

# 承 认 书

## APPROVAL SHEET

样品封订

客户名称 Customer Name Quec link

产品型号 Product Model M100

客户料号 Customer P/N QK1027200165

南斗星料号 SouthstarP/N N14-6215-R0A

制作日期 Production date 2019-11-04

封样版本 Sample Version A 版

| 南斗星 (Southstar) |          |          |
|-----------------|----------|----------|
| 编制 (FICTION)    | 品质 (DQE) | 研发 (R&D) |
|                 |          |          |
| 客户 (Customer)   |          |          |
| 采 购 (PUR)       | 品质 (QC)  | 研发 (R&D) |
|                 |          |          |

生产厂商：深圳市南斗星科技有限公司  
SOUTH STAR TECHNOLOGY SHEN ZHEN COMPANY LIMITED

网 址：[WWW.SZ-SOUTHSTAR.COM](http://WWW.SZ-SOUTHSTAR.COM)

承认书变更履历

| 版 本     | 日 期          | 变 更 描 述 | 备 注 |
|---------|--------------|---------|-----|
| Rev. 01 | 2019. 11. 04 | 初 版     |     |
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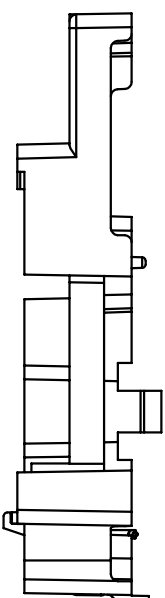
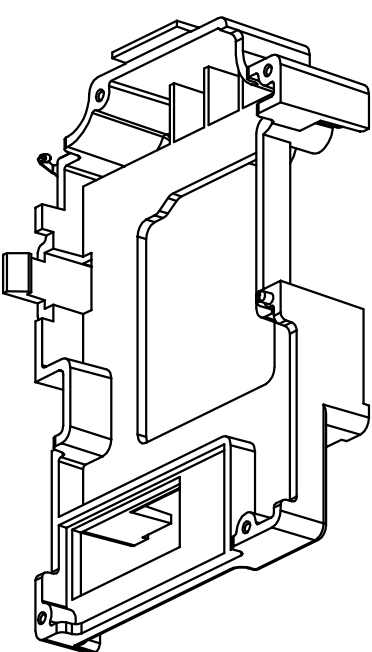
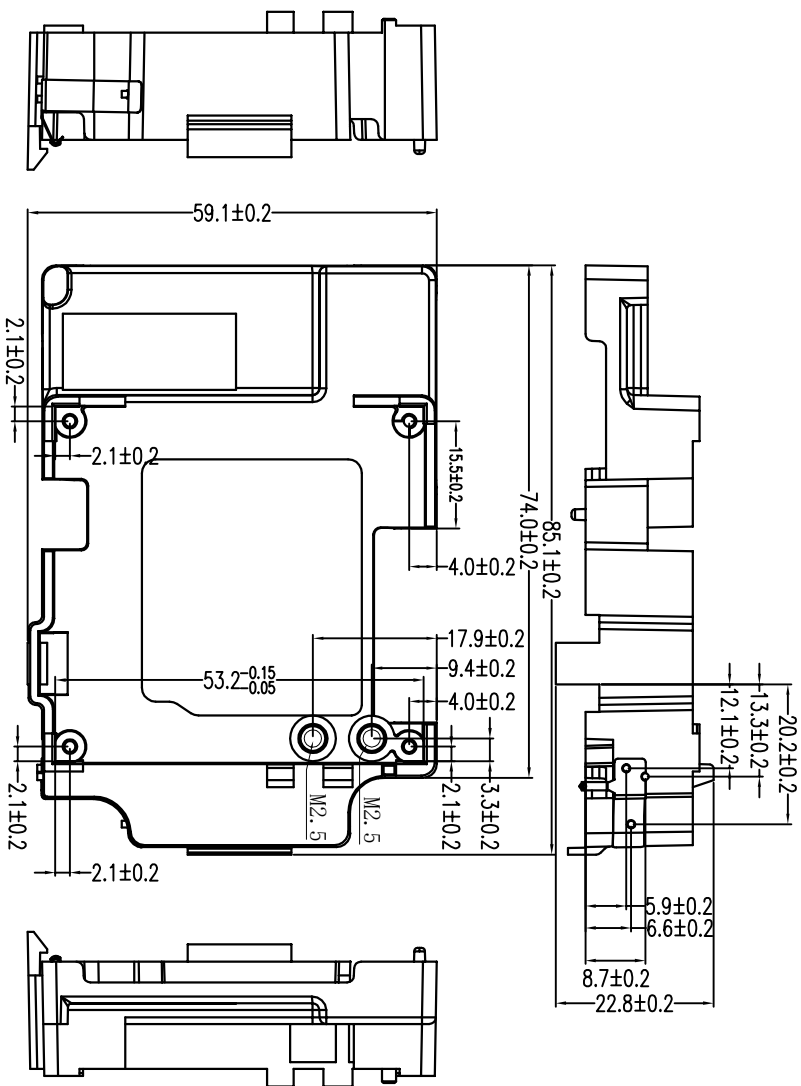
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## 基本参数(The basic parameters)

