

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: P332144

Luminaire Tested: **S123DIW-S560D1535U835-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332144  
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-S560D1535U835-4F0-1E-UDD-A  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 560 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: 8527.9 lumens  
Efficiency: N/A  
Efficacy: 140.7 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: Semi-Indirect

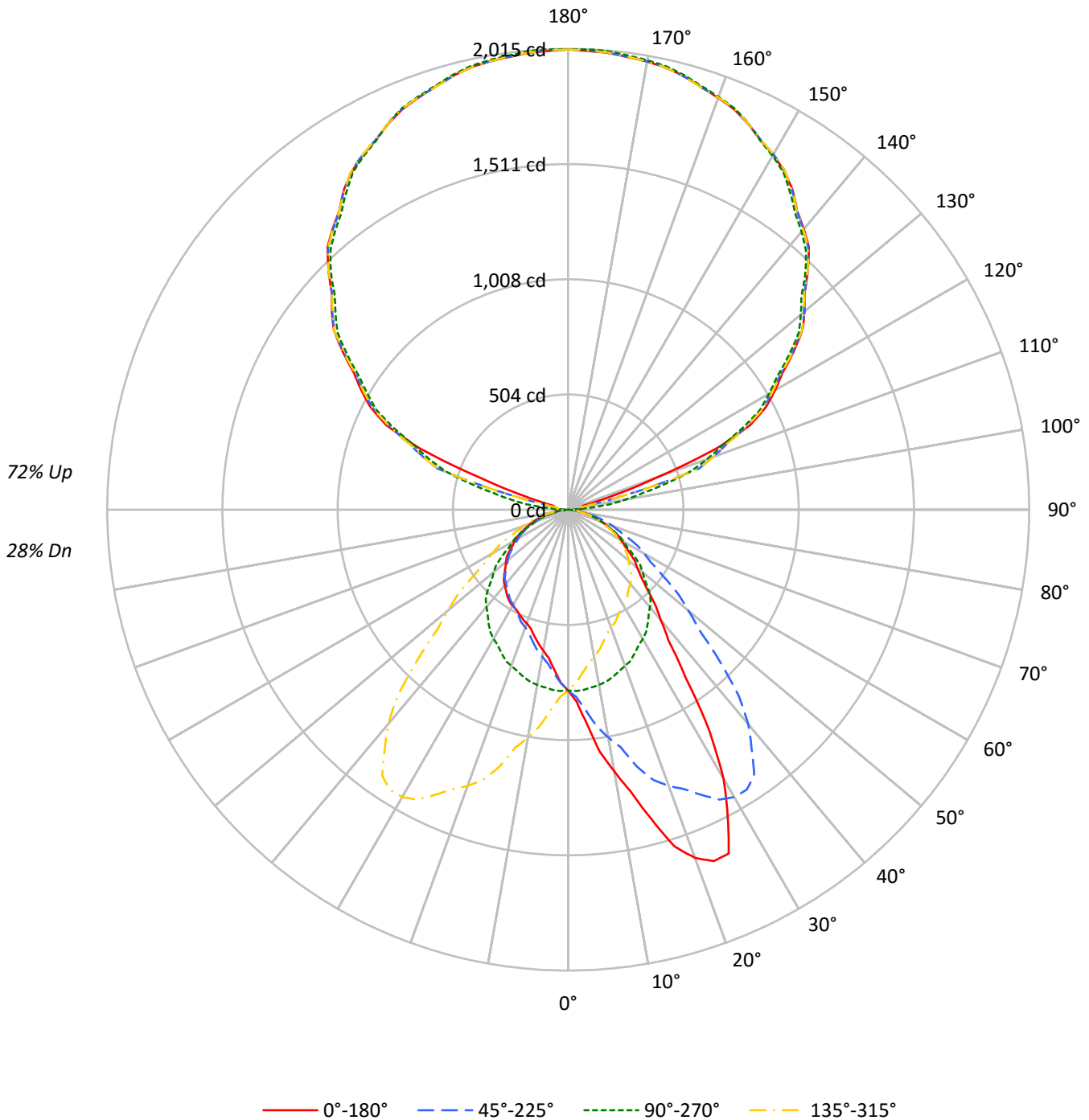
Input Watts (W): 60.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	50	30	10	0		
RCR																										
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28								
1	93	89	85	82	83	80	77	74	62	60	58	47	45	44	32	31	31	24								
2	85	78	72	67	76	70	65	61	55	51	49	41	39	37	28	27	26	20								
3	77	68	61	56	69	61	56	51	48	44	41	36	34	31	25	24	22	17								
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	23	21	19	15								
5	65	54	46	40	58	48	42	37	38	34	30	29	26	23	20	18	17	13								
6	60	48	40	35	53	43	37	32	35	30	26	26	23	20	18	16	15	11								
7	55	43	36	30	49	39	33	28	31	26	23	24	20	18	17	15	13	10								
8	51	39	32	27	46	35	29	24	28	24	20	22	18	16	15	13	12	9								
9	47	36	28	24	42	32	26	22	26	21	18	20	17	14	14	12	11	8								
10	44	33	26	21	39	30	23	19	24	19	16	18	15	13	13	11	10	7								

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

	0°	90°	180°	270°
0°	8509	8509	8509	8509
5°	10147	8546	7573	8546
10°	12701	8502	6840	8502
15°	15578	8433	6367	8433
20°	18558	8326	6063	8326
25°	19705	8197	5995	8197
30°	16890	8103	6027	8103
35°	11746	7967	6089	7967
40°	8847	7808	6070	7808
45°	7346	7573	5993	7573
50°	6581	7093	5940	7093
55°	6152	6576	5864	6576
60°	5772	6036	5804	6036
65°	5422	5501	5619	5501
70°	5086	4894	5350	4894
75°	4554	4284	4907	4284
80°	3986	3515	4228	3515
85°	3125	2556	2841	2556



