

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: P332482-930

Luminaire Tested: **S123RDIW-S1165D1320U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332482-930
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: S123RDIW-S1165D1320U930-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1320 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8034.1 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

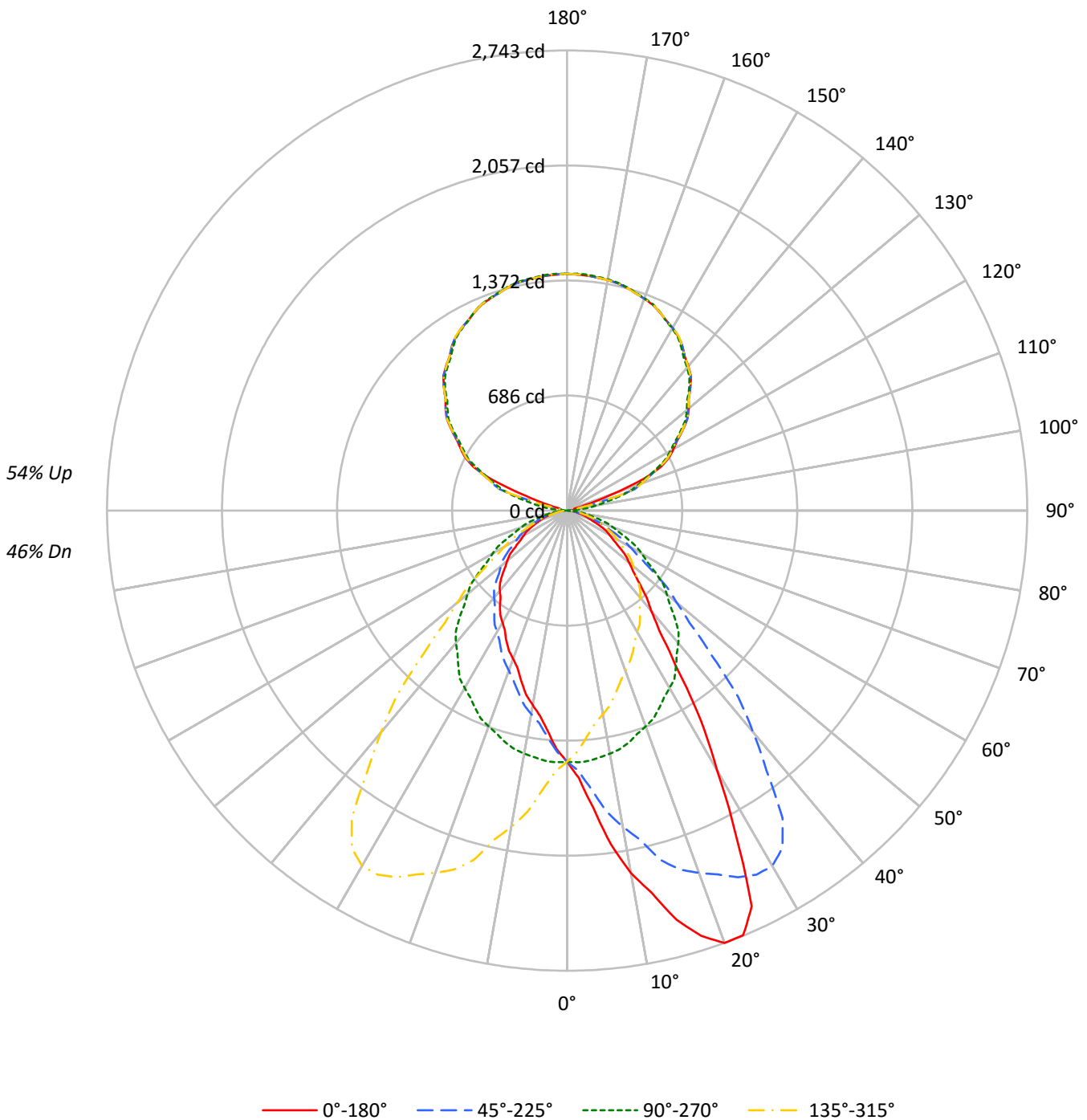
Input Watts (W): 76.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	98	98	98	98	81	81	81	66	66	66	53	53	53	46
1	98	93	90	86	89	86	83	80	72	70	68	59	58	56	48	47	46	40
2	89	82	76	71	82	76	71	67	64	60	57	53	50	48	42	41	39	35
3	82	73	66	60	75	67	61	56	57	52	49	47	44	41	38	36	34	30
4	75	65	57	51	69	60	53	48	51	46	42	42	39	36	34	32	30	26
5	69	58	50	44	63	54	47	42	46	40	36	38	34	31	31	28	26	23
6	64	52	44	39	58	48	41	36	41	36	32	35	31	28	28	26	23	20
7	59	47	39	34	54	44	37	32	38	32	28	32	28	25	26	23	21	18
8	55	43	35	30	50	40	33	29	34	29	25	29	25	22	24	21	19	16
9	51	39	32	27	47	37	30	26	32	26	23	27	23	20	22	19	17	15
10	48	36	29	24	44	34	27	23	29	24	21	25	21	18	21	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	16113	16113	16113	16113
5°	19207	16181	14249	16181
10°	23981	16088	12873	16088
15°	28149	15924	11739	15924
20°	31416	15678	10775	15678
25°	30914	15419	10183	15419
30°	22222	15181	9573	15181
35°	14837	14870	9179	14870
40°	10932	14497	8769	14497
45°	9168	13842	8369	13842
50°	8090	12983	7812	12983
55°	7096	12001	7047	12001
60°	6318	11063	6456	11063
65°	5547	10055	6006	10055
70°	4356	9155	5485	9155
75°	3839	7993	5011	7993
80°	3335	6794	4928	6794
85°	2692	5459	5224	5459



