



M.gear

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


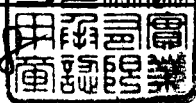
PART NAME: PIFA Antenna

PART NO:

REVISION:

W. Y. P/NO: C147-510649-A(SSR-210213)

REV: X1

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY :	Andrew 	
DATE :	2010.01.28 	

WHA YU GROUP

WHA YU INDUSTRIAL CO., LTD.(HEAD OFFICE)

華裕實業股份有限公司

Address: No. 326, Sec. 2, Kung Tao 5 Road, Hsin Chu City, Taiwan, R.O.C.

Tel:+886-3-5714225(REP.) Fax:+ 886-3-5713853 · + 886-3-5723600

DONGGUAN AEON TECH CO.,LTD.(CHINA)

東莞台霖電子通訊有限公司

Address:Hupan Industrial District,Tai Ling Shan Town,Dong Guan City,Guangdong,China

Tel:+86-769-85655858 Fax:+86-769-85655258

SUZHOU AEON TECH CO.,LTD(CHINA)

蘇州華廣電通有限公司

Address:Limin North Road, LiLi Town,LiLi Industrial Park,LinHu Economic Zone

Wujiang City,Jiangsu Province,China

Tel:+86-512-63627980 Fax:+86-512-63627981

AEON TECH (SHANGHAI) CO.,LTD(CHINA)

普翔電子貿易(上海)有限公司

Address:Flat 501,5F,Build 27, NO.68,Guiqing Road, Huhui District, Shanghai,China

Tel:+86-21-64959151 Fax:+86-21-64959059

DONGGUAN PARNER TECH CO.,LTD.(CHINA)

東莞倍能電子有限公司

Address:Hupan Industrial District, Shida Road, Tai Ling Shan Town,

Dong Guan City, Guangdong, China

Tel:+86-769-81662366 Fax:+86-769-81602681

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PIFA Antenna

Specification

1. Electrical Properties (With housing)

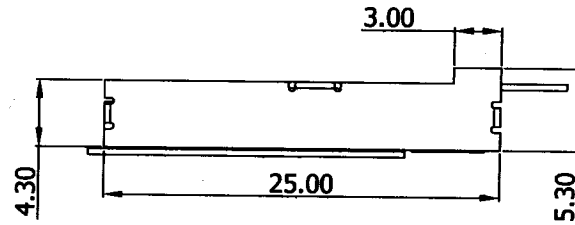
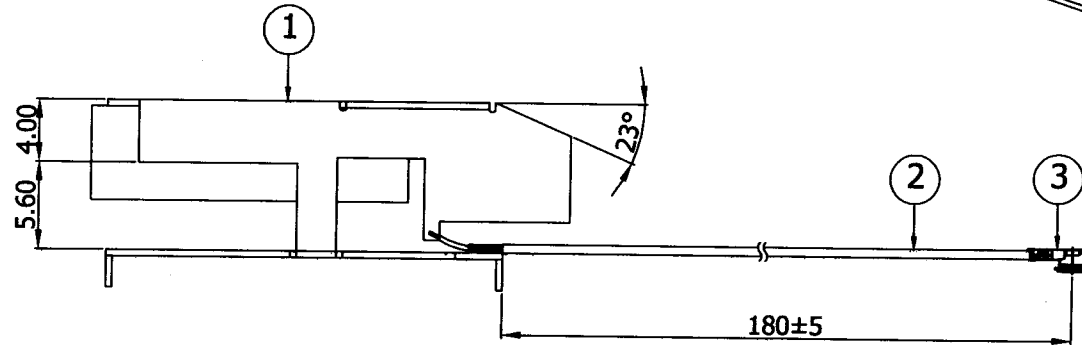
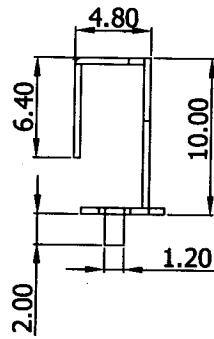
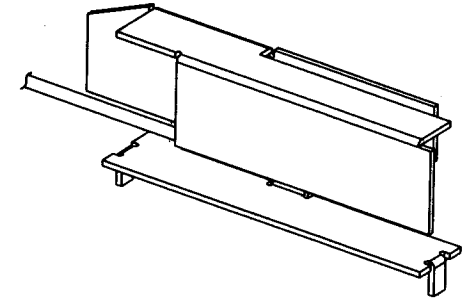
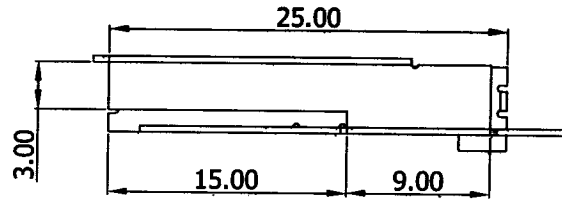
- 1.1 Frequency Range.....2.4GHz ~ 2.5GHz / 4.9GHz ~ 5.825GHz
- 1.2 Impedance 50Ω Nominal
- 1.3 VSWR 1.92:1 Max.
- 1.4 Return Loss..... -10 dB Max.
- 1.5 Radiation Omni-directional
- 1.6 Gain(peak).....3.3dBi (excluding cable loss)@2.4GHz ~ 2.5GHz
5.7dBi (excluding cable loss)@4.9GHz ~ 5.825GHz
- 1.7 Cable Loss..... 0.59dB Max.@2.4GHz ~ 2.5GHz
0.89dB Max.@4.9GHz ~ 5.825GHz
- 1.8 Polarization..... Linear ; Vertical
- 1.9 Admitted Power..... 1W
- 1.10 Cable..... φ1.13 Coaxial Cable ; Gray
- 1.11 Connector..... MHF

