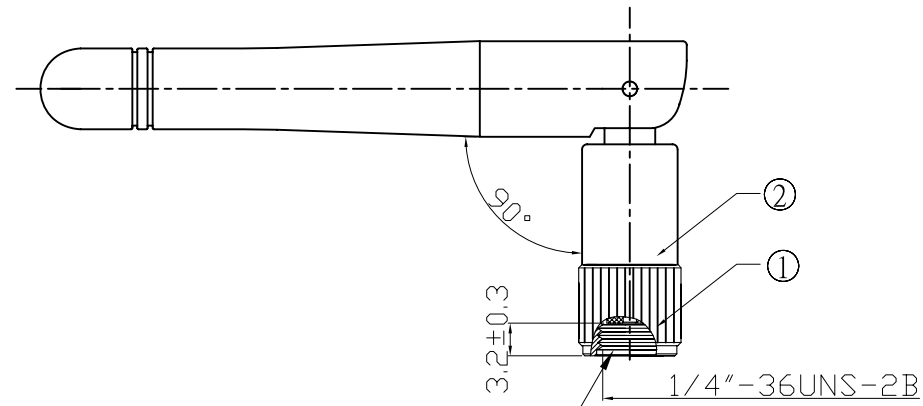
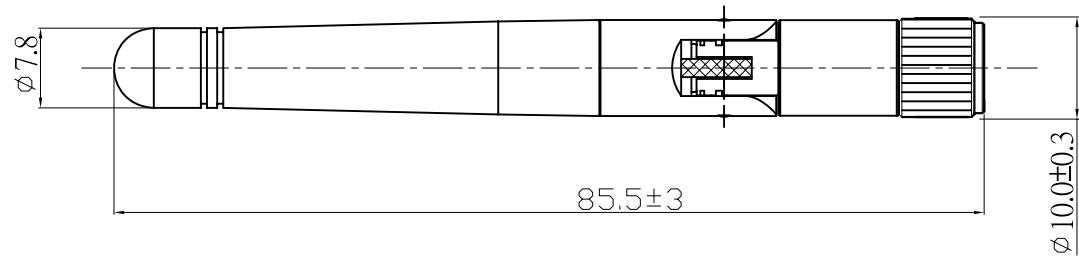


REVISIONS				
SYM	ECN No.	DESCRIPTION	DATE	APPROVED
A.X0		Design	24.03.11'	Robin



Reverse SMA PLUG

FREQUENCY	2.4~2.5GHz
駐波比 V.S.W.R	≤2.0
阻抗值 IMPE DANCE	50 Ohms
備注: NOTE	

NO.	Description	Material	Finish	Q'ty
7	178線材		棕色	1
6	天線外套	TPEE	黑色	1
5	銅管	黃銅	除油	1
4	鉚釘	POM	黑色	2
3	上固定座	PC	黑色	1
2	下固定座	PBT	黑色	1
1	Reverse SMA PLUG	POM	黑色	1

Tolerance	
X.X	±0.5
X.XX	±0.25
X°	±3°

APPROVALS	DATE	DRAWING NO.	TITLE
DRAWN Robin	24.03.11'	AN-DP027008	
CHECKED		CUSTOMER NO.	2.4G/2DBI/Antenna(黑色)
APPROVED		2W5S006	
SCALE: N.A.	SHEET 1 OF 1	Dail Fong Electronic Co., Ltd.	
UNIT mm	SIZE A4		

Product Name: 2.4GHz 2DBI Antenna

Index:

1. Reliability Testing
2. Specification
3. SParameter Test Data
4. Antenna Radiation Pattern
5. Mechanical Drawing
6. SGS Report