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.2	1.8
10°-20°	459.9	5.7
20°-30°	722.5	9.0
30°-40°	753.8	9.4
40°-50°	645.1	8.0
50°-60°	491.7	6.1
60°-70°	315.1	3.9
70°-80°	151.6	1.9
80°-90°	44.1	0.5
90°-100°	51.3	0.6
100°-110°	244.5	3.0
110°-120°	587.3	7.3
120°-130°	747.9	9.3
130°-140°	799.1	9.9
140°-150°	747.2	9.3
150°-160°	602.7	7.5
160°-170°	389.0	4.8
170°-180°	134.1	1.7
0°-30°	1329.6	16.5
0°-40°	2083.4	25.9
0°-60°	3220.2	40.1
0°-90°	3731.0	46.4
90°-120°	883.1	11.0
90°-150°	3177.3	39.5
90°-180°	4303.0	53.6
0°-180°	8034.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1497	1497	1497	1497	1497	
5°	1778	1498	1319	1498	1778	184
15°	2526	1429	1053	1429	2526	716
25°	2603	1298	857	1298	2603	1119
35°	1129	1132	698	1132	1129	740
45°	602	909	550	909	602	474
55°	378	640	376	640	378	342
65°	218	395	236	395	218	214
75°	92	192	120	192	92	99
85°	22	44	42	44	22	26
90°	32	1	32	1	32	15
95°	40	64	40	64	40	33
105°	46	312	46	312	46	105
115°	616	586	616	586	616	570
125°	843	826	843	826	843	753
135°	1039	1028	1039	1028	1039	801
145°	1198	1187	1198	1187	1198	748
155°	1305	1307	1305	1307	1305	602
165°	1375	1379	1375	1379	1375	388
175°	1406	1411	1406	1411	1406	134
180°	1411	1411	1411	1411	1411	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1594.3	1596.4	1589.7	1588.7	1580.9	1578.9	1578.9	1568.1	1561.5	1552.8	1547.7
5°	1777.6	1787.9	1782.7	1771.2	1751.9	1747.4	1735.3	1716.0	1694.3	1667.4	1654.6
7.5°	2006.5	2020.5	2015.1	1997.2	1977.1	1960.9	1926.5	1894.6	1849.8	1810.6	1777.0
10°	2194.1	2179.4	2167.8	2150.5	2131.9	2101.8	2066.0	2016.6	1959.6	1914.7	1864.8
12.5°	2334.5	2332.2	2317.5	2299.7	2273.5	2244.8	2200.7	2140.6	2074.4	2009.5	1952.4
15°	2526.0	2529.9	2520.3	2501.7	2464.5	2413.9	2347.2	2322.3	2227.4	2157.0	2086.4
17.5°	2658.5	2657.8	2656.5	2630.7	2592.8	2556.8	2495.0	2429.3	2343.4	2244.1	2149.1
20°	2742.6	2736.2	2737.5	2708.7	2680.5	2638.8	2578.5	2483.1	2412.6	2297.9	2199.8
22.5°	2740.5	2739.3	2744.1	2734.3	2713.8	2681.8	2634.5	2553.8	2463.9	2348.1	2237.8
25°	2602.9	2597.8	2628.0	2636.3	2669.0	2674.7	2660.6	2616.4	2531.2	2412.0	2275.5
27.5°	2178.5	2175.6	2231.6	2301.5	2390.2	2459.1	2525.8	2557.9	2531.2	2445.8	2309.1
30°	1787.9	1848.0	1876.2	1977.5	2090.3	2224.9	2342.8	2454.9	2482.4	2445.3	2333.1
32.5°	1484.3	1536.9	1560.5	1647.4	1752.5	1910.1	2086.9	2245.7	2357.9	2386.3	2318.8
35°	1129.1	1129.8	1183.6	1222.0	1319.4	1481.6	1653.3	1866.0	2077.5	2237.7	2254.3
37.5°	901.0	904.2	936.7	975.0	1048.1	1133.8	1285.1	1461.9	1706.2	1952.2	2096.3
40°	778.0	783.7	808.0	845.9	898.4	963.1	1081.0	1247.7	1451.4	1725.0	1948.6
42.5°	699.0	708.3	720.9	750.0	782.5	843.2	938.5	1067.2	1252.5	1511.2	1769.3
45°	602.3	607.5	617.1	630.6	660.0	702.3	766.4	852.9	1006.7	1215.0	1473.2
47.5°	531.3	528.6	538.7	549.7	569.3	598.1	641.1	711.7	821.4	988.5	1207.5
50°	483.1	482.5	489.6	497.9	516.5	537.6	572.9	626.1	713.2	851.7	1052.2
52.5°	438.1	440.5	445.5	455.8	469.3	486.4	518.0	556.4	631.2	750.6	917.9
55°	378.1	380.0	387.0	392.8	402.4	419.7	439.6	471.7	522.9	606.2	744.0
57.5°	327.3	326.4	333.2	334.6	345.5	359.6	375.0	399.8	437.0	499.0	591.7
60°	293.5	291.6	297.3	301.8	307.6	319.1	331.9	356.3	385.8	431.3	510.7
62.5°	262.7	261.8	266.0	270.5	275.3	285.8	296.5	315.3	338.6	376.9	439.9
65°	217.8	219.8	221.7	223.6	226.2	232.6	242.9	255.7	271.7	298.6	344.1
67.5°	171.2	173.2	173.8	177.7	183.3	187.3	193.6	205.0	216.1	238.8	264.6
70°	138.4	137.8	138.4	140.3	147.4	154.4	162.7	171.1	178.1	194.1	216.0
72.5°	119.0	117.8	119.4	119.8	123.3	125.2	130.4	138.3	147.4	158.2	173.9
75°	92.3	92.3	92.3	92.3	94.8	96.1	98.1	100.0	103.1	108.3	119.8
77.5°	68.2	68.3	69.2	69.9	70.4	71.1	72.3	74.2	75.3	78.0	83.1
80°	53.8	54.5	53.8	54.5	54.5	55.8	56.4	58.3	58.9	62.1	64.1
82.5°	40.5	40.1	40.5	41.2	41.2	42.4	42.6	43.9	44.1	45.7	47.7
85°	21.8	20.5	21.8	21.1	22.4	21.1	21.8	23.1	23.1	23.7	26.3
87.5°	11.4	12.3	11.3	11.7	11.6	11.9	11.7	11.6	12.4	11.7	11.6
90°	31.5	31.0	30.5	30.1	29.6	28.9	28.0	27.0	26.1	25.2	22.1
92.5°	34.8	34.5	34.2	34.0	33.7	32.8	31.3	29.8	28.3	26.8	24.5
95°	39.9	39.9	39.9	39.9	39.9	39.1	37.4	35.8	34.2	32.5	29.9
97.5°	43.2	43.0	42.7	42.5	42.2	41.2	39.4	37.5	35.6	33.8	50.5
100°	44.0	43.8	43.5	43.3	43.1	42.1	40.2	38.3	36.4	34.6	70.9
102.5°	44.8	44.4	44.0	43.6	43.2	45.9	51.6	57.4	63.2	69.0	108.7
105°	46.1	45.7	45.2	44.8	44.3	64.7	105.9	147.1	188.3	229.6	250.5
107.5°	144.9	175.9	207.0	238.1	269.2	299.9	330.1	360.4	390.5	420.8	417.5
110°	288.3	321.6	354.9	388.2	421.5	442.1	449.7	457.4	465.1	472.8	470.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	494.6	501.7	508.7	515.7	522.8	526.2	526.0	525.9	525.8	525.6	523.1
115°	616.4	615.5	614.6	613.6	612.7	611.1	608.7	606.4	604.1	601.8	599.7
117.5°	684.8	684.6	684.4	684.2	684.0	683.0	681.1	679.3	677.4	675.6	674.5
120°	731.7	731.7	731.7	731.7	731.7	730.8	729.0	727.1	725.2	723.3	722.7
122.5°	777.9	777.7	777.5	777.3	777.1	776.4	775.1	773.8	772.5	771.2	770.3
125°	842.9	842.4	842.0	841.5	841.0	840.5	840.1	839.6	839.1	838.7	837.7
127.5°	905.3	905.8	906.3	906.8	907.2	907.1	906.3	905.6	904.8	904.1	902.9
130°	945.6	946.1	946.6	947.0	947.5	947.2	946.3	945.3	944.4	943.5	942.6
132.5°	982.5	983.2	983.8	984.5	985.1	985.0	984.1	983.1	982.2	981.2	980.5
135°	1038.9	1039.6	1040.3	1041.0	1041.7	1041.7	1041.0	1040.3	1039.6	1038.9	1038.0
137.5°	1091.9	1092.4	1092.9	1093.3	1093.8	1093.5	1092.3	1091.3	1090.1	1089.0	1088.5
140°	1123.8	1124.3	1124.7	1125.2	1125.7	1125.4	1124.5	1123.6	1122.7	1121.7	1121.0
142.5°	1153.2	1153.8	1154.5	1155.1	1155.8	1155.8	1155.0	1154.2	1153.5	1152.8	1152.0
145°	1198.2	1198.2	1198.2	1198.2	1198.2	1198.0	1197.5	1197.1	1196.6	1196.1	1195.7
147.5°	1231.8	1232.9	1234.0	1235.0	1236.1	1236.4	1235.9	1235.4	1235.0	1234.5	1234.0
150°	1256.9	1257.7	1258.3	1259.1	1259.7	1259.9	1259.4	1258.9	1258.5	1258.0	1257.5
152.5°	1277.1	1278.1	1279.2	1280.3	1281.4	1281.5	1280.7	1279.8	1279.0	1278.1	1277.8
155°	1305.2	1306.6	1308.0	1309.4	1310.8	1310.9	1309.7	1308.6	1307.4	1306.2	1306.0
157.5°	1328.9	1330.6	1332.5	1334.3	1336.1	1336.4	1335.0	1333.6	1332.1	1330.7	1331.0
160°	1343.9	1345.6	1347.2	1348.8	1350.5	1350.6	1349.2	1347.8	1346.4	1345.0	1345.2
162.5°	1358.2	1359.7	1361.1	1362.5	1364.0	1363.9	1362.4	1360.7	1359.2	1357.6	1357.8
165°	1375.4	1377.0	1378.7	1380.3	1381.9	1381.9	1380.0	1378.1	1376.2	1374.4	1374.6
167.5°	1387.8	1389.7	1391.6	1393.3	1395.2	1395.2	1393.3	1391.6	1389.7	1387.8	1387.8
170°	1395.3	1397.2	1399.1	1400.9	1402.8	1402.8	1400.9	1399.1	1397.2	1395.3	1395.3
172.5°	1399.5	1401.6	1403.6	1405.7	1407.7	1407.9	1406.0	1404.1	1402.2	1400.4	1400.2
175°	1405.8	1407.7	1409.6	1411.4	1413.2	1413.4	1411.8	1410.1	1408.5	1406.9	1406.6
177.5°	1407.7	1409.6	1411.4	1413.3	1415.2	1415.4	1413.9	1412.3	1410.9	1409.4	1409.2
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1545.6	1544.1	1536.9	1528.7	1517.9	1510.7	1505.1	1502.0	1492.8	1481.6	1473.8
5°	1641.1	1621.9	1601.3	1576.4	1553.3	1529.6	1514.8	1497.5	1476.4	1452.7	1436.1
7.5°	1743.4	1705.7	1665.1	1623.2	1581.8	1544.6	1511.8	1483.7	1450.0	1416.0	1392.2
10°	1821.8	1766.7	1709.7	1651.3	1598.1	1548.2	1509.7	1471.9	1431.6	1392.4	1363.0
12.5°	1893.0	1820.5	1754.8	1683.1	1615.1	1555.3	1500.0	1455.5	1407.0	1365.3	1331.7
15°	1983.3	1908.9	1829.5	1720.5	1630.2	1554.6	1487.3	1429.0	1370.0	1318.7	1286.1
17.5°	2067.6	1955.7	1848.9	1758.1	1640.7	1546.2	1464.1	1394.4	1329.7	1275.3	1235.1
20°	2102.5	1994.1	1878.2	1762.2	1646.8	1541.2	1445.6	1368.7	1301.5	1239.9	1202.8
22.5°	2123.4	2000.8	1878.7	1754.0	1631.5	1521.7	1427.2	1342.6	1269.7	1211.2	1165.4
25°	2148.0	2001.9	1867.3	1744.3	1619.3	1500.2	1388.0	1298.3	1219.4	1157.3	1108.6
27.5°	2164.1	1992.3	1833.2	1696.5	1569.7	1451.0	1348.3	1253.1	1173.2	1107.4	1055.2
30°	2167.1	1984.5	1807.0	1659.1	1530.2	1421.3	1312.4	1221.4	1136.8	1066.9	1018.2
32.5°	2171.3	1965.6	1771.6	1614.5	1482.5	1374.7	1275.9	1189.0	1102.4	1033.6	983.9
35°	2154.3	1955.1	1718.0	1537.2	1405.2	1300.8	1211.8	1131.6	1046.4	979.7	929.2
37.5°	2081.5	1913.4	1662.4	1450.4	1312.4	1215.6	1143.0	1073.2	995.1	923.2	875.5
40°	2008.2	1872.4	1619.3	1397.6	1253.4	1154.1	1088.8	1031.7	956.1	888.8	837.6
42.5°	1899.1	1816.6	1578.3	1342.2	1186.7	1091.0	1035.9	982.4	916.1	847.7	799.6
45°	1698.8	1709.7	1494.4	1254.0	1094.5	998.3	946.5	909.3	850.4	793.9	744.6
47.5°	1447.6	1549.5	1395.8	1160.1	997.2	907.0	861.6	829.2	789.5	734.1	689.1
50°	1283.5	1429.0	1316.9	1097.1	936.2	846.5	801.6	775.3	740.8	697.2	654.3
52.5°	1132.3	1288.5	1221.5	1026.8	870.1	788.1	744.2	722.6	695.1	654.1	615.3
55°	923.4	1081.7	1066.3	920.8	770.9	697.2	663.9	639.5	620.9	590.2	559.5
57.5°	746.9	897.0	904.9	802.9	683.5	610.7	582.0	563.6	551.5	528.3	499.9
60°	635.7	773.5	800.4	723.5	620.9	556.8	528.6	513.9	504.3	485.8	463.9
62.5°	543.4	660.6	691.1	635.8	560.9	501.0	478.9	464.7	458.2	442.1	422.9
65°	415.9	513.3	542.7	512.0	472.9	424.9	406.9	394.8	389.0	380.0	365.9
67.5°	312.7	383.7	416.0	394.4	380.3	349.8	338.4	331.9	326.8	320.7	308.8
70°	251.2	303.7	337.0	331.3	319.8	303.7	295.4	290.9	285.8	280.7	270.4
72.5°	201.9	238.1	269.4	272.3	262.9	259.7	252.3	250.5	247.4	241.2	235.5
75°	134.0	158.9	180.7	189.1	192.9	196.1	192.9	192.2	191.6	186.5	183.3
77.5°	87.8	101.3	115.0	129.2	135.2	139.6	140.6	142.9	141.2	138.5	137.0
80°	67.3	70.5	80.1	92.3	101.9	105.7	108.3	109.6	108.9	108.3	105.7
82.5°	48.8	51.5	56.0	64.6	72.6	79.1	80.6	80.4	81.8	82.2	80.1
85°	26.3	26.9	28.2	29.5	34.0	41.0	43.0	44.2	45.5	45.5	41.7
87.5°	12.0	10.9	11.3	10.8	11.8	11.9	14.5	16.6	17.6	16.0	16.5
90°	19.1	16.1	13.0	10.4	8.1	5.7	3.3	1.1	3.3	5.7	8.1
92.5°	22.3	20.0	17.7	16.9	17.5	18.2	18.8	19.5	18.8	18.2	17.5
95°	27.4	24.8	22.3	25.8	35.3	44.8	54.4	63.9	54.4	44.8	35.3
97.5°	67.3	84.1	100.9	111.4	115.7	119.9	124.3	128.5	124.3	119.9	115.7
100°	107.3	143.7	179.9	195.8	191.1	186.5	181.8	177.2	181.8	186.5	191.1
102.5°	148.4	188.1	227.8	246.0	242.6	239.2	235.9	232.5	235.9	239.2	242.6
105°	271.5	292.4	313.5	322.6	320.1	317.6	315.0	312.4	315.0	317.6	320.1
107.5°	414.2	410.9	407.6	404.9	402.8	400.8	398.8	396.7	398.8	400.8	402.8
110°	467.7	465.1	462.5	460.3	458.4	456.6	454.8	452.9	454.8	456.6	458.4



