

# Testing Report

Customer Name: SHENZHEN SHIXINZHONGXIN TECHNOLOGY.CO.,LTD

Product Name: BT Antenna

Sample Model: F-6988

Reference Standard: *GB/T9410-2008; ANSI/IEEE Std 149-1979*

Issue Date: 2022.9.27

|                     |                 |
|---------------------|-----------------|
| Engineer: junwei Li | Date:2022.09.27 |
| Auditor: chao Ma    | Date:2022.09.27 |
| Approver: xiao Chen | Date:2022.09.27 |

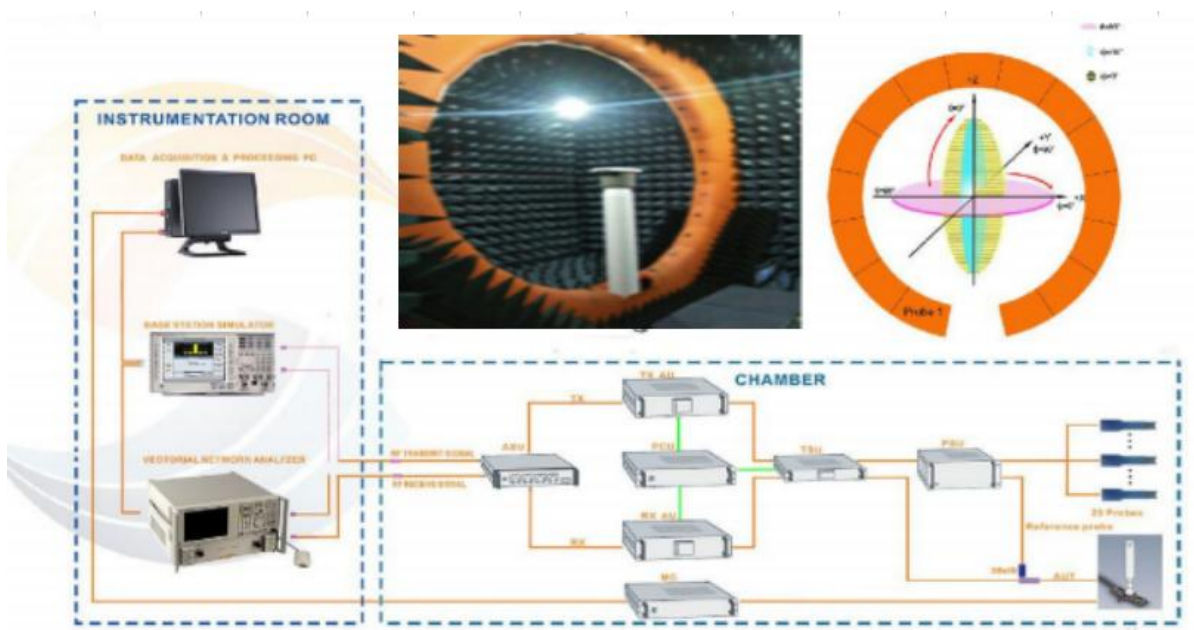
# 1. General Information

## 1.1 General Information of testing institutions

|           |                                                                                      |
|-----------|--------------------------------------------------------------------------------------|
| Name      | Shenzhen Hetuo Technology Co.,Ltd.                                                   |
| Address   | Room 1202B, Building C6, Hengfeng Industrial City, Xixiang, Baoan District, Shenzhen |
| Tel       | 18665849001                                                                          |
| E-mail    | 18665849001@163.com                                                                  |
| Equipment | Agilent 5071C                                                                        |

## 1.2 Testing principle

### Multi-probe OTA Measurement System



### 1.3 Test equipment

| Equipment                  | Model No. | Serial No. | Manufacturer | Calibration date | Next calibration date |
|----------------------------|-----------|------------|--------------|------------------|-----------------------|
| 24 probe microwave chamber | 4*3*3     | NA         | FEITU        | 2021.3.15        | 2023.3.14             |
| Network Analyzer           | 5071C     | NA         | Agilent      | 2022.5.13        | 2023.5.12             |

### 1.4 Test uncertainty

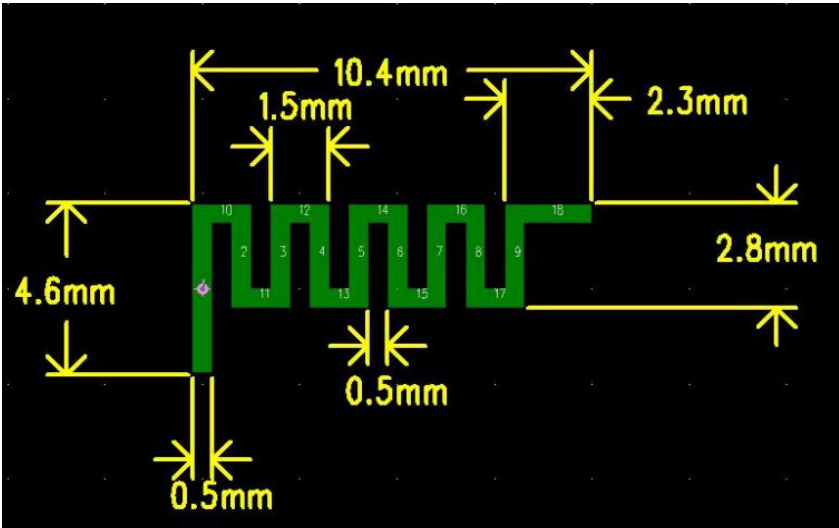
The uncertainty was calculated on the basis of the GUM published by ISO, using the inclusion factor of K=2 and the 95% confidence level to express the extended uncertainty.

