

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: P331639-930

Luminaire Tested: **SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331639-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1080 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4434.2 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

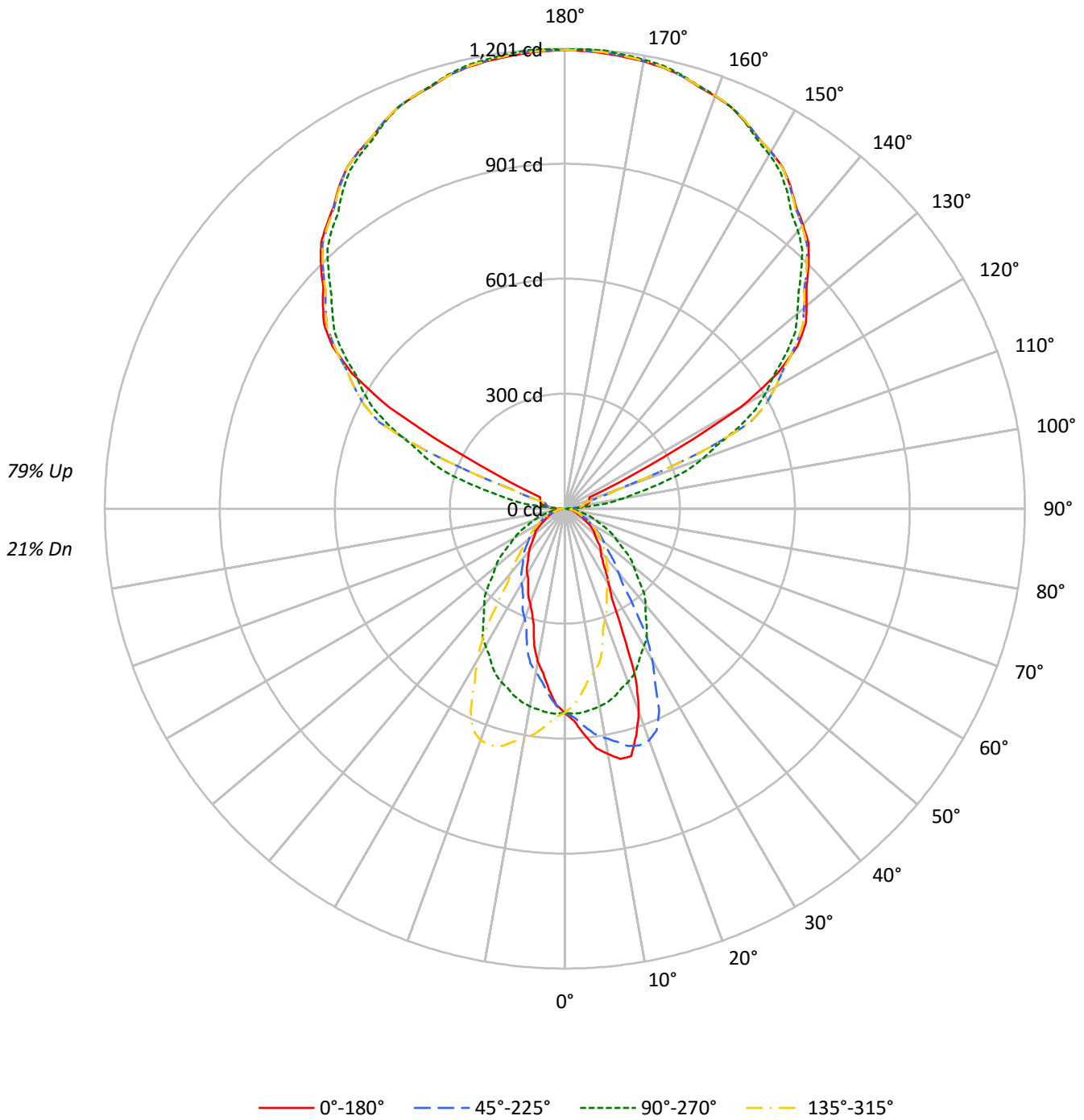
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100	100	100	89	89	89	89	67	67	67	47	47	47	29	29	29	21
1	92	88	84	81	81	78	75	72	59	57	55	42	41	40	26	26	25	18
2	84	77	71	66	74	68	64	60	52	49	46	37	35	34	24	23	22	16
3	76	68	61	56	67	60	55	50	46	42	39	33	31	29	21	20	19	14
4	70	60	53	47	62	54	47	43	41	37	34	30	27	25	19	18	17	12
5	64	53	46	40	57	48	41	37	37	33	29	27	24	22	17	16	15	11
6	59	48	40	35	52	43	36	32	33	29	25	24	21	19	16	14	13	10
7	55	43	36	31	48	39	32	28	30	26	22	22	19	17	15	13	12	9
8	51	39	32	27	45	35	29	25	27	23	20	20	17	15	13	12	11	8
9	47	36	29	24	42	32	26	22	25	21	18	19	16	14	13	11	10	7
10	44	33	26	21	39	29	24	20	23	19	16	17	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8606	8606	8606	8606
5°	9611	8660	7679	8660
10°	10663	8599	6655	8599
15°	11188	8473	5244	8473
20°	9699	8285	4538	8285
25°	6360	8031	4051	8031
30°	4282	7720	3667	7720
35°	3467	7330	3307	7330
40°	3084	6905	3060	6905
45°	2790	6405	2731	6405
50°	2539	5913	2532	5913
55°	2387	5362	2356	5362
60°	1999	4863	1973	4863
65°	1685	4413	1910	4413
70°	1553	3942	1803	3942
75°	1454	3431	1666	3431
80°	1339	2827	1478	2827
85°	1241	2242	1297	2242



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.5	1.1
10°-20°	140.8	3.2
20°-30°	181.4	4.1
30°-40°	172.4	3.9
40°-50°	147.7	3.3
50°-60°	112.5	2.5
60°-70°	71.1	1.6
70°-80°	35.5	0.8
80°-90°	12.2	0.3
90°-100°	40.0	0.9
100°-110°	146.5	3.3
110°-120°	391.7	8.8
120°-130°	646.5	14.6
130°-140°	687.6	15.5
140°-150°	639.1	14.4
150°-160°	513.8	11.6
160°-170°	331.1	7.5
170°-180°	114.0	2.6
0°-30°	372.7	8.4
0°-40°	545.1	12.3
0°-60°	805.3	18.2
0°-90°	924.1	20.8
90°-120°	578.1	13.0
90°-150°	2551.3	57.5
90°-180°	3510.0	79.2
0°-180°	4434.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	533	533	533	533	533	
5°	593	534	474	534	593	59
15°	669	507	314	507	669	181
25°	357	451	227	451	357	169
35°	176	372	168	372	176	113
45°	122	280	120	280	122	95
55°	85	190	84	190	85	74
65°	44	116	50	116	44	45
75°	23	55	27	55	23	25
85°	7	12	7	12	7	8
90°	23	1	23	1	23	11
95°	37	56	37	56	37	35
105°	66	264	66	264	66	68
115°	71	498	71	498	71	178
125°	741	705	741	705	741	641
135°	900	872	900	872	900	694
145°	1027	1012	1027	1012	1027	642
155°	1115	1114	1115	1114	1115	514
165°	1171	1174	1171	1174	1171	331
175°	1193	1200	1193	1200	1193	114
180°	1198	1198	1198	1198	1198	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	554.6	555.1	555.5	554.5	554.5	553.6	551.6	550.2	546.0	545.4	545.4
5°	593.0	592.6	593.4	590.9	587.7	586.9	583.3	578.7	573.9	568.6	567.4
7.5°	631.1	630.6	629.1	628.7	626.1	620.5	614.9	608.9	600.9	593.0	589.1
10°	650.4	656.6	652.8	646.4	647.6	639.0	634.3	626.3	619.6	608.0	605.4
12.5°	669.4	671.8	670.6	666.9	665.3	659.3	653.0	646.0	633.7	623.3	614.2
15°	669.3	672.8	673.8	672.6	673.5	673.2	669.8	664.1	653.4	641.9	631.9
17.5°	619.9	622.3	628.4	632.5	637.7	648.7	654.1	656.2	654.6	648.0	641.0
20°	564.5	560.4	577.5	586.1	593.5	612.0	628.0	634.1	643.9	643.8	641.9
22.5°	485.9	486.9	503.0	513.4	535.0	553.6	571.7	594.7	613.7	626.2	633.6
25°	357.0	364.1	380.2	394.3	418.3	452.8	484.1	520.4	554.6	581.7	607.5
27.5°	268.2	268.7	281.4	294.5	308.8	337.0	376.4	419.7	468.6	508.9	555.2
30°	229.7	228.5	233.9	241.9	254.1	276.0	305.6	348.1	396.9	457.6	511.7
32.5°	202.4	202.4	206.5	212.4	222.5	237.3	257.6	292.2	338.2	397.9	461.3
35°	175.9	175.8	178.7	183.0	187.2	196.7	210.6	228.7	260.4	316.1	380.9
37.5°	156.9	157.8	159.2	161.9	166.6	171.9	180.2	192.4	214.9	247.9	302.4
40°	146.3	146.7	148.7	150.9	153.7	157.8	164.6	174.5	190.9	217.2	257.1
42.5°	136.6	136.9	138.4	140.4	142.6	146.7	152.4	160.9	174.2	194.7	227.6
45°	122.2	122.2	123.5	124.4	126.9	130.5	135.2	142.3	151.5	166.6	188.5
47.5°	108.8	108.8	109.7	111.3	112.8	115.7	120.3	126.0	132.7	144.5	163.1
50°	101.1	101.3	101.8	103.1	104.1	106.6	110.2	115.2	122.2	131.3	146.8
52.5°	94.9	94.8	95.5	96.0	96.7	98.5	101.2	105.6	111.9	119.8	132.6
55°	84.8	84.1	85.2	86.1	86.7	87.4	88.9	91.6	97.0	103.7	113.3
57.5°	72.2	71.9	72.7	73.5	75.3	77.3	78.6	80.3	83.1	87.9	97.4
60°	61.9	61.9	63.5	64.1	66.1	68.7	71.3	72.8	75.6	78.7	85.8
62.5°	52.7	52.8	53.6	54.1	55.3	58.5	62.1	65.4	68.0	71.0	75.7
65°	44.1	44.4	44.4	44.8	45.6	46.3	47.8	50.4	55.0	59.3	62.8
67.5°	37.4	37.5	37.7	38.0	38.2	39.0	39.6	40.8	41.8	45.8	50.2
70°	32.9	33.5	33.3	33.7	33.9	34.2	35.0	35.5	37.3	38.2	40.8
72.5°	28.8	29.2	29.2	29.4	29.9	30.0	30.6	31.1	32.2	32.9	34.4
