

## Antenna specifications

### Antenna Sample Confirmation Form

Supplier's name Vendor Name	Shenzhen Aihui Technology Co., Ltd. ShenZhen Aihui Technology Co.,Ltd.				
Customer's name Customer's name	Jiehong				
Sample name Sample name	M2025-014				
Product model Part number	Tablet computer				
Sample specifications Specification	Main antenna line length:150mm 3Act for Conductive cloth 10x15 Silk-screen printing: <b>YBF01-LTE-AH</b> Three-in-one-line length:65mm 3Act for Conductive cloth 10x15 Silk-screen printing:YBF01-WGB-AH				
Inspection items Inspection Item	Performance test Performance	Appearance inspection Total Appearance	Organization Structure	Other Others	Test results Inspection Result
Remarks Remark					
Quality audit QA Audit		Project audit Engineer Audit	Chen Yichu	Business confirmation Sales Confirm	
The following is filled in by the customer The following are filled by Customer					

# Shenzhen Aihui Technology Co., Ltd

Customer's opinion <b>Customer Evaluation</b>	
Customer's signature/Seal <b>Signation/Chapter By Customer</b>	Date/Date: 2025. 06. 25

## Antenna Test Report

Test unit: Shenzhen Aihui Technology Co., Ltd. <b>Test by:</b> Shenzhen Aihui Technology Co., Ltd.			
<b>Material</b>	<b>FPC+Coaxial cable</b>		
<b>Antenna type</b>	<b>Monopole type</b>	<b>Polarization method</b>	<b>Linear</b>
<b>Application</b>			
<b>Band</b>	<b>GSM/WCDMA/LTE 2.4G/5.8G WIFI/BT/ Global Positioning System</b>	<b>VSWR.</b>	<b>≤2</b>
<b>Power</b>	<b>Max: Two watts ULZ 000105 Impedance</b>	<b>阻抗 Impedance</b>	<b>50Ω</b>
<b>DBi</b>	<b>≥1dBi</b>		
<b>Test equipment</b>	<b>HPE 5071C, Shielding Room, 3D automatic turntable</b>		

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**Antenna Description::**

**1. Grounding processing and picture description: no**

**2. Need to change the motherboard to match: no**

- Test voltage: 3.6V, check the antenna contact is good before testing.
- The RF cable of the integrated tester is kept in a natural state and cannot be curled.

Specification: test The Specified Power Level, All Indicators Must Conform To The specifications.

**One**, project pictures

**Two**, test tools

**Three**, antenna

matching

circuitFour , S11. Test

Four.0 **S11**. Description of the test method

4.1 **S11**. Parameter picture

**Five**, passive efficiency and gain of antenna

**6**, darkroom test equipment and data

6.0 Test equipment

6.1 Active test data

**7**、 Antenna assembly diagram

**8**、 Antenna environment treatment

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**Nine**, antenna mass production index **Ten**, structural drawings  
**One**, Project pictures

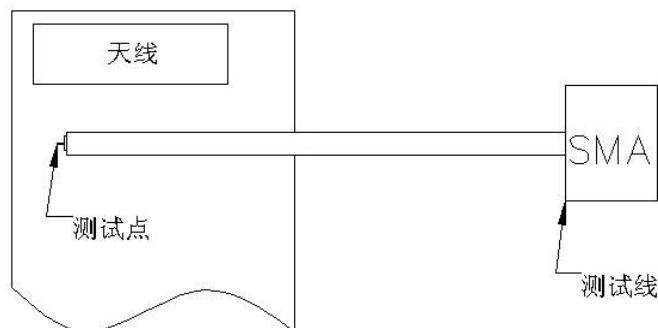
Description: The customer's final verification antenna performance prototype will be kept in our company for at least one year, which is convenient for the analysis and solution of the mass production of the antenna.

Abnormal situation, Ensure the quality of antenna shipment

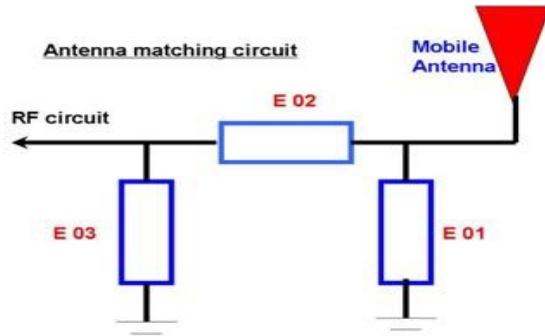
**Two**, test tools

Purpose: Test the passive parameters of the antenna as accurately as possible.

