

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: P332234-940

Luminaire Tested: **S123DIW-S1165D1535U940-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332234-940  
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: S123DIW-S1165D1535U940-4F0-1E-UDD-A  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1535 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9842.7 lumens  
Efficiency: N/A  
Efficacy: 118.7 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: General Diffuse

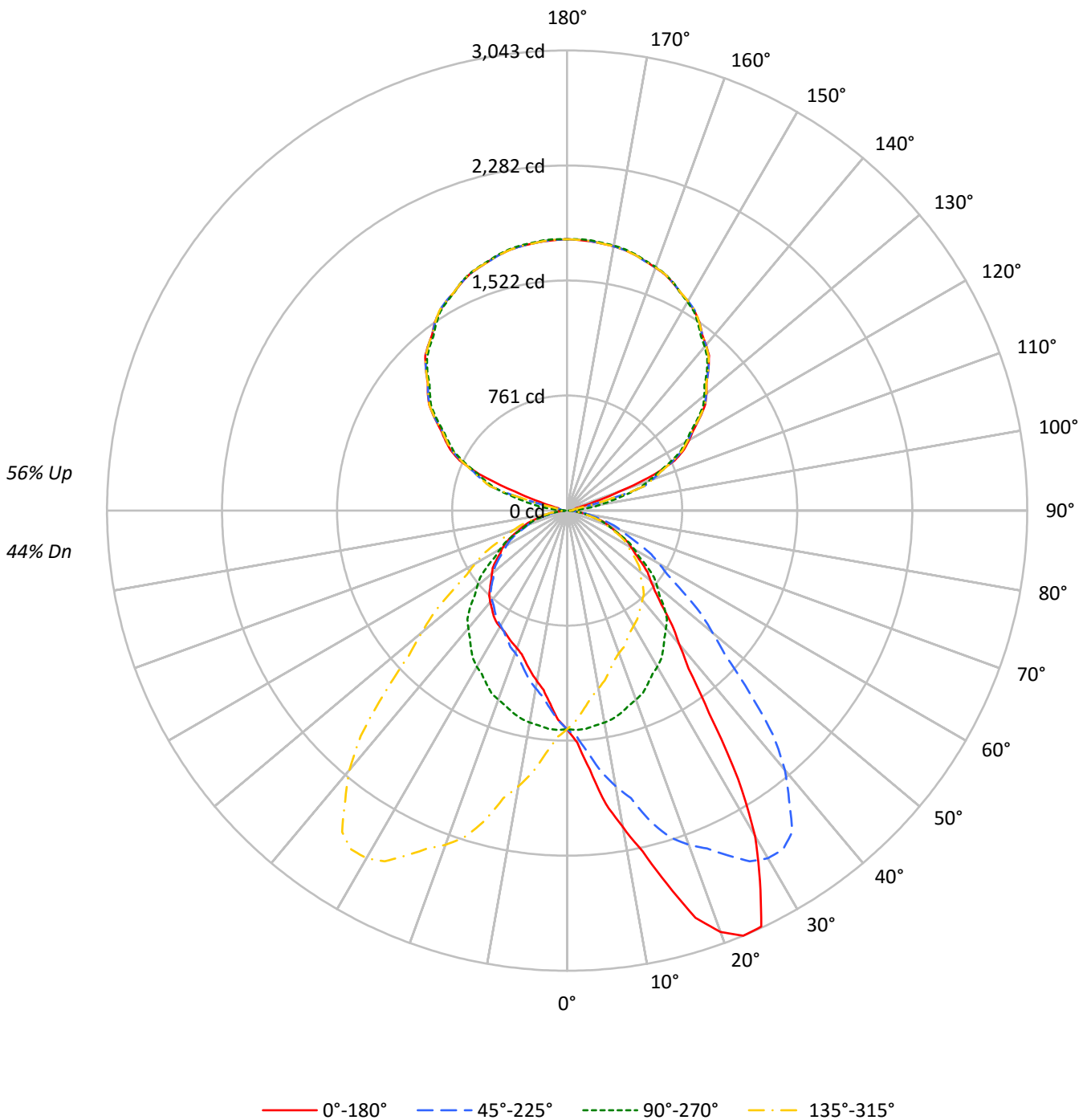
Input Watts (W): 82.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

### Luminous Intensity Polar Plot





TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-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	50	30	10	50	30	10	0		
RCR																										
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44					44			
1	97	93	89	85	88	85	82	79	71	68	66	58	56	55	45	44	44	38					38			
2	88	81	75	70	81	75	69	65	62	58	55	51	48	46	40	39	37	32					32			
3	81	71	64	59	74	66	60	55	55	50	47	45	42	39	36	34	32	27					27			
4	74	63	56	50	67	58	52	46	49	44	40	40	37	34	32	30	27	24					24			
5	68	56	48	43	62	52	45	40	44	39	34	36	32	29	29	26	24	21					21			
6	62	51	43	37	57	47	40	35	40	34	30	33	29	26	26	23	21	18					18			
7	58	46	38	32	53	42	35	30	36	30	26	30	26	23	24	21	19	16					16			
8	54	41	34	29	49	38	32	27	33	27	24	27	23	20	22	19	17	14					14			
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	20	17	15	13					13			
10	47	35	28	23	43	32	26	21	27	22	19	23	19	16	19	16	14	12					12			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	15569	15569	15569	15569
5°	18567	15637	13857	15637
10°	23240	15557	12516	15557
15°	28505	15432	11652	15432
20°	33956	15237	11094	15237
25°	36056	14998	10969	14998
30°	30904	14825	11028	14825
35°	21494	14578	11143	14578
40°	16190	14289	11108	14289
45°	13443	13857	10966	13857
50°	12042	12980	10868	12980
55°	11258	12033	10732	12033
60°	10559	11044	10622	11044
65°	9926	10068	10282	10068
70°	9309	8954	9791	8954
75°	8339	7839	8979	7839
80°	7296	6428	7736	6428
85°	5718	4668	5199	4668



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.5	1.4
10°-20°	456.9	4.6
20°-30°	766.8	7.8
30°-40°	868.3	8.8
40°-50°	778.6	7.9
50°-60°	628.3	6.4
60°-70°	437.9	4.4
70°-80°	230.1	2.3
80°-90°	61.3	0.6
90°-100°	65.2	0.7
100°-110°	310.9	3.2
110°-120°	746.8	7.6
120°-130°	951.0	9.7
130°-140°	1016.1	10.3
140°-150°	950.2	9.7
150°-160°	766.5	7.8
160°-170°	494.7	5.0
170°-180°	170.5	1.7
0°-30°	1366.2	13.9
0°-40°	2234.5	22.7
0°-60°	3641.5	37.0
0°-90°	4370.8	44.4
90°-120°	1123.0	11.4
90°-150°	4040.3	41.0
90°-180°	5472.0	55.6
0°-180°	9842.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1446	1446	1446	1446	1446	
5°	1718	1447	1282	1447	1718	178
15°	2558	1385	1046	1385	2558	739
25°	3036	1263	924	1263	3036	1331
35°	1636	1109	848	1109	1636	1063
45°	883	910	720	910	883	699
55°	600	641	572	641	600	538
65°	390	395	404	395	390	388
75°	200	188	216	188	200	215
85°	46	38	42	38	46	56
90°	40	1	40	1	40	20
95°	51	81	51	81	51	42
105°	59	397	59	397	59	134
115°	784	745	784	745	784	724
125°	1072	1050	1072	1050	1072	957
135°	1321	1308	1321	1308	1321	1019
145°	1524	1509	1524	1509	1524	951
155°	1660	1662	1660	1662	1660	765
165°	1749	1753	1749	1753	1749	494
175°	1788	1794	1788	1794	1788	170
180°	1794	1794	1794	1794	1794	



