

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: P332991-930

Luminaire Tested: **SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332991-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

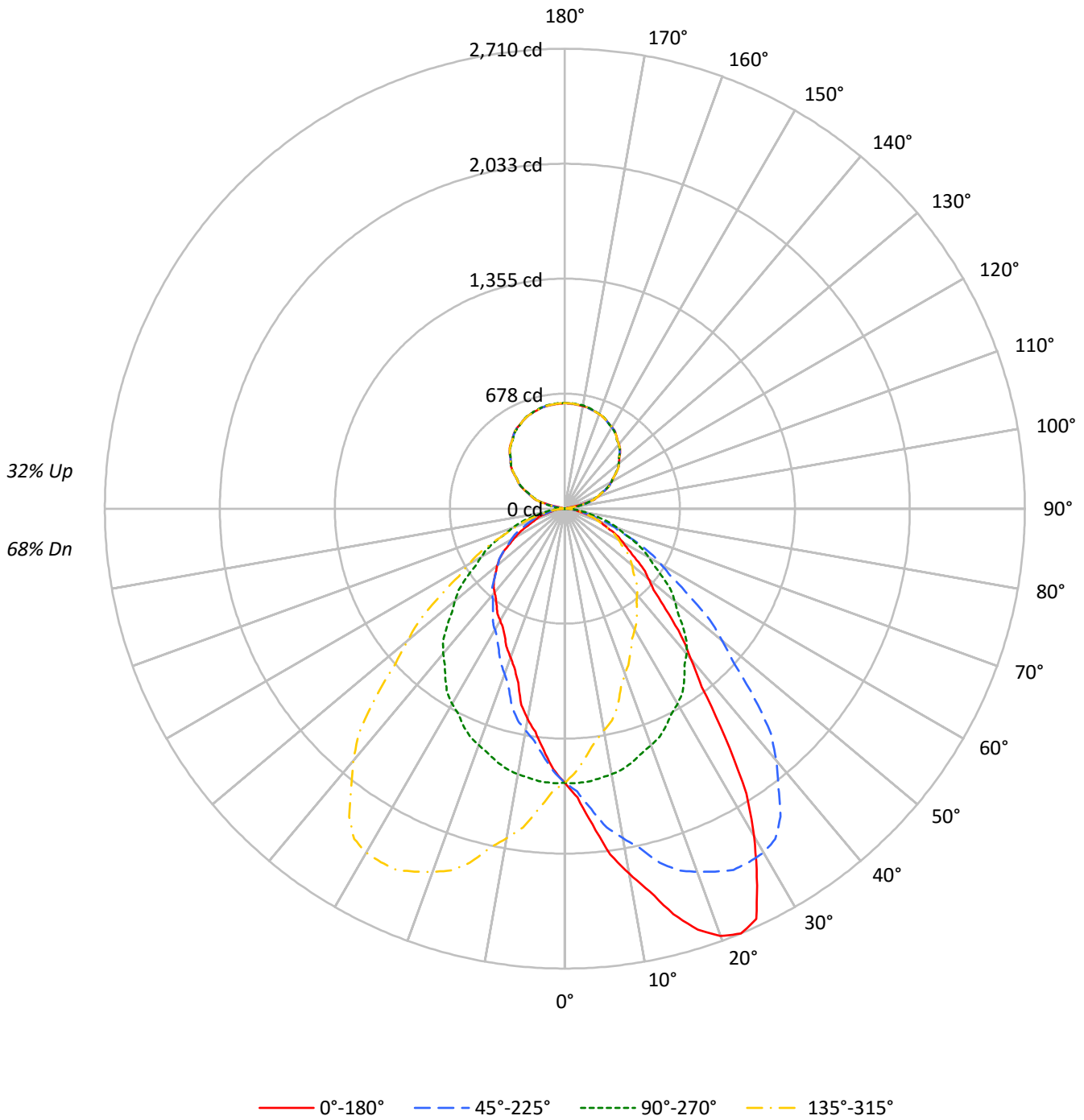
Lumens per Lamp: N/A
Luminaire Lumens: 6009.1 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 55.1
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	50	30	10	0	
RCR																						
0	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68				
1	102	98	95	91	97	93	90	87	83	80	78	74	72	70	65	64	63	59				
2	94	87	81	75	88	82	77	72	73	69	66	65	62	60	58	56	54	50				
3	86	77	69	64	81	73	66	61	65	60	56	58	54	51	52	49	46	43				
4	79	68	60	54	74	65	58	52	58	53	48	52	48	44	47	43	40	37				
5	73	61	53	47	69	58	51	45	53	47	42	47	43	39	43	39	36	33				
6	67	55	47	41	63	53	45	40	48	42	37	43	38	34	39	35	32	29				
7	62	50	42	37	59	48	40	35	43	37	33	39	34	31	36	31	28	26				
8	58	46	38	33	55	44	36	32	40	34	29	36	31	27	33	29	25	23				
9	54	42	34	29	51	40	33	28	37	31	27	33	28	25	30	26	23	21				
10	51	39	31	26	48	37	30	26	34	28	24	31	26	23	28	24	21	19				

