

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: P332198-840

Luminaire Tested: **S123DIW-S1000D1320U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332198-840
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-S1000D1320U840-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1320 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9615.8 lumens
Efficiency: N/A
Efficacy: 137.8 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

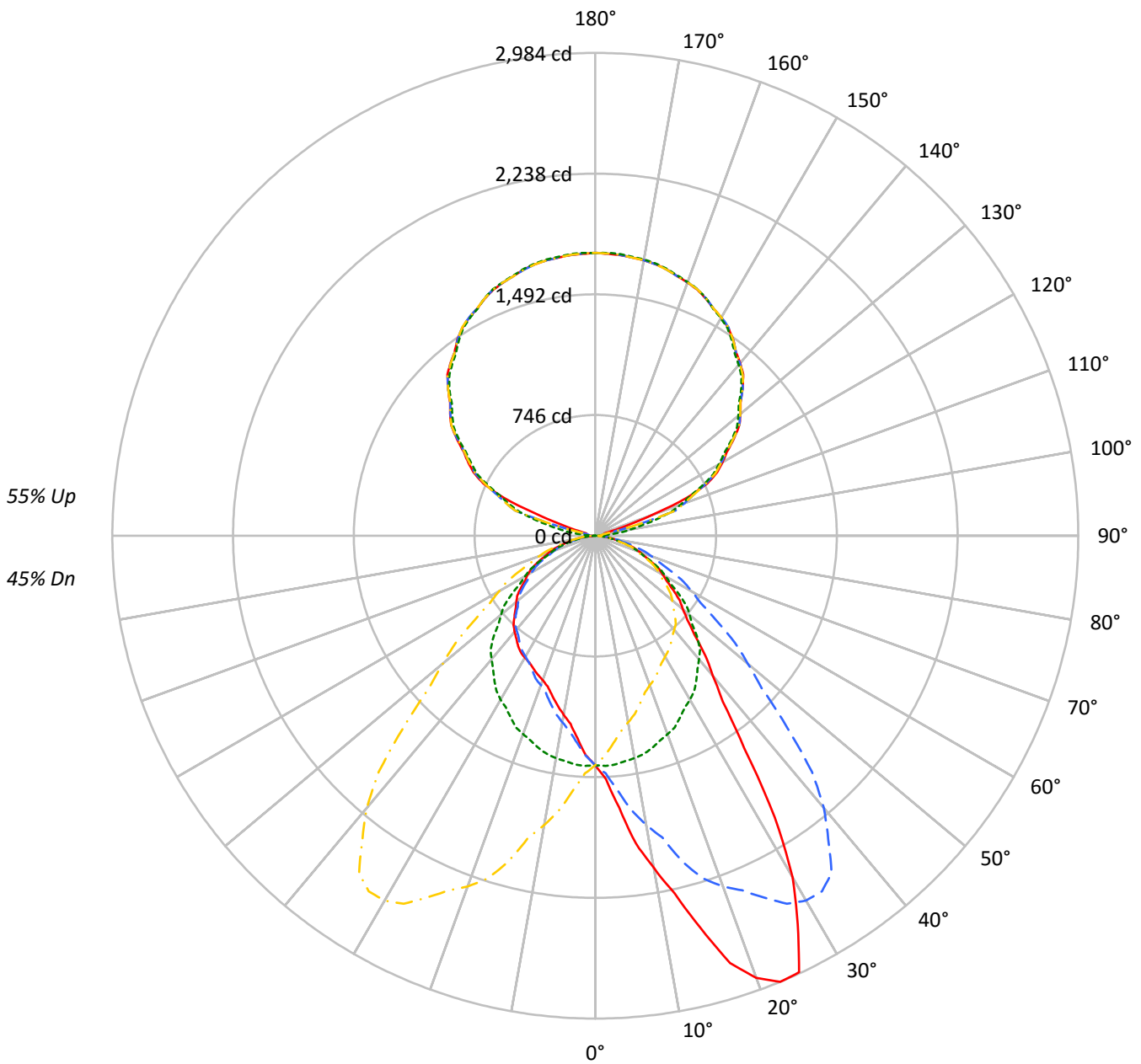
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - · 90°-270° - · - · 135°-315°



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	97	93	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	70	81	75	69	65	62	59	55	51	48	46	40	39	37	32
3	81	71	64	59	74	66	60	55	55	50	47	45	42	39	36	34	32	28
4	74	63	56	50	67	58	52	46	49	44	40	40	37	34	32	30	28	24
5	68	56	49	43	62	52	45	40	44	39	35	36	32	29	29	26	24	21
6	62	51	43	37	57	47	40	35	40	34	30	33	29	26	26	24	21	18
7	58	46	38	32	53	42	35	30	36	30	27	30	26	23	24	21	19	16
8	54	41	34	29	49	38	32	27	33	27	24	27	23	20	22	19	17	15
9	50	38	30	25	46	35	29	24	30	25	21	25	21	18	20	17	15	13
10	47	35	28	23	43	32	26	22	28	22	19	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15268	15268	15268	15268
5°	18208	15333	13588	15333
10°	22789	15255	12273	15255
15°	27952	15133	11426	15133
20°	33298	14940	10879	14940
25°	35357	14707	10757	14707
30°	30305	14537	10813	14537
35°	21077	14294	10926	14294
40°	15874	14011	10893	14011
45°	13181	13589	10753	13589
50°	11807	12727	10655	12727
55°	11038	11798	10524	11798
60°	10355	10828	10415	10828
65°	9732	9872	10083	9872
70°	9127	8781	9602	8781
75°	8172	7690	8804	7690
80°	7153	6304	7581	6304
85°	5595	4582	5088	4582



