

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: P332635

Luminaire Tested: **SA4XXDIP-C1020D590U835-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332635
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

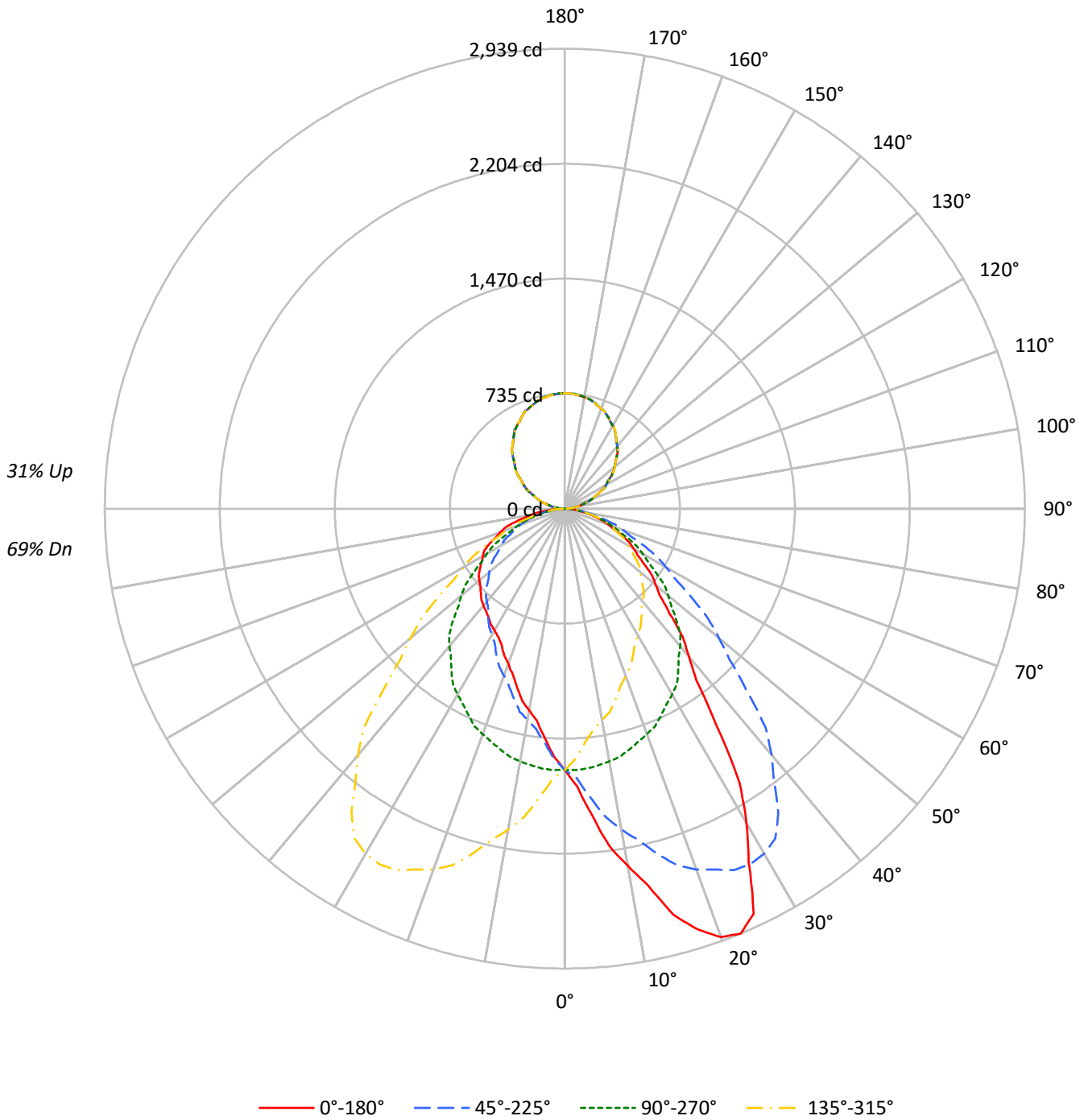
Lumens per Lamp: N/A
Luminaire Lumens: 6652.6 lumens
Efficiency: N/A
Efficacy: 136.3 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 48.8
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	94	94	94	83	83	83	74	74	74	69				
1	102	98	94	91	97	93	89	86	83	80	78	74	72	70	66	64	63	59				
2	94	86	80	75	88	82	76	71	73	69	65	65	62	59	58	56	54	50				
3	86	76	69	63	81	72	65	60	65	60	55	58	54	50	52	49	46	43				
4	78	68	59	53	74	64	57	51	58	52	47	52	47	44	47	43	40	37				
5	72	60	52	46	68	58	50	44	52	46	41	47	42	38	42	38	35	32				
6	67	54	46	40	63	52	44	39	47	41	36	43	37	34	38	34	31	28				
7	62	49	41	36	58	47	40	34	43	37	32	39	34	30	35	31	28	25				
8	58	45	37	32	54	43	36	31	39	33	29	36	30	27	32	28	25	23				
9	54	41	34	28	51	39	32	28	36	30	26	33	28	24	30	26	22	20				
10	50	38	31	26	48	36	29	25	33	27	23	30	25	22	28	24	20	19				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13472	13472	13472	13472
5°	15866	13507	11921	13507
10°	18996	13448	10733	13448
15°	22476	13312	9857	13312
20°	25027	13173	9075	13173
25°	25432	12968	8535	12968
30°	21640	12773	8364	12773
35°	16638	12454	8366	12454
40°	12968	12079	8524	12079
45°	10813	11515	8667	11515
50°	9516	10827	8960	10827
55°	8718	10003	9322	10003
60°	8170	9265	9755	9265
65°	7607	8437	10115	8437
70°	6951	7619	10346	7619
75°	6210	6706	10221	6706
80°	5207	5495	9898	5495
85°	3844	3974	9476	3974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.6	2.4
10°-20°	501.1	7.5
20°-30°	794.6	11.9
30°-40°	884.3	13.3
40°-50°	805.0	12.1
50°-60°	657.8	9.9
60°-70°	469.6	7.1
70°-80°	258.6	3.9
80°-90°	72.8	1.1
90°-100°	48.6	0.7
100°-110°	144.1	2.2
110°-120°	244.6	3.7
120°-130°	322.5	4.8
130°-140°	362.2	5.4
140°-150°	355.9	5.3
150°-160°	299.3	4.5
160°-170°	199.1	3.0
170°-180°	69.7	1.0
0°-30°	1458.3	21.9
0°-40°	2342.7	35.2
0°-60°	3805.5	57.2
0°-90°	4606.5	69.2
90°-120°	437.3	6.6
90°-150°	1477.8	22.2
90°-180°	2046.0	30.8
0°-180°	6652.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1669	1669	1669	1669	1669	
5°	1958	1667	1471	1667	1958	199
15°	2689	1593	1179	1593	2689	760
25°	2855	1456	958	1456	2855	1259
35°	1688	1264	849	1264	1688	1072
45°	947	1009	759	1009	947	746
55°	619	711	662	711	619	560
65°	398	442	530	442	398	394
75°	199	215	328	215	199	212
85°	42	43	102	43	42	51
90°	17	2	17	2	17	10
95°	45	34	45	34	45	47
105°	139	133	139	133	139	147
115°	246	249	246	249	246	244
125°	359	362	359	362	359	321
135°	468	467	468	467	468	361
145°	568	568	568	568	568	355
155°	650	650	650	650	650	299
165°	706	708	706	708	706	199
175°	733	736	733	736	733	70
180°	738	738	738	738	738	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1776.1	1775.6	1770.0	1768.9	1765.0	1760.1	1759.0	1750.1	1732.4	1724.1	1721.9
5°	1957.8	1971.6	1953.6	1950.2	1948.1	1925.3	1913.5	1899.7	1867.9	1849.2	1834.7
7.5°	2174.6	2176.2	2168.4	2162.0	2144.4	2124.5	2094.7	2062.9	2025.0	1985.6	1955.8
10°	2317.3	2322.8	2313.8	2312.4	2277.2	2255.0	2210.8	2173.5	2130.6	2082.9	2039.4
12.5°	2467.7	2459.9	2455.4	2425.8	2419.3	2378.9	2327.5	2289.1	2223.0	2168.1	2110.1
15°	2689.2	2674.0	2664.3	2623.5	2603.5	2547.5	2492.8	2450.7	2364.3	2282.0	2219.8
17.5°	2819.1	2834.4	2812.0	2795.2	2743.4	2704.1	2648.3	2559.8	2492.2	2390.0	2311.5
20°	2913.2	2914.5	2902.1	2884.8	2844.0	2794.3	2733.4	2636.6	2555.8	2454.1	2346.3
22.5°	2938.6	2938.9	2933.6	2917.4	2886.6	2846.2	2784.9	2704.1	2606.1	2495.6	2387.8
25°	2855.1	2852.3	2858.6	2876.5	2864.8	2852.3	2817.1	2756.9	2665.7	2548.8	2432.7
27.5°	2544.8	2563.9	2599.0	2643.3	2685.9	2718.4	2727.5	2715.2	2658.6	2562.5	2440.9
30°	2321.4	2344.9	2371.2	2415.4	2501.1	2550.2	2604.2	2644.9	2622.1	2545.4	2432.0
32.5°	2075.9	2081.7	2120.7	2171.0	2249.5	2343.9	2429.4	2512.2	2539.7	2499.5	2404.9
35°	1688.2	1697.8	1740.0	1789.8	1885.9	2001.3	2129.9	2244.7	2339.4	2377.4	2329.0
37.5°	1377.6	1405.4	1435.2	1488.7	1573.3	1677.2	1810.8	1959.3	2100.5	2195.0	2211.1
40°	1230.5	1247.8	1269.2	1310.0	1381.9	1484.2	1599.0	1769.1	1919.1	2054.6	2098.8
42.5°	1114.4	1124.5	1137.6	1174.5	1229.3	1331.0	1435.8	1585.4	1736.0	1898.0	1972.2
45°	947.1	957.5	979.6	1001.0	1042.5	1113.0	1210.5	1333.5	1484.9	1641.2	1778.0
47.5°	826.2	832.9	846.0	869.0	904.2	950.7	1030.0	1132.8	1273.1	1424.8	1570.6
50°	757.7	763.2	773.6	794.3	821.3	862.7	927.7	1023.8	1133.7	1286.5	1429.6
52.5°	703.5	705.7	713.3	727.4	748.8	783.7	837.0	916.5	1018.7	1154.9	1297.4
55°	619.4	622.2	629.1	639.5	658.1	680.2	721.0	780.5	869.7	987.9	1111.6
57.5°	550.3	552.2	558.0	562.0	577.4	595.4	626.7	669.2	736.8	837.0	947.5
60°	506.0	504.7	511.6	515.0	525.4	540.6	564.8	605.6	664.3	745.2	846.8
62.5°	462.9	461.0	466.8	471.3	477.3	490.3	510.0	542.0	589.7	662.8	750.6
65°	398.2	395.4	398.9	404.4	409.9	416.9	431.4	459.7	497.7	550.3	617.3
67.5°	333.2	336.1	336.7	339.4	342.6	352.0	362.0	382.0	408.8	450.9	507.7
70°	294.5	295.2	298.0	298.0	300.0	308.3	316.6	328.4	354.6	393.4	439.7
72.5°	255.8	258.7	257.6	259.8	261.3	266.8	272.9	284.1	306.5	335.3	374.4
75°	199.1	201.2	201.2	201.9	203.9	206.0	210.8	219.1	235.0	256.5	283.4
77.5°	145.2	145.5	146.4	148.9	148.9	152.2	155.8	162.5	170.3	185.0	201.4
80°	112.0	113.4	112.7	114.1	114.1	116.8	118.2	126.5	130.0	139.6	152.8
82.5°	82.1	83.5	83.4	85.3	86.4	87.0	88.9	92.2	95.7	104.2	109.6
85°	41.5	42.9	41.5	42.9	44.9	45.6	47.7	48.4	51.2	53.2	58.1
87.5°	15.6	17.2	17.1	17.6	18.7	19.2	19.6	18.9	20.9	21.3	23.3
90°	17.1	16.9	16.6	16.4	16.1	15.6	14.8	14.1	13.3	12.5	11.5
92.5°	25.3	25.2	25.0	24.9	24.7	24.4	24.0	23.5	23.0	22.6	21.9
95°	45.1	45.1	45.1	45.1	45.1	44.9	44.5	44.1	43.7	43.3	42.5
