

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: P332634-830

Luminaire Tested: **SA4XXDIP-C1020D590U830-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332634-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

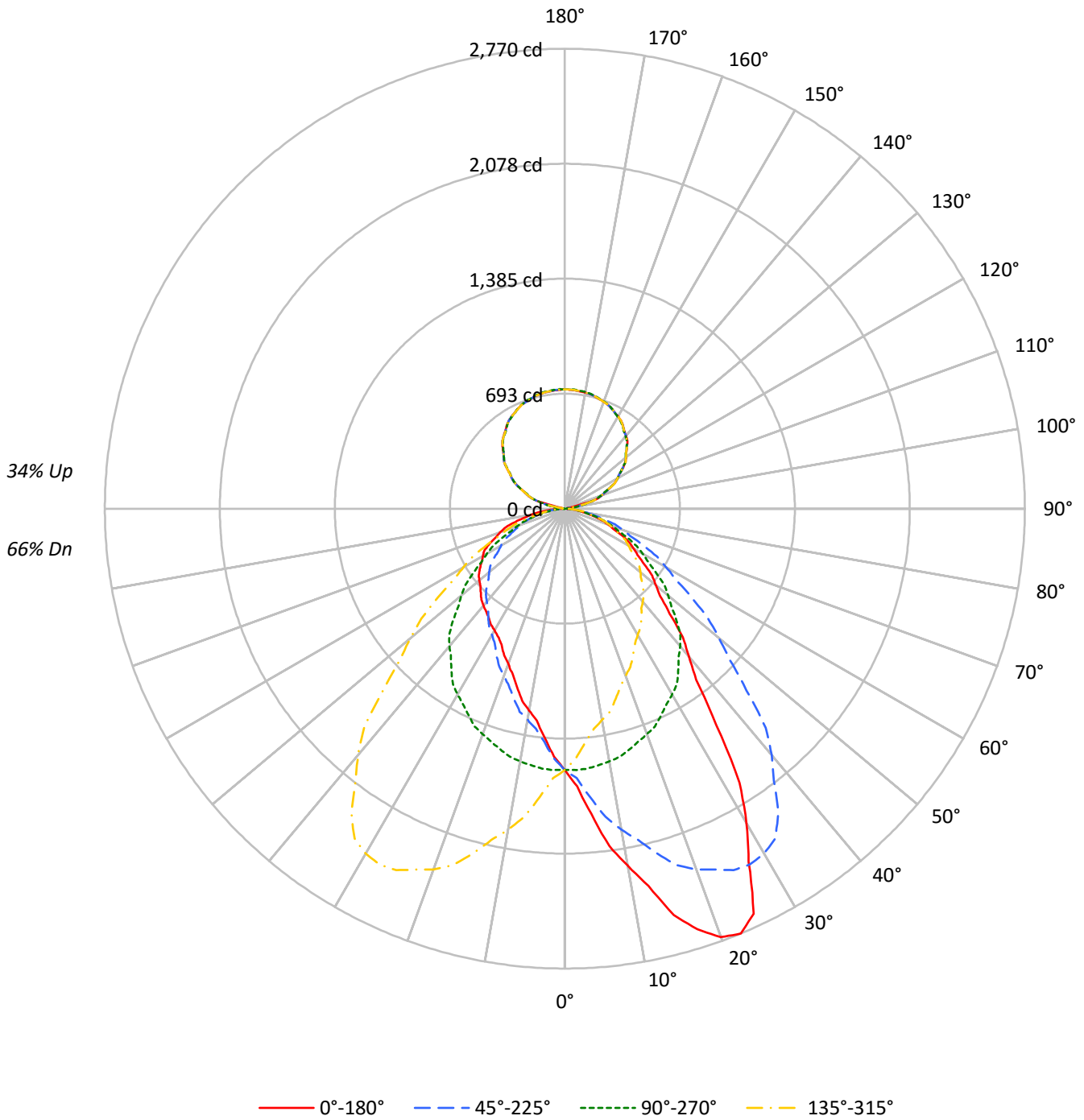
Lumens per Lamp: N/A
Luminaire Lumens: 6565.4 lumens
Efficiency: N/A
Efficacy: 134.5 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66				
1	102	97	93	90	96	92	88	85	81	79	77	72	70	68	63	62	60	56				
2	93	85	79	74	87	81	75	71	72	68	64	64	60	58	56	54	51	48				
3	85	75	68	62	80	71	65	59	64	58	54	56	52	49	50	47	44	41				
4	78	67	59	53	73	63	56	51	57	51	46	51	46	42	45	41	38	35				
5	72	60	52	46	67	57	49	44	51	45	40	46	41	37	40	37	34	31				
6	66	54	46	40	62	51	44	38	46	40	35	41	36	33	37	33	30	27				
7	61	49	41	35	58	46	39	34	42	36	31	38	33	29	34	30	26	24				
8	57	45	37	31	54	42	35	30	38	32	28	35	30	26	31	27	24	22				
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	25	22	20				
10	50	38	30	25	47	36	29	24	33	27	23	30	25	21	27	23	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12698	12698	12698	12698
5°	14954	12730	11237	12730
10°	17905	12675	10117	12675
15°	21184	12547	9290	12547
20°	23589	12416	8553	12416
25°	23971	12223	8044	12223
30°	20396	12039	7883	12039
35°	15682	11739	7885	11739
40°	12223	11385	8033	11385
45°	10192	10853	8169	10853
50°	8970	10206	8445	10206
55°	8217	9429	8785	9429
60°	7700	8732	9195	8732
65°	7169	7952	9534	7952
70°	6552	7183	9751	7183
75°	5855	6319	9635	6319
80°	4909	5179	9331	5179
85°	3622	3742	8929	3742



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.2	2.3
10°-20°	472.3	7.2
20°-30°	749.0	11.4
30°-40°	833.5	12.7
40°-50°	758.7	11.6
50°-60°	620.0	9.4
60°-70°	442.6	6.7
70°-80°	243.7	3.7
80°-90°	68.6	1.0
90°-100°	24.6	0.4
100°-110°	156.8	2.4
110°-120°	299.9	4.6
120°-130°	380.7	5.8
130°-140°	407.3	6.2
140°-150°	380.9	5.8
150°-160°	307.1	4.7
160°-170°	198.1	3.0
170°-180°	68.3	1.0
0°-30°	1374.6	20.9
0°-40°	2208.1	33.6
0°-60°	3586.8	54.6
0°-90°	4341.8	66.1
90°-120°	481.2	7.3
90°-150°	1650.1	25.1
90°-180°	2224.0	33.9
0°-180°	6565.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1573	1573	1573	1573	1573	
5°	1845	1571	1387	1571	1845	188
15°	2535	1501	1112	1501	2535	716
25°	2691	1372	903	1372	2691	1186
35°	1591	1191	800	1191	1591	1010
45°	893	951	716	951	893	703
55°	584	670	624	670	584	527
65°	375	416	499	416	375	372
75°	188	203	309	203	188	200
85°	39	40	96	40	39	48
90°	16	2	16	2	16	8
95°	16	30	16	30	16	12
105°	153	162	153	162	153	134
115°	304	302	304	302	304	301
125°	428	425	428	425	428	381
135°	531	527	531	527	531	408
145°	611	608	611	608	611	382
155°	666	666	666	666	666	307
165°	700	703	700	703	700	198
175°	714	719	714	719	714	68
180°	719	719	719	719	719	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1674.0	1673.6	1668.3	1667.3	1663.6	1659.0	1657.9	1649.5	1632.9	1625.0	1623.0
5°	1845.3	1858.3	1841.4	1838.1	1836.2	1814.7	1803.6	1790.5	1760.6	1742.9	1729.3
7.5°	2049.7	2051.2	2043.8	2037.8	2021.2	2002.4	1974.3	1944.4	1908.6	1871.5	1843.4
10°	2184.2	2189.3	2180.9	2179.5	2146.4	2125.4	2083.8	2048.6	2008.2	1963.2	1922.2
12.5°	2325.9	2318.6	2314.3	2286.4	2280.3	2242.2	2193.8	2157.6	2095.3	2043.5	1988.9
15°	2534.7	2520.4	2511.2	2472.8	2453.9	2401.1	2349.6	2309.9	2228.5	2150.9	2092.3
17.5°	2657.1	2671.5	2650.4	2634.6	2585.8	2548.7	2496.1	2412.7	2349.0	2252.7	2178.7
20°	2745.8	2747.0	2735.4	2719.0	2680.6	2633.7	2576.3	2485.1	2409.0	2313.1	2211.5
22.5°	2769.8	2770.0	2765.0	2749.8	2720.7	2682.7	2624.9	2548.7	2456.4	2352.2	2250.6
25°	2691.1	2688.4	2694.4	2711.2	2700.2	2688.4	2655.2	2598.5	2512.5	2402.4	2292.9
27.5°	2398.6	2416.6	2449.7	2491.4	2531.6	2562.2	2570.8	2559.2	2505.8	2415.3	2300.7
30°	2188.0	2210.2	2235.0	2276.6	2357.4	2403.7	2454.6	2492.9	2471.4	2399.1	2292.3
32.5°	1956.6	1962.1	1998.8	2046.3	2120.2	2209.2	2289.8	2367.9	2393.8	2355.9	2266.7
35°	1591.2	1600.2	1640.0	1687.0	1777.5	1886.3	2007.5	2115.7	2205.0	2240.8	2195.2
37.5°	1298.4	1324.6	1352.7	1403.2	1482.9	1580.8	1706.8	1846.7	1979.8	2068.9	2084.1
40°	1159.8	1176.1	1196.3	1234.7	1302.5	1398.9	1507.1	1667.5	1808.8	1936.5	1978.2
42.5°	1050.4	1059.9	1072.2	1107.0	1158.7	1254.5	1353.3	1494.3	1636.3	1788.9	1858.9
45°	892.7	902.5	923.3	943.5	982.6	1049.0	1140.9	1256.9	1399.6	1546.9	1675.8
47.5°	778.7	785.0	797.4	819.1	852.2	896.1	970.8	1067.7	1200.0	1342.9	1480.4
50°	714.2	719.3	729.2	748.7	774.1	813.1	874.4	965.0	1068.6	1212.6	1347.5
52.5°	663.1	665.2	672.3	685.6	705.8	738.7	788.9	863.8	960.2	1088.5	1222.9
55°	583.8	586.4	593.0	602.8	620.3	641.1	679.6	735.7	819.7	931.1	1047.7
57.5°	518.7	520.5	525.9	529.7	544.2	561.2	590.7	630.7	694.5	788.9	893.1
60°	476.9	475.7	482.2	485.4	495.2	509.5	532.3	570.8	626.1	702.4	798.1
62.5°	436.3	434.5	440.0	444.2	449.9	462.1	480.7	510.9	555.8	624.7	707.5
