

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: P331729-840

Luminaire Tested: **SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331729-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 865 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1080 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

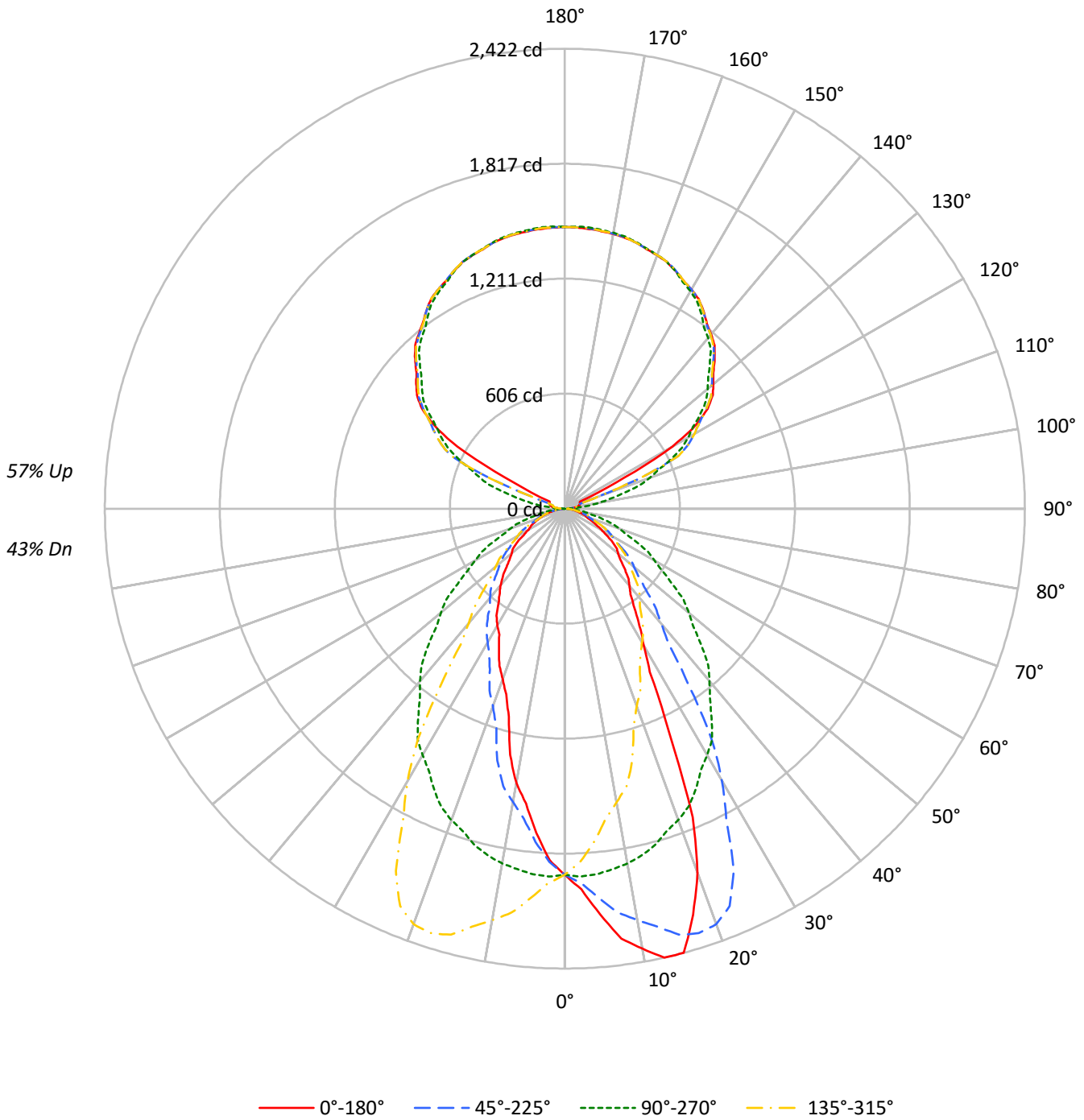
Lumens per Lamp: N/A
Luminaire Lumens: 7684.2 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

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	97	97	97	97	80	80	80	64	64	64	50	50	50	43
1	97	93	89	86	89	85	82	79	71	69	67	57	56	55	45	44	44	38
2	89	82	76	71	81	75	70	66	63	59	56	51	49	47	41	39	38	33
3	82	73	66	60	74	67	61	56	56	52	48	46	43	40	37	35	33	29
4	75	65	57	52	68	60	53	48	50	46	42	42	38	35	33	31	29	25
5	69	58	50	45	63	54	47	42	45	40	37	38	34	31	30	28	26	23
6	64	52	45	39	58	49	42	37	41	36	32	34	31	28	28	25	23	20
7	59	48	40	35	54	44	37	33	38	32	29	32	28	25	26	23	21	18
8	55	43	36	31	51	40	34	29	35	29	26	29	25	22	24	21	19	17
9	51	40	33	28	47	37	31	26	32	27	23	27	23	20	22	19	17	15
10	48	37	30	25	44	34	28	24	29	25	21	25	21	19	21	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	31136	31136	31136	31136
5°	34775	31331	27780	31331
10°	38581	31111	24079	31111
15°	40478	30654	18974	30654
20°	35093	29979	16417	29979
25°	23013	29054	14658	29054
30°	15491	27932	13267	27932
35°	12546	26518	11964	26518
40°	11158	24982	11072	24982
45°	10097	23178	9882	23178
50°	9191	21391	9156	21391
55°	8639	19409	8526	19409
60°	7227	17589	7143	17589
65°	6094	15973	6911	15973
70°	5632	14266	6515	14266
75°	5265	12414	6014	12414
80°	4863	10219	5365	10219
85°	4465	8058	4705	8058



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.8	2.4
10°-20°	509.4	6.6
20°-30°	656.4	8.5
30°-40°	623.8	8.1
40°-50°	534.4	7.0
50°-60°	406.9	5.3
60°-70°	257.2	3.3
70°-80°	128.5	1.7
80°-90°	37.1	0.5
90°-100°	49.5	0.6
100°-110°	181.5	2.4
110°-120°	485.1	6.3
120°-130°	800.8	10.4
130°-140°	851.6	11.1
140°-150°	791.6	10.3
150°-160°	636.4	8.3
160°-170°	410.1	5.3
170°-180°	141.2	1.8
0°-30°	1348.5	17.5
0°-40°	1972.3	25.7
0°-60°	2913.6	37.9
0°-90°	3336.4	43.4
90°-120°	716.1	9.3
90°-150°	3160.1	41.1
90°-180°	4348.0	56.6
0°-180°	7684.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1928	1928	1928	1928	1928	
5°	2146	1933	1714	1933	2146	212
15°	2422	1834	1135	1834	2422	653
25°	1292	1631	823	1631	1292	613
35°	636	1345	607	1345	636	407
45°	442	1015	433	1015	442	342
55°	307	690	303	690	307	269
65°	160	418	181	418	160	162
75°	84	199	96	199	84	90
85°	24	44	25	44	24	27
90°	29	1	29	1	29	14
