

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: P332478

Luminaire Tested: **S123RDIW-S1165D1030U835-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332478
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDIW-S1165D1030U835-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1030 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8697.9 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

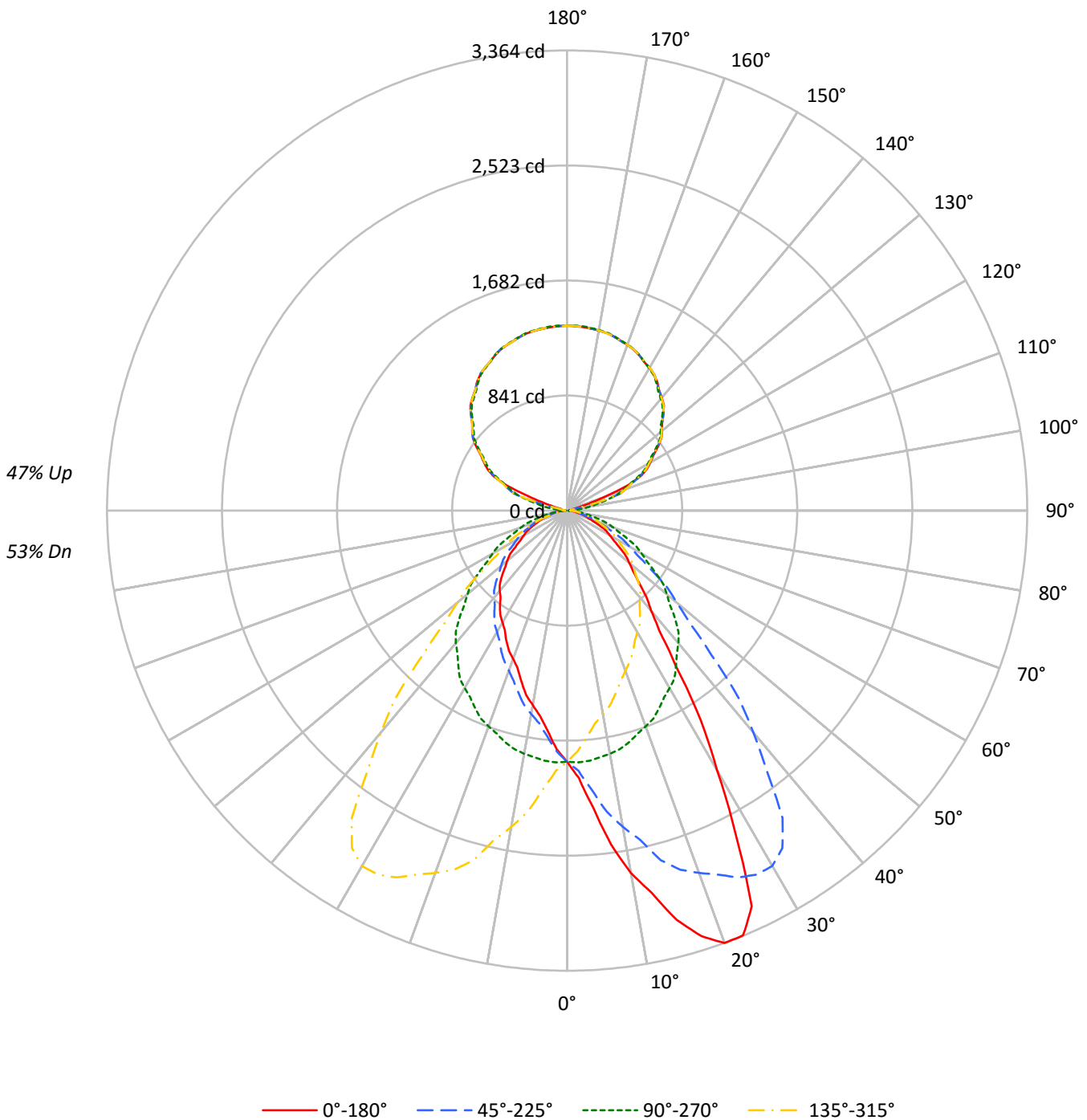
Input Watts (W): 67.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	99	95	91	88	92	88	85	82	75	73	71	63	62	60	53	52	51	46
2	91	84	78	73	84	78	73	68	67	63	60	57	54	51	47	45	44	39
3	83	74	67	61	77	69	63	58	59	55	51	50	47	44	42	40	38	34
4	76	66	58	52	70	61	55	50	53	48	44	45	42	38	38	35	33	30
5	70	59	51	45	65	55	48	43	48	42	38	41	37	34	35	32	29	26
6	65	53	45	40	60	50	43	38	43	38	34	37	33	30	32	28	26	23
7	60	48	40	35	56	45	38	33	39	34	30	34	30	27	29	26	23	21
8	56	44	36	31	52	41	34	30	36	31	27	31	27	24	27	23	21	19
9	52	40	33	28	48	38	31	27	33	28	24	29	25	22	25	21	19	17
10	49	37	30	25	45	35	28	24	31	25	22	27	23	20	23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	19763	19763	19763	19763
5°	23558	19847	17477	19847
10°	29415	19733	15789	19733
15°	34526	19531	14399	19531
20°	38533	19230	13216	19230
25°	37917	18912	12490	18912
30°	27256	18620	11742	18620
35°	18198	18239	11257	18239
40°	13408	17781	10756	17781
45°	11246	16978	10266	16978
50°	9923	15925	9582	15925
55°	8702	14720	8644	14720
60°	7750	13569	7918	13569
65°	6805	12332	7366	12332
70°	5344	11229	6729	11229
75°	4708	9807	6147	9807
80°	4091	8331	6044	8331
85°	3298	6694	6410	6694



