

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: P332636-830

Luminaire Tested: **SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332636-830  
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-C1020D590U830-4F0-1E-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**

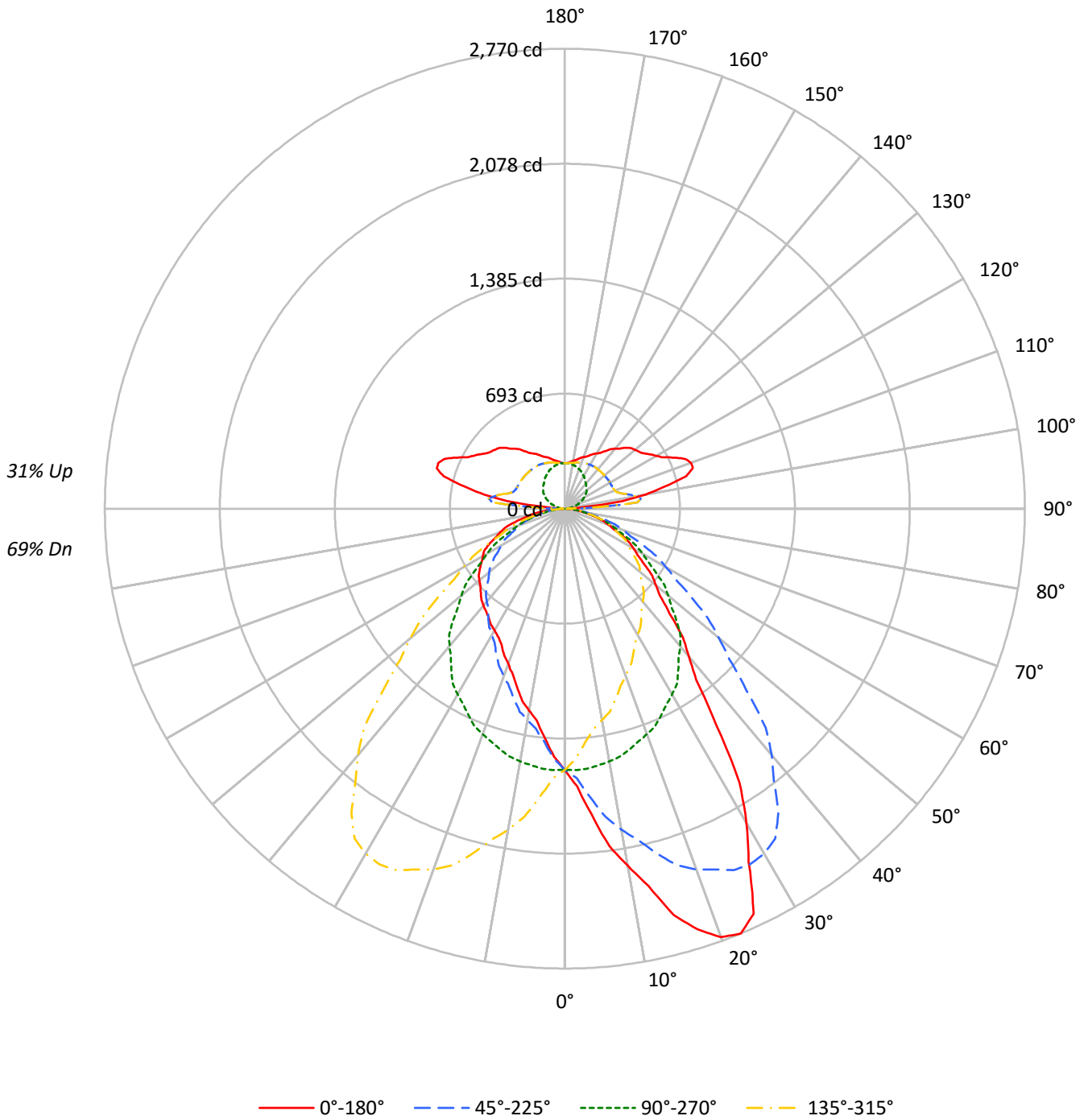
Lumens per Lamp: N/A  
Luminaire Lumens: 6331.7 lumens  
Efficiency: N/A  
Efficacy: 129.7 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: Semi-Direct

