

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: P332479-840

Luminaire Tested: **S123RDIW-S1165D1030U840-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332479-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123RDIW-S1165D1030U840-4F0-1E-UDD-A1  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1030 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

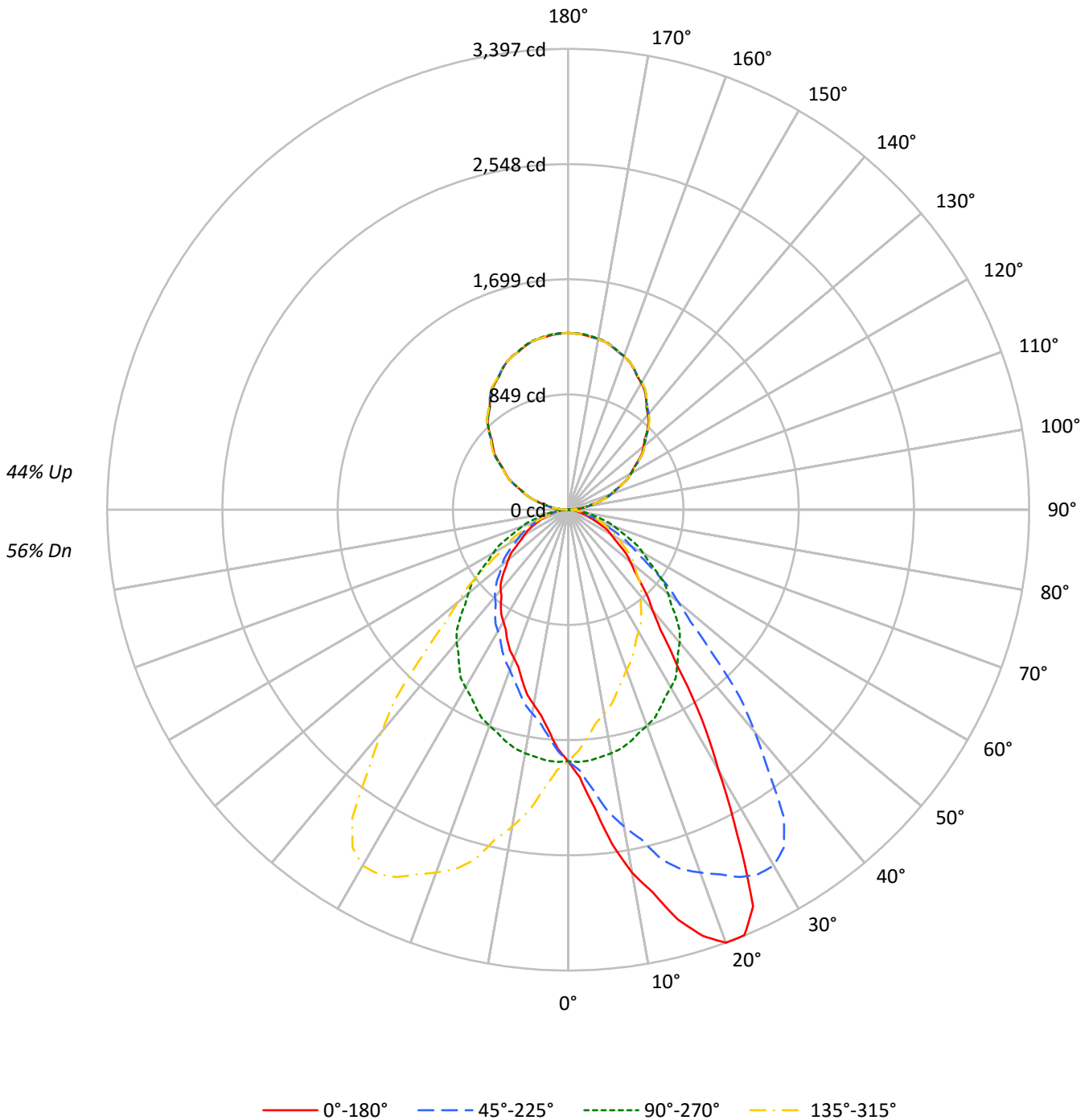
Lumens per Lamp: N/A  
Luminaire Lumens: 8228.9 lumens  
Efficiency: N/A  
Efficacy: 122.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 67.4  
Input Voltage (V): 120  
Input Current (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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56
1	100	96	92	89	93	89	86	83	77	75	73	66	64	63	56	54	53	49
2	91	84	78	74	85	79	74	69	68	64	61	59	56	53	50	48	46	42
3	84	75	68	62	78	70	64	59	61	56	52	52	49	46	45	42	40	36
4	77	67	59	53	71	62	56	50	54	49	45	47	43	40	40	37	35	32
5	71	60	52	46	66	56	49	44	49	44	39	43	38	35	37	33	31	28
6	66	54	46	40	61	51	43	38	44	39	35	39	34	31	33	30	27	25
7	61	49	41	36	57	46	39	34	41	35	31	35	31	28	31	27	25	22
8	57	44	37	32	53	42	35	30	37	32	28	33	28	25	28	25	22	20
9	53	41	33	28	49	38	32	27	34	29	25	30	26	22	26	23	20	18
10	49	37	30	26	46	35	29	25	32	26	22	28	23	20	24	21	18	17

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

	0°	90°	180°	270°
0°	19957	19957	19957	19957
5°	23791	20042	17650	20042
10°	29704	19928	15946	19928
15°	34867	19724	14540	19724
20°	38913	19420	13347	19420
25°	38292	19099	12613	19099
30°	27524	18804	11857	18804
35°	18378	18419	11369	18419
40°	13540	17956	10863	17956
45°	11357	17145	10368	17145
50°	10021	16083	9676	16083
55°	8788	14865	8728	14865
60°	7828	13702	7995	13702
65°	6872	12455	7440	12455
70°	5397	11339	6795	11339
75°	4754	9902	6209	9902
80°	4135	8412	6106	8412
85°	3335	6756	6472	6756