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.6	2.1
10°-20°	564.1	6.5
20°-30°	886.2	10.2
30°-40°	924.6	10.6
40°-50°	791.2	9.1
50°-60°	603.1	6.9
60°-70°	386.5	4.4
70°-80°	186.0	2.1
80°-90°	53.0	0.6
90°-100°	49.2	0.6
100°-110°	234.3	2.7
110°-120°	562.7	6.5
120°-130°	716.5	8.2
130°-140°	765.6	8.8
140°-150°	715.9	8.2
150°-160°	577.5	6.6
160°-170°	372.7	4.3
170°-180°	128.4	1.5
0°-30°	1630.8	18.7
0°-40°	2555.4	29.4
0°-60°	3949.7	45.4
0°-90°	4575.2	52.6
90°-120°	846.1	9.7
90°-150°	3044.1	35.0
90°-180°	4123.0	47.4
0°-180°	8697.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1836	1836	1836	1836	1836	
5°	2180	1837	1618	1837	2180	225
15°	3098	1753	1292	1753	3098	879
25°	3193	1592	1052	1592	3193	1372
35°	1385	1388	857	1388	1385	908
45°	739	1115	674	1115	739	581
55°	464	784	461	784	464	419
65°	267	484	289	484	267	263
75°	113	236	148	236	113	121
85°	27	54	52	54	27	31
90°	30	1	30	1	30	14
95°	38	61	38	61	38	32
105°	44	299	44	299	44	101
115°	591	562	591	562	591	546
125°	808	792	808	792	808	721
135°	995	985	995	985	995	767
145°	1148	1137	1148	1137	1148	717
155°	1250	1252	1250	1252	1250	577
165°	1318	1321	1318	1321	1318	372
175°	1347	1352	1347	1352	1347	128
180°	1352	1352	1352	1352	1352	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1955.5	1958.0	1949.8	1948.6	1939.1	1936.6	1936.6	1923.4	1915.2	1904.6	1898.3
5°	2180.3	2192.9	2186.6	2172.4	2148.8	2143.3	2128.4	2104.8	2078.1	2045.1	2029.4
7.5°	2461.0	2478.2	2471.6	2449.7	2425.0	2405.1	2362.9	2323.8	2268.9	2220.8	2179.6
10°	2691.2	2673.1	2658.9	2637.7	2614.9	2578.0	2534.0	2473.4	2403.5	2348.5	2287.2
12.5°	2863.4	2860.5	2842.5	2820.7	2788.5	2753.4	2699.3	2625.6	2544.3	2464.8	2394.7
15°	3098.3	3103.0	3091.2	3068.4	3022.8	2960.7	2879.0	2848.4	2732.0	2645.6	2559.1
17.5°	3260.8	3259.9	3258.3	3226.7	3180.2	3136.0	3060.2	2979.6	2874.3	2752.5	2636.0
20°	3363.9	3356.1	3357.7	3322.3	3287.7	3236.6	3162.7	3045.6	2959.2	2818.5	2698.2
22.5°	3361.4	3359.9	3365.8	3353.7	3328.6	3289.4	3231.3	3132.4	3022.1	2880.1	2744.8
25°	3192.6	3186.3	3223.3	3233.5	3273.6	3280.6	3263.3	3209.1	3104.6	2958.4	2791.0
27.5°	2672.0	2668.5	2737.1	2822.9	2931.7	3016.2	3098.0	3137.4	3104.6	2999.9	2832.2
30°	2192.9	2266.7	2301.3	2425.5	2563.8	2728.9	2873.5	3011.0	3044.8	2999.3	2861.7
32.5°	1820.6	1885.1	1914.0	2020.6	2149.5	2342.8	2559.7	2754.5	2892.1	2926.9	2844.1
35°	1384.9	1385.7	1451.7	1498.8	1618.3	1817.2	2027.8	2288.7	2548.1	2744.6	2765.0
37.5°	1105.1	1109.0	1148.9	1195.9	1285.5	1390.7	1576.2	1793.1	2092.7	2394.4	2571.2
40°	954.2	961.2	991.1	1037.5	1101.9	1181.3	1325.9	1530.3	1780.2	2115.8	2390.1
42.5°	857.3	868.8	884.2	919.9	959.8	1034.2	1151.1	1309.0	1536.3	1853.6	2170.1
45°	738.8	745.1	756.9	773.4	809.5	861.4	940.0	1046.1	1234.8	1490.2	1806.9
47.5°	651.7	648.4	660.8	674.2	698.3	733.6	786.3	872.9	1007.5	1212.4	1481.1
50°	592.6	591.8	600.5	610.7	633.5	659.4	702.7	767.9	874.8	1044.6	1290.6
52.5°	537.3	540.3	546.4	559.1	575.6	596.6	635.4	682.4	774.2	920.7	1125.8
55°	463.7	466.1	474.7	481.8	493.6	514.8	539.2	578.5	641.4	743.5	912.5
57.5°	401.5	400.4	408.7	410.4	423.8	441.1	459.9	490.4	536.0	612.0	725.8
60°	360.0	357.6	364.7	370.2	377.3	391.4	407.1	437.0	473.2	529.0	626.4
62.5°	322.2	321.1	326.3	331.8	337.7	350.5	363.7	386.7	415.3	462.3	539.6
65°	267.2	269.6	271.9	274.3	277.4	285.3	297.9	313.6	333.3	366.3	422.1
67.5°	210.0	212.4	213.2	218.0	224.8	229.7	237.4	251.4	265.0	292.9	324.6
70°	169.8	169.0	169.8	172.1	180.8	189.4	199.6	209.9	218.5	238.1	264.9
72.5°	145.9	144.5	146.5	147.0	151.2	153.6	160.0	169.6	180.8	194.1	213.3
75°	113.2	113.2	113.2	113.2	116.3	117.9	120.3	122.6	126.5	132.8	147.0
77.5°	83.6	83.8	84.9	85.7	86.3	87.2	88.7	91.0	92.4	95.7	101.9
80°	66.0	66.8	66.0	66.8	66.8	68.4	69.2	71.5	72.3	76.2	78.6
82.5°	49.7	49.2	49.7	50.5	50.5	52.0	52.2	53.9	54.1	56.1	58.5
85°	26.7	25.2	26.7	25.9	27.5	25.9	26.7	28.3	28.3	29.1	32.2
87.5°	12.3	13.5	12.1	12.7	12.6	13.1	12.9	12.7	13.8	13.0	13.0
90°	30.1	29.7	29.2	28.8	28.3	27.7	26.8	25.9	25.0	24.1	21.2
92.5°	33.3	33.1	32.8	32.5	32.3	31.4	30.0	28.6	27.1	25.7	23.5
95°	38.2	38.2	38.2	38.2	38.2	37.4	35.8	34.3	32.7	31.1	28.7
97.5°	41.4	41.2	40.9	40.7	40.5	39.5	37.7	35.9	34.1	32.3	48.4
100°	42.2	42.0	41.7	41.5	41.3	40.3	38.5	36.7	34.9	33.1	68.0
102.5°	43.0	42.6	42.2	41.8	41.4	43.9	49.5	55.0	60.6	66.1	104.1
105°	44.2	43.7	43.3	42.9	42.4	61.9	101.4	141.0	180.5	220.0	240.1
107.5°	138.8	168.6	198.4	228.1	257.9	287.3	316.3	345.2	374.2	403.2	400.0
110°	276.2	308.1	340.0	372.0	403.9	423.5	430.9	438.3	445.6	453.0	450.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	473.9	480.6	487.4	494.1	500.8	504.1	504.0	503.9	503.7	503.6	501.2
115°	590.6	589.7	588.8	587.9	587.0	585.5	583.2	581.0	578.8	576.5	574.5
117.5°	656.1	655.9	655.7	655.5	655.4	654.4	652.6	650.8	649.0	647.2	646.2
120°	701.1	701.1	701.1	701.1	701.1	700.2	698.4	696.6	694.8	693.0	692.4
122.5°	745.3	745.1	744.9	744.7	744.6	743.8	742.6	741.3	740.1	738.8	738.0
125°	807.5	807.1	806.6	806.2	805.8	805.3	804.9	804.4	804.0	803.5	802.6
127.5°	867.4	867.9	868.3	868.7	869.2	869.1	868.3	867.6	866.9	866.2	865.1
130°	906.0	906.4	906.9	907.3	907.8	907.5	906.6	905.8	904.9	904.0	903.1
132.5°	941.3	942.0	942.6	943.2	943.8	943.7	942.8	941.9	941.0	940.1	939.4
135°	995.4	996.0	996.7	997.4	998.0	998.0	997.4	996.7	996.0	995.4	994.5
137.5°	1046.2	1046.6	1047.1	1047.5	1048.0	1047.7	1046.6	1045.5	1044.4	1043.4	1042.9
140°	1076.7	1077.2	1077.6	1078.1	1078.5	1078.3	1077.4	1076.5	1075.6	1074.7	1074.0
142.5°	1104.8	1105.5	1106.1	1106.7	1107.3	1107.3	1106.6	1105.9	1105.2	1104.4	1103.8
145°	1148.0	1148.0	1148.0	1148.0	1148.0	1147.8	1147.4	1146.9	1146.5	1146.0	1145.6
147.5°	1180.2	1181.2	1182.2	1183.3	1184.3	1184.6	1184.1	1183.7	1183.2	1182.8	1182.3
150°	1204.3	1205.0	1205.6	1206.3	1207.0	1207.1	1206.6	1206.2	1205.7	1205.3	1204.8
152.5°	1223.6	1224.6	1225.6	1226.6	1227.7	1227.8	1227.0	1226.2	1225.4	1224.6	1224.3
155°	1250.5	1251.8	1253.2	1254.5	1255.8	1256.0	1254.8	1253.7	1252.6	1251.5	1251.3
157.5°	1273.2	1274.9	1276.7	1278.4	1280.1	1280.3	1279.0	1277.7	1276.3	1275.0	1275.2
160°	1287.6	1289.2	1290.8	1292.3	1293.9	1294.0	1292.7	1291.3	1290.0	1288.7	1288.9
162.5°	1301.3	1302.7	1304.1	1305.5	1306.8	1306.8	1305.3	1303.7	1302.2	1300.7	1300.9
165°	1317.8	1319.3	1320.9	1322.5	1324.0	1323.9	1322.1	1320.3	1318.6	1316.8	1317.0
167.5°	1329.6	1331.4	1333.2	1335.0	1336.8	1336.8	1335.0	1333.2	1331.4	1329.6	1329.6
170°	1336.9	1338.6	1340.4	1342.2	1344.0	1344.0	1342.2	1340.4	1338.6	1336.9	1336.9
172.5°	1340.9	1342.8	1344.8	1346.8	1348.7	1348.8	1347.0	1345.3	1343.5	1341.7	1341.5
175°	1346.9	1348.7	1350.5	1352.3	1354.1	1354.2	1352.6	1351.0	1349.5	1347.9	1347.7
177.5°	1348.7	1350.5	1352.3	1354.1	1355.9	1356.0	1354.6	1353.2	1351.8	1350.3	1350.1
180°	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1895.8	1893.9	1885.1	1875.0	1861.8	1853.0	1846.1	1842.3	1831.0	1817.2	1807.7
5°	2012.9	1989.3	1964.1	1933.5	1905.2	1876.1	1858.0	1836.8	1810.9	1781.8	1761.4
7.5°	2138.3	2092.1	2042.3	1990.9	1940.1	1894.5	1854.3	1819.8	1778.5	1736.8	1707.6
10°	2234.5	2166.9	2097.0	2025.4	1960.2	1898.9	1851.7	1805.4	1755.9	1707.9	1671.8
12.5°	2321.9	2232.9	2152.3	2064.4	1981.0	1907.7	1839.8	1785.2	1725.7	1674.6	1633.4
15°	2432.6	2341.4	2243.9	2110.3	1999.5	1906.8	1824.2	1752.7	1680.4	1617.5	1577.4
17.5°	2536.0	2398.8	2267.8	2156.4	2012.4	1896.5	1795.8	1710.3	1630.9	1564.2	1514.9
20°	2578.8	2445.9	2303.7	2161.4	2019.9	1890.3	1773.1	1678.8	1596.3	1520.8	1475.3
22.5°	2604.5	2454.1	2304.3	2151.4	2001.1	1866.4	1750.5	1646.8	1557.3	1485.6	1429.4
25°	2634.6	2455.4	2290.3	2139.4	1986.1	1840.0	1702.4	1592.4	1495.7	1419.5	1359.7
27.5°	2654.4	2443.6	2248.5	2080.8	1925.3	1779.7	1653.7	1537.0	1439.0	1358.3	1294.2
30°	2658.1	2434.1	2216.4	2034.9	1876.9	1743.3	1609.7	1498.1	1394.3	1308.6	1248.9
32.5°	2663.2	2410.9	2173.0	1980.2	1818.4	1686.1	1565.0	1458.4	1352.2	1267.8	1206.8
35°	2642.4	2398.0	2107.2	1885.5	1723.6	1595.5	1486.3	1388.0	1283.5	1201.7	1139.7
37.5°	2553.1	2346.9	2039.0	1779.0	1609.7	1491.0	1402.0	1316.3	1220.5	1132.3	1073.8
40°	2463.2	2296.6	1986.1	1714.2	1537.4	1415.5	1335.4	1265.4	1172.7	1090.1	1027.3
42.5°	2329.3	2228.1	1935.8	1646.3	1455.6	1338.2	1270.6	1205.0	1123.6	1039.8	980.7
45°	2083.6	2097.0	1832.9	1538.1	1342.4	1224.5	1160.9	1115.3	1043.0	973.8	913.3
47.5°	1775.5	1900.5	1712.0	1422.9	1223.1	1112.5	1056.8	1017.0	968.3	900.4	845.2
50°	1574.3	1752.7	1615.2	1345.6	1148.3	1038.3	983.2	951.0	908.6	855.1	802.5
52.5°	1388.8	1580.4	1498.2	1259.4	1067.2	966.6	912.8	886.3	852.6	802.3	754.7
55°	1132.6	1326.7	1307.9	1129.4	945.5	855.1	814.3	784.4	761.6	723.9	686.2
57.5°	916.1	1100.2	1109.9	984.8	838.3	749.0	713.8	691.3	676.4	648.0	613.1
60°	779.7	948.7	981.7	887.4	761.6	683.0	648.4	630.3	618.6	595.8	569.0
62.5°	666.5	810.3	847.7	779.8	688.0	614.5	587.4	570.0	562.0	542.3	518.7
65°	510.1	629.6	665.7	628.0	580.0	521.1	499.1	484.2	477.1	466.1	448.8
67.5°	383.6	470.6	510.3	483.7	466.4	429.1	415.1	407.1	400.8	393.3	378.8
70°	308.1	372.5	413.4	406.3	392.2	372.5	362.3	356.8	350.5	344.3	331.7
72.5°	247.7	292.1	330.4	334.0	322.4	318.5	309.5	307.2	303.4	295.8	288.9
75°	164.3	194.9	221.6	231.9	236.6	240.5	236.6	235.8	235.0	228.7	224.8
77.5°	107.7	124.2	141.0	158.5	165.8	171.2	172.4	175.3	173.2	169.9	168.0
80°	82.5	86.5	98.2	113.2	125.0	129.7	132.8	134.4	133.6	132.8	129.7
82.5°	59.9	63.2	68.7	79.2	89.1	97.0	98.9	98.6	100.3	100.8	98.2
85°	32.2	33.0	34.6	36.2	41.7	50.3	52.7	54.2	55.8	55.8	51.1
87.5°	13.7	12.5	13.2	12.7	14.1	14.3	17.6	20.3	21.4	19.3	19.8
90°	18.3	15.4	12.5	9.9	7.7	5.5	3.2	1.0	3.2	5.5	7.7
92.5°	21.3	19.2	17.0	16.2	16.8	17.4	18.1	18.7	18.1	17.4	16.8
95°	26.2	23.8	21.3	24.7	33.8	43.0	52.1	61.3	52.1	43.0	33.8
97.5°	64.5	80.6	96.6	106.7	110.8	114.9	119.0	123.1	119.0	114.9	110.8
100°	102.8	137.6	172.4	187.6	183.1	178.7	174.2	169.7	174.2	178.7	183.1
102.5°	142.2	180.2	218.2	235.6	232.4	229.2	226.0	222.8	226.0	229.2	232.4
105°	260.1	280.2	300.3	309.1	306.7	304.2	301.8	299.3	301.8	304.2	306.7
107.5°	396.8	393.7	390.5	387.9	386.0	384.0	382.0	380.1	382.0	384.0	386.0
110°	448.1	445.6	443.2	441.0	439.3	437.5	435.7	433.9	435.7	437.5	439.3



