

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: P331411-840

Luminaire Tested: **S122DIP-S865D1080U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331411-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122DIP-S865D1080U840-4F0-1E-UDD-A  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 865 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1080 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8198.1 lumens  
Efficiency: N/A  
Efficacy: 125.4 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: General Diffuse

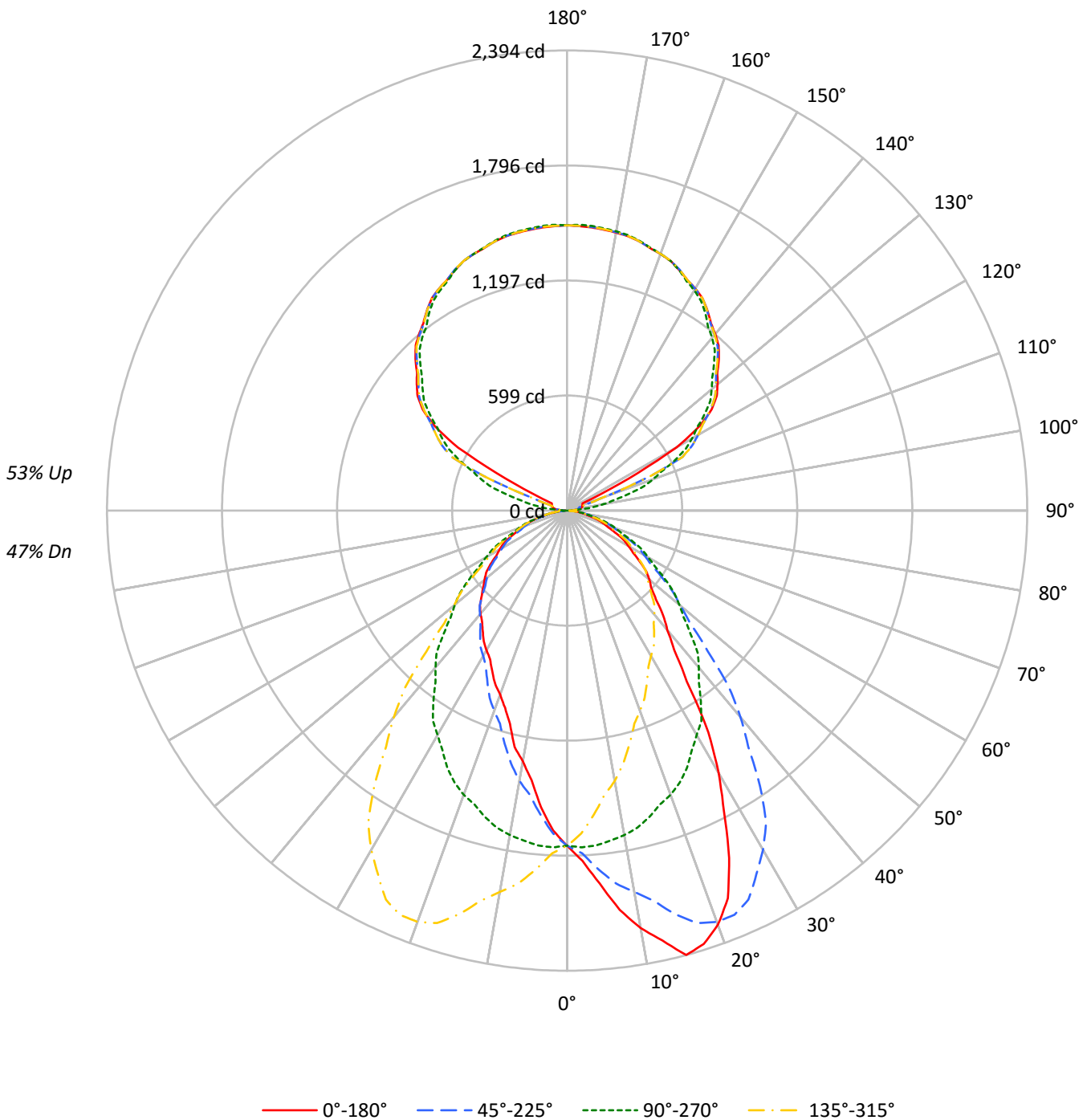
Input Watts (W): 65.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47
1	98	93	90	86	90	86	83	80	72	70	68	60	58	57	48	47	46	40
2	89	82	76	71	82	76	71	66	64	60	57	53	50	48	43	41	39	35
3	82	73	66	60	75	67	61	56	57	52	48	47	44	41	38	36	34	30
4	75	64	57	51	69	60	53	48	51	46	42	42	39	36	34	32	30	26
5	69	58	50	44	63	53	47	41	46	40	36	38	34	31	31	28	26	23
6	64	52	44	38	58	48	41	36	41	36	32	35	31	27	28	26	23	20
7	59	47	39	34	54	44	37	32	37	32	28	32	28	24	26	23	21	18
8	55	43	35	30	50	40	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	32	27	47	36	30	25	31	26	23	27	23	20	22	19	17	15
10	48	36	29	24	44	34	27	23	29	24	20	25	21	18	21	18	16	14

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

	0°	90°	180°	270°
0°	28150	28150	28150	28150
5°	31561	28336	25109	28336
10°	36166	28103	21730	28103
15°	40010	27587	19198	27587
20°	39400	27034	17500	27034
25°	35527	26298	16425	26298
30°	29358	25124	15642	25124
35°	21396	23893	15084	23893
40°	17089	22443	14773	22443
45°	14933	20763	14351	20763
50°	14039	19138	14071	19138
55°	12940	17486	13695	17486
60°	11858	15733	13114	15733
65°	10804	14155	12542	14155
70°	9805	12623	11703	12623
75°	8696	10911	10368	10911
80°	7476	9028	8350	9028
85°	6706	6706	4965	6706



