

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: P332993-840

Luminaire Tested: **SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332993-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7192.8 lumens
Efficiency: N/A
Efficacy: 130.5 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

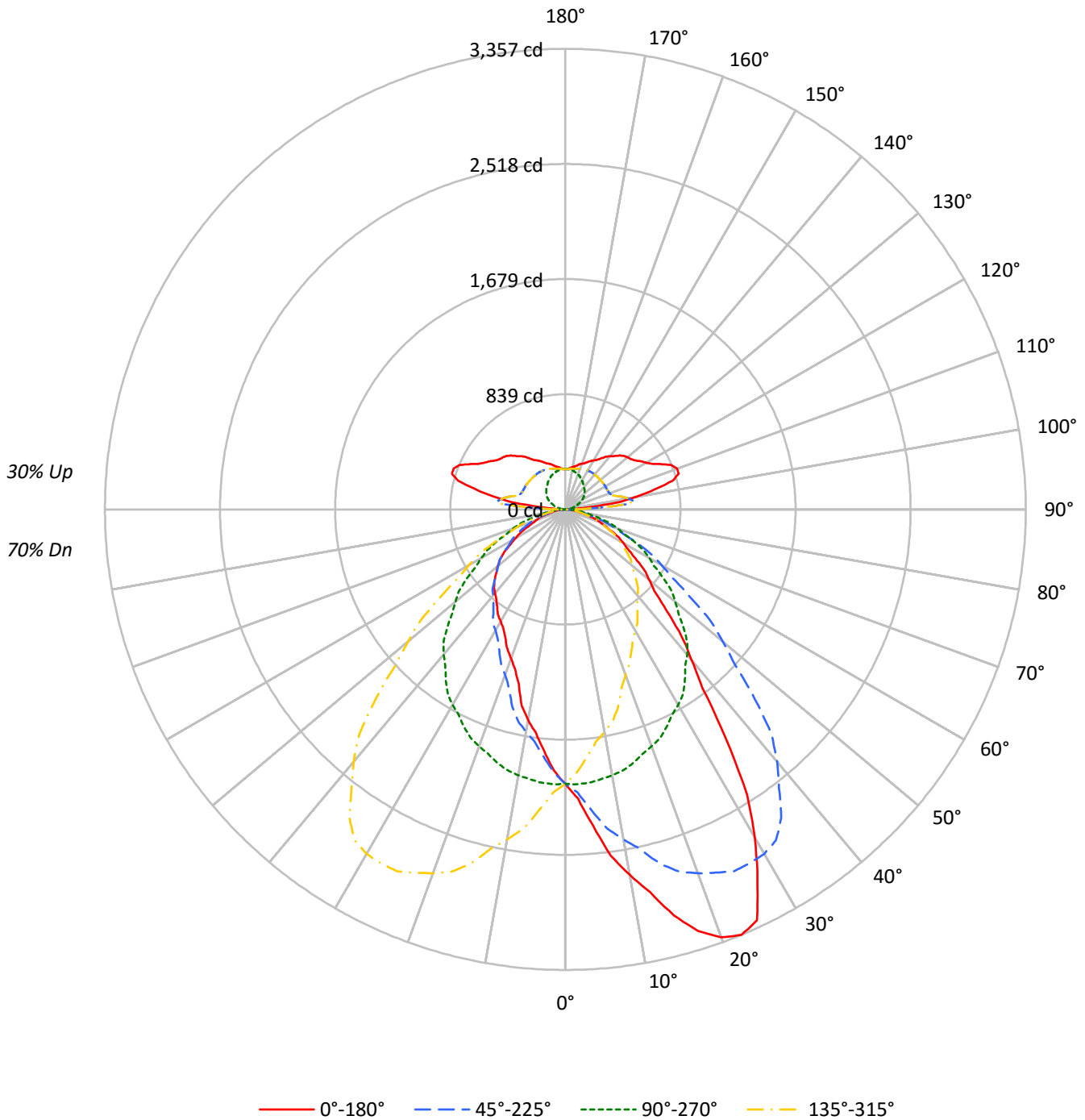
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	70				
1	103	99	95	92	97	94	90	87	84	82	79	75	73	72	67	66	65	61				
2	94	87	81	76	89	83	77	73	74	70	67	67	64	61	60	58	55	52				
3	86	77	70	64	82	73	67	62	66	61	57	60	56	52	54	50	48	45				
4	79	69	61	55	75	65	58	53	59	54	49	54	49	45	48	45	42	39				
5	73	62	54	48	69	59	51	46	53	47	43	48	44	40	44	40	37	34				
6	68	56	47	42	64	53	46	40	48	42	38	44	39	35	40	36	33	30				
7	63	50	42	37	59	48	41	36	44	38	33	40	35	31	37	32	29	27				
8	58	46	38	33	55	44	37	32	40	34	30	37	32	28	34	29	26	24				
9	55	42	35	30	52	40	33	29	37	31	27	34	29	25	31	27	24	22				
10	51	39	32	27	48	37	31	26	34	29	25	32	27	23	29	25	22	20				

