

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: P332645-940

Luminaire Tested: **SA4XXDIP-C1020D810U940-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332645-940
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-C1020D810U940-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

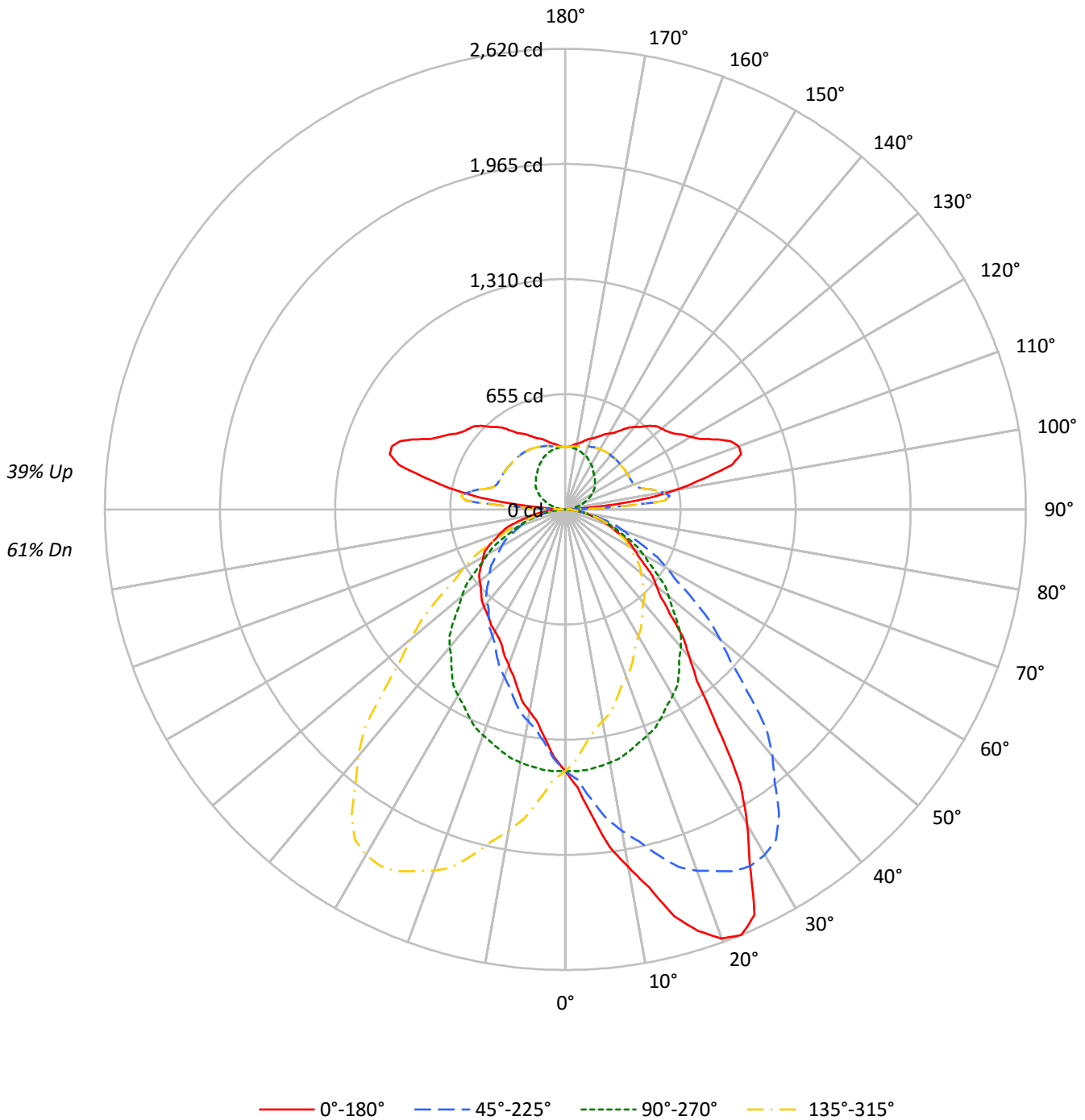
Lumens per Lamp: N/A
Luminaire Lumens: 6688.8 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 54.4
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	59	58	57	52
2	92	84	78	73	86	79	74	69	70	66	62	61	58	55	53	50	48	44
3	84	74	67	61	78	70	64	58	62	57	52	54	50	47	47	44	41	38
4	77	66	58	52	72	62	55	50	55	49	45	48	44	40	42	39	36	33
5	71	59	51	45	66	56	48	43	49	44	39	44	39	35	38	34	31	29
6	65	53	45	39	61	50	43	38	45	39	34	39	35	31	35	31	28	25
7	61	48	40	35	57	46	38	33	41	35	30	36	31	28	32	28	25	22
8	56	44	36	31	53	42	34	29	37	31	27	33	28	25	29	25	22	20
9	52	40	33	27	49	38	31	26	34	28	24	30	26	22	27	23	20	18
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	25	21	18	16