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°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	2006.7	2008.3	2009.9	2006.1	2006.1	2003.0	1996.0	1990.6	1975.6	1973.5	1973.5
5°	2145.6	2144.1	2146.9	2138.2	2126.1	2123.4	2110.7	2094.0	2076.5	2057.1	2053.1
7.5°	2283.5	2281.5	2276.1	2274.7	2265.4	2245.2	2224.7	2202.9	2173.9	2145.7	2131.4
10°	2353.2	2375.3	2362.0	2338.4	2343.2	2311.7	2294.9	2266.1	2242.0	2199.8	2190.4
12.5°	2421.9	2430.5	2426.3	2413.0	2407.0	2385.1	2362.5	2337.4	2292.9	2255.0	2222.0
15°	2421.6	2434.3	2437.6	2433.7	2437.0	2435.7	2423.6	2402.8	2364.0	2322.4	2286.2
17.5°	2242.8	2251.7	2273.6	2288.5	2307.2	2346.9	2366.5	2374.1	2368.3	2344.6	2319.2
20°	2042.4	2027.6	2089.2	2120.7	2147.5	2214.5	2272.2	2294.3	2329.8	2329.2	2322.4
22.5°	1758.2	1761.7	1820.2	1857.5	1935.8	2002.8	2068.5	2151.7	2220.4	2265.8	2292.4
25°	1291.8	1317.4	1375.6	1426.5	1513.7	1638.3	1751.5	1882.9	2006.8	2104.7	2197.8
27.5°	970.3	972.1	1018.3	1065.4	1117.1	1219.2	1361.8	1518.6	1695.4	1841.2	2008.9
30°	830.9	826.9	846.3	875.0	919.3	998.4	1105.6	1259.7	1435.9	1655.7	1851.4
32.5°	732.3	732.5	747.1	768.4	805.2	858.5	931.9	1057.1	1223.7	1439.7	1669.1
35°	636.5	635.9	646.6	662.0	677.4	711.6	761.8	827.5	942.1	1143.8	1378.3
37.5°	567.9	570.9	576.1	585.7	602.8	621.8	652.0	696.1	777.7	897.0	1094.1
40°	529.4	530.7	538.1	546.1	556.1	570.9	595.7	631.2	690.8	786.0	930.0
42.5°	493.9	495.3	500.5	508.1	515.9	530.7	551.2	581.9	630.3	704.5	823.3
45°	442.2	442.2	447.0	450.3	459.0	472.4	489.2	514.6	548.1	603.1	682.2
47.5°	393.7	393.8	397.0	402.7	408.2	418.7	435.2	456.0	480.3	522.8	590.4
50°	365.9	366.5	368.5	373.2	376.6	386.0	398.7	416.8	442.2	475.0	531.4
52.5°	343.4	343.0	345.5	347.5	349.8	356.5	366.0	381.9	404.8	433.2	479.9
55°	306.9	304.2	308.2	311.5	313.6	316.3	321.6	331.6	351.1	375.3	410.1
57.5°	261.4	260.2	263.1	266.1	272.5	279.6	284.3	290.6	300.7	318.0	352.5
60°	223.8	223.8	229.8	231.9	239.2	248.6	258.0	263.4	273.4	284.8	310.2
62.5°	190.6	191.1	193.9	195.9	200.1	211.6	224.7	236.5	246.0	256.9	273.8
65°	159.5	160.8	160.8	162.2	164.8	167.5	172.9	182.3	199.0	214.4	227.1
67.5°	135.3	135.7	136.1	137.5	138.1	141.1	143.3	147.4	151.3	165.9	181.7
70°	119.3	121.3	120.6	122.0	122.6	123.9	126.6	128.7	134.7	138.0	147.4
72.5°	104.2	105.7	105.6	106.4	108.2	108.5	110.6	112.6	116.4	119.3	124.3
75°	84.4	83.7	84.4	85.7	86.4	87.2	87.2	89.8	91.8	94.5	97.9
77.5°	65.1	65.8	65.6	65.8	65.9	67.2	67.1	68.2	70.2	71.6	73.2
80°	52.3	52.9	52.3	52.9	53.6	54.2	53.6	54.2	56.2	57.7	57.7
82.5°	40.5	40.6	41.0	41.1	41.3	41.4	42.3	42.5	43.9	43.7	44.2
85°	24.1	23.4	23.4	23.4	24.1	24.7	24.1	24.1	24.7	24.7	24.7
87.5°	14.3	14.8	14.7	14.6	14.5	14.3	14.1	14.4	13.6	13.9	13.0
