

# SPECIFICATION FOR APPROVAL

Specification Model/Description: Xin Er Sheng/Sanhe Tian Antenna/XESANT11B131043/Coaxial Cable + FPC/0.8T  
Black Cable/Cable Length L = 65mm/4th Generation Clasp/Gray/RoHS  
Compliant

Material Code: F.P.W.0000030

Manufacturer Part Number: XESANT11B131043

Supplier: ShenZhen XinErSheng Technology Co.,Ltd

Part Type ☒ Standard (STANDARD)      ☐ Special (Designated or SPECIAL)

| Material Part Acceptance Item 'Implementation Standard (Reference Acceptance Checklist)                                                                                                                                                                        |                          |                                      |         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------|---------|
| Acknowledgment Items                                                                                                                                                                                                                                           |                          | Technical Confirmation Column / Time |         |
| Whether the appearance meets the overall machine requirements                                                                                                                                                                                                  | <input type="checkbox"/> | ID Engineer:                         |         |
| Confirm whether the electrical performance, pin definition, and power consumption meet the overall system requirements.                                                                                                                                        | <input type="checkbox"/> | Hardware Engineer:                   |         |
| Confirm whether the materials meet the complete machine EMC/SAFETY/RF requirements                                                                                                                                                                             | <input type="checkbox"/> | EMC Engineer:                        |         |
| Refer to the 'Material Approval Checklist' for confirmation of the organizational part.                                                                                                                                                                        | <input type="checkbox"/> | Structural Engineer:                 |         |
| Confirm whether the driver and other components meet the overall machine requirements                                                                                                                                                                          | <input type="checkbox"/> | Drive Engineer:                      |         |
| Thermal: Confirm whether it meets the requirements of the entire machine                                                                                                                                                                                       | <input type="checkbox"/> | Thermal Engineer:                    |         |
| Confirm whether it meets the whole machine BIOS/EC requirements                                                                                                                                                                                                | <input type="checkbox"/> | SW Engineer:                         |         |
| Confirm whether the whole machine meets system compatibility/reliability testing.                                                                                                                                                                              | <input type="checkbox"/> | DQA Systems Engineer:                |         |
| Environmental Review Record (Applicable to ROHS Directive)                                                                                                                                                                                                     | <input type="checkbox"/> | Environmental Engineer:              |         |
| Confirm the supplier's appearance inspection standards/key processes                                                                                                                                                                                           | <input type="checkbox"/> | SQE Engineer:                        |         |
| Confirm whether it meets the customer's requirements                                                                                                                                                                                                           | <input type="checkbox"/> | Project Manager:                     |         |
| FAI full-size report, CPK report, packaging method (package), single unit reliability report, etc.                                                                                                                                                             | <input type="checkbox"/> | CE Engineer:                         |         |
| Sample attached <input checked="" type="checkbox"/> R&D <input type="checkbox"/> Quality <input type="checkbox"/> Purchasing <input checked="" type="checkbox"/> Supplier <input type="checkbox"/> Customer <input checked="" type="checkbox"/> Assembly plant |                          |                                      |         |
| Precautions for IQC Inspection:                                                                                                                                                                                                                                |                          |                                      |         |
|                                                                                                                                                                                                                                                                |                          |                                      |         |
| Version                                                                                                                                                                                                                                                        | Description of changes   | Change Date                          | Reviser |
| A                                                                                                                                                                                                                                                              | First edition release    |                                      |         |
|                                                                                                                                                                                                                                                                |                          |                                      |         |
|                                                                                                                                                                                                                                                                |                          |                                      |         |
|                                                                                                                                                                                                                                                                |                          |                                      |         |
| Formulate                                                                                                                                                                                                                                                      |                          | Review                               |         |



ShenZhen XinErSheng Technology Co.,Ltd

# SPECIFICATION FOR APPROVAL

Customer name: M8786-T30J-104MZ

Product name: GWB FPC antenna, 0.81 gray line, L = 65MM, with fourth-generation IPEX connector.

