

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: P332636-940

Luminaire Tested: **SA4XXDIP-C1020D590U940-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332636-940  
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-C1020D590U940-4F0-1E-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**

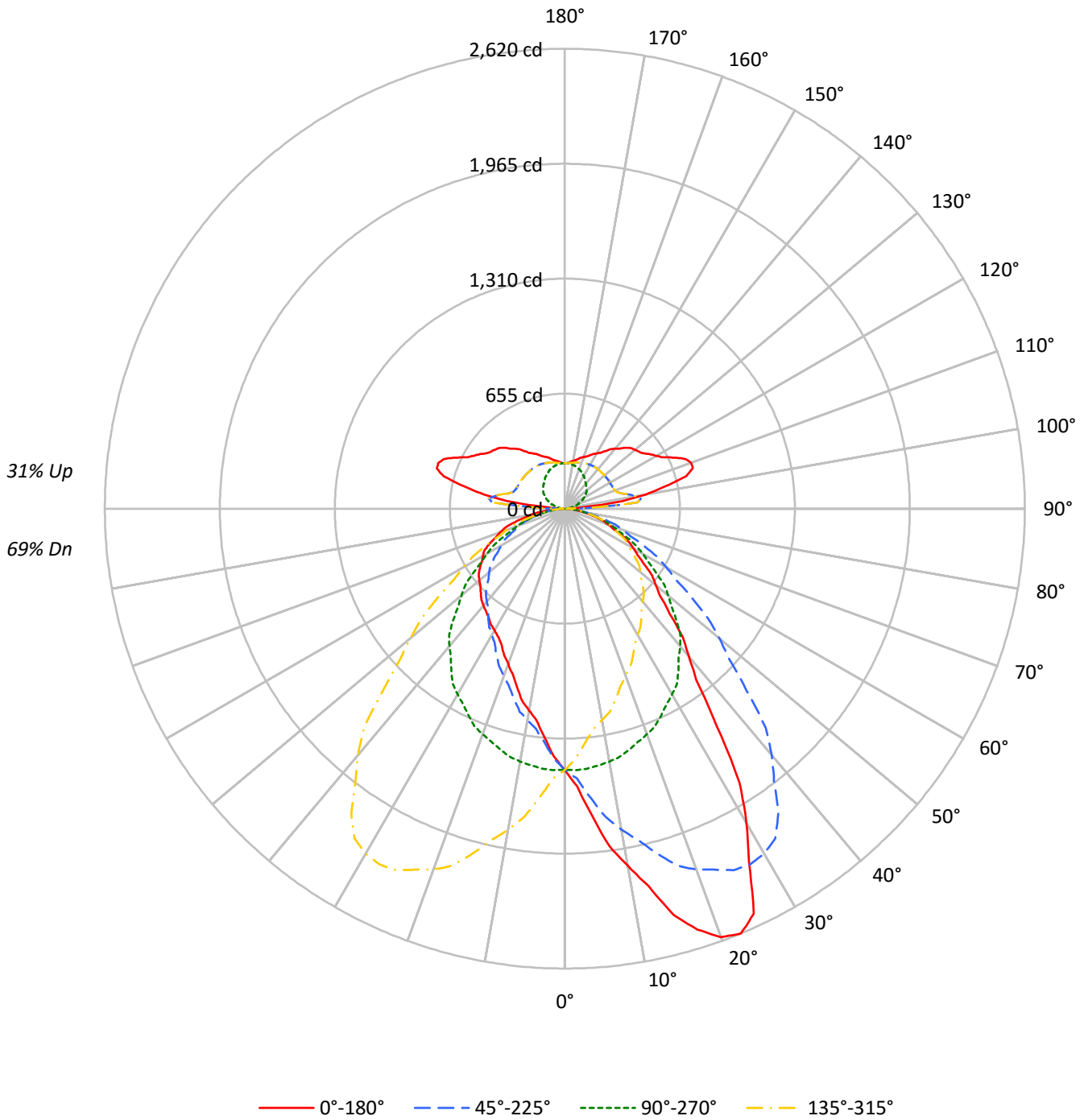
Lumens per Lamp: N/A  
Luminaire Lumens: 5990.2 lumens  
Efficiency: N/A  
Efficacy: 122.7 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: Semi-Direct

