

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: P332980-840

Luminaire Tested: **SA4XXRDIP-C1020D1205U840-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332980-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXRDIP-C1020D1205U840-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

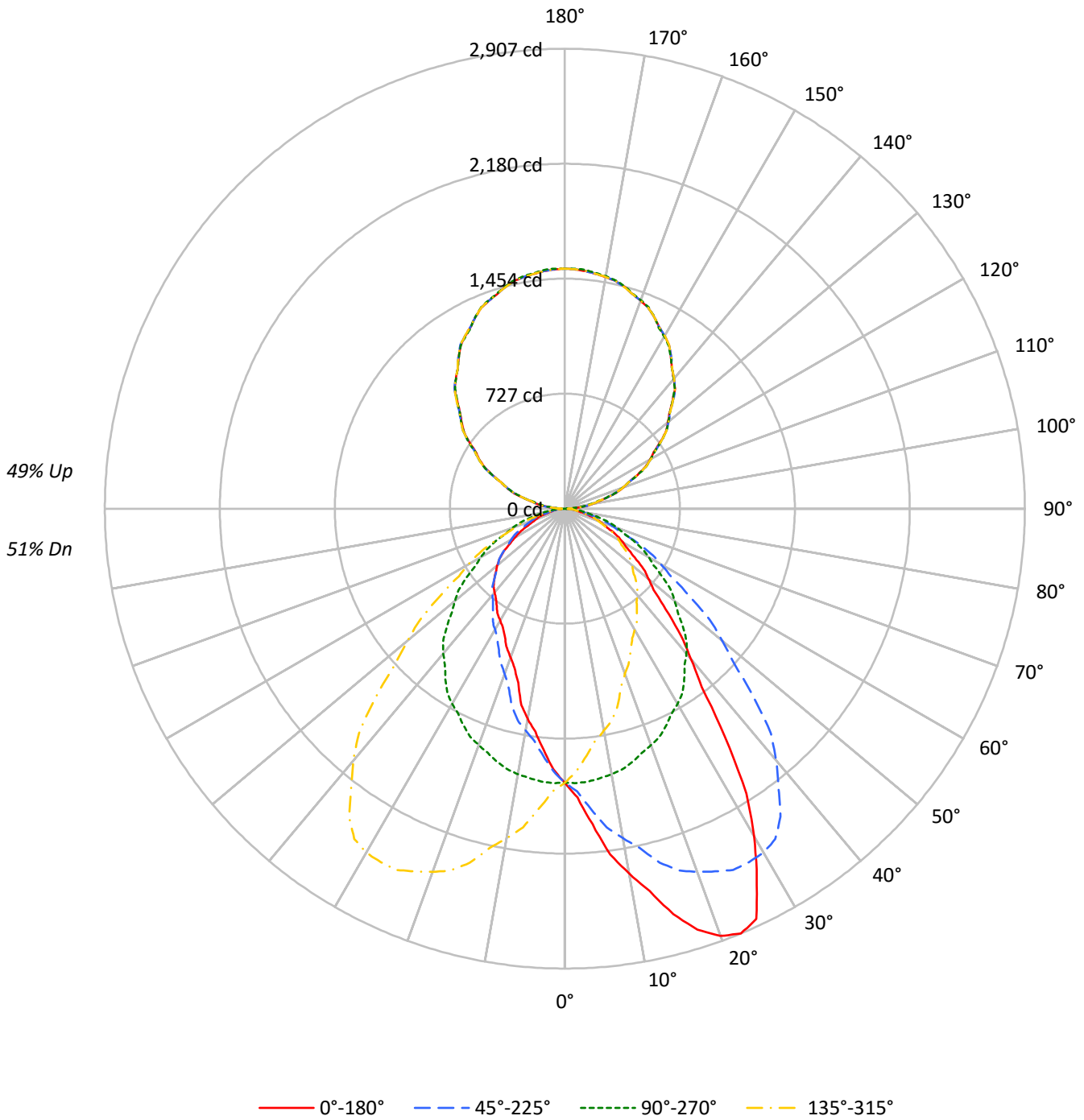
Lumens per Lamp: N/A
Luminaire Lumens: 8593.4 lumens
Efficiency: N/A
Efficacy: 131.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: General Diffuse

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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	98	94	91	87	91	87	84	81	74	72	70	62	61	59	51	50	49	44
2	90	83	77	72	83	77	72	67	66	62	59	55	53	50	46	44	42	38
3	82	73	66	61	76	68	62	57	58	54	50	49	46	43	41	38	36	32
4	76	65	57	52	70	61	54	49	52	47	43	44	40	37	37	34	32	28
5	70	58	50	44	64	54	47	42	47	41	37	40	36	32	33	30	28	25
6	64	52	44	39	59	49	42	37	42	37	33	36	32	29	30	27	25	22
7	59	47	40	34	55	44	37	32	38	33	29	33	29	25	28	24	22	19
8	55	43	35	30	51	40	33	29	35	30	26	30	26	23	26	22	20	17
9	51	39	32	27	48	37	30	26	32	27	23	28	24	21	24	20	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13988	13988	13988	13988
5°	16226	14030	12400	14030
10°	19194	13969	11068	13969
15°	22172	13840	9510	13840
20°	24686	13662	8600	13662
25°	25483	13488	7985	13488
30°	22309	13276	7614	13276
35°	17366	12962	7389	12962
40°	13022	12603	7268	12603
45°	10282	12028	7205	12028
50°	8681	11362	6997	11362
55°	7567	10632	6622	10632
60°	6807	9875	5861	9875
65°	6002	9054	5041	9054
70°	5403	8207	4548	8207
75°	4529	7274	3877	7274
80°	3831	6197	3636	6197
85°	3233	4844	3233	4844



