



# Antenna Specifications

Shenzhen JINGSONG Technology Co., LTD

## 2. Specifications

This report mainly provides the testing conditions of various electric and structural performance parameters for cell antenna ---- 2.4G/5.8G-WiFi. Figure 2-1 shows the antenna designed by JS & The fixturing of 2.4G/5.8G-WiFi

### 2-1: Specification

|                                         |                                                 |
|-----------------------------------------|-------------------------------------------------|
| Sample Photo                            |                                                 |
|                                         |                                                 |
| A.Electrical Characteristics            |                                                 |
| Frequency                               | 2400-2480MHz<br>5100-5850MHz                    |
| V.S.W.R.                                | 2400-2480 MHz: < 1.5<br>5100-5850MHz: <2.0      |
| Peak Gain                               | 2400-2480 MHz: 1.42dBi<br>5100-5850MHz: 1.82dBi |
| Polarization                            | Linear                                          |
| Impedance                               | 50 Ohm                                          |
| B.Material & Mechanical Characteristics |                                                 |
| Material of Radiator                    | /                                               |
| Material of Plastic                     | PCB                                             |
| Cable Type                              | /                                               |
| Connector Type                          | weld                                            |
| Connector Pull Test                     | > - 3 Kgf                                       |
| C.Environmental                         |                                                 |
| Operation Temperature                   | - 40 °C ~ + 70 °C                               |
| Storage Temperature                     | - 40 °C ~ + 80 °C                               |

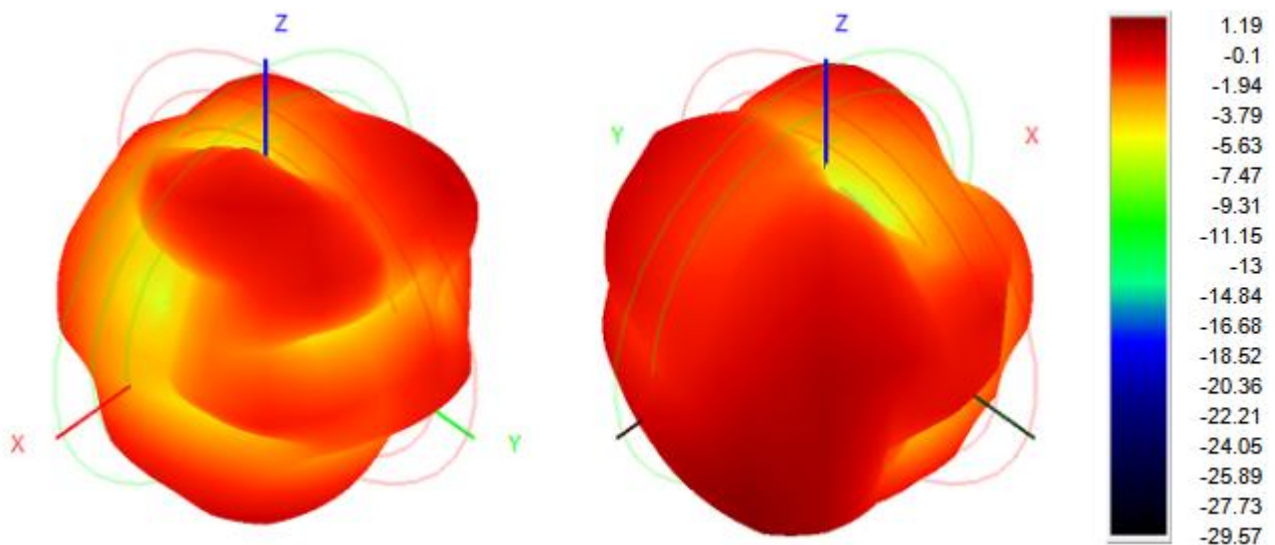
Add: 4 / F, South District, Building B, He Fuqin Industrial Park, Dalang Street Industrial Park Road,  
Longhua New District, Shenzhen City, Guangdong Province, P.R. China  
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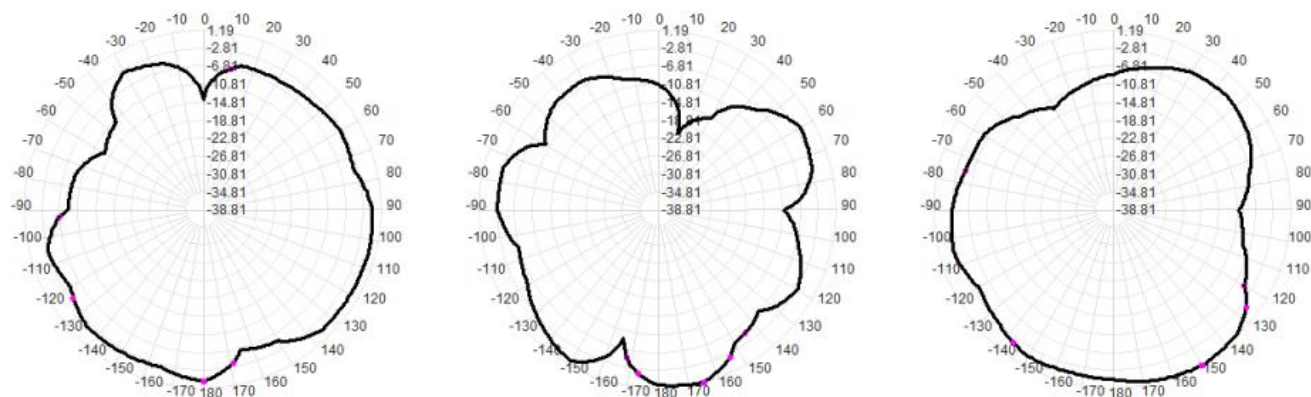
## 3. WiFi antenna test data