75°	23.3	23.2	23.3	23.7	23.9	24.1	24.1	24.8	25.4	26.1	27.1
77.5°	18.0	18.2	18.2	18.2	18.3	18.6	18.5	18.8	19.4	19.8	20.2
80°	14.4	14.6	14.4	14.6	14.8	15.0	14.8	15.0	15.6	15.9	15.9
82.5°	11.2	11.3	11.3	11.3	11.4	11.4	11.7	11.7	12.1	12.1	12.2
85°	6.7	6.5	6.5	6.5	6.7	6.8	6.7	6.7	6.8	6.8	6.8
87.5°	7.0	7.1	7.0	6.9	6.9	6.8	6.6	6.5	6.2	6.1	5.7
90°	23.4	23.0	22.7	22.3	21.9	21.2	20.2	19.2	18.3	17.4	15.8
92.5°	23.4	23.2	22.9	22.7	22.5	22.1	21.6	21.1	20.6	20.1	19.3
95°	37.3	37.4	37.7	37.8	38.1	37.7	36.7	35.7	34.7	33.8	32.4
97.5°	49.7	49.5	49.3	49.1	48.8	48.3	47.5	46.8	46.0	45.2	42.2
100°	58.0	57.7	57.3	56.9	56.5	55.6	54.1	52.5	51.0	49.4	46.1
102.5°	62.2	61.7	61.1	60.6	60.1	58.8	56.8	54.8	52.8	50.8	48.2
105°	65.9	65.1	64.3	63.6	62.8	61.3	59.2	57.1	55.0	52.8	50.4
107.5°	67.8	67.0	66.2	65.5	64.7	63.4	61.5	59.7	57.8	55.0	52.1
110°	68.5	67.7	66.9	66.1	65.4	64.6	63.9	63.2	62.4	61.6	60.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	69.1	68.6	67.9	67.3	66.7	101.5	171.8	242.1	312.3	382.5	396.3
115°	71.1	85.0	98.8	112.7	126.5	178.1	267.3	356.4	445.6	534.8	529.9
117.5°	290.2	335.7	381.3	426.9	472.5	506.1	527.6	549.2	570.7	592.3	589.0
120°	528.7	554.6	580.7	606.7	632.7	644.6	642.2	639.9	637.6	635.3	631.9
122.5°	659.7	664.8	669.8	674.9	679.9	681.8	680.4	679.0	677.6	676.2	672.5
125°	741.0	740.5	739.9	739.3	738.7	737.8	736.4	735.1	733.7	732.4	728.7
127.5°	792.3	792.2	792.1	792.0	791.9	790.8	788.9	786.9	785.0	783.0	780.2
130°	824.3	824.4	824.6	824.8	825.0	824.0	821.9	819.8	817.7	815.5	813.4
132.5°	855.4	855.7	855.8	856.0	856.2	855.4	853.6	851.7	849.9	848.2	846.0
135°	900.5	900.9	901.2	901.6	902.0	901.2	899.4	897.4	895.5	893.6	891.9
137.5°	941.6	942.2	942.9	943.5	944.2	943.5	941.7	939.8	937.9	936.0	934.1
140°	967.3	968.2	969.1	970.1	971.1	970.7	969.0	967.3	965.5	963.8	961.6
142.5°	992.2	993.2	994.1	995.1	996.1	995.7	994.2	992.5	991.0	989.4	987.0
145°	1027.0	1028.0	1029.0	1030.0	1030.9	1030.7	1029.3	1028.0	1026.6	1025.3	1022.1
147.5°	1057.7	1058.5	1059.3	1060.1	1060.9	1060.9	1059.9	1058.8	1057.9	1056.9	1053.6
150°	1076.4	1077.4	1078.4	1079.3	1080.3	1080.2	1079.0	1077.9	1076.8	1075.5	1072.5
152.5°	1092.4	1093.6	1094.9	1096.2	1097.5	1097.6	1096.4	1095.2	1094.1	1092.9	1090.0
155°	1114.6	1116.1	1117.7	1119.2	1120.7	1121.0	1119.8	1118.6	1117.4	1116.3	1114.0
157.5°	1134.8	1136.4	1137.8	1139.4	1140.8	1140.9	1139.6	1138.3	1137.0	1135.7	1134.1
160°	1146.6	1148.0	1149.3	1150.7	1152.0	1152.1	1151.0	1149.8	1148.7	1147.5	1146.4
162.5°	1156.3	1158.0	1159.7	1161.3	1162.9	1163.2	1161.8	1160.5	1159.2	1157.9	1156.9
165°	1170.9	1172.2	1173.6	1174.9	1176.3	1176.3	1174.9	1173.6	1172.2	1170.9	1170.4
167.5°	1180.1	1181.9	1183.6	1185.3	1187.0	1187.2	1185.9	1184.5	1183.2	1181.9	1181.3
170°	1185.6	1187.4	1189.1	1190.8	1192.5	1192.8	1191.4	1190.1	1188.7	1187.4	1187.0
172.5°	1189.8	1191.6	1193.3	1195.0	1196.8	1196.9	1195.6	1194.3	1192.9	1191.6	1191.2
175°	1193.4	1195.4	1197.3	1199.2	1201.2	1201.4	1200.1	1198.7	1197.4	1196.0	1195.6
177.5°	1195.7	1197.1	1198.5	1199.9	1201.3	1201.4	1200.3	1199.2	1198.2	1197.1	1196.9
180°	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	545.8	544.5	543.5	540.9	539.5	536.5	536.1	536.0	532.1	528.4	527.3
5°	564.5	561.5	557.1	551.9	546.5	541.0	537.3	534.3	526.8	519.8	515.8
7.5°	583.3	577.0	569.3	559.5	551.3	542.2	535.3	529.2	518.7	508.6	501.8
10°	597.5	587.1	576.9	563.4	552.8	542.4	532.8	524.5	512.7	499.3	489.8
12.5°	606.2	594.8	580.7	567.5	553.8	540.6	527.7	517.1	503.1	489.3	478.2
15°	618.0	605.8	588.7	569.8	552.3	535.0	520.2	506.9	488.8	472.2	458.5
17.5°	627.7	610.8	592.6	570.7	550.3	528.5	509.4	492.4	472.1	452.2	436.1
20°	630.8	614.1	593.0	571.1	547.1	521.3	500.8	482.2	460.6	438.9	420.4
22.5°	628.8	615.9	592.4	566.2	541.6	514.7	491.5	469.9	445.9	423.8	402.4
25°	615.8	611.3	589.1	560.6	532.5	501.2	474.3	450.8	423.4	399.7	376.3
27.5°	585.3	594.9	581.1	550.7	519.4	485.9	455.7	428.9	400.5	373.8	350.6
30°	556.0	578.0	572.1	543.9	508.9	476.0	442.1	414.1	383.8	356.3	333.4
32.5°	515.8	552.2	558.0	534.4	498.2	462.0	426.5	398.7	367.0	338.1	315.7
35°	451.8	506.3	531.3	516.3	480.0	440.9	404.3	371.9	340.0	311.5	289.3
37.5°	375.6	449.8	491.5	492.5	459.2	418.6	378.6	346.4	313.8	285.8	261.8
40°	326.1	406.5	460.8	472.8	444.7	400.8	360.4	327.6	295.8	268.3	240.8
42.5°	281.7	361.7	428.4	449.4	427.1	383.4	342.9	308.7	277.7	251.8	223.6
45°	227.8	297.8	371.3	408.7	396.3	356.0	313.2	280.5	251.5	229.1	202.0
47.5°	192.2	241.5	312.7	363.2	363.1	326.2	284.1	252.9	225.9	204.9	183.0
50°	171.9	214.8	275.0	332.4	337.2	306.3	266.3	235.4	210.2	188.2	170.6
52.5°	153.6	189.1	243.1	298.2	311.9	285.1	246.3	217.8	193.3	173.0	158.0
55°	129.8	157.3	198.4	249.8	270.6	251.7	217.2	190.5	170.7	153.7	140.7
