

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: P332969

Luminaire Tested: **SA4XXRDIP-C1020D810U835-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332969
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-C1020D810U835-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7234.0 lumens
Efficiency: N/A
Efficacy: 133.0 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: General Diffuse

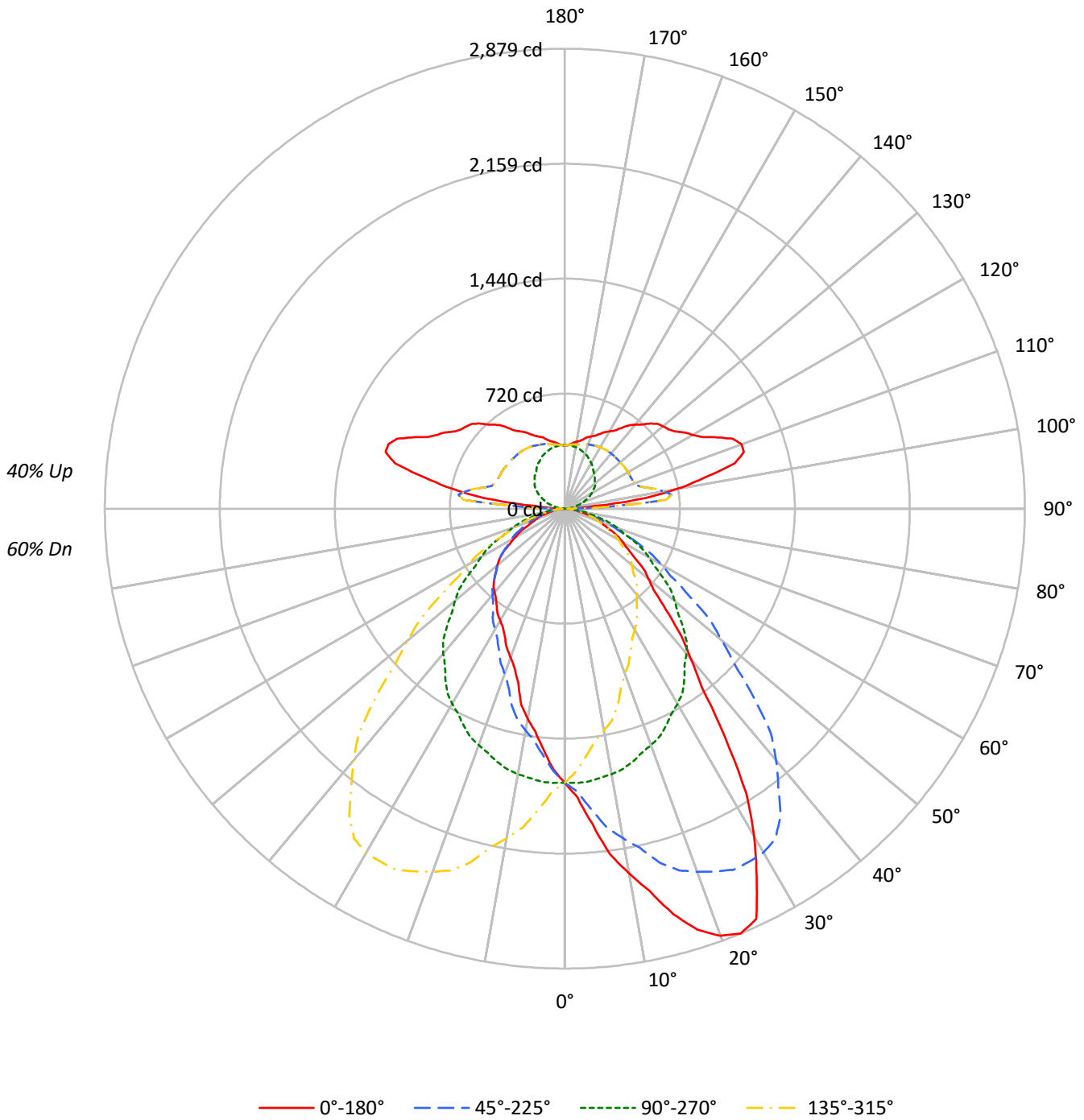
Input Watts (W): 54.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	65	65	65	60
1	101	96	93	89	94	90	87	84	79	76	74	68	67	65	59	57	56	52
2	92	85	79	74	86	80	74	70	70	66	62	61	58	55	52	50	48	44
3	84	75	68	62	79	71	64	59	62	57	53	54	50	47	47	44	42	38
4	77	67	59	53	72	63	56	51	55	50	46	49	44	41	42	39	36	33
5	71	60	52	46	66	56	49	44	50	44	40	44	39	36	38	35	32	29
6	66	54	46	40	61	51	44	38	45	39	35	40	35	32	35	31	28	26
7	61	49	41	35	57	46	39	34	41	35	31	36	32	28	32	28	25	23
8	57	44	37	31	53	42	35	30	38	32	28	33	29	25	29	26	23	21
9	53	41	33	28	49	39	32	27	35	29	25	31	26	23	27	23	21	19
10	49	37	30	25	46	36	29	24	32	26	23	28	24	21	25	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13852	13852	13852	13852
5°	16067	13893	12280	13893
10°	19007	13833	10960	13833
15°	21956	13705	9417	13705
20°	24445	13529	8516	13529
25°	25235	13356	7906	13356
30°	22091	13147	7539	13147
35°	17196	12835	7318	12835
40°	12895	12480	7198	12480
45°	10182	11910	7134	11910
50°	8596	11252	6929	11252
55°	7492	10528	6557	10528
60°	6741	9778	5804	9778
65°	5943	8967	4991	8967
70°	5351	8127	4504	8127
75°	4485	7202	3840	7202
80°	3794	6137	3598	6137
85°	3205	4798	3205	4798



