

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: P331277

Luminaire Tested: **SA2XXDIP-C290D1080U835-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331277  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,  
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-A1  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1080 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

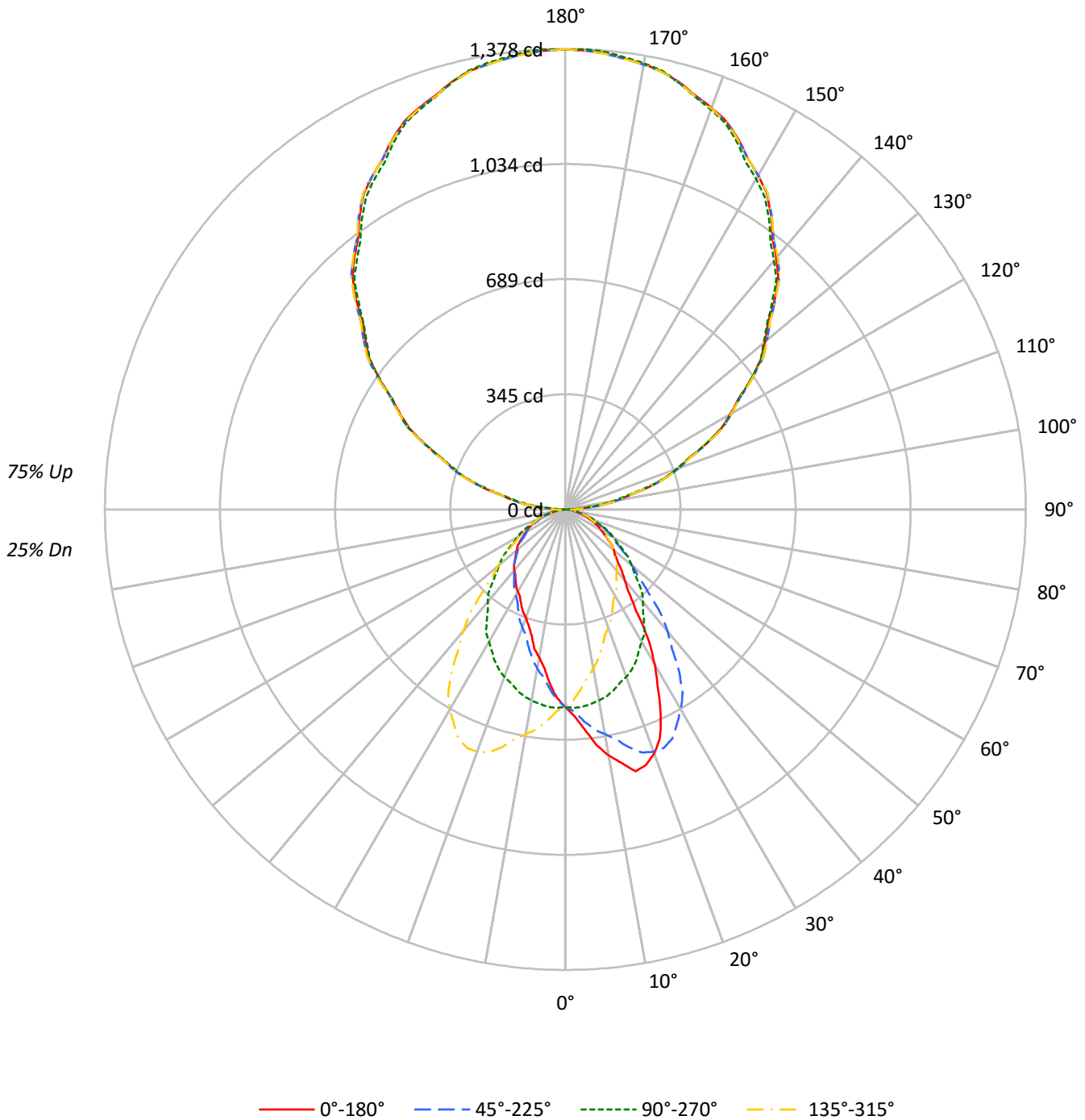
Lumens per Lamp: N/A  
Luminaire Lumens: 5158.4 lumens  
Efficiency: N/A  
Efficacy: 122.2 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect

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	70	70	70	51	51	51	34	34	34	25
1	92	88	85	81	82	79	76	73	61	59	57	45	44	43	30	29	29	22
2	84	77	72	67	75	69	64	60	54	51	48	40	38	36	27	25	24	19
3	77	68	61	56	68	61	55	51	48	44	40	35	33	31	24	22	21	16
4	71	60	53	47	63	54	48	43	42	38	35	32	29	26	21	20	18	14
5	65	54	46	40	57	48	42	37	38	33	30	28	25	23	19	18	16	12
6	60	48	41	35	53	43	37	32	34	29	26	26	22	20	18	16	14	11
7	55	43	36	31	49	39	33	28	31	26	23	23	20	18	16	14	13	10
8	51	39	32	27	45	35	29	25	28	24	20	21	18	16	15	13	11	9
9	47	36	29	24	42	32	26	22	26	21	18	20	16	14	14	12	10	8
10	44	33	26	21	39	30	24	20	24	19	16	18	15	13	13	11	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	1.1
10°-20°	163.7	3.2
20°-30°	237.5	4.6
30°-40°	250.6	4.9
40°-50°	221.9	4.3
50°-60°	177.1	3.4
60°-70°	120.4	2.3
70°-80°	61.7	1.2
80°-90°	20.4	0.4
90°-100°	87.2	1.7
100°-110°	270.9	5.3
110°-120°	463.1	9.0
120°-130°	608.9	11.8
130°-140°	683.5	13.2
140°-150°	670.1	13.0
150°-160°	562.1	10.9
160°-170°	372.8	7.2
170°-180°	130.3	2.5
0°-30°	457.5	8.9
0°-40°	708.1	13.7
0°-60°	1107.1	21.5
0°-90°	1309.5	25.4
90°-120°	821.2	15.9
90°-150°	2783.7	54.0
90°-180°	3849.0	74.6
0°-180°	5158.4	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	15
90°	40	1	40	1	40	18
95°	72	60	72	60	72	80
105°	258	250	258	250	258	271
115°	465	465	465	465	465	459
125°	678	676	678	676	678	605
135°	885	875	885	875	885	681
145°	1073	1062	1073	1062	1073	670
155°	1223	1214	1223	1214	1223	563
165°	1322	1321	1322	1321	1322	373
175°	1370	1374	1370	1374	1370	130
180°	1376	1376	1376	1376	1376	



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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°	12.6	12.6	12.7	12.5	12.4	12.6	12.7	12.6	12.9	13.2	12.3
90°	39.5	39.2	39.0	38.7	38.5	38.6	39.1	39.6	40.1	40.7	35.0
92.5°	37.6	37.6	37.5	37.5	37.4	37.4	37.2	37.1	37.0	36.9	35.6
95°	72.0	72.5	73.1	73.6	74.1	74.3	74.3	74.3	74.3	74.3	73.8
97.5°	124.8	124.8	124.9	124.9	125.0	125.0	125.0	125.0	125.0	125.0	124.0
100°	159.1	159.4	159.7	159.9	160.2	160.3	160.3	160.3	160.3	160.3	159.5
102.5°	198.2	198.4	198.7	198.9	199.2	199.2	199.0	198.8	198.6	198.4	197.4
105°	257.9	257.9	257.9	257.9	257.9	257.6	257.1	256.6	256.1	255.5	255.0
107.5°	314.1	315.3	316.5	317.7	318.8	319.3	319.1	318.9	318.7	318.5	318.5
110°	357.8	358.5	359.3	360.1	360.9	361.3	361.3	361.3	361.3	361.3	361.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	399.6	400.2	400.7	401.3	401.9	402.5	403.1	403.7	404.3	404.9	405.1
115°	464.6	465.4	466.2	467.0	467.7	468.2	468.5	468.8	469.0	469.3	469.8
117.5°	526.7	527.4	528.2	529.0	529.8	530.5	531.1	531.7	532.3	532.9	534.4
120°	570.3	571.1	571.9	572.7	573.4	573.8	573.8	573.8	573.8	573.8	575.9
122.5°	613.1	613.7	614.2	614.8	615.4	615.9	616.6	617.2	617.8	618.4	619.9
125°	678.4	678.6	678.9	679.1	679.4	679.9	680.7	681.5	682.2	683.0	683.8
127.5°	737.8	738.7	739.5	740.3	741.1	742.0	742.9	743.9	744.8	745.7	746.7
130°	780.6	781.6	782.6	783.7	784.7	785.5	786.0	786.5	787.0	787.6	788.1
132.5°	821.5	822.3	823.1	824.0	824.8	825.8	826.9	828.0	829.2	830.3	830.2
135°	885.1	885.9	886.7	887.4	888.2	888.7	889.0	889.3	889.5	889.8	889.3
137.5°	942.7	943.8	944.8	945.8	946.9	947.5	947.7	947.9	948.1	948.3	947.6
140°	982.7	983.7	984.8	985.8	986.8	987.3	987.3	987.3	987.3	987.3	986.1
142.5°	1018.9	1020.0	1021.0	1022.0	1023.1	1023.5	1023.3	1023.1	1022.9	1022.7	1021.8
145°	1073.3	1074.3	1075.4	1076.4	1077.4	1077.8	1077.6	1077.3	1077.0	1076.8	1075.2
147.5°	1121.9	1122.8	1123.8	1124.8	1125.8	1126.0	1125.4	1124.9	1124.3	1123.7	1122.7
150°	1153.5	1154.2	1155.0	1155.8	1156.6	1156.6	1155.8	1155.0	1154.2	1153.5	1152.4
152.5°	1183.2	1184.2	1185.2	1186.1	1187.1	1187.1	1186.1	1185.2	1184.2	1183.2	1182.0
155°	1223.1	1223.9	1224.7	1225.5	1226.2	1226.0	1224.7	1223.4	1222.1	1220.8	1220.1
157.5°	1257.5	1258.8	1260.0	1261.2	1262.5	1262.2	1260.5	1258.7	1257.0	1255.2	1254.7
160°	1278.9	1279.9	1281.0	1282.0	1283.0	1282.8	1281.2	1279.7	1278.1	1276.6	1276.3
162.5°	1297.5	1298.7	1300.0	1301.2	1302.4	1302.2	1300.4	1298.7	1296.9	1295.2	1294.9
165°	1321.9	1323.2	1324.5	1325.8	1327.0	1326.8	1325.0	1323.2	1321.4	1319.6	1319.6
167.5°	1341.9	1343.2	1344.5	1345.9	1347.2	1347.0	1345.2	1343.4	1341.6	1339.8	1339.8
170°	1352.1	1353.6	1355.2	1356.7	1358.3	1358.1	1356.3	1354.5	1352.7	1350.9	1351.2
172.5°	1360.4	1362.0	1363.5	1365.1	1366.6	1366.5	1364.7	1362.9	1361.1	1359.3	1359.5
175°	1369.5	1371.1	1372.6	1374.2	1375.7	1375.6	1373.8	1372.0	1370.2	1368.3	1368.9
177.5°	1373.7	1374.9	1376.2	1377.4	1378.6	1378.6	1377.4	1376.2	1374.9	1373.7	1374.1
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5



