

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: P332103-830

Luminaire Tested: **S123DIW-S340D1030U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332103-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIW-S340D1030U830-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1030 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4739.5 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: Semi-Indirect

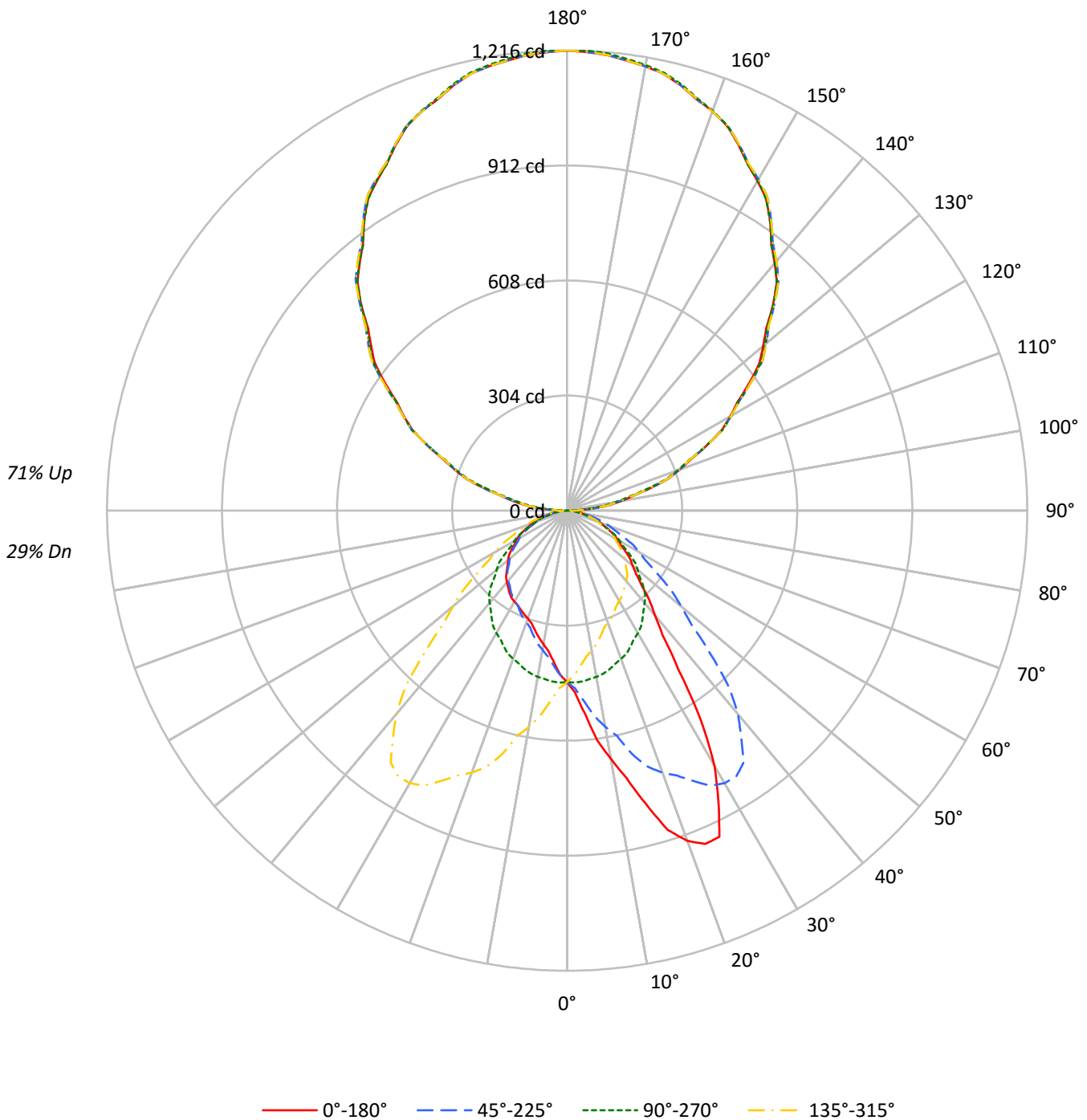
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29
1	93	89	85	82	83	80	77	74	63	61	59	47	46	45	33	32	31	25
2	85	78	72	67	76	70	65	61	55	52	49	42	39	37	29	28	27	21
3	78	69	62	56	69	62	56	51	49	45	41	37	34	32	26	24	23	18
4	71	61	53	47	63	55	48	43	43	39	35	33	30	27	23	21	20	15
5	65	54	46	40	58	49	42	37	39	34	30	29	26	24	21	19	17	13
6	60	48	40	35	53	44	37	32	35	30	26	27	23	21	19	17	15	12
7	55	43	36	30	49	39	33	28	31	27	23	24	21	18	17	15	13	11
8	51	39	32	27	46	36	29	25	29	24	20	22	19	16	16	14	12	9
9	47	36	29	24	43	32	26	22	26	21	18	20	17	14	15	12	11	8
10	44	33	26	21	40	30	24	19	24	19	16	19	15	13	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4878	4878	4878	4878
5°	5817	4900	4341	4900
10°	7282	4875	3922	4875
15°	8931	4835	3651	4835
20°	10639	4774	3477	4774
25°	11297	4700	3437	4700
30°	9684	4645	3455	4645
35°	6734	4568	3491	4568
40°	5073	4477	3481	4477
45°	4211	4341	3436	4341
50°	3773	4068	3404	4068
55°	3526	3772	3363	3772
60°	3309	3460	3328	3460
65°	3110	3156	3222	3156
70°	2917	2807	3068	2807
75°	2612	2458	2816	2458
80°	2287	2015	2424	2015
85°	1791	1470	1630	1470



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	0.9
10°-20°	143.2	3.0
20°-30°	240.3	5.1
30°-40°	272.0	5.7
40°-50°	244.0	5.1
50°-60°	196.9	4.2
60°-70°	137.2	2.9
70°-80°	72.1	1.5
80°-90°	21.2	0.4
90°-100°	79.2	1.7
100°-110°	237.0	5.0
110°-120°	403.1	8.5
120°-130°	530.3	11.2
130°-140°	596.0	12.6
140°-150°	585.8	12.4
150°-160°	493.2	10.4
160°-170°	328.3	6.9
170°-180°	115.0	2.4
0°-30°	428.1	9.0
0°-40°	700.1	14.8
0°-60°	1140.9	24.1
0°-90°	1371.5	28.9
90°-120°	719.4	15.2
90°-150°	2431.5	51.3
90°-180°	3368.0	71.1
0°-180°	4739.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	453	453	453	453	453	
5°	538	454	402	454	538	56
15°	801	434	328	434	801	231
25°	951	396	289	396	951	417
35°	512	348	266	348	512	333
45°	277	285	226	285	277	219
55°	188	201	179	201	188	169
65°	122	124	126	124	122	122
75°	63	59	68	59	63	67
85°	14	12	13	12	14	18
90°	29	1	29	1	29	15
95°	74	56	74	56	74	76
105°	227	215	227	215	227	241
115°	407	406	407	406	407	403
125°	587	594	587	594	587	525
135°	770	771	770	771	770	592
145°	935	935	935	935	935	584
155°	1069	1070	1069	1070	1069	492
165°	1162	1166	1162	1166	1162	328
175°	1208	1213	1208	1213	1208	115
180°	1216	1216	1216	1216	1216	



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	481.0	480.6	479.8	480.4	479.0	477.1	476.9	475.1	470.0	469.8	468.3
5°	538.4	536.7	536.4	536.2	533.1	529.0	521.0	520.4	509.8	504.6	498.2
7.5°	612.8	613.7	610.5	607.8	598.3	592.1	583.6	572.8	559.9	546.7	538.0
10°	666.2	673.4	664.5	658.3	652.6	641.9	629.3	613.7	598.1	579.9	566.1
12.5°	723.5	727.0	725.2	719.4	710.6	694.2	672.0	654.8	640.5	610.1	597.9
15°	801.4	814.8	806.3	786.6	786.9	771.4	742.4	710.6	693.6	667.0	630.8
17.5°	884.6	886.2	882.6	866.1	855.2	833.7	806.9	776.5	742.2	710.0	671.6
20°	928.8	927.5	919.8	911.3	892.4	875.7	846.5	812.5	768.5	736.9	694.9
22.5°	953.4	951.2	947.5	940.4	924.7	906.8	880.5	843.4	801.5	758.0	709.5
25°	951.2	954.0	954.5	952.5	947.1	936.3	915.7	886.0	844.3	788.2	737.8
27.5°	865.2	869.2	880.9	891.4	903.0	914.8	913.2	898.5	867.6	819.3	757.5
30°	779.1	770.2	792.0	819.4	838.1	871.1	889.5	890.6	873.3	831.8	771.6
32.5°	659.6	669.3	678.9	712.7	753.5	790.4	827.2	856.7	860.1	832.5	779.9
35°	512.5	524.6	542.2	559.7	603.6	641.4	706.0	762.1	806.9	812.8	780.6
37.5°	413.0	419.0	430.1	447.7	476.4	521.2	571.1	642.2	707.1	755.4	757.4
40°	361.0	362.8	375.2	388.6	411.9	448.8	493.8	556.7	634.3	701.8	729.9
42.5°	322.0	325.8	331.2	344.0	362.6	390.3	432.2	484.1	555.3	632.9	687.9
45°	276.6	281.1	284.4	292.9	306.1	324.8	353.9	401.4	455.6	535.7	609.7
47.5°	246.8	247.0	249.5	256.0	264.9	279.0	299.6	330.1	379.8	444.9	520.8
50°	225.3	228.8	229.7	234.7	241.8	252.0	269.2	295.1	335.9	393.0	462.9
52.5°	210.2	211.2	213.7	217.4	223.5	231.5	246.4	266.6	298.7	347.4	411.6
55°	187.9	187.9	190.4	193.2	196.7	204.0	213.9	228.8	253.2	291.0	344.1
57.5°	167.4	168.5	170.2	171.1	174.1	178.9	187.1	198.5	216.6	245.7	287.9
60°	153.7	155.7	155.4	157.2	159.9	163.6	170.6	179.8	196.0	219.3	255.0
62.5°	141.8	141.7	141.6	143.7	146.3	149.9	154.5	162.4	176.3	196.9	227.2
65°	122.1	121.7	123.2	124.5	125.4	128.0	131.5	138.6	147.8	163.2	186.6
67.5°	104.6	103.3	104.2	104.6	106.1	108.2	111.5	115.8	123.1	135.4	153.2
