

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: P332478-940

Luminaire Tested: **S123RDIW-S1165D1030U940-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332478-940  
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: S123RDIW-S1165D1030U940-4F0-1E-UDD-A  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1030 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7756.0 lumens  
Efficiency: N/A  
Efficacy: 115.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: General Diffuse

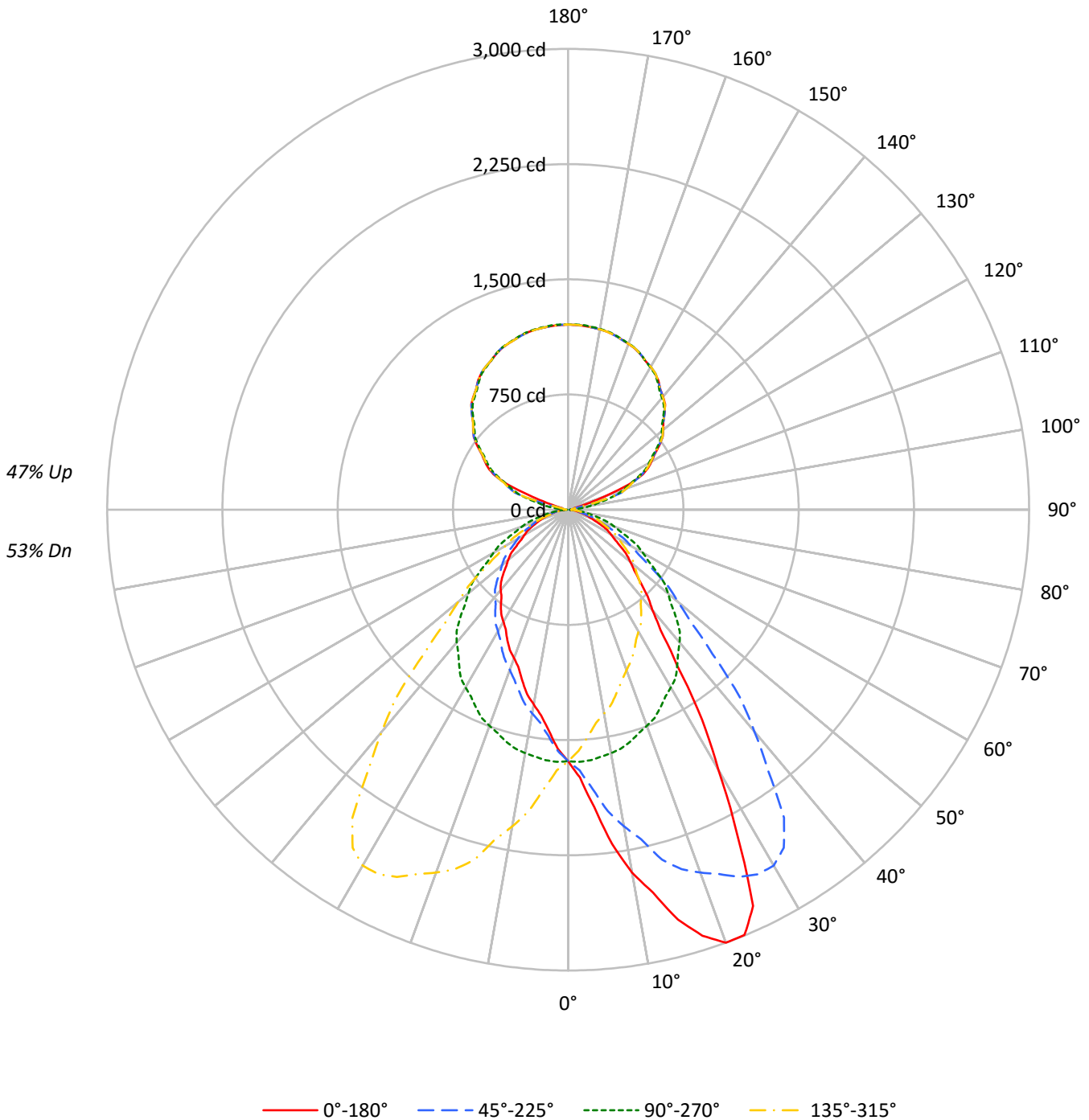
Input Watts (W): 67.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	99	95	91	88	92	88	85	82	75	73	71	63	62	60	53	52	51	46
2	91	84	78	73	84	78	73	68	67	63	60	57	54	51	47	45	44	39
3	83	74	67	61	77	69	63	58	59	55	51	50	47	44	42	40	38	34
4	76	66	58	52	70	61	55	50	53	48	44	45	42	38	38	35	33	30
5	70	59	51	45	65	55	48	43	48	42	38	41	37	34	35	32	29	26
6	65	53	45	40	60	50	43	38	43	38	34	37	33	30	32	28	26	23
7	60	48	40	35	56	45	38	33	39	34	30	34	30	27	29	26	23	21
8	56	44	36	31	52	41	34	30	36	31	27	31	27	24	27	23	21	19
9	52	40	33	28	48	38	31	27	33	28	24	29	25	22	25	21	19	17
10	49	37	30	25	45	35	28	24	31	25	22	27	23	20	23	20	17	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	17623	17623	17623	17623
5°	21007	17698	15584	17698
10°	26230	17596	14080	17596
15°	30788	17416	12840	17416
20°	34360	17148	11786	17148
25°	33812	16865	11137	16865
30°	24304	16604	10470	16604
35°	16227	16264	10038	16264
40°	11956	15855	9591	15855
45°	10029	15139	9155	15139
50°	8848	14200	8544	14200
55°	7760	13127	7707	13127
60°	6910	12099	7061	12099
65°	6069	10998	6569	10998
70°	4765	10014	5998	10014
75°	4196	8746	5481	8746
80°	3651	7426	5387	7426
85°	2939	5965	5718	5965



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.0	2.1
10°-20°	503.0	6.5
20°-30°	790.2	10.2
30°-40°	824.4	10.6
40°-50°	705.6	9.1
50°-60°	537.8	6.9
60°-70°	344.7	4.4
70°-80°	165.8	2.1
80°-90°	47.3	0.6
90°-100°	43.8	0.6
100°-110°	208.9	2.7
110°-120°	501.7	6.5
120°-130°	638.9	8.2
130°-140°	682.7	8.8
140°-150°	638.4	8.2
150°-160°	514.9	6.6
160°-170°	332.3	4.3
170°-180°	114.5	1.5
0°-30°	1454.2	18.7
0°-40°	2278.7	29.4
0°-60°	3522.0	45.4
0°-90°	4079.7	52.6
90°-120°	754.5	9.7
90°-150°	2714.5	35.0
90°-180°	3676.0	47.4
0°-180°	7756.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1637	1637	1637	1637	1637	
5°	1944	1638	1442	1638	1944	201
15°	2763	1563	1152	1563	2763	783
25°	2847	1420	938	1420	2847	1224
35°	1235	1238	764	1238	1235	810
45°	659	994	601	994	659	518
55°	414	700	411	700	414	374
65°	238	432	258	432	238	234
75°	101	210	132	210	101	108
85°	24	48	46	48	24	28
90°	27	1	27	1	27	13
95°	34	55	34	55	34	28
105°	39	267	39	267	39	90
115°	527	501	527	501	527	487
125°	720	706	720	706	720	643
135°	888	879	888	879	888	684
145°	1024	1014	1024	1014	1024	639
155°	1115	1117	1115	1117	1115	514
165°	1175	1178	1175	1178	1175	332
175°	1201	1206	1201	1206	1201	114
180°	1206	1206	1206	1206	1206	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1743.7	1746.0	1738.7	1737.6	1729.1	1726.9	1726.9	1715.1	1707.8	1698.4	1692.7
5°	1944.2	1955.4	1949.8	1937.2	1916.1	1911.2	1897.9	1876.9	1853.1	1823.6	1809.6
7.5°	2194.5	2209.8	2204.0	2184.4	2162.4	2144.7	2107.0	2072.2	2023.2	1980.3	1943.6
10°	2399.8	2383.6	2371.0	2352.1	2331.7	2298.8	2259.6	2205.6	2143.2	2094.2	2039.5
12.5°	2553.3	2550.7	2534.7	2515.2	2486.5	2455.2	2407.0	2341.3	2268.8	2197.9	2135.4
15°	2762.8	2767.0	2756.5	2736.1	2695.5	2640.1	2567.2	2539.9	2436.2	2359.1	2282.0
17.5°	2907.7	2906.9	2905.5	2877.3	2835.8	2796.4	2728.8	2656.9	2563.0	2454.4	2350.5
20°	2999.6	2992.7	2994.1	2962.5	2931.7	2886.1	2820.2	2715.8	2638.8	2513.3	2406.0
22.5°	2997.4	2996.1	3001.3	2990.5	2968.1	2933.2	2881.4	2793.2	2694.8	2568.2	2447.6
25°	2846.9	2841.3	2874.3	2883.3	2919.1	2925.3	2909.9	2861.6	2768.4	2638.0	2488.8
27.5°	2382.7	2379.5	2440.7	2517.2	2614.2	2689.6	2762.5	2797.7	2768.4	2675.0	2525.5
30°	1955.4	2021.2	2052.1	2162.8	2286.2	2433.4	2562.3	2684.9	2715.1	2674.5	2551.8
32.5°	1623.4	1681.0	1706.7	1801.8	1916.7	2089.1	2282.5	2456.2	2578.9	2609.9	2536.1
35°	1234.9	1235.6	1294.5	1336.5	1443.1	1620.4	1808.2	2040.9	2272.2	2447.4	2465.6
37.5°	985.4	988.9	1024.5	1066.4	1146.3	1240.1	1405.5	1598.9	1866.1	2135.1	2292.8
40°	850.9	857.1	883.8	925.1	982.6	1053.4	1182.3	1364.6	1587.4	1886.7	2131.3
42.5°	764.5	774.7	788.5	820.3	855.9	922.2	1026.4	1167.2	1369.9	1652.9	1935.1
45°	658.8	664.4	674.9	689.6	721.8	768.1	838.2	932.8	1101.1	1328.8	1611.2
47.5°	581.1	578.2	589.2	601.2	622.7	654.2	701.2	778.4	898.4	1081.1	1320.7
50°	528.4	527.7	535.5	544.6	564.9	588.0	626.6	684.7	780.1	931.5	1150.8
52.5°	479.1	481.8	487.2	498.6	513.3	532.0	566.6	608.5	690.4	821.0	1003.9
55°	413.5	415.6	423.3	429.6	440.1	459.1	480.8	515.9	571.9	663.0	813.7
57.5°	358.0	357.0	364.4	366.0	377.9	393.3	410.1	437.3	478.0	545.7	647.2
60°	321.0	318.9	325.2	330.1	336.4	349.0	363.0	389.7	422.0	471.7	558.6
62.5°	287.3	286.3	291.0	295.9	301.1	312.5	324.3	344.8	370.3	412.2	481.2