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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°	11.3	10.2	9.0	8.5	7.4	6.7	5.4	4.2	4.7	5.1	5.4
90°	29.3	23.6	17.9	13.6	10.5	7.4	4.3	1.2	4.3	7.4	10.5
92.5°	34.3	32.9	31.6	29.8	27.5	25.2	22.9	20.7	22.9	25.2	27.5
95°	73.3	72.8	72.3	70.7	68.1	65.6	63.0	60.4	63.0	65.6	68.1
97.5°	123.0	122.0	121.1	119.4	117.2	114.9	112.6	110.4	112.6	114.9	117.2
100°	158.7	158.0	157.2	155.8	153.7	151.7	149.6	147.5	149.6	151.7	153.7
102.5°	196.4	195.5	194.5	193.2	191.5	189.9	188.2	186.6	188.2	189.9	191.5
105°	254.5	254.0	253.5	252.8	252.1	251.3	250.5	249.7	250.5	251.3	252.1
107.5°	318.5	318.5	318.5	317.9	316.8	315.7	314.5	313.4	314.5	315.7	316.8
110°	361.3	361.3	361.3	360.5	358.9	357.4	355.8	354.3	355.8	357.4	358.9





TEST NUMBER: P331277

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	405.3	405.5	405.8	405.1	403.5	402.0	400.4	398.9	400.4	402.0	403.5
115°	470.3	470.8	471.3	470.8	469.3	467.7	466.2	464.6	466.2	467.7	469.3
117.5°	535.8	537.3	538.7	538.4	536.3	534.3	532.2	530.1	532.2	534.3	536.3
120°	578.0	580.0	582.1	582.1	580.0	578.0	575.9	573.8	575.9	578.0	580.0
122.5°	621.3	622.8	624.2	623.7	621.2	618.7	616.3	613.8	616.3	618.7	621.2
125°	684.6	685.3	686.1	685.3	683.0	680.7	678.4	676.0	678.4	680.7	683.0
127.5°	747.6	748.5	749.5	748.4	745.5	742.6	739.6	736.7	739.6	742.6	745.5
130°	788.6	789.1	789.6	788.2	784.8	781.5	778.1	774.8	778.1	781.5	784.8
132.5°	830.1	830.0	829.9	828.5	825.7	823.0	820.3	817.5	820.3	823.0	825.7
135°	888.7	888.2	887.7	886.0	883.2	880.4	877.5	874.7	877.5	880.4	883.2
137.5°	947.0	946.3	945.6	944.1	941.8	939.5	937.2	934.8	937.2	939.5	941.8
140°	984.8	983.5	982.2	980.4	978.1	975.7	973.4	971.1	973.4	975.7	978.1
142.5°	1020.9	1020.0	1019.1	1017.5	1015.2	1012.9	1010.6	1008.3	1010.6	1012.9	1015.2
145°	1073.7	1072.1	1070.6	1068.9	1067.1	1065.3	1063.5	1061.7	1063.5	1065.3	1067.1
147.5°	1121.7	1120.6	1119.6	1118.0	1115.8	1113.6	1111.5	1109.3	1111.5	1113.6	1115.8
150°	1151.4	1150.4	1149.3	1148.0	1146.5	1144.9	1143.4	1141.8	1143.4	1144.9	1146.5
152.5°	1180.7	1179.5	1178.2	1176.8	1175.3	1173.7	1172.2	1170.6	1172.2	1173.7	1175.3
155°	1219.3	1218.5	1217.7	1217.0	1216.2	1215.4	1214.6	1213.9	1214.6	1215.4	1216.2
157.5°	1254.3	1253.8	1253.3	1252.9	1252.3	1251.8	1251.3	1250.8	1251.3	1251.8	1252.3
160°	1276.1	1275.8	1275.5	1275.2	1274.6	1274.1	1273.6	1273.1	1273.6	1274.1	1274.6
162.5°	1294.6	1294.4	1294.1	1294.0	1293.8	1293.7	1293.6	1293.5	1293.6	1293.7	1293.8
165°	1319.6	1319.6	1319.6	1319.7	1319.9	1320.2	1320.5	1320.7	1320.5	1320.2	1319.9
167.5°	1339.9	1339.9	1340.0	1340.4	1341.2	1341.9	1342.7	1343.5	1342.7	1341.9	1341.2
170°	1351.4	1351.7	1352.0	1352.5	1353.2	1354.0	1354.8	1355.6	1354.8	1354.0	1353.2
172.5°	1359.8	1360.1	1360.3	1360.8	1361.6	1362.4	1363.2	1363.9	1363.2	1362.4	1361.6
175°	1369.4	1369.9	1370.4	1371.1	1371.8	1372.6	1373.4	1374.2	1373.4	1372.6	1371.8
177.5°	1374.5	1374.9	1375.3	1375.9	1376.5	1377.1	1377.7	1378.3	1377.7	1377.1	1376.5
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5



