

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: P332384-830

Luminaire Tested: **S123RDIP-S1165D1195U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332384-830  
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: S123RDIP-S1165D1195U830-4F0-1E-UDD-A  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1195 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

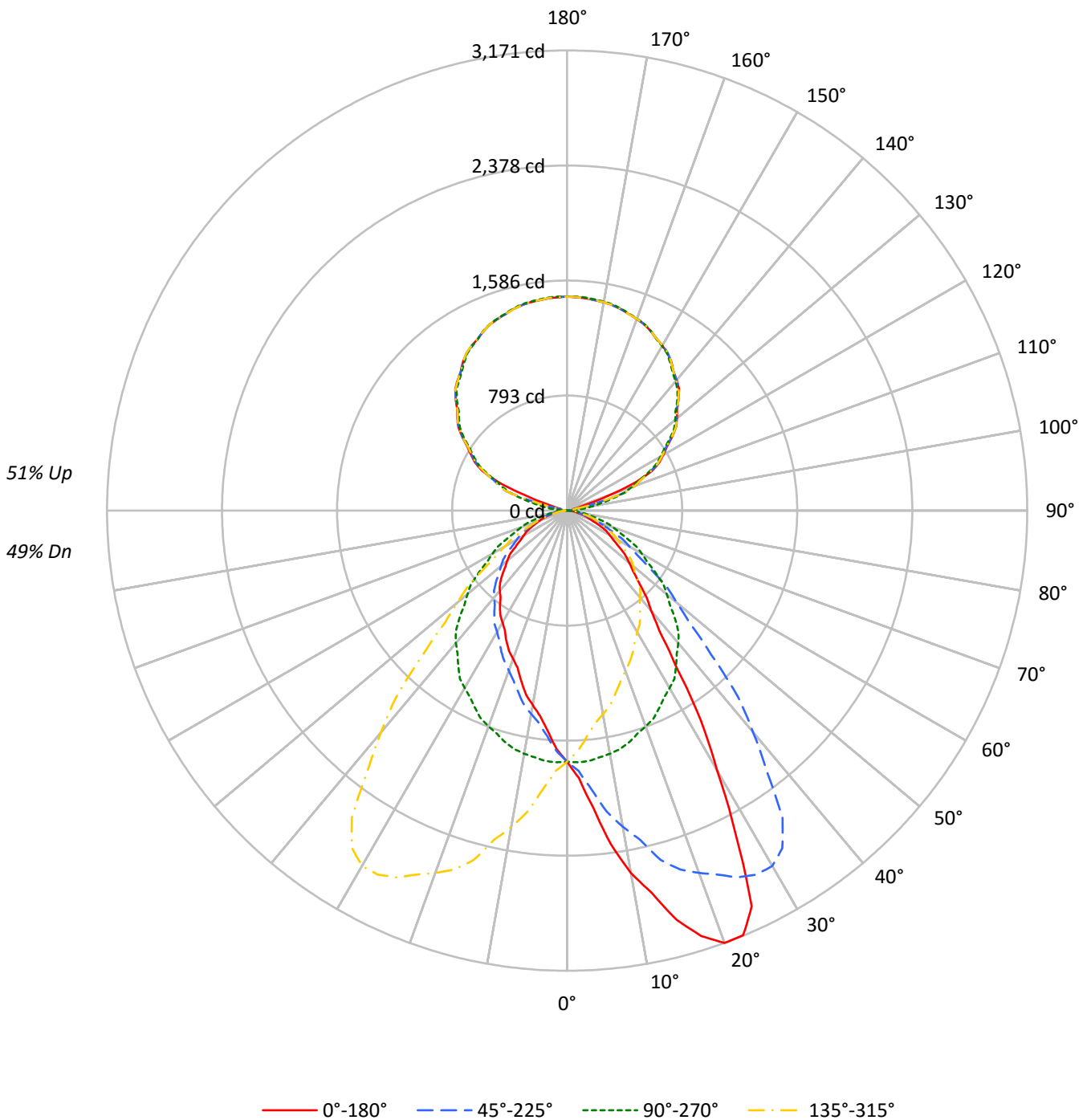
Lumens per Lamp: N/A  
Luminaire Lumens: 8807.7 lumens  
Efficiency: N/A  
Efficacy: 122.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 71.7  
Input Voltage (V): 120  
Input Current (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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49
1	98	94	90	87	90	87	84	81	73	71	69	61	59	58	50	49	48	42
2	90	83	77	72	83	77	72	67	65	61	58	54	52	49	44	43	41	36
3	82	73	66	61	76	68	62	57	58	53	50	48	45	42	40	38	36	32
4	76	65	58	52	69	61	54	49	52	47	43	44	40	37	36	33	31	28
5	70	58	50	45	64	54	47	42	47	41	37	39	35	32	33	30	27	24
6	64	53	45	39	59	49	42	37	42	37	33	36	32	28	30	27	24	22
7	59	48	40	34	55	44	37	33	38	33	29	33	28	25	27	24	22	19
8	55	43	36	31	51	40	34	29	35	30	26	30	26	23	25	22	20	17
9	51	40	32	27	48	37	30	26	32	27	23	28	24	21	23	20	18	16
10	48	36	29	25	45	34	28	23	30	25	21	26	22	19	22	19	16	14

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

	0°	90°	180°	270°
0°	18627	18627	18627	18627
5°	22204	18707	16473	18707
10°	27725	18600	14882	18600
15°	32543	18409	13572	18409
20°	36318	18125	12457	18125
25°	35739	17826	11772	17826
30°	25690	17550	11067	17550
35°	17152	17190	10611	17190
40°	12638	16759	10138	16759
45°	10601	16002	9677	16002
50°	9354	15011	9031	15011
55°	8203	13874	8146	13874
60°	7304	12790	7464	12790
65°	6413	11624	6943	11624
70°	5035	10584	6342	10584
75°	4438	9245	5793	9245
80°	3856	7854	5697	7854
85°	3112	6311	6039	6311



