

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: P332644

Luminaire Tested: **SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332644
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

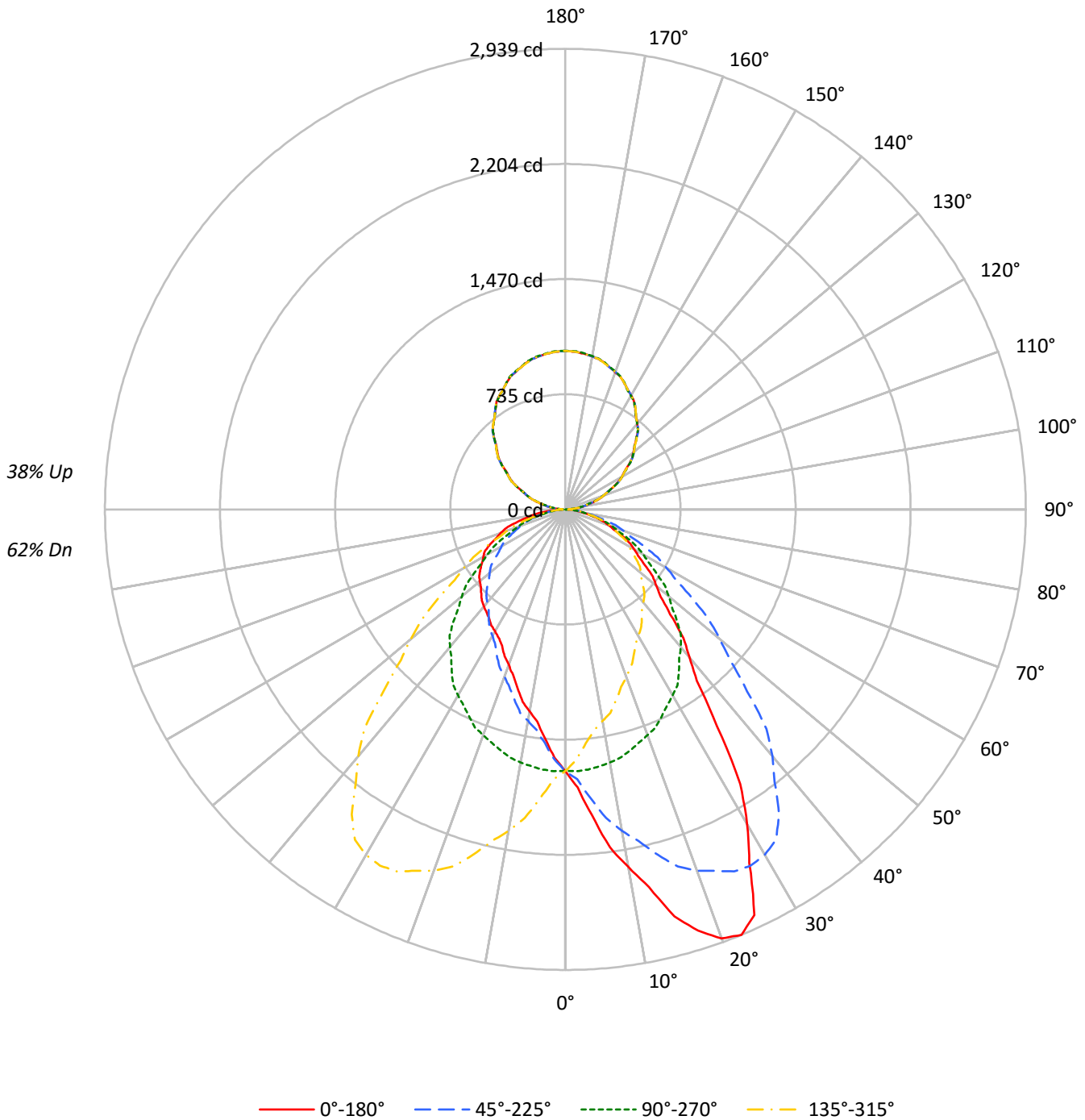
Lumens per Lamp: N/A
Luminaire Lumens: 7411.9 lumens
Efficiency: N/A
Efficacy: 136.2 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

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	50	30	10	0	
RCR																						
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62				
1	101	96	93	89	94	91	87	84	79	77	75	69	67	66	60	59	57	53				
2	92	85	78	73	86	80	74	70	70	66	62	61	58	55	53	51	49	45				
3	84	75	67	61	79	70	64	58	62	57	53	54	50	47	47	44	42	38				
4	77	66	58	52	72	62	55	50	55	50	45	49	44	41	42	39	36	33				
5	71	59	51	45	66	56	49	43	50	44	39	44	39	35	38	35	32	29				
6	66	53	45	39	61	50	43	38	45	39	34	40	35	31	35	31	28	25				
7	61	48	40	35	57	46	38	33	41	35	30	36	31	28	32	28	25	23				
8	56	44	36	31	53	42	35	30	37	31	27	33	28	25	29	25	23	20				
9	53	40	33	28	49	38	31	27	34	29	24	31	26	22	27	23	20	18				
10	49	37	30	25	46	35	28	24	32	26	22	28	24	20	25	21	19	17				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13472	13472	13472	13472
5°	15866	13507	11921	13507
10°	18996	13448	10733	13448
15°	22476	13312	9857	13312
20°	25027	13173	9075	13173
25°	25432	12968	8535	12968
30°	21640	12773	8364	12773
35°	16638	12454	8366	12454
40°	12968	12079	8524	12079
45°	10813	11515	8667	11515
50°	9516	10827	8960	10827
55°	8718	10003	9322	10003
60°	8170	9265	9755	9265
65°	7607	8437	10115	8437
70°	6951	7619	10346	7619
75°	6210	6706	10221	6706
80°	5207	5495	9898	5495
85°	3844	3974	9476	3974



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.6	2.2
10°-20°	501.1	6.8
20°-30°	794.6	10.7
30°-40°	884.3	11.9
40°-50°	805.0	10.9
50°-60°	657.8	8.9
60°-70°	469.6	6.3
70°-80°	258.6	3.5
80°-90°	73.6	1.0
90°-100°	66.7	0.9
100°-110°	197.5	2.7
110°-120°	335.2	4.5
120°-130°	442.0	6.0
130°-140°	496.4	6.7
140°-150°	487.8	6.6
150°-160°	410.3	5.5
160°-170°	273.0	3.7
170°-180°	95.6	1.3
0°-30°	1458.3	19.7
0°-40°	2342.7	31.6
0°-60°	3805.5	51.3
0°-90°	4607.3	62.2
90°-120°	599.4	8.1
90°-150°	2025.7	27.3
90°-180°	2805.0	37.8
0°-180°	7411.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1669	1669	1669	1669	1669	
5°	1958	1667	1471	1667	1958	199
15°	2689	1593	1179	1593	2689	760
25°	2855	1456	958	1456	2855	1259
35°	1688	1264	849	1264	1688	1072
45°	947	1009	759	1009	947	746
55°	619	711	662	711	619	560
65°	398	442	530	442	398	394
75°	199	215	328	215	199	212
85°	42	43	102	43	42	51
90°	24	2	24	2	24	14
95°	62	47	62	47	62	64
105°	191	182	191	182	191	201
115°	338	341	338	341	338	334
125°	492	496	492	496	492	439
135°	641	640	641	640	641	495
145°	779	778	779	778	779	487
155°	890	891	890	891	890	410
165°	968	970	968	970	968	273
175°	1005	1009	1005	1009	1005	95
180°	1011	1011	1011	1011	1011	