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.3	2.2
10°-20°	569.6	6.9
20°-30°	894.9	10.9
30°-40°	933.7	11.3
40°-50°	799.0	9.7
50°-60°	609.0	7.4
60°-70°	390.4	4.7
70°-80°	187.8	2.3
80°-90°	53.6	0.7
90°-100°	84.9	1.0
100°-110°	254.0	3.1
110°-120°	431.9	5.2
120°-130°	568.1	6.9
130°-140°	638.6	7.8
140°-150°	627.7	7.6
150°-160°	528.4	6.4
160°-170°	351.8	4.3
170°-180°	123.2	1.5
0°-30°	1646.9	20.0
0°-40°	2580.6	31.4
0°-60°	3988.6	48.5
0°-90°	4620.3	56.1
90°-120°	770.8	9.4
90°-150°	2605.2	31.7
90°-180°	3609.0	43.9
0°-180°	8228.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1854	1854	1854	1854	1854	
5°	2202	1855	1634	1855	2202	227
15°	3129	1770	1305	1770	3129	887
25°	3224	1608	1062	1608	3224	1386
35°	1399	1402	865	1402	1399	917
45°	746	1126	681	1126	746	587
55°	468	792	465	792	468	423
65°	270	489	292	489	270	265
75°	114	238	149	238	114	123
85°	27	55	52	55	27	32
90°	31	1	31	1	31	16
95°	80	60	80	60	80	82
105°	244	230	244	230	244	258
115°	436	435	436	435	436	432
125°	629	636	629	636	629	563
135°	825	826	825	826	825	634
145°	1002	1002	1002	1002	1002	625
155°	1145	1147	1145	1147	1145	527
165°	1245	1249	1245	1249	1245	351
175°	1294	1299	1294	1299	1294	123
180°	1302	1302	1302	1302	1302	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1974.8	1977.3	1969.0	1967.8	1958.2	1955.7	1955.7	1942.4	1934.1	1923.4	1917.0
5°	2201.8	2214.5	2208.2	2193.8	2170.0	2164.4	2149.4	2125.6	2098.6	2065.3	2049.4
7.5°	2485.3	2502.6	2496.0	2473.9	2448.9	2428.8	2386.2	2346.7	2291.3	2242.7	2201.1
10°	2717.7	2699.5	2685.1	2663.7	2640.7	2603.4	2559.0	2497.8	2427.2	2371.7	2309.8
12.5°	2891.6	2888.7	2870.5	2848.5	2816.0	2780.6	2725.9	2651.5	2569.4	2489.1	2418.3
15°	3128.9	3133.6	3121.7	3098.7	3052.6	2989.9	2907.4	2876.5	2759.0	2671.7	2584.3
17.5°	3293.0	3292.1	3290.4	3258.5	3211.6	3166.9	3090.4	3009.0	2902.7	2779.7	2662.0
20°	3397.1	3389.2	3390.8	3355.1	3320.1	3268.5	3193.9	3075.6	2988.4	2846.3	2724.8
22.5°	3394.6	3393.0	3399.0	3386.8	3361.4	3321.8	3263.2	3163.3	3051.9	2908.5	2771.9
25°	3224.1	3217.7	3255.1	3265.4	3305.9	3313.0	3295.5	3240.8	3135.2	2987.6	2818.5
27.5°	2698.4	2694.8	2764.1	2850.7	2960.6	3046.0	3128.6	3168.4	3135.2	3029.5	2860.1
30°	2214.5	2289.1	2324.0	2449.4	2589.1	2755.8	2901.8	3040.7	3074.8	3028.9	2889.9
32.5°	1838.6	1903.7	1932.9	2040.5	2170.7	2365.9	2585.0	2781.7	2920.6	2955.8	2872.2
35°	1398.6	1399.4	1466.0	1513.6	1634.3	1835.1	2047.8	2311.3	2573.2	2771.7	2792.3
37.5°	1116.0	1119.9	1160.2	1207.7	1298.2	1404.4	1591.7	1810.8	2113.3	2418.0	2596.6
40°	963.6	970.7	1000.9	1047.7	1112.8	1193.0	1339.0	1545.4	1797.8	2136.7	2413.7
42.5°	865.8	877.4	892.9	929.0	969.3	1044.4	1162.5	1321.9	1551.5	1871.9	2191.5
45°	746.1	752.5	764.4	781.0	817.5	869.9	949.3	1056.4	1247.0	1504.9	1824.7
47.5°	658.1	654.8	667.3	680.9	705.2	740.8	794.1	881.5	1017.4	1224.4	1495.7
50°	598.4	597.6	606.4	616.7	639.7	665.9	709.6	775.5	883.4	1054.9	1303.3
52.5°	542.6	545.6	551.8	564.6	581.3	602.5	641.7	689.1	781.8	929.8	1136.9
55°	468.3	470.7	479.4	486.6	498.5	519.9	544.5	584.2	647.7	750.8	921.5
57.5°	405.5	404.3	412.7	414.4	428.0	445.5	464.4	495.2	541.3	618.0	733.0
60°	363.6	361.1	368.3	373.9	381.0	395.3	411.1	441.3	477.9	534.2	632.6
62.5°	325.4	324.3	329.5	335.1	341.0	354.0	367.3	390.5	419.4	466.9	544.9
65°	269.8	272.3	274.6	277.0	280.1	288.1	300.8	316.7	336.6	369.9	426.3
67.5°	212.1	214.5	215.3	220.2	227.0	232.0	239.7	253.9	267.6	295.8	327.8
70°	171.5	170.7	171.5	173.8	182.6	191.3	201.6	212.0	220.7	240.4	267.5
72.5°	147.3	145.9	147.9	148.5	152.7	155.1	161.6	171.3	182.6	196.0	215.4
75°	114.3	114.3	114.3	114.3	117.4	119.1	121.5	123.8	127.7	134.1	148.5
77.5°	84.4	84.6	85.7	86.5	87.2	88.1	89.6	91.9	93.3	96.6	102.9
80°	66.7	67.5	66.7	67.5	67.5	69.1	69.9	72.2	73.0	77.0	79.4
82.5°	50.2	49.7	50.2	51.0	51.0	52.5	52.7	54.4	54.6	56.7	59.1
85°	27.0	25.4	27.0	26.2	27.8	26.2	27.0	28.6	28.6	29.4	32.5
87.5°	12.5	13.6	12.3	12.8	12.7	13.2	13.0	12.9	13.9	13.1	13.2
90°	30.7	30.2	29.8	29.3	28.9	28.2	27.3	26.4	25.4	24.5	21.6
92.5°	41.3	41.6	41.9	42.1	42.4	42.2	41.5	40.7	40.0	39.3	37.6
95°	79.8	79.8	79.8	79.8	79.8	79.4	78.5	77.6	76.6	75.7	73.9
97.5°	122.8	122.9	123.0	123.0	123.1	122.7	121.6	120.6	119.6	118.5	117.1
100°	155.5	155.0	154.6	154.1	153.7	153.1	152.5	151.8	151.1	150.4	149.3
102.5°	189.0	189.1	189.2	189.3	189.5	189.1	188.4	187.7	187.1	186.4	184.9
105°	243.5	243.1	242.6	242.2	241.7	241.5	241.5	241.5	241.5	241.5	239.4
107.5°	300.1	300.4	300.7	301.0	301.2	301.0	300.3	299.6	298.8	298.1	297.3
110°	338.6	339.1	339.5	340.0	340.4	340.2	339.3	338.4	337.5	336.6	336.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	379.6	379.7	379.7	379.8	379.9	379.4	378.3	377.3	376.2	375.1	375.0
115°	435.9	436.1	436.3	436.6	436.8	436.8	436.6	436.3	436.1	435.9	436.3
117.5°	492.9	493.5	494.2	494.8	495.4	495.8	495.8	495.9	495.9	496.0	496.6
120°	533.0	533.5	533.9	534.4	534.8	535.2	535.4	535.6	535.8	536.1	537.2
122.5°	571.5	572.2	572.8	573.4	574.0	574.7	575.2	575.8	576.4	577.0	577.6
125°	629.2	630.2	631.1	632.0	632.9	633.8	634.7	635.6	636.5	637.4	637.8
127.5°	686.7	687.7	688.8	689.8	690.8	692.1	693.4	694.6	695.9	697.1	697.6
130°	724.4	726.0	727.5	729.1	730.7	732.0	732.9	733.8	734.7	735.6	736.3
132.5°	763.7	764.9	766.1	767.3	768.6	769.7	770.8	771.9	773.0	774.1	774.6
135°	824.7	825.1	825.6	826.0	826.5	827.1	828.0	828.9	829.8	830.7	831.0
137.5°	878.5	879.3	880.2	881.0	881.9	882.8	883.7	884.7	885.7	886.7	886.1
140°	913.6	915.2	916.9	918.4	920.0	920.9	921.1	921.4	921.6	921.8	921.6
142.5°	949.7	950.9	952.1	953.3	954.5	955.3	955.5	955.7	955.9	956.2	955.8
145°	1001.6	1002.5	1003.4	1004.3	1005.2	1005.8	1006.0	1006.3	1006.5	1006.7	1006.0
147.5°	1047.8	1049.2	1050.6	1052.0	1053.3	1054.0	1054.0	1054.0	1054.0	1054.0	1053.4
150°	1077.3	1078.7	1080.1	1081.5	1082.8	1083.5	1083.5	1083.5	1083.5	1083.5	1083.0
152.5°	1106.0	1107.1	1108.3	1109.5	1110.8	1111.2	1110.8	1110.3	1110.0	1109.6	1109.4
155°	1144.9	1146.5	1148.0	1149.6	1151.2	1151.5	1150.6	1149.7	1148.8	1147.9	1147.7
157.5°	1180.2	1181.5	1182.9	1184.1	1185.4	1185.5	1184.6	1183.6	1182.7	1181.6	1181.5
160°	1203.2	1204.1	1205.0	1205.9	1206.8	1206.7	1205.6	1204.5	1203.3	1202.1	1202.1
162.5°	1220.3	1221.8	1223.2	1224.8	1226.2	1226.4	1225.2	1224.1	1222.9	1221.8	1221.6
165°	1245.2	1246.7	1248.3	1249.9	1251.5	1251.6	1250.2	1248.9	1247.5	1246.2	1246.2
167.5°	1266.2	1267.6	1269.0	1270.4	1271.8	1271.8	1270.4	1269.0	1267.6	1266.2	1266.1
170°	1276.9	1278.4	1280.0	1281.6	1283.2	1283.2	1281.6	1280.0	1278.4	1276.9	1276.9
172.5°	1285.1	1286.6	1288.2	1289.8	1291.4	1291.5	1290.1	1288.7	1287.3	1285.9	1285.9
175°	1294.2	1295.9	1297.4	1299.0	1300.6	1300.7	1299.4	1298.0	1296.7	1295.3	1295.3
177.5°	1299.2	1300.4	1301.7	1302.9	1304.2	1304.3	1303.2	1302.1	1301.0	1300.0	1300.0
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1914.5	1912.6	1903.7	1893.5	1880.2	1871.3	1864.3	1860.5	1849.1	1835.1	1825.5
5°	2032.8	2008.9	1983.5	1952.6	1924.0	1894.6	1876.3	1854.9	1828.8	1799.4	1778.8
7.5°	2159.4	2112.7	2062.4	2010.5	1959.2	1913.2	1872.6	1837.8	1796.0	1753.9	1724.4
10°	2256.5	2188.3	2117.7	2045.4	1979.5	1917.6	1870.0	1823.2	1773.2	1724.7	1688.3
12.5°	2344.8	2254.9	2173.5	2084.8	2000.5	1926.5	1857.9	1802.8	1742.7	1691.1	1649.5
15°	2456.6	2364.5	2266.0	2131.1	2019.2	1925.6	1842.2	1770.0	1697.0	1633.5	1593.0
17.5°	2561.0	2422.5	2290.2	2177.7	2032.3	1915.2	1813.5	1727.2	1647.0	1579.6	1529.8
20°	2604.2	2470.0	2326.4	2182.7	2039.8	1908.9	1790.6	1695.4	1612.0	1535.8	1489.9
22.5°	2630.2	2478.3	2327.0	2172.6	2020.8	1884.8	1767.8	1663.0	1572.7	1500.3	1443.5
25°	2660.6	2479.6	2312.9	2160.5	2005.7	1858.2	1719.2	1608.1	1510.5	1433.5	1373.1
27.5°	2680.6	2467.7	2270.7	2101.3	1944.3	1797.3	1670.0	1552.2	1453.2	1371.7	1307.0
30°	2684.3	2458.1	2238.3	2055.0	1895.4	1760.5	1625.6	1512.9	1408.1	1321.5	1261.2
32.5°	2689.5	2434.7	2194.4	1999.7	1836.3	1702.7	1580.4	1472.8	1365.5	1280.3	1218.7
35°	2668.5	2421.7	2128.0	1904.1	1740.6	1611.2	1501.0	1401.7	1296.2	1213.6	1150.9
37.5°	2578.3	2370.1	2059.1	1796.5	1625.6	1505.7	1415.8	1329.3	1232.5	1143.5	1084.4
40°	2487.5	2319.3	2005.7	1731.1	1552.6	1429.5	1348.6	1277.9	1184.3	1100.9	1037.4
42.5°	2352.3	2250.1	1954.9	1662.5	1470.0	1351.4	1283.1	1216.9	1134.7	1050.1	990.4
45°	2104.2	2117.7	1851.0	1553.3	1355.6	1236.6	1172.4	1126.3	1053.3	983.4	922.3
47.5°	1793.0	1919.2	1728.9	1436.9	1235.2	1123.5	1067.2	1027.0	977.9	909.3	853.5
50°	1589.8	1770.0	1631.1	1358.9	1159.6	1048.5	992.9	960.4	917.6	863.5	810.4
52.5°	1402.5	1596.0	1513.0	1271.8	1077.7	976.1	921.8	895.0	861.0	810.2	762.1
55°	1143.8	1339.8	1320.8	1140.5	954.8	863.5	822.3	792.1	769.1	731.0	693.0
57.5°	925.1	1111.1	1120.8	994.5	846.6	756.4	720.8	698.1	683.1	654.4	619.1
60°	787.4	958.1	991.4	896.2	769.1	689.7	654.8	636.5	624.7	601.7	574.6
62.5°	673.1	818.3	856.1	787.5	694.8	620.6	593.2	575.6	567.5	547.6	523.8
65°	515.1	635.8	672.3	634.2	585.7	526.2	504.0	489.0	481.8	470.7	453.2
67.5°	387.4	475.2	515.3	488.5	471.0	433.3	419.2	411.1	404.8	397.2	382.5
70°	311.1	376.2	417.5	410.3	396.1	376.2	365.9	360.3	354.0	347.7	335.0
72.5°	250.1	295.0	333.7	337.3	325.6	321.6	312.6	310.2	306.4	298.7	291.8
75°	165.9	196.8	223.8	234.2	238.9	242.9	238.9	238.1	237.3	231.0	227.0
77.5°	108.8	125.4	142.4	160.1	167.4	172.9	174.1	177.0	174.9	171.6	169.7
80°	83.3	87.4	99.2	114.3	126.2	131.0	134.1	135.7	134.9	134.1	131.0
82.5°	60.5	63.8	69.4	80.0	90.0	98.0	99.9	99.6	101.3	101.8	99.2
85°	32.5	33.3	34.9	36.6	42.1	50.8	53.2	54.7	56.4	56.4	51.6
87.5°	13.9	12.6	13.3	12.8	14.2	14.4	17.8	20.5	21.6	19.5	20.0
90°	18.7	15.7	12.7	10.1	7.9	5.6	3.3	1.0	3.3	5.6	7.9
92.5°	36.0	34.2	32.5	30.9	29.4	27.9	26.3	24.7	26.3	27.9	29.4
95°	72.1	70.3	68.5	66.8	65.1	63.5	61.9	60.4	61.9	63.5	65.1
97.5°	115.8	114.5	113.2	112.0	110.8	109.6	108.4	107.2	108.4	109.6	110.8
100°	148.1	147.0	145.8	144.6	143.2	141.9	140.5	139.2	140.5	141.9	143.2
102.5°	183.4	181.9	180.4	179.3	178.4	177.6	176.8	176.0	176.8	177.6	178.4
105°	237.3	235.3	233.3	232.1	231.6	231.2	230.7	230.2	230.7	231.2	231.6
107.5°	296.5	295.7	294.9	294.3	294.1	293.8	293.5	293.3	293.5	293.8	294.1
110°	335.7	335.3	334.8	334.4	333.9	333.5	333.0	332.5	333.0	333.5	333.9