97.5°	70.6	70.6	70.6	70.6	70.6	70.4	69.9	69.5	69.0	68.6	67.5
100°	88.4	88.4	88.4	88.4	88.4	88.3	88.0	87.8	87.5	87.3	86.1
102.5°	108.5	108.4	108.3	108.2	108.1	107.8	107.5	107.1	106.8	106.4	105.4
105°	139.2	138.8	138.4	138.0	137.6	137.3	136.9	136.5	136.1	135.7	135.2
107.5°	169.1	169.1	169.1	169.1	169.2	169.0	168.6	168.3	167.9	167.6	167.5
110°	190.5	190.1	189.7	189.4	189.0	188.9	189.2	189.4	189.7	189.9	190.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	212.4	212.3	212.2	212.2	212.1	212.1	212.1	212.2	212.2	212.3	212.5
115°	246.4	246.5	246.6	246.8	246.9	247.0	247.2	247.3	247.4	247.5	247.8
117.5°	278.8	279.0	279.3	279.5	279.8	280.1	280.6	281.0	281.4	281.9	282.0
120°	303.4	303.2	302.9	302.7	302.4	302.6	303.2	303.9	304.5	305.1	305.5
122.5°	324.0	324.4	324.9	325.3	325.8	326.2	326.7	327.1	327.5	328.0	328.1
125°	359.3	359.6	359.8	360.1	360.3	360.6	360.8	361.1	361.3	361.6	361.7
127.5°	392.1	392.3	392.5	392.7	392.9	393.1	393.4	393.6	393.9	394.1	394.3
130°	413.5	414.0	414.5	415.0	415.5	415.9	416.2	416.4	416.7	416.9	416.9
132.5°	436.3	436.5	436.7	436.9	437.1	437.4	437.6	437.9	438.1	438.4	438.5
135°	467.7	468.1	468.4	468.8	469.2	469.5	469.8	470.0	470.3	470.5	470.5
137.5°	500.7	500.6	500.5	500.4	500.3	500.5	500.8	501.1	501.5	501.8	501.6
140°	520.7	520.9	521.0	521.1	521.2	521.4	521.5	521.6	521.7	521.9	521.9
142.5°	540.8	540.8	540.9	540.9	540.9	540.9	541.0	541.0	541.0	541.0	541.1
145°	568.1	568.4	568.8	569.2	569.6	569.8	570.0	570.1	570.2	570.3	570.2
147.5°	595.7	595.8	595.9	596.1	596.2	596.3	596.4	596.5	596.6	596.7	596.8
150°	612.6	612.7	612.8	612.9	613.1	613.1	613.1	613.1	613.1	613.1	613.1
152.5°	628.1	628.4	628.7	629.1	629.4	629.4	629.1	628.8	628.5	628.2	628.1
155°	649.6	650.1	650.6	651.1	651.7	651.7	651.1	650.6	650.1	649.6	649.8
157.5°	668.9	669.3	669.8	670.2	670.6	670.7	670.3	669.9	669.5	669.1	669.2
160°	679.9	680.5	681.1	681.8	682.4	682.5	682.1	681.8	681.4	681.0	681.1
162.5°	691.3	691.9	692.5	693.2	693.8	693.8	693.1	692.4	691.7	691.0	691.2
165°	706.1	706.6	707.1	707.6	708.1	708.0	707.2	706.5	705.7	705.0	705.2
167.5°	716.7	717.5	718.3	719.1	719.8	719.9	719.1	718.3	717.6	716.8	716.8
170°	722.6	723.5	724.4	725.3	726.2	726.2	725.5	724.7	724.0	723.2	723.1
172.5°	727.7	728.5	729.4	730.3	731.2	731.2	730.4	729.5	728.6	727.8	727.7
175°	732.9	733.8	734.7	735.6	736.4	736.4	735.6	734.7	733.8	732.9	733.0
177.5°	735.6	736.4	737.3	738.1	738.9	738.9	738.2	737.5	736.8	736.1	736.1
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1722.5	1714.7	1709.2	1704.8	1692.6	1685.4	1679.9	1672.1	1663.3	1653.9	1642.3
5°	1820.2	1796.7	1779.4	1753.2	1728.3	1707.5	1686.1	1666.7	1643.2	1617.7	1599.0
7.5°	1922.9	1888.0	1843.2	1804.3	1760.6	1722.6	1688.6	1653.7	1617.5	1582.4	1550.2
10°	1988.2	1943.3	1893.5	1834.7	1779.4	1730.3	1684.7	1640.5	1597.6	1554.7	1518.1
12.5°	2058.4	2002.4	1928.9	1860.2	1798.2	1732.6	1677.5	1623.3	1571.6	1526.5	1483.8
15°	2152.7	2071.8	1986.8	1894.9	1813.3	1736.6	1661.2	1592.8	1534.7	1475.2	1433.8
17.5°	2210.7	2110.6	2013.4	1917.3	1818.5	1721.8	1640.5	1561.5	1488.8	1429.8	1377.5
20°	2248.8	2149.3	2028.3	1932.2	1814.7	1715.1	1621.1	1533.3	1457.3	1394.4	1340.4
22.5°	2282.0	2167.0	2046.0	1919.5	1802.5	1696.9	1594.0	1505.7	1428.0	1361.7	1310.0
25°	2300.0	2167.9	2036.6	1910.8	1778.0	1652.9	1559.6	1455.9	1372.9	1303.1	1247.8
27.5°	2301.9	2160.7	2012.1	1872.3	1735.3	1618.8	1501.0	1408.3	1322.2	1248.4	1195.3
30°	2295.8	2148.6	1988.9	1837.5	1699.9	1573.4	1471.1	1370.2	1282.4	1209.1	1153.8
32.5°	2276.5	2123.1	1959.0	1798.8	1656.2	1532.5	1426.9	1330.9	1245.3	1173.1	1115.1
35°	2220.5	2069.1	1894.2	1727.6	1581.7	1456.6	1361.2	1263.7	1178.0	1109.5	1053.6
37.5°	2133.0	1996.1	1818.3	1645.9	1502.6	1376.9	1282.4	1194.3	1117.0	1047.5	990.1
40°	2056.6	1936.3	1758.0	1590.0	1435.2	1315.6	1227.1	1146.2	1069.5	1003.8	949.2
42.5°	1968.7	1863.9	1699.4	1521.4	1372.1	1252.0	1165.7	1093.1	1020.8	960.1	905.5
45°	1811.9	1742.8	1587.9	1423.4	1267.9	1154.5	1072.2	1008.6	947.8	888.3	842.7
47.5°	1631.6	1597.3	1467.0	1310.7	1163.1	1051.3	980.0	921.2	867.9	817.5	777.3
50°	1510.5	1493.9	1381.2	1230.5	1089.5	984.4	912.5	862.1	816.4	772.2	734.2
52.5°	1391.0	1390.5	1288.9	1150.9	1020.4	919.2	847.8	800.7	761.1	725.2	691.0
55°	1208.4	1227.8	1148.3	1025.2	908.4	817.1	752.8	710.7	683.0	653.3	627.7
57.5°	1040.7	1072.8	1007.2	898.8	801.4	717.3	661.3	629.6	600.2	582.2	563.6
60°	931.2	961.6	910.5	819.2	727.3	655.4	602.1	573.8	548.2	535.8	522.6
62.5°	833.9	861.0	823.1	738.5	658.7	589.5	544.6	517.4	500.1	486.5	477.8
65°	694.8	717.6	685.1	623.6	555.1	499.8	463.2	441.7	425.2	419.6	409.9
67.5°	561.6	582.4	564.8	512.5	457.6	415.8	387.1	366.5	356.7	351.9	345.0
70°	482.5	503.3	484.6	439.0	396.8	361.6	334.6	322.8	312.5	310.4	300.7
72.5°	415.6	429.7	411.1	375.4	339.3	309.6	288.7	276.4	271.0	267.3	262.0
75°	311.8	324.2	311.8	284.1	258.5	237.8	219.8	215.0	208.8	206.7	203.2
77.5°	220.7	231.4	221.9	204.6	185.5	169.5	159.8	153.6	152.2	148.6	150.3
80°	168.7	175.6	166.6	154.9	139.6	128.6	121.7	118.2	114.1	112.7	115.4
82.5°	121.1	124.2	119.6	111.7	100.4	93.2	88.5	84.5	83.6	83.9	83.9
85°	62.9	62.2	61.5	54.6	51.2	46.3	43.6	42.9	42.2	43.6	44.9
87.5°	23.1	23.5	22.7	20.3	18.3	16.4	15.6	14.7	15.6	16.4	17.2
90°	10.5	9.5	8.5	7.3	5.9	4.5	3.1	1.7	3.1	4.5	5.9
92.5°	21.2	20.5	19.7	18.6	17.0	15.4	13.8	12.2	13.8	15.4	17.0
95°	41.6	40.7	39.8	38.8	37.6	36.5	35.4	34.2	35.4	36.5	37.6
97.5°	66.5	65.4	64.4	63.4	62.5	61.6	60.7	59.8	60.7	61.6	62.5
100°	85.0	83.8	82.7	81.9	81.4	80.9	80.4	79.8	80.4	80.9	81.4
102.5°	104.3	103.3	102.3	101.6	101.4	101.2	101.0	100.8	101.0	101.2	101.4
105°	134.7	134.2	133.7	133.4	133.3	133.1	133.0	132.9	133.0	133.1	133.3
107.5°	167.4	167.3	167.3	167.2	167.0	166.8	166.7	166.5	166.7	166.8	167.0
110°	190.2	190.3	190.4	190.4	190.1	189.9	189.6	189.4	189.6	189.9	190.1



