

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: P332478-935

Luminaire Tested: **S123RDIW-S1165D1030U935-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332478-935  
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-S1165D1030U935-4F0-1E-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**

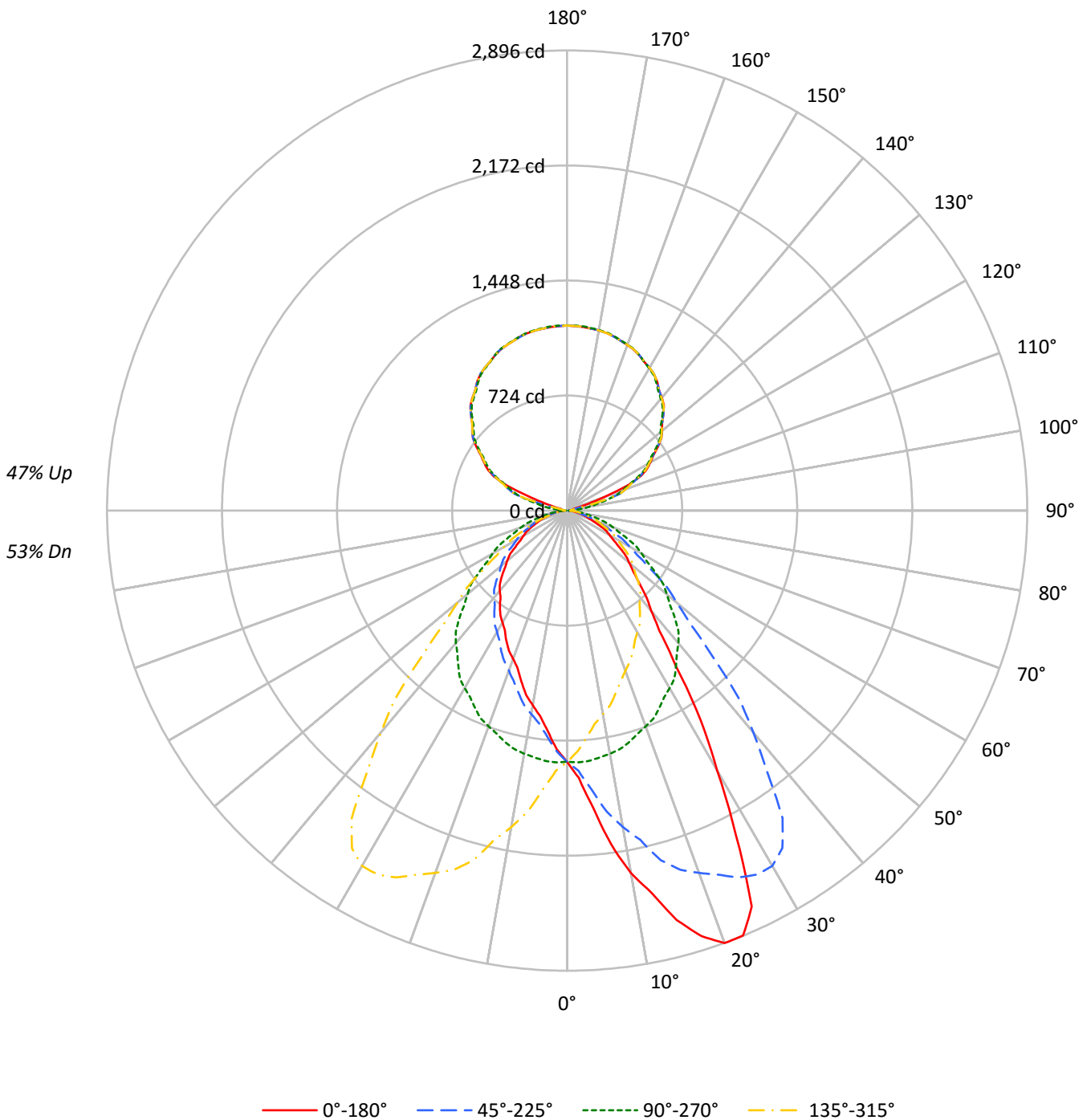
Lumens per Lamp: N/A  
Luminaire Lumens: 7488.9 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 67.4  
Input Voltage (V): 120  
Input Current (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°	17016	17016	17016	17016
5°	20283	17088	15048	17088
10°	25326	16990	13595	16990
15°	29727	16817	12397	16817
20°	33176	16557	11379	16557
25°	32647	16284	10753	16284
30°	23467	16032	10110	16032
35°	15669	15704	9692	15704
40°	11545	15309	9261	15309
45°	9683	14618	8840	14618
50°	8544	13711	8251	13711
55°	7492	12675	7443	12675
60°	6674	11683	6818	11683
65°	5861	10618	6342	10618
70°	4601	9668	5794	9668
75°	4055	8442	5294	8442
80°	3521	7172	5201	7172
85°	2841	5768	5521	5768



