

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: P332636

Luminaire Tested: **SA4XXDIP-C1020D590U835-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332636
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: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

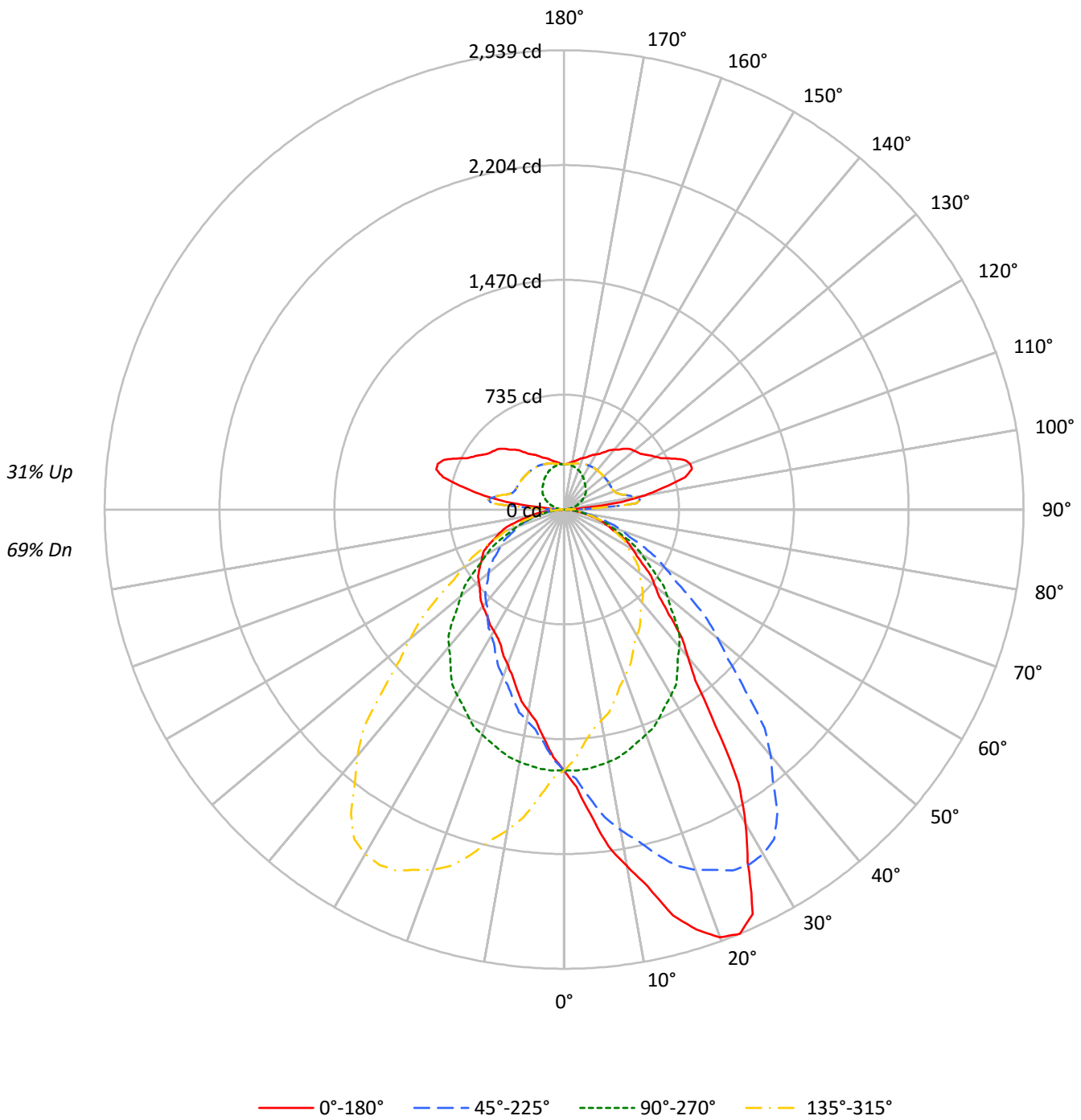
Lumens per Lamp: N/A
Luminaire Lumens: 6717.7 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

