

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: P332634-940

Luminaire Tested: **SA4XXDIP-C1020D590U940-4F0-1E-UDD-A**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332634-940  
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-C1020D590U940-4F0-1E-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**

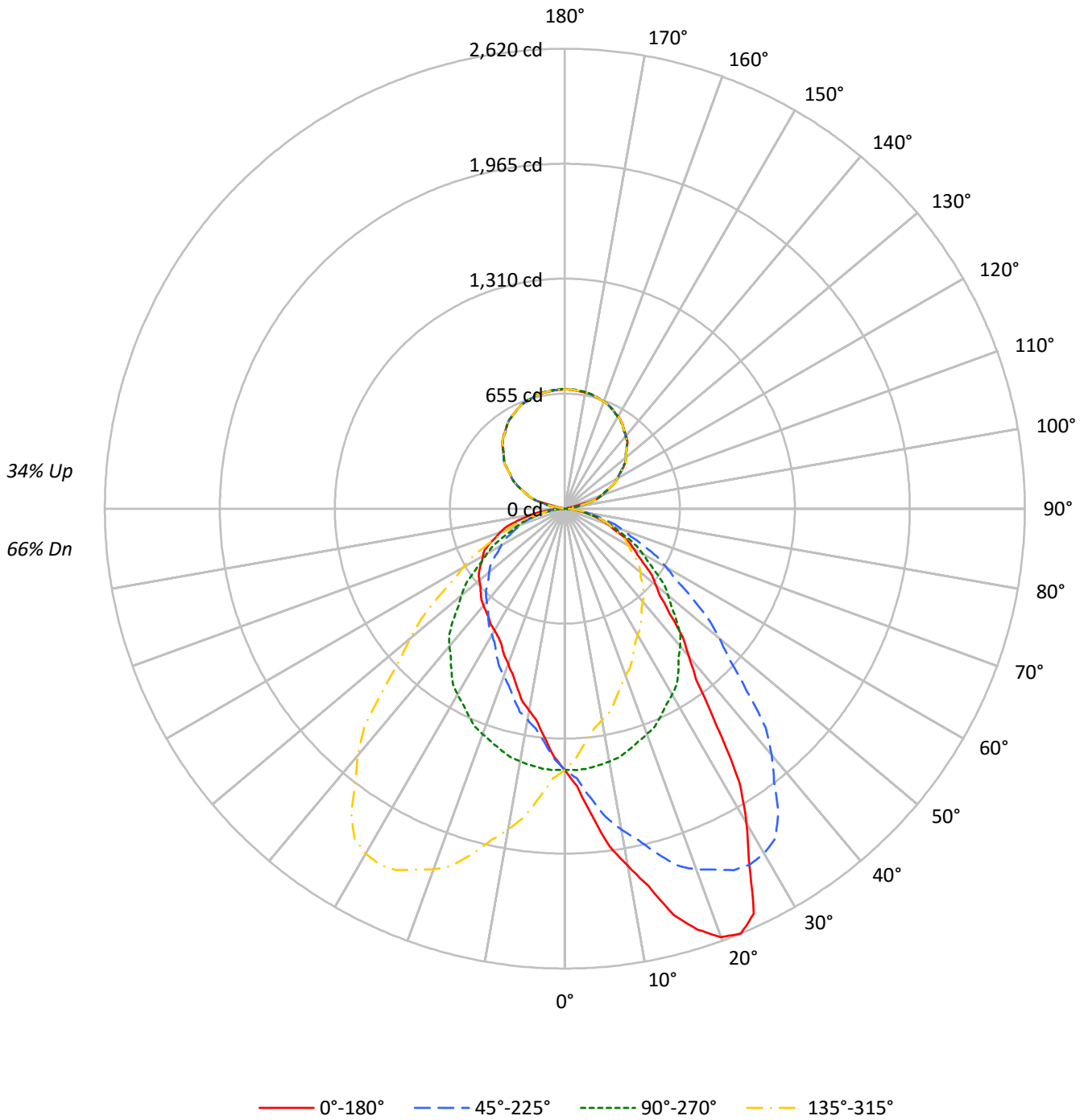
Lumens per Lamp: N/A  
Luminaire Lumens: 6211.3 lumens  
Efficiency: N/A  
Efficacy: 127.3 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 48.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	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°	12013	12013	12013	12013
5°	14148	12044	10631	12044
10°	16939	11992	9571	11992
15°	20042	11870	8790	11870
20°	22317	11747	8092	11747
25°	22678	11564	7611	11564
30°	19296	11389	7458	11389
35°	14836	11106	7460	11106
40°	11564	10771	7600	10771
45°	9642	10268	7728	10268
50°	8485	9654	7989	9654
55°	7773	8919	8313	8919
60°	7285	8262	8699	8262
65°	6783	7524	9020	7524
70°	6198	6793	9224	6793
75°	5536	5979	9114	5979
80°	4644	4900	8824	4900
85°	3427	3548	8448	3548