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1535.1	1533.9	1531.2	1533.4	1528.9	1522.7	1522.2	1516.5	1500.3	1499.1	1494.7
5°	1718.4	1712.8	1712.1	1711.4	1701.6	1688.3	1663.0	1660.9	1627.3	1610.4	1590.2
7.5°	1955.8	1958.7	1948.6	1939.6	1909.6	1889.8	1862.8	1828.2	1786.8	1744.9	1717.0
10°	2126.3	2149.4	2120.7	2101.0	2082.9	2048.4	2008.6	1958.7	1909.0	1850.8	1806.7
12.5°	2309.1	2320.4	2314.6	2296.2	2267.8	2215.5	2144.7	2090.0	2044.2	1947.3	1908.2
15°	2558.0	2600.8	2573.4	2510.3	2511.7	2461.9	2369.5	2267.8	2213.9	2129.0	2013.5
17.5°	2823.2	2828.5	2816.8	2764.3	2729.3	2660.9	2575.5	2478.1	2368.7	2266.2	2143.5
20°	2964.4	2960.2	2935.7	2908.4	2848.1	2794.9	2701.6	2593.0	2452.8	2352.0	2218.0
22.5°	3043.0	3035.9	3024.3	3001.4	2951.3	2894.0	2810.4	2691.7	2558.2	2419.2	2264.6
25°	3035.9	3045.0	3046.4	3040.1	3022.6	2988.3	2922.4	2827.8	2694.7	2516.0	2354.7
27.5°	2761.2	2774.1	2811.6	2844.7	2881.9	2919.7	2914.6	2867.7	2769.2	2614.9	2417.8
30°	2486.4	2458.4	2527.8	2615.5	2675.0	2780.1	2839.0	2842.5	2787.1	2654.7	2462.6
32.5°	2105.2	2136.1	2166.8	2274.6	2404.8	2522.8	2640.0	2734.3	2745.1	2656.9	2489.0
35°	1635.7	1674.3	1730.3	1786.4	1926.5	2047.1	2253.1	2432.5	2575.5	2594.4	2491.4
37.5°	1318.1	1337.1	1372.6	1428.8	1520.5	1663.5	1822.8	2049.6	2256.7	2410.8	2417.5
40°	1152.2	1157.7	1197.7	1240.5	1314.7	1432.4	1576.1	1776.6	2024.6	2239.8	2329.5
42.5°	1027.7	1040.0	1056.9	1098.1	1157.2	1245.8	1379.4	1545.0	1772.4	2020.0	2195.5
45°	883.1	897.1	907.6	934.9	977.0	1036.5	1129.7	1281.1	1454.2	1709.9	1946.2
47.5°	787.5	788.5	796.4	817.0	845.6	890.3	956.2	1053.5	1212.4	1419.9	1662.3
50°	719.1	730.2	733.1	749.1	771.6	804.5	859.2	941.9	1072.3	1254.5	1477.3
52.5°	670.8	674.2	682.1	693.7	713.3	739.0	786.3	851.0	953.4	1108.7	1313.6
55°	599.9	599.9	607.6	616.7	627.9	651.0	682.6	730.2	808.1	928.5	1098.1
57.5°	534.3	537.8	543.2	546.1	555.6	570.9	597.3	633.4	691.4	784.2	919.1
60°	490.5	496.9	496.1	501.8	510.2	522.1	544.6	574.0	625.8	700.1	813.7
62.5°	452.5	452.0	451.9	458.6	467.0	478.4	492.9	518.4	562.5	628.4	725.1
65°	389.7	388.3	393.2	397.3	400.2	408.6	419.8	442.2	471.6	520.7	595.7
67.5°	333.9	329.8	332.4	333.9	338.7	345.2	355.7	369.6	393.0	432.4	488.9
70°	295.8	292.2	291.5	292.9	297.1	302.0	309.8	323.1	344.8	376.3	417.7
72.5°	256.5	254.1	254.0	257.1	259.0	262.3	267.7	279.9	297.1	320.8	359.4
75°	200.5	200.5	200.5	201.2	203.2	206.1	210.3	216.5	229.9	246.6	272.6
77.5°	150.3	150.1	149.3	149.1	152.2	153.5	154.4	160.3	167.7	179.1	198.0
80°	117.7	114.2	115.7	117.7	119.1	119.8	122.0	123.3	129.7	136.0	149.3
82.5°	87.5	84.5	84.8	88.0	88.3	89.0	91.1	93.1	95.4	101.2	108.3
85°	46.3	46.3	47.0	47.0	47.6	47.0	49.0	49.8	49.8	53.2	57.4
87.5°	24.8	23.5	24.0	24.4	23.8	24.2	24.5	24.8	25.1	25.5	25.2
90°	39.9	39.4	38.8	38.3	37.6	36.7	35.6	34.3	33.2	32.0	28.2
92.5°	44.2	43.9	43.5	43.2	42.8	41.7	39.9	37.9	36.0	34.2	31.2
95°	50.6	50.6	50.6	50.6	50.6	49.6	47.5	45.5	43.4	41.3	38.1
97.5°	54.9	54.7	54.3	54.0	53.8	52.4	50.0	47.7	45.3	42.9	64.3
100°	56.0	55.7	55.4	55.1	54.8	53.5	51.1	48.7	46.4	44.0	90.2
102.5°	57.1	56.5	56.0	55.5	54.9	58.3	65.7	73.0	80.3	87.7	138.2
105°	58.7	58.1	57.5	56.9	56.3	82.2	134.6	187.1	239.5	291.9	318.6
107.5°	184.2	223.7	263.2	302.8	342.3	381.3	419.7	458.2	496.7	535.1	530.9
110°	366.6	408.9	451.3	493.7	536.0	562.1	571.9	581.7	591.5	601.2	598.0



