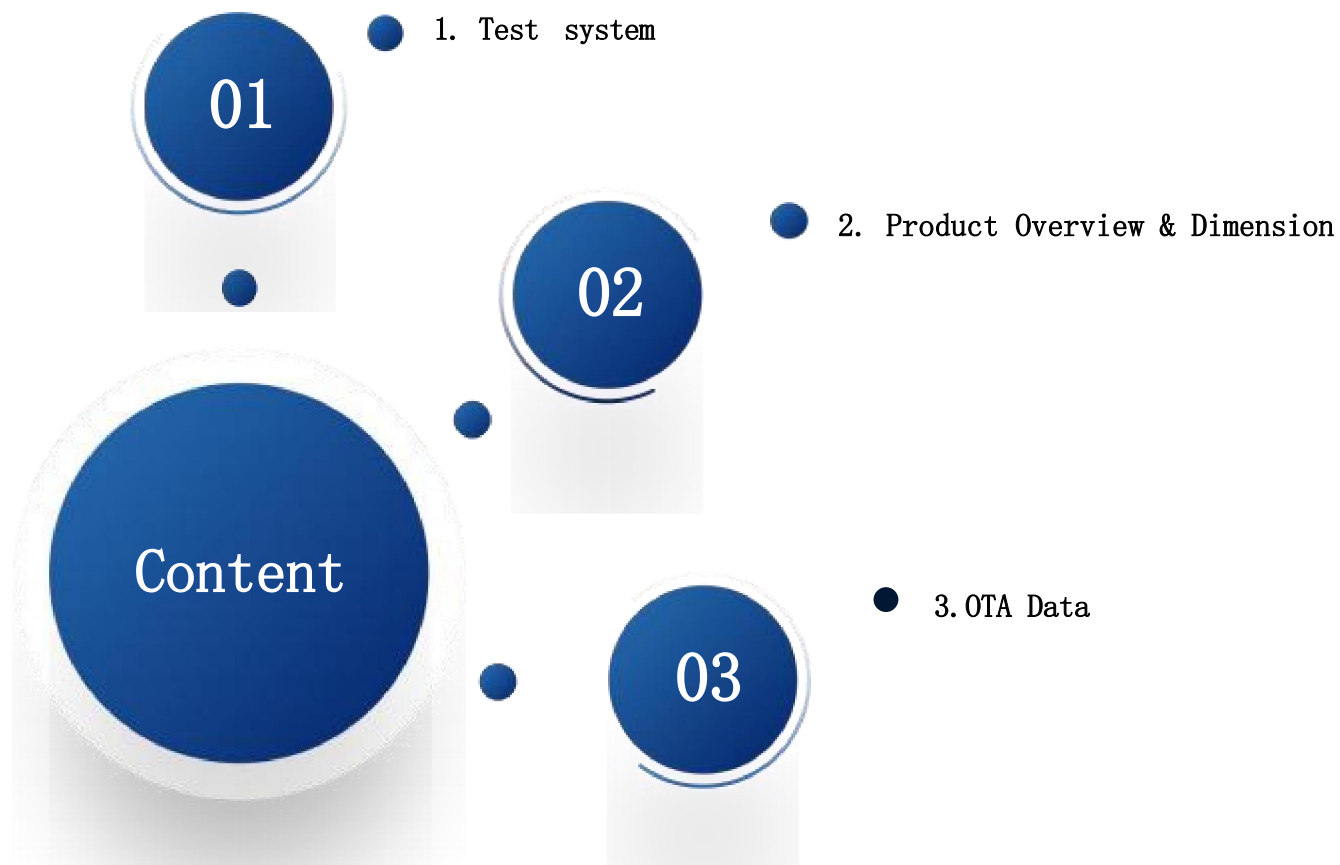




Room 1903, Building 2, Jiufang Plaza, Tiezai Road, Gongle Community, Xixiang Street, Bao'an District, Shenzhen, China

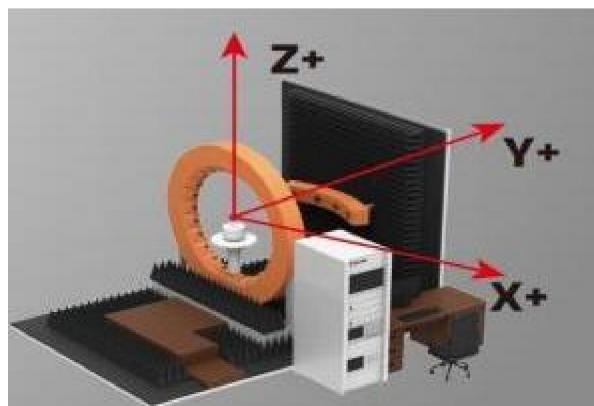
## Purpose

This report is to measure the performance of antenna for **BS8 10Z4J** The antenna operating frequency at 2400-2500MHz All test data are showed as below.



