

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: P331276-830

Luminaire Tested: **S122DIP-S290D1080U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331276-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DIP-S290D1080U830-4F0-1E-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: 5290.5 lumens
Efficiency: N/A
Efficacy: 125.4 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

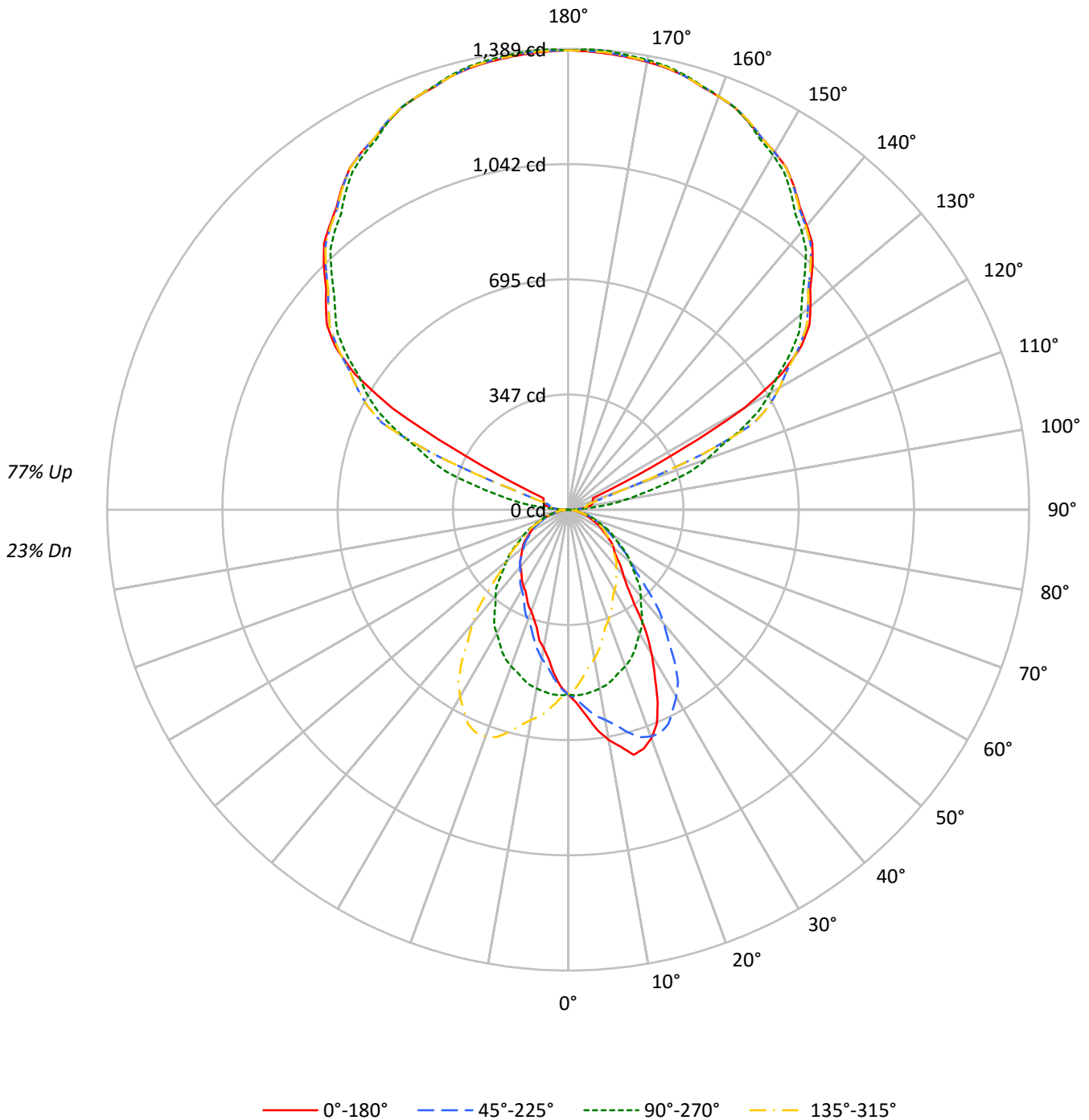
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

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	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°	8995	8995	8995	8995
5°	10084	9054	8023	9054
10°	11555	8979	6943	8979
15°	12784	8816	6135	8816
20°	12589	8639	5593	8639
25°	11352	8402	5248	8402
30°	9380	8028	4998	8028
35°	6838	7634	4819	7634
40°	5461	7172	4719	7172
45°	4772	6635	4587	6635
50°	4486	6116	4496	6116
55°	4132	5588	4374	5588
60°	3788	5025	4191	5025
65°	3454	4523	4008	4523
70°	3135	4032	3744	4032
75°	2782	3487	3313	3487
80°	2390	2882	2669	2882
85°	2149	2149	1593	2149



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	1.0
10°-20°	154.2	2.9
20°-30°	223.9	4.2
30°-40°	236.2	4.5
40°-50°	209.2	4.0
50°-60°	166.9	3.2
60°-70°	113.4	2.1
70°-80°	58.2	1.1
80°-90°	17.4	0.3
90°-100°	46.2	0.9
100°-110°	169.4	3.2
110°-120°	452.8	8.6
120°-130°	747.4	14.1
130°-140°	794.9	15.0
140°-150°	738.8	14.0
150°-160°	594.0	11.2
160°-170°	382.8	7.2
170°-180°	131.8	2.5
0°-30°	431.2	8.1
0°-40°	667.4	12.6
0°-60°	1043.5	19.7
0°-90°	1232.5	23.3
90°-120°	668.4	12.6
90°-150°	2949.4	55.8
90°-180°	4058.0	76.7
0°-180°	5290.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	557	557	557	557	557	
5°	622	559	495	559	622	62
15°	765	527	367	527	765	211
25°	637	472	295	472	637	288
35°	347	387	244	387	347	226
45°	209	291	201	291	209	164
55°	147	198	155	198	147	132
65°	90	118	105	118	90	90
75°	45	56	53	56	45	48
85°	12	12	9	12	12	13
90°	27	1	27	1	27	12
95°	43	65	43	65	43	40
105°	76	305	76	305	76	79
115°	82	576	82	576	82	206
125°	857	815	857	815	857	741
135°	1041	1008	1041	1008	1041	802
145°	1187	1169	1187	1169	1187	743
155°	1288	1288	1288	1288	1288	595
165°	1354	1357	1354	1357	1354	382
175°	1380	1388	1380	1388	1380	131
180°	1385	1385	1385	1385	1385	



