

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: P331639-927

Luminaire Tested: **SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331639-927
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-C290D1080U927-4F0-1E-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: 4308.5 lumens
Efficiency: N/A
Efficacy: 102.1 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

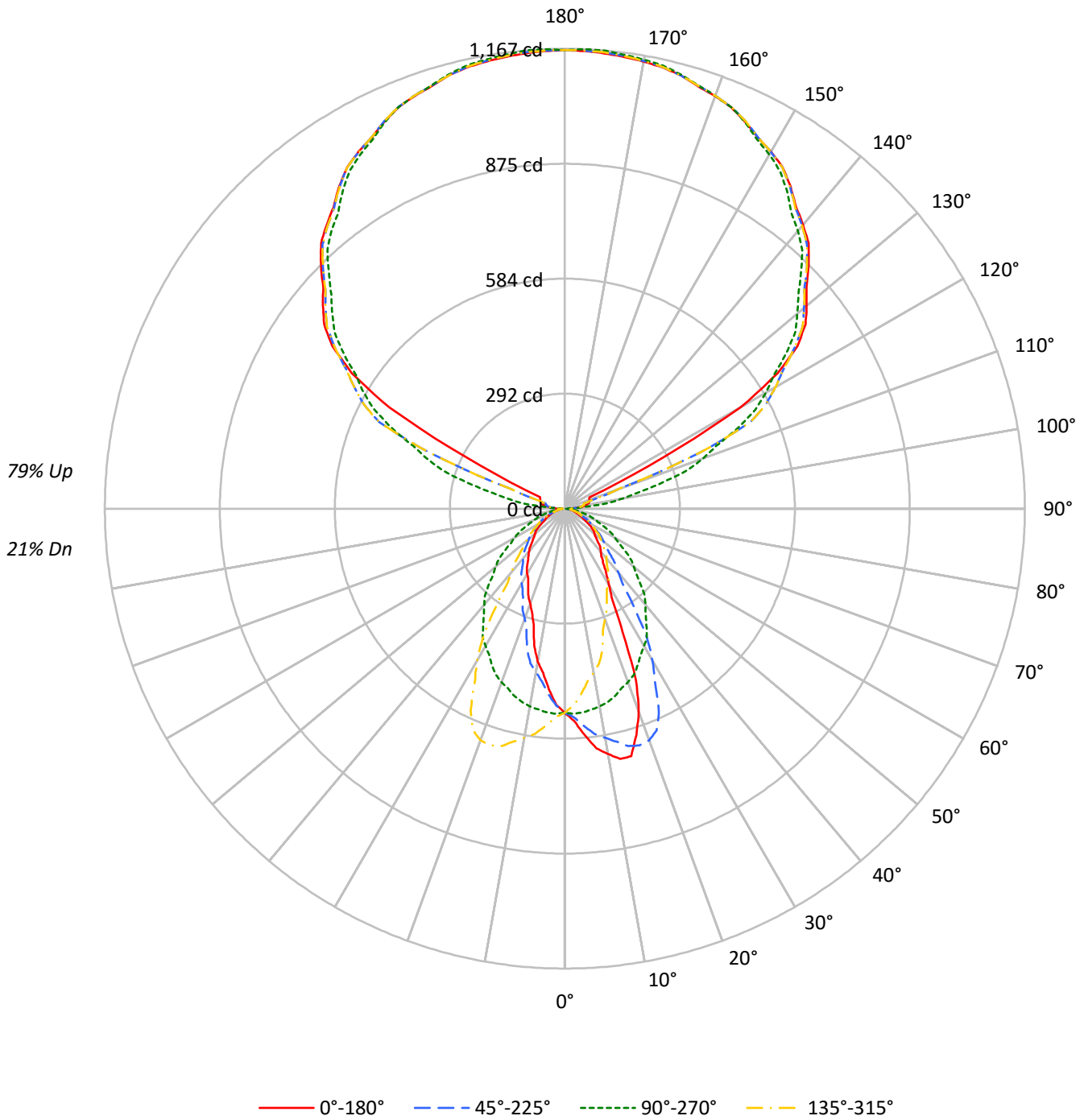
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8360	8360	8360	8360
5°	9339	8413	7460	8413
10°	10362	8355	6466	8355
15°	10870	8232	5095	8232
20°	9424	8052	4409	8052
25°	6180	7803	3935	7803
30°	4161	7500	3563	7500
35°	3370	7121	3213	7121
40°	2995	6709	2974	6709
45°	2710	6224	2653	6224
50°	2467	5745	2459	5745
55°	2320	5210	2291	5210
60°	1941	4724	1918	4724
65°	1639	4290	1857	4290
70°	1511	3829	1751	3829
75°	1416	3337	1616	3337
80°	1302	2743	1432	2743
85°	1204	2167	1260	2167



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	1.1
10°-20°	136.8	3.2
20°-30°	176.3	4.1
30°-40°	167.5	3.9
40°-50°	143.5	3.3
50°-60°	109.3	2.5
60°-70°	69.1	1.6
70°-80°	34.5	0.8
80°-90°	11.8	0.3
90°-100°	38.8	0.9
100°-110°	142.4	3.3
110°-120°	380.6	8.8
120°-130°	628.2	14.6
130°-140°	668.1	15.5
140°-150°	620.9	14.4
150°-160°	499.2	11.6
160°-170°	321.7	7.5
170°-180°	110.7	2.6
0°-30°	362.2	8.4
0°-40°	529.7	12.3
0°-60°	782.5	18.2
0°-90°	897.9	20.8
90°-120°	561.7	13.0
90°-150°	2478.9	57.5
90°-180°	3411.0	79.2
0°-180°	4308.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	518	518	518	518	518	
5°	576	519	460	519	576	57
15°	650	492	305	492	650	175
25°	347	438	221	438	347	165
35°	171	361	163	361	171	109
45°	119	273	116	273	119	92
55°	82	185	81	185	82	72
65°	43	112	49	112	43	44
75°	23	54	26	54	23	24
85°	6	12	7	12	6	8
90°	23	1	23	1	23	10
95°	36	55	36	55	36	34
105°	64	256	64	256	64	67
115°	69	484	69	484	69	173
125°	720	685	720	685	720	623
135°	875	847	875	847	875	674
145°	998	983	998	983	998	624
155°	1083	1082	1083	1082	1083	500
165°	1138	1140	1138	1140	1138	321
175°	1160	1166	1160	1166	1160	110
180°	1164	1164	1164	1164	1164	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	538.9	539.3	539.8	538.8	538.8	537.9	536.0	534.6	530.5	530.0	530.0
5°	576.2	575.8	576.6	574.2	571.0	570.2	566.8	562.3	557.6	552.5	551.4
7.5°	613.2	612.7	611.2	610.9	608.4	602.9	597.5	591.6	583.8	576.2	572.4
10°	632.0	637.9	634.3	628.0	629.2	620.8	616.3	608.6	602.1	590.7	588.3
12.5°	650.4	652.8	651.6	648.0	646.4	640.6	634.5	627.7	615.8	605.6	596.8
15°	650.3	653.7	654.7	653.6	654.4	654.1	650.9	645.3	634.9	623.7	613.9
17.5°	602.3	604.7	610.6	614.6	619.6	630.3	635.6	637.5	636.0	629.6	622.8
20°	548.5	544.5	561.1	569.5	576.7	594.7	610.2	616.2	625.7	625.5	623.7
22.5°	472.1	473.1	488.8	498.8	519.8	537.9	555.5	577.8	596.3	608.5	615.6
25°	346.9	353.8	369.4	383.1	406.5	440.0	470.4	505.6	538.9	565.2	590.3
27.5°	260.5	261.1	273.5	286.1	300.0	327.4	365.8	407.8	455.3	494.5	539.5
30°	223.2	222.0	227.3	235.0	246.9	268.2	296.9	338.3	385.6	444.7	497.2
32.5°	196.6	196.7	200.7	206.4	216.2	230.5	250.3	283.9	328.6	386.7	448.2
35°	171.0	170.8	173.6	177.8	181.9	191.1	204.6	222.2	253.0	307.1	370.1
37.5°	152.5	153.3	154.7	157.3	161.8	167.0	175.1	187.0	208.8	240.9	293.8
40°	142.1	142.5	144.5	146.6	149.3	153.3	159.9	169.5	185.5	211.0	249.8
42.5°	132.7	133.0	134.4	136.4	138.6	142.5	148.1	156.3	169.3	189.2	221.1
45°	118.7	118.7	120.0	120.9	123.3	126.8	131.3	138.2	147.2	161.9	183.2
47.5°	105.8	105.8	106.6	108.1	109.6	112.4	116.8	122.5	129.0	140.4	158.5
50°	98.2	98.5	98.9	100.2	101.2	103.6	107.1	111.9	118.7	127.6	142.7
52.5°	92.2	92.1	92.8	93.3	94.0	95.7	98.3	102.6	108.7	116.4	128.9
55°	82.4	81.7	82.8	83.7	84.2	84.9	86.3	89.0	94.3	100.8	110.1
57.5°	70.2	69.9	70.7	71.5	73.2	75.1	76.4	78.0	80.7	85.4	94.7
60°	60.1	60.1	61.7	62.3	64.2	66.8	69.3	70.7	73.4	76.4	83.3
62.5°	51.2	51.3	52.0	52.6	53.7	56.8	60.4	63.5	66.1	69.0	73.5
65°	42.9	43.2	43.2	43.6	44.3	45.0	46.4	49.0	53.5	57.6	61.0
67.5°	36.4	36.4	36.6	36.9	37.1	37.9	38.5	39.6	40.6	44.5	48.8
70°	32.0	32.6	32.4	32.7	33.0	33.3	34.0	34.5	36.2	37.1	39.6
72.5°	28.0	28.4	28.4	28.6	29.1	29.2	29.7	30.3	31.3	32.0	33.4
75°	22.7	22.5	22.7	23.1	23.2	23.4	23.4	24.1	24.6	25.3	26.3
77.5°	17.5	17.7	17.7	17.7	17.7	18.1	18.0	18.3	18.9	19.3	19.6
80°	14.0	14.2	14.0	14.2	14.4	14.6	14.4	14.6	15.1	15.4	15.4
82.5°	10.9	10.9	11.0	11.0	11.1	11.1	11.4	11.4	11.8	11.7	11.9
85°	6.5	6.3	6.3	6.3	6.5	6.7	6.5	6.5	6.7	6.7	6.7
87.5°	6.8	6.9	6.8	6.7	6.7	6.6	6.4	6.3	6.0	5.9	5.5
90°	22.7	22.3	22.0	21.6	21.2	20.6	19.6	18.7	17.7	16.9	15.4
92.5°	22.7	22.5	22.3	22.1	21.9	21.5	21.0	20.5	20.0	19.6	18.8
