

# TEST REPORT

**APPLICANT : JIANGSU HUITONG GROUP**

**PRODUCT NAME : Bluetooth remote**

**MODEL NAME : SF484**

**TRADE NAME : N/A**

**BRAND NAME : N/A**

**STANDARD(S) : ANSI/IEEE Std 149-2008**

**RECEIPT DATE : 2024-5.23**

**TEST DATE : 2024-5.23**

**ISSUE DATE : 2024-5.23**



**江苏惠通集团**

JIANGSU HUITONG GROUP

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| Change History |           |                   |
|----------------|-----------|-------------------|
| Version        | Date      | Reason for change |
| 1.0            | 2024-5.23 | First edition     |
|                |           |                   |

# 1. Technical Information

**Note:** Provide by manufacturer.

## 1.1. Applicant and Manufacturer Information

|                              |  |
|------------------------------|--|
| <b>Applicant:</b>            | JIANGSU HUITONG GROUP  |
| <b>Applicant Address:</b>    | No. 24, Taohuawu District 2, Zhenjiang City, Jiangsu Province, China |
| <b>Manufacturer:</b>         | N/9A   |
| <b>Manufacturer Address:</b> | N/A  |

## 1.2. Equipment Under Test (EUT) Description

|                     |                 |
|---------------------|-----------------|
| Wireless Type       | N/A             |
| Test frequency band | 2400MHz-2500MHz |
| Hardware Version    | N/A             |
| Software Version    | N/A             |
| IMEI                | N/A             |
| Sample No.          | 1#              |

## 2. Test Results

### 2.1. Applied Reference Documents

Leading reference documents for testing:

| No. | Identity               | Document Title                             |
|-----|------------------------|--|
| 1   | ANSI/IEEE Std 149-2008 | IEEE Standard Test Procedures for Antennas |

### 2.2. Test Conditions

Test Environment Conditions:

|                    |                  |
|--------------------|------------------|
| Relative Humidity: | 25 ... 75 %      |
| Temperature:       | +10 °C to +30 °C |

### 2.3. Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

| Item   | Measurement Uncertainty(dB) |
|--|-----------------------------|
| Gain   | ±0.5                        |
| VSWR   | ±0.2                        |
| Measurement Uncertainty(95% Confidence Interval) K=2 |                             |

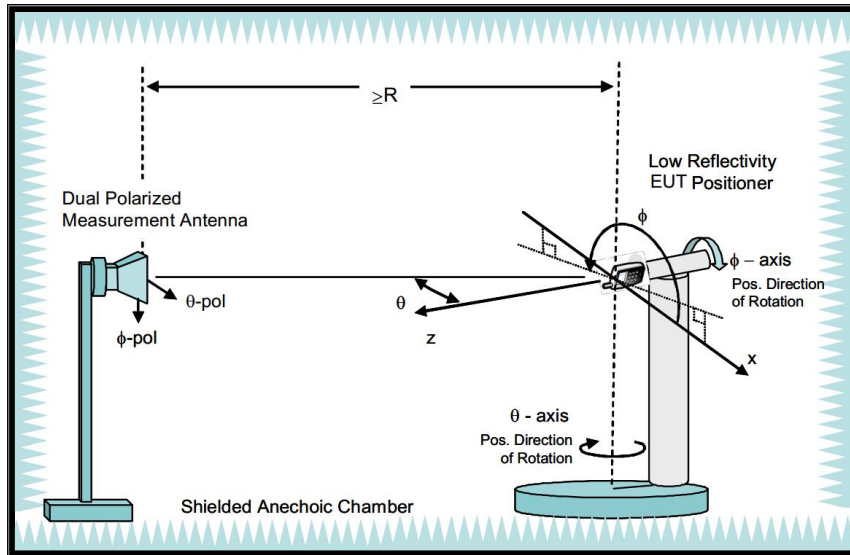
## 2.4. Test Results lists

### 2.4.1. Gain and Efficiency

| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 2400          | 56.3        | -2.49        | 3.73          |
| 2410          | 55.45       | -2.56        | 3.87          |
| 2420          | 59.62       | -2.24        | 4.07          |
| 2430          | 57.45       | -2.4         | 4.06          |
| 2440          | 57.37       | -2.41        | 3.99          |
| 2450          | 58.75       | -2.3         | 4.27          |
| 2460          | 55.03       | -2.59        | 4.13          |
| 2470          | 53.72       | -2.69        | 4.18          |
| 2480          | 56.69       | -2.46        | 4.36          |
| 2490          | 58.02       | -2.36        | 4.14          |
| 2500          | 60.6        | -2.17        | 4.06          |

