

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: P332192-830

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332192-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,  
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-A  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1030 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7885.0 lumens  
Efficiency: N/A  
Efficacy: 128.8 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

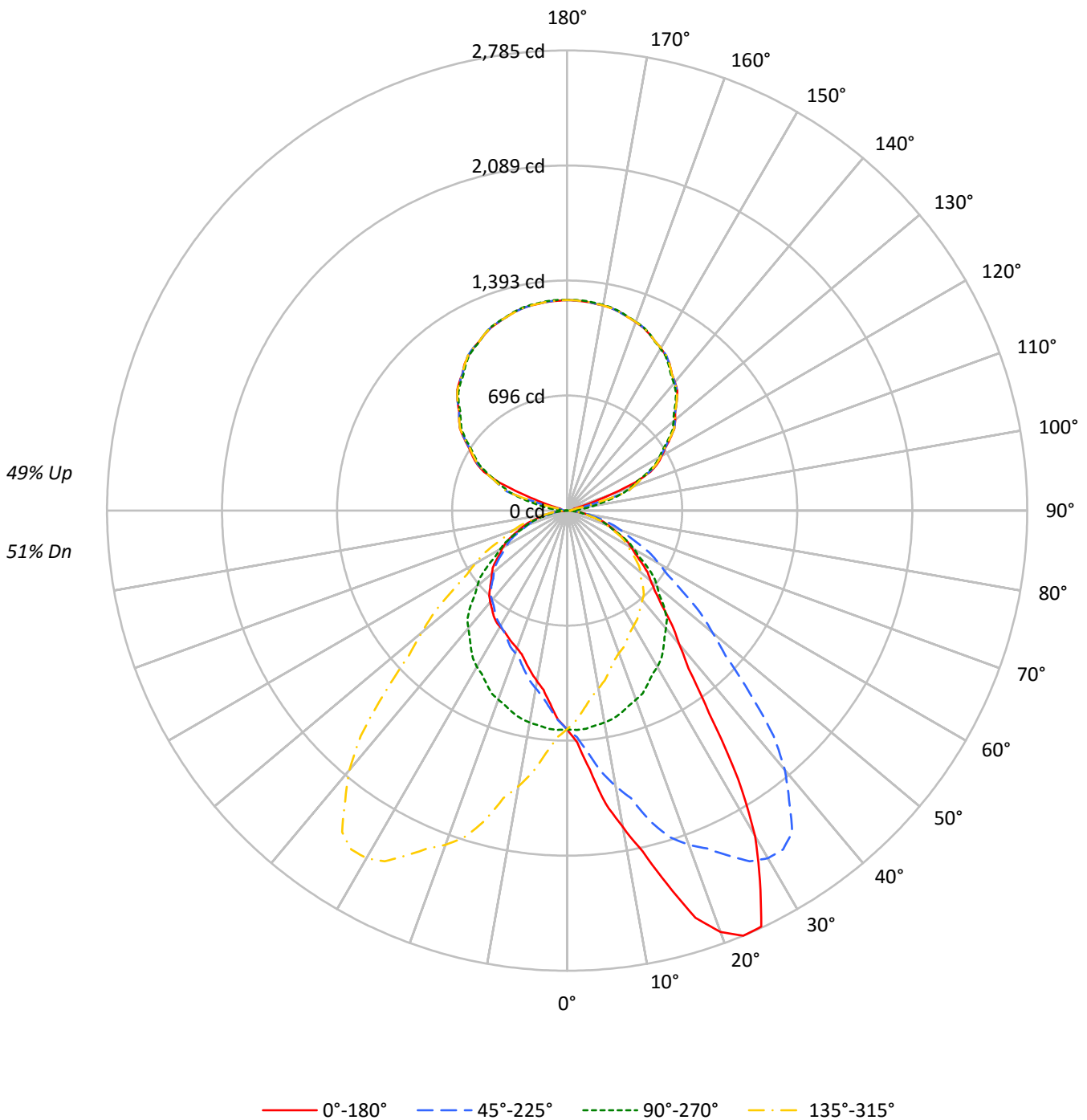
Input Watts (W): 61.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51				51
1	98	94	90	87	91	87	84	81	74	71	69	62	60	59	51	50	49	43				43
2	90	82	76	71	83	76	71	67	65	61	58	55	52	49	45	43	41	37				37
3	82	73	65	60	75	67	61	56	58	53	49	48	45	42	40	37	35	31				31
4	75	64	57	51	69	60	53	48	51	46	42	43	39	36	36	33	31	27				27
5	69	57	49	44	63	53	46	41	46	40	36	39	35	31	32	29	27	24				24
6	64	52	44	38	59	48	41	36	41	36	32	35	31	28	29	26	24	21				21
7	59	47	39	33	54	43	36	31	38	32	28	32	28	24	27	24	21	18				18
8	55	42	35	29	50	40	33	28	34	29	25	29	25	22	25	21	19	17				17
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	23	19	17	15				15
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	21	18	15	14				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	1.7
10°-20°	418.2	5.3
20°-30°	701.8	8.9
30°-40°	794.6	10.1
40°-50°	712.6	9.0
50°-60°	575.1	7.3
60°-70°	400.7	5.1
70°-80°	210.6	2.7
80°-90°	55.1	0.7
90°-100°	46.3	0.6
100°-110°	220.8	2.8
110°-120°	530.4	6.7
120°-130°	675.4	8.6
130°-140°	721.6	9.2
140°-150°	674.8	8.6
150°-160°	544.3	6.9
160°-170°	351.3	4.5
170°-180°	121.1	1.5
0°-30°	1250.4	15.9
0°-40°	2045.0	25.9
0°-60°	3332.7	42.3
0°-90°	3999.2	50.7
90°-120°	797.5	10.1
90°-150°	2869.2	36.4
90°-180°	3886.0	49.3
0°-180°	7885.0	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°	28	1	28	1	28	15
95°	36	58	36	58	36	30
105°	42	282	42	282	42	95
115°	557	529	557	529	557	514
125°	761	746	761	746	761	680
135°	938	929	938	929	938	723
145°	1082	1072	1082	1072	1082	675
155°	1179	1180	1179	1180	1179	543
165°	1242	1245	1242	1245	1242	351
175°	1270	1274	1270	1274	1270	121
180°	1274	1274	1274	1274	1274	