# 1.TestSystem

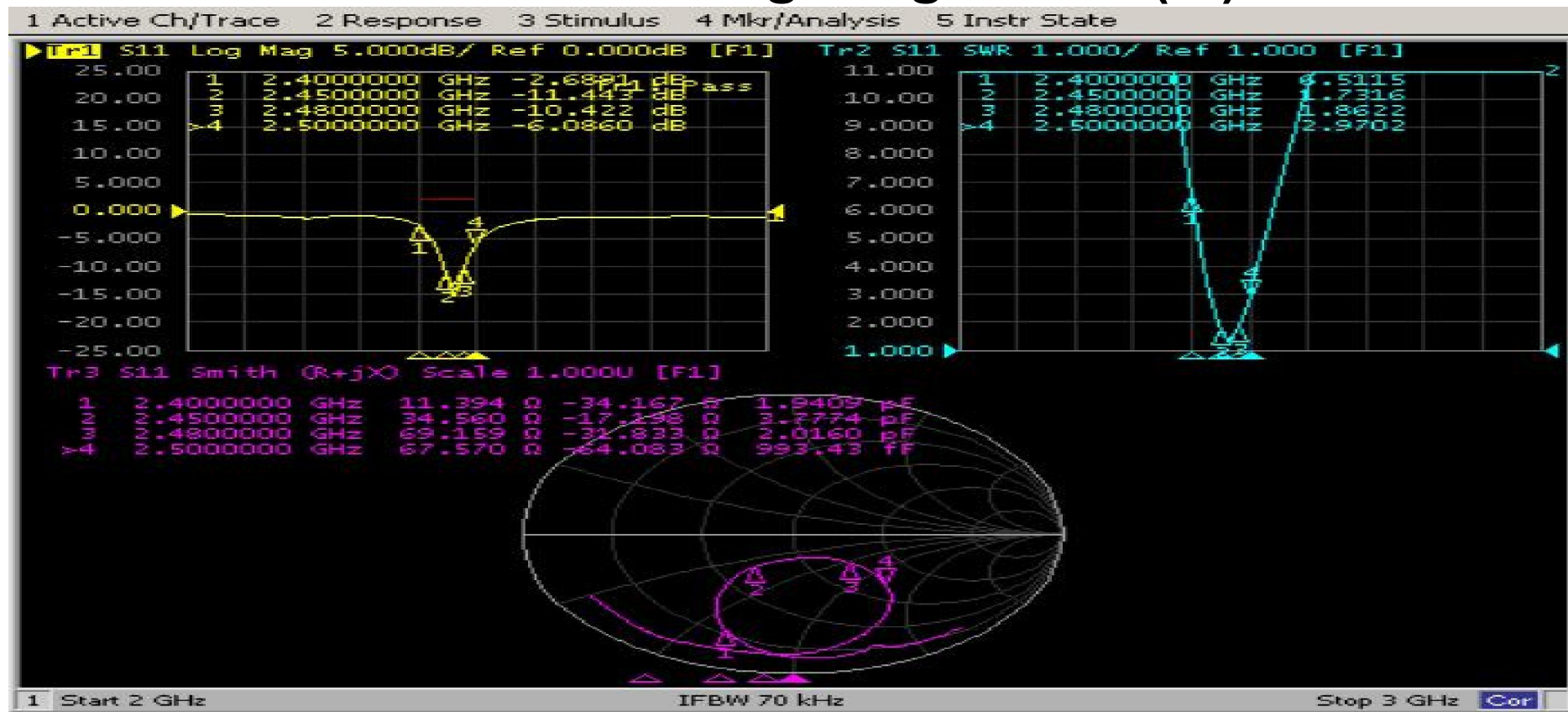
| Sequence Number   | Test Item         | equipment                     |
|-------------------|-------------------|-------------------------------|
| S parameter       | VSWR              | Agilent 5071C & Agilent 5071B |
| OTA Test          | TRP& TIS          | Agilent 8960 & CMW500 STIMO   |
| Gain & Efficiency | Gain & Efficiency | SATIMO<br>Agilent 5071C       |





