

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: P331484-930

Luminaire Tested: **S122DIW-S290D1240U930-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331484-930  
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-S290D1240U930-4F0-1E-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**

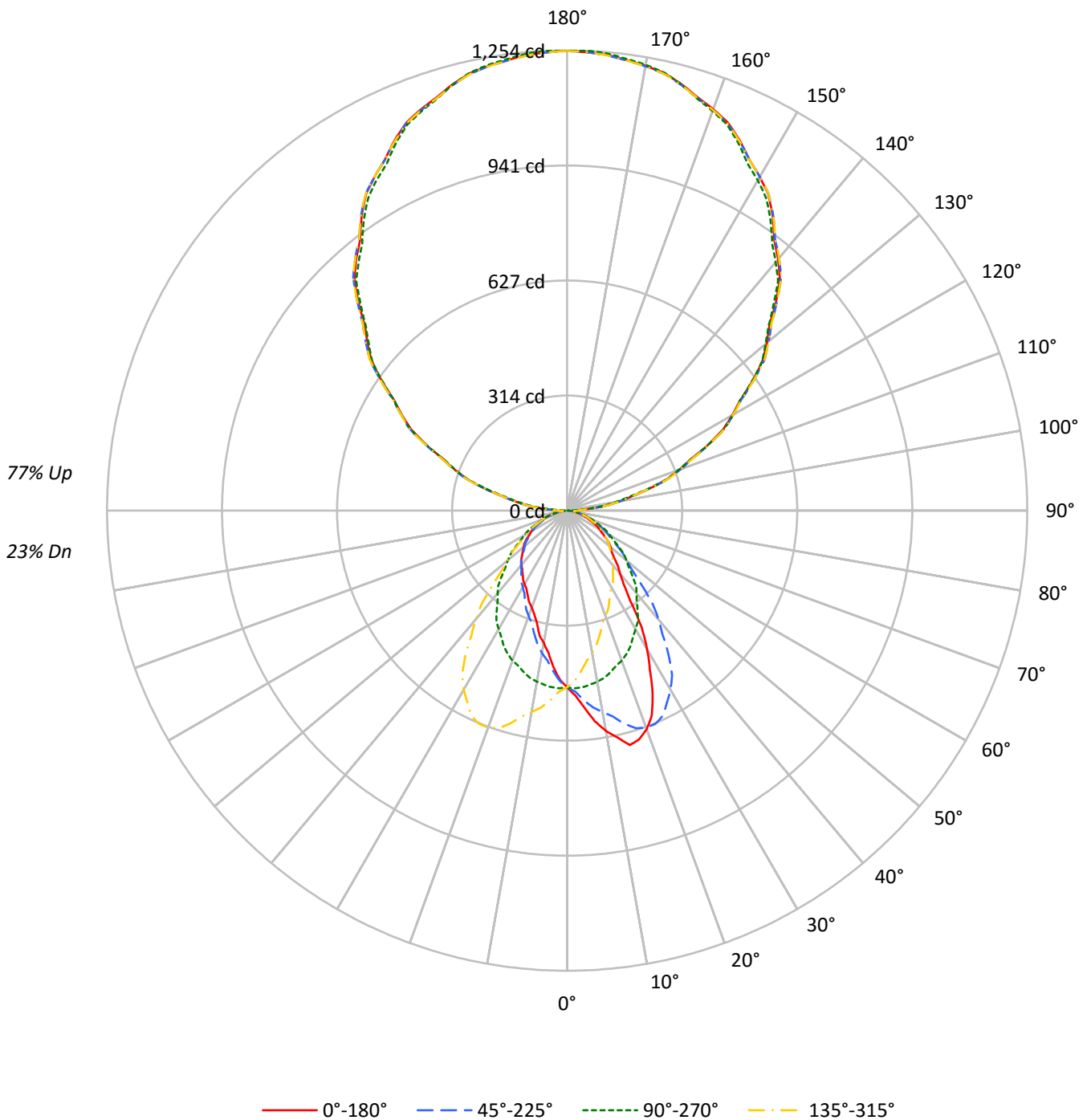
Lumens per Lamp: N/A  
Luminaire Lumens: 4571.0 lumens  
Efficiency: N/A  
Efficacy: 98.1 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 46.6  
Input Voltage (V): 120  
Input Current (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	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°	7781	7781	7781	7781
5°	8723	7831	6940	7831
10°	9996	7768	6005	7768
15°	11057	7626	5307	7626
20°	10890	7472	4837	7472
25°	9818	7269	4541	7269
30°	8114	6943	4323	6943
35°	5913	6603	4169	6603
40°	4723	6203	4083	6203
45°	4128	5740	3966	5740
50°	3881	5290	3888	5290
55°	3575	4833	3783	4833
60°	3278	4346	3626	4346
65°	2988	3912	3465	3912
70°	2710	3489	3238	3489
75°	2408	3013	2863	3013
80°	2073	2492	2306	2492
85°	1853	1853	1371	1853