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	628.9	637.9	646.8	655.8	664.8	669.1	669.0	668.8	668.6	668.4	665.1
115°	783.9	782.7	781.5	780.3	779.1	777.0	774.1	771.2	768.1	765.2	762.5
117.5°	870.8	870.6	870.3	870.0	869.9	868.5	866.1	863.8	861.4	859.1	857.6
120°	930.5	930.5	930.5	930.5	930.5	929.3	926.9	924.6	922.2	919.8	918.9
122.5°	989.2	988.9	988.6	988.5	988.2	987.3	985.6	983.9	982.3	980.6	979.5
125°	1071.8	1071.2	1070.6	1070.1	1069.4	1068.8	1068.3	1067.6	1067.1	1066.5	1065.3
127.5°	1151.3	1151.8	1152.4	1153.1	1153.6	1153.4	1152.5	1151.6	1150.6	1149.7	1148.3
130°	1202.5	1203.0	1203.6	1204.3	1204.8	1204.5	1203.4	1202.1	1201.0	1199.8	1198.6
132.5°	1249.4	1250.2	1251.1	1251.9	1252.7	1252.5	1251.3	1250.2	1248.9	1247.8	1246.8
135°	1321.1	1322.0	1322.9	1323.7	1324.6	1324.6	1323.7	1322.9	1322.0	1321.1	1319.9
137.5°	1388.6	1389.1	1389.7	1390.4	1390.9	1390.5	1389.1	1387.7	1386.3	1384.8	1384.2
140°	1429.1	1429.7	1430.3	1430.8	1431.5	1431.1	1429.9	1428.8	1427.6	1426.4	1425.5
142.5°	1466.4	1467.2	1468.0	1468.9	1469.7	1469.6	1468.7	1467.8	1466.8	1465.9	1465.0
145°	1523.8	1523.8	1523.8	1523.8	1523.8	1523.4	1522.9	1522.2	1521.6	1521.1	1520.5
147.5°	1566.4	1567.7	1569.1	1570.5	1571.8	1572.3	1571.6	1571.0	1570.5	1569.9	1569.2
150°	1598.4	1599.3	1600.2	1601.1	1602.0	1602.0	1601.5	1600.9	1600.3	1599.7	1599.1
152.5°	1624.0	1625.3	1626.7	1628.1	1629.4	1629.6	1628.5	1627.5	1626.4	1625.3	1625.0
155°	1659.7	1661.4	1663.2	1665.0	1666.8	1667.0	1665.4	1664.0	1662.5	1661.0	1660.7
157.5°	1689.8	1692.1	1694.4	1696.7	1699.1	1699.3	1697.5	1695.8	1694.0	1692.2	1692.6
160°	1709.1	1711.1	1713.2	1715.2	1717.3	1717.4	1715.7	1714.0	1712.2	1710.4	1710.7
162.5°	1727.2	1729.0	1730.8	1732.7	1734.5	1734.4	1732.4	1730.4	1728.4	1726.4	1726.6
165°	1749.0	1751.1	1753.2	1755.2	1757.3	1757.2	1754.8	1752.4	1750.1	1747.7	1748.0
167.5°	1764.8	1767.1	1769.5	1771.8	1774.2	1774.2	1771.8	1769.5	1767.1	1764.8	1764.8
170°	1774.3	1776.7	1779.1	1781.5	1783.9	1783.9	1781.5	1779.1	1776.7	1774.3	1774.3
172.5°	1779.7	1782.3	1784.9	1787.5	1790.1	1790.2	1787.9	1785.5	1783.2	1780.7	1780.5
175°	1787.7	1790.0	1792.4	1794.7	1797.2	1797.3	1795.2	1793.1	1791.1	1789.0	1788.7
177.5°	1790.1	1792.4	1794.8	1797.2	1799.6	1799.8	1797.9	1796.0	1794.1	1792.2	1792.0
180°	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1491.3	1486.8	1482.4	1474.5	1467.8	1458.2	1455.5	1452.1	1442.0	1433.1	1426.3
5°	1582.4	1565.6	1541.1	1518.7	1500.5	1476.0	1461.9	1447.2	1426.1	1407.2	1391.8
7.5°	1677.8	1644.7	1606.5	1565.3	1527.0	1490.0	1460.1	1433.4	1404.0	1376.1	1354.4
10°	1753.5	1705.8	1652.5	1595.1	1546.0	1498.3	1458.4	1423.3	1385.5	1352.5	1325.3
12.5°	1839.8	1769.2	1695.7	1625.9	1567.9	1501.7	1453.3	1408.8	1365.9	1326.2	1295.6
15°	1942.0	1852.3	1765.3	1669.4	1581.0	1498.3	1440.9	1384.8	1335.1	1294.4	1255.2
17.5°	2035.1	1933.4	1818.9	1702.1	1595.6	1497.5	1417.0	1353.7	1291.5	1241.7	1202.6
20°	2087.8	1972.1	1842.5	1721.2	1603.5	1494.2	1405.9	1330.2	1262.8	1210.3	1166.2
22.5°	2133.2	1997.9	1863.8	1734.1	1602.9	1485.1	1385.1	1307.2	1234.3	1182.9	1135.9
25°	2180.2	2018.4	1883.8	1731.7	1585.3	1463.3	1351.2	1262.8	1190.0	1129.7	1081.4
27.5°	2220.6	2017.0	1857.3	1693.7	1557.5	1435.3	1315.5	1220.8	1143.4	1078.0	1028.9
30°	2247.5	2019.7	1829.8	1667.9	1530.6	1404.4	1288.1	1192.8	1111.5	1044.9	998.6
32.5°	2264.3	2018.0	1804.6	1632.1	1488.0	1376.4	1258.4	1159.7	1076.2	1010.8	966.2
35°	2274.1	2005.7	1761.1	1557.9	1419.2	1310.5	1211.7	1109.4	1021.8	960.8	910.3
37.5°	2254.5	1979.8	1710.7	1486.4	1334.5	1227.5	1144.4	1057.2	973.4	906.3	862.8
40°	2223.7	1963.0	1671.4	1436.0	1276.2	1173.1	1102.4	1016.9	934.2	870.4	829.7
42.5°	2164.8	1928.8	1628.3	1379.9	1215.7	1112.6	1047.4	976.0	897.8	837.9	797.3
45°	2021.2	1854.3	1563.5	1295.8	1126.2	1019.7	962.2	910.3	839.5	781.4	746.4
47.5°	1821.9	1742.4	1469.9	1207.1	1032.9	930.4	870.7	828.9	777.2	730.2	696.6
50°	1683.4	1650.4	1406.5	1146.6	970.6	870.4	813.0	775.1	738.0	691.0	660.1
52.5°	1523.6	1543.9	1332.6	1083.7	907.3	808.8	754.7	724.6	690.9	652.3	625.4
55°	1298.6	1372.2	1204.7	978.3	813.0	719.1	667.9	641.2	621.6	592.9	569.8
57.5°	1088.0	1181.6	1066.5	869.7	720.3	639.3	590.2	561.2	548.6	533.6	515.4
60°	963.0	1055.4	967.9	796.8	658.1	580.9	537.5	513.0	500.3	489.9	474.5
62.5°	851.3	944.9	871.4	722.8	596.9	525.5	487.6	463.7	453.9	448.4	435.2
65°	698.0	778.6	729.5	607.6	509.5	446.4	412.1	395.3	386.1	384.1	375.7
67.5°	568.1	629.5	593.7	504.0	426.8	372.3	343.1	328.9	321.8	321.1	314.8
70°	482.9	540.3	513.0	431.7	365.2	322.4	297.1	284.5	280.4	279.6	276.2
72.5°	416.7	456.8	435.1	367.2	315.8	277.0	258.4	245.3	240.5	241.5	239.2
75°	308.4	338.5	325.9	278.9	237.6	212.3	196.9	188.5	184.3	186.5	183.6
77.5°	221.9	240.9	229.6	197.1	171.6	153.4	142.0	136.8	133.0	132.9	131.6
80°	167.5	178.7	172.4	152.8	131.8	116.4	107.2	103.7	101.7	100.9	100.2
82.5°	119.3	128.9	121.4	107.9	93.6	84.4	79.2	74.5	73.0	73.5	72.8
85°	60.3	63.8	61.0	52.5	47.0	42.7	39.9	37.8	36.5	37.2	35.8
87.5°	25.6	25.4	22.9	20.0	18.3	16.1	15.4	13.7	13.2	13.8	13.8
90°	24.3	20.4	16.6	13.2	10.3	7.2	4.3	1.3	4.3	7.2	10.3
92.5°	28.4	25.4	22.5	21.5	22.3	23.1	24.0	24.8	24.0	23.1	22.3
95°	34.8	31.6	28.3	32.7	44.9	57.1	69.2	81.3	69.2	57.1	44.9
97.5°	85.6	106.9	128.2	141.6	147.0	152.6	158.0	163.5	158.0	152.6	147.0
100°	136.4	182.6	228.8	249.0	243.1	237.1	231.2	225.3	231.2	237.1	243.1
102.5°	188.7	239.2	289.6	312.7	308.4	304.3	300.0	295.7	300.0	304.3	308.4
105°	345.3	371.9	398.6	410.3	407.1	403.8	400.6	397.3	400.6	403.8	407.1
107.5°	526.7	522.5	518.3	514.9	512.3	509.6	507.0	504.4	507.0	509.6	512.3
110°	594.7	591.5	588.2	585.4	583.0	580.6	578.3	575.9	578.3	580.6	583.0





TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	661.9	658.6	655.4	652.6	650.6	648.5	646.3	644.2	646.3	648.5	650.6
115°	759.8	757.2	754.6	752.3	750.6	748.8	747.0	745.2	747.0	748.8	750.6
117.5°	856.3	855.0	853.6	851.9	849.6	847.4	845.3	843.0	845.3	847.4	849.6
120°	918.0	917.1	916.3	914.5	911.9	909.2	906.5	903.8	906.5	909.2	911.9
122.5°	978.4	977.2	976.2	974.5	972.2	970.1	967.9	965.7	967.9	970.1	972.2
125°	1064.1	1062.9	1061.8	1060.0	1057.6	1055.3	1052.8	1050.4	1052.8	1055.3	1057.6
127.5°	1146.8	1145.4	1144.0	1142.1	1139.7	1137.4	1135.0	1132.6	1135.0	1137.4	1139.7
130°	1197.4	1196.2	1195.1	1193.3	1190.9	1188.6	1186.2	1183.7	1186.2	1188.6	1190.9
132.5°	1245.9	1244.9	1244.0	1242.3	1239.9	1237.6	1235.2	1232.9	1235.2	1237.6	1239.9
135°	1318.8	1317.5	1316.3	1314.9	1313.1	1311.3	1309.6	1307.8	1309.6	1311.3	1313.1
137.5°	1383.5	1382.9	1382.2	1380.7	1378.5	1376.3	1374.0	1371.7	1374.0	1376.3	1378.5
140°	1424.6	1423.7	1422.8	1421.6	1419.8	1418.0	1416.2	1414.4	1416.2	1418.0	1419.8
142.5°	1464.1	1463.2	1462.3	1461.0	1459.2	1457.4	1455.6	1453.8	1455.6	1457.4	1459.2
145°	1519.8	1519.3	1518.7	1517.3	1515.3	1513.2	1511.1	1509.0	1511.1	1513.2	1515.3
147.5°	1568.7	1568.1	1567.4	1566.5	1565.1	1563.8	1562.5	1561.0	1562.5	1563.8	1565.1
150°	1598.6	1597.9	1597.3	1596.6	1595.7	1594.8	1593.9	1593.0	1593.9	1594.8	1595.7
152.5°	1624.6	1624.3	1623.9	1623.5	1623.1	1622.6	1622.3	1621.8	1622.3	1622.6	1623.1
155°	1660.5	1660.2	1659.8	1660.0	1660.6	1661.2	1661.8	1662.3	1661.8	1661.2	1660.6
157.5°	1692.8	1693.1	1693.4	1693.6	1693.6	1693.7	1693.8	1693.8	1693.8	1693.7	1693.6
160°	1710.9	1711.3	1711.5	1711.8	1712.2	1712.4	1712.7	1713.1	1712.7	1712.4	1712.2
162.5°	1727.0	1727.2	1727.5	1728.0	1728.8	1729.7	1730.4	1731.2	1730.4	1729.7	1728.8
165°	1748.3	1748.6	1748.9	1749.4	1750.3	1751.2	1752.1	1753.0	1752.1	1751.2	1750.3
167.5°	1764.8	1764.8	1764.8	1765.3	1766.6	1767.7	1768.9	1770.0	1768.9	1767.7	1766.6
170°	1774.3	1774.3	1774.3	1775.0	1776.1	1777.3	1778.5	1779.7	1778.5	1777.3	1776.1
172.5°	1780.3	1780.0	1779.8	1780.4	1781.8	1783.2	1784.7	1786.1	1784.7	1783.2	1781.8
175°	1788.4	1788.1	1787.8	1788.4	1789.9	1791.4	1792.9	1794.3	1792.9	1791.4	1789.9
177.5°	1791.7	1791.5	1791.3	1791.7	1793.0	1794.1	1795.3	1796.4	1795.3	1794.1	1793.0
180°	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1422.4	1418.4	1412.8	1404.4	1397.7	1387.1	1387.1	1388.8	1388.8	1388.2	1387.1
5°	1379.2	1368.7	1356.1	1341.4	1326.0	1310.5	1307.7	1302.1	1297.9	1295.1	1291.6
7.5°	1333.6	1315.0	1296.6	1276.0	1257.2	1241.7	1230.9	1221.9	1216.2	1210.1	1205.5
10°	1302.8	1279.7	1257.9	1236.3	1212.4	1193.5	1181.6	1173.1	1166.9	1161.3	1158.4
12.5°	1266.4	1239.9	1215.9	1195.3	1169.2	1149.8	1138.4	1134.4	1127.0	1115.3	1109.1
15°	1213.1	1188.6	1159.8	1128.3	1115.7	1091.9	1078.5	1072.3	1068.0	1058.9	1056.1
17.5°	1167.5	1135.4	1103.2	1079.7	1056.2	1036.9	1029.5	1021.6	1016.0	1008.6	1006.4
20°	1131.1	1102.4	1072.9	1047.8	1023.1	1002.2	995.9	990.2	984.6	981.1	978.3
22.5°	1094.1	1065.4	1041.0	1017.4	991.2	977.5	970.6	964.5	960.6	958.1	955.4
25°	1042.1	1016.9	989.5	968.5	947.5	938.3	934.2	930.7	927.9	924.3	923.6
27.5°	995.6	968.1	945.9	926.3	911.2	903.7	899.6	897.9	898.5	899.7	900.5
30°	960.8	935.6	917.4	900.5	886.5	879.5	878.8	878.8	881.6	882.3	883.7
32.5°	928.9	908.1	889.9	873.6	863.0	858.2	860.9	860.9	863.1	865.0	867.5
35°	882.3	864.1	850.1	836.1	827.0	829.0	830.5	831.9	835.4	839.5	842.4
37.5°	837.9	822.1	807.4	796.6	792.4	796.1	799.5	802.5	806.5	809.8	812.5
40°	805.9	794.0	780.0	770.2	771.6	773.7	776.5	780.0	783.5	785.6	788.5
42.5°	776.2	763.8	753.1	744.9	746.9	749.6	751.3	753.1	757.2	761.0	762.6
45°	730.9	721.1	711.3	706.4	707.8	709.3	710.6	712.7	716.2	719.1	719.7
47.5°	680.1	673.2	666.6	661.8	664.1	663.5	665.4	669.9	670.9	672.6	676.5
50°	647.6	641.2	633.6	632.1	632.1	632.1	632.8	638.5	638.5	641.2	644.1
52.5°	611.7	607.6	602.7	600.2	599.1	599.1	602.0	604.8	605.9	609.8	612.7
55°	558.6	554.4	550.1	548.0	546.6	548.0	553.7	555.0	558.6	560.6	562.8
57.5°	503.2	500.0	496.6	495.4	495.2	497.0	500.1	504.3	505.2	511.6	514.8
60°	466.7	461.8	459.1	459.1	457.6	464.0	462.5	469.6	470.9	475.2	480.1
62.5°	429.2	422.6	421.5	421.5	423.5	425.3	427.2	430.3	433.9	439.3	443.1
65°	368.6	365.2	370.1	369.3	367.9	372.1	372.1	375.7	379.9	384.8	392.4
67.5°	311.3	309.5	309.9	309.9	312.0	314.4	316.4	319.4	324.5	329.7	334.7
70°	272.6	274.7	271.3	274.0	276.2	276.8	278.2	282.4	288.0	291.5	297.1
72.5°	235.1	234.9	235.3	236.5	238.5	239.8	241.2	246.0	252.2	255.1	259.6
75°	180.8	180.1	182.2	182.2	185.7	187.1	188.5	190.6	196.3	200.5	203.9
77.5°	132.1	132.9	132.4	134.8	133.8	134.1	138.5	140.6	141.2	149.5	151.2
80°	99.5	100.9	101.7	102.3	103.0	101.7	106.6	108.6	108.6	113.5	117.0
82.5°	71.5	72.3	74.2	74.8	75.0	76.4	76.8	78.4	80.1	82.1	86.8
85°	35.8	37.8	38.5	37.8	38.5	37.2	39.2	39.9	40.7	40.7	40.7
87.5°	13.8	15.1	15.3	16.7	16.9	18.2	18.4	17.6	17.7	19.7	17.7
90°	13.2	16.6	20.4	24.3	28.2	32.0	33.2	34.3	35.6	36.7	37.6
92.5°	21.5	22.5	25.4	28.4	31.2	34.2	36.0	37.9	39.9	41.7	42.8
95°	32.7	28.3	31.6	34.8	38.1	41.3	43.4	45.5	47.5	49.6	50.6
97.5°	141.6	128.2	106.9	85.6	64.3	42.9	45.3	47.7	50.0	52.4	53.8
100°	249.0	228.8	182.6	136.4	90.2	44.0	46.4	48.7	51.1	53.5	54.8
102.5°	312.7	289.6	239.2	188.7	138.2	87.7	80.3	73.0	65.7	58.3	54.9
105°	410.3	398.6	371.9	345.3	318.6	291.9	239.5	187.1	134.6	82.2	56.3
107.5°	514.9	518.3	522.5	526.7	530.9	535.1	496.7	458.2	419.7	381.3	342.3
110°	585.4	588.2	591.5	594.7	598.0	601.2	591.5	581.7	571.9	562.1	536.0



