



WHA YU INDUSTRIAL CO., LTD.(HEAD OFFICE)
 DONGGUAN AEON TECH CO.,LTD.(CHINA)
 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

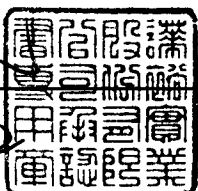

PART NAME: PIFA Antenna

PART NO.:

REVISION:

W. Y. P/NO.: C147-510674-A(SSR-210468)

REV.: XI

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY :	Andren 	
DATE :	2010.03.02 	

WHA YU GROUP

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PIFA Antenna

Specification

1. Electrical Properties : (with housing)

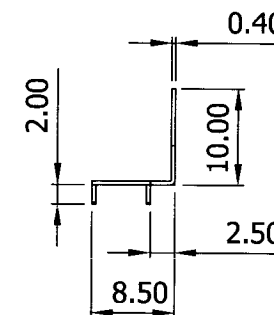
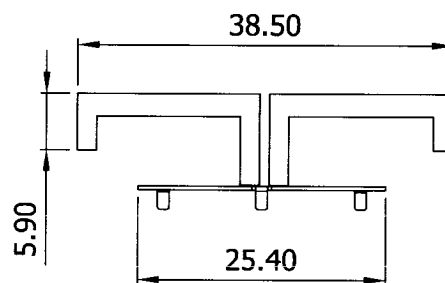
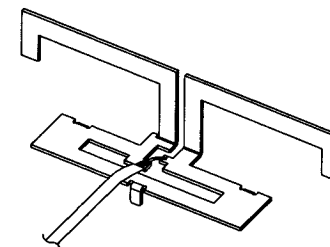
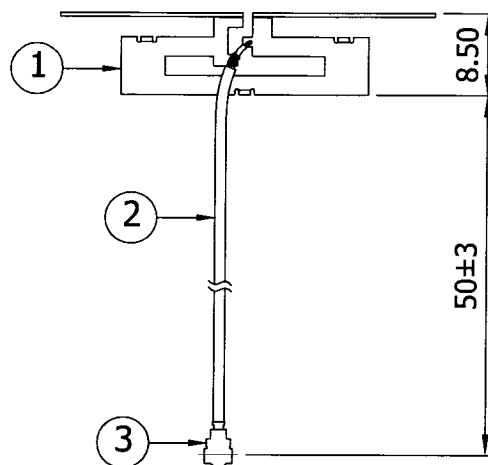
- 1.1 Frequency Range.....2.4GHz ~ 2.5GHz
- 1.2 Impedance50 Ω Nominal
- 1.3 VSWR1.92 Max.
- 1.4 Return Loss.....-10 dB Max.
- 1.5 Peak Gain(include cable loss).....2.4dBi
- 1.6 Cable loss.....0.16dB
- 1.7 Polarization..... Linear
- 1.8 Admitted Power..... 1W
- 1.9 Cable..... ϕ 1.13 Coaxial Cable
- 1.10 Connector.....MHF Connector

2. Physical Properties :

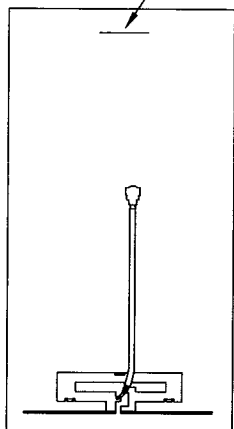
- 2.1 Operating Temp.-10 $^{\circ}$ C ~ +60 $^{\circ}$ C
- 2.2 Storage Temp.-10 $^{\circ}$ C ~ +70 $^{\circ}$ C

CG-

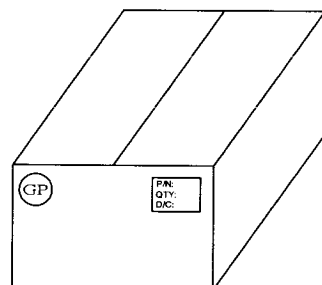
REV	DATE	DESCRIPTION
X1	3/24-2010	New Issue



釘書針



Packing : 1 pcs/bag
(每10袋用釘書機訂起來)



GP標籤貼於外箱兩邊側麥左上角共2PCS
標示Label貼於外箱兩邊側麥共2PCS

NO	DESCRIPTION	QTY	REMARK
3	Connector	1	MHF Connector
2	Cable	1	φ1.13 Coaxial Cable ; Gray
1	PIFA	1	SUS430 Nickel-Plating