Production method: Use one mobile phone to make utensils. Fifty Ohm's coaxial cable, one end is connected to the test point at the back end of the matching circuit of the mobile phone motherboard (the front end of the radio frequency test hole), and the other end is connected SMA Joint. The schematic diagram is as follows:



**Three, antenna matching circuit**



Modify the point/**Modify**

E01.	E02	E03.
Number	Number	Number

Remarks: Matching without modification.

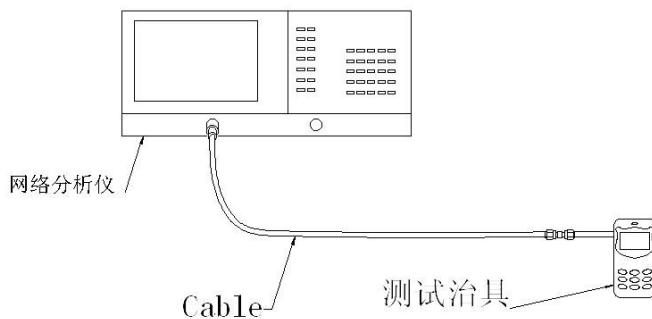
ULZ 000199 S11.

**4. S11. Test**

4.0 **S11. Test method description** test equipment: network analyzer (E5071C)

Test method: use oneFiftyOhmCableThe cable is exported from the instrument test port, and the calibration part is used to calibrate and connected to the mobile phone tool. SMAConnector, record the return loss and standing wave ratio corresponding to the relevant frequency points.

The test diagram is as follows:



Test diagram

**4.1 S11. Parameter picture**

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Main set antenna passive standing wave ratio

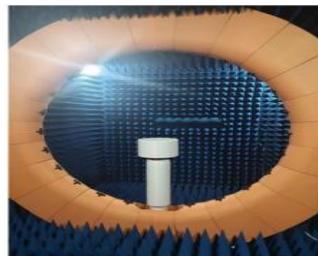
## **Five, darkroom test equipment and data**

### **6.0 Test equipment**

Test system: Shield the dark room

Test environment: Temperature **Twenty-two °C**  $\pm 3^\circ\text{C}$ , humidity 50%  $\pm 15\%$

Test equipment: When testing passive data, Use the network analyzer **Agilent E5071C** When testing active data, Use the comprehensive measuring instrument **CMW500**