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.7	1.5
10°-20°	448.0	4.7
20°-30°	751.9	7.8
30°-40°	851.4	8.9
40°-50°	763.5	7.9
50°-60°	616.1	6.4
60°-70°	429.4	4.5
70°-80°	225.7	2.3
80°-90°	60.1	0.6
90°-100°	63.5	0.7
100°-110°	302.9	3.1
110°-120°	727.5	7.6
120°-130°	926.3	9.6
130°-140°	989.8	10.3
140°-150°	925.5	9.6
150°-160°	746.6	7.8
160°-170°	481.8	5.0
170°-180°	166.1	1.7
0°-30°	1339.7	13.9
0°-40°	2191.1	22.8
0°-60°	3570.7	37.1
0°-90°	4285.9	44.6
90°-120°	1093.9	11.4
90°-150°	3935.5	40.9
90°-180°	5330.0	55.4
0°-180°	9615.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1418	1418	1418	1418	1418	
5°	1685	1419	1258	1419	1685	175
15°	2508	1358	1025	1358	2508	724
25°	2977	1238	906	1238	2977	1306
35°	1604	1088	832	1088	1604	1042
45°	866	893	706	893	866	685
55°	588	629	561	629	588	528
65°	382	388	396	388	382	380
75°	196	185	212	185	196	210
85°	45	37	41	37	45	55
90°	39	1	39	1	39	20
95°	49	79	49	79	49	41
105°	57	387	57	387	57	131
115°	764	726	764	726	764	706
125°	1044	1023	1044	1023	1044	932
135°	1287	1274	1287	1274	1287	992
145°	1484	1470	1484	1470	1484	926
155°	1617	1619	1617	1619	1617	745
165°	1704	1708	1704	1708	1704	481
175°	1741	1748	1741	1748	1741	166
180°	1748	1748	1748	1748	1748	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4
2.5°	1505.2	1504.2	1501.4	1503.6	1499.2	1493.2	1492.6	1487.1	1471.2	1470.1	1465.7
5°	1685.1	1679.5	1678.8	1678.2	1668.5	1655.5	1630.7	1628.7	1595.7	1579.2	1559.2
7.5°	1917.8	1920.8	1910.7	1901.9	1872.5	1853.1	1826.5	1792.6	1752.1	1711.0	1683.6
10°	2085.0	2107.7	2079.5	2060.2	2042.4	2008.7	1969.5	1920.8	1872.0	1814.9	1771.6
12.5°	2264.2	2275.3	2269.7	2251.6	2223.8	2172.5	2103.1	2049.4	2004.5	1909.5	1871.1
15°	2508.3	2550.2	2523.5	2461.5	2463.0	2414.2	2323.4	2223.8	2170.9	2087.7	1974.4
17.5°	2768.3	2773.6	2762.2	2710.6	2676.2	2609.2	2525.5	2429.9	2322.8	2222.1	2101.9
20°	2906.9	2902.8	2878.7	2851.9	2792.8	2740.6	2649.2	2542.6	2405.2	2306.2	2175.0
22.5°	2983.8	2977.0	2965.6	2943.2	2894.0	2837.9	2755.8	2639.4	2508.6	2372.3	2220.6
25°	2977.0	2985.9	2987.3	2981.1	2964.0	2930.2	2865.6	2772.9	2642.3	2467.1	2309.1
27.5°	2707.5	2720.3	2756.9	2789.6	2825.9	2863.1	2858.1	2812.1	2715.4	2564.0	2370.9
30°	2438.2	2410.7	2478.7	2564.7	2623.0	2726.1	2783.9	2787.3	2733.0	2603.1	2414.8
32.5°	2064.4	2094.6	2124.7	2230.4	2358.0	2473.8	2588.7	2681.2	2691.8	2605.4	2440.6
35°	1604.0	1641.7	1696.7	1751.7	1889.2	2007.3	2209.4	2385.3	2525.5	2544.1	2443.0
37.5°	1292.5	1311.2	1345.9	1401.1	1491.0	1631.1	1787.5	2009.8	2212.9	2364.0	2370.6
40°	1129.7	1135.3	1174.5	1216.4	1289.2	1404.6	1545.5	1742.0	1985.3	2196.4	2284.3
42.5°	1007.7	1019.8	1036.4	1076.7	1134.7	1221.5	1352.5	1515.0	1738.0	1980.7	2152.8
45°	865.9	879.6	889.9	916.8	958.0	1016.3	1107.8	1256.2	1425.9	1676.8	1908.3
47.5°	772.1	773.3	780.9	801.1	829.2	873.0	937.7	1033.0	1188.8	1392.3	1630.0
50°	705.1	716.1	718.8	734.6	756.6	788.9	842.5	923.6	1051.5	1230.1	1448.7
52.5°	657.8	661.1	668.8	680.2	699.4	724.6	771.0	834.6	934.8	1087.1	1288.1
55°	588.2	588.2	595.8	604.7	615.7	638.4	669.3	716.1	792.3	910.6	1076.8
57.5°	523.9	527.4	532.7	535.4	544.8	559.8	585.6	621.1	678.0	769.0	901.2
60°	481.0	487.3	486.6	492.0	500.3	512.0	533.9	562.8	613.7	686.5	797.9
62.5°	443.6	443.2	443.1	449.7	458.0	469.1	483.4	508.4	551.6	616.1	710.9
65°	382.1	380.7	385.6	389.6	392.4	400.6	411.6	433.6	462.5	510.6	584.1
67.5°	327.4	323.4	326.0	327.4	332.0	338.5	348.8	362.4	385.4	424.0	479.4
70°	290.0	286.6	285.9	287.2	291.3	296.2	303.8	316.8	338.1	369.0	409.6
72.5°	251.6	249.1	249.0	252.1	254.0	257.1	262.5	274.5	291.3	314.6	352.4
75°	196.5	196.5	196.5	197.2	199.2	202.1	206.1	212.4	225.4	241.9	267.3
77.5°	147.3	147.2	146.3	146.2	149.3	150.5	151.5	157.2	164.5	175.6	194.2
80°	115.4	112.0	113.4	115.4	116.8	117.5	119.6	121.0	127.1	133.3	146.3
82.5°	85.7	82.9	83.1	86.3	86.5	87.3	89.4	91.3	93.6	99.3	106.2
85°	45.3	45.3	46.0	46.0	46.8	46.0	48.1	48.8	48.8	52.2	56.4
87.5°	24.2	23.0	23.5	23.9	23.2	23.6	23.9	24.2	24.6	24.9	24.7
90°	39.0	38.4	37.8	37.3	36.7	35.7	34.6	33.4	32.3	31.2	27.4
92.5°	43.1	42.7	42.4	42.1	41.7	40.6	38.8	37.0	35.0	33.2	30.4
95°	49.4	49.4	49.4	49.4	49.4	48.4	46.4	44.3	42.3	40.3	37.1
97.5°	53.5	53.2	52.9	52.6	52.3	51.0	48.8	46.5	44.1	41.8	62.6
100°	54.5	54.2	53.9	53.6	53.4	52.1	49.8	47.5	45.1	42.8	87.9
102.5°	55.5	55.0	54.5	54.0	53.5	56.9	63.9	71.1	78.3	85.4	134.6
105°	57.2	56.6	55.9	55.4	54.8	80.1	131.2	182.2	233.3	284.4	310.3
107.5°	179.5	217.9	256.4	295.0	333.5	371.4	408.9	446.4	483.7	521.2	517.2
110°	357.1	398.4	439.6	480.9	522.1	547.5	557.0	566.5	576.1	585.6	582.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	612.7	621.4	630.1	638.7	647.5	651.8	651.6	651.5	651.3	651.1	647.9
115°	763.6	762.3	761.2	760.0	758.9	756.9	754.0	751.1	748.2	745.4	742.8
117.5°	848.2	848.0	847.7	847.5	847.3	846.0	843.6	841.4	839.1	836.8	835.5
120°	906.4	906.4	906.4	906.4	906.4	905.2	902.9	900.6	898.3	896.0	895.1
122.5°	963.5	963.3	963.0	962.8	962.6	961.7	960.1	958.5	956.8	955.2	954.1
125°	1044.0	1043.4	1042.9	1042.3	1041.7	1041.1	1040.6	1040.0	1039.4	1038.8	1037.6
127.5°	1121.4	1122.0	1122.6	1123.2	1123.7	1123.6	1122.6	1121.7	1120.7	1119.8	1118.4
130°	1171.2	1171.8	1172.5	1173.0	1173.6	1173.3	1172.2	1170.9	1169.8	1168.6	1167.5
132.5°	1217.0	1217.8	1218.6	1219.4	1220.2	1220.0	1218.9	1217.7	1216.6	1215.4	1214.5
135°	1286.9	1287.7	1288.6	1289.4	1290.3	1290.3	1289.4	1288.6	1287.7	1286.9	1285.7
137.5°	1352.5	1353.1	1353.7	1354.2	1354.8	1354.4	1353.0	1351.7	1350.3	1348.9	1348.3
140°	1392.0	1392.6	1393.1	1393.7	1394.3	1394.0	1392.9	1391.7	1390.6	1389.4	1388.6
142.5°	1428.4	1429.2	1430.0	1430.8	1431.6	1431.6	1430.6	1429.7	1428.8	1427.8	1426.9
145°	1484.2	1484.2	1484.2	1484.2	1484.2	1483.9	1483.3	1482.8	1482.2	1481.6	1481.1
147.5°	1525.7	1527.1	1528.4	1529.7	1531.1	1531.5	1530.9	1530.2	1529.7	1529.1	1528.5
150°	1556.9	1557.8	1558.6	1559.5	1560.3	1560.5	1559.9	1559.3	1558.8	1558.2	1557.6
152.5°	1581.9	1583.2	1584.5	1585.8	1587.2	1587.3	1586.3	1585.2	1584.2	1583.2	1582.8
155°	1616.7	1618.4	1620.1	1621.8	1623.6	1623.8	1622.2	1620.8	1619.4	1617.9	1617.7
157.5°	1646.0	1648.2	1650.5	1652.7	1655.0	1655.3	1653.6	1651.8	1650.0	1648.3	1648.6
160°	1664.7	1666.7	1668.7	1670.7	1672.7	1672.9	1671.2	1669.4	1667.7	1666.0	1666.3
162.5°	1682.3	1684.2	1686.0	1687.7	1689.5	1689.4	1687.5	1685.5	1683.5	1681.5	1681.8
165°	1703.6	1705.7	1707.7	1709.7	1711.7	1711.6	1709.3	1707.0	1704.7	1702.3	1702.6
167.5°	1719.0	1721.3	1723.6	1725.9	1728.2	1728.2	1725.9	1723.6	1721.3	1719.0	1719.0
170°	1728.3	1730.6	1732.9	1735.3	1737.6	1737.6	1735.3	1732.9	1730.6	1728.3	1728.3
172.5°	1733.5	1736.1	1738.6	1741.1	1743.6	1743.8	1741.5	1739.2	1736.9	1734.5	1734.3
175°	1741.3	1743.6	1746.0	1748.3	1750.5	1750.7	1748.7	1746.7	1744.6	1742.6	1742.3
177.5°	1743.6	1746.0	1748.3	1750.6	1752.9	1753.1	1751.3	1749.4	1747.6	1745.8	1745.5
180°	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4
2.5°	1462.4	1457.9	1453.6	1445.9	1439.3	1430.0	1427.1	1423.9	1414.0	1405.2	1398.6
5°	1551.7	1535.2	1511.2	1489.1	1471.3	1447.2	1433.5	1419.1	1398.5	1379.9	1364.8
7.5°	1645.2	1612.8	1575.4	1534.9	1497.3	1461.0	1431.7	1405.6	1376.7	1349.4	1328.1
10°	1719.4	1672.6	1620.4	1564.1	1516.0	1469.3	1430.1	1395.7	1358.6	1326.3	1299.5
12.5°	1804.0	1734.7	1662.7	1594.3	1537.4	1472.6	1425.1	1381.4	1339.4	1300.5	1270.4
15°	1904.2	1816.2	1731.1	1636.9	1550.3	1469.3	1412.9	1358.0	1309.1	1269.3	1230.8
17.5°	1995.5	1895.8	1783.5	1669.1	1564.6	1468.4	1389.6	1327.4	1266.4	1217.6	1179.2
20°	2047.2	1933.8	1806.6	1687.8	1572.4	1465.1	1378.6	1304.3	1238.3	1186.8	1143.5
22.5°	2091.7	1959.0	1827.6	1700.4	1571.8	1456.3	1358.2	1281.8	1210.3	1159.8	1113.8
25°	2137.9	1979.1	1847.2	1698.1	1554.5	1434.9	1324.9	1238.3	1166.9	1107.8	1060.4
27.5°	2177.5	1977.8	1821.2	1660.8	1527.2	1407.3	1290.0	1197.1	1121.3	1057.0	1009.0
30°	2203.8	1980.5	1794.3	1635.6	1500.9	1377.2	1263.0	1169.6	1089.9	1024.6	979.3
32.5°	2220.4	1978.8	1769.6	1600.3	1459.1	1349.7	1234.0	1137.2	1055.3	991.1	947.4
35°	2230.0	1966.8	1727.0	1527.6	1391.6	1285.1	1188.2	1087.8	1002.0	942.2	892.7
37.5°	2210.7	1941.4	1677.5	1457.5	1308.6	1203.7	1122.2	1036.7	954.5	888.7	846.1
40°	2180.5	1924.9	1639.0	1408.1	1251.4	1150.3	1081.0	997.1	916.0	853.5	813.6
42.5°	2122.7	1891.3	1596.7	1353.1	1192.0	1091.0	1027.1	957.0	880.3	821.6	781.7
45°	1981.9	1818.4	1533.2	1270.6	1104.3	999.9	943.5	892.7	823.2	766.2	731.8
47.5°	1786.5	1708.5	1441.4	1183.7	1012.8	912.3	853.7	812.8	762.1	716.1	683.1
50°	1650.6	1618.4	1379.2	1124.3	951.8	853.5	797.2	760.0	723.7	677.6	647.3
52.5°	1494.0	1513.9	1306.7	1062.7	889.7	793.0	740.0	710.5	677.4	639.6	613.3
55°	1273.4	1345.5	1181.3	959.4	797.2	705.1	654.9	628.7	609.6	581.4	558.7
57.5°	1066.8	1158.6	1045.8	852.8	706.3	626.8	578.8	550.3	538.0	523.2	505.3
60°	944.2	1034.9	949.1	781.3	645.3	569.7	527.0	503.0	490.7	480.4	465.2
62.5°	834.9	926.7	854.4	708.8	585.3	515.2	478.2	454.6	445.0	439.7	426.8
65°	684.5	763.5	715.4	595.8	499.6	437.8	404.0	387.6	378.7	376.6	368.3
67.5°	557.0	617.2	582.2	494.2	418.5	365.1	336.5	322.4	315.6	314.9	308.7
70°	473.5	529.9	503.0	423.3	358.0	316.1	291.3	279.0	274.9	274.2	270.7
72.5°	408.6	447.9	426.6	360.1	309.6	271.6	253.5	240.5	235.8	236.8	234.5
75°	302.4	331.9	319.5	273.5	233.0	208.2	193.1	184.9	180.8	182.8	180.1
77.5°	217.5	236.3	225.1	193.3	168.2	150.4	139.3	134.1	130.5	130.3	129.1
80°	164.2	175.2	169.1	149.8	129.2	114.1	105.1	101.7	99.7	99.0	98.3
82.5°	116.9	126.3	119.1	105.8	91.8	82.7	77.7	73.1	71.6	72.0	71.3
85°	59.1	62.5	59.8	51.5	46.0	41.9	39.2	37.1	35.7	36.5	35.0
87.5°	25.0	24.8	22.5	19.6	18.0	15.8	15.1	13.4	12.9	13.5	13.5
90°	23.6	19.9	16.2	12.8	10.0	7.1	4.1	1.3	4.1	7.1	10.0
92.5°	27.6	24.7	21.9	20.9	21.7	22.5	23.3	24.1	23.3	22.5	21.7
95°	33.9	30.7	27.6	31.9	43.7	55.5	67.4	79.2	67.4	55.5	43.7
97.5°	83.4	104.1	124.9	137.9	143.3	148.6	153.9	159.2	153.9	148.6	143.3
100°	132.9	177.9	222.9	242.6	236.7	231.0	225.2	219.4	225.2	231.0	236.7
102.5°	183.8	233.0	282.2	304.7	300.4	296.3	292.2	288.0	292.2	296.3	300.4
105°	336.3	362.2	388.3	399.6	396.5	393.3	390.1	387.0	390.1	393.3	396.5
107.5°	513.0	509.0	504.8	501.5	499.0	496.4	493.9	491.4	493.9	496.4	499.0
110°	579.3	576.1	572.9	570.2	567.8	565.5	563.3	561.0	563.3	565.5	567.8