TEST NUMBER: P332479-840

CATALOG NUMBER: S123RDIW-S1165D1030U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	374.9	374.8	374.7	374.6	374.3	374.0	373.8	373.4	373.8	374.0	374.3
115°	436.8	437.2	437.7	437.6	436.9	436.2	435.5	434.8	435.5	436.2	436.9
117.5°	497.2	497.8	498.4	498.5	498.0	497.6	497.1	496.7	497.1	497.6	498.0
120°	538.4	539.5	540.7	540.6	539.2	537.9	536.4	535.1	536.4	537.9	539.2
122.5°	578.2	578.9	579.4	579.2	578.1	577.2	576.2	575.2	576.2	577.2	578.1
125°	638.3	638.7	639.2	639.1	638.4	637.7	637.0	636.4	637.0	637.7	638.4
127.5°	698.1	698.6	699.1	698.6	697.2	695.8	694.3	692.9	694.3	695.8	697.2
130°	737.0	737.7	738.3	737.8	736.0	734.2	732.4	730.5	732.4	734.2	736.0
132.5°	775.1	775.6	776.1	775.5	773.7	771.7	769.9	768.1	769.9	771.7	773.7
135°	831.2	831.4	831.6	831.1	829.7	828.4	827.0	825.7	827.0	828.4	829.7
137.5°	885.4	884.8	884.2	883.4	882.2	881.1	880.0	878.9	880.0	881.1	882.2
140°	921.4	921.1	920.9	920.2	919.1	918.0	916.9	915.6	916.9	918.0	919.1
142.5°	955.3	954.9	954.5	953.8	952.6	951.5	950.4	949.3	950.4	951.5	952.6
145°	1005.4	1004.7	1004.0	1003.4	1003.0	1002.5	1002.1	1001.6	1002.1	1002.5	1003.0
147.5°	1052.8	1052.1	1051.5	1050.8	1050.0	1049.0	1048.2	1047.4	1048.2	1049.0	1050.0
150°	1082.6	1082.1	1081.7	1081.2	1080.8	1080.3	1079.8	1079.3	1079.8	1080.3	1080.8
152.5°	1109.1	1108.8	1108.5	1108.1	1107.5	1106.8	1106.2	1105.6	1106.2	1106.8	1107.5
155°	1147.5	1147.2	1147.0	1146.9	1146.9	1146.9	1146.9	1146.9	1146.9	1146.9	1146.9
157.5°	1181.3	1181.1	1180.9	1181.0	1181.2	1181.5	1181.8	1182.1	1181.8	1181.5	1181.2
160°	1202.1	1202.1	1202.1	1202.3	1202.9	1203.3	1203.8	1204.2	1203.8	1203.3	1202.9
162.5°	1221.4	1221.2	1221.0	1221.3	1221.9	1222.5	1223.2	1223.9	1223.2	1222.5	1221.9
165°	1246.2	1246.2	1246.2	1246.5	1247.2	1247.9	1248.5	1249.2	1248.5	1247.9	1247.2
167.5°	1265.9	1265.7	1265.5	1265.9	1266.8	1267.7	1268.6	1269.5	1268.6	1267.7	1266.8
170°	1276.9	1276.9	1276.9	1277.3	1278.2	1279.1	1280.0	1280.9	1280.0	1279.1	1278.2
172.5°	1285.9	1285.9	1285.9	1286.3	1287.2	1288.1	1289.0	1289.9	1289.0	1288.1	1287.2
175°	1295.3	1295.3	1295.3	1295.8	1296.7	1297.6	1298.5	1299.4	1298.5	1297.6	1296.7
177.5°	1300.0	1300.0	1300.0	1300.3	1301.0	1301.8	1302.5	1303.2	1302.5	1301.8	1301.0
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4