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.3	2.3
10°-20°	501.5	6.9
20°-30°	784.4	10.8
30°-40°	872.0	12.1
40°-50°	773.6	10.7
50°-60°	602.8	8.3
60°-70°	394.7	5.5
70°-80°	194.1	2.7
80°-90°	50.1	0.7
90°-100°	287.5	4.0
100°-110°	598.3	8.3
110°-120°	535.9	7.4
120°-130°	450.8	6.2
130°-140°	375.9	5.2
140°-150°	287.1	4.0
150°-160°	201.8	2.8
160°-170°	118.7	1.6
170°-180°	38.6	0.5
0°-30°	1452.1	20.1
0°-40°	2324.1	32.1
0°-60°	3700.5	51.2
0°-90°	4339.4	60.0
90°-120°	1421.6	19.7
90°-150°	2535.4	35.0
90°-180°	2895.0	40.0
0°-180°	7234.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1716	1716	1716	1716	1716	
5°	1983	1714	1515	1714	1983	201
15°	2627	1640	1127	1640	2627	747
25°	2833	1499	888	1499	2833	1257
35°	1745	1302	742	1302	1745	1094
45°	892	1043	625	1043	892	706
55°	532	748	466	748	532	484
65°	311	469	261	469	311	313
75°	144	231	123	231	144	158
85°	35	52	35	52	35	39
90°	16	1	16	1	16	15
95°	191	26	191	26	191	296
105°	1100	92	1100	92	1100	1088
115°	1056	161	1056	161	1056	1049
125°	843	224	843	224	843	766
135°	754	267	754	267	754	582
145°	615	307	615	307	615	390
155°	515	350	515	350	515	240
165°	450	381	450	381	450	129
175°	405	397	405	397	405	39
180°	398	398	398	398	398	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1809.8	1814.8	1809.8	1809.3	1803.8	1802.1	1799.9	1792.7	1779.4	1771.7	1773.3
5°	1982.7	1999.9	1990.3	1988.9	1973.7	1958.5	1948.8	1926.7	1903.2	1887.3	1874.1
7.5°	2182.6	2192.5	2186.5	2176.8	2152.2	2138.2	2115.8	2086.6	2044.5	2012.2	1982.8
10°	2318.6	2326.9	2324.2	2306.2	2288.2	2251.6	2230.8	2190.1	2136.8	2094.7	2055.2
12.5°	2452.5	2461.3	2437.0	2437.8	2403.8	2374.9	2342.0	2290.7	2229.2	2174.8	2125.5
15°	2627.0	2615.9	2615.9	2602.1	2564.0	2524.0	2490.1	2436.2	2358.7	2293.7	2225.3
17.5°	2763.6	2767.4	2761.8	2729.1	2699.3	2657.8	2595.7	2532.8	2460.9	2373.7	2303.7
20°	2845.4	2845.4	2839.2	2817.1	2778.4	2734.1	2667.1	2598.6	2507.4	2419.6	2340.8
22.5°	2878.6	2880.8	2873.5	2855.2	2820.4	2777.2	2720.1	2650.6	2556.6	2457.7	2360.1
25°	2833.0	2846.1	2847.5	2842.6	2832.3	2806.0	2756.9	2685.7	2601.4	2494.2	2389.1
27.5°	2601.0	2617.6	2632.1	2656.0	2687.8	2704.4	2706.6	2670.4	2596.8	2493.7	2387.9
30°	2369.8	2383.6	2428.6	2487.3	2532.9	2574.4	2610.4	2620.0	2578.6	2485.9	2374.6
32.5°	2113.2	2132.0	2176.9	2240.1	2316.1	2386.4	2467.1	2508.3	2507.2	2451.6	2348.6
35°	1744.9	1758.7	1800.2	1866.5	1957.8	2062.2	2190.1	2289.6	2357.3	2352.5	2289.6
37.5°	1407.2	1422.8	1464.7	1519.8	1608.3	1737.5	1861.3	1998.4	2123.7	2194.1	2173.0
40°	1223.6	1224.3	1265.1	1321.8	1404.7	1517.4	1652.2	1804.3	1943.9	2058.0	2080.1
42.5°	1078.7	1078.8	1105.8	1166.9	1226.7	1332.7	1461.4	1612.4	1775.8	1907.6	1966.2
45°	891.8	898.0	920.1	956.8	1003.8	1093.6	1196.6	1337.0	1520.2	1676.4	1773.9
47.5°	755.2	764.3	778.4	808.3	845.7	905.6	990.8	1116.9	1265.9	1437.8	1576.5
50°	684.4	685.8	703.7	720.3	752.8	800.5	875.2	980.3	1117.1	1282.4	1436.5
52.5°	623.6	623.3	634.1	655.1	681.5	718.7	779.0	874.6	996.0	1144.1	1303.2
55°	532.3	535.8	544.1	560.6	580.7	607.0	654.7	726.6	822.0	948.5	1093.0
57.5°	462.9	464.7	471.2	478.2	496.6	515.7	551.5	601.4	681.9	785.5	920.1
60°	417.5	418.2	420.3	430.7	445.2	463.2	487.4	529.5	597.3	692.0	798.5
62.5°	373.3	374.5	377.7	385.3	396.5	409.0	434.3	468.2	524.3	605.2	701.1
65°	311.1	311.8	316.6	319.4	328.4	339.4	358.1	380.9	419.6	487.4	560.0
67.5°	259.9	259.9	260.2	263.9	270.2	277.5	288.7	306.9	336.1	377.7	441.7
70°	226.7	226.7	228.1	230.2	233.7	239.9	246.1	259.9	281.4	315.2	364.3
72.5°	195.8	196.3	197.7	198.1	199.9	205.0	209.6	218.5	234.4	259.9	299.6
75°	143.8	145.9	149.3	152.1	155.5	154.9	159.7	165.2	170.1	185.3	208.1
77.5°	107.0	105.9	106.3	108.7	109.1	109.8	113.2	117.5	121.1	128.3	136.5
80°	81.6	81.6	83.6	84.3	83.6	84.3	87.8	89.9	91.3	94.0	101.6
82.5°	61.7	62.8	62.1	62.8	63.2	63.9	66.8	67.2	68.6	69.7	72.9
85°	34.6	35.3	35.9	34.6	34.6	34.6	35.9	36.6	38.0	37.3	38.7
87.5°	15.5	14.9	15.6	15.5	15.8	15.3	15.7	16.6	15.4	16.1	15.8
90°	16.4	16.4	17.2	16.4	15.6	15.6	14.9	14.1	13.3	14.1	12.5
92.5°	60.2	60.2	62.9	67.1	76.3	92.0	115.6	153.6	206.6	248.0	217.1
95°	190.8	201.0	215.0	239.3	277.6	353.4	458.2	579.4	655.3	637.3	480.9
97.5°	510.0	526.2	549.7	596.8	652.9	734.5	811.0	856.0	823.2	671.2	450.1
100°	717.0	723.3	746.7	794.4	862.5	920.3	958.6	943.0	828.8	628.7	408.2
102.5°	897.2	902.2	926.9	961.5	1003.2	1027.3	1016.2	938.6	781.9	575.5	380.0
105°	1100.2	1104.9	1115.8	1122.1	1120.5	1088.4	1011.0	875.8	696.7	512.9	355.8
107.5°	1175.5	1173.5	1165.7	1147.9	1109.2	1039.5	930.5	786.5	627.9	477.9	351.4
110°	1176.8	1169.8	1155.7	1122.8	1067.3	981.3	867.9	732.7	593.5	466.0	352.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1139.9	1128.5	1108.8	1069.0	1006.0	920.0	812.9	693.3	574.1	460.4	356.4
115°	1056.4	1050.1	1025.1	978.2	916.4	841.3	749.9	653.7	555.9	457.4	363.6
117.5°	971.8	966.9	941.6	902.2	849.5	785.8	713.9	634.3	547.8	456.6	371.3
120°	924.2	915.6	895.3	860.9	816.3	760.8	698.3	625.5	543.4	456.6	376.9
122.5°	886.7	878.1	860.9	831.5	793.8	745.2	688.2	618.0	538.4	456.0	382.5
125°	842.9	838.2	823.4	800.7	769.4	726.4	672.5	605.2	530.1	455.1	391.0
127.5°	817.3	812.6	800.1	779.9	748.5	707.6	653.8	589.6	519.0	453.4	397.7
130°	802.3	797.6	785.1	765.5	733.4	692.0	638.8	577.1	512.2	452.7	402.7
132.5°	785.4	780.7	768.8	746.7	715.3	673.9	621.9	563.9	505.9	452.1	407.1
135°	753.8	749.1	736.6	714.7	683.4	644.3	596.6	545.8	496.5	451.2	413.6
137.5°	714.7	709.0	698.7	677.1	647.9	612.6	572.4	529.4	488.4	451.0	417.5
140°	686.5	680.3	669.3	652.1	624.8	591.9	556.7	520.0	484.0	450.4	420.7
142.5°	656.5	652.1	642.4	626.5	602.2	573.8	543.6	511.2	480.3	450.4	423.2
145°	615.4	611.5	603.6	590.4	570.8	548.9	525.5	498.9	473.8	448.8	424.6
147.5°	578.9	577.5	571.6	560.2	545.8	528.6	509.8	488.7	468.1	446.0	425.4
150°	558.3	557.5	552.8	542.7	530.1	516.1	500.4	482.4	463.7	444.1	425.4
152.5°	539.5	538.7	535.9	527.6	517.0	505.4	491.0	475.6	458.7	441.0	424.1
155°	515.3	515.3	512.9	506.7	498.9	489.5	477.8	465.2	451.2	436.3	422.2
157.5°	494.0	494.0	492.6	487.9	482.0	474.5	464.6	454.1	443.5	431.5	420.2
160°	480.9	480.9	480.1	475.4	470.7	464.5	455.9	447.3	437.9	427.7	418.3
162.5°	468.4	469.0	468.2	463.5	460.1	454.5	447.7	440.4	432.9	424.0	416.5
165°	449.6	450.4	451.2	448.0	444.9	441.0	435.5	430.8	424.6	418.3	412.9
167.5°	434.7	435.4	435.5	433.5	431.9	429.6	425.2	421.6	417.1	412.7	409.1
170°	425.4	425.4	426.1	425.4	423.8	421.5	418.3	416.0	412.1	408.9	406.6
172.5°	416.0	417.2	418.0	417.2	416.3	414.6	412.7	411.0	407.7	405.2	404.1
175°	405.0	406.6	408.2	406.6	406.6	406.6	405.0	404.3	402.7	401.1	401.1
177.5°	398.6	399.9	401.1	400.5	401.1	400.5	400.5	399.9	399.2	398.6	398.6
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1767.8	1760.1	1756.2	1747.3	1736.8	1731.3	1726.3	1719.1	1709.7	1699.8	1692.6
5°	1857.5	1840.9	1820.2	1795.3	1773.2	1751.8	1733.1	1714.4	1693.0	1670.9	1648.8
7.5°	1949.6	1917.0	1881.7	1840.9	1801.3	1765.2	1732.0	1700.2	1664.2	1632.0	1602.7
10°	2013.8	1969.5	1920.4	1868.6	1816.7	1771.8	1727.6	1687.5	1643.2	1603.8	1570.6
12.5°	2065.8	2013.8	1954.7	1890.2	1827.8	1773.5	1722.6	1670.3	1620.0	1577.3	1533.0
15°	2152.0	2080.8	2001.3	1923.9	1843.0	1769.0	1700.6	1639.8	1582.4	1522.3	1480.1
17.5°	2211.3	2126.9	2030.2	1937.2	1841.6	1754.4	1675.4	1603.0	1536.8	1475.4	1425.2
20°	2246.7	2153.4	2046.3	1940.5	1833.3	1740.0	1655.0	1574.8	1506.4	1440.0	1388.1
22.5°	2266.6	2163.4	2046.3	1935.5	1824.5	1723.4	1630.1	1546.6	1472.1	1405.7	1348.3
25°	2273.0	2162.4	2042.8	1915.6	1793.9	1686.8	1590.0	1499.4	1416.5	1350.1	1289.3
27.5°	2264.2	2133.9	2011.4	1880.9	1755.4	1642.4	1540.8	1445.7	1362.6	1291.4	1229.0
30°	2250.9	2111.2	1979.9	1844.4	1717.2	1608.7	1501.5	1410.3	1323.8	1249.9	1187.0
32.5°	2222.1	2083.6	1942.3	1803.5	1674.6	1562.8	1461.1	1369.3	1284.6	1209.0	1142.2
35°	2165.2	2024.8	1871.4	1729.0	1602.4	1486.3	1390.9	1302.4	1221.5	1140.7	1070.1
37.5°	2090.1	1946.7	1794.1	1638.1	1511.5	1401.8	1314.3	1231.2	1152.3	1078.4	1000.3
40°	2019.3	1888.6	1731.0	1576.2	1446.2	1340.4	1259.6	1184.2	1104.7	1031.4	953.3
42.5°	1933.6	1822.3	1663.0	1507.6	1379.3	1277.4	1202.0	1128.3	1056.0	985.0	903.5
45°	1790.5	1706.1	1556.8	1407.5	1278.2	1177.3	1108.2	1043.2	979.6	911.8	835.1
47.5°	1626.5	1569.4	1440.5	1287.6	1168.0	1077.2	1010.4	957.3	903.5	835.8	768.5
50°	1512.6	1475.9	1351.5	1211.9	1097.8	1014.1	945.7	895.9	851.0	786.0	725.9
52.5°	1390.9	1371.4	1266.3	1132.8	1022.6	940.6	882.1	837.3	791.8	737.9	681.6
55°	1205.6	1216.0	1126.8	1011.4	907.7	838.6	785.3	748.0	709.3	663.7	620.1
57.5°	1016.2	1054.1	994.2	892.9	795.7	731.8	691.7	660.3	627.8	590.0	552.8
60°	902.8	934.6	900.8	811.6	726.6	667.1	629.8	605.6	573.1	538.5	510.2
62.5°	792.2	826.2	806.2	734.2	655.2	604.1	571.2	548.6	524.4	494.3	464.8
65°	653.3	675.4	665.7	616.0	560.0	516.4	486.0	469.4	447.3	425.2	398.9
67.5°	500.4	543.1	537.4	511.0	462.6	428.6	408.7	394.0	373.9	357.4	339.6
70°	411.3	450.7	450.0	428.6	402.3	370.5	356.7	344.3	326.3	310.4	295.9
72.5°	336.7	372.8	378.1	361.7	343.7	319.7	306.4	297.8	280.4	269.5	257.7
75°	235.7	262.0	268.9	268.9	260.6	248.2	236.4	230.9	218.5	208.8	201.9
77.5°	154.6	171.2	182.0	184.4	185.7	181.5	171.9	168.0	158.4	155.0	148.4
80°	109.2	120.3	132.7	136.9	140.3	139.0	134.8	132.0	123.1	119.6	116.8
82.5°	75.5	81.6	91.8	100.9	100.0	103.6	100.0	97.8	91.0	89.7	87.0
85°	39.4	40.1	41.5	47.7	51.2	52.5	53.2	51.8	49.8	49.8	44.9
87.5°	15.5	14.9	15.1	15.1	15.5	17.5	18.7	19.0	17.6	16.4	14.9
90°	10.9	10.9	6.3	6.3	5.5	4.7	2.3	0.8	2.3	4.7	5.5
92.5°	157.9	97.3	57.5	41.3	29.9	20.3	13.0	8.9	13.0	20.3	29.9
95°	294.0	165.8	97.7	64.9	46.1	36.0	28.1	25.8	28.1	36.0	46.1
97.5°	264.3	158.4	106.0	78.5	62.4	53.0	46.3	46.3	46.3	53.0	62.4
100°	248.7	160.3	114.2	89.1	74.3	64.9	59.4	59.4	59.4	64.9	74.3
102.5°	244.3	166.5	124.8	101.0	86.8	78.0	73.2	71.9	73.2	78.0	86.8
105°	246.3	181.4	143.9	121.2	107.1	97.7	93.8	91.5	93.8	97.7	107.1
107.5°	257.9	198.8	164.4	142.0	128.5	118.5	114.6	113.1	114.6	118.5	128.5
110°	266.6	211.9	177.5	156.4	142.3	132.9	129.0	127.5	129.0	132.9	142.3



