

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: P332204-830

Luminaire Tested: **S123DIW-S1000D1535U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332204-830  
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-S1000D1535U830-4F0-1E-UDD-A  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1535 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9784.7 lumens  
Efficiency: N/A  
Efficacy: 127.7 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

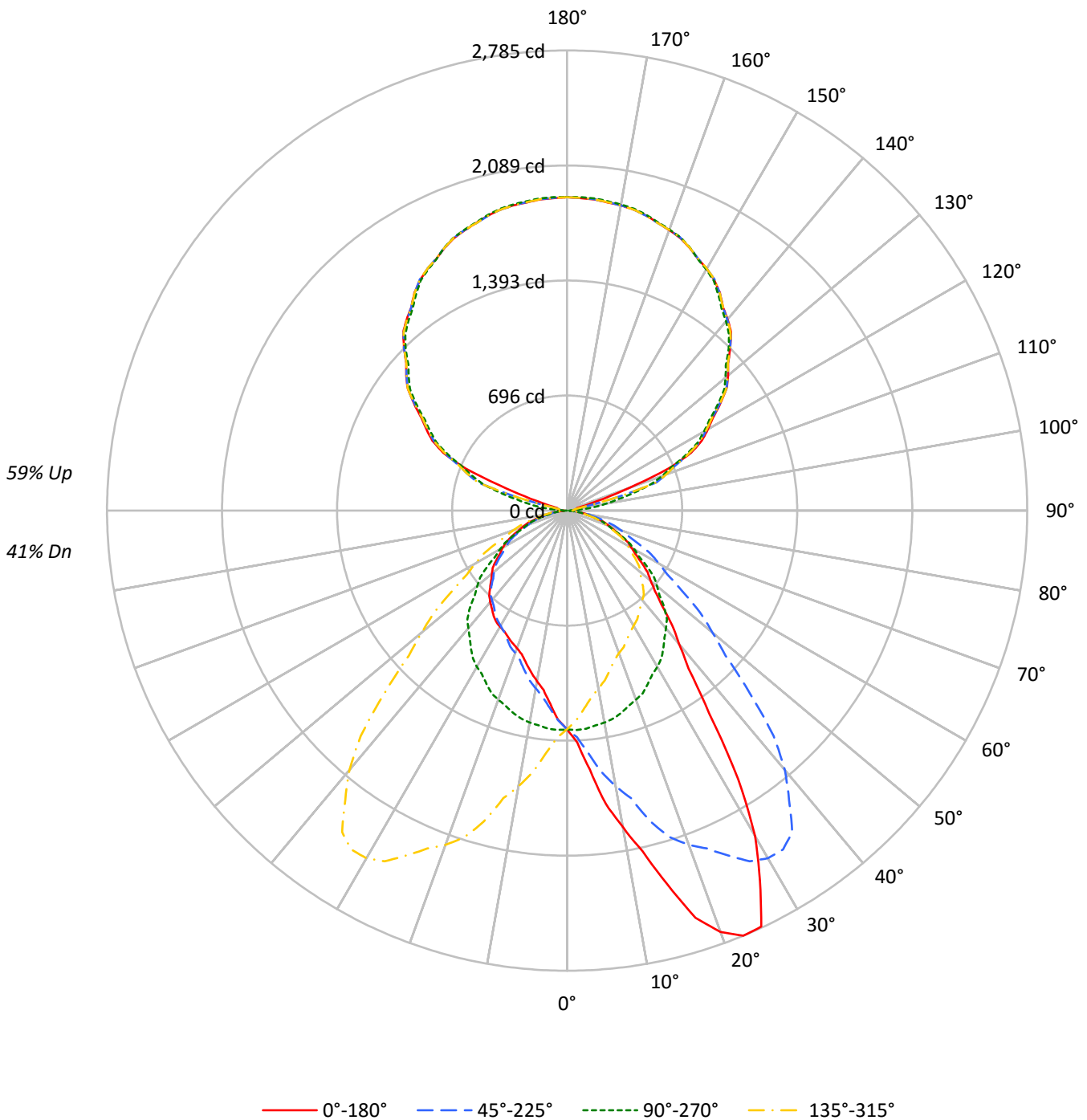
Input Watts (W): 76.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	50	30	10	0																			
RCR																																														
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41																												
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	43	42	41	35																												
2	88	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30																												
3	80	71	64	58	73	65	59	54	54	49	45	43	40	37	34	31	30	25																												
4	73	63	55	49	66	57	51	46	48	43	39	39	35	32	30	28	26	22																												
5	67	56	48	42	61	51	44	39	43	37	33	35	31	28	27	25	22	19																												
6	62	50	42	37	56	46	39	34	38	33	29	31	27	24	25	22	20	17																												
7	57	45	37	32	52	42	35	30	35	30	26	28	25	22	22	20	18	15																												
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16	13																												
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12																												
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13	11																												