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.0	2.3
10°-20°	446.9	7.2
20°-30°	708.6	11.4
30°-40°	788.6	12.7
40°-50°	717.8	11.6
50°-60°	586.6	9.4
60°-70°	418.8	6.7
70°-80°	230.6	3.7
80°-90°	64.9	1.0
90°-100°	23.3	0.4
100°-110°	148.3	2.4
110°-120°	283.7	4.6
120°-130°	360.1	5.8
130°-140°	385.3	6.2
140°-150°	360.3	5.8
150°-160°	290.6	4.7
160°-170°	187.4	3.0
170°-180°	64.6	1.0
0°-30°	1300.4	20.9
0°-40°	2089.0	33.6
0°-60°	3393.4	54.6
0°-90°	4107.7	66.1
90°-120°	455.3	7.3
90°-150°	1561.1	25.1
90°-180°	2104.0	33.9
0°-180°	6211.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1488	1488	1488	1488	1488	
5°	1746	1486	1312	1486	1746	178
15°	2398	1420	1052	1420	2398	678
25°	2546	1298	854	1298	2546	1122
35°	1505	1127	757	1127	1505	956
45°	844	899	677	899	844	665
55°	552	634	591	634	552	499
65°	355	394	472	394	355	352
75°	178	192	292	192	178	189
85°	37	38	91	38	37	45
90°	15	2	15	2	15	8
95°	15	28	15	28	15	12
105°	145	153	145	153	145	126
115°	288	286	288	286	288	285
125°	405	402	405	402	405	361
135°	502	498	502	498	502	386
145°	578	575	578	575	578	361
155°	630	630	630	630	630	290
165°	662	665	662	665	662	187
175°	676	680	676	680	676	64
180°	680	680	680	680	680	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1583.8	1583.3	1578.3	1577.3	1573.9	1569.5	1568.5	1560.6	1544.8	1537.4	1535.4
5°	1745.8	1758.1	1742.0	1739.0	1737.1	1716.8	1706.3	1694.0	1665.6	1649.0	1636.0
7.5°	1939.1	1940.5	1933.6	1927.9	1912.2	1894.4	1867.9	1839.5	1805.7	1770.6	1744.0
10°	2066.4	2071.3	2063.2	2062.0	2030.6	2010.8	1971.4	1938.1	1899.9	1857.3	1818.6
12.5°	2200.5	2193.5	2189.5	2163.1	2157.3	2121.3	2075.5	2041.2	1982.3	1933.3	1881.6
15°	2398.0	2384.4	2375.8	2339.4	2321.6	2271.6	2222.9	2185.3	2108.3	2034.9	1979.4
17.5°	2513.8	2527.5	2507.5	2492.5	2446.3	2411.3	2361.5	2282.6	2222.3	2131.2	2061.2
20°	2597.7	2598.9	2587.8	2572.4	2536.0	2491.7	2437.4	2351.1	2279.0	2188.3	2092.2
22.5°	2620.4	2620.6	2615.9	2601.5	2574.0	2538.0	2483.3	2411.3	2323.9	2225.4	2129.2
25°	2545.9	2543.4	2549.0	2565.0	2554.6	2543.4	2512.0	2458.4	2377.0	2272.8	2169.3
27.5°	2269.2	2286.3	2317.6	2357.1	2395.0	2424.0	2432.1	2421.2	2370.7	2285.0	2176.6
30°	2070.0	2091.0	2114.4	2153.8	2230.3	2274.0	2322.2	2358.5	2338.2	2269.8	2168.6
32.5°	1851.1	1856.3	1891.1	1935.9	2005.9	2090.1	2166.3	2240.2	2264.7	2228.8	2144.5
35°	1505.4	1513.9	1551.6	1596.0	1681.7	1784.6	1899.3	2001.6	2086.1	2120.0	2076.8
37.5°	1228.4	1253.2	1279.8	1327.5	1402.9	1495.6	1614.7	1747.1	1873.0	1957.3	1971.7
40°	1097.3	1112.7	1131.8	1168.1	1232.3	1323.5	1425.8	1577.5	1711.3	1832.1	1871.5
42.5°	993.7	1002.7	1014.4	1047.3	1096.2	1186.9	1280.3	1413.7	1548.0	1692.5	1758.6
45°	844.5	853.8	873.5	892.6	929.6	992.5	1079.4	1189.1	1324.1	1463.5	1585.5
47.5°	736.7	742.7	754.4	774.9	806.3	847.7	918.5	1010.1	1135.2	1270.5	1400.5
50°	675.6	680.6	689.8	708.3	732.4	769.3	827.2	912.9	1010.9	1147.2	1274.8
52.5°	627.3	629.3	636.1	648.6	667.7	698.8	746.4	817.3	908.4	1029.8	1156.9
55°	552.3	554.8	561.0	570.2	586.8	606.5	642.9	696.0	775.5	880.9	991.2
57.5°	490.7	492.4	497.6	501.1	514.9	530.9	558.8	596.7	657.0	746.4	844.9
60°	451.2	450.0	456.2	459.2	468.5	482.1	503.6	540.0	592.4	664.5	755.1
62.5°	412.8	411.1	416.3	420.3	425.6	437.2	454.8	483.3	525.8	591.0	669.3
65°	355.1	352.6	355.7	360.6	365.5	371.8	384.7	409.9	443.8	490.7	550.5
67.5°	297.1	299.7	300.2	302.6	305.5	313.9	322.8	340.6	364.5	402.1	452.7
70°	262.6	263.2	265.7	265.7	267.5	274.9	282.3	292.8	316.2	350.8	392.1
72.5°	228.1	230.7	229.7	231.7	233.0	237.9	243.3	253.3	273.3	299.0	333.9
75°	177.5	179.4	179.4	180.0	181.8	183.7	188.0	195.4	209.6	228.7	252.7
77.5°	129.5	129.7	130.5	132.8	132.8	135.7	138.9	144.9	151.9	165.0	179.6
80°	99.9	101.1	100.5	101.7	101.7	104.2	105.4	112.8	115.9	124.5	136.3
82.5°	73.2	74.5	74.4	76.1	77.0	77.6	79.3	82.2	85.3	92.9	97.7
85°	37.0	38.3	37.0	38.3	40.0	40.7	42.5	43.2	45.7	47.4	51.8
87.5°	13.9	15.3	15.2	15.7	16.7	17.1	17.5	16.9	18.6	19.0	20.8
90°	15.2	15.1	14.8	14.6	14.4	13.9	13.2	12.6	11.9	11.1	10.3
92.5°	14.0	14.0	13.9	13.9	13.8	13.5	12.8	12.1	11.5	10.8	9.9
95°	14.7	14.6	14.5	14.4	14.3	13.9	13.2	12.6	11.9	11.1	11.1
97.5°	14.3	14.1	14.0	13.9	13.8	13.7	13.6	13.6	13.5	13.5	26.0
100°	14.3	14.1	14.0	13.9	13.8	14.7	16.6	18.5	20.4	22.4	38.0
102.5°	14.6	14.6	14.6	14.6	14.5	24.9	45.7	66.3	87.1	107.8	109.9
105°	145.0	149.0	153.1	157.2	161.2	162.7	161.8	160.8	159.7	158.7	158.1
107.5°	202.1	201.6	201.2	200.7	200.3	199.8	199.4	198.9	198.4	197.9	197.1
110°	226.9	226.5	226.1	225.9	225.5	225.2	225.0	224.8	224.5	224.4	223.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	251.6	251.3	250.8	250.4	249.9	249.8	249.9	249.9	249.9	249.9	249.7
115°	287.9	287.9	287.9	287.9	287.9	287.8	287.6	287.3	287.1	286.9	287.0
117.5°	324.8	324.8	324.9	324.9	324.9	324.9	325.0	325.0	325.1	325.1	324.9
120°	347.9	348.1	348.4	348.6	348.8	348.8	348.6	348.4	348.1	347.9	348.0
122.5°	370.7	371.0	371.1	371.4	371.6	371.7	371.5	371.4	371.2	371.1	371.0
125°	404.9	404.7	404.7	404.6	404.5	404.2	403.9	403.5	403.2	402.9	403.1
127.5°	434.9	435.0	435.1	435.2	435.2	435.3	435.4	435.5	435.5	435.6	435.1
130°	455.2	455.2	455.2	455.2	455.2	455.2	455.0	455.0	454.9	454.8	454.4
132.5°	473.9	474.0	474.1	474.2	474.3	474.3	474.2	474.1	473.9	473.9	473.4
135°	502.0	501.9	501.6	501.3	501.1	500.9	500.7	500.4	500.2	500.0	499.5
137.5°	526.0	526.1	526.2	526.3	526.3	526.2	526.0	525.8	525.5	525.2	524.8
140°	542.7	542.6	542.5	542.4	542.2	542.1	541.7	541.4	541.0	540.7	540.5
142.5°	556.6	556.5	556.5	556.5	556.5	556.3	556.1	555.8	555.6	555.4	555.2
145°	577.8	577.7	577.4	577.1	576.9	576.8	576.7	576.5	576.4	576.3	576.3
147.5°	595.4	595.3	595.2	595.1	594.9	594.9	594.8	594.7	594.6	594.5	594.6
150°	606.8	606.7	606.6	606.5	606.4	606.3	606.3	606.3	606.3	606.3	606.5
152.5°	616.6	616.6	616.7	616.8	616.9	616.8	616.6	616.4	616.3	616.1	616.3
155°	629.7	630.1	630.4	630.7	631.1	631.0	630.5	630.1	629.6	629.2	629.5
157.5°	640.7	641.3	641.9	642.5	643.0	643.0	642.5	641.9	641.3	640.7	641.1
160°	648.0	648.7	649.3	650.1	650.8	650.8	650.1	649.3	648.7	648.0	648.1
162.5°	653.7	654.5	655.2	656.0	656.8	656.8	656.1	655.5	654.8	654.2	654.2
165°	661.7	662.8	663.8	664.8	665.8	665.9	664.9	664.1	663.2	662.3	662.3
167.5°	667.8	668.9	670.0	671.2	672.3	672.3	671.4	670.4	669.4	668.3	668.4
170°	671.5	672.5	673.7	674.8	675.9	676.1	675.1	674.2	673.3	672.4	672.3
172.5°	673.4	674.7	675.9	677.2	678.3	678.5	677.6	676.7	675.8	674.8	674.8
175°	676.0	677.3	678.7	680.1	681.4	681.6	680.6	679.6	678.5	677.5	677.4
177.5°	677.6	678.7	679.8	680.9	682.0	682.2	681.4	680.7	680.0	679.2	679.0
180°	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1536.0	1529.0	1524.1	1520.2	1509.3	1502.9	1498.0	1491.0	1483.2	1474.8	1464.5
5°	1623.1	1602.1	1586.7	1563.3	1541.1	1522.6	1503.5	1486.2	1465.3	1442.5	1425.8
7.5°	1714.7	1683.6	1643.6	1608.9	1569.9	1536.1	1505.7	1474.6	1442.3	1411.0	1382.3
10°	1772.9	1732.9	1688.5	1636.0	1586.7	1542.9	1502.3	1462.9	1424.6	1386.3	1353.7
12.5°	1835.5	1785.6	1720.0	1658.8	1603.5	1545.0	1495.8	1447.5	1401.4	1361.2	1323.1
15°	1919.6	1847.4	1771.7	1689.7	1616.9	1548.5	1481.3	1420.3	1368.5	1315.5	1278.5
17.5°	1971.3	1882.0	1795.4	1709.7	1621.6	1535.3	1462.9	1392.4	1327.6	1275.0	1228.3
20°	2005.3	1916.6	1808.7	1723.0	1618.2	1529.4	1445.6	1367.3	1299.5	1243.4	1195.2
22.5°	2034.9	1932.3	1824.4	1711.6	1607.3	1513.1	1421.4	1342.6	1273.4	1214.2	1168.1
25°	2050.9	1933.1	1816.1	1703.9	1585.5	1473.9	1390.7	1298.2	1224.2	1162.0	1112.7
27.5°	2052.6	1926.7	1794.2	1669.6	1547.4	1443.5	1338.5	1255.8	1179.0	1113.2	1065.9
30°	2047.2	1915.9	1773.5	1638.5	1515.8	1403.0	1311.8	1221.8	1143.5	1078.2	1028.9
32.5°	2030.0	1893.2	1746.9	1604.0	1476.9	1366.5	1272.4	1186.8	1110.4	1046.1	994.3
35°	1980.0	1845.0	1689.1	1540.5	1410.4	1298.9	1213.8	1126.9	1050.4	989.4	939.5
37.5°	1902.0	1779.9	1621.4	1467.7	1339.9	1227.8	1143.5	1065.0	996.0	934.1	882.9
40°	1833.9	1726.6	1567.6	1417.8	1279.8	1173.1	1094.2	1022.1	953.7	895.1	846.4
42.5°	1755.5	1662.1	1515.4	1356.6	1223.5	1116.4	1039.5	974.7	910.3	856.1	807.4
45°	1615.7	1554.1	1415.9	1269.3	1130.6	1029.5	956.1	899.4	845.2	792.1	751.4
47.5°	1454.9	1424.3	1308.1	1168.8	1037.1	937.5	873.9	821.4	773.9	729.0	693.1
50°	1346.9	1332.1	1231.6	1097.3	971.5	877.8	813.7	768.7	728.0	688.6	654.7
52.5°	1240.4	1239.9	1149.3	1026.3	909.9	819.7	756.0	714.0	678.7	646.7	616.2
55°	1077.5	1094.8	1024.0	914.2	810.0	728.6	671.3	633.7	609.0	582.6	559.7
57.5°	928.0	956.6	898.1	801.5	714.6	639.6	589.7	561.4	535.2	519.2	502.6
60°	830.4	857.5	811.9	730.5	648.5	584.4	536.9	511.7	488.8	477.8	466.0
62.5°	743.6	767.8	734.0	658.5	587.4	525.7	485.6	461.4	445.9	433.8	426.1
65°	619.6	639.9	610.9	556.1	495.0	445.7	413.0	393.9	379.2	374.2	365.5
67.5°	500.8	519.3	503.6	457.0	408.0	370.8	345.2	326.8	318.1	313.8	307.6
70°	430.3	448.8	432.1	391.5	353.8	322.4	298.4	287.8	278.7	276.8	268.1
72.5°	370.6	383.2	366.6	334.7	302.6	276.1	257.4	246.5	241.7	238.4	233.6
75°	278.0	289.1	278.0	253.3	230.5	212.0	196.0	191.7	186.2	184.3	181.2
77.5°	196.8	206.3	197.9	182.4	165.4	151.1	142.5	137.0	135.7	132.5	134.0
80°	150.4	156.6	148.6	138.1	124.5	114.7	108.5	105.4	101.7	100.5	102.9
82.5°	108.0	110.8	106.6	99.6	89.5	83.1	78.9	75.3	74.5	74.8	74.8
85°	56.1	55.5	54.8	48.7	45.7	41.3	38.9	38.3	37.6	38.9	40.0
87.5°	20.6	21.0	20.2	18.1	16.3	14.6	13.9	13.1	13.9	14.6	15.3
90°	9.4	8.5	7.6	6.5	5.3	4.0	2.8	1.5	2.8	4.0	5.3
92.5°	9.0	8.1	7.1	6.7	6.6	6.5	6.5	6.4	6.5	6.5	6.6
95°	11.0	10.9	10.7	12.6	16.4	20.3	24.2	28.0	24.2	20.3	16.4
97.5°	38.7	51.3	63.8	69.0	66.6	64.2	61.8	59.4	61.8	64.2	66.6
100°	53.6	69.2	84.8	91.6	89.5	87.5	85.4	83.4	85.4	87.5	89.5
102.5°	111.9	114.0	116.0	116.3	114.8	113.2	111.7	110.3	111.7	113.2	114.8
105°	157.6	157.0	156.4	155.8	155.2	154.4	153.8	153.1	153.8	154.4	155.2
107.5°	196.4	195.6	194.7	194.2	193.9	193.6	193.2	192.9	193.2	193.6	193.9
110°	222.9	222.3	221.6	221.1	220.8	220.4	220.1	219.7	220.1	220.4	220.8





