

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: P332193-830

Luminaire Tested: **S123DIW-S1000D1030U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332193-830
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-S1000D1030U830-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1000 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: 7367.2 lumens
Efficiency: N/A
Efficacy: 120.4 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

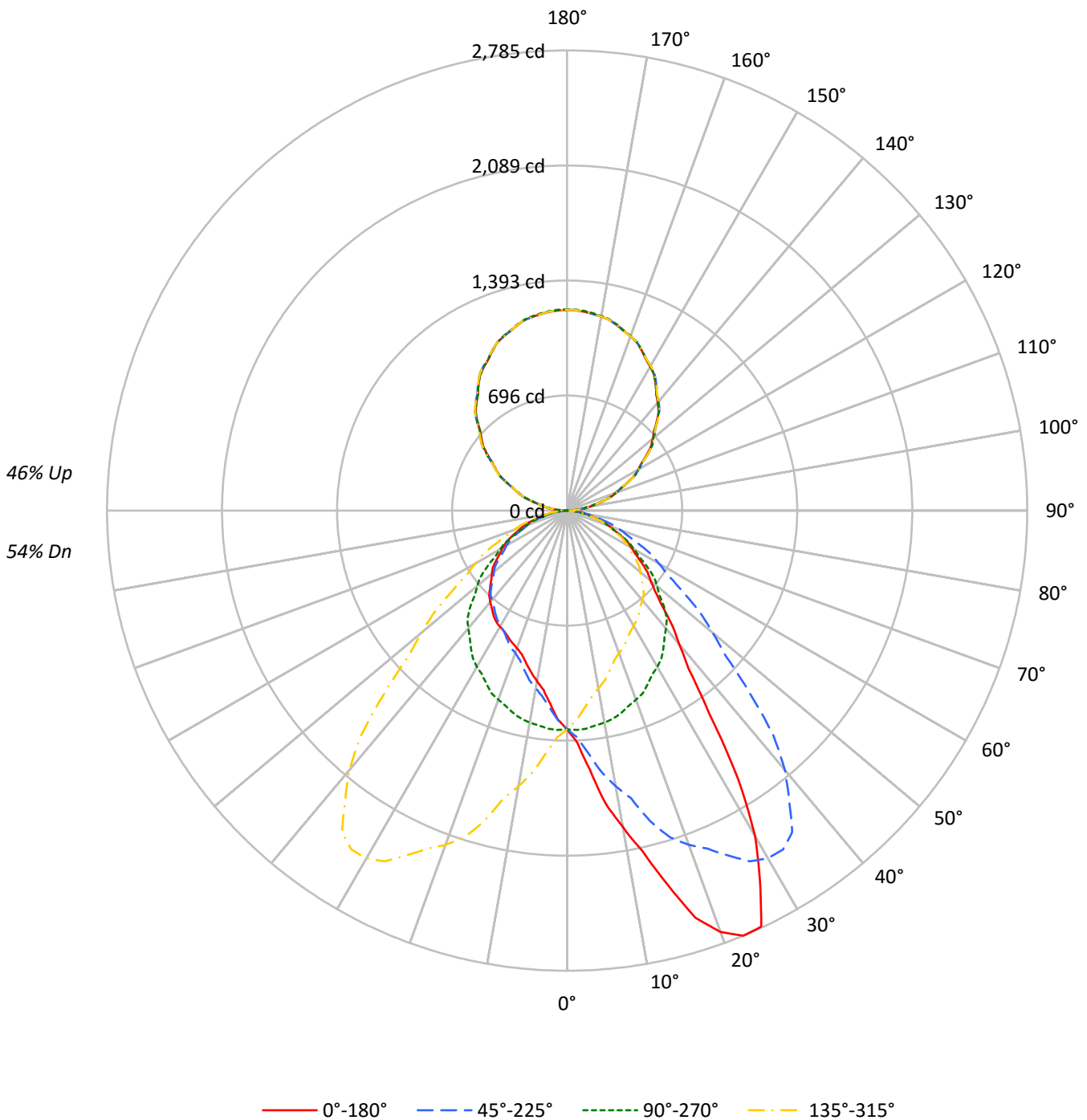
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54
1	99	95	91	88	92	88	85	82	76	73	71	64	62	61	54	52	51	46
2	90	83	77	72	84	77	72	68	67	63	59	57	54	51	47	45	44	39
3	83	73	66	60	76	68	62	57	59	54	50	50	47	44	42	40	37	34
4	76	65	57	51	70	61	54	48	53	47	43	45	41	38	38	35	32	29
5	70	58	50	44	64	54	47	42	47	41	37	40	36	33	34	31	28	25
6	64	52	44	38	59	49	42	36	43	37	33	37	32	29	31	28	25	22
7	59	47	39	34	55	44	37	32	39	33	29	33	29	25	28	25	22	20
8	55	43	35	30	51	40	33	28	35	30	26	31	26	23	26	23	20	18
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	21	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14249	14249	14249	14249
5°	16993	14311	12682	14311
10°	21270	14238	11455	14238
15°	26088	14123	10664	14123
20°	31078	13945	10153	13945
25°	32999	13726	10041	13726
30°	28285	13569	10092	13569
35°	19671	13341	10198	13341
40°	14816	13078	10166	13078
45°	12301	12683	10036	12683
50°	11020	11879	9945	11879
55°	10303	11012	9822	11012
60°	9664	10107	9722	10107
65°	9085	9212	9411	9212
70°	8519	8195	8960	8195
75°	7627	7178	8218	7178
80°	6676	5883	7073	5883
85°	5224	4273	4755	4273