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.9	0.9
10°-20°	249.7	2.9
20°-30°	419.1	4.9
30°-40°	474.5	5.6
40°-50°	425.5	5.0
50°-60°	343.4	4.0
60°-70°	239.3	2.8
70°-80°	125.8	1.5
80°-90°	36.4	0.4
90°-100°	73.2	0.9
100°-110°	348.7	4.1
110°-120°	837.5	9.8
120°-130°	1066.5	12.5
130°-140°	1139.5	13.4
140°-150°	1065.6	12.5
150°-160°	859.5	10.1
160°-170°	554.7	6.5
170°-180°	191.2	2.2
0°-30°	746.6	8.8
0°-40°	1221.1	14.3
0°-60°	1990.1	23.3
0°-90°	2391.5	28.0
90°-120°	1259.4	14.8
90°-150°	4531.0	53.1
90°-180°	6136.0	72.0
0°-180°	8527.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	790	790	790	790	790	
5°	939	791	701	791	939	97
15°	1398	757	571	757	1398	404
25°	1659	690	505	690	1659	728
35°	894	606	463	606	894	581
45°	483	498	394	498	483	382
55°	328	350	312	350	328	294
65°	213	216	221	216	213	212
75°	110	103	118	103	110	117
85°	25	21	23	21	25	31
90°	45	2	45	2	45	22
95°	57	91	57	91	57	48
105°	66	446	66	446	66	150
115°	879	836	879	836	879	812
125°	1202	1178	1202	1178	1202	1073
135°	1482	1467	1482	1467	1482	1142
145°	1709	1692	1709	1692	1709	1067
155°	1861	1864	1861	1864	1861	858
165°	1961	1966	1961	1966	1961	554
175°	2005	2012	2005	2012	2005	191
180°	2012	2012	2012	2012	2012	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5
2.5°	838.9	838.3	836.8	838.0	835.5	832.2	831.9	828.8	819.9	819.3	816.9
5°	939.1	936.0	935.7	935.3	929.9	922.6	908.8	907.7	889.3	880.1	869.0
7.5°	1068.9	1070.5	1064.9	1060.0	1043.6	1032.8	1018.0	999.1	976.5	953.6	938.3
10°	1162.0	1174.6	1158.9	1148.2	1138.3	1119.5	1097.7	1070.5	1043.3	1011.5	987.4
12.5°	1261.9	1268.1	1265.0	1254.8	1239.4	1210.8	1172.1	1142.2	1117.1	1064.2	1042.8
15°	1397.9	1421.3	1406.4	1371.9	1372.7	1345.5	1294.9	1239.4	1209.9	1163.5	1100.3
17.5°	1542.9	1545.8	1539.4	1510.7	1491.5	1454.2	1407.5	1354.3	1294.5	1238.5	1171.4
20°	1620.1	1617.8	1604.4	1589.4	1556.5	1527.4	1476.4	1417.1	1340.5	1285.3	1212.2
22.5°	1663.0	1659.1	1652.8	1640.3	1612.9	1581.6	1535.9	1471.0	1398.1	1322.1	1237.6
25°	1659.1	1664.1	1664.9	1661.4	1651.9	1633.1	1597.1	1545.4	1472.6	1375.0	1286.9
27.5°	1509.0	1516.0	1536.5	1554.7	1575.0	1595.6	1592.9	1567.2	1513.4	1429.0	1321.3
30°	1358.9	1343.5	1381.5	1429.3	1461.9	1519.3	1551.5	1553.4	1523.2	1450.8	1345.8
32.5°	1150.5	1167.4	1184.1	1243.0	1314.2	1378.7	1442.7	1494.3	1500.2	1452.0	1360.2
35°	893.9	915.0	945.6	976.3	1052.9	1118.7	1231.3	1329.4	1407.5	1417.8	1361.5
37.5°	720.3	730.8	750.1	780.8	830.9	909.1	996.2	1120.1	1233.3	1317.5	1321.2
40°	629.6	632.7	654.5	677.9	718.5	782.8	861.4	970.9	1106.5	1224.1	1273.1
42.5°	561.6	568.4	577.6	600.1	632.4	680.8	753.8	844.4	968.6	1103.9	1199.8
45°	482.6	490.2	496.0	510.9	533.9	566.4	617.4	700.1	794.7	934.5	1063.6
47.5°	430.3	430.9	435.2	446.5	462.1	486.6	522.6	575.7	662.6	775.9	908.5
50°	393.0	399.1	400.6	409.4	421.7	439.7	469.6	514.7	586.0	685.6	807.4
52.5°	366.6	368.4	372.7	379.1	389.8	403.8	429.7	465.1	521.0	605.9	717.9
55°	327.8	327.8	332.1	337.0	343.2	355.8	373.0	399.1	441.6	507.5	600.2
57.5°	292.0	293.9	296.9	298.4	303.6	312.0	326.4	346.2	377.9	428.6	502.3
60°	268.1	271.5	271.2	274.2	278.8	285.3	297.6	313.7	342.0	382.6	444.7
62.5°	247.3	247.0	247.0	250.6	255.2	261.4	269.4	283.3	307.4	343.4	396.2
65°	212.9	212.2	214.9	217.2	218.7	223.3	229.4	241.7	257.8	284.6	325.5
67.5°	182.5	180.2	181.7	182.5	185.1	188.7	194.4	202.0	214.8	236.3	267.2
70°	161.6	159.7	159.3	160.1	162.4	165.1	169.3	176.6	188.4	205.7	228.3
72.5°	140.2	138.9	138.8	140.5	141.6	143.3	146.3	153.0	162.4	175.3	196.4
75°	109.5	109.5	109.5	109.9	111.1	112.6	114.9	118.3	125.6	134.8	149.0
77.5°	82.1	82.0	81.6	81.5	83.2	83.9	84.4	87.6	91.7	97.9	108.2
80°	64.3	62.4	63.2	64.3	65.1	65.5	66.6	67.4	70.9	74.3	81.6
82.5°	47.8	46.2	46.3	48.1	48.3	48.6	49.8	50.9	52.2	55.3	59.2
85°	25.3	25.3	25.7	25.7	26.0	25.7	26.8	27.2	27.2	29.1	31.4
87.5°	18.2	17.4	17.6	17.8	17.3	17.4	17.5	17.5	17.6	17.6	17.0
90°	44.8	44.2	43.5	42.9	42.2	41.2	39.9	38.5	37.2	35.9	31.6
92.5°	49.6	49.2	48.8	48.4	48.0	46.8	44.7	42.5	40.4	38.3	35.0
95°	56.8	56.8	56.8	56.8	56.8	55.6	53.3	51.0	48.7	46.3	42.7
97.5°	61.6	61.3	60.9	60.6	60.3	58.8	56.1	53.5	50.8	48.1	42.1
100°	62.8	62.5	62.1	61.8	61.5	60.0	57.3	54.6	52.0	49.3	41.2
102.5°	64.0	63.4	62.8	62.2	61.6	65.4	73.7	81.9	90.1	98.4	155.0
105°	65.8	65.1	64.5	63.8	63.1	92.2	151.0	209.8	268.6	327.4	357.3
107.5°	206.6	250.9	295.2	339.6	383.9	427.6	470.7	513.8	557.0	600.1	595.4
110°	411.1	458.6	506.1	553.6	601.1	630.4	641.3	652.3	663.3	674.2	670.6