95°	36.2	36.4	36.6	36.8	37.0	36.6	35.6	34.7	33.7	32.9	31.5
97.5°	48.3	48.1	47.9	47.7	47.5	47.0	46.2	45.5	44.7	44.0	41.0
100°	56.4	56.1	55.7	55.3	54.9	54.0	52.5	51.0	49.5	48.0	44.8
102.5°	60.4	60.0	59.4	58.9	58.4	57.1	55.2	53.2	51.3	49.4	46.0
105°	64.0	63.2	62.5	61.8	61.0	59.6	57.5	55.5	53.4	51.3	48.4
107.5°	65.8	65.1	64.3	63.6	62.9	63.5	65.6	67.7	69.8	71.9	73.2
110°	66.5	65.8	65.0	64.2	63.5	72.5	91.3	110.0	128.7	147.3	201.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	67.2	66.6	66.0	65.4	64.8	98.6	166.9	235.2	303.5	371.7	385.1
115°	69.1	82.5	96.0	109.5	122.9	173.0	259.7	346.3	432.9	519.6	514.9
117.5°	281.9	326.2	370.5	414.8	459.1	491.7	512.6	533.6	554.5	575.5	572.3
120°	513.7	538.9	564.2	589.5	614.7	626.3	624.0	621.8	619.5	617.3	613.9
122.5°	641.0	645.9	650.9	655.8	660.6	662.4	661.1	659.7	658.4	657.0	653.4
125°	720.0	719.5	718.9	718.4	717.8	716.8	715.5	714.2	712.9	711.6	708.1
127.5°	769.8	769.8	769.7	769.5	769.4	768.4	766.5	764.6	762.7	760.8	758.1
130°	800.9	801.1	801.2	801.5	801.6	800.7	798.6	796.5	794.5	792.4	790.4
132.5°	831.2	831.4	831.6	831.7	831.9	831.2	829.4	827.6	825.9	824.1	822.0
135°	875.0	875.4	875.7	876.1	876.5	875.7	873.9	872.0	870.1	868.2	866.6
137.5°	914.9	915.5	916.2	916.8	917.4	916.8	915.0	913.1	911.3	909.5	907.6
140°	939.8	940.7	941.7	942.6	943.6	943.2	941.5	939.8	938.1	936.4	934.4
142.5°	964.1	965.0	965.9	966.9	967.8	967.5	966.0	964.4	962.9	961.4	959.0
145°	997.9	998.9	999.8	1000.8	1001.6	1001.5	1000.1	998.9	997.5	996.2	993.1
147.5°	1027.7	1028.5	1029.3	1030.1	1030.9	1030.8	1029.8	1028.8	1027.9	1026.9	1023.7
150°	1045.9	1046.9	1047.8	1048.7	1049.6	1049.6	1048.5	1047.3	1046.2	1045.0	1042.1
152.5°	1061.4	1062.6	1063.9	1065.1	1066.4	1066.4	1065.3	1064.1	1063.0	1061.9	1059.1
155°	1083.0	1084.5	1086.0	1087.4	1088.9	1089.2	1088.1	1086.9	1085.8	1084.7	1082.4
157.5°	1102.6	1104.1	1105.6	1107.1	1108.5	1108.6	1107.3	1106.0	1104.8	1103.5	1101.9
160°	1114.1	1115.5	1116.7	1118.1	1119.4	1119.4	1118.3	1117.2	1116.1	1115.0	1113.9
162.5°	1123.6	1125.1	1126.8	1128.4	1130.0	1130.2	1128.9	1127.6	1126.3	1125.1	1124.1
165°	1137.7	1139.0	1140.3	1141.6	1143.0	1143.0	1141.6	1140.3	1139.0	1137.7	1137.2
167.5°	1146.6	1148.3	1150.0	1151.7	1153.3	1153.6	1152.2	1151.0	1149.6	1148.3	1147.8
170°	1152.0	1153.7	1155.4	1157.1	1158.7	1159.0	1157.6	1156.3	1155.0	1153.7	1153.3
172.5°	1156.0	1157.8	1159.4	1161.1	1162.8	1163.0	1161.7	1160.4	1159.0	1157.8	1157.4
175°	1159.6	1161.5	1163.3	1165.2	1167.1	1167.4	1166.1	1164.7	1163.5	1162.1	1161.7
177.5°	1161.8	1163.2	1164.5	1165.9	1167.2	1167.4	1166.3	1165.2	1164.2	1163.2	1163.0
180°	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	530.3	529.1	528.1	525.5	524.2	521.3	520.9	520.8	517.1	513.4	512.4
5°	548.5	545.6	541.3	536.2	531.0	525.6	522.0	519.1	511.9	505.1	501.1
7.5°	566.8	560.6	553.2	543.7	535.7	526.8	520.1	514.2	504.0	494.2	487.6
10°	580.5	570.5	560.5	547.4	537.1	527.0	517.7	509.6	498.1	485.1	475.9
12.5°	589.0	577.9	564.3	551.4	538.1	525.3	512.8	502.4	488.9	475.5	464.6
15°	600.5	588.6	572.0	553.7	536.6	519.8	505.5	492.5	474.9	458.8	445.5
17.5°	609.9	593.5	575.8	554.5	534.7	513.5	495.0	478.4	458.8	439.4	423.7
20°	612.9	596.7	576.2	554.9	531.6	506.5	486.6	468.6	447.5	426.4	408.4
22.5°	611.0	598.4	575.6	550.2	526.2	500.1	477.5	456.6	433.2	411.8	390.9
25°	598.3	594.0	572.4	544.7	517.4	487.0	460.8	438.0	411.4	388.3	365.7
27.5°	568.7	578.1	564.7	535.1	504.7	472.1	442.8	416.8	389.1	363.2	340.6
30°	540.2	561.6	555.9	528.5	494.5	462.5	429.5	402.3	372.9	346.2	323.9
32.5°	501.2	536.5	542.2	519.3	484.1	448.9	414.4	387.4	356.6	328.5	306.7
35°	439.0	491.9	516.3	501.7	466.4	428.4	392.8	361.3	330.3	302.7	281.1
37.5°	365.0	437.0	477.5	478.6	446.2	406.7	367.9	336.6	304.9	277.7	254.4
40°	316.9	395.0	447.7	459.4	432.1	389.4	350.1	318.3	287.4	260.7	233.9
42.5°	273.7	351.5	416.3	436.7	414.9	372.6	333.2	299.9	269.8	244.6	217.2
45°	221.3	289.4	360.8	397.1	385.1	345.9	304.3	272.6	244.4	222.6	196.3
47.5°	186.7	234.6	303.8	352.9	352.8	317.0	276.0	245.7	219.5	199.1	177.8
50°	167.0	208.7	267.2	323.0	327.6	297.6	258.7	228.7	204.2	182.8	165.7
52.5°	149.2	183.7	236.2	289.8	303.1	277.0	239.3	211.6	187.8	168.1	153.5
55°	126.1	152.8	192.7	242.7	262.9	244.5	211.0	185.1	165.9	149.3	136.7
57.5°	106.7	126.7	158.8	199.0	222.4	211.0	183.3	162.2	145.8	130.8	120.9
60°	94.5	110.8	138.0	171.7	197.6	189.5	165.9	146.3	132.3	119.3	110.0
62.5°	82.9	97.0	120.3	147.7	171.3	168.0	148.8	132.3	120.0	108.2	100.3
65°	66.8	77.0	95.2	116.6	135.7	137.3	123.4	112.3	101.3	92.0	84.9
67.5°	53.2	59.9	72.6	90.7	105.0	110.1	101.6	93.1	84.4	77.2	71.1
70°	44.8	50.2	59.6	74.1	87.3	92.7	87.8	81.1	73.6	67.7	62.4