65°	375.3	372.7	376.0	381.2	386.3	392.9	406.6	433.3	469.1	518.7	581.8
67.5°	314.1	316.8	317.4	319.9	322.9	331.8	341.2	360.1	385.3	425.0	478.5
70°	277.6	278.2	280.9	280.9	282.8	290.6	298.4	309.5	334.2	370.8	414.4
72.5°	241.1	243.8	242.8	244.9	246.3	251.5	257.2	267.8	288.9	316.0	352.9
75°	187.7	189.6	189.6	190.3	192.2	194.2	198.7	206.5	221.5	241.8	267.1
77.5°	136.9	137.1	138.0	140.3	140.3	143.5	146.8	153.2	160.5	174.4	189.8
80°	105.6	106.9	106.2	107.5	107.5	110.1	111.4	119.2	122.5	131.6	144.0
82.5°	77.4	78.7	78.6	80.4	81.4	82.0	83.8	86.9	90.2	98.2	103.3
85°	39.1	40.4	39.1	40.4	42.3	43.0	45.0	45.6	48.3	50.1	54.8
87.5°	14.7	16.2	16.1	16.6	17.6	18.1	18.5	17.8	19.7	20.1	22.0
90°	16.1	15.9	15.6	15.5	15.2	14.7	13.9	13.3	12.5	11.8	10.8
92.5°	14.8	14.8	14.7	14.7	14.6	14.2	13.6	12.8	12.2	11.4	10.5
95°	15.6	15.5	15.4	15.3	15.1	14.7	13.9	13.3	12.5	11.8	11.7
97.5°	15.1	14.9	14.8	14.7	14.6	14.5	14.4	14.3	14.2	14.2	27.5
100°	15.1	14.9	14.8	14.7	14.6	15.6	17.5	19.6	21.6	23.7	40.2
102.5°	15.5	15.5	15.5	15.5	15.4	26.3	48.3	70.1	92.1	114.0	116.1
105°	153.3	157.5	161.8	166.2	170.4	172.0	171.0	169.9	168.8	167.8	167.1
107.5°	213.6	213.1	212.6	212.2	211.7	211.2	210.8	210.2	209.7	209.2	208.3
110°	239.8	239.4	239.0	238.7	238.4	238.1	237.8	237.6	237.3	237.1	236.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	266.0	265.6	265.1	264.7	264.2	264.0	264.1	264.1	264.2	264.2	263.9
115°	304.3	304.3	304.3	304.3	304.3	304.2	304.0	303.7	303.5	303.2	303.3
117.5°	343.3	343.3	343.4	343.4	343.5	343.5	343.6	343.6	343.7	343.7	343.4
120°	367.8	368.0	368.3	368.4	368.7	368.7	368.4	368.3	368.0	367.8	367.9
122.5°	391.8	392.1	392.3	392.6	392.8	392.9	392.7	392.6	392.4	392.3	392.1
125°	428.0	427.8	427.7	427.6	427.5	427.3	426.9	426.5	426.2	425.8	426.0
127.5°	459.7	459.8	459.9	460.0	460.1	460.1	460.2	460.3	460.3	460.4	459.9
130°	481.2	481.2	481.2	481.2	481.2	481.2	481.0	480.9	480.8	480.7	480.3
132.5°	501.0	501.1	501.1	501.2	501.3	501.3	501.2	501.1	501.0	500.9	500.4
135°	530.7	530.5	530.2	529.9	529.7	529.4	529.2	529.0	528.8	528.5	528.0
137.5°	556.0	556.1	556.2	556.3	556.3	556.2	556.0	555.7	555.4	555.2	554.7
140°	573.6	573.5	573.4	573.3	573.2	573.0	572.6	572.2	571.8	571.6	571.3
142.5°	588.3	588.2	588.2	588.2	588.2	588.1	587.8	587.5	587.3	587.0	586.8
145°	610.8	610.6	610.3	610.0	609.8	609.6	609.5	609.4	609.3	609.2	609.2
147.5°	629.3	629.2	629.1	629.1	628.9	628.8	628.7	628.6	628.5	628.4	628.5
150°	641.4	641.3	641.2	641.0	640.9	640.8	640.8	640.8	640.8	640.8	641.0
152.5°	651.8	651.8	651.9	652.0	652.1	652.0	651.8	651.6	651.4	651.2	651.4
155°	665.6	666.0	666.3	666.7	667.0	666.9	666.5	666.0	665.5	665.1	665.4
157.5°	677.2	677.9	678.4	679.1	679.7	679.7	679.1	678.4	677.9	677.2	677.6
160°	684.9	685.7	686.4	687.1	687.9	687.9	687.1	686.4	685.7	684.9	685.0
162.5°	691.0	691.8	692.6	693.4	694.3	694.3	693.5	692.9	692.1	691.4	691.5
165°	699.5	700.6	701.6	702.7	703.8	703.9	702.9	701.9	701.0	700.0	700.0
167.5°	705.9	707.0	708.2	709.5	710.6	710.7	709.6	708.6	707.6	706.4	706.5
170°	709.7	710.9	712.1	713.3	714.4	714.6	713.6	712.7	711.7	710.8	710.7
172.5°	711.8	713.1	714.4	715.8	717.0	717.2	716.2	715.3	714.4	713.3	713.2
175°	714.5	716.0	717.4	718.9	720.3	720.5	719.3	718.3	717.2	716.1	716.0
177.5°	716.2	717.4	718.6	719.7	720.9	721.0	720.3	719.5	718.8	717.9	717.7
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1623.5	1616.2	1611.0	1606.8	1595.3	1588.6	1583.4	1576.0	1567.7	1558.9	1547.9
5°	1715.6	1693.5	1677.2	1652.5	1629.0	1609.4	1589.2	1570.9	1548.8	1524.8	1507.1
7.5°	1812.4	1779.5	1737.3	1700.6	1659.4	1623.6	1591.6	1558.7	1524.6	1491.5	1461.1
10°	1874.0	1831.6	1784.7	1729.3	1677.2	1630.9	1587.9	1546.2	1505.8	1465.4	1430.9
12.5°	1940.1	1887.3	1818.1	1753.3	1694.9	1633.0	1581.1	1530.0	1481.3	1438.8	1398.5
15°	2029.0	1952.8	1872.6	1786.0	1709.1	1636.8	1565.8	1501.3	1446.5	1390.4	1351.4
17.5°	2083.7	1989.3	1897.7	1807.1	1714.0	1622.9	1546.2	1471.8	1403.3	1347.6	1298.4
20°	2119.6	2025.8	1911.8	1821.2	1710.4	1616.6	1528.0	1445.2	1373.6	1314.3	1263.4
22.5°	2150.9	2042.5	1928.4	1809.2	1698.9	1599.4	1502.4	1419.2	1346.0	1283.5	1234.7
25°	2167.8	2043.3	1919.6	1801.0	1675.8	1557.9	1470.0	1372.2	1294.0	1228.2	1176.1
27.5°	2169.6	2036.6	1896.5	1764.7	1635.6	1525.8	1414.8	1327.4	1246.2	1176.7	1126.6
30°	2163.9	2025.1	1874.6	1731.9	1602.2	1483.0	1386.6	1291.5	1208.7	1139.6	1087.5
32.5°	2145.7	2001.1	1846.4	1695.4	1561.0	1444.4	1344.9	1254.4	1173.7	1105.7	1051.0
35°	2092.9	1950.2	1785.4	1628.3	1490.8	1372.9	1283.0	1191.1	1110.3	1045.8	993.1
37.5°	2010.4	1881.4	1713.8	1551.3	1416.3	1297.8	1208.7	1125.7	1052.8	987.3	933.2
40°	1938.4	1825.0	1657.0	1498.6	1352.7	1240.0	1156.6	1080.3	1008.0	946.1	894.7
42.5°	1855.6	1756.8	1601.8	1434.0	1293.3	1180.1	1098.7	1030.3	962.1	904.9	853.5
45°	1707.8	1642.7	1496.7	1341.6	1195.0	1088.2	1010.6	950.6	893.3	837.3	794.3