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	582.8	583.0	583.3	580.6	580.2	580.2	577.9	575.8	573.3	570.1	570.5
5°	622.2	624.5	625.4	622.8	619.0	618.6	614.9	609.0	603.3	598.9	595.7
7.5°	669.2	670.1	668.1	664.7	661.9	656.7	649.9	643.3	634.0	625.5	619.2
10°	704.8	706.2	702.5	697.6	693.5	687.5	677.7	667.6	655.4	643.7	634.2
12.5°	731.9	735.1	730.4	729.8	722.8	714.5	702.9	697.8	680.6	664.2	654.0
15°	764.8	764.6	765.1	760.9	755.8	754.5	742.2	728.6	704.5	694.7	678.1
17.5°	755.3	758.6	760.1	760.0	759.9	759.0	755.1	746.6	734.4	718.8	699.6
20°	732.7	737.0	737.6	742.5	745.4	748.9	750.5	748.1	740.6	727.5	710.9
22.5°	697.8	699.0	701.0	708.6	714.6	723.8	728.5	736.5	733.6	727.2	713.2
25°	637.2	635.1	642.5	646.4	660.3	674.9	685.4	696.9	707.2	713.4	709.4
27.5°	564.5	561.3	572.5	582.8	594.0	609.8	626.1	645.5	661.5	681.6	688.5
30°	503.1	505.1	515.8	526.7	543.8	566.1	584.6	605.7	628.7	651.1	666.8
32.5°	437.1	444.4	451.2	468.0	483.1	507.8	534.9	561.4	589.9	615.5	639.7
35°	346.9	355.4	364.9	377.0	398.2	422.8	449.2	484.9	524.0	558.8	587.5
37.5°	292.0	290.6	296.0	304.8	322.0	341.9	372.2	407.5	453.4	494.4	534.9
40°	259.1	258.3	262.0	270.2	283.2	297.8	324.4	355.4	398.0	448.2	496.3
42.5°	236.5	237.0	239.1	244.9	253.8	265.8	285.7	312.1	351.1	398.3	450.1
45°	209.0	210.5	212.8	215.7	220.7	230.6	241.8	260.6	291.4	330.8	381.7
47.5°	189.2	189.3	191.6	194.1	197.1	202.6	211.8	223.6	245.3	277.4	321.2
50°	178.6	177.1	178.8	180.7	183.9	187.8	193.8	204.9	219.4	245.3	282.0
52.5°	165.5	165.6	167.1	167.9	170.7	174.6	180.0	187.8	201.0	221.2	251.3
55°	146.8	148.0	148.8	150.1	152.7	155.4	159.8	164.9	175.1	190.3	212.6
57.5°	129.3	129.7	130.5	133.0	134.6	137.1	141.2	145.9	152.6	163.8	180.6
60°	117.3	117.3	119.0	120.1	122.2	124.8	128.0	132.5	138.6	147.7	161.3
62.5°	106.4	106.2	106.9	108.7	110.3	112.6	115.8	119.7	125.4	133.6	144.6
65°	90.4	89.9	91.2	91.6	93.3	95.7	98.3	102.4	106.9	112.8	122.7
67.5°	74.9	75.5	76.2	76.9	77.9	80.4	82.1	84.9	88.8	93.8	100.4
70°	66.4	66.4	66.4	67.0	68.3	69.6	71.3	73.6	77.3	81.5	87.6
72.5°	56.7	57.5	58.2	57.8	59.4	60.1	62.2	63.5	67.0	69.7	75.0
75°	44.6	44.6	44.6	45.6	46.3	46.8	48.2	49.5	51.2	54.6	57.4
77.5°	33.3	33.2	33.4	33.6	34.3	35.1	35.4	36.6	38.2	39.8	42.1
80°	25.7	26.1	26.3	26.8	26.8	27.1	27.4	28.9	30.0	31.0	32.5
82.5°	19.9	20.0	20.0	20.1	20.3	20.5	21.1	21.6	22.0	22.8	23.9
85°	11.6	11.3	11.3	11.8	11.6	11.6	12.0	12.4	12.4	12.6	13.3
87.5°	9.9	9.8	9.9	9.6	9.5	9.5	9.3	8.9	8.9	8.8	8.6
90°	27.1	26.6	26.2	25.7	25.3	24.5	23.4	22.2	21.1	20.1	18.3
92.5°	27.1	26.8	26.5	26.3	26.0	25.5	25.0	24.4	23.8	23.3	22.3
95°	43.1	43.3	43.5	43.7	44.0	43.5	42.4	41.3	40.2	39.1	37.5
97.5°	57.5	57.2	57.0	56.7	56.5	55.9	55.0	54.1	53.2	52.3	48.7
100°	67.1	66.7	66.3	65.8	65.3	64.3	62.5	60.7	58.9	57.1	53.3
102.5°	71.9	71.4	70.7	70.0	69.5	68.0	65.7	63.3	61.1	58.7	90.4
105°	76.2	75.2	74.4	73.5	72.6	70.9	68.4	66.0	63.5	61.1	121.9
107.5°	78.3	77.5	76.5	75.7	74.8	75.6	78.0	80.6	83.0	85.6	158.4
110°	79.2	78.2	77.4	76.4	75.6	86.2	108.6	130.8	153.1	175.3	239.7



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	79.9	79.3	78.5	77.9	77.1	117.3	198.6	279.8	361.1	442.2	458.2
115°	82.2	98.2	114.2	130.3	146.3	205.9	309.0	412.0	515.1	618.2	612.7
117.5°	335.5	388.1	440.8	493.5	546.2	585.0	609.9	634.9	659.8	684.8	680.9
120°	611.2	641.2	671.3	701.3	731.4	745.2	742.4	739.8	737.1	734.4	730.5
122.5°	762.7	768.5	774.4	780.2	786.0	788.2	786.6	784.9	783.3	781.7	777.4
125°	856.7	856.0	855.4	854.7	854.0	852.9	851.3	849.8	848.2	846.7	842.4
127.5°	916.0	915.9	915.8	915.6	915.5	914.3	912.0	909.7	907.5	905.2	902.0
130°	952.9	953.1	953.3	953.6	953.8	952.6	950.2	947.7	945.3	942.8	940.4
132.5°	988.9	989.2	989.4	989.6	989.9	988.9	986.8	984.7	982.6	980.5	978.1
135°	1041.0	1041.5	1041.9	1042.4	1042.8	1041.9	1039.7	1037.5	1035.3	1033.0	1031.0
137.5°	1088.5	1089.3	1090.1	1090.8	1091.6	1090.8	1088.6	1086.5	1084.3	1082.1	1079.9
140°	1118.2	1119.3	1120.4	1121.5	1122.7	1122.2	1120.2	1118.2	1116.2	1114.2	1111.7
142.5°	1147.1	1148.2	1149.2	1150.4	1151.5	1151.1	1149.3	1147.5	1145.7	1143.9	1141.0
145°	1187.3	1188.5	1189.6	1190.7	1191.8	1191.6	1190.0	1188.5	1186.8	1185.3	1181.6
147.5°	1222.8	1223.7	1224.6	1225.6	1226.5	1226.4	1225.3	1224.1	1222.9	1221.8	1218.0
150°	1244.4	1245.6	1246.7	1247.7	1248.9	1248.8	1247.5	1246.1	1244.8	1243.4	1239.9
152.5°	1262.9	1264.3	1265.8	1267.2	1268.8	1268.9	1267.5	1266.1	1264.8	1263.5	1260.1
155°	1288.5	1290.3	1292.1	1293.8	1295.6	1295.9	1294.6	1293.2	1291.8	1290.5	1287.9
157.5°	1311.9	1313.7	1315.4	1317.2	1318.9	1319.0	1317.5	1316.0	1314.5	1313.0	1311.1
160°	1325.6	1327.2	1328.7	1330.3	1331.8	1331.9	1330.6	1329.3	1327.9	1326.6	1325.3
162.5°	1336.8	1338.7	1340.7	1342.6	1344.4	1344.7	1343.1	1341.6	1340.1	1338.6	1337.5
165°	1353.7	1355.2	1356.8	1358.3	1359.9	1359.9	1358.3	1356.8	1355.2	1353.7	1353.0
167.5°	1364.2	1366.3	1368.3	1370.3	1372.2	1372.5	1370.9	1369.4	1367.8	1366.3	1365.6
170°	1370.6	1372.7	1374.7	1376.7	1378.7	1378.9	1377.3	1375.8	1374.2	1372.7	1372.2
172.5°	1375.5	1377.5	1379.5	1381.5	1383.6	1383.7	1382.1	1380.6	1379.0	1377.5	1377.1
175°	1379.7	1382.0	1384.1	1386.4	1388.6	1388.9	1387.4	1385.8	1384.3	1382.7	1382.2
177.5°	1382.3	1383.9	1385.5	1387.1	1388.7	1388.9	1387.6	1386.4	1385.2	1383.9	1383.7
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	571.7	570.3	569.5	566.4	563.6	560.9	560.1	560.3	556.6	553.0	551.5
5°	594.0	589.7	585.6	579.9	573.0	565.4	561.7	558.6	551.1	543.0	538.3
7.5°	613.9	607.8	599.9	589.1	579.1	567.3	559.8	553.2	542.2	530.7	523.7
10°	626.0	617.7	607.7	594.4	582.2	567.8	557.8	547.7	534.9	521.1	512.6
12.5°	636.5	625.3	615.4	598.3	583.9	565.9	554.0	539.8	526.3	510.0	501.6
15°	661.4	640.6	621.8	602.5	584.8	559.7	546.4	527.4	509.6	489.5	479.8
17.5°	680.6	657.2	627.6	603.1	582.4	554.6	535.2	512.4	491.3	468.3	455.2
20°	691.5	664.8	632.9	603.8	579.0	547.2	526.0	502.8	478.2	452.2	438.1
22.5°	698.0	670.0	638.4	601.2	572.1	541.3	514.6	489.0	464.1	436.1	421.3
25°	700.1	674.5	641.0	599.1	563.5	528.7	496.5	471.6	441.5	415.4	393.8
27.5°	689.9	671.6	639.4	595.0	553.6	512.8	477.0	448.9	417.1	388.7	366.9
30°	677.4	666.8	635.5	591.0	545.7	501.9	462.5	430.6	398.9	370.2	347.9
32.5°	658.1	655.8	628.3	585.1	537.3	488.0	447.2	415.0	379.8	351.7	330.5
35°	620.1	630.4	613.0	572.1	521.6	468.3	424.1	387.3	350.9	324.0	304.1
37.5°	569.1	594.7	590.1	553.1	500.2	446.8	398.0	359.6	324.9	297.7	278.1
40°	534.0	566.6	571.3	538.5	485.2	430.2	378.5	340.3	306.4	281.5	261.8
42.5°	496.3	534.3	547.2	521.0	468.7	412.6	361.1	321.4	287.9	263.7	246.3
45°	433.2	483.4	506.8	491.8	441.3	383.9	330.8	290.6	260.1	237.4	223.9
47.5°	374.1	429.0	460.4	455.2	410.8	353.9	301.4	262.8	233.2	215.1	203.0
50°	332.3	388.8	426.7	428.5	388.8	332.5	279.8	243.5	216.2	199.3	189.5
52.5°	296.0	350.0	391.2	400.4	364.3	310.3	260.5	224.2	200.3	184.7	176.0
55°	248.5	294.2	340.0	356.8	327.8	276.4	230.4	198.5	176.0	165.3	157.6
57.5°	206.7	244.7	287.0	305.5	287.7	243.6	200.5	172.8	154.6	145.2	139.2
60°	184.5	214.5	252.2	274.3	258.8	219.7	182.0	155.6	140.6	132.3	126.8
62.5°	164.0	190.6	222.4	242.6	234.2	197.3	163.5	140.3	127.3	119.5	115.5
65°	135.3	156.3	181.0	199.5	194.0	166.0	138.3	118.4	108.1	101.9	98.7
67.5°	111.4	126.6	143.6	159.9	155.5	135.6	113.5	97.9	90.3	84.9	82.9
70°	96.3	107.9	123.1	136.2	132.5	116.3	98.7	85.4	78.8	74.3	72.4
72.5°	82.0	91.4	103.1	113.8	111.3	97.7	83.1	73.1	68.0	63.8	62.3
75°	61.9	69.2	76.3	83.3	82.7	72.2	63.6	55.9	51.8	48.6	48.0
77.5°	45.7	49.8	54.6	58.7	57.6	51.6	44.9	40.4	37.5	35.3	35.0
80°	34.9	37.2	40.7	43.6	42.2	39.6	34.2	31.0	28.9	26.8	25.9
82.5°	25.4	27.6	29.7	31.4	30.2	27.8	24.5	22.3	21.0	19.6	19.2
85°	13.3	14.5	15.5	15.8	15.5	13.9	12.4	11.6	10.5	9.8	9.6
87.5°	8.4	8.1	7.7	7.6	6.6	6.1	5.0	4.0	4.2	4.6	4.7
90°	16.5	14.7	12.9	10.8	8.4	5.9	3.5	1.0	3.5	5.9	8.4
92.5°	21.5	20.5	19.7	19.3	19.6	19.8	20.0	20.3	20.0	19.8	19.6
95°	36.0	34.4	32.8	35.7	43.1	50.4	57.8	65.1	57.8	50.4	43.1
97.5°	45.1	41.5	37.9	46.5	67.1	87.8	108.6	129.2	108.6	87.8	67.1
100°	49.6	45.7	41.9	55.3	85.9	116.3	146.8	177.4	146.8	116.3	85.9
102.5°	122.1	153.7	185.4	204.4	210.8	217.4	223.8	230.3	223.8	217.4	210.8
105°	182.7	243.5	304.3	331.3	324.6	317.9	311.3	304.6	311.3	317.9	324.6
107.5°	231.4	304.3	377.2	410.9	405.5	400.1	394.7	389.4	394.7	400.1	405.5
110°	304.1	368.3	432.7	462.6	457.9	453.3	448.6	443.8	448.6	453.3	457.9