70°	92.7	91.5	91.3	91.8	93.1	94.6	97.1	101.2	108.0	117.9	130.8
72.5°	80.4	79.6	79.6	80.6	81.2	82.2	83.9	87.7	93.1	100.6	112.6
75°	62.8	62.8	62.8	63.1	63.7	64.6	65.9	67.9	72.0	77.3	85.4
77.5°	47.0	47.0	46.8	46.8	47.7	48.1	48.4	50.2	52.6	56.1	62.0
80°	36.9	35.8	36.2	36.9	37.3	37.5	38.2	38.6	40.6	42.6	46.8
82.5°	27.4	26.5	26.6	27.6	27.7	27.9	28.6	29.1	29.9	31.7	33.9
85°	14.5	14.5	14.7	14.7	14.9	14.7	15.4	15.6	15.6	16.7	18.0
87.5°	11.0	10.6	10.7	10.7	10.5	10.6	10.6	10.6	10.6	10.6	10.2
90°	28.7	28.2	27.8	27.3	27.0	26.3	25.4	24.6	23.8	22.9	20.2
92.5°	38.5	38.8	39.1	39.3	39.6	39.4	38.7	38.0	37.3	36.7	35.1
95°	74.5	74.5	74.5	74.5	74.5	74.1	73.2	72.4	71.5	70.7	69.0
97.5°	114.6	114.7	114.8	114.8	114.9	114.5	113.5	112.5	111.6	110.6	109.3
100°	145.2	144.7	144.3	143.8	143.5	142.9	142.3	141.7	141.0	140.3	139.3
102.5°	176.4	176.5	176.6	176.7	176.8	176.5	175.9	175.2	174.7	174.0	172.6
105°	227.2	226.9	226.4	226.0	225.6	225.4	225.4	225.4	225.4	225.4	223.5
107.5°	280.1	280.4	280.7	281.0	281.2	281.0	280.3	279.7	278.9	278.2	277.5
110°	316.0	316.5	316.9	317.4	317.7	317.5	316.7	315.8	315.0	314.1	313.8



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	354.3	354.4	354.4	354.5	354.6	354.1	353.1	352.1	351.1	350.1	350.0
115°	406.8	407.0	407.2	407.5	407.6	407.6	407.5	407.2	407.0	406.8	407.2
117.5°	460.1	460.6	461.3	461.8	462.4	462.8	462.8	462.9	462.9	463.0	463.4
120°	497.5	497.9	498.3	498.8	499.2	499.5	499.7	499.9	500.1	500.4	501.4
122.5°	533.4	534.0	534.6	535.2	535.7	536.4	536.9	537.4	538.0	538.6	539.1
125°	587.3	588.1	589.0	589.8	590.7	591.5	592.4	593.2	594.1	594.9	595.3
127.5°	640.9	641.9	642.9	643.9	644.8	645.9	647.1	648.3	649.5	650.6	651.1
130°	676.1	677.6	679.0	680.5	682.0	683.2	684.0	684.9	685.7	686.5	687.2
132.5°	712.8	713.9	715.0	716.1	717.4	718.4	719.4	720.5	721.4	722.5	722.9
135°	769.7	770.1	770.5	770.9	771.4	771.9	772.8	773.6	774.5	775.3	775.6
137.5°	819.9	820.7	821.5	822.3	823.1	824.0	824.8	825.8	826.6	827.6	827.0
140°	852.7	854.2	855.7	857.1	858.7	859.5	859.7	860.0	860.2	860.4	860.2
142.5°	886.4	887.5	888.6	889.8	890.9	891.6	891.8	892.0	892.2	892.5	892.1
145°	934.8	935.7	936.5	937.4	938.2	938.8	939.0	939.2	939.4	939.6	939.0
147.5°	978.0	979.3	980.5	981.8	983.1	983.7	983.7	983.7	983.7	983.7	983.2
150°	1005.5	1006.8	1008.0	1009.4	1010.6	1011.3	1011.3	1011.3	1011.3	1011.3	1010.8
152.5°	1032.3	1033.3	1034.4	1035.6	1036.7	1037.1	1036.7	1036.3	1036.0	1035.7	1035.5
155°	1068.6	1070.1	1071.5	1073.0	1074.5	1074.8	1073.9	1073.1	1072.2	1071.4	1071.2
157.5°	1101.5	1102.8	1104.0	1105.1	1106.4	1106.5	1105.6	1104.7	1103.8	1102.9	1102.8
160°	1122.9	1123.8	1124.6	1125.5	1126.3	1126.2	1125.2	1124.2	1123.0	1122.0	1122.0
162.5°	1139.0	1140.4	1141.7	1143.1	1144.4	1144.6	1143.5	1142.5	1141.4	1140.4	1140.2
165°	1162.2	1163.6	1165.1	1166.6	1168.1	1168.2	1166.9	1165.6	1164.3	1163.1	1163.1
167.5°	1181.8	1183.1	1184.4	1185.7	1187.0	1187.0	1185.7	1184.4	1183.1	1181.8	1181.7
170°	1191.8	1193.2	1194.7	1196.2	1197.7	1197.7	1196.2	1194.7	1193.2	1191.8	1191.8
172.5°	1199.4	1200.8	1202.3	1203.8	1205.3	1205.4	1204.1	1202.8	1201.5	1200.1	1200.1
175°	1208.0	1209.5	1210.9	1212.4	1213.9	1214.0	1212.8	1211.4	1210.2	1208.9	1208.9
177.5°	1212.6	1213.7	1214.9	1216.1	1217.3	1217.4	1216.4	1215.3	1214.3	1213.3	1213.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	467.2	465.9	464.5	462.0	459.9	456.9	456.0	455.0	451.8	449.0	446.9
5°	495.8	490.5	482.9	475.8	470.1	462.4	458.1	453.5	446.9	440.9	436.1
7.5°	525.7	515.3	503.3	490.5	478.4	466.8	457.5	449.1	439.9	431.2	424.3
10°	549.4	534.4	517.7	499.7	484.4	469.5	456.9	446.0	434.1	423.8	415.2
12.5°	576.5	554.3	531.3	509.4	491.3	470.5	455.3	441.4	427.9	415.6	406.0
15°	608.4	580.3	553.1	523.0	495.4	469.5	451.5	433.9	418.3	405.6	393.2
17.5°	637.6	605.8	569.9	533.3	499.9	469.2	444.0	424.1	404.6	389.1	376.8
20°	654.1	617.9	577.3	539.3	502.4	468.2	440.5	416.8	395.7	379.2	365.4
22.5°	668.4	625.9	583.9	543.3	502.2	465.3	433.9	409.5	386.7	370.6	355.9
25°	683.2	632.4	590.2	542.6	496.7	458.5	423.4	395.7	372.9	353.9	338.8
27.5°	695.8	632.0	581.9	530.7	488.0	449.7	412.2	382.5	358.3	337.7	322.3
30°	704.2	632.8	573.3	522.6	479.6	440.1	403.6	373.7	348.3	327.4	312.9
32.5°	709.5	632.3	565.4	511.3	466.2	431.2	394.3	363.4	337.1	316.7	302.7
35°	712.6	628.4	551.8	488.1	444.7	410.6	379.7	347.6	320.2	301.0	285.2
37.5°	706.3	620.3	536.0	465.7	418.1	384.7	358.5	331.3	305.0	284.0	270.3
40°	696.7	615.0	523.7	449.9	399.8	367.6	345.4	318.6	292.7	272.7	260.0
42.5°	678.3	604.4	510.2	432.3	380.9	348.6	328.2	305.8	281.3	262.5	249.8
45°	633.3	581.0	489.8	406.0	352.9	319.5	301.5	285.2	263.1	244.9	233.8
47.5°	570.8	545.9	460.5	378.2	323.6	291.5	272.8	259.8	243.6	228.8	218.3
50°	527.4	517.1	440.7	359.2	304.2	272.7	254.7	242.9	231.2	216.5	206.9