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.1	2.0
10°-20°	482.7	5.9
20°-30°	700.6	8.5
30°-40°	739.3	9.0
40°-50°	654.6	8.0
50°-60°	522.4	6.4
60°-70°	355.1	4.3
70°-80°	182.0	2.2
80°-90°	47.5	0.6
90°-100°	49.5	0.6
100°-110°	181.5	2.2
110°-120°	485.1	5.9
120°-130°	800.8	9.8
130°-140°	851.6	10.4
140°-150°	791.6	9.7
150°-160°	636.4	7.8
160°-170°	410.1	5.0
170°-180°	141.2	1.7
0°-30°	1349.4	16.5
0°-40°	2088.7	25.5
0°-60°	3265.7	39.8
0°-90°	3850.3	47.0
90°-120°	716.1	8.7
90°-150°	3160.1	38.5
90°-180°	4348.0	53.0
0°-180°	8198.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1744	1744	1744	1744	1744	
5°	1947	1748	1549	1748	1947	194
15°	2394	1650	1148	1650	2394	660
25°	1994	1476	922	1476	1994	901
35°	1086	1212	765	1212	1086	706
45°	654	909	628	909	654	514
55°	460	621	486	621	460	412
65°	283	370	328	370	283	281
75°	139	175	166	175	139	149
85°	36	36	27	36	36	40
90°	29	1	29	1	29	15
95°	46	70	46	70	46	43
105°	82	326	82	326	82	85
115°	88	617	88	617	88	220
125°	918	873	918	873	918	794
135°	1115	1080	1115	1080	1115	860
145°	1272	1253	1272	1253	1272	796
155°	1381	1380	1381	1380	1381	637
165°	1450	1454	1450	1454	1450	409
175°	1478	1487	1478	1487	1478	141
180°	1484	1484	1484	1484	1484	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1824.0	1824.5	1825.6	1817.1	1815.9	1815.9	1808.5	1802.0	1794.5	1784.3	1785.4
5°	1947.3	1954.7	1957.3	1949.3	1937.2	1935.9	1924.5	1905.7	1888.3	1874.2	1864.2
7.5°	2094.5	2097.4	2090.8	2080.2	2071.2	2055.2	2034.0	2013.3	1984.2	1957.5	1937.6
10°	2205.9	2210.0	2198.6	2183.1	2170.4	2151.6	2120.8	2089.3	2051.1	2014.3	1984.8
12.5°	2290.7	2300.6	2285.9	2283.9	2262.1	2236.3	2199.7	2183.7	2130.0	2078.6	2047.0
15°	2393.6	2392.9	2394.3	2381.5	2365.4	2361.4	2322.6	2280.4	2204.6	2174.4	2122.2
17.5°	2363.8	2374.0	2378.7	2378.5	2378.1	2375.6	2363.2	2336.5	2298.6	2249.7	2189.3
20°	2293.1	2306.4	2308.5	2323.9	2332.6	2344.0	2348.6	2341.3	2317.8	2276.9	2224.7
22.5°	2183.7	2187.5	2193.7	2217.8	2236.6	2265.2	2280.1	2304.8	2295.8	2275.9	2232.2
25°	1994.2	1987.5	2010.9	2023.0	2066.6	2112.1	2145.0	2181.1	2213.3	2232.7	2220.0
27.5°	1766.7	1756.6	1791.7	1823.7	1859.1	1908.4	1959.6	2020.0	2070.3	2133.1	2154.7
30°	1574.7	1580.7	1614.3	1648.4	1702.0	1771.7	1829.4	1895.7	1967.4	2037.7	2086.7
32.5°	1367.8	1391.0	1412.2	1464.5	1511.8	1589.4	1673.9	1756.9	1846.2	1926.2	2002.0
35°	1085.5	1112.4	1141.9	1180.0	1246.4	1323.4	1405.8	1517.7	1639.7	1749.0	1838.8
37.5°	913.7	909.5	926.3	953.9	1007.6	1069.9	1164.8	1275.4	1418.9	1547.2	1673.9
40°	810.8	808.1	820.2	845.7	886.6	932.1	1015.2	1112.4	1245.7	1402.5	1553.3
42.5°	740.0	741.6	748.3	766.3	794.4	831.8	894.0	976.7	1098.8	1246.5	1408.6
45°	654.0	658.7	666.1	674.8	690.8	721.6	756.5	815.5	912.0	1035.3	1194.8
47.5°	592.1	592.2	599.8	607.3	616.9	634.3	662.7	699.7	767.8	868.2	1005.3
50°	558.9	554.2	559.6	565.5	575.6	587.6	606.4	641.3	686.8	767.9	882.5
52.5°	518.2	518.3	523.1	525.3	534.3	546.4	563.5	587.6	628.9	692.4	786.6
55°	459.7	463.0	465.7	469.7	477.8	486.5	499.9	515.9	548.2	595.7	665.4
57.5°	404.8	405.8	408.5	416.2	421.2	429.3	442.0	456.6	477.5	512.7	565.1
60°	367.2	367.2	372.5	375.9	382.6	390.6	400.7	414.8	433.5	462.3	504.6
62.5°	333.0	332.3	334.5	340.0	345.1	352.6	362.6	374.6	392.2	417.9	452.6
65°	282.8	281.4	285.5	286.8	292.2	299.5	307.6	320.3	334.4	353.1	384.0
67.5°	234.5	236.1	238.3	240.9	243.8	251.6	256.9	265.9	277.8	293.4	314.3
70°	207.7	207.7	207.7	209.7	213.8	217.8	223.2	230.6	241.9	255.3	274.1
72.5°	177.7	179.9	182.0	180.8	185.9	188.3	194.7	198.8	209.7	218.3	234.9
75°	139.4	139.4	139.4	142.7	144.7	146.7	150.8	154.8	160.2	170.9	179.6
77.5°	104.0	103.7	104.4	105.2	107.3	109.8	111.0	114.6	119.6	124.5	131.9
80°	80.4	81.8	82.4	83.7	83.7	85.1	85.7	90.5	93.8	97.1	101.9
82.5°	62.2	62.4	62.6	62.8	63.4	64.2	65.9	67.5	68.6	71.4	75.0
85°	36.2	35.5	35.5	36.9	36.2	36.2	37.6	38.9	38.9	39.5	41.5
87.5°	19.7	19.6	20.1	19.5	19.4	19.7	19.5	18.7	19.0	19.3	19.5
90°	29.0	28.5	28.1	27.6	27.1	26.3	25.0	23.8	22.6	21.5	19.6
92.5°	29.0	28.7	28.4	28.2	27.9	27.4	26.8	26.2	25.5	24.9	23.9
95°	46.2	46.4	46.7	46.9	47.2	46.7	45.4	44.2	43.0	41.9	40.2
97.5°	61.6	61.3	61.1	60.8	60.5	59.9	58.9	58.0	57.0	56.0	52.2
100°	71.9	71.5	71.0	70.5	70.0	68.9	67.0	65.0	63.1	61.2	57.2
102.5°	77.1	76.4	75.7	75.0	74.4	72.8	70.4	67.9	65.4	62.9	96.8
105°	81.6	80.6	79.7	78.8	77.8	75.9	73.3	70.7	68.1	65.4	130.6
107.5°	83.9	83.0	82.0	81.1	80.2	81.0	83.6	86.3	89.0	91.7	169.8
110°	84.8	83.8	82.9	81.9	81.0	92.4	116.3	140.2	164.0	187.8	256.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	85.6	84.9	84.1	83.4	82.6	125.7	212.8	299.8	386.9	473.8	490.9
115°	88.1	105.2	122.4	139.6	156.7	220.6	331.0	441.4	551.9	662.4	656.4
117.5°	359.4	415.9	472.3	528.8	585.2	626.8	653.5	680.2	706.9	733.7	729.5
120°	654.9	687.0	719.2	751.4	783.7	798.4	795.5	792.6	789.7	786.9	782.6
122.5°	817.2	823.4	829.7	836.0	842.1	844.4	842.7	841.0	839.3	837.6	832.9
125°	917.9	917.2	916.5	915.7	915.0	913.8	912.1	910.5	908.8	907.2	902.6
127.5°	981.4	981.3	981.2	981.0	980.9	979.6	977.1	974.7	972.3	969.9	966.4
130°	1021.0	1021.2	1021.4	1021.7	1021.9	1020.7	1018.0	1015.4	1012.8	1010.2	1007.5
132.5°	1059.6	1059.9	1060.1	1060.3	1060.6	1059.6	1057.3	1055.0	1052.8	1050.6	1047.9
135°	1115.4	1115.9	1116.3	1116.8	1117.3	1116.3	1114.0	1111.6	1109.2	1106.8	1104.7
137.5°	1166.3	1167.1	1167.9	1168.7	1169.5	1168.7	1166.4	1164.1	1161.7	1159.4	1157.0
140°	1198.1	1199.2	1200.4	1201.6	1202.9	1202.3	1200.2	1198.1	1195.9	1193.8	1191.1
142.5°	1229.0	1230.2	1231.3	1232.5	1233.8	1233.3	1231.4	1229.4	1227.5	1225.6	1222.5
145°	1272.1	1273.3	1274.6	1275.8	1276.9	1276.7	1275.0	1273.3	1271.6	1270.0	1266.0
147.5°	1310.1	1311.1	1312.1	1313.1	1314.1	1314.0	1312.8	1311.5	1310.3	1309.1	1305.0
150°	1333.3	1334.5	1335.7	1336.9	1338.1	1338.0	1336.6	1335.1	1333.7	1332.2	1328.5
152.5°	1353.1	1354.6	1356.2	1357.8	1359.4	1359.5	1358.1	1356.6	1355.1	1353.7	1350.1
155°	1380.6	1382.5	1384.4	1386.2	1388.2	1388.5	1387.0	1385.5	1384.1	1382.7	1379.9
157.5°	1405.6	1407.5	1409.4	1411.3	1413.1	1413.2	1411.6	1410.0	1408.4	1406.7	1404.7
160°	1420.3	1422.0	1423.6	1425.3	1426.9	1427.0	1425.6	1424.2	1422.8	1421.4	1420.0
162.5°	1432.3	1434.3	1436.4	1438.5	1440.5	1440.8	1439.1	1437.4	1435.8	1434.2	1433.0
165°	1450.4	1452.0	1453.7	1455.3	1457.0	1457.0	1455.3	1453.7	1452.0	1450.4	1449.7
167.5°	1461.7	1463.9	1466.0	1468.1	1470.3	1470.6	1468.8	1467.2	1465.5	1463.9	1463.2
170°	1468.5	1470.8	1472.9	1475.0	1477.1	1477.4	1475.7	1474.1	1472.4	1470.8	1470.3
172.5°	1473.7	1475.9	1478.0	1480.2	1482.4	1482.6	1480.9	1479.3	1477.5	1475.9	1475.4
175°	1478.2	1480.7	1483.0	1485.4	1487.8	1488.1	1486.5	1484.8	1483.2	1481.5	1481.0
177.5°	1481.1	1482.8	1484.5	1486.2	1487.9	1488.1	1486.7	1485.4	1484.1	1482.8	1482.6
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1789.2	1784.8	1782.2	1772.5	1763.9	1755.3	1752.7	1753.7	1742.0	1730.7	1725.9
5°	1858.9	1845.4	1832.7	1814.6	1793.2	1769.7	1757.7	1748.3	1724.8	1699.4	1684.7
7.5°	1921.3	1902.1	1877.6	1843.6	1812.3	1775.4	1752.0	1731.2	1697.0	1661.0	1639.0
10°	1959.3	1933.2	1901.7	1860.2	1822.0	1777.1	1745.6	1714.1	1673.9	1631.0	1604.2
12.5°	1992.1	1956.8	1925.8	1872.5	1827.4	1771.2	1733.8	1689.4	1647.1	1596.2	1569.9
15°	2069.9	2004.9	1945.9	1885.6	1830.0	1751.6	1710.1	1650.4	1594.8	1531.9	1501.7
17.5°	2130.1	2057.1	1964.2	1887.5	1822.6	1735.9	1674.9	1603.4	1537.6	1465.6	1424.6
20°	2164.4	2080.6	1980.7	1889.7	1811.9	1712.7	1646.4	1573.4	1496.3	1415.2	1371.0
22.5°	2184.7	2096.7	1997.9	1881.6	1790.5	1693.9	1610.5	1530.5	1452.4	1364.8	1318.5
25°	2191.2	2110.8	2006.3	1874.9	1763.7	1654.5	1554.0	1476.2	1381.7	1300.0	1232.3
27.5°	2159.3	2101.6	2001.1	1862.3	1732.7	1605.0	1493.0	1404.9	1305.3	1216.5	1148.4
30°	2120.2	2086.7	1988.8	1849.5	1708.1	1570.7	1447.4	1347.6	1248.4	1158.6	1088.9
32.5°	2059.6	2052.3	1966.3	1831.2	1681.8	1527.3	1399.7	1298.8	1188.9	1100.7	1034.2
35°	1940.6	1972.8	1918.4	1790.5	1632.3	1465.5	1327.5	1212.2	1098.3	1013.8	951.5
37.5°	1781.1	1861.0	1846.7	1730.8	1565.6	1398.3	1245.9	1125.4	1016.8	931.6	870.4
40°	1671.2	1773.0	1787.8	1685.3	1518.4	1346.3	1184.8	1064.8	958.9	881.2	819.5
42.5°	1553.3	1672.2	1712.7	1630.6	1466.9	1291.5	1130.0	1005.8	901.0	825.5	770.7
45°	1355.6	1513.1	1586.1	1539.2	1381.1	1201.4	1035.3	909.3	814.2	743.2	700.9
47.5°	1170.7	1342.8	1441.1	1424.5	1285.5	1107.6	943.3	822.4	729.8	673.2	635.4
50°	1040.0	1216.9	1335.4	1340.9	1216.9	1040.7	875.9	761.9	676.8	623.9	593.0
52.5°	926.3	1095.2	1224.6	1252.9	1140.2	971.0	815.3	701.9	626.9	578.2	550.7
55°	778.0	920.7	1064.1	1116.4	1025.9	865.1	721.0	621.2	550.8	517.4	493.2
57.5°	646.8	765.8	898.2	955.9	900.2	762.5	627.4	540.8	483.6	454.3	435.9
60°	577.6	671.5	789.4	858.4	810.1	687.5	569.6	487.2	440.3	414.1	396.7
62.5°	513.3	596.4	696.1	759.2	733.0	617.3	511.7	438.9	398.4	374.0	361.3
65°	423.5	489.2	566.2	624.5	607.1	519.3	432.9	370.5	338.4	318.9	308.9
67.5°	348.7	396.2	449.6	500.7	486.7	424.4	355.0	306.5	282.6	265.8	259.7
70°	301.5	337.7	385.3	426.2	414.8	363.9	308.9	267.4	246.6	232.6	226.5
72.5°	256.5	286.3	322.6	356.0	348.3	306.0	260.1	228.7	212.8	199.9	194.9
75°	193.7	216.4	238.5	260.6	258.6	225.8	199.0	174.9	162.2	152.1	150.1
77.5°	143.0	155.7	170.8	183.9	180.3	161.5	140.5	126.6	117.2	110.6	109.5
80°	109.3	116.6	127.3	136.7	132.0	124.0	107.2	97.1	90.5	83.7	81.1
82.5°	79.2	86.5	93.0	98.1	94.5	86.9	76.6	69.8	65.8	61.2	60.2
85°	41.5	45.5	48.3	49.6	48.3	43.5	38.9	36.2	32.8	30.8	30.2
87.5°	19.6	19.2	18.9	19.5	17.4	16.8	14.1	12.0	12.0	12.0	11.4
90°	17.7	15.8	13.8	11.6	9.0	6.4	3.7	1.1	3.7	6.4	9.0
92.5°	23.0	22.0	21.1	20.7	21.0	21.2	21.4	21.7	21.4	21.2	21.0
95°	38.6	36.9	35.1	38.3	46.2	54.0	61.9	69.8	61.9	54.0	46.2
97.5°	48.3	44.4	40.6	49.8	71.9	94.1	116.3	138.5	116.3	94.1	71.9
100°	53.1	49.0	44.9	59.3	92.0	124.6	157.3	190.1	157.3	124.6	92.0
102.5°	130.8	164.7	198.6	219.0	225.9	232.9	239.7	246.7	239.7	232.9	225.9
105°	195.7	260.8	326.0	355.0	347.8	340.6	333.6	326.4	333.6	340.6	347.8
107.5°	247.9	326.0	404.1	440.3	434.4	428.7	422.9	417.2	422.9	428.7	434.4
110°	325.8	394.7	463.6	495.6	490.6	485.6	480.6	475.5	480.6	485.6	490.6