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**CANDELA DISTRIBUTION (continued):**

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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5
2.5°	815.0	812.6	810.1	805.8	802.1	796.9	795.4	793.6	788.1	783.1	779.5
5°	864.8	855.6	842.2	829.9	820.0	806.6	798.9	790.9	779.4	769.1	760.6
7.5°	916.9	898.8	878.0	855.5	834.5	814.2	797.9	783.4	767.3	752.0	740.2
10°	958.3	932.2	903.1	871.7	844.9	818.8	797.0	777.9	757.2	739.2	724.2
12.5°	1005.4	966.8	926.7	888.5	856.8	820.7	794.3	769.9	746.5	724.8	708.0
15°	1061.3	1012.3	964.8	912.3	864.0	818.8	787.4	756.8	729.6	707.4	685.9
17.5°	1112.1	1056.6	994.0	930.2	872.0	818.4	774.4	739.8	705.8	678.6	657.2
20°	1140.9	1077.7	1006.9	940.6	876.3	816.5	768.3	726.9	690.2	661.4	637.3
22.5°	1165.8	1091.8	1018.5	947.7	876.0	811.6	757.0	714.4	674.5	646.4	620.8
25°	1191.5	1103.0	1029.5	946.4	866.3	799.7	738.4	690.2	650.3	617.4	591.0
27.5°	1213.6	1102.3	1015.0	925.6	851.2	784.4	719.0	667.2	624.9	589.1	562.3
30°	1228.3	1103.8	1000.0	911.5	836.5	767.5	703.9	651.9	607.4	571.0	545.8
32.5°	1237.5	1102.9	986.2	891.9	813.2	752.2	687.7	633.8	588.1	552.4	528.0
35°	1242.8	1096.1	962.5	851.4	775.6	716.2	662.2	606.3	558.4	525.1	497.5
37.5°	1232.1	1082.0	934.9	812.3	729.3	670.9	625.4	577.8	532.0	495.3	471.5
40°	1215.2	1072.8	913.4	784.8	697.4	641.1	602.5	555.7	510.5	475.7	453.5
42.5°	1183.1	1054.1	889.9	754.1	664.3	608.0	572.4	533.4	490.6	457.9	435.7
45°	1104.6	1013.4	854.5	708.2	615.5	557.3	525.9	497.5	458.8	427.0	407.9
47.5°	995.6	952.2	803.3	659.7	564.5	508.5	475.8	453.0	424.7	399.1	380.7
50°	920.0	902.0	768.7	626.6	530.4	475.7	444.3	423.6	403.3	377.6	360.8
52.5°	832.6	843.7	728.2	592.3	495.8	442.0	412.4	396.0	377.6	356.5	341.8
55°	709.7	749.9	658.4	534.7	444.3	393.0	365.0	350.4	339.7	324.0	311.4
57.5°	594.6	645.7	582.8	475.3	393.6	349.4	322.6	306.7	299.8	291.6	281.7
60°	526.2	576.8	528.9	435.5	359.6	317.5	293.8	280.4	273.5	267.7	259.3
62.5°	465.3	516.4	476.2	395.0	326.2	287.2	266.5	253.4	248.0	245.0	237.8
65°	381.5	425.5	398.7	332.1	278.4	244.0	225.2	216.0	211.0	209.9	205.3
67.5°	310.5	344.0	324.5	275.4	233.2	203.4	187.5	179.7	175.9	175.5	172.0
70°	263.9	295.3	280.4	235.9	199.5	176.2	162.4	155.5	153.2	152.8	150.9
72.5°	227.7	249.6	237.8	200.7	172.6	151.4	141.2	134.0	131.4	132.0	130.7
75°	168.5	185.0	178.1	152.4	129.8	116.0	107.6	103.0	100.7	101.9	100.3
77.5°	121.3	131.7	125.5	107.7	93.8	83.8	77.6	74.8	72.7	72.6	71.9
80°	91.5	97.7	94.2	83.5	72.0	63.6	58.6	56.7	55.5	55.2	54.8
82.5°	65.2	70.4	66.3	59.0	51.2	46.1	43.3	40.8	39.9	40.1	39.8
85°	32.9	34.9	33.3	28.7	25.7	23.4	21.8	20.7	19.9	20.3	19.5
87.5°	16.8	16.2	14.4	12.5	11.2	9.6	8.9	7.7	7.7	8.4	8.7
90°	27.2	22.9	18.6	14.8	11.5	8.1	4.8	1.5	4.8	8.1	11.5
92.5°	31.8	28.5	25.2	24.1	25.0	25.9	26.9	27.8	26.9	25.9	25.0
95°	39.0	35.4	31.7	36.7	50.3	64.0	77.6	91.2	77.6	64.0	50.3
97.5°	96.0	119.9	143.8	158.8	164.9	171.1	177.2	183.3	177.2	171.1	164.9
100°	153.0	204.8	256.6	279.2	272.6	265.9	259.3	252.7	259.3	265.9	272.6
102.5°	211.6	268.2	324.8	350.7	345.9	341.2	336.4	331.6	336.4	341.2	345.9
105°	387.2	417.1	447.0	460.1	456.5	452.8	449.2	445.5	449.2	452.8	456.5
107.5°	590.7	585.9	581.2	577.4	574.5	571.5	568.6	565.7	568.6	571.5	574.5
110°	666.9	663.3	659.6	656.5	653.8	651.1	648.5	645.8	648.5	651.1	653.8