1. Reliability Testing

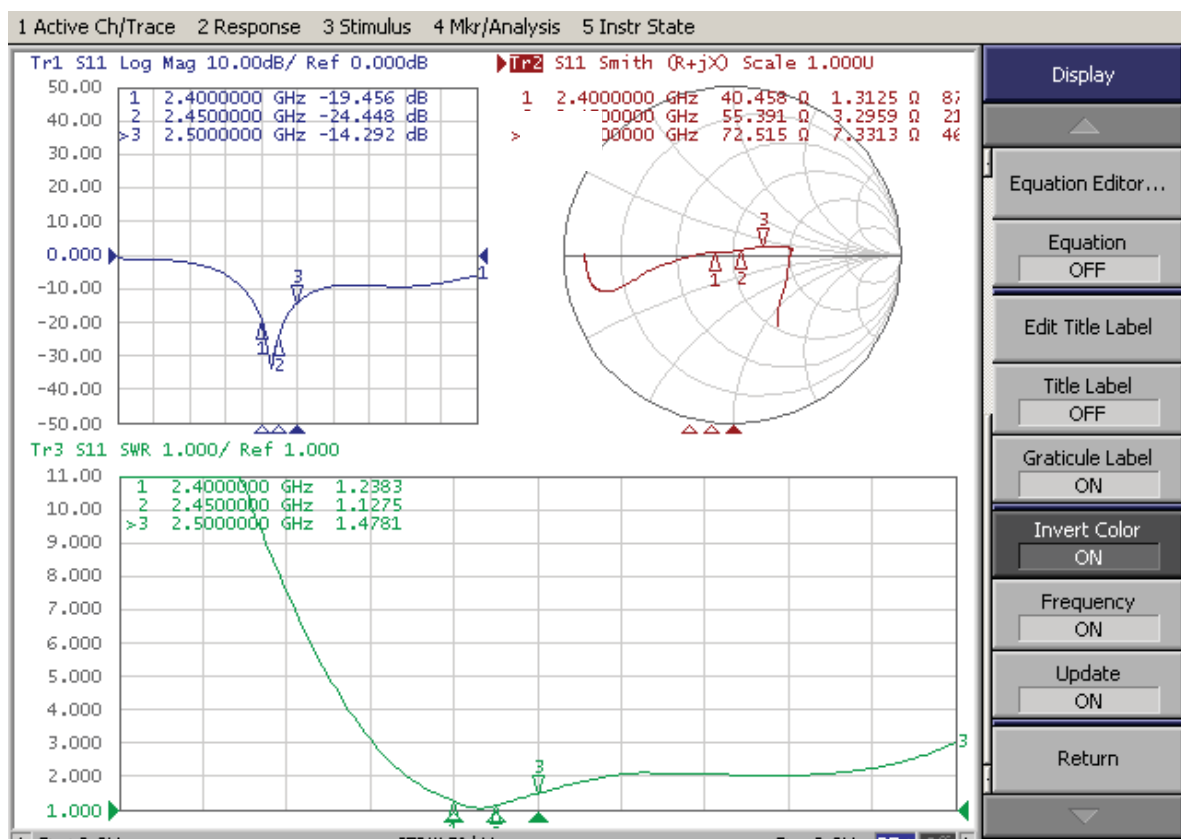
Test Item	Procedure	Requirement
1. Visual inspection and Dimension Check	Applicable methods using x5 magnification	follow specification
2. Rapid Changing of Temperature	-40°C (30minutes) to 90°C (30minutes); 24 cycles	After 2 hours recovery: 1. no visible damage 2. Freq. Tol.: < $\pm 5\%$
3. Damp Heat	24 hours at 60°C; 90 ~ 95% RH	After 2 hours recovery: 1. no visible damage 2. Freq. Tol. : < $\pm 5\%$
4. Endurance	24 hours at 90°C	After 2 hours recovery: 1. no visible damage 2. Freq Tol.: < $\pm 5\%$

Product Name: 2.4GHz 2DBI Antenna

2. Specification

A. Electrical Characteristics	
S.W.R.	2400-2500 MHz: ≤ 2.0
Antenna Gain	2.0 ± 0.7 dBi
Impedance	50 Ohm
B. Material	
Material of Radiator	Cu (Plated)
Connector Type	SMA Male Reverse
C. Environmental	
Operation Temperature	- 30 °C ~ + 85 °C
Storage Temperature	- 30 °C ~ + 85 °C

