

Shenzhen Yingyixin Technology Co., Ltd.

Address: Room 2F293, Gushu Huating, No.38 Gushu 1st Road, Guxing Community, Xixiang Subdistrict, Bao'an District, Shenzhen City

承認書

SPECIFICATION FOR APPROVAL

客 戶： 千幻实业

Customer

项目名： GL02-1300 项目

Project

品 名： 2.4G+5G WIFI 双频天线

Description

料 號： 2WF2415A-FBT-A

Part Number

日 期： 2026 年 01 月 16 日

Date Year Month Day

承認人簽章

Signature

制定 Responsible	审核 Approve	客户确认 Confirm
	 Contact: 15814739800 工程专用章	

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±1 X.X=±0.1 X.XX=±0.01



盈亿芯

盈亿芯科技有限公司

Yingyixin Technology Co., Ltd

SCALE :

UNIT : mm

DRAWN BY : 李浩

CHECKED BY : 庄志林

DESIGNED BY : 庄志林

APPROVED BY : 黄志雄

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TITLE : 2WF2415A-FBT-A Specification

DOCUMENT
NO.

PAGE REV.
P0

1. Electrical Specification :

Those specifications were specially defined for 千幻实业-GL02-1300 项目 WIFI model, and all characteristics were measured under the model's handset testing jig .

1-1. Frequency Band:

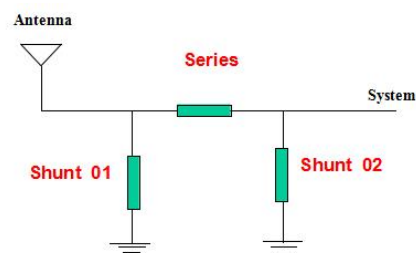
Frequency Band	MHz
Wi-Fi	2400-2500/5000-5800

1-2. Impedance

50 ohm nominal

1-3. Antenna Matching Network

Location	capacitor	Inductor
Shunt 01	N/A	N/A
Series	N/A	N/A
Shunt 02	N/A	N/A



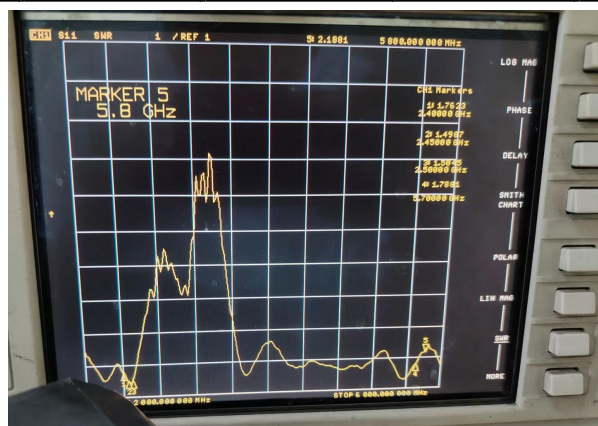
2. VSWR

2-1 Measuring Method

1. A 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,
2. Keeping this jig away from metal at least 20cm.

2-2 Measurement frequency points and VSWR value

Frequency (M Hz)	2400	2450	2500	5700	5800
VSWR	1.76	1.49	1.53	1.78	2.04



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3. Efficiency and Gain

- 量测仪器: 微波暗室, Agilent 网络分析仪, Agilent 频谱分析仪, 8960 综合测试仪, 标准天线。
- 微波暗室说明:

这是本公司设置在深圳的微波暗室, 本微波暗室是属于一套远场量测系统,暗室的大小为 5.0 米 x3.0 米 x3.0 米 , 静区尺寸(Quiet zone)大小为 15 厘米 x15 厘米 x15 厘米。

