

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: P332229-930

Luminaire Tested: **S123DIW-S1165D1320U930-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332229-930  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DIW-S1165D1320U930-4F0-1E-UDD-A1  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1320 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7725.2 lumens  
Efficiency: N/A  
Efficacy: 101.4 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

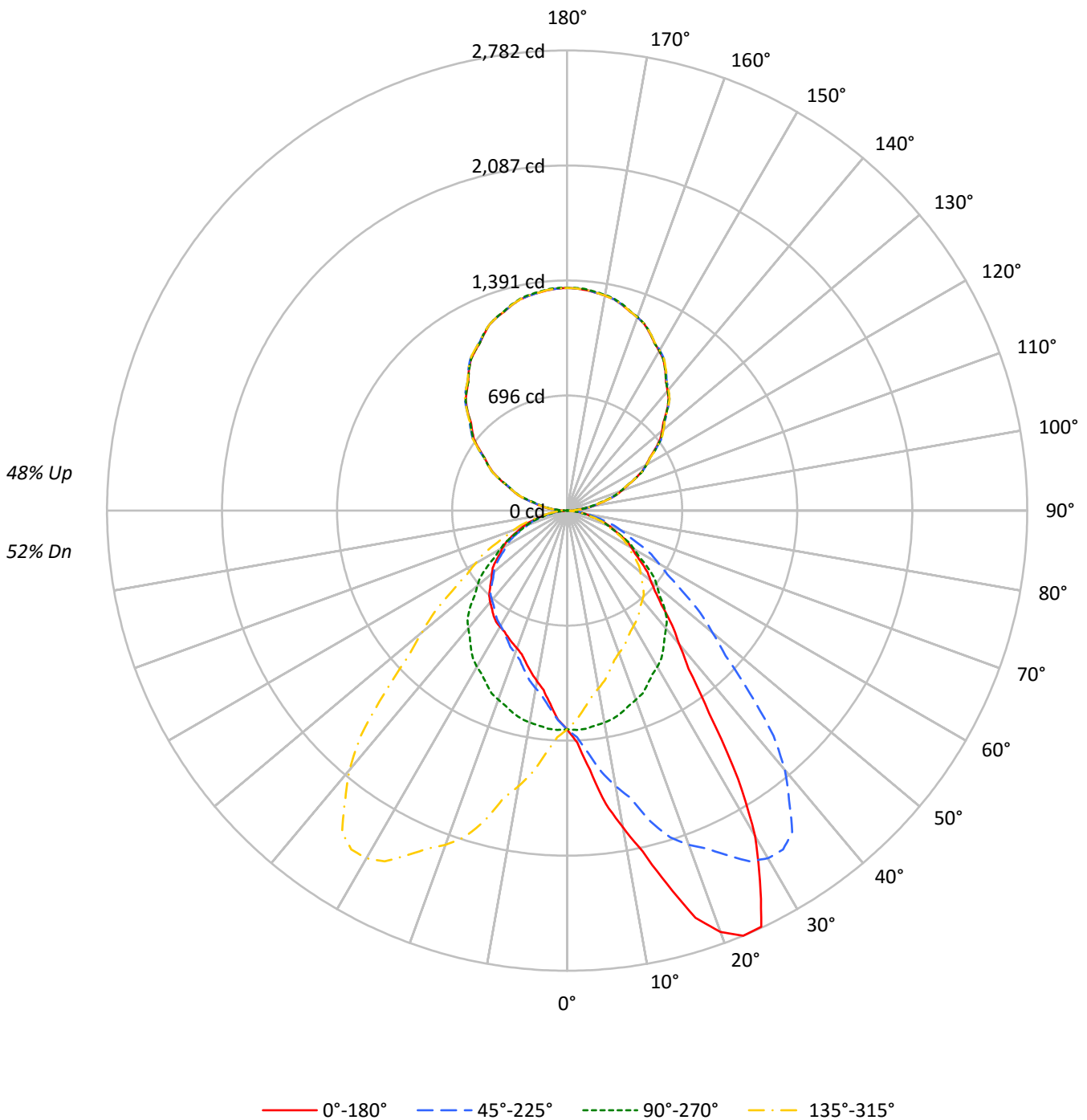
Input Watts (W): 76.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52
1	98	94	90	87	91	87	84	81	74	72	70	62	61	59	51	50	49	44
2	90	83	77	72	83	77	71	67	65	62	58	55	52	50	46	44	42	37
3	82	73	66	60	76	68	61	56	58	53	49	49	45	42	41	38	36	32
4	75	65	57	51	69	60	53	48	52	46	42	44	40	37	36	34	31	28
5	69	58	50	44	64	54	47	41	46	41	36	39	35	32	33	30	27	24
6	64	52	44	38	59	48	41	36	42	36	32	36	31	28	30	27	24	21
7	59	47	39	33	54	44	37	32	38	32	28	32	28	25	27	24	21	19
8	55	42	35	29	51	40	33	28	35	29	25	30	25	22	25	22	19	17
9	51	39	31	26	47	36	30	25	32	26	22	27	23	20	23	20	17	15
10	48	36	28	24	44	33	27	22	29	24	20	25	21	18	21	18	16	14

