

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: P331761-830

Luminaire Tested: **SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331761-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-16,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A4  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1005 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1080 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

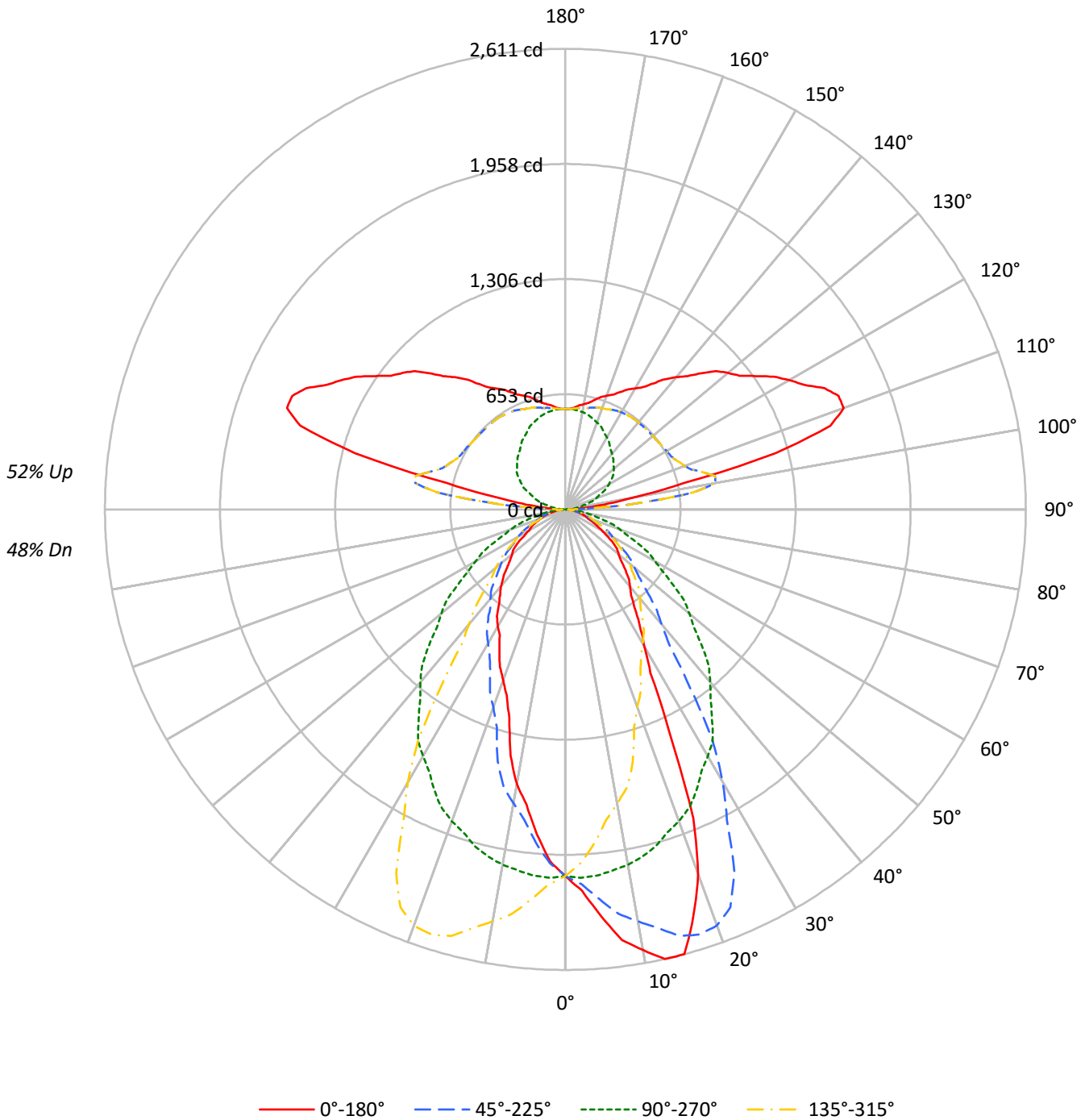
Lumens per Lamp: N/A  
Luminaire Lumens: 7559.6 lumens  
Efficiency: N/A  
Efficacy: 105.4 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: General Diffuse

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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48
1	98	94	90	87	90	87	84	81	73	71	69	60	59	57	49	48	47	42
2	90	83	77	72	82	77	72	68	65	61	58	54	51	49	44	42	41	36
3	82	74	67	61	76	68	62	57	58	53	50	48	45	43	40	37	36	31
4	76	66	58	53	70	61	54	49	52	47	43	44	40	37	36	33	31	28
5	70	59	51	46	64	55	48	43	47	42	38	40	36	33	33	30	28	25
6	65	53	46	40	60	50	43	38	43	37	34	36	32	29	30	27	25	22
7	60	48	41	36	55	45	38	34	39	34	30	33	29	26	28	25	23	20
8	56	44	37	32	52	41	35	30	36	31	27	31	27	24	26	23	21	18
9	52	41	33	29	48	38	32	27	33	28	24	28	24	22	24	21	19	17
10	49	37	30	26	45	35	29	25	31	26	22	26	22	20	22	19	17	15

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

	0°	90°	180°	270°
0°	33562	33562	33562	33562
5°	37483	33773	29945	33773
10°	41589	33536	25956	33536
15°	43632	33045	20451	33045
20°	37826	32316	17698	32316
25°	24807	31319	15800	31319
30°	16697	30109	14300	30109
35°	13525	28586	12899	28586
40°	12026	26930	11936	26930
45°	10885	24987	10654	24987
50°	9907	23059	9869	23059
55°	9312	20921	9191	20921
60°	7789	18962	7698	18962
65°	6567	17219	7450	17219
70°	6071	15375	7024	15375
75°	5677	13381	6488	13381
80°	5244	11018	5774	11018
85°	4817	8688	5076	8688



