

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: P332991-830

Luminaire Tested: **SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332991-830
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: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

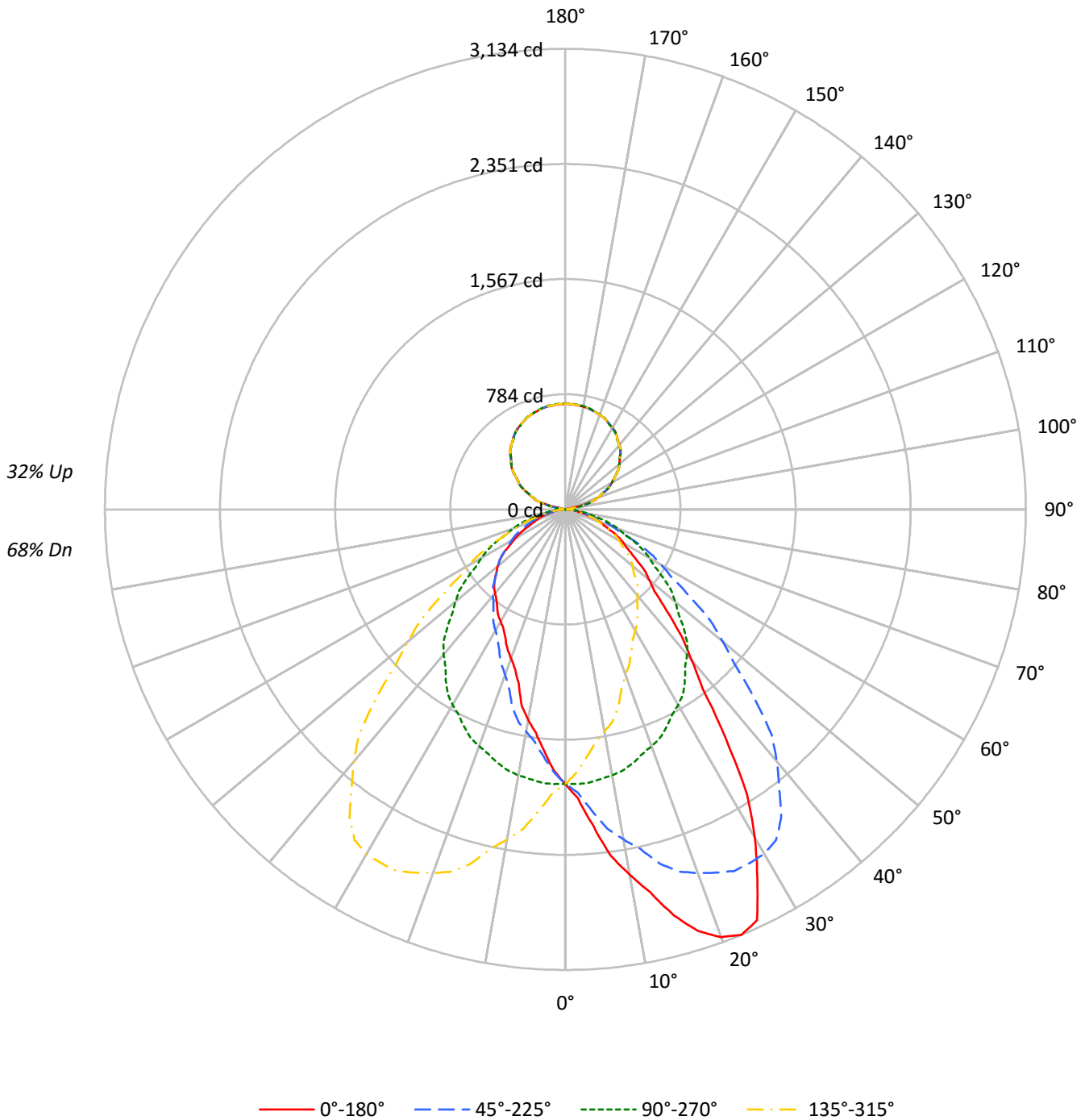
Lumens per Lamp: N/A
Luminaire Lumens: 6947.0 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68
1	102	98	95	91	97	93	90	87	83	80	78	74	72	70	65	64	63	59
2	94	87	81	75	88	82	77	72	73	69	66	65	62	60	58	56	54	50
3	86	77	69	64	81	73	66	61	65	60	56	58	54	51	52	49	46	43
4	79	68	60	54	74	65	58	52	58	53	48	52	48	44	47	43	40	37
5	73	61	53	47	69	58	51	45	53	47	42	47	43	39	43	39	36	33
6	67	55	47	41	63	53	45	40	48	42	37	43	38	34	39	35	32	29
7	62	50	42	37	59	48	40	35	43	37	33	39	34	31	36	31	28	26
8	58	46	38	33	55	44	36	32	40	34	29	36	31	27	33	29	25	23
9	54	42	34	29	51	40	33	28	37	31	27	33	28	25	30	26	23	21
10	51	39	31	26	48	37	30	26	34	28	24	31	26	23	28	24	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15079	15079	15079	15079
5°	17490	15124	13367	15124
10°	20690	15058	11931	15058
15°	23901	14919	10252	14919
20°	26611	14728	9271	14728
25°	27470	14539	8607	14539
30°	24047	14311	8207	14311
35°	18719	13973	7965	13973
40°	14037	13585	7835	13585
45°	11082	12965	7767	12965
50°	9357	12248	7542	12248
55°	8156	11461	7139	11461
60°	7338	10643	6318	10643
65°	6470	9761	5435	9761
70°	5828	8847	4902	8847
75°	4885	7842	4177	7842
80°	4128	6681	3919	6681
85°	3483	5233	3483	5233



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	2.6
10°-20°	545.9	7.9
20°-30°	853.8	12.3
30°-40°	949.2	13.7
40°-50°	842.2	12.1
50°-60°	656.2	9.4
60°-70°	429.6	6.2
70°-80°	211.3	3.0
80°-90°	54.2	0.8
90°-100°	24.6	0.4
100°-110°	156.8	2.3
110°-120°	299.9	4.3
120°-130°	380.7	5.5
130°-140°	407.3	5.9
140°-150°	380.9	5.5
150°-160°	307.1	4.4
160°-170°	198.1	2.9
170°-180°	68.3	1.0
0°-30°	1580.7	22.8
0°-40°	2529.9	36.4
0°-60°	4028.3	58.0
0°-90°	4723.4	68.0
90°-120°	481.2	6.9
90°-150°	1650.1	23.8
90°-180°	2224.0	32.0
0°-180°	6947.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1868	1868	1868	1868	1868	
5°	2158	1866	1650	1866	2158	218
15°	2860	1785	1227	1785	2860	813
25°	3084	1632	966	1632	3084	1368
35°	1899	1418	808	1418	1899	1191
45°	971	1136	680	1136	971	769
55°	580	814	507	814	580	527
65°	339	511	284	511	339	341
75°	157	251	134	251	157	172
85°	38	56	38	56	38	43
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	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1970.1	1975.6	1970.1	1969.5	1963.5	1961.7	1959.3	1951.4	1937.0	1928.6	1930.4
5°	2158.2	2177.1	2166.5	2165.0	2148.5	2131.9	2121.4	2097.3	2071.7	2054.5	2040.1
7.5°	2375.9	2386.7	2380.1	2369.6	2342.8	2327.6	2303.2	2271.4	2225.5	2190.5	2158.4