**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	1.7
10°-20°	417.7	5.4
20°-30°	701.1	9.1
30°-40°	793.9	10.3
40°-50°	711.9	9.2
50°-60°	574.5	7.4
60°-70°	400.3	5.2
70°-80°	210.4	2.7
80°-90°	55.4	0.7
90°-100°	87.7	1.1
100°-110°	262.5	3.4
110°-120°	446.4	5.8
120°-130°	587.2	7.6
130°-140°	660.0	8.5
140°-150°	648.8	8.4
150°-160°	546.2	7.1
160°-170°	363.6	4.7
170°-180°	127.3	1.6
0°-30°	1249.1	16.2
0°-40°	2043.0	26.4
0°-60°	3329.4	43.1
0°-90°	3995.6	51.7
90°-120°	796.6	10.3
90°-150°	2692.5	34.9
90°-180°	3730.0	48.3
0°-180°	7725.2	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°	32	1	32	1	32	18
95°	82	62	82	62	82	85
105°	252	238	252	238	252	267
115°	450	449	450	449	450	446
125°	650	658	650	658	650	581
135°	852	853	852	853	852	655
145°	1035	1035	1035	1035	1035	646
155°	1183	1185	1183	1185	1183	545
165°	1287	1291	1287	1291	1287	363
175°	1338	1343	1338	1343	1338	127
180°	1346	1346	1346	1346	1346	



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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°	21.7	20.6	21.0	21.4	20.9	21.2	21.5	21.9	22.2	22.5	22.4
90°	31.7	31.2	30.8	30.3	29.8	29.1	28.2	27.2	26.3	25.4	22.3
92.5°	42.7	43.0	43.3	43.5	43.9	43.6	42.9	42.1	41.3	40.6	38.9
95°	82.5	82.5	82.5	82.5	82.5	82.0	81.0	80.1	79.2	78.3	76.4
97.5°	126.9	127.0	127.1	127.2	127.3	126.8	125.7	124.6	123.5	122.5	121.1
100°	160.7	160.3	159.8	159.3	158.8	158.2	157.5	156.9	156.1	155.5	154.3
102.5°	195.4	195.5	195.6	195.7	195.8	195.5	194.8	194.0	193.4	192.7	191.1
105°	251.7	251.2	250.7	250.3	249.8	249.6	249.6	249.6	249.6	249.6	247.4
107.5°	310.2	310.5	310.8	311.1	311.4	311.1	310.4	309.7	308.9	308.1	307.3
110°	350.0	350.5	351.0	351.4	351.9	351.6	350.7	349.8	348.9	347.9	347.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	392.3	392.4	392.5	392.6	392.6	392.2	391.0	389.9	388.8	387.7	387.6
115°	450.5	450.7	450.9	451.2	451.4	451.4	451.2	450.9	450.7	450.5	450.9
117.5°	509.5	510.1	510.8	511.4	512.1	512.4	512.5	512.6	512.6	512.7	513.2
120°	550.9	551.4	551.9	552.4	552.8	553.2	553.4	553.6	553.8	554.1	555.3
122.5°	590.7	591.3	592.0	592.6	593.3	593.9	594.5	595.2	595.7	596.4	597.0
125°	650.3	651.3	652.2	653.1	654.1	655.0	656.0	656.9	657.9	658.8	659.3
127.5°	709.7	710.9	711.9	713.0	714.0	715.3	716.6	717.9	719.2	720.6	721.1
130°	748.7	750.3	752.0	753.6	755.2	756.5	757.5	758.4	759.4	760.3	761.0
132.5°	789.3	790.5	791.8	793.0	794.3	795.6	796.6	797.8	798.9	800.1	800.5
135°	852.3	852.7	853.2	853.7	854.2	854.8	855.8	856.7	857.7	858.6	858.8
137.5°	907.9	908.8	909.7	910.6	911.5	912.4	913.4	914.4	915.3	916.4	915.7
140°	944.3	945.9	947.5	949.3	950.9	951.8	952.0	952.3	952.5	952.8	952.5
142.5°	981.5	982.8	984.1	985.3	986.6	987.3	987.6	987.8	988.1	988.3	987.8
145°	1035.2	1036.2	1037.1	1038.0	1039.0	1039.6	1039.8	1040.0	1040.2	1040.5	1039.8
147.5°	1083.0	1084.4	1085.8	1087.3	1088.7	1089.3	1089.3	1089.3	1089.3	1089.3	1088.7
150°	1113.5	1114.8	1116.3	1117.7	1119.1	1119.8	1119.8	1119.8	1119.8	1119.8	1119.3
152.5°	1143.0	1144.3	1145.5	1146.7	1147.9	1148.3	1148.0	1147.6	1147.3	1146.9	1146.6
155°	1183.2	1184.9	1186.6	1188.2	1189.8	1190.2	1189.3	1188.3	1187.4	1186.4	1186.2
157.5°	1219.9	1221.2	1222.5	1223.8	1225.1	1225.3	1224.3	1223.3	1222.3	1221.3	1221.2
160°	1243.5	1244.5	1245.5	1246.3	1247.3	1247.2	1246.0	1244.8	1243.7	1242.4	1242.4
162.5°	1261.3	1262.8	1264.3	1265.8	1267.3	1267.5	1266.3	1265.1	1264.0	1262.7	1262.6
165°	1286.9	1288.5	1290.2	1291.8	1293.5	1293.6	1292.2	1290.8	1289.3	1287.9	1287.9
167.5°	1308.6	1310.1	1311.6	1313.0	1314.5	1314.5	1313.0	1311.6	1310.1	1308.6	1308.5
170°	1319.6	1321.3	1323.0	1324.6	1326.2	1326.2	1324.6	1323.0	1321.3	1319.6	1319.6
172.5°	1328.1	1329.8	1331.4	1333.1	1334.7	1334.8	1333.3	1331.9	1330.4	1328.9	1328.9
175°	1337.7	1339.3	1340.9	1342.6	1344.2	1344.3	1343.0	1341.5	1340.1	1338.7	1338.7
177.5°	1342.7	1344.0	1345.3	1346.6	1348.0	1348.1	1347.0	1345.8	1344.7	1343.5	1343.5
180°	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1



