

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: P331456-840

Luminaire Tested: **SA2XXDIP-C1005D1080U840-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331456-840
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: SA2XXDIP-C1005D1080U840-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1005 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1080 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

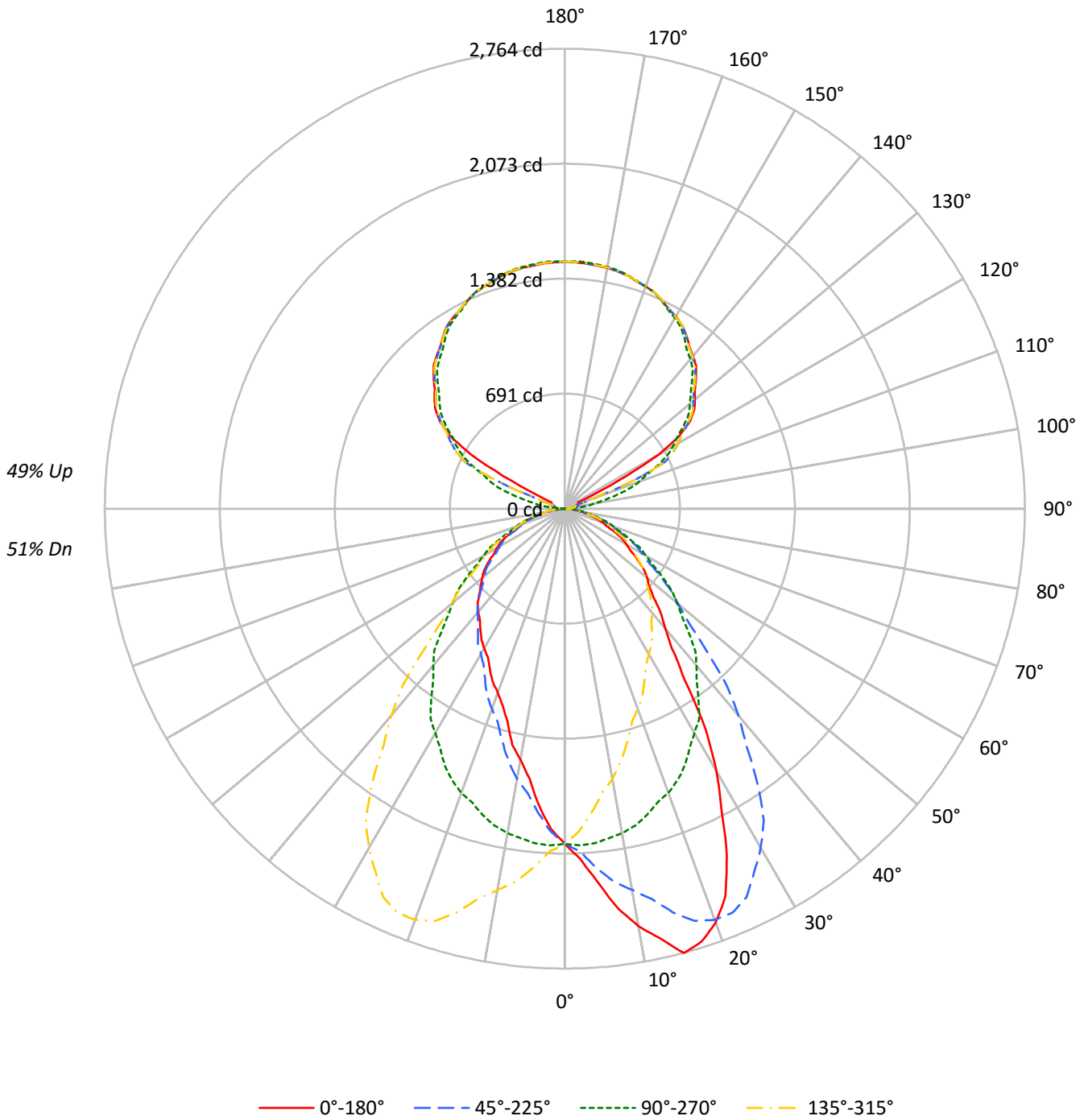
Lumens per Lamp: N/A
Luminaire Lumens: 8794.1 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	107	107	107	107	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	60	59	51	50	49	44
2	90	83	77	72	83	77	72	67	65	62	58	55	52	50	45	43	42	37
3	82	73	66	61	76	68	62	57	58	54	50	49	46	43	41	38	36	32
4	76	65	58	52	70	61	54	49	52	47	43	44	40	37	37	34	32	28
5	70	58	50	45	64	54	47	42	47	41	37	40	36	32	33	30	28	25
6	64	53	45	39	59	49	42	37	42	37	33	36	32	29	30	27	25	22
7	60	48	40	34	55	44	38	33	39	33	29	33	29	26	28	25	22	20
8	55	43	36	31	51	41	34	29	35	30	26	30	26	23	26	22	20	18
9	52	40	32	27	48	37	31	26	32	27	23	28	24	21	24	21	18	16
10	48	36	29	25	45	34	28	24	30	25	21	26	22	19	22	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	32513	32513	32513	32513
5°	36451	32725	29000	32725
10°	41769	32455	25097	32455
15°	46208	31861	22173	31861
20°	45505	31223	20213	31223
25°	41031	30375	18971	30375
30°	33907	29015	18066	29015
35°	24711	27595	17420	27595
40°	19736	25918	17062	25918
45°	17249	23980	16575	23980
50°	16211	22102	16252	22102
55°	14945	20194	15817	20194
60°	13695	18167	15145	18167
65°	12478	16351	14487	16351
70°	11325	14578	13520	14578
75°	10044	12601	11977	12601
80°	8638	10432	9642	10432
85°	7744	7744	5743	7744



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.8	2.2
10°-20°	557.5	6.3
20°-30°	809.1	9.2
30°-40°	853.9	9.7
40°-50°	756.0	8.6
50°-60°	603.3	6.9
60°-70°	410.1	4.7
70°-80°	210.2	2.4
80°-90°	54.3	0.6
90°-100°	49.5	0.6
100°-110°	181.5	2.1
110°-120°	485.1	5.5
120°-130°	800.8	9.1
130°-140°	851.6	9.7
140°-150°	791.6	9.0
150°-160°	636.4	7.2
160°-170°	410.1	4.7
170°-180°	141.2	1.6
0°-30°	1558.5	17.7
0°-40°	2412.3	27.4
0°-60°	3771.7	42.9
0°-90°	4446.3	50.6
90°-120°	716.1	8.1
90°-150°	3160.1	35.9
90°-180°	4348.0	49.4
0°-180°	8794.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2014	2014	2014	2014	2014	
5°	2249	2019	1789	2019	2249	225
15°	2764	1906	1326	1906	2764	763
25°	2303	1705	1065	1705	2303	1041
35°	1254	1400	884	1400	1254	815
45°	755	1050	726	1050	755	594
55°	531	717	562	717	531	476
65°	327	428	379	428	327	325
75°	161	202	192	202	161	172
85°	42	42	31	42	42	47
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°	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7