**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	1.3
10°-20°	418.2	4.3
20°-30°	701.8	7.2
30°-40°	794.6	8.1
40°-50°	712.6	7.3
50°-60°	575.1	5.9
60°-70°	400.7	4.1
70°-80°	210.6	2.2
80°-90°	56.8	0.6
90°-100°	69.0	0.7
100°-110°	328.6	3.4
110°-120°	789.4	8.1
120°-130°	1005.2	10.3
130°-140°	1074.1	11.0
140°-150°	1004.4	10.3
150°-160°	810.1	8.3
160°-170°	522.9	5.3
170°-180°	180.2	1.8
0°-30°	1250.4	12.8
0°-40°	2045.0	20.9
0°-60°	3332.7	34.1
0°-90°	4000.9	40.9
90°-120°	1187.0	12.1
90°-150°	4270.6	43.6
90°-180°	5784.0	59.1
0°-180°	9784.7	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°	42	1	42	1	42	21
95°	54	86	54	86	54	45
105°	62	420	62	420	62	142
115°	829	788	829	788	829	766
125°	1133	1110	1133	1110	1133	1012
135°	1396	1382	1396	1382	1396	1077
145°	1611	1595	1611	1595	1611	1005
155°	1754	1757	1754	1757	1754	809
165°	1849	1853	1849	1853	1849	522
175°	1890	1897	1890	1897	1890	180
180°	1897	1897	1897	1897	1897	



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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°	23.8	22.7	23.1	23.5	22.8	23.2	23.4	23.7	23.9	24.2	23.9
90°	42.2	41.7	41.0	40.4	39.8	38.8	37.6	36.3	35.1	33.8	29.8
92.5°	46.8	46.4	46.0	45.6	45.2	44.1	42.1	40.1	38.1	36.1	33.0
95°	53.5	53.5	53.5	53.5	53.5	52.4	50.2	48.1	45.9	43.6	40.2
97.5°	58.1	57.8	57.4	57.1	56.8	55.4	52.9	50.4	47.9	45.3	68.0
100°	59.2	58.9	58.5	58.2	58.0	56.6	54.0	51.5	49.0	46.5	95.4
102.5°	60.3	59.8	59.2	58.6	58.1	61.6	69.5	77.2	84.9	92.7	146.1
105°	62.0	61.4	60.8	60.1	59.5	86.9	142.3	197.7	253.2	308.6	336.8
107.5°	194.7	236.5	278.2	320.1	361.8	403.0	443.7	484.3	525.0	565.6	561.2
110°	387.5	432.3	477.0	521.8	566.6	594.2	604.5	614.8	625.2	635.5	632.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	664.8	674.3	683.7	693.1	702.7	707.3	707.1	706.9	706.7	706.5	703.0
115°	828.6	827.3	826.0	824.8	823.5	821.3	818.2	815.1	811.9	808.8	806.0
117.5°	920.4	920.2	919.9	919.6	919.5	918.0	915.5	913.0	910.5	908.0	906.5
120°	983.5	983.5	983.5	983.5	983.5	982.3	979.8	977.3	974.8	972.2	971.3
122.5°	1045.6	1045.3	1045.0	1044.8	1044.5	1043.6	1041.8	1040.0	1038.3	1036.5	1035.3
125°	1132.9	1132.3	1131.6	1131.1	1130.4	1129.7	1129.2	1128.5	1127.9	1127.3	1126.1
127.5°	1216.9	1217.5	1218.1	1218.8	1219.4	1219.2	1218.2	1217.2	1216.2	1215.2	1213.7
130°	1271.0	1271.6	1272.2	1272.9	1273.5	1273.2	1272.0	1270.6	1269.4	1268.2	1267.0
132.5°	1320.6	1321.4	1322.4	1323.2	1324.1	1323.9	1322.7	1321.4	1320.1	1318.9	1317.9
135°	1396.4	1397.3	1398.3	1399.2	1400.1	1400.1	1399.2	1398.3	1397.3	1396.4	1395.2
137.5°	1467.7	1468.3	1469.0	1469.6	1470.2	1469.8	1468.3	1466.8	1465.3	1463.8	1463.1
140°	1510.5	1511.2	1511.8	1512.4	1513.1	1512.7	1511.5	1510.2	1509.0	1507.7	1506.7
142.5°	1550.0	1550.9	1551.7	1552.7	1553.5	1553.4	1552.5	1551.4	1550.4	1549.4	1548.5
145°	1610.6	1610.6	1610.6	1610.6	1610.6	1610.2	1609.7	1609.0	1608.4	1607.8	1607.1
147.5°	1655.7	1657.1	1658.6	1660.0	1661.4	1661.9	1661.2	1660.6	1660.0	1659.3	1658.7
150°	1689.5	1690.5	1691.4	1692.3	1693.3	1693.4	1692.8	1692.1	1691.5	1690.9	1690.3
152.5°	1716.6	1718.0	1719.4	1720.9	1722.3	1722.5	1721.4	1720.2	1719.1	1718.0	1717.6
155°	1754.4	1756.1	1758.0	1759.9	1761.8	1762.0	1760.4	1758.9	1757.3	1755.7	1755.4
157.5°	1786.1	1788.6	1791.0	1793.5	1795.9	1796.2	1794.3	1792.4	1790.5	1788.7	1789.0
160°	1806.5	1808.6	1810.8	1813.0	1815.2	1815.3	1813.5	1811.7	1809.8	1807.9	1808.2
162.5°	1825.6	1827.6	1829.5	1831.5	1833.3	1833.2	1831.2	1829.0	1826.9	1824.8	1825.0
165°	1848.7	1850.9	1853.1	1855.3	1857.5	1857.4	1854.8	1852.3	1849.8	1847.3	1847.7
167.5°	1865.4	1867.8	1870.4	1872.8	1875.4	1875.4	1872.8	1870.4	1867.8	1865.4	1865.4
170°	1875.5	1878.0	1880.5	1883.0	1885.6	1885.6	1883.0	1880.5	1878.0	1875.5	1875.5
172.5°	1881.1	1883.9	1886.7	1889.4	1892.2	1892.2	1889.8	1887.3	1884.8	1882.3	1882.0
175°	1889.6	1892.1	1894.6	1897.1	1899.6	1899.8	1897.5	1895.4	1893.2	1891.0	1890.6
177.5°	1892.2	1894.6	1897.1	1899.6	1902.1	1902.4	1900.4	1898.4	1896.4	1894.4	1894.1
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6