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.5	2.6
10°-20°	472.2	7.9
20°-30°	738.6	12.3
30°-40°	821.0	13.7
40°-50°	728.5	12.1
50°-60°	567.6	9.4
60°-70°	371.6	6.2
70°-80°	182.8	3.0
80°-90°	46.9	0.8
90°-100°	21.3	0.4
100°-110°	135.6	2.3
110°-120°	259.4	4.3
120°-130°	329.3	5.5
130°-140°	352.3	5.9
140°-150°	329.4	5.5
150°-160°	265.7	4.4
160°-170°	171.4	2.9
170°-180°	59.1	1.0
0°-30°	1367.3	22.8
0°-40°	2188.4	36.4
0°-60°	3484.5	58.0
0°-90°	4085.8	68.0
90°-120°	416.3	6.9
90°-150°	1427.3	23.8
90°-180°	1923.0	32.0
0°-180°	6009.1	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°	14	1	14	1	14	8
95°	14	26	14	26	14	11
105°	133	140	133	140	133	116
115°	263	261	263	261	263	261
125°	370	367	370	367	370	330
135°	459	456	459	456	459	353
145°	528	526	528	526	528	330
155°	576	576	576	576	576	265
165°	605	608	605	608	605	171
175°	618	622	618	622	618	59
180°	622	622	622	622	622	



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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°	14.3	13.7	14.2	14.1	14.6	14.0	14.4	15.3	14.2	14.5	14.3
90°	13.9	13.8	13.5	13.4	13.1	12.7	12.1	11.5	10.8	10.2	9.4
92.5°	12.8	12.8	12.7	12.7	12.6	12.3	11.7	11.1	10.5	9.9	9.0
95°	13.5	13.4	13.3	13.2	13.0	12.7	12.1	11.5	10.8	10.2	10.1
97.5°	13.0	12.9	12.8	12.7	12.6	12.6	12.5	12.4	12.3	12.3	23.8
100°	13.0	12.9	12.8	12.7	12.6	13.5	15.2	17.0	18.7	20.5	34.7
102.5°	13.4	13.4	13.4	13.4	13.3	22.7	41.7	60.7	79.7	98.6	100.4
105°	132.6	136.2	140.0	143.7	147.4	148.8	147.9	147.0	146.0	145.1	144.6
107.5°	184.7	184.3	183.9	183.5	183.1	182.7	182.3	181.8	181.4	180.9	180.2
110°	207.4	207.1	206.8	206.5	206.2	205.9	205.7	205.5	205.3	205.1	204.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	230.1	229.8	229.3	228.9	228.5	228.4	228.4	228.4	228.5	228.5	228.3
115°	263.3	263.3	263.3	263.3	263.3	263.1	262.9	262.7	262.5	262.3	262.4
117.5°	296.9	296.9	297.0	297.0	297.1	297.1	297.2	297.2	297.3	297.3	297.0
120°	318.1	318.3	318.5	318.7	318.9	318.9	318.7	318.5	318.3	318.1	318.2
122.5°	338.9	339.2	339.3	339.6	339.7	339.8	339.7	339.6	339.4	339.3	339.2
125°	370.2	370.1	370.0	369.9	369.8	369.6	369.2	368.9	368.7	368.4	368.5
127.5°	397.6	397.7	397.8	397.9	397.9	398.0	398.1	398.2	398.2	398.3	397.8
130°	416.2	416.2	416.2	416.2	416.2	416.2	416.0	416.0	415.9	415.8	415.5
132.5°	433.3	433.4	433.5	433.6	433.7	433.7	433.6	433.5	433.3	433.3	432.8
135°	459.0	458.9	458.6	458.4	458.2	458.0	457.8	457.5	457.4	457.1	456.7
137.5°	480.9	481.0	481.1	481.2	481.2	481.1	480.9	480.7	480.5	480.2	479.8
140°	496.2	496.1	496.0	495.9	495.8	495.6	495.3	495.0	494.6	494.4	494.2
142.5°	508.9	508.8	508.8	508.8	508.8	508.7	508.4	508.2	508.0	507.8	507.6
145°	528.3	528.2	527.9	527.7	527.5	527.3	527.3	527.1	527.0	526.9	526.9
147.5°	544.4	544.3	544.2	544.1	544.0	543.9	543.8	543.7	543.6	543.6	543.6
150°	554.8	554.7	554.6	554.5	554.4	554.3	554.3	554.3	554.3	554.3	554.5
152.5°	563.8	563.8	563.9	563.9	564.0	563.9	563.8	563.6	563.5	563.3	563.5
155°	575.8	576.1	576.3	576.7	577.0	576.9	576.5	576.1	575.7	575.3	575.6
157.5°	585.8	586.4	586.9	587.4	587.9	587.9	587.4	586.9	586.4	585.8	586.1
160°	592.5	593.1	593.7	594.4	595.0	595.0	594.4	593.7	593.1	592.5	592.6
162.5°	597.7	598.4	599.1	599.8	600.5	600.5	599.9	599.3	598.7	598.1	598.2
165°	605.0	606.0	606.9	607.8	608.8	608.9	608.0	607.2	606.3	605.5	605.5
167.5°	610.6	611.6	612.6	613.7	614.7	614.7	613.8	612.9	612.0	611.1	611.1
170°	613.9	614.9	616.0	617.0	618.0	618.2	617.3	616.4	615.6	614.8	614.7
172.5°	615.7	616.9	618.0	619.1	620.2	620.4	619.5	618.7	617.9	617.0	616.9
175°	618.1	619.3	620.5	621.8	623.1	623.2	622.2	621.3	620.4	619.5	619.4
177.5°	619.5	620.5	621.6	622.6	623.5	623.7	623.1	622.4	621.7	621.0	620.9
180°	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8



