

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

Luminaire Tested: **SA2XXDIP-C290D1080U835-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331276
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-C290D1080U835-4F0-1E-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: 5613.0 lumens
Efficiency: N/A
Efficacy: 133.0 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

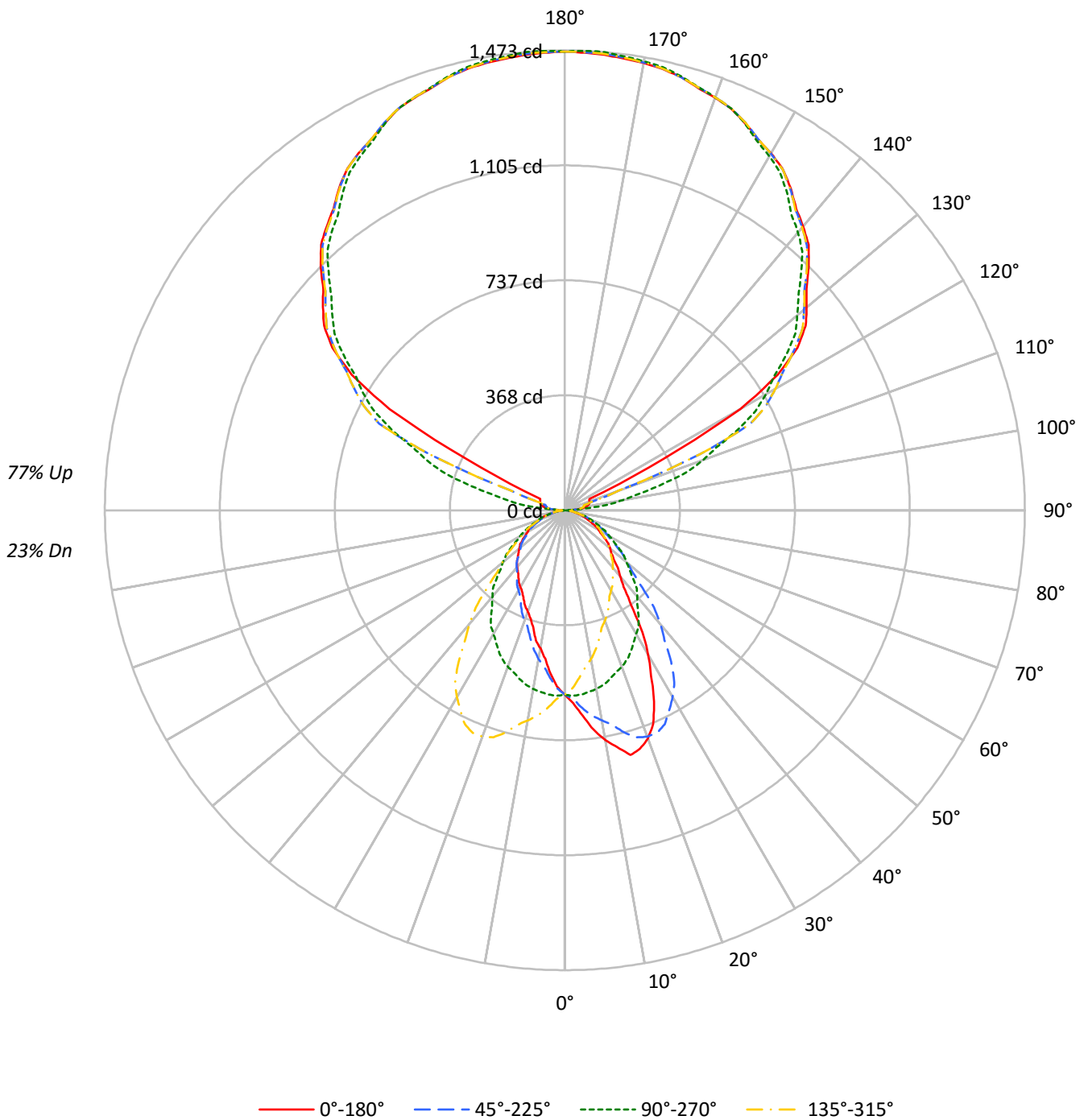
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



77% Up

23% Dn



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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°	9544	9544	9544	9544
5°	10699	9606	8512	9606
10°	12260	9527	7366	9527
15°	13563	9352	6509	9352
20°	13357	9165	5933	9165
25°	12043	8915	5569	8915
30°	9952	8516	5302	8516
35°	7253	8099	5113	8099
40°	5794	7609	5008	7609
45°	5062	7040	4866	7040
50°	4760	6488	4770	6488
55°	4386	5928	4642	5928
60°	4020	5331	4447	5331
65°	3664	4798	4252	4798
70°	3323	4277	3970	4277
75°	2951	3699	3512	3699
80°	2538	3059	2827	3059
85°	2279	2279	1686	2279