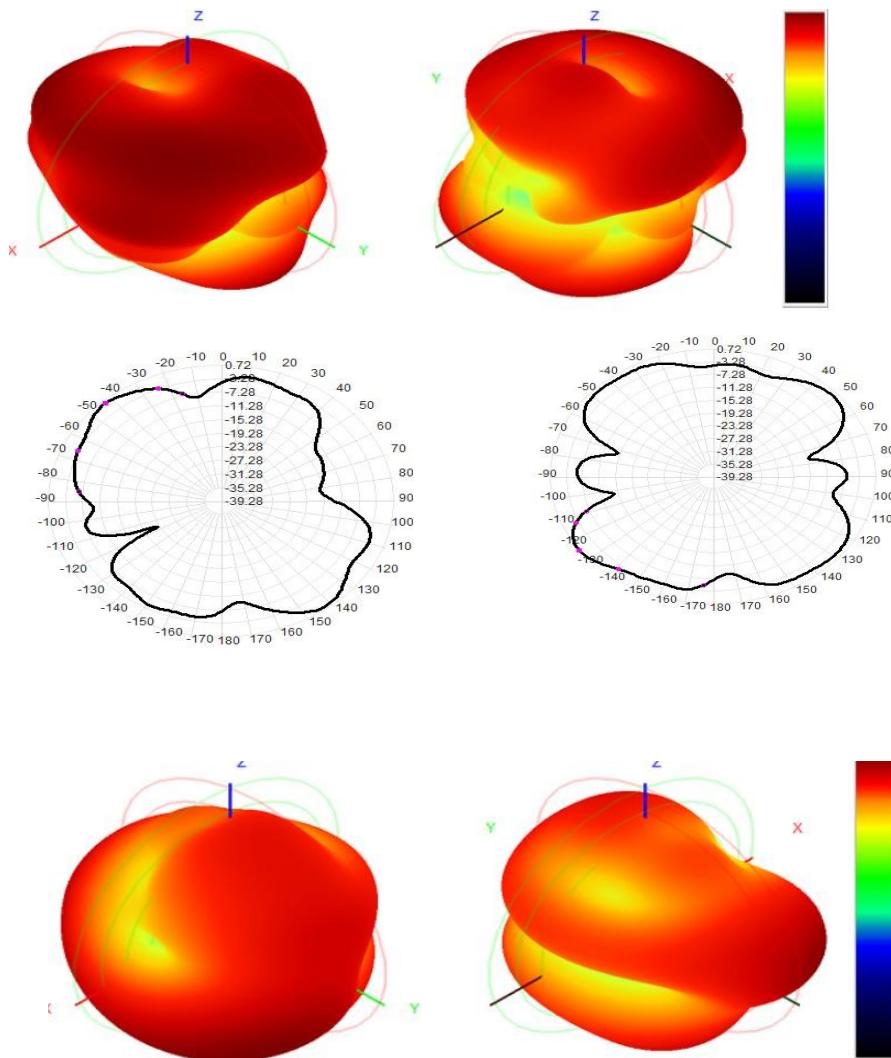
### **5.1 Antenna passive test data**

Main antenna:

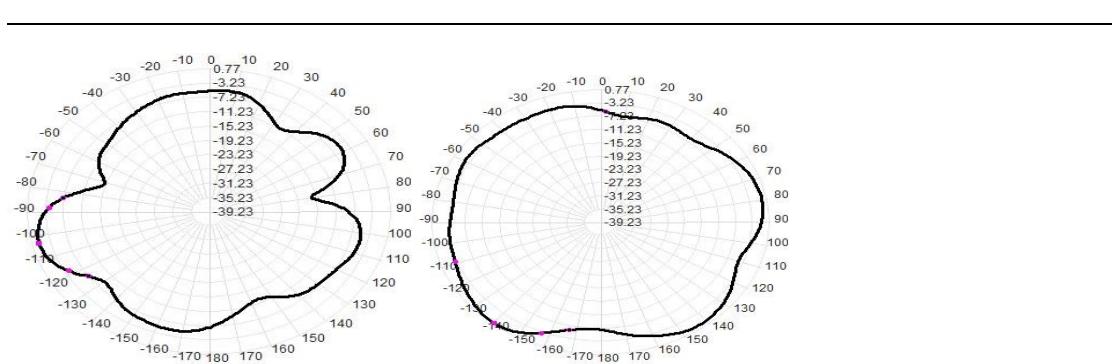
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Antenna model: YBF01-LTE-AH

Gain&Efficiency 增益和效率			
frequency 频率(Hz)	gain 增益(dB)	efficiency 效率(dB)	efficiency 效率
820M	0.72	-4.74	32.18%
840M	0.38	-4.18	33.15%
860M	0.86	-4.38	34.88%
880M	0.49	-4.55	34.17%
900M	0.92	-4.43	33.04%
920M	0.49	-4.89	32.4%
940M	0.85	-4.58	35.88%
960M	0.77	-4.69	36.78%