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°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	1974.5	1970.2	1966.5	1956.8	1952.0	1941.3	1939.6	1939.1	1925.2	1911.8	1908.0
5°	2042.4	2031.6	2015.5	1996.8	1977.3	1957.2	1943.8	1933.1	1906.3	1880.9	1866.1
7.5°	2110.7	2087.6	2059.9	2024.4	1994.8	1961.6	1936.8	1914.7	1876.7	1840.3	1815.7
10°	2161.6	2124.0	2087.2	2038.3	2000.1	1962.6	1927.7	1897.6	1854.7	1806.4	1772.3
12.5°	2193.2	2151.9	2101.1	2053.4	2003.9	1956.1	1909.6	1870.8	1820.4	1770.6	1729.9
15°	2235.9	2191.7	2130.1	2061.7	1998.1	1935.8	1882.2	1833.9	1768.3	1708.6	1659.0
17.5°	2271.0	2210.1	2143.9	2064.9	1991.2	1912.0	1842.9	1781.3	1708.2	1636.3	1577.8
20°	2282.2	2221.9	2145.6	2066.5	1979.3	1886.2	1811.8	1744.8	1666.4	1588.0	1521.1
22.5°	2275.2	2228.4	2143.3	2048.7	1959.5	1862.1	1778.1	1700.3	1613.4	1533.4	1455.6
25°	2228.0	2211.8	2131.4	2028.2	1926.4	1813.2	1716.0	1630.9	1531.8	1446.0	1361.5
27.5°	2117.7	2152.3	2102.5	1992.6	1879.4	1758.0	1648.7	1551.9	1449.0	1352.4	1268.3
30°	2011.6	2091.2	2069.8	1967.9	1841.3	1722.0	1599.4	1498.2	1388.4	1289.2	1206.1
32.5°	1866.2	1997.9	2018.9	1933.7	1802.7	1671.6	1543.2	1442.5	1327.8	1223.2	1142.3
35°	1635.0	1831.9	1922.4	1868.1	1736.8	1595.4	1462.7	1345.4	1230.2	1127.0	1046.6
37.5°	1359.0	1627.3	1778.1	1781.9	1661.3	1514.3	1369.9	1253.4	1135.5	1034.2	947.2
40°	1179.9	1470.8	1667.1	1710.6	1608.8	1450.0	1303.9	1185.3	1070.1	970.9	871.1
42.5°	1019.2	1308.9	1550.2	1626.0	1545.0	1387.3	1240.7	1116.7	1004.7	910.9	808.9
45°	824.2	1077.4	1343.4	1478.8	1433.9	1287.9	1133.1	1015.1	909.9	828.9	731.0
47.5°	695.3	873.7	1131.1	1314.2	1313.4	1180.1	1027.8	914.9	817.3	741.3	662.2
50°	621.8	777.3	995.0	1202.7	1220.1	1108.2	963.5	851.6	760.5	680.8	617.1
52.5°	555.8	684.0	879.8	1078.9	1128.5	1031.6	891.2	787.9	699.4	626.1	571.6
55°	469.7	568.9	717.6	903.9	979.0	910.6	786.0	689.5	617.8	556.1	509.3
57.5°	397.4	471.7	591.1	741.0	828.5	785.5	682.7	604.3	542.9	487.2	450.1
60°	351.7	412.7	513.9	639.2	735.7	705.6	617.8	544.7	492.5	444.2	409.4
62.5°	308.9	361.3	448.0	549.7	638.1	625.7	554.0	492.7	447.0	402.9	373.4
65°	248.6	286.8	354.5	434.2	505.2	511.3	459.7	418.1	377.3	342.4	316.3
67.5°	197.9	222.9	270.5	337.7	390.9	409.9	378.4	346.7	314.3	287.3	264.7
70°	166.8	186.9	221.8	276.1	325.0	345.1	327.0	302.2	274.1	252.0	232.5
72.5°	135.2	154.8	180.5	220.4	262.3	284.0	277.7	259.8	237.0	218.7	200.4
75°	101.9	107.9	125.3	152.1	184.9	203.7	208.4	199.0	180.9	166.8	156.1
77.5°	75.3	79.0	87.3	101.3	122.8	139.5	146.3	145.2	132.8	124.6	114.6
80°	60.3	62.3	66.3	72.4	88.5	105.2	109.9	109.9	101.2	97.9	87.8
82.5°	45.8	47.3	49.7	53.0	60.6	75.1	80.4	81.5	75.9	71.6	63.6