TEST NUMBER: P332198-840

CATALOG NUMBER: S123DIW-S1000D1320U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	644.7	641.6	638.3	635.7	633.7	631.6	629.5	627.4	629.5	631.6	633.7
115°	740.1	737.5	735.0	732.8	731.0	729.3	727.6	725.9	727.6	729.3	731.0
117.5°	834.1	832.7	831.4	829.7	827.6	825.5	823.3	821.2	823.3	825.5	827.6
120°	894.2	893.3	892.5	890.8	888.2	885.6	883.0	880.4	883.0	885.6	888.2
122.5°	953.0	951.9	950.8	949.2	947.1	944.9	942.8	940.7	942.8	944.9	947.1
125°	1036.5	1035.3	1034.2	1032.5	1030.2	1027.8	1025.5	1023.2	1025.5	1027.8	1030.2
127.5°	1117.1	1115.7	1114.3	1112.5	1110.1	1107.8	1105.5	1103.2	1105.5	1107.8	1110.1
130°	1166.4	1165.2	1164.1	1162.4	1160.0	1157.7	1155.4	1153.1	1155.4	1157.7	1160.0
132.5°	1213.6	1212.6	1211.7	1210.1	1207.8	1205.5	1203.2	1200.8	1203.2	1205.5	1207.8
135°	1284.5	1283.3	1282.2	1280.8	1279.0	1277.3	1275.6	1273.8	1275.6	1277.3	1279.0
137.5°	1347.7	1347.0	1346.4	1344.9	1342.7	1340.6	1338.4	1336.2	1338.4	1340.6	1342.7
140°	1387.7	1386.8	1385.9	1384.6	1382.9	1381.2	1379.5	1377.8	1379.5	1381.2	1382.9
142.5°	1426.1	1425.2	1424.4	1423.1	1421.4	1419.7	1417.9	1416.1	1417.9	1419.7	1421.4
145°	1480.5	1479.9	1479.3	1478.0	1476.0	1474.0	1472.0	1470.0	1472.0	1474.0	1476.0
147.5°	1527.9	1527.4	1526.8	1525.9	1524.5	1523.2	1521.9	1520.6	1521.9	1523.2	1524.5
150°	1557.0	1556.5	1555.9	1555.2	1554.3	1553.5	1552.6	1551.8	1552.6	1553.5	1554.3
152.5°	1582.5	1582.2	1581.8	1581.3	1580.9	1580.5	1580.1	1579.7	1580.1	1580.5	1580.9
155°	1617.4	1617.1	1616.8	1616.9	1617.5	1618.1	1618.7	1619.2	1618.7	1618.1	1617.5
157.5°	1648.9	1649.2	1649.5	1649.6	1649.7	1649.8	1649.8	1649.9	1649.8	1649.8	1649.7
160°	1666.6	1666.9	1667.2	1667.4	1667.7	1668.0	1668.3	1668.6	1668.3	1668.0	1667.7
162.5°	1682.1	1682.4	1682.7	1683.2	1683.9	1684.8	1685.5	1686.3	1685.5	1684.8	1683.9
165°	1702.9	1703.2	1703.5	1704.0	1705.0	1705.8	1706.7	1707.6	1706.7	1705.8	1705.0
167.5°	1719.0	1719.0	1719.0	1719.5	1720.7	1721.8	1723.0	1724.1	1723.0	1721.8	1720.7
170°	1728.3	1728.3	1728.3	1728.9	1730.1	1731.2	1732.3	1733.5	1732.3	1731.2	1730.1
172.5°	1734.1	1733.8	1733.6	1734.2	1735.6	1737.0	1738.4	1739.8	1738.4	1737.0	1735.6
175°	1742.0	1741.7	1741.4	1742.0	1743.4	1744.9	1746.4	1747.8	1746.4	1744.9	1743.4
177.5°	1745.2	1745.0	1744.8	1745.2	1746.5	1747.6	1748.7	1749.9	1748.7	1747.6	1746.5
180°	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8