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.2	1.9
10°-20°	531.7	6.0
20°-30°	835.3	9.5
30°-40°	871.4	9.9
40°-50°	745.8	8.5
50°-60°	568.4	6.5
60°-70°	364.3	4.1
70°-80°	175.3	2.0
80°-90°	50.5	0.6
90°-100°	53.6	0.6
100°-110°	255.4	2.9
110°-120°	613.5	7.0
120°-130°	781.2	8.9
130°-140°	834.7	9.5
140°-150°	780.5	8.9
150°-160°	629.6	7.1
160°-170°	406.3	4.6
170°-180°	140.0	1.6
0°-30°	1537.1	17.5
0°-40°	2408.6	27.3
0°-60°	3722.7	42.3
0°-90°	4312.9	49.0
90°-120°	922.4	10.5
90°-150°	3318.8	37.7
90°-180°	4495.0	51.0
0°-180°	8807.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1730	1730	1730	1730	1730	
5°	2055	1731	1525	1731	2055	212
15°	2920	1652	1218	1652	2920	828
25°	3009	1501	991	1501	3009	1293
35°	1305	1308	808	1308	1305	856
45°	696	1051	636	1051	696	548
55°	437	739	434	739	437	395
65°	252	456	273	456	252	248
75°	107	222	139	222	107	114
85°	25	51	49	51	25	30
90°	33	1	33	1	33	16
95°	42	67	42	67	42	35
105°	48	326	48	326	48	110
115°	644	612	644	612	644	595
125°	880	863	880	863	880	786
135°	1085	1074	1085	1074	1085	837
145°	1252	1240	1252	1240	1252	781
155°	1363	1366	1363	1366	1363	629
165°	1437	1440	1437	1440	1437	406
175°	1468	1474	1468	1474	1468	140
180°	1474	1474	1474	1474	1474	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1843.1	1845.5	1837.8	1836.6	1827.7	1825.3	1825.3	1812.9	1805.2	1795.2	1789.2
5°	2055.0	2066.9	2061.0	2047.6	2025.3	2020.2	2006.1	1983.9	1958.7	1927.6	1912.8
7.5°	2319.6	2335.8	2329.6	2308.9	2285.7	2266.9	2227.1	2190.3	2138.5	2093.2	2054.4
10°	2536.6	2519.5	2506.1	2486.1	2464.7	2429.9	2388.4	2331.3	2265.4	2213.6	2155.8
12.5°	2698.9	2696.1	2679.2	2658.6	2628.3	2595.2	2544.2	2474.7	2398.1	2323.2	2257.1
15°	2920.3	2924.7	2913.6	2892.1	2849.1	2790.6	2713.6	2684.7	2575.0	2493.6	2412.1
17.5°	3073.4	3072.6	3071.1	3041.3	2997.5	2955.8	2884.4	2808.4	2709.2	2594.3	2484.5
20°	3170.6	3163.3	3164.8	3131.4	3098.8	3050.6	2981.0	2870.6	2789.2	2656.6	2543.2
22.5°	3168.3	3166.8	3172.4	3161.0	3137.3	3100.4	3045.6	2952.4	2848.5	2714.6	2587.1
25°	3009.2	3003.2	3038.1	3047.7	3085.5	3092.1	3075.8	3024.7	2926.2	2788.4	2630.6
27.5°	2518.5	2515.2	2579.8	2660.7	2763.3	2842.9	2920.0	2957.1	2926.2	2827.5	2669.5
30°	2066.9	2136.5	2169.1	2286.1	2416.5	2572.1	2708.4	2838.0	2869.9	2827.0	2697.3
32.5°	1716.0	1776.8	1804.0	1904.5	2026.0	2208.2	2412.6	2596.2	2725.9	2758.7	2680.7
35°	1305.3	1306.1	1368.3	1412.7	1525.3	1712.8	1911.3	2157.2	2401.7	2586.9	2606.1
37.5°	1041.6	1045.3	1082.9	1127.2	1211.6	1310.8	1485.6	1690.1	1972.5	2256.8	2423.5
40°	899.4	906.0	934.2	977.9	1038.6	1113.4	1249.7	1442.4	1677.9	1994.2	2252.8
42.5°	808.0	818.9	833.4	867.0	904.7	974.8	1085.0	1233.8	1448.0	1747.1	2045.4
45°	696.4	702.3	713.4	729.0	763.0	811.9	886.0	986.0	1163.9	1404.6	1703.1
47.5°	614.3	611.1	622.8	635.5	658.2	691.4	741.1	822.7	949.6	1142.7	1396.0
50°	558.6	557.8	566.0	575.6	597.1	621.5	662.3	723.8	824.5	984.6	1216.4
52.5°	506.4	509.3	515.0	527.0	542.5	562.3	598.9	643.2	729.7	867.8	1061.1
55°	437.1	439.3	447.4	454.1	465.2	485.2	508.2	545.3	604.5	700.8	860.1
57.5°	378.4	377.4	385.2	386.8	399.4	415.8	433.5	462.2	505.2	576.8	684.1
60°	339.3	337.1	343.7	348.9	355.6	368.9	383.7	411.9	446.0	498.6	590.4
62.5°	303.7	302.7	307.6	312.7	318.3	330.4	342.8	364.5	391.4	435.7	508.6
65°	251.8	254.1	256.3	258.5	261.5	268.9	280.8	295.6	314.1	345.3	397.8
67.5°	197.9	200.2	201.0	205.5	211.9	216.5	223.8	237.0	249.8	276.1	305.9
70°	160.0	159.3	160.0	162.2	170.4	178.5	188.1	197.8	205.9	224.4	249.7
72.5°	137.5	136.2	138.1	138.6	142.5	144.8	150.8	159.9	170.4	182.9	201.0
75°	106.7	106.7	106.7	106.7	109.6	111.1	113.4	115.6	119.2	125.2	138.6
77.5°	78.8	79.0	80.0	80.8	81.3	82.2	83.6	85.8	87.1	90.2	96.0
80°	62.2	63.0	62.2	63.0	63.0	64.5	65.2	67.4	68.1	71.8	74.1
82.5°	46.8	46.4	46.8	47.6	47.6	49.0	49.2	50.8	51.0	52.9	55.1
85°	25.2	23.8	25.2	24.4	25.9	24.4	25.2	26.7	26.7	27.4	30.3
87.5°	12.5	13.6	12.3	12.8	12.7	13.1	12.9	12.7	13.8	13.0	12.9
90°	32.9	32.3	31.9	31.4	30.9	30.2	29.2	28.2	27.2	26.3	23.1
92.5°	36.4	36.1	35.8	35.4	35.2	34.3	32.7	31.1	29.6	28.0	25.6
95°	41.6	41.6	41.6	41.6	41.6	40.7	39.0	37.3	35.6	33.9	31.3
97.5°	45.1	44.9	44.7	44.4	44.1	43.1	41.1	39.1	37.2	35.3	32.8
100°	46.0	45.7	45.5	45.2	45.1	43.9	41.9	40.1	38.1	36.1	34.1
102.5°	46.8	46.5	46.0	45.5	45.1	47.9	53.9	59.9	66.0	72.0	113.5
105°	48.2	47.7	47.2	46.8	46.3	67.5	110.6	153.6	196.7	239.8	261.7
107.5°	151.4	183.8	216.2	248.7	281.2	313.2	344.8	376.4	407.9	439.6	436.1
110°	301.1	335.9	370.7	405.6	440.4	461.8	469.8	477.8	485.9	493.9	491.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	516.6	524.0	531.3	538.7	546.0	549.7	549.5	549.3	549.2	549.0	546.4
115°	643.9	642.9	642.0	640.9	640.0	638.3	635.8	633.4	631.0	628.6	626.4
117.5°	715.3	715.1	714.9	714.7	714.5	713.4	711.5	709.5	707.6	705.7	704.6
120°	764.3	764.3	764.3	764.3	764.3	763.4	761.4	759.5	757.5	755.5	754.9
122.5°	812.6	812.4	812.1	811.9	811.7	811.0	809.6	808.2	806.9	805.5	804.6
125°	880.4	880.0	879.5	878.9	878.4	878.0	877.5	877.0	876.6	876.0	875.1
127.5°	945.7	946.2	946.7	947.2	947.6	947.4	946.7	945.9	945.2	944.3	943.2
130°	987.8	988.3	988.7	989.2	989.7	989.5	988.4	987.5	986.6	985.5	984.6
132.5°	1026.2	1027.0	1027.7	1028.3	1029.0	1028.9	1027.9	1026.9	1026.0	1025.0	1024.2
135°	1085.2	1085.9	1086.7	1087.4	1088.2	1088.2	1087.4	1086.7	1085.9	1085.2	1084.2
137.5°	1140.6	1141.1	1141.6	1142.1	1142.6	1142.2	1141.0	1139.9	1138.7	1137.6	1137.0
140°	1173.9	1174.4	1174.9	1175.4	1175.8	1175.6	1174.6	1173.7	1172.7	1171.7	1171.0
142.5°	1204.6	1205.2	1205.9	1206.6	1207.3	1207.2	1206.5	1205.7	1204.9	1204.1	1203.4
145°	1251.6	1251.6	1251.6	1251.6	1251.6	1251.4	1250.9	1250.5	1249.9	1249.4	1249.0
147.5°	1286.7	1287.8	1288.9	1290.1	1291.2	1291.5	1291.0	1290.5	1290.1	1289.5	1289.0
150°	1313.0	1313.7	1314.5	1315.1	1315.9	1316.0	1315.5	1315.0	1314.6	1314.1	1313.6
152.5°	1334.0	1335.1	1336.2	1337.4	1338.5	1338.6	1337.8	1336.8	1336.0	1335.1	1334.8
155°	1363.4	1364.8	1366.3	1367.7	1369.1	1369.3	1368.1	1366.9	1365.6	1364.4	1364.2
157.5°	1388.1	1390.0	1391.9	1393.8	1395.7	1395.9	1394.4	1393.0	1391.6	1390.1	1390.3
160°	1403.8	1405.5	1407.3	1409.0	1410.7	1410.8	1409.3	1407.9	1406.5	1405.0	1405.2
162.5°	1418.7	1420.2	1421.7	1423.2	1424.7	1424.7	1423.1	1421.4	1419.8	1418.1	1418.3
165°	1436.7	1438.4	1440.1	1441.8	1443.5	1443.4	1441.4	1439.5	1437.6	1435.6	1435.9
167.5°	1449.6	1451.6	1453.5	1455.5	1457.5	1457.5	1455.5	1453.5	1451.6	1449.6	1449.6
170°	1457.5	1459.4	1461.4	1463.4	1465.3	1465.3	1463.4	1461.4	1459.4	1457.5	1457.5
172.5°	1461.9	1464.1	1466.2	1468.3	1470.5	1470.6	1468.6	1466.7	1464.7	1462.7	1462.5
175°	1468.5	1470.5	1472.3	1474.3	1476.2	1476.4	1474.7	1473.0	1471.3	1469.5	1469.3
177.5°	1470.5	1472.3	1474.3	1476.3	1478.2	1478.4	1476.9	1475.3	1473.8	1472.2	1472.0
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1786.9	1785.1	1776.8	1767.3	1754.8	1746.5	1740.0	1736.4	1725.8	1712.8	1703.8
5°	1897.2	1875.0	1851.2	1822.4	1795.7	1768.3	1751.2	1731.3	1706.9	1679.4	1660.2
7.5°	2015.4	1971.9	1925.0	1876.5	1828.6	1785.6	1747.8	1715.2	1676.3	1637.0	1609.5
10°	2106.1	2042.4	1976.5	1909.0	1847.6	1789.8	1745.3	1701.7	1655.0	1609.8	1575.7
12.5°	2188.5	2104.6	2028.6	1945.8	1867.2	1798.1	1734.1	1682.6	1626.5	1578.4	1539.5
15°	2292.8	2206.9	2115.0	1989.0	1884.6	1797.2	1719.4	1652.0	1583.8	1524.6	1486.8
17.5°	2390.3	2261.0	2137.5	2032.5	1896.8	1787.5	1692.6	1612.0	1537.2	1474.3	1427.9
20°	2430.6	2305.4	2171.3	2037.2	1903.8	1781.7	1671.2	1582.3	1504.6	1433.4	1390.5
22.5°	2454.9	2313.1	2171.9	2027.8	1886.1	1759.2	1649.9	1552.2	1467.8	1400.2	1347.3
25°	2483.2	2314.3	2158.7	2016.5	1872.0	1734.3	1604.6	1500.9	1409.8	1337.9	1281.6
27.5°	2501.9	2303.2	2119.3	1961.2	1814.7	1677.4	1558.7	1448.7	1356.3	1280.3	1219.8
30°	2505.4	2294.2	2089.1	1918.0	1769.1	1643.1	1517.2	1412.0	1314.2	1233.4	1177.1
32.5°	2510.2	2272.4	2048.1	1866.4	1713.9	1589.2	1475.1	1374.6	1274.5	1195.0	1137.5
35°	2490.6	2260.2	1986.1	1777.2	1624.6	1503.8	1400.9	1308.2	1209.8	1132.7	1074.2
37.5°	2406.4	2212.1	1921.8	1676.8	1517.2	1405.3	1321.4	1240.7	1150.4	1067.2	1012.1
40°	2321.7	2164.6	1872.0	1615.7	1449.1	1334.2	1258.7	1192.7	1105.3	1027.5	968.3
42.5°	2195.5	2100.1	1824.6	1551.7	1372.0	1261.3	1197.6	1135.8	1059.0	980.1	924.4
45°	1963.9	1976.5	1727.6	1449.7	1265.3	1154.1	1094.2	1051.2	983.1	917.8	860.8
47.5°	1673.5	1791.3	1613.6	1341.1	1152.8	1048.6	996.1	958.6	912.7	848.7	796.6
50°	1483.8	1652.0	1522.4	1268.3	1082.3	978.6	926.7	896.4	856.4	806.0	756.4
52.5°	1309.0	1489.6	1412.1	1187.0	1005.9	911.1	860.4	835.4	803.6	756.2	711.3
55°	1067.5	1250.5	1232.8	1064.5	891.2	806.0	767.5	739.3	717.8	682.3	646.8
57.5°	863.5	1037.0	1046.1	928.2	790.1	706.0	672.8	651.6	637.5	610.8	577.9
60°	734.9	894.2	925.3	836.4	717.8	643.8	611.1	594.1	583.1	561.6	536.3
62.5°	628.2	763.7	799.0	735.0	648.5	579.2	553.6	537.2	529.7	511.1	488.9
65°	480.8	593.4	627.5	591.9	546.7	491.2	470.4	456.4	449.7	439.3	423.0
67.5°	361.6	443.6	481.0	455.9	439.6	404.4	391.2	383.7	377.8	370.7	357.0
70°	290.4	351.1	389.6	383.0	369.7	351.1	341.5	336.3	330.4	324.5	312.6
72.5°	233.5	275.3	311.4	314.8	303.9	300.2	291.7	289.5	286.0	278.8	272.3
75°	154.9	183.7	208.9	218.6	223.0	226.7	223.0	222.3	221.5	215.6	211.9
77.5°	101.5	117.1	132.9	149.4	156.3	161.4	162.5	165.2	163.2	160.1	158.3
80°	77.8	81.5	92.6	106.7	117.8	122.2	125.2	126.7	125.9	125.2	122.2
82.5°	56.5	59.6	64.8	74.6	84.0	91.4	93.2	92.9	94.5	95.0	92.6
85°	30.3	31.1	32.6	34.1	39.3	47.4	49.7	51.1	52.6	52.6	48.2
87.5°	13.5	12.3	12.8	12.3	13.6	13.7	16.7	19.2	20.3	18.4	18.9
90°	20.0	16.8	13.7	10.8	8.4	5.9	3.5	1.1	3.5	5.9	8.4
92.5°	23.3	20.9	18.5	17.6	18.3	19.0	19.7	20.4	19.7	19.0	18.3
95°	28.6	25.9	23.3	26.9	36.9	46.8	56.8	66.8	56.8	46.8	36.9
97.5°	70.3	87.8	105.4	116.3	120.8	125.3	129.8	134.2	129.8	125.3	120.8
100°	112.1	150.1	187.9	204.5	199.6	194.8	189.9	185.0	189.9	194.8	199.6
102.5°	155.0	196.4	237.9	256.9	253.4	249.9	246.4	242.9	246.4	249.9	253.4
105°	283.6	305.5	327.4	337.1	334.3	331.7	329.0	326.3	329.0	331.7	334.3
107.5°	432.6	429.2	425.7	422.9	420.8	418.7	416.5	414.3	416.5	418.7	420.8
110°	488.5	485.9	483.1	480.9	478.9	476.9	475.0	473.1	475.0	476.9	478.9





