

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: P332234-930

Luminaire Tested: **S123DIW-S1165D1535U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332234-930
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-S1165D1535U930-4F0-1E-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: 8999.3 lumens
Efficiency: N/A
Efficacy: 108.6 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

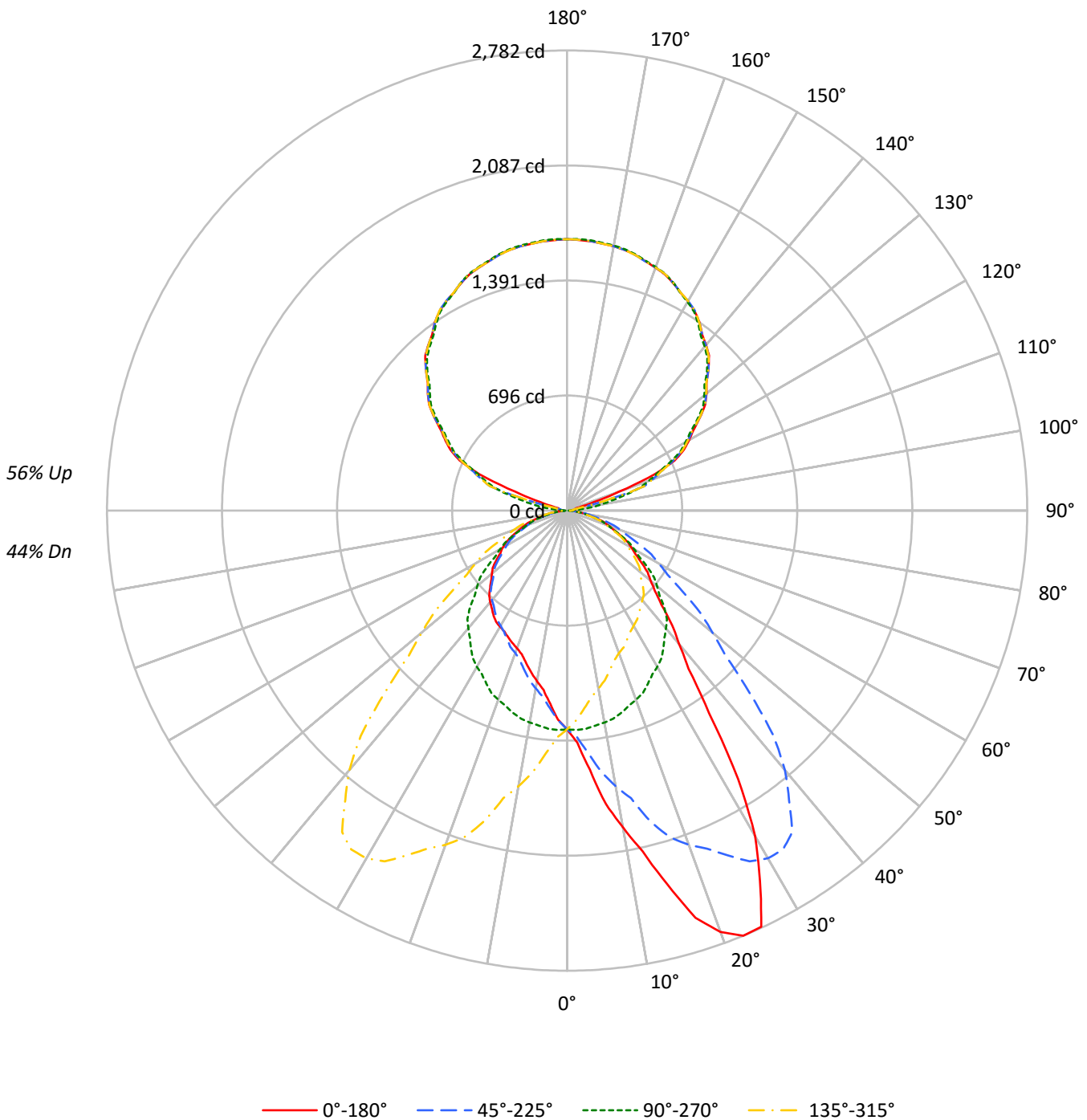
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14235	14235	14235	14235
5°	16977	14296	12670	14296
10°	21249	14224	11444	14224
15°	26063	14110	10653	14110
20°	31047	13931	10143	13931
25°	32967	13713	10030	13713
30°	28256	13554	10082	13554
35°	19651	13328	10188	13328
40°	14802	13065	10156	13065
45°	12291	12670	10027	12670
50°	11010	11868	9937	11868
55°	10293	11003	9813	11003
60°	9655	10097	9711	10097
65°	9075	9205	9401	9205
70°	8510	8189	8954	8189
75°	7623	7170	8210	7170
80°	6670	5876	7073	5876
85°	5224	4273	4755	4273



