

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: P332108-930

Luminaire Tested: **S123DIW-S340D1320U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332108-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIW-S340D1320U930-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1320 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5490.2 lumens
Efficiency: N/A
Efficacy: 117.8 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

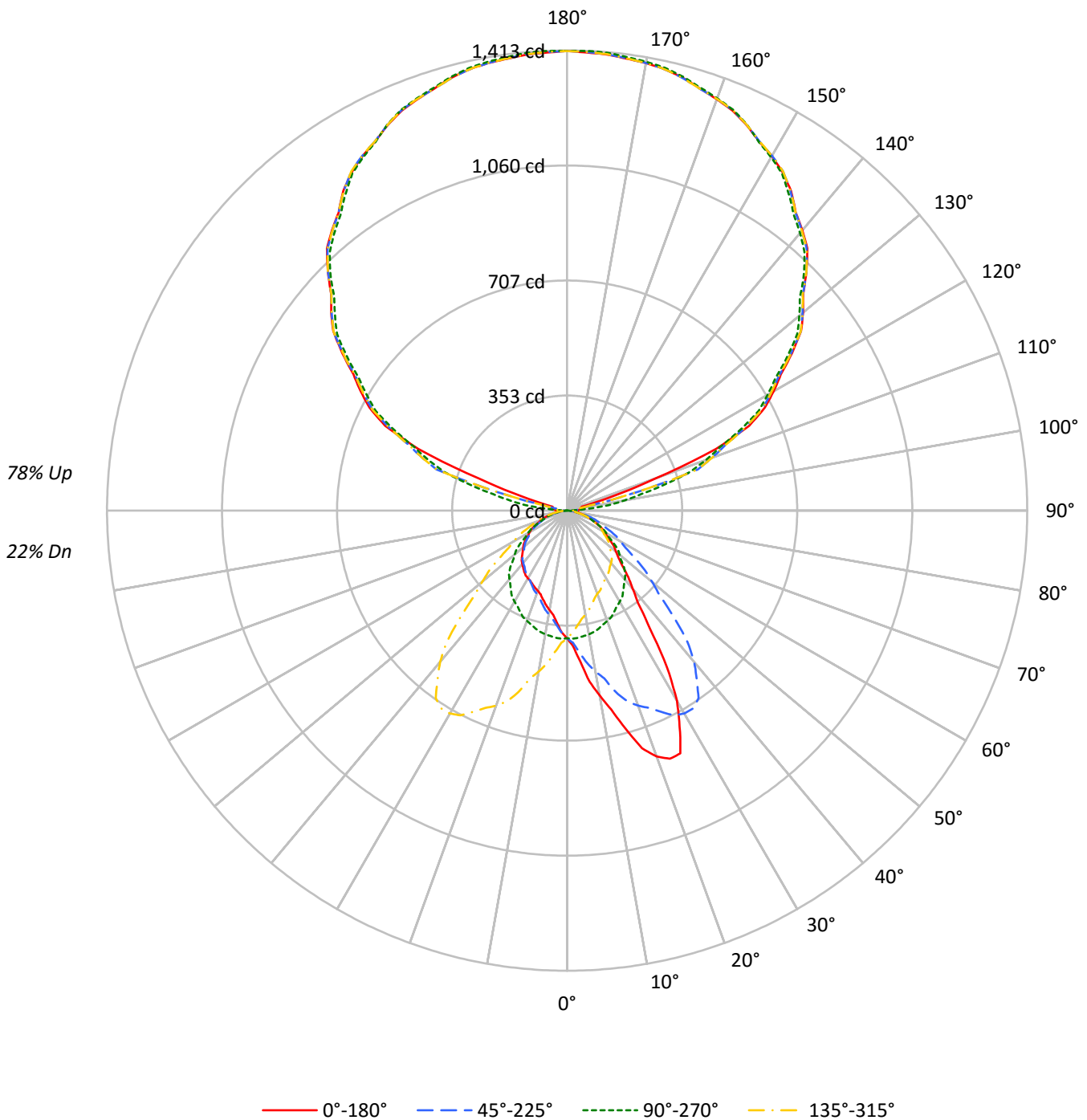
Input Watts (W): 46.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

Luminous Intensity Polar Plot





TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

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	68	68	68	48	48	48	30	30	30	22
1	92	87	84	80	81	78	75	72	59	57	55	42	41	40	27	26	26	18
2	83	76	71	66	74	68	63	59	52	49	46	37	35	34	24	23	22	16
3	76	67	60	55	67	60	54	49	46	42	39	33	30	28	21	20	18	13
4	70	59	52	46	61	53	47	42	41	36	33	29	27	24	19	17	16	12
5	64	53	45	39	56	47	41	36	36	32	28	26	23	21	17	15	14	10
6	59	47	39	34	52	42	36	31	33	28	24	24	21	18	15	14	12	9
7	54	42	35	30	48	38	31	27	29	25	21	21	18	16	14	12	11	8
8	50	38	31	26	44	34	28	24	27	22	19	20	16	14	13	11	10	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	6
10	43	32	25	20	38	28	23	18	22	18	15	16	13	11	11	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4219	4219	4219	4219
5°	5032	4238	3756	4238
10°	6299	4217	3393	4217
15°	7725	4182	3158	4182
20°	9203	4129	3007	4129
25°	9772	4065	2973	4065
30°	8376	4018	2988	4018
35°	5825	3951	3020	3951
40°	4388	3873	3011	3873
45°	3643	3755	2973	3755
50°	3264	3518	2946	3518
55°	3051	3262	2909	3262
60°	2863	2992	2878	2992
65°	2690	2728	2786	2728
70°	2521	2426	2653	2426
75°	2258	2125	2433	2125
80°	1977	1742	2095	1742
85°	1556	1272	1408	1272



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.6	0.7
10°-20°	123.8	2.3
20°-30°	207.8	3.8
30°-40°	235.3	4.3
40°-50°	211.0	3.8
50°-60°	170.3	3.1
60°-70°	118.7	2.2
70°-80°	62.4	1.1
80°-90°	19.2	0.3
90°-100°	51.3	0.9
100°-110°	244.5	4.5
110°-120°	587.3	10.7
120°-130°	747.9	13.6
130°-140°	799.1	14.6
140°-150°	747.2	13.6
150°-160°	602.7	11.0
160°-170°	389.0	7.1
170°-180°	134.1	2.4
0°-30°	370.3	6.7
0°-40°	605.6	11.0
0°-60°	986.9	18.0
0°-90°	1187.2	21.6
90°-120°	883.1	16.1
90°-150°	3177.3	57.9
90°-180°	4303.0	78.4
0°-180°	5490.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	392	392	392	392	392	
5°	466	392	348	392	466	48
15°	693	375	283	375	693	200
25°	823	342	250	342	823	361
35°	443	301	230	301	443	288
45°	239	247	195	247	239	189
55°	163	174	155	174	163	146
65°	106	107	109	107	106	105
75°	54	51	58	51	54	58
85°	13	10	11	10	13	16
90°	32	1	32	1	32	15
95°	40	64	40	64	40	33
105°	46	312	46	312	46	105
115°	616	586	616	586	616	570
125°	843	826	843	826	843	753
135°	1039	1028	1039	1028	1039	801
145°	1198	1187	1198	1187	1198	748
155°	1305	1307	1305	1307	1305	602
165°	1375	1379	1375	1379	1375	388
175°	1406	1411	1406	1411	1406	134
180°	1411	1411	1411	1411	1411	