TEST NUMBER: P331277

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A1

**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°	5.8	6.5	7.4	8.6	9.5	10.5	10.2	10.1	10.0	9.5	9.5
90°	13.6	17.9	23.6	29.3	35.0	40.7	40.1	39.6	39.1	38.6	38.5
92.5°	29.8	31.6	32.9	34.3	35.6	36.9	37.0	37.1	37.2	37.4	37.4
95°	70.7	72.3	72.8	73.3	73.8	74.3	74.3	74.3	74.3	74.3	74.1
97.5°	119.4	121.1	122.0	123.0	124.0	125.0	125.0	125.0	125.0	125.0	125.0
100°	155.8	157.2	158.0	158.7	159.5	160.3	160.3	160.3	160.3	160.3	160.2
102.5°	193.2	194.5	195.5	196.4	197.4	198.4	198.6	198.8	199.0	199.2	199.2
105°	252.8	253.5	254.0	254.5	255.0	255.5	256.1	256.6	257.1	257.6	257.9
107.5°	317.9	318.5	318.5	318.5	318.5	318.5	318.7	318.9	319.1	319.3	318.8
110°	360.5	361.3	361.3	361.3	361.3	361.3	361.3	361.3	361.3	361.3	360.9



TEST NUMBER: P331277

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	405.1	405.8	405.5	405.3	405.1	404.9	404.3	403.7	403.1	402.5	401.9
115°	470.8	471.3	470.8	470.3	469.8	469.3	469.0	468.8	468.5	468.2	467.7
117.5°	538.4	538.7	537.3	535.8	534.4	532.9	532.3	531.7	531.1	530.5	529.8
120°	582.1	582.1	580.0	578.0	575.9	573.8	573.8	573.8	573.8	573.8	573.4
122.5°	623.7	624.2	622.8	621.3	619.9	618.4	617.8	617.2	616.6	615.9	615.4
125°	685.3	686.1	685.3	684.6	683.8	683.0	682.2	681.5	680.7	679.9	679.4
127.5°	748.4	749.5	748.5	747.6	746.7	745.7	744.8	743.9	742.9	742.0	741.1
130°	788.2	789.6	789.1	788.6	788.1	787.6	787.0	786.5	786.0	785.5	784.7
132.5°	828.5	829.9	830.0	830.1	830.2	830.3	829.2	828.0	826.9	825.8	824.8
135°	886.0	887.7	888.2	888.7	889.3	889.8	889.5	889.3	889.0	888.7	888.2
137.5°	944.1	945.6	946.3	947.0	947.6	948.3	948.1	947.9	947.7	947.5	946.9
140°	980.4	982.2	983.5	984.8	986.1	987.3	987.3	987.3	987.3	987.3	986.8
142.5°	1017.5	1019.1	1020.0	1020.9	1021.8	1022.7	1022.9	1023.1	1023.3	1023.5	1023.1
145°	1068.9	1070.6	1072.1	1073.7	1075.2	1076.8	1077.0	1077.3	1077.6	1077.8	1077.4
147.5°	1118.0	1119.6	1120.6	1121.7	1122.7	1123.7	1124.3	1124.9	1125.4	1126.0	1125.8
150°	1148.0	1149.3	1150.4	1151.4	1152.4	1153.5	1154.2	1155.0	1155.8	1156.6	1156.6
152.5°	1176.8	1178.2	1179.5	1180.7	1182.0	1183.2	1184.2	1185.2	1186.1	1187.1	1187.1
155°	1217.0	1217.7	1218.5	1219.3	1220.1	1220.8	1222.1	1223.4	1224.7	1226.0	1226.2
157.5°	1252.9	1253.3	1253.8	1254.3	1254.7	1255.2	1257.0	1258.7	1260.5	1262.2	1262.5
160°	1275.2	1275.5	1275.8	1276.1	1276.3	1276.6	1278.1	1279.7	1281.2	1282.8	1283.0
162.5°	1294.0	1294.1	1294.4	1294.6	1294.9	1295.2	1296.9	1298.7	1300.4	1302.2	1302.4
165°	1319.7	1319.6	1319.6	1319.6	1319.6	1319.6	1321.4	1323.2	1325.0	1326.8	1327.0
167.5°	1340.4	1340.0	1339.9	1339.9	1339.8	1339.8	1341.6	1343.4	1345.2	1347.0	1347.2
170°	1352.5	1352.0	1351.7	1351.4	1351.2	1350.9	1352.7	1354.5	1356.3	1358.1	1358.3
172.5°	1360.8	1360.3	1360.1	1359.8	1359.5	1359.3	1361.1	1362.9	1364.7	1366.5	1366.6
175°	1371.1	1370.4	1369.9	1369.4	1368.9	1368.3	1370.2	1372.0	1373.8	1375.6	1375.7
177.5°	1375.9	1375.3	1374.9	1374.5	1374.1	1373.7	1374.9	1376.2	1377.4	1378.6	1378.6
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5



