



# 承認書 Approval Sheet

PAO No : PAO-1101608  
Page : 1 of 1  
Date : 05 / 05 / 2011

Part No : 617202A7WY	REV: 2	Where use: NA910	
Maker : WHA YU INDUSTRIAL CO., LTD	Maker P/N : C147-510711-A	REV: X2	
Part Name : ANTENNA	Vendor : WHA YU	Place/Origin : China	
Part Description : ANTENNA C147-510711-A,106mm/50ohm/GA WYI			Green Related RoHS

**Contents or Instructions :**

1. RD Jason Chen 通知 廠商承認書需增加 Gain (peak) value, 以符合EMC CE Report 敘述。  
 1-1. Change the revision of the SerComm P/N: 617202A7WY from 1 to 2.  
 1-2. 廠商承認書Electrical Properties Specification說明 增加 Gain (peak) value.

1.5 Peak Gain.....3.8 dBi
1.6 Cable Loss.....0.3dB Max
1.7 Radiation..... Omni-directional

2. Detailed specification is shown as attachment.

中磊電子股份有限公司

May. 05 2011

文件管制中心發行章

\* 任何變更須事前經協調並承認後始可變更. Any change must be negotiated in advance, and execute the revision after SerComm's Approval.

Disposition	Countersign	In Charge (Name/Date)	Checked By (Name/Date)
<b>Final Approval :</b> <input checked="" type="checkbox"/> electrical <input checked="" type="checkbox"/> dimensional <input checked="" type="checkbox"/> visual <input checked="" type="checkbox"/> function	✓ Component	May Hsu 05/05/2011	PS Yang 05/05/2011
<b>Conditional Approval :</b> <input type="checkbox"/> electrical <input type="checkbox"/> dimensional <input type="checkbox"/> visual <input type="checkbox"/> function	PM		
<b>Temporary Approval :</b> <input type="checkbox"/> electrical <input type="checkbox"/> dimensional <input type="checkbox"/> visual <input type="checkbox"/> function	✓ EMI	Ronnie Cheng 05/05/2011	Ronnie Cheng 05/05/2011
<b>Attachments :</b> <input type="checkbox"/> sample <input checked="" type="checkbox"/> specification <input type="checkbox"/> drawing <input type="checkbox"/> other	✓ H/W EE	Jason Chen 05/05/2011	David Chiang 05/05/2011
<b>Final disposition :</b> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Conditional Approved : For purchasing to by _____ pcs, for pilot production test. <input type="checkbox"/> Temporary approved : Vendor is requested to supply samples again before _____ (mm)/ _____ (dd)/ _____ (yy)	Mechanical		
	PE		
<b>Change history (變更記錄)</b>			
	REV	Related Document (相關文件)	FILE No. (編號)

**DISTRIBUTION :**  CHUNAN  SERNET  VENDOR  R/D

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 SUZHOU AEON TECH CO.,LTD.(CHINA)  
 AEON TECH (SHANGHAI) CO.,LTD(CHINA)  
 DONGGUAN PARNER TECH CO.,LTD.(CHINA)



**SPECIFICATION FOR APPROVAL**

**CUSTOMER:** 中磊電子股份有限公司

**PART NAME:** PIFA Antenna

**PART NO:**

**REVISION:**

**W. Y. P/NO:** C147-510711-A(SSR-02200)

**REV:** X2

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY :	<i>ea</i>	
DATE :	2010.12.3	

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# PIFA Antenna Assembly

## Specification

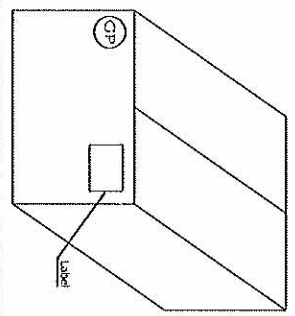
### 1. Electrical Properties :

- 1.1 Frequency Range..... 2.4~2.5GHz
- 1.2 Impedance ..... 50  $\Omega$  Nominal
- 1.3 VSWR ..... 1.92 : 1 Max.
- 1.4 Return Loss..... -10 dB Max.
- 1.5 Peak Gain..... 3.8 dBi
- 1.6 Cable Loss..... 0.3dB Max
- 1.7 Radiation..... Omni-directional
- 1.8 Polarization..... Linear ; Vertical
- 1.9 Admitted Power..... 1W
- 1.10 Cable.....  $\phi$  1.13 Coaxial Cable
- 1.11 Connector..... MHF Plug Connector