47.5°	1537.9	1505.5	1382.7	1235.4	1096.3	990.9	923.7	868.3	818.0	770.5	732.6
50°	1423.7	1408.1	1301.8	1159.8	1026.9	927.8	860.1	812.6	769.5	727.8	692.0
52.5°	1311.1	1310.6	1214.8	1084.8	961.8	866.4	799.1	754.7	717.4	683.5	651.3
55°	1139.0	1157.3	1082.3	966.3	856.2	770.2	709.5	669.9	643.8	615.8	591.6
57.5°	980.9	1011.2	949.3	847.2	755.4	676.1	623.3	593.4	565.7	548.7	531.2
60°	877.7	906.3	858.2	772.1	685.5	617.7	567.5	540.8	516.7	505.0	492.6
62.5°	786.0	811.5	775.8	696.1	620.9	555.6	513.3	487.7	471.4	458.5	450.3
65°	654.9	676.4	645.7	587.8	523.2	471.1	436.6	416.3	400.8	395.5	386.3
67.5°	529.3	548.9	532.3	483.1	431.3	391.9	364.9	345.4	336.2	331.7	325.2
70°	454.8	474.4	456.8	413.8	374.0	340.8	315.4	304.3	294.5	292.6	283.4
72.5°	391.7	405.0	387.5	353.8	319.8	291.8	272.1	260.5	255.4	251.9	246.9
75°	293.9	305.6	293.9	267.8	243.6	224.1	207.2	202.6	196.8	194.8	191.5
77.5°	208.0	218.1	209.2	192.8	174.8	159.8	150.6	144.8	143.5	140.1	141.7
80°	159.0	165.5	157.0	146.0	131.6	121.2	114.7	111.4	107.5	106.2	108.8
82.5°	114.1	117.1	112.7	105.3	94.6	87.8	83.4	79.6	78.8	79.1	79.1
85°	59.3	58.6	58.0	51.5	48.3	43.6	41.1	40.4	39.8	41.1	42.3
87.5°	21.8	22.1	21.4	19.1	17.2	15.5	14.7	13.9	14.7	15.5	16.2
90°	9.9	9.0	8.0	6.9	5.6	4.2	2.9	1.6	2.9	4.2	5.6
92.5°	9.5	8.6	7.5	7.1	7.0	6.9	6.9	6.8	6.9	6.9	7.0
95°	11.6	11.5	11.3	13.3	17.3	21.5	25.5	29.6	25.5	21.5	17.3
97.5°	40.9	54.2	67.5	73.0	70.4	67.9	65.3	62.8	65.3	67.9	70.4
100°	56.6	73.1	89.6	96.8	94.6	92.5	90.3	88.1	90.3	92.5	94.6
102.5°	118.3	120.5	122.6	122.9	121.3	119.7	118.1	116.6	118.1	119.7	121.3
105°	166.5	166.0	165.3	164.7	164.0	163.2	162.6	161.8	162.6	163.2	164.0
107.5°	207.5	206.7	205.9	205.3	204.9	204.6	204.2	203.9	204.2	204.6	204.9
110°	235.6	235.0	234.2	233.7	233.4	233.0	232.6	232.2	232.6	233.0	233.4



TEST NUMBER: P332634-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	263.5	263.2	262.9	262.4	261.7	261.1	260.4	259.8	260.4	261.1	261.7
115°	303.5	303.6	303.7	303.6	303.2	302.8	302.6	302.2	302.6	302.8	303.2
117.5°	343.2	342.9	342.6	342.2	341.8	341.3	340.8	340.4	340.8	341.3	341.8
120°	368.0	368.2	368.3	368.1	367.6	367.1	366.6	366.2	366.6	367.1	367.6
122.5°	391.9	391.8	391.6	391.3	391.1	390.8	390.5	390.2	390.5	390.8	391.1
125°	426.3	426.5	426.8	426.7	426.2	425.7	425.2	424.7	425.2	425.7	426.2
127.5°	459.3	458.8	458.3	457.9	457.8	457.7	457.5	457.4	457.5	457.7	457.8
130°	479.9	479.6	479.2	479.0	478.9	478.7	478.6	478.5	478.6	478.7	478.9
132.5°	499.9	499.5	499.1	498.7	498.5	498.3	498.0	497.9	498.0	498.3	498.5
135°	527.5	527.1	526.6	526.4	526.5	526.7	526.8	526.9	526.8	526.7	526.5
137.5°	554.1	553.6	553.1	552.8	552.7	552.7	552.6	552.6	552.6	552.7	552.7
140°	571.1	570.8	570.5	570.3	570.0	569.9	569.6	569.4	569.6	569.9	570.0
142.5°	586.7	586.5	586.4	586.2	585.7	585.3	584.8	584.5	584.8	585.3	585.7
145°	609.2	609.2	609.2	609.0	608.6	608.2	607.9	607.6	607.9	608.2	608.6
147.5°	628.7	628.8	628.9	628.6	627.9	627.3	626.6	625.9	626.6	627.3	627.9
150°	641.1	641.2	641.4	641.2	640.7	640.3	639.7	639.2	639.7	640.3	640.7
152.5°	651.7	651.9	652.1	652.0	651.6	651.2	650.8	650.4	650.8	651.2	651.6
155°	665.8	666.2	666.5	666.7	666.5	666.4	666.3	666.2	666.3	666.4	666.5
157.5°	678.1	678.4	678.8	679.1	679.2	679.2	679.3	679.4	679.3	679.2	679.2
160°	685.2	685.3	685.4	685.7	686.1	686.4	686.7	687.1	686.7	686.4	686.1
162.5°	691.6	691.7	691.9	692.2	692.7	693.1	693.5	694.0	693.5	693.1	692.7
165°	700.0	700.0	700.0	700.3	700.9	701.5	702.1	702.7	702.1	701.5	700.9
167.5°	706.6	706.7	706.7	707.1	707.8	708.3	709.0	709.5	709.0	708.3	707.8
170°	710.5	710.4	710.3	710.6	711.3	712.0	712.8	713.5	712.8	712.0	711.3
172.5°	713.1	713.0	712.8	713.2	713.9	714.6	715.3	716.0	715.3	714.6	713.9
175°	716.0	715.8	715.7	716.0	716.7	717.4	718.1	718.9	718.1	717.4	716.7
177.5°	717.6	717.4	717.2	717.5	718.1	718.8	719.4	720.1	719.4	718.8	718.1
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9



TEST NUMBER: P332634-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1542.7	1538.0	1531.3	1521.8	1514.0	1505.7	1503.6	1500.4	1506.7	1501.5	1500.0
5°	1492.1	1478.5	1460.8	1440.7	1428.9	1412.0	1408.7	1402.2	1395.7	1395.1	1388.6
7.5°	1438.6	1418.5	1395.4	1374.9	1355.8	1337.3	1325.2	1322.6	1313.0	1307.3	1300.8
10°	1404.2	1379.4	1352.7	1333.1	1311.0	1291.5	1277.8	1270.0	1263.4	1256.2	1249.7
12.5°	1363.5	1337.2	1315.1	1294.0	1267.7	1252.8	1230.3	1216.7	1215.5	1215.6	1198.6
15°	1316.2	1290.2	1256.2	1226.2	1211.9	1183.3	1170.9	1155.3	1145.5	1135.7	1127.9
17.5°	1262.2	1229.6	1203.2	1168.8	1141.4	1118.6	1102.4	1093.0	1078.3	1064.4	1054.4
20°	1228.2	1193.7	1165.6	1129.2	1099.2	1071.2	1057.5	1044.5	1033.4	1021.7	1010.6
22.5°	1193.8	1157.7	1123.4	1088.0	1060.2	1030.6	1017.4	999.7	989.1	982.6	971.5
25°	1139.6	1100.5	1061.4	1027.6	998.9	972.8	955.3	941.5	929.8	924.6	917.5
27.5°	1080.7	1041.9	1004.1	965.6	933.1	914.2	900.1	889.8	883.1	876.1	872.9