TEST NUMBER: P331411-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	508.0	524.9	542.0	548.3	543.8	539.4	535.0	530.6	535.0	539.4	543.8
115°	650.5	644.5	638.5	633.5	629.4	625.4	621.4	617.3	621.4	625.4	629.4
117.5°	725.5	721.3	717.2	713.0	708.4	703.9	699.3	694.8	699.3	703.9	708.4
120°	778.3	774.1	769.7	765.8	762.2	758.6	755.1	751.4	755.1	758.6	762.2
122.5°	828.2	823.5	818.9	814.7	810.9	807.1	803.3	799.6	803.3	807.1	810.9
125°	898.1	893.5	889.0	885.1	882.1	879.0	875.9	872.8	875.9	879.0	882.1
127.5°	963.0	959.7	956.2	952.9	949.5	946.0	942.6	939.2	942.6	946.0	949.5
130°	1004.9	1002.3	999.7	996.4	992.7	988.9	985.0	981.2	985.0	988.9	992.7
132.5°	1045.3	1042.7	1040.1	1037.1	1033.9	1030.7	1027.4	1024.1	1027.4	1030.7	1033.9
135°	1102.5	1100.3	1098.2	1095.2	1091.5	1087.6	1083.8	1079.9	1083.8	1087.6	1091.5
137.5°	1154.6	1152.2	1149.6	1147.1	1144.5	1141.8	1139.1	1136.4	1139.1	1141.8	1144.5
140°	1188.5	1185.9	1183.3	1181.0	1179.1	1177.2	1175.3	1173.4	1175.3	1177.2	1179.1
142.5°	1219.5	1216.5	1213.6	1211.1	1209.4	1207.7	1206.0	1204.3	1206.0	1207.7	1209.4
145°	1261.8	1257.8	1253.7	1251.8	1252.1	1252.3	1252.5	1252.8	1252.5	1252.3	1252.1
147.5°	1301.0	1297.1	1293.0	1291.5	1292.4	1293.3	1294.2	1295.2	1294.2	1293.3	1292.4
150°	1324.6	1320.8	1317.0	1316.0	1317.6	1319.3	1320.9	1322.6	1320.9	1319.3	1317.6
152.5°	1346.5	1342.8	1339.2	1338.4	1340.2	1342.0	1343.9	1345.7	1343.9	1342.0	1340.2
155°	1377.0	1374.1	1371.3	1370.9	1373.0	1375.2	1377.4	1379.5	1377.4	1375.2	1373.0
157.5°	1402.7	1400.8	1398.8	1398.7	1400.5	1402.3	1404.1	1405.9	1404.1	1402.3	1400.5
160°	1418.5	1417.0	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4	1420.0	1418.5	1417.0
162.5°	1431.8	1430.5	1429.3	1429.4	1430.8	1432.2	1433.7	1435.1	1433.7	1432.2	1430.8
165°	1449.0	1448.1	1447.4	1447.8	1449.3	1450.7	1452.1	1453.6	1452.1	1450.7	1449.3
167.5°	1462.5	1461.9	1461.2	1461.6	1463.0	1464.4	1465.9	1467.3	1465.9	1464.4	1463.0
170°	1469.8	1469.4	1468.8	1469.4	1470.8	1472.2	1473.6	1475.0	1473.6	1472.2	1470.8
172.5°	1474.9	1474.5	1474.0	1474.5	1475.9	1477.3	1478.7	1480.2	1478.7	1477.3	1475.9
175°	1480.6	1480.1	1479.6	1480.2	1481.9	1483.5	1485.2	1486.8	1485.2	1483.5	1481.9
177.5°	1482.4	1482.2	1482.0	1482.6	1483.9	1485.2	1486.6	1487.9	1486.6	1485.2	1483.9
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



