

# Testing Report

Customer Name: Netvue

Product Name: Peekababy

Sample Model: NI-9010

Reference Standard: *GB/T 9410-2008; ANSI/IEEE Std 149-1979*

Issue Date: 2021.6.10

|                         |                        |
|-------------------------|------------------------|
| Engineer: <i>Amanda</i> | Date: <i>2021.6.9</i>  |
| Auditor: <i>Eason</i>   | Date: <i>2021.6.10</i> |
| Approver: <i>Aaron</i>  | Date: <i>2021.6.10</i> |



## Version

| Version No. | Date      | Description                   | Formulate | Approval |
|-------------|-----------|-------------------------------|-----------|----------|
| A0          | 2021.6.10 | For the first time, formulate | Amanda    | Eason    |
|             |           |                               |           |          |
|             |           |                               |           |          |

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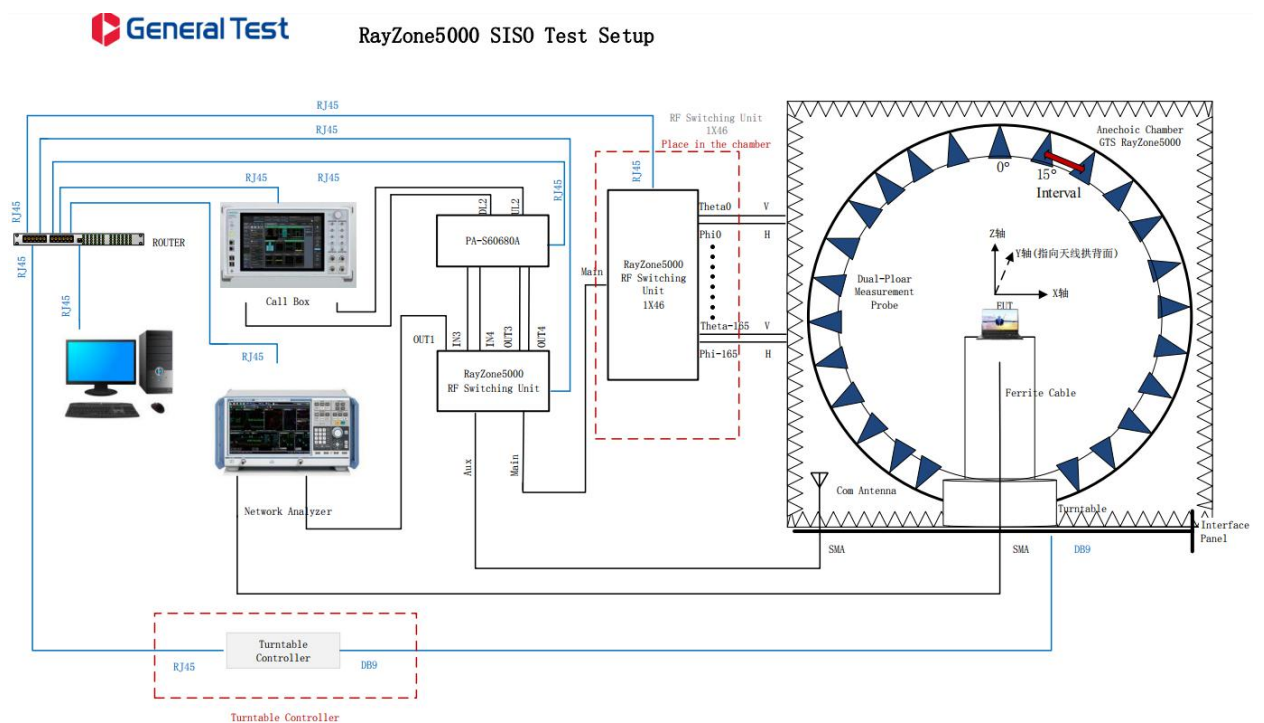
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## 1.General Information

## 1.1 General information of testing institutions

|                  |                                                                                                                                                               |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>      | Shenzhen RFI-LAB Communication Technology Co., Ltd.                                                                                                           |
| <b>Address</b>   | 10/F A, Lingyun Bld, Liufang Road, Baoan District, Shenzhen                                                                                                   |
| <b>Tel</b>       | 13682621346                                                                                                                                                   |
| <b>E-mail</b>    | rfi-lab@tech-now.com                                                                                                                                          |
| <b>Equipment</b> | All the equipment used in the report is fixed in Zone B, West Side of 1/F, Building 1, Tingwei Industrial Park, No.6 Liufang Road, Bao 'an District, Shenzhen |