TEST NUMBER: P332479-840

CATALOG NUMBER: S123RDIW-S1165D1030U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1822.4	1814.1	1808.5	1795.7	1787.5	1778.6	1769.7	1775.4	1774.7	1774.1	1774.1
5°	1761.3	1743.0	1726.4	1705.0	1691.4	1674.8	1662.0	1660.4	1663.7	1652.5	1646.2
7.5°	1700.6	1675.7	1652.0	1628.4	1603.4	1583.4	1570.7	1564.9	1556.8	1549.9	1542.9
10°	1658.1	1628.7	1605.7	1576.3	1549.3	1525.5	1510.5	1500.2	1494.6	1489.0	1478.7
12.5°	1614.3	1585.6	1556.2	1523.0	1497.3	1469.7	1458.3	1446.8	1436.1	1430.0	1415.8
15°	1550.1	1512.9	1481.9	1446.9	1418.4	1391.4	1375.5	1352.5	1349.3	1341.4	1327.1
17.5°	1485.8	1445.3	1402.7	1376.7	1344.5	1316.5	1292.3	1284.5	1261.8	1253.2	1240.9
20°	1435.0	1397.8	1365.2	1331.1	1284.2	1258.1	1239.0	1228.7	1210.4	1199.3	1191.3
22.5°	1391.2	1353.3	1315.7	1275.9	1237.3	1207.9	1194.0	1177.9	1167.9	1152.4	1143.8
25°	1328.7	1287.4	1242.1	1199.3	1171.5	1149.3	1127.1	1112.8	1098.5	1091.4	1075.5
27.5°	1256.0	1212.8	1170.5	1138.0	1103.9	1082.0	1061.9	1049.1	1032.0	1020.0	1011.2
30°	1216.0	1165.2	1128.6	1099.3	1055.6	1035.0	1020.0	1004.1	991.4	978.7	970.0
32.5°	1169.6	1123.3	1088.6	1052.3	1018.9	996.2	976.7	962.8	952.0	939.9	931.2
35°	1096.9	1058.0	1022.3	985.8	961.2	938.2	915.1	903.2	892.9	881.8	873.9
37.5°	1031.2	994.8	960.9	926.2	895.8	877.1	858.5	849.4	835.5	828.0	819.9
40°	990.6	954.8	918.4	885.0	853.2	839.0	822.3	808.8	796.1	790.5	781.8
42.5°	946.1	910.4	879.6	843.7	817.7	798.3	782.9	768.2	758.6	750.5	745.6
45°	880.2	848.5	818.3	782.6	758.0	741.3	723.9	710.3	701.7	696.1	687.3
47.5°	816.3	784.6	753.9	722.8	698.9	679.9	662.5	653.1	641.5	634.7	628.7
50°	769.9	741.3	708.8	680.2	656.4	637.3	623.1	611.2	600.9	592.1	588.1
52.5°	727.4	696.9	668.8	642.1	617.0	595.4	582.4	569.9	562.1	552.1	547.5
55°	657.2	627.8	604.0	577.8	553.2	534.9	519.1	508.0	500.1	489.0	482.6
57.5°	591.3	565.0	536.5	513.8	488.5	473.0	459.9	444.8	435.2	426.4	420.2
60°	546.8	516.7	492.1	470.7	448.5	428.6	416.7	404.8	394.5	385.8	380.2
62.5°	500.5	474.1	450.8	427.5	407.2	389.9	376.1	366.1	357.0	351.4	345.9
65°	429.4	408.8	385.0	365.9	346.9	334.2	323.1	314.3	308.0	304.0	299.2
67.5°	364.0	344.0	323.2	304.5	291.8	282.1	274.8	267.3	264.2	259.0	255.9
70°	321.4	300.8	282.6	268.3	255.6	248.4	243.7	238.1	234.9	228.6	225.4
72.5°	275.1	260.1	247.0	235.3	225.1	218.6	212.6	205.7	200.7	193.7	190.5
75°	216.7	203.2	192.9	184.9	178.5	169.9	161.2	154.0	151.6	149.3	148.5
77.5°	160.5	151.9	144.4	137.7	129.9	123.5	121.6	120.0	119.6	118.3	118.3
80°	126.2	118.3	112.7	104.7	100.0	100.0	100.0	98.5	99.2	99.2	99.2
82.5°	93.8	86.5	83.5	80.7	79.7	80.3	80.3	80.7	80.2	81.4	80.8
85°	48.4	49.2	50.8	50.0	50.8	50.8	52.4	51.6	52.4	50.8	52.4
87.5°	19.8	22.2	23.4	24.6	26.0	25.9	26.7	26.9	27.7	27.9	28.0
90°	10.1	12.7	15.7	18.7	21.6	24.5	25.4	26.4	27.3	28.2	28.9
92.5°	30.9	32.5	34.2	36.0	37.6	39.3	40.0	40.7	41.5	42.2	42.4
95°	66.8	68.5	70.3	72.1	73.9	75.7	76.6	77.6	78.5	79.4	79.8
97.5°	112.0	113.2	114.5	115.8	117.1	118.5	119.6	120.6	121.6	122.7	123.1
100°	144.6	145.8	147.0	148.1	149.3	150.4	151.1	151.8	152.5	153.1	153.7
102.5°	179.3	180.4	181.9	183.4	184.9	186.4	187.1	187.7	188.4	189.1	189.5
105°	232.1	233.3	235.3	237.3	239.4	241.5	241.5	241.5	241.5	241.5	241.7
107.5°	294.3	294.9	295.7	296.5	297.3	298.1	298.8	299.6	300.3	301.0	301.2
110°	334.4	334.8	335.3	335.7	336.2	336.6	337.5	338.4	339.3	340.2	340.4



TEST NUMBER: P332479-840

CATALOG NUMBER: S123RDIW-S1165D1030U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	374.6	374.7	374.8	374.9	375.0	375.1	376.2	377.3	378.3	379.4	379.9
115°	437.6	437.7	437.2	436.8	436.3	435.9	436.1	436.3	436.6	436.8	436.8
117.5°	498.5	498.4	497.8	497.2	496.6	496.0	495.9	495.9	495.8	495.8	495.4
120°	540.6	540.7	539.5	538.4	537.2	536.1	535.8	535.6	535.4	535.2	534.8
122.5°	579.2	579.4	578.9	578.2	577.6	577.0	576.4	575.8	575.2	574.7	574.0
125°	639.1	639.2	638.7	638.3	637.8	637.4	636.5	635.6	634.7	633.8	632.9
127.5°	698.6	699.1	698.6	698.1	697.6	697.1	695.9	694.6	693.4	692.1	690.8
130°	737.8	738.3	737.7	737.0	736.3	735.6	734.7	733.8	732.9	732.0	730.7
132.5°	775.5	776.1	775.6	775.1	774.6	774.1	773.0	771.9	770.8	769.7	768.6
135°	831.1	831.6	831.4	831.2	831.0	830.7	829.8	828.9	828.0	827.1	826.5
137.5°	883.4	884.2	884.8	885.4	886.1	886.7	885.7	884.7	883.7	882.8	881.9
140°	920.2	920.9	921.1	921.4	921.6	921.8	921.6	921.4	921.1	920.9	920.0
142.5°	953.8	954.5	954.9	955.3	955.8	956.2	955.9	955.7	955.5	955.3	954.5
145°	1003.4	1004.0	1004.7	1005.4	1006.0	1006.7	1006.5	1006.3	1006.0	1005.8	1005.2
147.5°	1050.8	1051.5	1052.1	1052.8	1053.4	1054.0	1054.0	1054.0	1054.0	1054.0	1053.3
150°	1081.2	1081.7	1082.1	1082.6	1083.0	1083.5	1083.5	1083.5	1083.5	1083.5	1082.8
152.5°	1108.1	1108.5	1108.8	1109.1	1109.4	1109.6	1110.0	1110.3	1110.8	1111.2	1110.8
155°	1146.9	1147.0	1147.2	1147.5	1147.7	1147.9	1148.8	1149.7	1150.6	1151.5	1151.2
157.5°	1181.0	1180.9	1181.1	1181.3	1181.5	1181.6	1182.7	1183.6	1184.6	1185.5	1185.4
160°	1202.3	1202.1	1202.1	1202.1	1202.1	1202.1	1203.3	1204.5	1205.6	1206.7	1206.8
162.5°	1221.3	1221.0	1221.2	1221.4	1221.6	1221.8	1222.9	1224.1	1225.2	1226.4	1226.2
165°	1246.5	1246.2	1246.2	1246.2	1246.2	1246.2	1247.5	1248.9	1250.2	1251.6	1251.5
167.5°	1265.9	1265.5	1265.7	1265.9	1266.1	1266.2	1267.6	1269.0	1270.4	1271.8	1271.8
170°	1277.3	1276.9	1276.9	1276.9	1276.9	1276.9	1278.4	1280.0	1281.6	1283.2	1283.2
172.5°	1286.3	1285.9	1285.9	1285.9	1285.9	1285.9	1287.3	1288.7	1290.1	1291.5	1291.4
175°	1295.8	1295.3	1295.3	1295.3	1295.3	1295.3	1296.7	1298.0	1299.4	1300.7	1300.6
177.5°	1300.3	1300.0	1300.0	1300.0	1300.0	1300.0	1301.0	1302.1	1303.2	1304.3	1304.2
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4