2.5°	2106.6	2107.2	2108.4	2098.5	2097.3	2097.3	2088.6	2081.2	2072.5	2060.7	2062.0
5°	2249.0	2257.5	2260.6	2251.3	2237.4	2235.8	2222.7	2201.0	2180.9	2164.6	2153.0
7.5°	2418.9	2422.4	2414.8	2402.6	2392.2	2373.6	2349.1	2325.1	2291.6	2260.8	2237.9
10°	2547.7	2552.3	2539.2	2521.4	2506.7	2485.1	2449.4	2413.1	2368.9	2326.4	2292.3
12.5°	2645.5	2657.0	2640.1	2637.8	2612.6	2582.8	2540.4	2522.0	2459.9	2400.7	2364.2
15°	2764.4	2763.6	2765.2	2750.5	2731.9	2727.2	2682.4	2633.6	2546.2	2511.3	2450.9
17.5°	2730.1	2741.8	2747.2	2747.0	2746.6	2743.7	2729.3	2698.5	2654.6	2598.2	2528.5
20°	2648.4	2663.8	2666.1	2683.9	2694.0	2707.1	2712.6	2704.0	2677.0	2629.8	2569.4
22.5°	2522.0	2526.4	2533.7	2561.3	2583.1	2616.2	2633.3	2661.9	2651.6	2628.5	2578.1
25°	2303.2	2295.4	2322.5	2336.4	2386.7	2439.3	2477.3	2519.1	2556.3	2578.7	2563.9
27.5°	2040.3	2028.7	2069.3	2106.3	2147.2	2204.1	2263.2	2333.0	2391.1	2463.7	2488.6
30°	1818.7	1825.6	1864.3	1903.8	1965.7	2046.2	2112.7	2189.4	2272.2	2353.5	2409.9
32.5°	1579.7	1606.5	1630.9	1691.4	1746.0	1835.7	1933.2	2029.0	2132.3	2224.7	2312.2
35°	1253.7	1284.6	1318.8	1362.8	1439.5	1528.4	1623.7	1752.9	1893.8	2019.9	2123.6
37.5°	1055.3	1050.4	1069.9	1101.8	1163.8	1235.7	1345.2	1472.9	1638.7	1787.0	1933.2
40°	936.4	933.3	947.3	976.6	1023.9	1076.5	1172.5	1284.6	1438.7	1619.8	1793.9
42.5°	854.7	856.6	864.3	885.0	917.4	960.7	1032.6	1128.0	1269.1	1439.7	1626.8
45°	755.4	760.7	769.3	779.3	797.9	833.5	873.7	941.9	1053.3	1195.7	1379.9
47.5°	683.8	684.0	692.7	701.5	712.5	732.6	765.4	808.1	886.8	1002.7	1161.0
50°	645.4	640.1	646.2	653.2	664.8	678.7	700.3	740.6	793.2	886.9	1019.3
52.5°	598.3	598.5	604.1	606.7	617.1	631.1	650.9	678.7	726.4	799.6	908.4
55°	530.9	534.7	537.9	542.5	551.8	561.9	577.3	595.9	633.1	688.0	768.5
57.5°	467.5	468.7	471.8	480.6	486.5	495.7	510.5	527.4	551.5	592.2	652.7
60°	424.1	424.1	430.3	434.1	441.9	451.2	462.8	479.1	500.7	534.0	582.8
62.5°	384.5	383.8	386.4	392.6	398.6	407.3	418.8	432.6	453.0	482.6	522.7
65°	326.6	325.1	329.7	331.2	337.4	346.0	355.3	369.9	386.2	407.9	443.4
67.5°	270.8	272.8	275.2	278.1	281.6	290.5	296.7	307.1	320.8	338.8	362.9
70°	239.9	239.9	239.9	242.3	246.9	251.6	257.7	266.2	279.4	294.9	316.5
72.5°	205.2	207.7	210.2	208.8	214.7	217.4	224.9	229.7	242.3	252.2	271.4
75°	161.0	161.0	161.0	164.8	167.1	169.5	174.1	178.7	185.0	197.3	207.4
77.5°	120.1	119.8	120.6	121.5	124.0	126.7	128.2	132.3	138.0	143.8	152.3
80°	92.9	94.4	95.2	96.7	96.7	98.3	99.1	104.5	108.4	112.2	117.6
82.5°	71.8	72.1	72.3	72.6	73.2	74.1	76.1	77.9	79.3	82.5	86.6
85°	41.8	41.0	41.0	42.5	41.8	41.8	43.3	44.8	44.8	45.6	48.0
87.5°	21.9	21.8	22.3	21.6	21.5	22.0	21.7	20.9	21.2	21.6	21.9
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°	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7