65°	238.3	240.4	242.5	244.6	247.4	254.4	265.6	279.6	297.2	326.6	376.4
67.5°	187.3	189.4	190.1	194.4	200.5	204.8	211.7	224.2	236.3	261.2	289.4
70°	151.4	150.7	151.4	153.5	161.2	168.9	178.0	187.2	194.8	212.3	236.2
72.5°	130.1	128.9	130.6	131.1	134.8	137.0	142.7	151.2	161.2	173.1	190.2
75°	100.9	100.9	100.9	100.9	103.7	105.1	107.3	109.3	112.8	118.4	131.1
77.5°	74.5	74.7	75.7	76.4	77.0	77.8	79.1	81.1	82.4	85.3	90.9
80°	58.9	59.6	58.9	59.6	59.6	61.0	61.7	63.8	64.5	67.9	70.1
82.5°	44.3	43.9	44.3	45.0	45.0	46.4	46.5	48.1	48.2	50.0	52.2
85°	23.8	22.5	23.8	23.1	24.5	23.1	23.8	25.2	25.2	25.9	28.7
87.5°	11.0	12.0	10.8	11.3	11.2	11.7	11.5	11.3	12.3	11.6	11.6
90°	26.8	26.5	26.0	25.7	25.2	24.7	23.9	23.1	22.3	21.5	18.9
92.5°	29.7	29.5	29.2	29.0	28.8	28.0	26.8	25.5	24.2	22.9	21.0
95°	34.1	34.1	34.1	34.1	34.1	33.3	31.9	30.6	29.2	27.7	25.6
97.5°	36.9	36.7	36.5	36.3	36.1	35.2	33.6	32.0	30.4	28.8	43.2
100°	37.6	37.5	37.2	37.0	36.8	35.9	34.3	32.7	31.1	29.5	60.6
102.5°	38.3	38.0	37.6	37.3	36.9	39.1	44.1	49.0	54.0	58.9	92.8
105°	39.4	39.0	38.6	38.3	37.8	55.2	90.4	125.7	161.0	196.2	214.1
107.5°	123.8	150.3	176.9	203.4	230.0	256.2	282.0	307.8	333.7	359.5	356.7
110°	246.3	274.7	303.2	331.7	360.2	377.6	384.2	390.8	397.3	403.9	401.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	422.6	428.6	434.6	440.6	446.6	449.5	449.4	449.3	449.2	449.1	446.9
115°	526.6	525.8	525.0	524.2	523.4	522.1	520.0	518.1	516.1	514.1	512.3
117.5°	585.1	584.9	584.7	584.5	584.4	583.5	581.9	580.3	578.7	577.1	576.2
120°	625.2	625.2	625.2	625.2	625.2	624.4	622.8	621.2	619.6	618.0	617.4
122.5°	664.6	664.4	664.2	664.1	664.0	663.3	662.2	661.0	660.0	658.8	658.1
125°	720.1	719.7	719.3	718.9	718.5	718.1	717.7	717.3	716.9	716.5	715.7
127.5°	773.5	773.9	774.3	774.6	775.1	775.0	774.3	773.6	773.0	772.4	771.4
130°	807.9	808.2	808.7	809.0	809.5	809.2	808.4	807.7	806.9	806.1	805.3
132.5°	839.4	840.0	840.5	841.1	841.6	841.5	840.7	839.9	839.1	838.3	837.7
135°	887.6	888.1	888.8	889.4	889.9	889.9	889.4	888.8	888.1	887.6	886.8
137.5°	932.9	933.3	933.7	934.1	934.5	934.2	933.3	932.3	931.3	930.4	930.0
140°	960.1	960.6	960.9	961.4	961.7	961.5	960.7	959.9	959.1	958.3	957.7
142.5°	985.2	985.8	986.3	986.9	987.4	987.4	986.8	986.1	985.5	984.8	984.3
145°	1023.7	1023.7	1023.7	1023.7	1023.7	1023.5	1023.1	1022.7	1022.3	1021.9	1021.5
147.5°	1052.4	1053.3	1054.2	1055.2	1056.1	1056.3	1055.9	1055.5	1055.1	1054.7	1054.3
150°	1073.9	1074.5	1075.0	1075.7	1076.3	1076.4	1075.9	1075.6	1075.1	1074.8	1074.3
152.5°	1091.1	1092.0	1092.9	1093.8	1094.8	1094.8	1094.1	1093.4	1092.7	1092.0	1091.7
155°	1115.1	1116.2	1117.5	1118.7	1119.8	1120.0	1118.9	1117.9	1117.0	1116.0	1115.8
157.5°	1135.3	1136.8	1138.4	1140.0	1141.5	1141.7	1140.5	1139.3	1138.1	1136.9	1137.1
160°	1148.2	1149.6	1151.0	1152.4	1153.8	1153.9	1152.7	1151.5	1150.3	1149.1	1149.3
162.5°	1160.4	1161.6	1162.9	1164.1	1165.3	1165.3	1164.0	1162.5	1161.2	1159.8	1160.0
165°	1175.1	1176.4	1177.9	1179.3	1180.6	1180.5	1178.9	1177.3	1175.8	1174.2	1174.4
167.5°	1185.6	1187.2	1188.8	1190.4	1192.0	1192.0	1190.4	1188.8	1187.2	1185.6	1185.6
170°	1192.1	1193.6	1195.2	1196.9	1198.5	1198.5	1196.9	1195.2	1193.6	1192.1	1192.1
172.5°	1195.7	1197.4	1199.2	1201.0	1202.7	1202.7	1201.1	1199.6	1198.0	1196.4	1196.2
175°	1201.0	1202.7	1204.3	1205.9	1207.5	1207.6	1206.1	1204.7	1203.4	1201.9	1201.8
177.5°	1202.7	1204.3	1205.9	1207.5	1209.1	1209.2	1207.9	1206.7	1205.4	1204.1	1203.9
180°	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1690.5	1688.8	1681.0	1672.0	1660.2	1652.3	1646.2	1642.8	1632.7	1620.4	1611.9
5°	1794.9	1773.9	1751.4	1724.1	1698.9	1672.9	1656.8	1637.9	1614.8	1588.9	1570.7
7.5°	1906.7	1865.5	1821.1	1775.3	1730.0	1689.3	1653.5	1622.7	1585.9	1548.7	1522.7
10°	1992.5	1932.2	1869.9	1806.1	1747.9	1693.3	1651.2	1609.9	1565.8	1523.0	1490.8
12.5°	2070.5	1991.1	1919.2	1840.8	1766.5	1701.1	1640.6	1591.9	1538.8	1493.3	1456.5
15°	2169.2	2087.9	2000.9	1881.8	1783.0	1700.3	1626.7	1562.9	1498.4	1442.3	1406.6
17.5°	2261.4	2139.0	2022.2	1922.9	1794.5	1691.1	1601.3	1525.1	1454.3	1394.8	1350.9
20°	2299.5	2181.0	2054.2	1927.3	1801.2	1685.6	1581.1	1497.0	1423.4	1356.1	1315.5
22.5°	2322.5	2188.3	2054.8	1918.4	1784.4	1664.3	1560.9	1468.5	1388.7	1324.7	1274.6
25°	2349.3	2189.5	2042.3	1907.7	1771.0	1640.7	1518.0	1420.0	1333.7	1265.8	1212.5
27.5°	2367.0	2179.0	2005.0	1855.5	1716.8	1587.0	1474.6	1370.6	1283.2	1211.2	1154.1
30°	2370.3	2170.5	1976.4	1814.5	1673.7	1554.5	1435.4	1335.9	1243.3	1166.9	1113.7
32.5°	2374.8	2149.8	1937.7	1765.8	1621.5	1503.5	1395.5	1300.5	1205.8	1130.5	1076.1
35°	2356.3	2138.3	1879.0	1681.3	1537.0	1422.7	1325.3	1237.7	1144.5	1071.6	1016.3
37.5°	2276.6	2092.8	1818.2	1586.4	1435.4	1329.5	1250.2	1173.8	1088.3	1009.7	957.5
40°	2196.5	2047.9	1771.0	1528.6	1370.9	1262.2	1190.8	1128.4	1045.7	972.1	916.1
42.5°	2077.1	1986.8	1726.2	1468.0	1298.0	1193.3	1133.0	1074.5	1001.9	927.2	874.5
45°	1858.0	1869.9	1634.4	1371.5	1197.0	1091.9	1035.2	994.5	930.1	868.3	814.4