85°	26.2	25.4	26.8	28.8	30.2	34.1	42.2	43.5	42.2	36.9	34.8
87.5°	12.6	12.8	12.4	11.4	11.4	11.4	13.6	15.8	14.1	13.0	12.5
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: P331729-840

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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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	1901.1	1897.3	1890.4	1879.7	1873.2	1862.0	1854.4	1858.8	1859.8	1858.8	1857.6
5°	1850.0	1835.9	1816.5	1797.8	1780.3	1761.6	1750.8	1746.2	1736.8	1731.4	1728.8
7.5°	1788.3	1764.0	1736.5	1703.8	1676.1	1647.0	1632.1	1624.8	1605.6	1595.1	1586.0
10°	1742.1	1703.9	1676.5	1633.6	1607.5	1569.2	1543.2	1543.8	1517.6	1502.9	1492.2
12.5°	1691.2	1649.3	1603.6	1565.0	1528.6	1497.9	1466.5	1453.7	1426.0	1411.8	1382.8
15°	1606.8	1557.9	1509.6	1457.3	1420.5	1372.9	1327.4	1271.7	1226.9	1188.0	1177.3
17.5°	1514.6	1454.0	1405.6	1344.2	1281.1	1201.1	1148.3	1116.0	1088.9	1068.4	1053.2
20°	1451.4	1389.7	1338.1	1245.7	1160.5	1106.3	1067.4	1042.6	1014.5	992.4	980.3
22.5°	1384.8	1320.5	1250.2	1147.0	1080.7	1037.1	1002.5	974.0	954.9	937.7	926.7
25°	1290.5	1220.1	1104.3	1033.2	979.6	934.0	909.9	892.5	872.4	849.0	838.2
27.5°	1190.8	1078.9	995.7	942.9	891.7	862.1	840.4	814.4	796.4	785.9	774.7
30°	1116.3	1004.4	939.4	881.8	845.6	812.7	787.3	772.5	755.2	737.1	729.7
32.5°	1033.2	943.8	881.5	833.5	796.8	768.8	748.7	724.9	712.3	701.1	685.7
35°	930.0	862.3	805.4	766.6	731.7	708.9	685.5	671.4	648.6	639.2	633.2
37.5°	842.6	784.0	741.4	700.4	672.9	647.6	633.3	611.0	601.1	588.0	575.3
40°	793.3	735.7	694.9	661.4	630.6	611.8	593.7	575.6	560.9	554.8	539.4
42.5°	743.0	696.1	655.2	618.4	597.8	577.9	555.1	541.8	526.5	516.7	507.3
45°	673.4	631.9	597.0	566.8	544.1	523.3	508.6	486.5	477.8	458.3	450.3
47.5°	612.3	573.7	540.5	511.8	489.6	476.1	454.4	437.2	423.2	411.3	400.9
50°	568.9	536.7	504.5	479.1	459.0	439.6	417.5	408.7	387.3	381.2	375.3
52.5°	529.2	498.7	469.2	444.2	424.1	405.3	385.8	374.5	359.9	354.0	349.5
55°	473.7	444.2	416.1	393.9	373.9	354.5	342.4	328.3	321.6	316.9	311.5
57.5°	418.0	391.4	369.9	347.5	327.3	311.8	297.9	289.4	282.5	276.3	269.9
60°	382.6	357.1	337.7	316.9	296.2	283.5	272.7	262.7	254.6	245.2	242.6
62.5°	345.1	322.9	305.0	284.8	266.7	255.0	244.8	235.3	225.7	212.0	208.2
65°	293.5	276.1	257.3	240.5	224.5	213.1	198.3	187.6	183.6	182.3	181.6
67.5°	246.8	230.4	214.3	197.1	182.5	172.0	164.4	162.8	160.0	159.2	157.3
70°	215.7	200.4	184.3	168.1	154.1	152.1	149.5	146.7	143.4	142.1	140.7
72.5°	187.8	172.0	155.8	143.0	136.9	134.4	131.7	129.1	126.7	125.4	124.6
75°	144.1	129.4	118.6	113.9	110.6	108.6	104.5	102.5	101.2	99.2	98.5
77.5°	103.7	95.4	90.5	87.6	84.0	81.9	79.6	77.6	76.1	75.7	74.6