CUSTOMER'S SINGATURE

XX.	±5	APPROVED
X.	±3.0	<i>Deve</i>
.X	±1.0	CHECKED <i>陳信仁</i>
.XX	±0.5	
.XXX	±0.1	DRAWING <i>Sarah</i>

CUSTOMER: 中磊		
PART NO :		
PARTNAME: PIFA Antenna		
W.Y P/NO : C147-510674-A		
REV	UNIT	FILE : SSR-210468
X1	m/m	SHEET : 1/1

M.gear Wha Yu Group

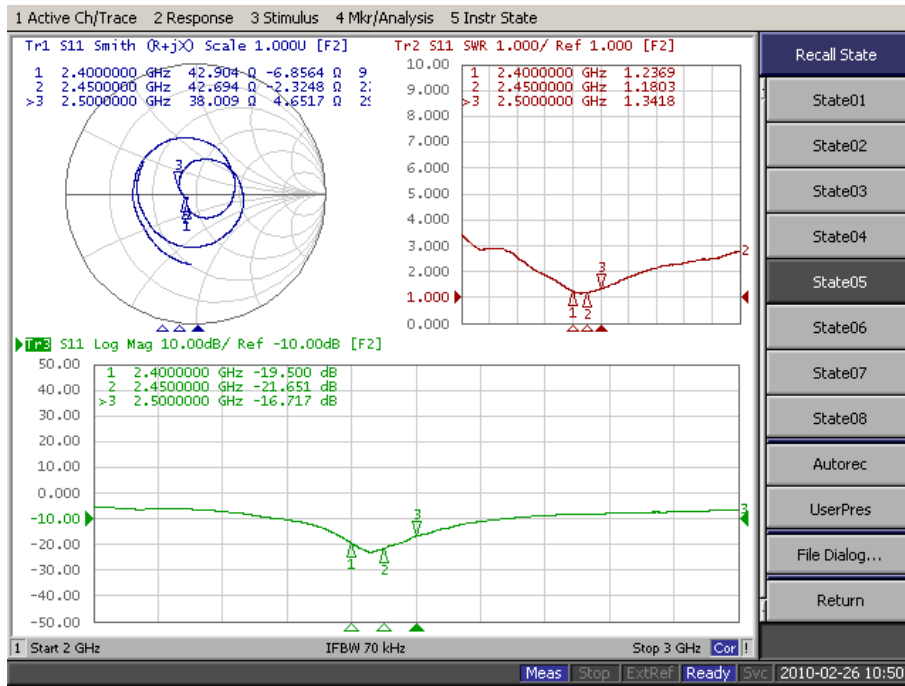
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1 S-parameter test results

1.1 S11 test results

1.1.1 M.gear

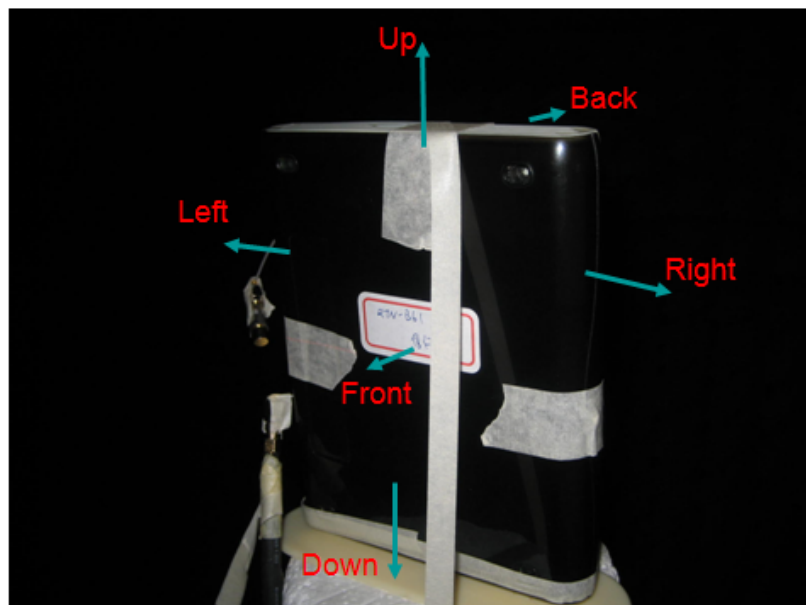
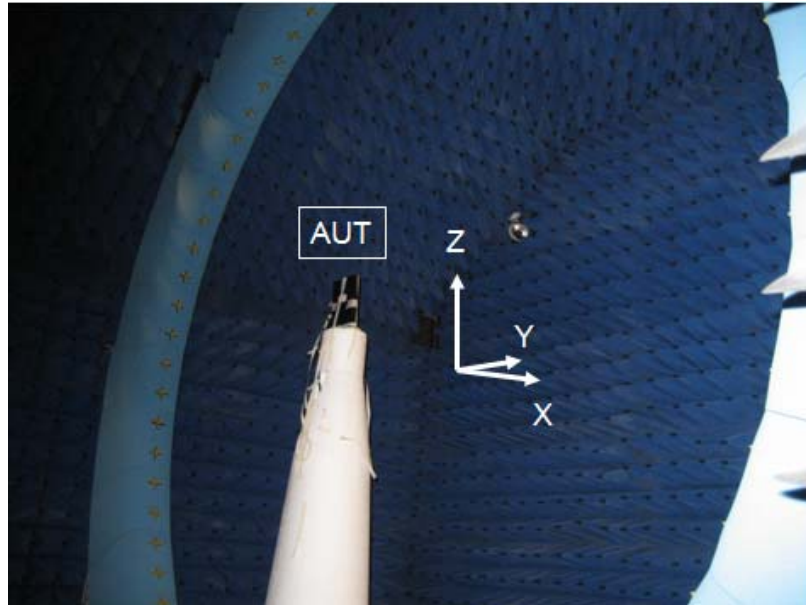
1.1.1.1 Ant1