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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°	22.8	22.7	20.5	18.0	16.5	14.5	14.0	12.5	12.0	12.4	12.4
90°	19.2	16.2	13.1	10.4	8.1	5.8	3.4	1.1	3.4	5.8	8.1
92.5°	37.1	35.4	33.7	32.0	30.4	28.8	27.1	25.6	27.1	28.8	30.4
95°	74.5	72.6	70.8	69.0	67.3	65.7	64.0	62.4	64.0	65.7	67.3
97.5°	119.7	118.4	117.0	115.7	114.5	113.2	112.0	110.8	112.0	113.2	114.5
100°	153.1	151.9	150.7	149.4	148.1	146.6	145.2	143.8	145.2	146.6	148.1
102.5°	189.6	188.0	186.5	185.2	184.4	183.6	182.7	181.9	182.7	183.6	184.4
105°	245.3	243.2	241.1	239.8	239.3	238.9	238.4	237.9	238.4	238.9	239.3
107.5°	306.5	305.6	304.8	304.2	303.9	303.6	303.4	303.0	303.4	303.6	303.9
110°	347.0	346.5	346.0	345.5	345.0	344.6	344.1	343.6	344.1	344.6	345.0





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	387.4	387.3	387.3	387.1	386.8	386.5	386.2	386.0	386.2	386.5	386.8
115°	451.4	451.8	452.3	452.2	451.5	450.8	450.1	449.4	450.1	450.8	451.5
117.5°	513.9	514.5	515.1	515.2	514.7	514.2	513.7	513.3	513.7	514.2	514.7
120°	556.4	557.6	558.8	558.6	557.3	555.9	554.4	553.0	554.4	555.9	557.3
122.5°	597.6	598.2	598.8	598.6	597.6	596.6	595.5	594.5	595.5	596.6	597.6
125°	659.7	660.1	660.6	660.6	659.8	659.1	658.4	657.7	658.4	659.1	659.8
127.5°	721.5	722.1	722.6	722.1	720.6	719.1	717.6	716.1	717.6	719.1	720.6
130°	761.7	762.4	763.1	762.5	760.7	758.8	756.8	755.0	756.8	758.8	760.7
132.5°	801.1	801.6	802.1	801.4	799.6	797.7	795.8	793.9	795.8	797.7	799.6
135°	859.1	859.3	859.6	859.0	857.5	856.1	854.8	853.4	854.8	856.1	857.5
137.5°	915.2	914.5	914.0	913.1	911.8	910.7	909.5	908.3	909.5	910.7	911.8
140°	952.3	952.0	951.8	951.1	949.9	948.8	947.5	946.4	947.5	948.8	949.9
142.5°	987.4	987.0	986.6	985.8	984.6	983.4	982.3	981.0	982.3	983.4	984.6
145°	1039.1	1038.4	1037.7	1037.1	1036.7	1036.2	1035.7	1035.2	1035.7	1036.2	1036.7
147.5°	1088.0	1087.4	1086.7	1086.0	1085.2	1084.3	1083.5	1082.6	1083.5	1084.3	1085.2
150°	1118.8	1118.4	1117.9	1117.4	1117.0	1116.6	1116.1	1115.6	1116.1	1116.6	1117.0
152.5°	1146.3	1146.1	1145.7	1145.3	1144.6	1143.9	1143.3	1142.6	1143.3	1143.9	1144.6
155°	1185.9	1185.7	1185.5	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4	1185.4
157.5°	1220.9	1220.7	1220.6	1220.6	1220.9	1221.2	1221.5	1221.7	1221.5	1221.2	1220.9
160°	1242.4	1242.4	1242.4	1242.7	1243.2	1243.7	1244.1	1244.6	1244.1	1243.7	1243.2
162.5°	1262.4	1262.2	1262.0	1262.2	1262.9	1263.6	1264.2	1264.9	1264.2	1263.6	1262.9
165°	1287.9	1287.9	1287.9	1288.3	1289.0	1289.7	1290.4	1291.1	1290.4	1289.7	1289.0
167.5°	1308.3	1308.1	1307.9	1308.3	1309.2	1310.2	1311.1	1312.1	1311.1	1310.2	1309.2
170°	1319.6	1319.6	1319.6	1320.1	1321.1	1322.0	1323.0	1323.9	1323.0	1322.0	1321.1
172.5°	1328.9	1328.9	1328.9	1329.4	1330.4	1331.3	1332.3	1333.2	1332.3	1331.3	1330.4
175°	1338.7	1338.7	1338.7	1339.1	1340.1	1341.1	1342.0	1343.0	1342.0	1341.1	1340.1
177.5°	1343.5	1343.5	1343.5	1343.9	1344.7	1345.4	1346.2	1347.0	1346.2	1345.4	1344.7
180°	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1