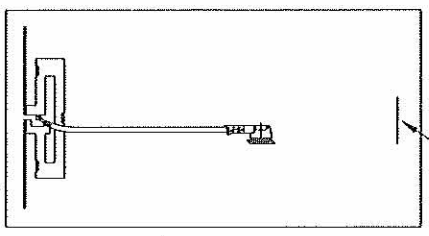
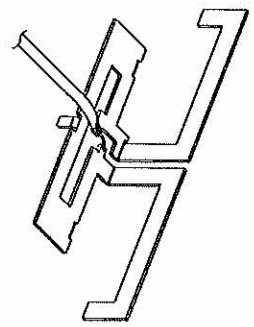
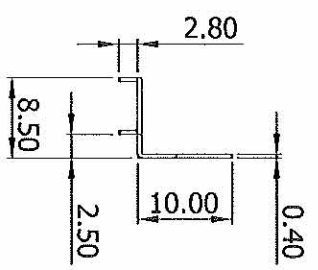
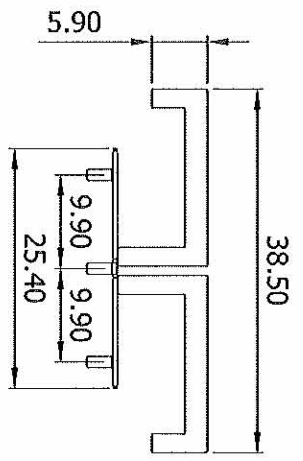
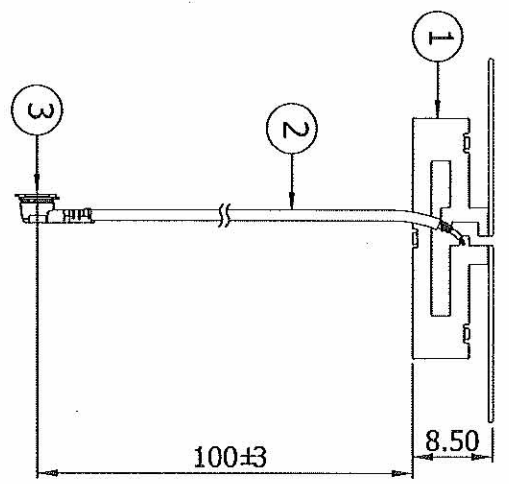
### 2. Physical Properties :

- 2.2 Operating Temp. .... -10°C ~ +60°C
- 2.3 Storage Temp. .... -10°C ~ +70°C

REV	DATE	DESCRIPTION
X1	7/9-2010	New Issue



GP 標籤貼於外箱兩邊側面左上角共 2PCS  
 標示 Label 貼於外箱兩邊側面共 2PCS



Packing : 1 pcs/bag  
 (每10袋用釘書機釘起來)

NO	DESCRIPTION	QTY	REMARK
3	Connector	1	MHF Plug
2	Cable	1	Ø1.13 Coaxial Cable : Gray
1	PIFA	1	SUS430 Nickel-Plating