TEST NUMBER: P332634-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	249.3	249.0	248.7	248.3	247.6	247.0	246.4	245.8	246.4	247.0	247.6
115°	287.1	287.2	287.3	287.2	286.9	286.5	286.2	285.9	286.2	286.5	286.9
117.5°	324.7	324.4	324.1	323.8	323.3	322.9	322.4	322.0	322.4	322.9	323.3
120°	348.1	348.3	348.4	348.2	347.8	347.3	346.9	346.4	346.9	347.3	347.8
122.5°	370.8	370.7	370.5	370.2	370.0	369.7	369.4	369.2	369.4	369.7	370.0
125°	403.3	403.5	403.8	403.7	403.2	402.8	402.3	401.8	402.3	402.8	403.2
127.5°	434.5	434.1	433.5	433.2	433.1	433.0	432.8	432.7	432.8	433.0	433.1
130°	454.1	453.7	453.3	453.2	453.1	452.9	452.8	452.7	452.8	452.9	453.1
132.5°	473.0	472.6	472.2	471.8	471.6	471.4	471.2	471.0	471.2	471.4	471.6
135°	499.1	498.6	498.2	498.0	498.1	498.3	498.4	498.5	498.4	498.3	498.1
137.5°	524.2	523.7	523.3	523.0	522.9	522.9	522.8	522.8	522.8	522.9	522.9
140°	540.3	540.0	539.8	539.6	539.3	539.1	538.9	538.7	538.9	539.1	539.3
142.5°	555.1	554.9	554.8	554.6	554.1	553.8	553.3	552.9	553.3	553.8	554.1
145°	576.3	576.3	576.3	576.1	575.8	575.4	575.2	574.8	575.2	575.4	575.8
147.5°	594.8	594.9	594.9	594.7	594.1	593.4	592.8	592.2	592.8	593.4	594.1
150°	606.5	606.6	606.8	606.6	606.2	605.7	605.2	604.8	605.2	605.7	606.2
152.5°	616.5	616.7	616.9	616.8	616.4	616.1	615.7	615.4	615.7	616.1	616.4
155°	629.9	630.3	630.5	630.7	630.5	630.4	630.4	630.3	630.4	630.4	630.5
157.5°	641.5	641.9	642.2	642.5	642.6	642.6	642.7	642.7	642.7	642.6	642.6
160°	648.3	648.4	648.5	648.7	649.1	649.3	649.7	650.1	649.7	649.3	649.1
162.5°	654.3	654.4	654.6	654.9	655.3	655.7	656.1	656.6	656.1	655.7	655.3
165°	662.3	662.3	662.3	662.5	663.1	663.7	664.2	664.8	664.2	663.7	663.1
167.5°	668.5	668.6	668.6	669.0	669.6	670.1	670.7	671.3	670.7	670.1	669.6
170°	672.2	672.1	672.0	672.3	673.0	673.6	674.3	675.0	674.3	673.6	673.0
172.5°	674.7	674.6	674.4	674.8	675.4	676.1	676.7	677.4	676.7	676.1	675.4
175°	677.3	677.2	677.1	677.3	678.1	678.7	679.4	680.1	679.4	678.7	678.1
177.5°	678.9	678.7	678.5	678.8	679.4	680.0	680.6	681.3	680.6	680.0	679.4
180°	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1