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.3	1.4
10°-20°	417.7	4.6
20°-30°	701.1	7.8
30°-40°	793.9	8.8
40°-50°	711.9	7.9
50°-60°	574.5	6.4
60°-70°	400.3	4.4
70°-80°	210.4	2.3
80°-90°	56.1	0.6
90°-100°	59.6	0.7
100°-110°	284.3	3.2
110°-120°	682.8	7.6
120°-130°	869.5	9.7
130°-140°	929.1	10.3
140°-150°	868.8	9.7
150°-160°	700.8	7.8
160°-170°	452.3	5.0
170°-180°	155.9	1.7
0°-30°	1249.1	13.9
0°-40°	2043.0	22.7
0°-60°	3329.4	37.0
0°-90°	3996.3	44.4
90°-120°	1026.8	11.4
90°-150°	3694.1	41.0
90°-180°	5003.0	55.6
0°-180°	8999.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1322	1322	1322	1322	1322	
5°	1571	1323	1173	1323	1571	163
15°	2339	1266	956	1266	2339	675
25°	2776	1155	844	1155	2776	1217
35°	1496	1014	775	1014	1496	972
45°	807	832	659	832	807	639
55°	548	586	523	586	548	492
65°	356	361	369	361	356	355
75°	183	172	197	172	183	196
85°	42	35	38	35	42	51
90°	36	1	36	1	36	19
95°	46	74	46	74	46	39
105°	54	363	54	363	54	123
115°	717	681	717	681	717	662
125°	980	960	980	960	980	875
135°	1208	1196	1208	1196	1208	931
145°	1393	1380	1393	1380	1393	870
155°	1518	1520	1518	1520	1518	700
165°	1599	1603	1599	1603	1599	452
175°	1634	1640	1634	1640	1634	156
180°	1640	1640	1640	1640	1640	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1403.5	1402.5	1400.0	1402.0	1397.9	1392.2	1391.7	1386.6	1371.7	1370.7	1366.6
5°	1571.2	1566.0	1565.4	1564.7	1555.8	1543.6	1520.5	1518.6	1487.8	1472.4	1453.9
7.5°	1788.2	1790.9	1781.6	1773.4	1746.0	1727.9	1703.2	1671.5	1633.7	1595.4	1569.9
10°	1944.1	1965.2	1938.9	1921.0	1904.4	1872.9	1836.5	1790.9	1745.4	1692.2	1651.9
12.5°	2111.2	2121.6	2116.3	2099.4	2073.5	2025.7	1961.0	1910.9	1869.0	1780.5	1744.7
15°	2338.8	2377.9	2352.9	2295.2	2296.5	2251.0	2166.4	2073.5	2024.1	1946.6	1840.9
17.5°	2581.2	2586.1	2575.4	2527.4	2495.4	2432.9	2354.8	2265.7	2165.8	2072.0	1959.8
20°	2710.4	2706.5	2684.1	2659.2	2604.1	2555.4	2470.1	2370.8	2242.6	2150.4	2028.0
22.5°	2782.2	2775.8	2765.2	2744.2	2698.4	2646.1	2569.6	2461.1	2339.0	2211.9	2070.5
25°	2775.8	2784.1	2785.4	2779.6	2763.6	2732.2	2672.0	2585.5	2463.8	2300.4	2153.0
27.5°	2524.6	2536.4	2570.6	2601.0	2635.0	2669.5	2664.9	2622.0	2531.9	2390.8	2210.6
30°	2273.4	2247.8	2311.2	2391.4	2445.8	2541.9	2595.7	2598.9	2548.3	2427.2	2251.6
32.5°	1924.8	1953.0	1981.1	2079.7	2198.7	2306.6	2413.8	2500.0	2509.9	2429.3	2275.7
35°	1495.5	1530.8	1582.0	1633.3	1761.5	1871.7	2060.0	2224.1	2354.8	2372.1	2277.9
37.5°	1205.2	1222.5	1255.0	1306.4	1390.2	1520.9	1666.6	1874.0	2063.4	2204.2	2210.4
40°	1053.4	1058.5	1095.0	1134.2	1202.1	1309.7	1441.0	1624.3	1851.1	2047.9	2129.9
42.5°	939.6	950.9	966.4	1004.0	1058.0	1139.1	1261.2	1412.6	1620.5	1846.9	2007.3
45°	807.4	820.2	829.8	854.8	893.2	947.7	1032.9	1171.3	1329.6	1563.4	1779.4
47.5°	720.0	721.0	728.1	747.0	773.1	814.0	874.2	963.2	1108.5	1298.2	1519.9
50°	657.5	667.6	670.3	684.9	705.5	735.6	785.5	861.2	980.4	1147.0	1350.7
52.5°	613.3	616.4	623.6	634.2	652.2	675.6	718.9	778.1	871.7	1013.7	1201.0
55°	548.5	548.5	555.5	563.9	574.1	595.3	624.1	667.6	738.8	849.0	1004.0
57.5°	488.5	491.7	496.7	499.3	508.0	522.0	546.1	579.1	632.2	717.0	840.3
60°	448.5	454.3	453.6	458.8	466.5	477.4	497.9	524.8	572.2	640.1	744.0
62.5°	413.7	413.3	413.2	419.3	427.0	437.4	450.7	474.0	514.3	574.5	662.9
65°	356.3	355.0	359.5	363.3	365.9	373.6	383.8	404.3	431.2	476.1	544.6
67.5°	305.2	301.6	303.9	305.2	309.7	315.6	325.2	337.9	359.3	395.3	447.0
70°	270.4	267.2	266.5	267.8	271.7	276.1	283.2	295.4	315.3	344.1	381.9
72.5°	234.5	232.4	232.2	235.1	236.8	239.8	244.8	255.9	271.7	293.3	328.6
75°	183.3	183.3	183.3	183.9	185.8	188.4	192.2	198.0	210.2	225.5	249.2
77.5°	137.4	137.2	136.5	136.3	139.2	140.3	141.2	146.6	153.4	163.8	181.1
80°	107.6	104.4	105.7	107.6	108.9	109.6	111.5	112.8	118.5	124.3	136.5
82.5°	80.0	77.3	77.5	80.5	80.7	81.4	83.3	85.1	87.2	92.5	99.1
85°	42.3	42.3	43.0	43.0	43.5	43.0	44.8	45.5	45.5	48.7	52.5
87.5°	22.7	21.5	21.9	22.3	21.8	22.1	22.4	22.7	23.0	23.3	23.1
90°	36.5	36.0	35.5	35.0	34.4	33.6	32.5	31.4	30.3	29.3	25.8
92.5°	40.4	40.1	39.8	39.5	39.1	38.2	36.4	34.7	32.9	31.2	28.5
95°	46.3	46.3	46.3	46.3	46.3	45.3	43.5	41.6	39.7	37.7	34.8
97.5°	50.2	50.0	49.7	49.4	49.2	47.9	45.7	43.6	41.4	39.2	58.8
100°	51.2	51.0	50.6	50.4	50.1	48.9	46.7	44.5	42.4	40.2	82.5
102.5°	52.2	51.7	51.2	50.7	50.2	53.3	60.1	66.8	73.5	80.2	126.4
105°	53.6	53.1	52.6	52.0	51.4	75.2	123.1	171.0	219.0	266.9	291.3
107.5°	168.4	204.6	240.7	276.9	313.0	348.6	383.8	418.9	454.1	489.3	485.4
110°	335.2	373.9	412.6	451.3	490.1	514.0	522.9	531.8	540.8	549.7	546.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	575.0	583.3	591.4	599.6	607.8	611.8	611.6	611.5	611.3	611.1	608.1
115°	716.7	715.6	714.5	713.5	712.3	710.5	707.8	705.1	702.3	699.6	697.2
117.5°	796.1	796.0	795.7	795.5	795.3	794.1	791.9	789.8	787.6	785.5	784.2
120°	850.8	850.8	850.8	850.8	850.8	849.7	847.5	845.4	843.2	841.0	840.2
122.5°	904.4	904.2	903.9	903.8	903.5	902.7	901.2	899.6	898.1	896.6	895.5
125°	980.0	979.4	978.8	978.4	977.8	977.2	976.7	976.2	975.7	975.1	974.0
127.5°	1052.6	1053.1	1053.7	1054.3	1054.8	1054.6	1053.8	1052.9	1052.0	1051.2	1049.9