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	2.2
10°-20°	446.9	6.7
20°-30°	708.6	10.6
30°-40°	788.6	11.8
40°-50°	717.8	10.7
50°-60°	586.6	8.8
60°-70°	418.8	6.3
70°-80°	230.6	3.4
80°-90°	64.9	1.0
90°-100°	256.3	3.8
100°-110°	533.5	8.0
110°-120°	477.9	7.1
120°-130°	402.0	6.0
130°-140°	335.1	5.0
140°-150°	256.1	3.8
150°-160°	180.0	2.7
160°-170°	105.9	1.6
170°-180°	34.4	0.5
0°-30°	1300.4	19.4
0°-40°	2089.0	31.2
0°-60°	3393.4	50.7
0°-90°	4107.7	61.4
90°-120°	1267.7	19.0
90°-150°	2260.9	33.8
90°-180°	2581.0	38.6
0°-180°	6688.8	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	1	15	1	15	13
95°	170	23	170	23	170	264
105°	981	82	981	82	981	970
115°	942	144	942	144	942	935
125°	752	200	752	200	752	683
135°	672	238	672	238	672	519
145°	549	274	549	274	549	348
155°	460	312	460	312	460	214
165°	401	340	401	340	401	115
175°	361	354	361	354	361	35
180°	355	355	355	355	355	



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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°	13.8	15.2	15.4	15.8	16.6	17.1	17.5	16.9	18.6	19.3	21.0
90°	14.6	14.6	15.3	14.6	13.9	13.9	13.3	12.6	11.9	12.6	11.1
92.5°	53.7	53.7	56.1	59.8	68.0	82.0	103.1	137.0	184.2	221.1	193.6
95°	170.1	179.2	191.7	213.4	247.5	315.1	408.6	516.7	584.3	568.3	428.8
97.5°	454.8	469.2	490.2	532.2	582.2	655.0	723.2	763.3	734.1	598.5	401.4
100°	639.4	645.0	665.8	708.4	769.1	820.6	854.8	840.9	739.0	560.6	364.0
102.5°	800.0	804.5	826.5	857.4	894.6	916.1	906.2	837.0	697.2	513.2	338.9
105°	981.1	985.3	995.0	1000.6	999.2	970.5	901.5	781.0	621.3	457.4	317.3
107.5°	1048.2	1046.4	1039.5	1023.6	989.1	926.9	829.7	701.3	559.9	426.1	313.3
110°	1049.4	1043.1	1030.6	1001.2	951.7	875.0	773.9	653.4	529.2	415.5	314.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1016.5	1006.3	988.7	953.2	897.1	820.4	724.9	618.2	511.9	410.5	317.8
115°	942.0	936.4	914.1	872.3	817.2	750.2	668.7	582.9	495.7	407.9	324.2
117.5°	866.6	862.2	839.6	804.5	757.5	700.7	636.6	565.6	488.5	407.2	331.1
120°	824.1	816.5	798.3	767.7	727.9	678.4	622.7	557.8	484.6	407.2	336.1
122.5°	790.7	783.0	767.7	741.5	707.8	664.5	613.7	551.1	480.1	406.6	341.1
125°	751.6	747.4	734.2	714.0	686.1	647.7	599.7	539.7	472.7	405.8	348.7
127.5°	728.8	724.6	713.5	695.4	667.4	631.0	583.0	525.8	462.8	404.3	354.6
130°	715.4	711.2	700.1	682.6	654.0	617.1	569.6	514.6	456.7	403.7	359.1
132.5°	700.3	696.2	685.5	665.8	637.8	600.9	554.6	502.8	451.1	403.1	363.0
135°	672.2	668.0	656.8	637.3	609.4	574.5	532.0	486.7	442.7	402.3	368.8
137.5°	637.3	632.2	623.0	603.8	577.7	546.3	510.4	472.1	435.5	402.2	372.3
140°	612.2	606.6	596.8	581.5	557.1	527.8	496.4	463.7	431.6	401.6	375.1
142.5°	585.4	581.5	572.8	558.7	537.0	511.7	484.7	455.8	428.3	401.6	377.4
145°	548.8	545.3	538.2	526.5	509.0	489.5	468.6	444.9	422.5	400.2	378.6
147.5°	516.2	515.0	509.7	499.5	486.7	471.4	454.6	435.8	417.4	397.7	379.3
150°	497.8	497.1	492.9	483.9	472.7	460.2	446.2	430.2	413.5	396.0	379.3
152.5°	481.1	480.4	477.9	470.5	461.0	450.7	437.8	424.1	409.0	393.2	378.2
155°	459.5	459.5	457.4	451.8	444.9	436.5	426.1	414.8	402.3	389.1	376.5
157.5°	440.5	440.5	439.3	435.1	429.8	423.1	414.3	404.9	395.5	384.8	374.7
160°	428.8	428.8	428.1	423.9	419.7	414.2	406.5	398.9	390.5	381.4	373.0
162.5°	417.7	418.2	417.5	413.3	410.3	405.3	399.2	392.7	386.0	378.1	371.4
165°	400.9	401.6	402.3	399.5	396.7	393.2	388.3	384.1	378.6	373.0	368.2
167.5°	387.6	388.3	388.3	386.6	385.1	383.1	379.2	375.9	371.9	368.0	364.8
170°	379.3	379.3	380.0	379.3	377.9	375.9	373.0	371.0	367.5	364.6	362.6
172.5°	371.0	372.0	372.7	372.0	371.2	369.7	368.0	366.5	363.6	361.3	360.3
175°	361.1	362.6	364.0	362.6	362.6	362.6	361.1	360.5	359.1	357.7	357.7
177.5°	355.4	356.6	357.7	357.1	357.7	357.1	357.1	356.6	356.0	355.4	355.4
180°	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9