TEST NUMBER: P332635

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	212.7	213.0	213.2	213.3	213.2	213.2	213.1	213.1	213.1	213.2	213.2
115°	248.0	248.3	248.5	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7
117.5°	282.2	282.4	282.6	282.6	282.5	282.4	282.3	282.2	282.3	282.4	282.5
120°	305.9	306.3	306.7	306.6	306.1	305.6	305.1	304.6	305.1	305.6	306.1
122.5°	328.3	328.5	328.7	328.6	328.4	328.2	328.0	327.8	328.0	328.2	328.4
125°	361.9	362.0	362.1	362.2	362.2	362.2	362.2	362.2	362.2	362.2	362.2
127.5°	394.5	394.7	394.9	394.8	394.5	394.1	393.7	393.3	393.7	394.1	394.5
130°	416.9	416.9	416.9	416.7	416.4	416.0	415.6	415.2	415.6	416.0	416.4
132.5°	438.6	438.7	438.8	438.7	438.4	438.1	437.9	437.6	437.9	438.1	438.4
135°	470.5	470.5	470.5	470.2	469.4	468.6	467.9	467.1	467.9	468.6	469.4
137.5°	501.4	501.2	501.0	500.7	500.3	500.0	499.6	499.3	499.6	500.0	500.3
140°	521.9	521.9	521.9	521.7	521.5	521.2	521.0	520.7	521.0	521.2	521.5
142.5°	541.2	541.3	541.4	541.4	541.1	540.9	540.6	540.3	540.6	540.9	541.1
145°	570.1	570.0	569.8	569.5	569.0	568.5	568.0	567.5	568.0	568.5	569.0
147.5°	596.9	597.0	597.1	596.9	596.2	595.6	595.0	594.4	595.0	595.6	596.2
150°	613.1	613.1	613.1	612.9	612.4	611.9	611.4	610.8	611.4	611.9	612.4
152.5°	628.0	627.9	627.8	627.6	627.3	627.0	626.7	626.4	626.7	627.0	627.3
155°	649.9	650.0	650.1	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2
157.5°	669.2	669.2	669.2	669.4	669.6	669.8	670.0	670.3	670.0	669.8	669.6
160°	681.3	681.4	681.5	681.6	681.8	681.9	682.0	682.1	682.0	681.9	681.8
162.5°	691.3	691.4	691.5	691.8	692.1	692.4	692.8	693.1	692.8	692.4	692.1
165°	705.5	705.7	706.0	706.3	706.7	707.0	707.4	707.8	707.4	707.0	706.7
167.5°	716.8	716.7	716.7	717.0	717.5	718.0	718.6	719.1	718.6	718.0	717.5
170°	722.9	722.8	722.7	722.9	723.6	724.2	724.9	725.5	724.9	724.2	723.6
172.5°	727.7	727.7	727.7	727.9	728.5	729.0	729.5	730.0	729.5	729.0	728.5
175°	733.2	733.3	733.4	733.8	734.4	735.1	735.7	736.3	735.7	735.1	734.4
177.5°	736.1	736.1	736.1	736.3	736.9	737.4	737.9	738.4	737.9	737.4	736.9
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5