Customer Part Number: F.P.W.0000030

Manufacturers of Material: XESANT11B131043

Deliver quantity: 5PCS

| Mark | Check | Examine and approve | Datelanded |
|------|-------|---------------------|------------|
| Biao | Lisen | Amy                 | 2025.06.16 |

That Customers:

| Acknowledge | Check | Examine and approve | Datelanded |
|-------------|-------|---------------------|------------|
|             |       |                     |            |

Admit that situation: ☒new product ☐ product shanges

Admit that project: ☐acknowledgement ☐soecimen 5PCS

Admit that conclusion: ☐reception ☐refuse

Company address: Floor 3, Building D, No.96 Lingxia Road, Fuyong Fenghuang Fourth Industrial Zone, Baoan District, Shenzhen

Phone number: 0755-33881455

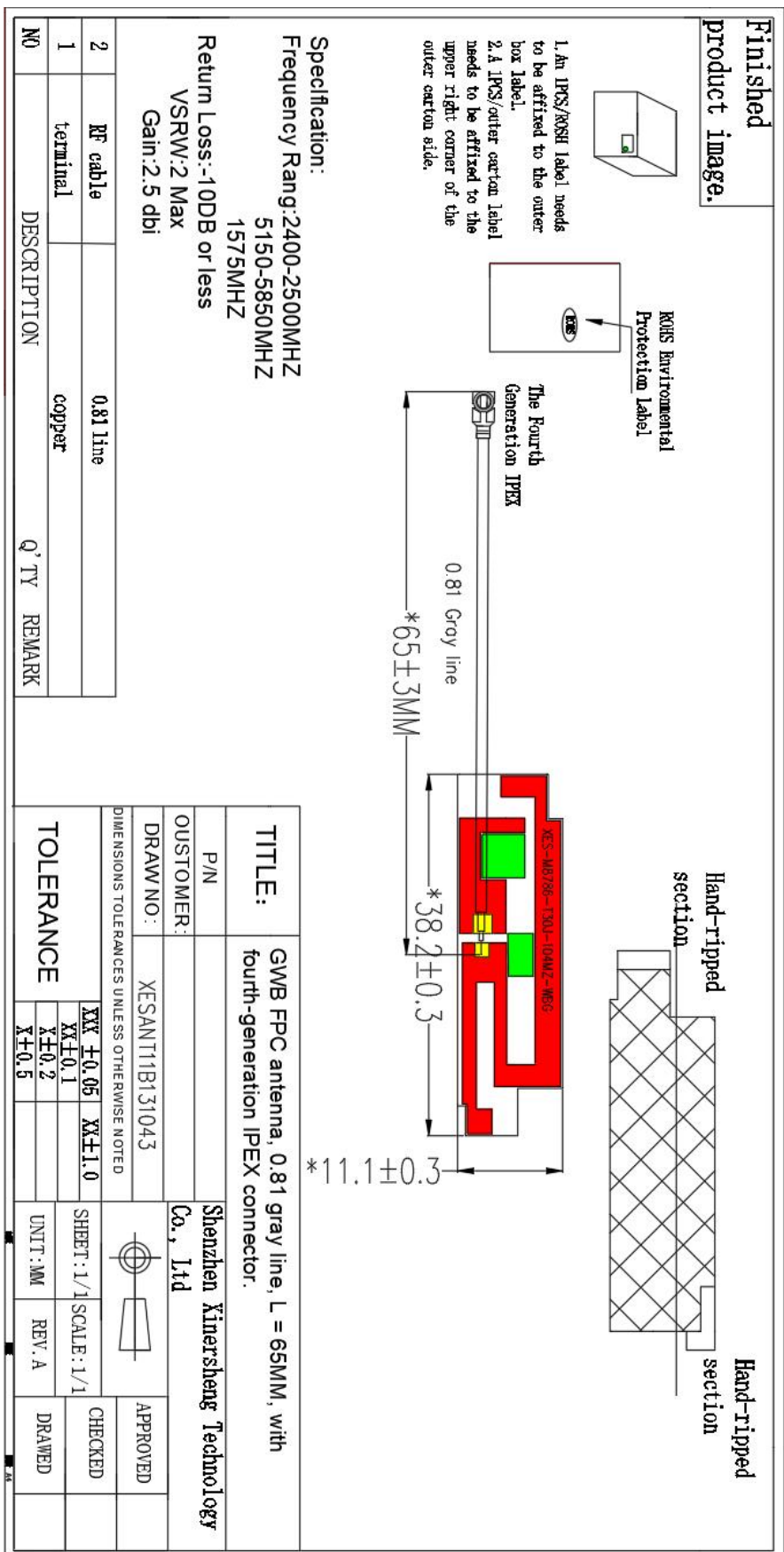
Fax NO.: 0755-33233276

Email: [liqinghui@xinershengant.com](mailto:liqinghui@xinershengant.com)