TEST NUMBER: P332479-840

CATALOG NUMBER: S123RDIW-S1165D1030U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1766.6	1765.8	1766.6	1763.9	1766.6	1765.8	1766.6	1774.1	1774.1	1774.7	1775.4
5°	1643.8	1643.1	1640.6	1633.5	1640.6	1643.1	1643.8	1646.2	1652.5	1663.7	1660.4
7.5°	1536.6	1535.5	1528.5	1528.7	1528.5	1535.5	1536.6	1542.9	1549.9	1556.8	1564.9
10°	1473.2	1473.9	1464.4	1458.9	1464.4	1473.9	1473.2	1478.7	1489.0	1494.6	1500.2
12.5°	1411.6	1408.0	1400.3	1394.1	1400.3	1408.0	1411.6	1415.8	1430.0	1436.1	1446.8
15°	1330.3	1322.3	1303.3	1304.8	1303.3	1322.3	1330.3	1327.1	1341.4	1349.3	1352.5
17.5°	1234.6	1228.7	1228.4	1217.3	1228.4	1228.7	1234.6	1240.9	1253.2	1261.8	1284.5
20°	1178.7	1174.7	1176.3	1165.2	1176.3	1174.7	1178.7	1191.3	1199.3	1210.4	1228.7
22.5°	1134.9	1130.8	1124.2	1120.7	1124.2	1130.8	1134.9	1143.8	1152.4	1167.9	1177.9
25°	1070.8	1064.4	1058.0	1062.0	1058.0	1064.4	1070.8	1075.5	1091.4	1098.5	1112.8
27.5°	1006.6	1001.9	995.5	994.7	995.5	1001.9	1006.6	1011.2	1020.0	1032.0	1049.1
30°	965.9	961.2	958.1	954.0	958.1	961.2	965.9	970.0	978.7	991.4	1004.1
32.5°	924.7	923.7	918.1	917.3	918.1	923.7	924.7	931.2	939.9	952.0	962.8
35°	870.7	866.0	864.3	865.2	864.3	866.0	870.7	873.9	881.8	892.9	903.2
37.5°	819.4	813.0	810.2	807.4	810.2	813.0	819.4	819.9	828.0	835.5	849.4
40°	782.6	776.3	774.7	773.1	774.7	776.3	782.6	781.8	790.5	796.1	808.8
42.5°	741.3	738.8	737.8	735.0	737.8	738.8	741.3	745.6	750.5	758.6	768.2
45°	685.0	684.2	679.4	681.1	679.4	684.2	685.0	687.3	696.1	701.7	710.3
47.5°	625.6	622.1	618.7	621.0	618.7	622.1	625.6	628.7	634.7	641.5	653.1
50°	585.0	583.4	576.2	577.8	576.2	583.4	585.0	588.1	592.1	600.9	611.2
52.5°	544.3	538.3	535.6	534.6	535.6	538.3	544.3	547.5	552.1	562.1	569.9
55°	477.1	469.9	466.7	465.1	466.7	469.9	477.1	482.6	489.0	500.1	508.0
57.5°	411.0	409.1	406.6	408.3	406.6	409.1	411.0	420.2	426.4	435.2	444.8
60°	372.2	372.2	372.2	371.4	372.2	372.2	372.2	380.2	385.8	394.5	404.8
62.5°	342.4	340.5	339.9	341.0	339.9	340.5	342.4	345.9	351.4	357.0	366.1
65°	296.9	296.1	292.9	292.1	292.9	296.1	296.9	299.2	304.0	308.0	314.3
67.5°	253.9	251.0	250.0	248.9	250.0	251.0	253.9	255.9	259.0	264.2	267.3
70°	221.5	219.8	215.1	215.9	215.1	219.8	221.5	225.4	228.6	234.9	238.1
72.5°	186.5	184.9	184.0	182.9	184.0	184.9	186.5	190.5	193.7	200.7	205.7
75°	147.6	146.8	146.0	149.3	146.0	146.8	147.6	148.5	149.3	151.6	154.0
77.5°	118.3	118.3	118.8	117.4	118.8	118.3	118.3	118.3	118.3	119.6	120.0
80°	99.2	99.2	98.5	98.5	98.5	99.2	99.2	99.2	99.2	99.2	98.5
82.5°	79.6	80.2	80.7	79.4	80.7	80.2	79.6	80.8	81.4	80.2	80.7
85°	52.4	51.6	53.2	52.4	53.2	51.6	52.4	52.4	50.8	52.4	51.6
87.5°	29.4	28.2	28.3	29.0	28.3	28.2	29.4	28.0	27.9	27.7	26.9
90°	29.3	29.8	30.2	30.7	30.2	29.8	29.3	28.9	28.2	27.3	26.4
92.5°	42.1	41.9	41.6	41.3	41.6	41.9	42.1	42.4	42.2	41.5	40.7
95°	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.4	78.5	77.6
97.5°	123.0	123.0	122.9	122.8	122.9	123.0	123.0	123.1	122.7	121.6	120.6
100°	154.1	154.6	155.0	155.5	155.0	154.6	154.1	153.7	153.1	152.5	151.8
102.5°	189.3	189.2	189.1	189.0	189.1	189.2	189.3	189.5	189.1	188.4	187.7
105°	242.2	242.6	243.1	243.5	243.1	242.6	242.2	241.7	241.5	241.5	241.5
107.5°	301.0	300.7	300.4	300.1	300.4	300.7	301.0	301.2	301.0	300.3	299.6
110°	340.0	339.5	339.1	338.6	339.1	339.5	340.0	340.4	340.2	339.3	338.4



TEST NUMBER: P332479-840

CATALOG NUMBER: S123RDIW-S1165D1030U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	379.8	379.7	379.7	379.6	379.7	379.7	379.8	379.9	379.4	378.3	377.3
115°	436.6	436.3	436.1	435.9	436.1	436.3	436.6	436.8	436.8	436.6	436.3
117.5°	494.8	494.2	493.5	492.9	493.5	494.2	494.8	495.4	495.8	495.8	495.9
120°	534.4	533.9	533.5	533.0	533.5	533.9	534.4	534.8	535.2	535.4	535.6
122.5°	573.4	572.8	572.2	571.5	572.2	572.8	573.4	574.0	574.7	575.2	575.8
125°	632.0	631.1	630.2	629.2	630.2	631.1	632.0	632.9	633.8	634.7	635.6
127.5°	689.8	688.8	687.7	686.7	687.7	688.8	689.8	690.8	692.1	693.4	694.6
130°	729.1	727.5	726.0	724.4	726.0	727.5	729.1	730.7	732.0	732.9	733.8
132.5°	767.3	766.1	764.9	763.7	764.9	766.1	767.3	768.6	769.7	770.8	771.9
135°	826.0	825.6	825.1	824.7	825.1	825.6	826.0	826.5	827.1	828.0	828.9
137.5°	881.0	880.2	879.3	878.5	879.3	880.2	881.0	881.9	882.8	883.7	884.7
140°	918.4	916.9	915.2	913.6	915.2	916.9	918.4	920.0	920.9	921.1	921.4
142.5°	953.3	952.1	950.9	949.7	950.9	952.1	953.3	954.5	955.3	955.5	955.7
145°	1004.3	1003.4	1002.5	1001.6	1002.5	1003.4	1004.3	1005.2	1005.8	1006.0	1006.3
147.5°	1052.0	1050.6	1049.2	1047.8	1049.2	1050.6	1052.0	1053.3	1054.0	1054.0	1054.0
150°	1081.5	1080.1	1078.7	1077.3	1078.7	1080.1	1081.5	1082.8	1083.5	1083.5	1083.5
152.5°	1109.5	1108.3	1107.1	1106.0	1107.1	1108.3	1109.5	1110.8	1111.2	1110.8	1110.3
155°	1149.6	1148.0	1146.5	1144.9	1146.5	1148.0	1149.6	1151.2	1151.5	1150.6	1149.7
157.5°	1184.1	1182.9	1181.5	1180.2	1181.5	1182.9	1184.1	1185.4	1185.5	1184.6	1183.6
160°	1205.9	1205.0	1204.1	1203.2	1204.1	1205.0	1205.9	1206.8	1206.7	1205.6	1204.5
162.5°	1224.8	1223.2	1221.8	1220.3	1221.8	1223.2	1224.8	1226.2	1226.4	1225.2	1224.1
165°	1249.9	1248.3	1246.7	1245.2	1246.7	1248.3	1249.9	1251.5	1251.6	1250.2	1248.9
167.5°	1270.4	1269.0	1267.6	1266.2	1267.6	1269.0	1270.4	1271.8	1271.8	1270.4	1269.0
170°	1281.6	1280.0	1278.4	1276.9	1278.4	1280.0	1281.6	1283.2	1283.2	1281.6	1280.0
172.5°	1289.8	1288.2	1286.6	1285.1	1286.6	1288.2	1289.8	1291.4	1291.5	1290.1	1288.7
175°	1299.0	1297.4	1295.9	1294.2	1295.9	1297.4	1299.0	1300.6	1300.7	1299.4	1298.0
177.5°	1302.9	1301.7	1300.4	1299.2	1300.4	1301.7	1302.9	1304.2	1304.3	1303.2	1302.1
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4