## 1.2 Testing principle



### 1.3 Test equipment

| Equipment        | Model No.    | Serial No.     | Manufacturer | Calibration date | Next calibration date |
|------------------|--------------|----------------|--------------|------------------|-----------------------|
| OTA Test System  | RayZone-5000 | RFI-LAB-RF-D00 | GTS          | 2021.3.15        | 2023.3.14             |
| Network Analyzer | E5071C       | RFI-LAB-RF-D01 | KEYSIGHT     | 2021.4.26        | 2022.4.25             |

### 1.4 Test environment

|             |           |
|-------------|-----------|
| Temperature | 24.1℃     |
| Humidity    | 59%RH     |
| Pressure    | 100.07kPa |

### 1.5 Statement

- (1) The test results in the report are only applicable to the tested samples and the tested samples work under the environment described in the report.
- (2) Only Shenzhen RFI-LAB Communication Technology Co., Ltd. have the right to modify the report, and the modification information shall be annotated in the revision form.
- (3) Any objection to this report shall be raised within 30 days after formal confirmation of the report.
- (4) This report is invalid if there is any evidence that the sample information provided is falsified.
- (5) The report is invalid without the signature of the auditor and approver.

## 2.Sample Information

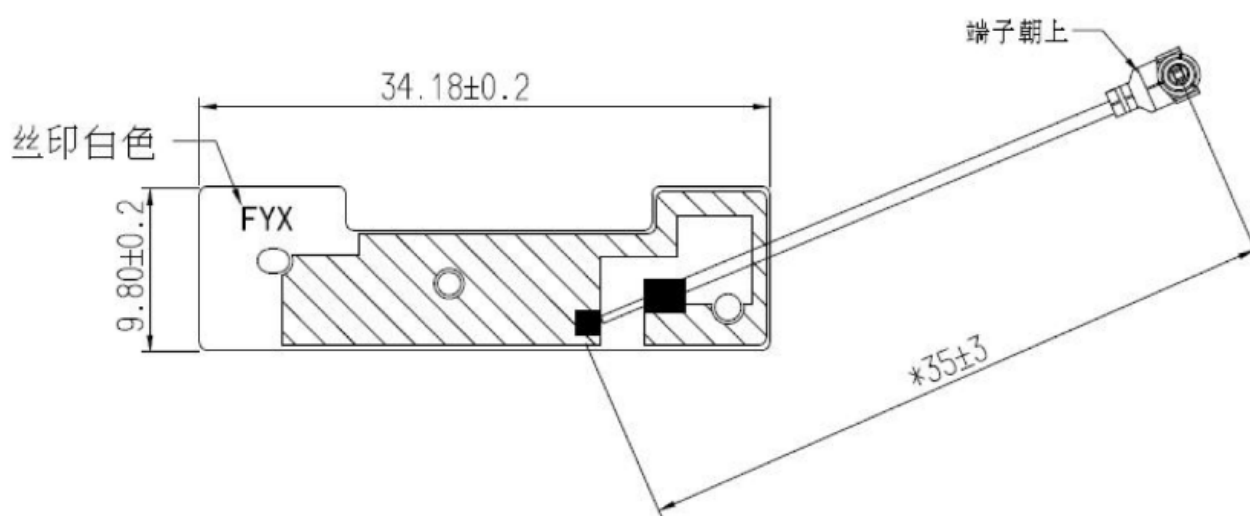
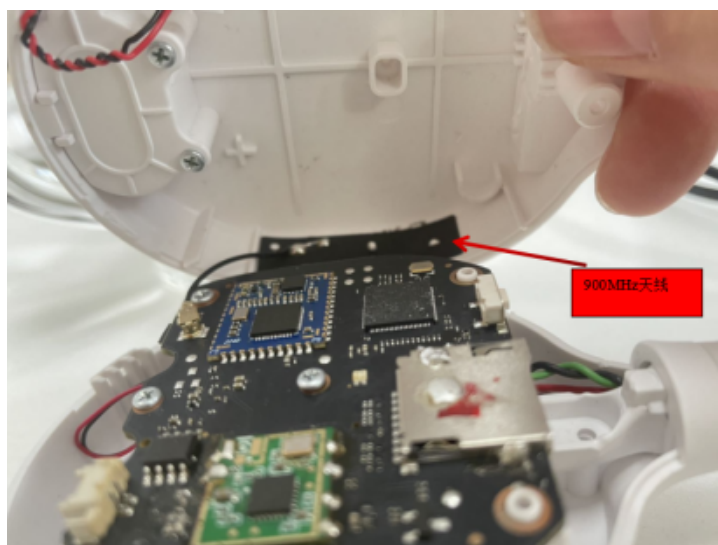
### 2.1 Client information