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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	20.4	20.8	20.3	20.6	20.9	21.3	21.7	22.0	22.0
90°	28.4	28.0	27.5	27.1	26.7	26.1	25.3	24.4	23.6	22.7	20.0
92.5°	31.4	31.2	30.9	30.6	30.4	29.6	28.3	27.0	25.5	24.2	22.1
95°	36.0	36.0	36.0	36.0	36.0	35.3	33.7	32.3	30.8	29.3	27.1
97.5°	39.0	38.8	38.5	38.4	38.2	37.2	35.5	33.8	32.1	30.4	45.6
100°	39.8	39.6	39.3	39.1	38.9	38.0	36.3	34.6	32.9	31.2	64.1
102.5°	40.5	40.2	39.8	39.4	39.0	41.4	46.7	51.8	57.1	62.3	98.1
105°	41.7	41.2	40.8	40.4	40.0	58.3	95.6	132.9	170.1	207.4	226.3
107.5°	130.8	158.9	187.0	215.0	243.1	270.8	298.1	325.4	352.7	380.0	377.0
110°	260.3	290.4	320.5	350.6	380.7	399.2	406.1	413.1	420.0	427.0	424.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	446.7	453.0	459.4	465.7	472.0	475.1	475.0	474.9	474.8	474.7	472.4
115°	556.7	555.8	555.0	554.1	553.3	551.9	549.7	547.6	545.5	543.4	541.5
117.5°	618.4	618.2	618.0	617.8	617.7	616.8	615.1	613.4	611.7	610.0	609.1
120°	660.8	660.8	660.8	660.8	660.8	660.0	658.3	656.6	654.9	653.2	652.6
122.5°	702.5	702.3	702.1	701.9	701.8	701.1	699.9	698.7	697.6	696.4	695.6
125°	761.1	760.7	760.3	759.9	759.5	759.0	758.7	758.2	757.8	757.3	756.5
127.5°	817.6	818.0	818.4	818.8	819.3	819.2	818.4	817.7	817.1	816.4	815.4
130°	853.9	854.3	854.8	855.2	855.6	855.4	854.5	853.8	852.9	852.1	851.2
132.5°	887.2	887.9	888.4	889.0	889.6	889.5	888.6	887.8	886.9	886.1	885.4
135°	938.2	938.8	939.4	940.1	940.7	940.7	940.1	939.4	938.8	938.2	937.4
137.5°	986.1	986.5	986.9	987.3	987.8	987.5	986.5	985.4	984.4	983.4	983.0
140°	1014.8	1015.3	1015.7	1016.2	1016.5	1016.3	1015.5	1014.6	1013.8	1013.0	1012.3
142.5°	1041.3	1042.0	1042.5	1043.1	1043.7	1043.7	1043.0	1042.4	1041.7	1040.9	1040.4
145°	1082.0	1082.0	1082.0	1082.0	1082.0	1081.9	1081.5	1081.0	1080.6	1080.2	1079.8
147.5°	1112.4	1113.3	1114.3	1115.3	1116.3	1116.5	1116.1	1115.7	1115.2	1114.8	1114.4
150°	1135.1	1135.8	1136.3	1137.0	1137.6	1137.7	1137.3	1136.9	1136.4	1136.0	1135.6
152.5°	1153.3	1154.2	1155.2	1156.1	1157.2	1157.3	1156.5	1155.7	1155.0	1154.2	1154.0
155°	1178.6	1179.9	1181.2	1182.4	1183.6	1183.8	1182.7	1181.7	1180.6	1179.6	1179.4
157.5°	1200.0	1201.6	1203.3	1204.9	1206.5	1206.7	1205.5	1204.3	1203.0	1201.7	1201.9
160°	1213.6	1215.1	1216.6	1218.0	1219.6	1219.7	1218.4	1217.1	1215.9	1214.7	1214.8
162.5°	1226.5	1227.9	1229.2	1230.5	1231.7	1231.7	1230.3	1228.8	1227.4	1226.0	1226.2
165°	1242.1	1243.5	1245.0	1246.5	1247.9	1247.8	1246.1	1244.4	1242.8	1241.1	1241.3
167.5°	1253.2	1254.9	1256.6	1258.3	1260.0	1260.0	1258.3	1256.6	1254.9	1253.2	1253.2
170°	1260.1	1261.7	1263.4	1265.1	1266.8	1266.8	1265.1	1263.4	1261.7	1260.1	1260.1
172.5°	1263.9	1265.6	1267.5	1269.4	1271.2	1271.3	1269.6	1268.0	1266.3	1264.6	1264.4
175°	1269.5	1271.2	1272.9	1274.6	1276.3	1276.4	1274.9	1273.4	1272.0	1270.5	1270.3
177.5°	1271.2	1272.9	1274.6	1276.3	1278.0	1278.1	1276.8	1275.4	1274.1	1272.7	1272.5
180°	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2