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	474.1	489.9	505.9	511.7	507.6	503.4	499.4	495.2	499.4	503.4	507.6
115°	607.1	601.5	596.0	591.3	587.5	583.7	579.9	576.2	579.9	583.7	587.5
117.5°	677.1	673.3	669.4	665.4	661.2	657.0	652.7	648.5	652.7	657.0	661.2
120°	726.4	722.5	718.4	714.7	711.4	708.0	704.7	701.3	704.7	708.0	711.4
122.5°	773.0	768.6	764.3	760.3	756.9	753.3	749.8	746.3	749.8	753.3	756.9
125°	838.2	834.0	829.7	826.1	823.3	820.4	817.5	814.6	817.5	820.4	823.3
127.5°	898.8	895.7	892.5	889.4	886.2	883.0	879.8	876.6	879.8	883.0	886.2
130°	937.9	935.5	933.0	930.0	926.5	922.9	919.4	915.8	919.4	922.9	926.5
132.5°	975.6	973.2	970.7	968.0	965.0	962.0	958.9	955.8	958.9	962.0	965.0
135°	1029.0	1027.0	1025.0	1022.2	1018.7	1015.1	1011.5	1008.0	1011.5	1015.1	1018.7
137.5°	1077.6	1075.3	1073.0	1070.6	1068.2	1065.6	1063.2	1060.6	1063.2	1065.6	1068.2
140°	1109.3	1106.8	1104.4	1102.3	1100.5	1098.7	1096.9	1095.1	1096.9	1098.7	1100.5
142.5°	1138.2	1135.4	1132.7	1130.4	1128.8	1127.2	1125.6	1124.0	1125.6	1127.2	1128.8
145°	1177.7	1173.9	1170.2	1168.4	1168.7	1168.8	1169.0	1169.3	1169.0	1168.8	1168.7
147.5°	1214.3	1210.6	1206.8	1205.4	1206.3	1207.1	1208.0	1208.8	1208.0	1207.1	1206.3
150°	1236.3	1232.8	1229.2	1228.2	1229.7	1231.3	1232.8	1234.4	1232.8	1231.3	1229.7
152.5°	1256.7	1253.3	1249.9	1249.2	1250.8	1252.5	1254.3	1256.0	1254.3	1252.5	1250.8
155°	1285.2	1282.5	1279.9	1279.5	1281.5	1283.6	1285.5	1287.5	1285.5	1283.6	1281.5
157.5°	1309.2	1307.4	1305.5	1305.4	1307.1	1308.8	1310.5	1312.2	1310.5	1308.8	1307.1
160°	1323.9	1322.6	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6	1325.3	1323.9	1322.6
162.5°	1336.3	1335.1	1334.0	1334.1	1335.4	1336.7	1338.1	1339.4	1338.1	1336.7	1335.4
165°	1352.4	1351.6	1350.9	1351.3	1352.6	1354.0	1355.3	1356.7	1355.3	1354.0	1352.6
167.5°	1365.0	1364.4	1363.8	1364.1	1365.5	1366.8	1368.2	1369.5	1368.2	1366.8	1365.5
170°	1371.8	1371.4	1370.9	1371.4	1372.7	1374.0	1375.4	1376.7	1375.4	1374.0	1372.7
172.5°	1376.6	1376.2	1375.7	1376.2	1377.5	1378.8	1380.2	1381.5	1380.2	1378.8	1377.5
175°	1381.9	1381.4	1380.9	1381.5	1383.1	1384.6	1386.2	1387.7	1386.2	1384.6	1383.1
177.5°	1383.6	1383.4	1383.2	1383.7	1385.0	1386.2	1387.5	1388.7	1387.5	1386.2	1385.0
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	549.8	548.7	545.2	543.3	540.2	537.2	535.4	536.2	536.9	536.6	536.0
5°	534.0	529.9	523.7	518.4	514.5	507.5	504.4	502.9	501.6	500.2	498.7
7.5°	515.2	508.8	499.9	492.3	485.1	476.3	471.3	468.3	465.2	461.8	458.8
10°	501.9	492.9	483.4	472.8	464.2	456.3	449.2	444.5	440.2	436.1	433.2
12.5°	487.9	477.5	465.8	451.2	441.8	430.4	429.3	421.0	414.3	411.8	408.3
15°	465.5	450.9	436.1	418.8	411.3	401.1	394.6	388.1	382.4	378.3	377.3
17.5°	440.1	421.2	406.5	394.1	381.8	371.3	365.3	360.2	355.4	350.1	349.3
20°	420.8	404.4	388.4	377.5	364.9	354.1	346.9	341.8	337.6	334.4	331.7
22.5°	402.4	384.6	369.9	358.0	345.5	336.9	331.1	326.1	322.7	319.2	316.6
25°	373.0	359.1	343.0	329.5	319.2	313.7	309.0	304.7	302.6	300.2	297.2
27.5°	347.2	331.8	316.8	306.3	297.3	292.4	289.0	286.1	284.1	282.7	281.0
30°	329.1	313.5	301.7	291.4	283.9	279.0	276.8	275.1	272.8	271.9	271.1
32.5°	311.6	297.6	287.5	278.5	271.5	268.2	266.3	264.7	262.9	262.0	260.2
35°	286.9	275.1	265.3	260.3	254.6	251.8	250.3	248.2	246.5	245.6	245.3
37.5°	263.6	253.4	246.9	240.6	238.2	236.5	234.4	233.0	232.4	232.3	232.1
40°	248.5	240.3	234.4	229.3	228.3	225.6	223.9	222.7	222.7	222.9	222.7
42.5°	234.9	227.3	222.3	217.8	216.6	215.1	213.3	213.3	213.6	214.3	213.6
45°	214.1	208.8	205.1	203.0	200.7	199.2	198.9	199.5	199.7	200.0	200.7
47.5°	195.0	191.4	188.1	185.8	184.7	184.5	184.3	185.4	186.4	186.8	187.8
50°	183.7	179.6	176.8	175.3	174.5	174.1	174.5	175.8	176.6	177.7	178.3
52.5°	171.1	168.1	166.3	165.0	164.8	165.0	165.0	166.5	167.9	168.3	168.6
55°	153.5	151.4	151.0	149.0	149.9	149.7	150.7	151.6	152.9	154.2	154.4
57.5°	136.0	134.3	133.2	133.4	133.7	134.6	135.4	137.0	138.3	139.7	139.8
60°	124.4	123.6	122.9	122.9	123.3	124.6	125.6	127.1	128.0	128.9	129.5
62.5°	113.8	112.9	112.3	112.6	113.8	114.5	115.7	116.6	117.4	118.3	118.6
65°	97.0	96.6	97.2	97.6	97.8	98.9	100.4	101.0	101.9	102.4	103.9
67.5°	81.5	81.6	81.5	82.1	83.4	83.6	85.0	86.5	86.7	87.6	88.5
70°	71.1	71.5	71.9	72.4	73.4	73.9	74.9	75.6	76.4	77.1	77.8
72.5°	61.5	61.5	62.0	61.9	62.9	63.7	64.7	65.3	66.2	67.0	67.6
75°	47.3	47.3	47.8	48.0	49.0	50.1	49.9	50.3	51.2	52.0	52.5
77.5°	34.6	34.1	34.6	34.8	35.2	36.0	36.2	36.8	37.8	37.5	38.0
80°	26.3	25.7	26.3	26.6	26.6	27.6	27.6	28.1	28.7	28.1	28.7
82.5°	18.8	18.5	18.9	19.0	19.3	19.4	19.7	19.8	20.5	20.2	20.5
85°	9.4	9.2	9.4	9.2	9.4	9.6	9.6	9.4	9.4	9.8	9.2
87.5°	5.1	5.3	5.5	5.8	6.0	6.2	6.3	6.5	6.7	6.6	6.8
90°	10.8	12.9	14.7	16.5	18.3	20.1	21.1	22.2	23.4	24.5	25.3
92.5°	19.3	19.7	20.5	21.5	22.3	23.3	23.8	24.4	25.0	25.5	26.0
95°	35.7	32.8	34.4	36.0	37.5	39.1	40.2	41.3	42.4	43.5	44.0
97.5°	46.5	37.9	41.5	45.1	48.7	52.3	53.2	54.1	55.0	55.9	56.5
100°	55.3	41.9	45.7	49.6	53.3	57.1	58.9	60.7	62.5	64.3	65.3
102.5°	204.4	185.4	153.7	122.1	90.4	58.7	61.1	63.3	65.7	68.0	69.5
105°	331.3	304.3	243.5	182.7	121.9	61.1	63.5	66.0	68.4	70.9	72.6
107.5°	410.9	377.2	304.3	231.4	158.4	85.6	83.0	80.6	78.0	75.6	74.8
110°	462.6	432.7	368.3	304.1	239.7	175.3	153.1	130.8	108.6	86.2	75.6