80°	79.1	75.0	71.7	67.7	66.3	63.6	63.0	61.0	61.6	59.7	59.7
82.5°	61.4	56.2	53.4	51.6	50.3	48.1	47.5	46.5	46.7	45.1	45.1
85°	31.5	30.2	28.8	27.5	27.5	25.4	26.2	25.4	25.4	24.1	23.4
87.5°	12.5	12.4	11.7	12.1	12.5	12.3	12.6	12.3	12.5	12.7	12.4
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: P331729-840

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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: P331729-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	1851.8	1852.8	1851.2	1852.3	1851.2	1852.8	1851.8	1857.6	1858.8	1859.8	1858.8
5°	1725.4	1717.4	1716.0	1714.0	1716.0	1717.4	1725.4	1728.8	1731.4	1736.8	1746.2
7.5°	1574.5	1573.3	1569.9	1565.3	1569.9	1573.3	1574.5	1586.0	1595.1	1605.6	1624.8
10°	1477.4	1474.1	1473.5	1468.7	1473.5	1474.1	1477.4	1492.2	1502.9	1517.6	1543.8
12.5°	1363.8	1342.2	1340.0	1328.3	1340.0	1342.2	1363.8	1382.8	1411.8	1426.0	1453.7
15°	1161.2	1157.2	1143.8	1135.1	1143.8	1157.2	1161.2	1177.3	1188.0	1226.9	1271.7
17.5°	1045.4	1032.3	1028.1	1026.2	1028.1	1032.3	1045.4	1053.2	1068.4	1088.9	1116.0
20°	970.9	958.9	956.8	955.5	956.8	958.9	970.9	980.3	992.4	1014.5	1042.6
22.5°	919.5	906.9	901.6	897.6	901.6	906.9	919.5	926.7	937.7	954.9	974.0
25°	831.5	826.9	824.2	822.8	824.2	826.9	831.5	838.2	849.0	872.4	892.5
27.5°	762.8	752.5	750.4	747.0	750.4	752.5	762.8	774.7	785.9	796.4	814.4
30°	723.7	720.3	715.6	711.6	715.6	720.3	723.7	729.7	737.1	755.2	772.5
32.5°	677.5	674.8	670.6	668.7	670.6	674.8	677.5	685.7	701.1	712.3	724.9
35°	626.5	617.1	613.1	607.0	613.1	617.1	626.5	633.2	639.2	648.6	671.4
37.5°	572.5	567.5	561.9	563.9	561.9	567.5	572.5	575.3	588.0	601.1	611.0
40°	530.7	527.4	526.0	525.3	526.0	527.4	530.7	539.4	554.8	560.9	575.6
42.5°	497.5	488.2	484.7	484.5	484.7	488.2	497.5	507.3	516.7	526.5	541.8
45°	447.0	438.2	432.2	432.8	432.2	438.2	447.0	450.3	458.3	477.8	486.5
47.5°	395.2	395.0	391.2	392.4	391.2	395.0	395.2	400.9	411.3	423.2	437.2
50°	370.5	366.5	363.9	364.5	363.9	366.5	370.5	375.3	381.2	387.3	408.7
52.5°	347.0	343.5	341.3	344.2	341.3	343.5	347.0	349.5	354.0	359.9	374.5
55°	308.2	304.2	303.6	302.9	303.6	304.2	308.2	311.5	316.9	321.6	328.3
57.5°	265.0	262.3	258.2	256.5	258.2	262.3	265.0	269.9	276.3	282.5	289.4
60°	233.9	228.5	221.8	221.2	221.8	228.5	233.9	242.6	245.2	254.6	262.7
62.5°	205.4	204.4	203.0	202.9	203.0	204.4	205.4	208.2	212.0	225.7	235.3
65°	180.3	179.6	180.3	180.9	180.3	179.6	180.3	181.6	182.3	183.6	187.6
67.5°	157.0	155.8	154.6	155.2	154.6	155.8	157.0	157.3	159.2	160.0	162.8
70°	139.4	138.7	138.0	138.0	138.0	138.7	139.4	140.7	142.1	143.4	146.7
72.5°	122.2	122.1	121.4	120.9	121.4	122.1	122.2	124.6	125.4	126.7	129.1
