

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: P331456-830

Luminaire Tested: **SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331456-830
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-C1005D1080U830-4F0-1E-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

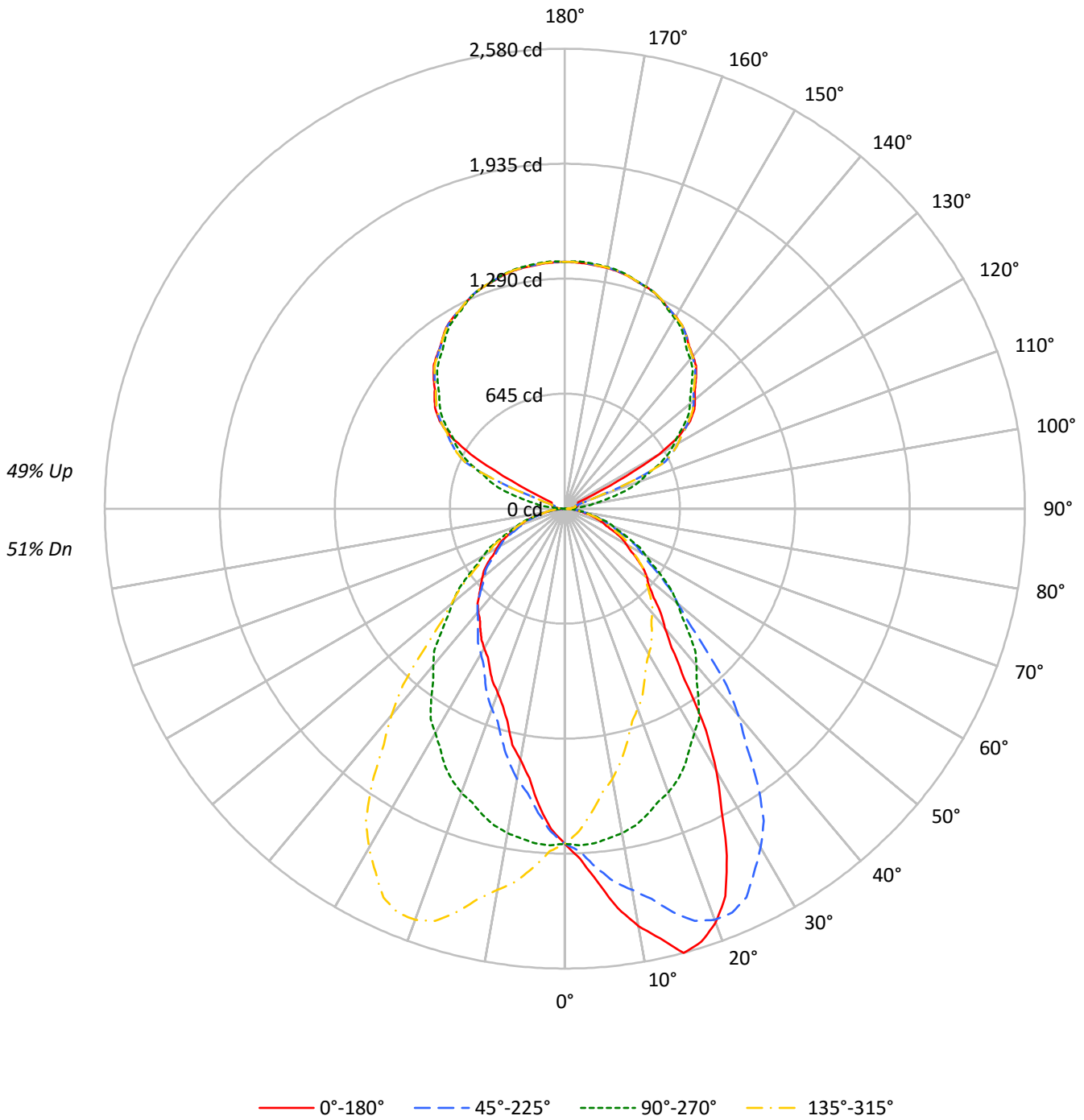
Lumens per Lamp: N/A
Luminaire Lumens: 8207.9 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

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°	30344	30344	30344	30344
5°	34020	30543	27067	30543
10°	38984	30293	23423	30293
15°	43127	29737	20694	29737
20°	42471	29141	18866	29141
25°	38297	28349	17706	28349
30°	31646	27082	16861	27082
35°	23065	25754	16259	25754
40°	18421	24190	15924	24190
45°	16098	22379	15470	22379
50°	15131	20627	15169	20627
55°	13948	18849	14762	18849
60°	12784	16956	14134	16956
65°	11645	15259	13521	15259
70°	10570	13605	12619	13605
75°	9370	11759	11179	11759
80°	8061	9735	9000	9735
85°	7225	7225	5354	7225



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.0	2.2
10°-20°	520.4	6.3
20°-30°	755.2	9.2
30°-40°	796.9	9.7
40°-50°	705.6	8.6
50°-60°	563.1	6.9
60°-70°	382.7	4.7
70°-80°	196.2	2.4
80°-90°	50.7	0.6
90°-100°	46.2	0.6
100°-110°	169.4	2.1
110°-120°	452.8	5.5
120°-130°	747.4	9.1
130°-140°	794.9	9.7
140°-150°	738.8	9.0
150°-160°	594.0	7.2
160°-170°	382.8	4.7
170°-180°	131.8	1.6
0°-30°	1454.6	17.7
0°-40°	2251.5	27.4
0°-60°	3520.2	42.9
0°-90°	4149.9	50.6
90°-120°	668.4	8.1
90°-150°	2949.4	35.9
90°-180°	4058.0	49.4
0°-180°	8207.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1879	1879	1879	1879	1879	
5°	2099	1884	1670	1884	2099	210
15°	2580	1779	1238	1779	2580	712
25°	2150	1591	994	1591	2150	972
35°	1170	1307	825	1307	1170	761
45°	705	980	678	980	705	554
55°	496	670	524	670	496	444
65°	305	399	354	399	305	303
75°	150	188	179	188	150	161
85°	39	39	29	39	39	43
90°	27	1	27	1	27	14
95°	43	65	43	65	43	40
105°	76	305	76	305	76	79
115°	82	576	82	576	82	206
125°	857	815	857	815	857	741
135°	1041	1008	1041	1008	1041	802
145°	1187	1169	1187	1169	1187	743
155°	1288	1288	1288	1288	1288	595
165°	1354	1357	1354	1357	1354	382
175°	1380	1388	1380	1388	1380	131
180°	1385	1385	1385	1385	1385	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1966.1	1966.7	1967.8	1958.6	1957.5	1957.5	1949.4	1942.5	1934.4	1923.4	1924.6
5°	2099.0	2107.0	2109.9	2101.2	2088.2	2086.8	2074.5	2054.3	2035.5	2020.3	2009.5
7.5°	2257.7	2260.9	2253.8	2242.4	2232.7	2215.4	2192.5	2170.1	2138.8	2110.1	2088.7
10°	2377.8	2382.2	2369.9	2353.3	2339.6	2319.4	2286.1	2252.2	2211.0	2171.3	2139.5
12.5°	2469.2	2479.8	2464.1	2461.9	2438.5	2410.6	2371.1	2353.9	2295.9	2240.6	2206.6
15°	2580.1	2579.4	2580.9	2567.1	2549.8	2545.4	2503.6	2458.1	2376.4	2343.9	2287.6
17.5°	2548.1	2559.0	2564.1	2563.9	2563.5	2560.8	2547.3	2518.6	2477.7	2425.0	2359.9
20°	2471.8	2486.2	2488.4	2505.0	2514.4	2526.7	2531.8	2523.8	2498.5	2454.5	2398.1
22.5°	2353.9	2358.0	2364.7	2390.6	2410.9	2441.8	2457.8	2484.4	2474.8	2453.2	2406.2
25°	2149.7	2142.4	2167.7	2180.7	2227.6	2276.7	2312.2	2351.2	2385.9	2406.8	2393.0
27.5°	1904.3	1893.5	1931.4	1965.9	2004.0	2057.2	2112.3	2177.5	2231.7	2299.4	2322.7
30°	1697.4	1703.9	1740.0	1776.9	1834.7	1909.8	1971.9	2043.4	2120.7	2196.6	2249.3
32.5°	1474.4	1499.4	1522.2	1578.7	1629.6	1713.4	1804.3	1893.8	1990.2	2076.4	2158.0
35°	1170.2	1199.0	1230.9	1272.0	1343.5	1426.5	1515.4	1636.1	1767.6	1885.3	1982.1
37.5°	985.0	980.3	998.5	1028.3	1086.2	1153.3	1255.6	1374.7	1529.5	1667.8	1804.3
40°	874.0	871.1	884.1	911.5	955.6	1004.8	1094.3	1199.0	1342.7	1511.8	1674.3
42.5°	797.8	799.5	806.7	826.0	856.2	896.6	963.7	1052.8	1184.5	1343.7	1518.3
45°	705.0	710.0	718.0	727.4	744.7	778.0	815.5	879.1	983.1	1116.0	1287.9
47.5°	638.2	638.4	646.5	654.7	665.0	683.7	714.4	754.2	827.6	935.9	1083.6
50°	602.4	597.4	603.1	609.6	620.5	633.5	653.7	691.3	740.4	827.7	951.3
52.5°	558.5	558.6	563.8	566.3	576.0	589.0	607.5	633.5	678.0	746.3	847.8
55°	495.5	499.1	502.0	506.3	515.0	524.4	538.9	556.2	590.9	642.2	717.3
57.5°	436.3	437.4	440.4	448.6	454.0	462.7	476.5	492.2	514.7	552.7	609.2
60°	395.9	395.9	401.6	405.2	412.5	421.1	432.0	447.1	467.3	498.4	543.9
62.5°	358.8	358.3	360.6	366.5	372.0	380.1	390.9	403.8	422.8	450.4	487.9
65°	304.8	303.4	307.7	309.2	314.9	322.9	331.6	345.3	360.4	380.7	413.9
67.5°	252.8	254.6	256.8	259.6	262.8	271.2	276.9	286.6	299.4	316.2	338.7
70°	223.9	223.9	223.9	226.1	230.5	234.8	240.5	248.5	260.8	275.2	295.4
72.5°	191.5	193.9	196.1	194.9	200.4	202.9	209.9	214.4	226.1	235.4	253.3
75°	150.2	150.2	150.2	153.8	156.0	158.2	162.5	166.8	172.7	184.2	193.6
77.5°	112.1	111.8	112.5	113.4	115.7	118.3	119.6	123.5	128.8	134.2	142.1
80°	86.7	88.1	88.9	90.3	90.3	91.7	92.5	97.6	101.1	104.7	109.8
82.5°	67.0	67.3	67.5	67.8	68.3	69.2	71.1	72.7	74.0	77.0	80.9
85°	39.0	38.3	38.3	39.7	39.0	39.0	40.4	41.8	41.8	42.6	44.8
87.5°	20.5	20.4	20.8	20.2	20.1	20.5	20.3	19.5	19.8	20.2	20.5
