

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: P331700-840

Luminaire Tested: **SA2XXRDIP-C675D1080U840-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331700-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-C675D1080U840-4F0-1E-UDD-A1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 675 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1080 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6456.3 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

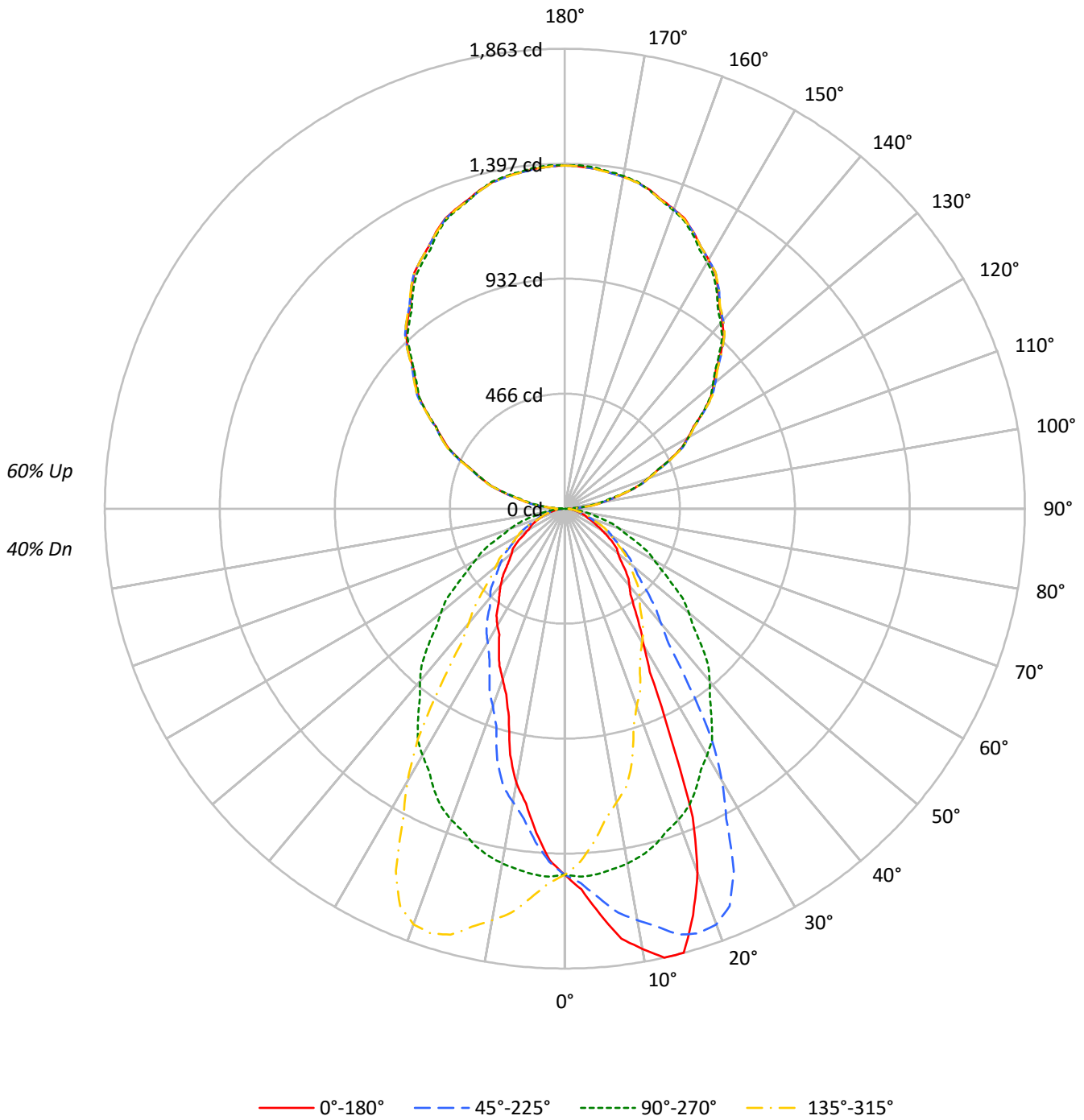
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40				
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	42	41	41	35				
2	88	81	75	71	80	74	69	65	61	58	55	49	47	45	38	36	35	30				
3	81	72	65	60	73	66	60	55	54	50	47	44	41	39	34	32	31	26				
4	74	64	57	51	67	59	52	47	49	44	40	40	36	34	31	29	27	23				
5	68	57	50	44	62	53	46	41	44	39	35	36	32	30	28	26	24	21				
6	63	52	44	39	57	48	41	36	40	35	31	33	29	26	26	24	22	19				
7	59	47	39	34	53	43	37	32	36	31	28	30	26	24	24	21	19	17				
8	54	43	35	30	50	40	33	28	33	28	25	28	24	21	22	20	18	15				
9	51	39	32	27	46	36	30	26	31	26	22	26	22	19	21	18	16	14				
10	47	36	29	25	43	33	27	23	28	24	20	24	20	18	19	17	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	23954	23954	23954	23954
5°	26752	24104	21371	24104
10°	29681	23935	18525	23935
15°	31141	23584	14596	23584
20°	26996	23063	12631	23063
25°	17706	22352	11277	22352
30°	11917	21490	10206	21490
35°	9652	20402	9207	20402
40°	8585	19220	8517	19220
45°	7768	17831	7606	17831
50°	7068	16458	7043	16458
55°	6646	14933	6559	14933
60°	5561	13533	5493	13533
65°	4688	12287	5318	12287
70°	4334	10976	5013	10976
75°	4049	9551	4629	9551
80°	3738	7857	4119	7857
85°	3446	6206	3631	6206



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.6	2.2
10°-20°	391.9	6.1
20°-30°	505.0	7.8
30°-40°	479.9	7.4
40°-50°	411.1	6.4
50°-60°	313.0	4.8
60°-70°	197.9	3.1
70°-80°	98.8	1.5
80°-90°	31.3	0.5
90°-100°	88.1	1.4
100°-110°	273.6	4.2
110°-120°	467.6	7.2
120°-130°	614.9	9.5
130°-140°	690.2	10.7
140°-150°	676.7	10.5
150°-160°	567.6	8.8
160°-170°	376.5	5.8
170°-180°	131.6	2.0
0°-30°	1037.5	16.1
0°-40°	1517.4	23.5
0°-60°	2241.5	34.7
0°-90°	2569.5	39.8
90°-120°	829.3	12.8
90°-150°	2811.1	43.5
90°-180°	3887.0	60.2
0°-180°	6456.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1484	1484	1484	1484	1484	
5°	1651	1487	1319	1487	1651	163
15°	1863	1411	873	1411	1863	503
25°	994	1255	633	1255	994	472
35°	490	1035	467	1035	490	313
45°	340	781	333	781	340	263
55°	236	530	233	530	236	207
65°	123	322	139	322	123	125
75°	65	153	74	153	65	69
85°	19	34	20	34	19	21
90°	40	1	40	1	40	18
95°	73	61	73	61	73	81
105°	260	252	260	252	260	274
115°	469	469	469	469	469	463
125°	685	683	685	683	685	611
135°	894	883	894	883	894	688
145°	1084	1072	1084	1072	1084	677
155°	1235	1226	1235	1226	1235	568
165°	1335	1334	1335	1334	1335	376
175°	1383	1388	1383	1388	1383	131
180°	1390	1390	1390	1390	1390	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1543.8	1545.0	1546.3	1543.4	1543.4	1540.9	1535.5	1531.5	1519.8	1518.2	1518.2
5°	1650.6	1649.5	1651.6	1645.0	1635.7	1633.6	1623.8	1610.9	1597.5	1582.6	1579.4
7.5°	1756.8	1755.2	1751.1	1750.0	1742.8	1727.3	1711.5	1694.8	1672.4	1650.7	1639.8
10°	1810.4	1827.5	1817.1	1799.1	1802.7	1778.5	1765.5	1743.4	1724.8	1692.3	1685.2
12.5°	1863.2	1869.9	1866.6	1856.3	1851.7	1834.9	1817.6	1798.3	1764.0	1734.8	1709.5
15°	1863.0	1872.8	1875.3	1872.3	1874.8	1873.8	1864.5	1848.6	1818.7	1786.7	1758.9
17.5°	1725.5	1732.2	1749.2	1760.6	1775.0	1805.5	1820.6	1826.4	1822.0	1803.8	1784.2
20°	1571.2	1559.8	1607.3	1631.5	1652.1	1703.6	1748.0	1765.0	1792.3	1791.8	1786.7
22.5°	1352.6	1355.3	1400.3	1429.1	1489.2	1540.8	1591.3	1655.4	1708.2	1743.1	1763.6
25°	993.9	1013.5	1058.3	1097.5	1164.5	1260.4	1347.5	1448.6	1543.9	1619.1	1690.8
27.5°	746.4	747.9	783.5	819.6	859.4	938.0	1047.6	1168.3	1304.2	1416.4	1545.5
30°	639.2	636.1	651.1	673.3	707.2	768.1	850.5	969.2	1104.7	1273.7	1424.3
32.5°	563.3	563.5	574.8	591.2	619.5	660.5	716.9	813.2	941.4	1107.6	1284.0
35°	489.7	489.2	497.5	509.3	521.2	547.4	586.1	636.6	724.8	879.9	1060.4
37.5°	437.0	439.2	443.2	450.6	463.7	478.4	501.6	535.5	598.2	690.0	841.7
40°	407.3	408.3	413.9	420.1	427.9	439.2	458.3	485.5	531.5	604.7	715.5
42.5°	380.0	381.0	385.1	390.8	396.9	408.3	424.0	447.7	484.8	542.0	633.4
45°	340.2	340.2	343.9	346.4	353.1	363.5	376.3	395.9	421.7	463.9	524.7
47.5°	302.9	303.0	305.4	309.8	314.1	322.0	334.8	350.7	369.5	402.2	454.1
50°	281.4	282.0	283.5	287.1	289.7	296.9	306.7	320.6	340.2	365.5	408.8
52.5°	264.2	263.8	265.8	267.3	269.1	274.3	281.6	293.9	311.3	333.4	369.2
55°	236.1	234.0	237.1	239.7	241.3	243.3	247.4	255.2	270.1	288.7	315.5
57.5°	201.1	200.3	202.4	204.8	209.6	215.2	218.6	223.6	231.4	244.7	271.2
60°	172.2	172.2	176.8	178.3	184.0	191.3	198.4	202.6	210.4	219.0	238.6
62.5°	146.6	147.0	149.2	150.8	153.9	162.8	172.9	182.0	189.2	197.6	210.7