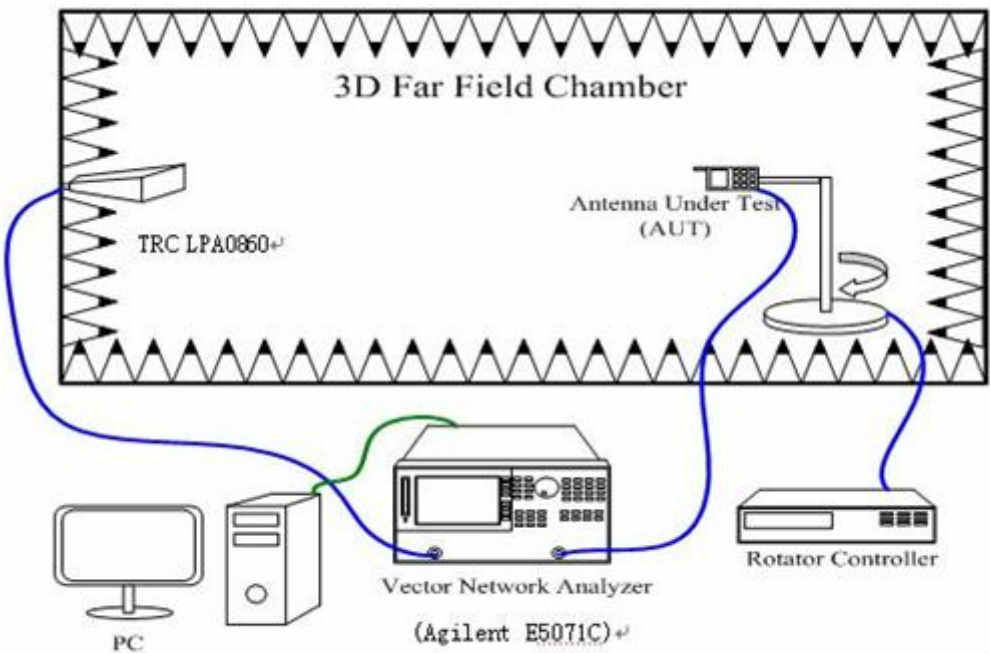


图. 1. 微波暗室内仪器设置 r.

图. 1 为微波暗室内的仪器设置及网络分析仪的联接图, 发射天线(0.8-6.0GHZ for Gain Calibration)到待测天线(AUT)的距离为 3.0 米, 待测天线放置在旋转平台上,藉由控制转台旋转的角度可对待测天线做概略性及较为准确的量测。

将待测天线放置于旋转台上,并测得其各个平面(ZY 平面及 ZX 平面)的 360 度场强数据。再将待测天线换置成标准偶极天线将其 360 度的场强数据测出, 以作换算增益标准值, 经由式 1 的换算即可获得待测天线的增益值及方向图。

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		PAGE 3 OF 5	

3-1 Measuring Method

1. Using a low loss coaxial cable to link a standard handset jig,
2. Fixed this handset jig on chamber's rotator plane,
3. Linking jig into network analyzer port and using a probing horn antenna to collect data,
4. Using another standard gain horn antenna to calibrated those data.

3-2 Efficiency and Gain Value

Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400	52.82	1.68
2410	51.22	2.17
2420	50.73	2.06
2430	57.69	2.49
2440	49.02	2.62
2450	53.9	2.2
2460	52.18	2.82
2470	55.27	2.24
2480	55.43	2.3
2490	50.73	1.79
2500	58.57	1.59

Freq	Effi	Gain
(MHz)	(%)	(dBi)
5100	55.05	1.24
5200	56	2.23
5300	55.84	2.04
5400	55.21	1.9
5500	56.11	1.82
5650	56.71	1.84
5700	57.73	1.63
5750	57.92	1.61
5800	58.53	2.53

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 $X = \pm 1$ $X.X = \pm 0.1$ $X.XX = \pm 0.01$



