

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: P332223-840

Luminaire Tested: **S123DIW-S1165D1030U840-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332223-840
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-S1165D1030U840-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1030 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8556.6 lumens
Efficiency: N/A
Efficacy: 127.0 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

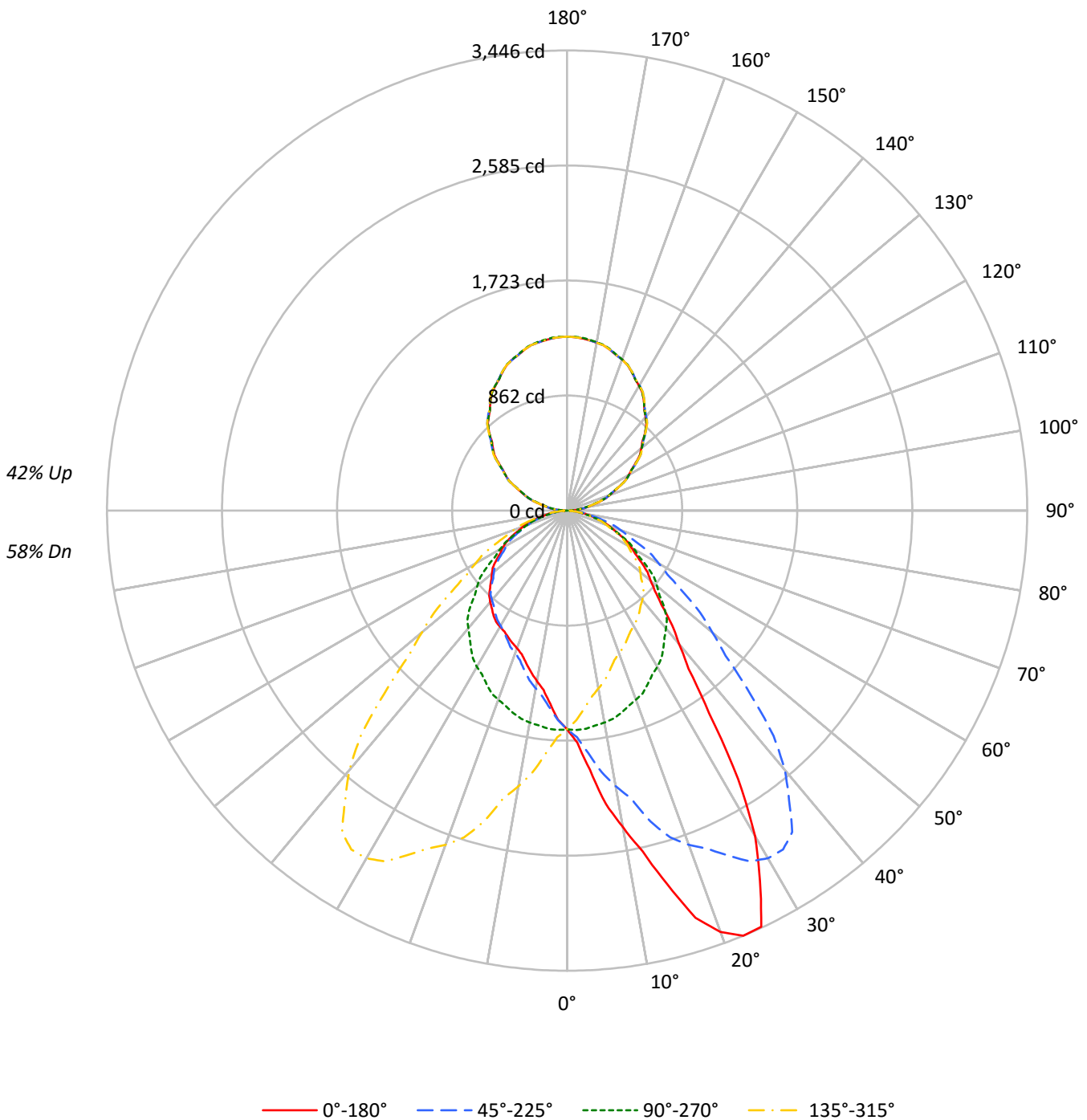
Input Watts (W): 67.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	100	96	92	88	93	89	86	83	77	75	73	67	65	63	56	55	54	49
2	91	84	78	73	85	78	73	69	68	64	61	59	56	53	50	48	46	42
3	83	74	67	61	77	69	63	58	60	55	51	52	48	45	45	42	39	36
4	76	66	58	52	71	62	55	49	54	48	44	47	42	39	40	37	34	31
5	70	59	51	45	65	55	48	42	48	43	38	42	38	34	36	33	30	27
6	65	53	45	39	60	50	42	37	44	38	33	38	33	30	33	29	26	24
7	60	48	40	34	56	45	38	33	40	34	29	35	30	27	30	26	24	21
8	56	43	36	30	52	41	34	29	36	30	26	32	27	24	28	24	21	19
9	52	40	32	27	48	37	31	26	33	28	24	29	25	21	25	22	19	17
10	48	36	29	24	45	34	28	23	31	25	21	27	22	19	24	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	17632	17632	17632	17632
5°	21028	17708	15693	17708
10°	26319	17618	14175	17618
15°	32282	17477	13196	17477
20°	38456	17255	12564	17255
25°	40834	16986	12423	16986
30°	34999	16789	12489	16789
35°	24341	16509	12620	16509
40°	18334	16183	12579	16183
45°	15224	15694	12420	15694
50°	13638	14699	12308	14699
55°	12748	13628	12153	13628
60°	11959	12508	12030	12508
65°	11240	11403	11645	11403
70°	10543	10140	11087	10140
75°	9441	8879	10168	8879
80°	8263	7277	8759	7277
85°	6472	5286	5891	5286



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.4	1.9
10°-20°	517.4	6.0
20°-30°	868.4	10.1
30°-40°	983.3	11.5
40°-50°	881.8	10.3
50°-60°	711.6	8.3
60°-70°	495.9	5.8
70°-80°	260.6	3.0
80°-90°	67.6	0.8
90°-100°	84.9	1.0
100°-110°	254.0	3.0
110°-120°	431.9	5.0
120°-130°	568.1	6.6
130°-140°	638.6	7.5
140°-150°	627.7	7.3
150°-160°	528.4	6.2
160°-170°	351.8	4.1
170°-180°	123.2	1.4
0°-30°	1547.2	18.1
0°-40°	2530.6	29.6
0°-60°	4124.0	48.2
0°-90°	4948.1	57.8
90°-120°	770.8	9.0
90°-150°	2605.2	30.4
90°-180°	3609.0	42.2
0°-180°	8556.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1638	1638	1638	1638	1638	
5°	1946	1639	1452	1639	1946	202
15°	2897	1568	1184	1568	2897	836
25°	3438	1430	1046	1430	3438	1508
35°	1852	1256	960	1256	1852	1204
45°	1000	1031	816	1031	1000	791
55°	679	726	648	726	679	610
65°	441	448	457	448	441	439
75°	227	214	244	214	227	243
85°	52	43	48	43	52	63
90°	31	1	31	1	31	18
95°	80	60	80	60	80	82
105°	244	230	244	230	244	258
115°	436	435	436	435	436	432
125°	629	636	629	636	629	563
135°	825	826	825	826	825	634
145°	1002	1002	1002	1002	1002	625
155°	1145	1147	1145	1147	1145	527
165°	1245	1249	1245	1249	1245	351
175°	1294	1299	1294	1299	1294	123
180°	1302	1302	1302	1302	1302	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1738.5	1737.2	1734.0	1736.6	1731.5	1724.4	1723.8	1717.5	1699.1	1697.8	1692.7
5°	1946.1	1939.7	1938.9	1938.1	1927.0	1912.0	1883.4	1881.0	1842.9	1823.8	1800.9
7.5°	2214.9	2218.3	2206.8	2196.6	2162.6	2140.2	2109.6	2070.4	2023.6	1976.1	1944.5
10°	2408.0	2434.2	2401.7	2379.4	2358.8	2319.9	2274.7	2218.3	2161.9	2096.1	2046.1
12.5°	2615.0	2627.9	2621.3	2600.4	2568.3	2509.1	2428.9	2366.9	2315.0	2205.3	2161.0
15°	2896.9	2945.4	2914.4	2843.0	2844.5	2788.1	2683.4	2568.3	2507.2	2411.2	2280.3
17.5°	3197.2	3203.3	3190.1	3130.6	3090.9	3013.4	2916.8	2806.4	2682.6	2566.5	2427.5
20°	3357.2	3352.4	3324.7	3293.8	3225.5	3165.2	3059.6	2936.6	2777.8	2663.6	2511.9
22.5°	3446.2	3438.2	3425.1	3399.1	3342.4	3277.5	3182.8	3048.4	2897.2	2739.8	2564.7
25°	3438.2	3448.5	3450.1	3442.9	3423.1	3384.3	3309.6	3202.5	3051.7	2849.3	2666.8
27.5°	3127.0	3141.7	3184.1	3221.7	3263.8	3306.6	3300.8	3247.7	3136.1	2961.3	2738.1
30°	2815.9	2784.2	2862.8	2962.0	3029.5	3148.5	3215.2	3219.1	3156.4	3006.5	2788.9
32.5°	2384.2	2419.1	2453.9	2576.0	2723.4	2857.1	2989.8	3096.7	3108.9	3009.0	2818.8
35°	1852.4	1896.1	1959.5	2023.1	2181.8	2318.3	2551.6	2754.8	2916.8	2938.2	2821.5
37.5°	1492.8	1514.3	1554.5	1618.1	1721.9	1883.9	2064.4	2321.2	2555.8	2730.3	2737.8
40°	1304.8	1311.1	1356.3	1404.8	1488.9	1622.2	1784.9	2012.0	2292.9	2536.6	2638.2
42.5°	1163.9	1177.8	1197.0	1243.5	1310.5	1410.9	1562.2	1749.7	2007.2	2287.6	2486.4
45°	1000.1	1015.9	1027.8	1058.7	1106.4	1173.9	1279.4	1450.9	1646.9	1936.5	2204.0
47.5°	891.8	893.0	901.9	925.2	957.7	1008.2	1082.9	1193.1	1373.0	1608.0	1882.6
50°	814.4	827.0	830.2	848.4	873.8	911.1	973.0	1066.7	1214.4	1420.7	1673.0
52.5°	759.7	763.6	772.4	785.6	807.8	836.9	890.5	963.8	1079.7	1255.6	1487.6
55°	679.3	679.3	688.1	698.4	711.1	737.3	773.1	827.0	915.1	1051.6	1243.6
57.5°	605.1	609.0	615.2	618.4	629.2	646.5	676.4	717.3	783.0	888.1	1040.9
60°	555.5	562.7	561.9	568.3	577.8	591.3	616.7	650.1	708.7	792.8	921.5
62.5°	512.4	511.9	511.8	519.4	528.9	541.8	558.3	587.1	637.0	711.7	821.1
