

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: P333011-840

Luminaire Tested: **SA4XXRDIP-C1195D1205U840-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P333011-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXRDIP-C1195D1205U840-4F0-1E-UDD-A4  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

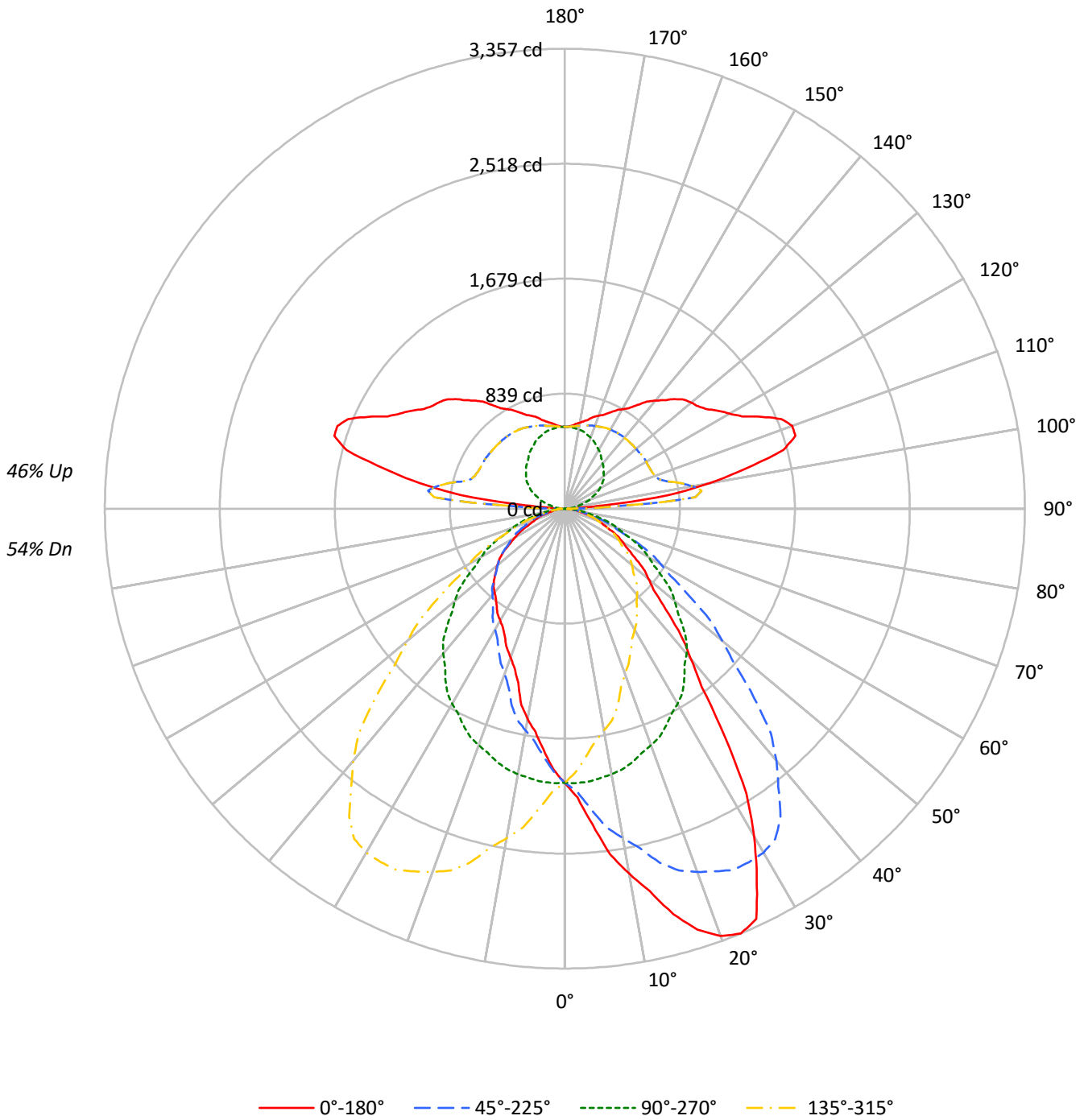
Lumens per Lamp: N/A  
Luminaire Lumens: 9405.9 lumens  
Efficiency: N/A  
Efficacy: 131.2 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 71.7  
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	100	100	100	100	85	85	85	72	72	72	60	60	60	54
1	99	95	91	88	92	88	85	82	76	73	71	64	63	61	53	52	51	46
2	91	84	78	73	84	78	73	68	67	63	60	57	54	52	48	46	44	40
3	83	74	67	61	77	69	63	58	59	55	51	51	47	44	43	40	38	34
4	76	66	58	52	70	61	54	49	53	48	44	45	42	38	38	35	33	30
5	70	59	51	45	65	55	48	43	48	42	38	41	37	33	35	32	29	26
6	65	53	45	39	60	49	42	37	43	38	33	37	33	30	32	28	26	23
7	60	48	40	34	56	45	38	33	39	34	30	34	30	26	29	26	23	21
8	56	44	36	31	52	41	34	29	36	30	26	31	27	24	27	23	21	18
9	52	40	32	27	48	37	31	26	33	27	24	29	24	21	25	21	19	17
10	49	37	29	25	45	34	28	24	30	25	21	27	22	19	23	20	17	15

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

	0°	90°	180°	270°
0°	16156	16156	16156	16156
5°	18739	16204	14323	16204
10°	22168	16133	12782	16133
15°	25607	15984	10984	15984
20°	28511	15779	9933	15779
25°	29432	15577	9222	15577
30°	25765	15333	8793	15333
35°	20056	14970	8535	14970
40°	15039	14556	8395	14556
45°	11875	13891	8322	13891
50°	10025	13123	8081	13123
55°	8739	12279	7648	12279
60°	7863	11404	6770	11404
65°	6930	10457	5822	10457
70°	6243	9477	5254	9477
75°	5231	8400	4476	8400
80°	4421	7159	4198	7159
85°	3733	5604	3733	5604



