

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: P331484-830

Luminaire Tested: **S122DIW-S290D1240U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331484-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122DIW-S290D1240U830-4F0-1E-UDD-A1  
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1240 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

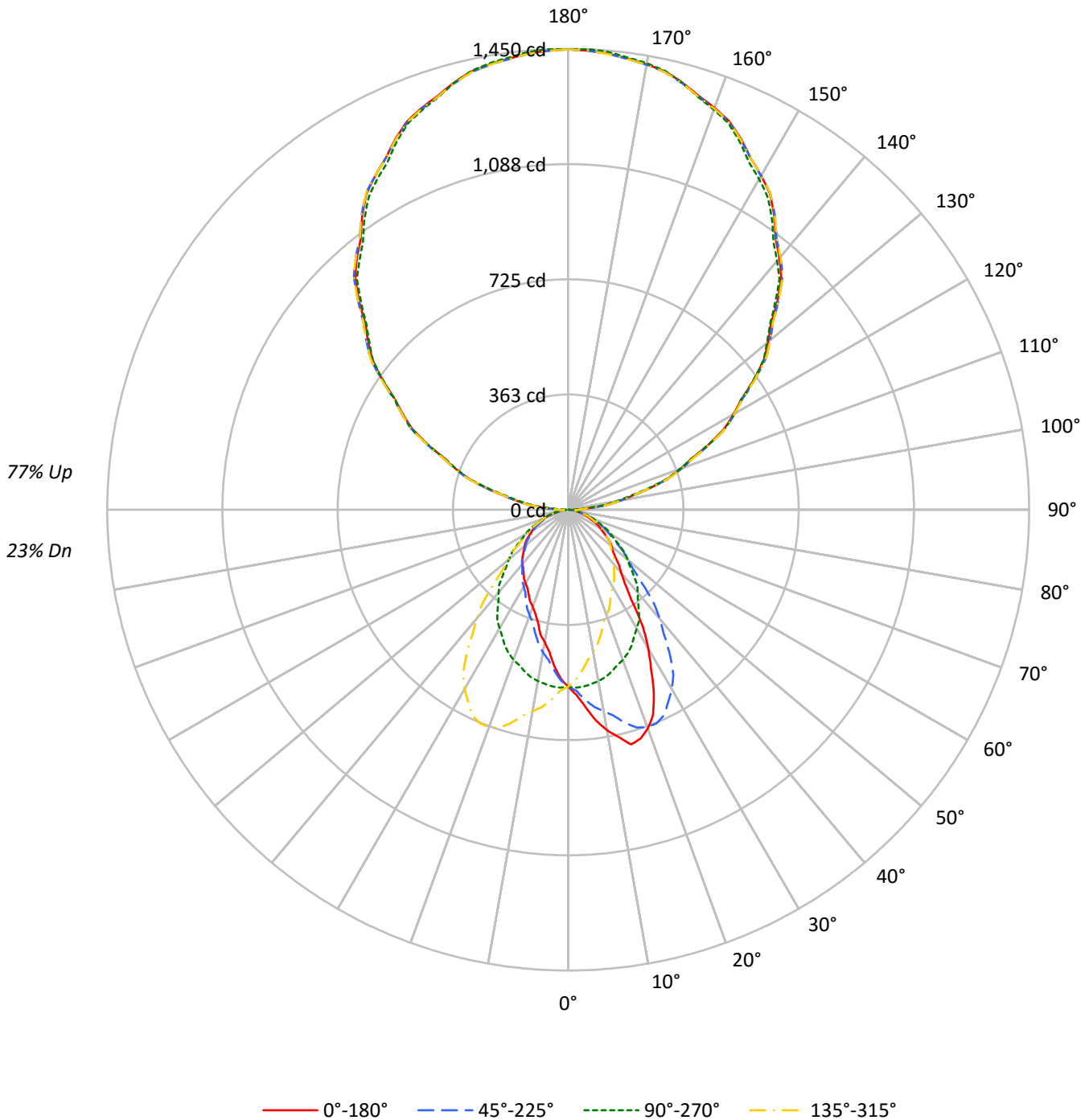
Lumens per Lamp: N/A  
Luminaire Lumens: 5284.4 lumens  
Efficiency: N/A  
Efficacy: 113.4 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 46.6  
Input Voltage (V): 120  
Input Current (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	90	90	90	90	69	69	69	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	23	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