TEST NUMBER: P332478

CATALOG NUMBER: S123RDIW-S1165D1030U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	498.7	496.2	493.8	491.8	490.2	488.5	486.9	485.3	486.9	488.5	490.2
115°	572.5	570.5	568.5	566.8	565.5	564.1	562.8	561.5	562.8	564.1	565.5
117.5°	645.2	644.2	643.1	641.8	640.1	638.5	636.8	635.2	636.8	638.5	640.1
120°	691.7	691.0	690.4	689.0	687.0	685.0	683.0	681.0	683.0	685.0	687.0
122.5°	737.1	736.3	735.4	734.2	732.5	730.9	729.2	727.6	729.2	730.9	732.5
125°	801.7	800.8	800.0	798.6	796.8	795.0	793.3	791.5	793.3	795.0	796.8
127.5°	864.1	863.0	861.9	860.5	858.7	856.9	855.1	853.3	855.1	856.9	858.7
130°	902.2	901.3	900.4	899.1	897.3	895.5	893.7	891.9	893.7	895.5	897.3
132.5°	938.7	938.0	937.3	936.0	934.2	932.4	930.7	928.9	930.7	932.4	934.2
135°	993.6	992.7	991.8	990.7	989.3	988.0	986.7	985.3	986.7	988.0	989.3
137.5°	1042.4	1041.9	1041.4	1040.3	1038.6	1036.9	1035.2	1033.5	1035.2	1036.9	1038.6
140°	1073.4	1072.7	1072.0	1071.0	1069.7	1068.4	1067.0	1065.7	1067.0	1068.4	1069.7
142.5°	1103.1	1102.4	1101.8	1100.8	1099.4	1098.1	1096.7	1095.4	1096.7	1098.1	1099.4
145°	1145.1	1144.7	1144.2	1143.2	1141.7	1140.1	1138.5	1137.0	1138.5	1140.1	1141.7
147.5°	1181.9	1181.4	1181.0	1180.3	1179.2	1178.2	1177.2	1176.2	1177.2	1178.2	1179.2
150°	1204.4	1203.9	1203.5	1202.9	1202.3	1201.6	1200.9	1200.3	1200.9	1201.6	1202.3
152.5°	1224.0	1223.8	1223.5	1223.2	1222.9	1222.6	1222.3	1222.0	1222.3	1222.6	1222.9
155°	1251.0	1250.8	1250.6	1250.7	1251.2	1251.6	1252.0	1252.5	1252.0	1251.6	1251.2
157.5°	1275.4	1275.7	1275.9	1276.0	1276.1	1276.1	1276.2	1276.2	1276.2	1276.1	1276.1
160°	1289.1	1289.3	1289.5	1289.8	1290.0	1290.2	1290.4	1290.7	1290.4	1290.2	1290.0
162.5°	1301.2	1301.4	1301.6	1302.0	1302.6	1303.2	1303.7	1304.3	1303.7	1303.2	1302.6
165°	1317.2	1317.4	1317.7	1318.1	1318.8	1319.5	1320.1	1320.8	1320.1	1319.5	1318.8
167.5°	1329.6	1329.6	1329.6	1330.1	1331.0	1331.9	1332.8	1333.6	1332.8	1331.9	1331.0
170°	1336.9	1336.9	1336.9	1337.3	1338.2	1339.1	1340.0	1340.9	1340.0	1339.1	1338.2
172.5°	1341.3	1341.1	1341.0	1341.4	1342.5	1343.6	1344.6	1345.7	1344.6	1343.6	1342.5
175°	1347.5	1347.2	1347.0	1347.5	1348.6	1349.7	1350.8	1351.9	1350.8	1349.7	1348.6
177.5°	1350.0	1349.8	1349.6	1350.0	1350.9	1351.8	1352.6	1353.5	1352.6	1351.8	1350.9
180°	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9