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.9	2.1
10°-20°	584.9	6.2
20°-30°	914.8	9.7
30°-40°	1017.0	10.8
40°-50°	902.3	9.6
50°-60°	703.1	7.5
60°-70°	460.3	4.9
70°-80°	226.4	2.4
80°-90°	59.2	0.6
90°-100°	431.4	4.6
100°-110°	897.9	9.5
110°-120°	804.2	8.6
120°-130°	676.5	7.2
130°-140°	564.1	6.0
140°-150°	430.9	4.6
150°-160°	302.9	3.2
160°-170°	178.2	1.9
170°-180°	58.0	0.6
0°-30°	1693.6	18.0
0°-40°	2710.6	28.8
0°-60°	4316.0	45.9
0°-90°	5061.9	53.8
90°-120°	2133.5	22.7
90°-150°	3805.0	40.5
90°-180°	4344.0	46.2
0°-180°	9405.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2001	2001	2001	2001	2001	
5°	2312	2000	1767	2000	2312	234
15°	3064	1912	1314	1912	3064	871
25°	3304	1749	1035	1749	3304	1466
35°	2035	1519	866	1519	2035	1276
45°	1040	1217	729	1217	1040	824
55°	621	872	543	872	621	565
65°	363	547	305	547	363	365
75°	168	269	144	269	168	185
85°	40	60	40	60	40	46
90°	25	1	25	1	25	22
95°	286	39	286	39	286	444
105°	1651	137	1651	137	1651	1632
115°	1585	242	1585	242	1585	1574
125°	1265	337	1265	337	1265	1149
135°	1131	400	1131	400	1131	873
145°	924	461	924	461	924	585
155°	773	524	773	524	773	361
165°	675	572	675	572	675	193
175°	608	596	608	596	608	59
180°	597	597	597	597	597	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2110.8	2116.7	2110.8	2110.2	2103.8	2101.8	2099.2	2090.8	2075.4	2066.4	2068.3
5°	2312.4	2332.6	2321.3	2319.7	2302.0	2284.2	2272.9	2247.2	2219.7	2201.2	2185.9
7.5°	2545.6	2557.2	2550.1	2538.8	2510.1	2493.9	2467.7	2433.7	2384.5	2346.9	2312.6
10°	2704.3	2713.9	2710.8	2689.8	2668.8	2626.1	2601.9	2554.4	2492.2	2443.1	2397.1
12.5°	2860.3	2870.7	2842.4	2843.3	2803.6	2770.0	2731.6	2671.7	2600.0	2536.6	2479.0
15°	3063.9	3051.0	3051.0	3034.8	2990.5	2943.8	2904.3	2841.4	2751.1	2675.2	2595.5
17.5°	3223.2	3227.7	3221.1	3183.1	3148.3	3099.9	3027.5	2954.1	2870.2	2768.4	2686.8
20°	3318.7	3318.7	3311.4	3285.6	3240.5	3188.9	3110.7	3030.8	2924.4	2822.0	2730.1
22.5°	3357.4	3359.9	3351.4	3330.1	3289.5	3239.1	3172.6	3091.5	2981.8	2866.5	2752.7
25°	3304.2	3319.5	3321.0	3315.5	3303.4	3272.7	3215.5	3132.4	3034.0	2909.1	2786.5
27.5°	3033.5	3052.9	3069.9	3097.8	3134.8	3154.2	3156.7	3114.5	3028.7	2908.4	2785.1
30°	2763.9	2780.1	2832.5	2901.0	2954.3	3002.6	3044.5	3055.9	3007.5	2899.4	2769.6
32.5°	2464.7	2486.6	2539.0	2612.7	2701.4	2783.3	2877.5	2925.5	2924.3	2859.4	2739.3
35°	2035.1	2051.2	2099.6	2177.0	2283.4	2405.2	2554.4	2670.4	2749.5	2743.8	2670.4
37.5°	1641.2	1659.5	1708.4	1772.5	1875.7	2026.5	2170.8	2330.8	2476.9	2559.0	2534.5
40°	1427.1	1427.9	1475.5	1541.7	1638.4	1769.8	1927.0	2104.4	2267.2	2400.3	2426.1
42.5°	1258.1	1258.3	1289.7	1361.0	1430.7	1554.4	1704.5	1880.6	2071.2	2224.8	2293.2
45°	1040.1	1047.3	1073.2	1115.9	1170.7	1275.6	1395.6	1559.3	1773.0	1955.2	2068.9
47.5°	880.8	891.4	907.9	942.7	986.4	1056.2	1155.6	1302.6	1476.4	1676.9	1838.7
50°	798.2	799.8	820.8	840.1	878.1	933.7	1020.8	1143.3	1302.9	1495.6	1675.5
52.5°	727.3	726.9	739.5	764.1	794.9	838.2	908.5	1020.1	1161.6	1334.4	1520.0
55°	620.9	624.9	634.5	653.9	677.3	707.9	763.6	847.4	958.7	1106.2	1274.8
57.5°	539.9	542.0	549.6	557.7	579.3	601.5	643.3	701.5	795.4	916.1	1073.2
60°	487.0	487.8	490.2	502.3	519.3	540.2	568.5	617.6	696.6	807.1	931.3
62.5°	435.4	436.9	440.6	449.4	462.5	477.0	506.5	546.0	611.5	705.8	817.7
65°	362.8	363.7	369.3	372.5	382.9	395.9	417.7	444.2	489.4	568.5	653.1
67.5°	303.2	303.2	303.5	307.8	315.1	323.7	336.7	358.0	392.0	440.6	515.2
70°	264.5	264.5	266.1	268.5	272.6	279.7	287.0	303.2	328.2	367.7	425.0
72.5°	228.3	228.9	230.6	231.1	233.2	239.1	244.5	254.8	273.4	303.2	349.4
75°	167.7	170.2	174.2	177.4	181.4	180.6	186.2	192.7	198.3	216.1	242.7
77.5°	124.8	123.5	124.0	126.7	127.2	128.1	132.1	137.0	141.3	149.7	159.2
80°	95.1	95.1	97.6	98.4	97.6	98.4	102.4	104.8	106.4	109.7	118.6
82.5°	71.9	73.2	72.4	73.2	73.7	74.5	77.9	78.4	80.0	81.3	85.0
85°	40.3	41.1	41.9	40.3	40.3	40.3	41.9	42.7	44.3	43.5	45.1
87.5°	19.1	18.5	19.4	19.1	19.5	18.9	19.3	20.4	18.8	19.7	19.2
90°	24.6	24.6	25.9	24.6	23.4	23.4	22.3	21.1	20.0	21.1	18.8
92.5°	90.4	90.4	94.3	100.7	114.5	138.0	173.4	230.5	310.0	372.2	325.8
95°	286.3	301.5	322.8	359.1	416.6	530.4	687.6	869.5	983.4	956.3	721.6
97.5°	765.4	789.7	825.0	895.5	979.9	1102.4	1217.1	1284.8	1235.5	1007.3	675.4
100°	1076.1	1085.5	1120.6	1192.2	1294.3	1381.2	1438.7	1415.2	1243.9	943.4	612.6
102.5°	1346.5	1353.9	1391.0	1442.9	1505.5	1541.7	1525.0	1408.7	1173.5	863.6	570.3
105°	1651.0	1658.1	1674.6	1683.9	1681.5	1633.5	1517.3	1314.2	1045.5	769.8	533.9
107.5°	1764.2	1761.1	1749.4	1722.6	1664.7	1560.0	1396.4	1180.2	942.3	717.2	527.4
110°	1766.1	1755.5	1734.3	1685.1	1601.7	1472.7	1302.5	1099.5	890.7	699.4	529.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1710.7	1693.5	1664.0	1604.4	1509.7	1380.7	1219.9	1040.4	861.5	690.9	534.8
115°	1585.4	1576.0	1538.4	1468.0	1375.3	1262.6	1125.4	981.0	834.4	686.5	545.6
117.5°	1458.3	1451.1	1413.1	1353.9	1274.9	1179.3	1071.4	951.9	822.1	685.3	557.1
120°	1387.0	1374.1	1343.6	1292.0	1225.1	1141.8	1047.9	938.8	815.6	685.3	565.6
122.5°	1330.7	1317.8	1292.0	1247.9	1191.3	1118.3	1032.9	927.5	808.1	684.4	574.1
125°	1265.0	1258.0	1235.7	1201.6	1154.7	1090.1	1009.2	908.3	795.6	683.0	586.7
127.5°	1226.5	1219.5	1200.7	1170.4	1123.3	1062.0	981.3	884.7	778.9	680.3	596.8
130°	1204.0	1196.9	1178.1	1148.8	1100.8	1038.5	958.8	866.1	768.6	679.4	604.3
132.5°	1178.6	1171.5	1153.8	1120.6	1073.5	1011.3	933.4	846.3	759.2	678.5	610.9
135°	1131.3	1124.2	1105.4	1072.6	1025.6	966.9	895.3	819.1	745.2	677.1	620.8
137.5°	1072.6	1064.1	1048.6	1016.2	972.3	919.3	859.0	794.5	733.0	676.8	626.6
140°	1030.3	1020.9	1004.5	978.7	937.6	888.3	835.5	780.3	726.4	675.9	631.4
142.5°	985.2	978.7	964.1	940.2	903.8	861.1	815.8	767.2	720.7	675.9	635.1
145°	923.5	917.7	905.9	886.0	856.7	823.7	788.6	748.7	711.1	673.6	637.2
147.5°	868.8	866.8	857.8	840.7	819.1	793.2	765.1	733.5	702.5	669.3	638.3
150°	837.9	836.7	829.6	814.4	795.6	774.5	751.0	724.1	695.9	666.5	638.3
152.5°	809.7	808.5	804.3	791.8	775.9	758.5	736.9	713.7	688.3	661.9	636.5
155°	773.4	773.4	769.8	760.4	748.7	734.6	717.0	698.2	677.1	654.8	633.7
157.5°	741.4	741.4	739.3	732.3	723.4	712.1	697.3	681.6	665.6	647.5	630.7
160°	721.6	721.6	720.5	713.5	706.4	697.0	684.1	671.3	657.1	641.9	627.8
162.5°	702.9	703.9	702.7	695.6	690.4	682.1	672.0	660.9	649.6	636.2	625.0
165°	674.8	675.9	677.1	672.4	667.7	661.9	653.6	646.6	637.2	627.8	619.6
167.5°	652.5	653.4	653.6	650.6	648.2	644.7	638.1	632.8	625.9	619.4	614.0
170°	638.3	638.3	639.5	638.3	636.0	632.5	627.8	624.3	618.4	613.7	610.2
172.5°	624.3	626.1	627.3	626.1	624.7	622.2	619.4	616.7	611.9	608.0	606.4
175°	607.8	610.2	612.6	610.2	610.2	610.2	607.8	606.7	604.3	602.0	602.0
177.5°	598.2	600.1	602.0	601.1	602.0	601.1	601.1	600.1	599.2	598.2	598.2
180°	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2061.8	2052.9	2048.3	2038.0	2025.7	2019.2	2013.5	2005.1	1994.1	1982.5	1974.1
5°	2166.5	2147.2	2122.9	2094.0	2068.1	2043.2	2021.3	1999.6	1974.6	1948.8	1923.0
7.5°	2273.9	2235.8	2194.7	2147.2	2100.8	2058.8	2020.0	1983.0	1941.1	1903.5	1869.3
10°	2348.7	2297.1	2239.9	2179.4	2118.9	2066.5	2014.9	1968.1	1916.5	1870.6	1831.9
12.5°	2409.3	2348.7	2279.9	2204.5	2131.8	2068.4	2009.1	1948.1	1889.5	1839.7	1788.1
15°	2509.9	2426.9	2334.2	2243.9	2149.6	2063.3	1983.5	1912.5	1845.6	1775.4	1726.3
17.5°	2579.2	2480.6	2367.9	2259.4	2148.0	2046.2	1954.1	1869.7	1792.4	1720.8	1662.2
20°	2620.4	2511.5	2386.6	2263.2	2138.3	2029.4	1930.3	1836.7	1756.9	1679.5	1619.0
22.5°	2643.6	2523.1	2386.6	2257.5	2128.0	2010.0	1901.2	1803.8	1716.9	1639.5	1572.6
25°	2651.1	2522.0	2382.6	2234.2	2092.3	1967.3	1854.4	1748.8	1652.0	1574.7	1503.7
27.5°	2640.8	2488.8	2346.0	2193.7	2047.3	1915.6	1797.1	1686.1	1589.2	1506.1	1433.4
30°	2625.2	2462.4	2309.2	2151.2	2002.8	1876.2	1751.2	1644.9	1544.1	1457.7	1384.4
32.5°	2591.7	2430.1	2265.3	2103.4	1953.2	1822.7	1704.1	1597.1	1498.2	1410.1	1332.1
35°	2525.3	2361.6	2182.6	2016.5	1869.0	1733.5	1622.2	1519.0	1424.7	1330.4	1248.1
37.5°	2437.7	2270.5	2092.4	1910.6	1762.8	1635.0	1532.9	1436.0	1343.9	1257.8	1166.7
40°	2355.2	2202.8	2018.9	1838.4	1686.8	1563.4	1469.1	1381.2	1288.5	1203.0	1111.9
42.5°	2255.2	2125.4	1939.6	1758.4	1608.7	1489.9	1402.0	1316.1	1231.7	1148.8	1053.8
45°	2088.3	1989.9	1815.7	1641.6	1490.9	1373.1	1292.5	1216.7	1142.5	1063.5	974.0
47.5°	1897.0	1830.4	1680.1	1501.8	1362.3	1256.4	1178.5	1116.5	1053.8	974.8	896.3
50°	1764.1	1721.4	1576.3	1413.4	1280.4	1182.9	1103.0	1044.9	992.5	916.8	846.6
52.5°	1622.2	1599.5	1476.9	1321.2	1192.7	1097.0	1028.9	976.5	923.5	860.6	795.0
55°	1406.1	1418.3	1314.2	1179.6	1058.6	978.1	915.9	872.4	827.3	774.1	723.3
57.5°	1185.3	1229.4	1159.6	1041.4	928.1	853.5	806.8	770.1	732.3	688.1	644.7
60°	1053.0	1090.0	1050.6	946.5	847.4	778.1	734.6	706.3	668.4	628.1	595.0
62.5°	924.0	963.7	940.3	856.3	764.2	704.6	666.1	639.9	611.7	576.5	542.2
65°	761.9	787.7	776.5	718.4	653.1	602.3	566.8	547.4	521.7	495.8	465.2
67.5°	583.6	633.4	626.8	596.0	539.6	499.9	476.7	459.6	436.1	416.9	396.1
70°	479.8	525.7	524.9	499.9	469.3	432.1	416.1	401.5	380.5	362.0	345.1
72.5°	392.6	434.7	441.0	421.8	400.9	372.8	357.4	347.4	327.0	314.3	300.5
75°	275.0	305.6	313.7	313.7	304.0	289.4	275.8	269.3	254.8	243.5	235.4
77.5°	180.3	199.7	212.2	215.1	216.6	211.8	200.5	195.9	184.8	180.8	173.0
80°	127.3	140.3	154.8	159.7	163.7	162.1	157.2	154.0	143.5	139.5	136.2
82.5°	88.1	95.1	107.0	117.8	116.5	120.8	116.5	114.0	106.1	104.6	101.4
85°	45.9	46.8	48.4	55.6	59.7	61.3	62.1	60.5	58.1	58.1	52.4
87.5°	18.8	18.1	18.0	18.0	18.4	20.8	22.0	22.1	20.7	19.5	17.8
90°	16.5	16.5	9.4	9.4	8.2	7.1	3.5	1.2	3.5	7.1	8.2
92.5°	237.0	146.0	86.3	62.0	44.8	30.5	19.5	13.3	19.5	30.5	44.8
95°	441.2	248.7	146.7	97.4	69.3	54.0	42.2	38.7	42.2	54.0	69.3
97.5°	396.7	237.7	159.2	117.9	93.6	79.6	69.5	69.5	69.5	79.6	93.6
100°	373.1	240.5	171.4	133.8	111.5	97.4	89.2	89.2	89.2	97.4	111.5
102.5°	366.6	249.9	187.3	151.6	130.3	117.1	109.9	108.0	109.9	117.1	130.3
105°	369.6	272.3	215.9	181.9	160.8	146.7	140.8	137.3	140.8	146.7	160.8
107.5°	387.0	298.3	246.7	213.1	192.9	177.9	172.0	169.7	172.0	177.9	192.9
110°	400.1	318.0	266.4	234.7	213.6	199.4	193.6	191.3	193.6	199.4	213.6





