

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: P332998-930

Luminaire Tested: **SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332998-930  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6373.0 lumens  
Efficiency: N/A  
Efficacy: 105.0 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: Semi-Direct

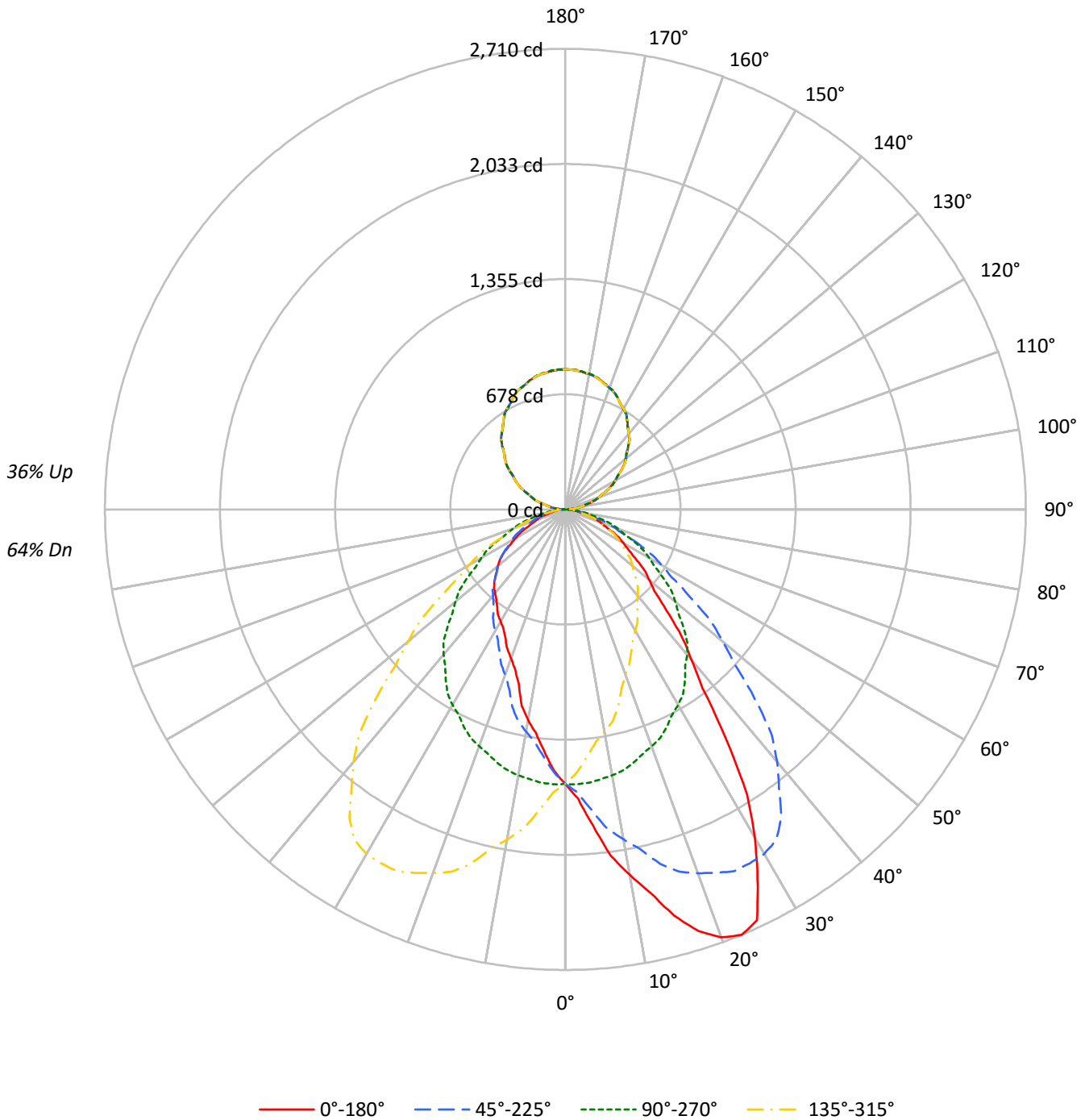
Input Watts (W): 60.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

### Luminous Intensity Polar Plot





TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**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	50	30	10	0	
RCR																						
0	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64				
1	102	97	94	90	95	92	88	85	81	78	76	71	69	68	62	61	60	55				
2	93	86	80	75	87	81	76	71	72	68	64	63	60	57	55	53	51	47				
3	85	76	69	63	80	72	65	60	64	59	55	56	52	49	49	47	44	41				
4	78	68	60	54	73	64	57	51	57	51	47	51	46	43	45	41	38	35				
5	72	61	52	47	68	57	50	45	51	45	41	46	41	37	40	37	34	31				
6	67	55	46	41	62	52	44	39	46	40	36	41	37	33	37	33	30	27				
7	62	49	42	36	58	47	40	35	42	36	32	38	33	29	34	30	27	24				
8	57	45	37	32	54	43	36	31	39	33	29	35	30	26	31	27	24	22				
9	54	41	34	29	50	39	32	28	36	30	26	32	27	24	29	25	22	20				
10	50	38	31	26	47	36	30	25	33	27	23	30	25	22	27	23	20	18				

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

	0°	90°	180°	270°
0°	13043	13043	13043	13043
5°	15129	13083	11563	13083
10°	17898	13025	10320	13025
15°	20674	12904	8868	12904
20°	23018	12740	8019	12740
25°	23762	12577	7445	12577
30°	20801	12379	7100	12379
35°	16192	12086	6890	12086
40°	12142	11751	6777	11751
45°	9587	11215	6719	11215
50°	8093	10595	6523	10595
55°	7054	9913	6175	9913
60°	6347	9206	5465	9206
65°	5595	8443	4701	8443
70°	5039	7652	4242	7652
75°	4223	6781	3615	6781
80°	3570	5779	3389	5779
85°	3010	4520	3010	4520



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.5	2.5
10°-20°	472.2	7.4
20°-30°	738.6	11.6
30°-40°	821.0	12.9
40°-50°	728.5	11.4
50°-60°	567.6	8.9
60°-70°	371.6	5.8
70°-80°	182.8	2.9
80°-90°	47.6	0.7
90°-100°	54.4	0.9
100°-110°	161.0	2.5
110°-120°	273.3	4.3
120°-130°	360.4	5.7
130°-140°	404.7	6.4
140°-150°	397.7	6.2
150°-160°	334.5	5.2
160°-170°	222.6	3.5
170°-180°	77.9	1.2
0°-30°	1367.3	21.5
0°-40°	2188.4	34.3
0°-60°	3484.5	54.7
0°-90°	4086.4	64.1
90°-120°	488.7	7.7
90°-150°	1651.5	25.9
90°-180°	2287.0	35.9
0°-180°	6373.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1616	1616	1616	1616	1616	
5°	1867	1614	1427	1614	1867	189
15°	2474	1544	1061	1544	2474	703
25°	2668	1412	836	1412	2668	1183
35°	1643	1226	699	1226	1643	1030
45°	840	982	588	982	840	665
55°	501	704	439	704	501	456
65°	293	442	246	442	293	295
75°	135	217	116	217	135	149
85°	32	49	32	49	32	37
90°	19	2	19	2	19	11
95°	50	38	50	38	50	52
105°	156	148	156	148	156	164
115°	275	278	275	278	275	272
125°	402	405	402	405	402	358
135°	523	522	523	522	523	404
145°	635	634	635	634	635	397
155°	726	727	726	727	726	334
165°	789	791	789	791	789	222
175°	819	823	819	823	819	78
180°	824	824	824	824	824	