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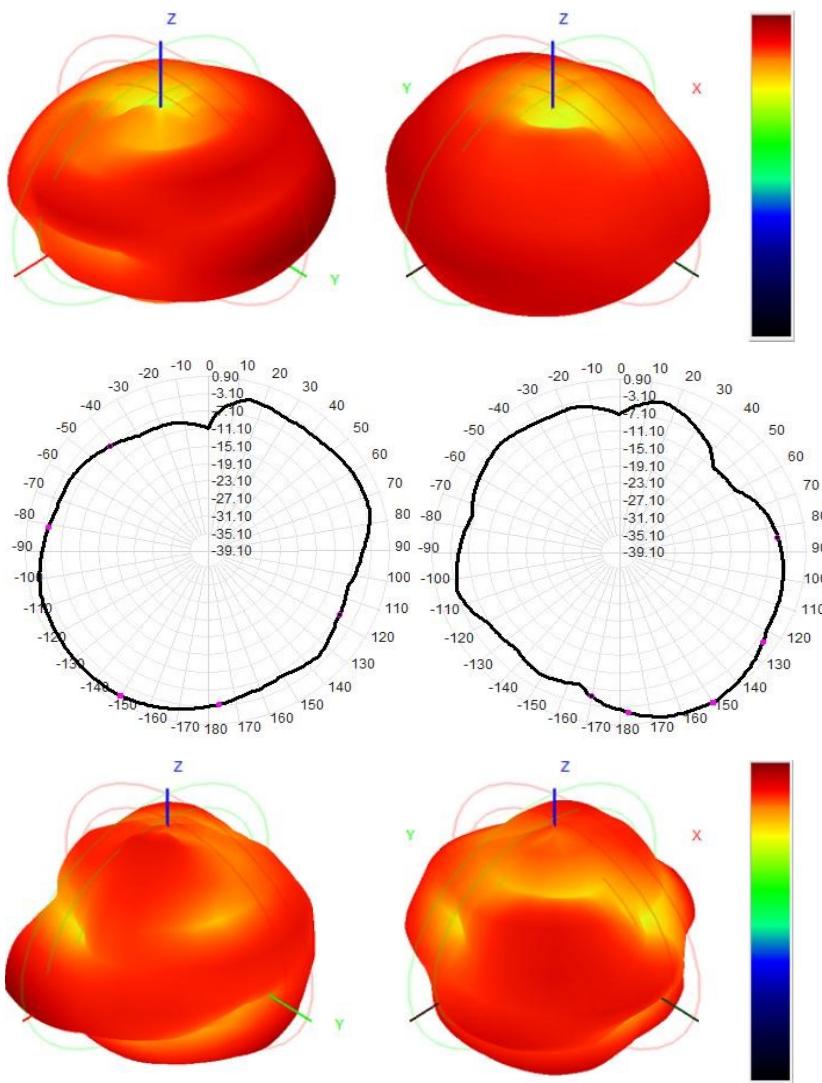
Antenna model: YBF01-LTE-AH

Gain&Efficiency

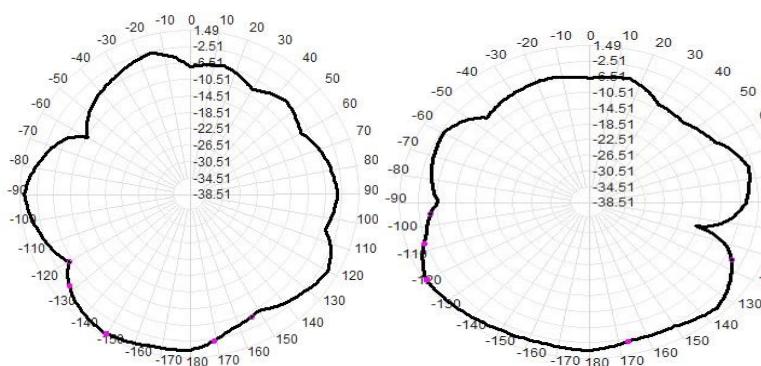
增益和效率

frequency 频率(Hz)	gain 增益(dB)	efficiency 效率(dB)	efficiency 效率
1710M	0.9	-4.06	39.24%
1743M	1.2	-4.07	39.16%
1777M	1.05	-3.87	40.99%
1811M	1.16	-4.08	39.1%
1845M	1.51	-4.27	37.38%
1878M	1.3	-3.94	40.34%
1912M	1.73	-3.72	42.45%
1946M	1.77	-3.94	40.38%
1980M	1.51	-3.86	41.08%
2014M	1.64	-3.45	45.19%
2047M	1.36	-3.65	43.18%
2081M	1.18	-3.62	43.49%
2115M	1.2	-3.35	46.28%
2149M	1.45	-3.8	41.72%
2183M	0.89	-4.56	34.98%
2216M	0.86	-4.6	34.68%
2250M	0.93	-5.12	30.76%
2284M	1.05	-4.91	32.28%
2318M	1.21	-4.55	35.07%

2318M	1.21	-4.55	35.07%
2352M	0.96	-4.75	33.5%
2385M	0.87	-4.87	32.58%
2419M	0.63	-4.28	37.35%
2453M	1.33	-4.03	39.57%
2487M	0.86	-4.33	36.92%
2521M	0.83	-3.95	40.24%
2554M	0.86	-3.9	40.72%
2588M	1.39	-4.13	38.65%
2622M	1.25	-4.23	37.73%
2656M	0.62	-4.31	37.1%
2690M	1.49	-4.65	34.25%



