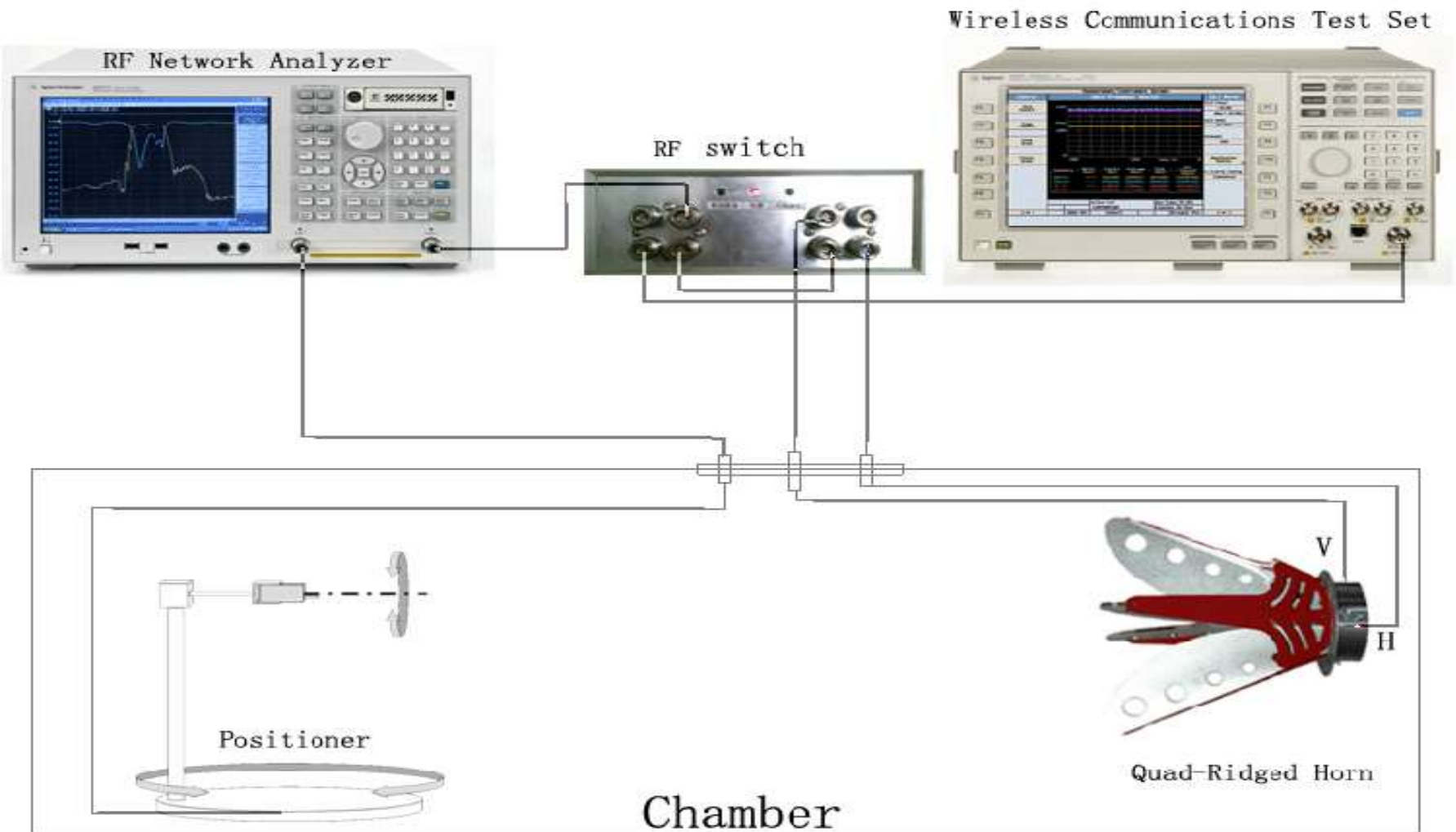


# Antenna Test Report

|                    |                                                                                             |
|--------------------|---------------------------------------------------------------------------------------------|
| entry name:        | SW-R1359                                                                                    |
| Material category: | BT antenna                                                                                  |
| Antenna Type       | PCB Antenna                                                                                 |
| Date:              | 2025.05.13                                                                                  |
| customer:          | ZHENZHENSHI QIRUI ELECTRON CO.,LTD                                                          |
| Address:           | 2A, No.140, Songyu Road, Songgang Street, Baoan District, Shenzhen City, Guangdong Province |