Wifi:2.4G efficiency / gain

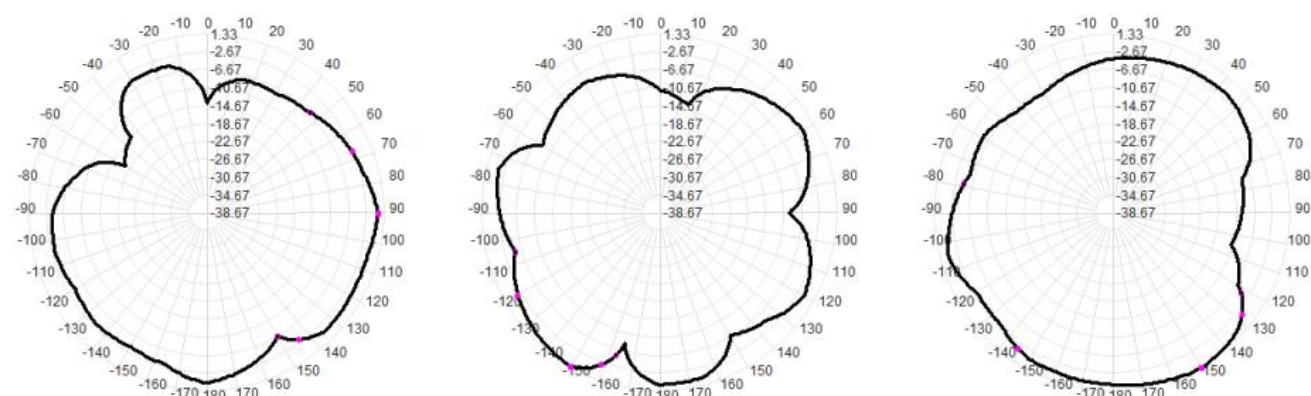
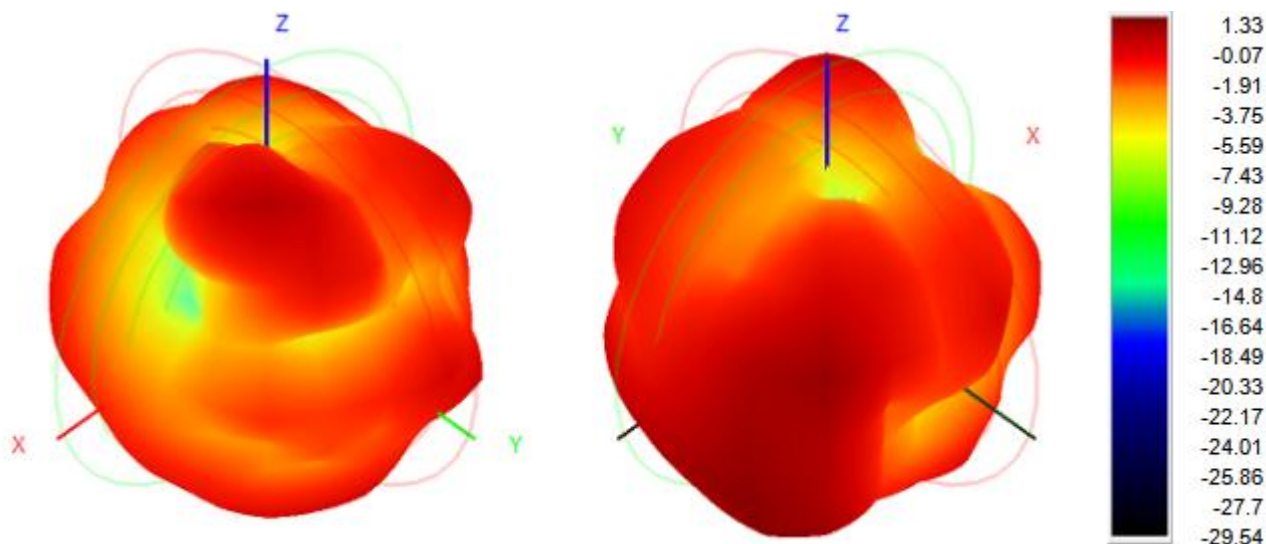
| Fre.(Mhz) | Efficiency(%) | Gain(dBi) |
|-----------|---------------|-----------|
| 2400      | 45.1          | 1.19      |
| 2410      | 42.6          | 1.23      |
| 2420      | 41.6          | 1.15      |
| 2430      | 43.8          | 1.18      |
| 2440      | 45.6          | 1.12      |
| 2450      | 42.4          | 1.33      |
| 2460      | 45.8          | 1.34      |
| 2470      | 47.1          | 1.42      |
| 2480      | 46.2          | 1.31      |