57.5°	109.8	130.4	163.4	204.8	228.9	217.1	188.7	167.0	150.0	134.6	124.4
60°	97.3	114.1	142.0	176.7	203.3	195.0	170.7	150.6	136.2	122.8	113.2
62.5°	85.4	99.9	123.8	152.0	176.3	172.9	153.1	136.2	123.5	111.4	103.2
65°	68.7	79.2	98.0	120.0	139.7	141.3	127.0	115.5	104.3	94.7	87.4
67.5°	54.7	61.6	74.8	93.4	108.0	113.3	104.6	95.8	86.8	79.4	73.1
70°	46.1	51.7	61.3	76.3	89.8	95.4	90.3	83.5	75.7	69.6	64.2
72.5°	37.3	42.8	49.9	60.9	72.5	78.5	76.7	71.8	65.6	60.4	55.4
75°	28.1	29.8	34.7	42.1	51.1	56.3	57.6	55.0	50.0	46.1	43.1
77.5°	20.8	21.9	24.1	28.0	33.9	38.6	40.4	40.1	36.7	34.5	31.6
80°	16.6	17.2	18.3	20.0	24.5	29.1	30.4	30.4	28.0	27.1	24.3
82.5°	12.6	13.0	13.8	14.7	16.7	20.8	22.3	22.5	21.0	19.8	17.6
85°	7.3	7.0	7.4	8.0	8.3	9.5	11.7	12.1	11.7	10.2	9.6
87.5°	5.4	5.2	4.9	4.4	4.1	3.8	4.2	4.5	4.3	4.2	4.4
90°	14.3	12.7	11.2	9.4	7.3	5.1	3.0	0.9	3.0	5.1	7.3
92.5°	18.6	17.8	17.0	16.7	17.0	17.1	17.3	17.5	17.3	17.1	17.0
95°	31.1	29.8	28.4	30.9	37.3	43.6	50.0	56.3	50.0	43.6	37.3
97.5°	39.0	35.9	32.8	40.2	58.0	76.0	93.9	111.8	93.9	76.0	58.0
100°	42.9	39.5	36.3	47.9	74.3	100.6	127.0	153.4	127.0	100.6	74.3
102.5°	105.6	133.0	160.4	176.8	182.4	188.0	193.6	199.2	193.6	188.0	182.4
105°	158.0	210.6	263.2	286.6	280.8	275.0	269.3	263.5	269.3	275.0	280.8
107.5°	200.2	263.2	326.3	355.5	350.7	346.1	341.4	336.8	341.4	346.1	350.7
110°	263.0	318.6	374.3	400.1	396.1	392.1	388.0	383.9	388.0	392.1	396.1



TEST NUMBER: P331639-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	410.1	423.8	437.6	442.6	439.0	435.5	431.9	428.4	431.9	435.5	439.0
115°	525.1	520.3	515.5	511.4	508.2	504.9	501.7	498.4	501.7	504.9	508.2
117.5°	585.7	582.4	579.0	575.6	571.9	568.3	564.6	560.9	564.6	568.3	571.9
120°	628.4	624.9	621.4	618.2	615.4	612.5	609.6	606.7	609.6	612.5	615.4
122.5°	668.6	664.9	661.1	657.7	654.7	651.6	648.6	645.6	648.6	651.6	654.7
125°	725.0	721.4	717.7	714.6	712.2	709.6	707.1	704.7	707.1	709.6	712.2
127.5°	777.5	774.8	772.0	769.3	766.5	763.8	761.0	758.2	761.0	763.8	766.5
130°	811.3	809.2	807.1	804.5	801.4	798.3	795.2	792.1	795.2	798.3	801.4
132.5°	843.9	841.8	839.7	837.3	834.7	832.1	829.5	826.8	829.5	832.1	834.7
135°	890.1	888.4	886.6	884.2	881.2	878.1	875.0	871.9	875.0	878.1	881.2
137.5°	932.1	930.2	928.1	926.1	924.0	921.8	919.7	917.5	919.7	921.8	924.0
140°	959.5	957.4	955.3	953.5	951.9	950.4	948.8	947.3	948.8	950.4	951.9
142.5°	984.6	982.1	979.7	977.8	976.4	975.0	973.6	972.2	973.6	975.0	976.4
145°	1018.7	1015.5	1012.2	1010.6	1010.9	1011.1	1011.2	1011.5	1011.2	1011.1	1010.9
147.5°	1050.4	1047.2	1043.9	1042.7	1043.4	1044.2	1044.9	1045.6	1044.9	1044.2	1043.4
150°	1069.4	1066.3	1063.2	1062.4	1063.7	1065.1	1066.4	1067.8	1066.4	1065.1	1063.7
152.5°	1087.0	1084.1	1081.2	1080.5	1082.0	1083.5	1085.0	1086.5	1085.0	1083.5	1082.0
155°	1111.7	1109.4	1107.1	1106.8	1108.5	1110.3	1112.0	1113.7	1112.0	1110.3	1108.5
157.5°	1132.5	1130.9	1129.3	1129.2	1130.7	1132.1	1133.6	1135.1	1133.6	1132.1	1130.7
160°	1145.2	1144.0	1142.9	1142.9	1144.0	1145.2	1146.4	1147.5	1146.4	1145.2	1144.0
162.5°	1155.9	1154.9	1153.9	1154.0	1155.1	1156.3	1157.5	1158.6	1157.5	1156.3	1155.1
165°	1169.8	1169.1	1168.6	1168.9	1170.0	1171.2	1172.3	1173.5	1172.3	1171.2	1170.0
167.5°	1180.7	1180.2	1179.7	1180.0	1181.1	1182.3	1183.5	1184.6	1183.5	1182.3	1181.1
170°	1186.6	1186.3	1185.9	1186.3	1187.4	1188.5	1189.7	1190.8	1189.7	1188.5	1187.4
172.5°	1190.7	1190.4	1190.0	1190.4	1191.6	1192.7	1193.8	1195.0	1193.8	1192.7	1191.6
175°	1195.3	1194.9	1194.5	1195.0	1196.4	1197.7	1199.1	1200.4	1199.1	1197.7	1196.4
177.5°	1196.8	1196.6	1196.5	1196.9	1198.0	1199.1	1200.2	1201.3	1200.2	1199.1	1198.0
180°	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8



TEST NUMBER: P331639-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	525.5	524.4	522.4	519.5	517.7	514.6	512.6	513.7	514.0	513.7	513.5
5°	511.4	507.4	502.1	496.8	492.0	486.9	483.9	482.7	480.0	478.6	477.8
7.5°	494.2	487.5	480.0	470.9	463.3	455.2	451.1	449.1	443.8	440.9	438.4
10°	481.5	470.9	463.3	451.5	444.3	433.7	426.5	426.7	419.5	415.4	412.5
12.5°	467.4	455.8	443.2	432.5	422.5	414.0	405.3	401.8	394.1	390.2	382.2
15°	444.1	430.6	417.3	402.8	392.6	379.4	366.9	351.5	339.1	328.3	325.4
17.5°	418.7	401.9	388.5	371.5	354.1	332.0	317.4	308.4	301.0	295.3	291.1
20°	401.1	384.1	369.8	344.3	320.7	305.7	295.1	288.1	280.4	274.3	270.9
22.5°	382.8	365.0	345.5	317.0	298.6	286.7	277.1	269.2	263.9	259.2	256.1
25°	356.7	337.2	305.2	285.6	270.8	258.1	251.5	246.7	241.2	234.6	231.7
27.5°	329.1	298.2	275.2	260.6	246.5	238.3	232.3	225.1	220.1	217.2	214.1
30°	308.5	277.6	259.7	243.7	233.7	224.6	217.6	213.5	208.7	203.7	201.7
32.5°	285.6	260.9	243.6	230.4	220.2	212.5	206.9	200.3	196.9	193.8	189.6
