

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: P331640-840

Luminaire Tested: **SA2XXRDIP-C290D1080U840-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331640-840
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: SA2XXRDIP-C290D1080U840-4F0-1E-UDD-A1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1080 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5033.4 lumens
Efficiency: N/A
Efficacy: 119.3 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

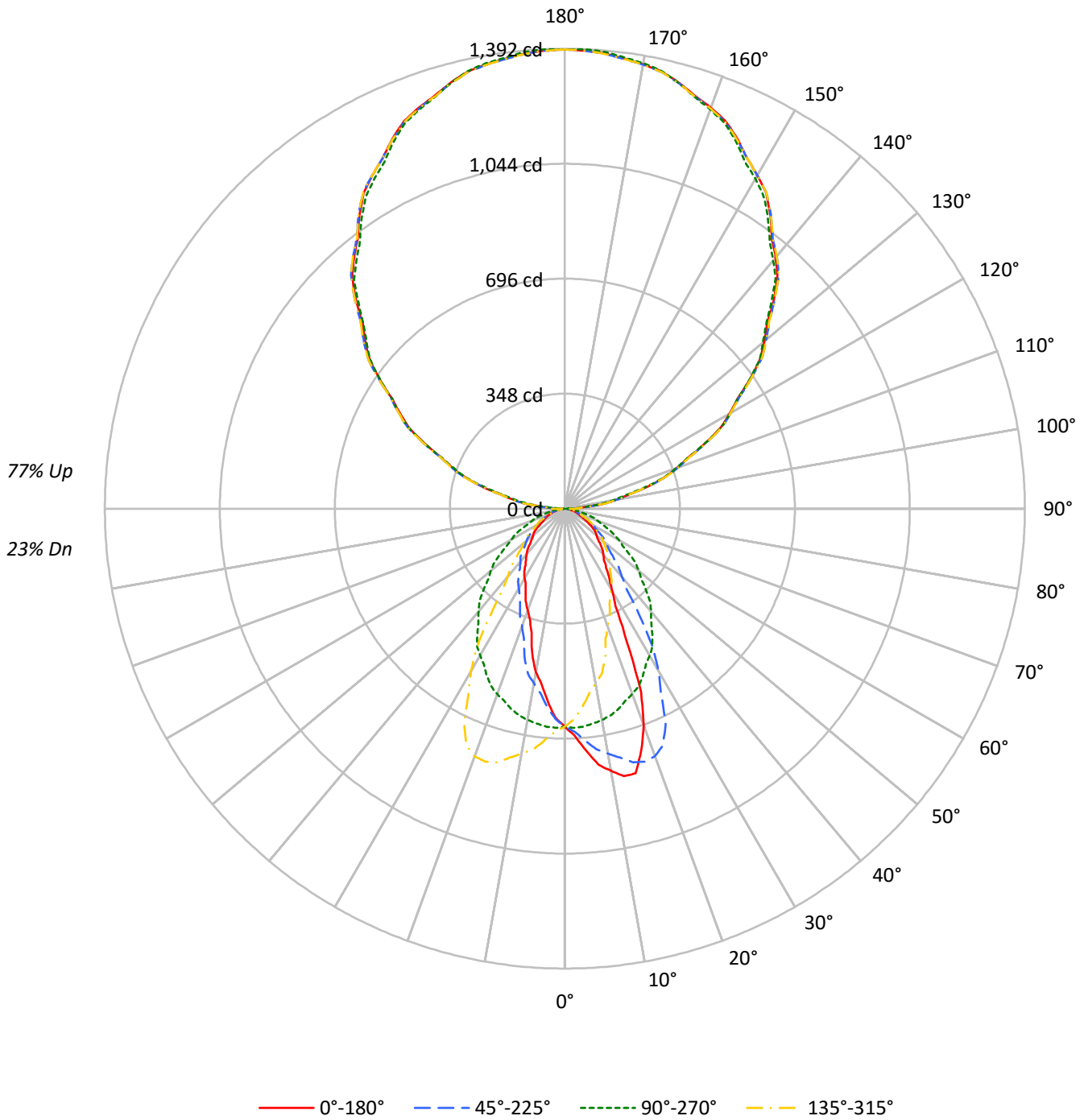
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23				
1	92	88	84	81	82	78	75	73	60	58	56	43	42	41	28	27	27	20				
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23	17				
3	77	68	61	56	68	61	55	51	47	43	40	34	32	30	23	21	20	15				
4	70	60	53	48	62	54	48	43	42	38	34	31	28	26	20	19	18	13				
5	65	54	46	41	57	48	42	37	38	33	30	28	25	23	19	17	16	12				
6	60	48	41	35	53	43	37	32	34	29	26	25	22	20	17	15	14	11				
7	55	44	36	31	49	39	33	28	31	26	23	23	20	18	16	14	13	10				
8	51	40	32	27	45	36	29	25	28	24	20	21	18	16	14	13	11	9				
9	47	36	29	24	42	32	26	22	26	21	18	19	16	14	13	12	10	8				
10	44	33	26	22	39	30	24	20	24	19	16	18	15	13	12	11	9	7				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10658	10658	10658	10658
5°	11904	10726	9511	10726
10°	13209	10650	8243	10650
15°	13857	10494	6496	10494
20°	12014	10263	5620	10263
25°	7878	9948	5018	9948
30°	5304	9562	4542	9562
35°	4295	9079	4096	9079
40°	3819	8553	3792	8553
45°	3457	7935	3382	7935
50°	3145	7322	3135	7322
55°	2956	6643	2919	6643
60°	2474	6022	2444	6022
65°	2086	5467	2365	5467
70°	1926	4881	2233	4881
75°	1803	4255	2059	4255
80°	1664	3505	1832	3505
85°	1538	2760	1612	2760



