

# SPECIFICATION

for

**0dBi glue stick 2.4/5.8G WIFI antenna**

**Customer No.**

**Product No.**

TX-2.4~5.8G rubber stick antenna

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Release Date: 2024.10.08

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## **1. Bilateral Confirmation page**

### **1.1 Customer signature**

**Customer:**

| Seapartment/post     | Sign | Date |
|----------------------|------|------|
| Hardware Engineer/RD |      |      |
| Mechanical/MD        |      |      |
| Project Manager/PM   |      |      |
| Commercial/Puchasing |      |      |
| Checker              |      |      |

### **1.2 Signature of Tianxing Communications**

| Seapartment/post    | Sign | Date |
|---------------------|------|------|
| Antenna Engineer/RD |      |      |
| Mechanical/MD       |      |      |
| Project Manager/PM  |      |      |
| QA                  |      |      |
| Checker             |      |      |

## 2. General

### 2.1 Scope of application

2.4G/5.8G WIFI Antenna

### 2.2 Operating temperature range

Temperature range of this product: -20 ~ +65 °C

### 2.3 Storage temperature range:

This product is stored at - 30 ~ + 75 °C

## 3. General product specifications

| NO. | ITEMS                    | DETAILS                                                                              |
|-----|--------------------------|--------------------------------------------------------------------------------------|
| 1   | Type                     | 2.4G/5.8G WIFI Antenna                                                               |
| 2   | Operating Frequency Band | 2400-2500MHz & 5100-5900MHz                                                          |
| 3   | VSWR                     | $\leq 2.5$                                                                           |
| 4   | Gain                     | 0dBi                                                                                 |
| 5   | Impedance                | 50 $\Omega$                                                                          |
| 6   | Antenna Type             | Glue stick antenna                                                                   |
| 7   | Antenna composition      | Glue stick                                                                           |
| 8   | Entity Picture           |  |