TEST NUMBER: P333011-840

CATALOG NUMBER: SA4XXRDIP-C1195D1205U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	414.2	336.8	287.0	255.4	234.2	221.1	214.3	212.0	214.3	221.1	234.2
115°	436.6	366.1	319.2	287.5	265.2	253.5	245.3	241.8	245.3	253.5	265.2
117.5°	459.3	394.6	349.9	317.1	296.2	283.3	276.0	272.7	276.0	283.3	296.2
120°	475.2	414.2	369.6	336.8	316.8	304.0	295.7	293.4	295.7	304.0	316.8
122.5°	490.3	433.0	388.4	356.5	334.7	322.8	314.5	312.1	314.5	322.8	334.7
125°	512.8	458.8	416.6	383.7	361.4	348.5	341.4	336.8	341.4	348.5	361.4
127.5°	532.3	482.7	441.9	408.8	385.6	370.8	362.3	358.6	362.3	370.8	385.6
130°	544.5	498.8	458.8	424.7	402.5	384.9	375.5	370.8	375.5	384.9	402.5
132.5°	556.7	511.9	472.0	439.8	415.7	399.0	386.8	383.0	386.8	399.0	415.7
135°	572.7	530.4	491.7	461.2	436.6	416.6	404.9	400.1	404.9	416.6	436.6
137.5°	583.9	544.5	508.4	479.3	453.6	434.6	421.7	417.3	421.7	434.6	453.6
140°	591.4	553.9	518.7	490.5	465.9	446.0	433.0	429.5	433.0	446.0	465.9
142.5°	597.0	562.3	528.1	500.8	477.2	458.1	446.2	442.6	446.2	458.1	477.2
145°	603.2	571.5	541.0	515.1	492.8	476.5	464.7	461.2	464.7	476.5	492.8
147.5°	608.5	580.9	552.2	529.0	510.5	493.5	483.2	482.0	483.2	493.5	510.5
150°	611.4	585.5	559.8	537.5	519.9	505.7	496.3	495.2	496.3	505.7	519.9
152.5°	613.3	589.4	566.3	545.9	530.2	517.1	507.7	507.4	507.7	517.1	530.2
155°	614.9	594.9	575.0	557.4	544.5	532.7	525.7	524.5	525.7	532.7	544.5
157.5°	614.9	599.0	582.1	568.2	556.9	547.8	541.2	541.2	541.2	547.8	556.9
160°	614.9	600.8	586.7	573.8	564.4	556.2	551.5	551.5	551.5	556.2	564.4
162.5°	614.9	602.7	589.6	579.5	571.0	563.7	560.0	560.9	560.0	563.7	571.0
165°	612.6	603.2	592.6	585.5	579.7	573.8	571.5	571.5	571.5	573.8	579.7
167.5°	609.8	602.9	595.2	589.8	586.5	582.1	580.9	582.1	580.9	582.1	586.5
170°	607.8	602.0	596.1	592.6	590.3	586.7	585.5	586.7	585.5	586.7	590.3
172.5°	606.0	601.1	597.0	594.5	593.1	590.5	590.3	591.4	590.3	590.5	593.1
175°	603.2	599.7	597.3	597.3	596.1	594.9	594.9	596.1	594.9	594.9	596.1
177.5°	600.1	598.2	597.3	597.3	597.3	596.3	597.3	598.2	597.3	596.3	597.3
180°	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3