65°	441.3	439.7	445.2	450.0	453.2	462.7	475.4	500.8	534.1	589.7	674.6
67.5°	378.1	373.5	376.5	378.1	383.5	390.9	402.8	418.6	445.0	489.7	553.7
70°	335.0	330.9	330.1	331.7	336.5	342.0	350.8	365.9	390.5	426.2	473.0
72.5°	290.4	287.8	287.6	291.1	293.4	297.0	303.2	317.0	336.5	363.3	407.0
75°	227.0	227.0	227.0	227.8	230.1	233.4	238.1	245.2	260.3	279.3	308.7
77.5°	170.2	170.0	169.1	168.8	172.4	173.8	174.9	181.6	190.0	202.9	224.3
80°	133.3	129.4	131.0	133.3	134.9	135.7	138.1	139.7	146.8	154.0	169.1
82.5°	99.1	95.7	96.0	99.7	100.0	100.8	103.2	105.4	108.1	114.6	122.7
85°	52.4	52.4	53.2	53.2	53.9	53.2	55.5	56.4	56.4	60.3	65.0
87.5°	25.1	23.8	24.3	24.9	24.2	24.6	25.1	25.5	26.1	26.5	26.6
90°	30.7	30.2	29.8	29.3	28.9	28.2	27.3	26.4	25.4	24.5	21.6
92.5°	41.3	41.6	41.9	42.1	42.4	42.2	41.5	40.7	40.0	39.3	37.6
95°	79.8	79.8	79.8	79.8	79.8	79.4	78.5	77.6	76.6	75.7	73.9
97.5°	122.8	122.9	123.0	123.0	123.1	122.7	121.6	120.6	119.6	118.5	117.1
100°	155.5	155.0	154.6	154.1	153.7	153.1	152.5	151.8	151.1	150.4	149.3
102.5°	189.0	189.1	189.2	189.3	189.5	189.1	188.4	187.7	187.1	186.4	184.9
105°	243.5	243.1	242.6	242.2	241.7	241.5	241.5	241.5	241.5	241.5	239.4
107.5°	300.1	300.4	300.7	301.0	301.2	301.0	300.3	299.6	298.8	298.1	297.3
110°	338.6	339.1	339.5	340.0	340.4	340.2	339.3	338.4	337.5	336.6	336.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	379.6	379.7	379.7	379.8	379.9	379.4	378.3	377.3	376.2	375.1	375.0
115°	435.9	436.1	436.3	436.6	436.8	436.8	436.6	436.3	436.1	435.9	436.3
117.5°	492.9	493.5	494.2	494.8	495.4	495.8	495.8	495.9	495.9	496.0	496.6
120°	533.0	533.5	533.9	534.4	534.8	535.2	535.4	535.6	535.8	536.1	537.2
122.5°	571.5	572.2	572.8	573.4	574.0	574.7	575.2	575.8	576.4	577.0	577.6
125°	629.2	630.2	631.1	632.0	632.9	633.8	634.7	635.6	636.5	637.4	637.8
127.5°	686.7	687.7	688.8	689.8	690.8	692.1	693.4	694.6	695.9	697.1	697.6
130°	724.4	726.0	727.5	729.1	730.7	732.0	732.9	733.8	734.7	735.6	736.3
132.5°	763.7	764.9	766.1	767.3	768.6	769.7	770.8	771.9	773.0	774.1	774.6
135°	824.7	825.1	825.6	826.0	826.5	827.1	828.0	828.9	829.8	830.7	831.0
137.5°	878.5	879.3	880.2	881.0	881.9	882.8	883.7	884.7	885.7	886.7	886.1
140°	913.6	915.2	916.9	918.4	920.0	920.9	921.1	921.4	921.6	921.8	921.6
142.5°	949.7	950.9	952.1	953.3	954.5	955.3	955.5	955.7	955.9	956.2	955.8
145°	1001.6	1002.5	1003.4	1004.3	1005.2	1005.8	1006.0	1006.3	1006.5	1006.7	1006.0
147.5°	1047.8	1049.2	1050.6	1052.0	1053.3	1054.0	1054.0	1054.0	1054.0	1054.0	1053.4
150°	1077.3	1078.7	1080.1	1081.5	1082.8	1083.5	1083.5	1083.5	1083.5	1083.5	1083.0
152.5°	1106.0	1107.1	1108.3	1109.5	1110.8	1111.2	1110.8	1110.3	1110.0	1109.6	1109.4
155°	1144.9	1146.5	1148.0	1149.6	1151.2	1151.5	1150.6	1149.7	1148.8	1147.9	1147.7
157.5°	1180.2	1181.5	1182.9	1184.1	1185.4	1185.5	1184.6	1183.6	1182.7	1181.6	1181.5
160°	1203.2	1204.1	1205.0	1205.9	1206.8	1206.7	1205.6	1204.5	1203.3	1202.1	1202.1
162.5°	1220.3	1221.8	1223.2	1224.8	1226.2	1226.4	1225.2	1224.1	1222.9	1221.8	1221.6
165°	1245.2	1246.7	1248.3	1249.9	1251.5	1251.6	1250.2	1248.9	1247.5	1246.2	1246.2
167.5°	1266.2	1267.6	1269.0	1270.4	1271.8	1271.8	1270.4	1269.0	1267.6	1266.2	1266.1
170°	1276.9	1278.4	1280.0	1281.6	1283.2	1283.2	1281.6	1280.0	1278.4	1276.9	1276.9
172.5°	1285.1	1286.6	1288.2	1289.8	1291.4	1291.5	1290.1	1288.7	1287.3	1285.9	1285.9
175°	1294.2	1295.9	1297.4	1299.0	1300.6	1300.7	1299.4	1298.0	1296.7	1295.3	1295.3
177.5°	1299.2	1300.4	1301.7	1302.9	1304.2	1304.3	1303.2	1302.1	1301.0	1300.0	1300.0
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1688.9	1683.8	1678.8	1669.9	1662.2	1651.4	1648.3	1644.5	1633.1	1623.0	1615.3
5°	1792.1	1773.0	1745.2	1719.9	1699.3	1671.5	1655.6	1638.9	1615.1	1593.7	1576.2
7.5°	1900.1	1862.6	1819.4	1772.7	1729.3	1687.4	1653.6	1623.4	1590.0	1558.4	1533.9
10°	1985.8	1931.8	1871.5	1806.4	1750.8	1696.9	1651.6	1611.9	1569.1	1531.8	1500.9
12.5°	2083.6	2003.6	1920.4	1841.3	1775.6	1700.7	1645.9	1595.5	1546.9	1502.0	1467.2
15°	2199.3	2097.7	1999.2	1890.6	1790.5	1696.9	1631.8	1568.3	1512.0	1465.9	1421.5
17.5°	2304.7	2189.6	2059.9	1927.6	1807.1	1696.0	1604.8	1533.1	1462.6	1406.2	1361.9
20°	2364.4	2233.4	2086.6	1949.2	1815.9	1692.1	1592.2	1506.4	1430.2	1370.7	1320.7
22.5°	2415.8	2262.6	2110.7	1963.9	1815.3	1681.9	1568.6	1480.4	1397.9	1339.6	1286.4
25°	2469.1	2285.8	2133.4	1961.2	1795.3	1657.2	1530.2	1430.2	1347.7	1279.4	1224.7
27.5°	2514.9	2284.2	2103.3	1918.1	1763.8	1625.5	1489.9	1382.6	1294.9	1220.8	1165.3
30°	2545.3	2287.3	2072.2	1889.0	1733.4	1590.5	1458.8	1350.8	1258.8	1183.4	1130.9
32.5°	2564.4	2285.4	2043.7	1848.4	1685.2	1558.7	1425.1	1313.3	1218.8	1144.7	1094.2
35°	2575.5	2271.5	1994.5	1764.3	1607.2	1484.2	1372.3	1256.4	1157.2	1088.1	1031.0
37.5°	2553.2	2242.1	1937.3	1683.3	1511.4	1390.2	1296.1	1197.3	1102.4	1026.4	977.1
40°	2518.3	2223.1	1892.9	1626.3	1445.3	1328.6	1248.5	1151.7	1057.9	985.7	939.7
42.5°	2451.6	2184.3	1844.0	1562.8	1376.7	1260.0	1186.2	1105.3	1016.7	948.9	902.9
45°	2289.0	2100.0	1770.7	1467.5	1275.5	1154.8	1089.7	1031.0	950.8	884.9	845.3