30°	1043.2	1002.8	962.4	926.5	896.5	877.7	864.7	857.5	852.2	849.0	845.7
32.5°	1005.1	965.3	922.7	890.0	863.2	846.4	836.5	829.3	826.7	825.6	824.3
35°	944.1	903.7	864.7	835.4	809.9	803.4	794.9	791.0	789.8	794.3	796.3
37.5°	885.1	847.6	811.6	783.2	766.6	757.1	754.1	754.3	758.9	763.0	767.7
40°	847.1	810.6	776.7	752.0	736.3	730.5	729.2	732.4	737.6	742.2	747.3
42.5°	810.0	774.1	743.3	720.1	709.2	703.8	704.6	707.8	715.2	720.8	728.6
45°	752.6	722.6	692.7	673.7	664.6	665.9	665.9	671.8	678.9	687.4	695.9
47.5°	698.5	668.3	643.7	627.7	623.0	621.9	625.6	633.2	643.5	653.9	665.8
50°	662.0	633.3	611.8	597.5	592.3	594.3	599.5	606.6	619.0	632.1	644.4
52.5°	625.0	598.9	579.0	565.7	562.0	565.6	570.8	582.1	593.0	607.0	622.0
55°	567.5	545.4	529.7	520.0	518.7	520.7	526.5	538.9	554.5	572.1	586.4
57.5°	510.3	491.8	477.5	470.7	471.4	473.2	482.9	497.6	514.3	533.0	551.5
60°	471.7	454.8	443.1	437.9	438.5	442.4	454.1	467.9	488.7	506.9	526.5
62.5°	435.3	420.4	409.2	404.5	403.6	412.2	423.4	437.6	458.5	478.8	499.9
65°	376.6	364.9	355.8	353.2	355.2	361.7	376.0	394.8	412.5	433.9	456.1
67.5°	319.2	309.6	303.4	304.5	306.9	316.5	328.6	344.8	364.8	387.0	409.0
70°	282.8	273.6	268.4	269.1	273.1	284.7	295.2	311.4	333.0	355.8	374.0
72.5°	245.2	239.2	234.6	237.3	241.2	249.3	262.3	278.6	297.6	318.8	338.0
75°	188.3	188.3	185.7	187.7	193.5	201.3	211.1	228.1	246.9	263.9	279.6
77.5°	139.7	138.3	140.0	142.3	145.7	155.0	166.2	178.2	192.5	209.4	222.3
80°	106.9	107.5	110.7	114.7	116.0	123.2	134.9	146.0	157.0	171.4	183.7
82.5°	80.3	81.0	82.7	87.6	88.9	96.6	104.2	115.2	125.3	134.9	145.2
85°	43.6	43.6	46.9	48.8	52.1	57.3	61.9	68.4	77.6	84.1	93.8
87.5°	18.1	18.3	20.5	21.8	23.6	26.3	27.5	33.4	35.6	38.4	43.2
90°	6.9	8.0	9.0	9.9	10.8	11.8	12.5	13.3	13.9	14.7	15.2
92.5°	7.1	7.5	8.6	9.5	10.5	11.4	12.2	12.8	13.6	14.2	14.6
95°	13.3	11.3	11.5	11.6	11.7	11.8	12.5	13.3	13.9	14.7	15.1
97.5°	73.0	67.5	54.2	40.9	27.5	14.2	14.2	14.3	14.4	14.5	14.6
100°	96.8	89.6	73.1	56.6	40.2	23.7	21.6	19.6	17.5	15.6	14.6
102.5°	122.9	122.6	120.5	118.3	116.1	114.0	92.1	70.1	48.3	26.3	15.4
105°	164.7	165.3	166.0	166.5	167.1	167.8	168.8	169.9	171.0	172.0	170.4
107.5°	205.3	205.9	206.7	207.5	208.3	209.2	209.7	210.2	210.8	211.2	211.7
110°	233.7	234.2	235.0	235.6	236.4	237.1	237.3	237.6	237.8	238.1	238.4



TEST NUMBER: P332634-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	262.4	262.9	263.2	263.5	263.9	264.2	264.2	264.1	264.1	264.0	264.2
115°	303.6	303.7	303.6	303.5	303.3	303.2	303.5	303.7	304.0	304.2	304.3
117.5°	342.2	342.6	342.9	343.2	343.4	343.7	343.7	343.6	343.6	343.5	343.5
120°	368.1	368.3	368.2	368.0	367.9	367.8	368.0	368.3	368.4	368.7	368.7
122.5°	391.3	391.6	391.8	391.9	392.1	392.3	392.4	392.6	392.7	392.9	392.8
125°	426.7	426.8	426.5	426.3	426.0	425.8	426.2	426.5	426.9	427.3	427.5
127.5°	457.9	458.3	458.8	459.3	459.9	460.4	460.3	460.3	460.2	460.1	460.1
130°	479.0	479.2	479.6	479.9	480.3	480.7	480.8	480.9	481.0	481.2	481.2
132.5°	498.7	499.1	499.5	499.9	500.4	500.9	501.0	501.1	501.2	501.3	501.3
135°	526.4	526.6	527.1	527.5	528.0	528.5	528.8	529.0	529.2	529.4	529.7
137.5°	552.8	553.1	553.6	554.1	554.7	555.2	555.4	555.7	556.0	556.2	556.3
140°	570.3	570.5	570.8	571.1	571.3	571.6	571.8	572.2	572.6	573.0	573.2
142.5°	586.2	586.4	586.5	586.7	586.8	587.0	587.3	587.5	587.8	588.1	588.2
145°	609.0	609.2	609.2	609.2	609.2	609.2	609.3	609.4	609.5	609.6	609.8
147.5°	628.6	628.9	628.8	628.7	628.5	628.4	628.5	628.6	628.7	628.8	628.9
150°	641.2	641.4	641.2	641.1	641.0	640.8	640.8	640.8	640.8	640.8	640.9
152.5°	652.0	652.1	651.9	651.7	651.4	651.2	651.4	651.6	651.8	652.0	652.1
155°	666.7	666.5	666.2	665.8	665.4	665.1	665.5	666.0	666.5	666.9	667.0
157.5°	679.1	678.8	678.4	678.1	677.6	677.2	677.9	678.4	679.1	679.7	679.7
160°	685.7	685.4	685.3	685.2	685.0	684.9	685.7	686.4	687.1	687.9	687.9
162.5°	692.2	691.9	691.7	691.6	691.5	691.4	692.1	692.9	693.5	694.3	694.3
165°	700.3	700.0	700.0	700.0	700.0	700.0	701.0	701.9	702.9	703.9	703.8
167.5°	707.1	706.7	706.7	706.6	706.5	706.4	707.6	708.6	709.6	710.7	710.6
170°	710.6	710.3	710.4	710.5	710.7	710.8	711.7	712.7	713.6	714.6	714.4
172.5°	713.2	712.8	713.0	713.1	713.2	713.3	714.4	715.3	716.2	717.2	717.0
175°	716.0	715.7	715.8	716.0	716.0	716.1	717.2	718.3	719.3	720.5	720.3
177.5°	717.5	717.2	717.4	717.6	717.7	717.9	718.8	719.5	720.3	721.0	720.9
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9



TEST NUMBER: P332634-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1498.9	1497.9	1494.2	1493.7	1494.2	1497.9	1498.9	1500.0	1501.5	1506.7	1500.4
5°	1384.6	1381.4	1379.4	1386.6	1379.4	1381.4	1384.6	1388.6	1395.1	1395.7	1402.2
7.5°	1298.4	1295.9	1290.2	1288.4	1290.2	1295.9	1298.4	1300.8	1307.3	1313.0	1322.6
10°	1243.2	1240.6	1235.4	1234.1	1235.4	1240.6	1243.2	1249.7	1256.2	1263.4	1270.0
12.5°	1190.1	1184.9	1183.8	1185.1	1183.8	1184.9	1190.1	1198.6	1215.6	1215.5	1216.7
