

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: P332993-930

Luminaire Tested: **SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332993-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5807.0 lumens
Efficiency: N/A
Efficacy: 105.4 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

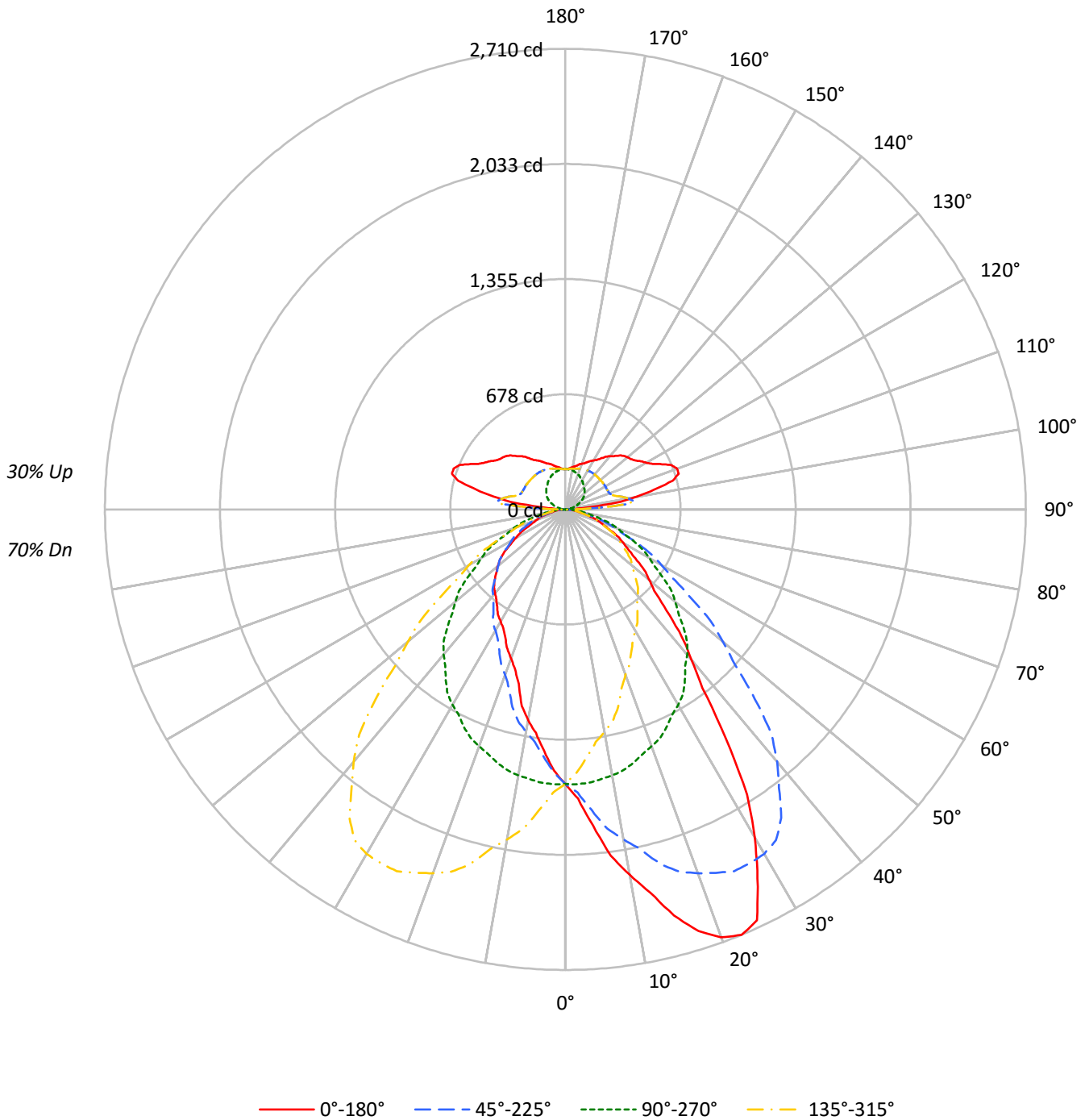
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	70				
1	103	99	95	92	97	94	90	87	84	82	79	75	73	72	67	66	65	61				
2	94	87	81	76	89	83	77	73	74	70	67	67	64	61	60	58	55	52				
3	86	77	70	64	82	73	67	62	66	61	57	60	56	52	54	50	48	45				
4	79	69	61	55	75	65	58	53	59	54	49	54	49	45	48	45	42	39				
5	73	62	54	48	69	59	51	46	53	47	43	48	44	40	44	40	37	34				
6	68	56	47	42	64	53	46	40	48	42	38	44	39	35	40	36	33	30				
7	63	50	42	37	59	48	41	36	44	38	33	40	35	31	37	32	29	27				
8	58	46	38	33	55	44	37	32	40	34	30	37	32	28	34	29	26	24				
9	55	42	35	30	52	40	33	29	37	31	27	34	29	25	31	27	24	22				
10	51	39	32	27	48	37	31	26	34	29	25	32	27	23	29	25	22	20				