47.5°	2063.3	1973.3	1664.7	1367.1	1169.7	1053.7	986.0	938.8	880.2	827.0	788.9
50°	1906.4	1869.1	1592.9	1298.5	1099.2	985.7	920.7	877.8	835.8	782.5	747.6
52.5°	1725.5	1748.5	1509.1	1227.3	1027.5	915.9	854.6	820.6	782.4	738.7	708.3
55°	1470.7	1554.0	1364.3	1107.9	920.7	814.4	756.4	726.2	704.0	671.5	645.3
57.5°	1232.1	1338.2	1207.8	984.9	815.8	724.0	668.4	635.6	621.3	604.3	583.7
60°	1090.6	1195.3	1096.1	902.4	745.3	657.9	608.7	581.0	566.6	554.8	537.3
62.5°	964.1	1070.2	986.8	818.6	676.0	595.1	552.2	525.1	514.0	507.8	492.9
65°	790.5	881.8	826.2	688.1	577.0	505.5	466.7	447.7	437.3	434.9	425.5
67.5°	643.4	712.9	672.4	570.8	483.3	421.6	388.6	372.4	364.5	363.7	356.5
70°	546.8	611.9	581.0	488.9	413.5	365.1	336.5	322.2	317.5	316.7	312.8
72.5°	471.9	517.4	492.7	415.9	357.6	313.7	292.7	277.8	272.4	273.5	270.8
75°	349.2	383.3	369.1	315.9	269.0	240.4	223.0	213.5	208.7	211.2	207.9
77.5°	251.3	272.9	260.0	223.2	194.3	173.7	160.8	154.9	150.7	150.5	149.1
80°	189.7	202.4	195.2	173.0	149.3	131.8	121.4	117.4	115.1	114.3	113.5
82.5°	135.1	145.9	137.4	122.2	106.0	95.5	89.7	84.4	82.7	83.2	82.4
85°	68.3	72.2	69.1	59.5	53.2	48.4	45.2	42.8	41.3	42.1	40.5
87.5°	27.3	27.3	24.7	21.7	20.0	17.7	17.2	15.5	14.6	15.0	14.9
90°	18.7	15.7	12.7	10.1	7.9	5.6	3.3	1.0	3.3	5.6	7.9
92.5°	36.0	34.2	32.5	30.9	29.4	27.9	26.3	24.7	26.3	27.9	29.4
95°	72.1	70.3	68.5	66.8	65.1	63.5	61.9	60.4	61.9	63.5	65.1
97.5°	115.8	114.5	113.2	112.0	110.8	109.6	108.4	107.2	108.4	109.6	110.8
100°	148.1	147.0	145.8	144.6	143.2	141.9	140.5	139.2	140.5	141.9	143.2
102.5°	183.4	181.9	180.4	179.3	178.4	177.6	176.8	176.0	176.8	177.6	178.4
105°	237.3	235.3	233.3	232.1	231.6	231.2	230.7	230.2	230.7	231.2	231.6
107.5°	296.5	295.7	294.9	294.3	294.1	293.8	293.5	293.3	293.5	293.8	294.1
110°	335.7	335.3	334.8	334.4	333.9	333.5	333.0	332.5	333.0	333.5	333.9



TEST NUMBER: P332223-840

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	374.9	374.8	374.7	374.6	374.3	374.0	373.8	373.4	373.8	374.0	374.3
115°	436.8	437.2	437.7	437.6	436.9	436.2	435.5	434.8	435.5	436.2	436.9
117.5°	497.2	497.8	498.4	498.5	498.0	497.6	497.1	496.7	497.1	497.6	498.0
120°	538.4	539.5	540.7	540.6	539.2	537.9	536.4	535.1	536.4	537.9	539.2
122.5°	578.2	578.9	579.4	579.2	578.1	577.2	576.2	575.2	576.2	577.2	578.1
125°	638.3	638.7	639.2	639.1	638.4	637.7	637.0	636.4	637.0	637.7	638.4
127.5°	698.1	698.6	699.1	698.6	697.2	695.8	694.3	692.9	694.3	695.8	697.2
130°	737.0	737.7	738.3	737.8	736.0	734.2	732.4	730.5	732.4	734.2	736.0
132.5°	775.1	775.6	776.1	775.5	773.7	771.7	769.9	768.1	769.9	771.7	773.7
135°	831.2	831.4	831.6	831.1	829.7	828.4	827.0	825.7	827.0	828.4	829.7
137.5°	885.4	884.8	884.2	883.4	882.2	881.1	880.0	878.9	880.0	881.1	882.2
140°	921.4	921.1	920.9	920.2	919.1	918.0	916.9	915.6	916.9	918.0	919.1
142.5°	955.3	954.9	954.5	953.8	952.6	951.5	950.4	949.3	950.4	951.5	952.6
145°	1005.4	1004.7	1004.0	1003.4	1003.0	1002.5	1002.1	1001.6	1002.1	1002.5	1003.0
147.5°	1052.8	1052.1	1051.5	1050.8	1050.0	1049.0	1048.2	1047.4	1048.2	1049.0	1050.0
150°	1082.6	1082.1	1081.7	1081.2	1080.8	1080.3	1079.8	1079.3	1079.8	1080.3	1080.8
152.5°	1109.1	1108.8	1108.5	1108.1	1107.5	1106.8	1106.2	1105.6	1106.2	1106.8	1107.5
155°	1147.5	1147.2	1147.0	1146.9	1146.9	1146.9	1146.9	1146.9	1146.9	1146.9	1146.9
157.5°	1181.3	1181.1	1180.9	1181.0	1181.2	1181.5	1181.8	1182.1	1181.8	1181.5	1181.2
160°	1202.1	1202.1	1202.1	1202.3	1202.9	1203.3	1203.8	1204.2	1203.8	1203.3	1202.9
162.5°	1221.4	1221.2	1221.0	1221.3	1221.9	1222.5	1223.2	1223.9	1223.2	1222.5	1221.9
165°	1246.2	1246.2	1246.2	1246.5	1247.2	1247.9	1248.5	1249.2	1248.5	1247.9	1247.2
167.5°	1265.9	1265.7	1265.5	1265.9	1266.8	1267.7	1268.6	1269.5	1268.6	1267.7	1266.8
170°	1276.9	1276.9	1276.9	1277.3	1278.2	1279.1	1280.0	1280.9	1280.0	1279.1	1278.2
172.5°	1285.9	1285.9	1285.9	1286.3	1287.2	1288.1	1289.0	1289.9	1289.0	1288.1	1287.2
175°	1295.3	1295.3	1295.3	1295.8	1296.7	1297.6	1298.5	1299.4	1298.5	1297.6	1296.7
177.5°	1300.0	1300.0	1300.0	1300.3	1301.0	1301.8	1302.5	1303.2	1302.5	1301.8	1301.0
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4



TEST NUMBER: P332223-840

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1610.8	1606.4	1600.0	1590.5	1582.9	1570.8	1570.8	1572.8	1572.8	1572.2	1570.8
5°	1562.0	1550.0	1535.8	1519.1	1501.7	1484.2	1481.0	1474.6	1469.9	1466.7	1462.8
7.5°	1510.4	1489.2	1468.4	1445.1	1423.8	1406.2	1394.0	1383.8	1377.4	1370.4	1365.2
10°	1475.4	1449.3	1424.6	1400.1	1373.0	1351.6	1338.2	1328.6	1321.5	1315.1	1311.9
12.5°	1434.2	1404.2	1377.1	1353.7	1324.1	1302.1	1289.3	1284.8	1276.4	1263.0	1256.1
15°	1373.8	1346.0	1313.5	1277.8	1263.5	1236.6	1221.4	1214.4	1209.5	1199.2	1196.1
17.5°	1322.2	1285.9	1249.4	1222.7	1196.2	1174.3	1165.9	1157.0	1150.6	1142.3	1139.7
20°	1281.0	1248.5	1215.1	1186.6	1158.7	1135.0	1127.8	1121.5	1115.1	1111.2	1107.9
22.5°	1239.1	1206.6	1178.9	1152.3	1122.6	1107.0	1099.2	1092.3	1087.8	1085.1	1082.0
25°	1180.2	1151.7	1120.6	1096.8	1073.1	1062.7	1057.9	1054.0	1050.9	1046.8	1046.0