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	1.2
10°-20°	174.4	3.5
20°-30°	224.7	4.5
30°-40°	213.5	4.2
40°-50°	182.9	3.6
50°-60°	139.3	2.8
60°-70°	88.1	1.7
70°-80°	44.0	0.9
80°-90°	17.0	0.3
90°-100°	88.1	1.7
100°-110°	273.6	5.4
110°-120°	467.6	9.3
120°-130°	614.9	12.2
130°-140°	690.2	13.7
140°-150°	676.7	13.4
150°-160°	567.6	11.3
160°-170°	376.5	7.5
170°-180°	131.6	2.6
0°-30°	461.7	9.2
0°-40°	675.2	13.4
0°-60°	997.5	19.8
0°-90°	1146.5	22.8
90°-120°	829.3	16.5
90°-150°	2811.1	55.9
90°-180°	3887.0	77.2
0°-180°	5033.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	660	660	660	660	660	
5°	734	662	587	662	734	72
15°	829	628	389	628	829	224
25°	442	558	282	558	442	210
35°	218	461	208	461	218	139
45°	151	348	148	348	151	117
55°	105	236	104	236	105	92
65°	55	143	62	143	55	56
75°	29	68	33	68	29	31
85°	8	15	9	15	8	10
90°	40	1	40	1	40	18
95°	73	61	73	61	73	81
105°	260	252	260	252	260	274
115°	469	469	469	469	469	463
125°	685	683	685	683	685	611
135°	894	883	894	883	894	688
145°	1084	1072	1084	1072	1084	677
155°	1235	1226	1235	1226	1235	568
165°	1335	1334	1335	1334	1335	376
175°	1383	1388	1383	1388	1383	131
180°	1390	1390	1390	1390	1390	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	687.0	687.5	688.1	686.8	686.8	685.7	683.3	681.5	676.3	675.6	675.6
5°	734.5	734.1	735.0	732.0	727.9	726.9	722.6	716.8	710.8	704.3	702.9
7.5°	781.7	781.0	779.2	778.7	775.6	768.6	761.6	754.2	744.3	734.6	729.7
10°	805.7	813.2	808.6	800.6	802.1	791.4	785.7	775.8	767.5	753.1	749.9
12.5°	829.1	832.1	830.6	826.1	824.0	816.6	808.8	800.2	785.0	772.0	760.7
15°	829.0	833.3	834.6	833.1	834.2	833.8	829.7	822.6	809.3	795.1	782.6
17.5°	767.8	770.8	778.4	783.5	789.9	803.4	810.2	812.7	810.8	802.6	794.0
20°	699.2	694.2	715.3	726.0	735.2	758.1	777.9	785.5	797.6	797.4	795.1
22.5°	601.9	603.1	623.1	635.9	662.7	685.7	708.1	736.6	760.1	775.7	784.8
25°	442.2	451.0	470.9	488.4	518.2	560.9	599.7	644.6	687.0	720.5	752.5
27.5°	332.1	332.9	348.6	364.8	382.4	417.4	466.3	519.9	580.4	630.4	687.7
30°	284.5	283.1	289.7	299.6	314.8	341.8	378.5	431.2	491.6	566.8	633.8
32.5°	250.6	250.7	255.8	263.1	275.6	293.9	319.0	361.9	418.9	492.9	571.4
35°	217.9	217.7	221.4	226.6	231.9	243.6	260.8	283.3	322.6	391.5	471.8
37.5°	194.4	195.4	197.2	200.6	206.3	212.9	223.2	238.3	266.2	307.1	374.6
40°	181.2	181.7	184.2	186.9	190.4	195.4	203.9	216.1	236.5	269.0	318.4
42.5°	169.2	169.6	171.4	173.9	176.6	181.7	188.7	199.2	215.8	241.2	281.9
45°	151.4	151.4	153.0	154.1	157.1	161.7	167.4	176.2	187.6	206.4	233.5
47.5°	134.8	134.8	135.9	137.8	139.8	143.3	149.0	156.1	164.4	178.9	202.1
50°	125.2	125.5	126.1	127.7	129.0	132.1	136.5	142.7	151.4	162.7	181.9
52.5°	117.5	117.4	118.3	119.0	119.8	122.0	125.3	130.8	138.6	148.3	164.3
55°	105.0	104.1	105.5	106.6	107.3	108.3	110.1	113.5	120.2	128.5	140.4
57.5°	89.5	89.1	90.1	91.1	93.3	95.7	97.4	99.5	102.9	108.9	120.7
60°	76.6	76.6	78.7	79.4	81.9	85.1	88.4	90.2	93.6	97.5	106.2
62.5°	65.2	65.4	66.3	67.1	68.5	72.4	77.0	81.0	84.2	88.0	93.7
65°	54.6	55.0	55.0	55.5	56.5	57.4	59.2	62.4	68.2	73.4	77.8
67.5°	46.4	46.5	46.7	47.1	47.3	48.3	49.1	50.5	51.8	56.8	62.2
70°	40.8	41.5	41.3	41.7	42.0	42.4	43.3	44.0	46.2	47.3	50.5
72.5°	35.6	36.2	36.2	36.5	37.1	37.2	37.9	38.6	39.9	40.8	42.6
75°	28.9	28.7	28.9	29.4	29.6	29.8	29.8	30.7	31.4	32.3	33.5
77.5°	22.3	22.5	22.5	22.5	22.6	23.0	22.9	23.3	24.0	24.5	25.0
80°	17.9	18.1	17.9	18.1	18.4	18.6	18.4	18.6	19.3	19.7	19.7
82.5°	13.8	13.9	14.0	14.0	14.1	14.1	14.5	14.5	15.0	14.9	15.1
85°	8.3	8.1	8.1	8.1	8.3	8.5	8.3	8.3	8.5	8.5	8.5
87.5°	10.9	11.0	11.0	10.9	10.9	10.9	11.0	11.3	11.2	11.5	10.2
90°	39.9	39.6	39.4	39.1	38.9	39.0	39.5	40.0	40.5	41.1	35.3
92.5°	38.0	38.0	37.9	37.9	37.8	37.8	37.6	37.5	37.4	37.3	36.0
95°	72.7	73.2	73.8	74.3	74.8	75.0	75.0	75.0	75.0	75.0	74.5
97.5°	126.0	126.0	126.1	126.1	126.2	126.2	126.2	126.2	126.2	126.2	125.2
100°	160.7	161.0	161.3	161.5	161.8	161.9	161.9	161.9	161.9	161.9	161.1
102.5°	200.2	200.4	200.7	200.9	201.2	201.2	201.0	200.8	200.6	200.4	199.3
105°	260.4	260.4	260.4	260.4	260.4	260.1	259.6	259.1	258.6	258.0	257.5
107.5°	317.2	318.4	319.6	320.8	321.9	322.4	322.2	322.0	321.8	321.6	321.6
110°	361.3	362.0	362.8	363.7	364.5	364.9	364.9	364.9	364.9	364.9	364.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	403.5	404.1	404.7	405.3	405.9	406.5	407.1	407.7	408.3	408.9	409.1
115°	469.2	470.0	470.8	471.6	472.3	472.8	473.1	473.4	473.6	473.9	474.4
117.5°	531.9	532.6	533.4	534.2	535.0	535.7	536.3	536.9	537.6	538.2	539.7
120°	575.9	576.7	577.5	578.3	579.1	579.5	579.5	579.5	579.5	579.5	581.6
122.5°	619.1	619.8	620.3	620.9	621.5	622.0	622.7	623.3	623.9	624.5	626.0
125°	685.1	685.3	685.6	685.8	686.1	686.6	687.4	688.2	688.9	689.7	690.5
127.5°	745.1	746.0	746.8	747.6	748.4	749.3	750.2	751.2	752.1	753.1	754.1
130°	788.3	789.3	790.3	791.4	792.4	793.2	793.8	794.3	794.8	795.4	795.9
132.5°	829.6	830.4	831.2	832.1	832.9	833.9	835.1	836.2	837.4	838.5	838.4
135°	893.8	894.6	895.4	896.2	897.0	897.5	897.8	898.1	898.3	898.6	898.1
137.5°	952.0	953.1	954.1	955.1	956.2	956.8	957.0	957.3	957.5	957.7	956.9
140°	992.4	993.4	994.5	995.5	996.5	997.0	997.0	997.0	997.0	997.0	995.8
142.5°	1029.0	1030.1	1031.1	1032.1	1033.2	1033.6	1033.4	1033.2	1033.0	1032.8	1031.9
145°	1083.9	1084.9	1086.0	1087.0	1088.0	1088.4	1088.2	1087.9	1087.6	1087.4	1085.8
147.5°	1133.0	1133.9	1134.9	1135.9	1136.9	1137.1	1136.5	1136.0	1135.4	1134.8	1133.8
150°	1164.9	1165.6	1166.4	1167.2	1168.0	1168.0	1167.2	1166.4	1165.6	1164.9	1163.8
152.5°	1194.9	1195.9	1196.9	1197.8	1198.8	1198.8	1197.8	1196.9	1195.9	1194.9	1193.7
155°	1235.2	1236.0	1236.8	1237.6	1238.3	1238.1	1236.8	1235.5	1234.2	1232.8	1232.1
157.5°	1269.9	1271.2	1272.4	1273.6	1275.0	1274.7	1272.9	1271.1	1269.4	1267.6	1267.1
160°	1291.5	1292.5	1293.6	1294.6	1295.7	1295.5	1293.8	1292.3	1290.7	1289.2	1288.9
162.5°	1310.3	1311.5	1312.8	1314.0	1315.2	1315.0	1313.2	1311.5	1309.7	1308.0	1307.7
165°	1334.9	1336.3	1337.6	1338.9	1340.1	1339.9	1338.1	1336.3	1334.4	1332.6	1332.6
167.5°	1355.1	1356.5	1357.8	1359.2	1360.5	1360.3	1358.5	1356.7	1354.8	1353.0	1353.0
170°	1365.4	1367.0	1368.6	1370.1	1371.7	1371.5	1369.7	1367.9	1366.0	1364.2	1364.5
172.5°	1373.8	1375.4	1377.0	1378.6	1380.1	1380.0	1378.2	1376.3	1374.5	1372.7	1372.9
175°	1383.0	1384.6	1386.1	1387.8	1389.3	1389.2	1387.4	1385.5	1383.7	1381.8	1382.4
177.5°	1387.3	1388.5	1389.8	1391.0	1392.2	1392.2	1391.0	1389.8	1388.5	1387.3	1387.7
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	676.0	674.5	673.2	669.9	668.2	664.6	664.1	663.9	659.1	654.5	653.2
5°	699.2	695.5	690.0	683.6	676.9	670.0	665.5	661.8	652.6	643.9	638.8
7.5°	722.6	714.7	705.2	693.1	682.9	671.6	663.1	655.5	642.5	630.0	621.6
10°	740.0	727.2	714.6	697.8	684.7	671.9	659.9	649.6	635.0	618.4	606.7
12.5°	750.8	736.7	719.3	703.0	686.0	669.6	653.7	640.5	623.2	606.1	592.3
15°	765.5	750.3	729.2	705.8	684.1	662.7	644.4	627.8	605.4	584.9	567.9
17.5°	777.5	756.6	734.0	706.9	681.7	654.6	631.0	609.9	584.8	560.2	540.2
20°	781.3	760.6	734.5	707.4	677.6	645.7	620.3	597.3	570.5	543.6	520.7
22.5°	778.9	762.9	733.8	701.4	670.9	637.5	608.7	582.1	552.3	524.9	498.4
25°	762.8	757.2	729.7	694.4	659.5	620.8	587.4	558.4	524.4	495.0	466.2
27.5°	725.0	736.9	719.8	682.2	643.4	601.9	564.4	531.3	496.0	463.0	434.2
30°	688.6	715.9	708.6	673.7	630.4	589.6	547.5	512.9	475.3	441.3	412.9
32.5°	638.9	684.0	691.2	662.0	617.1	572.3	528.3	493.8	454.5	418.8	391.0