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1776.1	1775.6	1770.0	1768.9	1765.0	1760.1	1759.0	1750.1	1732.4	1724.1	1721.9
5°	1957.8	1971.6	1953.6	1950.2	1948.1	1925.3	1913.5	1899.7	1867.9	1849.2	1834.7
7.5°	2174.6	2176.2	2168.4	2162.0	2144.4	2124.5	2094.7	2062.9	2025.0	1985.6	1955.8
10°	2317.3	2322.8	2313.8	2312.4	2277.2	2255.0	2210.8	2173.5	2130.6	2082.9	2039.4
12.5°	2467.7	2459.9	2455.4	2425.8	2419.3	2378.9	2327.5	2289.1	2223.0	2168.1	2110.1
15°	2689.2	2674.0	2664.3	2623.5	2603.5	2547.5	2492.8	2450.7	2364.3	2282.0	2219.8
17.5°	2819.1	2834.4	2812.0	2795.2	2743.4	2704.1	2648.3	2559.8	2492.2	2390.0	2311.5
20°	2913.2	2914.5	2902.1	2884.8	2844.0	2794.3	2733.4	2636.6	2555.8	2454.1	2346.3
22.5°	2938.6	2938.9	2933.6	2917.4	2886.6	2846.2	2784.9	2704.1	2606.1	2495.6	2387.8
25°	2855.1	2852.3	2858.6	2876.5	2864.8	2852.3	2817.1	2756.9	2665.7	2548.8	2432.7
27.5°	2544.8	2563.9	2599.0	2643.3	2685.9	2718.4	2727.5	2715.2	2658.6	2562.5	2440.9
30°	2321.4	2344.9	2371.2	2415.4	2501.1	2550.2	2604.2	2644.9	2622.1	2545.4	2432.0
32.5°	2075.9	2081.7	2120.7	2171.0	2249.5	2343.9	2429.4	2512.2	2539.7	2499.5	2404.9
35°	1688.2	1697.8	1740.0	1789.8	1885.9	2001.3	2129.9	2244.7	2339.4	2377.4	2329.0
37.5°	1377.6	1405.4	1435.2	1488.7	1573.3	1677.2	1810.8	1959.3	2100.5	2195.0	2211.1
40°	1230.5	1247.8	1269.2	1310.0	1381.9	1484.2	1599.0	1769.1	1919.1	2054.6	2098.8
42.5°	1114.4	1124.5	1137.6	1174.5	1229.3	1331.0	1435.8	1585.4	1736.0	1898.0	1972.2
45°	947.1	957.5	979.6	1001.0	1042.5	1113.0	1210.5	1333.5	1484.9	1641.2	1778.0
47.5°	826.2	832.9	846.0	869.0	904.2	950.7	1030.0	1132.8	1273.1	1424.8	1570.6
50°	757.7	763.2	773.6	794.3	821.3	862.7	927.7	1023.8	1133.7	1286.5	1429.6
52.5°	703.5	705.7	713.3	727.4	748.8	783.7	837.0	916.5	1018.7	1154.9	1297.4
55°	619.4	622.2	629.1	639.5	658.1	680.2	721.0	780.5	869.7	987.9	1111.6
57.5°	550.3	552.2	558.0	562.0	577.4	595.4	626.7	669.2	736.8	837.0	947.5
60°	506.0	504.7	511.6	515.0	525.4	540.6	564.8	605.6	664.3	745.2	846.8
62.5°	462.9	461.0	466.8	471.3	477.3	490.3	510.0	542.0	589.7	662.8	750.6
65°	398.2	395.4	398.9	404.4	409.9	416.9	431.4	459.7	497.7	550.3	617.3
67.5°	333.2	336.1	336.7	339.4	342.6	352.0	362.0	382.0	408.8	450.9	507.7
70°	294.5	295.2	298.0	298.0	300.0	308.3	316.6	328.4	354.6	393.4	439.7
72.5°	255.8	258.7	257.6	259.8	261.3	266.8	272.9	284.1	306.5	335.3	374.4
75°	199.1	201.2	201.2	201.9	203.9	206.0	210.8	219.1	235.0	256.5	283.4
77.5°	145.2	145.5	146.4	148.9	148.9	152.2	155.8	162.5	170.3	185.0	201.4
80°	112.0	113.4	112.7	114.1	114.1	116.8	118.2	126.5	130.0	139.6	152.8
82.5°	82.1	83.5	83.4	85.3	86.4	87.0	88.9	92.2	95.7	104.2	109.6
85°	41.5	42.9	41.5	42.9	44.9	45.6	47.7	48.4	51.2	53.2	58.1
87.5°	16.9	18.4	18.4	18.9	19.9	20.3	20.7	19.9	21.9	22.2	24.2
90°	23.5	23.1	22.8	22.4	22.1	21.4	20.3	19.3	18.2	17.2	15.8
92.5°	34.7	34.5	34.3	34.1	33.9	33.5	32.8	32.2	31.6	31.0	30.0
95°	61.8	61.8	61.8	61.8	61.8	61.5	61.0	60.5	59.9	59.4	58.2
97.5°	96.8	96.8	96.8	96.8	96.8	96.5	95.8	95.2	94.6	94.0	92.5
100°	121.2	121.2	121.2	121.2	121.2	121.0	120.7	120.3	120.0	119.6	118.0
102.5°	148.7	148.6	148.4	148.3	148.1	147.8	147.3	146.9	146.4	145.9	144.5
105°	190.8	190.2	189.7	189.2	188.7	188.1	187.6	187.1	186.6	186.1	185.4
107.5°	231.7	231.8	231.8	231.8	231.9	231.6	231.1	230.7	230.2	229.7	229.6
110°	261.1	260.6	260.1	259.6	259.0	258.9	259.3	259.6	260.0	260.3	260.5