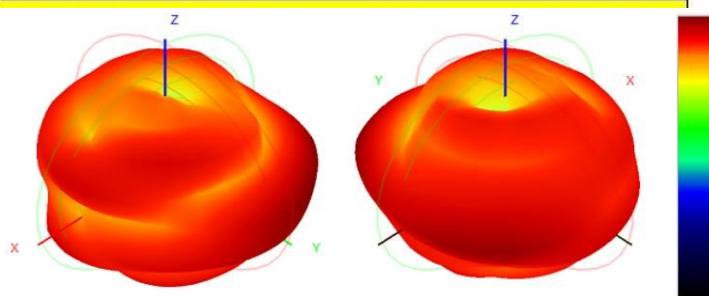
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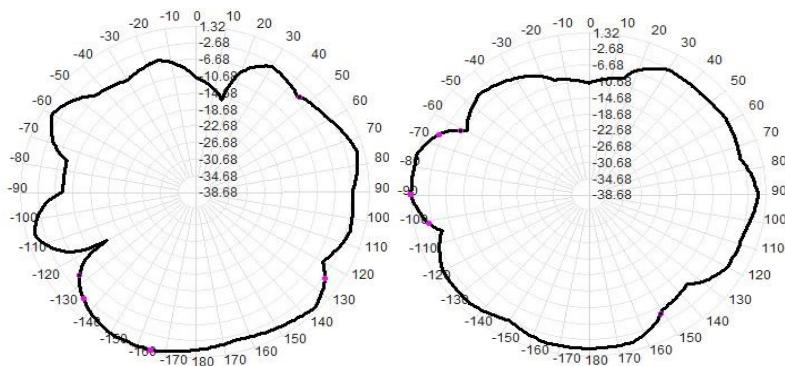
Antenna model: YBF01-WGB-AH

Three-in-one antenna: 2.4G WIFI

Gain&Efficiency			
frequency( Hz)	gain (dB)	efficiency (dB)	efficiency
2400M	1.32	-3.96	47.36%
2410M	0.89	-3.88	49.58%
2420M	1.03	-3.93	51.11%
2430M	1.01	-3.97	50.21%
2440M	1.21	-3.85	51.03%
2450M	1.18	-3.84	48.63%
2460M	1.15	-3.96	49.28%
2470M	0.96	-3.92	50.11%
2480M	1.09	-3.91	47.63%
2490M	1.23	-4.25	46.85%
2500M	1.02	-4.16	46.32%