35°	257.1	238.3	222.6	211.9	202.2	195.9	189.5	185.6	179.3	176.7	175.0
37.5°	232.9	216.7	205.0	193.6	186.0	179.0	175.0	168.8	166.2	162.5	159.0
40°	219.2	203.3	192.1	182.8	174.2	169.1	164.1	159.1	155.0	153.4	149.1
42.5°	205.4	192.4	181.1	171.0	165.3	159.7	153.4	149.8	145.5	142.8	140.2
45°	186.1	174.6	165.0	156.7	150.3	144.6	140.6	134.4	132.1	126.7	124.4
47.5°	169.3	158.6	149.4	141.5	135.3	131.6	125.6	120.8	117.0	113.7	110.8
50°	157.3	148.3	139.4	132.4	126.9	121.5	115.4	113.0	107.0	105.3	103.7
52.5°	146.3	137.8	129.7	122.8	117.2	112.0	106.6	103.5	99.5	97.8	96.6
55°	130.9	122.8	115.0	108.9	103.4	98.0	94.7	90.7	88.9	87.6	86.1
57.5°	115.5	108.2	102.2	96.0	90.4	86.2	82.3	80.0	78.1	76.4	74.6
60°	105.7	98.7	93.4	87.6	81.9	78.4	75.4	72.6	70.4	67.8	67.0
62.5°	95.4	89.2	84.3	78.7	73.7	70.5	67.7	65.1	62.4	58.6	57.6
65°	81.1	76.3	71.1	66.4	62.0	58.9	54.8	51.9	50.7	50.4	50.2
67.5°	68.2	63.7	59.2	54.5	50.5	47.5	45.4	45.0	44.2	44.0	43.5
70°	59.6	55.4	51.0	46.5	42.6	42.1	41.3	40.5	39.6	39.3	38.9
72.5°	51.9	47.5	43.0	39.5	37.8	37.2	36.4	35.6	35.1	34.7	34.5
75°	39.8	35.7	32.8	31.5	30.6	30.0	28.9	28.4	28.0	27.4	27.2
77.5°	28.7	26.3	25.0	24.2	23.2	22.7	22.0	21.4	21.0	21.0	20.6
80°	21.9	20.7	19.8	18.7	18.3	17.6	17.4	16.9	17.0	16.5	16.5
82.5°	17.0	15.6	14.8	14.3	13.9	13.3	13.1	12.9	12.9	12.5	12.5
85°	8.7	8.3	8.0	7.6	7.6	7.0	7.3	7.0	7.0	6.7	6.5
87.5°	4.6	4.9	4.9	5.2	5.5	5.7	5.9	6.0	6.1	6.3	6.3
90°	9.4	11.2	12.7	14.3	15.8	17.4	18.3	19.2	20.2	21.2	21.9
92.5°	16.7	17.0	17.8	18.6	19.3	20.1	20.6	21.1	21.6	22.1	22.5
95°	30.9	28.4	29.8	31.1	32.4	33.8	34.7	35.7	36.7	37.7	38.1
97.5°	40.2	32.8	35.9	39.0	42.2	45.2	46.0	46.8	47.5	48.3	48.8
100°	47.9	36.3	39.5	42.9	46.1	49.4	51.0	52.5	54.1	55.6	56.5
102.5°	176.8	160.4	133.0	105.6	78.2	50.8	52.8	54.8	56.8	58.8	60.1
105°	286.6	263.2	210.6	158.0	105.4	52.8	55.0	57.1	59.2	61.3	62.8
107.5°	355.5	326.3	263.2	200.2	137.1	74.0	71.8	69.7	67.5	65.4	64.7
110°	400.1	374.3	318.6	263.0	207.3	151.6	132.4	113.2	93.9	74.6	65.4



TEST NUMBER: P331639-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	442.6	437.6	423.8	410.1	396.3	382.5	312.3	242.1	171.8	101.5	66.7
115°	511.4	515.5	520.3	525.1	529.9	534.8	445.6	356.4	267.3	178.1	126.5
117.5°	575.6	579.0	582.4	585.7	589.0	592.3	570.7	549.2	527.6	506.1	472.5
120°	618.2	621.4	624.9	628.4	631.9	635.3	637.6	639.9	642.2	644.6	632.7
122.5°	657.7	661.1	664.9	668.6	672.5	676.2	677.6	679.0	680.4	681.8	679.9
125°	714.6	717.7	721.4	725.0	728.7	732.4	733.7	735.1	736.4	737.8	738.7
127.5°	769.3	772.0	774.8	777.5	780.2	783.0	785.0	786.9	788.9	790.8	791.9
130°	804.5	807.1	809.2	811.3	813.4	815.5	817.7	819.8	821.9	824.0	825.0
132.5°	837.3	839.7	841.8	843.9	846.0	848.2	849.9	851.7	853.6	855.4	856.2
135°	884.2	886.6	888.4	890.1	891.9	893.6	895.5	897.4	899.4	901.2	902.0
137.5°	926.1	928.1	930.2	932.1	934.1	936.0	937.9	939.8	941.7	943.5	944.2
140°	953.5	955.3	957.4	959.5	961.6	963.8	965.5	967.3	969.0	970.7	971.1
142.5°	977.8	979.7	982.1	984.6	987.0	989.4	991.0	992.5	994.2	995.7	996.1
145°	1010.6	1012.2	1015.5	1018.7	1022.1	1025.3	1026.6	1028.0	1029.3	1030.7	1030.9
147.5°	1042.7	1043.9	1047.2	1050.4	1053.6	1056.9	1057.9	1058.8	1059.9	1060.9	1060.9
150°	1062.4	1063.2	1066.3	1069.4	1072.5	1075.5	1076.8	1077.9	1079.0	1080.2	1080.3
152.5°	1080.5	1081.2	1084.1	1087.0	1090.0	1092.9	1094.1	1095.2	1096.4	1097.6	1097.5
155°	1106.8	1107.1	1109.4	1111.7	1114.0	1116.3	1117.4	1118.6	1119.8	1121.0	1120.7
157.5°	1129.2	1129.3	1130.9	1132.5	1134.1	1135.7	1137.0	1138.3	1139.6	1140.9	1140.8
160°	1142.9	1142.9	1144.0	1145.2	1146.4	1147.5	1148.7	1149.8	1151.0	1152.1	1152.0
162.5°	1154.0	1153.9	1154.9	1155.9	1156.9	1157.9	1159.2	1160.5	1161.8	1163.2	1162.9
165°	1168.9	1168.6	1169.1	1169.8	1170.4	1170.9	1172.2	1173.6	1174.9	1176.3	1176.3
167.5°	1180.0	1179.7	1180.2	1180.7	1181.3	1181.9	1183.2	1184.5	1185.9	1187.2	1187.0
170°	1186.3	1185.9	1186.3	1186.6	1187.0	1187.4	1188.7	1190.1	1191.4	1192.8	1192.5
172.5°	1190.4	1190.0	1190.4	1190.7	1191.2	1191.6	1192.9	1194.3	1195.6	1196.9	1196.8
175°	1195.0	1194.5	1194.9	1195.3	1195.6	1196.0	1197.4	1198.7	1200.1	1201.4	1201.2
177.5°	1196.9	1196.5	1196.6	1196.8	1196.9	1197.1	1198.2	1199.2	1200.3	1201.4	1201.3
180°	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8



TEST NUMBER: P331639-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	511.8	512.1	511.7	511.9	511.7	512.1	511.8	513.5	513.7	514.0	513.7
5°	476.9	474.7	474.3	473.8	474.3	474.7	476.9	477.8	478.6	480.0	482.7
7.5°	435.2	434.9	433.9	432.6	433.9	434.9	435.2	438.4	440.9	443.8	449.1
10°	408.4	407.4	407.2	405.9	407.2	407.4	408.4	412.5	415.4	419.5	426.7
12.5°	376.9	371.0	370.4	367.1	370.4	371.0	376.9	382.2	390.2	394.1	401.8