TEST NUMBER: P331411-840

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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1720.5	1717.3	1706.1	1700.2	1690.5	1681.4	1675.5	1678.2	1680.3	1679.2	1677.7
5°	1671.2	1658.5	1639.0	1622.2	1610.2	1588.1	1578.7	1574.1	1570.0	1565.3	1560.6
7.5°	1612.6	1592.5	1564.5	1540.7	1518.1	1490.7	1475.0	1465.6	1456.0	1445.4	1436.0
10°	1570.7	1542.6	1513.1	1479.6	1452.8	1427.9	1405.8	1391.1	1377.8	1364.9	1355.6
12.5°	1526.7	1494.3	1457.8	1412.0	1382.5	1347.1	1343.6	1317.7	1296.8	1288.9	1277.9
15°	1456.8	1411.2	1364.9	1310.7	1287.3	1255.1	1235.0	1214.9	1196.8	1184.1	1180.7
17.5°	1377.4	1318.4	1272.3	1233.3	1194.9	1162.0	1143.5	1127.4	1112.5	1095.5	1093.2
20°	1316.8	1265.8	1215.6	1181.3	1141.9	1108.3	1085.5	1069.4	1056.7	1046.7	1037.9
22.5°	1259.4	1203.7	1157.6	1120.2	1081.3	1054.2	1036.2	1020.7	1010.1	999.0	990.8
25°	1167.3	1123.8	1073.5	1031.3	999.1	981.7	966.9	953.5	946.8	939.5	930.1
27.5°	1086.7	1038.3	991.4	958.7	930.4	914.9	904.5	895.3	889.1	884.7	879.4
30°	1030.0	981.0	944.1	912.0	888.6	873.1	866.5	861.1	853.7	851.0	848.4
32.5°	975.2	931.2	899.7	871.8	849.4	839.4	833.2	828.4	822.6	819.9	814.6
35°	898.0	861.1	830.2	814.9	796.8	788.0	783.4	776.7	771.2	768.6	767.9
37.5°	825.2	793.1	772.8	753.1	745.4	740.0	733.7	729.0	727.4	727.0	726.4
40°	778.0	751.8	733.8	717.7	714.3	706.3	700.9	696.9	696.9	697.6	696.9
42.5°	735.1	711.7	695.7	681.8	677.8	673.1	667.7	667.4	668.5	670.8	668.5
45°	670.0	653.4	642.0	635.2	627.8	623.2	622.5	624.5	625.2	625.9	627.8
47.5°	610.4	599.2	588.9	581.5	578.2	577.4	576.6	580.2	583.4	584.6	587.6
50°	574.9	562.2	553.5	548.8	546.1	544.8	546.1	550.2	552.8	556.1	558.2
52.5°	535.2	526.2	520.3	516.6	515.5	516.3	516.6	521.2	525.5	526.6	527.7
55°	480.5	473.7	472.4	466.4	469.1	468.4	471.7	474.4	478.5	482.5	483.1
57.5°	425.8	420.4	416.8	417.4	418.2	421.1	423.9	428.6	432.9	437.2	437.6
60°	389.3	386.7	384.7	384.7	386.0	390.0	393.3	398.0	400.7	403.4	405.4
62.5°	356.1	353.5	351.4	352.4	356.0	358.4	362.2	364.8	367.5	370.1	371.1
65°	303.6	302.3	304.3	305.6	306.2	309.6	314.3	316.3	318.9	320.3	325.0
67.5°	255.2	255.4	255.2	257.0	260.9	261.8	266.2	270.8	271.4	274.0	277.0
70°	222.5	223.8	225.2	226.5	229.8	231.2	234.5	236.5	239.2	241.3	243.3
72.5°	192.5	192.7	194.1	193.8	196.6	199.5	202.4	204.4	207.0	209.6	211.6
75°	148.0	148.0	149.5	150.1	153.5	156.8	156.1	157.4	160.2	162.8	164.2
77.5°	108.2	106.6	108.2	108.9	109.9	112.7	113.2	115.1	118.2	117.2	118.8
80°	82.4	80.4	82.4	83.1	83.1	86.4	86.4	87.8	89.8	87.8	89.8
82.5°	58.9	57.9	59.4	59.5	60.6	60.7	61.8	62.0	64.0	63.1	64.0
85°	29.5	28.8	29.5	28.8	29.5	30.2	30.2	29.5	29.5	30.8	28.8
87.5°	11.4	11.3	11.2	11.6	11.4	11.3	11.0	11.2	11.4	10.6	10.8
90°	11.6	13.8	15.8	17.7	19.6	21.5	22.6	23.8	25.0	26.3	27.1
92.5°	20.7	21.1	22.0	23.0	23.9	24.9	25.5	26.2	26.8	27.4	27.9
95°	38.3	35.1	36.9	38.6	40.2	41.9	43.0	44.2	45.4	46.7	47.2
97.5°	49.8	40.6	44.4	48.3	52.2	56.0	57.0	58.0	58.9	59.9	60.5
100°	59.3	44.9	49.0	53.1	57.2	61.2	63.1	65.0	67.0	68.9	70.0
102.5°	219.0	198.6	164.7	130.8	96.8	62.9	65.4	67.9	70.4	72.8	74.4
105°	355.0	326.0	260.8	195.7	130.6	65.4	68.1	70.7	73.3	75.9	77.8
107.5°	440.3	404.1	326.0	247.9	169.8	91.7	89.0	86.3	83.6	81.0	80.2
110°	495.6	463.6	394.7	325.8	256.8	187.8	164.0	140.2	116.3	92.4	81.0



TEST NUMBER: P331411-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	548.3	542.0	524.9	508.0	490.9	473.8	386.9	299.8	212.8	125.7	82.6
115°	633.5	638.5	644.5	650.5	656.4	662.4	551.9	441.4	331.0	220.6	156.7
117.5°	713.0	717.2	721.3	725.5	729.5	733.7	706.9	680.2	653.5	626.8	585.2
120°	765.8	769.7	774.1	778.3	782.6	786.9	789.7	792.6	795.5	798.4	783.7
122.5°	814.7	818.9	823.5	828.2	832.9	837.6	839.3	841.0	842.7	844.4	842.1
125°	885.1	889.0	893.5	898.1	902.6	907.2	908.8	910.5	912.1	913.8	915.0
127.5°	952.9	956.2	959.7	963.0	966.4	969.9	972.3	974.7	977.1	979.6	980.9
130°	996.4	999.7	1002.3	1004.9	1007.5	1010.2	1012.8	1015.4	1018.0	1020.7	1021.9
132.5°	1037.1	1040.1	1042.7	1045.3	1047.9	1050.6	1052.8	1055.0	1057.3	1059.6	1060.6
135°	1095.2	1098.2	1100.3	1102.5	1104.7	1106.8	1109.2	1111.6	1114.0	1116.3	1117.3
137.5°	1147.1	1149.6	1152.2	1154.6	1157.0	1159.4	1161.7	1164.1	1166.4	1168.7	1169.5
140°	1181.0	1183.3	1185.9	1188.5	1191.1	1193.8	1195.9	1198.1	1200.2	1202.3	1202.9
142.5°	1211.1	1213.6	1216.5	1219.5	1222.5	1225.6	1227.5	1229.4	1231.4	1233.3	1233.8
145°	1251.8	1253.7	1257.8	1261.8	1266.0	1270.0	1271.6	1273.3	1275.0	1276.7	1276.9
147.5°	1291.5	1293.0	1297.1	1301.0	1305.0	1309.1	1310.3	1311.5	1312.8	1314.0	1314.1
150°	1316.0	1317.0	1320.8	1324.6	1328.5	1332.2	1333.7	1335.1	1336.6	1338.0	1338.1
152.5°	1338.4	1339.2	1342.8	1346.5	1350.1	1353.7	1355.1	1356.6	1358.1	1359.5	1359.4
155°	1370.9	1371.3	1374.1	1377.0	1379.9	1382.7	1384.1	1385.5	1387.0	1388.5	1388.2
157.5°	1398.7	1398.8	1400.8	1402.7	1404.7	1406.7	1408.4	1410.0	1411.6	1413.2	1413.1
160°	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4	1422.8	1424.2	1425.6	1427.0	1426.9
162.5°	1429.4	1429.3	1430.5	1431.8	1433.0	1434.2	1435.8	1437.4	1439.1	1440.8	1440.5
165°	1447.8	1447.4	1448.1	1449.0	1449.7	1450.4	1452.0	1453.7	1455.3	1457.0	1457.0
167.5°	1461.6	1461.2	1461.9	1462.5	1463.2	1463.9	1465.5	1467.2	1468.8	1470.6	1470.3
170°	1469.4	1468.8	1469.4	1469.8	1470.3	1470.8	1472.4	1474.1	1475.7	1477.4	1477.1
172.5°	1474.5	1474.0	1474.5	1474.9	1475.4	1475.9	1477.5	1479.3	1480.9	1482.6	1482.4
175°	1480.2	1479.6	1480.1	1480.6	1481.0	1481.5	1483.2	1484.8	1486.5	1488.1	1487.8
177.5°	1482.6	1482.0	1482.2	1482.4	1482.6	1482.8	1484.1	1485.4	1486.7	1488.1	1487.9
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