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.4	1.8
10°-20°	418.2	5.7
20°-30°	701.8	9.5
30°-40°	794.6	10.8
40°-50°	712.6	9.7
50°-60°	575.1	7.8
60°-70°	400.7	5.4
70°-80°	210.6	2.9
80°-90°	55.1	0.7
90°-100°	79.2	1.1
100°-110°	237.0	3.2
110°-120°	403.1	5.5
120°-130°	530.3	7.2
130°-140°	596.0	8.1
140°-150°	585.8	8.0
150°-160°	493.2	6.7
160°-170°	328.3	4.5
170°-180°	115.0	1.6
0°-30°	1250.4	17.0
0°-40°	2045.0	27.8
0°-60°	3332.7	45.2
0°-90°	3999.2	54.3
90°-120°	719.4	9.8
90°-150°	2431.5	33.0
90°-180°	3368.0	45.7
0°-180°	7367.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1324	1324	1324	1324	1324	
5°	1573	1324	1174	1324	1573	163
15°	2341	1267	957	1267	2341	676
25°	2778	1156	845	1156	2778	1219
35°	1497	1015	776	1015	1497	973
45°	808	833	659	833	808	640
55°	549	587	523	587	549	493
65°	357	362	370	362	357	355
75°	183	173	198	173	183	196
85°	42	35	38	35	42	51
90°	29	1	29	1	29	16
95°	74	56	74	56	74	76
105°	227	215	227	215	227	241
115°	407	406	407	406	407	403
125°	587	594	587	594	587	525
135°	770	771	770	771	770	592
145°	935	935	935	935	935	584
155°	1069	1070	1069	1070	1069	492
165°	1162	1166	1162	1166	1162	328
175°	1208	1213	1208	1213	1208	115
180°	1216	1216	1216	1216	1216	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1404.9	1403.9	1401.3	1403.4	1399.3	1393.6	1393.1	1388.0	1373.1	1372.1	1368.0
5°	1572.7	1567.5	1566.9	1566.3	1557.3	1545.1	1522.0	1520.1	1489.3	1473.9	1455.3
7.5°	1790.0	1792.7	1783.3	1775.1	1747.7	1729.6	1704.8	1673.1	1635.3	1596.9	1571.4
10°	1946.0	1967.2	1940.9	1922.9	1906.2	1874.8	1838.2	1792.7	1747.2	1693.9	1653.5
12.5°	2113.3	2123.6	2118.4	2101.5	2075.6	2027.7	1962.9	1912.8	1870.9	1782.2	1746.3
15°	2341.1	2380.2	2355.2	2297.4	2298.8	2253.2	2168.5	2075.6	2026.2	1948.5	1842.8
17.5°	2583.8	2588.7	2578.0	2529.9	2497.8	2435.2	2357.1	2267.9	2167.9	2074.0	1961.8
20°	2713.1	2709.2	2686.8	2661.7	2606.6	2557.9	2472.6	2373.1	2244.9	2152.5	2030.0
22.5°	2784.9	2778.5	2767.9	2746.9	2701.0	2648.7	2572.1	2463.4	2341.4	2214.1	2072.6
25°	2778.5	2786.8	2788.1	2782.4	2766.4	2734.9	2674.6	2588.0	2466.2	2302.6	2155.1
27.5°	2527.1	2538.9	2573.1	2603.6	2637.5	2672.2	2667.6	2624.6	2534.4	2393.1	2212.8
30°	2275.7	2250.0	2313.5	2393.7	2448.2	2544.4	2598.3	2601.5	2550.8	2429.6	2253.8
32.5°	1926.7	1954.9	1983.0	2081.7	2200.8	2308.9	2416.1	2502.5	2512.3	2431.7	2277.9
35°	1497.0	1532.3	1583.6	1634.9	1763.2	1873.5	2062.1	2226.3	2357.1	2374.5	2280.1
37.5°	1206.4	1223.8	1256.2	1307.7	1391.6	1522.4	1668.3	1875.8	2065.4	2206.4	2212.5
40°	1054.4	1059.6	1096.2	1135.3	1203.2	1311.0	1442.5	1625.9	1852.9	2049.9	2132.0
42.5°	940.6	951.8	967.3	1004.9	1059.0	1140.1	1262.3	1414.0	1622.1	1848.7	2009.3
45°	808.1	821.0	830.6	855.6	894.1	948.6	1034.0	1172.4	1330.9	1565.0	1781.1
47.5°	720.7	721.7	728.9	747.7	773.9	814.8	875.2	964.1	1109.6	1299.5	1521.4
50°	658.1	668.4	670.9	685.6	706.2	736.3	786.4	862.0	981.4	1148.1	1352.1
52.5°	614.0	617.0	624.2	634.9	652.8	676.3	719.6	778.9	872.5	1014.6	1202.2
55°	549.0	549.0	556.1	564.4	574.7	595.9	624.7	668.4	739.5	849.9	1005.0
57.5°	489.0	492.2	497.2	499.7	508.5	522.5	546.6	579.7	632.8	717.7	841.1
60°	448.9	454.8	454.1	459.2	466.9	477.9	498.3	525.3	572.8	640.7	744.7
62.5°	414.1	413.7	413.6	419.7	427.4	437.8	451.2	474.5	514.8	575.0	663.5
65°	356.7	355.3	359.9	363.6	366.3	373.9	384.2	404.7	431.7	476.5	545.2
67.5°	305.6	301.8	304.3	305.6	309.9	315.9	325.6	338.3	359.7	395.8	447.4
70°	270.7	267.5	266.8	268.1	271.9	276.4	283.5	295.7	315.6	344.4	382.3
72.5°	234.8	232.5	232.4	235.3	237.0	240.0	245.0	256.2	271.9	293.6	328.9
75°	183.4	183.4	183.4	184.1	186.0	188.6	192.4	198.2	210.4	225.7	249.5
77.5°	137.5	137.4	136.6	136.5	139.3	140.4	141.4	146.8	153.5	163.9	181.3
80°	107.7	104.5	105.8	107.7	109.1	109.7	111.6	112.9	118.7	124.4	136.6
82.5°	80.0	77.4	77.6	80.6	80.8	81.4	83.4	85.2	87.4	92.7	99.2
85°	42.3	42.3	43.0	43.0	43.6	43.0	44.9	45.5	45.5	48.7	52.6
87.5°	21.1	20.0	20.5	20.8	20.3	20.6	21.0	21.3	21.7	22.1	22.0
90°	28.7	28.2	27.8	27.3	27.0	26.3	25.4	24.6	23.8	22.9	20.2
92.5°	38.5	38.8	39.1	39.3	39.6	39.4	38.7	38.0	37.3	36.7	35.1
95°	74.5	74.5	74.5	74.5	74.5	74.1	73.2	72.4	71.5	70.7	69.0
97.5°	114.6	114.7	114.8	114.8	114.9	114.5	113.5	112.5	111.6	110.6	109.3
100°	145.2	144.7	144.3	143.8	143.5	142.9	142.3	141.7	141.0	140.3	139.3
102.5°	176.4	176.5	176.6	176.7	176.8	176.5	175.9	175.2	174.7	174.0	172.6
105°	227.2	226.9	226.4	226.0	225.6	225.4	225.4	225.4	225.4	225.4	223.5
107.5°	280.1	280.4	280.7	281.0	281.2	281.0	280.3	279.7	278.9	278.2	277.5
110°	316.0	316.5	316.9	317.4	317.7	317.5	316.7	315.8	315.0	314.1	313.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	354.3	354.4	354.4	354.5	354.6	354.1	353.1	352.1	351.1	350.1	350.0
115°	406.8	407.0	407.2	407.5	407.6	407.6	407.5	407.2	407.0	406.8	407.2
117.5°	460.1	460.6	461.3	461.8	462.4	462.8	462.8	462.9	462.9	463.0	463.4
120°	497.5	497.9	498.3	498.8	499.2	499.5	499.7	499.9	500.1	500.4	501.4
122.5°	533.4	534.0	534.6	535.2	535.7	536.4	536.9	537.4	538.0	538.6	539.1
125°	587.3	588.1	589.0	589.8	590.7	591.5	592.4	593.2	594.1	594.9	595.3
127.5°	640.9	641.9	642.9	643.9	644.8	645.9	647.1	648.3	649.5	650.6	651.1
130°	676.1	677.6	679.0	680.5	682.0	683.2	684.0	684.9	685.7	686.5	687.2
132.5°	712.8	713.9	715.0	716.1	717.4	718.4	719.4	720.5	721.4	722.5	722.9
135°	769.7	770.1	770.5	770.9	771.4	771.9	772.8	773.6	774.5	775.3	775.6
137.5°	819.9	820.7	821.5	822.3	823.1	824.0	824.8	825.8	826.6	827.6	827.0
140°	852.7	854.2	855.7	857.1	858.7	859.5	859.7	860.0	860.2	860.4	860.2
142.5°	886.4	887.5	888.6	889.8	890.9	891.6	891.8	892.0	892.2	892.5	892.1
145°	934.8	935.7	936.5	937.4	938.2	938.8	939.0	939.2	939.4	939.6	939.0
147.5°	978.0	979.3	980.5	981.8	983.1	983.7	983.7	983.7	983.7	983.7	983.2
150°	1005.5	1006.8	1008.0	1009.4	1010.6	1011.3	1011.3	1011.3	1011.3	1011.3	1010.8
152.5°	1032.3	1033.3	1034.4	1035.6	1036.7	1037.1	1036.7	1036.3	1036.0	1035.7	1035.5
155°	1068.6	1070.1	1071.5	1073.0	1074.5	1074.8	1073.9	1073.1	1072.2	1071.4	1071.2
157.5°	1101.5	1102.8	1104.0	1105.1	1106.4	1106.5	1105.6	1104.7	1103.8	1102.9	1102.8
160°	1122.9	1123.8	1124.6	1125.5	1126.3	1126.2	1125.2	1124.2	1123.0	1122.0	1122.0
162.5°	1139.0	1140.4	1141.7	1143.1	1144.4	1144.6	1143.5	1142.5	1141.4	1140.4	1140.2
165°	1162.2	1163.6	1165.1	1166.6	1168.1	1168.2	1166.9	1165.6	1164.3	1163.1	1163.1
167.5°	1181.8	1183.1	1184.4	1185.7	1187.0	1187.0	1185.7	1184.4	1183.1	1181.8	1181.7
170°	1191.8	1193.2	1194.7	1196.2	1197.7	1197.7	1196.2	1194.7	1193.2	1191.8	1191.8
172.5°	1199.4	1200.8	1202.3	1203.8	1205.3	1205.4	1204.1	1202.8	1201.5	1200.1	1200.1
175°	1208.0	1209.5	1210.9	1212.4	1213.9	1214.0	1212.8	1211.4	1210.2	1208.9	1208.9
177.5°	1212.6	1213.7	1214.9	1216.1	1217.3	1217.4	1216.4	1215.3	1214.3	1213.3	1213.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1364.9	1360.7	1356.7	1349.5	1343.3	1334.6	1332.0	1329.0	1319.7	1311.5	1305.3
5°	1448.2	1432.9	1410.4	1389.9	1373.2	1350.8	1337.9	1324.5	1305.2	1287.9	1273.8
7.5°	1535.5	1505.2	1470.4	1432.6	1397.5	1363.6	1336.2	1311.9	1285.0	1259.4	1239.5
10°	1604.8	1561.1	1512.4	1459.8	1414.9	1371.3	1334.7	1302.7	1268.0	1237.8	1212.9
12.5°	1683.8	1619.1	1551.9	1488.0	1434.9	1374.4	1330.1	1289.3	1250.1	1213.8	1185.7
15°	1777.3	1695.2	1615.7	1527.8	1447.0	1371.3	1318.7	1267.4	1221.8	1184.7	1148.8
17.5°	1862.5	1769.4	1664.6	1557.8	1460.3	1370.6	1296.9	1238.9	1181.9	1136.4	1100.6
20°	1910.7	1804.9	1686.2	1575.3	1467.5	1367.4	1286.7	1217.4	1155.7	1107.7	1067.2
22.5°	1952.3	1828.4	1705.7	1587.1	1467.0	1359.2	1267.6	1196.4	1129.6	1082.5	1039.5
25°	1995.4	1847.2	1724.1	1584.9	1450.9	1339.3	1236.6	1155.7	1089.1	1034.0	989.7
27.5°	2032.3	1846.0	1699.8	1550.1	1425.4	1313.5	1204.0	1117.3	1046.5	986.6	941.7
30°	2056.9	1848.5	1674.7	1526.5	1400.8	1285.3	1178.8	1091.7	1017.3	956.3	914.0
32.5°	2072.4	1846.9	1651.6	1493.6	1361.8	1259.7	1151.7	1061.4	985.0	925.0	884.2
35°	2081.3	1835.7	1611.8	1425.8	1298.8	1199.4	1109.0	1015.3	935.2	879.4	833.2
37.5°	2063.3	1811.9	1565.7	1360.4	1221.3	1123.4	1047.4	967.6	890.9	829.4	789.7
40°	2035.1	1796.6	1529.7	1314.2	1168.0	1073.7	1008.9	930.7	855.0	796.6	759.4
42.5°	1981.2	1765.2	1490.3	1262.9	1112.6	1018.2	958.7	893.2	821.6	766.9	729.6
45°	1849.7	1697.1	1431.0	1185.9	1030.7	933.2	880.6	833.2	768.4	715.1	683.1
47.5°	1667.4	1594.6	1345.3	1104.8	945.3	851.5	796.8	758.7	711.3	668.4	637.5
50°	1540.6	1510.5	1287.2	1049.3	888.3	796.6	744.0	709.4	675.4	632.4	604.2
52.5°	1394.4	1413.0	1219.6	991.8	830.4	740.2	690.7	663.2	632.3	597.0	572.4
55°	1188.5	1255.8	1102.6	895.4	744.0	658.1	611.2	586.8	568.9	542.6	521.4
57.5°	995.7	1081.4	976.1	796.0	659.2	585.0	540.2	513.6	502.1	488.3	471.6
60°	881.3	965.9	885.8	729.2	602.3	531.7	491.9	469.5	458.0	448.4	434.2
62.5°	779.2	864.9	797.5	661.6	546.3	480.9	446.3	424.3	415.4	410.4	398.3
65°	638.9	712.6	667.7	556.1	466.3	408.6	377.1	361.7	353.5	351.5	343.7
67.5°	519.9	576.1	543.4	461.3	390.6	340.7	314.1	301.0	294.5	293.9	288.1
70°	442.0	494.6	469.5	395.1	334.1	295.0	271.9	260.4	256.6	255.9	252.7
72.5°	381.4	418.0	398.1	336.1	289.0	253.4	236.6	224.5	220.1	221.0	218.9
75°	282.2	309.8	298.2	255.2	217.4	194.4	180.2	172.6	168.7	170.6	168.1
77.5°	203.0	220.6	210.1	180.4	157.0	140.3	130.0	125.2	121.8	121.6	120.5
80°	153.3	163.5	157.8	139.8	120.6	106.5	98.1	94.9	93.0	92.4	91.7
82.5°	109.1	117.9	111.1	98.8	85.7	77.2	72.5	68.2	66.8	67.2	66.5
85°	55.1	58.3	55.8	48.1	43.0	39.1	36.6	34.6	33.4	34.0	32.7
87.5°	22.4	22.4	20.4	17.8	16.3	14.4	13.9	12.5	11.9	12.3	12.3
90°	17.4	14.6	11.9	9.4	7.4	5.2	3.1	0.9	3.1	5.2	7.4
92.5°	33.6	32.0	30.3	28.8	27.4	26.0	24.5	23.1	24.5	26.0	27.4
95°	67.3	65.6	63.9	62.3	60.8	59.3	57.8	56.4	57.8	59.3	60.8
97.5°	108.1	106.9	105.7	104.5	103.4	102.3	101.1	100.1	101.1	102.3	103.4
100°	138.3	137.2	136.1	135.0	133.7	132.4	131.1	129.9	131.1	132.4	133.7
102.5°	171.2	169.8	168.3	167.3	166.5	165.8	165.0	164.3	165.0	165.8	166.5
105°	221.5	219.6	217.7	216.6	216.1	215.7	215.3	214.9	215.3	215.7	216.1
107.5°	276.7	276.0	275.2	274.7	274.5	274.2	273.9	273.7	273.9	274.2	274.5
110°	313.3	312.9	312.5	312.1	311.6	311.2	310.8	310.4	310.8	311.2	311.6



