

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: P332228-940

Luminaire Tested: **S123DIW-S1165D1320U940-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332228-940
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-S1165D1320U940-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1320 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9076.5 lumens
Efficiency: N/A
Efficacy: 119.1 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

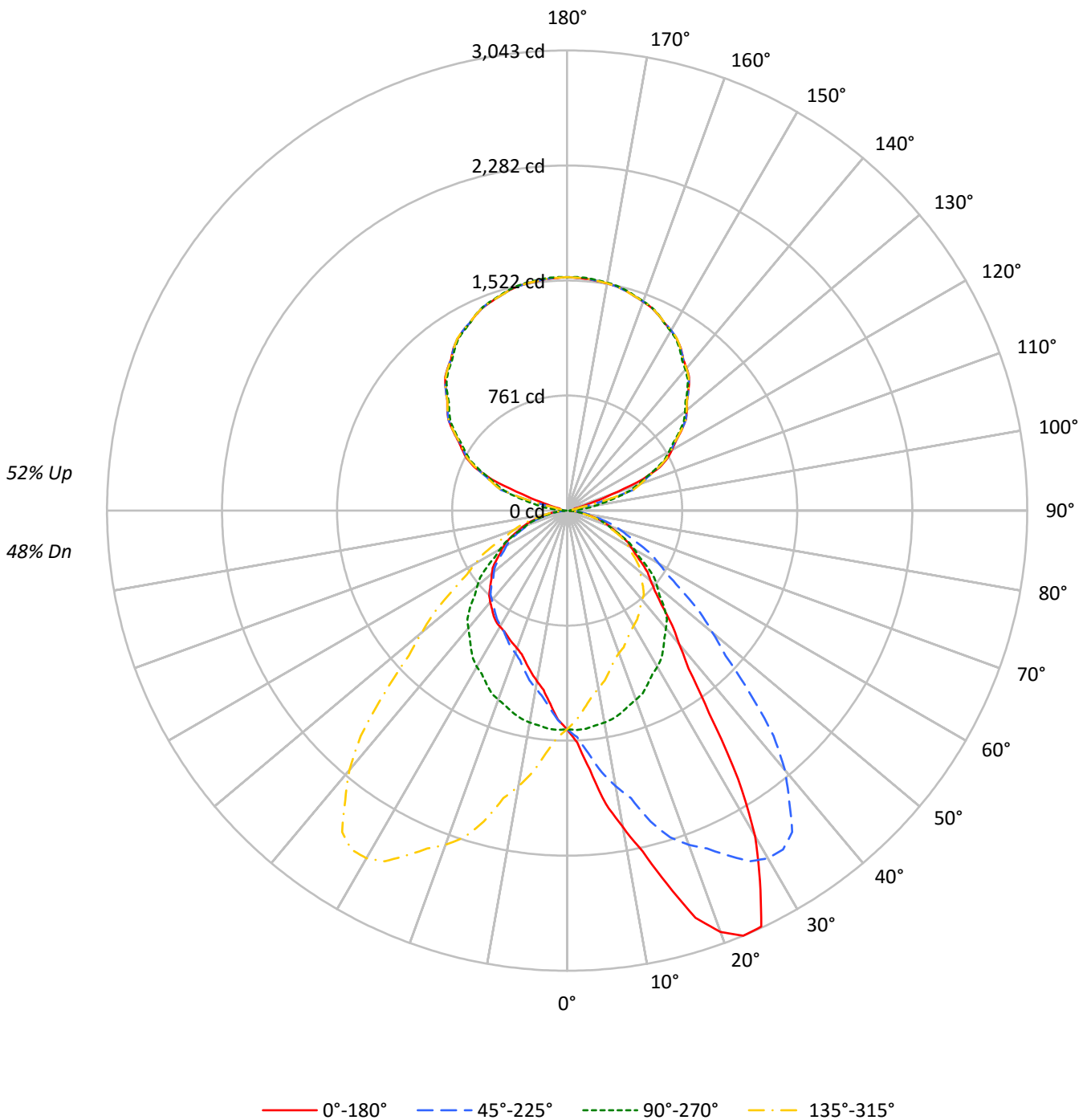
Input Watts (W): 76.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-UDD-A

Luminous Intensity Polar Plot





TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48					48			
1	98	93	90	86	90	86	83	80	73	70	68	60	58	57	49	47	46					41				
2	89	82	76	71	82	76	70	66	64	60	57	53	50	48	43	41	40					35				
3	81	72	65	59	75	67	60	55	56	52	48	47	44	41	38	36	34					30				
4	75	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29					26				
5	68	57	49	43	63	53	46	41	45	40	35	38	34	31	31	28	26					22				
6	63	51	43	37	58	48	40	35	41	35	31	34	30	27	28	25	23					20				
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	23	20					18				
8	54	42	34	29	50	39	32	27	34	28	24	28	24	21	24	20	18					16				
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	19	16					14				
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15					13				

