

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: P332486

Luminaire Tested: **S123RDIW-S1165D1535U835-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332486
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-S1165D1535U835-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1535 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10713.4 lumens
Efficiency: N/A
Efficacy: 129.2 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

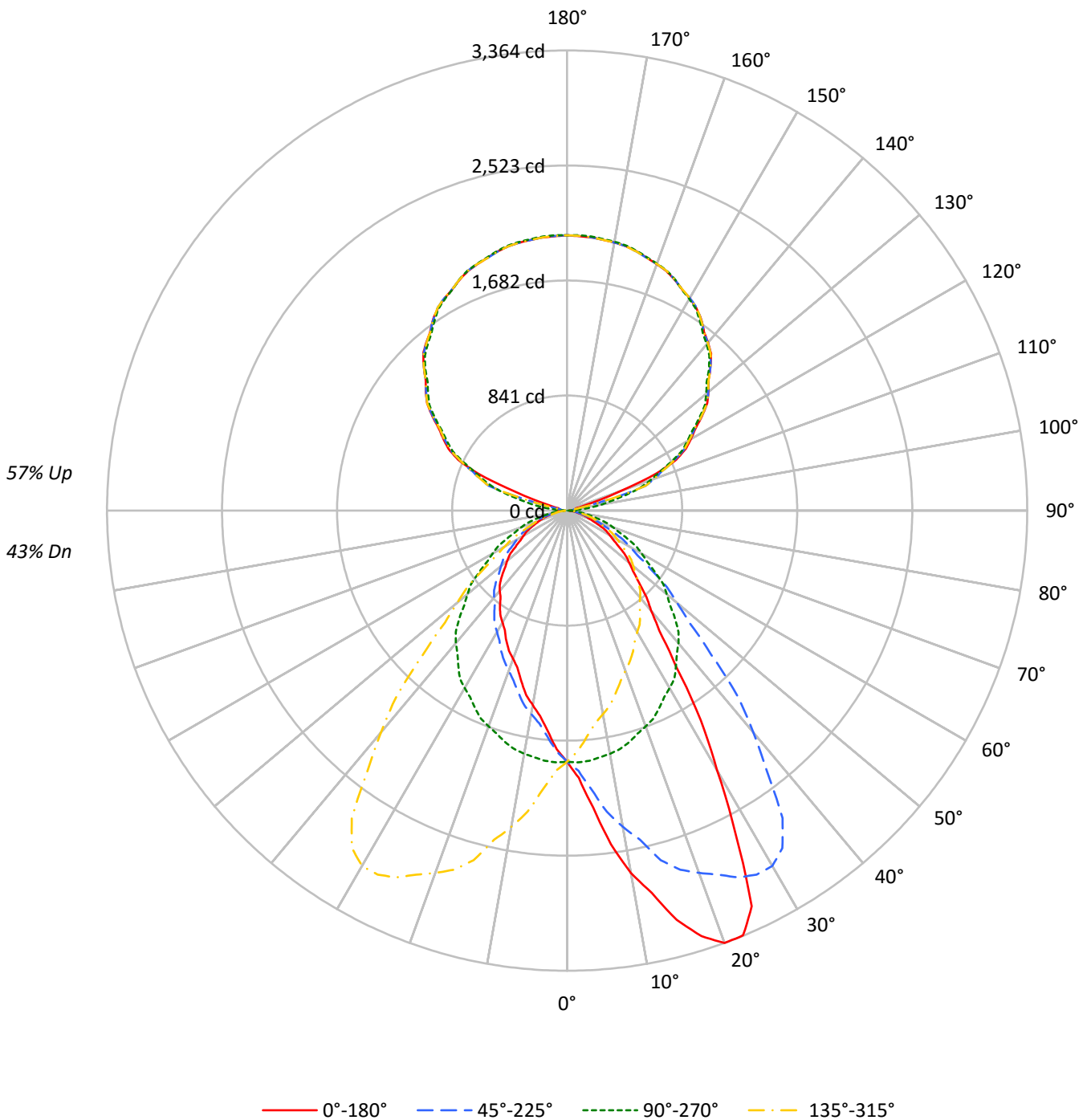
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-UDD-A

Luminous Intensity Polar Plot





TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	43
1	97	93	89	86	88	85	82	79	70	68	66	57	55	54	44	44	43	37
2	88	81	76	71	81	75	70	66	62	59	55	50	48	46	40	38	37	32
3	81	72	65	59	74	66	60	55	55	51	47	45	42	39	36	34	32	27
4	74	64	56	51	68	59	52	47	49	44	41	40	37	34	32	30	28	24
5	68	57	49	44	62	53	46	41	44	39	35	36	33	30	29	27	24	21
6	63	51	44	38	57	47	41	36	40	35	31	33	29	26	27	24	22	19
7	58	46	39	33	53	43	36	31	36	31	27	30	26	23	24	22	19	17
8	54	42	35	30	50	39	32	28	33	28	24	28	24	21	22	20	18	15
9	50	39	31	26	46	36	29	25	31	25	22	26	22	19	21	18	16	14
10	47	35	28	24	43	33	27	22	28	23	20	24	20	17	19	17	15	13

