

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: P332679-830

Luminaire Tested: **SA4XXDIP-C1195D590U830-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332679-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7237.8 lumens
Efficiency: N/A
Efficacy: 131.4 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

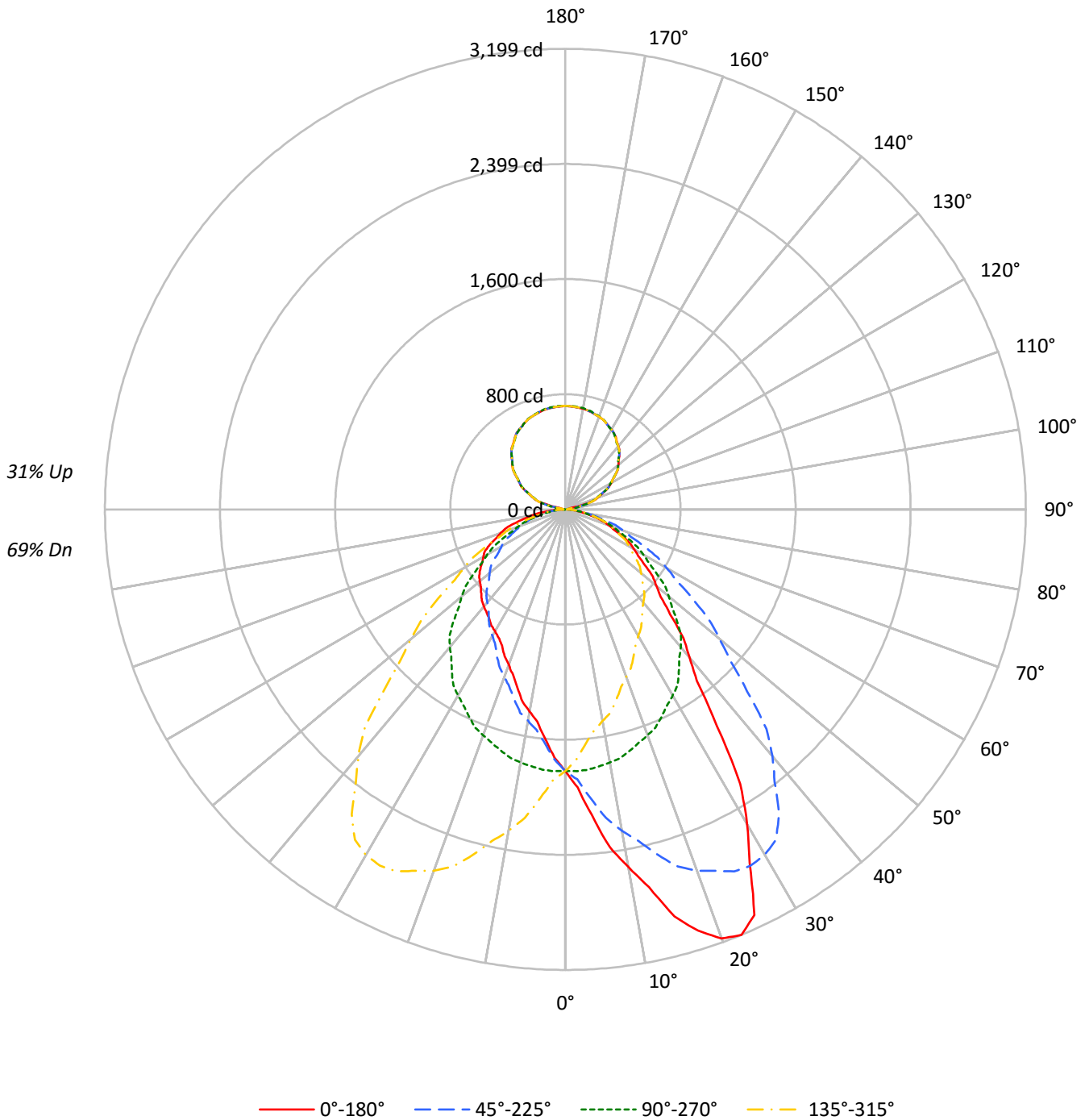
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

Luminous Intensity Polar Plot





TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	69				
1	102	98	94	91	97	93	89	86	83	80	78	74	72	70	66	64	63	59				
2	94	86	80	75	88	82	76	71	73	69	65	65	62	59	58	56	54	50				
3	86	76	69	63	81	72	65	60	65	60	55	58	54	50	52	49	46	43				
4	78	68	59	53	74	64	57	51	58	52	47	52	47	44	47	43	40	37				
5	72	60	52	46	68	58	50	44	52	46	41	47	42	38	42	38	35	32				
6	67	54	46	40	63	52	44	39	47	41	36	43	37	34	38	34	31	28				
7	62	49	41	36	58	47	40	34	43	37	32	39	34	30	35	31	28	25				
8	58	45	37	32	54	43	36	31	39	33	29	36	30	27	32	28	25	23				
9	54	41	34	28	51	39	32	28	36	30	26	33	28	24	30	26	22	20				
10	50	38	31	26	48	36	29	25	33	27	23	30	25	22	28	24	20	19				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14666	14666	14666	14666
5°	17271	14704	12977	14704
10°	20678	14638	11684	14638
15°	24466	14491	10730	14491
20°	27244	14339	9879	14339
25°	27684	14118	9291	14118
30°	23557	13904	9106	13904
35°	18111	13557	9107	13557
40°	14116	13149	9278	13149
45°	11771	12536	9434	12536
50°	10359	11786	9755	11786
55°	9491	10888	10148	10888
60°	8893	10085	10619	10085
65°	8281	9186	11012	9186
70°	7567	8297	11261	8297
75°	6759	7299	11126	7299
80°	5667	5983	10776	5983
85°	4177	4326	10319	4326



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.0	2.4
10°-20°	545.5	7.5
20°-30°	865.0	12.0
30°-40°	962.7	13.3
40°-50°	876.3	12.1
50°-60°	716.1	9.9
60°-70°	511.2	7.1
70°-80°	281.5	3.9
80°-90°	78.9	1.1
90°-100°	24.6	0.3
100°-110°	156.8	2.2
110°-120°	299.9	4.1
120°-130°	380.7	5.3
130°-140°	407.3	5.6
140°-150°	380.9	5.3
150°-160°	307.1	4.2
160°-170°	198.1	2.7
170°-180°	68.3	0.9
0°-30°	1587.5	21.9
0°-40°	2550.2	35.2
0°-60°	4142.6	57.2
0°-90°	5014.2	69.3
90°-120°	481.2	6.6
90°-150°	1650.1	22.8
90°-180°	2224.0	30.7
0°-180°	7237.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1817	1817	1817	1817	1817	
5°	2131	1814	1601	1814	2131	217
15°	2927	1734	1284	1734	2927	827
25°	3108	1585	1043	1585	3108	1370
35°	1838	1376	924	1376	1838	1166
45°	1031	1098	826	1098	1031	812
55°	674	774	721	774	674	609
65°	434	481	576	481	434	429
75°	217	234	357	234	217	230
85°	45	47	111	47	45	55
90°	16	2	16	2	16	9
95°	16	30	16	30	16	12
105°	153	162	153	162	153	134
115°	304	302	304	302	304	301
125°	428	425	428	425	428	381
135°	531	527	531	527	531	408
145°	611	608	611	608	611	382
155°	666	666	666	666	666	307
165°	700	703	700	703	700	198
175°	714	719	714	719	714	68
180°	719	719	719	719	719	