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	291.1	291.0	290.9	290.8	290.7	290.7	290.8	290.8	290.9	291.0	291.3
115°	337.7	337.9	338.1	338.3	338.4	338.6	338.8	338.9	339.1	339.3	339.6
117.5°	382.1	382.5	382.8	383.2	383.5	384.0	384.6	385.2	385.8	386.4	386.6
120°	415.9	415.6	415.2	414.9	414.5	414.8	415.6	416.5	417.4	418.3	418.8
122.5°	444.1	444.7	445.3	445.9	446.6	447.2	447.8	448.3	448.9	449.5	449.8
125°	492.5	492.9	493.2	493.6	493.9	494.3	494.6	495.0	495.3	495.7	495.8
127.5°	537.4	537.7	538.0	538.2	538.5	538.8	539.2	539.5	539.9	540.2	540.5
130°	566.8	567.5	568.2	568.9	569.6	570.1	570.4	570.8	571.1	571.5	571.5
132.5°	598.1	598.3	598.6	598.9	599.2	599.5	599.8	600.2	600.5	600.9	601.0
135°	641.1	641.6	642.1	642.6	643.1	643.6	643.9	644.3	644.6	645.0	645.0
137.5°	686.3	686.1	686.0	685.9	685.8	686.0	686.5	686.9	687.4	687.8	687.5
140°	713.8	713.9	714.1	714.3	714.5	714.6	714.8	715.0	715.2	715.3	715.3
142.5°	741.3	741.3	741.4	741.4	741.4	741.5	741.5	741.5	741.6	741.6	741.7
145°	778.7	779.2	779.7	780.2	780.7	781.1	781.3	781.4	781.6	781.8	781.6
147.5°	816.5	816.7	816.8	817.0	817.2	817.3	817.5	817.6	817.8	817.9	818.0
150°	839.6	839.8	840.0	840.2	840.3	840.4	840.4	840.4	840.4	840.4	840.4
152.5°	860.9	861.4	861.8	862.3	862.7	862.7	862.3	861.9	861.5	861.1	860.9
155°	890.5	891.1	891.8	892.5	893.2	893.2	892.5	891.8	891.1	890.5	890.6
157.5°	916.9	917.5	918.1	918.7	919.2	919.3	918.8	918.2	917.7	917.2	917.2
160°	931.9	932.8	933.6	934.5	935.4	935.5	935.0	934.5	934.0	933.5	933.6
162.5°	947.5	948.4	949.3	950.1	951.0	951.0	950.0	949.1	948.2	947.2	947.4
165°	967.9	968.5	969.2	969.9	970.6	970.5	969.4	968.4	967.3	966.3	966.6
167.5°	982.4	983.5	984.5	985.6	986.7	986.7	985.7	984.6	983.6	982.5	982.5
170°	990.5	991.7	993.0	994.2	995.4	995.5	994.4	993.4	992.3	991.3	991.1
172.5°	997.4	998.6	999.8	1001.1	1002.3	1002.3	1001.1	999.9	998.7	997.6	997.5
175°	1004.6	1005.8	1007.0	1008.2	1009.5	1009.5	1008.2	1007.0	1005.8	1004.6	1004.8
177.5°	1008.3	1009.5	1010.6	1011.7	1012.8	1012.9	1011.9	1010.9	1009.9	1009.0	1009.0
180°	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1722.5	1714.7	1709.2	1704.8	1692.6	1685.4	1679.9	1672.1	1663.3	1653.9	1642.3
5°	1820.2	1796.7	1779.4	1753.2	1728.3	1707.5	1686.1	1666.7	1643.2	1617.7	1599.0
7.5°	1922.9	1888.0	1843.2	1804.3	1760.6	1722.6	1688.6	1653.7	1617.5	1582.4	1550.2
10°	1988.2	1943.3	1893.5	1834.7	1779.4	1730.3	1684.7	1640.5	1597.6	1554.7	1518.1
12.5°	2058.4	2002.4	1928.9	1860.2	1798.2	1732.6	1677.5	1623.3	1571.6	1526.5	1483.8
15°	2152.7	2071.8	1986.8	1894.9	1813.3	1736.6	1661.2	1592.8	1534.7	1475.2	1433.8
17.5°	2210.7	2110.6	2013.4	1917.3	1818.5	1721.8	1640.5	1561.5	1488.8	1429.8	1377.5
20°	2248.8	2149.3	2028.3	1932.2	1814.7	1715.1	1621.1	1533.3	1457.3	1394.4	1340.4
22.5°	2282.0	2167.0	2046.0	1919.5	1802.5	1696.9	1594.0	1505.7	1428.0	1361.7	1310.0
25°	2300.0	2167.9	2036.6	1910.8	1778.0	1652.9	1559.6	1455.9	1372.9	1303.1	1247.8
27.5°	2301.9	2160.7	2012.1	1872.3	1735.3	1618.8	1501.0	1408.3	1322.2	1248.4	1195.3
30°	2295.8	2148.6	1988.9	1837.5	1699.9	1573.4	1471.1	1370.2	1282.4	1209.1	1153.8
32.5°	2276.5	2123.1	1959.0	1798.8	1656.2	1532.5	1426.9	1330.9	1245.3	1173.1	1115.1
35°	2220.5	2069.1	1894.2	1727.6	1581.7	1456.6	1361.2	1263.7	1178.0	1109.5	1053.6
37.5°	2133.0	1996.1	1818.3	1645.9	1502.6	1376.9	1282.4	1194.3	1117.0	1047.5	990.1
40°	2056.6	1936.3	1758.0	1590.0	1435.2	1315.6	1227.1	1146.2	1069.5	1003.8	949.2
42.5°	1968.7	1863.9	1699.4	1521.4	1372.1	1252.0	1165.7	1093.1	1020.8	960.1	905.5
45°	1811.9	1742.8	1587.9	1423.4	1267.9	1154.5	1072.2	1008.6	947.8	888.3	842.7
47.5°	1631.6	1597.3	1467.0	1310.7	1163.1	1051.3	980.0	921.2	867.9	817.5	777.3
50°	1510.5	1493.9	1381.2	1230.5	1089.5	984.4	912.5	862.1	816.4	772.2	734.2
52.5°	1391.0	1390.5	1288.9	1150.9	1020.4	919.2	847.8	800.7	761.1	725.2	691.0
55°	1208.4	1227.8	1148.3	1025.2	908.4	817.1	752.8	710.7	683.0	653.3	627.7
57.5°	1040.7	1072.8	1007.2	898.8	801.4	717.3	661.3	629.6	600.2	582.2	563.6
60°	931.2	961.6	910.5	819.2	727.3	655.4	602.1	573.8	548.2	535.8	522.6
62.5°	833.9	861.0	823.1	738.5	658.7	589.5	544.6	517.4	500.1	486.5	477.8
65°	694.8	717.6	685.1	623.6	555.1	499.8	463.2	441.7	425.2	419.6	409.9
67.5°	561.6	582.4	564.8	512.5	457.6	415.8	387.1	366.5	356.7	351.9	345.0
70°	482.5	503.3	484.6	439.0	396.8	361.6	334.6	322.8	312.5	310.4	300.7
72.5°	415.6	429.7	411.1	375.4	339.3	309.6	288.7	276.4	271.0	267.3	262.0
75°	311.8	324.2	311.8	284.1	258.5	237.8	219.8	215.0	208.8	206.7	203.2
77.5°	220.7	231.4	221.9	204.6	185.5	169.5	159.8	153.6	152.2	148.6	150.3
80°	168.7	175.6	166.6	154.9	139.6	128.6	121.7	118.2	114.1	112.7	115.4
82.5°	121.1	124.2	119.6	111.7	100.4	93.2	88.5	84.5	83.6	83.9	83.9
85°	62.9	62.2	61.5	54.6	51.2	46.3	43.6	42.9	42.2	43.6	44.9
87.5°	23.9	24.2	23.3	20.8	18.8	16.7	15.8	14.8	15.8	16.7	17.7
90°	14.4	13.0	11.6	10.0	8.1	6.2	4.3	2.3	4.3	6.2	8.1
92.5°	29.0	28.0	27.1	25.5	23.3	21.1	18.9	16.7	18.9	21.1	23.3
95°	57.0	55.8	54.6	53.2	51.6	50.0	48.5	46.9	48.5	50.0	51.6
97.5°	91.1	89.7	88.3	86.9	85.7	84.4	83.2	81.9	83.2	84.4	85.7
100°	116.5	114.9	113.4	112.2	111.5	110.8	110.1	109.5	110.1	110.8	111.5
102.5°	143.0	141.6	140.2	139.3	139.1	138.8	138.5	138.2	138.5	138.8	139.1
105°	184.7	184.0	183.3	182.9	182.7	182.5	182.3	182.2	182.3	182.5	182.7
107.5°	229.5	229.4	229.3	229.1	228.9	228.7	228.5	228.3	228.5	228.7	228.9
110°	260.7	260.9	261.0	260.9	260.6	260.2	259.9	259.6	259.9	260.2	260.6