TEST NUMBER: P332969

CATALOG NUMBER: SA4XXRDIP-C1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	276.0	224.4	191.3	170.1	156.1	147.3	142.8	141.2	142.8	147.3	156.1
115°	290.9	244.0	212.7	191.6	176.7	168.9	163.4	161.1	163.4	168.9	176.7
117.5°	306.0	262.9	233.2	211.3	197.4	188.8	183.9	181.7	183.9	188.8	197.4
120°	316.7	276.0	246.3	224.4	211.1	202.5	197.0	195.5	197.0	202.5	211.1
122.5°	326.7	288.5	258.8	237.5	223.0	215.0	209.6	208.0	209.6	215.0	223.0
125°	341.7	305.7	277.6	255.7	240.8	232.2	227.5	224.4	227.5	232.2	240.8
127.5°	354.7	321.7	294.5	272.4	256.9	247.1	241.5	239.0	241.5	247.1	256.9
130°	362.8	332.3	305.7	283.1	268.2	256.5	250.2	247.1	250.2	256.5	268.2
132.5°	370.9	341.1	314.5	293.1	277.0	265.9	257.7	255.2	257.7	265.9	277.0
135°	381.6	353.4	327.6	307.3	290.9	277.6	269.8	266.6	269.8	277.6	290.9
137.5°	389.1	362.8	338.7	319.3	302.3	289.6	281.0	278.1	281.0	289.6	302.3
140°	394.1	369.1	345.6	326.8	310.4	297.1	288.5	286.2	288.5	297.1	310.4
142.5°	397.8	374.7	351.9	333.7	317.9	305.3	297.3	294.9	297.3	305.3	317.9
145°	401.9	380.8	360.5	343.3	328.4	317.5	309.6	307.3	309.6	317.5	328.4
147.5°	405.5	387.1	368.0	352.5	340.1	328.9	322.0	321.2	322.0	328.9	340.1
150°	407.4	390.2	373.0	358.1	346.4	337.0	330.8	330.0	330.8	337.0	346.4
152.5°	408.6	392.7	377.4	363.8	353.3	344.5	338.3	338.1	338.3	344.5	353.3
155°	409.7	396.4	383.1	371.4	362.8	355.0	350.3	349.5	350.3	355.0	362.8
157.5°	409.7	399.1	387.8	378.6	371.1	365.0	360.6	360.6	360.6	365.0	371.1
160°	409.7	400.3	391.0	382.4	376.1	370.6	367.5	367.5	367.5	370.6	376.1
162.5°	409.7	401.6	392.8	386.1	380.5	375.6	373.1	373.8	373.1	375.6	380.5
165°	408.2	401.9	394.9	390.2	386.3	382.4	380.8	380.8	380.8	382.4	386.3
167.5°	406.3	401.8	396.6	393.0	390.8	387.8	387.1	387.8	387.1	387.8	390.8
170°	405.0	401.1	397.2	394.9	393.3	391.0	390.2	391.0	390.2	391.0	393.3
172.5°	403.8	400.5	397.8	396.1	395.2	393.5	393.3	394.1	393.3	393.5	395.2
175°	401.9	399.6	398.0	398.0	397.2	396.4	396.4	397.2	396.4	396.4	397.2
177.5°	399.9	398.6	398.0	398.0	398.0	397.4	398.0	398.6	398.0	397.4	398.0
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0