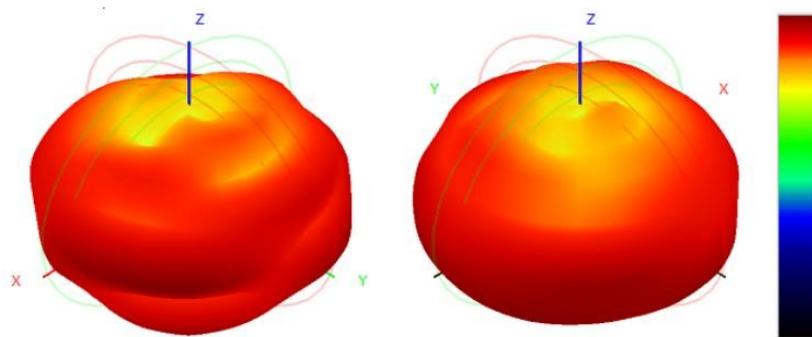
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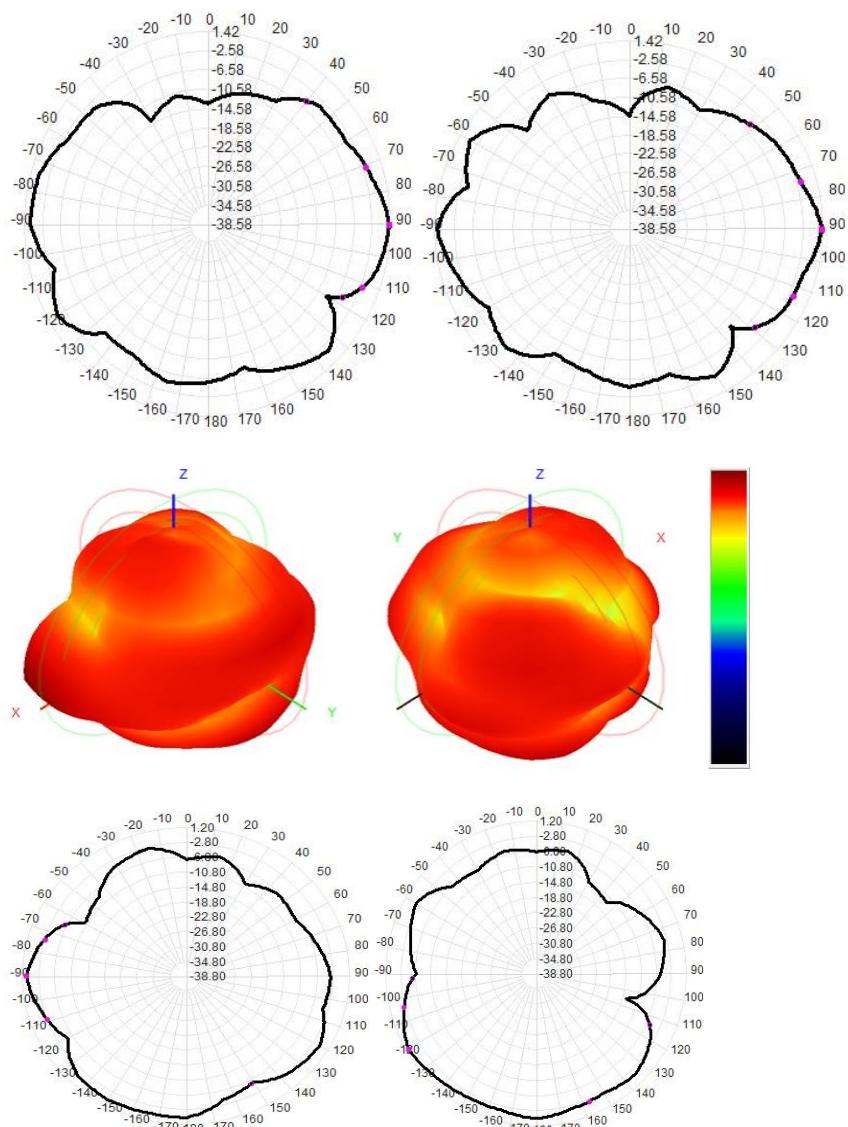
Antenna model: YBF01-WGB-AH

5.8G WiFi:

Gain&Efficiency			
frequency 频率(Hz)	gain 增益(dB)	efficiency 效率(dB)	efficiency 效率
5050M	1.42	-3.47	48.54%
5100M	1.12	-3.43	49.15%
5150M	1.04	-3.86	47.25%
5200M	1.26	-3.17	49.38%
5250M	1.21	-2.97	47.23%
5300M	1.31	-3.13	50.66%
5350M	1.04	-3.55	51.73%
5400M	1.15	-3.02	51.62%
5450M	0.98	-3.34	53.38%
5500M	1.08	-3.43	51.83%
5550M	1.29	-3.24	50.52%
5600M	1.24	-3.61	52.71%
5650M	1.37	-3.88	49.10%
5700M	1.1	-3.79	52.83%
5750M	1.41	-4.1	52.19%
5800M	1.32	-4.22	51.24%
5850M	1.2	-4.31	50.28%



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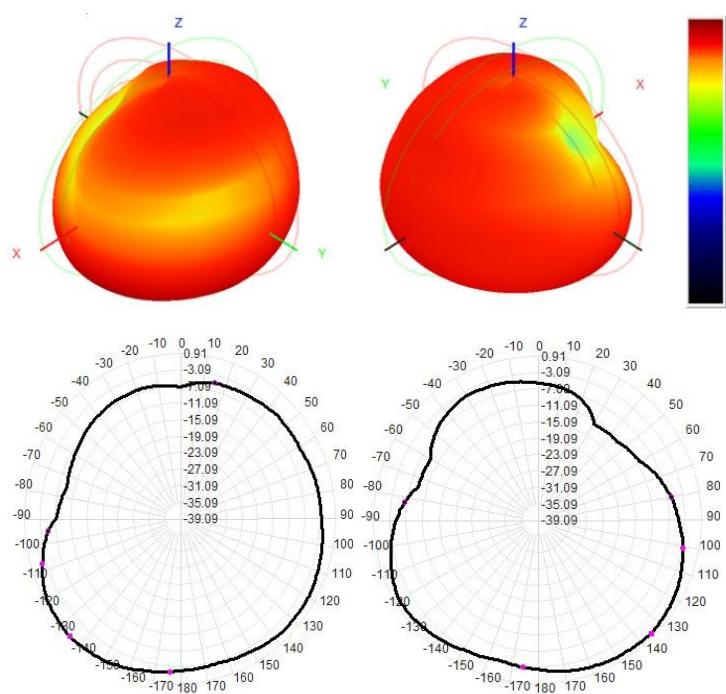
Antenna model: YBF01-WGB-AH