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	652.6	655.4	658.6	661.9	665.1	668.4	668.6	668.8	669.0	669.1	664.8
115°	752.3	754.6	757.2	759.8	762.5	765.2	768.1	771.2	774.1	777.0	779.1
117.5°	851.9	853.6	855.0	856.3	857.6	859.1	861.4	863.8	866.1	868.5	869.9
120°	914.5	916.3	917.1	918.0	918.9	919.8	922.2	924.6	926.9	929.3	930.5
122.5°	974.5	976.2	977.2	978.4	979.5	980.6	982.3	983.9	985.6	987.3	988.2
125°	1060.0	1061.8	1062.9	1064.1	1065.3	1066.5	1067.1	1067.6	1068.3	1068.8	1069.4
127.5°	1142.1	1144.0	1145.4	1146.8	1148.3	1149.7	1150.6	1151.6	1152.5	1153.4	1153.6
130°	1193.3	1195.1	1196.2	1197.4	1198.6	1199.8	1201.0	1202.1	1203.4	1204.5	1204.8
132.5°	1242.3	1244.0	1244.9	1245.9	1246.8	1247.8	1248.9	1250.2	1251.3	1252.5	1252.7
135°	1314.9	1316.3	1317.5	1318.8	1319.9	1321.1	1322.0	1322.9	1323.7	1324.6	1324.6
137.5°	1380.7	1382.2	1382.9	1383.5	1384.2	1384.8	1386.3	1387.7	1389.1	1390.5	1390.9
140°	1421.6	1422.8	1423.7	1424.6	1425.5	1426.4	1427.6	1428.8	1429.9	1431.1	1431.5
142.5°	1461.0	1462.3	1463.2	1464.1	1465.0	1465.9	1466.8	1467.8	1468.7	1469.6	1469.7
145°	1517.3	1518.7	1519.3	1519.8	1520.5	1521.1	1521.6	1522.2	1522.9	1523.4	1523.8
147.5°	1566.5	1567.4	1568.1	1568.7	1569.2	1569.9	1570.5	1571.0	1571.6	1572.3	1571.8
150°	1596.6	1597.3	1597.9	1598.6	1599.1	1599.7	1600.3	1600.9	1601.5	1602.0	1602.0
152.5°	1623.5	1623.9	1624.3	1624.6	1625.0	1625.3	1626.4	1627.5	1628.5	1629.6	1629.4
155°	1660.0	1659.8	1660.2	1660.5	1660.7	1661.0	1662.5	1664.0	1665.4	1667.0	1666.8
157.5°	1693.6	1693.4	1693.1	1692.8	1692.6	1692.2	1694.0	1695.8	1697.5	1699.3	1699.1
160°	1711.8	1711.5	1711.3	1710.9	1710.7	1710.4	1712.2	1714.0	1715.7	1717.4	1717.3
162.5°	1728.0	1727.5	1727.2	1727.0	1726.6	1726.4	1728.4	1730.4	1732.4	1734.4	1734.5
165°	1749.4	1748.9	1748.6	1748.3	1748.0	1747.7	1750.1	1752.4	1754.8	1757.2	1757.3
167.5°	1765.3	1764.8	1764.8	1764.8	1764.8	1764.8	1767.1	1769.5	1771.8	1774.2	1774.2
170°	1775.0	1774.3	1774.3	1774.3	1774.3	1774.3	1776.7	1779.1	1781.5	1783.9	1783.9
172.5°	1780.4	1779.8	1780.0	1780.3	1780.5	1780.7	1783.2	1785.5	1787.9	1790.2	1790.1
175°	1788.4	1787.8	1788.1	1788.4	1788.7	1789.0	1791.1	1793.1	1795.2	1797.3	1797.2
177.5°	1791.7	1791.3	1791.5	1791.7	1792.0	1792.2	1794.1	1796.0	1797.9	1799.8	1799.6
180°	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1383.1	1382.6	1386.5	1383.7	1386.5	1382.6	1383.1	1387.1	1388.2	1388.8	1388.8
5°	1287.4	1289.5	1282.5	1282.5	1282.5	1289.5	1287.4	1291.6	1295.1	1297.9	1302.1
7.5°	1202.2	1199.1	1199.4	1195.6	1199.4	1199.1	1202.2	1205.5	1210.1	1216.2	1221.9
10°	1150.0	1145.8	1144.4	1145.1	1144.4	1145.8	1150.0	1158.4	1161.3	1166.9	1173.1
12.5°	1106.9	1106.0	1096.8	1096.9	1096.8	1106.0	1106.9	1109.1	1115.3	1127.0	1134.4
15°	1056.1	1042.9	1041.4	1045.6	1041.4	1042.9	1056.1	1056.1	1058.9	1068.0	1072.3
17.5°	1005.2	998.3	998.6	996.6	998.6	998.3	1005.2	1006.4	1008.6	1016.0	1021.6
20°	978.3	974.1	973.4	968.5	973.4	974.1	978.3	978.3	981.1	984.6	990.2
22.5°	953.7	952.3	952.7	947.3	952.7	952.3	953.7	955.4	958.1	960.6	964.5
25°	923.0	926.5	923.6	923.6	923.6	926.5	923.0	923.6	924.3	927.9	930.7
27.5°	902.2	902.1	900.7	900.7	900.7	902.1	902.2	900.5	899.7	898.5	897.9
30°	886.5	885.8	887.3	887.3	887.3	885.8	886.5	883.7	882.3	881.6	878.8
32.5°	870.8	871.8	872.1	872.6	872.1	871.8	870.8	867.5	865.0	863.1	860.9
35°	846.6	847.3	849.4	848.0	849.4	847.3	846.6	842.4	839.5	835.4	831.9
37.5°	813.8	817.0	816.3	817.4	816.3	817.0	813.8	812.5	809.8	806.5	802.5
40°	789.1	791.2	790.5	790.5	790.5	791.2	789.1	788.5	785.6	783.5	780.0
42.5°	763.9	765.4	763.6	762.5	763.6	765.4	763.9	762.6	761.0	757.2	753.1
45°	722.6	721.1	723.3	720.4	723.3	721.1	722.6	719.7	719.1	716.2	712.7
47.5°	676.3	677.7	678.2	680.4	678.2	677.7	676.3	676.5	672.6	670.9	669.9
50°	645.4	649.6	649.6	649.0	649.6	649.6	645.4	644.1	641.2	638.5	638.5
52.5°	615.2	617.2	619.9	619.8	619.9	617.2	615.2	612.7	609.8	605.9	604.8
55°	568.4	569.8	571.1	571.9	571.1	569.8	568.4	562.8	560.6	558.6	555.0
57.5°	519.9	519.3	522.6	523.6	522.6	519.3	519.9	514.8	511.6	505.2	504.3
60°	485.6	485.6	491.2	493.4	491.2	485.6	485.6	480.1	475.2	470.9	469.6
62.5°	449.2	451.5	457.1	454.1	457.1	451.5	449.2	443.1	439.3	433.9	430.3
65°	395.9	401.5	400.8	403.7	400.8	401.5	395.9	392.4	384.8	379.9	375.7
67.5°	340.3	343.8	348.8	349.3	348.8	343.8	340.3	334.7	329.7	324.5	319.4
70°	302.7	306.2	309.1	311.1	309.1	306.2	302.7	297.1	291.5	288.0	282.4
72.5°	266.4	268.1	274.8	271.9	274.8	268.1	266.4	259.6	255.1	252.2	246.0
75°	208.8	213.7	217.9	215.9	217.9	213.7	208.8	203.9	200.5	196.3	190.6
77.5°	154.4	159.3	161.3	159.5	161.3	159.3	154.4	151.2	149.5	141.2	140.6
80°	122.0	121.3	125.5	124.8	125.5	121.3	122.0	117.0	113.5	108.6	108.6
82.5°	89.4	88.7	90.7	91.1	90.7	88.7	89.4	86.8	82.1	80.1	78.4
85°	43.4	45.6	42.7	42.1	42.7	45.6	43.4	40.7	40.7	40.7	39.9
87.5°	17.7	17.8	17.4	16.9	17.4	17.8	17.7	17.7	19.7	17.7	17.6
90°	38.3	38.8	39.4	39.9	39.4	38.8	38.3	37.6	36.7	35.6	34.3
92.5°	43.2	43.5	43.9	44.2	43.9	43.5	43.2	42.8	41.7	39.9	37.9
95°	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	49.6	47.5	45.5
97.5°	54.0	54.3	54.7	54.9	54.7	54.3	54.0	53.8	52.4	50.0	47.7
100°	55.1	55.4	55.7	56.0	55.7	55.4	55.1	54.8	53.5	51.1	48.7
102.5°	55.5	56.0	56.5	57.1	56.5	56.0	55.5	54.9	58.3	65.7	73.0
105°	56.9	57.5	58.1	58.7	58.1	57.5	56.9	56.3	82.2	134.6	187.1
107.5°	302.8	263.2	223.7	184.2	223.7	263.2	302.8	342.3	381.3	419.7	458.2
110°	493.7	451.3	408.9	366.6	408.9	451.3	493.7	536.0	562.1	571.9	581.7