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	2.7
10°-20°	584.9	8.1
20°-30°	914.8	12.7
30°-40°	1017.0	14.1
40°-50°	902.3	12.5
50°-60°	703.1	9.8
60°-70°	460.3	6.4
70°-80°	226.4	3.1
80°-90°	57.5	0.8
90°-100°	211.8	2.9
100°-110°	440.8	6.1
110°-120°	394.8	5.5
120°-130°	332.1	4.6
130°-140°	276.9	3.8
140°-150°	211.5	2.9
150°-160°	148.7	2.1
160°-170°	87.5	1.2
170°-180°	28.5	0.4
0°-30°	1693.6	23.5
0°-40°	2710.6	37.7
0°-60°	4316.0	60.0
0°-90°	5060.2	70.4
90°-120°	1047.4	14.6
90°-150°	1868.0	26.0
90°-180°	2133.0	29.7
0°-180°	7192.8	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°	12	1	12	1	12	12
95°	141	19	141	19	141	218
105°	810	67	810	67	810	801
115°	778	119	778	119	778	773
125°	621	165	621	165	621	564
135°	555	196	555	196	555	429
145°	453	226	453	226	453	287
155°	380	258	380	258	380	177
165°	331	280	331	280	331	95
175°	298	293	298	293	298	29
180°	293	293	293	293	293	



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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°	16.6	16.0	16.8	16.6	17.2	16.5	17.1	18.2	16.8	17.6	17.4
90°	12.1	12.1	12.6	12.1	11.5	11.5	10.9	10.4	9.8	10.4	9.2
92.5°	44.3	44.3	46.4	49.4	56.2	67.8	85.1	113.1	152.2	182.7	160.0
95°	140.6	148.0	158.4	176.3	204.5	260.3	337.6	426.9	482.7	469.5	354.3
97.5°	375.7	387.7	405.0	439.7	481.0	541.2	597.5	630.7	606.5	494.5	331.6
100°	528.3	532.9	550.2	585.3	635.4	678.0	706.3	694.8	610.7	463.1	300.7
102.5°	661.0	664.7	682.9	708.3	739.1	756.9	748.7	691.6	576.0	424.0	279.9
105°	810.5	814.0	822.0	826.7	825.6	801.9	744.9	645.2	513.3	377.9	262.2
107.5°	866.1	864.5	858.8	845.7	817.2	765.9	685.5	579.5	462.6	352.1	258.9
110°	867.0	861.8	851.4	827.3	786.4	723.0	639.4	539.8	437.3	343.4	259.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	839.8	831.4	816.9	787.6	741.1	677.8	598.8	510.8	422.9	339.2	262.6
115°	778.3	773.7	755.3	720.6	675.2	619.9	552.5	481.6	409.6	337.0	267.9
117.5°	716.0	712.4	693.7	664.7	625.8	579.0	525.9	467.3	403.6	336.4	273.5
120°	681.0	674.6	659.6	634.3	601.4	560.5	514.4	460.9	400.4	336.4	277.7
122.5°	653.3	646.9	634.3	612.6	584.8	549.0	507.1	455.3	396.7	336.0	281.9
125°	621.0	617.5	606.6	589.9	566.8	535.1	495.4	445.9	390.6	335.3	288.0
127.5°	602.1	598.6	589.5	574.6	551.4	521.4	481.7	434.3	382.4	334.0	293.0
130°	591.1	587.6	578.3	564.0	540.4	509.8	470.7	425.2	377.3	333.6	296.7
132.5°	578.7	575.1	566.4	550.2	526.9	496.4	458.2	415.5	372.7	333.1	299.9
135°	555.3	551.9	542.7	526.5	503.5	474.6	439.6	402.1	365.8	332.3	304.8
137.5°	526.5	522.4	514.8	498.9	477.4	451.3	421.7	390.0	359.8	332.2	307.6
140°	505.8	501.2	493.1	480.5	460.3	436.1	410.2	383.0	356.6	331.8	309.9
142.5°	483.6	480.5	473.3	461.5	443.7	422.7	400.5	376.7	353.9	331.8	311.7
145°	453.3	450.5	444.7	434.9	420.5	404.5	387.1	367.5	349.1	330.6	312.9
147.5°	426.6	425.5	421.1	412.7	402.1	389.4	375.6	360.0	344.9	328.6	313.4
150°	411.3	410.7	407.3	399.8	390.6	380.2	368.7	355.5	341.6	327.2	313.4
152.5°	397.5	396.9	394.9	388.7	380.9	372.3	361.7	350.3	337.9	324.9	312.5
155°	379.6	379.6	377.9	373.3	367.5	360.6	351.9	342.7	332.3	321.4	311.0
157.5°	364.0	364.0	362.9	359.5	355.1	349.5	342.3	334.6	326.8	317.9	309.6
160°	354.3	354.3	353.8	350.2	346.8	342.1	335.9	329.5	322.7	315.1	308.2
162.5°	345.1	345.6	345.0	341.5	339.0	334.8	329.8	324.5	318.9	312.4	306.8
165°	331.2	331.8	332.3	330.1	327.8	324.9	320.8	317.4	312.9	308.2	304.2
167.5°	320.3	320.7	320.8	319.4	318.2	316.5	313.3	310.6	307.3	304.1	301.4
170°	313.4	313.4	314.0	313.4	312.3	310.5	308.2	306.5	303.6	301.2	299.5
172.5°	306.5	307.4	308.0	307.4	306.7	305.5	304.1	302.8	300.3	298.5	297.7
175°	298.4	299.5	300.7	299.5	299.5	299.5	298.4	297.8	296.7	295.5	295.5
177.5°	293.7	294.6	295.5	295.1	295.5	295.1	295.1	294.6	294.2	293.7	293.7
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