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	416.0	415.7	415.0	415.6	414.3	412.7	412.5	411.0	406.6	406.3	405.1
5°	465.7	464.2	464.0	463.8	461.1	457.5	450.7	450.1	441.0	436.5	431.0
7.5°	530.1	530.8	528.1	525.7	517.6	512.2	504.8	495.5	484.3	472.9	465.4
10°	576.3	582.5	574.8	569.4	564.5	555.2	544.4	530.8	517.4	501.7	489.7
12.5°	625.8	628.8	627.3	622.3	614.7	600.5	581.3	566.4	554.0	527.7	517.1
15°	693.2	704.8	697.4	680.4	680.7	667.2	642.2	614.7	600.0	577.0	545.7
17.5°	765.2	766.5	763.4	749.2	739.7	721.1	698.0	671.6	642.0	614.2	580.9
20°	803.4	802.3	795.7	788.2	771.9	757.5	732.2	702.8	664.8	637.4	601.1
22.5°	824.7	822.8	819.6	813.4	799.9	784.4	761.7	729.5	693.3	655.7	613.8
25°	822.8	825.2	825.7	823.9	819.2	809.9	792.1	766.4	730.3	681.8	638.2
27.5°	748.4	751.9	762.0	771.0	781.1	791.3	789.9	777.2	750.5	708.7	655.3
30°	673.9	666.3	685.1	708.8	725.0	753.5	769.4	770.4	755.4	719.5	667.4
32.5°	570.5	578.9	587.3	616.4	651.8	683.7	715.5	741.0	744.0	720.1	674.6
35°	443.3	453.8	469.0	484.1	522.1	554.8	610.7	659.3	698.0	703.1	675.2
37.5°	357.3	362.4	372.0	387.3	412.1	450.9	494.0	555.5	611.6	653.4	655.2
40°	312.3	313.8	324.6	336.1	356.3	388.2	427.1	481.5	548.7	607.1	631.4
42.5°	278.5	281.8	286.5	297.6	313.6	337.6	373.8	418.7	480.4	547.5	595.0
45°	239.3	243.1	246.0	253.4	264.8	281.0	306.1	347.2	394.1	463.4	527.4
47.5°	213.4	213.7	215.8	221.4	229.2	241.3	259.2	285.5	328.6	384.8	450.5
50°	194.9	197.9	198.7	203.0	209.1	218.0	232.8	255.3	290.6	340.0	400.4
52.5°	181.8	182.7	184.8	188.0	193.3	200.2	213.1	230.6	258.4	300.5	356.0
55°	162.6	162.6	164.7	167.1	170.2	176.4	185.0	197.9	219.0	251.7	297.7
57.5°	144.8	145.8	147.2	148.0	150.6	154.7	161.8	171.7	187.4	212.5	249.1
60°	133.0	134.7	134.4	136.0	138.3	141.5	147.6	155.6	169.6	189.7	220.5
62.5°	122.6	122.5	122.5	124.3	126.5	129.6	133.6	140.5	152.5	170.3	196.5
65°	105.6	105.3	106.6	107.7	108.4	110.7	113.7	119.8	127.8	141.1	161.4
67.5°	90.5	89.4	90.1	90.5	91.8	93.6	96.4	100.2	106.5	117.2	132.5
70°	80.1	79.2	79.0	79.4	80.6	81.9	84.0	87.6	93.4	102.0	113.2
72.5°	69.5	68.9	68.8	69.7	70.2	71.1	72.6	75.8	80.6	87.0	97.4
75°	54.3	54.3	54.3	54.5	55.1	55.8	57.0	58.7	62.3	66.9	73.9
77.5°	40.7	40.7	40.4	40.4	41.3	41.6	41.8	43.5	45.5	48.5	53.6
80°	31.9	31.0	31.3	31.9	32.3	32.4	33.0	33.4	35.1	36.9	40.4
82.5°	23.7	22.9	23.0	23.9	24.0	24.1	24.7	25.2	25.8	27.4	29.4
85°	12.6	12.6	12.7	12.7	12.9	12.7	13.3	13.5	13.5	14.4	15.6
87.5°	10.8	10.4	10.5	10.6	10.4	10.4	10.3	10.3	10.3	10.2	9.8
90°	31.5	31.0	30.5	30.1	29.6	28.9	28.0	27.0	26.1	25.2	22.1
92.5°	34.8	34.5	34.2	34.0	33.7	32.8	31.3	29.8	28.3	26.8	24.5
95°	39.9	39.9	39.9	39.9	39.9	39.1	37.4	35.8	34.2	32.5	29.9
97.5°	43.2	43.0	42.7	42.5	42.2	41.2	39.4	37.5	35.6	33.8	50.5
100°	44.0	43.8	43.5	43.3	43.1	42.1	40.2	38.3	36.4	34.6	70.9
102.5°	44.8	44.4	44.0	43.6	43.2	45.9	51.6	57.4	63.2	69.0	108.7
105°	46.1	45.7	45.2	44.8	44.3	64.7	105.9	147.1	188.3	229.6	250.5
107.5°	144.9	175.9	207.0	238.1	269.2	299.9	330.1	360.4	390.5	420.8	417.5
110°	288.3	321.6	354.9	388.2	421.5	442.1	449.7	457.4	465.1	472.8	470.3