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	655.8	646.8	637.9	628.9	637.9	646.8	655.8	664.8	669.1	669.0	668.8
115°	780.3	781.5	782.7	783.9	782.7	781.5	780.3	779.1	777.0	774.1	771.2
117.5°	870.0	870.3	870.6	870.8	870.6	870.3	870.0	869.9	868.5	866.1	863.8
120°	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	929.3	926.9	924.6
122.5°	988.5	988.6	988.9	989.2	988.9	988.6	988.5	988.2	987.3	985.6	983.9
125°	1070.1	1070.6	1071.2	1071.8	1071.2	1070.6	1070.1	1069.4	1068.8	1068.3	1067.6
127.5°	1153.1	1152.4	1151.8	1151.3	1151.8	1152.4	1153.1	1153.6	1153.4	1152.5	1151.6
130°	1204.3	1203.6	1203.0	1202.5	1203.0	1203.6	1204.3	1204.8	1204.5	1203.4	1202.1
132.5°	1251.9	1251.1	1250.2	1249.4	1250.2	1251.1	1251.9	1252.7	1252.5	1251.3	1250.2
135°	1323.7	1322.9	1322.0	1321.1	1322.0	1322.9	1323.7	1324.6	1324.6	1323.7	1322.9
137.5°	1390.4	1389.7	1389.1	1388.6	1389.1	1389.7	1390.4	1390.9	1390.5	1389.1	1387.7
140°	1430.8	1430.3	1429.7	1429.1	1429.7	1430.3	1430.8	1431.5	1431.1	1429.9	1428.8
142.5°	1468.9	1468.0	1467.2	1466.4	1467.2	1468.0	1468.9	1469.7	1469.6	1468.7	1467.8
145°	1523.8	1523.8	1523.8	1523.8	1523.8	1523.8	1523.8	1523.8	1523.4	1522.9	1522.2
147.5°	1570.5	1569.1	1567.7	1566.4	1567.7	1569.1	1570.5	1571.8	1572.3	1571.6	1571.0
150°	1601.1	1600.2	1599.3	1598.4	1599.3	1600.2	1601.1	1602.0	1602.0	1601.5	1600.9
152.5°	1628.1	1626.7	1625.3	1624.0	1625.3	1626.7	1628.1	1629.4	1629.6	1628.5	1627.5
155°	1665.0	1663.2	1661.4	1659.7	1661.4	1663.2	1665.0	1666.8	1667.0	1665.4	1664.0
157.5°	1696.7	1694.4	1692.1	1689.8	1692.1	1694.4	1696.7	1699.1	1699.3	1697.5	1695.8
160°	1715.2	1713.2	1711.1	1709.1	1711.1	1713.2	1715.2	1717.3	1717.4	1715.7	1714.0
162.5°	1732.7	1730.8	1729.0	1727.2	1729.0	1730.8	1732.7	1734.5	1734.4	1732.4	1730.4
165°	1755.2	1753.2	1751.1	1749.0	1751.1	1753.2	1755.2	1757.3	1757.2	1754.8	1752.4
167.5°	1771.8	1769.5	1767.1	1764.8	1767.1	1769.5	1771.8	1774.2	1774.2	1771.8	1769.5
170°	1781.5	1779.1	1776.7	1774.3	1776.7	1779.1	1781.5	1783.9	1783.9	1781.5	1779.1
172.5°	1787.5	1784.9	1782.3	1779.7	1782.3	1784.9	1787.5	1790.1	1790.2	1787.9	1785.5
175°	1794.7	1792.4	1790.0	1787.7	1790.0	1792.4	1794.7	1797.2	1797.3	1795.2	1793.1
177.5°	1797.2	1794.8	1792.4	1790.1	1792.4	1794.8	1797.2	1799.6	1799.8	1797.9	1796.0
180°	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1387.1	1387.1	1397.7	1404.4	1412.8	1418.4	1422.4	1426.3	1433.1	1442.0	1452.1
5°	1307.7	1310.5	1326.0	1341.4	1356.1	1368.7	1379.2	1391.8	1407.2	1426.1	1447.2
7.5°	1230.9	1241.7	1257.2	1276.0	1296.6	1315.0	1333.6	1354.4	1376.1	1404.0	1433.4
10°	1181.6	1193.5	1212.4	1236.3	1257.9	1279.7	1302.8	1325.3	1352.5	1385.5	1423.3
12.5°	1138.4	1149.8	1169.2	1195.3	1215.9	1239.9	1266.4	1295.6	1326.2	1365.9	1408.8
15°	1078.5	1091.9	1115.7	1128.3	1159.8	1188.6	1213.1	1255.2	1294.4	1335.1	1384.8
17.5°	1029.5	1036.9	1056.2	1079.7	1103.2	1135.4	1167.5	1202.6	1241.7	1291.5	1353.7
20°	995.9	1002.2	1023.1	1047.8	1072.9	1102.4	1131.1	1166.2	1210.3	1262.8	1330.2
22.5°	970.6	977.5	991.2	1017.4	1041.0	1065.4	1094.1	1135.9	1182.9	1234.3	1307.2
25°	934.2	938.3	947.5	968.5	989.5	1016.9	1042.1	1081.4	1129.7	1190.0	1262.8
27.5°	899.6	903.7	911.2	926.3	945.9	968.1	995.6	1028.9	1078.0	1143.4	1220.8
30°	878.8	879.5	886.5	900.5	917.4	935.6	960.8	998.6	1044.9	1111.5	1192.8
32.5°	860.9	858.2	863.0	873.6	889.9	908.1	928.9	966.2	1010.8	1076.2	1159.7
35°	830.5	829.0	827.0	836.1	850.1	864.1	882.3	910.3	960.8	1021.8	1109.4
37.5°	799.5	796.1	792.4	796.6	807.4	822.1	837.9	862.8	906.3	973.4	1057.2
40°	776.5	773.7	771.6	770.2	780.0	794.0	805.9	829.7	870.4	934.2	1016.9
42.5°	751.3	749.6	746.9	744.9	753.1	763.8	776.2	797.3	837.9	897.8	976.0
45°	710.6	709.3	707.8	706.4	711.3	721.1	730.9	746.4	781.4	839.5	910.3
47.5°	665.4	663.5	664.1	661.8	666.6	673.2	680.1	696.6	730.2	777.2	828.9
50°	632.8	632.1	632.1	632.1	633.6	641.2	647.6	660.1	691.0	738.0	775.1
52.5°	602.0	599.1	599.1	600.2	602.7	607.6	611.7	625.4	652.3	690.9	724.6
55°	553.7	548.0	546.6	548.0	550.1	554.4	558.6	569.8	592.9	621.6	641.2
57.5°	500.1	497.0	495.2	495.4	496.6	500.0	503.2	515.4	533.6	548.6	561.2
60°	462.5	464.0	457.6	459.1	459.1	461.8	466.7	474.5	489.9	500.3	513.0
62.5°	427.2	425.3	423.5	421.5	421.5	422.6	429.2	435.2	448.4	453.9	463.7
65°	372.1	372.1	367.9	369.3	370.1	365.2	368.6	375.7	384.1	386.1	395.3
67.5°	316.4	314.4	312.0	309.9	309.9	309.5	311.3	314.8	321.1	321.8	328.9
70°	278.2	276.8	276.2	274.0	271.3	274.7	272.6	276.2	279.6	280.4	284.5
72.5°	241.2	239.8	238.5	236.5	235.3	234.9	235.1	239.2	241.5	240.5	245.3
75°	188.5	187.1	185.7	182.2	182.2	180.1	180.8	183.6	186.5	184.3	188.5
77.5°	138.5	134.1	133.8	134.8	132.4	132.9	132.1	131.6	132.9	133.0	136.8
80°	106.6	101.7	103.0	102.3	101.7	100.9	99.5	100.2	100.9	101.7	103.7
82.5°	76.8	76.4	75.0	74.8	74.2	72.3	71.5	72.8	73.5	73.0	74.5
85°	39.2	37.2	38.5	37.8	38.5	37.8	35.8	35.8	37.2	36.5	37.8
87.5°	18.4	18.2	16.9	16.7	15.3	15.1	13.8	13.8	13.8	13.2	13.7
90°	33.2	32.0	28.2	24.3	20.4	16.6	13.2	10.3	7.2	4.3	1.3
92.5°	36.0	34.2	31.2	28.4	25.4	22.5	21.5	22.3	23.1	24.0	24.8
95°	43.4	41.3	38.1	34.8	31.6	28.3	32.7	44.9	57.1	69.2	81.3
97.5°	45.3	42.9	64.3	85.6	106.9	128.2	141.6	147.0	152.6	158.0	163.5
100°	46.4	44.0	90.2	136.4	182.6	228.8	249.0	243.1	237.1	231.2	225.3
102.5°	80.3	87.7	138.2	188.7	239.2	289.6	312.7	308.4	304.3	300.0	295.7
105°	239.5	291.9	318.6	345.3	371.9	398.6	410.3	407.1	403.8	400.6	397.3
107.5°	496.7	535.1	530.9	526.7	522.5	518.3	514.9	512.3	509.6	507.0	504.4
110°	591.5	601.2	598.0	594.7	591.5	588.2	585.4	583.0	580.6	578.3	575.9