52.5°	477.4	483.7	417.5	339.6	284.3	253.4	236.5	227.1	216.5	204.3	196.0
55°	406.9	429.9	377.5	306.5	254.7	225.3	209.2	201.0	194.7	185.8	178.5
57.5°	340.9	370.2	334.1	272.5	225.6	200.3	184.9	175.9	171.9	167.2	161.5
60°	301.7	330.6	303.2	249.7	206.2	182.0	168.4	160.7	156.7	153.4	148.6
62.5°	266.7	296.1	273.1	226.5	187.0	164.7	152.8	145.2	142.2	140.5	136.4
65°	218.7	243.9	228.6	190.4	159.7	139.9	129.1	123.9	121.0	120.4	117.7
67.5°	178.0	197.2	186.1	157.9	133.7	116.7	107.5	103.0	100.9	100.6	98.6
70°	151.3	169.3	160.7	135.3	114.4	101.0	93.1	89.2	87.8	87.7	86.5
72.5°	130.5	143.1	136.3	115.1	99.0	86.8	81.0	76.8	75.4	75.7	74.9
75°	96.6	106.0	102.1	87.4	74.5	66.5	61.7	59.1	57.8	58.4	57.5
77.5°	69.6	75.5	71.9	61.7	53.7	48.1	44.5	42.9	41.7	41.7	41.3
80°	52.5	56.0	54.0	47.9	41.3	36.5	33.6	32.5	31.9	31.6	31.4
82.5°	37.4	40.3	38.0	33.8	29.3	26.4	24.8	23.4	22.9	23.0	22.8
85°	18.9	20.0	19.1	16.5	14.7	13.4	12.5	11.9	11.4	11.6	11.2
87.5°	10.0	9.6	8.5	7.4	6.6	5.6	5.2	4.4	4.5	4.9	5.2
90°	17.4	14.6	11.9	9.4	7.4	5.2	3.1	0.9	3.1	5.2	7.4
92.5°	33.6	32.0	30.3	28.8	27.4	26.0	24.5	23.1	24.5	26.0	27.4
95°	67.3	65.6	63.9	62.3	60.8	59.3	57.8	56.4	57.8	59.3	60.8
97.5°	108.1	106.9	105.7	104.5	103.4	102.3	101.1	100.1	101.1	102.3	103.4
100°	138.3	137.2	136.1	135.0	133.7	132.4	131.1	129.9	131.1	132.4	133.7
102.5°	171.2	169.8	168.3	167.3	166.5	165.8	165.0	164.3	165.0	165.8	166.5
105°	221.5	219.6	217.7	216.6	216.1	215.7	215.3	214.9	215.3	215.7	216.1
107.5°	276.7	276.0	275.2	274.7	274.5	274.2	273.9	273.7	273.9	274.2	274.5
110°	313.3	312.9	312.5	312.1	311.6	311.2	310.8	310.4	310.8	311.2	311.6



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	349.9	349.8	349.7	349.6	349.3	349.0	348.8	348.6	348.8	349.0	349.3
115°	407.6	408.0	408.5	408.4	407.7	407.1	406.4	405.9	406.4	407.1	407.7
117.5°	464.0	464.6	465.1	465.2	464.8	464.4	463.9	463.5	463.9	464.4	464.8
120°	502.5	503.5	504.6	504.5	503.2	502.0	500.7	499.5	500.7	502.0	503.2
122.5°	539.7	540.3	540.7	540.5	539.6	538.8	537.8	536.9	537.8	538.8	539.6
125°	595.8	596.2	596.6	596.5	595.9	595.2	594.6	594.0	594.6	595.2	595.9
127.5°	651.6	652.1	652.5	652.1	650.7	649.4	648.0	646.7	648.0	649.4	650.7
130°	687.9	688.5	689.1	688.6	686.9	685.2	683.5	681.8	683.5	685.2	686.9
132.5°	723.4	723.9	724.3	723.8	722.1	720.3	718.6	716.9	718.6	720.3	722.1
135°	775.8	776.0	776.2	775.7	774.4	773.2	771.8	770.6	771.8	773.2	774.4
137.5°	826.4	825.9	825.3	824.5	823.4	822.4	821.3	820.3	821.3	822.4	823.4
140°	860.0	859.7	859.5	858.8	857.8	856.8	855.7	854.6	855.7	856.8	857.8
142.5°	891.6	891.3	890.9	890.2	889.1	888.1	887.0	886.0	887.0	888.1	889.1
145°	938.4	937.7	937.1	936.5	936.1	935.7	935.3	934.8	935.3	935.7	936.1
147.5°	982.6	981.9	981.4	980.7	980.0	979.1	978.4	977.6	978.4	979.1	980.0
150°	1010.4	1009.9	1009.6	1009.1	1008.7	1008.2	1007.9	1007.4	1007.9	1008.2	1008.7
152.5°	1035.2	1034.9	1034.6	1034.3	1033.7	1033.0	1032.5	1031.9	1032.5	1033.0	1033.7
155°	1071.0	1070.7	1070.5	1070.4	1070.4	1070.4	1070.4	1070.4	1070.4	1070.4	1070.4
157.5°	1102.6	1102.4	1102.2	1102.3	1102.5	1102.8	1103.1	1103.3	1103.1	1102.8	1102.5
160°	1122.0	1122.0	1122.0	1122.2	1122.7	1123.0	1123.5	1123.9	1123.5	1123.0	1122.7
162.5°	1140.0	1139.8	1139.6	1139.9	1140.5	1141.0	1141.7	1142.3	1141.7	1141.0	1140.5
165°	1163.1	1163.1	1163.1	1163.4	1164.0	1164.7	1165.3	1165.9	1165.3	1164.7	1164.0
167.5°	1181.5	1181.3	1181.1	1181.5	1182.3	1183.2	1184.0	1184.9	1184.0	1183.2	1182.3
170°	1191.8	1191.8	1191.8	1192.1	1193.0	1193.8	1194.7	1195.5	1194.7	1193.8	1193.0
172.5°	1200.1	1200.1	1200.1	1200.5	1201.4	1202.2	1203.1	1203.9	1203.1	1202.2	1201.4
175°	1208.9	1208.9	1208.9	1209.4	1210.2	1211.1	1211.9	1212.8	1211.9	1211.1	1210.2
177.5°	1213.3	1213.3	1213.3	1213.6	1214.3	1215.0	1215.7	1216.4	1215.7	1215.0	1214.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	445.6	444.4	442.7	440.1	437.9	434.6	434.6	435.1	435.1	435.0	434.6
5°	432.2	428.9	424.9	420.3	415.5	410.6	409.7	407.9	406.7	405.8	404.7
7.5°	417.8	412.0	406.2	399.8	393.9	389.1	385.7	382.9	381.1	379.1	377.7
10°	408.2	401.0	394.2	387.4	379.8	373.9	370.2	367.6	365.6	363.8	363.0
12.5°	396.8	388.5	381.0	374.5	366.4	360.2	356.7	355.4	353.2	349.4	347.5
15°	380.1	372.4	363.4	353.5	349.6	342.1	337.9	335.9	334.6	331.8	330.9
17.5°	365.8	355.8	345.6	338.3	330.9	324.9	322.5	320.1	318.4	316.0	315.3
20°	354.4	345.4	336.2	328.3	320.6	314.0	312.0	310.3	308.5	307.5	306.5
22.5°	342.8	333.8	326.1	318.8	310.6	306.2	304.2	302.2	301.0	300.2	299.4
25°	326.5	318.6	310.0	303.5	296.9	294.0	292.7	291.6	290.7	289.6	289.4
27.5°	312.0	303.3	296.4	290.2	285.5	283.1	281.8	281.3	281.5	281.9	282.2
30°	301.0	293.1	287.5	282.2	277.8	275.6	275.3	275.3	276.3	276.4	276.9