27.5°	1127.5	1096.4	1071.3	1049.0	1032.0	1023.4	1018.8	1016.8	1017.5	1019.0	1019.9
30°	1088.1	1059.6	1038.9	1019.9	1004.0	996.0	995.2	995.2	998.5	999.3	1000.8
32.5°	1052.0	1028.4	1007.8	989.4	977.3	971.9	974.9	974.9	977.4	979.6	982.4
35°	999.3	978.6	962.7	946.8	936.5	938.9	940.5	942.1	946.0	950.8	954.0
37.5°	948.9	931.0	914.4	902.1	897.4	901.6	905.4	908.8	913.3	917.1	920.2
40°	912.7	899.2	883.3	872.2	873.8	876.3	879.4	883.3	887.4	889.7	892.9
42.5°	879.1	864.9	852.9	843.6	845.9	848.9	850.8	852.9	857.5	861.8	863.6
45°	827.8	816.7	805.6	800.0	801.6	803.2	804.8	807.2	811.1	814.4	815.1
47.5°	770.2	762.4	755.0	749.5	752.0	751.4	753.6	758.6	759.8	761.7	766.2
50°	733.4	726.2	717.5	715.9	715.9	715.9	716.7	723.1	723.1	726.2	729.4
52.5°	692.8	688.1	682.6	679.7	678.4	678.4	681.8	685.0	686.2	690.6	693.9
55°	632.6	627.8	623.0	620.7	619.0	620.7	627.0	628.5	632.6	634.9	637.3
57.5°	569.9	566.2	562.4	561.1	560.8	562.9	566.3	571.1	572.1	579.4	583.0
60°	528.6	523.0	519.9	519.9	518.3	525.4	523.8	531.8	533.3	538.2	543.7
62.5°	486.0	478.6	477.4	477.4	479.6	481.6	483.8	487.4	491.4	497.5	501.8
65°	417.5	413.5	419.1	418.3	416.7	421.4	421.4	425.5	430.2	435.8	444.4
67.5°	352.5	350.5	350.9	350.9	353.4	356.1	358.3	361.7	367.5	373.3	379.1
70°	308.7	311.1	307.2	310.3	312.8	313.5	315.1	319.8	326.2	330.1	336.5
72.5°	266.2	266.0	266.5	267.8	270.1	271.6	273.2	278.6	285.6	288.9	294.0
75°	204.8	204.0	206.3	206.3	210.4	211.9	213.5	215.9	222.3	227.0	231.0
77.5°	149.6	150.5	150.0	152.7	151.6	151.9	156.8	159.3	159.9	169.3	171.3
80°	112.7	114.3	115.1	115.8	116.6	115.1	120.7	123.0	123.0	128.6	132.5
82.5°	81.0	81.9	84.0	84.7	84.9	86.5	86.9	88.8	90.7	93.0	98.3
85°	40.5	42.8	43.6	42.8	43.6	42.1	44.4	45.2	46.0	46.0	46.0
87.5°	14.7	15.9	15.9	17.1	17.1	18.3	18.4	17.4	17.5	19.6	17.2
90°	10.1	12.7	15.7	18.7	21.6	24.5	25.4	26.4	27.3	28.2	28.9
92.5°	30.9	32.5	34.2	36.0	37.6	39.3	40.0	40.7	41.5	42.2	42.4
95°	66.8	68.5	70.3	72.1	73.9	75.7	76.6	77.6	78.5	79.4	79.8
97.5°	112.0	113.2	114.5	115.8	117.1	118.5	119.6	120.6	121.6	122.7	123.1
100°	144.6	145.8	147.0	148.1	149.3	150.4	151.1	151.8	152.5	153.1	153.7
102.5°	179.3	180.4	181.9	183.4	184.9	186.4	187.1	187.7	188.4	189.1	189.5
105°	232.1	233.3	235.3	237.3	239.4	241.5	241.5	241.5	241.5	241.5	241.7
107.5°	294.3	294.9	295.7	296.5	297.3	298.1	298.8	299.6	300.3	301.0	301.2
110°	334.4	334.8	335.3	335.7	336.2	336.6	337.5	338.4	339.3	340.2	340.4



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	374.6	374.7	374.8	374.9	375.0	375.1	376.2	377.3	378.3	379.4	379.9
115°	437.6	437.7	437.2	436.8	436.3	435.9	436.1	436.3	436.6	436.8	436.8
117.5°	498.5	498.4	497.8	497.2	496.6	496.0	495.9	495.9	495.8	495.8	495.4
120°	540.6	540.7	539.5	538.4	537.2	536.1	535.8	535.6	535.4	535.2	534.8
122.5°	579.2	579.4	578.9	578.2	577.6	577.0	576.4	575.8	575.2	574.7	574.0
125°	639.1	639.2	638.7	638.3	637.8	637.4	636.5	635.6	634.7	633.8	632.9
127.5°	698.6	699.1	698.6	698.1	697.6	697.1	695.9	694.6	693.4	692.1	690.8
130°	737.8	738.3	737.7	737.0	736.3	735.6	734.7	733.8	732.9	732.0	730.7
132.5°	775.5	776.1	775.6	775.1	774.6	774.1	773.0	771.9	770.8	769.7	768.6
135°	831.1	831.6	831.4	831.2	831.0	830.7	829.8	828.9	828.0	827.1	826.5
137.5°	883.4	884.2	884.8	885.4	886.1	886.7	885.7	884.7	883.7	882.8	881.9
140°	920.2	920.9	921.1	921.4	921.6	921.8	921.6	921.4	921.1	920.9	920.0
142.5°	953.8	954.5	954.9	955.3	955.8	956.2	955.9	955.7	955.5	955.3	954.5
145°	1003.4	1004.0	1004.7	1005.4	1006.0	1006.7	1006.5	1006.3	1006.0	1005.8	1005.2
147.5°	1050.8	1051.5	1052.1	1052.8	1053.4	1054.0	1054.0	1054.0	1054.0	1054.0	1053.3
150°	1081.2	1081.7	1082.1	1082.6	1083.0	1083.5	1083.5	1083.5	1083.5	1083.5	1082.8
152.5°	1108.1	1108.5	1108.8	1109.1	1109.4	1109.6	1110.0	1110.3	1110.8	1111.2	1110.8
155°	1146.9	1147.0	1147.2	1147.5	1147.7	1147.9	1148.8	1149.7	1150.6	1151.5	1151.2
157.5°	1181.0	1180.9	1181.1	1181.3	1181.5	1181.6	1182.7	1183.6	1184.6	1185.5	1185.4
160°	1202.3	1202.1	1202.1	1202.1	1202.1	1202.1	1203.3	1204.5	1205.6	1206.7	1206.8
162.5°	1221.3	1221.0	1221.2	1221.4	1221.6	1221.8	1222.9	1224.1	1225.2	1226.4	1226.2
165°	1246.5	1246.2	1246.2	1246.2	1246.2	1246.2	1247.5	1248.9	1250.2	1251.6	1251.5
167.5°	1265.9	1265.5	1265.7	1265.9	1266.1	1266.2	1267.6	1269.0	1270.4	1271.8	1271.8
170°	1277.3	1276.9	1276.9	1276.9	1276.9	1276.9	1278.4	1280.0	1281.6	1283.2	1283.2
172.5°	1286.3	1285.9	1285.9	1285.9	1285.9	1285.9	1287.3	1288.7	1290.1	1291.5	1291.4
175°	1295.8	1295.3	1295.3	1295.3	1295.3	1295.3	1296.7	1298.0	1299.4	1300.7	1300.6
177.5°	1300.3	1300.0	1300.0	1300.0	1300.0	1300.0	1301.0	1302.1	1303.2	1304.3	1304.2
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1566.4	1565.8	1570.2	1567.0	1570.2	1565.8	1566.4	1570.8	1572.2	1572.8	1572.8
5°	1457.9	1460.4	1452.4	1452.4	1452.4	1460.4	1457.9	1462.8	1466.7	1469.9	1474.6
7.5°	1361.5	1358.0	1358.3	1354.0	1358.3	1358.0	1361.5	1365.2	1370.4	1377.4	1383.8
10°	1302.4	1297.7	1296.1	1296.9	1296.1	1297.7	1302.4	1311.9	1315.1	1321.5	1328.6