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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°	17.1	16.5	17.1	17.1	17.6	20.0	21.6	22.0	20.3	18.8	17.0
90°	8.1	8.1	4.6	4.6	4.0	3.4	1.7	0.6	1.7	3.4	4.0
92.5°	116.3	71.7	42.4	30.4	22.0	14.9	9.6	6.6	9.6	14.9	22.0
95°	216.6	122.1	72.0	47.8	34.0	26.5	20.7	19.0	20.7	26.5	34.0
97.5°	194.7	116.7	78.2	57.9	45.9	39.1	34.1	34.1	34.1	39.1	45.9
100°	183.2	118.1	84.1	65.6	54.7	47.8	43.8	43.8	43.8	47.8	54.7
102.5°	180.0	122.7	91.9	74.4	63.9	57.5	53.9	53.0	53.9	57.5	63.9
105°	181.5	133.6	106.0	89.3	79.0	72.0	69.2	67.4	69.2	72.0	79.0
107.5°	190.0	146.4	121.1	104.6	94.7	87.4	84.4	83.3	84.4	87.4	94.7
110°	196.4	156.1	130.8	115.2	104.8	98.0	95.0	93.9	95.0	98.0	104.8



TEST NUMBER: P332993-840

CATALOG NUMBER: SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	203.4	165.3	140.9	125.3	115.0	108.6	105.2	104.0	105.2	108.6	115.0
115°	214.3	179.8	156.7	141.2	130.2	124.4	120.4	118.7	120.4	124.4	130.2
117.5°	225.5	193.7	171.8	155.6	145.4	139.1	135.5	133.9	135.5	139.1	145.4
120°	233.3	203.4	181.5	165.3	155.5	149.2	145.2	144.0	145.2	149.2	155.5
122.5°	240.7	212.6	190.7	175.0	164.3	158.4	154.4	153.2	154.4	158.4	164.3
125°	251.8	225.2	204.5	188.3	177.4	171.1	167.6	165.3	167.6	171.1	177.4
127.5°	261.4	237.0	216.9	200.7	189.2	182.1	177.9	176.0	177.9	182.1	189.2
130°	267.3	244.8	225.2	208.5	197.6	188.9	184.3	182.1	184.3	188.9	197.6
132.5°	273.3	251.3	231.7	215.9	204.1	195.9	189.9	188.0	189.9	195.9	204.1
135°	281.1	260.3	241.4	226.4	214.3	204.5	198.7	196.4	198.7	204.5	214.3
137.5°	286.7	267.3	249.5	235.3	222.7	213.4	207.0	204.9	207.0	213.4	222.7
140°	290.3	272.0	254.6	240.8	228.7	218.9	212.6	210.9	212.6	218.9	228.7
142.5°	293.1	276.1	259.2	245.9	234.2	224.9	219.0	217.3	219.0	224.9	234.2
145°	296.1	280.5	265.6	252.9	242.0	233.9	228.1	226.4	228.1	233.9	242.0
147.5°	298.7	285.2	271.1	259.7	250.5	242.3	237.2	236.6	237.2	242.3	250.5
150°	300.1	287.5	274.8	263.9	255.2	248.3	243.7	243.1	243.7	248.3	255.2
152.5°	301.0	289.3	278.0	268.0	260.2	253.8	249.2	249.1	249.2	253.8	260.2
155°	301.8	292.1	282.3	273.7	267.3	261.6	258.1	257.5	258.1	261.6	267.3
157.5°	301.8	294.1	285.7	278.9	273.4	268.9	265.7	265.7	265.7	268.9	273.4
160°	301.8	295.0	288.0	281.7	277.1	273.1	270.7	270.7	270.7	273.1	277.1
162.5°	301.8	295.9	289.4	284.5	280.3	276.7	274.9	275.4	274.9	276.7	280.3
165°	300.7	296.1	290.9	287.5	284.6	281.7	280.5	280.5	280.5	281.7	284.6
167.5°	299.3	296.0	292.2	289.5	287.9	285.7	285.2	285.7	285.2	285.7	287.9
170°	298.4	295.5	292.7	290.9	289.7	288.0	287.5	288.0	287.5	288.0	289.7
172.5°	297.5	295.1	293.1	291.9	291.1	289.8	289.7	290.3	289.7	289.8	291.1
175°	296.1	294.4	293.3	293.3	292.7	292.1	292.1	292.7	292.1	292.1	292.7
177.5°	294.6	293.7	293.3	293.3	293.3	292.8	293.3	293.7	293.3	292.8	293.3
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