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	494.6	501.7	508.7	515.7	522.8	526.2	526.0	525.9	525.8	525.6	523.1
115°	616.4	615.5	614.6	613.6	612.7	611.1	608.7	606.4	604.1	601.8	599.7
117.5°	684.8	684.6	684.4	684.2	684.0	683.0	681.1	679.3	677.4	675.6	674.5
120°	731.7	731.7	731.7	731.7	731.7	730.8	729.0	727.1	725.2	723.3	722.7
122.5°	777.9	777.7	777.5	777.3	777.1	776.4	775.1	773.8	772.5	771.2	770.3
125°	842.9	842.4	842.0	841.5	841.0	840.5	840.1	839.6	839.1	838.7	837.7
127.5°	905.3	905.8	906.3	906.8	907.2	907.1	906.3	905.6	904.8	904.1	902.9
130°	945.6	946.1	946.6	947.0	947.5	947.2	946.3	945.3	944.4	943.5	942.6
132.5°	982.5	983.2	983.8	984.5	985.1	985.0	984.1	983.1	982.2	981.2	980.5
135°	1038.9	1039.6	1040.3	1041.0	1041.7	1041.7	1041.0	1040.3	1039.6	1038.9	1038.0
137.5°	1091.9	1092.4	1092.9	1093.3	1093.8	1093.5	1092.3	1091.3	1090.1	1089.0	1088.5
140°	1123.8	1124.3	1124.7	1125.2	1125.7	1125.4	1124.5	1123.6	1122.7	1121.7	1121.0
142.5°	1153.2	1153.8	1154.5	1155.1	1155.8	1155.8	1155.0	1154.2	1153.5	1152.8	1152.0
145°	1198.2	1198.2	1198.2	1198.2	1198.2	1198.0	1197.5	1197.1	1196.6	1196.1	1195.7
147.5°	1231.8	1232.9	1234.0	1235.0	1236.1	1236.4	1235.9	1235.4	1235.0	1234.5	1234.0
150°	1256.9	1257.7	1258.3	1259.1	1259.7	1259.9	1259.4	1258.9	1258.5	1258.0	1257.5
152.5°	1277.1	1278.1	1279.2	1280.3	1281.4	1281.5	1280.7	1279.8	1279.0	1278.1	1277.8
155°	1305.2	1306.6	1308.0	1309.4	1310.8	1310.9	1309.7	1308.6	1307.4	1306.2	1306.0
157.5°	1328.9	1330.6	1332.5	1334.3	1336.1	1336.4	1335.0	1333.6	1332.1	1330.7	1331.0
160°	1343.9	1345.6	1347.2	1348.8	1350.5	1350.6	1349.2	1347.8	1346.4	1345.0	1345.2
162.5°	1358.2	1359.7	1361.1	1362.5	1364.0	1363.9	1362.4	1360.7	1359.2	1357.6	1357.8
165°	1375.4	1377.0	1378.7	1380.3	1381.9	1381.9	1380.0	1378.1	1376.2	1374.4	1374.6
167.5°	1387.8	1389.7	1391.6	1393.3	1395.2	1395.2	1393.3	1391.6	1389.7	1387.8	1387.8
170°	1395.3	1397.2	1399.1	1400.9	1402.8	1402.8	1400.9	1399.1	1397.2	1395.3	1395.3
172.5°	1399.5	1401.6	1403.6	1405.7	1407.7	1407.9	1406.0	1404.1	1402.2	1400.4	1400.2
175°	1405.8	1407.7	1409.6	1411.4	1413.2	1413.4	1411.8	1410.1	1408.5	1406.9	1406.6
177.5°	1407.7	1409.6	1411.4	1413.3	1415.2	1415.4	1413.9	1412.3	1410.9	1409.4	1409.2
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	404.1	403.0	401.8	399.7	397.8	395.3	394.4	393.5	390.8	388.4	386.5
5°	428.8	424.3	417.7	411.6	406.7	400.0	396.2	392.2	386.5	381.4	377.2
7.5°	454.7	445.7	435.4	424.3	413.8	403.8	395.7	388.5	380.5	373.0	367.0
10°	475.2	462.3	447.8	432.3	419.0	406.1	395.3	385.8	375.5	366.6	359.1
12.5°	498.6	479.5	459.6	440.7	424.9	407.0	393.9	381.8	370.1	359.5	351.1
15°	526.3	502.0	478.4	452.4	428.5	406.1	390.5	375.3	361.8	350.8	340.1
17.5°	551.5	524.0	492.9	461.3	432.4	405.9	384.1	366.9	350.0	336.6	326.0
20°	565.8	534.5	499.4	466.5	434.6	405.0	381.0	360.5	342.3	328.0	316.1
22.5°	578.1	541.4	505.1	469.9	434.4	402.5	375.4	354.2	334.5	320.6	307.9
25°	590.9	547.0	510.5	469.4	429.7	396.6	366.2	342.3	322.5	306.1	293.1
27.5°	601.9	546.7	503.4	459.0	422.1	389.0	356.5	330.8	309.9	292.1	278.8
30°	609.1	547.4	495.9	452.1	414.8	380.7	349.1	323.3	301.3	283.2	270.7
32.5°	613.7	546.9	489.1	442.3	403.2	373.0	341.0	314.3	291.6	273.9	261.9
35°	616.4	543.6	477.3	422.2	384.7	355.1	328.4	300.7	277.0	260.4	246.7
37.5°	611.0	536.5	463.7	402.8	361.7	332.7	310.1	286.6	263.8	245.6	233.8
40°	602.7	532.0	453.0	389.1	345.8	318.0	298.8	275.6	253.2	235.9	224.9
42.5°	586.7	522.8	441.3	374.0	329.5	301.6	283.9	264.5	243.3	227.1	216.1
45°	547.8	502.6	423.7	351.2	305.2	276.4	260.8	246.7	227.6	211.8	202.3
47.5°	493.7	472.2	398.4	327.2	279.9	252.2	235.9	224.7	210.7	197.9	188.8
50°	456.2	447.3	381.2	310.7	263.1	235.9	220.3	210.1	200.0	187.3	179.0
52.5°	412.9	418.4	361.2	293.8	245.9	219.2	204.6	196.4	187.3	176.8	169.5
55°	352.0	371.9	326.5	265.1	220.3	194.9	181.0	173.8	168.4	160.7	154.4
57.5°	294.9	320.2	289.0	235.7	195.2	173.3	160.0	152.1	148.7	144.6	139.7
60°	261.0	286.0	262.3	216.0	178.4	157.4	145.7	139.0	135.6	132.7	128.6
62.5°	230.7	256.1	236.2	195.9	161.8	142.4	132.2	125.6	123.0	121.6	118.0
65°	189.1	211.0	197.7	164.7	138.1	121.0	111.7	107.1	104.7	104.1	101.8
67.5°	153.9	170.6	160.9	136.6	115.7	100.9	93.0	89.1	87.2	87.0	85.3
70°	130.9	146.4	139.0	117.0	99.0	87.4	80.6	77.1	76.0	75.8	74.8
72.5°	112.9	123.8	117.9	99.5	85.6	75.1	70.0	66.4	65.2	65.5	64.8
75°	83.6	91.7	88.3	75.6	64.4	57.6	53.4	51.1	50.0	50.5	49.7
77.5°	60.2	65.3	62.2	53.4	46.5	41.6	38.5	37.1	36.0	36.0	35.7
80°	45.4	48.4	46.7	41.4	35.7	31.6	29.0	28.1	27.6	27.3	27.1
82.5°	32.4	34.9	32.9	29.3	25.4	22.8	21.4	20.2	19.8	19.9	19.7
85°	16.3	17.3	16.6	14.3	12.7	11.6	10.8	10.3	9.9	10.0	9.7
87.5°	9.5	9.0	7.9	6.8	6.0	5.1	4.6	3.8	4.0	4.5	4.8
90°	19.1	16.1	13.0	10.4	8.1	5.7	3.3	1.1	3.3	5.7	8.1
92.5°	22.3	20.0	17.7	16.9	17.5	18.2	18.8	19.5	18.8	18.2	17.5
95°	27.4	24.8	22.3	25.8	35.3	44.8	54.4	63.9	54.4	44.8	35.3
97.5°	67.3	84.1	100.9	111.4	115.7	119.9	124.3	128.5	124.3	119.9	115.7
100°	107.3	143.7	179.9	195.8	191.1	186.5	181.8	177.2	181.8	186.5	191.1
102.5°	148.4	188.1	227.8	246.0	242.6	239.2	235.9	232.5	235.9	239.2	242.6
105°	271.5	292.4	313.5	322.6	320.1	317.6	315.0	312.4	315.0	317.6	320.1
107.5°	414.2	410.9	407.6	404.9	402.8	400.8	398.8	396.7	398.8	400.8	402.8
110°	467.7	465.1	462.5	460.3	458.4	456.6	454.8	452.9	454.8	456.6	458.4