TEST NUMBER: P332482-930

CATALOG NUMBER: S123RDIW-S1165D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	520.5	518.0	515.4	513.2	511.6	509.9	508.3	506.5	508.3	509.9	511.6
115°	597.5	595.4	593.4	591.6	590.2	588.8	587.4	586.0	587.4	588.8	590.2
117.5°	673.4	672.3	671.2	669.8	668.1	666.4	664.7	663.0	664.7	666.4	668.1
120°	721.9	721.2	720.6	719.2	717.1	714.9	712.9	710.8	712.9	714.9	717.1
122.5°	769.4	768.5	767.6	766.3	764.6	762.9	761.2	759.5	761.2	762.9	764.6
125°	836.8	835.8	834.9	833.6	831.7	829.8	827.9	826.1	827.9	829.8	831.7
127.5°	901.9	900.7	899.6	898.1	896.3	894.4	892.5	890.6	892.5	894.4	896.3
130°	941.7	940.7	939.8	938.4	936.5	934.7	932.8	930.9	932.8	934.7	936.5
132.5°	979.7	979.0	978.3	977.0	975.1	973.2	971.3	969.5	971.3	973.2	975.1
135°	1037.1	1036.1	1035.2	1034.0	1032.6	1031.2	1029.8	1028.4	1029.8	1031.2	1032.6
137.5°	1088.0	1087.4	1087.0	1085.8	1084.0	1082.3	1080.5	1078.7	1080.5	1082.3	1084.0
140°	1120.3	1119.7	1118.9	1117.9	1116.5	1115.1	1113.7	1112.3	1113.7	1115.1	1116.5
142.5°	1151.4	1150.6	1150.0	1148.9	1147.5	1146.1	1144.7	1143.3	1144.7	1146.1	1147.5
145°	1195.2	1194.7	1194.3	1193.3	1191.6	1190.0	1188.4	1186.7	1188.4	1190.0	1191.6
147.5°	1233.5	1233.1	1232.7	1231.9	1230.8	1229.7	1228.7	1227.6	1228.7	1229.7	1230.8
150°	1257.0	1256.6	1256.1	1255.6	1254.8	1254.2	1253.4	1252.8	1253.4	1254.2	1254.8
152.5°	1277.6	1277.3	1277.0	1276.7	1276.4	1276.0	1275.7	1275.4	1275.7	1276.0	1276.4
155°	1305.8	1305.5	1305.3	1305.4	1305.9	1306.4	1306.8	1307.3	1306.8	1306.4	1305.9
157.5°	1331.2	1331.5	1331.7	1331.8	1331.9	1332.0	1332.0	1332.0	1332.0	1332.0	1331.9
160°	1345.5	1345.7	1346.0	1346.1	1346.4	1346.6	1346.9	1347.1	1346.9	1346.6	1346.4
162.5°	1358.0	1358.3	1358.5	1358.9	1359.5	1360.2	1360.7	1361.4	1360.7	1360.2	1359.5
165°	1374.8	1375.1	1375.3	1375.7	1376.5	1377.1	1377.9	1378.6	1377.9	1377.1	1376.5
167.5°	1387.8	1387.8	1387.8	1388.2	1389.2	1390.1	1391.1	1392.0	1391.1	1390.1	1389.2
170°	1395.3	1395.3	1395.3	1395.8	1396.8	1397.7	1398.6	1399.5	1398.6	1397.7	1396.8
172.5°	1400.0	1399.8	1399.6	1400.1	1401.2	1402.3	1403.5	1404.6	1403.5	1402.3	1401.2
175°	1406.4	1406.1	1405.9	1406.4	1407.5	1408.8	1409.9	1411.0	1409.9	1408.8	1407.5
177.5°	1409.0	1408.8	1408.7	1409.0	1410.0	1410.9	1411.8	1412.8	1411.8	1410.9	1410.0
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0