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.9	2.0
10°-20°	506.4	5.9
20°-30°	792.1	9.2
30°-40°	880.6	10.2
40°-50°	781.3	9.1
50°-60°	608.8	7.1
60°-70°	398.6	4.6
70°-80°	196.0	2.3
80°-90°	52.9	0.6
90°-100°	100.1	1.2
100°-110°	296.4	3.4
110°-120°	503.1	5.9
120°-130°	663.4	7.7
130°-140°	745.0	8.7
140°-150°	732.1	8.5
150°-160°	615.7	7.2
160°-170°	409.7	4.8
170°-180°	143.5	1.7
0°-30°	1466.4	17.1
0°-40°	2347.0	27.3
0°-60°	3737.0	43.5
0°-90°	4384.5	51.0
90°-120°	899.6	10.5
90°-150°	3040.1	35.4
90°-180°	4209.0	49.0
0°-180°	8593.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1733	1733	1733	1733	1733	
5°	2002	1731	1530	1731	2002	203
15°	2653	1656	1138	1656	2653	754
25°	2861	1514	896	1514	2861	1269
35°	1762	1315	750	1315	1762	1105
45°	901	1054	631	1054	901	713
55°	538	755	470	755	538	489
65°	314	474	264	474	314	316
75°	145	233	124	233	145	160
85°	35	52	35	52	35	40
90°	35	4	35	4	35	19
95°	93	70	93	70	93	97
105°	286	273	286	273	286	302
115°	507	512	507	512	507	501
125°	739	745	739	745	739	659
135°	962	961	962	961	962	743
145°	1169	1167	1169	1167	1169	731
155°	1336	1338	1336	1338	1336	615
165°	1452	1456	1452	1456	1452	409
175°	1508	1515	1508	1515	1508	143
180°	1517	1517	1517	1517	1517	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1827.7	1832.7	1827.7	1827.1	1821.6	1819.9	1817.7	1810.4	1797.0	1789.2	1790.8
5°	2002.3	2019.6	2009.9	2008.5	1993.2	1977.8	1968.0	1945.7	1922.0	1905.9	1892.6
7.5°	2204.1	2214.1	2208.1	2198.3	2173.4	2159.3	2136.7	2107.2	2064.7	2032.1	2002.4
10°	2341.5	2349.9	2347.1	2329.0	2310.8	2273.8	2252.8	2211.7	2157.9	2115.4	2075.5
12.5°	2476.7	2485.6	2461.0	2461.8	2427.5	2398.3	2365.1	2313.3	2251.2	2196.3	2146.5
15°	2652.9	2641.7	2641.7	2627.8	2589.3	2548.9	2514.7	2460.2	2382.0	2316.3	2247.3
17.5°	2790.9	2794.7	2789.0	2756.0	2725.9	2684.0	2621.3	2557.8	2485.2	2397.1	2326.4
20°	2873.5	2873.5	2867.2	2844.9	2805.8	2761.1	2693.4	2624.2	2532.1	2443.5	2363.9
22.5°	2907.0	2909.2	2901.8	2883.4	2848.2	2804.6	2746.9	2676.7	2581.8	2481.9	2383.4
25°	2860.9	2874.2	2875.6	2870.6	2860.2	2833.7	2784.1	2712.2	2627.1	2518.8	2412.7
27.5°	2626.7	2643.4	2658.1	2682.2	2714.3	2731.1	2733.3	2696.7	2622.4	2518.3	2411.5
30°	2393.2	2407.1	2452.6	2511.8	2557.9	2599.8	2636.2	2645.8	2604.0	2510.4	2398.0
32.5°	2134.0	2153.0	2198.4	2262.2	2338.9	2409.9	2491.4	2533.0	2531.9	2475.8	2371.8
35°	1762.1	1776.0	1818.0	1884.9	1977.1	2082.5	2211.7	2312.2	2380.6	2375.7	2312.2
37.5°	1421.1	1436.8	1479.1	1534.8	1624.2	1754.6	1879.7	2018.1	2144.7	2215.7	2194.4
40°	1235.7	1236.4	1277.6	1334.8	1418.6	1532.4	1668.5	1822.1	1963.1	2078.3	2100.6
42.5°	1089.3	1089.4	1116.7	1178.4	1238.8	1345.8	1475.8	1628.3	1793.3	1926.4	1985.6
45°	900.6	906.9	929.2	966.2	1013.7	1104.4	1208.4	1350.2	1535.2	1692.9	1791.4
47.5°	762.7	771.8	786.1	816.3	854.0	914.5	1000.6	1127.9	1278.4	1452.0	1592.1
50°	691.2	692.6	710.6	727.4	760.2	808.4	883.8	990.0	1128.1	1295.1	1450.7
52.5°	629.8	629.4	640.4	661.6	688.2	725.8	786.7	883.2	1005.8	1155.4	1316.1
55°	537.6	541.1	549.5	566.1	586.4	613.0	661.2	733.8	830.1	957.9	1103.8
57.5°	467.5	469.3	475.8	482.9	501.5	520.8	556.9	607.3	688.6	793.2	929.2
60°	421.6	422.3	424.4	434.9	449.6	467.8	492.2	534.7	603.2	698.8	806.4
62.5°	377.0	378.2	381.4	389.1	400.4	413.0	438.6	472.8	529.5	611.2	708.0
65°	314.2	314.9	319.7	322.6	331.6	342.7	361.6	384.7	423.7	492.2	565.5
67.5°	262.5	262.5	262.8	266.5	272.9	280.2	291.5	309.9	339.4	381.4	446.1
70°	228.9	228.9	230.4	232.5	236.0	242.3	248.5	262.5	284.2	318.3	367.9
72.5°	197.7	198.2	199.7	200.1	201.9	207.0	211.7	220.7	236.7	262.5	302.6
75°	145.2	147.3	150.8	153.6	157.0	156.4	161.3	166.8	171.8	187.1	210.2
77.5°	108.1	106.9	107.3	109.8	110.2	110.9	114.3	118.7	122.3	129.6	137.8
80°	82.4	82.4	84.4	85.1	84.4	85.1	88.7	90.8	92.2	94.9	102.6
82.5°	62.3	63.4	62.7	63.4	63.8	64.5	67.5	67.9	69.3	70.4	73.6
85°	34.9	35.6	36.3	34.9	34.9	34.9	36.3	37.0	38.4	37.7	39.1
87.5°	19.3	18.7	19.1	19.0	19.5	18.7	19.0	19.8	18.3	18.6	18.2
90°	35.2	34.6	34.1	33.6	33.1	32.1	30.5	29.0	27.4	25.9	23.7
92.5°	52.1	51.8	51.5	51.2	50.8	50.2	49.3	48.4	47.4	46.5	45.0
95°	92.7	92.7	92.7	92.7	92.7	92.3	91.5	90.7	90.0	89.2	87.4
97.5°	145.2	145.2	145.2	145.2	145.2	144.8	143.8	142.9	142.0	141.0	138.9
100°	181.9	181.9	181.9	181.9	181.9	181.6	181.1	180.6	180.1	179.6	177.1
102.5°	223.2	223.0	222.8	222.6	222.3	221.9	221.2	220.4	219.6	218.9	216.8
105°	286.3	285.5	284.7	284.0	283.2	282.4	281.6	280.8	280.0	279.2	278.2
107.5°	347.8	347.8	347.9	347.9	348.0	347.6	346.9	346.2	345.5	344.7	344.6
110°	391.8	391.1	390.3	389.5	388.7	388.6	389.1	389.6	390.2	390.7	390.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	437.0	436.8	436.6	436.5	436.3	436.3	436.4	436.5	436.6	436.7	437.2
115°	506.9	507.2	507.4	507.7	507.9	508.2	508.4	508.7	509.0	509.2	509.7
117.5°	573.5	574.0	574.5	575.0	575.6	576.2	577.1	578.0	579.0	579.9	580.2
120°	624.2	623.7	623.1	622.6	622.1	622.5	623.8	625.1	626.4	627.7	628.4
122.5°	666.4	667.3	668.3	669.2	670.1	671.1	672.0	672.9	673.8	674.6	675.0
125°	739.1	739.6	740.2	740.7	741.2	741.7	742.3	742.8	743.4	743.9	744.1
127.5°	806.5	806.9	807.3	807.8	808.2	808.6	809.2	809.7	810.2	810.7	811.1
130°	850.6	851.6	852.7	853.7	854.7	855.6	856.1	856.6	857.2	857.7	857.7
132.5°	897.6	898.0	898.4	898.8	899.2	899.7	900.2	900.7	901.2	901.8	902.0
135°	962.1	962.8	963.6	964.4	965.2	965.8	966.3	966.9	967.5	968.0	968.0
137.5°	1029.9	1029.8	1029.6	1029.5	1029.3	1029.6	1030.2	1030.9	1031.6	1032.2	1031.8
140°	1071.2	1071.5	1071.7	1072.0	1072.3	1072.5	1072.8	1073.0	1073.3	1073.5	1073.5
142.5°	1112.5	1112.6	1112.6	1112.7	1112.7	1112.8	1112.8	1112.9	1112.9	1113.0	1113.2
145°	1168.6	1169.3	1170.1	1170.9	1171.6	1172.3	1172.5	1172.8	1173.0	1173.3	1173.0
147.5°	1225.4	1225.6	1225.9	1226.2	1226.4	1226.6	1226.9	1227.1	1227.3	1227.5	1227.7
150°	1260.1	1260.3	1260.6	1260.8	1261.1	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2
152.5°	1292.0	1292.6	1293.3	1294.0	1294.7	1294.7	1294.1	1293.4	1292.8	1292.2	1292.0
155°	1336.4	1337.4	1338.5	1339.5	1340.5	1340.5	1339.5	1338.5	1337.4	1336.4	1336.6
157.5°	1376.0	1376.8	1377.8	1378.7	1379.6	1379.6	1378.8	1378.1	1377.3	1376.4	1376.5
160°	1398.6	1399.9	1401.1	1402.4	1403.7	1404.0	1403.2	1402.4	1401.7	1400.9	1401.1
162.5°	1422.0	1423.3	1424.6	1425.9	1427.2	1427.1	1425.7	1424.3	1422.9	1421.5	1421.8
165°	1452.5	1453.5	1454.6	1455.6	1456.6	1456.4	1454.8	1453.3	1451.7	1450.2	1450.7
167.5°	1474.3	1475.9	1477.5	1479.1	1480.8	1480.8	1479.3	1477.6	1476.1	1474.5	1474.5
170°	1486.5	1488.3	1490.2	1492.0	1493.8	1494.0	1492.4	1490.9	1489.2	1487.7	1487.4
172.5°	1496.8	1498.6	1500.5	1502.3	1504.2	1504.2	1502.4	1500.7	1498.8	1497.1	1497.0
175°	1507.6	1509.4	1511.3	1513.1	1514.9	1514.9	1513.1	1511.3	1509.4	1507.6	1507.9
177.5°	1513.3	1514.9	1516.6	1518.2	1519.9	1520.0	1518.6	1517.1	1515.7	1514.2	1514.2
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1785.2	1777.5	1773.5	1764.5	1753.9	1748.4	1743.3	1736.1	1726.6	1716.6	1709.3
5°	1875.8	1859.1	1838.2	1813.0	1790.7	1769.1	1750.2	1731.3	1709.7	1687.4	1665.1
7.5°	1968.8	1935.9	1900.3	1859.1	1819.1	1782.6	1749.1	1717.0	1680.6	1648.1	1618.5
10°	2033.7	1988.9	1939.3	1887.0	1834.6	1789.3	1744.6	1704.1	1659.4	1619.6	1586.1
12.5°	2086.2	2033.7	1974.0	1908.8	1845.8	1791.0	1739.6	1686.8	1636.0	1592.9	1548.1
15°	2173.2	2101.3	2021.0	1942.9	1861.2	1786.5	1717.4	1656.0	1598.0	1537.3	1494.7
17.5°	2233.1	2147.9	2050.2	1956.3	1859.8	1771.7	1691.9	1618.8	1552.0	1490.0	1439.3
20°	2268.9	2174.6	2066.5	1959.6	1851.4	1757.2	1671.3	1590.3	1521.3	1454.2	1401.8
22.5°	2289.0	2184.7	2066.5	1954.6	1842.5	1740.4	1646.2	1561.9	1486.6	1419.6	1361.6
25°	2295.4	2183.7	2063.0	1934.5	1811.6	1703.4	1605.7	1514.2	1430.5	1363.4	1302.0
27.5°	2286.5	2155.0	2031.2	1899.5	1772.7	1658.6	1556.0	1460.0	1376.0	1304.1	1241.1
30°	2273.1	2132.0	1999.4	1862.6	1734.1	1624.6	1516.3	1424.2	1336.9	1262.2	1198.7
32.5°	2244.0	2104.2	1961.5	1821.3	1691.1	1578.2	1475.5	1382.8	1297.3	1220.9	1153.5
35°	2186.6	2044.8	1889.9	1746.1	1618.2	1501.0	1404.6	1315.2	1233.6	1152.0	1080.7
37.5°	2110.7	1965.9	1811.8	1654.3	1526.4	1415.6	1327.3	1243.3	1163.7	1089.0	1010.2
40°	2039.2	1907.2	1748.1	1591.7	1460.5	1353.6	1272.0	1195.9	1115.6	1041.6	962.7
42.5°	1952.7	1840.3	1679.4	1522.5	1392.9	1290.0	1213.9	1139.4	1066.4	994.7	912.4
45°	1808.2	1722.9	1572.2	1421.4	1290.8	1188.9	1119.1	1053.5	989.3	920.8	843.3
47.5°	1642.5	1584.9	1454.7	1300.3	1179.5	1087.8	1020.4	966.7	912.4	844.0	776.1
50°	1527.5	1490.5	1364.8	1223.9	1108.6	1024.1	955.0	904.7	859.4	793.8	733.1
52.5°	1404.6	1384.9	1278.8	1144.0	1032.7	949.9	890.8	845.6	799.6	745.2	688.3
55°	1217.5	1228.0	1137.9	1021.4	916.7	846.9	793.0	755.4	716.3	670.2	626.2
57.5°	1026.2	1064.5	1004.0	901.7	803.5	739.0	698.5	666.8	634.0	595.8	558.3
60°	911.7	943.8	909.7	819.6	733.8	673.7	636.0	611.6	578.8	543.8	515.2
62.5°	800.0	834.4	814.2	741.4	661.7	610.1	576.8	554.0	529.6	499.2	469.4
65°	659.7	682.1	672.3	622.1	565.5	521.5	490.8	474.0	451.7	429.4	402.8
67.5°	505.3	548.5	542.7	516.0	467.2	432.8	412.7	397.9	377.6	360.9	343.0
70°	415.4	455.1	454.4	432.8	406.3	374.2	360.2	347.7	329.5	313.5	298.8
72.5°	340.0	376.5	381.8	365.3	347.1	322.9	309.4	300.7	283.2	272.2	260.2
75°	238.0	264.6	271.6	271.6	263.2	250.6	238.7	233.2	220.7	210.9	203.9
77.5°	156.1	172.9	183.8	186.2	187.5	183.3	173.6	169.7	160.0	156.5	149.9
80°	110.3	121.5	134.0	138.3	141.7	140.4	136.1	133.3	124.3	120.8	118.0
82.5°	76.2	82.4	92.7	101.9	101.0	104.6	101.0	98.8	91.9	90.6	87.9
85°	39.8	40.5	41.9	48.2	51.7	53.0	53.7	52.3	50.3	50.3	45.3
87.5°	17.8	16.8	17.5	17.0	17.0	18.6	19.7	19.7	18.6	17.5	16.4
90°	21.6	19.6	17.5	14.9	12.1	9.3	6.4	3.5	6.4	9.3	12.1
92.5°	43.5	42.1	40.6	38.3	34.9	31.7	28.4	25.1	28.4	31.7	34.9
95°	85.5	83.7	81.9	79.8	77.5	75.1	72.7	70.4	72.7	75.1	77.5
97.5°	136.7	134.6	132.5	130.5	128.6	126.7	124.8	123.0	124.8	126.7	128.6
100°	174.8	172.5	170.2	168.4	167.3	166.3	165.3	164.3	165.3	166.3	167.3
102.5°	214.7	212.5	210.4	209.1	208.6	208.2	207.8	207.4	207.8	208.2	208.6
105°	277.1	276.1	275.1	274.4	274.2	273.9	273.7	273.4	273.7	273.9	274.2
107.5°	344.4	344.3	344.1	343.9	343.6	343.3	343.0	342.5	343.0	343.3	343.6
110°	391.2	391.5	391.7	391.6	391.1	390.5	390.0	389.5	390.0	390.5	391.1