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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°	14.2	13.5	14.4	14.2	14.5	16.4	17.7	18.0	16.6	15.3	13.9
90°	8.6	7.7	6.9	6.0	4.8	3.7	2.5	1.4	2.5	3.7	4.8
92.5°	8.2	7.4	6.5	6.1	6.0	6.0	6.0	5.9	6.0	6.0	6.0
95°	10.0	9.9	9.8	11.5	15.0	18.6	22.1	25.6	22.1	18.6	15.0
97.5°	35.4	46.9	58.4	63.1	60.9	58.7	56.5	54.3	56.5	58.7	60.9
100°	49.0	63.3	77.5	83.7	81.9	80.0	78.1	76.2	78.1	80.0	81.9
102.5°	102.3	104.2	106.1	106.3	104.9	103.5	102.2	100.9	102.2	103.5	104.9
105°	144.1	143.6	143.0	142.4	141.9	141.2	140.6	140.0	140.6	141.2	141.9
107.5°	179.5	178.8	178.1	177.6	177.2	177.0	176.7	176.3	176.7	177.0	177.2
110°	203.8	203.3	202.6	202.1	201.9	201.5	201.2	200.9	201.2	201.5	201.9



TEST NUMBER: P332991-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	228.0	227.6	227.4	227.0	226.4	225.8	225.3	224.7	225.3	225.8	226.4
115°	262.5	262.6	262.7	262.6	262.3	262.0	261.7	261.4	261.7	262.0	262.3
117.5°	296.9	296.6	296.4	296.0	295.6	295.2	294.8	294.4	294.8	295.2	295.6
120°	318.3	318.5	318.5	318.4	318.0	317.6	317.2	316.7	317.2	317.6	318.0
122.5°	339.0	338.9	338.8	338.5	338.3	338.0	337.8	337.5	337.8	338.0	338.3
125°	368.8	368.9	369.2	369.1	368.7	368.3	367.8	367.4	367.8	368.3	368.7
127.5°	397.3	396.9	396.4	396.1	396.0	395.9	395.7	395.7	395.7	395.9	396.0
130°	415.2	414.8	414.5	414.3	414.3	414.1	414.0	413.9	414.0	414.1	414.3
132.5°	432.4	432.1	431.7	431.4	431.2	431.0	430.8	430.6	430.8	431.0	431.2
135°	456.3	455.9	455.5	455.3	455.4	455.6	455.7	455.8	455.7	455.6	455.4
137.5°	479.3	478.8	478.4	478.2	478.1	478.1	478.0	478.0	478.0	478.1	478.1
140°	494.0	493.7	493.5	493.3	493.1	492.9	492.7	492.5	492.7	492.9	493.1
142.5°	507.5	507.4	507.3	507.0	506.6	506.3	505.9	505.6	505.9	506.3	506.6
145°	526.9	526.9	526.9	526.8	526.4	526.1	525.9	525.5	525.9	526.1	526.4
147.5°	543.8	543.9	544.0	543.7	543.2	542.6	542.0	541.4	542.0	542.6	543.2
150°	554.6	554.6	554.8	554.6	554.2	553.8	553.3	552.9	553.3	553.8	554.2
152.5°	563.7	563.9	564.0	563.9	563.6	563.3	563.0	562.6	563.0	563.3	563.6
155°	575.9	576.3	576.5	576.7	576.5	576.4	576.3	576.3	576.3	576.4	576.5
157.5°	586.5	586.9	587.2	587.4	587.5	587.5	587.6	587.7	587.6	587.5	587.5
160°	592.7	592.8	592.9	593.1	593.5	593.7	594.0	594.4	594.0	593.7	593.5
162.5°	598.3	598.3	598.5	598.8	599.2	599.5	599.9	600.3	599.9	599.5	599.2
165°	605.5	605.5	605.5	605.8	606.3	606.8	607.3	607.8	607.3	606.8	606.3
167.5°	611.2	611.3	611.3	611.6	612.2	612.7	613.3	613.8	613.3	612.7	612.2
170°	614.6	614.5	614.4	614.7	615.3	615.9	616.5	617.2	616.5	615.9	615.3
172.5°	616.9	616.8	616.6	616.9	617.5	618.2	618.7	619.4	618.7	618.2	617.5
175°	619.3	619.1	619.1	619.3	620.0	620.5	621.2	621.8	621.2	620.5	620.0
177.5°	620.7	620.5	620.4	620.6	621.2	621.7	622.3	622.9	622.3	621.7	621.2
180°	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8



TEST NUMBER: P332991-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A

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°	14.2	13.9	14.0	13.2	13.9	14.0	13.6	13.8	14.4	13.5	13.5
90°	6.0	6.9	7.7	8.6	9.4	10.2	10.8	11.5	12.1	12.7	13.1
92.5°	6.1	6.5	7.4	8.2	9.0	9.9	10.5	11.1	11.7	12.3	12.6
95°	11.5	9.8	9.9	10.0	10.1	10.2	10.8	11.5	12.1	12.7	13.0
97.5°	63.1	58.4	46.9	35.4	23.8	12.3	12.3	12.4	12.5	12.6	12.6
100°	83.7	77.5	63.3	49.0	34.7	20.5	18.7	17.0	15.2	13.5	12.6
102.5°	106.3	106.1	104.2	102.3	100.4	98.6	79.7	60.7	41.7	22.7	13.3
105°	142.4	143.0	143.6	144.1	144.6	145.1	146.0	147.0	147.9	148.8	147.4
107.5°	177.6	178.1	178.8	179.5	180.2	180.9	181.4	181.8	182.3	182.7	183.1
110°	202.1	202.6	203.3	203.8	204.5	205.1	205.3	205.5	205.7	205.9	206.2