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1933.4	1932.8	1926.8	1925.6	1921.4	1916.0	1914.8	1905.2	1885.8	1876.8	1874.4
5°	2131.2	2146.3	2126.7	2122.9	2120.6	2095.8	2083.0	2067.9	2033.3	2013.1	1997.2
7.5°	2367.2	2369.0	2360.4	2353.5	2334.4	2312.7	2280.2	2245.6	2204.3	2161.4	2129.1
10°	2522.5	2528.6	2518.8	2517.2	2478.9	2454.8	2406.6	2366.0	2319.3	2267.4	2220.0
12.5°	2686.2	2677.9	2672.9	2640.6	2633.6	2589.6	2533.6	2491.8	2419.9	2360.1	2297.1
15°	2927.3	2910.9	2900.3	2855.9	2834.0	2773.1	2713.7	2667.8	2573.7	2484.2	2416.4
17.5°	3068.8	3085.4	3061.0	3042.8	2986.4	2943.7	2882.9	2786.5	2712.9	2601.7	2516.2
20°	3171.2	3172.7	3159.1	3140.4	3096.0	3041.8	2975.5	2870.1	2782.1	2671.5	2554.1
22.5°	3198.9	3199.2	3193.4	3175.9	3142.2	3098.3	3031.5	2943.7	2837.0	2716.7	2599.2
25°	3107.9	3104.9	3111.7	3131.3	3118.5	3104.9	3066.6	3001.1	2901.8	2774.6	2648.2
27.5°	2770.2	2791.0	2829.2	2877.4	2923.8	2959.1	2969.1	2955.6	2894.1	2789.5	2657.0
30°	2527.1	2552.6	2581.2	2629.3	2722.7	2776.1	2834.8	2879.2	2854.4	2770.9	2647.4
32.5°	2259.7	2266.1	2308.5	2363.2	2448.7	2551.6	2644.6	2734.7	2764.7	2720.8	2617.9
35°	1837.7	1848.2	1894.1	1948.3	2053.0	2178.6	2318.6	2443.4	2546.6	2587.9	2535.3
37.5°	1499.7	1529.9	1562.3	1620.5	1712.6	1825.8	1971.2	2132.9	2286.5	2389.4	2406.9
40°	1339.5	1358.3	1381.7	1426.1	1504.3	1615.7	1740.6	1925.7	2089.1	2236.6	2284.7
42.5°	1213.1	1224.1	1238.4	1278.6	1338.1	1449.0	1563.0	1725.9	1889.8	2066.1	2146.8
45°	1031.0	1042.3	1066.3	1089.7	1134.8	1211.5	1317.7	1451.6	1616.5	1786.5	1935.5
47.5°	899.5	906.6	921.0	945.9	984.3	1034.9	1121.2	1233.1	1385.9	1551.0	1709.8
50°	824.8	830.8	842.1	864.7	894.0	939.1	1009.9	1114.5	1234.2	1400.4	1556.2
52.5°	765.8	768.2	776.5	791.8	815.1	853.1	911.2	997.7	1108.9	1257.2	1412.4
55°	674.3	677.3	684.9	696.1	716.4	740.5	784.9	849.6	946.7	1075.3	1210.0
57.5°	599.0	601.2	607.5	611.8	628.5	648.1	682.2	728.5	802.0	911.2	1031.4
60°	550.8	549.3	556.9	560.6	571.9	588.5	614.8	659.2	723.2	811.2	921.9
62.5°	503.9	501.8	508.1	513.1	519.5	533.7	555.3	590.0	641.9	721.5	817.1
65°	433.5	430.5	434.2	440.3	446.3	453.7	469.6	500.4	541.9	599.0	672.0
67.5°	362.7	365.9	366.5	369.5	373.0	383.2	394.0	415.8	445.1	490.8	552.7
70°	320.6	321.3	324.3	324.3	326.6	335.6	344.7	357.4	386.1	428.2	478.6
72.5°	278.4	281.6	280.4	282.8	284.5	290.5	297.1	309.2	333.7	365.0	407.6
75°	216.7	219.0	219.0	219.7	222.0	224.2	229.5	238.6	255.9	279.2	308.5
77.5°	158.1	158.3	159.4	162.1	162.1	165.7	169.7	176.8	185.4	201.4	219.3
80°	121.9	123.4	122.6	124.1	124.1	127.1	128.7	137.7	141.5	152.0	166.3
82.5°	89.4	90.9	90.8	92.8	94.1	94.6	96.8	100.4	104.2	113.5	119.3
85°	45.1	46.7	45.1	46.7	48.9	49.7	51.9	52.7	55.7	58.0	63.2
87.5°	16.5	18.2	18.2	18.8	19.9	20.4	20.8	20.1	22.3	22.8	25.1
90°	16.1	15.9	15.6	15.5	15.2	14.7	13.9	13.3	12.5	11.8	10.8
92.5°	14.8	14.8	14.7	14.7	14.6	14.2	13.6	12.8	12.2	11.4	10.5
95°	15.6	15.5	15.4	15.3	15.1	14.7	13.9	13.3	12.5	11.8	11.7
97.5°	15.1	14.9	14.8	14.7	14.6	14.5	14.4	14.3	14.2	14.2	27.5
100°	15.1	14.9	14.8	14.7	14.6	15.6	17.5	19.6	21.6	23.7	40.2
102.5°	15.5	15.5	15.5	15.5	15.4	26.3	48.3	70.1	92.1	114.0	116.1
105°	153.3	157.5	161.8	166.2	170.4	172.0	171.0	169.9	168.8	167.8	167.1
107.5°	213.6	213.1	212.6	212.2	211.7	211.2	210.8	210.2	209.7	209.2	208.3
110°	239.8	239.4	239.0	238.7	238.4	238.1	237.8	237.6	237.3	237.1	236.4