3. S Parameter Test data



Product Name: 2.4GHz 2DBI Antenna

4. Antenna Radiation Pattern

Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m

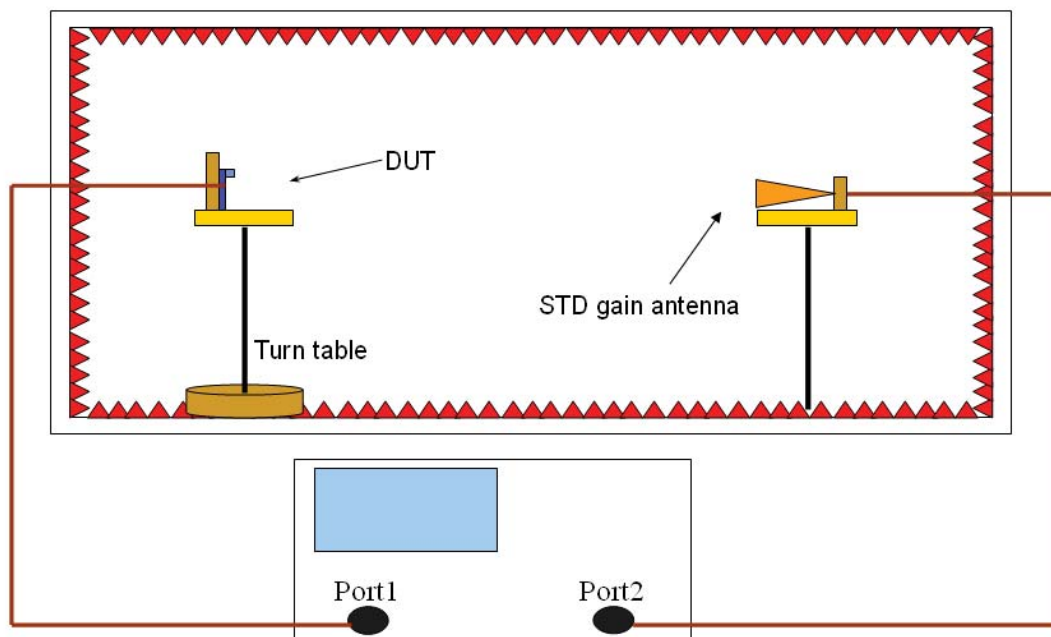
Quiet Zone: 600mm @1 GHz

Isolation: >100dB @ 1 MHz ~ 10 GHz

Testing Equipment: Agilent 5071B

Received Antenna: 0.7 ~ 6.0 GHz for Gain Calibration

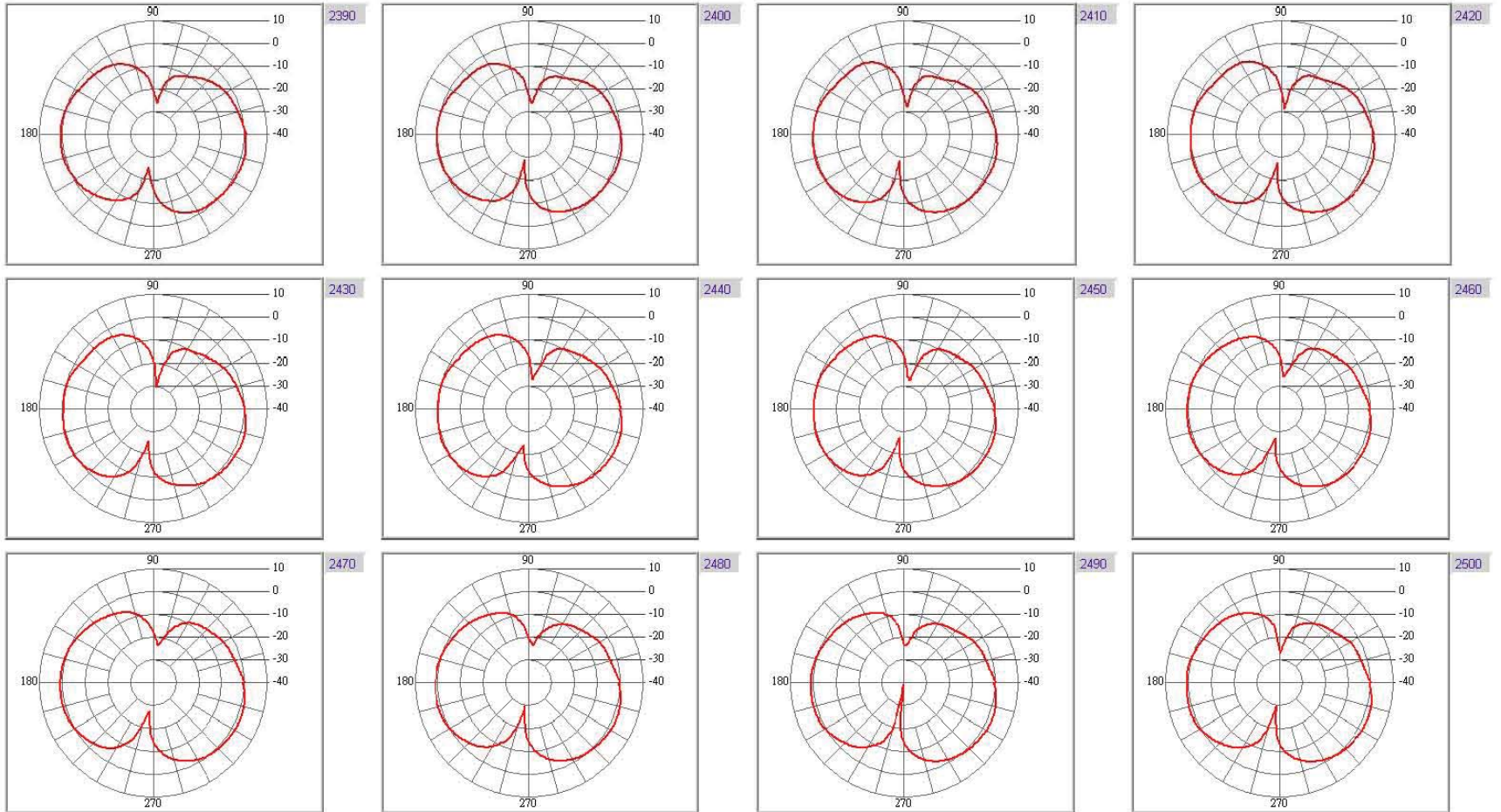
Double Ridged Horn Antenna



Model : 2.4GHz Antenna // Cortec
 Remark : E-Plane // Vertical Polarizator
 Tested by : CORTEC Antenna 3D Lab // Chen Bao Qiu

Location: **Chamber** Date: **2010/11/22** Time: **下午 07:57:49**
 Temperatur (°C): **22.00** Humidity (%): **55.00** Approved by:

Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	1.56	1.36	1.69	1.94	1.95	2.07	1.6	1.62	1.6	1.66	1.95	2.08
Peak Degree	347	347	347	342	341	341	336	341	336	341	341	341
AV Gain (dBi)	-2.38	-2.63	-2.39	-2.28	-2.3	-2.17	-2.45	-2.27	-2.31	-2.42	-2.22	-2.22