32.5°	291.1	284.6	278.8	273.7	270.4	268.9	269.8	269.8	270.4	271.0	271.8
35°	276.4	270.7	266.4	261.9	259.1	259.8	260.2	260.6	261.7	263.1	263.9
37.5°	262.5	257.6	253.0	249.6	248.3	249.4	250.5	251.4	252.7	253.7	254.6
40°	252.5	248.7	244.4	241.3	241.8	242.4	243.3	244.4	245.5	246.2	247.0
42.5°	243.2	239.3	235.9	233.4	234.0	234.9	235.4	235.9	237.2	238.5	238.9
45°	229.0	225.9	222.9	221.3	221.8	222.3	222.6	223.3	224.4	225.3	225.6
47.5°	213.1	210.9	208.9	207.4	208.1	207.9	208.5	209.9	210.2	210.8	212.0
50°	202.9	201.0	198.5	198.0	198.0	198.0	198.3	200.0	200.0	201.0	201.8
52.5°	191.6	190.4	188.9	188.0	187.7	187.7	188.6	189.5	189.8	191.1	192.0
55°	175.0	173.7	172.4	171.7	171.3	171.7	173.4	173.9	175.0	175.7	176.3
57.5°	157.7	156.7	155.6	155.2	155.1	155.7	156.7	158.0	158.3	160.3	161.3
60°	146.3	144.7	143.8	143.8	143.4	145.3	145.0	147.1	147.6	148.9	150.4
62.5°	134.5	132.4	132.1	132.1	132.7	133.3	133.8	134.8	136.0	137.6	138.8
65°	115.5	114.4	115.9	115.7	115.3	116.6	116.6	117.7	119.0	120.6	123.0
67.5°	97.6	97.0	97.1	97.1	97.7	98.5	99.2	100.1	101.7	103.3	104.9
70°	85.4	86.1	85.0	85.9	86.5	86.7	87.2	88.5	90.2	91.3	93.1
72.5°	73.6	73.6	73.7	74.1	74.7	75.1	75.6	77.1	79.0	79.9	81.3
75°	56.6	56.5	57.1	57.1	58.2	58.6	59.1	59.8	61.5	62.8	63.9
77.5°	41.4	41.7	41.5	42.2	41.9	42.0	43.4	44.0	44.2	46.8	47.4
80°	31.2	31.6	31.9	32.0	32.2	31.9	33.4	34.0	34.0	35.5	36.7
82.5°	22.4	22.6	23.2	23.5	23.5	23.9	24.0	24.5	25.1	25.7	27.1
85°	11.2	11.9	12.1	11.9	12.1	11.6	12.3	12.5	12.7	12.7	12.7
87.5°	5.4	6.0	6.4	7.2	7.5	8.3	8.5	8.3	8.4	9.1	8.6
90°	9.4	11.9	14.6	17.4	20.2	22.9	23.8	24.6	25.4	26.3	27.0
92.5°	28.8	30.3	32.0	33.6	35.1	36.7	37.3	38.0	38.7	39.4	39.6
95°	62.3	63.9	65.6	67.3	69.0	70.7	71.5	72.4	73.2	74.1	74.5
97.5°	104.5	105.7	106.9	108.1	109.3	110.6	111.6	112.5	113.5	114.5	114.9
100°	135.0	136.1	137.2	138.3	139.3	140.3	141.0	141.7	142.3	142.9	143.5
102.5°	167.3	168.3	169.8	171.2	172.6	174.0	174.7	175.2	175.9	176.5	176.8
105°	216.6	217.7	219.6	221.5	223.5	225.4	225.4	225.4	225.4	225.4	225.6
107.5°	274.7	275.2	276.0	276.7	277.5	278.2	278.9	279.7	280.3	281.0	281.2
110°	312.1	312.5	312.9	313.3	313.8	314.1	315.0	315.8	316.7	317.5	317.7



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	349.6	349.7	349.8	349.9	350.0	350.1	351.1	352.1	353.1	354.1	354.6
115°	408.4	408.5	408.0	407.6	407.2	406.8	407.0	407.2	407.5	407.6	407.6
117.5°	465.2	465.1	464.6	464.0	463.4	463.0	462.9	462.9	462.8	462.8	462.4
120°	504.5	504.6	503.5	502.5	501.4	500.4	500.1	499.9	499.7	499.5	499.2
122.5°	540.5	540.7	540.3	539.7	539.1	538.6	538.0	537.4	536.9	536.4	535.7
125°	596.5	596.6	596.2	595.8	595.3	594.9	594.1	593.2	592.4	591.5	590.7
127.5°	652.1	652.5	652.1	651.6	651.1	650.6	649.5	648.3	647.1	645.9	644.8
130°	688.6	689.1	688.5	687.9	687.2	686.5	685.7	684.9	684.0	683.2	682.0
132.5°	723.8	724.3	723.9	723.4	722.9	722.5	721.4	720.5	719.4	718.4	717.4
135°	775.7	776.2	776.0	775.8	775.6	775.3	774.5	773.6	772.8	771.9	771.4
137.5°	824.5	825.3	825.9	826.4	827.0	827.6	826.6	825.8	824.8	824.0	823.1
140°	858.8	859.5	859.7	860.0	860.2	860.4	860.2	860.0	859.7	859.5	858.7
142.5°	890.2	890.9	891.3	891.6	892.1	892.5	892.2	892.0	891.8	891.6	890.9
145°	936.5	937.1	937.7	938.4	939.0	939.6	939.4	939.2	939.0	938.8	938.2
147.5°	980.7	981.4	981.9	982.6	983.2	983.7	983.7	983.7	983.7	983.7	983.1
150°	1009.1	1009.6	1009.9	1010.4	1010.8	1011.3	1011.3	1011.3	1011.3	1011.3	1010.6
152.5°	1034.3	1034.6	1034.9	1035.2	1035.5	1035.7	1036.0	1036.3	1036.7	1037.1	1036.7
155°	1070.4	1070.5	1070.7	1071.0	1071.2	1071.4	1072.2	1073.1	1073.9	1074.8	1074.5
157.5°	1102.3	1102.2	1102.4	1102.6	1102.8	1102.9	1103.8	1104.7	1105.6	1106.5	1106.4
160°	1122.2	1122.0	1122.0	1122.0	1122.0	1122.0	1123.0	1124.2	1125.2	1126.2	1126.3
162.5°	1139.9	1139.6	1139.8	1140.0	1140.2	1140.4	1141.4	1142.5	1143.5	1144.6	1144.4
165°	1163.4	1163.1	1163.1	1163.1	1163.1	1163.1	1164.3	1165.6	1166.9	1168.2	1168.1
167.5°	1181.5	1181.1	1181.3	1181.5	1181.7	1181.8	1183.1	1184.4	1185.7	1187.0	1187.0
170°	1192.1	1191.8	1191.8	1191.8	1191.8	1191.8	1193.2	1194.7	1196.2	1197.7	1197.7
172.5°	1200.5	1200.1	1200.1	1200.1	1200.1	1200.1	1201.5	1202.8	1204.1	1205.4	1205.3
175°	1209.4	1208.9	1208.9	1208.9	1208.9	1208.9	1210.2	1211.4	1212.8	1214.0	1213.9
177.5°	1213.6	1213.3	1213.3	1213.3	1213.3	1213.3	1214.3	1215.3	1216.4	1217.4	1217.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	433.4	433.2	434.4	433.6	434.4	433.2	433.4	434.6	435.0	435.1	435.1
5°	403.4	404.1	401.8	401.8	401.8	404.1	403.4	404.7	405.8	406.7	407.9
7.5°	376.6	375.7	375.8	374.6	375.8	375.7	376.6	377.7	379.1	381.1	382.9
10°	360.3	359.0	358.5	358.8	358.5	359.0	360.3	363.0	363.8	365.6	367.6
12.5°	346.8	346.6	343.7	343.7	343.7	346.6	346.8	347.5	349.4	353.2	355.4
15°	330.9	326.8	326.3	327.6	326.3	326.8	330.9	330.9	331.8	334.6	335.9