35°	559.7	627.1	658.1	639.5	594.6	546.1	500.8	460.6	421.1	385.9	358.3
37.5°	465.2	557.1	608.7	610.1	568.8	518.5	469.0	429.1	388.7	354.1	324.3
40°	403.9	503.5	570.8	585.6	550.8	496.4	446.4	405.8	366.4	332.3	298.2
42.5°	348.9	448.1	530.7	556.6	529.0	474.9	424.7	382.3	344.0	311.8	276.9
45°	282.2	368.9	459.9	506.2	490.9	440.9	387.9	347.5	311.5	283.8	250.2
47.5°	238.0	299.1	387.3	449.9	449.7	404.0	351.8	313.3	279.8	253.8	226.7
50°	212.9	266.1	340.6	411.7	417.7	379.4	329.8	291.5	260.3	233.1	211.3
52.5°	190.3	234.2	301.1	369.4	386.4	353.1	305.1	269.7	239.4	214.3	195.7
55°	160.8	194.8	245.7	309.4	335.2	311.7	269.0	236.0	211.5	190.4	174.3
57.5°	136.0	161.5	202.4	253.7	283.6	268.9	233.7	206.8	185.8	166.7	154.1
60°	120.5	141.3	175.9	218.8	251.9	241.6	211.5	186.5	168.6	152.1	140.2
62.5°	105.7	123.7	153.4	188.2	218.4	214.2	189.7	168.6	153.0	137.9	127.8
65°	85.1	98.2	121.4	148.7	173.0	175.0	157.3	143.1	129.2	117.2	108.3
67.5°	67.8	76.3	92.6	115.6	133.8	140.4	129.6	118.7	107.6	98.4	90.6
70°	57.2	64.0	75.9	94.5	111.3	118.2	111.9	103.4	93.8	86.2	79.6
72.5°	46.3	53.0	61.8	75.4	89.8	97.3	95.0	89.0	81.2	74.8	68.6
75°	34.8	37.0	42.9	52.1	63.3	69.8	71.3	68.2	61.9	57.2	53.4
77.5°	25.8	27.1	29.9	34.6	42.0	47.8	50.1	49.7	45.4	42.7	39.2
80°	20.6	21.3	22.7	24.7	30.3	36.1	37.7	37.7	34.6	33.5	30.1
82.5°	15.7	16.2	17.1	18.2	20.7	25.8	27.6	27.9	26.1	24.5	21.8
85°	9.0	8.7	9.2	9.9	10.3	11.7	14.4	14.9	14.4	12.6	11.9
87.5°	9.0	8.1	7.0	5.9	5.5	4.9	5.3	5.6	5.5	5.6	5.8
90°	29.6	23.8	18.1	13.7	10.6	7.5	4.3	1.2	4.3	7.5	10.6
92.5°	34.6	33.2	31.9	30.1	27.8	25.4	23.1	20.9	23.1	25.4	27.8
95°	74.0	73.5	73.0	71.4	68.8	66.2	63.6	61.0	63.6	66.2	68.8
97.5°	124.2	123.2	122.3	120.6	118.4	116.0	113.7	111.5	113.7	116.0	118.4
100°	160.3	159.6	158.8	157.3	155.2	153.2	151.1	149.0	151.1	153.2	155.2
102.5°	198.3	197.4	196.4	195.1	193.4	191.8	190.1	188.4	190.1	191.8	193.4
105°	257.0	256.5	256.0	255.3	254.6	253.8	253.0	252.2	253.0	253.8	254.6
107.5°	321.6	321.6	321.6	321.0	319.9	318.8	317.6	316.5	317.6	318.8	319.9
110°	364.9	364.9	364.9	364.1	362.4	360.9	359.3	357.8	359.3	360.9	362.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	409.3	409.5	409.8	409.1	407.5	406.0	404.3	402.8	404.3	406.0	407.5
115°	474.9	475.4	475.9	475.4	473.9	472.3	470.8	469.2	470.8	472.3	473.9
117.5°	541.1	542.6	544.0	543.7	541.6	539.6	537.5	535.3	537.5	539.6	541.6
120°	583.7	585.7	587.8	587.8	585.7	583.7	581.6	579.5	581.6	583.7	585.7
122.5°	627.4	628.9	630.4	629.9	627.3	624.8	622.4	619.9	622.4	624.8	627.3
125°	691.4	692.1	692.9	692.1	689.7	687.4	685.1	682.7	685.1	687.4	689.7
127.5°	755.0	755.9	756.9	755.8	752.9	749.9	746.9	744.0	746.9	749.9	752.9
130°	796.4	796.9	797.4	796.0	792.5	789.2	785.8	782.4	785.8	789.2	792.5
132.5°	838.3	838.2	838.1	836.7	833.8	831.1	828.4	825.6	828.4	831.1	833.8
135°	897.5	897.0	896.5	894.7	891.9	889.1	886.2	883.3	886.2	889.1	891.9
137.5°	956.3	955.6	954.9	953.4	951.1	948.8	946.4	944.0	946.4	948.8	951.1
140°	994.5	993.2	991.9	990.1	987.7	985.3	983.0	980.7	983.0	985.3	987.7
142.5°	1031.0	1030.1	1029.2	1027.5	1025.2	1022.9	1020.6	1018.2	1020.6	1022.9	1025.2
145°	1084.3	1082.7	1081.2	1079.4	1077.6	1075.8	1074.0	1072.2	1074.0	1075.8	1077.6
147.5°	1132.8	1131.7	1130.6	1129.0	1126.8	1124.6	1122.5	1120.2	1122.5	1124.6	1126.8
150°	1162.8	1161.7	1160.6	1159.3	1157.8	1156.2	1154.7	1153.1	1154.7	1156.2	1157.8
152.5°	1192.3	1191.1	1189.8	1188.4	1186.9	1185.3	1183.8	1182.1	1183.8	1185.3	1186.9
155°	1231.3	1230.5	1229.7	1229.0	1228.2	1227.4	1226.6	1225.9	1226.6	1227.4	1228.2
157.5°	1266.7	1266.2	1265.7	1265.3	1264.7	1264.1	1263.6	1263.1	1263.6	1264.1	1264.7
160°	1288.7	1288.4	1288.1	1287.8	1287.2	1286.7	1286.2	1285.7	1286.2	1286.7	1287.2
162.5°	1307.4	1307.2	1306.9	1306.8	1306.6	1306.5	1306.4	1306.3	1306.4	1306.5	1306.6
165°	1332.6	1332.6	1332.6	1332.7	1332.9	1333.2	1333.5	1333.7	1333.5	1333.2	1332.9
167.5°	1353.1	1353.1	1353.2	1353.6	1354.4	1355.1	1355.9	1356.8	1355.9	1355.1	1354.4
170°	1364.7	1365.0	1365.3	1365.8	1366.5	1367.4	1368.2	1369.0	1368.2	1367.4	1366.5
172.5°	1373.2	1373.5	1373.7	1374.2	1375.0	1375.8	1376.6	1377.4	1376.6	1375.8	1375.0
175°	1382.9	1383.4	1383.9	1384.6	1385.3	1386.1	1386.9	1387.8	1386.9	1386.1	1385.3
177.5°	1388.1	1388.5	1388.9	1389.5	1390.1	1390.7	1391.3	1391.9	1391.3	1390.7	1390.1
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	650.9	649.5	647.1	643.5	641.3	637.4	634.9	636.3	636.7	636.3	636.0
5°	633.4	628.5	621.9	615.4	609.5	603.1	599.4	597.8	594.6	592.8	591.8
7.5°	612.2	603.9	594.5	583.3	573.8	563.8	558.8	556.2	549.7	546.1	543.0
10°	596.4	583.3	573.9	559.3	550.3	537.2	528.3	528.6	519.6	514.5	510.9
12.5°	579.0	564.6	549.0	535.7	523.3	512.8	502.0	497.7	488.2	483.3	473.4
15°	550.1	533.3	516.8	499.0	486.4	470.0	454.4	435.4	420.0	406.7	403.0
17.5°	518.6	497.8	481.2	460.2	438.6	411.2	393.1	382.0	372.8	365.8	360.5
20°	496.9	475.7	458.1	426.5	397.3	378.7	365.5	356.9	347.3	339.7	335.6
22.5°	474.1	452.1	428.0	392.6	369.9	355.1	343.3	333.5	326.9	321.0	317.2
25°	441.8	417.7	378.0	353.8	335.4	319.7	311.5	305.6	298.7	290.6	287.0
27.5°	407.7	369.4	340.8	322.8	305.3	295.2	287.7	278.8	272.7	269.0	265.2
30°	382.1	343.9	321.6	301.8	289.5	278.2	269.5	264.5	258.5	252.4	249.8
32.5°	353.8	323.2	301.7	285.4	272.8	263.2	256.3	248.1	243.9	240.0	234.8
35°	318.4	295.2	275.7	262.5	250.4	242.7	234.7	229.8	222.1	218.8	216.8
37.5°	288.5	268.4	253.9	239.8	230.4	221.8	216.8	209.1	205.8	201.3	196.9
40°	271.6	251.9	237.9	226.4	215.8	209.4	203.3	197.0	192.0	190.0	184.7
42.5°	254.4	238.3	224.3	211.8	204.7	197.8	190.1	185.5	180.3	176.9	173.7
45°	230.6	216.3	204.4	194.1	186.2	179.2	174.1	166.5	163.6	156.9	154.1
47.5°	209.6	196.4	185.0	175.2	167.6	163.0	155.6	149.7	144.9	140.8	137.2
50°	194.8	183.7	172.7	164.0	157.1	150.5	142.9	140.0	132.6	130.5	128.5
52.5°	181.2	170.7	160.7	152.1	145.2	138.8	132.1	128.2	123.2	121.2	119.7
55°	162.2	152.1	142.5	134.9	128.1	121.4	117.2	112.4	110.1	108.5	106.6
57.5°	143.1	134.0	126.6	119.0	112.0	106.7	102.0	99.1	96.7	94.6	92.4
60°	131.0	122.3	115.6	108.5	101.4	97.0	93.4	89.9	87.2	83.9	83.0
62.5°	118.2	110.5	104.4	97.5	91.3	87.4	83.8	80.6	77.3	72.6	71.3
65°	100.5	94.5	88.1	82.3	76.9	72.9	67.9	64.2	62.8	62.4	62.2
67.5°	84.5	78.9	73.3	67.5	62.5	58.9	56.2	55.7	54.7	54.5	53.8
70°	73.8	68.6	63.1	57.6	52.7	52.1	51.2	50.2	49.1	48.7	48.2
72.5°	64.3	58.9	53.3	49.0	46.9	46.0	45.1	44.1	43.4	42.9	42.7
75°	49.3	44.2	40.6	39.0	37.9	37.2	35.7	35.1	34.6	33.9	33.7
77.5°	35.5	32.6	31.0	30.0	28.8	28.1	27.3	26.6	26.1	26.0	25.5
80°	27.1	25.7	24.5	23.1	22.7	21.8	21.6	20.9	21.1	20.4	20.4
82.5°	21.0	19.3	18.3	17.7	17.2	16.5	16.3	16.0	16.0	15.5	15.5
85°	10.8	10.3	9.9	9.4	9.4	8.7	9.0	8.7	8.7	8.3	8.1
87.5°	6.3	7.0	7.7	8.9	10.0	11.0	10.9	10.6	10.5	10.4	10.2
90°	13.7	18.1	23.8	29.6	35.3	41.1	40.5	40.0	39.5	39.0	38.9
92.5°	30.1	31.9	33.2	34.6	36.0	37.3	37.4	37.5	37.6	37.8	37.8
95°	71.4	73.0	73.5	74.0	74.5	75.0	75.0	75.0	75.0	75.0	74.8
97.5°	120.6	122.3	123.2	124.2	125.2	126.2	126.2	126.2	126.2	126.2	126.2
100°	157.3	158.8	159.6	160.3	161.1	161.9	161.9	161.9	161.9	161.9	161.8
102.5°	195.1	196.4	197.4	198.3	199.3	200.4	200.6	200.8	201.0	201.2	201.2
105°	255.3	256.0	256.5	257.0	257.5	258.0	258.6	259.1	259.6	260.1	260.4
107.5°	321.0	321.6	321.6	321.6	321.6	321.6	321.8	322.0	322.2	322.4	321.9
110°	364.1	364.9	364.9	364.9	364.9	364.9	364.9	364.9	364.9	364.9	364.5