TEST NUMBER: P332993-840

CATALOG NUMBER: SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A4

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°	17.1	16.4	17.1	15.8	16.7	16.9	16.2	16.3	17.1	15.9	15.9
90°	4.6	4.6	8.1	8.1	9.2	10.4	9.8	10.4	10.9	11.5	11.5
92.5°	30.4	42.4	71.7	116.3	160.0	182.7	152.2	113.1	85.1	67.8	56.2
95°	47.8	72.0	122.1	216.6	354.3	469.5	482.7	426.9	337.6	260.3	204.5
97.5°	57.9	78.2	116.7	194.7	331.6	494.5	606.5	630.7	597.5	541.2	481.0
100°	65.6	84.1	118.1	183.2	300.7	463.1	610.7	694.8	706.3	678.0	635.4
102.5°	74.4	91.9	122.7	180.0	279.9	424.0	576.0	691.6	748.7	756.9	739.1
105°	89.3	106.0	133.6	181.5	262.2	377.9	513.3	645.2	744.9	801.9	825.6
107.5°	104.6	121.1	146.4	190.0	258.9	352.1	462.6	579.5	685.5	765.9	817.2
110°	115.2	130.8	156.1	196.4	259.8	343.4	437.3	539.8	639.4	723.0	786.4



TEST NUMBER: P332993-840

CATALOG NUMBER: SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	125.3	140.9	165.3	203.4	262.6	339.2	422.9	510.8	598.8	677.8	741.1
115°	141.2	156.7	179.8	214.3	267.9	337.0	409.6	481.6	552.5	619.9	675.2
117.5°	155.6	171.8	193.7	225.5	273.5	336.4	403.6	467.3	525.9	579.0	625.8
120°	165.3	181.5	203.4	233.3	277.7	336.4	400.4	460.9	514.4	560.5	601.4
122.5°	175.0	190.7	212.6	240.7	281.9	336.0	396.7	455.3	507.1	549.0	584.8
125°	188.3	204.5	225.2	251.8	288.0	335.3	390.6	445.9	495.4	535.1	566.8
127.5°	200.7	216.9	237.0	261.4	293.0	334.0	382.4	434.3	481.7	521.4	551.4
130°	208.5	225.2	244.8	267.3	296.7	333.6	377.3	425.2	470.7	509.8	540.4
132.5°	215.9	231.7	251.3	273.3	299.9	333.1	372.7	415.5	458.2	496.4	526.9
135°	226.4	241.4	260.3	281.1	304.8	332.3	365.8	402.1	439.6	474.6	503.5
137.5°	235.3	249.5	267.3	286.7	307.6	332.2	359.8	390.0	421.7	451.3	477.4
140°	240.8	254.6	272.0	290.3	309.9	331.8	356.6	383.0	410.2	436.1	460.3
142.5°	245.9	259.2	276.1	293.1	311.7	331.8	353.9	376.7	400.5	422.7	443.7
145°	252.9	265.6	280.5	296.1	312.9	330.6	349.1	367.5	387.1	404.5	420.5
147.5°	259.7	271.1	285.2	298.7	313.4	328.6	344.9	360.0	375.6	389.4	402.1
150°	263.9	274.8	287.5	300.1	313.4	327.2	341.6	355.5	368.7	380.2	390.6
152.5°	268.0	278.0	289.3	301.0	312.5	324.9	337.9	350.3	361.7	372.3	380.9
155°	273.7	282.3	292.1	301.8	311.0	321.4	332.3	342.7	351.9	360.6	367.5
157.5°	278.9	285.7	294.1	301.8	309.6	317.9	326.8	334.6	342.3	349.5	355.1
160°	281.7	288.0	295.0	301.8	308.2	315.1	322.7	329.5	335.9	342.1	346.8
162.5°	284.5	289.4	295.9	301.8	306.8	312.4	318.9	324.5	329.8	334.8	339.0
165°	287.5	290.9	296.1	300.7	304.2	308.2	312.9	317.4	320.8	324.9	327.8
167.5°	289.5	292.2	296.0	299.3	301.4	304.1	307.3	310.6	313.3	316.5	318.2
170°	290.9	292.7	295.5	298.4	299.5	301.2	303.6	306.5	308.2	310.5	312.3
172.5°	291.9	293.1	295.1	297.5	297.7	298.5	300.3	302.8	304.1	305.5	306.7
175°	293.3	293.3	294.4	296.1	295.5	295.5	296.7	297.8	298.4	299.5	299.5
177.5°	293.3	293.3	293.7	294.6	293.7	293.7	294.2	294.6	295.1	295.1	295.5
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



