

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: P331276-940

Luminaire Tested: **SA2XXDIP-C290D1080U940-4F0-1E-UDD-A**

Issue Date: 10/7/2019

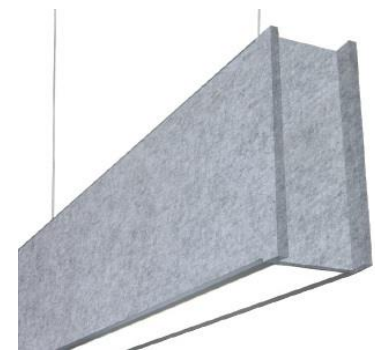
Test Information

Test Method: LM-79-08
Report Number: P331276-940
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: SA2XXDIP-C290D1080U940-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1080 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5005.2 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

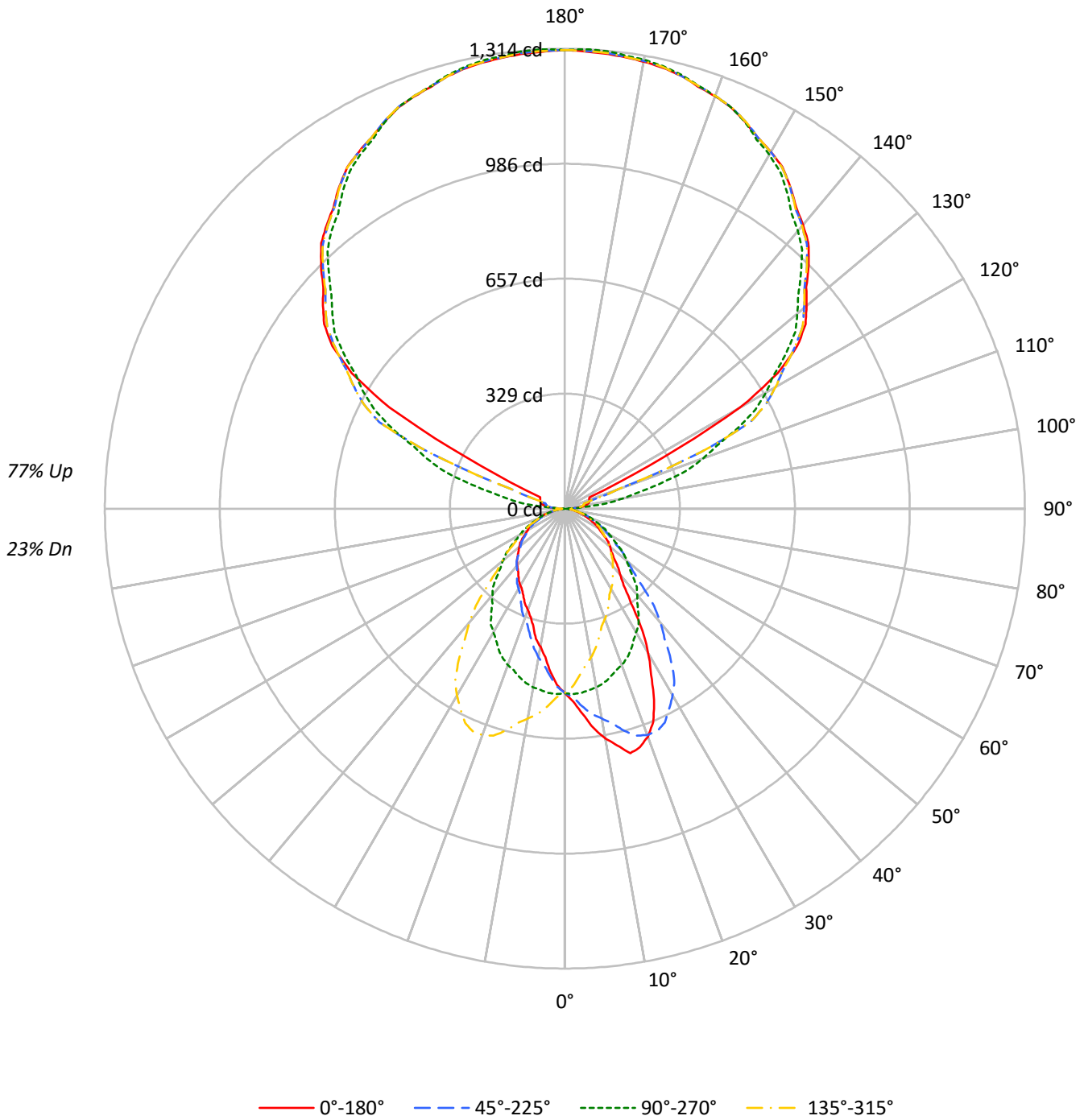
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	101	101	101	90	90	90	90	68	68	68	49	49	49	32	32	32	23
1	92	88	84	81	82	78	75	73	60	58	56	44	42	41	28	28	27	20
2	84	77	71	66	74	69	64	60	53	50	47	38	36	35	25	24	23	17
3	77	68	61	55	68	61	55	50	47	43	40	34	32	30	22	21	20	15
4	70	60	53	47	62	54	47	43	42	37	34	31	28	25	20	19	17	13
5	64	53	46	40	57	48	41	36	37	33	29	27	24	22	18	17	15	11
6	59	48	40	35	52	43	36	32	34	29	25	25	22	19	17	15	13	10
7	55	43	36	30	48	39	32	28	30	26	22	22	19	17	15	13	12	9
8	51	39	32	27	45	35	29	24	28	23	20	21	17	15	14	12	11	8
9	47	35	28	24	42	32	26	22	25	21	18	19	16	14	13	11	10	7
10	44	32	26	21	39	29	23	19	23	19	16	17	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8510	8510	8510	8510
5°	9540	8566	7590	8566
10°	10932	8496	6568	8496
15°	12094	8339	5804	8339
20°	11911	8172	5290	8172
25°	10739	7949	4965	7949
30°	8874	7594	4728	7594
35°	6467	7222	4559	7222
40°	5166	6785	4466	6785
45°	4514	6277	4338	6277
50°	4245	5785	4253	5785
55°	3910	5286	4138	5286
60°	3584	4753	3965	4753
65°	3266	4279	3790	4279
70°	2965	3814	3541	3814
75°	2633	3300	3132	3300
80°	2259	2724	2520	2724
85°	2038	2038	1501	2038