TEST NUMBER: P331640-840

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	409.1	409.8	409.5	409.3	409.1	408.9	408.3	407.7	407.1	406.5	405.9
115°	475.4	475.9	475.4	474.9	474.4	473.9	473.6	473.4	473.1	472.8	472.3
117.5°	543.7	544.0	542.6	541.1	539.7	538.2	537.6	536.9	536.3	535.7	535.0
120°	587.8	587.8	585.7	583.7	581.6	579.5	579.5	579.5	579.5	579.5	579.1
122.5°	629.9	630.4	628.9	627.4	626.0	624.5	623.9	623.3	622.7	622.0	621.5
125°	692.1	692.9	692.1	691.4	690.5	689.7	688.9	688.2	687.4	686.6	686.1
127.5°	755.8	756.9	755.9	755.0	754.1	753.1	752.1	751.2	750.2	749.3	748.4
130°	796.0	797.4	796.9	796.4	795.9	795.4	794.8	794.3	793.8	793.2	792.4
132.5°	836.7	838.1	838.2	838.3	838.4	838.5	837.4	836.2	835.1	833.9	832.9
135°	894.7	896.5	897.0	897.5	898.1	898.6	898.3	898.1	897.8	897.5	897.0
137.5°	953.4	954.9	955.6	956.3	956.9	957.7	957.5	957.3	957.0	956.8	956.2
140°	990.1	991.9	993.2	994.5	995.8	997.0	997.0	997.0	997.0	997.0	996.5
142.5°	1027.5	1029.2	1030.1	1031.0	1031.9	1032.8	1033.0	1033.2	1033.4	1033.6	1033.2
145°	1079.4	1081.2	1082.7	1084.3	1085.8	1087.4	1087.6	1087.9	1088.2	1088.4	1088.0
147.5°	1129.0	1130.6	1131.7	1132.8	1133.8	1134.8	1135.4	1136.0	1136.5	1137.1	1136.9
150°	1159.3	1160.6	1161.7	1162.8	1163.8	1164.9	1165.6	1166.4	1167.2	1168.0	1168.0
152.5°	1188.4	1189.8	1191.1	1192.3	1193.7	1194.9	1195.9	1196.9	1197.8	1198.8	1198.8
155°	1229.0	1229.7	1230.5	1231.3	1232.1	1232.8	1234.2	1235.5	1236.8	1238.1	1238.3
157.5°	1265.3	1265.7	1266.2	1266.7	1267.1	1267.6	1269.4	1271.1	1272.9	1274.7	1275.0
160°	1287.8	1288.1	1288.4	1288.7	1288.9	1289.2	1290.7	1292.3	1293.8	1295.5	1295.7
162.5°	1306.8	1306.9	1307.2	1307.4	1307.7	1308.0	1309.7	1311.5	1313.2	1315.0	1315.2
165°	1332.7	1332.6	1332.6	1332.6	1332.6	1332.6	1334.4	1336.3	1338.1	1339.9	1340.1
167.5°	1353.6	1353.2	1353.1	1353.1	1353.0	1353.0	1354.8	1356.7	1358.5	1360.3	1360.5
170°	1365.8	1365.3	1365.0	1364.7	1364.5	1364.2	1366.0	1367.9	1369.7	1371.5	1371.7
172.5°	1374.2	1373.7	1373.5	1373.2	1372.9	1372.7	1374.5	1376.3	1378.2	1380.0	1380.1
175°	1384.6	1383.9	1383.4	1382.9	1382.4	1381.8	1383.7	1385.5	1387.4	1389.2	1389.3
177.5°	1389.5	1388.9	1388.5	1388.1	1387.7	1387.3	1388.5	1389.8	1391.0	1392.2	1392.2
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