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7
2.5°	1704.1	1708.9	1704.1	1703.6	1698.4	1696.9	1694.8	1688.0	1675.5	1668.3	1669.8
5°	1866.9	1883.2	1874.0	1872.7	1858.5	1844.1	1835.0	1814.2	1792.0	1777.1	1764.7
7.5°	2055.1	2064.5	2058.8	2049.7	2026.5	2013.4	1992.3	1964.8	1925.1	1894.8	1867.0
10°	2183.3	2191.0	2188.5	2171.5	2154.6	2120.1	2100.6	2062.2	2012.1	1972.4	1935.3
12.5°	2309.3	2317.7	2294.7	2295.5	2263.4	2236.3	2205.3	2157.0	2099.1	2047.9	2001.4
15°	2473.6	2463.2	2463.2	2450.1	2414.3	2376.6	2344.7	2293.9	2221.0	2159.8	2095.4
17.5°	2602.2	2605.9	2600.5	2569.8	2541.7	2502.6	2444.2	2384.9	2317.2	2235.1	2169.2
20°	2679.3	2679.3	2673.4	2652.6	2616.1	2574.5	2511.4	2446.9	2360.9	2278.3	2204.1
22.5°	2710.5	2712.6	2705.7	2688.5	2655.8	2615.1	2561.3	2495.9	2407.3	2314.2	2222.3
25°	2667.6	2680.0	2681.2	2676.7	2666.9	2642.1	2596.0	2528.9	2449.5	2348.6	2249.7
27.5°	2449.1	2464.7	2478.4	2500.9	2530.9	2546.5	2548.5	2514.5	2445.2	2348.1	2248.5
30°	2231.4	2244.4	2286.8	2342.1	2385.1	2424.1	2458.0	2467.1	2428.0	2340.8	2236.0
32.5°	1989.8	2007.5	2049.8	2109.3	2180.9	2247.0	2323.1	2361.8	2360.9	2308.5	2211.5
35°	1643.0	1656.0	1695.1	1757.5	1843.5	1941.8	2062.2	2155.9	2219.7	2215.2	2155.9
37.5°	1325.0	1339.8	1379.2	1431.0	1514.3	1636.1	1752.6	1881.7	1999.7	2066.0	2046.2
40°	1152.2	1152.8	1191.2	1244.6	1322.7	1428.8	1555.8	1698.9	1830.4	1937.9	1958.7
42.5°	1015.7	1015.9	1041.2	1098.8	1155.0	1254.9	1376.1	1518.3	1672.2	1796.2	1851.4
45°	839.7	845.5	866.4	900.9	945.2	1029.8	1126.7	1258.9	1431.4	1578.5	1670.3
47.5°	711.1	719.7	733.0	761.1	796.4	852.7	932.9	1051.7	1192.0	1353.8	1484.4
50°	644.4	645.7	662.7	678.2	708.9	753.8	824.1	923.0	1051.9	1207.5	1352.7
52.5°	587.2	586.9	597.0	616.9	641.7	676.7	733.4	823.5	937.8	1077.3	1227.2
55°	501.2	504.5	512.3	527.9	546.8	571.5	616.4	684.1	774.0	893.1	1029.2
57.5°	435.9	437.6	443.7	450.3	467.7	485.6	519.3	566.3	642.1	739.6	866.4
60°	393.1	393.8	395.7	405.5	419.2	436.1	458.9	498.6	562.4	651.6	751.9
62.5°	351.5	352.7	355.7	362.8	373.4	385.1	409.0	440.8	493.7	569.8	660.1
65°	292.9	293.6	298.2	300.8	309.2	319.6	337.2	358.7	395.1	458.9	527.3
67.5°	244.8	244.8	245.0	248.5	254.4	261.3	271.8	289.0	316.5	355.7	416.0
70°	213.5	213.5	214.8	216.8	220.0	225.8	231.7	244.8	265.0	296.9	343.1
72.5°	184.3	184.8	186.1	186.5	188.3	193.1	197.4	205.7	220.7	244.8	282.1
75°	135.4	137.4	140.6	143.2	146.4	145.8	150.3	155.6	160.1	174.5	195.9
77.5°	100.8	99.7	100.1	102.3	102.7	103.4	106.6	110.6	114.1	120.8	128.5
80°	76.8	76.8	78.8	79.4	78.8	79.4	82.7	84.6	85.9	88.5	95.7
82.5°	58.0	59.1	58.5	59.1	59.5	60.2	62.9	63.3	64.6	65.6	68.6
85°	32.5	33.2	33.8	32.5	32.5	32.5	33.8	34.5	35.8	35.1	36.4
87.5°	15.2	14.7	15.2	15.1	15.6	14.9	15.3	16.1	14.9	15.3	15.1
90°	19.2	18.8	18.6	18.3	18.0	17.4	16.6	15.7	14.8	14.0	12.9
92.5°	28.3	28.1	28.0	27.8	27.6	27.3	26.7	26.3	25.8	25.3	24.5
95°	50.4	50.4	50.4	50.4	50.4	50.1	49.7	49.3	48.8	48.4	47.5
97.5°	78.9	78.9	78.9	78.9	78.9	78.7	78.1	77.6	77.1	76.6	75.4
100°	98.8	98.8	98.8	98.8	98.8	98.7	98.4	98.1	97.8	97.5	96.2
102.5°	121.2	121.2	121.0	120.9	120.7	120.5	120.1	119.8	119.4	119.0	117.8
105°	155.6	155.1	154.7	154.3	153.8	153.4	153.0	152.5	152.1	151.7	151.2
107.5°	188.9	189.0	189.0	189.0	189.1	188.8	188.4	188.1	187.7	187.3	187.2
110°	212.9	212.5	212.1	211.7	211.2	211.1	211.4	211.7	212.0	212.2	212.4