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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°	22.4	22.4	20.4	17.8	16.3	14.3	13.9	12.5	11.9	12.3	12.3
90°	17.2	14.5	11.8	9.3	7.3	5.2	3.0	0.9	3.0	5.2	7.3
92.5°	20.1	18.1	16.0	15.3	15.8	16.4	17.1	17.6	17.1	16.4	15.8
95°	24.7	22.4	20.1	23.3	31.9	40.5	49.1	57.8	49.1	40.5	31.9
97.5°	60.8	76.0	91.0	100.6	104.4	108.3	112.2	116.0	112.2	108.3	104.4
100°	96.9	129.7	162.5	176.8	172.6	168.4	164.2	159.9	164.2	168.4	172.6
102.5°	134.0	169.8	205.7	222.1	219.0	216.0	213.0	210.0	213.0	216.0	219.0
105°	245.2	264.1	283.0	291.3	289.1	286.7	284.5	282.1	284.5	286.7	289.1
107.5°	374.0	371.1	368.1	365.6	363.8	361.9	360.1	358.3	360.1	361.9	363.8
110°	422.4	420.0	417.7	415.7	414.1	412.4	410.7	409.0	410.7	412.4	414.1





TEST NUMBER: P332192-830

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	470.0	467.7	465.4	463.5	462.0	460.4	458.9	457.4	458.9	460.4	462.0
115°	539.6	537.7	535.8	534.2	533.0	531.7	530.5	529.2	530.5	531.7	533.0
117.5°	608.1	607.2	606.1	604.9	603.3	601.8	600.2	598.7	600.2	601.8	603.3
120°	652.0	651.3	650.7	649.4	647.5	645.6	643.8	641.9	643.8	645.6	647.5
122.5°	694.7	694.0	693.1	692.0	690.4	688.9	687.3	685.8	687.3	688.9	690.4
125°	755.6	754.8	754.0	752.7	751.0	749.3	747.7	746.0	747.7	749.3	751.0
127.5°	814.5	813.4	812.4	811.1	809.4	807.7	806.0	804.3	806.0	807.7	809.4
130°	850.4	849.5	848.7	847.4	845.7	844.0	842.4	840.7	842.4	844.0	845.7
132.5°	884.8	884.1	883.4	882.2	880.5	878.8	877.2	875.5	877.2	878.8	880.5
135°	936.5	935.7	934.8	933.8	932.5	931.2	930.0	928.7	930.0	931.2	932.5
137.5°	982.5	982.0	981.6	980.5	978.9	977.3	975.7	974.1	975.7	977.3	978.9
140°	1011.7	1011.1	1010.4	1009.5	1008.2	1007.0	1005.7	1004.5	1005.7	1007.0	1008.2
142.5°	1039.7	1039.1	1038.5	1037.6	1036.2	1035.0	1033.7	1032.5	1033.7	1035.0	1036.2
145°	1079.3	1078.9	1078.5	1077.5	1076.1	1074.6	1073.1	1071.7	1073.1	1074.6	1076.1
147.5°	1114.0	1113.5	1113.1	1112.5	1111.4	1110.5	1109.6	1108.6	1109.6	1110.5	1111.4
150°	1135.2	1134.7	1134.3	1133.8	1133.2	1132.6	1131.9	1131.3	1131.9	1132.6	1133.2
152.5°	1153.7	1153.5	1153.2	1152.9	1152.6	1152.4	1152.1	1151.8	1152.1	1152.4	1152.6
155°	1179.1	1178.9	1178.7	1178.8	1179.3	1179.7	1180.1	1180.5	1180.1	1179.7	1179.3
157.5°	1202.1	1202.4	1202.6	1202.7	1202.8	1202.8	1202.9	1202.9	1202.9	1202.8	1202.8
160°	1215.0	1215.2	1215.4	1215.7	1215.9	1216.1	1216.3	1216.5	1216.3	1216.1	1215.9
162.5°	1226.4	1226.6	1226.8	1227.2	1227.8	1228.3	1228.8	1229.4	1228.8	1228.3	1227.8
165°	1241.5	1241.7	1242.0	1242.4	1243.0	1243.7	1244.3	1244.9	1244.3	1243.7	1243.0
167.5°	1253.2	1253.2	1253.2	1253.7	1254.5	1255.4	1256.2	1257.0	1256.2	1255.4	1254.5
170°	1260.1	1260.1	1260.1	1260.5	1261.3	1262.2	1263.0	1263.9	1263.0	1262.2	1261.3
172.5°	1264.2	1264.0	1263.9	1264.3	1265.4	1266.4	1267.3	1268.4	1267.3	1266.4	1265.4
175°	1270.1	1269.8	1269.6	1270.1	1271.1	1272.1	1273.2	1274.2	1273.2	1272.1	1271.1
177.5°	1272.4	1272.2	1272.1	1272.4	1273.3	1274.1	1274.9	1275.7	1274.9	1274.1	1273.3
180°	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2