10°	2524.0	2533.0	2530.1	2510.5	2490.9	2451.0	2428.5	2384.1	2326.1	2280.2	2237.3
12.5°	2669.7	2679.4	2652.9	2653.7	2616.7	2585.3	2549.5	2493.6	2426.7	2367.5	2313.8
15°	2859.7	2847.6	2847.6	2832.5	2791.2	2747.5	2710.7	2651.9	2567.7	2496.9	2422.4
17.5°	3008.3	3012.6	3006.3	2970.9	2938.4	2893.2	2825.6	2757.1	2678.9	2583.9	2507.7
20°	3097.5	3097.5	3090.7	3066.6	3024.4	2976.3	2903.3	2828.8	2729.4	2633.8	2548.1
22.5°	3133.6	3135.9	3128.0	3108.1	3070.2	3023.2	2961.1	2885.4	2783.0	2675.4	2569.2
25°	3083.9	3098.2	3099.6	3094.5	3083.2	3054.5	3001.1	2923.6	2831.8	2715.2	2600.8
27.5°	2831.3	2849.4	2865.2	2891.2	2925.8	2943.9	2946.3	2906.9	2826.8	2714.5	2599.4
30°	2579.6	2594.7	2643.6	2707.6	2757.3	2802.5	2841.6	2852.1	2807.0	2706.1	2584.9
32.5°	2300.4	2320.8	2369.7	2438.5	2521.3	2597.7	2685.7	2730.5	2729.3	2668.8	2556.6
35°	1899.4	1914.5	1959.6	2031.8	2131.2	2244.9	2384.1	2492.4	2566.2	2560.9	2492.4
37.5°	1531.8	1548.9	1594.5	1654.4	1750.7	1891.4	2026.1	2175.4	2311.8	2388.4	2365.5
40°	1332.0	1332.8	1377.1	1438.9	1529.2	1651.8	1798.6	1964.1	2116.1	2240.3	2264.4
42.5°	1174.2	1174.4	1203.7	1270.3	1335.3	1450.8	1590.8	1755.2	1933.2	2076.5	2140.3
45°	970.7	977.5	1001.6	1041.5	1092.7	1190.5	1302.6	1455.4	1654.8	1824.9	1931.0
47.5°	822.1	832.0	847.3	879.9	920.7	985.8	1078.6	1215.8	1378.0	1565.1	1716.1
50°	745.0	746.5	766.1	784.1	819.5	871.5	952.7	1067.1	1216.1	1395.9	1563.8
52.5°	678.8	678.4	690.2	713.1	741.9	782.3	847.9	952.1	1084.2	1245.5	1418.7
55°	579.5	583.2	592.2	610.3	632.2	660.7	712.7	790.9	894.8	1032.5	1189.8
57.5°	503.9	505.9	512.9	520.6	540.6	561.4	600.4	654.7	742.3	855.1	1001.6
60°	454.5	455.2	457.5	468.8	484.7	504.2	530.6	576.5	650.2	753.3	869.2
62.5°	406.3	407.7	411.2	419.4	431.7	445.2	472.8	509.6	570.7	658.7	763.2
65°	338.7	339.4	344.7	347.7	357.4	369.5	389.8	414.6	456.8	530.6	609.5
67.5°	283.0	283.0	283.2	287.3	294.1	302.1	314.2	334.1	365.9	411.2	480.9
70°	246.9	246.9	248.4	250.6	254.4	261.1	267.9	283.0	306.3	343.2	396.6
72.5°	213.1	213.7	215.2	215.7	217.6	223.2	228.2	237.8	255.1	283.0	326.1
75°	156.6	158.8	162.6	165.6	169.3	168.5	173.8	179.8	185.1	201.7	226.5
77.5°	116.5	115.3	115.7	118.3	118.8	119.5	123.3	127.9	131.9	139.7	148.5
80°	88.8	88.8	91.0	91.8	91.0	91.8	95.6	97.8	99.3	102.4	110.7
82.5°	67.1	68.3	67.6	68.3	68.8	69.6	72.7	73.1	74.6	75.9	79.4
85°	37.6	38.4	39.1	37.6	37.6	37.6	39.1	39.9	41.4	40.6	42.1
87.5°	16.5	15.8	16.4	16.3	16.9	16.2	16.7	17.7	16.4	16.8	16.6
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



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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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1924.4	1916.0	1911.8	1902.1	1890.6	1884.6	1879.2	1871.4	1861.1	1850.3	1842.5