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	266.0	265.6	265.1	264.7	264.2	264.0	264.1	264.1	264.2	264.2	263.9
115°	304.3	304.3	304.3	304.3	304.3	304.2	304.0	303.7	303.5	303.2	303.3
117.5°	343.3	343.3	343.4	343.4	343.5	343.5	343.6	343.6	343.7	343.7	343.4
120°	367.8	368.0	368.3	368.4	368.7	368.7	368.4	368.3	368.0	367.8	367.9
122.5°	391.8	392.1	392.3	392.6	392.8	392.9	392.7	392.6	392.4	392.3	392.1
125°	428.0	427.8	427.7	427.6	427.5	427.3	426.9	426.5	426.2	425.8	426.0
127.5°	459.7	459.8	459.9	460.0	460.1	460.1	460.2	460.3	460.3	460.4	459.9
130°	481.2	481.2	481.2	481.2	481.2	481.2	481.0	480.9	480.8	480.7	480.3
132.5°	501.0	501.1	501.1	501.2	501.3	501.3	501.2	501.1	501.0	500.9	500.4
135°	530.7	530.5	530.2	529.9	529.7	529.4	529.2	529.0	528.8	528.5	528.0
137.5°	556.0	556.1	556.2	556.3	556.3	556.2	556.0	555.7	555.4	555.2	554.7
140°	573.6	573.5	573.4	573.3	573.2	573.0	572.6	572.2	571.8	571.6	571.3
142.5°	588.3	588.2	588.2	588.2	588.2	588.1	587.8	587.5	587.3	587.0	586.8
145°	610.8	610.6	610.3	610.0	609.8	609.6	609.5	609.4	609.3	609.2	609.2
147.5°	629.3	629.2	629.1	629.1	628.9	628.8	628.7	628.6	628.5	628.4	628.5
150°	641.4	641.3	641.2	641.0	640.9	640.8	640.8	640.8	640.8	640.8	641.0
152.5°	651.8	651.8	651.9	652.0	652.1	652.0	651.8	651.6	651.4	651.2	651.4
155°	665.6	666.0	666.3	666.7	667.0	666.9	666.5	666.0	665.5	665.1	665.4
157.5°	677.2	677.9	678.4	679.1	679.7	679.7	679.1	678.4	677.9	677.2	677.6
160°	684.9	685.7	686.4	687.1	687.9	687.9	687.1	686.4	685.7	684.9	685.0
162.5°	691.0	691.8	692.6	693.4	694.3	694.3	693.5	692.9	692.1	691.4	691.5
165°	699.5	700.6	701.6	702.7	703.8	703.9	702.9	701.9	701.0	700.0	700.0
167.5°	705.9	707.0	708.2	709.5	710.6	710.7	709.6	708.6	707.6	706.4	706.5
170°	709.7	710.9	712.1	713.3	714.4	714.6	713.6	712.7	711.7	710.8	710.7
172.5°	711.8	713.1	714.4	715.8	717.0	717.2	716.2	715.3	714.4	713.3	713.2
175°	714.5	716.0	717.4	718.9	720.3	720.5	719.3	718.3	717.2	716.1	716.0
177.5°	716.2	717.4	718.6	719.7	720.9	721.0	720.3	719.5	718.8	717.9	717.7
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1875.0	1866.6	1860.6	1855.8	1842.5	1834.7	1828.6	1820.2	1810.6	1800.4	1787.7
5°	1981.4	1955.9	1937.0	1908.5	1881.3	1858.8	1835.4	1814.4	1788.8	1761.0	1740.6
7.5°	2093.3	2055.2	2006.4	1964.2	1916.6	1875.2	1838.1	1800.3	1760.8	1722.6	1687.5
10°	2164.3	2115.3	2061.2	1997.2	1937.0	1883.6	1833.9	1785.7	1739.1	1692.4	1652.6
12.5°	2240.8	2179.8	2099.7	2025.0	1957.5	1886.0	1826.1	1767.1	1710.8	1661.8	1615.2
15°	2343.4	2255.3	2162.8	2062.7	1973.9	1890.4	1808.4	1733.8	1670.7	1605.9	1560.8
17.5°	2406.5	2297.5	2191.7	2087.1	1979.6	1874.2	1785.7	1699.9	1620.7	1556.4	1499.5
20°	2448.0	2339.7	2207.9	2103.4	1975.4	1867.1	1764.7	1669.1	1586.4	1517.9	1459.2
22.5°	2484.2	2358.9	2227.2	2089.5	1962.2	1847.2	1735.2	1639.0	1554.4	1482.3	1426.1
25°	2503.7	2359.9	2217.0	2080.0	1935.5	1799.3	1697.7	1584.9	1494.5	1418.5	1358.3
27.5°	2505.8	2352.1	2190.4	2038.2	1889.0	1762.2	1633.9	1533.0	1439.3	1359.0	1301.2
30°	2499.2	2338.9	2165.0	2000.3	1850.5	1712.8	1601.4	1491.6	1396.0	1316.2	1255.9
32.5°	2478.1	2311.2	2132.5	1958.1	1802.9	1668.2	1553.2	1448.8	1355.7	1277.1	1213.8
35°	2417.2	2252.3	2061.9	1880.6	1721.8	1585.6	1481.8	1375.6	1282.3	1207.9	1146.9
37.5°	2321.9	2172.8	1979.3	1791.7	1635.7	1498.9	1396.0	1300.0	1216.0	1140.3	1077.8
40°	2238.8	2107.9	1913.7	1730.8	1562.3	1432.1	1335.8	1247.7	1164.1	1092.7	1033.2
42.5°	2143.1	2029.0	1849.9	1656.1	1493.6	1362.8	1268.9	1189.9	1111.2	1045.1	985.7
45°	1972.4	1897.1	1728.6	1549.4	1380.2	1256.7	1167.2	1098.0	1031.7	967.0	917.4
47.5°	1776.1	1738.8	1596.9	1426.8	1266.0	1144.4	1066.8	1002.9	944.7	889.9	846.1
50°	1644.3	1626.3	1503.5	1339.5	1186.0	1071.6	993.3	938.4	888.7	840.6	799.2
52.5°	1514.3	1513.6	1403.1	1252.8	1110.8	1000.6	922.9	871.6	828.6	789.4	752.2
55°	1315.4	1336.5	1250.0	1116.0	988.8	889.5	819.5	773.6	743.5	711.1	683.3
57.5°	1132.8	1167.8	1096.5	978.5	872.3	780.8	719.9	685.4	653.4	633.8	613.5
60°	1013.7	1046.8	991.1	891.7	791.6	713.4	655.4	624.6	596.7	583.2	568.9
62.5°	907.7	937.2	896.0	803.9	717.0	641.8	592.9	563.2	544.4	529.6	520.2
65°	756.3	781.2	745.7	678.8	604.3	544.1	504.2	480.9	462.8	456.8	446.3
67.5°	611.3	634.0	614.8	557.9	498.1	452.6	421.4	399.0	388.3	383.0	375.5
70°	525.3	547.8	527.5	477.9	432.0	393.6	364.2	351.5	340.2	337.9	327.3
72.5°	452.4	467.8	447.4	408.6	369.4	337.0	314.2	300.9	295.0	291.0	285.2
75°	339.4	353.0	339.4	309.2	281.4	258.9	239.3	234.0	227.2	225.0	221.2
77.5°	240.3	251.9	241.6	222.7	202.0	184.5	174.0	167.2	165.7	161.8	163.6
80°	183.6	191.1	181.3	168.5	152.0	140.0	132.4	128.7	124.1	122.6	125.6
82.5°	131.9	135.2	130.2	121.6	109.2	101.4	96.3	92.0	91.0	91.3	91.3
85°	68.5	67.8	67.0	59.5	55.7	50.4	47.4	46.7	45.9	47.4	48.9
87.5°	24.9	25.3	24.5	21.9	19.8	17.7	16.9	15.9	16.9	17.7	18.6
90°	9.9	9.0	8.0	6.9	5.6	4.2	2.9	1.6	2.9	4.2	5.6
92.5°	9.5	8.6	7.5	7.1	7.0	6.9	6.9	6.8	6.9	6.9	7.0
95°	11.6	11.5	11.3	13.3	17.3	21.5	25.5	29.6	25.5	21.5	17.3
97.5°	40.9	54.2	67.5	73.0	70.4	67.9	65.3	62.8	65.3	67.9	70.4
100°	56.6	73.1	89.6	96.8	94.6	92.5	90.3	88.1	90.3	92.5	94.6
102.5°	118.3	120.5	122.6	122.9	121.3	119.7	118.1	116.6	118.1	119.7	121.3
105°	166.5	166.0	165.3	164.7	164.0	163.2	162.6	161.8	162.6	163.2	164.0
107.5°	207.5	206.7	205.9	205.3	204.9	204.6	204.2	203.9	204.2	204.6	204.9
110°	235.6	235.0	234.2	233.7	233.4	233.0	232.6	232.2	232.6	233.0	233.4