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



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.6	1.7
10°-20°	564.1	5.3
20°-30°	886.2	8.3
30°-40°	924.6	8.6
40°-50°	791.2	7.4
50°-60°	603.1	5.6
60°-70°	386.5	3.6
70°-80°	186.0	1.7
80°-90°	54.8	0.5
90°-100°	73.2	0.7
100°-110°	348.7	3.3
110°-120°	837.5	7.8
120°-130°	1066.5	10.0
130°-140°	1139.5	10.6
140°-150°	1065.6	9.9
150°-160°	859.5	8.0
160°-170°	554.7	5.2
170°-180°	191.2	1.8
0°-30°	1630.8	15.2
0°-40°	2555.4	23.9
0°-60°	3949.7	36.9
0°-90°	4577.0	42.7
90°-120°	1259.4	11.8
90°-150°	4531.0	42.3
90°-180°	6136.0	57.3
0°-180°	10713.4	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	32
90°	45	2	45	2	45	21
95°	57	91	57	91	57	48
105°	66	446	66	446	66	150
115°	879	836	879	836	879	812
125°	1202	1178	1202	1178	1202	1073
135°	1482	1467	1482	1467	1482	1142
145°	1709	1692	1709	1692	1709	1067
155°	1861	1864	1861	1864	1861	858
165°	1961	1966	1961	1966	1961	554
175°	2005	2012	2005	2012	2005	191
180°	2012	2012	2012	2012	2012	



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-UDD-A

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°	15.3	16.4	15.0	15.5	15.4	15.8	15.5	15.3	16.2	15.3	15.1
90°	44.8	44.2	43.5	42.9	42.2	41.2	39.9	38.5	37.2	35.9	31.6
92.5°	49.6	49.2	48.8	48.4	48.0	46.8	44.7	42.5	40.4	38.3	35.0
95°	56.8	56.8	56.8	56.8	56.8	55.6	53.3	51.0	48.7	46.3	42.7
97.5°	61.6	61.3	60.9	60.6	60.3	58.8	56.1	53.5	50.8	48.1	42.1
100°	62.8	62.5	62.1	61.8	61.5	60.0	57.3	54.6	52.0	49.3	41.2
102.5°	64.0	63.4	62.8	62.2	61.6	65.4	73.7	81.9	90.1	98.4	155.0
105°	65.8	65.1	64.5	63.8	63.1	92.2	151.0	209.8	268.6	327.4	357.3
107.5°	206.6	250.9	295.2	339.6	383.9	427.6	470.7	513.8	557.0	600.1	595.4
110°	411.1	458.6	506.1	553.6	601.1	630.4	641.3	652.3	663.3	674.2	670.6



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	705.3	715.4	725.4	735.4	745.5	750.4	750.2	750.0	749.8	749.6	745.9
115°	879.1	877.7	876.4	875.1	873.7	871.4	868.1	864.8	861.4	858.1	855.1
117.5°	976.5	976.3	976.0	975.7	975.5	974.0	971.3	968.7	966.0	963.4	961.8
120°	1043.5	1043.5	1043.5	1043.5	1043.5	1042.2	1039.5	1036.9	1034.2	1031.5	1030.5
122.5°	1109.3	1109.0	1108.7	1108.5	1108.2	1107.2	1105.3	1103.4	1101.6	1099.7	1098.4
125°	1202.0	1201.3	1200.6	1200.0	1199.3	1198.6	1198.0	1197.3	1196.7	1196.0	1194.7
127.5°	1291.1	1291.7	1292.4	1293.1	1293.7	1293.5	1292.5	1291.4	1290.3	1289.3	1287.7
130°	1348.5	1349.1	1349.8	1350.5	1351.1	1350.8	1349.5	1348.1	1346.8	1345.5	1344.2
132.5°	1401.1	1402.0	1403.0	1403.9	1404.8	1404.6	1403.3	1402.0	1400.6	1399.3	1398.2
135°	1481.5	1482.5	1483.5	1484.5	1485.5	1485.5	1484.5	1483.5	1482.5	1481.5	1480.2
137.5°	1557.2	1557.8	1558.5	1559.2	1559.8	1559.4	1557.8	1556.2	1554.6	1553.0	1552.3
140°	1602.6	1603.3	1604.0	1604.6	1605.3	1604.9	1603.6	1602.3	1601.0	1599.6	1598.6
142.5°	1644.5	1645.4	1646.3	1647.3	1648.2	1648.1	1647.1	1646.0	1644.9	1643.9	1642.9
145°	1708.8	1708.8	1708.8	1708.8	1708.8	1708.4	1707.8	1707.1	1706.4	1705.8	1705.1
147.5°	1756.6	1758.1	1759.7	1761.2	1762.7	1763.2	1762.5	1761.8	1761.2	1760.5	1759.8
150°	1792.5	1793.5	1794.5	1795.5	1796.5	1796.6	1796.0	1795.3	1794.6	1794.0	1793.3
152.5°	1821.2	1822.7	1824.2	1825.8	1827.3	1827.5	1826.3	1825.1	1823.9	1822.7	1822.3
155°	1861.3	1863.2	1865.2	1867.2	1869.2	1869.4	1867.7	1866.1	1864.4	1862.7	1862.4
157.5°	1895.0	1897.6	1900.2	1902.8	1905.4	1905.7	1903.7	1901.7	1899.7	1897.7	1898.1
160°	1916.6	1918.9	1921.2	1923.5	1925.9	1926.0	1924.0	1922.1	1920.1	1918.1	1918.4
162.5°	1936.9	1939.0	1941.0	1943.1	1945.1	1945.0	1942.8	1940.5	1938.3	1936.0	1936.3
165°	1961.4	1963.7	1966.1	1968.4	1970.7	1970.6	1967.9	1965.2	1962.6	1959.9	1960.3
167.5°	1979.1	1981.7	1984.4	1987.0	1989.7	1989.7	1987.0	1984.4	1981.7	1979.1	1979.1
170°	1989.8	1992.5	1995.1	1997.8	2000.5	2000.5	1997.8	1995.1	1992.5	1989.8	1989.8
172.5°	1995.8	1998.7	2001.7	2004.6	2007.5	2007.6	2005.0	2002.3	1999.7	1997.0	1996.7
175°	2004.8	2007.4	2010.1	2012.7	2015.4	2015.6	2013.2	2010.9	2008.6	2006.3	2005.9
177.5°	2007.5	2010.1	2012.8	2015.4	2018.1	2018.4	2016.2	2014.1	2012.0	2009.9	2009.6
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-UDD-A