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	50	30	10	50	30	10	50	30	10	0				
RCR	0	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73	69															
	1	102	98	94	90	96	93	89	86	83	80	78	74	72	70	65	64	62	58															
	2	93	86	80	74	88	81	76	71	73	69	65	65	62	59	58	55	53	49															
	3	85	76	68	62	80	72	65	60	65	59	55	58	54	50	51	48	46	42															
	4	78	67	59	53	74	64	57	51	58	52	47	52	47	43	46	43	39	36															
	5	72	60	52	46	68	57	50	44	52	46	41	47	42	38	42	38	35	32															
	6	67	54	46	40	63	52	44	39	47	41	36	42	37	33	38	34	31	28															
	7	62	49	41	35	58	47	40	34	43	36	32	39	33	30	35	31	27	25															
	8	57	45	37	32	54	43	36	31	39	33	29	35	30	27	32	28	25	22															
	9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	30	25	22	20															
	10	50	38	30	26	47	36	29	25	33	27	23	30	25	22	27	23	20	18															

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	11.8
30°-40°	884.3	13.2
40°-50°	805.0	12.0
50°-60°	657.8	9.8
60°-70°	469.6	7.0
70°-80°	258.6	3.8
80°-90°	72.2	1.1
90°-100°	209.7	3.1
100°-110°	436.5	6.5
110°-120°	391.0	5.8
120°-130°	328.9	4.9
130°-140°	274.2	4.1
140°-150°	209.5	3.1
150°-160°	147.2	2.2
160°-170°	86.6	1.3
170°-180°	28.2	0.4
0°-30°	1458.3	21.7
0°-40°	2342.7	34.9
0°-60°	3805.5	56.6
0°-90°	4605.9	68.6
90°-120°	1037.2	15.4
90°-150°	1849.7	27.5
90°-180°	2112.0	31.4
0°-180°	6717.7	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°	12	1	12	1	12	11
95°	139	19	139	19	139	216
105°	803	67	803	67	803	794
115°	771	118	771	118	771	765
125°	615	164	615	164	615	559
135°	550	194	550	194	550	424
145°	449	224	449	224	449	285
155°	376	255	376	255	376	175
165°	328	278	328	278	328	94
175°	296	290	296	290	296	29
180°	290	290	290	290	290	



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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°	14.6	16.2	16.3	16.8	17.8	18.3	18.8	18.1	20.2	20.9	22.8
90°	12.0	12.0	12.5	12.0	11.4	11.4	10.8	10.3	9.7	10.3	9.1
92.5°	43.9	43.9	45.9	48.9	55.7	67.1	84.3	112.0	150.7	180.9	158.4
95°	139.2	146.6	156.9	174.6	202.5	257.8	334.3	422.7	478.0	464.9	350.8
97.5°	372.0	383.9	401.0	435.4	476.3	535.9	591.7	624.5	600.6	489.7	328.4
100°	523.1	527.7	544.8	579.6	629.2	671.4	699.4	688.0	604.7	458.6	297.8
102.5°	654.5	658.2	676.2	701.4	731.9	749.5	741.4	684.8	570.4	419.9	277.2
105°	802.6	806.0	814.0	818.6	817.5	794.1	737.6	638.9	508.3	374.2	259.6
107.5°	857.6	856.1	850.4	837.4	809.2	758.4	678.8	573.8	458.1	348.7	256.4
110°	858.5	853.4	843.1	819.2	778.7	715.9	633.2	534.5	433.0	340.0	257.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	831.6	823.3	808.9	779.9	733.9	671.2	593.0	505.8	418.8	335.9	260.0
115°	770.7	766.1	747.9	713.6	668.6	613.8	547.1	476.9	405.6	333.7	265.3
117.5°	709.0	705.4	686.9	658.2	619.7	573.3	520.8	462.7	399.7	333.1	270.8
120°	674.3	668.0	653.2	628.1	595.5	555.0	509.4	456.4	396.5	333.1	275.0
122.5°	646.9	640.6	628.1	606.6	579.1	543.6	502.1	450.9	392.8	332.7	279.1
125°	614.9	611.5	600.7	584.1	561.3	529.9	490.6	441.5	386.8	332.0	285.2
127.5°	596.2	592.8	583.7	569.0	546.0	516.3	477.0	430.1	378.7	330.7	290.1
130°	585.3	581.9	572.7	558.5	535.1	504.8	466.1	421.0	373.6	330.3	293.8
132.5°	573.0	569.5	560.9	544.8	521.8	491.6	453.7	411.4	369.1	329.8	297.0
135°	549.9	546.5	537.4	521.4	498.6	470.0	435.3	398.2	362.2	329.1	301.8
137.5°	521.4	517.3	509.8	494.0	472.7	446.9	417.6	386.2	356.3	329.0	304.6
140°	500.9	496.3	488.3	475.8	455.8	431.8	406.2	379.3	353.1	328.6	306.9
142.5°	478.9	475.8	468.7	457.0	439.4	418.6	396.6	373.0	350.4	328.6	308.7
145°	448.9	446.1	440.4	430.7	416.4	400.5	383.3	363.9	345.7	327.4	309.8
147.5°	422.4	421.3	417.0	408.7	398.2	385.6	371.9	356.5	341.5	325.4	310.3
150°	407.3	406.7	403.3	395.9	386.8	376.5	365.1	352.0	338.3	324.0	310.3
152.5°	393.6	393.0	391.0	384.9	377.2	368.7	358.2	346.9	334.6	321.7	309.4
155°	375.9	375.9	374.2	369.7	363.9	357.1	348.5	339.4	329.1	318.3	308.0
157.5°	360.4	360.4	359.4	356.0	351.6	346.1	339.0	331.3	323.6	314.8	306.6
160°	350.8	350.8	350.3	346.8	343.4	338.8	332.6	326.3	319.5	312.0	305.2
162.5°	341.7	342.2	341.6	338.2	335.7	331.5	326.6	321.3	315.8	309.3	303.8
165°	328.0	328.6	329.1	326.9	324.6	321.7	317.7	314.3	309.8	305.2	301.2
167.5°	317.2	317.6	317.7	316.3	315.1	313.4	310.2	307.6	304.3	301.1	298.5
170°	310.3	310.3	310.9	310.3	309.2	307.5	305.2	303.5	300.6	298.3	296.6
172.5°	303.5	304.4	305.0	304.4	303.7	302.5	301.1	299.8	297.4	295.6	294.8
175°	295.5	296.6	297.8	296.6	296.6	296.6	295.5	294.9	293.8	292.6	292.6
177.5°	290.8	291.7	292.6	292.2	292.6	292.2	292.2	291.7	291.3	290.8	290.8
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4