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.5	2.1
10°-20°	485.7	6.5
20°-30°	763.0	10.2
30°-40°	796.1	10.6
40°-50°	681.2	9.1
50°-60°	519.2	6.9
60°-70°	332.8	4.4
70°-80°	160.1	2.1
80°-90°	45.6	0.6
90°-100°	42.3	0.6
100°-110°	201.7	2.7
110°-120°	484.5	6.5
120°-130°	616.9	8.2
130°-140°	659.2	8.8
140°-150°	616.4	8.2
150°-160°	497.2	6.6
160°-170°	320.9	4.3
170°-180°	110.6	1.5
0°-30°	1404.1	18.7
0°-40°	2200.2	29.4
0°-60°	3400.7	45.4
0°-90°	3939.2	52.6
90°-120°	728.5	9.7
90°-150°	2621.0	35.0
90°-180°	3550.0	47.4
0°-180°	7488.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1581	1581	1581	1581	1581	
5°	1877	1582	1393	1582	1877	194
15°	2668	1509	1112	1509	2668	756
25°	2749	1371	905	1371	2749	1181
35°	1192	1195	738	1195	1192	782
45°	636	960	581	960	636	500
55°	399	675	397	675	399	361
65°	230	417	249	417	230	226
75°	98	203	127	203	98	105
85°	23	47	45	47	23	27
90°	26	1	26	1	26	12
95°	33	53	33	53	33	27
105°	38	258	38	258	38	87
115°	508	484	508	484	508	470
125°	695	682	695	682	695	621
135°	857	848	857	848	857	661
145°	988	979	988	979	988	617
155°	1077	1078	1077	1078	1077	496
165°	1135	1137	1135	1137	1135	320
175°	1160	1164	1160	1164	1160	110
180°	1164	1164	1164	1164	1164	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1683.7	1685.8	1678.8	1677.7	1669.6	1667.4	1667.4	1656.0	1649.0	1639.9	1634.4
5°	1877.2	1888.1	1882.7	1870.4	1850.1	1845.4	1832.6	1812.2	1789.2	1760.8	1747.3
7.5°	2118.9	2133.7	2128.0	2109.2	2087.9	2070.8	2034.5	2000.8	1953.5	1912.1	1876.6
10°	2317.1	2301.5	2289.3	2271.1	2251.4	2219.7	2181.8	2129.6	2069.4	2022.1	1969.3
12.5°	2465.4	2462.9	2447.4	2428.6	2400.9	2370.7	2324.1	2260.6	2190.6	2122.2	2061.8
15°	2667.6	2671.7	2661.5	2641.9	2602.6	2549.2	2478.8	2452.5	2352.3	2277.9	2203.4
17.5°	2807.5	2806.8	2805.4	2778.2	2738.2	2700.1	2634.8	2565.4	2474.8	2369.9	2269.6
20°	2896.3	2889.6	2891.0	2860.5	2830.7	2786.7	2723.1	2622.3	2547.9	2426.7	2323.2
22.5°	2894.2	2892.9	2898.0	2887.5	2865.9	2832.2	2782.1	2697.0	2602.0	2479.8	2363.3
25°	2748.8	2743.4	2775.3	2784.0	2818.6	2824.6	2809.7	2763.0	2673.1	2547.2	2403.1
27.5°	2300.6	2297.6	2356.6	2430.5	2524.2	2596.9	2667.4	2701.3	2673.1	2582.9	2438.5
30°	1888.1	1951.6	1981.4	2088.4	2207.4	2349.6	2474.1	2592.5	2621.6	2582.4	2463.9
32.5°	1567.5	1623.1	1648.0	1739.7	1850.7	2017.2	2203.9	2371.6	2490.1	2520.1	2448.8
35°	1192.4	1193.1	1249.9	1290.5	1393.4	1564.6	1745.9	1970.6	2193.9	2363.1	2380.7
37.5°	951.5	954.8	989.2	1029.7	1106.8	1197.4	1357.1	1543.9	1801.8	2061.6	2213.8
40°	821.6	827.6	853.3	893.3	948.7	1017.1	1141.6	1317.6	1532.8	1821.7	2057.9
42.5°	738.1	748.0	761.3	792.0	826.4	890.4	991.1	1127.0	1322.8	1595.9	1868.5
45°	636.1	641.5	651.7	665.9	697.0	741.7	809.3	900.7	1063.2	1283.1	1555.7
47.5°	561.1	558.3	568.9	580.5	601.2	631.6	677.0	751.6	867.5	1043.9	1275.2
50°	510.2	509.5	517.0	525.8	545.4	567.7	605.0	661.2	753.2	899.4	1111.2
52.5°	462.6	465.2	470.5	481.4	495.6	513.7	547.1	587.5	666.6	792.7	969.3
55°	399.2	401.3	408.7	414.8	425.0	443.2	464.3	498.1	552.2	640.2	785.7
57.5°	345.7	344.7	351.9	353.4	364.9	379.8	396.0	422.2	461.5	526.9	624.9
60°	310.0	307.9	314.0	318.7	324.9	337.0	350.5	376.3	407.4	455.5	539.3
62.5°	277.4	276.5	280.9	285.7	290.8	301.8	313.1	332.9	357.6	398.0	464.6
65°	230.1	232.1	234.1	236.2	238.8	245.6	256.5	270.0	287.0	315.4	363.4
67.5°	180.8	182.9	183.6	187.7	193.6	197.8	204.4	216.5	228.2	252.2	279.5
70°	146.2	145.5	146.2	148.2	155.7	163.1	171.9	180.7	188.1	205.0	228.1
72.5°	125.6	124.4	126.1	126.6	130.2	132.2	137.8	146.0	155.7	167.1	183.7
75°	97.5	97.5	97.5	97.5	100.1	101.5	103.6	105.6	108.9	114.3	126.6
77.5°	72.0	72.2	73.1	73.8	74.3	75.1	76.4	78.4	79.6	82.4	87.7
80°	56.8	57.5	56.8	57.5	57.5	58.9	59.6	61.6	62.3	65.6	67.7
82.5°	42.8	42.4	42.8	43.5	43.5	44.8	44.9	46.4	46.6	48.3	50.4
85°	23.0	21.7	23.0	22.3	23.7	22.3	23.0	24.4	24.4	25.1	27.7
87.5°	10.6	11.6	10.4	10.9	10.8	11.3	11.1	10.9	11.9	11.2	11.2
90°	25.9	25.6	25.1	24.8	24.4	23.8	23.1	22.3	21.5	20.8	18.3
92.5°	28.7	28.5	28.2	28.0	27.8	27.0	25.8	24.6	23.3	22.1	20.2
95°	32.9	32.9	32.9	32.9	32.9	32.2	30.8	29.5	28.2	26.8	24.7
97.5°	35.6	35.5	35.2	35.0	34.9	34.0	32.5	30.9	29.4	27.8	41.7
100°	36.3	36.2	35.9	35.7	35.6	34.7	33.1	31.6	30.0	28.5	58.5
102.5°	37.0	36.7	36.3	36.0	35.6	37.8	42.6	47.4	52.2	56.9	89.6
105°	38.1	37.6	37.3	36.9	36.5	53.3	87.3	121.4	155.4	189.4	206.7
107.5°	119.5	145.2	170.8	196.4	222.1	247.4	272.3	297.2	322.2	347.2	344.4
110°	237.8	265.3	292.7	320.3	347.8	364.6	371.0	377.4	383.7	390.0	387.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	408.0	413.8	419.7	425.4	431.2	434.0	433.9	433.9	433.7	433.6	431.5
115°	508.5	507.7	507.0	506.2	505.4	504.1	502.1	500.2	498.3	496.4	494.6
117.5°	564.9	564.7	564.6	564.4	564.3	563.4	561.9	560.3	558.8	557.2	556.4
120°	603.6	603.6	603.6	603.6	603.6	602.9	601.3	599.8	598.2	596.7	596.2
122.5°	641.7	641.5	641.4	641.2	641.1	640.4	639.4	638.3	637.2	636.1	635.4
125°	695.3	694.9	694.5	694.1	693.8	693.4	693.0	692.6	692.2	691.8	691.0
127.5°	746.8	747.3	747.6	748.0	748.4	748.3	747.6	747.0	746.4	745.8	744.9
130°	780.1	780.4	780.8	781.2	781.6	781.4	780.6	779.9	779.1	778.3	777.6
132.5°	810.5	811.1	811.6	812.1	812.6	812.5	811.8	811.0	810.2	809.4	808.8
135°	857.0	857.6	858.2	858.8	859.3	859.3	858.8	858.2	857.6	857.0	856.3
137.5°	900.8	901.1	901.6	901.9	902.3	902.1	901.1	900.2	899.2	898.4	897.9
140°	927.0	927.5	927.8	928.2	928.6	928.4	927.6	926.9	926.1	925.3	924.7
142.5°	951.2	951.8	952.4	952.9	953.4	953.4	952.8	952.2	951.6	950.9	950.4
145°	988.4	988.4	988.4	988.4	988.4	988.3	987.9	987.5	987.1	986.7	986.4
147.5°	1016.2	1017.0	1017.9	1018.8	1019.7	1019.9	1019.5	1019.2	1018.7	1018.4	1018.0
150°	1036.9	1037.5	1038.0	1038.6	1039.2	1039.3	1038.9	1038.5	1038.1	1037.8	1037.3
152.5°	1053.5	1054.4	1055.2	1056.1	1057.0	1057.1	1056.4	1055.8	1055.1	1054.4	1054.1
155°	1076.7	1077.8	1079.0	1080.1	1081.2	1081.4	1080.4	1079.4	1078.5	1077.5	1077.4
157.5°	1096.2	1097.7	1099.2	1100.7	1102.2	1102.3	1101.2	1100.1	1098.9	1097.8	1097.9
160°	1108.6	1110.0	1111.4	1112.7	1114.0	1114.1	1113.0	1111.8	1110.7	1109.6	1109.7
162.5°	1120.4	1121.6	1122.8	1124.0	1125.2	1125.2	1123.9	1122.5	1121.2	1119.9	1120.1
165°	1134.6	1135.9	1137.3	1138.7	1140.0	1139.9	1138.3	1136.8	1135.3	1133.8	1133.9
167.5°	1144.8	1146.3	1147.9	1149.4	1151.0	1151.0	1149.4	1147.9	1146.3	1144.8	1144.8
170°	1151.1	1152.5	1154.1	1155.6	1157.2	1157.2	1155.6	1154.1	1152.5	1151.1	1151.1
172.5°	1154.5	1156.2	1157.9	1159.6	1161.2	1161.3	1159.8	1158.3	1156.8	1155.2	1155.0
175°	1159.7	1161.2	1162.8	1164.3	1165.9	1166.0	1164.6	1163.2	1161.9	1160.5	1160.4
177.5°	1161.2	1162.8	1164.3	1165.9	1167.4	1167.5	1166.3	1165.1	1163.9	1162.6	1162.4
180°	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1632.3	1630.6	1623.1	1614.4	1603.0	1595.4	1589.5	1586.2	1576.5	1564.6	1556.4
5°	1733.1	1712.8	1691.1	1664.7	1640.4	1615.3	1599.7	1581.5	1559.2	1534.1	1516.6
7.5°	1841.1	1801.3	1758.4	1714.2	1670.4	1631.2	1596.6	1566.8	1531.3	1495.4	1470.2
10°	1923.9	1865.7	1805.5	1743.9	1687.7	1635.0	1594.3	1554.4	1511.8	1470.5	1439.4
12.5°	1999.2	1922.5	1853.1	1777.4	1705.6	1642.5	1584.1	1537.1	1485.8	1441.8	1406.4
15°	2094.5	2015.9	1932.0	1817.0	1721.6	1641.8	1570.6	1509.1	1446.8	1392.7	1358.1
17.5°	2183.5	2065.4	1952.6	1856.7	1732.7	1632.9	1546.2	1472.6	1404.2	1346.8	1304.3
20°	2220.3	2105.9	1983.5	1861.0	1739.1	1627.5	1526.6	1445.4	1374.4	1309.4	1270.2
22.5°	2242.5	2113.0	1984.0	1852.4	1722.9	1607.0	1507.2	1417.9	1340.8	1279.1	1230.7
25°	2268.4	2114.1	1971.9	1842.0	1710.0	1584.2	1465.8	1371.1	1287.8	1222.2	1170.7
27.5°	2285.4	2103.9	1936.0	1791.6	1657.7	1532.3	1423.8	1323.4	1239.0	1169.5	1114.3
30°	2288.6	2095.8	1908.3	1752.0	1616.0	1501.0	1386.0	1289.9	1200.5	1126.7	1075.3
32.5°	2293.0	2075.8	1871.0	1705.0	1565.6	1451.7	1347.5	1255.7	1164.2	1091.6	1039.1
35°	2275.1	2064.7	1814.3	1623.4	1484.0	1373.7	1279.7	1195.1	1105.1	1034.7	981.3
37.5°	2198.2	2020.7	1755.6	1531.7	1386.0	1283.8	1207.1	1133.3	1050.9	974.9	924.5
40°	2120.8	1977.4	1710.0	1475.9	1323.7	1218.7	1149.8	1089.5	1009.7	938.6	884.5
42.5°	2005.5	1918.4	1666.7	1417.5	1253.3	1152.2	1094.0	1037.5	967.4	895.3	844.4
45°	1794.0	1805.5	1578.1	1324.3	1155.8	1054.3	999.5	960.3	898.0	838.4	786.4
47.5°	1528.7	1636.3	1474.0	1225.1	1053.1	957.9	909.9	875.6	833.7	775.2	727.7
50°	1355.5	1509.1	1390.7	1158.6	988.7	894.0	846.5	818.8	782.3	736.2	691.0
52.5°	1195.8	1360.7	1290.0	1084.3	918.9	832.2	785.9	763.1	734.1	690.8	649.8
55°	975.2	1142.3	1126.1	972.4	814.1	736.2	701.1	675.4	655.7	623.3	590.8
57.5°	788.8	947.3	955.6	847.9	721.8	644.9	614.6	595.2	582.4	557.9	527.9
60°	671.3	816.8	845.2	764.1	655.7	588.1	558.3	542.7	532.6	513.0	489.9
62.5°	573.9	697.7	729.9	671.4	592.4	529.1	505.8	490.8	483.9	466.9	446.6
65°	439.2	542.1	573.2	540.7	499.4	448.7	429.7	416.9	410.8	401.3	386.4
67.5°	330.3	405.2	439.4	416.5	401.6	369.5	357.4	350.5	345.1	338.6	326.1
70°	265.3	320.7	355.9	349.8	337.7	320.7	311.9	307.2	301.8	296.4	285.6
72.5°	213.3	251.5	284.5	287.6	277.6	274.2	266.5	264.5	261.2	254.7	248.7
75°	141.5	167.8	190.8	199.7	203.7	207.1	203.7	203.0	202.3	196.9	193.6
77.5°	92.7	106.9	121.4	136.5	142.8	147.4	148.4	150.9	149.1	146.3	144.6
80°	71.0	74.5	84.6	97.5	107.6	111.7	114.3	115.7	115.0	114.3	111.7
82.5°	51.6	54.4	59.2	68.2	76.7	83.5	85.2	84.9	86.4	86.8	84.6
85°	27.7	28.4	29.8	31.2	35.9	43.3	45.4	46.7	48.0	48.0	44.0
87.5°	11.8	10.8	11.4	10.9	12.1	12.3	15.2	17.5	18.4	16.6	17.0
90°	15.8	13.3	10.8	8.5	6.6	4.7	2.8	0.9	2.8	4.7	6.6
92.5°	18.3	16.5	14.6	13.9	14.5	15.0	15.6	16.1	15.6	15.0	14.5
95°	22.6	20.5	18.3	21.3	29.1	37.0	44.9	52.8	44.9	37.0	29.1
97.5°	55.5	69.4	83.2	91.9	95.4	98.9	102.5	106.0	102.5	98.9	95.4
100°	88.5	118.5	148.4	161.5	157.6	153.9	150.0	146.1	150.0	153.9	157.6
102.5°	122.4	155.2	187.9	202.9	200.1	197.3	194.6	191.8	194.6	197.3	200.1
105°	223.9	241.3	258.6	266.1	264.1	261.9	259.8	257.7	259.8	261.9	264.1
107.5°	341.6	339.0	336.2	334.0	332.3	330.6	328.9	327.3	328.9	330.6	332.3
110°	385.8	383.7	381.6	379.7	378.2	376.7	375.1	373.6	375.1	376.7	378.2