TEST NUMBER: P332193-830

CATALOG NUMBER: S123DIW-S1000D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	349.9	349.8	349.7	349.6	349.3	349.0	348.8	348.6	348.8	349.0	349.3
115°	407.6	408.0	408.5	408.4	407.7	407.1	406.4	405.9	406.4	407.1	407.7
117.5°	464.0	464.6	465.1	465.2	464.8	464.4	463.9	463.5	463.9	464.4	464.8
120°	502.5	503.5	504.6	504.5	503.2	502.0	500.7	499.5	500.7	502.0	503.2
122.5°	539.7	540.3	540.7	540.5	539.6	538.8	537.8	536.9	537.8	538.8	539.6
125°	595.8	596.2	596.6	596.5	595.9	595.2	594.6	594.0	594.6	595.2	595.9
127.5°	651.6	652.1	652.5	652.1	650.7	649.4	648.0	646.7	648.0	649.4	650.7
130°	687.9	688.5	689.1	688.6	686.9	685.2	683.5	681.8	683.5	685.2	686.9
132.5°	723.4	723.9	724.3	723.8	722.1	720.3	718.6	716.9	718.6	720.3	722.1
135°	775.8	776.0	776.2	775.7	774.4	773.2	771.8	770.6	771.8	773.2	774.4
137.5°	826.4	825.9	825.3	824.5	823.4	822.4	821.3	820.3	821.3	822.4	823.4
140°	860.0	859.7	859.5	858.8	857.8	856.8	855.7	854.6	855.7	856.8	857.8
142.5°	891.6	891.3	890.9	890.2	889.1	888.1	887.0	886.0	887.0	888.1	889.1
145°	938.4	937.7	937.1	936.5	936.1	935.7	935.3	934.8	935.3	935.7	936.1
147.5°	982.6	981.9	981.4	980.7	980.0	979.1	978.4	977.6	978.4	979.1	980.0
150°	1010.4	1009.9	1009.6	1009.1	1008.7	1008.2	1007.9	1007.4	1007.9	1008.2	1008.7
152.5°	1035.2	1034.9	1034.6	1034.3	1033.7	1033.0	1032.5	1031.9	1032.5	1033.0	1033.7
155°	1071.0	1070.7	1070.5	1070.4	1070.4	1070.4	1070.4	1070.4	1070.4	1070.4	1070.4
157.5°	1102.6	1102.4	1102.2	1102.3	1102.5	1102.8	1103.1	1103.3	1103.1	1102.8	1102.5
160°	1122.0	1122.0	1122.0	1122.2	1122.7	1123.0	1123.5	1123.9	1123.5	1123.0	1122.7
162.5°	1140.0	1139.8	1139.6	1139.9	1140.5	1141.0	1141.7	1142.3	1141.7	1141.0	1140.5
165°	1163.1	1163.1	1163.1	1163.4	1164.0	1164.7	1165.3	1165.9	1165.3	1164.7	1164.0
167.5°	1181.5	1181.3	1181.1	1181.5	1182.3	1183.2	1184.0	1184.9	1184.0	1183.2	1182.3
170°	1191.8	1191.8	1191.8	1192.1	1193.0	1193.8	1194.7	1195.5	1194.7	1193.8	1193.0
172.5°	1200.1	1200.1	1200.1	1200.5	1201.4	1202.2	1203.1	1203.9	1203.1	1202.2	1201.4
175°	1208.9	1208.9	1208.9	1209.4	1210.2	1211.1	1211.9	1212.8	1211.9	1211.1	1210.2
177.5°	1213.3	1213.3	1213.3	1213.6	1214.3	1215.0	1215.7	1216.4	1215.7	1215.0	1214.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