TEST NUMBER: P332198-840

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4
2.5°	1394.7	1390.9	1385.4	1377.2	1370.6	1360.1	1360.1	1361.8	1361.8	1361.2	1360.1
5°	1352.4	1342.1	1329.8	1315.3	1300.2	1285.1	1282.3	1276.9	1272.7	1269.9	1266.5
7.5°	1307.8	1289.5	1271.4	1251.2	1232.8	1217.6	1207.0	1198.2	1192.5	1186.5	1182.1
10°	1277.5	1254.9	1233.6	1212.2	1188.8	1170.3	1158.6	1150.3	1144.2	1138.7	1136.0
12.5°	1241.7	1215.8	1192.3	1172.0	1146.5	1127.4	1116.3	1112.5	1105.2	1093.6	1087.5
15°	1189.5	1165.5	1137.3	1106.4	1094.0	1070.7	1057.6	1051.5	1047.3	1038.3	1035.6
17.5°	1144.9	1113.4	1081.8	1058.7	1035.7	1016.8	1009.5	1001.8	996.3	989.1	986.8
20°	1109.1	1081.0	1052.1	1027.3	1003.3	982.7	976.5	971.0	965.5	962.1	959.4
22.5°	1072.9	1044.7	1020.8	997.6	972.0	958.5	951.8	945.7	941.9	939.6	936.8
25°	1021.9	997.1	970.4	949.7	929.1	920.2	916.0	912.6	909.9	906.5	905.7
27.5°	976.2	949.3	927.6	908.4	893.5	886.1	882.1	880.4	881.0	882.2	883.0
30°	942.2	917.5	899.6	883.0	869.3	862.4	861.7	861.7	864.5	865.2	866.6
32.5°	910.8	890.5	872.6	856.7	846.3	841.5	844.1	844.1	846.4	848.2	850.6
35°	865.2	847.3	833.5	819.8	810.9	812.9	814.4	815.7	819.1	823.2	826.1
37.5°	821.6	806.1	791.8	781.0	777.0	780.6	784.0	786.9	790.8	794.0	796.8
40°	790.3	778.6	764.9	755.3	756.6	758.7	761.4	764.9	768.3	770.3	773.2
42.5°	761.1	748.9	738.5	730.5	732.5	735.1	736.7	738.5	742.5	746.2	747.8
45°	716.8	707.1	697.5	692.7	694.1	695.5	696.8	698.9	702.4	705.1	705.8
47.5°	666.8	660.1	653.7	649.0	651.2	650.7	652.5	656.8	657.9	659.5	663.4
50°	635.0	628.7	621.3	619.9	619.9	619.9	620.6	626.0	626.0	628.7	631.6
52.5°	599.8	595.8	591.0	588.5	587.4	587.4	590.3	593.1	594.2	598.0	600.8
55°	547.8	543.6	539.5	537.3	536.0	537.3	542.9	544.2	547.8	549.8	551.8
57.5°	493.4	490.3	487.0	485.8	485.5	487.4	490.4	494.5	495.3	501.7	504.8
60°	457.7	452.8	450.1	450.1	448.8	454.9	453.5	460.4	461.8	466.0	470.7
62.5°	420.8	414.3	413.2	413.2	415.3	417.0	418.9	421.9	425.6	430.7	434.4
65°	361.4	358.0	362.8	362.1	360.8	364.9	364.9	368.3	372.4	377.3	384.9
67.5°	305.3	303.5	303.9	303.9	306.0	308.3	310.2	313.3	318.2	323.3	328.2
70°	267.3	269.4	266.0	268.7	270.7	271.5	272.9	276.9	282.5	285.9	291.3
72.5°	230.5	230.4	230.8	231.9	233.9	235.2	236.5	241.3	247.2	250.1	254.6
75°	177.3	176.6	178.6	178.6	182.1	183.5	184.9	186.9	192.4	196.5	200.0
77.5°	129.5	130.3	129.9	132.2	131.3	131.5	135.8	137.8	138.5	146.5	148.3
80°	97.6	99.0	99.7	100.4	101.0	99.7	104.4	106.5	106.5	111.3	114.7
82.5°	70.1	70.9	72.7	73.4	73.5	74.9	75.3	76.9	78.5	80.6	85.0
85°	35.0	37.1	37.8	37.1	37.8	36.5	38.5	39.2	39.9	39.9	39.9
87.5°	13.5	14.7	14.9	16.3	16.5	17.8	18.0	17.2	17.4	19.3	17.3
90°	12.8	16.2	19.9	23.6	27.4	31.2	32.3	33.4	34.6	35.7	36.7
92.5°	20.9	21.9	24.7	27.6	30.4	33.2	35.0	37.0	38.8	40.6	41.7
95°	31.9	27.6	30.7	33.9	37.1	40.3	42.3	44.3	46.4	48.4	49.4
97.5°	137.9	124.9	104.1	83.4	62.6	41.8	44.1	46.5	48.8	51.0	52.3
100°	242.6	222.9	177.9	132.9	87.9	42.8	45.1	47.5	49.8	52.1	53.4
102.5°	304.7	282.2	233.0	183.8	134.6	85.4	78.3	71.1	63.9	56.9	53.5
105°	399.6	388.3	362.2	336.3	310.3	284.4	233.3	182.2	131.2	80.1	54.8
107.5°	501.5	504.8	509.0	513.0	517.2	521.2	483.7	446.4	408.9	371.4	333.5
110°	570.2	572.9	576.1	579.3	582.5	585.6	576.1	566.5	557.0	547.5	522.1



TEST NUMBER: P332198-840

CATALOG NUMBER: S123DIW-S1000D1320U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	635.7	638.3	641.6	644.7	647.9	651.1	651.3	651.5	651.6	651.8	647.5
115°	732.8	735.0	737.5	740.1	742.8	745.4	748.2	751.1	754.0	756.9	758.9
117.5°	829.7	831.4	832.7	834.1	835.5	836.8	839.1	841.4	843.6	846.0	847.3
120°	890.8	892.5	893.3	894.2	895.1	896.0	898.3	900.6	902.9	905.2	906.4
122.5°	949.2	950.8	951.9	953.0	954.1	955.2	956.8	958.5	960.1	961.7	962.6
125°	1032.5	1034.2	1035.3	1036.5	1037.6	1038.8	1039.4	1040.0	1040.6	1041.1	1041.7
127.5°	1112.5	1114.3	1115.7	1117.1	1118.4	1119.8	1120.7	1121.7	1122.6	1123.6	1123.7
130°	1162.4	1164.1	1165.2	1166.4	1167.5	1168.6	1169.8	1170.9	1172.2	1173.3	1173.6
132.5°	1210.1	1211.7	1212.6	1213.6	1214.5	1215.4	1216.6	1217.7	1218.9	1220.0	1220.2
135°	1280.8	1282.2	1283.3	1284.5	1285.7	1286.9	1287.7	1288.6	1289.4	1290.3	1290.3
137.5°	1344.9	1346.4	1347.0	1347.7	1348.3	1348.9	1350.3	1351.7	1353.0	1354.4	1354.8
140°	1384.6	1385.9	1386.8	1387.7	1388.6	1389.4	1390.6	1391.7	1392.9	1394.0	1394.3
142.5°	1423.1	1424.4	1425.2	1426.1	1426.9	1427.8	1428.8	1429.7	1430.6	1431.6	1431.6
145°	1478.0	1479.3	1479.9	1480.5	1481.1	1481.6	1482.2	1482.8	1483.3	1483.9	1484.2
147.5°	1525.9	1526.8	1527.4	1527.9	1528.5	1529.1	1529.7	1530.2	1530.9	1531.5	1531.1
150°	1555.2	1555.9	1556.5	1557.0	1557.6	1558.2	1558.8	1559.3	1559.9	1560.5	1560.3
152.5°	1581.3	1581.8	1582.2	1582.5	1582.8	1583.2	1584.2	1585.2	1586.3	1587.3	1587.2
155°	1616.9	1616.8	1617.1	1617.4	1617.7	1617.9	1619.4	1620.8	1622.2	1623.8	1623.6
157.5°	1649.6	1649.5	1649.2	1648.9	1648.6	1648.3	1650.0	1651.8	1653.6	1655.3	1655.0
160°	1667.4	1667.2	1666.9	1666.6	1666.3	1666.0	1667.7	1669.4	1671.2	1672.9	1672.7
162.5°	1683.2	1682.7	1682.4	1682.1	1681.8	1681.5	1683.5	1685.5	1687.5	1689.4	1689.5
165°	1704.0	1703.5	1703.2	1702.9	1702.6	1702.3	1704.7	1707.0	1709.3	1711.6	1711.7
167.5°	1719.5	1719.0	1719.0	1719.0	1719.0	1719.0	1721.3	1723.6	1725.9	1728.2	1728.2
170°	1728.9	1728.3	1728.3	1728.3	1728.3	1728.3	1730.6	1732.9	1735.3	1737.6	1737.6
172.5°	1734.2	1733.6	1733.8	1734.1	1734.3	1734.5	1736.9	1739.2	1741.5	1743.8	1743.6
175°	1742.0	1741.4	1741.7	1742.0	1742.3	1742.6	1744.6	1746.7	1748.7	1750.7	1750.5
177.5°	1745.2	1744.8	1745.0	1745.2	1745.5	1745.8	1747.6	1749.4	1751.3	1753.1	1752.9
180°	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8