TEST NUMBER: P332993-840

CATALOG NUMBER: SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A4

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°	17.3	16.8	16.0	16.6	16.0	16.8	17.3	15.9	15.9	17.1	16.3
90°	12.1	12.6	12.1	12.1	12.1	12.6	12.1	11.5	11.5	10.9	10.4
92.5°	49.4	46.4	44.3	44.3	44.3	46.4	49.4	56.2	67.8	85.1	113.1
95°	176.3	158.4	148.0	140.6	148.0	158.4	176.3	204.5	260.3	337.6	426.9
97.5°	439.7	405.0	387.7	375.7	387.7	405.0	439.7	481.0	541.2	597.5	630.7
100°	585.3	550.2	532.9	528.3	532.9	550.2	585.3	635.4	678.0	706.3	694.8
102.5°	708.3	682.9	664.7	661.0	664.7	682.9	708.3	739.1	756.9	748.7	691.6
105°	826.7	822.0	814.0	810.5	814.0	822.0	826.7	825.6	801.9	744.9	645.2
107.5°	845.7	858.8	864.5	866.1	864.5	858.8	845.7	817.2	765.9	685.5	579.5
110°	827.3	851.4	861.8	867.0	861.8	851.4	827.3	786.4	723.0	639.4	539.8



TEST NUMBER: P332993-840

CATALOG NUMBER: SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	787.6	816.9	831.4	839.8	831.4	816.9	787.6	741.1	677.8	598.8	510.8
115°	720.6	755.3	773.7	778.3	773.7	755.3	720.6	675.2	619.9	552.5	481.6
117.5°	664.7	693.7	712.4	716.0	712.4	693.7	664.7	625.8	579.0	525.9	467.3
120°	634.3	659.6	674.6	681.0	674.6	659.6	634.3	601.4	560.5	514.4	460.9
122.5°	612.6	634.3	646.9	653.3	646.9	634.3	612.6	584.8	549.0	507.1	455.3
125°	589.9	606.6	617.5	621.0	617.5	606.6	589.9	566.8	535.1	495.4	445.9
127.5°	574.6	589.5	598.6	602.1	598.6	589.5	574.6	551.4	521.4	481.7	434.3
130°	564.0	578.3	587.6	591.1	587.6	578.3	564.0	540.4	509.8	470.7	425.2
132.5°	550.2	566.4	575.1	578.7	575.1	566.4	550.2	526.9	496.4	458.2	415.5
135°	526.5	542.7	551.9	555.3	551.9	542.7	526.5	503.5	474.6	439.6	402.1
137.5°	498.9	514.8	522.4	526.5	522.4	514.8	498.9	477.4	451.3	421.7	390.0
140°	480.5	493.1	501.2	505.8	501.2	493.1	480.5	460.3	436.1	410.2	383.0
142.5°	461.5	473.3	480.5	483.6	480.5	473.3	461.5	443.7	422.7	400.5	376.7
145°	434.9	444.7	450.5	453.3	450.5	444.7	434.9	420.5	404.5	387.1	367.5
147.5°	412.7	421.1	425.5	426.6	425.5	421.1	412.7	402.1	389.4	375.6	360.0
150°	399.8	407.3	410.7	411.3	410.7	407.3	399.8	390.6	380.2	368.7	355.5
152.5°	388.7	394.9	396.9	397.5	396.9	394.9	388.7	380.9	372.3	361.7	350.3
155°	373.3	377.9	379.6	379.6	379.6	377.9	373.3	367.5	360.6	351.9	342.7
157.5°	359.5	362.9	364.0	364.0	364.0	362.9	359.5	355.1	349.5	342.3	334.6
160°	350.2	353.8	354.3	354.3	354.3	353.8	350.2	346.8	342.1	335.9	329.5
162.5°	341.5	345.0	345.6	345.1	345.6	345.0	341.5	339.0	334.8	329.8	324.5
165°	330.1	332.3	331.8	331.2	331.8	332.3	330.1	327.8	324.9	320.8	317.4
167.5°	319.4	320.8	320.7	320.3	320.7	320.8	319.4	318.2	316.5	313.3	310.6
170°	313.4	314.0	313.4	313.4	313.4	314.0	313.4	312.3	310.5	308.2	306.5
172.5°	307.4	308.0	307.4	306.5	307.4	308.0	307.4	306.7	305.5	304.1	302.8
175°	299.5	300.7	299.5	298.4	299.5	300.7	299.5	299.5	299.5	298.4	297.8
177.5°	295.1	295.5	294.6	293.7	294.6	295.5	295.1	295.5	295.1	295.1	294.6
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