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°	15.5	14.0	14.4	13.6	14.9	14.8	17.9	20.4	21.7	19.9	20.5
90°	27.2	22.9	18.6	14.8	11.5	8.1	4.8	1.5	4.8	8.1	11.5
92.5°	31.8	28.5	25.2	24.1	25.0	25.9	26.9	27.8	26.9	25.9	25.0
95°	39.0	35.4	31.7	36.7	50.3	64.0	77.6	91.2	77.6	64.0	50.3
97.5°	96.0	119.9	143.8	158.8	164.9	171.1	177.2	183.3	177.2	171.1	164.9
100°	153.0	204.8	256.6	279.2	272.6	265.9	259.3	252.7	259.3	265.9	272.6
102.5°	211.6	268.2	324.8	350.7	345.9	341.2	336.4	331.6	336.4	341.2	345.9
105°	387.2	417.1	447.0	460.1	456.5	452.8	449.2	445.5	449.2	452.8	456.5
107.5°	590.7	585.9	581.2	577.4	574.5	571.5	568.6	565.7	568.6	571.5	574.5
110°	666.9	663.3	659.6	656.5	653.8	651.1	648.5	645.8	648.5	651.1	653.8



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	742.3	738.6	735.0	731.9	729.6	727.2	724.8	722.4	724.8	727.2	729.6
115°	852.1	849.2	846.2	843.7	841.7	839.7	837.7	835.7	837.7	839.7	841.7
117.5°	960.3	958.8	957.3	955.3	952.8	950.3	947.9	945.4	947.9	950.3	952.8
120°	1029.5	1028.5	1027.6	1025.6	1022.6	1019.6	1016.6	1013.6	1016.6	1019.6	1022.6
122.5°	1097.2	1095.9	1094.7	1092.8	1090.3	1087.9	1085.4	1083.0	1085.4	1087.9	1090.3
125°	1193.3	1192.0	1190.7	1188.7	1186.0	1183.4	1180.7	1178.0	1180.7	1183.4	1186.0
127.5°	1286.1	1284.5	1282.9	1280.8	1278.1	1275.5	1272.8	1270.1	1272.8	1275.5	1278.1
130°	1342.8	1341.5	1340.2	1338.2	1335.5	1332.9	1330.2	1327.5	1330.2	1332.9	1335.5
132.5°	1397.2	1396.1	1395.1	1393.2	1390.5	1387.9	1385.2	1382.6	1385.2	1387.9	1390.5
135°	1478.9	1477.5	1476.2	1474.6	1472.6	1470.6	1468.6	1466.6	1468.6	1470.6	1472.6
137.5°	1551.5	1550.8	1550.1	1548.4	1545.9	1543.4	1540.9	1538.3	1540.9	1543.4	1545.9
140°	1597.6	1596.6	1595.6	1594.2	1592.2	1590.2	1588.2	1586.2	1588.2	1590.2	1592.2
142.5°	1641.9	1640.9	1639.9	1638.4	1636.4	1634.4	1632.4	1630.4	1632.4	1634.4	1636.4
145°	1704.4	1703.8	1703.1	1701.6	1699.3	1697.0	1694.6	1692.3	1694.6	1697.0	1699.3
147.5°	1759.2	1758.5	1757.8	1756.7	1755.2	1753.7	1752.2	1750.6	1752.2	1753.7	1755.2
150°	1792.7	1792.0	1791.3	1790.5	1789.5	1788.5	1787.5	1786.5	1787.5	1788.5	1789.5
152.5°	1821.9	1821.5	1821.1	1820.7	1820.2	1819.7	1819.3	1818.8	1819.3	1819.7	1820.2
155°	1862.1	1861.8	1861.4	1861.6	1862.3	1862.9	1863.6	1864.2	1863.6	1862.9	1862.3
157.5°	1898.4	1898.7	1899.1	1899.3	1899.3	1899.4	1899.5	1899.5	1899.5	1899.4	1899.3
160°	1918.7	1919.1	1919.4	1919.7	1920.1	1920.4	1920.7	1921.1	1920.7	1920.4	1920.1
162.5°	1936.7	1937.0	1937.3	1937.9	1938.8	1939.7	1940.5	1941.4	1940.5	1939.7	1938.8
165°	1960.6	1960.9	1961.3	1961.9	1962.9	1963.9	1964.9	1965.9	1964.9	1963.9	1962.9
167.5°	1979.1	1979.1	1979.1	1979.7	1981.1	1982.4	1983.7	1985.0	1983.7	1982.4	1981.1
170°	1989.8	1989.8	1989.8	1990.5	1991.8	1993.1	1994.5	1995.8	1994.5	1993.1	1991.8
172.5°	1996.5	1996.2	1995.9	1996.6	1998.2	1999.8	2001.4	2003.0	2001.4	1999.8	1998.2
175°	2005.6	2005.3	2004.9	2005.6	2007.3	2008.9	2010.6	2012.2	2010.6	2008.9	2007.3
177.5°	2009.3	2009.1	2008.8	2009.3	2010.7	2012.0	2013.3	2014.6	2013.3	2012.0	2010.7
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-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°	20.6	23.2	24.7	26.2	27.7	27.9	28.8	29.1	30.0	30.2	30.4
90°	14.8	18.6	22.9	27.2	31.6	35.9	37.2	38.5	39.9	41.2	42.2
92.5°	24.1	25.2	28.5	31.8	35.0	38.3	40.4	42.5	44.7	46.8	48.0
95°	36.7	31.7	35.4	39.0	42.7	46.3	48.7	51.0	53.3	55.6	56.8
97.5°	158.8	143.8	119.9	96.0	72.1	48.1	50.8	53.5	56.1	58.8	60.3
100°	279.2	256.6	204.8	153.0	101.2	49.3	52.0	54.6	57.3	60.0	61.5
102.5°	350.7	324.8	268.2	211.6	155.0	98.4	90.1	81.9	73.7	65.4	61.6
105°	460.1	447.0	417.1	387.2	357.3	327.4	268.6	209.8	151.0	92.2	63.1
107.5°	577.4	581.2	585.9	590.7	595.4	600.1	557.0	513.8	470.7	427.6	383.9
110°	656.5	659.6	663.3	666.9	670.6	674.2	663.3	652.3	641.3	630.4	601.1