TEST NUMBER: P332479-840

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1769.7	1778.6	1787.5	1795.7	1808.5	1814.1	1822.4	1825.5	1835.1	1849.1	1860.5
5°	1662.0	1674.8	1691.4	1705.0	1726.4	1743.0	1761.3	1778.8	1799.4	1828.8	1854.9
7.5°	1570.7	1583.4	1603.4	1628.4	1652.0	1675.7	1700.6	1724.4	1753.9	1796.0	1837.8
10°	1510.5	1525.5	1549.3	1576.3	1605.7	1628.7	1658.1	1688.3	1724.7	1773.2	1823.2
12.5°	1458.3	1469.7	1497.3	1523.0	1556.2	1585.6	1614.3	1649.5	1691.1	1742.7	1802.8
15°	1375.5	1391.4	1418.4	1446.9	1481.9	1512.9	1550.1	1593.0	1633.5	1697.0	1770.0
17.5°	1292.3	1316.5	1344.5	1376.7	1402.7	1445.3	1485.8	1529.8	1579.6	1647.0	1727.2
20°	1239.0	1258.1	1284.2	1331.1	1365.2	1397.8	1435.0	1489.9	1535.8	1612.0	1695.4
22.5°	1194.0	1207.9	1237.3	1275.9	1315.7	1353.3	1391.2	1443.5	1500.3	1572.7	1663.0
25°	1127.1	1149.3	1171.5	1199.3	1242.1	1287.4	1328.7	1373.1	1433.5	1510.5	1608.1
27.5°	1061.9	1082.0	1103.9	1138.0	1170.5	1212.8	1256.0	1307.0	1371.7	1453.2	1552.2
30°	1020.0	1035.0	1055.6	1099.3	1128.6	1165.2	1216.0	1261.2	1321.5	1408.1	1512.9
32.5°	976.7	996.2	1018.9	1052.3	1088.6	1123.3	1169.6	1218.7	1280.3	1365.5	1472.8
35°	915.1	938.2	961.2	985.8	1022.3	1058.0	1096.9	1150.9	1213.6	1296.2	1401.7
37.5°	858.5	877.1	895.8	926.2	960.9	994.8	1031.2	1084.4	1143.5	1232.5	1329.3
40°	822.3	839.0	853.2	885.0	918.4	954.8	990.6	1037.4	1100.9	1184.3	1277.9
42.5°	782.9	798.3	817.7	843.7	879.6	910.4	946.1	990.4	1050.1	1134.7	1216.9
45°	723.9	741.3	758.0	782.6	818.3	848.5	880.2	922.3	983.4	1053.3	1126.3
47.5°	662.5	679.9	698.9	722.8	753.9	784.6	816.3	853.5	909.3	977.9	1027.0
50°	623.1	637.3	656.4	680.2	708.8	741.3	769.9	810.4	863.5	917.6	960.4
52.5°	582.4	595.4	617.0	642.1	668.8	696.9	727.4	762.1	810.2	861.0	895.0
55°	519.1	534.9	553.2	577.8	604.0	627.8	657.2	693.0	731.0	769.1	792.1
57.5°	459.9	473.0	488.5	513.8	536.5	565.0	591.3	619.1	654.4	683.1	698.1
60°	416.7	428.6	448.5	470.7	492.1	516.7	546.8	574.6	601.7	624.7	636.5
62.5°	376.1	389.9	407.2	427.5	450.8	474.1	500.5	523.8	547.6	567.5	575.6
65°	323.1	334.2	346.9	365.9	385.0	408.8	429.4	453.2	470.7	481.8	489.0
67.5°	274.8	282.1	291.8	304.5	323.2	344.0	364.0	382.5	397.2	404.8	411.1
70°	243.7	248.4	255.6	268.3	282.6	300.8	321.4	335.0	347.7	354.0	360.3
72.5°	212.6	218.6	225.1	235.3	247.0	260.1	275.1	291.8	298.7	306.4	310.2
75°	161.2	169.9	178.5	184.9	192.9	203.2	216.7	227.0	231.0	237.3	238.1
77.5°	121.6	123.5	129.9	137.7	144.4	151.9	160.5	169.7	171.6	174.9	177.0
80°	100.0	100.0	100.0	104.7	112.7	118.3	126.2	131.0	134.1	134.9	135.7
82.5°	80.3	80.3	79.7	80.7	83.5	86.5	93.8	99.2	101.8	101.3	99.6
85°	52.4	50.8	50.8	50.0	50.8	49.2	48.4	51.6	56.4	56.4	54.7
87.5°	26.7	25.9	26.0	24.6	23.4	22.2	19.8	20.0	19.5	21.6	20.5
90°	25.4	24.5	21.6	18.7	15.7	12.7	10.1	7.9	5.6	3.3	1.0
92.5°	40.0	39.3	37.6	36.0	34.2	32.5	30.9	29.4	27.9	26.3	24.7
95°	76.6	75.7	73.9	72.1	70.3	68.5	66.8	65.1	63.5	61.9	60.4
97.5°	119.6	118.5	117.1	115.8	114.5	113.2	112.0	110.8	109.6	108.4	107.2
100°	151.1	150.4	149.3	148.1	147.0	145.8	144.6	143.2	141.9	140.5	139.2
102.5°	187.1	186.4	184.9	183.4	181.9	180.4	179.3	178.4	177.6	176.8	176.0
105°	241.5	241.5	239.4	237.3	235.3	233.3	232.1	231.6	231.2	230.7	230.2
107.5°	298.8	298.1	297.3	296.5	295.7	294.9	294.3	294.1	293.8	293.5	293.3
110°	337.5	336.6	336.2	335.7	335.3	334.8	334.4	333.9	333.5	333.0	332.5