15°	1119.5	1116.8	1109.7	1111.6	1109.7	1116.8	1119.5	1127.9	1135.7	1145.5	1155.3
17.5°	1049.8	1046.7	1038.0	1045.7	1038.0	1046.7	1049.8	1054.4	1064.4	1078.3	1093.0
20°	1006.1	1000.8	996.3	995.6	996.3	1000.8	1006.1	1010.6	1021.7	1033.4	1044.5
22.5°	964.3	959.7	959.2	955.0	959.2	959.7	964.3	971.5	982.6	989.1	999.7
25°	912.2	907.7	906.3	903.1	906.3	907.7	912.2	917.5	924.6	929.8	941.5
27.5°	872.2	870.0	867.6	868.6	867.6	870.0	872.2	872.9	876.1	883.1	889.8
30°	847.7	847.1	845.7	845.7	845.7	847.1	847.7	845.7	849.0	852.2	857.5
32.5°	827.4	827.3	828.0	828.0	828.0	827.3	827.4	824.3	825.6	826.7	829.3
35°	798.8	800.8	802.1	800.1	802.1	800.8	798.8	796.3	794.3	789.8	791.0
37.5°	773.1	775.0	776.8	779.0	776.8	775.0	773.1	767.7	763.0	758.9	754.3
40°	753.2	757.8	759.1	762.3	759.1	757.8	753.2	747.3	742.2	737.6	732.4
42.5°	734.4	739.5	742.9	743.6	742.9	739.5	734.4	728.6	720.8	715.2	707.8
45°	705.7	710.9	715.5	715.5	715.5	710.9	705.7	695.9	687.4	678.9	671.8
47.5°	675.8	683.3	688.0	689.1	688.0	683.3	675.8	665.8	653.9	643.5	633.2
50°	655.5	664.6	669.2	672.4	669.2	664.6	655.5	644.4	632.1	619.0	606.6
52.5°	635.7	644.8	650.9	652.6	650.9	644.8	635.7	622.0	607.0	593.0	582.1
55°	601.4	614.4	621.6	624.2	621.6	614.4	601.4	586.4	572.1	554.5	538.9
57.5°	569.1	581.1	589.5	591.4	589.5	581.1	569.1	551.5	533.0	514.3	497.6
60°	544.0	557.1	567.5	569.5	567.5	557.1	544.0	526.5	506.9	488.7	467.9
62.5°	518.5	532.1	541.5	546.6	541.5	532.1	518.5	499.9	478.8	458.5	437.6
65°	474.4	488.0	497.2	499.1	497.2	488.0	474.4	456.1	433.9	412.5	394.8
67.5°	426.1	439.8	445.8	449.6	445.8	439.8	426.1	409.0	387.0	364.8	344.8
70°	392.3	403.3	409.8	413.1	409.8	403.3	392.3	374.0	355.8	333.0	311.4
72.5°	353.6	365.2	372.9	373.5	372.9	365.2	353.6	338.0	318.8	297.6	278.6
75°	294.5	304.9	308.9	308.9	308.9	304.9	294.5	279.6	263.9	246.9	228.1
77.5°	233.1	238.5	243.5	244.5	243.5	238.5	233.1	222.3	209.4	192.5	178.2
80°	193.5	196.8	200.7	200.7	200.7	196.8	193.5	183.7	171.4	157.0	146.0
82.5°	152.9	155.6	159.5	159.0	159.5	155.6	152.9	145.2	134.9	125.3	115.2
85°	92.6	98.4	97.7	96.4	97.7	98.4	92.6	93.8	84.1	77.6	68.4
87.5°	44.8	45.3	46.9	48.1	46.9	45.3	44.8	43.2	38.4	35.6	33.4
90°	15.5	15.6	15.9	16.1	15.9	15.6	15.5	15.2	14.7	13.9	13.3
92.5°	14.7	14.7	14.8	14.8	14.8	14.7	14.7	14.6	14.2	13.6	12.8
95°	15.3	15.4	15.5	15.6	15.5	15.4	15.3	15.1	14.7	13.9	13.3
97.5°	14.7	14.8	14.9	15.1	14.9	14.8	14.7	14.6	14.5	14.4	14.3
100°	14.7	14.8	14.9	15.1	14.9	14.8	14.7	14.6	15.6	17.5	19.6
102.5°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.4	26.3	48.3	70.1
105°	166.2	161.8	157.5	153.3	157.5	161.8	166.2	170.4	172.0	171.0	169.9
107.5°	212.2	212.6	213.1	213.6	213.1	212.6	212.2	211.7	211.2	210.8	210.2
110°	238.7	239.0	239.4	239.8	239.4	239.0	238.7	238.4	238.1	237.8	237.6



TEST NUMBER: P332634-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	264.7	265.1	265.6	266.0	265.6	265.1	264.7	264.2	264.0	264.1	264.1
115°	304.3	304.3	304.3	304.3	304.3	304.3	304.3	304.3	304.2	304.0	303.7
117.5°	343.4	343.4	343.3	343.3	343.3	343.4	343.4	343.5	343.5	343.6	343.6
120°	368.4	368.3	368.0	367.8	368.0	368.3	368.4	368.7	368.7	368.4	368.3
122.5°	392.6	392.3	392.1	391.8	392.1	392.3	392.6	392.8	392.9	392.7	392.6
125°	427.6	427.7	427.8	428.0	427.8	427.7	427.6	427.5	427.3	426.9	426.5
127.5°	460.0	459.9	459.8	459.7	459.8	459.9	460.0	460.1	460.1	460.2	460.3
130°	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.0	480.9
132.5°	501.2	501.1	501.1	501.0	501.1	501.1	501.2	501.3	501.3	501.2	501.1
135°	529.9	530.2	530.5	530.7	530.5	530.2	529.9	529.7	529.4	529.2	529.0
137.5°	556.3	556.2	556.1	556.0	556.1	556.2	556.3	556.3	556.2	556.0	555.7
140°	573.3	573.4	573.5	573.6	573.5	573.4	573.3	573.2	573.0	572.6	572.2
142.5°	588.2	588.2	588.2	588.3	588.2	588.2	588.2	588.2	588.1	587.8	587.5
145°	610.0	610.3	610.6	610.8	610.6	610.3	610.0	609.8	609.6	609.5	609.4
147.5°	629.1	629.1	629.2	629.3	629.2	629.1	629.1	628.9	628.8	628.7	628.6
150°	641.0	641.2	641.3	641.4	641.3	641.2	641.0	640.9	640.8	640.8	640.8
152.5°	652.0	651.9	651.8	651.8	651.8	651.9	652.0	652.1	652.0	651.8	651.6
155°	666.7	666.3	666.0	665.6	666.0	666.3	666.7	667.0	666.9	666.5	666.0
157.5°	679.1	678.4	677.9	677.2	677.9	678.4	679.1	679.7	679.7	679.1	678.4
160°	687.1	686.4	685.7	684.9	685.7	686.4	687.1	687.9	687.9	687.1	686.4
162.5°	693.4	692.6	691.8	691.0	691.8	692.6	693.4	694.3	694.3	693.5	692.9
165°	702.7	701.6	700.6	699.5	700.6	701.6	702.7	703.8	703.9	702.9	701.9
167.5°	709.5	708.2	707.0	705.9	707.0	708.2	709.5	710.6	710.7	709.6	708.6
170°	713.3	712.1	710.9	709.7	710.9	712.1	713.3	714.4	714.6	713.6	712.7
172.5°	715.8	714.4	713.1	711.8	713.1	714.4	715.8	717.0	717.2	716.2	715.3
175°	718.9	717.4	716.0	714.5	716.0	717.4	718.9	720.3	720.5	719.3	718.3
177.5°	719.7	718.6	717.4	716.2	717.4	718.6	719.7	720.9	721.0	720.3	719.5