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	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°	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	2.4
10°-20°	446.9	7.5
20°-30°	708.6	11.8
30°-40°	788.6	13.2
40°-50°	717.8	12.0
50°-60°	586.6	9.8
60°-70°	418.8	7.0
70°-80°	230.6	3.8
80°-90°	64.4	1.1
90°-100°	187.0	3.1
100°-110°	389.2	6.5
110°-120°	348.6	5.8
120°-130°	293.2	4.9
130°-140°	244.5	4.1
140°-150°	186.8	3.1
150°-160°	131.3	2.2
160°-170°	77.2	1.3
170°-180°	25.1	0.4
0°-30°	1300.4	21.7
0°-40°	2089.0	34.9
0°-60°	3393.4	56.6
0°-90°	4107.1	68.6
90°-120°	924.8	15.4
90°-150°	1649.4	27.5
90°-180°	1883.0	31.4
0°-180°	5990.2	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°	11	0	11	0	11	10
95°	124	17	124	17	124	193
105°	716	60	716	60	716	708
115°	687	105	687	105	687	682
125°	548	146	548	146	548	498
135°	490	173	490	173	490	379
145°	400	200	400	200	400	254
155°	335	227	335	227	335	156
165°	292	248	292	248	292	84
175°	264	258	264	258	264	26
180°	259	259	259	259	259	



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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°	13.0	14.4	14.5	15.0	15.9	16.3	16.8	16.1	18.0	18.6	20.3
90°	10.7	10.7	11.1	10.7	10.2	10.2	9.6	9.2	8.6	9.2	8.1
92.5°	39.1	39.1	40.9	43.6	49.7	59.8	75.2	99.9	134.4	161.3	141.2
95°	124.1	130.7	139.9	155.7	180.6	229.9	298.1	376.9	426.2	414.6	312.8
97.5°	331.7	342.3	357.6	388.3	424.7	477.9	527.6	556.9	535.6	436.7	292.8
100°	466.5	470.6	485.8	516.8	561.1	598.7	623.7	613.5	539.2	408.9	265.6
102.5°	583.6	586.9	603.0	625.4	652.6	668.3	661.1	610.6	508.6	374.4	247.2
105°	715.7	718.7	725.9	730.0	729.0	708.1	657.7	569.7	453.3	333.7	231.5
107.5°	764.7	763.4	758.3	746.7	721.6	676.3	605.3	511.7	408.5	310.9	228.6
110°	765.5	761.0	751.8	730.5	694.4	638.4	564.6	476.6	386.1	303.2	229.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	741.5	734.1	721.3	695.4	654.4	598.5	528.8	451.0	373.4	299.5	231.8
115°	687.2	683.1	666.9	636.3	596.2	547.3	487.9	425.3	361.7	297.6	236.6
117.5°	632.2	629.0	612.5	586.9	552.6	511.2	464.4	412.6	356.4	297.0	241.5
120°	601.3	595.7	582.5	560.1	531.0	494.9	454.2	407.0	353.6	297.0	245.2
122.5°	576.8	571.2	560.1	540.9	516.4	484.7	447.7	402.1	350.3	296.7	248.9
125°	548.3	545.3	535.7	520.8	500.5	472.5	437.5	393.7	344.9	296.0	254.3
127.5°	531.6	528.6	520.5	507.4	486.9	460.4	425.3	383.5	337.7	294.9	258.7
130°	521.9	518.9	510.7	498.0	477.2	450.1	415.6	375.4	333.1	294.5	262.0
132.5°	511.0	507.8	500.2	485.8	465.3	438.4	404.6	366.8	329.1	294.1	264.8
135°	490.4	487.3	479.2	464.9	444.6	419.1	388.2	355.1	323.0	293.5	269.1
137.5°	464.9	461.3	454.6	440.5	421.5	398.5	372.4	344.4	317.7	293.4	271.6
140°	446.7	442.6	435.4	424.3	406.4	385.0	362.2	338.2	314.9	293.0	273.7
142.5°	427.0	424.3	417.9	407.5	391.8	373.3	353.7	332.6	312.5	293.0	275.3
145°	400.3	397.8	392.7	384.1	371.3	357.1	341.8	324.5	308.3	291.9	276.3
147.5°	376.7	375.7	371.8	364.4	355.1	343.8	331.6	317.9	304.5	290.2	276.7
150°	363.2	362.7	359.6	353.0	344.9	335.7	325.6	313.9	301.7	288.9	276.7
152.5°	351.0	350.4	348.7	343.2	336.4	328.8	319.4	309.3	298.4	286.9	275.9
155°	335.2	335.2	333.7	329.7	324.5	318.4	310.8	302.6	293.5	283.8	274.6
157.5°	321.4	321.4	320.5	317.4	313.5	308.6	302.3	295.4	288.6	280.7	273.4
160°	312.8	312.8	312.4	309.2	306.2	302.1	296.6	291.0	284.9	278.2	272.2
162.5°	304.7	305.1	304.6	301.6	299.3	295.6	291.2	286.5	281.6	275.8	270.9
165°	292.5	293.0	293.5	291.5	289.4	286.9	283.3	280.3	276.3	272.2	268.6
167.5°	282.9	283.2	283.3	282.0	281.0	279.5	276.6	274.3	271.3	268.5	266.2
170°	276.7	276.7	277.2	276.7	275.7	274.2	272.2	270.6	268.0	266.0	264.5
172.5°	270.6	271.4	272.0	271.4	270.8	269.7	268.5	267.3	265.2	263.6	262.9
175°	263.5	264.5	265.6	264.5	264.5	264.5	263.5	263.0	262.0	260.9	260.9
177.5°	259.3	260.1	260.9	260.6	260.9	260.6	260.6	260.1	259.8	259.3	259.3
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0