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.9	1.0
10°-20°	133.4	2.9
20°-30°	193.6	4.2
30°-40°	204.3	4.5
40°-50°	180.9	4.0
50°-60°	144.4	3.2
60°-70°	98.1	2.1
70°-80°	50.3	1.1
80°-90°	17.1	0.4
90°-100°	79.4	1.7
100°-110°	246.5	5.4
110°-120°	421.4	9.2
120°-130°	554.2	12.1
130°-140°	622.0	13.6
140°-150°	609.9	13.3
150°-160°	511.5	11.2
160°-170°	339.3	7.4
170°-180°	118.6	2.6
0°-30°	373.0	8.2
0°-40°	577.3	12.6
0°-60°	902.6	19.7
0°-90°	1068.2	23.4
90°-120°	747.3	16.3
90°-150°	2533.4	55.4
90°-180°	3503.0	76.6
0°-180°	4571.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	482	482	482	482	482	
5°	538	483	428	483	538	54
15°	662	456	318	456	662	183
25°	551	408	255	408	551	249
35°	300	335	212	335	300	195
45°	181	251	174	251	181	142
55°	127	172	134	172	127	114
65°	78	102	91	102	78	78
75°	39	48	46	48	39	41
85°	10	10	7	10	10	12
90°	36	1	36	1	36	16
95°	66	55	66	55	66	73
105°	235	227	235	227	235	247
115°	423	423	423	423	423	418
125°	617	615	617	615	617	550
135°	806	796	806	796	806	620
145°	977	966	977	966	977	610
155°	1113	1105	1113	1105	1113	512
165°	1203	1202	1203	1202	1203	339
175°	1246	1251	1246	1251	1246	118
180°	1253	1253	1253	1253	1253	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	504.1	504.3	504.6	502.2	501.9	501.9	499.9	498.1	495.9	493.2	493.5
5°	538.2	540.2	541.0	538.7	535.4	535.1	531.9	526.8	521.9	518.0	515.3
7.5°	578.9	579.7	577.9	574.9	572.5	568.0	562.1	556.4	548.4	541.0	535.6
10°	609.7	610.8	607.6	603.4	599.9	594.7	586.2	577.5	567.0	556.8	548.6
12.5°	633.1	635.9	631.8	631.3	625.3	618.1	608.0	603.6	588.7	574.5	565.7
15°	661.5	661.4	661.8	658.2	653.8	652.6	642.0	630.2	609.4	601.0	586.5
17.5°	653.3	656.2	657.5	657.4	657.3	656.6	653.1	645.8	635.3	621.7	605.1
20°	633.8	637.5	638.1	642.3	644.7	647.8	649.1	647.1	640.7	629.3	614.9
22.5°	603.6	604.6	606.3	612.9	618.2	626.1	630.1	637.1	634.5	629.0	616.9
25°	551.1	549.3	555.8	559.1	571.2	583.8	592.9	602.8	611.7	617.1	613.6
27.5°	488.3	485.5	495.2	504.1	513.8	527.5	541.6	558.3	572.2	589.6	595.6
30°	435.2	436.9	446.1	455.6	470.4	489.7	505.6	523.9	543.8	563.2	576.7
32.5°	378.1	384.4	390.3	404.8	417.8	439.3	462.7	485.6	510.3	532.4	553.3
35°	300.0	307.4	315.6	326.1	344.5	365.7	388.6	419.5	453.2	483.4	508.2
37.5°	252.6	251.4	256.0	263.7	278.5	295.7	322.0	352.5	392.2	427.6	462.7
40°	224.1	223.4	226.7	233.7	245.0	257.6	280.6	307.4	344.3	387.7	429.3
42.5°	204.6	205.0	206.8	211.8	219.6	229.9	247.1	269.9	303.7	344.5	389.3
45°	180.8	182.1	184.1	186.5	190.9	199.5	209.1	225.4	252.1	286.2	330.2
47.5°	163.6	163.7	165.8	167.9	170.5	175.3	183.2	193.4	212.2	239.9	277.9
50°	154.5	153.2	154.7	156.3	159.1	162.4	167.6	177.2	189.8	212.2	243.9
52.5°	143.2	143.2	144.6	145.2	147.7	151.0	155.7	162.4	173.8	191.4	217.4
55°	127.0	128.0	128.7	129.8	132.1	134.4	138.2	142.6	151.5	164.6	183.9
57.5°	111.9	112.2	112.9	115.0	116.4	118.6	122.1	126.2	132.0	141.7	156.2
60°	101.5	101.5	103.0	103.9	105.7	107.9	110.7	114.6	119.8	127.8	139.5
62.5°	92.0	91.9	92.5	94.0	95.4	97.4	100.2	103.5	108.4	115.5	125.1
65°	78.2	77.8	78.9	79.2	80.7	82.8	85.0	88.5	92.5	97.6	106.2
67.5°	64.8	65.3	65.9	66.5	67.3	69.5	71.0	73.5	76.8	81.1	86.8
70°	57.4	57.4	57.4	58.0	59.1	60.2	61.6	63.7	66.9	70.5	75.7
72.5°	49.1	49.7	50.3	50.0	51.4	52.0	53.8	55.0	58.0	60.3	64.9
75°	38.6	38.6	38.6	39.5	40.0	40.5	41.7	42.8	44.3	47.2	49.7
77.5°	28.8	28.7	28.9	29.1	29.7	30.3	30.7	31.6	33.0	34.4	36.4
80°	22.3	22.6	22.7	23.2	23.2	23.5	23.7	25.0	25.9	26.8	28.1
82.5°	17.2	17.3	17.3	17.4	17.5	17.8	18.3	18.7	19.0	19.7	20.7
85°	10.0	9.8	9.8	10.2	10.0	10.0	10.4	10.8	10.8	10.9	11.5
87.5°	11.0	11.0	11.1	10.9	10.8	11.0	11.1	11.1	11.3	11.6	10.7
90°	36.0	35.7	35.5	35.2	35.0	35.1	35.6	36.0	36.5	37.0	31.8
92.5°	34.2	34.2	34.2	34.1	34.1	34.0	33.9	33.8	33.7	33.6	32.4
95°	65.6	66.0	66.4	66.9	67.4	67.7	67.7	67.7	67.7	67.7	67.2
97.5°	113.6	113.6	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	112.8
100°	144.8	145.0	145.3	145.5	145.8	145.9	145.9	145.9	145.9	145.9	145.2
102.5°	180.3	180.6	180.8	181.1	181.3	181.3	181.2	180.9	180.8	180.6	179.7
105°	234.7	234.7	234.7	234.7	234.7	234.5	234.0	233.5	233.0	232.6	232.1
107.5°	285.8	286.9	288.0	289.1	290.2	290.7	290.4	290.2	290.1	289.8	289.8
110°	325.6	326.3	327.0	327.8	328.4	328.8	328.8	328.8	328.8	328.8	328.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	363.6	364.2	364.7	365.2	365.7	366.2	366.8	367.4	367.9	368.5	368.7
115°	422.9	423.5	424.3	425.0	425.7	426.2	426.4	426.6	426.9	427.1	427.5
117.5°	479.3	480.0	480.7	481.4	482.2	482.7	483.3	483.9	484.5	485.0	486.3
120°	519.1	519.8	520.5	521.1	521.9	522.2	522.2	522.2	522.2	522.2	524.1
122.5°	558.0	558.5	559.0	559.5	560.0	560.6	561.2	561.7	562.2	562.8	564.1
125°	617.3	617.6	617.8	618.1	618.3	618.8	619.5	620.2	620.9	621.6	622.3
127.5°	671.5	672.3	673.0	673.8	674.5	675.3	676.1	677.0	677.8	678.7	679.6
130°	710.4	711.3	712.3	713.2	714.2	714.9	715.3	715.8	716.2	716.7	717.2
132.5°	747.6	748.4	749.1	749.9	750.6	751.5	752.5	753.6	754.6	755.6	755.5
135°	805.5	806.2	807.0	807.6	808.4	808.9	809.1	809.3	809.5	809.8	809.3
137.5°	858.0	858.9	859.9	860.8	861.8	862.3	862.5	862.7	862.9	863.1	862.4
140°	894.4	895.3	896.3	897.2	898.1	898.5	898.5	898.5	898.5	898.5	897.4
142.5°	927.3	928.3	929.2	930.2	931.1	931.5	931.3	931.1	930.9	930.7	929.9
145°	976.8	977.8	978.7	979.7	980.6	980.9	980.7	980.5	980.2	980.0	978.6
147.5°	1021.0	1021.9	1022.8	1023.7	1024.6	1024.7	1024.3	1023.7	1023.2	1022.7	1021.7
150°	1049.8	1050.4	1051.2	1051.9	1052.6	1052.6	1051.9	1051.2	1050.4	1049.8	1048.8
152.5°	1076.8	1077.7	1078.6	1079.5	1080.4	1080.4	1079.5	1078.6	1077.7	1076.8	1075.7
155°	1113.2	1113.9	1114.6	1115.3	1116.0	1115.7	1114.6	1113.5	1112.2	1111.1	1110.4
157.5°	1144.4	1145.6	1146.7	1147.9	1149.0	1148.8	1147.1	1145.6	1143.9	1142.4	1141.9
160°	1163.9	1164.9	1165.8	1166.8	1167.7	1167.4	1166.0	1164.7	1163.2	1161.8	1161.6
162.5°	1180.9	1181.9	1183.1	1184.2	1185.4	1185.1	1183.5	1181.9	1180.3	1178.8	1178.5
165°	1203.1	1204.2	1205.4	1206.6	1207.7	1207.5	1205.8	1204.2	1202.6	1200.9	1200.9
167.5°	1221.2	1222.5	1223.7	1224.9	1226.1	1225.9	1224.3	1222.6	1221.0	1219.3	1219.4
170°	1230.5	1231.9	1233.4	1234.8	1236.2	1236.1	1234.4	1232.7	1231.1	1229.5	1229.7
172.5°	1238.1	1239.6	1241.0	1242.4	1243.7	1243.7	1242.0	1240.4	1238.8	1237.1	1237.3
175°	1246.3	1247.8	1249.2	1250.6	1252.1	1251.9	1250.3	1248.6	1247.0	1245.3	1245.8
177.5°	1250.2	1251.3	1252.5	1253.6	1254.7	1254.7	1253.6	1252.5	1251.3	1250.2	1250.6
180°	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	494.5	493.3	492.6	489.9	487.5	485.2	484.5	484.7	481.4	478.3	477.0
5°	513.8	510.1	506.5	501.6	495.6	489.1	485.8	483.2	476.7	469.7	465.6
7.5°	531.0	525.7	518.9	509.6	500.9	490.7	484.2	478.5	469.0	459.1	453.0
10°	541.5	534.3	525.6	514.1	503.6	491.1	482.5	473.8	462.7	450.8	443.4
12.5°	550.6	540.9	532.3	517.6	505.1	489.5	479.2	466.9	455.3	441.2	433.9
15°	572.1	554.2	537.9	521.1	505.8	484.1	472.6	456.2	440.8	423.4	415.1
17.5°	588.7	568.5	542.9	521.7	503.8	479.7	462.9	443.2	425.0	405.1	393.8
20°	598.2	575.0	547.5	522.3	500.8	473.4	455.0	434.9	413.6	391.2	379.0
22.5°	603.8	579.5	552.2	520.1	494.9	468.2	445.2	423.0	401.5	377.2	364.4
25°	605.6	583.4	554.5	518.2	487.5	457.3	429.5	408.0	381.9	359.3	340.6
27.5°	596.8	580.9	553.1	514.7	478.9	443.6	412.6	388.3	360.8	336.2	317.4
30°	586.0	576.7	549.7	511.2	472.1	434.1	400.1	372.4	345.0	320.2	300.9
32.5°	569.2	567.3	543.5	506.1	464.8	422.2	386.9	359.0	328.6	304.2	285.8
35°	536.4	545.3	530.3	494.9	451.2	405.0	366.9	335.0	303.5	280.2	263.0
37.5°	492.3	514.4	510.5	478.4	432.7	386.5	344.3	311.0	281.0	257.5	240.6
40°	461.9	490.1	494.2	465.8	419.7	372.1	327.4	294.3	265.1	243.5	226.5
42.5°	429.3	462.2	473.4	450.7	405.4	356.9	312.3	278.0	249.0	228.1	213.0
45°	374.7	418.2	438.4	425.4	381.7	332.1	286.2	251.4	225.0	205.4	193.7
47.5°	323.6	371.1	398.3	393.7	355.3	306.1	260.7	227.3	201.7	186.1	175.6
50°	287.5	336.3	369.1	370.6	336.3	287.6	242.1	210.6	187.0	172.4	163.9
52.5°	256.0	302.7	338.4	346.3	315.1	268.4	225.3	194.0	173.3	159.8	152.2
55°	215.0	254.5	294.1	308.6	283.6	239.1	199.3	171.7	152.2	143.0	136.3
57.5°	178.8	211.7	248.3	264.2	248.8	210.8	173.4	149.4	133.7	125.6	120.4
60°	159.6	185.6	218.2	237.3	223.9	190.0	157.4	134.6	121.6	114.5	109.7
62.5°	141.9	164.9	192.4	209.9	202.6	170.6	141.5	121.3	110.1	103.4	99.9
65°	117.1	135.2	156.5	172.6	167.8	143.6	119.6	102.4	93.5	88.1	85.4
67.5°	96.4	109.5	124.3	138.4	134.5	117.3	98.2	84.7	78.1	73.5	71.7
70°	83.3	93.4	106.5	117.8	114.6	100.6	85.4	73.9	68.2	64.2	62.6
72.5°	70.9	79.1	89.2	98.4	96.3	84.5	71.9	63.3	58.8	55.2	53.9
75°	53.6	59.8	66.0	72.1	71.5	62.5	55.0	48.3	44.8	42.1	41.5
77.5°	39.5	43.0	47.2	50.8	49.8	44.6	38.8	35.0	32.4	30.6	30.2
80°	30.2	32.2	35.2	37.7	36.5	34.2	29.6	26.8	25.0	23.2	22.4
82.5°	21.9	23.9	25.7	27.1	26.1	24.1	21.2	19.3	18.2	17.0	16.6
85°	11.5	12.6	13.4	13.7	13.4	12.1	10.8	10.0	9.0	8.5	8.3
87.5°	9.8	8.7	7.7	7.2	6.2	5.6	4.5	3.5	3.9	4.3	4.6
90°	26.7	21.5	16.3	12.3	9.5	6.7	3.9	1.1	3.9	6.7	9.5
92.5°	31.1	29.9	28.7	27.1	25.0	23.0	20.9	18.8	20.9	23.0	25.0
95°	66.7	66.3	65.8	64.4	62.0	59.7	57.3	55.0	57.3	59.7	62.0
97.5°	111.9	111.0	110.1	108.7	106.6	104.6	102.5	100.4	102.5	104.6	106.6
100°	144.5	143.7	143.1	141.8	139.9	138.0	136.2	134.3	136.2	138.0	139.9
102.5°	178.8	177.9	177.0	175.8	174.3	172.8	171.3	169.7	171.3	172.8	174.3
105°	231.6	231.1	230.7	230.1	229.4	228.7	228.0	227.3	228.0	228.7	229.4
107.5°	289.8	289.8	289.8	289.3	288.3	287.3	286.3	285.2	286.3	287.3	288.3
110°	328.8	328.8	328.8	328.1	326.7	325.2	323.8	322.5	323.8	325.2	326.7