TEST NUMBER: P332993-840

CATALOG NUMBER: SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A4

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°	16.2	16.9	16.7	15.8	17.1	16.4	17.1	17.0	18.8	20.3	22.0
90°	9.8	10.4	9.2	8.1	8.1	4.6	4.6	4.0	3.4	1.7	0.6
92.5°	152.2	182.7	160.0	116.3	71.7	42.4	30.4	22.0	14.9	9.6	6.6
95°	482.7	469.5	354.3	216.6	122.1	72.0	47.8	34.0	26.5	20.7	19.0
97.5°	606.5	494.5	331.6	194.7	116.7	78.2	57.9	45.9	39.1	34.1	34.1
100°	610.7	463.1	300.7	183.2	118.1	84.1	65.6	54.7	47.8	43.8	43.8
102.5°	576.0	424.0	279.9	180.0	122.7	91.9	74.4	63.9	57.5	53.9	53.0
105°	513.3	377.9	262.2	181.5	133.6	106.0	89.3	79.0	72.0	69.2	67.4
107.5°	462.6	352.1	258.9	190.0	146.4	121.1	104.6	94.7	87.4	84.4	83.3
110°	437.3	343.4	259.8	196.4	156.1	130.8	115.2	104.8	98.0	95.0	93.9



TEST NUMBER: P332993-840

CATALOG NUMBER: SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	422.9	339.2	262.6	203.4	165.3	140.9	125.3	115.0	108.6	105.2	104.0
115°	409.6	337.0	267.9	214.3	179.8	156.7	141.2	130.2	124.4	120.4	118.7
117.5°	403.6	336.4	273.5	225.5	193.7	171.8	155.6	145.4	139.1	135.5	133.9
120°	400.4	336.4	277.7	233.3	203.4	181.5	165.3	155.5	149.2	145.2	144.0
122.5°	396.7	336.0	281.9	240.7	212.6	190.7	175.0	164.3	158.4	154.4	153.2
125°	390.6	335.3	288.0	251.8	225.2	204.5	188.3	177.4	171.1	167.6	165.3
127.5°	382.4	334.0	293.0	261.4	237.0	216.9	200.7	189.2	182.1	177.9	176.0
130°	377.3	333.6	296.7	267.3	244.8	225.2	208.5	197.6	188.9	184.3	182.1
132.5°	372.7	333.1	299.9	273.3	251.3	231.7	215.9	204.1	195.9	189.9	188.0
135°	365.8	332.3	304.8	281.1	260.3	241.4	226.4	214.3	204.5	198.7	196.4
137.5°	359.8	332.2	307.6	286.7	267.3	249.5	235.3	222.7	213.4	207.0	204.9
140°	356.6	331.8	309.9	290.3	272.0	254.6	240.8	228.7	218.9	212.6	210.9
142.5°	353.9	331.8	311.7	293.1	276.1	259.2	245.9	234.2	224.9	219.0	217.3
145°	349.1	330.6	312.9	296.1	280.5	265.6	252.9	242.0	233.9	228.1	226.4
147.5°	344.9	328.6	313.4	298.7	285.2	271.1	259.7	250.5	242.3	237.2	236.6
150°	341.6	327.2	313.4	300.1	287.5	274.8	263.9	255.2	248.3	243.7	243.1
152.5°	337.9	324.9	312.5	301.0	289.3	278.0	268.0	260.2	253.8	249.2	249.1
155°	332.3	321.4	311.0	301.8	292.1	282.3	273.7	267.3	261.6	258.1	257.5
157.5°	326.8	317.9	309.6	301.8	294.1	285.7	278.9	273.4	268.9	265.7	265.7
160°	322.7	315.1	308.2	301.8	295.0	288.0	281.7	277.1	273.1	270.7	270.7
162.5°	318.9	312.4	306.8	301.8	295.9	289.4	284.5	280.3	276.7	274.9	275.4
165°	312.9	308.2	304.2	300.7	296.1	290.9	287.5	284.6	281.7	280.5	280.5
167.5°	307.3	304.1	301.4	299.3	296.0	292.2	289.5	287.9	285.7	285.2	285.7
170°	303.6	301.2	299.5	298.4	295.5	292.7	290.9	289.7	288.0	287.5	288.0
172.5°	300.3	298.5	297.7	297.5	295.1	293.1	291.9	291.1	289.8	289.7	290.3
175°	296.7	295.5	295.5	296.1	294.4	293.3	293.3	292.7	292.1	292.1	292.7
177.5°	294.2	293.7	293.7	294.6	293.7	293.3	293.3	293.3	292.8	293.3	293.7
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



