

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: P332222-940

Luminaire Tested: **S123DIW-S1165D1030U940-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332222-940  
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: S123DIW-S1165D1030U940-4F0-1E-UDD-A  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1030 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8045.4 lumens  
Efficiency: N/A  
Efficacy: 119.4 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

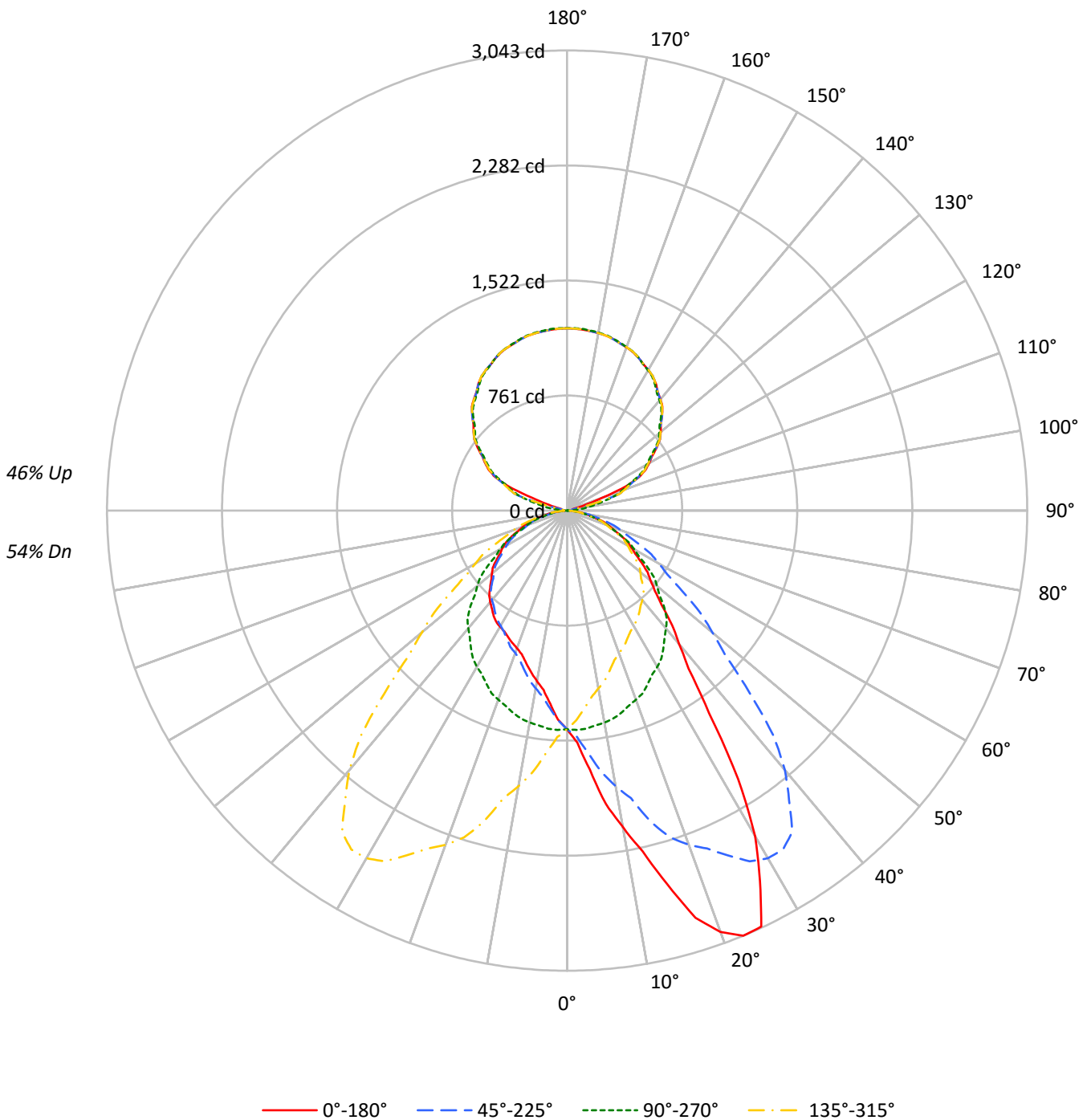
Input Watts (W): 67.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	86	86	86	72	72	72	60	60	60	54
1	99	95	91	88	92	88	85	82	76	73	71	64	62	61	54	52	51	46
2	90	83	77	72	84	77	72	68	67	63	59	57	54	51	47	45	44	39
3	83	73	66	60	76	68	62	57	59	54	50	50	47	44	42	40	37	34
4	76	65	57	51	70	61	54	48	53	47	43	45	41	38	38	35	32	29
5	70	58	50	44	64	54	47	42	47	41	37	40	36	33	34	31	28	25
6	64	52	44	38	59	49	42	36	43	37	33	37	32	29	31	28	25	22
7	59	47	39	34	55	44	37	32	39	33	29	33	29	25	28	25	22	20
8	55	43	35	30	51	40	33	28	35	30	26	31	26	23	26	23	20	18
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	21	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16	14

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

	0°	90°	180°	270°
0°	15569	15569	15569	15569
5°	18567	15637	13857	15637
10°	23240	15557	12516	15557
15°	28505	15432	11652	15432
20°	33956	15237	11094	15237
25°	36056	14998	10969	14998
30°	30904	14825	11028	14825
35°	21494	14578	11143	14578
40°	16190	14289	11108	14289
45°	13443	13857	10966	13857
50°	12042	12980	10868	12980
55°	11258	12033	10732	12033
60°	10559	11044	10622	11044
65°	9926	10068	10282	10068
70°	9309	8954	9791	8954
75°	8339	7839	8979	7839
80°	7296	6428	7736	6428
85°	5718	4668	5199	4668



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.5	1.8
10°-20°	456.9	5.7
20°-30°	766.8	9.5
30°-40°	868.3	10.8
40°-50°	778.6	9.7
50°-60°	628.3	7.8
60°-70°	437.9	5.4
70°-80°	230.1	2.9
80°-90°	59.7	0.7
90°-100°	43.8	0.5
100°-110°	208.9	2.6
110°-120°	501.7	6.2
120°-130°	638.9	7.9
130°-140°	682.7	8.5
140°-150°	638.4	7.9
150°-160°	514.9	6.4
160°-170°	332.3	4.1
170°-180°	114.5	1.4
0°-30°	1366.2	17.0
0°-40°	2234.5	27.8
0°-60°	3641.5	45.3
0°-90°	4369.1	54.3
90°-120°	754.5	9.4
90°-150°	2714.5	33.7
90°-180°	3676.0	45.7
0°-180°	8045.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1446	1446	1446	1446	1446	
5°	1718	1447	1282	1447	1718	178
15°	2558	1385	1046	1385	2558	739
25°	3036	1263	924	1263	3036	1331
35°	1636	1109	848	1109	1636	1063
45°	883	910	720	910	883	699
55°	600	641	572	641	600	538
65°	390	395	404	395	390	388
75°	200	188	216	188	200	215
85°	46	38	42	38	46	55
90°	27	1	27	1	27	14