TEST NUMBER: P331484-930

CATALOG NUMBER: S122DIW-S290D1240U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	368.9	369.1	369.2	368.7	367.3	365.8	364.4	363.1	364.4	365.8	367.3
115°	428.0	428.5	428.9	428.5	427.1	425.7	424.3	422.9	424.3	425.7	427.1
117.5°	487.6	488.9	490.3	490.0	488.1	486.2	484.4	482.5	484.4	486.2	488.1
120°	526.0	527.9	529.8	529.8	527.9	526.0	524.1	522.2	524.1	526.0	527.9
122.5°	565.5	566.8	568.1	567.6	565.3	563.1	560.8	558.6	560.8	563.1	565.3
125°	623.1	623.7	624.4	623.7	621.6	619.5	617.3	615.2	617.3	619.5	621.6
127.5°	680.4	681.3	682.1	681.2	678.5	675.8	673.1	670.4	673.1	675.8	678.5
130°	717.7	718.2	718.6	717.3	714.3	711.3	708.2	705.2	708.2	711.3	714.3
132.5°	755.5	755.4	755.3	754.0	751.5	749.0	746.5	744.0	746.5	749.0	751.5
135°	808.9	808.4	807.9	806.4	803.8	801.2	798.6	796.1	798.6	801.2	803.8
137.5°	861.9	861.2	860.6	859.2	857.1	855.0	852.9	850.8	852.9	855.0	857.1
140°	896.3	895.0	893.9	892.3	890.1	888.0	885.9	883.8	885.9	888.0	890.1
142.5°	929.1	928.3	927.5	926.1	924.0	921.9	919.7	917.6	919.7	921.9	924.0
145°	977.1	975.8	974.4	972.8	971.2	969.6	967.9	966.2	967.9	969.6	971.2
147.5°	1020.8	1019.9	1019.0	1017.5	1015.5	1013.5	1011.5	1009.6	1011.5	1013.5	1015.5
150°	1047.9	1046.9	1046.0	1044.8	1043.4	1042.0	1040.6	1039.2	1040.6	1042.0	1043.4
152.5°	1074.6	1073.4	1072.3	1071.1	1069.6	1068.2	1066.8	1065.4	1066.8	1068.2	1069.6
155°	1109.6	1109.0	1108.2	1107.6	1106.9	1106.1	1105.5	1104.7	1105.5	1106.1	1106.9
157.5°	1141.5	1141.1	1140.7	1140.2	1139.8	1139.3	1138.8	1138.3	1138.8	1139.3	1139.8
160°	1161.3	1161.1	1160.9	1160.5	1160.1	1159.6	1159.1	1158.6	1159.1	1159.6	1160.1
162.5°	1178.3	1178.0	1177.8	1177.6	1177.5	1177.5	1177.4	1177.2	1177.4	1177.5	1177.5
165°	1200.9	1200.9	1200.9	1201.0	1201.3	1201.5	1201.8	1202.0	1201.8	1201.5	1201.3
167.5°	1219.4	1219.4	1219.5	1219.9	1220.6	1221.3	1222.0	1222.7	1222.0	1221.3	1220.6
170°	1230.0	1230.2	1230.4	1230.9	1231.6	1232.3	1233.0	1233.7	1233.0	1232.3	1231.6
172.5°	1237.5	1237.8	1238.0	1238.5	1239.2	1239.9	1240.6	1241.3	1240.6	1239.9	1239.2
175°	1246.3	1246.8	1247.2	1247.8	1248.5	1249.2	1249.9	1250.6	1249.9	1249.2	1248.5
177.5°	1250.9	1251.3	1251.7	1252.1	1252.7	1253.3	1253.8	1254.4	1253.8	1253.3	1252.7
180°	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7