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**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°	19.8	0.4
90°-100°	91.8	1.7
100°-110°	285.0	5.4
110°-120°	487.2	9.2
120°-130°	640.7	12.1
130°-140°	719.1	13.6
140°-150°	705.1	13.3
150°-160°	591.4	11.2
160°-170°	392.2	7.4
170°-180°	137.1	2.6
0°-30°	431.2	8.2
0°-40°	667.4	12.6
0°-60°	1043.5	19.7
0°-90°	1234.9	23.4
90°-120°	864.0	16.3
90°-150°	2928.8	55.4
90°-180°	4050.0	76.6
0°-180°	5284.4	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	14
90°	42	1	42	1	42	19
95°	76	64	76	64	76	84
105°	271	263	271	263	271	285
115°	489	489	489	489	489	483
125°	714	711	714	711	714	636
135°	931	920	931	920	931	717
145°	1129	1117	1129	1117	1129	705
155°	1287	1277	1287	1277	1287	592
165°	1391	1390	1391	1390	1391	392
175°	1441	1446	1441	1446	1441	137
180°	1448	1448	1448	1448	1448	



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**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°	12.7	12.7	12.8	12.6	12.5	12.7	12.8	12.8	13.1	13.4	12.3
90°	41.6	41.3	41.0	40.7	40.4	40.6	41.2	41.7	42.2	42.8	36.8
92.5°	39.6	39.6	39.5	39.4	39.4	39.3	39.2	39.1	38.9	38.8	37.4
95°	75.8	76.3	76.8	77.4	77.9	78.2	78.2	78.2	78.2	78.2	77.7
97.5°	131.3	131.3	131.4	131.4	131.5	131.5	131.5	131.5	131.5	131.5	130.4
100°	167.4	167.7	168.0	168.2	168.5	168.6	168.6	168.6	168.6	168.6	167.9
102.5°	208.5	208.8	209.1	209.3	209.6	209.6	209.4	209.2	209.0	208.8	207.7
105°	271.4	271.4	271.4	271.4	271.4	271.1	270.5	269.9	269.4	268.9	268.3
107.5°	330.5	331.7	333.0	334.2	335.5	336.0	335.7	335.5	335.4	335.1	335.1
110°	376.5	377.2	378.1	378.9	379.7	380.1	380.1	380.1	380.1	380.1	380.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	420.4	421.0	421.6	422.2	422.8	423.4	424.0	424.7	425.4	426.0	426.2
115°	488.9	489.7	490.5	491.3	492.1	492.7	492.9	493.2	493.5	493.7	494.3
117.5°	554.1	555.0	555.7	556.6	557.4	558.1	558.7	559.4	560.1	560.7	562.2
120°	600.1	600.9	601.7	602.5	603.3	603.7	603.7	603.7	603.7	603.7	605.9
122.5°	645.1	645.6	646.2	646.9	647.4	648.1	648.8	649.4	650.0	650.6	652.1
125°	713.7	714.0	714.3	714.5	714.8	715.4	716.1	717.0	717.8	718.6	719.4
127.5°	776.3	777.2	778.1	778.9	779.8	780.7	781.7	782.7	783.6	784.6	785.6
130°	821.2	822.4	823.5	824.5	825.7	826.4	827.0	827.6	828.0	828.6	829.2
132.5°	864.3	865.2	866.0	867.0	867.8	868.8	870.0	871.2	872.4	873.5	873.5
135°	931.2	932.1	932.9	933.7	934.5	935.1	935.4	935.7	935.9	936.1	935.7
137.5°	991.9	993.0	994.1	995.1	996.3	996.9	997.1	997.3	997.6	997.8	997.0
140°	1034.0	1035.0	1036.1	1037.2	1038.3	1038.8	1038.8	1038.8	1038.8	1038.8	1037.5
142.5°	1072.0	1073.2	1074.2	1075.3	1076.4	1076.9	1076.7	1076.4	1076.2	1076.0	1075.1
145°	1129.3	1130.4	1131.4	1132.6	1133.6	1134.0	1133.8	1133.5	1133.2	1132.9	1131.3
147.5°	1180.3	1181.4	1182.4	1183.5	1184.5	1184.7	1184.1	1183.5	1182.9	1182.3	1181.2
150°	1213.6	1214.4	1215.2	1216.1	1216.8	1216.8	1216.1	1215.2	1214.4	1213.6	1212.5
152.5°	1244.9	1245.9	1247.0	1247.9	1249.0	1249.0	1247.9	1247.0	1245.9	1244.9	1243.6
155°	1286.9	1287.7	1288.5	1289.4	1290.2	1289.9	1288.5	1287.2	1285.8	1284.5	1283.6
157.5°	1323.0	1324.4	1325.7	1327.0	1328.3	1328.0	1326.2	1324.4	1322.5	1320.7	1320.1
160°	1345.6	1346.7	1347.7	1348.9	1349.9	1349.6	1348.0	1346.4	1344.7	1343.1	1342.8
162.5°	1365.2	1366.4	1367.7	1369.0	1370.4	1370.1	1368.2	1366.4	1364.5	1362.7	1362.4
165°	1390.8	1392.1	1393.5	1394.9	1396.2	1396.0	1394.0	1392.1	1390.3	1388.4	1388.4
167.5°	1411.8	1413.2	1414.7	1416.1	1417.5	1417.2	1415.3	1413.4	1411.6	1409.6	1409.7
170°	1422.6	1424.2	1425.9	1427.5	1429.1	1429.0	1427.0	1425.1	1423.2	1421.4	1421.6
172.5°	1431.3	1433.0	1434.6	1436.2	1437.8	1437.8	1435.9	1434.0	1432.1	1430.1	1430.4
175°	1440.9	1442.6	1444.2	1445.8	1447.5	1447.3	1445.4	1443.5	1441.6	1439.6	1440.2
177.5°	1445.3	1446.6	1447.9	1449.3	1450.5	1450.5	1449.3	1447.9	1446.6	1445.3	1445.8
180°	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2