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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°	20.7	21.2	19.9	17.9	16.2	14.6	13.7	12.9	13.7	14.6	15.2
90°	9.7	9.7	5.6	5.6	4.9	4.2	2.1	0.7	2.1	4.2	4.9
92.5°	140.8	86.8	51.3	36.8	26.7	18.1	11.6	7.9	11.6	18.1	26.7
95°	262.2	147.8	87.1	57.9	41.1	32.1	25.1	23.0	25.1	32.1	41.1
97.5°	235.7	141.2	94.5	70.0	55.6	47.3	41.3	41.3	41.3	47.3	55.6
100°	221.8	142.9	101.8	79.5	66.3	57.9	53.0	53.0	53.0	57.9	66.3
102.5°	217.8	148.5	111.3	90.1	77.4	69.6	65.3	64.1	65.3	69.6	77.4
105°	219.6	161.8	128.3	108.1	95.5	87.1	83.6	81.6	83.6	87.1	95.5
107.5°	230.0	177.3	146.6	126.6	114.6	105.7	102.2	100.9	102.2	105.7	114.6
110°	237.7	189.0	158.3	139.5	126.9	118.5	115.0	113.7	115.0	118.5	126.9



TEST NUMBER: P332645-940

CATALOG NUMBER: SA4XXDIP-C1020D810U940-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	246.1	200.1	170.6	151.7	139.2	131.3	127.3	125.9	127.3	131.3	139.2
115°	259.4	217.6	189.7	170.9	157.6	150.6	145.7	143.7	145.7	150.6	157.6
117.5°	272.9	234.4	207.9	188.4	176.0	168.4	164.0	162.0	164.0	168.4	176.0
120°	282.4	246.1	219.6	200.1	188.2	180.6	175.7	174.3	175.7	180.6	188.2
122.5°	291.3	257.3	230.8	211.8	198.9	191.7	186.9	185.5	186.9	191.7	198.9
125°	304.7	272.6	247.5	228.0	214.7	207.1	202.9	200.1	202.9	207.1	214.7
127.5°	316.3	286.9	262.6	242.9	229.1	220.3	215.3	213.1	215.3	220.3	229.1
130°	323.5	296.3	272.6	252.4	239.2	228.7	223.1	220.3	223.1	228.7	239.2
132.5°	330.7	304.2	280.4	261.4	247.0	237.1	229.8	227.6	229.8	237.1	247.0
135°	340.3	315.1	292.1	274.0	259.4	247.5	240.6	237.7	240.6	247.5	259.4
137.5°	347.0	323.5	302.0	284.7	269.6	258.2	250.6	248.0	250.6	258.2	269.6
140°	351.4	329.1	308.2	291.4	276.8	264.9	257.3	255.2	257.3	264.9	276.8
142.5°	354.7	334.1	313.8	297.6	283.5	272.2	265.1	263.0	265.1	272.2	283.5
145°	358.4	339.6	321.5	306.1	292.8	283.1	276.1	274.0	276.1	283.1	292.8
147.5°	361.6	345.2	328.1	314.3	303.3	293.3	287.1	286.4	287.1	293.3	303.3
150°	363.3	347.9	332.6	319.3	308.9	300.5	295.0	294.3	295.0	300.5	308.9
152.5°	364.4	350.2	336.5	324.4	315.0	307.2	301.7	301.5	301.7	307.2	315.0
155°	365.3	353.5	341.6	331.2	323.5	316.6	312.4	311.7	312.4	316.6	323.5
157.5°	365.3	355.9	345.8	337.6	330.9	325.5	321.6	321.6	321.6	325.5	330.9
160°	365.3	357.0	348.7	341.0	335.4	330.5	327.7	327.7	327.7	330.5	335.4
162.5°	365.3	358.1	350.3	344.3	339.3	334.9	332.7	333.3	332.7	334.9	339.3
165°	364.0	358.4	352.1	347.9	344.5	341.0	339.6	339.6	339.6	341.0	344.5
167.5°	362.3	358.3	353.7	350.4	348.5	345.8	345.2	345.8	345.2	345.8	348.5
170°	361.1	357.7	354.2	352.1	350.7	348.7	347.9	348.7	347.9	348.7	350.7
172.5°	360.1	357.1	354.7	353.2	352.4	350.9	350.7	351.4	350.7	350.9	352.4
175°	358.4	356.3	354.9	354.9	354.2	353.5	353.5	354.2	353.5	353.5	354.2
177.5°	356.6	355.4	354.9	354.9	354.9	354.4	354.9	355.4	354.9	354.4	354.9
180°	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9



