

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: P332199-830

Luminaire Tested: **S123DIW-S1000D1320U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332199-830
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-S1000D1320U830-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1320 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8311.8 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

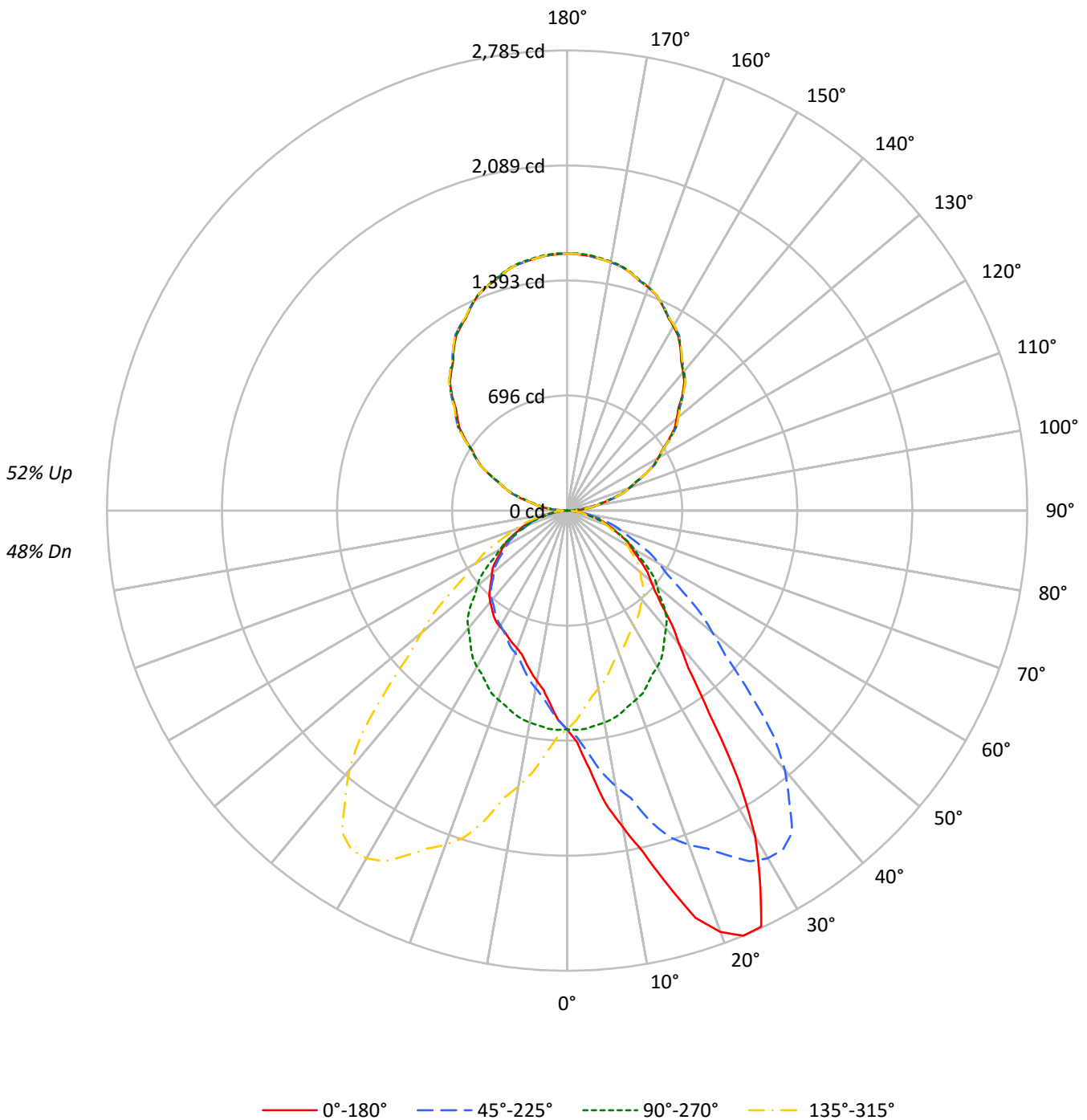
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48
1	98	93	90	86	90	86	83	80	73	70	68	60	58	57	48	47	46	41
2	89	82	76	71	82	76	70	66	64	60	57	53	50	48	43	41	39	35
3	81	72	65	59	75	67	60	55	56	52	48	47	44	41	38	36	34	30
4	75	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29	26
5	68	57	49	43	63	53	46	41	45	40	35	38	34	31	31	28	26	22
6	63	51	43	37	58	48	40	35	41	35	31	34	30	27	28	25	23	20
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	23	20	18
8	54	42	34	29	50	39	32	27	34	28	24	28	24	21	24	20	18	16
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15	13

