

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: P331456-940

Luminaire Tested: **SA2XXDIP-C1005D1080U940-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331456-940
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-C1005D1080U940-4F0-1E-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

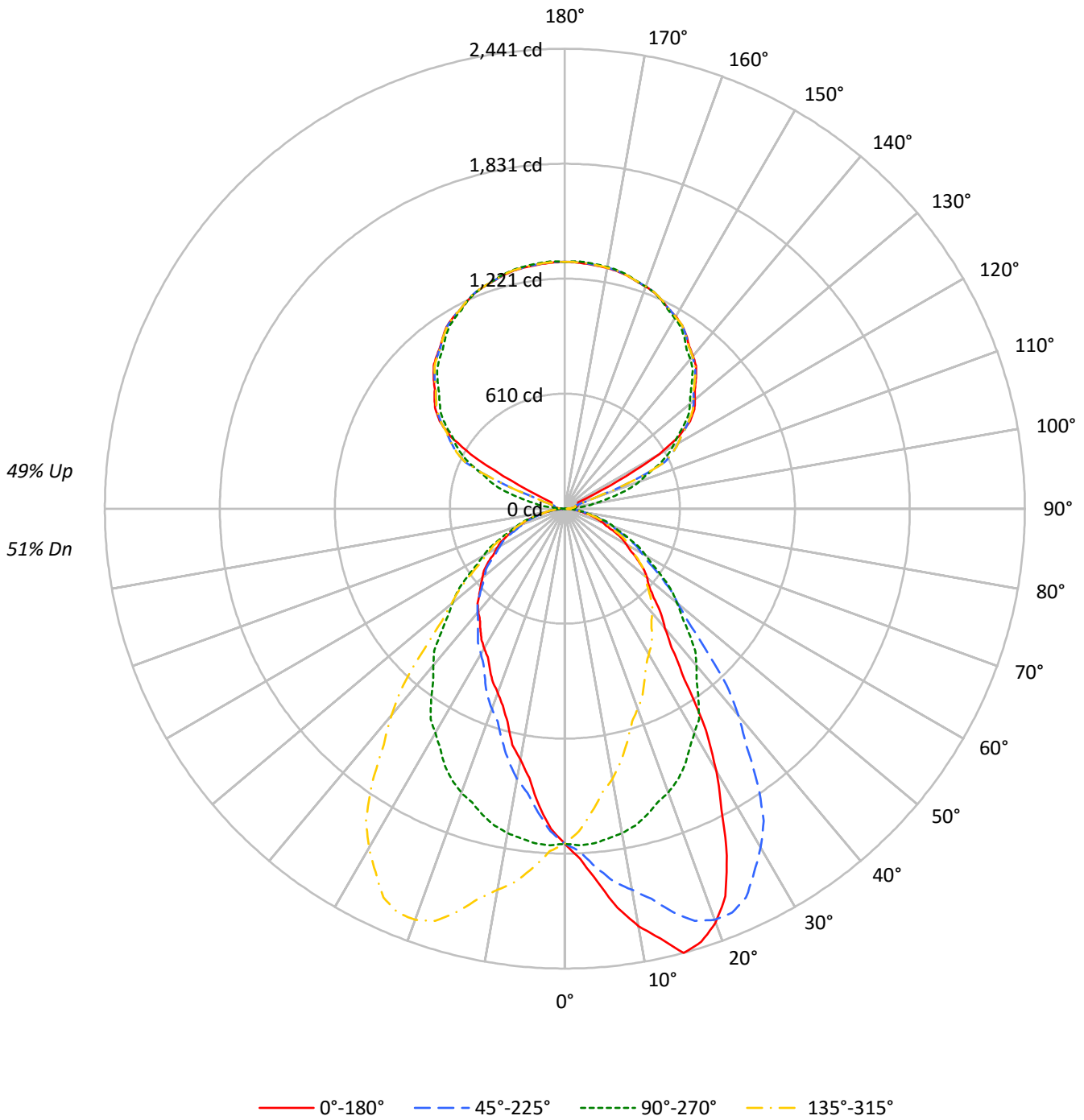
Lumens per Lamp: N/A
Luminaire Lumens: 7765.2 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

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°	28709	28709	28709	28709
5°	32185	28896	25606	28896
10°	36882	28658	22161	28658
15°	40802	28134	19579	28134
20°	40180	27569	17849	27569
25°	36230	26820	16751	26820
30°	29940	25620	15951	25620
35°	21821	24366	15382	24366
40°	17428	22885	15066	22885
45°	15230	21174	14636	21174
50°	14315	19515	14350	19515
55°	13196	17833	13965	17833
60°	12093	16043	13372	16043
65°	11018	14437	12791	14437
70°	10003	12873	11939	12873
75°	8865	11123	10574	11123
80°	7624	9214	8517	9214
85°	6836	6836	5076	6836



