





TEST REPORT

APPLICANT : Acrox Technologies Co., Ltd
PRODUCT NAME : PCB Antenna
MODEL NAME : Ant-B2I
TRADE NAME : N/A
BRAND NAME : N/A
STANDARD(S) : IEEE Std 149-2021
RECEIPT DATE : 2022-11-04
TEST DATE : 2022-11-07
ISSUE DATE : 2022-11-17

Edited by: 
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| Change History | | |
|----------------|------------|-------------------|
| Version | Date | Reason for change |
| 1.0 | 2022-11-17 | First edition |
| | | |



1. Technical Information

Note: Provide by manufacturer.

1.1. Applicant and Manufacturer Information

| | |
|------------------------------|--|
| Applicant: | Acrox Technologies Co., Ltd |
| Applicant Address: | 4F., No.89, Minshan St., Neihu Dist., Taipei City 114, Taiwan, R.O.C |
| Manufacturer: | Acrox Technologies Co., Ltd |
| Manufacturer Address: | 4F., No.89, Minshan St., Neihu Dist., Taipei City 114, Taiwan, R.O.C |

1.2. Equipment Under Test (EUT) Description

| | |
|----------------------|---------------------|
| Wireless Type | Bluetooth |
| Frequency | N/A |
| IMEI | N/A |
| Antenna Type | Meander PCB antenna |
| Sample No. | 5# |

2. Test Results

2.1. Applied Reference Documents

Leading reference documents for testing:

| No. | Identity | Document Title |
|-----|-------------------|--|
| 1 | IEEE Std 149-2021 | IEEE Recommended Practice for Antenna Measurements |

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. When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% Confidence intervals.

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



2.4. Test Results

2.4.1. Gain

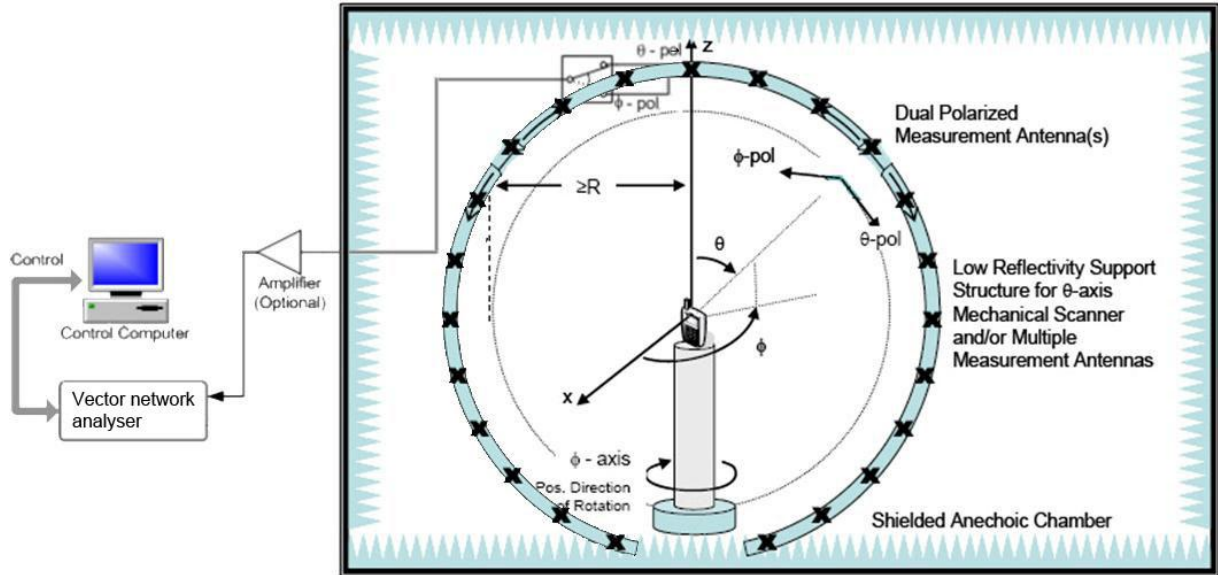
| Frequency (MHz) | Gain(dBi) |
|-----------------|-----------|
| 2400 | 2.80 |
| 2410 | 2.91 |
| 2420 | 2.75 |
| 2430 | 2.65 |
| 2440 | 2.89 |
| 2450 | 3.00 |
| 2460 | 3.09 |
| 2470 | 2.82 |
| 2480 | 2.76 |
| 2490 | 2.75 |
| 2500 | 2.82 |