72.5°	36.3	41.6	48.5	59.2	70.4	76.3	74.5	69.8	63.7	58.7	53.8
75°	27.3	29.0	33.7	40.9	49.7	54.7	55.9	53.5	48.6	44.8	41.9
77.5°	20.2	21.2	23.4	27.2	33.0	37.5	39.3	39.0	35.6	33.5	30.7
80°	16.2	16.7	17.8	19.4	23.8	28.3	29.5	29.5	27.2	26.3	23.6
82.5°	12.3	12.7	13.4	14.3	16.2	20.2	21.6	21.9	20.4	19.3	17.1
85°	7.1	6.8	7.2	7.8	8.1	9.2	11.3	11.7	11.3	9.9	9.3
87.5°	5.2	5.1	4.8	4.3	4.0	3.7	4.0	4.4	4.2	4.1	4.3
90°	13.9	12.4	10.9	9.1	7.1	5.0	2.9	0.9	2.9	5.0	7.1
92.5°	18.1	17.3	16.6	16.2	16.5	16.6	16.8	17.0	16.8	16.6	16.5
95°	30.3	28.9	27.6	30.0	36.2	42.4	48.6	54.7	48.6	42.4	36.2
97.5°	37.9	34.9	31.8	39.1	56.4	73.8	91.3	108.6	91.3	73.8	56.4
100°	41.7	38.4	35.3	46.5	72.2	97.8	123.4	149.1	123.4	97.8	72.2
102.5°	102.6	129.2	155.8	171.8	177.2	182.7	188.1	193.5	188.1	182.7	177.2
105°	153.5	204.6	255.7	278.5	272.8	267.2	261.7	256.0	261.7	267.2	272.8
107.5°	194.5	255.7	317.0	345.4	340.8	336.3	331.8	327.3	331.8	336.3	340.8
110°	255.6	309.6	363.7	388.8	384.8	381.0	377.0	373.0	377.0	381.0	384.8



TEST NUMBER: P331639-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	398.5	411.8	425.2	430.1	426.6	423.1	419.7	416.2	419.7	423.1	426.6
115°	510.2	505.6	500.9	496.9	493.8	490.6	487.4	484.3	487.4	490.6	493.8
117.5°	569.1	565.9	562.6	559.3	555.7	552.2	548.6	545.0	548.6	552.2	555.7
120°	610.5	607.2	603.8	600.7	597.9	595.1	592.3	589.5	592.3	595.1	597.9
122.5°	649.7	646.0	642.4	639.1	636.1	633.1	630.2	627.2	630.2	633.1	636.1
125°	704.5	700.9	697.4	694.3	692.0	689.5	687.1	684.7	687.1	689.5	692.0
127.5°	755.4	752.8	750.1	747.5	744.8	742.1	739.4	736.7	739.4	742.1	744.8
130°	788.3	786.2	784.2	781.6	778.7	775.7	772.7	769.7	772.7	775.7	778.7
132.5°	820.0	817.9	815.9	813.6	811.0	808.5	806.0	803.4	806.0	808.5	811.0
135°	864.8	863.2	861.5	859.1	856.2	853.2	850.2	847.2	850.2	853.2	856.2
137.5°	905.7	903.8	901.8	899.8	897.8	895.6	893.6	891.4	893.6	895.6	897.8
140°	932.3	930.3	928.2	926.5	925.0	923.4	921.9	920.4	921.9	923.4	925.0
142.5°	956.6	954.3	952.0	950.1	948.7	947.4	946.0	944.7	946.0	947.4	948.7
145°	989.8	986.7	983.5	982.0	982.2	982.4	982.5	982.8	982.5	982.4	982.2
147.5°	1020.6	1017.5	1014.3	1013.1	1013.8	1014.5	1015.3	1016.0	1015.3	1014.5	1013.8
150°	1039.1	1036.1	1033.1	1032.3	1033.6	1034.9	1036.2	1037.5	1036.2	1034.9	1033.6
152.5°	1056.2	1053.4	1050.5	1049.9	1051.3	1052.7	1054.2	1055.7	1054.2	1052.7	1051.3
155°	1080.1	1077.9	1075.7	1075.4	1077.1	1078.8	1080.5	1082.1	1080.5	1078.8	1077.1
157.5°	1100.3	1098.8	1097.3	1097.2	1098.6	1100.0	1101.5	1102.9	1101.5	1100.0	1098.6
160°	1112.7	1111.6	1110.5	1110.5	1111.6	1112.7	1113.9	1115.0	1113.9	1112.7	1111.6
162.5°	1123.2	1122.1	1121.2	1121.3	1122.4	1123.5	1124.7	1125.8	1124.7	1123.5	1122.4
165°	1136.6	1136.0	1135.4	1135.8	1136.9	1138.0	1139.1	1140.3	1139.1	1138.0	1136.9
167.5°	1147.2	1146.8	1146.2	1146.5	1147.6	1148.7	1149.9	1151.0	1149.9	1148.7	1147.6
170°	1152.9	1152.6	1152.2	1152.6	1153.7	1154.8	1156.0	1157.1	1156.0	1154.8	1153.7
172.5°	1157.0	1156.7	1156.3	1156.7	1157.8	1158.9	1160.0	1161.1	1160.0	1158.9	1157.8
175°	1161.4	1161.0	1160.6	1161.1	1162.4	1163.7	1165.1	1166.3	1165.1	1163.7	1162.4
177.5°	1162.8	1162.7	1162.5	1163.0	1164.0	1165.1	1166.2	1167.2	1166.2	1165.1	1164.0
180°	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8



TEST NUMBER: P331639-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	510.6	509.5	507.6	504.8	503.0	500.0	498.0	499.2	499.5	499.2	498.9
5°	496.9	493.1	487.8	482.8	478.1	473.1	470.2	469.0	466.4	465.0	464.2
7.5°	480.2	473.7	466.4	457.6	450.1	442.3	438.3	436.3	431.2	428.4	426.0
10°	467.9	457.6	450.2	438.7	431.7	421.4	414.4	414.6	407.6	403.6	400.8
12.5°	454.2	442.9	430.6	420.3	410.5	402.3	393.8	390.4	382.9	379.1	371.4
15°	431.5	418.4	405.4	391.4	381.5	368.7	356.5	341.5	329.5	319.0	316.2
17.5°	406.8	390.5	377.5	361.0	344.0	322.6	308.4	299.7	292.5	286.9	282.8
20°	389.8	373.2	359.3	334.5	311.6	297.1	286.7	280.0	272.4	266.5	263.2
22.5°	371.9	354.7	335.7	308.0	290.2	278.5	269.3	261.6	256.4	251.8	248.8
25°	346.6	327.6	296.5	277.5	263.1	250.8	244.4	239.7	234.3	228.0	225.1
27.5°	319.8	289.8	267.4	253.2	239.5	231.6	225.7	218.7	213.9	211.0	208.0
30°	299.8	269.7	252.3	236.8	227.1	218.2	211.4	207.5	202.8	198.0	196.0
32.5°	277.5	253.5	236.7	223.9	214.0	206.4	201.1	194.6	191.3	188.3	184.2
35°	249.8	231.6	216.3	205.9	196.5	190.4	184.1	180.3	174.2	171.7	170.1
37.5°	226.3	210.6	199.2	188.1	180.7	174.0	170.1	164.1	161.4	157.9	154.5
40°	213.0	197.6	186.6	177.6	169.3	164.3	159.5	154.6	150.6	149.0	144.9
42.5°	199.6	187.0	175.9	166.1	160.6	155.2	149.1	145.5	141.4	138.8	136.3
45°	180.9	169.7	160.3	152.3	146.1	140.5	136.6	130.6	128.3	123.1	120.9
