

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: P332991-840

Luminaire Tested: **SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332991-840
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-C1195D590U840-4F0-1E-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

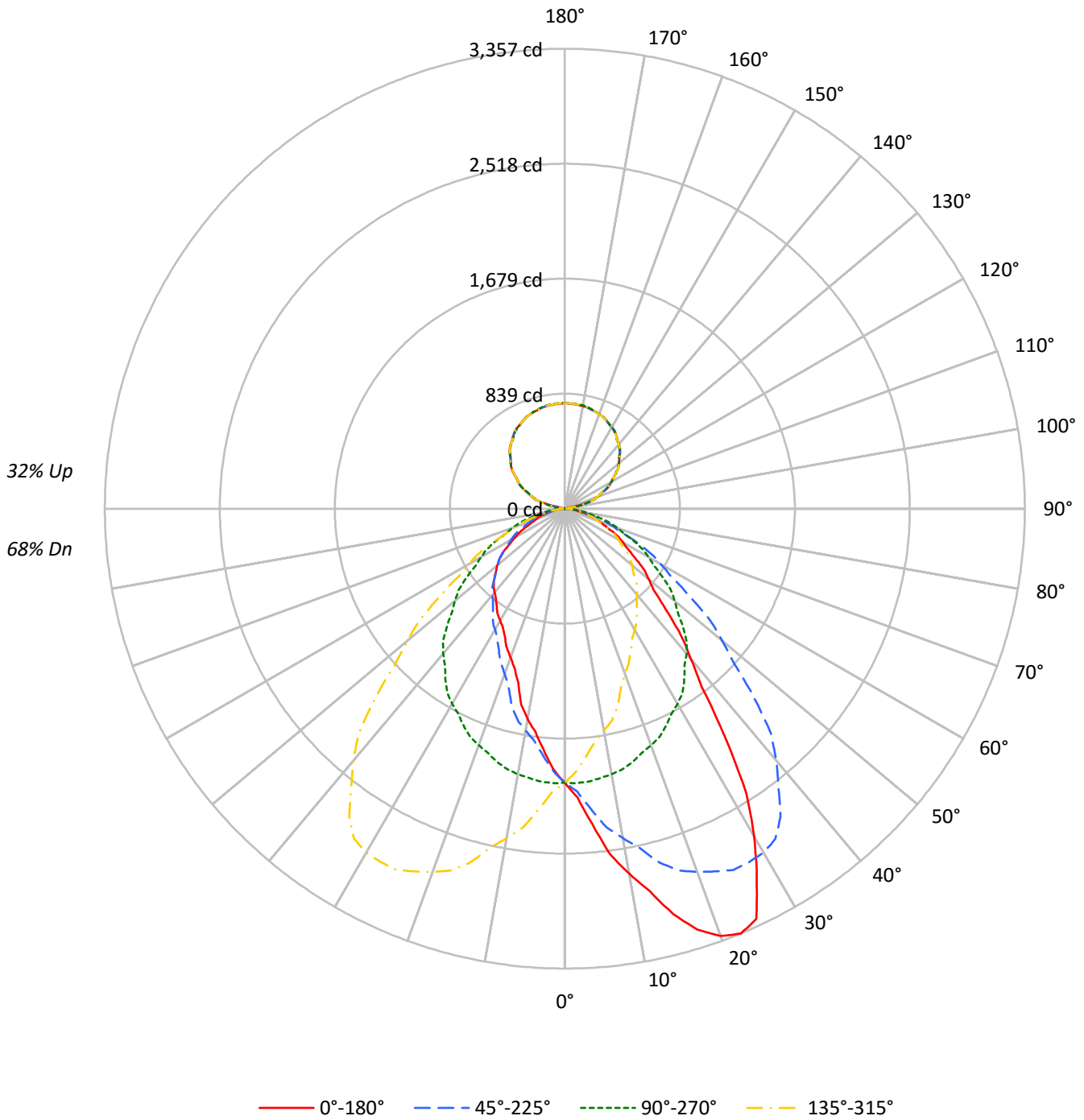
Lumens per Lamp: N/A
Luminaire Lumens: 7443.2 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

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	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	36	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°	16156	16156	16156	16156
5°	18739	16204	14323	16204
10°	22168	16133	12782	16133
15°	25607	15984	10984	15984
20°	28511	15779	9933	15779
25°	29432	15577	9222	15577
30°	25765	15333	8793	15333
35°	20056	14970	8535	14970
40°	15039	14556	8395	14556
45°	11875	13891	8322	13891
50°	10025	13123	8081	13123
55°	8739	12279	7648	12279
60°	7863	11404	6770	11404
65°	6930	10457	5822	10457
70°	6243	9477	5254	9477
75°	5231	8400	4476	8400
80°	4421	7159	4198	7159
85°	3733	5604	3733	5604