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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°	20.2	20.7	19.5	17.6	16.0	14.4	13.6	12.9	13.6	14.4	15.0
90°	7.1	7.1	4.1	4.1	3.6	3.0	1.5	0.5	1.5	3.0	3.6
92.5°	102.7	63.3	37.5	26.8	19.4	13.2	8.5	5.8	8.5	13.2	19.4
95°	191.3	107.8	63.6	42.2	30.1	23.4	18.3	16.8	18.3	23.4	30.1
97.5°	171.9	103.1	69.0	51.1	40.6	34.5	30.1	30.1	30.1	34.5	40.6
100°	161.8	104.2	74.3	58.0	48.3	42.2	38.7	38.7	38.7	42.2	48.3
102.5°	158.9	108.3	81.1	65.7	56.4	50.7	47.6	46.8	47.6	50.7	56.4
105°	160.2	118.0	93.6	78.8	69.7	63.6	61.1	59.5	61.1	63.6	69.7
107.5°	167.7	129.3	106.9	92.4	83.6	77.1	74.5	73.6	74.5	77.1	83.6
110°	173.4	137.9	115.5	101.7	92.6	86.5	83.9	82.9	83.9	86.5	92.6





TEST NUMBER: P332636-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	179.6	146.0	124.4	110.7	101.6	95.9	92.9	91.8	92.9	95.9	101.6
115°	189.2	158.7	138.4	124.7	114.9	109.9	106.3	104.8	106.3	109.9	114.9
117.5°	199.1	171.0	151.7	137.4	128.4	122.8	119.7	118.2	119.7	122.8	128.4
120°	206.0	179.6	160.2	146.0	137.3	131.7	128.2	127.2	128.2	131.7	137.3
122.5°	212.5	187.7	168.4	154.5	145.1	139.9	136.3	135.3	136.3	139.9	145.1
125°	222.3	198.9	180.6	166.3	156.7	151.1	148.0	146.0	148.0	151.1	156.7
127.5°	230.8	209.3	191.5	177.2	167.1	160.8	157.1	155.4	157.1	160.8	167.1
130°	236.0	216.2	198.9	184.1	174.5	166.8	162.7	160.8	162.7	166.8	174.5
132.5°	241.3	221.9	204.6	190.6	180.2	173.0	167.6	166.0	167.6	173.0	180.2
135°	248.3	229.9	213.1	199.9	189.2	180.6	175.5	173.4	175.5	180.6	189.2
137.5°	253.2	236.0	220.3	207.8	196.6	188.4	182.8	180.9	182.8	188.4	196.6
140°	256.4	240.1	224.8	212.6	202.0	193.3	187.7	186.2	187.7	193.3	202.0
142.5°	258.8	243.8	228.9	217.1	206.8	198.6	193.4	191.9	193.4	198.6	206.8
145°	261.4	247.7	234.5	223.3	213.7	206.5	201.4	199.9	201.4	206.5	213.7
147.5°	263.8	251.8	239.4	229.3	221.2	213.9	209.5	208.9	209.5	213.9	221.2
150°	265.0	253.9	242.6	233.0	225.3	219.3	215.2	214.6	215.2	219.3	225.3
152.5°	265.8	255.5	245.5	236.7	229.8	224.1	220.1	220.0	220.1	224.1	229.8
155°	266.5	257.9	249.2	241.7	236.0	231.0	227.9	227.4	227.9	231.0	236.0
157.5°	266.5	259.7	252.3	246.3	241.4	237.5	234.6	234.6	234.6	237.5	241.4
160°	266.5	260.5	254.3	248.7	244.7	241.1	239.1	239.1	239.1	241.1	244.7
162.5°	266.5	261.3	255.6	251.2	247.5	244.3	242.7	243.2	242.7	244.3	247.5
165°	265.6	261.4	256.9	253.9	251.3	248.7	247.7	247.7	247.7	248.7	251.3
167.5°	264.3	261.4	258.0	255.7	254.2	252.3	251.8	252.3	251.8	252.3	254.2
170°	263.5	260.9	258.4	256.9	255.8	254.3	253.9	254.3	253.9	254.3	255.8
172.5°	262.7	260.6	258.8	257.7	257.1	255.9	255.8	256.4	255.8	255.9	257.1
175°	261.4	259.9	259.0	259.0	258.4	257.9	257.9	258.4	257.9	257.9	258.4
177.5°	260.1	259.3	259.0	259.0	259.0	258.5	259.0	259.3	259.0	258.5	259.0
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0