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	237.3	237.3	237.2	237.1	237.0	237.0	237.1	237.1	237.2	237.3	237.5
115°	275.3	275.5	275.7	275.8	275.9	276.1	276.2	276.3	276.5	276.6	276.9
117.5°	311.5	311.9	312.1	312.4	312.7	313.1	313.6	314.1	314.5	315.0	315.2
120°	339.1	338.8	338.5	338.3	337.9	338.2	338.8	339.6	340.3	341.0	341.4
122.5°	362.1	362.6	363.1	363.5	364.1	364.6	365.1	365.5	366.0	366.5	366.7
125°	401.5	401.9	402.1	402.4	402.7	403.0	403.2	403.6	403.8	404.1	404.2
127.5°	438.1	438.4	438.6	438.8	439.0	439.3	439.6	439.9	440.2	440.4	440.7
130°	462.1	462.7	463.3	463.8	464.4	464.8	465.0	465.4	465.6	465.9	465.9
132.5°	487.6	487.8	488.0	488.3	488.5	488.8	489.0	489.3	489.6	489.9	490.0
135°	522.7	523.1	523.5	523.9	524.3	524.7	525.0	525.3	525.5	525.9	525.9
137.5°	559.5	559.4	559.3	559.2	559.1	559.3	559.7	560.0	560.4	560.8	560.5
140°	582.0	582.0	582.2	582.4	582.5	582.6	582.8	582.9	583.1	583.2	583.2
142.5°	604.4	604.4	604.5	604.5	604.5	604.5	604.5	604.5	604.6	604.6	604.7
145°	634.9	635.3	635.7	636.1	636.5	636.8	637.0	637.1	637.2	637.4	637.2
147.5°	665.7	665.9	665.9	666.1	666.3	666.3	666.5	666.6	666.8	666.8	666.9
150°	684.5	684.7	684.9	685.0	685.1	685.2	685.2	685.2	685.2	685.2	685.2
152.5°	701.9	702.3	702.6	703.0	703.4	703.4	703.0	702.7	702.4	702.1	701.9
155°	726.0	726.5	727.1	727.7	728.2	728.2	727.7	727.1	726.5	726.0	726.1
157.5°	747.5	748.0	748.5	749.0	749.4	749.5	749.1	748.6	748.2	747.8	747.8
160°	759.8	760.5	761.2	761.9	762.6	762.7	762.3	761.9	761.5	761.1	761.2
162.5°	772.5	773.2	774.0	774.6	775.3	775.3	774.5	773.8	773.1	772.3	772.4
165°	789.1	789.6	790.2	790.8	791.3	791.2	790.4	789.5	788.6	787.8	788.1
167.5°	801.0	801.8	802.7	803.6	804.5	804.5	803.6	802.7	801.9	801.0	801.0
170°	807.6	808.5	809.6	810.6	811.5	811.6	810.7	809.9	809.0	808.2	808.0
172.5°	813.2	814.2	815.1	816.2	817.2	817.2	816.2	815.2	814.2	813.3	813.3
175°	819.0	820.0	821.0	822.0	823.0	823.0	822.0	821.0	820.0	819.0	819.2
177.5°	822.1	823.0	823.9	824.8	825.7	825.8	825.0	824.2	823.4	822.6	822.6
180°	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7
2.5°	1664.6	1657.3	1653.7	1645.4	1635.4	1630.2	1625.5	1618.8	1609.9	1600.5	1593.7
5°	1749.1	1733.5	1713.9	1690.5	1669.7	1649.5	1631.9	1614.4	1594.2	1573.4	1552.5
7.5°	1835.8	1805.1	1771.9	1733.5	1696.1	1662.2	1630.8	1600.9	1567.1	1536.8	1509.1
10°	1896.2	1854.6	1808.3	1759.5	1710.7	1668.3	1626.7	1588.9	1547.3	1510.2	1479.0
12.5°	1945.1	1896.2	1840.6	1779.8	1721.1	1669.9	1622.0	1572.8	1525.4	1485.2	1443.6
15°	2026.3	1959.3	1884.5	1811.6	1735.4	1665.7	1601.3	1544.0	1490.0	1433.4	1393.7
17.5°	2082.3	2002.7	1911.7	1824.1	1734.1	1652.0	1577.6	1509.4	1447.1	1389.3	1342.0
20°	2115.5	2027.6	1926.8	1827.2	1726.3	1638.4	1558.4	1482.9	1418.4	1355.9	1307.1
22.5°	2134.3	2037.0	1926.8	1822.5	1718.0	1622.8	1534.9	1456.3	1386.1	1323.6	1269.6
25°	2140.3	2036.1	1923.5	1803.8	1689.2	1588.3	1497.1	1411.9	1333.7	1271.3	1214.0
27.5°	2132.0	2009.3	1894.0	1771.1	1652.9	1546.5	1450.8	1361.2	1283.0	1215.9	1157.2
30°	2119.5	1987.9	1864.3	1736.8	1616.9	1514.7	1413.8	1328.0	1246.6	1176.9	1117.7
32.5°	2092.4	1961.9	1828.9	1698.2	1576.9	1471.5	1375.8	1289.4	1209.6	1138.4	1075.5
35°	2038.7	1906.6	1762.1	1628.0	1508.9	1399.5	1309.7	1226.4	1150.2	1074.1	1007.6
37.5°	1968.1	1833.0	1689.3	1542.5	1423.2	1320.0	1237.5	1159.4	1085.0	1015.5	941.9
40°	1901.4	1778.4	1629.9	1484.2	1361.8	1262.2	1186.0	1115.1	1040.2	971.2	897.6
42.5°	1820.7	1715.9	1565.9	1419.6	1298.8	1202.8	1131.9	1062.5	994.4	927.5	850.8
45°	1686.0	1606.5	1465.9	1325.4	1203.6	1108.6	1043.5	982.3	922.3	858.6	786.4
47.5°	1531.5	1477.7	1356.4	1212.4	1099.8	1014.3	951.5	901.4	850.8	787.0	723.6
50°	1424.2	1389.8	1272.6	1141.1	1033.7	955.0	890.5	843.6	801.3	740.1	683.5
52.5°	1309.7	1291.4	1192.4	1066.7	962.9	885.7	830.6	788.4	745.6	694.8	641.8
55°	1135.2	1145.0	1061.0	952.4	854.7	789.6	739.5	704.3	667.9	624.9	583.9
57.5°	956.9	992.5	936.2	840.7	749.3	689.1	651.3	621.7	591.2	555.5	520.5
60°	850.1	880.0	848.2	764.2	684.1	628.2	593.0	570.2	539.6	507.1	480.4
62.5°	746.0	778.0	759.1	691.3	616.9	568.8	537.8	516.6	493.8	465.5	437.7
65°	615.1	635.9	626.9	580.0	527.3	486.2	457.6	442.0	421.2	400.3	375.6
67.5°	471.2	511.4	506.1	481.2	435.6	403.6	384.8	371.0	352.0	336.6	319.8
70°	387.3	424.4	423.8	403.6	378.9	348.9	335.9	324.2	307.2	292.3	278.6
72.5°	317.0	351.0	356.0	340.6	323.7	301.0	288.5	280.5	264.0	253.7	242.6
75°	222.0	246.7	253.2	253.2	245.4	233.7	222.7	217.4	205.7	196.6	190.0
77.5°	145.5	161.2	171.3	173.7	174.9	171.0	161.8	158.2	149.2	145.9	139.7
80°	102.8	113.2	125.0	128.9	132.2	130.9	126.9	124.3	115.9	112.6	110.0
82.5°	71.1	76.8	86.4	95.1	94.1	97.5	94.1	92.0	85.7	84.5	81.9
85°	37.1	37.7	39.1	44.9	48.2	49.5	50.1	48.8	46.9	46.9	42.3
87.5°	14.8	14.1	14.9	14.7	14.8	16.6	17.9	18.1	16.9	15.6	14.3
90°	11.7	10.6	9.5	8.2	6.6	5.1	3.5	1.9	3.5	5.1	6.6
92.5°	23.6	22.8	22.1	20.8	19.0	17.2	15.4	13.6	15.4	17.2	19.0
95°	46.5	45.5	44.5	43.4	42.1	40.8	39.5	38.2	39.5	40.8	42.1
97.5°	74.3	73.1	72.0	70.8	69.9	68.8	67.8	66.8	67.8	68.8	69.9
100°	95.0	93.7	92.5	91.5	90.9	90.3	89.8	89.3	89.8	90.3	90.9
102.5°	116.6	115.4	114.3	113.6	113.4	113.2	112.9	112.7	112.9	113.2	113.4
105°	150.6	150.0	149.4	149.1	149.0	148.8	148.6	148.5	148.6	148.8	149.0
107.5°	187.1	187.0	186.9	186.8	186.6	186.5	186.3	186.1	186.3	186.5	186.6
110°	212.5	212.7	212.8	212.7	212.5	212.1	211.9	211.7	211.9	212.1	212.5





TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	237.7	238.0	238.2	238.4	238.3	238.2	238.1	238.1	238.1	238.2	238.3
115°	277.2	277.4	277.8	277.9	277.9	277.9	277.9	277.9	277.9	277.9	277.9
117.5°	315.4	315.6	315.8	315.8	315.7	315.6	315.5	315.4	315.5	315.6	315.7
120°	341.9	342.3	342.7	342.7	342.1	341.5	341.0	340.4	341.0	341.5	342.1
122.5°	366.9	367.1	367.3	367.3	367.0	366.8	366.6	366.4	366.6	366.8	367.0
125°	404.4	404.6	404.6	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7
127.5°	440.9	441.1	441.3	441.2	440.8	440.4	439.9	439.5	439.9	440.4	440.8
130°	465.9	465.9	465.9	465.7	465.3	464.9	464.5	464.0	464.5	464.9	465.3
132.5°	490.2	490.2	490.3	490.2	489.9	489.7	489.3	489.0	489.3	489.7	489.9
135°	525.9	525.9	525.9	525.5	524.6	523.7	522.9	522.0	522.9	523.7	524.6
137.5°	560.4	560.1	559.9	559.5	559.1	558.7	558.4	558.0	558.4	558.7	559.1
140°	583.2	583.2	583.2	583.1	582.8	582.5	582.2	582.0	582.2	582.5	582.8
142.5°	604.9	605.0	605.1	605.0	604.7	604.5	604.1	603.9	604.1	604.5	604.7
145°	637.1	637.0	636.8	636.5	635.9	635.4	634.8	634.2	634.8	635.4	635.9
147.5°	667.1	667.2	667.3	667.0	666.3	665.6	665.0	664.3	665.0	665.6	666.3
150°	685.2	685.2	685.2	684.9	684.4	683.8	683.2	682.7	683.2	683.8	684.4
152.5°	701.8	701.6	701.6	701.3	701.0	700.7	700.3	700.0	700.3	700.7	701.0
155°	726.3	726.4	726.5	726.6	726.6	726.6	726.6	726.6	726.6	726.6	726.6
157.5°	747.9	747.9	747.9	748.0	748.3	748.5	748.8	749.1	748.8	748.5	748.3
160°	761.3	761.5	761.6	761.7	761.9	762.1	762.1	762.3	762.1	762.1	761.9
162.5°	772.6	772.7	772.8	773.1	773.5	773.8	774.2	774.5	774.2	773.8	773.5
165°	788.4	788.6	789.0	789.3	789.7	790.2	790.6	791.0	790.6	790.2	789.7
167.5°	801.0	801.0	801.0	801.3	801.8	802.4	803.0	803.6	803.0	802.4	801.8
170°	808.0	807.8	807.6	808.0	808.6	809.3	810.1	810.7	810.1	809.3	808.6
172.5°	813.3	813.3	813.2	813.5	814.1	814.6	815.3	815.9	815.3	814.6	814.1
175°	819.3	819.5	819.6	820.0	820.8	821.4	822.1	822.9	822.1	821.4	820.8
177.5°	822.6	822.6	822.6	822.9	823.5	824.0	824.6	825.2	824.6	824.0	823.5
180°	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7
2.5°	1586.5	1581.3	1574.5	1566.7	1557.3	1549.0	1545.3	1548.5	1550.0	1545.9	1545.3
5°	1538.1	1521.9	1508.9	1489.4	1473.7	1460.7	1451.6	1447.7	1449.0	1438.6	1436.0
7.5°	1483.9	1464.6	1443.2	1420.1	1398.5	1379.3	1369.3	1363.8	1352.8	1348.1	1340.2
10°	1449.0	1422.9	1402.2	1374.8	1350.1	1327.3	1316.2	1307.1	1296.0	1290.8	1279.8
12.5°	1413.1	1382.8	1359.9	1331.5	1306.3	1278.9	1268.3	1251.4	1234.0	1223.1	1208.9
15°	1362.4	1326.0	1298.0	1264.1	1234.2	1203.0	1174.9	1143.7	1132.0	1107.3	1092.9
17.5°	1303.2	1266.2	1231.6	1186.2	1140.0	1101.1	1071.3	1041.4	1023.4	1007.6	1000.4
20°	1264.1	1230.3	1182.1	1129.4	1078.0	1035.0	1010.9	991.4	971.8	960.8	953.0
22.5°	1227.2	1183.9	1128.0	1071.1	1019.6	986.0	965.6	945.6	929.7	919.2	908.7
25°	1165.2	1108.6	1049.3	984.2	949.1	919.8	897.6	881.3	871.6	857.9	852.7
27.5°	1101.6	1032.9	967.6	923.8	887.2	860.4	841.1	828.9	816.5	807.8	801.0
30°	1052.6	982.9	924.3	882.6	845.5	823.5	807.8	793.5	783.7	776.6	771.4
32.5°	1004.1	934.5	885.3	840.5	811.2	789.6	772.9	762.2	754.6	745.3	742.2
35°	934.1	872.3	829.3	789.0	759.0	739.5	726.4	715.4	708.9	706.3	704.3
37.5°	866.8	816.1	770.0	736.9	710.2	694.8	679.5	674.0	669.5	664.9	667.0
40°	824.1	776.6	735.6	700.4	678.9	662.0	652.9	646.4	642.5	642.5	642.5
42.5°	787.1	740.6	700.7	669.2	647.7	633.4	623.2	617.8	616.4	616.0	619.1
45°	729.7	686.7	646.4	620.4	602.1	587.8	582.0	577.4	577.4	580.0	580.7
47.5°	672.8	632.6	600.1	571.0	554.3	545.4	540.3	537.9	538.2	540.8	543.8
50°	637.9	598.2	566.3	540.3	524.6	516.2	511.6	510.4	511.6	511.6	516.2
52.5°	599.9	564.4	533.0	511.1	493.4	485.5	483.0	481.2	481.9	484.0	486.0
55°	544.2	512.3	482.3	461.5	448.5	443.3	437.4	438.1	436.8	438.1	438.1
57.5°	488.4	459.7	431.9	415.3	403.8	396.3	389.9	391.8	389.8	389.6	388.5
60°	452.4	421.2	399.0	384.1	371.0	364.5	358.7	360.0	358.0	356.7	354.1
62.5°	413.4	387.3	366.2	351.8	341.4	333.8	327.9	326.6	322.1	317.6	311.9
65°	356.7	335.3	316.3	302.7	292.9	287.1	282.5	278.6	268.8	258.4	253.2
67.5°	301.7	286.2	268.6	257.0	249.1	241.4	232.7	226.0	216.9	211.2	207.9
70°	266.2	251.3	236.3	225.2	216.8	209.6	199.8	195.3	188.7	186.1	183.0
72.5°	232.4	218.4	204.6	194.5	185.5	179.9	172.3	167.7	164.9	163.8	160.5
75°	181.0	169.9	159.5	150.3	143.2	139.3	136.1	132.8	131.5	125.6	122.4
77.5°	132.0	124.7	118.2	111.7	106.6	104.0	97.8	94.0	91.8	89.0	88.4
80°	102.8	97.7	91.2	87.2	80.1	77.5	74.8	74.2	73.5	72.9	72.2
82.5°	77.4	72.2	65.6	63.3	61.3	59.8	58.2	57.6	56.9	57.3	57.2
85°	39.1	36.4	36.4	35.8	35.1	34.5	33.8	33.8	33.2	33.8	33.2
87.5°	14.7	14.4	14.6	13.8	14.6	14.8	14.4	14.6	15.3	14.4	14.5
90°	8.2	9.5	10.6	11.7	12.9	14.0	14.8	15.7	16.6	17.4	18.0
92.5°	20.8	22.1	22.8	23.6	24.5	25.3	25.8	26.3	26.7	27.3	27.6
95°	43.4	44.5	45.5	46.5	47.5	48.4	48.8	49.3	49.7	50.1	50.4
97.5°	70.8	72.0	73.1	74.3	75.4	76.6	77.1	77.6	78.1	78.7	78.9
100°	91.5	92.5	93.7	95.0	96.2	97.5	97.8	98.1	98.4	98.7	98.8
102.5°	113.6	114.3	115.4	116.6	117.8	119.0	119.4	119.8	120.1	120.5	120.7
105°	149.1	149.4	150.0	150.6	151.2	151.7	152.1	152.5	153.0	153.4	153.8
107.5°	186.8	186.9	187.0	187.1	187.2	187.3	187.7	188.1	188.4	188.8	189.1
110°	212.7	212.8	212.7	212.5	212.4	212.2	212.0	211.7	211.4	211.1	211.2