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.3	1.0
10°-20°	163.7	2.9
20°-30°	237.5	4.2
30°-40°	250.6	4.5
40°-50°	221.9	4.0
50°-60°	177.1	3.2
60°-70°	120.4	2.1
70°-80°	61.7	1.1
80°-90°	18.5	0.3
90°-100°	49.0	0.9
100°-110°	179.7	3.2
110°-120°	480.4	8.6
120°-130°	793.0	14.1
130°-140°	843.3	15.0
140°-150°	783.8	14.0
150°-160°	630.2	11.2
160°-170°	406.1	7.2
170°-180°	139.8	2.5
0°-30°	457.5	8.1
0°-40°	708.1	12.6
0°-60°	1107.1	19.7
0°-90°	1307.7	23.3
90°-120°	709.1	12.6
90°-150°	3129.2	55.8
90°-180°	4305.0	76.7
0°-180°	5613.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	591	591	591	591	591	
5°	660	593	525	593	660	66
15°	811	560	389	560	811	224
25°	676	500	313	500	676	306
35°	368	411	259	411	368	239
45°	222	308	213	308	222	174
55°	156	211	165	211	156	140
65°	96	126	111	126	96	95
75°	47	59	56	59	47	51
85°	12	12	9	12	12	14
90°	29	1	29	1	29	13
95°	46	69	46	69	46	43
105°	81	323	81	323	81	84
115°	87	611	87	611	87	218
125°	909	864	909	864	909	786
135°	1104	1069	1104	1069	1104	851
145°	1260	1241	1260	1241	1260	788
155°	1367	1366	1367	1366	1367	631
165°	1436	1439	1436	1439	1436	405
175°	1464	1472	1464	1472	1464	139
180°	1469	1469	1469	1469	1469	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	618.3	618.5	618.9	616.0	615.6	615.6	613.1	610.9	608.3	604.9	605.3
5°	660.1	662.6	663.5	660.8	656.7	656.3	652.4	646.1	640.1	635.4	632.0
7.5°	710.0	711.0	708.8	705.2	702.2	696.7	689.5	682.5	672.6	663.6	656.9
10°	747.8	749.2	745.3	740.1	735.8	729.4	719.0	708.3	695.4	682.9	672.9
12.5°	776.5	779.9	774.9	774.3	766.9	758.1	745.7	740.3	722.1	704.7	693.9
15°	811.4	811.2	811.7	807.3	801.9	800.5	787.4	773.0	747.4	737.1	719.4
17.5°	801.3	804.8	806.4	806.3	806.2	805.3	801.1	792.1	779.2	762.6	742.2
20°	777.4	781.9	782.6	787.8	790.8	794.6	796.2	793.7	785.8	771.9	754.2
22.5°	740.3	741.6	743.7	751.8	758.2	767.9	772.9	781.4	778.3	771.5	756.7
25°	676.0	673.8	681.7	685.8	700.6	716.0	727.2	739.4	750.3	756.9	752.6
27.5°	598.9	595.5	607.4	618.3	630.2	647.0	664.3	684.8	701.8	723.2	730.5
30°	533.8	535.9	547.2	558.8	577.0	600.6	620.2	642.6	667.0	690.8	707.4
32.5°	463.7	471.5	478.7	496.5	512.5	538.8	567.5	595.6	625.9	653.0	678.7
35°	368.0	377.1	387.1	400.0	422.5	448.6	476.6	514.5	555.9	592.9	623.3
37.5°	309.8	308.3	314.0	323.4	341.6	362.7	394.9	432.3	481.0	524.5	567.5
40°	274.9	274.0	278.0	286.7	300.5	316.0	344.2	377.1	422.3	475.5	526.6
42.5°	250.9	251.4	253.7	259.8	269.3	282.0	303.1	331.1	372.5	422.6	477.5
45°	221.7	223.3	225.8	228.8	234.2	244.7	256.5	276.5	309.2	351.0	405.0
47.5°	200.7	200.8	203.3	205.9	209.1	215.0	224.7	237.2	260.3	294.3	340.8
50°	189.5	187.9	189.7	191.7	195.1	199.2	205.6	217.4	232.8	260.3	299.2
52.5°	175.6	175.7	177.3	178.1	181.1	185.2	191.0	199.2	213.2	234.7	266.6
55°	155.8	157.0	157.9	159.2	162.0	164.9	169.5	174.9	185.8	201.9	225.6
57.5°	137.2	137.6	138.5	141.1	142.8	145.5	149.8	154.8	161.9	173.8	191.6
60°	124.5	124.5	126.3	127.4	129.7	132.4	135.8	140.6	147.0	156.7	171.1
62.5°	112.9	112.7	113.4	115.3	117.0	119.5	122.9	127.0	133.0	141.7	153.4
65°	95.9	95.4	96.8	97.2	99.0	101.5	104.3	108.6	113.4	119.7	130.2
67.5°	79.5	80.1	80.8	81.6	82.6	85.3	87.1	90.1	94.2	99.5	106.5
70°	70.4	70.4	70.4	71.1	72.5	73.8	75.6	78.1	82.0	86.5	92.9
72.5°	60.2	61.0	61.7	61.3	63.0	63.8	66.0	67.4	71.1	74.0	79.6
75°	47.3	47.3	47.3	48.4	49.1	49.7	51.1	52.5	54.3	57.9	60.9
77.5°	35.3	35.2	35.4	35.7	36.4	37.2	37.6	38.8	40.5	42.2	44.7
80°	27.3	27.7	27.9	28.4	28.4	28.8	29.1	30.7	31.8	32.9	34.5
82.5°	21.1	21.2	21.2	21.3	21.5	21.8	22.4	22.9	23.3	24.2	25.4
85°	12.3	12.0	12.0	12.5	12.3	12.3	12.7	13.2	13.2	13.4	14.1
87.5°	10.5	10.4	10.5	10.2	10.1	10.1	9.9	9.4	9.4	9.3	9.1
90°	28.7	28.2	27.8	27.3	26.8	26.0	24.8	23.6	22.4	21.3	19.4
92.5°	28.7	28.4	28.1	27.9	27.6	27.1	26.5	25.9	25.3	24.7	23.7
95°	45.7	45.9	46.2	46.4	46.7	46.2	45.0	43.8	42.6	41.5	39.8
97.5°	61.0	60.7	60.5	60.2	59.9	59.3	58.3	57.4	56.4	55.5	51.7
100°	71.2	70.8	70.3	69.8	69.3	68.2	66.3	64.4	62.5	60.6	56.6
102.5°	76.3	75.7	75.0	74.3	73.7	72.1	69.7	67.2	64.8	62.3	95.9
105°	80.8	79.8	78.9	78.0	77.0	75.2	72.6	70.0	67.4	64.8	129.3
107.5°	83.1	82.2	81.2	80.3	79.4	80.2	82.8	85.5	88.1	90.8	168.1
110°	84.0	83.0	82.1	81.1	80.2	91.5	115.2	138.8	162.4	186.0	254.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	84.8	84.1	83.3	82.6	81.8	124.5	210.7	296.9	383.1	469.2	486.1
115°	87.2	104.2	121.2	138.2	155.2	218.4	327.8	437.1	546.5	655.9	650.0
117.5°	355.9	411.8	467.7	523.6	579.5	620.7	647.1	673.6	700.0	726.5	722.4
120°	648.5	680.3	712.2	744.1	776.0	790.6	787.7	784.9	782.0	779.2	775.0
122.5°	809.2	815.4	821.6	827.8	833.9	836.2	834.5	832.8	831.1	829.4	824.8
125°	908.9	908.2	907.5	906.8	906.1	904.9	903.2	901.6	899.9	898.3	893.8
127.5°	971.8	971.7	971.6	971.4	971.3	970.0	967.6	965.2	962.8	960.4	957.0