TEST NUMBER: P332192-830

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

**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	13.1	13.2	14.2	14.2	15.4	15.5	14.6	14.8	16.5	14.6
90°	9.3	11.8	14.5	17.2	20.0	22.7	23.6	24.4	25.3	26.1	26.7
92.5°	15.3	16.0	18.1	20.1	22.1	24.2	25.5	27.0	28.3	29.6	30.4
95°	23.3	20.1	22.4	24.7	27.1	29.3	30.8	32.3	33.7	35.3	36.0
97.5°	100.6	91.0	76.0	60.8	45.6	30.4	32.1	33.8	35.5	37.2	38.2
100°	176.8	162.5	129.7	96.9	64.1	31.2	32.9	34.6	36.3	38.0	38.9
102.5°	222.1	205.7	169.8	134.0	98.1	62.3	57.1	51.8	46.7	41.4	39.0
105°	291.3	283.0	264.1	245.2	226.3	207.4	170.1	132.9	95.6	58.3	40.0
107.5°	365.6	368.1	371.1	374.0	377.0	380.0	352.7	325.4	298.1	270.8	243.1
110°	415.7	417.7	420.0	422.4	424.6	427.0	420.0	413.1	406.1	399.2	380.7



TEST NUMBER: P332192-830

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

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	463.5	465.4	467.7	470.0	472.4	474.7	474.8	474.9	475.0	475.1	472.0
115°	534.2	535.8	537.7	539.6	541.5	543.4	545.5	547.6	549.7	551.9	553.3
117.5°	604.9	606.1	607.2	608.1	609.1	610.0	611.7	613.4	615.1	616.8	617.7
120°	649.4	650.7	651.3	652.0	652.6	653.2	654.9	656.6	658.3	660.0	660.8
122.5°	692.0	693.1	694.0	694.7	695.6	696.4	697.6	698.7	699.9	701.1	701.8
125°	752.7	754.0	754.8	755.6	756.5	757.3	757.8	758.2	758.7	759.0	759.5
127.5°	811.1	812.4	813.4	814.5	815.4	816.4	817.1	817.7	818.4	819.2	819.3
130°	847.4	848.7	849.5	850.4	851.2	852.1	852.9	853.8	854.5	855.4	855.6
132.5°	882.2	883.4	884.1	884.8	885.4	886.1	886.9	887.8	888.6	889.5	889.6
135°	933.8	934.8	935.7	936.5	937.4	938.2	938.8	939.4	940.1	940.7	940.7
137.5°	980.5	981.6	982.0	982.5	983.0	983.4	984.4	985.4	986.5	987.5	987.8
140°	1009.5	1010.4	1011.1	1011.7	1012.3	1013.0	1013.8	1014.6	1015.5	1016.3	1016.5
142.5°	1037.6	1038.5	1039.1	1039.7	1040.4	1040.9	1041.7	1042.4	1043.0	1043.7	1043.7
145°	1077.5	1078.5	1078.9	1079.3	1079.8	1080.2	1080.6	1081.0	1081.5	1081.9	1082.0
147.5°	1112.5	1113.1	1113.5	1114.0	1114.4	1114.8	1115.2	1115.7	1116.1	1116.5	1116.3
150°	1133.8	1134.3	1134.7	1135.2	1135.6	1136.0	1136.4	1136.9	1137.3	1137.7	1137.6
152.5°	1152.9	1153.2	1153.5	1153.7	1154.0	1154.2	1155.0	1155.7	1156.5	1157.3	1157.2
155°	1178.8	1178.7	1178.9	1179.1	1179.4	1179.6	1180.6	1181.7	1182.7	1183.8	1183.6
157.5°	1202.7	1202.6	1202.4	1202.1	1201.9	1201.7	1203.0	1204.3	1205.5	1206.7	1206.5
160°	1215.7	1215.4	1215.2	1215.0	1214.8	1214.7	1215.9	1217.1	1218.4	1219.7	1219.6
162.5°	1227.2	1226.8	1226.6	1226.4	1226.2	1226.0	1227.4	1228.8	1230.3	1231.7	1231.7
165°	1242.4	1242.0	1241.7	1241.5	1241.3	1241.1	1242.8	1244.4	1246.1	1247.8	1247.9
167.5°	1253.7	1253.2	1253.2	1253.2	1253.2	1253.2	1254.9	1256.6	1258.3	1260.0	1260.0
170°	1260.5	1260.1	1260.1	1260.1	1260.1	1260.1	1261.7	1263.4	1265.1	1266.8	1266.8
172.5°	1264.3	1263.9	1264.0	1264.2	1264.4	1264.6	1266.3	1268.0	1269.6	1271.3	1271.2
175°	1270.1	1269.6	1269.8	1270.1	1270.3	1270.5	1272.0	1273.4	1274.9	1276.4	1276.3
177.5°	1272.4	1272.1	1272.2	1272.4	1272.5	1272.7	1274.1	1275.4	1276.8	1278.1	1278.0
180°	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2