65°	122.7	123.7	123.7	124.7	126.8	128.9	133.0	140.2	153.1	164.9	174.7
67.5°	104.1	104.4	104.7	105.7	106.3	108.6	110.2	113.4	116.4	127.6	139.8
70°	91.8	93.3	92.8	93.8	94.3	95.3	97.5	99.0	103.6	106.2	113.4
72.5°	80.2	81.3	81.2	81.9	83.2	83.4	85.0	86.6	89.6	91.8	95.6
75°	64.9	64.4	64.9	65.9	66.4	67.1	67.1	69.1	70.6	72.7	75.2
77.5°	50.1	50.6	50.5	50.6	50.7	51.6	51.5	52.5	54.0	55.0	56.2
80°	40.2	40.7	40.2	40.7	41.2	41.7	41.2	41.7	43.3	44.3	44.3
82.5°	31.1	31.2	31.5	31.6	31.7	31.8	32.6	32.7	33.8	33.6	34.0
85°	18.6	18.1	18.1	18.1	18.6	19.1	18.6	18.6	19.1	19.1	19.1
87.5°	14.5	14.9	14.8	14.8	14.7	14.8	14.9	15.5	15.1	15.7	14.0
90°	39.9	39.6	39.4	39.1	38.9	39.0	39.5	40.0	40.5	41.1	35.3
92.5°	38.0	38.0	37.9	37.9	37.8	37.8	37.6	37.5	37.4	37.3	36.0
95°	72.7	73.2	73.8	74.3	74.8	75.0	75.0	75.0	75.0	75.0	74.5
97.5°	126.0	126.0	126.1	126.1	126.2	126.2	126.2	126.2	126.2	126.2	125.2
100°	160.7	161.0	161.3	161.5	161.8	161.9	161.9	161.9	161.9	161.9	161.1
102.5°	200.2	200.4	200.7	200.9	201.2	201.2	201.0	200.8	200.6	200.4	199.3
105°	260.4	260.4	260.4	260.4	260.4	260.1	259.6	259.1	258.6	258.0	257.5
107.5°	317.2	318.4	319.6	320.8	321.9	322.4	322.2	322.0	321.8	321.6	321.6
110°	361.3	362.0	362.8	363.7	364.5	364.9	364.9	364.9	364.9	364.9	364.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	403.5	404.1	404.7	405.3	405.9	406.5	407.1	407.7	408.3	408.9	409.1
115°	469.2	470.0	470.8	471.6	472.3	472.8	473.1	473.4	473.6	473.9	474.4
117.5°	531.9	532.6	533.4	534.2	535.0	535.7	536.3	536.9	537.6	538.2	539.7
120°	575.9	576.7	577.5	578.3	579.1	579.5	579.5	579.5	579.5	579.5	581.6
122.5°	619.1	619.8	620.3	620.9	621.5	622.0	622.7	623.3	623.9	624.5	626.0
125°	685.1	685.3	685.6	685.8	686.1	686.6	687.4	688.2	688.9	689.7	690.5
127.5°	745.1	746.0	746.8	747.6	748.4	749.3	750.2	751.2	752.1	753.1	754.1
130°	788.3	789.3	790.3	791.4	792.4	793.2	793.8	794.3	794.8	795.4	795.9
132.5°	829.6	830.4	831.2	832.1	832.9	833.9	835.1	836.2	837.4	838.5	838.4
135°	893.8	894.6	895.4	896.2	897.0	897.5	897.8	898.1	898.3	898.6	898.1
137.5°	952.0	953.1	954.1	955.1	956.2	956.8	957.0	957.3	957.5	957.7	956.9
140°	992.4	993.4	994.5	995.5	996.5	997.0	997.0	997.0	997.0	997.0	995.8
142.5°	1029.0	1030.1	1031.1	1032.1	1033.2	1033.6	1033.4	1033.2	1033.0	1032.8	1031.9
145°	1083.9	1084.9	1086.0	1087.0	1088.0	1088.4	1088.2	1087.9	1087.6	1087.4	1085.8
147.5°	1133.0	1133.9	1134.9	1135.9	1136.9	1137.1	1136.5	1136.0	1135.4	1134.8	1133.8
150°	1164.9	1165.6	1166.4	1167.2	1168.0	1168.0	1167.2	1166.4	1165.6	1164.9	1163.8
152.5°	1194.9	1195.9	1196.9	1197.8	1198.8	1198.8	1197.8	1196.9	1195.9	1194.9	1193.7
155°	1235.2	1236.0	1236.8	1237.6	1238.3	1238.1	1236.8	1235.5	1234.2	1232.8	1232.1
157.5°	1269.9	1271.2	1272.4	1273.6	1275.0	1274.7	1272.9	1271.1	1269.4	1267.6	1267.1
160°	1291.5	1292.5	1293.6	1294.6	1295.7	1295.5	1293.8	1292.3	1290.7	1289.2	1288.9
162.5°	1310.3	1311.5	1312.8	1314.0	1315.2	1315.0	1313.2	1311.5	1309.7	1308.0	1307.7
165°	1334.9	1336.3	1337.6	1338.9	1340.1	1339.9	1338.1	1336.3	1334.4	1332.6	1332.6
167.5°	1355.1	1356.5	1357.8	1359.2	1360.5	1360.3	1358.5	1356.7	1354.8	1353.0	1353.0
170°	1365.4	1367.0	1368.6	1370.1	1371.7	1371.5	1369.7	1367.9	1366.0	1364.2	1364.5
172.5°	1373.8	1375.4	1377.0	1378.6	1380.1	1380.0	1378.2	1376.3	1374.5	1372.7	1372.9
175°	1383.0	1384.6	1386.1	1387.8	1389.3	1389.2	1387.4	1385.5	1383.7	1381.8	1382.4
177.5°	1387.3	1388.5	1389.8	1391.0	1392.2	1392.2	1391.0	1389.8	1388.5	1387.3	1387.7
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1519.0	1515.7	1512.9	1505.4	1501.8	1493.5	1492.3	1491.9	1481.1	1470.8	1467.9
5°	1571.2	1563.0	1550.5	1536.1	1521.2	1505.7	1495.4	1487.2	1466.5	1446.9	1435.6
7.5°	1623.8	1606.1	1584.7	1557.4	1534.6	1509.0	1490.1	1473.1	1443.8	1415.7	1396.8
10°	1662.9	1634.1	1605.8	1568.1	1538.7	1509.8	1483.1	1459.9	1426.8	1389.8	1363.4
12.5°	1687.3	1655.6	1616.5	1579.6	1541.7	1504.9	1469.1	1439.3	1400.5	1362.1	1330.9
15°	1720.2	1686.2	1638.7	1586.2	1537.2	1489.2	1448.0	1410.9	1360.4	1314.5	1276.4
17.5°	1747.1	1700.3	1649.3	1588.5	1531.9	1470.9	1417.7	1370.4	1314.1	1258.8	1213.9
20°	1755.8	1709.4	1650.6	1589.7	1522.8	1451.1	1393.9	1342.3	1282.0	1221.7	1170.1
22.5°	1750.4	1714.3	1648.9	1576.2	1507.5	1432.5	1367.9	1308.1	1241.2	1179.6	1119.8
25°	1714.0	1701.6	1639.8	1560.3	1482.1	1394.9	1320.2	1254.7	1178.4	1112.5	1047.4
27.5°	1629.1	1655.9	1617.5	1533.0	1445.8	1352.4	1268.4	1193.9	1114.7	1040.5	975.7
30°	1547.5	1608.8	1592.4	1514.0	1416.5	1324.8	1230.5	1152.7	1068.1	991.8	927.9
32.5°	1435.7	1537.1	1553.2	1487.6	1386.8	1286.1	1187.2	1109.7	1021.5	941.1	878.8
35°	1257.8	1409.4	1478.9	1437.1	1336.2	1227.4	1125.3	1035.1	946.4	867.1	805.2
37.5°	1045.5	1251.9	1367.9	1370.9	1278.1	1165.0	1053.9	964.3	873.5	795.6	728.7
40°	907.8	1131.5	1282.5	1316.1	1237.7	1115.5	1003.1	911.9	823.2	746.9	670.1
42.5°	784.1	1006.9	1192.7	1250.9	1188.6	1067.2	954.5	859.1	773.0	700.7	622.3