TEST NUMBER: P332193-830

CATALOG NUMBER: S123DIW-S1000D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1301.7	1298.2	1293.1	1285.3	1279.2	1269.4	1269.4	1271.0	1271.0	1270.5	1269.4
5°	1262.3	1252.6	1241.1	1227.7	1213.5	1199.4	1196.8	1191.8	1187.9	1185.2	1182.0
7.5°	1220.6	1203.5	1186.7	1167.8	1150.7	1136.4	1126.5	1118.3	1113.0	1107.4	1103.3
10°	1192.3	1171.2	1151.3	1131.4	1109.6	1092.3	1081.4	1073.7	1067.9	1062.8	1060.3
12.5°	1159.0	1134.7	1112.9	1093.9	1070.1	1052.3	1041.9	1038.3	1031.5	1020.7	1015.0
15°	1110.2	1087.8	1061.5	1032.6	1021.1	999.3	987.1	981.4	977.5	969.1	966.6
17.5°	1068.6	1039.2	1009.7	988.2	966.7	949.0	942.2	935.0	929.9	923.1	921.1
20°	1035.2	1008.9	981.9	958.8	936.4	917.2	911.4	906.3	901.2	898.0	895.4
22.5°	1001.4	975.1	952.7	931.1	907.2	894.6	888.3	882.7	879.1	876.9	874.3
25°	953.8	930.7	905.7	886.4	867.1	858.8	855.0	851.8	849.2	846.0	845.4
27.5°	911.2	886.0	865.7	847.8	834.0	827.0	823.3	821.7	822.3	823.4	824.2
30°	879.4	856.3	839.6	824.2	811.3	804.9	804.3	804.3	806.9	807.5	808.8
32.5°	850.1	831.1	814.5	799.6	789.9	785.4	787.9	787.9	789.9	791.6	793.9
35°	807.5	790.8	778.0	765.2	756.9	758.7	760.1	761.3	764.5	768.4	771.0
37.5°	766.9	752.3	739.0	729.0	725.2	728.6	731.7	734.4	738.1	741.0	743.7
40°	737.6	726.7	713.9	704.9	706.2	708.1	710.7	713.9	717.1	719.0	721.6
42.5°	710.4	699.0	689.3	681.8	683.6	686.1	687.6	689.3	693.0	696.4	698.0
45°	669.0	660.0	651.0	646.5	647.8	649.1	650.4	652.3	655.5	658.1	658.7
47.5°	622.4	616.1	610.1	605.8	607.8	607.3	609.0	613.0	614.1	615.6	619.2
50°	592.7	586.8	579.9	578.5	578.5	578.5	579.2	584.3	584.3	586.8	589.5
52.5°	559.8	556.1	551.6	549.3	548.3	548.3	550.9	553.6	554.6	558.2	560.7
55°	511.2	507.4	503.5	501.5	500.3	501.5	506.7	507.9	511.2	513.1	515.0
57.5°	460.5	457.6	454.5	453.5	453.2	454.9	457.7	461.6	462.3	468.3	471.2
60°	427.2	422.6	420.1	420.1	418.9	424.6	423.3	429.7	431.0	434.9	439.3
62.5°	392.8	386.7	385.7	385.7	387.6	389.2	391.0	393.8	397.2	402.0	405.5
65°	337.3	334.1	338.7	338.0	336.8	340.5	340.5	343.7	347.6	352.1	359.2
67.5°	284.9	283.2	283.6	283.6	285.6	287.8	289.5	292.4	297.0	301.7	306.3
70°	249.5	251.5	248.3	250.8	252.7	253.4	254.7	258.4	263.6	266.8	271.9
72.5°	215.1	215.0	215.4	216.4	218.3	219.5	220.7	225.2	230.7	233.5	237.6
75°	165.5	164.9	166.7	166.7	169.9	171.3	172.6	174.5	179.6	183.4	186.6
77.5°	120.8	121.6	121.2	123.4	122.5	122.7	126.8	128.7	129.2	136.8	138.5
80°	91.0	92.4	93.0	93.7	94.3	93.0	97.5	99.4	99.4	103.9	107.1
82.5°	65.4	66.2	67.9	68.5	68.6	69.9	70.3	71.7	73.2	75.2	79.4
85°	32.7	34.6	35.3	34.6	35.3	34.0	35.9	36.6	37.2	37.2	37.2
87.5°	12.2	13.2	13.2	14.2	14.3	15.4	15.6	14.7	14.8	16.6	14.6
90°	9.4	11.9	14.6	17.4	20.2	22.9	23.8	24.6	25.4	26.3	27.0
92.5°	28.8	30.3	32.0	33.6	35.1	36.7	37.3	38.0	38.7	39.4	39.6
95°	62.3	63.9	65.6	67.3	69.0	70.7	71.5	72.4	73.2	74.1	74.5
97.5°	104.5	105.7	106.9	108.1	109.3	110.6	111.6	112.5	113.5	114.5	114.9
100°	135.0	136.1	137.2	138.3	139.3	140.3	141.0	141.7	142.3	142.9	143.5
102.5°	167.3	168.3	169.8	171.2	172.6	174.0	174.7	175.2	175.9	176.5	176.8
105°	216.6	217.7	219.6	221.5	223.5	225.4	225.4	225.4	225.4	225.4	225.6
107.5°	274.7	275.2	276.0	276.7	277.5	278.2	278.9	279.7	280.3	281.0	281.2
110°	312.1	312.5	312.9	313.3	313.8	314.1	315.0	315.8	316.7	317.5	317.7



TEST NUMBER: P332193-830

CATALOG NUMBER: S123DIW-S1000D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	349.6	349.7	349.8	349.9	350.0	350.1	351.1	352.1	353.1	354.1	354.6
115°	408.4	408.5	408.0	407.6	407.2	406.8	407.0	407.2	407.5	407.6	407.6
117.5°	465.2	465.1	464.6	464.0	463.4	463.0	462.9	462.9	462.8	462.8	462.4
120°	504.5	504.6	503.5	502.5	501.4	500.4	500.1	499.9	499.7	499.5	499.2
122.5°	540.5	540.7	540.3	539.7	539.1	538.6	538.0	537.4	536.9	536.4	535.7
125°	596.5	596.6	596.2	595.8	595.3	594.9	594.1	593.2	592.4	591.5	590.7
127.5°	652.1	652.5	652.1	651.6	651.1	650.6	649.5	648.3	647.1	645.9	644.8
130°	688.6	689.1	688.5	687.9	687.2	686.5	685.7	684.9	684.0	683.2	682.0
132.5°	723.8	724.3	723.9	723.4	722.9	722.5	721.4	720.5	719.4	718.4	717.4
135°	775.7	776.2	776.0	775.8	775.6	775.3	774.5	773.6	772.8	771.9	771.4
137.5°	824.5	825.3	825.9	826.4	827.0	827.6	826.6	825.8	824.8	824.0	823.1
140°	858.8	859.5	859.7	860.0	860.2	860.4	860.2	860.0	859.7	859.5	858.7
142.5°	890.2	890.9	891.3	891.6	892.1	892.5	892.2	892.0	891.8	891.6	890.9
145°	936.5	937.1	937.7	938.4	939.0	939.6	939.4	939.2	939.0	938.8	938.2
147.5°	980.7	981.4	981.9	982.6	983.2	983.7	983.7	983.7	983.7	983.7	983.1
150°	1009.1	1009.6	1009.9	1010.4	1010.8	1011.3	1011.3	1011.3	1011.3	1011.3	1010.6
152.5°	1034.3	1034.6	1034.9	1035.2	1035.5	1035.7	1036.0	1036.3	1036.7	1037.1	1036.7
155°	1070.4	1070.5	1070.7	1071.0	1071.2	1071.4	1072.2	1073.1	1073.9	1074.8	1074.5
157.5°	1102.3	1102.2	1102.4	1102.6	1102.8	1102.9	1103.8	1104.7	1105.6	1106.5	1106.4
160°	1122.2	1122.0	1122.0	1122.0	1122.0	1122.0	1123.0	1124.2	1125.2	1126.2	1126.3
162.5°	1139.9	1139.6	1139.8	1140.0	1140.2	1140.4	1141.4	1142.5	1143.5	1144.6	1144.4
165°	1163.4	1163.1	1163.1	1163.1	1163.1	1163.1	1164.3	1165.6	1166.9	1168.2	1168.1
167.5°	1181.5	1181.1	1181.3	1181.5	1181.7	1181.8	1183.1	1184.4	1185.7	1187.0	1187.0
170°	1192.1	1191.8	1191.8	1191.8	1191.8	1191.8	1193.2	1194.7	1196.2	1197.7	1197.7
172.5°	1200.5	1200.1	1200.1	1200.1	1200.1	1200.1	1201.5	1202.8	1204.1	1205.4	1205.3
175°	1209.4	1208.9	1208.9	1208.9	1208.9	1208.9	1210.2	1211.4	1212.8	1214.0	1213.9
177.5°	1213.6	1213.3	1213.3	1213.3	1213.3	1213.3	1214.3	1215.3	1216.4	1217.4	1217.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