5°	2022.0	2004.0	1981.4	1954.4	1930.2	1907.0	1886.6	1866.3	1843.0	1818.9	1794.8
7.5°	2122.3	2086.8	2048.4	2004.0	1960.8	1921.6	1885.4	1850.8	1811.7	1776.6	1744.6
10°	2192.2	2144.0	2090.6	2034.1	1977.6	1928.7	1880.6	1836.9	1788.8	1745.9	1709.8
12.5°	2248.7	2192.2	2127.9	2057.6	1989.7	1930.5	1875.2	1818.3	1763.5	1717.0	1668.9
15°	2342.6	2265.1	2178.6	2094.3	2006.3	1925.7	1851.2	1785.0	1722.6	1657.1	1611.2
17.5°	2407.3	2315.3	2210.1	2108.8	2004.8	1909.8	1823.8	1745.0	1672.9	1606.1	1551.4
20°	2445.7	2344.1	2227.5	2112.3	1995.7	1894.1	1801.6	1714.3	1639.7	1567.5	1511.1
22.5°	2467.4	2354.9	2227.5	2107.0	1986.1	1876.0	1774.4	1683.6	1602.4	1530.2	1467.7
25°	2474.4	2353.9	2223.7	2085.3	1952.9	1836.2	1730.8	1632.2	1541.9	1469.7	1403.4
27.5°	2464.7	2322.9	2189.6	2047.5	1910.8	1787.9	1677.3	1573.7	1483.3	1405.7	1337.8
30°	2450.2	2298.2	2155.2	2007.8	1869.3	1751.1	1634.5	1535.2	1441.1	1360.6	1292.1
32.5°	2418.9	2268.1	2114.3	1963.2	1823.0	1701.2	1590.5	1490.6	1398.4	1316.1	1243.3
35°	2356.9	2204.1	2037.1	1882.1	1744.4	1618.0	1514.1	1417.8	1329.7	1241.7	1164.9
37.5°	2275.2	2119.1	1952.9	1783.2	1645.3	1526.0	1430.7	1340.3	1254.3	1173.9	1088.9
40°	2198.2	2056.0	1884.3	1715.8	1574.3	1459.2	1371.1	1289.1	1202.6	1122.8	1037.7
42.5°	2104.9	1983.7	1810.3	1641.2	1501.5	1390.5	1308.5	1228.3	1149.6	1072.2	983.5
45°	1949.1	1857.3	1694.7	1532.2	1391.5	1281.6	1206.4	1135.6	1066.3	992.6	909.1
47.5°	1770.6	1708.4	1568.1	1401.7	1271.5	1172.6	1099.9	1042.1	983.5	909.8	836.5
50°	1646.5	1606.7	1471.2	1319.2	1195.0	1104.0	1029.4	975.2	926.3	855.6	790.1
52.5°	1514.1	1492.9	1378.5	1233.1	1113.1	1023.9	960.3	911.4	862.0	803.2	742.0
55°	1312.4	1323.7	1226.6	1101.0	988.1	912.9	854.9	814.3	772.1	722.5	675.0
57.5°	1106.3	1147.5	1082.3	971.9	866.2	796.6	753.0	718.8	683.4	642.2	601.7
60°	982.8	1017.4	980.5	883.4	790.9	726.2	685.6	659.2	623.9	586.3	555.3
62.5°	862.4	899.5	877.6	799.2	713.2	657.6	621.7	597.2	570.9	538.1	506.1
65°	711.1	735.2	724.7	670.5	609.5	562.1	529.0	511.0	486.9	462.8	434.2
67.5°	544.7	591.2	585.0	556.3	503.6	466.6	444.9	429.0	407.0	389.1	369.7
70°	447.8	490.7	489.9	466.6	438.0	403.3	388.3	374.8	355.2	337.9	322.1
72.5°	366.5	405.8	411.6	393.7	374.2	348.0	333.6	324.2	305.2	293.3	280.5
75°	256.7	285.2	292.8	292.8	283.7	270.1	257.4	251.4	237.8	227.2	219.7
77.5°	168.2	186.3	198.0	200.8	202.2	197.7	187.1	182.9	172.5	168.7	161.5
80°	118.9	130.9	144.5	149.0	152.8	151.3	146.8	143.7	133.9	130.2	127.1
82.5°	82.2	88.8	99.9	109.9	108.8	112.7	108.8	106.4	99.1	97.6	94.6
85°	42.9	43.6	45.1	51.9	55.7	57.2	58.0	56.5	54.2	54.2	48.9
87.5°	16.4	15.6	16.7	16.4	16.8	18.9	20.5	20.8	19.2	17.7	16.1