TEST NUMBER: P331640-840

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	634.0	634.3	633.8	634.1	633.8	634.3	634.0	636.0	636.3	636.7	636.3
5°	590.7	587.9	587.4	586.8	587.4	587.9	590.7	591.8	592.8	594.6	597.8
7.5°	539.1	538.7	537.5	535.8	537.5	538.7	539.1	543.0	546.1	549.7	556.2
10°	505.8	504.6	504.4	502.8	504.4	504.6	505.8	510.9	514.5	519.6	528.6
12.5°	466.9	459.5	458.8	454.7	458.8	459.5	466.9	473.4	483.3	488.2	497.7
15°	397.6	396.2	391.5	388.6	391.5	396.2	397.6	403.0	406.7	420.0	435.4
17.5°	357.9	353.4	351.9	351.3	351.9	353.4	357.9	360.5	365.8	372.8	382.0
20°	332.3	328.3	327.6	327.1	327.6	328.3	332.3	335.6	339.7	347.3	356.9
22.5°	314.8	310.4	308.7	307.3	308.7	310.4	314.8	317.2	321.0	326.9	333.5
25°	284.7	283.1	282.2	281.7	282.2	283.1	284.7	287.0	290.6	298.7	305.6
27.5°	261.2	257.6	256.9	255.7	256.9	257.6	261.2	265.2	269.0	272.7	278.8
30°	247.7	246.6	245.0	243.6	245.0	246.6	247.7	249.8	252.4	258.5	264.5
32.5°	232.0	231.0	229.5	228.9	229.5	231.0	232.0	234.8	240.0	243.9	248.1
35°	214.5	211.3	209.8	207.8	209.8	211.3	214.5	216.8	218.8	222.1	229.8
37.5°	196.0	194.3	192.4	193.1	192.4	194.3	196.0	196.9	201.3	205.8	209.1
40°	181.7	180.6	180.1	179.9	180.1	180.6	181.7	184.7	190.0	192.0	197.0
42.5°	170.3	167.1	165.9	165.9	165.9	167.1	170.3	173.7	176.9	180.3	185.5
45°	153.0	150.1	147.9	148.1	147.9	150.1	153.0	154.1	156.9	163.6	166.5
47.5°	135.3	135.2	133.9	134.3	133.9	135.2	135.3	137.2	140.8	144.9	149.7
50°	126.8	125.5	124.5	124.8	124.5	125.5	126.8	128.5	130.5	132.6	140.0
52.5°	118.8	117.5	116.8	117.9	116.8	117.5	118.8	119.7	121.2	123.2	128.2
55°	105.5	104.1	103.9	103.7	103.9	104.1	105.5	106.6	108.5	110.1	112.4
57.5°	90.7	89.8	88.4	87.9	88.4	89.8	90.7	92.4	94.6	96.7	99.1
60°	80.1	78.3	75.9	75.7	75.9	78.3	80.1	83.0	83.9	87.2	89.9
62.5°	70.3	70.0	69.5	69.5	69.5	70.0	70.3	71.3	72.6	77.3	80.6
65°	61.7	61.5	61.7	61.9	61.7	61.5	61.7	62.2	62.4	62.8	64.2
67.5°	53.7	53.3	52.9	53.1	52.9	53.3	53.7	53.8	54.5	54.7	55.7
70°	47.7	47.5	47.3	47.3	47.3	47.5	47.7	48.2	48.7	49.1	50.2
72.5°	41.8	41.8	41.6	41.4	41.6	41.8	41.8	42.7	42.9	43.4	44.1
75°	33.5	33.0	33.0	33.0	33.0	33.0	33.5	33.7	33.9	34.6	35.1
77.5°	25.5	25.2	25.0	24.8	25.0	25.2	25.5	25.5	26.0	26.1	26.6
80°	20.2	20.0	19.7	19.7	19.7	20.0	20.2	20.4	20.4	21.1	20.9
82.5°	15.5	15.1	15.1	14.9	15.1	15.1	15.5	15.5	15.5	16.0	16.0
85°	8.3	8.5	8.3	8.7	8.3	8.5	8.3	8.1	8.3	8.7	8.7
87.5°	10.2	10.1	10.3	10.2	10.3	10.1	10.2	10.2	10.4	10.5	10.6
90°	39.1	39.4	39.6	39.9	39.6	39.4	39.1	38.9	39.0	39.5	40.0
92.5°	37.9	37.9	38.0	38.0	38.0	37.9	37.9	37.8	37.8	37.6	37.5
95°	74.3	73.8	73.2	72.7	73.2	73.8	74.3	74.8	75.0	75.0	75.0
97.5°	126.1	126.1	126.0	126.0	126.0	126.1	126.1	126.2	126.2	126.2	126.2
100°	161.5	161.3	161.0	160.7	161.0	161.3	161.5	161.8	161.9	161.9	161.9
102.5°	200.9	200.7	200.4	200.2	200.4	200.7	200.9	201.2	201.2	201.0	200.8
105°	260.4	260.4	260.4	260.4	260.4	260.4	260.4	260.4	260.1	259.6	259.1
107.5°	320.8	319.6	318.4	317.2	318.4	319.6	320.8	321.9	322.4	322.2	322.0
110°	363.7	362.8	362.0	361.3	362.0	362.8	363.7	364.5	364.9	364.9	364.9



TEST NUMBER: P331640-840

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	405.3	404.7	404.1	403.5	404.1	404.7	405.3	405.9	406.5	407.1	407.7
115°	471.6	470.8	470.0	469.2	470.0	470.8	471.6	472.3	472.8	473.1	473.4
117.5°	534.2	533.4	532.6	531.9	532.6	533.4	534.2	535.0	535.7	536.3	536.9
120°	578.3	577.5	576.7	575.9	576.7	577.5	578.3	579.1	579.5	579.5	579.5
122.5°	620.9	620.3	619.8	619.1	619.8	620.3	620.9	621.5	622.0	622.7	623.3
125°	685.8	685.6	685.3	685.1	685.3	685.6	685.8	686.1	686.6	687.4	688.2
127.5°	747.6	746.8	746.0	745.1	746.0	746.8	747.6	748.4	749.3	750.2	751.2
130°	791.4	790.3	789.3	788.3	789.3	790.3	791.4	792.4	793.2	793.8	794.3
132.5°	832.1	831.2	830.4	829.6	830.4	831.2	832.1	832.9	833.9	835.1	836.2
135°	896.2	895.4	894.6	893.8	894.6	895.4	896.2	897.0	897.5	897.8	898.1
137.5°	955.1	954.1	953.1	952.0	953.1	954.1	955.1	956.2	956.8	957.0	957.3
140°	995.5	994.5	993.4	992.4	993.4	994.5	995.5	996.5	997.0	997.0	997.0
142.5°	1032.1	1031.1	1030.1	1029.0	1030.1	1031.1	1032.1	1033.2	1033.6	1033.4	1033.2
145°	1087.0	1086.0	1084.9	1083.9	1084.9	1086.0	1087.0	1088.0	1088.4	1088.2	1087.9
147.5°	1135.9	1134.9	1133.9	1133.0	1133.9	1134.9	1135.9	1136.9	1137.1	1136.5	1136.0
150°	1167.2	1166.4	1165.6	1164.9	1165.6	1166.4	1167.2	1168.0	1168.0	1167.2	1166.4
152.5°	1197.8	1196.9	1195.9	1194.9	1195.9	1196.9	1197.8	1198.8	1198.8	1197.8	1196.9
155°	1237.6	1236.8	1236.0	1235.2	1236.0	1236.8	1237.6	1238.3	1238.1	1236.8	1235.5
157.5°	1273.6	1272.4	1271.2	1269.9	1271.2	1272.4	1273.6	1275.0	1274.7	1272.9	1271.1
160°	1294.6	1293.6	1292.5	1291.5	1292.5	1293.6	1294.6	1295.7	1295.5	1293.8	1292.3
162.5°	1314.0	1312.8	1311.5	1310.3	1311.5	1312.8	1314.0	1315.2	1315.0	1313.2	1311.5
165°	1338.9	1337.6	1336.3	1334.9	1336.3	1337.6	1338.9	1340.1	1339.9	1338.1	1336.3
167.5°	1359.2	1357.8	1356.5	1355.1	1356.5	1357.8	1359.2	1360.5	1360.3	1358.5	1356.7
170°	1370.1	1368.6	1367.0	1365.4	1367.0	1368.6	1370.1	1371.7	1371.5	1369.7	1367.9
172.5°	1378.6	1377.0	1375.4	1373.8	1375.4	1377.0	1378.6	1380.1	1380.0	1378.2	1376.3
175°	1387.8	1386.1	1384.6	1383.0	1384.6	1386.1	1387.8	1389.3	1389.2	1387.4	1385.5
177.5°	1391.0	1389.8	1388.5	1387.3	1388.5	1389.8	1391.0	1392.2	1392.2	1391.0	1389.8
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