CUSTOMER: 中磊

PART NO : \_\_\_\_\_

PARTNAME: PIFA Antenna

W.Y P/NO : C147-510711-A

REV : SSR-00694

UNIT : m/m

FILE : \_\_\_\_\_

SHEET : 1/1

CUSTOMER'S SIGNATURE

APPROVED: *[Signature]*

CHECKED: *[Signature]*

DRAWING: *[Signature]*

XX	±5	XXX	±0.1
X	±0.0	XX	±0.5
X	±0.0	XX	±0.1

**M·gear** Wha Yu Group

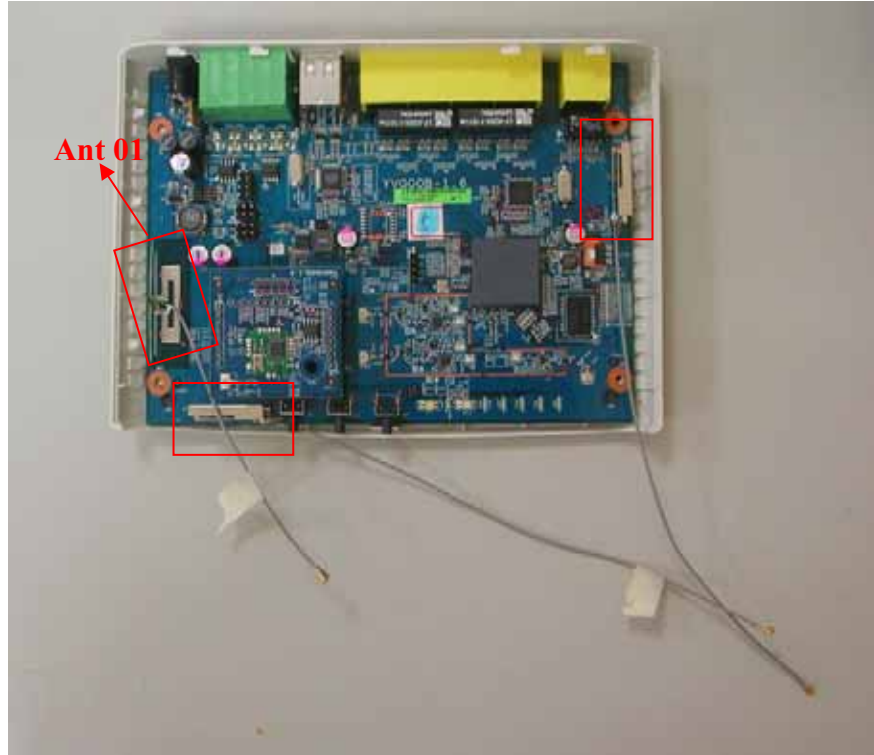
THIS DRAWING, AND ITS INHERANT DESIGN CONCEPTS, ARE THE PROPERTY OF WHA YU AND AS SUCH MAY NOT BE COPIED, REPRODUCED, OR GIVEN TO THIRD PARTIES WITHOUT THE WRITTEN CONSENT OF WHA YU.

# SSR-02200

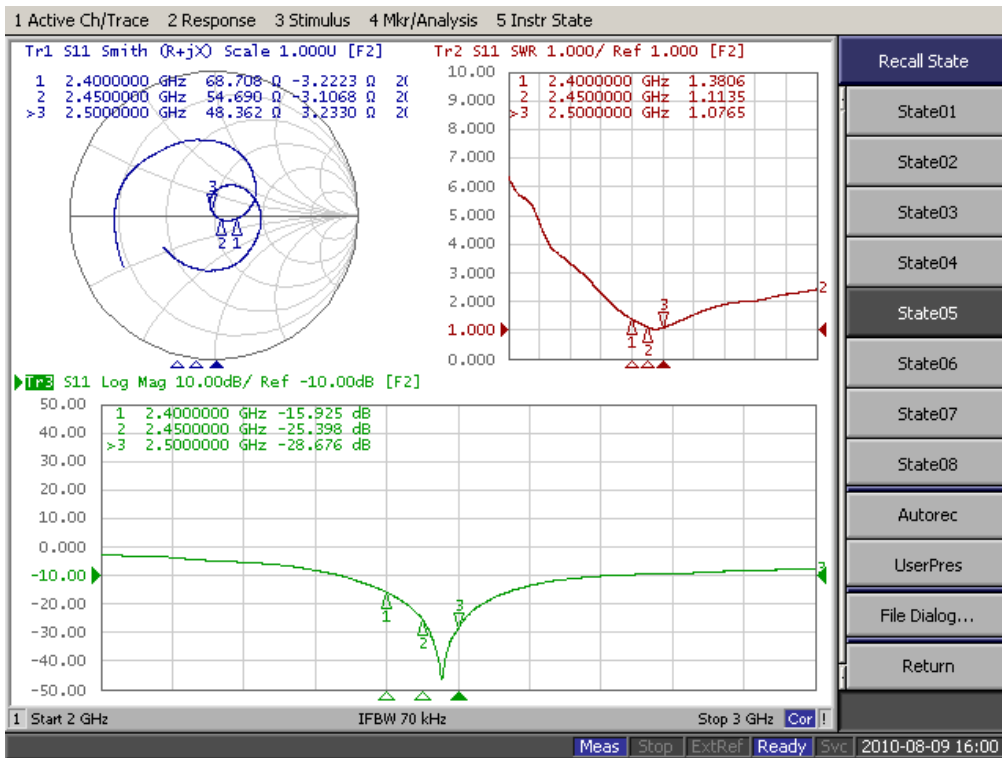
<b>Test Data</b>	<b>2010/08/10</b>
<b>Test Member</b>	<b>FISH</b>