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: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.5	1.6
10°-20°	456.9	5.0
20°-30°	766.8	8.4
30°-40°	868.3	9.6
40°-50°	778.6	8.6
50°-60°	628.3	6.9
60°-70°	437.9	4.8
70°-80°	230.1	2.5
80°-90°	60.6	0.7
90°-100°	56.1	0.6
100°-110°	267.4	2.9
110°-120°	642.3	7.1
120°-130°	818.0	9.0
130°-140°	874.0	9.6
140°-150°	817.3	9.0
150°-160°	659.2	7.3
160°-170°	425.5	4.7
170°-180°	146.6	1.6
0°-30°	1366.2	15.1
0°-40°	2234.5	24.6
0°-60°	3641.5	40.1
0°-90°	4370.1	48.1
90°-120°	965.9	10.6
90°-150°	3475.0	38.3
90°-180°	4706.0	51.8
0°-180°	9076.5	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°	34	1	34	1	34	18
95°	44	70	44	70	44	36
105°	50	342	50	342	50	115
115°	674	641	674	641	674	623
125°	922	904	922	904	922	823
135°	1136	1125	1136	1125	1136	876
145°	1310	1298	1310	1298	1310	818
155°	1428	1430	1428	1430	1428	658
165°	1504	1508	1504	1508	1504	425
175°	1538	1543	1538	1543	1538	146
180°	1543	1543	1543	1543	1543	



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-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°	23.7	22.5	22.9	23.4	22.7	23.1	23.5	23.8	24.2	24.5	24.4
90°	34.4	33.9	33.3	32.9	32.4	31.6	30.6	29.5	28.5	27.6	24.2
92.5°	38.1	37.7	37.5	37.2	36.8	35.8	34.2	32.6	30.9	29.3	26.8
95°	43.6	43.6	43.6	43.6	43.6	42.7	40.9	39.1	37.4	35.6	32.7
97.5°	47.3	47.0	46.7	46.5	46.2	45.0	43.1	41.0	39.0	36.9	35.3
100°	48.2	47.9	47.6	47.3	47.2	46.0	44.0	41.9	39.9	37.8	37.6
102.5°	49.0	48.6	48.2	47.7	47.3	50.2	56.4	62.8	69.1	75.4	118.9
105°	50.5	49.9	49.4	49.0	48.4	70.7	115.8	160.9	206.0	251.1	274.0
107.5°	158.5	192.4	226.4	260.5	294.4	328.0	361.1	394.1	427.1	460.2	456.6
110°	315.3	351.8	388.2	424.6	461.0	483.5	491.9	500.2	508.7	517.1	514.3