75°	97.9	96.4	96.4	96.4	96.4	96.4	97.9	98.5	99.2	101.2	102.5
77.5°	74.5	73.8	73.2	72.6	73.2	73.8	74.5	74.6	75.7	76.1	77.6
80°	59.0	58.3	57.7	57.7	57.7	58.3	59.0	59.7	59.7	61.6	61.0
82.5°	45.0	44.3	44.2	43.7	44.2	44.3	45.0	45.1	45.1	46.7	46.5
85°	24.1	24.7	24.1	25.4	24.1	24.7	24.1	23.4	24.1	25.4	25.4
87.5°	12.5	12.0	12.6	12.2	12.6	12.0	12.5	12.4	12.7	12.5	12.3
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: P331729-840

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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°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	1854.4	1862.0	1873.2	1879.7	1890.4	1897.3	1901.1	1908.0	1911.8	1925.2	1939.1
5°	1750.8	1761.6	1780.3	1797.8	1816.5	1835.9	1850.0	1866.1	1880.9	1906.3	1933.1
7.5°	1632.1	1647.0	1676.1	1703.8	1736.5	1764.0	1788.3	1815.7	1840.3	1876.7	1914.7
10°	1543.2	1569.2	1607.5	1633.6	1676.5	1703.9	1742.1	1772.3	1806.4	1854.7	1897.6
12.5°	1466.5	1497.9	1528.6	1565.0	1603.6	1649.3	1691.2	1729.9	1770.6	1820.4	1870.8
15°	1327.4	1372.9	1420.5	1457.3	1509.6	1557.9	1606.8	1659.0	1708.6	1768.3	1833.9
17.5°	1148.3	1201.1	1281.1	1344.2	1405.6	1454.0	1514.6	1577.8	1636.3	1708.2	1781.3
20°	1067.4	1106.3	1160.5	1245.7	1338.1	1389.7	1451.4	1521.1	1588.0	1666.4	1744.8
22.5°	1002.5	1037.1	1080.7	1147.0	1250.2	1320.5	1384.8	1455.6	1533.4	1613.4	1700.3
25°	909.9	934.0	979.6	1033.2	1104.3	1220.1	1290.5	1361.5	1446.0	1531.8	1630.9
27.5°	840.4	862.1	891.7	942.9	995.7	1078.9	1190.8	1268.3	1352.4	1449.0	1551.9
30°	787.3	812.7	845.6	881.8	939.4	1004.4	1116.3	1206.1	1289.2	1388.4	1498.2
32.5°	748.7	768.8	796.8	833.5	881.5	943.8	1033.2	1142.3	1223.2	1327.8	1442.5
35°	685.5	708.9	731.7	766.6	805.4	862.3	930.0	1046.6	1127.0	1230.2	1345.4
37.5°	633.3	647.6	672.9	700.4	741.4	784.0	842.6	947.2	1034.2	1135.5	1253.4
40°	593.7	611.8	630.6	661.4	694.9	735.7	793.3	871.1	970.9	1070.1	1185.3
42.5°	555.1	577.9	597.8	618.4	655.2	696.1	743.0	808.9	910.9	1004.7	1116.7
45°	508.6	523.3	544.1	566.8	597.0	631.9	673.4	731.0	828.9	909.9	1015.1
47.5°	454.4	476.1	489.6	511.8	540.5	573.7	612.3	662.2	741.3	817.3	914.9
50°	417.5	439.6	459.0	479.1	504.5	536.7	568.9	617.1	680.8	760.5	851.6
52.5°	385.8	405.3	424.1	444.2	469.2	498.7	529.2	571.6	626.1	699.4	787.9
55°	342.4	354.5	373.9	393.9	416.1	444.2	473.7	509.3	556.1	617.8	689.5
57.5°	297.9	311.8	327.3	347.5	369.9	391.4	418.0	450.1	487.2	542.9	604.3
60°	272.7	283.5	296.2	316.9	337.7	357.1	382.6	409.4	444.2	492.5	544.7
62.5°	244.8	255.0	266.7	284.8	305.0	322.9	345.1	373.4	402.9	447.0	492.7
65°	198.3	213.1	224.5	240.5	257.3	276.1	293.5	316.3	342.4	377.3	418.1
67.5°	164.4	172.0	182.5	197.1	214.3	230.4	246.8	264.7	287.3	314.3	346.7