15°	321.0	319.8	316.1	313.7	316.1	319.8	321.0	325.4	328.3	339.1	351.5
17.5°	288.9	285.3	284.1	283.6	284.1	285.3	288.9	291.1	295.3	301.0	308.4
20°	268.3	265.1	264.5	264.1	264.5	265.1	268.3	270.9	274.3	280.4	288.1
22.5°	254.1	250.6	249.2	248.1	249.2	250.6	254.1	256.1	259.2	263.9	269.2
25°	229.8	228.5	227.8	227.4	227.8	228.5	229.8	231.7	234.6	241.2	246.7
27.5°	210.8	208.0	207.4	206.4	207.4	208.0	210.8	214.1	217.2	220.1	225.1
30°	200.0	199.1	197.8	196.7	197.8	199.1	200.0	201.7	203.7	208.7	213.5
32.5°	187.3	186.5	185.3	184.8	185.3	186.5	187.3	189.6	193.8	196.9	200.3
35°	173.2	170.6	169.4	167.8	169.4	170.6	173.2	175.0	176.7	179.3	185.6
37.5°	158.2	156.9	155.3	155.9	155.3	156.9	158.2	159.0	162.5	166.2	168.8
40°	146.7	145.8	145.4	145.2	145.4	145.8	146.7	149.1	153.4	155.0	159.1
42.5°	137.5	134.9	134.0	134.0	134.0	134.9	137.5	140.2	142.8	145.5	149.8
45°	123.5	121.2	119.4	119.6	119.4	121.2	123.5	124.4	126.7	132.1	134.4
47.5°	109.3	109.2	108.1	108.4	108.1	109.2	109.3	110.8	113.7	117.0	120.8
50°	102.4	101.3	100.5	100.8	100.5	101.3	102.4	103.7	105.3	107.0	113.0
52.5°	95.9	94.9	94.3	95.1	94.3	94.9	95.9	96.6	97.8	99.5	103.5
55°	85.2	84.1	83.9	83.7	83.9	84.1	85.2	86.1	87.6	88.9	90.7
57.5°	73.2	72.5	71.3	70.9	71.3	72.5	73.2	74.6	76.4	78.1	80.0
60°	64.7	63.2	61.3	61.1	61.3	63.2	64.7	67.0	67.8	70.4	72.6
62.5°	56.7	56.5	56.1	56.1	56.1	56.5	56.7	57.6	58.6	62.4	65.1
65°	49.8	49.7	49.8	50.0	49.8	49.7	49.8	50.2	50.4	50.7	51.9
67.5°	43.4	43.0	42.7	42.9	42.7	43.0	43.4	43.5	44.0	44.2	45.0
70°	38.5	38.3	38.2	38.2	38.2	38.3	38.5	38.9	39.3	39.6	40.5
72.5°	33.8	33.8	33.6	33.4	33.6	33.8	33.8	34.5	34.7	35.1	35.6
75°	27.1	26.7	26.7	26.7	26.7	26.7	27.1	27.2	27.4	28.0	28.4
77.5°	20.6	20.4	20.2	20.1	20.2	20.4	20.6	20.6	21.0	21.0	21.4
80°	16.3	16.1	15.9	15.9	15.9	16.1	16.3	16.5	16.5	17.0	16.9
82.5°	12.5	12.2	12.2	12.1	12.2	12.2	12.5	12.5	12.5	12.9	12.9
85°	6.7	6.8	6.7	7.0	6.7	6.8	6.7	6.5	6.7	7.0	7.0
87.5°	6.4	6.3	6.5	6.4	6.5	6.3	6.4	6.3	6.3	6.1	6.0
90°	22.3	22.7	23.0	23.4	23.0	22.7	22.3	21.9	21.2	20.2	19.2
92.5°	22.7	22.9	23.2	23.4	23.2	22.9	22.7	22.5	22.1	21.6	21.1
95°	37.8	37.7	37.4	37.3	37.4	37.7	37.8	38.1	37.7	36.7	35.7
97.5°	49.1	49.3	49.5	49.7	49.5	49.3	49.1	48.8	48.3	47.5	46.8
100°	56.9	57.3	57.7	58.0	57.7	57.3	56.9	56.5	55.6	54.1	52.5
102.5°	60.6	61.1	61.7	62.2	61.7	61.1	60.6	60.1	58.8	56.8	54.8
105°	63.6	64.3	65.1	65.9	65.1	64.3	63.6	62.8	61.3	59.2	57.1
107.5°	65.5	66.2	67.0	67.8	67.0	66.2	65.5	64.7	65.4	67.5	69.7
110°	66.1	66.9	67.7	68.5	67.7	66.9	66.1	65.4	74.6	93.9	113.2



TEST NUMBER: P331639-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	67.3	67.9	68.6	69.1	68.6	67.9	67.3	66.7	101.5	171.8	242.1
115°	112.7	98.8	85.0	71.1	85.0	98.8	112.7	126.5	178.1	267.3	356.4
117.5°	426.9	381.3	335.7	290.2	335.7	381.3	426.9	472.5	506.1	527.6	549.2
120°	606.7	580.7	554.6	528.7	554.6	580.7	606.7	632.7	644.6	642.2	639.9
122.5°	674.9	669.8	664.8	659.7	664.8	669.8	674.9	679.9	681.8	680.4	679.0
125°	739.3	739.9	740.5	741.0	740.5	739.9	739.3	738.7	737.8	736.4	735.1
127.5°	792.0	792.1	792.2	792.3	792.2	792.1	792.0	791.9	790.8	788.9	786.9
130°	824.8	824.6	824.4	824.3	824.4	824.6	824.8	825.0	824.0	821.9	819.8
132.5°	856.0	855.8	855.7	855.4	855.7	855.8	856.0	856.2	855.4	853.6	851.7
135°	901.6	901.2	900.9	900.5	900.9	901.2	901.6	902.0	901.2	899.4	897.4
137.5°	943.5	942.9	942.2	941.6	942.2	942.9	943.5	944.2	943.5	941.7	939.8
140°	970.1	969.1	968.2	967.3	968.2	969.1	970.1	971.1	970.7	969.0	967.3
142.5°	995.1	994.1	993.2	992.2	993.2	994.1	995.1	996.1	995.7	994.2	992.5
145°	1030.0	1029.0	1028.0	1027.0	1028.0	1029.0	1030.0	1030.9	1030.7	1029.3	1028.0
147.5°	1060.1	1059.3	1058.5	1057.7	1058.5	1059.3	1060.1	1060.9	1060.9	1059.9	1058.8
150°	1079.3	1078.4	1077.4	1076.4	1077.4	1078.4	1079.3	1080.3	1080.2	1079.0	1077.9
152.5°	1096.2	1094.9	1093.6	1092.4	1093.6	1094.9	1096.2	1097.5	1097.6	1096.4	1095.2
155°	1119.2	1117.7	1116.1	1114.6	1116.1	1117.7	1119.2	1120.7	1121.0	1119.8	1118.6
157.5°	1139.4	1137.8	1136.4	1134.8	1136.4	1137.8	1139.4	1140.8	1140.9	1139.6	1138.3
160°	1150.7	1149.3	1148.0	1146.6	1148.0	1149.3	1150.7	1152.0	1152.1	1151.0	1149.8
162.5°	1161.3	1159.7	1158.0	1156.3	1158.0	1159.7	1161.3	1162.9	1163.2	1161.8	1160.5
165°	1174.9	1173.6	1172.2	1170.9	1172.2	1173.6	1174.9	1176.3	1176.3	1174.9	1173.6
167.5°	1185.3	1183.6	1181.9	1180.1	1181.9	1183.6	1185.3	1187.0	1187.2	1185.9	1184.5
170°	1190.8	1189.1	1187.4	1185.6	1187.4	1189.1	1190.8	1192.5	1192.8	1191.4	1190.1
172.5°	1195.0	1193.3	1191.6	1189.8	1191.6	1193.3	1195.0	1196.8	1196.9	1195.6	1194.3
175°	1199.2	1197.3	1195.4	1193.4	1195.4	1197.3	1199.2	1201.2	1201.4	1200.1	1198.7
177.5°	1199.9	1198.5	1197.1	1195.7	1197.1	1198.5	1199.9	1201.3	1201.4	1200.3	1199.2