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: P332991-830

CATALOG NUMBER: SA4XXRDIP-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: P332991-830
 CATALOG NUMBER: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1834.1	1828.1	1820.2	1811.2	1800.4	1790.7	1786.5	1790.2	1792.0	1787.2	1786.5
5°	1778.2	1759.4	1744.4	1721.8	1703.7	1688.7	1678.2	1673.7	1675.2	1663.1	1660.1
7.5°	1715.5	1693.2	1668.5	1641.7	1616.7	1594.6	1583.0	1576.7	1564.0	1558.5	1549.4
10°	1675.2	1645.0	1621.0	1589.3	1560.8	1534.5	1521.6	1511.1	1498.3	1492.2	1479.5
12.5°	1633.6	1598.6	1572.2	1539.4	1510.1	1478.5	1466.2	1446.7	1426.6	1414.0	1397.6
15°	1575.1	1533.0	1500.5	1461.4	1426.8	1390.7	1358.3	1322.2	1308.6	1280.1	1263.5
17.5°	1506.6	1463.9	1423.8	1371.3	1317.9	1273.0	1238.5	1203.9	1183.2	1164.9	1156.5
20°	1461.4	1422.3	1366.6	1305.6	1246.2	1196.6	1168.7	1146.1	1123.5	1110.8	1101.7
22.5°	1418.7	1368.7	1304.0	1238.2	1178.7	1139.9	1116.3	1093.2	1074.8	1062.6	1050.6
25°	1347.1	1281.6	1213.1	1137.8	1097.2	1063.4	1037.7	1018.9	1007.7	991.8	985.8
27.5°	1273.5	1194.1	1118.6	1068.0	1025.7	994.7	972.4	958.3	944.0	933.9	926.0
30°	1216.8	1136.3	1068.6	1020.4	977.5	952.0	933.9	917.4	906.1	897.8	891.7
32.5°	1160.8	1080.3	1023.4	971.7	937.8	912.9	893.5	881.2	872.3	861.7	858.0
35°	1079.9	1008.4	958.8	912.1	877.4	854.9	839.8	827.1	819.5	816.5	814.3
37.5°	1002.1	943.5	890.1	851.9	821.0	803.2	785.5	779.2	774.0	768.6	771.1
40°	952.7	897.8	850.4	809.7	784.9	765.3	754.8	747.2	742.7	742.7	742.7
42.5°	909.9	856.2	810.0	773.6	748.8	732.3	720.5	714.2	712.7	712.1	715.7
45°	843.6	793.9	747.2	717.2	696.1	679.6	672.8	667.5	667.5	670.5	671.3
47.5°	777.8	731.3	693.8	660.2	640.8	630.5	624.6	621.9	622.2	625.2	628.7
50°	737.4	691.5	654.7	624.6	606.5	596.7	591.4	590.0	591.4	591.4	596.7
52.5°	693.5	652.4	616.1	590.9	570.4	561.3	558.4	556.3	557.1	559.6	561.8
55°	629.1	592.2	557.6	533.6	518.5	512.5	505.7	506.4	504.9	506.4	506.4
57.5°	564.6	531.4	499.3	480.1	466.8	458.2	450.7	452.9	450.6	450.3	449.1
60°	523.0	486.9	461.3	444.0	429.0	421.4	414.6	416.1	413.9	412.4	409.3
62.5°	477.9	447.8	423.4	406.7	394.6	385.9	379.1	377.6	372.4	367.2	360.6
65°	412.4	387.6	365.7	350.0	338.7	331.9	326.6	322.1	310.8	298.8	292.8
67.5°	348.7	330.8	310.5	297.1	287.9	279.1	269.0	261.3	250.7	244.1	240.3
70°	307.7	290.5	273.1	260.3	250.6	242.3	231.0	225.7	218.2	215.2	211.5
72.5°	268.6	252.5	236.5	224.9	214.4	208.0	199.2	193.9	190.6	189.4	185.6
75°	209.2	196.4	184.4	173.8	165.6	161.1	157.3	153.5	152.0	145.2	141.5
77.5°	152.6	144.2	136.7	129.1	123.3	120.3	113.0	108.7	106.1	102.9	102.2
80°	118.9	112.9	105.4	100.9	92.6	89.5	86.5	85.8	85.0	84.3	83.5
82.5°	89.4	83.4	75.9	73.1	70.9	69.1	67.3	66.5	65.8	66.3	66.1
85°	45.1	42.1	42.1	41.4	40.6	39.9	39.1	39.1	38.4	39.1	38.4