TEST NUMBER: P332969

CATALOG NUMBER: SA4XXRDIP-C1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1684.8	1679.3	1672.1	1663.8	1653.9	1645.0	1641.2	1644.5	1646.1	1641.7	1641.2
5°	1633.6	1616.3	1602.4	1581.7	1565.1	1551.3	1541.6	1537.5	1538.8	1527.8	1525.0
7.5°	1575.9	1555.4	1532.8	1508.1	1485.2	1464.9	1454.2	1448.4	1436.7	1431.7	1423.3
10°	1538.8	1511.2	1489.1	1460.0	1433.8	1409.6	1397.8	1388.1	1376.4	1370.9	1359.1
12.5°	1500.7	1468.6	1444.3	1414.1	1387.3	1358.1	1346.9	1329.0	1310.6	1299.0	1283.9
15°	1446.9	1408.2	1378.5	1342.5	1310.7	1277.5	1247.8	1214.6	1202.2	1175.9	1160.7
17.5°	1384.0	1344.7	1307.9	1259.7	1210.6	1169.4	1137.7	1105.9	1086.9	1070.1	1062.4
20°	1342.5	1306.6	1255.4	1199.4	1144.8	1099.2	1073.6	1052.9	1032.1	1020.4	1012.1
22.5°	1303.2	1257.3	1197.9	1137.5	1082.9	1047.2	1025.5	1004.2	987.3	976.1	965.1
25°	1237.4	1177.3	1114.4	1045.3	1007.9	976.8	953.3	936.0	925.7	911.1	905.6
27.5°	1169.8	1097.0	1027.6	981.1	942.2	913.8	893.3	880.3	867.2	857.9	850.7
30°	1117.8	1043.9	981.7	937.4	898.0	874.5	857.9	842.7	832.3	824.7	819.2
32.5°	1066.4	992.4	940.2	892.6	861.5	838.6	820.9	809.5	801.4	791.5	788.2
35°	992.0	926.3	880.7	837.9	806.1	785.3	771.5	759.7	752.8	750.1	748.0
37.5°	920.5	866.8	817.7	782.6	754.2	737.9	721.6	715.8	711.1	706.1	708.3
40°	875.2	824.7	781.2	743.8	721.0	703.1	693.4	686.5	682.3	682.3	682.3
42.5°	835.9	786.6	744.1	710.7	687.8	672.6	661.9	656.0	654.7	654.1	657.4
45°	775.0	729.3	686.5	658.8	639.5	624.2	618.0	613.2	613.2	616.0	616.6
47.5°	714.5	671.8	637.4	606.4	588.7	579.2	573.8	571.3	571.6	574.3	577.5
50°	677.5	635.3	601.4	573.8	557.2	548.2	543.4	542.0	543.4	543.4	548.2
52.5°	637.1	599.4	566.0	542.8	524.0	515.6	512.9	511.0	511.8	514.1	516.1
55°	577.9	544.1	512.3	490.1	476.3	470.8	464.6	465.2	463.9	465.2	465.2
57.5°	518.6	488.2	458.6	441.1	428.9	420.9	414.1	416.0	414.0	413.7	412.6
60°	480.5	447.3	423.8	407.9	394.0	387.1	380.9	382.3	380.2	378.8	376.1
62.5°	439.0	411.3	388.9	373.6	362.5	354.5	348.3	346.9	342.1	337.4	331.3
65°	378.8	356.0	336.0	321.5	311.1	304.9	300.0	295.9	285.5	274.4	268.9
67.5°	320.4	303.9	285.2	272.9	264.5	256.3	247.1	240.0	230.3	224.3	220.8
70°	282.7	266.8	250.9	239.2	230.2	222.6	212.2	207.4	200.5	197.7	194.3
72.5°	246.8	232.0	217.2	206.6	197.0	191.1	182.9	178.1	175.0	173.9	170.5
75°	192.2	180.4	169.4	159.7	152.1	147.9	144.5	141.0	139.6	133.4	130.0
77.5°	140.2	132.5	125.5	118.6	113.2	110.5	103.8	99.8	97.5	94.6	93.9
80°	109.2	103.7	96.8	92.6	85.0	82.3	79.5	78.8	78.1	77.4	76.7
82.5°	82.1	76.6	69.7	67.2	65.1	63.5	61.8	61.1	60.4	60.8	60.7
85°	41.5	38.7	38.7	38.0	37.3	36.6	35.9	35.9	35.3	35.9	35.3
87.5°	15.1	14.5	15.5	14.4	15.2	15.5	14.8	15.0	15.7	14.7	14.7
90°	6.3	6.3	10.9	10.9	12.5	14.1	13.3	14.1	14.9	15.6	15.6
92.5°	41.3	57.5	97.3	157.9	217.1	248.0	206.6	153.6	115.6	92.0	76.3
95°	64.9	97.7	165.8	294.0	480.9	637.3	655.3	579.4	458.2	353.4	277.6
97.5°	78.5	106.0	158.4	264.3	450.1	671.2	823.2	856.0	811.0	734.5	652.9
100°	89.1	114.2	160.3	248.7	408.2	628.7	828.8	943.0	958.6	920.3	862.5
102.5°	101.0	124.8	166.5	244.3	380.0	575.5	781.9	938.6	1016.2	1027.3	1003.2
105°	121.2	143.9	181.4	246.3	355.8	512.9	696.7	875.8	1011.0	1088.4	1120.5
107.5°	142.0	164.4	198.8	257.9	351.4	477.9	627.9	786.5	930.5	1039.5	1109.2
110°	156.4	177.5	211.9	266.6	352.6	466.0	593.5	732.7	867.9	981.3	1067.3



TEST NUMBER: P332969

CATALOG NUMBER: SA4XXRDIP-C1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	170.1	191.3	224.4	276.0	356.4	460.4	574.1	693.3	812.9	920.0	1006.0
115°	191.6	212.7	244.0	290.9	363.6	457.4	555.9	653.7	749.9	841.3	916.4
117.5°	211.3	233.2	262.9	306.0	371.3	456.6	547.8	634.3	713.9	785.8	849.5
120°	224.4	246.3	276.0	316.7	376.9	456.6	543.4	625.5	698.3	760.8	816.3
122.5°	237.5	258.8	288.5	326.7	382.5	456.0	538.4	618.0	688.2	745.2	793.8
125°	255.7	277.6	305.7	341.7	391.0	455.1	530.1	605.2	672.5	726.4	769.4
127.5°	272.4	294.5	321.7	354.7	397.7	453.4	519.0	589.6	653.8	707.6	748.5
130°	283.1	305.7	332.3	362.8	402.7	452.7	512.2	577.1	638.8	692.0	733.4
132.5°	293.1	314.5	341.1	370.9	407.1	452.1	505.9	563.9	621.9	673.9	715.3
135°	307.3	327.6	353.4	381.6	413.6	451.2	496.5	545.8	596.6	644.3	683.4
137.5°	319.3	338.7	362.8	389.1	417.5	451.0	488.4	529.4	572.4	612.6	647.9
140°	326.8	345.6	369.1	394.1	420.7	450.4	484.0	520.0	556.7	591.9	624.8
142.5°	333.7	351.9	374.7	397.8	423.2	450.4	480.3	511.2	543.6	573.8	602.2
145°	343.3	360.5	380.8	401.9	424.6	448.8	473.8	498.9	525.5	548.9	570.8
147.5°	352.5	368.0	387.1	405.5	425.4	446.0	468.1	488.7	509.8	528.6	545.8
150°	358.1	373.0	390.2	407.4	425.4	444.1	463.7	482.4	500.4	516.1	530.1
152.5°	363.8	377.4	392.7	408.6	424.1	441.0	458.7	475.6	491.0	505.4	517.0
155°	371.4	383.1	396.4	409.7	422.2	436.3	451.2	465.2	477.8	489.5	498.9
157.5°	378.6	387.8	399.1	409.7	420.2	431.5	443.5	454.1	464.6	474.5	482.0
160°	382.4	391.0	400.3	409.7	418.3	427.7	437.9	447.3	455.9	464.5	470.7
162.5°	386.1	392.8	401.6	409.7	416.5	424.0	432.9	440.4	447.7	454.5	460.1
165°	390.2	394.9	401.9	408.2	412.9	418.3	424.6	430.8	435.5	441.0	444.9
167.5°	393.0	396.6	401.8	406.3	409.1	412.7	417.1	421.6	425.2	429.6	431.9
170°	394.9	397.2	401.1	405.0	406.6	408.9	412.1	416.0	418.3	421.5	423.8
172.5°	396.1	397.8	400.5	403.8	404.1	405.2	407.7	411.0	412.7	414.6	416.3
175°	398.0	398.0	399.6	401.9	401.1	401.1	402.7	404.3	405.0	406.6	406.6
177.5°	398.0	398.0	398.6	399.9	398.6	398.6	399.2	399.9	400.5	400.5	401.1
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0