TEST NUMBER: P331411-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1672.2	1671.2	1671.2	1666.4	1671.2	1671.2	1672.2	1677.7	1679.2	1680.3	1678.2
5°	1551.3	1549.2	1545.9	1549.2	1545.9	1549.2	1551.3	1560.6	1565.3	1570.0	1574.1
7.5°	1431.6	1423.5	1422.3	1414.4	1422.3	1423.5	1431.6	1436.0	1445.4	1456.0	1465.6
10°	1344.2	1338.9	1338.2	1325.4	1338.2	1338.9	1344.2	1355.6	1364.9	1377.8	1391.1
12.5°	1277.8	1264.9	1267.4	1260.0	1267.4	1264.9	1277.8	1277.9	1288.9	1296.8	1317.7
15°	1162.7	1162.7	1159.9	1148.5	1159.9	1162.7	1162.7	1180.7	1184.1	1196.8	1214.9
17.5°	1079.9	1078.5	1072.2	1075.4	1072.2	1078.5	1079.9	1093.2	1095.5	1112.5	1127.4
20°	1030.6	1026.6	1018.5	1018.5	1018.5	1026.6	1030.6	1037.9	1046.7	1056.7	1069.4
22.5°	984.0	983.7	975.1	977.8	975.1	983.7	984.0	990.8	999.0	1010.1	1020.7
25°	929.4	924.0	920.1	922.0	920.1	924.0	929.4	930.1	939.5	946.8	953.5
27.5°	877.7	874.7	874.4	869.0	874.4	874.7	877.7	879.4	884.7	889.1	895.3
30°	847.7	841.0	842.3	839.0	842.3	841.0	847.7	848.4	851.0	853.7	861.1
32.5°	813.3	810.9	809.6	806.8	809.6	810.9	813.3	814.6	819.9	822.6	828.4
35°	766.6	767.3	763.9	765.3	763.9	767.3	766.6	767.9	768.6	771.2	776.7
37.5°	725.7	727.8	726.3	726.7	726.3	727.8	725.7	726.4	727.0	727.4	729.0
40°	698.9	698.9	698.9	700.9	698.9	698.9	698.9	696.9	697.6	696.9	696.9
42.5°	673.2	672.1	671.1	670.9	671.1	672.1	673.2	668.5	670.8	668.5	667.4
45°	629.2	631.3	631.9	628.5	631.9	631.3	629.2	627.8	625.9	625.2	624.5
47.5°	589.5	589.7	589.5	592.4	589.5	589.7	589.5	587.6	584.6	583.4	580.2
50°	561.6	560.2	561.6	560.2	561.6	560.2	561.6	558.2	556.1	552.8	550.2
52.5°	532.1	532.3	531.5	531.3	531.5	532.3	532.1	527.7	526.6	525.5	521.2
55°	485.8	487.2	486.5	486.5	486.5	487.2	485.8	483.1	482.5	478.5	474.4
57.5°	438.0	439.2	440.1	437.2	440.1	439.2	438.0	437.6	437.2	432.9	428.6
60°	404.8	408.1	407.4	406.1	407.4	408.1	404.8	405.4	403.4	400.7	398.0
62.5°	374.2	375.4	375.3	375.0	375.3	375.4	374.2	371.1	370.1	367.5	364.8
65°	327.0	328.3	326.3	328.3	326.3	328.3	327.0	325.0	320.3	318.9	316.3
67.5°	276.2	276.6	278.1	279.0	278.1	276.6	276.2	277.0	274.0	271.4	270.8
70°	244.6	243.9	245.9	247.9	245.9	243.9	244.6	243.3	241.3	239.2	236.5
72.5°	211.4	212.8	212.2	213.6	212.2	212.8	211.4	211.6	209.6	207.0	204.4
75°	162.8	164.8	164.2	166.2	164.2	164.8	162.8	164.2	162.8	160.2	157.4
77.5°	117.6	118.0	117.6	118.8	117.6	118.0	117.6	118.8	117.2	118.2	115.1
80°	89.8	88.5	87.2	89.8	87.2	88.5	89.8	89.8	87.8	89.8	87.8
82.5°	62.4	63.2	61.9	61.9	61.9	63.2	62.4	64.0	63.1	64.0	62.0
85°	28.8	28.2	26.8	26.8	26.8	28.2	28.8	28.8	30.8	29.5	29.5
87.5°	10.9	10.4	10.5	10.1	10.5	10.4	10.9	10.8	10.6	11.4	11.2
90°	27.6	28.1	28.5	29.0	28.5	28.1	27.6	27.1	26.3	25.0	23.8
92.5°	28.2	28.4	28.7	29.0	28.7	28.4	28.2	27.9	27.4	26.8	26.2
95°	46.9	46.7	46.4	46.2	46.4	46.7	46.9	47.2	46.7	45.4	44.2
97.5°	60.8	61.1	61.3	61.6	61.3	61.1	60.8	60.5	59.9	58.9	58.0
100°	70.5	71.0	71.5	71.9	71.5	71.0	70.5	70.0	68.9	67.0	65.0
102.5°	75.0	75.7	76.4	77.1	76.4	75.7	75.0	74.4	72.8	70.4	67.9
105°	78.8	79.7	80.6	81.6	80.6	79.7	78.8	77.8	75.9	73.3	70.7
107.5°	81.1	82.0	83.0	83.9	83.0	82.0	81.1	80.2	81.0	83.6	86.3
110°	81.9	82.9	83.8	84.8	83.8	82.9	81.9	81.0	92.4	116.3	140.2