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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°	22.6	23.2	21.9	19.7	17.9	16.2	15.3	14.5	15.3	16.2	16.8
90°	8.0	8.0	4.6	4.6	4.0	3.4	1.7	0.6	1.7	3.4	4.0
92.5°	115.2	71.0	42.0	30.1	21.8	14.8	9.5	6.5	9.5	14.8	21.8
95°	214.5	120.9	71.3	47.3	33.7	26.2	20.5	18.8	20.5	26.2	33.7
97.5°	192.8	115.6	77.4	57.3	45.5	38.7	33.8	33.8	33.8	38.7	45.5
100°	181.4	116.9	83.3	65.0	54.2	47.3	43.4	43.4	43.4	47.3	54.2
102.5°	178.2	121.5	91.0	73.7	63.3	56.9	53.4	52.5	53.4	56.9	63.3
105°	179.7	132.3	105.0	88.4	78.2	71.3	68.5	66.7	68.5	71.3	78.2
107.5°	188.1	145.0	119.9	103.6	93.8	86.5	83.6	82.5	83.6	86.5	93.8
110°	194.5	154.6	129.5	114.1	103.8	97.0	94.1	93.0	94.1	97.0	103.8



TEST NUMBER: P332636

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	201.4	163.7	139.5	124.1	113.9	107.5	104.2	103.0	104.2	107.5	113.9
115°	212.2	178.0	155.2	139.8	128.9	123.2	119.2	117.5	119.2	123.2	128.9
117.5°	223.3	191.8	170.1	154.1	144.0	137.7	134.2	132.6	134.2	137.7	144.0
120°	231.0	201.4	179.7	163.7	154.0	147.7	143.8	142.6	143.8	147.7	154.0
122.5°	238.3	210.5	188.8	173.3	162.7	156.9	152.9	151.7	152.9	156.9	162.7
125°	249.3	223.0	202.5	186.5	175.7	169.4	166.0	163.7	166.0	169.4	175.7
127.5°	258.8	234.7	214.8	198.7	187.4	180.3	176.2	174.3	176.2	180.3	187.4
130°	264.7	242.4	223.0	206.5	195.7	187.1	182.5	180.3	182.5	187.1	195.7
132.5°	270.6	248.8	229.4	213.8	202.1	194.0	188.0	186.2	188.0	194.0	202.1
135°	278.4	257.8	239.0	224.2	212.2	202.5	196.8	194.5	196.8	202.5	212.2
137.5°	283.9	264.7	247.1	233.0	220.5	211.3	205.0	202.9	205.0	211.3	220.5
140°	287.5	269.3	252.1	238.4	226.5	216.8	210.5	208.8	210.5	216.8	226.5
142.5°	290.2	273.4	256.7	243.5	231.9	222.7	216.9	215.2	216.9	222.7	231.9
145°	293.2	277.8	263.0	250.4	239.6	231.6	225.9	224.2	225.9	231.6	239.6
147.5°	295.8	282.4	268.5	257.2	248.1	239.9	234.9	234.3	234.9	239.9	248.1
150°	297.2	284.7	272.1	261.3	252.7	245.9	241.3	240.7	241.3	245.9	252.7
152.5°	298.1	286.5	275.3	265.4	257.7	251.3	246.8	246.7	246.8	251.3	257.7
155°	298.9	289.2	279.5	271.0	264.7	259.0	255.6	255.0	255.6	259.0	264.7
157.5°	298.9	291.2	282.9	276.2	270.7	266.3	263.1	263.1	263.1	266.3	270.7
160°	298.9	292.1	285.2	278.9	274.4	270.4	268.1	268.1	268.1	270.4	274.4
162.5°	298.9	293.0	286.6	281.7	277.6	274.0	272.2	272.2	272.2	274.0	277.6
165°	297.8	293.2	288.1	284.7	281.8	278.9	277.8	277.8	277.8	278.9	281.8
167.5°	296.4	293.1	289.3	286.7	285.1	282.9	282.4	282.9	282.4	282.9	285.1
170°	295.5	292.6	289.8	288.1	286.9	285.2	284.7	285.2	284.7	285.2	286.9
172.5°	294.6	292.2	290.2	289.0	288.3	287.0	286.9	287.5	286.9	287.0	288.3
175°	293.2	291.5	290.4	290.4	289.8	289.2	289.2	289.8	289.2	289.2	289.8
177.5°	291.7	290.8	290.4	290.4	290.4	289.9	290.4	290.8	290.4	289.9	290.4
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4



TEST NUMBER: P332636