TEST NUMBER: P332993-840

CATALOG NUMBER: SA4XXRDIP-C1195D590U840-4F0-1E-UDD-A4

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°	21.6	20.0	17.6	17.1	17.1	16.5	17.1	17.4	17.6	16.8	18.2
90°	1.7	3.4	4.0	4.6	4.6	8.1	8.1	9.2	10.4	9.8	10.4
92.5°	9.6	14.9	22.0	30.4	42.4	71.7	116.3	160.0	182.7	152.2	113.1
95°	20.7	26.5	34.0	47.8	72.0	122.1	216.6	354.3	469.5	482.7	426.9
97.5°	34.1	39.1	45.9	57.9	78.2	116.7	194.7	331.6	494.5	606.5	630.7
100°	43.8	47.8	54.7	65.6	84.1	118.1	183.2	300.7	463.1	610.7	694.8
102.5°	53.9	57.5	63.9	74.4	91.9	122.7	180.0	279.9	424.0	576.0	691.6
105°	69.2	72.0	79.0	89.3	106.0	133.6	181.5	262.2	377.9	513.3	645.2
107.5°	84.4	87.4	94.7	104.6	121.1	146.4	190.0	258.9	352.1	462.6	579.5
110°	95.0	98.0	104.8	115.2	130.8	156.1	196.4	259.8	343.4	437.3	539.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	105.2	108.6	115.0	125.3	140.9	165.3	203.4	262.6	339.2	422.9	510.8
115°	120.4	124.4	130.2	141.2	156.7	179.8	214.3	267.9	337.0	409.6	481.6
117.5°	135.5	139.1	145.4	155.6	171.8	193.7	225.5	273.5	336.4	403.6	467.3
120°	145.2	149.2	155.5	165.3	181.5	203.4	233.3	277.7	336.4	400.4	460.9
122.5°	154.4	158.4	164.3	175.0	190.7	212.6	240.7	281.9	336.0	396.7	455.3
125°	167.6	171.1	177.4	188.3	204.5	225.2	251.8	288.0	335.3	390.6	445.9
127.5°	177.9	182.1	189.2	200.7	216.9	237.0	261.4	293.0	334.0	382.4	434.3
130°	184.3	188.9	197.6	208.5	225.2	244.8	267.3	296.7	333.6	377.3	425.2
132.5°	189.9	195.9	204.1	215.9	231.7	251.3	273.3	299.9	333.1	372.7	415.5
135°	198.7	204.5	214.3	226.4	241.4	260.3	281.1	304.8	332.3	365.8	402.1
137.5°	207.0	213.4	222.7	235.3	249.5	267.3	286.7	307.6	332.2	359.8	390.0
140°	212.6	218.9	228.7	240.8	254.6	272.0	290.3	309.9	331.8	356.6	383.0
142.5°	219.0	224.9	234.2	245.9	259.2	276.1	293.1	311.7	331.8	353.9	376.7
145°	228.1	233.9	242.0	252.9	265.6	280.5	296.1	312.9	330.6	349.1	367.5
147.5°	237.2	242.3	250.5	259.7	271.1	285.2	298.7	313.4	328.6	344.9	360.0
150°	243.7	248.3	255.2	263.9	274.8	287.5	300.1	313.4	327.2	341.6	355.5
152.5°	249.2	253.8	260.2	268.0	278.0	289.3	301.0	312.5	324.9	337.9	350.3
155°	258.1	261.6	267.3	273.7	282.3	292.1	301.8	311.0	321.4	332.3	342.7
157.5°	265.7	268.9	273.4	278.9	285.7	294.1	301.8	309.6	317.9	326.8	334.6
160°	270.7	273.1	277.1	281.7	288.0	295.0	301.8	308.2	315.1	322.7	329.5
162.5°	274.9	276.7	280.3	284.5	289.4	295.9	301.8	306.8	312.4	318.9	324.5
165°	280.5	281.7	284.6	287.5	290.9	296.1	300.7	304.2	308.2	312.9	317.4
167.5°	285.2	285.7	287.9	289.5	292.2	296.0	299.3	301.4	304.1	307.3	310.6
170°	287.5	288.0	289.7	290.9	292.7	295.5	298.4	299.5	301.2	303.6	306.5
172.5°	289.7	289.8	291.1	291.9	293.1	295.1	297.5	297.7	298.5	300.3	302.8
175°	292.1	292.1	292.7	293.3	293.3	294.4	296.1	295.5	295.5	296.7	297.8
177.5°	293.3	292.8	293.3	293.3	293.3	293.7	294.6	293.7	293.7	294.2	294.6
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