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.2	1.0
10°-20°	145.9	2.9
20°-30°	211.8	4.2
30°-40°	223.5	4.5
40°-50°	197.9	4.0
50°-60°	157.9	3.2
60°-70°	107.3	2.1
70°-80°	55.0	1.1
80°-90°	16.5	0.3
90°-100°	43.7	0.9
100°-110°	160.2	3.2
110°-120°	428.4	8.6
120°-130°	707.1	14.1
130°-140°	752.0	15.0
140°-150°	699.0	14.0
150°-160°	562.0	11.2
160°-170°	362.1	7.2
170°-180°	124.6	2.5
0°-30°	407.9	8.1
0°-40°	631.4	12.6
0°-60°	987.2	19.7
0°-90°	1166.1	23.3
90°-120°	632.3	12.6
90°-150°	2790.4	55.8
90°-180°	3839.0	76.7
0°-180°	5005.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	527	527	527	527	527	
5°	589	528	468	528	589	59
15°	724	499	347	499	724	200
25°	603	446	279	446	603	272
35°	328	366	231	366	328	213
45°	198	275	190	275	198	155
55°	139	188	147	188	139	125
65°	86	112	99	112	86	85
75°	42	53	50	53	42	45
85°	11	11	8	11	11	13
90°	26	1	26	1	26	12
95°	41	62	41	62	41	38
105°	72	288	72	288	72	75
115°	78	545	78	545	78	195
125°	810	771	810	771	810	701
135°	985	954	985	954	985	759
145°	1123	1106	1123	1106	1123	702
155°	1219	1218	1219	1218	1219	563
165°	1281	1284	1281	1284	1281	362
175°	1305	1313	1305	1313	1305	124
180°	1310	1310	1310	1310	1310	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1
2.5°	551.3	551.5	551.9	549.3	548.9	548.9	546.7	544.7	542.4	539.4	539.8
5°	588.6	590.8	591.7	589.2	585.6	585.2	581.8	576.1	570.8	566.6	563.6
7.5°	633.1	634.0	632.0	628.8	626.2	621.3	614.8	608.6	599.8	591.7	585.8
10°	666.8	668.1	664.6	660.0	656.1	650.4	641.1	631.6	620.1	608.9	600.0
12.5°	692.4	695.4	691.0	690.5	683.9	676.0	664.9	660.1	643.9	628.4	618.8
15°	723.5	723.4	723.8	719.9	715.1	713.8	702.1	689.3	666.5	657.3	641.5
17.5°	714.5	717.6	719.1	719.0	718.9	718.1	714.3	706.3	694.8	680.0	661.8
20°	693.2	697.2	697.9	702.5	705.2	708.6	710.0	707.8	700.7	688.3	672.5
22.5°	660.1	661.3	663.2	670.4	676.1	684.7	689.2	696.8	694.0	688.0	674.8
25°	602.8	600.8	607.9	611.5	624.7	638.5	648.5	659.3	669.1	674.9	671.1
27.5°	534.0	531.0	541.6	551.3	562.0	576.9	592.4	610.6	625.8	644.9	651.4
30°	476.0	477.9	487.9	498.3	514.5	535.6	553.0	573.0	594.8	616.0	630.8
32.5°	413.5	420.4	426.9	442.7	457.0	480.5	506.0	531.1	558.1	582.3	605.2
35°	328.1	336.3	345.2	356.7	376.7	400.0	425.0	458.8	495.7	528.7	555.8
37.5°	276.3	274.9	280.0	288.4	304.6	323.4	352.1	385.5	428.9	467.7	506.0
40°	245.1	244.3	247.9	255.7	268.0	281.8	306.9	336.3	376.6	424.0	469.6
42.5°	223.7	224.2	226.2	231.7	240.1	251.5	270.3	295.2	332.2	376.8	425.8
45°	197.7	199.1	201.3	204.0	208.8	218.2	228.7	246.6	275.7	313.0	361.1
47.5°	179.0	179.1	181.3	183.6	186.5	191.7	200.4	211.5	232.1	262.4	303.9
50°	169.0	167.6	169.2	170.9	174.0	177.6	183.3	193.9	207.6	232.1	266.8
52.5°	156.6	156.7	158.1	158.8	161.5	165.1	170.3	177.6	190.1	209.3	237.7
55°	138.9	140.0	140.8	142.0	144.5	147.0	151.1	156.0	165.7	180.0	201.2
57.5°	122.3	122.7	123.5	125.8	127.3	129.7	133.6	138.0	144.4	155.0	170.9
60°	111.0	111.0	112.6	113.6	115.7	118.1	121.1	125.4	131.1	139.7	152.6
62.5°	100.7	100.5	101.1	102.8	104.3	106.6	109.6	113.2	118.6	126.4	136.8
65°	85.5	85.1	86.3	86.7	88.3	90.5	93.0	96.8	101.1	106.7	116.1
67.5°	70.9	71.4	72.1	72.8	73.7	76.1	77.7	80.3	84.0	88.7	95.0
70°	62.8	62.8	62.8	63.4	64.6	65.8	67.4	69.6	73.1	77.1	82.8
72.5°	53.7	54.4	55.0	54.7	56.2	56.9	58.9	60.1	63.4	66.0	71.0
75°	42.2	42.2	42.2	43.2	43.8	44.3	45.6	46.8	48.4	51.6	54.3
77.5°	31.5	31.4	31.6	31.8	32.5	33.2	33.5	34.6	36.1	37.6	39.9
80°	24.3	24.7	24.9	25.3	25.3	25.7	25.9	27.4	28.4	29.3	30.8
82.5°	18.8	18.9	18.9	19.0	19.2	19.4	20.0	20.4	20.8	21.6	22.6
85°	11.0	10.7	10.7	11.1	11.0	11.0	11.3	11.8	11.8	11.9	12.6
87.5°	9.4	9.3	9.4	9.1	9.0	9.0	8.8	8.4	8.4	8.3	8.1
90°	25.6	25.1	24.8	24.3	23.9	23.2	22.1	21.0	20.0	19.0	17.3
92.5°	25.6	25.3	25.1	24.9	24.6	24.2	23.6	23.1	22.6	22.0	21.1
95°	40.8	40.9	41.2	41.4	41.6	41.2	40.1	39.1	38.0	37.0	35.5
97.5°	54.4	54.1	53.9	53.7	53.4	52.9	52.0	51.2	50.3	49.5	46.1
100°	63.5	63.1	62.7	62.2	61.8	60.8	59.1	57.4	55.7	54.0	50.5
102.5°	68.0	67.5	66.9	66.3	65.7	64.3	62.2	59.9	57.8	55.6	85.5
105°	72.1	71.2	70.4	69.6	68.7	67.1	64.7	62.4	60.1	57.8	115.3
107.5°	74.1	73.3	72.4	71.6	70.8	71.5	73.8	76.2	78.6	81.0	149.9
110°	74.9	74.0	73.2	72.3	71.5	81.6	102.7	123.8	144.8	165.9	226.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	75.6	75.0	74.3	73.7	72.9	111.0	187.9	264.7	341.6	418.4	433.5
115°	77.8	92.9	108.1	123.2	138.4	194.7	292.3	389.8	487.3	584.9	579.6
117.5°	317.4	367.2	417.1	466.9	516.7	553.5	577.0	600.7	624.2	647.8	644.2
120°	578.3	606.6	635.1	663.5	692.0	705.0	702.4	699.9	697.3	694.8	691.1
122.5°	721.6	727.1	732.6	738.2	743.6	745.6	744.1	742.6	741.1	739.6	735.5
125°	810.5	809.9	809.2	808.6	808.0	806.9	805.4	804.0	802.5	801.0	797.0
127.5°	866.6	866.5	866.4	866.2	866.1	865.0	862.8	860.7	858.5	856.4	853.4
130°	901.5	901.7	901.9	902.1	902.3	901.3	898.9	896.6	894.3	892.0	889.7
132.5°	935.6	935.9	936.0	936.2	936.5	935.6	933.6	931.6	929.6	927.6	925.3
135°	984.9	985.3	985.7	986.1	986.6	985.7	983.6	981.5	979.5	977.3	975.4
137.5°	1029.8	1030.6	1031.3	1032.0	1032.7	1032.0	1029.9	1027.9	1025.8	1023.8	1021.6
140°	1057.9	1058.9	1060.0	1061.0	1062.1	1061.7	1059.8	1057.9	1056.0	1054.1	1051.8
142.5°	1085.2	1086.3	1087.3	1088.3	1089.4	1089.0	1087.4	1085.6	1083.9	1082.2	1079.5
145°	1123.3	1124.4	1125.4	1126.5	1127.5	1127.3	1125.8	1124.4	1122.8	1121.4	1117.8
147.5°	1156.8	1157.7	1158.6	1159.5	1160.4	1160.3	1159.2	1158.1	1157.0	1155.9	1152.4
150°	1177.3	1178.4	1179.5	1180.4	1181.5	1181.4	1180.2	1178.9	1177.7	1176.3	1173.0
152.5°	1194.8	1196.1	1197.6	1198.9	1200.3	1200.4	1199.2	1197.8	1196.6	1195.3	1192.1
155°	1219.1	1220.8	1222.4	1224.1	1225.7	1226.0	1224.8	1223.4	1222.2	1220.9	1218.4
157.5°	1241.2	1242.9	1244.5	1246.2	1247.8	1247.9	1246.4	1245.0	1243.6	1242.2	1240.4
160°	1254.1	1255.6	1257.0	1258.6	1260.0	1260.1	1258.8	1257.6	1256.3	1255.1	1253.8
162.5°	1264.7	1266.5	1268.4	1270.2	1271.9	1272.2	1270.7	1269.3	1267.8	1266.4	1265.3
165°	1280.7	1282.1	1283.6	1285.0	1286.6	1286.6	1285.0	1283.6	1282.1	1280.7	1280.1
167.5°	1290.7	1292.6	1294.5	1296.4	1298.2	1298.5	1297.0	1295.6	1294.1	1292.6	1292.0
170°	1296.7	1298.7	1300.6	1302.4	1304.3	1304.6	1303.1	1301.6	1300.1	1298.7	1298.2
172.5°	1301.3	1303.2	1305.1	1307.0	1308.9	1309.1	1307.6	1306.2	1304.7	1303.2	1302.8
175°	1305.3	1307.4	1309.5	1311.6	1313.8	1314.0	1312.6	1311.1	1309.7	1308.1	1307.7
177.5°	1307.8	1309.3	1310.8	1312.3	1313.8	1314.0	1312.8	1311.6	1310.5	1309.3	1309.1
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1
2.5°	540.8	539.6	538.8	535.8	533.2	530.7	529.9	530.1	526.6	523.2	521.7
5°	562.0	557.9	554.0	548.6	542.1	534.9	531.4	528.5	521.4	513.7	509.3
7.5°	580.8	575.0	567.6	557.3	547.9	536.7	529.6	523.3	513.0	502.1	495.4
10°	592.3	584.4	574.9	562.3	550.8	537.2	527.7	518.2	506.0	493.0	484.9
12.5°	602.2	591.6	582.2	566.1	552.4	535.4	524.1	510.7	497.9	482.5	474.6
15°	625.7	606.1	588.3	570.0	553.2	529.5	516.9	498.9	482.1	463.1	454.0
17.5°	643.9	621.8	593.8	570.6	551.0	524.7	506.3	484.7	464.8	443.1	430.7
20°	654.2	628.9	598.8	571.2	547.8	517.7	497.7	475.6	452.4	427.8	414.5
22.5°	660.4	633.8	604.0	568.8	541.3	512.1	486.9	462.6	439.1	412.6	398.6
25°	662.4	638.1	606.5	566.8	533.2	500.2	469.8	446.2	417.7	393.0	372.6
27.5°	652.7	635.3	604.9	562.9	523.8	485.2	451.3	424.7	394.6	367.7	347.1
30°	640.9	630.8	601.2	559.1	516.3	474.8	437.6	407.3	377.4	350.3	329.1
32.5°	622.6	620.5	594.4	553.6	508.4	461.7	423.1	392.6	359.4	332.7	312.6
35°	586.7	596.4	580.0	541.3	493.5	443.0	401.3	366.4	332.0	306.5	287.7
37.5°	538.4	562.6	558.3	523.3	473.2	422.7	376.6	340.2	307.4	281.6	263.1
40°	505.2	536.0	540.5	509.4	459.1	407.0	358.1	321.9	289.9	266.4	247.7
42.5°	469.6	505.5	517.7	492.9	443.4	390.4	341.6	304.1	272.3	249.5	233.0
45°	409.8	457.4	479.5	465.3	417.5	363.2	313.0	274.9	246.1	224.6	211.9
47.5°	353.9	405.9	435.6	430.6	388.6	334.8	285.2	248.6	220.6	203.5	192.1
50°	314.4	367.8	403.7	405.4	367.8	314.6	264.7	230.3	204.6	188.6	179.2
52.5°	280.0	331.1	370.1	378.8	344.6	293.6	246.5	212.1	189.5	174.8	166.5
55°	235.1	278.3	321.6	337.5	310.1	261.5	217.9	187.8	166.5	156.4	149.1
57.5°	195.6	231.5	271.5	289.0	272.2	230.5	189.7	163.5	146.2	137.3	131.7
60°	174.6	203.0	238.6	259.5	244.9	207.9	172.2	147.2	133.0	125.2	119.9
62.5°	155.2	180.3	210.4	229.5	221.6	186.6	154.7	132.7	120.5	113.1	109.2
65°	128.0	147.8	171.2	188.8	183.5	157.0	130.8	112.0	102.3	96.4	93.4
67.5°	105.4	119.8	135.9	151.3	147.1	128.3	107.4	92.6	85.4	80.3	78.5
70°	91.1	102.1	116.5	128.9	125.4	110.0	93.4	80.8	74.5	70.3	68.5
72.5°	77.6	86.5	97.6	107.6	105.3	92.5	78.6	69.2	64.3	60.4	58.9
75°	58.6	65.5	72.1	78.8	78.2	68.3	60.2	52.9	49.0	46.0	45.4
77.5°	43.2	47.1	51.6	55.6	54.5	48.8	42.4	38.3	35.5	33.4	33.1
80°	33.0	35.2	38.5	41.3	39.9	37.5	32.4	29.3	27.4	25.3	24.5
82.5°	24.0	26.1	28.1	29.7	28.5	26.3	23.2	21.1	19.9	18.5	18.2
85°	12.6	13.7	14.6	15.0	14.6	13.2	11.8	11.0	9.9	9.3	9.1
87.5°	7.9	7.7	7.3	7.2	6.2	5.8	4.7	3.7	4.0	4.4	4.5
90°	15.6	13.9	12.2	10.3	7.9	5.6	3.3	1.0	3.3	5.6	7.9
92.5°	20.3	19.4	18.6	18.3	18.5	18.7	18.9	19.2	18.9	18.7	18.5
95°	34.1	32.5	31.0	33.8	40.8	47.7	54.7	61.6	54.7	47.7	40.8
97.5°	42.6	39.2	35.8	44.0	63.5	83.1	102.7	122.3	102.7	83.1	63.5
100°	46.9	43.2	39.7	52.3	81.2	110.0	138.9	167.8	138.9	110.0	81.2
102.5°	115.5	145.4	175.4	193.4	199.5	205.6	211.7	217.8	211.7	205.6	199.5
105°	172.8	230.3	287.8	313.4	307.1	300.8	294.5	288.2	294.5	300.8	307.1
107.5°	218.9	287.8	356.9	388.8	383.6	378.5	373.4	368.4	373.4	378.5	383.6
110°	287.7	348.5	409.4	437.7	433.2	428.8	424.4	419.9	424.4	428.8	433.2