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**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°	11.3	10.1	9.0	8.3	7.2	6.5	5.2	4.1	4.5	5.0	5.3
90°	30.8	24.9	18.9	14.2	11.0	7.7	4.5	1.2	4.5	7.7	11.0
92.5°	36.0	34.6	33.2	31.3	28.9	26.6	24.1	21.8	24.1	26.6	28.9
95°	77.1	76.6	76.1	74.5	71.7	69.0	66.3	63.5	66.3	69.0	71.7
97.5°	129.4	128.4	127.3	125.6	123.3	120.9	118.5	116.1	118.5	120.9	123.3
100°	167.0	166.2	165.4	163.9	161.7	159.6	157.4	155.2	157.4	159.6	161.7
102.5°	206.7	205.7	204.6	203.2	201.5	199.7	198.0	196.2	198.0	199.7	201.5
105°	267.8	267.2	266.7	266.0	265.2	264.4	263.5	262.8	263.5	264.4	265.2
107.5°	335.1	335.1	335.1	334.5	333.3	332.2	330.9	329.7	330.9	332.2	333.3
110°	380.1	380.1	380.1	379.3	377.7	376.0	374.4	372.8	374.4	376.0	377.7





TEST NUMBER: P331484-830

CATALOG NUMBER: S122DIW-S290D1240U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	426.5	426.7	426.9	426.2	424.6	422.9	421.3	419.7	421.3	422.9	424.6
115°	494.8	495.4	495.9	495.4	493.7	492.1	490.5	488.9	490.5	492.1	493.7
117.5°	563.7	565.2	566.8	566.5	564.3	562.1	560.0	557.8	560.0	562.1	564.3
120°	608.1	610.3	612.5	612.5	610.3	608.1	605.9	603.7	605.9	608.1	610.3
122.5°	653.7	655.3	656.8	656.2	653.6	651.0	648.4	645.7	648.4	651.0	653.6
125°	720.3	721.0	721.9	721.0	718.6	716.1	713.7	711.2	713.7	716.1	718.6
127.5°	786.6	787.6	788.5	787.5	784.4	781.3	778.2	775.1	778.2	781.3	784.4
130°	829.7	830.3	830.8	829.2	825.8	822.3	818.7	815.2	818.7	822.3	825.8
132.5°	873.4	873.3	873.2	871.7	868.7	865.9	863.0	860.2	863.0	865.9	868.7
135°	935.1	934.5	934.0	932.3	929.3	926.2	923.2	920.3	923.2	926.2	929.3
137.5°	996.4	995.6	994.9	993.3	990.9	988.4	986.0	983.5	986.0	988.4	990.9
140°	1036.1	1034.7	1033.4	1031.5	1029.1	1026.6	1024.2	1021.7	1024.2	1026.6	1029.1
142.5°	1074.1	1073.2	1072.2	1070.6	1068.2	1065.7	1063.3	1060.8	1063.3	1065.7	1068.2
145°	1129.6	1128.0	1126.4	1124.6	1122.8	1120.9	1119.0	1117.0	1119.0	1120.9	1122.8
147.5°	1180.2	1179.0	1178.0	1176.3	1174.0	1171.7	1169.4	1167.2	1169.4	1171.7	1174.0
150°	1211.4	1210.3	1209.3	1207.9	1206.3	1204.7	1203.0	1201.4	1203.0	1204.7	1206.3
152.5°	1242.3	1241.0	1239.6	1238.2	1236.5	1234.9	1233.3	1231.7	1233.3	1234.9	1236.5
155°	1282.8	1282.0	1281.2	1280.4	1279.6	1278.7	1278.0	1277.1	1278.0	1278.7	1279.6
157.5°	1319.7	1319.2	1318.7	1318.1	1317.7	1317.1	1316.5	1316.0	1316.5	1317.1	1317.7
160°	1342.6	1342.3	1342.1	1341.6	1341.1	1340.6	1340.0	1339.4	1340.0	1340.6	1341.1
162.5°	1362.2	1361.9	1361.6	1361.4	1361.3	1361.2	1361.1	1360.9	1361.1	1361.2	1361.3
165°	1388.4	1388.4	1388.4	1388.5	1388.7	1389.0	1389.3	1389.6	1389.3	1389.0	1388.7
167.5°	1409.8	1409.8	1409.9	1410.2	1411.1	1411.9	1412.7	1413.5	1412.7	1411.9	1411.1
170°	1421.9	1422.2	1422.5	1423.0	1423.8	1424.7	1425.4	1426.3	1425.4	1424.7	1423.8
172.5°	1430.7	1431.0	1431.3	1431.8	1432.6	1433.4	1434.3	1435.0	1434.3	1433.4	1432.6
175°	1440.8	1441.3	1441.9	1442.6	1443.3	1444.2	1445.0	1445.8	1445.0	1444.2	1443.3
177.5°	1446.1	1446.6	1447.1	1447.6	1448.2	1448.9	1449.5	1450.2	1449.5	1448.9	1448.2
180°	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2