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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°	24.1	23.8	21.5	18.7	17.1	14.9	14.2	12.6	12.2	12.8	12.9
90°	25.6	21.6	17.5	13.9	10.8	7.6	4.5	1.4	4.5	7.6	10.8
92.5°	30.0	26.9	23.8	22.7	23.6	24.4	25.4	26.2	25.4	24.4	23.6
95°	36.8	33.4	29.9	34.6	47.4	60.3	73.1	86.0	73.1	60.3	47.4
97.5°	90.5	113.0	135.5	149.7	155.4	161.3	167.0	172.8	167.0	161.3	155.4
100°	144.2	193.0	241.9	263.2	256.9	250.6	244.4	238.2	244.4	250.6	256.9
102.5°	199.4	252.8	306.1	330.5	326.0	321.6	317.1	312.5	317.1	321.6	326.0
105°	365.0	393.1	421.3	433.7	430.3	426.8	423.4	419.9	423.4	426.8	430.3
107.5°	556.8	552.2	547.8	544.2	541.5	538.7	535.9	533.2	535.9	538.7	541.5
110°	628.6	625.2	621.7	618.8	616.2	613.7	611.2	608.7	611.2	613.7	616.2





TEST NUMBER: P332204-830

CATALOG NUMBER: S123DIW-S1000D1535U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	699.6	696.2	692.8	689.8	687.7	685.4	683.2	680.9	683.2	685.4	687.7
115°	803.1	800.4	797.6	795.2	793.3	791.5	789.6	787.7	789.6	791.5	793.3
117.5°	905.1	903.7	902.3	900.4	898.1	895.7	893.4	891.1	893.4	895.7	898.1
120°	970.3	969.4	968.6	966.7	963.8	961.0	958.2	955.4	958.2	961.0	963.8
122.5°	1034.2	1032.9	1031.8	1030.0	1027.7	1025.4	1023.0	1020.8	1023.0	1025.4	1027.7
125°	1124.7	1123.5	1122.3	1120.4	1117.9	1115.4	1112.9	1110.3	1112.9	1115.4	1117.9
127.5°	1212.2	1210.7	1209.2	1207.2	1204.7	1202.2	1199.7	1197.1	1199.7	1202.2	1204.7
130°	1265.6	1264.4	1263.2	1261.3	1258.8	1256.3	1253.8	1251.2	1253.8	1256.3	1258.8
132.5°	1316.9	1315.9	1314.9	1313.2	1310.6	1308.2	1305.6	1303.2	1305.6	1308.2	1310.6
135°	1393.9	1392.6	1391.4	1389.9	1388.0	1386.1	1384.2	1382.3	1384.2	1386.1	1388.0
137.5°	1462.4	1461.7	1461.0	1459.4	1457.1	1454.7	1452.4	1449.9	1452.4	1454.7	1457.1
140°	1505.8	1504.9	1503.9	1502.6	1500.7	1498.8	1496.9	1495.1	1496.9	1498.8	1500.7
142.5°	1547.6	1546.6	1545.7	1544.3	1542.4	1540.5	1538.6	1536.7	1538.6	1540.5	1542.4
145°	1606.5	1605.9	1605.2	1603.8	1601.7	1599.5	1597.2	1595.1	1597.2	1599.5	1601.7
147.5°	1658.1	1657.5	1656.8	1655.8	1654.4	1652.9	1651.5	1650.0	1651.5	1652.9	1654.4
150°	1689.7	1689.0	1688.4	1687.6	1686.7	1685.7	1684.8	1683.9	1684.8	1685.7	1686.7
152.5°	1717.2	1716.8	1716.5	1716.1	1715.6	1715.1	1714.8	1714.3	1714.8	1715.1	1715.6
155°	1755.1	1754.8	1754.4	1754.6	1755.3	1755.9	1756.5	1757.1	1756.5	1755.9	1755.3
157.5°	1789.3	1789.6	1790.0	1790.2	1790.2	1790.3	1790.4	1790.4	1790.4	1790.3	1790.2
160°	1808.5	1808.8	1809.1	1809.4	1809.8	1810.1	1810.3	1810.7	1810.3	1810.1	1809.8
162.5°	1825.4	1825.7	1826.0	1826.6	1827.4	1828.2	1829.0	1829.9	1829.0	1828.2	1827.4
165°	1847.9	1848.2	1848.6	1849.2	1850.1	1851.1	1852.0	1852.9	1852.0	1851.1	1850.1
167.5°	1865.4	1865.4	1865.4	1866.0	1867.3	1868.5	1869.7	1870.9	1869.7	1868.5	1867.3
170°	1875.5	1875.5	1875.5	1876.1	1877.4	1878.6	1879.9	1881.1	1879.9	1878.6	1877.4
172.5°	1881.8	1881.5	1881.2	1881.9	1883.4	1884.9	1886.4	1887.9	1886.4	1884.9	1883.4
175°	1890.4	1890.1	1889.7	1890.4	1892.0	1893.5	1895.1	1896.6	1895.1	1893.5	1892.0
177.5°	1893.9	1893.7	1893.4	1893.9	1895.2	1896.4	1897.6	1898.8	1897.6	1896.4	1895.2
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6