TEST NUMBER: P332634-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1459.5	1455.1	1448.7	1439.8	1432.4	1424.5	1422.5	1419.5	1425.5	1420.5	1419.1
5°	1411.7	1398.7	1382.1	1363.0	1351.8	1335.9	1332.8	1326.6	1320.4	1319.8	1313.7
7.5°	1361.0	1342.0	1320.2	1300.7	1282.7	1265.2	1253.7	1251.2	1242.2	1236.8	1230.7
10°	1328.5	1305.0	1279.8	1261.2	1240.3	1221.8	1208.9	1201.5	1195.2	1188.5	1182.3
12.5°	1289.9	1265.1	1244.2	1224.2	1199.4	1185.3	1164.0	1151.1	1150.0	1150.0	1134.0
15°	1245.2	1220.6	1188.5	1160.1	1146.6	1119.5	1107.8	1093.0	1083.7	1074.4	1067.1
17.5°	1194.1	1163.3	1138.4	1105.8	1079.9	1058.3	1042.9	1034.0	1020.1	1007.0	997.6
20°	1162.0	1129.4	1102.8	1068.3	1039.9	1013.4	1000.5	988.2	977.7	966.6	956.1
22.5°	1129.4	1095.3	1062.8	1029.3	1003.0	975.0	962.5	945.7	935.8	929.6	919.1
25°	1078.2	1041.2	1004.2	972.1	945.0	920.3	903.7	890.7	879.7	874.8	868.0
27.5°	1022.4	985.7	949.9	913.6	882.8	864.9	851.6	841.8	835.4	828.8	825.8
30°	986.9	948.7	910.5	876.6	848.2	830.4	818.1	811.3	806.3	803.3	800.1
32.5°	950.9	913.2	873.0	842.0	816.6	800.8	791.4	784.6	782.1	781.0	779.9
35°	893.2	855.0	818.1	790.3	766.2	760.1	752.1	748.3	747.2	751.4	753.3
37.5°	837.4	801.9	767.9	740.9	725.2	716.2	713.5	713.6	718.0	721.8	726.3
40°	801.4	766.9	734.8	711.4	696.6	691.1	689.8	692.9	697.9	702.1	707.0
42.5°	766.3	732.4	703.2	681.3	670.9	665.8	666.6	669.7	676.6	681.9	689.3
45°	712.0	683.7	655.3	637.4	628.7	630.0	630.0	635.5	642.3	650.3	658.4
47.5°	660.8	632.2	608.9	593.9	589.4	588.4	591.8	599.1	608.8	618.7	629.9
50°	626.3	599.1	578.8	565.3	560.4	562.2	567.1	573.9	585.6	598.0	609.7
52.5°	591.3	566.6	547.8	535.2	531.7	535.1	540.0	550.7	561.0	574.3	588.4
55°	536.9	515.9	501.1	492.0	490.7	492.6	498.1	509.8	524.6	541.3	554.8
57.5°	482.8	465.3	451.7	445.3	445.9	447.6	456.8	470.7	486.5	504.3	521.7
60°	446.3	430.3	419.2	414.3	414.8	418.6	429.6	442.6	462.4	479.6	498.1
62.5°	411.8	397.7	387.1	382.7	381.8	389.9	400.6	414.0	433.7	453.0	473.0
65°	356.3	345.2	336.6	334.1	336.0	342.1	355.7	373.5	390.2	410.5	431.5
67.5°	302.0	292.9	287.0	288.1	290.3	299.4	310.9	326.2	345.1	366.1	386.9
70°	267.5	258.9	254.0	254.6	258.3	269.4	279.3	294.6	315.0	336.6	353.8
72.5°	232.0	226.3	221.9	224.5	228.2	235.9	248.2	263.6	281.5	301.6	319.8
75°	178.2	178.2	175.7	177.5	183.1	190.5	199.7	215.8	233.6	249.7	264.5
77.5°	132.2	130.8	132.4	134.6	137.9	146.6	157.2	168.6	182.1	198.1	210.4
80°	101.1	101.7	104.8	108.5	109.8	116.5	127.6	138.1	148.6	162.1	173.8
82.5°	76.0	76.6	78.2	82.8	84.1	91.4	98.5	109.0	118.5	127.6	137.3
85°	41.3	41.3	44.4	46.2	49.3	54.2	58.6	64.7	73.4	79.5	88.7
87.5°	17.1	17.3	19.4	20.6	22.3	24.9	26.0	31.6	33.7	36.3	40.8
90°	6.5	7.6	8.5	9.4	10.3	11.1	11.9	12.6	13.2	13.9	14.4
92.5°	6.7	7.1	8.1	9.0	9.9	10.8	11.5	12.1	12.8	13.5	13.8
95°	12.6	10.7	10.9	11.0	11.1	11.1	11.9	12.6	13.2	13.9	14.3
97.5°	69.0	63.8	51.3	38.7	26.0	13.5	13.5	13.6	13.6	13.7	13.8
100°	91.6	84.8	69.2	53.6	38.0	22.4	20.4	18.5	16.6	14.7	13.8
102.5°	116.3	116.0	114.0	111.9	109.9	107.8	87.1	66.3	45.7	24.9	14.5
105°	155.8	156.4	157.0	157.6	158.1	158.7	159.7	160.8	161.8	162.7	161.2
107.5°	194.2	194.7	195.6	196.4	197.1	197.9	198.4	198.9	199.4	199.8	200.3
110°	221.1	221.6	222.3	222.9	223.6	224.4	224.5	224.8	225.0	225.2	225.5



TEST NUMBER: P332634-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	248.3	248.7	249.0	249.3	249.7	249.9	249.9	249.9	249.9	249.8	249.9
115°	287.2	287.3	287.2	287.1	287.0	286.9	287.1	287.3	287.6	287.8	287.9
117.5°	323.8	324.1	324.4	324.7	324.9	325.1	325.1	325.0	325.0	324.9	324.9
120°	348.2	348.4	348.3	348.1	348.0	347.9	348.1	348.4	348.6	348.8	348.8
122.5°	370.2	370.5	370.7	370.8	371.0	371.1	371.2	371.4	371.5	371.7	371.6
125°	403.7	403.8	403.5	403.3	403.1	402.9	403.2	403.5	403.9	404.2	404.5
127.5°	433.2	433.5	434.1	434.5	435.1	435.6	435.5	435.5	435.4	435.3	435.2
130°	453.2	453.3	453.7	454.1	454.4	454.8	454.9	455.0	455.0	455.2	455.2
132.5°	471.8	472.2	472.6	473.0	473.4	473.9	473.9	474.1	474.2	474.3	474.3
135°	498.0	498.2	498.6	499.1	499.5	500.0	500.2	500.4	500.7	500.9	501.1
137.5°	523.0	523.3	523.7	524.2	524.8	525.2	525.5	525.8	526.0	526.2	526.3
140°	539.6	539.8	540.0	540.3	540.5	540.7	541.0	541.4	541.7	542.1	542.2
142.5°	554.6	554.8	554.9	555.1	555.2	555.4	555.6	555.8	556.1	556.3	556.5
145°	576.1	576.3	576.3	576.3	576.3	576.3	576.4	576.5	576.7	576.8	576.9
147.5°	594.7	594.9	594.9	594.8	594.6	594.5	594.6	594.7	594.8	594.9	594.9
150°	606.6	606.8	606.6	606.5	606.5	606.3	606.3	606.3	606.3	606.3	606.4
152.5°	616.8	616.9	616.7	616.5	616.3	616.1	616.3	616.4	616.6	616.8	616.9
155°	630.7	630.5	630.3	629.9	629.5	629.2	629.6	630.1	630.5	631.0	631.1
157.5°	642.5	642.2	641.9	641.5	641.1	640.7	641.3	641.9	642.5	643.0	643.0
160°	648.7	648.5	648.4	648.3	648.1	648.0	648.7	649.3	650.1	650.8	650.8
162.5°	654.9	654.6	654.4	654.3	654.2	654.2	654.8	655.5	656.1	656.8	656.8
165°	662.5	662.3	662.3	662.3	662.3	662.3	663.2	664.1	664.9	665.9	665.8
167.5°	669.0	668.6	668.6	668.5	668.4	668.3	669.4	670.4	671.4	672.3	672.3
170°	672.3	672.0	672.1	672.2	672.3	672.4	673.3	674.2	675.1	676.1	675.9
172.5°	674.8	674.4	674.6	674.7	674.8	674.8	675.8	676.7	677.6	678.5	678.3
175°	677.3	677.1	677.2	677.3	677.4	677.5	678.5	679.6	680.6	681.6	681.4
177.5°	678.8	678.5	678.7	678.9	679.0	679.2	680.0	680.7	681.4	682.2	682.0
180°	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1