一、 Return Loss & VSWR

測試線焊接示意圖

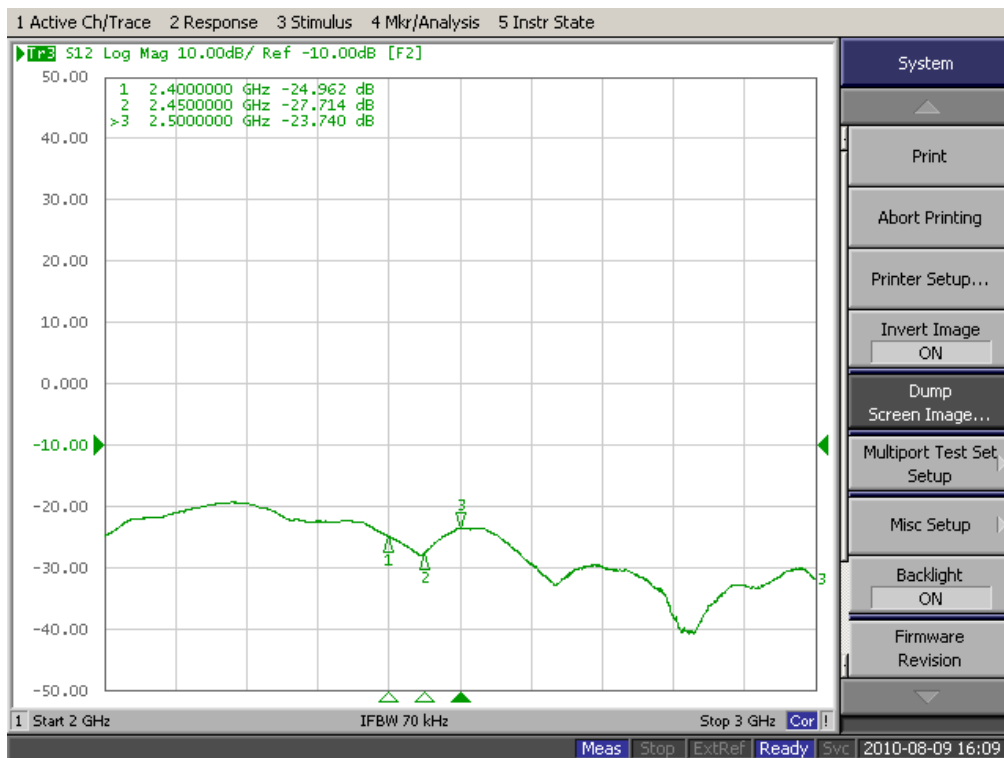


## ANT01

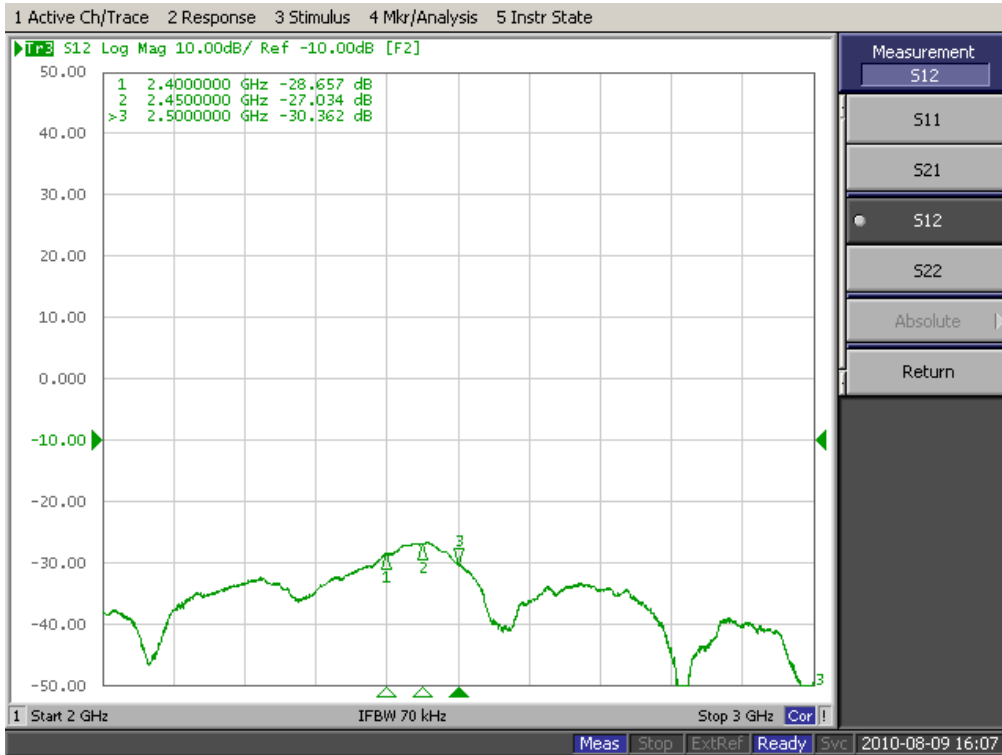