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	376.2	375.1	375.0	374.9	374.8	374.7	374.6	374.3	374.0	373.8	373.4
115°	436.1	435.9	436.3	436.8	437.2	437.7	437.6	436.9	436.2	435.5	434.8
117.5°	495.9	496.0	496.6	497.2	497.8	498.4	498.5	498.0	497.6	497.1	496.7
120°	535.8	536.1	537.2	538.4	539.5	540.7	540.6	539.2	537.9	536.4	535.1
122.5°	576.4	577.0	577.6	578.2	578.9	579.4	579.2	578.1	577.2	576.2	575.2
125°	636.5	637.4	637.8	638.3	638.7	639.2	639.1	638.4	637.7	637.0	636.4
127.5°	695.9	697.1	697.6	698.1	698.6	699.1	698.6	697.2	695.8	694.3	692.9
130°	734.7	735.6	736.3	737.0	737.7	738.3	737.8	736.0	734.2	732.4	730.5
132.5°	773.0	774.1	774.6	775.1	775.6	776.1	775.5	773.7	771.7	769.9	768.1
135°	829.8	830.7	831.0	831.2	831.4	831.6	831.1	829.7	828.4	827.0	825.7
137.5°	885.7	886.7	886.1	885.4	884.8	884.2	883.4	882.2	881.1	880.0	878.9
140°	921.6	921.8	921.6	921.4	921.1	920.9	920.2	919.1	918.0	916.9	915.6
142.5°	955.9	956.2	955.8	955.3	954.9	954.5	953.8	952.6	951.5	950.4	949.3
145°	1006.5	1006.7	1006.0	1005.4	1004.7	1004.0	1003.4	1003.0	1002.5	1002.1	1001.6
147.5°	1054.0	1054.0	1053.4	1052.8	1052.1	1051.5	1050.8	1050.0	1049.0	1048.2	1047.4
150°	1083.5	1083.5	1083.0	1082.6	1082.1	1081.7	1081.2	1080.8	1080.3	1079.8	1079.3
152.5°	1110.0	1109.6	1109.4	1109.1	1108.8	1108.5	1108.1	1107.5	1106.8	1106.2	1105.6
155°	1148.8	1147.9	1147.7	1147.5	1147.2	1147.0	1146.9	1146.9	1146.9	1146.9	1146.9
157.5°	1182.7	1181.6	1181.5	1181.3	1181.1	1180.9	1181.0	1181.2	1181.5	1181.8	1182.1
160°	1203.3	1202.1	1202.1	1202.1	1202.1	1202.1	1202.3	1202.9	1203.3	1203.8	1204.2
162.5°	1222.9	1221.8	1221.6	1221.4	1221.2	1221.0	1221.3	1221.9	1222.5	1223.2	1223.9
165°	1247.5	1246.2	1246.2	1246.2	1246.2	1246.2	1246.5	1247.2	1247.9	1248.5	1249.2
167.5°	1267.6	1266.2	1266.1	1265.9	1265.7	1265.5	1265.9	1266.8	1267.7	1268.6	1269.5
170°	1278.4	1276.9	1276.9	1276.9	1276.9	1276.9	1277.3	1278.2	1279.1	1280.0	1280.9
172.5°	1287.3	1285.9	1285.9	1285.9	1285.9	1285.9	1286.3	1287.2	1288.1	1289.0	1289.9
175°	1296.7	1295.3	1295.3	1295.3	1295.3	1295.3	1295.8	1296.7	1297.6	1298.5	1299.4
177.5°	1301.0	1300.0	1300.0	1300.0	1300.0	1300.0	1300.3	1301.0	1301.8	1302.5	1303.2
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4



TEST NUMBER: P332479-840

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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1864.3	1871.3	1880.2	1893.5	1903.7	1912.6	1914.5	1917.0	1923.4	1934.1	1942.4
5°	1876.3	1894.6	1924.0	1952.6	1983.5	2008.9	2032.8	2049.4	2065.3	2098.6	2125.6
7.5°	1872.6	1913.2	1959.2	2010.5	2062.4	2112.7	2159.4	2201.1	2242.7	2291.3	2346.7
10°	1870.0	1917.6	1979.5	2045.4	2117.7	2188.3	2256.5	2309.8	2371.7	2427.2	2497.8
12.5°	1857.9	1926.5	2000.5	2084.8	2173.5	2254.9	2344.8	2418.3	2489.1	2569.4	2651.5
15°	1842.2	1925.6	2019.2	2131.1	2266.0	2364.5	2456.6	2584.3	2671.7	2759.0	2876.5
17.5°	1813.5	1915.2	2032.3	2177.7	2290.2	2422.5	2561.0	2662.0	2779.7	2902.7	3009.0
20°	1790.6	1908.9	2039.8	2182.7	2326.4	2470.0	2604.2	2724.8	2846.3	2988.4	3075.6
22.5°	1767.8	1884.8	2020.8	2172.6	2327.0	2478.3	2630.2	2771.9	2908.5	3051.9	3163.3
25°	1719.2	1858.2	2005.7	2160.5	2312.9	2479.6	2660.6	2818.5	2987.6	3135.2	3240.8
27.5°	1670.0	1797.3	1944.3	2101.3	2270.7	2467.7	2680.6	2860.1	3029.5	3135.2	3168.4
30°	1625.6	1760.5	1895.4	2055.0	2238.3	2458.1	2684.3	2889.9	3028.9	3074.8	3040.7
32.5°	1580.4	1702.7	1836.3	1999.7	2194.4	2434.7	2689.5	2872.2	2955.8	2920.6	2781.7
35°	1501.0	1611.2	1740.6	1904.1	2128.0	2421.7	2668.5	2792.3	2771.7	2573.2	2311.3
37.5°	1415.8	1505.7	1625.6	1796.5	2059.1	2370.1	2578.3	2596.6	2418.0	2113.3	1810.8
40°	1348.6	1429.5	1552.6	1731.1	2005.7	2319.3	2487.5	2413.7	2136.7	1797.8	1545.4
42.5°	1283.1	1351.4	1470.0	1662.5	1954.9	2250.1	2352.3	2191.5	1871.9	1551.5	1321.9
45°	1172.4	1236.6	1355.6	1553.3	1851.0	2117.7	2104.2	1824.7	1504.9	1247.0	1056.4
47.5°	1067.2	1123.5	1235.2	1436.9	1728.9	1919.2	1793.0	1495.7	1224.4	1017.4	881.5
50°	992.9	1048.5	1159.6	1358.9	1631.1	1770.0	1589.8	1303.3	1054.9	883.4	775.5
52.5°	921.8	976.1	1077.7	1271.8	1513.0	1596.0	1402.5	1136.9	929.8	781.8	689.1
55°	822.3	863.5	954.8	1140.5	1320.8	1339.8	1143.8	921.5	750.8	647.7	584.2
57.5°	720.8	756.4	846.6	994.5	1120.8	1111.1	925.1	733.0	618.0	541.3	495.2
60°	654.8	689.7	769.1	896.2	991.4	958.1	787.4	632.6	534.2	477.9	441.3
62.5°	593.2	620.6	694.8	787.5	856.1	818.3	673.1	544.9	466.9	419.4	390.5
65°	504.0	526.2	585.7	634.2	672.3	635.8	515.1	426.3	369.9	336.6	316.7
67.5°	419.2	433.3	471.0	488.5	515.3	475.2	387.4	327.8	295.8	267.6	253.9
70°	365.9	376.2	396.1	410.3	417.5	376.2	311.1	267.5	240.4	220.7	212.0
72.5°	312.6	321.6	325.6	337.3	333.7	295.0	250.1	215.4	196.0	182.6	171.3
75°	238.9	242.9	238.9	234.2	223.8	196.8	165.9	148.5	134.1	127.7	123.8
77.5°	174.1	172.9	167.4	160.1	142.4	125.4	108.8	102.9	96.6	93.3	91.9
80°	134.1	131.0	126.2	114.3	99.2	87.4	83.3	79.4	77.0	73.0	72.2
82.5°	99.9	98.0	90.0	80.0	69.4	63.8	60.5	59.1	56.7	54.6	54.4
85°	53.2	50.8	42.1	36.6	34.9	33.3	32.5	32.5	29.4	28.6	28.6
87.5°	17.8	14.4	14.2	12.8	13.3	12.6	13.9	13.2	13.1	13.9	12.9
90°	3.3	5.6	7.9	10.1	12.7	15.7	18.7	21.6	24.5	25.4	26.4
92.5°	26.3	27.9	29.4	30.9	32.5	34.2	36.0	37.6	39.3	40.0	40.7
95°	61.9	63.5	65.1	66.8	68.5	70.3	72.1	73.9	75.7	76.6	77.6
97.5°	108.4	109.6	110.8	112.0	113.2	114.5	115.8	117.1	118.5	119.6	120.6
100°	140.5	141.9	143.2	144.6	145.8	147.0	148.1	149.3	150.4	151.1	151.8
102.5°	176.8	177.6	178.4	179.3	180.4	181.9	183.4	184.9	186.4	187.1	187.7
105°	230.7	231.2	231.6	232.1	233.3	235.3	237.3	239.4	241.5	241.5	241.5
107.5°	293.5	293.8	294.1	294.3	294.9	295.7	296.5	297.3	298.1	298.8	299.6
110°	333.0	333.5	333.9	334.4	334.8	335.3	335.7	336.2	336.6	337.5	338.4