90°	27.1	26.6	26.2	25.7	25.3	24.5	23.4	22.2	21.1	20.1	18.3
92.5°	27.1	26.8	26.5	26.3	26.0	25.5	25.0	24.4	23.8	23.3	22.3
95°	43.1	43.3	43.5	43.7	44.0	43.5	42.4	41.3	40.2	39.1	37.5
97.5°	57.5	57.2	57.0	56.7	56.5	55.9	55.0	54.1	53.2	52.3	48.7
100°	67.1	66.7	66.3	65.8	65.3	64.3	62.5	60.7	58.9	57.1	53.3
102.5°	71.9	71.4	70.7	70.0	69.5	68.0	65.7	63.3	61.1	58.7	90.4
105°	76.2	75.2	74.4	73.5	72.6	70.9	68.4	66.0	63.5	61.1	121.9
107.5°	78.3	77.5	76.5	75.7	74.8	75.6	78.0	80.6	83.0	85.6	158.4
110°	79.2	78.2	77.4	76.4	75.6	86.2	108.6	130.8	153.1	175.3	239.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	79.9	79.3	78.5	77.9	77.1	117.3	198.6	279.8	361.1	442.2	458.2
115°	82.2	98.2	114.2	130.3	146.3	205.9	309.0	412.0	515.1	618.2	612.7
117.5°	335.5	388.1	440.8	493.5	546.2	585.0	609.9	634.9	659.8	684.8	680.9
120°	611.2	641.2	671.3	701.3	731.4	745.2	742.4	739.8	737.1	734.4	730.5
122.5°	762.7	768.5	774.4	780.2	786.0	788.2	786.6	784.9	783.3	781.7	777.4
125°	856.7	856.0	855.4	854.7	854.0	852.9	851.3	849.8	848.2	846.7	842.4
127.5°	916.0	915.9	915.8	915.6	915.5	914.3	912.0	909.7	907.5	905.2	902.0
130°	952.9	953.1	953.3	953.6	953.8	952.6	950.2	947.7	945.3	942.8	940.4
132.5°	988.9	989.2	989.4	989.6	989.9	988.9	986.8	984.7	982.6	980.5	978.1
135°	1041.0	1041.5	1041.9	1042.4	1042.8	1041.9	1039.7	1037.5	1035.3	1033.0	1031.0
137.5°	1088.5	1089.3	1090.1	1090.8	1091.6	1090.8	1088.6	1086.5	1084.3	1082.1	1079.9
140°	1118.2	1119.3	1120.4	1121.5	1122.7	1122.2	1120.2	1118.2	1116.2	1114.2	1111.7
142.5°	1147.1	1148.2	1149.2	1150.4	1151.5	1151.1	1149.3	1147.5	1145.7	1143.9	1141.0
145°	1187.3	1188.5	1189.6	1190.7	1191.8	1191.6	1190.0	1188.5	1186.8	1185.3	1181.6
147.5°	1222.8	1223.7	1224.6	1225.6	1226.5	1226.4	1225.3	1224.1	1222.9	1221.8	1218.0
150°	1244.4	1245.6	1246.7	1247.7	1248.9	1248.8	1247.5	1246.1	1244.8	1243.4	1239.9
152.5°	1262.9	1264.3	1265.8	1267.2	1268.8	1268.9	1267.5	1266.1	1264.8	1263.5	1260.1
155°	1288.5	1290.3	1292.1	1293.8	1295.6	1295.9	1294.6	1293.2	1291.8	1290.5	1287.9
157.5°	1311.9	1313.7	1315.4	1317.2	1318.9	1319.0	1317.5	1316.0	1314.5	1313.0	1311.1
160°	1325.6	1327.2	1328.7	1330.3	1331.8	1331.9	1330.6	1329.3	1327.9	1326.6	1325.3
162.5°	1336.8	1338.7	1340.7	1342.6	1344.4	1344.7	1343.1	1341.6	1340.1	1338.6	1337.5
165°	1353.7	1355.2	1356.8	1358.3	1359.9	1359.9	1358.3	1356.8	1355.2	1353.7	1353.0
167.5°	1364.2	1366.3	1368.3	1370.3	1372.2	1372.5	1370.9	1369.4	1367.8	1366.3	1365.6
170°	1370.6	1372.7	1374.7	1376.7	1378.7	1378.9	1377.3	1375.8	1374.2	1372.7	1372.2
172.5°	1375.5	1377.5	1379.5	1381.5	1383.6	1383.7	1382.1	1380.6	1379.0	1377.5	1377.1
175°	1379.7	1382.0	1384.1	1386.4	1388.6	1388.9	1387.4	1385.8	1384.3	1382.7	1382.2
177.5°	1382.3	1383.9	1385.5	1387.1	1388.7	1388.9	1387.6	1386.4	1385.2	1383.9	1383.7
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1928.6	1924.0	1921.1	1910.7	1901.4	1892.2	1889.3	1890.5	1877.7	1865.6	1860.4
5°	2003.8	1989.2	1975.6	1956.1	1933.0	1907.6	1894.6	1884.5	1859.3	1831.8	1815.9
7.5°	2071.0	2050.4	2023.9	1987.3	1953.6	1913.8	1888.6	1866.1	1829.2	1790.5	1766.8
10°	2112.0	2083.9	2049.9	2005.2	1964.0	1915.6	1881.6	1847.7	1804.3	1758.1	1729.2
12.5°	2147.3	2109.3	2075.9	2018.5	1969.7	1909.2	1869.0	1821.1	1775.5	1720.5	1692.2
15°	2231.3	2161.2	2097.6	2032.6	1972.6	1888.1	1843.3	1779.0	1719.1	1651.2	1618.7
17.5°	2296.1	2217.3	2117.2	2034.7	1964.7	1871.1	1805.3	1728.3	1657.5	1579.9	1535.7
20°	2333.1	2242.8	2135.1	2036.9	1953.1	1846.3	1774.7	1696.0	1613.0	1525.5	1477.9
22.5°	2355.0	2260.1	2153.7	2028.3	1930.0	1826.0	1736.0	1649.7	1565.6	1471.2	1421.3
25°	2362.0	2275.3	2162.7	2021.1	1901.1	1783.4	1675.1	1591.3	1489.4	1401.3	1328.3
27.5°	2327.6	2265.5	2157.1	2007.4	1867.7	1730.1	1609.3	1514.4	1406.9	1311.3	1237.9
30°	2285.4	2249.3	2143.8	1993.6	1841.2	1693.1	1560.2	1452.6	1345.7	1248.9	1173.7
32.5°	2220.2	2212.3	2119.6	1974.0	1812.9	1646.3	1508.8	1400.0	1281.6	1186.5	1114.8
35°	2091.9	2126.5	2068.0	1930.0	1759.5	1579.7	1430.9	1306.6	1183.9	1092.9	1025.7
37.5°	1920.0	2006.0	1990.7	1865.8	1687.6	1507.2	1342.9	1213.1	1096.1	1004.2	938.3
40°	1801.5	1911.3	1927.1	1816.7	1636.8	1451.1	1277.1	1147.7	1033.6	949.9	883.4
42.5°	1674.3	1802.6	1846.3	1757.7	1581.3	1392.2	1218.1	1084.2	971.2	889.8	830.9
45°	1461.2	1631.0	1709.8	1659.2	1488.7	1295.1	1116.0	980.1	877.6	801.1	755.5
47.5°	1262.1	1447.6	1553.4	1535.5	1385.7	1194.0	1016.9	886.6	786.7	725.7	684.9
50°	1121.1	1311.7	1439.5	1445.4	1311.7	1121.7	944.1	821.2	729.5	672.5	639.2
52.5°	998.5	1180.5	1319.9	1350.6	1229.1	1046.6	878.7	756.6	675.8	623.4	593.6
55°	838.6	992.5	1147.1	1203.3	1105.9	932.6	777.2	669.6	593.7	557.6	531.6
57.5°	697.2	825.5	968.2	1030.5	970.3	822.0	676.4	582.9	521.4	489.7	469.8
60°	622.6	723.8	850.9	925.3	873.3	741.1	614.0	525.1	474.6	446.4	427.6
62.5°	553.3	642.9	750.4	818.4	790.0	665.4	551.6	473.2	429.5	403.0	389.5
65°	456.5	527.3	610.4	673.2	654.4	559.8	466.7	399.4	364.8	343.8	333.0