TEST NUMBER: P332482-930

CATALOG NUMBER: S123RDIW-S1165D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1471.3	1464.6	1460.0	1449.8	1443.1	1435.9	1428.7	1433.4	1432.8	1432.3	1432.3
5°	1422.0	1407.2	1393.8	1376.5	1365.5	1352.1	1341.8	1340.5	1343.1	1334.2	1329.0
7.5°	1373.0	1352.8	1333.7	1314.7	1294.5	1278.3	1268.1	1263.4	1256.9	1251.3	1245.6
10°	1338.6	1314.9	1296.3	1272.6	1250.8	1231.6	1219.4	1211.1	1206.6	1202.2	1193.8
12.5°	1303.3	1280.1	1256.4	1229.6	1208.8	1186.5	1177.4	1168.1	1159.4	1154.5	1143.0
15°	1251.5	1221.4	1196.4	1168.2	1145.1	1123.3	1110.5	1091.9	1089.3	1083.0	1071.4
17.5°	1199.5	1166.9	1132.5	1111.5	1085.5	1062.8	1043.3	1037.1	1018.7	1011.8	1001.8
20°	1158.5	1128.5	1102.2	1074.6	1036.8	1015.7	1000.3	992.0	977.2	968.2	961.8
22.5°	1123.2	1092.6	1062.2	1030.0	998.9	975.2	963.9	951.0	942.9	930.3	923.4
25°	1072.7	1039.3	1002.8	968.2	945.8	927.9	910.0	898.4	886.9	881.1	868.3
27.5°	1014.0	979.2	945.0	918.8	891.2	873.5	857.3	847.0	833.2	823.5	816.4
30°	981.7	940.7	911.2	887.5	852.2	835.6	823.5	810.7	800.4	790.1	783.1
32.5°	944.3	906.9	878.9	849.5	822.6	804.3	788.6	777.3	768.6	758.8	751.8
35°	885.6	854.2	825.3	795.9	776.0	757.4	738.8	729.2	720.9	711.9	705.6
37.5°	832.5	803.2	775.8	747.8	723.2	708.1	693.1	685.7	674.5	668.5	661.9
40°	799.7	770.9	741.4	714.5	688.8	677.4	663.9	653.0	642.7	638.2	631.2
42.5°	763.9	735.0	710.1	681.2	660.1	644.5	632.1	620.2	612.5	605.9	601.9
45°	710.6	685.0	660.6	631.9	612.0	598.5	584.4	573.5	566.5	562.0	554.9
47.5°	659.0	633.4	608.6	583.5	564.3	548.9	534.8	527.3	517.9	512.4	507.6
50°	621.6	598.5	572.3	549.2	529.9	514.5	503.0	493.4	485.1	478.0	474.8
52.5°	587.3	562.6	540.0	518.4	498.1	480.7	470.2	460.1	453.8	445.7	442.1
55°	530.6	506.9	487.6	466.5	446.6	431.9	419.1	410.1	403.7	394.8	389.6
57.5°	477.4	456.2	433.2	414.8	394.4	381.9	371.3	359.1	351.3	344.2	339.2
60°	441.5	417.2	397.3	380.0	362.1	346.0	336.4	326.8	318.5	311.4	307.0
62.5°	404.1	382.8	363.9	345.1	328.7	314.8	303.6	295.5	288.2	283.7	279.2
65°	346.7	330.0	310.8	295.4	280.1	269.8	260.8	253.7	248.7	245.4	241.6
67.5°	293.8	277.7	260.9	245.8	235.5	227.7	221.8	215.8	213.3	209.1	206.6
70°	259.5	242.9	228.1	216.6	206.4	200.6	196.7	192.2	189.6	184.6	182.0
72.5°	222.1	210.0	199.4	190.0	181.7	176.5	171.6	166.1	162.0	156.4	153.8
75°	175.0	164.0	155.7	149.3	144.1	137.1	130.1	124.3	122.4	120.5	119.8
77.5°	129.6	122.6	116.6	111.2	104.8	99.7	98.2	96.9	96.5	95.5	95.5
80°	101.9	95.5	91.0	84.5	80.7	80.7	80.7	79.5	80.1	80.1	80.1
82.5°	75.7	69.9	67.4	65.1	64.3	64.8	64.8	65.1	64.7	65.7	65.2
85°	39.1	39.7	41.0	40.4	41.0	41.0	42.3	41.7	42.3	41.0	42.3
87.5°	16.4	18.5	19.6	20.7	21.9	21.9	22.7	22.8	23.6	23.7	23.9
90°	10.4	13.0	16.1	19.1	22.1	25.2	26.1	27.0	28.0	28.9	29.6
92.5°	16.9	17.7	20.0	22.3	24.5	26.8	28.3	29.8	31.3	32.8	33.7
95°	25.8	22.3	24.8	27.4	29.9	32.5	34.2	35.8	37.4	39.1	39.9
97.5°	111.4	100.9	84.1	67.3	50.5	33.8	35.6	37.5	39.4	41.2	42.2
100°	195.8	179.9	143.7	107.3	70.9	34.6	36.4	38.3	40.2	42.1	43.1
102.5°	246.0	227.8	188.1	148.4	108.7	69.0	63.2	57.4	51.6	45.9	43.2
105°	322.6	313.5	292.4	271.5	250.5	229.6	188.3	147.1	105.9	64.7	44.3
107.5°	404.9	407.6	410.9	414.2	417.5	420.8	390.5	360.4	330.1	299.9	269.2
110°	460.3	462.5	465.1	467.7	470.3	472.8	465.1	457.4	449.7	442.1	421.5



TEST NUMBER: P332482-930

CATALOG NUMBER: S123RDIW-S1165D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	513.2	515.4	518.0	520.5	523.1	525.6	525.8	525.9	526.0	526.2	522.8
115°	591.6	593.4	595.4	597.5	599.7	601.8	604.1	606.4	608.7	611.1	612.7
117.5°	669.8	671.2	672.3	673.4	674.5	675.6	677.4	679.3	681.1	683.0	684.0
120°	719.2	720.6	721.2	721.9	722.7	723.3	725.2	727.1	729.0	730.8	731.7
122.5°	766.3	767.6	768.5	769.4	770.3	771.2	772.5	773.8	775.1	776.4	777.1
125°	833.6	834.9	835.8	836.8	837.7	838.7	839.1	839.6	840.1	840.5	841.0
127.5°	898.1	899.6	900.7	901.9	902.9	904.1	904.8	905.6	906.3	907.1	907.2
130°	938.4	939.8	940.7	941.7	942.6	943.5	944.4	945.3	946.3	947.2	947.5
132.5°	977.0	978.3	979.0	979.7	980.5	981.2	982.2	983.1	984.1	985.0	985.1
135°	1034.0	1035.2	1036.1	1037.1	1038.0	1038.9	1039.6	1040.3	1041.0	1041.7	1041.7
137.5°	1085.8	1087.0	1087.4	1088.0	1088.5	1089.0	1090.1	1091.3	1092.3	1093.5	1093.8
140°	1117.9	1118.9	1119.7	1120.3	1121.0	1121.7	1122.7	1123.6	1124.5	1125.4	1125.7
142.5°	1148.9	1150.0	1150.6	1151.4	1152.0	1152.8	1153.5	1154.2	1155.0	1155.8	1155.8
145°	1193.3	1194.3	1194.7	1195.2	1195.7	1196.1	1196.6	1197.1	1197.5	1198.0	1198.2
147.5°	1231.9	1232.7	1233.1	1233.5	1234.0	1234.5	1235.0	1235.4	1235.9	1236.4	1236.1
150°	1255.6	1256.1	1256.6	1257.0	1257.5	1258.0	1258.5	1258.9	1259.4	1259.9	1259.7
152.5°	1276.7	1277.0	1277.3	1277.6	1277.8	1278.1	1279.0	1279.8	1280.7	1281.5	1281.4
155°	1305.4	1305.3	1305.5	1305.8	1306.0	1306.2	1307.4	1308.6	1309.7	1310.9	1310.8
157.5°	1331.8	1331.7	1331.5	1331.2	1331.0	1330.7	1332.1	1333.6	1335.0	1336.4	1336.1
160°	1346.1	1346.0	1345.7	1345.5	1345.2	1345.0	1346.4	1347.8	1349.2	1350.6	1350.5
162.5°	1358.9	1358.5	1358.3	1358.0	1357.8	1357.6	1359.2	1360.7	1362.4	1363.9	1364.0
165°	1375.7	1375.3	1375.1	1374.8	1374.6	1374.4	1376.2	1378.1	1380.0	1381.9	1381.9
167.5°	1388.2	1387.8	1387.8	1387.8	1387.8	1387.8	1389.7	1391.6	1393.3	1395.2	1395.2
170°	1395.8	1395.3	1395.3	1395.3	1395.3	1395.3	1397.2	1399.1	1400.9	1402.8	1402.8
172.5°	1400.1	1399.6	1399.8	1400.0	1400.2	1400.4	1402.2	1404.1	1406.0	1407.9	1407.7
175°	1406.4	1405.9	1406.1	1406.4	1406.6	1406.9	1408.5	1410.1	1411.8	1413.4	1413.2
177.5°	1409.0	1408.7	1408.8	1409.0	1409.2	1409.4	1410.9	1412.3	1413.9	1415.4	1415.2
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0