TEST NUMBER: P332636-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A4

**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°	16.6	16.6	19.2	20.2	21.8	24.5	25.4	30.9	33.0	35.6	40.0
90°	4.1	4.1	7.1	7.1	8.1	9.2	8.6	9.2	9.6	10.2	10.2
92.5°	26.8	37.5	63.3	102.7	141.2	161.3	134.4	99.9	75.2	59.8	49.7
95°	42.2	63.6	107.8	191.3	312.8	414.6	426.2	376.9	298.1	229.9	180.6
97.5°	51.1	69.0	103.1	171.9	292.8	436.7	535.6	556.9	527.6	477.9	424.7
100°	58.0	74.3	104.2	161.8	265.6	408.9	539.2	613.5	623.7	598.7	561.1
102.5°	65.7	81.1	108.3	158.9	247.2	374.4	508.6	610.6	661.1	668.3	652.6
105°	78.8	93.6	118.0	160.2	231.5	333.7	453.3	569.7	657.7	708.1	729.0
107.5°	92.4	106.9	129.3	167.7	228.6	310.9	408.5	511.7	605.3	676.3	721.6
110°	101.7	115.5	137.9	173.4	229.4	303.2	386.1	476.6	564.6	638.4	694.4



TEST NUMBER: P332636-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	110.7	124.4	146.0	179.6	231.8	299.5	373.4	451.0	528.8	598.5	654.4
115°	124.7	138.4	158.7	189.2	236.6	297.6	361.7	425.3	487.9	547.3	596.2
117.5°	137.4	151.7	171.0	199.1	241.5	297.0	356.4	412.6	464.4	511.2	552.6
120°	146.0	160.2	179.6	206.0	245.2	297.0	353.6	407.0	454.2	494.9	531.0
122.5°	154.5	168.4	187.7	212.5	248.9	296.7	350.3	402.1	447.7	484.7	516.4
125°	166.3	180.6	198.9	222.3	254.3	296.0	344.9	393.7	437.5	472.5	500.5
127.5°	177.2	191.5	209.3	230.8	258.7	294.9	337.7	383.5	425.3	460.4	486.9
130°	184.1	198.9	216.2	236.0	262.0	294.5	333.1	375.4	415.6	450.1	477.2
132.5°	190.6	204.6	221.9	241.3	264.8	294.1	329.1	366.8	404.6	438.4	465.3
135°	199.9	213.1	229.9	248.3	269.1	293.5	323.0	355.1	388.2	419.1	444.6
137.5°	207.8	220.3	236.0	253.2	271.6	293.4	317.7	344.4	372.4	398.5	421.5
140°	212.6	224.8	240.1	256.4	273.7	293.0	314.9	338.2	362.2	385.0	406.4
142.5°	217.1	228.9	243.8	258.8	275.3	293.0	312.5	332.6	353.7	373.3	391.8
145°	223.3	234.5	247.7	261.4	276.3	291.9	308.3	324.5	341.8	357.1	371.3
147.5°	229.3	239.4	251.8	263.8	276.7	290.2	304.5	317.9	331.6	343.8	355.1
150°	233.0	242.6	253.9	265.0	276.7	288.9	301.7	313.9	325.6	335.7	344.9
152.5°	236.7	245.5	255.5	265.8	275.9	286.9	298.4	309.3	319.4	328.8	336.4
155°	241.7	249.2	257.9	266.5	274.6	283.8	293.5	302.6	310.8	318.4	324.5
157.5°	246.3	252.3	259.7	266.5	273.4	280.7	288.6	295.4	302.3	308.6	313.5
160°	248.7	254.3	260.5	266.5	272.2	278.2	284.9	291.0	296.6	302.1	306.2
162.5°	251.2	255.6	261.3	266.5	270.9	275.8	281.6	286.5	291.2	295.6	299.3
165°	253.9	256.9	261.4	265.6	268.6	272.2	276.3	280.3	283.3	286.9	289.4
167.5°	255.7	258.0	261.4	264.3	266.2	268.5	271.3	274.3	276.6	279.5	281.0
170°	256.9	258.4	260.9	263.5	264.5	266.0	268.0	270.6	272.2	274.2	275.7
172.5°	257.7	258.8	260.6	262.7	262.9	263.6	265.2	267.3	268.5	269.7	270.8
175°	259.0	259.0	259.9	261.4	260.9	260.9	262.0	263.0	263.5	264.5	264.5
177.5°	259.0	259.0	259.3	260.1	259.3	259.3	259.8	260.1	260.6	260.6	260.9
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0