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.1	2.6
10°-20°	549.1	7.3
20°-30°	707.5	9.4
30°-40°	672.4	8.9
40°-50°	576.0	7.6
50°-60°	438.6	5.8
60°-70°	277.3	3.7
70°-80°	138.5	1.8
80°-90°	41.2	0.5
90°-100°	227.7	3.0
100°-110°	772.5	10.2
110°-120°	820.7	10.9
120°-130°	675.6	8.9
130°-140°	542.5	7.2
140°-150°	410.0	5.4
150°-160°	288.1	3.8
160°-170°	169.6	2.2
170°-180°	55.2	0.7
0°-30°	1453.7	19.2
0°-40°	2126.0	28.1
0°-60°	3140.7	41.5
0°-90°	3597.6	47.6
90°-120°	1820.9	24.1
90°-150°	3449.0	45.6
90°-180°	3962.0	52.4
0°-180°	7559.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2079	2079	2079	2079	2079	
5°	2313	2084	1848	2084	2313	228
15°	2610	1977	1224	1977	2610	704
25°	1392	1758	887	1758	1392	661
35°	686	1450	654	1450	686	439
45°	477	1094	467	1094	477	369
55°	331	743	326	743	331	290
65°	172	451	195	451	172	175
75°	91	214	104	214	91	97
85°	26	47	27	47	26	29
90°	36	1	36	1	36	20
95°	125	38	125	38	125	162
105°	1234	134	1234	134	1234	1194
115°	1624	235	1624	235	1624	1590
125°	1317	328	1317	328	1317	1190
135°	1092	385	1092	385	1092	848
145°	872	440	872	440	872	554
155°	732	500	732	500	732	342
165°	643	545	643	545	643	184
175°	579	568	579	568	579	56
180°	569	569	569	569	569	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2163.0	2164.8	2166.5	2162.5	2162.5	2159.0	2151.5	2145.7	2129.6	2127.2	2127.2
5°	2312.7	2311.3	2314.1	2304.8	2291.8	2288.9	2275.2	2257.1	2238.4	2217.4	2213.1
7.5°	2461.5	2459.4	2453.5	2452.0	2442.0	2420.2	2398.1	2374.5	2343.3	2312.9	2297.5
10°	2536.7	2560.5	2546.0	2520.7	2525.8	2491.9	2473.8	2442.8	2416.8	2371.2	2361.2
12.5°	2610.6	2620.0	2615.4	2601.0	2594.5	2571.0	2546.6	2519.6	2471.6	2430.7	2395.2
15°	2610.3	2624.0	2627.6	2623.3	2627.0	2625.5	2612.4	2590.1	2548.2	2503.4	2464.4
17.5°	2417.6	2427.1	2450.8	2466.8	2487.1	2529.9	2550.9	2559.2	2553.0	2527.4	2499.9
20°	2201.5	2185.6	2252.0	2286.0	2314.9	2387.1	2449.2	2473.0	2511.3	2510.7	2503.4
22.5°	1895.3	1899.0	1962.0	2002.3	2086.7	2158.9	2229.7	2319.4	2393.5	2442.4	2471.1
25°	1392.5	1420.0	1482.8	1537.8	1631.6	1765.9	1888.0	2029.6	2163.2	2268.7	2369.1
27.5°	1045.8	1047.9	1097.7	1148.4	1204.2	1314.3	1467.9	1637.0	1827.5	1984.7	2165.5
30°	895.6	891.3	912.2	943.3	991.0	1076.2	1191.8	1357.9	1547.8	1784.7	1995.6
32.5°	789.3	789.6	805.3	828.3	867.9	925.4	1004.6	1139.4	1319.0	1551.9	1799.2
35°	686.2	685.4	697.0	713.6	730.2	767.0	821.2	892.0	1015.5	1232.9	1485.7
37.5°	612.2	615.4	621.0	631.4	649.8	670.2	702.8	750.3	838.3	966.9	1179.3
40°	570.6	572.0	579.9	588.6	599.5	615.4	642.1	680.4	744.7	847.3	1002.5
42.5°	532.4	534.0	539.5	547.6	556.2	572.0	594.2	627.3	679.4	759.4	887.5
45°	476.7	476.7	481.7	485.4	494.7	509.2	527.3	554.7	590.8	650.1	735.3
47.5°	424.4	424.5	427.9	434.1	440.0	451.3	469.0	491.4	517.7	563.5	636.3
50°	394.4	395.1	397.3	402.3	406.0	416.0	429.8	449.2	476.7	512.1	572.8
52.5°	370.1	369.7	372.4	374.6	377.0	384.3	394.5	411.7	436.2	467.0	517.3
55°	330.8	327.9	332.2	335.8	338.0	340.9	346.7	357.5	378.4	404.4	442.1
57.5°	281.7	280.5	283.6	286.9	293.7	301.5	306.4	313.3	324.1	342.8	380.0
60°	241.2	241.2	247.7	249.9	257.9	268.0	278.1	283.9	294.7	307.0	334.4
62.5°	205.4	206.0	209.1	211.2	215.7	228.1	242.2	255.0	265.2	276.9	295.1
65°	171.9	173.3	173.3	174.7	177.7	180.6	186.3	196.4	214.5	231.1	244.9
67.5°	145.9	146.4	146.8	148.2	148.9	152.1	154.4	158.9	163.1	178.8	195.9
70°	128.6	130.7	130.0	131.5	132.1	133.7	136.5	138.6	145.2	148.8	158.9
72.5°	112.4	114.0	113.9	114.7	116.6	116.9	119.1	121.3	125.5	128.6	134.0
75°	91.0	90.3	91.0	92.5	93.2	93.9	93.9	96.8	99.0	101.8	105.5
77.5°	70.2	71.0	70.8	71.0	71.1	72.4	72.2	73.5	75.7	77.1	78.9
80°	56.4	57.0	56.4	57.0	57.8	58.5	57.8	58.5	60.7	62.1	62.1
82.5°	43.6	43.7	44.2	44.4	44.5	44.7	45.6	45.8	47.4	47.1	47.7
85°	26.0	25.3	25.3	25.3	26.0	26.8	26.0	26.0	26.8	26.8	26.8
87.5°	16.5	17.1	17.1	17.1	17.1	16.9	16.4	17.4	17.1	17.8	17.1
90°	36.1	36.1	36.1	36.1	36.1	35.1	32.9	35.1	36.1	37.2	36.1
92.5°	60.7	62.4	61.5	65.0	65.9	72.7	81.9	95.5	120.3	142.3	140.3
95°	124.8	123.8	127.1	135.7	150.0	174.1	220.1	286.9	375.6	429.2	379.9
97.5°	245.7	254.9	270.9	297.8	350.2	429.2	547.7	669.4	768.6	732.7	551.9
100°	392.0	411.7	443.5	490.5	581.4	713.9	863.9	999.7	1022.7	865.0	595.6
102.5°	689.8	716.5	756.2	836.5	935.3	1075.6	1185.3	1216.1	1117.3	869.4	579.0
105°	1234.0	1249.3	1296.4	1364.2	1432.2	1468.3	1454.1	1330.3	1102.6	811.3	546.4
107.5°	1576.2	1596.6	1606.0	1609.8	1601.2	1548.2	1434.4	1248.0	1006.4	749.1	530.2
110°	1679.6	1680.7	1670.8	1650.0	1603.0	1513.2	1373.0	1177.0	946.0	719.3	526.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1677.8	1672.0	1653.3	1618.5	1553.0	1450.1	1300.3	1112.2	904.0	700.1	527.5
115°	1623.8	1613.9	1585.5	1535.1	1457.4	1344.5	1201.2	1032.6	851.9	678.8	532.2
117.5°	1527.2	1518.9	1488.8	1435.7	1356.4	1250.7	1120.6	972.5	819.0	668.5	540.0
120°	1465.0	1454.1	1422.3	1370.8	1294.2	1194.6	1078.5	942.7	801.4	662.4	545.3
122.5°	1400.1	1391.0	1362.7	1312.1	1243.4	1153.4	1043.5	919.1	786.6	658.9	551.4
125°	1317.2	1308.4	1281.1	1239.4	1175.9	1093.8	997.5	884.7	765.3	652.6	560.6
127.5°	1244.5	1237.5	1213.8	1174.9	1119.5	1043.7	952.8	850.7	745.6	648.8	570.0
130°	1203.3	1194.6	1172.7	1135.5	1081.8	1009.6	923.0	828.9	732.5	647.1	577.0
132.5°	1160.4	1152.5	1132.4	1095.1	1042.4	974.5	895.0	807.9	722.0	646.2	584.0
135°	1091.7	1087.2	1067.5	1031.4	984.3	923.0	850.7	778.4	707.3	644.9	592.4
137.5°	1024.2	1017.7	1000.3	969.2	926.3	872.9	815.5	755.1	697.0	644.7	599.8
140°	977.8	971.2	954.8	926.3	891.3	843.1	792.8	740.2	690.9	643.9	603.3
142.5°	931.3	930.0	915.4	889.5	856.2	816.0	772.6	727.9	684.8	643.9	606.0
145°	871.6	868.3	857.3	838.7	812.5	780.7	746.8	710.6	676.7	641.6	608.8
147.5°	821.4	819.4	812.0	797.1	775.4	752.2	725.8	697.3	668.4	637.7	609.6
150°	791.6	790.5	784.0	770.8	754.4	734.7	711.7	687.6	661.3	635.1	608.8
152.5°	766.2	766.0	761.2	749.8	736.9	719.8	700.3	678.0	655.2	630.7	607.0
155°	732.5	734.7	730.3	722.6	710.6	698.5	682.1	664.6	643.9	623.0	604.4
157.5°	703.8	703.8	701.8	695.5	686.9	677.5	663.7	649.0	633.1	615.1	599.4
160°	685.4	685.4	684.3	678.8	671.2	663.5	651.5	639.4	625.2	609.9	596.7
162.5°	667.9	668.7	667.7	663.9	656.3	650.4	640.1	629.8	618.2	605.5	594.1
165°	642.7	643.9	643.9	639.4	635.1	630.7	623.0	615.4	606.6	596.7	589.1
167.5°	619.5	620.9	621.0	618.6	616.7	612.7	607.5	601.5	595.2	589.1	584.0
170°	605.5	607.7	608.8	605.5	604.4	602.2	597.9	594.6	589.1	584.7	581.4
172.5°	594.1	595.4	596.5	595.0	593.9	592.6	589.1	586.6	583.0	579.5	577.9
175°	579.2	581.4	582.5	581.4	581.4	580.3	579.2	578.2	574.9	573.7	572.7
177.5°	570.2	572.0	572.9	572.9	572.9	572.9	572.0	572.0	570.2	569.4	570.2
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2128.4	2123.7	2119.8	2109.3	2104.1	2092.5	2090.8	2090.3	2075.3	2060.8	2056.7
5°	2201.5	2189.9	2172.7	2152.4	2131.5	2109.8	2095.4	2083.8	2054.8	2027.4	2011.6
7.5°	2275.2	2250.3	2220.4	2182.2	2150.2	2114.4	2087.8	2064.0	2023.0	1983.7	1957.2
10°	2330.1	2289.6	2249.8	2197.2	2156.0	2115.5	2078.0	2045.5	1999.2	1947.3	1910.4
12.5°	2364.2	2319.7	2264.9	2213.4	2160.0	2108.7	2058.3	2016.6	1962.3	1908.6	1864.8
15°	2410.3	2362.6	2296.1	2222.4	2153.8	2086.7	2028.9	1976.9	1906.1	1841.8	1788.4
17.5°	2448.0	2382.4	2311.0	2225.8	2146.4	2061.0	1986.6	1920.1	1841.4	1763.8	1700.8
20°	2460.0	2395.1	2312.7	2227.5	2133.6	2033.3	1953.0	1880.8	1796.3	1711.8	1639.6
22.5°	2452.6	2402.0	2310.5	2208.5	2112.2	2007.2	1916.7	1832.9	1739.1	1652.8	1569.1
25°	2401.6	2384.3	2297.5	2186.3	2076.5	1954.5	1849.7	1758.0	1651.1	1558.7	1467.6
27.5°	2282.6	2320.1	2266.3	2147.9	2025.8	1895.0	1777.3	1672.8	1561.9	1457.8	1367.2
30°	2168.3	2254.2	2231.1	2121.3	1984.8	1856.2	1724.1	1615.0	1496.6	1389.7	1300.1
32.5°	2011.7	2153.7	2176.2	2084.3	1943.2	1802.0	1663.4	1554.9	1431.3	1318.6	1231.3
35°	1762.4	1974.7	2072.2	2013.7	1872.2	1719.8	1576.7	1450.3	1326.1	1214.8	1128.2
37.5°	1464.9	1754.2	1916.7	1920.8	1790.8	1632.4	1476.6	1351.1	1224.0	1114.7	1021.1
40°	1272.0	1585.4	1797.1	1844.0	1734.2	1563.0	1405.5	1277.7	1153.5	1046.6	939.0
42.5°	1098.6	1410.9	1671.0	1752.7	1665.5	1495.4	1337.4	1203.7	1083.0	981.8	871.9
45°	888.4	1161.4	1448.1	1594.0	1545.7	1388.2	1221.3	1094.3	980.8	893.4	788.0
47.5°	749.4	941.9	1219.4	1416.6	1415.8	1272.1	1108.0	986.2	881.0	799.1	713.8
50°	670.2	837.8	1072.6	1296.5	1315.2	1194.7	1038.6	918.0	819.8	733.9	665.2
52.5°	599.2	737.3	948.4	1163.0	1216.4	1112.0	960.6	849.2	753.9	674.9	616.1
55°	506.3	613.2	773.5	974.3	1055.3	981.6	847.3	743.2	665.9	599.5	548.9
57.5°	428.3	508.5	637.2	798.8	893.1	846.7	735.8	651.4	585.2	525.1	485.2
60°	379.2	444.9	554.0	689.1	793.1	760.5	665.9	587.2	530.8	478.9	441.3
62.5°	333.0	389.5	483.0	592.6	687.9	674.5	597.2	531.1	481.7	434.4	402.6
65°	268.0	309.2	382.1	468.1	544.6	551.1	495.5	450.7	406.6	369.1	340.9
67.5°	213.4	240.3	291.6	364.0	421.4	441.9	407.9	373.7	338.7	309.7	285.3
70°	179.8	201.5	239.0	297.6	350.3	371.9	352.5	325.7	295.4	271.5	250.6
72.5°	145.7	166.8	194.5	237.5	282.7	306.1	299.4	280.1	255.5	235.7	215.9
75°	109.8	116.3	135.1	164.0	199.3	219.6	224.6	214.5	195.0	179.8	168.2
77.5°	81.2	85.1	94.1	109.2	132.3	150.3	157.8	156.6	143.2	134.3	123.5
80°	65.0	67.2	71.5	78.0	95.4	113.4	118.5	118.5	109.1	105.5	94.6
82.5°	49.4	51.0	53.6	57.2	65.3	81.1	86.7	87.8	81.9	77.1	68.6
85°	28.2	27.4	28.9	31.1	32.5	36.9	45.5	46.9	45.5	39.7	37.5
87.5°	15.7	14.8	13.7	12.4	12.6	12.7	14.7	17.0	15.4	14.4	13.8
90°	29.6	21.9	16.4	13.1	10.9	8.8	4.3	1.1	4.3	8.8	10.9
92.5°	109.2	74.5	49.7	39.4	32.0	27.1	19.2	13.4	19.2	27.1	32.0
95°	252.9	157.7	107.3	81.1	63.5	53.6	42.7	38.4	42.7	53.6	63.5
97.5°	340.7	208.0	144.8	115.0	94.8	79.9	68.3	62.4	68.3	79.9	94.8
100°	359.1	225.6	167.5	136.9	115.0	97.5	87.6	84.3	87.6	97.5	115.0
102.5°	360.1	241.3	187.7	157.0	134.2	116.7	106.9	104.4	106.9	116.7	134.2
105°	365.7	268.2	216.8	186.2	162.0	145.6	138.0	133.6	138.0	145.6	162.0
107.5°	380.8	295.9	245.9	215.1	191.1	176.1	168.6	165.1	168.6	176.1	191.1
110°	393.0	314.2	266.1	234.3	211.3	197.1	190.5	186.2	190.5	197.1	211.3