TEST NUMBER: P332991-930

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	227.0	227.4	227.6	228.0	228.3	228.5	228.5	228.4	228.4	228.4	228.5
115°	262.6	262.7	262.6	262.5	262.4	262.3	262.5	262.7	262.9	263.1	263.3
117.5°	296.0	296.4	296.6	296.9	297.0	297.3	297.3	297.2	297.2	297.1	297.1
120°	318.4	318.5	318.5	318.3	318.2	318.1	318.3	318.5	318.7	318.9	318.9
122.5°	338.5	338.8	338.9	339.0	339.2	339.3	339.4	339.6	339.7	339.8	339.7
125°	369.1	369.2	368.9	368.8	368.5	368.4	368.7	368.9	369.2	369.6	369.8
127.5°	396.1	396.4	396.9	397.3	397.8	398.3	398.2	398.2	398.1	398.0	397.9
130°	414.3	414.5	414.8	415.2	415.5	415.8	415.9	416.0	416.0	416.2	416.2
132.5°	431.4	431.7	432.1	432.4	432.8	433.3	433.3	433.5	433.6	433.7	433.7
135°	455.3	455.5	455.9	456.3	456.7	457.1	457.4	457.5	457.8	458.0	458.2
137.5°	478.2	478.4	478.8	479.3	479.8	480.2	480.5	480.7	480.9	481.1	481.2
140°	493.3	493.5	493.7	494.0	494.2	494.4	494.6	495.0	495.3	495.6	495.8
142.5°	507.0	507.3	507.4	507.5	507.6	507.8	508.0	508.2	508.4	508.7	508.8
145°	526.8	526.9	526.9	526.9	526.9	526.9	527.0	527.1	527.3	527.3	527.5
147.5°	543.7	544.0	543.9	543.8	543.6	543.6	543.6	543.7	543.8	543.9	544.0
150°	554.6	554.8	554.6	554.6	554.5	554.3	554.3	554.3	554.3	554.3	554.4
152.5°	563.9	564.0	563.9	563.7	563.5	563.3	563.5	563.6	563.8	563.9	564.0
155°	576.7	576.5	576.3	575.9	575.6	575.3	575.7	576.1	576.5	576.9	577.0
157.5°	587.4	587.2	586.9	586.5	586.1	585.8	586.4	586.9	587.4	587.9	587.9
160°	593.1	592.9	592.8	592.7	592.6	592.5	593.1	593.7	594.4	595.0	595.0
162.5°	598.8	598.5	598.3	598.3	598.2	598.1	598.7	599.3	599.9	600.5	600.5
165°	605.8	605.5	605.5	605.5	605.5	605.5	606.3	607.2	608.0	608.9	608.8
167.5°	611.6	611.3	611.3	611.2	611.1	611.1	612.0	612.9	613.8	614.7	614.7
170°	614.7	614.4	614.5	614.6	614.7	614.8	615.6	616.4	617.3	618.2	618.0
172.5°	616.9	616.6	616.8	616.9	616.9	617.0	617.9	618.7	619.5	620.4	620.2
175°	619.3	619.1	619.1	619.3	619.4	619.5	620.4	621.3	622.2	623.2	623.1
177.5°	620.6	620.4	620.5	620.7	620.9	621.0	621.7	622.4	623.1	623.7	623.5
180°	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8



TEST NUMBER: P332991-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A

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°	14.7	14.2	13.7	14.3	13.7	14.2	14.7	13.5	13.5	14.4	13.8
90°	13.4	13.5	13.8	13.9	13.8	13.5	13.4	13.1	12.7	12.1	11.5
92.5°	12.7	12.7	12.8	12.8	12.8	12.7	12.7	12.6	12.3	11.7	11.1
95°	13.2	13.3	13.4	13.5	13.4	13.3	13.2	13.0	12.7	12.1	11.5