45°	634.1	828.9	1033.6	1137.7	1103.2	990.8	871.7	780.9	700.0	637.6	562.4
47.5°	534.8	672.2	870.2	1011.1	1010.5	907.9	790.7	703.9	628.8	570.4	509.4
50°	478.4	597.9	765.5	925.3	938.7	852.6	741.2	655.2	585.1	523.7	474.7
52.5°	427.7	526.2	676.8	830.0	868.2	793.7	685.6	606.1	538.1	481.7	439.7
55°	361.3	437.7	552.1	695.4	753.2	700.5	604.7	530.5	475.2	427.9	391.7
57.5°	305.7	362.9	454.7	570.2	637.3	604.3	525.1	464.8	417.7	374.8	346.3
60°	270.6	317.5	395.4	491.8	566.0	542.8	475.2	419.1	378.9	341.7	315.0
62.5°	237.6	277.9	344.7	422.9	491.0	481.4	426.2	379.1	343.9	310.0	287.3
65°	191.3	220.7	272.7	334.1	388.7	393.3	353.7	321.6	290.2	263.4	243.3
67.5°	152.3	171.5	208.1	259.8	300.7	315.4	291.1	266.7	241.8	221.1	203.6
70°	128.4	143.8	170.7	212.4	250.0	265.5	251.6	232.5	210.9	193.8	178.8
72.5°	104.0	119.1	138.9	169.5	201.8	218.4	213.6	200.0	182.4	168.2	154.1
75°	78.4	83.0	96.4	117.0	142.3	156.7	160.4	153.1	139.2	128.4	120.1
77.5°	58.0	60.7	67.2	78.0	94.4	107.3	112.6	111.8	102.2	95.8	88.2
80°	46.4	48.0	51.0	55.6	68.1	80.9	84.5	84.5	77.9	75.2	67.6
82.5°	35.2	36.4	38.3	40.8	46.6	57.9	61.9	62.7	58.5	55.0	49.0
85°	20.1	19.6	20.6	22.1	23.2	26.3	32.5	33.5	32.5	28.4	26.8
87.5°	12.9	12.2	11.0	9.8	9.5	9.3	10.8	12.2	11.2	10.6	10.4
90°	29.6	23.8	18.1	13.7	10.6	7.5	4.3	1.2	4.3	7.5	10.6
92.5°	34.6	33.2	31.9	30.1	27.8	25.4	23.1	20.9	23.1	25.4	27.8
95°	74.0	73.5	73.0	71.4	68.8	66.2	63.6	61.0	63.6	66.2	68.8
97.5°	124.2	123.2	122.3	120.6	118.4	116.0	113.7	111.5	113.7	116.0	118.4
100°	160.3	159.6	158.8	157.3	155.2	153.2	151.1	149.0	151.1	153.2	155.2
102.5°	198.3	197.4	196.4	195.1	193.4	191.8	190.1	188.4	190.1	191.8	193.4
105°	257.0	256.5	256.0	255.3	254.6	253.8	253.0	252.2	253.0	253.8	254.6
107.5°	321.6	321.6	321.6	321.0	319.9	318.8	317.6	316.5	317.6	318.8	319.9
110°	364.9	364.9	364.9	364.1	362.4	360.9	359.3	357.8	359.3	360.9	362.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	409.3	409.5	409.8	409.1	407.5	406.0	404.3	402.8	404.3	406.0	407.5
115°	474.9	475.4	475.9	475.4	473.9	472.3	470.8	469.2	470.8	472.3	473.9
117.5°	541.1	542.6	544.0	543.7	541.6	539.6	537.5	535.3	537.5	539.6	541.6
120°	583.7	585.7	587.8	587.8	585.7	583.7	581.6	579.5	581.6	583.7	585.7
122.5°	627.4	628.9	630.4	629.9	627.3	624.8	622.4	619.9	622.4	624.8	627.3
125°	691.4	692.1	692.9	692.1	689.7	687.4	685.1	682.7	685.1	687.4	689.7
127.5°	755.0	755.9	756.9	755.8	752.9	749.9	746.9	744.0	746.9	749.9	752.9
130°	796.4	796.9	797.4	796.0	792.5	789.2	785.8	782.4	785.8	789.2	792.5
132.5°	838.3	838.2	838.1	836.7	833.8	831.1	828.4	825.6	828.4	831.1	833.8
135°	897.5	897.0	896.5	894.7	891.9	889.1	886.2	883.3	886.2	889.1	891.9
137.5°	956.3	955.6	954.9	953.4	951.1	948.8	946.4	944.0	946.4	948.8	951.1
140°	994.5	993.2	991.9	990.1	987.7	985.3	983.0	980.7	983.0	985.3	987.7
142.5°	1031.0	1030.1	1029.2	1027.5	1025.2	1022.9	1020.6	1018.2	1020.6	1022.9	1025.2
145°	1084.3	1082.7	1081.2	1079.4	1077.6	1075.8	1074.0	1072.2	1074.0	1075.8	1077.6
147.5°	1132.8	1131.7	1130.6	1129.0	1126.8	1124.6	1122.5	1120.2	1122.5	1124.6	1126.8
150°	1162.8	1161.7	1160.6	1159.3	1157.8	1156.2	1154.7	1153.1	1154.7	1156.2	1157.8
152.5°	1192.3	1191.1	1189.8	1188.4	1186.9	1185.3	1183.8	1182.1	1183.8	1185.3	1186.9
155°	1231.3	1230.5	1229.7	1229.0	1228.2	1227.4	1226.6	1225.9	1226.6	1227.4	1228.2
157.5°	1266.7	1266.2	1265.7	1265.3	1264.7	1264.1	1263.6	1263.1	1263.6	1264.1	1264.7
160°	1288.7	1288.4	1288.1	1287.8	1287.2	1286.7	1286.2	1285.7	1286.2	1286.7	1287.2
162.5°	1307.4	1307.2	1306.9	1306.8	1306.6	1306.5	1306.4	1306.3	1306.4	1306.5	1306.6
165°	1332.6	1332.6	1332.6	1332.7	1332.9	1333.2	1333.5	1333.7	1333.5	1333.2	1332.9
167.5°	1353.1	1353.1	1353.2	1353.6	1354.4	1355.1	1355.9	1356.8	1355.9	1355.1	1354.4
170°	1364.7	1365.0	1365.3	1365.8	1366.5	1367.4	1368.2	1369.0	1368.2	1367.4	1366.5
172.5°	1373.2	1373.5	1373.7	1374.2	1375.0	1375.8	1376.6	1377.4	1376.6	1375.8	1375.0
175°	1382.9	1383.4	1383.9	1384.6	1385.3	1386.1	1386.9	1387.8	1386.9	1386.1	1385.3
177.5°	1388.1	1388.5	1388.9	1389.5	1390.1	1390.7	1391.3	1391.9	1391.3	1390.7	1390.1
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1462.6	1459.7	1454.3	1446.0	1441.1	1432.4	1426.6	1430.0	1430.8	1430.0	1429.2
5°	1423.3	1412.4	1397.5	1383.0	1369.7	1355.2	1347.0	1343.3	1336.2	1332.0	1330.0
7.5°	1375.7	1357.1	1336.0	1310.8	1289.4	1267.1	1255.7	1249.9	1235.2	1227.2	1220.1
10°	1340.3	1310.9	1289.8	1256.8	1236.7	1207.3	1187.2	1187.7	1167.6	1156.2	1148.0
12.5°	1301.1	1268.8	1233.7	1204.0	1176.0	1152.5	1128.2	1118.4	1097.0	1086.1	1063.9
15°	1236.2	1198.5	1161.4	1121.2	1092.9	1056.2	1021.2	978.4	943.8	913.9	905.7
17.5°	1165.2	1118.6	1081.4	1034.2	985.6	924.0	883.4	858.6	837.8	822.0	810.2
20°	1116.5	1069.1	1029.5	958.3	892.8	851.1	821.2	802.1	780.4	763.5	754.2
22.5°	1065.4	1015.9	961.8	882.4	831.4	797.9	771.2	749.3	734.7	721.3	713.0
25°	992.8	938.7	849.5	794.9	753.7	718.6	700.0	686.6	671.2	653.1	644.9
