

深圳市华信科技有限公司

承认书

SPECIFICATION FOR APPROVAL

客 户：元铂

Customer

项目名：8788

Project

品 名： WIFI 天线

Description

料 號： HX-W2215-150-11-A

Part Number

日 期： 2024 年 11 月 19 日

Date Year Month Day

承 认 人 簽 章

Signature

1. Electrical Specification :

Those specifications were specially defined for 元铭 WIFI model, and all

制定 Responsible	审核 Approve	客户确认 Confirm
	Contact: 13410001990	

UNLESS OTHER SPECIFIED TOLERANCES ON:

X=±1 X.X=±0.1 X.XX=±0.01

ANGLES=± HOLE DIA=±

SCALE: UNIT: mm

DRAWN BY: CHECKED BY:

DESIGNED BY: APPROVED BY: 程海耀

TITLE: HXW2215-150-11-A Specification

DOCUMENT
NO.

PAGE REV.
P0

深圳华信科技有限公司

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF HUAXIN TECHNOLOGY CO.,LTD. AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION.

characteristics were measured under the model's handset testing jig .

1-1. Frequency Band:

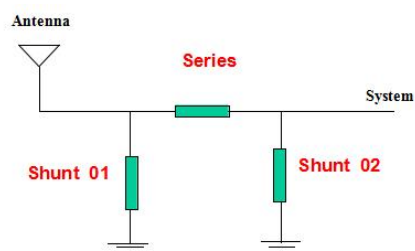
Frequency Band	MHz
Wi-Fi/BT	2400-2500
Wi-Fi	5150-5850

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 50 Ω 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.

Frequency (MHz)	2400	2450	2500	5720	5850
VSWR	1.72	1.59	1.52	2.36	2.12

2-2 Measurement frequency points and VSWR value



UNLESS OTHER SPECIFIED TOLERANCES ON:

X=±1 X.X=±0.1 X.XX=±0.01

ANGLES=± HOLE DIA=±

SCALE: UNIT: mm

DRAWN BY: CHECKED BY:

DESIGNED BY: APPROVED BY: 程海耀

TITLE: HXW2215-150-11-A Specification

DOCUMENT
NO.

PAGE REV.
P0

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。

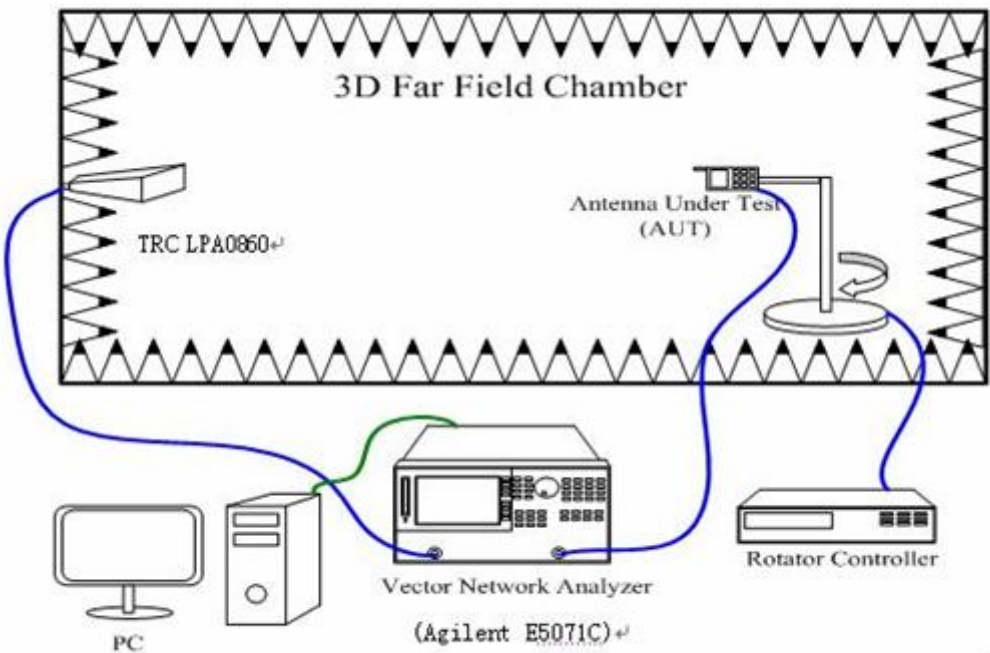


图. 1. 微波暗室内仪器设置 r.