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.3	2.2
10°-20°	492.3	6.3
20°-30°	714.5	9.2
30°-40°	754.0	9.7
40°-50°	667.6	8.6
50°-60°	532.7	6.9
60°-70°	362.1	4.7
70°-80°	185.6	2.4
80°-90°	48.0	0.6
90°-100°	43.7	0.6
100°-110°	160.2	2.1
110°-120°	428.4	5.5
120°-130°	707.1	9.1
130°-140°	752.0	9.7
140°-150°	699.0	9.0
150°-160°	562.0	7.2
160°-170°	362.1	4.7
170°-180°	124.6	1.6
0°-30°	1376.1	17.7
0°-40°	2130.1	27.4
0°-60°	3330.4	42.9
0°-90°	3926.1	50.6
90°-120°	632.3	8.1
90°-150°	2790.4	35.9
90°-180°	3839.0	49.4
0°-180°	7765.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1778	1778	1778	1778	1778	
5°	1986	1783	1580	1783	1986	198
15°	2441	1683	1171	1683	2441	674
25°	2034	1506	940	1506	2034	919
35°	1107	1236	780	1236	1107	720
45°	667	927	641	927	667	524
55°	469	634	496	634	469	420
65°	288	378	335	378	288	287
75°	142	178	170	178	142	152
85°	37	37	27	37	37	41
90°	26	1	26	1	26	13
95°	41	62	41	62	41	38
105°	72	288	72	288	72	75
115°	78	545	78	545	78	195
125°	810	771	810	771	810	701
135°	985	954	985	954	985	759
145°	1123	1106	1123	1106	1123	702
155°	1219	1218	1219	1218	1219	563
165°	1281	1284	1281	1284	1281	362
175°	1305	1313	1305	1313	1305	124
180°	1310	1310	1310	1310	1310	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1
2.5°	1860.1	1860.6	1861.7	1853.0	1851.9	1851.9	1844.2	1837.7	1830.1	1819.6	1820.8
5°	1985.8	1993.3	1996.1	1987.9	1975.6	1974.2	1962.7	1943.5	1925.7	1911.4	1901.1
7.5°	2135.9	2138.9	2132.3	2121.5	2112.3	2095.9	2074.3	2053.1	2023.5	1996.3	1976.0
10°	2249.6	2253.7	2242.1	2226.4	2213.4	2194.3	2162.8	2130.7	2091.8	2054.2	2024.1
12.5°	2336.0	2346.1	2331.2	2329.1	2306.9	2280.6	2243.2	2227.0	2172.1	2119.8	2087.6
15°	2441.0	2440.3	2441.7	2428.7	2412.3	2408.2	2368.6	2325.5	2248.3	2217.5	2164.2
17.5°	2410.7	2421.0	2425.8	2425.6	2425.3	2422.7	2409.9	2382.7	2344.0	2294.2	2232.7
20°	2338.5	2352.2	2354.2	2369.9	2378.8	2390.4	2395.2	2387.6	2363.7	2322.1	2268.8
22.5°	2227.0	2230.8	2237.2	2261.6	2280.9	2310.1	2325.2	2350.5	2341.4	2320.9	2276.4
25°	2033.7	2026.9	2050.8	2063.1	2107.5	2153.9	2187.5	2224.4	2257.2	2277.0	2264.0
27.5°	1801.6	1791.4	1827.2	1859.8	1896.0	1946.2	1998.4	2060.0	2111.3	2175.4	2197.4
30°	1605.9	1612.0	1646.2	1681.1	1735.7	1806.8	1865.5	1933.2	2006.3	2078.1	2128.0
32.5°	1394.9	1418.5	1440.1	1493.5	1541.7	1621.0	1707.0	1791.6	1882.8	1964.4	2041.7
35°	1107.1	1134.3	1164.5	1203.4	1271.0	1349.6	1433.7	1547.8	1672.2	1783.6	1875.2
37.5°	931.8	927.5	944.7	972.9	1027.6	1091.1	1187.8	1300.6	1447.0	1577.9	1707.0
40°	826.9	824.1	836.4	862.4	904.1	950.6	1035.3	1134.3	1270.3	1430.3	1584.0
42.5°	754.7	756.3	763.2	781.5	810.0	848.3	911.8	996.0	1120.6	1271.2	1436.5
45°	667.0	671.7	679.3	688.1	704.5	736.0	771.5	831.7	930.1	1055.8	1218.4
47.5°	603.8	604.0	611.6	619.4	629.1	646.8	675.8	713.5	783.0	885.4	1025.2
50°	569.9	565.2	570.6	576.8	587.0	599.3	618.4	654.0	700.4	783.1	900.0
52.5°	528.3	528.5	533.4	535.7	544.9	557.2	574.7	599.3	641.4	706.1	802.1
55°	468.8	472.2	474.9	479.0	487.2	496.1	509.8	526.2	559.0	607.5	678.6
57.5°	412.8	413.8	416.6	424.4	429.5	437.7	450.8	465.7	487.0	522.9	576.3
60°	374.5	374.5	380.0	383.3	390.2	398.4	408.7	423.0	442.1	471.5	514.6
62.5°	339.5	338.9	341.2	346.7	352.0	359.6	369.8	382.0	400.0	426.1	461.5
65°	288.4	287.0	291.1	292.5	297.9	305.5	313.7	326.6	341.0	360.2	391.6
67.5°	239.2	240.9	243.0	245.6	248.6	256.5	262.0	271.2	283.3	299.2	320.5
70°	211.9	211.9	211.9	213.9	218.0	222.1	227.6	235.1	246.7	260.4	279.5
72.5°	181.2	183.4	185.6	184.4	189.6	192.0	198.6	202.9	213.9	222.7	239.6
75°	142.1	142.1	142.1	145.5	147.6	149.6	153.7	157.8	163.4	174.2	183.2
77.5°	106.0	105.8	106.5	107.3	109.5	111.9	113.2	116.8	121.9	127.0	134.5
80°	82.0	83.4	84.1	85.4	85.4	86.8	87.5	92.3	95.7	99.1	103.9
82.5°	63.4	63.7	63.8	64.1	64.6	65.5	67.2	68.8	70.0	72.9	76.5
85°	36.9	36.2	36.2	37.5	36.9	36.9	38.3	39.6	39.6	40.3	42.4
87.5°	19.4	19.3	19.7	19.1	19.0	19.4	19.2	18.5	18.7	19.1	19.4
90°	25.6	25.1	24.8	24.3	23.9	23.2	22.1	21.0	20.0	19.0	17.3
92.5°	25.6	25.3	25.1	24.9	24.6	24.2	23.6	23.1	22.6	22.0	21.1
95°	40.8	40.9	41.2	41.4	41.6	41.2	40.1	39.1	38.0	37.0	35.5
97.5°	54.4	54.1	53.9	53.7	53.4	52.9	52.0	51.2	50.3	49.5	46.1
100°	63.5	63.1	62.7	62.2	61.8	60.8	59.1	57.4	55.7	54.0	50.5
102.5°	68.0	67.5	66.9	66.3	65.7	64.3	62.2	59.9	57.8	55.6	85.5
105°	72.1	71.2	70.4	69.6	68.7	67.1	64.7	62.4	60.1	57.8	115.3
107.5°	74.1	73.3	72.4	71.6	70.8	71.5	73.8	76.2	78.6	81.0	149.9
110°	74.9	74.0	73.2	72.3	71.5	81.6	102.7	123.8	144.8	165.9	226.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	75.6	75.0	74.3	73.7	72.9	111.0	187.9	264.7	341.6	418.4	433.5
115°	77.8	92.9	108.1	123.2	138.4	194.7	292.3	389.8	487.3	584.9	579.6
117.5°	317.4	367.2	417.1	466.9	516.7	553.5	577.0	600.7	624.2	647.8	644.2
120°	578.3	606.6	635.1	663.5	692.0	705.0	702.4	699.9	697.3	694.8	691.1
122.5°	721.6	727.1	732.6	738.2	743.6	745.6	744.1	742.6	741.1	739.6	735.5
125°	810.5	809.9	809.2	808.6	808.0	806.9	805.4	804.0	802.5	801.0	797.0
127.5°	866.6	866.5	866.4	866.2	866.1	865.0	862.8	860.7	858.5	856.4	853.4
130°	901.5	901.7	901.9	902.1	902.3	901.3	898.9	896.6	894.3	892.0	889.7
132.5°	935.6	935.9	936.0	936.2	936.5	935.6	933.6	931.6	929.6	927.6	925.3
135°	984.9	985.3	985.7	986.1	986.6	985.7	983.6	981.5	979.5	977.3	975.4
137.5°	1029.8	1030.6	1031.3	1032.0	1032.7	1032.0	1029.9	1027.9	1025.8	1023.8	1021.6
140°	1057.9	1058.9	1060.0	1061.0	1062.1	1061.7	1059.8	1057.9	1056.0	1054.1	1051.8
142.5°	1085.2	1086.3	1087.3	1088.3	1089.4	1089.0	1087.4	1085.6	1083.9	1082.2	1079.5
145°	1123.3	1124.4	1125.4	1126.5	1127.5	1127.3	1125.8	1124.4	1122.8	1121.4	1117.8
147.5°	1156.8	1157.7	1158.6	1159.5	1160.4	1160.3	1159.2	1158.1	1157.0	1155.9	1152.4
150°	1177.3	1178.4	1179.5	1180.4	1181.5	1181.4	1180.2	1178.9	1177.7	1176.3	1173.0
152.5°	1194.8	1196.1	1197.6	1198.9	1200.3	1200.4	1199.2	1197.8	1196.6	1195.3	1192.1
155°	1219.1	1220.8	1222.4	1224.1	1225.7	1226.0	1224.8	1223.4	1222.2	1220.9	1218.4
157.5°	1241.2	1242.9	1244.5	1246.2	1247.8	1247.9	1246.4	1245.0	1243.6	1242.2	1240.4
160°	1254.1	1255.6	1257.0	1258.6	1260.0	1260.1	1258.8	1257.6	1256.3	1255.1	1253.8
162.5°	1264.7	1266.5	1268.4	1270.2	1271.9	1272.2	1270.7	1269.3	1267.8	1266.4	1265.3
165°	1280.7	1282.1	1283.6	1285.0	1286.6	1286.6	1285.0	1283.6	1282.1	1280.7	1280.1
167.5°	1290.7	1292.6	1294.5	1296.4	1298.2	1298.5	1297.0	1295.6	1294.1	1292.6	1292.0
170°	1296.7	1298.7	1300.6	1302.4	1304.3	1304.6	1303.1	1301.6	1300.1	1298.7	1298.2
172.5°	1301.3	1303.2	1305.1	1307.0	1308.9	1309.1	1307.6	1306.2	1304.7	1303.2	1302.8
175°	1305.3	1307.4	1309.5	1311.6	1313.8	1314.0	1312.6	1311.1	1309.7	1308.1	1307.7
177.5°	1307.8	1309.3	1310.8	1312.3	1313.8	1314.0	1312.8	1311.6	1310.5	1309.3	1309.1
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1
2.5°	1824.6	1820.2	1817.5	1807.7	1798.8	1790.1	1787.4	1788.5	1776.5	1765.0	1760.1
5°	1895.7	1882.0	1869.0	1850.6	1828.7	1804.7	1792.4	1782.9	1759.0	1733.0	1718.0
7.5°	1959.4	1939.8	1914.8	1880.1	1848.2	1810.6	1786.7	1765.5	1730.5	1693.9	1671.5
10°	1998.1	1971.5	1939.4	1897.0	1858.1	1812.3	1780.1	1748.0	1707.0	1663.3	1635.9
12.5°	2031.5	1995.6	1964.0	1909.6	1863.5	1806.2	1768.2	1722.9	1679.7	1627.7	1601.0
15°	2110.9	2044.6	1984.5	1923.0	1866.3	1786.3	1743.9	1683.1	1626.4	1562.2	1531.4
17.5°	2172.3	2097.7	2003.0	1924.9	1858.8	1770.2	1708.0	1635.1	1568.1	1494.7	1452.9
20°	2207.3	2121.8	2020.0	1927.1	1847.8	1746.7	1679.0	1604.5	1526.0	1443.2	1398.2
22.5°	2228.0	2138.2	2037.6	1918.9	1826.0	1727.5	1642.4	1560.8	1481.1	1391.9	1344.6
25°	2234.6	2152.6	2046.0	1912.1	1798.6	1687.2	1584.7	1505.5	1409.1	1325.7	1256.7
27.5°	2202.1	2143.3	2040.8	1899.2	1767.0	1636.8	1522.5	1432.7	1331.1	1240.5	1171.2
30°	2162.1	2128.0	2028.2	1886.1	1741.9	1601.8	1476.0	1374.2	1273.1	1181.5	1110.4
32.5°	2100.4	2093.0	2005.3	1867.5	1715.1	1557.6	1427.5	1324.5	1212.5	1122.5	1054.7
35°	1979.1	2011.8	1956.5	1826.0	1664.6	1494.5	1353.7	1236.2	1120.1	1033.9	970.4
37.5°	1816.4	1897.8	1883.4	1765.1	1596.6	1425.9	1270.5	1147.6	1037.0	950.0	887.7
40°	1704.3	1808.2	1823.2	1718.7	1548.5	1372.9	1208.2	1085.8	977.9	898.7	835.7
42.5°	1584.0	1705.4	1746.7	1662.9	1496.0	1317.1	1152.4	1025.7	918.8	841.8	786.0
45°	1382.4	1543.0	1617.6	1569.7	1408.5	1225.3	1055.8	927.3	830.3	757.9	714.8
47.5°	1194.0	1369.5	1469.6	1452.7	1311.0	1129.6	962.1	838.7	744.3	686.5	648.0
50°	1060.6	1241.0	1361.9	1367.4	1241.0	1061.2	893.1	776.9	690.2	636.2	604.8
52.5°	944.7	1116.9	1248.8	1277.7	1162.8	990.2	831.3	715.8	639.4	589.8	561.6
55°	793.4	939.0	1085.2	1138.4	1046.2	882.3	735.3	633.5	561.7	527.5	502.9
57.5°	659.6	781.0	916.0	974.9	918.0	777.7	639.9	551.4	493.3	463.3	444.4
60°	589.1	684.7	805.0	875.4	826.2	701.2	580.9	496.8	449.0	422.3	404.6
62.5°	523.4	608.2	709.9	774.3	747.4	629.5	521.8	447.6	406.4	381.3	368.5
65°	431.9	498.8	577.5	636.9	619.1	529.6	441.5	377.9	345.1	325.3	315.0
67.5°	355.6	404.0	458.5	510.6	496.2	432.8	362.0	312.5	288.1	271.0	264.8
70°	307.6	344.4	393.0	434.6	423.0	371.0	315.0	272.7	251.5	237.1	231.0
72.5°	261.6	291.9	329.0	363.0	355.2	312.0	265.3	233.3	217.0	203.8	198.8
75°	197.5	220.7	243.3	265.8	263.8	230.3	203.0	178.3	165.4	155.2	153.1
77.5°	145.8	158.8	174.2	187.5	183.8	164.7	143.2	129.1	119.6	112.7	111.6
80°	111.4	118.9	129.8	139.4	134.6	126.4	109.3	99.1	92.3	85.4	82.7
82.5°	80.8	88.3	94.9	100.0	96.4	88.7	78.2	71.2	67.1	62.4	61.3
85°	42.4	46.5	49.2	50.6	49.2	44.4	39.6	36.9	33.5	31.5	30.8
87.5°	19.5	19.2	18.8	19.5	17.5	16.9	14.4	12.2	12.1	12.0	11.4
90°	15.6	13.9	12.2	10.3	7.9	5.6	3.3	1.0	3.3	5.6	7.9
92.5°	20.3	19.4	18.6	18.3	18.5	18.7	18.9	19.2	18.9	18.7	18.5
95°	34.1	32.5	31.0	33.8	40.8	47.7	54.7	61.6	54.7	47.7	40.8
97.5°	42.6	39.2	35.8	44.0	63.5	83.1	102.7	122.3	102.7	83.1	63.5
100°	46.9	43.2	39.7	52.3	81.2	110.0	138.9	167.8	138.9	110.0	81.2
102.5°	115.5	145.4	175.4	193.4	199.5	205.6	211.7	217.8	211.7	205.6	199.5
105°	172.8	230.3	287.8	313.4	307.1	300.8	294.5	288.2	294.5	300.8	307.1
107.5°	218.9	287.8	356.9	388.8	383.6	378.5	373.4	368.4	373.4	378.5	383.6
110°	287.7	348.5	409.4	437.7	433.2	428.8	424.4	419.9	424.4	428.8	433.2