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	731.9	735.0	738.6	742.3	745.9	749.6	749.8	750.0	750.2	750.4	745.5
115°	843.7	846.2	849.2	852.1	855.1	858.1	861.4	864.8	868.1	871.4	873.7
117.5°	955.3	957.3	958.8	960.3	961.8	963.4	966.0	968.7	971.3	974.0	975.5
120°	1025.6	1027.6	1028.5	1029.5	1030.5	1031.5	1034.2	1036.9	1039.5	1042.2	1043.5
122.5°	1092.8	1094.7	1095.9	1097.2	1098.4	1099.7	1101.6	1103.4	1105.3	1107.2	1108.2
125°	1188.7	1190.7	1192.0	1193.3	1194.7	1196.0	1196.7	1197.3	1198.0	1198.6	1199.3
127.5°	1280.8	1282.9	1284.5	1286.1	1287.7	1289.3	1290.3	1291.4	1292.5	1293.5	1293.7
130°	1338.2	1340.2	1341.5	1342.8	1344.2	1345.5	1346.8	1348.1	1349.5	1350.8	1351.1
132.5°	1393.2	1395.1	1396.1	1397.2	1398.2	1399.3	1400.6	1402.0	1403.3	1404.6	1404.8
135°	1474.6	1476.2	1477.5	1478.9	1480.2	1481.5	1482.5	1483.5	1484.5	1485.5	1485.5
137.5°	1548.4	1550.1	1550.8	1551.5	1552.3	1553.0	1554.6	1556.2	1557.8	1559.4	1559.8
140°	1594.2	1595.6	1596.6	1597.6	1598.6	1599.6	1601.0	1602.3	1603.6	1604.9	1605.3
142.5°	1638.4	1639.9	1640.9	1641.9	1642.9	1643.9	1644.9	1646.0	1647.1	1648.1	1648.2
145°	1701.6	1703.1	1703.8	1704.4	1705.1	1705.8	1706.4	1707.1	1707.8	1708.4	1708.8
147.5°	1756.7	1757.8	1758.5	1759.2	1759.8	1760.5	1761.2	1761.8	1762.5	1763.2	1762.7
150°	1790.5	1791.3	1792.0	1792.7	1793.3	1794.0	1794.6	1795.3	1796.0	1796.6	1796.5
152.5°	1820.7	1821.1	1821.5	1821.9	1822.3	1822.7	1823.9	1825.1	1826.3	1827.5	1827.3
155°	1861.6	1861.4	1861.8	1862.1	1862.4	1862.7	1864.4	1866.1	1867.7	1869.4	1869.2
157.5°	1899.3	1899.1	1898.7	1898.4	1898.1	1897.7	1899.7	1901.7	1903.7	1905.7	1905.4
160°	1919.7	1919.4	1919.1	1918.7	1918.4	1918.1	1920.1	1922.1	1924.0	1926.0	1925.9
162.5°	1937.9	1937.3	1937.0	1936.7	1936.3	1936.0	1938.3	1940.5	1942.8	1945.0	1945.1
165°	1961.9	1961.3	1960.9	1960.6	1960.3	1959.9	1962.6	1965.2	1967.9	1970.6	1970.7
167.5°	1979.7	1979.1	1979.1	1979.1	1979.1	1979.1	1981.7	1984.4	1987.0	1989.7	1989.7
170°	1990.5	1989.8	1989.8	1989.8	1989.8	1989.8	1992.5	1995.1	1997.8	2000.5	2000.5
172.5°	1996.6	1995.9	1996.2	1996.5	1996.7	1997.0	1999.7	2002.3	2005.0	2007.6	2007.5
175°	2005.6	2004.9	2005.3	2005.6	2005.9	2006.3	2008.6	2010.9	2013.2	2015.6	2015.4
177.5°	2009.3	2008.8	2009.1	2009.3	2009.6	2009.9	2012.0	2014.1	2016.2	2018.4	2018.1
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-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°	31.8	30.7	30.8	31.6	30.8	30.7	31.8	30.4	30.2	30.0	29.1
90°	42.9	43.5	44.2	44.8	44.2	43.5	42.9	42.2	41.2	39.9	38.5
92.5°	48.4	48.8	49.2	49.6	49.2	48.8	48.4	48.0	46.8	44.7	42.5
95°	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	55.6	53.3	51.0
97.5°	60.6	60.9	61.3	61.6	61.3	60.9	60.6	60.3	58.8	56.1	53.5