TEST NUMBER: P332478

CATALOG NUMBER: S123RDIW-S1165D1030U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1804.6	1796.4	1790.8	1778.2	1770.0	1761.2	1752.4	1758.1	1757.4	1756.8	1756.8
5°	1744.1	1726.0	1709.5	1688.3	1674.9	1658.4	1645.8	1644.2	1647.4	1636.4	1630.1
7.5°	1684.0	1659.3	1635.9	1612.5	1587.7	1567.9	1555.4	1549.6	1541.6	1534.8	1527.8
10°	1641.9	1612.8	1590.0	1560.9	1534.2	1510.6	1495.7	1485.5	1480.0	1474.5	1464.3
12.5°	1598.5	1570.1	1541.0	1508.1	1482.7	1455.3	1444.1	1432.7	1422.1	1416.0	1402.0
15°	1535.0	1498.1	1467.4	1432.8	1404.5	1377.8	1362.1	1339.3	1336.1	1328.3	1314.1
17.5°	1471.3	1431.2	1389.0	1363.3	1331.4	1303.6	1279.7	1272.0	1249.5	1241.0	1228.8
20°	1421.0	1384.1	1351.9	1318.1	1271.7	1245.8	1226.9	1216.7	1198.6	1187.6	1179.7
22.5°	1377.6	1340.1	1302.8	1263.4	1225.2	1196.1	1182.3	1166.4	1156.5	1141.1	1132.6
25°	1315.7	1274.8	1230.0	1187.6	1160.1	1138.1	1116.1	1101.9	1087.8	1080.7	1065.0
27.5°	1243.7	1201.0	1159.1	1126.9	1093.1	1071.4	1051.5	1038.9	1021.9	1010.0	1001.3
30°	1204.1	1153.8	1117.6	1088.6	1045.3	1024.9	1010.0	994.3	981.7	969.1	960.5
32.5°	1158.2	1112.3	1078.0	1042.0	1008.9	986.5	967.2	953.4	942.7	930.7	922.1
35°	1086.2	1047.7	1012.3	976.2	951.8	929.0	906.2	894.4	884.2	873.2	865.4
37.5°	1021.1	985.1	951.5	917.2	887.0	868.5	850.1	841.1	827.3	819.9	811.9
40°	980.9	945.5	909.4	876.4	844.9	830.8	814.3	800.9	788.3	782.8	774.2
42.5°	936.9	901.5	871.0	835.5	809.7	790.5	775.3	760.7	751.2	743.2	738.3
45°	871.6	840.2	810.3	775.0	750.6	734.1	716.8	703.4	694.8	689.3	680.6
47.5°	808.3	776.9	746.5	715.7	692.1	673.3	656.0	646.7	635.2	628.5	622.6
50°	762.4	734.1	701.9	673.6	650.0	631.1	617.0	605.2	595.0	586.3	582.4
52.5°	720.3	690.1	662.3	635.8	611.0	589.6	576.7	564.3	556.6	546.7	542.2
55°	650.8	621.7	598.1	572.2	547.8	529.7	514.0	503.0	495.2	484.2	477.9
57.5°	585.5	559.5	531.3	508.8	483.7	468.4	455.4	440.5	430.9	422.2	416.1
60°	541.5	511.7	487.3	466.1	444.1	424.4	412.6	400.8	390.6	382.0	376.5
62.5°	495.6	469.5	446.4	423.3	403.2	386.1	372.4	362.5	353.5	348.0	342.5
65°	425.2	404.8	381.2	362.3	343.5	330.9	319.9	311.2	305.0	301.0	296.3
67.5°	360.4	340.6	320.0	301.5	288.9	279.3	272.1	264.7	261.6	256.5	253.4
70°	318.3	297.9	279.8	265.7	253.1	246.0	241.3	235.8	232.6	226.4	223.2
72.5°	272.4	257.6	244.6	233.0	222.9	216.5	210.5	203.7	198.7	191.8	188.6
75°	214.6	201.2	191.0	183.1	176.8	168.2	159.6	152.5	150.1	147.8	147.0
77.5°	158.9	150.4	143.0	136.4	128.6	122.3	120.4	118.8	118.4	117.1	117.1
80°	125.0	117.1	111.6	103.7	99.0	99.0	99.0	97.5	98.2	98.2	98.2
82.5°	92.9	85.7	82.7	79.9	78.9	79.5	79.5	79.9	79.4	80.6	80.0
85°	47.9	48.7	50.3	49.5	50.3	50.3	51.9	51.1	51.9	50.3	51.9
87.5°	19.6	22.0	23.2	24.4	25.6	25.6	26.4	26.6	27.4	27.5	27.7
90°	9.9	12.5	15.4	18.3	21.2	24.1	25.0	25.9	26.8	27.7	28.3
92.5°	16.2	17.0	19.2	21.3	23.5	25.7	27.1	28.6	30.0	31.4	32.3
95°	24.7	21.3	23.8	26.2	28.7	31.1	32.7	34.3	35.8	37.4	38.2
97.5°	106.7	96.6	80.6	64.5	48.4	32.3	34.1	35.9	37.7	39.5	40.5
100°	187.6	172.4	137.6	102.8	68.0	33.1	34.9	36.7	38.5	40.3	41.3
102.5°	235.6	218.2	180.2	142.2	104.1	66.1	60.6	55.0	49.5	43.9	41.4
105°	309.1	300.3	280.2	260.1	240.1	220.0	180.5	141.0	101.4	61.9	42.4
107.5°	387.9	390.5	393.7	396.8	400.0	403.2	374.2	345.2	316.3	287.3	257.9
110°	441.0	443.2	445.6	448.1	450.5	453.0	445.6	438.3	430.9	423.5	403.9



TEST NUMBER: P332478

CATALOG NUMBER: S123RDIW-S1165D1030U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	491.8	493.8	496.2	498.7	501.2	503.6	503.7	503.9	504.0	504.1	500.8
115°	566.8	568.5	570.5	572.5	574.5	576.5	578.8	581.0	583.2	585.5	587.0
117.5°	641.8	643.1	644.2	645.2	646.2	647.2	649.0	650.8	652.6	654.4	655.4
120°	689.0	690.4	691.0	691.7	692.4	693.0	694.8	696.6	698.4	700.2	701.1
122.5°	734.2	735.4	736.3	737.1	738.0	738.8	740.1	741.3	742.6	743.8	744.6
125°	798.6	800.0	800.8	801.7	802.6	803.5	804.0	804.4	804.9	805.3	805.8
127.5°	860.5	861.9	863.0	864.1	865.1	866.2	866.9	867.6	868.3	869.1	869.2
130°	899.1	900.4	901.3	902.2	903.1	904.0	904.9	905.8	906.6	907.5	907.8
132.5°	936.0	937.3	938.0	938.7	939.4	940.1	941.0	941.9	942.8	943.7	943.8
135°	990.7	991.8	992.7	993.6	994.5	995.4	996.0	996.7	997.4	998.0	998.0
137.5°	1040.3	1041.4	1041.9	1042.4	1042.9	1043.4	1044.4	1045.5	1046.6	1047.7	1048.0
140°	1071.0	1072.0	1072.7	1073.4	1074.0	1074.7	1075.6	1076.5	1077.4	1078.3	1078.5
142.5°	1100.8	1101.8	1102.4	1103.1	1103.8	1104.4	1105.2	1105.9	1106.6	1107.3	1107.3
145°	1143.2	1144.2	1144.7	1145.1	1145.6	1146.0	1146.5	1146.9	1147.4	1147.8	1148.0
147.5°	1180.3	1181.0	1181.4	1181.9	1182.3	1182.8	1183.2	1183.7	1184.1	1184.6	1184.3
150°	1202.9	1203.5	1203.9	1204.4	1204.8	1205.3	1205.7	1206.2	1206.6	1207.1	1207.0
152.5°	1223.2	1223.5	1223.8	1224.0	1224.3	1224.6	1225.4	1226.2	1227.0	1227.8	1227.7
155°	1250.7	1250.6	1250.8	1251.0	1251.3	1251.5	1252.6	1253.7	1254.8	1256.0	1255.8
157.5°	1276.0	1275.9	1275.7	1275.4	1275.2	1275.0	1276.3	1277.7	1279.0	1280.3	1280.1
160°	1289.8	1289.5	1289.3	1289.1	1288.9	1288.7	1290.0	1291.3	1292.7	1294.0	1293.9
162.5°	1302.0	1301.6	1301.4	1301.2	1300.9	1300.7	1302.2	1303.7	1305.3	1306.8	1306.8
165°	1318.1	1317.7	1317.4	1317.2	1317.0	1316.8	1318.6	1320.3	1322.1	1323.9	1324.0
167.5°	1330.1	1329.6	1329.6	1329.6	1329.6	1329.6	1331.4	1333.2	1335.0	1336.8	1336.8
170°	1337.3	1336.9	1336.9	1336.9	1336.9	1336.9	1338.6	1340.4	1342.2	1344.0	1344.0
172.5°	1341.4	1341.0	1341.1	1341.3	1341.5	1341.7	1343.5	1345.3	1347.0	1348.8	1348.7
175°	1347.5	1347.0	1347.2	1347.5	1347.7	1347.9	1349.5	1351.0	1352.6	1354.2	1354.1
177.5°	1350.0	1349.6	1349.8	1350.0	1350.1	1350.3	1351.8	1353.2	1354.6	1356.0	1355.9
180°	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9