47.5°	164.5	154.1	145.1	137.4	131.5	127.9	122.1	117.4	113.7	110.4	107.7
50°	152.8	144.1	135.5	128.7	123.3	118.0	112.1	109.8	104.0	102.3	100.8
52.5°	142.1	133.9	126.0	119.3	113.9	108.8	103.6	100.5	96.6	95.1	93.9
55°	127.2	119.3	111.8	105.8	100.4	95.2	92.0	88.2	86.3	85.1	83.7
57.5°	112.3	105.1	99.3	93.3	87.9	83.7	80.0	77.7	75.9	74.2	72.5
60°	102.7	95.9	90.7	85.1	79.5	76.1	73.3	70.5	68.4	65.8	65.1
62.5°	92.7	86.7	81.9	76.4	71.6	68.5	65.8	63.2	60.6	57.0	55.9
65°	78.8	74.1	69.1	64.6	60.3	57.2	53.2	50.4	49.3	49.0	48.8
67.5°	66.3	61.9	57.5	52.9	49.0	46.2	44.1	43.7	42.9	42.8	42.2
70°	57.9	53.8	49.5	45.2	41.4	40.9	40.2	39.4	38.5	38.2	37.8
72.5°	50.5	46.2	41.8	38.4	36.8	36.1	35.4	34.6	34.1	33.7	33.5
75°	38.7	34.7	31.8	30.6	29.7	29.2	28.0	27.6	27.2	26.6	26.5
77.5°	27.9	25.6	24.3	23.5	22.6	22.0	21.4	20.8	20.4	20.4	20.0
80°	21.2	20.1	19.3	18.1	17.8	17.1	17.0	16.4	16.6	16.0	16.0
82.5°	16.5	15.1	14.3	13.9	13.5	12.9	12.8	12.5	12.5	12.1	12.1
85°	8.5	8.1	7.8	7.4	7.4	6.8	7.1	6.8	6.8	6.5	6.3
87.5°	4.5	4.8	4.8	5.1	5.4	5.5	5.7	5.8	5.9	6.1	6.1
90°	9.1	10.9	12.4	13.9	15.4	16.9	17.7	18.7	19.6	20.6	21.2
92.5°	16.2	16.6	17.3	18.1	18.8	19.6	20.0	20.5	21.0	21.5	21.9
95°	30.0	27.6	28.9	30.3	31.5	32.9	33.7	34.7	35.6	36.6	37.0
97.5°	39.1	31.8	34.9	37.9	41.0	44.0	44.7	45.5	46.2	47.0	47.5
100°	46.5	35.3	38.4	41.7	44.8	48.0	49.5	51.0	52.5	54.0	54.9
102.5°	171.8	155.8	129.2	102.6	76.0	49.4	51.3	53.2	55.2	57.1	58.4
105°	278.5	255.7	204.6	153.5	102.4	51.3	53.4	55.5	57.5	59.6	61.0
107.5°	345.4	317.0	255.7	194.5	133.2	71.9	69.8	67.7	65.6	63.5	62.9
110°	388.8	363.7	309.6	255.6	201.5	147.3	128.7	110.0	91.3	72.5	63.5



TEST NUMBER: P331639-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	430.1	425.2	411.8	398.5	385.1	371.7	303.5	235.2	166.9	98.6	64.8
115°	496.9	500.9	505.6	510.2	514.9	519.6	432.9	346.3	259.7	173.0	122.9
117.5°	559.3	562.6	565.9	569.1	572.3	575.5	554.5	533.6	512.6	491.7	459.1
120°	600.7	603.8	607.2	610.5	613.9	617.3	619.5	621.8	624.0	626.3	614.7
122.5°	639.1	642.4	646.0	649.7	653.4	657.0	658.4	659.7	661.1	662.4	660.6
125°	694.3	697.4	700.9	704.5	708.1	711.6	712.9	714.2	715.5	716.8	717.8
127.5°	747.5	750.1	752.8	755.4	758.1	760.8	762.7	764.6	766.5	768.4	769.4
130°	781.6	784.2	786.2	788.3	790.4	792.4	794.5	796.5	798.6	800.7	801.6
132.5°	813.6	815.9	817.9	820.0	822.0	824.1	825.9	827.6	829.4	831.2	831.9
135°	859.1	861.5	863.2	864.8	866.6	868.2	870.1	872.0	873.9	875.7	876.5
137.5°	899.8	901.8	903.8	905.7	907.6	909.5	911.3	913.1	915.0	916.8	917.4
140°	926.5	928.2	930.3	932.3	934.4	936.4	938.1	939.8	941.5	943.2	943.6
142.5°	950.1	952.0	954.3	956.6	959.0	961.4	962.9	964.4	966.0	967.5	967.8
145°	982.0	983.5	986.7	989.8	993.1	996.2	997.5	998.9	1000.1	1001.5	1001.6
147.5°	1013.1	1014.3	1017.5	1020.6	1023.7	1026.9	1027.9	1028.8	1029.8	1030.8	1030.9
150°	1032.3	1033.1	1036.1	1039.1	1042.1	1045.0	1046.2	1047.3	1048.5	1049.6	1049.6
152.5°	1049.9	1050.5	1053.4	1056.2	1059.1	1061.9	1063.0	1064.1	1065.3	1066.4	1066.4
155°	1075.4	1075.7	1077.9	1080.1	1082.4	1084.7	1085.8	1086.9	1088.1	1089.2	1088.9
157.5°	1097.2	1097.3	1098.8	1100.3	1101.9	1103.5	1104.8	1106.0	1107.3	1108.6	1108.5
160°	1110.5	1110.5	1111.6	1112.7	1113.9	1115.0	1116.1	1117.2	1118.3	1119.4	1119.4
162.5°	1121.3	1121.2	1122.1	1123.2	1124.1	1125.1	1126.3	1127.6	1128.9	1130.2	1130.0
165°	1135.8	1135.4	1136.0	1136.6	1137.2	1137.7	1139.0	1140.3	1141.6	1143.0	1143.0
167.5°	1146.5	1146.2	1146.8	1147.2	1147.8	1148.3	1149.6	1151.0	1152.2	1153.6	1153.3
170°	1152.6	1152.2	1152.6	1152.9	1153.3	1153.7	1155.0	1156.3	1157.6	1159.0	1158.7
172.5°	1156.7	1156.3	1156.7	1157.0	1157.4	1157.8	1159.0	1160.4	1161.7	1163.0	1162.8
175°	1161.1	1160.6	1161.0	1161.4	1161.7	1162.1	1163.5	1164.7	1166.1	1167.4	1167.1
177.5°	1163.0	1162.5	1162.7	1162.8	1163.0	1163.2	1164.2	1165.2	1166.3	1167.4	1167.2
180°	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8



TEST NUMBER: P331639-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	497.3	497.6	497.2	497.4	497.2	497.6	497.3	498.9	499.2	499.5	499.2
5°	463.3	461.2	460.8	460.3	460.8	461.2	463.3	464.2	465.0	466.4	469.0
7.5°	422.9	422.6	421.6	420.3	421.6	422.6	422.9	426.0	428.4	431.2	436.3
10°	396.8	395.9	395.7	394.4	395.7	395.9	396.8	400.8	403.6	407.6	414.6
12.5°	366.2	360.4	359.9	356.7	359.9	360.4	366.2	371.4	379.1	382.9	390.4
15°	311.9	310.8	307.1	304.8	307.1	310.8	311.9	316.2	319.0	329.5	341.5
17.5°	280.7	277.2	276.1	275.6	276.1	277.2	280.7	282.8	286.9	292.5	299.7
20°	260.7	257.5	257.0	256.6	257.0	257.5	260.7	263.2	266.5	272.4	280.0
22.5°	246.9	243.5	242.2	241.1	242.2	243.5	246.9	248.8	251.8	256.4	261.6