TEST NUMBER: P331276-940

CATALOG NUMBER: SA2XXDIP-C290D1080U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	448.5	463.5	478.6	484.1	480.2	476.3	472.4	468.5	472.4	476.3	480.2
115°	574.4	569.1	563.8	559.4	555.8	552.2	548.7	545.1	548.7	552.2	555.8
117.5°	640.6	636.9	633.3	629.5	625.5	621.5	617.5	613.5	617.5	621.5	625.5
120°	687.2	683.5	679.7	676.2	673.1	669.9	666.7	663.5	666.7	669.9	673.1
122.5°	731.3	727.2	723.1	719.3	716.0	712.7	709.4	706.1	709.4	712.7	716.0
125°	793.0	789.0	785.0	781.6	778.9	776.1	773.4	770.7	773.4	776.1	778.9
127.5°	850.3	847.4	844.4	841.4	838.4	835.4	832.3	829.3	832.3	835.4	838.4
130°	887.3	885.0	882.7	879.9	876.6	873.2	869.8	866.4	869.8	873.2	876.6
132.5°	923.0	920.7	918.4	915.8	912.9	910.1	907.2	904.3	907.2	910.1	912.9
135°	973.5	971.6	969.7	967.1	963.8	960.4	957.0	953.6	957.0	960.4	963.8
137.5°	1019.5	1017.4	1015.1	1012.9	1010.6	1008.2	1005.8	1003.4	1005.8	1008.2	1010.6
140°	1049.5	1047.1	1044.8	1042.9	1041.2	1039.5	1037.8	1036.1	1037.8	1039.5	1041.2
142.5°	1076.8	1074.2	1071.6	1069.4	1067.9	1066.4	1064.9	1063.4	1064.9	1066.4	1067.9
145°	1114.2	1110.6	1107.1	1105.4	1105.6	1105.8	1106.0	1106.3	1106.0	1105.8	1105.6
147.5°	1148.8	1145.3	1141.7	1140.4	1141.2	1142.0	1142.8	1143.6	1142.8	1142.0	1141.2
150°	1169.7	1166.3	1162.9	1162.0	1163.4	1164.9	1166.4	1167.9	1166.4	1164.9	1163.4
152.5°	1188.9	1185.7	1182.5	1181.8	1183.4	1185.0	1186.7	1188.3	1186.7	1185.0	1183.4
155°	1215.8	1213.4	1210.9	1210.5	1212.4	1214.3	1216.2	1218.1	1216.2	1214.3	1212.4
157.5°	1238.6	1236.9	1235.1	1235.0	1236.6	1238.2	1239.8	1241.4	1239.8	1238.2	1236.6
160°	1252.5	1251.2	1250.0	1250.0	1251.2	1252.5	1253.8	1255.1	1253.8	1252.5	1251.2
162.5°	1264.3	1263.1	1262.0	1262.1	1263.4	1264.6	1266.0	1267.2	1266.0	1264.6	1263.4
165°	1279.4	1278.7	1278.1	1278.4	1279.7	1280.9	1282.2	1283.5	1282.2	1280.9	1279.7
167.5°	1291.4	1290.8	1290.2	1290.6	1291.8	1293.1	1294.4	1295.7	1294.4	1293.1	1291.8
170°	1297.8	1297.4	1297.0	1297.4	1298.7	1299.9	1301.2	1302.4	1301.2	1299.9	1298.7
172.5°	1302.3	1302.0	1301.5	1302.0	1303.2	1304.5	1305.7	1307.0	1305.7	1304.5	1303.2
175°	1307.3	1306.9	1306.4	1307.0	1308.5	1309.9	1311.4	1312.9	1311.4	1309.9	1308.5
177.5°	1308.9	1308.8	1308.6	1309.1	1310.3	1311.4	1312.7	1313.8	1312.7	1311.4	1310.3
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0