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	291.6	291.9	292.2	292.4	292.3	292.2	292.1	292.1	292.1	292.2	292.3
115°	340.0	340.3	340.7	340.9	340.9	340.9	340.9	340.9	340.9	340.9	340.9
117.5°	386.8	387.1	387.3	387.4	387.2	387.1	387.0	386.8	387.0	387.1	387.2
120°	419.3	419.8	420.3	420.3	419.6	418.9	418.2	417.5	418.2	418.9	419.6
122.5°	450.0	450.3	450.5	450.5	450.2	449.9	449.6	449.4	449.6	449.9	450.2
125°	496.0	496.2	496.3	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4
127.5°	540.8	541.0	541.3	541.2	540.7	540.2	539.6	539.1	539.6	540.2	540.7
130°	571.5	571.5	571.5	571.2	570.7	570.2	569.7	569.1	569.7	570.2	570.7
132.5°	601.2	601.3	601.4	601.3	600.9	600.6	600.2	599.8	600.2	600.6	600.9
135°	645.0	645.0	645.0	644.5	643.4	642.4	641.3	640.3	641.3	642.4	643.4
137.5°	687.3	687.0	686.7	686.3	685.8	685.3	684.9	684.4	684.9	685.3	685.8
140°	715.3	715.3	715.3	715.2	714.8	714.5	714.1	713.8	714.1	714.5	714.8
142.5°	741.9	742.0	742.2	742.1	741.7	741.4	741.0	740.7	741.0	741.4	741.7
145°	781.4	781.3	781.1	780.7	780.0	779.3	778.6	777.9	778.6	779.3	780.0
147.5°	818.2	818.3	818.5	818.1	817.3	816.4	815.6	814.8	815.6	816.4	817.3
150°	840.4	840.4	840.4	840.1	839.4	838.7	838.0	837.3	838.0	838.7	839.4
152.5°	860.8	860.6	860.5	860.2	859.8	859.4	859.0	858.6	859.0	859.4	859.8
155°	890.8	891.0	891.1	891.2	891.2	891.2	891.2	891.2	891.2	891.2	891.2
157.5°	917.3	917.3	917.3	917.5	917.8	918.1	918.4	918.8	918.4	918.1	917.8
160°	933.8	934.0	934.1	934.3	934.5	934.7	934.8	935.0	934.8	934.7	934.5
162.5°	947.6	947.7	947.9	948.2	948.7	949.1	949.6	950.0	949.6	949.1	948.7
165°	967.0	967.3	967.7	968.1	968.6	969.2	969.7	970.2	969.7	969.2	968.6
167.5°	982.5	982.4	982.4	982.8	983.5	984.2	984.9	985.7	984.9	984.2	983.5
170°	991.0	990.8	990.6	991.0	991.8	992.7	993.6	994.4	993.6	992.7	991.8
172.5°	997.5	997.5	997.4	997.8	998.5	999.2	1000.0	1000.7	1000.0	999.2	998.5
175°	1004.9	1005.1	1005.3	1005.8	1006.7	1007.5	1008.4	1009.3	1008.4	1007.5	1006.7
177.5°	1009.0	1009.0	1009.0	1009.3	1010.0	1010.7	1011.4	1012.1	1011.4	1010.7	1010.0
180°	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1636.7	1631.8	1624.6	1614.6	1606.3	1597.5	1595.3	1591.9	1598.6	1593.0	1591.4
5°	1583.1	1568.6	1549.9	1528.5	1516.0	1498.1	1494.6	1487.7	1480.8	1480.1	1473.2
7.5°	1526.3	1505.0	1480.5	1458.7	1438.5	1418.8	1406.0	1403.2	1393.0	1387.0	1380.1
10°	1489.8	1463.5	1435.2	1414.4	1390.9	1370.2	1355.7	1347.4	1340.4	1332.8	1325.9
12.5°	1446.6	1418.7	1395.3	1372.9	1345.0	1329.2	1305.3	1290.9	1289.6	1289.7	1271.7
15°	1396.4	1368.8	1332.8	1301.0	1285.8	1255.4	1242.3	1225.7	1215.3	1204.9	1196.7
17.5°	1339.1	1304.6	1276.6	1240.1	1211.0	1186.8	1169.6	1159.6	1144.0	1129.3	1118.7
20°	1303.1	1266.5	1236.7	1198.0	1166.2	1136.5	1122.0	1108.2	1096.4	1084.0	1072.2
22.5°	1266.6	1228.3	1191.9	1154.3	1124.8	1093.4	1079.4	1060.6	1049.4	1042.5	1030.7
25°	1209.1	1167.6	1126.1	1090.2	1059.8	1032.1	1013.5	998.9	986.5	981.0	973.4
27.5°	1146.6	1105.4	1065.3	1024.5	990.0	969.9	955.0	944.0	936.9	929.5	926.1
30°	1106.8	1063.9	1021.1	983.0	951.2	931.2	917.4	909.8	904.2	900.8	897.3
32.5°	1066.4	1024.1	979.0	944.3	915.8	898.0	887.5	879.9	877.1	875.9	874.6
35°	1001.7	958.8	917.4	886.3	859.3	852.4	843.4	839.2	837.9	842.7	844.8
37.5°	939.1	899.3	861.1	830.9	813.3	803.2	800.1	800.3	805.2	809.5	814.5
40°	898.7	860.0	824.0	797.8	781.2	775.0	773.6	777.0	782.6	787.4	792.9
42.5°	859.4	821.3	788.6	764.0	752.4	746.7	747.6	751.0	758.8	764.7	773.0
45°	798.5	766.7	734.9	714.8	705.1	706.5	706.5	712.7	720.3	729.3	738.3
47.5°	741.1	709.0	682.9	666.0	661.0	659.8	663.7	671.8	682.7	693.8	706.4
50°	702.4	671.9	649.1	633.9	628.4	630.5	636.0	643.6	656.7	670.6	683.7
52.5°	663.1	635.4	614.3	600.2	596.3	600.1	605.6	617.6	629.1	644.0	659.9
55°	602.1	578.6	562.0	551.7	550.3	552.4	558.6	571.7	588.3	607.0	622.2
57.5°	541.4	521.8	506.6	499.4	500.1	502.0	512.3	527.9	545.6	565.5	585.1
60°	500.5	482.5	470.1	464.6	465.2	469.4	481.8	496.4	518.5	537.8	558.6
62.5°	461.8	446.0	434.1	429.2	428.2	437.3	449.2	464.3	486.4	508.0	530.4
65°	399.6	387.1	377.5	374.7	376.8	383.7	398.9	418.9	437.6	460.4	483.9
67.5°	338.7	328.5	321.9	323.1	325.6	335.8	348.6	365.8	387.0	410.6	433.9
70°	300.0	290.3	284.8	285.5	289.7	302.1	313.2	330.4	353.3	377.5	396.8
72.5°	260.2	253.8	248.9	251.8	255.9	264.5	278.3	295.6	315.7	338.2	358.6
75°	199.8	199.8	197.0	199.1	205.3	213.6	224.0	242.0	262.0	280.0	296.6
77.5°	148.2	146.7	148.5	151.0	154.6	164.4	176.3	189.1	204.2	222.2	235.9
80°	113.4	114.1	117.5	121.7	123.1	130.7	143.1	154.9	166.6	181.8	194.9
82.5°	85.2	85.9	87.7	92.9	94.3	102.5	110.5	122.2	132.9	143.1	154.0
85°	46.3	46.3	49.8	51.8	55.3	60.8	65.7	72.6	82.3	89.2	99.5
87.5°	19.7	20.0	22.5	23.9	25.8	28.9	30.2	36.5	38.9	41.9	47.0
90°	10.0	11.6	13.0	14.4	15.8	17.2	18.2	19.3	20.3	21.4	22.1
92.5°	25.5	27.1	28.0	29.0	30.0	31.0	31.6	32.2	32.8	33.5	33.9
95°	53.2	54.6	55.8	57.0	58.2	59.4	59.9	60.5	61.0	61.5	61.8
97.5°	86.9	88.3	89.7	91.1	92.5	94.0	94.6	95.2	95.8	96.5	96.8
100°	112.2	113.4	114.9	116.5	118.0	119.6	120.0	120.3	120.7	121.0	121.2
102.5°	139.3	140.2	141.6	143.0	144.5	145.9	146.4	146.9	147.3	147.8	148.1
105°	182.9	183.3	184.0	184.7	185.4	186.1	186.6	187.1	187.6	188.1	188.7
107.5°	229.1	229.3	229.4	229.5	229.6	229.7	230.2	230.7	231.1	231.6	231.9
110°	260.9	261.0	260.9	260.7	260.5	260.3	260.0	259.6	259.3	258.9	259.0