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.9	2.6
10°-20°	584.9	7.9
20°-30°	914.8	12.3
30°-40°	1017.0	13.7
40°-50°	902.3	12.1
50°-60°	703.1	9.4
60°-70°	460.3	6.2
70°-80°	226.4	3.0
80°-90°	58.1	0.8
90°-100°	26.3	0.4
100°-110°	168.0	2.3
110°-120°	321.3	4.3
120°-130°	407.9	5.5
130°-140°	436.4	5.9
140°-150°	408.1	5.5
150°-160°	329.1	4.4
160°-170°	212.2	2.9
170°-180°	73.2	1.0
0°-30°	1693.6	22.8
0°-40°	2710.6	36.4
0°-60°	4316.0	58.0
0°-90°	5060.8	68.0
90°-120°	515.6	6.9
90°-150°	1767.9	23.8
90°-180°	2382.0	32.0
0°-180°	7443.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2001	2001	2001	2001	2001	
5°	2312	2000	1767	2000	2312	234
15°	3064	1912	1314	1912	3064	871
25°	3304	1749	1035	1749	3304	1466
35°	2035	1519	866	1519	2035	1276
45°	1040	1217	729	1217	1040	824
55°	621	872	543	872	621	565
65°	363	547	305	547	363	365
75°	168	269	144	269	168	185
85°	40	60	40	60	40	46
90°	17	2	17	2	17	9
95°	17	32	17	32	17	13
105°	164	173	164	173	164	143
115°	326	324	326	324	326	323
125°	459	455	459	455	459	408
135°	569	564	569	564	569	438
145°	654	651	654	651	654	409
155°	713	714	713	714	713	329
165°	749	753	749	753	749	212
175°	766	770	766	770	766	73
180°	770	770	770	770	770	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2110.8	2116.7	2110.8	2110.2	2103.8	2101.8	2099.2	2090.8	2075.4	2066.4	2068.3
5°	2312.4	2332.6	2321.3	2319.7	2302.0	2284.2	2272.9	2247.2	2219.7	2201.2	2185.9
7.5°	2545.6	2557.2	2550.1	2538.8	2510.1	2493.9	2467.7	2433.7	2384.5	2346.9	2312.6
10°	2704.3	2713.9	2710.8	2689.8	2668.8	2626.1	2601.9	2554.4	2492.2	2443.1	2397.1
12.5°	2860.3	2870.7	2842.4	2843.3	2803.6	2770.0	2731.6	2671.7	2600.0	2536.6	2479.0
15°	3063.9	3051.0	3051.0	3034.8	2990.5	2943.8	2904.3	2841.4	2751.1	2675.2	2595.5
17.5°	3223.2	3227.7	3221.1	3183.1	3148.3	3099.9	3027.5	2954.1	2870.2	2768.4	2686.8
20°	3318.7	3318.7	3311.4	3285.6	3240.5	3188.9	3110.7	3030.8	2924.4	2822.0	2730.1
22.5°	3357.4	3359.9	3351.4	3330.1	3289.5	3239.1	3172.6	3091.5	2981.8	2866.5	2752.7
25°	3304.2	3319.5	3321.0	3315.5	3303.4	3272.7	3215.5	3132.4	3034.0	2909.1	2786.5
27.5°	3033.5	3052.9	3069.9	3097.8	3134.8	3154.2	3156.7	3114.5	3028.7	2908.4	2785.1
30°	2763.9	2780.1	2832.5	2901.0	2954.3	3002.6	3044.5	3055.9	3007.5	2899.4	2769.6
32.5°	2464.7	2486.6	2539.0	2612.7	2701.4	2783.3	2877.5	2925.5	2924.3	2859.4	2739.3
35°	2035.1	2051.2	2099.6	2177.0	2283.4	2405.2	2554.4	2670.4	2749.5	2743.8	2670.4
37.5°	1641.2	1659.5	1708.4	1772.5	1875.7	2026.5	2170.8	2330.8	2476.9	2559.0	2534.5
40°	1427.1	1427.9	1475.5	1541.7	1638.4	1769.8	1927.0	2104.4	2267.2	2400.3	2426.1
42.5°	1258.1	1258.3	1289.7	1361.0	1430.7	1554.4	1704.5	1880.6	2071.2	2224.8	2293.2
45°	1040.1	1047.3	1073.2	1115.9	1170.7	1275.6	1395.6	1559.3	1773.0	1955.2	2068.9
47.5°	880.8	891.4	907.9	942.7	986.4	1056.2	1155.6	1302.6	1476.4	1676.9	1838.7
50°	798.2	799.8	820.8	840.1	878.1	933.7	1020.8	1143.3	1302.9	1495.6	1675.5
52.5°	727.3	726.9	739.5	764.1	794.9	838.2	908.5	1020.1	1161.6	1334.4	1520.0
55°	620.9	624.9	634.5	653.9	677.3	707.9	763.6	847.4	958.7	1106.2	1274.8
57.5°	539.9	542.0	549.6	557.7	579.3	601.5	643.3	701.5	795.4	916.1	1073.2
60°	487.0	487.8	490.2	502.3	519.3	540.2	568.5	617.6	696.6	807.1	931.3
62.5°	435.4	436.9	440.6	449.4	462.5	477.0	506.5	546.0	611.5	705.8	817.7
65°	362.8	363.7	369.3	372.5	382.9	395.9	417.7	444.2	489.4	568.5	653.1
67.5°	303.2	303.2	303.5	307.8	315.1	323.7	336.7	358.0	392.0	440.6	515.2
70°	264.5	264.5	266.1	268.5	272.6	279.7	287.0	303.2	328.2	367.7	425.0
72.5°	228.3	228.9	230.6	231.1	233.2	239.1	244.5	254.8	273.4	303.2	349.4
75°	167.7	170.2	174.2	177.4	181.4	180.6	186.2	192.7	198.3	216.1	242.7
77.5°	124.8	123.5	124.0	126.7	127.2	128.1	132.1	137.0	141.3	149.7	159.2
80°	95.1	95.1	97.6	98.4	97.6	98.4	102.4	104.8	106.4	109.7	118.6
82.5°	71.9	73.2	72.4	73.2	73.7	74.5	77.9	78.4	80.0	81.3	85.0
85°	40.3	41.1	41.9	40.3	40.3	40.3	41.9	42.7	44.3	43.5	45.1
87.5°	17.7	17.0	17.6	17.5	18.1	17.4	17.9	19.0	17.6	18.0	17.8
90°	17.3	17.1	16.8	16.6	16.3	15.8	14.9	14.2	13.4	12.6	11.6
92.5°	15.9	15.9	15.8	15.8	15.7	15.2	14.5	13.7	13.0	12.2	11.2
95°	16.7	16.6	16.5	16.4	16.2	15.8	14.9	14.2	13.4	12.6	12.5
97.5°	16.2	16.0	15.9	15.8	15.7	15.6	15.5	15.3	15.2	15.2	29.5
100°	16.2	16.0	15.9	15.8	15.7	16.7	18.8	21.0	23.1	25.3	43.0
102.5°	16.6	16.6	16.6	16.6	16.5	28.2	51.7	75.1	98.7	122.1	124.4
105°	164.2	168.7	173.4	178.0	182.6	184.3	183.2	182.1	180.9	179.8	179.0
107.5°	228.8	228.3	227.8	227.3	226.8	226.3	225.8	225.2	224.7	224.1	223.2
110°	256.9	256.5	256.1	255.8	255.4	255.1	254.8	254.6	254.3	254.1	253.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	285.0	284.6	284.1	283.6	283.1	282.9	283.0	283.0	283.1	283.1	282.8
115°	326.1	326.1	326.1	326.1	326.1	325.9	325.7	325.4	325.2	324.9	325.0
117.5°	367.8	367.8	367.9	367.9	368.0	368.0	368.1	368.1	368.2	368.2	367.9
120°	394.0	394.3	394.6	394.8	395.1	395.1	394.8	394.6	394.3	394.0	394.2
122.5°	419.8	420.1	420.3	420.6	420.8	420.9	420.7	420.6	420.4	420.3	420.1
125°	458.6	458.4	458.3	458.2	458.1	457.8	457.4	457.0	456.7	456.3	456.5
127.5°	492.5	492.6	492.7	492.8	492.9	493.0	493.1	493.2	493.2	493.3	492.7
130°	515.5	515.5	515.5	515.5	515.5	515.5	515.3	515.2	515.1	515.0	514.6
132.5°	536.7	536.8	536.9	537.0	537.1	537.1	537.0	536.9	536.7	536.6	536.1
135°	568.6	568.4	568.0	567.7	567.5	567.2	567.0	566.7	566.5	566.2	565.7
137.5°	595.7	595.8	595.9	596.0	596.0	595.9	595.7	595.4	595.1	594.8	594.3
140°	614.6	614.5	614.4	614.3	614.1	613.9	613.5	613.1	612.7	612.4	612.1
142.5°	630.4	630.3	630.3	630.3	630.3	630.1	629.8	629.4	629.2	628.9	628.7
145°	654.4	654.2	653.9	653.6	653.4	653.2	653.1	652.9	652.8	652.7	652.7
147.5°	674.3	674.2	674.1	674.0	673.8	673.7	673.6	673.5	673.4	673.3	673.4
150°	687.2	687.1	687.0	686.8	686.7	686.6	686.6	686.6	686.6	686.6	686.8
152.5°	698.3	698.3	698.4	698.5	698.6	698.5	698.3	698.1	697.9	697.7	697.9
155°	713.2	713.6	713.9	714.3	714.7	714.6	714.1	713.6	713.1	712.6	713.0
157.5°	725.6	726.3	726.9	727.6	728.2	728.2	727.6	726.9	726.3	725.6	726.0