TEST NUMBER: P331411-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	83.4	84.1	84.9	85.6	84.9	84.1	83.4	82.6	125.7	212.8	299.8
115°	139.6	122.4	105.2	88.1	105.2	122.4	139.6	156.7	220.6	331.0	441.4
117.5°	528.8	472.3	415.9	359.4	415.9	472.3	528.8	585.2	626.8	653.5	680.2
120°	751.4	719.2	687.0	654.9	687.0	719.2	751.4	783.7	798.4	795.5	792.6
122.5°	836.0	829.7	823.4	817.2	823.4	829.7	836.0	842.1	844.4	842.7	841.0
125°	915.7	916.5	917.2	917.9	917.2	916.5	915.7	915.0	913.8	912.1	910.5
127.5°	981.0	981.2	981.3	981.4	981.3	981.2	981.0	980.9	979.6	977.1	974.7
130°	1021.7	1021.4	1021.2	1021.0	1021.2	1021.4	1021.7	1021.9	1020.7	1018.0	1015.4
132.5°	1060.3	1060.1	1059.9	1059.6	1059.9	1060.1	1060.3	1060.6	1059.6	1057.3	1055.0
135°	1116.8	1116.3	1115.9	1115.4	1115.9	1116.3	1116.8	1117.3	1116.3	1114.0	1111.6
137.5°	1168.7	1167.9	1167.1	1166.3	1167.1	1167.9	1168.7	1169.5	1168.7	1166.4	1164.1
140°	1201.6	1200.4	1199.2	1198.1	1199.2	1200.4	1201.6	1202.9	1202.3	1200.2	1198.1
142.5°	1232.5	1231.3	1230.2	1229.0	1230.2	1231.3	1232.5	1233.8	1233.3	1231.4	1229.4
145°	1275.8	1274.6	1273.3	1272.1	1273.3	1274.6	1275.8	1276.9	1276.7	1275.0	1273.3
147.5°	1313.1	1312.1	1311.1	1310.1	1311.1	1312.1	1313.1	1314.1	1314.0	1312.8	1311.5
150°	1336.9	1335.7	1334.5	1333.3	1334.5	1335.7	1336.9	1338.1	1338.0	1336.6	1335.1
152.5°	1357.8	1356.2	1354.6	1353.1	1354.6	1356.2	1357.8	1359.4	1359.5	1358.1	1356.6
155°	1386.2	1384.4	1382.5	1380.6	1382.5	1384.4	1386.2	1388.2	1388.5	1387.0	1385.5
157.5°	1411.3	1409.4	1407.5	1405.6	1407.5	1409.4	1411.3	1413.1	1413.2	1411.6	1410.0
160°	1425.3	1423.6	1422.0	1420.3	1422.0	1423.6	1425.3	1426.9	1427.0	1425.6	1424.2
162.5°	1438.5	1436.4	1434.3	1432.3	1434.3	1436.4	1438.5	1440.5	1440.8	1439.1	1437.4
165°	1455.3	1453.7	1452.0	1450.4	1452.0	1453.7	1455.3	1457.0	1457.0	1455.3	1453.7
167.5°	1468.1	1466.0	1463.9	1461.7	1463.9	1466.0	1468.1	1470.3	1470.6	1468.8	1467.2
170°	1475.0	1472.9	1470.8	1468.5	1470.8	1472.9	1475.0	1477.1	1477.4	1475.7	1474.1
172.5°	1480.2	1478.0	1475.9	1473.7	1475.9	1478.0	1480.2	1482.4	1482.6	1480.9	1479.3
175°	1485.4	1483.0	1480.7	1478.2	1480.7	1483.0	1485.4	1487.8	1488.1	1486.5	1484.8
177.5°	1486.2	1484.5	1482.8	1481.1	1482.8	1484.5	1486.2	1487.9	1488.1	1486.7	1485.4
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1675.5	1681.4	1690.5	1700.2	1706.1	1717.3	1720.5	1725.9	1730.7	1742.0	1753.7
5°	1578.7	1588.1	1610.2	1622.2	1639.0	1658.5	1671.2	1684.7	1699.4	1724.8	1748.3
7.5°	1475.0	1490.7	1518.1	1540.7	1564.5	1592.5	1612.6	1639.0	1661.0	1697.0	1731.2
10°	1405.8	1427.9	1452.8	1479.6	1513.1	1542.6	1570.7	1604.2	1631.0	1673.9	1714.1
12.5°	1343.6	1347.1	1382.5	1412.0	1457.8	1494.3	1526.7	1569.9	1596.2	1647.1	1689.4
15°	1235.0	1255.1	1287.3	1310.7	1364.9	1411.2	1456.8	1501.7	1531.9	1594.8	1650.4
17.5°	1143.5	1162.0	1194.9	1233.3	1272.3	1318.4	1377.4	1424.6	1465.6	1537.6	1603.4
20°	1085.5	1108.3	1141.9	1181.3	1215.6	1265.8	1316.8	1371.0	1415.2	1496.3	1573.4
22.5°	1036.2	1054.2	1081.3	1120.2	1157.6	1203.7	1259.4	1318.5	1364.8	1452.4	1530.5
25°	966.9	981.7	999.1	1031.3	1073.5	1123.8	1167.3	1232.3	1300.0	1381.7	1476.2
27.5°	904.5	914.9	930.4	958.7	991.4	1038.3	1086.7	1148.4	1216.5	1305.3	1404.9
30°	866.5	873.1	888.6	912.0	944.1	981.0	1030.0	1088.9	1158.6	1248.4	1347.6
32.5°	833.2	839.4	849.4	871.8	899.7	931.2	975.2	1034.2	1100.7	1188.9	1298.8
35°	783.4	788.0	796.8	814.9	830.2	861.1	898.0	951.5	1013.8	1098.3	1212.2
37.5°	733.7	740.0	745.4	753.1	772.8	793.1	825.2	870.4	931.6	1016.8	1125.4
40°	700.9	706.3	714.3	717.7	733.8	751.8	778.0	819.5	881.2	958.9	1064.8
42.5°	667.7	673.1	677.8	681.8	695.7	711.7	735.1	770.7	825.5	901.0	1005.8
45°	622.5	623.2	627.8	635.2	642.0	653.4	670.0	700.9	743.2	814.2	909.3
47.5°	576.6	577.4	578.2	581.5	588.9	599.2	610.4	635.4	673.2	729.8	822.4
50°	546.1	544.8	546.1	548.8	553.5	562.2	574.9	593.0	623.9	676.8	761.9
52.5°	516.6	516.3	515.5	516.6	520.3	526.2	535.2	550.7	578.2	626.9	701.9
55°	471.7	468.4	469.1	466.4	472.4	473.7	480.5	493.2	517.4	550.8	621.2
57.5°	423.9	421.1	418.2	417.4	416.8	420.4	425.8	435.9	454.3	483.6	540.8
60°	393.3	390.0	386.0	384.7	384.7	386.7	389.3	396.7	414.1	440.3	487.2
62.5°	362.2	358.4	356.0	352.4	351.4	353.5	356.1	361.3	374.0	398.4	438.9
65°	314.3	309.6	306.2	305.6	304.3	302.3	303.6	308.9	318.9	338.4	370.5
67.5°	266.2	261.8	260.9	257.0	255.2	255.4	255.2	259.7	265.8	282.6	306.5
70°	234.5	231.2	229.8	226.5	225.2	223.8	222.5	226.5	232.6	246.6	267.4
72.5°	202.4	199.5	196.6	193.8	194.1	192.7	192.5	194.9	199.9	212.8	228.7
75°	156.1	156.8	153.5	150.1	149.5	148.0	148.0	150.1	152.1	162.2	174.9
77.5°	113.2	112.7	109.9	108.9	108.2	106.6	108.2	109.5	110.6	117.2	126.6
80°	86.4	86.4	83.1	83.1	82.4	80.4	82.4	81.1	83.7	90.5	97.1
82.5°	61.8	60.7	60.6	59.5	59.4	57.9	58.9	60.2	61.2	65.8	69.8
85°	30.2	30.2	29.5	28.8	29.5	28.8	29.5	30.2	30.8	32.8	36.2
87.5°	11.0	11.3	11.4	11.6	11.2	11.3	11.4	11.4	12.0	12.0	12.0
90°	22.6	21.5	19.6	17.7	15.8	13.8	11.6	9.0	6.4	3.7	1.1
92.5°	25.5	24.9	23.9	23.0	22.0	21.1	20.7	21.0	21.2	21.4	21.7
95°	43.0	41.9	40.2	38.6	36.9	35.1	38.3	46.2	54.0	61.9	69.8
97.5°	57.0	56.0	52.2	48.3	44.4	40.6	49.8	71.9	94.1	116.3	138.5
100°	63.1	61.2	57.2	53.1	49.0	44.9	59.3	92.0	124.6	157.3	190.1
102.5°	65.4	62.9	96.8	130.8	164.7	198.6	219.0	225.9	232.9	239.7	246.7
105°	68.1	65.4	130.6	195.7	260.8	326.0	355.0	347.8	340.6	333.6	326.4
107.5°	89.0	91.7	169.8	247.9	326.0	404.1	440.3	434.4	428.7	422.9	417.2
110°	164.0	187.8	256.8	325.8	394.7	463.6	495.6	490.6	485.6	480.6	475.5



TEST NUMBER: P331411-840

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	386.9	473.8	490.9	508.0	524.9	542.0	548.3	543.8	539.4	535.0	530.6
115°	551.9	662.4	656.4	650.5	644.5	638.5	633.5	629.4	625.4	621.4	617.3
117.5°	706.9	733.7	729.5	725.5	721.3	717.2	713.0	708.4	703.9	699.3	694.8
120°	789.7	786.9	782.6	778.3	774.1	769.7	765.8	762.2	758.6	755.1	751.4
122.5°	839.3	837.6	832.9	828.2	823.5	818.9	814.7	810.9	807.1	803.3	799.6
125°	908.8	907.2	902.6	898.1	893.5	889.0	885.1	882.1	879.0	875.9	872.8
127.5°	972.3	969.9	966.4	963.0	959.7	956.2	952.9	949.5	946.0	942.6	939.2
130°	1012.8	1010.2	1007.5	1004.9	1002.3	999.7	996.4	992.7	988.9	985.0	981.2
132.5°	1052.8	1050.6	1047.9	1045.3	1042.7	1040.1	1037.1	1033.9	1030.7	1027.4	1024.1
135°	1109.2	1106.8	1104.7	1102.5	1100.3	1098.2	1095.2	1091.5	1087.6	1083.8	1079.9
137.5°	1161.7	1159.4	1157.0	1154.6	1152.2	1149.6	1147.1	1144.5	1141.8	1139.1	1136.4
140°	1195.9	1193.8	1191.1	1188.5	1185.9	1183.3	1181.0	1179.1	1177.2	1175.3	1173.4
142.5°	1227.5	1225.6	1222.5	1219.5	1216.5	1213.6	1211.1	1209.4	1207.7	1206.0	1204.3
145°	1271.6	1270.0	1266.0	1261.8	1257.8	1253.7	1251.8	1252.1	1252.3	1252.5	1252.8
147.5°	1310.3	1309.1	1305.0	1301.0	1297.1	1293.0	1291.5	1292.4	1293.3	1294.2	1295.2
150°	1333.7	1332.2	1328.5	1324.6	1320.8	1317.0	1316.0	1317.6	1319.3	1320.9	1322.6
152.5°	1355.1	1353.7	1350.1	1346.5	1342.8	1339.2	1338.4	1340.2	1342.0	1343.9	1345.7
155°	1384.1	1382.7	1379.9	1377.0	1374.1	1371.3	1370.9	1373.0	1375.2	1377.4	1379.5
157.5°	1408.4	1406.7	1404.7	1402.7	1400.8	1398.8	1398.7	1400.5	1402.3	1404.1	1405.9
160°	1422.8	1421.4	1420.0	1418.5	1417.0	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4
162.5°	1435.8	1434.2	1433.0	1431.8	1430.5	1429.3	1429.4	1430.8	1432.2	1433.7	1435.1
165°	1452.0	1450.4	1449.7	1449.0	1448.1	1447.4	1447.8	1449.3	1450.7	1452.1	1453.6
167.5°	1465.5	1463.9	1463.2	1462.5	1461.9	1461.2	1461.6	1463.0	1464.4	1465.9	1467.3
170°	1472.4	1470.8	1470.3	1469.8	1469.4	1468.8	1469.4	1470.8	1472.2	1473.6	1475.0
172.5°	1477.5	1475.9	1475.4	1474.9	1474.5	1474.0	1474.5	1475.9	1477.3	1478.7	1480.2
175°	1483.2	1481.5	1481.0	1480.6	1480.1	1479.6	1480.2	1481.9	1483.5	1485.2	1486.8
177.5°	1484.1	1482.8	1482.6	1482.4	1482.2	1482.0	1482.6	1483.9	1485.2	1486.6	1487.9
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