TEST NUMBER: P332635

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1636.7	1631.8	1624.6	1614.6	1606.3	1597.5	1595.3	1591.9	1598.6	1593.0	1591.4
5°	1583.1	1568.6	1549.9	1528.5	1516.0	1498.1	1494.6	1487.7	1480.8	1480.1	1473.2
7.5°	1526.3	1505.0	1480.5	1458.7	1438.5	1418.8	1406.0	1403.2	1393.0	1387.0	1380.1
10°	1489.8	1463.5	1435.2	1414.4	1390.9	1370.2	1355.7	1347.4	1340.4	1332.8	1325.9
12.5°	1446.6	1418.7	1395.3	1372.9	1345.0	1329.2	1305.3	1290.9	1289.6	1289.7	1271.7
15°	1396.4	1368.8	1332.8	1301.0	1285.8	1255.4	1242.3	1225.7	1215.3	1204.9	1196.7
17.5°	1339.1	1304.6	1276.6	1240.1	1211.0	1186.8	1169.6	1159.6	1144.0	1129.3	1118.7
20°	1303.1	1266.5	1236.7	1198.0	1166.2	1136.5	1122.0	1108.2	1096.4	1084.0	1072.2
22.5°	1266.6	1228.3	1191.9	1154.3	1124.8	1093.4	1079.4	1060.6	1049.4	1042.5	1030.7
25°	1209.1	1167.6	1126.1	1090.2	1059.8	1032.1	1013.5	998.9	986.5	981.0	973.4
27.5°	1146.6	1105.4	1065.3	1024.5	990.0	969.9	955.0	944.0	936.9	929.5	926.1
30°	1106.8	1063.9	1021.1	983.0	951.2	931.2	917.4	909.8	904.2	900.8	897.3
32.5°	1066.4	1024.1	979.0	944.3	915.8	898.0	887.5	879.9	877.1	875.9	874.6
35°	1001.7	958.8	917.4	886.3	859.3	852.4	843.4	839.2	837.9	842.7	844.8
37.5°	939.1	899.3	861.1	830.9	813.3	803.2	800.1	800.3	805.2	809.5	814.5
40°	898.7	860.0	824.0	797.8	781.2	775.0	773.6	777.0	782.6	787.4	792.9
42.5°	859.4	821.3	788.6	764.0	752.4	746.7	747.6	751.0	758.8	764.7	773.0
45°	798.5	766.7	734.9	714.8	705.1	706.5	706.5	712.7	720.3	729.3	738.3
47.5°	741.1	709.0	682.9	666.0	661.0	659.8	663.7	671.8	682.7	693.8	706.4
50°	702.4	671.9	649.1	633.9	628.4	630.5	636.0	643.6	656.7	670.6	683.7
52.5°	663.1	635.4	614.3	600.2	596.3	600.1	605.6	617.6	629.1	644.0	659.9
55°	602.1	578.6	562.0	551.7	550.3	552.4	558.6	571.7	588.3	607.0	622.2
57.5°	541.4	521.8	506.6	499.4	500.1	502.0	512.3	527.9	545.6	565.5	585.1
60°	500.5	482.5	470.1	464.6	465.2	469.4	481.8	496.4	518.5	537.8	558.6
62.5°	461.8	446.0	434.1	429.2	428.2	437.3	449.2	464.3	486.4	508.0	530.4
65°	399.6	387.1	377.5	374.7	376.8	383.7	398.9	418.9	437.6	460.4	483.9
67.5°	338.7	328.5	321.9	323.1	325.6	335.8	348.6	365.8	387.0	410.6	433.9
70°	300.0	290.3	284.8	285.5	289.7	302.1	313.2	330.4	353.3	377.5	396.8
72.5°	260.2	253.8	248.9	251.8	255.9	264.5	278.3	295.6	315.7	338.2	358.6
75°	199.8	199.8	197.0	199.1	205.3	213.6	224.0	242.0	262.0	280.0	296.6
77.5°	148.2	146.7	148.5	151.0	154.6	164.4	176.3	189.1	204.2	222.2	235.9
80°	113.4	114.1	117.5	121.7	123.1	130.7	143.1	154.9	166.6	181.8	194.9
82.5°	85.2	85.9	87.7	92.9	94.3	102.5	110.5	122.2	132.9	143.1	154.0
85°	46.3	46.3	49.8	51.8	55.3	60.8	65.7	72.6	82.3	89.2	99.5
87.5°	19.2	19.4	21.8	23.1	25.0	27.9	29.2	35.4	37.8	40.7	45.8
90°	7.3	8.5	9.5	10.5	11.5	12.5	13.3	14.1	14.8	15.6	16.1
92.5°	18.6	19.7	20.5	21.2	21.9	22.6	23.0	23.5	24.0	24.4	24.7
95°	38.8	39.8	40.7	41.6	42.5	43.3	43.7	44.1	44.5	44.9	45.1
97.5°	63.4	64.4	65.4	66.5	67.5	68.6	69.0	69.5	69.9	70.4	70.6
100°	81.9	82.7	83.8	85.0	86.1	87.3	87.5	87.8	88.0	88.3	88.4
102.5°	101.6	102.3	103.3	104.3	105.4	106.4	106.8	107.1	107.5	107.8	108.1
105°	133.4	133.7	134.2	134.7	135.2	135.7	136.1	136.5	136.9	137.3	137.6
107.5°	167.2	167.3	167.3	167.4	167.5	167.6	167.9	168.3	168.6	169.0	169.2
110°	190.4	190.4	190.3	190.2	190.1	189.9	189.7	189.4	189.2	188.9	189.0



TEST NUMBER: P332635

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	213.3	213.2	213.0	212.7	212.5	212.3	212.2	212.2	212.1	212.1	212.1
115°	248.7	248.5	248.3	248.0	247.8	247.5	247.4	247.3	247.2	247.0	246.9
117.5°	282.6	282.6	282.4	282.2	282.0	281.9	281.4	281.0	280.6	280.1	279.8
120°	306.6	306.7	306.3	305.9	305.5	305.1	304.5	303.9	303.2	302.6	302.4
122.5°	328.6	328.7	328.5	328.3	328.1	328.0	327.5	327.1	326.7	326.2	325.8
125°	362.2	362.1	362.0	361.9	361.7	361.6	361.3	361.1	360.8	360.6	360.3
127.5°	394.8	394.9	394.7	394.5	394.3	394.1	393.9	393.6	393.4	393.1	392.9
130°	416.7	416.9	416.9	416.9	416.9	416.9	416.7	416.4	416.2	415.9	415.5
132.5°	438.7	438.8	438.7	438.6	438.5	438.4	438.1	437.9	437.6	437.4	437.1
135°	470.2	470.5	470.5	470.5	470.5	470.5	470.3	470.0	469.8	469.5	469.2
137.5°	500.7	501.0	501.2	501.4	501.6	501.8	501.5	501.1	500.8	500.5	500.3
140°	521.7	521.9	521.9	521.9	521.9	521.9	521.7	521.6	521.5	521.4	521.2
142.5°	541.4	541.4	541.3	541.2	541.1	541.0	541.0	541.0	541.0	540.9	540.9
145°	569.5	569.8	570.0	570.1	570.2	570.3	570.2	570.1	570.0	569.8	569.6
147.5°	596.9	597.1	597.0	596.9	596.8	596.7	596.6	596.5	596.4	596.3	596.2
150°	612.9	613.1	613.1	613.1	613.1	613.1	613.1	613.1	613.1	613.1	613.1
152.5°	627.6	627.8	627.9	628.0	628.1	628.2	628.5	628.8	629.1	629.4	629.4
155°	650.2	650.1	650.0	649.9	649.8	649.6	650.1	650.6	651.1	651.7	651.7
157.5°	669.4	669.2	669.2	669.2	669.2	669.1	669.5	669.9	670.3	670.7	670.6
160°	681.6	681.5	681.4	681.3	681.1	681.0	681.4	681.8	682.1	682.5	682.4
162.5°	691.8	691.5	691.4	691.3	691.2	691.0	691.7	692.4	693.1	693.8	693.8
165°	706.3	706.0	705.7	705.5	705.2	705.0	705.7	706.5	707.2	708.0	708.1
167.5°	717.0	716.7	716.7	716.8	716.8	716.8	717.6	718.3	719.1	719.9	719.8
170°	722.9	722.7	722.8	722.9	723.1	723.2	724.0	724.7	725.5	726.2	726.2
172.5°	727.9	727.7	727.7	727.7	727.7	727.8	728.6	729.5	730.4	731.2	731.2
175°	733.8	733.4	733.3	733.2	733.0	732.9	733.8	734.7	735.6	736.4	736.4
177.5°	736.3	736.1	736.1	736.1	736.1	736.1	736.8	737.5	738.2	738.9	738.9
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5