TEST NUMBER: P331276-940

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1
2.5°	520.1	519.2	515.8	514.0	511.0	508.3	506.5	507.3	507.9	507.7	507.1
5°	505.2	501.3	495.4	490.4	486.8	480.1	477.2	475.8	474.6	473.2	471.8
7.5°	487.4	481.3	473.0	465.7	459.0	450.6	445.9	443.1	440.1	436.9	434.1
10°	474.8	466.3	457.4	447.3	439.2	431.7	425.0	420.5	416.4	412.6	409.8
12.5°	461.5	451.7	440.7	426.9	417.9	407.2	406.2	398.3	392.0	389.6	386.3
15°	440.4	426.6	412.6	396.2	389.1	379.4	373.4	367.2	361.8	357.9	357.0
17.5°	416.3	398.5	384.6	372.8	361.2	351.2	345.6	340.8	336.3	331.2	330.5
20°	398.1	382.6	367.5	357.1	345.2	335.0	328.1	323.3	319.4	316.4	313.8
22.5°	380.7	363.8	349.9	338.7	326.9	318.7	313.3	308.5	305.3	302.0	299.5
25°	352.8	339.7	324.5	311.7	302.0	296.8	292.3	288.3	286.2	284.0	281.2
27.5°	328.5	313.9	299.7	289.8	281.2	276.6	273.4	270.6	268.8	267.4	265.8
30°	311.4	296.6	285.4	275.7	268.6	263.9	261.9	260.3	258.1	257.3	256.5
32.5°	294.8	281.5	272.0	263.5	256.8	253.7	251.9	250.4	248.7	247.9	246.2
35°	271.4	260.3	251.0	246.3	240.9	238.2	236.8	234.8	233.2	232.4	232.1
37.5°	249.4	239.8	233.6	227.7	225.3	223.7	221.8	220.4	219.9	219.8	219.5
40°	235.1	227.3	221.8	217.0	216.0	213.5	211.9	210.7	210.7	210.9	210.7
42.5°	222.2	215.1	210.3	206.1	204.9	203.5	201.8	201.8	202.1	202.8	202.1
45°	202.6	197.5	194.0	192.1	189.8	188.4	188.2	188.8	189.0	189.2	189.8
47.5°	184.5	181.1	178.0	175.8	174.8	174.6	174.3	175.4	176.4	176.7	177.6
50°	173.8	170.0	167.3	165.9	165.1	164.7	165.1	166.3	167.1	168.1	168.7
52.5°	161.8	159.1	157.3	156.1	155.9	156.1	156.1	157.6	158.8	159.3	159.5
55°	145.3	143.2	142.9	141.0	141.8	141.6	142.6	143.4	144.6	145.9	146.1
57.5°	128.7	127.1	126.0	126.2	126.4	127.3	128.1	129.6	130.8	132.2	132.2
60°	117.7	116.9	116.3	116.3	116.6	117.9	118.9	120.3	121.1	122.0	122.5
62.5°	107.6	106.8	106.2	106.6	107.6	108.3	109.5	110.3	111.1	111.9	112.2
65°	91.8	91.4	91.9	92.4	92.6	93.5	95.0	95.6	96.4	96.8	98.3
67.5°	77.1	77.2	77.1	77.7	78.9	79.1	80.4	81.9	82.0	82.8	83.7
70°	67.2	67.7	68.0	68.5	69.5	69.9	70.9	71.5	72.3	72.9	73.6
72.5°	58.1	58.2	58.7	58.6	59.5	60.3	61.2	61.8	62.6	63.4	63.9
75°	44.8	44.8	45.2	45.4	46.4	47.4	47.2	47.6	48.4	49.2	49.7
77.5°	32.7	32.3	32.7	32.9	33.3	34.1	34.2	34.8	35.8	35.5	35.9
80°	24.9	24.3	24.9	25.1	25.1	26.1	26.1	26.6	27.1	26.6	27.1
82.5°	17.7	17.5	17.9	18.0	18.3	18.4	18.6	18.7	19.4	19.1	19.4
85°	8.9	8.7	8.9	8.7	8.9	9.1	9.1	8.9	8.9	9.3	8.7
87.5°	4.8	5.0	5.2	5.5	5.7	5.9	6.0	6.2	6.3	6.2	6.4
90°	10.3	12.2	13.9	15.6	17.3	19.0	20.0	21.0	22.1	23.2	23.9
92.5°	18.3	18.6	19.4	20.3	21.1	22.0	22.6	23.1	23.6	24.2	24.6
95°	33.8	31.0	32.5	34.1	35.5	37.0	38.0	39.1	40.1	41.2	41.6
97.5°	44.0	35.8	39.2	42.6	46.1	49.5	50.3	51.2	52.0	52.9	53.4
100°	52.3	39.7	43.2	46.9	50.5	54.0	55.7	57.4	59.1	60.8	61.8
102.5°	193.4	175.4	145.4	115.5	85.5	55.6	57.8	59.9	62.2	64.3	65.7
105°	313.4	287.8	230.3	172.8	115.3	57.8	60.1	62.4	64.7	67.1	68.7
107.5°	388.8	356.9	287.8	218.9	149.9	81.0	78.6	76.2	73.8	71.5	70.8
110°	437.7	409.4	348.5	287.7	226.8	165.9	144.8	123.8	102.7	81.6	71.5



TEST NUMBER: P331276-940

CATALOG NUMBER: SA2XXDIP-C290D1080U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	484.1	478.6	463.5	448.5	433.5	418.4	341.6	264.7	187.9	111.0	72.9
115°	559.4	563.8	569.1	574.4	579.6	584.9	487.3	389.8	292.3	194.7	138.4
117.5°	629.5	633.3	636.9	640.6	644.2	647.8	624.2	600.7	577.0	553.5	516.7
120°	676.2	679.7	683.5	687.2	691.1	694.8	697.3	699.9	702.4	705.0	692.0
122.5°	719.3	723.1	727.2	731.3	735.5	739.6	741.1	742.6	744.1	745.6	743.6
125°	781.6	785.0	789.0	793.0	797.0	801.0	802.5	804.0	805.4	806.9	808.0
127.5°	841.4	844.4	847.4	850.3	853.4	856.4	858.5	860.7	862.8	865.0	866.1
130°	879.9	882.7	885.0	887.3	889.7	892.0	894.3	896.6	898.9	901.3	902.3
132.5°	915.8	918.4	920.7	923.0	925.3	927.6	929.6	931.6	933.6	935.6	936.5
135°	967.1	969.7	971.6	973.5	975.4	977.3	979.5	981.5	983.6	985.7	986.6
137.5°	1012.9	1015.1	1017.4	1019.5	1021.6	1023.8	1025.8	1027.9	1029.9	1032.0	1032.7
140°	1042.9	1044.8	1047.1	1049.5	1051.8	1054.1	1056.0	1057.9	1059.8	1061.7	1062.1
142.5°	1069.4	1071.6	1074.2	1076.8	1079.5	1082.2	1083.9	1085.6	1087.4	1089.0	1089.4
145°	1105.4	1107.1	1110.6	1114.2	1117.8	1121.4	1122.8	1124.4	1125.8	1127.3	1127.5
147.5°	1140.4	1141.7	1145.3	1148.8	1152.4	1155.9	1157.0	1158.1	1159.2	1160.3	1160.4
150°	1162.0	1162.9	1166.3	1169.7	1173.0	1176.3	1177.7	1178.9	1180.2	1181.4	1181.5
152.5°	1181.8	1182.5	1185.7	1188.9	1192.1	1195.3	1196.6	1197.8	1199.2	1200.4	1200.3
155°	1210.5	1210.9	1213.4	1215.8	1218.4	1220.9	1222.2	1223.4	1224.8	1226.0	1225.7
157.5°	1235.0	1235.1	1236.9	1238.6	1240.4	1242.2	1243.6	1245.0	1246.4	1247.9	1247.8
160°	1250.0	1250.0	1251.2	1252.5	1253.8	1255.1	1256.3	1257.6	1258.8	1260.1	1260.0
162.5°	1262.1	1262.0	1263.1	1264.3	1265.3	1266.4	1267.8	1269.3	1270.7	1272.2	1271.9
165°	1278.4	1278.1	1278.7	1279.4	1280.1	1280.7	1282.1	1283.6	1285.0	1286.6	1286.6
167.5°	1290.6	1290.2	1290.8	1291.4	1292.0	1292.6	1294.1	1295.6	1297.0	1298.5	1298.2
170°	1297.4	1297.0	1297.4	1297.8	1298.2	1298.7	1300.1	1301.6	1303.1	1304.6	1304.3
172.5°	1302.0	1301.5	1302.0	1302.3	1302.8	1303.2	1304.7	1306.2	1307.6	1309.1	1308.9
175°	1307.0	1306.4	1306.9	1307.3	1307.7	1308.1	1309.7	1311.1	1312.6	1314.0	1313.8
177.5°	1309.1	1308.6	1308.8	1308.9	1309.1	1309.3	1310.5	1311.6	1312.8	1314.0	1313.8
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0