97.5°	12.7	12.8	12.9	13.0	12.9	12.8	12.7	12.6	12.6	12.5	12.4
100°	12.7	12.8	12.9	13.0	12.9	12.8	12.7	12.6	13.5	15.2	17.0
102.5°	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.3	22.7	41.7	60.7
105°	143.7	140.0	136.2	132.6	136.2	140.0	143.7	147.4	148.8	147.9	147.0
107.5°	183.5	183.9	184.3	184.7	184.3	183.9	183.5	183.1	182.7	182.3	181.8
110°	206.5	206.8	207.1	207.4	207.1	206.8	206.5	206.2	205.9	205.7	205.5



TEST NUMBER: P332991-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	228.9	229.3	229.8	230.1	229.8	229.3	228.9	228.5	228.4	228.4	228.4
115°	263.3	263.3	263.3	263.3	263.3	263.3	263.3	263.3	263.1	262.9	262.7
117.5°	297.0	297.0	296.9	296.9	296.9	297.0	297.0	297.1	297.1	297.2	297.2
120°	318.7	318.5	318.3	318.1	318.3	318.5	318.7	318.9	318.9	318.7	318.5
122.5°	339.6	339.3	339.2	338.9	339.2	339.3	339.6	339.7	339.8	339.7	339.6
125°	369.9	370.0	370.1	370.2	370.1	370.0	369.9	369.8	369.6	369.2	368.9
127.5°	397.9	397.8	397.7	397.6	397.7	397.8	397.9	397.9	398.0	398.1	398.2
130°	416.2	416.2	416.2	416.2	416.2	416.2	416.2	416.2	416.2	416.0	416.0
132.5°	433.6	433.5	433.4	433.3	433.4	433.5	433.6	433.7	433.7	433.6	433.5
135°	458.4	458.6	458.9	459.0	458.9	458.6	458.4	458.2	458.0	457.8	457.5
137.5°	481.2	481.1	481.0	480.9	481.0	481.1	481.2	481.2	481.1	480.9	480.7
140°	495.9	496.0	496.1	496.2	496.1	496.0	495.9	495.8	495.6	495.3	495.0
142.5°	508.8	508.8	508.8	508.9	508.8	508.8	508.8	508.8	508.7	508.4	508.2
145°	527.7	527.9	528.2	528.3	528.2	527.9	527.7	527.5	527.3	527.3	527.1
147.5°	544.1	544.2	544.3	544.4	544.3	544.2	544.1	544.0	543.9	543.8	543.7
150°	554.5	554.6	554.7	554.8	554.7	554.6	554.5	554.4	554.3	554.3	554.3
152.5°	563.9	563.9	563.8	563.8	563.8	563.9	563.9	564.0	563.9	563.8	563.6
155°	576.7	576.3	576.1	575.8	576.1	576.3	576.7	577.0	576.9	576.5	576.1
157.5°	587.4	586.9	586.4	585.8	586.4	586.9	587.4	587.9	587.9	587.4	586.9
160°	594.4	593.7	593.1	592.5	593.1	593.7	594.4	595.0	595.0	594.4	593.7
162.5°	599.8	599.1	598.4	597.7	598.4	599.1	599.8	600.5	600.5	599.9	599.3
165°	607.8	606.9	606.0	605.0	606.0	606.9	607.8	608.8	608.9	608.0	607.2
167.5°	613.7	612.6	611.6	610.6	611.6	612.6	613.7	614.7	614.7	613.8	612.9
170°	617.0	616.0	614.9	613.9	614.9	616.0	617.0	618.0	618.2	617.3	616.4
172.5°	619.1	618.0	616.9	615.7	616.9	618.0	619.1	620.2	620.4	619.5	618.7
175°	621.8	620.5	619.3	618.1	619.3	620.5	621.8	623.1	623.2	622.2	621.3
177.5°	622.6	621.6	620.5	619.5	620.5	621.6	622.6	623.5	623.7	623.1	622.4
180°	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8