180°	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8



TEST NUMBER: P331639-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	512.6	514.6	517.7	519.5	522.4	524.4	525.5	527.3	528.4	532.1	536.0
5°	483.9	486.9	492.0	496.8	502.1	507.4	511.4	515.8	519.8	526.8	534.3
7.5°	451.1	455.2	463.3	470.9	480.0	487.5	494.2	501.8	508.6	518.7	529.2
10°	426.5	433.7	444.3	451.5	463.3	470.9	481.5	489.8	499.3	512.7	524.5
12.5°	405.3	414.0	422.5	432.5	443.2	455.8	467.4	478.2	489.3	503.1	517.1
15°	366.9	379.4	392.6	402.8	417.3	430.6	444.1	458.5	472.2	488.8	506.9
17.5°	317.4	332.0	354.1	371.5	388.5	401.9	418.7	436.1	452.2	472.1	492.4
20°	295.1	305.7	320.7	344.3	369.8	384.1	401.1	420.4	438.9	460.6	482.2
22.5°	277.1	286.7	298.6	317.0	345.5	365.0	382.8	402.4	423.8	445.9	469.9
25°	251.5	258.1	270.8	285.6	305.2	337.2	356.7	376.3	399.7	423.4	450.8
27.5°	232.3	238.3	246.5	260.6	275.2	298.2	329.1	350.6	373.8	400.5	428.9
30°	217.6	224.6	233.7	243.7	259.7	277.6	308.5	333.4	356.3	383.8	414.1
32.5°	206.9	212.5	220.2	230.4	243.6	260.9	285.6	315.7	338.1	367.0	398.7
35°	189.5	195.9	202.2	211.9	222.6	238.3	257.1	289.3	311.5	340.0	371.9
37.5°	175.0	179.0	186.0	193.6	205.0	216.7	232.9	261.8	285.8	313.8	346.4
40°	164.1	169.1	174.2	182.8	192.1	203.3	219.2	240.8	268.3	295.8	327.6
42.5°	153.4	159.7	165.3	171.0	181.1	192.4	205.4	223.6	251.8	277.7	308.7
45°	140.6	144.6	150.3	156.7	165.0	174.6	186.1	202.0	229.1	251.5	280.5
47.5°	125.6	131.6	135.3	141.5	149.4	158.6	169.3	183.0	204.9	225.9	252.9
50°	115.4	121.5	126.9	132.4	139.4	148.3	157.3	170.6	188.2	210.2	235.4
52.5°	106.6	112.0	117.2	122.8	129.7	137.8	146.3	158.0	173.0	193.3	217.8
55°	94.7	98.0	103.4	108.9	115.0	122.8	130.9	140.7	153.7	170.7	190.5
57.5°	82.3	86.2	90.4	96.0	102.2	108.2	115.5	124.4	134.6	150.0	167.0
60°	75.4	78.4	81.9	87.6	93.4	98.7	105.7	113.2	122.8	136.2	150.6
62.5°	67.7	70.5	73.7	78.7	84.3	89.2	95.4	103.2	111.4	123.5	136.2
65°	54.8	58.9	62.0	66.4	71.1	76.3	81.1	87.4	94.7	104.3	115.5
67.5°	45.4	47.5	50.5	54.5	59.2	63.7	68.2	73.1	79.4	86.8	95.8
70°	41.3	42.1	42.6	46.5	51.0	55.4	59.6	64.2	69.6	75.7	83.5
72.5°	36.4	37.2	37.8	39.5	43.0	47.5	51.9	55.4	60.4	65.6	71.8
75°	28.9	30.0	30.6	31.5	32.8	35.7	39.8	43.1	46.1	50.0	55.0
77.5°	22.0	22.7	23.2	24.2	25.0	26.3	28.7	31.6	34.5	36.7	40.1
80°	17.4	17.6	18.3	18.7	19.8	20.7	21.9	24.3	27.1	28.0	30.4
82.5°	13.1	13.3	13.9	14.3	14.8	15.6	17.0	17.6	19.8	21.0	22.5
85°	7.3	7.0	7.6	7.6	8.0	8.3	8.7	9.6	10.2	11.7	12.1
87.5°	5.9	5.7	5.5	5.2	4.9	4.9	4.6	4.4	4.2	4.3	4.5
90°	18.3	17.4	15.8	14.3	12.7	11.2	9.4	7.3	5.1	3.0	0.9
92.5°	20.6	20.1	19.3	18.6	17.8	17.0	16.7	17.0	17.1	17.3	17.5
95°	34.7	33.8	32.4	31.1	29.8	28.4	30.9	37.3	43.6	50.0	56.3
97.5°	46.0	45.2	42.2	39.0	35.9	32.8	40.2	58.0	76.0	93.9	111.8
100°	51.0	49.4	46.1	42.9	39.5	36.3	47.9	74.3	100.6	127.0	153.4
102.5°	52.8	50.8	78.2	105.6	133.0	160.4	176.8	182.4	188.0	193.6	199.2
105°	55.0	52.8	105.4	158.0	210.6	263.2	286.6	280.8	275.0	269.3	263.5
107.5°	71.8	74.0	137.1	200.2	263.2	326.3	355.5	350.7	346.1	341.4	336.8
110°	132.4	151.6	207.3	263.0	318.6	374.3	400.1	396.1	392.1	388.0	383.9



TEST NUMBER: P331639-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	312.3	382.5	396.3	410.1	423.8	437.6	442.6	439.0	435.5	431.9	428.4
115°	445.6	534.8	529.9	525.1	520.3	515.5	511.4	508.2	504.9	501.7	498.4
117.5°	570.7	592.3	589.0	585.7	582.4	579.0	575.6	571.9	568.3	564.6	560.9
120°	637.6	635.3	631.9	628.4	624.9	621.4	618.2	615.4	612.5	609.6	606.7
122.5°	677.6	676.2	672.5	668.6	664.9	661.1	657.7	654.7	651.6	648.6	645.6
125°	733.7	732.4	728.7	725.0	721.4	717.7	714.6	712.2	709.6	707.1	704.7
127.5°	785.0	783.0	780.2	777.5	774.8	772.0	769.3	766.5	763.8	761.0	758.2
130°	817.7	815.5	813.4	811.3	809.2	807.1	804.5	801.4	798.3	795.2	792.1
132.5°	849.9	848.2	846.0	843.9	841.8	839.7	837.3	834.7	832.1	829.5	826.8
135°	895.5	893.6	891.9	890.1	888.4	886.6	884.2	881.2	878.1	875.0	871.9
137.5°	937.9	936.0	934.1	932.1	930.2	928.1	926.1	924.0	921.8	919.7	917.5
140°	965.5	963.8	961.6	959.5	957.4	955.3	953.5	951.9	950.4	948.8	947.3
142.5°	991.0	989.4	987.0	984.6	982.1	979.7	977.8	976.4	975.0	973.6	972.2
145°	1026.6	1025.3	1022.1	1018.7	1015.5	1012.2	1010.6	1010.9	1011.1	1011.2	1011.5
147.5°	1057.9	1056.9	1053.6	1050.4	1047.2	1043.9	1042.7	1043.4	1044.2	1044.9	1045.6
150°	1076.8	1075.5	1072.5	1069.4	1066.3	1063.2	1062.4	1063.7	1065.1	1066.4	1067.8
152.5°	1094.1	1092.9	1090.0	1087.0	1084.1	1081.2	1080.5	1082.0	1083.5	1085.0	1086.5
155°	1117.4	1116.3	1114.0	1111.7	1109.4	1107.1	1106.8	1108.5	1110.3	1112.0	1113.7
157.5°	1137.0	1135.7	1134.1	1132.5	1130.9	1129.3	1129.2	1130.7	1132.1	1133.6	1135.1
160°	1148.7	1147.5	1146.4	1145.2	1144.0	1142.9	1142.9	1144.0	1145.2	1146.4	1147.5