TEST NUMBER: P331484-830

CATALOG NUMBER: S122DIW-S290D1240U830-4F0-1E-UDD-A1

**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°	5.7	6.5	7.5	8.8	9.8	10.7	10.5	10.4	10.3	9.8	9.8
90°	14.2	18.9	24.9	30.8	36.8	42.8	42.2	41.7	41.2	40.6	40.4
92.5°	31.3	33.2	34.6	36.0	37.4	38.8	38.9	39.1	39.2	39.3	39.4
95°	74.5	76.1	76.6	77.1	77.7	78.2	78.2	78.2	78.2	78.2	77.9
97.5°	125.6	127.3	128.4	129.4	130.4	131.5	131.5	131.5	131.5	131.5	131.5
100°	163.9	165.4	166.2	167.0	167.9	168.6	168.6	168.6	168.6	168.6	168.5
102.5°	203.2	204.6	205.7	206.7	207.7	208.8	209.0	209.2	209.4	209.6	209.6
105°	266.0	266.7	267.2	267.8	268.3	268.9	269.4	269.9	270.5	271.1	271.4
107.5°	334.5	335.1	335.1	335.1	335.1	335.1	335.4	335.5	335.7	336.0	335.5
110°	379.3	380.1	380.1	380.1	380.1	380.1	380.1	380.1	380.1	380.1	379.7



TEST NUMBER: P331484-830

CATALOG NUMBER: S122DIW-S290D1240U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	426.2	426.9	426.7	426.5	426.2	426.0	425.4	424.7	424.0	423.4	422.8
115°	495.4	495.9	495.4	494.8	494.3	493.7	493.5	493.2	492.9	492.7	492.1
117.5°	566.5	566.8	565.2	563.7	562.2	560.7	560.1	559.4	558.7	558.1	557.4
120°	612.5	612.5	610.3	608.1	605.9	603.7	603.7	603.7	603.7	603.7	603.3
122.5°	656.2	656.8	655.3	653.7	652.1	650.6	650.0	649.4	648.8	648.1	647.4
125°	721.0	721.9	721.0	720.3	719.4	718.6	717.8	717.0	716.1	715.4	714.8
127.5°	787.5	788.5	787.6	786.6	785.6	784.6	783.6	782.7	781.7	780.7	779.8
130°	829.2	830.8	830.3	829.7	829.2	828.6	828.0	827.6	827.0	826.4	825.7
132.5°	871.7	873.2	873.3	873.4	873.5	873.5	872.4	871.2	870.0	868.8	867.8
135°	932.3	934.0	934.5	935.1	935.7	936.1	935.9	935.7	935.4	935.1	934.5
137.5°	993.3	994.9	995.6	996.4	997.0	997.8	997.6	997.3	997.1	996.9	996.3
140°	1031.5	1033.4	1034.7	1036.1	1037.5	1038.8	1038.8	1038.8	1038.8	1038.8	1038.3
142.5°	1070.6	1072.2	1073.2	1074.1	1075.1	1076.0	1076.2	1076.4	1076.7	1076.9	1076.4
145°	1124.6	1126.4	1128.0	1129.6	1131.3	1132.9	1133.2	1133.5	1133.8	1134.0	1133.6
147.5°	1176.3	1178.0	1179.0	1180.2	1181.2	1182.3	1182.9	1183.5	1184.1	1184.7	1184.5
150°	1207.9	1209.3	1210.3	1211.4	1212.5	1213.6	1214.4	1215.2	1216.1	1216.8	1216.8
152.5°	1238.2	1239.6	1241.0	1242.3	1243.6	1244.9	1245.9	1247.0	1247.9	1249.0	1249.0
155°	1280.4	1281.2	1282.0	1282.8	1283.6	1284.5	1285.8	1287.2	1288.5	1289.9	1290.2
157.5°	1318.1	1318.7	1319.2	1319.7	1320.1	1320.7	1322.5	1324.4	1326.2	1328.0	1328.3
160°	1341.6	1342.1	1342.3	1342.6	1342.8	1343.1	1344.7	1346.4	1348.0	1349.6	1349.9
162.5°	1361.4	1361.6	1361.9	1362.2	1362.4	1362.7	1364.5	1366.4	1368.2	1370.1	1370.4
165°	1388.5	1388.4	1388.4	1388.4	1388.4	1388.4	1390.3	1392.1	1394.0	1396.0	1396.2
167.5°	1410.2	1409.9	1409.8	1409.8	1409.7	1409.6	1411.6	1413.4	1415.3	1417.2	1417.5
170°	1423.0	1422.5	1422.2	1421.9	1421.6	1421.4	1423.2	1425.1	1427.0	1429.0	1429.1
172.5°	1431.8	1431.3	1431.0	1430.7	1430.4	1430.1	1432.1	1434.0	1435.9	1437.8	1437.8
175°	1442.6	1441.9	1441.3	1440.8	1440.2	1439.6	1441.6	1443.5	1445.4	1447.3	1447.5
177.5°	1447.6	1447.1	1446.6	1446.1	1445.8	1445.3	1446.6	1447.9	1449.3	1450.5	1450.5
180°	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2