TEST NUMBER: P331640-840

CATALOG NUMBER: SA2XXRDIP-C290D1080U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	634.9	637.4	641.3	643.5	647.1	649.5	650.9	653.2	654.5	659.1	663.9
5°	599.4	603.1	609.5	615.4	621.9	628.5	633.4	638.8	643.9	652.6	661.8
7.5°	558.8	563.8	573.8	583.3	594.5	603.9	612.2	621.6	630.0	642.5	655.5
10°	528.3	537.2	550.3	559.3	573.9	583.3	596.4	606.7	618.4	635.0	649.6
12.5°	502.0	512.8	523.3	535.7	549.0	564.6	579.0	592.3	606.1	623.2	640.5
15°	454.4	470.0	486.4	499.0	516.8	533.3	550.1	567.9	584.9	605.4	627.8
17.5°	393.1	411.2	438.6	460.2	481.2	497.8	518.6	540.2	560.2	584.8	609.9
20°	365.5	378.7	397.3	426.5	458.1	475.7	496.9	520.7	543.6	570.5	597.3
22.5°	343.3	355.1	369.9	392.6	428.0	452.1	474.1	498.4	524.9	552.3	582.1
25°	311.5	319.7	335.4	353.8	378.0	417.7	441.8	466.2	495.0	524.4	558.4
27.5°	287.7	295.2	305.3	322.8	340.8	369.4	407.7	434.2	463.0	496.0	531.3
30°	269.5	278.2	289.5	301.8	321.6	343.9	382.1	412.9	441.3	475.3	512.9
32.5°	256.3	263.2	272.8	285.4	301.7	323.2	353.8	391.0	418.8	454.5	493.8
35°	234.7	242.7	250.4	262.5	275.7	295.2	318.4	358.3	385.9	421.1	460.6
37.5°	216.8	221.8	230.4	239.8	253.9	268.4	288.5	324.3	354.1	388.7	429.1
40°	203.3	209.4	215.8	226.4	237.9	251.9	271.6	298.2	332.3	366.4	405.8
42.5°	190.1	197.8	204.7	211.8	224.3	238.3	254.4	276.9	311.8	344.0	382.3
45°	174.1	179.2	186.2	194.1	204.4	216.3	230.6	250.2	283.8	311.5	347.5
47.5°	155.6	163.0	167.6	175.2	185.0	196.4	209.6	226.7	253.8	279.8	313.3
50°	142.9	150.5	157.1	164.0	172.7	183.7	194.8	211.3	233.1	260.3	291.5
52.5°	132.1	138.8	145.2	152.1	160.7	170.7	181.2	195.7	214.3	239.4	269.7
55°	117.2	121.4	128.1	134.9	142.5	152.1	162.2	174.3	190.4	211.5	236.0
57.5°	102.0	106.7	112.0	119.0	126.6	134.0	143.1	154.1	166.7	185.8	206.8
60°	93.4	97.0	101.4	108.5	115.6	122.3	131.0	140.2	152.1	168.6	186.5
62.5°	83.8	87.4	91.3	97.5	104.4	110.5	118.2	127.8	137.9	153.0	168.6
65°	67.9	72.9	76.9	82.3	88.1	94.5	100.5	108.3	117.2	129.2	143.1
67.5°	56.2	58.9	62.5	67.5	73.3	78.9	84.5	90.6	98.4	107.6	118.7
70°	51.2	52.1	52.7	57.6	63.1	68.6	73.8	79.6	86.2	93.8	103.4
72.5°	45.1	46.0	46.9	49.0	53.3	58.9	64.3	68.6	74.8	81.2	89.0
75°	35.7	37.2	37.9	39.0	40.6	44.2	49.3	53.4	57.2	61.9	68.2
77.5°	27.3	28.1	28.8	30.0	31.0	32.6	35.5	39.2	42.7	45.4	49.7
80°	21.6	21.8	22.7	23.1	24.5	25.7	27.1	30.1	33.5	34.6	37.7
82.5°	16.3	16.5	17.2	17.7	18.3	19.3	21.0	21.8	24.5	26.1	27.9
85°	9.0	8.7	9.4	9.4	9.9	10.3	10.8	11.9	12.6	14.4	14.9
87.5°	10.9	11.0	10.0	8.9	7.7	7.0	6.3	5.8	5.6	5.5	5.6
90°	40.5	41.1	35.3	29.6	23.8	18.1	13.7	10.6	7.5	4.3	1.2
92.5°	37.4	37.3	36.0	34.6	33.2	31.9	30.1	27.8	25.4	23.1	20.9
95°	75.0	75.0	74.5	74.0	73.5	73.0	71.4	68.8	66.2	63.6	61.0
97.5°	126.2	126.2	125.2	124.2	123.2	122.3	120.6	118.4	116.0	113.7	111.5
100°	161.9	161.9	161.1	160.3	159.6	158.8	157.3	155.2	153.2	151.1	149.0
102.5°	200.6	200.4	199.3	198.3	197.4	196.4	195.1	193.4	191.8	190.1	188.4
105°	258.6	258.0	257.5	257.0	256.5	256.0	255.3	254.6	253.8	253.0	252.2
107.5°	321.8	321.6	321.6	321.6	321.6	321.6	321.0	319.9	318.8	317.6	316.5
110°	364.9	364.9	364.9	364.9	364.9	364.9	364.1	362.4	360.9	359.3	357.8