## 2. Test Result VSWR&Log Mag&Smith( $\Omega$ )

L



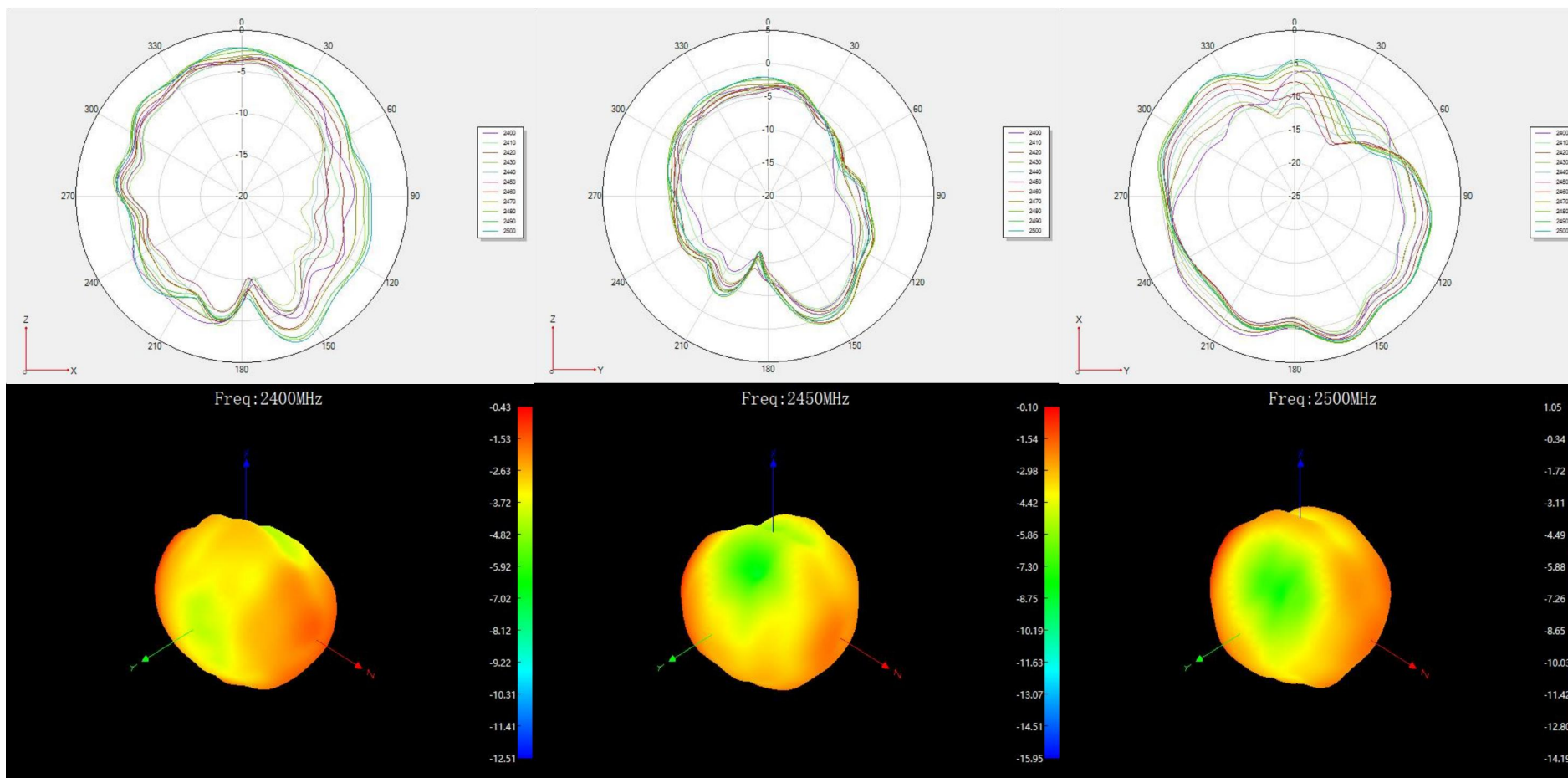
| Frequency (MHz)   | 2400  | 2450   | 2480   | 2500  |
|-------------------|-------|--------|--------|-------|
| Log Mag           | -2.68 | -11.44 | -10.42 | -6.08 |
| Smith( $\Omega$ ) | 11.39 | 34.56  | 69.15  | 67.57 |
| VSWR              | 6.51  | 1.73   | 1.86   | 2.97  |