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	292.4	292.2	291.9	291.6	291.3	291.0	290.9	290.8	290.8	290.7	290.7
115°	340.9	340.7	340.3	340.0	339.6	339.3	339.1	338.9	338.8	338.6	338.4
117.5°	387.4	387.3	387.1	386.8	386.6	386.4	385.8	385.2	384.6	384.0	383.5
120°	420.3	420.3	419.8	419.3	418.8	418.3	417.4	416.5	415.6	414.8	414.5
122.5°	450.5	450.5	450.3	450.0	449.8	449.5	448.9	448.3	447.8	447.2	446.6
125°	496.4	496.3	496.2	496.0	495.8	495.7	495.3	495.0	494.6	494.3	493.9
127.5°	541.2	541.3	541.0	540.8	540.5	540.2	539.9	539.5	539.2	538.8	538.5
130°	571.2	571.5	571.5	571.5	571.5	571.5	571.1	570.8	570.4	570.1	569.6
132.5°	601.3	601.4	601.3	601.2	601.0	600.9	600.5	600.2	599.8	599.5	599.2
135°	644.5	645.0	645.0	645.0	645.0	645.0	644.6	644.3	643.9	643.6	643.1
137.5°	686.3	686.7	687.0	687.3	687.5	687.8	687.4	686.9	686.5	686.0	685.8
140°	715.2	715.3	715.3	715.3	715.3	715.3	715.2	715.0	714.8	714.6	714.5
142.5°	742.1	742.2	742.0	741.9	741.7	741.6	741.6	741.5	741.5	741.5	741.4
145°	780.7	781.1	781.3	781.4	781.6	781.8	781.6	781.4	781.3	781.1	780.7
147.5°	818.1	818.5	818.3	818.2	818.0	817.9	817.8	817.6	817.5	817.3	817.2
150°	840.1	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.3
152.5°	860.2	860.5	860.6	860.8	860.9	861.1	861.5	861.9	862.3	862.7	862.7
155°	891.2	891.1	891.0	890.8	890.6	890.5	891.1	891.8	892.5	893.2	893.2
157.5°	917.5	917.3	917.3	917.3	917.2	917.2	917.7	918.2	918.8	919.3	919.2
160°	934.3	934.1	934.0	933.8	933.6	933.5	934.0	934.5	935.0	935.5	935.4
162.5°	948.2	947.9	947.7	947.6	947.4	947.2	948.2	949.1	950.0	951.0	951.0
165°	968.1	967.7	967.3	967.0	966.6	966.3	967.3	968.4	969.4	970.5	970.6
167.5°	982.8	982.4	982.4	982.5	982.5	982.5	983.6	984.6	985.7	986.7	986.7
170°	991.0	990.6	990.8	991.0	991.1	991.3	992.3	993.4	994.4	995.5	995.4
172.5°	997.8	997.4	997.5	997.5	997.5	997.6	998.7	999.9	1001.1	1002.3	1002.3
175°	1005.8	1005.3	1005.1	1004.9	1004.8	1004.6	1005.8	1007.0	1008.2	1009.5	1009.5
177.5°	1009.3	1009.0	1009.0	1009.0	1009.0	1009.0	1009.9	1010.9	1011.9	1012.9	1012.8
180°	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1590.3	1589.2	1585.3	1584.8	1585.3	1589.2	1590.3	1591.4	1593.0	1598.6	1591.9
5°	1469.0	1465.6	1463.5	1471.1	1463.5	1465.6	1469.0	1473.2	1480.1	1480.8	1487.7
7.5°	1377.6	1374.9	1368.8	1366.9	1368.8	1374.9	1377.6	1380.1	1387.0	1393.0	1403.2
10°	1319.0	1316.2	1310.7	1309.3	1310.7	1316.2	1319.0	1325.9	1332.8	1340.4	1347.4
12.5°	1262.6	1257.1	1256.0	1257.3	1256.0	1257.1	1262.6	1271.7	1289.7	1289.6	1290.9
15°	1187.7	1184.9	1177.3	1179.4	1177.3	1184.9	1187.7	1196.7	1204.9	1215.3	1225.7
17.5°	1113.8	1110.5	1101.3	1109.4	1101.3	1110.5	1113.8	1118.7	1129.3	1144.0	1159.6
20°	1067.4	1061.8	1057.0	1056.3	1057.0	1061.8	1067.4	1072.2	1084.0	1096.4	1108.2
22.5°	1023.1	1018.2	1017.7	1013.2	1017.7	1018.2	1023.1	1030.7	1042.5	1049.4	1060.6
25°	967.8	963.0	961.6	958.2	961.6	963.0	967.8	973.4	981.0	986.5	998.9
27.5°	925.4	923.0	920.5	921.6	920.5	923.0	925.4	926.1	929.5	936.9	944.0
30°	899.4	898.7	897.3	897.3	897.3	898.7	899.4	897.3	900.8	904.2	909.8
32.5°	877.8	877.7	878.5	878.5	878.5	877.7	877.8	874.6	875.9	877.1	879.9
35°	847.5	849.6	851.0	848.9	851.0	849.6	847.5	844.8	842.7	837.9	839.2
37.5°	820.2	822.2	824.2	826.5	824.2	822.2	820.2	814.5	809.5	805.2	800.3
40°	799.1	804.0	805.4	808.8	805.4	804.0	799.1	792.9	787.4	782.6	777.0
42.5°	779.2	784.6	788.2	788.9	788.2	784.6	779.2	773.0	764.7	758.8	751.0
45°	748.7	754.2	759.1	759.1	759.1	754.2	748.7	738.3	729.3	720.3	712.7
47.5°	717.0	725.0	729.9	731.1	729.9	725.0	717.0	706.4	693.8	682.7	671.8
50°	695.5	705.1	710.0	713.4	710.0	705.1	695.5	683.7	670.6	656.7	643.6
52.5°	674.4	684.1	690.6	692.4	690.6	684.1	674.4	659.9	644.0	629.1	617.6
55°	638.1	651.9	659.5	662.3	659.5	651.9	638.1	622.2	607.0	588.3	571.7
57.5°	603.8	616.5	625.4	627.4	625.4	616.5	603.8	585.1	565.5	545.6	527.9
60°	577.2	591.1	602.1	604.2	602.1	591.1	577.2	558.6	537.8	518.5	496.4
62.5°	550.1	564.5	574.5	579.9	574.5	564.5	550.1	530.4	508.0	486.4	464.3
65°	503.3	517.8	527.5	529.5	527.5	517.8	503.3	483.9	460.4	437.6	418.9
67.5°	452.1	466.6	473.0	477.0	473.0	466.6	452.1	433.9	410.6	387.0	365.8
70°	416.2	427.9	434.8	438.3	434.8	427.9	416.2	396.8	377.5	353.3	330.4
72.5°	375.2	387.5	395.6	396.3	395.6	387.5	375.2	358.6	338.2	315.7	295.6
75°	312.5	323.5	327.7	327.7	327.7	323.5	312.5	296.6	280.0	262.0	242.0
77.5°	247.3	253.0	258.3	259.4	258.3	253.0	247.3	235.9	222.2	204.2	189.1
80°	205.3	208.8	212.9	212.9	212.9	208.8	205.3	194.9	181.8	166.6	154.9
82.5°	162.2	165.1	169.2	168.7	169.2	165.1	162.2	154.0	143.1	132.9	122.2
85°	98.2	104.4	103.7	102.3	103.7	104.4	98.2	99.5	89.2	82.3	72.6
87.5°	48.7	49.3	51.1	52.3	51.1	49.3	48.7	47.0	41.9	38.9	36.5
90°	22.4	22.8	23.1	23.5	23.1	22.8	22.4	22.1	21.4	20.3	19.3
92.5°	34.1	34.3	34.5	34.7	34.5	34.3	34.1	33.9	33.5	32.8	32.2
95°	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.5	61.0	60.5
97.5°	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.5	95.8	95.2
100°	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.0	120.7	120.3
102.5°	148.3	148.4	148.6	148.7	148.6	148.4	148.3	148.1	147.8	147.3	146.9
105°	189.2	189.7	190.2	190.8	190.2	189.7	189.2	188.7	188.1	187.6	187.1
107.5°	231.8	231.8	231.8	231.7	231.8	231.8	231.8	231.9	231.6	231.1	230.7
110°	259.6	260.1	260.6	261.1	260.6	260.1	259.6	259.0	258.9	259.3	259.6