87.5°	16.4	16.0	16.2	15.3	16.0	16.2	15.7	15.9	16.7	15.6	15.6
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: P332991-830

CATALOG NUMBER: SA4XXRDIP-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: P332991-830
 CATALOG NUMBER: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1782.9	1784.1	1779.9	1778.7	1779.9	1784.1	1782.9	1786.5	1787.2	1792.0	1790.2
5°	1654.1	1652.6	1648.8	1649.5	1648.8	1652.6	1654.1	1660.1	1663.1	1675.2	1673.7
7.5°	1543.9	1538.0	1539.6	1533.7	1539.6	1538.0	1543.9	1549.4	1558.5	1564.0	1576.7
10°	1476.5	1468.2	1461.4	1455.4	1461.4	1468.2	1476.5	1479.5	1492.2	1498.3	1511.1
12.5°	1384.4	1377.2	1368.1	1369.9	1368.1	1377.2	1384.4	1397.6	1414.0	1426.6	1446.7
15°	1253.7	1242.5	1224.4	1226.6	1224.4	1242.5	1253.7	1263.5	1280.1	1308.6	1322.2
17.5°	1143.1	1143.2	1135.0	1136.9	1135.0	1143.2	1143.1	1156.5	1164.9	1183.2	1203.9
20°	1085.9	1080.6	1081.4	1079.1	1081.4	1080.6	1085.9	1101.7	1110.8	1123.5	1146.1
22.5°	1046.1	1039.7	1034.4	1029.7	1034.4	1039.7	1046.1	1050.6	1062.6	1074.8	1093.2
25°	979.0	974.5	967.8	966.3	967.8	974.5	979.0	985.8	991.8	1007.7	1018.9
27.5°	920.0	919.2	916.4	912.9	916.4	919.2	920.0	926.0	933.9	944.0	958.3
30°	885.7	884.2	882.7	880.4	882.7	884.2	885.7	891.7	897.8	906.1	917.4
32.5°	855.1	854.1	852.6	852.8	852.6	854.1	855.1	858.0	861.7	872.3	881.2
35°	811.2	810.5	809.0	808.2	809.0	810.5	811.2	814.3	816.5	819.5	827.1
37.5°	770.3	772.2	771.4	771.2	771.4	772.2	770.3	771.1	768.6	774.0	779.2
40°	742.0	742.7	744.2	743.5	744.2	742.7	742.0	742.7	742.7	742.7	747.2
42.5°	718.5	718.7	720.8	718.2	720.8	718.7	718.5	715.7	712.1	712.7	714.2
45°	676.6	681.1	680.3	680.3	680.3	681.1	676.6	671.3	670.5	667.5	667.5
47.5°	630.7	634.5	635.6	635.5	635.6	634.5	630.7	628.7	625.2	622.2	621.9
50°	600.5	599.0	601.2	600.5	601.2	599.0	600.5	596.7	591.4	591.4	590.0
52.5°	563.8	564.1	563.9	563.2	563.9	564.1	563.8	561.8	559.6	557.1	556.3
55°	507.2	507.9	506.4	507.2	506.4	507.9	507.2	506.4	506.4	504.9	506.4
57.5°	445.8	442.1	443.7	441.9	443.7	442.1	445.8	449.1	450.3	450.6	452.9
60°	401.9	395.9	394.4	391.3	394.4	395.9	401.9	409.3	412.4	413.9	416.1
62.5°	352.5	348.3	343.2	345.5	343.2	348.3	352.5	360.6	367.2	372.4	377.6
65°	286.7	283.7	281.4	284.5	281.4	283.7	286.7	292.8	298.8	310.8	322.1
67.5°	237.3	235.7	235.7	234.2	235.7	235.7	237.3	240.3	244.1	250.7	261.3
70°	211.5	209.2	209.2	207.7	209.2	209.2	211.5	211.5	215.2	218.2	225.7
72.5°	184.9	182.8	183.3	182.4	183.3	182.8	184.9	185.6	189.4	190.6	193.9
75°	137.0	133.2	133.2	133.9	133.2	133.2	137.0	141.5	145.2	152.0	153.5
77.5°	102.2	101.4	102.5	101.1	102.5	101.4	102.2	102.2	102.9	106.1	108.7
80°	83.5	82.8	82.0	84.3	82.0	82.8	83.5	83.5	84.3	85.0	85.8