TEST NUMBER: P331456-940

CATALOG NUMBER: SA2XXDIP-C1005D1080U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	448.5	463.5	478.6	484.1	480.2	476.3	472.4	468.5	472.4	476.3	480.2
115°	574.4	569.1	563.8	559.4	555.8	552.2	548.7	545.1	548.7	552.2	555.8
117.5°	640.6	636.9	633.3	629.5	625.5	621.5	617.5	613.5	617.5	621.5	625.5
120°	687.2	683.5	679.7	676.2	673.1	669.9	666.7	663.5	666.7	669.9	673.1
122.5°	731.3	727.2	723.1	719.3	716.0	712.7	709.4	706.1	709.4	712.7	716.0
125°	793.0	789.0	785.0	781.6	778.9	776.1	773.4	770.7	773.4	776.1	778.9
127.5°	850.3	847.4	844.4	841.4	838.4	835.4	832.3	829.3	832.3	835.4	838.4
130°	887.3	885.0	882.7	879.9	876.6	873.2	869.8	866.4	869.8	873.2	876.6
132.5°	923.0	920.7	918.4	915.8	912.9	910.1	907.2	904.3	907.2	910.1	912.9
135°	973.5	971.6	969.7	967.1	963.8	960.4	957.0	953.6	957.0	960.4	963.8
137.5°	1019.5	1017.4	1015.1	1012.9	1010.6	1008.2	1005.8	1003.4	1005.8	1008.2	1010.6
140°	1049.5	1047.1	1044.8	1042.9	1041.2	1039.5	1037.8	1036.1	1037.8	1039.5	1041.2
142.5°	1076.8	1074.2	1071.6	1069.4	1067.9	1066.4	1064.9	1063.4	1064.9	1066.4	1067.9
145°	1114.2	1110.6	1107.1	1105.4	1105.6	1105.8	1106.0	1106.3	1106.0	1105.8	1105.6
147.5°	1148.8	1145.3	1141.7	1140.4	1141.2	1142.0	1142.8	1143.6	1142.8	1142.0	1141.2
150°	1169.7	1166.3	1162.9	1162.0	1163.4	1164.9	1166.4	1167.9	1166.4	1164.9	1163.4
152.5°	1188.9	1185.7	1182.5	1181.8	1183.4	1185.0	1186.7	1188.3	1186.7	1185.0	1183.4
155°	1215.8	1213.4	1210.9	1210.5	1212.4	1214.3	1216.2	1218.1	1216.2	1214.3	1212.4
157.5°	1238.6	1236.9	1235.1	1235.0	1236.6	1238.2	1239.8	1241.4	1239.8	1238.2	1236.6
160°	1252.5	1251.2	1250.0	1250.0	1251.2	1252.5	1253.8	1255.1	1253.8	1252.5	1251.2
162.5°	1264.3	1263.1	1262.0	1262.1	1263.4	1264.6	1266.0	1267.2	1266.0	1264.6	1263.4
165°	1279.4	1278.7	1278.1	1278.4	1279.7	1280.9	1282.2	1283.5	1282.2	1280.9	1279.7
167.5°	1291.4	1290.8	1290.2	1290.6	1291.8	1293.1	1294.4	1295.7	1294.4	1293.1	1291.8
170°	1297.8	1297.4	1297.0	1297.4	1298.7	1299.9	1301.2	1302.4	1301.2	1299.9	1298.7
172.5°	1302.3	1302.0	1301.5	1302.0	1303.2	1304.5	1305.7	1307.0	1305.7	1304.5	1303.2
175°	1307.3	1306.9	1306.4	1307.0	1308.5	1309.9	1311.4	1312.9	1311.4	1309.9	1308.5
177.5°	1308.9	1308.8	1308.6	1309.1	1310.3	1311.4	1312.7	1313.8	1312.7	1311.4	1310.3
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0



