

KINTER NEW INDUSTRIAL TECHNOLOGY CO., LTD

SPECIFICATION FOR APPROVAL

Customer: Shenzhen Medica Technology
Development Co., Ltd

Project: EW202W

Description: WIFI Antenna

Part Number : W2411B-F1C1B-055-A

Date : 2019 . 11 . 15

Signature

Responsible	Approve	Confirm
	Contact: 18688745790 TEL:+86-755-23025852	

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±1 X.X=±0.1 X.XX=±0.01

ANGLES=± HOLE DIA=±

SCALE : UNIT : mm

DRAWN BY : 王浩 CHECKED BY : 黄志雄

DESIGNED BY : 方坤华 APPROVED BY : 易珂湘

TITLE : W2411B-F1C1B-055-A Specification



肯特新工业技术有限公司

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1. Electrical Specification :

Those specifications were specially defined for *Shenzhen Medica Technology Development Co., Ltd EW202W* WIFI model, and all characteristics were measured under the model's handset testing jig .

1-1. Frequency Band:

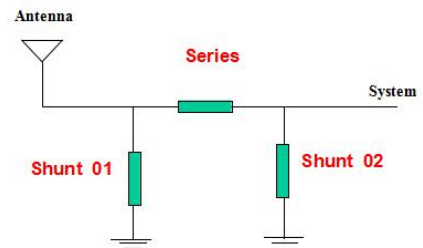
Frequency Band	MHz
Wi-Fi	2400-2500

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



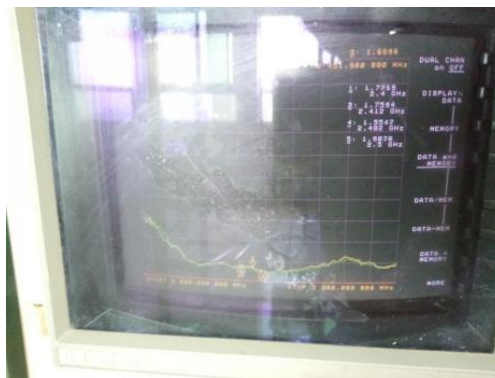
2. VSWR

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 (MHz)	2400	2450	2500
VSWR	1.70	1.66	1.50



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3. Efficiency and Gain

- **Measuring instrument:** Microwave anechoic chamber, Agilent network analyzer, Agilent spectrum analyzer, 8960 integrated tester, standard antenna.
- **Microwave darkroom instructions:**

This is our company's microwave anechoic chamber located in Shenzhen. This microwave anechoic chamber belongs to a far-field measurement system, with a size of 5.0 metersX3.0m x 3.0m, Quietzone size is 15cm x 15cm x 15cm.

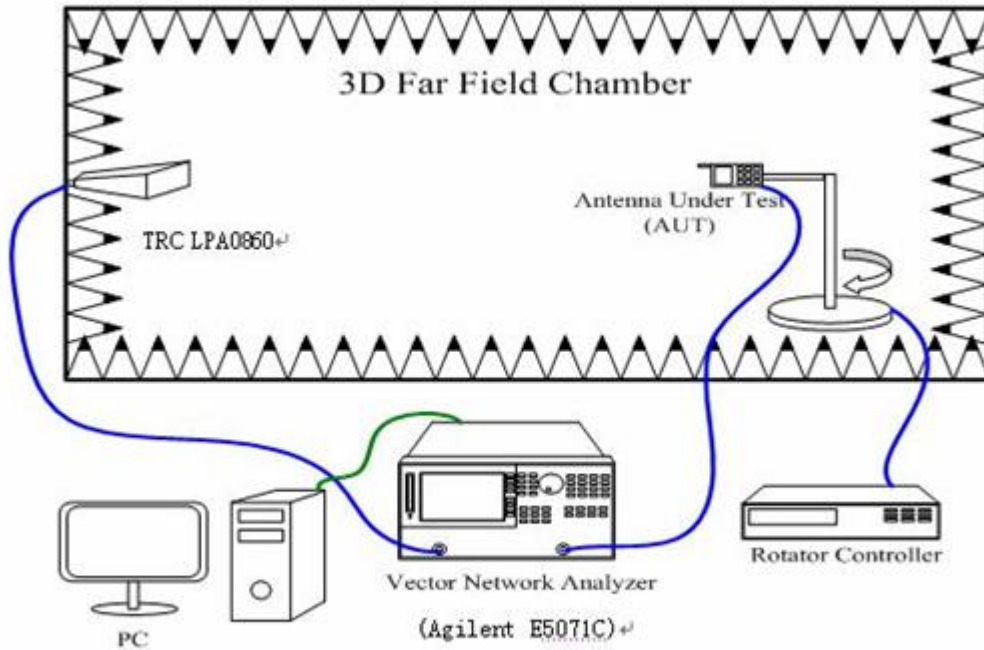



图. 1. 微波暗室内仪器设置 r.

Figure 1 shows the instrument settings in the microwave anechoic chamber and the connection diagram of the network analyzer. The distance from the transmitting antenna (0.8-6.0GHz for GainCalibration) to the antenna to be measured (AUT) is 3.0 meters. The antenna to be measured is placed on the rotating platform. By controlling the rotating angle of the turntable, the antenna to be measured can be measured roughly and accurately.