130°	1011.0	1011.2	1011.4	1011.7	1011.9	1010.7	1008.1	1005.5	1002.9	1000.3	997.7
132.5°	1049.2	1049.5	1049.7	1049.9	1050.2	1049.2	1047.0	1044.7	1042.5	1040.3	1037.7
135°	1104.5	1105.0	1105.4	1105.9	1106.4	1105.4	1103.1	1100.7	1098.4	1096.0	1093.9
137.5°	1154.9	1155.7	1156.5	1157.3	1158.1	1157.3	1155.0	1152.7	1150.4	1148.1	1145.7
140°	1186.4	1187.5	1188.7	1189.9	1191.1	1190.6	1188.5	1186.4	1184.2	1182.1	1179.5
142.5°	1217.0	1218.2	1219.3	1220.5	1221.7	1221.3	1219.4	1217.4	1215.5	1213.6	1210.6
145°	1259.7	1260.9	1262.1	1263.3	1264.4	1264.2	1262.5	1260.9	1259.2	1257.6	1253.6
147.5°	1297.3	1298.3	1299.3	1300.3	1301.3	1301.2	1300.0	1298.7	1297.5	1296.3	1292.3
150°	1320.3	1321.5	1322.7	1323.8	1325.0	1324.9	1323.5	1322.1	1320.7	1319.2	1315.5
152.5°	1339.9	1341.4	1343.0	1344.5	1346.1	1346.2	1344.8	1343.3	1341.9	1340.5	1336.9
155°	1367.1	1369.0	1370.9	1372.7	1374.6	1374.9	1373.5	1372.0	1370.6	1369.2	1366.4
157.5°	1391.9	1393.8	1395.6	1397.5	1399.3	1399.4	1397.8	1396.2	1394.6	1393.0	1391.0
160°	1406.4	1408.1	1409.7	1411.4	1413.0	1413.1	1411.7	1410.3	1408.9	1407.5	1406.1
162.5°	1418.3	1420.3	1422.4	1424.4	1426.4	1426.7	1425.0	1423.4	1421.8	1420.2	1419.0
165°	1436.2	1437.8	1439.5	1441.1	1442.8	1442.8	1441.1	1439.5	1437.8	1436.2	1435.5
167.5°	1447.4	1449.6	1451.7	1453.8	1455.9	1456.2	1454.5	1452.9	1451.2	1449.6	1448.9
170°	1454.2	1456.4	1458.5	1460.6	1462.7	1463.0	1461.3	1459.7	1458.0	1456.4	1455.9
172.5°	1459.3	1461.5	1463.6	1465.7	1467.9	1468.1	1466.4	1464.8	1463.1	1461.5	1461.0
175°	1463.8	1466.2	1468.5	1470.9	1473.3	1473.6	1472.0	1470.3	1468.7	1467.0	1466.5
177.5°	1466.6	1468.3	1470.0	1471.7	1473.4	1473.6	1472.2	1470.9	1469.6	1468.3	1468.1
180°	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	606.5	605.1	604.2	600.9	598.0	595.1	594.2	594.5	590.5	586.7	585.1
5°	630.2	625.6	621.3	615.2	607.9	599.9	595.9	592.7	584.7	576.1	571.1
7.5°	651.3	644.8	636.5	625.0	614.4	601.9	593.9	586.9	575.3	563.1	555.6
10°	664.2	655.4	644.7	630.6	617.7	602.4	591.8	581.1	567.5	552.9	543.8
12.5°	675.3	663.4	652.9	634.8	619.5	600.4	587.8	572.7	558.4	541.1	532.2
15°	701.7	679.7	659.7	639.2	620.4	593.8	579.7	559.5	540.7	519.3	509.1
17.5°	722.1	697.3	665.9	639.9	617.9	588.4	567.8	543.6	521.3	496.9	483.0
20°	733.7	705.3	671.5	640.6	614.3	580.6	558.1	533.4	507.3	479.8	464.8
22.5°	740.6	710.8	677.3	637.9	607.0	574.3	546.0	518.8	492.4	462.7	447.0
25°	742.8	715.6	680.1	635.6	597.9	560.9	526.8	500.4	468.4	440.7	417.8
27.5°	732.0	712.5	678.4	631.3	587.4	544.1	506.1	476.3	442.5	412.4	389.3
30°	718.7	707.4	674.2	627.0	579.0	532.5	490.7	456.8	423.2	392.8	369.1
32.5°	698.2	695.8	666.6	620.8	570.1	517.8	474.5	440.3	403.0	373.1	350.6
35°	657.9	668.8	650.4	607.0	553.4	496.8	450.0	410.9	372.3	343.7	322.6
37.5°	603.8	630.9	626.1	586.8	530.7	474.0	422.3	381.5	344.7	315.8	295.1
40°	566.5	601.1	606.1	571.3	514.8	456.4	401.6	361.0	325.1	298.7	277.8
42.5°	526.6	566.9	580.6	552.8	497.3	437.8	383.1	341.0	305.4	279.8	261.3
45°	459.6	512.9	537.7	521.8	468.2	407.3	351.0	308.3	276.0	251.9	237.6
47.5°	396.9	455.2	488.5	482.9	435.8	375.5	319.8	278.8	247.4	228.2	215.4
50°	352.6	412.5	452.7	454.6	412.5	352.8	296.9	258.3	229.4	211.5	201.0
52.5°	314.0	371.3	415.1	424.8	386.5	329.2	276.4	237.9	212.5	196.0	186.7
55°	263.7	312.1	360.7	378.5	347.8	293.3	244.4	210.6	186.7	175.4	167.2
57.5°	219.3	259.6	304.5	324.1	305.2	258.5	212.7	183.3	164.0	154.0	147.7
60°	195.8	227.6	267.6	291.0	274.6	233.1	193.1	165.1	149.2	140.4	134.5
62.5°	174.0	202.2	236.0	257.4	248.5	209.3	173.5	148.8	135.1	126.8	122.5
65°	143.6	165.8	192.0	211.7	205.8	176.1	146.7	125.6	114.7	108.1	104.7
67.5°	118.2	134.3	152.4	169.7	165.0	143.9	120.4	103.9	95.8	90.1	88.0
70°	102.2	114.5	130.6	144.5	140.6	123.4	104.7	90.6	83.6	78.8	76.8
72.5°	87.0	97.0	109.4	120.7	118.1	103.7	88.2	77.6	72.1	67.7	66.1
75°	65.7	73.4	80.9	88.4	87.7	76.6	67.5	59.3	55.0	51.6	50.9
77.5°	48.5	52.8	57.9	62.3	61.1	54.7	47.6	42.9	39.8	37.5	37.1
80°	37.0	39.5	43.2	46.3	44.8	42.0	36.3	32.9	30.7	28.4	27.5
82.5°	26.9	29.3	31.5	33.3	32.0	29.5	26.0	23.7	22.3	20.8	20.4
85°	14.1	15.4	16.4	16.8	16.4	14.8	13.2	12.3	11.1	10.4	10.2
87.5°	8.9	8.6	8.2	8.1	7.0	6.5	5.3	4.2	4.5	4.9	5.0
90°	17.5	15.6	13.7	11.5	8.9	6.3	3.7	1.1	3.7	6.3	8.9
92.5°	22.8	21.8	20.9	20.5	20.8	21.0	21.2	21.5	21.2	21.0	20.8
95°	38.2	36.5	34.8	37.9	45.7	53.5	61.3	69.1	61.3	53.5	45.7
97.5°	47.8	44.0	40.2	49.3	71.2	93.2	115.2	137.1	115.2	93.2	71.2
100°	52.6	48.5	44.5	58.7	91.1	123.4	155.8	188.2	155.8	123.4	91.1
102.5°	129.5	163.1	196.7	216.9	223.7	230.6	237.4	244.3	237.4	230.6	223.7
105°	193.8	258.3	322.8	351.5	344.4	337.3	330.3	323.2	330.3	337.3	344.4
107.5°	245.5	322.8	400.2	436.0	430.2	424.5	418.8	413.1	418.8	424.5	430.2
110°	322.6	390.8	459.1	490.8	485.8	480.9	475.9	470.9	475.9	480.9	485.8