82.5°	64.8	64.8	64.6	67.4	64.6	64.8	64.8	66.1	66.3	65.8	66.5
85°	39.1	37.6	39.1	37.6	39.1	37.6	39.1	38.4	39.1	38.4	39.1
87.5°	17.0	16.4	15.8	16.5	15.8	16.4	17.0	15.6	15.6	16.7	15.9
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: P332991-830

CATALOG NUMBER: SA4XXRDIP-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: P332991-830

CATALOG NUMBER: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1786.5	1790.7	1800.4	1811.2	1820.2	1828.1	1834.1	1842.5	1850.3	1861.1	1871.4
5°	1678.2	1688.7	1703.7	1721.8	1744.4	1759.4	1778.2	1794.8	1818.9	1843.0	1866.3
7.5°	1583.0	1594.6	1616.7	1641.7	1668.5	1693.2	1715.5	1744.6	1776.6	1811.7	1850.8
10°	1521.6	1534.5	1560.8	1589.3	1621.0	1645.0	1675.2	1709.8	1745.9	1788.8	1836.9
12.5°	1466.2	1478.5	1510.1	1539.4	1572.2	1598.6	1633.6	1668.9	1717.0	1763.5	1818.3
15°	1358.3	1390.7	1426.8	1461.4	1500.5	1533.0	1575.1	1611.2	1657.1	1722.6	1785.0
17.5°	1238.5	1273.0	1317.9	1371.3	1423.8	1463.9	1506.6	1551.4	1606.1	1672.9	1745.0
20°	1168.7	1196.6	1246.2	1305.6	1366.6	1422.3	1461.4	1511.1	1567.5	1639.7	1714.3
22.5°	1116.3	1139.9	1178.7	1238.2	1304.0	1368.7	1418.7	1467.7	1530.2	1602.4	1683.6
25°	1037.7	1063.4	1097.2	1137.8	1213.1	1281.6	1347.1	1403.4	1469.7	1541.9	1632.2
27.5°	972.4	994.7	1025.7	1068.0	1118.6	1194.1	1273.5	1337.8	1405.7	1483.3	1573.7
30°	933.9	952.0	977.5	1020.4	1068.6	1136.3	1216.8	1292.1	1360.6	1441.1	1535.2
32.5°	893.5	912.9	937.8	971.7	1023.4	1080.3	1160.8	1243.3	1316.1	1398.4	1490.6
35°	839.8	854.9	877.4	912.1	958.8	1008.4	1079.9	1164.9	1241.7	1329.7	1417.8
37.5°	785.5	803.2	821.0	851.9	890.1	943.5	1002.1	1088.9	1173.9	1254.3	1340.3
40°	754.8	765.3	784.9	809.7	850.4	897.8	952.7	1037.7	1122.8	1202.6	1289.1
42.5°	720.5	732.3	748.8	773.6	810.0	856.2	909.9	983.5	1072.2	1149.6	1228.3
45°	672.8	679.6	696.1	717.2	747.2	793.9	843.6	909.1	992.6	1066.3	1135.6
47.5°	624.6	630.5	640.8	660.2	693.8	731.3	777.8	836.5	909.8	983.5	1042.1
50°	591.4	596.7	606.5	624.6	654.7	691.5	737.4	790.1	855.6	926.3	975.2
52.5°	558.4	561.3	570.4	590.9	616.1	652.4	693.5	742.0	803.2	862.0	911.4
55°	505.7	512.5	518.5	533.6	557.6	592.2	629.1	675.0	722.5	772.1	814.3
57.5°	450.7	458.2	466.8	480.1	499.3	531.4	564.6	601.7	642.2	683.4	718.8
60°	414.6	421.4	429.0	444.0	461.3	486.9	523.0	555.3	586.3	623.9	659.2
62.5°	379.1	385.9	394.6	406.7	423.4	447.8	477.9	506.1	538.1	570.9	597.2
65°	326.6	331.9	338.7	350.0	365.7	387.6	412.4	434.2	462.8	486.9	511.0
67.5°	269.0	279.1	287.9	297.1	310.5	330.8	348.7	369.7	389.1	407.0	429.0
70°	231.0	242.3	250.6	260.3	273.1	290.5	307.7	322.1	337.9	355.2	374.8
72.5°	199.2	208.0	214.4	224.9	236.5	252.5	268.6	280.5	293.3	305.2	324.2
75°	157.3	161.1	165.6	173.8	184.4	196.4	209.2	219.7	227.2	237.8	251.4