TEST NUMBER: P332229-930

CATALOG NUMBER: S123DIW-S1165D1320U930-4F0-1E-UDD-A1

**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°	12.3	13.4	13.5	14.6	14.8	15.8	16.1	15.2	15.4	17.1	15.2
90°	10.4	13.1	16.2	19.2	22.3	25.4	26.3	27.2	28.2	29.1	29.8
92.5°	32.0	33.7	35.4	37.1	38.9	40.6	41.3	42.1	42.9	43.6	43.9
95°	69.0	70.8	72.6	74.5	76.4	78.3	79.2	80.1	81.0	82.0	82.5
97.5°	115.7	117.0	118.4	119.7	121.1	122.5	123.5	124.6	125.7	126.8	127.3
100°	149.4	150.7	151.9	153.1	154.3	155.5	156.1	156.9	157.5	158.2	158.8
102.5°	185.2	186.5	188.0	189.6	191.1	192.7	193.4	194.0	194.8	195.5	195.8
105°	239.8	241.1	243.2	245.3	247.4	249.6	249.6	249.6	249.6	249.6	249.8
107.5°	304.2	304.8	305.6	306.5	307.3	308.1	308.9	309.7	310.4	311.1	311.4
110°	345.5	346.0	346.5	347.0	347.4	347.9	348.9	349.8	350.7	351.6	351.9



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	387.1	387.3	387.3	387.4	387.6	387.7	388.8	389.9	391.0	392.2	392.6
115°	452.2	452.3	451.8	451.4	450.9	450.5	450.7	450.9	451.2	451.4	451.4
117.5°	515.2	515.1	514.5	513.9	513.2	512.7	512.6	512.6	512.5	512.4	512.1
120°	558.6	558.8	557.6	556.4	555.3	554.1	553.8	553.6	553.4	553.2	552.8
122.5°	598.6	598.8	598.2	597.6	597.0	596.4	595.7	595.2	594.5	593.9	593.3
125°	660.6	660.6	660.1	659.7	659.3	658.8	657.9	656.9	656.0	655.0	654.1
127.5°	722.1	722.6	722.1	721.5	721.1	720.6	719.2	717.9	716.6	715.3	714.0
130°	762.5	763.1	762.4	761.7	761.0	760.3	759.4	758.4	757.5	756.5	755.2
132.5°	801.4	802.1	801.6	801.1	800.5	800.1	798.9	797.8	796.6	795.6	794.3
135°	859.0	859.6	859.3	859.1	858.8	858.6	857.7	856.7	855.8	854.8	854.2
137.5°	913.1	914.0	914.5	915.2	915.7	916.4	915.3	914.4	913.4	912.4	911.5
140°	951.1	951.8	952.0	952.3	952.5	952.8	952.5	952.3	952.0	951.8	950.9
142.5°	985.8	986.6	987.0	987.4	987.8	988.3	988.1	987.8	987.6	987.3	986.6
145°	1037.1	1037.7	1038.4	1039.1	1039.8	1040.5	1040.2	1040.0	1039.8	1039.6	1039.0
147.5°	1086.0	1086.7	1087.4	1088.0	1088.7	1089.3	1089.3	1089.3	1089.3	1089.3	1088.7
150°	1117.4	1117.9	1118.4	1118.8	1119.3	1119.8	1119.8	1119.8	1119.8	1119.8	1119.1
152.5°	1145.3	1145.7	1146.1	1146.3	1146.6	1146.9	1147.3	1147.6	1148.0	1148.3	1147.9
155°	1185.4	1185.5	1185.7	1185.9	1186.2	1186.4	1187.4	1188.3	1189.3	1190.2	1189.8
157.5°	1220.6	1220.6	1220.7	1220.9	1221.2	1221.3	1222.3	1223.3	1224.3	1225.3	1225.1
160°	1242.7	1242.4	1242.4	1242.4	1242.4	1242.4	1243.7	1244.8	1246.0	1247.2	1247.3
162.5°	1262.2	1262.0	1262.2	1262.4	1262.6	1262.7	1264.0	1265.1	1266.3	1267.5	1267.3
165°	1288.3	1287.9	1287.9	1287.9	1287.9	1287.9	1289.3	1290.8	1292.2	1293.6	1293.5
167.5°	1308.3	1307.9	1308.1	1308.3	1308.5	1308.6	1310.1	1311.6	1313.0	1314.5	1314.5
170°	1320.1	1319.6	1319.6	1319.6	1319.6	1319.6	1321.3	1323.0	1324.6	1326.2	1326.2
172.5°	1329.4	1328.9	1328.9	1328.9	1328.9	1328.9	1330.4	1331.9	1333.3	1334.8	1334.7
175°	1339.1	1338.7	1338.7	1338.7	1338.7	1338.7	1340.1	1341.5	1343.0	1344.3	1344.2
177.5°	1343.9	1343.5	1343.5	1343.5	1343.5	1343.5	1344.7	1345.8	1347.0	1348.1	1348.0
180°	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1