TEST NUMBER: P332636-940  
 CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A4

**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°	41.6	42.2	43.6	44.6	43.6	42.2	41.6	40.0	35.6	33.0	30.9
90°	10.7	11.1	10.7	10.7	10.7	11.1	10.7	10.2	10.2	9.6	9.2
92.5°	43.6	40.9	39.1	39.1	39.1	40.9	43.6	49.7	59.8	75.2	99.9
95°	155.7	139.9	130.7	124.1	130.7	139.9	155.7	180.6	229.9	298.1	376.9
97.5°	388.3	357.6	342.3	331.7	342.3	357.6	388.3	424.7	477.9	527.6	556.9
100°	516.8	485.8	470.6	466.5	470.6	485.8	516.8	561.1	598.7	623.7	613.5
102.5°	625.4	603.0	586.9	583.6	586.9	603.0	625.4	652.6	668.3	661.1	610.6
105°	730.0	725.9	718.7	715.7	718.7	725.9	730.0	729.0	708.1	657.7	569.7
107.5°	746.7	758.3	763.4	764.7	763.4	758.3	746.7	721.6	676.3	605.3	511.7
110°	730.5	751.8	761.0	765.5	761.0	751.8	730.5	694.4	638.4	564.6	476.6



TEST NUMBER: P332636-940

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	695.4	721.3	734.1	741.5	734.1	721.3	695.4	654.4	598.5	528.8	451.0
115°	636.3	666.9	683.1	687.2	683.1	666.9	636.3	596.2	547.3	487.9	425.3
117.5°	586.9	612.5	629.0	632.2	629.0	612.5	586.9	552.6	511.2	464.4	412.6
120°	560.1	582.5	595.7	601.3	595.7	582.5	560.1	531.0	494.9	454.2	407.0
122.5°	540.9	560.1	571.2	576.8	571.2	560.1	540.9	516.4	484.7	447.7	402.1
125°	520.8	535.7	545.3	548.3	545.3	535.7	520.8	500.5	472.5	437.5	393.7
127.5°	507.4	520.5	528.6	531.6	528.6	520.5	507.4	486.9	460.4	425.3	383.5
130°	498.0	510.7	518.9	521.9	518.9	510.7	498.0	477.2	450.1	415.6	375.4
132.5°	485.8	500.2	507.8	511.0	507.8	500.2	485.8	465.3	438.4	404.6	366.8
135°	464.9	479.2	487.3	490.4	487.3	479.2	464.9	444.6	419.1	388.2	355.1
137.5°	440.5	454.6	461.3	464.9	461.3	454.6	440.5	421.5	398.5	372.4	344.4
140°	424.3	435.4	442.6	446.7	442.6	435.4	424.3	406.4	385.0	362.2	338.2
142.5°	407.5	417.9	424.3	427.0	424.3	417.9	407.5	391.8	373.3	353.7	332.6
145°	384.1	392.7	397.8	400.3	397.8	392.7	384.1	371.3	357.1	341.8	324.5
147.5°	364.4	371.8	375.7	376.7	375.7	371.8	364.4	355.1	343.8	331.6	317.9
150°	353.0	359.6	362.7	363.2	362.7	359.6	353.0	344.9	335.7	325.6	313.9
152.5°	343.2	348.7	350.4	351.0	350.4	348.7	343.2	336.4	328.8	319.4	309.3
155°	329.7	333.7	335.2	335.2	335.2	333.7	329.7	324.5	318.4	310.8	302.6
157.5°	317.4	320.5	321.4	321.4	321.4	320.5	317.4	313.5	308.6	302.3	295.4
160°	309.2	312.4	312.8	312.8	312.8	312.4	309.2	306.2	302.1	296.6	291.0
162.5°	301.6	304.6	305.1	304.7	305.1	304.6	301.6	299.3	295.6	291.2	286.5
165°	291.5	293.5	293.0	292.5	293.0	293.5	291.5	289.4	286.9	283.3	280.3
167.5°	282.0	283.3	283.2	282.9	283.2	283.3	282.0	281.0	279.5	276.6	274.3
170°	276.7	277.2	276.7	276.7	276.7	277.2	276.7	275.7	274.2	272.2	270.6
172.5°	271.4	272.0	271.4	270.6	271.4	272.0	271.4	270.8	269.7	268.5	267.3
175°	264.5	265.6	264.5	263.5	264.5	265.6	264.5	264.5	264.5	263.5	263.0
177.5°	260.6	260.9	260.1	259.3	260.1	260.9	260.6	260.9	260.6	260.6	260.1
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0