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	511.7	505.9	489.9	474.1	458.2	442.2	361.1	279.8	198.6	117.3	77.1
115°	591.3	596.0	601.5	607.1	612.7	618.2	515.1	412.0	309.0	205.9	146.3
117.5°	665.4	669.4	673.3	677.1	680.9	684.8	659.8	634.9	609.9	585.0	546.2
120°	714.7	718.4	722.5	726.4	730.5	734.4	737.1	739.8	742.4	745.2	731.4
122.5°	760.3	764.3	768.6	773.0	777.4	781.7	783.3	784.9	786.6	788.2	786.0
125°	826.1	829.7	834.0	838.2	842.4	846.7	848.2	849.8	851.3	852.9	854.0
127.5°	889.4	892.5	895.7	898.8	902.0	905.2	907.5	909.7	912.0	914.3	915.5
130°	930.0	933.0	935.5	937.9	940.4	942.8	945.3	947.7	950.2	952.6	953.8
132.5°	968.0	970.7	973.2	975.6	978.1	980.5	982.6	984.7	986.8	988.9	989.9
135°	1022.2	1025.0	1027.0	1029.0	1031.0	1033.0	1035.3	1037.5	1039.7	1041.9	1042.8
137.5°	1070.6	1073.0	1075.3	1077.6	1079.9	1082.1	1084.3	1086.5	1088.6	1090.8	1091.6
140°	1102.3	1104.4	1106.8	1109.3	1111.7	1114.2	1116.2	1118.2	1120.2	1122.2	1122.7
142.5°	1130.4	1132.7	1135.4	1138.2	1141.0	1143.9	1145.7	1147.5	1149.3	1151.1	1151.5
145°	1168.4	1170.2	1173.9	1177.7	1181.6	1185.3	1186.8	1188.5	1190.0	1191.6	1191.8
147.5°	1205.4	1206.8	1210.6	1214.3	1218.0	1221.8	1222.9	1224.1	1225.3	1226.4	1226.5
150°	1228.2	1229.2	1232.8	1236.3	1239.9	1243.4	1244.8	1246.1	1247.5	1248.8	1248.9
152.5°	1249.2	1249.9	1253.3	1256.7	1260.1	1263.5	1264.8	1266.1	1267.5	1268.9	1268.8
155°	1279.5	1279.9	1282.5	1285.2	1287.9	1290.5	1291.8	1293.2	1294.6	1295.9	1295.6
157.5°	1305.4	1305.5	1307.4	1309.2	1311.1	1313.0	1314.5	1316.0	1317.5	1319.0	1318.9
160°	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6	1327.9	1329.3	1330.6	1331.9	1331.8
162.5°	1334.1	1334.0	1335.1	1336.3	1337.5	1338.6	1340.1	1341.6	1343.1	1344.7	1344.4
165°	1351.3	1350.9	1351.6	1352.4	1353.0	1353.7	1355.2	1356.8	1358.3	1359.9	1359.9
167.5°	1364.1	1363.8	1364.4	1365.0	1365.6	1366.3	1367.8	1369.4	1370.9	1372.5	1372.2
170°	1371.4	1370.9	1371.4	1371.8	1372.2	1372.7	1374.2	1375.8	1377.3	1378.9	1378.7
172.5°	1376.2	1375.7	1376.2	1376.6	1377.1	1377.5	1379.0	1380.6	1382.1	1383.7	1383.6
175°	1381.5	1380.9	1381.4	1381.9	1382.2	1382.7	1384.3	1385.8	1387.4	1388.9	1388.6
177.5°	1383.7	1383.2	1383.4	1383.6	1383.7	1383.9	1385.2	1386.4	1387.6	1388.9	1388.7
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	534.3	534.0	534.0	532.4	534.0	534.0	534.3	536.0	536.6	536.9	536.2
5°	495.7	495.0	494.0	495.0	494.0	495.0	495.7	498.7	500.2	501.6	502.9
7.5°	457.4	454.9	454.5	451.9	454.5	454.9	457.4	458.8	461.8	465.2	468.3
10°	429.5	427.8	427.5	423.5	427.5	427.8	429.5	433.2	436.1	440.2	444.5
12.5°	408.3	404.2	405.0	402.7	405.0	404.2	408.3	408.3	411.8	414.3	421.0
15°	371.5	371.5	370.6	367.0	370.6	371.5	371.5	377.3	378.3	382.4	388.1
17.5°	345.1	344.6	342.6	343.7	342.6	344.6	345.1	349.3	350.1	355.4	360.2
20°	329.3	328.0	325.5	325.5	325.5	328.0	329.3	331.7	334.4	337.6	341.8
22.5°	314.4	314.3	311.6	312.5	311.6	314.3	314.4	316.6	319.2	322.7	326.1
25°	297.0	295.3	294.0	294.6	294.0	295.3	297.0	297.2	300.2	302.6	304.7
27.5°	280.4	279.5	279.4	277.7	279.4	279.5	280.4	281.0	282.7	284.1	286.1
30°	270.9	268.7	269.1	268.1	269.1	268.7	270.9	271.1	271.9	272.8	275.1
32.5°	259.9	259.1	258.7	257.8	258.7	259.1	259.9	260.2	262.0	262.9	264.7
35°	245.0	245.2	244.1	244.5	244.1	245.2	245.0	245.3	245.6	246.5	248.2
37.5°	231.9	232.5	232.1	232.1	232.1	232.5	231.9	232.1	232.3	232.4	233.0
40°	223.3	223.3	223.3	223.9	223.3	223.3	223.3	222.7	222.9	222.7	222.7
42.5°	215.1	214.7	214.4	214.3	214.4	214.7	215.1	213.6	214.3	213.6	213.3
45°	201.0	201.7	201.9	200.9	201.9	201.7	201.0	200.7	200.0	199.7	199.5
47.5°	188.3	188.4	188.3	189.3	188.3	188.4	188.3	187.8	186.8	186.4	185.4
50°	179.5	179.0	179.5	179.0	179.5	179.0	179.5	178.3	177.7	176.6	175.8
52.5°	170.0	170.1	169.8	169.8	169.8	170.1	170.0	168.6	168.3	167.9	166.5
55°	155.2	155.6	155.4	155.4	155.4	155.6	155.2	154.4	154.2	152.9	151.6
57.5°	140.0	140.3	140.6	139.7	140.6	140.3	140.0	139.8	139.7	138.3	137.0
60°	129.3	130.4	130.2	129.8	130.2	130.4	129.3	129.5	128.9	128.0	127.1
62.5°	119.5	120.0	119.9	119.8	119.9	120.0	119.5	118.6	118.3	117.4	116.6
65°	104.5	104.9	104.2	104.9	104.2	104.9	104.5	103.9	102.4	101.9	101.0
67.5°	88.2	88.4	88.9	89.2	88.9	88.4	88.2	88.5	87.6	86.7	86.5
70°	78.1	77.9	78.6	79.3	78.6	77.9	78.1	77.8	77.1	76.4	75.6
72.5°	67.5	68.0	67.8	68.2	67.8	68.0	67.5	67.6	67.0	66.2	65.3
75°	52.0	52.7	52.5	53.1	52.5	52.7	52.0	52.5	52.0	51.2	50.3
77.5°	37.6	37.7	37.6	38.0	37.6	37.7	37.6	38.0	37.5	37.8	36.8
80°	28.7	28.3	27.8	28.7	27.8	28.3	28.7	28.7	28.1	28.7	28.1
82.5°	20.0	20.2	19.8	19.8	19.8	20.2	20.0	20.5	20.2	20.5	19.8
85°	9.2	9.0	8.6	8.6	8.6	9.0	9.2	9.2	9.8	9.4	9.4
87.5°	6.9	6.8	6.9	6.8	6.9	6.8	6.9	6.8	6.6	6.7	6.5
90°	25.7	26.2	26.6	27.1	26.6	26.2	25.7	25.3	24.5	23.4	22.2
92.5°	26.3	26.5	26.8	27.1	26.8	26.5	26.3	26.0	25.5	25.0	24.4
95°	43.7	43.5	43.3	43.1	43.3	43.5	43.7	44.0	43.5	42.4	41.3
97.5°	56.7	57.0	57.2	57.5	57.2	57.0	56.7	56.5	55.9	55.0	54.1
100°	65.8	66.3	66.7	67.1	66.7	66.3	65.8	65.3	64.3	62.5	60.7
102.5°	70.0	70.7	71.4	71.9	71.4	70.7	70.0	69.5	68.0	65.7	63.3
105°	73.5	74.4	75.2	76.2	75.2	74.4	73.5	72.6	70.9	68.4	66.0
107.5°	75.7	76.5	77.5	78.3	77.5	76.5	75.7	74.8	75.6	78.0	80.6
110°	76.4	77.4	78.2	79.2	78.2	77.4	76.4	75.6	86.2	108.6	130.8