TEST NUMBER: P332384-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	543.8	541.0	538.4	536.1	534.4	532.6	530.8	529.1	530.8	532.6	534.4
115°	624.2	622.0	619.8	617.9	616.5	615.0	613.6	612.2	613.6	615.0	616.5
117.5°	703.4	702.3	701.2	699.7	698.0	696.1	694.3	692.5	694.3	696.1	698.0
120°	754.1	753.4	752.7	751.2	749.0	746.9	744.6	742.4	744.6	746.9	749.0
122.5°	803.7	802.8	801.8	800.5	798.6	796.8	795.0	793.2	795.0	796.8	798.6
125°	874.1	873.1	872.1	870.7	868.7	866.8	864.9	862.9	864.9	866.8	868.7
127.5°	942.1	940.8	939.7	938.1	936.2	934.2	932.3	930.4	932.3	934.2	936.2
130°	983.6	982.6	981.7	980.1	978.3	976.3	974.4	972.4	974.4	976.3	978.3
132.5°	1023.4	1022.7	1021.8	1020.5	1018.5	1016.6	1014.6	1012.7	1014.6	1016.6	1018.5
135°	1083.3	1082.3	1081.3	1080.1	1078.6	1077.1	1075.7	1074.2	1075.7	1077.1	1078.6
137.5°	1136.5	1136.0	1135.4	1134.3	1132.4	1130.5	1128.7	1126.8	1128.7	1130.5	1132.4
140°	1170.3	1169.5	1168.8	1167.7	1166.2	1164.8	1163.3	1161.9	1163.3	1164.8	1166.2
142.5°	1202.7	1201.9	1201.2	1200.1	1198.6	1197.2	1195.7	1194.3	1195.7	1197.2	1198.6
145°	1248.5	1248.0	1247.5	1246.4	1244.7	1243.0	1241.3	1239.6	1241.3	1243.0	1244.7
147.5°	1288.5	1288.1	1287.6	1286.8	1285.6	1284.6	1283.5	1282.3	1283.5	1284.6	1285.6
150°	1313.1	1312.6	1312.1	1311.5	1310.8	1310.0	1309.3	1308.6	1309.3	1310.0	1310.8
152.5°	1334.5	1334.2	1333.9	1333.6	1333.2	1332.9	1332.6	1332.3	1332.6	1332.9	1333.2
155°	1364.0	1363.7	1363.5	1363.6	1364.0	1364.5	1365.1	1365.6	1365.1	1364.5	1364.0
157.5°	1390.5	1390.8	1391.0	1391.2	1391.2	1391.3	1391.3	1391.4	1391.3	1391.3	1391.2
160°	1405.4	1405.7	1405.9	1406.2	1406.5	1406.7	1406.9	1407.1	1406.9	1406.7	1406.5
162.5°	1418.6	1418.8	1419.1	1419.5	1420.1	1420.8	1421.4	1422.0	1421.4	1420.8	1420.1
165°	1436.1	1436.3	1436.6	1437.1	1437.8	1438.5	1439.3	1440.0	1439.3	1438.5	1437.8
167.5°	1449.6	1449.6	1449.6	1450.1	1451.1	1452.1	1453.0	1454.1	1453.0	1452.1	1451.1
170°	1457.5	1457.5	1457.5	1458.0	1459.0	1460.0	1460.9	1461.9	1460.9	1460.0	1459.0
172.5°	1462.4	1462.2	1462.0	1462.4	1463.7	1464.8	1466.0	1467.2	1466.0	1464.8	1463.7
175°	1469.0	1468.9	1468.6	1469.0	1470.3	1471.5	1472.7	1473.9	1472.7	1471.5	1470.3
177.5°	1471.8	1471.6	1471.4	1471.8	1472.8	1473.8	1474.7	1475.7	1474.7	1473.8	1472.8
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P332384-830