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	1.6
10°-20°	418.2	5.0
20°-30°	701.8	8.4
30°-40°	794.6	9.6
40°-50°	712.6	8.6
50°-60°	575.1	6.9
60°-70°	400.7	4.8
70°-80°	210.6	2.5
80°-90°	56.1	0.7
90°-100°	101.4	1.2
100°-110°	303.4	3.7
110°-120°	516.1	6.2
120°-130°	678.8	8.2
130°-140°	763.0	9.2
140°-150°	750.0	9.0
150°-160°	631.4	7.6
160°-170°	420.3	5.1
170°-180°	147.2	1.8
0°-30°	1250.4	15.0
0°-40°	2045.0	24.6
0°-60°	3332.7	40.1
0°-90°	4000.2	48.1
90°-120°	920.9	11.1
90°-150°	3112.8	37.4
90°-180°	4312.0	51.9
0°-180°	8311.8	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°	37	1	37	1	37	20
95°	95	72	95	72	95	98
105°	291	275	291	275	291	309
115°	521	520	521	520	521	516
125°	752	760	752	760	752	672
135°	985	987	985	987	985	758
145°	1197	1197	1197	1197	1197	747
155°	1368	1370	1368	1370	1368	630
165°	1488	1493	1488	1493	1488	420
175°	1546	1553	1546	1553	1546	147
180°	1556	1556	1556	1556	1556	



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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°	22.7	21.6	22.0	22.4	21.8	22.1	22.4	22.7	23.0	23.3	23.1
90°	36.7	36.1	35.6	35.1	34.5	33.6	32.6	31.5	30.4	29.3	25.8
92.5°	49.4	49.7	50.0	50.3	50.7	50.4	49.6	48.6	47.8	46.9	45.0
95°	95.4	95.4	95.4	95.4	95.4	94.8	93.7	92.7	91.5	90.5	88.3
97.5°	146.7	146.8	146.9	147.0	147.1	146.6	145.3	144.0	142.8	141.6	140.0
100°	185.8	185.3	184.7	184.2	183.6	182.9	182.1	181.3	180.5	179.7	178.3
102.5°	225.9	226.0	226.1	226.2	226.3	226.0	225.2	224.3	223.6	222.7	220.9
105°	291.0	290.4	289.8	289.4	288.8	288.5	288.5	288.5	288.5	288.5	286.1
107.5°	358.6	359.0	359.3	359.7	360.0	359.7	358.8	358.0	357.1	356.2	355.2
110°	404.6	405.2	405.8	406.2	406.8	406.5	405.5	404.4	403.3	402.2	401.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	453.6	453.6	453.7	453.8	453.9	453.4	452.0	450.7	449.5	448.2	448.1
115°	520.8	521.0	521.3	521.6	521.9	521.9	521.6	521.3	521.0	520.8	521.3
117.5°	589.0	589.7	590.5	591.3	592.0	592.4	592.5	592.6	592.6	592.7	593.3
120°	636.9	637.4	638.0	638.6	639.0	639.5	639.8	640.0	640.3	640.6	642.0
122.5°	682.9	683.6	684.4	685.1	685.9	686.6	687.3	688.1	688.7	689.5	690.1
125°	751.8	752.9	753.9	755.1	756.2	757.2	758.4	759.4	760.5	761.6	762.1
127.5°	820.5	821.8	823.0	824.3	825.5	826.9	828.4	829.9	831.4	833.0	833.6
130°	865.5	867.4	869.3	871.2	873.1	874.6	875.7	876.8	877.9	878.9	879.8
132.5°	912.5	913.9	915.4	916.8	918.3	919.7	921.0	922.3	923.6	924.9	925.5
135°	985.3	985.8	986.4	986.9	987.5	988.3	989.4	990.4	991.6	992.6	992.9
137.5°	1049.6	1050.7	1051.7	1052.7	1053.8	1054.8	1055.9	1057.1	1058.2	1059.4	1058.7
140°	1091.7	1093.5	1095.4	1097.4	1099.3	1100.3	1100.6	1100.9	1101.2	1101.5	1101.2
142.5°	1134.7	1136.1	1137.6	1139.1	1140.6	1141.4	1141.7	1142.0	1142.3	1142.6	1142.0
145°	1196.7	1197.9	1198.9	1200.0	1201.2	1201.8	1202.1	1202.3	1202.6	1202.9	1202.1
147.5°	1252.1	1253.7	1255.3	1257.0	1258.6	1259.3	1259.3	1259.3	1259.3	1259.3	1258.6
150°	1287.2	1288.8	1290.5	1292.1	1293.7	1294.6	1294.6	1294.6	1294.6	1294.6	1294.0
152.5°	1321.4	1322.9	1324.3	1325.7	1327.1	1327.6	1327.2	1326.7	1326.3	1325.9	1325.6
155°	1367.9	1369.8	1371.8	1373.7	1375.5	1375.9	1374.9	1373.8	1372.7	1371.6	1371.3
157.5°	1410.2	1411.7	1413.2	1414.8	1416.3	1416.5	1415.3	1414.2	1413.1	1411.9	1411.7
160°	1437.6	1438.7	1439.8	1440.9	1442.0	1441.8	1440.5	1439.1	1437.8	1436.3	1436.3
162.5°	1458.1	1459.9	1461.6	1463.4	1465.1	1465.3	1464.0	1462.5	1461.2	1459.8	1459.6
165°	1487.7	1489.6	1491.6	1493.5	1495.3	1495.4	1493.8	1492.2	1490.5	1488.9	1488.9
167.5°	1512.9	1514.6	1516.3	1518.0	1519.7	1519.7	1518.0	1516.3	1514.6	1512.9	1512.7
170°	1525.6	1527.5	1529.5	1531.3	1533.2	1533.2	1531.3	1529.5	1527.5	1525.6	1525.6
172.5°	1535.4	1537.3	1539.2	1541.2	1543.0	1543.1	1541.4	1539.7	1538.0	1536.3	1536.3
175°	1546.4	1548.3	1550.2	1552.1	1554.0	1554.2	1552.6	1550.9	1549.3	1547.7	1547.7
177.5°	1552.3	1553.8	1555.3	1556.8	1558.4	1558.5	1557.2	1555.9	1554.5	1553.2	1553.2
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