2. Physical Properties :

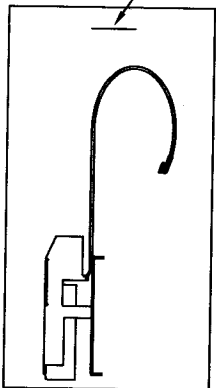
- 2.1 Operating Temp.-10°C ~ +60°C
- 2.2 Storage Temp.-10°C ~ +70°C

CG-

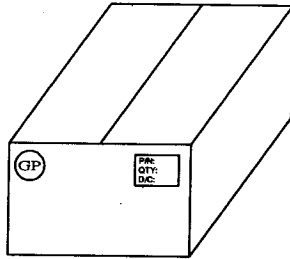
REV	DATE	DESCRIPTION
X1	1/25-2010	New Issue



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	MHF Connector	1
2	Cable	φ1.13 Coaxial Cable ; Gray	1
1	PIFA	SUS430 Nickel-Plating	1

CUSTOMER'S SIGNATURE	XX ±5	APPROVED	CUSTOMER: 中磊	
	X ±3.0	Andrew		PART NO :
	.X ±1.0	CHECKED		PARTNAME: PIFA Antenna
	.XX ±0.5	陳信仁		W.Y P/NO : C147-510649-A
	.XXX ±0.1	DRAWING		REV UNIT FILE : SSR-210213
			X1 m/m SHEET : 1/1	

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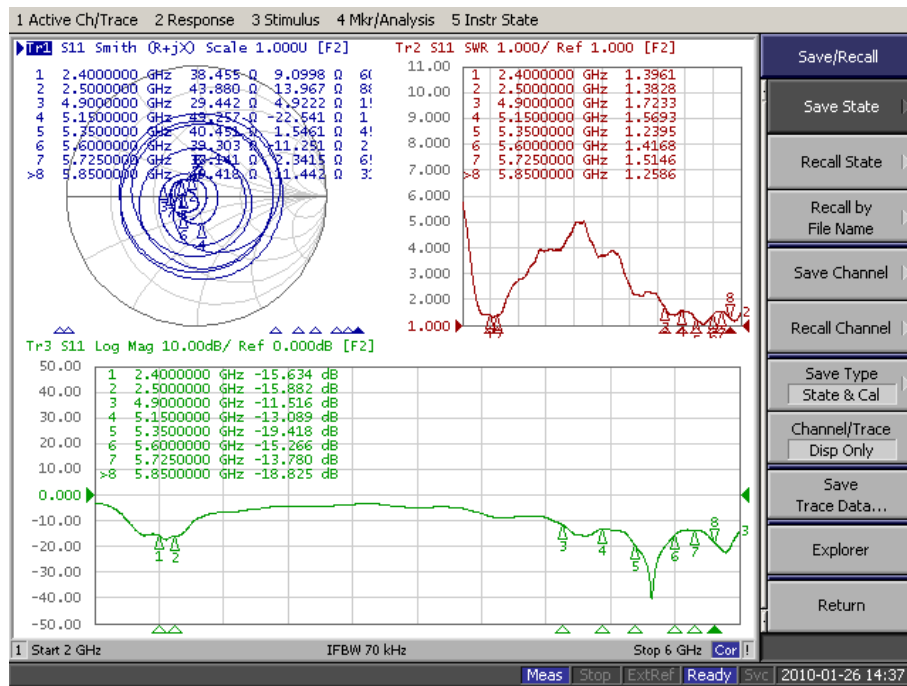
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1 S-parameter test results