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A4

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°	18.6	18.6	21.5	22.6	24.5	27.5	28.5	34.7	37.0	39.9	44.9
90°	4.6	4.6	8.0	8.0	9.1	10.3	9.7	10.3	10.8	11.4	11.4
92.5°	30.1	42.0	71.0	115.2	158.4	180.9	150.7	112.0	84.3	67.1	55.7
95°	47.3	71.3	120.9	214.5	350.8	464.9	478.0	422.7	334.3	257.8	202.5
97.5°	57.3	77.4	115.6	192.8	328.4	489.7	600.6	624.5	591.7	535.9	476.3
100°	65.0	83.3	116.9	181.4	297.8	458.6	604.7	688.0	699.4	671.4	629.2
102.5°	73.7	91.0	121.5	178.2	277.2	419.9	570.4	684.8	741.4	749.5	731.9
105°	88.4	105.0	132.3	179.7	259.6	374.2	508.3	638.9	737.6	794.1	817.5
107.5°	103.6	119.9	145.0	188.1	256.4	348.7	458.1	573.8	678.8	758.4	809.2
110°	114.1	129.5	154.6	194.5	257.3	340.0	433.0	534.5	633.2	715.9	778.7



TEST NUMBER: P332636

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	124.1	139.5	163.7	201.4	260.0	335.9	418.8	505.8	593.0	671.2	733.9
115°	139.8	155.2	178.0	212.2	265.3	333.7	405.6	476.9	547.1	613.8	668.6
117.5°	154.1	170.1	191.8	223.3	270.8	333.1	399.7	462.7	520.8	573.3	619.7
120°	163.7	179.7	201.4	231.0	275.0	333.1	396.5	456.4	509.4	555.0	595.5
122.5°	173.3	188.8	210.5	238.3	279.1	332.7	392.8	450.9	502.1	543.6	579.1
125°	186.5	202.5	223.0	249.3	285.2	332.0	386.8	441.5	490.6	529.9	561.3
127.5°	198.7	214.8	234.7	258.8	290.1	330.7	378.7	430.1	477.0	516.3	546.0
130°	206.5	223.0	242.4	264.7	293.8	330.3	373.6	421.0	466.1	504.8	535.1
132.5°	213.8	229.4	248.8	270.6	297.0	329.8	369.1	411.4	453.7	491.6	521.8
135°	224.2	239.0	257.8	278.4	301.8	329.1	362.2	398.2	435.3	470.0	498.6
137.5°	233.0	247.1	264.7	283.9	304.6	329.0	356.3	386.2	417.6	446.9	472.7
140°	238.4	252.1	269.3	287.5	306.9	328.6	353.1	379.3	406.2	431.8	455.8
142.5°	243.5	256.7	273.4	290.2	308.7	328.6	350.4	373.0	396.6	418.6	439.4
145°	250.4	263.0	277.8	293.2	309.8	327.4	345.7	363.9	383.3	400.5	416.4
147.5°	257.2	268.5	282.4	295.8	310.3	325.4	341.5	356.5	371.9	385.6	398.2
150°	261.3	272.1	284.7	297.2	310.3	324.0	338.3	352.0	365.1	376.5	386.8
152.5°	265.4	275.3	286.5	298.1	309.4	321.7	334.6	346.9	358.2	368.7	377.2
155°	271.0	279.5	289.2	298.9	308.0	318.3	329.1	339.4	348.5	357.1	363.9
157.5°	276.2	282.9	291.2	298.9	306.6	314.8	323.6	331.3	339.0	346.1	351.6
160°	278.9	285.2	292.1	298.9	305.2	312.0	319.5	326.3	332.6	338.8	343.4
162.5°	281.7	286.6	293.0	298.9	303.8	309.3	315.8	321.3	326.6	331.5	335.7
165°	284.7	288.1	293.2	297.8	301.2	305.2	309.8	314.3	317.7	321.7	324.6
167.5°	286.7	289.3	293.1	296.4	298.5	301.1	304.3	307.6	310.2	313.4	315.1
170°	288.1	289.8	292.6	295.5	296.6	298.3	300.6	303.5	305.2	307.5	309.2
172.5°	289.0	290.2	292.2	294.6	294.8	295.6	297.4	299.8	301.1	302.5	303.7
175°	290.4	290.4	291.5	293.2	292.6	292.6	293.8	294.9	295.5	296.6	296.6
177.5°	290.4	290.4	290.8	291.7	290.8	290.8	291.3	291.7	292.2	292.2	292.6
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4