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	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°	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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CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.2	2.4
10°-20°	472.3	7.5
20°-30°	749.0	11.8
30°-40°	833.5	13.2
40°-50°	758.7	12.0
50°-60°	620.0	9.8
60°-70°	442.6	7.0
70°-80°	243.7	3.8
80°-90°	68.1	1.1
90°-100°	197.7	3.1
100°-110°	411.4	6.5
110°-120°	368.5	5.8
120°-130°	310.0	4.9
130°-140°	258.4	4.1
140°-150°	197.4	3.1
150°-160°	138.8	2.2
160°-170°	81.6	1.3
170°-180°	26.6	0.4
0°-30°	1374.6	21.7
0°-40°	2208.1	34.9
0°-60°	3586.8	56.6
0°-90°	4341.3	68.6
90°-120°	977.6	15.4
90°-150°	1743.4	27.5
90°-180°	1990.0	31.4
0°-180°	6331.7	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°	11	1	11	1	11	11
95°	131	18	131	18	131	204
105°	756	63	756	63	756	748
115°	726	111	726	111	726	721
125°	580	154	580	154	580	527
135°	518	183	518	183	518	400
145°	423	211	423	211	423	268
155°	354	240	354	240	354	165
165°	309	262	309	262	309	89
175°	278	273	278	273	278	27
180°	274	274	274	274	274	



TEST NUMBER: P332636-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**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°	13.8	15.3	15.4	15.8	16.8	17.2	17.7	17.1	19.0	19.7	21.5
90°	11.3	11.3	11.8	11.3	10.7	10.7	10.2	9.7	9.1	9.7	8.6
92.5°	41.4	41.4	43.3	46.1	52.5	63.2	79.5	105.6	142.0	170.5	149.3
95°	131.2	138.2	147.9	164.6	190.9	243.0	315.1	398.4	450.5	438.2	330.6
97.5°	350.6	361.8	378.0	410.4	448.9	505.1	557.7	588.6	566.1	461.6	309.5
100°	493.0	497.4	513.5	546.3	593.0	632.8	659.2	648.5	570.0	432.3	280.7
102.5°	616.9	620.4	637.3	661.1	689.8	706.4	698.8	645.5	537.6	395.8	261.3
105°	756.5	759.7	767.2	771.6	770.5	748.5	695.2	602.2	479.1	352.7	244.7
107.5°	808.3	806.9	801.5	789.3	762.7	714.8	639.8	540.8	431.8	328.7	241.7
110°	809.2	804.4	794.7	772.1	734.0	674.8	596.8	503.8	408.1	320.5	242.5