1.1 S11 test results

1.1.1 M.gear

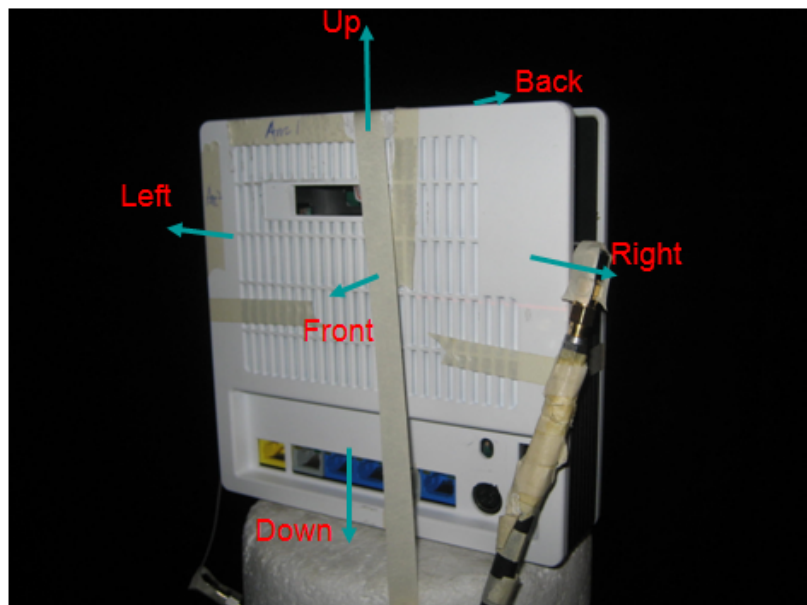
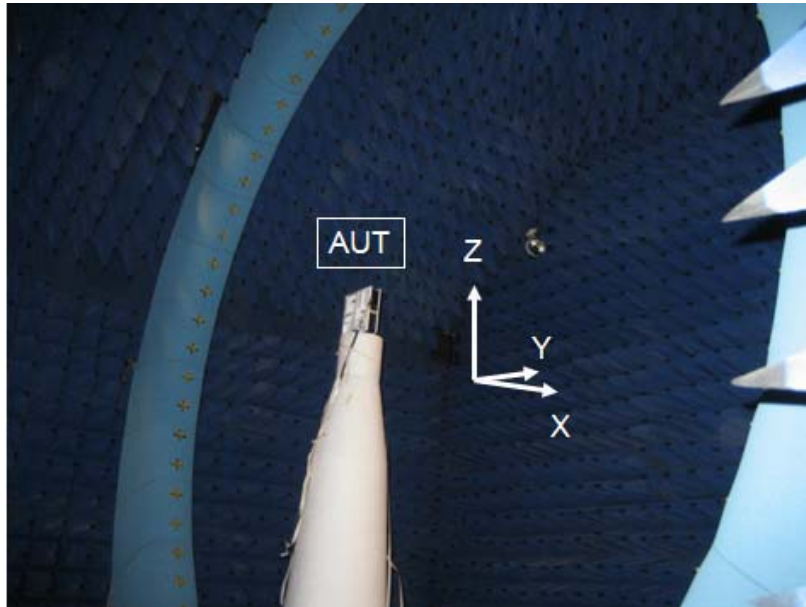
1.1.1.1 Ant2