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	238.4	238.2	238.0	237.7	237.5	237.3	237.2	237.1	237.1	237.0	237.0
115°	277.9	277.8	277.4	277.2	276.9	276.6	276.5	276.3	276.2	276.1	275.9
117.5°	315.8	315.8	315.6	315.4	315.2	315.0	314.5	314.1	313.6	313.1	312.7
120°	342.7	342.7	342.3	341.9	341.4	341.0	340.3	339.6	338.8	338.2	337.9
122.5°	367.3	367.3	367.1	366.9	366.7	366.5	366.0	365.5	365.1	364.6	364.1
125°	404.7	404.6	404.6	404.4	404.2	404.1	403.8	403.6	403.2	403.0	402.7
127.5°	441.2	441.3	441.1	440.9	440.7	440.4	440.2	439.9	439.6	439.3	439.0
130°	465.7	465.9	465.9	465.9	465.9	465.9	465.6	465.4	465.0	464.8	464.4
132.5°	490.2	490.3	490.2	490.2	490.0	489.9	489.6	489.3	489.0	488.8	488.5
135°	525.5	525.9	525.9	525.9	525.9	525.9	525.5	525.3	525.0	524.7	524.3
137.5°	559.5	559.9	560.1	560.4	560.5	560.8	560.4	560.0	559.7	559.3	559.1
140°	583.1	583.2	583.2	583.2	583.2	583.2	583.1	582.9	582.8	582.6	582.5
142.5°	605.0	605.1	605.0	604.9	604.7	604.6	604.6	604.5	604.5	604.5	604.5
145°	636.5	636.8	637.0	637.1	637.2	637.4	637.2	637.1	637.0	636.8	636.5
147.5°	667.0	667.3	667.2	667.1	666.9	666.8	666.8	666.6	666.5	666.3	666.3
150°	684.9	685.2	685.2	685.2	685.2	685.2	685.2	685.2	685.2	685.2	685.1
152.5°	701.3	701.6	701.6	701.8	701.9	702.1	702.4	702.7	703.0	703.4	703.4
155°	726.6	726.5	726.4	726.3	726.1	726.0	726.5	727.1	727.7	728.2	728.2
157.5°	748.0	747.9	747.9	747.9	747.8	747.8	748.2	748.6	749.1	749.5	749.4
160°	761.7	761.6	761.5	761.3	761.2	761.1	761.5	761.9	762.3	762.7	762.6
162.5°	773.1	772.8	772.7	772.6	772.4	772.3	773.1	773.8	774.5	775.3	775.3
165°	789.3	789.0	788.6	788.4	788.1	787.8	788.6	789.5	790.4	791.2	791.3
167.5°	801.3	801.0	801.0	801.0	801.0	801.0	801.9	802.7	803.6	804.5	804.5
170°	808.0	807.6	807.8	808.0	808.0	808.2	809.0	809.9	810.7	811.6	811.5
172.5°	813.5	813.2	813.3	813.3	813.3	813.3	814.2	815.2	816.2	817.2	817.2
175°	820.0	819.6	819.5	819.3	819.2	819.0	820.0	821.0	822.0	823.0	823.0
177.5°	822.9	822.6	822.6	822.6	822.6	822.6	823.4	824.2	825.0	825.8	825.7
180°	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7
2.5°	1542.2	1543.3	1539.6	1538.6	1539.6	1543.3	1542.2	1545.3	1545.9	1550.0	1548.5
5°	1430.8	1429.5	1426.2	1426.9	1426.2	1429.5	1430.8	1436.0	1438.6	1449.0	1447.7
7.5°	1335.5	1330.4	1331.8	1326.7	1331.8	1330.4	1335.5	1340.2	1348.1	1352.8	1363.8
10°	1277.2	1270.0	1264.1	1258.9	1264.1	1270.0	1277.2	1279.8	1290.8	1296.0	1307.1
12.5°	1197.5	1191.3	1183.4	1185.0	1183.4	1191.3	1197.5	1208.9	1223.1	1234.0	1251.4
15°	1084.4	1074.7	1059.1	1061.0	1059.1	1074.7	1084.4	1092.9	1107.3	1132.0	1143.7
17.5°	988.8	988.9	981.8	983.4	981.8	988.9	988.8	1000.4	1007.6	1023.4	1041.4
20°	939.3	934.7	935.4	933.4	935.4	934.7	939.3	953.0	960.8	971.8	991.4
22.5°	904.9	899.4	894.8	890.7	894.8	899.4	904.9	908.7	919.2	929.7	945.6
25°	846.9	842.9	837.1	835.8	837.1	842.9	846.9	852.7	857.9	871.6	881.3
27.5°	795.8	795.1	792.7	789.7	792.7	795.1	795.8	801.0	807.8	816.5	828.9
30°	766.1	764.8	763.5	761.6	763.5	764.8	766.1	771.4	776.6	783.7	793.5
32.5°	739.6	738.8	737.5	737.7	737.5	738.8	739.6	742.2	745.3	754.6	762.2
35°	701.7	701.1	699.8	699.1	699.8	701.1	701.7	704.3	706.3	708.9	715.4
37.5°	666.3	668.0	667.2	667.1	667.2	668.0	666.3	667.0	664.9	669.5	674.0
40°	641.8	642.5	643.8	643.1	643.8	642.5	641.8	642.5	642.5	642.5	646.4
42.5°	621.5	621.7	623.5	621.3	623.5	621.7	621.5	619.1	616.0	616.4	617.8
45°	585.2	589.1	588.5	588.5	588.5	589.1	585.2	580.7	580.0	577.4	577.4
47.5°	545.5	548.9	549.8	549.7	549.8	548.9	545.5	543.8	540.8	538.2	537.9
50°	519.4	518.1	520.1	519.4	520.1	518.1	519.4	516.2	511.6	511.6	510.4
52.5°	487.7	488.0	487.8	487.1	487.8	488.0	487.7	486.0	484.0	481.9	481.2
55°	438.7	439.4	438.1	438.7	438.1	439.4	438.7	438.1	438.1	436.8	438.1
57.5°	385.6	382.5	383.8	382.2	383.8	382.5	385.6	388.5	389.6	389.8	391.8
60°	347.6	342.4	341.1	338.5	341.1	342.4	347.6	354.1	356.7	358.0	360.0
62.5°	304.9	301.3	296.9	298.9	296.9	301.3	304.9	311.9	317.6	322.1	326.6
65°	248.0	245.4	243.4	246.1	243.4	245.4	248.0	253.2	258.4	268.8	278.6
67.5°	205.3	203.9	203.9	202.6	203.9	203.9	205.3	207.9	211.2	216.9	226.0
70°	183.0	181.0	181.0	179.7	181.0	181.0	183.0	183.0	186.1	188.7	195.3
72.5°	160.0	158.1	158.6	157.8	158.6	158.1	160.0	160.5	163.8	164.9	167.7
75°	118.5	115.2	115.2	115.9	115.2	115.2	118.5	122.4	125.6	131.5	132.8
77.5°	88.4	87.7	88.6	87.5	88.6	87.7	88.4	88.4	89.0	91.8	94.0
80°	72.2	71.6	70.9	72.9	70.9	71.6	72.2	72.2	72.9	73.5	74.2
82.5°	56.1	56.0	55.8	58.3	55.8	56.0	56.1	57.2	57.3	56.9	57.6
85°	33.8	32.5	33.8	32.5	33.8	32.5	33.8	33.2	33.8	33.2	33.8
87.5°	15.7	15.2	14.7	15.2	14.7	15.2	15.7	14.5	14.4	15.3	14.6
90°	18.3	18.6	18.8	19.2	18.8	18.6	18.3	18.0	17.4	16.6	15.7
92.5°	27.8	28.0	28.1	28.3	28.1	28.0	27.8	27.6	27.3	26.7	26.3
95°	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.1	49.7	49.3
97.5°	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.7	78.1	77.6
100°	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.7	98.4	98.1
102.5°	120.9	121.0	121.2	121.2	121.2	121.0	120.9	120.7	120.5	120.1	119.8
105°	154.3	154.7	155.1	155.6	155.1	154.7	154.3	153.8	153.4	153.0	152.5
107.5°	189.0	189.0	189.0	188.9	189.0	189.0	189.0	189.1	188.8	188.4	188.1
110°	211.7	212.1	212.5	212.9	212.5	212.1	211.7	211.2	211.1	211.4	211.7