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	2.7
10°-20°	472.2	8.1
20°-30°	738.6	12.7
30°-40°	821.0	14.1
40°-50°	728.5	12.5
50°-60°	567.6	9.8
60°-70°	371.6	6.4
70°-80°	182.8	3.1
80°-90°	46.4	0.8
90°-100°	171.0	2.9
100°-110°	355.9	6.1
110°-120°	318.7	5.5
120°-130°	268.1	4.6
130°-140°	223.6	3.8
140°-150°	170.8	2.9
150°-160°	120.0	2.1
160°-170°	70.6	1.2
170°-180°	23.0	0.4
0°-30°	1367.3	23.5
0°-40°	2188.4	37.7
0°-60°	3484.5	60.0
0°-90°	4085.3	70.4
90°-120°	845.6	14.6
90°-150°	1508.1	26.0
90°-180°	1722.0	29.7
0°-180°	5807.0	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°	10	0	10	0	10	9
95°	114	15	114	15	114	176
105°	654	54	654	54	654	647
115°	628	96	628	96	628	624
125°	501	134	501	134	501	456
135°	448	159	448	159	448	346
145°	366	183	366	183	366	232
155°	306	208	306	208	306	143
165°	267	226	267	226	267	77
175°	241	236	241	236	241	23
180°	237	237	237	237	237	



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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°	13.4	12.9	13.5	13.4	13.9	13.3	13.8	14.7	13.5	14.2	14.0
90°	9.8	9.8	10.2	9.8	9.3	9.3	8.8	8.4	7.9	8.4	7.4
92.5°	35.8	35.8	37.4	39.9	45.4	54.7	68.7	91.3	122.9	147.5	129.1
95°	113.5	119.5	127.9	142.4	165.1	210.2	272.6	344.6	389.7	379.0	286.0
97.5°	303.3	313.0	326.9	355.0	388.3	436.9	482.4	509.2	489.7	399.3	267.7
100°	426.5	430.2	444.2	472.5	513.0	547.4	570.2	560.9	493.0	373.9	242.8
102.5°	533.6	536.6	551.3	571.9	596.7	611.1	604.5	558.3	465.0	342.3	226.0
105°	654.4	657.1	663.7	667.4	666.5	647.4	601.4	520.9	414.4	305.1	211.7
107.5°	699.2	698.0	693.3	682.7	659.7	618.3	553.4	467.8	373.5	284.3	209.0
110°	699.9	695.8	687.4	667.9	634.9	583.7	516.2	435.8	353.0	277.2	209.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	678.0	671.2	659.5	635.9	598.3	547.2	483.5	412.4	341.4	273.9	212.0
115°	628.4	624.6	609.8	581.8	545.1	500.4	446.1	388.8	330.7	272.1	216.3
117.5°	578.0	575.1	560.0	536.6	505.2	467.4	424.6	377.2	325.9	271.6	220.8
120°	549.8	544.6	532.6	512.1	485.5	452.5	415.3	372.1	323.3	271.6	224.2
122.5°	527.4	522.3	512.1	494.6	472.1	443.2	409.4	367.6	320.2	271.3	227.6
125°	501.3	498.6	489.8	476.2	457.6	432.0	400.0	360.0	315.4	270.7	232.5
127.5°	486.1	483.3	475.9	463.9	445.2	420.9	388.9	350.7	308.8	269.6	236.5
130°	477.2	474.4	466.9	455.3	436.3	411.6	380.0	343.2	304.6	269.3	239.5
132.5°	467.2	464.3	457.3	444.2	425.4	400.8	369.9	335.4	300.9	268.9	242.1
135°	448.3	445.6	438.1	425.1	406.5	383.2	354.9	324.7	295.3	268.3	246.1
137.5°	425.1	421.8	415.6	402.8	385.4	364.4	340.5	314.9	290.5	268.2	248.3
140°	408.4	404.6	398.1	387.9	371.6	352.0	331.2	309.2	287.9	267.9	250.2
142.5°	390.4	387.9	382.1	372.6	358.2	341.3	323.3	304.1	285.7	267.9	251.7
145°	366.0	363.7	359.1	351.1	339.5	326.5	312.5	296.7	281.8	266.9	252.6
147.5°	344.4	343.5	340.0	333.2	324.7	314.4	303.2	290.7	278.4	265.3	253.0
150°	332.1	331.6	328.8	322.8	315.4	307.0	297.7	287.0	275.8	264.2	253.0
152.5°	320.9	320.4	318.8	313.8	307.5	300.6	292.0	282.8	272.8	262.3	252.3
155°	306.5	306.5	305.1	301.4	296.7	291.1	284.1	276.7	268.3	259.5	251.1
157.5°	293.8	293.8	293.0	290.2	286.7	282.2	276.4	270.1	263.8	256.7	250.0
160°	286.0	286.0	285.6	282.7	280.0	276.2	271.2	266.0	260.5	254.4	248.8
162.5°	278.6	279.0	278.5	275.7	273.7	270.3	266.3	262.0	257.5	252.2	247.7
165°	267.4	267.9	268.3	266.5	264.6	262.3	259.0	256.2	252.6	248.8	245.6
167.5°	258.6	258.9	259.0	257.9	256.9	255.5	252.9	250.8	248.1	245.5	243.4
170°	253.0	253.0	253.5	253.0	252.1	250.7	248.8	247.4	245.1	243.2	241.8
172.5°	247.4	248.2	248.7	248.2	247.6	246.6	245.5	244.4	242.5	241.0	240.4
175°	240.9	241.8	242.8	241.8	241.8	241.8	240.9	240.4	239.5	238.6	238.6
177.5°	237.1	237.8	238.6	238.2	238.6	238.2	238.2	237.8	237.5	237.1	237.1
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8