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| <b>Name</b>     | Netvue Technologies Co.,Ltd.                               |
| <b>Address</b>  | Room A501-502, 10 Kejinan Road, Nanshan District, Shenzhen |
| <b>Contacts</b> | Stone Feng                                                 |
| <b>Tel</b>      | 0769-87182258                                              |
| <b>E-mail</b>   | qiang.feng@netvue.com                                      |

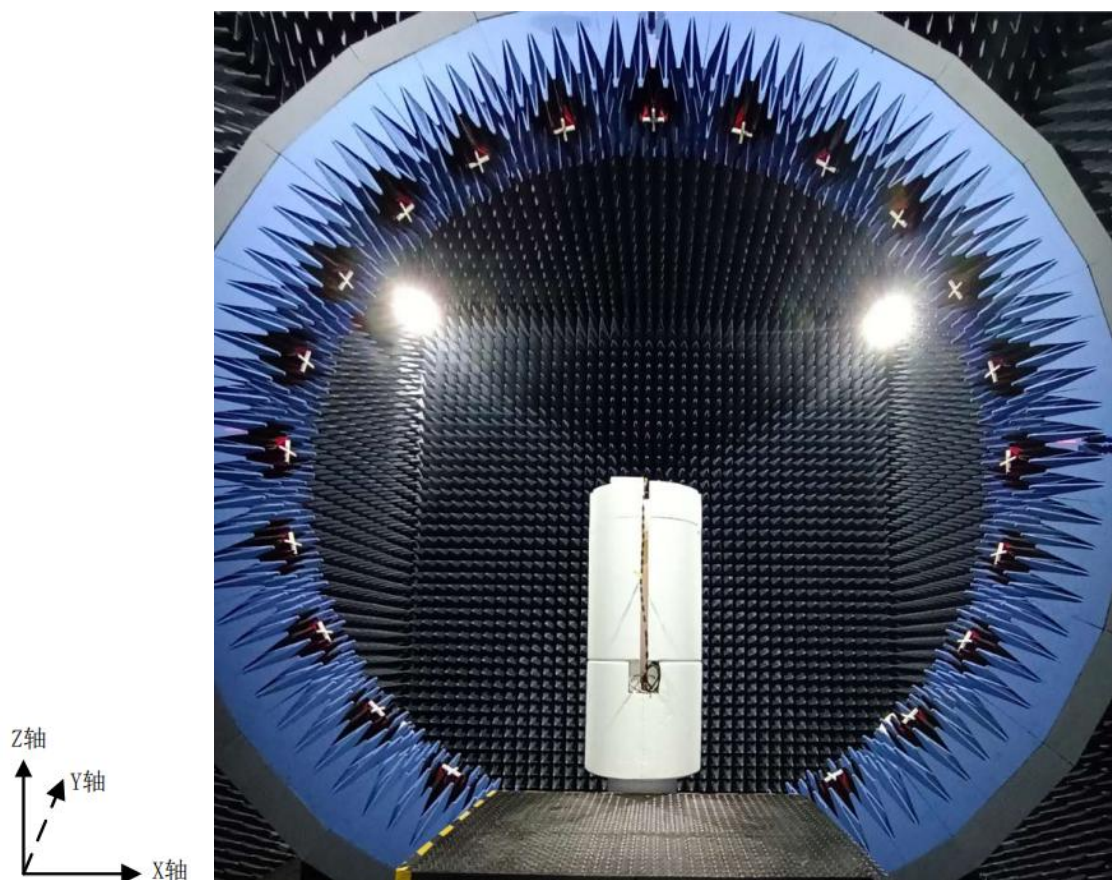
### 2.2 Description of EUT(S)

|                        |                                             |
|------------------------|---------------------------------------------|
| <b>Product Name</b>    | Peekababy                                   |
| <b>Sample Model</b>    | NI-9010                                     |
| <b>Size</b>            | /                                           |
| <b>Serial No.</b>      | /                                           |
| <b>Test Item</b>       | Antenna gain; Efficiency; Radiation pattern |
| <b>Frequency Range</b> | 900-1000MHz                                 |
| <b>Type</b>            | FPC                                         |
| <b>Test Date</b>       | 2021.6.9                                    |
| <b>Remark</b>          | The length of the RF cable is 30 mm         |