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	520.5	518.0	515.4	513.2	511.6	509.9	508.3	506.5	508.3	509.9	511.6
115°	597.5	595.4	593.4	591.6	590.2	588.8	587.4	586.0	587.4	588.8	590.2
117.5°	673.4	672.3	671.2	669.8	668.1	666.4	664.7	663.0	664.7	666.4	668.1
120°	721.9	721.2	720.6	719.2	717.1	714.9	712.9	710.8	712.9	714.9	717.1
122.5°	769.4	768.5	767.6	766.3	764.6	762.9	761.2	759.5	761.2	762.9	764.6
125°	836.8	835.8	834.9	833.6	831.7	829.8	827.9	826.1	827.9	829.8	831.7
127.5°	901.9	900.7	899.6	898.1	896.3	894.4	892.5	890.6	892.5	894.4	896.3
130°	941.7	940.7	939.8	938.4	936.5	934.7	932.8	930.9	932.8	934.7	936.5
132.5°	979.7	979.0	978.3	977.0	975.1	973.2	971.3	969.5	971.3	973.2	975.1
135°	1037.1	1036.1	1035.2	1034.0	1032.6	1031.2	1029.8	1028.4	1029.8	1031.2	1032.6
137.5°	1088.0	1087.4	1087.0	1085.8	1084.0	1082.3	1080.5	1078.7	1080.5	1082.3	1084.0
140°	1120.3	1119.7	1118.9	1117.9	1116.5	1115.1	1113.7	1112.3	1113.7	1115.1	1116.5
142.5°	1151.4	1150.6	1150.0	1148.9	1147.5	1146.1	1144.7	1143.3	1144.7	1146.1	1147.5
145°	1195.2	1194.7	1194.3	1193.3	1191.6	1190.0	1188.4	1186.7	1188.4	1190.0	1191.6
147.5°	1233.5	1233.1	1232.7	1231.9	1230.8	1229.7	1228.7	1227.6	1228.7	1229.7	1230.8
150°	1257.0	1256.6	1256.1	1255.6	1254.8	1254.2	1253.4	1252.8	1253.4	1254.2	1254.8
152.5°	1277.6	1277.3	1277.0	1276.7	1276.4	1276.0	1275.7	1275.4	1275.7	1276.0	1276.4
155°	1305.8	1305.5	1305.3	1305.4	1305.9	1306.4	1306.8	1307.3	1306.8	1306.4	1305.9
157.5°	1331.2	1331.5	1331.7	1331.8	1331.9	1332.0	1332.0	1332.0	1332.0	1332.0	1331.9
160°	1345.5	1345.7	1346.0	1346.1	1346.4	1346.6	1346.9	1347.1	1346.9	1346.6	1346.4
162.5°	1358.0	1358.3	1358.5	1358.9	1359.5	1360.2	1360.7	1361.4	1360.7	1360.2	1359.5
165°	1374.8	1375.1	1375.3	1375.7	1376.5	1377.1	1377.9	1378.6	1377.9	1377.1	1376.5
167.5°	1387.8	1387.8	1387.8	1388.2	1389.2	1390.1	1391.1	1392.0	1391.1	1390.1	1389.2
170°	1395.3	1395.3	1395.3	1395.8	1396.8	1397.7	1398.6	1399.5	1398.6	1397.7	1396.8
172.5°	1400.0	1399.8	1399.6	1400.1	1401.2	1402.3	1403.5	1404.6	1403.5	1402.3	1401.2
175°	1406.4	1406.1	1405.9	1406.4	1407.5	1408.8	1409.9	1411.0	1409.9	1408.8	1407.5
177.5°	1409.0	1408.8	1408.7	1409.0	1410.0	1410.9	1411.8	1412.8	1411.8	1410.9	1410.0
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	385.5	384.4	382.9	380.7	378.8	375.9	375.9	376.3	376.3	376.3	375.9
5°	373.8	371.0	367.5	363.5	359.4	355.1	354.4	352.9	351.8	351.0	350.1
7.5°	361.4	356.4	351.4	345.8	340.7	336.6	333.6	331.2	329.6	327.9	326.7
10°	353.1	346.8	341.0	335.1	328.6	323.4	320.2	318.0	316.3	314.7	314.0
12.5°	343.2	336.1	329.5	323.9	316.9	311.6	308.5	307.4	305.5	302.2	300.6
15°	328.8	322.1	314.4	305.8	302.4	296.0	292.3	290.6	289.4	287.0	286.3
17.5°	316.4	307.8	299.0	292.6	286.3	281.0	279.0	276.9	275.4	273.4	272.7
20°	306.6	298.8	290.8	284.0	277.3	271.6	269.9	268.4	266.8	266.0	265.1
22.5°	296.5	288.8	282.1	275.7	268.6	264.9	263.1	261.4	260.3	259.7	258.9
25°	282.4	275.6	268.2	262.5	256.8	254.3	253.2	252.3	251.4	250.5	250.3
27.5°	269.9	262.4	256.4	251.0	247.0	244.9	243.8	243.4	243.5	243.9	244.1
30°	260.4	253.6	248.7	244.1	240.3	238.4	238.1	238.1	239.0	239.1	239.5
32.5°	251.8	246.1	241.2	236.8	233.9	232.6	233.3	233.3	233.9	234.4	235.1
35°	239.1	234.2	230.4	226.6	224.1	224.7	225.1	225.4	226.4	227.6	228.3
37.5°	227.1	222.8	218.8	215.9	214.7	215.7	216.7	217.4	218.6	219.5	220.2
40°	218.4	215.2	211.4	208.7	209.1	209.7	210.4	211.4	212.4	213.0	213.7
42.5°	210.3	207.0	204.1	201.9	202.4	203.2	203.6	204.1	205.2	206.3	206.7
45°	198.1	195.4	192.8	191.4	191.8	192.2	192.6	193.1	194.1	194.9	195.1
47.5°	184.3	182.5	180.7	179.4	180.0	179.9	180.3	181.6	181.8	182.3	183.4
50°	175.5	173.8	171.7	171.3	171.3	171.3	171.5	173.0	173.0	173.8	174.6
52.5°	165.8	164.7	163.4	162.7	162.3	162.3	163.1	163.9	164.2	165.3	166.1
55°	151.4	150.3	149.1	148.5	148.1	148.5	150.0	150.4	151.4	152.0	152.5
57.5°	136.4	135.5	134.6	134.3	134.2	134.7	135.5	136.6	136.9	138.7	139.5
60°	126.5	125.1	124.4	124.4	124.0	125.7	125.4	127.3	127.7	128.8	130.1
62.5°	116.3	114.5	114.2	114.2	114.8	115.3	115.8	116.6	117.6	119.0	120.1
65°	99.9	99.0	100.3	100.1	99.7	100.9	100.9	101.8	103.0	104.3	106.4
67.5°	84.4	83.9	84.0	84.0	84.5	85.2	85.8	86.6	88.0	89.4	90.7
70°	73.9	74.4	73.5	74.3	74.8	75.0	75.4	76.6	78.0	79.0	80.6
72.5°	63.7	63.7	63.8	64.1	64.7	65.0	65.4	66.7	68.3	69.1	70.4
75°	49.0	48.8	49.4	49.4	50.3	50.7	51.1	51.7	53.2	54.3	55.3
77.5°	35.8	36.0	35.9	36.5	36.3	36.4	37.5	38.1	38.2	40.5	41.0
80°	27.0	27.3	27.6	27.7	27.9	27.6	28.9	29.4	29.4	30.7	31.7
82.5°	19.4	19.6	20.1	20.3	20.3	20.7	20.8	21.2	21.7	22.3	23.5
85°	9.7	10.3	10.4	10.3	10.4	10.0	10.6	10.8	11.0	11.0	11.0
87.5°	5.1	5.8	6.3	7.0	7.5	8.2	8.4	8.3	8.5	9.1	8.6
90°	10.4	13.0	16.1	19.1	22.1	25.2	26.1	27.0	28.0	28.9	29.6
92.5°	16.9	17.7	20.0	22.3	24.5	26.8	28.3	29.8	31.3	32.8	33.7
95°	25.8	22.3	24.8	27.4	29.9	32.5	34.2	35.8	37.4	39.1	39.9
97.5°	111.4	100.9	84.1	67.3	50.5	33.8	35.6	37.5	39.4	41.2	42.2
100°	195.8	179.9	143.7	107.3	70.9	34.6	36.4	38.3	40.2	42.1	43.1
102.5°	246.0	227.8	188.1	148.4	108.7	69.0	63.2	57.4	51.6	45.9	43.2
105°	322.6	313.5	292.4	271.5	250.5	229.6	188.3	147.1	105.9	64.7	44.3
107.5°	404.9	407.6	410.9	414.2	417.5	420.8	390.5	360.4	330.1	299.9	269.2
110°	460.3	462.5	465.1	467.7	470.3	472.8	465.1	457.4	449.7	442.1	421.5