TEST NUMBER: P331276

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	503.0	519.8	536.7	542.9	538.5	534.1	529.8	525.4	529.8	534.1	538.5
115°	644.1	638.2	632.3	627.3	623.3	619.3	615.3	611.3	615.3	619.3	623.3
117.5°	718.4	714.3	710.2	706.0	701.5	697.0	692.5	688.0	692.5	697.0	701.5
120°	770.7	766.5	762.2	758.3	754.8	751.2	747.7	744.1	747.7	751.2	754.8
122.5°	820.1	815.5	810.9	806.7	803.0	799.2	795.5	791.8	795.5	799.2	803.0
125°	889.3	884.8	880.3	876.5	873.5	870.4	867.3	864.3	867.3	870.4	873.5
127.5°	953.6	950.3	946.9	943.6	940.2	936.8	933.4	930.0	933.4	936.8	940.2
130°	995.1	992.5	989.9	986.7	983.0	979.2	975.4	971.6	975.4	979.2	983.0
132.5°	1035.1	1032.5	1029.9	1027.0	1023.8	1020.6	1017.4	1014.1	1017.4	1020.6	1023.8
135°	1091.7	1089.6	1087.5	1084.5	1080.8	1077.0	1073.2	1069.4	1073.2	1077.0	1080.8
137.5°	1143.3	1140.9	1138.4	1135.9	1133.3	1130.6	1128.0	1125.3	1128.0	1130.6	1133.3
140°	1176.9	1174.3	1171.7	1169.5	1167.6	1165.7	1163.8	1161.9	1163.8	1165.7	1167.6
142.5°	1207.6	1204.6	1201.7	1199.3	1197.6	1195.9	1194.2	1192.5	1194.2	1195.9	1197.6
145°	1249.5	1245.5	1241.5	1239.6	1239.9	1240.1	1240.3	1240.6	1240.3	1240.1	1239.9
147.5°	1288.3	1284.4	1280.4	1278.9	1279.8	1280.7	1281.6	1282.5	1281.6	1280.7	1279.8
150°	1311.7	1307.9	1304.1	1303.1	1304.7	1306.4	1308.0	1309.7	1308.0	1306.4	1304.7
152.5°	1333.3	1329.7	1326.1	1325.3	1327.1	1328.9	1330.8	1332.6	1330.8	1328.9	1327.1
155°	1363.5	1360.7	1357.9	1357.5	1359.6	1361.8	1363.9	1366.0	1363.9	1361.8	1359.6
157.5°	1389.0	1387.1	1385.1	1385.0	1386.8	1388.6	1390.4	1392.2	1390.4	1388.6	1386.8
160°	1404.6	1403.2	1401.8	1401.8	1403.2	1404.6	1406.1	1407.5	1406.1	1404.6	1403.2
162.5°	1417.8	1416.5	1415.3	1415.4	1416.8	1418.2	1419.7	1421.1	1419.7	1418.2	1416.8
165°	1434.8	1434.0	1433.3	1433.7	1435.1	1436.5	1437.9	1439.4	1437.9	1436.5	1435.1
167.5°	1448.2	1447.6	1446.9	1447.3	1448.7	1450.1	1451.6	1453.0	1451.6	1450.1	1448.7
170°	1455.4	1455.0	1454.5	1455.0	1456.4	1457.8	1459.2	1460.6	1459.2	1457.8	1456.4
172.5°	1460.5	1460.1	1459.6	1460.1	1461.5	1462.9	1464.3	1465.7	1464.3	1462.9	1461.5
175°	1466.1	1465.6	1465.1	1465.7	1467.4	1469.0	1470.7	1472.3	1470.7	1469.0	1467.4
177.5°	1467.9	1467.7	1467.5	1468.1	1469.4	1470.7	1472.1	1473.4	1472.1	1470.7	1469.4
180°	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1