TEST NUMBER: P331276-940

CATALOG NUMBER: SA2XXDIP-C290D1080U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1
2.5°	505.5	505.2	505.2	503.7	505.2	505.2	505.5	507.1	507.7	507.9	507.3
5°	469.0	468.3	467.3	468.3	467.3	468.3	469.0	471.8	473.2	474.6	475.8
7.5°	432.7	430.3	430.0	427.6	430.0	430.3	432.7	434.1	436.9	440.1	443.1
10°	406.4	404.7	404.5	400.6	404.5	404.7	406.4	409.8	412.6	416.4	420.5
12.5°	386.3	382.4	383.2	380.9	383.2	382.4	386.3	386.3	389.6	392.0	398.3
15°	351.4	351.4	350.6	347.2	350.6	351.4	351.4	357.0	357.9	361.8	367.2
17.5°	326.5	326.0	324.1	325.1	324.1	326.0	326.5	330.5	331.2	336.3	340.8
20°	311.6	310.3	307.9	307.9	307.9	310.3	311.6	313.8	316.4	319.4	323.3
22.5°	297.5	297.4	294.8	295.6	294.8	297.4	297.5	299.5	302.0	305.3	308.5
25°	281.0	279.4	278.1	278.7	278.1	279.4	281.0	281.2	284.0	286.2	288.3
27.5°	265.3	264.4	264.3	262.7	264.3	264.4	265.3	265.8	267.4	268.8	270.6
30°	256.3	254.2	254.6	253.6	254.6	254.2	256.3	256.5	257.3	258.1	260.3
32.5°	245.8	245.1	244.8	243.9	244.8	245.1	245.8	246.2	247.9	248.7	250.4
35°	231.8	231.9	231.0	231.3	231.0	231.9	231.8	232.1	232.4	233.2	234.8
37.5°	219.4	220.0	219.5	219.6	219.5	220.0	219.4	219.5	219.8	219.9	220.4
40°	211.2	211.2	211.2	211.9	211.2	211.2	211.2	210.7	210.9	210.7	210.7
42.5°	203.5	203.1	202.9	202.8	202.9	203.1	203.5	202.1	202.8	202.1	201.8
45°	190.2	190.8	191.0	190.0	191.0	190.8	190.2	189.8	189.2	189.0	188.8
47.5°	178.2	178.3	178.2	179.1	178.2	178.3	178.2	177.6	176.7	176.4	175.4
50°	169.8	169.3	169.8	169.3	169.8	169.3	169.8	168.7	168.1	167.1	166.3
52.5°	160.9	161.0	160.7	160.6	160.7	161.0	160.9	159.5	159.3	158.8	157.6
55°	146.9	147.2	147.0	147.0	147.0	147.2	146.9	146.1	145.9	144.6	143.4
57.5°	132.4	132.8	133.0	132.2	133.0	132.8	132.4	132.2	132.2	130.8	129.6
60°	122.3	123.3	123.1	122.8	123.1	123.3	122.3	122.5	122.0	121.1	120.3
62.5°	113.1	113.5	113.4	113.3	113.4	113.5	113.1	112.2	111.9	111.1	110.3
65°	98.9	99.2	98.6	99.2	98.6	99.2	98.9	98.3	96.8	96.4	95.6
67.5°	83.5	83.6	84.1	84.4	84.1	83.6	83.5	83.7	82.8	82.0	81.9
70°	73.9	73.7	74.4	75.0	74.4	73.7	73.9	73.6	72.9	72.3	71.5
72.5°	63.8	64.3	64.1	64.6	64.1	64.3	63.8	63.9	63.4	62.6	61.8
75°	49.2	49.8	49.7	50.2	49.7	49.8	49.2	49.7	49.2	48.4	47.6
77.5°	35.6	35.7	35.6	35.9	35.6	35.7	35.6	35.9	35.5	35.8	34.8
80°	27.1	26.8	26.3	27.1	26.3	26.8	27.1	27.1	26.6	27.1	26.6
82.5°	18.9	19.1	18.7	18.7	18.7	19.1	18.9	19.4	19.1	19.4	18.7
85°	8.7	8.5	8.1	8.1	8.1	8.5	8.7	8.7	9.3	8.9	8.9
87.5°	6.5	6.4	6.5	6.4	6.5	6.4	6.5	6.4	6.2	6.3	6.2
90°	24.3	24.8	25.1	25.6	25.1	24.8	24.3	23.9	23.2	22.1	21.0
92.5°	24.9	25.1	25.3	25.6	25.3	25.1	24.9	24.6	24.2	23.6	23.1
95°	41.4	41.2	40.9	40.8	40.9	41.2	41.4	41.6	41.2	40.1	39.1
97.5°	53.7	53.9	54.1	54.4	54.1	53.9	53.7	53.4	52.9	52.0	51.2
100°	62.2	62.7	63.1	63.5	63.1	62.7	62.2	61.8	60.8	59.1	57.4
102.5°	66.3	66.9	67.5	68.0	67.5	66.9	66.3	65.7	64.3	62.2	59.9
105°	69.6	70.4	71.2	72.1	71.2	70.4	69.6	68.7	67.1	64.7	62.4
107.5°	71.6	72.4	73.3	74.1	73.3	72.4	71.6	70.8	71.5	73.8	76.2
110°	72.3	73.2	74.0	74.9	74.0	73.2	72.3	71.5	81.6	102.7	123.8



TEST NUMBER: P331276-940

CATALOG NUMBER: SA2XXDIP-C290D1080U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	73.7	74.3	75.0	75.6	75.0	74.3	73.7	72.9	111.0	187.9	264.7
115°	123.2	108.1	92.9	77.8	92.9	108.1	123.2	138.4	194.7	292.3	389.8
117.5°	466.9	417.1	367.2	317.4	367.2	417.1	466.9	516.7	553.5	577.0	600.7
120°	663.5	635.1	606.6	578.3	606.6	635.1	663.5	692.0	705.0	702.4	699.9
122.5°	738.2	732.6	727.1	721.6	727.1	732.6	738.2	743.6	745.6	744.1	742.6
125°	808.6	809.2	809.9	810.5	809.9	809.2	808.6	808.0	806.9	805.4	804.0
127.5°	866.2	866.4	866.5	866.6	866.5	866.4	866.2	866.1	865.0	862.8	860.7
130°	902.1	901.9	901.7	901.5	901.7	901.9	902.1	902.3	901.3	898.9	896.6
132.5°	936.2	936.0	935.9	935.6	935.9	936.0	936.2	936.5	935.6	933.6	931.6
135°	986.1	985.7	985.3	984.9	985.3	985.7	986.1	986.6	985.7	983.6	981.5
137.5°	1032.0	1031.3	1030.6	1029.8	1030.6	1031.3	1032.0	1032.7	1032.0	1029.9	1027.9
140°	1061.0	1060.0	1058.9	1057.9	1058.9	1060.0	1061.0	1062.1	1061.7	1059.8	1057.9
142.5°	1088.3	1087.3	1086.3	1085.2	1086.3	1087.3	1088.3	1089.4	1089.0	1087.4	1085.6
145°	1126.5	1125.4	1124.4	1123.3	1124.4	1125.4	1126.5	1127.5	1127.3	1125.8	1124.4
147.5°	1159.5	1158.6	1157.7	1156.8	1157.7	1158.6	1159.5	1160.4	1160.3	1159.2	1158.1
150°	1180.4	1179.5	1178.4	1177.3	1178.4	1179.5	1180.4	1181.5	1181.4	1180.2	1178.9
152.5°	1198.9	1197.6	1196.1	1194.8	1196.1	1197.6	1198.9	1200.3	1200.4	1199.2	1197.8
155°	1224.1	1222.4	1220.8	1219.1	1220.8	1222.4	1224.1	1225.7	1226.0	1224.8	1223.4
157.5°	1246.2	1244.5	1242.9	1241.2	1242.9	1244.5	1246.2	1247.8	1247.9	1246.4	1245.0
160°	1258.6	1257.0	1255.6	1254.1	1255.6	1257.0	1258.6	1260.0	1260.1	1258.8	1257.6
162.5°	1270.2	1268.4	1266.5	1264.7	1266.5	1268.4	1270.2	1271.9	1272.2	1270.7	1269.3
165°	1285.0	1283.6	1282.1	1280.7	1282.1	1283.6	1285.0	1286.6	1286.6	1285.0	1283.6
167.5°	1296.4	1294.5	1292.6	1290.7	1292.6	1294.5	1296.4	1298.2	1298.5	1297.0	1295.6
170°	1302.4	1300.6	1298.7	1296.7	1298.7	1300.6	1302.4	1304.3	1304.6	1303.1	1301.6
172.5°	1307.0	1305.1	1303.2	1301.3	1303.2	1305.1	1307.0	1308.9	1309.1	1307.6	1306.2
175°	1311.6	1309.5	1307.4	1305.3	1307.4	1309.5	1311.6	1313.8	1314.0	1312.6	1311.1
177.5°	1312.3	1310.8	1309.3	1307.8	1309.3	1310.8	1312.3	1313.8	1314.0	1312.8	1311.6
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0



