



# 深圳市迪比通通讯设备有限公司

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**SHENZHEN DIBITONG TELECOMMUNICATION TECHNOLOGY CO.,LTD.**

## 2.4G WIFI antenna

### Product design and manufacturing specifications

◆ Customer:

◆ Project: Mobvoi TicNote

◆ Name: 2.4GWIFI antenna

◆ Antenna materials: FPC

◆ Part no:

Add: Rm505, 8th building, Yungu 2nd period, pingshan No.1 Road, Xili Town, Nanshan District, Shenzhen, China

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# 目录

**1.Antenna 2D diagram**

**2.Techincal target**

**3.Test results of antenna S11 parameters**

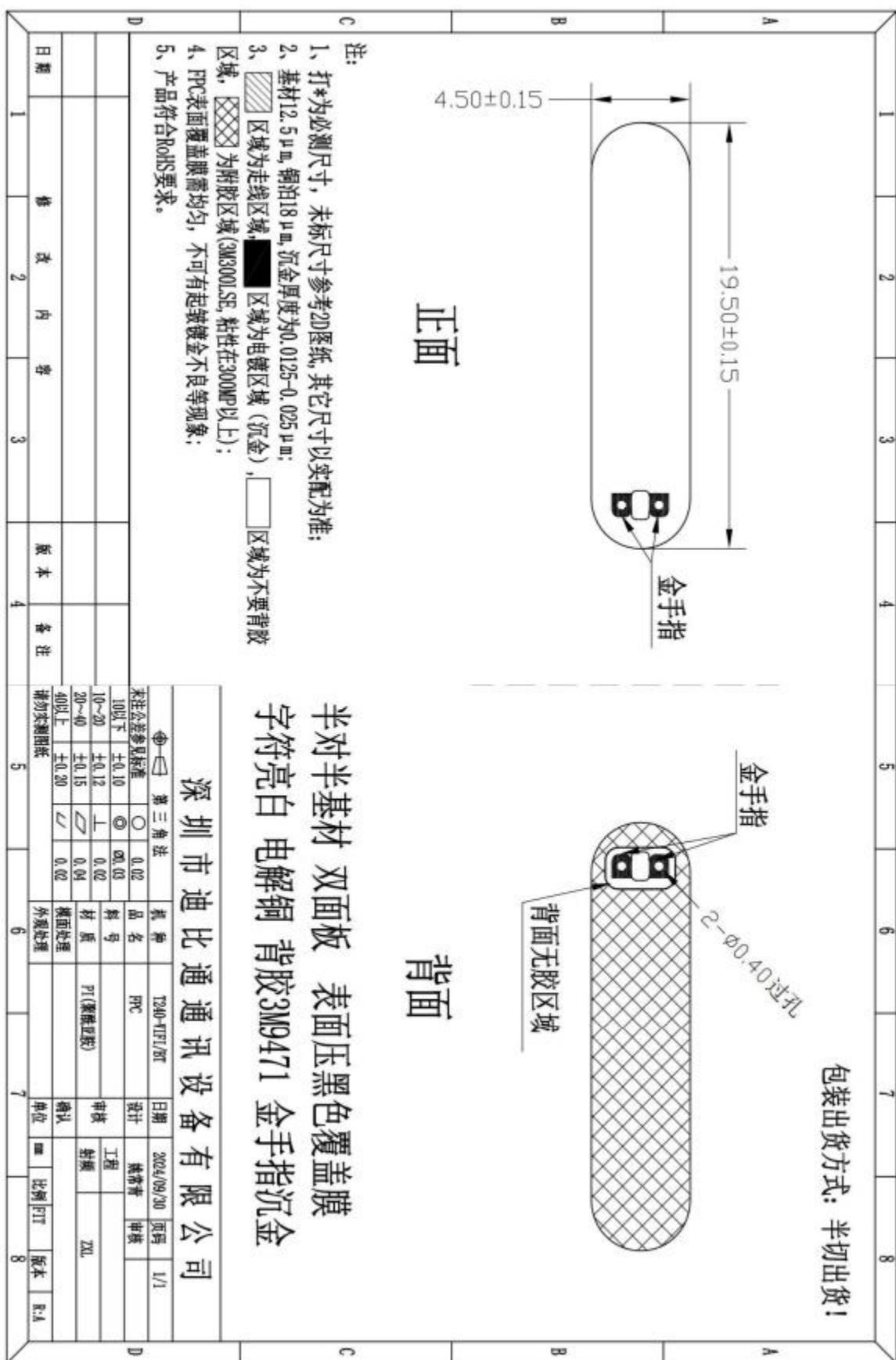
**4.Dynamic test instruction**

**5.Matching Circuit**

**6.Antenna test report**

**7.Packing method**

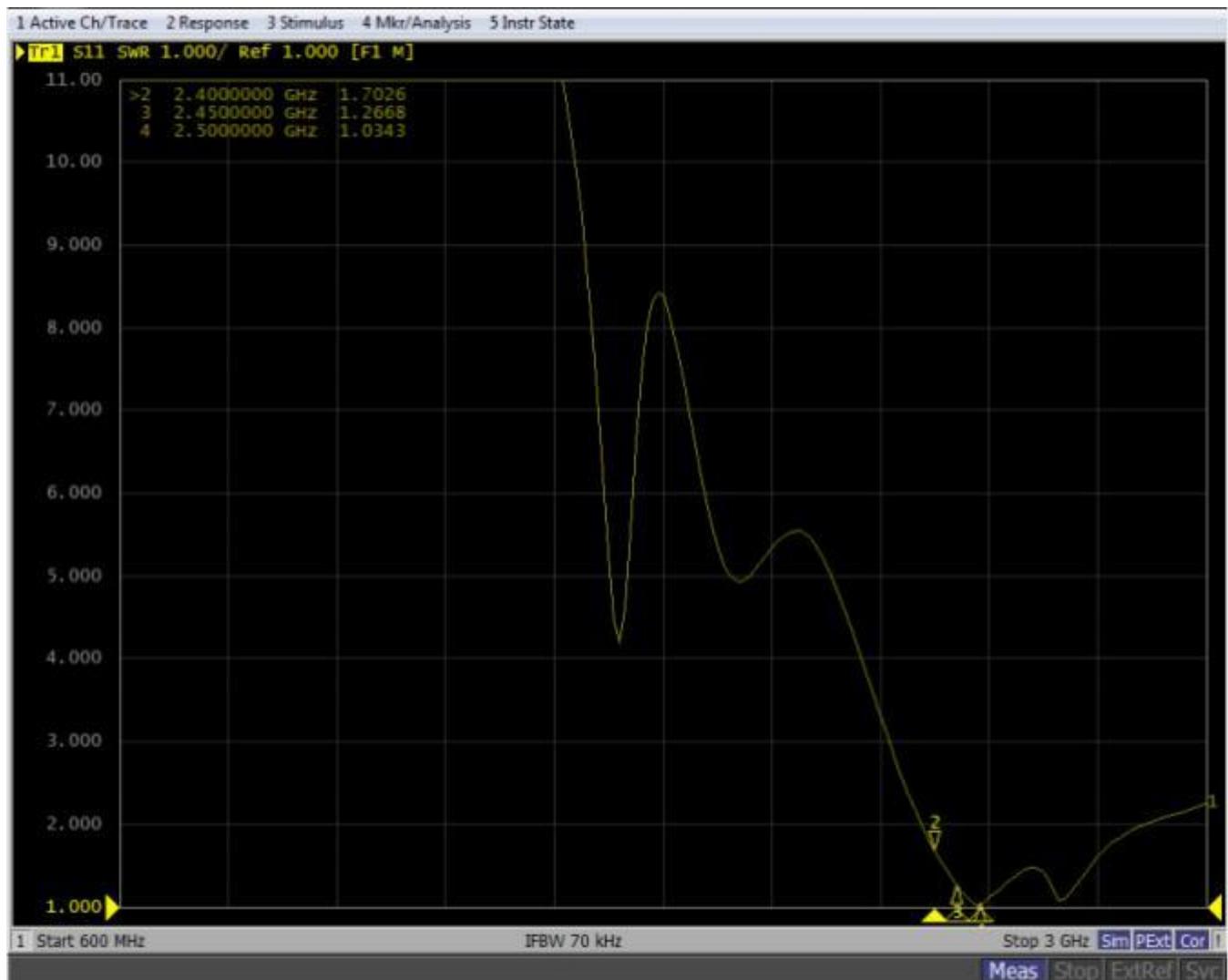
## 1. Antenna 2D diagram



## 2. Technical target

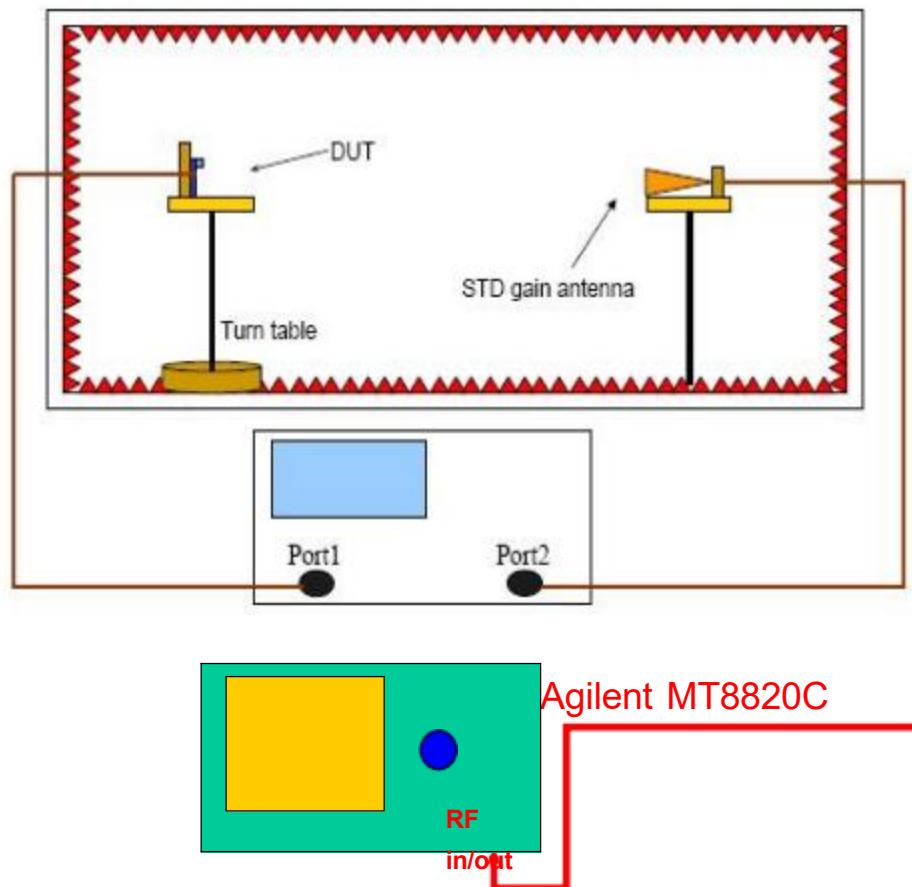
<b>A. Electrical Parameter</b>	
<b>Frequency Range</b>	<b>2400-2500MHz</b>
<b>VSWR</b>	<b>2400-2500MHz: ≤2.0</b>
<b>Gain (MAX)</b>	<b>2400-2500MHz: -6.02 dBi</b>
<b>Radiation efficiency</b>	<b>2400-2500MHz: 7.97%</b>
<b>Input Impedance</b>	<b>50 ohm</b>
<b>B. Material</b>	
<b>FPC</b>	
<b>C. Environmental Science</b>	
<b>Working Temperature</b>	<b>- 30°C ~ + 85 °C</b>
<b>Storage temperature</b>	<b>- 30°C ~ + 85 °C</b>

### 3. Test results of antenna S11 parameters

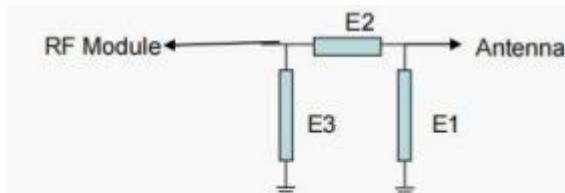


#### 4. Dynamic test instructions - Antennas are placed in electronic scales

Testing instrument : Anrits CMW500+ Anechoic Chamber 6X4X3m(3D-OTA)