25°	223.3	222.0	221.3	220.9	221.3	222.0	223.3	225.1	228.0	234.3	239.7
27.5°	204.9	202.1	201.5	200.6	201.5	202.1	204.9	208.0	211.0	213.9	218.7
30°	194.3	193.5	192.2	191.1	192.2	193.5	194.3	196.0	198.0	202.8	207.5
32.5°	182.0	181.2	180.1	179.6	180.1	181.2	182.0	184.2	188.3	191.3	194.6
35°	168.3	165.7	164.6	163.0	164.6	165.7	168.3	170.1	171.7	174.2	180.3
37.5°	153.8	152.4	150.9	151.5	150.9	152.4	153.8	154.5	157.9	161.4	164.1
40°	142.5	141.6	141.2	141.1	141.2	141.6	142.5	144.9	149.0	150.6	154.6
42.5°	133.6	131.1	130.2	130.2	130.2	131.1	133.6	136.3	138.8	141.4	145.5
45°	120.0	117.7	116.1	116.2	116.1	117.7	120.0	120.9	123.1	128.3	130.6
47.5°	106.2	106.1	105.0	105.4	105.0	106.1	106.2	107.7	110.4	113.7	117.4
50°	99.5	98.5	97.7	97.9	97.7	98.5	99.5	100.8	102.3	104.0	109.8
52.5°	93.2	92.2	91.7	92.4	91.7	92.2	93.2	93.9	95.1	96.6	100.5
55°	82.8	81.7	81.5	81.4	81.5	81.7	82.8	83.7	85.1	86.3	88.2
57.5°	71.1	70.4	69.3	68.9	69.3	70.4	71.1	72.5	74.2	75.9	77.7
60°	62.8	61.4	59.6	59.4	59.6	61.4	62.8	65.1	65.8	68.4	70.5
62.5°	55.1	54.9	54.5	54.5	54.5	54.9	55.1	55.9	57.0	60.6	63.2
65°	48.4	48.2	48.4	48.6	48.4	48.2	48.4	48.8	49.0	49.3	50.4
67.5°	42.1	41.8	41.5	41.7	41.5	41.8	42.1	42.2	42.8	42.9	43.7
70°	37.4	37.2	37.1	37.1	37.1	37.2	37.4	37.8	38.2	38.5	39.4
72.5°	32.8	32.8	32.6	32.5	32.6	32.8	32.8	33.5	33.7	34.1	34.6
75°	26.3	25.9	25.9	25.9	25.9	25.9	26.3	26.5	26.6	27.2	27.6
77.5°	20.0	19.8	19.6	19.5	19.6	19.8	20.0	20.0	20.4	20.4	20.8
80°	15.8	15.7	15.4	15.4	15.4	15.7	15.8	16.0	16.0	16.6	16.4
82.5°	12.1	11.9	11.9	11.7	11.9	11.9	12.1	12.1	12.1	12.5	12.5
85°	6.5	6.7	6.5	6.8	6.5	6.7	6.5	6.3	6.5	6.8	6.8
87.5°	6.2	6.1	6.3	6.3	6.3	6.1	6.2	6.1	6.1	5.9	5.8
90°	21.6	22.0	22.3	22.7	22.3	22.0	21.6	21.2	20.6	19.6	18.7
92.5°	22.1	22.3	22.5	22.7	22.5	22.3	22.1	21.9	21.5	21.0	20.5
95°	36.8	36.6	36.4	36.2	36.4	36.6	36.8	37.0	36.6	35.6	34.7
97.5°	47.7	47.9	48.1	48.3	48.1	47.9	47.7	47.5	47.0	46.2	45.5
100°	55.3	55.7	56.1	56.4	56.1	55.7	55.3	54.9	54.0	52.5	51.0
102.5°	58.9	59.4	60.0	60.4	60.0	59.4	58.9	58.4	57.1	55.2	53.2
105°	61.8	62.5	63.2	64.0	63.2	62.5	61.8	61.0	59.6	57.5	55.5
107.5°	63.6	64.3	65.1	65.8	65.1	64.3	63.6	62.9	63.5	65.6	67.7
110°	64.2	65.0	65.8	66.5	65.8	65.0	64.2	63.5	72.5	91.3	110.0



TEST NUMBER: P331639-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	65.4	66.0	66.6	67.2	66.6	66.0	65.4	64.8	98.6	166.9	235.2
115°	109.5	96.0	82.5	69.1	82.5	96.0	109.5	122.9	173.0	259.7	346.3
117.5°	414.8	370.5	326.2	281.9	326.2	370.5	414.8	459.1	491.7	512.6	533.6
120°	589.5	564.2	538.9	513.7	538.9	564.2	589.5	614.7	626.3	624.0	621.8
122.5°	655.8	650.9	645.9	641.0	645.9	650.9	655.8	660.6	662.4	661.1	659.7
125°	718.4	718.9	719.5	720.0	719.5	718.9	718.4	717.8	716.8	715.5	714.2
127.5°	769.5	769.7	769.8	769.8	769.8	769.7	769.5	769.4	768.4	766.5	764.6
130°	801.5	801.2	801.1	800.9	801.1	801.2	801.5	801.6	800.7	798.6	796.5
132.5°	831.7	831.6	831.4	831.2	831.4	831.6	831.7	831.9	831.2	829.4	827.6
135°	876.1	875.7	875.4	875.0	875.4	875.7	876.1	876.5	875.7	873.9	872.0
137.5°	916.8	916.2	915.5	914.9	915.5	916.2	916.8	917.4	916.8	915.0	913.1
140°	942.6	941.7	940.7	939.8	940.7	941.7	942.6	943.6	943.2	941.5	939.8
142.5°	966.9	965.9	965.0	964.1	965.0	965.9	966.9	967.8	967.5	966.0	964.4
145°	1000.8	999.8	998.9	997.9	998.9	999.8	1000.8	1001.6	1001.5	1000.1	998.9
147.5°	1030.1	1029.3	1028.5	1027.7	1028.5	1029.3	1030.1	1030.9	1030.8	1029.8	1028.8
150°	1048.7	1047.8	1046.9	1045.9	1046.9	1047.8	1048.7	1049.6	1049.6	1048.5	1047.3
152.5°	1065.1	1063.9	1062.6	1061.4	1062.6	1063.9	1065.1	1066.4	1066.4	1065.3	1064.1
155°	1087.4	1086.0	1084.5	1083.0	1084.5	1086.0	1087.4	1088.9	1089.2	1088.1	1086.9
157.5°	1107.1	1105.6	1104.1	1102.6	1104.1	1105.6	1107.1	1108.5	1108.6	1107.3	1106.0
160°	1118.1	1116.7	1115.5	1114.1	1115.5	1116.7	1118.1	1119.4	1119.4	1118.3	1117.2
162.5°	1128.4	1126.8	1125.1	1123.6	1125.1	1126.8	1128.4	1130.0	1130.2	1128.9	1127.6
165°	1141.6	1140.3	1139.0	1137.7	1139.0	1140.3	1141.6	1143.0	1143.0	1141.6	1140.3
167.5°	1151.7	1150.0	1148.3	1146.6	1148.3	1150.0	1151.7	1153.3	1153.6	1152.2	1151.0
170°	1157.1	1155.4	1153.7	1152.0	1153.7	1155.4	1157.1	1158.7	1159.0	1157.6	1156.3
172.5°	1161.1	1159.4	1157.8	1156.0	1157.8	1159.4	1161.1	1162.8	1163.0	1161.7	1160.4
175°	1165.2	1163.3	1161.5	1159.6	1161.5	1163.3	1165.2	1167.1	1167.4	1166.1	1164.7
177.5°	1165.9	1164.5	1163.2	1161.8	1163.2	1164.5	1165.9	1167.2	1167.4	1166.3	1165.2
180°	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8



TEST NUMBER: P331639-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	498.0	500.0	503.0	504.8	507.6	509.5	510.6	512.4	513.4	517.1	520.8