TEST NUMBER: P331276-940

CATALOG NUMBER: SA2XXDIP-C290D1080U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1
2.5°	506.5	508.3	511.0	514.0	515.8	519.2	520.1	521.7	523.2	526.6	530.1
5°	477.2	480.1	486.8	490.4	495.4	501.3	505.2	509.3	513.7	521.4	528.5
7.5°	445.9	450.6	459.0	465.7	473.0	481.3	487.4	495.4	502.1	513.0	523.3
10°	425.0	431.7	439.2	447.3	457.4	466.3	474.8	484.9	493.0	506.0	518.2
12.5°	406.2	407.2	417.9	426.9	440.7	451.7	461.5	474.6	482.5	497.9	510.7
15°	373.4	379.4	389.1	396.2	412.6	426.6	440.4	454.0	463.1	482.1	498.9
17.5°	345.6	351.2	361.2	372.8	384.6	398.5	416.3	430.7	443.1	464.8	484.7
20°	328.1	335.0	345.2	357.1	367.5	382.6	398.1	414.5	427.8	452.4	475.6
22.5°	313.3	318.7	326.9	338.7	349.9	363.8	380.7	398.6	412.6	439.1	462.6
25°	292.3	296.8	302.0	311.7	324.5	339.7	352.8	372.6	393.0	417.7	446.2
27.5°	273.4	276.6	281.2	289.8	299.7	313.9	328.5	347.1	367.7	394.6	424.7
30°	261.9	263.9	268.6	275.7	285.4	296.6	311.4	329.1	350.3	377.4	407.3
32.5°	251.9	253.7	256.8	263.5	272.0	281.5	294.8	312.6	332.7	359.4	392.6
35°	236.8	238.2	240.9	246.3	251.0	260.3	271.4	287.7	306.5	332.0	366.4
37.5°	221.8	223.7	225.3	227.7	233.6	239.8	249.4	263.1	281.6	307.4	340.2
40°	211.9	213.5	216.0	217.0	221.8	227.3	235.1	247.7	266.4	289.9	321.9
42.5°	201.8	203.5	204.9	206.1	210.3	215.1	222.2	233.0	249.5	272.3	304.1
45°	188.2	188.4	189.8	192.1	194.0	197.5	202.6	211.9	224.6	246.1	274.9
47.5°	174.3	174.6	174.8	175.8	178.0	181.1	184.5	192.1	203.5	220.6	248.6
50°	165.1	164.7	165.1	165.9	167.3	170.0	173.8	179.2	188.6	204.6	230.3
52.5°	156.1	156.1	155.9	156.1	157.3	159.1	161.8	166.5	174.8	189.5	212.1
55°	142.6	141.6	141.8	141.0	142.9	143.2	145.3	149.1	156.4	166.5	187.8
57.5°	128.1	127.3	126.4	126.2	126.0	127.1	128.7	131.7	137.3	146.2	163.5
60°	118.9	117.9	116.6	116.3	116.3	116.9	117.7	119.9	125.2	133.0	147.2
62.5°	109.5	108.3	107.6	106.6	106.2	106.8	107.6	109.2	113.1	120.5	132.7
65°	95.0	93.5	92.6	92.4	91.9	91.4	91.8	93.4	96.4	102.3	112.0
67.5°	80.4	79.1	78.9	77.7	77.1	77.2	77.1	78.5	80.3	85.4	92.6
70°	70.9	69.9	69.5	68.5	68.0	67.7	67.2	68.5	70.3	74.5	80.8
72.5°	61.2	60.3	59.5	58.6	58.7	58.2	58.1	58.9	60.4	64.3	69.2
75°	47.2	47.4	46.4	45.4	45.2	44.8	44.8	45.4	46.0	49.0	52.9
77.5°	34.2	34.1	33.3	32.9	32.7	32.3	32.7	33.1	33.4	35.5	38.3
80°	26.1	26.1	25.1	25.1	24.9	24.3	24.9	24.5	25.3	27.4	29.3
82.5°	18.6	18.4	18.3	18.0	17.9	17.5	17.7	18.2	18.5	19.9	21.1
85°	9.1	9.1	8.9	8.7	8.9	8.7	8.9	9.1	9.3	9.9	11.0
87.5°	6.0	5.9	5.7	5.5	5.2	5.0	4.8	4.5	4.4	4.0	3.7
90°	20.0	19.0	17.3	15.6	13.9	12.2	10.3	7.9	5.6	3.3	1.0
92.5°	22.6	22.0	21.1	20.3	19.4	18.6	18.3	18.5	18.7	18.9	19.2
95°	38.0	37.0	35.5	34.1	32.5	31.0	33.8	40.8	47.7	54.7	61.6
97.5°	50.3	49.5	46.1	42.6	39.2	35.8	44.0	63.5	83.1	102.7	122.3
100°	55.7	54.0	50.5	46.9	43.2	39.7	52.3	81.2	110.0	138.9	167.8
102.5°	57.8	55.6	85.5	115.5	145.4	175.4	193.4	199.5	205.6	211.7	217.8
105°	60.1	57.8	115.3	172.8	230.3	287.8	313.4	307.1	300.8	294.5	288.2
107.5°	78.6	81.0	149.9	218.9	287.8	356.9	388.8	383.6	378.5	373.4	368.4
110°	144.8	165.9	226.8	287.7	348.5	409.4	437.7	433.2	428.8	424.4	419.9