TEST NUMBER: P332636-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A4

**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°	25.4	24.5	21.8	20.2	19.2	16.6	16.6	15.0	14.4	13.6	12.9
90°	8.6	9.2	8.1	7.1	7.1	4.1	4.1	3.6	3.0	1.5	0.5
92.5°	134.4	161.3	141.2	102.7	63.3	37.5	26.8	19.4	13.2	8.5	5.8
95°	426.2	414.6	312.8	191.3	107.8	63.6	42.2	30.1	23.4	18.3	16.8
97.5°	535.6	436.7	292.8	171.9	103.1	69.0	51.1	40.6	34.5	30.1	30.1
100°	539.2	408.9	265.6	161.8	104.2	74.3	58.0	48.3	42.2	38.7	38.7
102.5°	508.6	374.4	247.2	158.9	108.3	81.1	65.7	56.4	50.7	47.6	46.8
105°	453.3	333.7	231.5	160.2	118.0	93.6	78.8	69.7	63.6	61.1	59.5
107.5°	408.5	310.9	228.6	167.7	129.3	106.9	92.4	83.6	77.1	74.5	73.6
110°	386.1	303.2	229.4	173.4	137.9	115.5	101.7	92.6	86.5	83.9	82.9



TEST NUMBER: P332636-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	373.4	299.5	231.8	179.6	146.0	124.4	110.7	101.6	95.9	92.9	91.8
115°	361.7	297.6	236.6	189.2	158.7	138.4	124.7	114.9	109.9	106.3	104.8
117.5°	356.4	297.0	241.5	199.1	171.0	151.7	137.4	128.4	122.8	119.7	118.2
120°	353.6	297.0	245.2	206.0	179.6	160.2	146.0	137.3	131.7	128.2	127.2
122.5°	350.3	296.7	248.9	212.5	187.7	168.4	154.5	145.1	139.9	136.3	135.3
125°	344.9	296.0	254.3	222.3	198.9	180.6	166.3	156.7	151.1	148.0	146.0
127.5°	337.7	294.9	258.7	230.8	209.3	191.5	177.2	167.1	160.8	157.1	155.4
130°	333.1	294.5	262.0	236.0	216.2	198.9	184.1	174.5	166.8	162.7	160.8
132.5°	329.1	294.1	264.8	241.3	221.9	204.6	190.6	180.2	173.0	167.6	166.0
135°	323.0	293.5	269.1	248.3	229.9	213.1	199.9	189.2	180.6	175.5	173.4
137.5°	317.7	293.4	271.6	253.2	236.0	220.3	207.8	196.6	188.4	182.8	180.9
140°	314.9	293.0	273.7	256.4	240.1	224.8	212.6	202.0	193.3	187.7	186.2
142.5°	312.5	293.0	275.3	258.8	243.8	228.9	217.1	206.8	198.6	193.4	191.9
145°	308.3	291.9	276.3	261.4	247.7	234.5	223.3	213.7	206.5	201.4	199.9
147.5°	304.5	290.2	276.7	263.8	251.8	239.4	229.3	221.2	213.9	209.5	208.9
150°	301.7	288.9	276.7	265.0	253.9	242.6	233.0	225.3	219.3	215.2	214.6
152.5°	298.4	286.9	275.9	265.8	255.5	245.5	236.7	229.8	224.1	220.1	220.0
155°	293.5	283.8	274.6	266.5	257.9	249.2	241.7	236.0	231.0	227.9	227.4
157.5°	288.6	280.7	273.4	266.5	259.7	252.3	246.3	241.4	237.5	234.6	234.6
160°	284.9	278.2	272.2	266.5	260.5	254.3	248.7	244.7	241.1	239.1	239.1
162.5°	281.6	275.8	270.9	266.5	261.3	255.6	251.2	247.5	244.3	242.7	243.2
165°	276.3	272.2	268.6	265.6	261.4	256.9	253.9	251.3	248.7	247.7	247.7
167.5°	271.3	268.5	266.2	264.3	261.4	258.0	255.7	254.2	252.3	251.8	252.3
170°	268.0	266.0	264.5	263.5	260.9	258.4	256.9	255.8	254.3	253.9	254.3
172.5°	265.2	263.6	262.9	262.7	260.6	258.8	257.7	257.1	255.9	255.8	256.4
175°	262.0	260.9	260.9	261.4	259.9	259.0	259.0	258.4	257.9	257.9	258.4
177.5°	259.8	259.3	259.3	260.1	259.3	259.0	259.0	259.0	258.5	259.0	259.3
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0