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	541.0	548.7	556.3	564.0	571.8	575.5	575.3	575.2	575.1	574.9	572.1
115°	674.2	673.2	672.2	671.1	670.1	668.3	665.8	663.3	660.7	658.2	655.9
117.5°	748.9	748.8	748.5	748.3	748.1	747.0	744.9	743.0	740.9	738.9	737.7
120°	800.3	800.3	800.3	800.3	800.3	799.3	797.3	795.2	793.2	791.1	790.4
122.5°	850.8	850.6	850.3	850.2	850.0	849.2	847.7	846.3	844.9	843.5	842.5
125°	921.9	921.3	920.9	920.3	919.8	919.3	918.8	918.3	917.7	917.3	916.2
127.5°	990.2	990.7	991.2	991.8	992.2	992.1	991.2	990.4	989.6	988.8	987.6
130°	1034.2	1034.7	1035.3	1035.7	1036.3	1036.0	1035.0	1033.9	1033.0	1031.9	1030.9
132.5°	1074.6	1075.3	1076.0	1076.7	1077.5	1077.3	1076.3	1075.2	1074.2	1073.2	1072.4
135°	1136.3	1137.0	1137.8	1138.5	1139.3	1139.3	1138.5	1137.8	1137.0	1136.3	1135.2
137.5°	1194.3	1194.8	1195.3	1195.8	1196.3	1196.0	1194.7	1193.6	1192.3	1191.1	1190.5
140°	1229.1	1229.7	1230.1	1230.7	1231.2	1230.9	1229.9	1228.9	1227.9	1226.8	1226.1
142.5°	1261.2	1261.9	1262.7	1263.4	1264.1	1264.1	1263.2	1262.4	1261.6	1260.8	1260.0
145°	1310.5	1310.5	1310.5	1310.5	1310.5	1310.3	1309.7	1309.3	1308.8	1308.2	1307.8
147.5°	1347.2	1348.4	1349.6	1350.8	1351.9	1352.3	1351.7	1351.2	1350.8	1350.2	1349.7
150°	1374.8	1375.6	1376.3	1377.1	1377.8	1378.0	1377.4	1376.9	1376.4	1375.9	1375.4
152.5°	1396.8	1397.9	1399.1	1400.3	1401.5	1401.6	1400.7	1399.7	1398.8	1397.9	1397.6
155°	1427.5	1429.1	1430.6	1432.1	1433.6	1433.8	1432.4	1431.2	1429.9	1428.6	1428.4
157.5°	1453.4	1455.4	1457.4	1459.4	1461.3	1461.6	1460.1	1458.6	1457.0	1455.5	1455.7
160°	1469.9	1471.7	1473.5	1475.2	1477.0	1477.2	1475.7	1474.1	1472.6	1471.1	1471.3
162.5°	1485.5	1487.1	1488.7	1490.2	1491.8	1491.7	1490.0	1488.3	1486.6	1484.8	1485.1
165°	1504.3	1506.1	1507.9	1509.7	1511.4	1511.4	1509.3	1507.3	1505.2	1503.2	1503.4
167.5°	1517.9	1519.9	1522.0	1523.9	1526.0	1526.0	1523.9	1522.0	1519.9	1517.9	1517.9
170°	1526.1	1528.1	1530.2	1532.2	1534.3	1534.3	1532.2	1530.2	1528.1	1526.1	1526.1
172.5°	1530.7	1532.9	1535.2	1537.4	1539.6	1539.8	1537.8	1535.7	1533.7	1531.6	1531.4
175°	1537.6	1539.6	1541.7	1543.7	1545.7	1545.9	1544.1	1542.3	1540.5	1538.7	1538.5
177.5°	1539.6	1541.7	1543.7	1545.8	1547.8	1548.0	1546.4	1544.7	1543.1	1541.5	1541.2
180°	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-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°	24.9	24.8	22.5	19.6	18.0	15.8	15.3	13.6	13.1	13.6	13.6
90°	20.9	17.6	14.3	11.3	8.8	6.2	3.7	1.2	3.7	6.2	8.8
92.5°	24.3	21.8	19.4	18.5	19.2	19.9	20.6	21.3	20.6	19.9	19.2
95°	30.0	27.1	24.3	28.2	38.6	49.0	59.5	69.9	59.5	49.0	38.6
97.5°	73.7	91.9	110.3	121.8	126.5	131.2	135.9	140.5	135.9	131.2	126.5
100°	117.3	157.1	196.8	214.2	209.0	203.9	198.9	193.8	198.9	203.9	209.0
102.5°	162.3	205.7	249.1	269.0	265.3	261.6	258.0	254.3	258.0	261.6	265.3
105°	296.9	319.9	342.9	352.8	350.1	347.3	344.5	341.7	344.5	347.3	350.1
107.5°	453.0	449.4	445.8	442.8	440.6	438.4	436.1	433.9	436.1	438.4	440.6
110°	511.5	508.7	505.9	503.5	501.4	499.4	497.4	495.3	497.4	499.4	501.4