TEST NUMBER: P332478-935

CATALOG NUMBER: S123RDIW-S1165D1030U935-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	429.4	427.2	425.2	423.4	422.1	420.6	419.2	417.8	419.2	420.6	422.1
115°	492.9	491.2	489.5	488.0	486.9	485.7	484.6	483.5	484.6	485.7	486.9
117.5°	555.5	554.7	553.7	552.6	551.1	549.7	548.3	546.9	548.3	549.7	551.1
120°	595.6	595.0	594.4	593.2	591.5	589.8	588.1	586.3	588.1	589.8	591.5
122.5°	634.6	634.0	633.2	632.1	630.7	629.3	627.8	626.5	627.8	629.3	630.7
125°	690.3	689.5	688.8	687.6	686.0	684.5	683.0	681.5	683.0	684.5	686.0
127.5°	744.0	743.0	742.1	740.9	739.3	737.8	736.2	734.7	736.2	737.8	739.3
130°	776.8	776.0	775.2	774.1	772.6	771.0	769.5	767.9	769.5	771.0	772.6
132.5°	808.2	807.6	807.0	805.9	804.3	802.8	801.3	799.8	801.3	802.8	804.3
135°	855.5	854.7	853.9	853.0	851.8	850.7	849.5	848.3	849.5	850.7	851.8
137.5°	897.5	897.1	896.6	895.7	894.2	892.8	891.3	889.8	891.3	892.8	894.2
140°	924.2	923.6	923.0	922.1	921.0	919.9	918.7	917.6	918.7	919.9	921.0
142.5°	949.8	949.2	948.6	947.8	946.6	945.5	944.3	943.1	944.3	945.5	946.6
145°	985.9	985.6	985.2	984.3	983.0	981.6	980.2	979.0	980.2	981.6	983.0
147.5°	1017.6	1017.2	1016.8	1016.2	1015.3	1014.4	1013.6	1012.7	1013.6	1014.4	1015.3
150°	1037.0	1036.6	1036.2	1035.7	1035.2	1034.6	1034.0	1033.5	1034.0	1034.6	1035.2
152.5°	1053.9	1053.7	1053.4	1053.2	1052.9	1052.7	1052.4	1052.1	1052.4	1052.7	1052.9
155°	1077.1	1076.9	1076.8	1076.9	1077.3	1077.6	1078.0	1078.4	1078.0	1077.6	1077.3
157.5°	1098.1	1098.4	1098.5	1098.6	1098.7	1098.7	1098.8	1098.8	1098.8	1098.7	1098.7
160°	1109.9	1110.1	1110.3	1110.5	1110.7	1110.9	1111.0	1111.3	1111.0	1110.9	1110.7
162.5°	1120.3	1120.5	1120.7	1121.0	1121.5	1122.1	1122.5	1123.0	1122.5	1122.1	1121.5
165°	1134.1	1134.3	1134.5	1134.9	1135.5	1136.1	1136.6	1137.2	1136.6	1136.1	1135.5
167.5°	1144.8	1144.8	1144.8	1145.2	1146.0	1146.8	1147.5	1148.2	1147.5	1146.8	1146.0
170°	1151.1	1151.1	1151.1	1151.4	1152.2	1153.0	1153.7	1154.5	1153.7	1153.0	1152.2
172.5°	1154.9	1154.7	1154.6	1154.9	1155.9	1156.8	1157.7	1158.6	1157.7	1156.8	1155.9
175°	1160.2	1159.9	1159.8	1160.2	1161.1	1162.1	1163.0	1164.0	1163.0	1162.1	1161.1
177.5°	1162.4	1162.2	1162.0	1162.4	1163.1	1163.9	1164.6	1165.4	1164.6	1163.9	1163.1
180°	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0