2.4.2. VSWR

| Frequency | VSWR |
|-----------|------|
| 2400MHz | 2.16 |
| 2440MHz | 1.96 |
| 2480MHz | 1.98 |

Annex A Photographs

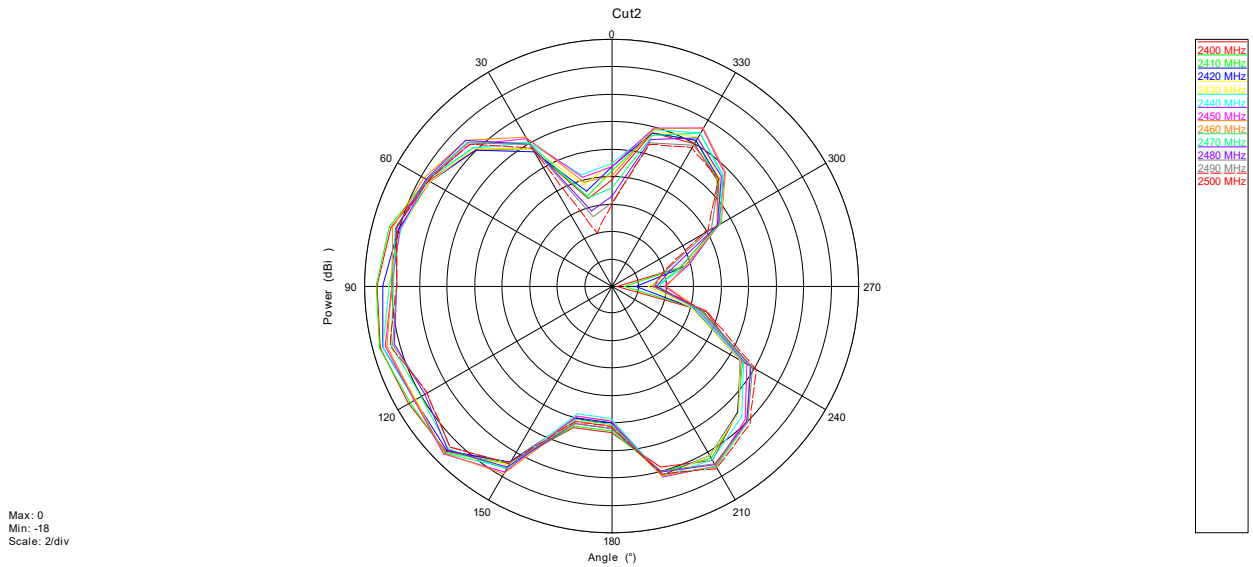