12.5°	1253.5	1252.5	1242.1	1242.2	1242.1	1252.5	1253.5	1256.1	1263.0	1276.4	1284.8
15°	1196.1	1181.0	1179.4	1184.2	1179.4	1181.0	1196.1	1196.1	1199.2	1209.5	1214.4
17.5°	1138.4	1130.5	1130.9	1128.6	1130.9	1130.5	1138.4	1139.7	1142.3	1150.6	1157.0
20°	1107.9	1103.2	1102.4	1096.8	1102.4	1103.2	1107.9	1107.9	1111.2	1115.1	1121.5
22.5°	1080.1	1078.4	1078.9	1072.8	1078.9	1078.4	1080.1	1082.0	1085.1	1087.8	1092.3
25°	1045.3	1049.2	1046.0	1046.0	1046.0	1049.2	1045.3	1046.0	1046.8	1050.9	1054.0
27.5°	1021.8	1021.6	1020.1	1020.1	1020.1	1021.6	1021.8	1019.9	1019.0	1017.5	1016.8
30°	1004.0	1003.2	1004.8	1004.8	1004.8	1003.2	1004.0	1000.8	999.3	998.5	995.2
32.5°	986.2	987.3	987.6	988.3	987.6	987.3	986.2	982.4	979.6	977.4	974.9
35°	958.8	959.6	961.9	960.4	961.9	959.6	958.8	954.0	950.8	946.0	942.1
37.5°	921.6	925.2	924.4	925.7	924.4	925.2	921.6	920.2	917.1	913.3	908.8
40°	893.6	896.1	895.2	895.2	895.2	896.1	893.6	892.9	889.7	887.4	883.3
42.5°	865.2	866.9	864.7	863.5	864.7	866.9	865.2	863.6	861.8	857.5	852.9
45°	818.3	816.7	819.1	815.9	819.1	816.7	818.3	815.1	814.4	811.1	807.2
47.5°	765.9	767.5	768.1	770.5	768.1	767.5	765.9	766.2	761.7	759.8	758.6
50°	730.9	735.7	735.7	735.0	735.7	735.7	730.9	729.4	726.2	723.1	723.1
52.5°	696.7	698.9	702.1	702.0	702.1	698.9	696.7	693.9	690.6	686.2	685.0
55°	643.7	645.3	646.8	647.6	646.8	645.3	643.7	637.3	634.9	632.6	628.5
57.5°	588.8	588.1	591.9	593.0	591.9	588.1	588.8	583.0	579.4	572.1	571.1
60°	550.0	550.0	556.3	558.8	556.3	550.0	550.0	543.7	538.2	533.3	531.8
62.5°	508.8	511.3	517.7	514.3	517.7	511.3	508.8	501.8	497.5	491.4	487.4
65°	448.4	454.7	453.9	457.2	453.9	454.7	448.4	444.4	435.8	430.2	425.5
67.5°	385.4	389.4	395.1	395.6	395.1	389.4	385.4	379.1	373.3	367.5	361.7
70°	342.8	346.8	350.0	352.3	350.0	346.8	342.8	336.5	330.1	326.2	319.8
72.5°	301.6	303.7	311.2	307.9	311.2	303.7	301.6	294.0	288.9	285.6	278.6
75°	236.5	242.1	246.8	244.5	246.8	242.1	236.5	231.0	227.0	222.3	215.9
77.5°	174.9	180.5	182.7	180.7	182.7	180.5	174.9	171.3	169.3	159.9	159.3
80°	138.1	137.3	142.1	141.3	142.1	137.3	138.1	132.5	128.6	123.0	123.0
82.5°	101.3	100.5	102.7	103.2	102.7	100.5	101.3	98.3	93.0	90.7	88.8
85°	49.2	51.6	48.4	47.7	48.4	51.6	49.2	46.0	46.0	46.0	45.2
87.5°	17.3	17.4	16.9	16.3	16.9	17.4	17.3	17.2	19.6	17.5	17.4
90°	29.3	29.8	30.2	30.7	30.2	29.8	29.3	28.9	28.2	27.3	26.4
92.5°	42.1	41.9	41.6	41.3	41.6	41.9	42.1	42.4	42.2	41.5	40.7
95°	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.4	78.5	77.6
97.5°	123.0	123.0	122.9	122.8	122.9	123.0	123.0	123.1	122.7	121.6	120.6
100°	154.1	154.6	155.0	155.5	155.0	154.6	154.1	153.7	153.1	152.5	151.8
102.5°	189.3	189.2	189.1	189.0	189.1	189.2	189.3	189.5	189.1	188.4	187.7
105°	242.2	242.6	243.1	243.5	243.1	242.6	242.2	241.7	241.5	241.5	241.5
107.5°	301.0	300.7	300.4	300.1	300.4	300.7	301.0	301.2	301.0	300.3	299.6
110°	340.0	339.5	339.1	338.6	339.1	339.5	340.0	340.4	340.2	339.3	338.4



TEST NUMBER: P332223-840

CATALOG NUMBER: S123DIW-S1165D1030U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	379.8	379.7	379.7	379.6	379.7	379.7	379.8	379.9	379.4	378.3	377.3
115°	436.6	436.3	436.1	435.9	436.1	436.3	436.6	436.8	436.8	436.6	436.3
117.5°	494.8	494.2	493.5	492.9	493.5	494.2	494.8	495.4	495.8	495.8	495.9
120°	534.4	533.9	533.5	533.0	533.5	533.9	534.4	534.8	535.2	535.4	535.6
122.5°	573.4	572.8	572.2	571.5	572.2	572.8	573.4	574.0	574.7	575.2	575.8
125°	632.0	631.1	630.2	629.2	630.2	631.1	632.0	632.9	633.8	634.7	635.6
127.5°	689.8	688.8	687.7	686.7	687.7	688.8	689.8	690.8	692.1	693.4	694.6
130°	729.1	727.5	726.0	724.4	726.0	727.5	729.1	730.7	732.0	732.9	733.8
132.5°	767.3	766.1	764.9	763.7	764.9	766.1	767.3	768.6	769.7	770.8	771.9
135°	826.0	825.6	825.1	824.7	825.1	825.6	826.0	826.5	827.1	828.0	828.9
137.5°	881.0	880.2	879.3	878.5	879.3	880.2	881.0	881.9	882.8	883.7	884.7
140°	918.4	916.9	915.2	913.6	915.2	916.9	918.4	920.0	920.9	921.1	921.4
142.5°	953.3	952.1	950.9	949.7	950.9	952.1	953.3	954.5	955.3	955.5	955.7
145°	1004.3	1003.4	1002.5	1001.6	1002.5	1003.4	1004.3	1005.2	1005.8	1006.0	1006.3
147.5°	1052.0	1050.6	1049.2	1047.8	1049.2	1050.6	1052.0	1053.3	1054.0	1054.0	1054.0
150°	1081.5	1080.1	1078.7	1077.3	1078.7	1080.1	1081.5	1082.8	1083.5	1083.5	1083.5
152.5°	1109.5	1108.3	1107.1	1106.0	1107.1	1108.3	1109.5	1110.8	1111.2	1110.8	1110.3
155°	1149.6	1148.0	1146.5	1144.9	1146.5	1148.0	1149.6	1151.2	1151.5	1150.6	1149.7
157.5°	1184.1	1182.9	1181.5	1180.2	1181.5	1182.9	1184.1	1185.4	1185.5	1184.6	1183.6
160°	1205.9	1205.0	1204.1	1203.2	1204.1	1205.0	1205.9	1206.8	1206.7	1205.6	1204.5
162.5°	1224.8	1223.2	1221.8	1220.3	1221.8	1223.2	1224.8	1226.2	1226.4	1225.2	1224.1
165°	1249.9	1248.3	1246.7	1245.2	1246.7	1248.3	1249.9	1251.5	1251.6	1250.2	1248.9
167.5°	1270.4	1269.0	1267.6	1266.2	1267.6	1269.0	1270.4	1271.8	1271.8	1270.4	1269.0
170°	1281.6	1280.0	1278.4	1276.9	1278.4	1280.0	1281.6	1283.2	1283.2	1281.6	1280.0
172.5°	1289.8	1288.2	1286.6	1285.1	1286.6	1288.2	1289.8	1291.4	1291.5	1290.1	1288.7