TEST NUMBER: P332482-930

CATALOG NUMBER: S123RDIW-S1165D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1426.2	1425.6	1426.2	1424.1	1426.2	1425.6	1426.2	1432.3	1432.3	1432.8	1433.4
5°	1327.1	1326.5	1324.5	1318.7	1324.5	1326.5	1327.1	1329.0	1334.2	1343.1	1340.5
7.5°	1240.6	1239.7	1234.0	1234.2	1234.0	1239.7	1240.6	1245.6	1251.3	1256.9	1263.4
10°	1189.4	1189.9	1182.3	1177.8	1182.3	1189.9	1189.4	1193.8	1202.2	1206.6	1211.1
12.5°	1139.6	1136.7	1130.5	1125.5	1130.5	1136.7	1139.6	1143.0	1154.5	1159.4	1168.1
15°	1074.0	1067.6	1052.2	1053.4	1052.2	1067.6	1074.0	1071.4	1083.0	1089.3	1091.9
17.5°	996.7	992.0	991.7	982.8	991.7	992.0	996.7	1001.8	1011.8	1018.7	1037.1
20°	951.6	948.4	949.7	940.7	949.7	948.4	951.6	961.8	968.2	977.2	992.0
22.5°	916.2	913.0	907.6	904.8	907.6	913.0	916.2	923.4	930.3	942.9	951.0
25°	864.5	859.3	854.2	857.4	854.2	859.3	864.5	868.3	881.1	886.9	898.4
27.5°	812.7	808.9	803.7	803.1	803.7	808.9	812.7	816.4	823.5	833.2	847.0
30°	779.8	776.0	773.5	770.2	773.5	776.0	779.8	783.1	790.1	800.4	810.7
32.5°	746.6	745.8	741.2	740.5	741.2	745.8	746.6	751.8	758.8	768.6	777.3
35°	703.0	699.1	697.8	698.5	697.8	699.1	703.0	705.6	711.9	720.9	729.2
37.5°	661.5	656.4	654.1	651.8	654.1	656.4	661.5	661.9	668.5	674.5	685.7
40°	631.9	626.7	625.4	624.1	625.4	626.7	631.9	631.2	638.2	642.7	653.0
42.5°	598.5	596.5	595.7	593.4	595.7	596.5	598.5	601.9	605.9	612.5	620.2
45°	553.0	552.4	548.5	549.8	548.5	552.4	553.0	554.9	562.0	566.5	573.5
47.5°	505.1	502.2	499.5	501.3	499.5	502.2	505.1	507.6	512.4	517.9	527.3
50°	472.3	471.0	465.2	466.5	465.2	471.0	472.3	474.8	478.0	485.1	493.4
52.5°	439.4	434.6	432.4	431.6	432.4	434.6	439.4	442.1	445.7	453.8	460.1
55°	385.1	379.4	376.7	375.5	376.7	379.4	385.1	389.6	394.8	403.7	410.1
57.5°	331.8	330.3	328.2	329.6	328.2	330.3	331.8	339.2	344.2	351.3	359.1
60°	300.5	300.5	300.5	299.9	300.5	300.5	300.5	307.0	311.4	318.5	326.8
62.5°	276.5	274.9	274.4	275.3	274.4	274.9	276.5	279.2	283.7	288.2	295.5
65°	239.7	239.0	236.4	235.8	236.4	239.0	239.7	241.6	245.4	248.7	253.7
67.5°	205.0	202.6	201.9	201.0	201.9	202.6	205.0	206.6	209.1	213.3	215.8
70°	178.8	177.5	173.7	174.3	173.7	177.5	178.8	182.0	184.6	189.6	192.2
72.5°	150.6	149.3	148.5	147.7	148.5	149.3	150.6	153.8	156.4	162.0	166.1
75°	119.2	118.5	117.9	120.5	117.9	118.5	119.2	119.8	120.5	122.4	124.3
77.5°	95.5	95.5	95.9	94.8	95.9	95.5	95.5	95.5	95.5	96.5	96.9
80°	80.1	80.1	79.5	79.5	79.5	80.1	80.1	80.1	80.1	80.1	79.5
82.5°	64.2	64.7	65.1	64.1	65.1	64.7	64.2	65.2	65.7	64.7	65.1
85°	42.3	41.7	43.0	42.3	43.0	41.7	42.3	42.3	41.0	42.3	41.7
87.5°	24.9	24.1	24.1	24.8	24.1	24.1	24.9	23.9	23.7	23.6	22.8
90°	30.1	30.5	31.0	31.5	31.0	30.5	30.1	29.6	28.9	28.0	27.0
92.5°	34.0	34.2	34.5	34.8	34.5	34.2	34.0	33.7	32.8	31.3	29.8
95°	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.1	37.4	35.8
97.5°	42.5	42.7	43.0	43.2	43.0	42.7	42.5	42.2	41.2	39.4	37.5
100°	43.3	43.5	43.8	44.0	43.8	43.5	43.3	43.1	42.1	40.2	38.3
102.5°	43.6	44.0	44.4	44.8	44.4	44.0	43.6	43.2	45.9	51.6	57.4
105°	44.8	45.2	45.7	46.1	45.7	45.2	44.8	44.3	64.7	105.9	147.1
107.5°	238.1	207.0	175.9	144.9	175.9	207.0	238.1	269.2	299.9	330.1	360.4
110°	388.2	354.9	321.6	288.3	321.6	354.9	388.2	421.5	442.1	449.7	457.4