## **4. Specification Detials**

### **4.1 Mechanical Properties**

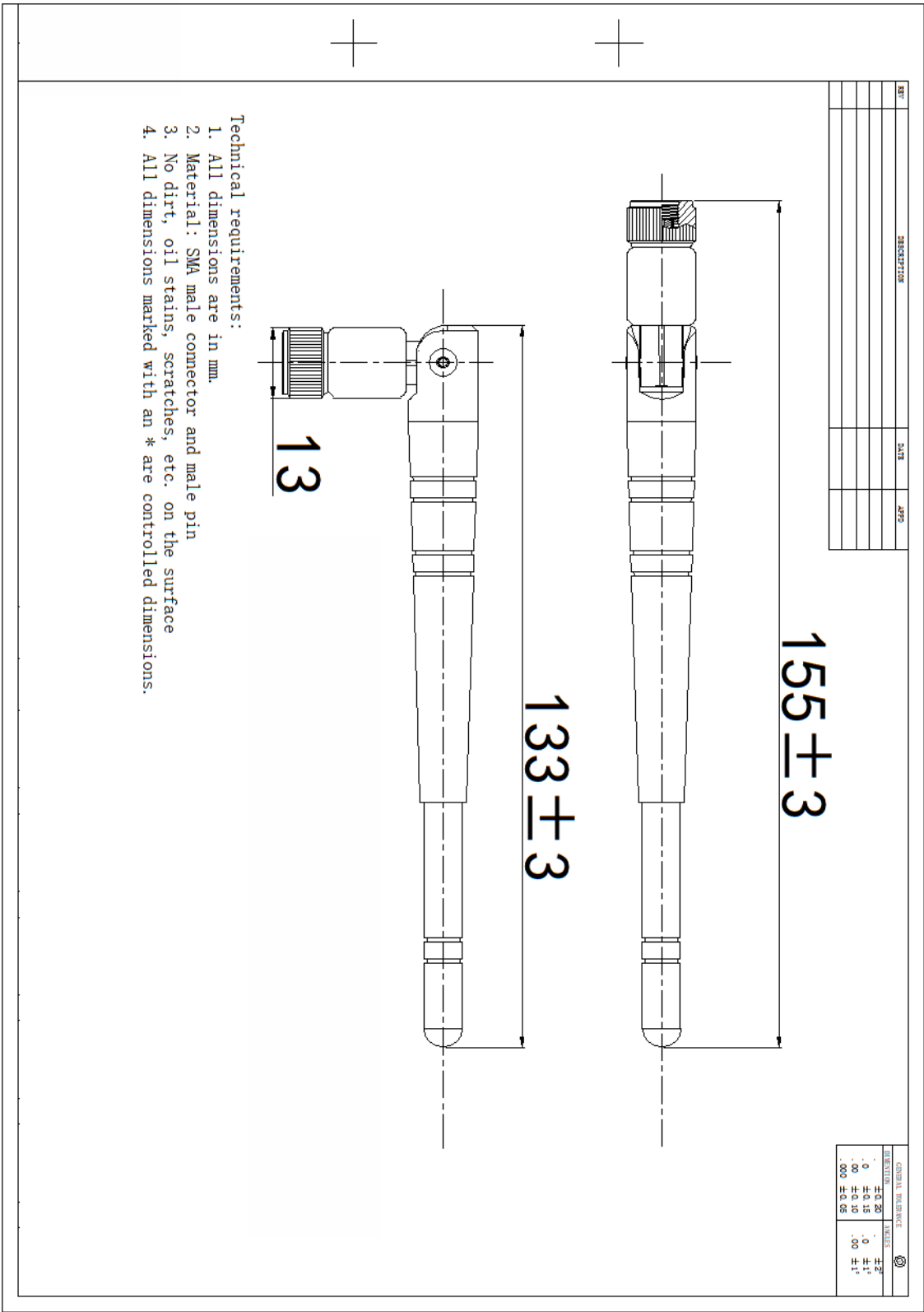
#### **4.11 Product Composition:**

#### **4.12 Apperance**

Good appearance without scars 、dirts、protuberances, etc.