TEST NUMBER: P332193-830

CATALOG NUMBER: S123DIW-S1000D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1265.8	1265.4	1268.9	1266.4	1268.9	1265.4	1265.8	1269.4	1270.5	1271.0	1271.0
5°	1178.3	1180.2	1173.7	1173.7	1173.7	1180.2	1178.3	1182.0	1185.2	1187.9	1191.8
7.5°	1100.2	1097.4	1097.7	1094.2	1097.7	1097.4	1100.2	1103.3	1107.4	1113.0	1118.3
10°	1052.5	1048.7	1047.4	1048.0	1047.4	1048.7	1052.5	1060.3	1062.8	1067.9	1073.7
12.5°	1013.0	1012.3	1003.8	1003.9	1003.8	1012.3	1013.0	1015.0	1020.7	1031.5	1038.3
15°	966.6	954.4	953.1	957.0	953.1	954.4	966.6	966.6	969.1	977.5	981.4
17.5°	920.0	913.6	914.0	912.1	914.0	913.6	920.0	921.1	923.1	929.9	935.0
20°	895.4	891.6	890.9	886.4	890.9	891.6	895.4	895.4	898.0	901.2	906.3
22.5°	872.8	871.6	871.9	867.0	871.9	871.6	872.8	874.3	876.9	879.1	882.7
25°	844.7	847.9	845.4	845.4	845.4	847.9	844.7	845.4	846.0	849.2	851.8
27.5°	825.8	825.6	824.3	824.3	824.3	825.6	825.8	824.2	823.4	822.3	821.7
30°	811.3	810.7	812.0	812.0	812.0	810.7	811.3	808.8	807.5	806.9	804.3
32.5°	797.0	797.9	798.1	798.6	798.1	797.9	797.0	793.9	791.6	789.9	787.9
35°	774.8	775.4	777.4	776.1	777.4	775.4	774.8	771.0	768.4	764.5	761.3
37.5°	744.8	747.7	747.1	748.1	747.1	747.7	744.8	743.7	741.0	738.1	734.4
40°	722.2	724.2	723.5	723.5	723.5	724.2	722.2	721.6	719.0	717.1	713.9
42.5°	699.1	700.5	698.9	697.9	698.9	700.5	699.1	698.0	696.4	693.0	689.3
45°	661.3	660.0	661.9	659.3	661.9	660.0	661.3	658.7	658.1	655.5	652.3
47.5°	619.0	620.2	620.8	622.6	620.8	620.2	619.0	619.2	615.6	614.1	613.0
50°	590.7	594.6	594.6	593.9	594.6	594.6	590.7	589.5	586.8	584.3	584.3
52.5°	563.0	564.8	567.4	567.2	567.4	564.8	563.0	560.7	558.2	554.6	553.6
55°	520.2	521.4	522.7	523.4	522.7	521.4	520.2	515.0	513.1	511.2	507.9
57.5°	475.8	475.2	478.3	479.3	478.3	475.2	475.8	471.2	468.3	462.3	461.6
60°	444.5	444.5	449.6	451.6	449.6	444.5	444.5	439.3	434.9	431.0	429.7
62.5°	411.1	413.2	418.3	415.7	418.3	413.2	411.1	405.5	402.0	397.2	393.8
65°	362.4	367.5	366.8	369.5	366.8	367.5	362.4	359.2	352.1	347.6	343.7
67.5°	311.4	314.6	319.2	319.7	319.2	314.6	311.4	306.3	301.7	297.0	292.4
70°	277.1	280.3	282.9	284.7	282.9	280.3	277.1	271.9	266.8	263.6	258.4
72.5°	243.7	245.4	251.6	248.8	251.6	245.4	243.7	237.6	233.5	230.7	225.2
75°	191.1	195.6	199.4	197.6	199.4	195.6	191.1	186.6	183.4	179.6	174.5
77.5°	141.4	145.8	147.6	146.0	147.6	145.8	141.4	138.5	136.8	129.2	128.7
80°	111.6	110.9	114.8	114.1	114.8	110.9	111.6	107.1	103.9	99.4	99.4
82.5°	81.8	81.2	83.0	83.4	83.0	81.2	81.8	79.4	75.2	73.2	71.7
85°	39.8	41.7	39.1	38.5	39.1	41.7	39.8	37.2	37.2	37.2	36.6
87.5°	14.7	14.8	14.3	13.9	14.3	14.8	14.7	14.6	16.6	14.8	14.7
90°	27.3	27.8	28.2	28.7	28.2	27.8	27.3	27.0	26.3	25.4	24.6
92.5°	39.3	39.1	38.8	38.5	38.8	39.1	39.3	39.6	39.4	38.7	38.0
95°	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.1	73.2	72.4
97.5°	114.8	114.8	114.7	114.6	114.7	114.8	114.8	114.9	114.5	113.5	112.5
100°	143.8	144.3	144.7	145.2	144.7	144.3	143.8	143.5	142.9	142.3	141.7
102.5°	176.7	176.6	176.5	176.4	176.5	176.6	176.7	176.8	176.5	175.9	175.2
105°	226.0	226.4	226.9	227.2	226.9	226.4	226.0	225.6	225.4	225.4	225.4
107.5°	281.0	280.7	280.4	280.1	280.4	280.7	281.0	281.2	281.0	280.3	279.7
110°	317.4	316.9	316.5	316.0	316.5	316.9	317.4	317.7	317.5	316.7	315.8