| A. Electrical Characteristics            |                      |
|------------------------------------------|----------------------|
| Frequency                                | 2400MHZ~2500MHZ      |
| VSWR                                     | < 2                  |
| Efficiency                               | >35%                 |
| Impedance                                | 50 $\Omega$ Norminal |
| Polarization                             | Linear               |
| Peak Gain                                | 1. 5 1 dBi           |
| B. Material & Mechanical Characteristics |                      |
| Material of Radiator                     | steel sheet          |
| Cable Type                               | NA                   |
| Connector Type                           | shrapnel             |
| Dimension                                | reference drawing    |
| C. Environmental                         |                      |
| Operation Temperature                    | - 20 °C ~ + 60 °C    |
| Storage Temperature                      | - 20 °C ~ + 80 °C    |



备注:  
1.带“\*”的尺寸为重点尺寸;  
2.可靠性测试按手机天线特性检验规范。

|   |    |                  |    |   |  |
|---|----|------------------|----|---|--|
| 3 | 螺母 | 黄铜M2.5, 4*4      | 金色 | 2 |  |
| 2 | 弹片 | SUS301, T:0.15mm | 本色 | 1 |  |
| 1 | 支架 | ABS              | 白色 | 1 |  |

|            |                              |
|------------|------------------------------|
| ***        | 深 圳 南 斗 星 科 技 有 限 公 司        |
| South Star | SHEN ZHEN SOUTHSTAR CO., LTD |

| Third Angle | Project   | M100         | Date        | 2020-04-10 |
|-------------|-----------|--------------|-------------|------------|
| 0~10        | Part Name | WiFi天线组件     | Designed by | 邹荣凯        |
| 10~20       | Part No.  | M14-6215-R0A | Checked by  | RF 周洪亮     |
| 20~40       | Material  |              | PE          |            |
| 40~         | Treatment | M14-6215-R0A | Approved by |            |

| Location | Unit | mm | Scale | 1:1 | Rev | D |
|----------|------|----|-------|-----|-----|---|
|----------|------|----|-------|-----|-----|---|

| Rev | Description | Date | Remark | 5 | 6 | 7 | 8 |
|-----|-------------|------|--------|---|---|---|---|
| 1   | New drawing |      |        |   |   |   |   |

## 测试设备(Test Equipment & Conditions)

### 1 测试仪器

VSWR 是使用安捷伦 E5071B 连接到手机夹具来测试，状态为自由空间。

### 2 测试环境及方式

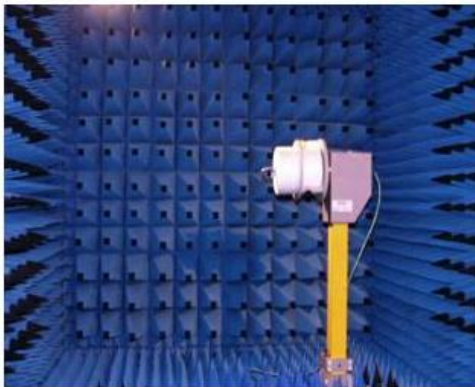
**暗室规格：ETS-7 4 3**

**TD-SCDMA测试设备:StarPoint SP6010/Agilent 8960**

**LTE-TDD/FDD-SCDMA测试设备:StarPoint SP8011 /CMW500**

**WCDMA/GSM/CDMA测试设备: Agilent 8960**

**无源效率测试设备: Agilent Technologies E5071B**





**South  
star**

Shenzhen South Star Technology Co. Ltd.  
103B, Build10, No.198 Zhang Heng Road ,  
Pudong New Area, Shanghai