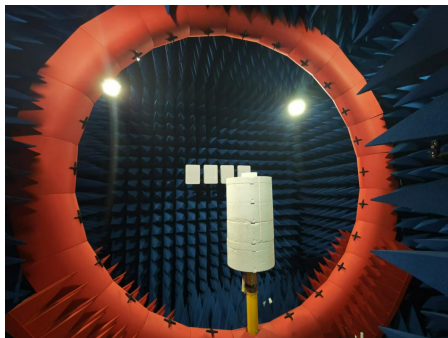
## Main technical parameters of the product

| Main technical specifications |                                             |
|-------------------------------|---------------------------------------------|
| Frequency Range(MHZ)          | 2400-2500/5150-5180 /1575                   |
| Impedance( $\Omega$ )         | $50 \pm 10$                                 |
| Peak Gain(dBi)                | $2 \pm 1$                                   |
| ReTurnLoss(dB)                | $\leq -10$                                  |
| VSWR                          | $\leq 2$                                    |
| Polarization                  | Linear Vertical                             |
| Connector Type                | Ipex                                        |
| Physical Properties           |                                             |
| Antenna Base                  | FPC                                         |
| Operating Temp                | $-20^{\circ}\text{C} - +60^{\circ}\text{C}$ |
| Storage Temp                  | $-20^{\circ}\text{C} - +70^{\circ}\text{C}$ |