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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°	23.5	23.3	21.0	18.3	16.8	14.7	14.1	12.5	12.1	12.6	12.6
90°	22.2	18.8	15.2	12.1	9.3	6.7	4.0	1.2	4.0	6.7	9.3
92.5°	42.9	40.9	38.9	36.9	35.2	33.3	31.4	29.6	31.4	33.3	35.2
95°	86.1	84.0	81.8	79.7	77.9	76.0	74.0	72.1	74.0	76.0	77.9
97.5°	138.4	136.9	135.3	133.7	132.3	130.9	129.5	128.1	129.5	130.9	132.3
100°	177.0	175.6	174.3	172.8	171.2	169.5	167.9	166.3	167.9	169.5	171.2
102.5°	219.1	217.4	215.6	214.1	213.2	212.3	211.2	210.3	211.2	212.3	213.2
105°	283.6	281.2	278.7	277.2	276.6	276.2	275.6	275.0	275.6	276.2	276.6
107.5°	354.3	353.3	352.3	351.7	351.4	351.0	350.7	350.3	350.7	351.0	351.4
110°	401.1	400.6	400.0	399.4	398.9	398.4	397.8	397.3	397.8	398.4	398.9



TEST NUMBER: P332199-830

CATALOG NUMBER: S123DIW-S1000D1320U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	447.9	447.8	447.7	447.5	447.1	446.9	446.5	446.2	446.5	446.9	447.1
115°	521.9	522.4	522.9	522.8	522.0	521.1	520.4	519.5	520.4	521.1	522.0
117.5°	594.1	594.7	595.5	595.6	595.0	594.5	593.9	593.4	593.9	594.5	595.0
120°	643.3	644.6	646.0	645.8	644.2	642.6	640.9	639.3	640.9	642.6	644.2
122.5°	690.9	691.5	692.3	692.0	690.9	689.7	688.4	687.3	688.4	689.7	690.9
125°	762.7	763.2	763.7	763.6	762.8	762.0	761.2	760.3	761.2	762.0	762.8
127.5°	834.2	834.8	835.4	834.8	833.0	831.3	829.6	827.8	829.6	831.3	833.0
130°	880.6	881.4	882.2	881.6	879.4	877.2	875.0	872.8	875.0	877.2	879.4
132.5°	926.1	926.7	927.3	926.5	924.4	922.2	920.0	917.8	920.0	922.2	924.4
135°	993.2	993.4	993.7	993.1	991.4	989.8	988.2	986.6	988.2	989.8	991.4
137.5°	1058.0	1057.2	1056.6	1055.6	1054.1	1052.8	1051.4	1050.1	1051.4	1052.8	1054.1
140°	1100.9	1100.6	1100.3	1099.6	1098.2	1096.8	1095.4	1094.1	1095.4	1096.8	1098.2
142.5°	1141.5	1141.0	1140.6	1139.6	1138.3	1136.9	1135.6	1134.2	1135.6	1136.9	1138.3
145°	1201.3	1200.4	1199.7	1198.9	1198.4	1197.9	1197.3	1196.7	1197.3	1197.9	1198.4
147.5°	1257.8	1257.1	1256.3	1255.5	1254.5	1253.5	1252.5	1251.5	1252.5	1253.5	1254.5
150°	1293.5	1293.0	1292.4	1291.8	1291.3	1290.8	1290.2	1289.7	1290.2	1290.8	1291.3
152.5°	1325.2	1324.9	1324.6	1324.0	1323.2	1322.5	1321.7	1321.0	1321.7	1322.5	1323.2
155°	1371.0	1370.7	1370.6	1370.4	1370.4	1370.4	1370.4	1370.4	1370.4	1370.4	1370.4
157.5°	1411.5	1411.3	1411.1	1411.1	1411.5	1411.7	1412.1	1412.4	1412.1	1411.7	1411.5
160°	1436.3	1436.3	1436.3	1436.6	1437.2	1437.8	1438.3	1438.8	1438.3	1437.8	1437.2
162.5°	1459.4	1459.2	1459.0	1459.2	1460.0	1460.8	1461.5	1462.3	1461.5	1460.8	1460.0
165°	1488.9	1488.9	1488.9	1489.4	1490.2	1491.0	1491.8	1492.6	1491.8	1491.0	1490.2
167.5°	1512.5	1512.2	1512.0	1512.5	1513.5	1514.7	1515.7	1516.8	1515.7	1514.7	1513.5
170°	1525.6	1525.6	1525.6	1526.2	1527.3	1528.3	1529.5	1530.5	1529.5	1528.3	1527.3
172.5°	1536.3	1536.3	1536.3	1536.9	1538.0	1539.1	1540.2	1541.2	1540.2	1539.1	1538.0
175°	1547.7	1547.7	1547.7	1548.1	1549.3	1550.4	1551.4	1552.6	1551.4	1550.4	1549.3
177.5°	1553.2	1553.2	1553.2	1553.7	1554.5	1555.4	1556.3	1557.2	1556.3	1555.4	1554.5
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