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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°	13.8	13.3	13.8	13.8	14.2	16.1	17.4	17.8	16.4	15.2	13.7
90°	6.5	6.5	3.8	3.8	3.3	2.8	1.4	0.5	1.4	2.8	3.3
92.5°	93.9	57.9	34.2	24.5	17.8	12.1	7.7	5.3	7.7	12.1	17.8
95°	174.9	98.6	58.1	38.6	27.5	21.4	16.7	15.3	16.7	21.4	27.5
97.5°	157.2	94.2	63.1	46.7	37.1	31.6	27.6	27.6	27.6	31.6	37.1
100°	147.9	95.3	67.9	53.0	44.2	38.6	35.4	35.4	35.4	38.6	44.2
102.5°	145.3	99.1	74.2	60.1	51.6	46.4	43.5	42.8	43.5	46.4	51.6
105°	146.5	107.9	85.6	72.1	63.8	58.1	55.8	54.4	55.8	58.1	63.8
107.5°	153.4	118.2	97.8	84.5	76.5	70.5	68.2	67.3	68.2	70.5	76.5
110°	158.6	126.0	105.6	93.0	84.6	79.1	76.7	75.8	76.7	79.1	84.6



TEST NUMBER: P332993-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	164.2	133.5	113.7	101.2	92.9	87.6	85.0	84.0	85.0	87.6	92.9
115°	173.0	145.1	126.5	114.0	105.1	100.4	97.2	95.8	97.2	100.4	105.1
117.5°	182.1	156.4	138.7	125.6	117.4	112.3	109.4	108.1	109.4	112.3	117.4
120°	188.3	164.2	146.5	133.5	125.6	120.4	117.2	116.3	117.2	120.4	125.6
122.5°	194.3	171.6	153.9	141.3	132.6	127.9	124.7	123.7	124.7	127.9	132.6
125°	203.3	181.8	165.1	152.1	143.2	138.1	135.3	133.5	135.3	138.1	143.2
127.5°	211.0	191.4	175.1	162.0	152.8	147.0	143.7	142.1	143.7	147.0	152.8
130°	215.8	197.6	181.8	168.4	159.6	152.5	148.8	147.0	148.8	152.5	159.6
132.5°	220.6	202.8	187.0	174.3	164.8	158.2	153.3	151.8	153.3	158.2	164.8
135°	227.0	210.2	194.9	182.8	173.0	165.1	160.5	158.6	160.5	165.1	173.0
137.5°	231.5	215.8	201.5	190.0	179.8	172.3	167.1	165.4	167.1	172.3	179.8
140°	234.4	219.6	205.5	194.4	184.7	176.8	171.6	170.2	171.6	176.8	184.7
142.5°	236.6	222.9	209.3	198.5	189.1	181.6	176.8	175.5	176.8	181.6	189.1
145°	239.0	226.5	214.4	204.2	195.3	188.8	184.2	182.8	184.2	188.8	195.3
147.5°	241.2	230.2	218.9	209.7	202.3	195.6	191.5	191.0	191.5	195.6	202.3
150°	242.3	232.1	221.8	213.0	206.0	200.5	196.7	196.2	196.7	200.5	206.0
152.5°	243.0	233.6	224.5	216.4	210.1	204.9	201.2	201.1	201.2	204.9	210.1
155°	243.7	235.8	227.9	220.9	215.8	211.2	208.4	207.9	208.4	211.2	215.8
157.5°	243.7	237.4	230.6	225.2	220.7	217.1	214.5	214.5	214.5	217.1	220.7
160°	243.7	238.1	232.5	227.4	223.7	220.5	218.6	218.6	218.6	220.5	223.7
162.5°	243.7	238.9	233.7	229.7	226.3	223.4	221.9	222.3	221.9	223.4	226.3
165°	242.8	239.0	234.9	232.1	229.8	227.4	226.5	226.5	226.5	227.4	229.8
167.5°	241.7	239.0	235.9	233.7	232.4	230.6	230.2	230.6	230.2	230.6	232.4
170°	240.9	238.6	236.3	234.9	233.9	232.5	232.1	232.5	232.1	232.5	233.9
172.5°	240.2	238.2	236.6	235.6	235.1	234.0	233.9	234.4	233.9	234.0	235.1
175°	239.0	237.7	236.8	236.8	236.3	235.8	235.8	236.3	235.8	235.8	236.3
177.5°	237.8	237.1	236.8	236.8	236.8	236.4	236.8	237.1	236.8	236.4	236.8
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8