27.5°	916.1	830.0	766.0	725.4	686.0	663.2	646.5	626.5	612.7	604.6	596.0
30°	858.8	772.7	722.8	678.4	650.6	625.3	605.7	594.4	581.0	567.0	561.4
32.5°	794.9	726.1	678.2	641.3	613.0	591.5	576.0	557.6	548.0	539.4	527.6
35°	715.5	663.5	619.7	589.8	562.9	545.4	527.4	516.5	499.0	491.8	487.2
37.5°	648.2	603.1	570.5	538.9	517.7	498.3	487.3	470.0	462.4	452.4	442.6
40°	610.4	566.0	534.5	508.8	485.0	470.6	456.8	442.8	431.4	426.9	415.0
42.5°	571.6	535.5	504.0	475.7	459.9	444.6	427.1	416.9	405.1	397.6	390.2
45°	518.1	486.1	459.3	436.1	418.6	402.6	391.2	374.3	367.6	352.5	346.4
47.5°	471.1	441.3	415.8	393.7	376.6	366.2	349.6	336.3	325.6	316.4	308.5
50°	437.7	412.9	388.2	368.6	353.1	338.2	321.1	314.5	297.9	293.3	288.7
52.5°	407.2	383.6	360.9	341.7	326.3	311.7	296.8	288.0	276.9	272.3	268.9
55°	364.5	341.7	320.1	303.1	287.6	272.7	263.4	252.6	247.4	243.8	239.7
57.5°	321.5	301.1	284.6	267.3	251.8	239.9	229.1	222.7	217.3	212.6	207.6
60°	294.4	274.8	259.8	243.8	227.8	218.0	209.8	202.1	195.9	188.6	186.6
62.5°	265.5	248.3	234.7	219.0	205.2	196.2	188.3	181.1	173.6	163.1	160.2
65°	225.8	212.4	197.9	185.1	172.7	163.9	152.6	144.3	141.3	140.2	139.7
67.5°	190.0	177.2	164.8	151.7	140.4	132.3	126.5	125.2	123.1	122.5	121.1
70°	166.0	154.1	141.8	129.4	118.6	117.0	114.9	112.9	110.3	109.3	108.3
72.5°	144.5	132.3	119.9	110.0	105.3	103.4	101.4	99.3	97.6	96.5	95.8
75°	110.8	99.5	91.3	87.7	85.0	83.5	80.4	78.9	77.9	76.2	75.7
77.5°	79.8	73.4	69.6	67.4	64.6	63.0	61.2	59.7	58.6	58.3	57.5
80°	60.8	57.8	55.1	52.1	51.0	49.0	48.5	47.0	47.5	45.8	45.8
82.5°	47.3	43.3	41.1	39.7	38.7	37.1	36.5	35.7	35.9	34.7	34.7
85°	24.2	23.2	22.1	21.1	21.1	19.6	20.1	19.6	19.6	18.6	18.1
87.5°	10.6	11.0	11.4	12.5	13.6	14.4	14.3	13.7	13.6	13.5	13.1
90°	13.7	18.1	23.8	29.6	35.3	41.1	40.5	40.0	39.5	39.0	38.9
92.5°	30.1	31.9	33.2	34.6	36.0	37.3	37.4	37.5	37.6	37.8	37.8
95°	71.4	73.0	73.5	74.0	74.5	75.0	75.0	75.0	75.0	75.0	74.8
97.5°	120.6	122.3	123.2	124.2	125.2	126.2	126.2	126.2	126.2	126.2	126.2
100°	157.3	158.8	159.6	160.3	161.1	161.9	161.9	161.9	161.9	161.9	161.8
102.5°	195.1	196.4	197.4	198.3	199.3	200.4	200.6	200.8	201.0	201.2	201.2
105°	255.3	256.0	256.5	257.0	257.5	258.0	258.6	259.1	259.6	260.1	260.4
107.5°	321.0	321.6	321.6	321.6	321.6	321.6	321.8	322.0	322.2	322.4	321.9
110°	364.1	364.9	364.9	364.9	364.9	364.9	364.9	364.9	364.9	364.9	364.5



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	409.1	409.8	409.5	409.3	409.1	408.9	408.3	407.7	407.1	406.5	405.9
115°	475.4	475.9	475.4	474.9	474.4	473.9	473.6	473.4	473.1	472.8	472.3
117.5°	543.7	544.0	542.6	541.1	539.7	538.2	537.6	536.9	536.3	535.7	535.0
120°	587.8	587.8	585.7	583.7	581.6	579.5	579.5	579.5	579.5	579.5	579.1
122.5°	629.9	630.4	628.9	627.4	626.0	624.5	623.9	623.3	622.7	622.0	621.5
125°	692.1	692.9	692.1	691.4	690.5	689.7	688.9	688.2	687.4	686.6	686.1
127.5°	755.8	756.9	755.9	755.0	754.1	753.1	752.1	751.2	750.2	749.3	748.4
130°	796.0	797.4	796.9	796.4	795.9	795.4	794.8	794.3	793.8	793.2	792.4
132.5°	836.7	838.1	838.2	838.3	838.4	838.5	837.4	836.2	835.1	833.9	832.9
135°	894.7	896.5	897.0	897.5	898.1	898.6	898.3	898.1	897.8	897.5	897.0
137.5°	953.4	954.9	955.6	956.3	956.9	957.7	957.5	957.3	957.0	956.8	956.2
140°	990.1	991.9	993.2	994.5	995.8	997.0	997.0	997.0	997.0	997.0	996.5
142.5°	1027.5	1029.2	1030.1	1031.0	1031.9	1032.8	1033.0	1033.2	1033.4	1033.6	1033.2
145°	1079.4	1081.2	1082.7	1084.3	1085.8	1087.4	1087.6	1087.9	1088.2	1088.4	1088.0
147.5°	1129.0	1130.6	1131.7	1132.8	1133.8	1134.8	1135.4	1136.0	1136.5	1137.1	1136.9
150°	1159.3	1160.6	1161.7	1162.8	1163.8	1164.9	1165.6	1166.4	1167.2	1168.0	1168.0
152.5°	1188.4	1189.8	1191.1	1192.3	1193.7	1194.9	1195.9	1196.9	1197.8	1198.8	1198.8
155°	1229.0	1229.7	1230.5	1231.3	1232.1	1232.8	1234.2	1235.5	1236.8	1238.1	1238.3
157.5°	1265.3	1265.7	1266.2	1266.7	1267.1	1267.6	1269.4	1271.1	1272.9	1274.7	1275.0
160°	1287.8	1288.1	1288.4	1288.7	1288.9	1289.2	1290.7	1292.3	1293.8	1295.5	1295.7
162.5°	1306.8	1306.9	1307.2	1307.4	1307.7	1308.0	1309.7	1311.5	1313.2	1315.0	1315.2
165°	1332.7	1332.6	1332.6	1332.6	1332.6	1332.6	1334.4	1336.3	1338.1	1339.9	1340.1
167.5°	1353.6	1353.2	1353.1	1353.1	1353.0	1353.0	1354.8	1356.7	1358.5	1360.3	1360.5
170°	1365.8	1365.3	1365.0	1364.7	1364.5	1364.2	1366.0	1367.9	1369.7	1371.5	1371.7
172.5°	1374.2	1373.7	1373.5	1373.2	1372.9	1372.7	1374.5	1376.3	1378.2	1380.0	1380.1
175°	1384.6	1383.9	1383.4	1382.9	1382.4	1381.8	1383.7	1385.5	1387.4	1389.2	1389.3
177.5°	1389.5	1388.9	1388.5	1388.1	1387.7	1387.3	1388.5	1389.8	1391.0	1392.2	1392.2
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1424.6	1425.4	1424.2	1425.0	1424.2	1425.4	1424.6	1429.2	1430.0	1430.8	1430.0
5°	1327.4	1321.2	1320.2	1318.6	1320.2	1321.2	1327.4	1330.0	1332.0	1336.2	1343.3
7.5°	1211.3	1210.3	1207.8	1204.2	1207.8	1210.3	1211.3	1220.1	1227.2	1235.2	1249.9
10°	1136.6	1134.1	1133.6	1129.9	1133.6	1134.1	1136.6	1148.0	1156.2	1167.6	1187.7