TEST NUMBER: P332636

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A4

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°	46.6	47.3	48.9	50.0	48.9	47.3	46.6	44.9	39.9	37.0	34.7
90°	12.0	12.5	12.0	12.0	12.0	12.5	12.0	11.4	11.4	10.8	10.3
92.5°	48.9	45.9	43.9	43.9	43.9	45.9	48.9	55.7	67.1	84.3	112.0
95°	174.6	156.9	146.6	139.2	146.6	156.9	174.6	202.5	257.8	334.3	422.7
97.5°	435.4	401.0	383.9	372.0	383.9	401.0	435.4	476.3	535.9	591.7	624.5
100°	579.6	544.8	527.7	523.1	527.7	544.8	579.6	629.2	671.4	699.4	688.0
102.5°	701.4	676.2	658.2	654.5	658.2	676.2	701.4	731.9	749.5	741.4	684.8
105°	818.6	814.0	806.0	802.6	806.0	814.0	818.6	817.5	794.1	737.6	638.9
107.5°	837.4	850.4	856.1	857.6	856.1	850.4	837.4	809.2	758.4	678.8	573.8
110°	819.2	843.1	853.4	858.5	853.4	843.1	819.2	778.7	715.9	633.2	534.5



TEST NUMBER: P332636

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	779.9	808.9	823.3	831.6	823.3	808.9	779.9	733.9	671.2	593.0	505.8
115°	713.6	747.9	766.1	770.7	766.1	747.9	713.6	668.6	613.8	547.1	476.9
117.5°	658.2	686.9	705.4	709.0	705.4	686.9	658.2	619.7	573.3	520.8	462.7
120°	628.1	653.2	668.0	674.3	668.0	653.2	628.1	595.5	555.0	509.4	456.4
122.5°	606.6	628.1	640.6	646.9	640.6	628.1	606.6	579.1	543.6	502.1	450.9
125°	584.1	600.7	611.5	614.9	611.5	600.7	584.1	561.3	529.9	490.6	441.5
127.5°	569.0	583.7	592.8	596.2	592.8	583.7	569.0	546.0	516.3	477.0	430.1
130°	558.5	572.7	581.9	585.3	581.9	572.7	558.5	535.1	504.8	466.1	421.0
132.5°	544.8	560.9	569.5	573.0	569.5	560.9	544.8	521.8	491.6	453.7	411.4
135°	521.4	537.4	546.5	549.9	546.5	537.4	521.4	498.6	470.0	435.3	398.2
137.5°	494.0	509.8	517.3	521.4	517.3	509.8	494.0	472.7	446.9	417.6	386.2
140°	475.8	488.3	496.3	500.9	496.3	488.3	475.8	455.8	431.8	406.2	379.3
142.5°	457.0	468.7	475.8	478.9	475.8	468.7	457.0	439.4	418.6	396.6	373.0
145°	430.7	440.4	446.1	448.9	446.1	440.4	430.7	416.4	400.5	383.3	363.9
147.5°	408.7	417.0	421.3	422.4	421.3	417.0	408.7	398.2	385.6	371.9	356.5
150°	395.9	403.3	406.7	407.3	406.7	403.3	395.9	386.8	376.5	365.1	352.0
152.5°	384.9	391.0	393.0	393.6	393.0	391.0	384.9	377.2	368.7	358.2	346.9
155°	369.7	374.2	375.9	375.9	375.9	374.2	369.7	363.9	357.1	348.5	339.4
157.5°	356.0	359.4	360.4	360.4	360.4	359.4	356.0	351.6	346.1	339.0	331.3
160°	346.8	350.3	350.8	350.8	350.8	350.3	346.8	343.4	338.8	332.6	326.3
162.5°	338.2	341.6	342.2	341.7	342.2	341.6	338.2	335.7	331.5	326.6	321.3
165°	326.9	329.1	328.6	328.0	328.6	329.1	326.9	324.6	321.7	317.7	314.3
167.5°	316.3	317.7	317.6	317.2	317.6	317.7	316.3	315.1	313.4	310.2	307.6
170°	310.3	310.9	310.3	310.3	310.3	310.9	310.3	309.2	307.5	305.2	303.5
172.5°	304.4	305.0	304.4	303.5	304.4	305.0	304.4	303.7	302.5	301.1	299.8
175°	296.6	297.8	296.6	295.5	296.6	297.8	296.6	296.6	296.6	295.5	294.9
177.5°	292.2	292.6	291.7	290.8	291.7	292.6	292.2	292.6	292.2	292.2	291.7
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4