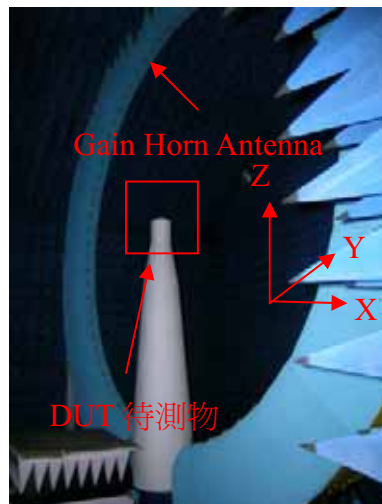
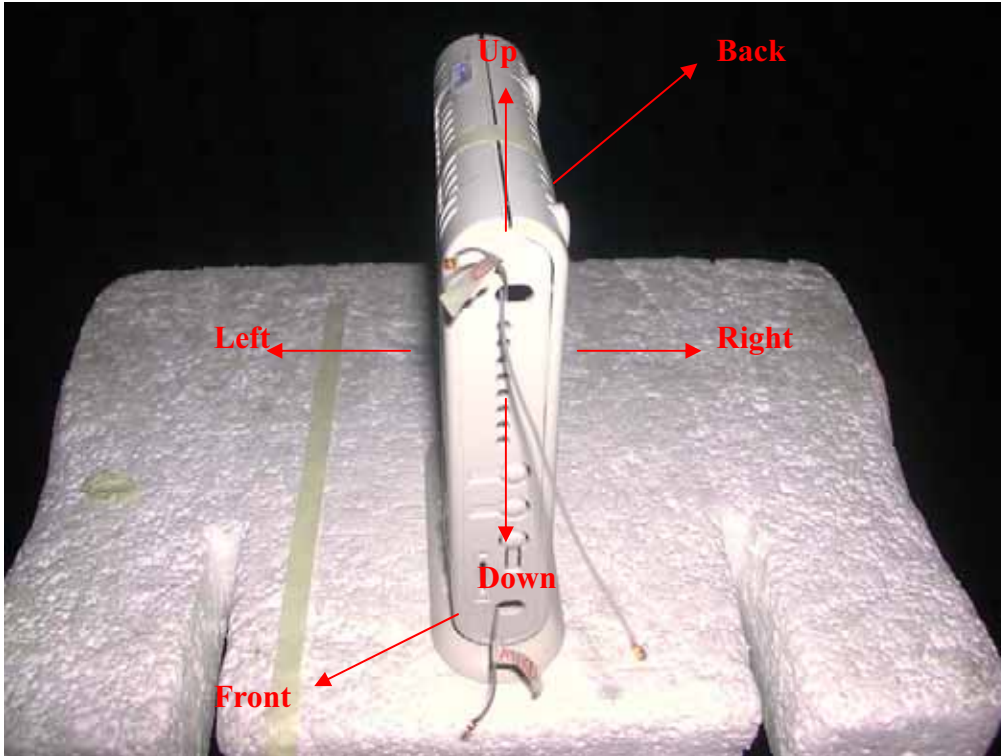
### Isolation LEFT-ANT01



