

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: P332482-935

Luminaire Tested: **S123RDIW-S1165D1320U935-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332482-935
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-S1165D1320U935-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1320 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8484.4 lumens
Efficiency: N/A
Efficacy: 111.3 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

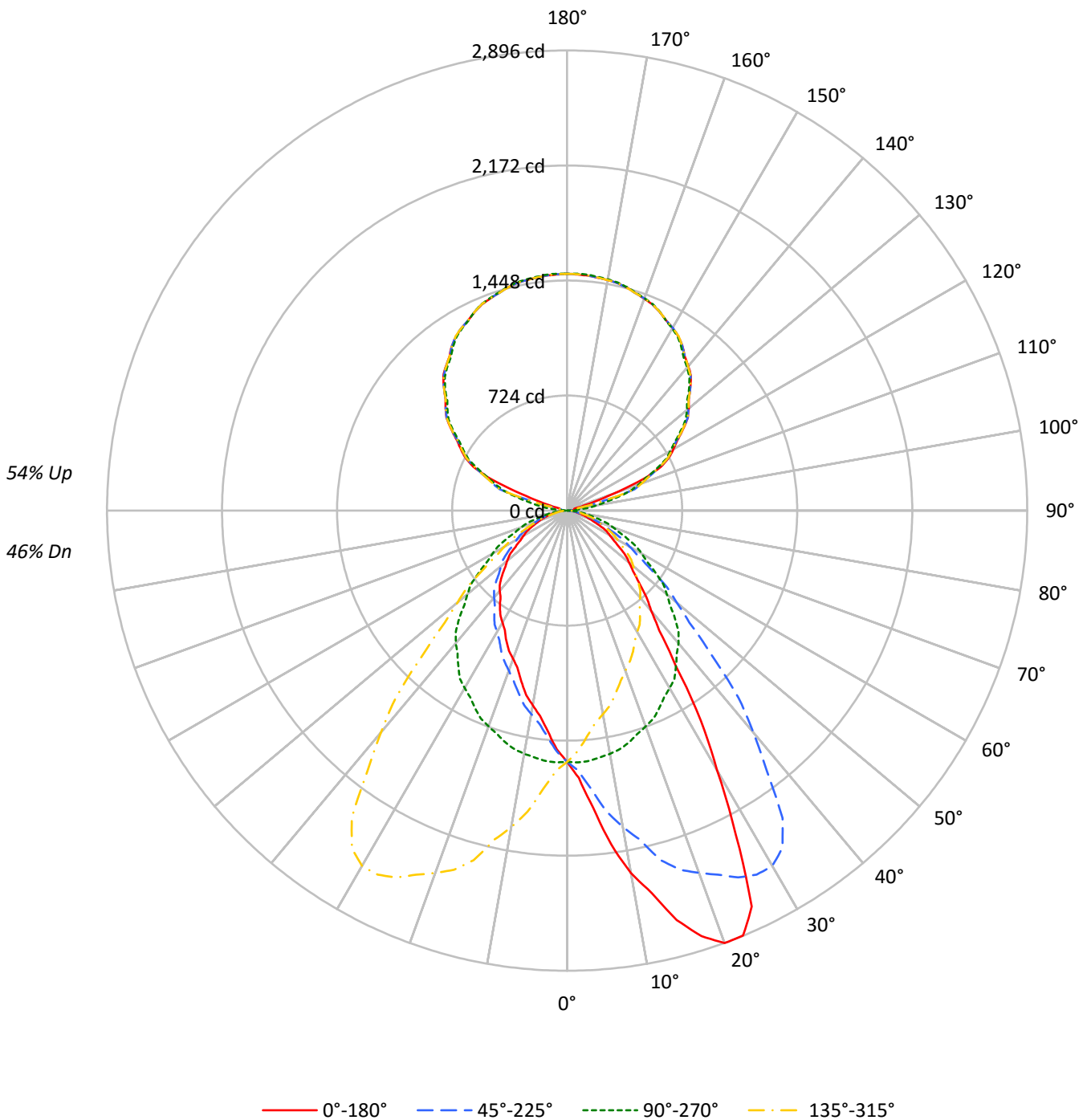
Input Watts (W): 76.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

Luminous Intensity Polar Plot





TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

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	106	106	106	106	98	98	98	98	81	81	81	66	66	66	53	53	53	46
1	98	93	90	86	89	86	83	80	72	70	68	59	58	56	48	47	46	40
2	89	82	76	71	82	76	71	67	64	60	57	53	50	48	42	41	39	35
3	82	73	66	60	75	67	61	56	57	52	49	47	44	41	38	36	34	30
4	75	65	57	51	69	60	53	48	51	46	42	42	39	36	34	32	30	26
5	69	58	50	44	63	54	47	42	46	40	36	38	34	31	31	28	26	23
6	64	52	44	39	58	48	41	36	41	36	32	35	31	28	28	26	23	20
7	59	47	39	34	54	44	37	32	38	32	28	32	28	25	26	23	21	18
8	55	43	35	30	50	40	33	29	34	29	25	29	25	22	24	21	19	16
9	51	39	32	27	47	37	30	26	32	26	23	27	23	20	22	19	17	15
10	48	36	29	24	44	34	27	23	29	24	21	25	21	18	21	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	17016	17016	17016	17016
5°	20283	17088	15048	17088
10°	25326	16990	13595	16990
15°	29727	16817	12397	16817
20°	33176	16557	11379	16557
25°	32647	16284	10753	16284
30°	23467	16032	10110	16032
35°	15669	15704	9692	15704
40°	11545	15309	9261	15309
45°	9683	14618	8840	14618
50°	8544	13711	8251	13711
55°	7492	12675	7443	12675
60°	6674	11683	6818	11683
65°	5861	10618	6342	10618
70°	4601	9668	5794	9668
75°	4055	8442	5294	8442
80°	3521	7172	5201	7172
85°	2841	5768	5521	5768



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.5	1.8
10°-20°	485.7	5.7
20°-30°	763.0	9.0
30°-40°	796.1	9.4
40°-50°	681.2	8.0
50°-60°	519.2	6.1
60°-70°	332.8	3.9
70°-80°	160.1	1.9
80°-90°	46.5	0.5
90°-100°	54.2	0.6
100°-110°	258.2	3.0
110°-120°	620.2	7.3
120°-130°	789.8	9.3
130°-140°	843.9	9.9
140°-150°	789.1	9.3
150°-160°	636.5	7.5
160°-170°	410.8	4.8
170°-180°	141.6	1.7
0°-30°	1404.1	16.5
0°-40°	2200.2	25.9
0°-60°	3400.7	40.1
0°-90°	3940.1	46.4
90°-120°	932.6	11.0
90°-150°	3355.4	39.5
90°-180°	4544.0	53.6
0°-180°	8484.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1581	1581	1581	1581	1581	
5°	1877	1582	1393	1582	1877	194
15°	2668	1509	1112	1509	2668	756
25°	2749	1371	905	1371	2749	1181
35°	1192	1195	738	1195	1192	782
45°	636	960	581	960	636	500
55°	399	675	397	675	399	361
65°	230	417	249	417	230	226
75°	98	203	127	203	98	105
85°	23	47	45	47	23	27
90°	33	1	33	1	33	16
95°	42	68	42	68	42	35
105°	49	330	49	330	49	111
115°	651	619	651	619	651	602
125°	890	872	890	872	890	795
135°	1097	1086	1097	1086	1097	846
145°	1265	1253	1265	1253	1265	790
155°	1378	1380	1378	1380	1378	636
165°	1452	1456	1452	1456	1452	410
175°	1485	1490	1485	1490	1485	141
180°	1490	1490	1490	1490	1490	