TEST NUMBER: P331456-940

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1
2.5°	1754.6	1751.3	1739.8	1733.8	1724.0	1714.7	1708.7	1711.5	1713.6	1712.5	1710.8
5°	1704.3	1691.3	1671.5	1654.4	1642.1	1619.6	1610.0	1605.3	1601.2	1596.3	1591.5
7.5°	1644.4	1624.0	1595.5	1571.2	1548.2	1520.2	1504.2	1494.7	1484.8	1474.0	1464.5
10°	1601.8	1573.1	1543.0	1508.9	1481.6	1456.3	1433.7	1418.6	1405.0	1392.0	1382.4
12.5°	1557.0	1523.9	1486.7	1440.0	1409.9	1373.7	1370.3	1343.8	1322.4	1314.4	1303.1
15°	1485.6	1439.1	1392.0	1336.7	1312.8	1280.0	1259.5	1238.9	1220.5	1207.5	1204.1
17.5°	1404.6	1344.4	1297.5	1257.8	1218.6	1185.0	1166.1	1149.7	1134.5	1117.1	1114.8
20°	1342.8	1290.8	1239.7	1204.8	1164.5	1130.2	1107.1	1090.7	1077.6	1067.4	1058.5
22.5°	1284.3	1227.4	1180.5	1142.5	1102.7	1075.0	1056.8	1040.9	1030.1	1018.8	1010.4
25°	1190.4	1146.0	1094.8	1051.7	1018.9	1001.1	986.1	972.4	965.6	958.1	948.5
27.5°	1108.3	1058.9	1010.9	977.6	948.8	933.1	922.4	913.1	906.7	902.3	896.9
30°	1050.3	1000.4	962.9	930.1	906.2	890.5	883.6	878.2	870.6	867.9	865.1
32.5°	994.5	949.6	917.5	889.0	866.2	856.0	849.7	844.8	838.9	836.2	830.7
35°	915.7	878.2	846.7	831.0	812.5	803.6	798.9	792.0	786.6	783.8	783.1
37.5°	841.5	808.9	788.2	767.9	760.2	754.7	748.1	743.5	741.9	741.5	740.7
40°	793.4	766.7	748.3	731.9	728.4	720.2	714.8	710.7	710.7	711.4	710.7
42.5°	749.7	725.8	709.4	695.3	691.3	686.3	680.9	680.6	681.7	684.0	681.7
45°	683.4	666.3	654.7	647.8	640.3	635.5	634.8	636.9	637.6	638.3	640.3
47.5°	622.4	611.1	600.6	593.0	589.8	588.9	588.1	591.7	594.9	596.2	599.3
50°	586.3	573.4	564.5	559.6	557.0	555.5	557.0	561.1	563.7	567.2	569.3
52.5°	545.9	536.7	530.6	526.9	525.8	526.6	526.9	531.5	535.9	537.2	538.1
55°	490.0	483.1	481.8	475.6	478.3	477.7	481.1	483.8	487.9	492.0	492.7
57.5°	434.2	428.7	425.1	425.6	426.4	429.4	432.3	437.1	441.5	445.9	446.2
60°	397.1	394.3	392.3	392.3	393.6	397.7	401.1	405.9	408.7	411.3	413.4
62.5°	363.1	360.4	358.4	359.4	363.0	365.4	369.4	372.0	374.8	377.5	378.4
65°	309.6	308.2	310.2	311.7	312.3	315.8	320.5	322.5	325.3	326.6	331.4
67.5°	260.2	260.5	260.2	262.2	266.1	266.9	271.4	276.3	276.8	279.4	282.5
70°	226.9	228.3	229.6	231.0	234.4	235.8	239.2	241.2	244.0	246.0	248.1
72.5°	196.3	196.5	197.9	197.6	200.5	203.5	206.3	208.4	211.2	213.7	215.8
75°	151.1	151.1	152.4	153.1	156.5	159.9	159.3	160.6	163.4	166.0	167.5
77.5°	110.3	108.8	110.3	111.0	112.1	114.9	115.5	117.4	120.6	119.6	121.1
80°	84.1	82.0	84.1	84.7	84.7	88.2	88.2	89.5	91.6	89.5	91.6
82.5°	60.0	59.0	60.5	60.7	61.8	61.9	63.0	63.3	65.4	64.4	65.4
85°	30.1	29.4	30.1	29.4	30.1	30.8	30.8	30.1	30.1	31.5	29.4
87.5°	11.3	11.1	11.0	11.3	11.1	10.9	10.5	10.8	11.0	10.1	10.3
90°	10.3	12.2	13.9	15.6	17.3	19.0	20.0	21.0	22.1	23.2	23.9
92.5°	18.3	18.6	19.4	20.3	21.1	22.0	22.6	23.1	23.6	24.2	24.6
95°	33.8	31.0	32.5	34.1	35.5	37.0	38.0	39.1	40.1	41.2	41.6
97.5°	44.0	35.8	39.2	42.6	46.1	49.5	50.3	51.2	52.0	52.9	53.4
100°	52.3	39.7	43.2	46.9	50.5	54.0	55.7	57.4	59.1	60.8	61.8
102.5°	193.4	175.4	145.4	115.5	85.5	55.6	57.8	59.9	62.2	64.3	65.7
105°	313.4	287.8	230.3	172.8	115.3	57.8	60.1	62.4	64.7	67.1	68.7
107.5°	388.8	356.9	287.8	218.9	149.9	81.0	78.6	76.2	73.8	71.5	70.8
110°	437.7	409.4	348.5	287.7	226.8	165.9	144.8	123.8	102.7	81.6	71.5



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CATALOG NUMBER: SA2XXDIP-C1005D1080U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	484.1	478.6	463.5	448.5	433.5	418.4	341.6	264.7	187.9	111.0	72.9
115°	559.4	563.8	569.1	574.4	579.6	584.9	487.3	389.8	292.3	194.7	138.4
117.5°	629.5	633.3	636.9	640.6	644.2	647.8	624.2	600.7	577.0	553.5	516.7
120°	676.2	679.7	683.5	687.2	691.1	694.8	697.3	699.9	702.4	705.0	692.0
122.5°	719.3	723.1	727.2	731.3	735.5	739.6	741.1	742.6	744.1	745.6	743.6
125°	781.6	785.0	789.0	793.0	797.0	801.0	802.5	804.0	805.4	806.9	808.0
127.5°	841.4	844.4	847.4	850.3	853.4	856.4	858.5	860.7	862.8	865.0	866.1
130°	879.9	882.7	885.0	887.3	889.7	892.0	894.3	896.6	898.9	901.3	902.3
132.5°	915.8	918.4	920.7	923.0	925.3	927.6	929.6	931.6	933.6	935.6	936.5
135°	967.1	969.7	971.6	973.5	975.4	977.3	979.5	981.5	983.6	985.7	986.6
137.5°	1012.9	1015.1	1017.4	1019.5	1021.6	1023.8	1025.8	1027.9	1029.9	1032.0	1032.7
140°	1042.9	1044.8	1047.1	1049.5	1051.8	1054.1	1056.0	1057.9	1059.8	1061.7	1062.1
142.5°	1069.4	1071.6	1074.2	1076.8	1079.5	1082.2	1083.9	1085.6	1087.4	1089.0	1089.4
145°	1105.4	1107.1	1110.6	1114.2	1117.8	1121.4	1122.8	1124.4	1125.8	1127.3	1127.5
147.5°	1140.4	1141.7	1145.3	1148.8	1152.4	1155.9	1157.0	1158.1	1159.2	1160.3	1160.4
150°	1162.0	1162.9	1166.3	1169.7	1173.0	1176.3	1177.7	1178.9	1180.2	1181.4	1181.5
152.5°	1181.8	1182.5	1185.7	1188.9	1192.1	1195.3	1196.6	1197.8	1199.2	1200.4	1200.3
155°	1210.5	1210.9	1213.4	1215.8	1218.4	1220.9	1222.2	1223.4	1224.8	1226.0	1225.7
157.5°	1235.0	1235.1	1236.9	1238.6	1240.4	1242.2	1243.6	1245.0	1246.4	1247.9	1247.8
160°	1250.0	1250.0	1251.2	1252.5	1253.8	1255.1	1256.3	1257.6	1258.8	1260.1	1260.0
162.5°	1262.1	1262.0	1263.1	1264.3	1265.3	1266.4	1267.8	1269.3	1270.7	1272.2	1271.9
165°	1278.4	1278.1	1278.7	1279.4	1280.1	1280.7	1282.1	1283.6	1285.0	1286.6	1286.6
167.5°	1290.6	1290.2	1290.8	1291.4	1292.0	1292.6	1294.1	1295.6	1297.0	1298.5	1298.2
170°	1297.4	1297.0	1297.4	1297.8	1298.2	1298.7	1300.1	1301.6	1303.1	1304.6	1304.3
172.5°	1302.0	1301.5	1302.0	1302.3	1302.8	1303.2	1304.7	1306.2	1307.6	1309.1	1308.9
175°	1307.0	1306.4	1306.9	1307.3	1307.7	1308.1	1309.7	1311.1	1312.6	1314.0	1313.8
177.5°	1309.1	1308.6	1308.8	1308.9	1309.1	1309.3	1310.5	1311.6	1312.8	1314.0	1313.8
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0