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	77.9	78.5	79.3	79.9	79.3	78.5	77.9	77.1	117.3	198.6	279.8
115°	130.3	114.2	98.2	82.2	98.2	114.2	130.3	146.3	205.9	309.0	412.0
117.5°	493.5	440.8	388.1	335.5	388.1	440.8	493.5	546.2	585.0	609.9	634.9
120°	701.3	671.3	641.2	611.2	641.2	671.3	701.3	731.4	745.2	742.4	739.8
122.5°	780.2	774.4	768.5	762.7	768.5	774.4	780.2	786.0	788.2	786.6	784.9
125°	854.7	855.4	856.0	856.7	856.0	855.4	854.7	854.0	852.9	851.3	849.8
127.5°	915.6	915.8	915.9	916.0	915.9	915.8	915.6	915.5	914.3	912.0	909.7
130°	953.6	953.3	953.1	952.9	953.1	953.3	953.6	953.8	952.6	950.2	947.7
132.5°	989.6	989.4	989.2	988.9	989.2	989.4	989.6	989.9	988.9	986.8	984.7
135°	1042.4	1041.9	1041.5	1041.0	1041.5	1041.9	1042.4	1042.8	1041.9	1039.7	1037.5
137.5°	1090.8	1090.1	1089.3	1088.5	1089.3	1090.1	1090.8	1091.6	1090.8	1088.6	1086.5
140°	1121.5	1120.4	1119.3	1118.2	1119.3	1120.4	1121.5	1122.7	1122.2	1120.2	1118.2
142.5°	1150.4	1149.2	1148.2	1147.1	1148.2	1149.2	1150.4	1151.5	1151.1	1149.3	1147.5
145°	1190.7	1189.6	1188.5	1187.3	1188.5	1189.6	1190.7	1191.8	1191.6	1190.0	1188.5
147.5°	1225.6	1224.6	1223.7	1222.8	1223.7	1224.6	1225.6	1226.5	1226.4	1225.3	1224.1
150°	1247.7	1246.7	1245.6	1244.4	1245.6	1246.7	1247.7	1248.9	1248.8	1247.5	1246.1
152.5°	1267.2	1265.8	1264.3	1262.9	1264.3	1265.8	1267.2	1268.8	1268.9	1267.5	1266.1
155°	1293.8	1292.1	1290.3	1288.5	1290.3	1292.1	1293.8	1295.6	1295.9	1294.6	1293.2
157.5°	1317.2	1315.4	1313.7	1311.9	1313.7	1315.4	1317.2	1318.9	1319.0	1317.5	1316.0
160°	1330.3	1328.7	1327.2	1325.6	1327.2	1328.7	1330.3	1331.8	1331.9	1330.6	1329.3
162.5°	1342.6	1340.7	1338.7	1336.8	1338.7	1340.7	1342.6	1344.4	1344.7	1343.1	1341.6
165°	1358.3	1356.8	1355.2	1353.7	1355.2	1356.8	1358.3	1359.9	1359.9	1358.3	1356.8
167.5°	1370.3	1368.3	1366.3	1364.2	1366.3	1368.3	1370.3	1372.2	1372.5	1370.9	1369.4
170°	1376.7	1374.7	1372.7	1370.6	1372.7	1374.7	1376.7	1378.7	1378.9	1377.3	1375.8
172.5°	1381.5	1379.5	1377.5	1375.5	1377.5	1379.5	1381.5	1383.6	1383.7	1382.1	1380.6
175°	1386.4	1384.1	1382.0	1379.7	1382.0	1384.1	1386.4	1388.6	1388.9	1387.4	1385.8
177.5°	1387.1	1385.5	1383.9	1382.3	1383.9	1385.5	1387.1	1388.7	1388.9	1387.6	1386.4
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	535.4	537.2	540.2	543.3	545.2	548.7	549.8	551.5	553.0	556.6	560.3
5°	504.4	507.5	514.5	518.4	523.7	529.9	534.0	538.3	543.0	551.1	558.6
7.5°	471.3	476.3	485.1	492.3	499.9	508.8	515.2	523.7	530.7	542.2	553.2
10°	449.2	456.3	464.2	472.8	483.4	492.9	501.9	512.6	521.1	534.9	547.7
12.5°	429.3	430.4	441.8	451.2	465.8	477.5	487.9	501.6	510.0	526.3	539.8
15°	394.6	401.1	411.3	418.8	436.1	450.9	465.5	479.8	489.5	509.6	527.4
17.5°	365.3	371.3	381.8	394.1	406.5	421.2	440.1	455.2	468.3	491.3	512.4
20°	346.9	354.1	364.9	377.5	388.4	404.4	420.8	438.1	452.2	478.2	502.8
22.5°	331.1	336.9	345.5	358.0	369.9	384.6	402.4	421.3	436.1	464.1	489.0
25°	309.0	313.7	319.2	329.5	343.0	359.1	373.0	393.8	415.4	441.5	471.6
27.5°	289.0	292.4	297.3	306.3	316.8	331.8	347.2	366.9	388.7	417.1	448.9
30°	276.8	279.0	283.9	291.4	301.7	313.5	329.1	347.9	370.2	398.9	430.6
32.5°	266.3	268.2	271.5	278.5	287.5	297.6	311.6	330.5	351.7	379.8	415.0
35°	250.3	251.8	254.6	260.3	265.3	275.1	286.9	304.1	324.0	350.9	387.3
37.5°	234.4	236.5	238.2	240.6	246.9	253.4	263.6	278.1	297.7	324.9	359.6
40°	223.9	225.6	228.3	229.3	234.4	240.3	248.5	261.8	281.5	306.4	340.3
42.5°	213.3	215.1	216.6	217.8	222.3	227.3	234.9	246.3	263.7	287.9	321.4
45°	198.9	199.2	200.7	203.0	205.1	208.8	214.1	223.9	237.4	260.1	290.6
47.5°	184.3	184.5	184.7	185.8	188.1	191.4	195.0	203.0	215.1	233.2	262.8
50°	174.5	174.1	174.5	175.3	176.8	179.6	183.7	189.5	199.3	216.2	243.5
52.5°	165.0	165.0	164.8	165.0	166.3	168.1	171.1	176.0	184.7	200.3	224.2
55°	150.7	149.7	149.9	149.0	151.0	151.4	153.5	157.6	165.3	176.0	198.5
57.5°	135.4	134.6	133.7	133.4	133.2	134.3	136.0	139.2	145.2	154.6	172.8
60°	125.6	124.6	123.3	122.9	122.9	123.6	124.4	126.8	132.3	140.6	155.6
62.5°	115.7	114.5	113.8	112.6	112.3	112.9	113.8	115.5	119.5	127.3	140.3
65°	100.4	98.9	97.8	97.6	97.2	96.6	97.0	98.7	101.9	108.1	118.4
67.5°	85.0	83.6	83.4	82.1	81.5	81.6	81.5	82.9	84.9	90.3	97.9
70°	74.9	73.9	73.4	72.4	71.9	71.5	71.1	72.4	74.3	78.8	85.4
72.5°	64.7	63.7	62.9	61.9	62.0	61.5	61.5	62.3	63.8	68.0	73.1
75°	49.9	50.1	49.0	48.0	47.8	47.3	47.3	48.0	48.6	51.8	55.9
77.5°	36.2	36.0	35.2	34.8	34.6	34.1	34.6	35.0	35.3	37.5	40.4
80°	27.6	27.6	26.6	26.6	26.3	25.7	26.3	25.9	26.8	28.9	31.0
82.5°	19.7	19.4	19.3	19.0	18.9	18.5	18.8	19.2	19.6	21.0	22.3
85°	9.6	9.6	9.4	9.2	9.4	9.2	9.4	9.6	9.8	10.5	11.6
87.5°	6.3	6.2	6.0	5.8	5.5	5.3	5.1	4.7	4.6	4.2	4.0
90°	21.1	20.1	18.3	16.5	14.7	12.9	10.8	8.4	5.9	3.5	1.0
92.5°	23.8	23.3	22.3	21.5	20.5	19.7	19.3	19.6	19.8	20.0	20.3
95°	40.2	39.1	37.5	36.0	34.4	32.8	35.7	43.1	50.4	57.8	65.1
97.5°	53.2	52.3	48.7	45.1	41.5	37.9	46.5	67.1	87.8	108.6	129.2
100°	58.9	57.1	53.3	49.6	45.7	41.9	55.3	85.9	116.3	146.8	177.4
102.5°	61.1	58.7	90.4	122.1	153.7	185.4	204.4	210.8	217.4	223.8	230.3
105°	63.5	61.1	121.9	182.7	243.5	304.3	331.3	324.6	317.9	311.3	304.6
107.5°	83.0	85.6	158.4	231.4	304.3	377.2	410.9	405.5	400.1	394.7	389.4
110°	153.1	175.3	239.7	304.1	368.3	432.7	462.6	457.9	453.3	448.6	443.8