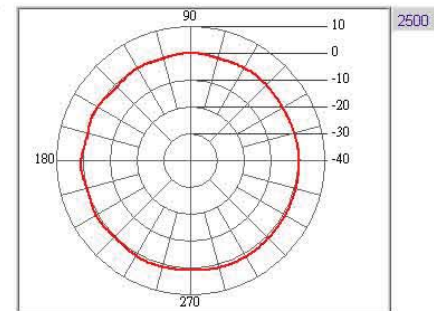
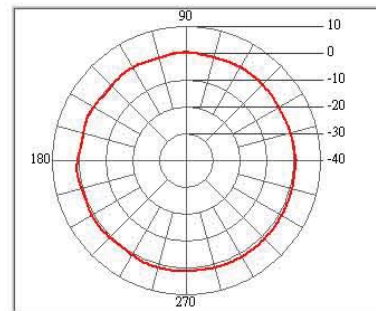
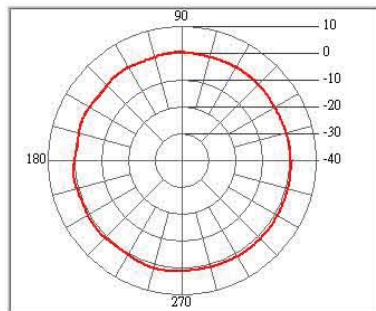
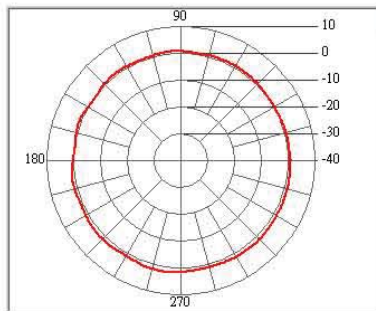
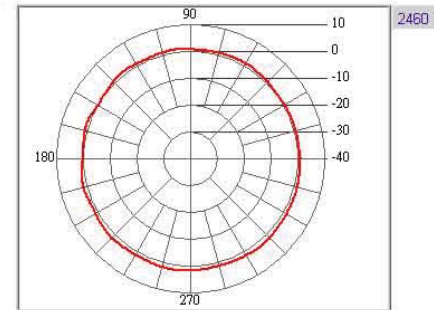
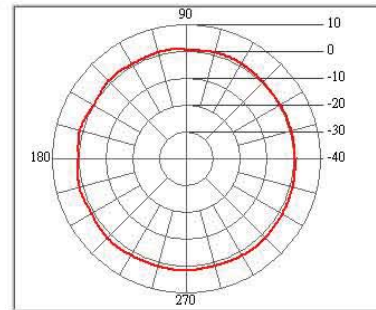
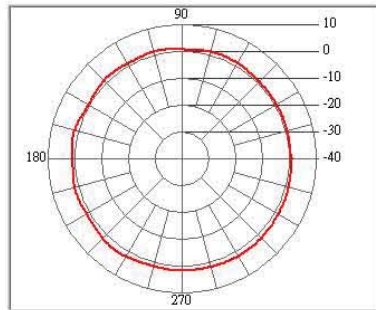
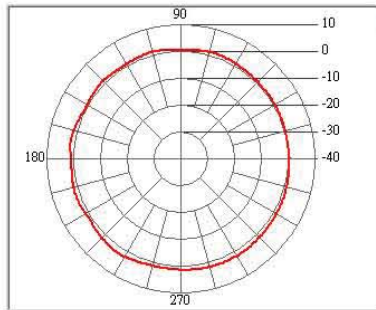
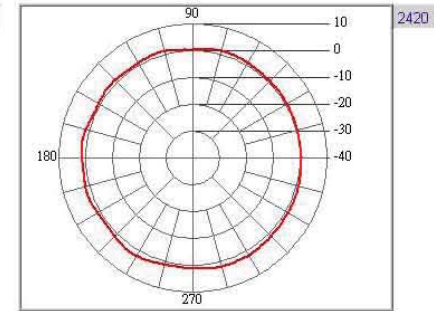
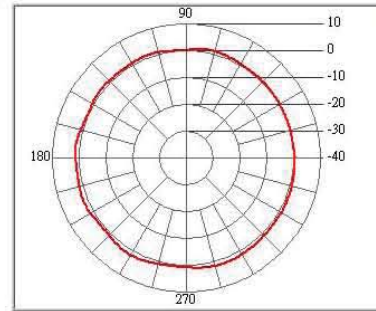
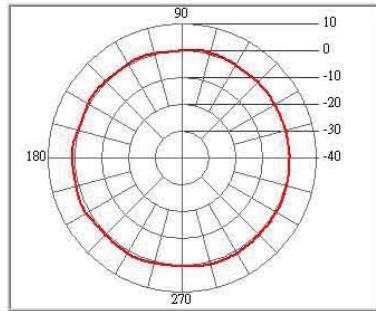
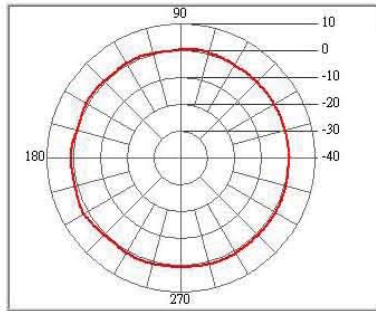
Model : 2.4GHz Antenna // Cortec
 Remark :H-Plane // Horizontal Polarization
 Tested by : CORTEC Antenna 3D Lab // Chen Bao Qiu

Location: **Chamber**
 Temperature (°C): **22.00**

Date: **2010. 11. 22**
 Humidity (%): **55.00**

Time: **下午 07:57:49**
 Approved by:

Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	1.69	1.36	1.79	2.15	2.21	2.22	1.81	1.96	1.91	1.59	1.38	1.36
Peak Degree	209	203	240	239	234	234	228	264	264	259	259	289
AV Gain (dBi)	0.6	0.46	0.86	1.09	1.11	1.24	1.02	1.04	0.87	0.5	0.5	0.33



Specification

Electrical Characteristics	
Frequency	2400 ~ 2500 MHz
S.W.R.	<= 2.0
Antenna Gain	2.0±0.7dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Material of Plastic	Body: TPE
Cable Type	RG-178
Connector Type	SMA Male Reverse
Connector Pull Test	>= 3 Kg
Connector Torque Test	100 ~ 300 g.cm
C. Environmental	
Operation Temperature	- 30 °C ~ + 85 °C
Storage Temperature	- 30 °C ~ + 85 °C
Antenna Color Storage life	< 2 year