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	513.2	515.4	518.0	520.5	523.1	525.6	525.8	525.9	526.0	526.2	522.8
115°	591.6	593.4	595.4	597.5	599.7	601.8	604.1	606.4	608.7	611.1	612.7
117.5°	669.8	671.2	672.3	673.4	674.5	675.6	677.4	679.3	681.1	683.0	684.0
120°	719.2	720.6	721.2	721.9	722.7	723.3	725.2	727.1	729.0	730.8	731.7
122.5°	766.3	767.6	768.5	769.4	770.3	771.2	772.5	773.8	775.1	776.4	777.1
125°	833.6	834.9	835.8	836.8	837.7	838.7	839.1	839.6	840.1	840.5	841.0
127.5°	898.1	899.6	900.7	901.9	902.9	904.1	904.8	905.6	906.3	907.1	907.2
130°	938.4	939.8	940.7	941.7	942.6	943.5	944.4	945.3	946.3	947.2	947.5
132.5°	977.0	978.3	979.0	979.7	980.5	981.2	982.2	983.1	984.1	985.0	985.1
135°	1034.0	1035.2	1036.1	1037.1	1038.0	1038.9	1039.6	1040.3	1041.0	1041.7	1041.7
137.5°	1085.8	1087.0	1087.4	1088.0	1088.5	1089.0	1090.1	1091.3	1092.3	1093.5	1093.8
140°	1117.9	1118.9	1119.7	1120.3	1121.0	1121.7	1122.7	1123.6	1124.5	1125.4	1125.7
142.5°	1148.9	1150.0	1150.6	1151.4	1152.0	1152.8	1153.5	1154.2	1155.0	1155.8	1155.8
145°	1193.3	1194.3	1194.7	1195.2	1195.7	1196.1	1196.6	1197.1	1197.5	1198.0	1198.2
147.5°	1231.9	1232.7	1233.1	1233.5	1234.0	1234.5	1235.0	1235.4	1235.9	1236.4	1236.1
150°	1255.6	1256.1	1256.6	1257.0	1257.5	1258.0	1258.5	1258.9	1259.4	1259.9	1259.7
152.5°	1276.7	1277.0	1277.3	1277.6	1277.8	1278.1	1279.0	1279.8	1280.7	1281.5	1281.4
155°	1305.4	1305.3	1305.5	1305.8	1306.0	1306.2	1307.4	1308.6	1309.7	1310.9	1310.8
157.5°	1331.8	1331.7	1331.5	1331.2	1331.0	1330.7	1332.1	1333.6	1335.0	1336.4	1336.1
160°	1346.1	1346.0	1345.7	1345.5	1345.2	1345.0	1346.4	1347.8	1349.2	1350.6	1350.5
162.5°	1358.9	1358.5	1358.3	1358.0	1357.8	1357.6	1359.2	1360.7	1362.4	1363.9	1364.0
165°	1375.7	1375.3	1375.1	1374.8	1374.6	1374.4	1376.2	1378.1	1380.0	1381.9	1381.9
167.5°	1388.2	1387.8	1387.8	1387.8	1387.8	1387.8	1389.7	1391.6	1393.3	1395.2	1395.2
170°	1395.8	1395.3	1395.3	1395.3	1395.3	1395.3	1397.2	1399.1	1400.9	1402.8	1402.8
172.5°	1400.1	1399.6	1399.8	1400.0	1400.2	1400.4	1402.2	1404.1	1406.0	1407.9	1407.7
175°	1406.4	1405.9	1406.1	1406.4	1406.6	1406.9	1408.5	1410.1	1411.8	1413.4	1413.2
177.5°	1409.0	1408.7	1408.8	1409.0	1409.2	1409.4	1410.9	1412.3	1413.9	1415.4	1415.2
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	374.9	374.7	375.8	375.0	375.8	374.7	374.9	375.9	376.3	376.3	376.3
5°	348.9	349.5	347.6	347.6	347.6	349.5	348.9	350.1	351.0	351.8	352.9
7.5°	325.8	325.0	325.1	324.0	325.1	325.0	325.8	326.7	327.9	329.6	331.2
10°	311.7	310.5	310.1	310.4	310.1	310.5	311.7	314.0	314.7	316.3	318.0
12.5°	299.9	299.8	297.3	297.3	297.3	299.8	299.9	300.6	302.2	305.5	307.4
15°	286.3	282.7	282.3	283.4	282.3	282.7	286.3	286.3	287.0	289.4	290.6
17.5°	272.5	270.5	270.7	270.1	270.7	270.5	272.5	272.7	273.4	275.4	276.9
20°	265.1	264.0	263.8	262.5	263.8	264.0	265.1	265.1	266.0	266.8	268.4
22.5°	258.4	258.1	258.2	256.7	258.2	258.1	258.4	258.9	259.7	260.3	261.4
25°	250.1	251.1	250.3	250.3	250.3	251.1	250.1	250.3	250.5	251.4	252.3
27.5°	244.5	244.5	244.1	244.1	244.1	244.5	244.5	244.1	243.9	243.5	243.4
30°	240.3	240.1	240.4	240.4	240.4	240.1	240.3	239.5	239.1	239.0	238.1
32.5°	236.0	236.3	236.4	236.5	236.4	236.3	236.0	235.1	234.4	233.9	233.3
35°	229.4	229.7	230.2	229.8	230.2	229.7	229.4	228.3	227.6	226.4	225.4
37.5°	220.5	221.4	221.3	221.5	221.3	221.4	220.5	220.2	219.5	218.6	217.4
40°	213.9	214.4	214.3	214.3	214.3	214.4	213.9	213.7	213.0	212.4	211.4
42.5°	207.0	207.4	206.9	206.7	206.9	207.4	207.0	206.7	206.3	205.2	204.1
45°	195.8	195.4	196.0	195.3	196.0	195.4	195.8	195.1	194.9	194.1	193.1
47.5°	183.3	183.7	183.8	184.4	183.8	183.7	183.3	183.4	182.3	181.8	181.6
50°	175.0	176.1	176.1	175.9	176.1	176.1	175.0	174.6	173.8	173.0	173.0
52.5°	166.7	167.2	168.0	168.0	168.0	167.2	166.7	166.1	165.3	164.2	163.9
55°	154.0	154.4	154.8	155.0	154.8	154.4	154.0	152.5	152.0	151.4	150.4
57.5°	140.9	140.7	141.6	141.9	141.6	140.7	140.9	139.5	138.7	136.9	136.6
60°	131.6	131.6	133.1	133.7	133.1	131.6	131.6	130.1	128.8	127.7	127.3
62.5°	121.7	122.4	123.8	123.1	123.8	122.4	121.7	120.1	119.0	117.6	116.6
65°	107.3	108.8	108.7	109.4	108.7	108.8	107.3	106.4	104.3	103.0	101.8
67.5°	92.2	93.2	94.6	94.7	94.6	93.2	92.2	90.7	89.4	88.0	86.6
70°	82.0	83.0	83.7	84.3	83.7	83.0	82.0	80.6	79.0	78.0	76.6
72.5°	72.2	72.6	74.5	73.7	74.5	72.6	72.2	70.4	69.1	68.3	66.7
75°	56.6	58.0	59.1	58.5	59.1	58.0	56.6	55.3	54.3	53.2	51.7
77.5°	41.8	43.2	43.7	43.2	43.7	43.2	41.8	41.0	40.5	38.2	38.1
80°	33.0	32.9	34.0	33.8	34.0	32.9	33.0	31.7	30.7	29.4	29.4
82.5°	24.2	24.1	24.5	24.7	24.5	24.1	24.2	23.5	22.3	21.7	21.2
85°	11.7	12.3	11.6	11.4	11.6	12.3	11.7	11.0	11.0	11.0	10.8
87.5°	8.7	8.8	8.8	8.7	8.8	8.8	8.7	8.6	9.1	8.5	8.3
90°	30.1	30.5	31.0	31.5	31.0	30.5	30.1	29.6	28.9	28.0	27.0
92.5°	34.0	34.2	34.5	34.8	34.5	34.2	34.0	33.7	32.8	31.3	29.8
95°	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.1	37.4	35.8
97.5°	42.5	42.7	43.0	43.2	43.0	42.7	42.5	42.2	41.2	39.4	37.5
100°	43.3	43.5	43.8	44.0	43.8	43.5	43.3	43.1	42.1	40.2	38.3
102.5°	43.6	44.0	44.4	44.8	44.4	44.0	43.6	43.2	45.9	51.6	57.4
105°	44.8	45.2	45.7	46.1	45.7	45.2	44.8	44.3	64.7	105.9	147.1
107.5°	238.1	207.0	175.9	144.9	175.9	207.0	238.1	269.2	299.9	330.1	360.4
110°	388.2	354.9	321.6	288.3	321.6	354.9	388.2	421.5	442.1	449.7	457.4