| Item                 | Uncertainty |
|----------------------|-------------|
| Antenna gain         | ±0.72dB     |
| Radiation efficiency | ±0.72dB     |

### 1.5 Test environment

|             |            |
|-------------|------------|
| Temperature | 24°C±1.5°C |
| Humidity    | 45%RH      |
| Pressure    | 101kPa     |

### 1.6 Antenna Photo & Lenght(mm)



## 2. Sample Information

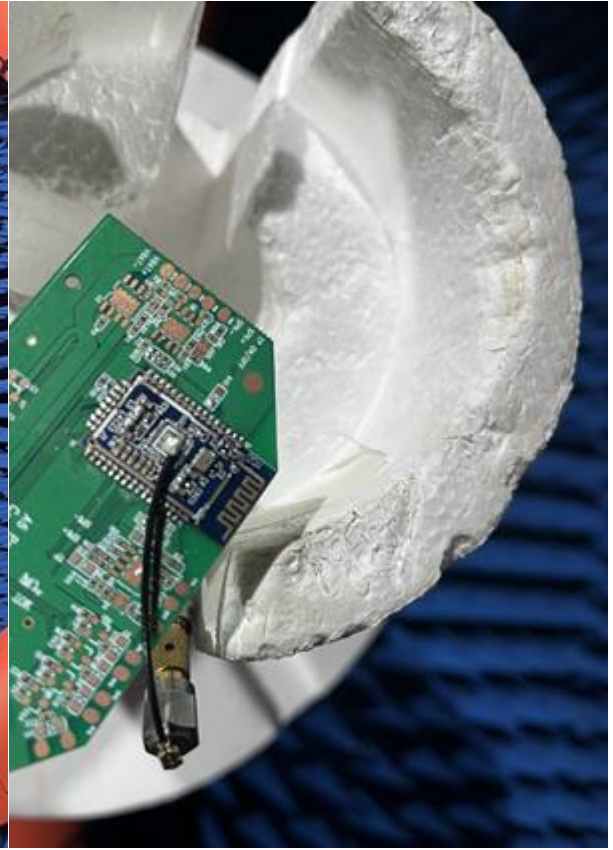
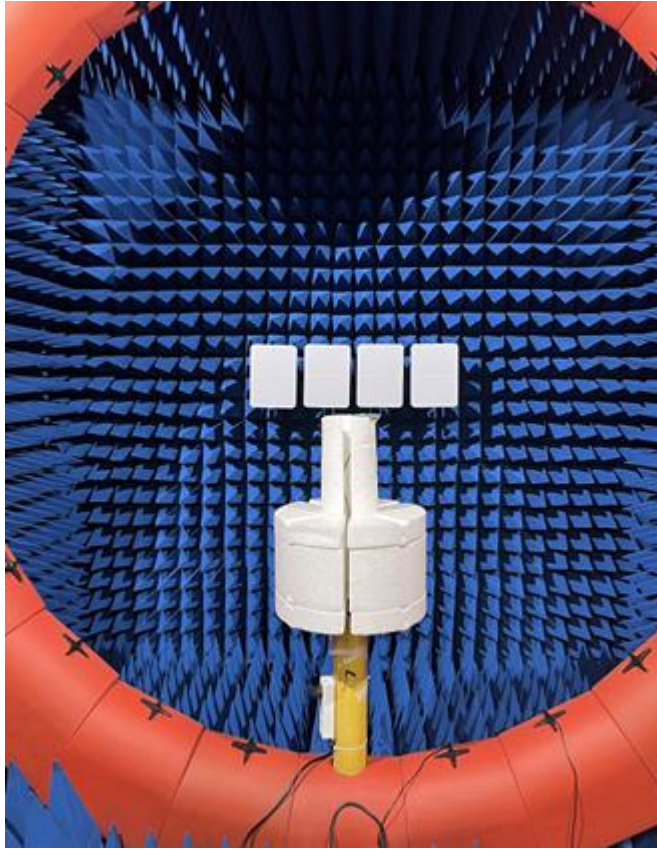
### 2.1 Client information

|                 |                                                                  |
|-----------------|------------------------------------------------------------------|
| <b>Name</b>     | SHENZHEN SHIXINZHONGXIN TECHNOLOGY. CO., LTD                     |
| <b>Address</b>  | A1, Shajing Donghuan Industrial Zone, Bao 'an District, Shenzhen |
| <b>Contacts</b> | Ma Chao                                                          |
| <b>Tel</b>      | 18218809918                                                      |
| <b>E-mail</b>   | machao@c-chip.com.cn                                             |

### 2.2 Description of EUT(S)

|                        |                                    |
|------------------------|------------------------------------|
| <b>Product Name</b>    | BT Antenna                         |
| <b>Sample Model</b>    | F-6988                             |
| <b>Antenna Size</b>    | 4.6*10.4mm                         |
| <b>Antenna Type</b>    | PCB antenna                        |
| <b>Serial No.</b>      | /                                  |
| <b>Test Item</b>       | Antenna Gain,Radiation pattern     |
| <b>Frequency Range</b> | 2400-2500MHz                       |
| <b>Received Date</b>   | 2022.09.25                         |
| <b>Test Date</b>       | 2022.09.27                         |
| <b>Remark</b>          | The length of the RF cable is 50mm |

## Test Photos



Test data

|                 |        |        |        |        |        |        |        |        |        |        |        |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Frequency (MHz) | 2400.0 | 2410.0 | 2420.0 | 2430.0 | 2440.0 | 2450.0 | 2460.0 | 2470.0 | 2480.0 | 2490.0 | 2500.0 |
| Gain (dBi)      | -1.82  | -1.63  | -2.22  | -2.15  | -1.57  | -1.61  | -1.39  | -1.23  | -1.28  | -1.57  | -1.23  |