TEST NUMBER: P332634-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1418.1	1417.1	1413.6	1413.2	1413.6	1417.1	1418.1	1419.1	1420.5	1425.5	1419.5
5°	1309.9	1306.9	1305.0	1311.8	1305.0	1306.9	1309.9	1313.7	1319.8	1320.4	1326.6
7.5°	1228.4	1226.0	1220.6	1218.9	1220.6	1226.0	1228.4	1230.7	1236.8	1242.2	1251.2
10°	1176.2	1173.7	1168.8	1167.5	1168.8	1173.7	1176.2	1182.3	1188.5	1195.2	1201.5
12.5°	1125.9	1121.0	1120.0	1121.1	1120.0	1121.0	1125.9	1134.0	1150.0	1150.0	1151.1
15°	1059.1	1056.6	1049.8	1051.7	1049.8	1056.6	1059.1	1067.1	1074.4	1083.7	1093.0
17.5°	993.2	990.2	982.0	989.3	982.0	990.2	993.2	997.6	1007.0	1020.1	1034.0
20°	951.8	946.8	942.5	941.9	942.5	946.8	951.8	956.1	966.6	977.7	988.2
22.5°	912.3	907.9	907.5	903.5	907.5	907.9	912.3	919.1	929.6	935.8	945.7
25°	863.0	858.7	857.5	854.4	857.5	858.7	863.0	868.0	874.8	879.7	890.7
27.5°	825.2	823.0	820.8	821.8	820.8	823.0	825.2	825.8	828.8	835.4	841.8
30°	802.0	801.4	800.1	800.1	800.1	801.4	802.0	800.1	803.3	806.3	811.3
32.5°	782.7	782.7	783.4	783.4	783.4	782.7	782.7	779.9	781.0	782.1	784.6
35°	755.7	757.6	758.8	757.0	758.8	757.6	755.7	753.3	751.4	747.2	748.3
37.5°	731.4	733.2	734.9	737.0	734.9	733.2	731.4	726.3	721.8	718.0	713.6
40°	712.6	716.9	718.2	721.2	718.2	716.9	712.6	707.0	702.1	697.9	692.9
42.5°	694.8	699.6	702.8	703.5	702.8	699.6	694.8	689.3	681.9	676.6	669.7
45°	667.6	672.5	676.9	676.9	676.9	672.5	667.6	658.4	650.3	642.3	635.5
47.5°	639.4	646.5	650.9	651.9	650.9	646.5	639.4	629.9	618.7	608.8	599.1
50°	620.2	628.7	633.1	636.1	633.1	628.7	620.2	609.7	598.0	585.6	573.9
52.5°	601.4	610.0	615.8	617.4	615.8	610.0	601.4	588.4	574.3	561.0	550.7
55°	569.0	581.3	588.1	590.6	588.1	581.3	569.0	554.8	541.3	524.6	509.8
57.5°	538.4	549.7	557.7	559.5	557.7	549.7	538.4	521.7	504.3	486.5	470.7
60°	514.7	527.1	536.9	538.8	536.9	527.1	514.7	498.1	479.6	462.4	442.6
62.5°	490.5	503.4	512.3	517.1	512.3	503.4	490.5	473.0	453.0	433.7	414.0
65°	448.8	461.7	470.4	472.2	470.4	461.7	448.8	431.5	410.5	390.2	373.5
67.5°	403.1	416.1	421.8	425.3	421.8	416.1	403.1	386.9	366.1	345.1	326.2
70°	371.1	381.6	387.7	390.8	387.7	381.6	371.1	353.8	336.6	315.0	294.6
72.5°	334.6	345.5	352.8	353.4	352.8	345.5	334.6	319.8	301.6	281.5	263.6
75°	278.7	288.5	292.2	292.2	292.2	288.5	278.7	264.5	249.7	233.6	215.8
77.5°	220.5	225.6	230.3	231.3	230.3	225.6	220.5	210.4	198.1	182.1	168.6
80°	183.1	186.2	189.8	189.8	189.8	186.2	183.1	173.8	162.1	148.6	138.1
82.5°	144.6	147.2	150.9	150.4	150.9	147.2	144.6	137.3	127.6	118.5	109.0
85°	87.6	93.1	92.5	91.2	92.5	93.1	87.6	88.7	79.5	73.4	64.7
87.5°	42.4	42.9	44.4	45.5	44.4	42.9	42.4	40.8	36.3	33.7	31.6
90°	14.6	14.8	15.1	15.2	15.1	14.8	14.6	14.4	13.9	13.2	12.6
92.5°	13.9	13.9	14.0	14.0	14.0	13.9	13.9	13.8	13.5	12.8	12.1
95°	14.4	14.5	14.6	14.7	14.6	14.5	14.4	14.3	13.9	13.2	12.6
97.5°	13.9	14.0	14.1	14.3	14.1	14.0	13.9	13.8	13.7	13.6	13.6
100°	13.9	14.0	14.1	14.3	14.1	14.0	13.9	13.8	14.7	16.6	18.5
102.5°	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.5	24.9	45.7	66.3
105°	157.2	153.1	149.0	145.0	149.0	153.1	157.2	161.2	162.7	161.8	160.8
107.5°	200.7	201.2	201.6	202.1	201.6	201.2	200.7	200.3	199.8	199.4	198.9
110°	225.9	226.1	226.5	226.9	226.5	226.1	225.9	225.5	225.2	225.0	224.8



TEST NUMBER: P332634-940

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	250.4	250.8	251.3	251.6	251.3	250.8	250.4	249.9	249.8	249.9	249.9
115°	287.9	287.9	287.9	287.9	287.9	287.9	287.9	287.9	287.8	287.6	287.3
117.5°	324.9	324.9	324.8	324.8	324.8	324.9	324.9	324.9	324.9	325.0	325.0
120°	348.6	348.4	348.1	347.9	348.1	348.4	348.6	348.8	348.8	348.6	348.4
122.5°	371.4	371.1	371.0	370.7	371.0	371.1	371.4	371.6	371.7	371.5	371.4
125°	404.6	404.7	404.7	404.9	404.7	404.7	404.6	404.5	404.2	403.9	403.5
127.5°	435.2	435.1	435.0	434.9	435.0	435.1	435.2	435.2	435.3	435.4	435.5
130°	455.2	455.2	455.2	455.2	455.2	455.2	455.2	455.2	455.2	455.0	455.0
132.5°	474.2	474.1	474.0	473.9	474.0	474.1	474.2	474.3	474.3	474.2	474.1
135°	501.3	501.6	501.9	502.0	501.9	501.6	501.3	501.1	500.9	500.7	500.4
137.5°	526.3	526.2	526.1	526.0	526.1	526.2	526.3	526.3	526.2	526.0	525.8
140°	542.4	542.5	542.6	542.7	542.6	542.5	542.4	542.2	542.1	541.7	541.4
142.5°	556.5	556.5	556.5	556.6	556.5	556.5	556.5	556.5	556.3	556.1	555.8
145°	577.1	577.4	577.7	577.8	577.7	577.4	577.1	576.9	576.8	576.7	576.5
147.5°	595.1	595.2	595.3	595.4	595.3	595.2	595.1	594.9	594.9	594.8	594.7
150°	606.5	606.6	606.7	606.8	606.7	606.6	606.5	606.4	606.3	606.3	606.3
152.5°	616.8	616.7	616.6	616.6	616.6	616.7	616.8	616.9	616.8	616.6	616.4
155°	630.7	630.4	630.1	629.7	630.1	630.4	630.7	631.1	631.0	630.5	630.1
157.5°	642.5	641.9	641.3	640.7	641.3	641.9	642.5	643.0	643.0	642.5	641.9
160°	650.1	649.3	648.7	648.0	648.7	649.3	650.1	650.8	650.8	650.1	649.3
162.5°	656.0	655.2	654.5	653.7	654.5	655.2	656.0	656.8	656.8	656.1	655.5
165°	664.8	663.8	662.8	661.7	662.8	663.8	664.8	665.8	665.9	664.9	664.1
167.5°	671.2	670.0	668.9	667.8	668.9	670.0	671.2	672.3	672.3	671.4	670.4
170°	674.8	673.7	672.5	671.5	672.5	673.7	674.8	675.9	676.1	675.1	674.2
172.5°	677.2	675.9	674.7	673.4	674.7	675.9	677.2	678.3	678.5	677.6	676.7
175°	680.1	678.7	677.3	676.0	677.3	678.7	680.1	681.4	681.6	680.6	679.6
177.5°	680.9	679.8	678.7	677.6	678.7	679.8	680.9	682.0	682.2	681.4	680.7
180°	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1