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	569.3	566.5	563.7	561.3	559.5	557.7	555.9	554.0	555.9	557.7	559.5
115°	653.5	651.2	649.0	647.0	645.5	644.0	642.5	641.0	642.5	644.0	645.5
117.5°	736.6	735.3	734.1	732.6	730.8	728.9	727.0	725.1	727.0	728.9	730.8
120°	789.6	788.8	788.1	786.6	784.3	781.9	779.7	777.4	779.7	781.9	784.3
122.5°	841.5	840.5	839.5	838.1	836.2	834.4	832.5	830.6	832.5	834.4	836.2
125°	915.3	914.2	913.2	911.7	909.6	907.6	905.5	903.5	905.5	907.6	909.6
127.5°	986.4	985.2	983.9	982.3	980.3	978.2	976.2	974.1	976.2	978.2	980.3
130°	1029.9	1028.9	1027.9	1026.4	1024.3	1022.3	1020.2	1018.2	1020.2	1022.3	1024.3
132.5°	1071.6	1070.8	1070.0	1068.5	1066.5	1064.4	1062.4	1060.3	1062.4	1064.4	1066.5
135°	1134.3	1133.2	1132.2	1131.0	1129.4	1127.8	1126.3	1124.8	1126.3	1127.8	1129.4
137.5°	1190.0	1189.4	1188.8	1187.6	1185.6	1183.7	1181.8	1179.8	1181.8	1183.7	1185.6
140°	1225.3	1224.6	1223.8	1222.6	1221.1	1219.6	1218.1	1216.6	1218.1	1219.6	1221.1
142.5°	1259.3	1258.5	1257.8	1256.6	1255.1	1253.6	1252.0	1250.4	1252.0	1253.6	1255.1
145°	1307.2	1306.7	1306.2	1305.1	1303.3	1301.5	1299.8	1298.0	1299.8	1301.5	1303.3
147.5°	1349.2	1348.7	1348.2	1347.4	1346.1	1345.0	1343.8	1342.6	1343.8	1345.0	1346.1
150°	1374.8	1374.4	1373.9	1373.2	1372.4	1371.7	1370.9	1370.2	1370.9	1371.7	1372.4
152.5°	1397.3	1397.0	1396.7	1396.3	1396.0	1395.6	1395.3	1394.9	1395.3	1395.6	1396.0
155°	1428.2	1427.9	1427.6	1427.7	1428.3	1428.8	1429.3	1429.8	1429.3	1428.8	1428.3
157.5°	1456.0	1456.3	1456.5	1456.6	1456.7	1456.8	1456.8	1456.9	1456.8	1456.8	1456.7
160°	1471.6	1471.9	1472.1	1472.3	1472.6	1472.8	1473.1	1473.4	1473.1	1472.8	1472.6
162.5°	1485.3	1485.6	1485.9	1486.3	1486.9	1487.6	1488.3	1489.0	1488.3	1487.6	1486.9
165°	1503.7	1504.0	1504.2	1504.7	1505.5	1506.2	1507.0	1507.8	1507.0	1506.2	1505.5
167.5°	1517.9	1517.9	1517.9	1518.3	1519.4	1520.4	1521.4	1522.4	1521.4	1520.4	1519.4
170°	1526.1	1526.1	1526.1	1526.6	1527.7	1528.7	1529.6	1530.7	1529.6	1528.7	1527.7
172.5°	1531.2	1531.0	1530.8	1531.3	1532.5	1533.7	1535.0	1536.2	1535.0	1533.7	1532.5
175°	1538.2	1537.9	1537.7	1538.2	1539.4	1540.8	1542.0	1543.3	1542.0	1540.8	1539.4
177.5°	1541.1	1540.9	1540.7	1541.1	1542.1	1543.1	1544.1	1545.2	1544.1	1543.1	1542.1
180°	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-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°	13.5	14.6	14.7	16.0	16.1	17.3	17.5	16.6	16.8	18.6	16.6
90°	11.3	14.3	17.6	20.9	24.2	27.6	28.5	29.5	30.6	31.6	32.4
92.5°	18.5	19.4	21.8	24.3	26.8	29.3	30.9	32.6	34.2	35.8	36.8
95°	28.2	24.3	27.1	30.0	32.7	35.6	37.4	39.1	40.9	42.7	43.6
97.5°	121.8	110.3	91.9	73.7	55.3	36.9	39.0	41.0	43.1	45.0	46.2
100°	214.2	196.8	157.1	117.3	77.6	37.8	39.9	41.9	44.0	46.0	47.2
102.5°	269.0	249.1	205.7	162.3	118.9	75.4	69.1	62.8	56.4	50.2	47.3
105°	352.8	342.9	319.9	296.9	274.0	251.1	206.0	160.9	115.8	70.7	48.4
107.5°	442.8	445.8	449.4	453.0	456.6	460.2	427.1	394.1	361.1	328.0	294.4
110°	503.5	505.9	508.7	511.5	514.3	517.1	508.7	500.2	491.9	483.5	461.0