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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1700.9	1693.2	1687.9	1676.0	1668.3	1660.0	1651.7	1657.1	1656.4	1655.9	1655.9
5°	1643.9	1626.8	1611.3	1591.3	1578.7	1563.1	1551.2	1549.7	1552.7	1542.4	1536.4
7.5°	1587.2	1564.0	1541.9	1519.8	1496.5	1477.8	1466.0	1460.6	1453.0	1446.6	1440.0
10°	1547.6	1520.1	1498.6	1471.2	1446.0	1423.8	1409.8	1400.1	1395.0	1389.8	1380.2
12.5°	1506.7	1479.9	1452.5	1421.4	1397.5	1371.7	1361.1	1350.4	1340.4	1334.6	1321.4
15°	1446.8	1412.0	1383.1	1350.5	1323.8	1298.6	1283.8	1262.3	1259.3	1252.0	1238.6
17.5°	1386.8	1349.0	1309.2	1285.0	1254.9	1228.7	1206.2	1198.9	1177.7	1169.7	1158.2
20°	1339.4	1304.6	1274.2	1242.4	1198.6	1174.2	1156.4	1146.8	1129.7	1119.4	1111.9
22.5°	1298.4	1263.1	1227.9	1190.8	1154.8	1127.4	1114.4	1099.4	1090.1	1075.5	1067.5
25°	1240.1	1201.6	1159.3	1119.4	1093.4	1072.7	1052.0	1038.6	1025.3	1018.6	1003.8
27.5°	1172.2	1132.0	1092.5	1062.2	1030.3	1009.8	991.1	979.2	963.2	952.0	943.8
30°	1134.9	1087.5	1053.4	1026.1	985.2	966.0	952.0	937.2	925.3	913.4	905.3
32.5°	1091.7	1048.4	1016.1	982.1	950.9	929.8	911.6	898.6	888.5	877.2	869.1
35°	1023.8	987.5	954.1	920.1	897.1	875.6	854.1	843.0	833.4	823.0	815.7
37.5°	962.4	928.5	896.8	864.5	836.0	818.6	801.3	792.8	779.8	772.8	765.3
40°	924.5	891.2	857.1	826.0	796.4	783.1	767.5	754.9	743.0	737.8	729.7
42.5°	883.1	849.7	821.0	787.5	763.2	745.1	730.8	717.0	708.0	700.5	695.9
45°	821.5	791.9	763.7	730.5	707.5	691.9	675.6	663.0	654.9	649.7	641.5
47.5°	761.9	732.3	703.6	674.6	652.3	634.6	618.3	609.5	598.7	592.4	586.8
50°	718.6	691.9	661.6	634.9	612.7	594.8	581.5	570.4	560.8	552.6	548.9
52.5°	678.9	650.4	624.2	599.3	575.9	555.7	543.6	531.9	524.6	515.3	511.0
55°	613.4	586.0	563.7	539.3	516.3	499.3	484.5	474.1	466.7	456.4	450.4
57.5°	551.9	527.4	500.8	479.6	455.9	441.5	429.2	415.2	406.1	397.9	392.2
60°	510.4	482.3	459.3	439.3	418.6	400.0	388.9	377.8	368.2	360.1	354.9
62.5°	467.1	442.5	420.8	399.0	380.0	363.9	351.0	341.7	333.2	328.0	322.8
65°	400.8	381.5	359.3	341.5	323.8	311.9	301.5	293.3	287.5	283.7	279.3
67.5°	339.7	321.0	301.6	284.2	272.3	263.3	256.5	249.5	246.6	241.8	238.8
70°	300.0	280.8	263.7	250.4	238.6	231.9	227.4	222.3	219.2	213.4	210.4
72.5°	256.7	242.8	230.5	219.6	210.1	204.1	198.4	192.0	187.3	180.8	177.8
75°	202.3	189.6	180.0	172.6	166.6	158.5	150.4	143.7	141.5	139.3	138.6
77.5°	149.8	141.8	134.8	128.6	121.2	115.3	113.5	112.0	111.6	110.4	110.4
80°	117.8	110.4	105.2	97.7	93.3	93.3	93.3	91.9	92.6	92.6	92.6
82.5°	87.6	80.8	77.9	75.3	74.4	74.9	74.9	75.3	74.8	76.0	75.4
85°	45.1	45.9	47.4	46.7	47.4	47.4	48.9	48.2	48.9	47.4	48.9
87.5°	18.8	21.1	22.3	23.6	24.8	24.8	25.6	25.8	26.6	26.8	27.0
90°	10.8	13.7	16.8	20.0	23.1	26.3	27.2	28.2	29.2	30.2	30.9
92.5°	17.6	18.5	20.9	23.3	25.6	28.0	29.6	31.1	32.7	34.3	35.2
95°	26.9	23.3	25.9	28.6	31.3	33.9	35.6	37.3	39.0	40.7	41.6
97.5°	116.3	105.4	87.8	70.3	52.8	35.3	37.2	39.1	41.1	43.1	44.1
100°	204.5	187.9	150.1	112.1	74.1	36.1	38.1	40.1	41.9	43.9	45.1
102.5°	256.9	237.9	196.4	155.0	113.5	72.0	66.0	59.9	53.9	47.9	45.1
105°	337.1	327.4	305.5	283.6	261.7	239.8	196.7	153.6	110.6	67.5	46.3
107.5°	422.9	425.7	429.2	432.6	436.1	439.6	407.9	376.4	344.8	313.2	281.2
110°	480.9	483.1	485.9	488.5	491.2	493.9	485.9	477.8	469.8	461.8	440.4