TEST NUMBER: P331640-840

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	408.3	408.9	409.1	409.3	409.5	409.8	409.1	407.5	406.0	404.3	402.8
115°	473.6	473.9	474.4	474.9	475.4	475.9	475.4	473.9	472.3	470.8	469.2
117.5°	537.6	538.2	539.7	541.1	542.6	544.0	543.7	541.6	539.6	537.5	535.3
120°	579.5	579.5	581.6	583.7	585.7	587.8	587.8	585.7	583.7	581.6	579.5
122.5°	623.9	624.5	626.0	627.4	628.9	630.4	629.9	627.3	624.8	622.4	619.9
125°	688.9	689.7	690.5	691.4	692.1	692.9	692.1	689.7	687.4	685.1	682.7
127.5°	752.1	753.1	754.1	755.0	755.9	756.9	755.8	752.9	749.9	746.9	744.0
130°	794.8	795.4	795.9	796.4	796.9	797.4	796.0	792.5	789.2	785.8	782.4
132.5°	837.4	838.5	838.4	838.3	838.2	838.1	836.7	833.8	831.1	828.4	825.6
135°	898.3	898.6	898.1	897.5	897.0	896.5	894.7	891.9	889.1	886.2	883.3
137.5°	957.5	957.7	956.9	956.3	955.6	954.9	953.4	951.1	948.8	946.4	944.0
140°	997.0	997.0	995.8	994.5	993.2	991.9	990.1	987.7	985.3	983.0	980.7
142.5°	1033.0	1032.8	1031.9	1031.0	1030.1	1029.2	1027.5	1025.2	1022.9	1020.6	1018.2
145°	1087.6	1087.4	1085.8	1084.3	1082.7	1081.2	1079.4	1077.6	1075.8	1074.0	1072.2
147.5°	1135.4	1134.8	1133.8	1132.8	1131.7	1130.6	1129.0	1126.8	1124.6	1122.5	1120.2
150°	1165.6	1164.9	1163.8	1162.8	1161.7	1160.6	1159.3	1157.8	1156.2	1154.7	1153.1
152.5°	1195.9	1194.9	1193.7	1192.3	1191.1	1189.8	1188.4	1186.9	1185.3	1183.8	1182.1
155°	1234.2	1232.8	1232.1	1231.3	1230.5	1229.7	1229.0	1228.2	1227.4	1226.6	1225.9
157.5°	1269.4	1267.6	1267.1	1266.7	1266.2	1265.7	1265.3	1264.7	1264.1	1263.6	1263.1
160°	1290.7	1289.2	1288.9	1288.7	1288.4	1288.1	1287.8	1287.2	1286.7	1286.2	1285.7
162.5°	1309.7	1308.0	1307.7	1307.4	1307.2	1306.9	1306.8	1306.6	1306.5	1306.4	1306.3
165°	1334.4	1332.6	1332.6	1332.6	1332.6	1332.6	1332.7	1332.9	1333.2	1333.5	1333.7
167.5°	1354.8	1353.0	1353.0	1353.1	1353.1	1353.2	1353.6	1354.4	1355.1	1355.9	1356.8
170°	1366.0	1364.2	1364.5	1364.7	1365.0	1365.3	1365.8	1366.5	1367.4	1368.2	1369.0
172.5°	1374.5	1372.7	1372.9	1373.2	1373.5	1373.7	1374.2	1375.0	1375.8	1376.6	1377.4
175°	1383.7	1381.8	1382.4	1382.9	1383.4	1383.9	1384.6	1385.3	1386.1	1386.9	1387.8
177.5°	1388.5	1387.3	1387.7	1388.1	1388.5	1388.9	1389.5	1390.1	1390.7	1391.3	1391.9
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



TEST NUMBER: P331640-840

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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	664.1	664.6	668.2	669.9	673.2	674.5	676.0	675.6	675.6	676.3	681.5
5°	665.5	670.0	676.9	683.6	690.0	695.5	699.2	702.9	704.3	710.8	716.8
7.5°	663.1	671.6	682.9	693.1	705.2	714.7	722.6	729.7	734.6	744.3	754.2
10°	659.9	671.9	684.7	697.8	714.6	727.2	740.0	749.9	753.1	767.5	775.8
12.5°	653.7	669.6	686.0	703.0	719.3	736.7	750.8	760.7	772.0	785.0	800.2
15°	644.4	662.7	684.1	705.8	729.2	750.3	765.5	782.6	795.1	809.3	822.6
17.5°	631.0	654.6	681.7	706.9	734.0	756.6	777.5	794.0	802.6	810.8	812.7
20°	620.3	645.7	677.6	707.4	734.5	760.6	781.3	795.1	797.4	797.6	785.5
22.5°	608.7	637.5	670.9	701.4	733.8	762.9	778.9	784.8	775.7	760.1	736.6
25°	587.4	620.8	659.5	694.4	729.7	757.2	762.8	752.5	720.5	687.0	644.6
27.5°	564.4	601.9	643.4	682.2	719.8	736.9	725.0	687.7	630.4	580.4	519.9
30°	547.5	589.6	630.4	673.7	708.6	715.9	688.6	633.8	566.8	491.6	431.2
32.5°	528.3	572.3	617.1	662.0	691.2	684.0	638.9	571.4	492.9	418.9	361.9
35°	500.8	546.1	594.6	639.5	658.1	627.1	559.7	471.8	391.5	322.6	283.3
37.5°	469.0	518.5	568.8	610.1	608.7	557.1	465.2	374.6	307.1	266.2	238.3
40°	446.4	496.4	550.8	585.6	570.8	503.5	403.9	318.4	269.0	236.5	216.1
42.5°	424.7	474.9	529.0	556.6	530.7	448.1	348.9	281.9	241.2	215.8	199.2
45°	387.9	440.9	490.9	506.2	459.9	368.9	282.2	233.5	206.4	187.6	176.2
47.5°	351.8	404.0	449.7	449.9	387.3	299.1	238.0	202.1	178.9	164.4	156.1
50°	329.8	379.4	417.7	411.7	340.6	266.1	212.9	181.9	162.7	151.4	142.7
52.5°	305.1	353.1	386.4	369.4	301.1	234.2	190.3	164.3	148.3	138.6	130.8
55°	269.0	311.7	335.2	309.4	245.7	194.8	160.8	140.4	128.5	120.2	113.5
57.5°	233.7	268.9	283.6	253.7	202.4	161.5	136.0	120.7	108.9	102.9	99.5
60°	211.5	241.6	251.9	218.8	175.9	141.3	120.5	106.2	97.5	93.6	90.2
62.5°	189.7	214.2	218.4	188.2	153.4	123.7	105.7	93.7	88.0	84.2	81.0
65°	157.3	175.0	173.0	148.7	121.4	98.2	85.1	77.8	73.4	68.2	62.4
67.5°	129.6	140.4	133.8	115.6	92.6	76.3	67.8	62.2	56.8	51.8	50.5
70°	111.9	118.2	111.3	94.5	75.9	64.0	57.2	50.5	47.3	46.2	44.0
72.5°	95.0	97.3	89.8	75.4	61.8	53.0	46.3	42.6	40.8	39.9	38.6
75°	71.3	69.8	63.3	52.1	42.9	37.0	34.8	33.5	32.3	31.4	30.7
77.5°	50.1	47.8	42.0	34.6	29.9	27.1	25.8	25.0	24.5	24.0	23.3
80°	37.7	36.1	30.3	24.7	22.7	21.3	20.6	19.7	19.7	19.3	18.6
82.5°	27.6	25.8	20.7	18.2	17.1	16.2	15.7	15.1	14.9	15.0	14.5
85°	14.4	11.7	10.3	9.9	9.2	8.7	9.0	8.5	8.5	8.5	8.3
87.5°	5.3	4.9	5.5	5.9	7.0	8.1	9.0	10.2	11.5	11.2	11.3
90°	4.3	7.5	10.6	13.7	18.1	23.8	29.6	35.3	41.1	40.5	40.0
92.5°	23.1	25.4	27.8	30.1	31.9	33.2	34.6	36.0	37.3	37.4	37.5
95°	63.6	66.2	68.8	71.4	73.0	73.5	74.0	74.5	75.0	75.0	75.0
97.5°	113.7	116.0	118.4	120.6	122.3	123.2	124.2	125.2	126.2	126.2	126.2
100°	151.1	153.2	155.2	157.3	158.8	159.6	160.3	161.1	161.9	161.9	161.9
102.5°	190.1	191.8	193.4	195.1	196.4	197.4	198.3	199.3	200.4	200.6	200.8
105°	253.0	253.8	254.6	255.3	256.0	256.5	257.0	257.5	258.0	258.6	259.1
107.5°	317.6	318.8	319.9	321.0	321.6	321.6	321.6	321.6	321.6	321.8	322.0
110°	359.3	360.9	362.4	364.1	364.9	364.9	364.9	364.9	364.9	364.9	364.9