TEST NUMBER: P332993-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A4

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°	13.8	13.2	13.8	12.7	13.5	13.6	13.0	13.1	13.8	12.8	12.8
90°	3.8	3.8	6.5	6.5	7.4	8.4	7.9	8.4	8.8	9.3	9.3
92.5°	24.5	34.2	57.9	93.9	129.1	147.5	122.9	91.3	68.7	54.7	45.4
95°	38.6	58.1	98.6	174.9	286.0	379.0	389.7	344.6	272.6	210.2	165.1
97.5°	46.7	63.1	94.2	157.2	267.7	399.3	489.7	509.2	482.4	436.9	388.3
100°	53.0	67.9	95.3	147.9	242.8	373.9	493.0	560.9	570.2	547.4	513.0
102.5°	60.1	74.2	99.1	145.3	226.0	342.3	465.0	558.3	604.5	611.1	596.7
105°	72.1	85.6	107.9	146.5	211.7	305.1	414.4	520.9	601.4	647.4	666.5
107.5°	84.5	97.8	118.2	153.4	209.0	284.3	373.5	467.8	553.4	618.3	659.7
110°	93.0	105.6	126.0	158.6	209.8	277.2	353.0	435.8	516.2	583.7	634.9



TEST NUMBER: P332993-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	101.2	113.7	133.5	164.2	212.0	273.9	341.4	412.4	483.5	547.2	598.3
115°	114.0	126.5	145.1	173.0	216.3	272.1	330.7	388.8	446.1	500.4	545.1
117.5°	125.6	138.7	156.4	182.1	220.8	271.6	325.9	377.2	424.6	467.4	505.2
120°	133.5	146.5	164.2	188.3	224.2	271.6	323.3	372.1	415.3	452.5	485.5
122.5°	141.3	153.9	171.6	194.3	227.6	271.3	320.2	367.6	409.4	443.2	472.1
125°	152.1	165.1	181.8	203.3	232.5	270.7	315.4	360.0	400.0	432.0	457.6
127.5°	162.0	175.1	191.4	211.0	236.5	269.6	308.8	350.7	388.9	420.9	445.2
130°	168.4	181.8	197.6	215.8	239.5	269.3	304.6	343.2	380.0	411.6	436.3
132.5°	174.3	187.0	202.8	220.6	242.1	268.9	300.9	335.4	369.9	400.8	425.4
135°	182.8	194.9	210.2	227.0	246.1	268.3	295.3	324.7	354.9	383.2	406.5
137.5°	190.0	201.5	215.8	231.5	248.3	268.2	290.5	314.9	340.5	364.4	385.4
140°	194.4	205.5	219.6	234.4	250.2	267.9	287.9	309.2	331.2	352.0	371.6
142.5°	198.5	209.3	222.9	236.6	251.7	267.9	285.7	304.1	323.3	341.3	358.2
145°	204.2	214.4	226.5	239.0	252.6	266.9	281.8	296.7	312.5	326.5	339.5
147.5°	209.7	218.9	230.2	241.2	253.0	265.3	278.4	290.7	303.2	314.4	324.7
150°	213.0	221.8	232.1	242.3	253.0	264.2	275.8	287.0	297.7	307.0	315.4
152.5°	216.4	224.5	233.6	243.0	252.3	262.3	272.8	282.8	292.0	300.6	307.5
155°	220.9	227.9	235.8	243.7	251.1	259.5	268.3	276.7	284.1	291.1	296.7
157.5°	225.2	230.6	237.4	243.7	250.0	256.7	263.8	270.1	276.4	282.2	286.7
160°	227.4	232.5	238.1	243.7	248.8	254.4	260.5	266.0	271.2	276.2	280.0
162.5°	229.7	233.7	238.9	243.7	247.7	252.2	257.5	262.0	266.3	270.3	273.7
165°	232.1	234.9	239.0	242.8	245.6	248.8	252.6	256.2	259.0	262.3	264.6
167.5°	233.7	235.9	239.0	241.7	243.4	245.5	248.1	250.8	252.9	255.5	256.9
170°	234.9	236.3	238.6	240.9	241.8	243.2	245.1	247.4	248.8	250.7	252.1
172.5°	235.6	236.6	238.2	240.2	240.4	241.0	242.5	244.4	245.5	246.6	247.6
175°	236.8	236.8	237.7	239.0	238.6	238.6	239.5	240.4	240.9	241.8	241.8
177.5°	236.8	236.8	237.1	237.8	237.1	237.1	237.5	237.8	238.2	238.2	238.6
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8