TEST NUMBER: P332478

CATALOG NUMBER: S123RDIW-S1165D1030U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1749.3	1748.6	1749.3	1746.7	1749.3	1748.6	1749.3	1756.8	1756.8	1757.4	1758.1
5°	1627.7	1627.0	1624.6	1617.5	1624.6	1627.0	1627.7	1630.1	1636.4	1647.4	1644.2
7.5°	1521.6	1520.5	1513.6	1513.8	1513.6	1520.5	1521.6	1527.8	1534.8	1541.6	1549.6
10°	1458.8	1459.5	1450.1	1444.6	1450.1	1459.5	1458.8	1464.3	1474.5	1480.0	1485.5
12.5°	1397.8	1394.2	1386.6	1380.5	1386.6	1394.2	1397.8	1402.0	1416.0	1422.1	1432.7
15°	1317.3	1309.4	1290.6	1292.1	1290.6	1309.4	1317.3	1314.1	1328.3	1336.1	1339.3
17.5°	1222.5	1216.7	1216.4	1205.4	1216.4	1216.7	1222.5	1228.8	1241.0	1249.5	1272.0
20°	1167.2	1163.2	1164.8	1153.8	1164.8	1163.2	1167.2	1179.7	1187.6	1198.6	1216.7
22.5°	1123.8	1119.8	1113.2	1109.8	1113.2	1119.8	1123.8	1132.6	1141.1	1156.5	1166.4
25°	1060.3	1054.0	1047.7	1051.6	1047.7	1054.0	1060.3	1065.0	1080.7	1087.8	1101.9
27.5°	996.8	992.1	985.8	985.0	985.8	992.1	996.8	1001.3	1010.0	1021.9	1038.9
30°	956.5	951.8	948.7	944.7	948.7	951.8	956.5	960.5	969.1	981.7	994.3
32.5°	915.7	914.7	909.1	908.3	909.1	914.7	915.7	922.1	930.7	942.7	953.4
35°	862.2	857.5	855.9	856.7	855.9	857.5	862.2	865.4	873.2	884.2	894.4
37.5°	811.4	805.1	802.3	799.5	802.3	805.1	811.4	811.9	819.9	827.3	841.1
40°	775.0	768.7	767.1	765.5	767.1	768.7	775.0	774.2	782.8	788.3	800.9
42.5°	734.1	731.6	730.6	727.8	730.6	731.6	734.1	738.3	743.2	751.2	760.7
45°	678.3	677.5	672.8	674.4	672.8	677.5	678.3	680.6	689.3	694.8	703.4
47.5°	619.5	616.0	612.7	614.9	612.7	616.0	619.5	622.6	628.5	635.2	646.7
50°	579.3	577.7	570.6	572.2	570.6	577.7	579.3	582.4	586.3	595.0	605.2
52.5°	539.0	533.0	530.4	529.4	530.4	533.0	539.0	542.2	546.7	556.6	564.3
55°	472.4	465.3	462.1	460.6	462.1	465.3	472.4	477.9	484.2	495.2	503.0
57.5°	407.0	405.1	402.6	404.3	402.6	405.1	407.0	416.1	422.2	430.9	440.5
60°	368.6	368.6	368.6	367.8	368.6	368.6	368.6	376.5	382.0	390.6	400.8
62.5°	339.1	337.2	336.6	337.7	336.6	337.2	339.1	342.5	348.0	353.5	362.5
65°	294.0	293.2	290.0	289.2	290.0	293.2	294.0	296.3	301.0	305.0	311.2
67.5°	251.4	248.5	247.6	246.5	247.6	248.5	251.4	253.4	256.5	261.6	264.7
70°	219.3	217.7	213.0	213.8	213.0	217.7	219.3	223.2	226.4	232.6	235.8
72.5°	184.7	183.1	182.2	181.1	182.2	183.1	184.7	188.6	191.8	198.7	203.7
75°	146.2	145.4	144.6	147.8	144.6	145.4	146.2	147.0	147.8	150.1	152.5
77.5°	117.1	117.1	117.6	116.3	117.6	117.1	117.1	117.1	117.1	118.4	118.8
80°	98.2	98.2	97.5	97.5	97.5	98.2	98.2	98.2	98.2	98.2	97.5
82.5°	78.8	79.4	79.9	78.6	79.9	79.4	78.8	80.0	80.6	79.4	79.9
85°	51.9	51.1	52.7	51.9	52.7	51.1	51.9	51.9	50.3	51.9	51.1
87.5°	29.0	27.9	27.9	28.7	27.9	27.9	29.0	27.7	27.5	27.4	26.6
90°	28.8	29.2	29.7	30.1	29.7	29.2	28.8	28.3	27.7	26.8	25.9
92.5°	32.5	32.8	33.1	33.3	33.1	32.8	32.5	32.3	31.4	30.0	28.6
95°	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	37.4	35.8	34.3
97.5°	40.7	40.9	41.2	41.4	41.2	40.9	40.7	40.5	39.5	37.7	35.9
100°	41.5	41.7	42.0	42.2	42.0	41.7	41.5	41.3	40.3	38.5	36.7
102.5°	41.8	42.2	42.6	43.0	42.6	42.2	41.8	41.4	43.9	49.5	55.0
105°	42.9	43.3	43.7	44.2	43.7	43.3	42.9	42.4	61.9	101.4	141.0
107.5°	228.1	198.4	168.6	138.8	168.6	198.4	228.1	257.9	287.3	316.3	345.2
110°	372.0	340.0	308.1	276.2	308.1	340.0	372.0	403.9	423.5	430.9	438.3



TEST NUMBER: P332478

CATALOG NUMBER: S123RDIW-S1165D1030U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	494.1	487.4	480.6	473.9	480.6	487.4	494.1	500.8	504.1	504.0	503.9
115°	587.9	588.8	589.7	590.6	589.7	588.8	587.9	587.0	585.5	583.2	581.0
117.5°	655.5	655.7	655.9	656.1	655.9	655.7	655.5	655.4	654.4	652.6	650.8
120°	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	700.2	698.4	696.6
122.5°	744.7	744.9	745.1	745.3	745.1	744.9	744.7	744.6	743.8	742.6	741.3
125°	806.2	806.6	807.1	807.5	807.1	806.6	806.2	805.8	805.3	804.9	804.4
127.5°	868.7	868.3	867.9	867.4	867.9	868.3	868.7	869.2	869.1	868.3	867.6
130°	907.3	906.9	906.4	906.0	906.4	906.9	907.3	907.8	907.5	906.6	905.8
132.5°	943.2	942.6	942.0	941.3	942.0	942.6	943.2	943.8	943.7	942.8	941.9
135°	997.4	996.7	996.0	995.4	996.0	996.7	997.4	998.0	998.0	997.4	996.7
137.5°	1047.5	1047.1	1046.6	1046.2	1046.6	1047.1	1047.5	1048.0	1047.7	1046.6	1045.5
140°	1078.1	1077.6	1077.2	1076.7	1077.2	1077.6	1078.1	1078.5	1078.3	1077.4	1076.5
142.5°	1106.7	1106.1	1105.5	1104.8	1105.5	1106.1	1106.7	1107.3	1107.3	1106.6	1105.9
145°	1148.0	1148.0	1148.0	1148.0	1148.0	1148.0	1148.0	1148.0	1147.8	1147.4	1146.9
147.5°	1183.3	1182.2	1181.2	1180.2	1181.2	1182.2	1183.3	1184.3	1184.6	1184.1	1183.7
150°	1206.3	1205.6	1205.0	1204.3	1205.0	1205.6	1206.3	1207.0	1207.1	1206.6	1206.2
152.5°	1226.6	1225.6	1224.6	1223.6	1224.6	1225.6	1226.6	1227.7	1227.8	1227.0	1226.2
155°	1254.5	1253.2	1251.8	1250.5	1251.8	1253.2	1254.5	1255.8	1256.0	1254.8	1253.7
157.5°	1278.4	1276.7	1274.9	1273.2	1274.9	1276.7	1278.4	1280.1	1280.3	1279.0	1277.7
160°	1292.3	1290.8	1289.2	1287.6	1289.2	1290.8	1292.3	1293.9	1294.0	1292.7	1291.3
162.5°	1305.5	1304.1	1302.7	1301.3	1302.7	1304.1	1305.5	1306.8	1306.8	1305.3	1303.7
165°	1322.5	1320.9	1319.3	1317.8	1319.3	1320.9	1322.5	1324.0	1323.9	1322.1	1320.3
167.5°	1335.0	1333.2	1331.4	1329.6	1331.4	1333.2	1335.0	1336.8	1336.8	1335.0	1333.2
170°	1342.2	1340.4	1338.6	1336.9	1338.6	1340.4	1342.2	1344.0	1344.0	1342.2	1340.4
172.5°	1346.8	1344.8	1342.8	1340.9	1342.8	1344.8	1346.8	1348.7	1348.8	1347.0	1345.3
175°	1352.3	1350.5	1348.7	1346.9	1348.7	1350.5	1352.3	1354.1	1354.2	1352.6	1351.0
177.5°	1354.1	1352.3	1350.5	1348.7	1350.5	1352.3	1354.1	1355.9	1356.0	1354.6	1353.2
180°	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9