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	237.1	237.2	237.3	237.3	237.3	237.2	237.1	237.0	237.0	237.1	237.1
115°	275.8	275.7	275.5	275.3	275.5	275.7	275.8	275.9	276.1	276.2	276.3
117.5°	312.4	312.1	311.9	311.5	311.9	312.1	312.4	312.7	313.1	313.6	314.1
120°	338.3	338.5	338.8	339.1	338.8	338.5	338.3	337.9	338.2	338.8	339.6
122.5°	363.5	363.1	362.6	362.1	362.6	363.1	363.5	364.1	364.6	365.1	365.5
125°	402.4	402.1	401.9	401.5	401.9	402.1	402.4	402.7	403.0	403.2	403.6
127.5°	438.8	438.6	438.4	438.1	438.4	438.6	438.8	439.0	439.3	439.6	439.9
130°	463.8	463.3	462.7	462.1	462.7	463.3	463.8	464.4	464.8	465.0	465.4
132.5°	488.3	488.0	487.8	487.6	487.8	488.0	488.3	488.5	488.8	489.0	489.3
135°	523.9	523.5	523.1	522.7	523.1	523.5	523.9	524.3	524.7	525.0	525.3
137.5°	559.2	559.3	559.4	559.5	559.4	559.3	559.2	559.1	559.3	559.7	560.0
140°	582.4	582.2	582.0	582.0	582.0	582.2	582.4	582.5	582.6	582.8	582.9
142.5°	604.5	604.5	604.4	604.4	604.4	604.5	604.5	604.5	604.5	604.5	604.5
145°	636.1	635.7	635.3	634.9	635.3	635.7	636.1	636.5	636.8	637.0	637.1
147.5°	666.1	665.9	665.9	665.7	665.9	665.9	666.1	666.3	666.3	666.5	666.6
150°	685.0	684.9	684.7	684.5	684.7	684.9	685.0	685.1	685.2	685.2	685.2
152.5°	703.0	702.6	702.3	701.9	702.3	702.6	703.0	703.4	703.4	703.0	702.7
155°	727.7	727.1	726.5	726.0	726.5	727.1	727.7	728.2	728.2	727.7	727.1
157.5°	749.0	748.5	748.0	747.5	748.0	748.5	749.0	749.4	749.5	749.1	748.6
160°	761.9	761.2	760.5	759.8	760.5	761.2	761.9	762.6	762.7	762.3	761.9
162.5°	774.6	774.0	773.2	772.5	773.2	774.0	774.6	775.3	775.3	774.5	773.8
165°	790.8	790.2	789.6	789.1	789.6	790.2	790.8	791.3	791.2	790.4	789.5
167.5°	803.6	802.7	801.8	801.0	801.8	802.7	803.6	804.5	804.5	803.6	802.7
170°	810.6	809.6	808.5	807.6	808.5	809.6	810.6	811.5	811.6	810.7	809.9
172.5°	816.2	815.1	814.2	813.2	814.2	815.1	816.2	817.2	817.2	816.2	815.2
175°	822.0	821.0	820.0	819.0	820.0	821.0	822.0	823.0	823.0	822.0	821.0
177.5°	824.8	823.9	823.0	822.1	823.0	823.9	824.8	825.7	825.8	825.0	824.2
180°	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7
2.5°	1545.3	1549.0	1557.3	1566.7	1574.5	1581.3	1586.5	1593.7	1600.5	1609.9	1618.8
5°	1451.6	1460.7	1473.7	1489.4	1508.9	1521.9	1538.1	1552.5	1573.4	1594.2	1614.4
7.5°	1369.3	1379.3	1398.5	1420.1	1443.2	1464.6	1483.9	1509.1	1536.8	1567.1	1600.9
10°	1316.2	1327.3	1350.1	1374.8	1402.2	1422.9	1449.0	1479.0	1510.2	1547.3	1588.9
12.5°	1268.3	1278.9	1306.3	1331.5	1359.9	1382.8	1413.1	1443.6	1485.2	1525.4	1572.8
15°	1174.9	1203.0	1234.2	1264.1	1298.0	1326.0	1362.4	1393.7	1433.4	1490.0	1544.0
17.5°	1071.3	1101.1	1140.0	1186.2	1231.6	1266.2	1303.2	1342.0	1389.3	1447.1	1509.4
20°	1010.9	1035.0	1078.0	1129.4	1182.1	1230.3	1264.1	1307.1	1355.9	1418.4	1482.9
22.5°	965.6	986.0	1019.6	1071.1	1128.0	1183.9	1227.2	1269.6	1323.6	1386.1	1456.3
25°	897.6	919.8	949.1	984.2	1049.3	1108.6	1165.2	1214.0	1271.3	1333.7	1411.9
27.5°	841.1	860.4	887.2	923.8	967.6	1032.9	1101.6	1157.2	1215.9	1283.0	1361.2
30°	807.8	823.5	845.5	882.6	924.3	982.9	1052.6	1117.7	1176.9	1246.6	1328.0
32.5°	772.9	789.6	811.2	840.5	885.3	934.5	1004.1	1075.5	1138.4	1209.6	1289.4
35°	726.4	739.5	759.0	789.0	829.3	872.3	934.1	1007.6	1074.1	1150.2	1226.4
37.5°	679.5	694.8	710.2	736.9	770.0	816.1	866.8	941.9	1015.5	1085.0	1159.4
40°	652.9	662.0	678.9	700.4	735.6	776.6	824.1	897.6	971.2	1040.2	1115.1
42.5°	623.2	633.4	647.7	669.2	700.7	740.6	787.1	850.8	927.5	994.4	1062.5
45°	582.0	587.8	602.1	620.4	646.4	686.7	729.7	786.4	858.6	922.3	982.3
47.5°	540.3	545.4	554.3	571.0	600.1	632.6	672.8	723.6	787.0	850.8	901.4
50°	511.6	516.2	524.6	540.3	566.3	598.2	637.9	683.5	740.1	801.3	843.6
52.5°	483.0	485.5	493.4	511.1	533.0	564.4	599.9	641.8	694.8	745.6	788.4
55°	437.4	443.3	448.5	461.5	482.3	512.3	544.2	583.9	624.9	667.9	704.3
57.5°	389.9	396.3	403.8	415.3	431.9	459.7	488.4	520.5	555.5	591.2	621.7
60°	358.7	364.5	371.0	384.1	399.0	421.2	452.4	480.4	507.1	539.6	570.2
62.5°	327.9	333.8	341.4	351.8	366.2	387.3	413.4	437.7	465.5	493.8	516.6
65°	282.5	287.1	292.9	302.7	316.3	335.3	356.7	375.6	400.3	421.2	442.0
67.5°	232.7	241.4	249.1	257.0	268.6	286.2	301.7	319.8	336.6	352.0	371.0
70°	199.8	209.6	216.8	225.2	236.3	251.3	266.2	278.6	292.3	307.2	324.2
72.5°	172.3	179.9	185.5	194.5	204.6	218.4	232.4	242.6	253.7	264.0	280.5
75°	136.1	139.3	143.2	150.3	159.5	169.9	181.0	190.0	196.6	205.7	217.4
77.5°	97.8	104.0	106.6	111.7	118.2	124.7	132.0	139.7	145.9	149.2	158.2
80°	74.8	77.5	80.1	87.2	91.2	97.7	102.8	110.0	112.6	115.9	124.3
82.5°	58.2	59.8	61.3	63.3	65.6	72.2	77.4	81.9	84.5	85.7	92.0
85°	33.8	34.5	35.1	35.8	36.4	36.4	39.1	42.3	46.9	46.9	48.8
87.5°	14.4	14.8	14.6	13.8	14.6	14.4	14.7	14.3	15.6	16.9	18.1
90°	14.8	14.0	12.9	11.7	10.6	9.5	8.2	6.6	5.1	3.5	1.9
92.5°	25.8	25.3	24.5	23.6	22.8	22.1	20.8	19.0	17.2	15.4	13.6
95°	48.8	48.4	47.5	46.5	45.5	44.5	43.4	42.1	40.8	39.5	38.2
97.5°	77.1	76.6	75.4	74.3	73.1	72.0	70.8	69.9	68.8	67.8	66.8
100°	97.8	97.5	96.2	95.0	93.7	92.5	91.5	90.9	90.3	89.8	89.3
102.5°	119.4	119.0	117.8	116.6	115.4	114.3	113.6	113.4	113.2	112.9	112.7
105°	152.1	151.7	151.2	150.6	150.0	149.4	149.1	149.0	148.8	148.6	148.5
107.5°	187.7	187.3	187.2	187.1	187.0	186.9	186.8	186.6	186.5	186.3	186.1
110°	212.0	212.2	212.4	212.5	212.7	212.8	212.7	212.5	212.1	211.9	211.7