TEST NUMBER: P332482-930

CATALOG NUMBER: S123RDIW-S1165D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	515.7	508.7	501.7	494.6	501.7	508.7	515.7	522.8	526.2	526.0	525.9
115°	613.6	614.6	615.5	616.4	615.5	614.6	613.6	612.7	611.1	608.7	606.4
117.5°	684.2	684.4	684.6	684.8	684.6	684.4	684.2	684.0	683.0	681.1	679.3
120°	731.7	731.7	731.7	731.7	731.7	731.7	731.7	731.7	730.8	729.0	727.1
122.5°	777.3	777.5	777.7	777.9	777.7	777.5	777.3	777.1	776.4	775.1	773.8
125°	841.5	842.0	842.4	842.9	842.4	842.0	841.5	841.0	840.5	840.1	839.6
127.5°	906.8	906.3	905.8	905.3	905.8	906.3	906.8	907.2	907.1	906.3	905.6
130°	947.0	946.6	946.1	945.6	946.1	946.6	947.0	947.5	947.2	946.3	945.3
132.5°	984.5	983.8	983.2	982.5	983.2	983.8	984.5	985.1	985.0	984.1	983.1
135°	1041.0	1040.3	1039.6	1038.9	1039.6	1040.3	1041.0	1041.7	1041.7	1041.0	1040.3
137.5°	1093.3	1092.9	1092.4	1091.9	1092.4	1092.9	1093.3	1093.8	1093.5	1092.3	1091.3
140°	1125.2	1124.7	1124.3	1123.8	1124.3	1124.7	1125.2	1125.7	1125.4	1124.5	1123.6
142.5°	1155.1	1154.5	1153.8	1153.2	1153.8	1154.5	1155.1	1155.8	1155.8	1155.0	1154.2
145°	1198.2	1198.2	1198.2	1198.2	1198.2	1198.2	1198.2	1198.2	1198.0	1197.5	1197.1
147.5°	1235.0	1234.0	1232.9	1231.8	1232.9	1234.0	1235.0	1236.1	1236.4	1235.9	1235.4
150°	1259.1	1258.3	1257.7	1256.9	1257.7	1258.3	1259.1	1259.7	1259.9	1259.4	1258.9
152.5°	1280.3	1279.2	1278.1	1277.1	1278.1	1279.2	1280.3	1281.4	1281.5	1280.7	1279.8
155°	1309.4	1308.0	1306.6	1305.2	1306.6	1308.0	1309.4	1310.8	1310.9	1309.7	1308.6
157.5°	1334.3	1332.5	1330.6	1328.9	1330.6	1332.5	1334.3	1336.1	1336.4	1335.0	1333.6
160°	1348.8	1347.2	1345.6	1343.9	1345.6	1347.2	1348.8	1350.5	1350.6	1349.2	1347.8
162.5°	1362.5	1361.1	1359.7	1358.2	1359.7	1361.1	1362.5	1364.0	1363.9	1362.4	1360.7
165°	1380.3	1378.7	1377.0	1375.4	1377.0	1378.7	1380.3	1381.9	1381.9	1380.0	1378.1
167.5°	1393.3	1391.6	1389.7	1387.8	1389.7	1391.6	1393.3	1395.2	1395.2	1393.3	1391.6
170°	1400.9	1399.1	1397.2	1395.3	1397.2	1399.1	1400.9	1402.8	1402.8	1400.9	1399.1
172.5°	1405.7	1403.6	1401.6	1399.5	1401.6	1403.6	1405.7	1407.7	1407.9	1406.0	1404.1
175°	1411.4	1409.6	1407.7	1405.8	1407.7	1409.6	1411.4	1413.2	1413.4	1411.8	1410.1
177.5°	1413.3	1411.4	1409.6	1407.7	1409.6	1411.4	1413.3	1415.2	1415.4	1413.9	1412.3
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1428.7	1435.9	1443.1	1449.8	1460.0	1464.6	1471.3	1473.8	1481.6	1492.8	1502.0
5°	1341.8	1352.1	1365.5	1376.5	1393.8	1407.2	1422.0	1436.1	1452.7	1476.4	1497.5
7.5°	1268.1	1278.3	1294.5	1314.7	1333.7	1352.8	1373.0	1392.2	1416.0	1450.0	1483.7
10°	1219.4	1231.6	1250.8	1272.6	1296.3	1314.9	1338.6	1363.0	1392.4	1431.6	1471.9
12.5°	1177.4	1186.5	1208.8	1229.6	1256.4	1280.1	1303.3	1331.7	1365.3	1407.0	1455.5
15°	1110.5	1123.3	1145.1	1168.2	1196.4	1221.4	1251.5	1286.1	1318.7	1370.0	1429.0
17.5°	1043.3	1062.8	1085.5	1111.5	1132.5	1166.9	1199.5	1235.1	1275.3	1329.7	1394.4
20°	1000.3	1015.7	1036.8	1074.6	1102.2	1128.5	1158.5	1202.8	1239.9	1301.5	1368.7
22.5°	963.9	975.2	998.9	1030.0	1062.2	1092.6	1123.2	1165.4	1211.2	1269.7	1342.6
25°	910.0	927.9	945.8	968.2	1002.8	1039.3	1072.7	1108.6	1157.3	1219.4	1298.3
27.5°	857.3	873.5	891.2	918.8	945.0	979.2	1014.0	1055.2	1107.4	1173.2	1253.1
30°	823.5	835.6	852.2	887.5	911.2	940.7	981.7	1018.2	1066.9	1136.8	1221.4
32.5°	788.6	804.3	822.6	849.5	878.9	906.9	944.3	983.9	1033.6	1102.4	1189.0
35°	738.8	757.4	776.0	795.9	825.3	854.2	885.6	929.2	979.7	1046.4	1131.6
37.5°	693.1	708.1	723.2	747.8	775.8	803.2	832.5	875.5	923.2	995.1	1073.2
40°	663.9	677.4	688.8	714.5	741.4	770.9	799.7	837.6	888.8	956.1	1031.7
42.5°	632.1	644.5	660.1	681.2	710.1	735.0	763.9	799.6	847.7	916.1	982.4
45°	584.4	598.5	612.0	631.9	660.6	685.0	710.6	744.6	793.9	850.4	909.3
47.5°	534.8	548.9	564.3	583.5	608.6	633.4	659.0	689.1	734.1	789.5	829.2
50°	503.0	514.5	529.9	549.2	572.3	598.5	621.6	654.3	697.2	740.8	775.3
52.5°	470.2	480.7	498.1	518.4	540.0	562.6	587.3	615.3	654.1	695.1	722.6
55°	419.1	431.9	446.6	466.5	487.6	506.9	530.6	559.5	590.2	620.9	639.5
57.5°	371.3	381.9	394.4	414.8	433.2	456.2	477.4	499.9	528.3	551.5	563.6
60°	336.4	346.0	362.1	380.0	397.3	417.2	441.5	463.9	485.8	504.3	513.9
62.5°	303.6	314.8	328.7	345.1	363.9	382.8	404.1	422.9	442.1	458.2	464.7
65°	260.8	269.8	280.1	295.4	310.8	330.0	346.7	365.9	380.0	389.0	394.8
67.5°	221.8	227.7	235.5	245.8	260.9	277.7	293.8	308.8	320.7	326.8	331.9
70°	196.7	200.6	206.4	216.6	228.1	242.9	259.5	270.4	280.7	285.8	290.9
72.5°	171.6	176.5	181.7	190.0	199.4	210.0	222.1	235.5	241.2	247.4	250.5
75°	130.1	137.1	144.1	149.3	155.7	164.0	175.0	183.3	186.5	191.6	192.2
77.5°	98.2	99.7	104.8	111.2	116.6	122.6	129.6	137.0	138.5	141.2	142.9
80°	80.7	80.7	80.7	84.5	91.0	95.5	101.9	105.7	108.3	108.9	109.6
82.5°	64.8	64.8	64.3	65.1	67.4	69.9	75.7	80.1	82.2	81.8	80.4
85°	42.3	41.0	41.0	40.4	41.0	39.7	39.1	41.7	45.5	45.5	44.2
87.5°	22.7	21.9	21.9	20.7	19.6	18.5	16.4	16.5	16.0	17.6	16.6
90°	26.1	25.2	22.1	19.1	16.1	13.0	10.4	8.1	5.7	3.3	1.1
92.5°	28.3	26.8	24.5	22.3	20.0	17.7	16.9	17.5	18.2	18.8	19.5
95°	34.2	32.5	29.9	27.4	24.8	22.3	25.8	35.3	44.8	54.4	63.9
97.5°	35.6	33.8	50.5	67.3	84.1	100.9	111.4	115.7	119.9	124.3	128.5
100°	36.4	34.6	70.9	107.3	143.7	179.9	195.8	191.1	186.5	181.8	177.2
102.5°	63.2	69.0	108.7	148.4	188.1	227.8	246.0	242.6	239.2	235.9	232.5
105°	188.3	229.6	250.5	271.5	292.4	313.5	322.6	320.1	317.6	315.0	312.4
107.5°	390.5	420.8	417.5	414.2	410.9	407.6	404.9	402.8	400.8	398.8	396.7
110°	465.1	472.8	470.3	467.7	465.1	462.5	460.3	458.4	456.6	454.8	452.9



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	525.8	525.6	523.1	520.5	518.0	515.4	513.2	511.6	509.9	508.3	506.5
115°	604.1	601.8	599.7	597.5	595.4	593.4	591.6	590.2	588.8	587.4	586.0
117.5°	677.4	675.6	674.5	673.4	672.3	671.2	669.8	668.1	666.4	664.7	663.0
120°	725.2	723.3	722.7	721.9	721.2	720.6	719.2	717.1	714.9	712.9	710.8
122.5°	772.5	771.2	770.3	769.4	768.5	767.6	766.3	764.6	762.9	761.2	759.5
125°	839.1	838.7	837.7	836.8	835.8	834.9	833.6	831.7	829.8	827.9	826.1
127.5°	904.8	904.1	902.9	901.9	900.7	899.6	898.1	896.3	894.4	892.5	890.6
130°	944.4	943.5	942.6	941.7	940.7	939.8	938.4	936.5	934.7	932.8	930.9
132.5°	982.2	981.2	980.5	979.7	979.0	978.3	977.0	975.1	973.2	971.3	969.5
135°	1039.6	1038.9	1038.0	1037.1	1036.1	1035.2	1034.0	1032.6	1031.2	1029.8	1028.4
137.5°	1090.1	1089.0	1088.5	1088.0	1087.4	1087.0	1085.8	1084.0	1082.3	1080.5	1078.7
140°	1122.7	1121.7	1121.0	1120.3	1119.7	1118.9	1117.9	1116.5	1115.1	1113.7	1112.3
142.5°	1153.5	1152.8	1152.0	1151.4	1150.6	1150.0	1148.9	1147.5	1146.1	1144.7	1143.3
145°	1196.6	1196.1	1195.7	1195.2	1194.7	1194.3	1193.3	1191.6	1190.0	1188.4	1186.7
147.5°	1235.0	1234.5	1234.0	1233.5	1233.1	1232.7	1231.9	1230.8	1229.7	1228.7	1227.6
150°	1258.5	1258.0	1257.5	1257.0	1256.6	1256.1	1255.6	1254.8	1254.2	1253.4	1252.8
152.5°	1279.0	1278.1	1277.8	1277.6	1277.3	1277.0	1276.7	1276.4	1276.0	1275.7	1275.4
155°	1307.4	1306.2	1306.0	1305.8	1305.5	1305.3	1305.4	1305.9	1306.4	1306.8	1307.3
157.5°	1332.1	1330.7	1331.0	1331.2	1331.5	1331.7	1331.8	1331.9	1332.0	1332.0	1332.0
160°	1346.4	1345.0	1345.2	1345.5	1345.7	1346.0	1346.1	1346.4	1346.6	1346.9	1347.1
162.5°	1359.2	1357.6	1357.8	1358.0	1358.3	1358.5	1358.9	1359.5	1360.2	1360.7	1361.4
165°	1376.2	1374.4	1374.6	1374.8	1375.1	1375.3	1375.7	1376.5	1377.1	1377.9	1378.6
167.5°	1389.7	1387.8	1387.8	1387.8	1387.8	1387.8	1388.2	1389.2	1390.1	1391.1	1392.0
170°	1397.2	1395.3	1395.3	1395.3	1395.3	1395.3	1395.8	1396.8	1397.7	1398.6	1399.5
172.5°	1402.2	1400.4	1400.2	1400.0	1399.8	1399.6	1400.1	1401.2	1402.3	1403.5	1404.6
175°	1408.5	1406.9	1406.6	1406.4	1406.1	1405.9	1406.4	1407.5	1408.8	1409.9	1411.0
177.5°	1410.9	1409.4	1409.2	1409.0	1408.8	1408.7	1409.0	1410.0	1410.9	1411.8	1412.8
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0