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9



TEST NUMBER: P332634-830
 CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1503.6	1505.7	1514.0	1521.8	1531.3	1538.0	1542.7	1547.9	1558.9	1567.7	1576.0
5°	1408.7	1412.0	1428.9	1440.7	1460.8	1478.5	1492.1	1507.1	1524.8	1548.8	1570.9
7.5°	1325.2	1337.3	1355.8	1374.9	1395.4	1418.5	1438.6	1461.1	1491.5	1524.6	1558.7
10°	1277.8	1291.5	1311.0	1333.1	1352.7	1379.4	1404.2	1430.9	1465.4	1505.8	1546.2
12.5°	1230.3	1252.8	1267.7	1294.0	1315.1	1337.2	1363.5	1398.5	1438.8	1481.3	1530.0
15°	1170.9	1183.3	1211.9	1226.2	1256.2	1290.2	1316.2	1351.4	1390.4	1446.5	1501.3
17.5°	1102.4	1118.6	1141.4	1168.8	1203.2	1229.6	1262.2	1298.4	1347.6	1403.3	1471.8
20°	1057.5	1071.2	1099.2	1129.2	1165.6	1193.7	1228.2	1263.4	1314.3	1373.6	1445.2
22.5°	1017.4	1030.6	1060.2	1088.0	1123.4	1157.7	1193.8	1234.7	1283.5	1346.0	1419.2
25°	955.3	972.8	998.9	1027.6	1061.4	1100.5	1139.6	1176.1	1228.2	1294.0	1372.2
27.5°	900.1	914.2	933.1	965.6	1004.1	1041.9	1080.7	1126.6	1176.7	1246.2	1327.4
30°	864.7	877.7	896.5	926.5	962.4	1002.8	1043.2	1087.5	1139.6	1208.7	1291.5
32.5°	836.5	846.4	863.2	890.0	922.7	965.3	1005.1	1051.0	1105.7	1173.7	1254.4
35°	794.9	803.4	809.9	835.4	864.7	903.7	944.1	993.1	1045.8	1110.3	1191.1
37.5°	754.1	757.1	766.6	783.2	811.6	847.6	885.1	933.2	987.3	1052.8	1125.7
40°	729.2	730.5	736.3	752.0	776.7	810.6	847.1	894.7	946.1	1008.0	1080.3
42.5°	704.6	703.8	709.2	720.1	743.3	774.1	810.0	853.5	904.9	962.1	1030.3
45°	665.9	665.9	664.6	673.7	692.7	722.6	752.6	794.3	837.3	893.3	950.6
47.5°	625.6	621.9	623.0	627.7	643.7	668.3	698.5	732.6	770.5	818.0	868.3
50°	599.5	594.3	592.3	597.5	611.8	633.3	662.0	692.0	727.8	769.5	812.6
52.5°	570.8	565.6	562.0	565.7	579.0	598.9	625.0	651.3	683.5	717.4	754.7
55°	526.5	520.7	518.7	520.0	529.7	545.4	567.5	591.6	615.8	643.8	669.9
57.5°	482.9	473.2	471.4	470.7	477.5	491.8	510.3	531.2	548.7	565.7	593.4
60°	454.1	442.4	438.5	437.9	443.1	454.8	471.7	492.6	505.0	516.7	540.8
62.5°	423.4	412.2	403.6	404.5	409.2	420.4	435.3	450.3	458.5	471.4	487.7
65°	376.0	361.7	355.2	353.2	355.8	364.9	376.6	386.3	395.5	400.8	416.3
67.5°	328.6	316.5	306.9	304.5	303.4	309.6	319.2	325.2	331.7	336.2	345.4
70°	295.2	284.7	273.1	269.1	268.4	273.6	282.8	283.4	292.6	294.5	304.3
72.5°	262.3	249.3	241.2	237.3	234.6	239.2	245.2	246.9	251.9	255.4	260.5
75°	211.1	201.3	193.5	187.7	185.7	188.3	188.3	191.5	194.8	196.8	202.6
77.5°	166.2	155.0	145.7	142.3	140.0	138.3	139.7	141.7	140.1	143.5	144.8
80°	134.9	123.2	116.0	114.7	110.7	107.5	106.9	108.8	106.2	107.5	111.4
82.5°	104.2	96.6	88.9	87.6	82.7	81.0	80.3	79.1	79.1	78.8	79.6
85°	61.9	57.3	52.1	48.8	46.9	43.6	43.6	42.3	41.1	39.8	40.4
87.5°	27.5	26.3	23.6	21.8	20.5	18.3	18.1	16.2	15.5	14.7	13.9
90°	12.5	11.8	10.8	9.9	9.0	8.0	6.9	5.6	4.2	2.9	1.6
92.5°	12.2	11.4	10.5	9.5	8.6	7.5	7.1	7.0	6.9	6.9	6.8
95°	12.5	11.8	11.7	11.6	11.5	11.3	13.3	17.3	21.5	25.5	29.6
97.5°	14.2	14.2	27.5	40.9	54.2	67.5	73.0	70.4	67.9	65.3	62.8
100°	21.6	23.7	40.2	56.6	73.1	89.6	96.8	94.6	92.5	90.3	88.1
102.5°	92.1	114.0	116.1	118.3	120.5	122.6	122.9	121.3	119.7	118.1	116.6
105°	168.8	167.8	167.1	166.5	166.0	165.3	164.7	164.0	163.2	162.6	161.8
107.5°	209.7	209.2	208.3	207.5	206.7	205.9	205.3	204.9	204.6	204.2	203.9
110°	237.3	237.1	236.4	235.6	235.0	234.2	233.7	233.4	233.0	232.6	232.2



TEST NUMBER: P332634-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	264.2	264.2	263.9	263.5	263.2	262.9	262.4	261.7	261.1	260.4	259.8
115°	303.5	303.2	303.3	303.5	303.6	303.7	303.6	303.2	302.8	302.6	302.2
117.5°	343.7	343.7	343.4	343.2	342.9	342.6	342.2	341.8	341.3	340.8	340.4
120°	368.0	367.8	367.9	368.0	368.2	368.3	368.1	367.6	367.1	366.6	366.2
122.5°	392.4	392.3	392.1	391.9	391.8	391.6	391.3	391.1	390.8	390.5	390.2
125°	426.2	425.8	426.0	426.3	426.5	426.8	426.7	426.2	425.7	425.2	424.7
127.5°	460.3	460.4	459.9	459.3	458.8	458.3	457.9	457.8	457.7	457.5	457.4
130°	480.8	480.7	480.3	479.9	479.6	479.2	479.0	478.9	478.7	478.6	478.5
132.5°	501.0	500.9	500.4	499.9	499.5	499.1	498.7	498.5	498.3	498.0	497.9
135°	528.8	528.5	528.0	527.5	527.1	526.6	526.4	526.5	526.7	526.8	526.9
137.5°	555.4	555.2	554.7	554.1	553.6	553.1	552.8	552.7	552.7	552.6	552.6
140°	571.8	571.6	571.3	571.1	570.8	570.5	570.3	570.0	569.9	569.6	569.4
142.5°	587.3	587.0	586.8	586.7	586.5	586.4	586.2	585.7	585.3	584.8	584.5
145°	609.3	609.2	609.2	609.2	609.2	609.2	609.0	608.6	608.2	607.9	607.6
147.5°	628.5	628.4	628.5	628.7	628.8	628.9	628.6	627.9	627.3	626.6	625.9
150°	640.8	640.8	641.0	641.1	641.2	641.4	641.2	640.7	640.3	639.7	639.2
152.5°	651.4	651.2	651.4	651.7	651.9	652.1	652.0	651.6	651.2	650.8	650.4
155°	665.5	665.1	665.4	665.8	666.2	666.5	666.7	666.5	666.4	666.3	666.2
157.5°	677.9	677.2	677.6	678.1	678.4	678.8	679.1	679.2	679.2	679.3	679.4