TEST NUMBER: P332634-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1422.5	1424.5	1432.4	1439.8	1448.7	1455.1	1459.5	1464.5	1474.8	1483.2	1491.0
5°	1332.8	1335.9	1351.8	1363.0	1382.1	1398.7	1411.7	1425.8	1442.5	1465.3	1486.2
7.5°	1253.7	1265.2	1282.7	1300.7	1320.2	1342.0	1361.0	1382.3	1411.0	1442.3	1474.6
10°	1208.9	1221.8	1240.3	1261.2	1279.8	1305.0	1328.5	1353.7	1386.3	1424.6	1462.9
12.5°	1164.0	1185.3	1199.4	1224.2	1244.2	1265.1	1289.9	1323.1	1361.2	1401.4	1447.5
15°	1107.8	1119.5	1146.6	1160.1	1188.5	1220.6	1245.2	1278.5	1315.5	1368.5	1420.3
17.5°	1042.9	1058.3	1079.9	1105.8	1138.4	1163.3	1194.1	1228.3	1275.0	1327.6	1392.4
20°	1000.5	1013.4	1039.9	1068.3	1102.8	1129.4	1162.0	1195.2	1243.4	1299.5	1367.3
22.5°	962.5	975.0	1003.0	1029.3	1062.8	1095.3	1129.4	1168.1	1214.2	1273.4	1342.6
25°	903.7	920.3	945.0	972.1	1004.2	1041.2	1078.2	1112.7	1162.0	1224.2	1298.2
27.5°	851.6	864.9	882.8	913.6	949.9	985.7	1022.4	1065.9	1113.2	1179.0	1255.8
30°	818.1	830.4	848.2	876.6	910.5	948.7	986.9	1028.9	1078.2	1143.5	1221.8
32.5°	791.4	800.8	816.6	842.0	873.0	913.2	950.9	994.3	1046.1	1110.4	1186.8
35°	752.1	760.1	766.2	790.3	818.1	855.0	893.2	939.5	989.4	1050.4	1126.9
37.5°	713.5	716.2	725.2	740.9	767.9	801.9	837.4	882.9	934.1	996.0	1065.0
40°	689.8	691.1	696.6	711.4	734.8	766.9	801.4	846.4	895.1	953.7	1022.1
42.5°	666.6	665.8	670.9	681.3	703.2	732.4	766.3	807.4	856.1	910.3	974.7
45°	630.0	630.0	628.7	637.4	655.3	683.7	712.0	751.4	792.1	845.2	899.4
47.5°	591.8	588.4	589.4	593.9	608.9	632.2	660.8	693.1	729.0	773.9	821.4
50°	567.1	562.2	560.4	565.3	578.8	599.1	626.3	654.7	688.6	728.0	768.7
52.5°	540.0	535.1	531.7	535.2	547.8	566.6	591.3	616.2	646.7	678.7	714.0
55°	498.1	492.6	490.7	492.0	501.1	515.9	536.9	559.7	582.6	609.0	633.7
57.5°	456.8	447.6	445.9	445.3	451.7	465.3	482.8	502.6	519.2	535.2	561.4
60°	429.6	418.6	414.8	414.3	419.2	430.3	446.3	466.0	477.8	488.8	511.7
62.5°	400.6	389.9	381.8	382.7	387.1	397.7	411.8	426.1	433.8	445.9	461.4
65°	355.7	342.1	336.0	334.1	336.6	345.2	356.3	365.5	374.2	379.2	393.9
67.5°	310.9	299.4	290.3	288.1	287.0	292.9	302.0	307.6	313.8	318.1	326.8
70°	279.3	269.4	258.3	254.6	254.0	258.9	267.5	268.1	276.8	278.7	287.8
72.5°	248.2	235.9	228.2	224.5	221.9	226.3	232.0	233.6	238.4	241.7	246.5
75°	199.7	190.5	183.1	177.5	175.7	178.2	178.2	181.2	184.3	186.2	191.7
77.5°	157.2	146.6	137.9	134.6	132.4	130.8	132.2	134.0	132.5	135.7	137.0
80°	127.6	116.5	109.8	108.5	104.8	101.7	101.1	102.9	100.5	101.7	105.4
82.5°	98.5	91.4	84.1	82.8	78.2	76.6	76.0	74.8	74.8	74.5	75.3
85°	58.6	54.2	49.3	46.2	44.4	41.3	41.3	40.0	38.9	37.6	38.3
87.5°	26.0	24.9	22.3	20.6	19.4	17.3	17.1	15.3	14.6	13.9	13.1
90°	11.9	11.1	10.3	9.4	8.5	7.6	6.5	5.3	4.0	2.8	1.5
92.5°	11.5	10.8	9.9	9.0	8.1	7.1	6.7	6.6	6.5	6.5	6.4
95°	11.9	11.1	11.1	11.0	10.9	10.7	12.6	16.4	20.3	24.2	28.0
97.5°	13.5	13.5	26.0	38.7	51.3	63.8	69.0	66.6	64.2	61.8	59.4
100°	20.4	22.4	38.0	53.6	69.2	84.8	91.6	89.5	87.5	85.4	83.4
102.5°	87.1	107.8	109.9	111.9	114.0	116.0	116.3	114.8	113.2	111.7	110.3
105°	159.7	158.7	158.1	157.6	157.0	156.4	155.8	155.2	154.4	153.8	153.1
107.5°	198.4	197.9	197.1	196.4	195.6	194.7	194.2	193.9	193.6	193.2	192.9
110°	224.5	224.4	223.6	222.9	222.3	221.6	221.1	220.8	220.4	220.1	219.7



TEST NUMBER: P332634-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	249.9	249.9	249.7	249.3	249.0	248.7	248.3	247.6	247.0	246.4	245.8
115°	287.1	286.9	287.0	287.1	287.2	287.3	287.2	286.9	286.5	286.2	285.9
117.5°	325.1	325.1	324.9	324.7	324.4	324.1	323.8	323.3	322.9	322.4	322.0
120°	348.1	347.9	348.0	348.1	348.3	348.4	348.2	347.8	347.3	346.9	346.4
122.5°	371.2	371.1	371.0	370.8	370.7	370.5	370.2	370.0	369.7	369.4	369.2
125°	403.2	402.9	403.1	403.3	403.5	403.8	403.7	403.2	402.8	402.3	401.8
127.5°	435.5	435.6	435.1	434.5	434.1	433.5	433.2	433.1	433.0	432.8	432.7
130°	454.9	454.8	454.4	454.1	453.7	453.3	453.2	453.1	452.9	452.8	452.7
132.5°	473.9	473.9	473.4	473.0	472.6	472.2	471.8	471.6	471.4	471.2	471.0
135°	500.2	500.0	499.5	499.1	498.6	498.2	498.0	498.1	498.3	498.4	498.5
137.5°	525.5	525.2	524.8	524.2	523.7	523.3	523.0	522.9	522.9	522.8	522.8
140°	541.0	540.7	540.5	540.3	540.0	539.8	539.6	539.3	539.1	538.9	538.7
142.5°	555.6	555.4	555.2	555.1	554.9	554.8	554.6	554.1	553.8	553.3	552.9
145°	576.4	576.3	576.3	576.3	576.3	576.3	576.1	575.8	575.4	575.2	574.8
147.5°	594.6	594.5	594.6	594.8	594.9	594.9	594.7	594.1	593.4	592.8	592.2
150°	606.3	606.3	606.5	606.5	606.6	606.8	606.6	606.2	605.7	605.2	604.8
152.5°	616.3	616.1	616.3	616.5	616.7	616.9	616.8	616.4	616.1	615.7	615.4
155°	629.6	629.2	629.5	629.9	630.3	630.5	630.7	630.5	630.4	630.4	630.3
157.5°	641.3	640.7	641.1	641.5	641.9	642.2	642.5	642.6	642.6	642.7	642.7
160°	648.7	648.0	648.1	648.3	648.4	648.5	648.7	649.1	649.3	649.7	650.1
162.5°	654.8	654.2	654.2	654.3	654.4	654.6	654.9	655.3	655.7	656.1	656.6
165°	663.2	662.3	662.3	662.3	662.3	662.3	662.5	663.1	663.7	664.2	664.8
167.5°	669.4	668.3	668.4	668.5	668.6	668.6	669.0	669.6	670.1	670.7	671.3
170°	673.3	672.4	672.3	672.2	672.1	672.0	672.3	673.0	673.6	674.3	675.0
172.5°	675.8	674.8	674.8	674.7	674.6	674.4	674.8	675.4	676.1	676.7	677.4
175°	678.5	677.5	677.4	677.3	677.2	677.1	677.3	678.1	678.7	679.4	680.1
177.5°	680.0	679.2	679.0	678.9	678.7	678.5	678.8	679.4	680.0	680.6	681.3
180°	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1