TEST NUMBER: P331456-940

CATALOG NUMBER: SA2XXDIP-C1005D1080U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1
2.5°	1705.4	1704.3	1704.3	1699.4	1704.3	1704.3	1705.4	1710.8	1712.5	1713.6	1711.5
5°	1582.0	1579.9	1576.5	1579.9	1576.5	1579.9	1582.0	1591.5	1596.3	1601.2	1605.3
7.5°	1459.9	1451.7	1450.5	1442.4	1450.5	1451.7	1459.9	1464.5	1474.0	1484.8	1494.7
10°	1370.8	1365.4	1364.7	1351.7	1364.7	1365.4	1370.8	1382.4	1392.0	1405.0	1418.6
12.5°	1303.1	1289.9	1292.5	1285.0	1292.5	1289.9	1303.1	1303.1	1314.4	1322.4	1343.8
15°	1185.6	1185.6	1182.9	1171.3	1182.9	1185.6	1185.6	1204.1	1207.5	1220.5	1238.9
17.5°	1101.4	1099.9	1093.4	1096.6	1093.4	1099.9	1101.4	1114.8	1117.1	1134.5	1149.7
20°	1051.0	1047.0	1038.8	1038.8	1038.8	1047.0	1051.0	1058.5	1067.4	1077.6	1090.7
22.5°	1003.4	1003.2	994.4	997.2	994.4	1003.2	1003.4	1010.4	1018.8	1030.1	1040.9
25°	947.8	942.4	938.3	940.3	938.3	942.4	947.8	948.5	958.1	965.6	972.4
27.5°	895.1	892.1	891.8	886.2	891.8	892.1	895.1	896.9	902.3	906.7	913.1
30°	864.4	857.6	859.0	855.6	859.0	857.6	864.4	865.1	867.9	870.6	878.2
32.5°	829.5	827.0	825.6	822.8	825.6	827.0	829.5	830.7	836.2	838.9	844.8
35°	781.8	782.5	779.0	780.4	779.0	782.5	781.8	783.1	783.8	786.6	792.0
37.5°	740.1	742.3	740.7	741.0	740.7	742.3	740.1	740.7	741.5	741.9	743.5
40°	712.7	712.7	712.7	714.8	712.7	712.7	712.7	710.7	711.4	710.7	710.7
42.5°	686.5	685.5	684.3	684.2	684.3	685.5	686.5	681.7	684.0	681.7	680.6
45°	641.7	643.7	644.4	641.0	644.4	643.7	641.7	640.3	638.3	637.6	636.9
47.5°	601.1	601.4	601.1	604.1	601.1	601.4	601.1	599.3	596.2	594.9	591.7
50°	572.7	571.3	572.7	571.3	572.7	571.3	572.7	569.3	567.2	563.7	561.1
52.5°	542.6	542.9	542.1	541.8	542.1	542.9	542.6	538.1	537.2	535.9	531.5
55°	495.4	496.8	496.1	496.1	496.1	496.8	495.4	492.7	492.0	487.9	483.8
57.5°	446.7	447.9	448.8	445.9	448.8	447.9	446.7	446.2	445.9	441.5	437.1
60°	412.8	416.2	415.4	414.1	415.4	416.2	412.8	413.4	411.3	408.7	405.9
62.5°	381.6	382.8	382.7	382.5	382.7	382.8	381.6	378.4	377.5	374.8	372.0
65°	333.5	334.8	332.8	334.8	332.8	334.8	333.5	331.4	326.6	325.3	322.5
67.5°	281.7	282.1	283.6	284.5	283.6	282.1	281.7	282.5	279.4	276.8	276.3
70°	249.4	248.8	250.8	252.9	250.8	248.8	249.4	248.1	246.0	244.0	241.2
72.5°	215.5	217.0	216.3	217.8	216.3	217.0	215.5	215.8	213.7	211.2	208.4
75°	166.0	168.1	167.5	169.5	167.5	168.1	166.0	167.5	166.0	163.4	160.6
77.5°	120.0	120.3	120.0	121.1	120.0	120.3	120.0	121.1	119.6	120.6	117.4
80°	91.6	90.2	88.8	91.6	88.8	90.2	91.6	91.6	89.5	91.6	89.5
82.5°	63.7	64.5	63.1	63.1	63.1	64.5	63.7	65.4	64.4	65.4	63.3
85°	29.4	28.7	27.4	27.4	27.4	28.7	29.4	29.4	31.5	30.1	30.1
87.5°	10.3	9.9	10.0	9.5	10.0	9.9	10.3	10.3	10.1	11.0	10.8
90°	24.3	24.8	25.1	25.6	25.1	24.8	24.3	23.9	23.2	22.1	21.0
92.5°	24.9	25.1	25.3	25.6	25.3	25.1	24.9	24.6	24.2	23.6	23.1
95°	41.4	41.2	40.9	40.8	40.9	41.2	41.4	41.6	41.2	40.1	39.1
97.5°	53.7	53.9	54.1	54.4	54.1	53.9	53.7	53.4	52.9	52.0	51.2
100°	62.2	62.7	63.1	63.5	63.1	62.7	62.2	61.8	60.8	59.1	57.4
102.5°	66.3	66.9	67.5	68.0	67.5	66.9	66.3	65.7	64.3	62.2	59.9
105°	69.6	70.4	71.2	72.1	71.2	70.4	69.6	68.7	67.1	64.7	62.4
107.5°	71.6	72.4	73.3	74.1	73.3	72.4	71.6	70.8	71.5	73.8	76.2
110°	72.3	73.2	74.0	74.9	74.0	73.2	72.3	71.5	81.6	102.7	123.8



TEST NUMBER: P331456-940

CATALOG NUMBER: SA2XXDIP-C1005D1080U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	73.7	74.3	75.0	75.6	75.0	74.3	73.7	72.9	111.0	187.9	264.7
115°	123.2	108.1	92.9	77.8	92.9	108.1	123.2	138.4	194.7	292.3	389.8
117.5°	466.9	417.1	367.2	317.4	367.2	417.1	466.9	516.7	553.5	577.0	600.7
120°	663.5	635.1	606.6	578.3	606.6	635.1	663.5	692.0	705.0	702.4	699.9
122.5°	738.2	732.6	727.1	721.6	727.1	732.6	738.2	743.6	745.6	744.1	742.6
125°	808.6	809.2	809.9	810.5	809.9	809.2	808.6	808.0	806.9	805.4	804.0
127.5°	866.2	866.4	866.5	866.6	866.5	866.4	866.2	866.1	865.0	862.8	860.7
130°	902.1	901.9	901.7	901.5	901.7	901.9	902.1	902.3	901.3	898.9	896.6
132.5°	936.2	936.0	935.9	935.6	935.9	936.0	936.2	936.5	935.6	933.6	931.6
135°	986.1	985.7	985.3	984.9	985.3	985.7	986.1	986.6	985.7	983.6	981.5
137.5°	1032.0	1031.3	1030.6	1029.8	1030.6	1031.3	1032.0	1032.7	1032.0	1029.9	1027.9
140°	1061.0	1060.0	1058.9	1057.9	1058.9	1060.0	1061.0	1062.1	1061.7	1059.8	1057.9
142.5°	1088.3	1087.3	1086.3	1085.2	1086.3	1087.3	1088.3	1089.4	1089.0	1087.4	1085.6
145°	1126.5	1125.4	1124.4	1123.3	1124.4	1125.4	1126.5	1127.5	1127.3	1125.8	1124.4
147.5°	1159.5	1158.6	1157.7	1156.8	1157.7	1158.6	1159.5	1160.4	1160.3	1159.2	1158.1
150°	1180.4	1179.5	1178.4	1177.3	1178.4	1179.5	1180.4	1181.5	1181.4	1180.2	1178.9
152.5°	1198.9	1197.6	1196.1	1194.8	1196.1	1197.6	1198.9	1200.3	1200.4	1199.2	1197.8
155°	1224.1	1222.4	1220.8	1219.1	1220.8	1222.4	1224.1	1225.7	1226.0	1224.8	1223.4
157.5°	1246.2	1244.5	1242.9	1241.2	1242.9	1244.5	1246.2	1247.8	1247.9	1246.4	1245.0
160°	1258.6	1257.0	1255.6	1254.1	1255.6	1257.0	1258.6	1260.0	1260.1	1258.8	1257.6
162.5°	1270.2	1268.4	1266.5	1264.7	1266.5	1268.4	1270.2	1271.9	1272.2	1270.7	1269.3
165°	1285.0	1283.6	1282.1	1280.7	1282.1	1283.6	1285.0	1286.6	1286.6	1285.0	1283.6
167.5°	1296.4	1294.5	1292.6	1290.7	1292.6	1294.5	1296.4	1298.2	1298.5	1297.0	1295.6
170°	1302.4	1300.6	1298.7	1296.7	1298.7	1300.6	1302.4	1304.3	1304.6	1303.1	1301.6
172.5°	1307.0	1305.1	1303.2	1301.3	1303.2	1305.1	1307.0	1308.9	1309.1	1307.6	1306.2
175°	1311.6	1309.5	1307.4	1305.3	1307.4	1309.5	1311.6	1313.8	1314.0	1312.6	1311.1
177.5°	1312.3	1310.8	1309.3	1307.8	1309.3	1310.8	1312.3	1313.8	1314.0	1312.8	1311.6
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0