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	515.7	508.7	501.7	494.6	501.7	508.7	515.7	522.8	526.2	526.0	525.9
115°	613.6	614.6	615.5	616.4	615.5	614.6	613.6	612.7	611.1	608.7	606.4
117.5°	684.2	684.4	684.6	684.8	684.6	684.4	684.2	684.0	683.0	681.1	679.3
120°	731.7	731.7	731.7	731.7	731.7	731.7	731.7	731.7	730.8	729.0	727.1
122.5°	777.3	777.5	777.7	777.9	777.7	777.5	777.3	777.1	776.4	775.1	773.8
125°	841.5	842.0	842.4	842.9	842.4	842.0	841.5	841.0	840.5	840.1	839.6
127.5°	906.8	906.3	905.8	905.3	905.8	906.3	906.8	907.2	907.1	906.3	905.6
130°	947.0	946.6	946.1	945.6	946.1	946.6	947.0	947.5	947.2	946.3	945.3
132.5°	984.5	983.8	983.2	982.5	983.2	983.8	984.5	985.1	985.0	984.1	983.1
135°	1041.0	1040.3	1039.6	1038.9	1039.6	1040.3	1041.0	1041.7	1041.7	1041.0	1040.3
137.5°	1093.3	1092.9	1092.4	1091.9	1092.4	1092.9	1093.3	1093.8	1093.5	1092.3	1091.3
140°	1125.2	1124.7	1124.3	1123.8	1124.3	1124.7	1125.2	1125.7	1125.4	1124.5	1123.6
142.5°	1155.1	1154.5	1153.8	1153.2	1153.8	1154.5	1155.1	1155.8	1155.8	1155.0	1154.2
145°	1198.2	1198.2	1198.2	1198.2	1198.2	1198.2	1198.2	1198.2	1198.0	1197.5	1197.1
147.5°	1235.0	1234.0	1232.9	1231.8	1232.9	1234.0	1235.0	1236.1	1236.4	1235.9	1235.4
150°	1259.1	1258.3	1257.7	1256.9	1257.7	1258.3	1259.1	1259.7	1259.9	1259.4	1258.9
152.5°	1280.3	1279.2	1278.1	1277.1	1278.1	1279.2	1280.3	1281.4	1281.5	1280.7	1279.8
155°	1309.4	1308.0	1306.6	1305.2	1306.6	1308.0	1309.4	1310.8	1310.9	1309.7	1308.6
157.5°	1334.3	1332.5	1330.6	1328.9	1330.6	1332.5	1334.3	1336.1	1336.4	1335.0	1333.6
160°	1348.8	1347.2	1345.6	1343.9	1345.6	1347.2	1348.8	1350.5	1350.6	1349.2	1347.8
162.5°	1362.5	1361.1	1359.7	1358.2	1359.7	1361.1	1362.5	1364.0	1363.9	1362.4	1360.7
165°	1380.3	1378.7	1377.0	1375.4	1377.0	1378.7	1380.3	1381.9	1381.9	1380.0	1378.1
167.5°	1393.3	1391.6	1389.7	1387.8	1389.7	1391.6	1393.3	1395.2	1395.2	1393.3	1391.6
170°	1400.9	1399.1	1397.2	1395.3	1397.2	1399.1	1400.9	1402.8	1402.8	1400.9	1399.1
172.5°	1405.7	1403.6	1401.6	1399.5	1401.6	1403.6	1405.7	1407.7	1407.9	1406.0	1404.1
175°	1411.4	1409.6	1407.7	1405.8	1407.7	1409.6	1411.4	1413.2	1413.4	1411.8	1410.1
177.5°	1413.3	1411.4	1409.6	1407.7	1409.6	1411.4	1413.3	1415.2	1415.4	1413.9	1412.3
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	375.9	375.9	378.8	380.7	382.9	384.4	385.5	386.5	388.4	390.8	393.5
5°	354.4	355.1	359.4	363.5	367.5	371.0	373.8	377.2	381.4	386.5	392.2
7.5°	333.6	336.6	340.7	345.8	351.4	356.4	361.4	367.0	373.0	380.5	388.5
10°	320.2	323.4	328.6	335.1	341.0	346.8	353.1	359.1	366.6	375.5	385.8
12.5°	308.5	311.6	316.9	323.9	329.5	336.1	343.2	351.1	359.5	370.1	381.8
15°	292.3	296.0	302.4	305.8	314.4	322.1	328.8	340.1	350.8	361.8	375.3
17.5°	279.0	281.0	286.3	292.6	299.0	307.8	316.4	326.0	336.6	350.0	366.9
20°	269.9	271.6	277.3	284.0	290.8	298.8	306.6	316.1	328.0	342.3	360.5
22.5°	263.1	264.9	268.6	275.7	282.1	288.8	296.5	307.9	320.6	334.5	354.2
25°	253.2	254.3	256.8	262.5	268.2	275.6	282.4	293.1	306.1	322.5	342.3
27.5°	243.8	244.9	247.0	251.0	256.4	262.4	269.9	278.8	292.1	309.9	330.8
30°	238.1	238.4	240.3	244.1	248.7	253.6	260.4	270.7	283.2	301.3	323.3
32.5°	233.3	232.6	233.9	236.8	241.2	246.1	251.8	261.9	273.9	291.6	314.3
35°	225.1	224.7	224.1	226.6	230.4	234.2	239.1	246.7	260.4	277.0	300.7
37.5°	216.7	215.7	214.7	215.9	218.8	222.8	227.1	233.8	245.6	263.8	286.6
40°	210.4	209.7	209.1	208.7	211.4	215.2	218.4	224.9	235.9	253.2	275.6
42.5°	203.6	203.2	202.4	201.9	204.1	207.0	210.3	216.1	227.1	243.3	264.5
45°	192.6	192.2	191.8	191.4	192.8	195.4	198.1	202.3	211.8	227.6	246.7
47.5°	180.3	179.9	180.0	179.4	180.7	182.5	184.3	188.8	197.9	210.7	224.7
50°	171.5	171.3	171.3	171.3	171.7	173.8	175.5	179.0	187.3	200.0	210.1
52.5°	163.1	162.3	162.3	162.7	163.4	164.7	165.8	169.5	176.8	187.3	196.4
55°	150.0	148.5	148.1	148.5	149.1	150.3	151.4	154.4	160.7	168.4	173.8
57.5°	135.5	134.7	134.2	134.3	134.6	135.5	136.4	139.7	144.6	148.7	152.1
60°	125.4	125.7	124.0	124.4	124.4	125.1	126.5	128.6	132.7	135.6	139.0
62.5°	115.8	115.3	114.8	114.2	114.2	114.5	116.3	118.0	121.6	123.0	125.6
65°	100.9	100.9	99.7	100.1	100.3	99.0	99.9	101.8	104.1	104.7	107.1
67.5°	85.8	85.2	84.5	84.0	84.0	83.9	84.4	85.3	87.0	87.2	89.1
70°	75.4	75.0	74.8	74.3	73.5	74.4	73.9	74.8	75.8	76.0	77.1
72.5°	65.4	65.0	64.7	64.1	63.8	63.7	63.7	64.8	65.5	65.2	66.4
75°	51.1	50.7	50.3	49.4	49.4	48.8	49.0	49.7	50.5	50.0	51.1
77.5°	37.5	36.4	36.3	36.5	35.9	36.0	35.8	35.7	36.0	36.0	37.1
80°	28.9	27.6	27.9	27.7	27.6	27.3	27.0	27.1	27.3	27.6	28.1
82.5°	20.8	20.7	20.3	20.3	20.1	19.6	19.4	19.7	19.9	19.8	20.2
85°	10.6	10.0	10.4	10.3	10.4	10.3	9.7	9.7	10.0	9.9	10.3
87.5°	8.4	8.2	7.5	7.0	6.3	5.8	5.1	4.8	4.5	4.0	3.8
90°	26.1	25.2	22.1	19.1	16.1	13.0	10.4	8.1	5.7	3.3	1.1
92.5°	28.3	26.8	24.5	22.3	20.0	17.7	16.9	17.5	18.2	18.8	19.5
95°	34.2	32.5	29.9	27.4	24.8	22.3	25.8	35.3	44.8	54.4	63.9
97.5°	35.6	33.8	50.5	67.3	84.1	100.9	111.4	115.7	119.9	124.3	128.5
100°	36.4	34.6	70.9	107.3	143.7	179.9	195.8	191.1	186.5	181.8	177.2
102.5°	63.2	69.0	108.7	148.4	188.1	227.8	246.0	242.6	239.2	235.9	232.5
105°	188.3	229.6	250.5	271.5	292.4	313.5	322.6	320.1	317.6	315.0	312.4
107.5°	390.5	420.8	417.5	414.2	410.9	407.6	404.9	402.8	400.8	398.8	396.7
110°	465.1	472.8	470.3	467.7	465.1	462.5	460.3	458.4	456.6	454.8	452.9