47.5°	1583.2	1694.7	1526.6	1268.8	1090.7	992.0	942.4	906.9	863.4	802.9	753.7
50°	1403.8	1562.9	1440.3	1199.9	1024.0	925.9	876.7	848.0	810.2	762.5	715.6
52.5°	1238.4	1409.3	1336.0	1123.0	951.6	861.9	814.0	790.3	760.3	715.4	673.0
55°	1010.0	1183.0	1166.3	1007.1	843.1	762.5	726.1	699.5	679.1	645.5	611.9
57.5°	816.9	981.1	989.7	878.2	747.5	667.9	636.5	616.4	603.2	577.8	546.7
60°	695.3	846.0	875.4	791.3	679.1	609.0	578.2	562.0	551.6	531.3	507.4
62.5°	594.3	722.6	755.9	695.4	613.5	548.0	523.8	508.3	501.1	483.6	462.5
65°	454.9	561.4	593.6	560.0	517.2	464.7	445.1	431.8	425.4	415.6	400.2
67.5°	342.1	419.6	455.0	431.3	415.9	382.6	370.1	363.0	357.4	350.7	337.8
70°	274.7	332.2	368.6	362.3	349.7	332.2	323.1	318.2	312.5	307.0	295.8
72.5°	220.9	260.5	294.6	297.8	287.5	284.0	276.0	273.9	270.5	263.8	257.6
75°	146.5	173.8	197.6	206.8	211.0	214.5	211.0	210.3	209.6	203.9	200.5
77.5°	96.0	110.8	125.7	141.3	147.8	152.7	153.7	156.3	154.4	151.5	149.8
80°	73.6	77.1	87.6	100.9	111.5	115.7	118.4	119.8	119.1	118.4	115.7
82.5°	53.4	56.4	61.3	70.6	79.5	86.5	88.2	87.9	89.4	89.9	87.6
85°	28.7	29.4	30.9	32.3	37.2	44.9	47.0	48.3	49.8	49.8	45.6
87.5°	12.2	11.1	11.8	11.3	12.6	12.8	15.7	18.1	19.1	17.2	17.7
90°	16.3	13.7	11.1	8.8	6.9	4.9	2.9	0.9	2.9	4.9	6.9
92.5°	19.0	17.1	15.2	14.4	15.0	15.5	16.1	16.7	16.1	15.5	15.0
95°	23.4	21.2	19.0	22.0	30.1	38.3	46.5	54.7	46.5	38.3	30.1
97.5°	57.5	71.9	86.1	95.1	98.8	102.5	106.1	109.8	106.1	102.5	98.8
100°	91.7	122.7	153.7	167.3	163.3	159.3	155.3	151.3	155.3	159.3	163.3
102.5°	126.8	160.7	194.6	210.1	207.2	204.4	201.5	198.7	201.5	204.4	207.2
105°	231.9	249.9	267.8	275.6	273.5	271.3	269.1	266.9	269.1	271.3	273.5
107.5°	353.8	351.1	348.2	345.9	344.2	342.4	340.6	338.9	340.6	342.4	344.2
110°	399.6	397.3	395.2	393.2	391.7	390.1	388.5	386.9	388.5	390.1	391.7





TEST NUMBER: P332478-940

CATALOG NUMBER: S123RDIW-S1165D1030U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	444.7	442.5	440.3	438.5	437.1	435.6	434.2	432.7	434.2	435.6	437.1
115°	510.5	508.7	506.9	505.4	504.3	503.0	501.9	500.7	501.9	503.0	504.3
117.5°	575.3	574.4	573.5	572.3	570.8	569.4	567.8	566.4	567.8	569.4	570.8
120°	616.8	616.2	615.6	614.4	612.6	610.8	609.0	607.3	609.0	610.8	612.6
122.5°	657.3	656.6	655.8	654.7	653.2	651.8	650.2	648.8	650.2	651.8	653.2
125°	714.9	714.1	713.4	712.1	710.5	708.9	707.4	705.8	707.4	708.9	710.5
127.5°	770.5	769.5	768.6	767.3	765.7	764.1	762.5	760.9	762.5	764.1	765.7
130°	804.5	803.7	802.9	801.7	800.1	798.5	796.9	795.3	796.9	798.5	800.1
132.5°	837.0	836.4	835.8	834.6	833.0	831.4	829.9	828.3	829.9	831.4	833.0
135°	886.0	885.2	884.4	883.4	882.2	881.0	879.9	878.6	879.9	881.0	882.2
137.5°	929.5	929.1	928.6	927.6	926.1	924.6	923.1	921.6	923.1	924.6	926.1
140°	957.2	956.5	955.9	955.0	953.9	952.7	951.5	950.3	951.5	952.7	953.9
142.5°	983.6	983.0	982.5	981.6	980.3	979.2	977.9	976.8	977.9	979.2	980.3
145°	1021.1	1020.7	1020.3	1019.4	1018.1	1016.6	1015.2	1013.9	1015.2	1016.6	1018.1
147.5°	1053.9	1053.5	1053.1	1052.5	1051.5	1050.6	1049.7	1048.8	1049.7	1050.6	1051.5
150°	1074.0	1073.5	1073.2	1072.6	1072.1	1071.5	1070.9	1070.3	1070.9	1071.5	1072.1
152.5°	1091.5	1091.3	1091.0	1090.7	1090.5	1090.2	1089.9	1089.7	1089.9	1090.2	1090.5
155°	1115.5	1115.4	1115.2	1115.3	1115.7	1116.1	1116.4	1116.9	1116.4	1116.1	1115.7
157.5°	1137.3	1137.6	1137.7	1137.8	1137.9	1137.9	1138.0	1138.0	1138.0	1137.9	1137.9
160°	1149.5	1149.7	1149.9	1150.1	1150.3	1150.5	1150.7	1150.9	1150.7	1150.5	1150.3
162.5°	1160.3	1160.5	1160.7	1161.0	1161.5	1162.1	1162.5	1163.1	1162.5	1162.1	1161.5
165°	1174.6	1174.7	1175.0	1175.4	1176.0	1176.6	1177.1	1177.8	1177.1	1176.6	1176.0
167.5°	1185.6	1185.6	1185.6	1186.1	1186.9	1187.7	1188.5	1189.2	1188.5	1187.7	1186.9
170°	1192.1	1192.1	1192.1	1192.5	1193.3	1194.1	1194.9	1195.7	1194.9	1194.1	1193.3
172.5°	1196.1	1195.9	1195.8	1196.1	1197.1	1198.1	1199.0	1200.0	1199.0	1198.1	1197.1
175°	1201.6	1201.3	1201.1	1201.6	1202.6	1203.5	1204.5	1205.5	1204.5	1203.5	1202.6
177.5°	1203.8	1203.6	1203.5	1203.8	1204.6	1205.4	1206.1	1206.9	1206.1	1205.4	1204.6
180°	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1609.2	1601.9	1596.9	1585.6	1578.3	1570.5	1562.6	1567.7	1567.1	1566.6	1566.6
5°	1555.2	1539.1	1524.4	1505.5	1493.5	1478.8	1467.6	1466.2	1469.0	1459.2	1453.6
7.5°	1501.6	1479.6	1458.7	1437.9	1415.8	1398.1	1387.0	1381.8	1374.7	1368.6	1362.4
10°	1464.1	1438.2	1417.8	1391.9	1368.1	1347.0	1333.7	1324.6	1319.7	1314.8	1305.7
12.5°	1425.4	1400.1	1374.1	1344.8	1322.1	1297.7	1287.7	1277.6	1268.1	1262.7	1250.2
15°	1368.8	1335.9	1308.5	1277.6	1252.4	1228.6	1214.6	1194.3	1191.4	1184.5	1171.8
17.5°	1312.0	1276.2	1238.6	1215.7	1187.2	1162.4	1141.1	1134.3	1114.2	1106.6	1095.7
20°	1267.1	1234.2	1205.5	1175.4	1134.0	1110.9	1094.0	1084.9	1068.8	1059.0	1052.0
22.5°	1228.4	1195.0	1161.7	1126.6	1092.5	1066.6	1054.3	1040.1	1031.3	1017.5	1010.0
25°	1173.2	1136.8	1096.8	1059.0	1034.5	1014.9	995.2	982.6	970.0	963.7	949.7
27.5°	1109.0	1070.9	1033.6	1004.9	974.7	955.4	937.6	926.4	911.2	900.6	892.9