TEST NUMBER: P332636-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	783.8	776.0	762.4	735.1	691.7	632.6	558.9	476.7	394.7	316.6	245.1
115°	726.4	722.1	704.9	672.6	630.2	578.5	515.7	449.5	382.3	314.5	250.1
117.5°	668.3	664.9	647.4	620.4	584.1	540.4	490.9	436.1	376.7	314.0	255.2
120°	635.6	629.6	615.7	592.0	561.3	523.1	480.1	430.2	373.7	314.0	259.2
122.5°	609.7	603.8	592.0	571.7	545.8	512.4	473.3	425.0	370.2	313.6	263.1
125°	579.6	576.4	566.2	550.5	529.0	499.5	462.4	416.1	364.6	312.9	268.8
127.5°	561.9	558.7	550.2	536.3	514.6	486.6	449.6	405.4	356.9	311.7	273.4
130°	551.7	548.5	539.8	526.4	504.4	475.8	439.3	396.8	352.1	311.3	276.9
132.5°	540.1	536.8	528.7	513.5	491.8	463.4	427.6	387.8	347.9	310.9	279.9
135°	518.3	515.1	506.5	491.4	470.0	443.0	410.3	375.3	341.4	310.2	284.5
137.5°	491.4	487.6	480.5	465.6	445.5	421.2	393.6	364.0	335.8	310.1	287.1
140°	472.1	467.8	460.2	448.5	429.6	407.0	382.9	357.5	332.8	309.7	289.3
142.5°	451.4	448.5	441.8	430.7	414.2	394.5	373.8	351.6	330.3	309.7	291.0
145°	423.1	420.5	415.1	406.0	392.5	377.5	361.3	343.0	325.8	308.6	292.0
147.5°	398.1	397.1	393.0	385.2	375.3	363.4	350.5	336.0	321.9	306.7	292.5
150°	383.9	383.3	380.1	373.2	364.6	354.9	344.1	331.8	318.9	305.4	292.5
152.5°	371.0	370.4	368.5	362.8	355.5	347.5	337.6	327.0	315.4	303.2	291.6
155°	354.3	354.3	352.7	348.5	343.0	336.6	328.5	319.9	310.2	300.0	290.3
157.5°	339.7	339.7	338.7	335.5	331.4	326.2	319.5	312.3	305.0	296.7	289.0
160°	330.6	330.6	330.2	326.9	323.7	319.3	313.5	307.6	301.1	294.1	287.7
162.5°	322.1	322.5	322.0	318.8	316.4	312.5	307.8	302.8	297.7	291.5	286.3
165°	309.2	309.7	310.2	308.1	305.9	303.2	299.4	296.2	292.0	287.7	283.9
167.5°	299.0	299.4	299.4	298.1	297.0	295.4	292.4	289.9	286.8	283.8	281.3
170°	292.5	292.5	293.0	292.5	291.4	289.8	287.7	286.1	283.3	281.2	279.6
172.5°	286.1	286.9	287.5	286.9	286.3	285.1	283.8	282.6	280.3	278.6	277.9
175°	278.5	279.6	280.7	279.6	279.6	279.6	278.5	278.0	276.9	275.8	275.8
177.5°	274.1	274.9	275.8	275.4	275.8	275.4	275.4	274.9	274.6	274.1	274.1
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332636-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**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°	21.3	21.9	20.6	18.6	16.9	15.3	14.4	13.7	14.4	15.3	15.8
90°	7.5	7.5	4.3	4.3	3.8	3.2	1.6	0.6	1.6	3.2	3.8
92.5°	108.6	66.9	39.6	28.4	20.5	13.9	9.0	6.1	9.0	13.9	20.5
95°	202.2	114.0	67.2	44.6	31.8	24.7	19.3	17.7	19.3	24.7	31.8
97.5°	181.7	109.0	73.0	54.0	42.9	36.5	31.9	31.9	31.9	36.5	42.9
100°	171.0	110.2	78.5	61.3	51.1	44.6	40.9	40.9	40.9	44.6	51.1
102.5°	168.0	114.5	85.8	69.5	59.7	53.6	50.3	49.5	50.3	53.6	59.7
105°	169.4	124.7	99.0	83.3	73.7	67.2	64.6	62.9	64.6	67.2	73.7
107.5°	177.3	136.7	113.0	97.6	88.4	81.5	78.8	77.8	78.8	81.5	88.4
110°	183.3	145.7	122.1	107.5	97.8	91.4	88.7	87.7	88.7	91.4	97.8