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	525.8	525.6	523.1	520.5	518.0	515.4	513.2	511.6	509.9	508.3	506.5
115°	604.1	601.8	599.7	597.5	595.4	593.4	591.6	590.2	588.8	587.4	586.0
117.5°	677.4	675.6	674.5	673.4	672.3	671.2	669.8	668.1	666.4	664.7	663.0
120°	725.2	723.3	722.7	721.9	721.2	720.6	719.2	717.1	714.9	712.9	710.8
122.5°	772.5	771.2	770.3	769.4	768.5	767.6	766.3	764.6	762.9	761.2	759.5
125°	839.1	838.7	837.7	836.8	835.8	834.9	833.6	831.7	829.8	827.9	826.1
127.5°	904.8	904.1	902.9	901.9	900.7	899.6	898.1	896.3	894.4	892.5	890.6
130°	944.4	943.5	942.6	941.7	940.7	939.8	938.4	936.5	934.7	932.8	930.9
132.5°	982.2	981.2	980.5	979.7	979.0	978.3	977.0	975.1	973.2	971.3	969.5
135°	1039.6	1038.9	1038.0	1037.1	1036.1	1035.2	1034.0	1032.6	1031.2	1029.8	1028.4
137.5°	1090.1	1089.0	1088.5	1088.0	1087.4	1087.0	1085.8	1084.0	1082.3	1080.5	1078.7
140°	1122.7	1121.7	1121.0	1120.3	1119.7	1118.9	1117.9	1116.5	1115.1	1113.7	1112.3
142.5°	1153.5	1152.8	1152.0	1151.4	1150.6	1150.0	1148.9	1147.5	1146.1	1144.7	1143.3
145°	1196.6	1196.1	1195.7	1195.2	1194.7	1194.3	1193.3	1191.6	1190.0	1188.4	1186.7
147.5°	1235.0	1234.5	1234.0	1233.5	1233.1	1232.7	1231.9	1230.8	1229.7	1228.7	1227.6
150°	1258.5	1258.0	1257.5	1257.0	1256.6	1256.1	1255.6	1254.8	1254.2	1253.4	1252.8
152.5°	1279.0	1278.1	1277.8	1277.6	1277.3	1277.0	1276.7	1276.4	1276.0	1275.7	1275.4
155°	1307.4	1306.2	1306.0	1305.8	1305.5	1305.3	1305.4	1305.9	1306.4	1306.8	1307.3
157.5°	1332.1	1330.7	1331.0	1331.2	1331.5	1331.7	1331.8	1331.9	1332.0	1332.0	1332.0
160°	1346.4	1345.0	1345.2	1345.5	1345.7	1346.0	1346.1	1346.4	1346.6	1346.9	1347.1
162.5°	1359.2	1357.6	1357.8	1358.0	1358.3	1358.5	1358.9	1359.5	1360.2	1360.7	1361.4
165°	1376.2	1374.4	1374.6	1374.8	1375.1	1375.3	1375.7	1376.5	1377.1	1377.9	1378.6
167.5°	1389.7	1387.8	1387.8	1387.8	1387.8	1387.8	1388.2	1389.2	1390.1	1391.1	1392.0
170°	1397.2	1395.3	1395.3	1395.3	1395.3	1395.3	1395.8	1396.8	1397.7	1398.6	1399.5
172.5°	1402.2	1400.4	1400.2	1400.0	1399.8	1399.6	1400.1	1401.2	1402.3	1403.5	1404.6
175°	1408.5	1406.9	1406.6	1406.4	1406.1	1405.9	1406.4	1407.5	1408.8	1409.9	1411.0
177.5°	1410.9	1409.4	1409.2	1409.0	1408.8	1408.7	1409.0	1410.0	1410.9	1411.8	1412.8
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	394.4	395.3	397.8	399.7	401.8	403.0	404.1	405.1	406.3	406.6	411.0
5°	396.2	400.0	406.7	411.6	417.7	424.3	428.8	431.0	436.5	441.0	450.1
7.5°	395.7	403.8	413.8	424.3	435.4	445.7	454.7	465.4	472.9	484.3	495.5
10°	395.3	406.1	419.0	432.3	447.8	462.3	475.2	489.7	501.7	517.4	530.8
12.5°	393.9	407.0	424.9	440.7	459.6	479.5	498.6	517.1	527.7	554.0	566.4
15°	390.5	406.1	428.5	452.4	478.4	502.0	526.3	545.7	577.0	600.0	614.7
17.5°	384.1	405.9	432.4	461.3	492.9	524.0	551.5	580.9	614.2	642.0	671.6
20°	381.0	405.0	434.6	466.5	499.4	534.5	565.8	601.1	637.4	664.8	702.8
22.5°	375.4	402.5	434.4	469.9	505.1	541.4	578.1	613.8	655.7	693.3	729.5
25°	366.2	396.6	429.7	469.4	510.5	547.0	590.9	638.2	681.8	730.3	766.4
27.5°	356.5	389.0	422.1	459.0	503.4	546.7	601.9	655.3	708.7	750.5	777.2
30°	349.1	380.7	414.8	452.1	495.9	547.4	609.1	667.4	719.5	755.4	770.4
32.5°	341.0	373.0	403.2	442.3	489.1	546.9	613.7	674.6	720.1	744.0	741.0
35°	328.4	355.1	384.7	422.2	477.3	543.6	616.4	675.2	703.1	698.0	659.3
37.5°	310.1	332.7	361.7	402.8	463.7	536.5	611.0	655.2	653.4	611.6	555.5
40°	298.8	318.0	345.8	389.1	453.0	532.0	602.7	631.4	607.1	548.7	481.5
42.5°	283.9	301.6	329.5	374.0	441.3	522.8	586.7	595.0	547.5	480.4	418.7
45°	260.8	276.4	305.2	351.2	423.7	502.6	547.8	527.4	463.4	394.1	347.2
47.5°	235.9	252.2	279.9	327.2	398.4	472.2	493.7	450.5	384.8	328.6	285.5
50°	220.3	235.9	263.1	310.7	381.2	447.3	456.2	400.4	340.0	290.6	255.3
52.5°	204.6	219.2	245.9	293.8	361.2	418.4	412.9	356.0	300.5	258.4	230.6
55°	181.0	194.9	220.3	265.1	326.5	371.9	352.0	297.7	251.7	219.0	197.9
57.5°	160.0	173.3	195.2	235.7	289.0	320.2	294.9	249.1	212.5	187.4	171.7
60°	145.7	157.4	178.4	216.0	262.3	286.0	261.0	220.5	189.7	169.6	155.6
62.5°	132.2	142.4	161.8	195.9	236.2	256.1	230.7	196.5	170.3	152.5	140.5
65°	111.7	121.0	138.1	164.7	197.7	211.0	189.1	161.4	141.1	127.8	119.8
67.5°	93.0	100.9	115.7	136.6	160.9	170.6	153.9	132.5	117.2	106.5	100.2
70°	80.6	87.4	99.0	117.0	139.0	146.4	130.9	113.2	102.0	93.4	87.6
72.5°	70.0	75.1	85.6	99.5	117.9	123.8	112.9	97.4	87.0	80.6	75.8
75°	53.4	57.6	64.4	75.6	88.3	91.7	83.6	73.9	66.9	62.3	58.7
77.5°	38.5	41.6	46.5	53.4	62.2	65.3	60.2	53.6	48.5	45.5	43.5
80°	29.0	31.6	35.7	41.4	46.7	48.4	45.4	40.4	36.9	35.1	33.4
82.5°	21.4	22.8	25.4	29.3	32.9	34.9	32.4	29.4	27.4	25.8	25.2
85°	10.8	11.6	12.7	14.3	16.6	17.3	16.3	15.6	14.4	13.5	13.5
87.5°	4.6	5.1	6.0	6.8	7.9	9.0	9.5	9.8	10.2	10.3	10.3
90°	3.3	5.7	8.1	10.4	13.0	16.1	19.1	22.1	25.2	26.1	27.0
92.5°	18.8	18.2	17.5	16.9	17.7	20.0	22.3	24.5	26.8	28.3	29.8
95°	54.4	44.8	35.3	25.8	22.3	24.8	27.4	29.9	32.5	34.2	35.8
97.5°	124.3	119.9	115.7	111.4	100.9	84.1	67.3	50.5	33.8	35.6	37.5
100°	181.8	186.5	191.1	195.8	179.9	143.7	107.3	70.9	34.6	36.4	38.3
102.5°	235.9	239.2	242.6	246.0	227.8	188.1	148.4	108.7	69.0	63.2	57.4
105°	315.0	317.6	320.1	322.6	313.5	292.4	271.5	250.5	229.6	188.3	147.1
107.5°	398.8	400.8	402.8	404.9	407.6	410.9	414.2	417.5	420.8	390.5	360.4
110°	454.8	456.6	458.4	460.3	462.5	465.1	467.7	470.3	472.8	465.1	457.4