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°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1535.1	1533.9	1531.2	1533.4	1528.9	1522.7	1522.2	1516.5	1500.3	1499.1	1494.7
5°	1718.4	1712.8	1712.1	1711.4	1701.6	1688.3	1663.0	1660.9	1627.3	1610.4	1590.2
7.5°	1955.8	1958.7	1948.6	1939.6	1909.6	1889.8	1862.8	1828.2	1786.8	1744.9	1717.0
10°	2126.3	2149.4	2120.7	2101.0	2082.9	2048.4	2008.6	1958.7	1909.0	1850.8	1806.7
12.5°	2309.1	2320.4	2314.6	2296.2	2267.8	2215.5	2144.7	2090.0	2044.2	1947.3	1908.2
15°	2558.0	2600.8	2573.4	2510.3	2511.7	2461.9	2369.5	2267.8	2213.9	2129.0	2013.5
17.5°	2823.2	2828.5	2816.8	2764.3	2729.3	2660.9	2575.5	2478.1	2368.7	2266.2	2143.5
20°	2964.4	2960.2	2935.7	2908.4	2848.1	2794.9	2701.6	2593.0	2452.8	2352.0	2218.0
22.5°	3043.0	3035.9	3024.3	3001.4	2951.3	2894.0	2810.4	2691.7	2558.2	2419.2	2264.6
25°	3035.9	3045.0	3046.4	3040.1	3022.6	2988.3	2922.4	2827.8	2694.7	2516.0	2354.7
27.5°	2761.2	2774.1	2811.6	2844.7	2881.9	2919.7	2914.6	2867.7	2769.2	2614.9	2417.8
30°	2486.4	2458.4	2527.8	2615.5	2675.0	2780.1	2839.0	2842.5	2787.1	2654.7	2462.6
32.5°	2105.2	2136.1	2166.8	2274.6	2404.8	2522.8	2640.0	2734.3	2745.1	2656.9	2489.0
35°	1635.7	1674.3	1730.3	1786.4	1926.5	2047.1	2253.1	2432.5	2575.5	2594.4	2491.4
37.5°	1318.1	1337.1	1372.6	1428.8	1520.5	1663.5	1822.8	2049.6	2256.7	2410.8	2417.5
40°	1152.2	1157.7	1197.7	1240.5	1314.7	1432.4	1576.1	1776.6	2024.6	2239.8	2329.5
42.5°	1027.7	1040.0	1056.9	1098.1	1157.2	1245.8	1379.4	1545.0	1772.4	2020.0	2195.5
45°	883.1	897.1	907.6	934.9	977.0	1036.5	1129.7	1281.1	1454.2	1709.9	1946.2
47.5°	787.5	788.5	796.4	817.0	845.6	890.3	956.2	1053.5	1212.4	1419.9	1662.3
50°	719.1	730.2	733.1	749.1	771.6	804.5	859.2	941.9	1072.3	1254.5	1477.3
52.5°	670.8	674.2	682.1	693.7	713.3	739.0	786.3	851.0	953.4	1108.7	1313.6
55°	599.9	599.9	607.6	616.7	627.9	651.0	682.6	730.2	808.1	928.5	1098.1
57.5°	534.3	537.8	543.2	546.1	555.6	570.9	597.3	633.4	691.4	784.2	919.1
60°	490.5	496.9	496.1	501.8	510.2	522.1	544.6	574.0	625.8	700.1	813.7
62.5°	452.5	452.0	451.9	458.6	467.0	478.4	492.9	518.4	562.5	628.4	725.1
65°	389.7	388.3	393.2	397.3	400.2	408.6	419.8	442.2	471.6	520.7	595.7
67.5°	333.9	329.8	332.4	333.9	338.7	345.2	355.7	369.6	393.0	432.4	488.9
70°	295.8	292.2	291.5	292.9	297.1	302.0	309.8	323.1	344.8	376.3	417.7
72.5°	256.5	254.1	254.0	257.1	259.0	262.3	267.7	279.9	297.1	320.8	359.4
75°	200.5	200.5	200.5	201.2	203.2	206.1	210.3	216.5	229.9	246.6	272.6
77.5°	150.3	150.1	149.3	149.1	152.2	153.5	154.4	160.3	167.7	179.1	198.0
80°	117.7	114.2	115.7	117.7	119.1	119.8	122.0	123.3	129.7	136.0	149.3
82.5°	87.5	84.5	84.8	88.0	88.3	89.0	91.1	93.1	95.4	101.2	108.3
85°	46.3	46.3	47.0	47.0	47.6	47.0	49.0	49.8	49.8	53.2	57.4