### 3. test Result

| Frequency (MHz) | Efficiency (%) | Max GAIN (dBi) |
|-----------------|----------------|----------------|
| 2400            | 17.01          | -0.43          |
| 2410            | 17.2           | -2.06          |
| 2420            | 18.97          | -2.43          |
| 2430            | 18.11          | -1.79          |
| 2440            | 19.14          | -1.28          |
| 2450            | 19.84          | -0.10          |
| 2460            | 18.83          | -1.43          |
| 2470            | 17.76          | -1.03          |
| 2480            | 16.05          | -1.77          |
| 2490            | 16.76          | -2.51          |
| 2500            | 15.35          | 1.05           |

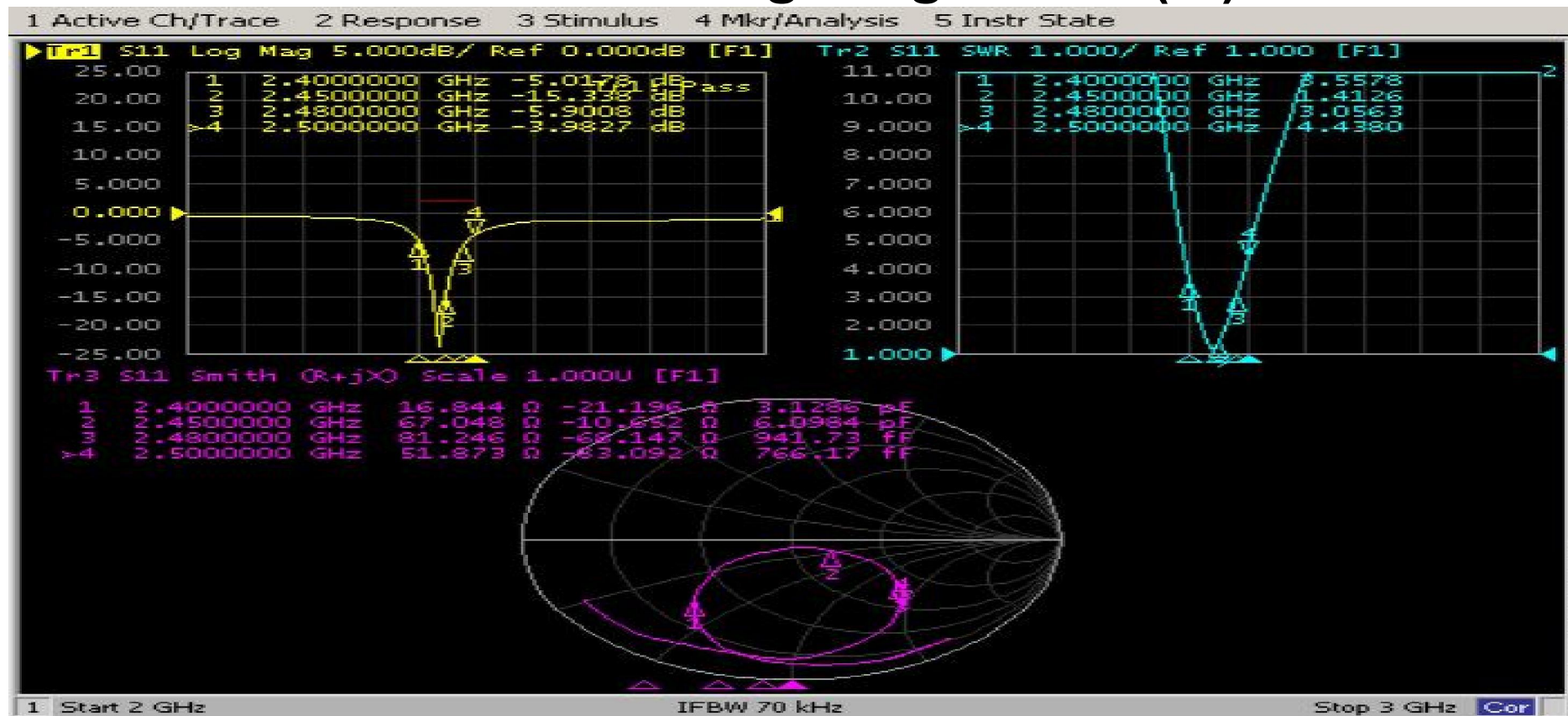
### 3. Test Result

#### 3.1 2D Pattern—BTANT



## 2. Test Result VSWR&Log Mag&Smith( $\Omega$ )

R



| Frequency (MHz)   | 2400  | 2450   | 2480  | 2500  |
|-------------------|-------|--------|-------|-------|
| Log Mag           | -5.01 | -15.33 | -5.9  | -3.98 |
| Smith( $\Omega$ ) | 16.84 | 67.04  | 81.24 | 51.87 |
| VSWR              | 3.55  | 1.41   | 3.05  | 4.43  |

