

SHENZHEN ATN COMMUNICATION TECHNOLOGY CO., LTD.

SPECIFICATION FOR APPROVL

CUSTOMER: Questyle Audio Technology Co., Ltd

CUSTOMER PRJ: M18i-MAX

CUSTOMER P/N:

OUR PRJ: ATN146001

SPECIFICATIONS: 2.4~2.48GHz

Q' TY: 1 PCS

DATE: 2025.12.20

|       |          |          | CUSTOMER   |              |          |
|-------|----------|----------|------------|--------------|----------|
| maker | reviewer | Approver | Structurer | Electronicer | Approver |
|       |          |          |            |              |          |

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艾特诺通讯

SHENZHEN ATN COMMUNICATION TECHNOLOGY CO., LTD.

## 1、 Test Equipment&Conditions

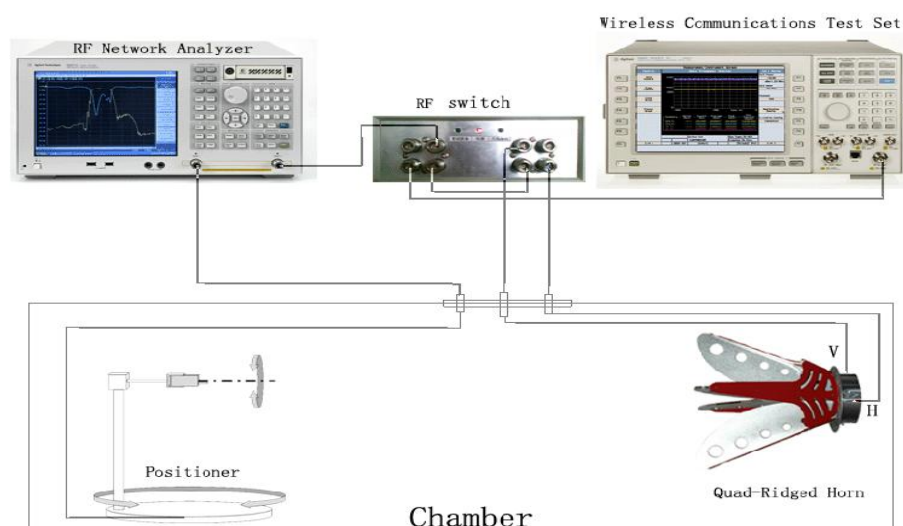
### 1.1 Network Analyzers

Agilent Technologies E5071B

### 1.2 ommunications Test Set

CMW500

### 1.3 Test System



## 2、 Product Specification

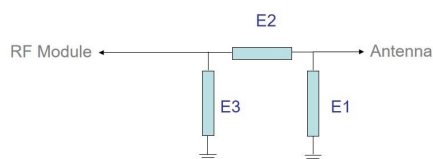
### 2.1、 Material&Mechanical Characteristics

|              |          |
|--------------|----------|
| Material     | FPC      |
| Antenna type | PIFA ANT |

### 2.2、 Storage conditions

|                     |          |
|---------------------|----------|
| Storage Temperature | 22℃±5℃   |
| relative humidity   | 35-65%   |
| Storage life        | 360 days |