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1683.7	1685.8	1678.8	1677.7	1669.6	1667.4	1667.4	1656.0	1649.0	1639.9	1634.4
5°	1877.2	1888.1	1882.7	1870.4	1850.1	1845.4	1832.6	1812.2	1789.2	1760.8	1747.3
7.5°	2118.9	2133.7	2128.0	2109.2	2087.9	2070.8	2034.5	2000.8	1953.5	1912.1	1876.6
10°	2317.1	2301.5	2289.3	2271.1	2251.4	2219.7	2181.8	2129.6	2069.4	2022.1	1969.3
12.5°	2465.4	2462.9	2447.4	2428.6	2400.9	2370.7	2324.1	2260.6	2190.6	2122.2	2061.8
15°	2667.6	2671.7	2661.5	2641.9	2602.6	2549.2	2478.8	2452.5	2352.3	2277.9	2203.4
17.5°	2807.5	2806.8	2805.4	2778.2	2738.2	2700.1	2634.8	2565.4	2474.8	2369.9	2269.6
20°	2896.3	2889.6	2891.0	2860.5	2830.7	2786.7	2723.1	2622.3	2547.9	2426.7	2323.2
22.5°	2894.2	2892.9	2898.0	2887.5	2865.9	2832.2	2782.1	2697.0	2602.0	2479.8	2363.3
25°	2748.8	2743.4	2775.3	2784.0	2818.6	2824.6	2809.7	2763.0	2673.1	2547.2	2403.1
27.5°	2300.6	2297.6	2356.6	2430.5	2524.2	2596.9	2667.4	2701.3	2673.1	2582.9	2438.5
30°	1888.1	1951.6	1981.4	2088.4	2207.4	2349.6	2474.1	2592.5	2621.6	2582.4	2463.9
32.5°	1567.5	1623.1	1648.0	1739.7	1850.7	2017.2	2203.9	2371.6	2490.1	2520.1	2448.8
35°	1192.4	1193.1	1249.9	1290.5	1393.4	1564.6	1745.9	1970.6	2193.9	2363.1	2380.7
37.5°	951.5	954.8	989.2	1029.7	1106.8	1197.4	1357.1	1543.9	1801.8	2061.6	2213.8
40°	821.6	827.6	853.3	893.3	948.7	1017.1	1141.6	1317.6	1532.8	1821.7	2057.9
42.5°	738.1	748.0	761.3	792.0	826.4	890.4	991.1	1127.0	1322.8	1595.9	1868.5
45°	636.1	641.5	651.7	665.9	697.0	741.7	809.3	900.7	1063.2	1283.1	1555.7
47.5°	561.1	558.3	568.9	580.5	601.2	631.6	677.0	751.6	867.5	1043.9	1275.2
50°	510.2	509.5	517.0	525.8	545.4	567.7	605.0	661.2	753.2	899.4	1111.2
52.5°	462.6	465.2	470.5	481.4	495.6	513.7	547.1	587.5	666.6	792.7	969.3
55°	399.2	401.3	408.7	414.8	425.0	443.2	464.3	498.1	552.2	640.2	785.7
57.5°	345.7	344.7	351.9	353.4	364.9	379.8	396.0	422.2	461.5	526.9	624.9
60°	310.0	307.9	314.0	318.7	324.9	337.0	350.5	376.3	407.4	455.5	539.3
62.5°	277.4	276.5	280.9	285.7	290.8	301.8	313.1	332.9	357.6	398.0	464.6
65°	230.1	232.1	234.1	236.2	238.8	245.6	256.5	270.0	287.0	315.4	363.4
67.5°	180.8	182.9	183.6	187.7	193.6	197.8	204.4	216.5	228.2	252.2	279.5
70°	146.2	145.5	146.2	148.2	155.7	163.1	171.9	180.7	188.1	205.0	228.1
72.5°	125.6	124.4	126.1	126.6	130.2	132.2	137.8	146.0	155.7	167.1	183.7
75°	97.5	97.5	97.5	97.5	100.1	101.5	103.6	105.6	108.9	114.3	126.6
77.5°	72.0	72.2	73.1	73.8	74.3	75.1	76.4	78.4	79.6	82.4	87.7
80°	56.8	57.5	56.8	57.5	57.5	58.9	59.6	61.6	62.3	65.6	67.7
82.5°	42.8	42.4	42.8	43.5	43.5	44.8	44.9	46.4	46.6	48.3	50.4
85°	23.0	21.7	23.0	22.3	23.7	22.3	23.0	24.4	24.4	25.1	27.7
87.5°	12.1	13.0	11.9	12.3	12.2	12.6	12.4	12.2	13.1	12.3	12.2
90°	33.2	32.7	32.2	31.8	31.3	30.5	29.5	28.5	27.6	26.6	23.3
92.5°	36.8	36.4	36.2	35.9	35.6	34.6	33.1	31.5	29.9	28.3	25.9
95°	42.1	42.1	42.1	42.1	42.1	41.2	39.5	37.8	36.1	34.4	31.6
97.5°	45.6	45.4	45.1	44.9	44.6	43.5	41.6	39.6	37.6	35.6	53.4
100°	46.5	46.2	46.0	45.7	45.5	44.4	42.4	40.5	38.5	36.5	74.9
102.5°	47.4	46.9	46.5	46.1	45.6	48.5	54.5	60.6	66.7	72.8	114.8
105°	48.7	48.2	47.7	47.3	46.8	68.3	111.8	155.3	198.9	242.5	264.6
107.5°	153.0	185.8	218.6	251.5	284.3	316.7	348.6	380.6	412.4	444.4	440.9
110°	304.4	339.7	374.8	410.0	445.1	466.8	474.9	483.0	491.2	499.3	496.6