# **1. Antennas' setup and enviroment**

## **With housing**



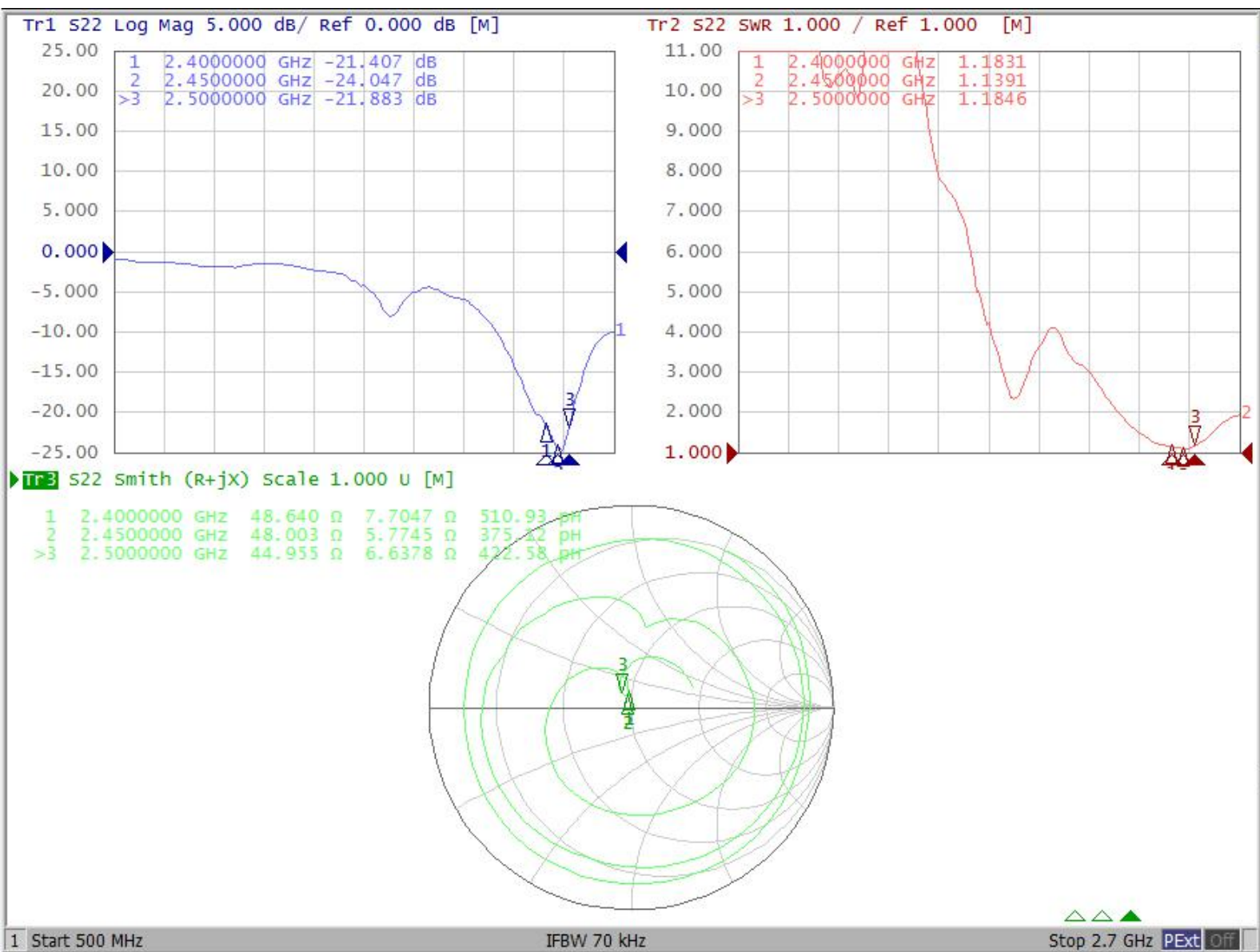


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## 2. Analyzer Measurement

### 2.1 S11 test results



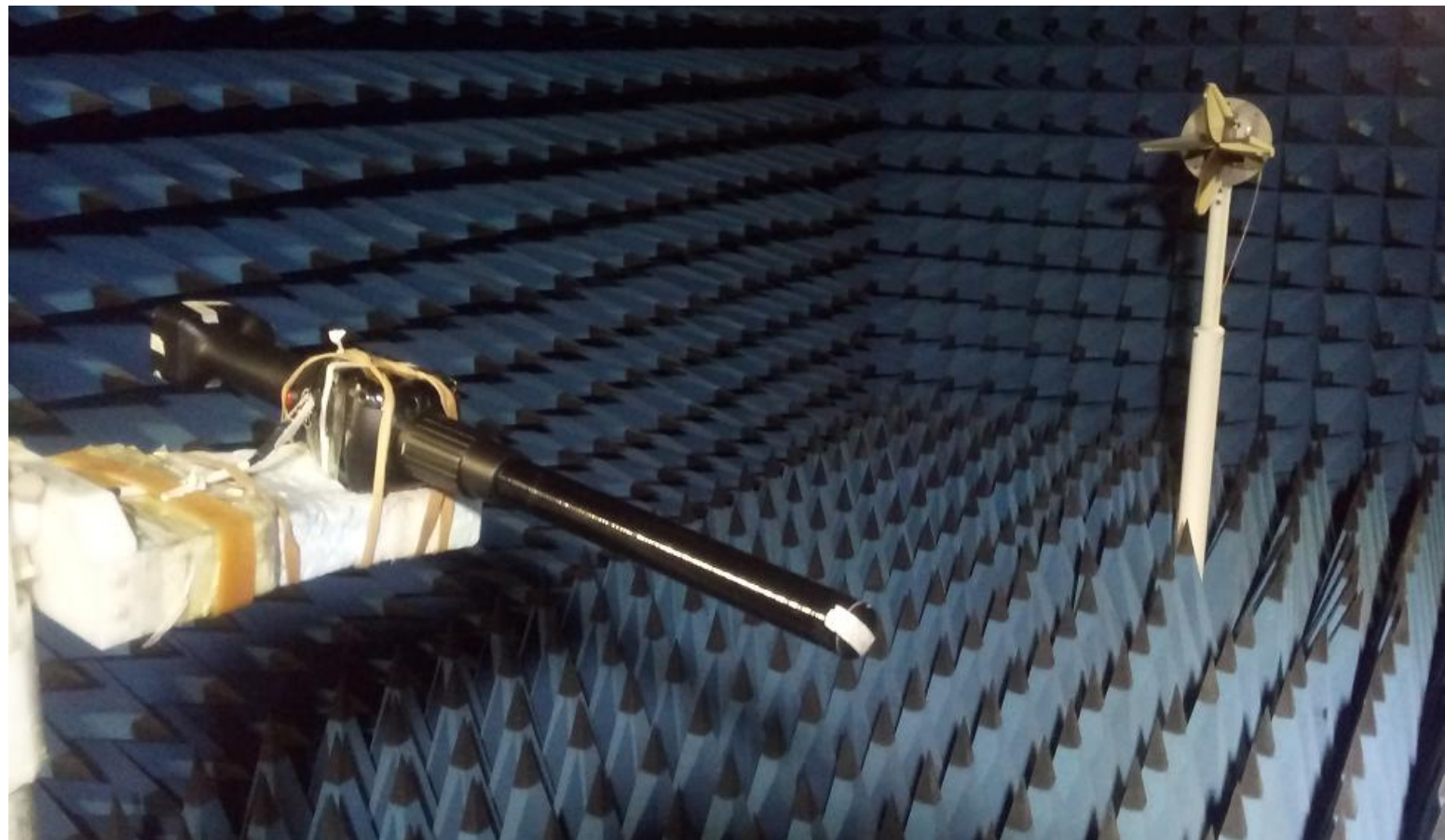


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## **3. Gain & Patterns test results**

### **3.1 Measurement setting**





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## 4.2 3D Peak Gain & Efficiency

| Freq  | Effi  | Gain  |
|-------|-------|-------|
| (MHz) | (%)   | (dBi) |
| 2400  | 41.14 | 0.75  |
| 2410  | 40.68 | 0.86  |
| 2420  | 40.88 | 1.09  |
| 2430  | 40.29 | 1.03  |
| 2440  | 39.96 | 1.14  |
| 2450  | 41.7  | 1.39  |
| 2460  | 39.72 | 1.23  |
| 2470  | 41.84 | 1.51  |
| 2480  | 41.05 | 1.47  |
| 2490  | 39.05 | 1.26  |
| 2500  | 39.98 | 1.37  |