TEST NUMBER: P332478-935

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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1553.8	1546.7	1541.9	1531.0	1524.0	1516.4	1508.8	1513.7	1513.1	1512.6	1512.6
5°	1501.7	1486.1	1471.9	1453.6	1442.1	1427.9	1417.0	1415.7	1418.4	1408.9	1403.5
7.5°	1449.9	1428.7	1408.5	1388.4	1367.0	1350.0	1339.2	1334.2	1327.3	1321.5	1315.4
10°	1413.7	1388.6	1369.0	1343.9	1320.9	1300.6	1287.8	1279.0	1274.3	1269.5	1260.8
12.5°	1376.3	1351.9	1326.8	1298.5	1276.6	1253.0	1243.4	1233.6	1224.4	1219.2	1207.1
15°	1321.6	1289.9	1263.4	1233.6	1209.3	1186.3	1172.8	1153.1	1150.4	1143.7	1131.4
17.5°	1266.8	1232.3	1195.9	1173.8	1146.3	1122.4	1101.8	1095.2	1075.8	1068.5	1058.0
20°	1223.5	1191.7	1164.0	1134.9	1094.9	1072.6	1056.4	1047.6	1032.0	1022.5	1015.7
22.5°	1186.1	1153.8	1121.7	1087.8	1054.9	1029.8	1018.0	1004.3	995.7	982.5	975.2
25°	1132.8	1097.6	1059.0	1022.5	998.8	979.9	961.0	948.7	936.6	930.5	917.0
27.5°	1070.8	1034.1	998.0	970.3	941.2	922.5	905.3	894.5	879.9	869.6	862.1
30°	1036.7	993.4	962.3	937.3	900.0	882.4	869.6	856.1	845.2	834.4	827.0
32.5°	997.2	957.7	928.2	897.2	868.7	849.4	832.8	820.9	811.7	801.3	793.9
35°	935.2	902.1	871.6	840.5	819.5	799.9	780.2	770.1	761.3	751.8	745.1
37.5°	879.2	848.2	819.2	789.7	763.7	747.8	731.9	724.2	712.3	705.9	699.0
40°	844.6	814.1	783.0	754.6	727.5	715.3	701.1	689.6	678.7	674.0	666.6
42.5°	806.7	776.2	749.9	719.4	697.2	680.6	667.5	655.0	646.8	639.9	635.7
45°	750.4	723.4	697.7	667.3	646.3	632.1	617.2	605.6	598.2	593.5	586.0
47.5°	695.9	668.9	642.7	616.2	595.9	579.7	564.8	556.8	546.9	541.1	536.1
50°	656.4	632.1	604.3	580.0	559.6	543.4	531.2	521.1	512.3	504.8	501.4
52.5°	620.2	594.2	570.2	547.4	526.1	507.6	496.5	485.9	479.2	470.7	466.8
55°	560.3	535.3	515.0	492.7	471.7	456.1	442.6	433.1	426.4	416.9	411.5
57.5°	504.1	481.7	457.4	438.1	416.5	403.3	392.1	379.3	371.0	363.5	358.3
60°	466.2	440.6	419.6	401.3	382.4	365.4	355.2	345.1	336.3	328.9	324.2
62.5°	426.7	404.2	384.4	364.5	347.2	332.4	320.6	312.1	304.4	299.6	294.9
65°	366.1	348.5	328.2	311.9	295.8	284.9	275.4	267.9	262.6	259.2	255.1
67.5°	310.3	293.3	275.5	259.6	248.7	240.5	234.3	227.9	225.2	220.8	218.2
70°	274.1	256.5	240.9	228.8	217.9	211.8	207.8	203.0	200.3	194.9	192.2
72.5°	234.5	221.8	210.6	200.6	191.9	186.4	181.2	175.4	171.1	165.1	162.4
75°	184.8	173.2	164.5	157.6	152.2	144.8	137.4	131.3	129.2	127.3	126.6
77.5°	136.8	129.5	123.1	117.4	110.7	105.3	103.7	102.3	101.9	100.8	100.8
80°	107.6	100.8	96.1	89.3	85.2	85.2	85.2	83.9	84.6	84.6	84.6
82.5°	80.0	73.8	71.2	68.8	67.9	68.4	68.4	68.8	68.4	69.4	68.9
85°	41.2	41.9	43.3	42.6	43.3	43.3	44.7	44.0	44.7	43.3	44.7
87.5°	16.9	18.9	20.0	21.0	22.0	22.0	22.7	22.9	23.6	23.7	23.8
90°	8.5	10.8	13.3	15.8	18.3	20.8	21.5	22.3	23.1	23.8	24.4
92.5°	13.9	14.6	16.5	18.3	20.2	22.1	23.3	24.6	25.8	27.0	27.8
95°	21.3	18.3	20.5	22.6	24.7	26.8	28.2	29.5	30.8	32.2	32.9
97.5°	91.9	83.2	69.4	55.5	41.7	27.8	29.4	30.9	32.5	34.0	34.9
100°	161.5	148.4	118.5	88.5	58.5	28.5	30.0	31.6	33.1	34.7	35.6
102.5°	202.9	187.9	155.2	122.4	89.6	56.9	52.2	47.4	42.6	37.8	35.6
105°	266.1	258.6	241.3	223.9	206.7	189.4	155.4	121.4	87.3	53.3	36.5
107.5°	334.0	336.2	339.0	341.6	344.4	347.2	322.2	297.2	272.3	247.4	222.1
110°	379.7	381.6	383.7	385.8	387.9	390.0	383.7	377.4	371.0	364.6	347.8



TEST NUMBER: P332478-935

CATALOG NUMBER: S123RDIW-S1165D1030U935-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	423.4	425.2	427.2	429.4	431.5	433.6	433.7	433.9	433.9	434.0	431.2
115°	488.0	489.5	491.2	492.9	494.6	496.4	498.3	500.2	502.1	504.1	505.4
117.5°	552.6	553.7	554.7	555.5	556.4	557.2	558.8	560.3	561.9	563.4	564.3
120°	593.2	594.4	595.0	595.6	596.2	596.7	598.2	599.8	601.3	602.9	603.6
122.5°	632.1	633.2	634.0	634.6	635.4	636.1	637.2	638.3	639.4	640.4	641.1
125°	687.6	688.8	689.5	690.3	691.0	691.8	692.2	692.6	693.0	693.4	693.8
127.5°	740.9	742.1	743.0	744.0	744.9	745.8	746.4	747.0	747.6	748.3	748.4
130°	774.1	775.2	776.0	776.8	777.6	778.3	779.1	779.9	780.6	781.4	781.6
132.5°	805.9	807.0	807.6	808.2	808.8	809.4	810.2	811.0	811.8	812.5	812.6
135°	853.0	853.9	854.7	855.5	856.3	857.0	857.6	858.2	858.8	859.3	859.3
137.5°	895.7	896.6	897.1	897.5	897.9	898.4	899.2	900.2	901.1	902.1	902.3
140°	922.1	923.0	923.6	924.2	924.7	925.3	926.1	926.9	927.6	928.4	928.6
142.5°	947.8	948.6	949.2	949.8	950.4	950.9	951.6	952.2	952.8	953.4	953.4
145°	984.3	985.2	985.6	985.9	986.4	986.7	987.1	987.5	987.9	988.3	988.4
147.5°	1016.2	1016.8	1017.2	1017.6	1018.0	1018.4	1018.7	1019.2	1019.5	1019.9	1019.7
150°	1035.7	1036.2	1036.6	1037.0	1037.3	1037.8	1038.1	1038.5	1038.9	1039.3	1039.2
152.5°	1053.2	1053.4	1053.7	1053.9	1054.1	1054.4	1055.1	1055.8	1056.4	1057.1	1057.0
155°	1076.9	1076.8	1076.9	1077.1	1077.4	1077.5	1078.5	1079.4	1080.4	1081.4	1081.2
157.5°	1098.6	1098.5	1098.4	1098.1	1097.9	1097.8	1098.9	1100.1	1101.2	1102.3	1102.2
160°	1110.5	1110.3	1110.1	1109.9	1109.7	1109.6	1110.7	1111.8	1113.0	1114.1	1114.0
162.5°	1121.0	1120.7	1120.5	1120.3	1120.1	1119.9	1121.2	1122.5	1123.9	1125.2	1125.2
165°	1134.9	1134.5	1134.3	1134.1	1133.9	1133.8	1135.3	1136.8	1138.3	1139.9	1140.0
167.5°	1145.2	1144.8	1144.8	1144.8	1144.8	1144.8	1146.3	1147.9	1149.4	1151.0	1151.0
170°	1151.4	1151.1	1151.1	1151.1	1151.1	1151.1	1152.5	1154.1	1155.6	1157.2	1157.2
172.5°	1154.9	1154.6	1154.7	1154.9	1155.0	1155.2	1156.8	1158.3	1159.8	1161.3	1161.2
175°	1160.2	1159.8	1159.9	1160.2	1160.4	1160.5	1161.9	1163.2	1164.6	1166.0	1165.9
177.5°	1162.4	1162.0	1162.2	1162.4	1162.4	1162.6	1163.9	1165.1	1166.3	1167.5	1167.4
180°	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0