TEST NUMBER: P332198-840

CATALOG NUMBER: S123DIW-S1000D1320U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4
2.5°	1356.2	1355.7	1359.6	1356.9	1359.6	1355.7	1356.2	1360.1	1361.2	1361.8	1361.8
5°	1262.4	1264.5	1257.6	1257.6	1257.6	1264.5	1262.4	1266.5	1269.9	1272.7	1276.9
7.5°	1178.8	1175.8	1176.1	1172.4	1176.1	1175.8	1178.8	1182.1	1186.5	1192.5	1198.2
10°	1127.7	1123.6	1122.2	1122.9	1122.2	1123.6	1127.7	1136.0	1138.7	1144.2	1150.3
12.5°	1085.4	1084.6	1075.5	1075.6	1075.5	1084.6	1085.4	1087.5	1093.6	1105.2	1112.5
15°	1035.6	1022.6	1021.2	1025.3	1021.2	1022.6	1035.6	1035.6	1038.3	1047.3	1051.5
17.5°	985.7	978.9	979.3	977.2	979.3	978.9	985.7	986.8	989.1	996.3	1001.8
20°	959.4	955.2	954.5	949.7	954.5	955.2	959.4	959.4	962.1	965.5	971.0
22.5°	935.1	933.8	934.2	928.9	934.2	933.8	935.1	936.8	939.6	941.9	945.7
25°	905.0	908.5	905.7	905.7	905.7	908.5	905.0	905.7	906.5	909.9	912.6
27.5°	884.7	884.5	883.2	883.2	883.2	884.5	884.7	883.0	882.2	881.0	880.4
30°	869.3	868.6	870.0	870.0	870.0	868.6	869.3	866.6	865.2	864.5	861.7
32.5°	853.9	854.9	855.2	855.7	855.2	854.9	853.9	850.6	848.2	846.4	844.1
35°	830.1	830.8	832.9	831.5	832.9	830.8	830.1	826.1	823.2	819.1	815.7
37.5°	798.0	801.1	800.4	801.5	800.4	801.1	798.0	796.8	794.0	790.8	786.9
40°	773.8	775.9	775.2	775.2	775.2	775.9	773.8	773.2	770.3	768.3	764.9
42.5°	749.0	750.5	748.8	747.7	748.8	750.5	749.0	747.8	746.2	742.5	738.5
45°	708.5	707.1	709.2	706.4	709.2	707.1	708.5	705.8	705.1	702.4	698.9
47.5°	663.2	664.5	665.1	667.1	665.1	664.5	663.2	663.4	659.5	657.9	656.8
50°	632.9	637.0	637.0	636.3	637.0	637.0	632.9	631.6	628.7	626.0	626.0
52.5°	603.2	605.1	607.9	607.7	607.9	605.1	603.2	600.8	598.0	594.2	593.1
55°	557.3	558.7	560.1	560.8	560.1	558.7	557.3	551.8	549.8	547.8	544.2
57.5°	509.8	509.2	512.5	513.5	512.5	509.2	509.8	504.8	501.7	495.3	494.5
60°	476.3	476.3	481.7	483.8	481.7	476.3	476.3	470.7	466.0	461.8	460.4
62.5°	440.5	442.7	448.2	445.4	448.2	442.7	440.5	434.4	430.7	425.6	421.9
65°	388.3	393.7	393.0	395.9	393.0	393.7	388.3	384.9	377.3	372.4	368.3
67.5°	333.7	337.1	342.0	342.5	342.0	337.1	333.7	328.2	323.3	318.2	313.3
70°	296.9	300.3	303.1	305.1	303.1	300.3	296.9	291.3	285.9	282.5	276.9
72.5°	261.2	263.0	269.5	266.6	269.5	263.0	261.2	254.6	250.1	247.2	241.3
75°	204.8	209.5	213.7	211.7	213.7	209.5	204.8	200.0	196.5	192.4	186.9
77.5°	151.5	156.2	158.1	156.4	158.1	156.2	151.5	148.3	146.5	138.5	137.8
80°	119.6	118.9	123.0	122.3	123.0	118.9	119.6	114.7	111.3	106.5	106.5
82.5°	87.7	87.1	89.0	89.4	89.0	87.1	87.7	85.0	80.6	78.5	76.9
85°	42.6	44.6	41.9	41.2	41.9	44.6	42.6	39.9	39.9	39.9	39.2
87.5°	17.4	17.5	17.1	16.6	17.1	17.5	17.4	17.3	19.3	17.4	17.2
90°	37.3	37.8	38.4	39.0	38.4	37.8	37.3	36.7	35.7	34.6	33.4
92.5°	42.1	42.4	42.7	43.1	42.7	42.4	42.1	41.7	40.6	38.8	37.0
95°	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	48.4	46.4	44.3
97.5°	52.6	52.9	53.2	53.5	53.2	52.9	52.6	52.3	51.0	48.8	46.5
100°	53.6	53.9	54.2	54.5	54.2	53.9	53.6	53.4	52.1	49.8	47.5
102.5°	54.0	54.5	55.0	55.5	55.0	54.5	54.0	53.5	56.9	63.9	71.1
105°	55.4	55.9	56.6	57.2	56.6	55.9	55.4	54.8	80.1	131.2	182.2
107.5°	295.0	256.4	217.9	179.5	217.9	256.4	295.0	333.5	371.4	408.9	446.4
110°	480.9	439.6	398.4	357.1	398.4	439.6	480.9	522.1	547.5	557.0	566.5