160°	733.9	734.7	735.4	736.2	737.0	737.0	736.2	735.4	734.7	733.9	734.0
162.5°	740.3	741.2	742.0	743.0	743.9	743.9	743.1	742.4	741.5	740.8	740.9
165°	749.4	750.6	751.7	752.9	754.1	754.2	753.1	752.0	751.0	750.0	750.0
167.5°	756.3	757.5	758.8	760.1	761.3	761.4	760.3	759.2	758.1	756.9	757.0
170°	760.4	761.6	763.0	764.3	765.5	765.7	764.6	763.6	762.5	761.5	761.4
172.5°	762.7	764.1	765.5	766.9	768.2	768.4	767.4	766.4	765.4	764.3	764.2
175°	765.6	767.1	768.6	770.2	771.7	771.9	770.7	769.6	768.4	767.3	767.2
177.5°	767.4	768.6	769.9	771.1	772.3	772.5	771.7	770.9	770.1	769.2	769.0
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2061.8	2052.9	2048.3	2038.0	2025.7	2019.2	2013.5	2005.1	1994.1	1982.5	1974.1
5°	2166.5	2147.2	2122.9	2094.0	2068.1	2043.2	2021.3	1999.6	1974.6	1948.8	1923.0
7.5°	2273.9	2235.8	2194.7	2147.2	2100.8	2058.8	2020.0	1983.0	1941.1	1903.5	1869.3
10°	2348.7	2297.1	2239.9	2179.4	2118.9	2066.5	2014.9	1968.1	1916.5	1870.6	1831.9
12.5°	2409.3	2348.7	2279.9	2204.5	2131.8	2068.4	2009.1	1948.1	1889.5	1839.7	1788.1
15°	2509.9	2426.9	2334.2	2243.9	2149.6	2063.3	1983.5	1912.5	1845.6	1775.4	1726.3
17.5°	2579.2	2480.6	2367.9	2259.4	2148.0	2046.2	1954.1	1869.7	1792.4	1720.8	1662.2
20°	2620.4	2511.5	2386.6	2263.2	2138.3	2029.4	1930.3	1836.7	1756.9	1679.5	1619.0
22.5°	2643.6	2523.1	2386.6	2257.5	2128.0	2010.0	1901.2	1803.8	1716.9	1639.5	1572.6
25°	2651.1	2522.0	2382.6	2234.2	2092.3	1967.3	1854.4	1748.8	1652.0	1574.7	1503.7
27.5°	2640.8	2488.8	2346.0	2193.7	2047.3	1915.6	1797.1	1686.1	1589.2	1506.1	1433.4
30°	2625.2	2462.4	2309.2	2151.2	2002.8	1876.2	1751.2	1644.9	1544.1	1457.7	1384.4
32.5°	2591.7	2430.1	2265.3	2103.4	1953.2	1822.7	1704.1	1597.1	1498.2	1410.1	1332.1
35°	2525.3	2361.6	2182.6	2016.5	1869.0	1733.5	1622.2	1519.0	1424.7	1330.4	1248.1
37.5°	2437.7	2270.5	2092.4	1910.6	1762.8	1635.0	1532.9	1436.0	1343.9	1257.8	1166.7
40°	2355.2	2202.8	2018.9	1838.4	1686.8	1563.4	1469.1	1381.2	1288.5	1203.0	1111.9
42.5°	2255.2	2125.4	1939.6	1758.4	1608.7	1489.9	1402.0	1316.1	1231.7	1148.8	1053.8
45°	2088.3	1989.9	1815.7	1641.6	1490.9	1373.1	1292.5	1216.7	1142.5	1063.5	974.0
47.5°	1897.0	1830.4	1680.1	1501.8	1362.3	1256.4	1178.5	1116.5	1053.8	974.8	896.3
50°	1764.1	1721.4	1576.3	1413.4	1280.4	1182.9	1103.0	1044.9	992.5	916.8	846.6
52.5°	1622.2	1599.5	1476.9	1321.2	1192.7	1097.0	1028.9	976.5	923.5	860.6	795.0
55°	1406.1	1418.3	1314.2	1179.6	1058.6	978.1	915.9	872.4	827.3	774.1	723.3
57.5°	1185.3	1229.4	1159.6	1041.4	928.1	853.5	806.8	770.1	732.3	688.1	644.7
60°	1053.0	1090.0	1050.6	946.5	847.4	778.1	734.6	706.3	668.4	628.1	595.0
62.5°	924.0	963.7	940.3	856.3	764.2	704.6	666.1	639.9	611.7	576.5	542.2
65°	761.9	787.7	776.5	718.4	653.1	602.3	566.8	547.4	521.7	495.8	465.2
67.5°	583.6	633.4	626.8	596.0	539.6	499.9	476.7	459.6	436.1	416.9	396.1
70°	479.8	525.7	524.9	499.9	469.3	432.1	416.1	401.5	380.5	362.0	345.1
72.5°	392.6	434.7	441.0	421.8	400.9	372.8	357.4	347.4	327.0	314.3	300.5
75°	275.0	305.6	313.7	313.7	304.0	289.4	275.8	269.3	254.8	243.5	235.4
77.5°	180.3	199.7	212.2	215.1	216.6	211.8	200.5	195.9	184.8	180.8	173.0
80°	127.3	140.3	154.8	159.7	163.7	162.1	157.2	154.0	143.5	139.5	136.2
82.5°	88.1	95.1	107.0	117.8	116.5	120.8	116.5	114.0	106.1	104.6	101.4
85°	45.9	46.8	48.4	55.6	59.7	61.3	62.1	60.5	58.1	58.1	52.4
87.5°	17.6	16.8	17.9	17.6	18.0	20.3	21.9	22.3	20.6	19.0	17.3
90°	10.6	9.6	8.6	7.4	6.0	4.5	3.1	1.7	3.1	4.5	6.0
92.5°	10.2	9.2	8.1	7.6	7.5	7.4	7.4	7.3	7.4	7.4	7.5
95°	12.4	12.3	12.1	14.2	18.6	23.0	27.4	31.7	27.4	23.0	18.6
97.5°	43.8	58.1	72.3	78.2	75.4	72.7	70.0	67.3	70.0	72.7	75.4
100°	60.7	78.4	96.0	103.7	101.4	99.1	96.7	94.4	96.7	99.1	101.4
102.5°	126.7	129.1	131.4	131.7	130.0	128.3	126.5	124.9	126.5	128.3	130.0
105°	178.4	177.8	177.1	176.4	175.7	174.9	174.2	173.4	174.2	174.9	175.7
107.5°	222.4	221.5	220.6	219.9	219.5	219.2	218.8	218.4	218.8	219.2	219.5
110°	252.5	251.8	251.0	250.3	250.0	249.6	249.2	248.8	249.2	249.6	250.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	282.4	282.0	281.7	281.1	280.4	279.7	279.0	278.3	279.0	279.7	280.4
115°	325.2	325.3	325.4	325.3	324.9	324.5	324.2	323.8	324.2	324.5	324.9
117.5°	367.7	367.4	367.1	366.7	366.2	365.7	365.2	364.7	365.2	365.7	366.2
120°	394.3	394.5	394.6	394.4	393.8	393.3	392.8	392.3	392.8	393.3	393.8
122.5°	419.9	419.8	419.6	419.3	419.0	418.7	418.4	418.1	418.4	418.7	419.0
125°	456.8	457.0	457.3	457.2	456.7	456.2	455.6	455.0	455.6	456.2	456.7
127.5°	492.1	491.6	491.0	490.6	490.5	490.4	490.2	490.1	490.2	490.4	490.5
130°	514.2	513.8	513.4	513.2	513.1	512.9	512.8	512.7	512.8	512.9	513.1
132.5°	535.6	535.2	534.7	534.3	534.1	533.9	533.6	533.4	533.6	533.9	534.1
135°	565.2	564.7	564.2	564.0	564.1	564.3	564.4	564.5	564.4	564.3	564.1
137.5°	593.7	593.1	592.6	592.3	592.2	592.2	592.1	592.1	592.1	592.2	592.2
140°	611.9	611.6	611.3	611.1	610.8	610.6	610.3	610.1	610.3	610.6	610.8
142.5°	628.6	628.4	628.3	628.0	627.5	627.1	626.6	626.2	626.6	627.1	627.5
145°	652.7	652.7	652.7	652.5	652.1	651.7	651.4	651.0	651.4	651.7	652.1
147.5°	673.6	673.7	673.8	673.5	672.8	672.1	671.4	670.7	671.4	672.1	672.8
150°	686.9	687.0	687.2	687.0	686.5	686.0	685.4	684.9	685.4	686.0	686.5
152.5°	698.2	698.4	698.6	698.5	698.1	697.7	697.3	696.9	697.3	697.7	698.1
155°	713.4	713.8	714.1	714.3	714.1	714.0	713.9	713.8	713.9	714.0	714.1
157.5°	726.5	726.9	727.3	727.6	727.7	727.7	727.8	727.9	727.8	727.7	727.7
160°	734.2	734.3	734.4	734.7	735.1	735.4	735.8	736.2	735.8	735.4	735.1
162.5°	741.0	741.1	741.3	741.6	742.1	742.6	743.1	743.6	743.1	742.6	742.1
165°	750.0	750.0	750.0	750.3	750.9	751.6	752.2	752.9	752.2	751.6	750.9
167.5°	757.1	757.2	757.2	757.6	758.3	758.9	759.6	760.2	759.6	758.9	758.3
170°	761.2	761.1	761.0	761.3	762.1	762.9	763.7	764.5	763.7	762.9	762.1
172.5°	764.1	764.0	763.8	764.2	764.9	765.7	766.4	767.2	766.4	765.7	764.9
175°	767.1	766.9	766.8	767.1	767.9	768.6	769.4	770.2	769.4	768.6	767.9
177.5°	768.8	768.6	768.4	768.7	769.4	770.1	770.8	771.5	770.8	770.1	769.4
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2



