4	372.0	371.6	371.8	372.0	372.2	372.4	372.4
117.5°	425.0	424.9	424.4	423.9	423.4	422.9	422.8	422.8	422.8	422.8	422.4
120°	460.9	461.0	459.9	459.0	458.1	457.1	456.8	456.7	456.5	456.3	456.0
122.5°	493.8	494.0	493.5	493.0	492.5	492.0	491.5	490.9	490.4	490.0	489.4
125°	544.9	545.0	544.6	544.2	543.8	543.5	542.7	541.9	541.1	540.4	539.6
127.5°	595.6	596.1	595.6	595.2	594.8	594.3	593.3	592.2	591.2	590.0	589.0
130°	629.0	629.5	629.0	628.4	627.8	627.2	626.4	625.6	624.8	624.1	623.0
132.5°	661.2	661.7	661.2	660.8	660.4	660.0	659.0	658.1	657.2	656.3	655.3
135°	708.6	709.0	708.9	708.7	708.5	708.3	707.5	706.7	705.9	705.2	704.6
137.5°	753.2	753.9	754.4	754.9	755.4	756.0	755.1	754.3	753.5	752.7	751.9
140°	784.5	785.1	785.3	785.6	785.7	785.9	785.7	785.6	785.3	785.1	784.4
142.5°	813.2	813.8	814.2	814.5	814.9	815.3	815.0	814.9	814.7	814.5	813.8
145°	855.5	856.0	856.6	857.2	857.7	858.3	858.2	858.0	857.7	857.6	857.0
147.5°	895.9	896.5	897.0	897.6	898.1	898.6	898.6	898.6	898.6	898.6	898.0
150°	921.8	922.2	922.6	923.0	923.3	923.8	923.8	923.8	923.8	923.8	923.2
152.5°	944.8	945.1	945.4	945.6	945.9	946.1	946.4	946.7	947.0	947.4	947.0
155°	977.8	977.9	978.1	978.4	978.5	978.7	979.5	980.2	981.0	981.8	981.5
157.5°	1006.9	1006.9	1007.0	1007.2	1007.4	1007.5	1008.3	1009.1	1010.0	1010.7	1010.6
160°	1025.1	1024.9	1024.9	1024.9	1024.9	1024.9	1025.9	1026.9	1027.9	1028.8	1028.9
162.5°	1041.3	1041.0	1041.2	1041.4	1041.6	1041.7	1042.7	1043.6	1044.6	1045.6	1045.4
165°	1062.7	1062.5	1062.5	1062.5	1062.5	1062.5	1063.6	1064.8	1065.9	1067.1	1067.0
167.5°	1079.3	1078.9	1079.1	1079.3	1079.4	1079.5	1080.7	1081.9	1083.1	1084.3	1084.3
170°	1089.0	1088.6	1088.6	1088.6	1088.6	1088.6	1089.9	1091.3	1092.7	1094.1	1094.1
172.5°	1096.7	1096.3	1096.3	1096.3	1096.3	1096.3	1097.5	1098.7	1099.9	1101.1	1101.0
175°	1104.7	1104.3	1104.3	1104.3	1104.3	1104.3	1105.5	1106.6	1107.8	1109.0	1108.9
177.5°	1108.6	1108.4	1108.4	1108.4	1108.4	1108.4	1109.2	1110.2	1111.1	1112.1	1112.0
180°	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4



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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°	14.7	14.8	14.4	13.9	14.4	14.8	14.7	14.6	16.7	14.9	14.8
90°	25.0	25.4	25.7	26.2	25.7	25.4	25.0	24.6	24.0	23.2	22.5
92.5°	35.9	35.7	35.5	35.2	35.5	35.7	35.9	36.2	36.0	35.4	34.7
95°	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	67.7	66.9	66.1
97.5°	104.9	104.9	104.8	104.7	104.8	104.9	104.9	105.0	104.6	103.7	102.8
100°	131.4	131.8	132.2	132.6	132.2	131.8	131.4	131.0	130.5	130.0	129.4
102.5°	161.4	161.4	161.3	161.2	161.3	161.4	161.4	161.5	161.3	160.7	160.1
105°	206.5	206.8	207.2	207.6	207.2	206.8	206.5	206.0	205.9	205.9	205.9
107.5°	256.7	256.4	256.1	255.9	256.1	256.4	256.7	256.8	256.7	256.1	255.5
110°	289.9	289.5	289.1	288.7	289.1	289.5	289.9	290.2	290.1	289.3	288.5