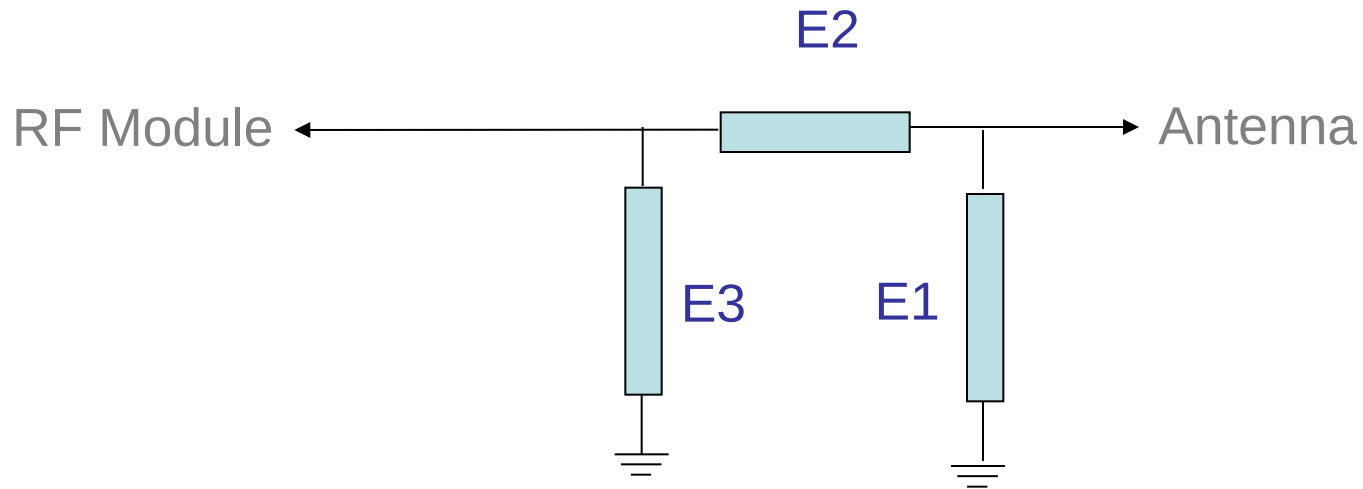
# Test System



Directory:

- 1、 Matching circuit.
- 2、 Passive test report.
- 3、 OTA test data

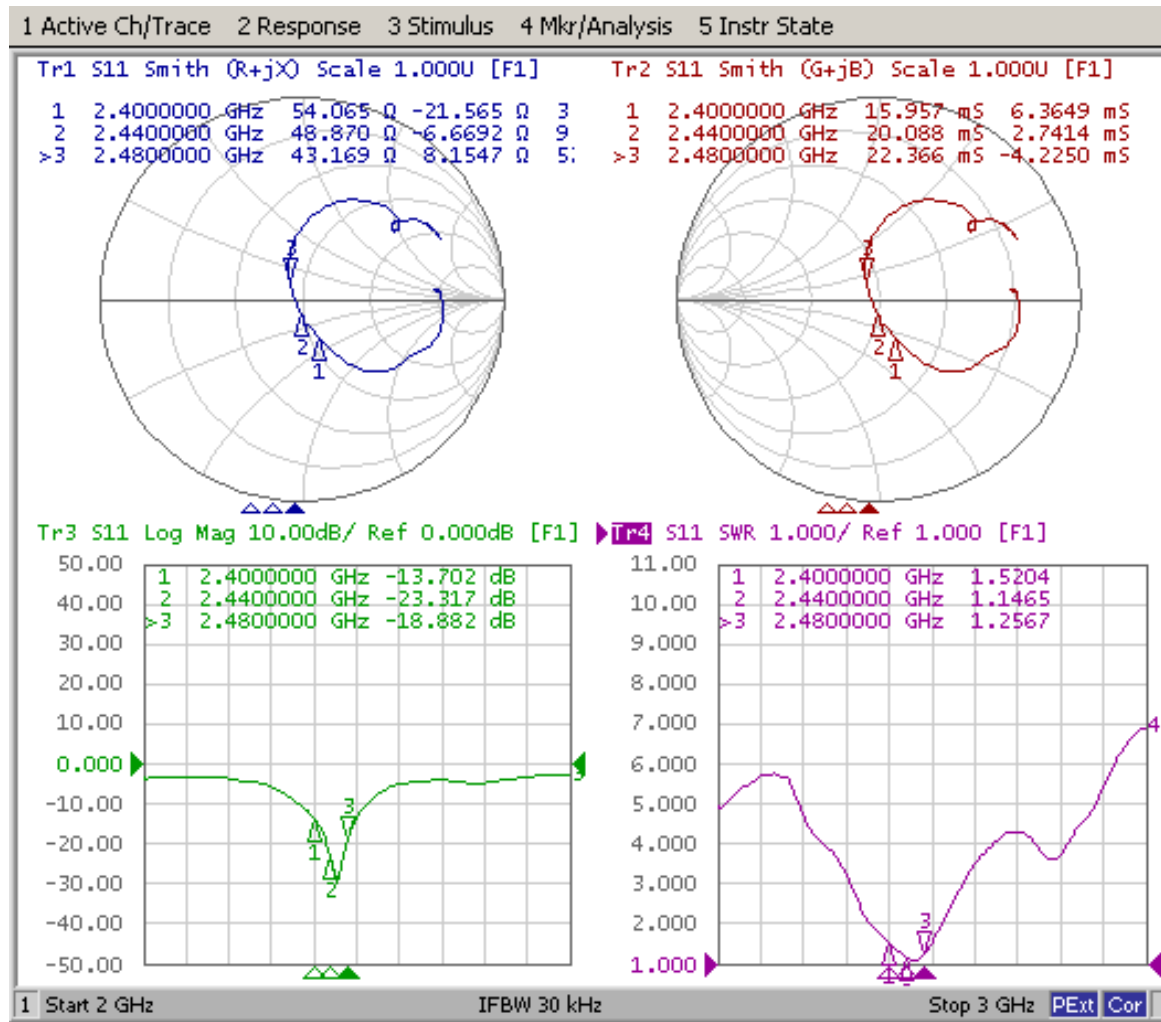
# 1. Matching circuit



| Element | Value |
|---------|-------|
| E1      | NC    |
| E2      | 0R    |
| E3      | NC    |
|         |       |