TEST NUMBER: P332478

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1752.4	1761.2	1770.0	1778.2	1790.8	1796.4	1804.6	1807.7	1817.2	1831.0	1842.3
5°	1645.8	1658.4	1674.9	1688.3	1709.5	1726.0	1744.1	1761.4	1781.8	1810.9	1836.8
7.5°	1555.4	1567.9	1587.7	1612.5	1635.9	1659.3	1684.0	1707.6	1736.8	1778.5	1819.8
10°	1495.7	1510.6	1534.2	1560.9	1590.0	1612.8	1641.9	1671.8	1707.9	1755.9	1805.4
12.5°	1444.1	1455.3	1482.7	1508.1	1541.0	1570.1	1598.5	1633.4	1674.6	1725.7	1785.2
15°	1362.1	1377.8	1404.5	1432.8	1467.4	1498.1	1535.0	1577.4	1617.5	1680.4	1752.7
17.5°	1279.7	1303.6	1331.4	1363.3	1389.0	1431.2	1471.3	1514.9	1564.2	1630.9	1710.3
20°	1226.9	1245.8	1271.7	1318.1	1351.9	1384.1	1421.0	1475.3	1520.8	1596.3	1678.8
22.5°	1182.3	1196.1	1225.2	1263.4	1302.8	1340.1	1377.6	1429.4	1485.6	1557.3	1646.8
25°	1116.1	1138.1	1160.1	1187.6	1230.0	1274.8	1315.7	1359.7	1419.5	1495.7	1592.4
27.5°	1051.5	1071.4	1093.1	1126.9	1159.1	1201.0	1243.7	1294.2	1358.3	1439.0	1537.0
30°	1010.0	1024.9	1045.3	1088.6	1117.6	1153.8	1204.1	1248.9	1308.6	1394.3	1498.1
32.5°	967.2	986.5	1008.9	1042.0	1078.0	1112.3	1158.2	1206.8	1267.8	1352.2	1458.4
35°	906.2	929.0	951.8	976.2	1012.3	1047.7	1086.2	1139.7	1201.7	1283.5	1388.0
37.5°	850.1	868.5	887.0	917.2	951.5	985.1	1021.1	1073.8	1132.3	1220.5	1316.3
40°	814.3	830.8	844.9	876.4	909.4	945.5	980.9	1027.3	1090.1	1172.7	1265.4
42.5°	775.3	790.5	809.7	835.5	871.0	901.5	936.9	980.7	1039.8	1123.6	1205.0
45°	716.8	734.1	750.6	775.0	810.3	840.2	871.6	913.3	973.8	1043.0	1115.3
47.5°	656.0	673.3	692.1	715.7	746.5	776.9	808.3	845.2	900.4	968.3	1017.0
50°	617.0	631.1	650.0	673.6	701.9	734.1	762.4	802.5	855.1	908.6	951.0
52.5°	576.7	589.6	611.0	635.8	662.3	690.1	720.3	754.7	802.3	852.6	886.3
55°	514.0	529.7	547.8	572.2	598.1	621.7	650.8	686.2	723.9	761.6	784.4
57.5°	455.4	468.4	483.7	508.8	531.3	559.5	585.5	613.1	648.0	676.4	691.3
60°	412.6	424.4	444.1	466.1	487.3	511.7	541.5	569.0	595.8	618.6	630.3
62.5°	372.4	386.1	403.2	423.3	446.4	469.5	495.6	518.7	542.3	562.0	570.0
65°	319.9	330.9	343.5	362.3	381.2	404.8	425.2	448.8	466.1	477.1	484.2
67.5°	272.1	279.3	288.9	301.5	320.0	340.6	360.4	378.8	393.3	400.8	407.1
70°	241.3	246.0	253.1	265.7	279.8	297.9	318.3	331.7	344.3	350.5	356.8
72.5°	210.5	216.5	222.9	233.0	244.6	257.6	272.4	288.9	295.8	303.4	307.2
75°	159.6	168.2	176.8	183.1	191.0	201.2	214.6	224.8	228.7	235.0	235.8
77.5°	120.4	122.3	128.6	136.4	143.0	150.4	158.9	168.0	169.9	173.2	175.3
80°	99.0	99.0	99.0	103.7	111.6	117.1	125.0	129.7	132.8	133.6	134.4
82.5°	79.5	79.5	78.9	79.9	82.7	85.7	92.9	98.2	100.8	100.3	98.6
85°	51.9	50.3	50.3	49.5	50.3	48.7	47.9	51.1	55.8	55.8	54.2
87.5°	26.4	25.6	25.6	24.4	23.2	22.0	19.6	19.8	19.3	21.4	20.3
90°	25.0	24.1	21.2	18.3	15.4	12.5	9.9	7.7	5.5	3.2	1.0
92.5°	27.1	25.7	23.5	21.3	19.2	17.0	16.2	16.8	17.4	18.1	18.7
95°	32.7	31.1	28.7	26.2	23.8	21.3	24.7	33.8	43.0	52.1	61.3
97.5°	34.1	32.3	48.4	64.5	80.6	96.6	106.7	110.8	114.9	119.0	123.1
100°	34.9	33.1	68.0	102.8	137.6	172.4	187.6	183.1	178.7	174.2	169.7
102.5°	60.6	66.1	104.1	142.2	180.2	218.2	235.6	232.4	229.2	226.0	222.8
105°	180.5	220.0	240.1	260.1	280.2	300.3	309.1	306.7	304.2	301.8	299.3
107.5°	374.2	403.2	400.0	396.8	393.7	390.5	387.9	386.0	384.0	382.0	380.1
110°	445.6	453.0	450.5	448.1	445.6	443.2	441.0	439.3	437.5	435.7	433.9



TEST NUMBER: P332478

CATALOG NUMBER: S123RDIW-S1165D1030U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	503.7	503.6	501.2	498.7	496.2	493.8	491.8	490.2	488.5	486.9	485.3
115°	578.8	576.5	574.5	572.5	570.5	568.5	566.8	565.5	564.1	562.8	561.5
117.5°	649.0	647.2	646.2	645.2	644.2	643.1	641.8	640.1	638.5	636.8	635.2
120°	694.8	693.0	692.4	691.7	691.0	690.4	689.0	687.0	685.0	683.0	681.0
122.5°	740.1	738.8	738.0	737.1	736.3	735.4	734.2	732.5	730.9	729.2	727.6
125°	804.0	803.5	802.6	801.7	800.8	800.0	798.6	796.8	795.0	793.3	791.5
127.5°	866.9	866.2	865.1	864.1	863.0	861.9	860.5	858.7	856.9	855.1	853.3
130°	904.9	904.0	903.1	902.2	901.3	900.4	899.1	897.3	895.5	893.7	891.9
132.5°	941.0	940.1	939.4	938.7	938.0	937.3	936.0	934.2	932.4	930.7	928.9
135°	996.0	995.4	994.5	993.6	992.7	991.8	990.7	989.3	988.0	986.7	985.3
137.5°	1044.4	1043.4	1042.9	1042.4	1041.9	1041.4	1040.3	1038.6	1036.9	1035.2	1033.5
140°	1075.6	1074.7	1074.0	1073.4	1072.7	1072.0	1071.0	1069.7	1068.4	1067.0	1065.7
142.5°	1105.2	1104.4	1103.8	1103.1	1102.4	1101.8	1100.8	1099.4	1098.1	1096.7	1095.4
145°	1146.5	1146.0	1145.6	1145.1	1144.7	1144.2	1143.2	1141.7	1140.1	1138.5	1137.0
147.5°	1183.2	1182.8	1182.3	1181.9	1181.4	1181.0	1180.3	1179.2	1178.2	1177.2	1176.2
150°	1205.7	1205.3	1204.8	1204.4	1203.9	1203.5	1202.9	1202.3	1201.6	1200.9	1200.3
152.5°	1225.4	1224.6	1224.3	1224.0	1223.8	1223.5	1223.2	1222.9	1222.6	1222.3	1222.0
155°	1252.6	1251.5	1251.3	1251.0	1250.8	1250.6	1250.7	1251.2	1251.6	1252.0	1252.5
157.5°	1276.3	1275.0	1275.2	1275.4	1275.7	1275.9	1276.0	1276.1	1276.1	1276.2	1276.2
160°	1290.0	1288.7	1288.9	1289.1	1289.3	1289.5	1289.8	1290.0	1290.2	1290.4	1290.7
162.5°	1302.2	1300.7	1300.9	1301.2	1301.4	1301.6	1302.0	1302.6	1303.2	1303.7	1304.3
165°	1318.6	1316.8	1317.0	1317.2	1317.4	1317.7	1318.1	1318.8	1319.5	1320.1	1320.8
167.5°	1331.4	1329.6	1329.6	1329.6	1329.6	1329.6	1330.1	1331.0	1331.9	1332.8	1333.6
170°	1338.6	1336.9	1336.9	1336.9	1336.9	1336.9	1337.3	1338.2	1339.1	1340.0	1340.9
172.5°	1343.5	1341.7	1341.5	1341.3	1341.1	1341.0	1341.4	1342.5	1343.6	1344.6	1345.7
175°	1349.5	1347.9	1347.7	1347.5	1347.2	1347.0	1347.5	1348.6	1349.7	1350.8	1351.9
177.5°	1351.8	1350.3	1350.1	1350.0	1349.8	1349.6	1350.0	1350.9	1351.8	1352.6	1353.5
180°	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9