5°	470.2	473.1	478.1	482.8	487.8	493.1	496.9	501.1	505.1	511.9	519.1
7.5°	438.3	442.3	450.1	457.6	466.4	473.7	480.2	487.6	494.2	504.0	514.2
10°	414.4	421.4	431.7	438.7	450.2	457.6	467.9	475.9	485.1	498.1	509.6
12.5°	393.8	402.3	410.5	420.3	430.6	442.9	454.2	464.6	475.5	488.9	502.4
15°	356.5	368.7	381.5	391.4	405.4	418.4	431.5	445.5	458.8	474.9	492.5
17.5°	308.4	322.6	344.0	361.0	377.5	390.5	406.8	423.7	439.4	458.8	478.4
20°	286.7	297.1	311.6	334.5	359.3	373.2	389.8	408.4	426.4	447.5	468.6
22.5°	269.3	278.5	290.2	308.0	335.7	354.7	371.9	390.9	411.8	433.2	456.6
25°	244.4	250.8	263.1	277.5	296.5	327.6	346.6	365.7	388.3	411.4	438.0
27.5°	225.7	231.6	239.5	253.2	267.4	289.8	319.8	340.6	363.2	389.1	416.8
30°	211.4	218.2	227.1	236.8	252.3	269.7	299.8	323.9	346.2	372.9	402.3
32.5°	201.1	206.4	214.0	223.9	236.7	253.5	277.5	306.7	328.5	356.6	387.4
35°	184.1	190.4	196.5	205.9	216.3	231.6	249.8	281.1	302.7	330.3	361.3
37.5°	170.1	174.0	180.7	188.1	199.2	210.6	226.3	254.4	277.7	304.9	336.6
40°	159.5	164.3	169.3	177.6	186.6	197.6	213.0	233.9	260.7	287.4	318.3
42.5°	149.1	155.2	160.6	166.1	175.9	187.0	199.6	217.2	244.6	269.8	299.9
45°	136.6	140.5	146.1	152.3	160.3	169.7	180.9	196.3	222.6	244.4	272.6
47.5°	122.1	127.9	131.5	137.4	145.1	154.1	164.5	177.8	199.1	219.5	245.7
50°	112.1	118.0	123.3	128.7	135.5	144.1	152.8	165.7	182.8	204.2	228.7
52.5°	103.6	108.8	113.9	119.3	126.0	133.9	142.1	153.5	168.1	187.8	211.6
55°	92.0	95.2	100.4	105.8	111.8	119.3	127.2	136.7	149.3	165.9	185.1
57.5°	80.0	83.7	87.9	93.3	99.3	105.1	112.3	120.9	130.8	145.8	162.2
60°	73.3	76.1	79.5	85.1	90.7	95.9	102.7	110.0	119.3	132.3	146.3
62.5°	65.8	68.5	71.6	76.4	81.9	86.7	92.7	100.3	108.2	120.0	132.3
65°	53.2	57.2	60.3	64.6	69.1	74.1	78.8	84.9	92.0	101.3	112.3
67.5°	44.1	46.2	49.0	52.9	57.5	61.9	66.3	71.1	77.2	84.4	93.1
70°	40.2	40.9	41.4	45.2	49.5	53.8	57.9	62.4	67.7	73.6	81.1
72.5°	35.4	36.1	36.8	38.4	41.8	46.2	50.5	53.8	58.7	63.7	69.8
75°	28.0	29.2	29.7	30.6	31.8	34.7	38.7	41.9	44.8	48.6	53.5
77.5°	21.4	22.0	22.6	23.5	24.3	25.6	27.9	30.7	33.5	35.6	39.0
80°	17.0	17.1	17.8	18.1	19.3	20.1	21.2	23.6	26.3	27.2	29.5
82.5°	12.8	12.9	13.5	13.9	14.3	15.1	16.5	17.1	19.3	20.4	21.9
85°	7.1	6.8	7.4	7.4	7.8	8.1	8.5	9.3	9.9	11.3	11.7
87.5°	5.7	5.5	5.4	5.1	4.8	4.8	4.5	4.3	4.1	4.2	4.4
90°	17.7	16.9	15.4	13.9	12.4	10.9	9.1	7.1	5.0	2.9	0.9
92.5°	20.0	19.6	18.8	18.1	17.3	16.6	16.2	16.5	16.6	16.8	17.0
95°	33.7	32.9	31.5	30.3	28.9	27.6	30.0	36.2	42.4	48.6	54.7
97.5°	44.7	44.0	41.0	37.9	34.9	31.8	39.1	56.4	73.8	91.3	108.6
100°	49.5	48.0	44.8	41.7	38.4	35.3	46.5	72.2	97.8	123.4	149.1
102.5°	51.3	49.4	76.0	102.6	129.2	155.8	171.8	177.2	182.7	188.1	193.5
105°	53.4	51.3	102.4	153.5	204.6	255.7	278.5	272.8	267.2	261.7	256.0
107.5°	69.8	71.9	133.2	194.5	255.7	317.0	345.4	340.8	336.3	331.8	327.3
110°	128.7	147.3	201.5	255.6	309.6	363.7	388.8	384.8	381.0	377.0	373.0



TEST NUMBER: P331639-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	303.5	371.7	385.1	398.5	411.8	425.2	430.1	426.6	423.1	419.7	416.2
115°	432.9	519.6	514.9	510.2	505.6	500.9	496.9	493.8	490.6	487.4	484.3
117.5°	554.5	575.5	572.3	569.1	565.9	562.6	559.3	555.7	552.2	548.6	545.0
120°	619.5	617.3	613.9	610.5	607.2	603.8	600.7	597.9	595.1	592.3	589.5
122.5°	658.4	657.0	653.4	649.7	646.0	642.4	639.1	636.1	633.1	630.2	627.2
125°	712.9	711.6	708.1	704.5	700.9	697.4	694.3	692.0	689.5	687.1	684.7
127.5°	762.7	760.8	758.1	755.4	752.8	750.1	747.5	744.8	742.1	739.4	736.7
130°	794.5	792.4	790.4	788.3	786.2	784.2	781.6	778.7	775.7	772.7	769.7
132.5°	825.9	824.1	822.0	820.0	817.9	815.9	813.6	811.0	808.5	806.0	803.4
135°	870.1	868.2	866.6	864.8	863.2	861.5	859.1	856.2	853.2	850.2	847.2
137.5°	911.3	909.5	907.6	905.7	903.8	901.8	899.8	897.8	895.6	893.6	891.4
140°	938.1	936.4	934.4	932.3	930.3	928.2	926.5	925.0	923.4	921.9	920.4
142.5°	962.9	961.4	959.0	956.6	954.3	952.0	950.1	948.7	947.4	946.0	944.7
145°	997.5	996.2	993.1	989.8	986.7	983.5	982.0	982.2	982.4	982.5	982.8
147.5°	1027.9	1026.9	1023.7	1020.6	1017.5	1014.3	1013.1	1013.8	1014.5	1015.3	1016.0
150°	1046.2	1045.0	1042.1	1039.1	1036.1	1033.1	1032.3	1033.6	1034.9	1036.2	1037.5
152.5°	1063.0	1061.9	1059.1	1056.2	1053.4	1050.5	1049.9	1051.3	1052.7	1054.2	1055.7
155°	1085.8	1084.7	1082.4	1080.1	1077.9	1075.7	1075.4	1077.1	1078.8	1080.5	1082.1
157.5°	1104.8	1103.5	1101.9	1100.3	1098.8	1097.3	1097.2	1098.6	1100.0	1101.5	1102.9
160°	1116.1	1115.0	1113.9	1112.7	1111.6	1110.5	1110.5	1111.6	1112.7	1113.9	1115.0
162.5°	1126.3	1125.1	1124.1	1123.2	1122.1	1121.2	1121.3	1122.4	1123.5	1124.7	1125.8
165°	1139.0	1137.7	1137.2	1136.6	1136.0	1135.4	1135.8	1136.9	1138.0	1139.1	1140.3