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	561.3	563.7	566.5	569.3	572.1	574.9	575.1	575.2	575.3	575.5	571.8
115°	647.0	649.0	651.2	653.5	655.9	658.2	660.7	663.3	665.8	668.3	670.1
117.5°	732.6	734.1	735.3	736.6	737.7	738.9	740.9	743.0	744.9	747.0	748.1
120°	786.6	788.1	788.8	789.6	790.4	791.1	793.2	795.2	797.3	799.3	800.3
122.5°	838.1	839.5	840.5	841.5	842.5	843.5	844.9	846.3	847.7	849.2	850.0
125°	911.7	913.2	914.2	915.3	916.2	917.3	917.7	918.3	918.8	919.3	919.8
127.5°	982.3	983.9	985.2	986.4	987.6	988.8	989.6	990.4	991.2	992.1	992.2
130°	1026.4	1027.9	1028.9	1029.9	1030.9	1031.9	1033.0	1033.9	1035.0	1036.0	1036.3
132.5°	1068.5	1070.0	1070.8	1071.6	1072.4	1073.2	1074.2	1075.2	1076.3	1077.3	1077.5
135°	1131.0	1132.2	1133.2	1134.3	1135.2	1136.3	1137.0	1137.8	1138.5	1139.3	1139.3
137.5°	1187.6	1188.8	1189.4	1190.0	1190.5	1191.1	1192.3	1193.6	1194.7	1196.0	1196.3
140°	1222.6	1223.8	1224.6	1225.3	1226.1	1226.8	1227.9	1228.9	1229.9	1230.9	1231.2
142.5°	1256.6	1257.8	1258.5	1259.3	1260.0	1260.8	1261.6	1262.4	1263.2	1264.1	1264.1
145°	1305.1	1306.2	1306.7	1307.2	1307.8	1308.2	1308.8	1309.3	1309.7	1310.3	1310.5
147.5°	1347.4	1348.2	1348.7	1349.2	1349.7	1350.2	1350.8	1351.2	1351.7	1352.3	1351.9
150°	1373.2	1373.9	1374.4	1374.8	1375.4	1375.9	1376.4	1376.9	1377.4	1378.0	1377.8
152.5°	1396.3	1396.7	1397.0	1397.3	1397.6	1397.9	1398.8	1399.7	1400.7	1401.6	1401.5
155°	1427.7	1427.6	1427.9	1428.2	1428.4	1428.6	1429.9	1431.2	1432.4	1433.8	1433.6
157.5°	1456.6	1456.5	1456.3	1456.0	1455.7	1455.5	1457.0	1458.6	1460.1	1461.6	1461.3
160°	1472.3	1472.1	1471.9	1471.6	1471.3	1471.1	1472.6	1474.1	1475.7	1477.2	1477.0
162.5°	1486.3	1485.9	1485.6	1485.3	1485.1	1484.8	1486.6	1488.3	1490.0	1491.7	1491.8
165°	1504.7	1504.2	1504.0	1503.7	1503.4	1503.2	1505.2	1507.3	1509.3	1511.4	1511.4
167.5°	1518.3	1517.9	1517.9	1517.9	1517.9	1517.9	1519.9	1522.0	1523.9	1526.0	1526.0
170°	1526.6	1526.1	1526.1	1526.1	1526.1	1526.1	1528.1	1530.2	1532.2	1534.3	1534.3
172.5°	1531.3	1530.8	1531.0	1531.2	1531.4	1531.6	1533.7	1535.7	1537.8	1539.8	1539.6
175°	1538.2	1537.7	1537.9	1538.2	1538.5	1538.7	1540.5	1542.3	1544.1	1545.9	1545.7
177.5°	1541.1	1540.7	1540.9	1541.1	1541.2	1541.5	1543.1	1544.7	1546.4	1548.0	1547.8
180°	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-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°	16.7	16.8	16.3	15.9	16.3	16.8	16.7	16.6	18.6	16.8	16.6
90°	32.9	33.3	33.9	34.4	33.9	33.3	32.9	32.4	31.6	30.6	29.5
92.5°	37.2	37.5	37.7	38.1	37.7	37.5	37.2	36.8	35.8	34.2	32.6
95°	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	42.7	40.9	39.1
97.5°	46.5	46.7	47.0	47.3	47.0	46.7	46.5	46.2	45.0	43.1	41.0
100°	47.3	47.6	47.9	48.2	47.9	47.6	47.3	47.2	46.0	44.0	41.9
102.5°	47.7	48.2	48.6	49.0	48.6	48.2	47.7	47.3	50.2	56.4	62.8
105°	49.0	49.4	49.9	50.5	49.9	49.4	49.0	48.4	70.7	115.8	160.9
107.5°	260.5	226.4	192.4	158.5	192.4	226.4	260.5	294.4	328.0	361.1	394.1
110°	424.6	388.2	351.8	315.3	351.8	388.2	424.6	461.0	483.5	491.9	500.2