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。

UNLESS OTHER SPECIFIED TOLERANCES ON: X=±1 X.X=±0.1 X.XX=±0.01 ANGLES=± HOLE DIA=±		深圳华信科技有限公司	
SCALE:	UNIT: mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF HUAXIN TECHNOLOGY CO.,LTD. AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION.	
DRAWN BY:	CHECKED BY:		
DESIGNED BY:	APPROVED BY: 程海耀		
TITLE: HXW2215-150-11-A Specification		DOCUMENT NO.	PAGE REV. P0
		PAGE 3 OF 5	

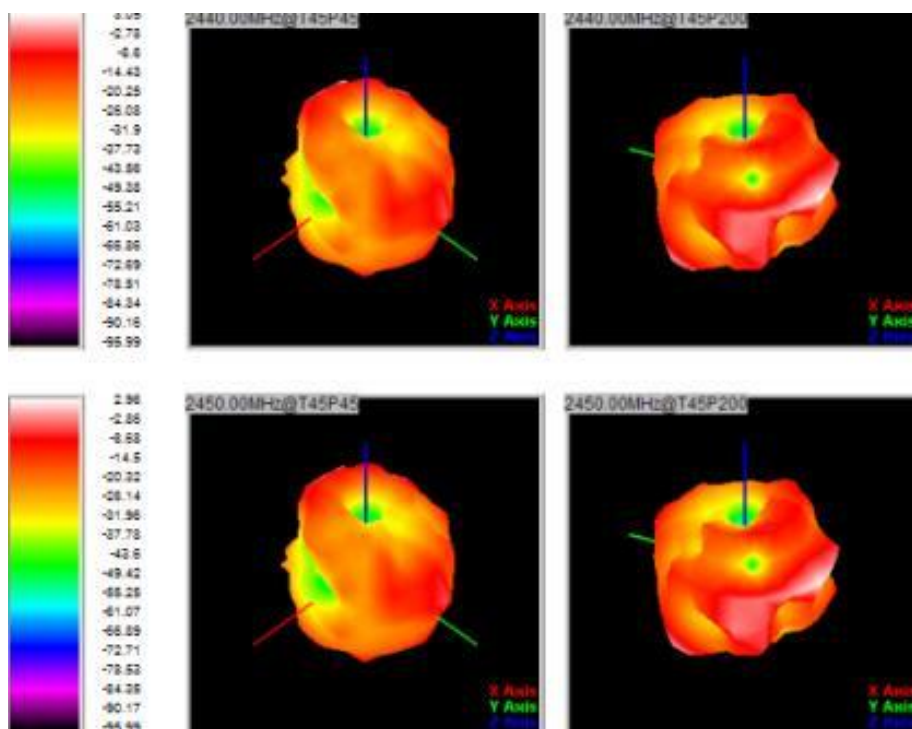
3-1 Measuring Method

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

Frequency (MHz)	Efficiency (%)	Average GAIN (dB)	Peak GAIN (dBi)
2400	43.64	-3.46	1.50
2450	44.73	-3.27	1.07
2490	45.62	-3.19	1.12
5150	38.92	-3.41	5.64
5850	40.19	-3.23	3.57