TEST NUMBER: P331484-930

CATALOG NUMBER: S122DIW-S290D1240U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	475.6	474.7	471.6	469.9	467.2	464.7	463.1	463.8	464.4	464.1	463.7
5°	461.9	458.4	453.0	448.4	445.1	439.0	436.3	435.0	433.9	432.7	431.4
7.5°	445.6	440.1	432.4	425.8	419.6	412.0	407.6	405.1	402.4	399.5	396.9
10°	434.1	426.3	418.2	409.0	401.5	394.7	388.6	384.5	380.7	377.2	374.7
12.5°	422.0	413.0	402.9	390.3	382.1	372.3	371.4	364.2	358.4	356.2	353.2
15°	402.7	390.0	377.2	362.2	355.8	346.9	341.4	335.7	330.8	327.3	326.4
17.5°	380.7	364.4	351.6	340.9	330.3	321.1	316.0	311.6	307.4	302.8	302.1
20°	363.9	349.8	336.0	326.5	315.6	306.3	300.0	295.6	292.0	289.3	286.9
22.5°	348.1	332.6	319.9	309.7	298.9	291.4	286.4	282.1	279.2	276.1	273.9
25°	322.6	310.6	296.7	285.0	276.1	271.3	267.3	263.6	261.7	259.7	257.1
27.5°	300.4	287.0	274.0	265.0	257.1	252.9	250.0	247.4	245.7	244.5	243.0
30°	284.7	271.2	261.0	252.1	245.6	241.3	239.5	238.0	235.9	235.2	234.5
32.5°	269.5	257.4	248.7	240.9	234.8	232.0	230.3	228.9	227.4	226.7	225.1
35°	248.2	238.0	229.5	225.2	220.2	217.8	216.5	214.7	213.2	212.5	212.2
37.5°	228.0	219.2	213.6	208.1	206.0	204.6	202.8	201.5	201.1	201.0	200.7
40°	215.0	207.8	202.8	198.4	197.5	195.2	193.7	192.7	192.7	192.8	192.7
42.5°	203.2	196.7	192.2	188.4	187.4	186.1	184.5	184.5	184.7	185.4	184.7
45°	185.2	180.6	177.4	175.6	173.6	172.3	172.0	172.6	172.8	173.0	173.6
47.5°	168.7	165.6	162.7	160.7	159.8	159.6	159.4	160.4	161.3	161.6	162.4
50°	158.9	155.4	153.0	151.6	150.9	150.6	150.9	152.1	152.8	153.7	154.3
52.5°	148.0	145.4	143.8	142.8	142.5	142.8	142.8	144.1	145.2	145.6	145.9
55°	132.8	130.9	130.6	128.9	129.6	129.5	130.4	131.1	132.2	133.4	133.5
57.5°	117.6	116.2	115.2	115.4	115.6	116.4	117.2	118.5	119.6	120.8	120.9
60°	107.6	106.9	106.3	106.3	106.6	107.8	108.7	110.0	110.7	111.5	112.0
62.5°	98.4	97.7	97.1	97.4	98.4	99.1	100.1	100.9	101.6	102.3	102.6
65°	83.9	83.6	84.1	84.5	84.6	85.5	86.8	87.4	88.1	88.5	89.8
67.5°	70.5	70.6	70.5	71.0	72.2	72.3	73.5	74.8	75.0	75.7	76.6
70°	61.5	61.9	62.2	62.6	63.5	63.9	64.8	65.4	66.1	66.7	67.3
72.5°	53.2	53.2	53.6	53.6	54.4	55.1	55.9	56.5	57.2	58.0	58.5
75°	40.9	40.9	41.3	41.5	42.4	43.4	43.1	43.5	44.3	45.0	45.4
77.5°	29.9	29.5	29.9	30.1	30.4	31.1	31.3	31.8	32.7	32.4	32.9
80°	22.7	22.3	22.7	23.0	23.0	23.9	23.9	24.3	24.8	24.3	24.8
82.5°	16.2	16.0	16.4	16.5	16.7	16.8	17.0	17.1	17.7	17.4	17.7
85°	8.2	8.0	8.2	8.0	8.2	8.3	8.3	8.2	8.2	8.5	8.0
87.5°	5.0	5.6	6.5	7.6	8.5	9.3	9.0	9.0	8.9	8.5	8.5
90°	12.3	16.3	21.5	26.7	31.8	37.0	36.5	36.0	35.6	35.1	35.0
92.5°	27.1	28.7	29.9	31.1	32.4	33.6	33.7	33.8	33.9	34.0	34.1
95°	64.4	65.8	66.3	66.7	67.2	67.7	67.7	67.7	67.7	67.7	67.4
97.5°	108.7	110.1	111.0	111.9	112.8	113.7	113.7	113.7	113.7	113.7	113.7
100°	141.8	143.1	143.7	144.5	145.2	145.9	145.9	145.9	145.9	145.9	145.8
102.5°	175.8	177.0	177.9	178.8	179.7	180.6	180.8	180.9	181.2	181.3	181.3
105°	230.1	230.7	231.1	231.6	232.1	232.6	233.0	233.5	234.0	234.5	234.7
107.5°	289.3	289.8	289.8	289.8	289.8	289.8	290.1	290.2	290.4	290.7	290.2
110°	328.1	328.8	328.8	328.8	328.8	328.8	328.8	328.8	328.8	328.8	328.4



TEST NUMBER: P331484-930

CATALOG NUMBER: S122DIW-S290D1240U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	368.7	369.2	369.1	368.9	368.7	368.5	367.9	367.4	366.8	366.2	365.7
115°	428.5	428.9	428.5	428.0	427.5	427.1	426.9	426.6	426.4	426.2	425.7
117.5°	490.0	490.3	488.9	487.6	486.3	485.0	484.5	483.9	483.3	482.7	482.2
120°	529.8	529.8	527.9	526.0	524.1	522.2	522.2	522.2	522.2	522.2	521.9
122.5°	567.6	568.1	566.8	565.5	564.1	562.8	562.2	561.7	561.2	560.6	560.0
125°	623.7	624.4	623.7	623.1	622.3	621.6	620.9	620.2	619.5	618.8	618.3
127.5°	681.2	682.1	681.3	680.4	679.6	678.7	677.8	677.0	676.1	675.3	674.5
130°	717.3	718.6	718.2	717.7	717.2	716.7	716.2	715.8	715.3	714.9	714.2
132.5°	754.0	755.3	755.4	755.5	755.5	755.6	754.6	753.6	752.5	751.5	750.6
135°	806.4	807.9	808.4	808.9	809.3	809.8	809.5	809.3	809.1	808.9	808.4
137.5°	859.2	860.6	861.2	861.9	862.4	863.1	862.9	862.7	862.5	862.3	861.8
140°	892.3	893.9	895.0	896.3	897.4	898.5	898.5	898.5	898.5	898.5	898.1
142.5°	926.1	927.5	928.3	929.1	929.9	930.7	930.9	931.1	931.3	931.5	931.1
145°	972.8	974.4	975.8	977.1	978.6	980.0	980.2	980.5	980.7	980.9	980.6
147.5°	1017.5	1019.0	1019.9	1020.8	1021.7	1022.7	1023.2	1023.7	1024.3	1024.7	1024.6
150°	1044.8	1046.0	1046.9	1047.9	1048.8	1049.8	1050.4	1051.2	1051.9	1052.6	1052.6
152.5°	1071.1	1072.3	1073.4	1074.6	1075.7	1076.8	1077.7	1078.6	1079.5	1080.4	1080.4
155°	1107.6	1108.2	1109.0	1109.6	1110.4	1111.1	1112.2	1113.5	1114.6	1115.7	1116.0
157.5°	1140.2	1140.7	1141.1	1141.5	1141.9	1142.4	1143.9	1145.6	1147.1	1148.8	1149.0
160°	1160.5	1160.9	1161.1	1161.3	1161.6	1161.8	1163.2	1164.7	1166.0	1167.4	1167.7
162.5°	1177.6	1177.8	1178.0	1178.3	1178.5	1178.8	1180.3	1181.9	1183.5	1185.1	1185.4
165°	1201.0	1200.9	1200.9	1200.9	1200.9	1200.9	1202.6	1204.2	1205.8	1207.5	1207.7
167.5°	1219.9	1219.5	1219.4	1219.4	1219.4	1219.3	1221.0	1222.6	1224.3	1225.9	1226.1
170°	1230.9	1230.4	1230.2	1230.0	1229.7	1229.5	1231.1	1232.7	1234.4	1236.1	1236.2
172.5°	1238.5	1238.0	1237.8	1237.5	1237.3	1237.1	1238.8	1240.4	1242.0	1243.7	1243.7
175°	1247.8	1247.2	1246.8	1246.3	1245.8	1245.3	1247.0	1248.6	1250.3	1251.9	1252.1
177.5°	1252.1	1251.7	1251.3	1250.9	1250.6	1250.2	1251.3	1252.5	1253.6	1254.7	1254.7
180°	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7