TEST NUMBER: P331411-840

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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1752.7	1755.3	1763.9	1772.5	1782.2	1784.8	1789.2	1785.4	1784.3	1794.5	1802.0
5°	1757.7	1769.7	1793.2	1814.6	1832.7	1845.4	1858.9	1864.2	1874.2	1888.3	1905.7
7.5°	1752.0	1775.4	1812.3	1843.6	1877.6	1902.1	1921.3	1937.6	1957.5	1984.2	2013.3
10°	1745.6	1777.1	1822.0	1860.2	1901.7	1933.2	1959.3	1984.8	2014.3	2051.1	2089.3
12.5°	1733.8	1771.2	1827.4	1872.5	1925.8	1956.8	1992.1	2047.0	2078.6	2130.0	2183.7
15°	1710.1	1751.6	1830.0	1885.6	1945.9	2004.9	2069.9	2122.2	2174.4	2204.6	2280.4
17.5°	1674.9	1735.9	1822.6	1887.5	1964.2	2057.1	2130.1	2189.3	2249.7	2298.6	2336.5
20°	1646.4	1712.7	1811.9	1889.7	1980.7	2080.6	2164.4	2224.7	2276.9	2317.8	2341.3
22.5°	1610.5	1693.9	1790.5	1881.6	1997.9	2096.7	2184.7	2232.2	2275.9	2295.8	2304.8
25°	1554.0	1654.5	1763.7	1874.9	2006.3	2110.8	2191.2	2220.0	2232.7	2213.3	2181.1
27.5°	1493.0	1605.0	1732.7	1862.3	2001.1	2101.6	2159.3	2154.7	2133.1	2070.3	2020.0
30°	1447.4	1570.7	1708.1	1849.5	1988.8	2086.7	2120.2	2086.7	2037.7	1967.4	1895.7
32.5°	1399.7	1527.3	1681.8	1831.2	1966.3	2052.3	2059.6	2002.0	1926.2	1846.2	1756.9
35°	1327.5	1465.5	1632.3	1790.5	1918.4	1972.8	1940.6	1838.8	1749.0	1639.7	1517.7
37.5°	1245.9	1398.3	1565.6	1730.8	1846.7	1861.0	1781.1	1673.9	1547.2	1418.9	1275.4
40°	1184.8	1346.3	1518.4	1685.3	1787.8	1773.0	1671.2	1553.3	1402.5	1245.7	1112.4
42.5°	1130.0	1291.5	1466.9	1630.6	1712.7	1672.2	1553.3	1408.6	1246.5	1098.8	976.7
45°	1035.3	1201.4	1381.1	1539.2	1586.1	1513.1	1355.6	1194.8	1035.3	912.0	815.5
47.5°	943.3	1107.6	1285.5	1424.5	1441.1	1342.8	1170.7	1005.3	868.2	767.8	699.7
50°	875.9	1040.7	1216.9	1340.9	1335.4	1216.9	1040.0	882.5	767.9	686.8	641.3
52.5°	815.3	971.0	1140.2	1252.9	1224.6	1095.2	926.3	786.6	692.4	628.9	587.6
55°	721.0	865.1	1025.9	1116.4	1064.1	920.7	778.0	665.4	595.7	548.2	515.9
57.5°	627.4	762.5	900.2	955.9	898.2	765.8	646.8	565.1	512.7	477.5	456.6
60°	569.6	687.5	810.1	858.4	789.4	671.5	577.6	504.6	462.3	433.5	414.8
62.5°	511.7	617.3	733.0	759.2	696.1	596.4	513.3	452.6	417.9	392.2	374.6
65°	432.9	519.3	607.1	624.5	566.2	489.2	423.5	384.0	353.1	334.4	320.3
67.5°	355.0	424.4	486.7	500.7	449.6	396.2	348.7	314.3	293.4	277.8	265.9
70°	308.9	363.9	414.8	426.2	385.3	337.7	301.5	274.1	255.3	241.9	230.6
72.5°	260.1	306.0	348.3	356.0	322.6	286.3	256.5	234.9	218.3	209.7	198.8
75°	199.0	225.8	258.6	260.6	238.5	216.4	193.7	179.6	170.9	160.2	154.8
77.5°	140.5	161.5	180.3	183.9	170.8	155.7	143.0	131.9	124.5	119.6	114.6
80°	107.2	124.0	132.0	136.7	127.3	116.6	109.3	101.9	97.1	93.8	90.5
82.5°	76.6	86.9	94.5	98.1	93.0	86.5	79.2	75.0	71.4	68.6	67.5
85°	38.9	43.5	48.3	49.6	48.3	45.5	41.5	41.5	39.5	38.9	38.9
87.5°	14.1	16.8	17.4	19.5	18.9	19.2	19.6	19.5	19.3	19.0	18.7
90°	3.7	6.4	9.0	11.6	13.8	15.8	17.7	19.6	21.5	22.6	23.8
92.5°	21.4	21.2	21.0	20.7	21.1	22.0	23.0	23.9	24.9	25.5	26.2
95°	61.9	54.0	46.2	38.3	35.1	36.9	38.6	40.2	41.9	43.0	44.2
97.5°	116.3	94.1	71.9	49.8	40.6	44.4	48.3	52.2	56.0	57.0	58.0
100°	157.3	124.6	92.0	59.3	44.9	49.0	53.1	57.2	61.2	63.1	65.0
102.5°	239.7	232.9	225.9	219.0	198.6	164.7	130.8	96.8	62.9	65.4	67.9
105°	333.6	340.6	347.8	355.0	326.0	260.8	195.7	130.6	65.4	68.1	70.7
107.5°	422.9	428.7	434.4	440.3	404.1	326.0	247.9	169.8	91.7	89.0	86.3
110°	480.6	485.6	490.6	495.6	463.6	394.7	325.8	256.8	187.8	164.0	140.2