12.5°	1049.2	1032.6	1030.9	1021.9	1030.9	1032.6	1049.2	1063.9	1086.1	1097.0	1118.4
15°	893.3	890.3	879.9	873.2	879.9	890.3	893.3	905.7	913.9	943.8	978.4
17.5°	804.3	794.2	790.9	789.5	790.9	794.2	804.3	810.2	822.0	837.8	858.6
20°	746.9	737.7	736.1	735.1	736.1	737.7	746.9	754.2	763.5	780.4	802.1
22.5°	707.3	697.6	693.7	690.5	693.7	697.6	707.3	713.0	721.3	734.7	749.3
25°	639.7	636.1	634.1	633.0	634.1	636.1	639.7	644.9	653.1	671.2	686.6
27.5°	586.8	578.9	577.3	574.7	577.3	578.9	586.8	596.0	604.6	612.7	626.5
30°	556.7	554.1	550.6	547.4	550.6	554.1	556.7	561.4	567.0	581.0	594.4
32.5°	521.3	519.1	515.9	514.4	515.9	519.1	521.3	527.6	539.4	548.0	557.6
35°	482.0	474.7	471.7	467.1	471.7	474.7	482.0	487.2	491.8	499.0	516.5
37.5°	440.4	436.7	432.3	433.8	432.3	436.7	440.4	442.6	452.4	462.4	470.0
40°	408.3	405.7	404.7	404.1	404.7	405.7	408.3	415.0	426.9	431.4	442.8
42.5°	382.7	375.6	372.9	372.8	372.9	375.6	382.7	390.2	397.6	405.1	416.9
45°	343.9	337.1	332.4	333.1	332.4	337.1	343.9	346.4	352.5	367.6	374.3
47.5°	304.1	303.9	300.9	301.8	300.9	303.9	304.1	308.5	316.4	325.6	336.3
50°	285.1	282.0	279.9	280.4	279.9	282.0	285.1	288.7	293.3	297.9	314.5
52.5°	266.9	264.3	262.6	264.8	262.6	264.3	266.9	268.9	272.3	276.9	288.0
55°	237.1	234.0	233.5	233.0	233.5	234.0	237.1	239.7	243.8	247.4	252.6
57.5°	203.8	201.8	198.6	197.3	198.6	201.8	203.8	207.6	212.6	217.3	222.7
60°	179.9	175.8	170.7	170.1	170.7	175.8	179.9	186.6	188.6	195.9	202.1
62.5°	158.0	157.2	156.2	156.1	156.2	157.2	158.0	160.2	163.1	173.6	181.1
65°	138.7	138.1	138.7	139.2	138.7	138.1	138.7	139.7	140.2	141.3	144.3
67.5°	120.9	119.9	119.0	119.4	119.0	119.9	120.9	121.1	122.5	123.1	125.2
70°	107.2	106.7	106.2	106.2	106.2	106.7	107.2	108.3	109.3	110.3	112.9
72.5°	94.0	93.9	93.4	93.0	93.4	93.9	94.0	95.8	96.5	97.6	99.3
75°	75.2	74.2	74.2	74.2	74.2	74.2	75.2	75.7	76.2	77.9	78.9
77.5°	57.4	56.9	56.2	55.8	56.2	56.9	57.4	57.5	58.3	58.6	59.7
80°	45.3	44.8	44.3	44.3	44.3	44.8	45.3	45.8	45.8	47.5	47.0
82.5°	34.6	34.1	34.0	33.6	34.0	34.1	34.6	34.7	34.7	35.9	35.7
85°	18.6	19.1	18.6	19.6	18.6	19.1	18.6	18.1	18.6	19.6	19.6
87.5°	13.2	12.8	13.3	12.9	13.3	12.8	13.2	13.1	13.5	13.6	13.7
90°	39.1	39.4	39.6	39.9	39.6	39.4	39.1	38.9	39.0	39.5	40.0
92.5°	37.9	37.9	38.0	38.0	38.0	37.9	37.9	37.8	37.8	37.6	37.5
95°	74.3	73.8	73.2	72.7	73.2	73.8	74.3	74.8	75.0	75.0	75.0
97.5°	126.1	126.1	126.0	126.0	126.0	126.1	126.1	126.2	126.2	126.2	126.2
100°	161.5	161.3	161.0	160.7	161.0	161.3	161.5	161.8	161.9	161.9	161.9
102.5°	200.9	200.7	200.4	200.2	200.4	200.7	200.9	201.2	201.2	201.0	200.8
105°	260.4	260.4	260.4	260.4	260.4	260.4	260.4	260.4	260.1	259.6	259.1
107.5°	320.8	319.6	318.4	317.2	318.4	319.6	320.8	321.9	322.4	322.2	322.0
110°	363.7	362.8	362.0	361.3	362.0	362.8	363.7	364.5	364.9	364.9	364.9



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	405.3	404.7	404.1	403.5	404.1	404.7	405.3	405.9	406.5	407.1	407.7
115°	471.6	470.8	470.0	469.2	470.0	470.8	471.6	472.3	472.8	473.1	473.4
117.5°	534.2	533.4	532.6	531.9	532.6	533.4	534.2	535.0	535.7	536.3	536.9
120°	578.3	577.5	576.7	575.9	576.7	577.5	578.3	579.1	579.5	579.5	579.5
122.5°	620.9	620.3	619.8	619.1	619.8	620.3	620.9	621.5	622.0	622.7	623.3
125°	685.8	685.6	685.3	685.1	685.3	685.6	685.8	686.1	686.6	687.4	688.2
127.5°	747.6	746.8	746.0	745.1	746.0	746.8	747.6	748.4	749.3	750.2	751.2
130°	791.4	790.3	789.3	788.3	789.3	790.3	791.4	792.4	793.2	793.8	794.3
132.5°	832.1	831.2	830.4	829.6	830.4	831.2	832.1	832.9	833.9	835.1	836.2
135°	896.2	895.4	894.6	893.8	894.6	895.4	896.2	897.0	897.5	897.8	898.1
137.5°	955.1	954.1	953.1	952.0	953.1	954.1	955.1	956.2	956.8	957.0	957.3
140°	995.5	994.5	993.4	992.4	993.4	994.5	995.5	996.5	997.0	997.0	997.0
142.5°	1032.1	1031.1	1030.1	1029.0	1030.1	1031.1	1032.1	1033.2	1033.6	1033.4	1033.2
145°	1087.0	1086.0	1084.9	1083.9	1084.9	1086.0	1087.0	1088.0	1088.4	1088.2	1087.9
147.5°	1135.9	1134.9	1133.9	1133.0	1133.9	1134.9	1135.9	1136.9	1137.1	1136.5	1136.0
150°	1167.2	1166.4	1165.6	1164.9	1165.6	1166.4	1167.2	1168.0	1168.0	1167.2	1166.4
152.5°	1197.8	1196.9	1195.9	1194.9	1195.9	1196.9	1197.8	1198.8	1198.8	1197.8	1196.9
155°	1237.6	1236.8	1236.0	1235.2	1236.0	1236.8	1237.6	1238.3	1238.1	1236.8	1235.5
157.5°	1273.6	1272.4	1271.2	1269.9	1271.2	1272.4	1273.6	1275.0	1274.7	1272.9	1271.1
160°	1294.6	1293.6	1292.5	1291.5	1292.5	1293.6	1294.6	1295.7	1295.5	1293.8	1292.3
162.5°	1314.0	1312.8	1311.5	1310.3	1311.5	1312.8	1314.0	1315.2	1315.0	1313.2	1311.5
165°	1338.9	1337.6	1336.3	1334.9	1336.3	1337.6	1338.9	1340.1	1339.9	1338.1	1336.3
167.5°	1359.2	1357.8	1356.5	1355.1	1356.5	1357.8	1359.2	1360.5	1360.3	1358.5	1356.7
170°	1370.1	1368.6	1367.0	1365.4	1367.0	1368.6	1370.1	1371.7	1371.5	1369.7	1367.9
172.5°	1378.6	1377.0	1375.4	1373.8	1375.4	1377.0	1378.6	1380.1	1380.0	1378.2	1376.3
175°	1387.8	1386.1	1384.6	1383.0	1384.6	1386.1	1387.8	1389.3	1389.2	1387.4	1385.5