# Product drawing



## Test equipment



**OTA testing system**

**Brand:** Feitu

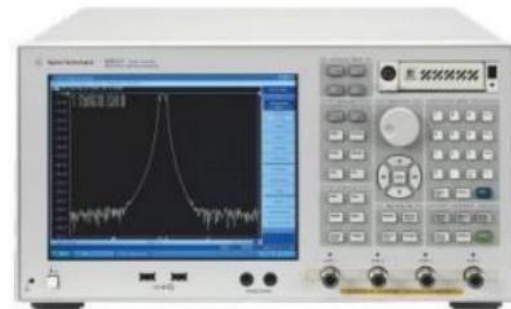
**Frequency range:** 400MHz-8.5GHz

**Dimensions of the dark chamber:** 4m x 4m x 4m

**Number of probes:** 24 (23 dual-polarized probes and 1 communication probe)

**Functions:** Passive and active testing; G network, C network, 2G/3G/4G.

**WIFI, BT, and other standard TRP, TIS testing, and so on.**



**Model:** 5071C

**Brand:** Agilent

**Frequency range:** 9KHz-8.5GHz

**Function:** Comprehensive passive testing of antennas, including 2G/3G/4G/BT/WIFI.



**Model:** 8960

**Brand:** Agilent

**Frequency range:** 292MHz-2700GHz

**Function:** Suitable for active testing of 2G/3G devices.



**Model:** CMW500

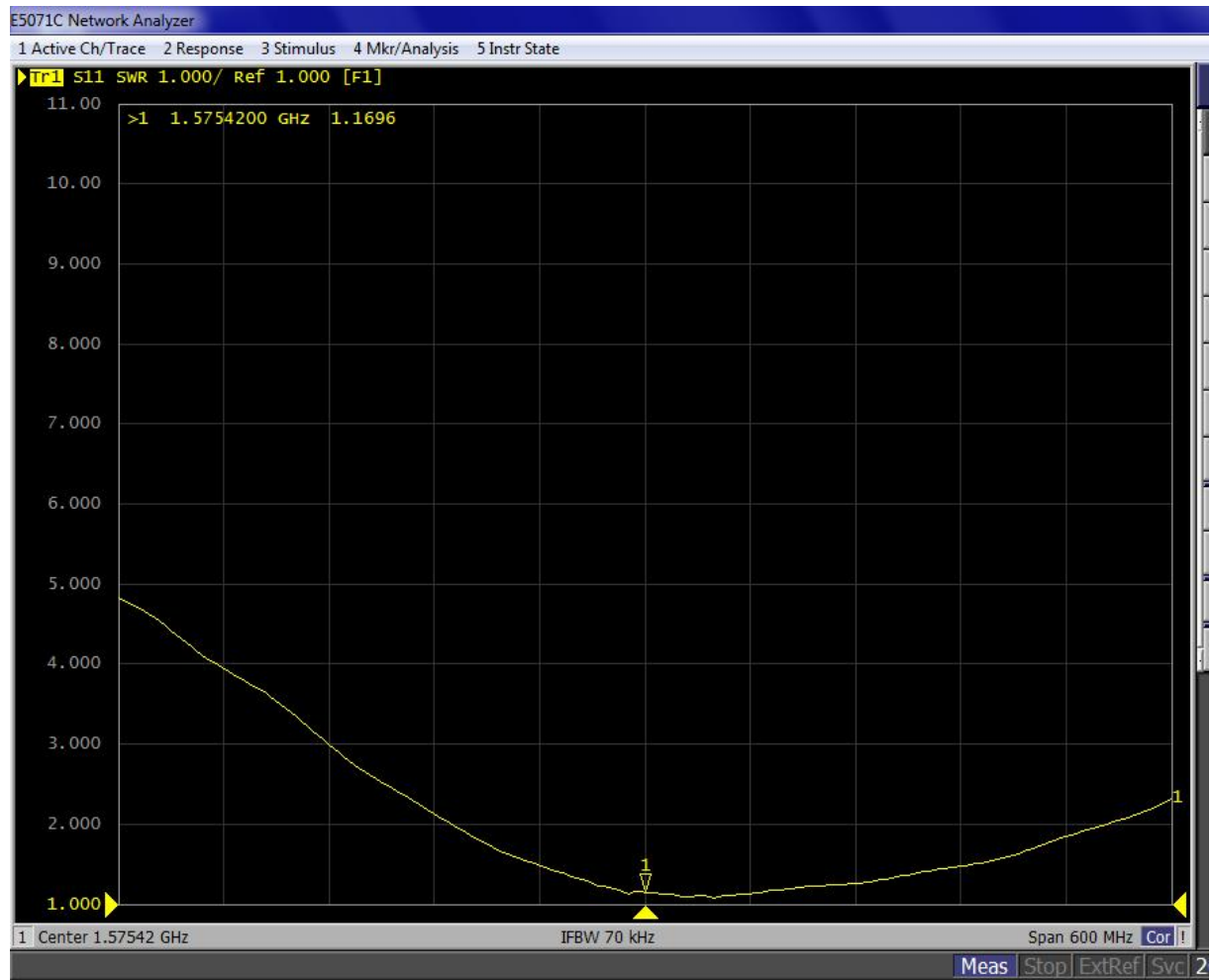