TEST NUMBER: P331761-830  
 CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	406.2	331.8	285.3	252.7	230.5	217.3	209.8	205.4	209.8	217.3	230.5
115°	425.9	359.1	312.1	282.5	260.6	247.4	240.9	235.4	240.9	247.4	260.6
117.5°	447.0	384.3	340.7	310.1	289.1	277.5	270.9	266.6	270.9	277.5	289.1
120°	461.0	401.8	359.1	328.5	306.6	296.7	290.1	285.8	290.1	296.7	306.6
122.5°	473.3	418.5	378.4	346.9	325.0	314.2	307.6	304.2	307.6	314.2	325.0
125°	492.8	443.5	404.1	373.3	351.5	338.4	331.8	328.5	331.8	338.4	351.5
127.5°	510.9	466.7	428.3	396.8	375.8	361.4	352.1	347.7	352.1	361.4	375.8
130°	522.3	480.7	442.3	411.7	389.8	374.5	363.5	359.1	363.5	374.5	389.8
132.5°	533.7	492.9	456.4	425.7	402.9	386.7	374.9	369.7	374.9	386.7	402.9
135°	548.6	510.2	475.2	444.5	419.3	402.9	389.8	385.4	389.8	402.9	419.3
137.5°	560.0	524.2	489.7	461.2	436.2	418.7	405.6	400.3	405.6	418.7	436.2
140°	566.1	532.2	499.3	470.8	446.8	429.2	416.0	411.7	416.0	429.2	446.8
142.5°	571.4	538.3	506.3	479.6	456.4	438.8	426.6	423.1	426.6	438.8	456.4
145°	578.2	547.4	517.9	493.8	471.9	455.5	444.5	440.2	444.5	455.5	471.9
147.5°	581.8	554.9	527.1	505.7	487.5	472.3	461.8	458.5	461.8	472.3	487.5
150°	583.6	558.5	533.2	513.5	497.1	482.9	474.1	470.8	474.1	482.9	497.1
152.5°	584.5	561.9	539.3	521.4	505.9	493.3	484.7	483.1	484.7	493.3	505.9
155°	585.8	567.1	548.6	532.2	520.1	508.0	501.4	500.4	501.4	508.0	520.1
157.5°	585.8	570.9	555.2	541.3	531.7	521.2	515.9	514.8	515.9	521.2	531.7
160°	585.8	572.7	559.5	547.4	538.7	529.9	525.6	524.4	525.6	529.9	538.7
162.5°	584.9	573.5	562.1	552.7	544.8	537.8	533.5	534.1	533.5	537.8	544.8
165°	582.5	574.9	565.0	558.5	552.9	546.4	544.2	545.3	544.2	546.4	552.9
167.5°	581.0	574.6	567.4	563.3	559.3	555.2	553.2	554.5	553.2	555.2	559.3
170°	579.2	573.7	568.3	565.0	562.8	559.5	558.5	560.6	558.5	559.5	562.8
172.5°	576.6	572.9	569.1	566.8	565.4	562.1	562.8	564.1	562.8	562.1	565.4
175°	573.7	571.6	569.4	568.3	568.3	566.1	567.1	568.3	567.1	566.1	568.3
177.5°	572.0	570.2	569.4	569.4	569.4	567.6	568.4	570.2	568.4	567.6	569.4
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4