160°	685.7	684.9	685.0	685.2	685.3	685.4	685.7	686.1	686.4	686.7	687.1
162.5°	692.1	691.4	691.5	691.6	691.7	691.9	692.2	692.7	693.1	693.5	694.0
165°	701.0	700.0	700.0	700.0	700.0	700.0	700.3	700.9	701.5	702.1	702.7
167.5°	707.6	706.4	706.5	706.6	706.7	706.7	707.1	707.8	708.3	709.0	709.5
170°	711.7	710.8	710.7	710.5	710.4	710.3	710.6	711.3	712.0	712.8	713.5
172.5°	714.4	713.3	713.2	713.1	713.0	712.8	713.2	713.9	714.6	715.3	716.0
175°	717.2	716.1	716.0	716.0	715.8	715.7	716.0	716.7	717.4	718.1	718.9
177.5°	718.8	717.9	717.7	717.6	717.4	717.2	717.5	718.1	718.8	719.4	720.1
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9



TEST NUMBER: P332634-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1583.4	1588.6	1595.3	1606.8	1611.0	1616.2	1623.5	1623.0	1625.0	1632.9	1649.5
5°	1589.2	1609.4	1629.0	1652.5	1677.2	1693.5	1715.6	1729.3	1742.9	1760.6	1790.5
7.5°	1591.6	1623.6	1659.4	1700.6	1737.3	1779.5	1812.4	1843.4	1871.5	1908.6	1944.4
10°	1587.9	1630.9	1677.2	1729.3	1784.7	1831.6	1874.0	1922.2	1963.2	2008.2	2048.6
12.5°	1581.1	1633.0	1694.9	1753.3	1818.1	1887.3	1940.1	1988.9	2043.5	2095.3	2157.6
15°	1565.8	1636.8	1709.1	1786.0	1872.6	1952.8	2029.0	2092.3	2150.9	2228.5	2309.9
17.5°	1546.2	1622.9	1714.0	1807.1	1897.7	1989.3	2083.7	2178.7	2252.7	2349.0	2412.7
20°	1528.0	1616.6	1710.4	1821.2	1911.8	2025.8	2119.6	2211.5	2313.1	2409.0	2485.1
22.5°	1502.4	1599.4	1698.9	1809.2	1928.4	2042.5	2150.9	2250.6	2352.2	2456.4	2548.7
25°	1470.0	1557.9	1675.8	1801.0	1919.6	2043.3	2167.8	2292.9	2402.4	2512.5	2598.5
27.5°	1414.8	1525.8	1635.6	1764.7	1896.5	2036.6	2169.6	2300.7	2415.3	2505.8	2559.2
30°	1386.6	1483.0	1602.2	1731.9	1874.6	2025.1	2163.9	2292.3	2399.1	2471.4	2492.9
32.5°	1344.9	1444.4	1561.0	1695.4	1846.4	2001.1	2145.7	2266.7	2355.9	2393.8	2367.9
35°	1283.0	1372.9	1490.8	1628.3	1785.4	1950.2	2092.9	2195.2	2240.8	2205.0	2115.7
37.5°	1208.7	1297.8	1416.3	1551.3	1713.8	1881.4	2010.4	2084.1	2068.9	1979.8	1846.7
40°	1156.6	1240.0	1352.7	1498.6	1657.0	1825.0	1938.4	1978.2	1936.5	1808.8	1667.5
42.5°	1098.7	1180.1	1293.3	1434.0	1601.8	1756.8	1855.6	1858.9	1788.9	1636.3	1494.3
45°	1010.6	1088.2	1195.0	1341.6	1496.7	1642.7	1707.8	1675.8	1546.9	1399.6	1256.9
47.5°	923.7	990.9	1096.3	1235.4	1382.7	1505.5	1537.9	1480.4	1342.9	1200.0	1067.7
50°	860.1	927.8	1026.9	1159.8	1301.8	1408.1	1423.7	1347.5	1212.6	1068.6	965.0
52.5°	799.1	866.4	961.8	1084.8	1214.8	1310.6	1311.1	1222.9	1088.5	960.2	863.8
55°	709.5	770.2	856.2	966.3	1082.3	1157.3	1139.0	1047.7	931.1	819.7	735.7
57.5°	623.3	676.1	755.4	847.2	949.3	1011.2	980.9	893.1	788.9	694.5	630.7
60°	567.5	617.7	685.5	772.1	858.2	906.3	877.7	798.1	702.4	626.1	570.8
62.5°	513.3	555.6	620.9	696.1	775.8	811.5	786.0	707.5	624.7	555.8	510.9
65°	436.6	471.1	523.2	587.8	645.7	676.4	654.9	581.8	518.7	469.1	433.3
67.5°	364.9	391.9	431.3	483.1	532.3	548.9	529.3	478.5	425.0	385.3	360.1
70°	315.4	340.8	374.0	413.8	456.8	474.4	454.8	414.4	370.8	334.2	309.5
72.5°	272.1	291.8	319.8	353.8	387.5	405.0	391.7	352.9	316.0	288.9	267.8
75°	207.2	224.1	243.6	267.8	293.9	305.6	293.9	267.1	241.8	221.5	206.5
77.5°	150.6	159.8	174.8	192.8	209.2	218.1	208.0	189.8	174.4	160.5	153.2
80°	114.7	121.2	131.6	146.0	157.0	165.5	159.0	144.0	131.6	122.5	119.2
82.5°	83.4	87.8	94.6	105.3	112.7	117.1	114.1	103.3	98.2	90.2	86.9
85°	41.1	43.6	48.3	51.5	58.0	58.6	59.3	54.8	50.1	48.3	45.6
87.5°	14.7	15.5	17.2	19.1	21.4	22.1	21.8	22.0	20.1	19.7	17.8
90°	2.9	4.2	5.6	6.9	8.0	9.0	9.9	10.8	11.8	12.5	13.3
92.5°	6.9	6.9	7.0	7.1	7.5	8.6	9.5	10.5	11.4	12.2	12.8
95°	25.5	21.5	17.3	13.3	11.3	11.5	11.6	11.7	11.8	12.5	13.3
97.5°	65.3	67.9	70.4	73.0	67.5	54.2	40.9	27.5	14.2	14.2	14.3
100°	90.3	92.5	94.6	96.8	89.6	73.1	56.6	40.2	23.7	21.6	19.6
102.5°	118.1	119.7	121.3	122.9	122.6	120.5	118.3	116.1	114.0	92.1	70.1
105°	162.6	163.2	164.0	164.7	165.3	166.0	166.5	167.1	167.8	168.8	169.9
107.5°	204.2	204.6	204.9	205.3	205.9	206.7	207.5	208.3	209.2	209.7	210.2
110°	232.6	233.0	233.4	233.7	234.2	235.0	235.6	236.4	237.1	237.3	237.6



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	260.4	261.1	261.7	262.4	262.9	263.2	263.5	263.9	264.2	264.2	264.1
115°	302.6	302.8	303.2	303.6	303.7	303.6	303.5	303.3	303.2	303.5	303.7
117.5°	340.8	341.3	341.8	342.2	342.6	342.9	343.2	343.4	343.7	343.7	343.6
120°	366.6	367.1	367.6	368.1	368.3	368.2	368.0	367.9	367.8	368.0	368.3
122.5°	390.5	390.8	391.1	391.3	391.6	391.8	391.9	392.1	392.3	392.4	392.6
125°	425.2	425.7	426.2	426.7	426.8	426.5	426.3	426.0	425.8	426.2	426.5
127.5°	457.5	457.7	457.8	457.9	458.3	458.8	459.3	459.9	460.4	460.3	460.3
130°	478.6	478.7	478.9	479.0	479.2	479.6	479.9	480.3	480.7	480.8	480.9
132.5°	498.0	498.3	498.5	498.7	499.1	499.5	499.9	500.4	500.9	501.0	501.1
135°	526.8	526.7	526.5	526.4	526.6	527.1	527.5	528.0	528.5	528.8	529.0
137.5°	552.6	552.7	552.7	552.8	553.1	553.6	554.1	554.7	555.2	555.4	555.7