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	361.1	442.2	458.2	474.1	489.9	505.9	511.7	507.6	503.4	499.4	495.2
115°	515.1	618.2	612.7	607.1	601.5	596.0	591.3	587.5	583.7	579.9	576.2
117.5°	659.8	684.8	680.9	677.1	673.3	669.4	665.4	661.2	657.0	652.7	648.5
120°	737.1	734.4	730.5	726.4	722.5	718.4	714.7	711.4	708.0	704.7	701.3
122.5°	783.3	781.7	777.4	773.0	768.6	764.3	760.3	756.9	753.3	749.8	746.3
125°	848.2	846.7	842.4	838.2	834.0	829.7	826.1	823.3	820.4	817.5	814.6
127.5°	907.5	905.2	902.0	898.8	895.7	892.5	889.4	886.2	883.0	879.8	876.6
130°	945.3	942.8	940.4	937.9	935.5	933.0	930.0	926.5	922.9	919.4	915.8
132.5°	982.6	980.5	978.1	975.6	973.2	970.7	968.0	965.0	962.0	958.9	955.8
135°	1035.3	1033.0	1031.0	1029.0	1027.0	1025.0	1022.2	1018.7	1015.1	1011.5	1008.0
137.5°	1084.3	1082.1	1079.9	1077.6	1075.3	1073.0	1070.6	1068.2	1065.6	1063.2	1060.6
140°	1116.2	1114.2	1111.7	1109.3	1106.8	1104.4	1102.3	1100.5	1098.7	1096.9	1095.1
142.5°	1145.7	1143.9	1141.0	1138.2	1135.4	1132.7	1130.4	1128.8	1127.2	1125.6	1124.0
145°	1186.8	1185.3	1181.6	1177.7	1173.9	1170.2	1168.4	1168.7	1168.8	1169.0	1169.3
147.5°	1222.9	1221.8	1218.0	1214.3	1210.6	1206.8	1205.4	1206.3	1207.1	1208.0	1208.8
150°	1244.8	1243.4	1239.9	1236.3	1232.8	1229.2	1228.2	1229.7	1231.3	1232.8	1234.4
152.5°	1264.8	1263.5	1260.1	1256.7	1253.3	1249.9	1249.2	1250.8	1252.5	1254.3	1256.0
155°	1291.8	1290.5	1287.9	1285.2	1282.5	1279.9	1279.5	1281.5	1283.6	1285.5	1287.5
157.5°	1314.5	1313.0	1311.1	1309.2	1307.4	1305.5	1305.4	1307.1	1308.8	1310.5	1312.2
160°	1327.9	1326.6	1325.3	1323.9	1322.6	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6
162.5°	1340.1	1338.6	1337.5	1336.3	1335.1	1334.0	1334.1	1335.4	1336.7	1338.1	1339.4
165°	1355.2	1353.7	1353.0	1352.4	1351.6	1350.9	1351.3	1352.6	1354.0	1355.3	1356.7
167.5°	1367.8	1366.3	1365.6	1365.0	1364.4	1363.8	1364.1	1365.5	1366.8	1368.2	1369.5
170°	1374.2	1372.7	1372.2	1371.8	1371.4	1370.9	1371.4	1372.7	1374.0	1375.4	1376.7
172.5°	1379.0	1377.5	1377.1	1376.6	1376.2	1375.7	1376.2	1377.5	1378.8	1380.2	1381.5
175°	1384.3	1382.7	1382.2	1381.9	1381.4	1380.9	1381.5	1383.1	1384.6	1386.2	1387.7
177.5°	1385.2	1383.9	1383.7	1383.6	1383.4	1383.2	1383.7	1385.0	1386.2	1387.5	1388.7
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	560.1	560.9	563.6	566.4	569.5	570.3	571.7	570.5	570.1	573.3	575.8
5°	561.7	565.4	573.0	579.9	585.6	589.7	594.0	595.7	598.9	603.3	609.0
7.5°	559.8	567.3	579.1	589.1	599.9	607.8	613.9	619.2	625.5	634.0	643.3
10°	557.8	567.8	582.2	594.4	607.7	617.7	626.0	634.2	643.7	655.4	667.6
12.5°	554.0	565.9	583.9	598.3	615.4	625.3	636.5	654.0	664.2	680.6	697.8
15°	546.4	559.7	584.8	602.5	621.8	640.6	661.4	678.1	694.7	704.5	728.6
17.5°	535.2	554.6	582.4	603.1	627.6	657.2	680.6	699.6	718.8	734.4	746.6
20°	526.0	547.2	579.0	603.8	632.9	664.8	691.5	710.9	727.5	740.6	748.1
22.5°	514.6	541.3	572.1	601.2	638.4	670.0	698.0	713.2	727.2	733.6	736.5
25°	496.5	528.7	563.5	599.1	641.0	674.5	700.1	709.4	713.4	707.2	696.9
27.5°	477.0	512.8	553.6	595.0	639.4	671.6	689.9	688.5	681.6	661.5	645.5
30°	462.5	501.9	545.7	591.0	635.5	666.8	677.4	666.8	651.1	628.7	605.7
32.5°	447.2	488.0	537.3	585.1	628.3	655.8	658.1	639.7	615.5	589.9	561.4
35°	424.1	468.3	521.6	572.1	613.0	630.4	620.1	587.5	558.8	524.0	484.9
37.5°	398.0	446.8	500.2	553.1	590.1	594.7	569.1	534.9	494.4	453.4	407.5
40°	378.5	430.2	485.2	538.5	571.3	566.6	534.0	496.3	448.2	398.0	355.4
42.5°	361.1	412.6	468.7	521.0	547.2	534.3	496.3	450.1	398.3	351.1	312.1
45°	330.8	383.9	441.3	491.8	506.8	483.4	433.2	381.7	330.8	291.4	260.6
47.5°	301.4	353.9	410.8	455.2	460.4	429.0	374.1	321.2	277.4	245.3	223.6
50°	279.8	332.5	388.8	428.5	426.7	388.8	332.3	282.0	245.3	219.4	204.9
52.5°	260.5	310.3	364.3	400.4	391.2	350.0	296.0	251.3	221.2	201.0	187.8
55°	230.4	276.4	327.8	356.8	340.0	294.2	248.5	212.6	190.3	175.1	164.9
57.5°	200.5	243.6	287.7	305.5	287.0	244.7	206.7	180.6	163.8	152.6	145.9
60°	182.0	219.7	258.8	274.3	252.2	214.5	184.5	161.3	147.7	138.6	132.5
62.5°	163.5	197.3	234.2	242.6	222.4	190.6	164.0	144.6	133.6	125.4	119.7
65°	138.3	166.0	194.0	199.5	181.0	156.3	135.3	122.7	112.8	106.9	102.4
67.5°	113.5	135.6	155.5	159.9	143.6	126.6	111.4	100.4	93.8	88.8	84.9
70°	98.7	116.3	132.5	136.2	123.1	107.9	96.3	87.6	81.5	77.3	73.6
72.5°	83.1	97.7	111.3	113.8	103.1	91.4	82.0	75.0	69.7	67.0	63.5
75°	63.6	72.2	82.7	83.3	76.3	69.2	61.9	57.4	54.6	51.2	49.5
77.5°	44.9	51.6	57.6	58.7	54.6	49.8	45.7	42.1	39.8	38.2	36.6
80°	34.2	39.6	42.2	43.6	40.7	37.2	34.9	32.5	31.0	30.0	28.9
82.5°	24.5	27.8	30.2	31.4	29.7	27.6	25.4	23.9	22.8	22.0	21.6
85°	12.4	13.9	15.5	15.8	15.5	14.5	13.3	13.3	12.6	12.4	12.4
87.5°	5.0	6.1	6.6	7.6	7.7	8.1	8.4	8.6	8.8	8.9	8.9
90°	3.5	5.9	8.4	10.8	12.9	14.7	16.5	18.3	20.1	21.1	22.2
92.5°	20.0	19.8	19.6	19.3	19.7	20.5	21.5	22.3	23.3	23.8	24.4
95°	57.8	50.4	43.1	35.7	32.8	34.4	36.0	37.5	39.1	40.2	41.3
97.5°	108.6	87.8	67.1	46.5	37.9	41.5	45.1	48.7	52.3	53.2	54.1
100°	146.8	116.3	85.9	55.3	41.9	45.7	49.6	53.3	57.1	58.9	60.7
102.5°	223.8	217.4	210.8	204.4	185.4	153.7	122.1	90.4	58.7	61.1	63.3
105°	311.3	317.9	324.6	331.3	304.3	243.5	182.7	121.9	61.1	63.5	66.0
107.5°	394.7	400.1	405.5	410.9	377.2	304.3	231.4	158.4	85.6	83.0	80.6
110°	448.6	453.3	457.9	462.6	432.7	368.3	304.1	239.7	175.3	153.1	130.8