TEST NUMBER: P333011-840

CATALOG NUMBER: SA4XXRDIP-C1195D1205U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	1965.1	1958.6	1950.3	1940.6	1928.9	1918.6	1914.1	1918.0	1920.0	1914.8	1914.1
5°	1905.2	1885.1	1869.0	1844.8	1825.4	1809.3	1798.1	1793.2	1794.8	1781.9	1778.7
7.5°	1838.1	1814.1	1787.7	1759.0	1732.2	1708.5	1696.1	1689.3	1675.7	1669.8	1660.0
10°	1794.8	1762.5	1736.8	1702.8	1672.2	1644.1	1630.3	1619.0	1605.3	1598.8	1585.2
12.5°	1750.3	1712.8	1684.5	1649.3	1618.0	1584.1	1570.9	1550.0	1528.5	1515.0	1497.4
15°	1687.6	1642.4	1607.7	1565.8	1528.7	1490.1	1455.3	1416.6	1402.1	1371.5	1353.7
17.5°	1614.2	1568.4	1525.5	1469.3	1412.0	1363.9	1327.0	1289.9	1267.7	1248.1	1239.1
20°	1565.8	1523.9	1464.2	1398.9	1335.2	1282.0	1252.1	1228.0	1203.8	1190.1	1180.4
22.5°	1520.0	1466.4	1397.1	1326.7	1262.9	1221.3	1196.1	1171.2	1151.5	1138.5	1125.6
25°	1443.3	1373.1	1299.7	1219.1	1175.6	1139.3	1111.9	1091.7	1079.6	1062.7	1056.2
27.5°	1364.4	1279.4	1198.5	1144.3	1098.9	1065.7	1041.9	1026.7	1011.4	1000.6	992.2
30°	1303.7	1217.5	1144.9	1093.3	1047.3	1020.0	1000.6	982.9	970.8	961.9	955.4
32.5°	1243.7	1157.5	1096.5	1041.1	1004.8	978.1	957.4	944.1	934.6	923.2	919.3
35°	1157.0	1080.5	1027.2	977.2	940.1	915.9	899.8	886.2	878.1	874.8	872.4
37.5°	1073.7	1010.9	953.7	912.7	879.7	860.6	841.6	834.9	829.3	823.5	826.2
40°	1020.8	961.9	911.1	867.6	840.9	820.0	808.7	800.6	795.8	795.8	795.8
42.5°	974.9	917.4	867.9	828.9	802.2	784.6	771.9	765.2	763.6	763.0	766.8
45°	903.8	850.6	800.6	768.4	745.8	728.1	720.8	715.2	715.2	718.4	719.2
47.5°	833.3	783.6	743.4	707.3	686.6	675.5	669.2	666.3	666.6	669.8	673.6
50°	790.1	740.9	701.5	669.2	649.8	639.3	633.7	632.2	633.7	633.7	639.3
52.5°	743.1	699.0	660.1	633.1	611.2	601.4	598.2	596.0	596.9	599.6	602.0
55°	674.1	634.5	597.4	571.7	555.5	549.1	541.8	542.6	541.0	542.6	542.6
57.5°	604.9	569.4	534.9	514.4	500.2	490.9	482.9	485.2	482.8	482.5	481.2
60°	560.4	521.7	494.2	475.7	459.6	451.5	444.2	445.9	443.4	441.8	438.6
62.5°	512.0	479.8	453.6	435.8	422.8	413.4	406.2	404.6	399.0	393.4	386.4
65°	441.8	415.3	391.8	375.0	362.8	355.6	349.9	345.1	333.0	320.1	313.7
67.5°	373.7	354.5	332.6	318.3	308.5	299.0	288.2	279.9	268.6	261.6	257.5
70°	329.7	311.2	292.7	278.9	268.5	259.6	247.5	241.9	233.8	230.6	226.6
72.5°	287.8	270.5	253.4	241.0	229.7	222.9	213.4	207.7	204.2	202.9	198.8
75°	224.2	210.5	197.5	186.2	177.4	172.6	168.5	164.5	162.9	155.6	151.6
77.5°	163.5	154.5	146.4	138.4	132.1	128.9	121.1	116.4	113.7	110.3	109.5
80°	127.3	121.0	112.9	108.1	99.2	95.9	92.7	91.9	91.1	90.3	89.5
82.5°	95.8	89.4	81.3	78.4	75.9	74.0	72.1	71.3	70.5	71.0	70.8
85°	48.4	45.1	45.1	44.3	43.5	42.7	41.9	41.9	41.1	41.9	41.1
87.5°	18.0	17.4	18.8	17.5	18.6	19.1	18.2	18.4	19.3	18.3	18.3
90°	9.4	9.4	16.5	16.5	18.8	21.1	20.0	21.1	22.3	23.4	23.4
92.5°	62.0	86.3	146.0	237.0	325.8	372.2	310.0	230.5	173.4	138.0	114.5
95°	97.4	146.7	248.7	441.2	721.6	956.3	983.4	869.5	687.6	530.4	416.6
97.5°	117.9	159.2	237.7	396.7	675.4	1007.3	1235.5	1284.8	1217.1	1102.4	979.9
100°	133.8	171.4	240.5	373.1	612.6	943.4	1243.9	1415.2	1438.7	1381.2	1294.3
102.5°	151.6	187.3	249.9	366.6	570.3	863.6	1173.5	1408.7	1525.0	1541.7	1505.5
105°	181.9	215.9	272.3	369.6	533.9	769.8	1045.5	1314.2	1517.3	1633.5	1681.5
107.5°	213.1	246.7	298.3	387.0	527.4	717.2	942.3	1180.2	1396.4	1560.0	1664.7
110°	234.7	266.4	318.0	400.1	529.3	699.4	890.7	1099.5	1302.5	1472.7	1601.7



TEST NUMBER: P333011-840

CATALOG NUMBER: SA4XXRDIP-C1195D1205U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	255.4	287.0	336.8	414.2	534.8	690.9	861.5	1040.4	1219.9	1380.7	1509.7
115°	287.5	319.2	366.1	436.6	545.6	686.5	834.4	981.0	1125.4	1262.6	1375.3
117.5°	317.1	349.9	394.6	459.3	557.1	685.3	822.1	951.9	1071.4	1179.3	1274.9
120°	336.8	369.6	414.2	475.2	565.6	685.3	815.6	938.8	1047.9	1141.8	1225.1
122.5°	356.5	388.4	433.0	490.3	574.1	684.4	808.1	927.5	1032.9	1118.3	1191.3
125°	383.7	416.6	458.8	512.8	586.7	683.0	795.6	908.3	1009.2	1090.1	1154.7
127.5°	408.8	441.9	482.7	532.3	596.8	680.3	778.9	884.7	981.3	1062.0	1123.3
130°	424.7	458.8	498.8	544.5	604.3	679.4	768.6	866.1	958.8	1038.5	1100.8
132.5°	439.8	472.0	511.9	556.7	610.9	678.5	759.2	846.3	933.4	1011.3	1073.5
135°	461.2	491.7	530.4	572.7	620.8	677.1	745.2	819.1	895.3	966.9	1025.6
137.5°	479.3	508.4	544.5	583.9	626.6	676.8	733.0	794.5	859.0	919.3	972.3
140°	490.5	518.7	553.9	591.4	631.4	675.9	726.4	780.3	835.5	888.3	937.6
142.5°	500.8	528.1	562.3	597.0	635.1	675.9	720.7	767.2	815.8	861.1	903.8
145°	515.1	541.0	571.5	603.2	637.2	673.6	711.1	748.7	788.6	823.7	856.7
147.5°	529.0	552.2	580.9	608.5	638.3	669.3	702.5	733.5	765.1	793.2	819.1
150°	537.5	559.8	585.5	611.4	638.3	666.5	695.9	724.1	751.0	774.5	795.6
152.5°	545.9	566.3	589.4	613.3	636.5	661.9	688.3	713.7	736.9	758.5	775.9
155°	557.4	575.0	594.9	614.9	633.7	654.8	677.1	698.2	717.0	734.6	748.7
157.5°	568.2	582.1	599.0	614.9	630.7	647.5	665.6	681.6	697.3	712.1	723.4
160°	573.8	586.7	600.8	614.9	627.8	641.9	657.1	671.3	684.1	697.0	706.4
162.5°	579.5	589.6	602.7	614.9	625.0	636.2	649.6	660.9	672.0	682.1	690.4
165°	585.5	592.6	603.2	612.6	619.6	627.8	637.2	646.6	653.6	661.9	667.7
167.5°	589.8	595.2	602.9	609.8	614.0	619.4	625.9	632.8	638.1	644.7	648.2
170°	592.6	596.1	602.0	607.8	610.2	613.7	618.4	624.3	627.8	632.5	636.0
172.5°	594.5	597.0	601.1	606.0	606.4	608.0	611.9	616.7	619.4	622.2	624.7
175°	597.3	597.3	599.7	603.2	602.0	602.0	604.3	606.7	607.8	610.2	610.2
177.5°	597.3	597.3	598.2	600.1	598.2	598.2	599.2	600.1	601.1	601.1	602.0
180°	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3