77.5°	113.0	120.3	123.3	129.1	136.7	144.2	152.6	161.5	168.7	172.5	182.9
80°	86.5	89.5	92.6	100.9	105.4	112.9	118.9	127.1	130.2	133.9	143.7
82.5°	67.3	69.1	70.9	73.1	75.9	83.4	89.4	94.6	97.6	99.1	106.4
85°	39.1	39.9	40.6	41.4	42.1	42.1	45.1	48.9	54.2	54.2	56.5
87.5°	15.7	16.2	16.0	15.3	16.2	16.0	16.4	16.1	17.7	19.2	20.8
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: P332991-830

CATALOG NUMBER: SA4XXRDIP-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: P332991-830

CATALOG NUMBER: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1879.2	1884.6	1890.6	1902.1	1911.8	1916.0	1924.4	1930.4	1928.6	1937.0	1951.4
5°	1886.6	1907.0	1930.2	1954.4	1981.4	2004.0	2022.0	2040.1	2054.5	2071.7	2097.3
7.5°	1885.4	1921.6	1960.8	2004.0	2048.4	2086.8	2122.3	2158.4	2190.5	2225.5	2271.4
10°	1880.6	1928.7	1977.6	2034.1	2090.6	2144.0	2192.2	2237.3	2280.2	2326.1	2384.1
12.5°	1875.2	1930.5	1989.7	2057.6	2127.9	2192.2	2248.7	2313.8	2367.5	2426.7	2493.6
15°	1851.2	1925.7	2006.3	2094.3	2178.6	2265.1	2342.6	2422.4	2496.9	2567.7	2651.9
17.5°	1823.8	1909.8	2004.8	2108.8	2210.1	2315.3	2407.3	2507.7	2583.9	2678.9	2757.1
20°	1801.6	1894.1	1995.7	2112.3	2227.5	2344.1	2445.7	2548.1	2633.8	2729.4	2828.8
22.5°	1774.4	1876.0	1986.1	2107.0	2227.5	2354.9	2467.4	2569.2	2675.4	2783.0	2885.4
25°	1730.8	1836.2	1952.9	2085.3	2223.7	2353.9	2474.4	2600.8	2715.2	2831.8	2923.6
27.5°	1677.3	1787.9	1910.8	2047.5	2189.6	2322.9	2464.7	2599.4	2714.5	2826.8	2906.9
30°	1634.5	1751.1	1869.3	2007.8	2155.2	2298.2	2450.2	2584.9	2706.1	2807.0	2852.1
32.5°	1590.5	1701.2	1823.0	1963.2	2114.3	2268.1	2418.9	2556.6	2668.8	2729.3	2730.5
35°	1514.1	1618.0	1744.4	1882.1	2037.1	2204.1	2356.9	2492.4	2560.9	2566.2	2492.4
37.5°	1430.7	1526.0	1645.3	1783.2	1952.9	2119.1	2275.2	2365.5	2388.4	2311.8	2175.4
40°	1371.1	1459.2	1574.3	1715.8	1884.3	2056.0	2198.2	2264.4	2240.3	2116.1	1964.1
42.5°	1308.5	1390.5	1501.5	1641.2	1810.3	1983.7	2104.9	2140.3	2076.5	1933.2	1755.2
45°	1206.4	1281.6	1391.5	1532.2	1694.7	1857.3	1949.1	1931.0	1824.9	1654.8	1455.4
47.5°	1099.9	1172.6	1271.5	1401.7	1568.1	1708.4	1770.6	1716.1	1565.1	1378.0	1215.8
50°	1029.4	1104.0	1195.0	1319.2	1471.2	1606.7	1646.5	1563.8	1395.9	1216.1	1067.1
52.5°	960.3	1023.9	1113.1	1233.1	1378.5	1492.9	1514.1	1418.7	1245.5	1084.2	952.1
55°	854.9	912.9	988.1	1101.0	1226.6	1323.7	1312.4	1189.8	1032.5	894.8	790.9
57.5°	753.0	796.6	866.2	971.9	1082.3	1147.5	1106.3	1001.6	855.1	742.3	654.7
60°	685.6	726.2	790.9	883.4	980.5	1017.4	982.8	869.2	753.3	650.2	576.5
62.5°	621.7	657.6	713.2	799.2	877.6	899.5	862.4	763.2	658.7	570.7	509.6
65°	529.0	562.1	609.5	670.5	724.7	735.2	711.1	609.5	530.6	456.8	414.6
67.5°	444.9	466.6	503.6	556.3	585.0	591.2	544.7	480.9	411.2	365.9	334.1