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	668.6	668.4	665.1	661.9	658.6	655.4	652.6	650.6	648.5	646.3	644.2
115°	768.1	765.2	762.5	759.8	757.2	754.6	752.3	750.6	748.8	747.0	745.2
117.5°	861.4	859.1	857.6	856.3	855.0	853.6	851.9	849.6	847.4	845.3	843.0
120°	922.2	919.8	918.9	918.0	917.1	916.3	914.5	911.9	909.2	906.5	903.8
122.5°	982.3	980.6	979.5	978.4	977.2	976.2	974.5	972.2	970.1	967.9	965.7
125°	1067.1	1066.5	1065.3	1064.1	1062.9	1061.8	1060.0	1057.6	1055.3	1052.8	1050.4
127.5°	1150.6	1149.7	1148.3	1146.8	1145.4	1144.0	1142.1	1139.7	1137.4	1135.0	1132.6
130°	1201.0	1199.8	1198.6	1197.4	1196.2	1195.1	1193.3	1190.9	1188.6	1186.2	1183.7
132.5°	1248.9	1247.8	1246.8	1245.9	1244.9	1244.0	1242.3	1239.9	1237.6	1235.2	1232.9
135°	1322.0	1321.1	1319.9	1318.8	1317.5	1316.3	1314.9	1313.1	1311.3	1309.6	1307.8
137.5°	1386.3	1384.8	1384.2	1383.5	1382.9	1382.2	1380.7	1378.5	1376.3	1374.0	1371.7
140°	1427.6	1426.4	1425.5	1424.6	1423.7	1422.8	1421.6	1419.8	1418.0	1416.2	1414.4
142.5°	1466.8	1465.9	1465.0	1464.1	1463.2	1462.3	1461.0	1459.2	1457.4	1455.6	1453.8
145°	1521.6	1521.1	1520.5	1519.8	1519.3	1518.7	1517.3	1515.3	1513.2	1511.1	1509.0
147.5°	1570.5	1569.9	1569.2	1568.7	1568.1	1567.4	1566.5	1565.1	1563.8	1562.5	1561.0
150°	1600.3	1599.7	1599.1	1598.6	1597.9	1597.3	1596.6	1595.7	1594.8	1593.9	1593.0
152.5°	1626.4	1625.3	1625.0	1624.6	1624.3	1623.9	1623.5	1623.1	1622.6	1622.3	1621.8
155°	1662.5	1661.0	1660.7	1660.5	1660.2	1659.8	1660.0	1660.6	1661.2	1661.8	1662.3
157.5°	1694.0	1692.2	1692.6	1692.8	1693.1	1693.4	1693.6	1693.6	1693.7	1693.8	1693.8
160°	1712.2	1710.4	1710.7	1710.9	1711.3	1711.5	1711.8	1712.2	1712.4	1712.7	1713.1
162.5°	1728.4	1726.4	1726.6	1727.0	1727.2	1727.5	1728.0	1728.8	1729.7	1730.4	1731.2
165°	1750.1	1747.7	1748.0	1748.3	1748.6	1748.9	1749.4	1750.3	1751.2	1752.1	1753.0
167.5°	1767.1	1764.8	1764.8	1764.8	1764.8	1764.8	1765.3	1766.6	1767.7	1768.9	1770.0
170°	1776.7	1774.3	1774.3	1774.3	1774.3	1774.3	1775.0	1776.1	1777.3	1778.5	1779.7
172.5°	1783.2	1780.7	1780.5	1780.3	1780.0	1779.8	1780.4	1781.8	1783.2	1784.7	1786.1
175°	1791.1	1789.0	1788.7	1788.4	1788.1	1787.8	1788.4	1789.9	1791.4	1792.9	1794.3
177.5°	1794.1	1792.2	1792.0	1791.7	1791.5	1791.3	1791.7	1793.0	1794.1	1795.3	1796.4
180°	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1455.5	1458.2	1467.8	1474.5	1482.4	1486.8	1491.3	1494.7	1499.1	1500.3	1516.5
5°	1461.9	1476.0	1500.5	1518.7	1541.1	1565.6	1582.4	1590.2	1610.4	1627.3	1660.9
7.5°	1460.1	1490.0	1527.0	1565.3	1606.5	1644.7	1677.8	1717.0	1744.9	1786.8	1828.2
10°	1458.4	1498.3	1546.0	1595.1	1652.5	1705.8	1753.5	1806.7	1850.8	1909.0	1958.7
12.5°	1453.3	1501.7	1567.9	1625.9	1695.7	1769.2	1839.8	1908.2	1947.3	2044.2	2090.0
15°	1440.9	1498.3	1581.0	1669.4	1765.3	1852.3	1942.0	2013.5	2129.0	2213.9	2267.8
17.5°	1417.0	1497.5	1595.6	1702.1	1818.9	1933.4	2035.1	2143.5	2266.2	2368.7	2478.1
20°	1405.9	1494.2	1603.5	1721.2	1842.5	1972.1	2087.8	2218.0	2352.0	2452.8	2593.0
22.5°	1385.1	1485.1	1602.9	1734.1	1863.8	1997.9	2133.2	2264.6	2419.2	2558.2	2691.7
25°	1351.2	1463.3	1585.3	1731.7	1883.8	2018.4	2180.2	2354.7	2516.0	2694.7	2827.8
27.5°	1315.5	1435.3	1557.5	1693.7	1857.3	2017.0	2220.6	2417.8	2614.9	2769.2	2867.7
30°	1288.1	1404.4	1530.6	1667.9	1829.8	2019.7	2247.5	2462.6	2654.7	2787.1	2842.5
32.5°	1258.4	1376.4	1488.0	1632.1	1804.6	2018.0	2264.3	2489.0	2656.9	2745.1	2734.3
35°	1211.7	1310.5	1419.2	1557.9	1761.1	2005.7	2274.1	2491.4	2594.4	2575.5	2432.5
37.5°	1144.4	1227.5	1334.5	1486.4	1710.7	1979.8	2254.5	2417.5	2410.8	2256.7	2049.6
40°	1102.4	1173.1	1276.2	1436.0	1671.4	1963.0	2223.7	2329.5	2239.8	2024.6	1776.6
42.5°	1047.4	1112.6	1215.7	1379.9	1628.3	1928.8	2164.8	2195.5	2020.0	1772.4	1545.0
45°	962.2	1019.7	1126.2	1295.8	1563.5	1854.3	2021.2	1946.2	1709.9	1454.2	1281.1
47.5°	870.7	930.4	1032.9	1207.1	1469.9	1742.4	1821.9	1662.3	1419.9	1212.4	1053.5
50°	813.0	870.4	970.6	1146.6	1406.5	1650.4	1683.4	1477.3	1254.5	1072.3	941.9
52.5°	754.7	808.8	907.3	1083.7	1332.6	1543.9	1523.6	1313.6	1108.7	953.4	851.0
55°	667.9	719.1	813.0	978.3	1204.7	1372.2	1298.6	1098.1	928.5	808.1	730.2
57.5°	590.2	639.3	720.3	869.7	1066.5	1181.6	1088.0	919.1	784.2	691.4	633.4
60°	537.5	580.9	658.1	796.8	967.9	1055.4	963.0	813.7	700.1	625.8	574.0
62.5°	487.6	525.5	596.9	722.8	871.4	944.9	851.3	725.1	628.4	562.5	518.4
65°	412.1	446.4	509.5	607.6	729.5	778.6	698.0	595.7	520.7	471.6	442.2
67.5°	343.1	372.3	426.8	504.0	593.7	629.5	568.1	488.9	432.4	393.0	369.6
70°	297.1	322.4	365.2	431.7	513.0	540.3	482.9	417.7	376.3	344.8	323.1
72.5°	258.4	277.0	315.8	367.2	435.1	456.8	416.7	359.4	320.8	297.1	279.9
75°	196.9	212.3	237.6	278.9	325.9	338.5	308.4	272.6	246.6	229.9	216.5
77.5°	142.0	153.4	171.6	197.1	229.6	240.9	221.9	198.0	179.1	167.7	160.3
80°	107.2	116.4	131.8	152.8	172.4	178.7	167.5	149.3	136.0	129.7	123.3
82.5°	79.2	84.4	93.6	107.9	121.4	128.9	119.3	108.3	101.2	95.4	93.1
85°	39.9	42.7	47.0	52.5	61.0	63.8	60.3	57.4	53.2	49.8	49.8
87.5°	15.4	16.1	18.3	20.0	22.9	25.4	25.6	25.2	25.5	25.1	24.8
90°	4.3	7.2	10.3	13.2	16.6	20.4	24.3	28.2	32.0	33.2	34.3
92.5°	24.0	23.1	22.3	21.5	22.5	25.4	28.4	31.2	34.2	36.0	37.9
95°	69.2	57.1	44.9	32.7	28.3	31.6	34.8	38.1	41.3	43.4	45.5
97.5°	158.0	152.6	147.0	141.6	128.2	106.9	85.6	64.3	42.9	45.3	47.7
100°	231.2	237.1	243.1	249.0	228.8	182.6	136.4	90.2	44.0	46.4	48.7
102.5°	300.0	304.3	308.4	312.7	289.6	239.2	188.7	138.2	87.7	80.3	73.0
105°	400.6	403.8	407.1	410.3	398.6	371.9	345.3	318.6	291.9	239.5	187.1
107.5°	507.0	509.6	512.3	514.9	518.3	522.5	526.7	530.9	535.1	496.7	458.2
110°	578.3	580.6	583.0	585.4	588.2	591.5	594.7	598.0	601.2	591.5	581.7





TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	646.3	648.5	650.6	652.6	655.4	658.6	661.9	665.1	668.4	668.6	668.8
115°	747.0	748.8	750.6	752.3	754.6	757.2	759.8	762.5	765.2	768.1	771.2
117.5°	845.3	847.4	849.6	851.9	853.6	855.0	856.3	857.6	859.1	861.4	863.8
120°	906.5	909.2	911.9	914.5	916.3	917.1	918.0	918.9	919.8	922.2	924.6
122.5°	967.9	970.1	972.2	974.5	976.2	977.2	978.4	979.5	980.6	982.3	983.9
125°	1052.8	1055.3	1057.6	1060.0	1061.8	1062.9	1064.1	1065.3	1066.5	1067.1	1067.6
127.5°	1135.0	1137.4	1139.7	1142.1	1144.0	1145.4	1146.8	1148.3	1149.7	1150.6	1151.6
130°	1186.2	1188.6	1190.9	1193.3	1195.1	1196.2	1197.4	1198.6	1199.8	1201.0	1202.1
132.5°	1235.2	1237.6	1239.9	1242.3	1244.0	1244.9	1245.9	1246.8	1247.8	1248.9	1250.2
135°	1309.6	1311.3	1313.1	1314.9	1316.3	1317.5	1318.8	1319.9	1321.1	1322.0	1322.9
137.5°	1374.0	1376.3	1378.5	1380.7	1382.2	1382.9	1383.5	1384.2	1384.8	1386.3	1387.7
140°	1416.2	1418.0	1419.8	1421.6	1422.8	1423.7	1424.6	1425.5	1426.4	1427.6	1428.8
142.5°	1455.6	1457.4	1459.2	1461.0	1462.3	1463.2	1464.1	1465.0	1465.9	1466.8	1467.8
145°	1511.1	1513.2	1515.3	1517.3	1518.7	1519.3	1519.8	1520.5	1521.1	1521.6	1522.2
147.5°	1562.5	1563.8	1565.1	1566.5	1567.4	1568.1	1568.7	1569.2	1569.9	1570.5	1571.0
150°	1593.9	1594.8	1595.7	1596.6	1597.3	1597.9	1598.6	1599.1	1599.7	1600.3	1600.9
152.5°	1622.3	1622.6	1623.1	1623.5	1623.9	1624.3	1624.6	1625.0	1625.3	1626.4	1627.5
155°	1661.8	1661.2	1660.6	1660.0	1659.8	1660.2	1660.5	1660.7	1661.0	1662.5	1664.0
157.5°	1693.8	1693.7	1693.6	1693.6	1693.4	1693.1	1692.8	1692.6	1692.2	1694.0	1695.8
160°	1712.7	1712.4	1712.2	1711.8	1711.5	1711.3	1710.9	1710.7	1710.4	1712.2	1714.0
162.5°	1730.4	1729.7	1728.8	1728.0	1727.5	1727.2	1727.0	1726.6	1726.4	1728.4	1730.4
165°	1752.1	1751.2	1750.3	1749.4	1748.9	1748.6	1748.3	1748.0	1747.7	1750.1	1752.4
167.5°	1768.9	1767.7	1766.6	1765.3	1764.8	1764.8	1764.8	1764.8	1764.8	1767.1	1769.5
170°	1778.5	1777.3	1776.1	1775.0	1774.3	1774.3	1774.3	1774.3	1774.3	1776.7	1779.1
172.5°	1784.7	1783.2	1781.8	1780.4	1779.8	1780.0	1780.3	1780.5	1780.7	1783.2	1785.5
175°	1792.9	1791.4	1789.9	1788.4	1787.8	1788.1	1788.4	1788.7	1789.0	1791.1	1793.1
177.5°	1795.3	1794.1	1793.0	1791.7	1791.3	1791.5	1791.7	1792.0	1792.2	1794.1	1796.0
180°	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1522.2	1522.7	1528.9	1533.4	1531.2	1533.9	1535.1
5°	1663.0	1688.3	1701.6	1711.4	1712.1	1712.8	1718.4
7.5°	1862.8	1889.8	1909.6	1939.6	1948.6	1958.7	1955.8
10°	2008.6	2048.4	2082.9	2101.0	2120.7	2149.4	2126.3
12.5°	2144.7	2215.5	2267.8	2296.2	2314.6	2320.4	2309.1
15°	2369.5	2461.9	2511.7	2510.3	2573.4	2600.8	2558.0
17.5°	2575.5	2660.9	2729.3	2764.3	2816.8	2828.5	2823.2
20°	2701.6	2794.9	2848.1	2908.4	2935.7	2960.2	2964.4
22.5°	2810.4	2894.0	2951.3	3001.4	3024.3	3035.9	3043.0
25°	2922.4	2988.3	3022.6	3040.1	3046.4	3045.0	3035.9
27.5°	2914.6	2919.7	2881.9	2844.7	2811.6	2774.1	2761.2
30°	2839.0	2780.1	2675.0	2615.5	2527.8	2458.4	2486.4
32.5°	2640.0	2522.8	2404.8	2274.6	2166.8	2136.1	2105.2
35°	2253.1	2047.1	1926.5	1786.4	1730.3	1674.3	1635.7
37.5°	1822.8	1663.5	1520.5	1428.8	1372.6	1337.1	1318.1
40°	1576.1	1432.4	1314.7	1240.5	1197.7	1157.7	1152.2
42.5°	1379.4	1245.8	1157.2	1098.1	1056.9	1040.0	1027.7
45°	1129.7	1036.5	977.0	934.9	907.6	897.1	883.1
47.5°	956.2	890.3	845.6	817.0	796.4	788.5	787.5
50°	859.2	804.5	771.6	749.1	733.1	730.2	719.1
52.5°	786.3	739.0	713.3	693.7	682.1	674.2	670.8
55°	682.6	651.0	627.9	616.7	607.6	599.9	599.9
57.5°	597.3	570.9	555.6	546.1	543.2	537.8	534.3
60°	544.6	522.1	510.2	501.8	496.1	496.9	490.5
62.5°	492.9	478.4	467.0	458.6	451.9	452.0	452.5
65°	419.8	408.6	400.2	397.3	393.2	388.3	389.7
67.5°	355.7	345.2	338.7	333.9	332.4	329.8	333.9
70°	309.8	302.0	297.1	292.9	291.5	292.2	295.8
72.5°	267.7	262.3	259.0	257.1	254.0	254.1	256.5
75°	210.3	206.1	203.2	201.2	200.5	200.5	200.5
77.5°	154.4	153.5	152.2	149.1	149.3	150.1	150.3
80°	122.0	119.8	119.1	117.7	115.7	114.2	117.7
82.5°	91.1	89.0	88.3	88.0	84.8	84.5	87.5
85°	49.0	47.0	47.6	47.0	47.0	46.3	46.3
87.5°	24.5	24.2	23.8	24.4	24.0	23.5	24.8
90°	35.6	36.7	37.6	38.3	38.8	39.4	39.9
92.5°	39.9	41.7	42.8	43.2	43.5	43.9	44.2
95°	47.5	49.6	50.6	50.6	50.6	50.6	50.6
97.5°	50.0	52.4	53.8	54.0	54.3	54.7	54.9
100°	51.1	53.5	54.8	55.1	55.4	55.7	56.0
102.5°	65.7	58.3	54.9	55.5	56.0	56.5	57.1
105°	134.6	82.2	56.3	56.9	57.5	58.1	58.7
107.5°	419.7	381.3	342.3	302.8	263.2	223.7	184.2
110°	571.9	562.1	536.0	493.7	451.3	408.9	366.6



TEST NUMBER: P332234-940

CATALOG NUMBER: S123DIW-S1165D1535U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	669.0	669.1	664.8	655.8	646.8	637.9	628.9
115°	774.1	777.0	779.1	780.3	781.5	782.7	783.9
117.5°	866.1	868.5	869.9	870.0	870.3	870.6	870.8
120°	926.9	929.3	930.5	930.5	930.5	930.5	930.5
122.5°	985.6	987.3	988.2	988.5	988.6	988.9	989.2
125°	1068.3	1068.8	1069.4	1070.1	1070.6	1071.2	1071.8
127.5°	1152.5	1153.4	1153.6	1153.1	1152.4	1151.8	1151.3
130°	1203.4	1204.5	1204.8	1204.3	1203.6	1203.0	1202.5
132.5°	1251.3	1252.5	1252.7	1251.9	1251.1	1250.2	1249.4
135°	1323.7	1324.6	1324.6	1323.7	1322.9	1322.0	1321.1
137.5°	1389.1	1390.5	1390.9	1390.4	1389.7	1389.1	1388.6
140°	1429.9	1431.1	1431.5	1430.8	1430.3	1429.7	1429.1
142.5°	1468.7	1469.6	1469.7	1468.9	1468.0	1467.2	1466.4
145°	1522.9	1523.4	1523.8	1523.8	1523.8	1523.8	1523.8
147.5°	1571.6	1572.3	1571.8	1570.5	1569.1	1567.7	1566.4
150°	1601.5	1602.0	1602.0	1601.1	1600.2	1599.3	1598.4
152.5°	1628.5	1629.6	1629.4	1628.1	1626.7	1625.3	1624.0
155°	1665.4	1667.0	1666.8	1665.0	1663.2	1661.4	1659.7
157.5°	1697.5	1699.3	1699.1	1696.7	1694.4	1692.1	1689.8
160°	1715.7	1717.4	1717.3	1715.2	1713.2	1711.1	1709.1
162.5°	1732.4	1734.4	1734.5	1732.7	1730.8	1729.0	1727.2
165°	1754.8	1757.2	1757.3	1755.2	1753.2	1751.1	1749.0
167.5°	1771.8	1774.2	1774.2	1771.8	1769.5	1767.1	1764.8
170°	1781.5	1783.9	1783.9	1781.5	1779.1	1776.7	1774.3
172.5°	1787.9	1790.2	1790.1	1787.5	1784.9	1782.3	1779.7
175°	1795.2	1797.3	1797.2	1794.7	1792.4	1790.0	1787.7
177.5°	1797.9	1799.8	1799.6	1797.2	1794.8	1792.4	1790.1
180°	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3	1794.3

(END OF REPORT)