### 2400MHZ Apple chart

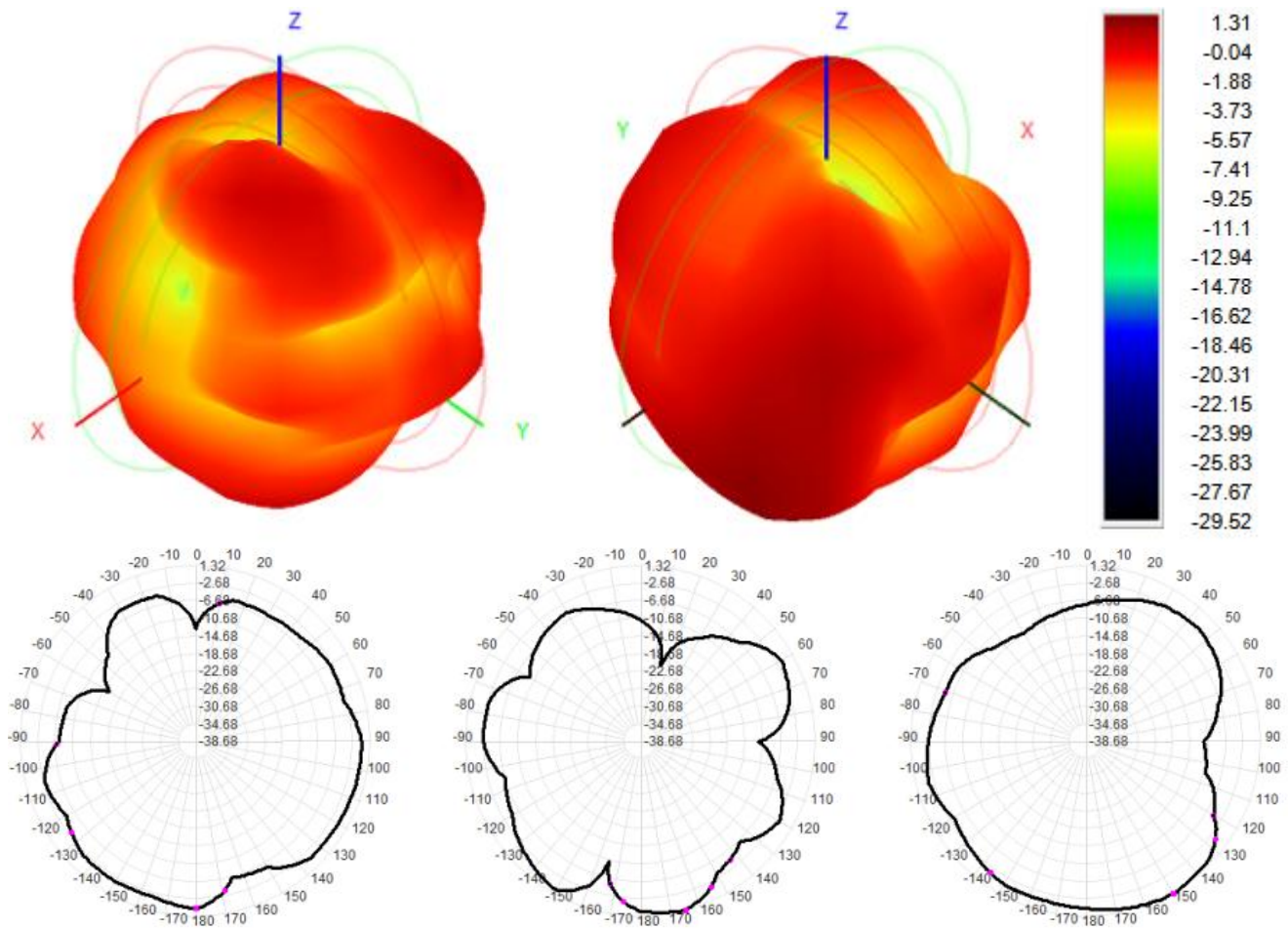




2450MHZ Apple chart



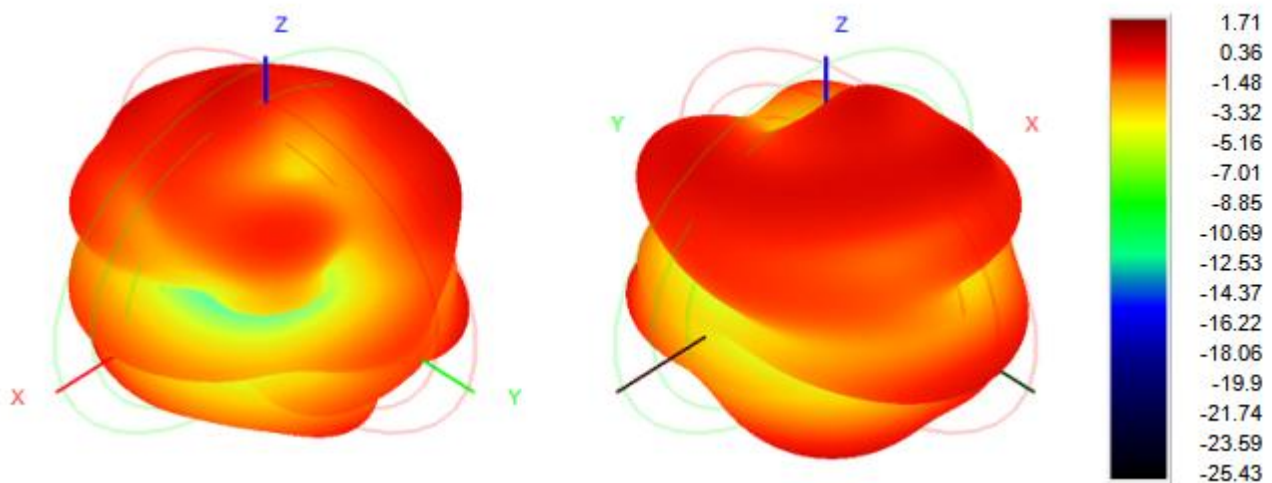
## 2480MHZ Apple chart

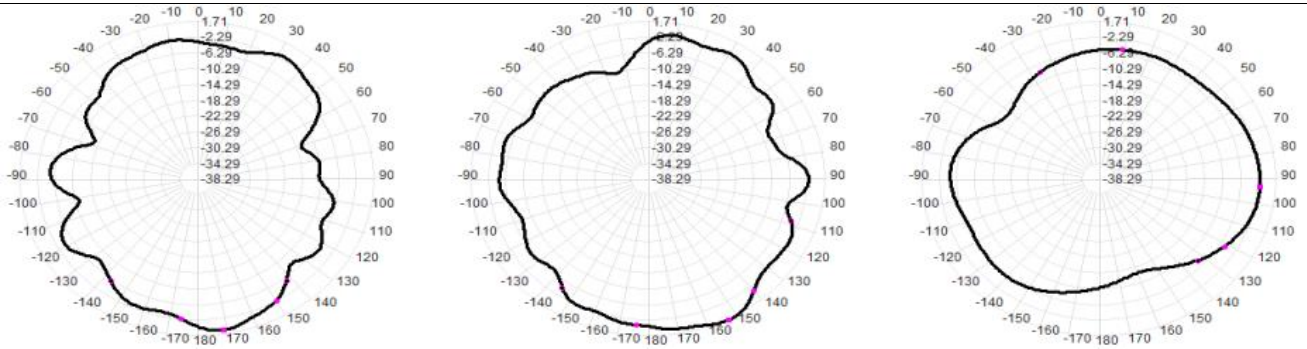


Wifi:5G efficiency / gain

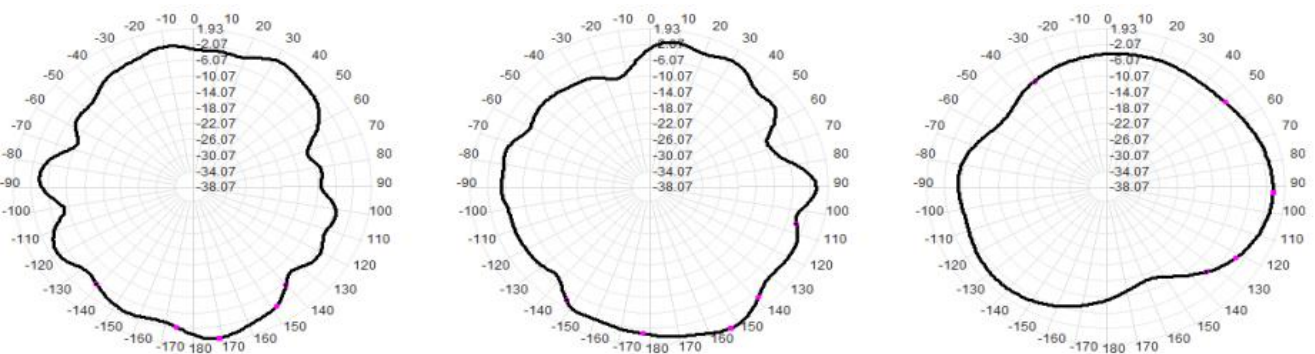
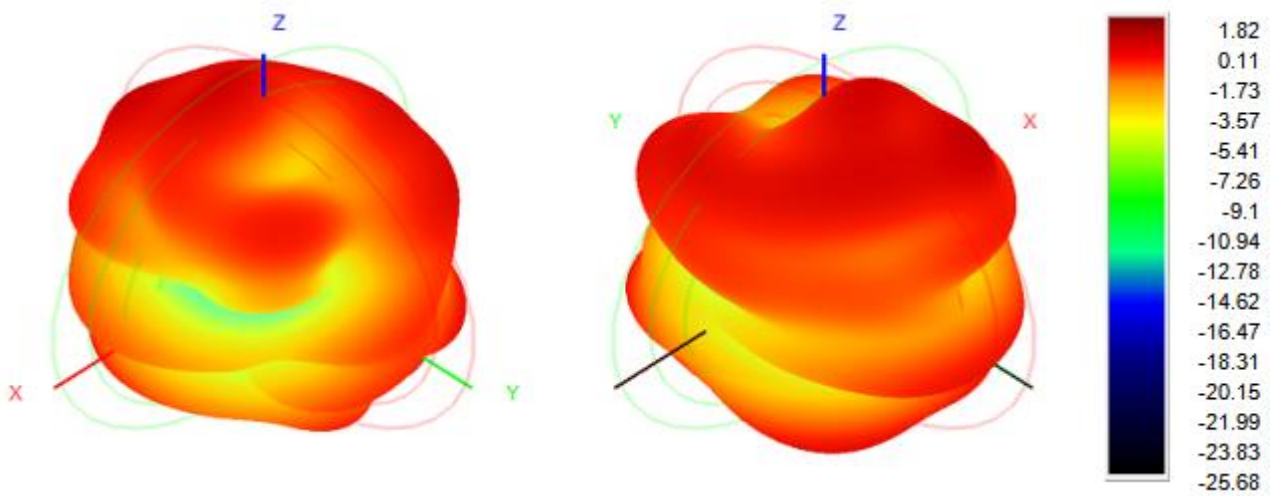
| WIFI: 5G  |                |            |
|-----------|----------------|------------|
| Freq(MHz) | Efficiency (%) | Gain (dBi) |
| 5150      | 48.3           | 1.71       |
| 5200      | 46.4           | 1.36       |
| 5250      | 44.8           | 1.25       |
| 5300      | 47.2           | 1.41       |
| 5350      | 46.3           | 1.76       |
| 5400      | 45.1           | 1.58       |
| 5450      | 49.4           | 1.35       |
| 5500      | 48.6           | 1.47       |
| 5550      | 47.1           | 1.82       |
| 5600      | 46.2           | 1.76       |
| 5650      | 43.4           | 1.65       |
| 5700      | 42.7           | 1.17       |
| 5750      | 43.4           | 1.31       |
| 5800      | 41.8           | 1.22       |
| 5850      | 43.5           | 0.92       |