TEST NUMBER: P332193-830

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	354.5	354.4	354.4	354.3	354.4	354.4	354.5	354.6	354.1	353.1	352.1
115°	407.5	407.2	407.0	406.8	407.0	407.2	407.5	407.6	407.6	407.5	407.2
117.5°	461.8	461.3	460.6	460.1	460.6	461.3	461.8	462.4	462.8	462.8	462.9
120°	498.8	498.3	497.9	497.5	497.9	498.3	498.8	499.2	499.5	499.7	499.9
122.5°	535.2	534.6	534.0	533.4	534.0	534.6	535.2	535.7	536.4	536.9	537.4
125°	589.8	589.0	588.1	587.3	588.1	589.0	589.8	590.7	591.5	592.4	593.2
127.5°	643.9	642.9	641.9	640.9	641.9	642.9	643.9	644.8	645.9	647.1	648.3
130°	680.5	679.0	677.6	676.1	677.6	679.0	680.5	682.0	683.2	684.0	684.9
132.5°	716.1	715.0	713.9	712.8	713.9	715.0	716.1	717.4	718.4	719.4	720.5
135°	770.9	770.5	770.1	769.7	770.1	770.5	770.9	771.4	771.9	772.8	773.6
137.5°	822.3	821.5	820.7	819.9	820.7	821.5	822.3	823.1	824.0	824.8	825.8
140°	857.1	855.7	854.2	852.7	854.2	855.7	857.1	858.7	859.5	859.7	860.0
142.5°	889.8	888.6	887.5	886.4	887.5	888.6	889.8	890.9	891.6	891.8	892.0
145°	937.4	936.5	935.7	934.8	935.7	936.5	937.4	938.2	938.8	939.0	939.2
147.5°	981.8	980.5	979.3	978.0	979.3	980.5	981.8	983.1	983.7	983.7	983.7
150°	1009.4	1008.0	1006.8	1005.5	1006.8	1008.0	1009.4	1010.6	1011.3	1011.3	1011.3
152.5°	1035.6	1034.4	1033.3	1032.3	1033.3	1034.4	1035.6	1036.7	1037.1	1036.7	1036.3
155°	1073.0	1071.5	1070.1	1068.6	1070.1	1071.5	1073.0	1074.5	1074.8	1073.9	1073.1
157.5°	1105.1	1104.0	1102.8	1101.5	1102.8	1104.0	1105.1	1106.4	1106.5	1105.6	1104.7
160°	1125.5	1124.6	1123.8	1122.9	1123.8	1124.6	1125.5	1126.3	1126.2	1125.2	1124.2
162.5°	1143.1	1141.7	1140.4	1139.0	1140.4	1141.7	1143.1	1144.4	1144.6	1143.5	1142.5
165°	1166.6	1165.1	1163.6	1162.2	1163.6	1165.1	1166.6	1168.1	1168.2	1166.9	1165.6
167.5°	1185.7	1184.4	1183.1	1181.8	1183.1	1184.4	1185.7	1187.0	1187.0	1185.7	1184.4
170°	1196.2	1194.7	1193.2	1191.8	1193.2	1194.7	1196.2	1197.7	1197.7	1196.2	1194.7
172.5°	1203.8	1202.3	1200.8	1199.4	1200.8	1202.3	1203.8	1205.3	1205.4	1204.1	1202.8
175°	1212.4	1210.9	1209.5	1208.0	1209.5	1210.9	1212.4	1213.9	1214.0	1212.8	1211.4
177.5°	1216.1	1214.9	1213.7	1212.6	1213.7	1214.9	1216.1	1217.3	1217.4	1216.4	1215.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1269.4	1269.4	1279.2	1285.3	1293.1	1298.2	1301.7	1305.3	1311.5	1319.7	1329.0
5°	1196.8	1199.4	1213.5	1227.7	1241.1	1252.6	1262.3	1273.8	1287.9	1305.2	1324.5
7.5°	1126.5	1136.4	1150.7	1167.8	1186.7	1203.5	1220.6	1239.5	1259.4	1285.0	1311.9
10°	1081.4	1092.3	1109.6	1131.4	1151.3	1171.2	1192.3	1212.9	1237.8	1268.0	1302.7
12.5°	1041.9	1052.3	1070.1	1093.9	1112.9	1134.7	1159.0	1185.7	1213.8	1250.1	1289.3
15°	987.1	999.3	1021.1	1032.6	1061.5	1087.8	1110.2	1148.8	1184.7	1221.8	1267.4
17.5°	942.2	949.0	966.7	988.2	1009.7	1039.2	1068.6	1100.6	1136.4	1181.9	1238.9
20°	911.4	917.2	936.4	958.8	981.9	1008.9	1035.2	1067.2	1107.7	1155.7	1217.4
22.5°	888.3	894.6	907.2	931.1	952.7	975.1	1001.4	1039.5	1082.5	1129.6	1196.4
25°	855.0	858.8	867.1	886.4	905.7	930.7	953.8	989.7	1034.0	1089.1	1155.7
27.5°	823.3	827.0	834.0	847.8	865.7	886.0	911.2	941.7	986.6	1046.5	1117.3
30°	804.3	804.9	811.3	824.2	839.6	856.3	879.4	914.0	956.3	1017.3	1091.7
32.5°	787.9	785.4	789.9	799.6	814.5	831.1	850.1	884.2	925.0	985.0	1061.4
35°	760.1	758.7	756.9	765.2	778.0	790.8	807.5	833.2	879.4	935.2	1015.3
37.5°	731.7	728.6	725.2	729.0	739.0	752.3	766.9	789.7	829.4	890.9	967.6
40°	710.7	708.1	706.2	704.9	713.9	726.7	737.6	759.4	796.6	855.0	930.7
42.5°	687.6	686.1	683.6	681.8	689.3	699.0	710.4	729.6	766.9	821.6	893.2
45°	650.4	649.1	647.8	646.5	651.0	660.0	669.0	683.1	715.1	768.4	833.2
47.5°	609.0	607.3	607.8	605.8	610.1	616.1	622.4	637.5	668.4	711.3	758.7
50°	579.2	578.5	578.5	578.5	579.9	586.8	592.7	604.2	632.4	675.4	709.4
52.5°	550.9	548.3	548.3	549.3	551.6	556.1	559.8	572.4	597.0	632.3	663.2
55°	506.7	501.5	500.3	501.5	503.5	507.4	511.2	521.4	542.6	568.9	586.8
57.5°	457.7	454.9	453.2	453.5	454.5	457.6	460.5	471.6	488.3	502.1	513.6
60°	423.3	424.6	418.9	420.1	420.1	422.6	427.2	434.2	448.4	458.0	469.5
62.5°	391.0	389.2	387.6	385.7	385.7	386.7	392.8	398.3	410.4	415.4	424.3
65°	340.5	340.5	336.8	338.0	338.7	334.1	337.3	343.7	351.5	353.5	361.7
67.5°	289.5	287.8	285.6	283.6	283.6	283.2	284.9	288.1	293.9	294.5	301.0
70°	254.7	253.4	252.7	250.8	248.3	251.5	249.5	252.7	255.9	256.6	260.4
72.5°	220.7	219.5	218.3	216.4	215.4	215.0	215.1	218.9	221.0	220.1	224.5
75°	172.6	171.3	169.9	166.7	166.7	164.9	165.5	168.1	170.6	168.7	172.6
77.5°	126.8	122.7	122.5	123.4	121.2	121.6	120.8	120.5	121.6	121.8	125.2
80°	97.5	93.0	94.3	93.7	93.0	92.4	91.0	91.7	92.4	93.0	94.9
82.5°	70.3	69.9	68.6	68.5	67.9	66.2	65.4	66.5	67.2	66.8	68.2
85°	35.9	34.0	35.3	34.6	35.3	34.6	32.7	32.7	34.0	33.4	34.6
87.5°	15.6	15.4	14.3	14.2	13.2	13.2	12.2	12.3	12.3	11.9	12.5
90°	23.8	22.9	20.2	17.4	14.6	11.9	9.4	7.4	5.2	3.1	0.9
92.5°	37.3	36.7	35.1	33.6	32.0	30.3	28.8	27.4	26.0	24.5	23.1
95°	71.5	70.7	69.0	67.3	65.6	63.9	62.3	60.8	59.3	57.8	56.4
97.5°	111.6	110.6	109.3	108.1	106.9	105.7	104.5	103.4	102.3	101.1	100.1
100°	141.0	140.3	139.3	138.3	137.2	136.1	135.0	133.7	132.4	131.1	129.9
102.5°	174.7	174.0	172.6	171.2	169.8	168.3	167.3	166.5	165.8	165.0	164.3
105°	225.4	225.4	223.5	221.5	219.6	217.7	216.6	216.1	215.7	215.3	214.9
107.5°	278.9	278.2	277.5	276.7	276.0	275.2	274.7	274.5	274.2	273.9	273.7
110°	315.0	314.1	313.8	313.3	312.9	312.5	312.1	311.6	311.2	310.8	310.4