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	323.8	323.7	323.7	323.6	323.7	323.7	323.8	323.9	323.5	322.5	321.7
115°	372.2	372.0	371.8	371.6	371.8	372.0	372.2	372.4	372.4	372.2	372.0
117.5°	421.9	421.4	420.8	420.3	420.8	421.4	421.9	422.4	422.8	422.8	422.8
120°	455.6	455.2	454.9	454.4	454.9	455.2	455.6	456.0	456.3	456.5	456.7
122.5°	488.9	488.4	487.8	487.2	487.8	488.4	488.9	489.4	490.0	490.4	490.9
125°	538.8	538.0	537.3	536.5	537.3	538.0	538.8	539.6	540.4	541.1	541.9
127.5°	588.1	587.3	586.3	585.5	586.3	587.3	588.1	589.0	590.0	591.2	592.2
130°	621.6	620.3	619.0	617.6	619.0	620.3	621.6	623.0	624.1	624.8	625.6
132.5°	654.2	653.2	652.1	651.1	652.1	653.2	654.2	655.3	656.3	657.2	658.1
135°	704.2	703.9	703.4	703.1	703.4	703.9	704.2	704.6	705.2	705.9	706.7
137.5°	751.1	750.4	749.7	749.0	749.7	750.4	751.1	751.9	752.7	753.5	754.3
140°	783.0	781.7	780.3	778.9	780.3	781.7	783.0	784.4	785.1	785.3	785.6
142.5°	812.8	811.8	810.7	809.7	810.7	811.8	812.8	813.8	814.5	814.7	814.9
145°	856.3	855.5	854.7	853.9	854.7	855.5	856.3	857.0	857.6	857.7	858.0
147.5°	896.9	895.7	894.6	893.4	894.6	895.7	896.9	898.0	898.6	898.6	898.6
150°	922.0	920.8	919.7	918.5	919.7	920.8	922.0	923.2	923.8	923.8	923.8
152.5°	946.0	944.9	943.9	943.0	943.9	944.9	946.0	947.0	947.4	947.0	946.7
155°	980.2	978.8	977.5	976.1	977.5	978.8	980.2	981.5	981.8	981.0	980.2
157.5°	1009.5	1008.5	1007.4	1006.3	1007.4	1008.5	1009.5	1010.6	1010.7	1010.0	1009.1
160°	1028.1	1027.3	1026.6	1025.8	1026.6	1027.3	1028.1	1028.9	1028.8	1027.9	1026.9
162.5°	1044.2	1042.9	1041.7	1040.4	1041.7	1042.9	1044.2	1045.4	1045.6	1044.6	1043.6
165°	1065.7	1064.3	1062.9	1061.6	1062.9	1064.3	1065.7	1067.0	1067.1	1065.9	1064.8
167.5°	1083.1	1081.9	1080.7	1079.5	1080.7	1081.9	1083.1	1084.3	1084.3	1083.1	1081.9
170°	1092.7	1091.3	1089.9	1088.6	1089.9	1091.3	1092.7	1094.1	1094.1	1092.7	1091.3
172.5°	1099.7	1098.3	1096.9	1095.6	1096.9	1098.3	1099.7	1101.0	1101.1	1099.9	1098.7
175°	1107.5	1106.1	1104.8	1103.5	1104.8	1106.1	1107.5	1108.9	1109.0	1107.8	1106.6
177.5°	1110.9	1109.8	1108.7	1107.7	1108.7	1109.8	1110.9	1112.0	1112.1	1111.1	1110.2
180°	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4