TEST NUMBER: P332991-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A

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°	13.6	14.0	13.9	13.2	14.0	13.9	14.2	13.9	15.3	16.6	18.0
90°	10.8	10.2	9.4	8.6	7.7	6.9	6.0	4.8	3.7	2.5	1.4
92.5°	10.5	9.9	9.0	8.2	7.4	6.5	6.1	6.0	6.0	6.0	5.9
95°	10.8	10.2	10.1	10.0	9.9	9.8	11.5	15.0	18.6	22.1	25.6
97.5°	12.3	12.3	23.8	35.4	46.9	58.4	63.1	60.9	58.7	56.5	54.3
100°	18.7	20.5	34.7	49.0	63.3	77.5	83.7	81.9	80.0	78.1	76.2
102.5°	79.7	98.6	100.4	102.3	104.2	106.1	106.3	104.9	103.5	102.2	100.9
105°	146.0	145.1	144.6	144.1	143.6	143.0	142.4	141.9	141.2	140.6	140.0
107.5°	181.4	180.9	180.2	179.5	178.8	178.1	177.6	177.2	177.0	176.7	176.3
110°	205.3	205.1	204.5	203.8	203.3	202.6	202.1	201.9	201.5	201.2	200.9



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	228.5	228.5	228.3	228.0	227.6	227.4	227.0	226.4	225.8	225.3	224.7
115°	262.5	262.3	262.4	262.5	262.6	262.7	262.6	262.3	262.0	261.7	261.4
117.5°	297.3	297.3	297.0	296.9	296.6	296.4	296.0	295.6	295.2	294.8	294.4
120°	318.3	318.1	318.2	318.3	318.5	318.5	318.4	318.0	317.6	317.2	316.7
122.5°	339.4	339.3	339.2	339.0	338.9	338.8	338.5	338.3	338.0	337.8	337.5
125°	368.7	368.4	368.5	368.8	368.9	369.2	369.1	368.7	368.3	367.8	367.4
127.5°	398.2	398.3	397.8	397.3	396.9	396.4	396.1	396.0	395.9	395.7	395.7
130°	415.9	415.8	415.5	415.2	414.8	414.5	414.3	414.3	414.1	414.0	413.9
132.5°	433.3	433.3	432.8	432.4	432.1	431.7	431.4	431.2	431.0	430.8	430.6
135°	457.4	457.1	456.7	456.3	455.9	455.5	455.3	455.4	455.6	455.7	455.8
137.5°	480.5	480.2	479.8	479.3	478.8	478.4	478.2	478.1	478.1	478.0	478.0
140°	494.6	494.4	494.2	494.0	493.7	493.5	493.3	493.1	492.9	492.7	492.5
142.5°	508.0	507.8	507.6	507.5	507.4	507.3	507.0	506.6	506.3	505.9	505.6
145°	527.0	526.9	526.9	526.9	526.9	526.9	526.8	526.4	526.1	525.9	525.5
147.5°	543.6	543.6	543.6	543.8	543.9	544.0	543.7	543.2	542.6	542.0	541.4
150°	554.3	554.3	554.5	554.6	554.6	554.8	554.6	554.2	553.8	553.3	552.9
152.5°	563.5	563.3	563.5	563.7	563.9	564.0	563.9	563.6	563.3	563.0	562.6
155°	575.7	575.3	575.6	575.9	576.3	576.5	576.7	576.5	576.4	576.3	576.3
157.5°	586.4	585.8	586.1	586.5	586.9	587.2	587.4	587.5	587.5	587.6	587.7
160°	593.1	592.5	592.6	592.7	592.8	592.9	593.1	593.5	593.7	594.0	594.4
162.5°	598.7	598.1	598.2	598.3	598.3	598.5	598.8	599.2	599.5	599.9	600.3
165°	606.3	605.5	605.5	605.5	605.5	605.5	605.8	606.3	606.8	607.3	607.8
167.5°	612.0	611.1	611.1	611.2	611.3	611.3	611.6	612.2	612.7	613.3	613.8
170°	615.6	614.8	614.7	614.6	614.5	614.4	614.7	615.3	615.9	616.5	617.2
172.5°	617.9	617.0	616.9	616.9	616.8	616.6	616.9	617.5	618.2	618.7	619.4
175°	620.4	619.5	619.4	619.3	619.1	619.1	619.3	620.0	620.5	621.2	621.8
177.5°	621.7	621.0	620.9	620.7	620.5	620.4	620.6	621.2	621.7	622.3	622.9
180°	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8