#### **4.13 Antenna Picture and Structure Dimension**

**Product drawings:**



## 4.2 Electric Performance

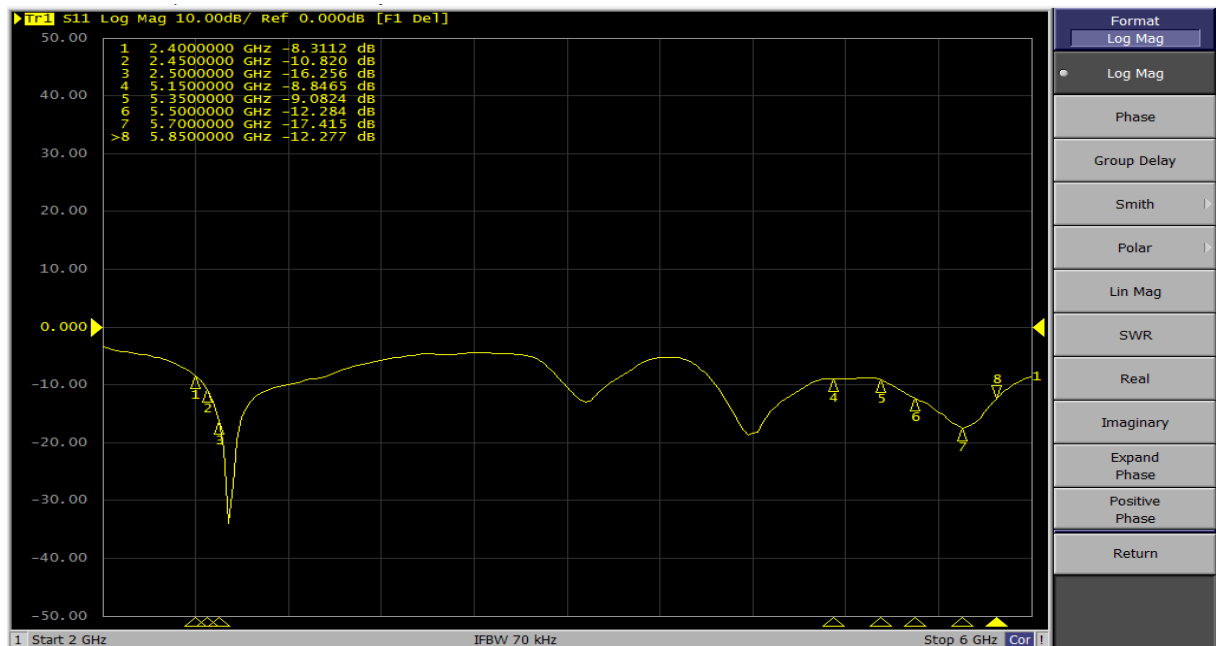
### 4.21 Test condition

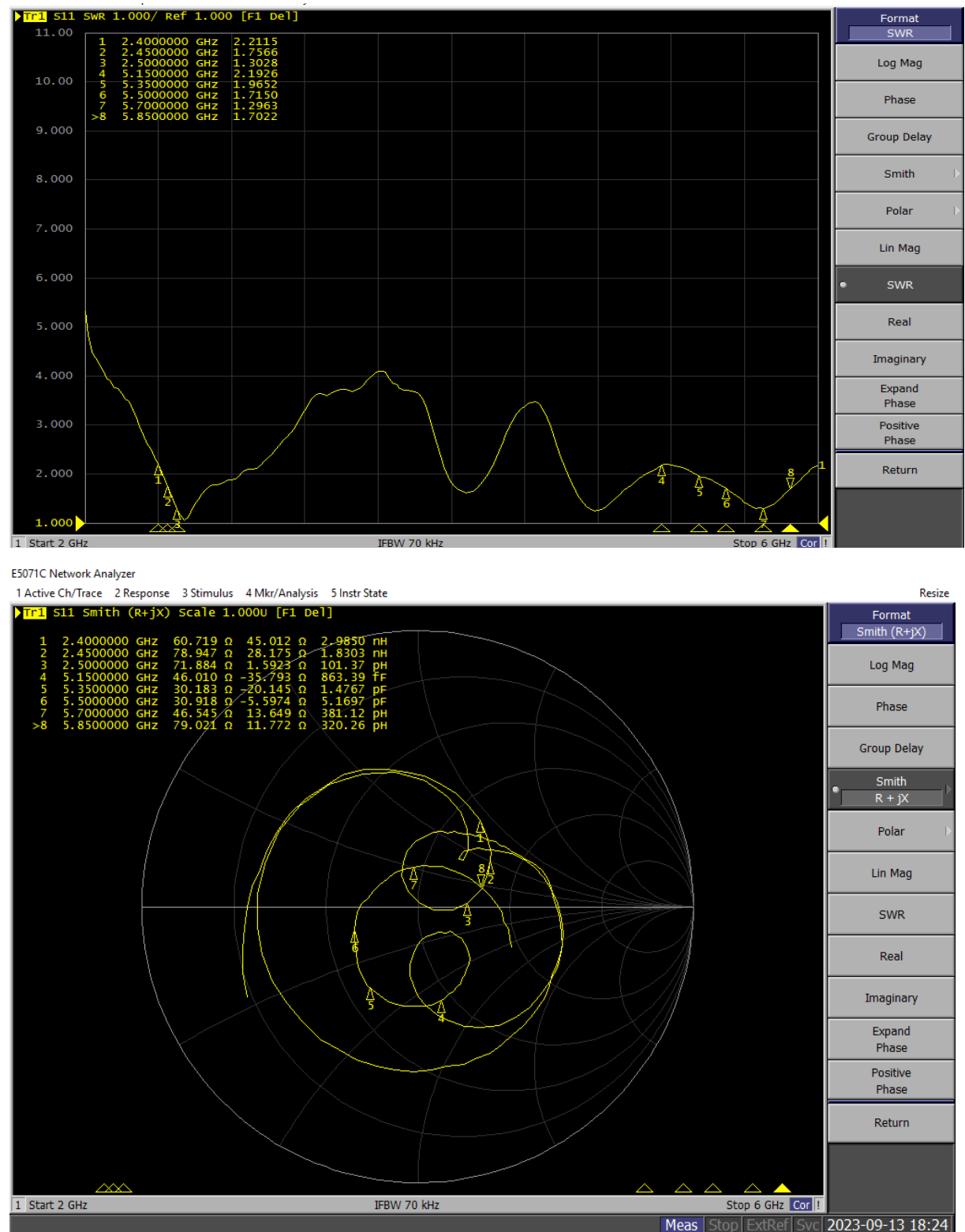
|                           |                                   |
|---------------------------|-----------------------------------|
| Environment:              | Equipment:                        |
| Temperature: 10℃——+30℃    | Network Analyzer: KEYSIGHT E5071C |
| Humidity: ≤80% (+40℃)     | AnechiorChamber:Multi-probe       |
| Atmospher: 750mmkg±30mmkg | Microwave                         |