17.5°	315.0	312.7	312.9	312.3	312.9	312.7	315.0	315.3	316.0	318.4	320.1
20°	306.5	305.2	305.0	303.5	305.0	305.2	306.5	306.5	307.5	308.5	310.3
22.5°	298.8	298.4	298.5	296.8	298.5	298.4	298.8	299.4	300.2	301.0	302.2
25°	289.2	290.3	289.4	289.4	289.4	290.3	289.2	289.4	289.6	290.7	291.6
27.5°	282.7	282.7	282.2	282.2	282.2	282.7	282.7	282.2	281.9	281.5	281.3
30°	277.8	277.6	278.0	278.0	278.0	277.6	277.8	276.9	276.4	276.3	275.3
32.5°	272.9	273.1	273.2	273.4	273.2	273.1	272.9	271.8	271.0	270.4	269.8
35°	265.2	265.5	266.2	265.7	266.2	265.5	265.2	263.9	263.1	261.7	260.6
37.5°	255.0	256.0	255.8	256.1	255.8	256.0	255.0	254.6	253.7	252.7	251.4
40°	247.2	247.9	247.7	247.7	247.7	247.9	247.2	247.0	246.2	245.5	244.4
42.5°	239.3	239.8	239.2	238.9	239.2	239.8	239.3	238.9	238.5	237.2	235.9
45°	226.4	225.9	226.6	225.7	226.6	225.9	226.4	225.6	225.3	224.4	223.3
47.5°	211.9	212.4	212.5	213.2	212.5	212.4	211.9	212.0	210.8	210.2	209.9
50°	202.3	203.6	203.6	203.3	203.6	203.6	202.3	201.8	201.0	200.0	200.0
52.5°	192.7	193.3	194.3	194.2	194.3	193.3	192.7	192.0	191.1	189.8	189.5
55°	178.0	178.5	179.0	179.2	179.0	178.5	178.0	176.3	175.7	175.0	173.9
57.5°	162.9	162.7	163.7	164.1	163.7	162.7	162.9	161.3	160.3	158.3	158.0
60°	152.1	152.1	153.9	154.6	153.9	152.1	152.1	150.4	148.9	147.6	147.1
62.5°	140.7	141.5	143.2	142.3	143.2	141.5	140.7	138.8	137.6	136.0	134.8
65°	124.0	125.8	125.6	126.5	125.6	125.8	124.0	123.0	120.6	119.0	117.7
67.5°	106.6	107.7	109.3	109.4	109.3	107.7	106.6	104.9	103.3	101.7	100.1
70°	94.8	96.0	96.8	97.5	96.8	96.0	94.8	93.1	91.3	90.2	88.5
72.5°	83.4	84.0	86.1	85.2	86.1	84.0	83.4	81.3	79.9	79.0	77.1
75°	65.4	67.0	68.3	67.7	68.3	67.0	65.4	63.9	62.8	61.5	59.8
77.5°	48.4	50.0	50.5	50.0	50.5	50.0	48.4	47.4	46.8	44.2	44.0
80°	38.2	38.0	39.3	39.1	39.3	38.0	38.2	36.7	35.5	34.0	34.0
82.5°	28.0	27.8	28.4	28.6	28.4	27.8	28.0	27.1	25.7	25.1	24.5
85°	13.6	14.2	13.4	13.2	13.4	14.2	13.6	12.7	12.7	12.7	12.5
87.5°	8.7	8.8	8.7	8.6	8.7	8.8	8.7	8.6	9.1	8.4	8.3
90°	27.3	27.8	28.2	28.7	28.2	27.8	27.3	27.0	26.3	25.4	24.6
92.5°	39.3	39.1	38.8	38.5	38.8	39.1	39.3	39.6	39.4	38.7	38.0
95°	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.1	73.2	72.4
97.5°	114.8	114.8	114.7	114.6	114.7	114.8	114.8	114.9	114.5	113.5	112.5
100°	143.8	144.3	144.7	145.2	144.7	144.3	143.8	143.5	142.9	142.3	141.7
102.5°	176.7	176.6	176.5	176.4	176.5	176.6	176.7	176.8	176.5	175.9	175.2
105°	226.0	226.4	226.9	227.2	226.9	226.4	226.0	225.6	225.4	225.4	225.4
107.5°	281.0	280.7	280.4	280.1	280.4	280.7	281.0	281.2	281.0	280.3	279.7
110°	317.4	316.9	316.5	316.0	316.5	316.9	317.4	317.7	317.5	316.7	315.8



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	354.5	354.4	354.4	354.3	354.4	354.4	354.5	354.6	354.1	353.1	352.1
115°	407.5	407.2	407.0	406.8	407.0	407.2	407.5	407.6	407.6	407.5	407.2
117.5°	461.8	461.3	460.6	460.1	460.6	461.3	461.8	462.4	462.8	462.8	462.9
120°	498.8	498.3	497.9	497.5	497.9	498.3	498.8	499.2	499.5	499.7	499.9
122.5°	535.2	534.6	534.0	533.4	534.0	534.6	535.2	535.7	536.4	536.9	537.4
125°	589.8	589.0	588.1	587.3	588.1	589.0	589.8	590.7	591.5	592.4	593.2
127.5°	643.9	642.9	641.9	640.9	641.9	642.9	643.9	644.8	645.9	647.1	648.3
130°	680.5	679.0	677.6	676.1	677.6	679.0	680.5	682.0	683.2	684.0	684.9
132.5°	716.1	715.0	713.9	712.8	713.9	715.0	716.1	717.4	718.4	719.4	720.5
135°	770.9	770.5	770.1	769.7	770.1	770.5	770.9	771.4	771.9	772.8	773.6
137.5°	822.3	821.5	820.7	819.9	820.7	821.5	822.3	823.1	824.0	824.8	825.8
140°	857.1	855.7	854.2	852.7	854.2	855.7	857.1	858.7	859.5	859.7	860.0
142.5°	889.8	888.6	887.5	886.4	887.5	888.6	889.8	890.9	891.6	891.8	892.0
145°	937.4	936.5	935.7	934.8	935.7	936.5	937.4	938.2	938.8	939.0	939.2
147.5°	981.8	980.5	979.3	978.0	979.3	980.5	981.8	983.1	983.7	983.7	983.7
150°	1009.4	1008.0	1006.8	1005.5	1006.8	1008.0	1009.4	1010.6	1011.3	1011.3	1011.3
152.5°	1035.6	1034.4	1033.3	1032.3	1033.3	1034.4	1035.6	1036.7	1037.1	1036.7	1036.3
155°	1073.0	1071.5	1070.1	1068.6	1070.1	1071.5	1073.0	1074.5	1074.8	1073.9	1073.1
157.5°	1105.1	1104.0	1102.8	1101.5	1102.8	1104.0	1105.1	1106.4	1106.5	1105.6	1104.7
160°	1125.5	1124.6	1123.8	1122.9	1123.8	1124.6	1125.5	1126.3	1126.2	1125.2	1124.2
162.5°	1143.1	1141.7	1140.4	1139.0	1140.4	1141.7	1143.1	1144.4	1144.6	1143.5	1142.5
165°	1166.6	1165.1	1163.6	1162.2	1163.6	1165.1	1166.6	1168.1	1168.2	1166.9	1165.6
167.5°	1185.7	1184.4	1183.1	1181.8	1183.1	1184.4	1185.7	1187.0	1187.0	1185.7	1184.4
170°	1196.2	1194.7	1193.2	1191.8	1193.2	1194.7	1196.2	1197.7	1197.7	1196.2	1194.7
172.5°	1203.8	1202.3	1200.8	1199.4	1200.8	1202.3	1203.8	1205.3	1205.4	1204.1	1202.8
175°	1212.4	1210.9	1209.5	1208.0	1209.5	1210.9	1212.4	1213.9	1214.0	1212.8	1211.4