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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°	17.1	16.5	17.2	16.6	16.8	16.0	16.6
90°	10.9	11.5	11.5	12.1	12.6	12.1	12.1
92.5°	85.1	67.8	56.2	49.4	46.4	44.3	44.3
95°	337.6	260.3	204.5	176.3	158.4	148.0	140.6
97.5°	597.5	541.2	481.0	439.7	405.0	387.7	375.7
100°	706.3	678.0	635.4	585.3	550.2	532.9	528.3
102.5°	748.7	756.9	739.1	708.3	682.9	664.7	661.0
105°	744.9	801.9	825.6	826.7	822.0	814.0	810.5
107.5°	685.5	765.9	817.2	845.7	858.8	864.5	866.1
110°	639.4	723.0	786.4	827.3	851.4	861.8	867.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	598.8	677.8	741.1	787.6	816.9	831.4	839.8
115°	552.5	619.9	675.2	720.6	755.3	773.7	778.3
117.5°	525.9	579.0	625.8	664.7	693.7	712.4	716.0
120°	514.4	560.5	601.4	634.3	659.6	674.6	681.0
122.5°	507.1	549.0	584.8	612.6	634.3	646.9	653.3
125°	495.4	535.1	566.8	589.9	606.6	617.5	621.0
127.5°	481.7	521.4	551.4	574.6	589.5	598.6	602.1
130°	470.7	509.8	540.4	564.0	578.3	587.6	591.1
132.5°	458.2	496.4	526.9	550.2	566.4	575.1	578.7
135°	439.6	474.6	503.5	526.5	542.7	551.9	555.3
137.5°	421.7	451.3	477.4	498.9	514.8	522.4	526.5
140°	410.2	436.1	460.3	480.5	493.1	501.2	505.8
142.5°	400.5	422.7	443.7	461.5	473.3	480.5	483.6
145°	387.1	404.5	420.5	434.9	444.7	450.5	453.3
147.5°	375.6	389.4	402.1	412.7	421.1	425.5	426.6
150°	368.7	380.2	390.6	399.8	407.3	410.7	411.3
152.5°	361.7	372.3	380.9	388.7	394.9	396.9	397.5
155°	351.9	360.6	367.5	373.3	377.9	379.6	379.6
157.5°	342.3	349.5	355.1	359.5	362.9	364.0	364.0
160°	335.9	342.1	346.8	350.2	353.8	354.3	354.3
162.5°	329.8	334.8	339.0	341.5	345.0	345.6	345.1
165°	320.8	324.9	327.8	330.1	332.3	331.8	331.2
167.5°	313.3	316.5	318.2	319.4	320.8	320.7	320.3
170°	308.2	310.5	312.3	313.4	314.0	313.4	313.4
172.5°	304.1	305.5	306.7	307.4	308.0	307.4	306.5
175°	298.4	299.5	299.5	299.5	300.7	299.5	298.4
177.5°	295.1	295.1	295.5	295.1	295.5	294.6	293.7
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3

(END OF REPORT)