100°	61.8	62.1	62.5	62.8	62.5	62.1	61.8	61.5	60.0	57.3	54.6
102.5°	62.2	62.8	63.4	64.0	63.4	62.8	62.2	61.6	65.4	73.7	81.9
105°	63.8	64.5	65.1	65.8	65.1	64.5	63.8	63.1	92.2	151.0	209.8
107.5°	339.6	295.2	250.9	206.6	250.9	295.2	339.6	383.9	427.6	470.7	513.8
110°	553.6	506.1	458.6	411.1	458.6	506.1	553.6	601.1	630.4	641.3	652.3



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	735.4	725.4	715.4	705.3	715.4	725.4	735.4	745.5	750.4	750.2	750.0
115°	875.1	876.4	877.7	879.1	877.7	876.4	875.1	873.7	871.4	868.1	864.8
117.5°	975.7	976.0	976.3	976.5	976.3	976.0	975.7	975.5	974.0	971.3	968.7
120°	1043.5	1043.5	1043.5	1043.5	1043.5	1043.5	1043.5	1043.5	1042.2	1039.5	1036.9
122.5°	1108.5	1108.7	1109.0	1109.3	1109.0	1108.7	1108.5	1108.2	1107.2	1105.3	1103.4
125°	1200.0	1200.6	1201.3	1202.0	1201.3	1200.6	1200.0	1199.3	1198.6	1198.0	1197.3
127.5°	1293.1	1292.4	1291.7	1291.1	1291.7	1292.4	1293.1	1293.7	1293.5	1292.5	1291.4
130°	1350.5	1349.8	1349.1	1348.5	1349.1	1349.8	1350.5	1351.1	1350.8	1349.5	1348.1
132.5°	1403.9	1403.0	1402.0	1401.1	1402.0	1403.0	1403.9	1404.8	1404.6	1403.3	1402.0
135°	1484.5	1483.5	1482.5	1481.5	1482.5	1483.5	1484.5	1485.5	1485.5	1484.5	1483.5
137.5°	1559.2	1558.5	1557.8	1557.2	1557.8	1558.5	1559.2	1559.8	1559.4	1557.8	1556.2
140°	1604.6	1604.0	1603.3	1602.6	1603.3	1604.0	1604.6	1605.3	1604.9	1603.6	1602.3
142.5°	1647.3	1646.3	1645.4	1644.5	1645.4	1646.3	1647.3	1648.2	1648.1	1647.1	1646.0
145°	1708.8	1708.8	1708.8	1708.8	1708.8	1708.8	1708.8	1708.8	1708.4	1707.8	1707.1
147.5°	1761.2	1759.7	1758.1	1756.6	1758.1	1759.7	1761.2	1762.7	1763.2	1762.5	1761.8
150°	1795.5	1794.5	1793.5	1792.5	1793.5	1794.5	1795.5	1796.5	1796.6	1796.0	1795.3
152.5°	1825.8	1824.2	1822.7	1821.2	1822.7	1824.2	1825.8	1827.3	1827.5	1826.3	1825.1
155°	1867.2	1865.2	1863.2	1861.3	1863.2	1865.2	1867.2	1869.2	1869.4	1867.7	1866.1
157.5°	1902.8	1900.2	1897.6	1895.0	1897.6	1900.2	1902.8	1905.4	1905.7	1903.7	1901.7
160°	1923.5	1921.2	1918.9	1916.6	1918.9	1921.2	1923.5	1925.9	1926.0	1924.0	1922.1
162.5°	1943.1	1941.0	1939.0	1936.9	1939.0	1941.0	1943.1	1945.1	1945.0	1942.8	1940.5
165°	1968.4	1966.1	1963.7	1961.4	1963.7	1966.1	1968.4	1970.7	1970.6	1967.9	1965.2
167.5°	1987.0	1984.4	1981.7	1979.1	1981.7	1984.4	1987.0	1989.7	1989.7	1987.0	1984.4
170°	1997.8	1995.1	1992.5	1989.8	1992.5	1995.1	1997.8	2000.5	2000.5	1997.8	1995.1
172.5°	2004.6	2001.7	1998.7	1995.8	1998.7	2001.7	2004.6	2007.5	2007.6	2005.0	2002.3
175°	2012.7	2010.1	2007.4	2004.8	2007.4	2010.1	2012.7	2015.4	2015.6	2013.2	2010.9
177.5°	2015.4	2012.8	2010.1	2007.5	2010.1	2012.8	2015.4	2018.1	2018.4	2016.2	2014.1
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-UDD-A