TEST NUMBER: P332980-840

CATALOG NUMBER: SA4XXRDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	437.7	438.1	438.6	438.8	438.7	438.6	438.5	438.3	438.5	438.6	438.7
115°	510.3	510.8	511.3	511.5	511.5	511.5	511.5	511.5	511.5	511.5	511.5
117.5°	580.6	580.9	581.3	581.4	581.2	581.0	580.8	580.6	580.8	581.0	581.2
120°	629.2	630.1	630.9	630.7	629.7	628.6	627.5	626.5	627.5	628.6	629.7
122.5°	675.4	675.7	676.1	676.1	675.6	675.2	674.8	674.4	674.8	675.2	675.6
125°	744.4	744.7	744.9	745.0	745.0	745.0	745.0	745.0	745.0	745.0	745.0
127.5°	811.5	811.9	812.4	812.2	811.4	810.6	809.9	809.1	809.9	810.6	811.4
130°	857.7	857.7	857.7	857.3	856.5	855.7	855.0	854.1	855.0	855.7	856.5
132.5°	902.2	902.4	902.6	902.4	901.8	901.3	900.7	900.1	900.7	901.3	901.8
135°	968.0	968.0	968.0	967.1	965.6	964.0	962.5	960.9	962.5	964.0	965.6
137.5°	1031.4	1031.0	1030.6	1030.0	1029.3	1028.5	1027.8	1027.0	1027.8	1028.5	1029.3
140°	1073.5	1073.5	1073.5	1073.3	1072.8	1072.3	1071.7	1071.2	1071.7	1072.3	1072.8
142.5°	1113.4	1113.6	1113.8	1113.7	1113.1	1112.6	1112.1	1111.6	1112.1	1112.6	1113.1
145°	1172.8	1172.5	1172.3	1171.5	1170.5	1169.5	1168.4	1167.4	1168.4	1169.5	1170.5
147.5°	1227.9	1228.1	1228.3	1227.8	1226.5	1225.3	1224.1	1222.7	1224.1	1225.3	1226.5
150°	1261.2	1261.2	1261.2	1260.7	1259.7	1258.7	1257.6	1256.6	1257.6	1258.7	1259.7
152.5°	1291.8	1291.6	1291.4	1291.0	1290.3	1289.7	1289.1	1288.5	1289.1	1289.7	1290.3
155°	1336.9	1337.2	1337.4	1337.5	1337.5	1337.5	1337.5	1337.5	1337.5	1337.5	1337.5
157.5°	1376.5	1376.6	1376.6	1377.0	1377.5	1377.9	1378.4	1378.8	1378.4	1377.9	1377.5
160°	1401.4	1401.7	1401.9	1402.2	1402.4	1402.7	1403.0	1403.2	1403.0	1402.7	1402.4
162.5°	1422.1	1422.3	1422.6	1423.0	1423.7	1424.4	1425.0	1425.7	1425.0	1424.4	1423.7
165°	1451.2	1451.7	1452.2	1452.9	1453.7	1454.4	1455.2	1456.0	1455.2	1454.4	1453.7
167.5°	1474.4	1474.4	1474.3	1474.9	1475.9	1477.0	1478.1	1479.3	1478.1	1477.0	1475.9
170°	1487.1	1486.9	1486.6	1487.1	1488.4	1489.8	1491.1	1492.4	1491.1	1489.8	1488.4
172.5°	1497.0	1496.9	1496.8	1497.4	1498.4	1499.5	1500.7	1501.8	1500.7	1499.5	1498.4
175°	1508.1	1508.4	1508.6	1509.4	1510.8	1512.1	1513.4	1514.7	1513.4	1512.1	1510.8
177.5°	1514.2	1514.2	1514.2	1514.7	1515.8	1516.8	1517.8	1518.9	1517.8	1516.8	1515.8
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0