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	263.5	263.2	262.9	262.4	261.7	261.1	260.4	259.8	260.4	261.1	261.7
115°	303.5	303.6	303.7	303.6	303.2	302.8	302.6	302.2	302.6	302.8	303.2
117.5°	343.2	342.9	342.6	342.2	341.8	341.3	340.8	340.4	340.8	341.3	341.8
120°	368.0	368.2	368.3	368.1	367.6	367.1	366.6	366.2	366.6	367.1	367.6
122.5°	391.9	391.8	391.6	391.3	391.1	390.8	390.5	390.2	390.5	390.8	391.1
125°	426.3	426.5	426.8	426.7	426.2	425.7	425.2	424.7	425.2	425.7	426.2
127.5°	459.3	458.8	458.3	457.9	457.8	457.7	457.5	457.4	457.5	457.7	457.8
130°	479.9	479.6	479.2	479.0	478.9	478.7	478.6	478.5	478.6	478.7	478.9
132.5°	499.9	499.5	499.1	498.7	498.5	498.3	498.0	497.9	498.0	498.3	498.5
135°	527.5	527.1	526.6	526.4	526.5	526.7	526.8	526.9	526.8	526.7	526.5
137.5°	554.1	553.6	553.1	552.8	552.7	552.7	552.6	552.6	552.6	552.7	552.7
140°	571.1	570.8	570.5	570.3	570.0	569.9	569.6	569.4	569.6	569.9	570.0
142.5°	586.7	586.5	586.4	586.2	585.7	585.3	584.8	584.5	584.8	585.3	585.7
145°	609.2	609.2	609.2	609.0	608.6	608.2	607.9	607.6	607.9	608.2	608.6
147.5°	628.7	628.8	628.9	628.6	627.9	627.3	626.6	625.9	626.6	627.3	627.9
150°	641.1	641.2	641.4	641.2	640.7	640.3	639.7	639.2	639.7	640.3	640.7
152.5°	651.7	651.9	652.1	652.0	651.6	651.2	650.8	650.4	650.8	651.2	651.6
155°	665.8	666.2	666.5	666.7	666.5	666.4	666.3	666.2	666.3	666.4	666.5
157.5°	678.1	678.4	678.8	679.1	679.2	679.2	679.3	679.4	679.3	679.2	679.2
160°	685.2	685.3	685.4	685.7	686.1	686.4	686.7	687.1	686.7	686.4	686.1
162.5°	691.6	691.7	691.9	692.2	692.7	693.1	693.5	694.0	693.5	693.1	692.7
165°	700.0	700.0	700.0	700.3	700.9	701.5	702.1	702.7	702.1	701.5	700.9
167.5°	706.6	706.7	706.7	707.1	707.8	708.3	709.0	709.5	709.0	708.3	707.8
170°	710.5	710.4	710.3	710.6	711.3	712.0	712.8	713.5	712.8	712.0	711.3
172.5°	713.1	713.0	712.8	713.2	713.9	714.6	715.3	716.0	715.3	714.6	713.9
175°	716.0	715.8	715.7	716.0	716.7	717.4	718.1	718.9	718.1	717.4	716.7
177.5°	717.6	717.4	717.2	717.5	718.1	718.8	719.4	720.1	719.4	718.8	718.1
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1781.7	1776.3	1768.5	1757.7	1748.6	1739.0	1736.5	1733.0	1740.1	1734.2	1732.3
5°	1723.3	1707.5	1687.2	1663.9	1650.3	1630.8	1627.0	1619.5	1611.9	1611.2	1603.6
7.5°	1661.4	1638.2	1611.7	1587.8	1565.8	1544.5	1530.5	1527.5	1516.4	1509.9	1502.3
10°	1621.7	1593.1	1562.3	1539.7	1514.1	1491.6	1475.7	1466.7	1459.2	1450.9	1443.4
12.5°	1574.8	1544.4	1518.9	1494.5	1464.1	1447.0	1421.0	1405.3	1403.8	1403.9	1384.4
15°	1520.1	1490.1	1450.9	1416.3	1399.7	1366.6	1352.3	1334.3	1323.0	1311.6	1302.7
17.5°	1457.6	1420.2	1389.6	1349.9	1318.3	1291.9	1273.2	1262.3	1245.3	1229.4	1217.8
20°	1418.5	1378.7	1346.3	1304.1	1269.5	1237.2	1221.3	1206.4	1193.5	1180.0	1167.2
22.5°	1378.8	1337.1	1297.5	1256.6	1224.4	1190.2	1175.0	1154.5	1142.4	1134.8	1122.0
25°	1316.2	1271.0	1225.9	1186.8	1153.7	1123.5	1103.2	1087.4	1073.8	1067.8	1059.6
27.5°	1248.1	1203.3	1159.7	1115.2	1077.6	1055.8	1039.5	1027.7	1019.8	1011.8	1008.1
30°	1204.9	1158.2	1111.5	1070.1	1035.5	1013.7	998.6	990.3	984.3	980.5	976.8
32.5°	1160.8	1114.8	1065.7	1027.9	996.9	977.5	966.1	957.8	954.8	953.5	952.2
35°	1090.4	1043.8	998.6	964.8	935.4	927.8	918.1	913.6	912.1	917.4	919.6
37.5°	1022.3	978.9	937.4	904.6	885.3	874.3	871.0	871.1	876.6	881.2	886.6
40°	978.3	936.1	897.0	868.5	850.4	843.6	842.1	845.8	851.9	857.1	863.2
42.5°	935.6	894.0	858.5	831.7	819.1	812.8	813.8	817.6	826.0	832.5	841.5
45°	869.2	834.5	799.9	778.2	767.6	769.1	769.1	775.9	784.1	793.9	803.7
47.5°	806.7	771.8	743.4	725.0	719.5	718.2	722.5	731.3	743.2	755.3	768.9
50°	764.6	731.5	706.6	690.0	684.1	686.4	692.3	700.6	714.9	730.0	744.2
52.5°	721.8	691.7	668.7	653.4	649.1	653.2	659.2	672.3	684.9	701.1	718.4
55°	655.4	629.9	611.8	600.5	599.0	601.2	608.0	622.4	640.4	660.7	677.3
57.5°	589.4	568.0	551.5	543.7	544.4	546.5	557.6	574.7	593.9	615.6	637.0
60°	544.8	525.3	511.7	505.7	506.4	511.0	524.5	540.4	564.4	585.5	608.0
62.5°	502.7	485.5	472.6	467.2	466.1	476.1	489.0	505.4	529.5	553.0	577.3
65°	435.0	421.4	410.9	407.8	410.1	417.6	434.2	456.0	476.4	501.1	526.8
67.5°	368.7	357.6	350.3	351.8	354.5	365.6	379.5	398.2	421.3	447.0	472.3
70°	326.6	316.0	310.0	310.8	315.3	328.9	340.9	359.7	384.6	410.9	432.0
72.5°	283.2	276.4	270.9	274.1	278.6	287.9	302.9	321.8	343.7	368.2	390.4
75°	217.4	217.4	214.4	216.7	223.5	232.5	243.8	263.3	285.2	304.8	322.8
77.5°	161.4	159.7	161.6	164.4	168.2	179.0	191.9	205.9	222.3	241.9	256.7
80°	123.4	124.1	127.9	132.4	133.9	142.2	155.8	168.5	181.3	197.9	212.3
82.5°	92.7	93.5	95.4	101.1	102.6	111.5	120.3	133.1	144.7	155.8	167.7
85°	50.4	50.4	54.2	56.5	60.2	66.3	71.4	79.0	89.5	97.1	108.4
87.5°	20.6	20.8	23.5	24.9	26.9	30.1	31.4	38.2	40.7	43.9	49.4
90°	6.9	8.0	9.0	9.9	10.8	11.8	12.5	13.3	13.9	14.7	15.2
92.5°	7.1	7.5	8.6	9.5	10.5	11.4	12.2	12.8	13.6	14.2	14.6
95°	13.3	11.3	11.5	11.6	11.7	11.8	12.5	13.3	13.9	14.7	15.1
97.5°	73.0	67.5	54.2	40.9	27.5	14.2	14.2	14.3	14.4	14.5	14.6
100°	96.8	89.6	73.1	56.6	40.2	23.7	21.6	19.6	17.5	15.6	14.6
102.5°	122.9	122.6	120.5	118.3	116.1	114.0	92.1	70.1	48.3	26.3	15.4
105°	164.7	165.3	166.0	166.5	167.1	167.8	168.8	169.9	171.0	172.0	170.4
107.5°	205.3	205.9	206.7	207.5	208.3	209.2	209.7	210.2	210.8	211.2	211.7
110°	233.7	234.2	235.0	235.6	236.4	237.1	237.3	237.6	237.8	238.1	238.4