2.5°	2066.4	2061.4	2058.3	2047.2	2037.2	2027.3	2024.3	2025.5	2011.9	1998.8	1993.3
5°	2146.9	2131.3	2116.7	2095.8	2071.0	2043.9	2029.9	2019.1	1992.1	1962.7	1945.6
7.5°	2219.0	2196.9	2168.5	2129.2	2093.1	2050.5	2023.5	1999.4	1959.8	1918.3	1893.0
10°	2262.9	2232.7	2196.4	2148.4	2104.3	2052.4	2016.0	1979.6	1933.2	1883.7	1852.7
12.5°	2300.7	2260.0	2224.2	2162.6	2110.4	2045.6	2002.5	1951.2	1902.3	1843.4	1813.1
15°	2390.7	2315.5	2247.5	2177.8	2113.5	2023.0	1975.0	1906.1	1841.9	1769.2	1734.3
17.5°	2460.1	2375.7	2268.5	2180.0	2105.1	2004.8	1934.3	1851.8	1775.8	1692.7	1645.4
20°	2499.7	2403.0	2287.6	2182.4	2092.6	1978.1	1901.5	1817.2	1728.2	1634.5	1583.5
22.5°	2523.2	2421.6	2307.5	2173.1	2067.9	1956.4	1860.0	1767.6	1677.4	1576.3	1522.8
25°	2530.7	2437.8	2317.1	2165.5	2036.9	1910.8	1794.7	1705.0	1595.8	1501.4	1423.2
27.5°	2493.9	2427.3	2311.2	2150.8	2001.1	1853.7	1724.2	1622.6	1507.4	1404.9	1326.4
30°	2448.6	2409.9	2296.9	2136.0	1972.7	1814.0	1671.6	1556.3	1441.8	1338.1	1257.6
32.5°	2378.7	2370.4	2271.0	2115.0	1942.4	1763.9	1616.6	1500.0	1373.1	1271.2	1194.5
35°	2241.3	2278.4	2215.7	2067.9	1885.2	1692.5	1533.1	1400.0	1268.5	1170.9	1098.9
37.5°	2057.1	2149.3	2132.9	1999.0	1808.2	1614.9	1438.9	1299.7	1174.4	1075.9	1005.3
40°	1930.2	2047.8	2064.8	1946.4	1753.7	1554.8	1368.3	1229.7	1107.4	1017.7	946.4
42.5°	1793.9	1931.4	1978.1	1883.2	1694.3	1491.7	1305.1	1161.6	1040.6	953.3	890.2
45°	1565.6	1747.5	1831.9	1777.7	1595.1	1387.7	1195.7	1050.2	940.3	858.3	809.5
47.5°	1352.2	1551.0	1664.4	1645.2	1484.7	1279.3	1089.5	949.9	842.9	777.5	733.9
50°	1201.1	1405.4	1542.4	1548.6	1405.4	1201.8	1011.5	879.9	781.6	720.5	684.9
52.5°	1069.9	1264.9	1414.2	1447.0	1316.9	1121.4	941.5	810.6	724.1	667.9	636.0
55°	898.5	1063.4	1229.0	1289.3	1184.9	999.2	832.7	717.4	636.1	597.4	569.6
57.5°	747.0	884.4	1037.3	1104.1	1039.7	880.7	724.7	624.5	558.7	524.7	503.3
60°	667.1	775.5	911.7	991.4	935.6	794.1	657.8	562.6	508.5	478.3	458.2
62.5°	592.8	688.8	804.0	876.9	846.5	713.0	591.0	507.0	460.2	431.8	417.3
65°	489.1	564.9	654.0	721.2	701.1	599.8	500.0	428.0	390.8	368.4	356.8
67.5°	402.7	457.6	519.3	578.2	562.0	490.2	410.0	354.0	326.3	306.9	299.9
70°	348.3	390.0	445.0	492.2	479.1	420.2	356.8	308.8	284.8	268.5	261.6
72.5°	296.3	330.6	372.5	411.1	402.2	353.4	300.4	264.2	245.8	230.8	225.1
75°	223.7	249.9	275.5	301.0	298.7	260.8	229.8	202.0	187.3	175.7	173.4
77.5°	165.1	179.9	197.2	212.4	208.1	186.5	162.2	146.2	135.4	127.6	126.4
80°	126.1	134.6	147.0	157.8	152.5	143.2	123.8	112.2	104.5	96.7	93.6
82.5°	91.5	100.0	107.4	113.3	109.2	100.5	88.6	80.7	76.0	70.7	69.5
85°	48.0	52.6	55.7	57.3	55.7	50.3	44.8	41.8	38.0	35.6	34.8
87.5°	22.1	21.7	21.3	22.1	19.8	19.2	16.3	13.8	13.7	13.6	12.9