TEST NUMBER: P333011-840

CATALOG NUMBER: SA4XXRDIP-C1195D1205U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	1910.3	1911.6	1907.0	1905.7	1907.0	1911.6	1910.3	1914.1	1914.8	1920.0	1918.0
5°	1772.2	1770.6	1766.6	1767.4	1766.6	1770.6	1772.2	1778.7	1781.9	1794.8	1793.2
7.5°	1654.2	1647.9	1649.6	1643.3	1649.6	1647.9	1654.2	1660.0	1669.8	1675.7	1689.3
10°	1582.0	1573.1	1565.8	1559.3	1565.8	1573.1	1582.0	1585.2	1598.8	1605.3	1619.0
12.5°	1483.3	1475.6	1465.8	1467.7	1465.8	1475.6	1483.3	1497.4	1515.0	1528.5	1550.0
15°	1343.2	1331.2	1311.8	1314.2	1311.8	1331.2	1343.2	1353.7	1371.5	1402.1	1416.6
17.5°	1224.8	1224.9	1216.1	1218.1	1216.1	1224.9	1224.8	1239.1	1248.1	1267.7	1289.9
20°	1163.5	1157.8	1158.6	1156.2	1158.6	1157.8	1163.5	1180.4	1190.1	1203.8	1228.0
22.5°	1120.8	1114.0	1108.3	1103.3	1108.3	1114.0	1120.8	1125.6	1138.5	1151.5	1171.2
25°	1048.9	1044.1	1036.9	1035.3	1036.9	1044.1	1048.9	1056.2	1062.7	1079.6	1091.7
27.5°	985.7	984.8	981.9	978.2	981.9	984.8	985.7	992.2	1000.6	1011.4	1026.7
30°	949.0	947.4	945.7	943.3	945.7	947.4	949.0	955.4	961.9	970.8	982.9
32.5°	916.1	915.1	913.5	913.7	913.5	915.1	916.1	919.3	923.2	934.6	944.1
35°	869.2	868.4	866.8	866.0	866.8	868.4	869.2	872.4	874.8	878.1	886.2
37.5°	825.4	827.4	826.5	826.3	826.5	827.4	825.4	826.2	823.5	829.3	834.9
40°	795.0	795.8	797.4	796.6	797.4	795.8	795.0	795.8	795.8	795.8	800.6
42.5°	769.8	770.0	772.2	769.5	772.2	770.0	769.8	766.8	763.0	763.6	765.2
45°	724.9	729.7	728.9	728.9	728.9	729.7	724.9	719.2	718.4	715.2	715.2
47.5°	675.7	679.8	681.0	680.9	681.0	679.8	675.7	673.6	669.8	666.6	666.3
50°	643.4	641.8	644.2	643.4	644.2	641.8	643.4	639.3	633.7	633.7	632.2
52.5°	604.1	604.4	604.2	603.4	604.2	604.4	604.1	602.0	599.6	596.9	596.0
55°	543.4	544.2	542.6	543.4	542.6	544.2	543.4	542.6	542.6	541.0	542.6
57.5°	477.7	473.7	475.3	473.4	475.3	473.7	477.7	481.2	482.5	482.8	485.2
60°	430.6	424.1	422.5	419.3	422.5	424.1	430.6	438.6	441.8	443.4	445.9
62.5°	377.7	373.1	367.7	370.2	367.7	373.1	377.7	386.4	393.4	399.0	404.6
65°	307.2	304.0	301.5	304.8	301.5	304.0	307.2	313.7	320.1	333.0	345.1
67.5°	254.3	252.6	252.6	251.0	252.6	252.6	254.3	257.5	261.6	268.6	279.9
70°	226.6	224.2	224.2	222.6	224.2	224.2	226.6	226.6	230.6	233.8	241.9
72.5°	198.1	195.8	196.4	195.4	196.4	195.8	198.1	198.8	202.9	204.2	207.7
75°	146.7	142.7	142.7	143.5	142.7	142.7	146.7	151.6	155.6	162.9	164.5
77.5°	109.5	108.7	109.8	108.4	109.8	108.7	109.5	109.5	110.3	113.7	116.4
80°	89.5	88.7	87.9	90.3	87.9	88.7	89.5	89.5	90.3	91.1	91.9
82.5°	69.5	69.4	69.2	72.2	69.2	69.4	69.5	70.8	71.0	70.5	71.3
85°	41.9	40.3	41.9	40.3	41.9	40.3	41.9	41.1	41.9	41.1	41.9
87.5°	19.8	19.4	18.5	19.1	18.5	19.4	19.8	18.3	18.3	19.3	18.4
90°	24.6	25.9	24.6	24.6	24.6	25.9	24.6	23.4	23.4	22.3	21.1
92.5°	100.7	94.3	90.4	90.4	90.4	94.3	100.7	114.5	138.0	173.4	230.5
95°	359.1	322.8	301.5	286.3	301.5	322.8	359.1	416.6	530.4	687.6	869.5
97.5°	895.5	825.0	789.7	765.4	789.7	825.0	895.5	979.9	1102.4	1217.1	1284.8
100°	1192.2	1120.6	1085.5	1076.1	1085.5	1120.6	1192.2	1294.3	1381.2	1438.7	1415.2
102.5°	1442.9	1391.0	1353.9	1346.5	1353.9	1391.0	1442.9	1505.5	1541.7	1525.0	1408.7
105°	1683.9	1674.6	1658.1	1651.0	1658.1	1674.6	1683.9	1681.5	1633.5	1517.3	1314.2
107.5°	1722.6	1749.4	1761.1	1764.2	1761.1	1749.4	1722.6	1664.7	1560.0	1396.4	1180.2
110°	1685.1	1734.3	1755.5	1766.1	1755.5	1734.3	1685.1	1601.7	1472.7	1302.5	1099.5