TEST NUMBER: P332478

CATALOG NUMBER: S123RDIW-S1165D1030U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1846.1	1853.0	1861.8	1875.0	1885.1	1893.9	1895.8	1898.3	1904.6	1915.2	1923.4
5°	1858.0	1876.1	1905.2	1933.5	1964.1	1989.3	2012.9	2029.4	2045.1	2078.1	2104.8
7.5°	1854.3	1894.5	1940.1	1990.9	2042.3	2092.1	2138.3	2179.6	2220.8	2268.9	2323.8
10°	1851.7	1898.9	1960.2	2025.4	2097.0	2166.9	2234.5	2287.2	2348.5	2403.5	2473.4
12.5°	1839.8	1907.7	1981.0	2064.4	2152.3	2232.9	2321.9	2394.7	2464.8	2544.3	2625.6
15°	1824.2	1906.8	1999.5	2110.3	2243.9	2341.4	2432.6	2559.1	2645.6	2732.0	2848.4
17.5°	1795.8	1896.5	2012.4	2156.4	2267.8	2398.8	2536.0	2636.0	2752.5	2874.3	2979.6
20°	1773.1	1890.3	2019.9	2161.4	2303.7	2445.9	2578.8	2698.2	2818.5	2959.2	3045.6
22.5°	1750.5	1866.4	2001.1	2151.4	2304.3	2454.1	2604.5	2744.8	2880.1	3022.1	3132.4
25°	1702.4	1840.0	1986.1	2139.4	2290.3	2455.4	2634.6	2791.0	2958.4	3104.6	3209.1
27.5°	1653.7	1779.7	1925.3	2080.8	2248.5	2443.6	2654.4	2832.2	2999.9	3104.6	3137.4
30°	1609.7	1743.3	1876.9	2034.9	2216.4	2434.1	2658.1	2861.7	2999.3	3044.8	3011.0
32.5°	1565.0	1686.1	1818.4	1980.2	2173.0	2410.9	2663.2	2844.1	2926.9	2892.1	2754.5
35°	1486.3	1595.5	1723.6	1885.5	2107.2	2398.0	2642.4	2765.0	2744.6	2548.1	2288.7
37.5°	1402.0	1491.0	1609.7	1779.0	2039.0	2346.9	2553.1	2571.2	2394.4	2092.7	1793.1
40°	1335.4	1415.5	1537.4	1714.2	1986.1	2296.6	2463.2	2390.1	2115.8	1780.2	1530.3
42.5°	1270.6	1338.2	1455.6	1646.3	1935.8	2228.1	2329.3	2170.1	1853.6	1536.3	1309.0
45°	1160.9	1224.5	1342.4	1538.1	1832.9	2097.0	2083.6	1806.9	1490.2	1234.8	1046.1
47.5°	1056.8	1112.5	1223.1	1422.9	1712.0	1900.5	1775.5	1481.1	1212.4	1007.5	872.9
50°	983.2	1038.3	1148.3	1345.6	1615.2	1752.7	1574.3	1290.6	1044.6	874.8	767.9
52.5°	912.8	966.6	1067.2	1259.4	1498.2	1580.4	1388.8	1125.8	920.7	774.2	682.4
55°	814.3	855.1	945.5	1129.4	1307.9	1326.7	1132.6	912.5	743.5	641.4	578.5
57.5°	713.8	749.0	838.3	984.8	1109.9	1100.2	916.1	725.8	612.0	536.0	490.4
60°	648.4	683.0	761.6	887.4	981.7	948.7	779.7	626.4	529.0	473.2	437.0
62.5°	587.4	614.5	688.0	779.8	847.7	810.3	666.5	539.6	462.3	415.3	386.7
65°	499.1	521.1	580.0	628.0	665.7	629.6	510.1	422.1	366.3	333.3	313.6
67.5°	415.1	429.1	466.4	483.7	510.3	470.6	383.6	324.6	292.9	265.0	251.4
70°	362.3	372.5	392.2	406.3	413.4	372.5	308.1	264.9	238.1	218.5	209.9
72.5°	309.5	318.5	322.4	334.0	330.4	292.1	247.7	213.3	194.1	180.8	169.6
75°	236.6	240.5	236.6	231.9	221.6	194.9	164.3	147.0	132.8	126.5	122.6
77.5°	172.4	171.2	165.8	158.5	141.0	124.2	107.7	101.9	95.7	92.4	91.0
80°	132.8	129.7	125.0	113.2	98.2	86.5	82.5	78.6	76.2	72.3	71.5
82.5°	98.9	97.0	89.1	79.2	68.7	63.2	59.9	58.5	56.1	54.1	53.9
85°	52.7	50.3	41.7	36.2	34.6	33.0	32.2	32.2	29.1	28.3	28.3
87.5°	17.6	14.3	14.1	12.7	13.2	12.5	13.7	13.0	13.0	13.8	12.7
90°	3.2	5.5	7.7	9.9	12.5	15.4	18.3	21.2	24.1	25.0	25.9
92.5°	18.1	17.4	16.8	16.2	17.0	19.2	21.3	23.5	25.7	27.1	28.6
95°	52.1	43.0	33.8	24.7	21.3	23.8	26.2	28.7	31.1	32.7	34.3
97.5°	119.0	114.9	110.8	106.7	96.6	80.6	64.5	48.4	32.3	34.1	35.9
100°	174.2	178.7	183.1	187.6	172.4	137.6	102.8	68.0	33.1	34.9	36.7
102.5°	226.0	229.2	232.4	235.6	218.2	180.2	142.2	104.1	66.1	60.6	55.0
105°	301.8	304.2	306.7	309.1	300.3	280.2	260.1	240.1	220.0	180.5	141.0
107.5°	382.0	384.0	386.0	387.9	390.5	393.7	396.8	400.0	403.2	374.2	345.2
110°	435.7	437.5	439.3	441.0	443.2	445.6	448.1	450.5	453.0	445.6	438.3