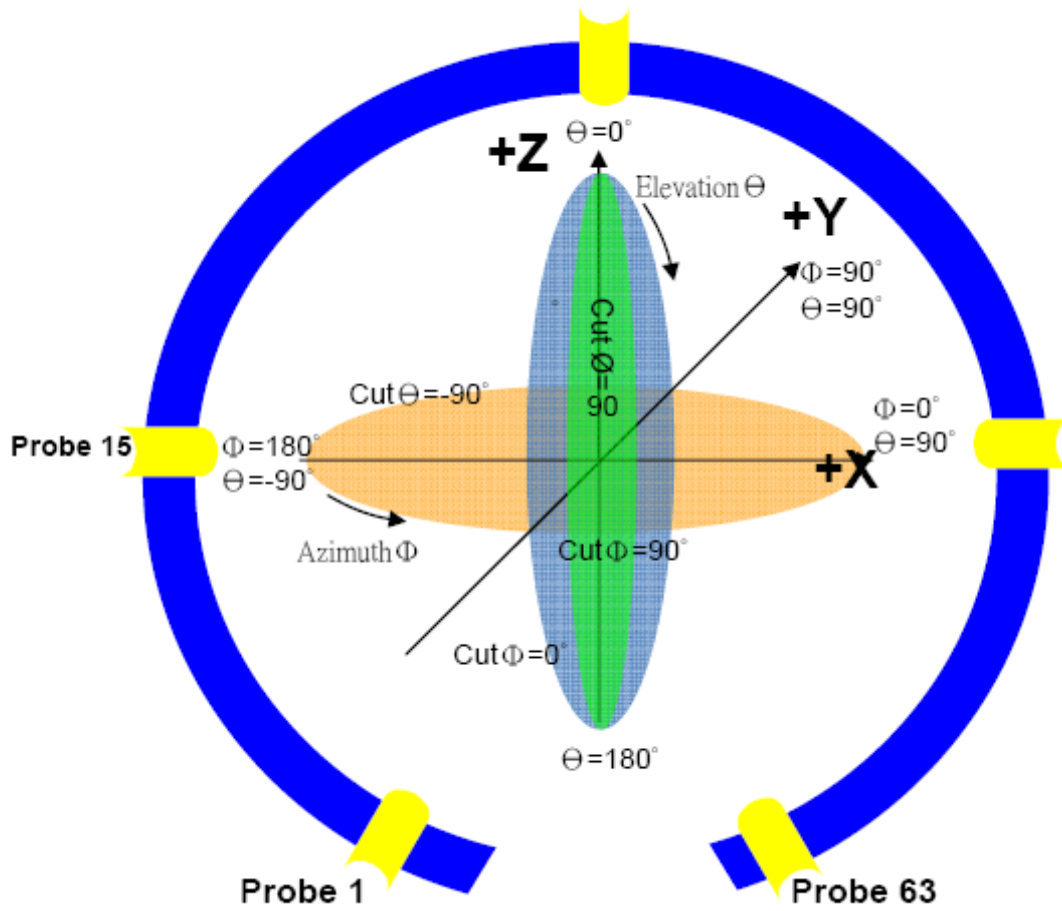
2 Gain & Patterns test results

2.1 Measurement setting

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



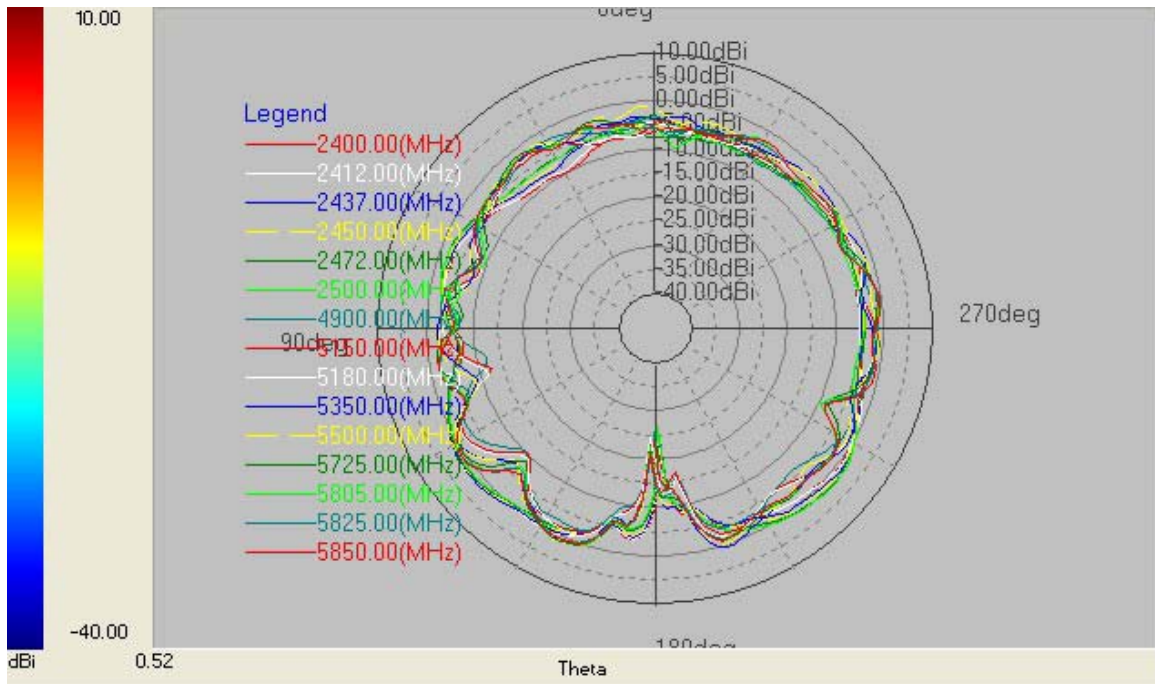
	θ	φ
Total angle	175°	360°
How many angle scan one point	5°	5°
Total scan point	36	73