Gain&Efficiency

增益和效率

frequency 频率(Hz)	gain 增益(dB)	efficiency 效率(dB)	efficiency 效率
1565M	0.73	-3.19	45.36%
1575M	0.91	-3.09	47.58%
1585M	0.68	-3.24	43.11%
1595M	0.82	-3.16	44.21%

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## 6. Antenna assembly diagram

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Frequency	Mass production standards
1,575 MHz	VSWR. (Mass production performance) < VSWR(Acknowledge the performance)+0.5

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MHZ -5850MHZ	VSWR.(Mass production performance)<VSWR(Acknowledge the performance)+0.5
824MHZ-2690MHZ	VSWR.(Mass production performance)<VSWR(Acknowledge the performance)+0.5
2400MHZ-2500MHZ	VSWR.(Mass production performance)<VSWR(Acknowledge the performance)+0.5

**7.**Environmental treatment ULZ 000279  
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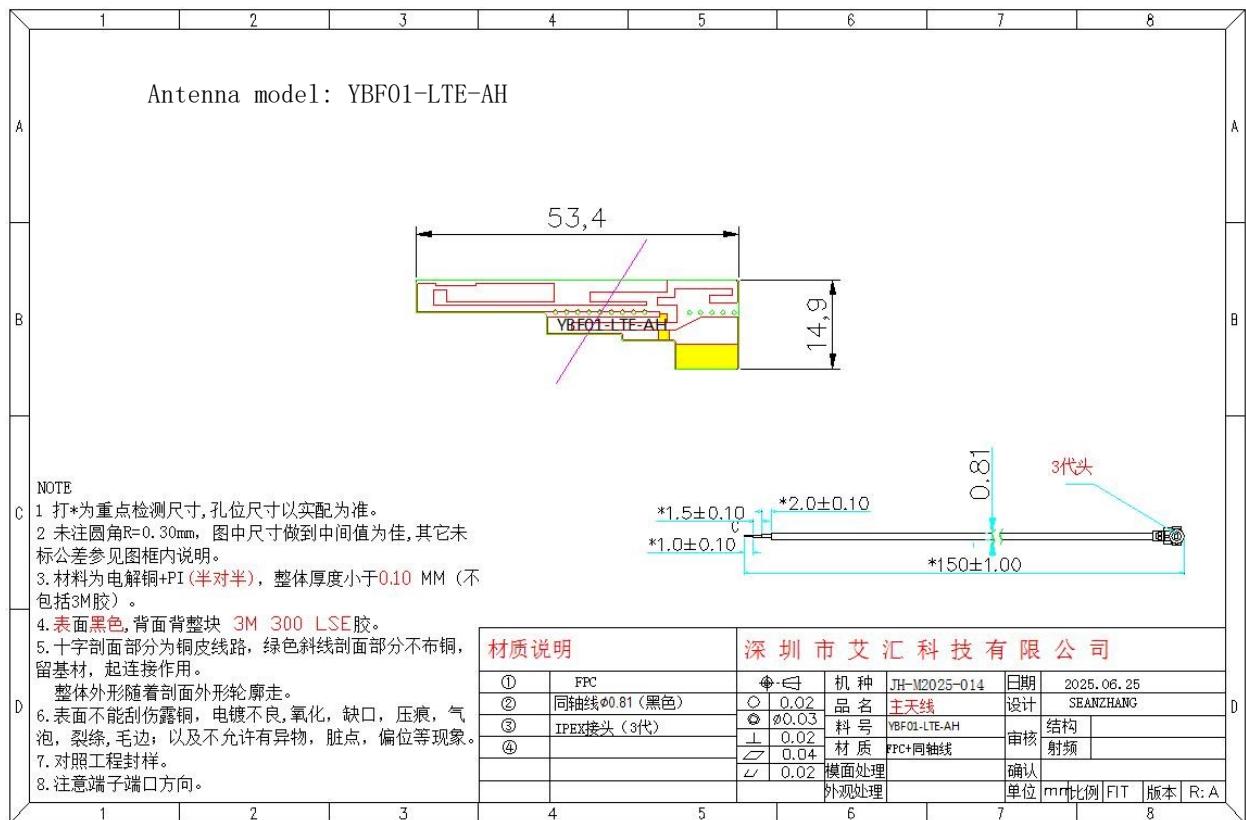
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## **8.**Antenna mass production index