TEST NUMBER: P331484-830

CATALOG NUMBER: S122DIW-S290D1240U830-4F0-1E-UDD-A1

**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°	9.9	9.7	9.8	9.7	9.8	9.7	9.9	9.8	9.8	10.3	10.4
90°	40.7	41.0	41.3	41.6	41.3	41.0	40.7	40.4	40.6	41.2	41.7
92.5°	39.4	39.5	39.6	39.6	39.6	39.5	39.4	39.4	39.3	39.2	39.1
95°	77.4	76.8	76.3	75.8	76.3	76.8	77.4	77.9	78.2	78.2	78.2
97.5°	131.4	131.4	131.3	131.3	131.3	131.4	131.4	131.5	131.5	131.5	131.5
100°	168.2	168.0	167.7	167.4	167.7	168.0	168.2	168.5	168.6	168.6	168.6
102.5°	209.3	209.1	208.8	208.5	208.8	209.1	209.3	209.6	209.6	209.4	209.2
105°	271.4	271.4	271.4	271.4	271.4	271.4	271.4	271.4	271.1	270.5	269.9
107.5°	334.2	333.0	331.7	330.5	331.7	333.0	334.2	335.5	336.0	335.7	335.5
110°	378.9	378.1	377.2	376.5	377.2	378.1	378.9	379.7	380.1	380.1	380.1



TEST NUMBER: P331484-830

CATALOG NUMBER: S122DIW-S290D1240U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	422.2	421.6	421.0	420.4	421.0	421.6	422.2	422.8	423.4	424.0	424.7
115°	491.3	490.5	489.7	488.9	489.7	490.5	491.3	492.1	492.7	492.9	493.2
117.5°	556.6	555.7	555.0	554.1	555.0	555.7	556.6	557.4	558.1	558.7	559.4
120°	602.5	601.7	600.9	600.1	600.9	601.7	602.5	603.3	603.7	603.7	603.7
122.5°	646.9	646.2	645.6	645.1	645.6	646.2	646.9	647.4	648.1	648.8	649.4
125°	714.5	714.3	714.0	713.7	714.0	714.3	714.5	714.8	715.4	716.1	717.0
127.5°	778.9	778.1	777.2	776.3	777.2	778.1	778.9	779.8	780.7	781.7	782.7
130°	824.5	823.5	822.4	821.2	822.4	823.5	824.5	825.7	826.4	827.0	827.6
132.5°	867.0	866.0	865.2	864.3	865.2	866.0	867.0	867.8	868.8	870.0	871.2
135°	933.7	932.9	932.1	931.2	932.1	932.9	933.7	934.5	935.1	935.4	935.7
137.5°	995.1	994.1	993.0	991.9	993.0	994.1	995.1	996.3	996.9	997.1	997.3
140°	1037.2	1036.1	1035.0	1034.0	1035.0	1036.1	1037.2	1038.3	1038.8	1038.8	1038.8
142.5°	1075.3	1074.2	1073.2	1072.0	1073.2	1074.2	1075.3	1076.4	1076.9	1076.7	1076.4
145°	1132.6	1131.4	1130.4	1129.3	1130.4	1131.4	1132.6	1133.6	1134.0	1133.8	1133.5
147.5°	1183.5	1182.4	1181.4	1180.3	1181.4	1182.4	1183.5	1184.5	1184.7	1184.1	1183.5
150°	1216.1	1215.2	1214.4	1213.6	1214.4	1215.2	1216.1	1216.8	1216.8	1216.1	1215.2
152.5°	1247.9	1247.0	1245.9	1244.9	1245.9	1247.0	1247.9	1249.0	1249.0	1247.9	1247.0
155°	1289.4	1288.5	1287.7	1286.9	1287.7	1288.5	1289.4	1290.2	1289.9	1288.5	1287.2
157.5°	1327.0	1325.7	1324.4	1323.0	1324.4	1325.7	1327.0	1328.3	1328.0	1326.2	1324.4
160°	1348.9	1347.7	1346.7	1345.6	1346.7	1347.7	1348.9	1349.9	1349.6	1348.0	1346.4
162.5°	1369.0	1367.7	1366.4	1365.2	1366.4	1367.7	1369.0	1370.4	1370.1	1368.2	1366.4
165°	1394.9	1393.5	1392.1	1390.8	1392.1	1393.5	1394.9	1396.2	1396.0	1394.0	1392.1
167.5°	1416.1	1414.7	1413.2	1411.8	1413.2	1414.7	1416.1	1417.5	1417.2	1415.3	1413.4
170°	1427.5	1425.9	1424.2	1422.6	1424.2	1425.9	1427.5	1429.1	1429.0	1427.0	1425.1
172.5°	1436.2	1434.6	1433.0	1431.3	1433.0	1434.6	1436.2	1437.8	1437.8	1435.9	1434.0
175°	1445.8	1444.2	1442.6	1440.9	1442.6	1444.2	1445.8	1447.5	1447.3	1445.4	1443.5
177.5°	1449.3	1447.9	1446.6	1445.3	1446.6	1447.9	1449.3	1450.5	1450.5	1449.3	1447.9
180°	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2