140°	569.6	569.9	570.0	570.3	570.5	570.8	571.1	571.3	571.6	571.8	572.2
142.5°	584.8	585.3	585.7	586.2	586.4	586.5	586.7	586.8	587.0	587.3	587.5
145°	607.9	608.2	608.6	609.0	609.2	609.2	609.2	609.2	609.2	609.3	609.4
147.5°	626.6	627.3	627.9	628.6	628.9	628.8	628.7	628.5	628.4	628.5	628.6
150°	639.7	640.3	640.7	641.2	641.4	641.2	641.1	641.0	640.8	640.8	640.8
152.5°	650.8	651.2	651.6	652.0	652.1	651.9	651.7	651.4	651.2	651.4	651.6
155°	666.3	666.4	666.5	666.7	666.5	666.2	665.8	665.4	665.1	665.5	666.0
157.5°	679.3	679.2	679.2	679.1	678.8	678.4	678.1	677.6	677.2	677.9	678.4
160°	686.7	686.4	686.1	685.7	685.4	685.3	685.2	685.0	684.9	685.7	686.4
162.5°	693.5	693.1	692.7	692.2	691.9	691.7	691.6	691.5	691.4	692.1	692.9
165°	702.1	701.5	700.9	700.3	700.0	700.0	700.0	700.0	700.0	701.0	701.9
167.5°	709.0	708.3	707.8	707.1	706.7	706.7	706.6	706.5	706.4	707.6	708.6
170°	712.8	712.0	711.3	710.6	710.3	710.4	710.5	710.7	710.8	711.7	712.7
172.5°	715.3	714.6	713.9	713.2	712.8	713.0	713.1	713.2	713.3	714.4	715.3
175°	718.1	717.4	716.7	716.0	715.7	715.8	716.0	716.0	716.1	717.2	718.3
177.5°	719.4	718.8	718.1	717.5	717.2	717.4	717.6	717.7	717.9	718.8	719.5
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1657.9	1659.0	1663.6	1667.3	1668.3	1673.6	1674.0
5°	1803.6	1814.7	1836.2	1838.1	1841.4	1858.3	1845.3
7.5°	1974.3	2002.4	2021.2	2037.8	2043.8	2051.2	2049.7
10°	2083.8	2125.4	2146.4	2179.5	2180.9	2189.3	2184.2
12.5°	2193.8	2242.2	2280.3	2286.4	2314.3	2318.6	2325.9
15°	2349.6	2401.1	2453.9	2472.8	2511.2	2520.4	2534.7
17.5°	2496.1	2548.7	2585.8	2634.6	2650.4	2671.5	2657.1
20°	2576.3	2633.7	2680.6	2719.0	2735.4	2747.0	2745.8
22.5°	2624.9	2682.7	2720.7	2749.8	2765.0	2770.0	2769.8
25°	2655.2	2688.4	2700.2	2711.2	2694.4	2688.4	2691.1
27.5°	2570.8	2562.2	2531.6	2491.4	2449.7	2416.6	2398.6
30°	2454.6	2403.7	2357.4	2276.6	2235.0	2210.2	2188.0
32.5°	2289.8	2209.2	2120.2	2046.3	1998.8	1962.1	1956.6
35°	2007.5	1886.3	1777.5	1687.0	1640.0	1600.2	1591.2
37.5°	1706.8	1580.8	1482.9	1403.2	1352.7	1324.6	1298.4
40°	1507.1	1398.9	1302.5	1234.7	1196.3	1176.1	1159.8
42.5°	1353.3	1254.5	1158.7	1107.0	1072.2	1059.9	1050.4
45°	1140.9	1049.0	982.6	943.5	923.3	902.5	892.7
47.5°	970.8	896.1	852.2	819.1	797.4	785.0	778.7
50°	874.4	813.1	774.1	748.7	729.2	719.3	714.2
52.5°	788.9	738.7	705.8	685.6	672.3	665.2	663.1
55°	679.6	641.1	620.3	602.8	593.0	586.4	583.8
57.5°	590.7	561.2	544.2	529.7	525.9	520.5	518.7
60°	532.3	509.5	495.2	485.4	482.2	475.7	476.9
62.5°	480.7	462.1	449.9	444.2	440.0	434.5	436.3
65°	406.6	392.9	386.3	381.2	376.0	372.7	375.3
67.5°	341.2	331.8	322.9	319.9	317.4	316.8	314.1
70°	298.4	290.6	282.8	280.9	280.9	278.2	277.6
72.5°	257.2	251.5	246.3	244.9	242.8	243.8	241.1
75°	198.7	194.2	192.2	190.3	189.6	189.6	187.7
77.5°	146.8	143.5	140.3	140.3	138.0	137.1	136.9
80°	111.4	110.1	107.5	107.5	106.2	106.9	105.6
82.5°	83.8	82.0	81.4	80.4	78.6	78.7	77.4
85°	45.0	43.0	42.3	40.4	39.1	40.4	39.1
87.5°	18.5	18.1	17.6	16.6	16.1	16.2	14.7
90°	13.9	14.7	15.2	15.5	15.6	15.9	16.1
92.5°	13.6	14.2	14.6	14.7	14.7	14.8	14.8
95°	13.9	14.7	15.1	15.3	15.4	15.5	15.6
97.5°	14.4	14.5	14.6	14.7	14.8	14.9	15.1
100°	17.5	15.6	14.6	14.7	14.8	14.9	15.1
102.5°	48.3	26.3	15.4	15.5	15.5	15.5	15.5
105°	171.0	172.0	170.4	166.2	161.8	157.5	153.3
107.5°	210.8	211.2	211.7	212.2	212.6	213.1	213.6
110°	237.8	238.1	238.4	238.7	239.0	239.4	239.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	264.1	264.0	264.2	264.7	265.1	265.6	266.0
115°	304.0	304.2	304.3	304.3	304.3	304.3	304.3
117.5°	343.6	343.5	343.5	343.4	343.4	343.3	343.3
120°	368.4	368.7	368.7	368.4	368.3	368.0	367.8
122.5°	392.7	392.9	392.8	392.6	392.3	392.1	391.8
125°	426.9	427.3	427.5	427.6	427.7	427.8	428.0
127.5°	460.2	460.1	460.1	460.0	459.9	459.8	459.7
130°	481.0	481.2	481.2	481.2	481.2	481.2	481.2
132.5°	501.2	501.3	501.3	501.2	501.1	501.1	501.0
135°	529.2	529.4	529.7	529.9	530.2	530.5	530.7
137.5°	556.0	556.2	556.3	556.3	556.2	556.1	556.0
140°	572.6	573.0	573.2	573.3	573.4	573.5	573.6
142.5°	587.8	588.1	588.2	588.2	588.2	588.2	588.3
145°	609.5	609.6	609.8	610.0	610.3	610.6	610.8
147.5°	628.7	628.8	628.9	629.1	629.1	629.2	629.3
150°	640.8	640.8	640.9	641.0	641.2	641.3	641.4
152.5°	651.8	652.0	652.1	652.0	651.9	651.8	651.8
155°	666.5	666.9	667.0	666.7	666.3	666.0	665.6
157.5°	679.1	679.7	679.7	679.1	678.4	677.9	677.2
160°	687.1	687.9	687.9	687.1	686.4	685.7	684.9
162.5°	693.5	694.3	694.3	693.4	692.6	691.8	691.0
165°	702.9	703.9	703.8	702.7	701.6	700.6	699.5
167.5°	709.6	710.7	710.6	709.5	708.2	707.0	705.9
170°	713.6	714.6	714.4	713.3	712.1	710.9	709.7
172.5°	716.2	717.2	717.0	715.8	714.4	713.1	711.8
175°	719.3	720.5	720.3	718.9	717.4	716.0	714.5
177.5°	720.3	721.0	720.9	719.7	718.6	717.4	716.2
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9

(END OF REPORT)