TEST NUMBER: P332478-935

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1506.1	1505.5	1506.1	1503.9	1506.1	1505.5	1506.1	1512.6	1512.6	1513.1	1513.7
5°	1401.4	1400.8	1398.8	1392.7	1398.8	1400.8	1401.4	1403.5	1408.9	1418.4	1415.7
7.5°	1310.1	1309.2	1303.2	1303.4	1303.2	1309.2	1310.1	1315.4	1321.5	1327.3	1334.2
10°	1256.0	1256.6	1248.5	1243.8	1248.5	1256.6	1256.0	1260.8	1269.5	1274.3	1279.0
12.5°	1203.5	1200.4	1193.9	1188.6	1193.9	1200.4	1203.5	1207.1	1219.2	1224.4	1233.6
15°	1134.2	1127.4	1111.2	1112.5	1111.2	1127.4	1134.2	1131.4	1143.7	1150.4	1153.1
17.5°	1052.6	1047.6	1047.3	1037.8	1047.3	1047.6	1052.6	1058.0	1068.5	1075.8	1095.2
20°	1005.0	1001.5	1002.9	993.4	1002.9	1001.5	1005.0	1015.7	1022.5	1032.0	1047.6
22.5°	967.6	964.1	958.5	955.5	958.5	964.1	967.6	975.2	982.5	995.7	1004.3
25°	912.9	907.5	902.1	905.4	902.1	907.5	912.9	917.0	930.5	936.6	948.7
27.5°	858.2	854.2	848.8	848.1	848.8	854.2	858.2	862.1	869.6	879.9	894.5
30°	823.5	819.5	816.8	813.4	816.8	819.5	823.5	827.0	834.4	845.2	856.1
32.5°	788.4	787.6	782.7	782.0	782.7	787.6	788.4	793.9	801.3	811.7	820.9
35°	742.4	738.3	736.9	737.6	736.9	738.3	742.4	745.1	751.8	761.3	770.1
37.5°	698.6	693.2	690.8	688.4	690.8	693.2	698.6	699.0	705.9	712.3	724.2
40°	667.3	661.9	660.5	659.1	660.5	661.9	667.3	666.6	674.0	678.7	689.6
42.5°	632.1	629.9	629.0	626.6	629.0	629.9	632.1	635.7	639.9	646.8	655.0
45°	584.0	583.3	579.3	580.7	579.3	583.3	584.0	586.0	593.5	598.2	605.6
47.5°	533.4	530.4	527.5	529.4	527.5	530.4	533.4	536.1	541.1	546.9	556.8
50°	498.8	497.4	491.3	492.7	491.3	497.4	498.8	501.4	504.8	512.3	521.1
52.5°	464.1	458.9	456.7	455.8	456.7	458.9	464.1	466.8	470.7	479.2	485.9
55°	406.7	400.6	397.9	396.6	397.9	400.6	406.7	411.5	416.9	426.4	433.1
57.5°	350.4	348.8	346.6	348.1	346.6	348.8	350.4	358.3	363.5	371.0	379.3
60°	317.4	317.4	317.4	316.7	317.4	317.4	317.4	324.2	328.9	336.3	345.1
62.5°	292.0	290.3	289.8	290.8	289.8	290.3	292.0	294.9	299.6	304.4	312.1
65°	253.1	252.4	249.7	249.0	249.7	252.4	253.1	255.1	259.2	262.6	267.9
67.5°	216.5	214.0	213.2	212.2	213.2	214.0	216.5	218.2	220.8	225.2	227.9
70°	188.8	187.4	183.4	184.1	183.4	187.4	188.8	192.2	194.9	200.3	203.0
72.5°	159.0	157.6	156.9	155.9	156.9	157.6	159.0	162.4	165.1	171.1	175.4
75°	125.9	125.2	124.5	127.3	124.5	125.2	125.9	126.6	127.3	129.2	131.3
77.5°	100.8	100.8	101.3	100.1	101.3	100.8	100.8	100.8	100.8	101.9	102.3
80°	84.6	84.6	83.9	83.9	83.9	84.6	84.6	84.6	84.6	84.6	83.9
82.5°	67.8	68.4	68.8	67.7	68.8	68.4	67.8	68.9	69.4	68.4	68.8
85°	44.7	44.0	45.4	44.7	45.4	44.0	44.7	44.7	43.3	44.7	44.0
87.5°	25.0	24.0	24.0	24.7	24.0	24.0	25.0	23.8	23.7	23.6	22.9
90°	24.8	25.1	25.6	25.9	25.6	25.1	24.8	24.4	23.8	23.1	22.3
92.5°	28.0	28.2	28.5	28.7	28.5	28.2	28.0	27.8	27.0	25.8	24.6
95°	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.2	30.8	29.5
97.5°	35.0	35.2	35.5	35.6	35.5	35.2	35.0	34.9	34.0	32.5	30.9
100°	35.7	35.9	36.2	36.3	36.2	35.9	35.7	35.6	34.7	33.1	31.6
102.5°	36.0	36.3	36.7	37.0	36.7	36.3	36.0	35.6	37.8	42.6	47.4
105°	36.9	37.3	37.6	38.1	37.6	37.3	36.9	36.5	53.3	87.3	121.4
107.5°	196.4	170.8	145.2	119.5	145.2	170.8	196.4	222.1	247.4	272.3	297.2
110°	320.3	292.7	265.3	237.8	265.3	292.7	320.3	347.8	364.6	371.0	377.4