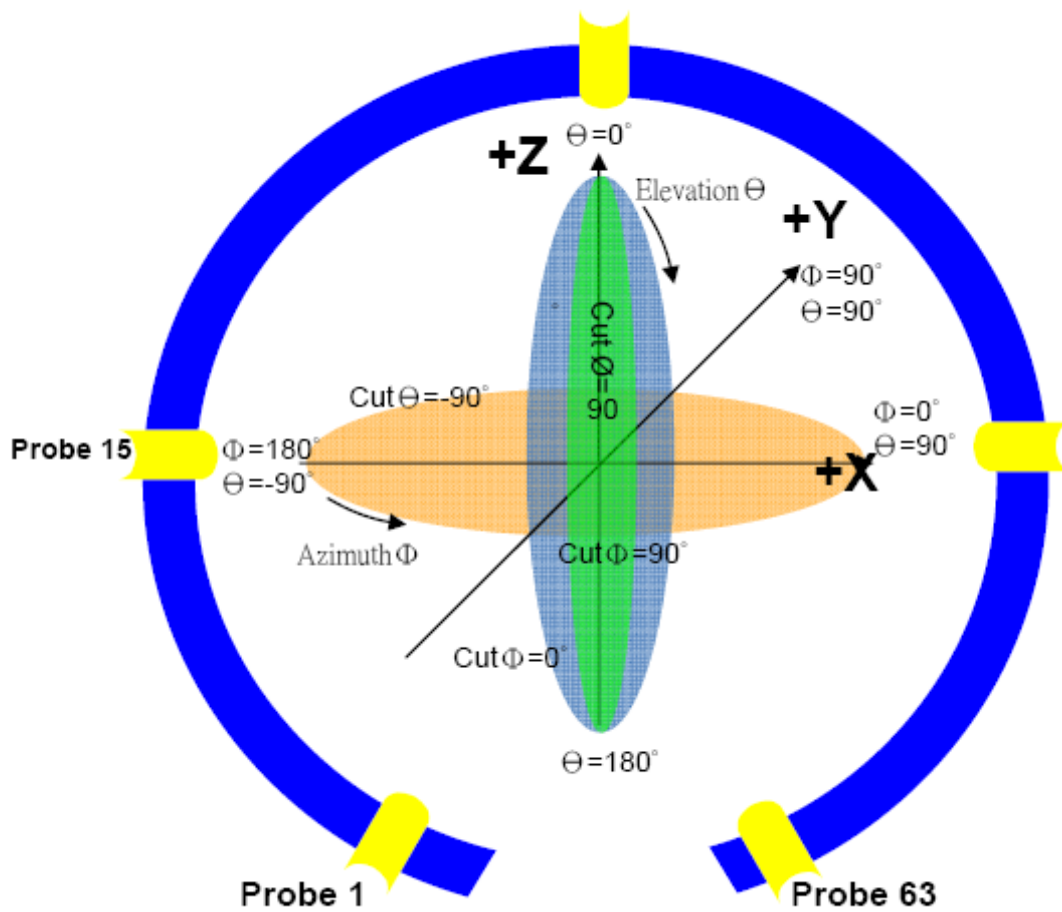
2 Gain & Patterns test results

2.1 Measurement setting

M.gear



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