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	522.4	529.8	537.2	544.6	552.1	555.7	555.5	555.4	555.3	555.1	552.4
115°	651.0	650.0	649.0	648.0	647.0	645.3	642.8	640.4	637.9	635.5	633.3
117.5°	723.2	723.0	722.7	722.6	722.4	721.3	719.3	717.4	715.4	713.4	712.3
120°	772.7	772.7	772.7	772.7	772.7	771.8	769.8	767.8	765.9	763.9	763.2
122.5°	821.5	821.3	821.0	820.9	820.7	819.9	818.6	817.2	815.8	814.4	813.5
125°	890.1	889.6	889.2	888.6	888.1	887.6	887.2	886.7	886.1	885.7	884.7
127.5°	956.1	956.6	957.1	957.6	958.0	957.9	957.1	956.3	955.5	954.8	953.6
130°	998.6	999.1	999.6	1000.1	1000.6	1000.3	999.4	998.3	997.4	996.3	995.4
132.5°	1037.6	1038.3	1039.0	1039.7	1040.3	1040.2	1039.2	1038.2	1037.2	1036.2	1035.4
135°	1097.2	1097.9	1098.6	1099.3	1100.1	1100.1	1099.3	1098.6	1097.9	1097.2	1096.1
137.5°	1153.1	1153.7	1154.2	1154.6	1155.1	1154.8	1153.6	1152.4	1151.2	1150.0	1149.5
140°	1186.8	1187.3	1187.7	1188.3	1188.8	1188.5	1187.6	1186.5	1185.6	1184.6	1183.9
142.5°	1217.8	1218.5	1219.2	1219.9	1220.6	1220.6	1219.7	1218.9	1218.1	1217.4	1216.6
145°	1265.4	1265.4	1265.4	1265.4	1265.4	1265.2	1264.6	1264.2	1263.7	1263.2	1262.7
147.5°	1300.8	1302.0	1303.1	1304.2	1305.4	1305.7	1305.2	1304.7	1304.2	1303.7	1303.2
150°	1327.4	1328.2	1328.9	1329.6	1330.3	1330.5	1330.0	1329.5	1329.0	1328.5	1328.0
152.5°	1348.7	1349.8	1350.9	1352.0	1353.2	1353.3	1352.5	1351.5	1350.7	1349.8	1349.4
155°	1378.4	1379.8	1381.3	1382.8	1384.2	1384.4	1383.1	1381.9	1380.7	1379.4	1379.2
157.5°	1403.3	1405.2	1407.2	1409.1	1411.0	1411.3	1409.8	1408.3	1406.8	1405.3	1405.6
160°	1419.3	1421.0	1422.7	1424.4	1426.2	1426.3	1424.9	1423.3	1421.9	1420.4	1420.6
162.5°	1434.3	1435.9	1437.4	1438.9	1440.5	1440.4	1438.7	1437.0	1435.4	1433.7	1433.9
165°	1452.5	1454.2	1456.0	1457.7	1459.4	1459.3	1457.3	1455.3	1453.4	1451.4	1451.6
167.5°	1465.6	1467.6	1469.6	1471.4	1473.4	1473.4	1471.4	1469.6	1467.6	1465.6	1465.6
170°	1473.5	1475.5	1477.5	1479.5	1481.4	1481.4	1479.5	1477.5	1475.5	1473.5	1473.5
172.5°	1478.0	1480.1	1482.3	1484.5	1486.6	1486.8	1484.8	1482.8	1480.8	1478.9	1478.7
175°	1484.6	1486.6	1488.6	1490.6	1492.5	1492.6	1490.9	1489.2	1487.5	1485.7	1485.5
177.5°	1486.6	1488.6	1490.6	1492.5	1494.5	1494.7	1493.1	1491.5	1490.0	1488.4	1488.2
180°	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1632.3	1630.6	1623.1	1614.4	1603.0	1595.4	1589.5	1586.2	1576.5	1564.6	1556.4
5°	1733.1	1712.8	1691.1	1664.7	1640.4	1615.3	1599.7	1581.5	1559.2	1534.1	1516.6
7.5°	1841.1	1801.3	1758.4	1714.2	1670.4	1631.2	1596.6	1566.8	1531.3	1495.4	1470.2
10°	1923.9	1865.7	1805.5	1743.9	1687.7	1635.0	1594.3	1554.4	1511.8	1470.5	1439.4
12.5°	1999.2	1922.5	1853.1	1777.4	1705.6	1642.5	1584.1	1537.1	1485.8	1441.8	1406.4
15°	2094.5	2015.9	1932.0	1817.0	1721.6	1641.8	1570.6	1509.1	1446.8	1392.7	1358.1
17.5°	2183.5	2065.4	1952.6	1856.7	1732.7	1632.9	1546.2	1472.6	1404.2	1346.8	1304.3
20°	2220.3	2105.9	1983.5	1861.0	1739.1	1627.5	1526.6	1445.4	1374.4	1309.4	1270.2
22.5°	2242.5	2113.0	1984.0	1852.4	1722.9	1607.0	1507.2	1417.9	1340.8	1279.1	1230.7
25°	2268.4	2114.1	1971.9	1842.0	1710.0	1584.2	1465.8	1371.1	1287.8	1222.2	1170.7
27.5°	2285.4	2103.9	1936.0	1791.6	1657.7	1532.3	1423.8	1323.4	1239.0	1169.5	1114.3
30°	2288.6	2095.8	1908.3	1752.0	1616.0	1501.0	1386.0	1289.9	1200.5	1126.7	1075.3
32.5°	2293.0	2075.8	1871.0	1705.0	1565.6	1451.7	1347.5	1255.7	1164.2	1091.6	1039.1
35°	2275.1	2064.7	1814.3	1623.4	1484.0	1373.7	1279.7	1195.1	1105.1	1034.7	981.3
37.5°	2198.2	2020.7	1755.6	1531.7	1386.0	1283.8	1207.1	1133.3	1050.9	974.9	924.5
40°	2120.8	1977.4	1710.0	1475.9	1323.7	1218.7	1149.8	1089.5	1009.7	938.6	884.5
42.5°	2005.5	1918.4	1666.7	1417.5	1253.3	1152.2	1094.0	1037.5	967.4	895.3	844.4
45°	1794.0	1805.5	1578.1	1324.3	1155.8	1054.3	999.5	960.3	898.0	838.4	786.4
47.5°	1528.7	1636.3	1474.0	1225.1	1053.1	957.9	909.9	875.6	833.7	775.2	727.7
50°	1355.5	1509.1	1390.7	1158.6	988.7	894.0	846.5	818.8	782.3	736.2	691.0
52.5°	1195.8	1360.7	1290.0	1084.3	918.9	832.2	785.9	763.1	734.1	690.8	649.8
55°	975.2	1142.3	1126.1	972.4	814.1	736.2	701.1	675.4	655.7	623.3	590.8
57.5°	788.8	947.3	955.6	847.9	721.8	644.9	614.6	595.2	582.4	557.9	527.9
60°	671.3	816.8	845.2	764.1	655.7	588.1	558.3	542.7	532.6	513.0	489.9
62.5°	573.9	697.7	729.9	671.4	592.4	529.1	505.8	490.8	483.9	466.9	446.6
65°	439.2	542.1	573.2	540.7	499.4	448.7	429.7	416.9	410.8	401.3	386.4
67.5°	330.3	405.2	439.4	416.5	401.6	369.5	357.4	350.5	345.1	338.6	326.1
70°	265.3	320.7	355.9	349.8	337.7	320.7	311.9	307.2	301.8	296.4	285.6
72.5°	213.3	251.5	284.5	287.6	277.6	274.2	266.5	264.5	261.2	254.7	248.7
75°	141.5	167.8	190.8	199.7	203.7	207.1	203.7	203.0	202.3	196.9	193.6
77.5°	92.7	106.9	121.4	136.5	142.8	147.4	148.4	150.9	149.1	146.3	144.6
80°	71.0	74.5	84.6	97.5	107.6	111.7	114.3	115.7	115.0	114.3	111.7
82.5°	51.6	54.4	59.2	68.2	76.7	83.5	85.2	84.9	86.4	86.8	84.6
85°	27.7	28.4	29.8	31.2	35.9	43.3	45.4	46.7	48.0	48.0	44.0
87.5°	12.7	11.5	12.0	11.4	12.5	12.6	15.3	17.6	18.6	16.9	17.4
90°	20.1	17.0	13.8	10.9	8.5	6.0	3.5	1.1	3.5	6.0	8.5
92.5°	23.5	21.1	18.7	17.8	18.5	19.2	19.9	20.6	19.9	19.2	18.5
95°	28.9	26.2	23.5	27.2	37.3	47.4	57.4	67.5	57.4	47.4	37.3
97.5°	71.1	88.8	106.5	117.6	122.2	126.7	131.2	135.7	131.2	126.7	122.2
100°	113.3	151.7	190.0	206.8	201.8	196.9	192.0	187.1	192.0	196.9	201.8
102.5°	156.7	198.6	240.6	259.8	256.1	252.6	249.1	245.6	249.1	252.6	256.1
105°	286.7	308.8	331.1	340.7	338.0	335.4	332.6	329.9	332.6	335.4	338.0
107.5°	437.4	433.9	430.4	427.6	425.4	423.3	421.1	419.0	421.1	423.3	425.4
110°	493.9	491.2	488.4	486.1	484.1	482.2	480.3	478.3	480.3	482.2	484.1