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	373.8	374.0	374.3	374.6	374.7	374.8	374.9	375.0	375.1	376.2	377.3
115°	435.5	436.2	436.9	437.6	437.7	437.2	436.8	436.3	435.9	436.1	436.3
117.5°	497.1	497.6	498.0	498.5	498.4	497.8	497.2	496.6	496.0	495.9	495.9
120°	536.4	537.9	539.2	540.6	540.7	539.5	538.4	537.2	536.1	535.8	535.6
122.5°	576.2	577.2	578.1	579.2	579.4	578.9	578.2	577.6	577.0	576.4	575.8
125°	637.0	637.7	638.4	639.1	639.2	638.7	638.3	637.8	637.4	636.5	635.6
127.5°	694.3	695.8	697.2	698.6	699.1	698.6	698.1	697.6	697.1	695.9	694.6
130°	732.4	734.2	736.0	737.8	738.3	737.7	737.0	736.3	735.6	734.7	733.8
132.5°	769.9	771.7	773.7	775.5	776.1	775.6	775.1	774.6	774.1	773.0	771.9
135°	827.0	828.4	829.7	831.1	831.6	831.4	831.2	831.0	830.7	829.8	828.9
137.5°	880.0	881.1	882.2	883.4	884.2	884.8	885.4	886.1	886.7	885.7	884.7
140°	916.9	918.0	919.1	920.2	920.9	921.1	921.4	921.6	921.8	921.6	921.4
142.5°	950.4	951.5	952.6	953.8	954.5	954.9	955.3	955.8	956.2	955.9	955.7
145°	1002.1	1002.5	1003.0	1003.4	1004.0	1004.7	1005.4	1006.0	1006.7	1006.5	1006.3
147.5°	1048.2	1049.0	1050.0	1050.8	1051.5	1052.1	1052.8	1053.4	1054.0	1054.0	1054.0
150°	1079.8	1080.3	1080.8	1081.2	1081.7	1082.1	1082.6	1083.0	1083.5	1083.5	1083.5
152.5°	1106.2	1106.8	1107.5	1108.1	1108.5	1108.8	1109.1	1109.4	1109.6	1110.0	1110.3
155°	1146.9	1146.9	1146.9	1146.9	1147.0	1147.2	1147.5	1147.7	1147.9	1148.8	1149.7
157.5°	1181.8	1181.5	1181.2	1181.0	1180.9	1181.1	1181.3	1181.5	1181.6	1182.7	1183.6
160°	1203.8	1203.3	1202.9	1202.3	1202.1	1202.1	1202.1	1202.1	1202.1	1203.3	1204.5
162.5°	1223.2	1222.5	1221.9	1221.3	1221.0	1221.2	1221.4	1221.6	1221.8	1222.9	1224.1
165°	1248.5	1247.9	1247.2	1246.5	1246.2	1246.2	1246.2	1246.2	1246.2	1247.5	1248.9
167.5°	1268.6	1267.7	1266.8	1265.9	1265.5	1265.7	1265.9	1266.1	1266.2	1267.6	1269.0
170°	1280.0	1279.1	1278.2	1277.3	1276.9	1276.9	1276.9	1276.9	1276.9	1278.4	1280.0
172.5°	1289.0	1288.1	1287.2	1286.3	1285.9	1285.9	1285.9	1285.9	1285.9	1287.3	1288.7
175°	1298.5	1297.6	1296.7	1295.8	1295.3	1295.3	1295.3	1295.3	1295.3	1296.7	1298.0
177.5°	1302.5	1301.8	1301.0	1300.3	1300.0	1300.0	1300.0	1300.0	1300.0	1301.0	1302.1
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1955.7	1955.7	1958.2	1967.8	1969.0	1977.3	1974.8
5°	2149.4	2164.4	2170.0	2193.8	2208.2	2214.5	2201.8
7.5°	2386.2	2428.8	2448.9	2473.9	2496.0	2502.6	2485.3
10°	2559.0	2603.4	2640.7	2663.7	2685.1	2699.5	2717.7
12.5°	2725.9	2780.6	2816.0	2848.5	2870.5	2888.7	2891.6
15°	2907.4	2989.9	3052.6	3098.7	3121.7	3133.6	3128.9
17.5°	3090.4	3166.9	3211.6	3258.5	3290.4	3292.1	3293.0
20°	3193.9	3268.5	3320.1	3355.1	3390.8	3389.2	3397.1
22.5°	3263.2	3321.8	3361.4	3386.8	3399.0	3393.0	3394.6
25°	3295.5	3313.0	3305.9	3265.4	3255.1	3217.7	3224.1
27.5°	3128.6	3046.0	2960.6	2850.7	2764.1	2694.8	2698.4
30°	2901.8	2755.8	2589.1	2449.4	2324.0	2289.1	2214.5
32.5°	2585.0	2365.9	2170.7	2040.5	1932.9	1903.7	1838.6
35°	2047.8	1835.1	1634.3	1513.6	1466.0	1399.4	1398.6
37.5°	1591.7	1404.4	1298.2	1207.7	1160.2	1119.9	1116.0
40°	1339.0	1193.0	1112.8	1047.7	1000.9	970.7	963.6
42.5°	1162.5	1044.4	969.3	929.0	892.9	877.4	865.8
45°	949.3	869.9	817.5	781.0	764.4	752.5	746.1
47.5°	794.1	740.8	705.2	680.9	667.3	654.8	658.1
50°	709.6	665.9	639.7	616.7	606.4	597.6	598.4
52.5°	641.7	602.5	581.3	564.6	551.8	545.6	542.6
55°	544.5	519.9	498.5	486.6	479.4	470.7	468.3
57.5°	464.4	445.5	428.0	414.4	412.7	404.3	405.5
60°	411.1	395.3	381.0	373.9	368.3	361.1	363.6
62.5°	367.3	354.0	341.0	335.1	329.5	324.3	325.4
65°	300.8	288.1	280.1	277.0	274.6	272.3	269.8
67.5°	239.7	232.0	227.0	220.2	215.3	214.5	212.1
70°	201.6	191.3	182.6	173.8	171.5	170.7	171.5
72.5°	161.6	155.1	152.7	148.5	147.9	145.9	147.3
75°	121.5	119.1	117.4	114.3	114.3	114.3	114.3
77.5°	89.6	88.1	87.2	86.5	85.7	84.6	84.4
80°	69.9	69.1	67.5	67.5	66.7	67.5	66.7
82.5°	52.7	52.5	51.0	51.0	50.2	49.7	50.2
85°	27.0	26.2	27.8	26.2	27.0	25.4	27.0
87.5°	13.0	13.2	12.7	12.8	12.3	13.6	12.5
90°	27.3	28.2	28.9	29.3	29.8	30.2	30.7
92.5°	41.5	42.2	42.4	42.1	41.9	41.6	41.3
95°	78.5	79.4	79.8	79.8	79.8	79.8	79.8
97.5°	121.6	122.7	123.1	123.0	123.0	122.9	122.8
100°	152.5	153.1	153.7	154.1	154.6	155.0	155.5
102.5°	188.4	189.1	189.5	189.3	189.2	189.1	189.0
105°	241.5	241.5	241.7	242.2	242.6	243.1	243.5
107.5°	300.3	301.0	301.2	301.0	300.7	300.4	300.1
110°	339.3	340.2	340.4	340.0	339.5	339.1	338.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	378.3	379.4	379.9	379.8	379.7	379.7	379.6
115°	436.6	436.8	436.8	436.6	436.3	436.1	435.9
117.5°	495.8	495.8	495.4	494.8	494.2	493.5	492.9
120°	535.4	535.2	534.8	534.4	533.9	533.5	533.0
122.5°	575.2	574.7	574.0	573.4	572.8	572.2	571.5
125°	634.7	633.8	632.9	632.0	631.1	630.2	629.2
127.5°	693.4	692.1	690.8	689.8	688.8	687.7	686.7
130°	732.9	732.0	730.7	729.1	727.5	726.0	724.4
132.5°	770.8	769.7	768.6	767.3	766.1	764.9	763.7
135°	828.0	827.1	826.5	826.0	825.6	825.1	824.7
137.5°	883.7	882.8	881.9	881.0	880.2	879.3	878.5
140°	921.1	920.9	920.0	918.4	916.9	915.2	913.6
142.5°	955.5	955.3	954.5	953.3	952.1	950.9	949.7
145°	1006.0	1005.8	1005.2	1004.3	1003.4	1002.5	1001.6
147.5°	1054.0	1054.0	1053.3	1052.0	1050.6	1049.2	1047.8
150°	1083.5	1083.5	1082.8	1081.5	1080.1	1078.7	1077.3
152.5°	1110.8	1111.2	1110.8	1109.5	1108.3	1107.1	1106.0
155°	1150.6	1151.5	1151.2	1149.6	1148.0	1146.5	1144.9
157.5°	1184.6	1185.5	1185.4	1184.1	1182.9	1181.5	1180.2
160°	1205.6	1206.7	1206.8	1205.9	1205.0	1204.1	1203.2
162.5°	1225.2	1226.4	1226.2	1224.8	1223.2	1221.8	1220.3
165°	1250.2	1251.6	1251.5	1249.9	1248.3	1246.7	1245.2
167.5°	1270.4	1271.8	1271.8	1270.4	1269.0	1267.6	1266.2
170°	1281.6	1283.2	1283.2	1281.6	1280.0	1278.4	1276.9
172.5°	1290.1	1291.5	1291.4	1289.8	1288.2	1286.6	1285.1
175°	1299.4	1300.7	1300.6	1299.0	1297.4	1295.9	1294.2
177.5°	1303.2	1304.3	1304.2	1302.9	1301.7	1300.4	1299.2
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4

(END OF REPORT)