**Brand:** Rohde & Schwarz

**Frequency range:** 70KHz-6GHz

**Function:** Comprehensive active testing of antennas, including 2G/3G/4G/BT/WIFI/NB-Lot.

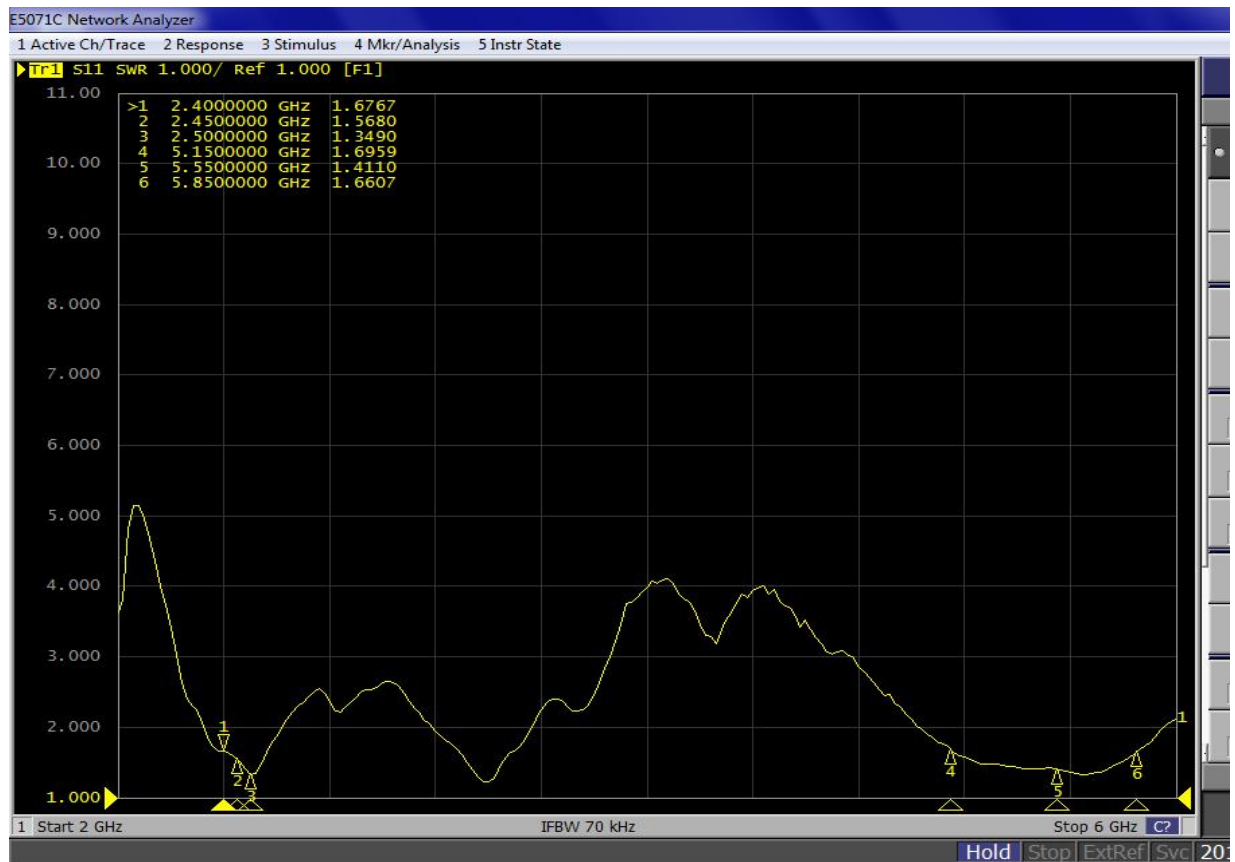
# GPS Network analyzer test report

## SWR

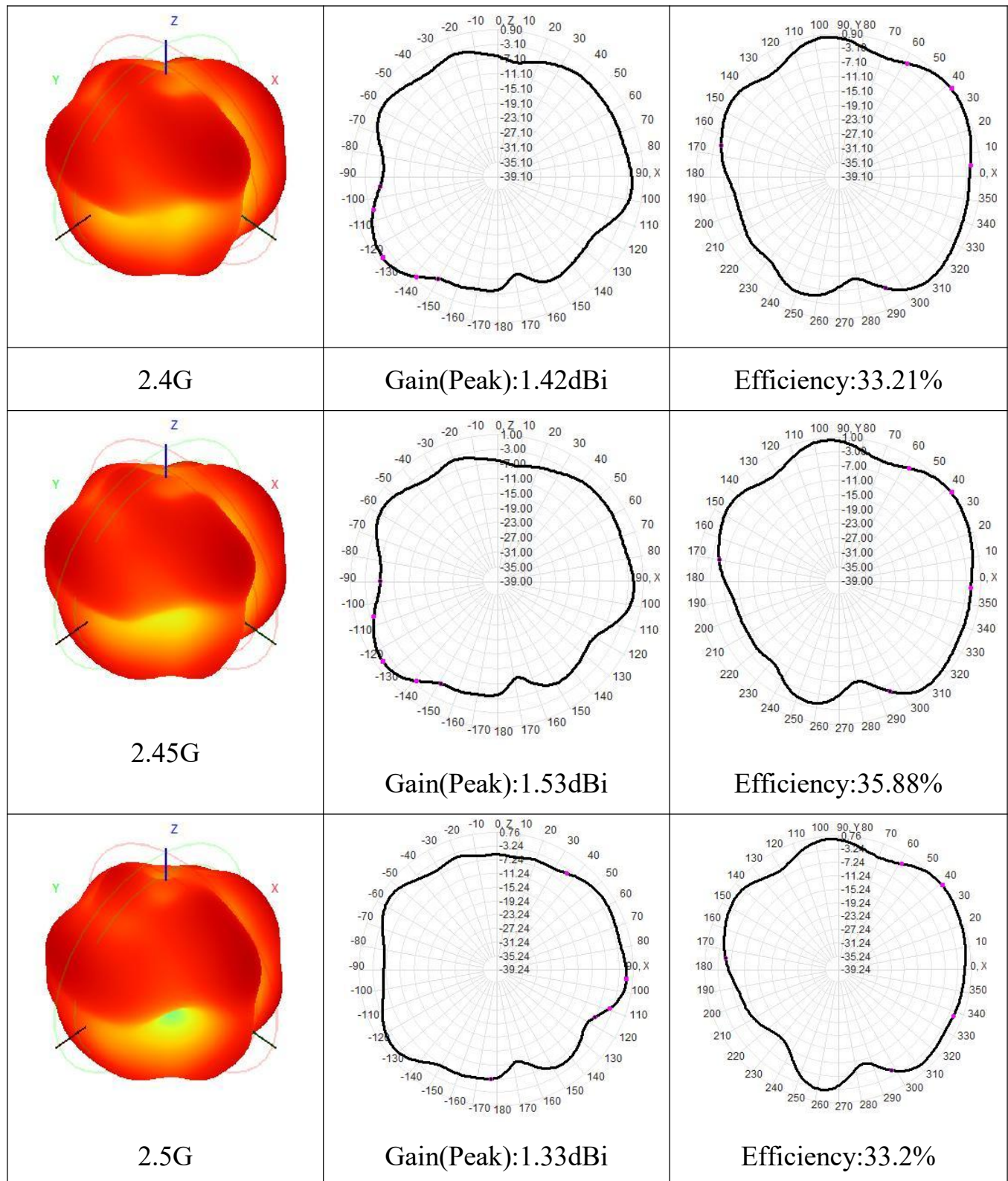


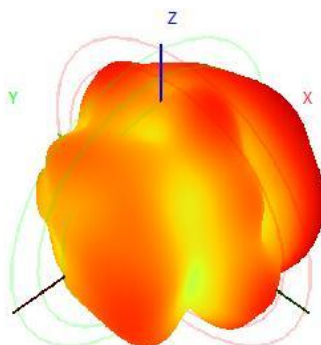
## WIFI/Bluetooth Network analyzer test report