TEST NUMBER: P332635

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1590.3	1589.2	1585.3	1584.8	1585.3	1589.2	1590.3	1591.4	1593.0	1598.6	1591.9
5°	1469.0	1465.6	1463.5	1471.1	1463.5	1465.6	1469.0	1473.2	1480.1	1480.8	1487.7
7.5°	1377.6	1374.9	1368.8	1366.9	1368.8	1374.9	1377.6	1380.1	1387.0	1393.0	1403.2
10°	1319.0	1316.2	1310.7	1309.3	1310.7	1316.2	1319.0	1325.9	1332.8	1340.4	1347.4
12.5°	1262.6	1257.1	1256.0	1257.3	1256.0	1257.1	1262.6	1271.7	1289.7	1289.6	1290.9
15°	1187.7	1184.9	1177.3	1179.4	1177.3	1184.9	1187.7	1196.7	1204.9	1215.3	1225.7
17.5°	1113.8	1110.5	1101.3	1109.4	1101.3	1110.5	1113.8	1118.7	1129.3	1144.0	1159.6
20°	1067.4	1061.8	1057.0	1056.3	1057.0	1061.8	1067.4	1072.2	1084.0	1096.4	1108.2
22.5°	1023.1	1018.2	1017.7	1013.2	1017.7	1018.2	1023.1	1030.7	1042.5	1049.4	1060.6
25°	967.8	963.0	961.6	958.2	961.6	963.0	967.8	973.4	981.0	986.5	998.9
27.5°	925.4	923.0	920.5	921.6	920.5	923.0	925.4	926.1	929.5	936.9	944.0
30°	899.4	898.7	897.3	897.3	897.3	898.7	899.4	897.3	900.8	904.2	909.8
32.5°	877.8	877.7	878.5	878.5	878.5	877.7	877.8	874.6	875.9	877.1	879.9
35°	847.5	849.6	851.0	848.9	851.0	849.6	847.5	844.8	842.7	837.9	839.2
37.5°	820.2	822.2	824.2	826.5	824.2	822.2	820.2	814.5	809.5	805.2	800.3
40°	799.1	804.0	805.4	808.8	805.4	804.0	799.1	792.9	787.4	782.6	777.0
42.5°	779.2	784.6	788.2	788.9	788.2	784.6	779.2	773.0	764.7	758.8	751.0
45°	748.7	754.2	759.1	759.1	759.1	754.2	748.7	738.3	729.3	720.3	712.7
47.5°	717.0	725.0	729.9	731.1	729.9	725.0	717.0	706.4	693.8	682.7	671.8
50°	695.5	705.1	710.0	713.4	710.0	705.1	695.5	683.7	670.6	656.7	643.6
52.5°	674.4	684.1	690.6	692.4	690.6	684.1	674.4	659.9	644.0	629.1	617.6
55°	638.1	651.9	659.5	662.3	659.5	651.9	638.1	622.2	607.0	588.3	571.7
57.5°	603.8	616.5	625.4	627.4	625.4	616.5	603.8	585.1	565.5	545.6	527.9
60°	577.2	591.1	602.1	604.2	602.1	591.1	577.2	558.6	537.8	518.5	496.4
62.5°	550.1	564.5	574.5	579.9	574.5	564.5	550.1	530.4	508.0	486.4	464.3
65°	503.3	517.8	527.5	529.5	527.5	517.8	503.3	483.9	460.4	437.6	418.9
67.5°	452.1	466.6	473.0	477.0	473.0	466.6	452.1	433.9	410.6	387.0	365.8
70°	416.2	427.9	434.8	438.3	434.8	427.9	416.2	396.8	377.5	353.3	330.4
72.5°	375.2	387.5	395.6	396.3	395.6	387.5	375.2	358.6	338.2	315.7	295.6
75°	312.5	323.5	327.7	327.7	327.7	323.5	312.5	296.6	280.0	262.0	242.0
77.5°	247.3	253.0	258.3	259.4	258.3	253.0	247.3	235.9	222.2	204.2	189.1
80°	205.3	208.8	212.9	212.9	212.9	208.8	205.3	194.9	181.8	166.6	154.9
82.5°	162.2	165.1	169.2	168.7	169.2	165.1	162.2	154.0	143.1	132.9	122.2
85°	98.2	104.4	103.7	102.3	103.7	104.4	98.2	99.5	89.2	82.3	72.6
87.5°	47.5	48.1	49.8	51.0	49.8	48.1	47.5	45.8	40.7	37.8	35.4
90°	16.4	16.6	16.9	17.1	16.9	16.6	16.4	16.1	15.6	14.8	14.1
92.5°	24.9	25.0	25.2	25.3	25.2	25.0	24.9	24.7	24.4	24.0	23.5
95°	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	44.9	44.5	44.1
97.5°	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.4	69.9	69.5
100°	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.3	88.0	87.8
102.5°	108.2	108.3	108.4	108.5	108.4	108.3	108.2	108.1	107.8	107.5	107.1
105°	138.0	138.4	138.8	139.2	138.8	138.4	138.0	137.6	137.3	136.9	136.5
107.5°	169.1	169.1	169.1	169.1	169.1	169.1	169.1	169.2	169.0	168.6	168.3
110°	189.4	189.7	190.1	190.5	190.1	189.7	189.4	189.0	188.9	189.2	189.4



TEST NUMBER: P332635

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	212.2	212.2	212.3	212.4	212.3	212.2	212.2	212.1	212.1	212.1	212.2
115°	246.8	246.6	246.5	246.4	246.5	246.6	246.8	246.9	247.0	247.2	247.3
117.5°	279.5	279.3	279.0	278.8	279.0	279.3	279.5	279.8	280.1	280.6	281.0
120°	302.7	302.9	303.2	303.4	303.2	302.9	302.7	302.4	302.6	303.2	303.9
122.5°	325.3	324.9	324.4	324.0	324.4	324.9	325.3	325.8	326.2	326.7	327.1
125°	360.1	359.8	359.6	359.3	359.6	359.8	360.1	360.3	360.6	360.8	361.1
127.5°	392.7	392.5	392.3	392.1	392.3	392.5	392.7	392.9	393.1	393.4	393.6
130°	415.0	414.5	414.0	413.5	414.0	414.5	415.0	415.5	415.9	416.2	416.4
132.5°	436.9	436.7	436.5	436.3	436.5	436.7	436.9	437.1	437.4	437.6	437.9
135°	468.8	468.4	468.1	467.7	468.1	468.4	468.8	469.2	469.5	469.8	470.0
137.5°	500.4	500.5	500.6	500.7	500.6	500.5	500.4	500.3	500.5	500.8	501.1
140°	521.1	521.0	520.9	520.7	520.9	521.0	521.1	521.2	521.4	521.5	521.6
142.5°	540.9	540.9	540.8	540.8	540.8	540.9	540.9	540.9	540.9	541.0	541.0
145°	569.2	568.8	568.4	568.1	568.4	568.8	569.2	569.6	569.8	570.0	570.1
147.5°	596.1	595.9	595.8	595.7	595.8	595.9	596.1	596.2	596.3	596.4	596.5
150°	612.9	612.8	612.7	612.6	612.7	612.8	612.9	613.1	613.1	613.1	613.1
152.5°	629.1	628.7	628.4	628.1	628.4	628.7	629.1	629.4	629.4	629.1	628.8
155°	651.1	650.6	650.1	649.6	650.1	650.6	651.1	651.7	651.7	651.1	650.6
157.5°	670.2	669.8	669.3	668.9	669.3	669.8	670.2	670.6	670.7	670.3	669.9
160°	681.8	681.1	680.5	679.9	680.5	681.1	681.8	682.4	682.5	682.1	681.8
162.5°	693.2	692.5	691.9	691.3	691.9	692.5	693.2	693.8	693.8	693.1	692.4
165°	707.6	707.1	706.6	706.1	706.6	707.1	707.6	708.1	708.0	707.2	706.5
167.5°	719.1	718.3	717.5	716.7	717.5	718.3	719.1	719.8	719.9	719.1	718.3
170°	725.3	724.4	723.5	722.6	723.5	724.4	725.3	726.2	726.2	725.5	724.7
172.5°	730.3	729.4	728.5	727.7	728.5	729.4	730.3	731.2	731.2	730.4	729.5
175°	735.6	734.7	733.8	732.9	733.8	734.7	735.6	736.4	736.4	735.6	734.7
177.5°	738.1	737.3	736.4	735.6	736.4	737.3	738.1	738.9	738.9	738.2	737.5
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5