TEST NUMBER: P331484-930

CATALOG NUMBER: S122DIW-S290D1240U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	462.2	461.9	461.9	460.6	461.9	461.9	462.2	463.7	464.1	464.4	463.8
5°	428.8	428.2	427.3	428.2	427.3	428.2	428.8	431.4	432.7	433.9	435.0
7.5°	395.7	393.5	393.1	390.9	393.1	393.5	395.7	396.9	399.5	402.4	405.1
10°	371.5	370.1	369.8	366.3	369.8	370.1	371.5	374.7	377.2	380.7	384.5
12.5°	353.2	349.6	350.3	348.3	350.3	349.6	353.2	353.2	356.2	358.4	364.2
15°	321.3	321.3	320.6	317.5	320.6	321.3	321.3	326.4	327.3	330.8	335.7
17.5°	298.5	298.1	296.4	297.3	296.4	298.1	298.5	302.1	302.8	307.4	311.6
20°	284.9	283.7	281.5	281.5	281.5	283.7	284.9	286.9	289.3	292.0	295.6
22.5°	272.0	271.9	269.5	270.3	269.5	271.9	272.0	273.9	276.1	279.2	282.1
25°	256.9	255.4	254.3	254.9	254.3	255.4	256.9	257.1	259.7	261.7	263.6
27.5°	242.6	241.7	241.7	240.2	241.7	241.7	242.6	243.0	244.5	245.7	247.4
30°	234.3	232.4	232.8	231.9	232.8	232.4	234.3	234.5	235.2	235.9	238.0
32.5°	224.8	224.1	223.8	223.0	223.8	224.1	224.8	225.1	226.7	227.4	228.9
35°	211.9	212.1	211.2	211.5	211.2	212.1	211.9	212.2	212.5	213.2	214.7
37.5°	200.6	201.1	200.7	200.8	200.7	201.1	200.6	200.7	201.0	201.1	201.5
40°	193.1	193.1	193.1	193.7	193.1	193.1	193.1	192.7	192.8	192.7	192.7
42.5°	186.1	185.7	185.5	185.4	185.5	185.7	186.1	184.7	185.4	184.7	184.5
45°	173.9	174.5	174.6	173.7	174.6	174.5	173.9	173.6	173.0	172.8	172.6
47.5°	162.9	163.0	162.9	163.7	162.9	163.0	162.9	162.4	161.6	161.3	160.4
50°	155.2	154.8	155.2	154.8	155.2	154.8	155.2	154.3	153.7	152.8	152.1
52.5°	147.1	147.2	146.9	146.8	146.9	147.2	147.1	145.9	145.6	145.2	144.1
55°	134.3	134.6	134.4	134.4	134.4	134.6	134.3	133.5	133.4	132.2	131.1
57.5°	121.1	121.4	121.6	120.8	121.6	121.4	121.1	120.9	120.8	119.6	118.5
60°	111.9	112.8	112.6	112.3	112.6	112.8	111.9	112.0	111.5	110.7	110.0
62.5°	103.4	103.8	103.7	103.6	103.7	103.8	103.4	102.6	102.3	101.6	100.9
65°	90.4	90.7	90.2	90.7	90.2	90.7	90.4	89.8	88.5	88.1	87.4
67.5°	76.3	76.5	76.9	77.1	76.9	76.5	76.3	76.6	75.7	75.0	74.8
70°	67.6	67.4	68.0	68.6	68.0	67.4	67.6	67.3	66.7	66.1	65.4
72.5°	58.4	58.8	58.6	59.0	58.6	58.8	58.4	58.5	58.0	57.2	56.5
75°	45.0	45.6	45.4	45.9	45.4	45.6	45.0	45.4	45.0	44.3	43.5
77.5°	32.5	32.6	32.5	32.9	32.5	32.6	32.5	32.9	32.4	32.7	31.8
80°	24.8	24.5	24.1	24.8	24.1	24.5	24.8	24.8	24.3	24.8	24.3
82.5°	17.3	17.4	17.1	17.1	17.1	17.4	17.3	17.7	17.4	17.7	17.1
85°	8.0	7.7	7.4	7.4	7.4	7.7	8.0	8.0	8.5	8.2	8.2
87.5°	8.6	8.4	8.5	8.4	8.5	8.4	8.6	8.5	8.5	8.9	9.0
90°	35.2	35.5	35.7	36.0	35.7	35.5	35.2	35.0	35.1	35.6	36.0
92.5°	34.1	34.2	34.2	34.2	34.2	34.2	34.1	34.1	34.0	33.9	33.8
95°	66.9	66.4	66.0	65.6	66.0	66.4	66.9	67.4	67.7	67.7	67.7
97.5°	113.7	113.7	113.6	113.6	113.6	113.7	113.7	113.7	113.7	113.7	113.7
100°	145.5	145.3	145.0	144.8	145.0	145.3	145.5	145.8	145.9	145.9	145.9
102.5°	181.1	180.8	180.6	180.3	180.6	180.8	181.1	181.3	181.3	181.2	180.9
105°	234.7	234.7	234.7	234.7	234.7	234.7	234.7	234.7	234.5	234.0	233.5
107.5°	289.1	288.0	286.9	285.8	286.9	288.0	289.1	290.2	290.7	290.4	290.2
110°	327.8	327.0	326.3	325.6	326.3	327.0	327.8	328.4	328.8	328.8	328.8



TEST NUMBER: P331484-930

CATALOG NUMBER: S122DIW-S290D1240U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	365.2	364.7	364.2	363.6	364.2	364.7	365.2	365.7	366.2	366.8	367.4
115°	425.0	424.3	423.5	422.9	423.5	424.3	425.0	425.7	426.2	426.4	426.6
117.5°	481.4	480.7	480.0	479.3	480.0	480.7	481.4	482.2	482.7	483.3	483.9
120°	521.1	520.5	519.8	519.1	519.8	520.5	521.1	521.9	522.2	522.2	522.2
122.5°	559.5	559.0	558.5	558.0	558.5	559.0	559.5	560.0	560.6	561.2	561.7
125°	618.1	617.8	617.6	617.3	617.6	617.8	618.1	618.3	618.8	619.5	620.2
127.5°	673.8	673.0	672.3	671.5	672.3	673.0	673.8	674.5	675.3	676.1	677.0
130°	713.2	712.3	711.3	710.4	711.3	712.3	713.2	714.2	714.9	715.3	715.8
132.5°	749.9	749.1	748.4	747.6	748.4	749.1	749.9	750.6	751.5	752.5	753.6
135°	807.6	807.0	806.2	805.5	806.2	807.0	807.6	808.4	808.9	809.1	809.3
137.5°	860.8	859.9	858.9	858.0	858.9	859.9	860.8	861.8	862.3	862.5	862.7
140°	897.2	896.3	895.3	894.4	895.3	896.3	897.2	898.1	898.5	898.5	898.5
142.5°	930.2	929.2	928.3	927.3	928.3	929.2	930.2	931.1	931.5	931.3	931.1
145°	979.7	978.7	977.8	976.8	977.8	978.7	979.7	980.6	980.9	980.7	980.5
147.5°	1023.7	1022.8	1021.9	1021.0	1021.9	1022.8	1023.7	1024.6	1024.7	1024.3	1023.7
150°	1051.9	1051.2	1050.4	1049.8	1050.4	1051.2	1051.9	1052.6	1052.6	1051.9	1051.2
152.5°	1079.5	1078.6	1077.7	1076.8	1077.7	1078.6	1079.5	1080.4	1080.4	1079.5	1078.6
155°	1115.3	1114.6	1113.9	1113.2	1113.9	1114.6	1115.3	1116.0	1115.7	1114.6	1113.5
157.5°	1147.9	1146.7	1145.6	1144.4	1145.6	1146.7	1147.9	1149.0	1148.8	1147.1	1145.6
160°	1166.8	1165.8	1164.9	1163.9	1164.9	1165.8	1166.8	1167.7	1167.4	1166.0	1164.7
162.5°	1184.2	1183.1	1181.9	1180.9	1181.9	1183.1	1184.2	1185.4	1185.1	1183.5	1181.9
165°	1206.6	1205.4	1204.2	1203.1	1204.2	1205.4	1206.6	1207.7	1207.5	1205.8	1204.2
167.5°	1224.9	1223.7	1222.5	1221.2	1222.5	1223.7	1224.9	1226.1	1225.9	1224.3	1222.6
170°	1234.8	1233.4	1231.9	1230.5	1231.9	1233.4	1234.8	1236.2	1236.1	1234.4	1232.7
172.5°	1242.4	1241.0	1239.6	1238.1	1239.6	1241.0	1242.4	1243.7	1243.7	1242.0	1240.4
175°	1250.6	1249.2	1247.8	1246.3	1247.8	1249.2	1250.6	1252.1	1251.9	1250.3	1248.6
177.5°	1253.6	1252.5	1251.3	1250.2	1251.3	1252.5	1253.6	1254.7	1254.7	1253.6	1252.5
180°	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7