TEST NUMBER: P332144

CATALOG NUMBER: S123DIW-S560D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

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



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5
2.5°	777.3	775.2	772.1	767.5	763.8	758.0	758.0	758.9	758.9	758.6	758.0
5°	753.7	748.0	741.1	733.1	724.6	716.2	714.7	711.6	709.3	707.8	705.9
7.5°	728.8	718.7	708.6	697.4	687.1	678.6	672.7	667.8	664.6	661.3	658.8
10°	712.0	699.3	687.5	675.6	662.6	652.2	645.7	641.1	637.7	634.6	633.1
12.5°	692.1	677.6	664.5	653.2	639.0	628.3	622.1	620.0	615.9	609.5	606.1
15°	663.0	649.6	633.9	616.6	609.7	596.7	589.4	586.0	583.7	578.7	577.2
17.5°	638.1	620.5	602.9	590.0	577.2	566.7	562.6	558.3	555.3	551.2	550.0
20°	618.2	602.5	586.4	572.6	559.2	547.7	544.2	541.2	538.1	536.2	534.7
22.5°	597.9	582.2	568.9	556.0	541.7	534.2	530.4	527.1	524.9	523.6	522.1
25°	569.5	555.7	540.8	529.3	517.8	512.8	510.5	508.6	507.1	505.2	504.8
27.5°	544.1	529.1	517.0	506.2	498.0	493.8	491.6	490.7	491.0	491.7	492.1
30°	525.1	511.3	501.3	492.1	484.5	480.7	480.3	480.3	481.8	482.2	483.0
32.5°	507.6	496.3	486.3	477.4	471.6	469.0	470.5	470.5	471.7	472.7	474.1
35°	482.2	472.2	464.6	456.9	451.9	453.1	453.8	454.6	456.5	458.8	460.4
37.5°	457.9	449.3	441.3	435.3	433.0	435.1	436.9	438.5	440.8	442.5	444.0
40°	440.4	433.9	426.3	420.9	421.7	422.8	424.4	426.3	428.2	429.3	430.9
42.5°	424.2	417.4	411.6	407.1	408.2	409.7	410.6	411.6	413.8	415.9	416.8
45°	399.5	394.1	388.7	386.1	386.8	387.6	388.4	389.5	391.4	393.0	393.3
47.5°	371.7	367.9	364.3	361.7	362.9	362.6	363.6	366.1	366.7	367.6	369.7
50°	353.9	350.4	346.2	345.5	345.5	345.5	345.8	348.9	348.9	350.4	352.0
52.5°	334.3	332.1	329.4	328.0	327.4	327.4	329.0	330.5	331.1	333.3	334.8
55°	305.2	302.9	300.7	299.5	298.7	299.5	302.6	303.3	305.2	306.4	307.5
57.5°	275.0	273.2	271.4	270.8	270.6	271.6	273.3	275.6	276.1	279.6	281.3
60°	255.1	252.4	250.9	250.9	250.1	253.5	252.8	256.6	257.4	259.7	262.4
62.5°	234.5	230.9	230.3	230.3	231.4	232.4	233.5	235.2	237.2	240.1	242.1
65°	201.5	199.5	202.2	201.8	201.1	203.4	203.4	205.3	207.6	210.3	214.5
67.5°	170.1	169.1	169.4	169.4	170.5	171.8	172.9	174.6	177.3	180.2	182.9
70°	149.0	150.1	148.2	149.8	150.9	151.3	152.0	154.3	157.4	159.3	162.4
72.5°	128.5	128.4	128.6	129.2	130.4	131.1	131.8	134.4	137.8	139.4	141.9
75°	98.8	98.4	99.6	99.6	101.5	102.3	103.0	104.2	107.2	109.5	111.5
77.5°	72.2	72.6	72.4	73.7	73.2	73.3	75.7	76.8	77.1	81.7	82.7
80°	54.4	55.2	55.5	55.9	56.3	55.5	58.2	59.4	59.4	62.0	64.0
82.5°	39.1	39.5	40.5	40.9	41.0	41.7	42.0	42.8	43.7	44.9	47.4
85°	19.5	20.7	21.1	20.7	21.1	20.3	21.4	21.8	22.2	22.2	22.2
87.5°	9.1	10.2	10.7	11.9	12.4	13.6	13.9	13.5	13.8	15.0	14.0
90°	14.8	18.6	22.9	27.2	31.6	35.9	37.2	38.5	39.9	41.2	42.2
92.5°	24.1	25.2	28.5	31.8	35.0	38.3	40.4	42.5	44.7	46.8	48.0
95°	36.7	31.7	35.4	39.0	42.7	46.3	48.7	51.0	53.3	55.6	56.8
97.5°	158.8	143.8	119.9	96.0	72.1	48.1	50.8	53.5	56.1	58.8	60.3
100°	279.2	256.6	204.8	153.0	101.2	49.3	52.0	54.6	57.3	60.0	61.5
102.5°	350.7	324.8	268.2	211.6	155.0	98.4	90.1	81.9	73.7	65.4	61.6
105°	460.1	447.0	417.1	387.2	357.3	327.4	268.6	209.8	151.0	92.2	63.1
107.5°	577.4	581.2	585.9	590.7	595.4	600.1	557.0	513.8	470.7	427.6	383.9
110°	656.5	659.6	663.3	666.9	670.6	674.2	663.3	652.3	641.3	630.4	601.1