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	535.0	539.4	543.8	548.3	542.0	524.9	508.0	490.9	473.8	386.9	299.8
115°	621.4	625.4	629.4	633.5	638.5	644.5	650.5	656.4	662.4	551.9	441.4
117.5°	699.3	703.9	708.4	713.0	717.2	721.3	725.5	729.5	733.7	706.9	680.2
120°	755.1	758.6	762.2	765.8	769.7	774.1	778.3	782.6	786.9	789.7	792.6
122.5°	803.3	807.1	810.9	814.7	818.9	823.5	828.2	832.9	837.6	839.3	841.0
125°	875.9	879.0	882.1	885.1	889.0	893.5	898.1	902.6	907.2	908.8	910.5
127.5°	942.6	946.0	949.5	952.9	956.2	959.7	963.0	966.4	969.9	972.3	974.7
130°	985.0	988.9	992.7	996.4	999.7	1002.3	1004.9	1007.5	1010.2	1012.8	1015.4
132.5°	1027.4	1030.7	1033.9	1037.1	1040.1	1042.7	1045.3	1047.9	1050.6	1052.8	1055.0
135°	1083.8	1087.6	1091.5	1095.2	1098.2	1100.3	1102.5	1104.7	1106.8	1109.2	1111.6
137.5°	1139.1	1141.8	1144.5	1147.1	1149.6	1152.2	1154.6	1157.0	1159.4	1161.7	1164.1
140°	1175.3	1177.2	1179.1	1181.0	1183.3	1185.9	1188.5	1191.1	1193.8	1195.9	1198.1
142.5°	1206.0	1207.7	1209.4	1211.1	1213.6	1216.5	1219.5	1222.5	1225.6	1227.5	1229.4
145°	1252.5	1252.3	1252.1	1251.8	1253.7	1257.8	1261.8	1266.0	1270.0	1271.6	1273.3
147.5°	1294.2	1293.3	1292.4	1291.5	1293.0	1297.1	1301.0	1305.0	1309.1	1310.3	1311.5
150°	1320.9	1319.3	1317.6	1316.0	1317.0	1320.8	1324.6	1328.5	1332.2	1333.7	1335.1
152.5°	1343.9	1342.0	1340.2	1338.4	1339.2	1342.8	1346.5	1350.1	1353.7	1355.1	1356.6
155°	1377.4	1375.2	1373.0	1370.9	1371.3	1374.1	1377.0	1379.9	1382.7	1384.1	1385.5
157.5°	1404.1	1402.3	1400.5	1398.7	1398.8	1400.8	1402.7	1404.7	1406.7	1408.4	1410.0
160°	1420.0	1418.5	1417.0	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4	1422.8	1424.2
162.5°	1433.7	1432.2	1430.8	1429.4	1429.3	1430.5	1431.8	1433.0	1434.2	1435.8	1437.4
165°	1452.1	1450.7	1449.3	1447.8	1447.4	1448.1	1449.0	1449.7	1450.4	1452.0	1453.7
167.5°	1465.9	1464.4	1463.0	1461.6	1461.2	1461.9	1462.5	1463.2	1463.9	1465.5	1467.2
170°	1473.6	1472.2	1470.8	1469.4	1468.8	1469.4	1469.8	1470.3	1470.8	1472.4	1474.1
172.5°	1478.7	1477.3	1475.9	1474.5	1474.0	1474.5	1474.9	1475.4	1475.9	1477.5	1479.3
175°	1485.2	1483.5	1481.9	1480.2	1479.6	1480.1	1480.6	1481.0	1481.5	1483.2	1484.8
177.5°	1486.6	1485.2	1483.9	1482.6	1482.0	1482.2	1482.4	1482.6	1482.8	1484.1	1485.4
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1808.5	1815.9	1815.9	1817.1	1825.6	1824.5	1824.0
5°	1924.5	1935.9	1937.2	1949.3	1957.3	1954.7	1947.3
7.5°	2034.0	2055.2	2071.2	2080.2	2090.8	2097.4	2094.5
10°	2120.8	2151.6	2170.4	2183.1	2198.6	2210.0	2205.9
12.5°	2199.7	2236.3	2262.1	2283.9	2285.9	2300.6	2290.7
15°	2322.6	2361.4	2365.4	2381.5	2394.3	2392.9	2393.6
17.5°	2363.2	2375.6	2378.1	2378.5	2378.7	2374.0	2363.8
20°	2348.6	2344.0	2332.6	2323.9	2308.5	2306.4	2293.1
22.5°	2280.1	2265.2	2236.6	2217.8	2193.7	2187.5	2183.7
25°	2145.0	2112.1	2066.6	2023.0	2010.9	1987.5	1994.2
27.5°	1959.6	1908.4	1859.1	1823.7	1791.7	1756.6	1766.7
30°	1829.4	1771.7	1702.0	1648.4	1614.3	1580.7	1574.7
32.5°	1673.9	1589.4	1511.8	1464.5	1412.2	1391.0	1367.8
35°	1405.8	1323.4	1246.4	1180.0	1141.9	1112.4	1085.5
37.5°	1164.8	1069.9	1007.6	953.9	926.3	909.5	913.7
40°	1015.2	932.1	886.6	845.7	820.2	808.1	810.8
42.5°	894.0	831.8	794.4	766.3	748.3	741.6	740.0
45°	756.5	721.6	690.8	674.8	666.1	658.7	654.0
47.5°	662.7	634.3	616.9	607.3	599.8	592.2	592.1
50°	606.4	587.6	575.6	565.5	559.6	554.2	558.9
52.5°	563.5	546.4	534.3	525.3	523.1	518.3	518.2
55°	499.9	486.5	477.8	469.7	465.7	463.0	459.7
57.5°	442.0	429.3	421.2	416.2	408.5	405.8	404.8
60°	400.7	390.6	382.6	375.9	372.5	367.2	367.2
62.5°	362.6	352.6	345.1	340.0	334.5	332.3	333.0
65°	307.6	299.5	292.2	286.8	285.5	281.4	282.8
67.5°	256.9	251.6	243.8	240.9	238.3	236.1	234.5
70°	223.2	217.8	213.8	209.7	207.7	207.7	207.7
72.5°	194.7	188.3	185.9	180.8	182.0	179.9	177.7
75°	150.8	146.7	144.7	142.7	139.4	139.4	139.4
77.5°	111.0	109.8	107.3	105.2	104.4	103.7	104.0
80°	85.7	85.1	83.7	83.7	82.4	81.8	80.4
82.5°	65.9	64.2	63.4	62.8	62.6	62.4	62.2
85°	37.6	36.2	36.2	36.9	35.5	35.5	36.2
87.5°	19.5	19.7	19.4	19.5	20.1	19.6	19.7
90°	25.0	26.3	27.1	27.6	28.1	28.5	29.0
92.5°	26.8	27.4	27.9	28.2	28.4	28.7	29.0
95°	45.4	46.7	47.2	46.9	46.7	46.4	46.2
97.5°	58.9	59.9	60.5	60.8	61.1	61.3	61.6
100°	67.0	68.9	70.0	70.5	71.0	71.5	71.9
102.5°	70.4	72.8	74.4	75.0	75.7	76.4	77.1
105°	73.3	75.9	77.8	78.8	79.7	80.6	81.6
107.5°	83.6	81.0	80.2	81.1	82.0	83.0	83.9
110°	116.3	92.4	81.0	81.9	82.9	83.8	84.8



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	212.8	125.7	82.6	83.4	84.1	84.9	85.6
115°	331.0	220.6	156.7	139.6	122.4	105.2	88.1
117.5°	653.5	626.8	585.2	528.8	472.3	415.9	359.4
120°	795.5	798.4	783.7	751.4	719.2	687.0	654.9
122.5°	842.7	844.4	842.1	836.0	829.7	823.4	817.2
125°	912.1	913.8	915.0	915.7	916.5	917.2	917.9
127.5°	977.1	979.6	980.9	981.0	981.2	981.3	981.4
130°	1018.0	1020.7	1021.9	1021.7	1021.4	1021.2	1021.0
132.5°	1057.3	1059.6	1060.6	1060.3	1060.1	1059.9	1059.6
135°	1114.0	1116.3	1117.3	1116.8	1116.3	1115.9	1115.4
137.5°	1166.4	1168.7	1169.5	1168.7	1167.9	1167.1	1166.3
140°	1200.2	1202.3	1202.9	1201.6	1200.4	1199.2	1198.1
142.5°	1231.4	1233.3	1233.8	1232.5	1231.3	1230.2	1229.0
145°	1275.0	1276.7	1276.9	1275.8	1274.6	1273.3	1272.1
147.5°	1312.8	1314.0	1314.1	1313.1	1312.1	1311.1	1310.1
150°	1336.6	1338.0	1338.1	1336.9	1335.7	1334.5	1333.3
152.5°	1358.1	1359.5	1359.4	1357.8	1356.2	1354.6	1353.1
155°	1387.0	1388.5	1388.2	1386.2	1384.4	1382.5	1380.6
157.5°	1411.6	1413.2	1413.1	1411.3	1409.4	1407.5	1405.6
160°	1425.6	1427.0	1426.9	1425.3	1423.6	1422.0	1420.3
162.5°	1439.1	1440.8	1440.5	1438.5	1436.4	1434.3	1432.3
165°	1455.3	1457.0	1457.0	1455.3	1453.7	1452.0	1450.4
167.5°	1468.8	1470.6	1470.3	1468.1	1466.0	1463.9	1461.7
170°	1475.7	1477.4	1477.1	1475.0	1472.9	1470.8	1468.5
172.5°	1480.9	1482.6	1482.4	1480.2	1478.0	1475.9	1473.7
175°	1486.5	1488.1	1487.8	1485.4	1483.0	1480.7	1478.2
177.5°	1486.7	1488.1	1487.9	1486.2	1484.5	1482.8	1481.1
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6

(END OF REPORT)