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: P331456-840

CATALOG NUMBER: SA2XXDIP-C1005D1080U840-4F0-1E-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: P331456-840

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7
2.5°	1987.1	1983.4	1970.3	1963.6	1952.5	1941.9	1935.1	1938.2	1940.7	1939.4	1937.5
5°	1930.2	1915.4	1893.0	1873.6	1859.7	1834.2	1823.3	1818.0	1813.3	1807.9	1802.4
7.5°	1862.3	1839.2	1807.0	1779.4	1753.3	1721.6	1703.5	1692.7	1681.5	1669.3	1658.5
10°	1814.0	1781.5	1747.5	1708.8	1677.9	1649.2	1623.7	1606.6	1591.1	1576.5	1565.6
12.5°	1763.3	1725.9	1683.7	1630.8	1596.7	1555.7	1551.9	1521.9	1497.6	1488.5	1475.8
15°	1682.4	1629.8	1576.5	1513.8	1486.7	1449.6	1426.3	1403.1	1382.2	1367.5	1363.6
17.5°	1590.7	1522.6	1469.5	1424.4	1380.1	1342.0	1320.6	1302.0	1284.9	1265.2	1262.5
20°	1520.8	1461.9	1403.9	1364.4	1318.8	1280.0	1253.7	1235.2	1220.4	1208.8	1198.8
22.5°	1454.5	1390.1	1337.0	1293.8	1248.8	1217.5	1196.8	1178.8	1166.6	1153.8	1144.3
25°	1348.2	1297.9	1239.8	1191.0	1153.9	1133.8	1116.7	1101.3	1093.6	1085.0	1074.2
27.5°	1255.2	1199.2	1144.9	1107.1	1074.5	1056.7	1044.6	1034.1	1026.8	1021.9	1015.7
30°	1189.5	1133.0	1090.5	1053.3	1026.2	1008.5	1000.7	994.5	985.9	982.9	979.8
32.5°	1126.3	1075.4	1039.1	1006.8	981.0	969.4	962.3	956.7	950.1	947.0	940.8
35°	1037.0	994.5	958.9	941.1	920.2	910.1	904.7	897.0	890.8	887.7	886.9
37.5°	953.0	916.0	892.6	869.7	860.9	854.7	847.3	842.0	840.2	839.7	838.9
40°	898.5	868.3	847.5	828.9	825.0	815.7	809.5	804.9	804.9	805.7	804.9
42.5°	849.0	821.9	803.4	787.4	782.8	777.3	771.1	770.8	772.0	774.7	772.0
45°	774.0	754.6	741.4	733.7	725.2	719.7	718.9	721.2	722.1	722.9	725.2
47.5°	704.9	692.1	680.1	671.6	667.9	666.9	666.0	670.0	673.8	675.2	678.7
50°	664.0	649.3	639.2	633.8	630.8	629.1	630.8	635.4	638.4	642.4	644.7
52.5°	618.2	607.8	600.9	596.7	595.4	596.4	596.7	602.0	606.9	608.3	609.4
55°	554.9	547.1	545.6	538.7	541.7	541.0	544.8	548.0	552.6	557.2	558.0
57.5°	491.7	485.5	481.4	482.0	482.9	486.4	489.6	495.0	500.0	504.9	505.3
60°	449.7	446.6	444.2	444.2	445.8	450.4	454.2	459.7	462.8	465.9	468.2
62.5°	411.2	408.2	405.9	407.1	411.1	413.8	418.4	421.3	424.4	427.5	428.6
65°	350.6	349.0	351.3	352.9	353.7	357.6	362.9	365.3	368.4	369.9	375.4
67.5°	294.7	295.0	294.7	296.9	301.3	302.3	307.4	312.9	313.5	316.4	319.9
70°	256.9	258.5	260.0	261.6	265.5	267.0	270.8	273.2	276.3	278.6	280.9
72.5°	222.3	222.6	224.1	223.8	227.0	230.5	233.7	236.0	239.1	242.1	244.4
75°	171.1	171.1	172.6	173.4	177.2	181.1	180.4	181.9	185.0	188.0	189.7
77.5°	124.9	123.2	124.9	125.7	126.9	130.2	130.8	133.0	136.5	135.4	137.1
80°	95.2	92.9	95.2	95.9	95.9	99.9	99.9	101.4	103.7	101.4	103.7
82.5°	68.0	66.9	68.6	68.8	70.0	70.1	71.4	71.7	74.0	72.9	74.0