67.5°	375.9	427.1	484.7	539.7	524.5	457.5	382.7	330.4	304.5	286.4	279.9
70°	325.1	364.0	415.4	459.4	447.1	392.2	333.0	288.2	265.8	250.6	244.1
72.5°	276.5	308.6	347.7	383.7	375.4	329.8	280.4	246.6	229.4	215.4	210.1
75°	208.8	233.3	257.1	281.0	278.8	243.5	214.5	188.5	174.8	164.0	161.8
77.5°	154.1	167.9	184.1	198.2	194.3	174.1	151.4	136.5	126.4	119.1	118.0
80°	117.7	125.6	137.2	147.3	142.3	133.7	115.6	104.7	97.6	90.3	87.4
82.5°	85.4	93.3	100.3	105.8	101.9	93.8	82.7	75.3	71.0	66.0	64.8
85°	44.8	49.1	52.0	53.4	52.0	46.9	41.8	39.0	35.4	33.3	32.5
87.5°	20.6	20.3	19.9	20.6	18.5	17.9	15.2	12.9	12.8	12.7	12.1
90°	16.5	14.7	12.9	10.8	8.4	5.9	3.5	1.0	3.5	5.9	8.4
92.5°	21.5	20.5	19.7	19.3	19.6	19.8	20.0	20.3	20.0	19.8	19.6
95°	36.0	34.4	32.8	35.7	43.1	50.4	57.8	65.1	57.8	50.4	43.1
97.5°	45.1	41.5	37.9	46.5	67.1	87.8	108.6	129.2	108.6	87.8	67.1
100°	49.6	45.7	41.9	55.3	85.9	116.3	146.8	177.4	146.8	116.3	85.9
102.5°	122.1	153.7	185.4	204.4	210.8	217.4	223.8	230.3	223.8	217.4	210.8
105°	182.7	243.5	304.3	331.3	324.6	317.9	311.3	304.6	311.3	317.9	324.6
107.5°	231.4	304.3	377.2	410.9	405.5	400.1	394.7	389.4	394.7	400.1	405.5
110°	304.1	368.3	432.7	462.6	457.9	453.3	448.6	443.8	448.6	453.3	457.9



TEST NUMBER: P331456-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	474.1	489.9	505.9	511.7	507.6	503.4	499.4	495.2	499.4	503.4	507.6
115°	607.1	601.5	596.0	591.3	587.5	583.7	579.9	576.2	579.9	583.7	587.5
117.5°	677.1	673.3	669.4	665.4	661.2	657.0	652.7	648.5	652.7	657.0	661.2
120°	726.4	722.5	718.4	714.7	711.4	708.0	704.7	701.3	704.7	708.0	711.4
122.5°	773.0	768.6	764.3	760.3	756.9	753.3	749.8	746.3	749.8	753.3	756.9
125°	838.2	834.0	829.7	826.1	823.3	820.4	817.5	814.6	817.5	820.4	823.3
127.5°	898.8	895.7	892.5	889.4	886.2	883.0	879.8	876.6	879.8	883.0	886.2
130°	937.9	935.5	933.0	930.0	926.5	922.9	919.4	915.8	919.4	922.9	926.5
132.5°	975.6	973.2	970.7	968.0	965.0	962.0	958.9	955.8	958.9	962.0	965.0
135°	1029.0	1027.0	1025.0	1022.2	1018.7	1015.1	1011.5	1008.0	1011.5	1015.1	1018.7
137.5°	1077.6	1075.3	1073.0	1070.6	1068.2	1065.6	1063.2	1060.6	1063.2	1065.6	1068.2
140°	1109.3	1106.8	1104.4	1102.3	1100.5	1098.7	1096.9	1095.1	1096.9	1098.7	1100.5
142.5°	1138.2	1135.4	1132.7	1130.4	1128.8	1127.2	1125.6	1124.0	1125.6	1127.2	1128.8
145°	1177.7	1173.9	1170.2	1168.4	1168.7	1168.8	1169.0	1169.3	1169.0	1168.8	1168.7
147.5°	1214.3	1210.6	1206.8	1205.4	1206.3	1207.1	1208.0	1208.8	1208.0	1207.1	1206.3
150°	1236.3	1232.8	1229.2	1228.2	1229.7	1231.3	1232.8	1234.4	1232.8	1231.3	1229.7
152.5°	1256.7	1253.3	1249.9	1249.2	1250.8	1252.5	1254.3	1256.0	1254.3	1252.5	1250.8
155°	1285.2	1282.5	1279.9	1279.5	1281.5	1283.6	1285.5	1287.5	1285.5	1283.6	1281.5
157.5°	1309.2	1307.4	1305.5	1305.4	1307.1	1308.8	1310.5	1312.2	1310.5	1308.8	1307.1
160°	1323.9	1322.6	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6	1325.3	1323.9	1322.6
162.5°	1336.3	1335.1	1334.0	1334.1	1335.4	1336.7	1338.1	1339.4	1338.1	1336.7	1335.4
165°	1352.4	1351.6	1350.9	1351.3	1352.6	1354.0	1355.3	1356.7	1355.3	1354.0	1352.6
167.5°	1365.0	1364.4	1363.8	1364.1	1365.5	1366.8	1368.2	1369.5	1368.2	1366.8	1365.5
170°	1371.8	1371.4	1370.9	1371.4	1372.7	1374.0	1375.4	1376.7	1375.4	1374.0	1372.7
172.5°	1376.6	1376.2	1375.7	1376.2	1377.5	1378.8	1380.2	1381.5	1380.2	1378.8	1377.5
175°	1381.9	1381.4	1380.9	1381.5	1383.1	1384.6	1386.2	1387.7	1386.2	1384.6	1383.1
177.5°	1383.6	1383.4	1383.2	1383.7	1385.0	1386.2	1387.5	1388.7	1387.5	1386.2	1385.0
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331456-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1854.6	1851.2	1839.0	1832.7	1822.3	1812.4	1806.1	1809.0	1811.3	1810.2	1808.4
5°	1801.5	1787.7	1766.8	1748.7	1735.7	1711.9	1701.8	1696.8	1692.4	1687.3	1682.2
7.5°	1738.1	1716.6	1686.5	1660.8	1636.4	1606.8	1590.0	1579.9	1569.4	1558.0	1547.9
10°	1693.1	1662.7	1631.0	1594.9	1566.0	1539.3	1515.4	1499.5	1485.1	1471.4	1461.2
12.5°	1645.8	1610.8	1571.5	1522.1	1490.3	1452.0	1448.4	1420.4	1397.8	1389.3	1377.4
15°	1570.3	1521.2	1471.4	1412.9	1387.6	1352.9	1331.2	1309.6	1290.1	1276.3	1272.7
17.5°	1484.7	1421.1	1371.5	1329.5	1288.1	1252.5	1232.6	1215.2	1199.2	1180.8	1178.4
20°	1419.4	1364.4	1310.3	1273.5	1230.9	1194.7	1170.2	1152.8	1139.1	1128.2	1118.9
22.5°	1357.5	1297.4	1247.8	1207.6	1165.5	1136.3	1117.0	1100.2	1088.8	1076.9	1068.0
25°	1258.3	1211.4	1157.2	1111.6	1076.9	1058.2	1042.3	1027.8	1020.7	1012.7	1002.6
27.5°	1171.5	1119.3	1068.6	1033.3	1002.9	986.3	975.0	965.2	958.4	953.8	948.0
30°	1110.2	1057.4	1017.8	983.1	957.8	941.2	934.0	928.2	920.2	917.4	914.5
32.5°	1051.2	1003.7	969.8	939.7	915.6	904.7	898.1	893.0	886.7	883.8	878.1
35°	967.9	928.2	894.9	878.4	858.8	849.4	844.4	837.2	831.4	828.5	827.7
37.5°	889.5	855.0	833.1	811.7	803.5	797.8	790.8	785.9	784.2	783.7	783.0
40°	838.6	810.4	791.0	773.6	770.0	761.3	755.5	751.2	751.2	752.0	751.2