2.2 2D patterns

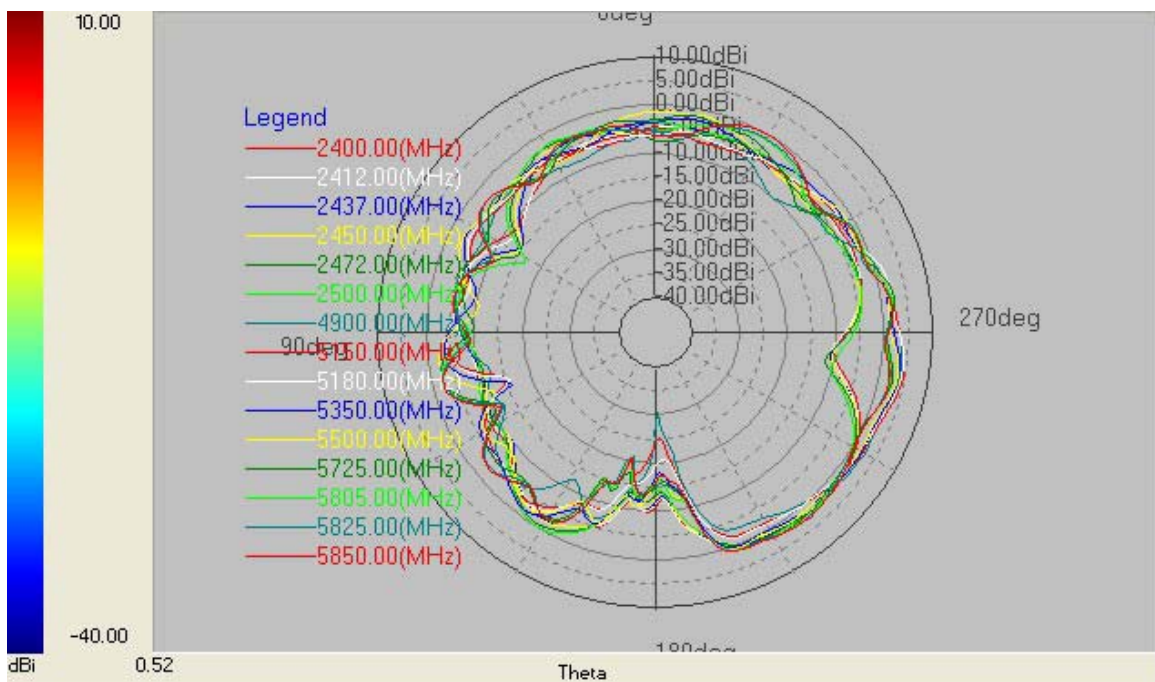
2.2.1 M.gear

3.2.1.3 Ant2

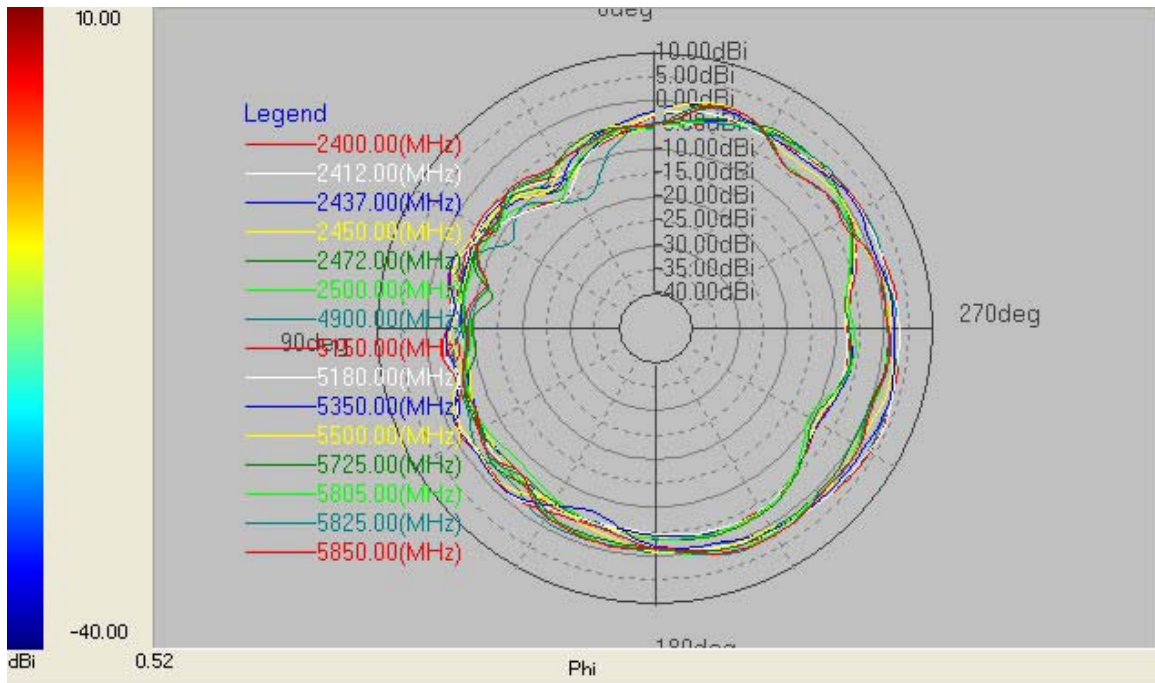
2.4~2.5GHz/4.9~5.825GHz



X-Z Plane (E-total)



Y-Z Plane (E-total)



X-Y Plane (E-total)

4 Summary

4.1 Return Loss

	Ant2(dB)
2.4GHz	-15.6
2.5GHz	-15.9
4.9GHz	-11.5
5.15GHz	-13.1
5.35GHz	-19.4
5.6GHz	-15.3
5.75GHz	-13.8
5.85GHz	-18.8

4.3 3D total Peak Gain & Efficiency

Frequency	Ant2	
	Peak Gain (dBi)	Efficiency (%)
2400MHz	3.3	50%
2412MHz	3.3	50%
2437MHz	3.1	50%
2450MHz	3.1	51%
2472MHz	2.9	52%
2500MHz	2.7	50%
4900MHz	5.0	53%
5150MHz	5.7	58%
5180MHz	5.6	58%
5350MHz	5.1	63%
5500MHz	4.9	61%
5725MHz	4.3	56%
5805MHz	4.4	57%
5825MHz	4.1	57%
5850MHz	4.2	59%