TEST NUMBER: P332478-935

CATALOG NUMBER: S123RDIW-S1165D1030U935-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	425.4	419.7	413.8	408.0	413.8	419.7	425.4	431.2	434.0	433.9	433.9
115°	506.2	507.0	507.7	508.5	507.7	507.0	506.2	505.4	504.1	502.1	500.2
117.5°	564.4	564.6	564.7	564.9	564.7	564.6	564.4	564.3	563.4	561.9	560.3
120°	603.6	603.6	603.6	603.6	603.6	603.6	603.6	603.6	602.9	601.3	599.8
122.5°	641.2	641.4	641.5	641.7	641.5	641.4	641.2	641.1	640.4	639.4	638.3
125°	694.1	694.5	694.9	695.3	694.9	694.5	694.1	693.8	693.4	693.0	692.6
127.5°	748.0	747.6	747.3	746.8	747.3	747.6	748.0	748.4	748.3	747.6	747.0
130°	781.2	780.8	780.4	780.1	780.4	780.8	781.2	781.6	781.4	780.6	779.9
132.5°	812.1	811.6	811.1	810.5	811.1	811.6	812.1	812.6	812.5	811.8	811.0
135°	858.8	858.2	857.6	857.0	857.6	858.2	858.8	859.3	859.3	858.8	858.2
137.5°	901.9	901.6	901.1	900.8	901.1	901.6	901.9	902.3	902.1	901.1	900.2
140°	928.2	927.8	927.5	927.0	927.5	927.8	928.2	928.6	928.4	927.6	926.9
142.5°	952.9	952.4	951.8	951.2	951.8	952.4	952.9	953.4	953.4	952.8	952.2
145°	988.4	988.4	988.4	988.4	988.4	988.4	988.4	988.4	988.3	987.9	987.5
147.5°	1018.8	1017.9	1017.0	1016.2	1017.0	1017.9	1018.8	1019.7	1019.9	1019.5	1019.2
150°	1038.6	1038.0	1037.5	1036.9	1037.5	1038.0	1038.6	1039.2	1039.3	1038.9	1038.5
152.5°	1056.1	1055.2	1054.4	1053.5	1054.4	1055.2	1056.1	1057.0	1057.1	1056.4	1055.8
155°	1080.1	1079.0	1077.8	1076.7	1077.8	1079.0	1080.1	1081.2	1081.4	1080.4	1079.4
157.5°	1100.7	1099.2	1097.7	1096.2	1097.7	1099.2	1100.7	1102.2	1102.3	1101.2	1100.1
160°	1112.7	1111.4	1110.0	1108.6	1110.0	1111.4	1112.7	1114.0	1114.1	1113.0	1111.8
162.5°	1124.0	1122.8	1121.6	1120.4	1121.6	1122.8	1124.0	1125.2	1125.2	1123.9	1122.5
165°	1138.7	1137.3	1135.9	1134.6	1135.9	1137.3	1138.7	1140.0	1139.9	1138.3	1136.8
167.5°	1149.4	1147.9	1146.3	1144.8	1146.3	1147.9	1149.4	1151.0	1151.0	1149.4	1147.9
170°	1155.6	1154.1	1152.5	1151.1	1152.5	1154.1	1155.6	1157.2	1157.2	1155.6	1154.1
172.5°	1159.6	1157.9	1156.2	1154.5	1156.2	1157.9	1159.6	1161.2	1161.3	1159.8	1158.3
175°	1164.3	1162.8	1161.2	1159.7	1161.2	1162.8	1164.3	1165.9	1166.0	1164.6	1163.2
177.5°	1165.9	1164.3	1162.8	1161.2	1162.8	1164.3	1165.9	1167.4	1167.5	1166.3	1165.1
180°	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1508.8	1516.4	1524.0	1531.0	1541.9	1546.7	1553.8	1556.4	1564.6	1576.5	1586.2
5°	1417.0	1427.9	1442.1	1453.6	1471.9	1486.1	1501.7	1516.6	1534.1	1559.2	1581.5
7.5°	1339.2	1350.0	1367.0	1388.4	1408.5	1428.7	1449.9	1470.2	1495.4	1531.3	1566.8
10°	1287.8	1300.6	1320.9	1343.9	1369.0	1388.6	1413.7	1439.4	1470.5	1511.8	1554.4
12.5°	1243.4	1253.0	1276.6	1298.5	1326.8	1351.9	1376.3	1406.4	1441.8	1485.8	1537.1
15°	1172.8	1186.3	1209.3	1233.6	1263.4	1289.9	1321.6	1358.1	1392.7	1446.8	1509.1
17.5°	1101.8	1122.4	1146.3	1173.8	1195.9	1232.3	1266.8	1304.3	1346.8	1404.2	1472.6
20°	1056.4	1072.6	1094.9	1134.9	1164.0	1191.7	1223.5	1270.2	1309.4	1374.4	1445.4
22.5°	1018.0	1029.8	1054.9	1087.8	1121.7	1153.8	1186.1	1230.7	1279.1	1340.8	1417.9
25°	961.0	979.9	998.8	1022.5	1059.0	1097.6	1132.8	1170.7	1222.2	1287.8	1371.1
27.5°	905.3	922.5	941.2	970.3	998.0	1034.1	1070.8	1114.3	1169.5	1239.0	1323.4
30°	869.6	882.4	900.0	937.3	962.3	993.4	1036.7	1075.3	1126.7	1200.5	1289.9
32.5°	832.8	849.4	868.7	897.2	928.2	957.7	997.2	1039.1	1091.6	1164.2	1255.7
35°	780.2	799.9	819.5	840.5	871.6	902.1	935.2	981.3	1034.7	1105.1	1195.1
37.5°	731.9	747.8	763.7	789.7	819.2	848.2	879.2	924.5	974.9	1050.9	1133.3
40°	701.1	715.3	727.5	754.6	783.0	814.1	844.6	884.5	938.6	1009.7	1089.5
42.5°	667.5	680.6	697.2	719.4	749.9	776.2	806.7	844.4	895.3	967.4	1037.5
45°	617.2	632.1	646.3	667.3	697.7	723.4	750.4	786.4	838.4	898.0	960.3
47.5°	564.8	579.7	595.9	616.2	642.7	668.9	695.9	727.7	775.2	833.7	875.6
50°	531.2	543.4	559.6	580.0	604.3	632.1	656.4	691.0	736.2	782.3	818.8
52.5°	496.5	507.6	526.1	547.4	570.2	594.2	620.2	649.8	690.8	734.1	763.1
55°	442.6	456.1	471.7	492.7	515.0	535.3	560.3	590.8	623.3	655.7	675.4
57.5°	392.1	403.3	416.5	438.1	457.4	481.7	504.1	527.9	557.9	582.4	595.2
60°	355.2	365.4	382.4	401.3	419.6	440.6	466.2	489.9	513.0	532.6	542.7
62.5°	320.6	332.4	347.2	364.5	384.4	404.2	426.7	446.6	466.9	483.9	490.8
65°	275.4	284.9	295.8	311.9	328.2	348.5	366.1	386.4	401.3	410.8	416.9
67.5°	234.3	240.5	248.7	259.6	275.5	293.3	310.3	326.1	338.6	345.1	350.5
70°	207.8	211.8	217.9	228.8	240.9	256.5	274.1	285.6	296.4	301.8	307.2
72.5°	181.2	186.4	191.9	200.6	210.6	221.8	234.5	248.7	254.7	261.2	264.5
75°	137.4	144.8	152.2	157.6	164.5	173.2	184.8	193.6	196.9	202.3	203.0
77.5°	103.7	105.3	110.7	117.4	123.1	129.5	136.8	144.6	146.3	149.1	150.9
80°	85.2	85.2	85.2	89.3	96.1	100.8	107.6	111.7	114.3	115.0	115.7
82.5°	68.4	68.4	67.9	68.8	71.2	73.8	80.0	84.6	86.8	86.4	84.9
85°	44.7	43.3	43.3	42.6	43.3	41.9	41.2	44.0	48.0	48.0	46.7
87.5°	22.7	22.0	22.0	21.0	20.0	18.9	16.9	17.0	16.6	18.4	17.5
90°	21.5	20.8	18.3	15.8	13.3	10.8	8.5	6.6	4.7	2.8	0.9
92.5°	23.3	22.1	20.2	18.3	16.5	14.6	13.9	14.5	15.0	15.6	16.1
95°	28.2	26.8	24.7	22.6	20.5	18.3	21.3	29.1	37.0	44.9	52.8
97.5°	29.4	27.8	41.7	55.5	69.4	83.2	91.9	95.4	98.9	102.5	106.0
100°	30.0	28.5	58.5	88.5	118.5	148.4	161.5	157.6	153.9	150.0	146.1
102.5°	52.2	56.9	89.6	122.4	155.2	187.9	202.9	200.1	197.3	194.6	191.8
105°	155.4	189.4	206.7	223.9	241.3	258.6	266.1	264.1	261.9	259.8	257.7
107.5°	322.2	347.2	344.4	341.6	339.0	336.2	334.0	332.3	330.6	328.9	327.3
110°	383.7	390.0	387.9	385.8	383.7	381.6	379.7	378.2	376.7	375.1	373.6



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	433.7	433.6	431.5	429.4	427.2	425.2	423.4	422.1	420.6	419.2	417.8
115°	498.3	496.4	494.6	492.9	491.2	489.5	488.0	486.9	485.7	484.6	483.5
117.5°	558.8	557.2	556.4	555.5	554.7	553.7	552.6	551.1	549.7	548.3	546.9
120°	598.2	596.7	596.2	595.6	595.0	594.4	593.2	591.5	589.8	588.1	586.3
122.5°	637.2	636.1	635.4	634.6	634.0	633.2	632.1	630.7	629.3	627.8	626.5
125°	692.2	691.8	691.0	690.3	689.5	688.8	687.6	686.0	684.5	683.0	681.5
127.5°	746.4	745.8	744.9	744.0	743.0	742.1	740.9	739.3	737.8	736.2	734.7
130°	779.1	778.3	777.6	776.8	776.0	775.2	774.1	772.6	771.0	769.5	767.9
132.5°	810.2	809.4	808.8	808.2	807.6	807.0	805.9	804.3	802.8	801.3	799.8
135°	857.6	857.0	856.3	855.5	854.7	853.9	853.0	851.8	850.7	849.5	848.3
137.5°	899.2	898.4	897.9	897.5	897.1	896.6	895.7	894.2	892.8	891.3	889.8
140°	926.1	925.3	924.7	924.2	923.6	923.0	922.1	921.0	919.9	918.7	917.6
142.5°	951.6	950.9	950.4	949.8	949.2	948.6	947.8	946.6	945.5	944.3	943.1
145°	987.1	986.7	986.4	985.9	985.6	985.2	984.3	983.0	981.6	980.2	979.0
147.5°	1018.7	1018.4	1018.0	1017.6	1017.2	1016.8	1016.2	1015.3	1014.4	1013.6	1012.7
150°	1038.1	1037.8	1037.3	1037.0	1036.6	1036.2	1035.7	1035.2	1034.6	1034.0	1033.5
152.5°	1055.1	1054.4	1054.1	1053.9	1053.7	1053.4	1053.2	1052.9	1052.7	1052.4	1052.1
155°	1078.5	1077.5	1077.4	1077.1	1076.9	1076.8	1076.9	1077.3	1077.6	1078.0	1078.4
157.5°	1098.9	1097.8	1097.9	1098.1	1098.4	1098.5	1098.6	1098.7	1098.7	1098.8	1098.8
160°	1110.7	1109.6	1109.7	1109.9	1110.1	1110.3	1110.5	1110.7	1110.9	1111.0	1111.3
162.5°	1121.2	1119.9	1120.1	1120.3	1120.5	1120.7	1121.0	1121.5	1122.1	1122.5	1123.0
165°	1135.3	1133.8	1133.9	1134.1	1134.3	1134.5	1134.9	1135.5	1136.1	1136.6	1137.2
167.5°	1146.3	1144.8	1144.8	1144.8	1144.8	1144.8	1145.2	1146.0	1146.8	1147.5	1148.2
170°	1152.5	1151.1	1151.1	1151.1	1151.1	1151.1	1151.4	1152.2	1153.0	1153.7	1154.5
172.5°	1156.8	1155.2	1155.0	1154.9	1154.7	1154.6	1154.9	1155.9	1156.8	1157.7	1158.6
175°	1161.9	1160.5	1160.4	1160.2	1159.9	1159.8	1160.2	1161.1	1162.1	1163.0	1164.0
177.5°	1163.9	1162.6	1162.4	1162.4	1162.2	1162.0	1162.4	1163.1	1163.9	1164.6	1165.4
180°	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0