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	549.7	547.0	544.2	542.0	540.3	538.5	536.7	534.9	536.7	538.5	540.3
115°	631.0	628.8	626.6	624.7	623.3	621.8	620.4	618.9	620.4	621.8	623.3
117.5°	711.2	710.0	708.9	707.4	705.6	703.8	702.0	700.2	702.0	703.8	705.6
120°	762.4	761.6	761.0	759.5	757.2	755.0	752.9	750.6	752.9	755.0	757.2
122.5°	812.5	811.6	810.6	809.3	807.4	805.6	803.8	802.0	803.8	805.6	807.4
125°	883.7	882.7	881.8	880.3	878.3	876.3	874.3	872.4	874.3	876.3	878.3
127.5°	952.4	951.2	950.0	948.5	946.5	944.5	942.5	940.6	942.5	944.5	946.5
130°	994.5	993.4	992.5	991.0	989.0	987.1	985.1	983.1	985.1	987.1	989.0
132.5°	1034.7	1033.9	1033.1	1031.7	1029.8	1027.8	1025.8	1023.8	1025.8	1027.8	1029.8
135°	1095.2	1094.2	1093.2	1092.0	1090.5	1089.0	1087.5	1086.1	1087.5	1089.0	1090.5
137.5°	1149.0	1148.4	1147.9	1146.7	1144.8	1143.0	1141.1	1139.2	1141.1	1143.0	1144.8
140°	1183.1	1182.4	1181.6	1180.5	1179.1	1177.6	1176.1	1174.7	1176.1	1177.6	1179.1
142.5°	1215.9	1215.1	1214.4	1213.3	1211.9	1210.4	1208.8	1207.4	1208.8	1210.4	1211.9
145°	1262.2	1261.7	1261.2	1260.2	1258.4	1256.7	1255.0	1253.3	1255.0	1256.7	1258.4
147.5°	1302.7	1302.3	1301.7	1301.0	1299.8	1298.6	1297.5	1296.4	1297.5	1298.6	1299.8
150°	1327.5	1327.1	1326.5	1325.9	1325.2	1324.5	1323.7	1323.0	1323.7	1324.5	1325.2
152.5°	1349.2	1348.9	1348.6	1348.2	1347.9	1347.6	1347.2	1346.9	1347.2	1347.6	1347.9
155°	1379.0	1378.7	1378.5	1378.5	1379.1	1379.6	1380.1	1380.5	1380.1	1379.6	1379.1
157.5°	1405.8	1406.1	1406.4	1406.4	1406.5	1406.6	1406.6	1406.7	1406.6	1406.6	1406.5
160°	1420.9	1421.2	1421.4	1421.6	1421.9	1422.1	1422.4	1422.6	1422.4	1422.1	1421.9
162.5°	1434.2	1434.4	1434.7	1435.1	1435.7	1436.4	1437.0	1437.7	1437.0	1436.4	1435.7
165°	1451.9	1452.2	1452.4	1452.9	1453.6	1454.3	1455.1	1455.9	1455.1	1454.3	1453.6
167.5°	1465.6	1465.6	1465.6	1466.0	1467.1	1468.0	1469.0	1470.0	1469.0	1468.0	1467.1
170°	1473.5	1473.5	1473.5	1474.0	1475.1	1476.0	1477.0	1478.0	1477.0	1476.0	1475.1
172.5°	1478.5	1478.3	1478.1	1478.6	1479.7	1480.9	1482.1	1483.3	1482.1	1480.9	1479.7
175°	1485.2	1485.0	1484.7	1485.2	1486.4	1487.7	1488.9	1490.1	1488.9	1487.7	1486.4
177.5°	1488.0	1487.8	1487.6	1488.0	1489.0	1490.0	1490.9	1491.9	1490.9	1490.0	1489.0
180°	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1553.8	1546.7	1541.9	1531.0	1524.0	1516.4	1508.8	1513.7	1513.1	1512.6	1512.6
5°	1501.7	1486.1	1471.9	1453.6	1442.1	1427.9	1417.0	1415.7	1418.4	1408.9	1403.5
7.5°	1449.9	1428.7	1408.5	1388.4	1367.0	1350.0	1339.2	1334.2	1327.3	1321.5	1315.4
10°	1413.7	1388.6	1369.0	1343.9	1320.9	1300.6	1287.8	1279.0	1274.3	1269.5	1260.8
12.5°	1376.3	1351.9	1326.8	1298.5	1276.6	1253.0	1243.4	1233.6	1224.4	1219.2	1207.1
15°	1321.6	1289.9	1263.4	1233.6	1209.3	1186.3	1172.8	1153.1	1150.4	1143.7	1131.4
17.5°	1266.8	1232.3	1195.9	1173.8	1146.3	1122.4	1101.8	1095.2	1075.8	1068.5	1058.0
20°	1223.5	1191.7	1164.0	1134.9	1094.9	1072.6	1056.4	1047.6	1032.0	1022.5	1015.7
22.5°	1186.1	1153.8	1121.7	1087.8	1054.9	1029.8	1018.0	1004.3	995.7	982.5	975.2
25°	1132.8	1097.6	1059.0	1022.5	998.8	979.9	961.0	948.7	936.6	930.5	917.0
27.5°	1070.8	1034.1	998.0	970.3	941.2	922.5	905.3	894.5	879.9	869.6	862.1
30°	1036.7	993.4	962.3	937.3	900.0	882.4	869.6	856.1	845.2	834.4	827.0
32.5°	997.2	957.7	928.2	897.2	868.7	849.4	832.8	820.9	811.7	801.3	793.9
35°	935.2	902.1	871.6	840.5	819.5	799.9	780.2	770.1	761.3	751.8	745.1
37.5°	879.2	848.2	819.2	789.7	763.7	747.8	731.9	724.2	712.3	705.9	699.0
40°	844.6	814.1	783.0	754.6	727.5	715.3	701.1	689.6	678.7	674.0	666.6
42.5°	806.7	776.2	749.9	719.4	697.2	680.6	667.5	655.0	646.8	639.9	635.7
45°	750.4	723.4	697.7	667.3	646.3	632.1	617.2	605.6	598.2	593.5	586.0
47.5°	695.9	668.9	642.7	616.2	595.9	579.7	564.8	556.8	546.9	541.1	536.1
50°	656.4	632.1	604.3	580.0	559.6	543.4	531.2	521.1	512.3	504.8	501.4
52.5°	620.2	594.2	570.2	547.4	526.1	507.6	496.5	485.9	479.2	470.7	466.8
55°	560.3	535.3	515.0	492.7	471.7	456.1	442.6	433.1	426.4	416.9	411.5
57.5°	504.1	481.7	457.4	438.1	416.5	403.3	392.1	379.3	371.0	363.5	358.3
60°	466.2	440.6	419.6	401.3	382.4	365.4	355.2	345.1	336.3	328.9	324.2
62.5°	426.7	404.2	384.4	364.5	347.2	332.4	320.6	312.1	304.4	299.6	294.9
65°	366.1	348.5	328.2	311.9	295.8	284.9	275.4	267.9	262.6	259.2	255.1
67.5°	310.3	293.3	275.5	259.6	248.7	240.5	234.3	227.9	225.2	220.8	218.2
70°	274.1	256.5	240.9	228.8	217.9	211.8	207.8	203.0	200.3	194.9	192.2
72.5°	234.5	221.8	210.6	200.6	191.9	186.4	181.2	175.4	171.1	165.1	162.4
75°	184.8	173.2	164.5	157.6	152.2	144.8	137.4	131.3	129.2	127.3	126.6
77.5°	136.8	129.5	123.1	117.4	110.7	105.3	103.7	102.3	101.9	100.8	100.8
80°	107.6	100.8	96.1	89.3	85.2	85.2	85.2	83.9	84.6	84.6	84.6
82.5°	80.0	73.8	71.2	68.8	67.9	68.4	68.4	68.8	68.4	69.4	68.9
85°	41.2	41.9	43.3	42.6	43.3	43.3	44.7	44.0	44.7	43.3	44.7
87.5°	17.3	19.5	20.8	21.9	23.1	23.2	23.9	24.1	24.9	25.1	25.2
90°	10.9	13.8	17.0	20.1	23.3	26.6	27.6	28.5	29.5	30.5	31.3
92.5°	17.8	18.7	21.1	23.5	25.9	28.3	29.9	31.5	33.1	34.6	35.6
95°	27.2	23.5	26.2	28.9	31.6	34.4	36.1	37.8	39.5	41.2	42.1
97.5°	117.6	106.5	88.8	71.1	53.4	35.6	37.6	39.6	41.6	43.5	44.6
100°	206.8	190.0	151.7	113.3	74.9	36.5	38.5	40.5	42.4	44.4	45.5
102.5°	259.8	240.6	198.6	156.7	114.8	72.8	66.7	60.6	54.5	48.5	45.6
105°	340.7	331.1	308.8	286.7	264.6	242.5	198.9	155.3	111.8	68.3	46.8
107.5°	427.6	430.4	433.9	437.4	440.9	444.4	412.4	380.6	348.6	316.7	284.3
110°	486.1	488.4	491.2	493.9	496.6	499.3	491.2	483.0	474.9	466.8	445.1