TEST NUMBER: P332636-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	189.8	154.3	131.5	117.0	107.4	101.3	98.2	97.1	98.2	101.3	107.4
115°	200.0	167.8	146.3	131.8	121.5	116.1	112.4	110.7	112.4	116.1	121.5
117.5°	210.5	180.8	160.3	145.2	135.7	129.8	126.5	125.0	126.5	129.8	135.7
120°	217.7	189.8	169.4	154.3	145.2	139.2	135.5	134.4	135.5	139.2	145.2
122.5°	224.6	198.4	178.0	163.3	153.4	147.9	144.1	143.0	144.1	147.9	153.4
125°	235.0	210.2	190.9	175.8	165.6	159.7	156.5	154.3	156.5	159.7	165.6
127.5°	243.9	221.2	202.5	187.3	176.6	169.9	166.1	164.3	166.1	169.9	176.6
130°	249.5	228.5	210.2	194.6	184.5	176.3	172.0	169.9	172.0	176.3	184.5
132.5°	255.1	234.5	216.2	201.5	190.5	182.9	177.2	175.5	177.2	182.9	190.5
135°	262.4	243.0	225.3	211.3	200.0	190.9	185.5	183.3	185.5	190.9	200.0
137.5°	267.6	249.5	232.9	219.6	207.8	199.2	193.2	191.2	193.2	199.2	207.8
140°	271.0	253.8	237.6	224.7	213.5	204.3	198.4	196.8	198.4	204.3	213.5
142.5°	273.5	257.7	242.0	229.5	218.6	209.9	204.4	202.8	204.4	209.9	218.6
145°	276.4	261.8	247.9	236.0	225.8	218.3	212.9	211.3	212.9	218.3	225.8
147.5°	278.8	266.2	253.1	242.4	233.8	226.1	221.4	220.8	221.4	226.1	233.8
150°	280.1	268.3	256.5	246.3	238.2	231.8	227.4	226.9	227.4	231.8	238.2
152.5°	281.0	270.0	259.5	250.2	242.9	236.9	232.6	232.5	232.6	236.9	242.9
155°	281.7	272.6	263.4	255.4	249.5	244.1	240.9	240.3	240.9	244.1	249.5
157.5°	281.7	274.5	266.6	260.3	255.1	251.0	248.0	248.0	248.0	251.0	255.1
160°	281.7	275.3	268.8	262.9	258.6	254.9	252.7	252.7	252.7	254.9	258.6
162.5°	281.7	276.2	270.1	265.5	261.6	258.3	256.6	257.0	256.6	258.3	261.6
165°	280.7	276.4	271.5	268.3	265.6	262.9	261.8	261.8	261.8	262.9	265.6
167.5°	279.4	276.3	272.7	270.2	268.7	266.6	266.2	266.6	266.2	266.6	268.7
170°	278.5	275.8	273.1	271.5	270.4	268.8	268.3	268.8	268.3	268.8	270.4
172.5°	277.7	275.4	273.5	272.4	271.7	270.5	270.4	271.0	270.4	270.5	271.7
175°	276.4	274.8	273.7	273.7	273.1	272.6	272.6	273.1	272.6	272.6	273.1
177.5°	274.9	274.1	273.7	273.7	273.7	273.2	273.7	274.1	273.7	273.2	273.7
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332636-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**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°	17.5	17.5	20.3	21.3	23.1	25.9	26.9	32.7	34.9	37.6	42.3
90°	4.3	4.3	7.5	7.5	8.6	9.7	9.1	9.7	10.2	10.7	10.7
92.5°	28.4	39.6	66.9	108.6	149.3	170.5	142.0	105.6	79.5	63.2	52.5
95°	44.6	67.2	114.0	202.2	330.6	438.2	450.5	398.4	315.1	243.0	190.9
97.5°	54.0	73.0	109.0	181.7	309.5	461.6	566.1	588.6	557.7	505.1	448.9
100°	61.3	78.5	110.2	171.0	280.7	432.3	570.0	648.5	659.2	632.8	593.0
102.5°	69.5	85.8	114.5	168.0	261.3	395.8	537.6	645.5	698.8	706.4	689.8
105°	83.3	99.0	124.7	169.4	244.7	352.7	479.1	602.2	695.2	748.5	770.5
107.5°	97.6	113.0	136.7	177.3	241.7	328.7	431.8	540.8	639.8	714.8	762.7
110°	107.5	122.1	145.7	183.3	242.5	320.5	408.1	503.8	596.8	674.8	734.0