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	638.7	630.1	621.4	612.7	621.4	630.1	638.7	647.5	651.8	651.6	651.5
115°	760.0	761.2	762.3	763.6	762.3	761.2	760.0	758.9	756.9	754.0	751.1
117.5°	847.5	847.7	848.0	848.2	848.0	847.7	847.5	847.3	846.0	843.6	841.4
120°	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4	905.2	902.9	900.6
122.5°	962.8	963.0	963.3	963.5	963.3	963.0	962.8	962.6	961.7	960.1	958.5
125°	1042.3	1042.9	1043.4	1044.0	1043.4	1042.9	1042.3	1041.7	1041.1	1040.6	1040.0
127.5°	1123.2	1122.6	1122.0	1121.4	1122.0	1122.6	1123.2	1123.7	1123.6	1122.6	1121.7
130°	1173.0	1172.5	1171.8	1171.2	1171.8	1172.5	1173.0	1173.6	1173.3	1172.2	1170.9
132.5°	1219.4	1218.6	1217.8	1217.0	1217.8	1218.6	1219.4	1220.2	1220.0	1218.9	1217.7
135°	1289.4	1288.6	1287.7	1286.9	1287.7	1288.6	1289.4	1290.3	1290.3	1289.4	1288.6
137.5°	1354.2	1353.7	1353.1	1352.5	1353.1	1353.7	1354.2	1354.8	1354.4	1353.0	1351.7
140°	1393.7	1393.1	1392.6	1392.0	1392.6	1393.1	1393.7	1394.3	1394.0	1392.9	1391.7
142.5°	1430.8	1430.0	1429.2	1428.4	1429.2	1430.0	1430.8	1431.6	1431.6	1430.6	1429.7
145°	1484.2	1484.2	1484.2	1484.2	1484.2	1484.2	1484.2	1484.2	1483.9	1483.3	1482.8
147.5°	1529.7	1528.4	1527.1	1525.7	1527.1	1528.4	1529.7	1531.1	1531.5	1530.9	1530.2
150°	1559.5	1558.6	1557.8	1556.9	1557.8	1558.6	1559.5	1560.3	1560.5	1559.9	1559.3
152.5°	1585.8	1584.5	1583.2	1581.9	1583.2	1584.5	1585.8	1587.2	1587.3	1586.3	1585.2
155°	1621.8	1620.1	1618.4	1616.7	1618.4	1620.1	1621.8	1623.6	1623.8	1622.2	1620.8
157.5°	1652.7	1650.5	1648.2	1646.0	1648.2	1650.5	1652.7	1655.0	1655.3	1653.6	1651.8
160°	1670.7	1668.7	1666.7	1664.7	1666.7	1668.7	1670.7	1672.7	1672.9	1671.2	1669.4
162.5°	1687.7	1686.0	1684.2	1682.3	1684.2	1686.0	1687.7	1689.5	1689.4	1687.5	1685.5
165°	1709.7	1707.7	1705.7	1703.6	1705.7	1707.7	1709.7	1711.7	1711.6	1709.3	1707.0
167.5°	1725.9	1723.6	1721.3	1719.0	1721.3	1723.6	1725.9	1728.2	1728.2	1725.9	1723.6
170°	1735.3	1732.9	1730.6	1728.3	1730.6	1732.9	1735.3	1737.6	1737.6	1735.3	1732.9
172.5°	1741.1	1738.6	1736.1	1733.5	1736.1	1738.6	1741.1	1743.6	1743.8	1741.5	1739.2
175°	1748.3	1746.0	1743.6	1741.3	1743.6	1746.0	1748.3	1750.5	1750.7	1748.7	1746.7
177.5°	1750.6	1748.3	1746.0	1743.6	1746.0	1748.3	1750.6	1752.9	1753.1	1751.3	1749.4
180°	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4
2.5°	1360.1	1360.1	1370.6	1377.2	1385.4	1390.9	1394.7	1398.6	1405.2	1414.0	1423.9
5°	1282.3	1285.1	1300.2	1315.3	1329.8	1342.1	1352.4	1364.8	1379.9	1398.5	1419.1
7.5°	1207.0	1217.6	1232.8	1251.2	1271.4	1289.5	1307.8	1328.1	1349.4	1376.7	1405.6
10°	1158.6	1170.3	1188.8	1212.2	1233.6	1254.9	1277.5	1299.5	1326.3	1358.6	1395.7
12.5°	1116.3	1127.4	1146.5	1172.0	1192.3	1215.8	1241.7	1270.4	1300.5	1339.4	1381.4
15°	1057.6	1070.7	1094.0	1106.4	1137.3	1165.5	1189.5	1230.8	1269.3	1309.1	1358.0
17.5°	1009.5	1016.8	1035.7	1058.7	1081.8	1113.4	1144.9	1179.2	1217.6	1266.4	1327.4
20°	976.5	982.7	1003.3	1027.3	1052.1	1081.0	1109.1	1143.5	1186.8	1238.3	1304.3
22.5°	951.8	958.5	972.0	997.6	1020.8	1044.7	1072.9	1113.8	1159.8	1210.3	1281.8
25°	916.0	920.2	929.1	949.7	970.4	997.1	1021.9	1060.4	1107.8	1166.9	1238.3
27.5°	882.1	886.1	893.5	908.4	927.6	949.3	976.2	1009.0	1057.0	1121.3	1197.1
30°	861.7	862.4	869.3	883.0	899.6	917.5	942.2	979.3	1024.6	1089.9	1169.6
32.5°	844.1	841.5	846.3	856.7	872.6	890.5	910.8	947.4	991.1	1055.3	1137.2
35°	814.4	812.9	810.9	819.8	833.5	847.3	865.2	892.7	942.2	1002.0	1087.8
37.5°	784.0	780.6	777.0	781.0	791.8	806.1	821.6	846.1	888.7	954.5	1036.7
40°	761.4	758.7	756.6	755.3	764.9	778.6	790.3	813.6	853.5	916.0	997.1
42.5°	736.7	735.1	732.5	730.5	738.5	748.9	761.1	781.7	821.6	880.3	957.0
45°	696.8	695.5	694.1	692.7	697.5	707.1	716.8	731.8	766.2	823.2	892.7
47.5°	652.5	650.7	651.2	649.0	653.7	660.1	666.8	683.1	716.1	762.1	812.8
50°	620.6	619.9	619.9	619.9	621.3	628.7	635.0	647.3	677.6	723.7	760.0
52.5°	590.3	587.4	587.4	588.5	591.0	595.8	599.8	613.3	639.6	677.4	710.5
55°	542.9	537.3	536.0	537.3	539.5	543.6	547.8	558.7	581.4	609.6	628.7
57.5°	490.4	487.4	485.5	485.8	487.0	490.3	493.4	505.3	523.2	538.0	550.3
60°	453.5	454.9	448.8	450.1	450.1	452.8	457.7	465.2	480.4	490.7	503.0
62.5°	418.9	417.0	415.3	413.2	413.2	414.3	420.8	426.8	439.7	445.0	454.6
65°	364.9	364.9	360.8	362.1	362.8	358.0	361.4	368.3	376.6	378.7	387.6
67.5°	310.2	308.3	306.0	303.9	303.9	303.5	305.3	308.7	314.9	315.6	322.4
70°	272.9	271.5	270.7	268.7	266.0	269.4	267.3	270.7	274.2	274.9	279.0
72.5°	236.5	235.2	233.9	231.9	230.8	230.4	230.5	234.5	236.8	235.8	240.5
75°	184.9	183.5	182.1	178.6	178.6	176.6	177.3	180.1	182.8	180.8	184.9
77.5°	135.8	131.5	131.3	132.2	129.9	130.3	129.5	129.1	130.3	130.5	134.1
80°	104.4	99.7	101.0	100.4	99.7	99.0	97.6	98.3	99.0	99.7	101.7
82.5°	75.3	74.9	73.5	73.4	72.7	70.9	70.1	71.3	72.0	71.6	73.1
85°	38.5	36.5	37.8	37.1	37.8	37.1	35.0	35.0	36.5	35.7	37.1
87.5°	18.0	17.8	16.5	16.3	14.9	14.7	13.5	13.5	13.5	12.9	13.4
90°	32.3	31.2	27.4	23.6	19.9	16.2	12.8	10.0	7.1	4.1	1.3
92.5°	35.0	33.2	30.4	27.6	24.7	21.9	20.9	21.7	22.5	23.3	24.1
95°	42.3	40.3	37.1	33.9	30.7	27.6	31.9	43.7	55.5	67.4	79.2
97.5°	44.1	41.8	62.6	83.4	104.1	124.9	137.9	143.3	148.6	153.9	159.2
100°	45.1	42.8	87.9	132.9	177.9	222.9	242.6	236.7	231.0	225.2	219.4
102.5°	78.3	85.4	134.6	183.8	233.0	282.2	304.7	300.4	296.3	292.2	288.0
105°	233.3	284.4	310.3	336.3	362.2	388.3	399.6	396.5	393.3	390.1	387.0
107.5°	483.7	521.2	517.2	513.0	509.0	504.8	501.5	499.0	496.4	493.9	491.4
110°	576.1	585.6	582.5	579.3	576.1	572.9	570.2	567.8	565.5	563.3	561.0



TEST NUMBER: P332198-840

CATALOG NUMBER: S123DIW-S1000D1320U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	651.3	651.1	647.9	644.7	641.6	638.3	635.7	633.7	631.6	629.5	627.4
115°	748.2	745.4	742.8	740.1	737.5	735.0	732.8	731.0	729.3	727.6	725.9
117.5°	839.1	836.8	835.5	834.1	832.7	831.4	829.7	827.6	825.5	823.3	821.2
120°	898.3	896.0	895.1	894.2	893.3	892.5	890.8	888.2	885.6	883.0	880.4
122.5°	956.8	955.2	954.1	953.0	951.9	950.8	949.2	947.1	944.9	942.8	940.7
125°	1039.4	1038.8	1037.6	1036.5	1035.3	1034.2	1032.5	1030.2	1027.8	1025.5	1023.2
127.5°	1120.7	1119.8	1118.4	1117.1	1115.7	1114.3	1112.5	1110.1	1107.8	1105.5	1103.2
130°	1169.8	1168.6	1167.5	1166.4	1165.2	1164.1	1162.4	1160.0	1157.7	1155.4	1153.1
132.5°	1216.6	1215.4	1214.5	1213.6	1212.6	1211.7	1210.1	1207.8	1205.5	1203.2	1200.8
135°	1287.7	1286.9	1285.7	1284.5	1283.3	1282.2	1280.8	1279.0	1277.3	1275.6	1273.8
137.5°	1350.3	1348.9	1348.3	1347.7	1347.0	1346.4	1344.9	1342.7	1340.6	1338.4	1336.2
140°	1390.6	1389.4	1388.6	1387.7	1386.8	1385.9	1384.6	1382.9	1381.2	1379.5	1377.8
142.5°	1428.8	1427.8	1426.9	1426.1	1425.2	1424.4	1423.1	1421.4	1419.7	1417.9	1416.1
145°	1482.2	1481.6	1481.1	1480.5	1479.9	1479.3	1478.0	1476.0	1474.0	1472.0	1470.0
147.5°	1529.7	1529.1	1528.5	1527.9	1527.4	1526.8	1525.9	1524.5	1523.2	1521.9	1520.6
150°	1558.8	1558.2	1557.6	1557.0	1556.5	1555.9	1555.2	1554.3	1553.5	1552.6	1551.8
152.5°	1584.2	1583.2	1582.8	1582.5	1582.2	1581.8	1581.3	1580.9	1580.5	1580.1	1579.7
155°	1619.4	1617.9	1617.7	1617.4	1617.1	1616.8	1616.9	1617.5	1618.1	1618.7	1619.2
157.5°	1650.0	1648.3	1648.6	1648.9	1649.2	1649.5	1649.6	1649.7	1649.8	1649.8	1649.9
160°	1667.7	1666.0	1666.3	1666.6	1666.9	1667.2	1667.4	1667.7	1668.0	1668.3	1668.6
162.5°	1683.5	1681.5	1681.8	1682.1	1682.4	1682.7	1683.2	1683.9	1684.8	1685.5	1686.3
165°	1704.7	1702.3	1702.6	1702.9	1703.2	1703.5	1704.0	1705.0	1705.8	1706.7	1707.6
167.5°	1721.3	1719.0	1719.0	1719.0	1719.0	1719.0	1719.5	1720.7	1721.8	1723.0	1724.1
170°	1730.6	1728.3	1728.3	1728.3	1728.3	1728.3	1728.9	1730.1	1731.2	1732.3	1733.5
172.5°	1736.9	1734.5	1734.3	1734.1	1733.8	1733.6	1734.2	1735.6	1737.0	1738.4	1739.8
175°	1744.6	1742.6	1742.3	1742.0	1741.7	1741.4	1742.0	1743.4	1744.9	1746.4	1747.8
177.5°	1747.6	1745.8	1745.5	1745.2	1745.0	1744.8	1745.2	1746.5	1747.6	1748.7	1749.9
180°	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8