30°	1073.7	1028.9	996.6	970.7	932.1	913.9	900.6	886.6	875.4	864.2	856.5
32.5°	1032.8	991.8	961.3	929.2	899.6	879.7	862.5	850.2	840.6	829.9	822.2
35°	968.6	934.2	902.7	870.5	848.7	828.4	808.1	797.5	788.5	778.6	771.7
37.5°	910.5	878.4	848.5	817.9	790.9	774.5	758.0	750.0	737.7	731.1	724.0
40°	874.7	843.1	810.9	781.5	753.4	740.8	726.1	714.2	702.9	698.0	690.4
42.5°	835.4	803.9	776.7	745.0	722.0	704.9	691.3	678.3	669.9	662.7	658.4
45°	777.2	749.2	722.6	691.1	669.3	654.6	639.2	627.2	619.6	614.7	606.9
47.5°	720.8	692.8	665.7	638.2	617.2	600.4	585.0	576.7	566.4	560.4	555.2
50°	679.8	654.6	625.9	600.7	579.6	562.8	550.2	539.7	530.6	522.8	519.3
52.5°	642.3	615.4	590.6	566.9	544.8	525.8	514.2	503.2	496.3	487.5	483.5
55°	580.3	554.4	533.3	510.2	488.5	472.3	458.3	448.5	441.6	431.8	426.1
57.5°	522.1	498.9	473.8	453.7	431.3	417.7	406.1	392.8	384.2	376.5	371.0
60°	482.9	456.3	434.5	415.6	396.0	378.4	367.9	357.4	348.3	340.6	335.7
62.5°	441.9	418.7	398.1	377.5	359.5	344.3	332.1	323.2	315.2	310.3	305.4
65°	379.2	361.0	339.9	323.1	306.3	295.1	285.3	277.5	272.0	268.4	264.2
67.5°	321.4	303.7	285.3	268.9	257.6	249.1	242.6	236.0	233.3	228.7	226.0
70°	283.8	265.6	249.5	236.9	225.7	219.4	215.2	210.3	207.4	201.9	199.0
72.5°	242.9	229.7	218.1	207.8	198.8	193.1	187.7	181.6	177.2	171.0	168.2
75°	191.4	179.4	170.3	163.3	157.7	150.0	142.3	136.0	133.8	131.8	131.1
77.5°	141.7	134.1	127.5	121.6	114.7	109.1	107.4	105.9	105.6	104.4	104.4
80°	111.5	104.4	99.5	92.5	88.3	88.3	88.3	86.9	87.6	87.6	87.6
82.5°	82.8	76.4	73.7	71.2	70.4	70.9	70.9	71.2	70.8	71.9	71.3
85°	42.7	43.4	44.9	44.1	44.9	44.9	46.3	45.6	46.3	44.9	46.3
87.5°	17.5	19.6	20.7	21.8	22.8	22.8	23.5	23.7	24.4	24.5	24.7
90°	8.8	11.1	13.7	16.3	18.9	21.5	22.3	23.1	23.9	24.7	25.2
92.5°	14.4	15.2	17.1	19.0	21.0	22.9	24.2	25.5	26.8	28.0	28.8
95°	22.0	19.0	21.2	23.4	25.6	27.7	29.2	30.6	31.9	33.3	34.1
97.5°	95.1	86.1	71.9	57.5	43.2	28.8	30.4	32.0	33.6	35.2	36.1
100°	167.3	153.7	122.7	91.7	60.6	29.5	31.1	32.7	34.3	35.9	36.8
102.5°	210.1	194.6	160.7	126.8	92.8	58.9	54.0	49.0	44.1	39.1	36.9
105°	275.6	267.8	249.9	231.9	214.1	196.2	161.0	125.7	90.4	55.2	37.8
107.5°	345.9	348.2	351.1	353.8	356.7	359.5	333.7	307.8	282.0	256.2	230.0
110°	393.2	395.2	397.3	399.6	401.7	403.9	397.3	390.8	384.2	377.6	360.2



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	438.5	440.3	442.5	444.7	446.9	449.1	449.2	449.3	449.4	449.5	446.6
115°	505.4	506.9	508.7	510.5	512.3	514.1	516.1	518.1	520.0	522.1	523.4
117.5°	572.3	573.5	574.4	575.3	576.2	577.1	578.7	580.3	581.9	583.5	584.4
120°	614.4	615.6	616.2	616.8	617.4	618.0	619.6	621.2	622.8	624.4	625.2
122.5°	654.7	655.8	656.6	657.3	658.1	658.8	660.0	661.0	662.2	663.3	664.0
125°	712.1	713.4	714.1	714.9	715.7	716.5	716.9	717.3	717.7	718.1	718.5
127.5°	767.3	768.6	769.5	770.5	771.4	772.4	773.0	773.6	774.3	775.0	775.1
130°	801.7	802.9	803.7	804.5	805.3	806.1	806.9	807.7	808.4	809.2	809.5
132.5°	834.6	835.8	836.4	837.0	837.7	838.3	839.1	839.9	840.7	841.5	841.6
135°	883.4	884.4	885.2	886.0	886.8	887.6	888.1	888.8	889.4	889.9	889.9
137.5°	927.6	928.6	929.1	929.5	930.0	930.4	931.3	932.3	933.3	934.2	934.5
140°	955.0	955.9	956.5	957.2	957.7	958.3	959.1	959.9	960.7	961.5	961.7
142.5°	981.6	982.5	983.0	983.6	984.3	984.8	985.5	986.1	986.8	987.4	987.4
145°	1019.4	1020.3	1020.7	1021.1	1021.5	1021.9	1022.3	1022.7	1023.1	1023.5	1023.7
147.5°	1052.5	1053.1	1053.5	1053.9	1054.3	1054.7	1055.1	1055.5	1055.9	1056.3	1056.1
150°	1072.6	1073.2	1073.5	1074.0	1074.3	1074.8	1075.1	1075.6	1075.9	1076.4	1076.3
152.5°	1090.7	1091.0	1091.3	1091.5	1091.7	1092.0	1092.7	1093.4	1094.1	1094.8	1094.8
155°	1115.3	1115.2	1115.4	1115.5	1115.8	1116.0	1117.0	1117.9	1118.9	1120.0	1119.8
157.5°	1137.8	1137.7	1137.6	1137.3	1137.1	1136.9	1138.1	1139.3	1140.5	1141.7	1141.5
160°	1150.1	1149.9	1149.7	1149.5	1149.3	1149.1	1150.3	1151.5	1152.7	1153.9	1153.8
162.5°	1161.0	1160.7	1160.5	1160.3	1160.0	1159.8	1161.2	1162.5	1164.0	1165.3	1165.3
165°	1175.4	1175.0	1174.7	1174.6	1174.4	1174.2	1175.8	1177.3	1178.9	1180.5	1180.6
167.5°	1186.1	1185.6	1185.6	1185.6	1185.6	1185.6	1187.2	1188.8	1190.4	1192.0	1192.0
170°	1192.5	1192.1	1192.1	1192.1	1192.1	1192.1	1193.6	1195.2	1196.9	1198.5	1198.5
172.5°	1196.1	1195.8	1195.9	1196.1	1196.2	1196.4	1198.0	1199.6	1201.1	1202.7	1202.7
175°	1201.6	1201.1	1201.3	1201.6	1201.8	1201.9	1203.4	1204.7	1206.1	1207.6	1207.5
177.5°	1203.8	1203.5	1203.6	1203.8	1203.9	1204.1	1205.4	1206.7	1207.9	1209.2	1209.1
180°	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1559.9	1559.2	1559.9	1557.6	1559.9	1559.2	1559.9	1566.6	1566.6	1567.1	1567.7
5°	1451.4	1450.8	1448.7	1442.3	1448.7	1450.8	1451.4	1453.6	1459.2	1469.0	1466.2
7.5°	1356.8	1355.8	1349.7	1349.9	1349.7	1355.8	1356.8	1362.4	1368.6	1374.7	1381.8
10°	1300.8	1301.5	1293.1	1288.2	1293.1	1301.5	1300.8	1305.7	1314.8	1319.7	1324.6
12.5°	1246.4	1243.2	1236.4	1231.0	1236.4	1243.2	1246.4	1250.2	1262.7	1268.1	1277.6