TEST NUMBER: P332204-830

CATALOG NUMBER: S123DIW-S1000D1535U830-4F0-1E-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°	13.0	14.3	14.6	15.9	16.2	17.5	17.8	17.1	17.2	19.0	17.2
90°	13.9	17.5	21.6	25.6	29.8	33.8	35.1	36.3	37.6	38.8	39.8
92.5°	22.7	23.8	26.9	30.0	33.0	36.1	38.1	40.1	42.1	44.1	45.2
95°	34.6	29.9	33.4	36.8	40.2	43.6	45.9	48.1	50.2	52.4	53.5
97.5°	149.7	135.5	113.0	90.5	68.0	45.3	47.9	50.4	52.9	55.4	56.8
100°	263.2	241.9	193.0	144.2	95.4	46.5	49.0	51.5	54.0	56.6	58.0
102.5°	330.5	306.1	252.8	199.4	146.1	92.7	84.9	77.2	69.5	61.6	58.1
105°	433.7	421.3	393.1	365.0	336.8	308.6	253.2	197.7	142.3	86.9	59.5
107.5°	544.2	547.8	552.2	556.8	561.2	565.6	525.0	484.3	443.7	403.0	361.8
110°	618.8	621.7	625.2	628.6	632.1	635.5	625.2	614.8	604.5	594.2	566.6



TEST NUMBER: P332204-830

CATALOG NUMBER: S123DIW-S1000D1535U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	689.8	692.8	696.2	699.6	703.0	706.5	706.7	706.9	707.1	707.3	702.7
115°	795.2	797.6	800.4	803.1	806.0	808.8	811.9	815.1	818.2	821.3	823.5
117.5°	900.4	902.3	903.7	905.1	906.5	908.0	910.5	913.0	915.5	918.0	919.5
120°	966.7	968.6	969.4	970.3	971.3	972.2	974.8	977.3	979.8	982.3	983.5
122.5°	1030.0	1031.8	1032.9	1034.2	1035.3	1036.5	1038.3	1040.0	1041.8	1043.6	1044.5
125°	1120.4	1122.3	1123.5	1124.7	1126.1	1127.3	1127.9	1128.5	1129.2	1129.7	1130.4
127.5°	1207.2	1209.2	1210.7	1212.2	1213.7	1215.2	1216.2	1217.2	1218.2	1219.2	1219.4
130°	1261.3	1263.2	1264.4	1265.6	1267.0	1268.2	1269.4	1270.6	1272.0	1273.2	1273.5
132.5°	1313.2	1314.9	1315.9	1316.9	1317.9	1318.9	1320.1	1321.4	1322.7	1323.9	1324.1
135°	1389.9	1391.4	1392.6	1393.9	1395.2	1396.4	1397.3	1398.3	1399.2	1400.1	1400.1
137.5°	1459.4	1461.0	1461.7	1462.4	1463.1	1463.8	1465.3	1466.8	1468.3	1469.8	1470.2
140°	1502.6	1503.9	1504.9	1505.8	1506.7	1507.7	1509.0	1510.2	1511.5	1512.7	1513.1
142.5°	1544.3	1545.7	1546.6	1547.6	1548.5	1549.4	1550.4	1551.4	1552.5	1553.4	1553.5
145°	1603.8	1605.2	1605.9	1606.5	1607.1	1607.8	1608.4	1609.0	1609.7	1610.2	1610.6
147.5°	1655.8	1656.8	1657.5	1658.1	1658.7	1659.3	1660.0	1660.6	1661.2	1661.9	1661.4
150°	1687.6	1688.4	1689.0	1689.7	1690.3	1690.9	1691.5	1692.1	1692.8	1693.4	1693.3
152.5°	1716.1	1716.5	1716.8	1717.2	1717.6	1718.0	1719.1	1720.2	1721.4	1722.5	1722.3
155°	1754.6	1754.4	1754.8	1755.1	1755.4	1755.7	1757.3	1758.9	1760.4	1762.0	1761.8
157.5°	1790.2	1790.0	1789.6	1789.3	1789.0	1788.7	1790.5	1792.4	1794.3	1796.2	1795.9
160°	1809.4	1809.1	1808.8	1808.5	1808.2	1807.9	1809.8	1811.7	1813.5	1815.3	1815.2
162.5°	1826.6	1826.0	1825.7	1825.4	1825.0	1824.8	1826.9	1829.0	1831.2	1833.2	1833.3
165°	1849.2	1848.6	1848.2	1847.9	1847.7	1847.3	1849.8	1852.3	1854.8	1857.4	1857.5
167.5°	1866.0	1865.4	1865.4	1865.4	1865.4	1865.4	1867.8	1870.4	1872.8	1875.4	1875.4
170°	1876.1	1875.5	1875.5	1875.5	1875.5	1875.5	1878.0	1880.5	1883.0	1885.6	1885.6
172.5°	1881.9	1881.2	1881.5	1881.8	1882.0	1882.3	1884.8	1887.3	1889.8	1892.2	1892.2
175°	1890.4	1889.7	1890.1	1890.4	1890.6	1891.0	1893.2	1895.4	1897.5	1899.8	1899.6
177.5°	1893.9	1893.4	1893.7	1893.9	1894.1	1894.4	1896.4	1898.4	1900.4	1902.4	1902.1
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6