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**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°	15.3	15.4	15.0	14.5	15.0	15.4	15.3	15.2	17.1	15.4	15.2
90°	30.3	30.8	31.2	31.7	31.2	30.8	30.3	29.8	29.1	28.2	27.2
92.5°	43.5	43.3	43.0	42.7	43.0	43.3	43.5	43.9	43.6	42.9	42.1
95°	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.0	81.0	80.1
97.5°	127.2	127.1	127.0	126.9	127.0	127.1	127.2	127.3	126.8	125.7	124.6
100°	159.3	159.8	160.3	160.7	160.3	159.8	159.3	158.8	158.2	157.5	156.9
102.5°	195.7	195.6	195.5	195.4	195.5	195.6	195.7	195.8	195.5	194.8	194.0
105°	250.3	250.7	251.2	251.7	251.2	250.7	250.3	249.8	249.6	249.6	249.6
107.5°	311.1	310.8	310.5	310.2	310.5	310.8	311.1	311.4	311.1	310.4	309.7
110°	351.4	351.0	350.5	350.0	350.5	351.0	351.4	351.9	351.6	350.7	349.8



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	392.6	392.5	392.4	392.3	392.4	392.5	392.6	392.6	392.2	391.0	389.9
115°	451.2	450.9	450.7	450.5	450.7	450.9	451.2	451.4	451.4	451.2	450.9
117.5°	511.4	510.8	510.1	509.5	510.1	510.8	511.4	512.1	512.4	512.5	512.6
120°	552.4	551.9	551.4	550.9	551.4	551.9	552.4	552.8	553.2	553.4	553.6
122.5°	592.6	592.0	591.3	590.7	591.3	592.0	592.6	593.3	593.9	594.5	595.2
125°	653.1	652.2	651.3	650.3	651.3	652.2	653.1	654.1	655.0	656.0	656.9
127.5°	713.0	711.9	710.9	709.7	710.9	711.9	713.0	714.0	715.3	716.6	717.9
130°	753.6	752.0	750.3	748.7	750.3	752.0	753.6	755.2	756.5	757.5	758.4
132.5°	793.0	791.8	790.5	789.3	790.5	791.8	793.0	794.3	795.6	796.6	797.8
135°	853.7	853.2	852.7	852.3	852.7	853.2	853.7	854.2	854.8	855.8	856.7
137.5°	910.6	909.7	908.8	907.9	908.8	909.7	910.6	911.5	912.4	913.4	914.4
140°	949.3	947.5	945.9	944.3	945.9	947.5	949.3	950.9	951.8	952.0	952.3
142.5°	985.3	984.1	982.8	981.5	982.8	984.1	985.3	986.6	987.3	987.6	987.8
145°	1038.0	1037.1	1036.2	1035.2	1036.2	1037.1	1038.0	1039.0	1039.6	1039.8	1040.0
147.5°	1087.3	1085.8	1084.4	1083.0	1084.4	1085.8	1087.3	1088.7	1089.3	1089.3	1089.3
150°	1117.7	1116.3	1114.8	1113.5	1114.8	1116.3	1117.7	1119.1	1119.8	1119.8	1119.8
152.5°	1146.7	1145.5	1144.3	1143.0	1144.3	1145.5	1146.7	1147.9	1148.3	1148.0	1147.6
155°	1188.2	1186.6	1184.9	1183.2	1184.9	1186.6	1188.2	1189.8	1190.2	1189.3	1188.3
157.5°	1223.8	1222.5	1221.2	1219.9	1221.2	1222.5	1223.8	1225.1	1225.3	1224.3	1223.3
160°	1246.3	1245.5	1244.5	1243.5	1244.5	1245.5	1246.3	1247.3	1247.2	1246.0	1244.8
162.5°	1265.8	1264.3	1262.8	1261.3	1262.8	1264.3	1265.8	1267.3	1267.5	1266.3	1265.1
165°	1291.8	1290.2	1288.5	1286.9	1288.5	1290.2	1291.8	1293.5	1293.6	1292.2	1290.8
167.5°	1313.0	1311.6	1310.1	1308.6	1310.1	1311.6	1313.0	1314.5	1314.5	1313.0	1311.6
170°	1324.6	1323.0	1321.3	1319.6	1321.3	1323.0	1324.6	1326.2	1326.2	1324.6	1323.0
172.5°	1333.1	1331.4	1329.8	1328.1	1329.8	1331.4	1333.1	1334.7	1334.8	1333.3	1331.9
175°	1342.6	1340.9	1339.3	1337.7	1339.3	1340.9	1342.6	1344.2	1344.3	1343.0	1341.5
177.5°	1346.6	1345.3	1344.0	1342.7	1344.0	1345.3	1346.6	1348.0	1348.1	1347.0	1345.8
180°	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1