TEST NUMBER: P332636

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A4

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°	28.5	27.5	24.5	22.6	21.5	18.6	18.6	16.8	16.2	15.3	14.5
90°	9.7	10.3	9.1	8.0	8.0	4.6	4.6	4.0	3.4	1.7	0.6
92.5°	150.7	180.9	158.4	115.2	71.0	42.0	30.1	21.8	14.8	9.5	6.5
95°	478.0	464.9	350.8	214.5	120.9	71.3	47.3	33.7	26.2	20.5	18.8
97.5°	600.6	489.7	328.4	192.8	115.6	77.4	57.3	45.5	38.7	33.8	33.8
100°	604.7	458.6	297.8	181.4	116.9	83.3	65.0	54.2	47.3	43.4	43.4
102.5°	570.4	419.9	277.2	178.2	121.5	91.0	73.7	63.3	56.9	53.4	52.5
105°	508.3	374.2	259.6	179.7	132.3	105.0	88.4	78.2	71.3	68.5	66.7
107.5°	458.1	348.7	256.4	188.1	145.0	119.9	103.6	93.8	86.5	83.6	82.5
110°	433.0	340.0	257.3	194.5	154.6	129.5	114.1	103.8	97.0	94.1	93.0



TEST NUMBER: P332636

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	418.8	335.9	260.0	201.4	163.7	139.5	124.1	113.9	107.5	104.2	103.0
115°	405.6	333.7	265.3	212.2	178.0	155.2	139.8	128.9	123.2	119.2	117.5
117.5°	399.7	333.1	270.8	223.3	191.8	170.1	154.1	144.0	137.7	134.2	132.6
120°	396.5	333.1	275.0	231.0	201.4	179.7	163.7	154.0	147.7	143.8	142.6
122.5°	392.8	332.7	279.1	238.3	210.5	188.8	173.3	162.7	156.9	152.9	151.7
125°	386.8	332.0	285.2	249.3	223.0	202.5	186.5	175.7	169.4	166.0	163.7
127.5°	378.7	330.7	290.1	258.8	234.7	214.8	198.7	187.4	180.3	176.2	174.3
130°	373.6	330.3	293.8	264.7	242.4	223.0	206.5	195.7	187.1	182.5	180.3
132.5°	369.1	329.8	297.0	270.6	248.8	229.4	213.8	202.1	194.0	188.0	186.2
135°	362.2	329.1	301.8	278.4	257.8	239.0	224.2	212.2	202.5	196.8	194.5
137.5°	356.3	329.0	304.6	283.9	264.7	247.1	233.0	220.5	211.3	205.0	202.9
140°	353.1	328.6	306.9	287.5	269.3	252.1	238.4	226.5	216.8	210.5	208.8
142.5°	350.4	328.6	308.7	290.2	273.4	256.7	243.5	231.9	222.7	216.9	215.2
145°	345.7	327.4	309.8	293.2	277.8	263.0	250.4	239.6	231.6	225.9	224.2
147.5°	341.5	325.4	310.3	295.8	282.4	268.5	257.2	248.1	239.9	234.9	234.3
150°	338.3	324.0	310.3	297.2	284.7	272.1	261.3	252.7	245.9	241.3	240.7
152.5°	334.6	321.7	309.4	298.1	286.5	275.3	265.4	257.7	251.3	246.8	246.7
155°	329.1	318.3	308.0	298.9	289.2	279.5	271.0	264.7	259.0	255.6	255.0
157.5°	323.6	314.8	306.6	298.9	291.2	282.9	276.2	270.7	266.3	263.1	263.1
160°	319.5	312.0	305.2	298.9	292.1	285.2	278.9	274.4	270.4	268.1	268.1
162.5°	315.8	309.3	303.8	298.9	293.0	286.6	281.7	277.6	274.0	272.2	272.7
165°	309.8	305.2	301.2	297.8	293.2	288.1	284.7	281.8	278.9	277.8	277.8
167.5°	304.3	301.1	298.5	296.4	293.1	289.3	286.7	285.1	282.9	282.4	282.9
170°	300.6	298.3	296.6	295.5	292.6	289.8	288.1	286.9	285.2	284.7	285.2
172.5°	297.4	295.6	294.8	294.6	292.2	290.2	289.0	288.3	287.0	286.9	287.5
175°	293.8	292.6	292.6	293.2	291.5	290.4	290.4	289.8	289.2	289.2	289.8
177.5°	291.3	290.8	290.8	291.7	290.8	290.4	290.4	290.4	289.9	290.4	290.8
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4