TEST NUMBER: P332980-840

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1701.4	1695.9	1688.6	1680.2	1670.2	1661.2	1657.4	1660.7	1662.3	1657.9	1657.4
5°	1649.7	1632.2	1618.2	1597.3	1580.5	1566.6	1556.8	1552.7	1554.0	1542.9	1540.0
7.5°	1591.4	1570.7	1547.9	1523.0	1499.9	1479.4	1468.5	1462.7	1450.9	1445.8	1437.3
10°	1554.0	1526.1	1503.8	1474.4	1447.9	1423.5	1411.6	1401.8	1390.0	1384.4	1372.5
12.5°	1515.5	1483.1	1458.5	1428.1	1401.0	1371.5	1360.2	1342.1	1323.5	1311.8	1296.6
15°	1461.2	1422.1	1392.1	1355.7	1323.6	1290.1	1260.1	1226.6	1214.1	1187.5	1172.2
17.5°	1397.7	1358.0	1320.8	1272.1	1222.5	1180.9	1148.9	1116.8	1097.6	1080.7	1072.9
20°	1355.7	1319.5	1267.8	1211.2	1156.1	1110.0	1084.2	1063.3	1042.3	1030.5	1022.1
22.5°	1316.1	1269.7	1209.7	1148.7	1093.6	1057.5	1035.6	1014.1	997.0	985.7	974.6
25°	1249.6	1188.9	1125.4	1055.6	1017.8	986.4	962.7	945.2	934.8	920.1	914.5
27.5°	1181.3	1107.8	1037.7	990.8	951.5	922.8	902.1	889.0	875.8	866.4	859.1
30°	1128.8	1054.2	991.4	946.6	906.9	883.1	866.4	851.0	840.5	832.8	827.3
32.5°	1076.9	1002.2	949.5	901.4	870.0	846.9	829.0	817.5	809.3	799.3	796.0
35°	1001.8	935.4	889.4	846.2	814.1	793.0	779.1	767.2	760.2	757.5	755.4
37.5°	929.6	875.4	825.8	790.3	761.6	745.2	728.7	722.9	718.1	713.1	715.3
40°	883.8	832.8	788.9	751.1	728.1	710.0	700.2	693.3	689.0	689.0	689.0
42.5°	844.1	794.4	751.4	717.7	694.6	679.2	668.4	662.5	661.2	660.6	663.9
45°	782.6	736.5	693.3	665.3	645.8	630.4	624.1	619.2	619.2	622.1	622.7
47.5°	721.5	678.4	643.7	612.4	594.5	584.9	579.5	576.9	577.2	580.0	583.2
50°	684.2	641.6	607.3	579.5	562.7	553.6	548.8	547.3	548.8	548.8	553.6
52.5°	643.4	605.3	571.6	548.2	529.2	520.7	518.0	516.0	516.8	519.2	521.2
55°	583.6	549.5	517.4	494.9	481.0	475.4	469.2	469.8	468.5	469.8	469.8
57.5°	523.7	493.0	463.1	445.5	433.1	425.1	418.2	420.1	418.1	417.8	416.7
60°	485.2	451.7	428.0	411.9	397.9	390.9	384.7	386.1	384.0	382.5	379.8
62.5°	443.3	415.4	392.7	377.3	366.1	358.0	351.7	350.3	345.5	340.7	334.6
65°	382.5	359.5	339.3	324.7	314.2	307.9	303.0	298.8	288.3	277.1	271.6
67.5°	323.6	306.9	288.0	275.6	267.1	258.8	249.5	242.4	232.6	226.5	223.0
70°	285.5	269.4	253.4	241.6	232.5	224.8	214.3	209.4	202.5	199.7	196.2
72.5°	249.2	234.3	219.3	208.6	198.9	193.0	184.7	179.9	176.7	175.6	172.2
75°	194.1	182.2	171.1	161.3	153.6	149.4	145.9	142.4	141.0	134.7	131.3
77.5°	141.6	133.8	126.7	119.8	114.3	111.6	104.8	100.8	98.5	95.5	94.8
80°	110.3	104.7	97.8	93.5	85.8	83.1	80.3	79.6	78.9	78.2	77.5
82.5°	82.9	77.4	70.4	67.9	65.7	64.1	62.4	61.7	61.0	61.4	61.3
85°	41.9	39.1	39.1	38.4	37.7	37.0	36.3	36.3	35.6	36.3	35.6
87.5°	17.0	16.9	17.3	16.7	17.6	18.0	17.8	18.1	19.0	18.2	18.4
90°	14.9	17.5	19.6	21.6	23.7	25.9	27.4	29.0	30.5	32.1	33.1
92.5°	38.3	40.6	42.1	43.5	45.0	46.5	47.4	48.4	49.3	50.2	50.8
95°	79.8	81.9	83.7	85.5	87.4	89.2	90.0	90.7	91.5	92.3	92.7
97.5°	130.5	132.5	134.6	136.7	138.9	141.0	142.0	142.9	143.8	144.8	145.2
100°	168.4	170.2	172.5	174.8	177.1	179.6	180.1	180.6	181.1	181.6	181.9
102.5°	209.1	210.4	212.5	214.7	216.8	218.9	219.6	220.4	221.2	221.9	222.3
105°	274.4	275.1	276.1	277.1	278.2	279.2	280.0	280.8	281.6	282.4	283.2
107.5°	343.9	344.1	344.3	344.4	344.6	344.7	345.5	346.2	346.9	347.6	348.0
110°	391.6	391.7	391.5	391.2	390.9	390.7	390.2	389.6	389.1	388.6	388.7



TEST NUMBER: P332980-840

CATALOG NUMBER: SA4XXRDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	438.8	438.6	438.1	437.7	437.2	436.7	436.6	436.5	436.4	436.3	436.3
115°	511.5	511.3	510.8	510.3	509.7	509.2	509.0	508.7	508.4	508.2	507.9
117.5°	581.4	581.3	580.9	580.6	580.2	579.9	579.0	578.0	577.1	576.2	575.6
120°	630.7	630.9	630.1	629.2	628.4	627.7	626.4	625.1	623.8	622.5	622.1
122.5°	676.1	676.1	675.7	675.4	675.0	674.6	673.8	672.9	672.0	671.1	670.1
125°	745.0	744.9	744.7	744.4	744.1	743.9	743.4	742.8	742.3	741.7	741.2
127.5°	812.2	812.4	811.9	811.5	811.1	810.7	810.2	809.7	809.2	808.6	808.2
130°	857.3	857.7	857.7	857.7	857.7	857.7	857.2	856.6	856.1	855.6	854.7
132.5°	902.4	902.6	902.4	902.2	902.0	901.8	901.2	900.7	900.2	899.7	899.2
135°	967.1	968.0	968.0	968.0	968.0	968.0	967.5	966.9	966.3	965.8	965.2
137.5°	1030.0	1030.6	1031.0	1031.4	1031.8	1032.2	1031.6	1030.9	1030.2	1029.6	1029.3
140°	1073.3	1073.5	1073.5	1073.5	1073.5	1073.5	1073.3	1073.0	1072.8	1072.5	1072.3
142.5°	1113.7	1113.8	1113.6	1113.4	1113.2	1113.0	1112.9	1112.9	1112.8	1112.8	1112.7
145°	1171.5	1172.3	1172.5	1172.8	1173.0	1173.3	1173.0	1172.8	1172.5	1172.3	1171.6
147.5°	1227.8	1228.3	1228.1	1227.9	1227.7	1227.5	1227.3	1227.1	1226.9	1226.6	1226.4
150°	1260.7	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2	1261.1
152.5°	1291.0	1291.4	1291.6	1291.8	1292.0	1292.2	1292.8	1293.4	1294.1	1294.7	1294.7
155°	1337.5	1337.4	1337.2	1336.9	1336.6	1336.4	1337.4	1338.5	1339.5	1340.5	1340.5
157.5°	1377.0	1376.6	1376.6	1376.5	1376.5	1376.4	1377.3	1378.1	1378.8	1379.6	1379.6
160°	1402.2	1401.9	1401.7	1401.4	1401.1	1400.9	1401.7	1402.4	1403.2	1404.0	1403.7
162.5°	1423.0	1422.6	1422.3	1422.1	1421.8	1421.5	1422.9	1424.3	1425.7	1427.1	1427.2
165°	1452.9	1452.2	1451.7	1451.2	1450.7	1450.2	1451.7	1453.3	1454.8	1456.4	1456.6
167.5°	1474.9	1474.3	1474.4	1474.4	1474.5	1474.5	1476.1	1477.6	1479.3	1480.8	1480.8
170°	1487.1	1486.6	1486.9	1487.1	1487.4	1487.7	1489.2	1490.9	1492.4	1494.0	1493.8
172.5°	1497.4	1496.8	1496.9	1497.0	1497.0	1497.1	1498.8	1500.7	1502.4	1504.2	1504.2
175°	1509.4	1508.6	1508.4	1508.1	1507.9	1507.6	1509.4	1511.3	1513.1	1514.9	1514.9
177.5°	1514.7	1514.2	1514.2	1514.2	1514.2	1514.2	1515.7	1517.1	1518.6	1520.0	1519.9
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0