TEST NUMBER: P332204-830

CATALOG NUMBER: S123DIW-S1000D1535U830-4F0-1E-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°	17.3	17.4	17.1	16.7	17.1	17.4	17.3	17.2	19.0	17.2	17.1
90°	40.4	41.0	41.7	42.2	41.7	41.0	40.4	39.8	38.8	37.6	36.3
92.5°	45.6	46.0	46.4	46.8	46.4	46.0	45.6	45.2	44.1	42.1	40.1
95°	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	52.4	50.2	48.1
97.5°	57.1	57.4	57.8	58.1	57.8	57.4	57.1	56.8	55.4	52.9	50.4
100°	58.2	58.5	58.9	59.2	58.9	58.5	58.2	58.0	56.6	54.0	51.5
102.5°	58.6	59.2	59.8	60.3	59.8	59.2	58.6	58.1	61.6	69.5	77.2
105°	60.1	60.8	61.4	62.0	61.4	60.8	60.1	59.5	86.9	142.3	197.7
107.5°	320.1	278.2	236.5	194.7	236.5	278.2	320.1	361.8	403.0	443.7	484.3
110°	521.8	477.0	432.3	387.5	432.3	477.0	521.8	566.6	594.2	604.5	614.8



TEST NUMBER: P332204-830

CATALOG NUMBER: S123DIW-S1000D1535U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	693.1	683.7	674.3	664.8	674.3	683.7	693.1	702.7	707.3	707.1	706.9
115°	824.8	826.0	827.3	828.6	827.3	826.0	824.8	823.5	821.3	818.2	815.1
117.5°	919.6	919.9	920.2	920.4	920.2	919.9	919.6	919.5	918.0	915.5	913.0
120°	983.5	983.5	983.5	983.5	983.5	983.5	983.5	983.5	982.3	979.8	977.3
122.5°	1044.8	1045.0	1045.3	1045.6	1045.3	1045.0	1044.8	1044.5	1043.6	1041.8	1040.0
125°	1131.1	1131.6	1132.3	1132.9	1132.3	1131.6	1131.1	1130.4	1129.7	1129.2	1128.5
127.5°	1218.8	1218.1	1217.5	1216.9	1217.5	1218.1	1218.8	1219.4	1219.2	1218.2	1217.2
130°	1272.9	1272.2	1271.6	1271.0	1271.6	1272.2	1272.9	1273.5	1273.2	1272.0	1270.6
132.5°	1323.2	1322.4	1321.4	1320.6	1321.4	1322.4	1323.2	1324.1	1323.9	1322.7	1321.4
135°	1399.2	1398.3	1397.3	1396.4	1397.3	1398.3	1399.2	1400.1	1400.1	1399.2	1398.3
137.5°	1469.6	1469.0	1468.3	1467.7	1468.3	1469.0	1469.6	1470.2	1469.8	1468.3	1466.8
140°	1512.4	1511.8	1511.2	1510.5	1511.2	1511.8	1512.4	1513.1	1512.7	1511.5	1510.2
142.5°	1552.7	1551.7	1550.9	1550.0	1550.9	1551.7	1552.7	1553.5	1553.4	1552.5	1551.4
145°	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.2	1609.7	1609.0
147.5°	1660.0	1658.6	1657.1	1655.7	1657.1	1658.6	1660.0	1661.4	1661.9	1661.2	1660.6
150°	1692.3	1691.4	1690.5	1689.5	1690.5	1691.4	1692.3	1693.3	1693.4	1692.8	1692.1
152.5°	1720.9	1719.4	1718.0	1716.6	1718.0	1719.4	1720.9	1722.3	1722.5	1721.4	1720.2
155°	1759.9	1758.0	1756.1	1754.4	1756.1	1758.0	1759.9	1761.8	1762.0	1760.4	1758.9
157.5°	1793.5	1791.0	1788.6	1786.1	1788.6	1791.0	1793.5	1795.9	1796.2	1794.3	1792.4
160°	1813.0	1810.8	1808.6	1806.5	1808.6	1810.8	1813.0	1815.2	1815.3	1813.5	1811.7
162.5°	1831.5	1829.5	1827.6	1825.6	1827.6	1829.5	1831.5	1833.3	1833.2	1831.2	1829.0
165°	1855.3	1853.1	1850.9	1848.7	1850.9	1853.1	1855.3	1857.5	1857.4	1854.8	1852.3
167.5°	1872.8	1870.4	1867.8	1865.4	1867.8	1870.4	1872.8	1875.4	1875.4	1872.8	1870.4
170°	1883.0	1880.5	1878.0	1875.5	1878.0	1880.5	1883.0	1885.6	1885.6	1883.0	1880.5
172.5°	1889.4	1886.7	1883.9	1881.1	1883.9	1886.7	1889.4	1892.2	1892.2	1889.8	1887.3
175°	1897.1	1894.6	1892.1	1889.6	1892.1	1894.6	1897.1	1899.6	1899.8	1897.5	1895.4
177.5°	1899.6	1897.1	1894.6	1892.2	1894.6	1897.1	1899.6	1902.1	1902.4	1900.4	1898.4
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6