TEST NUMBER: P332991-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A

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°	17.7	16.4	14.5	14.2	14.4	13.5	14.2	14.3	14.5	14.2	15.3
90°	2.5	3.7	4.8	6.0	6.9	7.7	8.6	9.4	10.2	10.8	11.5
92.5°	6.0	6.0	6.0	6.1	6.5	7.4	8.2	9.0	9.9	10.5	11.1
95°	22.1	18.6	15.0	11.5	9.8	9.9	10.0	10.1	10.2	10.8	11.5
97.5°	56.5	58.7	60.9	63.1	58.4	46.9	35.4	23.8	12.3	12.3	12.4
100°	78.1	80.0	81.9	83.7	77.5	63.3	49.0	34.7	20.5	18.7	17.0
102.5°	102.2	103.5	104.9	106.3	106.1	104.2	102.3	100.4	98.6	79.7	60.7
105°	140.6	141.2	141.9	142.4	143.0	143.6	144.1	144.6	145.1	146.0	147.0
107.5°	176.7	177.0	177.2	177.6	178.1	178.8	179.5	180.2	180.9	181.4	181.8
110°	201.2	201.5	201.9	202.1	202.6	203.3	203.8	204.5	205.1	205.3	205.5



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	225.3	225.8	226.4	227.0	227.4	227.6	228.0	228.3	228.5	228.5	228.4
115°	261.7	262.0	262.3	262.6	262.7	262.6	262.5	262.4	262.3	262.5	262.7
117.5°	294.8	295.2	295.6	296.0	296.4	296.6	296.9	297.0	297.3	297.3	297.2
120°	317.2	317.6	318.0	318.4	318.5	318.5	318.3	318.2	318.1	318.3	318.5
122.5°	337.8	338.0	338.3	338.5	338.8	338.9	339.0	339.2	339.3	339.4	339.6
125°	367.8	368.3	368.7	369.1	369.2	368.9	368.8	368.5	368.4	368.7	368.9
127.5°	395.7	395.9	396.0	396.1	396.4	396.9	397.3	397.8	398.3	398.2	398.2
130°	414.0	414.1	414.3	414.3	414.5	414.8	415.2	415.5	415.8	415.9	416.0
132.5°	430.8	431.0	431.2	431.4	431.7	432.1	432.4	432.8	433.3	433.3	433.5
135°	455.7	455.6	455.4	455.3	455.5	455.9	456.3	456.7	457.1	457.4	457.5
137.5°	478.0	478.1	478.1	478.2	478.4	478.8	479.3	479.8	480.2	480.5	480.7
140°	492.7	492.9	493.1	493.3	493.5	493.7	494.0	494.2	494.4	494.6	495.0
142.5°	505.9	506.3	506.6	507.0	507.3	507.4	507.5	507.6	507.8	508.0	508.2
145°	525.9	526.1	526.4	526.8	526.9	526.9	526.9	526.9	526.9	527.0	527.1
147.5°	542.0	542.6	543.2	543.7	544.0	543.9	543.8	543.6	543.6	543.6	543.7
150°	553.3	553.8	554.2	554.6	554.8	554.6	554.6	554.5	554.3	554.3	554.3
152.5°	563.0	563.3	563.6	563.9	564.0	563.9	563.7	563.5	563.3	563.5	563.6
155°	576.3	576.4	576.5	576.7	576.5	576.3	575.9	575.6	575.3	575.7	576.1
157.5°	587.6	587.5	587.5	587.4	587.2	586.9	586.5	586.1	585.8	586.4	586.9
160°	594.0	593.7	593.5	593.1	592.9	592.8	592.7	592.6	592.5	593.1	593.7
162.5°	599.9	599.5	599.2	598.8	598.5	598.3	598.3	598.2	598.1	598.7	599.3
165°	607.3	606.8	606.3	605.8	605.5	605.5	605.5	605.5	605.5	606.3	607.2
167.5°	613.3	612.7	612.2	611.6	611.3	611.3	611.2	611.1	611.1	612.0	612.9
170°	616.5	615.9	615.3	614.7	614.4	614.5	614.6	614.7	614.8	615.6	616.4
172.5°	618.7	618.2	617.5	616.9	616.6	616.8	616.9	616.9	617.0	617.9	618.7
175°	621.2	620.5	620.0	619.3	619.1	619.1	619.3	619.4	619.5	620.4	621.3
177.5°	622.3	621.7	621.2	620.6	620.4	620.5	620.7	620.9	621.0	621.7	622.4
180°	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8