TEST NUMBER: P332636-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	117.0	131.5	154.3	189.8	245.1	316.6	394.7	476.7	558.9	632.6	691.7
115°	131.8	146.3	167.8	200.0	250.1	314.5	382.3	449.5	515.7	578.5	630.2
117.5°	145.2	160.3	180.8	210.5	255.2	314.0	376.7	436.1	490.9	540.4	584.1
120°	154.3	169.4	189.8	217.7	259.2	314.0	373.7	430.2	480.1	523.1	561.3
122.5°	163.3	178.0	198.4	224.6	263.1	313.6	370.2	425.0	473.3	512.4	545.8
125°	175.8	190.9	210.2	235.0	268.8	312.9	364.6	416.1	462.4	499.5	529.0
127.5°	187.3	202.5	221.2	243.9	273.4	311.7	356.9	405.4	449.6	486.6	514.6
130°	194.6	210.2	228.5	249.5	276.9	311.3	352.1	396.8	439.3	475.8	504.4
132.5°	201.5	216.2	234.5	255.1	279.9	310.9	347.9	387.8	427.6	463.4	491.8
135°	211.3	225.3	243.0	262.4	284.5	310.2	341.4	375.3	410.3	443.0	470.0
137.5°	219.6	232.9	249.5	267.6	287.1	310.1	335.8	364.0	393.6	421.2	445.5
140°	224.7	237.6	253.8	271.0	289.3	309.7	332.8	357.5	382.9	407.0	429.6
142.5°	229.5	242.0	257.7	273.5	291.0	309.7	330.3	351.6	373.8	394.5	414.2
145°	236.0	247.9	261.8	276.4	292.0	308.6	325.8	343.0	361.3	377.5	392.5
147.5°	242.4	253.1	266.2	278.8	292.5	306.7	321.9	336.0	350.5	363.4	375.3
150°	246.3	256.5	268.3	280.1	292.5	305.4	318.9	331.8	344.1	354.9	364.6
152.5°	250.2	259.5	270.0	281.0	291.6	303.2	315.4	327.0	337.6	347.5	355.5
155°	255.4	263.4	272.6	281.7	290.3	300.0	310.2	319.9	328.5	336.6	343.0
157.5°	260.3	266.6	274.5	281.7	289.0	296.7	305.0	312.3	319.5	326.2	331.4
160°	262.9	268.8	275.3	281.7	287.7	294.1	301.1	307.6	313.5	319.3	323.7
162.5°	265.5	270.1	276.2	281.7	286.3	291.5	297.7	302.8	307.8	312.5	316.4
165°	268.3	271.5	276.4	280.7	283.9	287.7	292.0	296.2	299.4	303.2	305.9
167.5°	270.2	272.7	276.3	279.4	281.3	283.8	286.8	289.9	292.4	295.4	297.0
170°	271.5	273.1	275.8	278.5	279.6	281.2	283.3	286.1	287.7	289.8	291.4
172.5°	272.4	273.5	275.4	277.7	277.9	278.6	280.3	282.6	283.8	285.1	286.3
175°	273.7	273.7	274.8	276.4	275.8	275.8	276.9	278.0	278.5	279.6	279.6
177.5°	273.7	273.7	274.1	274.9	274.1	274.1	274.6	274.9	275.4	275.4	275.8
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332636-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**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°	43.9	44.6	46.1	47.1	46.1	44.6	43.9	42.3	37.6	34.9	32.7
90°	11.3	11.8	11.3	11.3	11.3	11.8	11.3	10.7	10.7	10.2	9.7
92.5°	46.1	43.3	41.4	41.4	41.4	43.3	46.1	52.5	63.2	79.5	105.6
95°	164.6	147.9	138.2	131.2	138.2	147.9	164.6	190.9	243.0	315.1	398.4
97.5°	410.4	378.0	361.8	350.6	361.8	378.0	410.4	448.9	505.1	557.7	588.6
100°	546.3	513.5	497.4	493.0	497.4	513.5	546.3	593.0	632.8	659.2	648.5
102.5°	661.1	637.3	620.4	616.9	620.4	637.3	661.1	689.8	706.4	698.8	645.5
105°	771.6	767.2	759.7	756.5	759.7	767.2	771.6	770.5	748.5	695.2	602.2
107.5°	789.3	801.5	806.9	808.3	806.9	801.5	789.3	762.7	714.8	639.8	540.8
110°	772.1	794.7	804.4	809.2	804.4	794.7	772.1	734.0	674.8	596.8	503.8