### 4.22 Test Data for Electrical Performance:

#### 4.22.1 S11 of the Antenna:

| Marker (MHZ) | 2400  | 2450   | 2500   | 5150  | 5350  | 5500   | 5700   | 5850   |
|--------------|-------|--------|--------|-------|-------|--------|--------|--------|
| Return loss  | -8.31 | -10.82 | -16.25 | -8.81 | -9.08 | -12.28 | -17.41 | -12.27 |
| VSWR         | 2.21  | 1.75   | 1.30   | 2.19  | 1.96  | 1.71   | 1.29   | 1.70   |

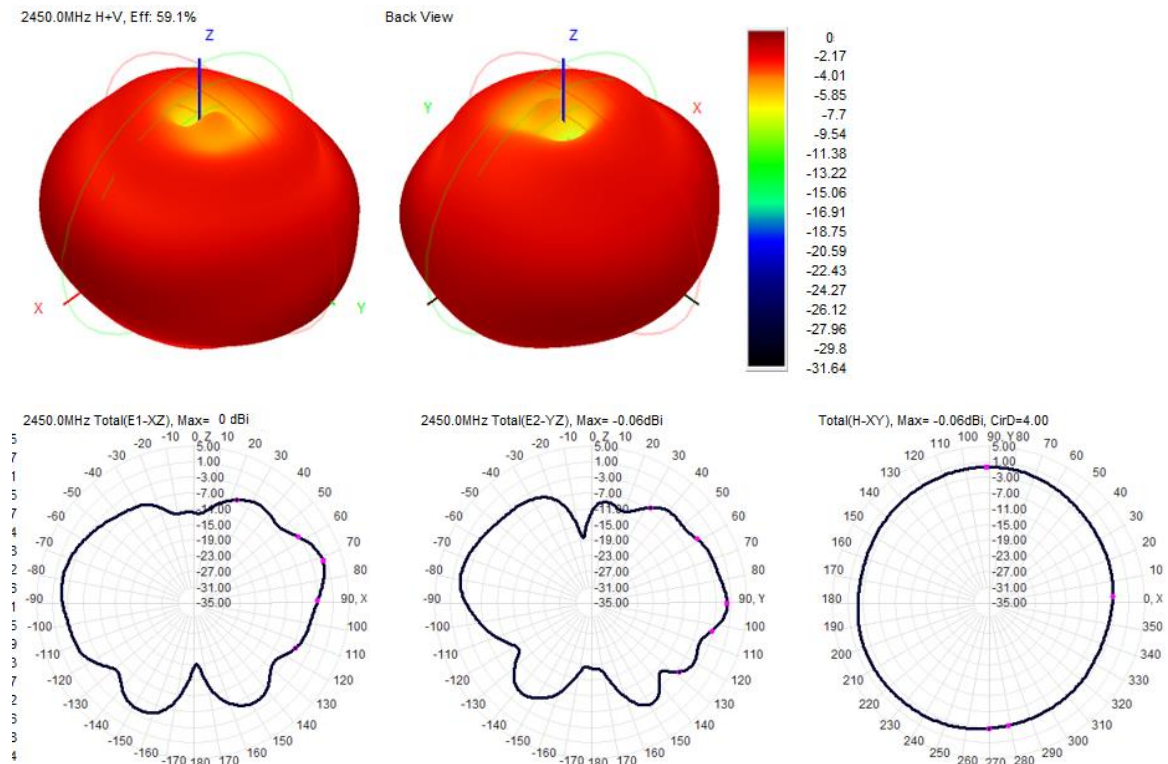




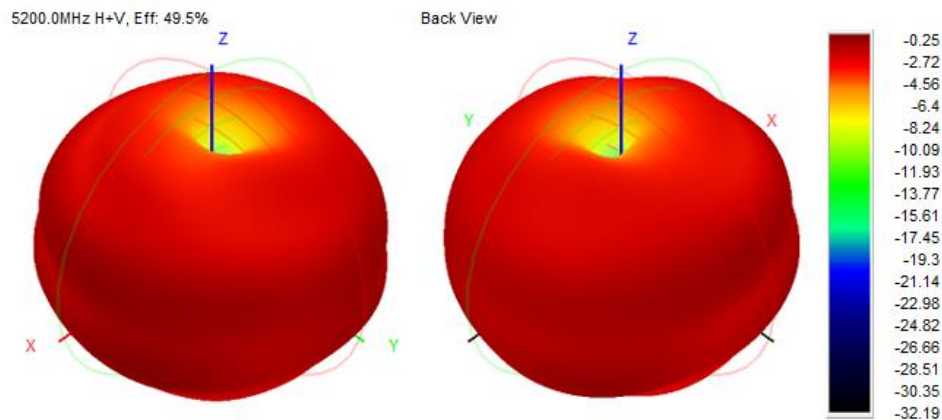
#### 4. 22. 2 Passive gain、 efficiency and Radiation Pattern:

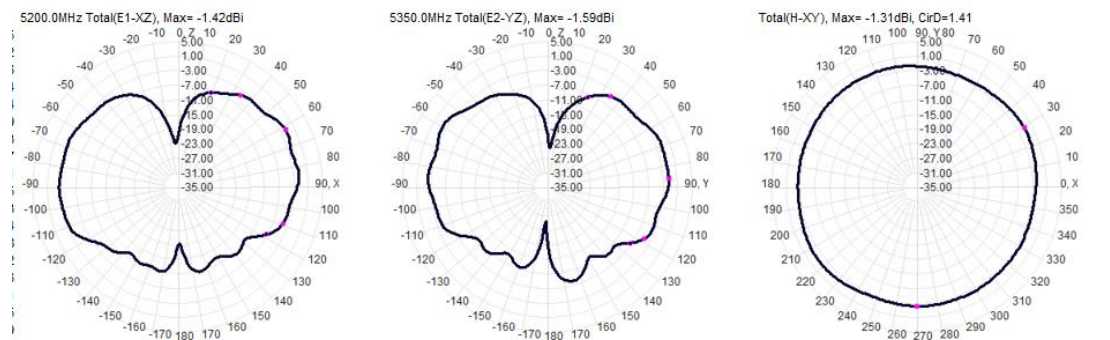
| Marker (MHz)   | 2400  | 2450 | 2500  | 5150 | 5200  | 5350  | 5500  | 5700  | 5800  | 5850  |
|----------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|
| Gain (dBi)     | -0.56 | 0    | -0.50 | -0.5 | -0.25 | -0.08 | -0.35 | -0.16 | -0.01 | -0.23 |
| Efficiency (%) | 54.6  | 59.1 | 55.9  | 48.2 | 49.5  | 50.5  | 49.3  | 52.1  | 53.2  | 48.7  |