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	237.2	237.3	237.5	237.7	238.0	238.2	238.4	238.3	238.2	238.1	238.1
115°	276.5	276.6	276.9	277.2	277.4	277.8	277.9	277.9	277.9	277.9	277.9
117.5°	314.5	315.0	315.2	315.4	315.6	315.8	315.8	315.7	315.6	315.5	315.4
120°	340.3	341.0	341.4	341.9	342.3	342.7	342.7	342.1	341.5	341.0	340.4
122.5°	366.0	366.5	366.7	366.9	367.1	367.3	367.3	367.0	366.8	366.6	366.4
125°	403.8	404.1	404.2	404.4	404.6	404.6	404.7	404.7	404.7	404.7	404.7
127.5°	440.2	440.4	440.7	440.9	441.1	441.3	441.2	440.8	440.4	439.9	439.5
130°	465.6	465.9	465.9	465.9	465.9	465.9	465.7	465.3	464.9	464.5	464.0
132.5°	489.6	489.9	490.0	490.2	490.2	490.3	490.2	489.9	489.7	489.3	489.0
135°	525.5	525.9	525.9	525.9	525.9	525.9	525.5	524.6	523.7	522.9	522.0
137.5°	560.4	560.8	560.5	560.4	560.1	559.9	559.5	559.1	558.7	558.4	558.0
140°	583.1	583.2	583.2	583.2	583.2	583.2	583.1	582.8	582.5	582.2	582.0
142.5°	604.6	604.6	604.7	604.9	605.0	605.1	605.0	604.7	604.5	604.1	603.9
145°	637.2	637.4	637.2	637.1	637.0	636.8	636.5	635.9	635.4	634.8	634.2
147.5°	666.8	666.8	666.9	667.1	667.2	667.3	667.0	666.3	665.6	665.0	664.3
150°	685.2	685.2	685.2	685.2	685.2	685.2	684.9	684.4	683.8	683.2	682.7
152.5°	702.4	702.1	701.9	701.8	701.6	701.6	701.3	701.0	700.7	700.3	700.0
155°	726.5	726.0	726.1	726.3	726.4	726.5	726.6	726.6	726.6	726.6	726.6
157.5°	748.2	747.8	747.8	747.9	747.9	747.9	748.0	748.3	748.5	748.8	749.1
160°	761.5	761.1	761.2	761.3	761.5	761.6	761.7	761.9	762.1	762.1	762.3
162.5°	773.1	772.3	772.4	772.6	772.7	772.8	773.1	773.5	773.8	774.2	774.5
165°	788.6	787.8	788.1	788.4	788.6	789.0	789.3	789.7	790.2	790.6	791.0
167.5°	801.9	801.0	801.0	801.0	801.0	801.0	801.3	801.8	802.4	803.0	803.6
170°	809.0	808.2	808.0	808.0	807.8	807.6	808.0	808.6	809.3	810.1	810.7
172.5°	814.2	813.3	813.3	813.3	813.3	813.2	813.5	814.1	814.6	815.3	815.9
175°	820.0	819.0	819.2	819.3	819.5	819.6	820.0	820.8	821.4	822.1	822.9
177.5°	823.4	822.6	822.6	822.6	822.6	822.6	822.9	823.5	824.0	824.6	825.2
180°	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7
2.5°	1625.5	1630.2	1635.4	1645.4	1653.7	1657.3	1664.6	1669.8	1668.3	1675.5	1688.0
5°	1631.9	1649.5	1669.7	1690.5	1713.9	1733.5	1749.1	1764.7	1777.1	1792.0	1814.2
7.5°	1630.8	1662.2	1696.1	1733.5	1771.9	1805.1	1835.8	1867.0	1894.8	1925.1	1964.8
10°	1626.7	1668.3	1710.7	1759.5	1808.3	1854.6	1896.2	1935.3	1972.4	2012.1	2062.2
12.5°	1622.0	1669.9	1721.1	1779.8	1840.6	1896.2	1945.1	2001.4	2047.9	2099.1	2157.0
15°	1601.3	1665.7	1735.4	1811.6	1884.5	1959.3	2026.3	2095.4	2159.8	2221.0	2293.9
17.5°	1577.6	1652.0	1734.1	1824.1	1911.7	2002.7	2082.3	2169.2	2235.1	2317.2	2384.9
20°	1558.4	1638.4	1726.3	1827.2	1926.8	2027.6	2115.5	2204.1	2278.3	2360.9	2446.9
22.5°	1534.9	1622.8	1718.0	1822.5	1926.8	2037.0	2134.3	2222.3	2314.2	2407.3	2495.9
25°	1497.1	1588.3	1689.2	1803.8	1923.5	2036.1	2140.3	2249.7	2348.6	2449.5	2528.9
27.5°	1450.8	1546.5	1652.9	1771.1	1894.0	2009.3	2132.0	2248.5	2348.1	2445.2	2514.5
30°	1413.8	1514.7	1616.9	1736.8	1864.3	1987.9	2119.5	2236.0	2340.8	2428.0	2467.1
32.5°	1375.8	1471.5	1576.9	1698.2	1828.9	1961.9	2092.4	2211.5	2308.5	2360.9	2361.8
35°	1309.7	1399.5	1508.9	1628.0	1762.1	1906.6	2038.7	2155.9	2215.2	2219.7	2155.9
37.5°	1237.5	1320.0	1423.2	1542.5	1689.3	1833.0	1968.1	2046.2	2066.0	1999.7	1881.7
40°	1186.0	1262.2	1361.8	1484.2	1629.9	1778.4	1901.4	1958.7	1937.9	1830.4	1698.9
42.5°	1131.9	1202.8	1298.8	1419.6	1565.9	1715.9	1820.7	1851.4	1796.2	1672.2	1518.3
45°	1043.5	1108.6	1203.6	1325.4	1465.9	1606.5	1686.0	1670.3	1578.5	1431.4	1258.9
47.5°	951.5	1014.3	1099.8	1212.4	1356.4	1477.7	1531.5	1484.4	1353.8	1192.0	1051.7
50°	890.5	955.0	1033.7	1141.1	1272.6	1389.8	1424.2	1352.7	1207.5	1051.9	923.0
52.5°	830.6	885.7	962.9	1066.7	1192.4	1291.4	1309.7	1227.2	1077.3	937.8	823.5
55°	739.5	789.6	854.7	952.4	1061.0	1145.0	1135.2	1029.2	893.1	774.0	684.1
57.5°	651.3	689.1	749.3	840.7	936.2	992.5	956.9	866.4	739.6	642.1	566.3
60°	593.0	628.2	684.1	764.2	848.2	880.0	850.1	751.9	651.6	562.4	498.6
62.5°	537.8	568.8	616.9	691.3	759.1	778.0	746.0	660.1	569.8	493.7	440.8
65°	457.6	486.2	527.3	580.0	626.9	635.9	615.1	527.3	458.9	395.1	358.7
67.5°	384.8	403.6	435.6	481.2	506.1	511.4	471.2	416.0	355.7	316.5	289.0
70°	335.9	348.9	378.9	403.6	423.8	424.4	387.3	343.1	296.9	265.0	244.8
72.5°	288.5	301.0	323.7	340.6	356.0	351.0	317.0	282.1	244.8	220.7	205.7
75°	222.7	233.7	245.4	253.2	253.2	246.7	222.0	195.9	174.5	160.1	155.6
77.5°	161.8	171.0	174.9	173.7	171.3	161.2	145.5	128.5	120.8	114.1	110.6
80°	126.9	130.9	132.2	128.9	125.0	113.2	102.8	95.7	88.5	85.9	84.6
82.5°	94.1	97.5	94.1	95.1	86.4	76.8	71.1	68.6	65.6	64.6	63.3
85°	50.1	49.5	48.2	44.9	39.1	37.7	37.1	36.4	35.1	35.8	34.5
87.5°	17.9	16.6	14.8	14.7	14.9	14.1	14.8	15.1	15.3	14.9	16.1
90°	3.5	5.1	6.6	8.2	9.5	10.6	11.7	12.9	14.0	14.8	15.7
92.5°	15.4	17.2	19.0	20.8	22.1	22.8	23.6	24.5	25.3	25.8	26.3
95°	39.5	40.8	42.1	43.4	44.5	45.5	46.5	47.5	48.4	48.8	49.3
97.5°	67.8	68.8	69.9	70.8	72.0	73.1	74.3	75.4	76.6	77.1	77.6
100°	89.8	90.3	90.9	91.5	92.5	93.7	95.0	96.2	97.5	97.8	98.1
102.5°	112.9	113.2	113.4	113.6	114.3	115.4	116.6	117.8	119.0	119.4	119.8
105°	148.6	148.8	149.0	149.1	149.4	150.0	150.6	151.2	151.7	152.1	152.5
107.5°	186.3	186.5	186.6	186.8	186.9	187.0	187.1	187.2	187.3	187.7	188.1
110°	211.9	212.1	212.5	212.7	212.8	212.7	212.5	212.4	212.2	212.0	211.7





TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	238.1	238.2	238.3	238.4	238.2	238.0	237.7	237.5	237.3	237.2	237.1
115°	277.9	277.9	277.9	277.9	277.8	277.4	277.2	276.9	276.6	276.5	276.3
117.5°	315.5	315.6	315.7	315.8	315.8	315.6	315.4	315.2	315.0	314.5	314.1
120°	341.0	341.5	342.1	342.7	342.7	342.3	341.9	341.4	341.0	340.3	339.6
122.5°	366.6	366.8	367.0	367.3	367.3	367.1	366.9	366.7	366.5	366.0	365.5
125°	404.7	404.7	404.7	404.7	404.6	404.6	404.4	404.2	404.1	403.8	403.6
127.5°	439.9	440.4	440.8	441.2	441.3	441.1	440.9	440.7	440.4	440.2	439.9
130°	464.5	464.9	465.3	465.7	465.9	465.9	465.9	465.9	465.9	465.6	465.4
132.5°	489.3	489.7	489.9	490.2	490.3	490.2	490.2	490.0	489.9	489.6	489.3
135°	522.9	523.7	524.6	525.5	525.9	525.9	525.9	525.9	525.9	525.5	525.3
137.5°	558.4	558.7	559.1	559.5	559.9	560.1	560.4	560.5	560.8	560.4	560.0
140°	582.2	582.5	582.8	583.1	583.2	583.2	583.2	583.2	583.2	583.1	582.9
142.5°	604.1	604.5	604.7	605.0	605.1	605.0	604.9	604.7	604.6	604.6	604.5
145°	634.8	635.4	635.9	636.5	636.8	637.0	637.1	637.2	637.4	637.2	637.1
147.5°	665.0	665.6	666.3	667.0	667.3	667.2	667.1	666.9	666.8	666.8	666.6
150°	683.2	683.8	684.4	684.9	685.2	685.2	685.2	685.2	685.2	685.2	685.2
152.5°	700.3	700.7	701.0	701.3	701.6	701.6	701.8	701.9	702.1	702.4	702.7
155°	726.6	726.6	726.6	726.6	726.5	726.4	726.3	726.1	726.0	726.5	727.1
157.5°	748.8	748.5	748.3	748.0	747.9	747.9	747.9	747.8	747.8	748.2	748.6
160°	762.1	762.1	761.9	761.7	761.6	761.5	761.3	761.2	761.1	761.5	761.9
162.5°	774.2	773.8	773.5	773.1	772.8	772.7	772.6	772.4	772.3	773.1	773.8
165°	790.6	790.2	789.7	789.3	789.0	788.6	788.4	788.1	787.8	788.6	789.5
167.5°	803.0	802.4	801.8	801.3	801.0	801.0	801.0	801.0	801.0	801.9	802.7
170°	810.1	809.3	808.6	808.0	807.6	807.8	808.0	808.0	808.2	809.0	809.9
172.5°	815.3	814.6	814.1	813.5	813.2	813.3	813.3	813.3	813.3	814.2	815.2
175°	822.1	821.4	820.8	820.0	819.6	819.5	819.3	819.2	819.0	820.0	821.0
177.5°	824.6	824.0	823.5	822.9	822.6	822.6	822.6	822.6	822.6	823.4	824.2
180°	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1	824.1



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7	1615.7
2.5°	1694.8	1696.9	1698.4	1703.6	1704.1	1708.9	1704.1
5°	1835.0	1844.1	1858.5	1872.7	1874.0	1883.2	1866.9
7.5°	1992.3	2013.4	2026.5	2049.7	2058.8	2064.5	2055.1
10°	2100.6	2120.1	2154.6	2171.5	2188.5	2191.0	2183.3
12.5°	2205.3	2236.3	2263.4	2295.5	2294.7	2317.7	2309.3
15°	2344.7	2376.6	2414.3	2450.1	2463.2	2463.2	2473.6
17.5°	2444.2	2502.6	2541.7	2569.8	2600.5	2605.9	2602.2
20°	2511.4	2574.5	2616.1	2652.6	2673.4	2679.3	2679.3
22.5°	2561.3	2615.1	2655.8	2688.5	2705.7	2712.6	2710.5
25°	2596.0	2642.1	2666.9	2676.7	2681.2	2680.0	2667.6
27.5°	2548.5	2546.5	2530.9	2500.9	2478.4	2464.7	2449.1
30°	2458.0	2424.1	2385.1	2342.1	2286.8	2244.4	2231.4
32.5°	2323.1	2247.0	2180.9	2109.3	2049.8	2007.5	1989.8
35°	2062.2	1941.8	1843.5	1757.5	1695.1	1656.0	1643.0
37.5°	1752.6	1636.1	1514.3	1431.0	1379.2	1339.8	1325.0
40°	1555.8	1428.8	1322.7	1244.6	1191.2	1152.8	1152.2
42.5°	1376.1	1254.9	1155.0	1098.8	1041.2	1015.9	1015.7
45°	1126.7	1029.8	945.2	900.9	866.4	845.5	839.7
47.5°	932.9	852.7	796.4	761.1	733.0	719.7	711.1
50°	824.1	753.8	708.9	678.2	662.7	645.7	644.4
52.5°	733.4	676.7	641.7	616.9	597.0	586.9	587.2
55°	616.4	571.5	546.8	527.9	512.3	504.5	501.2
57.5°	519.3	485.6	467.7	450.3	443.7	437.6	435.9
60°	458.9	436.1	419.2	405.5	395.7	393.8	393.1
62.5°	409.0	385.1	373.4	362.8	355.7	352.7	351.5
65°	337.2	319.6	309.2	300.8	298.2	293.6	292.9
67.5°	271.8	261.3	254.4	248.5	245.0	244.8	244.8
70°	231.7	225.8	220.0	216.8	214.8	213.5	213.5
72.5°	197.4	193.1	188.3	186.5	186.1	184.8	184.3
75°	150.3	145.8	146.4	143.2	140.6	137.4	135.4
77.5°	106.6	103.4	102.7	102.3	100.1	99.7	100.8
80°	82.7	79.4	78.8	79.4	78.8	76.8	76.8
82.5°	62.9	60.2	59.5	59.1	58.5	59.1	58.0
85°	33.8	32.5	32.5	32.5	33.8	33.2	32.5
87.5°	15.3	14.9	15.6	15.1	15.2	14.7	15.2
90°	16.6	17.4	18.0	18.3	18.6	18.8	19.2
92.5°	26.7	27.3	27.6	27.8	28.0	28.1	28.3
95°	49.7	50.1	50.4	50.4	50.4	50.4	50.4
97.5°	78.1	78.7	78.9	78.9	78.9	78.9	78.9
100°	98.4	98.7	98.8	98.8	98.8	98.8	98.8
102.5°	120.1	120.5	120.7	120.9	121.0	121.2	121.2
105°	153.0	153.4	153.8	154.3	154.7	155.1	155.6
107.5°	188.4	188.8	189.1	189.0	189.0	189.0	188.9
110°	211.4	211.1	211.2	211.7	212.1	212.5	212.9



TEST NUMBER: P332998-930

CATALOG NUMBER: SA4XXRDIP-C1195D810U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	237.1	237.0	237.0	237.1	237.2	237.3	237.3
115°	276.2	276.1	275.9	275.8	275.7	275.5	275.3
117.5°	313.6	313.1	312.7	312.4	312.1	311.9	311.5
120°	338.8	338.2	337.9	338.3	338.5	338.8	339.1
122.5°	365.1	364.6	364.1	363.5	363.1	362.6	362.1
125°	403.2	403.0	402.7	402.4	402.1	401.9	401.5
127.5°	439.6	439.3	439.0	438.8	438.6	438.4	438.1
130°	465.0	464.8	464.4	463.8	463.3	462.7	462.1
132.5°	489.0	488.8	488.5	488.3	488.0	487.8	487.6
135°	525.0	524.7	524.3	523.9	523.5	523.1	522.7
137.5°	559.7	559.3	559.1	559.2	559.3	559.4	559.5
140°	582.8	582.6	582.5	582.4	582.2	582.0	582.0
142.5°	604.5	604.5	604.5	604.5	604.5	604.4	604.4
145°	637.0	636.8	636.5	636.1	635.7	635.3	634.9
147.5°	666.5	666.3	666.3	666.1	665.9	665.9	665.7
150°	685.2	685.2	685.1	685.0	684.9	684.7	684.5
152.5°	703.0	703.4	703.4	703.0	702.6	702.3	701.9
155°	727.7	728.2	728.2	727.7	727.1	726.5	726.0
157.5°	749.1	749.5	749.4	749.0	748.5	748.0	747.5
160°	762.3	762.7	762.6	761.9	761.2	760.5	759.8
162.5°	774.5	775.3	775.3	774.6	774.0	773.2	772.5
165°	790.4	791.2	791.3	790.8	790.2	789.6	789.1
167.5°	803.6	804.5	804.5	803.6	802.7	801.8	801.0
170°	810.7	811.6	811.5	810.6	809.6	808.5	807.6
172.5°	816.2	817.2	817.2	816.2	815.1	814.2	813.2
175°	822.0	823.0	823.0	822.0	821.0	820.0	819.0
177.5°	825.0	825.8	825.7	824.8	823.9	823.0	822.1
180°	824.1	824.1	824.1	824.1	824.1	824.1	824.1

(END OF REPORT)