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	542.0	544.2	547.0	549.7	552.4	555.1	555.3	555.4	555.5	555.7	552.1
115°	624.7	626.6	628.8	631.0	633.3	635.5	637.9	640.4	642.8	645.3	647.0
117.5°	707.4	708.9	710.0	711.2	712.3	713.4	715.4	717.4	719.3	721.3	722.4
120°	759.5	761.0	761.6	762.4	763.2	763.9	765.9	767.8	769.8	771.8	772.7
122.5°	809.3	810.6	811.6	812.5	813.5	814.4	815.8	817.2	818.6	819.9	820.7
125°	880.3	881.8	882.7	883.7	884.7	885.7	886.1	886.7	887.2	887.6	888.1
127.5°	948.5	950.0	951.2	952.4	953.6	954.8	955.5	956.3	957.1	957.9	958.0
130°	991.0	992.5	993.4	994.5	995.4	996.3	997.4	998.3	999.4	1000.3	1000.6
132.5°	1031.7	1033.1	1033.9	1034.7	1035.4	1036.2	1037.2	1038.2	1039.2	1040.2	1040.3
135°	1092.0	1093.2	1094.2	1095.2	1096.1	1097.2	1097.9	1098.6	1099.3	1100.1	1100.1
137.5°	1146.7	1147.9	1148.4	1149.0	1149.5	1150.0	1151.2	1152.4	1153.6	1154.8	1155.1
140°	1180.5	1181.6	1182.4	1183.1	1183.9	1184.6	1185.6	1186.5	1187.6	1188.5	1188.8
142.5°	1213.3	1214.4	1215.1	1215.9	1216.6	1217.4	1218.1	1218.9	1219.7	1220.6	1220.6
145°	1260.2	1261.2	1261.7	1262.2	1262.7	1263.2	1263.7	1264.2	1264.6	1265.2	1265.4
147.5°	1301.0	1301.7	1302.3	1302.7	1303.2	1303.7	1304.2	1304.7	1305.2	1305.7	1305.4
150°	1325.9	1326.5	1327.1	1327.5	1328.0	1328.5	1329.0	1329.5	1330.0	1330.5	1330.3
152.5°	1348.2	1348.6	1348.9	1349.2	1349.4	1349.8	1350.7	1351.5	1352.5	1353.3	1353.2
155°	1378.5	1378.5	1378.7	1379.0	1379.2	1379.4	1380.7	1381.9	1383.1	1384.4	1384.2
157.5°	1406.4	1406.4	1406.1	1405.8	1405.6	1405.3	1406.8	1408.3	1409.8	1411.3	1411.0
160°	1421.6	1421.4	1421.2	1420.9	1420.6	1420.4	1421.9	1423.3	1424.9	1426.3	1426.2
162.5°	1435.1	1434.7	1434.4	1434.2	1433.9	1433.7	1435.4	1437.0	1438.7	1440.4	1440.5
165°	1452.9	1452.4	1452.2	1451.9	1451.6	1451.4	1453.4	1455.3	1457.3	1459.3	1459.4
167.5°	1466.0	1465.6	1465.6	1465.6	1465.6	1465.6	1467.6	1469.6	1471.4	1473.4	1473.4
170°	1474.0	1473.5	1473.5	1473.5	1473.5	1473.5	1475.5	1477.5	1479.5	1481.4	1481.4
172.5°	1478.6	1478.1	1478.3	1478.5	1478.7	1478.9	1480.8	1482.8	1484.8	1486.8	1486.6
175°	1485.2	1484.7	1485.0	1485.2	1485.5	1485.7	1487.5	1489.2	1490.9	1492.6	1492.5
177.5°	1488.0	1487.6	1487.8	1488.0	1488.2	1488.4	1490.0	1491.5	1493.1	1494.7	1494.5
180°	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1506.1	1505.5	1506.1	1503.9	1506.1	1505.5	1506.1	1512.6	1512.6	1513.1	1513.7
5°	1401.4	1400.8	1398.8	1392.7	1398.8	1400.8	1401.4	1403.5	1408.9	1418.4	1415.7
7.5°	1310.1	1309.2	1303.2	1303.4	1303.2	1309.2	1310.1	1315.4	1321.5	1327.3	1334.2
10°	1256.0	1256.6	1248.5	1243.8	1248.5	1256.6	1256.0	1260.8	1269.5	1274.3	1279.0
12.5°	1203.5	1200.4	1193.9	1188.6	1193.9	1200.4	1203.5	1207.1	1219.2	1224.4	1233.6
15°	1134.2	1127.4	1111.2	1112.5	1111.2	1127.4	1134.2	1131.4	1143.7	1150.4	1153.1
17.5°	1052.6	1047.6	1047.3	1037.8	1047.3	1047.6	1052.6	1058.0	1068.5	1075.8	1095.2
20°	1005.0	1001.5	1002.9	993.4	1002.9	1001.5	1005.0	1015.7	1022.5	1032.0	1047.6
22.5°	967.6	964.1	958.5	955.5	958.5	964.1	967.6	975.2	982.5	995.7	1004.3
25°	912.9	907.5	902.1	905.4	902.1	907.5	912.9	917.0	930.5	936.6	948.7
27.5°	858.2	854.2	848.8	848.1	848.8	854.2	858.2	862.1	869.6	879.9	894.5
30°	823.5	819.5	816.8	813.4	816.8	819.5	823.5	827.0	834.4	845.2	856.1
32.5°	788.4	787.6	782.7	782.0	782.7	787.6	788.4	793.9	801.3	811.7	820.9
35°	742.4	738.3	736.9	737.6	736.9	738.3	742.4	745.1	751.8	761.3	770.1
37.5°	698.6	693.2	690.8	688.4	690.8	693.2	698.6	699.0	705.9	712.3	724.2
40°	667.3	661.9	660.5	659.1	660.5	661.9	667.3	666.6	674.0	678.7	689.6
42.5°	632.1	629.9	629.0	626.6	629.0	629.9	632.1	635.7	639.9	646.8	655.0
45°	584.0	583.3	579.3	580.7	579.3	583.3	584.0	586.0	593.5	598.2	605.6
47.5°	533.4	530.4	527.5	529.4	527.5	530.4	533.4	536.1	541.1	546.9	556.8
50°	498.8	497.4	491.3	492.7	491.3	497.4	498.8	501.4	504.8	512.3	521.1
52.5°	464.1	458.9	456.7	455.8	456.7	458.9	464.1	466.8	470.7	479.2	485.9
55°	406.7	400.6	397.9	396.6	397.9	400.6	406.7	411.5	416.9	426.4	433.1
57.5°	350.4	348.8	346.6	348.1	346.6	348.8	350.4	358.3	363.5	371.0	379.3
60°	317.4	317.4	317.4	316.7	317.4	317.4	317.4	324.2	328.9	336.3	345.1
62.5°	292.0	290.3	289.8	290.8	289.8	290.3	292.0	294.9	299.6	304.4	312.1
65°	253.1	252.4	249.7	249.0	249.7	252.4	253.1	255.1	259.2	262.6	267.9
67.5°	216.5	214.0	213.2	212.2	213.2	214.0	216.5	218.2	220.8	225.2	227.9
70°	188.8	187.4	183.4	184.1	183.4	187.4	188.8	192.2	194.9	200.3	203.0
72.5°	159.0	157.6	156.9	155.9	156.9	157.6	159.0	162.4	165.1	171.1	175.4
75°	125.9	125.2	124.5	127.3	124.5	125.2	125.9	126.6	127.3	129.2	131.3
77.5°	100.8	100.8	101.3	100.1	101.3	100.8	100.8	100.8	100.8	101.9	102.3
80°	84.6	84.6	83.9	83.9	83.9	84.6	84.6	84.6	84.6	84.6	83.9
82.5°	67.8	68.4	68.8	67.7	68.8	68.4	67.8	68.9	69.4	68.4	68.8
85°	44.7	44.0	45.4	44.7	45.4	44.0	44.7	44.7	43.3	44.7	44.0
87.5°	26.3	25.4	25.5	26.2	25.5	25.4	26.3	25.2	25.1	24.9	24.1
90°	31.8	32.2	32.7	33.2	32.7	32.2	31.8	31.3	30.5	29.5	28.5
92.5°	35.9	36.2	36.4	36.8	36.4	36.2	35.9	35.6	34.6	33.1	31.5
95°	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	41.2	39.5	37.8
97.5°	44.9	45.1	45.4	45.6	45.4	45.1	44.9	44.6	43.5	41.6	39.6
100°	45.7	46.0	46.2	46.5	46.2	46.0	45.7	45.5	44.4	42.4	40.5
102.5°	46.1	46.5	46.9	47.4	46.9	46.5	46.1	45.6	48.5	54.5	60.6
105°	47.3	47.7	48.2	48.7	48.2	47.7	47.3	46.8	68.3	111.8	155.3
107.5°	251.5	218.6	185.8	153.0	185.8	218.6	251.5	284.3	316.7	348.6	380.6
110°	410.0	374.8	339.7	304.4	339.7	374.8	410.0	445.1	466.8	474.9	483.0



