

# Specification

**Parts No.:** Bluetooth antenna (right earbud)

**Supplier:** Shenzhen NQI network communication., ltd

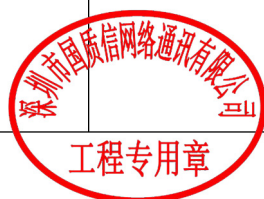
**Brand:** NQI

**Type/Spec:** NQI-0656-R-BT-FB-V6

**Document No.:** NQI-RD-SPEC-20220918

**Version:** V6

| Supplier    |             | Customer         |              |
|-------------|-------------|------------------|--------------|
| Approved By | Prepared By | Engineering Dept | Quality Dept |
|             |             |                  |              |



## 1. Electrical Parameter

|              |              |
|--------------|--------------|
| Frequency    | 2400-2500MHz |
| Impedance    | 50 ohm       |
| VSWR         | $\leq 2$     |
| Gain         | -0.57dBi     |
| Polarization | horizontal   |
| Directivity  | Omni antenna |

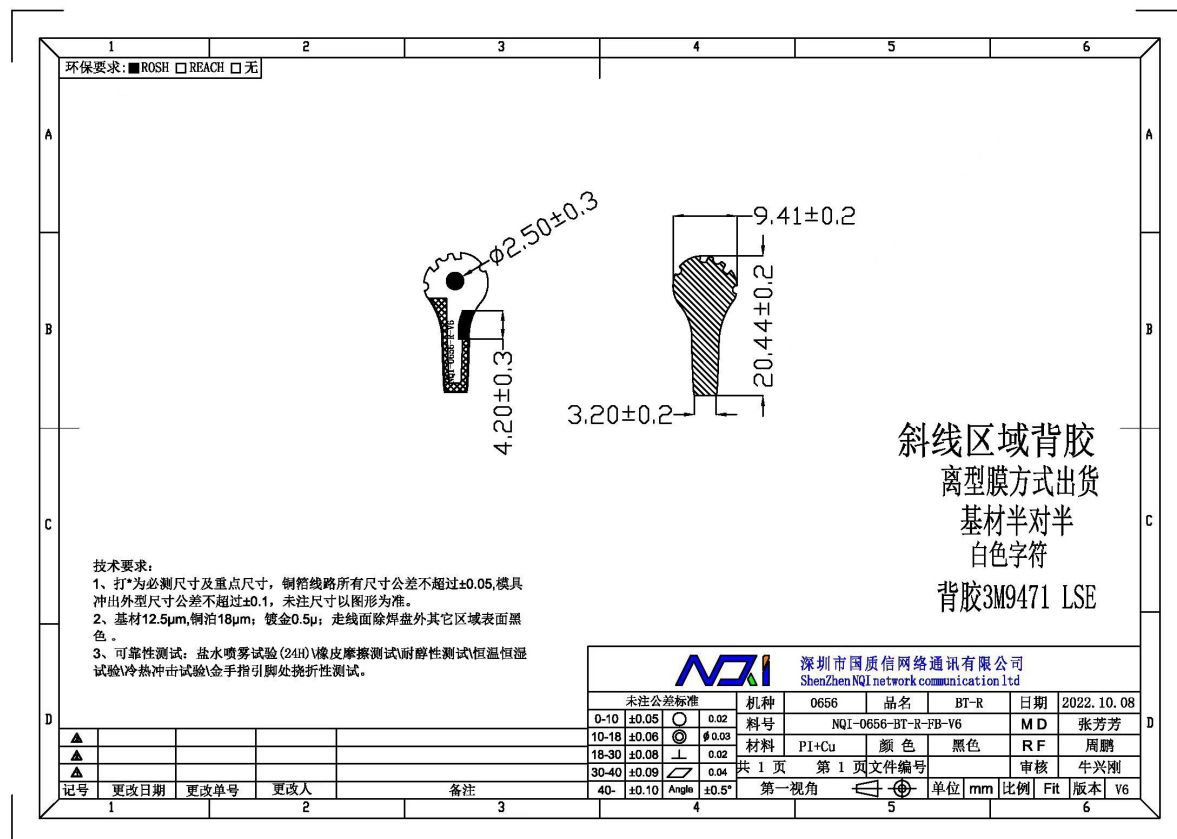
## 2. Temperature

|                       |            |
|-----------------------|------------|
| Operating temperature | -30℃ ~ 65℃ |
| Storage temperature   | -30℃ ~ 75℃ |