162.5°	1159.2	1157.9	1156.9	1155.9	1154.9	1153.9	1154.0	1155.1	1156.3	1157.5	1158.6
165°	1172.2	1170.9	1170.4	1169.8	1169.1	1168.6	1168.9	1170.0	1171.2	1172.3	1173.5
167.5°	1183.2	1181.9	1181.3	1180.7	1180.2	1179.7	1180.0	1181.1	1182.3	1183.5	1184.6
170°	1188.7	1187.4	1187.0	1186.6	1186.3	1185.9	1186.3	1187.4	1188.5	1189.7	1190.8
172.5°	1192.9	1191.6	1191.2	1190.7	1190.4	1190.0	1190.4	1191.6	1192.7	1193.8	1195.0
175°	1197.4	1196.0	1195.6	1195.3	1194.9	1194.5	1195.0	1196.4	1197.7	1199.1	1200.4
177.5°	1198.2	1197.1	1196.9	1196.8	1196.6	1196.5	1196.9	1198.0	1199.1	1200.2	1201.3
180°	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8



TEST NUMBER: P331639-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	536.1	536.5	539.5	540.9	543.5	544.5	545.8	545.4	545.4	546.0	550.2
5°	537.3	541.0	546.5	551.9	557.1	561.5	564.5	567.4	568.6	573.9	578.7
7.5°	535.3	542.2	551.3	559.5	569.3	577.0	583.3	589.1	593.0	600.9	608.9
10°	532.8	542.4	552.8	563.4	576.9	587.1	597.5	605.4	608.0	619.6	626.3
12.5°	527.7	540.6	553.8	567.5	580.7	594.8	606.2	614.2	623.3	633.7	646.0
15°	520.2	535.0	552.3	569.8	588.7	605.8	618.0	631.9	641.9	653.4	664.1
17.5°	509.4	528.5	550.3	570.7	592.6	610.8	627.7	641.0	648.0	654.6	656.2
20°	500.8	521.3	547.1	571.1	593.0	614.1	630.8	641.9	643.8	643.9	634.1
22.5°	491.5	514.7	541.6	566.2	592.4	615.9	628.8	633.6	626.2	613.7	594.7
25°	474.3	501.2	532.5	560.6	589.1	611.3	615.8	607.5	581.7	554.6	520.4
27.5°	455.7	485.9	519.4	550.7	581.1	594.9	585.3	555.2	508.9	468.6	419.7
30°	442.1	476.0	508.9	543.9	572.1	578.0	556.0	511.7	457.6	396.9	348.1
32.5°	426.5	462.0	498.2	534.4	558.0	552.2	515.8	461.3	397.9	338.2	292.2
35°	404.3	440.9	480.0	516.3	531.3	506.3	451.8	380.9	316.1	260.4	228.7
37.5°	378.6	418.6	459.2	492.5	491.5	449.8	375.6	302.4	247.9	214.9	192.4
40°	360.4	400.8	444.7	472.8	460.8	406.5	326.1	257.1	217.2	190.9	174.5
42.5°	342.9	383.4	427.1	449.4	428.4	361.7	281.7	227.6	194.7	174.2	160.9
45°	313.2	356.0	396.3	408.7	371.3	297.8	227.8	188.5	166.6	151.5	142.3
47.5°	284.1	326.2	363.1	363.2	312.7	241.5	192.2	163.1	144.5	132.7	126.0
50°	266.3	306.3	337.2	332.4	275.0	214.8	171.9	146.8	131.3	122.2	115.2
52.5°	246.3	285.1	311.9	298.2	243.1	189.1	153.6	132.6	119.8	111.9	105.6
55°	217.2	251.7	270.6	249.8	198.4	157.3	129.8	113.3	103.7	97.0	91.6
57.5°	188.7	217.1	228.9	204.8	163.4	130.4	109.8	97.4	87.9	83.1	80.3
60°	170.7	195.0	203.3	176.7	142.0	114.1	97.3	85.8	78.7	75.6	72.8
62.5°	153.1	172.9	176.3	152.0	123.8	99.9	85.4	75.7	71.0	68.0	65.4
65°	127.0	141.3	139.7	120.0	98.0	79.2	68.7	62.8	59.3	55.0	50.4
67.5°	104.6	113.3	108.0	93.4	74.8	61.6	54.7	50.2	45.8	41.8	40.8
70°	90.3	95.4	89.8	76.3	61.3	51.7	46.1	40.8	38.2	37.3	35.5
72.5°	76.7	78.5	72.5	60.9	49.9	42.8	37.3	34.4	32.9	32.2	31.1
75°	57.6	56.3	51.1	42.1	34.7	29.8	28.1	27.1	26.1	25.4	24.8
77.5°	40.4	38.6	33.9	28.0	24.1	21.9	20.8	20.2	19.8	19.4	18.8
80°	30.4	29.1	24.5	20.0	18.3	17.2	16.6	15.9	15.9	15.6	15.0
82.5°	22.3	20.8	16.7	14.7	13.8	13.0	12.6	12.2	12.1	12.1	11.7
85°	11.7	9.5	8.3	8.0	7.4	7.0	7.3	6.8	6.8	6.8	6.7
87.5°	4.2	3.8	4.1	4.4	4.9	5.2	5.4	5.7	6.1	6.2	6.5
90°	3.0	5.1	7.3	9.4	11.2	12.7	14.3	15.8	17.4	18.3	19.2
92.5°	17.3	17.1	17.0	16.7	17.0	17.8	18.6	19.3	20.1	20.6	21.1
95°	50.0	43.6	37.3	30.9	28.4	29.8	31.1	32.4	33.8	34.7	35.7
97.5°	93.9	76.0	58.0	40.2	32.8	35.9	39.0	42.2	45.2	46.0	46.8
100°	127.0	100.6	74.3	47.9	36.3	39.5	42.9	46.1	49.4	51.0	52.5
102.5°	193.6	188.0	182.4	176.8	160.4	133.0	105.6	78.2	50.8	52.8	54.8
105°	269.3	275.0	280.8	286.6	263.2	210.6	158.0	105.4	52.8	55.0	57.1
107.5°	341.4	346.1	350.7	355.5	326.3	263.2	200.2	137.1	74.0	71.8	69.7
110°	388.0	392.1	396.1	400.1	374.3	318.6	263.0	207.3	151.6	132.4	113.2



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	431.9	435.5	439.0	442.6	437.6	423.8	410.1	396.3	382.5	312.3	242.1
115°	501.7	504.9	508.2	511.4	515.5	520.3	525.1	529.9	534.8	445.6	356.4
117.5°	564.6	568.3	571.9	575.6	579.0	582.4	585.7	589.0	592.3	570.7	549.2
120°	609.6	612.5	615.4	618.2	621.4	624.9	628.4	631.9	635.3	637.6	639.9
122.5°	648.6	651.6	654.7	657.7	661.1	664.9	668.6	672.5	676.2	677.6	679.0
125°	707.1	709.6	712.2	714.6	717.7	721.4	725.0	728.7	732.4	733.7	735.1
127.5°	761.0	763.8	766.5	769.3	772.0	774.8	777.5	780.2	783.0	785.0	786.9
130°	795.2	798.3	801.4	804.5	807.1	809.2	811.3	813.4	815.5	817.7	819.8
132.5°	829.5	832.1	834.7	837.3	839.7	841.8	843.9	846.0	848.2	849.9	851.7
135°	875.0	878.1	881.2	884.2	886.6	888.4	890.1	891.9	893.6	895.5	897.4
137.5°	919.7	921.8	924.0	926.1	928.1	930.2	932.1	934.1	936.0	937.9	939.8
140°	948.8	950.4	951.9	953.5	955.3	957.4	959.5	961.6	963.8	965.5	967.3
142.5°	973.6	975.0	976.4	977.8	979.7	982.1	984.6	987.0	989.4	991.0	992.5