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	499.4	503.4	507.6	511.7	505.9	489.9	474.1	458.2	442.2	361.1	279.8
115°	579.9	583.7	587.5	591.3	596.0	601.5	607.1	612.7	618.2	515.1	412.0
117.5°	652.7	657.0	661.2	665.4	669.4	673.3	677.1	680.9	684.8	659.8	634.9
120°	704.7	708.0	711.4	714.7	718.4	722.5	726.4	730.5	734.4	737.1	739.8
122.5°	749.8	753.3	756.9	760.3	764.3	768.6	773.0	777.4	781.7	783.3	784.9
125°	817.5	820.4	823.3	826.1	829.7	834.0	838.2	842.4	846.7	848.2	849.8
127.5°	879.8	883.0	886.2	889.4	892.5	895.7	898.8	902.0	905.2	907.5	909.7
130°	919.4	922.9	926.5	930.0	933.0	935.5	937.9	940.4	942.8	945.3	947.7
132.5°	958.9	962.0	965.0	968.0	970.7	973.2	975.6	978.1	980.5	982.6	984.7
135°	1011.5	1015.1	1018.7	1022.2	1025.0	1027.0	1029.0	1031.0	1033.0	1035.3	1037.5
137.5°	1063.2	1065.6	1068.2	1070.6	1073.0	1075.3	1077.6	1079.9	1082.1	1084.3	1086.5
140°	1096.9	1098.7	1100.5	1102.3	1104.4	1106.8	1109.3	1111.7	1114.2	1116.2	1118.2
142.5°	1125.6	1127.2	1128.8	1130.4	1132.7	1135.4	1138.2	1141.0	1143.9	1145.7	1147.5
145°	1169.0	1168.8	1168.7	1168.4	1170.2	1173.9	1177.7	1181.6	1185.3	1186.8	1188.5
147.5°	1208.0	1207.1	1206.3	1205.4	1206.8	1210.6	1214.3	1218.0	1221.8	1222.9	1224.1
150°	1232.8	1231.3	1229.7	1228.2	1229.2	1232.8	1236.3	1239.9	1243.4	1244.8	1246.1
152.5°	1254.3	1252.5	1250.8	1249.2	1249.9	1253.3	1256.7	1260.1	1263.5	1264.8	1266.1
155°	1285.5	1283.6	1281.5	1279.5	1279.9	1282.5	1285.2	1287.9	1290.5	1291.8	1293.2
157.5°	1310.5	1308.8	1307.1	1305.4	1305.5	1307.4	1309.2	1311.1	1313.0	1314.5	1316.0
160°	1325.3	1323.9	1322.6	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6	1327.9	1329.3
162.5°	1338.1	1336.7	1335.4	1334.1	1334.0	1335.1	1336.3	1337.5	1338.6	1340.1	1341.6
165°	1355.3	1354.0	1352.6	1351.3	1350.9	1351.6	1352.4	1353.0	1353.7	1355.2	1356.8
167.5°	1368.2	1366.8	1365.5	1364.1	1363.8	1364.4	1365.0	1365.6	1366.3	1367.8	1369.4
170°	1375.4	1374.0	1372.7	1371.4	1370.9	1371.4	1371.8	1372.2	1372.7	1374.2	1375.8
172.5°	1380.2	1378.8	1377.5	1376.2	1375.7	1376.2	1376.6	1377.1	1377.5	1379.0	1380.6
175°	1386.2	1384.6	1383.1	1381.5	1380.9	1381.4	1381.9	1382.2	1382.7	1384.3	1385.8
177.5°	1387.5	1386.2	1385.0	1383.7	1383.2	1383.4	1383.6	1383.7	1383.9	1385.2	1386.4
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	577.9	580.2	580.2	580.6	583.3	583.0	582.8
5°	614.9	618.6	619.0	622.8	625.4	624.5	622.2
7.5°	649.9	656.7	661.9	664.7	668.1	670.1	669.2
10°	677.7	687.5	693.5	697.6	702.5	706.2	704.8
12.5°	702.9	714.5	722.8	729.8	730.4	735.1	731.9
15°	742.2	754.5	755.8	760.9	765.1	764.6	764.8
17.5°	755.1	759.0	759.9	760.0	760.1	758.6	755.3
20°	750.5	748.9	745.4	742.5	737.6	737.0	732.7
22.5°	728.5	723.8	714.6	708.6	701.0	699.0	697.8
25°	685.4	674.9	660.3	646.4	642.5	635.1	637.2
27.5°	626.1	609.8	594.0	582.8	572.5	561.3	564.5
30°	584.6	566.1	543.8	526.7	515.8	505.1	503.1
32.5°	534.9	507.8	483.1	468.0	451.2	444.4	437.1
35°	449.2	422.8	398.2	377.0	364.9	355.4	346.9
37.5°	372.2	341.9	322.0	304.8	296.0	290.6	292.0
40°	324.4	297.8	283.2	270.2	262.0	258.3	259.1
42.5°	285.7	265.8	253.8	244.9	239.1	237.0	236.5
45°	241.8	230.6	220.7	215.7	212.8	210.5	209.0
47.5°	211.8	202.6	197.1	194.1	191.6	189.3	189.2
50°	193.8	187.8	183.9	180.7	178.8	177.1	178.6
52.5°	180.0	174.6	170.7	167.9	167.1	165.6	165.5
55°	159.8	155.4	152.7	150.1	148.8	148.0	146.8
57.5°	141.2	137.1	134.6	133.0	130.5	129.7	129.3
60°	128.0	124.8	122.2	120.1	119.0	117.3	117.3
62.5°	115.8	112.6	110.3	108.7	106.9	106.2	106.4
65°	98.3	95.7	93.3	91.6	91.2	89.9	90.4
67.5°	82.1	80.4	77.9	76.9	76.2	75.5	74.9
70°	71.3	69.6	68.3	67.0	66.4	66.4	66.4
72.5°	62.2	60.1	59.4	57.8	58.2	57.5	56.7
75°	48.2	46.8	46.3	45.6	44.6	44.6	44.6
77.5°	35.4	35.1	34.3	33.6	33.4	33.2	33.3
80°	27.4	27.1	26.8	26.8	26.3	26.1	25.7
82.5°	21.1	20.5	20.3	20.1	20.0	20.0	19.9
85°	12.0	11.6	11.6	11.8	11.3	11.3	11.6
87.5°	9.3	9.5	9.5	9.6	9.9	9.8	9.9
90°	23.4	24.5	25.3	25.7	26.2	26.6	27.1
92.5°	25.0	25.5	26.0	26.3	26.5	26.8	27.1
95°	42.4	43.5	44.0	43.7	43.5	43.3	43.1
97.5°	55.0	55.9	56.5	56.7	57.0	57.2	57.5
100°	62.5	64.3	65.3	65.8	66.3	66.7	67.1
102.5°	65.7	68.0	69.5	70.0	70.7	71.4	71.9
105°	68.4	70.9	72.6	73.5	74.4	75.2	76.2
107.5°	78.0	75.6	74.8	75.7	76.5	77.5	78.3
110°	108.6	86.2	75.6	76.4	77.4	78.2	79.2