#### 5. Matching Circuit



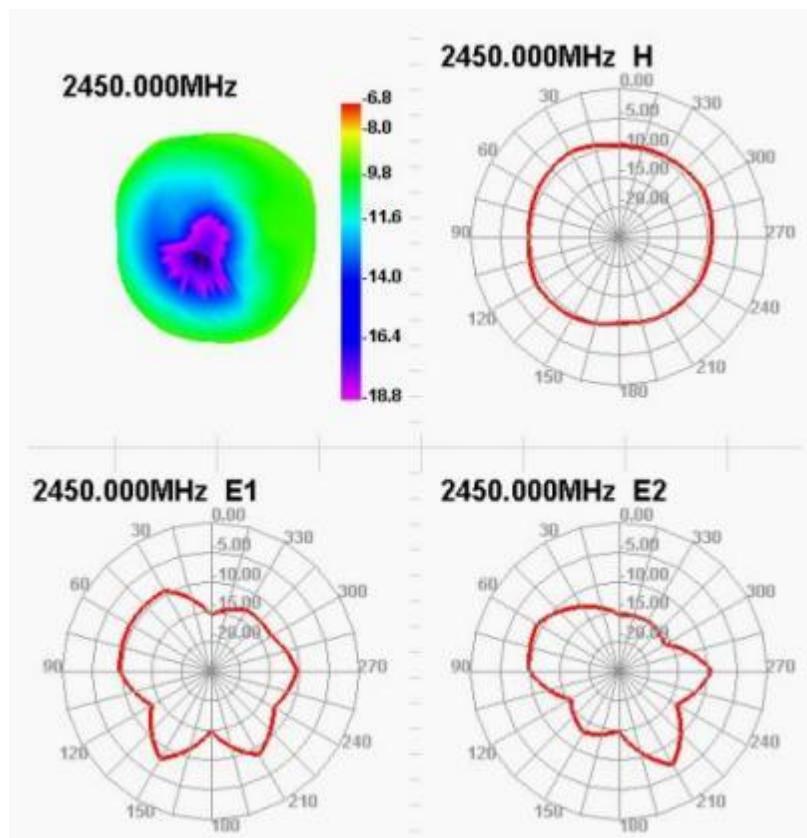
Element	2.4G WIFI
E1	NC
E2	0Ω
E3	NC

(匹配电路未做修改)

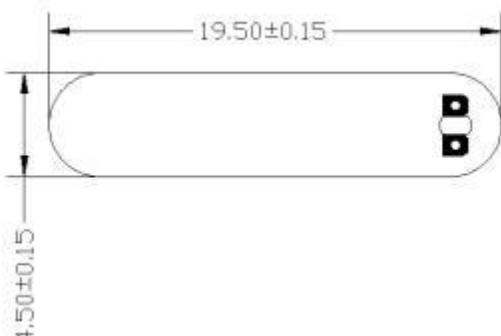
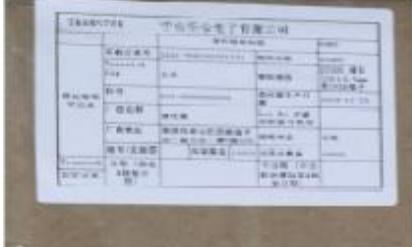
## 6.Antenna test report

Test data\_Gain/Efficiency/3D POLar plot & Radiation Pattern

Freq (MHz)	Effi (%)	Gain (dBi)
2400	7.01	-6.98
2410	5.58	-8.11
2420	6.43	-7.66
2430	9.1	-6.11
2440	7.76	-6.85
2450	8.24	-6.77
2460	9.59	-6.1
2470	7.78	-7.06
2480	7.97	-6.94
2490	9.83	-6.02
2500	8.43	-6.62



## 7.Packing method

1. drawing of the product			The product material number		
			Product name	T240_antenna	
			Product version	/	
2. Photos of all stacked layers in the box	3. Photo of the whole case after sealing				
			Number of full pages	Subject to the actual quantity!	
			Remarks: the quantity of each box shall be actual, the picture on the left side shall be for reference, and the actual goods shall be regarded as standard.		
4. A whole pack of photos	5. A photograph of the label on the surface of the entire case		Storage conditions: between -10 ° to 30 ° , humidity 70% Rh below the indoor.		
					
Note: the picture in the picture above is only used for packing standard demonstration, not for final data audit.					
Confirmor	Yang Xiaoping		Date	2025-01-05	

**Remark:**

- 1.The above test results are limited to the test prototype.
- 2.Full shell material technology, software version, accessories (camera, FPC, speaker, receiver, motor, battery, etc.), core The performance of the whole antenna will change with the change of the chip.
- 3.The change of environmental treatment (such as grounding position, size, shielding mode, etc.) of the whole machine will lead to the change of the performance of the whole machine.

**Solemnly declare:**

This antenna design and R&D intellectual property rights are owned by our company. If we find that the same products are supplied to your company without our permission, we will pursue the corresponding legal responsibility according to law. Please respect intellectual property rights. Your support is our unlimited power. Thank you for your cooperation.