TEST NUMBER: P332384-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	536.1	538.4	541.0	543.8	546.4	549.0	549.2	549.3	549.5	549.7	546.0
115°	617.9	619.8	622.0	624.2	626.4	628.6	631.0	633.4	635.8	638.3	640.0
117.5°	699.7	701.2	702.3	703.4	704.6	705.7	707.6	709.5	711.5	713.4	714.5
120°	751.2	752.7	753.4	754.1	754.9	755.5	757.5	759.5	761.4	763.4	764.3
122.5°	800.5	801.8	802.8	803.7	804.6	805.5	806.9	808.2	809.6	811.0	811.7
125°	870.7	872.1	873.1	874.1	875.1	876.0	876.6	877.0	877.5	878.0	878.4
127.5°	938.1	939.7	940.8	942.1	943.2	944.3	945.2	945.9	946.7	947.4	947.6
130°	980.1	981.7	982.6	983.6	984.6	985.5	986.6	987.5	988.4	989.5	989.7
132.5°	1020.5	1021.8	1022.7	1023.4	1024.2	1025.0	1026.0	1026.9	1027.9	1028.9	1029.0
135°	1080.1	1081.3	1082.3	1083.3	1084.2	1085.2	1085.9	1086.7	1087.4	1088.2	1088.2
137.5°	1134.3	1135.4	1136.0	1136.5	1137.0	1137.6	1138.7	1139.9	1141.0	1142.2	1142.6
140°	1167.7	1168.8	1169.5	1170.3	1171.0	1171.7	1172.7	1173.7	1174.6	1175.6	1175.8
142.5°	1200.1	1201.2	1201.9	1202.7	1203.4	1204.1	1204.9	1205.7	1206.5	1207.2	1207.3
145°	1246.4	1247.5	1248.0	1248.5	1249.0	1249.4	1249.9	1250.5	1250.9	1251.4	1251.6
147.5°	1286.8	1287.6	1288.1	1288.5	1289.0	1289.5	1290.1	1290.5	1291.0	1291.5	1291.2
150°	1311.5	1312.1	1312.6	1313.1	1313.6	1314.1	1314.6	1315.0	1315.5	1316.0	1315.9
152.5°	1333.6	1333.9	1334.2	1334.5	1334.8	1335.1	1336.0	1336.8	1337.8	1338.6	1338.5
155°	1363.6	1363.5	1363.7	1364.0	1364.2	1364.4	1365.6	1366.9	1368.1	1369.3	1369.1
157.5°	1391.2	1391.0	1390.8	1390.5	1390.3	1390.1	1391.6	1393.0	1394.4	1395.9	1395.7
160°	1406.2	1405.9	1405.7	1405.4	1405.2	1405.0	1406.5	1407.9	1409.3	1410.8	1410.7
162.5°	1419.5	1419.1	1418.8	1418.6	1418.3	1418.1	1419.8	1421.4	1423.1	1424.7	1424.7
165°	1437.1	1436.6	1436.3	1436.1	1435.9	1435.6	1437.6	1439.5	1441.4	1443.4	1443.5
167.5°	1450.1	1449.6	1449.6	1449.6	1449.6	1449.6	1451.6	1453.5	1455.5	1457.5	1457.5
170°	1458.0	1457.5	1457.5	1457.5	1457.5	1457.5	1459.4	1461.4	1463.4	1465.3	1465.3
172.5°	1462.4	1462.0	1462.2	1462.4	1462.5	1462.7	1464.7	1466.7	1468.6	1470.6	1470.5
175°	1469.0	1468.6	1468.9	1469.0	1469.3	1469.5	1471.3	1473.0	1474.7	1476.4	1476.2
177.5°	1471.8	1471.4	1471.6	1471.8	1472.0	1472.2	1473.8	1475.3	1476.9	1478.4	1478.2
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P332384-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1648.8	1648.1	1648.8	1646.3	1648.8	1648.1	1648.8	1655.9	1655.9	1656.4	1657.1
5°	1534.2	1533.5	1531.3	1524.6	1531.3	1533.5	1534.2	1536.4	1542.4	1552.7	1549.7
7.5°	1434.2	1433.1	1426.6	1426.8	1426.6	1433.1	1434.2	1440.0	1446.6	1453.0	1460.6
10°	1375.0	1375.6	1366.8	1361.6	1366.8	1375.6	1375.0	1380.2	1389.8	1395.0	1400.1
12.5°	1317.5	1314.1	1306.9	1301.2	1306.9	1314.1	1317.5	1321.4	1334.6	1340.4	1350.4
15°	1241.6	1234.2	1216.4	1217.9	1216.4	1234.2	1241.6	1238.6	1252.0	1259.3	1262.3
17.5°	1152.3	1146.8	1146.5	1136.1	1146.5	1146.8	1152.3	1158.2	1169.7	1177.7	1198.9
20°	1100.1	1096.4	1097.9	1087.5	1097.9	1096.4	1100.1	1111.9	1119.4	1129.7	1146.8
22.5°	1059.2	1055.5	1049.2	1046.0	1049.2	1055.5	1059.2	1067.5	1075.5	1090.1	1099.4
25°	999.4	993.4	987.5	991.2	987.5	993.4	999.4	1003.8	1018.6	1025.3	1038.6
27.5°	939.5	935.1	929.2	928.4	929.2	935.1	939.5	943.8	952.0	963.2	979.2
30°	901.5	897.1	894.2	890.4	894.2	897.1	901.5	905.3	913.4	925.3	937.2
32.5°	863.1	862.1	856.9	856.1	856.9	862.1	863.1	869.1	877.2	888.5	898.6
35°	812.7	808.2	806.7	807.5	806.7	808.2	812.7	815.7	823.0	833.4	843.0
37.5°	764.8	758.8	756.2	753.6	756.2	758.8	764.8	765.3	772.8	779.8	792.8
40°	730.5	724.5	723.0	721.5	723.0	724.5	730.5	729.7	737.8	743.0	754.9
42.5°	691.9	689.6	688.6	686.0	688.6	689.6	691.9	695.9	700.5	708.0	717.0
45°	639.3	638.6	634.1	635.7	634.1	638.6	639.3	641.5	649.7	654.9	663.0
47.5°	583.9	580.6	577.5	579.6	577.5	580.6	583.9	586.8	592.4	598.7	609.5
50°	546.0	544.5	537.8	539.3	537.8	544.5	546.0	548.9	552.6	560.8	570.4
52.5°	508.0	502.4	499.9	499.0	499.9	502.4	508.0	511.0	515.3	524.6	531.9
55°	445.3	438.6	435.5	434.1	435.5	438.6	445.3	450.4	456.4	466.7	474.1
57.5°	383.6	381.8	379.5	381.1	379.5	381.8	383.6	392.2	397.9	406.1	415.2
60°	347.4	347.4	347.4	346.7	347.4	347.4	347.4	354.9	360.1	368.2	377.8
62.5°	319.6	317.8	317.3	318.3	317.3	317.8	319.6	322.8	328.0	333.2	341.7
65°	277.1	276.4	273.3	272.6	273.3	276.4	277.1	279.3	283.7	287.5	293.3
67.5°	237.0	234.2	233.4	232.3	233.4	234.2	237.0	238.8	241.8	246.6	249.5
70°	206.7	205.2	200.8	201.5	200.8	205.2	206.7	210.4	213.4	219.2	222.3
72.5°	174.1	172.6	171.7	170.7	171.7	172.6	174.1	177.8	180.8	187.3	192.0
75°	137.8	137.0	136.3	139.3	136.3	137.0	137.8	138.6	139.3	141.5	143.7
77.5°	110.4	110.4	110.8	109.6	110.8	110.4	110.4	110.4	110.4	111.6	112.0
80°	92.6	92.6	91.9	91.9	91.9	92.6	92.6	92.6	92.6	92.6	91.9
82.5°	74.3	74.8	75.3	74.1	75.3	74.8	74.3	75.4	76.0	74.8	75.3
85°	48.9	48.2	49.7	48.9	49.7	48.2	48.9	48.9	47.4	48.9	48.2
87.5°	28.2	27.1	27.2	27.9	27.2	27.1	28.2	27.0	26.8	26.6	25.8
90°	31.4	31.9	32.3	32.9	32.3	31.9	31.4	30.9	30.2	29.2	28.2
92.5°	35.4	35.8	36.1	36.4	36.1	35.8	35.4	35.2	34.3	32.7	31.1
95°	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	40.7	39.0	37.3
97.5°	44.4	44.7	44.9	45.1	44.9	44.7	44.4	44.1	43.1	41.1	39.1
100°	45.2	45.5	45.7	46.0	45.7	45.5	45.2	45.1	43.9	41.9	40.1
102.5°	45.5	46.0	46.5	46.8	46.5	46.0	45.5	45.1	47.9	53.9	59.9
105°	46.8	47.2	47.7	48.2	47.7	47.2	46.8	46.3	67.5	110.6	153.6
107.5°	248.7	216.2	183.8	151.4	183.8	216.2	248.7	281.2	313.2	344.8	376.4
110°	405.6	370.7	335.9	301.1	335.9	370.7	405.6	440.4	461.8	469.8	477.8