TEST NUMBER: P332969

CATALOG NUMBER: SA4XXRDIP-C1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1637.8	1638.9	1635.1	1634.0	1635.1	1638.9	1637.8	1641.2	1641.7	1646.1	1644.5
5°	1519.5	1518.1	1514.6	1515.3	1514.6	1518.1	1519.5	1525.0	1527.8	1538.8	1537.5
7.5°	1418.3	1412.9	1414.4	1408.9	1414.4	1412.9	1418.3	1423.3	1431.7	1436.7	1448.4
10°	1356.3	1348.7	1342.5	1337.0	1342.5	1348.7	1356.3	1359.1	1370.9	1376.4	1388.1
12.5°	1271.7	1265.2	1256.8	1258.5	1256.8	1265.2	1271.7	1283.9	1299.0	1310.6	1329.0
15°	1151.7	1141.3	1124.8	1126.8	1124.8	1141.3	1151.7	1160.7	1175.9	1202.2	1214.6
17.5°	1050.1	1050.2	1042.6	1044.4	1042.6	1050.2	1050.1	1062.4	1070.1	1086.9	1105.9
20°	997.6	992.7	993.4	991.3	993.4	992.7	997.6	1012.1	1020.4	1032.1	1052.9
22.5°	961.1	955.1	950.3	946.0	950.3	955.1	961.1	965.1	976.1	987.3	1004.2
25°	899.4	895.2	889.0	887.6	889.0	895.2	899.4	905.6	911.1	925.7	936.0
27.5°	845.2	844.4	841.9	838.7	841.9	844.4	845.2	850.7	857.9	867.2	880.3
30°	813.7	812.3	810.9	808.8	810.9	812.3	813.7	819.2	824.7	832.3	842.7
32.5°	785.5	784.6	783.2	783.4	783.2	784.6	785.5	788.2	791.5	801.4	809.5
35°	745.2	744.5	743.2	742.5	743.2	744.5	745.2	748.0	750.1	752.8	759.7
37.5°	707.6	709.4	708.6	708.4	708.6	709.4	707.6	708.3	706.1	711.1	715.8
40°	681.6	682.3	683.7	683.0	683.7	682.3	681.6	682.3	682.3	682.3	686.5
42.5°	660.1	660.2	662.1	659.8	662.1	660.2	660.1	657.4	654.1	654.7	656.0
45°	621.5	625.6	624.9	624.9	624.9	625.6	621.5	616.6	616.0	613.2	613.2
47.5°	579.3	582.9	583.9	583.7	583.9	582.9	579.3	577.5	574.3	571.6	571.3
50°	551.7	550.3	552.4	551.7	552.4	550.3	551.7	548.2	543.4	543.4	542.0
52.5°	517.9	518.2	518.1	517.4	518.1	518.2	517.9	516.1	514.1	511.8	511.0
55°	465.9	466.6	465.2	465.9	465.2	466.6	465.9	465.2	465.2	463.9	465.2
57.5°	409.5	406.2	407.6	405.9	407.6	406.2	409.5	412.6	413.7	414.0	416.0
60°	369.2	363.6	362.2	359.5	362.2	363.6	369.2	376.1	378.8	380.2	382.3
62.5°	323.8	319.9	315.2	317.4	315.2	319.9	323.8	331.3	337.4	342.1	346.9
65°	263.4	260.6	258.5	261.3	258.5	260.6	263.4	268.9	274.4	285.5	295.9
67.5°	218.0	216.5	216.5	215.1	216.5	216.5	218.0	220.8	224.3	230.3	240.0
70°	194.3	192.2	192.2	190.8	192.2	192.2	194.3	194.3	197.7	200.5	207.4
72.5°	169.9	167.8	168.4	167.6	168.4	167.8	169.9	170.5	173.9	175.0	178.1
75°	125.8	122.4	122.4	123.1	122.4	122.4	125.8	130.0	133.4	139.6	141.0
77.5°	93.9	93.2	94.2	92.9	94.2	93.2	93.9	93.9	94.6	97.5	99.8
80°	76.7	76.0	75.4	77.4	75.4	76.0	76.7	76.7	77.4	78.1	78.8
82.5°	59.6	59.5	59.3	61.9	59.3	59.5	59.6	60.7	60.8	60.4	61.1
85°	35.9	34.6	35.9	34.6	35.9	34.6	35.9	35.3	35.9	35.3	35.9
87.5°	16.0	15.6	14.9	15.5	14.9	15.6	16.0	14.7	14.7	15.7	15.0
90°	16.4	17.2	16.4	16.4	16.4	17.2	16.4	15.6	15.6	14.9	14.1
92.5°	67.1	62.9	60.2	60.2	60.2	62.9	67.1	76.3	92.0	115.6	153.6
95°	239.3	215.0	201.0	190.8	201.0	215.0	239.3	277.6	353.4	458.2	579.4
97.5°	596.8	549.7	526.2	510.0	526.2	549.7	596.8	652.9	734.5	811.0	856.0
100°	794.4	746.7	723.3	717.0	723.3	746.7	794.4	862.5	920.3	958.6	943.0
102.5°	961.5	926.9	902.2	897.2	902.2	926.9	961.5	1003.2	1027.3	1016.2	938.6
105°	1122.1	1115.8	1104.9	1100.2	1104.9	1115.8	1122.1	1120.5	1088.4	1011.0	875.8
107.5°	1147.9	1165.7	1173.5	1175.5	1173.5	1165.7	1147.9	1109.2	1039.5	930.5	786.5
110°	1122.8	1155.7	1169.8	1176.8	1169.8	1155.7	1122.8	1067.3	981.3	867.9	732.7



TEST NUMBER: P332969

CATALOG NUMBER: SA4XXRDIP-C1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1069.0	1108.8	1128.5	1139.9	1128.5	1108.8	1069.0	1006.0	920.0	812.9	693.3
115°	978.2	1025.1	1050.1	1056.4	1050.1	1025.1	978.2	916.4	841.3	749.9	653.7
117.5°	902.2	941.6	966.9	971.8	966.9	941.6	902.2	849.5	785.8	713.9	634.3
120°	860.9	895.3	915.6	924.2	915.6	895.3	860.9	816.3	760.8	698.3	625.5
122.5°	831.5	860.9	878.1	886.7	878.1	860.9	831.5	793.8	745.2	688.2	618.0
125°	800.7	823.4	838.2	842.9	838.2	823.4	800.7	769.4	726.4	672.5	605.2
127.5°	779.9	800.1	812.6	817.3	812.6	800.1	779.9	748.5	707.6	653.8	589.6
130°	765.5	785.1	797.6	802.3	797.6	785.1	765.5	733.4	692.0	638.8	577.1
132.5°	746.7	768.8	780.7	785.4	780.7	768.8	746.7	715.3	673.9	621.9	563.9
135°	714.7	736.6	749.1	753.8	749.1	736.6	714.7	683.4	644.3	596.6	545.8
137.5°	677.1	698.7	709.0	714.7	709.0	698.7	677.1	647.9	612.6	572.4	529.4
140°	652.1	669.3	680.3	686.5	680.3	669.3	652.1	624.8	591.9	556.7	520.0
142.5°	626.5	642.4	652.1	656.5	652.1	642.4	626.5	602.2	573.8	543.6	511.2
145°	590.4	603.6	611.5	615.4	611.5	603.6	590.4	570.8	548.9	525.5	498.9
147.5°	560.2	571.6	577.5	578.9	577.5	571.6	560.2	545.8	528.6	509.8	488.7
150°	542.7	552.8	557.5	558.3	557.5	552.8	542.7	530.1	516.1	500.4	482.4
152.5°	527.6	535.9	538.7	539.5	538.7	535.9	527.6	517.0	505.4	491.0	475.6
155°	506.7	512.9	515.3	515.3	515.3	512.9	506.7	498.9	489.5	477.8	465.2
157.5°	487.9	492.6	494.0	494.0	494.0	492.6	487.9	482.0	474.5	464.6	454.1
160°	475.4	480.1	480.9	480.9	480.9	480.1	475.4	470.7	464.5	455.9	447.3
162.5°	463.5	468.2	469.0	468.4	469.0	468.2	463.5	460.1	454.5	447.7	440.4
165°	448.0	451.2	450.4	449.6	450.4	451.2	448.0	444.9	441.0	435.5	430.8
167.5°	433.5	435.5	435.4	434.7	435.4	435.5	433.5	431.9	429.6	425.2	421.6
170°	425.4	426.1	425.4	425.4	425.4	426.1	425.4	423.8	421.5	418.3	416.0
172.5°	417.2	418.0	417.2	416.0	417.2	418.0	417.2	416.3	414.6	412.7	411.0
175°	406.6	408.2	406.6	405.0	406.6	408.2	406.6	406.6	406.6	405.0	404.3
177.5°	400.5	401.1	399.9	398.6	399.9	401.1	400.5	401.1	400.5	400.5	399.9
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0