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**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°	16.1	15.8	14.8	14.6	13.5	13.4	12.3	12.4	12.4	12.0	12.5
90°	26.3	25.4	22.3	19.2	16.2	13.1	10.4	8.1	5.8	3.4	1.1
92.5°	41.3	40.6	38.9	37.1	35.4	33.7	32.0	30.4	28.8	27.1	25.6
95°	79.2	78.3	76.4	74.5	72.6	70.8	69.0	67.3	65.7	64.0	62.4
97.5°	123.5	122.5	121.1	119.7	118.4	117.0	115.7	114.5	113.2	112.0	110.8
100°	156.1	155.5	154.3	153.1	151.9	150.7	149.4	148.1	146.6	145.2	143.8
102.5°	193.4	192.7	191.1	189.6	188.0	186.5	185.2	184.4	183.6	182.7	181.9
105°	249.6	249.6	247.4	245.3	243.2	241.1	239.8	239.3	238.9	238.4	237.9
107.5°	308.9	308.1	307.3	306.5	305.6	304.8	304.2	303.9	303.6	303.4	303.0
110°	348.9	347.9	347.4	347.0	346.5	346.0	345.5	345.0	344.6	344.1	343.6



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	388.8	387.7	387.6	387.4	387.3	387.3	387.1	386.8	386.5	386.2	386.0
115°	450.7	450.5	450.9	451.4	451.8	452.3	452.2	451.5	450.8	450.1	449.4
117.5°	512.6	512.7	513.2	513.9	514.5	515.1	515.2	514.7	514.2	513.7	513.3
120°	553.8	554.1	555.3	556.4	557.6	558.8	558.6	557.3	555.9	554.4	553.0
122.5°	595.7	596.4	597.0	597.6	598.2	598.8	598.6	597.6	596.6	595.5	594.5
125°	657.9	658.8	659.3	659.7	660.1	660.6	660.6	659.8	659.1	658.4	657.7
127.5°	719.2	720.6	721.1	721.5	722.1	722.6	722.1	720.6	719.1	717.6	716.1
130°	759.4	760.3	761.0	761.7	762.4	763.1	762.5	760.7	758.8	756.8	755.0
132.5°	798.9	800.1	800.5	801.1	801.6	802.1	801.4	799.6	797.7	795.8	793.9
135°	857.7	858.6	858.8	859.1	859.3	859.6	859.0	857.5	856.1	854.8	853.4
137.5°	915.3	916.4	915.7	915.2	914.5	914.0	913.1	911.8	910.7	909.5	908.3
140°	952.5	952.8	952.5	952.3	952.0	951.8	951.1	949.9	948.8	947.5	946.4
142.5°	988.1	988.3	987.8	987.4	987.0	986.6	985.8	984.6	983.4	982.3	981.0
145°	1040.2	1040.5	1039.8	1039.1	1038.4	1037.7	1037.1	1036.7	1036.2	1035.7	1035.2
147.5°	1089.3	1089.3	1088.7	1088.0	1087.4	1086.7	1086.0	1085.2	1084.3	1083.5	1082.6
150°	1119.8	1119.8	1119.3	1118.8	1118.4	1117.9	1117.4	1117.0	1116.6	1116.1	1115.6
152.5°	1147.3	1146.9	1146.6	1146.3	1146.1	1145.7	1145.3	1144.6	1143.9	1143.3	1142.6
155°	1187.4	1186.4	1186.2	1185.9	1185.7	1185.5	1185.4	1185.4	1185.4	1185.4	1185.4
157.5°	1222.3	1221.3	1221.2	1220.9	1220.7	1220.6	1220.6	1220.9	1221.2	1221.5	1221.7
160°	1243.7	1242.4	1242.4	1242.4	1242.4	1242.4	1242.7	1243.2	1243.7	1244.1	1244.6
162.5°	1264.0	1262.7	1262.6	1262.4	1262.2	1262.0	1262.2	1262.9	1263.6	1264.2	1264.9
165°	1289.3	1287.9	1287.9	1287.9	1287.9	1287.9	1288.3	1289.0	1289.7	1290.4	1291.1
167.5°	1310.1	1308.6	1308.5	1308.3	1308.1	1307.9	1308.3	1309.2	1310.2	1311.1	1312.1
170°	1321.3	1319.6	1319.6	1319.6	1319.6	1319.6	1320.1	1321.1	1322.0	1323.0	1323.9
172.5°	1330.4	1328.9	1328.9	1328.9	1328.9	1328.9	1329.4	1330.4	1331.3	1332.3	1333.2
175°	1340.1	1338.7	1338.7	1338.7	1338.7	1338.7	1339.1	1340.1	1341.1	1342.0	1343.0
177.5°	1344.7	1343.5	1343.5	1343.5	1343.5	1343.5	1343.9	1344.7	1345.4	1346.2	1347.0
180°	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1