TEST NUMBER: P331484-830

CATALOG NUMBER: S122DIW-S290D1240U830-4F0-1E-UDD-A1

**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°	10.5	10.7	9.8	8.8	7.5	6.5	5.7	5.3	5.0	4.5	4.1
90°	42.2	42.8	36.8	30.8	24.9	18.9	14.2	11.0	7.7	4.5	1.2
92.5°	38.9	38.8	37.4	36.0	34.6	33.2	31.3	28.9	26.6	24.1	21.8
95°	78.2	78.2	77.7	77.1	76.6	76.1	74.5	71.7	69.0	66.3	63.5
97.5°	131.5	131.5	130.4	129.4	128.4	127.3	125.6	123.3	120.9	118.5	116.1
100°	168.6	168.6	167.9	167.0	166.2	165.4	163.9	161.7	159.6	157.4	155.2
102.5°	209.0	208.8	207.7	206.7	205.7	204.6	203.2	201.5	199.7	198.0	196.2
105°	269.4	268.9	268.3	267.8	267.2	266.7	266.0	265.2	264.4	263.5	262.8
107.5°	335.4	335.1	335.1	335.1	335.1	335.1	334.5	333.3	332.2	330.9	329.7
110°	380.1	380.1	380.1	380.1	380.1	380.1	379.3	377.7	376.0	374.4	372.8



TEST NUMBER: P331484-830

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	425.4	426.0	426.2	426.5	426.7	426.9	426.2	424.6	422.9	421.3	419.7
115°	493.5	493.7	494.3	494.8	495.4	495.9	495.4	493.7	492.1	490.5	488.9
117.5°	560.1	560.7	562.2	563.7	565.2	566.8	566.5	564.3	562.1	560.0	557.8
120°	603.7	603.7	605.9	608.1	610.3	612.5	612.5	610.3	608.1	605.9	603.7
122.5°	650.0	650.6	652.1	653.7	655.3	656.8	656.2	653.6	651.0	648.4	645.7
125°	717.8	718.6	719.4	720.3	721.0	721.9	721.0	718.6	716.1	713.7	711.2
127.5°	783.6	784.6	785.6	786.6	787.6	788.5	787.5	784.4	781.3	778.2	775.1
130°	828.0	828.6	829.2	829.7	830.3	830.8	829.2	825.8	822.3	818.7	815.2
132.5°	872.4	873.5	873.5	873.4	873.3	873.2	871.7	868.7	865.9	863.0	860.2
135°	935.9	936.1	935.7	935.1	934.5	934.0	932.3	929.3	926.2	923.2	920.3
137.5°	997.6	997.8	997.0	996.4	995.6	994.9	993.3	990.9	988.4	986.0	983.5
140°	1038.8	1038.8	1037.5	1036.1	1034.7	1033.4	1031.5	1029.1	1026.6	1024.2	1021.7
142.5°	1076.2	1076.0	1075.1	1074.1	1073.2	1072.2	1070.6	1068.2	1065.7	1063.3	1060.8
145°	1133.2	1132.9	1131.3	1129.6	1128.0	1126.4	1124.6	1122.8	1120.9	1119.0	1117.0
147.5°	1182.9	1182.3	1181.2	1180.2	1179.0	1178.0	1176.3	1174.0	1171.7	1169.4	1167.2
150°	1214.4	1213.6	1212.5	1211.4	1210.3	1209.3	1207.9	1206.3	1204.7	1203.0	1201.4
152.5°	1245.9	1244.9	1243.6	1242.3	1241.0	1239.6	1238.2	1236.5	1234.9	1233.3	1231.7
155°	1285.8	1284.5	1283.6	1282.8	1282.0	1281.2	1280.4	1279.6	1278.7	1278.0	1277.1
157.5°	1322.5	1320.7	1320.1	1319.7	1319.2	1318.7	1318.1	1317.7	1317.1	1316.5	1316.0
160°	1344.7	1343.1	1342.8	1342.6	1342.3	1342.1	1341.6	1341.1	1340.6	1340.0	1339.4
162.5°	1364.5	1362.7	1362.4	1362.2	1361.9	1361.6	1361.4	1361.3	1361.2	1361.1	1360.9
165°	1390.3	1388.4	1388.4	1388.4	1388.4	1388.4	1388.5	1388.7	1389.0	1389.3	1389.6
167.5°	1411.6	1409.6	1409.7	1409.8	1409.8	1409.9	1410.2	1411.1	1411.9	1412.7	1413.5
170°	1423.2	1421.4	1421.6	1421.9	1422.2	1422.5	1423.0	1423.8	1424.7	1425.4	1426.3
172.5°	1432.1	1430.1	1430.4	1430.7	1431.0	1431.3	1431.8	1432.6	1433.4	1434.3	1435.0
175°	1441.6	1439.6	1440.2	1440.8	1441.3	1441.9	1442.6	1443.3	1444.2	1445.0	1445.8
177.5°	1446.6	1445.3	1445.8	1446.1	1446.6	1447.1	1447.6	1448.2	1448.9	1449.5	1450.2
180°	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2