TEST NUMBER: P332993-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A4

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°	13.9	13.5	12.9	13.4	12.9	13.5	13.9	12.8	12.8	13.8	13.1
90°	9.8	10.2	9.8	9.8	9.8	10.2	9.8	9.3	9.3	8.8	8.4
92.5°	39.9	37.4	35.8	35.8	35.8	37.4	39.9	45.4	54.7	68.7	91.3
95°	142.4	127.9	119.5	113.5	119.5	127.9	142.4	165.1	210.2	272.6	344.6
97.5°	355.0	326.9	313.0	303.3	313.0	326.9	355.0	388.3	436.9	482.4	509.2
100°	472.5	444.2	430.2	426.5	430.2	444.2	472.5	513.0	547.4	570.2	560.9
102.5°	571.9	551.3	536.6	533.6	536.6	551.3	571.9	596.7	611.1	604.5	558.3
105°	667.4	663.7	657.1	654.4	657.1	663.7	667.4	666.5	647.4	601.4	520.9
107.5°	682.7	693.3	698.0	699.2	698.0	693.3	682.7	659.7	618.3	553.4	467.8
110°	667.9	687.4	695.8	699.9	695.8	687.4	667.9	634.9	583.7	516.2	435.8



TEST NUMBER: P332993-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	635.9	659.5	671.2	678.0	671.2	659.5	635.9	598.3	547.2	483.5	412.4
115°	581.8	609.8	624.6	628.4	624.6	609.8	581.8	545.1	500.4	446.1	388.8
117.5°	536.6	560.0	575.1	578.0	575.1	560.0	536.6	505.2	467.4	424.6	377.2
120°	512.1	532.6	544.6	549.8	544.6	532.6	512.1	485.5	452.5	415.3	372.1
122.5°	494.6	512.1	522.3	527.4	522.3	512.1	494.6	472.1	443.2	409.4	367.6
125°	476.2	489.8	498.6	501.3	498.6	489.8	476.2	457.6	432.0	400.0	360.0
127.5°	463.9	475.9	483.3	486.1	483.3	475.9	463.9	445.2	420.9	388.9	350.7
130°	455.3	466.9	474.4	477.2	474.4	466.9	455.3	436.3	411.6	380.0	343.2
132.5°	444.2	457.3	464.3	467.2	464.3	457.3	444.2	425.4	400.8	369.9	335.4
135°	425.1	438.1	445.6	448.3	445.6	438.1	425.1	406.5	383.2	354.9	324.7
137.5°	402.8	415.6	421.8	425.1	421.8	415.6	402.8	385.4	364.4	340.5	314.9
140°	387.9	398.1	404.6	408.4	404.6	398.1	387.9	371.6	352.0	331.2	309.2
142.5°	372.6	382.1	387.9	390.4	387.9	382.1	372.6	358.2	341.3	323.3	304.1
145°	351.1	359.1	363.7	366.0	363.7	359.1	351.1	339.5	326.5	312.5	296.7
147.5°	333.2	340.0	343.5	344.4	343.5	340.0	333.2	324.7	314.4	303.2	290.7
150°	322.8	328.8	331.6	332.1	331.6	328.8	322.8	315.4	307.0	297.7	287.0
152.5°	313.8	318.8	320.4	320.9	320.4	318.8	313.8	307.5	300.6	292.0	282.8
155°	301.4	305.1	306.5	306.5	306.5	305.1	301.4	296.7	291.1	284.1	276.7
157.5°	290.2	293.0	293.8	293.8	293.8	293.0	290.2	286.7	282.2	276.4	270.1
160°	282.7	285.6	286.0	286.0	286.0	285.6	282.7	280.0	276.2	271.2	266.0
162.5°	275.7	278.5	279.0	278.6	279.0	278.5	275.7	273.7	270.3	266.3	262.0
165°	266.5	268.3	267.9	267.4	267.9	268.3	266.5	264.6	262.3	259.0	256.2
167.5°	257.9	259.0	258.9	258.6	258.9	259.0	257.9	256.9	255.5	252.9	250.8
170°	253.0	253.5	253.0	253.0	253.0	253.5	253.0	252.1	250.7	248.8	247.4
172.5°	248.2	248.7	248.2	247.4	248.2	248.7	248.2	247.6	246.6	245.5	244.4
175°	241.8	242.8	241.8	240.9	241.8	242.8	241.8	241.8	241.8	240.9	240.4
177.5°	238.2	238.6	237.8	237.1	237.8	238.6	238.2	238.6	238.2	238.2	237.8
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8