TEST NUMBER: P331276

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	583.3	582.2	578.4	576.4	573.1	570.0	568.0	568.9	569.6	569.3	568.7
5°	566.5	562.2	555.6	550.0	545.9	538.4	535.2	533.6	532.2	530.7	529.1
7.5°	546.6	539.8	530.4	522.3	514.7	505.3	500.0	496.9	493.6	490.0	486.8
10°	532.5	522.9	512.9	501.6	492.5	484.1	476.6	471.6	467.0	462.7	459.6
12.5°	517.6	506.6	494.2	478.7	468.7	456.6	455.5	446.7	439.6	436.9	433.2
15°	493.9	478.4	462.7	444.3	436.4	425.5	418.7	411.8	405.7	401.4	400.3
17.5°	466.9	446.9	431.3	418.1	405.1	393.9	387.6	382.2	377.1	371.4	370.6
20°	446.4	429.1	412.1	400.5	387.1	375.7	368.0	362.6	358.2	354.8	351.9
22.5°	426.9	408.0	392.4	379.8	366.6	357.4	351.3	346.0	342.4	338.7	335.9
25°	395.7	381.0	363.9	349.6	338.7	332.8	327.8	323.3	321.0	318.5	315.3
27.5°	368.4	352.0	336.1	325.0	315.4	310.2	306.6	303.5	301.4	299.9	298.1
30°	349.2	332.6	320.1	309.2	301.2	296.0	293.7	291.9	289.4	288.5	287.6
32.5°	330.6	315.7	305.0	295.5	288.0	284.5	282.5	280.8	278.9	278.0	276.1
35°	304.4	291.9	281.5	276.2	270.1	267.1	265.6	263.3	261.5	260.6	260.3
37.5°	279.7	268.9	262.0	255.3	252.7	250.9	248.7	247.2	246.6	246.5	246.2
40°	263.7	254.9	248.7	243.3	242.2	239.4	237.6	236.3	236.3	236.5	236.3
42.5°	249.2	241.2	235.8	231.1	229.8	228.2	226.3	226.3	226.6	227.4	226.6
45°	227.2	221.5	217.6	215.4	212.9	211.3	211.0	211.7	211.9	212.2	212.9
47.5°	206.9	203.1	199.6	197.1	196.0	195.8	195.5	196.7	197.8	198.2	199.2
50°	194.9	190.6	187.6	186.0	185.1	184.7	185.1	186.5	187.4	188.5	189.2
52.5°	181.5	178.4	176.4	175.1	174.8	175.1	175.1	176.7	178.1	178.6	178.9
55°	162.9	160.6	160.2	158.1	159.0	158.8	159.9	160.8	162.2	163.6	163.8
57.5°	144.3	142.5	141.3	141.5	141.8	142.8	143.7	145.3	146.7	148.2	148.3
60°	132.0	131.1	130.4	130.4	130.8	132.2	133.3	134.9	135.8	136.8	137.4
62.5°	120.7	119.8	119.1	119.5	120.7	121.5	122.8	123.7	124.6	125.5	125.8
65°	102.9	102.5	103.1	103.6	103.8	104.9	106.5	107.2	108.1	108.6	110.2
67.5°	86.5	86.6	86.5	87.1	88.5	88.7	90.2	91.8	92.0	92.9	93.9
70°	75.4	75.9	76.3	76.8	77.9	78.4	79.5	80.2	81.1	81.8	82.5
72.5°	65.2	65.3	65.8	65.7	66.7	67.6	68.6	69.3	70.2	71.1	71.7
75°	50.2	50.2	50.7	50.9	52.0	53.2	52.9	53.4	54.3	55.2	55.7
77.5°	36.7	36.2	36.7	36.9	37.3	38.2	38.4	39.0	40.1	39.8	40.3
80°	27.9	27.3	27.9	28.2	28.2	29.3	29.3	29.8	30.4	29.8	30.4
82.5°	19.9	19.6	20.1	20.2	20.5	20.6	20.9	21.0	21.7	21.4	21.7
85°	10.0	9.8	10.0	9.8	10.0	10.2	10.2	10.0	10.0	10.4	9.8
87.5°	5.4	5.6	5.8	6.2	6.4	6.6	6.7	6.9	7.1	7.0	7.2
90°	11.5	13.7	15.6	17.5	19.4	21.3	22.4	23.6	24.8	26.0	26.8
92.5°	20.5	20.9	21.8	22.8	23.7	24.7	25.3	25.9	26.5	27.1	27.6
95°	37.9	34.8	36.5	38.2	39.8	41.5	42.6	43.8	45.0	46.2	46.7
97.5°	49.3	40.2	44.0	47.8	51.7	55.5	56.4	57.4	58.3	59.3	59.9
100°	58.7	44.5	48.5	52.6	56.6	60.6	62.5	64.4	66.3	68.2	69.3
102.5°	216.9	196.7	163.1	129.5	95.9	62.3	64.8	67.2	69.7	72.1	73.7
105°	351.5	322.8	258.3	193.8	129.3	64.8	67.4	70.0	72.6	75.2	77.0
107.5°	436.0	400.2	322.8	245.5	168.1	90.8	88.1	85.5	82.8	80.2	79.4
110°	490.8	459.1	390.8	322.6	254.3	186.0	162.4	138.8	115.2	91.5	80.2



TEST NUMBER: P331276

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	542.9	536.7	519.8	503.0	486.1	469.2	383.1	296.9	210.7	124.5	81.8
115°	627.3	632.3	638.2	644.1	650.0	655.9	546.5	437.1	327.8	218.4	155.2
117.5°	706.0	710.2	714.3	718.4	722.4	726.5	700.0	673.6	647.1	620.7	579.5
120°	758.3	762.2	766.5	770.7	775.0	779.2	782.0	784.9	787.7	790.6	776.0
122.5°	806.7	810.9	815.5	820.1	824.8	829.4	831.1	832.8	834.5	836.2	833.9
125°	876.5	880.3	884.8	889.3	893.8	898.3	899.9	901.6	903.2	904.9	906.1
127.5°	943.6	946.9	950.3	953.6	957.0	960.4	962.8	965.2	967.6	970.0	971.3
130°	986.7	989.9	992.5	995.1	997.7	1000.3	1002.9	1005.5	1008.1	1010.7	1011.9
132.5°	1027.0	1029.9	1032.5	1035.1	1037.7	1040.3	1042.5	1044.7	1047.0	1049.2	1050.2
135°	1084.5	1087.5	1089.6	1091.7	1093.9	1096.0	1098.4	1100.7	1103.1	1105.4	1106.4
137.5°	1135.9	1138.4	1140.9	1143.3	1145.7	1148.1	1150.4	1152.7	1155.0	1157.3	1158.1
140°	1169.5	1171.7	1174.3	1176.9	1179.5	1182.1	1184.2	1186.4	1188.5	1190.6	1191.1
142.5°	1199.3	1201.7	1204.6	1207.6	1210.6	1213.6	1215.5	1217.4	1219.4	1221.3	1221.7
145°	1239.6	1241.5	1245.5	1249.5	1253.6	1257.6	1259.2	1260.9	1262.5	1264.2	1264.4
147.5°	1278.9	1280.4	1284.4	1288.3	1292.3	1296.3	1297.5	1298.7	1300.0	1301.2	1301.3
150°	1303.1	1304.1	1307.9	1311.7	1315.5	1319.2	1320.7	1322.1	1323.5	1324.9	1325.0
152.5°	1325.3	1326.1	1329.7	1333.3	1336.9	1340.5	1341.9	1343.3	1344.8	1346.2	1346.1
155°	1357.5	1357.9	1360.7	1363.5	1366.4	1369.2	1370.6	1372.0	1373.5	1374.9	1374.6
157.5°	1385.0	1385.1	1387.1	1389.0	1391.0	1393.0	1394.6	1396.2	1397.8	1399.4	1399.3
160°	1401.8	1401.8	1403.2	1404.6	1406.1	1407.5	1408.9	1410.3	1411.7	1413.1	1413.0
162.5°	1415.4	1415.3	1416.5	1417.8	1419.0	1420.2	1421.8	1423.4	1425.0	1426.7	1426.4
165°	1433.7	1433.3	1434.0	1434.8	1435.5	1436.2	1437.8	1439.5	1441.1	1442.8	1442.8
167.5°	1447.3	1446.9	1447.6	1448.2	1448.9	1449.6	1451.2	1452.9	1454.5	1456.2	1455.9
170°	1455.0	1454.5	1455.0	1455.4	1455.9	1456.4	1458.0	1459.7	1461.3	1463.0	1462.7
172.5°	1460.1	1459.6	1460.1	1460.5	1461.0	1461.5	1463.1	1464.8	1466.4	1468.1	1467.9
175°	1465.7	1465.1	1465.6	1466.1	1466.5	1467.0	1468.7	1470.3	1472.0	1473.6	1473.3
177.5°	1468.1	1467.5	1467.7	1467.9	1468.1	1468.3	1469.6	1470.9	1472.2	1473.6	1473.4
180°	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1