Place the antenna to be tested on a rotating platform and measure the 360 degree field strength data of its various planes (ZY plane and ZX plane). Then, replace the antenna to be tested with a standard dipole antenna and measure its 360 degree field strength data as the standard value for conversion gain. Through the conversion of equation 1, the gain value and directional pattern of the antenna to be tested can be obtained.

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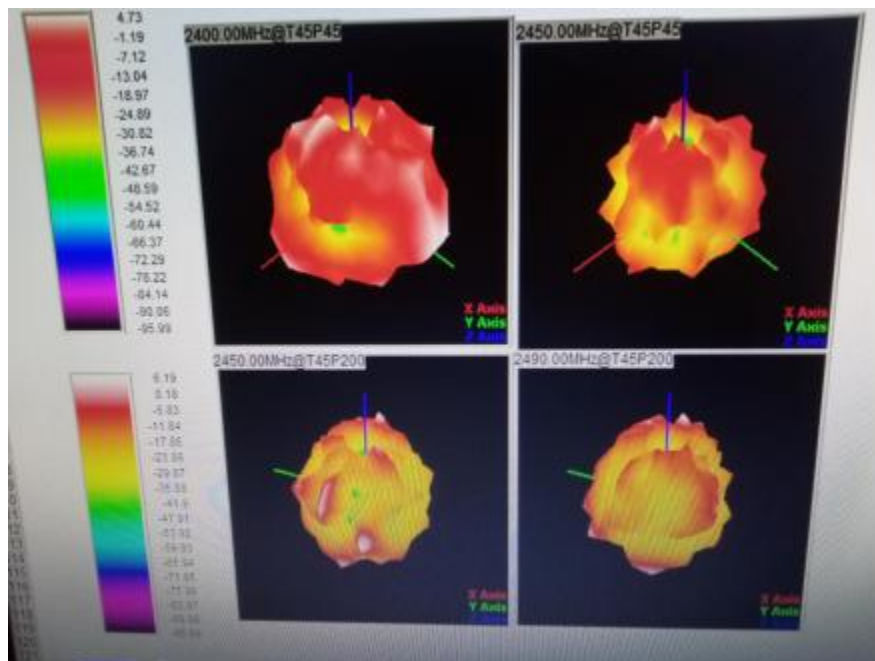
3-1 Measuring Method

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	68.52	-1.64	4.17
2450	68.90	-1.62	4.60
2490	67.80	-1.69	4.04


3-3 3D Pattern



4. Mechanical Specification:

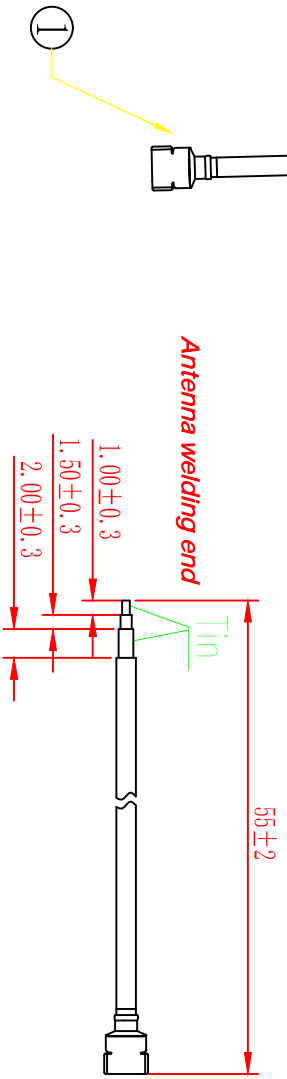
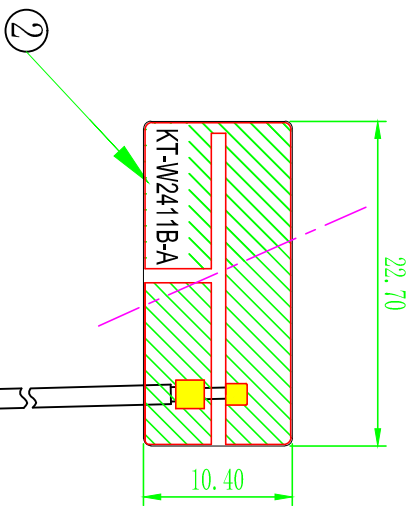
Mechanical Configuration (Unit: mm)

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

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NO.	NAME	SPECIFICATION	Q'TY
1	天线线	L=55mm 0. D.=1.13mm 黑色 1代端子开口朝下	1
2	ANTENNA	W2411B-FBT-A 黑色油墨亮黑字符	1

版次	变更内容	设计	日期
A0		黄志雄	2019-11-15



NOTES:

1. Electrical:
 - 1.1 Impedance: 50 OHM.
 - 1.2 Frequency: 2400~2500MHz
 - 1.3 Polarization :Vertical
 - 1.4 VSWR: ≤2.0
 - 1.5 Gain: 2dBi
2. Environmental:
 - 2.1 Storage Temperature Range: -30 TO +70°C.
 - 2.2 Operating Temperature Range: -30 TO +70°C.
3. All Materials Must Meet & Shall Rolls Request.


 深圳市肯特新工业技术有限公司

设计	黄志雄	2019-11-15	名称	WiFi 天线			
审核			成品料号	W2411B-F1C1B-055-A			
批准			比例	版次	单位	视图	变更标记

比例	版次	单位	视图	变更标记	变更数量
FREE	A0	mm			—