TEST NUMBER: P331456-940
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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1
2.5°	1708.7	1714.7	1724.0	1733.8	1739.8	1751.3	1754.6	1760.1	1765.0	1776.5	1788.5
5°	1610.0	1619.6	1642.1	1654.4	1671.5	1691.3	1704.3	1718.0	1733.0	1759.0	1782.9
7.5°	1504.2	1520.2	1548.2	1571.2	1595.5	1624.0	1644.4	1671.5	1693.9	1730.5	1765.5
10°	1433.7	1456.3	1481.6	1508.9	1543.0	1573.1	1601.8	1635.9	1663.3	1707.0	1748.0
12.5°	1370.3	1373.7	1409.9	1440.0	1486.7	1523.9	1557.0	1601.0	1627.7	1679.7	1722.9
15°	1259.5	1280.0	1312.8	1336.7	1392.0	1439.1	1485.6	1531.4	1562.2	1626.4	1683.1
17.5°	1166.1	1185.0	1218.6	1257.8	1297.5	1344.4	1404.6	1452.9	1494.7	1568.1	1635.1
20°	1107.1	1130.2	1164.5	1204.8	1239.7	1290.8	1342.8	1398.2	1443.2	1526.0	1604.5
22.5°	1056.8	1075.0	1102.7	1142.5	1180.5	1227.4	1284.3	1344.6	1391.9	1481.1	1560.8
25°	986.1	1001.1	1018.9	1051.7	1094.8	1146.0	1190.4	1256.7	1325.7	1409.1	1505.5
27.5°	922.4	933.1	948.8	977.6	1010.9	1058.9	1108.3	1171.2	1240.5	1331.1	1432.7
30°	883.6	890.5	906.2	930.1	962.9	1000.4	1050.3	1110.4	1181.5	1273.1	1374.2
32.5°	849.7	856.0	866.2	889.0	917.5	949.6	994.5	1054.7	1122.5	1212.5	1324.5
35°	798.9	803.6	812.5	831.0	846.7	878.2	915.7	970.4	1033.9	1120.1	1236.2
37.5°	748.1	754.7	760.2	767.9	788.2	808.9	841.5	887.7	950.0	1037.0	1147.6
40°	714.8	720.2	728.4	731.9	748.3	766.7	793.4	835.7	898.7	977.9	1085.8
42.5°	680.9	686.3	691.3	695.3	709.4	725.8	749.7	786.0	841.8	918.8	1025.7
45°	634.8	635.5	640.3	647.8	654.7	666.3	683.4	714.8	757.9	830.3	927.3
47.5°	588.1	588.9	589.8	593.0	600.6	611.1	622.4	648.0	686.5	744.3	838.7
50°	557.0	555.5	557.0	559.6	564.5	573.4	586.3	604.8	636.2	690.2	776.9
52.5°	526.9	526.6	525.8	526.9	530.6	536.7	545.9	561.6	589.8	639.4	715.8
55°	481.1	477.7	478.3	475.6	481.8	483.1	490.0	502.9	527.5	561.7	633.5
57.5°	432.3	429.4	426.4	425.6	425.1	428.7	434.2	444.4	463.3	493.3	551.4
60°	401.1	397.7	393.6	392.3	392.3	394.3	397.1	404.6	422.3	449.0	496.8
62.5°	369.4	365.4	363.0	359.4	358.4	360.4	363.1	368.5	381.3	406.4	447.6
65°	320.5	315.8	312.3	311.7	310.2	308.2	309.6	315.0	325.3	345.1	377.9
67.5°	271.4	266.9	266.1	262.2	260.2	260.5	260.2	264.8	271.0	288.1	312.5
70°	239.2	235.8	234.4	231.0	229.6	228.3	226.9	231.0	237.1	251.5	272.7
72.5°	206.3	203.5	200.5	197.6	197.9	196.5	196.3	198.8	203.8	217.0	233.3
75°	159.3	159.9	156.5	153.1	152.4	151.1	151.1	153.1	155.2	165.4	178.3
77.5°	115.5	114.9	112.1	111.0	110.3	108.8	110.3	111.6	112.7	119.6	129.1
80°	88.2	88.2	84.7	84.7	84.1	82.0	84.1	82.7	85.4	92.3	99.1
82.5°	63.0	61.9	61.8	60.7	60.5	59.0	60.0	61.3	62.4	67.1	71.2
85°	30.8	30.8	30.1	29.4	30.1	29.4	30.1	30.8	31.5	33.5	36.9
87.5°	10.5	10.9	11.1	11.3	11.0	11.1	11.3	11.4	12.0	12.1	12.2
90°	20.0	19.0	17.3	15.6	13.9	12.2	10.3	7.9	5.6	3.3	1.0
92.5°	22.6	22.0	21.1	20.3	19.4	18.6	18.3	18.5	18.7	18.9	19.2
95°	38.0	37.0	35.5	34.1	32.5	31.0	33.8	40.8	47.7	54.7	61.6
97.5°	50.3	49.5	46.1	42.6	39.2	35.8	44.0	63.5	83.1	102.7	122.3
100°	55.7	54.0	50.5	46.9	43.2	39.7	52.3	81.2	110.0	138.9	167.8
102.5°	57.8	55.6	85.5	115.5	145.4	175.4	193.4	199.5	205.6	211.7	217.8
105°	60.1	57.8	115.3	172.8	230.3	287.8	313.4	307.1	300.8	294.5	288.2
107.5°	78.6	81.0	149.9	218.9	287.8	356.9	388.8	383.6	378.5	373.4	368.4
110°	144.8	165.9	226.8	287.7	348.5	409.4	437.7	433.2	428.8	424.4	419.9



TEST NUMBER: P331456-940

CATALOG NUMBER: SA2XXDIP-C1005D1080U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	341.6	418.4	433.5	448.5	463.5	478.6	484.1	480.2	476.3	472.4	468.5
115°	487.3	584.9	579.6	574.4	569.1	563.8	559.4	555.8	552.2	548.7	545.1
117.5°	624.2	647.8	644.2	640.6	636.9	633.3	629.5	625.5	621.5	617.5	613.5
120°	697.3	694.8	691.1	687.2	683.5	679.7	676.2	673.1	669.9	666.7	663.5
122.5°	741.1	739.6	735.5	731.3	727.2	723.1	719.3	716.0	712.7	709.4	706.1
125°	802.5	801.0	797.0	793.0	789.0	785.0	781.6	778.9	776.1	773.4	770.7
127.5°	858.5	856.4	853.4	850.3	847.4	844.4	841.4	838.4	835.4	832.3	829.3
130°	894.3	892.0	889.7	887.3	885.0	882.7	879.9	876.6	873.2	869.8	866.4
132.5°	929.6	927.6	925.3	923.0	920.7	918.4	915.8	912.9	910.1	907.2	904.3
135°	979.5	977.3	975.4	973.5	971.6	969.7	967.1	963.8	960.4	957.0	953.6
137.5°	1025.8	1023.8	1021.6	1019.5	1017.4	1015.1	1012.9	1010.6	1008.2	1005.8	1003.4
140°	1056.0	1054.1	1051.8	1049.5	1047.1	1044.8	1042.9	1041.2	1039.5	1037.8	1036.1
142.5°	1083.9	1082.2	1079.5	1076.8	1074.2	1071.6	1069.4	1067.9	1066.4	1064.9	1063.4
145°	1122.8	1121.4	1117.8	1114.2	1110.6	1107.1	1105.4	1105.6	1105.8	1106.0	1106.3
147.5°	1157.0	1155.9	1152.4	1148.8	1145.3	1141.7	1140.4	1141.2	1142.0	1142.8	1143.6
150°	1177.7	1176.3	1173.0	1169.7	1166.3	1162.9	1162.0	1163.4	1164.9	1166.4	1167.9
152.5°	1196.6	1195.3	1192.1	1188.9	1185.7	1182.5	1181.8	1183.4	1185.0	1186.7	1188.3
155°	1222.2	1220.9	1218.4	1215.8	1213.4	1210.9	1210.5	1212.4	1214.3	1216.2	1218.1
157.5°	1243.6	1242.2	1240.4	1238.6	1236.9	1235.1	1235.0	1236.6	1238.2	1239.8	1241.4
160°	1256.3	1255.1	1253.8	1252.5	1251.2	1250.0	1250.0	1251.2	1252.5	1253.8	1255.1
162.5°	1267.8	1266.4	1265.3	1264.3	1263.1	1262.0	1262.1	1263.4	1264.6	1266.0	1267.2
165°	1282.1	1280.7	1280.1	1279.4	1278.7	1278.1	1278.4	1279.7	1280.9	1282.2	1283.5
167.5°	1294.1	1292.6	1292.0	1291.4	1290.8	1290.2	1290.6	1291.8	1293.1	1294.4	1295.7
170°	1300.1	1298.7	1298.2	1297.8	1297.4	1297.0	1297.4	1298.7	1299.9	1301.2	1302.4
172.5°	1304.7	1303.2	1302.8	1302.3	1302.0	1301.5	1302.0	1303.2	1304.5	1305.7	1307.0
175°	1309.7	1308.1	1307.7	1307.3	1306.9	1306.4	1307.0	1308.5	1309.9	1311.4	1312.9
177.5°	1310.5	1309.3	1309.1	1308.9	1308.8	1308.6	1309.1	1310.3	1311.4	1312.7	1313.8
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0