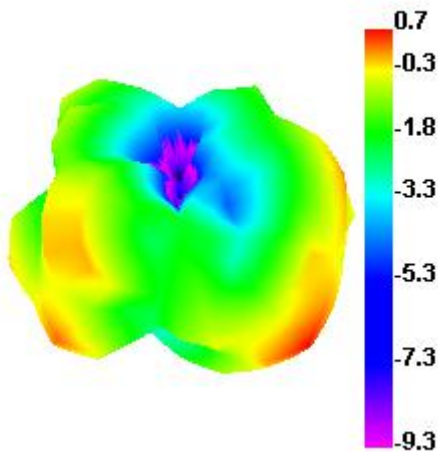


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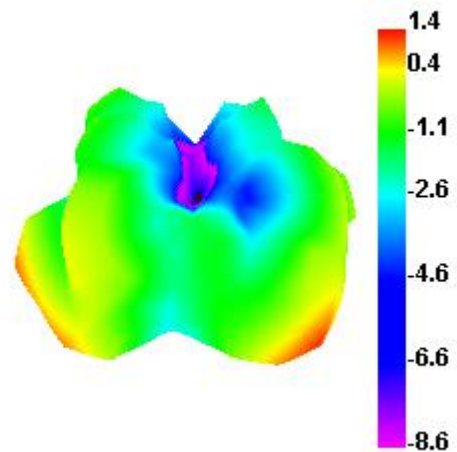
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103B, Build10, No.198 Zhang Heng Road ,  
Pudong New Area, Shanghai

### 3.2 2.4G--2D/3D Patterns

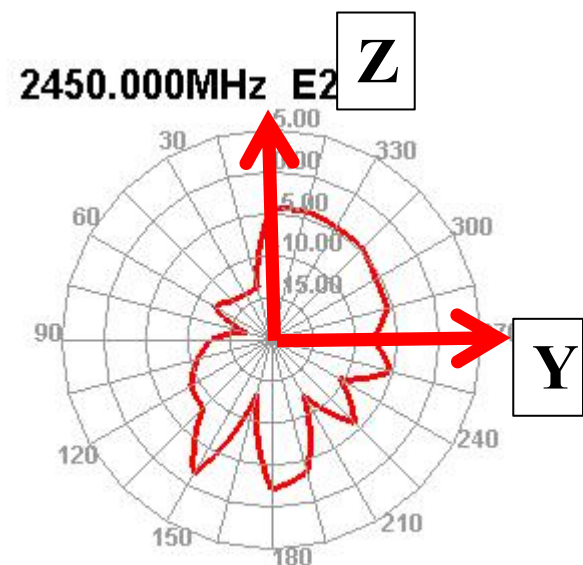
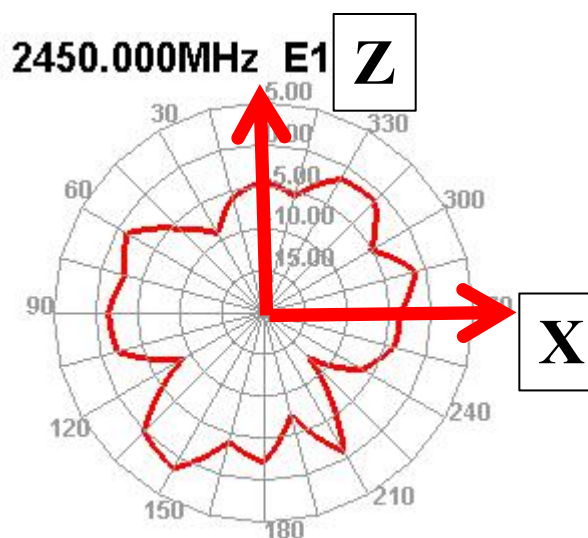
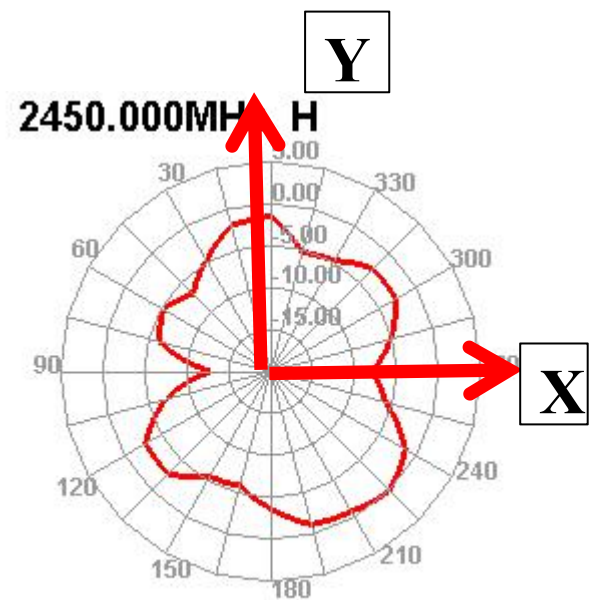
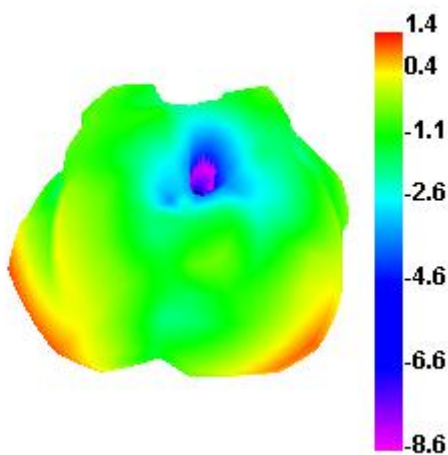
2400.000MHz