85°	34.0	33.3	34.0	33.3	34.0	34.8	34.8	34.0	34.0	35.6	33.3
87.5°	12.8	12.6	12.4	12.8	12.6	12.3	11.9	12.2	12.4	11.4	11.6
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: P331456-840

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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: P331456-840

CATALOG NUMBER: SA2XXDIP-C1005D1080U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7
2.5°	1931.4	1930.2	1930.2	1924.6	1930.2	1930.2	1931.4	1937.5	1939.4	1940.7	1938.2
5°	1791.6	1789.3	1785.4	1789.3	1785.4	1789.3	1791.6	1802.4	1807.9	1813.3	1818.0
7.5°	1653.4	1644.1	1642.7	1633.6	1642.7	1644.1	1653.4	1658.5	1669.3	1681.5	1692.7
10°	1552.5	1546.3	1545.5	1530.8	1545.5	1546.3	1552.5	1565.6	1576.5	1591.1	1606.6
12.5°	1475.7	1460.9	1463.8	1455.2	1463.8	1460.9	1475.7	1475.8	1488.5	1497.6	1521.9
15°	1342.7	1342.7	1339.7	1326.5	1339.7	1342.7	1342.7	1363.6	1367.5	1382.2	1403.1
17.5°	1247.3	1245.7	1238.3	1241.9	1238.3	1245.7	1247.3	1262.5	1265.2	1284.9	1302.0
20°	1190.2	1185.7	1176.4	1176.4	1176.4	1185.7	1190.2	1198.8	1208.8	1220.4	1235.2
22.5°	1136.4	1136.1	1126.2	1129.3	1126.2	1136.1	1136.4	1144.3	1153.8	1166.6	1178.8
25°	1073.4	1067.2	1062.6	1064.9	1062.6	1067.2	1073.4	1074.2	1085.0	1093.6	1101.3
27.5°	1013.7	1010.3	1010.0	1003.6	1010.0	1010.3	1013.7	1015.7	1021.9	1026.8	1034.1
30°	979.0	971.3	972.8	969.0	972.8	971.3	979.0	979.8	982.9	985.9	994.5
32.5°	939.4	936.5	935.0	931.8	935.0	936.5	939.4	940.8	947.0	950.1	956.7
35°	885.3	886.2	882.2	883.8	882.2	886.2	885.3	886.9	887.7	890.8	897.0
37.5°	838.2	840.6	838.8	839.2	838.8	840.6	838.2	838.9	839.7	840.2	842.0
40°	807.2	807.2	807.2	809.5	807.2	807.2	807.2	804.9	805.7	804.9	804.9
42.5°	777.5	776.3	775.0	774.9	775.0	776.3	777.5	772.0	774.7	772.0	770.8
45°	726.7	729.0	729.8	725.9	729.8	729.0	726.7	725.2	722.9	722.1	721.2
47.5°	680.8	681.1	680.8	684.2	680.8	681.1	680.8	678.7	675.2	673.8	670.0
50°	648.5	647.0	648.5	647.0	648.5	647.0	648.5	644.7	642.4	638.4	635.4
52.5°	614.5	614.8	613.9	613.6	613.9	614.8	614.5	609.4	608.3	606.9	602.0
55°	561.1	562.6	561.9	561.9	561.9	562.6	561.1	558.0	557.2	552.6	548.0
57.5°	505.8	507.3	508.3	504.9	508.3	507.3	505.8	505.3	504.9	500.0	495.0
60°	467.5	471.3	470.5	469.0	470.5	471.3	467.5	468.2	465.9	462.8	459.7
62.5°	432.1	433.5	433.4	433.1	433.4	433.5	432.1	428.6	427.5	424.4	421.3
65°	377.7	379.2	376.9	379.2	376.9	379.2	377.7	375.4	369.9	368.4	365.3
67.5°	319.0	319.5	321.1	322.2	321.1	319.5	319.0	319.9	316.4	313.5	312.9
70°	282.5	281.8	284.1	286.4	284.1	281.8	282.5	280.9	278.6	276.3	273.2
72.5°	244.1	245.8	245.0	246.7	245.0	245.8	244.1	244.4	242.1	239.1	236.0
75°	188.0	190.4	189.7	192.0	189.7	190.4	188.0	189.7	188.0	185.0	181.9
77.5°	135.9	136.2	135.9	137.1	135.9	136.2	135.9	137.1	135.4	136.5	133.0