TEST NUMBER: P331276-940

CATALOG NUMBER: SA2XXDIP-C290D1080U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	341.6	418.4	433.5	448.5	463.5	478.6	484.1	480.2	476.3	472.4	468.5
115°	487.3	584.9	579.6	574.4	569.1	563.8	559.4	555.8	552.2	548.7	545.1
117.5°	624.2	647.8	644.2	640.6	636.9	633.3	629.5	625.5	621.5	617.5	613.5
120°	697.3	694.8	691.1	687.2	683.5	679.7	676.2	673.1	669.9	666.7	663.5
122.5°	741.1	739.6	735.5	731.3	727.2	723.1	719.3	716.0	712.7	709.4	706.1
125°	802.5	801.0	797.0	793.0	789.0	785.0	781.6	778.9	776.1	773.4	770.7
127.5°	858.5	856.4	853.4	850.3	847.4	844.4	841.4	838.4	835.4	832.3	829.3
130°	894.3	892.0	889.7	887.3	885.0	882.7	879.9	876.6	873.2	869.8	866.4
132.5°	929.6	927.6	925.3	923.0	920.7	918.4	915.8	912.9	910.1	907.2	904.3
135°	979.5	977.3	975.4	973.5	971.6	969.7	967.1	963.8	960.4	957.0	953.6
137.5°	1025.8	1023.8	1021.6	1019.5	1017.4	1015.1	1012.9	1010.6	1008.2	1005.8	1003.4
140°	1056.0	1054.1	1051.8	1049.5	1047.1	1044.8	1042.9	1041.2	1039.5	1037.8	1036.1
142.5°	1083.9	1082.2	1079.5	1076.8	1074.2	1071.6	1069.4	1067.9	1066.4	1064.9	1063.4
145°	1122.8	1121.4	1117.8	1114.2	1110.6	1107.1	1105.4	1105.6	1105.8	1106.0	1106.3
147.5°	1157.0	1155.9	1152.4	1148.8	1145.3	1141.7	1140.4	1141.2	1142.0	1142.8	1143.6
150°	1177.7	1176.3	1173.0	1169.7	1166.3	1162.9	1162.0	1163.4	1164.9	1166.4	1167.9
152.5°	1196.6	1195.3	1192.1	1188.9	1185.7	1182.5	1181.8	1183.4	1185.0	1186.7	1188.3
155°	1222.2	1220.9	1218.4	1215.8	1213.4	1210.9	1210.5	1212.4	1214.3	1216.2	1218.1
157.5°	1243.6	1242.2	1240.4	1238.6	1236.9	1235.1	1235.0	1236.6	1238.2	1239.8	1241.4
160°	1256.3	1255.1	1253.8	1252.5	1251.2	1250.0	1250.0	1251.2	1252.5	1253.8	1255.1
162.5°	1267.8	1266.4	1265.3	1264.3	1263.1	1262.0	1262.1	1263.4	1264.6	1266.0	1267.2
165°	1282.1	1280.7	1280.1	1279.4	1278.7	1278.1	1278.4	1279.7	1280.9	1282.2	1283.5
167.5°	1294.1	1292.6	1292.0	1291.4	1290.8	1290.2	1290.6	1291.8	1293.1	1294.4	1295.7
170°	1300.1	1298.7	1298.2	1297.8	1297.4	1297.0	1297.4	1298.7	1299.9	1301.2	1302.4
172.5°	1304.7	1303.2	1302.8	1302.3	1302.0	1301.5	1302.0	1303.2	1304.5	1305.7	1307.0
175°	1309.7	1308.1	1307.7	1307.3	1306.9	1306.4	1307.0	1308.5	1309.9	1311.4	1312.9
177.5°	1310.5	1309.3	1309.1	1308.9	1308.8	1308.6	1309.1	1310.3	1311.4	1312.7	1313.8
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0



TEST NUMBER: P331276-940

CATALOG NUMBER: SA2XXDIP-C290D1080U940-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1	527.1
2.5°	529.9	530.7	533.2	535.8	538.8	539.6	540.8	539.8	539.4	542.4	544.7
5°	531.4	534.9	542.1	548.6	554.0	557.9	562.0	563.6	566.6	570.8	576.1
7.5°	529.6	536.7	547.9	557.3	567.6	575.0	580.8	585.8	591.7	599.8	608.6
10°	527.7	537.2	550.8	562.3	574.9	584.4	592.3	600.0	608.9	620.1	631.6
12.5°	524.1	535.4	552.4	566.1	582.2	591.6	602.2	618.8	628.4	643.9	660.1
15°	516.9	529.5	553.2	570.0	588.3	606.1	625.7	641.5	657.3	666.5	689.3
17.5°	506.3	524.7	551.0	570.6	593.8	621.8	643.9	661.8	680.0	694.8	706.3
20°	497.7	517.7	547.8	571.2	598.8	628.9	654.2	672.5	688.3	700.7	707.8
22.5°	486.9	512.1	541.3	568.8	604.0	633.8	660.4	674.8	688.0	694.0	696.8
25°	469.8	500.2	533.2	566.8	606.5	638.1	662.4	671.1	674.9	669.1	659.3
27.5°	451.3	485.2	523.8	562.9	604.9	635.3	652.7	651.4	644.9	625.8	610.6
30°	437.6	474.8	516.3	559.1	601.2	630.8	640.9	630.8	616.0	594.8	573.0
32.5°	423.1	461.7	508.4	553.6	594.4	620.5	622.6	605.2	582.3	558.1	531.1
35°	401.3	443.0	493.5	541.3	580.0	596.4	586.7	555.8	528.7	495.7	458.8
37.5°	376.6	422.7	473.2	523.3	558.3	562.6	538.4	506.0	467.7	428.9	385.5
40°	358.1	407.0	459.1	509.4	540.5	536.0	505.2	469.6	424.0	376.6	336.3
42.5°	341.6	390.4	443.4	492.9	517.7	505.5	469.6	425.8	376.8	332.2	295.2
45°	313.0	363.2	417.5	465.3	479.5	457.4	409.8	361.1	313.0	275.7	246.6
47.5°	285.2	334.8	388.6	430.6	435.6	405.9	353.9	303.9	262.4	232.1	211.5
50°	264.7	314.6	367.8	405.4	403.7	367.8	314.4	266.8	232.1	207.6	193.9
52.5°	246.5	293.6	344.6	378.8	370.1	331.1	280.0	237.7	209.3	190.1	177.6
55°	217.9	261.5	310.1	337.5	321.6	278.3	235.1	201.2	180.0	165.7	156.0
57.5°	189.7	230.5	272.2	289.0	271.5	231.5	195.6	170.9	155.0	144.4	138.0
60°	172.2	207.9	244.9	259.5	238.6	203.0	174.6	152.6	139.7	131.1	125.4
62.5°	154.7	186.6	221.6	229.5	210.4	180.3	155.2	136.8	126.4	118.6	113.2
65°	130.8	157.0	183.5	188.8	171.2	147.8	128.0	116.1	106.7	101.1	96.8
67.5°	107.4	128.3	147.1	151.3	135.9	119.8	105.4	95.0	88.7	84.0	80.3
70°	93.4	110.0	125.4	128.9	116.5	102.1	91.1	82.8	77.1	73.1	69.6
72.5°	78.6	92.5	105.3	107.6	97.6	86.5	77.6	71.0	66.0	63.4	60.1
75°	60.2	68.3	78.2	78.8	72.1	65.5	58.6	54.3	51.6	48.4	46.8
77.5°	42.4	48.8	54.5	55.6	51.6	47.1	43.2	39.9	37.6	36.1	34.6
80°	32.4	37.5	39.9	41.3	38.5	35.2	33.0	30.8	29.3	28.4	27.4
82.5°	23.2	26.3	28.5	29.7	28.1	26.1	24.0	22.6	21.6	20.8	20.4
85°	11.8	13.2	14.6	15.0	14.6	13.7	12.6	12.6	11.9	11.8	11.8
87.5°	4.7	5.8	6.2	7.2	7.3	7.7	7.9	8.1	8.3	8.4	8.4
90°	3.3	5.6	7.9	10.3	12.2	13.9	15.6	17.3	19.0	20.0	21.0
92.5°	18.9	18.7	18.5	18.3	18.6	19.4	20.3	21.1	22.0	22.6	23.1
95°	54.7	47.7	40.8	33.8	31.0	32.5	34.1	35.5	37.0	38.0	39.1
97.5°	102.7	83.1	63.5	44.0	35.8	39.2	42.6	46.1	49.5	50.3	51.2
100°	138.9	110.0	81.2	52.3	39.7	43.2	46.9	50.5	54.0	55.7	57.4
102.5°	211.7	205.6	199.5	193.4	175.4	145.4	115.5	85.5	55.6	57.8	59.9
105°	294.5	300.8	307.1	313.4	287.8	230.3	172.8	115.3	57.8	60.1	62.4
107.5°	373.4	378.5	383.6	388.8	356.9	287.8	218.9	149.9	81.0	78.6	76.2
110°	424.4	428.8	433.2	437.7	409.4	348.5	287.7	226.8	165.9	144.8	123.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	472.4	476.3	480.2	484.1	478.6	463.5	448.5	433.5	418.4	341.6	264.7
115°	548.7	552.2	555.8	559.4	563.8	569.1	574.4	579.6	584.9	487.3	389.8
117.5°	617.5	621.5	625.5	629.5	633.3	636.9	640.6	644.2	647.8	624.2	600.7
120°	666.7	669.9	673.1	676.2	679.7	683.5	687.2	691.1	694.8	697.3	699.9
122.5°	709.4	712.7	716.0	719.3	723.1	727.2	731.3	735.5	739.6	741.1	742.6
125°	773.4	776.1	778.9	781.6	785.0	789.0	793.0	797.0	801.0	802.5	804.0
127.5°	832.3	835.4	838.4	841.4	844.4	847.4	850.3	853.4	856.4	858.5	860.7
130°	869.8	873.2	876.6	879.9	882.7	885.0	887.3	889.7	892.0	894.3	896.6
132.5°	907.2	910.1	912.9	915.8	918.4	920.7	923.0	925.3	927.6	929.6	931.6
135°	957.0	960.4	963.8	967.1	969.7	971.6	973.5	975.4	977.3	979.5	981.5
137.5°	1005.8	1008.2	1010.6	1012.9	1015.1	1017.4	1019.5	1021.6	1023.8	1025.8	1027.9
140°	1037.8	1039.5	1041.2	1042.9	1044.8	1047.1	1049.5	1051.8	1054.1	1056.0	1057.9
142.5°	1064.9	1066.4	1067.9	1069.4	1071.6	1074.2	1076.8	1079.5	1082.2	1083.9	1085.6
145°	1106.0	1105.8	1105.6	1105.4	1107.1	1110.6	1114.2	1117.8	1121.4	1122.8	1124.4
147.5°	1142.8	1142.0	1141.2	1140.4	1141.7	1145.3	1148.8	1152.4	1155.9	1157.0	1158.1
150°	1166.4	1164.9	1163.4	1162.0	1162.9	1166.3	1169.7	1173.0	1176.3	1177.7	1178.9
152.5°	1186.7	1185.0	1183.4	1181.8	1182.5	1185.7	1188.9	1192.1	1195.3	1196.6	1197.8
155°	1216.2	1214.3	1212.4	1210.5	1210.9	1213.4	1215.8	1218.4	1220.9	1222.2	1223.4
157.5°	1239.8	1238.2	1236.6	1235.0	1235.1	1236.9	1238.6	1240.4	1242.2	1243.6	1245.0
160°	1253.8	1252.5	1251.2	1250.0	1250.0	1251.2	1252.5	1253.8	1255.1	1256.3	1257.6
162.5°	1266.0	1264.6	1263.4	1262.1	1262.0	1263.1	1264.3	1265.3	1266.4	1267.8	1269.3
165°	1282.2	1280.9	1279.7	1278.4	1278.1	1278.7	1279.4	1280.1	1280.7	1282.1	1283.6
167.5°	1294.4	1293.1	1291.8	1290.6	1290.2	1290.8	1291.4	1292.0	1292.6	1294.1	1295.6
170°	1301.2	1299.9	1298.7	1297.4	1297.0	1297.4	1297.8	1298.2	1298.7	1300.1	1301.6
172.5°	1305.7	1304.5	1303.2	1302.0	1301.5	1302.0	1302.3	1302.8	1303.2	1304.7	1306.2
175°	1311.4	1309.9	1308.5	1307.0	1306.4	1306.9	1307.3	1307.7	1308.1	1309.7	1311.1
177.5°	1312.7	1311.4	1310.3	1309.1	1308.6	1308.8	1308.9	1309.1	1309.3	1310.5	1311.6
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	527.1	527.1	527.1	527.1	527.1	527.1	527.1
2.5°	546.7	548.9	548.9	549.3	551.9	551.5	551.3
5°	581.8	585.2	585.6	589.2	591.7	590.8	588.6
7.5°	614.8	621.3	626.2	628.8	632.0	634.0	633.1
10°	641.1	650.4	656.1	660.0	664.6	668.1	666.8
12.5°	664.9	676.0	683.9	690.5	691.0	695.4	692.4
15°	702.1	713.8	715.1	719.9	723.8	723.4	723.5
17.5°	714.3	718.1	718.9	719.0	719.1	717.6	714.5
20°	710.0	708.6	705.2	702.5	697.9	697.2	693.2
22.5°	689.2	684.7	676.1	670.4	663.2	661.3	660.1
25°	648.5	638.5	624.7	611.5	607.9	600.8	602.8
27.5°	592.4	576.9	562.0	551.3	541.6	531.0	534.0
30°	553.0	535.6	514.5	498.3	487.9	477.9	476.0
32.5°	506.0	480.5	457.0	442.7	426.9	420.4	413.5
35°	425.0	400.0	376.7	356.7	345.2	336.3	328.1
37.5°	352.1	323.4	304.6	288.4	280.0	274.9	276.3
40°	306.9	281.8	268.0	255.7	247.9	244.3	245.1
42.5°	270.3	251.5	240.1	231.7	226.2	224.2	223.7
45°	228.7	218.2	208.8	204.0	201.3	199.1	197.7
47.5°	200.4	191.7	186.5	183.6	181.3	179.1	179.0
50°	183.3	177.6	174.0	170.9	169.2	167.6	169.0
52.5°	170.3	165.1	161.5	158.8	158.1	156.7	156.6
55°	151.1	147.0	144.5	142.0	140.8	140.0	138.9
57.5°	133.6	129.7	127.3	125.8	123.5	122.7	122.3
60°	121.1	118.1	115.7	113.6	112.6	111.0	111.0
62.5°	109.6	106.6	104.3	102.8	101.1	100.5	100.7
65°	93.0	90.5	88.3	86.7	86.3	85.1	85.5
67.5°	77.7	76.1	73.7	72.8	72.1	71.4	70.9
70°	67.4	65.8	64.6	63.4	62.8	62.8	62.8
72.5°	58.9	56.9	56.2	54.7	55.0	54.4	53.7
75°	45.6	44.3	43.8	43.2	42.2	42.2	42.2
77.5°	33.5	33.2	32.5	31.8	31.6	31.4	31.5
80°	25.9	25.7	25.3	25.3	24.9	24.7	24.3
82.5°	20.0	19.4	19.2	19.0	18.9	18.9	18.8
85°	11.3	11.0	11.0	11.1	10.7	10.7	11.0
87.5°	8.8	9.0	9.0	9.1	9.4	9.3	9.4
90°	22.1	23.2	23.9	24.3	24.8	25.1	25.6
92.5°	23.6	24.2	24.6	24.9	25.1	25.3	25.6
95°	40.1	41.2	41.6	41.4	41.2	40.9	40.8
97.5°	52.0	52.9	53.4	53.7	53.9	54.1	54.4
100°	59.1	60.8	61.8	62.2	62.7	63.1	63.5
102.5°	62.2	64.3	65.7	66.3	66.9	67.5	68.0
105°	64.7	67.1	68.7	69.6	70.4	71.2	72.1
107.5°	73.8	71.5	70.8	71.6	72.4	73.3	74.1
110°	102.7	81.6	71.5	72.3	73.2	74.0	74.9