TEST NUMBER: P332991-840

CATALOG NUMBER: SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	1965.1	1958.6	1950.3	1940.6	1928.9	1918.6	1914.1	1918.0	1920.0	1914.8	1914.1
5°	1905.2	1885.1	1869.0	1844.8	1825.4	1809.3	1798.1	1793.2	1794.8	1781.9	1778.7
7.5°	1838.1	1814.1	1787.7	1759.0	1732.2	1708.5	1696.1	1689.3	1675.7	1669.8	1660.0
10°	1794.8	1762.5	1736.8	1702.8	1672.2	1644.1	1630.3	1619.0	1605.3	1598.8	1585.2
12.5°	1750.3	1712.8	1684.5	1649.3	1618.0	1584.1	1570.9	1550.0	1528.5	1515.0	1497.4
15°	1687.6	1642.4	1607.7	1565.8	1528.7	1490.1	1455.3	1416.6	1402.1	1371.5	1353.7
17.5°	1614.2	1568.4	1525.5	1469.3	1412.0	1363.9	1327.0	1289.9	1267.7	1248.1	1239.1
20°	1565.8	1523.9	1464.2	1398.9	1335.2	1282.0	1252.1	1228.0	1203.8	1190.1	1180.4
22.5°	1520.0	1466.4	1397.1	1326.7	1262.9	1221.3	1196.1	1171.2	1151.5	1138.5	1125.6
25°	1443.3	1373.1	1299.7	1219.1	1175.6	1139.3	1111.9	1091.7	1079.6	1062.7	1056.2
27.5°	1364.4	1279.4	1198.5	1144.3	1098.9	1065.7	1041.9	1026.7	1011.4	1000.6	992.2
30°	1303.7	1217.5	1144.9	1093.3	1047.3	1020.0	1000.6	982.9	970.8	961.9	955.4
32.5°	1243.7	1157.5	1096.5	1041.1	1004.8	978.1	957.4	944.1	934.6	923.2	919.3
35°	1157.0	1080.5	1027.2	977.2	940.1	915.9	899.8	886.2	878.1	874.8	872.4
37.5°	1073.7	1010.9	953.7	912.7	879.7	860.6	841.6	834.9	829.3	823.5	826.2
40°	1020.8	961.9	911.1	867.6	840.9	820.0	808.7	800.6	795.8	795.8	795.8
42.5°	974.9	917.4	867.9	828.9	802.2	784.6	771.9	765.2	763.6	763.0	766.8
45°	903.8	850.6	800.6	768.4	745.8	728.1	720.8	715.2	715.2	718.4	719.2
47.5°	833.3	783.6	743.4	707.3	686.6	675.5	669.2	666.3	666.6	669.8	673.6
50°	790.1	740.9	701.5	669.2	649.8	639.3	633.7	632.2	633.7	633.7	639.3
52.5°	743.1	699.0	660.1	633.1	611.2	601.4	598.2	596.0	596.9	599.6	602.0
55°	674.1	634.5	597.4	571.7	555.5	549.1	541.8	542.6	541.0	542.6	542.6
57.5°	604.9	569.4	534.9	514.4	500.2	490.9	482.9	485.2	482.8	482.5	481.2
60°	560.4	521.7	494.2	475.7	459.6	451.5	444.2	445.9	443.4	441.8	438.6
62.5°	512.0	479.8	453.6	435.8	422.8	413.4	406.2	404.6	399.0	393.4	386.4
65°	441.8	415.3	391.8	375.0	362.8	355.6	349.9	345.1	333.0	320.1	313.7
67.5°	373.7	354.5	332.6	318.3	308.5	299.0	288.2	279.9	268.6	261.6	257.5
70°	329.7	311.2	292.7	278.9	268.5	259.6	247.5	241.9	233.8	230.6	226.6
72.5°	287.8	270.5	253.4	241.0	229.7	222.9	213.4	207.7	204.2	202.9	198.8
75°	224.2	210.5	197.5	186.2	177.4	172.6	168.5	164.5	162.9	155.6	151.6
77.5°	163.5	154.5	146.4	138.4	132.1	128.9	121.1	116.4	113.7	110.3	109.5
80°	127.3	121.0	112.9	108.1	99.2	95.9	92.7	91.9	91.1	90.3	89.5
82.5°	95.8	89.4	81.3	78.4	75.9	74.0	72.1	71.3	70.5	71.0	70.8
85°	48.4	45.1	45.1	44.3	43.5	42.7	41.9	41.9	41.1	41.9	41.1
87.5°	17.6	17.2	17.4	16.4	17.2	17.4	16.9	17.1	17.9	16.7	16.8
90°	7.4	8.6	9.6	10.6	11.6	12.6	13.4	14.2	14.9	15.8	16.3
92.5°	7.6	8.1	9.2	10.2	11.2	12.2	13.0	13.7	14.5	15.2	15.7
95°	14.2	12.1	12.3	12.4	12.5	12.6	13.4	14.2	14.9	15.8	16.2
97.5°	78.2	72.3	58.1	43.8	29.5	15.2	15.2	15.3	15.5	15.6	15.7
100°	103.7	96.0	78.4	60.7	43.0	25.3	23.1	21.0	18.8	16.7	15.7
102.5°	131.7	131.4	129.1	126.7	124.4	122.1	98.7	75.1	51.7	28.2	16.5
105°	176.4	177.1	177.8	178.4	179.0	179.8	180.9	182.1	183.2	184.3	182.6
107.5°	219.9	220.6	221.5	222.4	223.2	224.1	224.7	225.2	225.8	226.3	226.8
110°	250.3	251.0	251.8	252.5	253.3	254.1	254.3	254.6	254.8	255.1	255.4



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	281.1	281.7	282.0	282.4	282.8	283.1	283.1	283.0	283.0	282.9	283.1
115°	325.3	325.4	325.3	325.2	325.0	324.9	325.2	325.4	325.7	325.9	326.1
117.5°	366.7	367.1	367.4	367.7	367.9	368.2	368.2	368.1	368.1	368.0	368.0
120°	394.4	394.6	394.5	394.3	394.2	394.0	394.3	394.6	394.8	395.1	395.1
122.5°	419.3	419.6	419.8	419.9	420.1	420.3	420.4	420.6	420.7	420.9	420.8
125°	457.2	457.3	457.0	456.8	456.5	456.3	456.7	457.0	457.4	457.8	458.1
127.5°	490.6	491.0	491.6	492.1	492.7	493.3	493.2	493.2	493.1	493.0	492.9
130°	513.2	513.4	513.8	514.2	514.6	515.0	515.1	515.2	515.3	515.5	515.5
132.5°	534.3	534.7	535.2	535.6	536.1	536.6	536.7	536.9	537.0	537.1	537.1
135°	564.0	564.2	564.7	565.2	565.7	566.2	566.5	566.7	567.0	567.2	567.5
137.5°	592.3	592.6	593.1	593.7	594.3	594.8	595.1	595.4	595.7	595.9	596.0
140°	611.1	611.3	611.6	611.9	612.1	612.4	612.7	613.1	613.5	613.9	614.1
142.5°	628.0	628.3	628.4	628.6	628.7	628.9	629.2	629.4	629.8	630.1	630.3
145°	652.5	652.7	652.7	652.7	652.7	652.7	652.8	652.9	653.1	653.2	653.4
147.5°	673.5	673.8	673.7	673.6	673.4	673.3	673.4	673.5	673.6	673.7	673.8
150°	687.0	687.2	687.0	686.9	686.8	686.6	686.6	686.6	686.6	686.6	686.7
152.5°	698.5	698.6	698.4	698.2	697.9	697.7	697.9	698.1	698.3	698.5	698.6
155°	714.3	714.1	713.8	713.4	713.0	712.6	713.1	713.6	714.1	714.6	714.7
157.5°	727.6	727.3	726.9	726.5	726.0	725.6	726.3	726.9	727.6	728.2	728.2
160°	734.7	734.4	734.3	734.2	734.0	733.9	734.7	735.4	736.2	737.0	737.0
162.5°	741.6	741.3	741.1	741.0	740.9	740.8	741.5	742.4	743.1	743.9	743.9
165°	750.3	750.0	750.0	750.0	750.0	750.0	751.0	752.0	753.1	754.2	754.1
167.5°	757.6	757.2	757.2	757.1	757.0	756.9	758.1	759.2	760.3	761.4	761.3
170°	761.3	761.0	761.1	761.2	761.4	761.5	762.5	763.6	764.6	765.7	765.5
172.5°	764.2	763.8	764.0	764.1	764.2	764.3	765.4	766.4	767.4	768.4	768.2
175°	767.1	766.8	766.9	767.1	767.2	767.3	768.4	769.6	770.7	771.9	771.7
177.5°	768.7	768.4	768.6	768.8	769.0	769.2	770.1	770.9	771.7	772.5	772.3
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2