TEST NUMBER: P332636-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	735.1	762.4	776.0	783.8	776.0	762.4	735.1	691.7	632.6	558.9	476.7
115°	672.6	704.9	722.1	726.4	722.1	704.9	672.6	630.2	578.5	515.7	449.5
117.5°	620.4	647.4	664.9	668.3	664.9	647.4	620.4	584.1	540.4	490.9	436.1
120°	592.0	615.7	629.6	635.6	629.6	615.7	592.0	561.3	523.1	480.1	430.2
122.5°	571.7	592.0	603.8	609.7	603.8	592.0	571.7	545.8	512.4	473.3	425.0
125°	550.5	566.2	576.4	579.6	576.4	566.2	550.5	529.0	499.5	462.4	416.1
127.5°	536.3	550.2	558.7	561.9	558.7	550.2	536.3	514.6	486.6	449.6	405.4
130°	526.4	539.8	548.5	551.7	548.5	539.8	526.4	504.4	475.8	439.3	396.8
132.5°	513.5	528.7	536.8	540.1	536.8	528.7	513.5	491.8	463.4	427.6	387.8
135°	491.4	506.5	515.1	518.3	515.1	506.5	491.4	470.0	443.0	410.3	375.3
137.5°	465.6	480.5	487.6	491.4	487.6	480.5	465.6	445.5	421.2	393.6	364.0
140°	448.5	460.2	467.8	472.1	467.8	460.2	448.5	429.6	407.0	382.9	357.5
142.5°	430.7	441.8	448.5	451.4	448.5	441.8	430.7	414.2	394.5	373.8	351.6
145°	406.0	415.1	420.5	423.1	420.5	415.1	406.0	392.5	377.5	361.3	343.0
147.5°	385.2	393.0	397.1	398.1	397.1	393.0	385.2	375.3	363.4	350.5	336.0
150°	373.2	380.1	383.3	383.9	383.3	380.1	373.2	364.6	354.9	344.1	331.8
152.5°	362.8	368.5	370.4	371.0	370.4	368.5	362.8	355.5	347.5	337.6	327.0
155°	348.5	352.7	354.3	354.3	354.3	352.7	348.5	343.0	336.6	328.5	319.9
157.5°	335.5	338.7	339.7	339.7	339.7	338.7	335.5	331.4	326.2	319.5	312.3
160°	326.9	330.2	330.6	330.6	330.6	330.2	326.9	323.7	319.3	313.5	307.6
162.5°	318.8	322.0	322.5	322.1	322.5	322.0	318.8	316.4	312.5	307.8	302.8
165°	308.1	310.2	309.7	309.2	309.7	310.2	308.1	305.9	303.2	299.4	296.2
167.5°	298.1	299.4	299.4	299.0	299.4	299.4	298.1	297.0	295.4	292.4	289.9
170°	292.5	293.0	292.5	292.5	292.5	293.0	292.5	291.4	289.8	287.7	286.1
172.5°	286.9	287.5	286.9	286.1	286.9	287.5	286.9	286.3	285.1	283.8	282.6
175°	279.6	280.7	279.6	278.5	279.6	280.7	279.6	279.6	279.6	278.5	278.0
177.5°	275.4	275.8	274.9	274.1	274.9	275.8	275.4	275.8	275.4	275.4	274.9
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332636-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**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°	26.9	25.9	23.1	21.3	20.3	17.5	17.5	15.8	15.3	14.4	13.7
90°	9.1	9.7	8.6	7.5	7.5	4.3	4.3	3.8	3.2	1.6	0.6
92.5°	142.0	170.5	149.3	108.6	66.9	39.6	28.4	20.5	13.9	9.0	6.1
95°	450.5	438.2	330.6	202.2	114.0	67.2	44.6	31.8	24.7	19.3	17.7