42.5°	792.4	767.1	749.9	734.9	730.7	725.5	719.7	719.4	720.6	723.0	720.6
45°	722.4	704.3	692.0	684.8	676.8	671.8	671.0	673.2	673.9	674.7	676.8
47.5°	657.9	645.9	634.8	626.8	623.4	622.5	621.6	625.4	628.9	630.2	633.5
50°	619.7	606.1	596.6	591.5	588.7	587.2	588.7	593.0	595.9	599.6	601.7
52.5°	577.0	567.3	560.8	556.9	555.7	556.7	556.9	561.8	566.5	567.8	568.7
55°	517.9	510.7	509.3	502.8	505.6	504.9	508.5	511.4	515.8	520.1	520.8
57.5°	458.9	453.2	449.3	449.9	450.7	453.9	456.9	462.0	466.7	471.3	471.6
60°	419.7	416.8	414.6	414.6	416.0	420.4	424.0	429.0	432.0	434.8	437.0
62.5°	383.8	381.0	378.8	379.9	383.7	386.3	390.5	393.2	396.2	399.0	400.0
65°	327.3	325.7	327.9	329.4	330.1	333.8	338.7	340.9	343.8	345.3	350.3
67.5°	275.0	275.3	275.0	277.1	281.3	282.1	286.9	292.0	292.6	295.3	298.6
70°	239.8	241.3	242.7	244.1	247.8	249.2	252.8	255.0	257.9	260.0	262.2
72.5°	207.5	207.7	209.2	208.9	211.9	215.1	218.1	220.3	223.2	225.9	228.1
75°	159.7	159.7	161.1	161.8	165.4	169.0	168.3	169.8	172.7	175.5	177.0
77.5°	116.6	115.0	116.6	117.3	118.5	121.5	122.1	124.1	127.4	126.4	128.0
80°	88.9	86.7	88.9	89.5	89.5	93.2	93.2	94.6	96.8	94.6	96.8
82.5°	63.4	62.4	64.0	64.2	65.3	65.4	66.6	66.9	69.1	68.1	69.1
85°	31.8	31.1	31.8	31.1	31.8	32.5	32.5	31.8	31.8	33.3	31.1
87.5°	12.0	11.8	11.6	12.0	11.8	11.5	11.1	11.4	11.6	10.7	10.8
90°	10.8	12.9	14.7	16.5	18.3	20.1	21.1	22.2	23.4	24.5	25.3
92.5°	19.3	19.7	20.5	21.5	22.3	23.3	23.8	24.4	25.0	25.5	26.0
95°	35.7	32.8	34.4	36.0	37.5	39.1	40.2	41.3	42.4	43.5	44.0
97.5°	46.5	37.9	41.5	45.1	48.7	52.3	53.2	54.1	55.0	55.9	56.5
100°	55.3	41.9	45.7	49.6	53.3	57.1	58.9	60.7	62.5	64.3	65.3
102.5°	204.4	185.4	153.7	122.1	90.4	58.7	61.1	63.3	65.7	68.0	69.5
105°	331.3	304.3	243.5	182.7	121.9	61.1	63.5	66.0	68.4	70.9	72.6
107.5°	410.9	377.2	304.3	231.4	158.4	85.6	83.0	80.6	78.0	75.6	74.8
110°	462.6	432.7	368.3	304.1	239.7	175.3	153.1	130.8	108.6	86.2	75.6



TEST NUMBER: P331456-830

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	511.7	505.9	489.9	474.1	458.2	442.2	361.1	279.8	198.6	117.3	77.1
115°	591.3	596.0	601.5	607.1	612.7	618.2	515.1	412.0	309.0	205.9	146.3
117.5°	665.4	669.4	673.3	677.1	680.9	684.8	659.8	634.9	609.9	585.0	546.2
120°	714.7	718.4	722.5	726.4	730.5	734.4	737.1	739.8	742.4	745.2	731.4
122.5°	760.3	764.3	768.6	773.0	777.4	781.7	783.3	784.9	786.6	788.2	786.0
125°	826.1	829.7	834.0	838.2	842.4	846.7	848.2	849.8	851.3	852.9	854.0
127.5°	889.4	892.5	895.7	898.8	902.0	905.2	907.5	909.7	912.0	914.3	915.5
130°	930.0	933.0	935.5	937.9	940.4	942.8	945.3	947.7	950.2	952.6	953.8
132.5°	968.0	970.7	973.2	975.6	978.1	980.5	982.6	984.7	986.8	988.9	989.9
135°	1022.2	1025.0	1027.0	1029.0	1031.0	1033.0	1035.3	1037.5	1039.7	1041.9	1042.8
137.5°	1070.6	1073.0	1075.3	1077.6	1079.9	1082.1	1084.3	1086.5	1088.6	1090.8	1091.6
140°	1102.3	1104.4	1106.8	1109.3	1111.7	1114.2	1116.2	1118.2	1120.2	1122.2	1122.7
142.5°	1130.4	1132.7	1135.4	1138.2	1141.0	1143.9	1145.7	1147.5	1149.3	1151.1	1151.5
145°	1168.4	1170.2	1173.9	1177.7	1181.6	1185.3	1186.8	1188.5	1190.0	1191.6	1191.8
147.5°	1205.4	1206.8	1210.6	1214.3	1218.0	1221.8	1222.9	1224.1	1225.3	1226.4	1226.5
150°	1228.2	1229.2	1232.8	1236.3	1239.9	1243.4	1244.8	1246.1	1247.5	1248.8	1248.9
152.5°	1249.2	1249.9	1253.3	1256.7	1260.1	1263.5	1264.8	1266.1	1267.5	1268.9	1268.8
155°	1279.5	1279.9	1282.5	1285.2	1287.9	1290.5	1291.8	1293.2	1294.6	1295.9	1295.6
157.5°	1305.4	1305.5	1307.4	1309.2	1311.1	1313.0	1314.5	1316.0	1317.5	1319.0	1318.9
160°	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6	1327.9	1329.3	1330.6	1331.9	1331.8
162.5°	1334.1	1334.0	1335.1	1336.3	1337.5	1338.6	1340.1	1341.6	1343.1	1344.7	1344.4
165°	1351.3	1350.9	1351.6	1352.4	1353.0	1353.7	1355.2	1356.8	1358.3	1359.9	1359.9
167.5°	1364.1	1363.8	1364.4	1365.0	1365.6	1366.3	1367.8	1369.4	1370.9	1372.5	1372.2
170°	1371.4	1370.9	1371.4	1371.8	1372.2	1372.7	1374.2	1375.8	1377.3	1378.9	1378.7
172.5°	1376.2	1375.7	1376.2	1376.6	1377.1	1377.5	1379.0	1380.6	1382.1	1383.7	1383.6
175°	1381.5	1380.9	1381.4	1381.9	1382.2	1382.7	1384.3	1385.8	1387.4	1388.9	1388.6
177.5°	1383.7	1383.2	1383.4	1383.6	1383.7	1383.9	1385.2	1386.4	1387.6	1388.9	1388.7
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331456-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1802.6	1801.5	1801.5	1796.3	1801.5	1801.5	1802.6	1808.4	1810.2	1811.3	1809.0
5°	1672.2	1670.0	1666.4	1670.0	1666.4	1670.0	1672.2	1682.2	1687.3	1692.4	1696.8
7.5°	1543.1	1534.5	1533.2	1524.7	1533.2	1534.5	1543.1	1547.9	1558.0	1569.4	1579.9
10°	1449.0	1443.2	1442.5	1428.7	1442.5	1443.2	1449.0	1461.2	1471.4	1485.1	1499.5
12.5°	1377.3	1363.5	1366.2	1358.2	1366.2	1363.5	1377.3	1377.4	1389.3	1397.8	1420.4
15°	1253.2	1253.2	1250.4	1238.0	1250.4	1253.2	1253.2	1272.7	1276.3	1290.1	1309.6
17.5°	1164.1	1162.6	1155.7	1159.1	1155.7	1162.6	1164.1	1178.4	1180.8	1199.2	1215.2
20°	1110.9	1106.6	1098.0	1098.0	1098.0	1106.6	1110.9	1118.9	1128.2	1139.1	1152.8