TEST NUMBER: P332645-940

CATALOG NUMBER: SA4XXDIP-C1020D810U940-4F0-1E-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°	16.9	16.9	19.7	20.7	22.5	25.2	26.0	31.6	33.7	36.3	40.8
90°	5.6	5.6	9.7	9.7	11.1	12.6	11.9	12.6	13.3	13.9	13.9
92.5°	36.8	51.3	86.8	140.8	193.6	221.1	184.2	137.0	103.1	82.0	68.0
95°	57.9	87.1	147.8	262.2	428.8	568.3	584.3	516.7	408.6	315.1	247.5
97.5°	70.0	94.5	141.2	235.7	401.4	598.5	734.1	763.3	723.2	655.0	582.2
100°	79.5	101.8	142.9	221.8	364.0	560.6	739.0	840.9	854.8	820.6	769.1
102.5°	90.1	111.3	148.5	217.8	338.9	513.2	697.2	837.0	906.2	916.1	894.6
105°	108.1	128.3	161.8	219.6	317.3	457.4	621.3	781.0	901.5	970.5	999.2
107.5°	126.6	146.6	177.3	230.0	313.3	426.1	559.9	701.3	829.7	926.9	989.1
110°	139.5	158.3	189.0	237.7	314.4	415.5	529.2	653.4	773.9	875.0	951.7



TEST NUMBER: P332645-940

CATALOG NUMBER: SA4XXDIP-C1020D810U940-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	151.7	170.6	200.1	246.1	317.8	410.5	511.9	618.2	724.9	820.4	897.1
115°	170.9	189.7	217.6	259.4	324.2	407.9	495.7	582.9	668.7	750.2	817.2
117.5°	188.4	207.9	234.4	272.9	331.1	407.2	488.5	565.6	636.6	700.7	757.5
120°	200.1	219.6	246.1	282.4	336.1	407.2	484.6	557.8	622.7	678.4	727.9
122.5°	211.8	230.8	257.3	291.3	341.1	406.6	480.1	551.1	613.7	664.5	707.8
125°	228.0	247.5	272.6	304.7	348.7	405.8	472.7	539.7	599.7	647.7	686.1
127.5°	242.9	262.6	286.9	316.3	354.6	404.3	462.8	525.8	583.0	631.0	667.4
130°	252.4	272.6	296.3	323.5	359.1	403.7	456.7	514.6	569.6	617.1	654.0
132.5°	261.4	280.4	304.2	330.7	363.0	403.1	451.1	502.8	554.6	600.9	637.8
135°	274.0	292.1	315.1	340.3	368.8	402.3	442.7	486.7	532.0	574.5	609.4
137.5°	284.7	302.0	323.5	347.0	372.3	402.2	435.5	472.1	510.4	546.3	577.7
140°	291.4	308.2	329.1	351.4	375.1	401.6	431.6	463.7	496.4	527.8	557.1
142.5°	297.6	313.8	334.1	354.7	377.4	401.6	428.3	455.8	484.7	511.7	537.0
145°	306.1	321.5	339.6	358.4	378.6	400.2	422.5	444.9	468.6	489.5	509.0
147.5°	314.3	328.1	345.2	361.6	379.3	397.7	417.4	435.8	454.6	471.4	486.7
150°	319.3	332.6	347.9	363.3	379.3	396.0	413.5	430.2	446.2	460.2	472.7
152.5°	324.4	336.5	350.2	364.4	378.2	393.2	409.0	424.1	437.8	450.7	461.0
155°	331.2	341.6	353.5	365.3	376.5	389.1	402.3	414.8	426.1	436.5	444.9
157.5°	337.6	345.8	355.9	365.3	374.7	384.8	395.5	404.9	414.3	423.1	429.8
160°	341.0	348.7	357.0	365.3	373.0	381.4	390.5	398.9	406.5	414.2	419.7
162.5°	344.3	350.3	358.1	365.3	371.4	378.1	386.0	392.7	399.2	405.3	410.3
165°	347.9	352.1	358.4	364.0	368.2	373.0	378.6	384.1	388.3	393.2	396.7
167.5°	350.4	353.7	358.3	362.3	364.8	368.0	371.9	375.9	379.2	383.1	385.1
170°	352.1	354.2	357.7	361.1	362.6	364.6	367.5	371.0	373.0	375.9	377.9
172.5°	353.2	354.7	357.1	360.1	360.3	361.3	363.6	366.5	368.0	369.7	371.2
175°	354.9	354.9	356.3	358.4	357.7	357.7	359.1	360.5	361.1	362.6	362.6
177.5°	354.9	354.9	355.4	356.6	355.4	355.4	356.0	356.6	357.1	357.1	357.7
180°	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9