177.5°	1216.1	1214.9	1213.7	1212.6	1213.7	1214.9	1216.1	1217.3	1217.4	1216.4	1215.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	434.6	434.6	437.9	440.1	442.7	444.4	445.6	446.9	449.0	451.8	455.0
5°	409.7	410.6	415.5	420.3	424.9	428.9	432.2	436.1	440.9	446.9	453.5
7.5°	385.7	389.1	393.9	399.8	406.2	412.0	417.8	424.3	431.2	439.9	449.1
10°	370.2	373.9	379.8	387.4	394.2	401.0	408.2	415.2	423.8	434.1	446.0
12.5°	356.7	360.2	366.4	374.5	381.0	388.5	396.8	406.0	415.6	427.9	441.4
15°	337.9	342.1	349.6	353.5	363.4	372.4	380.1	393.2	405.6	418.3	433.9
17.5°	322.5	324.9	330.9	338.3	345.6	355.8	365.8	376.8	389.1	404.6	424.1
20°	312.0	314.0	320.6	328.3	336.2	345.4	354.4	365.4	379.2	395.7	416.8
22.5°	304.2	306.2	310.6	318.8	326.1	333.8	342.8	355.9	370.6	386.7	409.5
25°	292.7	294.0	296.9	303.5	310.0	318.6	326.5	338.8	353.9	372.9	395.7
27.5°	281.8	283.1	285.5	290.2	296.4	303.3	312.0	322.3	337.7	358.3	382.5
30°	275.3	275.6	277.8	282.2	287.5	293.1	301.0	312.9	327.4	348.3	373.7
32.5°	269.8	268.9	270.4	273.7	278.8	284.6	291.1	302.7	316.7	337.1	363.4
35°	260.2	259.8	259.1	261.9	266.4	270.7	276.4	285.2	301.0	320.2	347.6
37.5°	250.5	249.4	248.3	249.6	253.0	257.6	262.5	270.3	284.0	305.0	331.3
40°	243.3	242.4	241.8	241.3	244.4	248.7	252.5	260.0	272.7	292.7	318.6
42.5°	235.4	234.9	234.0	233.4	235.9	239.3	243.2	249.8	262.5	281.3	305.8
45°	222.6	222.3	221.8	221.3	222.9	225.9	229.0	233.8	244.9	263.1	285.2
47.5°	208.5	207.9	208.1	207.4	208.9	210.9	213.1	218.3	228.8	243.6	259.8
50°	198.3	198.0	198.0	198.0	198.5	201.0	202.9	206.9	216.5	231.2	242.9
52.5°	188.6	187.7	187.7	188.0	188.9	190.4	191.6	196.0	204.3	216.5	227.1
55°	173.4	171.7	171.3	171.7	172.4	173.7	175.0	178.5	185.8	194.7	201.0
57.5°	156.7	155.7	155.1	155.2	155.6	156.7	157.7	161.5	167.2	171.9	175.9
60°	145.0	145.3	143.4	143.8	143.8	144.7	146.3	148.6	153.4	156.7	160.7
62.5°	133.8	133.3	132.7	132.1	132.1	132.4	134.5	136.4	140.5	142.2	145.2
65°	116.6	116.6	115.3	115.7	115.9	114.4	115.5	117.7	120.4	121.0	123.9
67.5°	99.2	98.5	97.7	97.1	97.1	97.0	97.6	98.6	100.6	100.9	103.0
70°	87.2	86.7	86.5	85.9	85.0	86.1	85.4	86.5	87.7	87.8	89.2
72.5°	75.6	75.1	74.7	74.1	73.7	73.6	73.6	74.9	75.7	75.4	76.8
75°	59.1	58.6	58.2	57.1	57.1	56.5	56.6	57.5	58.4	57.8	59.1
77.5°	43.4	42.0	41.9	42.2	41.5	41.7	41.4	41.3	41.7	41.7	42.9
80°	33.4	31.9	32.2	32.0	31.9	31.6	31.2	31.4	31.6	31.9	32.5
82.5°	24.0	23.9	23.5	23.5	23.2	22.6	22.4	22.8	23.0	22.9	23.4
85°	12.3	11.6	12.1	11.9	12.1	11.9	11.2	11.2	11.6	11.4	11.9
87.5°	8.5	8.3	7.5	7.2	6.4	6.0	5.4	5.2	4.9	4.5	4.4
90°	23.8	22.9	20.2	17.4	14.6	11.9	9.4	7.4	5.2	3.1	0.9
92.5°	37.3	36.7	35.1	33.6	32.0	30.3	28.8	27.4	26.0	24.5	23.1
95°	71.5	70.7	69.0	67.3	65.6	63.9	62.3	60.8	59.3	57.8	56.4
97.5°	111.6	110.6	109.3	108.1	106.9	105.7	104.5	103.4	102.3	101.1	100.1
100°	141.0	140.3	139.3	138.3	137.2	136.1	135.0	133.7	132.4	131.1	129.9
102.5°	174.7	174.0	172.6	171.2	169.8	168.3	167.3	166.5	165.8	165.0	164.3
105°	225.4	225.4	223.5	221.5	219.6	217.7	216.6	216.1	215.7	215.3	214.9
107.5°	278.9	278.2	277.5	276.7	276.0	275.2	274.7	274.5	274.2	273.9	273.7
110°	315.0	314.1	313.8	313.3	312.9	312.5	312.1	311.6	311.2	310.8	310.4



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	351.1	350.1	350.0	349.9	349.8	349.7	349.6	349.3	349.0	348.8	348.6
115°	407.0	406.8	407.2	407.6	408.0	408.5	408.4	407.7	407.1	406.4	405.9
117.5°	462.9	463.0	463.4	464.0	464.6	465.1	465.2	464.8	464.4	463.9	463.5
120°	500.1	500.4	501.4	502.5	503.5	504.6	504.5	503.2	502.0	500.7	499.5
122.5°	538.0	538.6	539.1	539.7	540.3	540.7	540.5	539.6	538.8	537.8	536.9
125°	594.1	594.9	595.3	595.8	596.2	596.6	596.5	595.9	595.2	594.6	594.0
127.5°	649.5	650.6	651.1	651.6	652.1	652.5	652.1	650.7	649.4	648.0	646.7
130°	685.7	686.5	687.2	687.9	688.5	689.1	688.6	686.9	685.2	683.5	681.8
132.5°	721.4	722.5	722.9	723.4	723.9	724.3	723.8	722.1	720.3	718.6	716.9
135°	774.5	775.3	775.6	775.8	776.0	776.2	775.7	774.4	773.2	771.8	770.6
137.5°	826.6	827.6	827.0	826.4	825.9	825.3	824.5	823.4	822.4	821.3	820.3
140°	860.2	860.4	860.2	860.0	859.7	859.5	858.8	857.8	856.8	855.7	854.6
142.5°	892.2	892.5	892.1	891.6	891.3	890.9	890.2	889.1	888.1	887.0	886.0
145°	939.4	939.6	939.0	938.4	937.7	937.1	936.5	936.1	935.7	935.3	934.8
147.5°	983.7	983.7	983.2	982.6	981.9	981.4	980.7	980.0	979.1	978.4	977.6
150°	1011.3	1011.3	1010.8	1010.4	1009.9	1009.6	1009.1	1008.7	1008.2	1007.9	1007.4
152.5°	1036.0	1035.7	1035.5	1035.2	1034.9	1034.6	1034.3	1033.7	1033.0	1032.5	1031.9
155°	1072.2	1071.4	1071.2	1071.0	1070.7	1070.5	1070.4	1070.4	1070.4	1070.4	1070.4
157.5°	1103.8	1102.9	1102.8	1102.6	1102.4	1102.2	1102.3	1102.5	1102.8	1103.1	1103.3
160°	1123.0	1122.0	1122.0	1122.0	1122.0	1122.0	1122.2	1122.7	1123.0	1123.5	1123.9