87.5°	22.2	21.0	21.5	21.9	21.3	21.8	22.1	22.6	22.9	23.4	23.4
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°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1491.3	1486.8	1482.4	1474.5	1467.8	1458.2	1455.5	1452.1	1442.0	1433.1	1426.3
5°	1582.4	1565.6	1541.1	1518.7	1500.5	1476.0	1461.9	1447.2	1426.1	1407.2	1391.8
7.5°	1677.8	1644.7	1606.5	1565.3	1527.0	1490.0	1460.1	1433.4	1404.0	1376.1	1354.4
10°	1753.5	1705.8	1652.5	1595.1	1546.0	1498.3	1458.4	1423.3	1385.5	1352.5	1325.3
12.5°	1839.8	1769.2	1695.7	1625.9	1567.9	1501.7	1453.3	1408.8	1365.9	1326.2	1295.6
15°	1942.0	1852.3	1765.3	1669.4	1581.0	1498.3	1440.9	1384.8	1335.1	1294.4	1255.2
17.5°	2035.1	1933.4	1818.9	1702.1	1595.6	1497.5	1417.0	1353.7	1291.5	1241.7	1202.6
20°	2087.8	1972.1	1842.5	1721.2	1603.5	1494.2	1405.9	1330.2	1262.8	1210.3	1166.2
22.5°	2133.2	1997.9	1863.8	1734.1	1602.9	1485.1	1385.1	1307.2	1234.3	1182.9	1135.9
25°	2180.2	2018.4	1883.8	1731.7	1585.3	1463.3	1351.2	1262.8	1190.0	1129.7	1081.4
27.5°	2220.6	2017.0	1857.3	1693.7	1557.5	1435.3	1315.5	1220.8	1143.4	1078.0	1028.9
30°	2247.5	2019.7	1829.8	1667.9	1530.6	1404.4	1288.1	1192.8	1111.5	1044.9	998.6
32.5°	2264.3	2018.0	1804.6	1632.1	1488.0	1376.4	1258.4	1159.7	1076.2	1010.8	966.2
35°	2274.1	2005.7	1761.1	1557.9	1419.2	1310.5	1211.7	1109.4	1021.8	960.8	910.3
37.5°	2254.5	1979.8	1710.7	1486.4	1334.5	1227.5	1144.4	1057.2	973.4	906.3	862.8
40°	2223.7	1963.0	1671.4	1436.0	1276.2	1173.1	1102.4	1016.9	934.2	870.4	829.7
42.5°	2164.8	1928.8	1628.3	1379.9	1215.7	1112.6	1047.4	976.0	897.8	837.9	797.3
45°	2021.2	1854.3	1563.5	1295.8	1126.2	1019.7	962.2	910.3	839.5	781.4	746.4
47.5°	1821.9	1742.4	1469.9	1207.1	1032.9	930.4	870.7	828.9	777.2	730.2	696.6
50°	1683.4	1650.4	1406.5	1146.6	970.6	870.4	813.0	775.1	738.0	691.0	660.1
52.5°	1523.6	1543.9	1332.6	1083.7	907.3	808.8	754.7	724.6	690.9	652.3	625.4
55°	1298.6	1372.2	1204.7	978.3	813.0	719.1	667.9	641.2	621.6	592.9	569.8
57.5°	1088.0	1181.6	1066.5	869.7	720.3	639.3	590.2	561.2	548.6	533.6	515.4
60°	963.0	1055.4	967.9	796.8	658.1	580.9	537.5	513.0	500.3	489.9	474.5
62.5°	851.3	944.9	871.4	722.8	596.9	525.5	487.6	463.7	453.9	448.4	435.2
65°	698.0	778.6	729.5	607.6	509.5	446.4	412.1	395.3	386.1	384.1	375.7
67.5°	568.1	629.5	593.7	504.0	426.8	372.3	343.1	328.9	321.8	321.1	314.8
70°	482.9	540.3	513.0	431.7	365.2	322.4	297.1	284.5	280.4	279.6	276.2
72.5°	416.7	456.8	435.1	367.2	315.8	277.0	258.4	245.3	240.5	241.5	239.2
75°	308.4	338.5	325.9	278.9	237.6	212.3	196.9	188.5	184.3	186.5	183.6
77.5°	221.9	240.9	229.6	197.1	171.6	153.4	142.0	136.8	133.0	132.9	131.6
80°	167.5	178.7	172.4	152.8	131.8	116.4	107.2	103.7	101.7	100.9	100.2