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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°	17.8	17.5	16.2	15.9	14.6	14.3	13.0	12.9	12.8	12.2	12.6
90°	35.1	33.8	29.8	25.6	21.6	17.5	13.9	10.8	7.6	4.5	1.4
92.5°	38.1	36.1	33.0	30.0	26.9	23.8	22.7	23.6	24.4	25.4	26.2
95°	45.9	43.6	40.2	36.8	33.4	29.9	34.6	47.4	60.3	73.1	86.0
97.5°	47.9	45.3	68.0	90.5	113.0	135.5	149.7	155.4	161.3	167.0	172.8
100°	49.0	46.5	95.4	144.2	193.0	241.9	263.2	256.9	250.6	244.4	238.2
102.5°	84.9	92.7	146.1	199.4	252.8	306.1	330.5	326.0	321.6	317.1	312.5
105°	253.2	308.6	336.8	365.0	393.1	421.3	433.7	430.3	426.8	423.4	419.9
107.5°	525.0	565.6	561.2	556.8	552.2	547.8	544.2	541.5	538.7	535.9	533.2
110°	625.2	635.5	632.1	628.6	625.2	621.7	618.8	616.2	613.7	611.2	608.7



TEST NUMBER: P332204-830

CATALOG NUMBER: S123DIW-S1000D1535U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	706.7	706.5	703.0	699.6	696.2	692.8	689.8	687.7	685.4	683.2	680.9
115°	811.9	808.8	806.0	803.1	800.4	797.6	795.2	793.3	791.5	789.6	787.7
117.5°	910.5	908.0	906.5	905.1	903.7	902.3	900.4	898.1	895.7	893.4	891.1
120°	974.8	972.2	971.3	970.3	969.4	968.6	966.7	963.8	961.0	958.2	955.4
122.5°	1038.3	1036.5	1035.3	1034.2	1032.9	1031.8	1030.0	1027.7	1025.4	1023.0	1020.8
125°	1127.9	1127.3	1126.1	1124.7	1123.5	1122.3	1120.4	1117.9	1115.4	1112.9	1110.3
127.5°	1216.2	1215.2	1213.7	1212.2	1210.7	1209.2	1207.2	1204.7	1202.2	1199.7	1197.1
130°	1269.4	1268.2	1267.0	1265.6	1264.4	1263.2	1261.3	1258.8	1256.3	1253.8	1251.2
132.5°	1320.1	1318.9	1317.9	1316.9	1315.9	1314.9	1313.2	1310.6	1308.2	1305.6	1303.2
135°	1397.3	1396.4	1395.2	1393.9	1392.6	1391.4	1389.9	1388.0	1386.1	1384.2	1382.3
137.5°	1465.3	1463.8	1463.1	1462.4	1461.7	1461.0	1459.4	1457.1	1454.7	1452.4	1449.9
140°	1509.0	1507.7	1506.7	1505.8	1504.9	1503.9	1502.6	1500.7	1498.8	1496.9	1495.1
142.5°	1550.4	1549.4	1548.5	1547.6	1546.6	1545.7	1544.3	1542.4	1540.5	1538.6	1536.7
145°	1608.4	1607.8	1607.1	1606.5	1605.9	1605.2	1603.8	1601.7	1599.5	1597.2	1595.1
147.5°	1660.0	1659.3	1658.7	1658.1	1657.5	1656.8	1655.8	1654.4	1652.9	1651.5	1650.0
150°	1691.5	1690.9	1690.3	1689.7	1689.0	1688.4	1687.6	1686.7	1685.7	1684.8	1683.9
152.5°	1719.1	1718.0	1717.6	1717.2	1716.8	1716.5	1716.1	1715.6	1715.1	1714.8	1714.3
155°	1757.3	1755.7	1755.4	1755.1	1754.8	1754.4	1754.6	1755.3	1755.9	1756.5	1757.1
157.5°	1790.5	1788.7	1789.0	1789.3	1789.6	1790.0	1790.2	1790.2	1790.3	1790.4	1790.4
160°	1809.8	1807.9	1808.2	1808.5	1808.8	1809.1	1809.4	1809.8	1810.1	1810.3	1810.7
162.5°	1826.9	1824.8	1825.0	1825.4	1825.7	1826.0	1826.6	1827.4	1828.2	1829.0	1829.9
165°	1849.8	1847.3	1847.7	1847.9	1848.2	1848.6	1849.2	1850.1	1851.1	1852.0	1852.9
167.5°	1867.8	1865.4	1865.4	1865.4	1865.4	1865.4	1866.0	1867.3	1868.5	1869.7	1870.9
170°	1878.0	1875.5	1875.5	1875.5	1875.5	1875.5	1876.1	1877.4	1878.6	1879.9	1881.1
172.5°	1884.8	1882.3	1882.0	1881.8	1881.5	1881.2	1881.9	1883.4	1884.9	1886.4	1887.9
175°	1893.2	1891.0	1890.6	1890.4	1890.1	1889.7	1890.4	1892.0	1893.5	1895.1	1896.6
177.5°	1896.4	1894.4	1894.1	1893.9	1893.7	1893.4	1893.9	1895.2	1896.4	1897.6	1898.8
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6