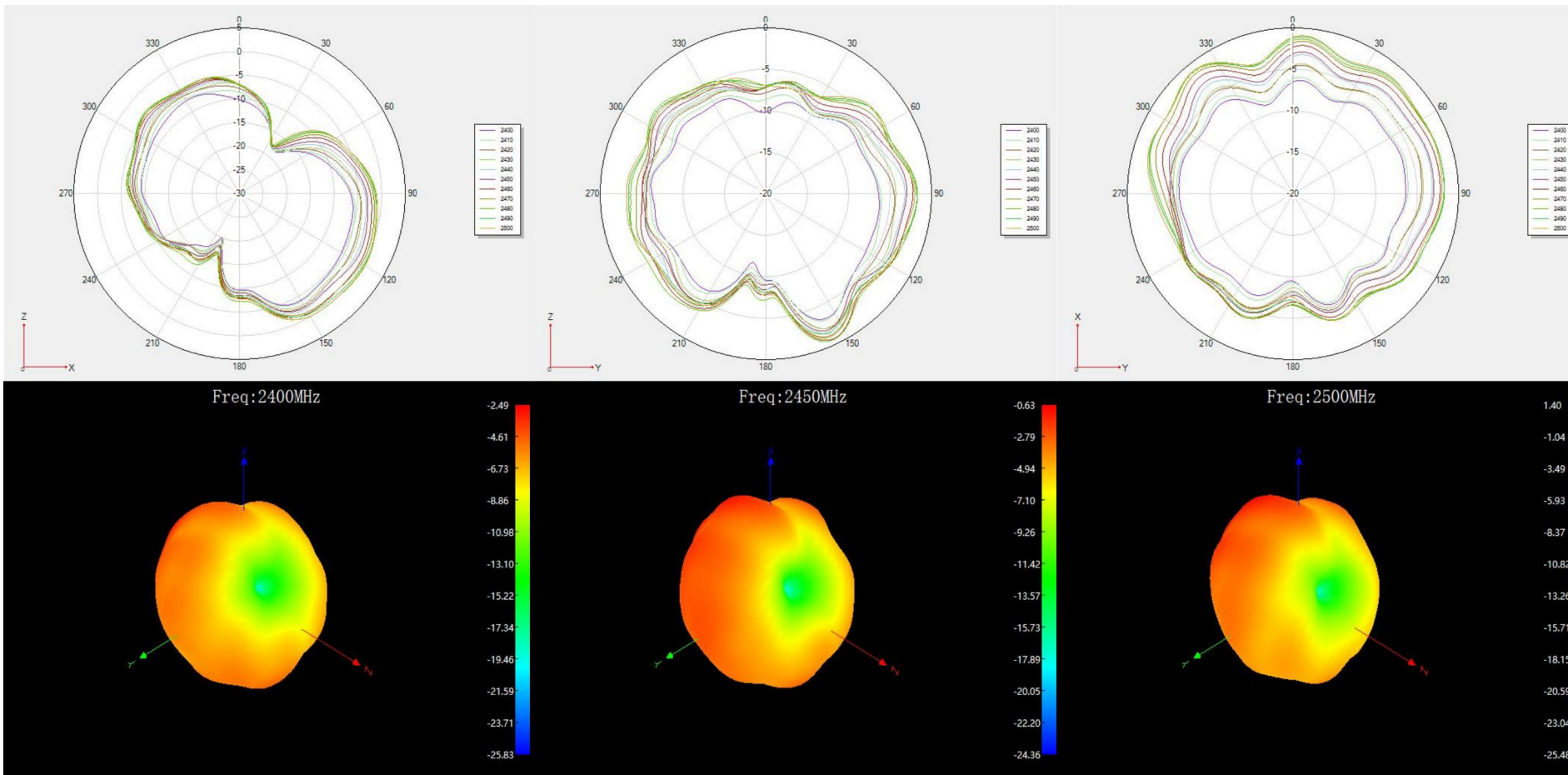
### 3. test Result

| Frequency (MHz) | Efficiency (%) | Max GAIN (dBi) |
|-----------------|----------------|----------------|
| 2400            | 17.13          | -2.49          |
| 2410            | 17.77          | -2.34          |
| 2420            | 18.9           | -1.25          |
| 2430            | 18.37          | -1.44          |
| 2440            | 18.58          | -1.35          |
| 2450            | 18.75          | -0.63          |
| 2460            | 17.92          | -1.86          |
| 2470            | 17.67          | -1.48          |
| 2480            | 16.44          | -2.46          |
| 2490            | 16.54          | -2.78          |
| 2500            | 16.04          | 1.40           |