70°	149.5	152.1	154.1	168.1	184.3	200.4	215.7	232.5	252.0	274.1	302.2
72.5°	131.7	134.4	136.9	143.0	155.8	172.0	187.8	200.4	218.7	237.0	259.8
75°	104.5	108.6	110.6	113.9	118.6	129.4	144.1	156.1	166.8	180.9	199.0
77.5°	79.6	81.9	84.0	87.6	90.5	95.4	103.7	114.6	124.6	132.8	145.2
80°	63.0	63.6	66.3	67.7	71.7	75.0	79.1	87.8	97.9	101.2	109.9
82.5°	47.5	48.1	50.3	51.6	53.4	56.2	61.4	63.6	71.6	75.9	81.5
85°	26.2	25.4	27.5	27.5	28.8	30.2	31.5	34.8	36.9	42.2	43.5
87.5°	12.6	12.3	12.5	12.1	11.7	12.4	12.5	12.5	13.0	14.1	15.8
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



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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



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	1939.6	1941.3	1952.0	1956.8	1966.5	1970.2	1974.5	1973.5	1973.5	1975.6	1990.6
5°	1943.8	1957.2	1977.3	1996.8	2015.5	2031.6	2042.4	2053.1	2057.1	2076.5	2094.0
7.5°	1936.8	1961.6	1994.8	2024.4	2059.9	2087.6	2110.7	2131.4	2145.7	2173.9	2202.9
10°	1927.7	1962.6	2000.1	2038.3	2087.2	2124.0	2161.6	2190.4	2199.8	2242.0	2266.1
12.5°	1909.6	1956.1	2003.9	2053.4	2101.1	2151.9	2193.2	2222.0	2255.0	2292.9	2337.4
15°	1882.2	1935.8	1998.1	2061.7	2130.1	2191.7	2235.9	2286.2	2322.4	2364.0	2402.8
17.5°	1842.9	1912.0	1991.2	2064.9	2143.9	2210.1	2271.0	2319.2	2344.6	2368.3	2374.1
20°	1811.8	1886.2	1979.3	2066.5	2145.6	2221.9	2282.2	2322.4	2329.2	2329.8	2294.3
22.5°	1778.1	1862.1	1959.5	2048.7	2143.3	2228.4	2275.2	2292.4	2265.8	2220.4	2151.7
25°	1716.0	1813.2	1926.4	2028.2	2131.4	2211.8	2228.0	2197.8	2104.7	2006.8	1882.9
27.5°	1648.7	1758.0	1879.4	1992.6	2102.5	2152.3	2117.7	2008.9	1841.2	1695.4	1518.6
30°	1599.4	1722.0	1841.3	1967.9	2069.8	2091.2	2011.6	1851.4	1655.7	1435.9	1259.7
32.5°	1543.2	1671.6	1802.7	1933.7	2018.9	1997.9	1866.2	1669.1	1439.7	1223.7	1057.1
35°	1462.7	1595.4	1736.8	1868.1	1922.4	1831.9	1635.0	1378.3	1143.8	942.1	827.5
37.5°	1369.9	1514.3	1661.3	1781.9	1778.1	1627.3	1359.0	1094.1	897.0	777.7	696.1
40°	1303.9	1450.0	1608.8	1710.6	1667.1	1470.8	1179.9	930.0	786.0	690.8	631.2
42.5°	1240.7	1387.3	1545.0	1626.0	1550.2	1308.9	1019.2	823.3	704.5	630.3	581.9
45°	1133.1	1287.9	1433.9	1478.8	1343.4	1077.4	824.2	682.2	603.1	548.1	514.6
47.5°	1027.8	1180.1	1313.4	1314.2	1131.1	873.7	695.3	590.4	522.8	480.3	456.0
50°	963.5	1108.2	1220.1	1202.7	995.0	777.3	621.8	531.4	475.0	442.2	416.8
52.5°	891.2	1031.6	1128.5	1078.9	879.8	684.0	555.8	479.9	433.2	404.8	381.9
55°	786.0	910.6	979.0	903.9	717.6	568.9	469.7	410.1	375.3	351.1	331.6
57.5°	682.7	785.5	828.5	741.0	591.1	471.7	397.4	352.5	318.0	300.7	290.6