TEST NUMBER: P331761-830  
 CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2049.3	2045.2	2037.7	2026.1	2019.2	2007.1	1998.9	2003.6	2004.8	2003.6	2002.4
5°	1994.2	1979.1	1958.1	1937.9	1919.1	1898.8	1887.3	1882.3	1872.2	1866.3	1863.5
7.5°	1927.6	1901.5	1871.9	1836.6	1806.7	1775.4	1759.3	1751.3	1730.7	1719.5	1709.6
10°	1877.9	1836.7	1807.1	1761.0	1732.8	1691.6	1663.4	1664.2	1636.0	1620.0	1608.5
12.5°	1823.1	1777.8	1728.5	1687.0	1647.8	1614.8	1580.7	1567.1	1537.2	1521.8	1490.6
15°	1732.0	1679.3	1627.3	1570.9	1531.3	1480.0	1430.9	1370.9	1322.5	1280.6	1269.0
17.5°	1632.7	1567.4	1515.2	1449.1	1381.0	1294.8	1237.8	1203.1	1173.8	1151.8	1135.3
20°	1564.4	1498.0	1442.4	1342.7	1250.9	1192.5	1150.6	1123.9	1093.5	1069.7	1056.7
22.5°	1492.8	1423.4	1347.6	1236.4	1164.9	1117.9	1080.6	1049.9	1029.4	1010.8	998.9
25°	1391.1	1315.2	1190.3	1113.7	1055.9	1006.8	980.8	962.1	940.4	915.1	903.6
27.5°	1283.6	1163.0	1073.3	1016.3	961.2	929.3	905.9	877.9	858.5	847.1	835.1
30°	1203.3	1082.7	1012.7	950.6	911.5	876.1	848.7	832.8	814.0	794.5	786.6
32.5°	1113.7	1017.4	950.3	898.5	858.9	828.8	807.1	781.4	767.8	755.8	739.1
35°	1002.5	929.5	868.2	826.3	788.7	764.2	738.9	723.7	699.2	689.1	682.6
37.5°	908.3	845.1	799.3	755.1	725.3	698.1	682.7	658.6	647.9	633.9	620.2
40°	855.2	793.1	749.0	712.8	679.7	659.4	639.9	620.5	604.5	598.0	581.5
42.5°	800.9	750.3	706.2	666.7	644.4	623.0	598.3	584.0	567.6	557.0	546.8
45°	725.9	681.1	643.6	611.1	586.4	564.1	548.2	524.3	515.0	494.1	485.4
47.5°	660.1	618.4	582.6	551.7	527.7	513.1	489.8	471.2	456.2	443.4	432.3
50°	613.2	578.5	543.8	516.4	494.7	473.8	450.0	440.5	417.5	410.9	404.4
52.5°	570.4	537.5	505.8	478.9	457.2	436.9	415.8	403.6	388.0	381.5	376.7
55°	510.7	478.9	448.6	424.7	403.0	382.1	369.1	353.9	346.7	341.7	335.8
57.5°	450.5	422.0	398.7	374.6	352.8	336.1	321.1	312.0	304.5	297.8	291.0
60°	412.5	384.9	364.0	341.7	319.2	305.5	294.0	283.1	274.5	264.4	261.5
62.5°	371.9	348.0	328.8	307.0	287.5	274.9	263.9	253.6	243.3	228.6	224.5
65°	316.3	297.6	277.4	259.3	242.0	229.7	213.8	202.3	197.9	196.4	195.8
67.5°	266.1	248.4	231.0	212.4	196.7	185.3	177.3	175.5	172.5	171.6	169.6
70°	232.6	215.9	198.6	181.3	166.2	164.0	161.1	158.2	154.6	153.2	151.7
72.5°	202.6	185.3	168.0	154.1	147.6	144.9	142.0	139.1	136.7	135.3	134.3
75°	155.3	139.4	127.8	122.8	119.1	117.0	112.6	110.5	109.1	106.9	106.1
77.5°	111.8	102.8	97.6	94.3	90.6	88.2	85.8	83.6	82.1	81.6	80.5
80°	85.2	80.9	77.3	73.0	71.5	68.6	67.9	65.7	66.4	64.3	64.3
82.5°	66.2	60.7	57.7	55.6	54.2	51.8	51.2	50.1	50.2	48.6	48.6
85°	33.9	32.5	31.1	29.6	29.6	27.4	28.2	27.4	27.4	26.0	25.3
87.5°	13.6	13.7	13.7	15.2	16.5	16.1	15.9	15.1	14.7	15.1	14.7
90°	13.1	16.4	21.9	29.6	36.1	37.2	36.1	35.1	32.9	35.1	36.1
92.5°	39.4	49.7	74.5	109.2	140.3	142.3	120.3	95.5	81.9	72.7	65.9
95°	81.1	107.3	157.7	252.9	379.9	429.2	375.6	286.9	220.1	174.1	150.0
97.5°	115.0	144.8	208.0	340.7	551.9	732.7	768.6	669.4	547.7	429.2	350.2
100°	136.9	167.5	225.6	359.1	595.6	865.0	1022.7	999.7	863.9	713.9	581.4
102.5°	157.0	187.7	241.3	360.1	579.0	869.4	1117.3	1216.1	1185.3	1075.6	935.3
105°	186.2	216.8	268.2	365.7	546.4	811.3	1102.6	1330.3	1454.1	1468.3	1432.2
107.5°	215.1	245.9	295.9	380.8	530.2	749.1	1006.4	1248.0	1434.4	1548.2	1601.2
110°	234.3	266.1	314.2	393.0	526.7	719.3	946.0	1177.0	1373.0	1513.2	1603.0



TEST NUMBER: P331761-830

CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	252.7	285.3	331.8	406.2	527.5	700.1	904.0	1112.2	1300.3	1450.1	1553.0
115°	282.5	312.1	359.1	425.9	532.2	678.8	851.9	1032.6	1201.2	1344.5	1457.4
117.5°	310.1	340.7	384.3	447.0	540.0	668.5	819.0	972.5	1120.6	1250.7	1356.4
120°	328.5	359.1	401.8	461.0	545.3	662.4	801.4	942.7	1078.5	1194.6	1294.2
122.5°	346.9	378.4	418.5	473.3	551.4	658.9	786.6	919.1	1043.5	1153.4	1243.4
125°	373.3	404.1	443.5	492.8	560.6	652.6	765.3	884.7	997.5	1093.8	1175.9
127.5°	396.8	428.3	466.7	510.9	570.0	648.8	745.6	850.7	952.8	1043.7	1119.5
130°	411.7	442.3	480.7	522.3	577.0	647.1	732.5	828.9	923.0	1009.6	1081.8
132.5°	425.7	456.4	492.9	533.7	584.0	646.2	722.0	807.9	895.0	974.5	1042.4
135°	444.5	475.2	510.2	548.6	592.4	644.9	707.3	778.4	850.7	923.0	984.3
137.5°	461.2	489.7	524.2	560.0	599.8	644.7	697.0	755.1	815.5	872.9	926.3
140°	470.8	499.3	532.2	566.1	603.3	643.9	690.9	740.2	792.8	843.1	891.3
142.5°	479.6	506.3	538.3	571.4	606.0	643.9	684.8	727.9	772.6	816.0	856.2
145°	493.8	517.9	547.4	578.2	608.8	641.6	676.7	710.6	746.8	780.7	812.5
147.5°	505.7	527.1	554.9	581.8	609.6	637.7	668.4	697.3	725.8	752.2	775.4
150°	513.5	533.2	558.5	583.6	608.8	635.1	661.3	687.6	711.7	734.7	754.4
152.5°	521.4	539.3	561.9	584.5	607.0	630.7	655.2	678.0	700.3	719.8	736.9
155°	532.2	548.6	567.1	585.8	604.4	623.0	643.9	664.6	682.1	698.5	710.6
157.5°	541.3	555.2	570.9	585.8	599.4	615.1	633.1	649.0	663.7	677.5	686.9
160°	547.4	559.5	572.7	585.8	596.7	609.9	625.2	639.4	651.5	663.5	671.2
162.5°	552.7	562.1	573.5	584.9	594.1	605.5	618.2	629.8	640.1	650.4	656.3
165°	558.5	565.0	574.9	582.5	589.1	596.7	606.6	615.4	623.0	630.7	635.1
167.5°	563.3	567.4	574.6	581.0	584.0	589.1	595.2	601.5	607.5	612.7	616.7
170°	565.0	568.3	573.7	579.2	581.4	584.7	589.1	594.6	597.9	602.2	604.4
172.5°	566.8	569.1	572.9	576.6	577.9	579.5	583.0	586.6	589.1	592.6	593.9
175°	568.3	569.4	571.6	573.7	572.7	573.7	574.9	578.2	579.2	580.3	581.4
177.5°	569.4	569.4	570.2	572.0	570.2	569.4	570.2	572.0	572.0	572.9	572.9
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4