TEST NUMBER: P333011-840  
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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1604.4	1664.0	1693.5	1710.7	1693.5	1664.0	1604.4	1509.7	1380.7	1219.9	1040.4
115°	1468.0	1538.4	1576.0	1585.4	1576.0	1538.4	1468.0	1375.3	1262.6	1125.4	981.0
117.5°	1353.9	1413.1	1451.1	1458.3	1451.1	1413.1	1353.9	1274.9	1179.3	1071.4	951.9
120°	1292.0	1343.6	1374.1	1387.0	1374.1	1343.6	1292.0	1225.1	1141.8	1047.9	938.8
122.5°	1247.9	1292.0	1317.8	1330.7	1317.8	1292.0	1247.9	1191.3	1118.3	1032.9	927.5
125°	1201.6	1235.7	1258.0	1265.0	1258.0	1235.7	1201.6	1154.7	1090.1	1009.2	908.3
127.5°	1170.4	1200.7	1219.5	1226.5	1219.5	1200.7	1170.4	1123.3	1062.0	981.3	884.7
130°	1148.8	1178.1	1196.9	1204.0	1196.9	1178.1	1148.8	1100.8	1038.5	958.8	866.1
132.5°	1120.6	1153.8	1171.5	1178.6	1171.5	1153.8	1120.6	1073.5	1011.3	933.4	846.3
135°	1072.6	1105.4	1124.2	1131.3	1124.2	1105.4	1072.6	1025.6	966.9	895.3	819.1
137.5°	1016.2	1048.6	1064.1	1072.6	1064.1	1048.6	1016.2	972.3	919.3	859.0	794.5
140°	978.7	1004.5	1020.9	1030.3	1020.9	1004.5	978.7	937.6	888.3	835.5	780.3
142.5°	940.2	964.1	978.7	985.2	978.7	964.1	940.2	903.8	861.1	815.8	767.2
145°	886.0	905.9	917.7	923.5	917.7	905.9	886.0	856.7	823.7	788.6	748.7
147.5°	840.7	857.8	866.8	868.8	866.8	857.8	840.7	819.1	793.2	765.1	733.5
150°	814.4	829.6	836.7	837.9	836.7	829.6	814.4	795.6	774.5	751.0	724.1
152.5°	791.8	804.3	808.5	809.7	808.5	804.3	791.8	775.9	758.5	736.9	713.7
155°	760.4	769.8	773.4	773.4	773.4	769.8	760.4	748.7	734.6	717.0	698.2
157.5°	732.3	739.3	741.4	741.4	741.4	739.3	732.3	723.4	712.1	697.3	681.6
160°	713.5	720.5	721.6	721.6	721.6	720.5	713.5	706.4	697.0	684.1	671.3
162.5°	695.6	702.7	703.9	702.9	703.9	702.7	695.6	690.4	682.1	672.0	660.9
165°	672.4	677.1	675.9	674.8	675.9	677.1	672.4	667.7	661.9	653.6	646.6
167.5°	650.6	653.6	653.4	652.5	653.4	653.6	650.6	648.2	644.7	638.1	632.8
170°	638.3	639.5	638.3	638.3	638.3	639.5	638.3	636.0	632.5	627.8	624.3
172.5°	626.1	627.3	626.1	624.3	626.1	627.3	626.1	624.7	622.2	619.4	616.7
175°	610.2	612.6	610.2	607.8	610.2	612.6	610.2	610.2	610.2	607.8	606.7
177.5°	601.1	602.0	600.1	598.2	600.1	602.0	601.1	602.0	601.1	601.1	600.1
180°	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	1914.1	1918.6	1928.9	1940.6	1950.3	1958.6	1965.1	1974.1	1982.5	1994.1	2005.1
5°	1798.1	1809.3	1825.4	1844.8	1869.0	1885.1	1905.2	1923.0	1948.8	1974.6	1999.6
7.5°	1696.1	1708.5	1732.2	1759.0	1787.7	1814.1	1838.1	1869.3	1903.5	1941.1	1983.0
10°	1630.3	1644.1	1672.2	1702.8	1736.8	1762.5	1794.8	1831.9	1870.6	1916.5	1968.1
12.5°	1570.9	1584.1	1618.0	1649.3	1684.5	1712.8	1750.3	1788.1	1839.7	1889.5	1948.1
15°	1455.3	1490.1	1528.7	1565.8	1607.7	1642.4	1687.6	1726.3	1775.4	1845.6	1912.5
17.5°	1327.0	1363.9	1412.0	1469.3	1525.5	1568.4	1614.2	1662.2	1720.8	1792.4	1869.7
20°	1252.1	1282.0	1335.2	1398.9	1464.2	1523.9	1565.8	1619.0	1679.5	1756.9	1836.7
22.5°	1196.1	1221.3	1262.9	1326.7	1397.1	1466.4	1520.0	1572.6	1639.5	1716.9	1803.8
25°	1111.9	1139.3	1175.6	1219.1	1299.7	1373.1	1443.3	1503.7	1574.7	1652.0	1748.8
27.5°	1041.9	1065.7	1098.9	1144.3	1198.5	1279.4	1364.4	1433.4	1506.1	1589.2	1686.1
30°	1000.6	1020.0	1047.3	1093.3	1144.9	1217.5	1303.7	1384.4	1457.7	1544.1	1644.9
32.5°	957.4	978.1	1004.8	1041.1	1096.5	1157.5	1243.7	1332.1	1410.1	1498.2	1597.1
35°	899.8	915.9	940.1	977.2	1027.2	1080.5	1157.0	1248.1	1330.4	1424.7	1519.0
37.5°	841.6	860.6	879.7	912.7	953.7	1010.9	1073.7	1166.7	1257.8	1343.9	1436.0
40°	808.7	820.0	840.9	867.6	911.1	961.9	1020.8	1111.9	1203.0	1288.5	1381.2
42.5°	771.9	784.6	802.2	828.9	867.9	917.4	974.9	1053.8	1148.8	1231.7	1316.1
45°	720.8	728.1	745.8	768.4	800.6	850.6	903.8	974.0	1063.5	1142.5	1216.7
47.5°	669.2	675.5	686.6	707.3	743.4	783.6	833.3	896.3	974.8	1053.8	1116.5
50°	633.7	639.3	649.8	669.2	701.5	740.9	790.1	846.6	916.8	992.5	1044.9
52.5°	598.2	601.4	611.2	633.1	660.1	699.0	743.1	795.0	860.6	923.5	976.5
55°	541.8	549.1	555.5	571.7	597.4	634.5	674.1	723.3	774.1	827.3	872.4
57.5°	482.9	490.9	500.2	514.4	534.9	569.4	604.9	644.7	688.1	732.3	770.1
60°	444.2	451.5	459.6	475.7	494.2	521.7	560.4	595.0	628.1	668.4	706.3
62.5°	406.2	413.4	422.8	435.8	453.6	479.8	512.0	542.2	576.5	611.7	639.9
65°	349.9	355.6	362.8	375.0	391.8	415.3	441.8	465.2	495.8	521.7	547.4
67.5°	288.2	299.0	308.5	318.3	332.6	354.5	373.7	396.1	416.9	436.1	459.6
70°	247.5	259.6	268.5	278.9	292.7	311.2	329.7	345.1	362.0	380.5	401.5
72.5°	213.4	222.9	229.7	241.0	253.4	270.5	287.8	300.5	314.3	327.0	347.4
75°	168.5	172.6	177.4	186.2	197.5	210.5	224.2	235.4	243.5	254.8	269.3
77.5°	121.1	128.9	132.1	138.4	146.4	154.5	163.5	173.0	180.8	184.8	195.9
80°	92.7	95.9	99.2	108.1	112.9	121.0	127.3	136.2	139.5	143.5	154.0
82.5°	72.1	74.0	75.9	78.4	81.3	89.4	95.8	101.4	104.6	106.1	114.0
85°	41.9	42.7	43.5	44.3	45.1	45.1	48.4	52.4	58.1	58.1	60.5
87.5°	18.2	19.1	18.6	17.5	18.8	17.4	18.0	17.8	19.5	20.7	22.1
90°	20.0	21.1	18.8	16.5	16.5	9.4	9.4	8.2	7.1	3.5	1.2
92.5°	310.0	372.2	325.8	237.0	146.0	86.3	62.0	44.8	30.5	19.5	13.3
95°	983.4	956.3	721.6	441.2	248.7	146.7	97.4	69.3	54.0	42.2	38.7
97.5°	1235.5	1007.3	675.4	396.7	237.7	159.2	117.9	93.6	79.6	69.5	69.5
100°	1243.9	943.4	612.6	373.1	240.5	171.4	133.8	111.5	97.4	89.2	89.2
102.5°	1173.5	863.6	570.3	366.6	249.9	187.3	151.6	130.3	117.1	109.9	108.0
105°	1045.5	769.8	533.9	369.6	272.3	215.9	181.9	160.8	146.7	140.8	137.3
107.5°	942.3	717.2	527.4	387.0	298.3	246.7	213.1	192.9	177.9	172.0	169.7
110°	890.7	699.4	529.3	400.1	318.0	266.4	234.7	213.6	199.4	193.6	191.3