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	290.8	290.9	291.0	291.1	291.0	290.9	290.8	290.7	290.7	290.8	290.8
115°	338.3	338.1	337.9	337.7	337.9	338.1	338.3	338.4	338.6	338.8	338.9
117.5°	383.2	382.8	382.5	382.1	382.5	382.8	383.2	383.5	384.0	384.6	385.2
120°	414.9	415.2	415.6	415.9	415.6	415.2	414.9	414.5	414.8	415.6	416.5
122.5°	445.9	445.3	444.7	444.1	444.7	445.3	445.9	446.6	447.2	447.8	448.3
125°	493.6	493.2	492.9	492.5	492.9	493.2	493.6	493.9	494.3	494.6	495.0
127.5°	538.2	538.0	537.7	537.4	537.7	538.0	538.2	538.5	538.8	539.2	539.5
130°	568.9	568.2	567.5	566.8	567.5	568.2	568.9	569.6	570.1	570.4	570.8
132.5°	598.9	598.6	598.3	598.1	598.3	598.6	598.9	599.2	599.5	599.8	600.2
135°	642.6	642.1	641.6	641.1	641.6	642.1	642.6	643.1	643.6	643.9	644.3
137.5°	685.9	686.0	686.1	686.3	686.1	686.0	685.9	685.8	686.0	686.5	686.9
140°	714.3	714.1	713.9	713.8	713.9	714.1	714.3	714.5	714.6	714.8	715.0
142.5°	741.4	741.4	741.3	741.3	741.3	741.4	741.4	741.4	741.5	741.5	741.5
145°	780.2	779.7	779.2	778.7	779.2	779.7	780.2	780.7	781.1	781.3	781.4
147.5°	817.0	816.8	816.7	816.5	816.7	816.8	817.0	817.2	817.3	817.5	817.6
150°	840.2	840.0	839.8	839.6	839.8	840.0	840.2	840.3	840.4	840.4	840.4
152.5°	862.3	861.8	861.4	860.9	861.4	861.8	862.3	862.7	862.7	862.3	861.9
155°	892.5	891.8	891.1	890.5	891.1	891.8	892.5	893.2	893.2	892.5	891.8
157.5°	918.7	918.1	917.5	916.9	917.5	918.1	918.7	919.2	919.3	918.8	918.2
160°	934.5	933.6	932.8	931.9	932.8	933.6	934.5	935.4	935.5	935.0	934.5
162.5°	950.1	949.3	948.4	947.5	948.4	949.3	950.1	951.0	951.0	950.0	949.1
165°	969.9	969.2	968.5	967.9	968.5	969.2	969.9	970.6	970.5	969.4	968.4
167.5°	985.6	984.5	983.5	982.4	983.5	984.5	985.6	986.7	986.7	985.7	984.6
170°	994.2	993.0	991.7	990.5	991.7	993.0	994.2	995.4	995.5	994.4	993.4
172.5°	1001.1	999.8	998.6	997.4	998.6	999.8	1001.1	1002.3	1002.3	1001.1	999.9
175°	1008.2	1007.0	1005.8	1004.6	1005.8	1007.0	1008.2	1009.5	1009.5	1008.2	1007.0
177.5°	1011.7	1010.6	1009.5	1008.3	1009.5	1010.6	1011.7	1012.8	1012.9	1011.9	1010.9
180°	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1595.3	1597.5	1606.3	1614.6	1624.6	1631.8	1636.7	1642.3	1653.9	1663.3	1672.1
5°	1494.6	1498.1	1516.0	1528.5	1549.9	1568.6	1583.1	1599.0	1617.7	1643.2	1666.7
7.5°	1406.0	1418.8	1438.5	1458.7	1480.5	1505.0	1526.3	1550.2	1582.4	1617.5	1653.7
10°	1355.7	1370.2	1390.9	1414.4	1435.2	1463.5	1489.8	1518.1	1554.7	1597.6	1640.5
12.5°	1305.3	1329.2	1345.0	1372.9	1395.3	1418.7	1446.6	1483.8	1526.5	1571.6	1623.3
15°	1242.3	1255.4	1285.8	1301.0	1332.8	1368.8	1396.4	1433.8	1475.2	1534.7	1592.8
17.5°	1169.6	1186.8	1211.0	1240.1	1276.6	1304.6	1339.1	1377.5	1429.8	1488.8	1561.5
20°	1122.0	1136.5	1166.2	1198.0	1236.7	1266.5	1303.1	1340.4	1394.4	1457.3	1533.3
22.5°	1079.4	1093.4	1124.8	1154.3	1191.9	1228.3	1266.6	1310.0	1361.7	1428.0	1505.7
25°	1013.5	1032.1	1059.8	1090.2	1126.1	1167.6	1209.1	1247.8	1303.1	1372.9	1455.9
27.5°	955.0	969.9	990.0	1024.5	1065.3	1105.4	1146.6	1195.3	1248.4	1322.2	1408.3
30°	917.4	931.2	951.2	983.0	1021.1	1063.9	1106.8	1153.8	1209.1	1282.4	1370.2
32.5°	887.5	898.0	915.8	944.3	979.0	1024.1	1066.4	1115.1	1173.1	1245.3	1330.9
35°	843.4	852.4	859.3	886.3	917.4	958.8	1001.7	1053.6	1109.5	1178.0	1263.7
37.5°	800.1	803.2	813.3	830.9	861.1	899.3	939.1	990.1	1047.5	1117.0	1194.3
40°	773.6	775.0	781.2	797.8	824.0	860.0	898.7	949.2	1003.8	1069.5	1146.2
42.5°	747.6	746.7	752.4	764.0	788.6	821.3	859.4	905.5	960.1	1020.8	1093.1
45°	706.5	706.5	705.1	714.8	734.9	766.7	798.5	842.7	888.3	947.8	1008.6
47.5°	663.7	659.8	661.0	666.0	682.9	709.0	741.1	777.3	817.5	867.9	921.2
50°	636.0	630.5	628.4	633.9	649.1	671.9	702.4	734.2	772.2	816.4	862.1
52.5°	605.6	600.1	596.3	600.2	614.3	635.4	663.1	691.0	725.2	761.1	800.7
55°	558.6	552.4	550.3	551.7	562.0	578.6	602.1	627.7	653.3	683.0	710.7
57.5°	512.3	502.0	500.1	499.4	506.6	521.8	541.4	563.6	582.2	600.2	629.6
60°	481.8	469.4	465.2	464.6	470.1	482.5	500.5	522.6	535.8	548.2	573.8
62.5°	449.2	437.3	428.2	429.2	434.1	446.0	461.8	477.8	486.5	500.1	517.4
65°	398.9	383.7	376.8	374.7	377.5	387.1	399.6	409.9	419.6	425.2	441.7
67.5°	348.6	335.8	325.6	323.1	321.9	328.5	338.7	345.0	351.9	356.7	366.5
70°	313.2	302.1	289.7	285.5	284.8	290.3	300.0	300.7	310.4	312.5	322.8
72.5°	278.3	264.5	255.9	251.8	248.9	253.8	260.2	262.0	267.3	271.0	276.4
75°	224.0	213.6	205.3	199.1	197.0	199.8	199.8	203.2	206.7	208.8	215.0
77.5°	176.3	164.4	154.6	151.0	148.5	146.7	148.2	150.3	148.6	152.2	153.6
80°	143.1	130.7	123.1	121.7	117.5	114.1	113.4	115.4	112.7	114.1	118.2
82.5°	110.5	102.5	94.3	92.9	87.7	85.9	85.2	83.9	83.9	83.6	84.5
85°	65.7	60.8	55.3	51.8	49.8	46.3	46.3	44.9	43.6	42.2	42.9
87.5°	30.2	28.9	25.8	23.9	22.5	20.0	19.7	17.7	16.7	15.8	14.8
90°	18.2	17.2	15.8	14.4	13.0	11.6	10.0	8.1	6.2	4.3	2.3
92.5°	31.6	31.0	30.0	29.0	28.0	27.1	25.5	23.3	21.1	18.9	16.7
95°	59.9	59.4	58.2	57.0	55.8	54.6	53.2	51.6	50.0	48.5	46.9
97.5°	94.6	94.0	92.5	91.1	89.7	88.3	86.9	85.7	84.4	83.2	81.9
100°	120.0	119.6	118.0	116.5	114.9	113.4	112.2	111.5	110.8	110.1	109.5
102.5°	146.4	145.9	144.5	143.0	141.6	140.2	139.3	139.1	138.8	138.5	138.2
105°	186.6	186.1	185.4	184.7	184.0	183.3	182.9	182.7	182.5	182.3	182.2
107.5°	230.2	229.7	229.6	229.5	229.4	229.3	229.1	228.9	228.7	228.5	228.3
110°	260.0	260.3	260.5	260.7	260.9	261.0	260.9	260.6	260.2	259.9	259.6