177.5°	1391.0	1389.8	1388.5	1387.3	1388.5	1389.8	1391.0	1392.2	1392.2	1391.0	1389.8
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1426.6	1432.4	1441.1	1446.0	1454.3	1459.7	1462.6	1467.9	1470.8	1481.1	1491.9
5°	1347.0	1355.2	1369.7	1383.0	1397.5	1412.4	1423.3	1435.6	1446.9	1466.5	1487.2
7.5°	1255.7	1267.1	1289.4	1310.8	1336.0	1357.1	1375.7	1396.8	1415.7	1443.8	1473.1
10°	1187.2	1207.3	1236.7	1256.8	1289.8	1310.9	1340.3	1363.4	1389.8	1426.8	1459.9
12.5°	1128.2	1152.5	1176.0	1204.0	1233.7	1268.8	1301.1	1330.9	1362.1	1400.5	1439.3
15°	1021.2	1056.2	1092.9	1121.2	1161.4	1198.5	1236.2	1276.4	1314.5	1360.4	1410.9
17.5°	883.4	924.0	985.6	1034.2	1081.4	1118.6	1165.2	1213.9	1258.8	1314.1	1370.4
20°	821.2	851.1	892.8	958.3	1029.5	1069.1	1116.5	1170.1	1221.7	1282.0	1342.3
22.5°	771.2	797.9	831.4	882.4	961.8	1015.9	1065.4	1119.8	1179.6	1241.2	1308.1
25°	700.0	718.6	753.7	794.9	849.5	938.7	992.8	1047.4	1112.5	1178.4	1254.7
27.5°	646.5	663.2	686.0	725.4	766.0	830.0	916.1	975.7	1040.5	1114.7	1193.9
30°	605.7	625.3	650.6	678.4	722.8	772.7	858.8	927.9	991.8	1068.1	1152.7
32.5°	576.0	591.5	613.0	641.3	678.2	726.1	794.9	878.8	941.1	1021.5	1109.7
35°	527.4	545.4	562.9	589.8	619.7	663.5	715.5	805.2	867.1	946.4	1035.1
37.5°	487.3	498.3	517.7	538.9	570.5	603.1	648.2	728.7	795.6	873.5	964.3
40°	456.8	470.6	485.0	508.8	534.5	566.0	610.4	670.1	746.9	823.2	911.9
42.5°	427.1	444.6	459.9	475.7	504.0	535.5	571.6	622.3	700.7	773.0	859.1
45°	391.2	402.6	418.6	436.1	459.3	486.1	518.1	562.4	637.6	700.0	780.9
47.5°	349.6	366.2	376.6	393.7	415.8	441.3	471.1	509.4	570.4	628.8	703.9
50°	321.1	338.2	353.1	368.6	388.2	412.9	437.7	474.7	523.7	585.1	655.2
52.5°	296.8	311.7	326.3	341.7	360.9	383.6	407.2	439.7	481.7	538.1	606.1
55°	263.4	272.7	287.6	303.1	320.1	341.7	364.5	391.7	427.9	475.2	530.5
57.5°	229.1	239.9	251.8	267.3	284.6	301.1	321.5	346.3	374.8	417.7	464.8
60°	209.8	218.0	227.8	243.8	259.8	274.8	294.4	315.0	341.7	378.9	419.1
62.5°	188.3	196.2	205.2	219.0	234.7	248.3	265.5	287.3	310.0	343.9	379.1
65°	152.6	163.9	172.7	185.1	197.9	212.4	225.8	243.3	263.4	290.2	321.6
67.5°	126.5	132.3	140.4	151.7	164.8	177.2	190.0	203.6	221.1	241.8	266.7
70°	114.9	117.0	118.6	129.4	141.8	154.1	166.0	178.8	193.8	210.9	232.5
72.5°	101.4	103.4	105.3	110.0	119.9	132.3	144.5	154.1	168.2	182.4	200.0
75°	80.4	83.5	85.0	87.7	91.3	99.5	110.8	120.1	128.4	139.2	153.1
77.5°	61.2	63.0	64.6	67.4	69.6	73.4	79.8	88.2	95.8	102.2	111.8
80°	48.5	49.0	51.0	52.1	55.1	57.8	60.8	67.6	75.2	77.9	84.5
82.5°	36.5	37.1	38.7	39.7	41.1	43.3	47.3	49.0	55.0	58.5	62.7
85°	20.1	19.6	21.1	21.1	22.1	23.2	24.2	26.8	28.4	32.5	33.5
87.5°	14.3	14.4	13.6	12.5	11.4	11.0	10.6	10.4	10.6	11.2	12.2
90°	40.5	41.1	35.3	29.6	23.8	18.1	13.7	10.6	7.5	4.3	1.2
92.5°	37.4	37.3	36.0	34.6	33.2	31.9	30.1	27.8	25.4	23.1	20.9
95°	75.0	75.0	74.5	74.0	73.5	73.0	71.4	68.8	66.2	63.6	61.0
97.5°	126.2	126.2	125.2	124.2	123.2	122.3	120.6	118.4	116.0	113.7	111.5
100°	161.9	161.9	161.1	160.3	159.6	158.8	157.3	155.2	153.2	151.1	149.0
102.5°	200.6	200.4	199.3	198.3	197.4	196.4	195.1	193.4	191.8	190.1	188.4
105°	258.6	258.0	257.5	257.0	256.5	256.0	255.3	254.6	253.8	253.0	252.2
107.5°	321.8	321.6	321.6	321.6	321.6	321.6	321.0	319.9	318.8	317.6	316.5
110°	364.9	364.9	364.9	364.9	364.9	364.9	364.1	362.4	360.9	359.3	357.8



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	408.3	408.9	409.1	409.3	409.5	409.8	409.1	407.5	406.0	404.3	402.8
115°	473.6	473.9	474.4	474.9	475.4	475.9	475.4	473.9	472.3	470.8	469.2
117.5°	537.6	538.2	539.7	541.1	542.6	544.0	543.7	541.6	539.6	537.5	535.3
120°	579.5	579.5	581.6	583.7	585.7	587.8	587.8	585.7	583.7	581.6	579.5
122.5°	623.9	624.5	626.0	627.4	628.9	630.4	629.9	627.3	624.8	622.4	619.9
125°	688.9	689.7	690.5	691.4	692.1	692.9	692.1	689.7	687.4	685.1	682.7
127.5°	752.1	753.1	754.1	755.0	755.9	756.9	755.8	752.9	749.9	746.9	744.0
130°	794.8	795.4	795.9	796.4	796.9	797.4	796.0	792.5	789.2	785.8	782.4
132.5°	837.4	838.5	838.4	838.3	838.2	838.1	836.7	833.8	831.1	828.4	825.6
135°	898.3	898.6	898.1	897.5	897.0	896.5	894.7	891.9	889.1	886.2	883.3
137.5°	957.5	957.7	956.9	956.3	955.6	954.9	953.4	951.1	948.8	946.4	944.0
140°	997.0	997.0	995.8	994.5	993.2	991.9	990.1	987.7	985.3	983.0	980.7
142.5°	1033.0	1032.8	1031.9	1031.0	1030.1	1029.2	1027.5	1025.2	1022.9	1020.6	1018.2
145°	1087.6	1087.4	1085.8	1084.3	1082.7	1081.2	1079.4	1077.6	1075.8	1074.0	1072.2
147.5°	1135.4	1134.8	1133.8	1132.8	1131.7	1130.6	1129.0	1126.8	1124.6	1122.5	1120.2
150°	1165.6	1164.9	1163.8	1162.8	1161.7	1160.6	1159.3	1157.8	1156.2	1154.7	1153.1
152.5°	1195.9	1194.9	1193.7	1192.3	1191.1	1189.8	1188.4	1186.9	1185.3	1183.8	1182.1
155°	1234.2	1232.8	1232.1	1231.3	1230.5	1229.7	1229.0	1228.2	1227.4	1226.6	1225.9
157.5°	1269.4	1267.6	1267.1	1266.7	1266.2	1265.7	1265.3	1264.7	1264.1	1263.6	1263.1
160°	1290.7	1289.2	1288.9	1288.7	1288.4	1288.1	1287.8	1287.2	1286.7	1286.2	1285.7