### SWR

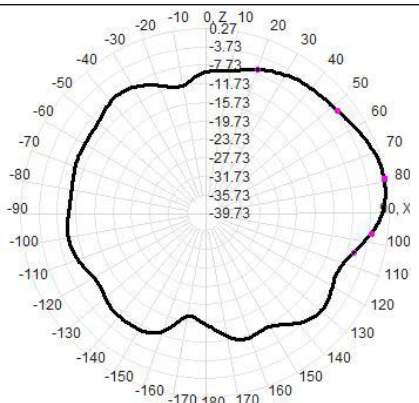


## 2D、3DRaditation Pattern

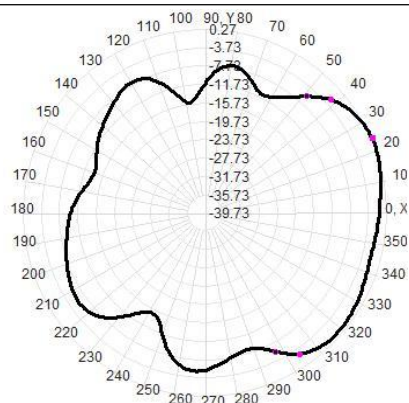




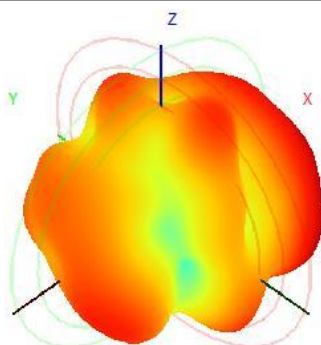
5.15G



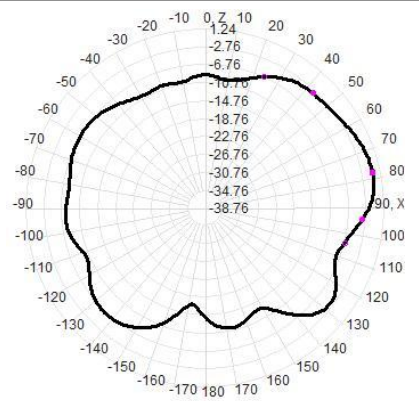
Gain(Peak):1.21dBi



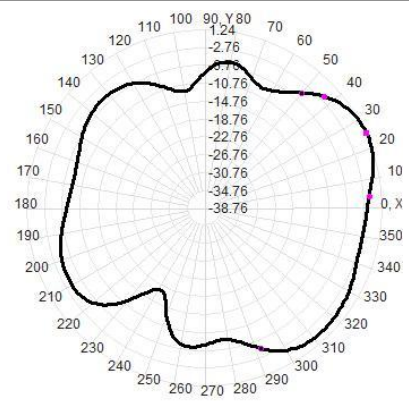
Efficiency:37.3%



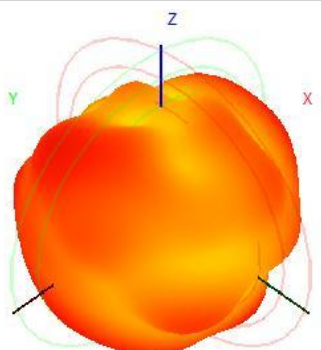
5.5G



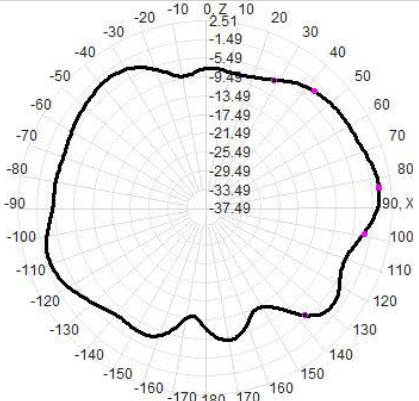
Gain(Peak):1.76dBi



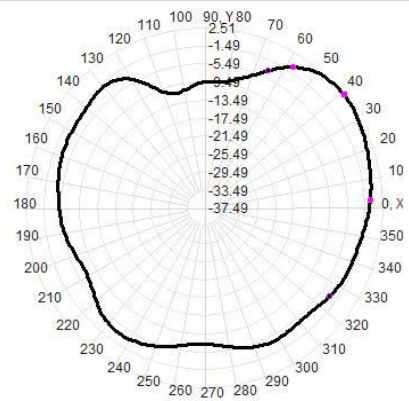
Efficiency:43.25%



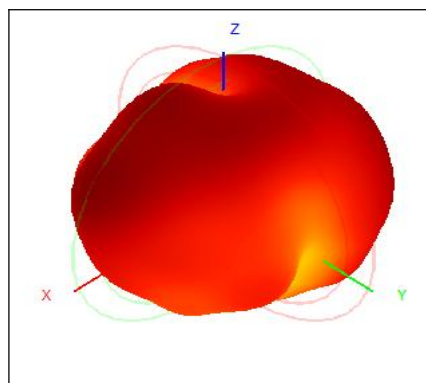
5.85G



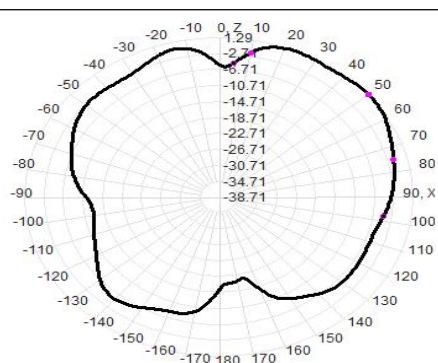
Gain(Peak):2.05dBi



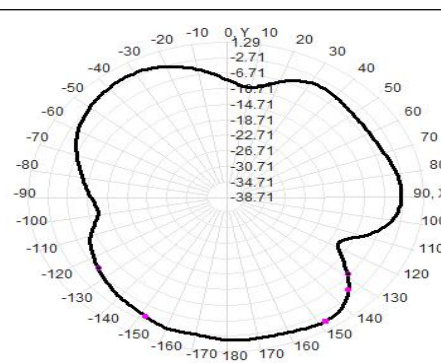
Efficiency:47.12%



1575.42M

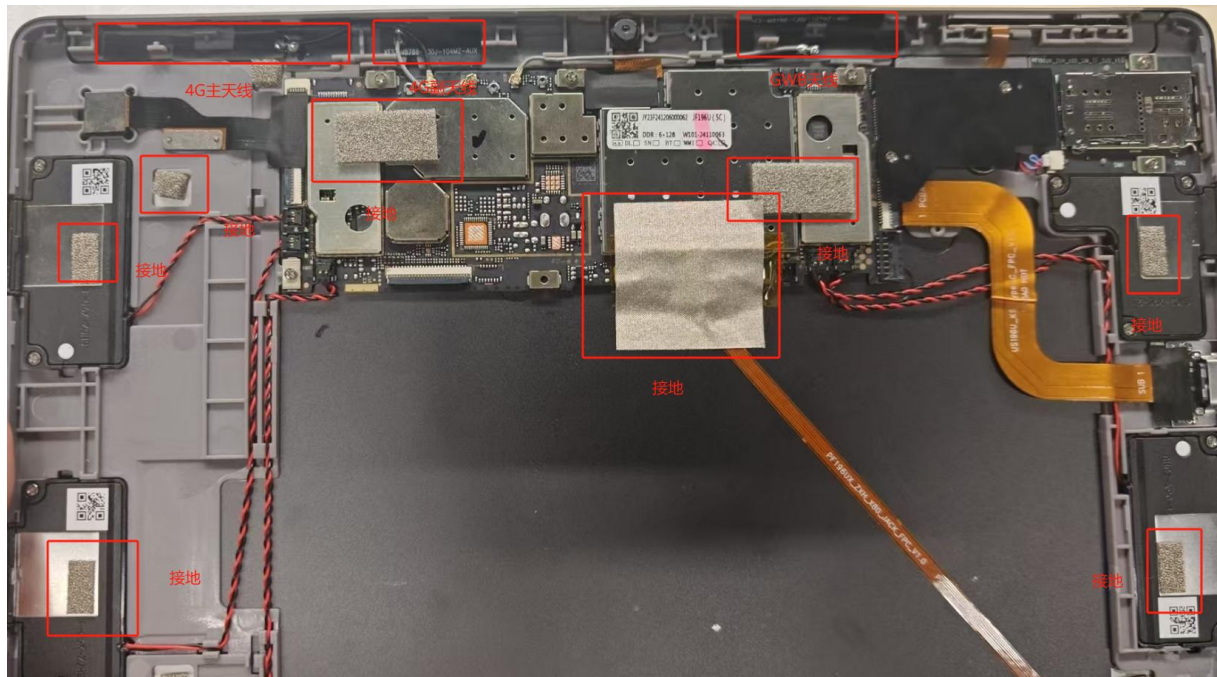


Gain(Peak):1.92dBi



Efficiency:38.7%

## Assembly picture



## OTA testing data

|    |    |       |       |    |      |        |
|----|----|-------|-------|----|------|--------|
| 4G | B3 | 19250 | 17.55 | B3 |      |        |
|    |    | 19575 | 16.83 |    |      |        |
|    |    | 19900 | 17.79 |    | 1900 | -94.56 |
|    | B4 | 20000 | 16.66 | B4 |      |        |
|    |    | 20175 | 14.86 |    |      |        |
|    |    | 20350 | 17.67 |    | 2350 | -91.51 |
|    | B7 | 20800 | 18.54 | B7 |      |        |
|    |    | 21100 | 17.26 |    |      |        |
|    |    | 21400 | 17.96 |    | 3400 | -92.67 |

|      |       |     |       |       |     |        |
|------|-------|-----|-------|-------|-----|--------|
| WIFI | Band  |     | TRP   | Band  |     | TIS    |
|      | B-11M | 1   | 10.31 | B-11M | 1   | -77.57 |
|      |       | 6   | 10.65 |       | 6   | -77.52 |
|      |       | 11  | 9.89  |       | 11  | -77.32 |
|      | A-54M | 36  | 10.59 | A-54M | 36  | -73.54 |
|      |       | 149 | 9.68  |       | 149 | -71.52 |
|      |       | 165 | 9.87  |       | 165 | -72.64 |

# Reliability testing report

|   |                 |                                                                                                                                                                                                                                                                                                                             |