22.5°	1060.6	1060.4	1051.1	1054.0	1051.1	1060.4	1060.6	1068.0	1076.9	1088.8	1100.2
25°	1001.8	996.1	991.7	993.9	991.7	996.1	1001.8	1002.6	1012.7	1020.7	1027.8
27.5°	946.1	942.9	942.6	936.7	942.6	942.9	946.1	948.0	953.8	958.4	965.2
30°	913.7	906.5	908.0	904.4	908.0	906.5	913.7	914.5	917.4	920.2	928.2
32.5°	876.8	874.1	872.7	869.7	872.7	874.1	876.8	878.1	883.8	886.7	893.0
35°	826.3	827.1	823.4	824.9	823.4	827.1	826.3	827.7	828.5	831.4	837.2
37.5°	782.3	784.6	782.9	783.3	782.9	784.6	782.3	783.0	783.7	784.2	785.9
40°	753.4	753.4	753.4	755.5	753.4	753.4	753.4	751.2	752.0	751.2	751.2
42.5°	725.7	724.5	723.3	723.2	723.3	724.5	725.7	720.6	723.0	720.6	719.4
45°	678.3	680.4	681.2	677.5	681.2	680.4	678.3	676.8	674.7	673.9	673.2
47.5°	635.4	635.7	635.4	638.6	635.4	635.7	635.4	633.5	630.2	628.9	625.4
50°	605.3	603.9	605.3	603.9	605.3	603.9	605.3	601.7	599.6	595.9	593.0
52.5°	573.5	573.8	573.0	572.7	573.0	573.8	573.5	568.7	567.8	566.5	561.8
55°	523.7	525.1	524.4	524.4	524.4	525.1	523.7	520.8	520.1	515.8	511.4
57.5°	472.1	473.4	474.4	471.3	474.4	473.4	472.1	471.6	471.3	466.7	462.0
60°	436.3	439.9	439.1	437.7	439.1	439.9	436.3	437.0	434.8	432.0	429.0
62.5°	403.3	404.6	404.5	404.3	404.5	404.6	403.3	400.0	399.0	396.2	393.2
65°	352.5	353.9	351.8	353.9	351.8	353.9	352.5	350.3	345.3	343.8	340.9
67.5°	297.7	298.2	299.7	300.8	299.7	298.2	297.7	298.6	295.3	292.6	292.0
70°	263.6	263.0	265.1	267.3	265.1	263.0	263.6	262.2	260.0	257.9	255.0
72.5°	227.8	229.4	228.7	230.3	228.7	229.4	227.8	228.1	225.9	223.2	220.3
75°	175.5	177.7	177.0	179.2	177.0	177.7	175.5	177.0	175.5	172.7	169.8
77.5°	126.9	127.1	126.9	128.0	126.9	127.1	126.9	128.0	126.4	127.4	124.1
80°	96.8	95.4	93.9	96.8	93.9	95.4	96.8	96.8	94.6	96.8	94.6
82.5°	67.3	68.1	66.7	66.7	66.7	68.1	67.3	69.1	68.1	69.1	66.9
85°	31.1	30.3	28.9	28.9	28.9	30.3	31.1	31.1	33.3	31.8	31.8
87.5°	10.9	10.5	10.6	10.0	10.6	10.5	10.9	10.8	10.7	11.6	11.4
90°	25.7	26.2	26.6	27.1	26.6	26.2	25.7	25.3	24.5	23.4	22.2
92.5°	26.3	26.5	26.8	27.1	26.8	26.5	26.3	26.0	25.5	25.0	24.4
95°	43.7	43.5	43.3	43.1	43.3	43.5	43.7	44.0	43.5	42.4	41.3
97.5°	56.7	57.0	57.2	57.5	57.2	57.0	56.7	56.5	55.9	55.0	54.1
100°	65.8	66.3	66.7	67.1	66.7	66.3	65.8	65.3	64.3	62.5	60.7
102.5°	70.0	70.7	71.4	71.9	71.4	70.7	70.0	69.5	68.0	65.7	63.3
105°	73.5	74.4	75.2	76.2	75.2	74.4	73.5	72.6	70.9	68.4	66.0
107.5°	75.7	76.5	77.5	78.3	77.5	76.5	75.7	74.8	75.6	78.0	80.6
110°	76.4	77.4	78.2	79.2	78.2	77.4	76.4	75.6	86.2	108.6	130.8



TEST NUMBER: P331456-830

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	77.9	78.5	79.3	79.9	79.3	78.5	77.9	77.1	117.3	198.6	279.8
115°	130.3	114.2	98.2	82.2	98.2	114.2	130.3	146.3	205.9	309.0	412.0
117.5°	493.5	440.8	388.1	335.5	388.1	440.8	493.5	546.2	585.0	609.9	634.9
120°	701.3	671.3	641.2	611.2	641.2	671.3	701.3	731.4	745.2	742.4	739.8
122.5°	780.2	774.4	768.5	762.7	768.5	774.4	780.2	786.0	788.2	786.6	784.9
125°	854.7	855.4	856.0	856.7	856.0	855.4	854.7	854.0	852.9	851.3	849.8
127.5°	915.6	915.8	915.9	916.0	915.9	915.8	915.6	915.5	914.3	912.0	909.7
130°	953.6	953.3	953.1	952.9	953.1	953.3	953.6	953.8	952.6	950.2	947.7
132.5°	989.6	989.4	989.2	988.9	989.2	989.4	989.6	989.9	988.9	986.8	984.7
135°	1042.4	1041.9	1041.5	1041.0	1041.5	1041.9	1042.4	1042.8	1041.9	1039.7	1037.5
137.5°	1090.8	1090.1	1089.3	1088.5	1089.3	1090.1	1090.8	1091.6	1090.8	1088.6	1086.5
140°	1121.5	1120.4	1119.3	1118.2	1119.3	1120.4	1121.5	1122.7	1122.2	1120.2	1118.2
142.5°	1150.4	1149.2	1148.2	1147.1	1148.2	1149.2	1150.4	1151.5	1151.1	1149.3	1147.5
145°	1190.7	1189.6	1188.5	1187.3	1188.5	1189.6	1190.7	1191.8	1191.6	1190.0	1188.5
147.5°	1225.6	1224.6	1223.7	1222.8	1223.7	1224.6	1225.6	1226.5	1226.4	1225.3	1224.1
150°	1247.7	1246.7	1245.6	1244.4	1245.6	1246.7	1247.7	1248.9	1248.8	1247.5	1246.1
152.5°	1267.2	1265.8	1264.3	1262.9	1264.3	1265.8	1267.2	1268.8	1268.9	1267.5	1266.1
155°	1293.8	1292.1	1290.3	1288.5	1290.3	1292.1	1293.8	1295.6	1295.9	1294.6	1293.2
157.5°	1317.2	1315.4	1313.7	1311.9	1313.7	1315.4	1317.2	1318.9	1319.0	1317.5	1316.0
160°	1330.3	1328.7	1327.2	1325.6	1327.2	1328.7	1330.3	1331.8	1331.9	1330.6	1329.3
162.5°	1342.6	1340.7	1338.7	1336.8	1338.7	1340.7	1342.6	1344.4	1344.7	1343.1	1341.6
165°	1358.3	1356.8	1355.2	1353.7	1355.2	1356.8	1358.3	1359.9	1359.9	1358.3	1356.8
167.5°	1370.3	1368.3	1366.3	1364.2	1366.3	1368.3	1370.3	1372.2	1372.5	1370.9	1369.4
170°	1376.7	1374.7	1372.7	1370.6	1372.7	1374.7	1376.7	1378.7	1378.9	1377.3	1375.8
172.5°	1381.5	1379.5	1377.5	1375.5	1377.5	1379.5	1381.5	1383.6	1383.7	1382.1	1380.6
175°	1386.4	1384.1	1382.0	1379.7	1382.0	1384.1	1386.4	1388.6	1388.9	1387.4	1385.8
177.5°	1387.1	1385.5	1383.9	1382.3	1383.9	1385.5	1387.1	1388.7	1388.9	1387.6	1386.4
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1806.1	1812.4	1822.3	1832.7	1839.0	1851.2	1854.6	1860.4	1865.6	1877.7	1890.5