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	262.4	262.9	263.2	263.5	263.9	264.2	264.2	264.1	264.1	264.0	264.2
115°	303.6	303.7	303.6	303.5	303.3	303.2	303.5	303.7	304.0	304.2	304.3
117.5°	342.2	342.6	342.9	343.2	343.4	343.7	343.7	343.6	343.6	343.5	343.5
120°	368.1	368.3	368.2	368.0	367.9	367.8	368.0	368.3	368.4	368.7	368.7
122.5°	391.3	391.6	391.8	391.9	392.1	392.3	392.4	392.6	392.7	392.9	392.8
125°	426.7	426.8	426.5	426.3	426.0	425.8	426.2	426.5	426.9	427.3	427.5
127.5°	457.9	458.3	458.8	459.3	459.9	460.4	460.3	460.3	460.2	460.1	460.1
130°	479.0	479.2	479.6	479.9	480.3	480.7	480.8	480.9	481.0	481.2	481.2
132.5°	498.7	499.1	499.5	499.9	500.4	500.9	501.0	501.1	501.2	501.3	501.3
135°	526.4	526.6	527.1	527.5	528.0	528.5	528.8	529.0	529.2	529.4	529.7
137.5°	552.8	553.1	553.6	554.1	554.7	555.2	555.4	555.7	556.0	556.2	556.3
140°	570.3	570.5	570.8	571.1	571.3	571.6	571.8	572.2	572.6	573.0	573.2
142.5°	586.2	586.4	586.5	586.7	586.8	587.0	587.3	587.5	587.8	588.1	588.2
145°	609.0	609.2	609.2	609.2	609.2	609.2	609.3	609.4	609.5	609.6	609.8
147.5°	628.6	628.9	628.8	628.7	628.5	628.4	628.5	628.6	628.7	628.8	628.9
150°	641.2	641.4	641.2	641.1	641.0	640.8	640.8	640.8	640.8	640.8	640.9
152.5°	652.0	652.1	651.9	651.7	651.4	651.2	651.4	651.6	651.8	652.0	652.1
155°	666.7	666.5	666.2	665.8	665.4	665.1	665.5	666.0	666.5	666.9	667.0
157.5°	679.1	678.8	678.4	678.1	677.6	677.2	677.9	678.4	679.1	679.7	679.7
160°	685.7	685.4	685.3	685.2	685.0	684.9	685.7	686.4	687.1	687.9	687.9
162.5°	692.2	691.9	691.7	691.6	691.5	691.4	692.1	692.9	693.5	694.3	694.3
165°	700.3	700.0	700.0	700.0	700.0	700.0	701.0	701.9	702.9	703.9	703.8
167.5°	707.1	706.7	706.7	706.6	706.5	706.4	707.6	708.6	709.6	710.7	710.6
170°	710.6	710.3	710.4	710.5	710.7	710.8	711.7	712.7	713.6	714.6	714.4
172.5°	713.2	712.8	713.0	713.1	713.2	713.3	714.4	715.3	716.2	717.2	717.0
175°	716.0	715.7	715.8	716.0	716.0	716.1	717.2	718.3	719.3	720.5	720.3
177.5°	717.5	717.2	717.4	717.6	717.7	717.9	718.8	719.5	720.3	721.0	720.9
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1731.2	1729.9	1725.7	1725.1	1725.7	1729.9	1731.2	1732.3	1734.2	1740.1	1733.0
5°	1599.1	1595.3	1593.1	1601.4	1593.1	1595.3	1599.1	1603.6	1611.2	1611.9	1619.5
7.5°	1499.7	1496.7	1490.1	1487.9	1490.1	1496.7	1499.7	1502.3	1509.9	1516.4	1527.5
10°	1435.9	1432.9	1426.8	1425.3	1426.8	1432.9	1435.9	1443.4	1450.9	1459.2	1466.7
12.5°	1374.4	1368.4	1367.3	1368.8	1367.3	1368.4	1374.4	1384.4	1403.9	1403.8	1405.3
15°	1292.9	1289.9	1281.6	1283.8	1281.6	1289.9	1292.9	1302.7	1311.6	1323.0	1334.3
17.5°	1212.5	1208.9	1198.8	1207.7	1198.8	1208.9	1212.5	1217.8	1229.4	1245.3	1262.3
20°	1161.9	1155.9	1150.7	1149.9	1150.7	1155.9	1161.9	1167.2	1180.0	1193.5	1206.4
22.5°	1113.7	1108.3	1107.9	1103.0	1107.9	1108.3	1113.7	1122.0	1134.8	1142.4	1154.5
25°	1053.6	1048.3	1046.8	1043.0	1046.8	1048.3	1053.6	1059.6	1067.8	1073.8	1087.4
27.5°	1007.4	1004.8	1002.1	1003.2	1002.1	1004.8	1007.4	1008.1	1011.8	1019.8	1027.7
30°	979.0	978.3	976.8	976.8	976.8	978.3	979.0	976.8	980.5	984.3	990.3
32.5°	955.5	955.5	956.3	956.3	956.3	955.5	955.5	952.2	953.5	954.8	957.8
35°	922.7	924.8	926.3	924.1	926.3	924.8	922.7	919.6	917.4	912.1	913.6
37.5°	892.8	895.0	897.2	899.8	897.2	895.0	892.8	886.6	881.2	876.6	871.1
40°	870.0	875.2	876.7	880.4	876.7	875.2	870.0	863.2	857.1	851.9	845.8
42.5°	848.3	854.1	858.0	858.8	858.0	854.1	848.3	841.5	832.5	826.0	817.6
45°	815.0	821.0	826.3	826.3	826.3	821.0	815.0	803.7	793.9	784.1	775.9
47.5°	780.5	789.3	794.6	795.9	794.6	789.3	780.5	768.9	755.3	743.2	731.3
50°	757.1	767.6	772.9	776.7	772.9	767.6	757.1	744.2	730.0	714.9	700.6
52.5°	734.1	744.7	751.8	753.8	751.8	744.7	734.1	718.4	701.1	684.9	672.3
55°	694.6	709.6	717.9	721.0	717.9	709.6	694.6	677.3	660.7	640.4	622.4
57.5°	657.2	671.1	680.7	683.0	680.7	671.1	657.2	637.0	615.6	593.9	574.7
60°	628.4	643.4	655.4	657.7	655.4	643.4	628.4	608.0	585.5	564.4	540.4
62.5°	598.9	614.5	625.4	631.2	625.4	614.5	598.9	577.3	553.0	529.5	505.4
65°	547.8	563.6	574.2	576.5	574.2	563.6	547.8	526.8	501.1	476.4	456.0
67.5°	492.2	507.9	514.9	519.2	514.9	507.9	492.2	472.3	447.0	421.3	398.2
70°	453.0	465.8	473.3	477.1	473.3	465.8	453.0	432.0	410.9	384.6	359.7
72.5°	408.5	421.9	430.6	431.3	430.6	421.9	408.5	390.4	368.2	343.7	321.8
75°	340.2	352.2	356.7	356.7	356.7	352.2	340.2	322.8	304.8	285.2	263.3
77.5°	269.3	275.4	281.2	282.4	281.2	275.4	269.3	256.7	241.9	222.3	205.9
80°	223.5	227.2	231.8	231.8	231.8	227.2	223.5	212.3	197.9	181.3	168.5
82.5°	176.5	179.7	184.3	183.6	184.3	179.7	176.5	167.7	155.8	144.7	133.1
85°	106.9	113.7	112.9	111.4	112.9	113.7	106.9	108.4	97.1	89.5	79.0
87.5°	51.3	51.9	53.7	55.0	53.7	51.9	51.3	49.4	43.9	40.7	38.2
90°	15.5	15.6	15.9	16.1	15.9	15.6	15.5	15.2	14.7	13.9	13.3
92.5°	14.7	14.7	14.8	14.8	14.8	14.7	14.7	14.6	14.2	13.6	12.8
95°	15.3	15.4	15.5	15.6	15.5	15.4	15.3	15.1	14.7	13.9	13.3
97.5°	14.7	14.8	14.9	15.1	14.9	14.8	14.7	14.6	14.5	14.4	14.3
100°	14.7	14.8	14.9	15.1	14.9	14.8	14.7	14.6	15.6	17.5	19.6
102.5°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.4	26.3	48.3	70.1
105°	166.2	161.8	157.5	153.3	157.5	161.8	166.2	170.4	172.0	171.0	169.9
107.5°	212.2	212.6	213.1	213.6	213.1	212.6	212.2	211.7	211.2	210.8	210.2
110°	238.7	239.0	239.4	239.8	239.4	239.0	238.7	238.4	238.1	237.8	237.6