TEST NUMBER: P332634-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1498.0	1502.9	1509.3	1520.2	1524.1	1529.0	1536.0	1535.4	1537.4	1544.8	1560.6
5°	1503.5	1522.6	1541.1	1563.3	1586.7	1602.1	1623.1	1636.0	1649.0	1665.6	1694.0
7.5°	1505.7	1536.1	1569.9	1608.9	1643.6	1683.6	1714.7	1744.0	1770.6	1805.7	1839.5
10°	1502.3	1542.9	1586.7	1636.0	1688.5	1732.9	1772.9	1818.6	1857.3	1899.9	1938.1
12.5°	1495.8	1545.0	1603.5	1658.8	1720.0	1785.6	1835.5	1881.6	1933.3	1982.3	2041.2
15°	1481.3	1548.5	1616.9	1689.7	1771.7	1847.4	1919.6	1979.4	2034.9	2108.3	2185.3
17.5°	1462.9	1535.3	1621.6	1709.7	1795.4	1882.0	1971.3	2061.2	2131.2	2222.3	2282.6
20°	1445.6	1529.4	1618.2	1723.0	1808.7	1916.6	2005.3	2092.2	2188.3	2279.0	2351.1
22.5°	1421.4	1513.1	1607.3	1711.6	1824.4	1932.3	2034.9	2129.2	2225.4	2323.9	2411.3
25°	1390.7	1473.9	1585.5	1703.9	1816.1	1933.1	2050.9	2169.3	2272.8	2377.0	2458.4
27.5°	1338.5	1443.5	1547.4	1669.6	1794.2	1926.7	2052.6	2176.6	2285.0	2370.7	2421.2
30°	1311.8	1403.0	1515.8	1638.5	1773.5	1915.9	2047.2	2168.6	2269.8	2338.2	2358.5
32.5°	1272.4	1366.5	1476.9	1604.0	1746.9	1893.2	2030.0	2144.5	2228.8	2264.7	2240.2
35°	1213.8	1298.9	1410.4	1540.5	1689.1	1845.0	1980.0	2076.8	2120.0	2086.1	2001.6
37.5°	1143.5	1227.8	1339.9	1467.7	1621.4	1779.9	1902.0	1971.7	1957.3	1873.0	1747.1
40°	1094.2	1173.1	1279.8	1417.8	1567.6	1726.6	1833.9	1871.5	1832.1	1711.3	1577.5
42.5°	1039.5	1116.4	1223.5	1356.6	1515.4	1662.1	1755.5	1758.6	1692.5	1548.0	1413.7
45°	956.1	1029.5	1130.6	1269.3	1415.9	1554.1	1615.7	1585.5	1463.5	1324.1	1189.1
47.5°	873.9	937.5	1037.1	1168.8	1308.1	1424.3	1454.9	1400.5	1270.5	1135.2	1010.1
50°	813.7	877.8	971.5	1097.3	1231.6	1332.1	1346.9	1274.8	1147.2	1010.9	912.9
52.5°	756.0	819.7	909.9	1026.3	1149.3	1239.9	1240.4	1156.9	1029.8	908.4	817.3
55°	671.3	728.6	810.0	914.2	1024.0	1094.8	1077.5	991.2	880.9	775.5	696.0
57.5°	589.7	639.6	714.6	801.5	898.1	956.6	928.0	844.9	746.4	657.0	596.7
60°	536.9	584.4	648.5	730.5	811.9	857.5	830.4	755.1	664.5	592.4	540.0
62.5°	485.6	525.7	587.4	658.5	734.0	767.8	743.6	669.3	591.0	525.8	483.3
65°	413.0	445.7	495.0	556.1	610.9	639.9	619.6	550.5	490.7	443.8	409.9
67.5°	345.2	370.8	408.0	457.0	503.6	519.3	500.8	452.7	402.1	364.5	340.6
70°	298.4	322.4	353.8	391.5	432.1	448.8	430.3	392.1	350.8	316.2	292.8
72.5°	257.4	276.1	302.6	334.7	366.6	383.2	370.6	333.9	299.0	273.3	253.3
75°	196.0	212.0	230.5	253.3	278.0	289.1	278.0	252.7	228.7	209.6	195.4
77.5°	142.5	151.1	165.4	182.4	197.9	206.3	196.8	179.6	165.0	151.9	144.9
80°	108.5	114.7	124.5	138.1	148.6	156.6	150.4	136.3	124.5	115.9	112.8
82.5°	78.9	83.1	89.5	99.6	106.6	110.8	108.0	97.7	92.9	85.3	82.2
85°	38.9	41.3	45.7	48.7	54.8	55.5	56.1	51.8	47.4	45.7	43.2
87.5°	13.9	14.6	16.3	18.1	20.2	21.0	20.6	20.8	19.0	18.6	16.9
90°	2.8	4.0	5.3	6.5	7.6	8.5	9.4	10.3	11.1	11.9	12.6
92.5°	6.5	6.5	6.6	6.7	7.1	8.1	9.0	9.9	10.8	11.5	12.1
95°	24.2	20.3	16.4	12.6	10.7	10.9	11.0	11.1	11.1	11.9	12.6
97.5°	61.8	64.2	66.6	69.0	63.8	51.3	38.7	26.0	13.5	13.5	13.6
100°	85.4	87.5	89.5	91.6	84.8	69.2	53.6	38.0	22.4	20.4	18.5
102.5°	111.7	113.2	114.8	116.3	116.0	114.0	111.9	109.9	107.8	87.1	66.3
105°	153.8	154.4	155.2	155.8	156.4	157.0	157.6	158.1	158.7	159.7	160.8
107.5°	193.2	193.6	193.9	194.2	194.7	195.6	196.4	197.1	197.9	198.4	198.9
110°	220.1	220.4	220.8	221.1	221.6	222.3	222.9	223.6	224.4	224.5	224.8