TEST NUMBER: P332204-830

CATALOG NUMBER: S123DIW-S1000D1535U830-4F0-1E-UDD-A

**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°	14.2	14.9	17.1	18.7	21.5	23.8	24.1	23.9	24.2	23.9	23.7
90°	4.5	7.6	10.8	13.9	17.5	21.6	25.6	29.8	33.8	35.1	36.3
92.5°	25.4	24.4	23.6	22.7	23.8	26.9	30.0	33.0	36.1	38.1	40.1
95°	73.1	60.3	47.4	34.6	29.9	33.4	36.8	40.2	43.6	45.9	48.1
97.5°	167.0	161.3	155.4	149.7	135.5	113.0	90.5	68.0	45.3	47.9	50.4
100°	244.4	250.6	256.9	263.2	241.9	193.0	144.2	95.4	46.5	49.0	51.5
102.5°	317.1	321.6	326.0	330.5	306.1	252.8	199.4	146.1	92.7	84.9	77.2
105°	423.4	426.8	430.3	433.7	421.3	393.1	365.0	336.8	308.6	253.2	197.7
107.5°	535.9	538.7	541.5	544.2	547.8	552.2	556.8	561.2	565.6	525.0	484.3
110°	611.2	613.7	616.2	618.8	621.7	625.2	628.6	632.1	635.5	625.2	614.8





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	683.2	685.4	687.7	689.8	692.8	696.2	699.6	703.0	706.5	706.7	706.9
115°	789.6	791.5	793.3	795.2	797.6	800.4	803.1	806.0	808.8	811.9	815.1
117.5°	893.4	895.7	898.1	900.4	902.3	903.7	905.1	906.5	908.0	910.5	913.0
120°	958.2	961.0	963.8	966.7	968.6	969.4	970.3	971.3	972.2	974.8	977.3
122.5°	1023.0	1025.4	1027.7	1030.0	1031.8	1032.9	1034.2	1035.3	1036.5	1038.3	1040.0
125°	1112.9	1115.4	1117.9	1120.4	1122.3	1123.5	1124.7	1126.1	1127.3	1127.9	1128.5
127.5°	1199.7	1202.2	1204.7	1207.2	1209.2	1210.7	1212.2	1213.7	1215.2	1216.2	1217.2
130°	1253.8	1256.3	1258.8	1261.3	1263.2	1264.4	1265.6	1267.0	1268.2	1269.4	1270.6
132.5°	1305.6	1308.2	1310.6	1313.2	1314.9	1315.9	1316.9	1317.9	1318.9	1320.1	1321.4
135°	1384.2	1386.1	1388.0	1389.9	1391.4	1392.6	1393.9	1395.2	1396.4	1397.3	1398.3
137.5°	1452.4	1454.7	1457.1	1459.4	1461.0	1461.7	1462.4	1463.1	1463.8	1465.3	1466.8
140°	1496.9	1498.8	1500.7	1502.6	1503.9	1504.9	1505.8	1506.7	1507.7	1509.0	1510.2
142.5°	1538.6	1540.5	1542.4	1544.3	1545.7	1546.6	1547.6	1548.5	1549.4	1550.4	1551.4
145°	1597.2	1599.5	1601.7	1603.8	1605.2	1605.9	1606.5	1607.1	1607.8	1608.4	1609.0
147.5°	1651.5	1652.9	1654.4	1655.8	1656.8	1657.5	1658.1	1658.7	1659.3	1660.0	1660.6
150°	1684.8	1685.7	1686.7	1687.6	1688.4	1689.0	1689.7	1690.3	1690.9	1691.5	1692.1
152.5°	1714.8	1715.1	1715.6	1716.1	1716.5	1716.8	1717.2	1717.6	1718.0	1719.1	1720.2
155°	1756.5	1755.9	1755.3	1754.6	1754.4	1754.8	1755.1	1755.4	1755.7	1757.3	1758.9
157.5°	1790.4	1790.3	1790.2	1790.2	1790.0	1789.6	1789.3	1789.0	1788.7	1790.5	1792.4
160°	1810.3	1810.1	1809.8	1809.4	1809.1	1808.8	1808.5	1808.2	1807.9	1809.8	1811.7
162.5°	1829.0	1828.2	1827.4	1826.6	1826.0	1825.7	1825.4	1825.0	1824.8	1826.9	1829.0
165°	1852.0	1851.1	1850.1	1849.2	1848.6	1848.2	1847.9	1847.7	1847.3	1849.8	1852.3
167.5°	1869.7	1868.5	1867.3	1866.0	1865.4	1865.4	1865.4	1865.4	1865.4	1867.8	1870.4
170°	1879.9	1878.6	1877.4	1876.1	1875.5	1875.5	1875.5	1875.5	1875.5	1878.0	1880.5
172.5°	1886.4	1884.9	1883.4	1881.9	1881.2	1881.5	1881.8	1882.0	1882.3	1884.8	1887.3
175°	1895.1	1893.5	1892.0	1890.4	1889.7	1890.1	1890.4	1890.6	1891.0	1893.2	1895.4
177.5°	1897.6	1896.4	1895.2	1893.9	1893.4	1893.7	1893.9	1894.1	1894.4	1896.4	1898.4
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6