162.5°	1141.4	1140.4	1140.2	1140.0	1139.8	1139.6	1139.9	1140.5	1141.0	1141.7	1142.3
165°	1164.3	1163.1	1163.1	1163.1	1163.1	1163.1	1163.4	1164.0	1164.7	1165.3	1165.9
167.5°	1183.1	1181.8	1181.7	1181.5	1181.3	1181.1	1181.5	1182.3	1183.2	1184.0	1184.9
170°	1193.2	1191.8	1191.8	1191.8	1191.8	1191.8	1192.1	1193.0	1193.8	1194.7	1195.5
172.5°	1201.5	1200.1	1200.1	1200.1	1200.1	1200.1	1200.5	1201.4	1202.2	1203.1	1203.9
175°	1210.2	1208.9	1208.9	1208.9	1208.9	1208.9	1209.4	1210.2	1211.1	1211.9	1212.8
177.5°	1214.3	1213.3	1213.3	1213.3	1213.3	1213.3	1213.6	1214.3	1215.0	1215.7	1216.4
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	456.0	456.9	459.9	462.0	464.5	465.9	467.2	468.3	469.8	470.0	475.1
5°	458.1	462.4	470.1	475.8	482.9	490.5	495.8	498.2	504.6	509.8	520.4
7.5°	457.5	466.8	478.4	490.5	503.3	515.3	525.7	538.0	546.7	559.9	572.8
10°	456.9	469.5	484.4	499.7	517.7	534.4	549.4	566.1	579.9	598.1	613.7
12.5°	455.3	470.5	491.3	509.4	531.3	554.3	576.5	597.9	610.1	640.5	654.8
15°	451.5	469.5	495.4	523.0	553.1	580.3	608.4	630.8	667.0	693.6	710.6
17.5°	444.0	469.2	499.9	533.3	569.9	605.8	637.6	671.6	710.0	742.2	776.5
20°	440.5	468.2	502.4	539.3	577.3	617.9	654.1	694.9	736.9	768.5	812.5
22.5°	433.9	465.3	502.2	543.3	583.9	625.9	668.4	709.5	758.0	801.5	843.4
25°	423.4	458.5	496.7	542.6	590.2	632.4	683.2	737.8	788.2	844.3	886.0
27.5°	412.2	449.7	488.0	530.7	581.9	632.0	695.8	757.5	819.3	867.6	898.5
30°	403.6	440.1	479.6	522.6	573.3	632.8	704.2	771.6	831.8	873.3	890.6
32.5°	394.3	431.2	466.2	511.3	565.4	632.3	709.5	779.9	832.5	860.1	856.7
35°	379.7	410.6	444.7	488.1	551.8	628.4	712.6	780.6	812.8	806.9	762.1
37.5°	358.5	384.7	418.1	465.7	536.0	620.3	706.3	757.4	755.4	707.1	642.2
40°	345.4	367.6	399.8	449.9	523.7	615.0	696.7	729.9	701.8	634.3	556.7
42.5°	328.2	348.6	380.9	432.3	510.2	604.4	678.3	687.9	632.9	555.3	484.1
45°	301.5	319.5	352.9	406.0	489.8	581.0	633.3	609.7	535.7	455.6	401.4
47.5°	272.8	291.5	323.6	378.2	460.5	545.9	570.8	520.8	444.9	379.8	330.1
50°	254.7	272.7	304.2	359.2	440.7	517.1	527.4	462.9	393.0	335.9	295.1
52.5°	236.5	253.4	284.3	339.6	417.5	483.7	477.4	411.6	347.4	298.7	266.6
55°	209.2	225.3	254.7	306.5	377.5	429.9	406.9	344.1	291.0	253.2	228.8
57.5°	184.9	200.3	225.6	272.5	334.1	370.2	340.9	287.9	245.7	216.6	198.5
60°	168.4	182.0	206.2	249.7	303.2	330.6	301.7	255.0	219.3	196.0	179.8
62.5°	152.8	164.7	187.0	226.5	273.1	296.1	266.7	227.2	196.9	176.3	162.4
65°	129.1	139.9	159.7	190.4	228.6	243.9	218.7	186.6	163.2	147.8	138.6
67.5°	107.5	116.7	133.7	157.9	186.1	197.2	178.0	153.2	135.4	123.1	115.8
70°	93.1	101.0	114.4	135.3	160.7	169.3	151.3	130.8	117.9	108.0	101.2
72.5°	81.0	86.8	99.0	115.1	136.3	143.1	130.5	112.6	100.6	93.1	87.7
75°	61.7	66.5	74.5	87.4	102.1	106.0	96.6	85.4	77.3	72.0	67.9
77.5°	44.5	48.1	53.7	61.7	71.9	75.5	69.6	62.0	56.1	52.6	50.2
80°	33.6	36.5	41.3	47.9	54.0	56.0	52.5	46.8	42.6	40.6	38.6
82.5°	24.8	26.4	29.3	33.8	38.0	40.3	37.4	33.9	31.7	29.9	29.1
85°	12.5	13.4	14.7	16.5	19.1	20.0	18.9	18.0	16.7	15.6	15.6
87.5°	5.2	5.6	6.6	7.4	8.5	9.6	10.0	10.2	10.6	10.6	10.6
90°	3.1	5.2	7.4	9.4	11.9	14.6	17.4	20.2	22.9	23.8	24.6
92.5°	24.5	26.0	27.4	28.8	30.3	32.0	33.6	35.1	36.7	37.3	38.0
95°	57.8	59.3	60.8	62.3	63.9	65.6	67.3	69.0	70.7	71.5	72.4
97.5°	101.1	102.3	103.4	104.5	105.7	106.9	108.1	109.3	110.6	111.6	112.5
100°	131.1	132.4	133.7	135.0	136.1	137.2	138.3	139.3	140.3	141.0	141.7
102.5°	165.0	165.8	166.5	167.3	168.3	169.8	171.2	172.6	174.0	174.7	175.2
105°	215.3	215.7	216.1	216.6	217.7	219.6	221.5	223.5	225.4	225.4	225.4
107.5°	273.9	274.2	274.5	274.7	275.2	276.0	276.7	277.5	278.2	278.9	279.7
110°	310.8	311.2	311.6	312.1	312.5	312.9	313.3	313.8	314.1	315.0	315.8



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	348.8	349.0	349.3	349.6	349.7	349.8	349.9	350.0	350.1	351.1	352.1
115°	406.4	407.1	407.7	408.4	408.5	408.0	407.6	407.2	406.8	407.0	407.2
117.5°	463.9	464.4	464.8	465.2	465.1	464.6	464.0	463.4	463.0	462.9	462.9
120°	500.7	502.0	503.2	504.5	504.6	503.5	502.5	501.4	500.4	500.1	499.9
122.5°	537.8	538.8	539.6	540.5	540.7	540.3	539.7	539.1	538.6	538.0	537.4
125°	594.6	595.2	595.9	596.5	596.6	596.2	595.8	595.3	594.9	594.1	593.2
127.5°	648.0	649.4	650.7	652.1	652.5	652.1	651.6	651.1	650.6	649.5	648.3
130°	683.5	685.2	686.9	688.6	689.1	688.5	687.9	687.2	686.5	685.7	684.9
132.5°	718.6	720.3	722.1	723.8	724.3	723.9	723.4	722.9	722.5	721.4	720.5
135°	771.8	773.2	774.4	775.7	776.2	776.0	775.8	775.6	775.3	774.5	773.6
137.5°	821.3	822.4	823.4	824.5	825.3	825.9	826.4	827.0	827.6	826.6	825.8
140°	855.7	856.8	857.8	858.8	859.5	859.7	860.0	860.2	860.4	860.2	860.0
142.5°	887.0	888.1	889.1	890.2	890.9	891.3	891.6	892.1	892.5	892.2	892.0
145°	935.3	935.7	936.1	936.5	937.1	937.7	938.4	939.0	939.6	939.4	939.2