60°	617.8	705.6	735.7	639.2	513.9	412.7	351.7	310.2	284.8	273.4	263.4
62.5°	554.0	625.7	638.1	549.7	448.0	361.3	308.9	273.8	256.9	246.0	236.5
65°	459.7	511.3	505.2	434.2	354.5	286.8	248.6	227.1	214.4	199.0	182.3
67.5°	378.4	409.9	390.9	337.7	270.5	222.9	197.9	181.7	165.9	151.3	147.4
70°	327.0	345.1	325.0	276.1	221.8	186.9	166.8	147.4	138.0	134.7	128.7
72.5°	277.7	284.0	262.3	220.4	180.5	154.8	135.2	124.3	119.3	116.4	112.6
75°	208.4	203.7	184.9	152.1	125.3	107.9	101.9	97.9	94.5	91.8	89.8
77.5°	146.3	139.5	122.8	101.3	87.3	79.0	75.3	73.2	71.6	70.2	68.2
80°	109.9	105.2	88.5	72.4	66.3	62.3	60.3	57.7	57.7	56.2	54.2
82.5°	80.4	75.1	60.6	53.0	49.7	47.3	45.8	44.2	43.7	43.9	42.5
85°	42.2	34.1	30.2	28.8	26.8	25.4	26.2	24.7	24.7	24.7	24.1
87.5°	13.6	11.4	11.4	11.4	12.4	12.8	12.6	13.0	13.9	13.6	14.4
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°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	1996.0	2003.0	2006.1	2006.1	2009.9	2008.3	2006.7
5°	2110.7	2123.4	2126.1	2138.2	2146.9	2144.1	2145.6
7.5°	2224.7	2245.2	2265.4	2274.7	2276.1	2281.5	2283.5
10°	2294.9	2311.7	2343.2	2338.4	2362.0	2375.3	2353.2
12.5°	2362.5	2385.1	2407.0	2413.0	2426.3	2430.5	2421.9
15°	2423.6	2435.7	2437.0	2433.7	2437.6	2434.3	2421.6
17.5°	2366.5	2346.9	2307.2	2288.5	2273.6	2251.7	2242.8
20°	2272.2	2214.5	2147.5	2120.7	2089.2	2027.6	2042.4
22.5°	2068.5	2002.8	1935.8	1857.5	1820.2	1761.7	1758.2
25°	1751.5	1638.3	1513.7	1426.5	1375.6	1317.4	1291.8
27.5°	1361.8	1219.2	1117.1	1065.4	1018.3	972.1	970.3
30°	1105.6	998.4	919.3	875.0	846.3	826.9	830.9
32.5°	931.9	858.5	805.2	768.4	747.1	732.5	732.3
35°	761.8	711.6	677.4	662.0	646.6	635.9	636.5
37.5°	652.0	621.8	602.8	585.7	576.1	570.9	567.9
40°	595.7	570.9	556.1	546.1	538.1	530.7	529.4
42.5°	551.2	530.7	515.9	508.1	500.5	495.3	493.9
45°	489.2	472.4	459.0	450.3	447.0	442.2	442.2
47.5°	435.2	418.7	408.2	402.7	397.0	393.8	393.7
50°	398.7	386.0	376.6	373.2	368.5	366.5	365.9
52.5°	366.0	356.5	349.8	347.5	345.5	343.0	343.4
55°	321.6	316.3	313.6	311.5	308.2	304.2	306.9
57.5°	284.3	279.6	272.5	266.1	263.1	260.2	261.4
60°	258.0	248.6	239.2	231.9	229.8	223.8	223.8
62.5°	224.7	211.6	200.1	195.9	193.9	191.1	190.6
65°	172.9	167.5	164.8	162.2	160.8	160.8	159.5
67.5°	143.3	141.1	138.1	137.5	136.1	135.7	135.3
70°	126.6	123.9	122.6	122.0	120.6	121.3	119.3
72.5°	110.6	108.5	108.2	106.4	105.6	105.7	104.2
75°	87.2	87.2	86.4	85.7	84.4	83.7	84.4
77.5°	67.1	67.2	65.9	65.8	65.6	65.8	65.1
80°	53.6	54.2	53.6	52.9	52.3	52.9	52.3
82.5°	42.3	41.4	41.3	41.1	41.0	40.6	40.5
85°	24.1	24.7	24.1	23.4	23.4	23.4	24.1
87.5°	14.1	14.3	14.5	14.6	14.7	14.8	14.3
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)