TEST NUMBER: P332192-830

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

**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	14.7	14.3	13.9	14.3	14.7	14.7	14.6	16.5	14.8	14.6
90°	27.1	27.5	28.0	28.4	28.0	27.5	27.1	26.7	26.1	25.3	24.4
92.5°	30.6	30.9	31.2	31.4	31.2	30.9	30.6	30.4	29.6	28.3	27.0
95°	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	35.3	33.7	32.3
97.5°	38.4	38.5	38.8	39.0	38.8	38.5	38.4	38.2	37.2	35.5	33.8
100°	39.1	39.3	39.6	39.8	39.6	39.3	39.1	38.9	38.0	36.3	34.6
102.5°	39.4	39.8	40.2	40.5	40.2	39.8	39.4	39.0	41.4	46.7	51.8
105°	40.4	40.8	41.2	41.7	41.2	40.8	40.4	40.0	58.3	95.6	132.9
107.5°	215.0	187.0	158.9	130.8	158.9	187.0	215.0	243.1	270.8	298.1	325.4
110°	350.6	320.5	290.4	260.3	290.4	320.5	350.6	380.7	399.2	406.1	413.1



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	465.7	459.4	453.0	446.7	453.0	459.4	465.7	472.0	475.1	475.0	474.9
115°	554.1	555.0	555.8	556.7	555.8	555.0	554.1	553.3	551.9	549.7	547.6
117.5°	617.8	618.0	618.2	618.4	618.2	618.0	617.8	617.7	616.8	615.1	613.4
120°	660.8	660.8	660.8	660.8	660.8	660.8	660.8	660.8	660.0	658.3	656.6
122.5°	701.9	702.1	702.3	702.5	702.3	702.1	701.9	701.8	701.1	699.9	698.7
125°	759.9	760.3	760.7	761.1	760.7	760.3	759.9	759.5	759.0	758.7	758.2
127.5°	818.8	818.4	818.0	817.6	818.0	818.4	818.8	819.3	819.2	818.4	817.7
130°	855.2	854.8	854.3	853.9	854.3	854.8	855.2	855.6	855.4	854.5	853.8
132.5°	889.0	888.4	887.9	887.2	887.9	888.4	889.0	889.6	889.5	888.6	887.8
135°	940.1	939.4	938.8	938.2	938.8	939.4	940.1	940.7	940.7	940.1	939.4
137.5°	987.3	986.9	986.5	986.1	986.5	986.9	987.3	987.8	987.5	986.5	985.4
140°	1016.2	1015.7	1015.3	1014.8	1015.3	1015.7	1016.2	1016.5	1016.3	1015.5	1014.6
142.5°	1043.1	1042.5	1042.0	1041.3	1042.0	1042.5	1043.1	1043.7	1043.7	1043.0	1042.4
145°	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0	1081.9	1081.5	1081.0
147.5°	1115.3	1114.3	1113.3	1112.4	1113.3	1114.3	1115.3	1116.3	1116.5	1116.1	1115.7
150°	1137.0	1136.3	1135.8	1135.1	1135.8	1136.3	1137.0	1137.6	1137.7	1137.3	1136.9
152.5°	1156.1	1155.2	1154.2	1153.3	1154.2	1155.2	1156.1	1157.2	1157.3	1156.5	1155.7
155°	1182.4	1181.2	1179.9	1178.6	1179.9	1181.2	1182.4	1183.6	1183.8	1182.7	1181.7
157.5°	1204.9	1203.3	1201.6	1200.0	1201.6	1203.3	1204.9	1206.5	1206.7	1205.5	1204.3
160°	1218.0	1216.6	1215.1	1213.6	1215.1	1216.6	1218.0	1219.6	1219.7	1218.4	1217.1
162.5°	1230.5	1229.2	1227.9	1226.5	1227.9	1229.2	1230.5	1231.7	1231.7	1230.3	1228.8
165°	1246.5	1245.0	1243.5	1242.1	1243.5	1245.0	1246.5	1247.9	1247.8	1246.1	1244.4
167.5°	1258.3	1256.6	1254.9	1253.2	1254.9	1256.6	1258.3	1260.0	1260.0	1258.3	1256.6
170°	1265.1	1263.4	1261.7	1260.1	1261.7	1263.4	1265.1	1266.8	1266.8	1265.1	1263.4
172.5°	1269.4	1267.5	1265.6	1263.9	1265.6	1267.5	1269.4	1271.2	1271.3	1269.6	1268.0
175°	1274.6	1272.9	1271.2	1269.5	1271.2	1272.9	1274.6	1276.3	1276.4	1274.9	1273.4
177.5°	1276.3	1274.6	1272.9	1271.2	1272.9	1274.6	1276.3	1278.0	1278.1	1276.8	1275.4
180°	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2