### 3. Test Result

#### 3.1 2D Pattern——BTANT



### 3.OTA Data

自由数据

|                 |            |          |          |
|-----------------|------------|----------|----------|
| Test Equipment: | R&S CMW500 |          |          |
| Test Condition: | 3D chamber |          |          |
| Band            | Channel    | TRP(dBm) | TIS(dBm) |
| L               | 0          | 3.47     | -87.65   |
|                 | 39         | 2.51     | -86.7    |
|                 | 78         | 2.43     | -86.04   |
| R               | 0          | 3.75     | -87.89   |
|                 | 39         | 2.87     | -86.67   |
|                 | 78         | 2.11     | -86.1    |

## 3.OTA Data

头模数据

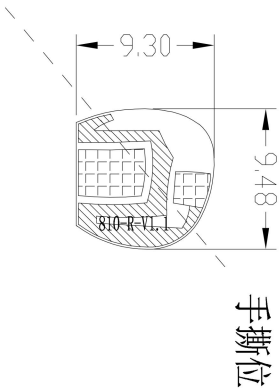
|                 |            |          |          |
|-----------------|------------|----------|----------|
| Test Equipment: | R&S CMW500 |          |          |
| Test Condition: | 3D chamber |          |          |
| Band            | Channel    | TRP(dBm) | TIS(dBm) |
| L               | 0          | 0.18     | -84.22   |
|                 | 39         | -0.13    | -83.5    |
|                 | 78         | -0.44    | -83.03   |
| R               | 0          | 0.39     | -84.66   |
|                 | 39         | -0.08    | -83.61   |
|                 | 78         | -0.36    | -83.44   |





产品图纸或实物图片 R  
Drawing or Product Image

丝印白色, 天线黑色



注:

- 1、背胶采用3M 9471 300SE, 粘性在300MP以上, 背胶外形与基材一致, 覆在基材背面, 背胶做半切;
- 2、材料单面版, 一对半基材, 柔韧性要好;
- 3、产品覆油后经180°折弯表面无裂痕现象, 柔韧性要好;
- 4、金手指表面镀金, 不可有氧化现象, 以铜箔相接处, 经180°折弯之后无裂痕、不导通现象;
- 5、走线及孔精确公差范围:  $\pm 0.03\text{mm}$ , 外形尺寸公差控制在 $0.1\text{mm}$ 以内;
- 6、打★号为严格控制尺寸, 标有\*为重点尺寸, 未标注尺寸按GD电子图档1:1量取;
- 7、表面印字, 具体内容及位置见图;
- 8、所求非模样, 需要切割好外形之后, 在送样到我司。

| No. |  | Description(Thickness) |  | Manufacturer & P/N            |  |
|-----|--|------------------------|--|-------------------------------|--|
| 1   |  | 背胶                     |  | 3M9471LM                      |  |
| 2   |  | 基材                     |  | KIM-800F NR6310 $\mu\text{m}$ |  |
| 3   |  | 印油                     |  | PSM-800F3DM-ASM-80            |  |

| 第三角法  |  | 机种    |  | 日期   |  | 设计                   |  | 绘图        |  | 审核  |  | 页码     |  |
|-------|--|-------|--|------|--|----------------------|--|-----------|--|-----|--|--------|--|
| 0~10  |  | ±0.10 |  | 0.02 |  | BS810241             |  | 2026-3-10 |  | 朱增圆 |  | 1 of 1 |  |
| 10~20 |  | ±0.12 |  | 0.03 |  | BT天线                 |  |           |  |     |  |        |  |
| 20~40 |  | ±0.15 |  | 0.02 |  | BT006-BSS10241-+V1.1 |  |           |  |     |  |        |  |
| 40~   |  | ±0.20 |  | 0.04 |  | FPC-309471           |  |           |  |     |  |        |  |

| 位置    |  | 材料   |  | 结构 |  | 射频 |  | 单位 |  | 比例  |  | 版本    |  |
|-------|--|------|--|----|--|----|--|----|--|-----|--|-------|--|
| 请见测试图 |  | 外观处理 |  |    |  |    |  |    |  | 1:1 |  | REV.A |  |