2450 MHz:



5200 MHz:

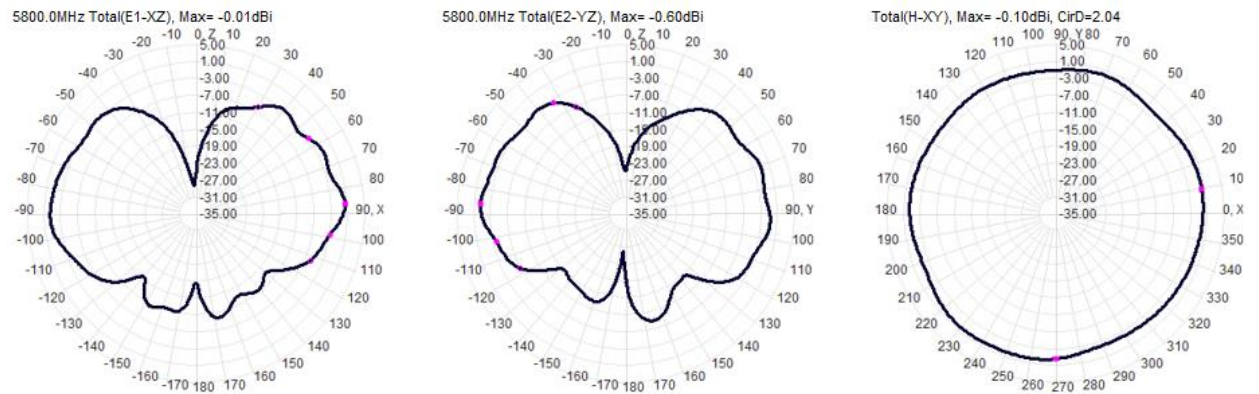
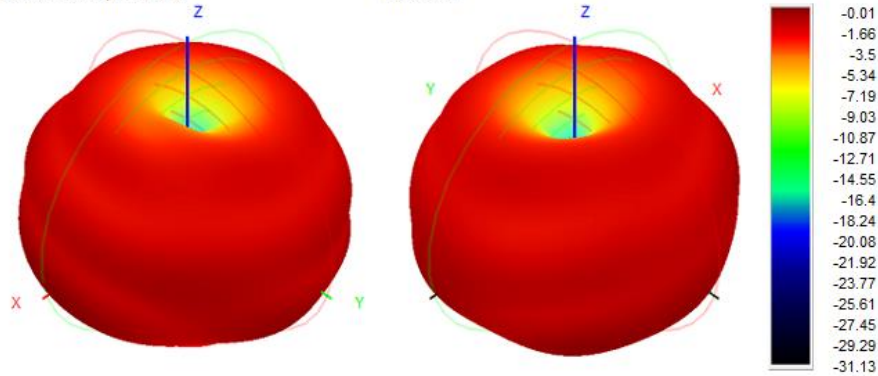




5800 MHz:

5800.0MHz H+V, Eff: 53.2%

Back View



5. Product Packaging

Manner of packing:

Packed in self sealed bags, 200 pcs each.

6. Document Resume

|              |             |
|--------------|-------------|
| Document No. |             |
| Release Date | 2024/10/08  |
| Author       | XiofengZeng |
| Review       | LiMing      |

Revised History

| Date      | Version | Revised Record |
|-----------|---------|----------------|
| 2024/10/8 | 1.00    | New Project    |
|           |         |                |