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	564.0	556.3	548.7	541.0	548.7	556.3	564.0	571.8	575.5	575.3	575.2
115°	671.1	672.2	673.2	674.2	673.2	672.2	671.1	670.1	668.3	665.8	663.3
117.5°	748.3	748.5	748.8	748.9	748.8	748.5	748.3	748.1	747.0	744.9	743.0
120°	800.3	800.3	800.3	800.3	800.3	800.3	800.3	800.3	799.3	797.3	795.2
122.5°	850.2	850.3	850.6	850.8	850.6	850.3	850.2	850.0	849.2	847.7	846.3
125°	920.3	920.9	921.3	921.9	921.3	920.9	920.3	919.8	919.3	918.8	918.3
127.5°	991.8	991.2	990.7	990.2	990.7	991.2	991.8	992.2	992.1	991.2	990.4
130°	1035.7	1035.3	1034.7	1034.2	1034.7	1035.3	1035.7	1036.3	1036.0	1035.0	1033.9
132.5°	1076.7	1076.0	1075.3	1074.6	1075.3	1076.0	1076.7	1077.5	1077.3	1076.3	1075.2
135°	1138.5	1137.8	1137.0	1136.3	1137.0	1137.8	1138.5	1139.3	1139.3	1138.5	1137.8
137.5°	1195.8	1195.3	1194.8	1194.3	1194.8	1195.3	1195.8	1196.3	1196.0	1194.7	1193.6
140°	1230.7	1230.1	1229.7	1229.1	1229.7	1230.1	1230.7	1231.2	1230.9	1229.9	1228.9
142.5°	1263.4	1262.7	1261.9	1261.2	1261.9	1262.7	1263.4	1264.1	1264.1	1263.2	1262.4
145°	1310.5	1310.5	1310.5	1310.5	1310.5	1310.5	1310.5	1310.5	1310.3	1309.7	1309.3
147.5°	1350.8	1349.6	1348.4	1347.2	1348.4	1349.6	1350.8	1351.9	1352.3	1351.7	1351.2
150°	1377.1	1376.3	1375.6	1374.8	1375.6	1376.3	1377.1	1377.8	1378.0	1377.4	1376.9
152.5°	1400.3	1399.1	1397.9	1396.8	1397.9	1399.1	1400.3	1401.5	1401.6	1400.7	1399.7
155°	1432.1	1430.6	1429.1	1427.5	1429.1	1430.6	1432.1	1433.6	1433.8	1432.4	1431.2
157.5°	1459.4	1457.4	1455.4	1453.4	1455.4	1457.4	1459.4	1461.3	1461.6	1460.1	1458.6
160°	1475.2	1473.5	1471.7	1469.9	1471.7	1473.5	1475.2	1477.0	1477.2	1475.7	1474.1
162.5°	1490.2	1488.7	1487.1	1485.5	1487.1	1488.7	1490.2	1491.8	1491.7	1490.0	1488.3
165°	1509.7	1507.9	1506.1	1504.3	1506.1	1507.9	1509.7	1511.4	1511.4	1509.3	1507.3
167.5°	1523.9	1522.0	1519.9	1517.9	1519.9	1522.0	1523.9	1526.0	1526.0	1523.9	1522.0
170°	1532.2	1530.2	1528.1	1526.1	1528.1	1530.2	1532.2	1534.3	1534.3	1532.2	1530.2
172.5°	1537.4	1535.2	1532.9	1530.7	1532.9	1535.2	1537.4	1539.6	1539.8	1537.8	1535.7
175°	1543.7	1541.7	1539.6	1537.6	1539.6	1541.7	1543.7	1545.7	1545.9	1544.1	1542.3
177.5°	1545.8	1543.7	1541.7	1539.6	1541.7	1543.7	1545.8	1547.8	1548.0	1546.4	1544.7
180°	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-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°	17.5	17.3	16.1	16.0	14.7	14.6	13.5	13.6	13.6	13.1	13.6
90°	28.5	27.6	24.2	20.9	17.6	14.3	11.3	8.8	6.2	3.7	1.2
92.5°	30.9	29.3	26.8	24.3	21.8	19.4	18.5	19.2	19.9	20.6	21.3
95°	37.4	35.6	32.7	30.0	27.1	24.3	28.2	38.6	49.0	59.5	69.9
97.5°	39.0	36.9	55.3	73.7	91.9	110.3	121.8	126.5	131.2	135.9	140.5
100°	39.9	37.8	77.6	117.3	157.1	196.8	214.2	209.0	203.9	198.9	193.8
102.5°	69.1	75.4	118.9	162.3	205.7	249.1	269.0	265.3	261.6	258.0	254.3
105°	206.0	251.1	274.0	296.9	319.9	342.9	352.8	350.1	347.3	344.5	341.7
107.5°	427.1	460.2	456.6	453.0	449.4	445.8	442.8	440.6	438.4	436.1	433.9
110°	508.7	517.1	514.3	511.5	508.7	505.9	503.5	501.4	499.4	497.4	495.3