130°	1099.4	1099.9	1100.5	1101.1	1101.6	1101.3	1100.2	1099.1	1098.0	1097.0	1095.9
132.5°	1142.3	1143.0	1143.9	1144.6	1145.3	1145.2	1144.1	1143.0	1141.9	1140.8	1140.0
135°	1207.9	1208.7	1209.5	1210.3	1211.1	1211.1	1210.3	1209.5	1208.7	1207.9	1206.8
137.5°	1269.6	1270.1	1270.6	1271.2	1271.7	1271.4	1270.1	1268.8	1267.5	1266.2	1265.6
140°	1306.6	1307.2	1307.7	1308.2	1308.8	1308.5	1307.4	1306.4	1305.3	1304.2	1303.3
142.5°	1340.8	1341.5	1342.2	1343.0	1343.8	1343.7	1342.9	1342.0	1341.1	1340.3	1339.5
145°	1393.2	1393.2	1393.2	1393.2	1393.2	1392.9	1392.4	1391.8	1391.2	1390.7	1390.2
147.5°	1432.2	1433.4	1434.7	1435.9	1437.1	1437.5	1437.0	1436.4	1435.9	1435.3	1434.8
150°	1461.4	1462.2	1463.1	1463.9	1464.7	1464.8	1464.3	1463.7	1463.1	1462.6	1462.1
152.5°	1484.8	1486.0	1487.3	1488.6	1489.8	1490.0	1489.0	1488.0	1487.0	1486.0	1485.7
155°	1517.5	1519.1	1520.7	1522.3	1524.0	1524.1	1522.7	1521.4	1520.0	1518.7	1518.4
157.5°	1545.0	1547.1	1549.2	1551.4	1553.5	1553.7	1552.1	1550.5	1548.8	1547.2	1547.5
160°	1562.6	1564.5	1566.4	1568.2	1570.2	1570.3	1568.6	1567.1	1565.5	1563.8	1564.1
162.5°	1579.2	1580.9	1582.5	1584.2	1585.8	1585.8	1584.0	1582.1	1580.3	1578.4	1578.7
165°	1599.1	1601.0	1603.0	1604.8	1606.7	1606.6	1604.4	1602.2	1600.1	1597.9	1598.2
167.5°	1613.6	1615.7	1617.9	1620.0	1622.2	1622.2	1620.0	1617.9	1615.7	1613.6	1613.6
170°	1622.3	1624.5	1626.6	1628.8	1631.0	1631.0	1628.8	1626.6	1624.5	1622.3	1622.3
172.5°	1627.2	1629.5	1632.0	1634.3	1636.7	1636.8	1634.7	1632.5	1630.4	1628.2	1627.9
175°	1634.5	1636.6	1638.8	1641.0	1643.2	1643.3	1641.4	1639.5	1637.6	1635.7	1635.4
177.5°	1636.7	1638.8	1641.0	1643.2	1645.4	1645.6	1643.8	1642.1	1640.4	1638.7	1638.4
180°	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1363.5	1359.4	1355.4	1348.2	1342.0	1333.3	1330.7	1327.6	1318.4	1310.3	1304.1
5°	1446.8	1431.4	1409.0	1388.5	1371.9	1349.5	1336.6	1323.1	1303.9	1286.6	1272.5
7.5°	1534.0	1503.7	1468.8	1431.2	1396.1	1362.3	1335.0	1310.6	1283.7	1258.2	1238.4
10°	1603.2	1559.6	1510.9	1458.4	1413.5	1369.9	1333.4	1301.4	1266.8	1236.6	1211.7
12.5°	1682.1	1617.6	1550.4	1486.5	1433.5	1373.0	1328.8	1288.1	1248.9	1212.6	1184.5
15°	1775.6	1693.5	1614.0	1526.3	1445.5	1369.9	1317.4	1266.2	1220.7	1183.5	1147.6
17.5°	1860.7	1767.7	1663.0	1556.2	1458.9	1369.2	1295.6	1237.7	1180.8	1135.3	1099.5
20°	1908.9	1803.1	1684.6	1573.7	1466.1	1366.1	1285.4	1216.2	1154.6	1106.6	1066.2
22.5°	1950.4	1826.7	1704.1	1585.5	1465.6	1357.9	1266.4	1195.1	1128.5	1081.5	1038.5
25°	1993.4	1845.4	1722.4	1583.3	1449.4	1337.9	1235.4	1154.6	1088.0	1032.9	988.7
27.5°	2030.3	1844.1	1698.1	1548.6	1424.0	1312.3	1202.8	1116.2	1045.5	985.6	940.8
30°	2054.9	1846.7	1673.0	1525.0	1399.5	1284.1	1177.7	1090.5	1016.3	955.4	913.1
32.5°	2070.3	1845.1	1649.9	1492.2	1360.5	1258.4	1150.6	1060.3	984.0	924.1	883.4
35°	2079.3	1833.9	1610.2	1424.4	1297.5	1198.2	1107.9	1014.3	934.3	878.5	832.3
37.5°	2061.3	1810.1	1564.1	1359.0	1220.2	1122.3	1046.4	966.6	890.0	828.7	788.9
40°	2033.1	1794.8	1528.2	1313.0	1166.9	1072.6	1008.0	929.8	854.1	795.8	758.6
42.5°	1979.3	1763.5	1488.7	1261.7	1111.5	1017.2	957.7	892.3	820.8	766.1	729.0
45°	1848.0	1695.4	1429.5	1184.8	1029.7	932.3	879.8	832.3	767.6	714.4	682.4
47.5°	1665.7	1593.1	1343.9	1103.7	944.4	850.7	796.1	757.9	710.6	667.6	636.9
50°	1539.1	1509.0	1286.0	1048.3	887.5	795.8	743.3	708.7	674.7	631.8	603.6
52.5°	1393.0	1411.6	1218.4	990.8	829.6	739.5	690.0	662.5	631.7	596.4	571.9
55°	1187.3	1254.6	1101.5	894.5	743.3	657.5	610.7	586.3	568.3	542.1	521.0
57.5°	994.7	1080.4	975.1	795.2	658.6	584.5	539.6	513.1	501.6	487.9	471.2
60°	880.4	965.0	884.9	728.6	601.7	531.2	491.5	469.0	457.5	447.9	433.8
62.5°	778.4	864.0	796.7	660.9	545.8	480.5	445.8	424.0	415.0	409.9	397.9
65°	638.2	711.9	667.0	555.5	465.9	408.1	376.7	361.4	353.0	351.1	343.5
67.5°	519.4	575.5	542.8	460.8	390.2	340.4	313.7	300.7	294.2	293.6	287.8
70°	441.5	494.0	469.0	394.7	333.9	294.7	271.7	260.2	256.3	255.7	252.5
72.5°	381.0	417.7	397.8	335.7	288.7	253.2	236.3	224.3	219.9	220.8	218.7
75°	281.9	309.5	298.0	255.0	217.2	194.1	180.0	172.4	168.5	170.5	167.9
77.5°	202.8	220.3	209.9	180.2	156.9	140.2	129.8	125.1	121.6	121.5	120.3
80°	153.1	163.4	157.6	139.7	120.5	106.4	98.0	94.8	92.9	92.3	91.6
82.5°	109.1	117.8	111.0	98.7	85.6	77.1	72.4	68.2	66.8	67.2	66.5
85°	55.1	58.3	55.8	48.0	43.0	39.1	36.5	34.6	33.3	34.0	32.7
87.5°	23.4	23.2	21.0	18.3	16.7	14.7	14.1	12.6	12.1	12.6	12.6
90°	22.2	18.7	15.2	12.1	9.4	6.6	3.9	1.2	3.9	6.6	9.4
92.5°	25.9	23.2	20.5	19.6	20.4	21.1	21.9	22.7	21.9	21.1	20.4
95°	31.8	28.9	25.8	29.9	41.0	52.2	63.3	74.4	63.3	52.2	41.0
97.5°	78.3	97.8	117.2	129.5	134.4	139.5	144.5	149.4	144.5	139.5	134.4
100°	124.7	167.0	209.2	227.6	222.3	216.8	211.4	206.0	211.4	216.8	222.3
102.5°	172.5	218.7	264.8	285.9	282.0	278.2	274.3	270.4	274.3	278.2	282.0
105°	315.7	340.1	364.4	375.1	372.2	369.2	366.2	363.2	366.2	369.2	372.2
107.5°	481.6	477.7	473.9	470.8	468.4	465.9	463.6	461.2	463.6	465.9	468.4
110°	543.7	540.8	537.8	535.2	533.0	530.8	528.7	526.5	528.7	530.8	533.0