97.5°	566.1	461.6	309.5	181.7	109.0	73.0	54.0	42.9	36.5	31.9	31.9
100°	570.0	432.3	280.7	171.0	110.2	78.5	61.3	51.1	44.6	40.9	40.9
102.5°	537.6	395.8	261.3	168.0	114.5	85.8	69.5	59.7	53.6	50.3	49.5
105°	479.1	352.7	244.7	169.4	124.7	99.0	83.3	73.7	67.2	64.6	62.9
107.5°	431.8	328.7	241.7	177.3	136.7	113.0	97.6	88.4	81.5	78.8	77.8
110°	408.1	320.5	242.5	183.3	145.7	122.1	107.5	97.8	91.4	88.7	87.7



TEST NUMBER: P332636-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	394.7	316.6	245.1	189.8	154.3	131.5	117.0	107.4	101.3	98.2	97.1
115°	382.3	314.5	250.1	200.0	167.8	146.3	131.8	121.5	116.1	112.4	110.7
117.5°	376.7	314.0	255.2	210.5	180.8	160.3	145.2	135.7	129.8	126.5	125.0
120°	373.7	314.0	259.2	217.7	189.8	169.4	154.3	145.2	139.2	135.5	134.4
122.5°	370.2	313.6	263.1	224.6	198.4	178.0	163.3	153.4	147.9	144.1	143.0
125°	364.6	312.9	268.8	235.0	210.2	190.9	175.8	165.6	159.7	156.5	154.3
127.5°	356.9	311.7	273.4	243.9	221.2	202.5	187.3	176.6	169.9	166.1	164.3
130°	352.1	311.3	276.9	249.5	228.5	210.2	194.6	184.5	176.3	172.0	169.9
132.5°	347.9	310.9	279.9	255.1	234.5	216.2	201.5	190.5	182.9	177.2	175.5
135°	341.4	310.2	284.5	262.4	243.0	225.3	211.3	200.0	190.9	185.5	183.3
137.5°	335.8	310.1	287.1	267.6	249.5	232.9	219.6	207.8	199.2	193.2	191.2
140°	332.8	309.7	289.3	271.0	253.8	237.6	224.7	213.5	204.3	198.4	196.8
142.5°	330.3	309.7	291.0	273.5	257.7	242.0	229.5	218.6	209.9	204.4	202.8
145°	325.8	308.6	292.0	276.4	261.8	247.9	236.0	225.8	218.3	212.9	211.3
147.5°	321.9	306.7	292.5	278.8	266.2	253.1	242.4	233.8	226.1	221.4	220.8
150°	318.9	305.4	292.5	280.1	268.3	256.5	246.3	238.2	231.8	227.4	226.9
152.5°	315.4	303.2	291.6	281.0	270.0	259.5	250.2	242.9	236.9	232.6	232.5
155°	310.2	300.0	290.3	281.7	272.6	263.4	255.4	249.5	244.1	240.9	240.3
157.5°	305.0	296.7	289.0	281.7	274.5	266.6	260.3	255.1	251.0	248.0	248.0
160°	301.1	294.1	287.7	281.7	275.3	268.8	262.9	258.6	254.9	252.7	252.7
162.5°	297.7	291.5	286.3	281.7	276.2	270.1	265.5	261.6	258.3	256.6	257.0
165°	292.0	287.7	283.9	280.7	276.4	271.5	268.3	265.6	262.9	261.8	261.8
167.5°	286.8	283.8	281.3	279.4	276.3	272.7	270.2	268.7	266.6	266.2	266.6
170°	283.3	281.2	279.6	278.5	275.8	273.1	271.5	270.4	268.8	268.3	268.8
172.5°	280.3	278.6	277.9	277.7	275.4	273.5	272.4	271.7	270.5	270.4	271.0
175°	276.9	275.8	275.8	276.4	274.8	273.7	273.7	273.1	272.6	272.6	273.1
177.5°	274.6	274.1	274.1	274.9	274.1	273.7	273.7	273.7	273.2	273.7	274.1
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7