TEST NUMBER: P332636-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A4

**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°	13.6	14.4	16.0	17.6	19.5	20.7	20.2	20.3	18.6	18.0	16.1
90°	1.5	3.0	3.6	4.1	4.1	7.1	7.1	8.1	9.2	8.6	9.2
92.5°	8.5	13.2	19.4	26.8	37.5	63.3	102.7	141.2	161.3	134.4	99.9
95°	18.3	23.4	30.1	42.2	63.6	107.8	191.3	312.8	414.6	426.2	376.9
97.5°	30.1	34.5	40.6	51.1	69.0	103.1	171.9	292.8	436.7	535.6	556.9
100°	38.7	42.2	48.3	58.0	74.3	104.2	161.8	265.6	408.9	539.2	613.5
102.5°	47.6	50.7	56.4	65.7	81.1	108.3	158.9	247.2	374.4	508.6	610.6
105°	61.1	63.6	69.7	78.8	93.6	118.0	160.2	231.5	333.7	453.3	569.7
107.5°	74.5	77.1	83.6	92.4	106.9	129.3	167.7	228.6	310.9	408.5	511.7
110°	83.9	86.5	92.6	101.7	115.5	137.9	173.4	229.4	303.2	386.1	476.6





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	92.9	95.9	101.6	110.7	124.4	146.0	179.6	231.8	299.5	373.4	451.0
115°	106.3	109.9	114.9	124.7	138.4	158.7	189.2	236.6	297.6	361.7	425.3
117.5°	119.7	122.8	128.4	137.4	151.7	171.0	199.1	241.5	297.0	356.4	412.6
120°	128.2	131.7	137.3	146.0	160.2	179.6	206.0	245.2	297.0	353.6	407.0
122.5°	136.3	139.9	145.1	154.5	168.4	187.7	212.5	248.9	296.7	350.3	402.1
125°	148.0	151.1	156.7	166.3	180.6	198.9	222.3	254.3	296.0	344.9	393.7
127.5°	157.1	160.8	167.1	177.2	191.5	209.3	230.8	258.7	294.9	337.7	383.5
130°	162.7	166.8	174.5	184.1	198.9	216.2	236.0	262.0	294.5	333.1	375.4
132.5°	167.6	173.0	180.2	190.6	204.6	221.9	241.3	264.8	294.1	329.1	366.8
135°	175.5	180.6	189.2	199.9	213.1	229.9	248.3	269.1	293.5	323.0	355.1
137.5°	182.8	188.4	196.6	207.8	220.3	236.0	253.2	271.6	293.4	317.7	344.4
140°	187.7	193.3	202.0	212.6	224.8	240.1	256.4	273.7	293.0	314.9	338.2
142.5°	193.4	198.6	206.8	217.1	228.9	243.8	258.8	275.3	293.0	312.5	332.6
145°	201.4	206.5	213.7	223.3	234.5	247.7	261.4	276.3	291.9	308.3	324.5
147.5°	209.5	213.9	221.2	229.3	239.4	251.8	263.8	276.7	290.2	304.5	317.9
150°	215.2	219.3	225.3	233.0	242.6	253.9	265.0	276.7	288.9	301.7	313.9
152.5°	220.1	224.1	229.8	236.7	245.5	255.5	265.8	275.9	286.9	298.4	309.3
155°	227.9	231.0	236.0	241.7	249.2	257.9	266.5	274.6	283.8	293.5	302.6
157.5°	234.6	237.5	241.4	246.3	252.3	259.7	266.5	273.4	280.7	288.6	295.4
160°	239.1	241.1	244.7	248.7	254.3	260.5	266.5	272.2	278.2	284.9	291.0
162.5°	242.7	244.3	247.5	251.2	255.6	261.3	266.5	270.9	275.8	281.6	286.5
165°	247.7	248.7	251.3	253.9	256.9	261.4	265.6	268.6	272.2	276.3	280.3
167.5°	251.8	252.3	254.2	255.7	258.0	261.4	264.3	266.2	268.5	271.3	274.3
170°	253.9	254.3	255.8	256.9	258.4	260.9	263.5	264.5	266.0	268.0	270.6
172.5°	255.8	255.9	257.1	257.7	258.8	260.6	262.7	262.9	263.6	265.2	267.3
175°	257.9	257.9	258.4	259.0	259.0	259.0	259.9	261.4	260.9	260.9	263.0
177.5°	259.0	258.5	259.0	259.0	259.0	259.0	259.3	260.1	259.3	259.3	260.1
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0