TEST NUMBER: P332980-840

CATALOG NUMBER: SA4XXRDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1654.0	1655.1	1651.2	1650.1	1651.2	1655.1	1654.0	1657.4	1657.9	1662.3	1660.7
5°	1534.5	1533.1	1529.5	1530.2	1529.5	1533.1	1534.5	1540.0	1542.9	1554.0	1552.7
7.5°	1432.3	1426.8	1428.4	1422.8	1428.4	1426.8	1432.3	1437.3	1445.8	1450.9	1462.7
10°	1369.7	1362.0	1355.7	1350.2	1355.7	1362.0	1369.7	1372.5	1384.4	1390.0	1401.8
12.5°	1284.2	1277.7	1269.2	1270.9	1269.2	1277.7	1284.2	1296.6	1311.8	1323.5	1342.1
15°	1163.1	1152.6	1135.9	1137.9	1135.9	1152.6	1163.1	1172.2	1187.5	1214.1	1226.6
17.5°	1060.5	1060.6	1052.9	1054.7	1052.9	1060.6	1060.5	1072.9	1080.7	1097.6	1116.8
20°	1007.4	1002.5	1003.2	1001.1	1003.2	1002.5	1007.4	1022.1	1030.5	1042.3	1063.3
22.5°	970.6	964.5	959.7	955.3	959.7	964.5	970.6	974.6	985.7	997.0	1014.1
25°	908.3	904.0	897.8	896.4	897.8	904.0	908.3	914.5	920.1	934.8	945.2
27.5°	853.5	852.7	850.2	847.0	850.2	852.7	853.5	859.1	866.4	875.8	889.0
30°	821.7	820.3	818.9	816.8	818.9	820.3	821.7	827.3	832.8	840.5	851.0
32.5°	793.2	792.3	790.9	791.1	790.9	792.3	793.2	796.0	799.3	809.3	817.5
35°	752.6	751.8	750.5	749.8	750.5	751.8	752.6	755.4	757.5	760.2	767.2
37.5°	714.6	716.4	715.6	715.4	715.6	716.4	714.6	715.3	713.1	718.1	722.9
40°	688.3	689.0	690.4	689.7	690.4	689.0	688.3	689.0	689.0	689.0	693.3
42.5°	666.6	666.7	668.6	666.3	668.6	666.7	666.6	663.9	660.6	661.2	662.5
45°	627.6	631.8	631.1	631.1	631.1	631.8	627.6	622.7	622.1	619.2	619.2
47.5°	585.0	588.7	589.7	589.5	589.7	588.7	585.0	583.2	580.0	577.2	576.9
50°	557.1	555.7	557.8	557.1	557.8	555.7	557.1	553.6	548.8	548.8	547.3
52.5°	523.0	523.3	523.2	522.5	523.2	523.3	523.0	521.2	519.2	516.8	516.0
55°	470.5	471.2	469.8	470.5	469.8	471.2	470.5	469.8	469.8	468.5	469.8
57.5°	413.5	410.2	411.6	409.9	411.6	410.2	413.5	416.7	417.8	418.1	420.1
60°	372.8	367.2	365.8	363.0	365.8	367.2	372.8	379.8	382.5	384.0	386.1
62.5°	327.0	323.1	318.3	320.5	318.3	323.1	327.0	334.6	340.7	345.5	350.3
65°	266.0	263.2	261.1	263.9	261.1	263.2	266.0	271.6	277.1	288.3	298.8
67.5°	220.2	218.6	218.6	217.2	218.6	218.6	220.2	223.0	226.5	232.6	242.4
70°	196.2	194.1	194.1	192.7	194.1	194.1	196.2	196.2	199.7	202.5	209.4
72.5°	171.6	169.5	170.1	169.3	170.1	169.5	171.6	172.2	175.6	176.7	179.9
75°	127.0	123.6	123.6	124.3	123.6	123.6	127.0	131.3	134.7	141.0	142.4
77.5°	94.8	94.1	95.1	93.8	95.1	94.1	94.8	94.8	95.5	98.5	100.8
80°	77.5	76.7	76.1	78.2	76.1	76.7	77.5	77.5	78.2	78.9	79.6
82.5°	60.2	60.1	59.9	62.5	59.9	60.1	60.2	61.3	61.4	61.0	61.7
85°	36.3	34.9	36.3	34.9	36.3	34.9	36.3	35.6	36.3	35.6	36.3
87.5°	19.6	19.1	18.7	19.3	18.7	19.1	19.6	18.4	18.2	19.0	18.1
90°	33.6	34.1	34.6	35.2	34.6	34.1	33.6	33.1	32.1	30.5	29.0
92.5°	51.2	51.5	51.8	52.1	51.8	51.5	51.2	50.8	50.2	49.3	48.4
95°	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.3	91.5	90.7
97.5°	145.2	145.2	145.2	145.2	145.2	145.2	145.2	145.2	144.8	143.8	142.9
100°	181.9	181.9	181.9	181.9	181.9	181.9	181.9	181.9	181.6	181.1	180.6
102.5°	222.6	222.8	223.0	223.2	223.0	222.8	222.6	222.3	221.9	221.2	220.4
105°	284.0	284.7	285.5	286.3	285.5	284.7	284.0	283.2	282.4	281.6	280.8
107.5°	347.9	347.9	347.8	347.8	347.8	347.9	347.9	348.0	347.6	346.9	346.2
110°	389.5	390.3	391.1	391.8	391.1	390.3	389.5	388.7	388.6	389.1	389.6