TEST NUMBER: P332199-830

CATALOG NUMBER: S123DIW-S1000D1320U830-4F0-1E-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°	12.7	13.9	14.0	15.3	15.5	16.7	16.9	16.0	16.3	18.0	16.1
90°	12.1	15.2	18.8	22.2	25.8	29.3	30.4	31.5	32.6	33.6	34.5
92.5°	36.9	38.9	40.9	42.9	45.0	46.9	47.8	48.6	49.6	50.4	50.7
95°	79.7	81.8	84.0	86.1	88.3	90.5	91.5	92.7	93.7	94.8	95.4
97.5°	133.7	135.3	136.9	138.4	140.0	141.6	142.8	144.0	145.3	146.6	147.1
100°	172.8	174.3	175.6	177.0	178.3	179.7	180.5	181.3	182.1	182.9	183.6
102.5°	214.1	215.6	217.4	219.1	220.9	222.7	223.6	224.3	225.2	226.0	226.3
105°	277.2	278.7	281.2	283.6	286.1	288.5	288.5	288.5	288.5	288.5	288.8
107.5°	351.7	352.3	353.3	354.3	355.2	356.2	357.1	358.0	358.8	359.7	360.0
110°	399.4	400.0	400.6	401.1	401.6	402.2	403.3	404.4	405.5	406.5	406.8



TEST NUMBER: P332199-830

CATALOG NUMBER: S123DIW-S1000D1320U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	447.5	447.7	447.8	447.9	448.1	448.2	449.5	450.7	452.0	453.4	453.9
115°	522.8	522.9	522.4	521.9	521.3	520.8	521.0	521.3	521.6	521.9	521.9
117.5°	595.6	595.5	594.7	594.1	593.3	592.7	592.6	592.6	592.5	592.4	592.0
120°	645.8	646.0	644.6	643.3	642.0	640.6	640.3	640.0	639.8	639.5	639.0
122.5°	692.0	692.3	691.5	690.9	690.1	689.5	688.7	688.1	687.3	686.6	685.9
125°	763.6	763.7	763.2	762.7	762.1	761.6	760.5	759.4	758.4	757.2	756.2
127.5°	834.8	835.4	834.8	834.2	833.6	833.0	831.4	829.9	828.4	826.9	825.5
130°	881.6	882.2	881.4	880.6	879.8	878.9	877.9	876.8	875.7	874.6	873.1
132.5°	926.5	927.3	926.7	926.1	925.5	924.9	923.6	922.3	921.0	919.7	918.3
135°	993.1	993.7	993.4	993.2	992.9	992.6	991.6	990.4	989.4	988.3	987.5
137.5°	1055.6	1056.6	1057.2	1058.0	1058.7	1059.4	1058.2	1057.1	1055.9	1054.8	1053.8
140°	1099.6	1100.3	1100.6	1100.9	1101.2	1101.5	1101.2	1100.9	1100.6	1100.3	1099.3
142.5°	1139.6	1140.6	1141.0	1141.5	1142.0	1142.6	1142.3	1142.0	1141.7	1141.4	1140.6
145°	1198.9	1199.7	1200.4	1201.3	1202.1	1202.9	1202.6	1202.3	1202.1	1201.8	1201.2
147.5°	1255.5	1256.3	1257.1	1257.8	1258.6	1259.3	1259.3	1259.3	1259.3	1259.3	1258.6
150°	1291.8	1292.4	1293.0	1293.5	1294.0	1294.6	1294.6	1294.6	1294.6	1294.6	1293.7
152.5°	1324.0	1324.6	1324.9	1325.2	1325.6	1325.9	1326.3	1326.7	1327.2	1327.6	1327.1
155°	1370.4	1370.6	1370.7	1371.0	1371.3	1371.6	1372.7	1373.8	1374.9	1375.9	1375.5
157.5°	1411.1	1411.1	1411.3	1411.5	1411.7	1411.9	1413.1	1414.2	1415.3	1416.5	1416.3
160°	1436.6	1436.3	1436.3	1436.3	1436.3	1436.3	1437.8	1439.1	1440.5	1441.8	1442.0
162.5°	1459.2	1459.0	1459.2	1459.4	1459.6	1459.8	1461.2	1462.5	1464.0	1465.3	1465.1
165°	1489.4	1488.9	1488.9	1488.9	1488.9	1488.9	1490.5	1492.2	1493.8	1495.4	1495.3
167.5°	1512.5	1512.0	1512.2	1512.5	1512.7	1512.9	1514.6	1516.3	1518.0	1519.7	1519.7
170°	1526.2	1525.6	1525.6	1525.6	1525.6	1525.6	1527.5	1529.5	1531.3	1533.2	1533.2
172.5°	1536.9	1536.3	1536.3	1536.3	1536.3	1536.3	1538.0	1539.7	1541.4	1543.1	1543.0
175°	1548.1	1547.7	1547.7	1547.7	1547.7	1547.7	1549.3	1550.9	1552.6	1554.2	1554.0
177.5°	1553.7	1553.2	1553.2	1553.2	1553.2	1553.2	1554.5	1555.9	1557.2	1558.5	1558.4
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