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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°	23.4	23.2	22.8	23.5	23.1	22.7	23.8
90°	37.6	38.8	39.8	40.4	41.0	41.7	42.2
92.5°	42.1	44.1	45.2	45.6	46.0	46.4	46.8
95°	50.2	52.4	53.5	53.5	53.5	53.5	53.5
97.5°	52.9	55.4	56.8	57.1	57.4	57.8	58.1
100°	54.0	56.6	58.0	58.2	58.5	58.9	59.2
102.5°	69.5	61.6	58.1	58.6	59.2	59.8	60.3
105°	142.3	86.9	59.5	60.1	60.8	61.4	62.0
107.5°	443.7	403.0	361.8	320.1	278.2	236.5	194.7
110°	604.5	594.2	566.6	521.8	477.0	432.3	387.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	707.1	707.3	702.7	693.1	683.7	674.3	664.8
115°	818.2	821.3	823.5	824.8	826.0	827.3	828.6
117.5°	915.5	918.0	919.5	919.6	919.9	920.2	920.4
120°	979.8	982.3	983.5	983.5	983.5	983.5	983.5
122.5°	1041.8	1043.6	1044.5	1044.8	1045.0	1045.3	1045.6
125°	1129.2	1129.7	1130.4	1131.1	1131.6	1132.3	1132.9
127.5°	1218.2	1219.2	1219.4	1218.8	1218.1	1217.5	1216.9
130°	1272.0	1273.2	1273.5	1272.9	1272.2	1271.6	1271.0
132.5°	1322.7	1323.9	1324.1	1323.2	1322.4	1321.4	1320.6
135°	1399.2	1400.1	1400.1	1399.2	1398.3	1397.3	1396.4
137.5°	1468.3	1469.8	1470.2	1469.6	1469.0	1468.3	1467.7
140°	1511.5	1512.7	1513.1	1512.4	1511.8	1511.2	1510.5
142.5°	1552.5	1553.4	1553.5	1552.7	1551.7	1550.9	1550.0
145°	1609.7	1610.2	1610.6	1610.6	1610.6	1610.6	1610.6
147.5°	1661.2	1661.9	1661.4	1660.0	1658.6	1657.1	1655.7
150°	1692.8	1693.4	1693.3	1692.3	1691.4	1690.5	1689.5
152.5°	1721.4	1722.5	1722.3	1720.9	1719.4	1718.0	1716.6
155°	1760.4	1762.0	1761.8	1759.9	1758.0	1756.1	1754.4
157.5°	1794.3	1796.2	1795.9	1793.5	1791.0	1788.6	1786.1
160°	1813.5	1815.3	1815.2	1813.0	1810.8	1808.6	1806.5
162.5°	1831.2	1833.2	1833.3	1831.5	1829.5	1827.6	1825.6
165°	1854.8	1857.4	1857.5	1855.3	1853.1	1850.9	1848.7
167.5°	1872.8	1875.4	1875.4	1872.8	1870.4	1867.8	1865.4
170°	1883.0	1885.6	1885.6	1883.0	1880.5	1878.0	1875.5
172.5°	1889.8	1892.2	1892.2	1889.4	1886.7	1883.9	1881.1
175°	1897.5	1899.8	1899.6	1897.1	1894.6	1892.1	1889.6
177.5°	1900.4	1902.4	1902.1	1899.6	1897.1	1894.6	1892.2
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6

(END OF REPORT)