TEST NUMBER: P331456-940
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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1
2.5°	1787.4	1790.1	1798.8	1807.7	1817.5	1820.2	1824.6	1820.8	1819.6	1830.1	1837.7
5°	1792.4	1804.7	1828.7	1850.6	1869.0	1882.0	1895.7	1901.1	1911.4	1925.7	1943.5
7.5°	1786.7	1810.6	1848.2	1880.1	1914.8	1939.8	1959.4	1976.0	1996.3	2023.5	2053.1
10°	1780.1	1812.3	1858.1	1897.0	1939.4	1971.5	1998.1	2024.1	2054.2	2091.8	2130.7
12.5°	1768.2	1806.2	1863.5	1909.6	1964.0	1995.6	2031.5	2087.6	2119.8	2172.1	2227.0
15°	1743.9	1786.3	1866.3	1923.0	1984.5	2044.6	2110.9	2164.2	2217.5	2248.3	2325.5
17.5°	1708.0	1770.2	1858.8	1924.9	2003.0	2097.7	2172.3	2232.7	2294.2	2344.0	2382.7
20°	1679.0	1746.7	1847.8	1927.1	2020.0	2121.8	2207.3	2268.8	2322.1	2363.7	2387.6
22.5°	1642.4	1727.5	1826.0	1918.9	2037.6	2138.2	2228.0	2276.4	2320.9	2341.4	2350.5
25°	1584.7	1687.2	1798.6	1912.1	2046.0	2152.6	2234.6	2264.0	2277.0	2257.2	2224.4
27.5°	1522.5	1636.8	1767.0	1899.2	2040.8	2143.3	2202.1	2197.4	2175.4	2111.3	2060.0
30°	1476.0	1601.8	1741.9	1886.1	2028.2	2128.0	2162.1	2128.0	2078.1	2006.3	1933.2
32.5°	1427.5	1557.6	1715.1	1867.5	2005.3	2093.0	2100.4	2041.7	1964.4	1882.8	1791.6
35°	1353.7	1494.5	1664.6	1826.0	1956.5	2011.8	1979.1	1875.2	1783.6	1672.2	1547.8
37.5°	1270.5	1425.9	1596.6	1765.1	1883.4	1897.8	1816.4	1707.0	1577.9	1447.0	1300.6
40°	1208.2	1372.9	1548.5	1718.7	1823.2	1808.2	1704.3	1584.0	1430.3	1270.3	1134.3
42.5°	1152.4	1317.1	1496.0	1662.9	1746.7	1705.4	1584.0	1436.5	1271.2	1120.6	996.0
45°	1055.8	1225.3	1408.5	1569.7	1617.6	1543.0	1382.4	1218.4	1055.8	930.1	831.7
47.5°	962.1	1129.6	1311.0	1452.7	1469.6	1369.5	1194.0	1025.2	885.4	783.0	713.5
50°	893.1	1061.2	1241.0	1367.4	1361.9	1241.0	1060.6	900.0	783.1	700.4	654.0
52.5°	831.3	990.2	1162.8	1277.7	1248.8	1116.9	944.7	802.1	706.1	641.4	599.3
55°	735.3	882.3	1046.2	1138.4	1085.2	939.0	793.4	678.6	607.5	559.0	526.2
57.5°	639.9	777.7	918.0	974.9	916.0	781.0	659.6	576.3	522.9	487.0	465.7
60°	580.9	701.2	826.2	875.4	805.0	684.7	589.1	514.6	471.5	442.1	423.0
62.5°	521.8	629.5	747.4	774.3	709.9	608.2	523.4	461.5	426.1	400.0	382.0
65°	441.5	529.6	619.1	636.9	577.5	498.8	431.9	391.6	360.2	341.0	326.6
67.5°	362.0	432.8	496.2	510.6	458.5	404.0	355.6	320.5	299.2	283.3	271.2
70°	315.0	371.0	423.0	434.6	393.0	344.4	307.6	279.5	260.4	246.7	235.1
72.5°	265.3	312.0	355.2	363.0	329.0	291.9	261.6	239.6	222.7	213.9	202.9
75°	203.0	230.3	263.8	265.8	243.3	220.7	197.5	183.2	174.2	163.4	157.8
77.5°	143.2	164.7	183.8	187.5	174.2	158.8	145.8	134.5	127.0	121.9	116.8
80°	109.3	126.4	134.6	139.4	129.8	118.9	111.4	103.9	99.1	95.7	92.3
82.5°	78.2	88.7	96.4	100.0	94.9	88.3	80.8	76.5	72.9	70.0	68.8
85°	39.6	44.4	49.2	50.6	49.2	46.5	42.4	42.4	40.3	39.6	39.6
87.5°	14.4	16.9	17.5	19.5	18.8	19.2	19.5	19.4	19.1	18.7	18.5
90°	3.3	5.6	7.9	10.3	12.2	13.9	15.6	17.3	19.0	20.0	21.0
92.5°	18.9	18.7	18.5	18.3	18.6	19.4	20.3	21.1	22.0	22.6	23.1
95°	54.7	47.7	40.8	33.8	31.0	32.5	34.1	35.5	37.0	38.0	39.1
97.5°	102.7	83.1	63.5	44.0	35.8	39.2	42.6	46.1	49.5	50.3	51.2
100°	138.9	110.0	81.2	52.3	39.7	43.2	46.9	50.5	54.0	55.7	57.4
102.5°	211.7	205.6	199.5	193.4	175.4	145.4	115.5	85.5	55.6	57.8	59.9
105°	294.5	300.8	307.1	313.4	287.8	230.3	172.8	115.3	57.8	60.1	62.4
107.5°	373.4	378.5	383.6	388.8	356.9	287.8	218.9	149.9	81.0	78.6	76.2
110°	424.4	428.8	433.2	437.7	409.4	348.5	287.7	226.8	165.9	144.8	123.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	472.4	476.3	480.2	484.1	478.6	463.5	448.5	433.5	418.4	341.6	264.7
115°	548.7	552.2	555.8	559.4	563.8	569.1	574.4	579.6	584.9	487.3	389.8
117.5°	617.5	621.5	625.5	629.5	633.3	636.9	640.6	644.2	647.8	624.2	600.7
120°	666.7	669.9	673.1	676.2	679.7	683.5	687.2	691.1	694.8	697.3	699.9
122.5°	709.4	712.7	716.0	719.3	723.1	727.2	731.3	735.5	739.6	741.1	742.6
125°	773.4	776.1	778.9	781.6	785.0	789.0	793.0	797.0	801.0	802.5	804.0
127.5°	832.3	835.4	838.4	841.4	844.4	847.4	850.3	853.4	856.4	858.5	860.7
130°	869.8	873.2	876.6	879.9	882.7	885.0	887.3	889.7	892.0	894.3	896.6
132.5°	907.2	910.1	912.9	915.8	918.4	920.7	923.0	925.3	927.6	929.6	931.6
135°	957.0	960.4	963.8	967.1	969.7	971.6	973.5	975.4	977.3	979.5	981.5
137.5°	1005.8	1008.2	1010.6	1012.9	1015.1	1017.4	1019.5	1021.6	1023.8	1025.8	1027.9
140°	1037.8	1039.5	1041.2	1042.9	1044.8	1047.1	1049.5	1051.8	1054.1	1056.0	1057.9
142.5°	1064.9	1066.4	1067.9	1069.4	1071.6	1074.2	1076.8	1079.5	1082.2	1083.9	1085.6
145°	1106.0	1105.8	1105.6	1105.4	1107.1	1110.6	1114.2	1117.8	1121.4	1122.8	1124.4
147.5°	1142.8	1142.0	1141.2	1140.4	1141.7	1145.3	1148.8	1152.4	1155.9	1157.0	1158.1
150°	1166.4	1164.9	1163.4	1162.0	1162.9	1166.3	1169.7	1173.0	1176.3	1177.7	1178.9
152.5°	1186.7	1185.0	1183.4	1181.8	1182.5	1185.7	1188.9	1192.1	1195.3	1196.6	1197.8
155°	1216.2	1214.3	1212.4	1210.5	1210.9	1213.4	1215.8	1218.4	1220.9	1222.2	1223.4
157.5°	1239.8	1238.2	1236.6	1235.0	1235.1	1236.9	1238.6	1240.4	1242.2	1243.6	1245.0
160°	1253.8	1252.5	1251.2	1250.0	1250.0	1251.2	1252.5	1253.8	1255.1	1256.3	1257.6
162.5°	1266.0	1264.6	1263.4	1262.1	1262.0	1263.1	1264.3	1265.3	1266.4	1267.8	1269.3
165°	1282.2	1280.9	1279.7	1278.4	1278.1	1278.7	1279.4	1280.1	1280.7	1282.1	1283.6
167.5°	1294.4	1293.1	1291.8	1290.6	1290.2	1290.8	1291.4	1292.0	1292.6	1294.1	1295.6
170°	1301.2	1299.9	1298.7	1297.4	1297.0	1297.4	1297.8	1298.2	1298.7	1300.1	1301.6
172.5°	1305.7	1304.5	1303.2	1302.0	1301.5	1302.0	1302.3	1302.8	1303.2	1304.7	1306.2
175°	1311.4	1309.9	1308.5	1307.0	1306.4	1306.9	1307.3	1307.7	1308.1	1309.7	1311.1
177.5°	1312.7	1311.4	1310.3	1309.1	1308.6	1308.8	1308.9	1309.1	1309.3	1310.5	1311.6
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1	1778.1
2.5°	1844.2	1851.9	1851.9	1853.0	1861.7	1860.6	1860.1
5°	1962.7	1974.2	1975.6	1987.9	1996.1	1993.3	1985.8
7.5°	2074.3	2095.9	2112.3	2121.5	2132.3	2138.9	2135.9
10°	2162.8	2194.3	2213.4	2226.4	2242.1	2253.7	2249.6
12.5°	2243.2	2280.6	2306.9	2329.1	2331.2	2346.1	2336.0
15°	2368.6	2408.2	2412.3	2428.7	2441.7	2440.3	2441.0
17.5°	2409.9	2422.7	2425.3	2425.6	2425.8	2421.0	2410.7
20°	2395.2	2390.4	2378.8	2369.9	2354.2	2352.2	2338.5
22.5°	2325.2	2310.1	2280.9	2261.6	2237.2	2230.8	2227.0
25°	2187.5	2153.9	2107.5	2063.1	2050.8	2026.9	2033.7
27.5°	1998.4	1946.2	1896.0	1859.8	1827.2	1791.4	1801.6
30°	1865.5	1806.8	1735.7	1681.1	1646.2	1612.0	1605.9
32.5°	1707.0	1621.0	1541.7	1493.5	1440.1	1418.5	1394.9
35°	1433.7	1349.6	1271.0	1203.4	1164.5	1134.3	1107.1
37.5°	1187.8	1091.1	1027.6	972.9	944.7	927.5	931.8
40°	1035.3	950.6	904.1	862.4	836.4	824.1	826.9
42.5°	911.8	848.3	810.0	781.5	763.2	756.3	754.7
45°	771.5	736.0	704.5	688.1	679.3	671.7	667.0
47.5°	675.8	646.8	629.1	619.4	611.6	604.0	603.8
50°	618.4	599.3	587.0	576.8	570.6	565.2	569.9
52.5°	574.7	557.2	544.9	535.7	533.4	528.5	528.3
55°	509.8	496.1	487.2	479.0	474.9	472.2	468.8
57.5°	450.8	437.7	429.5	424.4	416.6	413.8	412.8
60°	408.7	398.4	390.2	383.3	380.0	374.5	374.5
62.5°	369.8	359.6	352.0	346.7	341.2	338.9	339.5
65°	313.7	305.5	297.9	292.5	291.1	287.0	288.4
67.5°	262.0	256.5	248.6	245.6	243.0	240.9	239.2
70°	227.6	222.1	218.0	213.9	211.9	211.9	211.9
72.5°	198.6	192.0	189.6	184.4	185.6	183.4	181.2
75°	153.7	149.6	147.6	145.5	142.1	142.1	142.1
77.5°	113.2	111.9	109.5	107.3	106.5	105.8	106.0
80°	87.5	86.8	85.4	85.4	84.1	83.4	82.0
82.5°	67.2	65.5	64.6	64.1	63.8	63.7	63.4
85°	38.3	36.9	36.9	37.5	36.2	36.2	36.9
87.5°	19.2	19.4	19.0	19.1	19.7	19.3	19.4
90°	22.1	23.2	23.9	24.3	24.8	25.1	25.6
92.5°	23.6	24.2	24.6	24.9	25.1	25.3	25.6
95°	40.1	41.2	41.6	41.4	41.2	40.9	40.8
97.5°	52.0	52.9	53.4	53.7	53.9	54.1	54.4
100°	59.1	60.8	61.8	62.2	62.7	63.1	63.5
102.5°	62.2	64.3	65.7	66.3	66.9	67.5	68.0
105°	64.7	67.1	68.7	69.6	70.4	71.2	72.1
107.5°	73.8	71.5	70.8	71.6	72.4	73.3	74.1
110°	102.7	81.6	71.5	72.3	73.2	74.0	74.9