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**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°	14.0	14.5	16.5	18.0	20.5	22.7	22.8	22.4	22.5	22.2	21.9
90°	3.4	5.8	8.1	10.4	13.1	16.2	19.2	22.3	25.4	26.3	27.2
92.5°	27.1	28.8	30.4	32.0	33.7	35.4	37.1	38.9	40.6	41.3	42.1
95°	64.0	65.7	67.3	69.0	70.8	72.6	74.5	76.4	78.3	79.2	80.1
97.5°	112.0	113.2	114.5	115.7	117.0	118.4	119.7	121.1	122.5	123.5	124.6
100°	145.2	146.6	148.1	149.4	150.7	151.9	153.1	154.3	155.5	156.1	156.9
102.5°	182.7	183.6	184.4	185.2	186.5	188.0	189.6	191.1	192.7	193.4	194.0
105°	238.4	238.9	239.3	239.8	241.1	243.2	245.3	247.4	249.6	249.6	249.6
107.5°	303.4	303.6	303.9	304.2	304.8	305.6	306.5	307.3	308.1	308.9	309.7
110°	344.1	344.6	345.0	345.5	346.0	346.5	347.0	347.4	347.9	348.9	349.8





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	386.2	386.5	386.8	387.1	387.3	387.3	387.4	387.6	387.7	388.8	389.9
115°	450.1	450.8	451.5	452.2	452.3	451.8	451.4	450.9	450.5	450.7	450.9
117.5°	513.7	514.2	514.7	515.2	515.1	514.5	513.9	513.2	512.7	512.6	512.6
120°	554.4	555.9	557.3	558.6	558.8	557.6	556.4	555.3	554.1	553.8	553.6
122.5°	595.5	596.6	597.6	598.6	598.8	598.2	597.6	597.0	596.4	595.7	595.2
125°	658.4	659.1	659.8	660.6	660.6	660.1	659.7	659.3	658.8	657.9	656.9
127.5°	717.6	719.1	720.6	722.1	722.6	722.1	721.5	721.1	720.6	719.2	717.9
130°	756.8	758.8	760.7	762.5	763.1	762.4	761.7	761.0	760.3	759.4	758.4
132.5°	795.8	797.7	799.6	801.4	802.1	801.6	801.1	800.5	800.1	798.9	797.8
135°	854.8	856.1	857.5	859.0	859.6	859.3	859.1	858.8	858.6	857.7	856.7
137.5°	909.5	910.7	911.8	913.1	914.0	914.5	915.2	915.7	916.4	915.3	914.4
140°	947.5	948.8	949.9	951.1	951.8	952.0	952.3	952.5	952.8	952.5	952.3
142.5°	982.3	983.4	984.6	985.8	986.6	987.0	987.4	987.8	988.3	988.1	987.8
145°	1035.7	1036.2	1036.7	1037.1	1037.7	1038.4	1039.1	1039.8	1040.5	1040.2	1040.0
147.5°	1083.5	1084.3	1085.2	1086.0	1086.7	1087.4	1088.0	1088.7	1089.3	1089.3	1089.3
150°	1116.1	1116.6	1117.0	1117.4	1117.9	1118.4	1118.8	1119.3	1119.8	1119.8	1119.8
152.5°	1143.3	1143.9	1144.6	1145.3	1145.7	1146.1	1146.3	1146.6	1146.9	1147.3	1147.6
155°	1185.4	1185.4	1185.4	1185.4	1185.5	1185.7	1185.9	1186.2	1186.4	1187.4	1188.3
157.5°	1221.5	1221.2	1220.9	1220.6	1220.6	1220.7	1220.9	1221.2	1221.3	1222.3	1223.3
160°	1244.1	1243.7	1243.2	1242.7	1242.4	1242.4	1242.4	1242.4	1242.4	1243.7	1244.8
162.5°	1264.2	1263.6	1262.9	1262.2	1262.0	1262.2	1262.4	1262.6	1262.7	1264.0	1265.1
165°	1290.4	1289.7	1289.0	1288.3	1287.9	1287.9	1287.9	1287.9	1287.9	1289.3	1290.8
167.5°	1311.1	1310.2	1309.2	1308.3	1307.9	1308.1	1308.3	1308.5	1308.6	1310.1	1311.6
170°	1323.0	1322.0	1321.1	1320.1	1319.6	1319.6	1319.6	1319.6	1319.6	1321.3	1323.0
172.5°	1332.3	1331.3	1330.4	1329.4	1328.9	1328.9	1328.9	1328.9	1328.9	1330.4	1331.9
175°	1342.0	1341.1	1340.1	1339.1	1338.7	1338.7	1338.7	1338.7	1338.7	1340.1	1341.5
177.5°	1346.2	1345.4	1344.7	1343.9	1343.5	1343.5	1343.5	1343.5	1343.5	1344.7	1345.8
180°	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1