145°	1011.2	1011.1	1010.9	1010.6	1012.2	1015.5	1018.7	1022.1	1025.3	1026.6	1028.0
147.5°	1044.9	1044.2	1043.4	1042.7	1043.9	1047.2	1050.4	1053.6	1056.9	1057.9	1058.8
150°	1066.4	1065.1	1063.7	1062.4	1063.2	1066.3	1069.4	1072.5	1075.5	1076.8	1077.9
152.5°	1085.0	1083.5	1082.0	1080.5	1081.2	1084.1	1087.0	1090.0	1092.9	1094.1	1095.2
155°	1112.0	1110.3	1108.5	1106.8	1107.1	1109.4	1111.7	1114.0	1116.3	1117.4	1118.6
157.5°	1133.6	1132.1	1130.7	1129.2	1129.3	1130.9	1132.5	1134.1	1135.7	1137.0	1138.3
160°	1146.4	1145.2	1144.0	1142.9	1142.9	1144.0	1145.2	1146.4	1147.5	1148.7	1149.8
162.5°	1157.5	1156.3	1155.1	1154.0	1153.9	1154.9	1155.9	1156.9	1157.9	1159.2	1160.5
165°	1172.3	1171.2	1170.0	1168.9	1168.6	1169.1	1169.8	1170.4	1170.9	1172.2	1173.6
167.5°	1183.5	1182.3	1181.1	1180.0	1179.7	1180.2	1180.7	1181.3	1181.9	1183.2	1184.5
170°	1189.7	1188.5	1187.4	1186.3	1185.9	1186.3	1186.6	1187.0	1187.4	1188.7	1190.1
172.5°	1193.8	1192.7	1191.6	1190.4	1190.0	1190.4	1190.7	1191.2	1191.6	1192.9	1194.3
175°	1199.1	1197.7	1196.4	1195.0	1194.5	1194.9	1195.3	1195.6	1196.0	1197.4	1198.7
177.5°	1200.2	1199.1	1198.0	1196.9	1196.5	1196.6	1196.8	1196.9	1197.1	1198.2	1199.2
180°	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	551.6	553.6	554.5	554.5	555.5	555.1	554.6
5°	583.3	586.9	587.7	590.9	593.4	592.6	593.0
7.5°	614.9	620.5	626.1	628.7	629.1	630.6	631.1
10°	634.3	639.0	647.6	646.4	652.8	656.6	650.4
12.5°	653.0	659.3	665.3	666.9	670.6	671.8	669.4
15°	669.8	673.2	673.5	672.6	673.8	672.8	669.3
17.5°	654.1	648.7	637.7	632.5	628.4	622.3	619.9
20°	628.0	612.0	593.5	586.1	577.5	560.4	564.5
22.5°	571.7	553.6	535.0	513.4	503.0	486.9	485.9
25°	484.1	452.8	418.3	394.3	380.2	364.1	357.0
27.5°	376.4	337.0	308.8	294.5	281.4	268.7	268.2
30°	305.6	276.0	254.1	241.9	233.9	228.5	229.7
32.5°	257.6	237.3	222.5	212.4	206.5	202.4	202.4
35°	210.6	196.7	187.2	183.0	178.7	175.8	175.9
37.5°	180.2	171.9	166.6	161.9	159.2	157.8	156.9
40°	164.6	157.8	153.7	150.9	148.7	146.7	146.3
42.5°	152.4	146.7	142.6	140.4	138.4	136.9	136.6
45°	135.2	130.5	126.9	124.4	123.5	122.2	122.2
47.5°	120.3	115.7	112.8	111.3	109.7	108.8	108.8
50°	110.2	106.6	104.1	103.1	101.8	101.3	101.1
52.5°	101.2	98.5	96.7	96.0	95.5	94.8	94.9
55°	88.9	87.4	86.7	86.1	85.2	84.1	84.8
57.5°	78.6	77.3	75.3	73.5	72.7	71.9	72.2
60°	71.3	68.7	66.1	64.1	63.5	61.9	61.9
62.5°	62.1	58.5	55.3	54.1	53.6	52.8	52.7
65°	47.8	46.3	45.6	44.8	44.4	44.4	44.1
67.5°	39.6	39.0	38.2	38.0	37.7	37.5	37.4
70°	35.0	34.2	33.9	33.7	33.3	33.5	32.9
72.5°	30.6	30.0	29.9	29.4	29.2	29.2	28.8
75°	24.1	24.1	23.9	23.7	23.3	23.2	23.3
77.5°	18.5	18.6	18.3	18.2	18.2	18.2	18.0
80°	14.8	15.0	14.8	14.6	14.4	14.6	14.4
82.5°	11.7	11.4	11.4	11.3	11.3	11.3	11.2
85°	6.7	6.8	6.7	6.5	6.5	6.5	6.7
87.5°	6.6	6.8	6.9	6.9	7.0	7.1	7.0
90°	20.2	21.2	21.9	22.3	22.7	23.0	23.4
92.5°	21.6	22.1	22.5	22.7	22.9	23.2	23.4
95°	36.7	37.7	38.1	37.8	37.7	37.4	37.3
97.5°	47.5	48.3	48.8	49.1	49.3	49.5	49.7
100°	54.1	55.6	56.5	56.9	57.3	57.7	58.0
102.5°	56.8	58.8	60.1	60.6	61.1	61.7	62.2
105°	59.2	61.3	62.8	63.6	64.3	65.1	65.9
107.5°	67.5	65.4	64.7	65.5	66.2	67.0	67.8
110°	93.9	74.6	65.4	66.1	66.9	67.7	68.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	171.8	101.5	66.7	67.3	67.9	68.6	69.1
115°	267.3	178.1	126.5	112.7	98.8	85.0	71.1
117.5°	527.6	506.1	472.5	426.9	381.3	335.7	290.2
120°	642.2	644.6	632.7	606.7	580.7	554.6	528.7
122.5°	680.4	681.8	679.9	674.9	669.8	664.8	659.7
125°	736.4	737.8	738.7	739.3	739.9	740.5	741.0
127.5°	788.9	790.8	791.9	792.0	792.1	792.2	792.3
130°	821.9	824.0	825.0	824.8	824.6	824.4	824.3
132.5°	853.6	855.4	856.2	856.0	855.8	855.7	855.4
135°	899.4	901.2	902.0	901.6	901.2	900.9	900.5
137.5°	941.7	943.5	944.2	943.5	942.9	942.2	941.6
140°	969.0	970.7	971.1	970.1	969.1	968.2	967.3
142.5°	994.2	995.7	996.1	995.1	994.1	993.2	992.2
145°	1029.3	1030.7	1030.9	1030.0	1029.0	1028.0	1027.0
147.5°	1059.9	1060.9	1060.9	1060.1	1059.3	1058.5	1057.7
150°	1079.0	1080.2	1080.3	1079.3	1078.4	1077.4	1076.4
152.5°	1096.4	1097.6	1097.5	1096.2	1094.9	1093.6	1092.4
155°	1119.8	1121.0	1120.7	1119.2	1117.7	1116.1	1114.6
157.5°	1139.6	1140.9	1140.8	1139.4	1137.8	1136.4	1134.8
160°	1151.0	1152.1	1152.0	1150.7	1149.3	1148.0	1146.6
162.5°	1161.8	1163.2	1162.9	1161.3	1159.7	1158.0	1156.3
165°	1174.9	1176.3	1176.3	1174.9	1173.6	1172.2	1170.9
167.5°	1185.9	1187.2	1187.0	1185.3	1183.6	1181.9	1180.1
170°	1191.4	1192.8	1192.5	1190.8	1189.1	1187.4	1185.6
172.5°	1195.6	1196.9	1196.8	1195.0	1193.3	1191.6	1189.8
175°	1200.1	1201.4	1201.2	1199.2	1197.3	1195.4	1193.4
177.5°	1200.3	1201.4	1201.3	1199.9	1198.5	1197.1	1195.7
180°	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8	1197.8

(END OF REPORT)