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	264.7	265.1	265.6	266.0	265.6	265.1	264.7	264.2	264.0	264.1	264.1
115°	304.3	304.3	304.3	304.3	304.3	304.3	304.3	304.3	304.2	304.0	303.7
117.5°	343.4	343.4	343.3	343.3	343.3	343.4	343.4	343.5	343.5	343.6	343.6
120°	368.4	368.3	368.0	367.8	368.0	368.3	368.4	368.7	368.7	368.4	368.3
122.5°	392.6	392.3	392.1	391.8	392.1	392.3	392.6	392.8	392.9	392.7	392.6
125°	427.6	427.7	427.8	428.0	427.8	427.7	427.6	427.5	427.3	426.9	426.5
127.5°	460.0	459.9	459.8	459.7	459.8	459.9	460.0	460.1	460.1	460.2	460.3
130°	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.2	481.0	480.9
132.5°	501.2	501.1	501.1	501.0	501.1	501.1	501.2	501.3	501.3	501.2	501.1
135°	529.9	530.2	530.5	530.7	530.5	530.2	529.9	529.7	529.4	529.2	529.0
137.5°	556.3	556.2	556.1	556.0	556.1	556.2	556.3	556.3	556.2	556.0	555.7
140°	573.3	573.4	573.5	573.6	573.5	573.4	573.3	573.2	573.0	572.6	572.2
142.5°	588.2	588.2	588.2	588.3	588.2	588.2	588.2	588.2	588.1	587.8	587.5
145°	610.0	610.3	610.6	610.8	610.6	610.3	610.0	609.8	609.6	609.5	609.4
147.5°	629.1	629.1	629.2	629.3	629.2	629.1	629.1	628.9	628.8	628.7	628.6
150°	641.0	641.2	641.3	641.4	641.3	641.2	641.0	640.9	640.8	640.8	640.8
152.5°	652.0	651.9	651.8	651.8	651.8	651.9	652.0	652.1	652.0	651.8	651.6
155°	666.7	666.3	666.0	665.6	666.0	666.3	666.7	667.0	666.9	666.5	666.0
157.5°	679.1	678.4	677.9	677.2	677.9	678.4	679.1	679.7	679.7	679.1	678.4
160°	687.1	686.4	685.7	684.9	685.7	686.4	687.1	687.9	687.9	687.1	686.4
162.5°	693.4	692.6	691.8	691.0	691.8	692.6	693.4	694.3	694.3	693.5	692.9
165°	702.7	701.6	700.6	699.5	700.6	701.6	702.7	703.8	703.9	702.9	701.9
167.5°	709.5	708.2	707.0	705.9	707.0	708.2	709.5	710.6	710.7	709.6	708.6
170°	713.3	712.1	710.9	709.7	710.9	712.1	713.3	714.4	714.6	713.6	712.7
172.5°	715.8	714.4	713.1	711.8	713.1	714.4	715.8	717.0	717.2	716.2	715.3
175°	718.9	717.4	716.0	714.5	716.0	717.4	718.9	720.3	720.5	719.3	718.3
177.5°	719.7	718.6	717.4	716.2	717.4	718.6	719.7	720.9	721.0	720.3	719.5
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1736.5	1739.0	1748.6	1757.7	1768.5	1776.3	1781.7	1787.7	1800.4	1810.6	1820.2
5°	1627.0	1630.8	1650.3	1663.9	1687.2	1707.5	1723.3	1740.6	1761.0	1788.8	1814.4
7.5°	1530.5	1544.5	1565.8	1587.8	1611.7	1638.2	1661.4	1687.5	1722.6	1760.8	1800.3
10°	1475.7	1491.6	1514.1	1539.7	1562.3	1593.1	1621.7	1652.6	1692.4	1739.1	1785.7
12.5°	1421.0	1447.0	1464.1	1494.5	1518.9	1544.4	1574.8	1615.2	1661.8	1710.8	1767.1
15°	1352.3	1366.6	1399.7	1416.3	1450.9	1490.1	1520.1	1560.8	1605.9	1670.7	1733.8
17.5°	1273.2	1291.9	1318.3	1349.9	1389.6	1420.2	1457.6	1499.5	1556.4	1620.7	1699.9
20°	1221.3	1237.2	1269.5	1304.1	1346.3	1378.7	1418.5	1459.2	1517.9	1586.4	1669.1
22.5°	1175.0	1190.2	1224.4	1256.6	1297.5	1337.1	1378.8	1426.1	1482.3	1554.4	1639.0
25°	1103.2	1123.5	1153.7	1186.8	1225.9	1271.0	1316.2	1358.3	1418.5	1494.5	1584.9
27.5°	1039.5	1055.8	1077.6	1115.2	1159.7	1203.3	1248.1	1301.2	1359.0	1439.3	1533.0
30°	998.6	1013.7	1035.5	1070.1	1111.5	1158.2	1204.9	1255.9	1316.2	1396.0	1491.6
32.5°	966.1	977.5	996.9	1027.9	1065.7	1114.8	1160.8	1213.8	1277.1	1355.7	1448.8
35°	918.1	927.8	935.4	964.8	998.6	1043.8	1090.4	1146.9	1207.9	1282.3	1375.6
37.5°	871.0	874.3	885.3	904.6	937.4	978.9	1022.3	1077.8	1140.3	1216.0	1300.0
40°	842.1	843.6	850.4	868.5	897.0	936.1	978.3	1033.2	1092.7	1164.1	1247.7
42.5°	813.8	812.8	819.1	831.7	858.5	894.0	935.6	985.7	1045.1	1111.2	1189.9
45°	769.1	769.1	767.6	778.2	799.9	834.5	869.2	917.4	967.0	1031.7	1098.0
47.5°	722.5	718.2	719.5	725.0	743.4	771.8	806.7	846.1	889.9	944.7	1002.9
50°	692.3	686.4	684.1	690.0	706.6	731.5	764.6	799.2	840.6	888.7	938.4
52.5°	659.2	653.2	649.1	653.4	668.7	691.7	721.8	752.2	789.4	828.6	871.6
55°	608.0	601.2	599.0	600.5	611.8	629.9	655.4	683.3	711.1	743.5	773.6
57.5°	557.6	546.5	544.4	543.7	551.5	568.0	589.4	613.5	633.8	653.4	685.4
60°	524.5	511.0	506.4	505.7	511.7	525.3	544.8	568.9	583.2	596.7	624.6
62.5°	489.0	476.1	466.1	467.2	472.6	485.5	502.7	520.2	529.6	544.4	563.2
65°	434.2	417.6	410.1	407.8	410.9	421.4	435.0	446.3	456.8	462.8	480.9
67.5°	379.5	365.6	354.5	351.8	350.3	357.6	368.7	375.5	383.0	388.3	399.0
70°	340.9	328.9	315.3	310.8	310.0	316.0	326.6	327.3	337.9	340.2	351.5
72.5°	302.9	287.9	278.6	274.1	270.9	276.4	283.2	285.2	291.0	295.0	300.9
75°	243.8	232.5	223.5	216.7	214.4	217.4	217.4	221.2	225.0	227.2	234.0
77.5°	191.9	179.0	168.2	164.4	161.6	159.7	161.4	163.6	161.8	165.7	167.2
80°	155.8	142.2	133.9	132.4	127.9	124.1	123.4	125.6	122.6	124.1	128.7
82.5°	120.3	111.5	102.6	101.1	95.4	93.5	92.7	91.3	91.3	91.0	92.0
85°	71.4	66.3	60.2	56.5	54.2	50.4	50.4	48.9	47.4	45.9	46.7
87.5°	31.4	30.1	26.9	24.9	23.5	20.8	20.6	18.6	17.7	16.9	15.9
90°	12.5	11.8	10.8	9.9	9.0	8.0	6.9	5.6	4.2	2.9	1.6
92.5°	12.2	11.4	10.5	9.5	8.6	7.5	7.1	7.0	6.9	6.9	6.8
95°	12.5	11.8	11.7	11.6	11.5	11.3	13.3	17.3	21.5	25.5	29.6
97.5°	14.2	14.2	27.5	40.9	54.2	67.5	73.0	70.4	67.9	65.3	62.8
100°	21.6	23.7	40.2	56.6	73.1	89.6	96.8	94.6	92.5	90.3	88.1
102.5°	92.1	114.0	116.1	118.3	120.5	122.6	122.9	121.3	119.7	118.1	116.6
105°	168.8	167.8	167.1	166.5	166.0	165.3	164.7	164.0	163.2	162.6	161.8
107.5°	209.7	209.2	208.3	207.5	206.7	205.9	205.3	204.9	204.6	204.2	203.9
110°	237.3	237.1	236.4	235.6	235.0	234.2	233.7	233.4	233.0	232.6	232.2



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	264.2	264.2	263.9	263.5	263.2	262.9	262.4	261.7	261.1	260.4	259.8
115°	303.5	303.2	303.3	303.5	303.6	303.7	303.6	303.2	302.8	302.6	302.2
117.5°	343.7	343.7	343.4	343.2	342.9	342.6	342.2	341.8	341.3	340.8	340.4
120°	368.0	367.8	367.9	368.0	368.2	368.3	368.1	367.6	367.1	366.6	366.2
122.5°	392.4	392.3	392.1	391.9	391.8	391.6	391.3	391.1	390.8	390.5	390.2
125°	426.2	425.8	426.0	426.3	426.5	426.8	426.7	426.2	425.7	425.2	424.7
127.5°	460.3	460.4	459.9	459.3	458.8	458.3	457.9	457.8	457.7	457.5	457.4
130°	480.8	480.7	480.3	479.9	479.6	479.2	479.0	478.9	478.7	478.6	478.5
132.5°	501.0	500.9	500.4	499.9	499.5	499.1	498.7	498.5	498.3	498.0	497.9
135°	528.8	528.5	528.0	527.5	527.1	526.6	526.4	526.5	526.7	526.8	526.9
137.5°	555.4	555.2	554.7	554.1	553.6	553.1	552.8	552.7	552.7	552.6	552.6
140°	571.8	571.6	571.3	571.1	570.8	570.5	570.3	570.0	569.9	569.6	569.4
142.5°	587.3	587.0	586.8	586.7	586.5	586.4	586.2	585.7	585.3	584.8	584.5
145°	609.3	609.2	609.2	609.2	609.2	609.2	609.0	608.6	608.2	607.9	607.6
147.5°	628.5	628.4	628.5	628.7	628.8	628.9	628.6	627.9	627.3	626.6	625.9
150°	640.8	640.8	641.0	641.1	641.2	641.4	641.2	640.7	640.3	639.7	639.2
152.5°	651.4	651.2	651.4	651.7	651.9	652.1	652.0	651.6	651.2	650.8	650.4
155°	665.5	665.1	665.4	665.8	666.2	666.5	666.7	666.5	666.4	666.3	666.2
157.5°	677.9	677.2	677.6	678.1	678.4	678.8	679.1	679.2	679.2	679.3	679.4
160°	685.7	684.9	685.0	685.2	685.3	685.4	685.7	686.1	686.4	686.7	687.1
162.5°	692.1	691.4	691.5	691.6	691.7	691.9	692.2	692.7	693.1	693.5	694.0
165°	701.0	700.0	700.0	700.0	700.0	700.0	700.3	700.9	701.5	702.1	702.7
167.5°	707.6	706.4	706.5	706.6	706.7	706.7	707.1	707.8	708.3	709.0	709.5
170°	711.7	710.8	710.7	710.5	710.4	710.3	710.6	711.3	712.0	712.8	713.5
172.5°	714.4	713.3	713.2	713.1	713.0	712.8	713.2	713.9	714.6	715.3	716.0
175°	717.2	716.1	716.0	716.0	715.8	715.7	716.0	716.7	717.4	718.1	718.9
177.5°	718.8	717.9	717.7	717.6	717.4	717.2	717.5	718.1	718.8	719.4	720.1
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9