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	508.3	509.9	511.6	513.2	515.4	518.0	520.5	523.1	525.6	525.8	525.9
115°	587.4	588.8	590.2	591.6	593.4	595.4	597.5	599.7	601.8	604.1	606.4
117.5°	664.7	666.4	668.1	669.8	671.2	672.3	673.4	674.5	675.6	677.4	679.3
120°	712.9	714.9	717.1	719.2	720.6	721.2	721.9	722.7	723.3	725.2	727.1
122.5°	761.2	762.9	764.6	766.3	767.6	768.5	769.4	770.3	771.2	772.5	773.8
125°	827.9	829.8	831.7	833.6	834.9	835.8	836.8	837.7	838.7	839.1	839.6
127.5°	892.5	894.4	896.3	898.1	899.6	900.7	901.9	902.9	904.1	904.8	905.6
130°	932.8	934.7	936.5	938.4	939.8	940.7	941.7	942.6	943.5	944.4	945.3
132.5°	971.3	973.2	975.1	977.0	978.3	979.0	979.7	980.5	981.2	982.2	983.1
135°	1029.8	1031.2	1032.6	1034.0	1035.2	1036.1	1037.1	1038.0	1038.9	1039.6	1040.3
137.5°	1080.5	1082.3	1084.0	1085.8	1087.0	1087.4	1088.0	1088.5	1089.0	1090.1	1091.3
140°	1113.7	1115.1	1116.5	1117.9	1118.9	1119.7	1120.3	1121.0	1121.7	1122.7	1123.6
142.5°	1144.7	1146.1	1147.5	1148.9	1150.0	1150.6	1151.4	1152.0	1152.8	1153.5	1154.2
145°	1188.4	1190.0	1191.6	1193.3	1194.3	1194.7	1195.2	1195.7	1196.1	1196.6	1197.1
147.5°	1228.7	1229.7	1230.8	1231.9	1232.7	1233.1	1233.5	1234.0	1234.5	1235.0	1235.4
150°	1253.4	1254.2	1254.8	1255.6	1256.1	1256.6	1257.0	1257.5	1258.0	1258.5	1258.9
152.5°	1275.7	1276.0	1276.4	1276.7	1277.0	1277.3	1277.6	1277.8	1278.1	1279.0	1279.8
155°	1306.8	1306.4	1305.9	1305.4	1305.3	1305.5	1305.8	1306.0	1306.2	1307.4	1308.6
157.5°	1332.0	1332.0	1331.9	1331.8	1331.7	1331.5	1331.2	1331.0	1330.7	1332.1	1333.6
160°	1346.9	1346.6	1346.4	1346.1	1346.0	1345.7	1345.5	1345.2	1345.0	1346.4	1347.8
162.5°	1360.7	1360.2	1359.5	1358.9	1358.5	1358.3	1358.0	1357.8	1357.6	1359.2	1360.7
165°	1377.9	1377.1	1376.5	1375.7	1375.3	1375.1	1374.8	1374.6	1374.4	1376.2	1378.1
167.5°	1391.1	1390.1	1389.2	1388.2	1387.8	1387.8	1387.8	1387.8	1387.8	1389.7	1391.6
170°	1398.6	1397.7	1396.8	1395.8	1395.3	1395.3	1395.3	1395.3	1395.3	1397.2	1399.1
172.5°	1403.5	1402.3	1401.2	1400.1	1399.6	1399.8	1400.0	1400.2	1400.4	1402.2	1404.1
175°	1409.9	1408.8	1407.5	1406.4	1405.9	1406.1	1406.4	1406.6	1406.9	1408.5	1410.1
177.5°	1411.8	1410.9	1410.0	1409.0	1408.7	1408.8	1409.0	1409.2	1409.4	1410.9	1412.3
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	412.5	412.7	414.3	415.6	415.0	415.7	416.0
5°	450.7	457.5	461.1	463.8	464.0	464.2	465.7
7.5°	504.8	512.2	517.6	525.7	528.1	530.8	530.1
10°	544.4	555.2	564.5	569.4	574.8	582.5	576.3
12.5°	581.3	600.5	614.7	622.3	627.3	628.8	625.8
15°	642.2	667.2	680.7	680.4	697.4	704.8	693.2
17.5°	698.0	721.1	739.7	749.2	763.4	766.5	765.2
20°	732.2	757.5	771.9	788.2	795.7	802.3	803.4
22.5°	761.7	784.4	799.9	813.4	819.6	822.8	824.7
25°	792.1	809.9	819.2	823.9	825.7	825.2	822.8
27.5°	789.9	791.3	781.1	771.0	762.0	751.9	748.4
30°	769.4	753.5	725.0	708.8	685.1	666.3	673.9
32.5°	715.5	683.7	651.8	616.4	587.3	578.9	570.5
35°	610.7	554.8	522.1	484.1	469.0	453.8	443.3
37.5°	494.0	450.9	412.1	387.3	372.0	362.4	357.3
40°	427.1	388.2	356.3	336.1	324.6	313.8	312.3
42.5°	373.8	337.6	313.6	297.6	286.5	281.8	278.5
45°	306.1	281.0	264.8	253.4	246.0	243.1	239.3
47.5°	259.2	241.3	229.2	221.4	215.8	213.7	213.4
50°	232.8	218.0	209.1	203.0	198.7	197.9	194.9
52.5°	213.1	200.2	193.3	188.0	184.8	182.7	181.8
55°	185.0	176.4	170.2	167.1	164.7	162.6	162.6
57.5°	161.8	154.7	150.6	148.0	147.2	145.8	144.8
60°	147.6	141.5	138.3	136.0	134.4	134.7	133.0
62.5°	133.6	129.6	126.5	124.3	122.5	122.5	122.6
65°	113.7	110.7	108.4	107.7	106.6	105.3	105.6
67.5°	96.4	93.6	91.8	90.5	90.1	89.4	90.5
70°	84.0	81.9	80.6	79.4	79.0	79.2	80.1
72.5°	72.6	71.1	70.2	69.7	68.8	68.9	69.5
75°	57.0	55.8	55.1	54.5	54.3	54.3	54.3
77.5°	41.8	41.6	41.3	40.4	40.4	40.7	40.7
80°	33.0	32.4	32.3	31.9	31.3	31.0	31.9
82.5°	24.7	24.1	24.0	23.9	23.0	22.9	23.7
85°	13.3	12.7	12.9	12.7	12.7	12.6	12.6
87.5°	10.3	10.4	10.4	10.6	10.5	10.4	10.8
90°	28.0	28.9	29.6	30.1	30.5	31.0	31.5
92.5°	31.3	32.8	33.7	34.0	34.2	34.5	34.8
95°	37.4	39.1	39.9	39.9	39.9	39.9	39.9
97.5°	39.4	41.2	42.2	42.5	42.7	43.0	43.2
100°	40.2	42.1	43.1	43.3	43.5	43.8	44.0
102.5°	51.6	45.9	43.2	43.6	44.0	44.4	44.8
105°	105.9	64.7	44.3	44.8	45.2	45.7	46.1
107.5°	330.1	299.9	269.2	238.1	207.0	175.9	144.9
110°	449.7	442.1	421.5	388.2	354.9	321.6	288.3



TEST NUMBER: P332108-930

CATALOG NUMBER: S123DIW-S340D1320U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	526.0	526.2	522.8	515.7	508.7	501.7	494.6
115°	608.7	611.1	612.7	613.6	614.6	615.5	616.4
117.5°	681.1	683.0	684.0	684.2	684.4	684.6	684.8
120°	729.0	730.8	731.7	731.7	731.7	731.7	731.7
122.5°	775.1	776.4	777.1	777.3	777.5	777.7	777.9
125°	840.1	840.5	841.0	841.5	842.0	842.4	842.9
127.5°	906.3	907.1	907.2	906.8	906.3	905.8	905.3
130°	946.3	947.2	947.5	947.0	946.6	946.1	945.6
132.5°	984.1	985.0	985.1	984.5	983.8	983.2	982.5
135°	1041.0	1041.7	1041.7	1041.0	1040.3	1039.6	1038.9
137.5°	1092.3	1093.5	1093.8	1093.3	1092.9	1092.4	1091.9
140°	1124.5	1125.4	1125.7	1125.2	1124.7	1124.3	1123.8
142.5°	1155.0	1155.8	1155.8	1155.1	1154.5	1153.8	1153.2
145°	1197.5	1198.0	1198.2	1198.2	1198.2	1198.2	1198.2
147.5°	1235.9	1236.4	1236.1	1235.0	1234.0	1232.9	1231.8
150°	1259.4	1259.9	1259.7	1259.1	1258.3	1257.7	1256.9
152.5°	1280.7	1281.5	1281.4	1280.3	1279.2	1278.1	1277.1
155°	1309.7	1310.9	1310.8	1309.4	1308.0	1306.6	1305.2
157.5°	1335.0	1336.4	1336.1	1334.3	1332.5	1330.6	1328.9
160°	1349.2	1350.6	1350.5	1348.8	1347.2	1345.6	1343.9
162.5°	1362.4	1363.9	1364.0	1362.5	1361.1	1359.7	1358.2
165°	1380.0	1381.9	1381.9	1380.3	1378.7	1377.0	1375.4
167.5°	1393.3	1395.2	1395.2	1393.3	1391.6	1389.7	1387.8
170°	1400.9	1402.8	1402.8	1400.9	1399.1	1397.2	1395.3
172.5°	1406.0	1407.9	1407.7	1405.7	1403.6	1401.6	1399.5
175°	1411.8	1413.4	1413.2	1411.4	1409.6	1407.7	1405.8
177.5°	1413.9	1415.4	1415.2	1413.3	1411.4	1409.6	1407.7
180°	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0	1411.0

(END OF REPORT)