175°	1299.0	1297.4	1295.9	1294.2	1295.9	1297.4	1299.0	1300.6	1300.7	1299.4	1298.0
177.5°	1302.9	1301.7	1300.4	1299.2	1300.4	1301.7	1302.9	1304.2	1304.3	1303.2	1302.1
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1570.8	1570.8	1582.9	1590.5	1600.0	1606.4	1610.8	1615.3	1623.0	1633.1	1644.5
5°	1481.0	1484.2	1501.7	1519.1	1535.8	1550.0	1562.0	1576.2	1593.7	1615.1	1638.9
7.5°	1394.0	1406.2	1423.8	1445.1	1468.4	1489.2	1510.4	1533.9	1558.4	1590.0	1623.4
10°	1338.2	1351.6	1373.0	1400.1	1424.6	1449.3	1475.4	1500.9	1531.8	1569.1	1611.9
12.5°	1289.3	1302.1	1324.1	1353.7	1377.1	1404.2	1434.2	1467.2	1502.0	1546.9	1595.5
15°	1221.4	1236.6	1263.5	1277.8	1313.5	1346.0	1373.8	1421.5	1465.9	1512.0	1568.3
17.5°	1165.9	1174.3	1196.2	1222.7	1249.4	1285.9	1322.2	1361.9	1406.2	1462.6	1533.1
20°	1127.8	1135.0	1158.7	1186.6	1215.1	1248.5	1281.0	1320.7	1370.7	1430.2	1506.4
22.5°	1099.2	1107.0	1122.6	1152.3	1178.9	1206.6	1239.1	1286.4	1339.6	1397.9	1480.4
25°	1057.9	1062.7	1073.1	1096.8	1120.6	1151.7	1180.2	1224.7	1279.4	1347.7	1430.2
27.5°	1018.8	1023.4	1032.0	1049.0	1071.3	1096.4	1127.5	1165.3	1220.8	1294.9	1382.6
30°	995.2	996.0	1004.0	1019.9	1038.9	1059.6	1088.1	1130.9	1183.4	1258.8	1350.8
32.5°	974.9	971.9	977.3	989.4	1007.8	1028.4	1052.0	1094.2	1144.7	1218.8	1313.3
35°	940.5	938.9	936.5	946.8	962.7	978.6	999.3	1031.0	1088.1	1157.2	1256.4
37.5°	905.4	901.6	897.4	902.1	914.4	931.0	948.9	977.1	1026.4	1102.4	1197.3
40°	879.4	876.3	873.8	872.2	883.3	899.2	912.7	939.7	985.7	1057.9	1151.7
42.5°	850.8	848.9	845.9	843.6	852.9	864.9	879.1	902.9	948.9	1016.7	1105.3
45°	804.8	803.2	801.6	800.0	805.6	816.7	827.8	845.3	884.9	950.8	1031.0
47.5°	753.6	751.4	752.0	749.5	755.0	762.4	770.2	788.9	827.0	880.2	938.8
50°	716.7	715.9	715.9	715.9	717.5	726.2	733.4	747.6	782.5	835.8	877.8
52.5°	681.8	678.4	678.4	679.7	682.6	688.1	692.8	708.3	738.7	782.4	820.6
55°	627.0	620.7	619.0	620.7	623.0	627.8	632.6	645.3	671.5	704.0	726.2
57.5°	566.3	562.9	560.8	561.1	562.4	566.2	569.9	583.7	604.3	621.3	635.6
60°	523.8	525.4	518.3	519.9	519.9	523.0	528.6	537.3	554.8	566.6	581.0
62.5°	483.8	481.6	479.6	477.4	477.4	478.6	486.0	492.9	507.8	514.0	525.1
65°	421.4	421.4	416.7	418.3	419.1	413.5	417.5	425.5	434.9	437.3	447.7
67.5°	358.3	356.1	353.4	350.9	350.9	350.5	352.5	356.5	363.7	364.5	372.4
70°	315.1	313.5	312.8	310.3	307.2	311.1	308.7	312.8	316.7	317.5	322.2
72.5°	273.2	271.6	270.1	267.8	266.5	266.0	266.2	270.8	273.5	272.4	277.8
75°	213.5	211.9	210.4	206.3	206.3	204.0	204.8	207.9	211.2	208.7	213.5
77.5°	156.8	151.9	151.6	152.7	150.0	150.5	149.6	149.1	150.5	150.7	154.9
80°	120.7	115.1	116.6	115.8	115.1	114.3	112.7	113.5	114.3	115.1	117.4
82.5°	86.9	86.5	84.9	84.7	84.0	81.9	81.0	82.4	83.2	82.7	84.4
85°	44.4	42.1	43.6	42.8	43.6	42.8	40.5	40.5	42.1	41.3	42.8
87.5°	18.4	18.3	17.1	17.1	15.9	15.9	14.7	14.9	15.0	14.6	15.5
90°	25.4	24.5	21.6	18.7	15.7	12.7	10.1	7.9	5.6	3.3	1.0
92.5°	40.0	39.3	37.6	36.0	34.2	32.5	30.9	29.4	27.9	26.3	24.7
95°	76.6	75.7	73.9	72.1	70.3	68.5	66.8	65.1	63.5	61.9	60.4
97.5°	119.6	118.5	117.1	115.8	114.5	113.2	112.0	110.8	109.6	108.4	107.2
100°	151.1	150.4	149.3	148.1	147.0	145.8	144.6	143.2	141.9	140.5	139.2
102.5°	187.1	186.4	184.9	183.4	181.9	180.4	179.3	178.4	177.6	176.8	176.0
105°	241.5	241.5	239.4	237.3	235.3	233.3	232.1	231.6	231.2	230.7	230.2
107.5°	298.8	298.1	297.3	296.5	295.7	294.9	294.3	294.1	293.8	293.5	293.3
110°	337.5	336.6	336.2	335.7	335.3	334.8	334.4	333.9	333.5	333.0	332.5



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	376.2	375.1	375.0	374.9	374.8	374.7	374.6	374.3	374.0	373.8	373.4
115°	436.1	435.9	436.3	436.8	437.2	437.7	437.6	436.9	436.2	435.5	434.8
117.5°	495.9	496.0	496.6	497.2	497.8	498.4	498.5	498.0	497.6	497.1	496.7
120°	535.8	536.1	537.2	538.4	539.5	540.7	540.6	539.2	537.9	536.4	535.1
122.5°	576.4	577.0	577.6	578.2	578.9	579.4	579.2	578.1	577.2	576.2	575.2
125°	636.5	637.4	637.8	638.3	638.7	639.2	639.1	638.4	637.7	637.0	636.4
127.5°	695.9	697.1	697.6	698.1	698.6	699.1	698.6	697.2	695.8	694.3	692.9
130°	734.7	735.6	736.3	737.0	737.7	738.3	737.8	736.0	734.2	732.4	730.5
132.5°	773.0	774.1	774.6	775.1	775.6	776.1	775.5	773.7	771.7	769.9	768.1
135°	829.8	830.7	831.0	831.2	831.4	831.6	831.1	829.7	828.4	827.0	825.7
137.5°	885.7	886.7	886.1	885.4	884.8	884.2	883.4	882.2	881.1	880.0	878.9
140°	921.6	921.8	921.6	921.4	921.1	920.9	920.2	919.1	918.0	916.9	915.6
142.5°	955.9	956.2	955.8	955.3	954.9	954.5	953.8	952.6	951.5	950.4	949.3
145°	1006.5	1006.7	1006.0	1005.4	1004.7	1004.0	1003.4	1003.0	1002.5	1002.1	1001.6
147.5°	1054.0	1054.0	1053.4	1052.8	1052.1	1051.5	1050.8	1050.0	1049.0	1048.2	1047.4
150°	1083.5	1083.5	1083.0	1082.6	1082.1	1081.7	1081.2	1080.8	1080.3	1079.8	1079.3
152.5°	1110.0	1109.6	1109.4	1109.1	1108.8	1108.5	1108.1	1107.5	1106.8	1106.2	1105.6
155°	1148.8	1147.9	1147.7	1147.5	1147.2	1147.0	1146.9	1146.9	1146.9	1146.9	1146.9
157.5°	1182.7	1181.6	1181.5	1181.3	1181.1	1180.9	1181.0	1181.2	1181.5	1181.8	1182.1
160°	1203.3	1202.1	1202.1	1202.1	1202.1	1202.1	1202.3	1202.9	1203.3	1203.8	1204.2