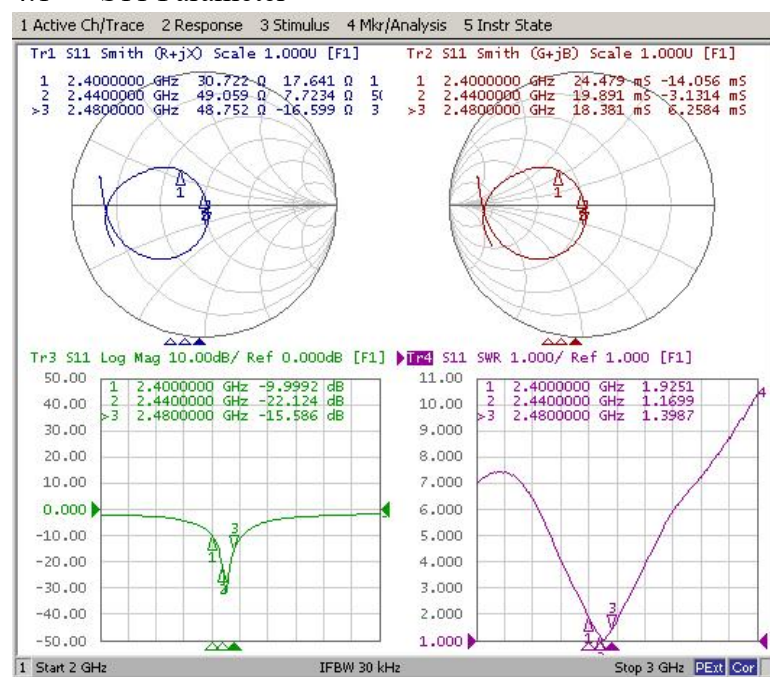
### 3、Matching circuit



| Element  | Value |
|----------|-------|
| E1(0201) | NC    |
| E2(0201) | 1.2pF |
| E3(0201) | NC    |

### 4、Test Data Report

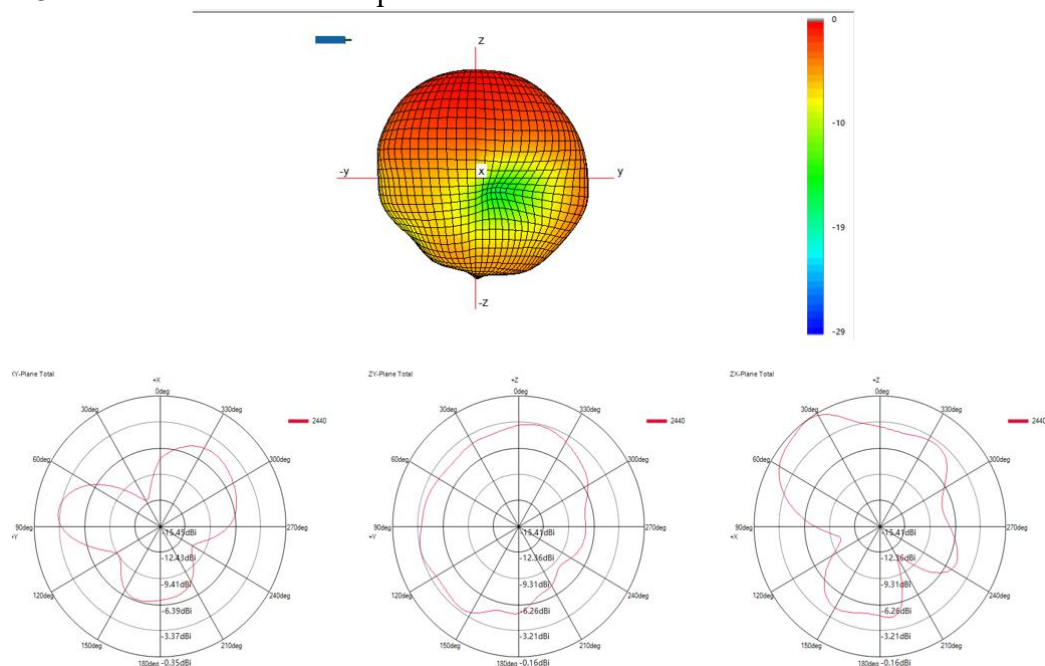
#### 4.1 S11 Parameter



#### 4.2 Gain & Efficiency

| Freq(MHz) | Gain(dBi) | Efficiency(dB) | Efficiency(%) |
|-----------|-----------|----------------|---------------|
| 2400      | -0.11     | -5.16          | 30.45         |
| 2410      | -0.07     | -5.18          | 30.32         |
| 2420      | -0.02     | -5.25          | 29.87         |
| 2430      | -0.15     | -5.16          | 30.45         |
| 2440      | -0.35     | -5.21          | 30.10         |
| 2450      | -0.46     | -5.25          | 29.88         |
| 2460      | -0.54     | -5.37          | 29.05         |
| 2470      | -0.79     | -5.59          | 27.59         |
| 2480      | -0.86     | -5.70          | 26.94         |

#### 4.3 Radiation pattern



4.4 OTA Test Data

| Bluetooth BR | Channel | Frequency (MHz) | TRP (dBm) |
|--------------|---------|-----------------|-----------|
|              | 0       | 2402            | 9.42      |
|              | 39      | 2441            | 9.44      |
|              | 78      | 2480            | 9.4       |
|              |         |                 |           |
|              | Channel | Frequency (MHz) | TIS (dBm) |
|              | 0       | 2402            | -91.79    |
|              | 39      | 2441            | -88.24    |
|              | 78      | 2480            | -89.67    |

5、Assembly requirements



6、Product Drawing