TEST NUMBER: P332144

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**CANDELA DISTRIBUTION (continued):**

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



TEST NUMBER: P332144

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5
2.5°	755.9	755.6	757.7	756.2	757.7	755.6	755.9	758.0	758.6	758.9	758.9
5°	703.6	704.7	700.9	700.9	700.9	704.7	703.6	705.9	707.8	709.3	711.6
7.5°	657.0	655.3	655.5	653.4	655.5	655.3	657.0	658.8	661.3	664.6	667.8
10°	628.5	626.2	625.4	625.8	625.4	626.2	628.5	633.1	634.6	637.7	641.1
12.5°	604.9	604.4	599.4	599.5	599.4	604.4	604.9	606.1	609.5	615.9	620.0
15°	577.2	569.9	569.1	571.4	569.1	569.9	577.2	577.2	578.7	583.7	586.0
17.5°	549.4	545.5	545.8	544.6	545.8	545.5	549.4	550.0	551.2	555.3	558.3
20°	534.7	532.4	532.0	529.3	532.0	532.4	534.7	534.7	536.2	538.1	541.2
22.5°	521.2	520.4	520.6	517.7	520.6	520.4	521.2	522.1	523.6	524.9	527.1
25°	504.4	506.3	504.8	504.8	504.8	506.3	504.4	504.8	505.2	507.1	508.6
27.5°	493.1	493.0	492.2	492.2	492.2	493.0	493.1	492.1	491.7	491.0	490.7
30°	484.5	484.1	484.9	484.9	484.9	484.1	484.5	483.0	482.2	481.8	480.3
32.5°	475.9	476.4	476.6	476.9	476.6	476.4	475.9	474.1	472.7	471.7	470.5
35°	462.7	463.0	464.2	463.4	464.2	463.0	462.7	460.4	458.8	456.5	454.6
37.5°	444.7	446.5	446.1	446.7	446.1	446.5	444.7	444.0	442.5	440.8	438.5
40°	431.3	432.4	432.0	432.0	432.0	432.4	431.3	430.9	429.3	428.2	426.3
42.5°	417.5	418.3	417.3	416.7	417.3	418.3	417.5	416.8	415.9	413.8	411.6
45°	394.9	394.1	395.3	393.7	395.3	394.1	394.9	393.3	393.0	391.4	389.5
47.5°	369.6	370.4	370.7	371.8	370.7	370.4	369.6	369.7	367.6	366.7	366.1
50°	352.7	355.0	355.0	354.7	355.0	355.0	352.7	352.0	350.4	348.9	348.9
52.5°	336.2	337.3	338.8	338.7	338.8	337.3	336.2	334.8	333.3	331.1	330.5
55°	310.6	311.4	312.1	312.5	312.1	311.4	310.6	307.5	306.4	305.2	303.3
57.5°	284.1	283.8	285.6	286.2	285.6	283.8	284.1	281.3	279.6	276.1	275.6
60°	265.4	265.4	268.5	269.6	268.5	265.4	265.4	262.4	259.7	257.4	256.6
62.5°	245.5	246.7	249.8	248.2	249.8	246.7	245.5	242.1	240.1	237.2	235.2
65°	216.4	219.5	219.1	220.6	219.1	219.5	216.4	214.5	210.3	207.6	205.3
67.5°	186.0	187.9	190.7	190.9	190.7	187.9	186.0	182.9	180.2	177.3	174.6
70°	165.5	167.4	168.9	170.0	168.9	167.4	165.5	162.4	159.3	157.4	154.3
72.5°	145.5	146.5	150.2	148.6	150.2	146.5	145.5	141.9	139.4	137.8	134.4
75°	114.1	116.8	119.1	118.0	119.1	116.8	114.1	111.5	109.5	107.2	104.2
77.5°	84.4	87.1	88.2	87.2	88.2	87.1	84.4	82.7	81.7	77.1	76.8
80°	66.6	66.3	68.6	68.2	68.6	66.3	66.6	64.0	62.0	59.4	59.4
82.5°	48.9	48.5	49.6	49.8	49.6	48.5	48.9	47.4	44.9	43.7	42.8
85°	23.7	24.9	23.4	23.0	23.4	24.9	23.7	22.2	22.2	22.2	21.8
87.5°	14.1	14.2	14.0	13.9	14.0	14.2	14.1	14.0	15.0	13.8	13.5
90°	42.9	43.5	44.2	44.8	44.2	43.5	42.9	42.2	41.2	39.9	38.5
92.5°	48.4	48.8	49.2	49.6	49.2	48.8	48.4	48.0	46.8	44.7	42.5
95°	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	55.6	53.3	51.0
97.5°	60.6	60.9	61.3	61.6	61.3	60.9	60.6	60.3	58.8	56.1	53.5
100°	61.8	62.1	62.5	62.8	62.5	62.1	61.8	61.5	60.0	57.3	54.6
102.5°	62.2	62.8	63.4	64.0	63.4	62.8	62.2	61.6	65.4	73.7	81.9
105°	63.8	64.5	65.1	65.8	65.1	64.5	63.8	63.1	92.2	151.0	209.8
107.5°	339.6	295.2	250.9	206.6	250.9	295.2	339.6	383.9	427.6	470.7	513.8
110°	553.6	506.1	458.6	411.1	458.6	506.1	553.6	601.1	630.4	641.3	652.3