82.5°	119.3	128.9	121.4	107.9	93.6	84.4	79.2	74.5	73.0	73.5	72.8
85°	60.3	63.8	61.0	52.5	47.0	42.7	39.9	37.8	36.5	37.2	35.8
87.5°	24.0	24.1	21.8	19.2	17.7	15.5	15.2	13.6	12.9	13.3	13.1
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





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**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°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1422.4	1418.4	1412.8	1404.4	1397.7	1387.1	1387.1	1388.8	1388.8	1388.2	1387.1
5°	1379.2	1368.7	1356.1	1341.4	1326.0	1310.5	1307.7	1302.1	1297.9	1295.1	1291.6
7.5°	1333.6	1315.0	1296.6	1276.0	1257.2	1241.7	1230.9	1221.9	1216.2	1210.1	1205.5
10°	1302.8	1279.7	1257.9	1236.3	1212.4	1193.5	1181.6	1173.1	1166.9	1161.3	1158.4
12.5°	1266.4	1239.9	1215.9	1195.3	1169.2	1149.8	1138.4	1134.4	1127.0	1115.3	1109.1
15°	1213.1	1188.6	1159.8	1128.3	1115.7	1091.9	1078.5	1072.3	1068.0	1058.9	1056.1
17.5°	1167.5	1135.4	1103.2	1079.7	1056.2	1036.9	1029.5	1021.6	1016.0	1008.6	1006.4
20°	1131.1	1102.4	1072.9	1047.8	1023.1	1002.2	995.9	990.2	984.6	981.1	978.3
22.5°	1094.1	1065.4	1041.0	1017.4	991.2	977.5	970.6	964.5	960.6	958.1	955.4
25°	1042.1	1016.9	989.5	968.5	947.5	938.3	934.2	930.7	927.9	924.3	923.6
27.5°	995.6	968.1	945.9	926.3	911.2	903.7	899.6	897.9	898.5	899.7	900.5
30°	960.8	935.6	917.4	900.5	886.5	879.5	878.8	878.8	881.6	882.3	883.7
32.5°	928.9	908.1	889.9	873.6	863.0	858.2	860.9	860.9	863.1	865.0	867.5
35°	882.3	864.1	850.1	836.1	827.0	829.0	830.5	831.9	835.4	839.5	842.4
37.5°	837.9	822.1	807.4	796.6	792.4	796.1	799.5	802.5	806.5	809.8	812.5
40°	805.9	794.0	780.0	770.2	771.6	773.7	776.5	780.0	783.5	785.6	788.5
42.5°	776.2	763.8	753.1	744.9	746.9	749.6	751.3	753.1	757.2	761.0	762.6
45°	730.9	721.1	711.3	706.4	707.8	709.3	710.6	712.7	716.2	719.1	719.7
47.5°	680.1	673.2	666.6	661.8	664.1	663.5	665.4	669.9	670.9	672.6	676.5
50°	647.6	641.2	633.6	632.1	632.1	632.1	632.8	638.5	638.5	641.2	644.1
52.5°	611.7	607.6	602.7	600.2	599.1	599.1	602.0	604.8	605.9	609.8	612.7
55°	558.6	554.4	550.1	548.0	546.6	548.0	553.7	555.0	558.6	560.6	562.8
57.5°	503.2	500.0	496.6	495.4	495.2	497.0	500.1	504.3	505.2	511.6	514.8
60°	466.7	461.8	459.1	459.1	457.6	464.0	462.5	469.6	470.9	475.2	480.1
62.5°	429.2	422.6	421.5	421.5	423.5	425.3	427.2	430.3	433.9	439.3	443.1
65°	368.6	365.2	370.1	369.3	367.9	372.1	372.1	375.7	379.9	384.8	392.4
67.5°	311.3	309.5	309.9	309.9	312.0	314.4	316.4	319.4	324.5	329.7	334.7
70°	272.6	274.7	271.3	274.0	276.2	276.8	278.2	282.4	288.0	291.5	297.1
72.5°	235.1	234.9	235.3	236.5	238.5	239.8	241.2	246.0	252.2	255.1	259.6
75°	180.8	180.1	182.2	182.2	185.7	187.1	188.5	190.6	196.3	200.5	203.9
77.5°	132.1	132.9	132.4	134.8	133.8	134.1	138.5	140.6	141.2	149.5	151.2