TEST NUMBER: P331276

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	566.9	566.5	566.5	564.9	566.5	566.5	566.9	568.7	569.3	569.6	568.9
5°	525.9	525.2	524.1	525.2	524.1	525.2	525.9	529.1	530.7	532.2	533.6
7.5°	485.3	482.6	482.2	479.5	482.2	482.6	485.3	486.8	490.0	493.6	496.9
10°	455.7	453.9	453.6	449.3	453.6	453.9	455.7	459.6	462.7	467.0	471.6
12.5°	433.2	428.8	429.7	427.2	429.7	428.8	433.2	433.2	436.9	439.6	446.7
15°	394.1	394.1	393.2	389.4	393.2	394.1	394.1	400.3	401.4	405.7	411.8
17.5°	366.1	365.6	363.5	364.6	363.5	365.6	366.1	370.6	371.4	377.1	382.2
20°	349.4	348.0	345.3	345.3	345.3	348.0	349.4	351.9	354.8	358.2	362.6
22.5°	333.6	333.5	330.6	331.5	330.6	333.5	333.6	335.9	338.7	342.4	346.0
25°	315.1	313.3	311.9	312.6	311.9	313.3	315.1	315.3	318.5	321.0	323.3
27.5°	297.5	296.5	296.4	294.6	296.4	296.5	297.5	298.1	299.9	301.4	303.5
30°	287.4	285.1	285.5	284.4	285.5	285.1	287.4	287.6	288.5	289.4	291.9
32.5°	275.7	274.9	274.5	273.5	274.5	274.9	275.7	276.1	278.0	278.9	280.8
35°	259.9	260.1	259.0	259.4	259.0	260.1	259.9	260.3	260.6	261.5	263.3
37.5°	246.0	246.7	246.2	246.3	246.2	246.7	246.0	246.2	246.5	246.6	247.2
40°	236.9	236.9	236.9	237.6	236.9	236.9	236.9	236.3	236.5	236.3	236.3
42.5°	228.2	227.8	227.5	227.4	227.5	227.8	228.2	226.6	227.4	226.6	226.3
45°	213.3	214.0	214.2	213.1	214.2	214.0	213.3	212.9	212.2	211.9	211.7
47.5°	199.8	199.9	199.8	200.8	199.8	199.9	199.8	199.2	198.2	197.8	196.7
50°	190.4	189.9	190.4	189.9	190.4	189.9	190.4	189.2	188.5	187.4	186.5
52.5°	180.4	180.5	180.2	180.1	180.2	180.5	180.4	178.9	178.6	178.1	176.7
55°	164.7	165.1	164.9	164.9	164.9	165.1	164.7	163.8	163.6	162.2	160.8
57.5°	148.5	148.9	149.2	148.2	149.2	148.9	148.5	148.3	148.2	146.7	145.3
60°	137.2	138.3	138.1	137.7	138.1	138.3	137.2	137.4	136.8	135.8	134.9
62.5°	126.8	127.3	127.2	127.1	127.2	127.3	126.8	125.8	125.5	124.6	123.7
65°	110.9	111.3	110.6	111.3	110.6	111.3	110.9	110.2	108.6	108.1	107.2
67.5°	93.6	93.8	94.3	94.6	94.3	93.8	93.6	93.9	92.9	92.0	91.8
70°	82.9	82.7	83.4	84.1	83.4	82.7	82.9	82.5	81.8	81.1	80.2
72.5°	71.6	72.1	71.9	72.4	71.9	72.1	71.6	71.7	71.1	70.2	69.3
75°	55.2	55.9	55.7	56.3	55.7	55.9	55.2	55.7	55.2	54.3	53.4
77.5°	39.9	40.0	39.9	40.3	39.9	40.0	39.9	40.3	39.8	40.1	39.0
80°	30.4	30.0	29.5	30.4	29.5	30.0	30.4	30.4	29.8	30.4	29.8
82.5°	21.2	21.4	21.0	21.0	21.0	21.4	21.2	21.7	21.4	21.7	21.0
85°	9.8	9.5	9.1	9.1	9.1	9.5	9.8	9.8	10.4	10.0	10.0
87.5°	7.3	7.2	7.3	7.2	7.3	7.2	7.3	7.2	7.0	7.1	6.9
90°	27.3	27.8	28.2	28.7	28.2	27.8	27.3	26.8	26.0	24.8	23.6
92.5°	27.9	28.1	28.4	28.7	28.4	28.1	27.9	27.6	27.1	26.5	25.9
95°	46.4	46.2	45.9	45.7	45.9	46.2	46.4	46.7	46.2	45.0	43.8
97.5°	60.2	60.5	60.7	61.0	60.7	60.5	60.2	59.9	59.3	58.3	57.4
100°	69.8	70.3	70.8	71.2	70.8	70.3	69.8	69.3	68.2	66.3	64.4
102.5°	74.3	75.0	75.7	76.3	75.7	75.0	74.3	73.7	72.1	69.7	67.2
105°	78.0	78.9	79.8	80.8	79.8	78.9	78.0	77.0	75.2	72.6	70.0
107.5°	80.3	81.2	82.2	83.1	82.2	81.2	80.3	79.4	80.2	82.8	85.5
110°	81.1	82.1	83.0	84.0	83.0	82.1	81.1	80.2	91.5	115.2	138.8



TEST NUMBER: P331276

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	82.6	83.3	84.1	84.8	84.1	83.3	82.6	81.8	124.5	210.7	296.9
115°	138.2	121.2	104.2	87.2	104.2	121.2	138.2	155.2	218.4	327.8	437.1
117.5°	523.6	467.7	411.8	355.9	411.8	467.7	523.6	579.5	620.7	647.1	673.6
120°	744.1	712.2	680.3	648.5	680.3	712.2	744.1	776.0	790.6	787.7	784.9
122.5°	827.8	821.6	815.4	809.2	815.4	821.6	827.8	833.9	836.2	834.5	832.8
125°	906.8	907.5	908.2	908.9	908.2	907.5	906.8	906.1	904.9	903.2	901.6
127.5°	971.4	971.6	971.7	971.8	971.7	971.6	971.4	971.3	970.0	967.6	965.2
130°	1011.7	1011.4	1011.2	1011.0	1011.2	1011.4	1011.7	1011.9	1010.7	1008.1	1005.5
132.5°	1049.9	1049.7	1049.5	1049.2	1049.5	1049.7	1049.9	1050.2	1049.2	1047.0	1044.7
135°	1105.9	1105.4	1105.0	1104.5	1105.0	1105.4	1105.9	1106.4	1105.4	1103.1	1100.7
137.5°	1157.3	1156.5	1155.7	1154.9	1155.7	1156.5	1157.3	1158.1	1157.3	1155.0	1152.7
140°	1189.9	1188.7	1187.5	1186.4	1187.5	1188.7	1189.9	1191.1	1190.6	1188.5	1186.4
142.5°	1220.5	1219.3	1218.2	1217.0	1218.2	1219.3	1220.5	1221.7	1221.3	1219.4	1217.4
145°	1263.3	1262.1	1260.9	1259.7	1260.9	1262.1	1263.3	1264.4	1264.2	1262.5	1260.9
147.5°	1300.3	1299.3	1298.3	1297.3	1298.3	1299.3	1300.3	1301.3	1301.2	1300.0	1298.7
150°	1323.8	1322.7	1321.5	1320.3	1321.5	1322.7	1323.8	1325.0	1324.9	1323.5	1322.1
152.5°	1344.5	1343.0	1341.4	1339.9	1341.4	1343.0	1344.5	1346.1	1346.2	1344.8	1343.3
155°	1372.7	1370.9	1369.0	1367.1	1369.0	1370.9	1372.7	1374.6	1374.9	1373.5	1372.0
157.5°	1397.5	1395.6	1393.8	1391.9	1393.8	1395.6	1397.5	1399.3	1399.4	1397.8	1396.2
160°	1411.4	1409.7	1408.1	1406.4	1408.1	1409.7	1411.4	1413.0	1413.1	1411.7	1410.3
162.5°	1424.4	1422.4	1420.3	1418.3	1420.3	1422.4	1424.4	1426.4	1426.7	1425.0	1423.4
165°	1441.1	1439.5	1437.8	1436.2	1437.8	1439.5	1441.1	1442.8	1442.8	1441.1	1439.5
167.5°	1453.8	1451.7	1449.6	1447.4	1449.6	1451.7	1453.8	1455.9	1456.2	1454.5	1452.9
170°	1460.6	1458.5	1456.4	1454.2	1456.4	1458.5	1460.6	1462.7	1463.0	1461.3	1459.7
172.5°	1465.7	1463.6	1461.5	1459.3	1461.5	1463.6	1465.7	1467.9	1468.1	1466.4	1464.8
175°	1470.9	1468.5	1466.2	1463.8	1466.2	1468.5	1470.9	1473.3	1473.6	1472.0	1470.3
177.5°	1471.7	1470.0	1468.3	1466.6	1468.3	1470.0	1471.7	1473.4	1473.6	1472.2	1470.9
180°	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1