147.5°	978.4	979.1	980.0	980.7	981.4	981.9	982.6	983.2	983.7	983.7	983.7
150°	1007.9	1008.2	1008.7	1009.1	1009.6	1009.9	1010.4	1010.8	1011.3	1011.3	1011.3
152.5°	1032.5	1033.0	1033.7	1034.3	1034.6	1034.9	1035.2	1035.5	1035.7	1036.0	1036.3
155°	1070.4	1070.4	1070.4	1070.4	1070.5	1070.7	1071.0	1071.2	1071.4	1072.2	1073.1
157.5°	1103.1	1102.8	1102.5	1102.3	1102.2	1102.4	1102.6	1102.8	1102.9	1103.8	1104.7
160°	1123.5	1123.0	1122.7	1122.2	1122.0	1122.0	1122.0	1122.0	1122.0	1123.0	1124.2
162.5°	1141.7	1141.0	1140.5	1139.9	1139.6	1139.8	1140.0	1140.2	1140.4	1141.4	1142.5
165°	1165.3	1164.7	1164.0	1163.4	1163.1	1163.1	1163.1	1163.1	1163.1	1164.3	1165.6
167.5°	1184.0	1183.2	1182.3	1181.5	1181.1	1181.3	1181.5	1181.7	1181.8	1183.1	1184.4
170°	1194.7	1193.8	1193.0	1192.1	1191.8	1191.8	1191.8	1191.8	1191.8	1193.2	1194.7
172.5°	1203.1	1202.2	1201.4	1200.5	1200.1	1200.1	1200.1	1200.1	1200.1	1201.5	1202.8
175°	1211.9	1211.1	1210.2	1209.4	1208.9	1208.9	1208.9	1208.9	1208.9	1210.2	1211.4
177.5°	1215.7	1215.0	1214.3	1213.6	1213.3	1213.3	1213.3	1213.3	1213.3	1214.3	1215.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	476.9	477.1	479.0	480.4	479.8	480.6	481.0
5°	521.0	529.0	533.1	536.2	536.4	536.7	538.4
7.5°	583.6	592.1	598.3	607.8	610.5	613.7	612.8
10°	629.3	641.9	652.6	658.3	664.5	673.4	666.2
12.5°	672.0	694.2	710.6	719.4	725.2	727.0	723.5
15°	742.4	771.4	786.9	786.6	806.3	814.8	801.4
17.5°	806.9	833.7	855.2	866.1	882.6	886.2	884.6
20°	846.5	875.7	892.4	911.3	919.8	927.5	928.8
22.5°	880.5	906.8	924.7	940.4	947.5	951.2	953.4
25°	915.7	936.3	947.1	952.5	954.5	954.0	951.2
27.5°	913.2	914.8	903.0	891.4	880.9	869.2	865.2
30°	889.5	871.1	838.1	819.4	792.0	770.2	779.1
32.5°	827.2	790.4	753.5	712.7	678.9	669.3	659.6
35°	706.0	641.4	603.6	559.7	542.2	524.6	512.5
37.5°	571.1	521.2	476.4	447.7	430.1	419.0	413.0
40°	493.8	448.8	411.9	388.6	375.2	362.8	361.0
42.5°	432.2	390.3	362.6	344.0	331.2	325.8	322.0
45°	353.9	324.8	306.1	292.9	284.4	281.1	276.6
47.5°	299.6	279.0	264.9	256.0	249.5	247.0	246.8
50°	269.2	252.0	241.8	234.7	229.7	228.8	225.3
52.5°	246.4	231.5	223.5	217.4	213.7	211.2	210.2
55°	213.9	204.0	196.7	193.2	190.4	187.9	187.9
57.5°	187.1	178.9	174.1	171.1	170.2	168.5	167.4
60°	170.6	163.6	159.9	157.2	155.4	155.7	153.7
62.5°	154.5	149.9	146.3	143.7	141.6	141.7	141.8
65°	131.5	128.0	125.4	124.5	123.2	121.7	122.1
67.5°	111.5	108.2	106.1	104.6	104.2	103.3	104.6
70°	97.1	94.6	93.1	91.8	91.3	91.5	92.7
72.5°	83.9	82.2	81.2	80.6	79.6	79.6	80.4
75°	65.9	64.6	63.7	63.1	62.8	62.8	62.8
77.5°	48.4	48.1	47.7	46.8	46.8	47.0	47.0
80°	38.2	37.5	37.3	36.9	36.2	35.8	36.9
82.5°	28.6	27.9	27.7	27.6	26.6	26.5	27.4
85°	15.4	14.7	14.9	14.7	14.7	14.5	14.5
87.5°	10.6	10.6	10.5	10.7	10.7	10.6	11.0
90°	25.4	26.3	27.0	27.3	27.8	28.2	28.7
92.5°	38.7	39.4	39.6	39.3	39.1	38.8	38.5
95°	73.2	74.1	74.5	74.5	74.5	74.5	74.5
97.5°	113.5	114.5	114.9	114.8	114.8	114.7	114.6
100°	142.3	142.9	143.5	143.8	144.3	144.7	145.2
102.5°	175.9	176.5	176.8	176.7	176.6	176.5	176.4
105°	225.4	225.4	225.6	226.0	226.4	226.9	227.2
107.5°	280.3	281.0	281.2	281.0	280.7	280.4	280.1
110°	316.7	317.5	317.7	317.4	316.9	316.5	316.0



TEST NUMBER: P332103-830

CATALOG NUMBER: S123DIW-S340D1030U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	353.1	354.1	354.6	354.5	354.4	354.4	354.3
115°	407.5	407.6	407.6	407.5	407.2	407.0	406.8
117.5°	462.8	462.8	462.4	461.8	461.3	460.6	460.1
120°	499.7	499.5	499.2	498.8	498.3	497.9	497.5
122.5°	536.9	536.4	535.7	535.2	534.6	534.0	533.4
125°	592.4	591.5	590.7	589.8	589.0	588.1	587.3
127.5°	647.1	645.9	644.8	643.9	642.9	641.9	640.9
130°	684.0	683.2	682.0	680.5	679.0	677.6	676.1
132.5°	719.4	718.4	717.4	716.1	715.0	713.9	712.8
135°	772.8	771.9	771.4	770.9	770.5	770.1	769.7
137.5°	824.8	824.0	823.1	822.3	821.5	820.7	819.9
140°	859.7	859.5	858.7	857.1	855.7	854.2	852.7
142.5°	891.8	891.6	890.9	889.8	888.6	887.5	886.4
145°	939.0	938.8	938.2	937.4	936.5	935.7	934.8
147.5°	983.7	983.7	983.1	981.8	980.5	979.3	978.0
150°	1011.3	1011.3	1010.6	1009.4	1008.0	1006.8	1005.5
152.5°	1036.7	1037.1	1036.7	1035.6	1034.4	1033.3	1032.3
155°	1073.9	1074.8	1074.5	1073.0	1071.5	1070.1	1068.6
157.5°	1105.6	1106.5	1106.4	1105.1	1104.0	1102.8	1101.5
160°	1125.2	1126.2	1126.3	1125.5	1124.6	1123.8	1122.9
162.5°	1143.5	1144.6	1144.4	1143.1	1141.7	1140.4	1139.0
165°	1166.9	1168.2	1168.1	1166.6	1165.1	1163.6	1162.2
167.5°	1185.7	1187.0	1187.0	1185.7	1184.4	1183.1	1181.8
170°	1196.2	1197.7	1197.7	1196.2	1194.7	1193.2	1191.8
172.5°	1204.1	1205.4	1205.3	1203.8	1202.3	1200.8	1199.4
175°	1212.8	1214.0	1213.9	1212.4	1210.9	1209.5	1208.0
177.5°	1216.4	1217.4	1217.3	1216.1	1214.9	1213.7	1212.6
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6

(END OF REPORT)