TEST NUMBER: P332645-940
 CATALOG NUMBER: SA4XXDIP-C1020D810U940-4F0-1E-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°	42.4	43.0	44.3	45.3	44.3	43.0	42.4	40.8	36.3	33.7	31.6
90°	14.6	15.3	14.6	14.6	14.6	15.3	14.6	13.9	13.9	13.3	12.6
92.5°	59.8	56.1	53.7	53.7	53.7	56.1	59.8	68.0	82.0	103.1	137.0
95°	213.4	191.7	179.2	170.1	179.2	191.7	213.4	247.5	315.1	408.6	516.7
97.5°	532.2	490.2	469.2	454.8	469.2	490.2	532.2	582.2	655.0	723.2	763.3
100°	708.4	665.8	645.0	639.4	645.0	665.8	708.4	769.1	820.6	854.8	840.9
102.5°	857.4	826.5	804.5	800.0	804.5	826.5	857.4	894.6	916.1	906.2	837.0
105°	1000.6	995.0	985.3	981.1	985.3	995.0	1000.6	999.2	970.5	901.5	781.0
107.5°	1023.6	1039.5	1046.4	1048.2	1046.4	1039.5	1023.6	989.1	926.9	829.7	701.3
110°	1001.2	1030.6	1043.1	1049.4	1043.1	1030.6	1001.2	951.7	875.0	773.9	653.4



TEST NUMBER: P332645-940

CATALOG NUMBER: SA4XXDIP-C1020D810U940-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	953.2	988.7	1006.3	1016.5	1006.3	988.7	953.2	897.1	820.4	724.9	618.2
115°	872.3	914.1	936.4	942.0	936.4	914.1	872.3	817.2	750.2	668.7	582.9
117.5°	804.5	839.6	862.2	866.6	862.2	839.6	804.5	757.5	700.7	636.6	565.6
120°	767.7	798.3	816.5	824.1	816.5	798.3	767.7	727.9	678.4	622.7	557.8
122.5°	741.5	767.7	783.0	790.7	783.0	767.7	741.5	707.8	664.5	613.7	551.1
125°	714.0	734.2	747.4	751.6	747.4	734.2	714.0	686.1	647.7	599.7	539.7
127.5°	695.4	713.5	724.6	728.8	724.6	713.5	695.4	667.4	631.0	583.0	525.8
130°	682.6	700.1	711.2	715.4	711.2	700.1	682.6	654.0	617.1	569.6	514.6
132.5°	665.8	685.5	696.2	700.3	696.2	685.5	665.8	637.8	600.9	554.6	502.8
135°	637.3	656.8	668.0	672.2	668.0	656.8	637.3	609.4	574.5	532.0	486.7
137.5°	603.8	623.0	632.2	637.3	632.2	623.0	603.8	577.7	546.3	510.4	472.1
140°	581.5	596.8	606.6	612.2	606.6	596.8	581.5	557.1	527.8	496.4	463.7
142.5°	558.7	572.8	581.5	585.4	581.5	572.8	558.7	537.0	511.7	484.7	455.8
145°	526.5	538.2	545.3	548.8	545.3	538.2	526.5	509.0	489.5	468.6	444.9
147.5°	499.5	509.7	515.0	516.2	515.0	509.7	499.5	486.7	471.4	454.6	435.8
150°	483.9	492.9	497.1	497.8	497.1	492.9	483.9	472.7	460.2	446.2	430.2
152.5°	470.5	477.9	480.4	481.1	480.4	477.9	470.5	461.0	450.7	437.8	424.1
155°	451.8	457.4	459.5	459.5	459.5	457.4	451.8	444.9	436.5	426.1	414.8
157.5°	435.1	439.3	440.5	440.5	440.5	439.3	435.1	429.8	423.1	414.3	404.9
160°	423.9	428.1	428.8	428.8	428.8	428.1	423.9	419.7	414.2	406.5	398.9
162.5°	413.3	417.5	418.2	417.7	418.2	417.5	413.3	410.3	405.3	399.2	392.7
165°	399.5	402.3	401.6	400.9	401.6	402.3	399.5	396.7	393.2	388.3	384.1
167.5°	386.6	388.3	388.3	387.6	388.3	388.3	386.6	385.1	383.1	379.2	375.9
170°	379.3	380.0	379.3	379.3	379.3	380.0	379.3	377.9	375.9	373.0	371.0
172.5°	372.0	372.7	372.0	371.0	372.0	372.7	372.0	371.2	369.7	368.0	366.5
175°	362.6	364.0	362.6	361.1	362.6	364.0	362.6	362.6	362.6	361.1	360.5
177.5°	357.1	357.7	356.6	355.4	356.6	357.7	357.1	357.7	357.1	357.1	356.6
180°	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9