TEST NUMBER: P331761-830  
 CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	1996.1	1997.2	1995.6	1996.7	1995.6	1997.2	1996.1	2002.4	2003.6	2004.8	2003.6
5°	1859.8	1851.2	1849.7	1847.6	1849.7	1851.2	1859.8	1863.5	1866.3	1872.2	1882.3
7.5°	1697.2	1695.9	1692.3	1687.2	1692.3	1695.9	1697.2	1709.6	1719.5	1730.7	1751.3
10°	1592.6	1589.0	1588.3	1583.2	1588.3	1589.0	1592.6	1608.5	1620.0	1636.0	1664.2
12.5°	1470.1	1446.9	1444.4	1431.8	1444.4	1446.9	1470.1	1490.6	1521.8	1537.2	1567.1
15°	1251.7	1247.4	1232.9	1223.5	1232.9	1247.4	1251.7	1269.0	1280.6	1322.5	1370.9
17.5°	1126.9	1112.8	1108.2	1106.3	1108.2	1112.8	1126.9	1135.3	1151.8	1173.8	1203.1
20°	1046.6	1033.6	1031.4	1030.0	1031.4	1033.6	1046.6	1056.7	1069.7	1093.5	1123.9
22.5°	991.1	977.5	971.9	967.5	971.9	977.5	991.1	998.9	1010.8	1029.4	1049.9
25°	896.4	891.3	888.4	886.9	888.4	891.3	896.4	903.6	915.1	940.4	962.1
27.5°	822.3	811.2	809.0	805.2	809.0	811.2	822.3	835.1	847.1	858.5	877.9
30°	780.0	776.5	771.4	767.0	771.4	776.5	780.0	786.6	794.5	814.0	832.8
32.5°	730.4	727.4	722.8	720.9	722.8	727.4	730.4	739.1	755.8	767.8	781.4
35°	675.3	665.2	660.9	654.4	660.9	665.2	675.3	682.6	689.1	699.2	723.7
37.5°	617.1	611.8	605.7	607.8	605.7	611.8	617.1	620.2	633.9	647.9	658.6
40°	572.0	568.4	567.0	566.3	567.0	568.4	572.0	581.5	598.0	604.5	620.5
42.5°	536.2	526.2	522.5	522.4	522.5	526.2	536.2	546.8	557.0	567.6	584.0
45°	481.7	472.4	465.9	466.6	465.9	472.4	481.7	485.4	494.1	515.0	524.3
47.5°	426.0	425.7	421.7	422.9	421.7	425.7	426.0	432.3	443.4	456.2	471.2
50°	399.4	395.1	392.2	392.9	392.2	395.1	399.4	404.4	410.9	417.5	440.5
52.5°	374.0	370.2	368.0	371.0	368.0	370.2	374.0	376.7	381.5	388.0	403.6
55°	332.2	327.9	327.2	326.5	327.2	327.9	332.2	335.8	341.7	346.7	353.9
57.5°	285.6	282.7	278.3	276.4	278.3	282.7	285.6	291.0	297.8	304.5	312.0
60°	252.0	246.3	239.0	238.4	239.0	246.3	252.0	261.5	264.4	274.5	283.1
62.5°	221.4	220.3	218.9	218.7	218.9	220.3	221.4	224.5	228.6	243.3	253.6
65°	194.3	193.6	194.3	195.0	194.3	193.6	194.3	195.8	196.4	197.9	202.3
67.5°	169.3	168.0	166.7	167.3	166.7	168.0	169.3	169.6	171.6	172.5	175.5
70°	150.2	149.5	148.8	148.8	148.8	149.5	150.2	151.7	153.2	154.6	158.2
72.5°	131.8	131.6	130.9	130.3	130.9	131.6	131.8	134.3	135.3	136.7	139.1
75°	105.5	104.0	104.0	104.0	104.0	104.0	105.5	106.1	106.9	109.1	110.5
77.5°	80.3	79.6	78.9	78.3	78.9	79.6	80.3	80.5	81.6	82.1	83.6
80°	63.5	62.9	62.1	62.1	62.1	62.9	63.5	64.3	64.3	66.4	65.7
82.5°	48.5	47.8	47.7	47.1	47.7	47.8	48.5	48.6	48.6	50.2	50.1
85°	26.0	26.8	26.0	27.4	26.0	26.8	26.0	25.3	26.0	27.4	27.4
87.5°	14.7	14.1	14.7	14.1	14.7	14.1	14.7	14.7	15.1	14.7	15.1
90°	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	35.1	32.9	35.1
92.5°	65.0	61.5	62.4	60.7	62.4	61.5	65.0	65.9	72.7	81.9	95.5
95°	135.7	127.1	123.8	124.8	123.8	127.1	135.7	150.0	174.1	220.1	286.9
97.5°	297.8	270.9	254.9	245.7	254.9	270.9	297.8	350.2	429.2	547.7	669.4
100°	490.5	443.5	411.7	392.0	411.7	443.5	490.5	581.4	713.9	863.9	999.7
102.5°	836.5	756.2	716.5	689.8	716.5	756.2	836.5	935.3	1075.6	1185.3	1216.1
105°	1364.2	1296.4	1249.3	1234.0	1249.3	1296.4	1364.2	1432.2	1468.3	1454.1	1330.3
107.5°	1609.8	1606.0	1596.6	1576.2	1596.6	1606.0	1609.8	1601.2	1548.2	1434.4	1248.0
110°	1650.0	1670.8	1680.7	1679.6	1680.7	1670.8	1650.0	1603.0	1513.2	1373.0	1177.0



TEST NUMBER: P331761-830  
 CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1618.5	1653.3	1672.0	1677.8	1672.0	1653.3	1618.5	1553.0	1450.1	1300.3	1112.2
115°	1535.1	1585.5	1613.9	1623.8	1613.9	1585.5	1535.1	1457.4	1344.5	1201.2	1032.6
117.5°	1435.7	1488.8	1518.9	1527.2	1518.9	1488.8	1435.7	1356.4	1250.7	1120.6	972.5
120°	1370.8	1422.3	1454.1	1465.0	1454.1	1422.3	1370.8	1294.2	1194.6	1078.5	942.7
122.5°	1312.1	1362.7	1391.0	1400.1	1391.0	1362.7	1312.1	1243.4	1153.4	1043.5	919.1
125°	1239.4	1281.1	1308.4	1317.2	1308.4	1281.1	1239.4	1175.9	1093.8	997.5	884.7
127.5°	1174.9	1213.8	1237.5	1244.5	1237.5	1213.8	1174.9	1119.5	1043.7	952.8	850.7
130°	1135.5	1172.7	1194.6	1203.3	1194.6	1172.7	1135.5	1081.8	1009.6	923.0	828.9
132.5°	1095.1	1132.4	1152.5	1160.4	1152.5	1132.4	1095.1	1042.4	974.5	895.0	807.9
135°	1031.4	1067.5	1087.2	1091.7	1087.2	1067.5	1031.4	984.3	923.0	850.7	778.4
137.5°	969.2	1000.3	1017.7	1024.2	1017.7	1000.3	969.2	926.3	872.9	815.5	755.1
140°	926.3	954.8	971.2	977.8	971.2	954.8	926.3	891.3	843.1	792.8	740.2
142.5°	889.5	915.4	930.0	931.3	930.0	915.4	889.5	856.2	816.0	772.6	727.9
145°	838.7	857.3	868.3	871.6	868.3	857.3	838.7	812.5	780.7	746.8	710.6
147.5°	797.1	812.0	819.4	821.4	819.4	812.0	797.1	775.4	752.2	725.8	697.3
150°	770.8	784.0	790.5	791.6	790.5	784.0	770.8	754.4	734.7	711.7	687.6
152.5°	749.8	761.2	766.0	766.2	766.0	761.2	749.8	736.9	719.8	700.3	678.0
155°	722.6	730.3	734.7	732.5	734.7	730.3	722.6	710.6	698.5	682.1	664.6
157.5°	695.5	701.8	703.8	703.8	703.8	701.8	695.5	686.9	677.5	663.7	649.0
160°	678.8	684.3	685.4	685.4	685.4	684.3	678.8	671.2	663.5	651.5	639.4
162.5°	663.9	667.7	668.7	667.9	668.7	667.7	663.9	656.3	650.4	640.1	629.8
165°	639.4	643.9	643.9	642.7	643.9	643.9	639.4	635.1	630.7	623.0	615.4
167.5°	618.6	621.0	620.9	619.5	620.9	621.0	618.6	616.7	612.7	607.5	601.5
170°	605.5	608.8	607.7	605.5	607.7	608.8	605.5	604.4	602.2	597.9	594.6
172.5°	595.0	596.5	595.4	594.1	595.4	596.5	595.0	593.9	592.6	589.1	586.6
175°	581.4	582.5	581.4	579.2	581.4	582.5	581.4	581.4	580.3	579.2	578.2
177.5°	572.9	572.9	572.0	570.2	572.0	572.9	572.9	572.9	572.9	572.0	572.0
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4