TEST NUMBER: P331276-830

CATALOG NUMBER: S122DIP-S290D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	198.6	117.3	77.1	77.9	78.5	79.3	79.9
115°	309.0	205.9	146.3	130.3	114.2	98.2	82.2
117.5°	609.9	585.0	546.2	493.5	440.8	388.1	335.5
120°	742.4	745.2	731.4	701.3	671.3	641.2	611.2
122.5°	786.6	788.2	786.0	780.2	774.4	768.5	762.7
125°	851.3	852.9	854.0	854.7	855.4	856.0	856.7
127.5°	912.0	914.3	915.5	915.6	915.8	915.9	916.0
130°	950.2	952.6	953.8	953.6	953.3	953.1	952.9
132.5°	986.8	988.9	989.9	989.6	989.4	989.2	988.9
135°	1039.7	1041.9	1042.8	1042.4	1041.9	1041.5	1041.0
137.5°	1088.6	1090.8	1091.6	1090.8	1090.1	1089.3	1088.5
140°	1120.2	1122.2	1122.7	1121.5	1120.4	1119.3	1118.2
142.5°	1149.3	1151.1	1151.5	1150.4	1149.2	1148.2	1147.1
145°	1190.0	1191.6	1191.8	1190.7	1189.6	1188.5	1187.3
147.5°	1225.3	1226.4	1226.5	1225.6	1224.6	1223.7	1222.8
150°	1247.5	1248.8	1248.9	1247.7	1246.7	1245.6	1244.4
152.5°	1267.5	1268.9	1268.8	1267.2	1265.8	1264.3	1262.9
155°	1294.6	1295.9	1295.6	1293.8	1292.1	1290.3	1288.5
157.5°	1317.5	1319.0	1318.9	1317.2	1315.4	1313.7	1311.9
160°	1330.6	1331.9	1331.8	1330.3	1328.7	1327.2	1325.6
162.5°	1343.1	1344.7	1344.4	1342.6	1340.7	1338.7	1336.8
165°	1358.3	1359.9	1359.9	1358.3	1356.8	1355.2	1353.7
167.5°	1370.9	1372.5	1372.2	1370.3	1368.3	1366.3	1364.2
170°	1377.3	1378.9	1378.7	1376.7	1374.7	1372.7	1370.6
172.5°	1382.1	1383.7	1383.6	1381.5	1379.5	1377.5	1375.5
175°	1387.4	1388.9	1388.6	1386.4	1384.1	1382.0	1379.7
177.5°	1387.6	1388.9	1388.7	1387.1	1385.5	1383.9	1382.3
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7

(END OF REPORT)