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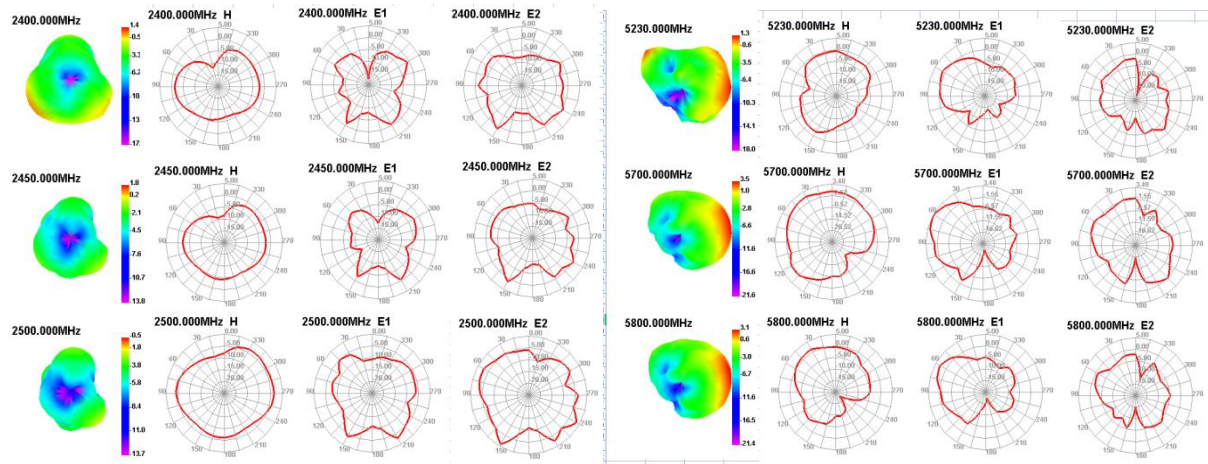
TITLE : 2WF2415A-FBT-A Specification

DOCUMENT
NO.

PAGE REV.
P0

5850	44	1.72
5900	42.6	2.07

3-3 2D&3D Pattern



频段	802.11b/11Mbps			802.11g/54Mbps		
信道	1	6	12	1	6	12
TRP	14.95	15.12	14.97	12.94	12.92	13.01
TIS			-83.16			-80.36

频段	802.11n/MCS7			802.11a/54Mbps		
信道	1	6	12	36	60	161
TRP	12.99	13.05	12.86	13.04	13.15	13.63
TIS			-80.11			-67.09

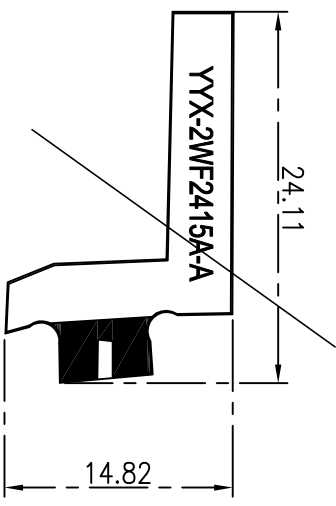
4. Mechanical Specification:

Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing Figure 4-1

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		PAGE 5 OF 5	

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			A0							



黑色油墨 白色字符

- 技术要求:
1. 绿色阴影部分为电路，黄色部分为漏焊接点镀金走线部分，镀金厚度为0.5um;
 2. 表面黑油，基材采用PI，电解铜，天线总厚度为0.12±0.03mm（不含离型纸），3M300胶纸;
 3. 打*为重点尺寸公差±0.05;
 4. 所有材料符合环保ROHS标准。

深圳市盈亿芯科技有限公司

DRAW NO.		DATE		DRAW NAME: 2WF2415A-FBT-A			
DESIGN:				FILE:		P/N NO:	
CHECK:				QT'Y:		DRAWING NO:	
APPROVED:				SCALE: 1:1		UNIT: mm	
				REV. A		SCALE N/A	
						SHEET: N/A	

DM	TOL	DM	TOL
XX	±0.25	XX	±5.0°
XX	±0.20	XX	±3.0°
XXX		XXX	±1.0°