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	351.1	350.1	350.0	349.9	349.8	349.7	349.6	349.3	349.0	348.8	348.6
115°	407.0	406.8	407.2	407.6	408.0	408.5	408.4	407.7	407.1	406.4	405.9
117.5°	462.9	463.0	463.4	464.0	464.6	465.1	465.2	464.8	464.4	463.9	463.5
120°	500.1	500.4	501.4	502.5	503.5	504.6	504.5	503.2	502.0	500.7	499.5
122.5°	538.0	538.6	539.1	539.7	540.3	540.7	540.5	539.6	538.8	537.8	536.9
125°	594.1	594.9	595.3	595.8	596.2	596.6	596.5	595.9	595.2	594.6	594.0
127.5°	649.5	650.6	651.1	651.6	652.1	652.5	652.1	650.7	649.4	648.0	646.7
130°	685.7	686.5	687.2	687.9	688.5	689.1	688.6	686.9	685.2	683.5	681.8
132.5°	721.4	722.5	722.9	723.4	723.9	724.3	723.8	722.1	720.3	718.6	716.9
135°	774.5	775.3	775.6	775.8	776.0	776.2	775.7	774.4	773.2	771.8	770.6
137.5°	826.6	827.6	827.0	826.4	825.9	825.3	824.5	823.4	822.4	821.3	820.3
140°	860.2	860.4	860.2	860.0	859.7	859.5	858.8	857.8	856.8	855.7	854.6
142.5°	892.2	892.5	892.1	891.6	891.3	890.9	890.2	889.1	888.1	887.0	886.0
145°	939.4	939.6	939.0	938.4	937.7	937.1	936.5	936.1	935.7	935.3	934.8
147.5°	983.7	983.7	983.2	982.6	981.9	981.4	980.7	980.0	979.1	978.4	977.6
150°	1011.3	1011.3	1010.8	1010.4	1009.9	1009.6	1009.1	1008.7	1008.2	1007.9	1007.4
152.5°	1036.0	1035.7	1035.5	1035.2	1034.9	1034.6	1034.3	1033.7	1033.0	1032.5	1031.9
155°	1072.2	1071.4	1071.2	1071.0	1070.7	1070.5	1070.4	1070.4	1070.4	1070.4	1070.4
157.5°	1103.8	1102.9	1102.8	1102.6	1102.4	1102.2	1102.3	1102.5	1102.8	1103.1	1103.3
160°	1123.0	1122.0	1122.0	1122.0	1122.0	1122.0	1122.2	1122.7	1123.0	1123.5	1123.9
162.5°	1141.4	1140.4	1140.2	1140.0	1139.8	1139.6	1139.9	1140.5	1141.0	1141.7	1142.3
165°	1164.3	1163.1	1163.1	1163.1	1163.1	1163.1	1163.4	1164.0	1164.7	1165.3	1165.9
167.5°	1183.1	1181.8	1181.7	1181.5	1181.3	1181.1	1181.5	1182.3	1183.2	1184.0	1184.9
170°	1193.2	1191.8	1191.8	1191.8	1191.8	1191.8	1192.1	1193.0	1193.8	1194.7	1195.5
172.5°	1201.5	1200.1	1200.1	1200.1	1200.1	1200.1	1200.5	1201.4	1202.2	1203.1	1203.9
175°	1210.2	1208.9	1208.9	1208.9	1208.9	1208.9	1209.4	1210.2	1211.1	1211.9	1212.8
177.5°	1214.3	1213.3	1213.3	1213.3	1213.3	1213.3	1213.6	1214.3	1215.0	1215.7	1216.4
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1332.0	1334.6	1343.3	1349.5	1356.7	1360.7	1364.9	1368.0	1372.1	1373.1	1388.0
5°	1337.9	1350.8	1373.2	1389.9	1410.4	1432.9	1448.2	1455.3	1473.9	1489.3	1520.1
7.5°	1336.2	1363.6	1397.5	1432.6	1470.4	1505.2	1535.5	1571.4	1596.9	1635.3	1673.1
10°	1334.7	1371.3	1414.9	1459.8	1512.4	1561.1	1604.8	1653.5	1693.9	1747.2	1792.7
12.5°	1330.1	1374.4	1434.9	1488.0	1551.9	1619.1	1683.8	1746.3	1782.2	1870.9	1912.8
15°	1318.7	1371.3	1447.0	1527.8	1615.7	1695.2	1777.3	1842.8	1948.5	2026.2	2075.6
17.5°	1296.9	1370.6	1460.3	1557.8	1664.6	1769.4	1862.5	1961.8	2074.0	2167.9	2267.9
20°	1286.7	1367.4	1467.5	1575.3	1686.2	1804.9	1910.7	2030.0	2152.5	2244.9	2373.1
22.5°	1267.6	1359.2	1467.0	1587.1	1705.7	1828.4	1952.3	2072.6	2214.1	2341.4	2463.4
25°	1236.6	1339.3	1450.9	1584.9	1724.1	1847.2	1995.4	2155.1	2302.6	2466.2	2588.0
27.5°	1204.0	1313.5	1425.4	1550.1	1699.8	1846.0	2032.3	2212.8	2393.1	2534.4	2624.6
30°	1178.8	1285.3	1400.8	1526.5	1674.7	1848.5	2056.9	2253.8	2429.6	2550.8	2601.5
32.5°	1151.7	1259.7	1361.8	1493.6	1651.6	1846.9	2072.4	2277.9	2431.7	2512.3	2502.5
35°	1109.0	1199.4	1298.8	1425.8	1611.8	1835.7	2081.3	2280.1	2374.5	2357.1	2226.3
37.5°	1047.4	1123.4	1221.3	1360.4	1565.7	1811.9	2063.3	2212.5	2206.4	2065.4	1875.8
40°	1008.9	1073.7	1168.0	1314.2	1529.7	1796.6	2035.1	2132.0	2049.9	1852.9	1625.9
42.5°	958.7	1018.2	1112.6	1262.9	1490.3	1765.2	1981.2	2009.3	1848.7	1622.1	1414.0
45°	880.6	933.2	1030.7	1185.9	1431.0	1697.1	1849.7	1781.1	1565.0	1330.9	1172.4
47.5°	796.8	851.5	945.3	1104.8	1345.3	1594.6	1667.4	1521.4	1299.5	1109.6	964.1
50°	744.0	796.6	888.3	1049.3	1287.2	1510.5	1540.6	1352.1	1148.1	981.4	862.0
52.5°	690.7	740.2	830.4	991.8	1219.6	1413.0	1394.4	1202.2	1014.6	872.5	778.9
55°	611.2	658.1	744.0	895.4	1102.6	1255.8	1188.5	1005.0	849.9	739.5	668.4
57.5°	540.2	585.0	659.2	796.0	976.1	1081.4	995.7	841.1	717.7	632.8	579.7
60°	491.9	531.7	602.3	729.2	885.8	965.9	881.3	744.7	640.7	572.8	525.3
62.5°	446.3	480.9	546.3	661.6	797.5	864.9	779.2	663.5	575.0	514.8	474.5
65°	377.1	408.6	466.3	556.1	667.7	712.6	638.9	545.2	476.5	431.7	404.7
67.5°	314.1	340.7	390.6	461.3	543.4	576.1	519.9	447.4	395.8	359.7	338.3
70°	271.9	295.0	334.1	395.1	469.5	494.6	442.0	382.3	344.4	315.6	295.7
72.5°	236.6	253.4	289.0	336.1	398.1	418.0	381.4	328.9	293.6	271.9	256.2
75°	180.2	194.4	217.4	255.2	298.2	309.8	282.2	249.5	225.7	210.4	198.2
77.5°	130.0	140.3	157.0	180.4	210.1	220.6	203.0	181.3	163.9	153.5	146.8
80°	98.1	106.5	120.6	139.8	157.8	163.5	153.3	136.6	124.4	118.7	112.9
82.5°	72.5	77.2	85.7	98.8	111.1	117.9	109.1	99.2	92.7	87.4	85.2
85°	36.6	39.1	43.0	48.1	55.8	58.3	55.1	52.6	48.7	45.5	45.5
87.5°	13.9	14.4	16.3	17.8	20.4	22.4	22.4	22.0	22.1	21.7	21.3
90°	3.1	5.2	7.4	9.4	11.9	14.6	17.4	20.2	22.9	23.8	24.6
92.5°	24.5	26.0	27.4	28.8	30.3	32.0	33.6	35.1	36.7	37.3	38.0
95°	57.8	59.3	60.8	62.3	63.9	65.6	67.3	69.0	70.7	71.5	72.4
97.5°	101.1	102.3	103.4	104.5	105.7	106.9	108.1	109.3	110.6	111.6	112.5
100°	131.1	132.4	133.7	135.0	136.1	137.2	138.3	139.3	140.3	141.0	141.7
102.5°	165.0	165.8	166.5	167.3	168.3	169.8	171.2	172.6	174.0	174.7	175.2
105°	215.3	215.7	216.1	216.6	217.7	219.6	221.5	223.5	225.4	225.4	225.4
107.5°	273.9	274.2	274.5	274.7	275.2	276.0	276.7	277.5	278.2	278.9	279.7
110°	310.8	311.2	311.6	312.1	312.5	312.9	313.3	313.8	314.1	315.0	315.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	348.8	349.0	349.3	349.6	349.7	349.8	349.9	350.0	350.1	351.1	352.1
115°	406.4	407.1	407.7	408.4	408.5	408.0	407.6	407.2	406.8	407.0	407.2