TEST NUMBER: P331484-830

CATALOG NUMBER: S122DIW-S290D1240U830-4F0-1E-UDD-A1

**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°	5.2	6.5	7.2	8.3	9.0	10.1	11.3	12.3	13.4	13.1	12.8
90°	4.5	7.7	11.0	14.2	18.9	24.9	30.8	36.8	42.8	42.2	41.7
92.5°	24.1	26.6	28.9	31.3	33.2	34.6	36.0	37.4	38.8	38.9	39.1
95°	66.3	69.0	71.7	74.5	76.1	76.6	77.1	77.7	78.2	78.2	78.2
97.5°	118.5	120.9	123.3	125.6	127.3	128.4	129.4	130.4	131.5	131.5	131.5
100°	157.4	159.6	161.7	163.9	165.4	166.2	167.0	167.9	168.6	168.6	168.6
102.5°	198.0	199.7	201.5	203.2	204.6	205.7	206.7	207.7	208.8	209.0	209.2
105°	263.5	264.4	265.2	266.0	266.7	267.2	267.8	268.3	268.9	269.4	269.9
107.5°	330.9	332.2	333.3	334.5	335.1	335.1	335.1	335.1	335.1	335.4	335.5
110°	374.4	376.0	377.7	379.3	380.1	380.1	380.1	380.1	380.1	380.1	380.1





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	421.3	422.9	424.6	426.2	426.9	426.7	426.5	426.2	426.0	425.4	424.7
115°	490.5	492.1	493.7	495.4	495.9	495.4	494.8	494.3	493.7	493.5	493.2
117.5°	560.0	562.1	564.3	566.5	566.8	565.2	563.7	562.2	560.7	560.1	559.4
120°	605.9	608.1	610.3	612.5	612.5	610.3	608.1	605.9	603.7	603.7	603.7
122.5°	648.4	651.0	653.6	656.2	656.8	655.3	653.7	652.1	650.6	650.0	649.4
125°	713.7	716.1	718.6	721.0	721.9	721.0	720.3	719.4	718.6	717.8	717.0
127.5°	778.2	781.3	784.4	787.5	788.5	787.6	786.6	785.6	784.6	783.6	782.7
130°	818.7	822.3	825.8	829.2	830.8	830.3	829.7	829.2	828.6	828.0	827.6
132.5°	863.0	865.9	868.7	871.7	873.2	873.3	873.4	873.5	873.5	872.4	871.2
135°	923.2	926.2	929.3	932.3	934.0	934.5	935.1	935.7	936.1	935.9	935.7
137.5°	986.0	988.4	990.9	993.3	994.9	995.6	996.4	997.0	997.8	997.6	997.3
140°	1024.2	1026.6	1029.1	1031.5	1033.4	1034.7	1036.1	1037.5	1038.8	1038.8	1038.8
142.5°	1063.3	1065.7	1068.2	1070.6	1072.2	1073.2	1074.1	1075.1	1076.0	1076.2	1076.4
145°	1119.0	1120.9	1122.8	1124.6	1126.4	1128.0	1129.6	1131.3	1132.9	1133.2	1133.5
147.5°	1169.4	1171.7	1174.0	1176.3	1178.0	1179.0	1180.2	1181.2	1182.3	1182.9	1183.5
150°	1203.0	1204.7	1206.3	1207.9	1209.3	1210.3	1211.4	1212.5	1213.6	1214.4	1215.2
152.5°	1233.3	1234.9	1236.5	1238.2	1239.6	1241.0	1242.3	1243.6	1244.9	1245.9	1247.0
155°	1278.0	1278.7	1279.6	1280.4	1281.2	1282.0	1282.8	1283.6	1284.5	1285.8	1287.2
157.5°	1316.5	1317.1	1317.7	1318.1	1318.7	1319.2	1319.7	1320.1	1320.7	1322.5	1324.4
160°	1340.0	1340.6	1341.1	1341.6	1342.1	1342.3	1342.6	1342.8	1343.1	1344.7	1346.4
162.5°	1361.1	1361.2	1361.3	1361.4	1361.6	1361.9	1362.2	1362.4	1362.7	1364.5	1366.4
165°	1389.3	1389.0	1388.7	1388.5	1388.4	1388.4	1388.4	1388.4	1388.4	1390.3	1392.1
167.5°	1412.7	1411.9	1411.1	1410.2	1409.9	1409.8	1409.8	1409.7	1409.6	1411.6	1413.4
170°	1425.4	1424.7	1423.8	1423.0	1422.5	1422.2	1421.9	1421.6	1421.4	1423.2	1425.1
172.5°	1434.3	1433.4	1432.6	1431.8	1431.3	1431.0	1430.7	1430.4	1430.1	1432.1	1434.0
175°	1445.0	1444.2	1443.3	1442.6	1441.9	1441.3	1440.8	1440.2	1439.6	1441.6	1443.5
177.5°	1449.5	1448.9	1448.2	1447.6	1447.1	1446.6	1446.1	1445.8	1445.3	1446.6	1447.9
180°	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2