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	861.5	690.9	534.8	414.2	336.8	287.0	255.4	234.2	221.1	214.3	212.0
115°	834.4	686.5	545.6	436.6	366.1	319.2	287.5	265.2	253.5	245.3	241.8
117.5°	822.1	685.3	557.1	459.3	394.6	349.9	317.1	296.2	283.3	276.0	272.7
120°	815.6	685.3	565.6	475.2	414.2	369.6	336.8	316.8	304.0	295.7	293.4
122.5°	808.1	684.4	574.1	490.3	433.0	388.4	356.5	334.7	322.8	314.5	312.1
125°	795.6	683.0	586.7	512.8	458.8	416.6	383.7	361.4	348.5	341.4	336.8
127.5°	778.9	680.3	596.8	532.3	482.7	441.9	408.8	385.6	370.8	362.3	358.6
130°	768.6	679.4	604.3	544.5	498.8	458.8	424.7	402.5	384.9	375.5	370.8
132.5°	759.2	678.5	610.9	556.7	511.9	472.0	439.8	415.7	399.0	386.8	383.0
135°	745.2	677.1	620.8	572.7	530.4	491.7	461.2	436.6	416.6	404.9	400.1
137.5°	733.0	676.8	626.6	583.9	544.5	508.4	479.3	453.6	434.6	421.7	417.3
140°	726.4	675.9	631.4	591.4	553.9	518.7	490.5	465.9	446.0	433.0	429.5
142.5°	720.7	675.9	635.1	597.0	562.3	528.1	500.8	477.2	458.1	446.2	442.6
145°	711.1	673.6	637.2	603.2	571.5	541.0	515.1	492.8	476.5	464.7	461.2
147.5°	702.5	669.3	638.3	608.5	580.9	552.2	529.0	510.5	493.5	483.2	482.0
150°	695.9	666.5	638.3	611.4	585.5	559.8	537.5	519.9	505.7	496.3	495.2
152.5°	688.3	661.9	636.5	613.3	589.4	566.3	545.9	530.2	517.1	507.7	507.4
155°	677.1	654.8	633.7	614.9	594.9	575.0	557.4	544.5	532.7	525.7	524.5
157.5°	665.6	647.5	630.7	614.9	599.0	582.1	568.2	556.9	547.8	541.2	541.2
160°	657.1	641.9	627.8	614.9	600.8	586.7	573.8	564.4	556.2	551.5	551.5
162.5°	649.6	636.2	625.0	614.9	602.7	589.6	579.5	571.0	563.7	560.0	560.9
165°	637.2	627.8	619.6	612.6	603.2	592.6	585.5	579.7	573.8	571.5	571.5
167.5°	625.9	619.4	614.0	609.8	602.9	595.2	589.8	586.5	582.1	580.9	582.1
170°	618.4	613.7	610.2	607.8	602.0	596.1	592.6	590.3	586.7	585.5	586.7
172.5°	611.9	608.0	606.4	606.0	601.1	597.0	594.5	593.1	590.5	590.3	591.4
175°	604.3	602.0	602.0	603.2	599.7	597.3	597.3	596.1	594.9	594.9	596.1
177.5°	599.2	598.2	598.2	600.1	598.2	597.3	597.3	597.3	596.3	597.3	598.2
180°	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3



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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2013.5	2019.2	2025.7	2038.0	2048.3	2052.9	2061.8	2068.3	2066.4	2075.4	2090.8
5°	2021.3	2043.2	2068.1	2094.0	2122.9	2147.2	2166.5	2185.9	2201.2	2219.7	2247.2
7.5°	2020.0	2058.8	2100.8	2147.2	2194.7	2235.8	2273.9	2312.6	2346.9	2384.5	2433.7
10°	2014.9	2066.5	2118.9	2179.4	2239.9	2297.1	2348.7	2397.1	2443.1	2492.2	2554.4
12.5°	2009.1	2068.4	2131.8	2204.5	2279.9	2348.7	2409.3	2479.0	2536.6	2600.0	2671.7
15°	1983.5	2063.3	2149.6	2243.9	2334.2	2426.9	2509.9	2595.5	2675.2	2751.1	2841.4
17.5°	1954.1	2046.2	2148.0	2259.4	2367.9	2480.6	2579.2	2686.8	2768.4	2870.2	2954.1
20°	1930.3	2029.4	2138.3	2263.2	2386.6	2511.5	2620.4	2730.1	2822.0	2924.4	3030.8
22.5°	1901.2	2010.0	2128.0	2257.5	2386.6	2523.1	2643.6	2752.7	2866.5	2981.8	3091.5
25°	1854.4	1967.3	2092.3	2234.2	2382.6	2522.0	2651.1	2786.5	2909.1	3034.0	3132.4
27.5°	1797.1	1915.6	2047.3	2193.7	2346.0	2488.8	2640.8	2785.1	2908.4	3028.7	3114.5
30°	1751.2	1876.2	2002.8	2151.2	2309.2	2462.4	2625.2	2769.6	2899.4	3007.5	3055.9
32.5°	1704.1	1822.7	1953.2	2103.4	2265.3	2430.1	2591.7	2739.3	2859.4	2924.3	2925.5
35°	1622.2	1733.5	1869.0	2016.5	2182.6	2361.6	2525.3	2670.4	2743.8	2749.5	2670.4
37.5°	1532.9	1635.0	1762.8	1910.6	2092.4	2270.5	2437.7	2534.5	2559.0	2476.9	2330.8
40°	1469.1	1563.4	1686.8	1838.4	2018.9	2202.8	2355.2	2426.1	2400.3	2267.2	2104.4
42.5°	1402.0	1489.9	1608.7	1758.4	1939.6	2125.4	2255.2	2293.2	2224.8	2071.2	1880.6
45°	1292.5	1373.1	1490.9	1641.6	1815.7	1989.9	2088.3	2068.9	1955.2	1773.0	1559.3
47.5°	1178.5	1256.4	1362.3	1501.8	1680.1	1830.4	1897.0	1838.7	1676.9	1476.4	1302.6
50°	1103.0	1182.9	1280.4	1413.4	1576.3	1721.4	1764.1	1675.5	1495.6	1302.9	1143.3
52.5°	1028.9	1097.0	1192.7	1321.2	1476.9	1599.5	1622.2	1520.0	1334.4	1161.6	1020.1
55°	915.9	978.1	1058.6	1179.6	1314.2	1418.3	1406.1	1274.8	1106.2	958.7	847.4
57.5°	806.8	853.5	928.1	1041.4	1159.6	1229.4	1185.3	1073.2	916.1	795.4	701.5
60°	734.6	778.1	847.4	946.5	1050.6	1090.0	1053.0	931.3	807.1	696.6	617.6
62.5°	666.1	704.6	764.2	856.3	940.3	963.7	924.0	817.7	705.8	611.5	546.0
65°	566.8	602.3	653.1	718.4	776.5	787.7	761.9	653.1	568.5	489.4	444.2
67.5°	476.7	499.9	539.6	596.0	626.8	633.4	583.6	515.2	440.6	392.0	358.0
70°	416.1	432.1	469.3	499.9	524.9	525.7	479.8	425.0	367.7	328.2	303.2
72.5°	357.4	372.8	400.9	421.8	441.0	434.7	392.6	349.4	303.2	273.4	254.8
75°	275.8	289.4	304.0	313.7	313.7	305.6	275.0	242.7	216.1	198.3	192.7
77.5°	200.5	211.8	216.6	215.1	212.2	199.7	180.3	159.2	149.7	141.3	137.0
80°	157.2	162.1	163.7	159.7	154.8	140.3	127.3	118.6	109.7	106.4	104.8
82.5°	116.5	120.8	116.5	117.8	107.0	95.1	88.1	85.0	81.3	80.0	78.4
85°	62.1	61.3	59.7	55.6	48.4	46.8	45.9	45.1	43.5	44.3	42.7
87.5°	22.0	20.8	18.4	18.0	18.0	18.1	18.8	19.2	19.7	18.8	20.4
90°	3.5	7.1	8.2	9.4	9.4	16.5	16.5	18.8	21.1	20.0	21.1
92.5°	19.5	30.5	44.8	62.0	86.3	146.0	237.0	325.8	372.2	310.0	230.5
95°	42.2	54.0	69.3	97.4	146.7	248.7	441.2	721.6	956.3	983.4	869.5
97.5°	69.5	79.6	93.6	117.9	159.2	237.7	396.7	675.4	1007.3	1235.5	1284.8
100°	89.2	97.4	111.5	133.8	171.4	240.5	373.1	612.6	943.4	1243.9	1415.2
102.5°	109.9	117.1	130.3	151.6	187.3	249.9	366.6	570.3	863.6	1173.5	1408.7
105°	140.8	146.7	160.8	181.9	215.9	272.3	369.6	533.9	769.8	1045.5	1314.2
107.5°	172.0	177.9	192.9	213.1	246.7	298.3	387.0	527.4	717.2	942.3	1180.2
110°	193.6	199.4	213.6	234.7	266.4	318.0	400.1	529.3	699.4	890.7	1099.5