TEST NUMBER: P332969

CATALOG NUMBER: SA4XXRDIP-C1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1641.2	1645.0	1653.9	1663.8	1672.1	1679.3	1684.8	1692.6	1699.8	1709.7	1719.1
5°	1541.6	1551.3	1565.1	1581.7	1602.4	1616.3	1633.6	1648.8	1670.9	1693.0	1714.4
7.5°	1454.2	1464.9	1485.2	1508.1	1532.8	1555.4	1575.9	1602.7	1632.0	1664.2	1700.2
10°	1397.8	1409.6	1433.8	1460.0	1489.1	1511.2	1538.8	1570.6	1603.8	1643.2	1687.5
12.5°	1346.9	1358.1	1387.3	1414.1	1444.3	1468.6	1500.7	1533.0	1577.3	1620.0	1670.3
15°	1247.8	1277.5	1310.7	1342.5	1378.5	1408.2	1446.9	1480.1	1522.3	1582.4	1639.8
17.5°	1137.7	1169.4	1210.6	1259.7	1307.9	1344.7	1384.0	1425.2	1475.4	1536.8	1603.0
20°	1073.6	1099.2	1144.8	1199.4	1255.4	1306.6	1342.5	1388.1	1440.0	1506.4	1574.8
22.5°	1025.5	1047.2	1082.9	1137.5	1197.9	1257.3	1303.2	1348.3	1405.7	1472.1	1546.6
25°	953.3	976.8	1007.9	1045.3	1114.4	1177.3	1237.4	1289.3	1350.1	1416.5	1499.4
27.5°	893.3	913.8	942.2	981.1	1027.6	1097.0	1169.8	1229.0	1291.4	1362.6	1445.7
30°	857.9	874.5	898.0	937.4	981.7	1043.9	1117.8	1187.0	1249.9	1323.8	1410.3
32.5°	820.9	838.6	861.5	892.6	940.2	992.4	1066.4	1142.2	1209.0	1284.6	1369.3
35°	771.5	785.3	806.1	837.9	880.7	926.3	992.0	1070.1	1140.7	1221.5	1302.4
37.5°	721.6	737.9	754.2	782.6	817.7	866.8	920.5	1000.3	1078.4	1152.3	1231.2
40°	693.4	703.1	721.0	743.8	781.2	824.7	875.2	953.3	1031.4	1104.7	1184.2
42.5°	661.9	672.6	687.8	710.7	744.1	786.6	835.9	903.5	985.0	1056.0	1128.3
45°	618.0	624.2	639.5	658.8	686.5	729.3	775.0	835.1	911.8	979.6	1043.2
47.5°	573.8	579.2	588.7	606.4	637.4	671.8	714.5	768.5	835.8	903.5	957.3
50°	543.4	548.2	557.2	573.8	601.4	635.3	677.5	725.9	786.0	851.0	895.9
52.5°	512.9	515.6	524.0	542.8	566.0	599.4	637.1	681.6	737.9	791.8	837.3
55°	464.6	470.8	476.3	490.1	512.3	544.1	577.9	620.1	663.7	709.3	748.0
57.5°	414.1	420.9	428.9	441.1	458.6	488.2	518.6	552.8	590.0	627.8	660.3
60°	380.9	387.1	394.0	407.9	423.8	447.3	480.5	510.2	538.5	573.1	605.6
62.5°	348.3	354.5	362.5	373.6	388.9	411.3	439.0	464.8	494.3	524.4	548.6
65°	300.0	304.9	311.1	321.5	336.0	356.0	378.8	398.9	425.2	447.3	469.4
67.5°	247.1	256.3	264.5	272.9	285.2	303.9	320.4	339.6	357.4	373.9	394.0
70°	212.2	222.6	230.2	239.2	250.9	266.8	282.7	295.9	310.4	326.3	344.3
72.5°	182.9	191.1	197.0	206.6	217.2	232.0	246.8	257.7	269.5	280.4	297.8
75°	144.5	147.9	152.1	159.7	169.4	180.4	192.2	201.9	208.8	218.5	230.9
77.5°	103.8	110.5	113.2	118.6	125.5	132.5	140.2	148.4	155.0	158.4	168.0
80°	79.5	82.3	85.0	92.6	96.8	103.7	109.2	116.8	119.6	123.1	132.0
82.5°	61.8	63.5	65.1	67.2	69.7	76.6	82.1	87.0	89.7	91.0	97.8
85°	35.9	36.6	37.3	38.0	38.7	38.7	41.5	44.9	49.8	49.8	51.8
87.5°	14.8	15.5	15.2	14.4	15.5	14.5	15.1	14.9	16.4	17.6	19.0
90°	13.3	14.1	12.5	10.9	10.9	6.3	6.3	5.5	4.7	2.3	0.8
92.5°	206.6	248.0	217.1	157.9	97.3	57.5	41.3	29.9	20.3	13.0	8.9
95°	655.3	637.3	480.9	294.0	165.8	97.7	64.9	46.1	36.0	28.1	25.8
97.5°	823.2	671.2	450.1	264.3	158.4	106.0	78.5	62.4	53.0	46.3	46.3
100°	828.8	628.7	408.2	248.7	160.3	114.2	89.1	74.3	64.9	59.4	59.4
102.5°	781.9	575.5	380.0	244.3	166.5	124.8	101.0	86.8	78.0	73.2	71.9
105°	696.7	512.9	355.8	246.3	181.4	143.9	121.2	107.1	97.7	93.8	91.5
107.5°	627.9	477.9	351.4	257.9	198.8	164.4	142.0	128.5	118.5	114.6	113.1
110°	593.5	466.0	352.6	266.6	211.9	177.5	156.4	142.3	132.9	129.0	127.5