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	290.9	291.0	291.3	291.6	291.9	292.2	292.4	292.3	292.2	292.1	292.1
115°	339.1	339.3	339.6	340.0	340.3	340.7	340.9	340.9	340.9	340.9	340.9
117.5°	385.8	386.4	386.6	386.8	387.1	387.3	387.4	387.2	387.1	387.0	386.8
120°	417.4	418.3	418.8	419.3	419.8	420.3	420.3	419.6	418.9	418.2	417.5
122.5°	448.9	449.5	449.8	450.0	450.3	450.5	450.5	450.2	449.9	449.6	449.4
125°	495.3	495.7	495.8	496.0	496.2	496.3	496.4	496.4	496.4	496.4	496.4
127.5°	539.9	540.2	540.5	540.8	541.0	541.3	541.2	540.7	540.2	539.6	539.1
130°	571.1	571.5	571.5	571.5	571.5	571.5	571.2	570.7	570.2	569.7	569.1
132.5°	600.5	600.9	601.0	601.2	601.3	601.4	601.3	600.9	600.6	600.2	599.8
135°	644.6	645.0	645.0	645.0	645.0	645.0	644.5	643.4	642.4	641.3	640.3
137.5°	687.4	687.8	687.5	687.3	687.0	686.7	686.3	685.8	685.3	684.9	684.4
140°	715.2	715.3	715.3	715.3	715.3	715.3	715.2	714.8	714.5	714.1	713.8
142.5°	741.6	741.6	741.7	741.9	742.0	742.2	742.1	741.7	741.4	741.0	740.7
145°	781.6	781.8	781.6	781.4	781.3	781.1	780.7	780.0	779.3	778.6	777.9
147.5°	817.8	817.9	818.0	818.2	818.3	818.5	818.1	817.3	816.4	815.6	814.8
150°	840.4	840.4	840.4	840.4	840.4	840.4	840.1	839.4	838.7	838.0	837.3
152.5°	861.5	861.1	860.9	860.8	860.6	860.5	860.2	859.8	859.4	859.0	858.6
155°	891.1	890.5	890.6	890.8	891.0	891.1	891.2	891.2	891.2	891.2	891.2
157.5°	917.7	917.2	917.2	917.3	917.3	917.3	917.5	917.8	918.1	918.4	918.8
160°	934.0	933.5	933.6	933.8	934.0	934.1	934.3	934.5	934.7	934.8	935.0
162.5°	948.2	947.2	947.4	947.6	947.7	947.9	948.2	948.7	949.1	949.6	950.0
165°	967.3	966.3	966.6	967.0	967.3	967.7	968.1	968.6	969.2	969.7	970.2
167.5°	983.6	982.5	982.5	982.5	982.4	982.4	982.8	983.5	984.2	984.9	985.7
170°	992.3	991.3	991.1	991.0	990.8	990.6	991.0	991.8	992.7	993.6	994.4
172.5°	998.7	997.6	997.5	997.5	997.5	997.4	997.8	998.5	999.2	1000.0	1000.7
175°	1005.8	1004.6	1004.8	1004.9	1005.1	1005.3	1005.8	1006.7	1007.5	1008.4	1009.3
177.5°	1009.9	1009.0	1009.0	1009.0	1009.0	1009.0	1009.3	1010.0	1010.7	1011.4	1012.1
180°	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1679.9	1685.4	1692.6	1704.8	1709.2	1714.7	1722.5	1721.9	1724.1	1732.4	1750.1
5°	1686.1	1707.5	1728.3	1753.2	1779.4	1796.7	1820.2	1834.7	1849.2	1867.9	1899.7
7.5°	1688.6	1722.6	1760.6	1804.3	1843.2	1888.0	1922.9	1955.8	1985.6	2025.0	2062.9
10°	1684.7	1730.3	1779.4	1834.7	1893.5	1943.3	1988.2	2039.4	2082.9	2130.6	2173.5
12.5°	1677.5	1732.6	1798.2	1860.2	1928.9	2002.4	2058.4	2110.1	2168.1	2223.0	2289.1
15°	1661.2	1736.6	1813.3	1894.9	1986.8	2071.8	2152.7	2219.8	2282.0	2364.3	2450.7
17.5°	1640.5	1721.8	1818.5	1917.3	2013.4	2110.6	2210.7	2311.5	2390.0	2492.2	2559.8
20°	1621.1	1715.1	1814.7	1932.2	2028.3	2149.3	2248.8	2346.3	2454.1	2555.8	2636.6
22.5°	1594.0	1696.9	1802.5	1919.5	2046.0	2167.0	2282.0	2387.8	2495.6	2606.1	2704.1
25°	1559.6	1652.9	1778.0	1910.8	2036.6	2167.9	2300.0	2432.7	2548.8	2665.7	2756.9
27.5°	1501.0	1618.8	1735.3	1872.3	2012.1	2160.7	2301.9	2440.9	2562.5	2658.6	2715.2
30°	1471.1	1573.4	1699.9	1837.5	1988.9	2148.6	2295.8	2432.0	2545.4	2622.1	2644.9
32.5°	1426.9	1532.5	1656.2	1798.8	1959.0	2123.1	2276.5	2404.9	2499.5	2539.7	2512.2
35°	1361.2	1456.6	1581.7	1727.6	1894.2	2069.1	2220.5	2329.0	2377.4	2339.4	2244.7
37.5°	1282.4	1376.9	1502.6	1645.9	1818.3	1996.1	2133.0	2211.1	2195.0	2100.5	1959.3
40°	1227.1	1315.6	1435.2	1590.0	1758.0	1936.3	2056.6	2098.8	2054.6	1919.1	1769.1
42.5°	1165.7	1252.0	1372.1	1521.4	1699.4	1863.9	1968.7	1972.2	1898.0	1736.0	1585.4
45°	1072.2	1154.5	1267.9	1423.4	1587.9	1742.8	1811.9	1778.0	1641.2	1484.9	1333.5
47.5°	980.0	1051.3	1163.1	1310.7	1467.0	1597.3	1631.6	1570.6	1424.8	1273.1	1132.8
50°	912.5	984.4	1089.5	1230.5	1381.2	1493.9	1510.5	1429.6	1286.5	1133.7	1023.8
52.5°	847.8	919.2	1020.4	1150.9	1288.9	1390.5	1391.0	1297.4	1154.9	1018.7	916.5
55°	752.8	817.1	908.4	1025.2	1148.3	1227.8	1208.4	1111.6	987.9	869.7	780.5
57.5°	661.3	717.3	801.4	898.8	1007.2	1072.8	1040.7	947.5	837.0	736.8	669.2
60°	602.1	655.4	727.3	819.2	910.5	961.6	931.2	846.8	745.2	664.3	605.6
62.5°	544.6	589.5	658.7	738.5	823.1	861.0	833.9	750.6	662.8	589.7	542.0
65°	463.2	499.8	555.1	623.6	685.1	717.6	694.8	617.3	550.3	497.7	459.7
67.5°	387.1	415.8	457.6	512.5	564.8	582.4	561.6	507.7	450.9	408.8	382.0
70°	334.6	361.6	396.8	439.0	484.6	503.3	482.5	439.7	393.4	354.6	328.4
72.5°	288.7	309.6	339.3	375.4	411.1	429.7	415.6	374.4	335.3	306.5	284.1
75°	219.8	237.8	258.5	284.1	311.8	324.2	311.8	283.4	256.5	235.0	219.1
77.5°	159.8	169.5	185.5	204.6	221.9	231.4	220.7	201.4	185.0	170.3	162.5
80°	121.7	128.6	139.6	154.9	166.6	175.6	168.7	152.8	139.6	130.0	126.5
82.5°	88.5	93.2	100.4	111.7	119.6	124.2	121.1	109.6	104.2	95.7	92.2
85°	43.6	46.3	51.2	54.6	61.5	62.2	62.9	58.1	53.2	51.2	48.4
87.5°	15.8	16.7	18.8	20.8	23.3	24.2	23.9	24.2	22.2	21.9	19.9
90°	4.3	6.2	8.1	10.0	11.6	13.0	14.4	15.8	17.2	18.2	19.3
92.5°	18.9	21.1	23.3	25.5	27.1	28.0	29.0	30.0	31.0	31.6	32.2
95°	48.5	50.0	51.6	53.2	54.6	55.8	57.0	58.2	59.4	59.9	60.5
97.5°	83.2	84.4	85.7	86.9	88.3	89.7	91.1	92.5	94.0	94.6	95.2
100°	110.1	110.8	111.5	112.2	113.4	114.9	116.5	118.0	119.6	120.0	120.3
102.5°	138.5	138.8	139.1	139.3	140.2	141.6	143.0	144.5	145.9	146.4	146.9
105°	182.3	182.5	182.7	182.9	183.3	184.0	184.7	185.4	186.1	186.6	187.1
107.5°	228.5	228.7	228.9	229.1	229.3	229.4	229.5	229.6	229.7	230.2	230.7
110°	259.9	260.2	260.6	260.9	261.0	260.9	260.7	260.5	260.3	260.0	259.6