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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°	15.5	15.4	14.2	14.2	13.2	13.1	12.2	12.3	12.3	11.9	12.5
90°	23.6	22.7	20.0	17.2	14.5	11.8	9.3	7.3	5.2	3.0	0.9
92.5°	25.5	24.2	22.1	20.1	18.1	16.0	15.3	15.8	16.4	17.1	17.6
95°	30.8	29.3	27.1	24.7	22.4	20.1	23.3	31.9	40.5	49.1	57.8
97.5°	32.1	30.4	45.6	60.8	76.0	91.0	100.6	104.4	108.3	112.2	116.0
100°	32.9	31.2	64.1	96.9	129.7	162.5	176.8	172.6	168.4	164.2	159.9
102.5°	57.1	62.3	98.1	134.0	169.8	205.7	222.1	219.0	216.0	213.0	210.0
105°	170.1	207.4	226.3	245.2	264.1	283.0	291.3	289.1	286.7	284.5	282.1
107.5°	352.7	380.0	377.0	374.0	371.1	368.1	365.6	363.8	361.9	360.1	358.3
110°	420.0	427.0	424.6	422.4	420.0	417.7	415.7	414.1	412.4	410.7	409.0



TEST NUMBER: P332192-830

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	474.8	474.7	472.4	470.0	467.7	465.4	463.5	462.0	460.4	458.9	457.4
115°	545.5	543.4	541.5	539.6	537.7	535.8	534.2	533.0	531.7	530.5	529.2
117.5°	611.7	610.0	609.1	608.1	607.2	606.1	604.9	603.3	601.8	600.2	598.7
120°	654.9	653.2	652.6	652.0	651.3	650.7	649.4	647.5	645.6	643.8	641.9
122.5°	697.6	696.4	695.6	694.7	694.0	693.1	692.0	690.4	688.9	687.3	685.8
125°	757.8	757.3	756.5	755.6	754.8	754.0	752.7	751.0	749.3	747.7	746.0
127.5°	817.1	816.4	815.4	814.5	813.4	812.4	811.1	809.4	807.7	806.0	804.3
130°	852.9	852.1	851.2	850.4	849.5	848.7	847.4	845.7	844.0	842.4	840.7
132.5°	886.9	886.1	885.4	884.8	884.1	883.4	882.2	880.5	878.8	877.2	875.5
135°	938.8	938.2	937.4	936.5	935.7	934.8	933.8	932.5	931.2	930.0	928.7
137.5°	984.4	983.4	983.0	982.5	982.0	981.6	980.5	978.9	977.3	975.7	974.1
140°	1013.8	1013.0	1012.3	1011.7	1011.1	1010.4	1009.5	1008.2	1007.0	1005.7	1004.5
142.5°	1041.7	1040.9	1040.4	1039.7	1039.1	1038.5	1037.6	1036.2	1035.0	1033.7	1032.5
145°	1080.6	1080.2	1079.8	1079.3	1078.9	1078.5	1077.5	1076.1	1074.6	1073.1	1071.7
147.5°	1115.2	1114.8	1114.4	1114.0	1113.5	1113.1	1112.5	1111.4	1110.5	1109.6	1108.6
150°	1136.4	1136.0	1135.6	1135.2	1134.7	1134.3	1133.8	1133.2	1132.6	1131.9	1131.3
152.5°	1155.0	1154.2	1154.0	1153.7	1153.5	1153.2	1152.9	1152.6	1152.4	1152.1	1151.8
155°	1180.6	1179.6	1179.4	1179.1	1178.9	1178.7	1178.8	1179.3	1179.7	1180.1	1180.5
157.5°	1203.0	1201.7	1201.9	1202.1	1202.4	1202.6	1202.7	1202.8	1202.8	1202.9	1202.9
160°	1215.9	1214.7	1214.8	1215.0	1215.2	1215.4	1215.7	1215.9	1216.1	1216.3	1216.5
162.5°	1227.4	1226.0	1226.2	1226.4	1226.6	1226.8	1227.2	1227.8	1228.3	1228.8	1229.4
165°	1242.8	1241.1	1241.3	1241.5	1241.7	1242.0	1242.4	1243.0	1243.7	1244.3	1244.9
167.5°	1254.9	1253.2	1253.2	1253.2	1253.2	1253.2	1253.7	1254.5	1255.4	1256.2	1257.0
170°	1261.7	1260.1	1260.1	1260.1	1260.1	1260.1	1260.5	1261.3	1262.2	1263.0	1263.9
172.5°	1266.3	1264.6	1264.4	1264.2	1264.0	1263.9	1264.3	1265.4	1266.4	1267.3	1268.4
175°	1272.0	1270.5	1270.3	1270.1	1269.8	1269.6	1270.1	1271.1	1272.1	1273.2	1274.2
177.5°	1274.1	1272.7	1272.5	1272.4	1272.2	1272.1	1272.4	1273.3	1274.1	1274.9	1275.7
180°	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2