15°	1174.7	1167.6	1150.8	1152.2	1150.8	1167.6	1174.7	1171.8	1184.5	1191.4	1194.3
17.5°	1090.1	1084.9	1084.7	1074.9	1084.7	1084.9	1090.1	1095.7	1106.6	1114.2	1134.3
20°	1040.8	1037.2	1038.7	1028.9	1038.7	1037.2	1040.8	1052.0	1059.0	1068.8	1084.9
22.5°	1002.1	998.5	992.7	989.6	992.7	998.5	1002.1	1010.0	1017.5	1031.3	1040.1
25°	945.5	939.9	934.2	937.7	934.2	939.9	945.5	949.7	963.7	970.0	982.6
27.5°	888.9	884.7	879.0	878.3	879.0	884.7	888.9	892.9	900.6	911.2	926.4
30°	852.9	848.7	846.0	842.4	846.0	848.7	852.9	856.5	864.2	875.4	886.6
32.5°	816.5	815.6	810.7	809.9	810.7	815.6	816.5	822.2	829.9	840.6	850.2
35°	768.8	764.6	763.2	763.9	763.2	764.6	768.8	771.7	778.6	788.5	797.5
37.5°	723.5	717.9	715.4	712.9	715.4	717.9	723.5	724.0	731.1	737.7	750.0
40°	691.1	685.5	684.0	682.6	684.0	685.5	691.1	690.4	698.0	702.9	714.2
42.5°	654.6	652.4	651.5	649.0	651.5	652.4	654.6	658.4	662.7	669.9	678.3
45°	604.8	604.1	599.9	601.4	599.9	604.1	604.8	606.9	614.7	619.6	627.2
47.5°	552.4	549.3	546.4	548.3	546.4	549.3	552.4	555.2	560.4	566.4	576.7
50°	516.6	515.1	508.8	510.2	508.8	515.1	516.6	519.3	522.8	530.6	539.7
52.5°	480.6	475.3	473.0	472.1	473.0	475.3	480.6	483.5	487.5	496.3	503.2
55°	421.2	414.9	412.1	410.7	412.1	414.9	421.2	426.1	431.8	441.6	448.5
57.5°	362.9	361.2	359.0	360.5	359.0	361.2	362.9	371.0	376.5	384.2	392.8
60°	328.7	328.7	328.7	328.0	328.7	328.7	328.7	335.7	340.6	348.3	357.4
62.5°	302.4	300.7	300.1	301.1	300.1	300.7	302.4	305.4	310.3	315.2	323.2
65°	262.2	261.4	258.6	257.9	258.6	261.4	262.2	264.2	268.4	272.0	277.5
67.5°	224.2	221.6	220.8	219.8	220.8	221.6	224.2	226.0	228.7	233.3	236.0
70°	195.6	194.1	189.9	190.6	189.9	194.1	195.6	199.0	201.9	207.4	210.3
72.5°	164.7	163.3	162.5	161.5	162.5	163.3	164.7	168.2	171.0	177.2	181.6
75°	130.4	129.7	128.9	131.8	128.9	129.7	130.4	131.1	131.8	133.8	136.0
77.5°	104.4	104.4	104.9	103.7	104.9	104.4	104.4	104.4	104.4	105.6	105.9
80°	87.6	87.6	86.9	86.9	86.9	87.6	87.6	87.6	87.6	87.6	86.9
82.5°	70.3	70.8	71.2	70.1	71.2	70.8	70.3	71.3	71.9	70.8	71.2
85°	46.3	45.6	47.0	46.3	47.0	45.6	46.3	46.3	44.9	46.3	45.6
87.5°	25.9	24.9	24.9	25.6	24.9	24.9	25.9	24.7	24.5	24.4	23.7
90°	25.7	26.0	26.5	26.8	26.5	26.0	25.7	25.2	24.7	23.9	23.1
92.5°	29.0	29.2	29.5	29.7	29.5	29.2	29.0	28.8	28.0	26.8	25.5
95°	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	33.3	31.9	30.6
97.5°	36.3	36.5	36.7	36.9	36.7	36.5	36.3	36.1	35.2	33.6	32.0
100°	37.0	37.2	37.5	37.6	37.5	37.2	37.0	36.8	35.9	34.3	32.7
102.5°	37.3	37.6	38.0	38.3	38.0	37.6	37.3	36.9	39.1	44.1	49.0
105°	38.3	38.6	39.0	39.4	39.0	38.6	38.3	37.8	55.2	90.4	125.7
107.5°	203.4	176.9	150.3	123.8	150.3	176.9	203.4	230.0	256.2	282.0	307.8
110°	331.7	303.2	274.7	246.3	274.7	303.2	331.7	360.2	377.6	384.2	390.8



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CATALOG NUMBER: S123RDIW-S1165D1030U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	440.6	434.6	428.6	422.6	428.6	434.6	440.6	446.6	449.5	449.4	449.3
115°	524.2	525.0	525.8	526.6	525.8	525.0	524.2	523.4	522.1	520.0	518.1
117.5°	584.5	584.7	584.9	585.1	584.9	584.7	584.5	584.4	583.5	581.9	580.3
120°	625.2	625.2	625.2	625.2	625.2	625.2	625.2	625.2	624.4	622.8	621.2
122.5°	664.1	664.2	664.4	664.6	664.4	664.2	664.1	664.0	663.3	662.2	661.0
125°	718.9	719.3	719.7	720.1	719.7	719.3	718.9	718.5	718.1	717.7	717.3
127.5°	774.6	774.3	773.9	773.5	773.9	774.3	774.6	775.1	775.0	774.3	773.6
130°	809.0	808.7	808.2	807.9	808.2	808.7	809.0	809.5	809.2	808.4	807.7
132.5°	841.1	840.5	840.0	839.4	840.0	840.5	841.1	841.6	841.5	840.7	839.9
135°	889.4	888.8	888.1	887.6	888.1	888.8	889.4	889.9	889.9	889.4	888.8
137.5°	934.1	933.7	933.3	932.9	933.3	933.7	934.1	934.5	934.2	933.3	932.3
140°	961.4	960.9	960.6	960.1	960.6	960.9	961.4	961.7	961.5	960.7	959.9
142.5°	986.9	986.3	985.8	985.2	985.8	986.3	986.9	987.4	987.4	986.8	986.1
145°	1023.7	1023.7	1023.7	1023.7	1023.7	1023.7	1023.7	1023.7	1023.5	1023.1	1022.7
147.5°	1055.2	1054.2	1053.3	1052.4	1053.3	1054.2	1055.2	1056.1	1056.3	1055.9	1055.5
150°	1075.7	1075.0	1074.5	1073.9	1074.5	1075.0	1075.7	1076.3	1076.4	1075.9	1075.6
152.5°	1093.8	1092.9	1092.0	1091.1	1092.0	1092.9	1093.8	1094.8	1094.8	1094.1	1093.4
155°	1118.7	1117.5	1116.2	1115.1	1116.2	1117.5	1118.7	1119.8	1120.0	1118.9	1117.9
157.5°	1140.0	1138.4	1136.8	1135.3	1136.8	1138.4	1140.0	1141.5	1141.7	1140.5	1139.3
160°	1152.4	1151.0	1149.6	1148.2	1149.6	1151.0	1152.4	1153.8	1153.9	1152.7	1151.5
162.5°	1164.1	1162.9	1161.6	1160.4	1161.6	1162.9	1164.1	1165.3	1165.3	1164.0	1162.5
165°	1179.3	1177.9	1176.4	1175.1	1176.4	1177.9	1179.3	1180.6	1180.5	1178.9	1177.3
167.5°	1190.4	1188.8	1187.2	1185.6	1187.2	1188.8	1190.4	1192.0	1192.0	1190.4	1188.8
170°	1196.9	1195.2	1193.6	1192.1	1193.6	1195.2	1196.9	1198.5	1198.5	1196.9	1195.2
172.5°	1201.0	1199.2	1197.4	1195.7	1197.4	1199.2	1201.0	1202.7	1202.7	1201.1	1199.6
175°	1205.9	1204.3	1202.7	1201.0	1202.7	1204.3	1205.9	1207.5	1207.6	1206.1	1204.7
177.5°	1207.5	1205.9	1204.3	1202.7	1204.3	1205.9	1207.5	1209.1	1209.2	1207.9	1206.7