80°	99.5	100.9	101.7	102.3	103.0	101.7	106.6	108.6	108.6	113.5	117.0
82.5°	71.5	72.3	74.2	74.8	75.0	76.4	76.8	78.4	80.1	82.1	86.8
85°	35.8	37.8	38.5	37.8	38.5	37.2	39.2	39.9	40.7	40.7	40.7
87.5°	13.0	14.0	14.0	15.1	15.0	16.1	16.2	15.2	15.4	17.3	15.2
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



TEST NUMBER: P332222-940

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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°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1383.1	1382.6	1386.5	1383.7	1386.5	1382.6	1383.1	1387.1	1388.2	1388.8	1388.8
5°	1287.4	1289.5	1282.5	1282.5	1282.5	1289.5	1287.4	1291.6	1295.1	1297.9	1302.1
7.5°	1202.2	1199.1	1199.4	1195.6	1199.4	1199.1	1202.2	1205.5	1210.1	1216.2	1221.9
10°	1150.0	1145.8	1144.4	1145.1	1144.4	1145.8	1150.0	1158.4	1161.3	1166.9	1173.1
12.5°	1106.9	1106.0	1096.8	1096.9	1096.8	1106.0	1106.9	1109.1	1115.3	1127.0	1134.4
15°	1056.1	1042.9	1041.4	1045.6	1041.4	1042.9	1056.1	1056.1	1058.9	1068.0	1072.3
17.5°	1005.2	998.3	998.6	996.6	998.6	998.3	1005.2	1006.4	1008.6	1016.0	1021.6
20°	978.3	974.1	973.4	968.5	973.4	974.1	978.3	978.3	981.1	984.6	990.2
22.5°	953.7	952.3	952.7	947.3	952.7	952.3	953.7	955.4	958.1	960.6	964.5
25°	923.0	926.5	923.6	923.6	923.6	926.5	923.0	923.6	924.3	927.9	930.7
27.5°	902.2	902.1	900.7	900.7	900.7	902.1	902.2	900.5	899.7	898.5	897.9
30°	886.5	885.8	887.3	887.3	887.3	885.8	886.5	883.7	882.3	881.6	878.8
32.5°	870.8	871.8	872.1	872.6	872.1	871.8	870.8	867.5	865.0	863.1	860.9
35°	846.6	847.3	849.4	848.0	849.4	847.3	846.6	842.4	839.5	835.4	831.9
37.5°	813.8	817.0	816.3	817.4	816.3	817.0	813.8	812.5	809.8	806.5	802.5
40°	789.1	791.2	790.5	790.5	790.5	791.2	789.1	788.5	785.6	783.5	780.0
42.5°	763.9	765.4	763.6	762.5	763.6	765.4	763.9	762.6	761.0	757.2	753.1
45°	722.6	721.1	723.3	720.4	723.3	721.1	722.6	719.7	719.1	716.2	712.7
47.5°	676.3	677.7	678.2	680.4	678.2	677.7	676.3	676.5	672.6	670.9	669.9
50°	645.4	649.6	649.6	649.0	649.6	649.6	645.4	644.1	641.2	638.5	638.5
52.5°	615.2	617.2	619.9	619.8	619.9	617.2	615.2	612.7	609.8	605.9	604.8
55°	568.4	569.8	571.1	571.9	571.1	569.8	568.4	562.8	560.6	558.6	555.0
57.5°	519.9	519.3	522.6	523.6	522.6	519.3	519.9	514.8	511.6	505.2	504.3
60°	485.6	485.6	491.2	493.4	491.2	485.6	485.6	480.1	475.2	470.9	469.6
62.5°	449.2	451.5	457.1	454.1	457.1	451.5	449.2	443.1	439.3	433.9	430.3
65°	395.9	401.5	400.8	403.7	400.8	401.5	395.9	392.4	384.8	379.9	375.7
67.5°	340.3	343.8	348.8	349.3	348.8	343.8	340.3	334.7	329.7	324.5	319.4
70°	302.7	306.2	309.1	311.1	309.1	306.2	302.7	297.1	291.5	288.0	282.4
72.5°	266.4	268.1	274.8	271.9	274.8	268.1	266.4	259.6	255.1	252.2	246.0