162.5°	1309.7	1308.0	1307.7	1307.4	1307.2	1306.9	1306.8	1306.6	1306.5	1306.4	1306.3
165°	1334.4	1332.6	1332.6	1332.6	1332.6	1332.6	1332.7	1332.9	1333.2	1333.5	1333.7
167.5°	1354.8	1353.0	1353.0	1353.1	1353.1	1353.2	1353.6	1354.4	1355.1	1355.9	1356.8
170°	1366.0	1364.2	1364.5	1364.7	1365.0	1365.3	1365.8	1366.5	1367.4	1368.2	1369.0
172.5°	1374.5	1372.7	1372.9	1373.2	1373.5	1373.7	1374.2	1375.0	1375.8	1376.6	1377.4
175°	1383.7	1381.8	1382.4	1382.9	1383.4	1383.9	1384.6	1385.3	1386.1	1386.9	1387.8
177.5°	1388.5	1387.3	1387.7	1388.1	1388.5	1388.9	1389.5	1390.1	1390.7	1391.3	1391.9
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1492.3	1493.5	1501.8	1505.4	1512.9	1515.7	1519.0	1518.2	1518.2	1519.8	1531.5
5°	1495.4	1505.7	1521.2	1536.1	1550.5	1563.0	1571.2	1579.4	1582.6	1597.5	1610.9
7.5°	1490.1	1509.0	1534.6	1557.4	1584.7	1606.1	1623.8	1639.8	1650.7	1672.4	1694.8
10°	1483.1	1509.8	1538.7	1568.1	1605.8	1634.1	1662.9	1685.2	1692.3	1724.8	1743.4
12.5°	1469.1	1504.9	1541.7	1579.6	1616.5	1655.6	1687.3	1709.5	1734.8	1764.0	1798.3
15°	1448.0	1489.2	1537.2	1586.2	1638.7	1686.2	1720.2	1758.9	1786.7	1818.7	1848.6
17.5°	1417.7	1470.9	1531.9	1588.5	1649.3	1700.3	1747.1	1784.2	1803.8	1822.0	1826.4
20°	1393.9	1451.1	1522.8	1589.7	1650.6	1709.4	1755.8	1786.7	1791.8	1792.3	1765.0
22.5°	1367.9	1432.5	1507.5	1576.2	1648.9	1714.3	1750.4	1763.6	1743.1	1708.2	1655.4
25°	1320.2	1394.9	1482.1	1560.3	1639.8	1701.6	1714.0	1690.8	1619.1	1543.9	1448.6
27.5°	1268.4	1352.4	1445.8	1533.0	1617.5	1655.9	1629.1	1545.5	1416.4	1304.2	1168.3
30°	1230.5	1324.8	1416.5	1514.0	1592.4	1608.8	1547.5	1424.3	1273.7	1104.7	969.2
32.5°	1187.2	1286.1	1386.8	1487.6	1553.2	1537.1	1435.7	1284.0	1107.6	941.4	813.2
35°	1125.3	1227.4	1336.2	1437.1	1478.9	1409.4	1257.8	1060.4	879.9	724.8	636.6
37.5°	1053.9	1165.0	1278.1	1370.9	1367.9	1251.9	1045.5	841.7	690.0	598.2	535.5
40°	1003.1	1115.5	1237.7	1316.1	1282.5	1131.5	907.8	715.5	604.7	531.5	485.5
42.5°	954.5	1067.2	1188.6	1250.9	1192.7	1006.9	784.1	633.4	542.0	484.8	447.7
45°	871.7	990.8	1103.2	1137.7	1033.6	828.9	634.1	524.7	463.9	421.7	395.9
47.5°	790.7	907.9	1010.5	1011.1	870.2	672.2	534.8	454.1	402.2	369.5	350.7
50°	741.2	852.6	938.7	925.3	765.5	597.9	478.4	408.8	365.5	340.2	320.6
52.5°	685.6	793.7	868.2	830.0	676.8	526.2	427.7	369.2	333.4	311.3	293.9
55°	604.7	700.5	753.2	695.4	552.1	437.7	361.3	315.5	288.7	270.1	255.2
57.5°	525.1	604.3	637.3	570.2	454.7	362.9	305.7	271.2	244.7	231.4	223.6
60°	475.2	542.8	566.0	491.8	395.4	317.5	270.6	238.6	219.0	210.4	202.6
62.5°	426.2	481.4	491.0	422.9	344.7	277.9	237.6	210.7	197.6	189.2	182.0
65°	353.7	393.3	388.7	334.1	272.7	220.7	191.3	174.7	164.9	153.1	140.2
67.5°	291.1	315.4	300.7	259.8	208.1	171.5	152.3	139.8	127.6	116.4	113.4
70°	251.6	265.5	250.0	212.4	170.7	143.8	128.4	113.4	106.2	103.6	99.0
72.5°	213.6	218.4	201.8	169.5	138.9	119.1	104.0	95.6	91.8	89.6	86.6
75°	160.4	156.7	142.3	117.0	96.4	83.0	78.4	75.2	72.7	70.6	69.1
77.5°	112.6	107.3	94.4	78.0	67.2	60.7	58.0	56.2	55.0	54.0	52.5
80°	84.5	80.9	68.1	55.6	51.0	48.0	46.4	44.3	44.3	43.3	41.7
82.5°	61.9	57.9	46.6	40.8	38.3	36.4	35.2	34.0	33.6	33.8	32.7
85°	32.5	26.3	23.2	22.1	20.6	19.6	20.1	19.1	19.1	19.1	18.6
87.5°	10.8	9.3	9.5	9.8	11.0	12.2	12.9	14.0	15.7	15.1	15.5
90°	4.3	7.5	10.6	13.7	18.1	23.8	29.6	35.3	41.1	40.5	40.0
92.5°	23.1	25.4	27.8	30.1	31.9	33.2	34.6	36.0	37.3	37.4	37.5
95°	63.6	66.2	68.8	71.4	73.0	73.5	74.0	74.5	75.0	75.0	75.0
97.5°	113.7	116.0	118.4	120.6	122.3	123.2	124.2	125.2	126.2	126.2	126.2
100°	151.1	153.2	155.2	157.3	158.8	159.6	160.3	161.1	161.9	161.9	161.9
102.5°	190.1	191.8	193.4	195.1	196.4	197.4	198.3	199.3	200.4	200.6	200.8
105°	253.0	253.8	254.6	255.3	256.0	256.5	257.0	257.5	258.0	258.6	259.1
107.5°	317.6	318.8	319.9	321.0	321.6	321.6	321.6	321.6	321.6	321.8	322.0
110°	359.3	360.9	362.4	364.1	364.9	364.9	364.9	364.9	364.9	364.9	364.9



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	404.3	406.0	407.5	409.1	409.8	409.5	409.3	409.1	408.9	408.3	407.7
115°	470.8	472.3	473.9	475.4	475.9	475.4	474.9	474.4	473.9	473.6	473.4
117.5°	537.5	539.6	541.6	543.7	544.0	542.6	541.1	539.7	538.2	537.6	536.9
120°	581.6	583.7	585.7	587.8	587.8	585.7	583.7	581.6	579.5	579.5	579.5
122.5°	622.4	624.8	627.3	629.9	630.4	628.9	627.4	626.0	624.5	623.9	623.3
125°	685.1	687.4	689.7	692.1	692.9	692.1	691.4	690.5	689.7	688.9	688.2
127.5°	746.9	749.9	752.9	755.8	756.9	755.9	755.0	754.1	753.1	752.1	751.2
130°	785.8	789.2	792.5	796.0	797.4	796.9	796.4	795.9	795.4	794.8	794.3
132.5°	828.4	831.1	833.8	836.7	838.1	838.2	838.3	838.4	838.5	837.4	836.2
135°	886.2	889.1	891.9	894.7	896.5	897.0	897.5	898.1	898.6	898.3	898.1
137.5°	946.4	948.8	951.1	953.4	954.9	955.6	956.3	956.9	957.7	957.5	957.3
140°	983.0	985.3	987.7	990.1	991.9	993.2	994.5	995.8	997.0	997.0	997.0
142.5°	1020.6	1022.9	1025.2	1027.5	1029.2	1030.1	1031.0	1031.9	1032.8	1033.0	1033.2