180°	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1562.6	1570.5	1578.3	1585.6	1596.9	1601.9	1609.2	1611.9	1620.4	1632.7	1642.8
5°	1467.6	1478.8	1493.5	1505.5	1524.4	1539.1	1555.2	1570.7	1588.9	1614.8	1637.9
7.5°	1387.0	1398.1	1415.8	1437.9	1458.7	1479.6	1501.6	1522.7	1548.7	1585.9	1622.7
10°	1333.7	1347.0	1368.1	1391.9	1417.8	1438.2	1464.1	1490.8	1523.0	1565.8	1609.9
12.5°	1287.7	1297.7	1322.1	1344.8	1374.1	1400.1	1425.4	1456.5	1493.3	1538.8	1591.9
15°	1214.6	1228.6	1252.4	1277.6	1308.5	1335.9	1368.8	1406.6	1442.3	1498.4	1562.9
17.5°	1141.1	1162.4	1187.2	1215.7	1238.6	1276.2	1312.0	1350.9	1394.8	1454.3	1525.1
20°	1094.0	1110.9	1134.0	1175.4	1205.5	1234.2	1267.1	1315.5	1356.1	1423.4	1497.0
22.5°	1054.3	1066.6	1092.5	1126.6	1161.7	1195.0	1228.4	1274.6	1324.7	1388.7	1468.5
25°	995.2	1014.9	1034.5	1059.0	1096.8	1136.8	1173.2	1212.5	1265.8	1333.7	1420.0
27.5°	937.6	955.4	974.7	1004.9	1033.6	1070.9	1109.0	1154.1	1211.2	1283.2	1370.6
30°	900.6	913.9	932.1	970.7	996.6	1028.9	1073.7	1113.7	1166.9	1243.3	1335.9
32.5°	862.5	879.7	899.6	929.2	961.3	991.8	1032.8	1076.1	1130.5	1205.8	1300.5
35°	808.1	828.4	848.7	870.5	902.7	934.2	968.6	1016.3	1071.6	1144.5	1237.7
37.5°	758.0	774.5	790.9	817.9	848.5	878.4	910.5	957.5	1009.7	1088.3	1173.8
40°	726.1	740.8	753.4	781.5	810.9	843.1	874.7	916.1	972.1	1045.7	1128.4
42.5°	691.3	704.9	722.0	745.0	776.7	803.9	835.4	874.5	927.2	1001.9	1074.5
45°	639.2	654.6	669.3	691.1	722.6	749.2	777.2	814.4	868.3	930.1	994.5
47.5°	585.0	600.4	617.2	638.2	665.7	692.8	720.8	753.7	802.9	863.4	906.9
50°	550.2	562.8	579.6	600.7	625.9	654.6	679.8	715.6	762.5	810.2	848.0
52.5°	514.2	525.8	544.8	566.9	590.6	615.4	642.3	673.0	715.4	760.3	790.3
55°	458.3	472.3	488.5	510.2	533.3	554.4	580.3	611.9	645.5	679.1	699.5
57.5°	406.1	417.7	431.3	453.7	473.8	498.9	522.1	546.7	577.8	603.2	616.4
60°	367.9	378.4	396.0	415.6	434.5	456.3	482.9	507.4	531.3	551.6	562.0
62.5°	332.1	344.3	359.5	377.5	398.1	418.7	441.9	462.5	483.6	501.1	508.3
65°	285.3	295.1	306.3	323.1	339.9	361.0	379.2	400.2	415.6	425.4	431.8
67.5°	242.6	249.1	257.6	268.9	285.3	303.7	321.4	337.8	350.7	357.4	363.0
70°	215.2	219.4	225.7	236.9	249.5	265.6	283.8	295.8	307.0	312.5	318.2
72.5°	187.7	193.1	198.8	207.8	218.1	229.7	242.9	257.6	263.8	270.5	273.9
75°	142.3	150.0	157.7	163.3	170.3	179.4	191.4	200.5	203.9	209.6	210.3
77.5°	107.4	109.1	114.7	121.6	127.5	134.1	141.7	149.8	151.5	154.4	156.3
80°	88.3	88.3	88.3	92.5	99.5	104.4	111.5	115.7	118.4	119.1	119.8
82.5°	70.9	70.9	70.4	71.2	73.7	76.4	82.8	87.6	89.9	89.4	87.9
85°	46.3	44.9	44.9	44.1	44.9	43.4	42.7	45.6	49.8	49.8	48.3
87.5°	23.5	22.8	22.8	21.8	20.7	19.6	17.5	17.7	17.2	19.1	18.1
90°	22.3	21.5	18.9	16.3	13.7	11.1	8.8	6.9	4.9	2.9	0.9
92.5°	24.2	22.9	21.0	19.0	17.1	15.2	14.4	15.0	15.5	16.1	16.7
95°	29.2	27.7	25.6	23.4	21.2	19.0	22.0	30.1	38.3	46.5	54.7
97.5°	30.4	28.8	43.2	57.5	71.9	86.1	95.1	98.8	102.5	106.1	109.8
100°	31.1	29.5	60.6	91.7	122.7	153.7	167.3	163.3	159.3	155.3	151.3
102.5°	54.0	58.9	92.8	126.8	160.7	194.6	210.1	207.2	204.4	201.5	198.7
105°	161.0	196.2	214.1	231.9	249.9	267.8	275.6	273.5	271.3	269.1	266.9
107.5°	333.7	359.5	356.7	353.8	351.1	348.2	345.9	344.2	342.4	340.6	338.9
110°	397.3	403.9	401.7	399.6	397.3	395.2	393.2	391.7	390.1	388.5	386.9



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CATALOG NUMBER: S123RDIW-S1165D1030U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	449.2	449.1	446.9	444.7	442.5	440.3	438.5	437.1	435.6	434.2	432.7
115°	516.1	514.1	512.3	510.5	508.7	506.9	505.4	504.3	503.0	501.9	500.7
117.5°	578.7	577.1	576.2	575.3	574.4	573.5	572.3	570.8	569.4	567.8	566.4
120°	619.6	618.0	617.4	616.8	616.2	615.6	614.4	612.6	610.8	609.0	607.3
122.5°	660.0	658.8	658.1	657.3	656.6	655.8	654.7	653.2	651.8	650.2	648.8
125°	716.9	716.5	715.7	714.9	714.1	713.4	712.1	710.5	708.9	707.4	705.8
127.5°	773.0	772.4	771.4	770.5	769.5	768.6	767.3	765.7	764.1	762.5	760.9
130°	806.9	806.1	805.3	804.5	803.7	802.9	801.7	800.1	798.5	796.9	795.3
132.5°	839.1	838.3	837.7	837.0	836.4	835.8	834.6	833.0	831.4	829.9	828.3
135°	888.1	887.6	886.8	886.0	885.2	884.4	883.4	882.2	881.0	879.9	878.6
137.5°	931.3	930.4	930.0	929.5	929.1	928.6	927.6	926.1	924.6	923.1	921.6
140°	959.1	958.3	957.7	957.2	956.5	955.9	955.0	953.9	952.7	951.5	950.3
142.5°	985.5	984.8	984.3	983.6	983.0	982.5	981.6	980.3	979.2	977.9	976.8
145°	1022.3	1021.9	1021.5	1021.1	1020.7	1020.3	1019.4	1018.1	1016.6	1015.2	1013.9
147.5°	1055.1	1054.7	1054.3	1053.9	1053.5	1053.1	1052.5	1051.5	1050.6	1049.7	1048.8
150°	1075.1	1074.8	1074.3	1074.0	1073.5	1073.2	1072.6	1072.1	1071.5	1070.9	1070.3
152.5°	1092.7	1092.0	1091.7	1091.5	1091.3	1091.0	1090.7	1090.5	1090.2	1089.9	1089.7
155°	1117.0	1116.0	1115.8	1115.5	1115.4	1115.2	1115.3	1115.7	1116.1	1116.4	1116.9
157.5°	1138.1	1136.9	1137.1	1137.3	1137.6	1137.7	1137.8	1137.9	1137.9	1138.0	1138.0
160°	1150.3	1149.1	1149.3	1149.5	1149.7	1149.9	1150.1	1150.3	1150.5	1150.7	1150.9