TEST NUMBER: P332635

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1595.3	1597.5	1606.3	1614.6	1624.6	1631.8	1636.7	1642.3	1653.9	1663.3	1672.1
5°	1494.6	1498.1	1516.0	1528.5	1549.9	1568.6	1583.1	1599.0	1617.7	1643.2	1666.7
7.5°	1406.0	1418.8	1438.5	1458.7	1480.5	1505.0	1526.3	1550.2	1582.4	1617.5	1653.7
10°	1355.7	1370.2	1390.9	1414.4	1435.2	1463.5	1489.8	1518.1	1554.7	1597.6	1640.5
12.5°	1305.3	1329.2	1345.0	1372.9	1395.3	1418.7	1446.6	1483.8	1526.5	1571.6	1623.3
15°	1242.3	1255.4	1285.8	1301.0	1332.8	1368.8	1396.4	1433.8	1475.2	1534.7	1592.8
17.5°	1169.6	1186.8	1211.0	1240.1	1276.6	1304.6	1339.1	1377.5	1429.8	1488.8	1561.5
20°	1122.0	1136.5	1166.2	1198.0	1236.7	1266.5	1303.1	1340.4	1394.4	1457.3	1533.3
22.5°	1079.4	1093.4	1124.8	1154.3	1191.9	1228.3	1266.6	1310.0	1361.7	1428.0	1505.7
25°	1013.5	1032.1	1059.8	1090.2	1126.1	1167.6	1209.1	1247.8	1303.1	1372.9	1455.9
27.5°	955.0	969.9	990.0	1024.5	1065.3	1105.4	1146.6	1195.3	1248.4	1322.2	1408.3
30°	917.4	931.2	951.2	983.0	1021.1	1063.9	1106.8	1153.8	1209.1	1282.4	1370.2
32.5°	887.5	898.0	915.8	944.3	979.0	1024.1	1066.4	1115.1	1173.1	1245.3	1330.9
35°	843.4	852.4	859.3	886.3	917.4	958.8	1001.7	1053.6	1109.5	1178.0	1263.7
37.5°	800.1	803.2	813.3	830.9	861.1	899.3	939.1	990.1	1047.5	1117.0	1194.3
40°	773.6	775.0	781.2	797.8	824.0	860.0	898.7	949.2	1003.8	1069.5	1146.2
42.5°	747.6	746.7	752.4	764.0	788.6	821.3	859.4	905.5	960.1	1020.8	1093.1
45°	706.5	706.5	705.1	714.8	734.9	766.7	798.5	842.7	888.3	947.8	1008.6
47.5°	663.7	659.8	661.0	666.0	682.9	709.0	741.1	777.3	817.5	867.9	921.2
50°	636.0	630.5	628.4	633.9	649.1	671.9	702.4	734.2	772.2	816.4	862.1
52.5°	605.6	600.1	596.3	600.2	614.3	635.4	663.1	691.0	725.2	761.1	800.7
55°	558.6	552.4	550.3	551.7	562.0	578.6	602.1	627.7	653.3	683.0	710.7
57.5°	512.3	502.0	500.1	499.4	506.6	521.8	541.4	563.6	582.2	600.2	629.6
60°	481.8	469.4	465.2	464.6	470.1	482.5	500.5	522.6	535.8	548.2	573.8
62.5°	449.2	437.3	428.2	429.2	434.1	446.0	461.8	477.8	486.5	500.1	517.4
65°	398.9	383.7	376.8	374.7	377.5	387.1	399.6	409.9	419.6	425.2	441.7
67.5°	348.6	335.8	325.6	323.1	321.9	328.5	338.7	345.0	351.9	356.7	366.5
70°	313.2	302.1	289.7	285.5	284.8	290.3	300.0	300.7	310.4	312.5	322.8
72.5°	278.3	264.5	255.9	251.8	248.9	253.8	260.2	262.0	267.3	271.0	276.4
75°	224.0	213.6	205.3	199.1	197.0	199.8	199.8	203.2	206.7	208.8	215.0
77.5°	176.3	164.4	154.6	151.0	148.5	146.7	148.2	150.3	148.6	152.2	153.6
80°	143.1	130.7	123.1	121.7	117.5	114.1	113.4	115.4	112.7	114.1	118.2
82.5°	110.5	102.5	94.3	92.9	87.7	85.9	85.2	83.9	83.9	83.6	84.5
85°	65.7	60.8	55.3	51.8	49.8	46.3	46.3	44.9	43.6	42.2	42.9
87.5°	29.2	27.9	25.0	23.1	21.8	19.4	19.2	17.2	16.4	15.6	14.7
90°	13.3	12.5	11.5	10.5	9.5	8.5	7.3	5.9	4.5	3.1	1.7
92.5°	23.0	22.6	21.9	21.2	20.5	19.7	18.6	17.0	15.4	13.8	12.2
95°	43.7	43.3	42.5	41.6	40.7	39.8	38.8	37.6	36.5	35.4	34.2
97.5°	69.0	68.6	67.5	66.5	65.4	64.4	63.4	62.5	61.6	60.7	59.8
100°	87.5	87.3	86.1	85.0	83.8	82.7	81.9	81.4	80.9	80.4	79.8
102.5°	106.8	106.4	105.4	104.3	103.3	102.3	101.6	101.4	101.2	101.0	100.8
105°	136.1	135.7	135.2	134.7	134.2	133.7	133.4	133.3	133.1	133.0	132.9
107.5°	167.9	167.6	167.5	167.4	167.3	167.3	167.2	167.0	166.8	166.7	166.5
110°	189.7	189.9	190.1	190.2	190.3	190.4	190.4	190.1	189.9	189.6	189.4