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CATALOG NUMBER: S123RDIW-S1165D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1505.1	1510.7	1517.9	1528.7	1536.9	1544.1	1545.6	1547.7	1552.8	1561.5	1568.1
5°	1514.8	1529.6	1553.3	1576.4	1601.3	1621.9	1641.1	1654.6	1667.4	1694.3	1716.0
7.5°	1511.8	1544.6	1581.8	1623.2	1665.1	1705.7	1743.4	1777.0	1810.6	1849.8	1894.6
10°	1509.7	1548.2	1598.1	1651.3	1709.7	1766.7	1821.8	1864.8	1914.7	1959.6	2016.6
12.5°	1500.0	1555.3	1615.1	1683.1	1754.8	1820.5	1893.0	1952.4	2009.5	2074.4	2140.6
15°	1487.3	1554.6	1630.2	1720.5	1829.5	1908.9	1983.3	2086.4	2157.0	2227.4	2322.3
17.5°	1464.1	1546.2	1640.7	1758.1	1848.9	1955.7	2067.6	2149.1	2244.1	2343.4	2429.3
20°	1445.6	1541.2	1646.8	1762.2	1878.2	1994.1	2102.5	2199.8	2297.9	2412.6	2483.1
22.5°	1427.2	1521.7	1631.5	1754.0	1878.7	2000.8	2123.4	2237.8	2348.1	2463.9	2553.8
25°	1388.0	1500.2	1619.3	1744.3	1867.3	2001.9	2148.0	2275.5	2412.0	2531.2	2616.4
27.5°	1348.3	1451.0	1569.7	1696.5	1833.2	1992.3	2164.1	2309.1	2445.8	2531.2	2557.9
30°	1312.4	1421.3	1530.2	1659.1	1807.0	1984.5	2167.1	2333.1	2445.3	2482.4	2454.9
32.5°	1275.9	1374.7	1482.5	1614.5	1771.6	1965.6	2171.3	2318.8	2386.3	2357.9	2245.7
35°	1211.8	1300.8	1405.2	1537.2	1718.0	1955.1	2154.3	2254.3	2237.7	2077.5	1866.0
37.5°	1143.0	1215.6	1312.4	1450.4	1662.4	1913.4	2081.5	2096.3	1952.2	1706.2	1461.9
40°	1088.8	1154.1	1253.4	1397.6	1619.3	1872.4	2008.2	1948.6	1725.0	1451.4	1247.7
42.5°	1035.9	1091.0	1186.7	1342.2	1578.3	1816.6	1899.1	1769.3	1511.2	1252.5	1067.2
45°	946.5	998.3	1094.5	1254.0	1494.4	1709.7	1698.8	1473.2	1215.0	1006.7	852.9
47.5°	861.6	907.0	997.2	1160.1	1395.8	1549.5	1447.6	1207.5	988.5	821.4	711.7
50°	801.6	846.5	936.2	1097.1	1316.9	1429.0	1283.5	1052.2	851.7	713.2	626.1
52.5°	744.2	788.1	870.1	1026.8	1221.5	1288.5	1132.3	917.9	750.6	631.2	556.4
55°	663.9	697.2	770.9	920.8	1066.3	1081.7	923.4	744.0	606.2	522.9	471.7
57.5°	582.0	610.7	683.5	802.9	904.9	897.0	746.9	591.7	499.0	437.0	399.8
60°	528.6	556.8	620.9	723.5	800.4	773.5	635.7	510.7	431.3	385.8	356.3
62.5°	478.9	501.0	560.9	635.8	691.1	660.6	543.4	439.9	376.9	338.6	315.3
65°	406.9	424.9	472.9	512.0	542.7	513.3	415.9	344.1	298.6	271.7	255.7
67.5°	338.4	349.8	380.3	394.4	416.0	383.7	312.7	264.6	238.8	216.1	205.0
70°	295.4	303.7	319.8	331.3	337.0	303.7	251.2	216.0	194.1	178.1	171.1
72.5°	252.3	259.7	262.9	272.3	269.4	238.1	201.9	173.9	158.2	147.4	138.3
75°	192.9	196.1	192.9	189.1	180.7	158.9	134.0	119.8	108.3	103.1	100.0
77.5°	140.6	139.6	135.2	129.2	115.0	101.3	87.8	83.1	78.0	75.3	74.2
80°	108.3	105.7	101.9	92.3	80.1	70.5	67.3	64.1	62.1	58.9	58.3
82.5°	80.6	79.1	72.6	64.6	56.0	51.5	48.8	47.7	45.7	44.1	43.9
85°	43.0	41.0	34.0	29.5	28.2	26.9	26.3	26.3	23.7	23.1	23.1
87.5°	14.5	11.9	11.8	10.8	11.3	10.9	12.0	11.6	11.7	12.4	11.6
90°	3.3	5.7	8.1	10.4	13.0	16.1	19.1	22.1	25.2	26.1	27.0
92.5°	18.8	18.2	17.5	16.9	17.7	20.0	22.3	24.5	26.8	28.3	29.8
95°	54.4	44.8	35.3	25.8	22.3	24.8	27.4	29.9	32.5	34.2	35.8
97.5°	124.3	119.9	115.7	111.4	100.9	84.1	67.3	50.5	33.8	35.6	37.5
100°	181.8	186.5	191.1	195.8	179.9	143.7	107.3	70.9	34.6	36.4	38.3
102.5°	235.9	239.2	242.6	246.0	227.8	188.1	148.4	108.7	69.0	63.2	57.4
105°	315.0	317.6	320.1	322.6	313.5	292.4	271.5	250.5	229.6	188.3	147.1
107.5°	398.8	400.8	402.8	404.9	407.6	410.9	414.2	417.5	420.8	390.5	360.4
110°	454.8	456.6	458.4	460.3	462.5	465.1	467.7	470.3	472.8	465.1	457.4