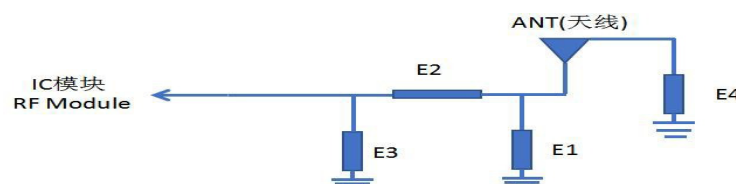
## 3. Photo



## 4.physical dimension



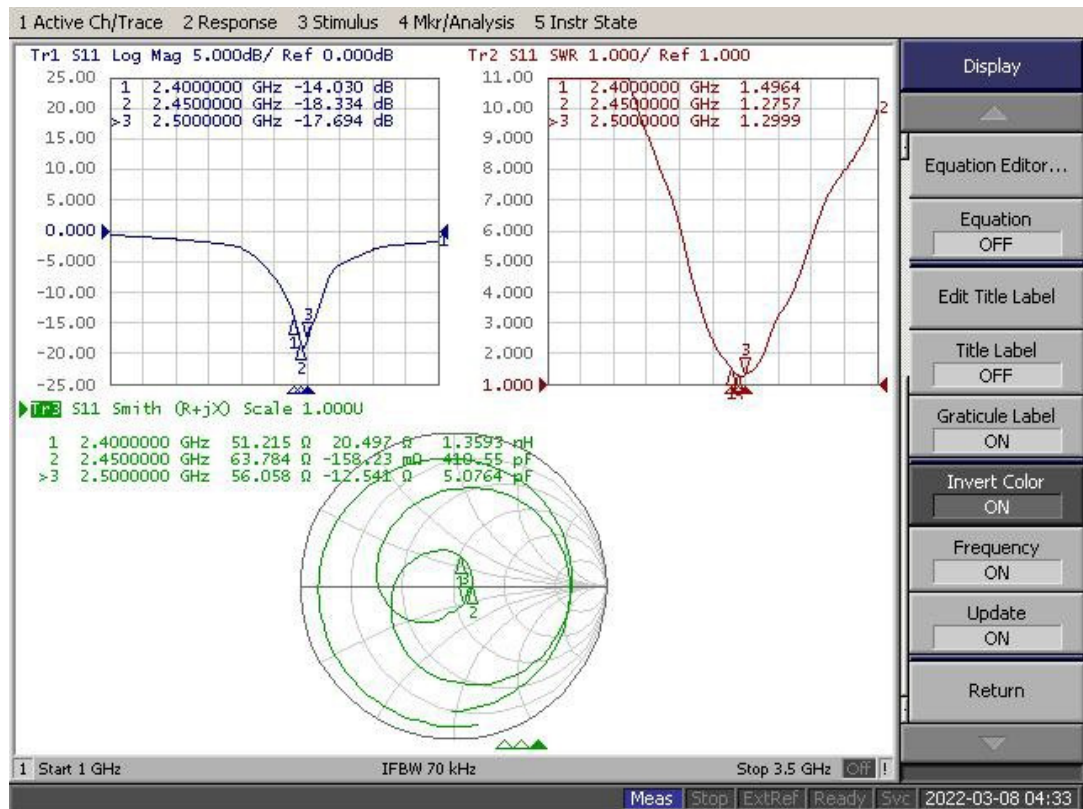
## 5.Match circuit



| Element  | (Value) |
|----------|---------|
| E1(0201) | NA      |
| E2(0201) | 0 Ω     |
| E3(0201) | NA      |
| E4(0201) | NA      |