TEST NUMBER: P331277

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A1

**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°	9.6	9.4	9.5	9.4	9.5	9.4	9.6	9.5	9.5	10.0	10.1
90°	38.7	39.0	39.2	39.5	39.2	39.0	38.7	38.5	38.6	39.1	39.6
92.5°	37.5	37.5	37.6	37.6	37.6	37.5	37.5	37.4	37.4	37.2	37.1
95°	73.6	73.1	72.5	72.0	72.5	73.1	73.6	74.1	74.3	74.3	74.3
97.5°	124.9	124.9	124.8	124.8	124.8	124.9	124.9	125.0	125.0	125.0	125.0
100°	159.9	159.7	159.4	159.1	159.4	159.7	159.9	160.2	160.3	160.3	160.3
102.5°	198.9	198.7	198.4	198.2	198.4	198.7	198.9	199.2	199.2	199.0	198.8
105°	257.9	257.9	257.9	257.9	257.9	257.9	257.9	257.9	257.6	257.1	256.6
107.5°	317.7	316.5	315.3	314.1	315.3	316.5	317.7	318.8	319.3	319.1	318.9
110°	360.1	359.3	358.5	357.8	358.5	359.3	360.1	360.9	361.3	361.3	361.3



TEST NUMBER: P331277

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	401.3	400.7	400.2	399.6	400.2	400.7	401.3	401.9	402.5	403.1	403.7
115°	467.0	466.2	465.4	464.6	465.4	466.2	467.0	467.7	468.2	468.5	468.8
117.5°	529.0	528.2	527.4	526.7	527.4	528.2	529.0	529.8	530.5	531.1	531.7
120°	572.7	571.9	571.1	570.3	571.1	571.9	572.7	573.4	573.8	573.8	573.8
122.5°	614.8	614.2	613.7	613.1	613.7	614.2	614.8	615.4	615.9	616.6	617.2
125°	679.1	678.9	678.6	678.4	678.6	678.9	679.1	679.4	679.9	680.7	681.5
127.5°	740.3	739.5	738.7	737.8	738.7	739.5	740.3	741.1	742.0	742.9	743.9
130°	783.7	782.6	781.6	780.6	781.6	782.6	783.7	784.7	785.5	786.0	786.5
132.5°	824.0	823.1	822.3	821.5	822.3	823.1	824.0	824.8	825.8	826.9	828.0
135°	887.4	886.7	885.9	885.1	885.9	886.7	887.4	888.2	888.7	889.0	889.3
137.5°	945.8	944.8	943.8	942.7	943.8	944.8	945.8	946.9	947.5	947.7	947.9
140°	985.8	984.8	983.7	982.7	983.7	984.8	985.8	986.8	987.3	987.3	987.3
142.5°	1022.0	1021.0	1020.0	1018.9	1020.0	1021.0	1022.0	1023.1	1023.5	1023.3	1023.1
145°	1076.4	1075.4	1074.3	1073.3	1074.3	1075.4	1076.4	1077.4	1077.8	1077.6	1077.3
147.5°	1124.8	1123.8	1122.8	1121.9	1122.8	1123.8	1124.8	1125.8	1126.0	1125.4	1124.9
150°	1155.8	1155.0	1154.2	1153.5	1154.2	1155.0	1155.8	1156.6	1156.6	1155.8	1155.0
152.5°	1186.1	1185.2	1184.2	1183.2	1184.2	1185.2	1186.1	1187.1	1187.1	1186.1	1185.2
155°	1225.5	1224.7	1223.9	1223.1	1223.9	1224.7	1225.5	1226.2	1226.0	1224.7	1223.4
157.5°	1261.2	1260.0	1258.8	1257.5	1258.8	1260.0	1261.2	1262.5	1262.2	1260.5	1258.7
160°	1282.0	1281.0	1279.9	1278.9	1279.9	1281.0	1282.0	1283.0	1282.8	1281.2	1279.7
162.5°	1301.2	1300.0	1298.7	1297.5	1298.7	1300.0	1301.2	1302.4	1302.2	1300.4	1298.7
165°	1325.8	1324.5	1323.2	1321.9	1323.2	1324.5	1325.8	1327.0	1326.8	1325.0	1323.2
167.5°	1345.9	1344.5	1343.2	1341.9	1343.2	1344.5	1345.9	1347.2	1347.0	1345.2	1343.4
170°	1356.7	1355.2	1353.6	1352.1	1353.6	1355.2	1356.7	1358.3	1358.1	1356.3	1354.5
172.5°	1365.1	1363.5	1362.0	1360.4	1362.0	1363.5	1365.1	1366.6	1366.5	1364.7	1362.9
175°	1374.2	1372.6	1371.1	1369.5	1371.1	1372.6	1374.2	1375.7	1375.6	1373.8	1372.0
177.5°	1377.4	1376.2	1374.9	1373.7	1374.9	1376.2	1377.4	1378.6	1378.6	1377.4	1376.2
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5