TEST NUMBER: P332645-940

CATALOG NUMBER: SA4XXDIP-C1020D810U940-4F0-1E-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°	26.0	25.2	22.5	20.7	19.7	16.9	16.9	15.2	14.6	13.7	12.9
90°	11.9	12.6	11.1	9.7	9.7	5.6	5.6	4.9	4.2	2.1	0.7
92.5°	184.2	221.1	193.6	140.8	86.8	51.3	36.8	26.7	18.1	11.6	7.9
95°	584.3	568.3	428.8	262.2	147.8	87.1	57.9	41.1	32.1	25.1	23.0
97.5°	734.1	598.5	401.4	235.7	141.2	94.5	70.0	55.6	47.3	41.3	41.3
100°	739.0	560.6	364.0	221.8	142.9	101.8	79.5	66.3	57.9	53.0	53.0
102.5°	697.2	513.2	338.9	217.8	148.5	111.3	90.1	77.4	69.6	65.3	64.1
105°	621.3	457.4	317.3	219.6	161.8	128.3	108.1	95.5	87.1	83.6	81.6
107.5°	559.9	426.1	313.3	230.0	177.3	146.6	126.6	114.6	105.7	102.2	100.9
110°	529.2	415.5	314.4	237.7	189.0	158.3	139.5	126.9	118.5	115.0	113.7



TEST NUMBER: P332645-940

CATALOG NUMBER: SA4XXDIP-C1020D810U940-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	511.9	410.5	317.8	246.1	200.1	170.6	151.7	139.2	131.3	127.3	125.9
115°	495.7	407.9	324.2	259.4	217.6	189.7	170.9	157.6	150.6	145.7	143.7
117.5°	488.5	407.2	331.1	272.9	234.4	207.9	188.4	176.0	168.4	164.0	162.0
120°	484.6	407.2	336.1	282.4	246.1	219.6	200.1	188.2	180.6	175.7	174.3
122.5°	480.1	406.6	341.1	291.3	257.3	230.8	211.8	198.9	191.7	186.9	185.5
125°	472.7	405.8	348.7	304.7	272.6	247.5	228.0	214.7	207.1	202.9	200.1
127.5°	462.8	404.3	354.6	316.3	286.9	262.6	242.9	229.1	220.3	215.3	213.1
130°	456.7	403.7	359.1	323.5	296.3	272.6	252.4	239.2	228.7	223.1	220.3
132.5°	451.1	403.1	363.0	330.7	304.2	280.4	261.4	247.0	237.1	229.8	227.6
135°	442.7	402.3	368.8	340.3	315.1	292.1	274.0	259.4	247.5	240.6	237.7
137.5°	435.5	402.2	372.3	347.0	323.5	302.0	284.7	269.6	258.2	250.6	248.0
140°	431.6	401.6	375.1	351.4	329.1	308.2	291.4	276.8	264.9	257.3	255.2
142.5°	428.3	401.6	377.4	354.7	334.1	313.8	297.6	283.5	272.2	265.1	263.0
145°	422.5	400.2	378.6	358.4	339.6	321.5	306.1	292.8	283.1	276.1	274.0
147.5°	417.4	397.7	379.3	361.6	345.2	328.1	314.3	303.3	293.3	287.1	286.4
150°	413.5	396.0	379.3	363.3	347.9	332.6	319.3	308.9	300.5	295.0	294.3
152.5°	409.0	393.2	378.2	364.4	350.2	336.5	324.4	315.0	307.2	301.7	301.5
155°	402.3	389.1	376.5	365.3	353.5	341.6	331.2	323.5	316.6	312.4	311.7
157.5°	395.5	384.8	374.7	365.3	355.9	345.8	337.6	330.9	325.5	321.6	321.6
160°	390.5	381.4	373.0	365.3	357.0	348.7	341.0	335.4	330.5	327.7	327.7
162.5°	386.0	378.1	371.4	365.3	358.1	350.3	344.3	339.3	334.9	332.7	333.3
165°	378.6	373.0	368.2	364.0	358.4	352.1	347.9	344.5	341.0	339.6	339.6
167.5°	371.9	368.0	364.8	362.3	358.3	353.7	350.4	348.5	345.8	345.2	345.8
170°	367.5	364.6	362.6	361.1	357.7	354.2	352.1	350.7	348.7	347.9	348.7
172.5°	363.6	361.3	360.3	360.1	357.1	354.7	353.2	352.4	350.9	350.7	351.4
175°	359.1	357.7	357.7	358.4	356.3	354.9	354.9	354.2	353.5	353.5	354.2
177.5°	356.0	355.4	355.4	356.6	355.4	354.9	354.9	354.9	354.4	354.9	355.4
180°	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9