TEST NUMBER: P332144

CATALOG NUMBER: S123DIW-S560D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

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



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5
2.5°	758.0	758.0	763.8	767.5	772.1	775.2	777.3	779.5	783.1	788.1	793.6
5°	714.7	716.2	724.6	733.1	741.1	748.0	753.7	760.6	769.1	779.4	790.9
7.5°	672.7	678.6	687.1	697.4	708.6	718.7	728.8	740.2	752.0	767.3	783.4
10°	645.7	652.2	662.6	675.6	687.5	699.3	712.0	724.2	739.2	757.2	777.9
12.5°	622.1	628.3	639.0	653.2	664.5	677.6	692.1	708.0	724.8	746.5	769.9
15°	589.4	596.7	609.7	616.6	633.9	649.6	663.0	685.9	707.4	729.6	756.8
17.5°	562.6	566.7	577.2	590.0	602.9	620.5	638.1	657.2	678.6	705.8	739.8
20°	544.2	547.7	559.2	572.6	586.4	602.5	618.2	637.3	661.4	690.2	726.9
22.5°	530.4	534.2	541.7	556.0	568.9	582.2	597.9	620.8	646.4	674.5	714.4
25°	510.5	512.8	517.8	529.3	540.8	555.7	569.5	591.0	617.4	650.3	690.2
27.5°	491.6	493.8	498.0	506.2	517.0	529.1	544.1	562.3	589.1	624.9	667.2
30°	480.3	480.7	484.5	492.1	501.3	511.3	525.1	545.8	571.0	607.4	651.9
32.5°	470.5	469.0	471.6	477.4	486.3	496.3	507.6	528.0	552.4	588.1	633.8
35°	453.8	453.1	451.9	456.9	464.6	472.2	482.2	497.5	525.1	558.4	606.3
37.5°	436.9	435.1	433.0	435.3	441.3	449.3	457.9	471.5	495.3	532.0	577.8
40°	424.4	422.8	421.7	420.9	426.3	433.9	440.4	453.5	475.7	510.5	555.7
42.5°	410.6	409.7	408.2	407.1	411.6	417.4	424.2	435.7	457.9	490.6	533.4
45°	388.4	387.6	386.8	386.1	388.7	394.1	399.5	407.9	427.0	458.8	497.5
47.5°	363.6	362.6	362.9	361.7	364.3	367.9	371.7	380.7	399.1	424.7	453.0
50°	345.8	345.5	345.5	345.5	346.2	350.4	353.9	360.8	377.6	403.3	423.6
52.5°	329.0	327.4	327.4	328.0	329.4	332.1	334.3	341.8	356.5	377.6	396.0
55°	302.6	299.5	298.7	299.5	300.7	302.9	305.2	311.4	324.0	339.7	350.4
57.5°	273.3	271.6	270.6	270.8	271.4	273.2	275.0	281.7	291.6	299.8	306.7
60°	252.8	253.5	250.1	250.9	250.9	252.4	255.1	259.3	267.7	273.5	280.4
62.5°	233.5	232.4	231.4	230.3	230.3	230.9	234.5	237.8	245.0	248.0	253.4
65°	203.4	203.4	201.1	201.8	202.2	199.5	201.5	205.3	209.9	211.0	216.0
67.5°	172.9	171.8	170.5	169.4	169.4	169.1	170.1	172.0	175.5	175.9	179.7
70°	152.0	151.3	150.9	149.8	148.2	150.1	149.0	150.9	152.8	153.2	155.5
72.5°	131.8	131.1	130.4	129.2	128.6	128.4	128.5	130.7	132.0	131.4	134.0
75°	103.0	102.3	101.5	99.6	99.6	98.4	98.8	100.3	101.9	100.7	103.0
77.5°	75.7	73.3	73.2	73.7	72.4	72.6	72.2	71.9	72.6	72.7	74.8
80°	58.2	55.5	56.3	55.9	55.5	55.2	54.4	54.8	55.2	55.5	56.7
82.5°	42.0	41.7	41.0	40.9	40.5	39.5	39.1	39.8	40.1	39.9	40.8
85°	21.4	20.3	21.1	20.7	21.1	20.7	19.5	19.5	20.3	19.9	20.7
87.5°	13.9	13.6	12.4	11.9	10.7	10.2	9.1	8.7	8.4	7.7	7.7
90°	37.2	35.9	31.6	27.2	22.9	18.6	14.8	11.5	8.1	4.8	1.5
92.5°	40.4	38.3	35.0	31.8	28.5	25.2	24.1	25.0	25.9	26.9	27.8
95°	48.7	46.3	42.7	39.0	35.4	31.7	36.7	50.3	64.0	77.6	91.2
97.5°	50.8	48.1	72.1	96.0	119.9	143.8	158.8	164.9	171.1	177.2	183.3
100°	52.0	49.3	101.2	153.0	204.8	256.6	279.2	272.6	265.9	259.3	252.7
102.5°	90.1	98.4	155.0	211.6	268.2	324.8	350.7	345.9	341.2	336.4	331.6
105°	268.6	327.4	357.3	387.2	417.1	447.0	460.1	456.5	452.8	449.2	445.5
107.5°	557.0	600.1	595.4	590.7	585.9	581.2	577.4	574.5	571.5	568.6	565.7
110°	663.3	674.2	670.6	666.9	663.3	659.6	656.5	653.8	651.1	648.5	645.8