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	575.1	574.9	572.1	569.3	566.5	563.7	561.3	559.5	557.7	555.9	554.0
115°	660.7	658.2	655.9	653.5	651.2	649.0	647.0	645.5	644.0	642.5	641.0
117.5°	740.9	738.9	737.7	736.6	735.3	734.1	732.6	730.8	728.9	727.0	725.1
120°	793.2	791.1	790.4	789.6	788.8	788.1	786.6	784.3	781.9	779.7	777.4
122.5°	844.9	843.5	842.5	841.5	840.5	839.5	838.1	836.2	834.4	832.5	830.6
125°	917.7	917.3	916.2	915.3	914.2	913.2	911.7	909.6	907.6	905.5	903.5
127.5°	989.6	988.8	987.6	986.4	985.2	983.9	982.3	980.3	978.2	976.2	974.1
130°	1033.0	1031.9	1030.9	1029.9	1028.9	1027.9	1026.4	1024.3	1022.3	1020.2	1018.2
132.5°	1074.2	1073.2	1072.4	1071.6	1070.8	1070.0	1068.5	1066.5	1064.4	1062.4	1060.3
135°	1137.0	1136.3	1135.2	1134.3	1133.2	1132.2	1131.0	1129.4	1127.8	1126.3	1124.8
137.5°	1192.3	1191.1	1190.5	1190.0	1189.4	1188.8	1187.6	1185.6	1183.7	1181.8	1179.8
140°	1227.9	1226.8	1226.1	1225.3	1224.6	1223.8	1222.6	1221.1	1219.6	1218.1	1216.6
142.5°	1261.6	1260.8	1260.0	1259.3	1258.5	1257.8	1256.6	1255.1	1253.6	1252.0	1250.4
145°	1308.8	1308.2	1307.8	1307.2	1306.7	1306.2	1305.1	1303.3	1301.5	1299.8	1298.0
147.5°	1350.8	1350.2	1349.7	1349.2	1348.7	1348.2	1347.4	1346.1	1345.0	1343.8	1342.6
150°	1376.4	1375.9	1375.4	1374.8	1374.4	1373.9	1373.2	1372.4	1371.7	1370.9	1370.2
152.5°	1398.8	1397.9	1397.6	1397.3	1397.0	1396.7	1396.3	1396.0	1395.6	1395.3	1394.9
155°	1429.9	1428.6	1428.4	1428.2	1427.9	1427.6	1427.7	1428.3	1428.8	1429.3	1429.8
157.5°	1457.0	1455.5	1455.7	1456.0	1456.3	1456.5	1456.6	1456.7	1456.8	1456.8	1456.9
160°	1472.6	1471.1	1471.3	1471.6	1471.9	1472.1	1472.3	1472.6	1472.8	1473.1	1473.4
162.5°	1486.6	1484.8	1485.1	1485.3	1485.6	1485.9	1486.3	1486.9	1487.6	1488.3	1489.0
165°	1505.2	1503.2	1503.4	1503.7	1504.0	1504.2	1504.7	1505.5	1506.2	1507.0	1507.8
167.5°	1519.9	1517.9	1517.9	1517.9	1517.9	1517.9	1518.3	1519.4	1520.4	1521.4	1522.4
170°	1528.1	1526.1	1526.1	1526.1	1526.1	1526.1	1526.6	1527.7	1528.7	1529.6	1530.7
172.5°	1533.7	1531.6	1531.4	1531.2	1531.0	1530.8	1531.3	1532.5	1533.7	1535.0	1536.2
175°	1540.5	1538.7	1538.5	1538.2	1537.9	1537.7	1538.2	1539.4	1540.8	1542.0	1543.3
177.5°	1543.1	1541.5	1541.2	1541.1	1540.9	1540.7	1541.1	1542.1	1543.1	1544.1	1545.2
180°	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-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°	15.3	15.8	18.0	19.6	22.5	24.8	24.9	24.4	24.5	24.2	23.8
90°	3.7	6.2	8.8	11.3	14.3	17.6	20.9	24.2	27.6	28.5	29.5
92.5°	20.6	19.9	19.2	18.5	19.4	21.8	24.3	26.8	29.3	30.9	32.6
95°	59.5	49.0	38.6	28.2	24.3	27.1	30.0	32.7	35.6	37.4	39.1
97.5°	135.9	131.2	126.5	121.8	110.3	91.9	73.7	55.3	36.9	39.0	41.0
100°	198.9	203.9	209.0	214.2	196.8	157.1	117.3	77.6	37.8	39.9	41.9
102.5°	258.0	261.6	265.3	269.0	249.1	205.7	162.3	118.9	75.4	69.1	62.8
105°	344.5	347.3	350.1	352.8	342.9	319.9	296.9	274.0	251.1	206.0	160.9
107.5°	436.1	438.4	440.6	442.8	445.8	449.4	453.0	456.6	460.2	427.1	394.1
110°	497.4	499.4	501.4	503.5	505.9	508.7	511.5	514.3	517.1	508.7	500.2