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°	28.8	27.9	27.7	26.2	24.7	23.2	20.6	20.5	19.9	21.7	20.4
90°	37.2	35.9	31.6	27.2	22.9	18.6	14.8	11.5	8.1	4.8	1.5
92.5°	40.4	38.3	35.0	31.8	28.5	25.2	24.1	25.0	25.9	26.9	27.8
95°	48.7	46.3	42.7	39.0	35.4	31.7	36.7	50.3	64.0	77.6	91.2
97.5°	50.8	48.1	72.1	96.0	119.9	143.8	158.8	164.9	171.1	177.2	183.3
100°	52.0	49.3	101.2	153.0	204.8	256.6	279.2	272.6	265.9	259.3	252.7
102.5°	90.1	98.4	155.0	211.6	268.2	324.8	350.7	345.9	341.2	336.4	331.6
105°	268.6	327.4	357.3	387.2	417.1	447.0	460.1	456.5	452.8	449.2	445.5
107.5°	557.0	600.1	595.4	590.7	585.9	581.2	577.4	574.5	571.5	568.6	565.7
110°	663.3	674.2	670.6	666.9	663.3	659.6	656.5	653.8	651.1	648.5	645.8



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	749.8	749.6	745.9	742.3	738.6	735.0	731.9	729.6	727.2	724.8	722.4
115°	861.4	858.1	855.1	852.1	849.2	846.2	843.7	841.7	839.7	837.7	835.7
117.5°	966.0	963.4	961.8	960.3	958.8	957.3	955.3	952.8	950.3	947.9	945.4
120°	1034.2	1031.5	1030.5	1029.5	1028.5	1027.6	1025.6	1022.6	1019.6	1016.6	1013.6
122.5°	1101.6	1099.7	1098.4	1097.2	1095.9	1094.7	1092.8	1090.3	1087.9	1085.4	1083.0
125°	1196.7	1196.0	1194.7	1193.3	1192.0	1190.7	1188.7	1186.0	1183.4	1180.7	1178.0
127.5°	1290.3	1289.3	1287.7	1286.1	1284.5	1282.9	1280.8	1278.1	1275.5	1272.8	1270.1
130°	1346.8	1345.5	1344.2	1342.8	1341.5	1340.2	1338.2	1335.5	1332.9	1330.2	1327.5
132.5°	1400.6	1399.3	1398.2	1397.2	1396.1	1395.1	1393.2	1390.5	1387.9	1385.2	1382.6
135°	1482.5	1481.5	1480.2	1478.9	1477.5	1476.2	1474.6	1472.6	1470.6	1468.6	1466.6
137.5°	1554.6	1553.0	1552.3	1551.5	1550.8	1550.1	1548.4	1545.9	1543.4	1540.9	1538.3
140°	1601.0	1599.6	1598.6	1597.6	1596.6	1595.6	1594.2	1592.2	1590.2	1588.2	1586.2
142.5°	1644.9	1643.9	1642.9	1641.9	1640.9	1639.9	1638.4	1636.4	1634.4	1632.4	1630.4
145°	1706.4	1705.8	1705.1	1704.4	1703.8	1703.1	1701.6	1699.3	1697.0	1694.6	1692.3
147.5°	1761.2	1760.5	1759.8	1759.2	1758.5	1757.8	1756.7	1755.2	1753.7	1752.2	1750.6
150°	1794.6	1794.0	1793.3	1792.7	1792.0	1791.3	1790.5	1789.5	1788.5	1787.5	1786.5
152.5°	1823.9	1822.7	1822.3	1821.9	1821.5	1821.1	1820.7	1820.2	1819.7	1819.3	1818.8
155°	1864.4	1862.7	1862.4	1862.1	1861.8	1861.4	1861.6	1862.3	1862.9	1863.6	1864.2
157.5°	1899.7	1897.7	1898.1	1898.4	1898.7	1899.1	1899.3	1899.3	1899.4	1899.5	1899.5
160°	1920.1	1918.1	1918.4	1918.7	1919.1	1919.4	1919.7	1920.1	1920.4	1920.7	1921.1
162.5°	1938.3	1936.0	1936.3	1936.7	1937.0	1937.3	1937.9	1938.8	1939.7	1940.5	1941.4
165°	1962.6	1959.9	1960.3	1960.6	1960.9	1961.3	1961.9	1962.9	1963.9	1964.9	1965.9
167.5°	1981.7	1979.1	1979.1	1979.1	1979.1	1979.1	1979.7	1981.1	1982.4	1983.7	1985.0
170°	1992.5	1989.8	1989.8	1989.8	1989.8	1989.8	1990.5	1991.8	1993.1	1994.5	1995.8
172.5°	1999.7	1997.0	1996.7	1996.5	1996.2	1995.9	1996.6	1998.2	1999.8	2001.4	2003.0
175°	2008.6	2006.3	2005.9	2005.6	2005.3	2004.9	2005.6	2007.3	2008.9	2010.6	2012.2
177.5°	2012.0	2009.9	2009.6	2009.3	2009.1	2008.8	2009.3	2010.7	2012.0	2013.3	2014.6