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	544.6	537.2	529.8	522.4	529.8	537.2	544.6	552.1	555.7	555.5	555.4
115°	648.0	649.0	650.0	651.0	650.0	649.0	648.0	647.0	645.3	642.8	640.4
117.5°	722.6	722.7	723.0	723.2	723.0	722.7	722.6	722.4	721.3	719.3	717.4
120°	772.7	772.7	772.7	772.7	772.7	772.7	772.7	772.7	771.8	769.8	767.8
122.5°	820.9	821.0	821.3	821.5	821.3	821.0	820.9	820.7	819.9	818.6	817.2
125°	888.6	889.2	889.6	890.1	889.6	889.2	888.6	888.1	887.6	887.2	886.7
127.5°	957.6	957.1	956.6	956.1	956.6	957.1	957.6	958.0	957.9	957.1	956.3
130°	1000.1	999.6	999.1	998.6	999.1	999.6	1000.1	1000.6	1000.3	999.4	998.3
132.5°	1039.7	1039.0	1038.3	1037.6	1038.3	1039.0	1039.7	1040.3	1040.2	1039.2	1038.2
135°	1099.3	1098.6	1097.9	1097.2	1097.9	1098.6	1099.3	1100.1	1100.1	1099.3	1098.6
137.5°	1154.6	1154.2	1153.7	1153.1	1153.7	1154.2	1154.6	1155.1	1154.8	1153.6	1152.4
140°	1188.3	1187.7	1187.3	1186.8	1187.3	1187.7	1188.3	1188.8	1188.5	1187.6	1186.5
142.5°	1219.9	1219.2	1218.5	1217.8	1218.5	1219.2	1219.9	1220.6	1220.6	1219.7	1218.9
145°	1265.4	1265.4	1265.4	1265.4	1265.4	1265.4	1265.4	1265.4	1265.2	1264.6	1264.2
147.5°	1304.2	1303.1	1302.0	1300.8	1302.0	1303.1	1304.2	1305.4	1305.7	1305.2	1304.7
150°	1329.6	1328.9	1328.2	1327.4	1328.2	1328.9	1329.6	1330.3	1330.5	1330.0	1329.5
152.5°	1352.0	1350.9	1349.8	1348.7	1349.8	1350.9	1352.0	1353.2	1353.3	1352.5	1351.5
155°	1382.8	1381.3	1379.8	1378.4	1379.8	1381.3	1382.8	1384.2	1384.4	1383.1	1381.9
157.5°	1409.1	1407.2	1405.2	1403.3	1405.2	1407.2	1409.1	1411.0	1411.3	1409.8	1408.3
160°	1424.4	1422.7	1421.0	1419.3	1421.0	1422.7	1424.4	1426.2	1426.3	1424.9	1423.3
162.5°	1438.9	1437.4	1435.9	1434.3	1435.9	1437.4	1438.9	1440.5	1440.4	1438.7	1437.0
165°	1457.7	1456.0	1454.2	1452.5	1454.2	1456.0	1457.7	1459.4	1459.3	1457.3	1455.3
167.5°	1471.4	1469.6	1467.6	1465.6	1467.6	1469.6	1471.4	1473.4	1473.4	1471.4	1469.6
170°	1479.5	1477.5	1475.5	1473.5	1475.5	1477.5	1479.5	1481.4	1481.4	1479.5	1477.5
172.5°	1484.5	1482.3	1480.1	1478.0	1480.1	1482.3	1484.5	1486.6	1486.8	1484.8	1482.8
175°	1490.6	1488.6	1486.6	1484.6	1486.6	1488.6	1490.6	1492.5	1492.6	1490.9	1489.2
177.5°	1492.5	1490.6	1488.6	1486.6	1488.6	1490.6	1492.5	1494.5	1494.7	1493.1	1491.5
180°	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1508.8	1516.4	1524.0	1531.0	1541.9	1546.7	1553.8	1556.4	1564.6	1576.5	1586.2
5°	1417.0	1427.9	1442.1	1453.6	1471.9	1486.1	1501.7	1516.6	1534.1	1559.2	1581.5
7.5°	1339.2	1350.0	1367.0	1388.4	1408.5	1428.7	1449.9	1470.2	1495.4	1531.3	1566.8
10°	1287.8	1300.6	1320.9	1343.9	1369.0	1388.6	1413.7	1439.4	1470.5	1511.8	1554.4
12.5°	1243.4	1253.0	1276.6	1298.5	1326.8	1351.9	1376.3	1406.4	1441.8	1485.8	1537.1
15°	1172.8	1186.3	1209.3	1233.6	1263.4	1289.9	1321.6	1358.1	1392.7	1446.8	1509.1
17.5°	1101.8	1122.4	1146.3	1173.8	1195.9	1232.3	1266.8	1304.3	1346.8	1404.2	1472.6
20°	1056.4	1072.6	1094.9	1134.9	1164.0	1191.7	1223.5	1270.2	1309.4	1374.4	1445.4
22.5°	1018.0	1029.8	1054.9	1087.8	1121.7	1153.8	1186.1	1230.7	1279.1	1340.8	1417.9
25°	961.0	979.9	998.8	1022.5	1059.0	1097.6	1132.8	1170.7	1222.2	1287.8	1371.1
27.5°	905.3	922.5	941.2	970.3	998.0	1034.1	1070.8	1114.3	1169.5	1239.0	1323.4
30°	869.6	882.4	900.0	937.3	962.3	993.4	1036.7	1075.3	1126.7	1200.5	1289.9
32.5°	832.8	849.4	868.7	897.2	928.2	957.7	997.2	1039.1	1091.6	1164.2	1255.7
35°	780.2	799.9	819.5	840.5	871.6	902.1	935.2	981.3	1034.7	1105.1	1195.1
37.5°	731.9	747.8	763.7	789.7	819.2	848.2	879.2	924.5	974.9	1050.9	1133.3
40°	701.1	715.3	727.5	754.6	783.0	814.1	844.6	884.5	938.6	1009.7	1089.5
42.5°	667.5	680.6	697.2	719.4	749.9	776.2	806.7	844.4	895.3	967.4	1037.5
45°	617.2	632.1	646.3	667.3	697.7	723.4	750.4	786.4	838.4	898.0	960.3
47.5°	564.8	579.7	595.9	616.2	642.7	668.9	695.9	727.7	775.2	833.7	875.6
50°	531.2	543.4	559.6	580.0	604.3	632.1	656.4	691.0	736.2	782.3	818.8
52.5°	496.5	507.6	526.1	547.4	570.2	594.2	620.2	649.8	690.8	734.1	763.1
55°	442.6	456.1	471.7	492.7	515.0	535.3	560.3	590.8	623.3	655.7	675.4
57.5°	392.1	403.3	416.5	438.1	457.4	481.7	504.1	527.9	557.9	582.4	595.2
60°	355.2	365.4	382.4	401.3	419.6	440.6	466.2	489.9	513.0	532.6	542.7
62.5°	320.6	332.4	347.2	364.5	384.4	404.2	426.7	446.6	466.9	483.9	490.8
65°	275.4	284.9	295.8	311.9	328.2	348.5	366.1	386.4	401.3	410.8	416.9
67.5°	234.3	240.5	248.7	259.6	275.5	293.3	310.3	326.1	338.6	345.1	350.5
70°	207.8	211.8	217.9	228.8	240.9	256.5	274.1	285.6	296.4	301.8	307.2
72.5°	181.2	186.4	191.9	200.6	210.6	221.8	234.5	248.7	254.7	261.2	264.5
75°	137.4	144.8	152.2	157.6	164.5	173.2	184.8	193.6	196.9	202.3	203.0
77.5°	103.7	105.3	110.7	117.4	123.1	129.5	136.8	144.6	146.3	149.1	150.9
80°	85.2	85.2	85.2	89.3	96.1	100.8	107.6	111.7	114.3	115.0	115.7
82.5°	68.4	68.4	67.9	68.8	71.2	73.8	80.0	84.6	86.8	86.4	84.9
85°	44.7	43.3	43.3	42.6	43.3	41.9	41.2	44.0	48.0	48.0	46.7
87.5°	23.9	23.2	23.1	21.9	20.8	19.5	17.3	17.4	16.9	18.6	17.6
90°	27.6	26.6	23.3	20.1	17.0	13.8	10.9	8.5	6.0	3.5	1.1
92.5°	29.9	28.3	25.9	23.5	21.1	18.7	17.8	18.5	19.2	19.9	20.6
95°	36.1	34.4	31.6	28.9	26.2	23.5	27.2	37.3	47.4	57.4	67.5
97.5°	37.6	35.6	53.4	71.1	88.8	106.5	117.6	122.2	126.7	131.2	135.7
100°	38.5	36.5	74.9	113.3	151.7	190.0	206.8	201.8	196.9	192.0	187.1
102.5°	66.7	72.8	114.8	156.7	198.6	240.6	259.8	256.1	252.6	249.1	245.6
105°	198.9	242.5	264.6	286.7	308.8	331.1	340.7	338.0	335.4	332.6	329.9
107.5°	412.4	444.4	440.9	437.4	433.9	430.4	427.6	425.4	423.3	421.1	419.0
110°	491.2	499.3	496.6	493.9	491.2	488.4	486.1	484.1	482.2	480.3	478.3