145°	1074.0	1075.8	1077.6	1079.4	1081.2	1082.7	1084.3	1085.8	1087.4	1087.6	1087.9
147.5°	1122.5	1124.6	1126.8	1129.0	1130.6	1131.7	1132.8	1133.8	1134.8	1135.4	1136.0
150°	1154.7	1156.2	1157.8	1159.3	1160.6	1161.7	1162.8	1163.8	1164.9	1165.6	1166.4
152.5°	1183.8	1185.3	1186.9	1188.4	1189.8	1191.1	1192.3	1193.7	1194.9	1195.9	1196.9
155°	1226.6	1227.4	1228.2	1229.0	1229.7	1230.5	1231.3	1232.1	1232.8	1234.2	1235.5
157.5°	1263.6	1264.1	1264.7	1265.3	1265.7	1266.2	1266.7	1267.1	1267.6	1269.4	1271.1
160°	1286.2	1286.7	1287.2	1287.8	1288.1	1288.4	1288.7	1288.9	1289.2	1290.7	1292.3
162.5°	1306.4	1306.5	1306.6	1306.8	1306.9	1307.2	1307.4	1307.7	1308.0	1309.7	1311.5
165°	1333.5	1333.2	1332.9	1332.7	1332.6	1332.6	1332.6	1332.6	1332.6	1334.4	1336.3
167.5°	1355.9	1355.1	1354.4	1353.6	1353.2	1353.1	1353.1	1353.0	1353.0	1354.8	1356.7
170°	1368.2	1367.4	1366.5	1365.8	1365.3	1365.0	1364.7	1364.5	1364.2	1366.0	1367.9
172.5°	1376.6	1375.8	1375.0	1374.2	1373.7	1373.5	1373.2	1372.9	1372.7	1374.5	1376.3
175°	1386.9	1386.1	1385.3	1384.6	1383.9	1383.4	1382.9	1382.4	1381.8	1383.7	1385.5
177.5°	1391.3	1390.7	1390.1	1389.5	1388.9	1388.5	1388.1	1387.7	1387.3	1388.5	1389.8
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1535.5	1540.9	1543.4	1543.4	1546.3	1545.0	1543.8
5°	1623.8	1633.6	1635.7	1645.0	1651.6	1649.5	1650.6
7.5°	1711.5	1727.3	1742.8	1750.0	1751.1	1755.2	1756.8
10°	1765.5	1778.5	1802.7	1799.1	1817.1	1827.5	1810.4
12.5°	1817.6	1834.9	1851.7	1856.3	1866.6	1869.9	1863.2
15°	1864.5	1873.8	1874.8	1872.3	1875.3	1872.8	1863.0
17.5°	1820.6	1805.5	1775.0	1760.6	1749.2	1732.2	1725.5
20°	1748.0	1703.6	1652.1	1631.5	1607.3	1559.8	1571.2
22.5°	1591.3	1540.8	1489.2	1429.1	1400.3	1355.3	1352.6
25°	1347.5	1260.4	1164.5	1097.5	1058.3	1013.5	993.9
27.5°	1047.6	938.0	859.4	819.6	783.5	747.9	746.4
30°	850.5	768.1	707.2	673.3	651.1	636.1	639.2
32.5°	716.9	660.5	619.5	591.2	574.8	563.5	563.3
35°	586.1	547.4	521.2	509.3	497.5	489.2	489.7
37.5°	501.6	478.4	463.7	450.6	443.2	439.2	437.0
40°	458.3	439.2	427.9	420.1	413.9	408.3	407.3
42.5°	424.0	408.3	396.9	390.8	385.1	381.0	380.0
45°	376.3	363.5	353.1	346.4	343.9	340.2	340.2
47.5°	334.8	322.0	314.1	309.8	305.4	303.0	302.9
50°	306.7	296.9	289.7	287.1	283.5	282.0	281.4
52.5°	281.6	274.3	269.1	267.3	265.8	263.8	264.2
55°	247.4	243.3	241.3	239.7	237.1	234.0	236.1
57.5°	218.6	215.2	209.6	204.8	202.4	200.3	201.1
60°	198.4	191.3	184.0	178.3	176.8	172.2	172.2
62.5°	172.9	162.8	153.9	150.8	149.2	147.0	146.6
65°	133.0	128.9	126.8	124.7	123.7	123.7	122.7
67.5°	110.2	108.6	106.3	105.7	104.7	104.4	104.1
70°	97.5	95.3	94.3	93.8	92.8	93.3	91.8
72.5°	85.0	83.4	83.2	81.9	81.2	81.3	80.2
75°	67.1	67.1	66.4	65.9	64.9	64.4	64.9
77.5°	51.5	51.6	50.7	50.6	50.5	50.6	50.1
80°	41.2	41.7	41.2	40.7	40.2	40.7	40.2
82.5°	32.6	31.8	31.7	31.6	31.5	31.2	31.1
85°	18.6	19.1	18.6	18.1	18.1	18.1	18.6
87.5°	14.9	14.8	14.7	14.8	14.8	14.9	14.5
90°	39.5	39.0	38.9	39.1	39.4	39.6	39.9
92.5°	37.6	37.8	37.8	37.9	37.9	38.0	38.0
95°	75.0	75.0	74.8	74.3	73.8	73.2	72.7
97.5°	126.2	126.2	126.2	126.1	126.1	126.0	126.0
100°	161.9	161.9	161.8	161.5	161.3	161.0	160.7
102.5°	201.0	201.2	201.2	200.9	200.7	200.4	200.2
105°	259.6	260.1	260.4	260.4	260.4	260.4	260.4
107.5°	322.2	322.4	321.9	320.8	319.6	318.4	317.2
110°	364.9	364.9	364.5	363.7	362.8	362.0	361.3



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	407.1	406.5	405.9	405.3	404.7	404.1	403.5
115°	473.1	472.8	472.3	471.6	470.8	470.0	469.2
117.5°	536.3	535.7	535.0	534.2	533.4	532.6	531.9
120°	579.5	579.5	579.1	578.3	577.5	576.7	575.9
122.5°	622.7	622.0	621.5	620.9	620.3	619.8	619.1
125°	687.4	686.6	686.1	685.8	685.6	685.3	685.1
127.5°	750.2	749.3	748.4	747.6	746.8	746.0	745.1
130°	793.8	793.2	792.4	791.4	790.3	789.3	788.3
132.5°	835.1	833.9	832.9	832.1	831.2	830.4	829.6
135°	897.8	897.5	897.0	896.2	895.4	894.6	893.8
137.5°	957.0	956.8	956.2	955.1	954.1	953.1	952.0
140°	997.0	997.0	996.5	995.5	994.5	993.4	992.4
142.5°	1033.4	1033.6	1033.2	1032.1	1031.1	1030.1	1029.0
145°	1088.2	1088.4	1088.0	1087.0	1086.0	1084.9	1083.9
147.5°	1136.5	1137.1	1136.9	1135.9	1134.9	1133.9	1133.0
150°	1167.2	1168.0	1168.0	1167.2	1166.4	1165.6	1164.9
152.5°	1197.8	1198.8	1198.8	1197.8	1196.9	1195.9	1194.9
155°	1236.8	1238.1	1238.3	1237.6	1236.8	1236.0	1235.2
157.5°	1272.9	1274.7	1275.0	1273.6	1272.4	1271.2	1269.9
160°	1293.8	1295.5	1295.7	1294.6	1293.6	1292.5	1291.5
162.5°	1313.2	1315.0	1315.2	1314.0	1312.8	1311.5	1310.3
165°	1338.1	1339.9	1340.1	1338.9	1337.6	1336.3	1334.9
167.5°	1358.5	1360.3	1360.5	1359.2	1357.8	1356.5	1355.1
170°	1369.7	1371.5	1371.7	1370.1	1368.6	1367.0	1365.4
172.5°	1378.2	1380.0	1380.1	1378.6	1377.0	1375.4	1373.8
175°	1387.4	1389.2	1389.3	1387.8	1386.1	1384.6	1383.0
177.5°	1391.0	1392.2	1392.2	1391.0	1389.8	1388.5	1387.3
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1

(END OF REPORT)