TEST NUMBER: P331761-830  
 CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	1998.9	2007.1	2019.2	2026.1	2037.7	2045.2	2049.3	2056.7	2060.8	2075.3	2090.3
5°	1887.3	1898.8	1919.1	1937.9	1958.1	1979.1	1994.2	2011.6	2027.4	2054.8	2083.8
7.5°	1759.3	1775.4	1806.7	1836.6	1871.9	1901.5	1927.6	1957.2	1983.7	2023.0	2064.0
10°	1663.4	1691.6	1732.8	1761.0	1807.1	1836.7	1877.9	1910.4	1947.3	1999.2	2045.5
12.5°	1580.7	1614.8	1647.8	1687.0	1728.5	1777.8	1823.1	1864.8	1908.6	1962.3	2016.6
15°	1430.9	1480.0	1531.3	1570.9	1627.3	1679.3	1732.0	1788.4	1841.8	1906.1	1976.9
17.5°	1237.8	1294.8	1381.0	1449.1	1515.2	1567.4	1632.7	1700.8	1763.8	1841.4	1920.1
20°	1150.6	1192.5	1250.9	1342.7	1442.4	1498.0	1564.4	1639.6	1711.8	1796.3	1880.8
22.5°	1080.6	1117.9	1164.9	1236.4	1347.6	1423.4	1492.8	1569.1	1652.8	1739.1	1832.9
25°	980.8	1006.8	1055.9	1113.7	1190.3	1315.2	1391.1	1467.6	1558.7	1651.1	1758.0
27.5°	905.9	929.3	961.2	1016.3	1073.3	1163.0	1283.6	1367.2	1457.8	1561.9	1672.8
30°	848.7	876.1	911.5	950.6	1012.7	1082.7	1203.3	1300.1	1389.7	1496.6	1615.0
32.5°	807.1	828.8	858.9	898.5	950.3	1017.4	1113.7	1231.3	1318.6	1431.3	1554.9
35°	738.9	764.2	788.7	826.3	868.2	929.5	1002.5	1128.2	1214.8	1326.1	1450.3
37.5°	682.7	698.1	725.3	755.1	799.3	845.1	908.3	1021.1	1114.7	1224.0	1351.1
40°	639.9	659.4	679.7	712.8	749.0	793.1	855.2	939.0	1046.6	1153.5	1277.7
42.5°	598.3	623.0	644.4	666.7	706.2	750.3	800.9	871.9	981.8	1083.0	1203.7
45°	548.2	564.1	586.4	611.1	643.6	681.1	725.9	788.0	893.4	980.8	1094.3
47.5°	489.8	513.1	527.7	551.7	582.6	618.4	660.1	713.8	799.1	881.0	986.2
50°	450.0	473.8	494.7	516.4	543.8	578.5	613.2	665.2	733.9	819.8	918.0
52.5°	415.8	436.9	457.2	478.9	505.8	537.5	570.4	616.1	674.9	753.9	849.2
55°	369.1	382.1	403.0	424.7	448.6	478.9	510.7	548.9	599.5	665.9	743.2
57.5°	321.1	336.1	352.8	374.6	398.7	422.0	450.5	485.2	525.1	585.2	651.4
60°	294.0	305.5	319.2	341.7	364.0	384.9	412.5	441.3	478.9	530.8	587.2
62.5°	263.9	274.9	287.5	307.0	328.8	348.0	371.9	402.6	434.4	481.7	531.1
65°	213.8	229.7	242.0	259.3	277.4	297.6	316.3	340.9	369.1	406.6	450.7
67.5°	177.3	185.3	196.7	212.4	231.0	248.4	266.1	285.3	309.7	338.7	373.7
70°	161.1	164.0	166.2	181.3	198.6	215.9	232.6	250.6	271.5	295.4	325.7
72.5°	142.0	144.9	147.6	154.1	168.0	185.3	202.6	215.9	235.7	255.5	280.1
75°	112.6	117.0	119.1	122.8	127.8	139.4	155.3	168.2	179.8	195.0	214.5
77.5°	85.8	88.2	90.6	94.3	97.6	102.8	111.8	123.5	134.3	143.2	156.6
80°	67.9	68.6	71.5	73.0	77.3	80.9	85.2	94.6	105.5	109.1	118.5
82.5°	51.2	51.8	54.2	55.6	57.7	60.7	66.2	68.6	77.1	81.9	87.8
85°	28.2	27.4	29.6	29.6	31.1	32.5	33.9	37.5	39.7	45.5	46.9
87.5°	15.9	16.1	16.5	15.2	13.7	13.7	13.6	13.8	14.4	15.4	17.0
90°	36.1	37.2	36.1	29.6	21.9	16.4	13.1	10.9	8.8	4.3	1.1
92.5°	120.3	142.3	140.3	109.2	74.5	49.7	39.4	32.0	27.1	19.2	13.4
95°	375.6	429.2	379.9	252.9	157.7	107.3	81.1	63.5	53.6	42.7	38.4
97.5°	768.6	732.7	551.9	340.7	208.0	144.8	115.0	94.8	79.9	68.3	62.4
100°	1022.7	865.0	595.6	359.1	225.6	167.5	136.9	115.0	97.5	87.6	84.3
102.5°	1117.3	869.4	579.0	360.1	241.3	187.7	157.0	134.2	116.7	106.9	104.4
105°	1102.6	811.3	546.4	365.7	268.2	216.8	186.2	162.0	145.6	138.0	133.6
107.5°	1006.4	749.1	530.2	380.8	295.9	245.9	215.1	191.1	176.1	168.6	165.1
110°	946.0	719.3	526.7	393.0	314.2	266.1	234.3	211.3	197.1	190.5	186.2