TEST NUMBER: P332679-830
 CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1828.6	1834.7	1842.5	1855.8	1860.6	1866.6	1875.0	1874.4	1876.8	1885.8	1905.2
5°	1835.4	1858.8	1881.3	1908.5	1937.0	1955.9	1981.4	1997.2	2013.1	2033.3	2067.9
7.5°	1838.1	1875.2	1916.6	1964.2	2006.4	2055.2	2093.3	2129.1	2161.4	2204.3	2245.6
10°	1833.9	1883.6	1937.0	1997.2	2061.2	2115.3	2164.3	2220.0	2267.4	2319.3	2366.0
12.5°	1826.1	1886.0	1957.5	2025.0	2099.7	2179.8	2240.8	2297.1	2360.1	2419.9	2491.8
15°	1808.4	1890.4	1973.9	2062.7	2162.8	2255.3	2343.4	2416.4	2484.2	2573.7	2667.8
17.5°	1785.7	1874.2	1979.6	2087.1	2191.7	2297.5	2406.5	2516.2	2601.7	2712.9	2786.5
20°	1764.7	1867.1	1975.4	2103.4	2207.9	2339.7	2448.0	2554.1	2671.5	2782.1	2870.1
22.5°	1735.2	1847.2	1962.2	2089.5	2227.2	2358.9	2484.2	2599.2	2716.7	2837.0	2943.7
25°	1697.7	1799.3	1935.5	2080.0	2217.0	2359.9	2503.7	2648.2	2774.6	2901.8	3001.1
27.5°	1633.9	1762.2	1889.0	2038.2	2190.4	2352.1	2505.8	2657.0	2789.5	2894.1	2955.6
30°	1601.4	1712.8	1850.5	2000.3	2165.0	2338.9	2499.2	2647.4	2770.9	2854.4	2879.2
32.5°	1553.2	1668.2	1802.9	1958.1	2132.5	2311.2	2478.1	2617.9	2720.8	2764.7	2734.7
35°	1481.8	1585.6	1721.8	1880.6	2061.9	2252.3	2417.2	2535.3	2587.9	2546.6	2443.4
37.5°	1396.0	1498.9	1635.7	1791.7	1979.3	2172.8	2321.9	2406.9	2389.4	2286.5	2132.9
40°	1335.8	1432.1	1562.3	1730.8	1913.7	2107.9	2238.8	2284.7	2236.6	2089.1	1925.7
42.5°	1268.9	1362.8	1493.6	1656.1	1849.9	2029.0	2143.1	2146.8	2066.1	1889.8	1725.9
45°	1167.2	1256.7	1380.2	1549.4	1728.6	1897.1	1972.4	1935.5	1786.5	1616.5	1451.6
47.5°	1066.8	1144.4	1266.0	1426.8	1596.9	1738.8	1776.1	1709.8	1551.0	1385.9	1233.1
50°	993.3	1071.6	1186.0	1339.5	1503.5	1626.3	1644.3	1556.2	1400.4	1234.2	1114.5
52.5°	922.9	1000.6	1110.8	1252.8	1403.1	1513.6	1514.3	1412.4	1257.2	1108.9	997.7
55°	819.5	889.5	988.8	1116.0	1250.0	1336.5	1315.4	1210.0	1075.3	946.7	849.6
57.5°	719.9	780.8	872.3	978.5	1096.5	1167.8	1132.8	1031.4	911.2	802.0	728.5
60°	655.4	713.4	791.6	891.7	991.1	1046.8	1013.7	921.9	811.2	723.2	659.2
62.5°	592.9	641.8	717.0	803.9	896.0	937.2	907.7	817.1	721.5	641.9	590.0
65°	504.2	544.1	604.3	678.8	745.7	781.2	756.3	672.0	599.0	541.9	500.4
67.5°	421.4	452.6	498.1	557.9	614.8	634.0	611.3	552.7	490.8	445.1	415.8
70°	364.2	393.6	432.0	477.9	527.5	547.8	525.3	478.6	428.2	386.1	357.4
72.5°	314.2	337.0	369.4	408.6	447.4	467.8	452.4	407.6	365.0	333.7	309.2
75°	239.3	258.9	281.4	309.2	339.4	353.0	339.4	308.5	279.2	255.9	238.6
77.5°	174.0	184.5	202.0	222.7	241.6	251.9	240.3	219.3	201.4	185.4	176.8
80°	132.4	140.0	152.0	168.5	181.3	191.1	183.6	166.3	152.0	141.5	137.7
82.5°	96.3	101.4	109.2	121.6	130.2	135.2	131.9	119.3	113.5	104.2	100.4
85°	47.4	50.4	55.7	59.5	67.0	67.8	68.5	63.2	58.0	55.7	52.7
87.5°	16.9	17.7	19.8	21.9	24.5	25.3	24.9	25.1	22.8	22.3	20.1
90°	2.9	4.2	5.6	6.9	8.0	9.0	9.9	10.8	11.8	12.5	13.3
92.5°	6.9	6.9	7.0	7.1	7.5	8.6	9.5	10.5	11.4	12.2	12.8
95°	25.5	21.5	17.3	13.3	11.3	11.5	11.6	11.7	11.8	12.5	13.3
97.5°	65.3	67.9	70.4	73.0	67.5	54.2	40.9	27.5	14.2	14.2	14.3
100°	90.3	92.5	94.6	96.8	89.6	73.1	56.6	40.2	23.7	21.6	19.6
102.5°	118.1	119.7	121.3	122.9	122.6	120.5	118.3	116.1	114.0	92.1	70.1
105°	162.6	163.2	164.0	164.7	165.3	166.0	166.5	167.1	167.8	168.8	169.9
107.5°	204.2	204.6	204.9	205.3	205.9	206.7	207.5	208.3	209.2	209.7	210.2
110°	232.6	233.0	233.4	233.7	234.2	235.0	235.6	236.4	237.1	237.3	237.6