TEST NUMBER: P332991-840

CATALOG NUMBER: SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	1910.3	1911.6	1907.0	1905.7	1907.0	1911.6	1910.3	1914.1	1914.8	1920.0	1918.0
5°	1772.2	1770.6	1766.6	1767.4	1766.6	1770.6	1772.2	1778.7	1781.9	1794.8	1793.2
7.5°	1654.2	1647.9	1649.6	1643.3	1649.6	1647.9	1654.2	1660.0	1669.8	1675.7	1689.3
10°	1582.0	1573.1	1565.8	1559.3	1565.8	1573.1	1582.0	1585.2	1598.8	1605.3	1619.0
12.5°	1483.3	1475.6	1465.8	1467.7	1465.8	1475.6	1483.3	1497.4	1515.0	1528.5	1550.0
15°	1343.2	1331.2	1311.8	1314.2	1311.8	1331.2	1343.2	1353.7	1371.5	1402.1	1416.6
17.5°	1224.8	1224.9	1216.1	1218.1	1216.1	1224.9	1224.8	1239.1	1248.1	1267.7	1289.9
20°	1163.5	1157.8	1158.6	1156.2	1158.6	1157.8	1163.5	1180.4	1190.1	1203.8	1228.0
22.5°	1120.8	1114.0	1108.3	1103.3	1108.3	1114.0	1120.8	1125.6	1138.5	1151.5	1171.2
25°	1048.9	1044.1	1036.9	1035.3	1036.9	1044.1	1048.9	1056.2	1062.7	1079.6	1091.7
27.5°	985.7	984.8	981.9	978.2	981.9	984.8	985.7	992.2	1000.6	1011.4	1026.7
30°	949.0	947.4	945.7	943.3	945.7	947.4	949.0	955.4	961.9	970.8	982.9
32.5°	916.1	915.1	913.5	913.7	913.5	915.1	916.1	919.3	923.2	934.6	944.1
35°	869.2	868.4	866.8	866.0	866.8	868.4	869.2	872.4	874.8	878.1	886.2
37.5°	825.4	827.4	826.5	826.3	826.5	827.4	825.4	826.2	823.5	829.3	834.9
40°	795.0	795.8	797.4	796.6	797.4	795.8	795.0	795.8	795.8	795.8	800.6
42.5°	769.8	770.0	772.2	769.5	772.2	770.0	769.8	766.8	763.0	763.6	765.2
45°	724.9	729.7	728.9	728.9	728.9	729.7	724.9	719.2	718.4	715.2	715.2
47.5°	675.7	679.8	681.0	680.9	681.0	679.8	675.7	673.6	669.8	666.6	666.3
50°	643.4	641.8	644.2	643.4	644.2	641.8	643.4	639.3	633.7	633.7	632.2
52.5°	604.1	604.4	604.2	603.4	604.2	604.4	604.1	602.0	599.6	596.9	596.0
55°	543.4	544.2	542.6	543.4	542.6	544.2	543.4	542.6	542.6	541.0	542.6
57.5°	477.7	473.7	475.3	473.4	475.3	473.7	477.7	481.2	482.5	482.8	485.2
60°	430.6	424.1	422.5	419.3	422.5	424.1	430.6	438.6	441.8	443.4	445.9
62.5°	377.7	373.1	367.7	370.2	367.7	373.1	377.7	386.4	393.4	399.0	404.6
65°	307.2	304.0	301.5	304.8	301.5	304.0	307.2	313.7	320.1	333.0	345.1
67.5°	254.3	252.6	252.6	251.0	252.6	252.6	254.3	257.5	261.6	268.6	279.9
70°	226.6	224.2	224.2	222.6	224.2	224.2	226.6	226.6	230.6	233.8	241.9
72.5°	198.1	195.8	196.4	195.4	196.4	195.8	198.1	198.8	202.9	204.2	207.7
75°	146.7	142.7	142.7	143.5	142.7	142.7	146.7	151.6	155.6	162.9	164.5
77.5°	109.5	108.7	109.8	108.4	109.8	108.7	109.5	109.5	110.3	113.7	116.4
80°	89.5	88.7	87.9	90.3	87.9	88.7	89.5	89.5	90.3	91.1	91.9
82.5°	69.5	69.4	69.2	72.2	69.2	69.4	69.5	70.8	71.0	70.5	71.3
85°	41.9	40.3	41.9	40.3	41.9	40.3	41.9	41.1	41.9	41.1	41.9
87.5°	18.2	17.6	17.0	17.7	17.0	17.6	18.2	16.8	16.7	17.9	17.1
90°	16.6	16.8	17.1	17.3	17.1	16.8	16.6	16.3	15.8	14.9	14.2
92.5°	15.8	15.8	15.9	15.9	15.9	15.8	15.8	15.7	15.2	14.5	13.7
95°	16.4	16.5	16.6	16.7	16.6	16.5	16.4	16.2	15.8	14.9	14.2
97.5°	15.8	15.9	16.0	16.2	16.0	15.9	15.8	15.7	15.6	15.5	15.3
100°	15.8	15.9	16.0	16.2	16.0	15.9	15.8	15.7	16.7	18.8	21.0
102.5°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.5	28.2	51.7	75.1
105°	178.0	173.4	168.7	164.2	168.7	173.4	178.0	182.6	184.3	183.2	182.1
107.5°	227.3	227.8	228.3	228.8	228.3	227.8	227.3	226.8	226.3	225.8	225.2
110°	255.8	256.1	256.5	256.9	256.5	256.1	255.8	255.4	255.1	254.8	254.6



TEST NUMBER: P332991-840

CATALOG NUMBER: SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	283.6	284.1	284.6	285.0	284.6	284.1	283.6	283.1	282.9	283.0	283.0
115°	326.1	326.1	326.1	326.1	326.1	326.1	326.1	326.1	325.9	325.7	325.4
117.5°	367.9	367.9	367.8	367.8	367.8	367.9	367.9	368.0	368.0	368.1	368.1
120°	394.8	394.6	394.3	394.0	394.3	394.6	394.8	395.1	395.1	394.8	394.6
122.5°	420.6	420.3	420.1	419.8	420.1	420.3	420.6	420.8	420.9	420.7	420.6
125°	458.2	458.3	458.4	458.6	458.4	458.3	458.2	458.1	457.8	457.4	457.0
127.5°	492.8	492.7	492.6	492.5	492.6	492.7	492.8	492.9	493.0	493.1	493.2
130°	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.3	515.2
132.5°	537.0	536.9	536.8	536.7	536.8	536.9	537.0	537.1	537.1	537.0	536.9
135°	567.7	568.0	568.4	568.6	568.4	568.0	567.7	567.5	567.2	567.0	566.7
137.5°	596.0	595.9	595.8	595.7	595.8	595.9	596.0	596.0	595.9	595.7	595.4
140°	614.3	614.4	614.5	614.6	614.5	614.4	614.3	614.1	613.9	613.5	613.1
142.5°	630.3	630.3	630.3	630.4	630.3	630.3	630.3	630.3	630.1	629.8	629.4
145°	653.6	653.9	654.2	654.4	654.2	653.9	653.6	653.4	653.2	653.1	652.9
147.5°	674.0	674.1	674.2	674.3	674.2	674.1	674.0	673.8	673.7	673.6	673.5
150°	686.8	687.0	687.1	687.2	687.1	687.0	686.8	686.7	686.6	686.6	686.6
152.5°	698.5	698.4	698.3	698.3	698.3	698.4	698.5	698.6	698.5	698.3	698.1
155°	714.3	713.9	713.6	713.2	713.6	713.9	714.3	714.7	714.6	714.1	713.6
157.5°	727.6	726.9	726.3	725.6	726.3	726.9	727.6	728.2	728.2	727.6	726.9
160°	736.2	735.4	734.7	733.9	734.7	735.4	736.2	737.0	737.0	736.2	735.4
162.5°	743.0	742.0	741.2	740.3	741.2	742.0	743.0	743.9	743.9	743.1	742.4
165°	752.9	751.7	750.6	749.4	750.6	751.7	752.9	754.1	754.2	753.1	752.0
167.5°	760.1	758.8	757.5	756.3	757.5	758.8	760.1	761.3	761.4	760.3	759.2
170°	764.3	763.0	761.6	760.4	761.6	763.0	764.3	765.5	765.7	764.6	763.6
172.5°	766.9	765.5	764.1	762.7	764.1	765.5	766.9	768.2	768.4	767.4	766.4
175°	770.2	768.6	767.1	765.6	767.1	768.6	770.2	771.7	771.9	770.7	769.6
177.5°	771.1	769.9	768.6	767.4	768.6	769.9	771.1	772.3	772.5	771.7	770.9
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2