117.5°	463.9	464.4	464.8	465.2	465.1	464.6	464.0	463.4	463.0	462.9	462.9
120°	500.7	502.0	503.2	504.5	504.6	503.5	502.5	501.4	500.4	500.1	499.9
122.5°	537.8	538.8	539.6	540.5	540.7	540.3	539.7	539.1	538.6	538.0	537.4
125°	594.6	595.2	595.9	596.5	596.6	596.2	595.8	595.3	594.9	594.1	593.2
127.5°	648.0	649.4	650.7	652.1	652.5	652.1	651.6	651.1	650.6	649.5	648.3
130°	683.5	685.2	686.9	688.6	689.1	688.5	687.9	687.2	686.5	685.7	684.9
132.5°	718.6	720.3	722.1	723.8	724.3	723.9	723.4	722.9	722.5	721.4	720.5
135°	771.8	773.2	774.4	775.7	776.2	776.0	775.8	775.6	775.3	774.5	773.6
137.5°	821.3	822.4	823.4	824.5	825.3	825.9	826.4	827.0	827.6	826.6	825.8
140°	855.7	856.8	857.8	858.8	859.5	859.7	860.0	860.2	860.4	860.2	860.0
142.5°	887.0	888.1	889.1	890.2	890.9	891.3	891.6	892.1	892.5	892.2	892.0
145°	935.3	935.7	936.1	936.5	937.1	937.7	938.4	939.0	939.6	939.4	939.2
147.5°	978.4	979.1	980.0	980.7	981.4	981.9	982.6	983.2	983.7	983.7	983.7
150°	1007.9	1008.2	1008.7	1009.1	1009.6	1009.9	1010.4	1010.8	1011.3	1011.3	1011.3
152.5°	1032.5	1033.0	1033.7	1034.3	1034.6	1034.9	1035.2	1035.5	1035.7	1036.0	1036.3
155°	1070.4	1070.4	1070.4	1070.4	1070.5	1070.7	1071.0	1071.2	1071.4	1072.2	1073.1
157.5°	1103.1	1102.8	1102.5	1102.3	1102.2	1102.4	1102.6	1102.8	1102.9	1103.8	1104.7
160°	1123.5	1123.0	1122.7	1122.2	1122.0	1122.0	1122.0	1122.0	1122.0	1123.0	1124.2
162.5°	1141.7	1141.0	1140.5	1139.9	1139.6	1139.8	1140.0	1140.2	1140.4	1141.4	1142.5
165°	1165.3	1164.7	1164.0	1163.4	1163.1	1163.1	1163.1	1163.1	1163.1	1164.3	1165.6
167.5°	1184.0	1183.2	1182.3	1181.5	1181.1	1181.3	1181.5	1181.7	1181.8	1183.1	1184.4
170°	1194.7	1193.8	1193.0	1192.1	1191.8	1191.8	1191.8	1191.8	1191.8	1193.2	1194.7
172.5°	1203.1	1202.2	1201.4	1200.5	1200.1	1200.1	1200.1	1200.1	1200.1	1201.5	1202.8
175°	1211.9	1211.1	1210.2	1209.4	1208.9	1208.9	1208.9	1208.9	1208.9	1210.2	1211.4
177.5°	1215.7	1215.0	1214.3	1213.6	1213.3	1213.3	1213.3	1213.3	1213.3	1214.3	1215.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1393.1	1393.6	1399.3	1403.4	1401.3	1403.9	1404.9
5°	1522.0	1545.1	1557.3	1566.3	1566.9	1567.5	1572.7
7.5°	1704.8	1729.6	1747.7	1775.1	1783.3	1792.7	1790.0
10°	1838.2	1874.8	1906.2	1922.9	1940.9	1967.2	1946.0
12.5°	1962.9	2027.7	2075.6	2101.5	2118.4	2123.6	2113.3
15°	2168.5	2253.2	2298.8	2297.4	2355.2	2380.2	2341.1
17.5°	2357.1	2435.2	2497.8	2529.9	2578.0	2588.7	2583.8
20°	2472.6	2557.9	2606.6	2661.7	2686.8	2709.2	2713.1
22.5°	2572.1	2648.7	2701.0	2746.9	2767.9	2778.5	2784.9
25°	2674.6	2734.9	2766.4	2782.4	2788.1	2786.8	2778.5
27.5°	2667.6	2672.2	2637.5	2603.6	2573.1	2538.9	2527.1
30°	2598.3	2544.4	2448.2	2393.7	2313.5	2250.0	2275.7
32.5°	2416.1	2308.9	2200.8	2081.7	1983.0	1954.9	1926.7
35°	2062.1	1873.5	1763.2	1634.9	1583.6	1532.3	1497.0
37.5°	1668.3	1522.4	1391.6	1307.7	1256.2	1223.8	1206.4
40°	1442.5	1311.0	1203.2	1135.3	1096.2	1059.6	1054.4
42.5°	1262.3	1140.1	1059.0	1004.9	967.3	951.8	940.6
45°	1034.0	948.6	894.1	855.6	830.6	821.0	808.1
47.5°	875.2	814.8	773.9	747.7	728.9	721.7	720.7
50°	786.4	736.3	706.2	685.6	670.9	668.4	658.1
52.5°	719.6	676.3	652.8	634.9	624.2	617.0	614.0
55°	624.7	595.9	574.7	564.4	556.1	549.0	549.0
57.5°	546.6	522.5	508.5	499.7	497.2	492.2	489.0
60°	498.3	477.9	466.9	459.2	454.1	454.8	448.9
62.5°	451.2	437.8	427.4	419.7	413.6	413.7	414.1
65°	384.2	373.9	366.3	363.6	359.9	355.3	356.7
67.5°	325.6	315.9	309.9	305.6	304.3	301.8	305.6
70°	283.5	276.4	271.9	268.1	266.8	267.5	270.7
72.5°	245.0	240.0	237.0	235.3	232.4	232.5	234.8
75°	192.4	188.6	186.0	184.1	183.4	183.4	183.4
77.5°	141.4	140.4	139.3	136.5	136.6	137.4	137.5
80°	111.6	109.7	109.1	107.7	105.8	104.5	107.7
82.5°	83.4	81.4	80.8	80.6	77.6	77.4	80.0
85°	44.9	43.0	43.6	43.0	43.0	42.3	42.3
87.5°	21.0	20.6	20.3	20.8	20.5	20.0	21.1
90°	25.4	26.3	27.0	27.3	27.8	28.2	28.7
92.5°	38.7	39.4	39.6	39.3	39.1	38.8	38.5
95°	73.2	74.1	74.5	74.5	74.5	74.5	74.5
97.5°	113.5	114.5	114.9	114.8	114.8	114.7	114.6
100°	142.3	142.9	143.5	143.8	144.3	144.7	145.2
102.5°	175.9	176.5	176.8	176.7	176.6	176.5	176.4
105°	225.4	225.4	225.6	226.0	226.4	226.9	227.2
107.5°	280.3	281.0	281.2	281.0	280.7	280.4	280.1
110°	316.7	317.5	317.7	317.4	316.9	316.5	316.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	353.1	354.1	354.6	354.5	354.4	354.4	354.3
115°	407.5	407.6	407.6	407.5	407.2	407.0	406.8
117.5°	462.8	462.8	462.4	461.8	461.3	460.6	460.1
120°	499.7	499.5	499.2	498.8	498.3	497.9	497.5
122.5°	536.9	536.4	535.7	535.2	534.6	534.0	533.4
125°	592.4	591.5	590.7	589.8	589.0	588.1	587.3
127.5°	647.1	645.9	644.8	643.9	642.9	641.9	640.9
130°	684.0	683.2	682.0	680.5	679.0	677.6	676.1
132.5°	719.4	718.4	717.4	716.1	715.0	713.9	712.8
135°	772.8	771.9	771.4	770.9	770.5	770.1	769.7
137.5°	824.8	824.0	823.1	822.3	821.5	820.7	819.9
140°	859.7	859.5	858.7	857.1	855.7	854.2	852.7
142.5°	891.8	891.6	890.9	889.8	888.6	887.5	886.4
145°	939.0	938.8	938.2	937.4	936.5	935.7	934.8
147.5°	983.7	983.7	983.1	981.8	980.5	979.3	978.0
150°	1011.3	1011.3	1010.6	1009.4	1008.0	1006.8	1005.5
152.5°	1036.7	1037.1	1036.7	1035.6	1034.4	1033.3	1032.3
155°	1073.9	1074.8	1074.5	1073.0	1071.5	1070.1	1068.6
157.5°	1105.6	1106.5	1106.4	1105.1	1104.0	1102.8	1101.5
160°	1125.2	1126.2	1126.3	1125.5	1124.6	1123.8	1122.9
162.5°	1143.5	1144.6	1144.4	1143.1	1141.7	1140.4	1139.0
165°	1166.9	1168.2	1168.1	1166.6	1165.1	1163.6	1162.2
167.5°	1185.7	1187.0	1187.0	1185.7	1184.4	1183.1	1181.8
170°	1196.2	1197.7	1197.7	1196.2	1194.7	1193.2	1191.8
172.5°	1204.1	1205.4	1205.3	1203.8	1202.3	1200.8	1199.4
175°	1212.8	1214.0	1213.9	1212.4	1210.9	1209.5	1208.0
177.5°	1216.4	1217.4	1217.3	1216.1	1214.9	1213.7	1212.6
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6

(END OF REPORT)