TEST NUMBER: P332234-930

CATALOG NUMBER: S123DIW-S1165D1535U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	605.2	602.2	599.2	596.7	594.8	592.9	590.9	589.0	590.9	592.9	594.8
115°	694.7	692.4	689.9	687.9	686.2	684.6	683.0	681.3	683.0	684.6	686.2
117.5°	782.9	781.7	780.5	778.9	776.8	774.8	772.8	770.8	772.8	774.8	776.8
120°	839.4	838.5	837.8	836.2	833.7	831.3	828.8	826.4	828.8	831.3	833.7
122.5°	894.5	893.5	892.5	891.0	888.9	887.0	884.9	883.0	884.9	887.0	888.9
125°	972.9	971.8	970.8	969.1	966.9	964.8	962.6	960.4	962.6	964.8	966.9
127.5°	1048.6	1047.3	1045.9	1044.2	1042.0	1039.9	1037.7	1035.5	1037.7	1039.9	1042.0
130°	1094.8	1093.7	1092.7	1091.0	1088.8	1086.7	1084.5	1082.3	1084.5	1086.7	1088.8
132.5°	1139.1	1138.2	1137.4	1135.9	1133.7	1131.6	1129.4	1127.2	1129.4	1131.6	1133.7
135°	1205.7	1204.6	1203.5	1202.2	1200.6	1199.0	1197.3	1195.7	1197.3	1199.0	1200.6
137.5°	1264.9	1264.4	1263.8	1262.4	1260.4	1258.3	1256.3	1254.2	1256.3	1258.3	1260.4
140°	1302.5	1301.7	1300.9	1299.8	1298.1	1296.5	1294.9	1293.2	1294.9	1296.5	1298.1
142.5°	1338.6	1337.8	1337.0	1335.8	1334.2	1332.5	1330.9	1329.3	1330.9	1332.5	1334.2
145°	1389.6	1389.1	1388.5	1387.3	1385.4	1383.6	1381.6	1379.7	1381.6	1383.6	1385.4
147.5°	1434.3	1433.7	1433.1	1432.2	1431.0	1429.8	1428.6	1427.3	1428.6	1429.8	1431.0
150°	1461.6	1461.0	1460.4	1459.8	1459.0	1458.2	1457.3	1456.5	1457.3	1458.2	1459.0
152.5°	1485.4	1485.1	1484.7	1484.4	1484.0	1483.6	1483.3	1482.9	1483.3	1483.6	1484.0
155°	1518.2	1517.9	1517.6	1517.8	1518.3	1518.8	1519.4	1519.9	1519.4	1518.8	1518.3
157.5°	1547.8	1548.0	1548.3	1548.5	1548.5	1548.6	1548.7	1548.7	1548.7	1548.6	1548.5
160°	1564.3	1564.6	1564.9	1565.1	1565.5	1565.7	1565.9	1566.3	1565.9	1565.7	1565.5
162.5°	1579.0	1579.2	1579.5	1580.0	1580.7	1581.4	1582.1	1582.8	1582.1	1581.4	1580.7
165°	1598.5	1598.7	1599.0	1599.5	1600.4	1601.2	1602.0	1602.8	1602.0	1601.2	1600.4
167.5°	1613.6	1613.6	1613.6	1614.0	1615.2	1616.2	1617.3	1618.4	1617.3	1616.2	1615.2
170°	1622.3	1622.3	1622.3	1622.9	1623.9	1625.0	1626.1	1627.2	1626.1	1625.0	1623.9
172.5°	1627.7	1627.5	1627.3	1627.8	1629.1	1630.4	1631.7	1633.0	1631.7	1630.4	1629.1
175°	1635.2	1634.9	1634.6	1635.2	1636.6	1637.9	1639.2	1640.5	1639.2	1637.9	1636.6
177.5°	1638.2	1638.0	1637.8	1638.2	1639.3	1640.4	1641.4	1642.5	1641.4	1640.4	1639.3
180°	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5