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-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°	17.9	14.8	14.9	13.6	14.4	14.0	15.5	15.1	15.3	16.2	15.3
90°	4.8	8.1	11.5	14.8	18.6	22.9	27.2	31.6	35.9	37.2	38.5
92.5°	26.9	25.9	25.0	24.1	25.2	28.5	31.8	35.0	38.3	40.4	42.5
95°	77.6	64.0	50.3	36.7	31.7	35.4	39.0	42.7	46.3	48.7	51.0
97.5°	177.2	171.1	164.9	158.8	143.8	119.9	96.0	72.1	48.1	50.8	53.5
100°	259.3	265.9	272.6	279.2	256.6	204.8	153.0	101.2	49.3	52.0	54.6
102.5°	336.4	341.2	345.9	350.7	324.8	268.2	211.6	155.0	98.4	90.1	81.9
105°	449.2	452.8	456.5	460.1	447.0	417.1	387.2	357.3	327.4	268.6	209.8
107.5°	568.6	571.5	574.5	577.4	581.2	585.9	590.7	595.4	600.1	557.0	513.8
110°	648.5	651.1	653.8	656.5	659.6	663.3	666.9	670.6	674.2	663.3	652.3



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	724.8	727.2	729.6	731.9	735.0	738.6	742.3	745.9	749.6	749.8	750.0
115°	837.7	839.7	841.7	843.7	846.2	849.2	852.1	855.1	858.1	861.4	864.8
117.5°	947.9	950.3	952.8	955.3	957.3	958.8	960.3	961.8	963.4	966.0	968.7
120°	1016.6	1019.6	1022.6	1025.6	1027.6	1028.5	1029.5	1030.5	1031.5	1034.2	1036.9
122.5°	1085.4	1087.9	1090.3	1092.8	1094.7	1095.9	1097.2	1098.4	1099.7	1101.6	1103.4
125°	1180.7	1183.4	1186.0	1188.7	1190.7	1192.0	1193.3	1194.7	1196.0	1196.7	1197.3
127.5°	1272.8	1275.5	1278.1	1280.8	1282.9	1284.5	1286.1	1287.7	1289.3	1290.3	1291.4
130°	1330.2	1332.9	1335.5	1338.2	1340.2	1341.5	1342.8	1344.2	1345.5	1346.8	1348.1
132.5°	1385.2	1387.9	1390.5	1393.2	1395.1	1396.1	1397.2	1398.2	1399.3	1400.6	1402.0
135°	1468.6	1470.6	1472.6	1474.6	1476.2	1477.5	1478.9	1480.2	1481.5	1482.5	1483.5
137.5°	1540.9	1543.4	1545.9	1548.4	1550.1	1550.8	1551.5	1552.3	1553.0	1554.6	1556.2
140°	1588.2	1590.2	1592.2	1594.2	1595.6	1596.6	1597.6	1598.6	1599.6	1601.0	1602.3
142.5°	1632.4	1634.4	1636.4	1638.4	1639.9	1640.9	1641.9	1642.9	1643.9	1644.9	1646.0
145°	1694.6	1697.0	1699.3	1701.6	1703.1	1703.8	1704.4	1705.1	1705.8	1706.4	1707.1
147.5°	1752.2	1753.7	1755.2	1756.7	1757.8	1758.5	1759.2	1759.8	1760.5	1761.2	1761.8
150°	1787.5	1788.5	1789.5	1790.5	1791.3	1792.0	1792.7	1793.3	1794.0	1794.6	1795.3
152.5°	1819.3	1819.7	1820.2	1820.7	1821.1	1821.5	1821.9	1822.3	1822.7	1823.9	1825.1
155°	1863.6	1862.9	1862.3	1861.6	1861.4	1861.8	1862.1	1862.4	1862.7	1864.4	1866.1
157.5°	1899.5	1899.4	1899.3	1899.3	1899.1	1898.7	1898.4	1898.1	1897.7	1899.7	1901.7
160°	1920.7	1920.4	1920.1	1919.7	1919.4	1919.1	1918.7	1918.4	1918.1	1920.1	1922.1
162.5°	1940.5	1939.7	1938.8	1937.9	1937.3	1937.0	1936.7	1936.3	1936.0	1938.3	1940.5
165°	1964.9	1963.9	1962.9	1961.9	1961.3	1960.9	1960.6	1960.3	1959.9	1962.6	1965.2
167.5°	1983.7	1982.4	1981.1	1979.7	1979.1	1979.1	1979.1	1979.1	1979.1	1981.7	1984.4
170°	1994.5	1993.1	1991.8	1990.5	1989.8	1989.8	1989.8	1989.8	1989.8	1992.5	1995.1
172.5°	2001.4	1999.8	1998.2	1996.6	1995.9	1996.2	1996.5	1996.7	1997.0	1999.7	2002.3
175°	2010.6	2008.9	2007.3	2005.6	2004.9	2005.3	2005.6	2005.9	2006.3	2008.6	2010.9
177.5°	2013.3	2012.0	2010.7	2009.3	2008.8	2009.1	2009.3	2009.6	2009.9	2012.0	2014.1
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-UDD-A