TEST NUMBER: P332980-840

CATALOG NUMBER: SA4XXRDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	436.5	436.6	436.8	437.0	436.8	436.6	436.5	436.3	436.3	436.4	436.5
115°	507.7	507.4	507.2	506.9	507.2	507.4	507.7	507.9	508.2	508.4	508.7
117.5°	575.0	574.5	574.0	573.5	574.0	574.5	575.0	575.6	576.2	577.1	578.0
120°	622.6	623.1	623.7	624.2	623.7	623.1	622.6	622.1	622.5	623.8	625.1
122.5°	669.2	668.3	667.3	666.4	667.3	668.3	669.2	670.1	671.1	672.0	672.9
125°	740.7	740.2	739.6	739.1	739.6	740.2	740.7	741.2	741.7	742.3	742.8
127.5°	807.8	807.3	806.9	806.5	806.9	807.3	807.8	808.2	808.6	809.2	809.7
130°	853.7	852.7	851.6	850.6	851.6	852.7	853.7	854.7	855.6	856.1	856.6
132.5°	898.8	898.4	898.0	897.6	898.0	898.4	898.8	899.2	899.7	900.2	900.7
135°	964.4	963.6	962.8	962.1	962.8	963.6	964.4	965.2	965.8	966.3	966.9
137.5°	1029.5	1029.6	1029.8	1029.9	1029.8	1029.6	1029.5	1029.3	1029.6	1030.2	1030.9
140°	1072.0	1071.7	1071.5	1071.2	1071.5	1071.7	1072.0	1072.3	1072.5	1072.8	1073.0
142.5°	1112.7	1112.6	1112.6	1112.5	1112.6	1112.6	1112.7	1112.7	1112.8	1112.8	1112.9
145°	1170.9	1170.1	1169.3	1168.6	1169.3	1170.1	1170.9	1171.6	1172.3	1172.5	1172.8
147.5°	1226.2	1225.9	1225.6	1225.4	1225.6	1225.9	1226.2	1226.4	1226.6	1226.9	1227.1
150°	1260.8	1260.6	1260.3	1260.1	1260.3	1260.6	1260.8	1261.1	1261.2	1261.2	1261.2
152.5°	1294.0	1293.3	1292.6	1292.0	1292.6	1293.3	1294.0	1294.7	1294.7	1294.1	1293.4
155°	1339.5	1338.5	1337.4	1336.4	1337.4	1338.5	1339.5	1340.5	1340.5	1339.5	1338.5
157.5°	1378.7	1377.8	1376.8	1376.0	1376.8	1377.8	1378.7	1379.6	1379.6	1378.8	1378.1
160°	1402.4	1401.1	1399.9	1398.6	1399.9	1401.1	1402.4	1403.7	1404.0	1403.2	1402.4
162.5°	1425.9	1424.6	1423.3	1422.0	1423.3	1424.6	1425.9	1427.2	1427.1	1425.7	1424.3
165°	1455.6	1454.6	1453.5	1452.5	1453.5	1454.6	1455.6	1456.6	1456.4	1454.8	1453.3
167.5°	1479.1	1477.5	1475.9	1474.3	1475.9	1477.5	1479.1	1480.8	1480.8	1479.3	1477.6
170°	1492.0	1490.2	1488.3	1486.5	1488.3	1490.2	1492.0	1493.8	1494.0	1492.4	1490.9
172.5°	1502.3	1500.5	1498.6	1496.8	1498.6	1500.5	1502.3	1504.2	1504.2	1502.4	1500.7
175°	1513.1	1511.3	1509.4	1507.6	1509.4	1511.3	1513.1	1514.9	1514.9	1513.1	1511.3
177.5°	1518.2	1516.6	1514.9	1513.3	1514.9	1516.6	1518.2	1519.9	1520.0	1518.6	1517.1
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1657.4	1661.2	1670.2	1680.2	1688.6	1695.9	1701.4	1709.3	1716.6	1726.6	1736.1
5°	1556.8	1566.6	1580.5	1597.3	1618.2	1632.2	1649.7	1665.1	1687.4	1709.7	1731.3
7.5°	1468.5	1479.4	1499.9	1523.0	1547.9	1570.7	1591.4	1618.5	1648.1	1680.6	1717.0
10°	1411.6	1423.5	1447.9	1474.4	1503.8	1526.1	1554.0	1586.1	1619.6	1659.4	1704.1
12.5°	1360.2	1371.5	1401.0	1428.1	1458.5	1483.1	1515.5	1548.1	1592.9	1636.0	1686.8
15°	1260.1	1290.1	1323.6	1355.7	1392.1	1422.1	1461.2	1494.7	1537.3	1598.0	1656.0
17.5°	1148.9	1180.9	1222.5	1272.1	1320.8	1358.0	1397.7	1439.3	1490.0	1552.0	1618.8
20°	1084.2	1110.0	1156.1	1211.2	1267.8	1319.5	1355.7	1401.8	1454.2	1521.3	1590.3
22.5°	1035.6	1057.5	1093.6	1148.7	1209.7	1269.7	1316.1	1361.6	1419.6	1486.6	1561.9
25°	962.7	986.4	1017.8	1055.6	1125.4	1188.9	1249.6	1302.0	1363.4	1430.5	1514.2
27.5°	902.1	922.8	951.5	990.8	1037.7	1107.8	1181.3	1241.1	1304.1	1376.0	1460.0
30°	866.4	883.1	906.9	946.6	991.4	1054.2	1128.8	1198.7	1262.2	1336.9	1424.2
32.5°	829.0	846.9	870.0	901.4	949.5	1002.2	1076.9	1153.5	1220.9	1297.3	1382.8
35°	779.1	793.0	814.1	846.2	889.4	935.4	1001.8	1080.7	1152.0	1233.6	1315.2
37.5°	728.7	745.2	761.6	790.3	825.8	875.4	929.6	1010.2	1089.0	1163.7	1243.3
40°	700.2	710.0	728.1	751.1	788.9	832.8	883.8	962.7	1041.6	1115.6	1195.9
42.5°	668.4	679.2	694.6	717.7	751.4	794.4	844.1	912.4	994.7	1066.4	1139.4
45°	624.1	630.4	645.8	665.3	693.3	736.5	782.6	843.3	920.8	989.3	1053.5
47.5°	579.5	584.9	594.5	612.4	643.7	678.4	721.5	776.1	844.0	912.4	966.7
50°	548.8	553.6	562.7	579.5	607.3	641.6	684.2	733.1	793.8	859.4	904.7
52.5°	518.0	520.7	529.2	548.2	571.6	605.3	643.4	688.3	745.2	799.6	845.6
55°	469.2	475.4	481.0	494.9	517.4	549.5	583.6	626.2	670.2	716.3	755.4
57.5°	418.2	425.1	433.1	445.5	463.1	493.0	523.7	558.3	595.8	634.0	666.8
60°	384.7	390.9	397.9	411.9	428.0	451.7	485.2	515.2	543.8	578.8	611.6
62.5°	351.7	358.0	366.1	377.3	392.7	415.4	443.3	469.4	499.2	529.6	554.0
65°	303.0	307.9	314.2	324.7	339.3	359.5	382.5	402.8	429.4	451.7	474.0
67.5°	249.5	258.8	267.1	275.6	288.0	306.9	323.6	343.0	360.9	377.6	397.9
70°	214.3	224.8	232.5	241.6	253.4	269.4	285.5	298.8	313.5	329.5	347.7
72.5°	184.7	193.0	198.9	208.6	219.3	234.3	249.2	260.2	272.2	283.2	300.7
75°	145.9	149.4	153.6	161.3	171.1	182.2	194.1	203.9	210.9	220.7	233.2
77.5°	104.8	111.6	114.3	119.8	126.7	133.8	141.6	149.9	156.5	160.0	169.7
80°	80.3	83.1	85.8	93.5	97.8	104.7	110.3	118.0	120.8	124.3	133.3
82.5°	62.4	64.1	65.7	67.9	70.4	77.4	82.9	87.9	90.6	91.9	98.8
85°	36.3	37.0	37.7	38.4	39.1	39.1	41.9	45.3	50.3	50.3	52.3
87.5°	17.8	18.0	17.6	16.7	17.3	16.9	17.0	16.4	17.5	18.6	19.7
90°	27.4	25.9	23.7	21.6	19.6	17.5	14.9	12.1	9.3	6.4	3.5
92.5°	47.4	46.5	45.0	43.5	42.1	40.6	38.3	34.9	31.7	28.4	25.1
95°	90.0	89.2	87.4	85.5	83.7	81.9	79.8	77.5	75.1	72.7	70.4
97.5°	142.0	141.0	138.9	136.7	134.6	132.5	130.5	128.6	126.7	124.8	123.0
100°	180.1	179.6	177.1	174.8	172.5	170.2	168.4	167.3	166.3	165.3	164.3
102.5°	219.6	218.9	216.8	214.7	212.5	210.4	209.1	208.6	208.2	207.8	207.4
105°	280.0	279.2	278.2	277.1	276.1	275.1	274.4	274.2	273.9	273.7	273.4
107.5°	345.5	344.7	344.6	344.4	344.3	344.1	343.9	343.6	343.3	343.0	342.5
110°	390.2	390.7	390.9	391.2	391.5	391.7	391.6	391.1	390.5	390.0	389.5



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	436.6	436.7	437.2	437.7	438.1	438.6	438.8	438.7	438.6	438.5	438.3
115°	509.0	509.2	509.7	510.3	510.8	511.3	511.5	511.5	511.5	511.5	511.5
117.5°	579.0	579.9	580.2	580.6	580.9	581.3	581.4	581.2	581.0	580.8	580.6
120°	626.4	627.7	628.4	629.2	630.1	630.9	630.7	629.7	628.6	627.5	626.5
122.5°	673.8	674.6	675.0	675.4	675.7	676.1	676.1	675.6	675.2	674.8	674.4
125°	743.4	743.9	744.1	744.4	744.7	744.9	745.0	745.0	745.0	745.0	745.0
127.5°	810.2	810.7	811.1	811.5	811.9	812.4	812.2	811.4	810.6	809.9	809.1
130°	857.2	857.7	857.7	857.7	857.7	857.7	857.3	856.5	855.7	855.0	854.1
132.5°	901.2	901.8	902.0	902.2	902.4	902.6	902.4	901.8	901.3	900.7	900.1
135°	967.5	968.0	968.0	968.0	968.0	968.0	967.1	965.6	964.0	962.5	960.9
137.5°	1031.6	1032.2	1031.8	1031.4	1031.0	1030.6	1030.0	1029.3	1028.5	1027.8	1027.0
140°	1073.3	1073.5	1073.5	1073.5	1073.5	1073.5	1073.3	1072.8	1072.3	1071.7	1071.2
142.5°	1112.9	1113.0	1113.2	1113.4	1113.6	1113.8	1113.7	1113.1	1112.6	1112.1	1111.6
145°	1173.0	1173.3	1173.0	1172.8	1172.5	1172.3	1171.5	1170.5	1169.5	1168.4	1167.4
147.5°	1227.3	1227.5	1227.7	1227.9	1228.1	1228.3	1227.8	1226.5	1225.3	1224.1	1222.7
150°	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2	1260.7	1259.7	1258.7	1257.6	1256.6
152.5°	1292.8	1292.2	1292.0	1291.8	1291.6	1291.4	1291.0	1290.3	1289.7	1289.1	1288.5
155°	1337.4	1336.4	1336.6	1336.9	1337.2	1337.4	1337.5	1337.5	1337.5	1337.5	1337.5
157.5°	1377.3	1376.4	1376.5	1376.5	1376.6	1376.6	1377.0	1377.5	1377.9	1378.4	1378.8
160°	1401.7	1400.9	1401.1	1401.4	1401.7	1401.9	1402.2	1402.4	1402.7	1403.0	1403.2
162.5°	1422.9	1421.5	1421.8	1422.1	1422.3	1422.6	1423.0	1423.7	1424.4	1425.0	1425.7
165°	1451.7	1450.2	1450.7	1451.2	1451.7	1452.2	1452.9	1453.7	1454.4	1455.2	1456.0
167.5°	1476.1	1474.5	1474.5	1474.4	1474.4	1474.3	1474.9	1475.9	1477.0	1478.1	1479.3
170°	1489.2	1487.7	1487.4	1487.1	1486.9	1486.6	1487.1	1488.4	1489.8	1491.1	1492.4
172.5°	1498.8	1497.1	1497.0	1497.0	1496.9	1496.8	1497.4	1498.4	1499.5	1500.7	1501.8
175°	1509.4	1507.6	1507.9	1508.1	1508.4	1508.6	1509.4	1510.8	1512.1	1513.4	1514.7
177.5°	1515.7	1514.2	1514.2	1514.2	1514.2	1514.2	1514.7	1515.8	1516.8	1517.8	1518.9
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0