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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°	14.4	14.0	14.6	14.1	14.2	13.7	14.3
90°	12.1	12.7	13.1	13.4	13.5	13.8	13.9
92.5°	11.7	12.3	12.6	12.7	12.7	12.8	12.8
95°	12.1	12.7	13.0	13.2	13.3	13.4	13.5
97.5°	12.5	12.6	12.6	12.7	12.8	12.9	13.0
100°	15.2	13.5	12.6	12.7	12.8	12.9	13.0
102.5°	41.7	22.7	13.3	13.4	13.4	13.4	13.4
105°	147.9	148.8	147.4	143.7	140.0	136.2	132.6
107.5°	182.3	182.7	183.1	183.5	183.9	184.3	184.7
110°	205.7	205.9	206.2	206.5	206.8	207.1	207.4



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	228.4	228.4	228.5	228.9	229.3	229.8	230.1
115°	262.9	263.1	263.3	263.3	263.3	263.3	263.3
117.5°	297.2	297.1	297.1	297.0	297.0	296.9	296.9
120°	318.7	318.9	318.9	318.7	318.5	318.3	318.1
122.5°	339.7	339.8	339.7	339.6	339.3	339.2	338.9
125°	369.2	369.6	369.8	369.9	370.0	370.1	370.2
127.5°	398.1	398.0	397.9	397.9	397.8	397.7	397.6
130°	416.0	416.2	416.2	416.2	416.2	416.2	416.2
132.5°	433.6	433.7	433.7	433.6	433.5	433.4	433.3
135°	457.8	458.0	458.2	458.4	458.6	458.9	459.0
137.5°	480.9	481.1	481.2	481.2	481.1	481.0	480.9
140°	495.3	495.6	495.8	495.9	496.0	496.1	496.2
142.5°	508.4	508.7	508.8	508.8	508.8	508.8	508.9
145°	527.3	527.3	527.5	527.7	527.9	528.2	528.3
147.5°	543.8	543.9	544.0	544.1	544.2	544.3	544.4
150°	554.3	554.3	554.4	554.5	554.6	554.7	554.8
152.5°	563.8	563.9	564.0	563.9	563.9	563.8	563.8
155°	576.5	576.9	577.0	576.7	576.3	576.1	575.8
157.5°	587.4	587.9	587.9	587.4	586.9	586.4	585.8
160°	594.4	595.0	595.0	594.4	593.7	593.1	592.5
162.5°	599.9	600.5	600.5	599.8	599.1	598.4	597.7
165°	608.0	608.9	608.8	607.8	606.9	606.0	605.0
167.5°	613.8	614.7	614.7	613.7	612.6	611.6	610.6
170°	617.3	618.2	618.0	617.0	616.0	614.9	613.9
172.5°	619.5	620.4	620.2	619.1	618.0	616.9	615.7
175°	622.2	623.2	623.1	621.8	620.5	619.3	618.1
177.5°	623.1	623.7	623.5	622.6	621.6	620.5	619.5
180°	621.8	621.8	621.8	621.8	621.8	621.8	621.8

(END OF REPORT)