TEST NUMBER: P332234-930

CATALOG NUMBER: S123DIW-S1165D1535U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1300.5	1296.9	1291.8	1284.1	1277.9	1268.2	1268.2	1269.7	1269.7	1269.3	1268.2
5°	1261.0	1251.4	1239.9	1226.5	1212.4	1198.2	1195.6	1190.5	1186.7	1184.1	1181.0
7.5°	1219.4	1202.3	1185.5	1166.7	1149.5	1135.3	1125.4	1117.2	1112.0	1106.4	1102.2
10°	1191.2	1170.0	1150.1	1130.3	1108.5	1091.2	1080.4	1072.6	1066.9	1061.8	1059.2
12.5°	1157.9	1133.7	1111.7	1092.9	1069.0	1051.2	1040.9	1037.2	1030.5	1019.7	1014.1
15°	1109.1	1086.7	1060.5	1031.6	1020.1	998.3	986.1	980.4	976.5	968.2	965.6
17.5°	1067.5	1038.1	1008.7	987.2	965.7	948.0	941.3	934.1	929.0	922.2	920.1
20°	1034.2	1008.0	981.0	958.0	935.5	916.3	910.5	905.4	900.3	897.1	894.5
22.5°	1000.4	974.1	951.8	930.3	906.3	893.7	887.5	881.8	878.2	876.0	873.5
25°	952.8	929.8	904.7	885.5	866.3	857.9	854.1	850.9	848.4	845.1	844.5
27.5°	910.3	885.2	864.9	846.9	833.2	826.2	822.5	820.9	821.5	822.6	823.4
30°	878.5	855.4	838.8	823.4	810.6	804.1	803.5	803.5	806.1	806.7	808.0
32.5°	849.3	830.3	813.7	798.7	789.0	784.6	787.1	787.1	789.1	790.8	793.1
35°	806.7	790.0	777.2	764.4	756.1	758.0	759.3	760.6	763.8	767.6	770.2
37.5°	766.1	751.6	738.3	728.3	724.5	727.9	731.0	733.7	737.4	740.4	742.9
40°	736.9	725.9	713.1	704.2	705.5	707.4	710.0	713.1	716.4	718.3	720.9
42.5°	709.7	698.3	688.6	681.1	682.9	685.3	686.9	688.6	692.3	695.8	697.2
45°	668.3	659.3	650.4	645.9	647.2	648.5	649.7	651.7	654.8	657.5	658.0
47.5°	621.8	615.6	609.5	605.1	607.2	606.7	608.4	612.5	613.4	615.0	618.6
50°	592.1	586.3	579.3	578.0	578.0	578.0	578.6	583.8	583.8	586.3	588.9
52.5°	559.3	555.5	551.1	548.8	547.7	547.7	550.4	553.0	554.0	557.6	560.2
55°	510.7	506.9	503.0	501.1	499.8	501.1	506.2	507.4	510.7	512.6	514.5
57.5°	460.1	457.1	454.0	453.0	452.7	454.4	457.2	461.1	461.9	467.7	470.7
60°	426.7	422.2	419.7	419.7	418.4	424.2	422.9	429.3	430.6	434.5	439.0
62.5°	392.4	386.4	385.4	385.4	387.2	388.8	390.6	393.5	396.7	401.6	405.1
65°	337.0	333.9	338.3	337.7	336.4	340.2	340.2	343.5	347.3	351.8	358.8
67.5°	284.6	283.0	283.3	283.3	285.3	287.5	289.3	292.0	296.7	301.4	306.1
70°	249.2	251.2	248.0	250.5	252.5	253.1	254.4	258.2	263.3	266.5	271.7
72.5°	214.9	214.7	215.2	216.2	218.1	219.2	220.5	224.9	230.6	233.3	237.3
75°	165.3	164.7	166.6	166.6	169.8	171.0	172.4	174.3	179.4	183.3	186.5
77.5°	120.7	121.5	121.1	123.3	122.4	122.6	126.6	128.6	129.1	136.6	138.3
80°	91.0	92.3	92.9	93.5	94.2	92.9	97.4	99.3	99.3	103.8	107.0
82.5°	65.4	66.1	67.8	68.4	68.6	69.9	70.2	71.7	73.2	75.1	79.3
85°	32.7	34.6	35.2	34.6	35.2	34.0	35.9	36.5	37.2	37.2	37.2
87.5°	12.6	13.8	14.0	15.2	15.4	16.6	16.8	16.1	16.2	18.0	16.1
90°	12.1	15.2	18.7	22.2	25.8	29.3	30.3	31.4	32.5	33.6	34.4
92.5°	19.6	20.5	23.2	25.9	28.5	31.2	32.9	34.7	36.4	38.2	39.1
95°	29.9	25.8	28.9	31.8	34.8	37.7	39.7	41.6	43.5	45.3	46.3
97.5°	129.5	117.2	97.8	78.3	58.8	39.2	41.4	43.6	45.7	47.9	49.2
100°	227.6	209.2	167.0	124.7	82.5	40.2	42.4	44.5	46.7	48.9	50.1
102.5°	285.9	264.8	218.7	172.5	126.4	80.2	73.5	66.8	60.1	53.3	50.2
105°	375.1	364.4	340.1	315.7	291.3	266.9	219.0	171.0	123.1	75.2	51.4
107.5°	470.8	473.9	477.7	481.6	485.4	489.3	454.1	418.9	383.8	348.6	313.0
110°	535.2	537.8	540.8	543.7	546.7	549.7	540.8	531.8	522.9	514.0	490.1



TEST NUMBER: P332234-930

CATALOG NUMBER: S123DIW-S1165D1535U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	596.7	599.2	602.2	605.2	608.1	611.1	611.3	611.5	611.6	611.8	607.8
115°	687.9	689.9	692.4	694.7	697.2	699.6	702.3	705.1	707.8	710.5	712.3
117.5°	778.9	780.5	781.7	782.9	784.2	785.5	787.6	789.8	791.9	794.1	795.3
120°	836.2	837.8	838.5	839.4	840.2	841.0	843.2	845.4	847.5	849.7	850.8
122.5°	891.0	892.5	893.5	894.5	895.5	896.6	898.1	899.6	901.2	902.7	903.5
125°	969.1	970.8	971.8	972.9	974.0	975.1	975.7	976.2	976.7	977.2	977.8
127.5°	1044.2	1045.9	1047.3	1048.6	1049.9	1051.2	1052.0	1052.9	1053.8	1054.6	1054.8
130°	1091.0	1092.7	1093.7	1094.8	1095.9	1097.0	1098.0	1099.1	1100.2	1101.3	1101.6
132.5°	1135.9	1137.4	1138.2	1139.1	1140.0	1140.8	1141.9	1143.0	1144.1	1145.2	1145.3
135°	1202.2	1203.5	1204.6	1205.7	1206.8	1207.9	1208.7	1209.5	1210.3	1211.1	1211.1
137.5°	1262.4	1263.8	1264.4	1264.9	1265.6	1266.2	1267.5	1268.8	1270.1	1271.4	1271.7
140°	1299.8	1300.9	1301.7	1302.5	1303.3	1304.2	1305.3	1306.4	1307.4	1308.5	1308.8
142.5°	1335.8	1337.0	1337.8	1338.6	1339.5	1340.3	1341.1	1342.0	1342.9	1343.7	1343.8
145°	1387.3	1388.5	1389.1	1389.6	1390.2	1390.7	1391.2	1391.8	1392.4	1392.9	1393.2
147.5°	1432.2	1433.1	1433.7	1434.3	1434.8	1435.3	1435.9	1436.4	1437.0	1437.5	1437.1
150°	1459.8	1460.4	1461.0	1461.6	1462.1	1462.6	1463.1	1463.7	1464.3	1464.8	1464.7
152.5°	1484.4	1484.7	1485.1	1485.4	1485.7	1486.0	1487.0	1488.0	1489.0	1490.0	1489.8
155°	1517.8	1517.6	1517.9	1518.2	1518.4	1518.7	1520.0	1521.4	1522.7	1524.1	1524.0
157.5°	1548.5	1548.3	1548.0	1547.8	1547.5	1547.2	1548.8	1550.5	1552.1	1553.7	1553.5
160°	1565.1	1564.9	1564.6	1564.3	1564.1	1563.8	1565.5	1567.1	1568.6	1570.3	1570.2
162.5°	1580.0	1579.5	1579.2	1579.0	1578.7	1578.4	1580.3	1582.1	1584.0	1585.8	1585.8
165°	1599.5	1599.0	1598.7	1598.5	1598.2	1597.9	1600.1	1602.2	1604.4	1606.6	1606.7
167.5°	1614.0	1613.6	1613.6	1613.6	1613.6	1613.6	1615.7	1617.9	1620.0	1622.2	1622.2
170°	1622.9	1622.3	1622.3	1622.3	1622.3	1622.3	1624.5	1626.6	1628.8	1631.0	1631.0
172.5°	1627.8	1627.3	1627.5	1627.7	1627.9	1628.2	1630.4	1632.5	1634.7	1636.8	1636.7
175°	1635.2	1634.6	1634.9	1635.2	1635.4	1635.7	1637.6	1639.5	1641.4	1643.3	1643.2
177.5°	1638.2	1637.8	1638.0	1638.2	1638.4	1638.7	1640.4	1642.1	1643.8	1645.6	1645.4
180°	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5