TEST NUMBER: P332991-840
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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	1914.1	1918.6	1928.9	1940.6	1950.3	1958.6	1965.1	1974.1	1982.5	1994.1	2005.1
5°	1798.1	1809.3	1825.4	1844.8	1869.0	1885.1	1905.2	1923.0	1948.8	1974.6	1999.6
7.5°	1696.1	1708.5	1732.2	1759.0	1787.7	1814.1	1838.1	1869.3	1903.5	1941.1	1983.0
10°	1630.3	1644.1	1672.2	1702.8	1736.8	1762.5	1794.8	1831.9	1870.6	1916.5	1968.1
12.5°	1570.9	1584.1	1618.0	1649.3	1684.5	1712.8	1750.3	1788.1	1839.7	1889.5	1948.1
15°	1455.3	1490.1	1528.7	1565.8	1607.7	1642.4	1687.6	1726.3	1775.4	1845.6	1912.5
17.5°	1327.0	1363.9	1412.0	1469.3	1525.5	1568.4	1614.2	1662.2	1720.8	1792.4	1869.7
20°	1252.1	1282.0	1335.2	1398.9	1464.2	1523.9	1565.8	1619.0	1679.5	1756.9	1836.7
22.5°	1196.1	1221.3	1262.9	1326.7	1397.1	1466.4	1520.0	1572.6	1639.5	1716.9	1803.8
25°	1111.9	1139.3	1175.6	1219.1	1299.7	1373.1	1443.3	1503.7	1574.7	1652.0	1748.8
27.5°	1041.9	1065.7	1098.9	1144.3	1198.5	1279.4	1364.4	1433.4	1506.1	1589.2	1686.1
30°	1000.6	1020.0	1047.3	1093.3	1144.9	1217.5	1303.7	1384.4	1457.7	1544.1	1644.9
32.5°	957.4	978.1	1004.8	1041.1	1096.5	1157.5	1243.7	1332.1	1410.1	1498.2	1597.1
35°	899.8	915.9	940.1	977.2	1027.2	1080.5	1157.0	1248.1	1330.4	1424.7	1519.0
37.5°	841.6	860.6	879.7	912.7	953.7	1010.9	1073.7	1166.7	1257.8	1343.9	1436.0
40°	808.7	820.0	840.9	867.6	911.1	961.9	1020.8	1111.9	1203.0	1288.5	1381.2
42.5°	771.9	784.6	802.2	828.9	867.9	917.4	974.9	1053.8	1148.8	1231.7	1316.1
45°	720.8	728.1	745.8	768.4	800.6	850.6	903.8	974.0	1063.5	1142.5	1216.7
47.5°	669.2	675.5	686.6	707.3	743.4	783.6	833.3	896.3	974.8	1053.8	1116.5
50°	633.7	639.3	649.8	669.2	701.5	740.9	790.1	846.6	916.8	992.5	1044.9
52.5°	598.2	601.4	611.2	633.1	660.1	699.0	743.1	795.0	860.6	923.5	976.5
55°	541.8	549.1	555.5	571.7	597.4	634.5	674.1	723.3	774.1	827.3	872.4
57.5°	482.9	490.9	500.2	514.4	534.9	569.4	604.9	644.7	688.1	732.3	770.1
60°	444.2	451.5	459.6	475.7	494.2	521.7	560.4	595.0	628.1	668.4	706.3
62.5°	406.2	413.4	422.8	435.8	453.6	479.8	512.0	542.2	576.5	611.7	639.9
65°	349.9	355.6	362.8	375.0	391.8	415.3	441.8	465.2	495.8	521.7	547.4
67.5°	288.2	299.0	308.5	318.3	332.6	354.5	373.7	396.1	416.9	436.1	459.6
70°	247.5	259.6	268.5	278.9	292.7	311.2	329.7	345.1	362.0	380.5	401.5
72.5°	213.4	222.9	229.7	241.0	253.4	270.5	287.8	300.5	314.3	327.0	347.4
75°	168.5	172.6	177.4	186.2	197.5	210.5	224.2	235.4	243.5	254.8	269.3
77.5°	121.1	128.9	132.1	138.4	146.4	154.5	163.5	173.0	180.8	184.8	195.9
80°	92.7	95.9	99.2	108.1	112.9	121.0	127.3	136.2	139.5	143.5	154.0
82.5°	72.1	74.0	75.9	78.4	81.3	89.4	95.8	101.4	104.6	106.1	114.0
85°	41.9	42.7	43.5	44.3	45.1	45.1	48.4	52.4	58.1	58.1	60.5
87.5°	16.9	17.4	17.2	16.4	17.4	17.2	17.6	17.3	19.0	20.6	22.3
90°	13.4	12.6	11.6	10.6	9.6	8.6	7.4	6.0	4.5	3.1	1.7
92.5°	13.0	12.2	11.2	10.2	9.2	8.1	7.6	7.5	7.4	7.4	7.3
95°	13.4	12.6	12.5	12.4	12.3	12.1	14.2	18.6	23.0	27.4	31.7
97.5°	15.2	15.2	29.5	43.8	58.1	72.3	78.2	75.4	72.7	70.0	67.3
100°	23.1	25.3	43.0	60.7	78.4	96.0	103.7	101.4	99.1	96.7	94.4
102.5°	98.7	122.1	124.4	126.7	129.1	131.4	131.7	130.0	128.3	126.5	124.9
105°	180.9	179.8	179.0	178.4	177.8	177.1	176.4	175.7	174.9	174.2	173.4
107.5°	224.7	224.1	223.2	222.4	221.5	220.6	219.9	219.5	219.2	218.8	218.4
110°	254.3	254.1	253.3	252.5	251.8	251.0	250.3	250.0	249.6	249.2	248.8



TEST NUMBER: P332991-840

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	283.1	283.1	282.8	282.4	282.0	281.7	281.1	280.4	279.7	279.0	278.3
115°	325.2	324.9	325.0	325.2	325.3	325.4	325.3	324.9	324.5	324.2	323.8
117.5°	368.2	368.2	367.9	367.7	367.4	367.1	366.7	366.2	365.7	365.2	364.7
120°	394.3	394.0	394.2	394.3	394.5	394.6	394.4	393.8	393.3	392.8	392.3
122.5°	420.4	420.3	420.1	419.9	419.8	419.6	419.3	419.0	418.7	418.4	418.1
125°	456.7	456.3	456.5	456.8	457.0	457.3	457.2	456.7	456.2	455.6	455.0
127.5°	493.2	493.3	492.7	492.1	491.6	491.0	490.6	490.5	490.4	490.2	490.1
130°	515.1	515.0	514.6	514.2	513.8	513.4	513.2	513.1	512.9	512.8	512.7
132.5°	536.7	536.6	536.1	535.6	535.2	534.7	534.3	534.1	533.9	533.6	533.4
135°	566.5	566.2	565.7	565.2	564.7	564.2	564.0	564.1	564.3	564.4	564.5
137.5°	595.1	594.8	594.3	593.7	593.1	592.6	592.3	592.2	592.2	592.1	592.1
140°	612.7	612.4	612.1	611.9	611.6	611.3	611.1	610.8	610.6	610.3	610.1
142.5°	629.2	628.9	628.7	628.6	628.4	628.3	628.0	627.5	627.1	626.6	626.2
145°	652.8	652.7	652.7	652.7	652.7	652.7	652.5	652.1	651.7	651.4	651.0
147.5°	673.4	673.3	673.4	673.6	673.7	673.8	673.5	672.8	672.1	671.4	670.7
150°	686.6	686.6	686.8	686.9	687.0	687.2	687.0	686.5	686.0	685.4	684.9
152.5°	697.9	697.7	697.9	698.2	698.4	698.6	698.5	698.1	697.7	697.3	696.9
155°	713.1	712.6	713.0	713.4	713.8	714.1	714.3	714.1	714.0	713.9	713.8
157.5°	726.3	725.6	726.0	726.5	726.9	727.3	727.6	727.7	727.7	727.8	727.9
160°	734.7	733.9	734.0	734.2	734.3	734.4	734.7	735.1	735.4	735.8	736.2
162.5°	741.5	740.8	740.9	741.0	741.1	741.3	741.6	742.1	742.6	743.1	743.6
165°	751.0	750.0	750.0	750.0	750.0	750.0	750.3	750.9	751.6	752.2	752.9
167.5°	758.1	756.9	757.0	757.1	757.2	757.2	757.6	758.3	758.9	759.6	760.2
170°	762.5	761.5	761.4	761.2	761.1	761.0	761.3	762.1	762.9	763.7	764.5
172.5°	765.4	764.3	764.2	764.1	764.0	763.8	764.2	764.9	765.7	766.4	767.2
175°	768.4	767.3	767.2	767.1	766.9	766.8	767.1	767.9	768.6	769.4	770.2
177.5°	770.1	769.2	769.0	768.8	768.6	768.4	768.7	769.4	770.1	770.8	771.5
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2