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**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°	12.8	12.7	12.5	12.6	12.8	12.7	12.7
90°	41.2	40.6	40.4	40.7	41.0	41.3	41.6
92.5°	39.2	39.3	39.4	39.4	39.5	39.6	39.6
95°	78.2	78.2	77.9	77.4	76.8	76.3	75.8
97.5°	131.5	131.5	131.5	131.4	131.4	131.3	131.3
100°	168.6	168.6	168.5	168.2	168.0	167.7	167.4
102.5°	209.4	209.6	209.6	209.3	209.1	208.8	208.5
105°	270.5	271.1	271.4	271.4	271.4	271.4	271.4
107.5°	335.7	336.0	335.5	334.2	333.0	331.7	330.5
110°	380.1	380.1	379.7	378.9	378.1	377.2	376.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	424.0	423.4	422.8	422.2	421.6	421.0	420.4
115°	492.9	492.7	492.1	491.3	490.5	489.7	488.9
117.5°	558.7	558.1	557.4	556.6	555.7	555.0	554.1
120°	603.7	603.7	603.3	602.5	601.7	600.9	600.1
122.5°	648.8	648.1	647.4	646.9	646.2	645.6	645.1
125°	716.1	715.4	714.8	714.5	714.3	714.0	713.7
127.5°	781.7	780.7	779.8	778.9	778.1	777.2	776.3
130°	827.0	826.4	825.7	824.5	823.5	822.4	821.2
132.5°	870.0	868.8	867.8	867.0	866.0	865.2	864.3
135°	935.4	935.1	934.5	933.7	932.9	932.1	931.2
137.5°	997.1	996.9	996.3	995.1	994.1	993.0	991.9
140°	1038.8	1038.8	1038.3	1037.2	1036.1	1035.0	1034.0
142.5°	1076.7	1076.9	1076.4	1075.3	1074.2	1073.2	1072.0
145°	1133.8	1134.0	1133.6	1132.6	1131.4	1130.4	1129.3
147.5°	1184.1	1184.7	1184.5	1183.5	1182.4	1181.4	1180.3
150°	1216.1	1216.8	1216.8	1216.1	1215.2	1214.4	1213.6
152.5°	1247.9	1249.0	1249.0	1247.9	1247.0	1245.9	1244.9
155°	1288.5	1289.9	1290.2	1289.4	1288.5	1287.7	1286.9
157.5°	1326.2	1328.0	1328.3	1327.0	1325.7	1324.4	1323.0
160°	1348.0	1349.6	1349.9	1348.9	1347.7	1346.7	1345.6
162.5°	1368.2	1370.1	1370.4	1369.0	1367.7	1366.4	1365.2
165°	1394.0	1396.0	1396.2	1394.9	1393.5	1392.1	1390.8
167.5°	1415.3	1417.2	1417.5	1416.1	1414.7	1413.2	1411.8
170°	1427.0	1429.0	1429.1	1427.5	1425.9	1424.2	1422.6
172.5°	1435.9	1437.8	1437.8	1436.2	1434.6	1433.0	1431.3
175°	1445.4	1447.3	1447.5	1445.8	1444.2	1442.6	1440.9
177.5°	1449.3	1450.5	1450.5	1449.3	1447.9	1446.6	1445.3
180°	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2	1448.2

(END OF REPORT)