TEST NUMBER: P332199-830

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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°	16.2	16.4	15.9	15.6	15.9	16.4	16.2	16.1	18.0	16.3	16.0
90°	35.1	35.6	36.1	36.7	36.1	35.6	35.1	34.5	33.6	32.6	31.5
92.5°	50.3	50.0	49.7	49.4	49.7	50.0	50.3	50.7	50.4	49.6	48.6
95°	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	94.8	93.7	92.7
97.5°	147.0	146.9	146.8	146.7	146.8	146.9	147.0	147.1	146.6	145.3	144.0
100°	184.2	184.7	185.3	185.8	185.3	184.7	184.2	183.6	182.9	182.1	181.3
102.5°	226.2	226.1	226.0	225.9	226.0	226.1	226.2	226.3	226.0	225.2	224.3
105°	289.4	289.8	290.4	291.0	290.4	289.8	289.4	288.8	288.5	288.5	288.5
107.5°	359.7	359.3	359.0	358.6	359.0	359.3	359.7	360.0	359.7	358.8	358.0
110°	406.2	405.8	405.2	404.6	405.2	405.8	406.2	406.8	406.5	405.5	404.4



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	453.8	453.7	453.6	453.6	453.6	453.7	453.8	453.9	453.4	452.0	450.7
115°	521.6	521.3	521.0	520.8	521.0	521.3	521.6	521.9	521.9	521.6	521.3
117.5°	591.3	590.5	589.7	589.0	589.7	590.5	591.3	592.0	592.4	592.5	592.6
120°	638.6	638.0	637.4	636.9	637.4	638.0	638.6	639.0	639.5	639.8	640.0
122.5°	685.1	684.4	683.6	682.9	683.6	684.4	685.1	685.9	686.6	687.3	688.1
125°	755.1	753.9	752.9	751.8	752.9	753.9	755.1	756.2	757.2	758.4	759.4
127.5°	824.3	823.0	821.8	820.5	821.8	823.0	824.3	825.5	826.9	828.4	829.9
130°	871.2	869.3	867.4	865.5	867.4	869.3	871.2	873.1	874.6	875.7	876.8
132.5°	916.8	915.4	913.9	912.5	913.9	915.4	916.8	918.3	919.7	921.0	922.3
135°	986.9	986.4	985.8	985.3	985.8	986.4	986.9	987.5	988.3	989.4	990.4
137.5°	1052.7	1051.7	1050.7	1049.6	1050.7	1051.7	1052.7	1053.8	1054.8	1055.9	1057.1
140°	1097.4	1095.4	1093.5	1091.7	1093.5	1095.4	1097.4	1099.3	1100.3	1100.6	1100.9
142.5°	1139.1	1137.6	1136.1	1134.7	1136.1	1137.6	1139.1	1140.6	1141.4	1141.7	1142.0
145°	1200.0	1198.9	1197.9	1196.7	1197.9	1198.9	1200.0	1201.2	1201.8	1202.1	1202.3
147.5°	1257.0	1255.3	1253.7	1252.1	1253.7	1255.3	1257.0	1258.6	1259.3	1259.3	1259.3
150°	1292.1	1290.5	1288.8	1287.2	1288.8	1290.5	1292.1	1293.7	1294.6	1294.6	1294.6
152.5°	1325.7	1324.3	1322.9	1321.4	1322.9	1324.3	1325.7	1327.1	1327.6	1327.2	1326.7
155°	1373.7	1371.8	1369.8	1367.9	1369.8	1371.8	1373.7	1375.5	1375.9	1374.9	1373.8
157.5°	1414.8	1413.2	1411.7	1410.2	1411.7	1413.2	1414.8	1416.3	1416.5	1415.3	1414.2
160°	1440.9	1439.8	1438.7	1437.6	1438.7	1439.8	1440.9	1442.0	1441.8	1440.5	1439.1
162.5°	1463.4	1461.6	1459.9	1458.1	1459.9	1461.6	1463.4	1465.1	1465.3	1464.0	1462.5
165°	1493.5	1491.6	1489.6	1487.7	1489.6	1491.6	1493.5	1495.3	1495.4	1493.8	1492.2
167.5°	1518.0	1516.3	1514.6	1512.9	1514.6	1516.3	1518.0	1519.7	1519.7	1518.0	1516.3
170°	1531.3	1529.5	1527.5	1525.6	1527.5	1529.5	1531.3	1533.2	1533.2	1531.3	1529.5
172.5°	1541.2	1539.2	1537.3	1535.4	1537.3	1539.2	1541.2	1543.0	1543.1	1541.4	1539.7
175°	1552.1	1550.2	1548.3	1546.4	1548.3	1550.2	1552.1	1554.0	1554.2	1552.6	1550.9
177.5°	1556.8	1555.3	1553.8	1552.3	1553.8	1555.3	1556.8	1558.4	1558.5	1557.2	1555.9
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