162.5°	1222.9	1221.8	1221.6	1221.4	1221.2	1221.0	1221.3	1221.9	1222.5	1223.2	1223.9
165°	1247.5	1246.2	1246.2	1246.2	1246.2	1246.2	1246.5	1247.2	1247.9	1248.5	1249.2
167.5°	1267.6	1266.2	1266.1	1265.9	1265.7	1265.5	1265.9	1266.8	1267.7	1268.6	1269.5
170°	1278.4	1276.9	1276.9	1276.9	1276.9	1276.9	1277.3	1278.2	1279.1	1280.0	1280.9
172.5°	1287.3	1285.9	1285.9	1285.9	1285.9	1285.9	1286.3	1287.2	1288.1	1289.0	1289.9
175°	1296.7	1295.3	1295.3	1295.3	1295.3	1295.3	1295.8	1296.7	1297.6	1298.5	1299.4
177.5°	1301.0	1300.0	1300.0	1300.0	1300.0	1300.0	1300.3	1301.0	1301.8	1302.5	1303.2
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1648.3	1651.4	1662.2	1669.9	1678.8	1683.8	1688.9	1692.7	1697.8	1699.1	1717.5
5°	1655.6	1671.5	1699.3	1719.9	1745.2	1773.0	1792.1	1800.9	1823.8	1842.9	1881.0
7.5°	1653.6	1687.4	1729.3	1772.7	1819.4	1862.6	1900.1	1944.5	1976.1	2023.6	2070.4
10°	1651.6	1696.9	1750.8	1806.4	1871.5	1931.8	1985.8	2046.1	2096.1	2161.9	2218.3
12.5°	1645.9	1700.7	1775.6	1841.3	1920.4	2003.6	2083.6	2161.0	2205.3	2315.0	2366.9
15°	1631.8	1696.9	1790.5	1890.6	1999.2	2097.7	2199.3	2280.3	2411.2	2507.2	2568.3
17.5°	1604.8	1696.0	1807.1	1927.6	2059.9	2189.6	2304.7	2427.5	2566.5	2682.6	2806.4
20°	1592.2	1692.1	1815.9	1949.2	2086.6	2233.4	2364.4	2511.9	2663.6	2777.8	2936.6
22.5°	1568.6	1681.9	1815.3	1963.9	2110.7	2262.6	2415.8	2564.7	2739.8	2897.2	3048.4
25°	1530.2	1657.2	1795.3	1961.2	2133.4	2285.8	2469.1	2666.8	2849.3	3051.7	3202.5
27.5°	1489.9	1625.5	1763.8	1918.1	2103.3	2284.2	2514.9	2738.1	2961.3	3136.1	3247.7
30°	1458.8	1590.5	1733.4	1889.0	2072.2	2287.3	2545.3	2788.9	3006.5	3156.4	3219.1
32.5°	1425.1	1558.7	1685.2	1848.4	2043.7	2285.4	2564.4	2818.8	3009.0	3108.9	3096.7
35°	1372.3	1484.2	1607.2	1764.3	1994.5	2271.5	2575.5	2821.5	2938.2	2916.8	2754.8
37.5°	1296.1	1390.2	1511.4	1683.3	1937.3	2242.1	2553.2	2737.8	2730.3	2555.8	2321.2
40°	1248.5	1328.6	1445.3	1626.3	1892.9	2223.1	2518.3	2638.2	2536.6	2292.9	2012.0
42.5°	1186.2	1260.0	1376.7	1562.8	1844.0	2184.3	2451.6	2486.4	2287.6	2007.2	1749.7
45°	1089.7	1154.8	1275.5	1467.5	1770.7	2100.0	2289.0	2204.0	1936.5	1646.9	1450.9
47.5°	986.0	1053.7	1169.7	1367.1	1664.7	1973.3	2063.3	1882.6	1608.0	1373.0	1193.1
50°	920.7	985.7	1099.2	1298.5	1592.9	1869.1	1906.4	1673.0	1420.7	1214.4	1066.7
52.5°	854.6	915.9	1027.5	1227.3	1509.1	1748.5	1725.5	1487.6	1255.6	1079.7	963.8
55°	756.4	814.4	920.7	1107.9	1364.3	1554.0	1470.7	1243.6	1051.6	915.1	827.0
57.5°	668.4	724.0	815.8	984.9	1207.8	1338.2	1232.1	1040.9	888.1	783.0	717.3
60°	608.7	657.9	745.3	902.4	1096.1	1195.3	1090.6	921.5	792.8	708.7	650.1
62.5°	552.2	595.1	676.0	818.6	986.8	1070.2	964.1	821.1	711.7	637.0	587.1
65°	466.7	505.5	577.0	688.1	826.2	881.8	790.5	674.6	589.7	534.1	500.8
67.5°	388.6	421.6	483.3	570.8	672.4	712.9	643.4	553.7	489.7	445.0	418.6
70°	336.5	365.1	413.5	488.9	581.0	611.9	546.8	473.0	426.2	390.5	365.9
72.5°	292.7	313.7	357.6	415.9	492.7	517.4	471.9	407.0	363.3	336.5	317.0
75°	223.0	240.4	269.0	315.9	369.1	383.3	349.2	308.7	279.3	260.3	245.2
77.5°	160.8	173.7	194.3	223.2	260.0	272.9	251.3	224.3	202.9	190.0	181.6
80°	121.4	131.8	149.3	173.0	195.2	202.4	189.7	169.1	154.0	146.8	139.7
82.5°	89.7	95.5	106.0	122.2	137.4	145.9	135.1	122.7	114.6	108.1	105.4
85°	45.2	48.4	53.2	59.5	69.1	72.2	68.3	65.0	60.3	56.4	56.4
87.5°	17.2	17.7	20.0	21.7	24.7	27.3	27.3	26.6	26.5	26.1	25.5
90°	3.3	5.6	7.9	10.1	12.7	15.7	18.7	21.6	24.5	25.4	26.4
92.5°	26.3	27.9	29.4	30.9	32.5	34.2	36.0	37.6	39.3	40.0	40.7
95°	61.9	63.5	65.1	66.8	68.5	70.3	72.1	73.9	75.7	76.6	77.6
97.5°	108.4	109.6	110.8	112.0	113.2	114.5	115.8	117.1	118.5	119.6	120.6
100°	140.5	141.9	143.2	144.6	145.8	147.0	148.1	149.3	150.4	151.1	151.8
102.5°	176.8	177.6	178.4	179.3	180.4	181.9	183.4	184.9	186.4	187.1	187.7
105°	230.7	231.2	231.6	232.1	233.3	235.3	237.3	239.4	241.5	241.5	241.5
107.5°	293.5	293.8	294.1	294.3	294.9	295.7	296.5	297.3	298.1	298.8	299.6
110°	333.0	333.5	333.9	334.4	334.8	335.3	335.7	336.2	336.6	337.5	338.4



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	373.8	374.0	374.3	374.6	374.7	374.8	374.9	375.0	375.1	376.2	377.3
115°	435.5	436.2	436.9	437.6	437.7	437.2	436.8	436.3	435.9	436.1	436.3
117.5°	497.1	497.6	498.0	498.5	498.4	497.8	497.2	496.6	496.0	495.9	495.9
120°	536.4	537.9	539.2	540.6	540.7	539.5	538.4	537.2	536.1	535.8	535.6
122.5°	576.2	577.2	578.1	579.2	579.4	578.9	578.2	577.6	577.0	576.4	575.8
125°	637.0	637.7	638.4	639.1	639.2	638.7	638.3	637.8	637.4	636.5	635.6
127.5°	694.3	695.8	697.2	698.6	699.1	698.6	698.1	697.6	697.1	695.9	694.6
130°	732.4	734.2	736.0	737.8	738.3	737.7	737.0	736.3	735.6	734.7	733.8
132.5°	769.9	771.7	773.7	775.5	776.1	775.6	775.1	774.6	774.1	773.0	771.9
135°	827.0	828.4	829.7	831.1	831.6	831.4	831.2	831.0	830.7	829.8	828.9
137.5°	880.0	881.1	882.2	883.4	884.2	884.8	885.4	886.1	886.7	885.7	884.7
140°	916.9	918.0	919.1	920.2	920.9	921.1	921.4	921.6	921.8	921.6	921.4
142.5°	950.4	951.5	952.6	953.8	954.5	954.9	955.3	955.8	956.2	955.9	955.7