TEST NUMBER: P332636-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**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°	14.4	15.3	16.9	18.6	20.6	21.9	21.3	21.5	19.7	19.0	17.1
90°	1.6	3.2	3.8	4.3	4.3	7.5	7.5	8.6	9.7	9.1	9.7
92.5°	9.0	13.9	20.5	28.4	39.6	66.9	108.6	149.3	170.5	142.0	105.6
95°	19.3	24.7	31.8	44.6	67.2	114.0	202.2	330.6	438.2	450.5	398.4
97.5°	31.9	36.5	42.9	54.0	73.0	109.0	181.7	309.5	461.6	566.1	588.6
100°	40.9	44.6	51.1	61.3	78.5	110.2	171.0	280.7	432.3	570.0	648.5
102.5°	50.3	53.6	59.7	69.5	85.8	114.5	168.0	261.3	395.8	537.6	645.5
105°	64.6	67.2	73.7	83.3	99.0	124.7	169.4	244.7	352.7	479.1	602.2
107.5°	78.8	81.5	88.4	97.6	113.0	136.7	177.3	241.7	328.7	431.8	540.8
110°	88.7	91.4	97.8	107.5	122.1	145.7	183.3	242.5	320.5	408.1	503.8





TEST NUMBER: P332636-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	98.2	101.3	107.4	117.0	131.5	154.3	189.8	245.1	316.6	394.7	476.7
115°	112.4	116.1	121.5	131.8	146.3	167.8	200.0	250.1	314.5	382.3	449.5
117.5°	126.5	129.8	135.7	145.2	160.3	180.8	210.5	255.2	314.0	376.7	436.1
120°	135.5	139.2	145.2	154.3	169.4	189.8	217.7	259.2	314.0	373.7	430.2
122.5°	144.1	147.9	153.4	163.3	178.0	198.4	224.6	263.1	313.6	370.2	425.0
125°	156.5	159.7	165.6	175.8	190.9	210.2	235.0	268.8	312.9	364.6	416.1
127.5°	166.1	169.9	176.6	187.3	202.5	221.2	243.9	273.4	311.7	356.9	405.4
130°	172.0	176.3	184.5	194.6	210.2	228.5	249.5	276.9	311.3	352.1	396.8
132.5°	177.2	182.9	190.5	201.5	216.2	234.5	255.1	279.9	310.9	347.9	387.8
135°	185.5	190.9	200.0	211.3	225.3	243.0	262.4	284.5	310.2	341.4	375.3
137.5°	193.2	199.2	207.8	219.6	232.9	249.5	267.6	287.1	310.1	335.8	364.0
140°	198.4	204.3	213.5	224.7	237.6	253.8	271.0	289.3	309.7	332.8	357.5
142.5°	204.4	209.9	218.6	229.5	242.0	257.7	273.5	291.0	309.7	330.3	351.6
145°	212.9	218.3	225.8	236.0	247.9	261.8	276.4	292.0	308.6	325.8	343.0
147.5°	221.4	226.1	233.8	242.4	253.1	266.2	278.8	292.5	306.7	321.9	336.0
150°	227.4	231.8	238.2	246.3	256.5	268.3	280.1	292.5	305.4	318.9	331.8
152.5°	232.6	236.9	242.9	250.2	259.5	270.0	281.0	291.6	303.2	315.4	327.0
155°	240.9	244.1	249.5	255.4	263.4	272.6	281.7	290.3	300.0	310.2	319.9
157.5°	248.0	251.0	255.1	260.3	266.6	274.5	281.7	289.0	296.7	305.0	312.3
160°	252.7	254.9	258.6	262.9	268.8	275.3	281.7	287.7	294.1	301.1	307.6
162.5°	256.6	258.3	261.6	265.5	270.1	276.2	281.7	286.3	291.5	297.7	302.8
165°	261.8	262.9	265.6	268.3	271.5	276.4	280.7	283.9	287.7	292.0	296.2
167.5°	266.2	266.6	268.7	270.2	272.7	276.3	279.4	281.3	283.8	286.8	289.9
170°	268.3	268.8	270.4	271.5	273.1	275.8	278.5	279.6	281.2	283.3	286.1
172.5°	270.4	270.5	271.7	272.4	273.5	275.4	277.7	277.9	278.6	280.3	282.6
175°	272.6	272.6	273.1	273.7	273.7	274.8	276.4	275.8	275.8	276.9	278.0
177.5°	273.7	273.2	273.7	273.7	273.7	274.1	274.9	274.1	274.1	274.6	274.9
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332636-830  
 CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**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°	17.7	17.2	16.8	15.8	15.4	15.3	13.8
90°	10.2	10.7	10.7	11.3	11.8	11.3	11.3
92.5°	79.5	63.2	52.5	46.1	43.3	41.4	41.4
95°	315.1	243.0	190.9	164.6	147.9	138.2	131.2
97.5°	557.7	505.1	448.9	410.4	378.0	361.8	350.6
100°	659.2	632.8	593.0	546.3	513.5	497.4	493.0
102.5°	698.8	706.4	689.8	661.1	637.3	620.4	616.9
105°	695.2	748.5	770.5	771.6	767.2	759.7	756.5
107.5°	639.8	714.8	762.7	789.3	801.5	806.9	808.3
110°	596.8	674.8	734.0	772.1	794.7	804.4	809.2



TEST NUMBER: P332636-830

CATALOG NUMBER: SA4XXDIP-C1020D590U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	558.9	632.6	691.7	735.1	762.4	776.0	783.8
115°	515.7	578.5	630.2	672.6	704.9	722.1	726.4
117.5°	490.9	540.4	584.1	620.4	647.4	664.9	668.3
120°	480.1	523.1	561.3	592.0	615.7	629.6	635.6
122.5°	473.3	512.4	545.8	571.7	592.0	603.8	609.7
125°	462.4	499.5	529.0	550.5	566.2	576.4	579.6
127.5°	449.6	486.6	514.6	536.3	550.2	558.7	561.9
130°	439.3	475.8	504.4	526.4	539.8	548.5	551.7
132.5°	427.6	463.4	491.8	513.5	528.7	536.8	540.1
135°	410.3	443.0	470.0	491.4	506.5	515.1	518.3
137.5°	393.6	421.2	445.5	465.6	480.5	487.6	491.4
140°	382.9	407.0	429.6	448.5	460.2	467.8	472.1
142.5°	373.8	394.5	414.2	430.7	441.8	448.5	451.4
145°	361.3	377.5	392.5	406.0	415.1	420.5	423.1
147.5°	350.5	363.4	375.3	385.2	393.0	397.1	398.1
150°	344.1	354.9	364.6	373.2	380.1	383.3	383.9
152.5°	337.6	347.5	355.5	362.8	368.5	370.4	371.0
155°	328.5	336.6	343.0	348.5	352.7	354.3	354.3
157.5°	319.5	326.2	331.4	335.5	338.7	339.7	339.7
160°	313.5	319.3	323.7	326.9	330.2	330.6	330.6
162.5°	307.8	312.5	316.4	318.8	322.0	322.5	322.1
165°	299.4	303.2	305.9	308.1	310.2	309.7	309.2
167.5°	292.4	295.4	297.0	298.1	299.4	299.4	299.0
170°	287.7	289.8	291.4	292.5	293.0	292.5	292.5
172.5°	283.8	285.1	286.3	286.9	287.5	286.9	286.1
175°	278.5	279.6	279.6	279.6	280.7	279.6	278.5
177.5°	275.4	275.4	275.8	275.4	275.8	274.9	274.1
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7

(END OF REPORT)