TEST NUMBER: P331276

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	568.0	570.0	573.1	576.4	578.4	582.2	583.3	585.1	586.7	590.5	594.5
5°	535.2	538.4	545.9	550.0	555.6	562.2	566.5	571.1	576.1	584.7	592.7
7.5°	500.0	505.3	514.7	522.3	530.4	539.8	546.6	555.6	563.1	575.3	586.9
10°	476.6	484.1	492.5	501.6	512.9	522.9	532.5	543.8	552.9	567.5	581.1
12.5°	455.5	456.6	468.7	478.7	494.2	506.6	517.6	532.2	541.1	558.4	572.7
15°	418.7	425.5	436.4	444.3	462.7	478.4	493.9	509.1	519.3	540.7	559.5
17.5°	387.6	393.9	405.1	418.1	431.3	446.9	466.9	483.0	496.9	521.3	543.6
20°	368.0	375.7	387.1	400.5	412.1	429.1	446.4	464.8	479.8	507.3	533.4
22.5°	351.3	357.4	366.6	379.8	392.4	408.0	426.9	447.0	462.7	492.4	518.8
25°	327.8	332.8	338.7	349.6	363.9	381.0	395.7	417.8	440.7	468.4	500.4
27.5°	306.6	310.2	315.4	325.0	336.1	352.0	368.4	389.3	412.4	442.5	476.3
30°	293.7	296.0	301.2	309.2	320.1	332.6	349.2	369.1	392.8	423.2	456.8
32.5°	282.5	284.5	288.0	295.5	305.0	315.7	330.6	350.6	373.1	403.0	440.3
35°	265.6	267.1	270.1	276.2	281.5	291.9	304.4	322.6	343.7	372.3	410.9
37.5°	248.7	250.9	252.7	255.3	262.0	268.9	279.7	295.1	315.8	344.7	381.5
40°	237.6	239.4	242.2	243.3	248.7	254.9	263.7	277.8	298.7	325.1	361.0
42.5°	226.3	228.2	229.8	231.1	235.8	241.2	249.2	261.3	279.8	305.4	341.0
45°	211.0	211.3	212.9	215.4	217.6	221.5	227.2	237.6	251.9	276.0	308.3
47.5°	195.5	195.8	196.0	197.1	199.6	203.1	206.9	215.4	228.2	247.4	278.8
50°	185.1	184.7	185.1	186.0	187.6	190.6	194.9	201.0	211.5	229.4	258.3
52.5°	175.1	175.1	174.8	175.1	176.4	178.4	181.5	186.7	196.0	212.5	237.9
55°	159.9	158.8	159.0	158.1	160.2	160.6	162.9	167.2	175.4	186.7	210.6
57.5°	143.7	142.8	141.8	141.5	141.3	142.5	144.3	147.7	154.0	164.0	183.3
60°	133.3	132.2	130.8	130.4	130.4	131.1	132.0	134.5	140.4	149.2	165.1
62.5°	122.8	121.5	120.7	119.5	119.1	119.8	120.7	122.5	126.8	135.1	148.8
65°	106.5	104.9	103.8	103.6	103.1	102.5	102.9	104.7	108.1	114.7	125.6
67.5°	90.2	88.7	88.5	87.1	86.5	86.6	86.5	88.0	90.1	95.8	103.9
70°	79.5	78.4	77.9	76.8	76.3	75.9	75.4	76.8	78.8	83.6	90.6
72.5°	68.6	67.6	66.7	65.7	65.8	65.3	65.2	66.1	67.7	72.1	77.6
75°	52.9	53.2	52.0	50.9	50.7	50.2	50.2	50.9	51.6	55.0	59.3
77.5°	38.4	38.2	37.3	36.9	36.7	36.2	36.7	37.1	37.5	39.8	42.9
80°	29.3	29.3	28.2	28.2	27.9	27.3	27.9	27.5	28.4	30.7	32.9
82.5°	20.9	20.6	20.5	20.2	20.1	19.6	19.9	20.4	20.8	22.3	23.7
85°	10.2	10.2	10.0	9.8	10.0	9.8	10.0	10.2	10.4	11.1	12.3
87.5°	6.7	6.6	6.4	6.2	5.8	5.6	5.4	5.0	4.9	4.5	4.2
90°	22.4	21.3	19.4	17.5	15.6	13.7	11.5	8.9	6.3	3.7	1.1
92.5°	25.3	24.7	23.7	22.8	21.8	20.9	20.5	20.8	21.0	21.2	21.5
95°	42.6	41.5	39.8	38.2	36.5	34.8	37.9	45.7	53.5	61.3	69.1
97.5°	56.4	55.5	51.7	47.8	44.0	40.2	49.3	71.2	93.2	115.2	137.1
100°	62.5	60.6	56.6	52.6	48.5	44.5	58.7	91.1	123.4	155.8	188.2
102.5°	64.8	62.3	95.9	129.5	163.1	196.7	216.9	223.7	230.6	237.4	244.3
105°	67.4	64.8	129.3	193.8	258.3	322.8	351.5	344.4	337.3	330.3	323.2
107.5°	88.1	90.8	168.1	245.5	322.8	400.2	436.0	430.2	424.5	418.8	413.1
110°	162.4	186.0	254.3	322.6	390.8	459.1	490.8	485.8	480.9	475.9	470.9



TEST NUMBER: P331276

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	383.1	469.2	486.1	503.0	519.8	536.7	542.9	538.5	534.1	529.8	525.4
115°	546.5	655.9	650.0	644.1	638.2	632.3	627.3	623.3	619.3	615.3	611.3
117.5°	700.0	726.5	722.4	718.4	714.3	710.2	706.0	701.5	697.0	692.5	688.0
120°	782.0	779.2	775.0	770.7	766.5	762.2	758.3	754.8	751.2	747.7	744.1
122.5°	831.1	829.4	824.8	820.1	815.5	810.9	806.7	803.0	799.2	795.5	791.8
125°	899.9	898.3	893.8	889.3	884.8	880.3	876.5	873.5	870.4	867.3	864.3
127.5°	962.8	960.4	957.0	953.6	950.3	946.9	943.6	940.2	936.8	933.4	930.0
130°	1002.9	1000.3	997.7	995.1	992.5	989.9	986.7	983.0	979.2	975.4	971.6
132.5°	1042.5	1040.3	1037.7	1035.1	1032.5	1029.9	1027.0	1023.8	1020.6	1017.4	1014.1
135°	1098.4	1096.0	1093.9	1091.7	1089.6	1087.5	1084.5	1080.8	1077.0	1073.2	1069.4
137.5°	1150.4	1148.1	1145.7	1143.3	1140.9	1138.4	1135.9	1133.3	1130.6	1128.0	1125.3
140°	1184.2	1182.1	1179.5	1176.9	1174.3	1171.7	1169.5	1167.6	1165.7	1163.8	1161.9
142.5°	1215.5	1213.6	1210.6	1207.6	1204.6	1201.7	1199.3	1197.6	1195.9	1194.2	1192.5
145°	1259.2	1257.6	1253.6	1249.5	1245.5	1241.5	1239.6	1239.9	1240.1	1240.3	1240.6
147.5°	1297.5	1296.3	1292.3	1288.3	1284.4	1280.4	1278.9	1279.8	1280.7	1281.6	1282.5
150°	1320.7	1319.2	1315.5	1311.7	1307.9	1304.1	1303.1	1304.7	1306.4	1308.0	1309.7
152.5°	1341.9	1340.5	1336.9	1333.3	1329.7	1326.1	1325.3	1327.1	1328.9	1330.8	1332.6
155°	1370.6	1369.2	1366.4	1363.5	1360.7	1357.9	1357.5	1359.6	1361.8	1363.9	1366.0
157.5°	1394.6	1393.0	1391.0	1389.0	1387.1	1385.1	1385.0	1386.8	1388.6	1390.4	1392.2
160°	1408.9	1407.5	1406.1	1404.6	1403.2	1401.8	1401.8	1403.2	1404.6	1406.1	1407.5
162.5°	1421.8	1420.2	1419.0	1417.8	1416.5	1415.3	1415.4	1416.8	1418.2	1419.7	1421.1
165°	1437.8	1436.2	1435.5	1434.8	1434.0	1433.3	1433.7	1435.1	1436.5	1437.9	1439.4
167.5°	1451.2	1449.6	1448.9	1448.2	1447.6	1446.9	1447.3	1448.7	1450.1	1451.6	1453.0
170°	1458.0	1456.4	1455.9	1455.4	1455.0	1454.5	1455.0	1456.4	1457.8	1459.2	1460.6
172.5°	1463.1	1461.5	1461.0	1460.5	1460.1	1459.6	1460.1	1461.5	1462.9	1464.3	1465.7
175°	1468.7	1467.0	1466.5	1466.1	1465.6	1465.1	1465.7	1467.4	1469.0	1470.7	1472.3
177.5°	1469.6	1468.3	1468.1	1467.9	1467.7	1467.5	1468.1	1469.4	1470.7	1472.1	1473.4
180°	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1