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°	15.5	15.8	15.4	15.5	15.0	16.4	15.3
90°	39.9	41.2	42.2	42.9	43.5	44.2	44.8
92.5°	44.7	46.8	48.0	48.4	48.8	49.2	49.6
95°	53.3	55.6	56.8	56.8	56.8	56.8	56.8
97.5°	56.1	58.8	60.3	60.6	60.9	61.3	61.6
100°	57.3	60.0	61.5	61.8	62.1	62.5	62.8
102.5°	73.7	65.4	61.6	62.2	62.8	63.4	64.0
105°	151.0	92.2	63.1	63.8	64.5	65.1	65.8
107.5°	470.7	427.6	383.9	339.6	295.2	250.9	206.6
110°	641.3	630.4	601.1	553.6	506.1	458.6	411.1



TEST NUMBER: P332486

CATALOG NUMBER: S123RDIW-S1165D1535U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	750.2	750.4	745.5	735.4	725.4	715.4	705.3
115°	868.1	871.4	873.7	875.1	876.4	877.7	879.1
117.5°	971.3	974.0	975.5	975.7	976.0	976.3	976.5
120°	1039.5	1042.2	1043.5	1043.5	1043.5	1043.5	1043.5
122.5°	1105.3	1107.2	1108.2	1108.5	1108.7	1109.0	1109.3
125°	1198.0	1198.6	1199.3	1200.0	1200.6	1201.3	1202.0
127.5°	1292.5	1293.5	1293.7	1293.1	1292.4	1291.7	1291.1
130°	1349.5	1350.8	1351.1	1350.5	1349.8	1349.1	1348.5
132.5°	1403.3	1404.6	1404.8	1403.9	1403.0	1402.0	1401.1
135°	1484.5	1485.5	1485.5	1484.5	1483.5	1482.5	1481.5
137.5°	1557.8	1559.4	1559.8	1559.2	1558.5	1557.8	1557.2
140°	1603.6	1604.9	1605.3	1604.6	1604.0	1603.3	1602.6
142.5°	1647.1	1648.1	1648.2	1647.3	1646.3	1645.4	1644.5
145°	1707.8	1708.4	1708.8	1708.8	1708.8	1708.8	1708.8
147.5°	1762.5	1763.2	1762.7	1761.2	1759.7	1758.1	1756.6
150°	1796.0	1796.6	1796.5	1795.5	1794.5	1793.5	1792.5
152.5°	1826.3	1827.5	1827.3	1825.8	1824.2	1822.7	1821.2
155°	1867.7	1869.4	1869.2	1867.2	1865.2	1863.2	1861.3
157.5°	1903.7	1905.7	1905.4	1902.8	1900.2	1897.6	1895.0
160°	1924.0	1926.0	1925.9	1923.5	1921.2	1918.9	1916.6
162.5°	1942.8	1945.0	1945.1	1943.1	1941.0	1939.0	1936.9
165°	1967.9	1970.6	1970.7	1968.4	1966.1	1963.7	1961.4
167.5°	1987.0	1989.7	1989.7	1987.0	1984.4	1981.7	1979.1
170°	1997.8	2000.5	2000.5	1997.8	1995.1	1992.5	1989.8
172.5°	2005.0	2007.6	2007.5	2004.6	2001.7	1998.7	1995.8
175°	2013.2	2015.6	2015.4	2012.7	2010.1	2007.4	2004.8
177.5°	2016.2	2018.4	2018.1	2015.4	2012.8	2010.1	2007.5
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2

(END OF REPORT)