TEST NUMBER: P332991-840

CATALOG NUMBER: SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2013.5	2019.2	2025.7	2038.0	2048.3	2052.9	2061.8	2068.3	2066.4	2075.4	2090.8
5°	2021.3	2043.2	2068.1	2094.0	2122.9	2147.2	2166.5	2185.9	2201.2	2219.7	2247.2
7.5°	2020.0	2058.8	2100.8	2147.2	2194.7	2235.8	2273.9	2312.6	2346.9	2384.5	2433.7
10°	2014.9	2066.5	2118.9	2179.4	2239.9	2297.1	2348.7	2397.1	2443.1	2492.2	2554.4
12.5°	2009.1	2068.4	2131.8	2204.5	2279.9	2348.7	2409.3	2479.0	2536.6	2600.0	2671.7
15°	1983.5	2063.3	2149.6	2243.9	2334.2	2426.9	2509.9	2595.5	2675.2	2751.1	2841.4
17.5°	1954.1	2046.2	2148.0	2259.4	2367.9	2480.6	2579.2	2686.8	2768.4	2870.2	2954.1
20°	1930.3	2029.4	2138.3	2263.2	2386.6	2511.5	2620.4	2730.1	2822.0	2924.4	3030.8
22.5°	1901.2	2010.0	2128.0	2257.5	2386.6	2523.1	2643.6	2752.7	2866.5	2981.8	3091.5
25°	1854.4	1967.3	2092.3	2234.2	2382.6	2522.0	2651.1	2786.5	2909.1	3034.0	3132.4
27.5°	1797.1	1915.6	2047.3	2193.7	2346.0	2488.8	2640.8	2785.1	2908.4	3028.7	3114.5
30°	1751.2	1876.2	2002.8	2151.2	2309.2	2462.4	2625.2	2769.6	2899.4	3007.5	3055.9
32.5°	1704.1	1822.7	1953.2	2103.4	2265.3	2430.1	2591.7	2739.3	2859.4	2924.3	2925.5
35°	1622.2	1733.5	1869.0	2016.5	2182.6	2361.6	2525.3	2670.4	2743.8	2749.5	2670.4
37.5°	1532.9	1635.0	1762.8	1910.6	2092.4	2270.5	2437.7	2534.5	2559.0	2476.9	2330.8
40°	1469.1	1563.4	1686.8	1838.4	2018.9	2202.8	2355.2	2426.1	2400.3	2267.2	2104.4
42.5°	1402.0	1489.9	1608.7	1758.4	1939.6	2125.4	2255.2	2293.2	2224.8	2071.2	1880.6
45°	1292.5	1373.1	1490.9	1641.6	1815.7	1989.9	2088.3	2068.9	1955.2	1773.0	1559.3
47.5°	1178.5	1256.4	1362.3	1501.8	1680.1	1830.4	1897.0	1838.7	1676.9	1476.4	1302.6
50°	1103.0	1182.9	1280.4	1413.4	1576.3	1721.4	1764.1	1675.5	1495.6	1302.9	1143.3
52.5°	1028.9	1097.0	1192.7	1321.2	1476.9	1599.5	1622.2	1520.0	1334.4	1161.6	1020.1
55°	915.9	978.1	1058.6	1179.6	1314.2	1418.3	1406.1	1274.8	1106.2	958.7	847.4
57.5°	806.8	853.5	928.1	1041.4	1159.6	1229.4	1185.3	1073.2	916.1	795.4	701.5
60°	734.6	778.1	847.4	946.5	1050.6	1090.0	1053.0	931.3	807.1	696.6	617.6
62.5°	666.1	704.6	764.2	856.3	940.3	963.7	924.0	817.7	705.8	611.5	546.0
65°	566.8	602.3	653.1	718.4	776.5	787.7	761.9	653.1	568.5	489.4	444.2
67.5°	476.7	499.9	539.6	596.0	626.8	633.4	583.6	515.2	440.6	392.0	358.0
70°	416.1	432.1	469.3	499.9	524.9	525.7	479.8	425.0	367.7	328.2	303.2
72.5°	357.4	372.8	400.9	421.8	441.0	434.7	392.6	349.4	303.2	273.4	254.8
75°	275.8	289.4	304.0	313.7	313.7	305.6	275.0	242.7	216.1	198.3	192.7
77.5°	200.5	211.8	216.6	215.1	212.2	199.7	180.3	159.2	149.7	141.3	137.0
80°	157.2	162.1	163.7	159.7	154.8	140.3	127.3	118.6	109.7	106.4	104.8
82.5°	116.5	120.8	116.5	117.8	107.0	95.1	88.1	85.0	81.3	80.0	78.4
85°	62.1	61.3	59.7	55.6	48.4	46.8	45.9	45.1	43.5	44.3	42.7
87.5°	21.9	20.3	18.0	17.6	17.9	16.8	17.6	17.8	18.0	17.6	19.0
90°	3.1	4.5	6.0	7.4	8.6	9.6	10.6	11.6	12.6	13.4	14.2
92.5°	7.4	7.4	7.5	7.6	8.1	9.2	10.2	11.2	12.2	13.0	13.7
95°	27.4	23.0	18.6	14.2	12.1	12.3	12.4	12.5	12.6	13.4	14.2
97.5°	70.0	72.7	75.4	78.2	72.3	58.1	43.8	29.5	15.2	15.2	15.3
100°	96.7	99.1	101.4	103.7	96.0	78.4	60.7	43.0	25.3	23.1	21.0
102.5°	126.5	128.3	130.0	131.7	131.4	129.1	126.7	124.4	122.1	98.7	75.1
105°	174.2	174.9	175.7	176.4	177.1	177.8	178.4	179.0	179.8	180.9	182.1
107.5°	218.8	219.2	219.5	219.9	220.6	221.5	222.4	223.2	224.1	224.7	225.2
110°	249.2	249.6	250.0	250.3	251.0	251.8	252.5	253.3	254.1	254.3	254.6