80°	103.7	102.2	100.6	103.7	100.6	102.2	103.7	103.7	101.4	103.7	101.4
82.5°	72.1	73.0	71.5	71.5	71.5	73.0	72.1	74.0	72.9	74.0	71.7
85°	33.3	32.5	31.0	31.0	31.0	32.5	33.3	33.3	35.6	34.0	34.0
87.5°	11.7	11.2	11.3	10.7	11.3	11.2	11.7	11.6	11.4	12.4	12.2
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: P331456-840
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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



TEST NUMBER: P331456-840
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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7
2.5°	1935.1	1941.9	1952.5	1963.6	1970.3	1983.4	1987.1	1993.3	1998.8	2011.9	2025.5
5°	1823.3	1834.2	1859.7	1873.6	1893.0	1915.4	1930.2	1945.6	1962.7	1992.1	2019.1
7.5°	1703.5	1721.6	1753.3	1779.4	1807.0	1839.2	1862.3	1893.0	1918.3	1959.8	1999.4
10°	1623.7	1649.2	1677.9	1708.8	1747.5	1781.5	1814.0	1852.7	1883.7	1933.2	1979.6
12.5°	1551.9	1555.7	1596.7	1630.8	1683.7	1725.9	1763.3	1813.1	1843.4	1902.3	1951.2
15°	1426.3	1449.6	1486.7	1513.8	1576.5	1629.8	1682.4	1734.3	1769.2	1841.9	1906.1
17.5°	1320.6	1342.0	1380.1	1424.4	1469.5	1522.6	1590.7	1645.4	1692.7	1775.8	1851.8
20°	1253.7	1280.0	1318.8	1364.4	1403.9	1461.9	1520.8	1583.5	1634.5	1728.2	1817.2
22.5°	1196.8	1217.5	1248.8	1293.8	1337.0	1390.1	1454.5	1522.8	1576.3	1677.4	1767.6
25°	1116.7	1133.8	1153.9	1191.0	1239.8	1297.9	1348.2	1423.2	1501.4	1595.8	1705.0
27.5°	1044.6	1056.7	1074.5	1107.1	1144.9	1199.2	1255.2	1326.4	1404.9	1507.4	1622.6
30°	1000.7	1008.5	1026.2	1053.3	1090.5	1133.0	1189.5	1257.6	1338.1	1441.8	1556.3
32.5°	962.3	969.4	981.0	1006.8	1039.1	1075.4	1126.3	1194.5	1271.2	1373.1	1500.0
35°	904.7	910.1	920.2	941.1	958.9	994.5	1037.0	1098.9	1170.9	1268.5	1400.0
37.5°	847.3	854.7	860.9	869.7	892.6	916.0	953.0	1005.3	1075.9	1174.4	1299.7
40°	809.5	815.7	825.0	828.9	847.5	868.3	898.5	946.4	1017.7	1107.4	1229.7
42.5°	771.1	777.3	782.8	787.4	803.4	821.9	849.0	890.2	953.3	1040.6	1161.6
45°	718.9	719.7	725.2	733.7	741.4	754.6	774.0	809.5	858.3	940.3	1050.2
47.5°	666.0	666.9	667.9	671.6	680.1	692.1	704.9	733.9	777.5	842.9	949.9
50°	630.8	629.1	630.8	633.8	639.2	649.3	664.0	684.9	720.5	781.6	879.9
52.5°	596.7	596.4	595.4	596.7	600.9	607.8	618.2	636.0	667.9	724.1	810.6
55°	544.8	541.0	541.7	538.7	545.6	547.1	554.9	569.6	597.4	636.1	717.4
57.5°	489.6	486.4	482.9	482.0	481.4	485.5	491.7	503.3	524.7	558.7	624.5
60°	454.2	450.4	445.8	444.2	444.2	446.6	449.7	458.2	478.3	508.5	562.6
62.5°	418.4	413.8	411.1	407.1	405.9	408.2	411.2	417.3	431.8	460.2	507.0
65°	362.9	357.6	353.7	352.9	351.3	349.0	350.6	356.8	368.4	390.8	428.0
67.5°	307.4	302.3	301.3	296.9	294.7	295.0	294.7	299.9	306.9	326.3	354.0
70°	270.8	267.0	265.5	261.6	260.0	258.5	256.9	261.6	268.5	284.8	308.8