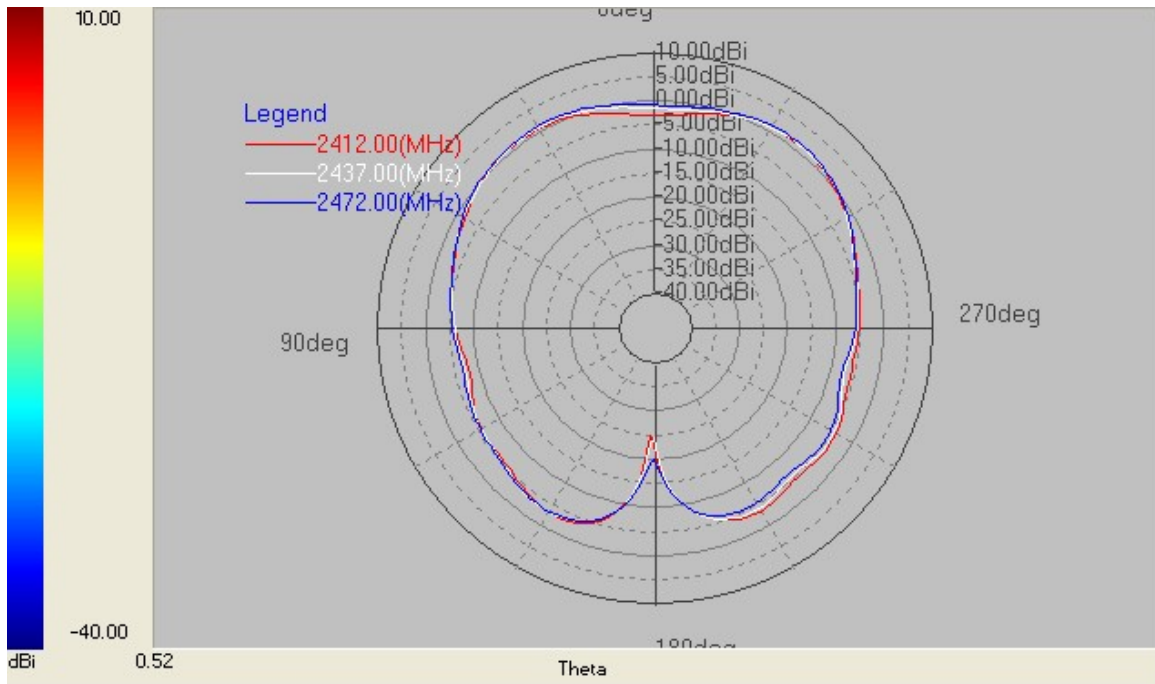
	θ	φ
Total angle	175°	360°
How many angle scan one point	5°	5°
Total scan point	36	73