TEST NUMBER: P332234-930

CATALOG NUMBER: S123DIW-S1165D1535U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1264.6	1264.1	1267.7	1265.1	1267.7	1264.1	1264.6	1268.2	1269.3	1269.7	1269.7
5°	1177.0	1179.0	1172.6	1172.6	1172.6	1179.0	1177.0	1181.0	1184.1	1186.7	1190.5
7.5°	1099.2	1096.3	1096.6	1093.2	1096.6	1096.3	1099.2	1102.2	1106.4	1112.0	1117.2
10°	1051.5	1047.7	1046.4	1047.0	1046.4	1047.7	1051.5	1059.2	1061.8	1066.9	1072.6
12.5°	1012.0	1011.2	1002.8	1002.9	1002.8	1011.2	1012.0	1014.1	1019.7	1030.5	1037.2
15°	965.6	953.5	952.2	956.0	952.2	953.5	965.6	965.6	968.2	976.5	980.4
17.5°	919.1	912.7	913.1	911.2	913.1	912.7	919.1	920.1	922.2	929.0	934.1
20°	894.5	890.6	890.0	885.5	890.0	890.6	894.5	894.5	897.1	900.3	905.4
22.5°	872.0	870.7	871.1	866.1	871.1	870.7	872.0	873.5	876.0	878.2	881.8
25°	843.9	847.1	844.5	844.5	844.5	847.1	843.9	844.5	845.1	848.4	850.9
27.5°	824.9	824.8	823.5	823.5	823.5	824.8	824.9	823.4	822.6	821.5	820.9
30°	810.6	809.9	811.2	811.2	811.2	809.9	810.6	808.0	806.7	806.1	803.5
32.5°	796.2	797.1	797.4	797.9	797.4	797.1	796.2	793.1	790.8	789.1	787.1
35°	774.0	774.7	776.6	775.3	776.6	774.7	774.0	770.2	767.6	763.8	760.6
37.5°	744.0	747.0	746.3	747.4	746.3	747.0	744.0	742.9	740.4	737.4	733.7
40°	721.5	723.4	722.8	722.8	722.8	723.4	721.5	720.9	718.3	716.4	713.1
42.5°	698.5	699.9	698.1	697.2	698.1	699.9	698.5	697.2	695.8	692.3	688.6
45°	660.6	659.3	661.3	658.7	661.3	659.3	660.6	658.0	657.5	654.8	651.7
47.5°	618.3	619.6	620.1	622.1	620.1	619.6	618.3	618.6	615.0	613.4	612.5
50°	590.1	593.9	593.9	593.4	593.9	593.9	590.1	588.9	586.3	583.8	583.8
52.5°	562.5	564.3	566.8	566.7	566.8	564.3	562.5	560.2	557.6	554.0	553.0
55°	519.7	521.0	522.2	522.9	522.2	521.0	519.7	514.5	512.6	510.7	507.4
57.5°	475.3	474.8	477.8	478.7	477.8	474.8	475.3	470.7	467.7	461.9	461.1
60°	444.0	444.0	449.1	451.1	449.1	444.0	444.0	439.0	434.5	430.6	429.3
62.5°	410.7	412.8	417.9	415.2	417.9	412.8	410.7	405.1	401.6	396.7	393.5
65°	362.0	367.1	366.5	369.1	366.5	367.1	362.0	358.8	351.8	347.3	343.5
67.5°	311.1	314.4	318.9	319.4	318.9	314.4	311.1	306.1	301.4	296.7	292.0
70°	276.8	280.0	282.6	284.5	282.6	280.0	276.8	271.7	266.5	263.3	258.2
72.5°	243.5	245.2	251.3	248.6	251.3	245.2	243.5	237.3	233.3	230.6	224.9
75°	190.9	195.4	199.3	197.4	199.3	195.4	190.9	186.5	183.3	179.4	174.3
77.5°	141.2	145.7	147.5	145.9	147.5	145.7	141.2	138.3	136.6	129.1	128.6
80°	111.5	110.9	114.7	114.1	114.7	110.9	111.5	107.0	103.8	99.3	99.3
82.5°	81.8	81.1	82.9	83.3	82.9	81.1	81.8	79.3	75.1	73.2	71.7
85°	39.7	41.7	39.1	38.5	39.1	41.7	39.7	37.2	37.2	37.2	36.5
87.5°	16.2	16.3	15.9	15.5	15.9	16.3	16.2	16.1	18.0	16.2	16.1
90°	35.0	35.5	36.0	36.5	36.0	35.5	35.0	34.4	33.6	32.5	31.4
92.5°	39.5	39.8	40.1	40.4	40.1	39.8	39.5	39.1	38.2	36.4	34.7
95°	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	45.3	43.5	41.6
97.5°	49.4	49.7	50.0	50.2	50.0	49.7	49.4	49.2	47.9	45.7	43.6
100°	50.4	50.6	51.0	51.2	51.0	50.6	50.4	50.1	48.9	46.7	44.5
102.5°	50.7	51.2	51.7	52.2	51.7	51.2	50.7	50.2	53.3	60.1	66.8
105°	52.0	52.6	53.1	53.6	53.1	52.6	52.0	51.4	75.2	123.1	171.0
107.5°	276.9	240.7	204.6	168.4	204.6	240.7	276.9	313.0	348.6	383.8	418.9
110°	451.3	412.6	373.9	335.2	373.9	412.6	451.3	490.1	514.0	522.9	531.8



TEST NUMBER: P332234-930

CATALOG NUMBER: S123DIW-S1165D1535U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	599.6	591.4	583.3	575.0	583.3	591.4	599.6	607.8	611.8	611.6	611.5
115°	713.5	714.5	715.6	716.7	715.6	714.5	713.5	712.3	710.5	707.8	705.1
117.5°	795.5	795.7	796.0	796.1	796.0	795.7	795.5	795.3	794.1	791.9	789.8
120°	850.8	850.8	850.8	850.8	850.8	850.8	850.8	850.8	849.7	847.5	845.4
122.5°	903.8	903.9	904.2	904.4	904.2	903.9	903.8	903.5	902.7	901.2	899.6
125°	978.4	978.8	979.4	980.0	979.4	978.8	978.4	977.8	977.2	976.7	976.2
127.5°	1054.3	1053.7	1053.1	1052.6	1053.1	1053.7	1054.3	1054.8	1054.6	1053.8	1052.9
130°	1101.1	1100.5	1099.9	1099.4	1099.9	1100.5	1101.1	1101.6	1101.3	1100.2	1099.1
132.5°	1144.6	1143.9	1143.0	1142.3	1143.0	1143.9	1144.6	1145.3	1145.2	1144.1	1143.0
135°	1210.3	1209.5	1208.7	1207.9	1208.7	1209.5	1210.3	1211.1	1211.1	1210.3	1209.5
137.5°	1271.2	1270.6	1270.1	1269.6	1270.1	1270.6	1271.2	1271.7	1271.4	1270.1	1268.8
140°	1308.2	1307.7	1307.2	1306.6	1307.2	1307.7	1308.2	1308.8	1308.5	1307.4	1306.4
142.5°	1343.0	1342.2	1341.5	1340.8	1341.5	1342.2	1343.0	1343.8	1343.7	1342.9	1342.0
145°	1393.2	1393.2	1393.2	1393.2	1393.2	1393.2	1393.2	1393.2	1392.9	1392.4	1391.8
147.5°	1435.9	1434.7	1433.4	1432.2	1433.4	1434.7	1435.9	1437.1	1437.5	1437.0	1436.4
150°	1463.9	1463.1	1462.2	1461.4	1462.2	1463.1	1463.9	1464.7	1464.8	1464.3	1463.7
152.5°	1488.6	1487.3	1486.0	1484.8	1486.0	1487.3	1488.6	1489.8	1490.0	1489.0	1488.0
155°	1522.3	1520.7	1519.1	1517.5	1519.1	1520.7	1522.3	1524.0	1524.1	1522.7	1521.4
157.5°	1551.4	1549.2	1547.1	1545.0	1547.1	1549.2	1551.4	1553.5	1553.7	1552.1	1550.5
160°	1568.2	1566.4	1564.5	1562.6	1564.5	1566.4	1568.2	1570.2	1570.3	1568.6	1567.1
162.5°	1584.2	1582.5	1580.9	1579.2	1580.9	1582.5	1584.2	1585.8	1585.8	1584.0	1582.1
165°	1604.8	1603.0	1601.0	1599.1	1601.0	1603.0	1604.8	1606.7	1606.6	1604.4	1602.2
167.5°	1620.0	1617.9	1615.7	1613.6	1615.7	1617.9	1620.0	1622.2	1622.2	1620.0	1617.9
170°	1628.8	1626.6	1624.5	1622.3	1624.5	1626.6	1628.8	1631.0	1631.0	1628.8	1626.6
172.5°	1634.3	1632.0	1629.5	1627.2	1629.5	1632.0	1634.3	1636.7	1636.8	1634.7	1632.5
175°	1641.0	1638.8	1636.6	1634.5	1636.6	1638.8	1641.0	1643.2	1643.3	1641.4	1639.5
177.5°	1643.2	1641.0	1638.8	1636.7	1638.8	1641.0	1643.2	1645.4	1645.6	1643.8	1642.1
180°	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5