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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°	15.7	15.6	14.6	14.6	13.5	13.5	12.6	12.7	12.8	12.5	13.2
90°	21.7	20.9	18.4	15.9	13.3	10.8	8.6	6.7	4.7	2.8	0.9
92.5°	34.1	33.5	32.0	30.7	29.2	27.7	26.3	25.1	23.8	22.4	21.1
95°	65.3	64.6	63.0	61.5	59.9	58.4	56.9	55.5	54.2	52.8	51.5
97.5°	101.9	101.0	99.9	98.8	97.6	96.5	95.5	94.5	93.4	92.4	91.4
100°	128.8	128.2	127.3	126.3	125.4	124.3	123.3	122.1	121.0	119.8	118.6
102.5°	159.5	158.9	157.6	156.4	155.1	153.8	152.8	152.1	151.4	150.8	150.1
105°	205.9	205.9	204.1	202.3	200.6	198.9	197.9	197.4	197.1	196.7	196.3
107.5°	254.8	254.2	253.5	252.8	252.1	251.4	250.9	250.7	250.5	250.2	250.0
110°	287.7	287.0	286.6	286.2	285.9	285.4	285.1	284.6	284.3	283.9	283.5



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	320.7	319.8	319.7	319.6	319.5	319.4	319.3	319.1	318.8	318.7	318.4
115°	371.8	371.6	372.0	372.4	372.7	373.2	373.1	372.5	371.9	371.3	370.7
117.5°	422.8	422.9	423.4	423.9	424.4	424.9	425.0	424.6	424.2	423.8	423.4
120°	456.8	457.1	458.1	459.0	459.9	461.0	460.9	459.7	458.6	457.4	456.2
122.5°	491.5	492.0	492.5	493.0	493.5	494.0	493.8	492.9	492.1	491.3	490.4
125°	542.7	543.5	543.8	544.2	544.6	545.0	544.9	544.3	543.7	543.1	542.6
127.5°	593.3	594.3	594.8	595.2	595.6	596.1	595.6	594.4	593.2	591.9	590.7
130°	626.4	627.2	627.8	628.4	629.0	629.5	629.0	627.5	625.9	624.4	622.8
132.5°	659.0	660.0	660.4	660.8	661.2	661.7	661.2	659.6	658.0	656.4	654.9
135°	707.5	708.3	708.5	708.7	708.9	709.0	708.6	707.4	706.3	705.1	704.0
137.5°	755.1	756.0	755.4	754.9	754.4	753.9	753.2	752.2	751.2	750.3	749.3
140°	785.7	785.9	785.7	785.6	785.3	785.1	784.5	783.6	782.6	781.7	780.7
142.5°	815.0	815.3	814.9	814.5	814.2	813.8	813.2	812.2	811.2	810.3	809.3
145°	858.2	858.3	857.7	857.2	856.6	856.0	855.5	855.1	854.7	854.4	853.9
147.5°	898.6	898.6	898.1	897.6	897.0	896.5	895.9	895.2	894.4	893.7	893.0
150°	923.8	923.8	923.3	923.0	922.6	922.2	921.8	921.4	921.0	920.7	920.2
152.5°	946.4	946.1	945.9	945.6	945.4	945.1	944.8	944.3	943.7	943.1	942.6
155°	979.5	978.7	978.5	978.4	978.1	977.9	977.8	977.8	977.8	977.8	977.8
157.5°	1008.3	1007.5	1007.4	1007.2	1007.0	1006.9	1006.9	1007.1	1007.4	1007.6	1007.9
160°	1025.9	1024.9	1024.9	1024.9	1024.9	1024.9	1025.1	1025.5	1025.9	1026.3	1026.7
162.5°	1042.7	1041.7	1041.6	1041.4	1041.2	1041.0	1041.3	1041.8	1042.3	1042.9	1043.4
165°	1063.6	1062.5	1062.5	1062.5	1062.5	1062.5	1062.7	1063.3	1063.9	1064.5	1065.1
167.5°	1080.7	1079.5	1079.4	1079.3	1079.1	1078.9	1079.3	1080.0	1080.8	1081.6	1082.4
170°	1089.9	1088.6	1088.6	1088.6	1088.6	1088.6	1089.0	1089.8	1090.5	1091.3	1092.1
172.5°	1097.5	1096.3	1096.3	1096.3	1096.3	1096.3	1096.7	1097.4	1098.2	1099.0	1099.8
175°	1105.5	1104.3	1104.3	1104.3	1104.3	1104.3	1104.7	1105.5	1106.3	1107.1	1107.8
177.5°	1109.2	1108.4	1108.4	1108.4	1108.4	1108.4	1108.6	1109.2	1109.9	1110.5	1111.1
180°	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4