TEST NUMBER: P331761-830

CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	904.0	700.1	527.5	406.2	331.8	285.3	252.7	230.5	217.3	209.8	205.4
115°	851.9	678.8	532.2	425.9	359.1	312.1	282.5	260.6	247.4	240.9	235.4
117.5°	819.0	668.5	540.0	447.0	384.3	340.7	310.1	289.1	277.5	270.9	266.6
120°	801.4	662.4	545.3	461.0	401.8	359.1	328.5	306.6	296.7	290.1	285.8
122.5°	786.6	658.9	551.4	473.3	418.5	378.4	346.9	325.0	314.2	307.6	304.2
125°	765.3	652.6	560.6	492.8	443.5	404.1	373.3	351.5	338.4	331.8	328.5
127.5°	745.6	648.8	570.0	510.9	466.7	428.3	396.8	375.8	361.4	352.1	347.7
130°	732.5	647.1	577.0	522.3	480.7	442.3	411.7	389.8	374.5	363.5	359.1
132.5°	722.0	646.2	584.0	533.7	492.9	456.4	425.7	402.9	386.7	374.9	369.7
135°	707.3	644.9	592.4	548.6	510.2	475.2	444.5	419.3	402.9	389.8	385.4
137.5°	697.0	644.7	599.8	560.0	524.2	489.7	461.2	436.2	418.7	405.6	400.3
140°	690.9	643.9	603.3	566.1	532.2	499.3	470.8	446.8	429.2	416.0	411.7
142.5°	684.8	643.9	606.0	571.4	538.3	506.3	479.6	456.4	438.8	426.6	423.1
145°	676.7	641.6	608.8	578.2	547.4	517.9	493.8	471.9	455.5	444.5	440.2
147.5°	668.4	637.7	609.6	581.8	554.9	527.1	505.7	487.5	472.3	461.8	458.5
150°	661.3	635.1	608.8	583.6	558.5	533.2	513.5	497.1	482.9	474.1	470.8
152.5°	655.2	630.7	607.0	584.5	561.9	539.3	521.4	505.9	493.3	484.7	483.1
155°	643.9	623.0	604.4	585.8	567.1	548.6	532.2	520.1	508.0	501.4	500.4
157.5°	633.1	615.1	599.4	585.8	570.9	555.2	541.3	531.7	521.2	515.9	514.8
160°	625.2	609.9	596.7	585.8	572.7	559.5	547.4	538.7	529.9	525.6	524.4
162.5°	618.2	605.5	594.1	584.9	573.5	562.1	552.7	544.8	537.8	533.5	534.1
165°	606.6	596.7	589.1	582.5	574.9	565.0	558.5	552.9	546.4	544.2	545.3
167.5°	595.2	589.1	584.0	581.0	574.6	567.4	563.3	559.3	555.2	553.2	554.5
170°	589.1	584.7	581.4	579.2	573.7	568.3	565.0	562.8	559.5	558.5	560.6
172.5°	583.0	579.5	577.9	576.6	572.9	569.1	566.8	565.4	562.1	562.8	564.1
175°	574.9	573.7	572.7	573.7	571.6	569.4	568.3	568.3	566.1	567.1	568.3
177.5°	570.2	569.4	570.2	572.0	570.2	569.4	569.4	569.4	567.6	568.4	570.2
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4





TEST NUMBER: P331761-830

CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2090.8	2092.5	2104.1	2109.3	2119.8	2123.7	2128.4	2127.2	2127.2	2129.6	2145.7
5°	2095.4	2109.8	2131.5	2152.4	2172.7	2189.9	2201.5	2213.1	2217.4	2238.4	2257.1
7.5°	2087.8	2114.4	2150.2	2182.2	2220.4	2250.3	2275.2	2297.5	2312.9	2343.3	2374.5
10°	2078.0	2115.5	2156.0	2197.2	2249.8	2289.6	2330.1	2361.2	2371.2	2416.8	2442.8
12.5°	2058.3	2108.7	2160.0	2213.4	2264.9	2319.7	2364.2	2395.2	2430.7	2471.6	2519.6
15°	2028.9	2086.7	2153.8	2222.4	2296.1	2362.6	2410.3	2464.4	2503.4	2548.2	2590.1
17.5°	1986.6	2061.0	2146.4	2225.8	2311.0	2382.4	2448.0	2499.9	2527.4	2553.0	2559.2
20°	1953.0	2033.3	2133.6	2227.5	2312.7	2395.1	2460.0	2503.4	2510.7	2511.3	2473.0
22.5°	1916.7	2007.2	2112.2	2208.5	2310.5	2402.0	2452.6	2471.1	2442.4	2393.5	2319.4
25°	1849.7	1954.5	2076.5	2186.3	2297.5	2384.3	2401.6	2369.1	2268.7	2163.2	2029.6
27.5°	1777.3	1895.0	2025.8	2147.9	2266.3	2320.1	2282.6	2165.5	1984.7	1827.5	1637.0
30°	1724.1	1856.2	1984.8	2121.3	2231.1	2254.2	2168.3	1995.6	1784.7	1547.8	1357.9
32.5°	1663.4	1802.0	1943.2	2084.3	2176.2	2153.7	2011.7	1799.2	1551.9	1319.0	1139.4
35°	1576.7	1719.8	1872.2	2013.7	2072.2	1974.7	1762.4	1485.7	1232.9	1015.5	892.0
37.5°	1476.6	1632.4	1790.8	1920.8	1916.7	1754.2	1464.9	1179.3	966.9	838.3	750.3
40°	1405.5	1563.0	1734.2	1844.0	1797.1	1585.4	1272.0	1002.5	847.3	744.7	680.4
42.5°	1337.4	1495.4	1665.5	1752.7	1671.0	1410.9	1098.6	887.5	759.4	679.4	627.3
45°	1221.3	1388.2	1545.7	1594.0	1448.1	1161.4	888.4	735.3	650.1	590.8	554.7
47.5°	1108.0	1272.1	1415.8	1416.6	1219.4	941.9	749.4	636.3	563.5	517.7	491.4
50°	1038.6	1194.7	1315.2	1296.5	1072.6	837.8	670.2	572.8	512.1	476.7	449.2
52.5°	960.6	1112.0	1216.4	1163.0	948.4	737.3	599.2	517.3	467.0	436.2	411.7
55°	847.3	981.6	1055.3	974.3	773.5	613.2	506.3	442.1	404.4	378.4	357.5
57.5°	735.8	846.7	893.1	798.8	637.2	508.5	428.3	380.0	342.8	324.1	313.3
60°	665.9	760.5	793.1	689.1	554.0	444.9	379.2	334.4	307.0	294.7	283.9
62.5°	597.2	674.5	687.9	592.6	483.0	389.5	333.0	295.1	276.9	265.2	255.0
65°	495.5	551.1	544.6	468.1	382.1	309.2	268.0	244.9	231.1	214.5	196.4
67.5°	407.9	441.9	421.4	364.0	291.6	240.3	213.4	195.9	178.8	163.1	158.9
70°	352.5	371.9	350.3	297.6	239.0	201.5	179.8	158.9	148.8	145.2	138.6
72.5°	299.4	306.1	282.7	237.5	194.5	166.8	145.7	134.0	128.6	125.5	121.3
75°	224.6	219.6	199.3	164.0	135.1	116.3	109.8	105.5	101.8	99.0	96.8
77.5°	157.8	150.3	132.3	109.2	94.1	85.1	81.2	78.9	77.1	75.7	73.5
80°	118.5	113.4	95.4	78.0	71.5	67.2	65.0	62.1	62.1	60.7	58.5
82.5°	86.7	81.1	65.3	57.2	53.6	51.0	49.4	47.7	47.1	47.4	45.8
85°	45.5	36.9	32.5	31.1	28.9	27.4	28.2	26.8	26.8	26.8	26.0
87.5°	14.7	12.7	12.6	12.4	13.7	14.8	15.7	17.1	17.8	17.1	17.4
90°	4.3	8.8	10.9	13.1	16.4	21.9	29.6	36.1	37.2	36.1	35.1
92.5°	19.2	27.1	32.0	39.4	49.7	74.5	109.2	140.3	142.3	120.3	95.5
95°	42.7	53.6	63.5	81.1	107.3	157.7	252.9	379.9	429.2	375.6	286.9
97.5°	68.3	79.9	94.8	115.0	144.8	208.0	340.7	551.9	732.7	768.6	669.4
100°	87.6	97.5	115.0	136.9	167.5	225.6	359.1	595.6	865.0	1022.7	999.7
102.5°	106.9	116.7	134.2	157.0	187.7	241.3	360.1	579.0	869.4	1117.3	1216.1
105°	138.0	145.6	162.0	186.2	216.8	268.2	365.7	546.4	811.3	1102.6	1330.3
107.5°	168.6	176.1	191.1	215.1	245.9	295.9	380.8	530.2	749.1	1006.4	1248.0
110°	190.5	197.1	211.3	234.3	266.1	314.2	393.0	526.7	719.3	946.0	1177.0