TEST NUMBER: P332234-930

CATALOG NUMBER: S123DIW-S1165D1535U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1268.2	1268.2	1277.9	1284.1	1291.8	1296.9	1300.5	1304.1	1310.3	1318.4	1327.6
5°	1195.6	1198.2	1212.4	1226.5	1239.9	1251.4	1261.0	1272.5	1286.6	1303.9	1323.1
7.5°	1125.4	1135.3	1149.5	1166.7	1185.5	1202.3	1219.4	1238.4	1258.2	1283.7	1310.6
10°	1080.4	1091.2	1108.5	1130.3	1150.1	1170.0	1191.2	1211.7	1236.6	1266.8	1301.4
12.5°	1040.9	1051.2	1069.0	1092.9	1111.7	1133.7	1157.9	1184.5	1212.6	1248.9	1288.1
15°	986.1	998.3	1020.1	1031.6	1060.5	1086.7	1109.1	1147.6	1183.5	1220.7	1266.2
17.5°	941.3	948.0	965.7	987.2	1008.7	1038.1	1067.5	1099.5	1135.3	1180.8	1237.7
20°	910.5	916.3	935.5	958.0	981.0	1008.0	1034.2	1066.2	1106.6	1154.6	1216.2
22.5°	887.5	893.7	906.3	930.3	951.8	974.1	1000.4	1038.5	1081.5	1128.5	1195.1
25°	854.1	857.9	866.3	885.5	904.7	929.8	952.8	988.7	1032.9	1088.0	1154.6
27.5°	822.5	826.2	833.2	846.9	864.9	885.2	910.3	940.8	985.6	1045.5	1116.2
30°	803.5	804.1	810.6	823.4	838.8	855.4	878.5	913.1	955.4	1016.3	1090.5
32.5°	787.1	784.6	789.0	798.7	813.7	830.3	849.3	883.4	924.1	984.0	1060.3
35°	759.3	758.0	756.1	764.4	777.2	790.0	806.7	832.3	878.5	934.3	1014.3
37.5°	731.0	727.9	724.5	728.3	738.3	751.6	766.1	788.9	828.7	890.0	966.6
40°	710.0	707.4	705.5	704.2	713.1	725.9	736.9	758.6	795.8	854.1	929.8
42.5°	686.9	685.3	682.9	681.1	688.6	698.3	709.7	729.0	766.1	820.8	892.3
45°	649.7	648.5	647.2	645.9	650.4	659.3	668.3	682.4	714.4	767.6	832.3
47.5°	608.4	606.7	607.2	605.1	609.5	615.6	621.8	636.9	667.6	710.6	757.9
50°	578.6	578.0	578.0	578.0	579.3	586.3	592.1	603.6	631.8	674.7	708.7
52.5°	550.4	547.7	547.7	548.8	551.1	555.5	559.3	571.9	596.4	631.7	662.5
55°	506.2	501.1	499.8	501.1	503.0	506.9	510.7	521.0	542.1	568.3	586.3
57.5°	457.2	454.4	452.7	453.0	454.0	457.1	460.1	471.2	487.9	501.6	513.1
60°	422.9	424.2	418.4	419.7	419.7	422.2	426.7	433.8	447.9	457.5	469.0
62.5°	390.6	388.8	387.2	385.4	385.4	386.4	392.4	397.9	409.9	415.0	424.0
65°	340.2	340.2	336.4	337.7	338.3	333.9	337.0	343.5	351.1	353.0	361.4
67.5°	289.3	287.5	285.3	283.3	283.3	283.0	284.6	287.8	293.6	294.2	300.7
70°	254.4	253.1	252.5	250.5	248.0	251.2	249.2	252.5	255.7	256.3	260.2
72.5°	220.5	219.2	218.1	216.2	215.2	214.7	214.9	218.7	220.8	219.9	224.3
75°	172.4	171.0	169.8	166.6	166.6	164.7	165.3	167.9	170.5	168.5	172.4
77.5°	126.6	122.6	122.4	123.3	121.1	121.5	120.7	120.3	121.5	121.6	125.1
80°	97.4	92.9	94.2	93.5	92.9	92.3	91.0	91.6	92.3	92.9	94.8
82.5°	70.2	69.9	68.6	68.4	67.8	66.1	65.4	66.5	67.2	66.8	68.2
85°	35.9	34.0	35.2	34.6	35.2	34.6	32.7	32.7	34.0	33.3	34.6
87.5°	16.8	16.6	15.4	15.2	14.0	13.8	12.6	12.6	12.6	12.1	12.6
90°	30.3	29.3	25.8	22.2	18.7	15.2	12.1	9.4	6.6	3.9	1.2
92.5°	32.9	31.2	28.5	25.9	23.2	20.5	19.6	20.4	21.1	21.9	22.7
95°	39.7	37.7	34.8	31.8	28.9	25.8	29.9	41.0	52.2	63.3	74.4
97.5°	41.4	39.2	58.8	78.3	97.8	117.2	129.5	134.4	139.5	144.5	149.4
100°	42.4	40.2	82.5	124.7	167.0	209.2	227.6	222.3	216.8	211.4	206.0
102.5°	73.5	80.2	126.4	172.5	218.7	264.8	285.9	282.0	278.2	274.3	270.4
105°	219.0	266.9	291.3	315.7	340.1	364.4	375.1	372.2	369.2	366.2	363.2
107.5°	454.1	489.3	485.4	481.6	477.7	473.9	470.8	468.4	465.9	463.6	461.2
110°	540.8	549.7	546.7	543.7	540.8	537.8	535.2	533.0	530.8	528.7	526.5



TEST NUMBER: P332234-930

CATALOG NUMBER: S123DIW-S1165D1535U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	611.3	611.1	608.1	605.2	602.2	599.2	596.7	594.8	592.9	590.9	589.0
115°	702.3	699.6	697.2	694.7	692.4	689.9	687.9	686.2	684.6	683.0	681.3
117.5°	787.6	785.5	784.2	782.9	781.7	780.5	778.9	776.8	774.8	772.8	770.8
120°	843.2	841.0	840.2	839.4	838.5	837.8	836.2	833.7	831.3	828.8	826.4
122.5°	898.1	896.6	895.5	894.5	893.5	892.5	891.0	888.9	887.0	884.9	883.0
125°	975.7	975.1	974.0	972.9	971.8	970.8	969.1	966.9	964.8	962.6	960.4
127.5°	1052.0	1051.2	1049.9	1048.6	1047.3	1045.9	1044.2	1042.0	1039.9	1037.7	1035.5
130°	1098.0	1097.0	1095.9	1094.8	1093.7	1092.7	1091.0	1088.8	1086.7	1084.5	1082.3
132.5°	1141.9	1140.8	1140.0	1139.1	1138.2	1137.4	1135.9	1133.7	1131.6	1129.4	1127.2
135°	1208.7	1207.9	1206.8	1205.7	1204.6	1203.5	1202.2	1200.6	1199.0	1197.3	1195.7
137.5°	1267.5	1266.2	1265.6	1264.9	1264.4	1263.8	1262.4	1260.4	1258.3	1256.3	1254.2
140°	1305.3	1304.2	1303.3	1302.5	1301.7	1300.9	1299.8	1298.1	1296.5	1294.9	1293.2
142.5°	1341.1	1340.3	1339.5	1338.6	1337.8	1337.0	1335.8	1334.2	1332.5	1330.9	1329.3
145°	1391.2	1390.7	1390.2	1389.6	1389.1	1388.5	1387.3	1385.4	1383.6	1381.6	1379.7
147.5°	1435.9	1435.3	1434.8	1434.3	1433.7	1433.1	1432.2	1431.0	1429.8	1428.6	1427.3
150°	1463.1	1462.6	1462.1	1461.6	1461.0	1460.4	1459.8	1459.0	1458.2	1457.3	1456.5
152.5°	1487.0	1486.0	1485.7	1485.4	1485.1	1484.7	1484.4	1484.0	1483.6	1483.3	1482.9
155°	1520.0	1518.7	1518.4	1518.2	1517.9	1517.6	1517.8	1518.3	1518.8	1519.4	1519.9
157.5°	1548.8	1547.2	1547.5	1547.8	1548.0	1548.3	1548.5	1548.5	1548.6	1548.7	1548.7
160°	1565.5	1563.8	1564.1	1564.3	1564.6	1564.9	1565.1	1565.5	1565.7	1565.9	1566.3
162.5°	1580.3	1578.4	1578.7	1579.0	1579.2	1579.5	1580.0	1580.7	1581.4	1582.1	1582.8
165°	1600.1	1597.9	1598.2	1598.5	1598.7	1599.0	1599.5	1600.4	1601.2	1602.0	1602.8
167.5°	1615.7	1613.6	1613.6	1613.6	1613.6	1613.6	1614.0	1615.2	1616.2	1617.3	1618.4
170°	1624.5	1622.3	1622.3	1622.3	1622.3	1622.3	1622.9	1623.9	1625.0	1626.1	1627.2
172.5°	1630.4	1628.2	1627.9	1627.7	1627.5	1627.3	1627.8	1629.1	1630.4	1631.7	1633.0
175°	1637.6	1635.7	1635.4	1635.2	1634.9	1634.6	1635.2	1636.6	1637.9	1639.2	1640.5
177.5°	1640.4	1638.7	1638.4	1638.2	1638.0	1637.8	1638.2	1639.3	1640.4	1641.4	1642.5
180°	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5