72.5°	233.7	230.5	227.0	223.8	224.1	222.6	222.3	225.1	230.8	245.8	264.2
75°	180.4	181.1	177.2	173.4	172.6	171.1	171.1	173.4	175.7	187.3	202.0
77.5°	130.8	130.2	126.9	125.7	124.9	123.2	124.9	126.4	127.6	135.4	146.2
80°	99.9	99.9	95.9	95.9	95.2	92.9	95.2	93.6	96.7	104.5	112.2
82.5°	71.4	70.1	70.0	68.8	68.6	66.9	68.0	69.5	70.7	76.0	80.7
85°	34.8	34.8	34.0	33.3	34.0	33.3	34.0	34.8	35.6	38.0	41.8
87.5°	11.9	12.3	12.6	12.8	12.4	12.6	12.8	12.9	13.6	13.7	13.8
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



TEST NUMBER: P331456-840

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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



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7
2.5°	2024.3	2027.3	2037.2	2047.2	2058.3	2061.4	2066.4	2062.0	2060.7	2072.5	2081.2
5°	2029.9	2043.9	2071.0	2095.8	2116.7	2131.3	2146.9	2153.0	2164.6	2180.9	2201.0
7.5°	2023.5	2050.5	2093.1	2129.2	2168.5	2196.9	2219.0	2237.9	2260.8	2291.6	2325.1
10°	2016.0	2052.4	2104.3	2148.4	2196.4	2232.7	2262.9	2292.3	2326.4	2368.9	2413.1
12.5°	2002.5	2045.6	2110.4	2162.6	2224.2	2260.0	2300.7	2364.2	2400.7	2459.9	2522.0
15°	1975.0	2023.0	2113.5	2177.8	2247.5	2315.5	2390.7	2450.9	2511.3	2546.2	2633.6
17.5°	1934.3	2004.8	2105.1	2180.0	2268.5	2375.7	2460.1	2528.5	2598.2	2654.6	2698.5
20°	1901.5	1978.1	2092.6	2182.4	2287.6	2403.0	2499.7	2569.4	2629.8	2677.0	2704.0
22.5°	1860.0	1956.4	2067.9	2173.1	2307.5	2421.6	2523.2	2578.1	2628.5	2651.6	2661.9
25°	1794.7	1910.8	2036.9	2165.5	2317.1	2437.8	2530.7	2563.9	2578.7	2556.3	2519.1
27.5°	1724.2	1853.7	2001.1	2150.8	2311.2	2427.3	2493.9	2488.6	2463.7	2391.1	2333.0
30°	1671.6	1814.0	1972.7	2136.0	2296.9	2409.9	2448.6	2409.9	2353.5	2272.2	2189.4
32.5°	1616.6	1763.9	1942.4	2115.0	2271.0	2370.4	2378.7	2312.2	2224.7	2132.3	2029.0
35°	1533.1	1692.5	1885.2	2067.9	2215.7	2278.4	2241.3	2123.6	2019.9	1893.8	1752.9
37.5°	1438.9	1614.9	1808.2	1999.0	2132.9	2149.3	2057.1	1933.2	1787.0	1638.7	1472.9
40°	1368.3	1554.8	1753.7	1946.4	2064.8	2047.8	1930.2	1793.9	1619.8	1438.7	1284.6
42.5°	1305.1	1491.7	1694.3	1883.2	1978.1	1931.4	1793.9	1626.8	1439.7	1269.1	1128.0
45°	1195.7	1387.7	1595.1	1777.7	1831.9	1747.5	1565.6	1379.9	1195.7	1053.3	941.9
47.5°	1089.5	1279.3	1484.7	1645.2	1664.4	1551.0	1352.2	1161.0	1002.7	886.8	808.1
50°	1011.5	1201.8	1405.4	1548.6	1542.4	1405.4	1201.1	1019.3	886.9	793.2	740.6
52.5°	941.5	1121.4	1316.9	1447.0	1414.2	1264.9	1069.9	908.4	799.6	726.4	678.7
55°	832.7	999.2	1184.9	1289.3	1229.0	1063.4	898.5	768.5	688.0	633.1	595.9
57.5°	724.7	880.7	1039.7	1104.1	1037.3	884.4	747.0	652.7	592.2	551.5	527.4
60°	657.8	794.1	935.6	991.4	911.7	775.5	667.1	582.8	534.0	500.7	479.1
62.5°	591.0	713.0	846.5	876.9	804.0	688.8	592.8	522.7	482.6	453.0	432.6