2.2 2D patterns

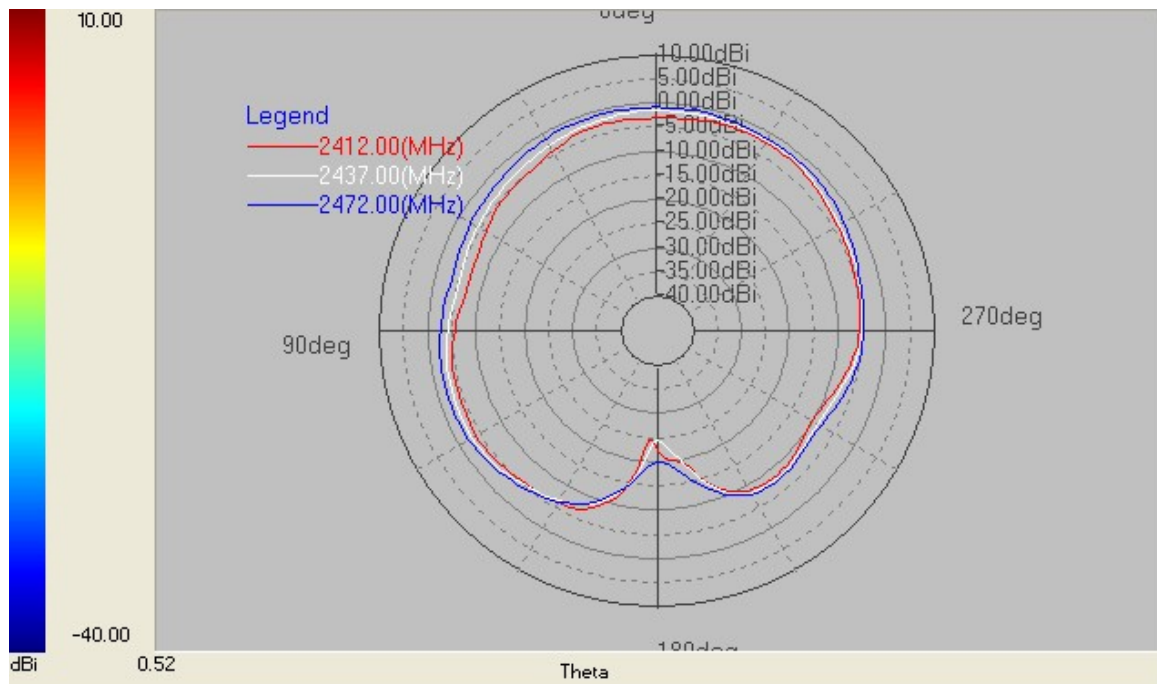
2.2.1 M.gear

2.2.1.1 Ant1

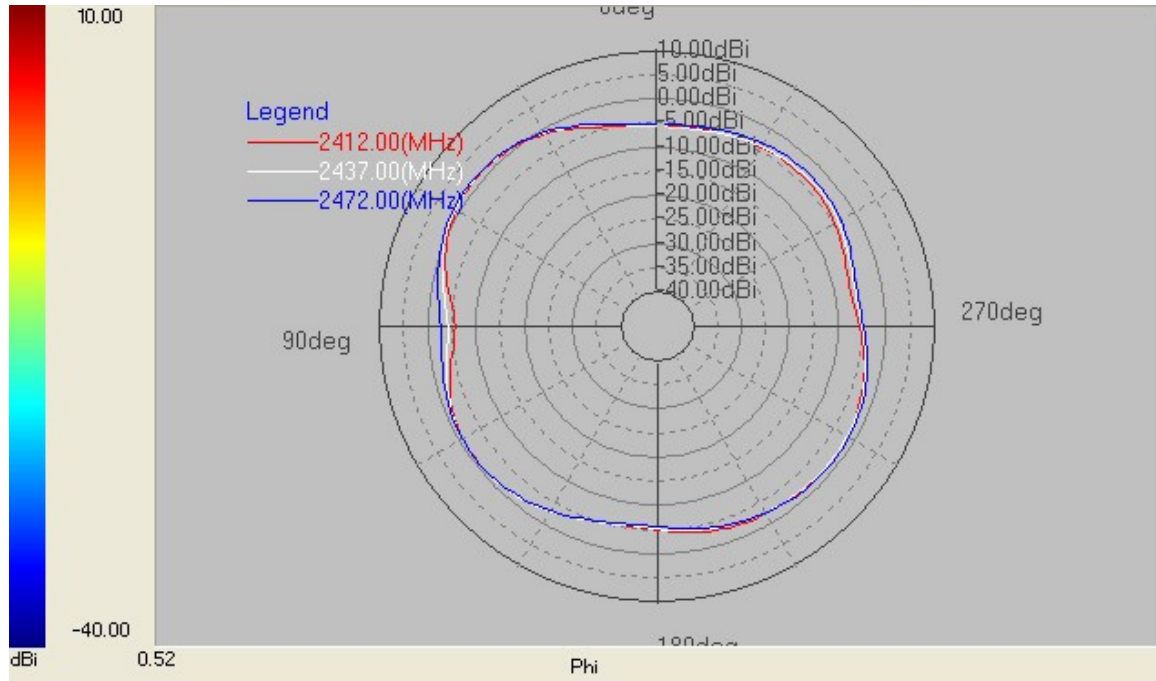
2.4~2.5GHz



X-Z Plane (E-total)



Y-Z Plane (E-total)



X-Y Plane (E-total)

4 Summary

4.1 Return Loss

	M.gear
	Ant1(dB)
2.4GHz	-19.5
2.45GHz	-21.7
2.5GHz	-16.7

4.3 3D total Peak Gain & Efficiency

Frequency	M.gear	
	Ant1	
	Peak Gain (dBi)	Efficiency (%)
2.412GHz	2.1	55%
2.437GHz	2.2	58%
2.472GHz	2.4	63%