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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°	13.9	14.3	16.3	17.8	20.4	22.4	22.4	22.0	22.0	21.7	21.3
90°	3.0	5.2	7.3	9.3	11.8	14.5	17.2	20.0	22.7	23.6	24.4
92.5°	17.1	16.4	15.8	15.3	16.0	18.1	20.1	22.1	24.2	25.5	27.0
95°	49.1	40.5	31.9	23.3	20.1	22.4	24.7	27.1	29.3	30.8	32.3
97.5°	112.2	108.3	104.4	100.6	91.0	76.0	60.8	45.6	30.4	32.1	33.8
100°	164.2	168.4	172.6	176.8	162.5	129.7	96.9	64.1	31.2	32.9	34.6
102.5°	213.0	216.0	219.0	222.1	205.7	169.8	134.0	98.1	62.3	57.1	51.8
105°	284.5	286.7	289.1	291.3	283.0	264.1	245.2	226.3	207.4	170.1	132.9
107.5°	360.1	361.9	363.8	365.6	368.1	371.1	374.0	377.0	380.0	352.7	325.4
110°	410.7	412.4	414.1	415.7	417.7	420.0	422.4	424.6	427.0	420.0	413.1





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	458.9	460.4	462.0	463.5	465.4	467.7	470.0	472.4	474.7	474.8	474.9
115°	530.5	531.7	533.0	534.2	535.8	537.7	539.6	541.5	543.4	545.5	547.6
117.5°	600.2	601.8	603.3	604.9	606.1	607.2	608.1	609.1	610.0	611.7	613.4
120°	643.8	645.6	647.5	649.4	650.7	651.3	652.0	652.6	653.2	654.9	656.6
122.5°	687.3	688.9	690.4	692.0	693.1	694.0	694.7	695.6	696.4	697.6	698.7
125°	747.7	749.3	751.0	752.7	754.0	754.8	755.6	756.5	757.3	757.8	758.2
127.5°	806.0	807.7	809.4	811.1	812.4	813.4	814.5	815.4	816.4	817.1	817.7
130°	842.4	844.0	845.7	847.4	848.7	849.5	850.4	851.2	852.1	852.9	853.8
132.5°	877.2	878.8	880.5	882.2	883.4	884.1	884.8	885.4	886.1	886.9	887.8
135°	930.0	931.2	932.5	933.8	934.8	935.7	936.5	937.4	938.2	938.8	939.4
137.5°	975.7	977.3	978.9	980.5	981.6	982.0	982.5	983.0	983.4	984.4	985.4
140°	1005.7	1007.0	1008.2	1009.5	1010.4	1011.1	1011.7	1012.3	1013.0	1013.8	1014.6
142.5°	1033.7	1035.0	1036.2	1037.6	1038.5	1039.1	1039.7	1040.4	1040.9	1041.7	1042.4
145°	1073.1	1074.6	1076.1	1077.5	1078.5	1078.9	1079.3	1079.8	1080.2	1080.6	1081.0
147.5°	1109.6	1110.5	1111.4	1112.5	1113.1	1113.5	1114.0	1114.4	1114.8	1115.2	1115.7
150°	1131.9	1132.6	1133.2	1133.8	1134.3	1134.7	1135.2	1135.6	1136.0	1136.4	1136.9
152.5°	1152.1	1152.4	1152.6	1152.9	1153.2	1153.5	1153.7	1154.0	1154.2	1155.0	1155.7
155°	1180.1	1179.7	1179.3	1178.8	1178.7	1178.9	1179.1	1179.4	1179.6	1180.6	1181.7
157.5°	1202.9	1202.8	1202.8	1202.7	1202.6	1202.4	1202.1	1201.9	1201.7	1203.0	1204.3
160°	1216.3	1216.1	1215.9	1215.7	1215.4	1215.2	1215.0	1214.8	1214.7	1215.9	1217.1
162.5°	1228.8	1228.3	1227.8	1227.2	1226.8	1226.6	1226.4	1226.2	1226.0	1227.4	1228.8
165°	1244.3	1243.7	1243.0	1242.4	1242.0	1241.7	1241.5	1241.3	1241.1	1242.8	1244.4
167.5°	1256.2	1255.4	1254.5	1253.7	1253.2	1253.2	1253.2	1253.2	1253.2	1254.9	1256.6
170°	1263.0	1262.2	1261.3	1260.5	1260.1	1260.1	1260.1	1260.1	1260.1	1261.7	1263.4
172.5°	1267.3	1266.4	1265.4	1264.3	1263.9	1264.0	1264.2	1264.4	1264.6	1266.3	1268.0
175°	1273.2	1272.1	1271.1	1270.1	1269.6	1269.8	1270.1	1270.3	1270.5	1272.0	1273.4
177.5°	1274.9	1274.1	1273.3	1272.4	1272.1	1272.2	1272.4	1272.5	1272.7	1274.1	1275.4
180°	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2