TEST NUMBER: P332144

CATALOG NUMBER: S123DIW-S560D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

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



TEST NUMBER: P332144

CATALOG NUMBER: S123DIW-S560D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5	790.5
2.5°	795.4	796.9	802.1	805.8	810.1	812.6	815.0	816.9	819.3	819.9	828.8
5°	798.9	806.6	820.0	829.9	842.2	855.6	864.8	869.0	880.1	889.3	907.7
7.5°	797.9	814.2	834.5	855.5	878.0	898.8	916.9	938.3	953.6	976.5	999.1
10°	797.0	818.8	844.9	871.7	903.1	932.2	958.3	987.4	1011.5	1043.3	1070.5
12.5°	794.3	820.7	856.8	888.5	926.7	966.8	1005.4	1042.8	1064.2	1117.1	1142.2
15°	787.4	818.8	864.0	912.3	964.8	1012.3	1061.3	1100.3	1163.5	1209.9	1239.4
17.5°	774.4	818.4	872.0	930.2	994.0	1056.6	1112.1	1171.4	1238.5	1294.5	1354.3
20°	768.3	816.5	876.3	940.6	1006.9	1077.7	1140.9	1212.2	1285.3	1340.5	1417.1
22.5°	757.0	811.6	876.0	947.7	1018.5	1091.8	1165.8	1237.6	1322.1	1398.1	1471.0
25°	738.4	799.7	866.3	946.4	1029.5	1103.0	1191.5	1286.9	1375.0	1472.6	1545.4
27.5°	719.0	784.4	851.2	925.6	1015.0	1102.3	1213.6	1321.3	1429.0	1513.4	1567.2
30°	703.9	767.5	836.5	911.5	1000.0	1103.8	1228.3	1345.8	1450.8	1523.2	1553.4
32.5°	687.7	752.2	813.2	891.9	986.2	1102.9	1237.5	1360.2	1452.0	1500.2	1494.3
35°	662.2	716.2	775.6	851.4	962.5	1096.1	1242.8	1361.5	1417.8	1407.5	1329.4
37.5°	625.4	670.9	729.3	812.3	934.9	1082.0	1232.1	1321.2	1317.5	1233.3	1120.1
40°	602.5	641.1	697.4	784.8	913.4	1072.8	1215.2	1273.1	1224.1	1106.5	970.9
42.5°	572.4	608.0	664.3	754.1	889.9	1054.1	1183.1	1199.8	1103.9	968.6	844.4
45°	525.9	557.3	615.5	708.2	854.5	1013.4	1104.6	1063.6	934.5	794.7	700.1
47.5°	475.8	508.5	564.5	659.7	803.3	952.2	995.6	908.5	775.9	662.6	575.7
50°	444.3	475.7	530.4	626.6	768.7	902.0	920.0	807.4	685.6	586.0	514.7
52.5°	412.4	442.0	495.8	592.3	728.2	843.7	832.6	717.9	605.9	521.0	465.1
55°	365.0	393.0	444.3	534.7	658.4	749.9	709.7	600.2	507.5	441.6	399.1
57.5°	322.6	349.4	393.6	475.3	582.8	645.7	594.6	502.3	428.6	377.9	346.2
60°	293.8	317.5	359.6	435.5	528.9	576.8	526.2	444.7	382.6	342.0	313.7
62.5°	266.5	287.2	326.2	395.0	476.2	516.4	465.3	396.2	343.4	307.4	283.3
65°	225.2	244.0	278.4	332.1	398.7	425.5	381.5	325.5	284.6	257.8	241.7
67.5°	187.5	203.4	233.2	275.4	324.5	344.0	310.5	267.2	236.3	214.8	202.0
70°	162.4	176.2	199.5	235.9	280.4	295.3	263.9	228.3	205.7	188.4	176.6
72.5°	141.2	151.4	172.6	200.7	237.8	249.6	227.7	196.4	175.3	162.4	153.0
75°	107.6	116.0	129.8	152.4	178.1	185.0	168.5	149.0	134.8	125.6	118.3
77.5°	77.6	83.8	93.8	107.7	125.5	131.7	121.3	108.2	97.9	91.7	87.6
80°	58.6	63.6	72.0	83.5	94.2	97.7	91.5	81.6	74.3	70.9	67.4
82.5°	43.3	46.1	51.2	59.0	66.3	70.4	65.2	59.2	55.3	52.2	50.9
85°	21.8	23.4	25.7	28.7	33.3	34.9	32.9	31.4	29.1	27.2	27.2
87.5°	8.9	9.6	11.2	12.5	14.4	16.2	16.8	17.0	17.6	17.6	17.5
90°	4.8	8.1	11.5	14.8	18.6	22.9	27.2	31.6	35.9	37.2	38.5
92.5°	26.9	25.9	25.0	24.1	25.2	28.5	31.8	35.0	38.3	40.4	42.5
95°	77.6	64.0	50.3	36.7	31.7	35.4	39.0	42.7	46.3	48.7	51.0
97.5°	177.2	171.1	164.9	158.8	143.8	119.9	96.0	72.1	48.1	50.8	53.5
100°	259.3	265.9	272.6	279.2	256.6	204.8	153.0	101.2	49.3	52.0	54.6
102.5°	336.4	341.2	345.9	350.7	324.8	268.2	211.6	155.0	98.4	90.1	81.9
105°	449.2	452.8	456.5	460.1	447.0	417.1	387.2	357.3	327.4	268.6	209.8
107.5°	568.6	571.5	574.5	577.4	581.2	585.9	590.7	595.4	600.1	557.0	513.8
110°	648.5	651.1	653.8	656.5	659.6	663.3	666.9	670.6	674.2	663.3	652.3