TEST NUMBER: P332993-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A4

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°	13.0	13.6	13.5	12.7	13.8	13.2	13.8	13.7	15.2	16.4	17.8
90°	7.9	8.4	7.4	6.5	6.5	3.8	3.8	3.3	2.8	1.4	0.5
92.5°	122.9	147.5	129.1	93.9	57.9	34.2	24.5	17.8	12.1	7.7	5.3
95°	389.7	379.0	286.0	174.9	98.6	58.1	38.6	27.5	21.4	16.7	15.3
97.5°	489.7	399.3	267.7	157.2	94.2	63.1	46.7	37.1	31.6	27.6	27.6
100°	493.0	373.9	242.8	147.9	95.3	67.9	53.0	44.2	38.6	35.4	35.4
102.5°	465.0	342.3	226.0	145.3	99.1	74.2	60.1	51.6	46.4	43.5	42.8
105°	414.4	305.1	211.7	146.5	107.9	85.6	72.1	63.8	58.1	55.8	54.4
107.5°	373.5	284.3	209.0	153.4	118.2	97.8	84.5	76.5	70.5	68.2	67.3
110°	353.0	277.2	209.8	158.6	126.0	105.6	93.0	84.6	79.1	76.7	75.8



TEST NUMBER: P332993-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	341.4	273.9	212.0	164.2	133.5	113.7	101.2	92.9	87.6	85.0	84.0
115°	330.7	272.1	216.3	173.0	145.1	126.5	114.0	105.1	100.4	97.2	95.8
117.5°	325.9	271.6	220.8	182.1	156.4	138.7	125.6	117.4	112.3	109.4	108.1
120°	323.3	271.6	224.2	188.3	164.2	146.5	133.5	125.6	120.4	117.2	116.3
122.5°	320.2	271.3	227.6	194.3	171.6	153.9	141.3	132.6	127.9	124.7	123.7
125°	315.4	270.7	232.5	203.3	181.8	165.1	152.1	143.2	138.1	135.3	133.5
127.5°	308.8	269.6	236.5	211.0	191.4	175.1	162.0	152.8	147.0	143.7	142.1
130°	304.6	269.3	239.5	215.8	197.6	181.8	168.4	159.6	152.5	148.8	147.0
132.5°	300.9	268.9	242.1	220.6	202.8	187.0	174.3	164.8	158.2	153.3	151.8
135°	295.3	268.3	246.1	227.0	210.2	194.9	182.8	173.0	165.1	160.5	158.6
137.5°	290.5	268.2	248.3	231.5	215.8	201.5	190.0	179.8	172.3	167.1	165.4
140°	287.9	267.9	250.2	234.4	219.6	205.5	194.4	184.7	176.8	171.6	170.2
142.5°	285.7	267.9	251.7	236.6	222.9	209.3	198.5	189.1	181.6	176.8	175.5
145°	281.8	266.9	252.6	239.0	226.5	214.4	204.2	195.3	188.8	184.2	182.8
147.5°	278.4	265.3	253.0	241.2	230.2	218.9	209.7	202.3	195.6	191.5	191.0
150°	275.8	264.2	253.0	242.3	232.1	221.8	213.0	206.0	200.5	196.7	196.2
152.5°	272.8	262.3	252.3	243.0	233.6	224.5	216.4	210.1	204.9	201.2	201.1
155°	268.3	259.5	251.1	243.7	235.8	227.9	220.9	215.8	211.2	208.4	207.9
157.5°	263.8	256.7	250.0	243.7	237.4	230.6	225.2	220.7	217.1	214.5	214.5
160°	260.5	254.4	248.8	243.7	238.1	232.5	227.4	223.7	220.5	218.6	218.6
162.5°	257.5	252.2	247.7	243.7	238.9	233.7	229.7	226.3	223.4	221.9	222.3
165°	252.6	248.8	245.6	242.8	239.0	234.9	232.1	229.8	227.4	226.5	226.5
167.5°	248.1	245.5	243.4	241.7	239.0	235.9	233.7	232.4	230.6	230.2	230.6
170°	245.1	243.2	241.8	240.9	238.6	236.3	234.9	233.9	232.5	232.1	232.5
172.5°	242.5	241.0	240.4	240.2	238.2	236.6	235.6	235.1	234.0	233.9	234.4
175°	239.5	238.6	238.6	239.0	237.7	236.8	236.8	236.3	235.8	235.8	236.3
177.5°	237.5	237.1	237.1	237.8	237.1	236.8	236.8	236.8	236.4	236.8	237.1
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8