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	555.3	555.1	552.4	549.7	547.0	544.2	542.0	540.3	538.5	536.7	534.9
115°	637.9	635.5	633.3	631.0	628.8	626.6	624.7	623.3	621.8	620.4	618.9
117.5°	715.4	713.4	712.3	711.2	710.0	708.9	707.4	705.6	703.8	702.0	700.2
120°	765.9	763.9	763.2	762.4	761.6	761.0	759.5	757.2	755.0	752.9	750.6
122.5°	815.8	814.4	813.5	812.5	811.6	810.6	809.3	807.4	805.6	803.8	802.0
125°	886.1	885.7	884.7	883.7	882.7	881.8	880.3	878.3	876.3	874.3	872.4
127.5°	955.5	954.8	953.6	952.4	951.2	950.0	948.5	946.5	944.5	942.5	940.6
130°	997.4	996.3	995.4	994.5	993.4	992.5	991.0	989.0	987.1	985.1	983.1
132.5°	1037.2	1036.2	1035.4	1034.7	1033.9	1033.1	1031.7	1029.8	1027.8	1025.8	1023.8
135°	1097.9	1097.2	1096.1	1095.2	1094.2	1093.2	1092.0	1090.5	1089.0	1087.5	1086.1
137.5°	1151.2	1150.0	1149.5	1149.0	1148.4	1147.9	1146.7	1144.8	1143.0	1141.1	1139.2
140°	1185.6	1184.6	1183.9	1183.1	1182.4	1181.6	1180.5	1179.1	1177.6	1176.1	1174.7
142.5°	1218.1	1217.4	1216.6	1215.9	1215.1	1214.4	1213.3	1211.9	1210.4	1208.8	1207.4
145°	1263.7	1263.2	1262.7	1262.2	1261.7	1261.2	1260.2	1258.4	1256.7	1255.0	1253.3
147.5°	1304.2	1303.7	1303.2	1302.7	1302.3	1301.7	1301.0	1299.8	1298.6	1297.5	1296.4
150°	1329.0	1328.5	1328.0	1327.5	1327.1	1326.5	1325.9	1325.2	1324.5	1323.7	1323.0
152.5°	1350.7	1349.8	1349.4	1349.2	1348.9	1348.6	1348.2	1347.9	1347.6	1347.2	1346.9
155°	1380.7	1379.4	1379.2	1379.0	1378.7	1378.5	1378.5	1379.1	1379.6	1380.1	1380.5
157.5°	1406.8	1405.3	1405.6	1405.8	1406.1	1406.4	1406.4	1406.5	1406.6	1406.6	1406.7
160°	1421.9	1420.4	1420.6	1420.9	1421.2	1421.4	1421.6	1421.9	1422.1	1422.4	1422.6
162.5°	1435.4	1433.7	1433.9	1434.2	1434.4	1434.7	1435.1	1435.7	1436.4	1437.0	1437.7
165°	1453.4	1451.4	1451.6	1451.9	1452.2	1452.4	1452.9	1453.6	1454.3	1455.1	1455.9
167.5°	1467.6	1465.6	1465.6	1465.6	1465.6	1465.6	1466.0	1467.1	1468.0	1469.0	1470.0
170°	1475.5	1473.5	1473.5	1473.5	1473.5	1473.5	1474.0	1475.1	1476.0	1477.0	1478.0
172.5°	1480.8	1478.9	1478.7	1478.5	1478.3	1478.1	1478.6	1479.7	1480.9	1482.1	1483.3
175°	1487.5	1485.7	1485.5	1485.2	1485.0	1484.7	1485.2	1486.4	1487.7	1488.9	1490.1
177.5°	1490.0	1488.4	1488.2	1488.0	1487.8	1487.6	1488.0	1489.0	1490.0	1490.9	1491.9
180°	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1589.5	1595.4	1603.0	1614.4	1623.1	1630.6	1632.3	1634.4	1639.9	1649.0	1656.0
5°	1599.7	1615.3	1640.4	1664.7	1691.1	1712.8	1733.1	1747.3	1760.8	1789.2	1812.2
7.5°	1596.6	1631.2	1670.4	1714.2	1758.4	1801.3	1841.1	1876.6	1912.1	1953.5	2000.8
10°	1594.3	1635.0	1687.7	1743.9	1805.5	1865.7	1923.9	1969.3	2022.1	2069.4	2129.6
12.5°	1584.1	1642.5	1705.6	1777.4	1853.1	1922.5	1999.2	2061.8	2122.2	2190.6	2260.6
15°	1570.6	1641.8	1721.6	1817.0	1932.0	2015.9	2094.5	2203.4	2277.9	2352.3	2452.5
17.5°	1546.2	1632.9	1732.7	1856.7	1952.6	2065.4	2183.5	2269.6	2369.9	2474.8	2565.4
20°	1526.6	1627.5	1739.1	1861.0	1983.5	2105.9	2220.3	2323.2	2426.7	2547.9	2622.3
22.5°	1507.2	1607.0	1722.9	1852.4	1984.0	2113.0	2242.5	2363.3	2479.8	2602.0	2697.0
25°	1465.8	1584.2	1710.0	1842.0	1971.9	2114.1	2268.4	2403.1	2547.2	2673.1	2763.0
27.5°	1423.8	1532.3	1657.7	1791.6	1936.0	2103.9	2285.4	2438.5	2582.9	2673.1	2701.3
30°	1386.0	1501.0	1616.0	1752.0	1908.3	2095.8	2288.6	2463.9	2582.4	2621.6	2592.5
32.5°	1347.5	1451.7	1565.6	1705.0	1871.0	2075.8	2293.0	2448.8	2520.1	2490.1	2371.6
35°	1279.7	1373.7	1484.0	1623.4	1814.3	2064.7	2275.1	2380.7	2363.1	2193.9	1970.6
37.5°	1207.1	1283.8	1386.0	1531.7	1755.6	2020.7	2198.2	2213.8	2061.6	1801.8	1543.9
40°	1149.8	1218.7	1323.7	1475.9	1710.0	1977.4	2120.8	2057.9	1821.7	1532.8	1317.6
42.5°	1094.0	1152.2	1253.3	1417.5	1666.7	1918.4	2005.5	1868.5	1595.9	1322.8	1127.0
45°	999.5	1054.3	1155.8	1324.3	1578.1	1805.5	1794.0	1555.7	1283.1	1063.2	900.7
47.5°	909.9	957.9	1053.1	1225.1	1474.0	1636.3	1528.7	1275.2	1043.9	867.5	751.6
50°	846.5	894.0	988.7	1158.6	1390.7	1509.1	1355.5	1111.2	899.4	753.2	661.2
52.5°	785.9	832.2	918.9	1084.3	1290.0	1360.7	1195.8	969.3	792.7	666.6	587.5
55°	701.1	736.2	814.1	972.4	1126.1	1142.3	975.2	785.7	640.2	552.2	498.1
57.5°	614.6	644.9	721.8	847.9	955.6	947.3	788.8	624.9	526.9	461.5	422.2
60°	558.3	588.1	655.7	764.1	845.2	816.8	671.3	539.3	455.5	407.4	376.3
62.5°	505.8	529.1	592.4	671.4	729.9	697.7	573.9	464.6	398.0	357.6	332.9
65°	429.7	448.7	499.4	540.7	573.2	542.1	439.2	363.4	315.4	287.0	270.0
67.5°	357.4	369.5	401.6	416.5	439.4	405.2	330.3	279.5	252.2	228.2	216.5
70°	311.9	320.7	337.7	349.8	355.9	320.7	265.3	228.1	205.0	188.1	180.7
72.5°	266.5	274.2	277.6	287.6	284.5	251.5	213.3	183.7	167.1	155.7	146.0
75°	203.7	207.1	203.7	199.7	190.8	167.8	141.5	126.6	114.3	108.9	105.6
77.5°	148.4	147.4	142.8	136.5	121.4	106.9	92.7	87.7	82.4	79.6	78.4
80°	114.3	111.7	107.6	97.5	84.6	74.5	71.0	67.7	65.6	62.3	61.6
82.5°	85.2	83.5	76.7	68.2	59.2	54.4	51.6	50.4	48.3	46.6	46.4
85°	45.4	43.3	35.9	31.2	29.8	28.4	27.7	27.7	25.1	24.4	24.4
87.5°	15.3	12.6	12.5	11.4	12.0	11.5	12.7	12.2	12.3	13.1	12.2
90°	3.5	6.0	8.5	10.9	13.8	17.0	20.1	23.3	26.6	27.6	28.5
92.5°	19.9	19.2	18.5	17.8	18.7	21.1	23.5	25.9	28.3	29.9	31.5
95°	57.4	47.4	37.3	27.2	23.5	26.2	28.9	31.6	34.4	36.1	37.8
97.5°	131.2	126.7	122.2	117.6	106.5	88.8	71.1	53.4	35.6	37.6	39.6
100°	192.0	196.9	201.8	206.8	190.0	151.7	113.3	74.9	36.5	38.5	40.5
102.5°	249.1	252.6	256.1	259.8	240.6	198.6	156.7	114.8	72.8	66.7	60.6
105°	332.6	335.4	338.0	340.7	331.1	308.8	286.7	264.6	242.5	198.9	155.3
107.5°	421.1	423.3	425.4	427.6	430.4	433.9	437.4	440.9	444.4	412.4	380.6
110°	480.3	482.2	484.1	486.1	488.4	491.2	493.9	496.6	499.3	491.2	483.0