TEST NUMBER: P332384-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	538.7	531.3	524.0	516.6	524.0	531.3	538.7	546.0	549.7	549.5	549.3
115°	640.9	642.0	642.9	643.9	642.9	642.0	640.9	640.0	638.3	635.8	633.4
117.5°	714.7	714.9	715.1	715.3	715.1	714.9	714.7	714.5	713.4	711.5	709.5
120°	764.3	764.3	764.3	764.3	764.3	764.3	764.3	764.3	763.4	761.4	759.5
122.5°	811.9	812.1	812.4	812.6	812.4	812.1	811.9	811.7	811.0	809.6	808.2
125°	878.9	879.5	880.0	880.4	880.0	879.5	878.9	878.4	878.0	877.5	877.0
127.5°	947.2	946.7	946.2	945.7	946.2	946.7	947.2	947.6	947.4	946.7	945.9
130°	989.2	988.7	988.3	987.8	988.3	988.7	989.2	989.7	989.5	988.4	987.5
132.5°	1028.3	1027.7	1027.0	1026.2	1027.0	1027.7	1028.3	1029.0	1028.9	1027.9	1026.9
135°	1087.4	1086.7	1085.9	1085.2	1085.9	1086.7	1087.4	1088.2	1088.2	1087.4	1086.7
137.5°	1142.1	1141.6	1141.1	1140.6	1141.1	1141.6	1142.1	1142.6	1142.2	1141.0	1139.9
140°	1175.4	1174.9	1174.4	1173.9	1174.4	1174.9	1175.4	1175.8	1175.6	1174.6	1173.7
142.5°	1206.6	1205.9	1205.2	1204.6	1205.2	1205.9	1206.6	1207.3	1207.2	1206.5	1205.7
145°	1251.6	1251.6	1251.6	1251.6	1251.6	1251.6	1251.6	1251.6	1251.4	1250.9	1250.5
147.5°	1290.1	1288.9	1287.8	1286.7	1287.8	1288.9	1290.1	1291.2	1291.5	1291.0	1290.5
150°	1315.1	1314.5	1313.7	1313.0	1313.7	1314.5	1315.1	1315.9	1316.0	1315.5	1315.0
152.5°	1337.4	1336.2	1335.1	1334.0	1335.1	1336.2	1337.4	1338.5	1338.6	1337.8	1336.8
155°	1367.7	1366.3	1364.8	1363.4	1364.8	1366.3	1367.7	1369.1	1369.3	1368.1	1366.9
157.5°	1393.8	1391.9	1390.0	1388.1	1390.0	1391.9	1393.8	1395.7	1395.9	1394.4	1393.0
160°	1409.0	1407.3	1405.5	1403.8	1405.5	1407.3	1409.0	1410.7	1410.8	1409.3	1407.9
162.5°	1423.2	1421.7	1420.2	1418.7	1420.2	1421.7	1423.2	1424.7	1424.7	1423.1	1421.4
165°	1441.8	1440.1	1438.4	1436.7	1438.4	1440.1	1441.8	1443.5	1443.4	1441.4	1439.5
167.5°	1455.5	1453.5	1451.6	1449.6	1451.6	1453.5	1455.5	1457.5	1457.5	1455.5	1453.5
170°	1463.4	1461.4	1459.4	1457.5	1459.4	1461.4	1463.4	1465.3	1465.3	1463.4	1461.4
172.5°	1468.3	1466.2	1464.1	1461.9	1464.1	1466.2	1468.3	1470.5	1470.6	1468.6	1466.7
175°	1474.3	1472.3	1470.5	1468.5	1470.5	1472.3	1474.3	1476.2	1476.4	1474.7	1473.0
177.5°	1476.3	1474.3	1472.3	1470.5	1472.3	1474.3	1476.3	1478.2	1478.4	1476.9	1475.3
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1651.7	1660.0	1668.3	1676.0	1687.9	1693.2	1700.9	1703.8	1712.8	1725.8	1736.4
5°	1551.2	1563.1	1578.7	1591.3	1611.3	1626.8	1643.9	1660.2	1679.4	1706.9	1731.3
7.5°	1466.0	1477.8	1496.5	1519.8	1541.9	1564.0	1587.2	1609.5	1637.0	1676.3	1715.2
10°	1409.8	1423.8	1446.0	1471.2	1498.6	1520.1	1547.6	1575.7	1609.8	1655.0	1701.7
12.5°	1361.1	1371.7	1397.5	1421.4	1452.5	1479.9	1506.7	1539.5	1578.4	1626.5	1682.6
15°	1283.8	1298.6	1323.8	1350.5	1383.1	1412.0	1446.8	1486.8	1524.6	1583.8	1652.0
17.5°	1206.2	1228.7	1254.9	1285.0	1309.2	1349.0	1386.8	1427.9	1474.3	1537.2	1612.0
20°	1156.4	1174.2	1198.6	1242.4	1274.2	1304.6	1339.4	1390.5	1433.4	1504.6	1582.3
22.5°	1114.4	1127.4	1154.8	1190.8	1227.9	1263.1	1298.4	1347.3	1400.2	1467.8	1552.2
25°	1052.0	1072.7	1093.4	1119.4	1159.3	1201.6	1240.1	1281.6	1337.9	1409.8	1500.9
27.5°	991.1	1009.8	1030.3	1062.2	1092.5	1132.0	1172.2	1219.8	1280.3	1356.3	1448.7
30°	952.0	966.0	985.2	1026.1	1053.4	1087.5	1134.9	1177.1	1233.4	1314.2	1412.0
32.5°	911.6	929.8	950.9	982.1	1016.1	1048.4	1091.7	1137.5	1195.0	1274.5	1374.6
35°	854.1	875.6	897.1	920.1	954.1	987.5	1023.8	1074.2	1132.7	1209.8	1308.2
37.5°	801.3	818.6	836.0	864.5	896.8	928.5	962.4	1012.1	1067.2	1150.4	1240.7
40°	767.5	783.1	796.4	826.0	857.1	891.2	924.5	968.3	1027.5	1105.3	1192.7
42.5°	730.8	745.1	763.2	787.5	821.0	849.7	883.1	924.4	980.1	1059.0	1135.8
45°	675.6	691.9	707.5	730.5	763.7	791.9	821.5	860.8	917.8	983.1	1051.2
47.5°	618.3	634.6	652.3	674.6	703.6	732.3	761.9	796.6	848.7	912.7	958.6
50°	581.5	594.8	612.7	634.9	661.6	691.9	718.6	756.4	806.0	856.4	896.4
52.5°	543.6	555.7	575.9	599.3	624.2	650.4	678.9	711.3	756.2	803.6	835.4
55°	484.5	499.3	516.3	539.3	563.7	586.0	613.4	646.8	682.3	717.8	739.3
57.5°	429.2	441.5	455.9	479.6	500.8	527.4	551.9	577.9	610.8	637.5	651.6
60°	388.9	400.0	418.6	439.3	459.3	482.3	510.4	536.3	561.6	583.1	594.1
62.5°	351.0	363.9	380.0	399.0	420.8	442.5	467.1	488.9	511.1	529.7	537.2
65°	301.5	311.9	323.8	341.5	359.3	381.5	400.8	423.0	439.3	449.7	456.4
67.5°	256.5	263.3	272.3	284.2	301.6	321.0	339.7	357.0	370.7	377.8	383.7
70°	227.4	231.9	238.6	250.4	263.7	280.8	300.0	312.6	324.5	330.4	336.3
72.5°	198.4	204.1	210.1	219.6	230.5	242.8	256.7	272.3	278.8	286.0	289.5
75°	150.4	158.5	166.6	172.6	180.0	189.6	202.3	211.9	215.6	221.5	222.3
77.5°	113.5	115.3	121.2	128.6	134.8	141.8	149.8	158.3	160.1	163.2	165.2
80°	93.3	93.3	93.3	97.7	105.2	110.4	117.8	122.2	125.2	125.9	126.7
82.5°	74.9	74.9	74.4	75.3	77.9	80.8	87.6	92.6	95.0	94.5	92.9
85°	48.9	47.4	47.4	46.7	47.4	45.9	45.1	48.2	52.6	52.6	51.1
87.5°	25.6	24.8	24.8	23.6	22.3	21.1	18.8	18.9	18.4	20.3	19.2
90°	27.2	26.3	23.1	20.0	16.8	13.7	10.8	8.4	5.9	3.5	1.1
92.5°	29.6	28.0	25.6	23.3	20.9	18.5	17.6	18.3	19.0	19.7	20.4
95°	35.6	33.9	31.3	28.6	25.9	23.3	26.9	36.9	46.8	56.8	66.8
97.5°	37.2	35.3	52.8	70.3	87.8	105.4	116.3	120.8	125.3	129.8	134.2
100°	38.1	36.1	74.1	112.1	150.1	187.9	204.5	199.6	194.8	189.9	185.0
102.5°	66.0	72.0	113.5	155.0	196.4	237.9	256.9	253.4	249.9	246.4	242.9
105°	196.7	239.8	261.7	283.6	305.5	327.4	337.1	334.3	331.7	329.0	326.3
107.5°	407.9	439.6	436.1	432.6	429.2	425.7	422.9	420.8	418.7	416.5	414.3
110°	485.9	493.9	491.2	488.5	485.9	483.1	480.9	478.9	476.9	475.0	473.1



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	549.2	549.0	546.4	543.8	541.0	538.4	536.1	534.4	532.6	530.8	529.1
115°	631.0	628.6	626.4	624.2	622.0	619.8	617.9	616.5	615.0	613.6	612.2
117.5°	707.6	705.7	704.6	703.4	702.3	701.2	699.7	698.0	696.1	694.3	692.5
120°	757.5	755.5	754.9	754.1	753.4	752.7	751.2	749.0	746.9	744.6	742.4
122.5°	806.9	805.5	804.6	803.7	802.8	801.8	800.5	798.6	796.8	795.0	793.2
125°	876.6	876.0	875.1	874.1	873.1	872.1	870.7	868.7	866.8	864.9	862.9
127.5°	945.2	944.3	943.2	942.1	940.8	939.7	938.1	936.2	934.2	932.3	930.4
130°	986.6	985.5	984.6	983.6	982.6	981.7	980.1	978.3	976.3	974.4	972.4
132.5°	1026.0	1025.0	1024.2	1023.4	1022.7	1021.8	1020.5	1018.5	1016.6	1014.6	1012.7
135°	1085.9	1085.2	1084.2	1083.3	1082.3	1081.3	1080.1	1078.6	1077.1	1075.7	1074.2
137.5°	1138.7	1137.6	1137.0	1136.5	1136.0	1135.4	1134.3	1132.4	1130.5	1128.7	1126.8
140°	1172.7	1171.7	1171.0	1170.3	1169.5	1168.8	1167.7	1166.2	1164.8	1163.3	1161.9
142.5°	1204.9	1204.1	1203.4	1202.7	1201.9	1201.2	1200.1	1198.6	1197.2	1195.7	1194.3
145°	1249.9	1249.4	1249.0	1248.5	1248.0	1247.5	1246.4	1244.7	1243.0	1241.3	1239.6
147.5°	1290.1	1289.5	1289.0	1288.5	1288.1	1287.6	1286.8	1285.6	1284.6	1283.5	1282.3
150°	1314.6	1314.1	1313.6	1313.1	1312.6	1312.1	1311.5	1310.8	1310.0	1309.3	1308.6
152.5°	1336.0	1335.1	1334.8	1334.5	1334.2	1333.9	1333.6	1333.2	1332.9	1332.6	1332.3
155°	1365.6	1364.4	1364.2	1364.0	1363.7	1363.5	1363.6	1364.0	1364.5	1365.1	1365.6
157.5°	1391.6	1390.1	1390.3	1390.5	1390.8	1391.0	1391.2	1391.2	1391.3	1391.3	1391.4
160°	1406.5	1405.0	1405.2	1405.4	1405.7	1405.9	1406.2	1406.5	1406.7	1406.9	1407.1
162.5°	1419.8	1418.1	1418.3	1418.6	1418.8	1419.1	1419.5	1420.1	1420.8	1421.4	1422.0
165°	1437.6	1435.6	1435.9	1436.1	1436.3	1436.6	1437.1	1437.8	1438.5	1439.3	1440.0
167.5°	1451.6	1449.6	1449.6	1449.6	1449.6	1449.6	1450.1	1451.1	1452.1	1453.0	1454.1
170°	1459.4	1457.5	1457.5	1457.5	1457.5	1457.5	1458.0	1459.0	1460.0	1460.9	1461.9
172.5°	1464.7	1462.7	1462.5	1462.4	1462.2	1462.0	1462.4	1463.7	1464.8	1466.0	1467.2
175°	1471.3	1469.5	1469.3	1469.0	1468.9	1468.6	1469.0	1470.3	1471.5	1472.7	1473.9
177.5°	1473.8	1472.2	1472.0	1471.8	1471.6	1471.4	1471.8	1472.8	1473.8	1474.7	1475.7
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P332384-830