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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°	16.8	16.3	15.9	15.0	14.5	14.4	13.0
90°	9.6	10.2	10.2	10.7	11.1	10.7	10.7
92.5°	75.2	59.8	49.7	43.6	40.9	39.1	39.1
95°	298.1	229.9	180.6	155.7	139.9	130.7	124.1
97.5°	527.6	477.9	424.7	388.3	357.6	342.3	331.7
100°	623.7	598.7	561.1	516.8	485.8	470.6	466.5
102.5°	661.1	668.3	652.6	625.4	603.0	586.9	583.6
105°	657.7	708.1	729.0	730.0	725.9	718.7	715.7
107.5°	605.3	676.3	721.6	746.7	758.3	763.4	764.7
110°	564.6	638.4	694.4	730.5	751.8	761.0	765.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	528.8	598.5	654.4	695.4	721.3	734.1	741.5
115°	487.9	547.3	596.2	636.3	666.9	683.1	687.2
117.5°	464.4	511.2	552.6	586.9	612.5	629.0	632.2
120°	454.2	494.9	531.0	560.1	582.5	595.7	601.3
122.5°	447.7	484.7	516.4	540.9	560.1	571.2	576.8
125°	437.5	472.5	500.5	520.8	535.7	545.3	548.3
127.5°	425.3	460.4	486.9	507.4	520.5	528.6	531.6
130°	415.6	450.1	477.2	498.0	510.7	518.9	521.9
132.5°	404.6	438.4	465.3	485.8	500.2	507.8	511.0
135°	388.2	419.1	444.6	464.9	479.2	487.3	490.4
137.5°	372.4	398.5	421.5	440.5	454.6	461.3	464.9
140°	362.2	385.0	406.4	424.3	435.4	442.6	446.7
142.5°	353.7	373.3	391.8	407.5	417.9	424.3	427.0
145°	341.8	357.1	371.3	384.1	392.7	397.8	400.3
147.5°	331.6	343.8	355.1	364.4	371.8	375.7	376.7
150°	325.6	335.7	344.9	353.0	359.6	362.7	363.2
152.5°	319.4	328.8	336.4	343.2	348.7	350.4	351.0
155°	310.8	318.4	324.5	329.7	333.7	335.2	335.2
157.5°	302.3	308.6	313.5	317.4	320.5	321.4	321.4
160°	296.6	302.1	306.2	309.2	312.4	312.8	312.8
162.5°	291.2	295.6	299.3	301.6	304.6	305.1	304.7
165°	283.3	286.9	289.4	291.5	293.5	293.0	292.5
167.5°	276.6	279.5	281.0	282.0	283.3	283.2	282.9
170°	272.2	274.2	275.7	276.7	277.2	276.7	276.7
172.5°	268.5	269.7	270.8	271.4	272.0	271.4	270.6
175°	263.5	264.5	264.5	264.5	265.6	264.5	263.5
177.5°	260.6	260.6	260.9	260.6	260.9	260.1	259.3
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0

(END OF REPORT)