TEST NUMBER: P332198-840

CATALOG NUMBER: S123DIW-S1000D1320U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4
2.5°	1427.1	1430.0	1439.3	1445.9	1453.6	1457.9	1462.4	1465.7	1470.1	1471.2	1487.1
5°	1433.5	1447.2	1471.3	1489.1	1511.2	1535.2	1551.7	1559.2	1579.2	1595.7	1628.7
7.5°	1431.7	1461.0	1497.3	1534.9	1575.4	1612.8	1645.2	1683.6	1711.0	1752.1	1792.6
10°	1430.1	1469.3	1516.0	1564.1	1620.4	1672.6	1719.4	1771.6	1814.9	1872.0	1920.8
12.5°	1425.1	1472.6	1537.4	1594.3	1662.7	1734.7	1804.0	1871.1	1909.5	2004.5	2049.4
15°	1412.9	1469.3	1550.3	1636.9	1731.1	1816.2	1904.2	1974.4	2087.7	2170.9	2223.8
17.5°	1389.6	1468.4	1564.6	1669.1	1783.5	1895.8	1995.5	2101.9	2222.1	2322.8	2429.9
20°	1378.6	1465.1	1572.4	1687.8	1806.6	1933.8	2047.2	2175.0	2306.2	2405.2	2542.6
22.5°	1358.2	1456.3	1571.8	1700.4	1827.6	1959.0	2091.7	2220.6	2372.3	2508.6	2639.4
25°	1324.9	1434.9	1554.5	1698.1	1847.2	1979.1	2137.9	2309.1	2467.1	2642.3	2772.9
27.5°	1290.0	1407.3	1527.2	1660.8	1821.2	1977.8	2177.5	2370.9	2564.0	2715.4	2812.1
30°	1263.0	1377.2	1500.9	1635.6	1794.3	1980.5	2203.8	2414.8	2603.1	2733.0	2787.3
32.5°	1234.0	1349.7	1459.1	1600.3	1769.6	1978.8	2220.4	2440.6	2605.4	2691.8	2681.2
35°	1188.2	1285.1	1391.6	1527.6	1727.0	1966.8	2230.0	2443.0	2544.1	2525.5	2385.3
37.5°	1122.2	1203.7	1308.6	1457.5	1677.5	1941.4	2210.7	2370.6	2364.0	2212.9	2009.8
40°	1081.0	1150.3	1251.4	1408.1	1639.0	1924.9	2180.5	2284.3	2196.4	1985.3	1742.0
42.5°	1027.1	1091.0	1192.0	1353.1	1596.7	1891.3	2122.7	2152.8	1980.7	1738.0	1515.0
45°	943.5	999.9	1104.3	1270.6	1533.2	1818.4	1981.9	1908.3	1676.8	1425.9	1256.2
47.5°	853.7	912.3	1012.8	1183.7	1441.4	1708.5	1786.5	1630.0	1392.3	1188.8	1033.0
50°	797.2	853.5	951.8	1124.3	1379.2	1618.4	1650.6	1448.7	1230.1	1051.5	923.6
52.5°	740.0	793.0	889.7	1062.7	1306.7	1513.9	1494.0	1288.1	1087.1	934.8	834.6
55°	654.9	705.1	797.2	959.4	1181.3	1345.5	1273.4	1076.8	910.6	792.3	716.1
57.5°	578.8	626.8	706.3	852.8	1045.8	1158.6	1066.8	901.2	769.0	678.0	621.1
60°	527.0	569.7	645.3	781.3	949.1	1034.9	944.2	797.9	686.5	613.7	562.8
62.5°	478.2	515.2	585.3	708.8	854.4	926.7	834.9	710.9	616.1	551.6	508.4
65°	404.0	437.8	499.6	595.8	715.4	763.5	684.5	584.1	510.6	462.5	433.6
67.5°	336.5	365.1	418.5	494.2	582.2	617.2	557.0	479.4	424.0	385.4	362.4
70°	291.3	316.1	358.0	423.3	503.0	529.9	473.5	409.6	369.0	338.1	316.8
72.5°	253.5	271.6	309.6	360.1	426.6	447.9	408.6	352.4	314.6	291.3	274.5
75°	193.1	208.2	233.0	273.5	319.5	331.9	302.4	267.3	241.9	225.4	212.4
77.5°	139.3	150.4	168.2	193.3	225.1	236.3	217.5	194.2	175.6	164.5	157.2
80°	105.1	114.1	129.2	149.8	169.1	175.2	164.2	146.3	133.3	127.1	121.0
82.5°	77.7	82.7	91.8	105.8	119.1	126.3	116.9	106.2	99.3	93.6	91.3
85°	39.2	41.9	46.0	51.5	59.8	62.5	59.1	56.4	52.2	48.8	48.8
87.5°	15.1	15.8	18.0	19.6	22.5	24.8	25.0	24.7	24.9	24.6	24.2
90°	4.1	7.1	10.0	12.8	16.2	19.9	23.6	27.4	31.2	32.3	33.4
92.5°	23.3	22.5	21.7	20.9	21.9	24.7	27.6	30.4	33.2	35.0	37.0
95°	67.4	55.5	43.7	31.9	27.6	30.7	33.9	37.1	40.3	42.3	44.3
97.5°	153.9	148.6	143.3	137.9	124.9	104.1	83.4	62.6	41.8	44.1	46.5
100°	225.2	231.0	236.7	242.6	222.9	177.9	132.9	87.9	42.8	45.1	47.5
102.5°	292.2	296.3	300.4	304.7	282.2	233.0	183.8	134.6	85.4	78.3	71.1
105°	390.1	393.3	396.5	399.6	388.3	362.2	336.3	310.3	284.4	233.3	182.2
107.5°	493.9	496.4	499.0	501.5	504.8	509.0	513.0	517.2	521.2	483.7	446.4
110°	563.3	565.5	567.8	570.2	572.9	576.1	579.3	582.5	585.6	576.1	566.5