TEST NUMBER: P332478-935

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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1589.5	1595.4	1603.0	1614.4	1623.1	1630.6	1632.3	1634.4	1639.9	1649.0	1656.0
5°	1599.7	1615.3	1640.4	1664.7	1691.1	1712.8	1733.1	1747.3	1760.8	1789.2	1812.2
7.5°	1596.6	1631.2	1670.4	1714.2	1758.4	1801.3	1841.1	1876.6	1912.1	1953.5	2000.8
10°	1594.3	1635.0	1687.7	1743.9	1805.5	1865.7	1923.9	1969.3	2022.1	2069.4	2129.6
12.5°	1584.1	1642.5	1705.6	1777.4	1853.1	1922.5	1999.2	2061.8	2122.2	2190.6	2260.6
15°	1570.6	1641.8	1721.6	1817.0	1932.0	2015.9	2094.5	2203.4	2277.9	2352.3	2452.5
17.5°	1546.2	1632.9	1732.7	1856.7	1952.6	2065.4	2183.5	2269.6	2369.9	2474.8	2565.4
20°	1526.6	1627.5	1739.1	1861.0	1983.5	2105.9	2220.3	2323.2	2426.7	2547.9	2622.3
22.5°	1507.2	1607.0	1722.9	1852.4	1984.0	2113.0	2242.5	2363.3	2479.8	2602.0	2697.0
25°	1465.8	1584.2	1710.0	1842.0	1971.9	2114.1	2268.4	2403.1	2547.2	2673.1	2763.0
27.5°	1423.8	1532.3	1657.7	1791.6	1936.0	2103.9	2285.4	2438.5	2582.9	2673.1	2701.3
30°	1386.0	1501.0	1616.0	1752.0	1908.3	2095.8	2288.6	2463.9	2582.4	2621.6	2592.5
32.5°	1347.5	1451.7	1565.6	1705.0	1871.0	2075.8	2293.0	2448.8	2520.1	2490.1	2371.6
35°	1279.7	1373.7	1484.0	1623.4	1814.3	2064.7	2275.1	2380.7	2363.1	2193.9	1970.6
37.5°	1207.1	1283.8	1386.0	1531.7	1755.6	2020.7	2198.2	2213.8	2061.6	1801.8	1543.9
40°	1149.8	1218.7	1323.7	1475.9	1710.0	1977.4	2120.8	2057.9	1821.7	1532.8	1317.6
42.5°	1094.0	1152.2	1253.3	1417.5	1666.7	1918.4	2005.5	1868.5	1595.9	1322.8	1127.0
45°	999.5	1054.3	1155.8	1324.3	1578.1	1805.5	1794.0	1555.7	1283.1	1063.2	900.7
47.5°	909.9	957.9	1053.1	1225.1	1474.0	1636.3	1528.7	1275.2	1043.9	867.5	751.6
50°	846.5	894.0	988.7	1158.6	1390.7	1509.1	1355.5	1111.2	899.4	753.2	661.2
52.5°	785.9	832.2	918.9	1084.3	1290.0	1360.7	1195.8	969.3	792.7	666.6	587.5
55°	701.1	736.2	814.1	972.4	1126.1	1142.3	975.2	785.7	640.2	552.2	498.1
57.5°	614.6	644.9	721.8	847.9	955.6	947.3	788.8	624.9	526.9	461.5	422.2
60°	558.3	588.1	655.7	764.1	845.2	816.8	671.3	539.3	455.5	407.4	376.3
62.5°	505.8	529.1	592.4	671.4	729.9	697.7	573.9	464.6	398.0	357.6	332.9
65°	429.7	448.7	499.4	540.7	573.2	542.1	439.2	363.4	315.4	287.0	270.0
67.5°	357.4	369.5	401.6	416.5	439.4	405.2	330.3	279.5	252.2	228.2	216.5
70°	311.9	320.7	337.7	349.8	355.9	320.7	265.3	228.1	205.0	188.1	180.7
72.5°	266.5	274.2	277.6	287.6	284.5	251.5	213.3	183.7	167.1	155.7	146.0
75°	203.7	207.1	203.7	199.7	190.8	167.8	141.5	126.6	114.3	108.9	105.6
77.5°	148.4	147.4	142.8	136.5	121.4	106.9	92.7	87.7	82.4	79.6	78.4
80°	114.3	111.7	107.6	97.5	84.6	74.5	71.0	67.7	65.6	62.3	61.6
82.5°	85.2	83.5	76.7	68.2	59.2	54.4	51.6	50.4	48.3	46.6	46.4
85°	45.4	43.3	35.9	31.2	29.8	28.4	27.7	27.7	25.1	24.4	24.4
87.5°	15.2	12.3	12.1	10.9	11.4	10.8	11.8	11.2	11.2	11.9	10.9
90°	2.8	4.7	6.6	8.5	10.8	13.3	15.8	18.3	20.8	21.5	22.3
92.5°	15.6	15.0	14.5	13.9	14.6	16.5	18.3	20.2	22.1	23.3	24.6
95°	44.9	37.0	29.1	21.3	18.3	20.5	22.6	24.7	26.8	28.2	29.5
97.5°	102.5	98.9	95.4	91.9	83.2	69.4	55.5	41.7	27.8	29.4	30.9
100°	150.0	153.9	157.6	161.5	148.4	118.5	88.5	58.5	28.5	30.0	31.6
102.5°	194.6	197.3	200.1	202.9	187.9	155.2	122.4	89.6	56.9	52.2	47.4
105°	259.8	261.9	264.1	266.1	258.6	241.3	223.9	206.7	189.4	155.4	121.4
107.5°	328.9	330.6	332.3	334.0	336.2	339.0	341.6	344.4	347.2	322.2	297.2
110°	375.1	376.7	378.2	379.7	381.6	383.7	385.8	387.9	390.0	383.7	377.4