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	246.4	247.0	247.6	248.3	248.7	249.0	249.3	249.7	249.9	249.9	249.9
115°	286.2	286.5	286.9	287.2	287.3	287.2	287.1	287.0	286.9	287.1	287.3
117.5°	322.4	322.9	323.3	323.8	324.1	324.4	324.7	324.9	325.1	325.1	325.0
120°	346.9	347.3	347.8	348.2	348.4	348.3	348.1	348.0	347.9	348.1	348.4
122.5°	369.4	369.7	370.0	370.2	370.5	370.7	370.8	371.0	371.1	371.2	371.4
125°	402.3	402.8	403.2	403.7	403.8	403.5	403.3	403.1	402.9	403.2	403.5
127.5°	432.8	433.0	433.1	433.2	433.5	434.1	434.5	435.1	435.6	435.5	435.5
130°	452.8	452.9	453.1	453.2	453.3	453.7	454.1	454.4	454.8	454.9	455.0
132.5°	471.2	471.4	471.6	471.8	472.2	472.6	473.0	473.4	473.9	473.9	474.1
135°	498.4	498.3	498.1	498.0	498.2	498.6	499.1	499.5	500.0	500.2	500.4
137.5°	522.8	522.9	522.9	523.0	523.3	523.7	524.2	524.8	525.2	525.5	525.8
140°	538.9	539.1	539.3	539.6	539.8	540.0	540.3	540.5	540.7	541.0	541.4
142.5°	553.3	553.8	554.1	554.6	554.8	554.9	555.1	555.2	555.4	555.6	555.8
145°	575.2	575.4	575.8	576.1	576.3	576.3	576.3	576.3	576.3	576.4	576.5
147.5°	592.8	593.4	594.1	594.7	594.9	594.9	594.8	594.6	594.5	594.6	594.7
150°	605.2	605.7	606.2	606.6	606.8	606.6	606.5	606.5	606.3	606.3	606.3
152.5°	615.7	616.1	616.4	616.8	616.9	616.7	616.5	616.3	616.1	616.3	616.4
155°	630.4	630.4	630.5	630.7	630.5	630.3	629.9	629.5	629.2	629.6	630.1
157.5°	642.7	642.6	642.6	642.5	642.2	641.9	641.5	641.1	640.7	641.3	641.9
160°	649.7	649.3	649.1	648.7	648.5	648.4	648.3	648.1	648.0	648.7	649.3
162.5°	656.1	655.7	655.3	654.9	654.6	654.4	654.3	654.2	654.2	654.8	655.5
165°	664.2	663.7	663.1	662.5	662.3	662.3	662.3	662.3	662.3	663.2	664.1
167.5°	670.7	670.1	669.6	669.0	668.6	668.6	668.5	668.4	668.3	669.4	670.4
170°	674.3	673.6	673.0	672.3	672.0	672.1	672.2	672.3	672.4	673.3	674.2
172.5°	676.7	676.1	675.4	674.8	674.4	674.6	674.7	674.8	674.8	675.8	676.7
175°	679.4	678.7	678.1	677.3	677.1	677.2	677.3	677.4	677.5	678.5	679.6
177.5°	680.6	680.0	679.4	678.8	678.5	678.7	678.9	679.0	679.2	680.0	680.7
180°	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1	680.1



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1568.5	1569.5	1573.9	1577.3	1578.3	1583.3	1583.8
5°	1706.3	1716.8	1737.1	1739.0	1742.0	1758.1	1745.8
7.5°	1867.9	1894.4	1912.2	1927.9	1933.6	1940.5	1939.1
10°	1971.4	2010.8	2030.6	2062.0	2063.2	2071.3	2066.4
12.5°	2075.5	2121.3	2157.3	2163.1	2189.5	2193.5	2200.5
15°	2222.9	2271.6	2321.6	2339.4	2375.8	2384.4	2398.0
17.5°	2361.5	2411.3	2446.3	2492.5	2507.5	2527.5	2513.8
20°	2437.4	2491.7	2536.0	2572.4	2587.8	2598.9	2597.7
22.5°	2483.3	2538.0	2574.0	2601.5	2615.9	2620.6	2620.4
25°	2512.0	2543.4	2554.6	2565.0	2549.0	2543.4	2545.9
27.5°	2432.1	2424.0	2395.0	2357.1	2317.6	2286.3	2269.2
30°	2322.2	2274.0	2230.3	2153.8	2114.4	2091.0	2070.0
32.5°	2166.3	2090.1	2005.9	1935.9	1891.1	1856.3	1851.1
35°	1899.3	1784.6	1681.7	1596.0	1551.6	1513.9	1505.4
37.5°	1614.7	1495.6	1402.9	1327.5	1279.8	1253.2	1228.4
40°	1425.8	1323.5	1232.3	1168.1	1131.8	1112.7	1097.3
42.5°	1280.3	1186.9	1096.2	1047.3	1014.4	1002.7	993.7
45°	1079.4	992.5	929.6	892.6	873.5	853.8	844.5
47.5°	918.5	847.7	806.3	774.9	754.4	742.7	736.7
50°	827.2	769.3	732.4	708.3	689.8	680.6	675.6
52.5°	746.4	698.8	667.7	648.6	636.1	629.3	627.3
55°	642.9	606.5	586.8	570.2	561.0	554.8	552.3
57.5°	558.8	530.9	514.9	501.1	497.6	492.4	490.7
60°	503.6	482.1	468.5	459.2	456.2	450.0	451.2
62.5°	454.8	437.2	425.6	420.3	416.3	411.1	412.8
65°	384.7	371.8	365.5	360.6	355.7	352.6	355.1
67.5°	322.8	313.9	305.5	302.6	300.2	299.7	297.1
70°	282.3	274.9	267.5	265.7	265.7	263.2	262.6
72.5°	243.3	237.9	233.0	231.7	229.7	230.7	228.1
75°	188.0	183.7	181.8	180.0	179.4	179.4	177.5
77.5°	138.9	135.7	132.8	132.8	130.5	129.7	129.5
80°	105.4	104.2	101.7	101.7	100.5	101.1	99.9
82.5°	79.3	77.6	77.0	76.1	74.4	74.5	73.2
85°	42.5	40.7	40.0	38.3	37.0	38.3	37.0
87.5°	17.5	17.1	16.7	15.7	15.2	15.3	13.9
90°	13.2	13.9	14.4	14.6	14.8	15.1	15.2
92.5°	12.8	13.5	13.8	13.9	13.9	14.0	14.0
95°	13.2	13.9	14.3	14.4	14.5	14.6	14.7
97.5°	13.6	13.7	13.8	13.9	14.0	14.1	14.3
100°	16.6	14.7	13.8	13.9	14.0	14.1	14.3
102.5°	45.7	24.9	14.5	14.6	14.6	14.6	14.6
105°	161.8	162.7	161.2	157.2	153.1	149.0	145.0
107.5°	199.4	199.8	200.3	200.7	201.2	201.6	202.1
110°	225.0	225.2	225.5	225.9	226.1	226.5	226.9



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	249.9	249.8	249.9	250.4	250.8	251.3	251.6
115°	287.6	287.8	287.9	287.9	287.9	287.9	287.9
117.5°	325.0	324.9	324.9	324.9	324.9	324.8	324.8
120°	348.6	348.8	348.8	348.6	348.4	348.1	347.9
122.5°	371.5	371.7	371.6	371.4	371.1	371.0	370.7
125°	403.9	404.2	404.5	404.6	404.7	404.7	404.9
127.5°	435.4	435.3	435.2	435.2	435.1	435.0	434.9
130°	455.0	455.2	455.2	455.2	455.2	455.2	455.2
132.5°	474.2	474.3	474.3	474.2	474.1	474.0	473.9
135°	500.7	500.9	501.1	501.3	501.6	501.9	502.0
137.5°	526.0	526.2	526.3	526.3	526.2	526.1	526.0
140°	541.7	542.1	542.2	542.4	542.5	542.6	542.7
142.5°	556.1	556.3	556.5	556.5	556.5	556.5	556.6
145°	576.7	576.8	576.9	577.1	577.4	577.7	577.8
147.5°	594.8	594.9	594.9	595.1	595.2	595.3	595.4
150°	606.3	606.3	606.4	606.5	606.6	606.7	606.8
152.5°	616.6	616.8	616.9	616.8	616.7	616.6	616.6
155°	630.5	631.0	631.1	630.7	630.4	630.1	629.7
157.5°	642.5	643.0	643.0	642.5	641.9	641.3	640.7
160°	650.1	650.8	650.8	650.1	649.3	648.7	648.0
162.5°	656.1	656.8	656.8	656.0	655.2	654.5	653.7
165°	664.9	665.9	665.8	664.8	663.8	662.8	661.7
167.5°	671.4	672.3	672.3	671.2	670.0	668.9	667.8
170°	675.1	676.1	675.9	674.8	673.7	672.5	671.5
172.5°	677.6	678.5	678.3	677.2	675.9	674.7	673.4
175°	680.6	681.6	681.4	680.1	678.7	677.3	676.0
177.5°	681.4	682.2	682.0	680.9	679.8	678.7	677.6
180°	680.1	680.1	680.1	680.1	680.1	680.1	680.1

(END OF REPORT)