5°	1701.8	1711.9	1735.7	1748.7	1766.8	1787.7	1801.5	1815.9	1831.8	1859.3	1884.5
7.5°	1590.0	1606.8	1636.4	1660.8	1686.5	1716.6	1738.1	1766.8	1790.5	1829.2	1866.1
10°	1515.4	1539.3	1566.0	1594.9	1631.0	1662.7	1693.1	1729.2	1758.1	1804.3	1847.7
12.5°	1448.4	1452.0	1490.3	1522.1	1571.5	1610.8	1645.8	1692.2	1720.5	1775.5	1821.1
15°	1331.2	1352.9	1387.6	1412.9	1471.4	1521.2	1570.3	1618.7	1651.2	1719.1	1779.0
17.5°	1232.6	1252.5	1288.1	1329.5	1371.5	1421.1	1484.7	1535.7	1579.9	1657.5	1728.3
20°	1170.2	1194.7	1230.9	1273.5	1310.3	1364.4	1419.4	1477.9	1525.5	1613.0	1696.0
22.5°	1117.0	1136.3	1165.5	1207.6	1247.8	1297.4	1357.5	1421.3	1471.2	1565.6	1649.7
25°	1042.3	1058.2	1076.9	1111.6	1157.2	1211.4	1258.3	1328.3	1401.3	1489.4	1591.3
27.5°	975.0	986.3	1002.9	1033.3	1068.6	1119.3	1171.5	1237.9	1311.3	1406.9	1514.4
30°	934.0	941.2	957.8	983.1	1017.8	1057.4	1110.2	1173.7	1248.9	1345.7	1452.6
32.5°	898.1	904.7	915.6	939.7	969.8	1003.7	1051.2	1114.8	1186.5	1281.6	1400.0
35°	844.4	849.4	858.8	878.4	894.9	928.2	967.9	1025.7	1092.9	1183.9	1306.6
37.5°	790.8	797.8	803.5	811.7	833.1	855.0	889.5	938.3	1004.2	1096.1	1213.1
40°	755.5	761.3	770.0	773.6	791.0	810.4	838.6	883.4	949.9	1033.6	1147.7
42.5°	719.7	725.5	730.7	734.9	749.9	767.1	792.4	830.9	889.8	971.2	1084.2
45°	671.0	671.8	676.8	684.8	692.0	704.3	722.4	755.5	801.1	877.6	980.1
47.5°	621.6	622.5	623.4	626.8	634.8	645.9	657.9	684.9	725.7	786.7	886.6
50°	588.7	587.2	588.7	591.5	596.6	606.1	619.7	639.2	672.5	729.5	821.2
52.5°	556.9	556.7	555.7	556.9	560.8	567.3	577.0	593.6	623.4	675.8	756.6
55°	508.5	504.9	505.6	502.8	509.3	510.7	517.9	531.6	557.6	593.7	669.6
57.5°	456.9	453.9	450.7	449.9	449.3	453.2	458.9	469.8	489.7	521.4	582.9
60°	424.0	420.4	416.0	414.6	414.6	416.8	419.7	427.6	446.4	474.6	525.1
62.5°	390.5	386.3	383.7	379.9	378.8	381.0	383.8	389.5	403.0	429.5	473.2
65°	338.7	333.8	330.1	329.4	327.9	325.7	327.3	333.0	343.8	364.8	399.4
67.5°	286.9	282.1	281.3	277.1	275.0	275.3	275.0	279.9	286.4	304.5	330.4
70°	252.8	249.2	247.8	244.1	242.7	241.3	239.8	244.1	250.6	265.8	288.2
72.5°	218.1	215.1	211.9	208.9	209.2	207.7	207.5	210.1	215.4	229.4	246.6
75°	168.3	169.0	165.4	161.8	161.1	159.7	159.7	161.8	164.0	174.8	188.5
77.5°	122.1	121.5	118.5	117.3	116.6	115.0	116.6	118.0	119.1	126.4	136.5
80°	93.2	93.2	89.5	89.5	88.9	86.7	88.9	87.4	90.3	97.6	104.7
82.5°	66.6	65.4	65.3	64.2	64.0	62.4	63.4	64.8	66.0	71.0	75.3
85°	32.5	32.5	31.8	31.1	31.8	31.1	31.8	32.5	33.3	35.4	39.0
87.5°	11.1	11.5	11.8	12.0	11.6	11.8	12.0	12.1	12.7	12.8	12.9
90°	21.1	20.1	18.3	16.5	14.7	12.9	10.8	8.4	5.9	3.5	1.0
92.5°	23.8	23.3	22.3	21.5	20.5	19.7	19.3	19.6	19.8	20.0	20.3
95°	40.2	39.1	37.5	36.0	34.4	32.8	35.7	43.1	50.4	57.8	65.1
97.5°	53.2	52.3	48.7	45.1	41.5	37.9	46.5	67.1	87.8	108.6	129.2
100°	58.9	57.1	53.3	49.6	45.7	41.9	55.3	85.9	116.3	146.8	177.4
102.5°	61.1	58.7	90.4	122.1	153.7	185.4	204.4	210.8	217.4	223.8	230.3
105°	63.5	61.1	121.9	182.7	243.5	304.3	331.3	324.6	317.9	311.3	304.6
107.5°	83.0	85.6	158.4	231.4	304.3	377.2	410.9	405.5	400.1	394.7	389.4
110°	153.1	175.3	239.7	304.1	368.3	432.7	462.6	457.9	453.3	448.6	443.8



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	361.1	442.2	458.2	474.1	489.9	505.9	511.7	507.6	503.4	499.4	495.2
115°	515.1	618.2	612.7	607.1	601.5	596.0	591.3	587.5	583.7	579.9	576.2
117.5°	659.8	684.8	680.9	677.1	673.3	669.4	665.4	661.2	657.0	652.7	648.5
120°	737.1	734.4	730.5	726.4	722.5	718.4	714.7	711.4	708.0	704.7	701.3
122.5°	783.3	781.7	777.4	773.0	768.6	764.3	760.3	756.9	753.3	749.8	746.3
125°	848.2	846.7	842.4	838.2	834.0	829.7	826.1	823.3	820.4	817.5	814.6
127.5°	907.5	905.2	902.0	898.8	895.7	892.5	889.4	886.2	883.0	879.8	876.6
130°	945.3	942.8	940.4	937.9	935.5	933.0	930.0	926.5	922.9	919.4	915.8
132.5°	982.6	980.5	978.1	975.6	973.2	970.7	968.0	965.0	962.0	958.9	955.8
135°	1035.3	1033.0	1031.0	1029.0	1027.0	1025.0	1022.2	1018.7	1015.1	1011.5	1008.0
137.5°	1084.3	1082.1	1079.9	1077.6	1075.3	1073.0	1070.6	1068.2	1065.6	1063.2	1060.6
140°	1116.2	1114.2	1111.7	1109.3	1106.8	1104.4	1102.3	1100.5	1098.7	1096.9	1095.1
142.5°	1145.7	1143.9	1141.0	1138.2	1135.4	1132.7	1130.4	1128.8	1127.2	1125.6	1124.0
145°	1186.8	1185.3	1181.6	1177.7	1173.9	1170.2	1168.4	1168.7	1168.8	1169.0	1169.3
147.5°	1222.9	1221.8	1218.0	1214.3	1210.6	1206.8	1205.4	1206.3	1207.1	1208.0	1208.8
150°	1244.8	1243.4	1239.9	1236.3	1232.8	1229.2	1228.2	1229.7	1231.3	1232.8	1234.4
152.5°	1264.8	1263.5	1260.1	1256.7	1253.3	1249.9	1249.2	1250.8	1252.5	1254.3	1256.0
155°	1291.8	1290.5	1287.9	1285.2	1282.5	1279.9	1279.5	1281.5	1283.6	1285.5	1287.5
157.5°	1314.5	1313.0	1311.1	1309.2	1307.4	1305.5	1305.4	1307.1	1308.8	1310.5	1312.2
160°	1327.9	1326.6	1325.3	1323.9	1322.6	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6
162.5°	1340.1	1338.6	1337.5	1336.3	1335.1	1334.0	1334.1	1335.4	1336.7	1338.1	1339.4
165°	1355.2	1353.7	1353.0	1352.4	1351.6	1350.9	1351.3	1352.6	1354.0	1355.3	1356.7