# 2 Passive pattern of BT antenna

## 2.1 S11 Parameter

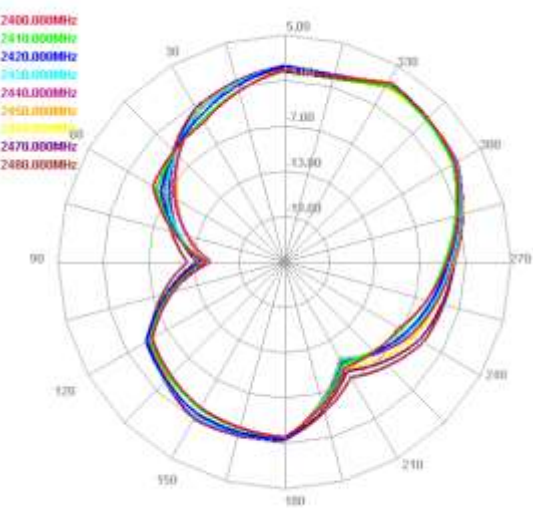


## 2.2 Gain & Efficiency

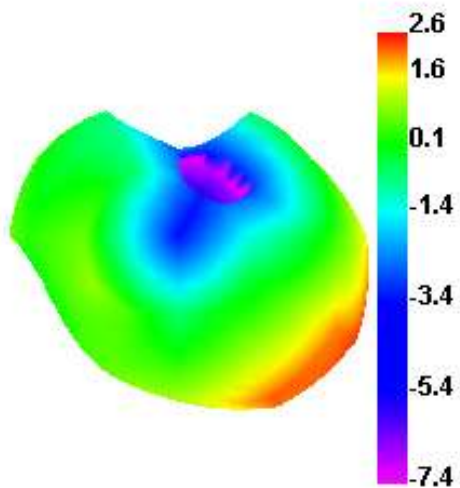
| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 2400          | 51.96       | -2.84        | 2.6           |
| 2410          | 51.05       | -2.92        | 2.3           |
| 2420          | 55.77       | -2.54        | 2.4           |
| 2430          | 57.25       | -2.42        | 2.5           |
| 2440          | 56.92       | -2.45        | 2.6           |
| 2450          | 57.71       | -2.39        | 2.7           |
| 2460          | 55.3        | -2.57        | 2.3           |
| 2470          | 59.61       | -2.25        | 2.7           |
| 2480          | 58.06       | -2.36        | 2.3           |