TEST NUMBER: P331277

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**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°	10.2	10.5	9.5	8.6	7.4	6.5	5.8	5.4	5.1	4.7	4.2
90°	40.1	40.7	35.0	29.3	23.6	17.9	13.6	10.5	7.4	4.3	1.2
92.5°	37.0	36.9	35.6	34.3	32.9	31.6	29.8	27.5	25.2	22.9	20.7
95°	74.3	74.3	73.8	73.3	72.8	72.3	70.7	68.1	65.6	63.0	60.4
97.5°	125.0	125.0	124.0	123.0	122.0	121.1	119.4	117.2	114.9	112.6	110.4
100°	160.3	160.3	159.5	158.7	158.0	157.2	155.8	153.7	151.7	149.6	147.5
102.5°	198.6	198.4	197.4	196.4	195.5	194.5	193.2	191.5	189.9	188.2	186.6
105°	256.1	255.5	255.0	254.5	254.0	253.5	252.8	252.1	251.3	250.5	249.7
107.5°	318.7	318.5	318.5	318.5	318.5	318.5	317.9	316.8	315.7	314.5	313.4
110°	361.3	361.3	361.3	361.3	361.3	361.3	360.5	358.9	357.4	355.8	354.3



TEST NUMBER: P331277

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	404.3	404.9	405.1	405.3	405.5	405.8	405.1	403.5	402.0	400.4	398.9
115°	469.0	469.3	469.8	470.3	470.8	471.3	470.8	469.3	467.7	466.2	464.6
117.5°	532.3	532.9	534.4	535.8	537.3	538.7	538.4	536.3	534.3	532.2	530.1
120°	573.8	573.8	575.9	578.0	580.0	582.1	582.1	580.0	578.0	575.9	573.8
122.5°	617.8	618.4	619.9	621.3	622.8	624.2	623.7	621.2	618.7	616.3	613.8
125°	682.2	683.0	683.8	684.6	685.3	686.1	685.3	683.0	680.7	678.4	676.0
127.5°	744.8	745.7	746.7	747.6	748.5	749.5	748.4	745.5	742.6	739.6	736.7
130°	787.0	787.6	788.1	788.6	789.1	789.6	788.2	784.8	781.5	778.1	774.8
132.5°	829.2	830.3	830.2	830.1	830.0	829.9	828.5	825.7	823.0	820.3	817.5
135°	889.5	889.8	889.3	888.7	888.2	887.7	886.0	883.2	880.4	877.5	874.7
137.5°	948.1	948.3	947.6	947.0	946.3	945.6	944.1	941.8	939.5	937.2	934.8
140°	987.3	987.3	986.1	984.8	983.5	982.2	980.4	978.1	975.7	973.4	971.1
142.5°	1022.9	1022.7	1021.8	1020.9	1020.0	1019.1	1017.5	1015.2	1012.9	1010.6	1008.3
145°	1077.0	1076.8	1075.2	1073.7	1072.1	1070.6	1068.9	1067.1	1065.3	1063.5	1061.7
147.5°	1124.3	1123.7	1122.7	1121.7	1120.6	1119.6	1118.0	1115.8	1113.6	1111.5	1109.3
150°	1154.2	1153.5	1152.4	1151.4	1150.4	1149.3	1148.0	1146.5	1144.9	1143.4	1141.8
152.5°	1184.2	1183.2	1182.0	1180.7	1179.5	1178.2	1176.8	1175.3	1173.7	1172.2	1170.6
155°	1222.1	1220.8	1220.1	1219.3	1218.5	1217.7	1217.0	1216.2	1215.4	1214.6	1213.9
157.5°	1257.0	1255.2	1254.7	1254.3	1253.8	1253.3	1252.9	1252.3	1251.8	1251.3	1250.8
160°	1278.1	1276.6	1276.3	1276.1	1275.8	1275.5	1275.2	1274.6	1274.1	1273.6	1273.1
162.5°	1296.9	1295.2	1294.9	1294.6	1294.4	1294.1	1294.0	1293.8	1293.7	1293.6	1293.5
165°	1321.4	1319.6	1319.6	1319.6	1319.6	1319.6	1319.7	1319.9	1320.2	1320.5	1320.7
167.5°	1341.6	1339.8	1339.8	1339.9	1339.9	1340.0	1340.4	1341.2	1341.9	1342.7	1343.5
170°	1352.7	1350.9	1351.2	1351.4	1351.7	1352.0	1352.5	1353.2	1354.0	1354.8	1355.6
172.5°	1361.1	1359.3	1359.5	1359.8	1360.1	1360.3	1360.8	1361.6	1362.4	1363.2	1363.9
175°	1370.2	1368.3	1368.9	1369.4	1369.9	1370.4	1371.1	1371.8	1372.6	1373.4	1374.2
177.5°	1374.9	1373.7	1374.1	1374.5	1374.9	1375.3	1375.9	1376.5	1377.1	1377.7	1378.3
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5