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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°	14.6	15.1	17.0	18.5	21.1	23.2	23.2	22.6	22.6	22.2	21.8
90°	2.8	4.7	6.7	8.6	10.8	13.3	15.9	18.4	20.9	21.7	22.5
92.5°	22.4	23.8	25.1	26.3	27.7	29.2	30.7	32.0	33.5	34.1	34.7
95°	52.8	54.2	55.5	56.9	58.4	59.9	61.5	63.0	64.6	65.3	66.1
97.5°	92.4	93.4	94.5	95.5	96.5	97.6	98.8	99.9	101.0	101.9	102.8
100°	119.8	121.0	122.1	123.3	124.3	125.4	126.3	127.3	128.2	128.8	129.4
102.5°	150.8	151.4	152.1	152.8	153.8	155.1	156.4	157.6	158.9	159.5	160.1
105°	196.7	197.1	197.4	197.9	198.9	200.6	202.3	204.1	205.9	205.9	205.9
107.5°	250.2	250.5	250.7	250.9	251.4	252.1	252.8	253.5	254.2	254.8	255.5
110°	283.9	284.3	284.6	285.1	285.4	285.9	286.2	286.6	287.0	287.7	288.5



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	318.7	318.8	319.1	319.3	319.4	319.5	319.6	319.7	319.8	320.7	321.7
115°	371.3	371.9	372.5	373.1	373.2	372.7	372.4	372.0	371.6	371.8	372.0
117.5°	423.8	424.2	424.6	425.0	424.9	424.4	423.9	423.4	422.9	422.8	422.8
120°	457.4	458.6	459.7	460.9	461.0	459.9	459.0	458.1	457.1	456.8	456.7
122.5°	491.3	492.1	492.9	493.8	494.0	493.5	493.0	492.5	492.0	491.5	490.9
125°	543.1	543.7	544.3	544.9	545.0	544.6	544.2	543.8	543.5	542.7	541.9
127.5°	591.9	593.2	594.4	595.6	596.1	595.6	595.2	594.8	594.3	593.3	592.2
130°	624.4	625.9	627.5	629.0	629.5	629.0	628.4	627.8	627.2	626.4	625.6
132.5°	656.4	658.0	659.6	661.2	661.7	661.2	660.8	660.4	660.0	659.0	658.1
135°	705.1	706.3	707.4	708.6	709.0	708.9	708.7	708.5	708.3	707.5	706.7
137.5°	750.3	751.2	752.2	753.2	753.9	754.4	754.9	755.4	756.0	755.1	754.3
140°	781.7	782.6	783.6	784.5	785.1	785.3	785.6	785.7	785.9	785.7	785.6
142.5°	810.3	811.2	812.2	813.2	813.8	814.2	814.5	814.9	815.3	815.0	814.9
145°	854.4	854.7	855.1	855.5	856.0	856.6	857.2	857.7	858.3	858.2	858.0
147.5°	893.7	894.4	895.2	895.9	896.5	897.0	897.6	898.1	898.6	898.6	898.6
150°	920.7	921.0	921.4	921.8	922.2	922.6	923.0	923.3	923.8	923.8	923.8
152.5°	943.1	943.7	944.3	944.8	945.1	945.4	945.6	945.9	946.1	946.4	946.7
155°	977.8	977.8	977.8	977.8	977.9	978.1	978.4	978.5	978.7	979.5	980.2
157.5°	1007.6	1007.4	1007.1	1006.9	1006.9	1007.0	1007.2	1007.4	1007.5	1008.3	1009.1
160°	1026.3	1025.9	1025.5	1025.1	1024.9	1024.9	1024.9	1024.9	1024.9	1025.9	1026.9
162.5°	1042.9	1042.3	1041.8	1041.3	1041.0	1041.2	1041.4	1041.6	1041.7	1042.7	1043.6
165°	1064.5	1063.9	1063.3	1062.7	1062.5	1062.5	1062.5	1062.5	1062.5	1063.6	1064.8
167.5°	1081.6	1080.8	1080.0	1079.3	1078.9	1079.1	1079.3	1079.4	1079.5	1080.7	1081.9
170°	1091.3	1090.5	1089.8	1089.0	1088.6	1088.6	1088.6	1088.6	1088.6	1089.9	1091.3
172.5°	1099.0	1098.2	1097.4	1096.7	1096.3	1096.3	1096.3	1096.3	1096.3	1097.5	1098.7
175°	1107.1	1106.3	1105.5	1104.7	1104.3	1104.3	1104.3	1104.3	1104.3	1105.5	1106.6
177.5°	1110.5	1109.9	1109.2	1108.6	1108.4	1108.4	1108.4	1108.4	1108.4	1109.2	1110.2
180°	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4