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	404.3	406.0	407.5	409.1	409.8	409.5	409.3	409.1	408.9	408.3	407.7
115°	470.8	472.3	473.9	475.4	475.9	475.4	474.9	474.4	473.9	473.6	473.4
117.5°	537.5	539.6	541.6	543.7	544.0	542.6	541.1	539.7	538.2	537.6	536.9
120°	581.6	583.7	585.7	587.8	587.8	585.7	583.7	581.6	579.5	579.5	579.5
122.5°	622.4	624.8	627.3	629.9	630.4	628.9	627.4	626.0	624.5	623.9	623.3
125°	685.1	687.4	689.7	692.1	692.9	692.1	691.4	690.5	689.7	688.9	688.2
127.5°	746.9	749.9	752.9	755.8	756.9	755.9	755.0	754.1	753.1	752.1	751.2
130°	785.8	789.2	792.5	796.0	797.4	796.9	796.4	795.9	795.4	794.8	794.3
132.5°	828.4	831.1	833.8	836.7	838.1	838.2	838.3	838.4	838.5	837.4	836.2
135°	886.2	889.1	891.9	894.7	896.5	897.0	897.5	898.1	898.6	898.3	898.1
137.5°	946.4	948.8	951.1	953.4	954.9	955.6	956.3	956.9	957.7	957.5	957.3
140°	983.0	985.3	987.7	990.1	991.9	993.2	994.5	995.8	997.0	997.0	997.0
142.5°	1020.6	1022.9	1025.2	1027.5	1029.2	1030.1	1031.0	1031.9	1032.8	1033.0	1033.2
145°	1074.0	1075.8	1077.6	1079.4	1081.2	1082.7	1084.3	1085.8	1087.4	1087.6	1087.9
147.5°	1122.5	1124.6	1126.8	1129.0	1130.6	1131.7	1132.8	1133.8	1134.8	1135.4	1136.0
150°	1154.7	1156.2	1157.8	1159.3	1160.6	1161.7	1162.8	1163.8	1164.9	1165.6	1166.4
152.5°	1183.8	1185.3	1186.9	1188.4	1189.8	1191.1	1192.3	1193.7	1194.9	1195.9	1196.9
155°	1226.6	1227.4	1228.2	1229.0	1229.7	1230.5	1231.3	1232.1	1232.8	1234.2	1235.5
157.5°	1263.6	1264.1	1264.7	1265.3	1265.7	1266.2	1266.7	1267.1	1267.6	1269.4	1271.1
160°	1286.2	1286.7	1287.2	1287.8	1288.1	1288.4	1288.7	1288.9	1289.2	1290.7	1292.3
162.5°	1306.4	1306.5	1306.6	1306.8	1306.9	1307.2	1307.4	1307.7	1308.0	1309.7	1311.5
165°	1333.5	1333.2	1332.9	1332.7	1332.6	1332.6	1332.6	1332.6	1332.6	1334.4	1336.3
167.5°	1355.9	1355.1	1354.4	1353.6	1353.2	1353.1	1353.1	1353.0	1353.0	1354.8	1356.7
170°	1368.2	1367.4	1366.5	1365.8	1365.3	1365.0	1364.7	1364.5	1364.2	1366.0	1367.9
172.5°	1376.6	1375.8	1375.0	1374.2	1373.7	1373.5	1373.2	1372.9	1372.7	1374.5	1376.3
175°	1386.9	1386.1	1385.3	1384.6	1383.9	1383.4	1382.9	1382.4	1381.8	1383.7	1385.5
177.5°	1391.3	1390.7	1390.1	1389.5	1388.9	1388.5	1388.1	1387.7	1387.3	1388.5	1389.8
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	683.3	685.7	686.8	686.8	688.1	687.5	687.0
5°	722.6	726.9	727.9	732.0	735.0	734.1	734.5
7.5°	761.6	768.6	775.6	778.7	779.2	781.0	781.7
10°	785.7	791.4	802.1	800.6	808.6	813.2	805.7
12.5°	808.8	816.6	824.0	826.1	830.6	832.1	829.1
15°	829.7	833.8	834.2	833.1	834.6	833.3	829.0
17.5°	810.2	803.4	789.9	783.5	778.4	770.8	767.8
20°	777.9	758.1	735.2	726.0	715.3	694.2	699.2
22.5°	708.1	685.7	662.7	635.9	623.1	603.1	601.9
25°	599.7	560.9	518.2	488.4	470.9	451.0	442.2
27.5°	466.3	417.4	382.4	364.8	348.6	332.9	332.1
30°	378.5	341.8	314.8	299.6	289.7	283.1	284.5
32.5°	319.0	293.9	275.6	263.1	255.8	250.7	250.6
35°	260.8	243.6	231.9	226.6	221.4	217.7	217.9
37.5°	223.2	212.9	206.3	200.6	197.2	195.4	194.4
40°	203.9	195.4	190.4	186.9	184.2	181.7	181.2
42.5°	188.7	181.7	176.6	173.9	171.4	169.6	169.2
45°	167.4	161.7	157.1	154.1	153.0	151.4	151.4
47.5°	149.0	143.3	139.8	137.8	135.9	134.8	134.8
50°	136.5	132.1	129.0	127.7	126.1	125.5	125.2
52.5°	125.3	122.0	119.8	119.0	118.3	117.4	117.5
55°	110.1	108.3	107.3	106.6	105.5	104.1	105.0
57.5°	97.4	95.7	93.3	91.1	90.1	89.1	89.5
60°	88.4	85.1	81.9	79.4	78.7	76.6	76.6
62.5°	77.0	72.4	68.5	67.1	66.3	65.4	65.2
65°	59.2	57.4	56.5	55.5	55.0	55.0	54.6
67.5°	49.1	48.3	47.3	47.1	46.7	46.5	46.4
70°	43.3	42.4	42.0	41.7	41.3	41.5	40.8
72.5°	37.9	37.2	37.1	36.5	36.2	36.2	35.6
75°	29.8	29.8	29.6	29.4	28.9	28.7	28.9
77.5°	22.9	23.0	22.6	22.5	22.5	22.5	22.3
80°	18.4	18.6	18.4	18.1	17.9	18.1	17.9
82.5°	14.5	14.1	14.1	14.0	14.0	13.9	13.8
85°	8.3	8.5	8.3	8.1	8.1	8.1	8.3
87.5°	11.0	10.9	10.9	10.9	11.0	11.0	10.9
90°	39.5	39.0	38.9	39.1	39.4	39.6	39.9
92.5°	37.6	37.8	37.8	37.9	37.9	38.0	38.0
95°	75.0	75.0	74.8	74.3	73.8	73.2	72.7
97.5°	126.2	126.2	126.2	126.1	126.1	126.0	126.0
100°	161.9	161.9	161.8	161.5	161.3	161.0	160.7
102.5°	201.0	201.2	201.2	200.9	200.7	200.4	200.2
105°	259.6	260.1	260.4	260.4	260.4	260.4	260.4
107.5°	322.2	322.4	321.9	320.8	319.6	318.4	317.2
110°	364.9	364.9	364.5	363.7	362.8	362.0	361.3



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	407.1	406.5	405.9	405.3	404.7	404.1	403.5
115°	473.1	472.8	472.3	471.6	470.8	470.0	469.2
117.5°	536.3	535.7	535.0	534.2	533.4	532.6	531.9
120°	579.5	579.5	579.1	578.3	577.5	576.7	575.9
122.5°	622.7	622.0	621.5	620.9	620.3	619.8	619.1
125°	687.4	686.6	686.1	685.8	685.6	685.3	685.1
127.5°	750.2	749.3	748.4	747.6	746.8	746.0	745.1
130°	793.8	793.2	792.4	791.4	790.3	789.3	788.3
132.5°	835.1	833.9	832.9	832.1	831.2	830.4	829.6
135°	897.8	897.5	897.0	896.2	895.4	894.6	893.8
137.5°	957.0	956.8	956.2	955.1	954.1	953.1	952.0
140°	997.0	997.0	996.5	995.5	994.5	993.4	992.4
142.5°	1033.4	1033.6	1033.2	1032.1	1031.1	1030.1	1029.0
145°	1088.2	1088.4	1088.0	1087.0	1086.0	1084.9	1083.9
147.5°	1136.5	1137.1	1136.9	1135.9	1134.9	1133.9	1133.0
150°	1167.2	1168.0	1168.0	1167.2	1166.4	1165.6	1164.9
152.5°	1197.8	1198.8	1198.8	1197.8	1196.9	1195.9	1194.9
155°	1236.8	1238.1	1238.3	1237.6	1236.8	1236.0	1235.2
157.5°	1272.9	1274.7	1275.0	1273.6	1272.4	1271.2	1269.9
160°	1293.8	1295.5	1295.7	1294.6	1293.6	1292.5	1291.5
162.5°	1313.2	1315.0	1315.2	1314.0	1312.8	1311.5	1310.3
165°	1338.1	1339.9	1340.1	1338.9	1337.6	1336.3	1334.9
167.5°	1358.5	1360.3	1360.5	1359.2	1357.8	1356.5	1355.1
170°	1369.7	1371.5	1371.7	1370.1	1368.6	1367.0	1365.4
172.5°	1378.2	1380.0	1380.1	1378.6	1377.0	1375.4	1373.8
175°	1387.4	1389.2	1389.3	1387.8	1386.1	1384.6	1383.0
177.5°	1391.0	1392.2	1392.2	1391.0	1389.8	1388.5	1387.3
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1

(END OF REPORT)