75°	208.8	213.7	217.9	215.9	217.9	213.7	208.8	203.9	200.5	196.3	190.6
77.5°	154.4	159.3	161.3	159.5	161.3	159.3	154.4	151.2	149.5	141.2	140.6
80°	122.0	121.3	125.5	124.8	125.5	121.3	122.0	117.0	113.5	108.6	108.6
82.5°	89.4	88.7	90.7	91.1	90.7	88.7	89.4	86.8	82.1	80.1	78.4
85°	43.4	45.6	42.7	42.1	42.7	45.6	43.4	40.7	40.7	40.7	39.9
87.5°	15.2	15.3	14.8	14.4	14.8	15.3	15.2	15.2	17.3	15.4	15.2
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



TEST NUMBER: P332222-940

CATALOG NUMBER: S123DIW-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°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1387.1	1387.1	1397.7	1404.4	1412.8	1418.4	1422.4	1426.3	1433.1	1442.0	1452.1
5°	1307.7	1310.5	1326.0	1341.4	1356.1	1368.7	1379.2	1391.8	1407.2	1426.1	1447.2
7.5°	1230.9	1241.7	1257.2	1276.0	1296.6	1315.0	1333.6	1354.4	1376.1	1404.0	1433.4
10°	1181.6	1193.5	1212.4	1236.3	1257.9	1279.7	1302.8	1325.3	1352.5	1385.5	1423.3
12.5°	1138.4	1149.8	1169.2	1195.3	1215.9	1239.9	1266.4	1295.6	1326.2	1365.9	1408.8
15°	1078.5	1091.9	1115.7	1128.3	1159.8	1188.6	1213.1	1255.2	1294.4	1335.1	1384.8
17.5°	1029.5	1036.9	1056.2	1079.7	1103.2	1135.4	1167.5	1202.6	1241.7	1291.5	1353.7
20°	995.9	1002.2	1023.1	1047.8	1072.9	1102.4	1131.1	1166.2	1210.3	1262.8	1330.2
22.5°	970.6	977.5	991.2	1017.4	1041.0	1065.4	1094.1	1135.9	1182.9	1234.3	1307.2
25°	934.2	938.3	947.5	968.5	989.5	1016.9	1042.1	1081.4	1129.7	1190.0	1262.8
27.5°	899.6	903.7	911.2	926.3	945.9	968.1	995.6	1028.9	1078.0	1143.4	1220.8
30°	878.8	879.5	886.5	900.5	917.4	935.6	960.8	998.6	1044.9	1111.5	1192.8
32.5°	860.9	858.2	863.0	873.6	889.9	908.1	928.9	966.2	1010.8	1076.2	1159.7
35°	830.5	829.0	827.0	836.1	850.1	864.1	882.3	910.3	960.8	1021.8	1109.4
37.5°	799.5	796.1	792.4	796.6	807.4	822.1	837.9	862.8	906.3	973.4	1057.2
40°	776.5	773.7	771.6	770.2	780.0	794.0	805.9	829.7	870.4	934.2	1016.9
42.5°	751.3	749.6	746.9	744.9	753.1	763.8	776.2	797.3	837.9	897.8	976.0
45°	710.6	709.3	707.8	706.4	711.3	721.1	730.9	746.4	781.4	839.5	910.3
47.5°	665.4	663.5	664.1	661.8	666.6	673.2	680.1	696.6	730.2	777.2	828.9
50°	632.8	632.1	632.1	632.1	633.6	641.2	647.6	660.1	691.0	738.0	775.1
52.5°	602.0	599.1	599.1	600.2	602.7	607.6	611.7	625.4	652.3	690.9	724.6
55°	553.7	548.0	546.6	548.0	550.1	554.4	558.6	569.8	592.9	621.6	641.2
57.5°	500.1	497.0	495.2	495.4	496.6	500.0	503.2	515.4	533.6	548.6	561.2
60°	462.5	464.0	457.6	459.1	459.1	461.8	466.7	474.5	489.9	500.3	513.0
62.5°	427.2	425.3	423.5	421.5	421.5	422.6	429.2	435.2	448.4	453.9	463.7
65°	372.1	372.1	367.9	369.3	370.1	365.2	368.6	375.7	384.1	386.1	395.3
67.5°	316.4	314.4	312.0	309.9	309.9	309.5	311.3	314.8	321.1	321.8	328.9
70°	278.2	276.8	276.2	274.0	271.3	274.7	272.6	276.2	279.6	280.4	284.5