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	279.0	279.7	280.4	281.1	281.7	282.0	282.4	282.8	283.1	283.1	283.0
115°	324.2	324.5	324.9	325.3	325.4	325.3	325.2	325.0	324.9	325.2	325.4
117.5°	365.2	365.7	366.2	366.7	367.1	367.4	367.7	367.9	368.2	368.2	368.1
120°	392.8	393.3	393.8	394.4	394.6	394.5	394.3	394.2	394.0	394.3	394.6
122.5°	418.4	418.7	419.0	419.3	419.6	419.8	419.9	420.1	420.3	420.4	420.6
125°	455.6	456.2	456.7	457.2	457.3	457.0	456.8	456.5	456.3	456.7	457.0
127.5°	490.2	490.4	490.5	490.6	491.0	491.6	492.1	492.7	493.3	493.2	493.2
130°	512.8	512.9	513.1	513.2	513.4	513.8	514.2	514.6	515.0	515.1	515.2
132.5°	533.6	533.9	534.1	534.3	534.7	535.2	535.6	536.1	536.6	536.7	536.9
135°	564.4	564.3	564.1	564.0	564.2	564.7	565.2	565.7	566.2	566.5	566.7
137.5°	592.1	592.2	592.2	592.3	592.6	593.1	593.7	594.3	594.8	595.1	595.4
140°	610.3	610.6	610.8	611.1	611.3	611.6	611.9	612.1	612.4	612.7	613.1
142.5°	626.6	627.1	627.5	628.0	628.3	628.4	628.6	628.7	628.9	629.2	629.4
145°	651.4	651.7	652.1	652.5	652.7	652.7	652.7	652.7	652.7	652.8	652.9
147.5°	671.4	672.1	672.8	673.5	673.8	673.7	673.6	673.4	673.3	673.4	673.5
150°	685.4	686.0	686.5	687.0	687.2	687.0	686.9	686.8	686.6	686.6	686.6
152.5°	697.3	697.7	698.1	698.5	698.6	698.4	698.2	697.9	697.7	697.9	698.1
155°	713.9	714.0	714.1	714.3	714.1	713.8	713.4	713.0	712.6	713.1	713.6
157.5°	727.8	727.7	727.7	727.6	727.3	726.9	726.5	726.0	725.6	726.3	726.9
160°	735.8	735.4	735.1	734.7	734.4	734.3	734.2	734.0	733.9	734.7	735.4
162.5°	743.1	742.6	742.1	741.6	741.3	741.1	741.0	740.9	740.8	741.5	742.4
165°	752.2	751.6	750.9	750.3	750.0	750.0	750.0	750.0	750.0	751.0	752.0
167.5°	759.6	758.9	758.3	757.6	757.2	757.2	757.1	757.0	756.9	758.1	759.2
170°	763.7	762.9	762.1	761.3	761.0	761.1	761.2	761.4	761.5	762.5	763.6
172.5°	766.4	765.7	764.9	764.2	763.8	764.0	764.1	764.2	764.3	765.4	766.4
175°	769.4	768.6	767.9	767.1	766.8	766.9	767.1	767.2	767.3	768.4	769.6
177.5°	770.8	770.1	769.4	768.7	768.4	768.6	768.8	769.0	769.2	770.1	770.9
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2099.2	2101.8	2103.8	2110.2	2110.8	2116.7	2110.8
5°	2272.9	2284.2	2302.0	2319.7	2321.3	2332.6	2312.4
7.5°	2467.7	2493.9	2510.1	2538.8	2550.1	2557.2	2545.6
10°	2601.9	2626.1	2668.8	2689.8	2710.8	2713.9	2704.3
12.5°	2731.6	2770.0	2803.6	2843.3	2842.4	2870.7	2860.3
15°	2904.3	2943.8	2990.5	3034.8	3051.0	3051.0	3063.9
17.5°	3027.5	3099.9	3148.3	3183.1	3221.1	3227.7	3223.2
20°	3110.7	3188.9	3240.5	3285.6	3311.4	3318.7	3318.7
22.5°	3172.6	3239.1	3289.5	3330.1	3351.4	3359.9	3357.4
25°	3215.5	3272.7	3303.4	3315.5	3321.0	3319.5	3304.2
27.5°	3156.7	3154.2	3134.8	3097.8	3069.9	3052.9	3033.5
30°	3044.5	3002.6	2954.3	2901.0	2832.5	2780.1	2763.9
32.5°	2877.5	2783.3	2701.4	2612.7	2539.0	2486.6	2464.7
35°	2554.4	2405.2	2283.4	2177.0	2099.6	2051.2	2035.1
37.5°	2170.8	2026.5	1875.7	1772.5	1708.4	1659.5	1641.2
40°	1927.0	1769.8	1638.4	1541.7	1475.5	1427.9	1427.1
42.5°	1704.5	1554.4	1430.7	1361.0	1289.7	1258.3	1258.1
45°	1395.6	1275.6	1170.7	1115.9	1073.2	1047.3	1040.1
47.5°	1155.6	1056.2	986.4	942.7	907.9	891.4	880.8
50°	1020.8	933.7	878.1	840.1	820.8	799.8	798.2
52.5°	908.5	838.2	794.9	764.1	739.5	726.9	727.3
55°	763.6	707.9	677.3	653.9	634.5	624.9	620.9
57.5°	643.3	601.5	579.3	557.7	549.6	542.0	539.9
60°	568.5	540.2	519.3	502.3	490.2	487.8	487.0
62.5°	506.5	477.0	462.5	449.4	440.6	436.9	435.4
65°	417.7	395.9	382.9	372.5	369.3	363.7	362.8
67.5°	336.7	323.7	315.1	307.8	303.5	303.2	303.2
70°	287.0	279.7	272.6	268.5	266.1	264.5	264.5
72.5°	244.5	239.1	233.2	231.1	230.6	228.9	228.3
75°	186.2	180.6	181.4	177.4	174.2	170.2	167.7
77.5°	132.1	128.1	127.2	126.7	124.0	123.5	124.8
80°	102.4	98.4	97.6	98.4	97.6	95.1	95.1
82.5°	77.9	74.5	73.7	73.2	72.4	73.2	71.9
85°	41.9	40.3	40.3	40.3	41.9	41.1	40.3
87.5°	17.9	17.4	18.1	17.5	17.6	17.0	17.7
90°	14.9	15.8	16.3	16.6	16.8	17.1	17.3
92.5°	14.5	15.2	15.7	15.8	15.8	15.9	15.9
95°	14.9	15.8	16.2	16.4	16.5	16.6	16.7
97.5°	15.5	15.6	15.7	15.8	15.9	16.0	16.2
100°	18.8	16.7	15.7	15.8	15.9	16.0	16.2
102.5°	51.7	28.2	16.5	16.6	16.6	16.6	16.6
105°	183.2	184.3	182.6	178.0	173.4	168.7	164.2
107.5°	225.8	226.3	226.8	227.3	227.8	228.3	228.8
110°	254.8	255.1	255.4	255.8	256.1	256.5	256.9



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	283.0	282.9	283.1	283.6	284.1	284.6	285.0
115°	325.7	325.9	326.1	326.1	326.1	326.1	326.1
117.5°	368.1	368.0	368.0	367.9	367.9	367.8	367.8
120°	394.8	395.1	395.1	394.8	394.6	394.3	394.0
122.5°	420.7	420.9	420.8	420.6	420.3	420.1	419.8
125°	457.4	457.8	458.1	458.2	458.3	458.4	458.6
127.5°	493.1	493.0	492.9	492.8	492.7	492.6	492.5
130°	515.3	515.5	515.5	515.5	515.5	515.5	515.5
132.5°	537.0	537.1	537.1	537.0	536.9	536.8	536.7
135°	567.0	567.2	567.5	567.7	568.0	568.4	568.6
137.5°	595.7	595.9	596.0	596.0	595.9	595.8	595.7
140°	613.5	613.9	614.1	614.3	614.4	614.5	614.6
142.5°	629.8	630.1	630.3	630.3	630.3	630.3	630.4
145°	653.1	653.2	653.4	653.6	653.9	654.2	654.4
147.5°	673.6	673.7	673.8	674.0	674.1	674.2	674.3
150°	686.6	686.6	686.7	686.8	687.0	687.1	687.2
152.5°	698.3	698.5	698.6	698.5	698.4	698.3	698.3
155°	714.1	714.6	714.7	714.3	713.9	713.6	713.2
157.5°	727.6	728.2	728.2	727.6	726.9	726.3	725.6
160°	736.2	737.0	737.0	736.2	735.4	734.7	733.9
162.5°	743.1	743.9	743.9	743.0	742.0	741.2	740.3
165°	753.1	754.2	754.1	752.9	751.7	750.6	749.4
167.5°	760.3	761.4	761.3	760.1	758.8	757.5	756.3
170°	764.6	765.7	765.5	764.3	763.0	761.6	760.4
172.5°	767.4	768.4	768.2	766.9	765.5	764.1	762.7
175°	770.7	771.9	771.7	770.2	768.6	767.1	765.6
177.5°	771.7	772.5	772.3	771.1	769.9	768.6	767.4
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2

(END OF REPORT)