TEST NUMBER: P331277

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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°	5.4	6.7	7.4	8.5	9.0	10.2	11.3	12.3	13.2	12.9	12.6
90°	4.3	7.4	10.5	13.6	17.9	23.6	29.3	35.0	40.7	40.1	39.6
92.5°	22.9	25.2	27.5	29.8	31.6	32.9	34.3	35.6	36.9	37.0	37.1
95°	63.0	65.6	68.1	70.7	72.3	72.8	73.3	73.8	74.3	74.3	74.3
97.5°	112.6	114.9	117.2	119.4	121.1	122.0	123.0	124.0	125.0	125.0	125.0
100°	149.6	151.7	153.7	155.8	157.2	158.0	158.7	159.5	160.3	160.3	160.3
102.5°	188.2	189.9	191.5	193.2	194.5	195.5	196.4	197.4	198.4	198.6	198.8
105°	250.5	251.3	252.1	252.8	253.5	254.0	254.5	255.0	255.5	256.1	256.6
107.5°	314.5	315.7	316.8	317.9	318.5	318.5	318.5	318.5	318.5	318.7	318.9
110°	355.8	357.4	358.9	360.5	361.3	361.3	361.3	361.3	361.3	361.3	361.3





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	400.4	402.0	403.5	405.1	405.8	405.5	405.3	405.1	404.9	404.3	403.7
115°	466.2	467.7	469.3	470.8	471.3	470.8	470.3	469.8	469.3	469.0	468.8
117.5°	532.2	534.3	536.3	538.4	538.7	537.3	535.8	534.4	532.9	532.3	531.7
120°	575.9	578.0	580.0	582.1	582.1	580.0	578.0	575.9	573.8	573.8	573.8
122.5°	616.3	618.7	621.2	623.7	624.2	622.8	621.3	619.9	618.4	617.8	617.2
125°	678.4	680.7	683.0	685.3	686.1	685.3	684.6	683.8	683.0	682.2	681.5
127.5°	739.6	742.6	745.5	748.4	749.5	748.5	747.6	746.7	745.7	744.8	743.9
130°	778.1	781.5	784.8	788.2	789.6	789.1	788.6	788.1	787.6	787.0	786.5
132.5°	820.3	823.0	825.7	828.5	829.9	830.0	830.1	830.2	830.3	829.2	828.0
135°	877.5	880.4	883.2	886.0	887.7	888.2	888.7	889.3	889.8	889.5	889.3
137.5°	937.2	939.5	941.8	944.1	945.6	946.3	947.0	947.6	948.3	948.1	947.9
140°	973.4	975.7	978.1	980.4	982.2	983.5	984.8	986.1	987.3	987.3	987.3
142.5°	1010.6	1012.9	1015.2	1017.5	1019.1	1020.0	1020.9	1021.8	1022.7	1022.9	1023.1
145°	1063.5	1065.3	1067.1	1068.9	1070.6	1072.1	1073.7	1075.2	1076.8	1077.0	1077.3
147.5°	1111.5	1113.6	1115.8	1118.0	1119.6	1120.6	1121.7	1122.7	1123.7	1124.3	1124.9
150°	1143.4	1144.9	1146.5	1148.0	1149.3	1150.4	1151.4	1152.4	1153.5	1154.2	1155.0
152.5°	1172.2	1173.7	1175.3	1176.8	1178.2	1179.5	1180.7	1182.0	1183.2	1184.2	1185.2
155°	1214.6	1215.4	1216.2	1217.0	1217.7	1218.5	1219.3	1220.1	1220.8	1222.1	1223.4
157.5°	1251.3	1251.8	1252.3	1252.9	1253.3	1253.8	1254.3	1254.7	1255.2	1257.0	1258.7
160°	1273.6	1274.1	1274.6	1275.2	1275.5	1275.8	1276.1	1276.3	1276.6	1278.1	1279.7
162.5°	1293.6	1293.7	1293.8	1294.0	1294.1	1294.4	1294.6	1294.9	1295.2	1296.9	1298.7
165°	1320.5	1320.2	1319.9	1319.7	1319.6	1319.6	1319.6	1319.6	1319.6	1321.4	1323.2
167.5°	1342.7	1341.9	1341.2	1340.4	1340.0	1339.9	1339.9	1339.8	1339.8	1341.6	1343.4
170°	1354.8	1354.0	1353.2	1352.5	1352.0	1351.7	1351.4	1351.2	1350.9	1352.7	1354.5
172.5°	1363.2	1362.4	1361.6	1360.8	1360.3	1360.1	1359.8	1359.5	1359.3	1361.1	1362.9
175°	1373.4	1372.6	1371.8	1371.1	1370.4	1369.9	1369.4	1368.9	1368.3	1370.2	1372.0
177.5°	1377.7	1377.1	1376.5	1375.9	1375.3	1374.9	1374.5	1374.1	1373.7	1374.9	1376.2
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5