TEST NUMBER: P332993-930

CATALOG NUMBER: SA4XXRDIP-C1195D590U930-4F0-1E-UDD-A4

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°	17.4	16.1	14.2	13.8	13.8	13.3	13.8	14.0	14.2	13.5	14.7
90°	1.4	2.8	3.3	3.8	3.8	6.5	6.5	7.4	8.4	7.9	8.4
92.5°	7.7	12.1	17.8	24.5	34.2	57.9	93.9	129.1	147.5	122.9	91.3
95°	16.7	21.4	27.5	38.6	58.1	98.6	174.9	286.0	379.0	389.7	344.6
97.5°	27.6	31.6	37.1	46.7	63.1	94.2	157.2	267.7	399.3	489.7	509.2
100°	35.4	38.6	44.2	53.0	67.9	95.3	147.9	242.8	373.9	493.0	560.9
102.5°	43.5	46.4	51.6	60.1	74.2	99.1	145.3	226.0	342.3	465.0	558.3
105°	55.8	58.1	63.8	72.1	85.6	107.9	146.5	211.7	305.1	414.4	520.9
107.5°	68.2	70.5	76.5	84.5	97.8	118.2	153.4	209.0	284.3	373.5	467.8
110°	76.7	79.1	84.6	93.0	105.6	126.0	158.6	209.8	277.2	353.0	435.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	85.0	87.6	92.9	101.2	113.7	133.5	164.2	212.0	273.9	341.4	412.4
115°	97.2	100.4	105.1	114.0	126.5	145.1	173.0	216.3	272.1	330.7	388.8
117.5°	109.4	112.3	117.4	125.6	138.7	156.4	182.1	220.8	271.6	325.9	377.2
120°	117.2	120.4	125.6	133.5	146.5	164.2	188.3	224.2	271.6	323.3	372.1
122.5°	124.7	127.9	132.6	141.3	153.9	171.6	194.3	227.6	271.3	320.2	367.6
125°	135.3	138.1	143.2	152.1	165.1	181.8	203.3	232.5	270.7	315.4	360.0
127.5°	143.7	147.0	152.8	162.0	175.1	191.4	211.0	236.5	269.6	308.8	350.7
130°	148.8	152.5	159.6	168.4	181.8	197.6	215.8	239.5	269.3	304.6	343.2
132.5°	153.3	158.2	164.8	174.3	187.0	202.8	220.6	242.1	268.9	300.9	335.4
135°	160.5	165.1	173.0	182.8	194.9	210.2	227.0	246.1	268.3	295.3	324.7
137.5°	167.1	172.3	179.8	190.0	201.5	215.8	231.5	248.3	268.2	290.5	314.9
140°	171.6	176.8	184.7	194.4	205.5	219.6	234.4	250.2	267.9	287.9	309.2
142.5°	176.8	181.6	189.1	198.5	209.3	222.9	236.6	251.7	267.9	285.7	304.1
145°	184.2	188.8	195.3	204.2	214.4	226.5	239.0	252.6	266.9	281.8	296.7
147.5°	191.5	195.6	202.3	209.7	218.9	230.2	241.2	253.0	265.3	278.4	290.7
150°	196.7	200.5	206.0	213.0	221.8	232.1	242.3	253.0	264.2	275.8	287.0
152.5°	201.2	204.9	210.1	216.4	224.5	233.6	243.0	252.3	262.3	272.8	282.8
155°	208.4	211.2	215.8	220.9	227.9	235.8	243.7	251.1	259.5	268.3	276.7
157.5°	214.5	217.1	220.7	225.2	230.6	237.4	243.7	250.0	256.7	263.8	270.1
160°	218.6	220.5	223.7	227.4	232.5	238.1	243.7	248.8	254.4	260.5	266.0
162.5°	221.9	223.4	226.3	229.7	233.7	238.9	243.7	247.7	252.2	257.5	262.0
165°	226.5	227.4	229.8	232.1	234.9	239.0	242.8	245.6	248.8	252.6	256.2
167.5°	230.2	230.6	232.4	233.7	235.9	239.0	241.7	243.4	245.5	248.1	250.8
170°	232.1	232.5	233.9	234.9	236.3	238.6	240.9	241.8	243.2	245.1	247.4
172.5°	233.9	234.0	235.1	235.6	236.6	238.2	240.2	240.4	241.0	242.5	244.4
175°	235.8	235.8	236.3	236.8	236.8	237.7	239.0	238.6	238.6	239.5	240.4
177.5°	236.8	236.4	236.8	236.8	236.8	237.1	237.8	237.1	237.1	237.5	237.8
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8