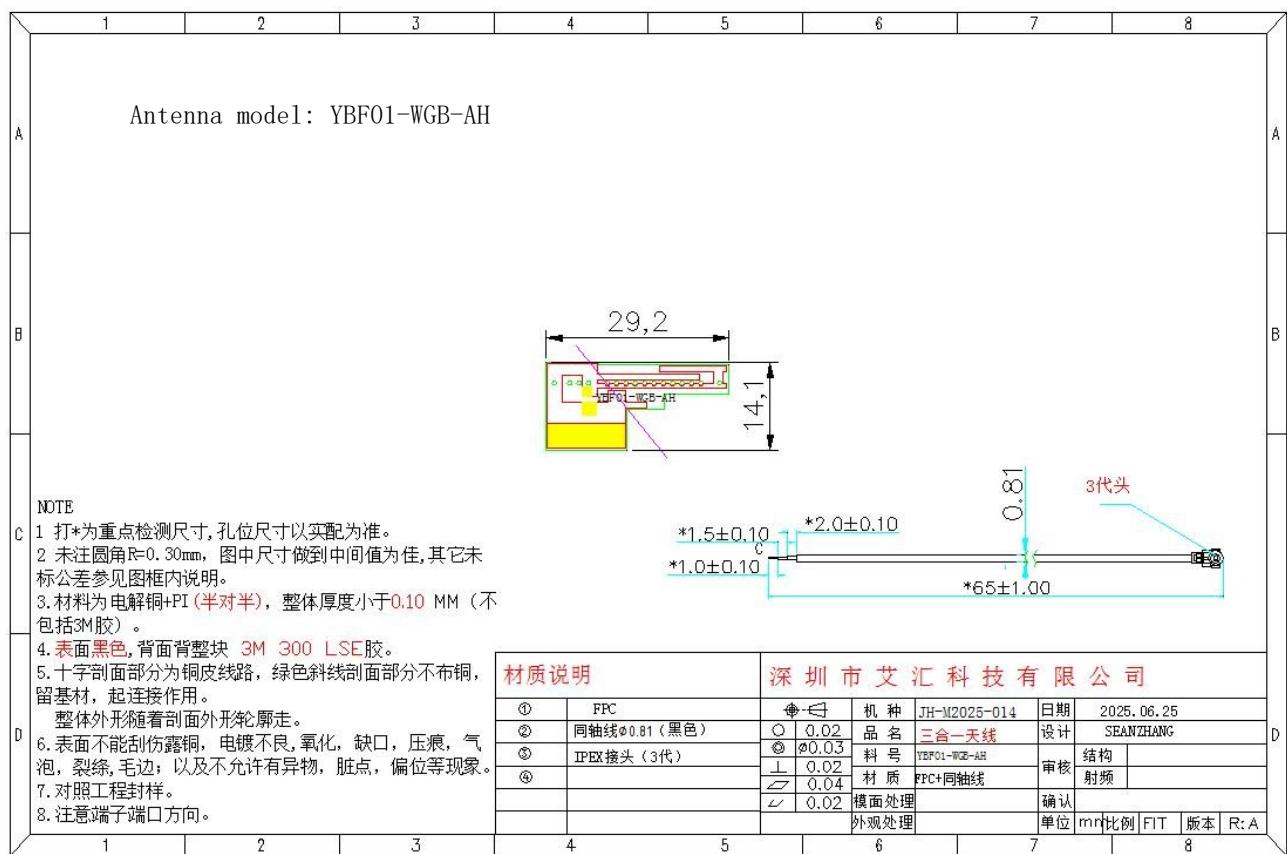
When the antenna is mass-produced, the standing wave ratio is taken as the mass production test standard.

According to the differences of the project itself, Give the following standards:

9. Structural drawings



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