162.5°	1161.2	1159.8	1160.0	1160.3	1160.5	1160.7	1161.0	1161.5	1162.1	1162.5	1163.1
165°	1175.8	1174.2	1174.4	1174.6	1174.7	1175.0	1175.4	1176.0	1176.6	1177.1	1177.8
167.5°	1187.2	1185.6	1185.6	1185.6	1185.6	1185.6	1186.1	1186.9	1187.7	1188.5	1189.2
170°	1193.6	1192.1	1192.1	1192.1	1192.1	1192.1	1192.5	1193.3	1194.1	1194.9	1195.7
172.5°	1198.0	1196.4	1196.2	1196.1	1195.9	1195.8	1196.1	1197.1	1198.1	1199.0	1200.0
175°	1203.4	1201.9	1201.8	1201.6	1201.3	1201.1	1201.6	1202.6	1203.5	1204.5	1205.5
177.5°	1205.4	1204.1	1203.9	1203.8	1203.6	1203.5	1203.8	1204.6	1205.4	1206.1	1206.9
180°	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5



TEST NUMBER: P332478-940

CATALOG NUMBER: S123RDIW-S1165D1030U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1646.2	1652.3	1660.2	1672.0	1681.0	1688.8	1690.5	1692.7	1698.4	1707.8	1715.1
5°	1656.8	1672.9	1698.9	1724.1	1751.4	1773.9	1794.9	1809.6	1823.6	1853.1	1876.9
7.5°	1653.5	1689.3	1730.0	1775.3	1821.1	1865.5	1906.7	1943.6	1980.3	2023.2	2072.2
10°	1651.2	1693.3	1747.9	1806.1	1869.9	1932.2	1992.5	2039.5	2094.2	2143.2	2205.6
12.5°	1640.6	1701.1	1766.5	1840.8	1919.2	1991.1	2070.5	2135.4	2197.9	2268.8	2341.3
15°	1626.7	1700.3	1783.0	1881.8	2000.9	2087.9	2169.2	2282.0	2359.1	2436.2	2539.9
17.5°	1601.3	1691.1	1794.5	1922.9	2022.2	2139.0	2261.4	2350.5	2454.4	2563.0	2656.9
20°	1581.1	1685.6	1801.2	1927.3	2054.2	2181.0	2299.5	2406.0	2513.3	2638.8	2715.8
22.5°	1560.9	1664.3	1784.4	1918.4	2054.8	2188.3	2322.5	2447.6	2568.2	2694.8	2793.2
25°	1518.0	1640.7	1771.0	1907.7	2042.3	2189.5	2349.3	2488.8	2638.0	2768.4	2861.6
27.5°	1474.6	1587.0	1716.8	1855.5	2005.0	2179.0	2367.0	2525.5	2675.0	2768.4	2797.7
30°	1435.4	1554.5	1673.7	1814.5	1976.4	2170.5	2370.3	2551.8	2674.5	2715.1	2684.9
32.5°	1395.5	1503.5	1621.5	1765.8	1937.7	2149.8	2374.8	2536.1	2609.9	2578.9	2456.2
35°	1325.3	1422.7	1537.0	1681.3	1879.0	2138.3	2356.3	2465.6	2447.4	2272.2	2040.9
37.5°	1250.2	1329.5	1435.4	1586.4	1818.2	2092.8	2276.6	2292.8	2135.1	1866.1	1598.9
40°	1190.8	1262.2	1370.9	1528.6	1771.0	2047.9	2196.5	2131.3	1886.7	1587.4	1364.6
42.5°	1133.0	1193.3	1298.0	1468.0	1726.2	1986.8	2077.1	1935.1	1652.9	1369.9	1167.2
45°	1035.2	1091.9	1197.0	1371.5	1634.4	1869.9	1858.0	1611.2	1328.8	1101.1	932.8
47.5°	942.4	992.0	1090.7	1268.8	1526.6	1694.7	1583.2	1320.7	1081.1	898.4	778.4
50°	876.7	925.9	1024.0	1199.9	1440.3	1562.9	1403.8	1150.8	931.5	780.1	684.7
52.5°	814.0	861.9	951.6	1123.0	1336.0	1409.3	1238.4	1003.9	821.0	690.4	608.5
55°	726.1	762.5	843.1	1007.1	1166.3	1183.0	1010.0	813.7	663.0	571.9	515.9
57.5°	636.5	667.9	747.5	878.2	989.7	981.1	816.9	647.2	545.7	478.0	437.3
60°	578.2	609.0	679.1	791.3	875.4	846.0	695.3	558.6	471.7	422.0	389.7
62.5°	523.8	548.0	613.5	695.4	755.9	722.6	594.3	481.2	412.2	370.3	344.8
65°	445.1	464.7	517.2	560.0	593.6	561.4	454.9	376.4	326.6	297.2	279.6
67.5°	370.1	382.6	415.9	431.3	455.0	419.6	342.1	289.4	261.2	236.3	224.2
70°	323.1	332.2	349.7	362.3	368.6	332.2	274.7	236.2	212.3	194.8	187.2
72.5°	276.0	284.0	287.5	297.8	294.6	260.5	220.9	190.2	173.1	161.2	151.2
75°	211.0	214.5	211.0	206.8	197.6	173.8	146.5	131.1	118.4	112.8	109.3
77.5°	153.7	152.7	147.8	141.3	125.7	110.8	96.0	90.9	85.3	82.4	81.1
80°	118.4	115.7	111.5	100.9	87.6	77.1	73.6	70.1	67.9	64.5	63.8
82.5°	88.2	86.5	79.5	70.6	61.3	56.4	53.4	52.2	50.0	48.2	48.1
85°	47.0	44.9	37.2	32.3	30.9	29.4	28.7	28.7	25.9	25.2	25.2
87.5°	15.7	12.8	12.6	11.3	11.8	11.1	12.2	11.6	11.6	12.3	11.3
90°	2.9	4.9	6.9	8.8	11.1	13.7	16.3	18.9	21.5	22.3	23.1
92.5°	16.1	15.5	15.0	14.4	15.2	17.1	19.0	21.0	22.9	24.2	25.5
95°	46.5	38.3	30.1	22.0	19.0	21.2	23.4	25.6	27.7	29.2	30.6
97.5°	106.1	102.5	98.8	95.1	86.1	71.9	57.5	43.2	28.8	30.4	32.0
100°	155.3	159.3	163.3	167.3	153.7	122.7	91.7	60.6	29.5	31.1	32.7
102.5°	201.5	204.4	207.2	210.1	194.6	160.7	126.8	92.8	58.9	54.0	49.0
105°	269.1	271.3	273.5	275.6	267.8	249.9	231.9	214.1	196.2	161.0	125.7
107.5°	340.6	342.4	344.2	345.9	348.2	351.1	353.8	356.7	359.5	333.7	307.8
110°	388.5	390.1	391.7	393.2	395.2	397.3	399.6	401.7	403.9	397.3	390.8





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	434.2	435.6	437.1	438.5	440.3	442.5	444.7	446.9	449.1	449.2	449.3
115°	501.9	503.0	504.3	505.4	506.9	508.7	510.5	512.3	514.1	516.1	518.1
117.5°	567.8	569.4	570.8	572.3	573.5	574.4	575.3	576.2	577.1	578.7	580.3
120°	609.0	610.8	612.6	614.4	615.6	616.2	616.8	617.4	618.0	619.6	621.2
122.5°	650.2	651.8	653.2	654.7	655.8	656.6	657.3	658.1	658.8	660.0	661.0
125°	707.4	708.9	710.5	712.1	713.4	714.1	714.9	715.7	716.5	716.9	717.3
127.5°	762.5	764.1	765.7	767.3	768.6	769.5	770.5	771.4	772.4	773.0	773.6
130°	796.9	798.5	800.1	801.7	802.9	803.7	804.5	805.3	806.1	806.9	807.7
132.5°	829.9	831.4	833.0	834.6	835.8	836.4	837.0	837.7	838.3	839.1	839.9
135°	879.9	881.0	882.2	883.4	884.4	885.2	886.0	886.8	887.6	888.1	888.8
137.5°	923.1	924.6	926.1	927.6	928.6	929.1	929.5	930.0	930.4	931.3	932.3
140°	951.5	952.7	953.9	955.0	955.9	956.5	957.2	957.7	958.3	959.1	959.9