TEST NUMBER: P332645-940

CATALOG NUMBER: SA4XXDIP-C1020D810U940-4F0-1E-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°	13.7	14.6	16.2	17.9	19.9	21.2	20.7	21.0	19.3	18.6	16.9
90°	2.1	4.2	4.9	5.6	5.6	9.7	9.7	11.1	12.6	11.9	12.6
92.5°	11.6	18.1	26.7	36.8	51.3	86.8	140.8	193.6	221.1	184.2	137.0
95°	25.1	32.1	41.1	57.9	87.1	147.8	262.2	428.8	568.3	584.3	516.7
97.5°	41.3	47.3	55.6	70.0	94.5	141.2	235.7	401.4	598.5	734.1	763.3
100°	53.0	57.9	66.3	79.5	101.8	142.9	221.8	364.0	560.6	739.0	840.9
102.5°	65.3	69.6	77.4	90.1	111.3	148.5	217.8	338.9	513.2	697.2	837.0
105°	83.6	87.1	95.5	108.1	128.3	161.8	219.6	317.3	457.4	621.3	781.0
107.5°	102.2	105.7	114.6	126.6	146.6	177.3	230.0	313.3	426.1	559.9	701.3
110°	115.0	118.5	126.9	139.5	158.3	189.0	237.7	314.4	415.5	529.2	653.4



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	127.3	131.3	139.2	151.7	170.6	200.1	246.1	317.8	410.5	511.9	618.2
115°	145.7	150.6	157.6	170.9	189.7	217.6	259.4	324.2	407.9	495.7	582.9
117.5°	164.0	168.4	176.0	188.4	207.9	234.4	272.9	331.1	407.2	488.5	565.6
120°	175.7	180.6	188.2	200.1	219.6	246.1	282.4	336.1	407.2	484.6	557.8
122.5°	186.9	191.7	198.9	211.8	230.8	257.3	291.3	341.1	406.6	480.1	551.1
125°	202.9	207.1	214.7	228.0	247.5	272.6	304.7	348.7	405.8	472.7	539.7
127.5°	215.3	220.3	229.1	242.9	262.6	286.9	316.3	354.6	404.3	462.8	525.8
130°	223.1	228.7	239.2	252.4	272.6	296.3	323.5	359.1	403.7	456.7	514.6
132.5°	229.8	237.1	247.0	261.4	280.4	304.2	330.7	363.0	403.1	451.1	502.8
135°	240.6	247.5	259.4	274.0	292.1	315.1	340.3	368.8	402.3	442.7	486.7
137.5°	250.6	258.2	269.6	284.7	302.0	323.5	347.0	372.3	402.2	435.5	472.1
140°	257.3	264.9	276.8	291.4	308.2	329.1	351.4	375.1	401.6	431.6	463.7
142.5°	265.1	272.2	283.5	297.6	313.8	334.1	354.7	377.4	401.6	428.3	455.8
145°	276.1	283.1	292.8	306.1	321.5	339.6	358.4	378.6	400.2	422.5	444.9
147.5°	287.1	293.3	303.3	314.3	328.1	345.2	361.6	379.3	397.7	417.4	435.8
150°	295.0	300.5	308.9	319.3	332.6	347.9	363.3	379.3	396.0	413.5	430.2
152.5°	301.7	307.2	315.0	324.4	336.5	350.2	364.4	378.2	393.2	409.0	424.1
155°	312.4	316.6	323.5	331.2	341.6	353.5	365.3	376.5	389.1	402.3	414.8
157.5°	321.6	325.5	330.9	337.6	345.8	355.9	365.3	374.7	384.8	395.5	404.9
160°	327.7	330.5	335.4	341.0	348.7	357.0	365.3	373.0	381.4	390.5	398.9
162.5°	332.7	334.9	339.3	344.3	350.3	358.1	365.3	371.4	378.1	386.0	392.7
165°	339.6	341.0	344.5	347.9	352.1	358.4	364.0	368.2	373.0	378.6	384.1
167.5°	345.2	345.8	348.5	350.4	353.7	358.3	362.3	364.8	368.0	371.9	375.9
170°	347.9	348.7	350.7	352.1	354.2	357.7	361.1	362.6	364.6	367.5	371.0
172.5°	350.7	350.9	352.4	353.2	354.7	357.1	360.1	360.3	361.3	363.6	366.5
175°	353.5	353.5	354.2	354.9	354.9	356.3	358.4	357.7	357.7	359.1	360.5
177.5°	354.9	354.4	354.9	354.9	354.9	355.4	356.6	355.4	355.4	356.0	356.6
180°	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9	354.9