## 2.3 Radiation pattern

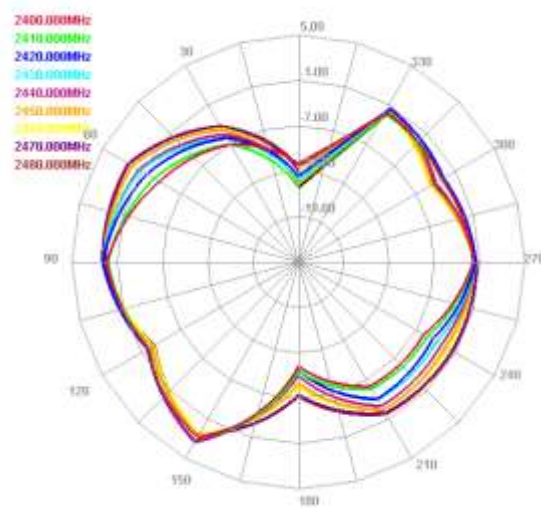
Horizontal



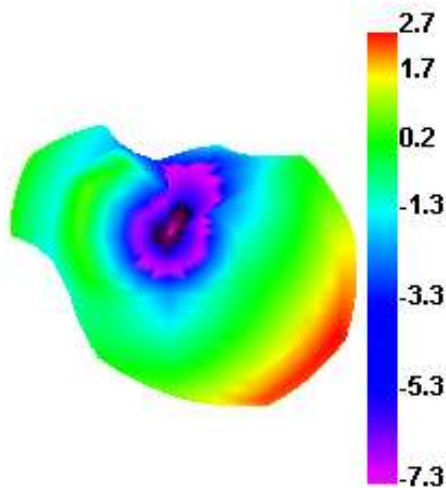
2400.000MHz



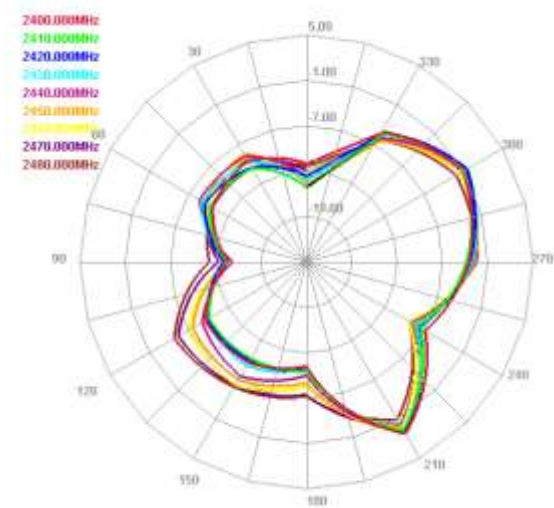
E1 Face



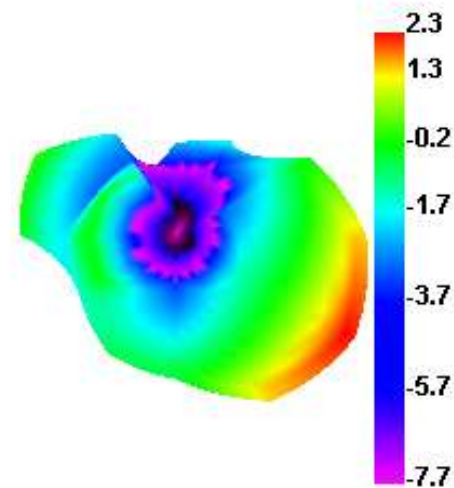
2450.000MHz



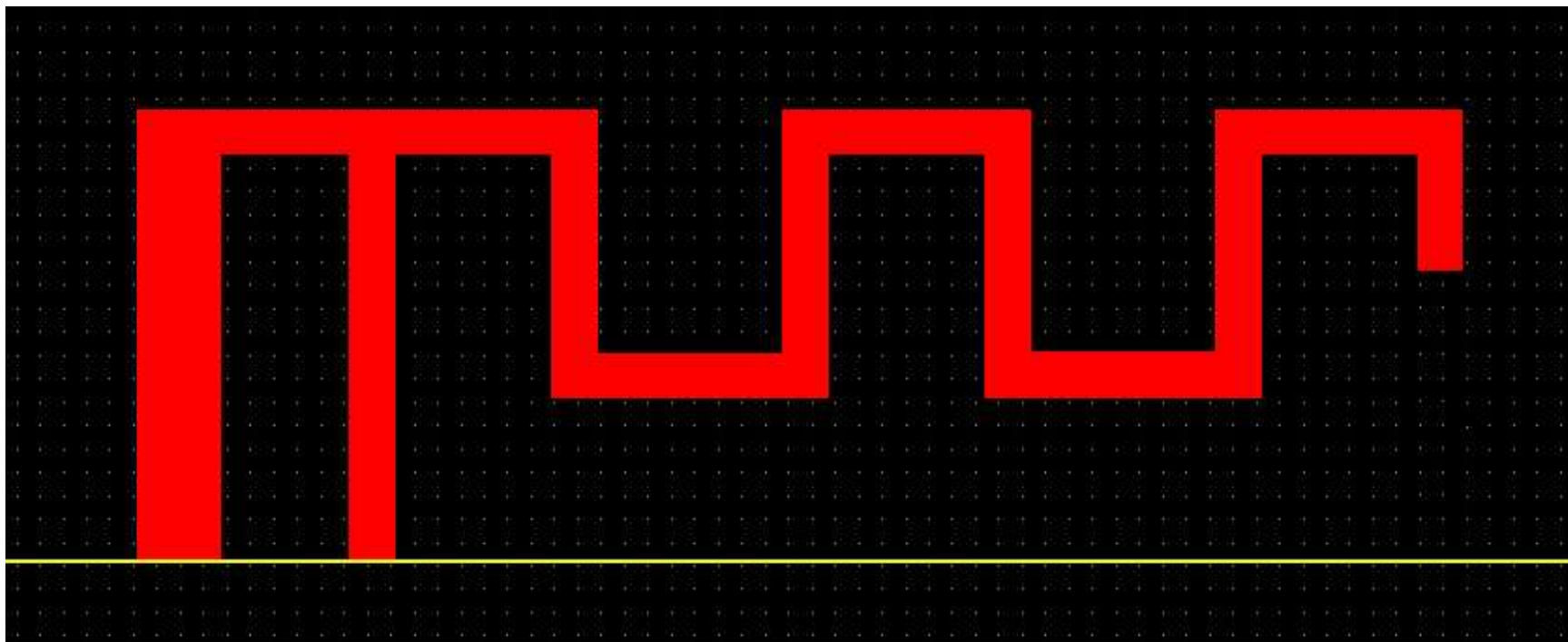
E2 Face



2480.000MHz



3、Antenna size:14.4\*5.8mm





### 3、OTA Test Data

| band         | channel | TRP (dBm) | TIS (dBm) |
|--------------|---------|-----------|-----------|
| Bluetooth BR | 0       | 5.9       | -90.1     |
|              | 39      | 6.4       | -91.7     |
|              | 78      | 6.4       | -91.8     |