167.5°	1149.6	1148.3	1147.8	1147.2	1146.8	1146.2	1146.5	1147.6	1148.7	1149.9	1151.0
170°	1155.0	1153.7	1153.3	1152.9	1152.6	1152.2	1152.6	1153.7	1154.8	1156.0	1157.1
172.5°	1159.0	1157.8	1157.4	1157.0	1156.7	1156.3	1156.7	1157.8	1158.9	1160.0	1161.1
175°	1163.5	1162.1	1161.7	1161.4	1161.0	1160.6	1161.1	1162.4	1163.7	1165.1	1166.3
177.5°	1164.2	1163.2	1163.0	1162.8	1162.7	1162.5	1163.0	1164.0	1165.1	1166.2	1167.2
180°	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8



TEST NUMBER: P331639-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	520.9	521.3	524.2	525.5	528.1	529.1	530.3	530.0	530.0	530.5	534.6
5°	522.0	525.6	531.0	536.2	541.3	545.6	548.5	551.4	552.5	557.6	562.3
7.5°	520.1	526.8	535.7	543.7	553.2	560.6	566.8	572.4	576.2	583.8	591.6
10°	517.7	527.0	537.1	547.4	560.5	570.5	580.5	588.3	590.7	602.1	608.6
12.5°	512.8	525.3	538.1	551.4	564.3	577.9	589.0	596.8	605.6	615.8	627.7
15°	505.5	519.8	536.6	553.7	572.0	588.6	600.5	613.9	623.7	634.9	645.3
17.5°	495.0	513.5	534.7	554.5	575.8	593.5	609.9	622.8	629.6	636.0	637.5
20°	486.6	506.5	531.6	554.9	576.2	596.7	612.9	623.7	625.5	625.7	616.2
22.5°	477.5	500.1	526.2	550.2	575.6	598.4	611.0	615.6	608.5	596.3	577.8
25°	460.8	487.0	517.4	544.7	572.4	594.0	598.3	590.3	565.2	538.9	505.6
27.5°	442.8	472.1	504.7	535.1	564.7	578.1	568.7	539.5	494.5	455.3	407.8
30°	429.5	462.5	494.5	528.5	555.9	561.6	540.2	497.2	444.7	385.6	338.3
32.5°	414.4	448.9	484.1	519.3	542.2	536.5	501.2	448.2	386.7	328.6	283.9
35°	392.8	428.4	466.4	501.7	516.3	491.9	439.0	370.1	307.1	253.0	222.2
37.5°	367.9	406.7	446.2	478.6	477.5	437.0	365.0	293.8	240.9	208.8	187.0
40°	350.1	389.4	432.1	459.4	447.7	395.0	316.9	249.8	211.0	185.5	169.5
42.5°	333.2	372.6	414.9	436.7	416.3	351.5	273.7	221.1	189.2	169.3	156.3
45°	304.3	345.9	385.1	397.1	360.8	289.4	221.3	183.2	161.9	147.2	138.2
47.5°	276.0	317.0	352.8	352.9	303.8	234.6	186.7	158.5	140.4	129.0	122.5
50°	258.7	297.6	327.6	323.0	267.2	208.7	167.0	142.7	127.6	118.7	111.9
52.5°	239.3	277.0	303.1	289.8	236.2	183.7	149.2	128.9	116.4	108.7	102.6
55°	211.0	244.5	262.9	242.7	192.7	152.8	126.1	110.1	100.8	94.3	89.0
57.5°	183.3	211.0	222.4	199.0	158.8	126.7	106.7	94.7	85.4	80.7	78.0
60°	165.9	189.5	197.6	171.7	138.0	110.8	94.5	83.3	76.4	73.4	70.7
62.5°	148.8	168.0	171.3	147.7	120.3	97.0	82.9	73.5	69.0	66.1	63.5
65°	123.4	137.3	135.7	116.6	95.2	77.0	66.8	61.0	57.6	53.5	49.0
67.5°	101.6	110.1	105.0	90.7	72.6	59.9	53.2	48.8	44.5	40.6	39.6
70°	87.8	92.7	87.3	74.1	59.6	50.2	44.8	39.6	37.1	36.2	34.5
72.5°	74.5	76.3	70.4	59.2	48.5	41.6	36.3	33.4	32.0	31.3	30.3
75°	55.9	54.7	49.7	40.9	33.7	29.0	27.3	26.3	25.3	24.6	24.1
77.5°	39.3	37.5	33.0	27.2	23.4	21.2	20.2	19.6	19.3	18.9	18.3
80°	29.5	28.3	23.8	19.4	17.8	16.7	16.2	15.4	15.4	15.1	14.6
82.5°	21.6	20.2	16.2	14.3	13.4	12.7	12.3	11.9	11.7	11.8	11.4
85°	11.3	9.2	8.1	7.8	7.2	6.8	7.1	6.7	6.7	6.7	6.5
87.5°	4.0	3.7	4.0	4.3	4.8	5.1	5.2	5.5	5.9	6.0	6.3
90°	2.9	5.0	7.1	9.1	10.9	12.4	13.9	15.4	16.9	17.7	18.7
92.5°	16.8	16.6	16.5	16.2	16.6	17.3	18.1	18.8	19.6	20.0	20.5
95°	48.6	42.4	36.2	30.0	27.6	28.9	30.3	31.5	32.9	33.7	34.7
97.5°	91.3	73.8	56.4	39.1	31.8	34.9	37.9	41.0	44.0	44.7	45.5
100°	123.4	97.8	72.2	46.5	35.3	38.4	41.7	44.8	48.0	49.5	51.0
102.5°	188.1	182.7	177.2	171.8	155.8	129.2	102.6	76.0	49.4	51.3	53.2
105°	261.7	267.2	272.8	278.5	255.7	204.6	153.5	102.4	51.3	53.4	55.5
107.5°	331.8	336.3	340.8	345.4	317.0	255.7	194.5	133.2	71.9	69.8	67.7
110°	377.0	381.0	384.8	388.8	363.7	309.6	255.6	201.5	147.3	128.7	110.0



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	419.7	423.1	426.6	430.1	425.2	411.8	398.5	385.1	371.7	303.5	235.2
115°	487.4	490.6	493.8	496.9	500.9	505.6	510.2	514.9	519.6	432.9	346.3
117.5°	548.6	552.2	555.7	559.3	562.6	565.9	569.1	572.3	575.5	554.5	533.6
120°	592.3	595.1	597.9	600.7	603.8	607.2	610.5	613.9	617.3	619.5	621.8
122.5°	630.2	633.1	636.1	639.1	642.4	646.0	649.7	653.4	657.0	658.4	659.7
125°	687.1	689.5	692.0	694.3	697.4	700.9	704.5	708.1	711.6	712.9	714.2
127.5°	739.4	742.1	744.8	747.5	750.1	752.8	755.4	758.1	760.8	762.7	764.6
130°	772.7	775.7	778.7	781.6	784.2	786.2	788.3	790.4	792.4	794.5	796.5
132.5°	806.0	808.5	811.0	813.6	815.9	817.9	820.0	822.0	824.1	825.9	827.6
135°	850.2	853.2	856.2	859.1	861.5	863.2	864.8	866.6	868.2	870.1	872.0
137.5°	893.6	895.6	897.8	899.8	901.8	903.8	905.7	907.6	909.5	911.3	913.1
140°	921.9	923.4	925.0	926.5	928.2	930.3	932.3	934.4	936.4	938.1	939.8
142.5°	946.0	947.4	948.7	950.1	952.0	954.3	956.6	959.0	961.4	962.9	964.4
145°	982.5	982.4	982.2	982.0	983.5	986.7	989.8	993.1	996.2	997.5	998.9