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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°	13.8	13.3	13.9	13.4	13.5	12.9	13.4
90°	8.8	9.3	9.3	9.8	10.2	9.8	9.8
92.5°	68.7	54.7	45.4	39.9	37.4	35.8	35.8
95°	272.6	210.2	165.1	142.4	127.9	119.5	113.5
97.5°	482.4	436.9	388.3	355.0	326.9	313.0	303.3
100°	570.2	547.4	513.0	472.5	444.2	430.2	426.5
102.5°	604.5	611.1	596.7	571.9	551.3	536.6	533.6
105°	601.4	647.4	666.5	667.4	663.7	657.1	654.4
107.5°	553.4	618.3	659.7	682.7	693.3	698.0	699.2
110°	516.2	583.7	634.9	667.9	687.4	695.8	699.9



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	483.5	547.2	598.3	635.9	659.5	671.2	678.0
115°	446.1	500.4	545.1	581.8	609.8	624.6	628.4
117.5°	424.6	467.4	505.2	536.6	560.0	575.1	578.0
120°	415.3	452.5	485.5	512.1	532.6	544.6	549.8
122.5°	409.4	443.2	472.1	494.6	512.1	522.3	527.4
125°	400.0	432.0	457.6	476.2	489.8	498.6	501.3
127.5°	388.9	420.9	445.2	463.9	475.9	483.3	486.1
130°	380.0	411.6	436.3	455.3	466.9	474.4	477.2
132.5°	369.9	400.8	425.4	444.2	457.3	464.3	467.2
135°	354.9	383.2	406.5	425.1	438.1	445.6	448.3
137.5°	340.5	364.4	385.4	402.8	415.6	421.8	425.1
140°	331.2	352.0	371.6	387.9	398.1	404.6	408.4
142.5°	323.3	341.3	358.2	372.6	382.1	387.9	390.4
145°	312.5	326.5	339.5	351.1	359.1	363.7	366.0
147.5°	303.2	314.4	324.7	333.2	340.0	343.5	344.4
150°	297.7	307.0	315.4	322.8	328.8	331.6	332.1
152.5°	292.0	300.6	307.5	313.8	318.8	320.4	320.9
155°	284.1	291.1	296.7	301.4	305.1	306.5	306.5
157.5°	276.4	282.2	286.7	290.2	293.0	293.8	293.8
160°	271.2	276.2	280.0	282.7	285.6	286.0	286.0
162.5°	266.3	270.3	273.7	275.7	278.5	279.0	278.6
165°	259.0	262.3	264.6	266.5	268.3	267.9	267.4
167.5°	252.9	255.5	256.9	257.9	259.0	258.9	258.6
170°	248.8	250.7	252.1	253.0	253.5	253.0	253.0
172.5°	245.5	246.6	247.6	248.2	248.7	248.2	247.4
175°	240.9	241.8	241.8	241.8	242.8	241.8	240.9
177.5°	238.2	238.2	238.6	238.2	238.6	237.8	237.1
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8

(END OF REPORT)