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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°	21.4	21.0	20.7	21.3	20.8	20.3	21.4
90°	23.2	24.0	24.6	25.0	25.4	25.7	26.2
92.5°	35.4	36.0	36.2	35.9	35.7	35.5	35.2
95°	66.9	67.7	68.0	68.0	68.0	68.0	68.0
97.5°	103.7	104.6	105.0	104.9	104.9	104.8	104.7
100°	130.0	130.5	131.0	131.4	131.8	132.2	132.6
102.5°	160.7	161.3	161.5	161.4	161.4	161.3	161.2
105°	205.9	205.9	206.0	206.5	206.8	207.2	207.6
107.5°	256.1	256.7	256.8	256.7	256.4	256.1	255.9
110°	289.3	290.1	290.2	289.9	289.5	289.1	288.7



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	322.5	323.5	323.9	323.8	323.7	323.7	323.6
115°	372.2	372.4	372.4	372.2	372.0	371.8	371.6
117.5°	422.8	422.8	422.4	421.9	421.4	420.8	420.3
120°	456.5	456.3	456.0	455.6	455.2	454.9	454.4
122.5°	490.4	490.0	489.4	488.9	488.4	487.8	487.2
125°	541.1	540.4	539.6	538.8	538.0	537.3	536.5
127.5°	591.2	590.0	589.0	588.1	587.3	586.3	585.5
130°	624.8	624.1	623.0	621.6	620.3	619.0	617.6
132.5°	657.2	656.3	655.3	654.2	653.2	652.1	651.1
135°	705.9	705.2	704.6	704.2	703.9	703.4	703.1
137.5°	753.5	752.7	751.9	751.1	750.4	749.7	749.0
140°	785.3	785.1	784.4	783.0	781.7	780.3	778.9
142.5°	814.7	814.5	813.8	812.8	811.8	810.7	809.7
145°	857.7	857.6	857.0	856.3	855.5	854.7	853.9
147.5°	898.6	898.6	898.0	896.9	895.7	894.6	893.4
150°	923.8	923.8	923.2	922.0	920.8	919.7	918.5
152.5°	947.0	947.4	947.0	946.0	944.9	943.9	943.0
155°	981.0	981.8	981.5	980.2	978.8	977.5	976.1
157.5°	1010.0	1010.7	1010.6	1009.5	1008.5	1007.4	1006.3
160°	1027.9	1028.8	1028.9	1028.1	1027.3	1026.6	1025.8
162.5°	1044.6	1045.6	1045.4	1044.2	1042.9	1041.7	1040.4
165°	1065.9	1067.1	1067.0	1065.7	1064.3	1062.9	1061.6
167.5°	1083.1	1084.3	1084.3	1083.1	1081.9	1080.7	1079.5
170°	1092.7	1094.1	1094.1	1092.7	1091.3	1089.9	1088.6
172.5°	1099.9	1101.1	1101.0	1099.7	1098.3	1096.9	1095.6
175°	1107.8	1109.0	1108.9	1107.5	1106.1	1104.8	1103.5
177.5°	1111.1	1112.1	1112.0	1110.9	1109.8	1108.7	1107.7
180°	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4	1110.4

(END OF REPORT)