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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°	21.5	21.2	20.9	21.4	21.0	20.6	21.7
90°	28.2	29.1	29.8	30.3	30.8	31.2	31.7
92.5°	42.9	43.6	43.9	43.5	43.3	43.0	42.7
95°	81.0	82.0	82.5	82.5	82.5	82.5	82.5
97.5°	125.7	126.8	127.3	127.2	127.1	127.0	126.9
100°	157.5	158.2	158.8	159.3	159.8	160.3	160.7
102.5°	194.8	195.5	195.8	195.7	195.6	195.5	195.4
105°	249.6	249.6	249.8	250.3	250.7	251.2	251.7
107.5°	310.4	311.1	311.4	311.1	310.8	310.5	310.2
110°	350.7	351.6	351.9	351.4	351.0	350.5	350.0



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	391.0	392.2	392.6	392.6	392.5	392.4	392.3
115°	451.2	451.4	451.4	451.2	450.9	450.7	450.5
117.5°	512.5	512.4	512.1	511.4	510.8	510.1	509.5
120°	553.4	553.2	552.8	552.4	551.9	551.4	550.9
122.5°	594.5	593.9	593.3	592.6	592.0	591.3	590.7
125°	656.0	655.0	654.1	653.1	652.2	651.3	650.3
127.5°	716.6	715.3	714.0	713.0	711.9	710.9	709.7
130°	757.5	756.5	755.2	753.6	752.0	750.3	748.7
132.5°	796.6	795.6	794.3	793.0	791.8	790.5	789.3
135°	855.8	854.8	854.2	853.7	853.2	852.7	852.3
137.5°	913.4	912.4	911.5	910.6	909.7	908.8	907.9
140°	952.0	951.8	950.9	949.3	947.5	945.9	944.3
142.5°	987.6	987.3	986.6	985.3	984.1	982.8	981.5
145°	1039.8	1039.6	1039.0	1038.0	1037.1	1036.2	1035.2
147.5°	1089.3	1089.3	1088.7	1087.3	1085.8	1084.4	1083.0
150°	1119.8	1119.8	1119.1	1117.7	1116.3	1114.8	1113.5
152.5°	1148.0	1148.3	1147.9	1146.7	1145.5	1144.3	1143.0
155°	1189.3	1190.2	1189.8	1188.2	1186.6	1184.9	1183.2
157.5°	1224.3	1225.3	1225.1	1223.8	1222.5	1221.2	1219.9
160°	1246.0	1247.2	1247.3	1246.3	1245.5	1244.5	1243.5
162.5°	1266.3	1267.5	1267.3	1265.8	1264.3	1262.8	1261.3
165°	1292.2	1293.6	1293.5	1291.8	1290.2	1288.5	1286.9
167.5°	1313.0	1314.5	1314.5	1313.0	1311.6	1310.1	1308.6
170°	1324.6	1326.2	1326.2	1324.6	1323.0	1321.3	1319.6
172.5°	1333.3	1334.8	1334.7	1333.1	1331.4	1329.8	1328.1
175°	1343.0	1344.3	1344.2	1342.6	1340.9	1339.3	1337.7
177.5°	1347.0	1348.1	1348.0	1346.6	1345.3	1344.0	1342.7
180°	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1	1346.1

(END OF REPORT)