167.5°	1367.8	1366.3	1365.6	1365.0	1364.4	1363.8	1364.1	1365.5	1366.8	1368.2	1369.5
170°	1374.2	1372.7	1372.2	1371.8	1371.4	1370.9	1371.4	1372.7	1374.0	1375.4	1376.7
172.5°	1379.0	1377.5	1377.1	1376.6	1376.2	1375.7	1376.2	1377.5	1378.8	1380.2	1381.5
175°	1384.3	1382.7	1382.2	1381.9	1381.4	1380.9	1381.5	1383.1	1384.6	1386.2	1387.7
177.5°	1385.2	1383.9	1383.7	1383.6	1383.4	1383.2	1383.7	1385.0	1386.2	1387.5	1388.7
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331456-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1889.3	1892.2	1901.4	1910.7	1921.1	1924.0	1928.6	1924.6	1923.4	1934.4	1942.5
5°	1894.6	1907.6	1933.0	1956.1	1975.6	1989.2	2003.8	2009.5	2020.3	2035.5	2054.3
7.5°	1888.6	1913.8	1953.6	1987.3	2023.9	2050.4	2071.0	2088.7	2110.1	2138.8	2170.1
10°	1881.6	1915.6	1964.0	2005.2	2049.9	2083.9	2112.0	2139.5	2171.3	2211.0	2252.2
12.5°	1869.0	1909.2	1969.7	2018.5	2075.9	2109.3	2147.3	2206.6	2240.6	2295.9	2353.9
15°	1843.3	1888.1	1972.6	2032.6	2097.6	2161.2	2231.3	2287.6	2343.9	2376.4	2458.1
17.5°	1805.3	1871.1	1964.7	2034.7	2117.2	2217.3	2296.1	2359.9	2425.0	2477.7	2518.6
20°	1774.7	1846.3	1953.1	2036.9	2135.1	2242.8	2333.1	2398.1	2454.5	2498.5	2523.8
22.5°	1736.0	1826.0	1930.0	2028.3	2153.7	2260.1	2355.0	2406.2	2453.2	2474.8	2484.4
25°	1675.1	1783.4	1901.1	2021.1	2162.7	2275.3	2362.0	2393.0	2406.8	2385.9	2351.2
27.5°	1609.3	1730.1	1867.7	2007.4	2157.1	2265.5	2327.6	2322.7	2299.4	2231.7	2177.5
30°	1560.2	1693.1	1841.2	1993.6	2143.8	2249.3	2285.4	2249.3	2196.6	2120.7	2043.4
32.5°	1508.8	1646.3	1812.9	1974.0	2119.6	2212.3	2220.2	2158.0	2076.4	1990.2	1893.8
35°	1430.9	1579.7	1759.5	1930.0	2068.0	2126.5	2091.9	1982.1	1885.3	1767.6	1636.1
37.5°	1342.9	1507.2	1687.6	1865.8	1990.7	2006.0	1920.0	1804.3	1667.8	1529.5	1374.7
40°	1277.1	1451.1	1636.8	1816.7	1927.1	1911.3	1801.5	1674.3	1511.8	1342.7	1199.0
42.5°	1218.1	1392.2	1581.3	1757.7	1846.3	1802.6	1674.3	1518.3	1343.7	1184.5	1052.8
45°	1116.0	1295.1	1488.7	1659.2	1709.8	1631.0	1461.2	1287.9	1116.0	983.1	879.1
47.5°	1016.9	1194.0	1385.7	1535.5	1553.4	1447.6	1262.1	1083.6	935.9	827.6	754.2
50°	944.1	1121.7	1311.7	1445.4	1439.5	1311.7	1121.1	951.3	827.7	740.4	691.3
52.5°	878.7	1046.6	1229.1	1350.6	1319.9	1180.5	998.5	847.8	746.3	678.0	633.5
55°	777.2	932.6	1105.9	1203.3	1147.1	992.5	838.6	717.3	642.2	590.9	556.2
57.5°	676.4	822.0	970.3	1030.5	968.2	825.5	697.2	609.2	552.7	514.7	492.2
60°	614.0	741.1	873.3	925.3	850.9	723.8	622.6	543.9	498.4	467.3	447.1
62.5°	551.6	665.4	790.0	818.4	750.4	642.9	553.3	487.9	450.4	422.8	403.8
65°	466.7	559.8	654.4	673.2	610.4	527.3	456.5	413.9	380.7	360.4	345.3
67.5°	382.7	457.5	524.5	539.7	484.7	427.1	375.9	338.7	316.2	299.4	286.6
70°	333.0	392.2	447.1	459.4	415.4	364.0	325.1	295.4	275.2	260.8	248.5
72.5°	280.4	329.8	375.4	383.7	347.7	308.6	276.5	253.3	235.4	226.1	214.4
75°	214.5	243.5	278.8	281.0	257.1	233.3	208.8	193.6	184.2	172.7	166.8
77.5°	151.4	174.1	194.3	198.2	184.1	167.9	154.1	142.1	134.2	128.8	123.5
80°	115.6	133.7	142.3	147.3	137.2	125.6	117.7	109.8	104.7	101.1	97.6
82.5°	82.7	93.8	101.9	105.8	100.3	93.3	85.4	80.9	77.0	74.0	72.7
85°	41.8	46.9	52.0	53.4	52.0	49.1	44.8	44.8	42.6	41.8	41.8
87.5°	15.2	17.9	18.5	20.6	19.9	20.3	20.6	20.5	20.2	19.8	19.5
90°	3.5	5.9	8.4	10.8	12.9	14.7	16.5	18.3	20.1	21.1	22.2
92.5°	20.0	19.8	19.6	19.3	19.7	20.5	21.5	22.3	23.3	23.8	24.4
95°	57.8	50.4	43.1	35.7	32.8	34.4	36.0	37.5	39.1	40.2	41.3
97.5°	108.6	87.8	67.1	46.5	37.9	41.5	45.1	48.7	52.3	53.2	54.1
100°	146.8	116.3	85.9	55.3	41.9	45.7	49.6	53.3	57.1	58.9	60.7
102.5°	223.8	217.4	210.8	204.4	185.4	153.7	122.1	90.4	58.7	61.1	63.3
105°	311.3	317.9	324.6	331.3	304.3	243.5	182.7	121.9	61.1	63.5	66.0
107.5°	394.7	400.1	405.5	410.9	377.2	304.3	231.4	158.4	85.6	83.0	80.6
110°	448.6	453.3	457.9	462.6	432.7	368.3	304.1	239.7	175.3	153.1	130.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	499.4	503.4	507.6	511.7	505.9	489.9	474.1	458.2	442.2	361.1	279.8
115°	579.9	583.7	587.5	591.3	596.0	601.5	607.1	612.7	618.2	515.1	412.0
117.5°	652.7	657.0	661.2	665.4	669.4	673.3	677.1	680.9	684.8	659.8	634.9
120°	704.7	708.0	711.4	714.7	718.4	722.5	726.4	730.5	734.4	737.1	739.8
122.5°	749.8	753.3	756.9	760.3	764.3	768.6	773.0	777.4	781.7	783.3	784.9
125°	817.5	820.4	823.3	826.1	829.7	834.0	838.2	842.4	846.7	848.2	849.8
127.5°	879.8	883.0	886.2	889.4	892.5	895.7	898.8	902.0	905.2	907.5	909.7
130°	919.4	922.9	926.5	930.0	933.0	935.5	937.9	940.4	942.8	945.3	947.7
132.5°	958.9	962.0	965.0	968.0	970.7	973.2	975.6	978.1	980.5	982.6	984.7
135°	1011.5	1015.1	1018.7	1022.2	1025.0	1027.0	1029.0	1031.0	1033.0	1035.3	1037.5
137.5°	1063.2	1065.6	1068.2	1070.6	1073.0	1075.3	1077.6	1079.9	1082.1	1084.3	1086.5
140°	1096.9	1098.7	1100.5	1102.3	1104.4	1106.8	1109.3	1111.7	1114.2	1116.2	1118.2
142.5°	1125.6	1127.2	1128.8	1130.4	1132.7	1135.4	1138.2	1141.0	1143.9	1145.7	1147.5