TEST NUMBER: P331484-930

CATALOG NUMBER: S122DIW-S290D1240U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	463.1	464.7	467.2	469.9	471.6	474.7	475.6	477.0	478.3	481.4	484.7
5°	436.3	439.0	445.1	448.4	453.0	458.4	461.9	465.6	469.7	476.7	483.2
7.5°	407.6	412.0	419.6	425.8	432.4	440.1	445.6	453.0	459.1	469.0	478.5
10°	388.6	394.7	401.5	409.0	418.2	426.3	434.1	443.4	450.8	462.7	473.8
12.5°	371.4	372.3	382.1	390.3	402.9	413.0	422.0	433.9	441.2	455.3	466.9
15°	341.4	346.9	355.8	362.2	377.2	390.0	402.7	415.1	423.4	440.8	456.2
17.5°	316.0	321.1	330.3	340.9	351.6	364.4	380.7	393.8	405.1	425.0	443.2
20°	300.0	306.3	315.6	326.5	336.0	349.8	363.9	379.0	391.2	413.6	434.9
22.5°	286.4	291.4	298.9	309.7	319.9	332.6	348.1	364.4	377.2	401.5	423.0
25°	267.3	271.3	276.1	285.0	296.7	310.6	322.6	340.6	359.3	381.9	408.0
27.5°	250.0	252.9	257.1	265.0	274.0	287.0	300.4	317.4	336.2	360.8	388.3
30°	239.5	241.3	245.6	252.1	261.0	271.2	284.7	300.9	320.2	345.0	372.4
32.5°	230.3	232.0	234.8	240.9	248.7	257.4	269.5	285.8	304.2	328.6	359.0
35°	216.5	217.8	220.2	225.2	229.5	238.0	248.2	263.0	280.2	303.5	335.0
37.5°	202.8	204.6	206.0	208.1	213.6	219.2	228.0	240.6	257.5	281.0	311.0
40°	193.7	195.2	197.5	198.4	202.8	207.8	215.0	226.5	243.5	265.1	294.3
42.5°	184.5	186.1	187.4	188.4	192.2	196.7	203.2	213.0	228.1	249.0	278.0
45°	172.0	172.3	173.6	175.6	177.4	180.6	185.2	193.7	205.4	225.0	251.4
47.5°	159.4	159.6	159.8	160.7	162.7	165.6	168.7	175.6	186.1	201.7	227.3
50°	150.9	150.6	150.9	151.6	153.0	155.4	158.9	163.9	172.4	187.0	210.6
52.5°	142.8	142.8	142.5	142.8	143.8	145.4	148.0	152.2	159.8	173.3	194.0
55°	130.4	129.5	129.6	128.9	130.6	130.9	132.8	136.3	143.0	152.2	171.7
57.5°	117.2	116.4	115.6	115.4	115.2	116.2	117.6	120.4	125.6	133.7	149.4
60°	108.7	107.8	106.6	106.3	106.3	106.9	107.6	109.7	114.5	121.6	134.6
62.5°	100.1	99.1	98.4	97.4	97.1	97.7	98.4	99.9	103.4	110.1	121.3
65°	86.8	85.5	84.6	84.5	84.1	83.6	83.9	85.4	88.1	93.5	102.4
67.5°	73.5	72.3	72.2	71.0	70.5	70.6	70.5	71.7	73.5	78.1	84.7
70°	64.8	63.9	63.5	62.6	62.2	61.9	61.5	62.6	64.2	68.2	73.9
72.5°	55.9	55.1	54.4	53.6	53.6	53.2	53.2	53.9	55.2	58.8	63.3
75°	43.1	43.4	42.4	41.5	41.3	40.9	40.9	41.5	42.1	44.8	48.3
77.5°	31.3	31.1	30.4	30.1	29.9	29.5	29.9	30.2	30.6	32.4	35.0
80°	23.9	23.9	23.0	23.0	22.7	22.3	22.7	22.4	23.2	25.0	26.8
82.5°	17.0	16.8	16.7	16.5	16.4	16.0	16.2	16.6	17.0	18.2	19.3
85°	8.3	8.3	8.2	8.0	8.2	8.0	8.2	8.3	8.5	9.0	10.0
87.5°	9.0	9.3	8.5	7.6	6.5	5.6	5.0	4.6	4.3	3.9	3.5
90°	36.5	37.0	31.8	26.7	21.5	16.3	12.3	9.5	6.7	3.9	1.1
92.5°	33.7	33.6	32.4	31.1	29.9	28.7	27.1	25.0	23.0	20.9	18.8
95°	67.7	67.7	67.2	66.7	66.3	65.8	64.4	62.0	59.7	57.3	55.0
97.5°	113.7	113.7	112.8	111.9	111.0	110.1	108.7	106.6	104.6	102.5	100.4
100°	145.9	145.9	145.2	144.5	143.7	143.1	141.8	139.9	138.0	136.2	134.3
102.5°	180.8	180.6	179.7	178.8	177.9	177.0	175.8	174.3	172.8	171.3	169.7
105°	233.0	232.6	232.1	231.6	231.1	230.7	230.1	229.4	228.7	228.0	227.3
107.5°	290.1	289.8	289.8	289.8	289.8	289.8	289.3	288.3	287.3	286.3	285.2
110°	328.8	328.8	328.8	328.8	328.8	328.8	328.1	326.7	325.2	323.8	322.5



TEST NUMBER: P331484-930

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	367.9	368.5	368.7	368.9	369.1	369.2	368.7	367.3	365.8	364.4	363.1
115°	426.9	427.1	427.5	428.0	428.5	428.9	428.5	427.1	425.7	424.3	422.9
117.5°	484.5	485.0	486.3	487.6	488.9	490.3	490.0	488.1	486.2	484.4	482.5
120°	522.2	522.2	524.1	526.0	527.9	529.8	529.8	527.9	526.0	524.1	522.2
122.5°	562.2	562.8	564.1	565.5	566.8	568.1	567.6	565.3	563.1	560.8	558.6
125°	620.9	621.6	622.3	623.1	623.7	624.4	623.7	621.6	619.5	617.3	615.2
127.5°	677.8	678.7	679.6	680.4	681.3	682.1	681.2	678.5	675.8	673.1	670.4
130°	716.2	716.7	717.2	717.7	718.2	718.6	717.3	714.3	711.3	708.2	705.2
132.5°	754.6	755.6	755.5	755.5	755.4	755.3	754.0	751.5	749.0	746.5	744.0
135°	809.5	809.8	809.3	808.9	808.4	807.9	806.4	803.8	801.2	798.6	796.1
137.5°	862.9	863.1	862.4	861.9	861.2	860.6	859.2	857.1	855.0	852.9	850.8
140°	898.5	898.5	897.4	896.3	895.0	893.9	892.3	890.1	888.0	885.9	883.8
142.5°	930.9	930.7	929.9	929.1	928.3	927.5	926.1	924.0	921.9	919.7	917.6
145°	980.2	980.0	978.6	977.1	975.8	974.4	972.8	971.2	969.6	967.9	966.2
147.5°	1023.2	1022.7	1021.7	1020.8	1019.9	1019.0	1017.5	1015.5	1013.5	1011.5	1009.6
150°	1050.4	1049.8	1048.8	1047.9	1046.9	1046.0	1044.8	1043.4	1042.0	1040.6	1039.2
152.5°	1077.7	1076.8	1075.7	1074.6	1073.4	1072.3	1071.1	1069.6	1068.2	1066.8	1065.4
155°	1112.2	1111.1	1110.4	1109.6	1109.0	1108.2	1107.6	1106.9	1106.1	1105.5	1104.7
157.5°	1143.9	1142.4	1141.9	1141.5	1141.1	1140.7	1140.2	1139.8	1139.3	1138.8	1138.3
160°	1163.2	1161.8	1161.6	1161.3	1161.1	1160.9	1160.5	1160.1	1159.6	1159.1	1158.6
162.5°	1180.3	1178.8	1178.5	1178.3	1178.0	1177.8	1177.6	1177.5	1177.5	1177.4	1177.2
165°	1202.6	1200.9	1200.9	1200.9	1200.9	1200.9	1201.0	1201.3	1201.5	1201.8	1202.0
167.5°	1221.0	1219.3	1219.4	1219.4	1219.4	1219.5	1219.9	1220.6	1221.3	1222.0	1222.7
170°	1231.1	1229.5	1229.7	1230.0	1230.2	1230.4	1230.9	1231.6	1232.3	1233.0	1233.7
172.5°	1238.8	1237.1	1237.3	1237.5	1237.8	1238.0	1238.5	1239.2	1239.9	1240.6	1241.3
175°	1247.0	1245.3	1245.8	1246.3	1246.8	1247.2	1247.8	1248.5	1249.2	1249.9	1250.6
177.5°	1251.3	1250.2	1250.6	1250.9	1251.3	1251.7	1252.1	1252.7	1253.3	1253.8	1254.4
180°	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7