1. Test Setup



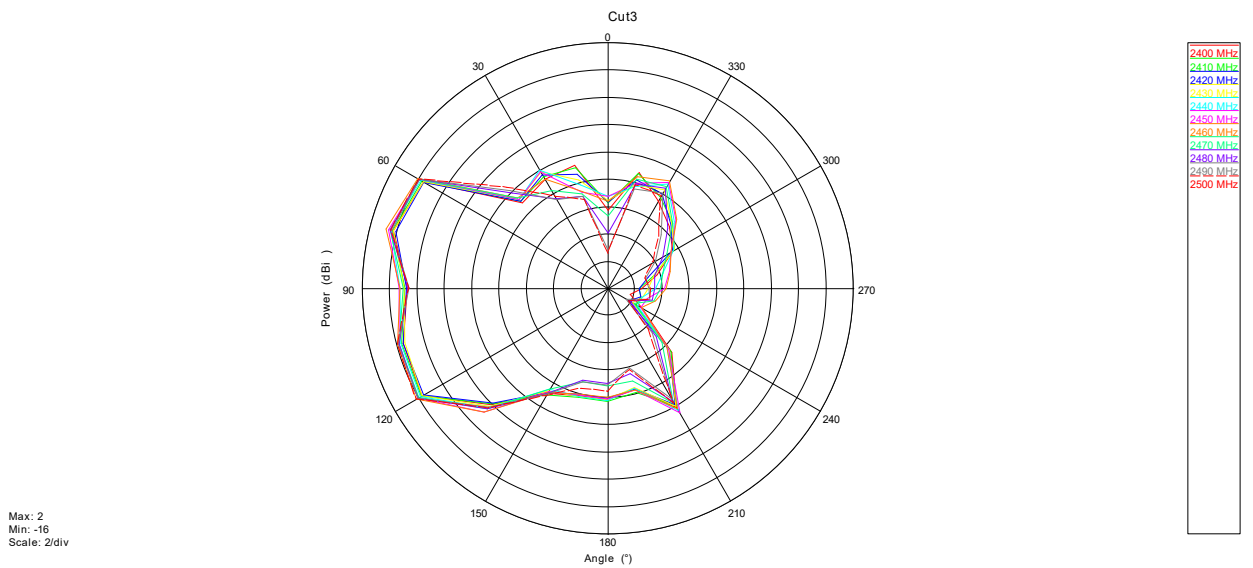
Annex B Figures

1. 2D Radiation Pattern

Phi=0°

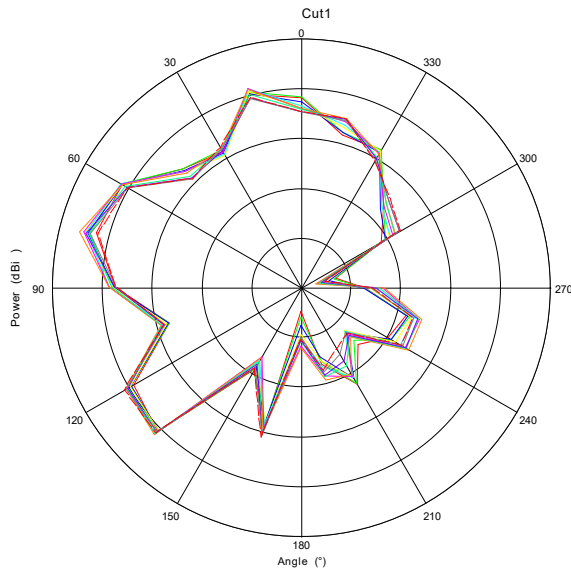


Phi=90°