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	292.1	292.2	292.3	292.4	292.2	291.9	291.6	291.3	291.0	290.9	290.8
115°	340.9	340.9	340.9	340.9	340.7	340.3	340.0	339.6	339.3	339.1	338.9
117.5°	387.0	387.1	387.2	387.4	387.3	387.1	386.8	386.6	386.4	385.8	385.2
120°	418.2	418.9	419.6	420.3	420.3	419.8	419.3	418.8	418.3	417.4	416.5
122.5°	449.6	449.9	450.2	450.5	450.5	450.3	450.0	449.8	449.5	448.9	448.3
125°	496.4	496.4	496.4	496.4	496.3	496.2	496.0	495.8	495.7	495.3	495.0
127.5°	539.6	540.2	540.7	541.2	541.3	541.0	540.8	540.5	540.2	539.9	539.5
130°	569.7	570.2	570.7	571.2	571.5	571.5	571.5	571.5	571.5	571.1	570.8
132.5°	600.2	600.6	600.9	601.3	601.4	601.3	601.2	601.0	600.9	600.5	600.2
135°	641.3	642.4	643.4	644.5	645.0	645.0	645.0	645.0	645.0	644.6	644.3
137.5°	684.9	685.3	685.8	686.3	686.7	687.0	687.3	687.5	687.8	687.4	686.9
140°	714.1	714.5	714.8	715.2	715.3	715.3	715.3	715.3	715.3	715.2	715.0
142.5°	741.0	741.4	741.7	742.1	742.2	742.0	741.9	741.7	741.6	741.6	741.5
145°	778.6	779.3	780.0	780.7	781.1	781.3	781.4	781.6	781.8	781.6	781.4
147.5°	815.6	816.4	817.3	818.1	818.5	818.3	818.2	818.0	817.9	817.8	817.6
150°	838.0	838.7	839.4	840.1	840.4	840.4	840.4	840.4	840.4	840.4	840.4
152.5°	859.0	859.4	859.8	860.2	860.5	860.6	860.8	860.9	861.1	861.5	861.9
155°	891.2	891.2	891.2	891.2	891.1	891.0	890.8	890.6	890.5	891.1	891.8
157.5°	918.4	918.1	917.8	917.5	917.3	917.3	917.3	917.2	917.2	917.7	918.2
160°	934.8	934.7	934.5	934.3	934.1	934.0	933.8	933.6	933.5	934.0	934.5
162.5°	949.6	949.1	948.7	948.2	947.9	947.7	947.6	947.4	947.2	948.2	949.1
165°	969.7	969.2	968.6	968.1	967.7	967.3	967.0	966.6	966.3	967.3	968.4
167.5°	984.9	984.2	983.5	982.8	982.4	982.4	982.5	982.5	982.5	983.6	984.6
170°	993.6	992.7	991.8	991.0	990.6	990.8	991.0	991.1	991.3	992.3	993.4
172.5°	1000.0	999.2	998.5	997.8	997.4	997.5	997.5	997.5	997.6	998.7	999.9
175°	1008.4	1007.5	1006.7	1005.8	1005.3	1005.1	1004.9	1004.8	1004.6	1005.8	1007.0
177.5°	1011.4	1010.7	1010.0	1009.3	1009.0	1009.0	1009.0	1009.0	1009.0	1009.9	1010.9
180°	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1759.0	1760.1	1765.0	1768.9	1770.0	1775.6	1776.1
5°	1913.5	1925.3	1948.1	1950.2	1953.6	1971.6	1957.8
7.5°	2094.7	2124.5	2144.4	2162.0	2168.4	2176.2	2174.6
10°	2210.8	2255.0	2277.2	2312.4	2313.8	2322.8	2317.3
12.5°	2327.5	2378.9	2419.3	2425.8	2455.4	2459.9	2467.7
15°	2492.8	2547.5	2603.5	2623.5	2664.3	2674.0	2689.2
17.5°	2648.3	2704.1	2743.4	2795.2	2812.0	2834.4	2819.1
20°	2733.4	2794.3	2844.0	2884.8	2902.1	2914.5	2913.2
22.5°	2784.9	2846.2	2886.6	2917.4	2933.6	2938.9	2938.6
25°	2817.1	2852.3	2864.8	2876.5	2858.6	2852.3	2855.1
27.5°	2727.5	2718.4	2685.9	2643.3	2599.0	2563.9	2544.8
30°	2604.2	2550.2	2501.1	2415.4	2371.2	2344.9	2321.4
32.5°	2429.4	2343.9	2249.5	2171.0	2120.7	2081.7	2075.9
35°	2129.9	2001.3	1885.9	1789.8	1740.0	1697.8	1688.2
37.5°	1810.8	1677.2	1573.3	1488.7	1435.2	1405.4	1377.6
40°	1599.0	1484.2	1381.9	1310.0	1269.2	1247.8	1230.5
42.5°	1435.8	1331.0	1229.3	1174.5	1137.6	1124.5	1114.4
45°	1210.5	1113.0	1042.5	1001.0	979.6	957.5	947.1
47.5°	1030.0	950.7	904.2	869.0	846.0	832.9	826.2
50°	927.7	862.7	821.3	794.3	773.6	763.2	757.7
52.5°	837.0	783.7	748.8	727.4	713.3	705.7	703.5
55°	721.0	680.2	658.1	639.5	629.1	622.2	619.4
57.5°	626.7	595.4	577.4	562.0	558.0	552.2	550.3
60°	564.8	540.6	525.4	515.0	511.6	504.7	506.0
62.5°	510.0	490.3	477.3	471.3	466.8	461.0	462.9
65°	431.4	416.9	409.9	404.4	398.9	395.4	398.2
67.5°	362.0	352.0	342.6	339.4	336.7	336.1	333.2
70°	316.6	308.3	300.0	298.0	298.0	295.2	294.5
72.5°	272.9	266.8	261.3	259.8	257.6	258.7	255.8
75°	210.8	206.0	203.9	201.9	201.2	201.2	199.1
77.5°	155.8	152.2	148.9	148.9	146.4	145.5	145.2
80°	118.2	116.8	114.1	114.1	112.7	113.4	112.0
82.5°	88.9	87.0	86.4	85.3	83.4	83.5	82.1
85°	47.7	45.6	44.9	42.9	41.5	42.9	41.5
87.5°	20.7	20.3	19.9	18.9	18.4	18.4	16.9
90°	20.3	21.4	22.1	22.4	22.8	23.1	23.5
92.5°	32.8	33.5	33.9	34.1	34.3	34.5	34.7
95°	61.0	61.5	61.8	61.8	61.8	61.8	61.8
97.5°	95.8	96.5	96.8	96.8	96.8	96.8	96.8
100°	120.7	121.0	121.2	121.2	121.2	121.2	121.2
102.5°	147.3	147.8	148.1	148.3	148.4	148.6	148.7
105°	187.6	188.1	188.7	189.2	189.7	190.2	190.8
107.5°	231.1	231.6	231.9	231.8	231.8	231.8	231.7
110°	259.3	258.9	259.0	259.6	260.1	260.6	261.1



TEST NUMBER: P332644

CATALOG NUMBER: SA4XXDIP-C1020D810U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	290.8	290.7	290.7	290.8	290.9	291.0	291.1
115°	338.8	338.6	338.4	338.3	338.1	337.9	337.7
117.5°	384.6	384.0	383.5	383.2	382.8	382.5	382.1
120°	415.6	414.8	414.5	414.9	415.2	415.6	415.9
122.5°	447.8	447.2	446.6	445.9	445.3	444.7	444.1
125°	494.6	494.3	493.9	493.6	493.2	492.9	492.5
127.5°	539.2	538.8	538.5	538.2	538.0	537.7	537.4
130°	570.4	570.1	569.6	568.9	568.2	567.5	566.8
132.5°	599.8	599.5	599.2	598.9	598.6	598.3	598.1
135°	643.9	643.6	643.1	642.6	642.1	641.6	641.1
137.5°	686.5	686.0	685.8	685.9	686.0	686.1	686.3
140°	714.8	714.6	714.5	714.3	714.1	713.9	713.8
142.5°	741.5	741.5	741.4	741.4	741.4	741.3	741.3
145°	781.3	781.1	780.7	780.2	779.7	779.2	778.7
147.5°	817.5	817.3	817.2	817.0	816.8	816.7	816.5
150°	840.4	840.4	840.3	840.2	840.0	839.8	839.6
152.5°	862.3	862.7	862.7	862.3	861.8	861.4	860.9
155°	892.5	893.2	893.2	892.5	891.8	891.1	890.5
157.5°	918.8	919.3	919.2	918.7	918.1	917.5	916.9
160°	935.0	935.5	935.4	934.5	933.6	932.8	931.9
162.5°	950.0	951.0	951.0	950.1	949.3	948.4	947.5
165°	969.4	970.5	970.6	969.9	969.2	968.5	967.9
167.5°	985.7	986.7	986.7	985.6	984.5	983.5	982.4
170°	994.4	995.5	995.4	994.2	993.0	991.7	990.5
172.5°	1001.1	1002.3	1002.3	1001.1	999.8	998.6	997.4
175°	1008.2	1009.5	1009.5	1008.2	1007.0	1005.8	1004.6
177.5°	1011.9	1012.9	1012.8	1011.7	1010.6	1009.5	1008.3
180°	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8	1010.8

(END OF REPORT)