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	486.9	488.5	490.2	491.8	493.8	496.2	498.7	501.2	503.6	503.7	503.9
115°	562.8	564.1	565.5	566.8	568.5	570.5	572.5	574.5	576.5	578.8	581.0
117.5°	636.8	638.5	640.1	641.8	643.1	644.2	645.2	646.2	647.2	649.0	650.8
120°	683.0	685.0	687.0	689.0	690.4	691.0	691.7	692.4	693.0	694.8	696.6
122.5°	729.2	730.9	732.5	734.2	735.4	736.3	737.1	738.0	738.8	740.1	741.3
125°	793.3	795.0	796.8	798.6	800.0	800.8	801.7	802.6	803.5	804.0	804.4
127.5°	855.1	856.9	858.7	860.5	861.9	863.0	864.1	865.1	866.2	866.9	867.6
130°	893.7	895.5	897.3	899.1	900.4	901.3	902.2	903.1	904.0	904.9	905.8
132.5°	930.7	932.4	934.2	936.0	937.3	938.0	938.7	939.4	940.1	941.0	941.9
135°	986.7	988.0	989.3	990.7	991.8	992.7	993.6	994.5	995.4	996.0	996.7
137.5°	1035.2	1036.9	1038.6	1040.3	1041.4	1041.9	1042.4	1042.9	1043.4	1044.4	1045.5
140°	1067.0	1068.4	1069.7	1071.0	1072.0	1072.7	1073.4	1074.0	1074.7	1075.6	1076.5
142.5°	1096.7	1098.1	1099.4	1100.8	1101.8	1102.4	1103.1	1103.8	1104.4	1105.2	1105.9
145°	1138.5	1140.1	1141.7	1143.2	1144.2	1144.7	1145.1	1145.6	1146.0	1146.5	1146.9
147.5°	1177.2	1178.2	1179.2	1180.3	1181.0	1181.4	1181.9	1182.3	1182.8	1183.2	1183.7
150°	1200.9	1201.6	1202.3	1202.9	1203.5	1203.9	1204.4	1204.8	1205.3	1205.7	1206.2
152.5°	1222.3	1222.6	1222.9	1223.2	1223.5	1223.8	1224.0	1224.3	1224.6	1225.4	1226.2
155°	1252.0	1251.6	1251.2	1250.7	1250.6	1250.8	1251.0	1251.3	1251.5	1252.6	1253.7
157.5°	1276.2	1276.1	1276.1	1276.0	1275.9	1275.7	1275.4	1275.2	1275.0	1276.3	1277.7
160°	1290.4	1290.2	1290.0	1289.8	1289.5	1289.3	1289.1	1288.9	1288.7	1290.0	1291.3
162.5°	1303.7	1303.2	1302.6	1302.0	1301.6	1301.4	1301.2	1300.9	1300.7	1302.2	1303.7
165°	1320.1	1319.5	1318.8	1318.1	1317.7	1317.4	1317.2	1317.0	1316.8	1318.6	1320.3
167.5°	1332.8	1331.9	1331.0	1330.1	1329.6	1329.6	1329.6	1329.6	1329.6	1331.4	1333.2
170°	1340.0	1339.1	1338.2	1337.3	1336.9	1336.9	1336.9	1336.9	1336.9	1338.6	1340.4
172.5°	1344.6	1343.6	1342.5	1341.4	1341.0	1341.1	1341.3	1341.5	1341.7	1343.5	1345.3
175°	1350.8	1349.7	1348.6	1347.5	1347.0	1347.2	1347.5	1347.7	1347.9	1349.5	1351.0
177.5°	1352.6	1351.8	1350.9	1350.0	1349.6	1349.8	1350.0	1350.1	1350.3	1351.8	1353.2
180°	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1936.6	1936.6	1939.1	1948.6	1949.8	1958.0	1955.5
5°	2128.4	2143.3	2148.8	2172.4	2186.6	2192.9	2180.3
7.5°	2362.9	2405.1	2425.0	2449.7	2471.6	2478.2	2461.0
10°	2534.0	2578.0	2614.9	2637.7	2658.9	2673.1	2691.2
12.5°	2699.3	2753.4	2788.5	2820.7	2842.5	2860.5	2863.4
15°	2879.0	2960.7	3022.8	3068.4	3091.2	3103.0	3098.3
17.5°	3060.2	3136.0	3180.2	3226.7	3258.3	3259.9	3260.8
20°	3162.7	3236.6	3287.7	3322.3	3357.7	3356.1	3363.9
22.5°	3231.3	3289.4	3328.6	3353.7	3365.8	3359.9	3361.4
25°	3263.3	3280.6	3273.6	3233.5	3223.3	3186.3	3192.6
27.5°	3098.0	3016.2	2931.7	2822.9	2737.1	2668.5	2672.0
30°	2873.5	2728.9	2563.8	2425.5	2301.3	2266.7	2192.9
32.5°	2559.7	2342.8	2149.5	2020.6	1914.0	1885.1	1820.6
35°	2027.8	1817.2	1618.3	1498.8	1451.7	1385.7	1384.9
37.5°	1576.2	1390.7	1285.5	1195.9	1148.9	1109.0	1105.1
40°	1325.9	1181.3	1101.9	1037.5	991.1	961.2	954.2
42.5°	1151.1	1034.2	959.8	919.9	884.2	868.8	857.3
45°	940.0	861.4	809.5	773.4	756.9	745.1	738.8
47.5°	786.3	733.6	698.3	674.2	660.8	648.4	651.7
50°	702.7	659.4	633.5	610.7	600.5	591.8	592.6
52.5°	635.4	596.6	575.6	559.1	546.4	540.3	537.3
55°	539.2	514.8	493.6	481.8	474.7	466.1	463.7
57.5°	459.9	441.1	423.8	410.4	408.7	400.4	401.5
60°	407.1	391.4	377.3	370.2	364.7	357.6	360.0
62.5°	363.7	350.5	337.7	331.8	326.3	321.1	322.2
65°	297.9	285.3	277.4	274.3	271.9	269.6	267.2
67.5°	237.4	229.7	224.8	218.0	213.2	212.4	210.0
70°	199.6	189.4	180.8	172.1	169.8	169.0	169.8
72.5°	160.0	153.6	151.2	147.0	146.5	144.5	145.9
75°	120.3	117.9	116.3	113.2	113.2	113.2	113.2
77.5°	88.7	87.2	86.3	85.7	84.9	83.8	83.6
80°	69.2	68.4	66.8	66.8	66.0	66.8	66.0
82.5°	52.2	52.0	50.5	50.5	49.7	49.2	49.7
85°	26.7	25.9	27.5	25.9	26.7	25.2	26.7
87.5°	12.9	13.1	12.6	12.7	12.1	13.5	12.3
90°	26.8	27.7	28.3	28.8	29.2	29.7	30.1
92.5°	30.0	31.4	32.3	32.5	32.8	33.1	33.3
95°	35.8	37.4	38.2	38.2	38.2	38.2	38.2
97.5°	37.7	39.5	40.5	40.7	40.9	41.2	41.4
100°	38.5	40.3	41.3	41.5	41.7	42.0	42.2
102.5°	49.5	43.9	41.4	41.8	42.2	42.6	43.0
105°	101.4	61.9	42.4	42.9	43.3	43.7	44.2
107.5°	316.3	287.3	257.9	228.1	198.4	168.6	138.8
110°	430.9	423.5	403.9	372.0	340.0	308.1	276.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	504.0	504.1	500.8	494.1	487.4	480.6	473.9
115°	583.2	585.5	587.0	587.9	588.8	589.7	590.6
117.5°	652.6	654.4	655.4	655.5	655.7	655.9	656.1
120°	698.4	700.2	701.1	701.1	701.1	701.1	701.1
122.5°	742.6	743.8	744.6	744.7	744.9	745.1	745.3
125°	804.9	805.3	805.8	806.2	806.6	807.1	807.5
127.5°	868.3	869.1	869.2	868.7	868.3	867.9	867.4
130°	906.6	907.5	907.8	907.3	906.9	906.4	906.0
132.5°	942.8	943.7	943.8	943.2	942.6	942.0	941.3
135°	997.4	998.0	998.0	997.4	996.7	996.0	995.4
137.5°	1046.6	1047.7	1048.0	1047.5	1047.1	1046.6	1046.2
140°	1077.4	1078.3	1078.5	1078.1	1077.6	1077.2	1076.7
142.5°	1106.6	1107.3	1107.3	1106.7	1106.1	1105.5	1104.8
145°	1147.4	1147.8	1148.0	1148.0	1148.0	1148.0	1148.0
147.5°	1184.1	1184.6	1184.3	1183.3	1182.2	1181.2	1180.2
150°	1206.6	1207.1	1207.0	1206.3	1205.6	1205.0	1204.3
152.5°	1227.0	1227.8	1227.7	1226.6	1225.6	1224.6	1223.6
155°	1254.8	1256.0	1255.8	1254.5	1253.2	1251.8	1250.5
157.5°	1279.0	1280.3	1280.1	1278.4	1276.7	1274.9	1273.2
160°	1292.7	1294.0	1293.9	1292.3	1290.8	1289.2	1287.6
162.5°	1305.3	1306.8	1306.8	1305.5	1304.1	1302.7	1301.3
165°	1322.1	1323.9	1324.0	1322.5	1320.9	1319.3	1317.8
167.5°	1335.0	1336.8	1336.8	1335.0	1333.2	1331.4	1329.6
170°	1342.2	1344.0	1344.0	1342.2	1340.4	1338.6	1336.9
172.5°	1347.0	1348.8	1348.7	1346.8	1344.8	1342.8	1340.9
175°	1352.6	1354.2	1354.1	1352.3	1350.5	1348.7	1346.9
177.5°	1354.6	1356.0	1355.9	1354.1	1352.3	1350.5	1348.7
180°	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9	1351.9

(END OF REPORT)