|---|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | SAIT SPRAY TEST | Saltwater spray test: in accordance with the standard GB1266-86.<br>Distilled water: Single distillation PH6.5~7<br>Spray volume: 1.4me80cm <sup>2</sup> /h<br>Compressed air pressure: 1Kgf/cm <sup>2</sup><br>Relative test angle: 98°<br>Temperature: 45° to 47°<br>Pressure-temperature: 35°<br>Test duration: 48 hours |
| 2 | HEAT TEST       | for 96 hours, after keep in normal condition for 30mim the to test.                                                                                                                                                                                                                                                         |
| 3 | HUMIDITY TEST   | 40+2℃ 90-95%RH for 96hours, after keep in normal condition for 30mim the to test.                                                                                                                                                                                                                                           |
| 4 | COLD TEST       | -20+2℃ for 96hours, after keep in normal condition for 30mim the to test.                                                                                                                                                                                                                                                   |

All characteristic range is 30% of the initial value

There are no signs indicating any damage to the electrical performance of the device.

## Product packaging specifications

Product name/Specifications

### 1、 Labeling Requirements

| ***** |       |
|-------|-------|
| 采购单号  | ***** |
| 物料编码  | ***** |
| 品名规格  | ***** |
| 数量/单位 | ***** |
| 备注    | ***** |

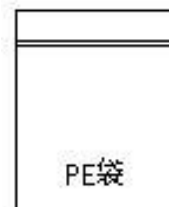
| ***** |       |
|-------|-------|
| 采购单号  | ***** |
| 物料编码  | ***** |
| 品名规格  | ***** |
| 数量/单位 | ***** |
| 备注    | ***** |

### 2、 Packing requirements

Homework instructions:

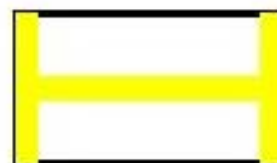
Inner packaging:

Product: 100 pieces per small bag

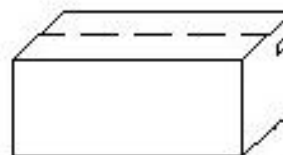


Exterior packaging:

Quantity determined based on actual quantity/box



纸箱



Precautions:

1. Is it necessary to add dividers or polyethylene foam;
2. Adhesion of labels, such as ROHS;