TEST NUMBER: P332969

CATALOG NUMBER: SA4XXRDIP-C1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	574.1	460.4	356.4	276.0	224.4	191.3	170.1	156.1	147.3	142.8	141.2
115°	555.9	457.4	363.6	290.9	244.0	212.7	191.6	176.7	168.9	163.4	161.1
117.5°	547.8	456.6	371.3	306.0	262.9	233.2	211.3	197.4	188.8	183.9	181.7
120°	543.4	456.6	376.9	316.7	276.0	246.3	224.4	211.1	202.5	197.0	195.5
122.5°	538.4	456.0	382.5	326.7	288.5	258.8	237.5	223.0	215.0	209.6	208.0
125°	530.1	455.1	391.0	341.7	305.7	277.6	255.7	240.8	232.2	227.5	224.4
127.5°	519.0	453.4	397.7	354.7	321.7	294.5	272.4	256.9	247.1	241.5	239.0
130°	512.2	452.7	402.7	362.8	332.3	305.7	283.1	268.2	256.5	250.2	247.1
132.5°	505.9	452.1	407.1	370.9	341.1	314.5	293.1	277.0	265.9	257.7	255.2
135°	496.5	451.2	413.6	381.6	353.4	327.6	307.3	290.9	277.6	269.8	266.6
137.5°	488.4	451.0	417.5	389.1	362.8	338.7	319.3	302.3	289.6	281.0	278.1
140°	484.0	450.4	420.7	394.1	369.1	345.6	326.8	310.4	297.1	288.5	286.2
142.5°	480.3	450.4	423.2	397.8	374.7	351.9	333.7	317.9	305.3	297.3	294.9
145°	473.8	448.8	424.6	401.9	380.8	360.5	343.3	328.4	317.5	309.6	307.3
147.5°	468.1	446.0	425.4	405.5	387.1	368.0	352.5	340.1	328.9	322.0	321.2
150°	463.7	444.1	425.4	407.4	390.2	373.0	358.1	346.4	337.0	330.8	330.0
152.5°	458.7	441.0	424.1	408.6	392.7	377.4	363.8	353.3	344.5	338.3	338.1
155°	451.2	436.3	422.2	409.7	396.4	383.1	371.4	362.8	355.0	350.3	349.5
157.5°	443.5	431.5	420.2	409.7	399.1	387.8	378.6	371.1	365.0	360.6	360.6
160°	437.9	427.7	418.3	409.7	400.3	391.0	382.4	376.1	370.6	367.5	367.5
162.5°	432.9	424.0	416.5	409.7	401.6	392.8	386.1	380.5	375.6	373.1	373.8
165°	424.6	418.3	412.9	408.2	401.9	394.9	390.2	386.3	382.4	380.8	380.8
167.5°	417.1	412.7	409.1	406.3	401.8	396.6	393.0	390.8	387.8	387.1	387.8
170°	412.1	408.9	406.6	405.0	401.1	397.2	394.9	393.3	391.0	390.2	391.0
172.5°	407.7	405.2	404.1	403.8	400.5	397.8	396.1	395.2	393.5	393.3	394.1
175°	402.7	401.1	401.1	401.9	399.6	398.0	398.0	397.2	396.4	396.4	397.2
177.5°	399.2	398.6	398.6	399.9	398.6	398.0	398.0	398.0	397.4	398.0	398.6
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0



TEST NUMBER: P332969

CATALOG NUMBER: SA4XXRDIP-C1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1726.3	1731.3	1736.8	1747.3	1756.2	1760.1	1767.8	1773.3	1771.7	1779.4	1792.7
5°	1733.1	1751.8	1773.2	1795.3	1820.2	1840.9	1857.5	1874.1	1887.3	1903.2	1926.7
7.5°	1732.0	1765.2	1801.3	1840.9	1881.7	1917.0	1949.6	1982.8	2012.2	2044.5	2086.6
10°	1727.6	1771.8	1816.7	1868.6	1920.4	1969.5	2013.8	2055.2	2094.7	2136.8	2190.1
12.5°	1722.6	1773.5	1827.8	1890.2	1954.7	2013.8	2065.8	2125.5	2174.8	2229.2	2290.7
15°	1700.6	1769.0	1843.0	1923.9	2001.3	2080.8	2152.0	2225.3	2293.7	2358.7	2436.2
17.5°	1675.4	1754.4	1841.6	1937.2	2030.2	2126.9	2211.3	2303.7	2373.7	2460.9	2532.8
20°	1655.0	1740.0	1833.3	1940.5	2046.3	2153.4	2246.7	2340.8	2419.6	2507.4	2598.6
22.5°	1630.1	1723.4	1824.5	1935.5	2046.3	2163.4	2266.6	2360.1	2457.7	2556.6	2650.6
25°	1590.0	1686.8	1793.9	1915.6	2042.8	2162.4	2273.0	2389.1	2494.2	2601.4	2685.7
27.5°	1540.8	1642.4	1755.4	1880.9	2011.4	2133.9	2264.2	2387.9	2493.7	2596.8	2670.4
30°	1501.5	1608.7	1717.2	1844.4	1979.9	2111.2	2250.9	2374.6	2485.9	2578.6	2620.0
32.5°	1461.1	1562.8	1674.6	1803.5	1942.3	2083.6	2222.1	2348.6	2451.6	2507.2	2508.3
35°	1390.9	1486.3	1602.4	1729.0	1871.4	2024.8	2165.2	2289.6	2352.5	2357.3	2289.6
37.5°	1314.3	1401.8	1511.5	1638.1	1794.1	1946.7	2090.1	2173.0	2194.1	2123.7	1998.4
40°	1259.6	1340.4	1446.2	1576.2	1731.0	1888.6	2019.3	2080.1	2058.0	1943.9	1804.3
42.5°	1202.0	1277.4	1379.3	1507.6	1663.0	1822.3	1933.6	1966.2	1907.6	1775.8	1612.4
45°	1108.2	1177.3	1278.2	1407.5	1556.8	1706.1	1790.5	1773.9	1676.4	1520.2	1337.0
47.5°	1010.4	1077.2	1168.0	1287.6	1440.5	1569.4	1626.5	1576.5	1437.8	1265.9	1116.9
50°	945.7	1014.1	1097.8	1211.9	1351.5	1475.9	1512.6	1436.5	1282.4	1117.1	980.3
52.5°	882.1	940.6	1022.6	1132.8	1266.3	1371.4	1390.9	1303.2	1144.1	996.0	874.6
55°	785.3	838.6	907.7	1011.4	1126.8	1216.0	1205.6	1093.0	948.5	822.0	726.6
57.5°	691.7	731.8	795.7	892.9	994.2	1054.1	1016.2	920.1	785.5	681.9	601.4
60°	629.8	667.1	726.6	811.6	900.8	934.6	902.8	798.5	692.0	597.3	529.5
62.5°	571.2	604.1	655.2	734.2	806.2	826.2	792.2	701.1	605.2	524.3	468.2
65°	486.0	516.4	560.0	616.0	665.7	675.4	653.3	560.0	487.4	419.6	380.9
67.5°	408.7	428.6	462.6	511.0	537.4	543.1	500.4	441.7	377.7	336.1	306.9
70°	356.7	370.5	402.3	428.6	450.0	450.7	411.3	364.3	315.2	281.4	259.9
72.5°	306.4	319.7	343.7	361.7	378.1	372.8	336.7	299.6	259.9	234.4	218.5
75°	236.4	248.2	260.6	268.9	268.9	262.0	235.7	208.1	185.3	170.1	165.2
77.5°	171.9	181.5	185.7	184.4	182.0	171.2	154.6	136.5	128.3	121.1	117.5
80°	134.8	139.0	140.3	136.9	132.7	120.3	109.2	101.6	94.0	91.3	89.9
82.5°	100.0	103.6	100.0	100.9	91.8	81.6	75.5	72.9	69.7	68.6	67.2
85°	53.2	52.5	51.2	47.7	41.5	40.1	39.4	38.7	37.3	38.0	36.6
87.5°	18.7	17.5	15.5	15.1	15.1	14.9	15.5	15.8	16.1	15.4	16.6
90°	2.3	4.7	5.5	6.3	6.3	10.9	10.9	12.5	14.1	13.3	14.1
92.5°	13.0	20.3	29.9	41.3	57.5	97.3	157.9	217.1	248.0	206.6	153.6
95°	28.1	36.0	46.1	64.9	97.7	165.8	294.0	480.9	637.3	655.3	579.4
97.5°	46.3	53.0	62.4	78.5	106.0	158.4	264.3	450.1	671.2	823.2	856.0
100°	59.4	64.9	74.3	89.1	114.2	160.3	248.7	408.2	628.7	828.8	943.0
102.5°	73.2	78.0	86.8	101.0	124.8	166.5	244.3	380.0	575.5	781.9	938.6
105°	93.8	97.7	107.1	121.2	143.9	181.4	246.3	355.8	512.9	696.7	875.8
107.5°	114.6	118.5	128.5	142.0	164.4	198.8	257.9	351.4	477.9	627.9	786.5
110°	129.0	132.9	142.3	156.4	177.5	211.9	266.6	352.6	466.0	593.5	732.7