TEST NUMBER: P331276

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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	594.2	595.1	598.0	600.9	604.2	605.1	606.5	605.3	604.9	608.3	610.9
5°	595.9	599.9	607.9	615.2	621.3	625.6	630.2	632.0	635.4	640.1	646.1
7.5°	593.9	601.9	614.4	625.0	636.5	644.8	651.3	656.9	663.6	672.6	682.5
10°	591.8	602.4	617.7	630.6	644.7	655.4	664.2	672.9	682.9	695.4	708.3
12.5°	587.8	600.4	619.5	634.8	652.9	663.4	675.3	693.9	704.7	722.1	740.3
15°	579.7	593.8	620.4	639.2	659.7	679.7	701.7	719.4	737.1	747.4	773.0
17.5°	567.8	588.4	617.9	639.9	665.9	697.3	722.1	742.2	762.6	779.2	792.1
20°	558.1	580.6	614.3	640.6	671.5	705.3	733.7	754.2	771.9	785.8	793.7
22.5°	546.0	574.3	607.0	637.9	677.3	710.8	740.6	756.7	771.5	778.3	781.4
25°	526.8	560.9	597.9	635.6	680.1	715.6	742.8	752.6	756.9	750.3	739.4
27.5°	506.1	544.1	587.4	631.3	678.4	712.5	732.0	730.5	723.2	701.8	684.8
30°	490.7	532.5	579.0	627.0	674.2	707.4	718.7	707.4	690.8	667.0	642.6
32.5°	474.5	517.8	570.1	620.8	666.6	695.8	698.2	678.7	653.0	625.9	595.6
35°	450.0	496.8	553.4	607.0	650.4	668.8	657.9	623.3	592.9	555.9	514.5
37.5°	422.3	474.0	530.7	586.8	626.1	630.9	603.8	567.5	524.5	481.0	432.3
40°	401.6	456.4	514.8	571.3	606.1	601.1	566.5	526.6	475.5	422.3	377.1
42.5°	383.1	437.8	497.3	552.8	580.6	566.9	526.6	477.5	422.6	372.5	331.1
45°	351.0	407.3	468.2	521.8	537.7	512.9	459.6	405.0	351.0	309.2	276.5
47.5°	319.8	375.5	435.8	482.9	488.5	455.2	396.9	340.8	294.3	260.3	237.2
50°	296.9	352.8	412.5	454.6	452.7	412.5	352.6	299.2	260.3	232.8	217.4
52.5°	276.4	329.2	386.5	424.8	415.1	371.3	314.0	266.6	234.7	213.2	199.2
55°	244.4	293.3	347.8	378.5	360.7	312.1	263.7	225.6	201.9	185.8	174.9
57.5°	212.7	258.5	305.2	324.1	304.5	259.6	219.3	191.6	173.8	161.9	154.8
60°	193.1	233.1	274.6	291.0	267.6	227.6	195.8	171.1	156.7	147.0	140.6
62.5°	173.5	209.3	248.5	257.4	236.0	202.2	174.0	153.4	141.7	133.0	127.0
65°	146.7	176.1	205.8	211.7	192.0	165.8	143.6	130.2	119.7	113.4	108.6
67.5°	120.4	143.9	165.0	169.7	152.4	134.3	118.2	106.5	99.5	94.2	90.1
70°	104.7	123.4	140.6	144.5	130.6	114.5	102.2	92.9	86.5	82.0	78.1
72.5°	88.2	103.7	118.1	120.7	109.4	97.0	87.0	79.6	74.0	71.1	67.4
75°	67.5	76.6	87.7	88.4	80.9	73.4	65.7	60.9	57.9	54.3	52.5
77.5°	47.6	54.7	61.1	62.3	57.9	52.8	48.5	44.7	42.2	40.5	38.8
80°	36.3	42.0	44.8	46.3	43.2	39.5	37.0	34.5	32.9	31.8	30.7
82.5°	26.0	29.5	32.0	33.3	31.5	29.3	26.9	25.4	24.2	23.3	22.9
85°	13.2	14.8	16.4	16.8	16.4	15.4	14.1	14.1	13.4	13.2	13.2
87.5°	5.3	6.5	7.0	8.1	8.2	8.6	8.9	9.1	9.3	9.4	9.4
90°	3.7	6.3	8.9	11.5	13.7	15.6	17.5	19.4	21.3	22.4	23.6
92.5°	21.2	21.0	20.8	20.5	20.9	21.8	22.8	23.7	24.7	25.3	25.9
95°	61.3	53.5	45.7	37.9	34.8	36.5	38.2	39.8	41.5	42.6	43.8
97.5°	115.2	93.2	71.2	49.3	40.2	44.0	47.8	51.7	55.5	56.4	57.4
100°	155.8	123.4	91.1	58.7	44.5	48.5	52.6	56.6	60.6	62.5	64.4
102.5°	237.4	230.6	223.7	216.9	196.7	163.1	129.5	95.9	62.3	64.8	67.2
105°	330.3	337.3	344.4	351.5	322.8	258.3	193.8	129.3	64.8	67.4	70.0
107.5°	418.8	424.5	430.2	436.0	400.2	322.8	245.5	168.1	90.8	88.1	85.5
110°	475.9	480.9	485.8	490.8	459.1	390.8	322.6	254.3	186.0	162.4	138.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	529.8	534.1	538.5	542.9	536.7	519.8	503.0	486.1	469.2	383.1	296.9
115°	615.3	619.3	623.3	627.3	632.3	638.2	644.1	650.0	655.9	546.5	437.1
117.5°	692.5	697.0	701.5	706.0	710.2	714.3	718.4	722.4	726.5	700.0	673.6
120°	747.7	751.2	754.8	758.3	762.2	766.5	770.7	775.0	779.2	782.0	784.9
122.5°	795.5	799.2	803.0	806.7	810.9	815.5	820.1	824.8	829.4	831.1	832.8
125°	867.3	870.4	873.5	876.5	880.3	884.8	889.3	893.8	898.3	899.9	901.6
127.5°	933.4	936.8	940.2	943.6	946.9	950.3	953.6	957.0	960.4	962.8	965.2
130°	975.4	979.2	983.0	986.7	989.9	992.5	995.1	997.7	1000.3	1002.9	1005.5
132.5°	1017.4	1020.6	1023.8	1027.0	1029.9	1032.5	1035.1	1037.7	1040.3	1042.5	1044.7
135°	1073.2	1077.0	1080.8	1084.5	1087.5	1089.6	1091.7	1093.9	1096.0	1098.4	1100.7
137.5°	1128.0	1130.6	1133.3	1135.9	1138.4	1140.9	1143.3	1145.7	1148.1	1150.4	1152.7
140°	1163.8	1165.7	1167.6	1169.5	1171.7	1174.3	1176.9	1179.5	1182.1	1184.2	1186.4
142.5°	1194.2	1195.9	1197.6	1199.3	1201.7	1204.6	1207.6	1210.6	1213.6	1215.5	1217.4
145°	1240.3	1240.1	1239.9	1239.6	1241.5	1245.5	1249.5	1253.6	1257.6	1259.2	1260.9
147.5°	1281.6	1280.7	1279.8	1278.9	1280.4	1284.4	1288.3	1292.3	1296.3	1297.5	1298.7
150°	1308.0	1306.4	1304.7	1303.1	1304.1	1307.9	1311.7	1315.5	1319.2	1320.7	1322.1
152.5°	1330.8	1328.9	1327.1	1325.3	1326.1	1329.7	1333.3	1336.9	1340.5	1341.9	1343.3
155°	1363.9	1361.8	1359.6	1357.5	1357.9	1360.7	1363.5	1366.4	1369.2	1370.6	1372.0
157.5°	1390.4	1388.6	1386.8	1385.0	1385.1	1387.1	1389.0	1391.0	1393.0	1394.6	1396.2
160°	1406.1	1404.6	1403.2	1401.8	1401.8	1403.2	1404.6	1406.1	1407.5	1408.9	1410.3
162.5°	1419.7	1418.2	1416.8	1415.4	1415.3	1416.5	1417.8	1419.0	1420.2	1421.8	1423.4
165°	1437.9	1436.5	1435.1	1433.7	1433.3	1434.0	1434.8	1435.5	1436.2	1437.8	1439.5
167.5°	1451.6	1450.1	1448.7	1447.3	1446.9	1447.6	1448.2	1448.9	1449.6	1451.2	1452.9
170°	1459.2	1457.8	1456.4	1455.0	1454.5	1455.0	1455.4	1455.9	1456.4	1458.0	1459.7
172.5°	1464.3	1462.9	1461.5	1460.1	1459.6	1460.1	1460.5	1461.0	1461.5	1463.1	1464.8
175°	1470.7	1469.0	1467.4	1465.7	1465.1	1465.6	1466.1	1466.5	1467.0	1468.7	1470.3
177.5°	1472.1	1470.7	1469.4	1468.1	1467.5	1467.7	1467.9	1468.1	1468.3	1469.6	1470.9
180°	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	613.1	615.6	615.6	616.0	618.9	618.5	618.3
5°	652.4	656.3	656.7	660.8	663.5	662.6	660.1
7.5°	689.5	696.7	702.2	705.2	708.8	711.0	710.0
10°	719.0	729.4	735.8	740.1	745.3	749.2	747.8
12.5°	745.7	758.1	766.9	774.3	774.9	779.9	776.5
15°	787.4	800.5	801.9	807.3	811.7	811.2	811.4
17.5°	801.1	805.3	806.2	806.3	806.4	804.8	801.3
20°	796.2	794.6	790.8	787.8	782.6	781.9	777.4
22.5°	772.9	767.9	758.2	751.8	743.7	741.6	740.3
25°	727.2	716.0	700.6	685.8	681.7	673.8	676.0
27.5°	664.3	647.0	630.2	618.3	607.4	595.5	598.9
30°	620.2	600.6	577.0	558.8	547.2	535.9	533.8
32.5°	567.5	538.8	512.5	496.5	478.7	471.5	463.7
35°	476.6	448.6	422.5	400.0	387.1	377.1	368.0
37.5°	394.9	362.7	341.6	323.4	314.0	308.3	309.8
40°	344.2	316.0	300.5	286.7	278.0	274.0	274.9
42.5°	303.1	282.0	269.3	259.8	253.7	251.4	250.9
45°	256.5	244.7	234.2	228.8	225.8	223.3	221.7
47.5°	224.7	215.0	209.1	205.9	203.3	200.8	200.7
50°	205.6	199.2	195.1	191.7	189.7	187.9	189.5
52.5°	191.0	185.2	181.1	178.1	177.3	175.7	175.6
55°	169.5	164.9	162.0	159.2	157.9	157.0	155.8
57.5°	149.8	145.5	142.8	141.1	138.5	137.6	137.2
60°	135.8	132.4	129.7	127.4	126.3	124.5	124.5
62.5°	122.9	119.5	117.0	115.3	113.4	112.7	112.9
65°	104.3	101.5	99.0	97.2	96.8	95.4	95.9
67.5°	87.1	85.3	82.6	81.6	80.8	80.1	79.5
70°	75.6	73.8	72.5	71.1	70.4	70.4	70.4
72.5°	66.0	63.8	63.0	61.3	61.7	61.0	60.2
75°	51.1	49.7	49.1	48.4	47.3	47.3	47.3
77.5°	37.6	37.2	36.4	35.7	35.4	35.2	35.3
80°	29.1	28.8	28.4	28.4	27.9	27.7	27.3
82.5°	22.4	21.8	21.5	21.3	21.2	21.2	21.1
85°	12.7	12.3	12.3	12.5	12.0	12.0	12.3
87.5°	9.9	10.1	10.1	10.2	10.5	10.4	10.5
90°	24.8	26.0	26.8	27.3	27.8	28.2	28.7
92.5°	26.5	27.1	27.6	27.9	28.1	28.4	28.7
95°	45.0	46.2	46.7	46.4	46.2	45.9	45.7
97.5°	58.3	59.3	59.9	60.2	60.5	60.7	61.0
100°	66.3	68.2	69.3	69.8	70.3	70.8	71.2
102.5°	69.7	72.1	73.7	74.3	75.0	75.7	76.3
105°	72.6	75.2	77.0	78.0	78.9	79.8	80.8
107.5°	82.8	80.2	79.4	80.3	81.2	82.2	83.1
110°	115.2	91.5	80.2	81.1	82.1	83.0	84.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	210.7	124.5	81.8	82.6	83.3	84.1	84.8
115°	327.8	218.4	155.2	138.2	121.2	104.2	87.2
117.5°	647.1	620.7	579.5	523.6	467.7	411.8	355.9
120°	787.7	790.6	776.0	744.1	712.2	680.3	648.5
122.5°	834.5	836.2	833.9	827.8	821.6	815.4	809.2
125°	903.2	904.9	906.1	906.8	907.5	908.2	908.9
127.5°	967.6	970.0	971.3	971.4	971.6	971.7	971.8
130°	1008.1	1010.7	1011.9	1011.7	1011.4	1011.2	1011.0
132.5°	1047.0	1049.2	1050.2	1049.9	1049.7	1049.5	1049.2
135°	1103.1	1105.4	1106.4	1105.9	1105.4	1105.0	1104.5
137.5°	1155.0	1157.3	1158.1	1157.3	1156.5	1155.7	1154.9
140°	1188.5	1190.6	1191.1	1189.9	1188.7	1187.5	1186.4
142.5°	1219.4	1221.3	1221.7	1220.5	1219.3	1218.2	1217.0
145°	1262.5	1264.2	1264.4	1263.3	1262.1	1260.9	1259.7
147.5°	1300.0	1301.2	1301.3	1300.3	1299.3	1298.3	1297.3
150°	1323.5	1324.9	1325.0	1323.8	1322.7	1321.5	1320.3
152.5°	1344.8	1346.2	1346.1	1344.5	1343.0	1341.4	1339.9
155°	1373.5	1374.9	1374.6	1372.7	1370.9	1369.0	1367.1
157.5°	1397.8	1399.4	1399.3	1397.5	1395.6	1393.8	1391.9
160°	1411.7	1413.1	1413.0	1411.4	1409.7	1408.1	1406.4
162.5°	1425.0	1426.7	1426.4	1424.4	1422.4	1420.3	1418.3
165°	1441.1	1442.8	1442.8	1441.1	1439.5	1437.8	1436.2
167.5°	1454.5	1456.2	1455.9	1453.8	1451.7	1449.6	1447.4
170°	1461.3	1463.0	1462.7	1460.6	1458.5	1456.4	1454.2
172.5°	1466.4	1468.1	1467.9	1465.7	1463.6	1461.5	1459.3
175°	1472.0	1473.6	1473.3	1470.9	1468.5	1466.2	1463.8
177.5°	1472.2	1473.6	1473.4	1471.7	1470.0	1468.3	1466.6
180°	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1	1469.1

(END OF REPORT)