70°	388.3	403.3	438.0	466.6	489.9	490.7	447.8	396.6	343.2	306.3	283.0
72.5°	333.6	348.0	374.2	393.7	411.6	405.8	366.5	326.1	283.0	255.1	237.8
75°	257.4	270.1	283.7	292.8	292.8	285.2	256.7	226.5	201.7	185.1	179.8
77.5°	187.1	197.7	202.2	200.8	198.0	186.3	168.2	148.5	139.7	131.9	127.9
80°	146.8	151.3	152.8	149.0	144.5	130.9	118.9	110.7	102.4	99.3	97.8
82.5°	108.8	112.7	108.8	109.9	99.9	88.8	82.2	79.4	75.9	74.6	73.1
85°	58.0	57.2	55.7	51.9	45.1	43.6	42.9	42.1	40.6	41.4	39.9
87.5°	20.5	18.9	16.8	16.4	16.7	15.6	16.4	16.6	16.8	16.4	17.7
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



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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



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1959.3	1961.7	1963.5	1969.5	1970.1	1975.6	1970.1
5°	2121.4	2131.9	2148.5	2165.0	2166.5	2177.1	2158.2
7.5°	2303.2	2327.6	2342.8	2369.6	2380.1	2386.7	2375.9
10°	2428.5	2451.0	2490.9	2510.5	2530.1	2533.0	2524.0
12.5°	2549.5	2585.3	2616.7	2653.7	2652.9	2679.4	2669.7
15°	2710.7	2747.5	2791.2	2832.5	2847.6	2847.6	2859.7
17.5°	2825.6	2893.2	2938.4	2970.9	3006.3	3012.6	3008.3
20°	2903.3	2976.3	3024.4	3066.6	3090.7	3097.5	3097.5
22.5°	2961.1	3023.2	3070.2	3108.1	3128.0	3135.9	3133.6
25°	3001.1	3054.5	3083.2	3094.5	3099.6	3098.2	3083.9
27.5°	2946.3	2943.9	2925.8	2891.2	2865.2	2849.4	2831.3
30°	2841.6	2802.5	2757.3	2707.6	2643.6	2594.7	2579.6
32.5°	2685.7	2597.7	2521.3	2438.5	2369.7	2320.8	2300.4
35°	2384.1	2244.9	2131.2	2031.8	1959.6	1914.5	1899.4
37.5°	2026.1	1891.4	1750.7	1654.4	1594.5	1548.9	1531.8
40°	1798.6	1651.8	1529.2	1438.9	1377.1	1332.8	1332.0
42.5°	1590.8	1450.8	1335.3	1270.3	1203.7	1174.4	1174.2
45°	1302.6	1190.5	1092.7	1041.5	1001.6	977.5	970.7
47.5°	1078.6	985.8	920.7	879.9	847.3	832.0	822.1
50°	952.7	871.5	819.5	784.1	766.1	746.5	745.0
52.5°	847.9	782.3	741.9	713.1	690.2	678.4	678.8
55°	712.7	660.7	632.2	610.3	592.2	583.2	579.5
57.5°	600.4	561.4	540.6	520.6	512.9	505.9	503.9
60°	530.6	504.2	484.7	468.8	457.5	455.2	454.5
62.5°	472.8	445.2	431.7	419.4	411.2	407.7	406.3
65°	389.8	369.5	357.4	347.7	344.7	339.4	338.7
67.5°	314.2	302.1	294.1	287.3	283.2	283.0	283.0
70°	267.9	261.1	254.4	250.6	248.4	246.9	246.9
72.5°	228.2	223.2	217.6	215.7	215.2	213.7	213.1
75°	173.8	168.5	169.3	165.6	162.6	158.8	156.6
77.5°	123.3	119.5	118.8	118.3	115.7	115.3	116.5
80°	95.6	91.8	91.0	91.8	91.0	88.8	88.8
82.5°	72.7	69.6	68.8	68.3	67.6	68.3	67.1
85°	39.1	37.6	37.6	37.6	39.1	38.4	37.6
87.5°	16.7	16.2	16.9	16.3	16.4	15.8	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



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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)