145°	1169.0	1168.8	1168.7	1168.4	1170.2	1173.9	1177.7	1181.6	1185.3	1186.8	1188.5
147.5°	1208.0	1207.1	1206.3	1205.4	1206.8	1210.6	1214.3	1218.0	1221.8	1222.9	1224.1
150°	1232.8	1231.3	1229.7	1228.2	1229.2	1232.8	1236.3	1239.9	1243.4	1244.8	1246.1
152.5°	1254.3	1252.5	1250.8	1249.2	1249.9	1253.3	1256.7	1260.1	1263.5	1264.8	1266.1
155°	1285.5	1283.6	1281.5	1279.5	1279.9	1282.5	1285.2	1287.9	1290.5	1291.8	1293.2
157.5°	1310.5	1308.8	1307.1	1305.4	1305.5	1307.4	1309.2	1311.1	1313.0	1314.5	1316.0
160°	1325.3	1323.9	1322.6	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6	1327.9	1329.3
162.5°	1338.1	1336.7	1335.4	1334.1	1334.0	1335.1	1336.3	1337.5	1338.6	1340.1	1341.6
165°	1355.3	1354.0	1352.6	1351.3	1350.9	1351.6	1352.4	1353.0	1353.7	1355.2	1356.8
167.5°	1368.2	1366.8	1365.5	1364.1	1363.8	1364.4	1365.0	1365.6	1366.3	1367.8	1369.4
170°	1375.4	1374.0	1372.7	1371.4	1370.9	1371.4	1371.8	1372.2	1372.7	1374.2	1375.8
172.5°	1380.2	1378.8	1377.5	1376.2	1375.7	1376.2	1376.6	1377.1	1377.5	1379.0	1380.6
175°	1386.2	1384.6	1383.1	1381.5	1380.9	1381.4	1381.9	1382.2	1382.7	1384.3	1385.8
177.5°	1387.5	1386.2	1385.0	1383.7	1383.2	1383.4	1383.6	1383.7	1383.9	1385.2	1386.4
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1949.4	1957.5	1957.5	1958.6	1967.8	1966.7	1966.1
5°	2074.5	2086.8	2088.2	2101.2	2109.9	2107.0	2099.0
7.5°	2192.5	2215.4	2232.7	2242.4	2253.8	2260.9	2257.7
10°	2286.1	2319.4	2339.6	2353.3	2369.9	2382.2	2377.8
12.5°	2371.1	2410.6	2438.5	2461.9	2464.1	2479.8	2469.2
15°	2503.6	2545.4	2549.8	2567.1	2580.9	2579.4	2580.1
17.5°	2547.3	2560.8	2563.5	2563.9	2564.1	2559.0	2548.1
20°	2531.8	2526.7	2514.4	2505.0	2488.4	2486.2	2471.8
22.5°	2457.8	2441.8	2410.9	2390.6	2364.7	2358.0	2353.9
25°	2312.2	2276.7	2227.6	2180.7	2167.7	2142.4	2149.7
27.5°	2112.3	2057.2	2004.0	1965.9	1931.4	1893.5	1904.3
30°	1971.9	1909.8	1834.7	1776.9	1740.0	1703.9	1697.4
32.5°	1804.3	1713.4	1629.6	1578.7	1522.2	1499.4	1474.4
35°	1515.4	1426.5	1343.5	1272.0	1230.9	1199.0	1170.2
37.5°	1255.6	1153.3	1086.2	1028.3	998.5	980.3	985.0
40°	1094.3	1004.8	955.6	911.5	884.1	871.1	874.0
42.5°	963.7	896.6	856.2	826.0	806.7	799.5	797.8
45°	815.5	778.0	744.7	727.4	718.0	710.0	705.0
47.5°	714.4	683.7	665.0	654.7	646.5	638.4	638.2
50°	653.7	633.5	620.5	609.6	603.1	597.4	602.4
52.5°	607.5	589.0	576.0	566.3	563.8	558.6	558.5
55°	538.9	524.4	515.0	506.3	502.0	499.1	495.5
57.5°	476.5	462.7	454.0	448.6	440.4	437.4	436.3
60°	432.0	421.1	412.5	405.2	401.6	395.9	395.9
62.5°	390.9	380.1	372.0	366.5	360.6	358.3	358.8
65°	331.6	322.9	314.9	309.2	307.7	303.4	304.8
67.5°	276.9	271.2	262.8	259.6	256.8	254.6	252.8
70°	240.5	234.8	230.5	226.1	223.9	223.9	223.9
72.5°	209.9	202.9	200.4	194.9	196.1	193.9	191.5
75°	162.5	158.2	156.0	153.8	150.2	150.2	150.2
77.5°	119.6	118.3	115.7	113.4	112.5	111.8	112.1
80°	92.5	91.7	90.3	90.3	88.9	88.1	86.7
82.5°	71.1	69.2	68.3	67.8	67.5	67.3	67.0
85°	40.4	39.0	39.0	39.7	38.3	38.3	39.0
87.5°	20.3	20.5	20.1	20.2	20.8	20.4	20.5
90°	23.4	24.5	25.3	25.7	26.2	26.6	27.1
92.5°	25.0	25.5	26.0	26.3	26.5	26.8	27.1
95°	42.4	43.5	44.0	43.7	43.5	43.3	43.1
97.5°	55.0	55.9	56.5	56.7	57.0	57.2	57.5
100°	62.5	64.3	65.3	65.8	66.3	66.7	67.1
102.5°	65.7	68.0	69.5	70.0	70.7	71.4	71.9
105°	68.4	70.9	72.6	73.5	74.4	75.2	76.2
107.5°	78.0	75.6	74.8	75.7	76.5	77.5	78.3
110°	108.6	86.2	75.6	76.4	77.4	78.2	79.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	198.6	117.3	77.1	77.9	78.5	79.3	79.9
115°	309.0	205.9	146.3	130.3	114.2	98.2	82.2
117.5°	609.9	585.0	546.2	493.5	440.8	388.1	335.5
120°	742.4	745.2	731.4	701.3	671.3	641.2	611.2
122.5°	786.6	788.2	786.0	780.2	774.4	768.5	762.7
125°	851.3	852.9	854.0	854.7	855.4	856.0	856.7
127.5°	912.0	914.3	915.5	915.6	915.8	915.9	916.0
130°	950.2	952.6	953.8	953.6	953.3	953.1	952.9
132.5°	986.8	988.9	989.9	989.6	989.4	989.2	988.9
135°	1039.7	1041.9	1042.8	1042.4	1041.9	1041.5	1041.0
137.5°	1088.6	1090.8	1091.6	1090.8	1090.1	1089.3	1088.5
140°	1120.2	1122.2	1122.7	1121.5	1120.4	1119.3	1118.2
142.5°	1149.3	1151.1	1151.5	1150.4	1149.2	1148.2	1147.1
145°	1190.0	1191.6	1191.8	1190.7	1189.6	1188.5	1187.3
147.5°	1225.3	1226.4	1226.5	1225.6	1224.6	1223.7	1222.8
150°	1247.5	1248.8	1248.9	1247.7	1246.7	1245.6	1244.4
152.5°	1267.5	1268.9	1268.8	1267.2	1265.8	1264.3	1262.9
155°	1294.6	1295.9	1295.6	1293.8	1292.1	1290.3	1288.5
157.5°	1317.5	1319.0	1318.9	1317.2	1315.4	1313.7	1311.9
160°	1330.6	1331.9	1331.8	1330.3	1328.7	1327.2	1325.6
162.5°	1343.1	1344.7	1344.4	1342.6	1340.7	1338.7	1336.8
165°	1358.3	1359.9	1359.9	1358.3	1356.8	1355.2	1353.7
167.5°	1370.9	1372.5	1372.2	1370.3	1368.3	1366.3	1364.2
170°	1377.3	1378.9	1378.7	1376.7	1374.7	1372.7	1370.6
172.5°	1382.1	1383.7	1383.6	1381.5	1379.5	1377.5	1375.5
175°	1387.4	1388.9	1388.6	1386.4	1384.1	1382.0	1379.7
177.5°	1387.6	1388.9	1388.7	1387.1	1385.5	1383.9	1382.3
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7

(END OF REPORT)