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	142.8	147.3	156.1	170.1	191.3	224.4	276.0	356.4	460.4	574.1	693.3
115°	163.4	168.9	176.7	191.6	212.7	244.0	290.9	363.6	457.4	555.9	653.7
117.5°	183.9	188.8	197.4	211.3	233.2	262.9	306.0	371.3	456.6	547.8	634.3
120°	197.0	202.5	211.1	224.4	246.3	276.0	316.7	376.9	456.6	543.4	625.5
122.5°	209.6	215.0	223.0	237.5	258.8	288.5	326.7	382.5	456.0	538.4	618.0
125°	227.5	232.2	240.8	255.7	277.6	305.7	341.7	391.0	455.1	530.1	605.2
127.5°	241.5	247.1	256.9	272.4	294.5	321.7	354.7	397.7	453.4	519.0	589.6
130°	250.2	256.5	268.2	283.1	305.7	332.3	362.8	402.7	452.7	512.2	577.1
132.5°	257.7	265.9	277.0	293.1	314.5	341.1	370.9	407.1	452.1	505.9	563.9
135°	269.8	277.6	290.9	307.3	327.6	353.4	381.6	413.6	451.2	496.5	545.8
137.5°	281.0	289.6	302.3	319.3	338.7	362.8	389.1	417.5	451.0	488.4	529.4
140°	288.5	297.1	310.4	326.8	345.6	369.1	394.1	420.7	450.4	484.0	520.0
142.5°	297.3	305.3	317.9	333.7	351.9	374.7	397.8	423.2	450.4	480.3	511.2
145°	309.6	317.5	328.4	343.3	360.5	380.8	401.9	424.6	448.8	473.8	498.9
147.5°	322.0	328.9	340.1	352.5	368.0	387.1	405.5	425.4	446.0	468.1	488.7
150°	330.8	337.0	346.4	358.1	373.0	390.2	407.4	425.4	444.1	463.7	482.4
152.5°	338.3	344.5	353.3	363.8	377.4	392.7	408.6	424.1	441.0	458.7	475.6
155°	350.3	355.0	362.8	371.4	383.1	396.4	409.7	422.2	436.3	451.2	465.2
157.5°	360.6	365.0	371.1	378.6	387.8	399.1	409.7	420.2	431.5	443.5	454.1
160°	367.5	370.6	376.1	382.4	391.0	400.3	409.7	418.3	427.7	437.9	447.3
162.5°	373.1	375.6	380.5	386.1	392.8	401.6	409.7	416.5	424.0	432.9	440.4
165°	380.8	382.4	386.3	390.2	394.9	401.9	408.2	412.9	418.3	424.6	430.8
167.5°	387.1	387.8	390.8	393.0	396.6	401.8	406.3	409.1	412.7	417.1	421.6
170°	390.2	391.0	393.3	394.9	397.2	401.1	405.0	406.6	408.9	412.1	416.0
172.5°	393.3	393.5	395.2	396.1	397.8	400.5	403.8	404.1	405.2	407.7	411.0
175°	396.4	396.4	397.2	398.0	398.0	399.6	401.9	401.1	401.1	402.7	404.3
177.5°	398.0	397.4	398.0	398.0	398.0	398.6	399.9	398.6	398.6	399.2	399.9
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1799.9	1802.1	1803.8	1809.3	1809.8	1814.8	1809.8
5°	1948.8	1958.5	1973.7	1988.9	1990.3	1999.9	1982.7
7.5°	2115.8	2138.2	2152.2	2176.8	2186.5	2192.5	2182.6
10°	2230.8	2251.6	2288.2	2306.2	2324.2	2326.9	2318.6
12.5°	2342.0	2374.9	2403.8	2437.8	2437.0	2461.3	2452.5
15°	2490.1	2524.0	2564.0	2602.1	2615.9	2615.9	2627.0
17.5°	2595.7	2657.8	2699.3	2729.1	2761.8	2767.4	2763.6
20°	2667.1	2734.1	2778.4	2817.1	2839.2	2845.4	2845.4
22.5°	2720.1	2777.2	2820.4	2855.2	2873.5	2880.8	2878.6
25°	2756.9	2806.0	2832.3	2842.6	2847.5	2846.1	2833.0
27.5°	2706.6	2704.4	2687.8	2656.0	2632.1	2617.6	2601.0
30°	2610.4	2574.4	2532.9	2487.3	2428.6	2383.6	2369.8
32.5°	2467.1	2386.4	2316.1	2240.1	2176.9	2132.0	2113.2
35°	2190.1	2062.2	1957.8	1866.5	1800.2	1758.7	1744.9
37.5°	1861.3	1737.5	1608.3	1519.8	1464.7	1422.8	1407.2
40°	1652.2	1517.4	1404.7	1321.8	1265.1	1224.3	1223.6
42.5°	1461.4	1332.7	1226.7	1166.9	1105.8	1078.8	1078.7
45°	1196.6	1093.6	1003.8	956.8	920.1	898.0	891.8
47.5°	990.8	905.6	845.7	808.3	778.4	764.3	755.2
50°	875.2	800.5	752.8	720.3	703.7	685.8	684.4
52.5°	779.0	718.7	681.5	655.1	634.1	623.3	623.6
55°	654.7	607.0	580.7	560.6	544.1	535.8	532.3
57.5°	551.5	515.7	496.6	478.2	471.2	464.7	462.9
60°	487.4	463.2	445.2	430.7	420.3	418.2	417.5
62.5°	434.3	409.0	396.5	385.3	377.7	374.5	373.3
65°	358.1	339.4	328.4	319.4	316.6	311.8	311.1
67.5°	288.7	277.5	270.2	263.9	260.2	259.9	259.9
70°	246.1	239.9	233.7	230.2	228.1	226.7	226.7
72.5°	209.6	205.0	199.9	198.1	197.7	196.3	195.8
75°	159.7	154.9	155.5	152.1	149.3	145.9	143.8
77.5°	113.2	109.8	109.1	108.7	106.3	105.9	107.0
80°	87.8	84.3	83.6	84.3	83.6	81.6	81.6
82.5°	66.8	63.9	63.2	62.8	62.1	62.8	61.7
85°	35.9	34.6	34.6	34.6	35.9	35.3	34.6
87.5°	15.7	15.3	15.8	15.5	15.6	14.9	15.5
90°	14.9	15.6	15.6	16.4	17.2	16.4	16.4
92.5°	115.6	92.0	76.3	67.1	62.9	60.2	60.2
95°	458.2	353.4	277.6	239.3	215.0	201.0	190.8
97.5°	811.0	734.5	652.9	596.8	549.7	526.2	510.0
100°	958.6	920.3	862.5	794.4	746.7	723.3	717.0
102.5°	1016.2	1027.3	1003.2	961.5	926.9	902.2	897.2
105°	1011.0	1088.4	1120.5	1122.1	1115.8	1104.9	1100.2
107.5°	930.5	1039.5	1109.2	1147.9	1165.7	1173.5	1175.5
110°	867.9	981.3	1067.3	1122.8	1155.7	1169.8	1176.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	812.9	920.0	1006.0	1069.0	1108.8	1128.5	1139.9
115°	749.9	841.3	916.4	978.2	1025.1	1050.1	1056.4
117.5°	713.9	785.8	849.5	902.2	941.6	966.9	971.8
120°	698.3	760.8	816.3	860.9	895.3	915.6	924.2
122.5°	688.2	745.2	793.8	831.5	860.9	878.1	886.7
125°	672.5	726.4	769.4	800.7	823.4	838.2	842.9
127.5°	653.8	707.6	748.5	779.9	800.1	812.6	817.3
130°	638.8	692.0	733.4	765.5	785.1	797.6	802.3
132.5°	621.9	673.9	715.3	746.7	768.8	780.7	785.4
135°	596.6	644.3	683.4	714.7	736.6	749.1	753.8
137.5°	572.4	612.6	647.9	677.1	698.7	709.0	714.7
140°	556.7	591.9	624.8	652.1	669.3	680.3	686.5
142.5°	543.6	573.8	602.2	626.5	642.4	652.1	656.5
145°	525.5	548.9	570.8	590.4	603.6	611.5	615.4
147.5°	509.8	528.6	545.8	560.2	571.6	577.5	578.9
150°	500.4	516.1	530.1	542.7	552.8	557.5	558.3
152.5°	491.0	505.4	517.0	527.6	535.9	538.7	539.5
155°	477.8	489.5	498.9	506.7	512.9	515.3	515.3
157.5°	464.6	474.5	482.0	487.9	492.6	494.0	494.0
160°	455.9	464.5	470.7	475.4	480.1	480.9	480.9
162.5°	447.7	454.5	460.1	463.5	468.2	469.0	468.4
165°	435.5	441.0	444.9	448.0	451.2	450.4	449.6
167.5°	425.2	429.6	431.9	433.5	435.5	435.4	434.7
170°	418.3	421.5	423.8	425.4	426.1	425.4	425.4
172.5°	412.7	414.6	416.3	417.2	418.0	417.2	416.0
175°	405.0	406.6	406.6	406.6	408.2	406.6	405.0
177.5°	400.5	400.5	401.1	400.5	401.1	399.9	398.6
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0

(END OF REPORT)