3-3 3D Pattern

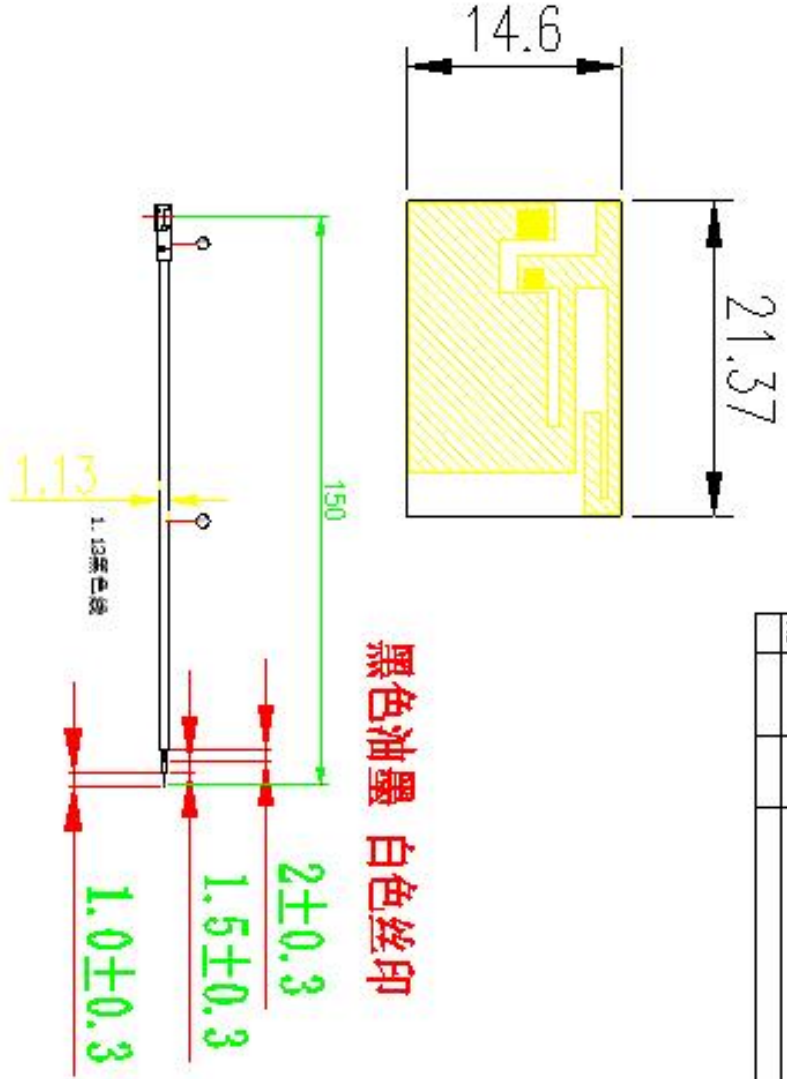


4. Mechanical Specification:

Mechanical Configuration (Unit: mm)
according to drawing Figure 4-1

The appearance of the antenna is

UNLESS OTHER SPECIFIED TOLERANCES ON: X=±1 X.X=±0.1 X.XX=±0.01 ANGLES=± HOLE DIA=±		深圳华信科技有限公司	
SCALE:	UNIT: mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF HUAXIN TECHNOLOGY CO.,LTD. AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION.	
DRAWN BY:	CHECKED BY:		
DESIGNED BY:	APPROVED BY: 程海耀		
TITLE: HXW2215-150-11-A Specification		DOCUMENT NO.	PAGE REV. P0



- 要求:
1. 材料: FPC, 一对半电解铜, 表面做雾面黑油, 镀点抗氧化。
 2. 双面胶用3M-300, 边缘不能露铜。
 3. 表面不可以有污染物、擦伤、黑点, 边缘部分不能出现毛刺等现象。
 4. 用1代端子, 1.13黑色同轴线, 焊接端口朝上

REV.	DATE	BY	CHK.	APP.
1.0	2023.08.08	WZ	WZ	WZ
1.1	2023.08.08	WZ	WZ	WZ
1.2	2023.08.08	WZ	WZ	WZ

DRAWN NO.		DATE		DRAW NAME: WZ215-150-11-A		P/N NO.	
DESIGN NO.		24/8/28		FILE:		DRAWING NO.	
CHECK:				SCALE: 1:1		SHEET: N/A	
APPROVED:				REV. A		SCALE N/A	

REV.	EDN NO.	LOCAS.	DESCRIPTION	DATE	DESIGN
1.0					

UNLESS OTHER SPECIFIED TOLERANCES ON:
X=±1 X.X=±0.1 X.XX=±0.01
ANGLES=± HOLE DIA=±

SCALE: UNIT: mm
DRAWN BY: CHECKED BY:
DESIGNED BY: APPROVED BY: 程海耀

TITLE: HXW2215-150-11-A Specification

深圳华信科技有限公司

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF HUAXIN TECHNOLOGY CO.,LTD. AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION.

DOCUMENT NO.		PAGE REV.
		P0