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	629.5	631.6	633.7	635.7	638.3	641.6	644.7	647.9	651.1	651.3	651.5
115°	727.6	729.3	731.0	732.8	735.0	737.5	740.1	742.8	745.4	748.2	751.1
117.5°	823.3	825.5	827.6	829.7	831.4	832.7	834.1	835.5	836.8	839.1	841.4
120°	883.0	885.6	888.2	890.8	892.5	893.3	894.2	895.1	896.0	898.3	900.6
122.5°	942.8	944.9	947.1	949.2	950.8	951.9	953.0	954.1	955.2	956.8	958.5
125°	1025.5	1027.8	1030.2	1032.5	1034.2	1035.3	1036.5	1037.6	1038.8	1039.4	1040.0
127.5°	1105.5	1107.8	1110.1	1112.5	1114.3	1115.7	1117.1	1118.4	1119.8	1120.7	1121.7
130°	1155.4	1157.7	1160.0	1162.4	1164.1	1165.2	1166.4	1167.5	1168.6	1169.8	1170.9
132.5°	1203.2	1205.5	1207.8	1210.1	1211.7	1212.6	1213.6	1214.5	1215.4	1216.6	1217.7
135°	1275.6	1277.3	1279.0	1280.8	1282.2	1283.3	1284.5	1285.7	1286.9	1287.7	1288.6
137.5°	1338.4	1340.6	1342.7	1344.9	1346.4	1347.0	1347.7	1348.3	1348.9	1350.3	1351.7
140°	1379.5	1381.2	1382.9	1384.6	1385.9	1386.8	1387.7	1388.6	1389.4	1390.6	1391.7
142.5°	1417.9	1419.7	1421.4	1423.1	1424.4	1425.2	1426.1	1426.9	1427.8	1428.8	1429.7
145°	1472.0	1474.0	1476.0	1478.0	1479.3	1479.9	1480.5	1481.1	1481.6	1482.2	1482.8
147.5°	1521.9	1523.2	1524.5	1525.9	1526.8	1527.4	1527.9	1528.5	1529.1	1529.7	1530.2
150°	1552.6	1553.5	1554.3	1555.2	1555.9	1556.5	1557.0	1557.6	1558.2	1558.8	1559.3
152.5°	1580.1	1580.5	1580.9	1581.3	1581.8	1582.2	1582.5	1582.8	1583.2	1584.2	1585.2
155°	1618.7	1618.1	1617.5	1616.9	1616.8	1617.1	1617.4	1617.7	1617.9	1619.4	1620.8
157.5°	1649.8	1649.8	1649.7	1649.6	1649.5	1649.2	1648.9	1648.6	1648.3	1650.0	1651.8
160°	1668.3	1668.0	1667.7	1667.4	1667.2	1666.9	1666.6	1666.3	1666.0	1667.7	1669.4
162.5°	1685.5	1684.8	1683.9	1683.2	1682.7	1682.4	1682.1	1681.8	1681.5	1683.5	1685.5
165°	1706.7	1705.8	1705.0	1704.0	1703.5	1703.2	1702.9	1702.6	1702.3	1704.7	1707.0
167.5°	1723.0	1721.8	1720.7	1719.5	1719.0	1719.0	1719.0	1719.0	1719.0	1721.3	1723.6
170°	1732.3	1731.2	1730.1	1728.9	1728.3	1728.3	1728.3	1728.3	1728.3	1730.6	1732.9
172.5°	1738.4	1737.0	1735.6	1734.2	1733.6	1733.8	1734.1	1734.3	1734.5	1736.9	1739.2
175°	1746.4	1744.9	1743.4	1742.0	1741.4	1741.7	1742.0	1742.3	1742.6	1744.6	1746.7
177.5°	1748.7	1747.6	1746.5	1745.2	1744.8	1745.0	1745.2	1745.5	1745.8	1747.6	1749.4
180°	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4
2.5°	1492.6	1493.2	1499.2	1503.6	1501.4	1504.2	1505.2
5°	1630.7	1655.5	1668.5	1678.2	1678.8	1679.5	1685.1
7.5°	1826.5	1853.1	1872.5	1901.9	1910.7	1920.8	1917.8
10°	1969.5	2008.7	2042.4	2060.2	2079.5	2107.7	2085.0
12.5°	2103.1	2172.5	2223.8	2251.6	2269.7	2275.3	2264.2
15°	2323.4	2414.2	2463.0	2461.5	2523.5	2550.2	2508.3
17.5°	2525.5	2609.2	2676.2	2710.6	2762.2	2773.6	2768.3
20°	2649.2	2740.6	2792.8	2851.9	2878.7	2902.8	2906.9
22.5°	2755.8	2837.9	2894.0	2943.2	2965.6	2977.0	2983.8
25°	2865.6	2930.2	2964.0	2981.1	2987.3	2985.9	2977.0
27.5°	2858.1	2863.1	2825.9	2789.6	2756.9	2720.3	2707.5
30°	2783.9	2726.1	2623.0	2564.7	2478.7	2410.7	2438.2
32.5°	2588.7	2473.8	2358.0	2230.4	2124.7	2094.6	2064.4
35°	2209.4	2007.3	1889.2	1751.7	1696.7	1641.7	1604.0
37.5°	1787.5	1631.1	1491.0	1401.1	1345.9	1311.2	1292.5
40°	1545.5	1404.6	1289.2	1216.4	1174.5	1135.3	1129.7
42.5°	1352.5	1221.5	1134.7	1076.7	1036.4	1019.8	1007.7
45°	1107.8	1016.3	958.0	916.8	889.9	879.6	865.9
47.5°	937.7	873.0	829.2	801.1	780.9	773.3	772.1
50°	842.5	788.9	756.6	734.6	718.8	716.1	705.1
52.5°	771.0	724.6	699.4	680.2	668.8	661.1	657.8
55°	669.3	638.4	615.7	604.7	595.8	588.2	588.2
57.5°	585.6	559.8	544.8	535.4	532.7	527.4	523.9
60°	533.9	512.0	500.3	492.0	486.6	487.3	481.0
62.5°	483.4	469.1	458.0	449.7	443.1	443.2	443.6
65°	411.6	400.6	392.4	389.6	385.6	380.7	382.1
67.5°	348.8	338.5	332.0	327.4	326.0	323.4	327.4
70°	303.8	296.2	291.3	287.2	285.9	286.6	290.0
72.5°	262.5	257.1	254.0	252.1	249.0	249.1	251.6
75°	206.1	202.1	199.2	197.2	196.5	196.5	196.5
77.5°	151.5	150.5	149.3	146.2	146.3	147.2	147.3
80°	119.6	117.5	116.8	115.4	113.4	112.0	115.4
82.5°	89.4	87.3	86.5	86.3	83.1	82.9	85.7
85°	48.1	46.0	46.8	46.0	46.0	45.3	45.3
87.5°	23.9	23.6	23.2	23.9	23.5	23.0	24.2
90°	34.6	35.7	36.7	37.3	37.8	38.4	39.0
92.5°	38.8	40.6	41.7	42.1	42.4	42.7	43.1
95°	46.4	48.4	49.4	49.4	49.4	49.4	49.4
97.5°	48.8	51.0	52.3	52.6	52.9	53.2	53.5
100°	49.8	52.1	53.4	53.6	53.9	54.2	54.5
102.5°	63.9	56.9	53.5	54.0	54.5	55.0	55.5
105°	131.2	80.1	54.8	55.4	55.9	56.6	57.2
107.5°	408.9	371.4	333.5	295.0	256.4	217.9	179.5
110°	557.0	547.5	522.1	480.9	439.6	398.4	357.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	651.6	651.8	647.5	638.7	630.1	621.4	612.7
115°	754.0	756.9	758.9	760.0	761.2	762.3	763.6
117.5°	843.6	846.0	847.3	847.5	847.7	848.0	848.2
120°	902.9	905.2	906.4	906.4	906.4	906.4	906.4
122.5°	960.1	961.7	962.6	962.8	963.0	963.3	963.5
125°	1040.6	1041.1	1041.7	1042.3	1042.9	1043.4	1044.0
127.5°	1122.6	1123.6	1123.7	1123.2	1122.6	1122.0	1121.4
130°	1172.2	1173.3	1173.6	1173.0	1172.5	1171.8	1171.2
132.5°	1218.9	1220.0	1220.2	1219.4	1218.6	1217.8	1217.0
135°	1289.4	1290.3	1290.3	1289.4	1288.6	1287.7	1286.9
137.5°	1353.0	1354.4	1354.8	1354.2	1353.7	1353.1	1352.5
140°	1392.9	1394.0	1394.3	1393.7	1393.1	1392.6	1392.0
142.5°	1430.6	1431.6	1431.6	1430.8	1430.0	1429.2	1428.4
145°	1483.3	1483.9	1484.2	1484.2	1484.2	1484.2	1484.2
147.5°	1530.9	1531.5	1531.1	1529.7	1528.4	1527.1	1525.7
150°	1559.9	1560.5	1560.3	1559.5	1558.6	1557.8	1556.9
152.5°	1586.3	1587.3	1587.2	1585.8	1584.5	1583.2	1581.9
155°	1622.2	1623.8	1623.6	1621.8	1620.1	1618.4	1616.7
157.5°	1653.6	1655.3	1655.0	1652.7	1650.5	1648.2	1646.0
160°	1671.2	1672.9	1672.7	1670.7	1668.7	1666.7	1664.7
162.5°	1687.5	1689.4	1689.5	1687.7	1686.0	1684.2	1682.3
165°	1709.3	1711.6	1711.7	1709.7	1707.7	1705.7	1703.6
167.5°	1725.9	1728.2	1728.2	1725.9	1723.6	1721.3	1719.0
170°	1735.3	1737.6	1737.6	1735.3	1732.9	1730.6	1728.3
172.5°	1741.5	1743.8	1743.6	1741.1	1738.6	1736.1	1733.5
175°	1748.7	1750.7	1750.5	1748.3	1746.0	1743.6	1741.3
177.5°	1751.3	1753.1	1752.9	1750.6	1748.3	1746.0	1743.6
180°	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8	1747.8

(END OF REPORT)