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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°	16.9	16.7	15.5	15.3	14.0	13.9	12.7	12.6	12.6	12.1	12.5
90°	30.4	29.3	25.8	22.2	18.8	15.2	12.1	9.3	6.7	4.0	1.2
92.5°	47.8	46.9	45.0	42.9	40.9	38.9	36.9	35.2	33.3	31.4	29.6
95°	91.5	90.5	88.3	86.1	84.0	81.8	79.7	77.9	76.0	74.0	72.1
97.5°	142.8	141.6	140.0	138.4	136.9	135.3	133.7	132.3	130.9	129.5	128.1
100°	180.5	179.7	178.3	177.0	175.6	174.3	172.8	171.2	169.5	167.9	166.3
102.5°	223.6	222.7	220.9	219.1	217.4	215.6	214.1	213.2	212.3	211.2	210.3
105°	288.5	288.5	286.1	283.6	281.2	278.7	277.2	276.6	276.2	275.6	275.0
107.5°	357.1	356.2	355.2	354.3	353.3	352.3	351.7	351.4	351.0	350.7	350.3
110°	403.3	402.2	401.6	401.1	400.6	400.0	399.4	398.9	398.4	397.8	397.3



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	449.5	448.2	448.1	447.9	447.8	447.7	447.5	447.1	446.9	446.5	446.2
115°	521.0	520.8	521.3	521.9	522.4	522.9	522.8	522.0	521.1	520.4	519.5
117.5°	592.6	592.7	593.3	594.1	594.7	595.5	595.6	595.0	594.5	593.9	593.4
120°	640.3	640.6	642.0	643.3	644.6	646.0	645.8	644.2	642.6	640.9	639.3
122.5°	688.7	689.5	690.1	690.9	691.5	692.3	692.0	690.9	689.7	688.4	687.3
125°	760.5	761.6	762.1	762.7	763.2	763.7	763.6	762.8	762.0	761.2	760.3
127.5°	831.4	833.0	833.6	834.2	834.8	835.4	834.8	833.0	831.3	829.6	827.8
130°	877.9	878.9	879.8	880.6	881.4	882.2	881.6	879.4	877.2	875.0	872.8
132.5°	923.6	924.9	925.5	926.1	926.7	927.3	926.5	924.4	922.2	920.0	917.8
135°	991.6	992.6	992.9	993.2	993.4	993.7	993.1	991.4	989.8	988.2	986.6
137.5°	1058.2	1059.4	1058.7	1058.0	1057.2	1056.6	1055.6	1054.1	1052.8	1051.4	1050.1
140°	1101.2	1101.5	1101.2	1100.9	1100.6	1100.3	1099.6	1098.2	1096.8	1095.4	1094.1
142.5°	1142.3	1142.6	1142.0	1141.5	1141.0	1140.6	1139.6	1138.3	1136.9	1135.6	1134.2
145°	1202.6	1202.9	1202.1	1201.3	1200.4	1199.7	1198.9	1198.4	1197.9	1197.3	1196.7
147.5°	1259.3	1259.3	1258.6	1257.8	1257.1	1256.3	1255.5	1254.5	1253.5	1252.5	1251.5
150°	1294.6	1294.6	1294.0	1293.5	1293.0	1292.4	1291.8	1291.3	1290.8	1290.2	1289.7
152.5°	1326.3	1325.9	1325.6	1325.2	1324.9	1324.6	1324.0	1323.2	1322.5	1321.7	1321.0
155°	1372.7	1371.6	1371.3	1371.0	1370.7	1370.6	1370.4	1370.4	1370.4	1370.4	1370.4
157.5°	1413.1	1411.9	1411.7	1411.5	1411.3	1411.1	1411.1	1411.5	1411.7	1412.1	1412.4
160°	1437.8	1436.3	1436.3	1436.3	1436.3	1436.3	1436.6	1437.2	1437.8	1438.3	1438.8
162.5°	1461.2	1459.8	1459.6	1459.4	1459.2	1459.0	1459.2	1460.0	1460.8	1461.5	1462.3
165°	1490.5	1488.9	1488.9	1488.9	1488.9	1488.9	1489.4	1490.2	1491.0	1491.8	1492.6
167.5°	1514.6	1512.9	1512.7	1512.5	1512.2	1512.0	1512.5	1513.5	1514.7	1515.7	1516.8
170°	1527.5	1525.6	1525.6	1525.6	1525.6	1525.6	1526.2	1527.3	1528.3	1529.5	1530.5
172.5°	1538.0	1536.3	1536.3	1536.3	1536.3	1536.3	1536.9	1538.0	1539.1	1540.2	1541.2
175°	1549.3	1547.7	1547.7	1547.7	1547.7	1547.7	1548.1	1549.3	1550.4	1551.4	1552.6
177.5°	1554.5	1553.2	1553.2	1553.2	1553.2	1553.2	1553.7	1554.5	1555.4	1556.3	1557.2
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