72.5°	241.2	239.8	238.5	236.5	235.3	234.9	235.1	239.2	241.5	240.5	245.3
75°	188.5	187.1	185.7	182.2	182.2	180.1	180.8	183.6	186.5	184.3	188.5
77.5°	138.5	134.1	133.8	134.8	132.4	132.9	132.1	131.6	132.9	133.0	136.8
80°	106.6	101.7	103.0	102.3	101.7	100.9	99.5	100.2	100.9	101.7	103.7
82.5°	76.8	76.4	75.0	74.8	74.2	72.3	71.5	72.8	73.5	73.0	74.5
85°	39.2	37.2	38.5	37.8	38.5	37.8	35.8	35.8	37.2	36.5	37.8
87.5°	16.2	16.1	15.0	15.1	14.0	14.0	13.0	13.1	13.3	12.9	13.6
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



TEST NUMBER: P332222-940

CATALOG NUMBER: S123DIW-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: P332222-940

CATALOG NUMBER: S123DIW-S1165D1030U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1455.5	1458.2	1467.8	1474.5	1482.4	1486.8	1491.3	1494.7	1499.1	1500.3	1516.5
5°	1461.9	1476.0	1500.5	1518.7	1541.1	1565.6	1582.4	1590.2	1610.4	1627.3	1660.9
7.5°	1460.1	1490.0	1527.0	1565.3	1606.5	1644.7	1677.8	1717.0	1744.9	1786.8	1828.2
10°	1458.4	1498.3	1546.0	1595.1	1652.5	1705.8	1753.5	1806.7	1850.8	1909.0	1958.7
12.5°	1453.3	1501.7	1567.9	1625.9	1695.7	1769.2	1839.8	1908.2	1947.3	2044.2	2090.0
15°	1440.9	1498.3	1581.0	1669.4	1765.3	1852.3	1942.0	2013.5	2129.0	2213.9	2267.8
17.5°	1417.0	1497.5	1595.6	1702.1	1818.9	1933.4	2035.1	2143.5	2266.2	2368.7	2478.1
20°	1405.9	1494.2	1603.5	1721.2	1842.5	1972.1	2087.8	2218.0	2352.0	2452.8	2593.0
22.5°	1385.1	1485.1	1602.9	1734.1	1863.8	1997.9	2133.2	2264.6	2419.2	2558.2	2691.7
25°	1351.2	1463.3	1585.3	1731.7	1883.8	2018.4	2180.2	2354.7	2516.0	2694.7	2827.8
27.5°	1315.5	1435.3	1557.5	1693.7	1857.3	2017.0	2220.6	2417.8	2614.9	2769.2	2867.7
30°	1288.1	1404.4	1530.6	1667.9	1829.8	2019.7	2247.5	2462.6	2654.7	2787.1	2842.5
32.5°	1258.4	1376.4	1488.0	1632.1	1804.6	2018.0	2264.3	2489.0	2656.9	2745.1	2734.3
35°	1211.7	1310.5	1419.2	1557.9	1761.1	2005.7	2274.1	2491.4	2594.4	2575.5	2432.5
37.5°	1144.4	1227.5	1334.5	1486.4	1710.7	1979.8	2254.5	2417.5	2410.8	2256.7	2049.6
40°	1102.4	1173.1	1276.2	1436.0	1671.4	1963.0	2223.7	2329.5	2239.8	2024.6	1776.6
42.5°	1047.4	1112.6	1215.7	1379.9	1628.3	1928.8	2164.8	2195.5	2020.0	1772.4	1545.0
45°	962.2	1019.7	1126.2	1295.8	1563.5	1854.3	2021.2	1946.2	1709.9	1454.2	1281.1
47.5°	870.7	930.4	1032.9	1207.1	1469.9	1742.4	1821.9	1662.3	1419.9	1212.4	1053.5
50°	813.0	870.4	970.6	1146.6	1406.5	1650.4	1683.4	1477.3	1254.5	1072.3	941.9
52.5°	754.7	808.8	907.3	1083.7	1332.6	1543.9	1523.6	1313.6	1108.7	953.4	851.0
55°	667.9	719.1	813.0	978.3	1204.7	1372.2	1298.6	1098.1	928.5	808.1	730.2
57.5°	590.2	639.3	720.3	869.7	1066.5	1181.6	1088.0	919.1	784.2	691.4	633.4
60°	537.5	580.9	658.1	796.8	967.9	1055.4	963.0	813.7	700.1	625.8	574.0