TEST NUMBER: P332635

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	212.2	212.3	212.5	212.7	213.0	213.2	213.3	213.2	213.2	213.1	213.1
115°	247.4	247.5	247.8	248.0	248.3	248.5	248.7	248.7	248.7	248.7	248.7
117.5°	281.4	281.9	282.0	282.2	282.4	282.6	282.6	282.5	282.4	282.3	282.2
120°	304.5	305.1	305.5	305.9	306.3	306.7	306.6	306.1	305.6	305.1	304.6
122.5°	327.5	328.0	328.1	328.3	328.5	328.7	328.6	328.4	328.2	328.0	327.8
125°	361.3	361.6	361.7	361.9	362.0	362.1	362.2	362.2	362.2	362.2	362.2
127.5°	393.9	394.1	394.3	394.5	394.7	394.9	394.8	394.5	394.1	393.7	393.3
130°	416.7	416.9	416.9	416.9	416.9	416.9	416.7	416.4	416.0	415.6	415.2
132.5°	438.1	438.4	438.5	438.6	438.7	438.8	438.7	438.4	438.1	437.9	437.6
135°	470.3	470.5	470.5	470.5	470.5	470.5	470.2	469.4	468.6	467.9	467.1
137.5°	501.5	501.8	501.6	501.4	501.2	501.0	500.7	500.3	500.0	499.6	499.3
140°	521.7	521.9	521.9	521.9	521.9	521.9	521.7	521.5	521.2	521.0	520.7
142.5°	541.0	541.0	541.1	541.2	541.3	541.4	541.4	541.1	540.9	540.6	540.3
145°	570.2	570.3	570.2	570.1	570.0	569.8	569.5	569.0	568.5	568.0	567.5
147.5°	596.6	596.7	596.8	596.9	597.0	597.1	596.9	596.2	595.6	595.0	594.4
150°	613.1	613.1	613.1	613.1	613.1	613.1	612.9	612.4	611.9	611.4	610.8
152.5°	628.5	628.2	628.1	628.0	627.9	627.8	627.6	627.3	627.0	626.7	626.4
155°	650.1	649.6	649.8	649.9	650.0	650.1	650.2	650.2	650.2	650.2	650.2
157.5°	669.5	669.1	669.2	669.2	669.2	669.2	669.4	669.6	669.8	670.0	670.3
160°	681.4	681.0	681.1	681.3	681.4	681.5	681.6	681.8	681.9	682.0	682.1
162.5°	691.7	691.0	691.2	691.3	691.4	691.5	691.8	692.1	692.4	692.8	693.1
165°	705.7	705.0	705.2	705.5	705.7	706.0	706.3	706.7	707.0	707.4	707.8
167.5°	717.6	716.8	716.8	716.8	716.7	716.7	717.0	717.5	718.0	718.6	719.1
170°	724.0	723.2	723.1	722.9	722.8	722.7	722.9	723.6	724.2	724.9	725.5
172.5°	728.6	727.8	727.7	727.7	727.7	727.7	727.9	728.5	729.0	729.5	730.0
175°	733.8	732.9	733.0	733.2	733.3	733.4	733.8	734.4	735.1	735.7	736.3
177.5°	736.8	736.1	736.1	736.1	736.1	736.1	736.3	736.9	737.4	737.9	738.4
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5



TEST NUMBER: P332635

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1679.9	1685.4	1692.6	1704.8	1709.2	1714.7	1722.5	1721.9	1724.1	1732.4	1750.1
5°	1686.1	1707.5	1728.3	1753.2	1779.4	1796.7	1820.2	1834.7	1849.2	1867.9	1899.7
7.5°	1688.6	1722.6	1760.6	1804.3	1843.2	1888.0	1922.9	1955.8	1985.6	2025.0	2062.9
10°	1684.7	1730.3	1779.4	1834.7	1893.5	1943.3	1988.2	2039.4	2082.9	2130.6	2173.5
12.5°	1677.5	1732.6	1798.2	1860.2	1928.9	2002.4	2058.4	2110.1	2168.1	2223.0	2289.1
15°	1661.2	1736.6	1813.3	1894.9	1986.8	2071.8	2152.7	2219.8	2282.0	2364.3	2450.7
17.5°	1640.5	1721.8	1818.5	1917.3	2013.4	2110.6	2210.7	2311.5	2390.0	2492.2	2559.8
20°	1621.1	1715.1	1814.7	1932.2	2028.3	2149.3	2248.8	2346.3	2454.1	2555.8	2636.6
22.5°	1594.0	1696.9	1802.5	1919.5	2046.0	2167.0	2282.0	2387.8	2495.6	2606.1	2704.1
25°	1559.6	1652.9	1778.0	1910.8	2036.6	2167.9	2300.0	2432.7	2548.8	2665.7	2756.9
27.5°	1501.0	1618.8	1735.3	1872.3	2012.1	2160.7	2301.9	2440.9	2562.5	2658.6	2715.2
30°	1471.1	1573.4	1699.9	1837.5	1988.9	2148.6	2295.8	2432.0	2545.4	2622.1	2644.9
32.5°	1426.9	1532.5	1656.2	1798.8	1959.0	2123.1	2276.5	2404.9	2499.5	2539.7	2512.2
35°	1361.2	1456.6	1581.7	1727.6	1894.2	2069.1	2220.5	2329.0	2377.4	2339.4	2244.7
37.5°	1282.4	1376.9	1502.6	1645.9	1818.3	1996.1	2133.0	2211.1	2195.0	2100.5	1959.3
40°	1227.1	1315.6	1435.2	1590.0	1758.0	1936.3	2056.6	2098.8	2054.6	1919.1	1769.1
42.5°	1165.7	1252.0	1372.1	1521.4	1699.4	1863.9	1968.7	1972.2	1898.0	1736.0	1585.4
45°	1072.2	1154.5	1267.9	1423.4	1587.9	1742.8	1811.9	1778.0	1641.2	1484.9	1333.5
47.5°	980.0	1051.3	1163.1	1310.7	1467.0	1597.3	1631.6	1570.6	1424.8	1273.1	1132.8
50°	912.5	984.4	1089.5	1230.5	1381.2	1493.9	1510.5	1429.6	1286.5	1133.7	1023.8
52.5°	847.8	919.2	1020.4	1150.9	1288.9	1390.5	1391.0	1297.4	1154.9	1018.7	916.5
55°	752.8	817.1	908.4	1025.2	1148.3	1227.8	1208.4	1111.6	987.9	869.7	780.5
57.5°	661.3	717.3	801.4	898.8	1007.2	1072.8	1040.7	947.5	837.0	736.8	669.2
60°	602.1	655.4	727.3	819.2	910.5	961.6	931.2	846.8	745.2	664.3	605.6
62.5°	544.6	589.5	658.7	738.5	823.1	861.0	833.9	750.6	662.8	589.7	542.0
65°	463.2	499.8	555.1	623.6	685.1	717.6	694.8	617.3	550.3	497.7	459.7
67.5°	387.1	415.8	457.6	512.5	564.8	582.4	561.6	507.7	450.9	408.8	382.0
70°	334.6	361.6	396.8	439.0	484.6	503.3	482.5	439.7	393.4	354.6	328.4
72.5°	288.7	309.6	339.3	375.4	411.1	429.7	415.6	374.4	335.3	306.5	284.1
75°	219.8	237.8	258.5	284.1	311.8	324.2	311.8	283.4	256.5	235.0	219.1
77.5°	159.8	169.5	185.5	204.6	221.9	231.4	220.7	201.4	185.0	170.3	162.5
80°	121.7	128.6	139.6	154.9	166.6	175.6	168.7	152.8	139.6	130.0	126.5
82.5°	88.5	93.2	100.4	111.7	119.6	124.2	121.1	109.6	104.2	95.7	92.2
85°	43.6	46.3	51.2	54.6	61.5	62.2	62.9	58.1	53.2	51.2	48.4
87.5°	15.6	16.4	18.3	20.3	22.7	23.5	23.1	23.3	21.3	20.9	18.9
90°	3.1	4.5	5.9	7.3	8.5	9.5	10.5	11.5	12.5	13.3	14.1
92.5°	13.8	15.4	17.0	18.6	19.7	20.5	21.2	21.9	22.6	23.0	23.5
95°	35.4	36.5	37.6	38.8	39.8	40.7	41.6	42.5	43.3	43.7	44.1
97.5°	60.7	61.6	62.5	63.4	64.4	65.4	66.5	67.5	68.6	69.0	69.5
100°	80.4	80.9	81.4	81.9	82.7	83.8	85.0	86.1	87.3	87.5	87.8
102.5°	101.0	101.2	101.4	101.6	102.3	103.3	104.3	105.4	106.4	106.8	107.1
105°	133.0	133.1	133.3	133.4	133.7	134.2	134.7	135.2	135.7	136.1	136.5
107.5°	166.7	166.8	167.0	167.2	167.3	167.3	167.4	167.5	167.6	167.9	168.3
110°	189.6	189.9	190.1	190.4	190.4	190.3	190.2	190.1	189.9	189.7	189.4