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	536.7	538.5	540.3	542.0	544.2	547.0	549.7	552.4	555.1	555.3	555.4
115°	620.4	621.8	623.3	624.7	626.6	628.8	631.0	633.3	635.5	637.9	640.4
117.5°	702.0	703.8	705.6	707.4	708.9	710.0	711.2	712.3	713.4	715.4	717.4
120°	752.9	755.0	757.2	759.5	761.0	761.6	762.4	763.2	763.9	765.9	767.8
122.5°	803.8	805.6	807.4	809.3	810.6	811.6	812.5	813.5	814.4	815.8	817.2
125°	874.3	876.3	878.3	880.3	881.8	882.7	883.7	884.7	885.7	886.1	886.7
127.5°	942.5	944.5	946.5	948.5	950.0	951.2	952.4	953.6	954.8	955.5	956.3
130°	985.1	987.1	989.0	991.0	992.5	993.4	994.5	995.4	996.3	997.4	998.3
132.5°	1025.8	1027.8	1029.8	1031.7	1033.1	1033.9	1034.7	1035.4	1036.2	1037.2	1038.2
135°	1087.5	1089.0	1090.5	1092.0	1093.2	1094.2	1095.2	1096.1	1097.2	1097.9	1098.6
137.5°	1141.1	1143.0	1144.8	1146.7	1147.9	1148.4	1149.0	1149.5	1150.0	1151.2	1152.4
140°	1176.1	1177.6	1179.1	1180.5	1181.6	1182.4	1183.1	1183.9	1184.6	1185.6	1186.5
142.5°	1208.8	1210.4	1211.9	1213.3	1214.4	1215.1	1215.9	1216.6	1217.4	1218.1	1218.9
145°	1255.0	1256.7	1258.4	1260.2	1261.2	1261.7	1262.2	1262.7	1263.2	1263.7	1264.2
147.5°	1297.5	1298.6	1299.8	1301.0	1301.7	1302.3	1302.7	1303.2	1303.7	1304.2	1304.7
150°	1323.7	1324.5	1325.2	1325.9	1326.5	1327.1	1327.5	1328.0	1328.5	1329.0	1329.5
152.5°	1347.2	1347.6	1347.9	1348.2	1348.6	1348.9	1349.2	1349.4	1349.8	1350.7	1351.5
155°	1380.1	1379.6	1379.1	1378.5	1378.5	1378.7	1379.0	1379.2	1379.4	1380.7	1381.9
157.5°	1406.6	1406.6	1406.5	1406.4	1406.4	1406.1	1405.8	1405.6	1405.3	1406.8	1408.3
160°	1422.4	1422.1	1421.9	1421.6	1421.4	1421.2	1420.9	1420.6	1420.4	1421.9	1423.3
162.5°	1437.0	1436.4	1435.7	1435.1	1434.7	1434.4	1434.2	1433.9	1433.7	1435.4	1437.0
165°	1455.1	1454.3	1453.6	1452.9	1452.4	1452.2	1451.9	1451.6	1451.4	1453.4	1455.3
167.5°	1469.0	1468.0	1467.1	1466.0	1465.6	1465.6	1465.6	1465.6	1465.6	1467.6	1469.6
170°	1477.0	1476.0	1475.1	1474.0	1473.5	1473.5	1473.5	1473.5	1473.5	1475.5	1477.5
172.5°	1482.1	1480.9	1479.7	1478.6	1478.1	1478.3	1478.5	1478.7	1478.9	1480.8	1482.8
175°	1488.9	1487.7	1486.4	1485.2	1484.7	1485.0	1485.2	1485.5	1485.7	1487.5	1489.2
177.5°	1490.9	1490.0	1489.0	1488.0	1487.6	1487.8	1488.0	1488.2	1488.4	1490.0	1491.5
180°	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8	1580.8
2.5°	1667.4	1667.4	1669.6	1677.7	1678.8	1685.8	1683.7
5°	1832.6	1845.4	1850.1	1870.4	1882.7	1888.1	1877.2
7.5°	2034.5	2070.8	2087.9	2109.2	2128.0	2133.7	2118.9
10°	2181.8	2219.7	2251.4	2271.1	2289.3	2301.5	2317.1
12.5°	2324.1	2370.7	2400.9	2428.6	2447.4	2462.9	2465.4
15°	2478.8	2549.2	2602.6	2641.9	2661.5	2671.7	2667.6
17.5°	2634.8	2700.1	2738.2	2778.2	2805.4	2806.8	2807.5
20°	2723.1	2786.7	2830.7	2860.5	2891.0	2889.6	2896.3
22.5°	2782.1	2832.2	2865.9	2887.5	2898.0	2892.9	2894.2
25°	2809.7	2824.6	2818.6	2784.0	2775.3	2743.4	2748.8
27.5°	2667.4	2596.9	2524.2	2430.5	2356.6	2297.6	2300.6
30°	2474.1	2349.6	2207.4	2088.4	1981.4	1951.6	1888.1
32.5°	2203.9	2017.2	1850.7	1739.7	1648.0	1623.1	1567.5
35°	1745.9	1564.6	1393.4	1290.5	1249.9	1193.1	1192.4
37.5°	1357.1	1197.4	1106.8	1029.7	989.2	954.8	951.5
40°	1141.6	1017.1	948.7	893.3	853.3	827.6	821.6
42.5°	991.1	890.4	826.4	792.0	761.3	748.0	738.1
45°	809.3	741.7	697.0	665.9	651.7	641.5	636.1
47.5°	677.0	631.6	601.2	580.5	568.9	558.3	561.1
50°	605.0	567.7	545.4	525.8	517.0	509.5	510.2
52.5°	547.1	513.7	495.6	481.4	470.5	465.2	462.6
55°	464.3	443.2	425.0	414.8	408.7	401.3	399.2
57.5°	396.0	379.8	364.9	353.4	351.9	344.7	345.7
60°	350.5	337.0	324.9	318.7	314.0	307.9	310.0
62.5°	313.1	301.8	290.8	285.7	280.9	276.5	277.4
65°	256.5	245.6	238.8	236.2	234.1	232.1	230.1
67.5°	204.4	197.8	193.6	187.7	183.6	182.9	180.8
70°	171.9	163.1	155.7	148.2	146.2	145.5	146.2
72.5°	137.8	132.2	130.2	126.6	126.1	124.4	125.6
75°	103.6	101.5	100.1	97.5	97.5	97.5	97.5
77.5°	76.4	75.1	74.3	73.8	73.1	72.2	72.0
80°	59.6	58.9	57.5	57.5	56.8	57.5	56.8
82.5°	44.9	44.8	43.5	43.5	42.8	42.4	42.8
85°	23.0	22.3	23.7	22.3	23.0	21.7	23.0
87.5°	12.4	12.6	12.2	12.3	11.9	13.0	12.1
90°	29.5	30.5	31.3	31.8	32.2	32.7	33.2
92.5°	33.1	34.6	35.6	35.9	36.2	36.4	36.8
95°	39.5	41.2	42.1	42.1	42.1	42.1	42.1
97.5°	41.6	43.5	44.6	44.9	45.1	45.4	45.6
100°	42.4	44.4	45.5	45.7	46.0	46.2	46.5
102.5°	54.5	48.5	45.6	46.1	46.5	46.9	47.4
105°	111.8	68.3	46.8	47.3	47.7	48.2	48.7
107.5°	348.6	316.7	284.3	251.5	218.6	185.8	153.0
110°	474.9	466.8	445.1	410.0	374.8	339.7	304.4



TEST NUMBER: P332482-935

CATALOG NUMBER: S123RDIW-S1165D1320U935-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	555.5	555.7	552.1	544.6	537.2	529.8	522.4
115°	642.8	645.3	647.0	648.0	649.0	650.0	651.0
117.5°	719.3	721.3	722.4	722.6	722.7	723.0	723.2
120°	769.8	771.8	772.7	772.7	772.7	772.7	772.7
122.5°	818.6	819.9	820.7	820.9	821.0	821.3	821.5
125°	887.2	887.6	888.1	888.6	889.2	889.6	890.1
127.5°	957.1	957.9	958.0	957.6	957.1	956.6	956.1
130°	999.4	1000.3	1000.6	1000.1	999.6	999.1	998.6
132.5°	1039.2	1040.2	1040.3	1039.7	1039.0	1038.3	1037.6
135°	1099.3	1100.1	1100.1	1099.3	1098.6	1097.9	1097.2
137.5°	1153.6	1154.8	1155.1	1154.6	1154.2	1153.7	1153.1
140°	1187.6	1188.5	1188.8	1188.3	1187.7	1187.3	1186.8
142.5°	1219.7	1220.6	1220.6	1219.9	1219.2	1218.5	1217.8
145°	1264.6	1265.2	1265.4	1265.4	1265.4	1265.4	1265.4
147.5°	1305.2	1305.7	1305.4	1304.2	1303.1	1302.0	1300.8
150°	1330.0	1330.5	1330.3	1329.6	1328.9	1328.2	1327.4
152.5°	1352.5	1353.3	1353.2	1352.0	1350.9	1349.8	1348.7
155°	1383.1	1384.4	1384.2	1382.8	1381.3	1379.8	1378.4
157.5°	1409.8	1411.3	1411.0	1409.1	1407.2	1405.2	1403.3
160°	1424.9	1426.3	1426.2	1424.4	1422.7	1421.0	1419.3
162.5°	1438.7	1440.4	1440.5	1438.9	1437.4	1435.9	1434.3
165°	1457.3	1459.3	1459.4	1457.7	1456.0	1454.2	1452.5
167.5°	1471.4	1473.4	1473.4	1471.4	1469.6	1467.6	1465.6
170°	1479.5	1481.4	1481.4	1479.5	1477.5	1475.5	1473.5
172.5°	1484.8	1486.8	1486.6	1484.5	1482.3	1480.1	1478.0
175°	1490.9	1492.6	1492.5	1490.6	1488.6	1486.6	1484.6
177.5°	1493.1	1494.7	1494.5	1492.5	1490.6	1488.6	1486.6
180°	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1	1490.1

(END OF REPORT)