TEST NUMBER: P331484-930

CATALOG NUMBER: S122DIW-S290D1240U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	484.5	485.2	487.5	489.9	492.6	493.3	494.5	493.5	493.2	495.9	498.1
5°	485.8	489.1	495.6	501.6	506.5	510.1	513.8	515.3	518.0	521.9	526.8
7.5°	484.2	490.7	500.9	509.6	518.9	525.7	531.0	535.6	541.0	548.4	556.4
10°	482.5	491.1	503.6	514.1	525.6	534.3	541.5	548.6	556.8	567.0	577.5
12.5°	479.2	489.5	505.1	517.6	532.3	540.9	550.6	565.7	574.5	588.7	603.6
15°	472.6	484.1	505.8	521.1	537.9	554.2	572.1	586.5	601.0	609.4	630.2
17.5°	462.9	479.7	503.8	521.7	542.9	568.5	588.7	605.1	621.7	635.3	645.8
20°	455.0	473.4	500.8	522.3	547.5	575.0	598.2	614.9	629.3	640.7	647.1
22.5°	445.2	468.2	494.9	520.1	552.2	579.5	603.8	616.9	629.0	634.5	637.1
25°	429.5	457.3	487.5	518.2	554.5	583.4	605.6	613.6	617.1	611.7	602.8
27.5°	412.6	443.6	478.9	514.7	553.1	580.9	596.8	595.6	589.6	572.2	558.3
30°	400.1	434.1	472.1	511.2	549.7	576.7	586.0	576.7	563.2	543.8	523.9
32.5°	386.9	422.2	464.8	506.1	543.5	567.3	569.2	553.3	532.4	510.3	485.6
35°	366.9	405.0	451.2	494.9	530.3	545.3	536.4	508.2	483.4	453.2	419.5
37.5°	344.3	386.5	432.7	478.4	510.5	514.4	492.3	462.7	427.6	392.2	352.5
40°	327.4	372.1	419.7	465.8	494.2	490.1	461.9	429.3	387.7	344.3	307.4
42.5°	312.3	356.9	405.4	450.7	473.4	462.2	429.3	389.3	344.5	303.7	269.9
45°	286.2	332.1	381.7	425.4	438.4	418.2	374.7	330.2	286.2	252.1	225.4
47.5°	260.7	306.1	355.3	393.7	398.3	371.1	323.6	277.9	239.9	212.2	193.4
50°	242.1	287.6	336.3	370.6	369.1	336.3	287.5	243.9	212.2	189.8	177.2
52.5°	225.3	268.4	315.1	346.3	338.4	302.7	256.0	217.4	191.4	173.8	162.4
55°	199.3	239.1	283.6	308.6	294.1	254.5	215.0	183.9	164.6	151.5	142.6
57.5°	173.4	210.8	248.8	264.2	248.3	211.7	178.8	156.2	141.7	132.0	126.2
60°	157.4	190.0	223.9	237.3	218.2	185.6	159.6	139.5	127.8	119.8	114.6
62.5°	141.5	170.6	202.6	209.9	192.4	164.9	141.9	125.1	115.5	108.4	103.5
65°	119.6	143.6	167.8	172.6	156.5	135.2	117.1	106.2	97.6	92.5	88.5
67.5°	98.2	117.3	134.5	138.4	124.3	109.5	96.4	86.8	81.1	76.8	73.5
70°	85.4	100.6	114.6	117.8	106.5	93.4	83.3	75.7	70.5	66.9	63.7
72.5°	71.9	84.5	96.3	98.4	89.2	79.1	70.9	64.9	60.3	58.0	55.0
75°	55.0	62.5	71.5	72.1	66.0	59.8	53.6	49.7	47.2	44.3	42.8
77.5°	38.8	44.6	49.8	50.8	47.2	43.0	39.5	36.4	34.4	33.0	31.6
80°	29.6	34.2	36.5	37.7	35.2	32.2	30.2	28.1	26.8	25.9	25.0
82.5°	21.2	24.1	26.1	27.1	25.7	23.9	21.9	20.7	19.7	19.0	18.7
85°	10.8	12.1	13.4	13.7	13.4	12.6	11.5	11.5	10.9	10.8	10.8
87.5°	4.5	5.6	6.2	7.2	7.7	8.7	9.8	10.7	11.6	11.3	11.1
90°	3.9	6.7	9.5	12.3	16.3	21.5	26.7	31.8	37.0	36.5	36.0
92.5°	20.9	23.0	25.0	27.1	28.7	29.9	31.1	32.4	33.6	33.7	33.8
95°	57.3	59.7	62.0	64.4	65.8	66.3	66.7	67.2	67.7	67.7	67.7
97.5°	102.5	104.6	106.6	108.7	110.1	111.0	111.9	112.8	113.7	113.7	113.7
100°	136.2	138.0	139.9	141.8	143.1	143.7	144.5	145.2	145.9	145.9	145.9
102.5°	171.3	172.8	174.3	175.8	177.0	177.9	178.8	179.7	180.6	180.8	180.9
105°	228.0	228.7	229.4	230.1	230.7	231.1	231.6	232.1	232.6	233.0	233.5
107.5°	286.3	287.3	288.3	289.3	289.8	289.8	289.8	289.8	289.8	290.1	290.2
110°	323.8	325.2	326.7	328.1	328.8	328.8	328.8	328.8	328.8	328.8	328.8