5150MHz Apple chart

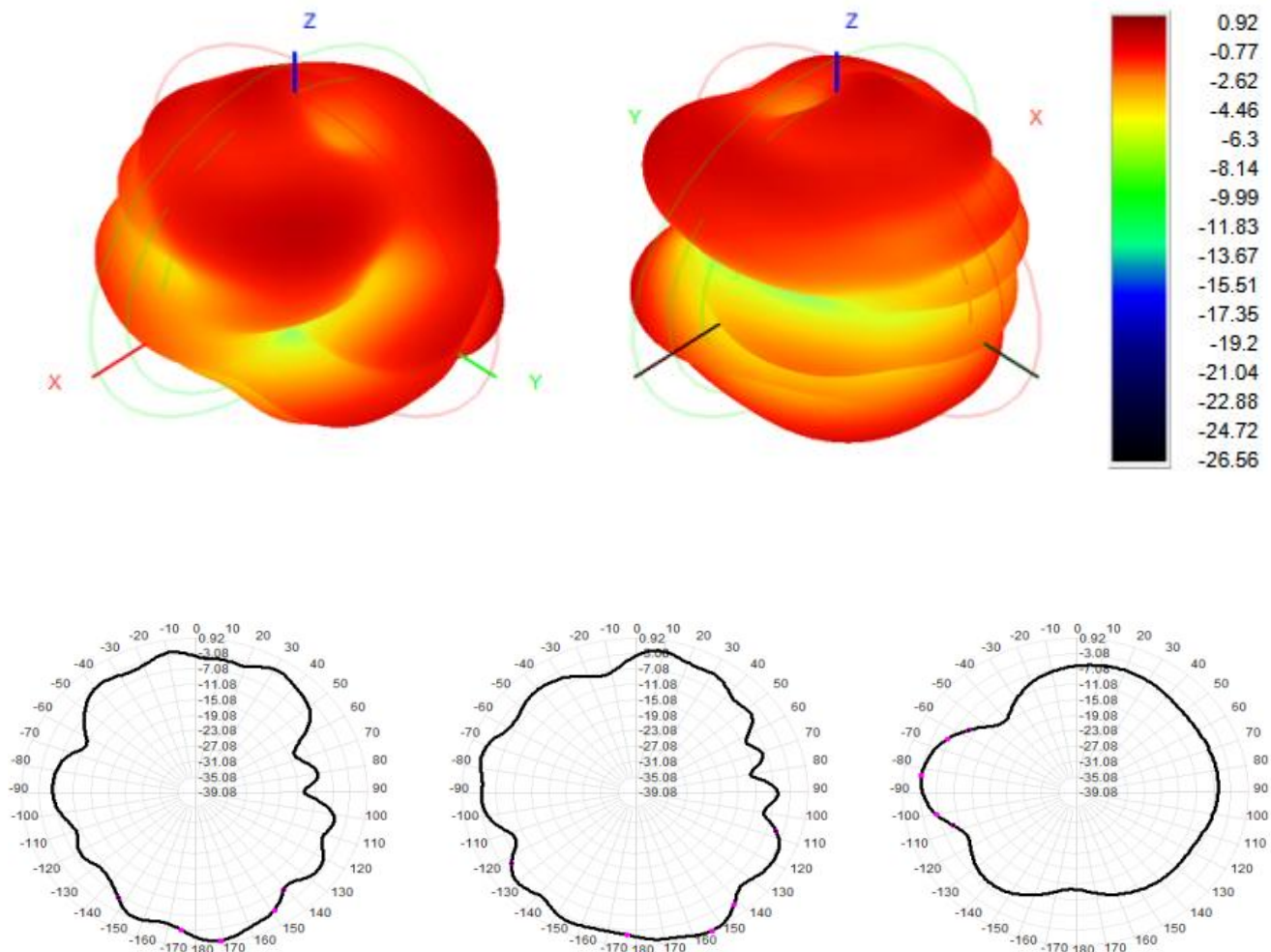




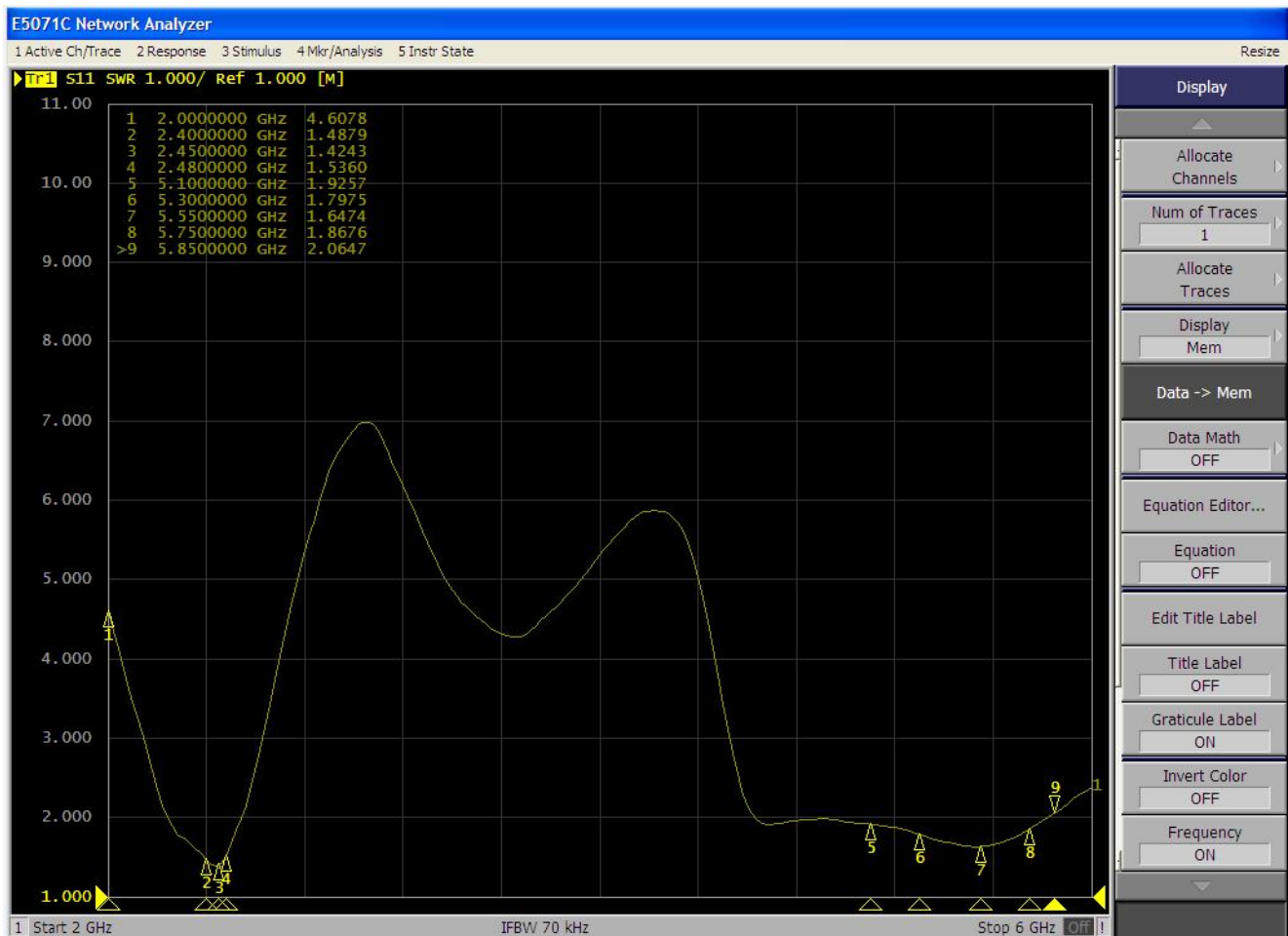
5550MHz Apple chart



## 5850MHz Apple chart



## SWR





**ANT**  
The front covered with black ink, no ink on the reverse side of the window area leakage of copper, white ink spray characters

**D**  
green fill part of the open window exposed copper  
The white cross filling part is the copper foil wiring part

**Top View Dimensions:**  
Overall width:  $10.8 \pm 0.15$   
Distance between mounting holes:  $5.5 \pm 0.15$

**Side View Dimensions:**  
Height:  $3 \pm 0.15$   
Base width:  $5.5 \pm 0.15$

**Cross-sectional View Dimensions:**  
Mounting hole diameter:  $\phi 1.0 \pm 0.1$   
Through-hole diameter:  $\phi 1.8 \pm 0.1$   
Pad diameter:  $\phi 1 \pm 0.1$

**MATERIALS**

| ① | PCB ANT | LOJSON | Type | Material    | Date | UNIT       | mm | P | T | FIT | Ver | R:A |
|---|---------|--------|------|-------------|------|------------|----|---|---|-----|-----|-----|
|   |         |        | ○    | 0.02        | P N  | WIFI       |    |   |   |     |     |     |
|   |         |        | ⊙    | $\phi 0.03$ | N o. | 003-086-0A |    |   |   |     |     |     |
|   |         |        | └    | 0.02        | M Q  | PCB        |    |   |   |     |     |     |
|   |         |        | └    | 0.04        |      |            |    |   |   |     |     |     |
|   |         |        | └    | 0.02        |      |            |    |   |   |     |     |     |

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