2450.000MHz

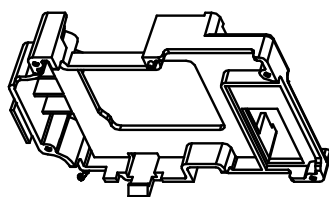


2500.000MHz

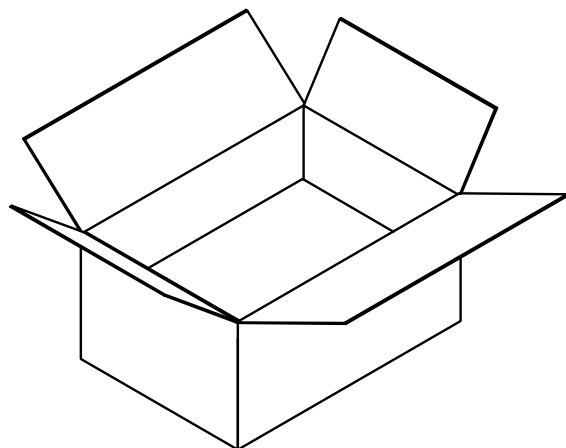
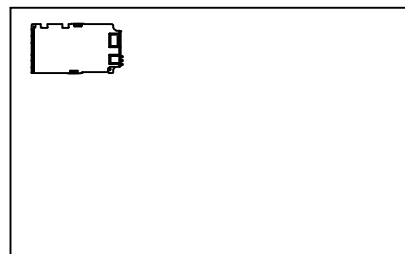


|                |       |
|----------------|-------|
| 成品名称：M100-钢片天线 | 版本：A  |
|                | 客户：移为 |

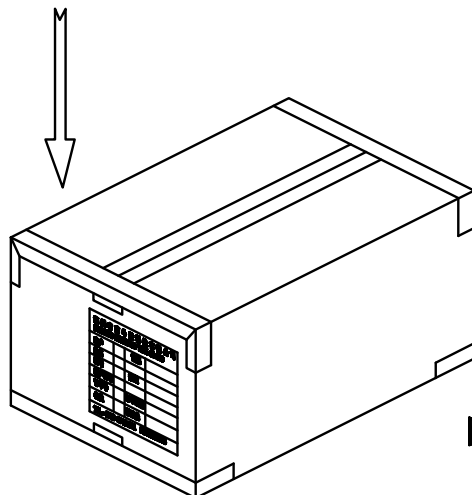
一：成品天线



二：用吸塑盘包装，30pcs一盘；  
在每隔档中不影响弹脚变形的情况  
下以实际包装为准；



三：吸塑盘叠加包装，用透明薄膜缠绕  
包装，10盘(300pcs)一箱(以实际包装为准)；



四：封箱，外箱贴我司生产标签和ROHS标签。

批准：\_\_\_\_\_

确认：\_\_\_\_\_

拟制： 邹荣凯