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	555.9	557.7	559.5	561.3	563.7	566.5	569.3	572.1	574.9	575.1	575.2
115°	642.5	644.0	645.5	647.0	649.0	651.2	653.5	655.9	658.2	660.7	663.3
117.5°	727.0	728.9	730.8	732.6	734.1	735.3	736.6	737.7	738.9	740.9	743.0
120°	779.7	781.9	784.3	786.6	788.1	788.8	789.6	790.4	791.1	793.2	795.2
122.5°	832.5	834.4	836.2	838.1	839.5	840.5	841.5	842.5	843.5	844.9	846.3
125°	905.5	907.6	909.6	911.7	913.2	914.2	915.3	916.2	917.3	917.7	918.3
127.5°	976.2	978.2	980.3	982.3	983.9	985.2	986.4	987.6	988.8	989.6	990.4
130°	1020.2	1022.3	1024.3	1026.4	1027.9	1028.9	1029.9	1030.9	1031.9	1033.0	1033.9
132.5°	1062.4	1064.4	1066.5	1068.5	1070.0	1070.8	1071.6	1072.4	1073.2	1074.2	1075.2
135°	1126.3	1127.8	1129.4	1131.0	1132.2	1133.2	1134.3	1135.2	1136.3	1137.0	1137.8
137.5°	1181.8	1183.7	1185.6	1187.6	1188.8	1189.4	1190.0	1190.5	1191.1	1192.3	1193.6
140°	1218.1	1219.6	1221.1	1222.6	1223.8	1224.6	1225.3	1226.1	1226.8	1227.9	1228.9
142.5°	1252.0	1253.6	1255.1	1256.6	1257.8	1258.5	1259.3	1260.0	1260.8	1261.6	1262.4
145°	1299.8	1301.5	1303.3	1305.1	1306.2	1306.7	1307.2	1307.8	1308.2	1308.8	1309.3
147.5°	1343.8	1345.0	1346.1	1347.4	1348.2	1348.7	1349.2	1349.7	1350.2	1350.8	1351.2
150°	1370.9	1371.7	1372.4	1373.2	1373.9	1374.4	1374.8	1375.4	1375.9	1376.4	1376.9
152.5°	1395.3	1395.6	1396.0	1396.3	1396.7	1397.0	1397.3	1397.6	1397.9	1398.8	1399.7
155°	1429.3	1428.8	1428.3	1427.7	1427.6	1427.9	1428.2	1428.4	1428.6	1429.9	1431.2
157.5°	1456.8	1456.8	1456.7	1456.6	1456.5	1456.3	1456.0	1455.7	1455.5	1457.0	1458.6
160°	1473.1	1472.8	1472.6	1472.3	1472.1	1471.9	1471.6	1471.3	1471.1	1472.6	1474.1
162.5°	1488.3	1487.6	1486.9	1486.3	1485.9	1485.6	1485.3	1485.1	1484.8	1486.6	1488.3
165°	1507.0	1506.2	1505.5	1504.7	1504.2	1504.0	1503.7	1503.4	1503.2	1505.2	1507.3
167.5°	1521.4	1520.4	1519.4	1518.3	1517.9	1517.9	1517.9	1517.9	1517.9	1519.9	1522.0
170°	1529.6	1528.7	1527.7	1526.6	1526.1	1526.1	1526.1	1526.1	1526.1	1528.1	1530.2
172.5°	1535.0	1533.7	1532.5	1531.3	1530.8	1531.0	1531.2	1531.4	1531.6	1533.7	1535.7
175°	1542.0	1540.8	1539.4	1538.2	1537.7	1537.9	1538.2	1538.5	1538.7	1540.5	1542.3
177.5°	1544.1	1543.1	1542.1	1541.1	1540.7	1540.9	1541.1	1541.2	1541.5	1543.1	1544.7
180°	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-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°	23.5	23.1	22.7	23.4	22.9	22.5	23.7
90°	30.6	31.6	32.4	32.9	33.3	33.9	34.4
92.5°	34.2	35.8	36.8	37.2	37.5	37.7	38.1
95°	40.9	42.7	43.6	43.6	43.6	43.6	43.6
97.5°	43.1	45.0	46.2	46.5	46.7	47.0	47.3
100°	44.0	46.0	47.2	47.3	47.6	47.9	48.2
102.5°	56.4	50.2	47.3	47.7	48.2	48.6	49.0
105°	115.8	70.7	48.4	49.0	49.4	49.9	50.5
107.5°	361.1	328.0	294.4	260.5	226.4	192.4	158.5
110°	491.9	483.5	461.0	424.6	388.2	351.8	315.3



TEST NUMBER: P332228-940

CATALOG NUMBER: S123DIW-S1165D1320U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	575.3	575.5	571.8	564.0	556.3	548.7	541.0
115°	665.8	668.3	670.1	671.1	672.2	673.2	674.2
117.5°	744.9	747.0	748.1	748.3	748.5	748.8	748.9
120°	797.3	799.3	800.3	800.3	800.3	800.3	800.3
122.5°	847.7	849.2	850.0	850.2	850.3	850.6	850.8
125°	918.8	919.3	919.8	920.3	920.9	921.3	921.9
127.5°	991.2	992.1	992.2	991.8	991.2	990.7	990.2
130°	1035.0	1036.0	1036.3	1035.7	1035.3	1034.7	1034.2
132.5°	1076.3	1077.3	1077.5	1076.7	1076.0	1075.3	1074.6
135°	1138.5	1139.3	1139.3	1138.5	1137.8	1137.0	1136.3
137.5°	1194.7	1196.0	1196.3	1195.8	1195.3	1194.8	1194.3
140°	1229.9	1230.9	1231.2	1230.7	1230.1	1229.7	1229.1
142.5°	1263.2	1264.1	1264.1	1263.4	1262.7	1261.9	1261.2
145°	1309.7	1310.3	1310.5	1310.5	1310.5	1310.5	1310.5
147.5°	1351.7	1352.3	1351.9	1350.8	1349.6	1348.4	1347.2
150°	1377.4	1378.0	1377.8	1377.1	1376.3	1375.6	1374.8
152.5°	1400.7	1401.6	1401.5	1400.3	1399.1	1397.9	1396.8
155°	1432.4	1433.8	1433.6	1432.1	1430.6	1429.1	1427.5
157.5°	1460.1	1461.6	1461.3	1459.4	1457.4	1455.4	1453.4
160°	1475.7	1477.2	1477.0	1475.2	1473.5	1471.7	1469.9
162.5°	1490.0	1491.7	1491.8	1490.2	1488.7	1487.1	1485.5
165°	1509.3	1511.4	1511.4	1509.7	1507.9	1506.1	1504.3
167.5°	1523.9	1526.0	1526.0	1523.9	1522.0	1519.9	1517.9
170°	1532.2	1534.3	1534.3	1532.2	1530.2	1528.1	1526.1
172.5°	1537.8	1539.8	1539.6	1537.4	1535.2	1532.9	1530.7
175°	1544.1	1545.9	1545.7	1543.7	1541.7	1539.6	1537.6
177.5°	1546.4	1548.0	1547.8	1545.8	1543.7	1541.7	1539.6
180°	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3	1543.3

(END OF REPORT)