**Isolation LEFT-ANT01**

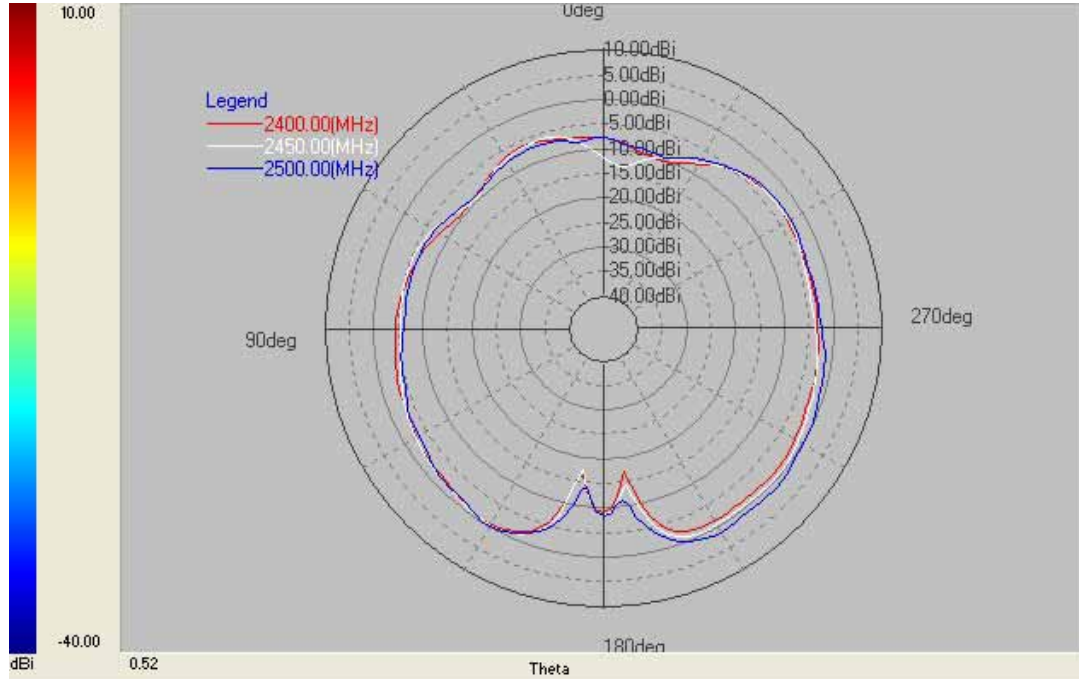


二、Radiation Pattern Measurement

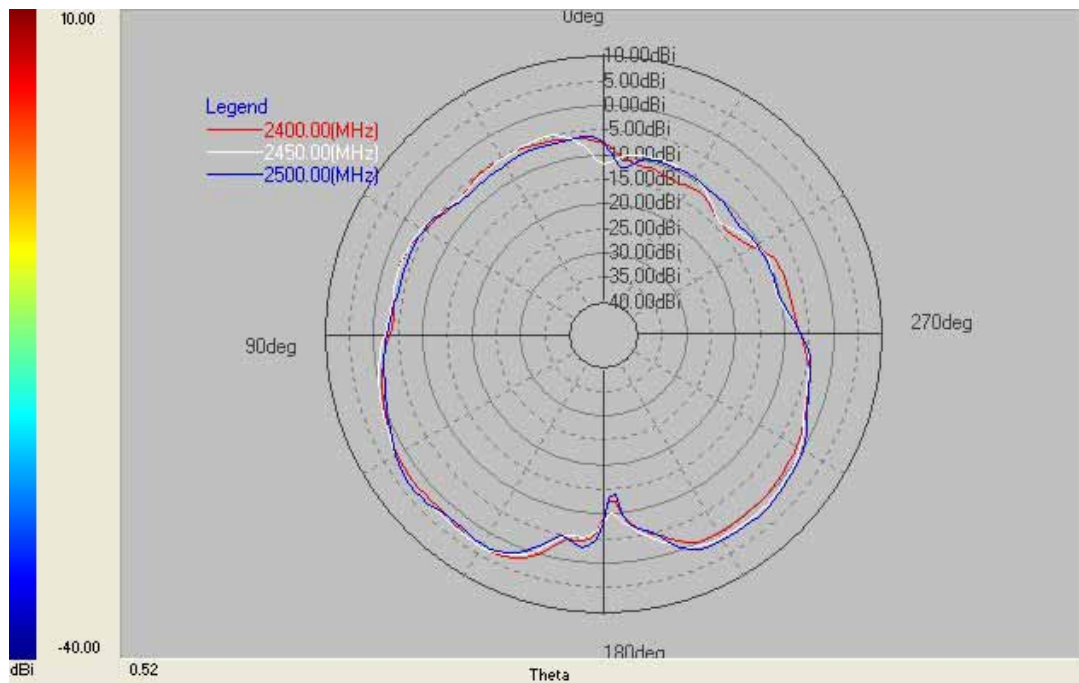


	XY	YZ	XZ
0°	Right	Up	Up
90°	Back	Back	Right
180°	Left	Down	Down
270°	Front	Front	Left

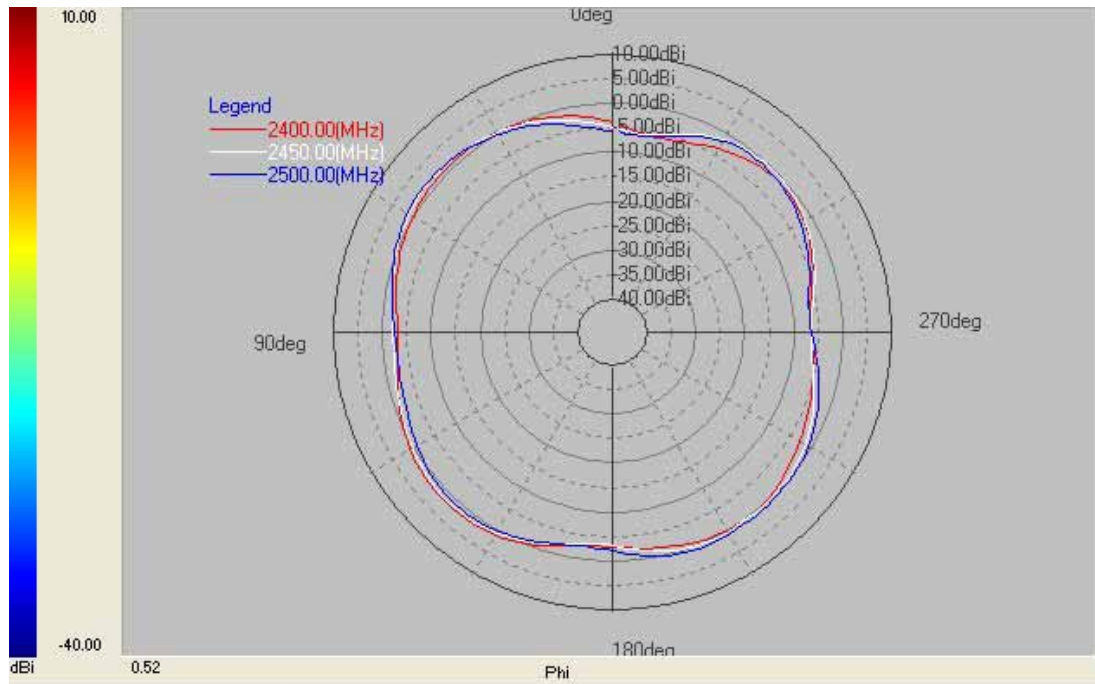
**ANT01**  
**X-Z Plane (E-total)**



**Y-Z Plane (E-total)**



**X-Y Plane (E-total)**



### 三、Test Value

#### 1-1 Return Loss

	ANT01(dB)		
2.40 GHz	-15.92		
2.45 GHz	-25.39		
2.50 GHz	-28.67		

#### Ant isolation

	Ant isolation 01&02(dB)	Ant isolation 01&03(dB)	Ant isolation 02&03(dB)
2.40 GHz	-24.96	-28.65	-20.24
2.45 GHz	-27.71	-27.03	-22.01
2.50 GHz	-23.74	-30.36	-25.73

#### 1-2 Peak Gain

##### ANT01

	Gain (dBi)	Efficiency (%)
2.40GHz	3.14	60.98
2.45GHz	3.73	67.56
2.50GHz	3.80	67.84