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	187.9	111.0	72.9	73.7	74.3	75.0	75.6
115°	292.3	194.7	138.4	123.2	108.1	92.9	77.8
117.5°	577.0	553.5	516.7	466.9	417.1	367.2	317.4
120°	702.4	705.0	692.0	663.5	635.1	606.6	578.3
122.5°	744.1	745.6	743.6	738.2	732.6	727.1	721.6
125°	805.4	806.9	808.0	808.6	809.2	809.9	810.5
127.5°	862.8	865.0	866.1	866.2	866.4	866.5	866.6
130°	898.9	901.3	902.3	902.1	901.9	901.7	901.5
132.5°	933.6	935.6	936.5	936.2	936.0	935.9	935.6
135°	983.6	985.7	986.6	986.1	985.7	985.3	984.9
137.5°	1029.9	1032.0	1032.7	1032.0	1031.3	1030.6	1029.8
140°	1059.8	1061.7	1062.1	1061.0	1060.0	1058.9	1057.9
142.5°	1087.4	1089.0	1089.4	1088.3	1087.3	1086.3	1085.2
145°	1125.8	1127.3	1127.5	1126.5	1125.4	1124.4	1123.3
147.5°	1159.2	1160.3	1160.4	1159.5	1158.6	1157.7	1156.8
150°	1180.2	1181.4	1181.5	1180.4	1179.5	1178.4	1177.3
152.5°	1199.2	1200.4	1200.3	1198.9	1197.6	1196.1	1194.8
155°	1224.8	1226.0	1225.7	1224.1	1222.4	1220.8	1219.1
157.5°	1246.4	1247.9	1247.8	1246.2	1244.5	1242.9	1241.2
160°	1258.8	1260.1	1260.0	1258.6	1257.0	1255.6	1254.1
162.5°	1270.7	1272.2	1271.9	1270.2	1268.4	1266.5	1264.7
165°	1285.0	1286.6	1286.6	1285.0	1283.6	1282.1	1280.7
167.5°	1297.0	1298.5	1298.2	1296.4	1294.5	1292.6	1290.7
170°	1303.1	1304.6	1304.3	1302.4	1300.6	1298.7	1296.7
172.5°	1307.6	1309.1	1308.9	1307.0	1305.1	1303.2	1301.3
175°	1312.6	1314.0	1313.8	1311.6	1309.5	1307.4	1305.3
177.5°	1312.8	1314.0	1313.8	1312.3	1310.8	1309.3	1307.8
180°	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0

(END OF REPORT)