62.5°	487.6	525.5	596.9	722.8	871.4	944.9	851.3	725.1	628.4	562.5	518.4
65°	412.1	446.4	509.5	607.6	729.5	778.6	698.0	595.7	520.7	471.6	442.2
67.5°	343.1	372.3	426.8	504.0	593.7	629.5	568.1	488.9	432.4	393.0	369.6
70°	297.1	322.4	365.2	431.7	513.0	540.3	482.9	417.7	376.3	344.8	323.1
72.5°	258.4	277.0	315.8	367.2	435.1	456.8	416.7	359.4	320.8	297.1	279.9
75°	196.9	212.3	237.6	278.9	325.9	338.5	308.4	272.6	246.6	229.9	216.5
77.5°	142.0	153.4	171.6	197.1	229.6	240.9	221.9	198.0	179.1	167.7	160.3
80°	107.2	116.4	131.8	152.8	172.4	178.7	167.5	149.3	136.0	129.7	123.3
82.5°	79.2	84.4	93.6	107.9	121.4	128.9	119.3	108.3	101.2	95.4	93.1
85°	39.9	42.7	47.0	52.5	61.0	63.8	60.3	57.4	53.2	49.8	49.8
87.5°	15.2	15.5	17.7	19.2	21.8	24.1	24.0	23.4	23.4	22.9	22.6
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°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1522.2	1522.7	1528.9	1533.4	1531.2	1533.9	1535.1
5°	1663.0	1688.3	1701.6	1711.4	1712.1	1712.8	1718.4
7.5°	1862.8	1889.8	1909.6	1939.6	1948.6	1958.7	1955.8
10°	2008.6	2048.4	2082.9	2101.0	2120.7	2149.4	2126.3
12.5°	2144.7	2215.5	2267.8	2296.2	2314.6	2320.4	2309.1
15°	2369.5	2461.9	2511.7	2510.3	2573.4	2600.8	2558.0
17.5°	2575.5	2660.9	2729.3	2764.3	2816.8	2828.5	2823.2
20°	2701.6	2794.9	2848.1	2908.4	2935.7	2960.2	2964.4
22.5°	2810.4	2894.0	2951.3	3001.4	3024.3	3035.9	3043.0
25°	2922.4	2988.3	3022.6	3040.1	3046.4	3045.0	3035.9
27.5°	2914.6	2919.7	2881.9	2844.7	2811.6	2774.1	2761.2
30°	2839.0	2780.1	2675.0	2615.5	2527.8	2458.4	2486.4
32.5°	2640.0	2522.8	2404.8	2274.6	2166.8	2136.1	2105.2
35°	2253.1	2047.1	1926.5	1786.4	1730.3	1674.3	1635.7
37.5°	1822.8	1663.5	1520.5	1428.8	1372.6	1337.1	1318.1
40°	1576.1	1432.4	1314.7	1240.5	1197.7	1157.7	1152.2
42.5°	1379.4	1245.8	1157.2	1098.1	1056.9	1040.0	1027.7
45°	1129.7	1036.5	977.0	934.9	907.6	897.1	883.1
47.5°	956.2	890.3	845.6	817.0	796.4	788.5	787.5
50°	859.2	804.5	771.6	749.1	733.1	730.2	719.1
52.5°	786.3	739.0	713.3	693.7	682.1	674.2	670.8
55°	682.6	651.0	627.9	616.7	607.6	599.9	599.9
57.5°	597.3	570.9	555.6	546.1	543.2	537.8	534.3
60°	544.6	522.1	510.2	501.8	496.1	496.9	490.5
62.5°	492.9	478.4	467.0	458.6	451.9	452.0	452.5
65°	419.8	408.6	400.2	397.3	393.2	388.3	389.7
67.5°	355.7	345.2	338.7	333.9	332.4	329.8	333.9
70°	309.8	302.0	297.1	292.9	291.5	292.2	295.8
72.5°	267.7	262.3	259.0	257.1	254.0	254.1	256.5
75°	210.3	206.1	203.2	201.2	200.5	200.5	200.5
77.5°	154.4	153.5	152.2	149.1	149.3	150.1	150.3
80°	122.0	119.8	119.1	117.7	115.7	114.2	117.7
82.5°	91.1	89.0	88.3	88.0	84.8	84.5	87.5
85°	49.0	47.0	47.6	47.0	47.0	46.3	46.3
87.5°	22.1	21.8	21.3	21.9	21.5	21.0	22.2
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)