## 2.3 EUT appearance AND SIZE



## 2.4 DUT setup photo of free space OTA testing



## 3. Test Results

### 3.1 Test standard

| Name                         | Parameter            | Method                                                               | Standard no.           |
|------------------------------|----------------------|----------------------------------------------------------------------|------------------------|
| Mobile communication antenna | Antenna gain         | Generic specification for antennas used in the mobile communications | GB/T 9410-2008         |
|                              | Radiation pattern    |                                                                      |                        |
| Antenna                      | Radiation efficiency | IEEE Standard Test Procedures for Antennas                           | ANSI/IEEE Std 149-1979 |
|                              | Gain and directivity |                                                                      |                        |

### 3.2 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      |
|----------------------|------------------|
| VSWR                 | $\pm 0.3$        |
| Antenna gain         | $\pm 1\text{dB}$ |
| Radiation efficiency | $\pm 10\%$       |

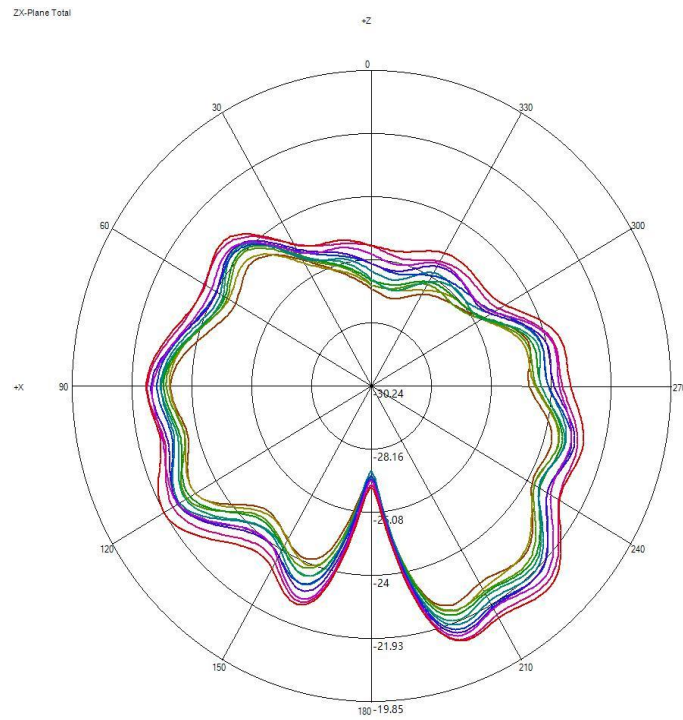
### 3.3 Test data

#### 3.3.1 Typical free space efficiency and gain

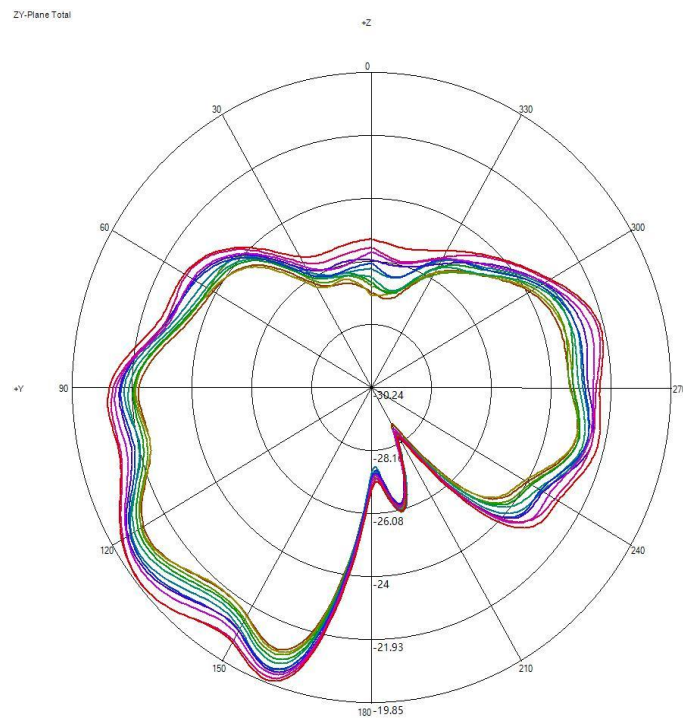
| Frequency/MHz | 900    | 910    | 920    | 930    | 940    | 950    | 960    | 970    | 980    | 990    | 1000   |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Efficiency/%  | -21.08 | -21.01 | -20.97 | -20.84 | -20.72 | -20.59 | -20.53 | -20.41 | -20.13 | -19.94 | -19.86 |
| Peak Gain/dBi | 0.48   | 0.53   | 0.61   | 0.44   | 0.45   | 0.46   | 0.47   | 0.48   | 0.50   | 0.51   | 0.53   |