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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°	20.9	20.6	20.3	20.8	20.4	20.0	21.1
90°	25.3	26.1	26.7	27.1	27.5	28.0	28.4
92.5°	28.3	29.6	30.4	30.6	30.9	31.2	31.4
95°	33.7	35.3	36.0	36.0	36.0	36.0	36.0
97.5°	35.5	37.2	38.2	38.4	38.5	38.8	39.0
100°	36.3	38.0	38.9	39.1	39.3	39.6	39.8
102.5°	46.7	41.4	39.0	39.4	39.8	40.2	40.5
105°	95.6	58.3	40.0	40.4	40.8	41.2	41.7
107.5°	298.1	270.8	243.1	215.0	187.0	158.9	130.8
110°	406.1	399.2	380.7	350.6	320.5	290.4	260.3



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	475.0	475.1	472.0	465.7	459.4	453.0	446.7
115°	549.7	551.9	553.3	554.1	555.0	555.8	556.7
117.5°	615.1	616.8	617.7	617.8	618.0	618.2	618.4
120°	658.3	660.0	660.8	660.8	660.8	660.8	660.8
122.5°	699.9	701.1	701.8	701.9	702.1	702.3	702.5
125°	758.7	759.0	759.5	759.9	760.3	760.7	761.1
127.5°	818.4	819.2	819.3	818.8	818.4	818.0	817.6
130°	854.5	855.4	855.6	855.2	854.8	854.3	853.9
132.5°	888.6	889.5	889.6	889.0	888.4	887.9	887.2
135°	940.1	940.7	940.7	940.1	939.4	938.8	938.2
137.5°	986.5	987.5	987.8	987.3	986.9	986.5	986.1
140°	1015.5	1016.3	1016.5	1016.2	1015.7	1015.3	1014.8
142.5°	1043.0	1043.7	1043.7	1043.1	1042.5	1042.0	1041.3
145°	1081.5	1081.9	1082.0	1082.0	1082.0	1082.0	1082.0
147.5°	1116.1	1116.5	1116.3	1115.3	1114.3	1113.3	1112.4
150°	1137.3	1137.7	1137.6	1137.0	1136.3	1135.8	1135.1
152.5°	1156.5	1157.3	1157.2	1156.1	1155.2	1154.2	1153.3
155°	1182.7	1183.8	1183.6	1182.4	1181.2	1179.9	1178.6
157.5°	1205.5	1206.7	1206.5	1204.9	1203.3	1201.6	1200.0
160°	1218.4	1219.7	1219.6	1218.0	1216.6	1215.1	1213.6
162.5°	1230.3	1231.7	1231.7	1230.5	1229.2	1227.9	1226.5
165°	1246.1	1247.8	1247.9	1246.5	1245.0	1243.5	1242.1
167.5°	1258.3	1260.0	1260.0	1258.3	1256.6	1254.9	1253.2
170°	1265.1	1266.8	1266.8	1265.1	1263.4	1261.7	1260.1
172.5°	1269.6	1271.3	1271.2	1269.4	1267.5	1265.6	1263.9
175°	1274.9	1276.4	1276.3	1274.6	1272.9	1271.2	1269.5
177.5°	1276.8	1278.1	1278.0	1276.3	1274.6	1272.9	1271.2
180°	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2	1274.2

(END OF REPORT)