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	213.1	213.2	213.2	213.3	213.2	213.0	212.7	212.5	212.3	212.2	212.2
115°	248.7	248.7	248.7	248.7	248.5	248.3	248.0	247.8	247.5	247.4	247.3
117.5°	282.3	282.4	282.5	282.6	282.6	282.4	282.2	282.0	281.9	281.4	281.0
120°	305.1	305.6	306.1	306.6	306.7	306.3	305.9	305.5	305.1	304.5	303.9
122.5°	328.0	328.2	328.4	328.6	328.7	328.5	328.3	328.1	328.0	327.5	327.1
125°	362.2	362.2	362.2	362.2	362.1	362.0	361.9	361.7	361.6	361.3	361.1
127.5°	393.7	394.1	394.5	394.8	394.9	394.7	394.5	394.3	394.1	393.9	393.6
130°	415.6	416.0	416.4	416.7	416.9	416.9	416.9	416.9	416.9	416.7	416.4
132.5°	437.9	438.1	438.4	438.7	438.8	438.7	438.6	438.5	438.4	438.1	437.9
135°	467.9	468.6	469.4	470.2	470.5	470.5	470.5	470.5	470.5	470.3	470.0
137.5°	499.6	500.0	500.3	500.7	501.0	501.2	501.4	501.6	501.8	501.5	501.1
140°	521.0	521.2	521.5	521.7	521.9	521.9	521.9	521.9	521.9	521.7	521.6
142.5°	540.6	540.9	541.1	541.4	541.4	541.3	541.2	541.1	541.0	541.0	541.0
145°	568.0	568.5	569.0	569.5	569.8	570.0	570.1	570.2	570.3	570.2	570.1
147.5°	595.0	595.6	596.2	596.9	597.1	597.0	596.9	596.8	596.7	596.6	596.5
150°	611.4	611.9	612.4	612.9	613.1	613.1	613.1	613.1	613.1	613.1	613.1
152.5°	626.7	627.0	627.3	627.6	627.8	627.9	628.0	628.1	628.2	628.5	628.8
155°	650.2	650.2	650.2	650.2	650.1	650.0	649.9	649.8	649.6	650.1	650.6
157.5°	670.0	669.8	669.6	669.4	669.2	669.2	669.2	669.2	669.1	669.5	669.9
160°	682.0	681.9	681.8	681.6	681.5	681.4	681.3	681.1	681.0	681.4	681.8
162.5°	692.8	692.4	692.1	691.8	691.5	691.4	691.3	691.2	691.0	691.7	692.4
165°	707.4	707.0	706.7	706.3	706.0	705.7	705.5	705.2	705.0	705.7	706.5
167.5°	718.6	718.0	717.5	717.0	716.7	716.7	716.8	716.8	716.8	717.6	718.3
170°	724.9	724.2	723.6	722.9	722.7	722.8	722.9	723.1	723.2	724.0	724.7
172.5°	729.5	729.0	728.5	727.9	727.7	727.7	727.7	727.7	727.8	728.6	729.5
175°	735.7	735.1	734.4	733.8	733.4	733.3	733.2	733.0	732.9	733.8	734.7
177.5°	737.9	737.4	736.9	736.3	736.1	736.1	736.1	736.1	736.1	736.8	737.5
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1759.0	1760.1	1765.0	1768.9	1770.0	1775.6	1776.1
5°	1913.5	1925.3	1948.1	1950.2	1953.6	1971.6	1957.8
7.5°	2094.7	2124.5	2144.4	2162.0	2168.4	2176.2	2174.6
10°	2210.8	2255.0	2277.2	2312.4	2313.8	2322.8	2317.3
12.5°	2327.5	2378.9	2419.3	2425.8	2455.4	2459.9	2467.7
15°	2492.8	2547.5	2603.5	2623.5	2664.3	2674.0	2689.2
17.5°	2648.3	2704.1	2743.4	2795.2	2812.0	2834.4	2819.1
20°	2733.4	2794.3	2844.0	2884.8	2902.1	2914.5	2913.2
22.5°	2784.9	2846.2	2886.6	2917.4	2933.6	2938.9	2938.6
25°	2817.1	2852.3	2864.8	2876.5	2858.6	2852.3	2855.1
27.5°	2727.5	2718.4	2685.9	2643.3	2599.0	2563.9	2544.8
30°	2604.2	2550.2	2501.1	2415.4	2371.2	2344.9	2321.4
32.5°	2429.4	2343.9	2249.5	2171.0	2120.7	2081.7	2075.9
35°	2129.9	2001.3	1885.9	1789.8	1740.0	1697.8	1688.2
37.5°	1810.8	1677.2	1573.3	1488.7	1435.2	1405.4	1377.6
40°	1599.0	1484.2	1381.9	1310.0	1269.2	1247.8	1230.5
42.5°	1435.8	1331.0	1229.3	1174.5	1137.6	1124.5	1114.4
45°	1210.5	1113.0	1042.5	1001.0	979.6	957.5	947.1
47.5°	1030.0	950.7	904.2	869.0	846.0	832.9	826.2
50°	927.7	862.7	821.3	794.3	773.6	763.2	757.7
52.5°	837.0	783.7	748.8	727.4	713.3	705.7	703.5
55°	721.0	680.2	658.1	639.5	629.1	622.2	619.4
57.5°	626.7	595.4	577.4	562.0	558.0	552.2	550.3
60°	564.8	540.6	525.4	515.0	511.6	504.7	506.0
62.5°	510.0	490.3	477.3	471.3	466.8	461.0	462.9
65°	431.4	416.9	409.9	404.4	398.9	395.4	398.2
67.5°	362.0	352.0	342.6	339.4	336.7	336.1	333.2
70°	316.6	308.3	300.0	298.0	298.0	295.2	294.5
72.5°	272.9	266.8	261.3	259.8	257.6	258.7	255.8
75°	210.8	206.0	203.9	201.9	201.2	201.2	199.1
77.5°	155.8	152.2	148.9	148.9	146.4	145.5	145.2
80°	118.2	116.8	114.1	114.1	112.7	113.4	112.0
82.5°	88.9	87.0	86.4	85.3	83.4	83.5	82.1
85°	47.7	45.6	44.9	42.9	41.5	42.9	41.5
87.5°	19.6	19.2	18.7	17.6	17.1	17.2	15.6
90°	14.8	15.6	16.1	16.4	16.6	16.9	17.1
92.5°	24.0	24.4	24.7	24.9	25.0	25.2	25.3
95°	44.5	44.9	45.1	45.1	45.1	45.1	45.1
97.5°	69.9	70.4	70.6	70.6	70.6	70.6	70.6
100°	88.0	88.3	88.4	88.4	88.4	88.4	88.4
102.5°	107.5	107.8	108.1	108.2	108.3	108.4	108.5
105°	136.9	137.3	137.6	138.0	138.4	138.8	139.2
107.5°	168.6	169.0	169.2	169.1	169.1	169.1	169.1
110°	189.2	188.9	189.0	189.4	189.7	190.1	190.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	212.1	212.1	212.1	212.2	212.2	212.3	212.4
115°	247.2	247.0	246.9	246.8	246.6	246.5	246.4
117.5°	280.6	280.1	279.8	279.5	279.3	279.0	278.8
120°	303.2	302.6	302.4	302.7	302.9	303.2	303.4
122.5°	326.7	326.2	325.8	325.3	324.9	324.4	324.0
125°	360.8	360.6	360.3	360.1	359.8	359.6	359.3
127.5°	393.4	393.1	392.9	392.7	392.5	392.3	392.1
130°	416.2	415.9	415.5	415.0	414.5	414.0	413.5
132.5°	437.6	437.4	437.1	436.9	436.7	436.5	436.3
135°	469.8	469.5	469.2	468.8	468.4	468.1	467.7
137.5°	500.8	500.5	500.3	500.4	500.5	500.6	500.7
140°	521.5	521.4	521.2	521.1	521.0	520.9	520.7
142.5°	541.0	540.9	540.9	540.9	540.9	540.8	540.8
145°	570.0	569.8	569.6	569.2	568.8	568.4	568.1
147.5°	596.4	596.3	596.2	596.1	595.9	595.8	595.7
150°	613.1	613.1	613.1	612.9	612.8	612.7	612.6
152.5°	629.1	629.4	629.4	629.1	628.7	628.4	628.1
155°	651.1	651.7	651.7	651.1	650.6	650.1	649.6
157.5°	670.3	670.7	670.6	670.2	669.8	669.3	668.9
160°	682.1	682.5	682.4	681.8	681.1	680.5	679.9
162.5°	693.1	693.8	693.8	693.2	692.5	691.9	691.3
165°	707.2	708.0	708.1	707.6	707.1	706.6	706.1
167.5°	719.1	719.9	719.8	719.1	718.3	717.5	716.7
170°	725.5	726.2	726.2	725.3	724.4	723.5	722.6
172.5°	730.4	731.2	731.2	730.3	729.4	728.5	727.7
175°	735.6	736.4	736.4	735.6	734.7	733.8	732.9
177.5°	738.2	738.9	738.9	738.1	737.3	736.4	735.6
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5

(END OF REPORT)