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	260.4	261.1	261.7	262.4	262.9	263.2	263.5	263.9	264.2	264.2	264.1
115°	302.6	302.8	303.2	303.6	303.7	303.6	303.5	303.3	303.2	303.5	303.7
117.5°	340.8	341.3	341.8	342.2	342.6	342.9	343.2	343.4	343.7	343.7	343.6
120°	366.6	367.1	367.6	368.1	368.3	368.2	368.0	367.9	367.8	368.0	368.3
122.5°	390.5	390.8	391.1	391.3	391.6	391.8	391.9	392.1	392.3	392.4	392.6
125°	425.2	425.7	426.2	426.7	426.8	426.5	426.3	426.0	425.8	426.2	426.5
127.5°	457.5	457.7	457.8	457.9	458.3	458.8	459.3	459.9	460.4	460.3	460.3
130°	478.6	478.7	478.9	479.0	479.2	479.6	479.9	480.3	480.7	480.8	480.9
132.5°	498.0	498.3	498.5	498.7	499.1	499.5	499.9	500.4	500.9	501.0	501.1
135°	526.8	526.7	526.5	526.4	526.6	527.1	527.5	528.0	528.5	528.8	529.0
137.5°	552.6	552.7	552.7	552.8	553.1	553.6	554.1	554.7	555.2	555.4	555.7
140°	569.6	569.9	570.0	570.3	570.5	570.8	571.1	571.3	571.6	571.8	572.2
142.5°	584.8	585.3	585.7	586.2	586.4	586.5	586.7	586.8	587.0	587.3	587.5
145°	607.9	608.2	608.6	609.0	609.2	609.2	609.2	609.2	609.2	609.3	609.4
147.5°	626.6	627.3	627.9	628.6	628.9	628.8	628.7	628.5	628.4	628.5	628.6
150°	639.7	640.3	640.7	641.2	641.4	641.2	641.1	641.0	640.8	640.8	640.8
152.5°	650.8	651.2	651.6	652.0	652.1	651.9	651.7	651.4	651.2	651.4	651.6
155°	666.3	666.4	666.5	666.7	666.5	666.2	665.8	665.4	665.1	665.5	666.0
157.5°	679.3	679.2	679.2	679.1	678.8	678.4	678.1	677.6	677.2	677.9	678.4
160°	686.7	686.4	686.1	685.7	685.4	685.3	685.2	685.0	684.9	685.7	686.4
162.5°	693.5	693.1	692.7	692.2	691.9	691.7	691.6	691.5	691.4	692.1	692.9
165°	702.1	701.5	700.9	700.3	700.0	700.0	700.0	700.0	700.0	701.0	701.9
167.5°	709.0	708.3	707.8	707.1	706.7	706.7	706.6	706.5	706.4	707.6	708.6
170°	712.8	712.0	711.3	710.6	710.3	710.4	710.5	710.7	710.8	711.7	712.7
172.5°	715.3	714.6	713.9	713.2	712.8	713.0	713.1	713.2	713.3	714.4	715.3
175°	718.1	717.4	716.7	716.0	715.7	715.8	716.0	716.0	716.1	717.2	718.3
177.5°	719.4	718.8	718.1	717.5	717.2	717.4	717.6	717.7	717.9	718.8	719.5
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9	718.9



TEST NUMBER: P332679-830
 CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1914.8	1916.0	1921.4	1925.6	1926.8	1932.8	1933.4
5°	2083.0	2095.8	2120.6	2122.9	2126.7	2146.3	2131.2
7.5°	2280.2	2312.7	2334.4	2353.5	2360.4	2369.0	2367.2
10°	2406.6	2454.8	2478.9	2517.2	2518.8	2528.6	2522.5
12.5°	2533.6	2589.6	2633.6	2640.6	2672.9	2677.9	2686.2
15°	2713.7	2773.1	2834.0	2855.9	2900.3	2910.9	2927.3
17.5°	2882.9	2943.7	2986.4	3042.8	3061.0	3085.4	3068.8
20°	2975.5	3041.8	3096.0	3140.4	3159.1	3172.7	3171.2
22.5°	3031.5	3098.3	3142.2	3175.9	3193.4	3199.2	3198.9
25°	3066.6	3104.9	3118.5	3131.3	3111.7	3104.9	3107.9
27.5°	2969.1	2959.1	2923.8	2877.4	2829.2	2791.0	2770.2
30°	2834.8	2776.1	2722.7	2629.3	2581.2	2552.6	2527.1
32.5°	2644.6	2551.6	2448.7	2363.2	2308.5	2266.1	2259.7
35°	2318.6	2178.6	2053.0	1948.3	1894.1	1848.2	1837.7
37.5°	1971.2	1825.8	1712.6	1620.5	1562.3	1529.9	1499.7
40°	1740.6	1615.7	1504.3	1426.1	1381.7	1358.3	1339.5
42.5°	1563.0	1449.0	1338.1	1278.6	1238.4	1224.1	1213.1
45°	1317.7	1211.5	1134.8	1089.7	1066.3	1042.3	1031.0
47.5°	1121.2	1034.9	984.3	945.9	921.0	906.6	899.5
50°	1009.9	939.1	894.0	864.7	842.1	830.8	824.8
52.5°	911.2	853.1	815.1	791.8	776.5	768.2	765.8
55°	784.9	740.5	716.4	696.1	684.9	677.3	674.3
57.5°	682.2	648.1	628.5	611.8	607.5	601.2	599.0
60°	614.8	588.5	571.9	560.6	556.9	549.3	550.8
62.5°	555.3	533.7	519.5	513.1	508.1	501.8	503.9
65°	469.6	453.7	446.3	440.3	434.2	430.5	433.5
67.5°	394.0	383.2	373.0	369.5	366.5	365.9	362.7
70°	344.7	335.6	326.6	324.3	324.3	321.3	320.6
72.5°	297.1	290.5	284.5	282.8	280.4	281.6	278.4
75°	229.5	224.2	222.0	219.7	219.0	219.0	216.7
77.5°	169.7	165.7	162.1	162.1	159.4	158.3	158.1
80°	128.7	127.1	124.1	124.1	122.6	123.4	121.9
82.5°	96.8	94.6	94.1	92.8	90.8	90.9	89.4
85°	51.9	49.7	48.9	46.7	45.1	46.7	45.1
87.5°	20.8	20.4	19.9	18.8	18.2	18.2	16.5
90°	13.9	14.7	15.2	15.5	15.6	15.9	16.1
92.5°	13.6	14.2	14.6	14.7	14.7	14.8	14.8
95°	13.9	14.7	15.1	15.3	15.4	15.5	15.6
97.5°	14.4	14.5	14.6	14.7	14.8	14.9	15.1
100°	17.5	15.6	14.6	14.7	14.8	14.9	15.1
102.5°	48.3	26.3	15.4	15.5	15.5	15.5	15.5
105°	171.0	172.0	170.4	166.2	161.8	157.5	153.3
107.5°	210.8	211.2	211.7	212.2	212.6	213.1	213.6
110°	237.8	238.1	238.4	238.7	239.0	239.4	239.8



TEST NUMBER: P332679-830

CATALOG NUMBER: SA4XXDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	264.1	264.0	264.2	264.7	265.1	265.6	266.0
115°	304.0	304.2	304.3	304.3	304.3	304.3	304.3
117.5°	343.6	343.5	343.5	343.4	343.4	343.3	343.3
120°	368.4	368.7	368.7	368.4	368.3	368.0	367.8
122.5°	392.7	392.9	392.8	392.6	392.3	392.1	391.8
125°	426.9	427.3	427.5	427.6	427.7	427.8	428.0
127.5°	460.2	460.1	460.1	460.0	459.9	459.8	459.7
130°	481.0	481.2	481.2	481.2	481.2	481.2	481.2
132.5°	501.2	501.3	501.3	501.2	501.1	501.1	501.0
135°	529.2	529.4	529.7	529.9	530.2	530.5	530.7
137.5°	556.0	556.2	556.3	556.3	556.2	556.1	556.0
140°	572.6	573.0	573.2	573.3	573.4	573.5	573.6
142.5°	587.8	588.1	588.2	588.2	588.2	588.2	588.3
145°	609.5	609.6	609.8	610.0	610.3	610.6	610.8
147.5°	628.7	628.8	628.9	629.1	629.1	629.2	629.3
150°	640.8	640.8	640.9	641.0	641.2	641.3	641.4
152.5°	651.8	652.0	652.1	652.0	651.9	651.8	651.8
155°	666.5	666.9	667.0	666.7	666.3	666.0	665.6
157.5°	679.1	679.7	679.7	679.1	678.4	677.9	677.2
160°	687.1	687.9	687.9	687.1	686.4	685.7	684.9
162.5°	693.5	694.3	694.3	693.4	692.6	691.8	691.0
165°	702.9	703.9	703.8	702.7	701.6	700.6	699.5
167.5°	709.6	710.7	710.6	709.5	708.2	707.0	705.9
170°	713.6	714.6	714.4	713.3	712.1	710.9	709.7
172.5°	716.2	717.2	717.0	715.8	714.4	713.1	711.8
175°	719.3	720.5	720.3	718.9	717.4	716.0	714.5
177.5°	720.3	721.0	720.9	719.7	718.6	717.4	716.2
180°	718.9	718.9	718.9	718.9	718.9	718.9	718.9

(END OF REPORT)