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**CANDELA DISTRIBUTION (continued):**

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



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	790.5	790.5	790.5	790.5	790.5	790.5	790.5
2.5°	831.9	832.2	835.5	838.0	836.8	838.3	838.9
5°	908.8	922.6	929.9	935.3	935.7	936.0	939.1
7.5°	1018.0	1032.8	1043.6	1060.0	1064.9	1070.5	1068.9
10°	1097.7	1119.5	1138.3	1148.2	1158.9	1174.6	1162.0
12.5°	1172.1	1210.8	1239.4	1254.8	1265.0	1268.1	1261.9
15°	1294.9	1345.5	1372.7	1371.9	1406.4	1421.3	1397.9
17.5°	1407.5	1454.2	1491.5	1510.7	1539.4	1545.8	1542.9
20°	1476.4	1527.4	1556.5	1589.4	1604.4	1617.8	1620.1
22.5°	1535.9	1581.6	1612.9	1640.3	1652.8	1659.1	1663.0
25°	1597.1	1633.1	1651.9	1661.4	1664.9	1664.1	1659.1
27.5°	1592.9	1595.6	1575.0	1554.7	1536.5	1516.0	1509.0
30°	1551.5	1519.3	1461.9	1429.3	1381.5	1343.5	1358.9
32.5°	1442.7	1378.7	1314.2	1243.0	1184.1	1167.4	1150.5
35°	1231.3	1118.7	1052.9	976.3	945.6	915.0	893.9
37.5°	996.2	909.1	830.9	780.8	750.1	730.8	720.3
40°	861.4	782.8	718.5	677.9	654.5	632.7	629.6
42.5°	753.8	680.8	632.4	600.1	577.6	568.4	561.6
45°	617.4	566.4	533.9	510.9	496.0	490.2	482.6
47.5°	522.6	486.6	462.1	446.5	435.2	430.9	430.3
50°	469.6	439.7	421.7	409.4	400.6	399.1	393.0
52.5°	429.7	403.8	389.8	379.1	372.7	368.4	366.6
55°	373.0	355.8	343.2	337.0	332.1	327.8	327.8
57.5°	326.4	312.0	303.6	298.4	296.9	293.9	292.0
60°	297.6	285.3	278.8	274.2	271.2	271.5	268.1
62.5°	269.4	261.4	255.2	250.6	247.0	247.0	247.3
65°	229.4	223.3	218.7	217.2	214.9	212.2	212.9
67.5°	194.4	188.7	185.1	182.5	181.7	180.2	182.5
70°	169.3	165.1	162.4	160.1	159.3	159.7	161.6
72.5°	146.3	143.3	141.6	140.5	138.8	138.9	140.2
75°	114.9	112.6	111.1	109.9	109.5	109.5	109.5
77.5°	84.4	83.9	83.2	81.5	81.6	82.0	82.1
80°	66.6	65.5	65.1	64.3	63.2	62.4	64.3
82.5°	49.8	48.6	48.3	48.1	46.3	46.2	47.8
85°	26.8	25.7	26.0	25.7	25.7	25.3	25.3
87.5°	17.5	17.4	17.3	17.8	17.6	17.4	18.2
90°	39.9	41.2	42.2	42.9	43.5	44.2	44.8
92.5°	44.7	46.8	48.0	48.4	48.8	49.2	49.6
95°	53.3	55.6	56.8	56.8	56.8	56.8	56.8
97.5°	56.1	58.8	60.3	60.6	60.9	61.3	61.6
100°	57.3	60.0	61.5	61.8	62.1	62.5	62.8
102.5°	73.7	65.4	61.6	62.2	62.8	63.4	64.0
105°	151.0	92.2	63.1	63.8	64.5	65.1	65.8
107.5°	470.7	427.6	383.9	339.6	295.2	250.9	206.6
110°	641.3	630.4	601.1	553.6	506.1	458.6	411.1



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**CANDELA DISTRIBUTION (continued):**

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

(END OF REPORT)