## 6. Parameter

### 6.1 VSWR



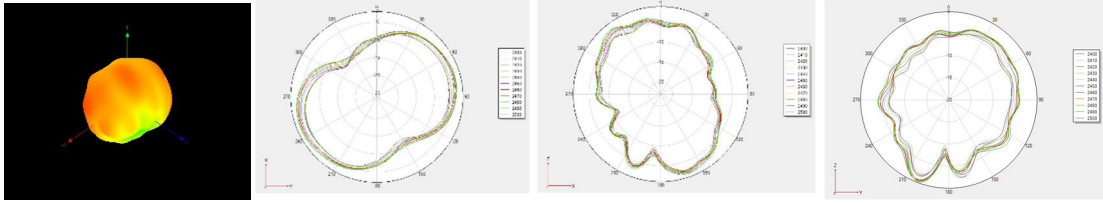
### 6.2 Gain

#### Free Space

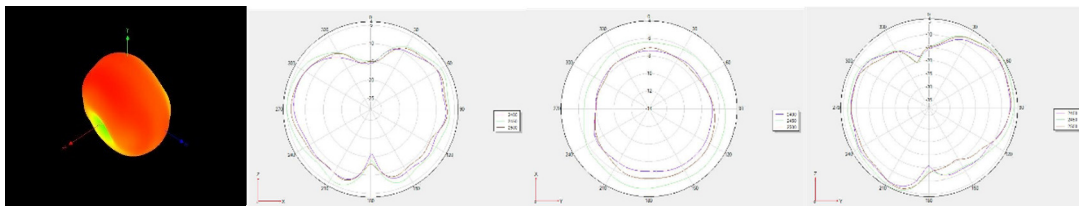
| Freq<br>(MHz) | Effi<br>(%) | Gain<br>(dBi) |
|---------------|-------------|---------------|
| 2400          | 25.88%      | -0.89         |
| 2450          | 29.56%      | -0.57         |
| 2500          | 30.16%      | -0.65         |

## 6.3 3D

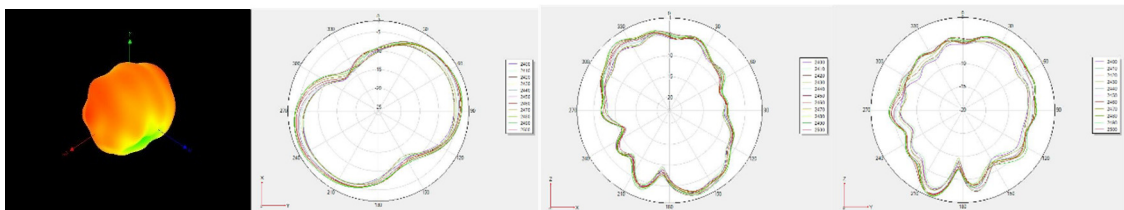
### 2400MHz



### 2450MHz



### 2500MHz



#### 6.4 TRP & TIS

| NQI ANT TRP&TIS parameter Summary of 0656 |           |                   |        |        |
|-------------------------------------------|-----------|-------------------|--------|--------|
| Free space                                | Test      | Bluetooth TRP&TIS |        |        |
|                                           | Result    | 0                 | 39     | 78     |
|                                           | TRP (dBm) | 1.02              | 2.31   | 0.69   |
|                                           | TIS (dBm) | -82.26            | -82.17 | -82.13 |
| NQI ANT TRP&TIS parameter Summary of 0656 |           |                   |        |        |
| Second generation head ear mold           | Test      | Bluetooth TRP&TIS |        |        |
|                                           | Result    | 0                 | 39     | 78     |
|                                           | TRP (dBm) | -3.76             | -3.68  | -3.42  |
|                                           | TIS (dBm) | -79.81            | -80.05 | -80.12 |