142.5°	977.9	979.2	980.3	981.6	982.5	983.0	983.6	984.3	984.8	985.5	986.1
145°	1015.2	1016.6	1018.1	1019.4	1020.3	1020.7	1021.1	1021.5	1021.9	1022.3	1022.7
147.5°	1049.7	1050.6	1051.5	1052.5	1053.1	1053.5	1053.9	1054.3	1054.7	1055.1	1055.5
150°	1070.9	1071.5	1072.1	1072.6	1073.2	1073.5	1074.0	1074.3	1074.8	1075.1	1075.6
152.5°	1089.9	1090.2	1090.5	1090.7	1091.0	1091.3	1091.5	1091.7	1092.0	1092.7	1093.4
155°	1116.4	1116.1	1115.7	1115.3	1115.2	1115.4	1115.5	1115.8	1116.0	1117.0	1117.9
157.5°	1138.0	1137.9	1137.9	1137.8	1137.7	1137.6	1137.3	1137.1	1136.9	1138.1	1139.3
160°	1150.7	1150.5	1150.3	1150.1	1149.9	1149.7	1149.5	1149.3	1149.1	1150.3	1151.5
162.5°	1162.5	1162.1	1161.5	1161.0	1160.7	1160.5	1160.3	1160.0	1159.8	1161.2	1162.5
165°	1177.1	1176.6	1176.0	1175.4	1175.0	1174.7	1174.6	1174.4	1174.2	1175.8	1177.3
167.5°	1188.5	1187.7	1186.9	1186.1	1185.6	1185.6	1185.6	1185.6	1185.6	1187.2	1188.8
170°	1194.9	1194.1	1193.3	1192.5	1192.1	1192.1	1192.1	1192.1	1192.1	1193.6	1195.2
172.5°	1199.0	1198.1	1197.1	1196.1	1195.8	1195.9	1196.1	1196.2	1196.4	1198.0	1199.6
175°	1204.5	1203.5	1202.6	1201.6	1201.1	1201.3	1201.6	1201.8	1201.9	1203.4	1204.7
177.5°	1206.1	1205.4	1204.6	1203.8	1203.5	1203.6	1203.8	1203.9	1204.1	1205.4	1206.7
180°	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1726.9	1726.9	1729.1	1737.6	1738.7	1746.0	1743.7
5°	1897.9	1911.2	1916.1	1937.2	1949.8	1955.4	1944.2
7.5°	2107.0	2144.7	2162.4	2184.4	2204.0	2209.8	2194.5
10°	2259.6	2298.8	2331.7	2352.1	2371.0	2383.6	2399.8
12.5°	2407.0	2455.2	2486.5	2515.2	2534.7	2550.7	2553.3
15°	2567.2	2640.1	2695.5	2736.1	2756.5	2767.0	2762.8
17.5°	2728.8	2796.4	2835.8	2877.3	2905.5	2906.9	2907.7
20°	2820.2	2886.1	2931.7	2962.5	2994.1	2992.7	2999.6
22.5°	2881.4	2933.2	2968.1	2990.5	3001.3	2996.1	2997.4
25°	2909.9	2925.3	2919.1	2883.3	2874.3	2841.3	2846.9
27.5°	2762.5	2689.6	2614.2	2517.2	2440.7	2379.5	2382.7
30°	2562.3	2433.4	2286.2	2162.8	2052.1	2021.2	1955.4
32.5°	2282.5	2089.1	1916.7	1801.8	1706.7	1681.0	1623.4
35°	1808.2	1620.4	1443.1	1336.5	1294.5	1235.6	1234.9
37.5°	1405.5	1240.1	1146.3	1066.4	1024.5	988.9	985.4
40°	1182.3	1053.4	982.6	925.1	883.8	857.1	850.9
42.5°	1026.4	922.2	855.9	820.3	788.5	774.7	764.5
45°	838.2	768.1	721.8	689.6	674.9	664.4	658.8
47.5°	701.2	654.2	622.7	601.2	589.2	578.2	581.1
50°	626.6	588.0	564.9	544.6	535.5	527.7	528.4
52.5°	566.6	532.0	513.3	498.6	487.2	481.8	479.1
55°	480.8	459.1	440.1	429.6	423.3	415.6	413.5
57.5°	410.1	393.3	377.9	366.0	364.4	357.0	358.0
60°	363.0	349.0	336.4	330.1	325.2	318.9	321.0
62.5°	324.3	312.5	301.1	295.9	291.0	286.3	287.3
65°	265.6	254.4	247.4	244.6	242.5	240.4	238.3
67.5°	211.7	204.8	200.5	194.4	190.1	189.4	187.3
70°	178.0	168.9	161.2	153.5	151.4	150.7	151.4
72.5°	142.7	137.0	134.8	131.1	130.6	128.9	130.1
75°	107.3	105.1	103.7	100.9	100.9	100.9	100.9
77.5°	79.1	77.8	77.0	76.4	75.7	74.7	74.5
80°	61.7	61.0	59.6	59.6	58.9	59.6	58.9
82.5°	46.5	46.4	45.0	45.0	44.3	43.9	44.3
85°	23.8	23.1	24.5	23.1	23.8	22.5	23.8
87.5°	11.5	11.7	11.2	11.3	10.8	12.0	11.0
90°	23.9	24.7	25.2	25.7	26.0	26.5	26.8
92.5°	26.8	28.0	28.8	29.0	29.2	29.5	29.7
95°	31.9	33.3	34.1	34.1	34.1	34.1	34.1
97.5°	33.6	35.2	36.1	36.3	36.5	36.7	36.9
100°	34.3	35.9	36.8	37.0	37.2	37.5	37.6
102.5°	44.1	39.1	36.9	37.3	37.6	38.0	38.3
105°	90.4	55.2	37.8	38.3	38.6	39.0	39.4
107.5°	282.0	256.2	230.0	203.4	176.9	150.3	123.8
110°	384.2	377.6	360.2	331.7	303.2	274.7	246.3



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	449.4	449.5	446.6	440.6	434.6	428.6	422.6
115°	520.0	522.1	523.4	524.2	525.0	525.8	526.6
117.5°	581.9	583.5	584.4	584.5	584.7	584.9	585.1
120°	622.8	624.4	625.2	625.2	625.2	625.2	625.2
122.5°	662.2	663.3	664.0	664.1	664.2	664.4	664.6
125°	717.7	718.1	718.5	718.9	719.3	719.7	720.1
127.5°	774.3	775.0	775.1	774.6	774.3	773.9	773.5
130°	808.4	809.2	809.5	809.0	808.7	808.2	807.9
132.5°	840.7	841.5	841.6	841.1	840.5	840.0	839.4
135°	889.4	889.9	889.9	889.4	888.8	888.1	887.6
137.5°	933.3	934.2	934.5	934.1	933.7	933.3	932.9
140°	960.7	961.5	961.7	961.4	960.9	960.6	960.1
142.5°	986.8	987.4	987.4	986.9	986.3	985.8	985.2
145°	1023.1	1023.5	1023.7	1023.7	1023.7	1023.7	1023.7
147.5°	1055.9	1056.3	1056.1	1055.2	1054.2	1053.3	1052.4
150°	1075.9	1076.4	1076.3	1075.7	1075.0	1074.5	1073.9
152.5°	1094.1	1094.8	1094.8	1093.8	1092.9	1092.0	1091.1
155°	1118.9	1120.0	1119.8	1118.7	1117.5	1116.2	1115.1
157.5°	1140.5	1141.7	1141.5	1140.0	1138.4	1136.8	1135.3
160°	1152.7	1153.9	1153.8	1152.4	1151.0	1149.6	1148.2
162.5°	1164.0	1165.3	1165.3	1164.1	1162.9	1161.6	1160.4
165°	1178.9	1180.5	1180.6	1179.3	1177.9	1176.4	1175.1
167.5°	1190.4	1192.0	1192.0	1190.4	1188.8	1187.2	1185.6
170°	1196.9	1198.5	1198.5	1196.9	1195.2	1193.6	1192.1
172.5°	1201.1	1202.7	1202.7	1201.0	1199.2	1197.4	1195.7
175°	1206.1	1207.6	1207.5	1205.9	1204.3	1202.7	1201.0
177.5°	1207.9	1209.2	1209.1	1207.5	1205.9	1204.3	1202.7
180°	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5	1205.5

(END OF REPORT)