147.5°	1015.3	1014.5	1013.8	1013.1	1014.3	1017.5	1020.6	1023.7	1026.9	1027.9	1028.8
150°	1036.2	1034.9	1033.6	1032.3	1033.1	1036.1	1039.1	1042.1	1045.0	1046.2	1047.3
152.5°	1054.2	1052.7	1051.3	1049.9	1050.5	1053.4	1056.2	1059.1	1061.9	1063.0	1064.1
155°	1080.5	1078.8	1077.1	1075.4	1075.7	1077.9	1080.1	1082.4	1084.7	1085.8	1086.9
157.5°	1101.5	1100.0	1098.6	1097.2	1097.3	1098.8	1100.3	1101.9	1103.5	1104.8	1106.0
160°	1113.9	1112.7	1111.6	1110.5	1110.5	1111.6	1112.7	1113.9	1115.0	1116.1	1117.2
162.5°	1124.7	1123.5	1122.4	1121.3	1121.2	1122.1	1123.2	1124.1	1125.1	1126.3	1127.6
165°	1139.1	1138.0	1136.9	1135.8	1135.4	1136.0	1136.6	1137.2	1137.7	1139.0	1140.3
167.5°	1149.9	1148.7	1147.6	1146.5	1146.2	1146.8	1147.2	1147.8	1148.3	1149.6	1151.0
170°	1156.0	1154.8	1153.7	1152.6	1152.2	1152.6	1152.9	1153.3	1153.7	1155.0	1156.3
172.5°	1160.0	1158.9	1157.8	1156.7	1156.3	1156.7	1157.0	1157.4	1157.8	1159.0	1160.4
175°	1165.1	1163.7	1162.4	1161.1	1160.6	1161.0	1161.4	1161.7	1162.1	1163.5	1164.7
177.5°	1166.2	1165.1	1164.0	1163.0	1162.5	1162.7	1162.8	1163.0	1163.2	1164.2	1165.2
180°	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	536.0	537.9	538.8	538.8	539.8	539.3	538.9
5°	566.8	570.2	571.0	574.2	576.6	575.8	576.2
7.5°	597.5	602.9	608.4	610.9	611.2	612.7	613.2
10°	616.3	620.8	629.2	628.0	634.3	637.9	632.0
12.5°	634.5	640.6	646.4	648.0	651.6	652.8	650.4
15°	650.9	654.1	654.4	653.6	654.7	653.7	650.3
17.5°	635.6	630.3	619.6	614.6	610.6	604.7	602.3
20°	610.2	594.7	576.7	569.5	561.1	544.5	548.5
22.5°	555.5	537.9	519.8	498.8	488.8	473.1	472.1
25°	470.4	440.0	406.5	383.1	369.4	353.8	346.9
27.5°	365.8	327.4	300.0	286.1	273.5	261.1	260.5
30°	296.9	268.2	246.9	235.0	227.3	222.0	223.2
32.5°	250.3	230.5	216.2	206.4	200.7	196.7	196.6
35°	204.6	191.1	181.9	177.8	173.6	170.8	171.0
37.5°	175.1	167.0	161.8	157.3	154.7	153.3	152.5
40°	159.9	153.3	149.3	146.6	144.5	142.5	142.1
42.5°	148.1	142.5	138.6	136.4	134.4	133.0	132.7
45°	131.3	126.8	123.3	120.9	120.0	118.7	118.7
47.5°	116.8	112.4	109.6	108.1	106.6	105.8	105.8
50°	107.1	103.6	101.2	100.2	98.9	98.5	98.2
52.5°	98.3	95.7	94.0	93.3	92.8	92.1	92.2
55°	86.3	84.9	84.2	83.7	82.8	81.7	82.4
57.5°	76.4	75.1	73.2	71.5	70.7	69.9	70.2
60°	69.3	66.8	64.2	62.3	61.7	60.1	60.1
62.5°	60.4	56.8	53.7	52.6	52.0	51.3	51.2
65°	46.4	45.0	44.3	43.6	43.2	43.2	42.9
67.5°	38.5	37.9	37.1	36.9	36.6	36.4	36.4
70°	34.0	33.3	33.0	32.7	32.4	32.6	32.0
72.5°	29.7	29.2	29.1	28.6	28.4	28.4	28.0
75°	23.4	23.4	23.2	23.1	22.7	22.5	22.7
77.5°	18.0	18.1	17.7	17.7	17.7	17.7	17.5
80°	14.4	14.6	14.4	14.2	14.0	14.2	14.0
82.5°	11.4	11.1	11.1	11.0	11.0	10.9	10.9
85°	6.5	6.7	6.5	6.3	6.3	6.3	6.5
87.5°	6.4	6.6	6.7	6.7	6.8	6.9	6.8
90°	19.6	20.6	21.2	21.6	22.0	22.3	22.7
92.5°	21.0	21.5	21.9	22.1	22.3	22.5	22.7
95°	35.6	36.6	37.0	36.8	36.6	36.4	36.2
97.5°	46.2	47.0	47.5	47.7	47.9	48.1	48.3
100°	52.5	54.0	54.9	55.3	55.7	56.1	56.4
102.5°	55.2	57.1	58.4	58.9	59.4	60.0	60.4
105°	57.5	59.6	61.0	61.8	62.5	63.2	64.0
107.5°	65.6	63.5	62.9	63.6	64.3	65.1	65.8
110°	91.3	72.5	63.5	64.2	65.0	65.8	66.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	166.9	98.6	64.8	65.4	66.0	66.6	67.2
115°	259.7	173.0	122.9	109.5	96.0	82.5	69.1
117.5°	512.6	491.7	459.1	414.8	370.5	326.2	281.9
120°	624.0	626.3	614.7	589.5	564.2	538.9	513.7
122.5°	661.1	662.4	660.6	655.8	650.9	645.9	641.0
125°	715.5	716.8	717.8	718.4	718.9	719.5	720.0
127.5°	766.5	768.4	769.4	769.5	769.7	769.8	769.8
130°	798.6	800.7	801.6	801.5	801.2	801.1	800.9
132.5°	829.4	831.2	831.9	831.7	831.6	831.4	831.2
135°	873.9	875.7	876.5	876.1	875.7	875.4	875.0
137.5°	915.0	916.8	917.4	916.8	916.2	915.5	914.9
140°	941.5	943.2	943.6	942.6	941.7	940.7	939.8
142.5°	966.0	967.5	967.8	966.9	965.9	965.0	964.1
145°	1000.1	1001.5	1001.6	1000.8	999.8	998.9	997.9
147.5°	1029.8	1030.8	1030.9	1030.1	1029.3	1028.5	1027.7
150°	1048.5	1049.6	1049.6	1048.7	1047.8	1046.9	1045.9
152.5°	1065.3	1066.4	1066.4	1065.1	1063.9	1062.6	1061.4
155°	1088.1	1089.2	1088.9	1087.4	1086.0	1084.5	1083.0
157.5°	1107.3	1108.6	1108.5	1107.1	1105.6	1104.1	1102.6
160°	1118.3	1119.4	1119.4	1118.1	1116.7	1115.5	1114.1
162.5°	1128.9	1130.2	1130.0	1128.4	1126.8	1125.1	1123.6
165°	1141.6	1143.0	1143.0	1141.6	1140.3	1139.0	1137.7
167.5°	1152.2	1153.6	1153.3	1151.7	1150.0	1148.3	1146.6
170°	1157.6	1159.0	1158.7	1157.1	1155.4	1153.7	1152.0
172.5°	1161.7	1163.0	1162.8	1161.1	1159.4	1157.8	1156.0
175°	1166.1	1167.4	1167.1	1165.2	1163.3	1161.5	1159.6
177.5°	1166.3	1167.4	1167.2	1165.9	1164.5	1163.2	1161.8
180°	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8	1163.8

(END OF REPORT)