TEST NUMBER: P332636

CATALOG NUMBER: SA4XXDIP-C1020D590U835-4F0-1E-UDD-A4

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°	15.3	16.2	17.9	19.7	21.9	23.2	22.6	22.8	20.9	20.2	18.1
90°	1.7	3.4	4.0	4.6	4.6	8.0	8.0	9.1	10.3	9.7	10.3
92.5°	9.5	14.8	21.8	30.1	42.0	71.0	115.2	158.4	180.9	150.7	112.0
95°	20.5	26.2	33.7	47.3	71.3	120.9	214.5	350.8	464.9	478.0	422.7
97.5°	33.8	38.7	45.5	57.3	77.4	115.6	192.8	328.4	489.7	600.6	624.5
100°	43.4	47.3	54.2	65.0	83.3	116.9	181.4	297.8	458.6	604.7	688.0
102.5°	53.4	56.9	63.3	73.7	91.0	121.5	178.2	277.2	419.9	570.4	684.8
105°	68.5	71.3	78.2	88.4	105.0	132.3	179.7	259.6	374.2	508.3	638.9
107.5°	83.6	86.5	93.8	103.6	119.9	145.0	188.1	256.4	348.7	458.1	573.8
110°	94.1	97.0	103.8	114.1	129.5	154.6	194.5	257.3	340.0	433.0	534.5



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	104.2	107.5	113.9	124.1	139.5	163.7	201.4	260.0	335.9	418.8	505.8
115°	119.2	123.2	128.9	139.8	155.2	178.0	212.2	265.3	333.7	405.6	476.9
117.5°	134.2	137.7	144.0	154.1	170.1	191.8	223.3	270.8	333.1	399.7	462.7
120°	143.8	147.7	154.0	163.7	179.7	201.4	231.0	275.0	333.1	396.5	456.4
122.5°	152.9	156.9	162.7	173.3	188.8	210.5	238.3	279.1	332.7	392.8	450.9
125°	166.0	169.4	175.7	186.5	202.5	223.0	249.3	285.2	332.0	386.8	441.5
127.5°	176.2	180.3	187.4	198.7	214.8	234.7	258.8	290.1	330.7	378.7	430.1
130°	182.5	187.1	195.7	206.5	223.0	242.4	264.7	293.8	330.3	373.6	421.0
132.5°	188.0	194.0	202.1	213.8	229.4	248.8	270.6	297.0	329.8	369.1	411.4
135°	196.8	202.5	212.2	224.2	239.0	257.8	278.4	301.8	329.1	362.2	398.2
137.5°	205.0	211.3	220.5	233.0	247.1	264.7	283.9	304.6	329.0	356.3	386.2
140°	210.5	216.8	226.5	238.4	252.1	269.3	287.5	306.9	328.6	353.1	379.3
142.5°	216.9	222.7	231.9	243.5	256.7	273.4	290.2	308.7	328.6	350.4	373.0
145°	225.9	231.6	239.6	250.4	263.0	277.8	293.2	309.8	327.4	345.7	363.9
147.5°	234.9	239.9	248.1	257.2	268.5	282.4	295.8	310.3	325.4	341.5	356.5
150°	241.3	245.9	252.7	261.3	272.1	284.7	297.2	310.3	324.0	338.3	352.0
152.5°	246.8	251.3	257.7	265.4	275.3	286.5	298.1	309.4	321.7	334.6	346.9
155°	255.6	259.0	264.7	271.0	279.5	289.2	298.9	308.0	318.3	329.1	339.4
157.5°	263.1	266.3	270.7	276.2	282.9	291.2	298.9	306.6	314.8	323.6	331.3
160°	268.1	270.4	274.4	278.9	285.2	292.1	298.9	305.2	312.0	319.5	326.3
162.5°	272.2	274.0	277.6	281.7	286.6	293.0	298.9	303.8	309.3	315.8	321.3
165°	277.8	278.9	281.8	284.7	288.1	293.2	297.8	301.2	305.2	309.8	314.3
167.5°	282.4	282.9	285.1	286.7	289.3	293.1	296.4	298.5	301.1	304.3	307.6
170°	284.7	285.2	286.9	288.1	289.8	292.6	295.5	296.6	298.3	300.6	303.5
172.5°	286.9	287.0	288.3	289.0	290.2	292.2	294.6	294.8	295.6	297.4	299.8
175°	289.2	289.2	289.8	290.4	290.4	291.5	293.2	292.6	292.6	293.8	294.9
177.5°	290.4	289.9	290.4	290.4	290.4	290.8	291.7	290.8	290.8	291.3	291.7
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4