### 3.3.2 Typical free space radiation pattern

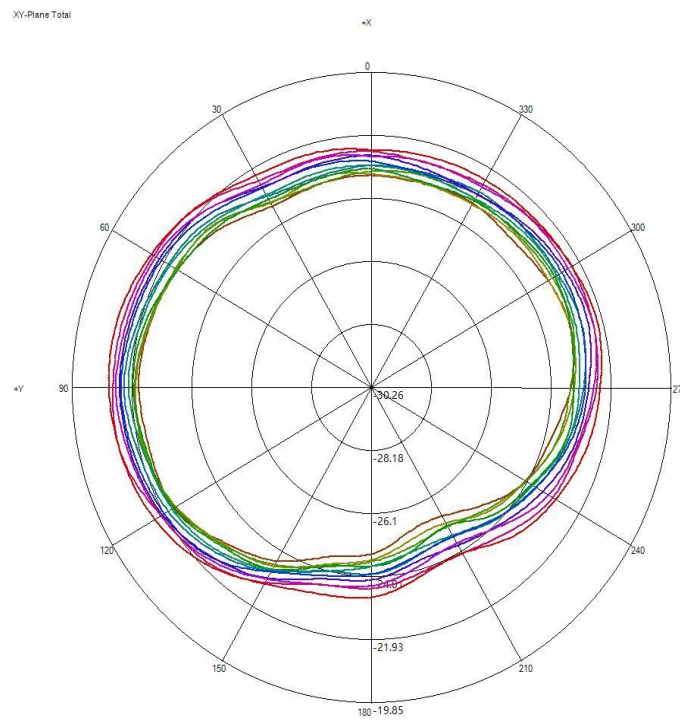
(1) X-Z Plane:



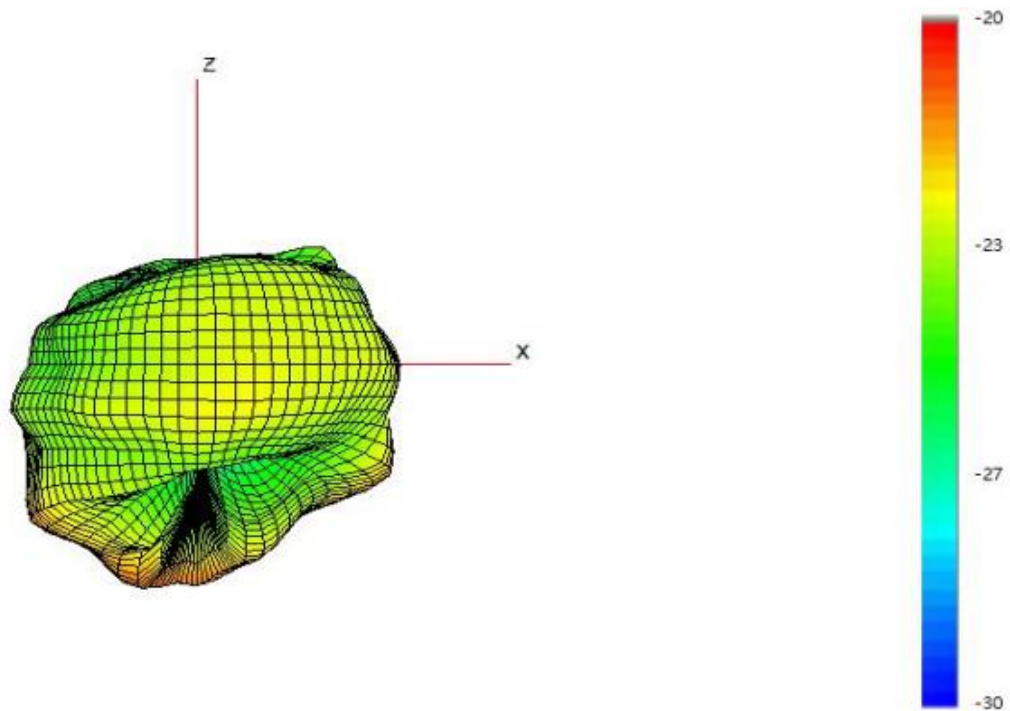
(2) Y-Z Plane:



(3) X-Y Plane:



(4) Typical Free Space 3D Radiation Pattern:



End

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