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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°	14.1	14.7	16.8	18.3	21.0	23.3	23.5	23.1	23.3	23.0	22.7
90°	4.0	6.7	9.3	12.1	15.2	18.8	22.2	25.8	29.3	30.4	31.5
92.5°	31.4	33.3	35.2	36.9	38.9	40.9	42.9	45.0	46.9	47.8	48.6
95°	74.0	76.0	77.9	79.7	81.8	84.0	86.1	88.3	90.5	91.5	92.7
97.5°	129.5	130.9	132.3	133.7	135.3	136.9	138.4	140.0	141.6	142.8	144.0
100°	167.9	169.5	171.2	172.8	174.3	175.6	177.0	178.3	179.7	180.5	181.3
102.5°	211.2	212.3	213.2	214.1	215.6	217.4	219.1	220.9	222.7	223.6	224.3
105°	275.6	276.2	276.6	277.2	278.7	281.2	283.6	286.1	288.5	288.5	288.5
107.5°	350.7	351.0	351.4	351.7	352.3	353.3	354.3	355.2	356.2	357.1	358.0
110°	397.8	398.4	398.9	399.4	400.0	400.6	401.1	401.6	402.2	403.3	404.4



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	446.5	446.9	447.1	447.5	447.7	447.8	447.9	448.1	448.2	449.5	450.7
115°	520.4	521.1	522.0	522.8	522.9	522.4	521.9	521.3	520.8	521.0	521.3
117.5°	593.9	594.5	595.0	595.6	595.5	594.7	594.1	593.3	592.7	592.6	592.6
120°	640.9	642.6	644.2	645.8	646.0	644.6	643.3	642.0	640.6	640.3	640.0
122.5°	688.4	689.7	690.9	692.0	692.3	691.5	690.9	690.1	689.5	688.7	688.1
125°	761.2	762.0	762.8	763.6	763.7	763.2	762.7	762.1	761.6	760.5	759.4
127.5°	829.6	831.3	833.0	834.8	835.4	834.8	834.2	833.6	833.0	831.4	829.9
130°	875.0	877.2	879.4	881.6	882.2	881.4	880.6	879.8	878.9	877.9	876.8
132.5°	920.0	922.2	924.4	926.5	927.3	926.7	926.1	925.5	924.9	923.6	922.3
135°	988.2	989.8	991.4	993.1	993.7	993.4	993.2	992.9	992.6	991.6	990.4
137.5°	1051.4	1052.8	1054.1	1055.6	1056.6	1057.2	1058.0	1058.7	1059.4	1058.2	1057.1
140°	1095.4	1096.8	1098.2	1099.6	1100.3	1100.6	1100.9	1101.2	1101.5	1101.2	1100.9
142.5°	1135.6	1136.9	1138.3	1139.6	1140.6	1141.0	1141.5	1142.0	1142.6	1142.3	1142.0
145°	1197.3	1197.9	1198.4	1198.9	1199.7	1200.4	1201.3	1202.1	1202.9	1202.6	1202.3
147.5°	1252.5	1253.5	1254.5	1255.5	1256.3	1257.1	1257.8	1258.6	1259.3	1259.3	1259.3
150°	1290.2	1290.8	1291.3	1291.8	1292.4	1293.0	1293.5	1294.0	1294.6	1294.6	1294.6
152.5°	1321.7	1322.5	1323.2	1324.0	1324.6	1324.9	1325.2	1325.6	1325.9	1326.3	1326.7
155°	1370.4	1370.4	1370.4	1370.4	1370.6	1370.7	1371.0	1371.3	1371.6	1372.7	1373.8
157.5°	1412.1	1411.7	1411.5	1411.1	1411.1	1411.3	1411.5	1411.7	1411.9	1413.1	1414.2
160°	1438.3	1437.8	1437.2	1436.6	1436.3	1436.3	1436.3	1436.3	1436.3	1437.8	1439.1
162.5°	1461.5	1460.8	1460.0	1459.2	1459.0	1459.2	1459.4	1459.6	1459.8	1461.2	1462.5
165°	1491.8	1491.0	1490.2	1489.4	1488.9	1488.9	1488.9	1488.9	1488.9	1490.5	1492.2
167.5°	1515.7	1514.7	1513.5	1512.5	1512.0	1512.2	1512.5	1512.7	1512.9	1514.6	1516.3
170°	1529.5	1528.3	1527.3	1526.2	1525.6	1525.6	1525.6	1525.6	1525.6	1527.5	1529.5
172.5°	1540.2	1539.1	1538.0	1536.9	1536.3	1536.3	1536.3	1536.3	1536.3	1538.0	1539.7
175°	1551.4	1550.4	1549.3	1548.1	1547.7	1547.7	1547.7	1547.7	1547.7	1549.3	1550.9
177.5°	1556.3	1555.4	1554.5	1553.7	1553.2	1553.2	1553.2	1553.2	1553.2	1554.5	1555.9
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