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	209.8	217.3	230.5	252.7	285.3	331.8	406.2	527.5	700.1	904.0	1112.2
115°	240.9	247.4	260.6	282.5	312.1	359.1	425.9	532.2	678.8	851.9	1032.6
117.5°	270.9	277.5	289.1	310.1	340.7	384.3	447.0	540.0	668.5	819.0	972.5
120°	290.1	296.7	306.6	328.5	359.1	401.8	461.0	545.3	662.4	801.4	942.7
122.5°	307.6	314.2	325.0	346.9	378.4	418.5	473.3	551.4	658.9	786.6	919.1
125°	331.8	338.4	351.5	373.3	404.1	443.5	492.8	560.6	652.6	765.3	884.7
127.5°	352.1	361.4	375.8	396.8	428.3	466.7	510.9	570.0	648.8	745.6	850.7
130°	363.5	374.5	389.8	411.7	442.3	480.7	522.3	577.0	647.1	732.5	828.9
132.5°	374.9	386.7	402.9	425.7	456.4	492.9	533.7	584.0	646.2	722.0	807.9
135°	389.8	402.9	419.3	444.5	475.2	510.2	548.6	592.4	644.9	707.3	778.4
137.5°	405.6	418.7	436.2	461.2	489.7	524.2	560.0	599.8	644.7	697.0	755.1
140°	416.0	429.2	446.8	470.8	499.3	532.2	566.1	603.3	643.9	690.9	740.2
142.5°	426.6	438.8	456.4	479.6	506.3	538.3	571.4	606.0	643.9	684.8	727.9
145°	444.5	455.5	471.9	493.8	517.9	547.4	578.2	608.8	641.6	676.7	710.6
147.5°	461.8	472.3	487.5	505.7	527.1	554.9	581.8	609.6	637.7	668.4	697.3
150°	474.1	482.9	497.1	513.5	533.2	558.5	583.6	608.8	635.1	661.3	687.6
152.5°	484.7	493.3	505.9	521.4	539.3	561.9	584.5	607.0	630.7	655.2	678.0
155°	501.4	508.0	520.1	532.2	548.6	567.1	585.8	604.4	623.0	643.9	664.6
157.5°	515.9	521.2	531.7	541.3	555.2	570.9	585.8	599.4	615.1	633.1	649.0
160°	525.6	529.9	538.7	547.4	559.5	572.7	585.8	596.7	609.9	625.2	639.4
162.5°	533.5	537.8	544.8	552.7	562.1	573.5	584.9	594.1	605.5	618.2	629.8
165°	544.2	546.4	552.9	558.5	565.0	574.9	582.5	589.1	596.7	606.6	615.4
167.5°	553.2	555.2	559.3	563.3	567.4	574.6	581.0	584.0	589.1	595.2	601.5
170°	558.5	559.5	562.8	565.0	568.3	573.7	579.2	581.4	584.7	589.1	594.6
172.5°	562.8	562.1	565.4	566.8	569.1	572.9	576.6	577.9	579.5	583.0	586.6
175°	567.1	566.1	568.3	568.3	569.4	571.6	573.7	572.7	573.7	574.9	578.2
177.5°	568.4	567.6	569.4	569.4	569.4	570.2	572.0	570.2	569.4	570.2	572.0
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2151.5	2159.0	2162.5	2162.5	2166.5	2164.8	2163.0
5°	2275.2	2288.9	2291.8	2304.8	2314.1	2311.3	2312.7
7.5°	2398.1	2420.2	2442.0	2452.0	2453.5	2459.4	2461.5
10°	2473.8	2491.9	2525.8	2520.7	2546.0	2560.5	2536.7
12.5°	2546.6	2571.0	2594.5	2601.0	2615.4	2620.0	2610.6
15°	2612.4	2625.5	2627.0	2623.3	2627.6	2624.0	2610.3
17.5°	2550.9	2529.9	2487.1	2466.8	2450.8	2427.1	2417.6
20°	2449.2	2387.1	2314.9	2286.0	2252.0	2185.6	2201.5
22.5°	2229.7	2158.9	2086.7	2002.3	1962.0	1899.0	1895.3
25°	1888.0	1765.9	1631.6	1537.8	1482.8	1420.0	1392.5
27.5°	1467.9	1314.3	1204.2	1148.4	1097.7	1047.9	1045.8
30°	1191.8	1076.2	991.0	943.3	912.2	891.3	895.6
32.5°	1004.6	925.4	867.9	828.3	805.3	789.6	789.3
35°	821.2	767.0	730.2	713.6	697.0	685.4	686.2
37.5°	702.8	670.2	649.8	631.4	621.0	615.4	612.2
40°	642.1	615.4	599.5	588.6	579.9	572.0	570.6
42.5°	594.2	572.0	556.2	547.6	539.5	534.0	532.4
45°	527.3	509.2	494.7	485.4	481.7	476.7	476.7
47.5°	469.0	451.3	440.0	434.1	427.9	424.5	424.4
50°	429.8	416.0	406.0	402.3	397.3	395.1	394.4
52.5°	394.5	384.3	377.0	374.6	372.4	369.7	370.1
55°	346.7	340.9	338.0	335.8	332.2	327.9	330.8
57.5°	306.4	301.5	293.7	286.9	283.6	280.5	281.7
60°	278.1	268.0	257.9	249.9	247.7	241.2	241.2
62.5°	242.2	228.1	215.7	211.2	209.1	206.0	205.4
65°	186.3	180.6	177.7	174.7	173.3	173.3	171.9
67.5°	154.4	152.1	148.9	148.2	146.8	146.4	145.9
70°	136.5	133.7	132.1	131.5	130.0	130.7	128.6
72.5°	119.1	116.9	116.6	114.7	113.9	114.0	112.4
75°	93.9	93.9	93.2	92.5	91.0	90.3	91.0
77.5°	72.2	72.4	71.1	71.0	70.8	71.0	70.2
80°	57.8	58.5	57.8	57.0	56.4	57.0	56.4
82.5°	45.6	44.7	44.5	44.4	44.2	43.7	43.6
85°	26.0	26.8	26.0	25.3	25.3	25.3	26.0
87.5°	16.4	16.9	17.1	17.1	17.1	17.1	16.5
90°	32.9	35.1	36.1	36.1	36.1	36.1	36.1
92.5°	81.9	72.7	65.9	65.0	61.5	62.4	60.7
95°	220.1	174.1	150.0	135.7	127.1	123.8	124.8
97.5°	547.7	429.2	350.2	297.8	270.9	254.9	245.7
100°	863.9	713.9	581.4	490.5	443.5	411.7	392.0
102.5°	1185.3	1075.6	935.3	836.5	756.2	716.5	689.8
105°	1454.1	1468.3	1432.2	1364.2	1296.4	1249.3	1234.0
107.5°	1434.4	1548.2	1601.2	1609.8	1606.0	1596.6	1576.2
110°	1373.0	1513.2	1603.0	1650.0	1670.8	1680.7	1679.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	1300.3	1450.1	1553.0	1618.5	1653.3	1672.0	1677.8
115°	1201.2	1344.5	1457.4	1535.1	1585.5	1613.9	1623.8
117.5°	1120.6	1250.7	1356.4	1435.7	1488.8	1518.9	1527.2
120°	1078.5	1194.6	1294.2	1370.8	1422.3	1454.1	1465.0
122.5°	1043.5	1153.4	1243.4	1312.1	1362.7	1391.0	1400.1
125°	997.5	1093.8	1175.9	1239.4	1281.1	1308.4	1317.2
127.5°	952.8	1043.7	1119.5	1174.9	1213.8	1237.5	1244.5
130°	923.0	1009.6	1081.8	1135.5	1172.7	1194.6	1203.3
132.5°	895.0	974.5	1042.4	1095.1	1132.4	1152.5	1160.4
135°	850.7	923.0	984.3	1031.4	1067.5	1087.2	1091.7
137.5°	815.5	872.9	926.3	969.2	1000.3	1017.7	1024.2
140°	792.8	843.1	891.3	926.3	954.8	971.2	977.8
142.5°	772.6	816.0	856.2	889.5	915.4	930.0	931.3
145°	746.8	780.7	812.5	838.7	857.3	868.3	871.6
147.5°	725.8	752.2	775.4	797.1	812.0	819.4	821.4
150°	711.7	734.7	754.4	770.8	784.0	790.5	791.6
152.5°	700.3	719.8	736.9	749.8	761.2	766.0	766.2
155°	682.1	698.5	710.6	722.6	730.3	734.7	732.5
157.5°	663.7	677.5	686.9	695.5	701.8	703.8	703.8
160°	651.5	663.5	671.2	678.8	684.3	685.4	685.4
162.5°	640.1	650.4	656.3	663.9	667.7	668.7	667.9
165°	623.0	630.7	635.1	639.4	643.9	643.9	642.7
167.5°	607.5	612.7	616.7	618.6	621.0	620.9	619.5
170°	597.9	602.2	604.4	605.5	608.8	607.7	605.5
172.5°	589.1	592.6	593.9	595.0	596.5	595.4	594.1
175°	579.2	580.3	581.4	581.4	582.5	581.4	579.2
177.5°	572.0	572.9	572.9	572.9	572.9	572.0	570.2
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4

(END OF REPORT)