145°	1002.1	1002.5	1003.0	1003.4	1004.0	1004.7	1005.4	1006.0	1006.7	1006.5	1006.3
147.5°	1048.2	1049.0	1050.0	1050.8	1051.5	1052.1	1052.8	1053.4	1054.0	1054.0	1054.0
150°	1079.8	1080.3	1080.8	1081.2	1081.7	1082.1	1082.6	1083.0	1083.5	1083.5	1083.5
152.5°	1106.2	1106.8	1107.5	1108.1	1108.5	1108.8	1109.1	1109.4	1109.6	1110.0	1110.3
155°	1146.9	1146.9	1146.9	1146.9	1147.0	1147.2	1147.5	1147.7	1147.9	1148.8	1149.7
157.5°	1181.8	1181.5	1181.2	1181.0	1180.9	1181.1	1181.3	1181.5	1181.6	1182.7	1183.6
160°	1203.8	1203.3	1202.9	1202.3	1202.1	1202.1	1202.1	1202.1	1202.1	1203.3	1204.5
162.5°	1223.2	1222.5	1221.9	1221.3	1221.0	1221.2	1221.4	1221.6	1221.8	1222.9	1224.1
165°	1248.5	1247.9	1247.2	1246.5	1246.2	1246.2	1246.2	1246.2	1246.2	1247.5	1248.9
167.5°	1268.6	1267.7	1266.8	1265.9	1265.5	1265.7	1265.9	1266.1	1266.2	1267.6	1269.0
170°	1280.0	1279.1	1278.2	1277.3	1276.9	1276.9	1276.9	1276.9	1276.9	1278.4	1280.0
172.5°	1289.0	1288.1	1287.2	1286.3	1285.9	1285.9	1285.9	1285.9	1285.9	1287.3	1288.7
175°	1298.5	1297.6	1296.7	1295.8	1295.3	1295.3	1295.3	1295.3	1295.3	1296.7	1298.0
177.5°	1302.5	1301.8	1301.0	1300.3	1300.0	1300.0	1300.0	1300.0	1300.0	1301.0	1302.1
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1723.8	1724.4	1731.5	1736.6	1734.0	1737.2	1738.5
5°	1883.4	1912.0	1927.0	1938.1	1938.9	1939.7	1946.1
7.5°	2109.6	2140.2	2162.6	2196.6	2206.8	2218.3	2214.9
10°	2274.7	2319.9	2358.8	2379.4	2401.7	2434.2	2408.0
12.5°	2428.9	2509.1	2568.3	2600.4	2621.3	2627.9	2615.0
15°	2683.4	2788.1	2844.5	2843.0	2914.4	2945.4	2896.9
17.5°	2916.8	3013.4	3090.9	3130.6	3190.1	3203.3	3197.2
20°	3059.6	3165.2	3225.5	3293.8	3324.7	3352.4	3357.2
22.5°	3182.8	3277.5	3342.4	3399.1	3425.1	3438.2	3446.2
25°	3309.6	3384.3	3423.1	3442.9	3450.1	3448.5	3438.2
27.5°	3300.8	3306.6	3263.8	3221.7	3184.1	3141.7	3127.0
30°	3215.2	3148.5	3029.5	2962.0	2862.8	2784.2	2815.9
32.5°	2989.8	2857.1	2723.4	2576.0	2453.9	2419.1	2384.2
35°	2551.6	2318.3	2181.8	2023.1	1959.5	1896.1	1852.4
37.5°	2064.4	1883.9	1721.9	1618.1	1554.5	1514.3	1492.8
40°	1784.9	1622.2	1488.9	1404.8	1356.3	1311.1	1304.8
42.5°	1562.2	1410.9	1310.5	1243.5	1197.0	1177.8	1163.9
45°	1279.4	1173.9	1106.4	1058.7	1027.8	1015.9	1000.1
47.5°	1082.9	1008.2	957.7	925.2	901.9	893.0	891.8
50°	973.0	911.1	873.8	848.4	830.2	827.0	814.4
52.5°	890.5	836.9	807.8	785.6	772.4	763.6	759.7
55°	773.1	737.3	711.1	698.4	688.1	679.3	679.3
57.5°	676.4	646.5	629.2	618.4	615.2	609.0	605.1
60°	616.7	591.3	577.8	568.3	561.9	562.7	555.5
62.5°	558.3	541.8	528.9	519.4	511.8	511.9	512.4
65°	475.4	462.7	453.2	450.0	445.2	439.7	441.3
67.5°	402.8	390.9	383.5	378.1	376.5	373.5	378.1
70°	350.8	342.0	336.5	331.7	330.1	330.9	335.0
72.5°	303.2	297.0	293.4	291.1	287.6	287.8	290.4
75°	238.1	233.4	230.1	227.8	227.0	227.0	227.0
77.5°	174.9	173.8	172.4	168.8	169.1	170.0	170.2
80°	138.1	135.7	134.9	133.3	131.0	129.4	133.3
82.5°	103.2	100.8	100.0	99.7	96.0	95.7	99.1
85°	55.5	53.2	53.9	53.2	53.2	52.4	52.4
87.5°	25.1	24.6	24.2	24.9	24.3	23.8	25.1
90°	27.3	28.2	28.9	29.3	29.8	30.2	30.7
92.5°	41.5	42.2	42.4	42.1	41.9	41.6	41.3
95°	78.5	79.4	79.8	79.8	79.8	79.8	79.8
97.5°	121.6	122.7	123.1	123.0	123.0	122.9	122.8
100°	152.5	153.1	153.7	154.1	154.6	155.0	155.5
102.5°	188.4	189.1	189.5	189.3	189.2	189.1	189.0
105°	241.5	241.5	241.7	242.2	242.6	243.1	243.5
107.5°	300.3	301.0	301.2	301.0	300.7	300.4	300.1
110°	339.3	340.2	340.4	340.0	339.5	339.1	338.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	378.3	379.4	379.9	379.8	379.7	379.7	379.6
115°	436.6	436.8	436.8	436.6	436.3	436.1	435.9
117.5°	495.8	495.8	495.4	494.8	494.2	493.5	492.9
120°	535.4	535.2	534.8	534.4	533.9	533.5	533.0
122.5°	575.2	574.7	574.0	573.4	572.8	572.2	571.5
125°	634.7	633.8	632.9	632.0	631.1	630.2	629.2
127.5°	693.4	692.1	690.8	689.8	688.8	687.7	686.7
130°	732.9	732.0	730.7	729.1	727.5	726.0	724.4
132.5°	770.8	769.7	768.6	767.3	766.1	764.9	763.7
135°	828.0	827.1	826.5	826.0	825.6	825.1	824.7
137.5°	883.7	882.8	881.9	881.0	880.2	879.3	878.5
140°	921.1	920.9	920.0	918.4	916.9	915.2	913.6
142.5°	955.5	955.3	954.5	953.3	952.1	950.9	949.7
145°	1006.0	1005.8	1005.2	1004.3	1003.4	1002.5	1001.6
147.5°	1054.0	1054.0	1053.3	1052.0	1050.6	1049.2	1047.8
150°	1083.5	1083.5	1082.8	1081.5	1080.1	1078.7	1077.3
152.5°	1110.8	1111.2	1110.8	1109.5	1108.3	1107.1	1106.0
155°	1150.6	1151.5	1151.2	1149.6	1148.0	1146.5	1144.9
157.5°	1184.6	1185.5	1185.4	1184.1	1182.9	1181.5	1180.2
160°	1205.6	1206.7	1206.8	1205.9	1205.0	1204.1	1203.2
162.5°	1225.2	1226.4	1226.2	1224.8	1223.2	1221.8	1220.3
165°	1250.2	1251.6	1251.5	1249.9	1248.3	1246.7	1245.2
167.5°	1270.4	1271.8	1271.8	1270.4	1269.0	1267.6	1266.2
170°	1281.6	1283.2	1283.2	1281.6	1280.0	1278.4	1276.9
172.5°	1290.1	1291.5	1291.4	1289.8	1288.2	1286.6	1285.1
175°	1299.4	1300.7	1300.6	1299.0	1297.4	1295.9	1294.2
177.5°	1303.2	1304.3	1304.2	1302.9	1301.7	1300.4	1299.2
180°	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4	1302.4

(END OF REPORT)