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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	16.6	15.8	15.4	15.2	13.8
90°	13.3	13.9	13.9	14.6	15.3	14.6	14.6
92.5°	103.1	82.0	68.0	59.8	56.1	53.7	53.7
95°	408.6	315.1	247.5	213.4	191.7	179.2	170.1
97.5°	723.2	655.0	582.2	532.2	490.2	469.2	454.8
100°	854.8	820.6	769.1	708.4	665.8	645.0	639.4
102.5°	906.2	916.1	894.6	857.4	826.5	804.5	800.0
105°	901.5	970.5	999.2	1000.6	995.0	985.3	981.1
107.5°	829.7	926.9	989.1	1023.6	1039.5	1046.4	1048.2
110°	773.9	875.0	951.7	1001.2	1030.6	1043.1	1049.4



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	724.9	820.4	897.1	953.2	988.7	1006.3	1016.5
115°	668.7	750.2	817.2	872.3	914.1	936.4	942.0
117.5°	636.6	700.7	757.5	804.5	839.6	862.2	866.6
120°	622.7	678.4	727.9	767.7	798.3	816.5	824.1
122.5°	613.7	664.5	707.8	741.5	767.7	783.0	790.7
125°	599.7	647.7	686.1	714.0	734.2	747.4	751.6
127.5°	583.0	631.0	667.4	695.4	713.5	724.6	728.8
130°	569.6	617.1	654.0	682.6	700.1	711.2	715.4
132.5°	554.6	600.9	637.8	665.8	685.5	696.2	700.3
135°	532.0	574.5	609.4	637.3	656.8	668.0	672.2
137.5°	510.4	546.3	577.7	603.8	623.0	632.2	637.3
140°	496.4	527.8	557.1	581.5	596.8	606.6	612.2
142.5°	484.7	511.7	537.0	558.7	572.8	581.5	585.4
145°	468.6	489.5	509.0	526.5	538.2	545.3	548.8
147.5°	454.6	471.4	486.7	499.5	509.7	515.0	516.2
150°	446.2	460.2	472.7	483.9	492.9	497.1	497.8
152.5°	437.8	450.7	461.0	470.5	477.9	480.4	481.1
155°	426.1	436.5	444.9	451.8	457.4	459.5	459.5
157.5°	414.3	423.1	429.8	435.1	439.3	440.5	440.5
160°	406.5	414.2	419.7	423.9	428.1	428.8	428.8
162.5°	399.2	405.3	410.3	413.3	417.5	418.2	417.7
165°	388.3	393.2	396.7	399.5	402.3	401.6	400.9
167.5°	379.2	383.1	385.1	386.6	388.3	388.3	387.6
170°	373.0	375.9	377.9	379.3	380.0	379.3	379.3
172.5°	368.0	369.7	371.2	372.0	372.7	372.0	371.0
175°	361.1	362.6	362.6	362.6	364.0	362.6	361.1
177.5°	357.1	357.1	357.7	357.1	357.7	356.6	355.4
180°	354.9	354.9	354.9	354.9	354.9	354.9	354.9

(END OF REPORT)