TEST NUMBER: P332980-840

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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1743.3	1748.4	1753.9	1764.5	1773.5	1777.5	1785.2	1790.8	1789.2	1797.0	1810.4
5°	1750.2	1769.1	1790.7	1813.0	1838.2	1859.1	1875.8	1892.6	1905.9	1922.0	1945.7
7.5°	1749.1	1782.6	1819.1	1859.1	1900.3	1935.9	1968.8	2002.4	2032.1	2064.7	2107.2
10°	1744.6	1789.3	1834.6	1887.0	1939.3	1988.9	2033.7	2075.5	2115.4	2157.9	2211.7
12.5°	1739.6	1791.0	1845.8	1908.8	1974.0	2033.7	2086.2	2146.5	2196.3	2251.2	2313.3
15°	1717.4	1786.5	1861.2	1942.9	2021.0	2101.3	2173.2	2247.3	2316.3	2382.0	2460.2
17.5°	1691.9	1771.7	1859.8	1956.3	2050.2	2147.9	2233.1	2326.4	2397.1	2485.2	2557.8
20°	1671.3	1757.2	1851.4	1959.6	2066.5	2174.6	2268.9	2363.9	2443.5	2532.1	2624.2
22.5°	1646.2	1740.4	1842.5	1954.6	2066.5	2184.7	2289.0	2383.4	2481.9	2581.8	2676.7
25°	1605.7	1703.4	1811.6	1934.5	2063.0	2183.7	2295.4	2412.7	2518.8	2627.1	2712.2
27.5°	1556.0	1658.6	1772.7	1899.5	2031.2	2155.0	2286.5	2411.5	2518.3	2622.4	2696.7
30°	1516.3	1624.6	1734.1	1862.6	1999.4	2132.0	2273.1	2398.0	2510.4	2604.0	2645.8
32.5°	1475.5	1578.2	1691.1	1821.3	1961.5	2104.2	2244.0	2371.8	2475.8	2531.9	2533.0
35°	1404.6	1501.0	1618.2	1746.1	1889.9	2044.8	2186.6	2312.2	2375.7	2380.6	2312.2
37.5°	1327.3	1415.6	1526.4	1654.3	1811.8	1965.9	2110.7	2194.4	2215.7	2144.7	2018.1
40°	1272.0	1353.6	1460.5	1591.7	1748.1	1907.2	2039.2	2100.6	2078.3	1963.1	1822.1
42.5°	1213.9	1290.0	1392.9	1522.5	1679.4	1840.3	1952.7	1985.6	1926.4	1793.3	1628.3
45°	1119.1	1188.9	1290.8	1421.4	1572.2	1722.9	1808.2	1791.4	1692.9	1535.2	1350.2
47.5°	1020.4	1087.8	1179.5	1300.3	1454.7	1584.9	1642.5	1592.1	1452.0	1278.4	1127.9
50°	955.0	1024.1	1108.6	1223.9	1364.8	1490.5	1527.5	1450.7	1295.1	1128.1	990.0
52.5°	890.8	949.9	1032.7	1144.0	1278.8	1384.9	1404.6	1316.1	1155.4	1005.8	883.2
55°	793.0	846.9	916.7	1021.4	1137.9	1228.0	1217.5	1103.8	957.9	830.1	733.8
57.5°	698.5	739.0	803.5	901.7	1004.0	1064.5	1026.2	929.2	793.2	688.6	607.3
60°	636.0	673.7	733.8	819.6	909.7	943.8	911.7	806.4	698.8	603.2	534.7
62.5°	576.8	610.1	661.7	741.4	814.2	834.4	800.0	708.0	611.2	529.5	472.8
65°	490.8	521.5	565.5	622.1	672.3	682.1	659.7	565.5	492.2	423.7	384.7
67.5°	412.7	432.8	467.2	516.0	542.7	548.5	505.3	446.1	381.4	339.4	309.9
70°	360.2	374.2	406.3	432.8	454.4	455.1	415.4	367.9	318.3	284.2	262.5
72.5°	309.4	322.9	347.1	365.3	381.8	376.5	340.0	302.6	262.5	236.7	220.7
75°	238.7	250.6	263.2	271.6	271.6	264.6	238.0	210.2	187.1	171.8	166.8
77.5°	173.6	183.3	187.5	186.2	183.8	172.9	156.1	137.8	129.6	122.3	118.7
80°	136.1	140.4	141.7	138.3	134.0	121.5	110.3	102.6	94.9	92.2	90.8
82.5°	101.0	104.6	101.0	101.9	92.7	82.4	76.2	73.6	70.4	69.3	67.9
85°	53.7	53.0	51.7	48.2	41.9	40.5	39.8	39.1	37.7	38.4	37.0
87.5°	19.7	18.6	17.0	17.0	17.5	16.8	17.8	18.2	18.6	18.3	19.8
90°	6.4	9.3	12.1	14.9	17.5	19.6	21.6	23.7	25.9	27.4	29.0
92.5°	28.4	31.7	34.9	38.3	40.6	42.1	43.5	45.0	46.5	47.4	48.4
95°	72.7	75.1	77.5	79.8	81.9	83.7	85.5	87.4	89.2	90.0	90.7
97.5°	124.8	126.7	128.6	130.5	132.5	134.6	136.7	138.9	141.0	142.0	142.9
100°	165.3	166.3	167.3	168.4	170.2	172.5	174.8	177.1	179.6	180.1	180.6
102.5°	207.8	208.2	208.6	209.1	210.4	212.5	214.7	216.8	218.9	219.6	220.4
105°	273.7	273.9	274.2	274.4	275.1	276.1	277.1	278.2	279.2	280.0	280.8
107.5°	343.0	343.3	343.6	343.9	344.1	344.3	344.4	344.6	344.7	345.5	346.2
110°	390.0	390.5	391.1	391.6	391.7	391.5	391.2	390.9	390.7	390.2	389.6