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	187.9	111.0	72.9	73.7	74.3	75.0	75.6
115°	292.3	194.7	138.4	123.2	108.1	92.9	77.8
117.5°	577.0	553.5	516.7	466.9	417.1	367.2	317.4
120°	702.4	705.0	692.0	663.5	635.1	606.6	578.3
122.5°	744.1	745.6	743.6	738.2	732.6	727.1	721.6
125°	805.4	806.9	808.0	808.6	809.2	809.9	810.5
127.5°	862.8	865.0	866.1	866.2	866.4	866.5	866.6
130°	898.9	901.3	902.3	902.1	901.9	901.7	901.5
132.5°	933.6	935.6	936.5	936.2	936.0	935.9	935.6
135°	983.6	985.7	986.6	986.1	985.7	985.3	984.9
137.5°	1029.9	1032.0	1032.7	1032.0	1031.3	1030.6	1029.8
140°	1059.8	1061.7	1062.1	1061.0	1060.0	1058.9	1057.9
142.5°	1087.4	1089.0	1089.4	1088.3	1087.3	1086.3	1085.2
145°	1125.8	1127.3	1127.5	1126.5	1125.4	1124.4	1123.3
147.5°	1159.2	1160.3	1160.4	1159.5	1158.6	1157.7	1156.8
150°	1180.2	1181.4	1181.5	1180.4	1179.5	1178.4	1177.3
152.5°	1199.2	1200.4	1200.3	1198.9	1197.6	1196.1	1194.8
155°	1224.8	1226.0	1225.7	1224.1	1222.4	1220.8	1219.1
157.5°	1246.4	1247.9	1247.8	1246.2	1244.5	1242.9	1241.2
160°	1258.8	1260.1	1260.0	1258.6	1257.0	1255.6	1254.1
162.5°	1270.7	1272.2	1271.9	1270.2	1268.4	1266.5	1264.7
165°	1285.0	1286.6	1286.6	1285.0	1283.6	1282.1	1280.7
167.5°	1297.0	1298.5	1298.2	1296.4	1294.5	1292.6	1290.7
170°	1303.1	1304.6	1304.3	1302.4	1300.6	1298.7	1296.7
172.5°	1307.6	1309.1	1308.9	1307.0	1305.1	1303.2	1301.3
175°	1312.6	1314.0	1313.8	1311.6	1309.5	1307.4	1305.3
177.5°	1312.8	1314.0	1313.8	1312.3	1310.8	1309.3	1307.8
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0

(END OF REPORT)