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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°	18.8	18.3	17.8	16.8	16.3	16.2	14.6
90°	10.8	11.4	11.4	12.0	12.5	12.0	12.0
92.5°	84.3	67.1	55.7	48.9	45.9	43.9	43.9
95°	334.3	257.8	202.5	174.6	156.9	146.6	139.2
97.5°	591.7	535.9	476.3	435.4	401.0	383.9	372.0
100°	699.4	671.4	629.2	579.6	544.8	527.7	523.1
102.5°	741.4	749.5	731.9	701.4	676.2	658.2	654.5
105°	737.6	794.1	817.5	818.6	814.0	806.0	802.6
107.5°	678.8	758.4	809.2	837.4	850.4	856.1	857.6
110°	633.2	715.9	778.7	819.2	843.1	853.4	858.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	593.0	671.2	733.9	779.9	808.9	823.3	831.6
115°	547.1	613.8	668.6	713.6	747.9	766.1	770.7
117.5°	520.8	573.3	619.7	658.2	686.9	705.4	709.0
120°	509.4	555.0	595.5	628.1	653.2	668.0	674.3
122.5°	502.1	543.6	579.1	606.6	628.1	640.6	646.9
125°	490.6	529.9	561.3	584.1	600.7	611.5	614.9
127.5°	477.0	516.3	546.0	569.0	583.7	592.8	596.2
130°	466.1	504.8	535.1	558.5	572.7	581.9	585.3
132.5°	453.7	491.6	521.8	544.8	560.9	569.5	573.0
135°	435.3	470.0	498.6	521.4	537.4	546.5	549.9
137.5°	417.6	446.9	472.7	494.0	509.8	517.3	521.4
140°	406.2	431.8	455.8	475.8	488.3	496.3	500.9
142.5°	396.6	418.6	439.4	457.0	468.7	475.8	478.9
145°	383.3	400.5	416.4	430.7	440.4	446.1	448.9
147.5°	371.9	385.6	398.2	408.7	417.0	421.3	422.4
150°	365.1	376.5	386.8	395.9	403.3	406.7	407.3
152.5°	358.2	368.7	377.2	384.9	391.0	393.0	393.6
155°	348.5	357.1	363.9	369.7	374.2	375.9	375.9
157.5°	339.0	346.1	351.6	356.0	359.4	360.4	360.4
160°	332.6	338.8	343.4	346.8	350.3	350.8	350.8
162.5°	326.6	331.5	335.7	338.2	341.6	342.2	341.7
165°	317.7	321.7	324.6	326.9	329.1	328.6	328.0
167.5°	310.2	313.4	315.1	316.3	317.7	317.6	317.2
170°	305.2	307.5	309.2	310.3	310.9	310.3	310.3
172.5°	301.1	302.5	303.7	304.4	305.0	304.4	303.5
175°	295.5	296.6	296.6	296.6	297.8	296.6	295.5
177.5°	292.2	292.2	292.6	292.2	292.6	291.7	290.8
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4

(END OF REPORT)