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	438.5	438.6	438.7	438.8	438.6	438.1	437.7	437.2	436.7	436.6	436.5
115°	511.5	511.5	511.5	511.5	511.3	510.8	510.3	509.7	509.2	509.0	508.7
117.5°	580.8	581.0	581.2	581.4	581.3	580.9	580.6	580.2	579.9	579.0	578.0
120°	627.5	628.6	629.7	630.7	630.9	630.1	629.2	628.4	627.7	626.4	625.1
122.5°	674.8	675.2	675.6	676.1	676.1	675.7	675.4	675.0	674.6	673.8	672.9
125°	745.0	745.0	745.0	745.0	744.9	744.7	744.4	744.1	743.9	743.4	742.8
127.5°	809.9	810.6	811.4	812.2	812.4	811.9	811.5	811.1	810.7	810.2	809.7
130°	855.0	855.7	856.5	857.3	857.7	857.7	857.7	857.7	857.7	857.2	856.6
132.5°	900.7	901.3	901.8	902.4	902.6	902.4	902.2	902.0	901.8	901.2	900.7
135°	962.5	964.0	965.6	967.1	968.0	968.0	968.0	968.0	968.0	967.5	966.9
137.5°	1027.8	1028.5	1029.3	1030.0	1030.6	1031.0	1031.4	1031.8	1032.2	1031.6	1030.9
140°	1071.7	1072.3	1072.8	1073.3	1073.5	1073.5	1073.5	1073.5	1073.5	1073.3	1073.0
142.5°	1112.1	1112.6	1113.1	1113.7	1113.8	1113.6	1113.4	1113.2	1113.0	1112.9	1112.9
145°	1168.4	1169.5	1170.5	1171.5	1172.3	1172.5	1172.8	1173.0	1173.3	1173.0	1172.8
147.5°	1224.1	1225.3	1226.5	1227.8	1228.3	1228.1	1227.9	1227.7	1227.5	1227.3	1227.1
150°	1257.6	1258.7	1259.7	1260.7	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2
152.5°	1289.1	1289.7	1290.3	1291.0	1291.4	1291.6	1291.8	1292.0	1292.2	1292.8	1293.4
155°	1337.5	1337.5	1337.5	1337.5	1337.4	1337.2	1336.9	1336.6	1336.4	1337.4	1338.5
157.5°	1378.4	1377.9	1377.5	1377.0	1376.6	1376.6	1376.5	1376.5	1376.4	1377.3	1378.1
160°	1403.0	1402.7	1402.4	1402.2	1401.9	1401.7	1401.4	1401.1	1400.9	1401.7	1402.4
162.5°	1425.0	1424.4	1423.7	1423.0	1422.6	1422.3	1422.1	1421.8	1421.5	1422.9	1424.3
165°	1455.2	1454.4	1453.7	1452.9	1452.2	1451.7	1451.2	1450.7	1450.2	1451.7	1453.3
167.5°	1478.1	1477.0	1475.9	1474.9	1474.3	1474.4	1474.4	1474.5	1474.5	1476.1	1477.6
170°	1491.1	1489.8	1488.4	1487.1	1486.6	1486.9	1487.1	1487.4	1487.7	1489.2	1490.9
172.5°	1500.7	1499.5	1498.4	1497.4	1496.8	1496.9	1497.0	1497.0	1497.1	1498.8	1500.7
175°	1513.4	1512.1	1510.8	1509.4	1508.6	1508.4	1508.1	1507.9	1507.6	1509.4	1511.3
177.5°	1517.8	1516.8	1515.8	1514.7	1514.2	1514.2	1514.2	1514.2	1514.2	1515.7	1517.1
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1817.7	1819.9	1821.6	1827.1	1827.7	1832.7	1827.7
5°	1968.0	1977.8	1993.2	2008.5	2009.9	2019.6	2002.3
7.5°	2136.7	2159.3	2173.4	2198.3	2208.1	2214.1	2204.1
10°	2252.8	2273.8	2310.8	2329.0	2347.1	2349.9	2341.5
12.5°	2365.1	2398.3	2427.5	2461.8	2461.0	2485.6	2476.7
15°	2514.7	2548.9	2589.3	2627.8	2641.7	2641.7	2652.9
17.5°	2621.3	2684.0	2725.9	2756.0	2789.0	2794.7	2790.9
20°	2693.4	2761.1	2805.8	2844.9	2867.2	2873.5	2873.5
22.5°	2746.9	2804.6	2848.2	2883.4	2901.8	2909.2	2907.0
25°	2784.1	2833.7	2860.2	2870.6	2875.6	2874.2	2860.9
27.5°	2733.3	2731.1	2714.3	2682.2	2658.1	2643.4	2626.7
30°	2636.2	2599.8	2557.9	2511.8	2452.6	2407.1	2393.2
32.5°	2491.4	2409.9	2338.9	2262.2	2198.4	2153.0	2134.0
35°	2211.7	2082.5	1977.1	1884.9	1818.0	1776.0	1762.1
37.5°	1879.7	1754.6	1624.2	1534.8	1479.1	1436.8	1421.1
40°	1668.5	1532.4	1418.6	1334.8	1277.6	1236.4	1235.7
42.5°	1475.8	1345.8	1238.8	1178.4	1116.7	1089.4	1089.3
45°	1208.4	1104.4	1013.7	966.2	929.2	906.9	900.6
47.5°	1000.6	914.5	854.0	816.3	786.1	771.8	762.7
50°	883.8	808.4	760.2	727.4	710.6	692.6	691.2
52.5°	786.7	725.8	688.2	661.6	640.4	629.4	629.8
55°	661.2	613.0	586.4	566.1	549.5	541.1	537.6
57.5°	556.9	520.8	501.5	482.9	475.8	469.3	467.5
60°	492.2	467.8	449.6	434.9	424.4	422.3	421.6
62.5°	438.6	413.0	400.4	389.1	381.4	378.2	377.0
65°	361.6	342.7	331.6	322.6	319.7	314.9	314.2
67.5°	291.5	280.2	272.9	266.5	262.8	262.5	262.5
70°	248.5	242.3	236.0	232.5	230.4	228.9	228.9
72.5°	211.7	207.0	201.9	200.1	199.7	198.2	197.7
75°	161.3	156.4	157.0	153.6	150.8	147.3	145.2
77.5°	114.3	110.9	110.2	109.8	107.3	106.9	108.1
80°	88.7	85.1	84.4	85.1	84.4	82.4	82.4
82.5°	67.5	64.5	63.8	63.4	62.7	63.4	62.3
85°	36.3	34.9	34.9	34.9	36.3	35.6	34.9
87.5°	19.0	18.7	19.5	19.0	19.1	18.7	19.3
90°	30.5	32.1	33.1	33.6	34.1	34.6	35.2
92.5°	49.3	50.2	50.8	51.2	51.5	51.8	52.1
95°	91.5	92.3	92.7	92.7	92.7	92.7	92.7
97.5°	143.8	144.8	145.2	145.2	145.2	145.2	145.2
100°	181.1	181.6	181.9	181.9	181.9	181.9	181.9
102.5°	221.2	221.9	222.3	222.6	222.8	223.0	223.2
105°	281.6	282.4	283.2	284.0	284.7	285.5	286.3
107.5°	346.9	347.6	348.0	347.9	347.9	347.8	347.8
110°	389.1	388.6	388.7	389.5	390.3	391.1	391.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	436.4	436.3	436.3	436.5	436.6	436.8	437.0
115°	508.4	508.2	507.9	507.7	507.4	507.2	506.9
117.5°	577.1	576.2	575.6	575.0	574.5	574.0	573.5
120°	623.8	622.5	622.1	622.6	623.1	623.7	624.2
122.5°	672.0	671.1	670.1	669.2	668.3	667.3	666.4
125°	742.3	741.7	741.2	740.7	740.2	739.6	739.1
127.5°	809.2	808.6	808.2	807.8	807.3	806.9	806.5
130°	856.1	855.6	854.7	853.7	852.7	851.6	850.6
132.5°	900.2	899.7	899.2	898.8	898.4	898.0	897.6
135°	966.3	965.8	965.2	964.4	963.6	962.8	962.1
137.5°	1030.2	1029.6	1029.3	1029.5	1029.6	1029.8	1029.9
140°	1072.8	1072.5	1072.3	1072.0	1071.7	1071.5	1071.2
142.5°	1112.8	1112.8	1112.7	1112.7	1112.6	1112.6	1112.5
145°	1172.5	1172.3	1171.6	1170.9	1170.1	1169.3	1168.6
147.5°	1226.9	1226.6	1226.4	1226.2	1225.9	1225.6	1225.4
150°	1261.2	1261.2	1261.1	1260.8	1260.6	1260.3	1260.1
152.5°	1294.1	1294.7	1294.7	1294.0	1293.3	1292.6	1292.0
155°	1339.5	1340.5	1340.5	1339.5	1338.5	1337.4	1336.4
157.5°	1378.8	1379.6	1379.6	1378.7	1377.8	1376.8	1376.0
160°	1403.2	1404.0	1403.7	1402.4	1401.1	1399.9	1398.6
162.5°	1425.7	1427.1	1427.2	1425.9	1424.6	1423.3	1422.0
165°	1454.8	1456.4	1456.6	1455.6	1454.6	1453.5	1452.5
167.5°	1479.3	1480.8	1480.8	1479.1	1477.5	1475.9	1474.3
170°	1492.4	1494.0	1493.8	1492.0	1490.2	1488.3	1486.5
172.5°	1502.4	1504.2	1504.2	1502.3	1500.5	1498.6	1496.8
175°	1513.1	1514.9	1514.9	1513.1	1511.3	1509.4	1507.6
177.5°	1518.6	1520.0	1519.9	1518.2	1516.6	1514.9	1513.3
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0

(END OF REPORT)