65°	500.0	599.8	701.1	721.2	654.0	564.9	489.1	443.4	407.9	386.2	369.9
67.5°	410.0	490.2	562.0	578.2	519.3	457.6	402.7	362.9	338.8	320.8	307.1
70°	356.8	420.2	479.1	492.2	445.0	390.0	348.3	316.5	294.9	279.4	266.2
72.5°	300.4	353.4	402.2	411.1	372.5	330.6	296.3	271.4	252.2	242.3	229.7
75°	229.8	260.8	298.7	301.0	275.5	249.9	223.7	207.4	197.3	185.0	178.7
77.5°	162.2	186.5	208.1	212.4	197.2	179.9	165.1	152.3	143.8	138.0	132.3
80°	123.8	143.2	152.5	157.8	147.0	134.6	126.1	117.6	112.2	108.4	104.5
82.5°	88.6	100.5	109.2	113.3	107.4	100.0	91.5	86.6	82.5	79.3	77.9
85°	44.8	50.3	55.7	57.3	55.7	52.6	48.0	48.0	45.6	44.8	44.8
87.5°	16.3	19.2	19.8	22.1	21.3	21.7	22.1	21.9	21.6	21.2	20.9
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°	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7	2013.7
2.5°	2088.6	2097.3	2097.3	2098.5	2108.4	2107.2	2106.6
5°	2222.7	2235.8	2237.4	2251.3	2260.6	2257.5	2249.0
7.5°	2349.1	2373.6	2392.2	2402.6	2414.8	2422.4	2418.9
10°	2449.4	2485.1	2506.7	2521.4	2539.2	2552.3	2547.7
12.5°	2540.4	2582.8	2612.6	2637.8	2640.1	2657.0	2645.5
15°	2682.4	2727.2	2731.9	2750.5	2765.2	2763.6	2764.4
17.5°	2729.3	2743.7	2746.6	2747.0	2747.2	2741.8	2730.1
20°	2712.6	2707.1	2694.0	2683.9	2666.1	2663.8	2648.4
22.5°	2633.3	2616.2	2583.1	2561.3	2533.7	2526.4	2522.0
25°	2477.3	2439.3	2386.7	2336.4	2322.5	2295.4	2303.2
27.5°	2263.2	2204.1	2147.2	2106.3	2069.3	2028.7	2040.3
30°	2112.7	2046.2	1965.7	1903.8	1864.3	1825.6	1818.7
32.5°	1933.2	1835.7	1746.0	1691.4	1630.9	1606.5	1579.7
35°	1623.7	1528.4	1439.5	1362.8	1318.8	1284.6	1253.7
37.5°	1345.2	1235.7	1163.8	1101.8	1069.9	1050.4	1055.3
40°	1172.5	1076.5	1023.9	976.6	947.3	933.3	936.4
42.5°	1032.6	960.7	917.4	885.0	864.3	856.6	854.7
45°	873.7	833.5	797.9	779.3	769.3	760.7	755.4
47.5°	765.4	732.6	712.5	701.5	692.7	684.0	683.8
50°	700.3	678.7	664.8	653.2	646.2	640.1	645.4
52.5°	650.9	631.1	617.1	606.7	604.1	598.5	598.3
55°	577.3	561.9	551.8	542.5	537.9	534.7	530.9
57.5°	510.5	495.7	486.5	480.6	471.8	468.7	467.5
60°	462.8	451.2	441.9	434.1	430.3	424.1	424.1
62.5°	418.8	407.3	398.6	392.6	386.4	383.8	384.5
65°	355.3	346.0	337.4	331.2	329.7	325.1	326.6
67.5°	296.7	290.5	281.6	278.1	275.2	272.8	270.8
70°	257.7	251.6	246.9	242.3	239.9	239.9	239.9
72.5°	224.9	217.4	214.7	208.8	210.2	207.7	205.2
75°	174.1	169.5	167.1	164.8	161.0	161.0	161.0
77.5°	128.2	126.7	124.0	121.5	120.6	119.8	120.1
80°	99.1	98.3	96.7	96.7	95.2	94.4	92.9
82.5°	76.1	74.1	73.2	72.6	72.3	72.1	71.8
85°	43.3	41.8	41.8	42.5	41.0	41.0	41.8
87.5°	21.7	22.0	21.5	21.6	22.3	21.8	21.9
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



TEST NUMBER: P331456-840

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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)