## Annex A Photographs

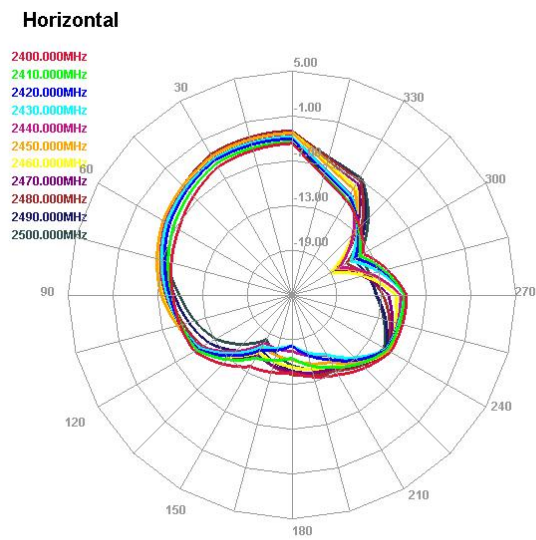
### 1. Test Setup



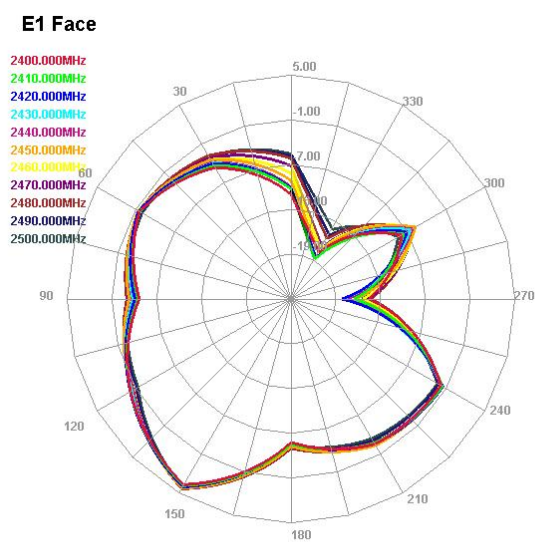
## Annex B Figures

### 1. 2D Radiation Pattern

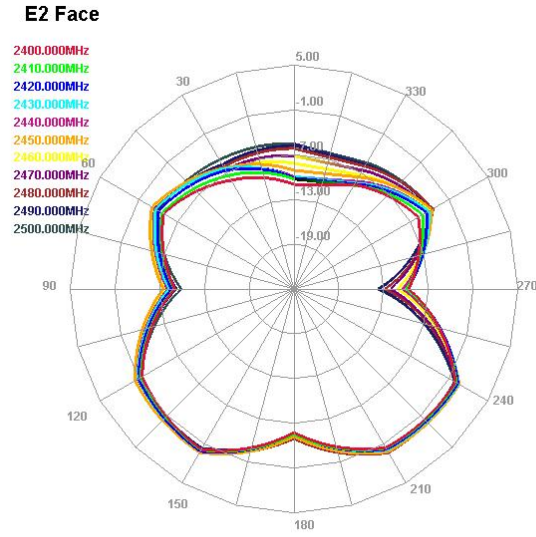
Phi=0°



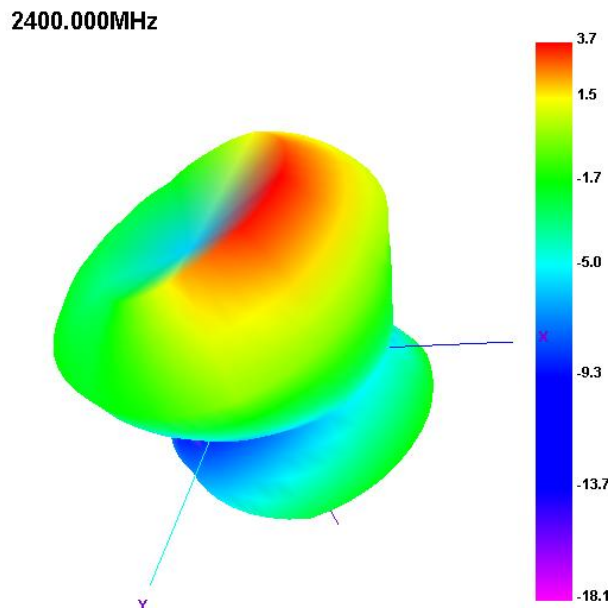
Phi=90°



Theta=90°

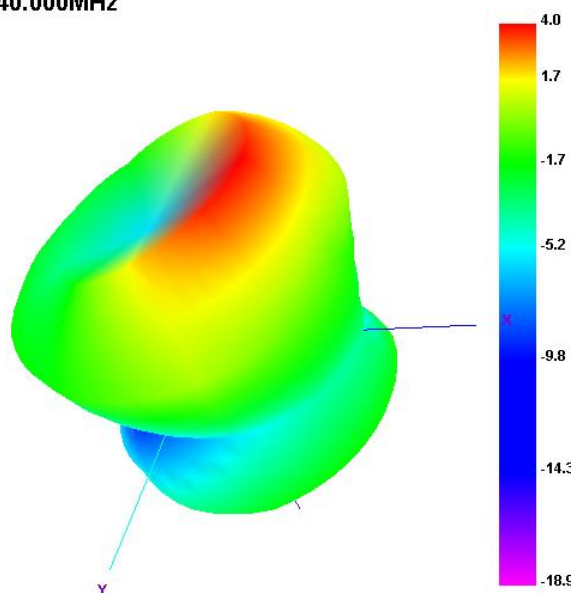


## 2. 3D Radiation Pattern

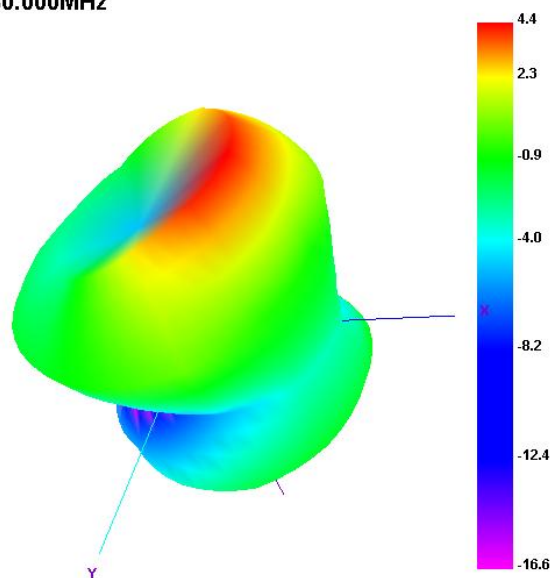




2440.000MHz



2480.000MHz



## **Annex C    Photographs**

### 1. Test environment

Please refer to the file of Test Setup  
Photo.

## Annex D General Information

### 1.1 Identification of the Responsible Testing Laboratory

|                     |  |
|---------------------|--|
| Laboratory Name:    | JIANGSU HUITONG GROUP  |
| Laboratory Address: | No. 24, Taohuawu District 2, Zhenjiang City, Jiangsu Province, China |
| Telephone:          |  |
| Facsimile:          |  |

### 1.2 Identification of the Responsible Testing Location

|          |  |
|----------|--|
| Name:    | JIANGSU HUITONG GROUP  |
| Address: | No. 24, Taohuawu District 2, Zhenjiang City, Jiangsu Province, China |

### 1.3 Test Equipments Utilized

#### 1.3.1 List of Test Equipment

| NO. | Equipment Name             | Serial NO. | Type             | Manufacturer | Cal.Date   | Cal.Due Date |
|-----|----------------------------|------------|------------------|--------------|------------|--------------|
| 1   | Vector Network Analyzer    | MY46214666 | E5071C           | Agilent      | 2021.03.17 | 2022.03.16   |
| 2   | OTA Chamber                | N/A        | ETS              | 欧铎           | 2021.01.12 | 2024.01.11   |
| 3   | Antenna Measurement System | N/A        | OTATester V4.303 | 欧铎           | N/A        | N/A          |

————— END OF REPORT —————