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	419.2	420.6	422.1	423.4	425.2	427.2	429.4	431.5	433.6	433.7	433.9
115°	484.6	485.7	486.9	488.0	489.5	491.2	492.9	494.6	496.4	498.3	500.2
117.5°	548.3	549.7	551.1	552.6	553.7	554.7	555.5	556.4	557.2	558.8	560.3
120°	588.1	589.8	591.5	593.2	594.4	595.0	595.6	596.2	596.7	598.2	599.8
122.5°	627.8	629.3	630.7	632.1	633.2	634.0	634.6	635.4	636.1	637.2	638.3
125°	683.0	684.5	686.0	687.6	688.8	689.5	690.3	691.0	691.8	692.2	692.6
127.5°	736.2	737.8	739.3	740.9	742.1	743.0	744.0	744.9	745.8	746.4	747.0
130°	769.5	771.0	772.6	774.1	775.2	776.0	776.8	777.6	778.3	779.1	779.9
132.5°	801.3	802.8	804.3	805.9	807.0	807.6	808.2	808.8	809.4	810.2	811.0
135°	849.5	850.7	851.8	853.0	853.9	854.7	855.5	856.3	857.0	857.6	858.2
137.5°	891.3	892.8	894.2	895.7	896.6	897.1	897.5	897.9	898.4	899.2	900.2
140°	918.7	919.9	921.0	922.1	923.0	923.6	924.2	924.7	925.3	926.1	926.9
142.5°	944.3	945.5	946.6	947.8	948.6	949.2	949.8	950.4	950.9	951.6	952.2
145°	980.2	981.6	983.0	984.3	985.2	985.6	985.9	986.4	986.7	987.1	987.5
147.5°	1013.6	1014.4	1015.3	1016.2	1016.8	1017.2	1017.6	1018.0	1018.4	1018.7	1019.2
150°	1034.0	1034.6	1035.2	1035.7	1036.2	1036.6	1037.0	1037.3	1037.8	1038.1	1038.5
152.5°	1052.4	1052.7	1052.9	1053.2	1053.4	1053.7	1053.9	1054.1	1054.4	1055.1	1055.8
155°	1078.0	1077.6	1077.3	1076.9	1076.8	1076.9	1077.1	1077.4	1077.5	1078.5	1079.4
157.5°	1098.8	1098.7	1098.7	1098.6	1098.5	1098.4	1098.1	1097.9	1097.8	1098.9	1100.1
160°	1111.0	1110.9	1110.7	1110.5	1110.3	1110.1	1109.9	1109.7	1109.6	1110.7	1111.8
162.5°	1122.5	1122.1	1121.5	1121.0	1120.7	1120.5	1120.3	1120.1	1119.9	1121.2	1122.5
165°	1136.6	1136.1	1135.5	1134.9	1134.5	1134.3	1134.1	1133.9	1133.8	1135.3	1136.8
167.5°	1147.5	1146.8	1146.0	1145.2	1144.8	1144.8	1144.8	1144.8	1144.8	1146.3	1147.9
170°	1153.7	1153.0	1152.2	1151.4	1151.1	1151.1	1151.1	1151.1	1151.1	1152.5	1154.1
172.5°	1157.7	1156.8	1155.9	1154.9	1154.6	1154.7	1154.9	1155.0	1155.2	1156.8	1158.3
175°	1163.0	1162.1	1161.1	1160.2	1159.8	1159.9	1160.2	1160.4	1160.5	1161.9	1163.2
177.5°	1164.6	1163.9	1163.1	1162.4	1162.0	1162.2	1162.4	1162.4	1162.6	1163.9	1165.1
180°	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1667.4	1667.4	1669.6	1677.7	1678.8	1685.8	1683.7
5°	1832.6	1845.4	1850.1	1870.4	1882.7	1888.1	1877.2
7.5°	2034.5	2070.8	2087.9	2109.2	2128.0	2133.7	2118.9
10°	2181.8	2219.7	2251.4	2271.1	2289.3	2301.5	2317.1
12.5°	2324.1	2370.7	2400.9	2428.6	2447.4	2462.9	2465.4
15°	2478.8	2549.2	2602.6	2641.9	2661.5	2671.7	2667.6
17.5°	2634.8	2700.1	2738.2	2778.2	2805.4	2806.8	2807.5
20°	2723.1	2786.7	2830.7	2860.5	2891.0	2889.6	2896.3
22.5°	2782.1	2832.2	2865.9	2887.5	2898.0	2892.9	2894.2
25°	2809.7	2824.6	2818.6	2784.0	2775.3	2743.4	2748.8
27.5°	2667.4	2596.9	2524.2	2430.5	2356.6	2297.6	2300.6
30°	2474.1	2349.6	2207.4	2088.4	1981.4	1951.6	1888.1
32.5°	2203.9	2017.2	1850.7	1739.7	1648.0	1623.1	1567.5
35°	1745.9	1564.6	1393.4	1290.5	1249.9	1193.1	1192.4
37.5°	1357.1	1197.4	1106.8	1029.7	989.2	954.8	951.5
40°	1141.6	1017.1	948.7	893.3	853.3	827.6	821.6
42.5°	991.1	890.4	826.4	792.0	761.3	748.0	738.1
45°	809.3	741.7	697.0	665.9	651.7	641.5	636.1
47.5°	677.0	631.6	601.2	580.5	568.9	558.3	561.1
50°	605.0	567.7	545.4	525.8	517.0	509.5	510.2
52.5°	547.1	513.7	495.6	481.4	470.5	465.2	462.6
55°	464.3	443.2	425.0	414.8	408.7	401.3	399.2
57.5°	396.0	379.8	364.9	353.4	351.9	344.7	345.7
60°	350.5	337.0	324.9	318.7	314.0	307.9	310.0
62.5°	313.1	301.8	290.8	285.7	280.9	276.5	277.4
65°	256.5	245.6	238.8	236.2	234.1	232.1	230.1
67.5°	204.4	197.8	193.6	187.7	183.6	182.9	180.8
70°	171.9	163.1	155.7	148.2	146.2	145.5	146.2
72.5°	137.8	132.2	130.2	126.6	126.1	124.4	125.6
75°	103.6	101.5	100.1	97.5	97.5	97.5	97.5
77.5°	76.4	75.1	74.3	73.8	73.1	72.2	72.0
80°	59.6	58.9	57.5	57.5	56.8	57.5	56.8
82.5°	44.9	44.8	43.5	43.5	42.8	42.4	42.8
85°	23.0	22.3	23.7	22.3	23.0	21.7	23.0
87.5°	11.1	11.3	10.8	10.9	10.4	11.6	10.6
90°	23.1	23.8	24.4	24.8	25.1	25.6	25.9
92.5°	25.8	27.0	27.8	28.0	28.2	28.5	28.7
95°	30.8	32.2	32.9	32.9	32.9	32.9	32.9
97.5°	32.5	34.0	34.9	35.0	35.2	35.5	35.6
100°	33.1	34.7	35.6	35.7	35.9	36.2	36.3
102.5°	42.6	37.8	35.6	36.0	36.3	36.7	37.0
105°	87.3	53.3	36.5	36.9	37.3	37.6	38.1
107.5°	272.3	247.4	222.1	196.4	170.8	145.2	119.5
110°	371.0	364.6	347.8	320.3	292.7	265.3	237.8



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	433.9	434.0	431.2	425.4	419.7	413.8	408.0
115°	502.1	504.1	505.4	506.2	507.0	507.7	508.5
117.5°	561.9	563.4	564.3	564.4	564.6	564.7	564.9
120°	601.3	602.9	603.6	603.6	603.6	603.6	603.6
122.5°	639.4	640.4	641.1	641.2	641.4	641.5	641.7
125°	693.0	693.4	693.8	694.1	694.5	694.9	695.3
127.5°	747.6	748.3	748.4	748.0	747.6	747.3	746.8
130°	780.6	781.4	781.6	781.2	780.8	780.4	780.1
132.5°	811.8	812.5	812.6	812.1	811.6	811.1	810.5
135°	858.8	859.3	859.3	858.8	858.2	857.6	857.0
137.5°	901.1	902.1	902.3	901.9	901.6	901.1	900.8
140°	927.6	928.4	928.6	928.2	927.8	927.5	927.0
142.5°	952.8	953.4	953.4	952.9	952.4	951.8	951.2
145°	987.9	988.3	988.4	988.4	988.4	988.4	988.4
147.5°	1019.5	1019.9	1019.7	1018.8	1017.9	1017.0	1016.2
150°	1038.9	1039.3	1039.2	1038.6	1038.0	1037.5	1036.9
152.5°	1056.4	1057.1	1057.0	1056.1	1055.2	1054.4	1053.5
155°	1080.4	1081.4	1081.2	1080.1	1079.0	1077.8	1076.7
157.5°	1101.2	1102.3	1102.2	1100.7	1099.2	1097.7	1096.2
160°	1113.0	1114.1	1114.0	1112.7	1111.4	1110.0	1108.6
162.5°	1123.9	1125.2	1125.2	1124.0	1122.8	1121.6	1120.4
165°	1138.3	1139.9	1140.0	1138.7	1137.3	1135.9	1134.6
167.5°	1149.4	1151.0	1151.0	1149.4	1147.9	1146.3	1144.8
170°	1155.6	1157.2	1157.2	1155.6	1154.1	1152.5	1151.1
172.5°	1159.8	1161.3	1161.2	1159.6	1157.9	1156.2	1154.5
175°	1164.6	1166.0	1165.9	1164.3	1162.8	1161.2	1159.7
177.5°	1166.3	1167.5	1167.4	1165.9	1164.3	1162.8	1161.2
180°	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0	1164.0

(END OF REPORT)