TEST NUMBER: P332234-930

CATALOG NUMBER: S123DIW-S1165D1535U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1330.7	1333.3	1342.0	1348.2	1355.4	1359.4	1363.5	1366.6	1370.7	1371.7	1386.6
5°	1336.6	1349.5	1371.9	1388.5	1409.0	1431.4	1446.8	1453.9	1472.4	1487.8	1518.6
7.5°	1335.0	1362.3	1396.1	1431.2	1468.8	1503.7	1534.0	1569.9	1595.4	1633.7	1671.5
10°	1333.4	1369.9	1413.5	1458.4	1510.9	1559.6	1603.2	1651.9	1692.2	1745.4	1790.9
12.5°	1328.8	1373.0	1433.5	1486.5	1550.4	1617.6	1682.1	1744.7	1780.5	1869.0	1910.9
15°	1317.4	1369.9	1445.5	1526.3	1614.0	1693.5	1775.6	1840.9	1946.6	2024.1	2073.5
17.5°	1295.6	1369.2	1458.9	1556.2	1663.0	1767.7	1860.7	1959.8	2072.0	2165.8	2265.7
20°	1285.4	1366.1	1466.1	1573.7	1684.6	1803.1	1908.9	2028.0	2150.4	2242.6	2370.8
22.5°	1266.4	1357.9	1465.6	1585.5	1704.1	1826.7	1950.4	2070.5	2211.9	2339.0	2461.1
25°	1235.4	1337.9	1449.4	1583.3	1722.4	1845.4	1993.4	2153.0	2300.4	2463.8	2585.5
27.5°	1202.8	1312.3	1424.0	1548.6	1698.1	1844.1	2030.3	2210.6	2390.8	2531.9	2622.0
30°	1177.7	1284.1	1399.5	1525.0	1673.0	1846.7	2054.9	2251.6	2427.2	2548.3	2598.9
32.5°	1150.6	1258.4	1360.5	1492.2	1649.9	1845.1	2070.3	2275.7	2429.3	2509.9	2500.0
35°	1107.9	1198.2	1297.5	1424.4	1610.2	1833.9	2079.3	2277.9	2372.1	2354.8	2224.1
37.5°	1046.4	1122.3	1220.2	1359.0	1564.1	1810.1	2061.3	2210.4	2204.2	2063.4	1874.0
40°	1008.0	1072.6	1166.9	1313.0	1528.2	1794.8	2033.1	2129.9	2047.9	1851.1	1624.3
42.5°	957.7	1017.2	1111.5	1261.7	1488.7	1763.5	1979.3	2007.3	1846.9	1620.5	1412.6
45°	879.8	932.3	1029.7	1184.8	1429.5	1695.4	1848.0	1779.4	1563.4	1329.6	1171.3
47.5°	796.1	850.7	944.4	1103.7	1343.9	1593.1	1665.7	1519.9	1298.2	1108.5	963.2
50°	743.3	795.8	887.5	1048.3	1286.0	1509.0	1539.1	1350.7	1147.0	980.4	861.2
52.5°	690.0	739.5	829.6	990.8	1218.4	1411.6	1393.0	1201.0	1013.7	871.7	778.1
55°	610.7	657.5	743.3	894.5	1101.5	1254.6	1187.3	1004.0	849.0	738.8	667.6
57.5°	539.6	584.5	658.6	795.2	975.1	1080.4	994.7	840.3	717.0	632.2	579.1
60°	491.5	531.2	601.7	728.6	884.9	965.0	880.4	744.0	640.1	572.2	524.8
62.5°	445.8	480.5	545.8	660.9	796.7	864.0	778.4	662.9	574.5	514.3	474.0
65°	376.7	408.1	465.9	555.5	667.0	711.9	638.2	544.6	476.1	431.2	404.3
67.5°	313.7	340.4	390.2	460.8	542.8	575.5	519.4	447.0	395.3	359.3	337.9
70°	271.7	294.7	333.9	394.7	469.0	494.0	441.5	381.9	344.1	315.3	295.4
72.5°	236.3	253.2	288.7	335.7	397.8	417.7	381.0	328.6	293.3	271.7	255.9
75°	180.0	194.1	217.2	255.0	298.0	309.5	281.9	249.2	225.5	210.2	198.0
77.5°	129.8	140.2	156.9	180.2	209.9	220.3	202.8	181.1	163.8	153.4	146.6
80°	98.0	106.4	120.5	139.7	157.6	163.4	153.1	136.5	124.3	118.5	112.8
82.5°	72.4	77.1	85.6	98.7	111.0	117.8	109.1	99.1	92.5	87.2	85.1
85°	36.5	39.1	43.0	48.0	55.8	58.3	55.1	52.5	48.7	45.5	45.5
87.5°	14.1	14.7	16.7	18.3	21.0	23.2	23.4	23.1	23.3	23.0	22.7
90°	3.9	6.6	9.4	12.1	15.2	18.7	22.2	25.8	29.3	30.3	31.4
92.5°	21.9	21.1	20.4	19.6	20.5	23.2	25.9	28.5	31.2	32.9	34.7
95°	63.3	52.2	41.0	29.9	25.8	28.9	31.8	34.8	37.7	39.7	41.6
97.5°	144.5	139.5	134.4	129.5	117.2	97.8	78.3	58.8	39.2	41.4	43.6
100°	211.4	216.8	222.3	227.6	209.2	167.0	124.7	82.5	40.2	42.4	44.5
102.5°	274.3	278.2	282.0	285.9	264.8	218.7	172.5	126.4	80.2	73.5	66.8
105°	366.2	369.2	372.2	375.1	364.4	340.1	315.7	291.3	266.9	219.0	171.0
107.5°	463.6	465.9	468.4	470.8	473.9	477.7	481.6	485.4	489.3	454.1	418.9
110°	528.7	530.8	533.0	535.2	537.8	540.8	543.7	546.7	549.7	540.8	531.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	590.9	592.9	594.8	596.7	599.2	602.2	605.2	608.1	611.1	611.3	611.5
115°	683.0	684.6	686.2	687.9	689.9	692.4	694.7	697.2	699.6	702.3	705.1
117.5°	772.8	774.8	776.8	778.9	780.5	781.7	782.9	784.2	785.5	787.6	789.8
120°	828.8	831.3	833.7	836.2	837.8	838.5	839.4	840.2	841.0	843.2	845.4
122.5°	884.9	887.0	888.9	891.0	892.5	893.5	894.5	895.5	896.6	898.1	899.6
125°	962.6	964.8	966.9	969.1	970.8	971.8	972.9	974.0	975.1	975.7	976.2
127.5°	1037.7	1039.9	1042.0	1044.2	1045.9	1047.3	1048.6	1049.9	1051.2	1052.0	1052.9
130°	1084.5	1086.7	1088.8	1091.0	1092.7	1093.7	1094.8	1095.9	1097.0	1098.0	1099.1
132.5°	1129.4	1131.6	1133.7	1135.9	1137.4	1138.2	1139.1	1140.0	1140.8	1141.9	1143.0
135°	1197.3	1199.0	1200.6	1202.2	1203.5	1204.6	1205.7	1206.8	1207.9	1208.7	1209.5
137.5°	1256.3	1258.3	1260.4	1262.4	1263.8	1264.4	1264.9	1265.6	1266.2	1267.5	1268.8
140°	1294.9	1296.5	1298.1	1299.8	1300.9	1301.7	1302.5	1303.3	1304.2	1305.3	1306.4
142.5°	1330.9	1332.5	1334.2	1335.8	1337.0	1337.8	1338.6	1339.5	1340.3	1341.1	1342.0
145°	1381.6	1383.6	1385.4	1387.3	1388.5	1389.1	1389.6	1390.2	1390.7	1391.2	1391.8
147.5°	1428.6	1429.8	1431.0	1432.2	1433.1	1433.7	1434.3	1434.8	1435.3	1435.9	1436.4
150°	1457.3	1458.2	1459.0	1459.8	1460.4	1461.0	1461.6	1462.1	1462.6	1463.1	1463.7
152.5°	1483.3	1483.6	1484.0	1484.4	1484.7	1485.1	1485.4	1485.7	1486.0	1487.0	1488.0
155°	1519.4	1518.8	1518.3	1517.8	1517.6	1517.9	1518.2	1518.4	1518.7	1520.0	1521.4
157.5°	1548.7	1548.6	1548.5	1548.5	1548.3	1548.0	1547.8	1547.5	1547.2	1548.8	1550.5
160°	1565.9	1565.7	1565.5	1565.1	1564.9	1564.6	1564.3	1564.1	1563.8	1565.5	1567.1
162.5°	1582.1	1581.4	1580.7	1580.0	1579.5	1579.2	1579.0	1578.7	1578.4	1580.3	1582.1
165°	1602.0	1601.2	1600.4	1599.5	1599.0	1598.7	1598.5	1598.2	1597.9	1600.1	1602.2
167.5°	1617.3	1616.2	1615.2	1614.0	1613.6	1613.6	1613.6	1613.6	1613.6	1615.7	1617.9
170°	1626.1	1625.0	1623.9	1622.9	1622.3	1622.3	1622.3	1622.3	1622.3	1624.5	1626.6
172.5°	1631.7	1630.4	1629.1	1627.8	1627.3	1627.5	1627.7	1627.9	1628.2	1630.4	1632.5
175°	1639.2	1637.9	1636.6	1635.2	1634.6	1634.9	1635.2	1635.4	1635.7	1637.6	1639.5
177.5°	1641.4	1640.4	1639.3	1638.2	1637.8	1638.0	1638.2	1638.4	1638.7	1640.4	1642.1
180°	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1391.7	1392.2	1397.9	1402.0	1400.0	1402.5	1403.5
5°	1520.5	1543.6	1555.8	1564.7	1565.4	1566.0	1571.2
7.5°	1703.2	1727.9	1746.0	1773.4	1781.6	1790.9	1788.2
10°	1836.5	1872.9	1904.4	1921.0	1938.9	1965.2	1944.1
12.5°	1961.0	2025.7	2073.5	2099.4	2116.3	2121.6	2111.2
15°	2166.4	2251.0	2296.5	2295.2	2352.9	2377.9	2338.8
17.5°	2354.8	2432.9	2495.4	2527.4	2575.4	2586.1	2581.2
20°	2470.1	2555.4	2604.1	2659.2	2684.1	2706.5	2710.4
22.5°	2569.6	2646.1	2698.4	2744.2	2765.2	2775.8	2782.2
25°	2672.0	2732.2	2763.6	2779.6	2785.4	2784.1	2775.8
27.5°	2664.9	2669.5	2635.0	2601.0	2570.6	2536.4	2524.6
30°	2595.7	2541.9	2445.8	2391.4	2311.2	2247.8	2273.4
32.5°	2413.8	2306.6	2198.7	2079.7	1981.1	1953.0	1924.8
35°	2060.0	1871.7	1761.5	1633.3	1582.0	1530.8	1495.5
37.5°	1666.6	1520.9	1390.2	1306.4	1255.0	1222.5	1205.2
40°	1441.0	1309.7	1202.1	1134.2	1095.0	1058.5	1053.4
42.5°	1261.2	1139.1	1058.0	1004.0	966.4	950.9	939.6
45°	1032.9	947.7	893.2	854.8	829.8	820.2	807.4
47.5°	874.2	814.0	773.1	747.0	728.1	721.0	720.0
50°	785.5	735.6	705.5	684.9	670.3	667.6	657.5
52.5°	718.9	675.6	652.2	634.2	623.6	616.4	613.3
55°	624.1	595.3	574.1	563.9	555.5	548.5	548.5
57.5°	546.1	522.0	508.0	499.3	496.7	491.7	488.5
60°	497.9	477.4	466.5	458.8	453.6	454.3	448.5
62.5°	450.7	437.4	427.0	419.3	413.2	413.3	413.7
65°	383.8	373.6	365.9	363.3	359.5	355.0	356.3
67.5°	325.2	315.6	309.7	305.2	303.9	301.6	305.2
70°	283.2	276.1	271.7	267.8	266.5	267.2	270.4
72.5°	244.8	239.8	236.8	235.1	232.2	232.4	234.5
75°	192.2	188.4	185.8	183.9	183.3	183.3	183.3
77.5°	141.2	140.3	139.2	136.3	136.5	137.2	137.4
80°	111.5	109.6	108.9	107.6	105.7	104.4	107.6
82.5°	83.3	81.4	80.7	80.5	77.5	77.3	80.0
85°	44.8	43.0	43.5	43.0	43.0	42.3	42.3
87.5°	22.4	22.1	21.8	22.3	21.9	21.5	22.7
90°	32.5	33.6	34.4	35.0	35.5	36.0	36.5
92.5°	36.4	38.2	39.1	39.5	39.8	40.1	40.4
95°	43.5	45.3	46.3	46.3	46.3	46.3	46.3
97.5°	45.7	47.9	49.2	49.4	49.7	50.0	50.2
100°	46.7	48.9	50.1	50.4	50.6	51.0	51.2
102.5°	60.1	53.3	50.2	50.7	51.2	51.7	52.2
105°	123.1	75.2	51.4	52.0	52.6	53.1	53.6
107.5°	383.8	348.6	313.0	276.9	240.7	204.6	168.4
110°	522.9	514.0	490.1	451.3	412.6	373.9	335.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	611.6	611.8	607.8	599.6	591.4	583.3	575.0
115°	707.8	710.5	712.3	713.5	714.5	715.6	716.7
117.5°	791.9	794.1	795.3	795.5	795.7	796.0	796.1
120°	847.5	849.7	850.8	850.8	850.8	850.8	850.8
122.5°	901.2	902.7	903.5	903.8	903.9	904.2	904.4
125°	976.7	977.2	977.8	978.4	978.8	979.4	980.0
127.5°	1053.8	1054.6	1054.8	1054.3	1053.7	1053.1	1052.6
130°	1100.2	1101.3	1101.6	1101.1	1100.5	1099.9	1099.4
132.5°	1144.1	1145.2	1145.3	1144.6	1143.9	1143.0	1142.3
135°	1210.3	1211.1	1211.1	1210.3	1209.5	1208.7	1207.9
137.5°	1270.1	1271.4	1271.7	1271.2	1270.6	1270.1	1269.6
140°	1307.4	1308.5	1308.8	1308.2	1307.7	1307.2	1306.6
142.5°	1342.9	1343.7	1343.8	1343.0	1342.2	1341.5	1340.8
145°	1392.4	1392.9	1393.2	1393.2	1393.2	1393.2	1393.2
147.5°	1437.0	1437.5	1437.1	1435.9	1434.7	1433.4	1432.2
150°	1464.3	1464.8	1464.7	1463.9	1463.1	1462.2	1461.4
152.5°	1489.0	1490.0	1489.8	1488.6	1487.3	1486.0	1484.8
155°	1522.7	1524.1	1524.0	1522.3	1520.7	1519.1	1517.5
157.5°	1552.1	1553.7	1553.5	1551.4	1549.2	1547.1	1545.0
160°	1568.6	1570.3	1570.2	1568.2	1566.4	1564.5	1562.6
162.5°	1584.0	1585.8	1585.8	1584.2	1582.5	1580.9	1579.2
165°	1604.4	1606.6	1606.7	1604.8	1603.0	1601.0	1599.1
167.5°	1620.0	1622.2	1622.2	1620.0	1617.9	1615.7	1613.6
170°	1628.8	1631.0	1631.0	1628.8	1626.6	1624.5	1622.3
172.5°	1634.7	1636.8	1636.7	1634.3	1632.0	1629.5	1627.2
175°	1641.4	1643.3	1643.2	1641.0	1638.8	1636.6	1634.5
177.5°	1643.8	1645.6	1645.4	1643.2	1641.0	1638.8	1636.7
180°	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5

(END OF REPORT)