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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°	12.7	12.6	12.4	12.5	12.7	12.6	12.6
90°	39.1	38.6	38.5	38.7	39.0	39.2	39.5
92.5°	37.2	37.4	37.4	37.5	37.5	37.6	37.6
95°	74.3	74.3	74.1	73.6	73.1	72.5	72.0
97.5°	125.0	125.0	125.0	124.9	124.9	124.8	124.8
100°	160.3	160.3	160.2	159.9	159.7	159.4	159.1
102.5°	199.0	199.2	199.2	198.9	198.7	198.4	198.2
105°	257.1	257.6	257.9	257.9	257.9	257.9	257.9
107.5°	319.1	319.3	318.8	317.7	316.5	315.3	314.1
110°	361.3	361.3	360.9	360.1	359.3	358.5	357.8



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	403.1	402.5	401.9	401.3	400.7	400.2	399.6
115°	468.5	468.2	467.7	467.0	466.2	465.4	464.6
117.5°	531.1	530.5	529.8	529.0	528.2	527.4	526.7
120°	573.8	573.8	573.4	572.7	571.9	571.1	570.3
122.5°	616.6	615.9	615.4	614.8	614.2	613.7	613.1
125°	680.7	679.9	679.4	679.1	678.9	678.6	678.4
127.5°	742.9	742.0	741.1	740.3	739.5	738.7	737.8
130°	786.0	785.5	784.7	783.7	782.6	781.6	780.6
132.5°	826.9	825.8	824.8	824.0	823.1	822.3	821.5
135°	889.0	888.7	888.2	887.4	886.7	885.9	885.1
137.5°	947.7	947.5	946.9	945.8	944.8	943.8	942.7
140°	987.3	987.3	986.8	985.8	984.8	983.7	982.7
142.5°	1023.3	1023.5	1023.1	1022.0	1021.0	1020.0	1018.9
145°	1077.6	1077.8	1077.4	1076.4	1075.4	1074.3	1073.3
147.5°	1125.4	1126.0	1125.8	1124.8	1123.8	1122.8	1121.9
150°	1155.8	1156.6	1156.6	1155.8	1155.0	1154.2	1153.5
152.5°	1186.1	1187.1	1187.1	1186.1	1185.2	1184.2	1183.2
155°	1224.7	1226.0	1226.2	1225.5	1224.7	1223.9	1223.1
157.5°	1260.5	1262.2	1262.5	1261.2	1260.0	1258.8	1257.5
160°	1281.2	1282.8	1283.0	1282.0	1281.0	1279.9	1278.9
162.5°	1300.4	1302.2	1302.4	1301.2	1300.0	1298.7	1297.5
165°	1325.0	1326.8	1327.0	1325.8	1324.5	1323.2	1321.9
167.5°	1345.2	1347.0	1347.2	1345.9	1344.5	1343.2	1341.9
170°	1356.3	1358.1	1358.3	1356.7	1355.2	1353.6	1352.1
172.5°	1364.7	1366.5	1366.6	1365.1	1363.5	1362.0	1360.4
175°	1373.8	1375.6	1375.7	1374.2	1372.6	1371.1	1369.5
177.5°	1377.4	1378.6	1378.6	1377.4	1376.2	1374.9	1373.7
180°	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5	1376.5

(END OF REPORT)