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	364.4	365.8	367.3	368.7	369.2	369.1	368.9	368.7	368.5	367.9	367.4
115°	424.3	425.7	427.1	428.5	428.9	428.5	428.0	427.5	427.1	426.9	426.6
117.5°	484.4	486.2	488.1	490.0	490.3	488.9	487.6	486.3	485.0	484.5	483.9
120°	524.1	526.0	527.9	529.8	529.8	527.9	526.0	524.1	522.2	522.2	522.2
122.5°	560.8	563.1	565.3	567.6	568.1	566.8	565.5	564.1	562.8	562.2	561.7
125°	617.3	619.5	621.6	623.7	624.4	623.7	623.1	622.3	621.6	620.9	620.2
127.5°	673.1	675.8	678.5	681.2	682.1	681.3	680.4	679.6	678.7	677.8	677.0
130°	708.2	711.3	714.3	717.3	718.6	718.2	717.7	717.2	716.7	716.2	715.8
132.5°	746.5	749.0	751.5	754.0	755.3	755.4	755.5	755.5	755.6	754.6	753.6
135°	798.6	801.2	803.8	806.4	807.9	808.4	808.9	809.3	809.8	809.5	809.3
137.5°	852.9	855.0	857.1	859.2	860.6	861.2	861.9	862.4	863.1	862.9	862.7
140°	885.9	888.0	890.1	892.3	893.9	895.0	896.3	897.4	898.5	898.5	898.5
142.5°	919.7	921.9	924.0	926.1	927.5	928.3	929.1	929.9	930.7	930.9	931.1
145°	967.9	969.6	971.2	972.8	974.4	975.8	977.1	978.6	980.0	980.2	980.5
147.5°	1011.5	1013.5	1015.5	1017.5	1019.0	1019.9	1020.8	1021.7	1022.7	1023.2	1023.7
150°	1040.6	1042.0	1043.4	1044.8	1046.0	1046.9	1047.9	1048.8	1049.8	1050.4	1051.2
152.5°	1066.8	1068.2	1069.6	1071.1	1072.3	1073.4	1074.6	1075.7	1076.8	1077.7	1078.6
155°	1105.5	1106.1	1106.9	1107.6	1108.2	1109.0	1109.6	1110.4	1111.1	1112.2	1113.5
157.5°	1138.8	1139.3	1139.8	1140.2	1140.7	1141.1	1141.5	1141.9	1142.4	1143.9	1145.6
160°	1159.1	1159.6	1160.1	1160.5	1160.9	1161.1	1161.3	1161.6	1161.8	1163.2	1164.7
162.5°	1177.4	1177.5	1177.5	1177.6	1177.8	1178.0	1178.3	1178.5	1178.8	1180.3	1181.9
165°	1201.8	1201.5	1201.3	1201.0	1200.9	1200.9	1200.9	1200.9	1200.9	1202.6	1204.2
167.5°	1222.0	1221.3	1220.6	1219.9	1219.5	1219.4	1219.4	1219.4	1219.3	1221.0	1222.6
170°	1233.0	1232.3	1231.6	1230.9	1230.4	1230.2	1230.0	1229.7	1229.5	1231.1	1232.7
172.5°	1240.6	1239.9	1239.2	1238.5	1238.0	1237.8	1237.5	1237.3	1237.1	1238.8	1240.4
175°	1249.9	1249.2	1248.5	1247.8	1247.2	1246.8	1246.3	1245.8	1245.3	1247.0	1248.6
177.5°	1253.8	1253.3	1252.7	1252.1	1251.7	1251.3	1250.9	1250.6	1250.2	1251.3	1252.5
180°	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	499.9	501.9	501.9	502.2	504.6	504.3	504.1
5°	531.9	535.1	535.4	538.7	541.0	540.2	538.2
7.5°	562.1	568.0	572.5	574.9	577.9	579.7	578.9
10°	586.2	594.7	599.9	603.4	607.6	610.8	609.7
12.5°	608.0	618.1	625.3	631.3	631.8	635.9	633.1
15°	642.0	652.6	653.8	658.2	661.8	661.4	661.5
17.5°	653.1	656.6	657.3	657.4	657.5	656.2	653.3
20°	649.1	647.8	644.7	642.3	638.1	637.5	633.8
22.5°	630.1	626.1	618.2	612.9	606.3	604.6	603.6
25°	592.9	583.8	571.2	559.1	555.8	549.3	551.1
27.5°	541.6	527.5	513.8	504.1	495.2	485.5	488.3
30°	505.6	489.7	470.4	455.6	446.1	436.9	435.2
32.5°	462.7	439.3	417.8	404.8	390.3	384.4	378.1
35°	388.6	365.7	344.5	326.1	315.6	307.4	300.0
37.5°	322.0	295.7	278.5	263.7	256.0	251.4	252.6
40°	280.6	257.6	245.0	233.7	226.7	223.4	224.1
42.5°	247.1	229.9	219.6	211.8	206.8	205.0	204.6
45°	209.1	199.5	190.9	186.5	184.1	182.1	180.8
47.5°	183.2	175.3	170.5	167.9	165.8	163.7	163.6
50°	167.6	162.4	159.1	156.3	154.7	153.2	154.5
52.5°	155.7	151.0	147.7	145.2	144.6	143.2	143.2
55°	138.2	134.4	132.1	129.8	128.7	128.0	127.0
57.5°	122.1	118.6	116.4	115.0	112.9	112.2	111.9
60°	110.7	107.9	105.7	103.9	103.0	101.5	101.5
62.5°	100.2	97.4	95.4	94.0	92.5	91.9	92.0
65°	85.0	82.8	80.7	79.2	78.9	77.8	78.2
67.5°	71.0	69.5	67.3	66.5	65.9	65.3	64.8
70°	61.6	60.2	59.1	58.0	57.4	57.4	57.4
72.5°	53.8	52.0	51.4	50.0	50.3	49.7	49.1
75°	41.7	40.5	40.0	39.5	38.6	38.6	38.6
77.5°	30.7	30.3	29.7	29.1	28.9	28.7	28.8
80°	23.7	23.5	23.2	23.2	22.7	22.6	22.3
82.5°	18.3	17.8	17.5	17.4	17.3	17.3	17.2
85°	10.4	10.0	10.0	10.2	9.8	9.8	10.0
87.5°	11.1	11.0	10.8	10.9	11.1	11.0	11.0
90°	35.6	35.1	35.0	35.2	35.5	35.7	36.0
92.5°	33.9	34.0	34.1	34.1	34.2	34.2	34.2
95°	67.7	67.7	67.4	66.9	66.4	66.0	65.6
97.5°	113.7	113.7	113.7	113.7	113.7	113.6	113.6
100°	145.9	145.9	145.8	145.5	145.3	145.0	144.8
102.5°	181.2	181.3	181.3	181.1	180.8	180.6	180.3
105°	234.0	234.5	234.7	234.7	234.7	234.7	234.7
107.5°	290.4	290.7	290.2	289.1	288.0	286.9	285.8
110°	328.8	328.8	328.4	327.8	327.0	326.3	325.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	366.8	366.2	365.7	365.2	364.7	364.2	363.6
115°	426.4	426.2	425.7	425.0	424.3	423.5	422.9
117.5°	483.3	482.7	482.2	481.4	480.7	480.0	479.3
120°	522.2	522.2	521.9	521.1	520.5	519.8	519.1
122.5°	561.2	560.6	560.0	559.5	559.0	558.5	558.0
125°	619.5	618.8	618.3	618.1	617.8	617.6	617.3
127.5°	676.1	675.3	674.5	673.8	673.0	672.3	671.5
130°	715.3	714.9	714.2	713.2	712.3	711.3	710.4
132.5°	752.5	751.5	750.6	749.9	749.1	748.4	747.6
135°	809.1	808.9	808.4	807.6	807.0	806.2	805.5
137.5°	862.5	862.3	861.8	860.8	859.9	858.9	858.0
140°	898.5	898.5	898.1	897.2	896.3	895.3	894.4
142.5°	931.3	931.5	931.1	930.2	929.2	928.3	927.3
145°	980.7	980.9	980.6	979.7	978.7	977.8	976.8
147.5°	1024.3	1024.7	1024.6	1023.7	1022.8	1021.9	1021.0
150°	1051.9	1052.6	1052.6	1051.9	1051.2	1050.4	1049.8
152.5°	1079.5	1080.4	1080.4	1079.5	1078.6	1077.7	1076.8
155°	1114.6	1115.7	1116.0	1115.3	1114.6	1113.9	1113.2
157.5°	1147.1	1148.8	1149.0	1147.9	1146.7	1145.6	1144.4
160°	1166.0	1167.4	1167.7	1166.8	1165.8	1164.9	1163.9
162.5°	1183.5	1185.1	1185.4	1184.2	1183.1	1181.9	1180.9
165°	1205.8	1207.5	1207.7	1206.6	1205.4	1204.2	1203.1
167.5°	1224.3	1225.9	1226.1	1224.9	1223.7	1222.5	1221.2
170°	1234.4	1236.1	1236.2	1234.8	1233.4	1231.9	1230.5
172.5°	1242.0	1243.7	1243.7	1242.4	1241.0	1239.6	1238.1
175°	1250.3	1251.9	1252.1	1250.6	1249.2	1247.8	1246.3
177.5°	1253.6	1254.7	1254.7	1253.6	1252.5	1251.3	1250.2
180°	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7	1252.7

(END OF REPORT)