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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1740.0	1746.5	1754.8	1767.3	1776.8	1785.1	1786.9	1789.2	1795.2	1805.2	1812.9
5°	1751.2	1768.3	1795.7	1822.4	1851.2	1875.0	1897.2	1912.8	1927.6	1958.7	1983.9
7.5°	1747.8	1785.6	1828.6	1876.5	1925.0	1971.9	2015.4	2054.4	2093.2	2138.5	2190.3
10°	1745.3	1789.8	1847.6	1909.0	1976.5	2042.4	2106.1	2155.8	2213.6	2265.4	2331.3
12.5°	1734.1	1798.1	1867.2	1945.8	2028.6	2104.6	2188.5	2257.1	2323.2	2398.1	2474.7
15°	1719.4	1797.2	1884.6	1989.0	2115.0	2206.9	2292.8	2412.1	2493.6	2575.0	2684.7
17.5°	1692.6	1787.5	1896.8	2032.5	2137.5	2261.0	2390.3	2484.5	2594.3	2709.2	2808.4
20°	1671.2	1781.7	1903.8	2037.2	2171.3	2305.4	2430.6	2543.2	2656.6	2789.2	2870.6
22.5°	1649.9	1759.2	1886.1	2027.8	2171.9	2313.1	2454.9	2587.1	2714.6	2848.5	2952.4
25°	1604.6	1734.3	1872.0	2016.5	2158.7	2314.3	2483.2	2630.6	2788.4	2926.2	3024.7
27.5°	1558.7	1677.4	1814.7	1961.2	2119.3	2303.2	2501.9	2669.5	2827.5	2926.2	2957.1
30°	1517.2	1643.1	1769.1	1918.0	2089.1	2294.2	2505.4	2697.3	2827.0	2869.9	2838.0
32.5°	1475.1	1589.2	1713.9	1866.4	2048.1	2272.4	2510.2	2680.7	2758.7	2725.9	2596.2
35°	1400.9	1503.8	1624.6	1777.2	1986.1	2260.2	2490.6	2606.1	2586.9	2401.7	2157.2
37.5°	1321.4	1405.3	1517.2	1676.8	1921.8	2212.1	2406.4	2423.5	2256.8	1972.5	1690.1
40°	1258.7	1334.2	1449.1	1615.7	1872.0	2164.6	2321.7	2252.8	1994.2	1677.9	1442.4
42.5°	1197.6	1261.3	1372.0	1551.7	1824.6	2100.1	2195.5	2045.4	1747.1	1448.0	1233.8
45°	1094.2	1154.1	1265.3	1449.7	1727.6	1976.5	1963.9	1703.1	1404.6	1163.9	986.0
47.5°	996.1	1048.6	1152.8	1341.1	1613.6	1791.3	1673.5	1396.0	1142.7	949.6	822.7
50°	926.7	978.6	1082.3	1268.3	1522.4	1652.0	1483.8	1216.4	984.6	824.5	723.8
52.5°	860.4	911.1	1005.9	1187.0	1412.1	1489.6	1309.0	1061.1	867.8	729.7	643.2
55°	767.5	806.0	891.2	1064.5	1232.8	1250.5	1067.5	860.1	700.8	604.5	545.3
57.5°	672.8	706.0	790.1	928.2	1046.1	1037.0	863.5	684.1	576.8	505.2	462.2
60°	611.1	643.8	717.8	836.4	925.3	894.2	734.9	590.4	498.6	446.0	411.9
62.5°	553.6	579.2	648.5	735.0	799.0	763.7	628.2	508.6	435.7	391.4	364.5
65°	470.4	491.2	546.7	591.9	627.5	593.4	480.8	397.8	345.3	314.1	295.6
67.5°	391.2	404.4	439.6	455.9	481.0	443.6	361.6	305.9	276.1	249.8	237.0
70°	341.5	351.1	369.7	383.0	389.6	351.1	290.4	249.7	224.4	205.9	197.8
72.5°	291.7	300.2	303.9	314.8	311.4	275.3	233.5	201.0	182.9	170.4	159.9
75°	223.0	226.7	223.0	218.6	208.9	183.7	154.9	138.6	125.2	119.2	115.6
77.5°	162.5	161.4	156.3	149.4	132.9	117.1	101.5	96.0	90.2	87.1	85.8
80°	125.2	122.2	117.8	106.7	92.6	81.5	77.8	74.1	71.8	68.1	67.4
82.5°	93.2	91.4	84.0	74.6	64.8	59.6	56.5	55.1	52.9	51.0	50.8
85°	49.7	47.4	39.3	34.1	32.6	31.1	30.3	30.3	27.4	26.7	26.7
87.5°	16.7	13.7	13.6	12.3	12.8	12.3	13.5	12.9	13.0	13.8	12.7
90°	3.5	5.9	8.4	10.8	13.7	16.8	20.0	23.1	26.3	27.2	28.2
92.5°	19.7	19.0	18.3	17.6	18.5	20.9	23.3	25.6	28.0	29.6	31.1
95°	56.8	46.8	36.9	26.9	23.3	25.9	28.6	31.3	33.9	35.6	37.3
97.5°	129.8	125.3	120.8	116.3	105.4	87.8	70.3	52.8	35.3	37.2	39.1
100°	189.9	194.8	199.6	204.5	187.9	150.1	112.1	74.1	36.1	38.1	40.1
102.5°	246.4	249.9	253.4	256.9	237.9	196.4	155.0	113.5	72.0	66.0	59.9
105°	329.0	331.7	334.3	337.1	327.4	305.5	283.6	261.7	239.8	196.7	153.6
107.5°	416.5	418.7	420.8	422.9	425.7	429.2	432.6	436.1	439.6	407.9	376.4
110°	475.0	476.9	478.9	480.9	483.1	485.9	488.5	491.2	493.9	485.9	477.8