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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°	22.4	22.1	21.8	22.4	22.0	21.6	22.7
90°	32.6	33.6	34.5	35.1	35.6	36.1	36.7
92.5°	49.6	50.4	50.7	50.3	50.0	49.7	49.4
95°	93.7	94.8	95.4	95.4	95.4	95.4	95.4
97.5°	145.3	146.6	147.1	147.0	146.9	146.8	146.7
100°	182.1	182.9	183.6	184.2	184.7	185.3	185.8
102.5°	225.2	226.0	226.3	226.2	226.1	226.0	225.9
105°	288.5	288.5	288.8	289.4	289.8	290.4	291.0
107.5°	358.8	359.7	360.0	359.7	359.3	359.0	358.6
110°	405.5	406.5	406.8	406.2	405.8	405.2	404.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	452.0	453.4	453.9	453.8	453.7	453.6	453.6
115°	521.6	521.9	521.9	521.6	521.3	521.0	520.8
117.5°	592.5	592.4	592.0	591.3	590.5	589.7	589.0
120°	639.8	639.5	639.0	638.6	638.0	637.4	636.9
122.5°	687.3	686.6	685.9	685.1	684.4	683.6	682.9
125°	758.4	757.2	756.2	755.1	753.9	752.9	751.8
127.5°	828.4	826.9	825.5	824.3	823.0	821.8	820.5
130°	875.7	874.6	873.1	871.2	869.3	867.4	865.5
132.5°	921.0	919.7	918.3	916.8	915.4	913.9	912.5
135°	989.4	988.3	987.5	986.9	986.4	985.8	985.3
137.5°	1055.9	1054.8	1053.8	1052.7	1051.7	1050.7	1049.6
140°	1100.6	1100.3	1099.3	1097.4	1095.4	1093.5	1091.7
142.5°	1141.7	1141.4	1140.6	1139.1	1137.6	1136.1	1134.7
145°	1202.1	1201.8	1201.2	1200.0	1198.9	1197.9	1196.7
147.5°	1259.3	1259.3	1258.6	1257.0	1255.3	1253.7	1252.1
150°	1294.6	1294.6	1293.7	1292.1	1290.5	1288.8	1287.2
152.5°	1327.2	1327.6	1327.1	1325.7	1324.3	1322.9	1321.4
155°	1374.9	1375.9	1375.5	1373.7	1371.8	1369.8	1367.9
157.5°	1415.3	1416.5	1416.3	1414.8	1413.2	1411.7	1410.2
160°	1440.5	1441.8	1442.0	1440.9	1439.8	1438.7	1437.6
162.5°	1464.0	1465.3	1465.1	1463.4	1461.6	1459.9	1458.1
165°	1493.8	1495.4	1495.3	1493.5	1491.6	1489.6	1487.7
167.5°	1518.0	1519.7	1519.7	1518.0	1516.3	1514.6	1512.9
170°	1531.3	1533.2	1533.2	1531.3	1529.5	1527.5	1525.6
172.5°	1541.4	1543.1	1543.0	1541.2	1539.2	1537.3	1535.4
175°	1552.6	1554.2	1554.0	1552.1	1550.2	1548.3	1546.4
177.5°	1557.2	1558.5	1558.4	1556.8	1555.3	1553.8	1552.3
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2

(END OF REPORT)