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	214.3	221.1	234.2	255.4	287.0	336.8	414.2	534.8	690.9	861.5	1040.4
115°	245.3	253.5	265.2	287.5	319.2	366.1	436.6	545.6	686.5	834.4	981.0
117.5°	276.0	283.3	296.2	317.1	349.9	394.6	459.3	557.1	685.3	822.1	951.9
120°	295.7	304.0	316.8	336.8	369.6	414.2	475.2	565.6	685.3	815.6	938.8
122.5°	314.5	322.8	334.7	356.5	388.4	433.0	490.3	574.1	684.4	808.1	927.5
125°	341.4	348.5	361.4	383.7	416.6	458.8	512.8	586.7	683.0	795.6	908.3
127.5°	362.3	370.8	385.6	408.8	441.9	482.7	532.3	596.8	680.3	778.9	884.7
130°	375.5	384.9	402.5	424.7	458.8	498.8	544.5	604.3	679.4	768.6	866.1
132.5°	386.8	399.0	415.7	439.8	472.0	511.9	556.7	610.9	678.5	759.2	846.3
135°	404.9	416.6	436.6	461.2	491.7	530.4	572.7	620.8	677.1	745.2	819.1
137.5°	421.7	434.6	453.6	479.3	508.4	544.5	583.9	626.6	676.8	733.0	794.5
140°	433.0	446.0	465.9	490.5	518.7	553.9	591.4	631.4	675.9	726.4	780.3
142.5°	446.2	458.1	477.2	500.8	528.1	562.3	597.0	635.1	675.9	720.7	767.2
145°	464.7	476.5	492.8	515.1	541.0	571.5	603.2	637.2	673.6	711.1	748.7
147.5°	483.2	493.5	510.5	529.0	552.2	580.9	608.5	638.3	669.3	702.5	733.5
150°	496.3	505.7	519.9	537.5	559.8	585.5	611.4	638.3	666.5	695.9	724.1
152.5°	507.7	517.1	530.2	545.9	566.3	589.4	613.3	636.5	661.9	688.3	713.7
155°	525.7	532.7	544.5	557.4	575.0	594.9	614.9	633.7	654.8	677.1	698.2
157.5°	541.2	547.8	556.9	568.2	582.1	599.0	614.9	630.7	647.5	665.6	681.6
160°	551.5	556.2	564.4	573.8	586.7	600.8	614.9	627.8	641.9	657.1	671.3
162.5°	560.0	563.7	571.0	579.5	589.6	602.7	614.9	625.0	636.2	649.6	660.9
165°	571.5	573.8	579.7	585.5	592.6	603.2	612.6	619.6	627.8	637.2	646.6
167.5°	580.9	582.1	586.5	589.8	595.2	602.9	609.8	614.0	619.4	625.9	632.8
170°	585.5	586.7	590.3	592.6	596.1	602.0	607.8	610.2	613.7	618.4	624.3
172.5°	590.3	590.5	593.1	594.5	597.0	601.1	606.0	606.4	608.0	611.9	616.7
175°	594.9	594.9	596.1	597.3	597.3	599.7	603.2	602.0	602.0	604.3	606.7
177.5°	597.3	596.3	597.3	597.3	597.3	598.2	600.1	598.2	598.2	599.2	600.1
180°	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2099.2	2101.8	2103.8	2110.2	2110.8	2116.7	2110.8
5°	2272.9	2284.2	2302.0	2319.7	2321.3	2332.6	2312.4
7.5°	2467.7	2493.9	2510.1	2538.8	2550.1	2557.2	2545.6
10°	2601.9	2626.1	2668.8	2689.8	2710.8	2713.9	2704.3
12.5°	2731.6	2770.0	2803.6	2843.3	2842.4	2870.7	2860.3
15°	2904.3	2943.8	2990.5	3034.8	3051.0	3051.0	3063.9
17.5°	3027.5	3099.9	3148.3	3183.1	3221.1	3227.7	3223.2
20°	3110.7	3188.9	3240.5	3285.6	3311.4	3318.7	3318.7
22.5°	3172.6	3239.1	3289.5	3330.1	3351.4	3359.9	3357.4
25°	3215.5	3272.7	3303.4	3315.5	3321.0	3319.5	3304.2
27.5°	3156.7	3154.2	3134.8	3097.8	3069.9	3052.9	3033.5
30°	3044.5	3002.6	2954.3	2901.0	2832.5	2780.1	2763.9
32.5°	2877.5	2783.3	2701.4	2612.7	2539.0	2486.6	2464.7
35°	2554.4	2405.2	2283.4	2177.0	2099.6	2051.2	2035.1
37.5°	2170.8	2026.5	1875.7	1772.5	1708.4	1659.5	1641.2
40°	1927.0	1769.8	1638.4	1541.7	1475.5	1427.9	1427.1
42.5°	1704.5	1554.4	1430.7	1361.0	1289.7	1258.3	1258.1
45°	1395.6	1275.6	1170.7	1115.9	1073.2	1047.3	1040.1
47.5°	1155.6	1056.2	986.4	942.7	907.9	891.4	880.8
50°	1020.8	933.7	878.1	840.1	820.8	799.8	798.2
52.5°	908.5	838.2	794.9	764.1	739.5	726.9	727.3
55°	763.6	707.9	677.3	653.9	634.5	624.9	620.9
57.5°	643.3	601.5	579.3	557.7	549.6	542.0	539.9
60°	568.5	540.2	519.3	502.3	490.2	487.8	487.0
62.5°	506.5	477.0	462.5	449.4	440.6	436.9	435.4
65°	417.7	395.9	382.9	372.5	369.3	363.7	362.8
67.5°	336.7	323.7	315.1	307.8	303.5	303.2	303.2
70°	287.0	279.7	272.6	268.5	266.1	264.5	264.5
72.5°	244.5	239.1	233.2	231.1	230.6	228.9	228.3
75°	186.2	180.6	181.4	177.4	174.2	170.2	167.7
77.5°	132.1	128.1	127.2	126.7	124.0	123.5	124.8
80°	102.4	98.4	97.6	98.4	97.6	95.1	95.1
82.5°	77.9	74.5	73.7	73.2	72.4	73.2	71.9
85°	41.9	40.3	40.3	40.3	41.9	41.1	40.3
87.5°	19.3	18.9	19.5	19.1	19.4	18.5	19.1
90°	22.3	23.4	23.4	24.6	25.9	24.6	24.6
92.5°	173.4	138.0	114.5	100.7	94.3	90.4	90.4
95°	687.6	530.4	416.6	359.1	322.8	301.5	286.3
97.5°	1217.1	1102.4	979.9	895.5	825.0	789.7	765.4
100°	1438.7	1381.2	1294.3	1192.2	1120.6	1085.5	1076.1
102.5°	1525.0	1541.7	1505.5	1442.9	1391.0	1353.9	1346.5
105°	1517.3	1633.5	1681.5	1683.9	1674.6	1658.1	1651.0
107.5°	1396.4	1560.0	1664.7	1722.6	1749.4	1761.1	1764.2
110°	1302.5	1472.7	1601.7	1685.1	1734.3	1755.5	1766.1



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	1219.9	1380.7	1509.7	1604.4	1664.0	1693.5	1710.7
115°	1125.4	1262.6	1375.3	1468.0	1538.4	1576.0	1585.4
117.5°	1071.4	1179.3	1274.9	1353.9	1413.1	1451.1	1458.3
120°	1047.9	1141.8	1225.1	1292.0	1343.6	1374.1	1387.0
122.5°	1032.9	1118.3	1191.3	1247.9	1292.0	1317.8	1330.7
125°	1009.2	1090.1	1154.7	1201.6	1235.7	1258.0	1265.0
127.5°	981.3	1062.0	1123.3	1170.4	1200.7	1219.5	1226.5
130°	958.8	1038.5	1100.8	1148.8	1178.1	1196.9	1204.0
132.5°	933.4	1011.3	1073.5	1120.6	1153.8	1171.5	1178.6
135°	895.3	966.9	1025.6	1072.6	1105.4	1124.2	1131.3
137.5°	859.0	919.3	972.3	1016.2	1048.6	1064.1	1072.6
140°	835.5	888.3	937.6	978.7	1004.5	1020.9	1030.3
142.5°	815.8	861.1	903.8	940.2	964.1	978.7	985.2
145°	788.6	823.7	856.7	886.0	905.9	917.7	923.5
147.5°	765.1	793.2	819.1	840.7	857.8	866.8	868.8
150°	751.0	774.5	795.6	814.4	829.6	836.7	837.9
152.5°	736.9	758.5	775.9	791.8	804.3	808.5	809.7
155°	717.0	734.6	748.7	760.4	769.8	773.4	773.4
157.5°	697.3	712.1	723.4	732.3	739.3	741.4	741.4
160°	684.1	697.0	706.4	713.5	720.5	721.6	721.6
162.5°	672.0	682.1	690.4	695.6	702.7	703.9	702.9
165°	653.6	661.9	667.7	672.4	677.1	675.9	674.8
167.5°	638.1	644.7	648.2	650.6	653.6	653.4	652.5
170°	627.8	632.5	636.0	638.3	639.5	638.3	638.3
172.5°	619.4	622.2	624.7	626.1	627.3	626.1	624.3
175°	607.8	610.2	610.2	610.2	612.6	610.2	607.8
177.5°	601.1	601.1	602.0	601.1	602.0	600.1	598.2
180°	597.3	597.3	597.3	597.3	597.3	597.3	597.3

(END OF REPORT)