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	530.8	532.6	534.4	536.1	538.4	541.0	543.8	546.4	549.0	549.2	549.3
115°	613.6	615.0	616.5	617.9	619.8	622.0	624.2	626.4	628.6	631.0	633.4
117.5°	694.3	696.1	698.0	699.7	701.2	702.3	703.4	704.6	705.7	707.6	709.5
120°	744.6	746.9	749.0	751.2	752.7	753.4	754.1	754.9	755.5	757.5	759.5
122.5°	795.0	796.8	798.6	800.5	801.8	802.8	803.7	804.6	805.5	806.9	808.2
125°	864.9	866.8	868.7	870.7	872.1	873.1	874.1	875.1	876.0	876.6	877.0
127.5°	932.3	934.2	936.2	938.1	939.7	940.8	942.1	943.2	944.3	945.2	945.9
130°	974.4	976.3	978.3	980.1	981.7	982.6	983.6	984.6	985.5	986.6	987.5
132.5°	1014.6	1016.6	1018.5	1020.5	1021.8	1022.7	1023.4	1024.2	1025.0	1026.0	1026.9
135°	1075.7	1077.1	1078.6	1080.1	1081.3	1082.3	1083.3	1084.2	1085.2	1085.9	1086.7
137.5°	1128.7	1130.5	1132.4	1134.3	1135.4	1136.0	1136.5	1137.0	1137.6	1138.7	1139.9
140°	1163.3	1164.8	1166.2	1167.7	1168.8	1169.5	1170.3	1171.0	1171.7	1172.7	1173.7
142.5°	1195.7	1197.2	1198.6	1200.1	1201.2	1201.9	1202.7	1203.4	1204.1	1204.9	1205.7
145°	1241.3	1243.0	1244.7	1246.4	1247.5	1248.0	1248.5	1249.0	1249.4	1249.9	1250.5
147.5°	1283.5	1284.6	1285.6	1286.8	1287.6	1288.1	1288.5	1289.0	1289.5	1290.1	1290.5
150°	1309.3	1310.0	1310.8	1311.5	1312.1	1312.6	1313.1	1313.6	1314.1	1314.6	1315.0
152.5°	1332.6	1332.9	1333.2	1333.6	1333.9	1334.2	1334.5	1334.8	1335.1	1336.0	1336.8
155°	1365.1	1364.5	1364.0	1363.6	1363.5	1363.7	1364.0	1364.2	1364.4	1365.6	1366.9
157.5°	1391.3	1391.3	1391.2	1391.2	1391.0	1390.8	1390.5	1390.3	1390.1	1391.6	1393.0
160°	1406.9	1406.7	1406.5	1406.2	1405.9	1405.7	1405.4	1405.2	1405.0	1406.5	1407.9
162.5°	1421.4	1420.8	1420.1	1419.5	1419.1	1418.8	1418.6	1418.3	1418.1	1419.8	1421.4
165°	1439.3	1438.5	1437.8	1437.1	1436.6	1436.3	1436.1	1435.9	1435.6	1437.6	1439.5
167.5°	1453.0	1452.1	1451.1	1450.1	1449.6	1449.6	1449.6	1449.6	1449.6	1451.6	1453.5
170°	1460.9	1460.0	1459.0	1458.0	1457.5	1457.5	1457.5	1457.5	1457.5	1459.4	1461.4
172.5°	1466.0	1464.8	1463.7	1462.4	1462.0	1462.2	1462.4	1462.5	1462.7	1464.7	1466.7
175°	1472.7	1471.5	1470.3	1469.0	1468.6	1468.9	1469.0	1469.3	1469.5	1471.3	1473.0
177.5°	1474.7	1473.8	1472.8	1471.8	1471.4	1471.6	1471.8	1472.0	1472.2	1473.8	1475.3
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1825.3	1825.3	1827.7	1836.6	1837.8	1845.5	1843.1
5°	2006.1	2020.2	2025.3	2047.6	2061.0	2066.9	2055.0
7.5°	2227.1	2266.9	2285.7	2308.9	2329.6	2335.8	2319.6
10°	2388.4	2429.9	2464.7	2486.1	2506.1	2519.5	2536.6
12.5°	2544.2	2595.2	2628.3	2658.6	2679.2	2696.1	2698.9
15°	2713.6	2790.6	2849.1	2892.1	2913.6	2924.7	2920.3
17.5°	2884.4	2955.8	2997.5	3041.3	3071.1	3072.6	3073.4
20°	2981.0	3050.6	3098.8	3131.4	3164.8	3163.3	3170.6
22.5°	3045.6	3100.4	3137.3	3161.0	3172.4	3166.8	3168.3
25°	3075.8	3092.1	3085.5	3047.7	3038.1	3003.2	3009.2
27.5°	2920.0	2842.9	2763.3	2660.7	2579.8	2515.2	2518.5
30°	2708.4	2572.1	2416.5	2286.1	2169.1	2136.5	2066.9
32.5°	2412.6	2208.2	2026.0	1904.5	1804.0	1776.8	1716.0
35°	1911.3	1712.8	1525.3	1412.7	1368.3	1306.1	1305.3
37.5°	1485.6	1310.8	1211.6	1127.2	1082.9	1045.3	1041.6
40°	1249.7	1113.4	1038.6	977.9	934.2	906.0	899.4
42.5°	1085.0	974.8	904.7	867.0	833.4	818.9	808.0
45°	886.0	811.9	763.0	729.0	713.4	702.3	696.4
47.5°	741.1	691.4	658.2	635.5	622.8	611.1	614.3
50°	662.3	621.5	597.1	575.6	566.0	557.8	558.6
52.5°	598.9	562.3	542.5	527.0	515.0	509.3	506.4
55°	508.2	485.2	465.2	454.1	447.4	439.3	437.1
57.5°	433.5	415.8	399.4	386.8	385.2	377.4	378.4
60°	383.7	368.9	355.6	348.9	343.7	337.1	339.3
62.5°	342.8	330.4	318.3	312.7	307.6	302.7	303.7
65°	280.8	268.9	261.5	258.5	256.3	254.1	251.8
67.5°	223.8	216.5	211.9	205.5	201.0	200.2	197.9
70°	188.1	178.5	170.4	162.2	160.0	159.3	160.0
72.5°	150.8	144.8	142.5	138.6	138.1	136.2	137.5
75°	113.4	111.1	109.6	106.7	106.7	106.7	106.7
77.5°	83.6	82.2	81.3	80.8	80.0	79.0	78.8
80°	65.2	64.5	63.0	63.0	62.2	63.0	62.2
82.5°	49.2	49.0	47.6	47.6	46.8	46.4	46.8
85°	25.2	24.4	25.9	24.4	25.2	23.8	25.2
87.5°	12.9	13.1	12.7	12.8	12.3	13.6	12.5
90°	29.2	30.2	30.9	31.4	31.9	32.3	32.9
92.5°	32.7	34.3	35.2	35.4	35.8	36.1	36.4
95°	39.0	40.7	41.6	41.6	41.6	41.6	41.6
97.5°	41.1	43.1	44.1	44.4	44.7	44.9	45.1
100°	41.9	43.9	45.1	45.2	45.5	45.7	46.0
102.5°	53.9	47.9	45.1	45.5	46.0	46.5	46.8
105°	110.6	67.5	46.3	46.8	47.2	47.7	48.2
107.5°	344.8	313.2	281.2	248.7	216.2	183.8	151.4
110°	469.8	461.8	440.4	405.6	370.7	335.9	301.1



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	549.5	549.7	546.0	538.7	531.3	524.0	516.6
115°	635.8	638.3	640.0	640.9	642.0	642.9	643.9
117.5°	711.5	713.4	714.5	714.7	714.9	715.1	715.3
120°	761.4	763.4	764.3	764.3	764.3	764.3	764.3
122.5°	809.6	811.0	811.7	811.9	812.1	812.4	812.6
125°	877.5	878.0	878.4	878.9	879.5	880.0	880.4
127.5°	946.7	947.4	947.6	947.2	946.7	946.2	945.7
130°	988.4	989.5	989.7	989.2	988.7	988.3	987.8
132.5°	1027.9	1028.9	1029.0	1028.3	1027.7	1027.0	1026.2
135°	1087.4	1088.2	1088.2	1087.4	1086.7	1085.9	1085.2
137.5°	1141.0	1142.2	1142.6	1142.1	1141.6	1141.1	1140.6
140°	1174.6	1175.6	1175.8	1175.4	1174.9	1174.4	1173.9
142.5°	1206.5	1207.2	1207.3	1206.6	1205.9	1205.2	1204.6
145°	1250.9	1251.4	1251.6	1251.6	1251.6	1251.6	1251.6
147.5°	1291.0	1291.5	1291.2	1290.1	1288.9	1287.8	1286.7
150°	1315.5	1316.0	1315.9	1315.1	1314.5	1313.7	1313.0
152.5°	1337.8	1338.6	1338.5	1337.4	1336.2	1335.1	1334.0
155°	1368.1	1369.3	1369.1	1367.7	1366.3	1364.8	1363.4
157.5°	1394.4	1395.9	1395.7	1393.8	1391.9	1390.0	1388.1
160°	1409.3	1410.8	1410.7	1409.0	1407.3	1405.5	1403.8
162.5°	1423.1	1424.7	1424.7	1423.2	1421.7	1420.2	1418.7
165°	1441.4	1443.4	1443.5	1441.8	1440.1	1438.4	1436.7
167.5°	1455.5	1457.5	1457.5	1455.5	1453.5	1451.6	1449.6
170°	1463.4	1465.3	1465.3	1463.4	1461.4	1459.4	1457.5
172.5°	1468.6	1470.6	1470.5	1468.3	1466.2	1464.1	1461.9
175°	1474.7	1476.4	1476.2	1474.3	1472.3	1470.5	1468.5
177.5°	1476.9	1478.4	1478.2	1476.3	1474.3	1472.3	1470.5
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9

(END OF REPORT)