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	508.3	509.9	511.6	513.2	515.4	518.0	520.5	523.1	525.6	525.8	525.9
115°	587.4	588.8	590.2	591.6	593.4	595.4	597.5	599.7	601.8	604.1	606.4
117.5°	664.7	666.4	668.1	669.8	671.2	672.3	673.4	674.5	675.6	677.4	679.3
120°	712.9	714.9	717.1	719.2	720.6	721.2	721.9	722.7	723.3	725.2	727.1
122.5°	761.2	762.9	764.6	766.3	767.6	768.5	769.4	770.3	771.2	772.5	773.8
125°	827.9	829.8	831.7	833.6	834.9	835.8	836.8	837.7	838.7	839.1	839.6
127.5°	892.5	894.4	896.3	898.1	899.6	900.7	901.9	902.9	904.1	904.8	905.6
130°	932.8	934.7	936.5	938.4	939.8	940.7	941.7	942.6	943.5	944.4	945.3
132.5°	971.3	973.2	975.1	977.0	978.3	979.0	979.7	980.5	981.2	982.2	983.1
135°	1029.8	1031.2	1032.6	1034.0	1035.2	1036.1	1037.1	1038.0	1038.9	1039.6	1040.3
137.5°	1080.5	1082.3	1084.0	1085.8	1087.0	1087.4	1088.0	1088.5	1089.0	1090.1	1091.3
140°	1113.7	1115.1	1116.5	1117.9	1118.9	1119.7	1120.3	1121.0	1121.7	1122.7	1123.6
142.5°	1144.7	1146.1	1147.5	1148.9	1150.0	1150.6	1151.4	1152.0	1152.8	1153.5	1154.2
145°	1188.4	1190.0	1191.6	1193.3	1194.3	1194.7	1195.2	1195.7	1196.1	1196.6	1197.1
147.5°	1228.7	1229.7	1230.8	1231.9	1232.7	1233.1	1233.5	1234.0	1234.5	1235.0	1235.4
150°	1253.4	1254.2	1254.8	1255.6	1256.1	1256.6	1257.0	1257.5	1258.0	1258.5	1258.9
152.5°	1275.7	1276.0	1276.4	1276.7	1277.0	1277.3	1277.6	1277.8	1278.1	1279.0	1279.8
155°	1306.8	1306.4	1305.9	1305.4	1305.3	1305.5	1305.8	1306.0	1306.2	1307.4	1308.6
157.5°	1332.0	1332.0	1331.9	1331.8	1331.7	1331.5	1331.2	1331.0	1330.7	1332.1	1333.6
160°	1346.9	1346.6	1346.4	1346.1	1346.0	1345.7	1345.5	1345.2	1345.0	1346.4	1347.8
162.5°	1360.7	1360.2	1359.5	1358.9	1358.5	1358.3	1358.0	1357.8	1357.6	1359.2	1360.7
165°	1377.9	1377.1	1376.5	1375.7	1375.3	1375.1	1374.8	1374.6	1374.4	1376.2	1378.1
167.5°	1391.1	1390.1	1389.2	1388.2	1387.8	1387.8	1387.8	1387.8	1387.8	1389.7	1391.6
170°	1398.6	1397.7	1396.8	1395.8	1395.3	1395.3	1395.3	1395.3	1395.3	1397.2	1399.1
172.5°	1403.5	1402.3	1401.2	1400.1	1399.6	1399.8	1400.0	1400.2	1400.4	1402.2	1404.1
175°	1409.9	1408.8	1407.5	1406.4	1405.9	1406.1	1406.4	1406.6	1406.9	1408.5	1410.1
177.5°	1411.8	1410.9	1410.0	1409.0	1408.7	1408.8	1409.0	1409.2	1409.4	1410.9	1412.3
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1578.9	1578.9	1580.9	1588.7	1589.7	1596.4	1594.3
5°	1735.3	1747.4	1751.9	1771.2	1782.7	1787.9	1777.6
7.5°	1926.5	1960.9	1977.1	1997.2	2015.1	2020.5	2006.5
10°	2066.0	2101.8	2131.9	2150.5	2167.8	2179.4	2194.1
12.5°	2200.7	2244.8	2273.5	2299.7	2317.5	2332.2	2334.5
15°	2347.2	2413.9	2464.5	2501.7	2520.3	2529.9	2526.0
17.5°	2495.0	2556.8	2592.8	2630.7	2656.5	2657.8	2658.5
20°	2578.5	2638.8	2680.5	2708.7	2737.5	2736.2	2742.6
22.5°	2634.5	2681.8	2713.8	2734.3	2744.1	2739.3	2740.5
25°	2660.6	2674.7	2669.0	2636.3	2628.0	2597.8	2602.9
27.5°	2525.8	2459.1	2390.2	2301.5	2231.6	2175.6	2178.5
30°	2342.8	2224.9	2090.3	1977.5	1876.2	1848.0	1787.9
32.5°	2086.9	1910.1	1752.5	1647.4	1560.5	1536.9	1484.3
35°	1653.3	1481.6	1319.4	1222.0	1183.6	1129.8	1129.1
37.5°	1285.1	1133.8	1048.1	975.0	936.7	904.2	901.0
40°	1081.0	963.1	898.4	845.9	808.0	783.7	778.0
42.5°	938.5	843.2	782.5	750.0	720.9	708.3	699.0
45°	766.4	702.3	660.0	630.6	617.1	607.5	602.3
47.5°	641.1	598.1	569.3	549.7	538.7	528.6	531.3
50°	572.9	537.6	516.5	497.9	489.6	482.5	483.1
52.5°	518.0	486.4	469.3	455.8	445.5	440.5	438.1
55°	439.6	419.7	402.4	392.8	387.0	380.0	378.1
57.5°	375.0	359.6	345.5	334.6	333.2	326.4	327.3
60°	331.9	319.1	307.6	301.8	297.3	291.6	293.5
62.5°	296.5	285.8	275.3	270.5	266.0	261.8	262.7
65°	242.9	232.6	226.2	223.6	221.7	219.8	217.8
67.5°	193.6	187.3	183.3	177.7	173.8	173.2	171.2
70°	162.7	154.4	147.4	140.3	138.4	137.8	138.4
72.5°	130.4	125.2	123.3	119.8	119.4	117.8	119.0
75°	98.1	96.1	94.8	92.3	92.3	92.3	92.3
77.5°	72.3	71.1	70.4	69.9	69.2	68.3	68.2
80°	56.4	55.8	54.5	54.5	53.8	54.5	53.8
82.5°	42.6	42.4	41.2	41.2	40.5	40.1	40.5
85°	21.8	21.1	22.4	21.1	21.8	20.5	21.8
87.5°	11.7	11.9	11.6	11.7	11.3	12.3	11.4
90°	28.0	28.9	29.6	30.1	30.5	31.0	31.5
92.5°	31.3	32.8	33.7	34.0	34.2	34.5	34.8
95°	37.4	39.1	39.9	39.9	39.9	39.9	39.9
97.5°	39.4	41.2	42.2	42.5	42.7	43.0	43.2
100°	40.2	42.1	43.1	43.3	43.5	43.8	44.0
102.5°	51.6	45.9	43.2	43.6	44.0	44.4	44.8
105°	105.9	64.7	44.3	44.8	45.2	45.7	46.1
107.5°	330.1	299.9	269.2	238.1	207.0	175.9	144.9
110°	449.7	442.1	421.5	388.2	354.9	321.6	288.3



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	526.0	526.2	522.8	515.7	508.7	501.7	494.6
115°	608.7	611.1	612.7	613.6	614.6	615.5	616.4
117.5°	681.1	683.0	684.0	684.2	684.4	684.6	684.8
120°	729.0	730.8	731.7	731.7	731.7	731.7	731.7
122.5°	775.1	776.4	777.1	777.3	777.5	777.7	777.9
125°	840.1	840.5	841.0	841.5	842.0	842.4	842.9
127.5°	906.3	907.1	907.2	906.8	906.3	905.8	905.3
130°	946.3	947.2	947.5	947.0	946.6	946.1	945.6
132.5°	984.1	985.0	985.1	984.5	983.8	983.2	982.5
135°	1041.0	1041.7	1041.7	1041.0	1040.3	1039.6	1038.9
137.5°	1092.3	1093.5	1093.8	1093.3	1092.9	1092.4	1091.9
140°	1124.5	1125.4	1125.7	1125.2	1124.7	1124.3	1123.8
142.5°	1155.0	1155.8	1155.8	1155.1	1154.5	1153.8	1153.2
145°	1197.5	1198.0	1198.2	1198.2	1198.2	1198.2	1198.2
147.5°	1235.9	1236.4	1236.1	1235.0	1234.0	1232.9	1231.8
150°	1259.4	1259.9	1259.7	1259.1	1258.3	1257.7	1256.9
152.5°	1280.7	1281.5	1281.4	1280.3	1279.2	1278.1	1277.1
155°	1309.7	1310.9	1310.8	1309.4	1308.0	1306.6	1305.2
157.5°	1335.0	1336.4	1336.1	1334.3	1332.5	1330.6	1328.9
160°	1349.2	1350.6	1350.5	1348.8	1347.2	1345.6	1343.9
162.5°	1362.4	1363.9	1364.0	1362.5	1361.1	1359.7	1358.2
165°	1380.0	1381.9	1381.9	1380.3	1378.7	1377.0	1375.4
167.5°	1393.3	1395.2	1395.2	1393.3	1391.6	1389.7	1387.8
170°	1400.9	1402.8	1402.8	1400.9	1399.1	1397.2	1395.3
172.5°	1406.0	1407.9	1407.7	1405.7	1403.6	1401.6	1399.5
175°	1411.8	1413.4	1413.2	1411.4	1409.6	1407.7	1405.8
177.5°	1413.9	1415.4	1415.2	1413.3	1411.4	1409.6	1407.7
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0

(END OF REPORT)