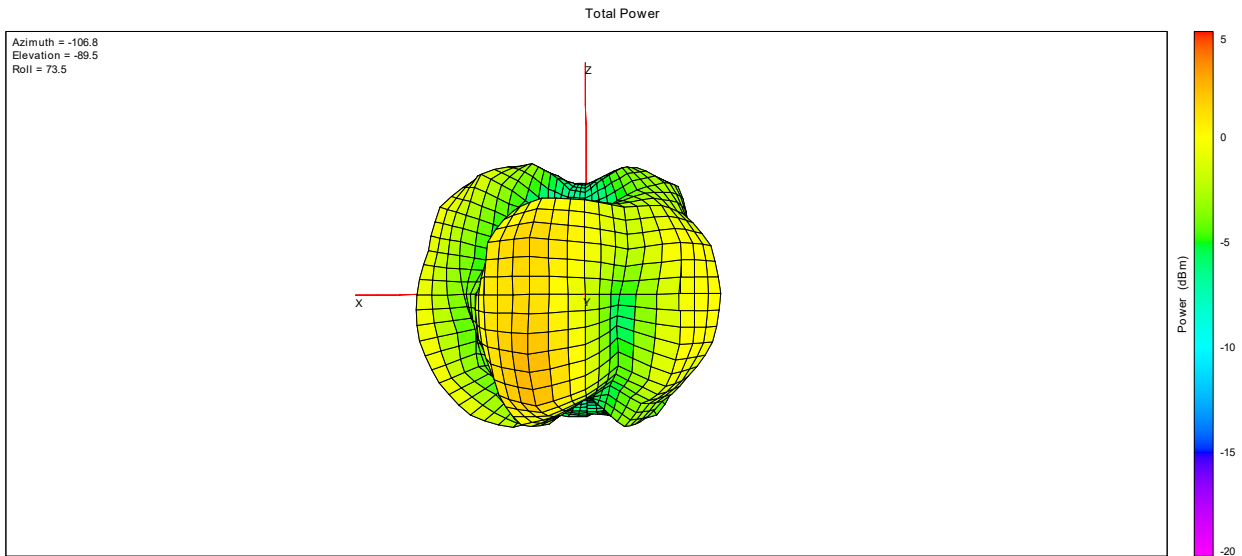




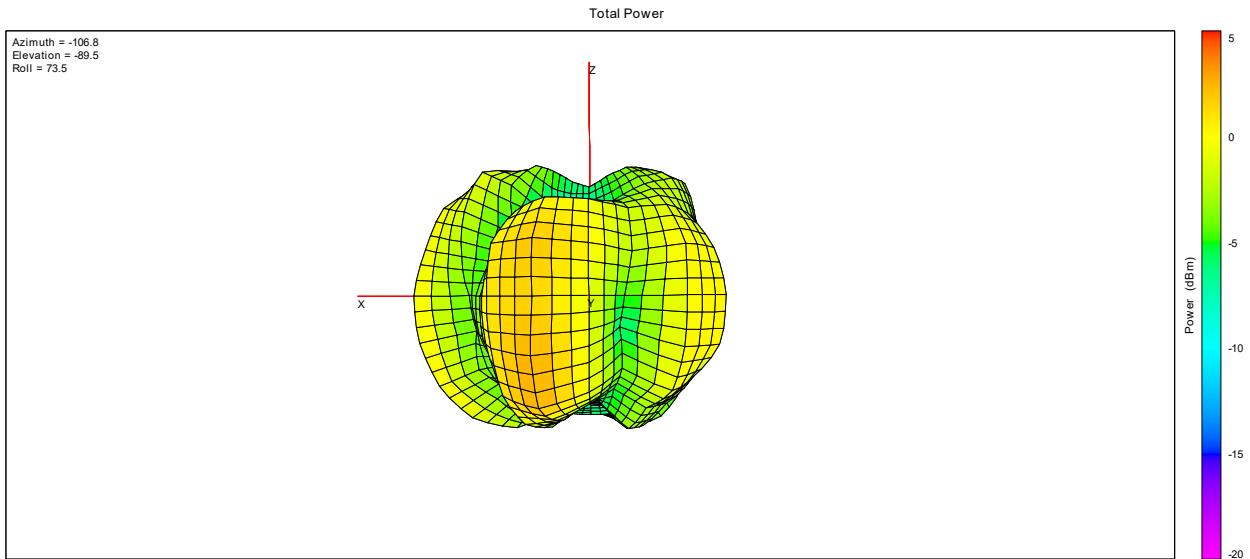
Theta=90°



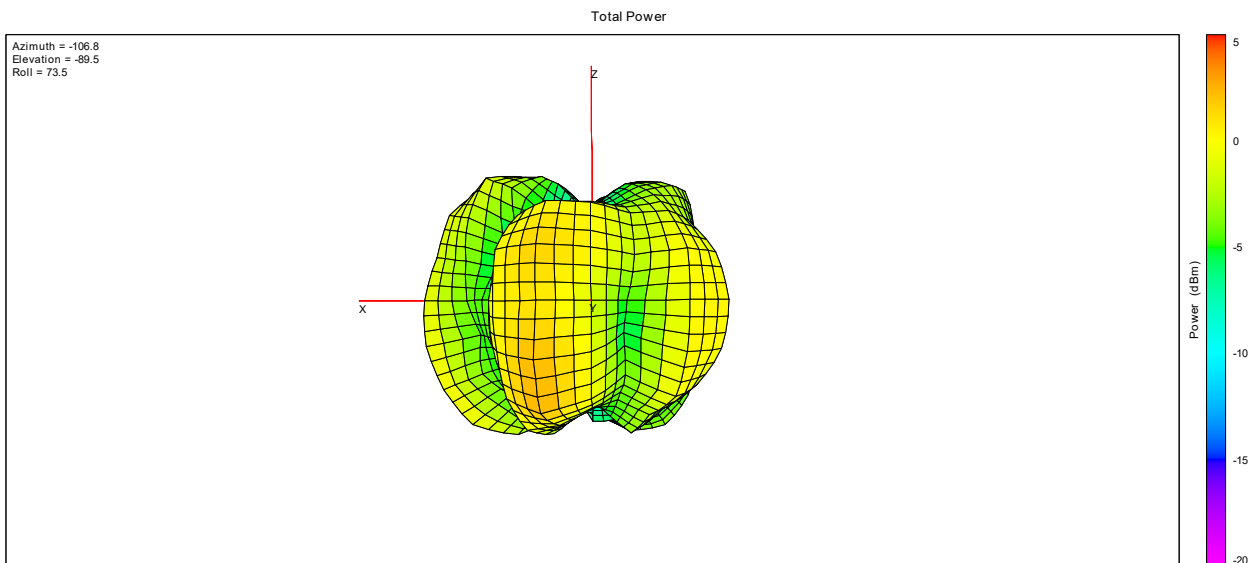
2. 3D Radiation Pattern



2400MHz



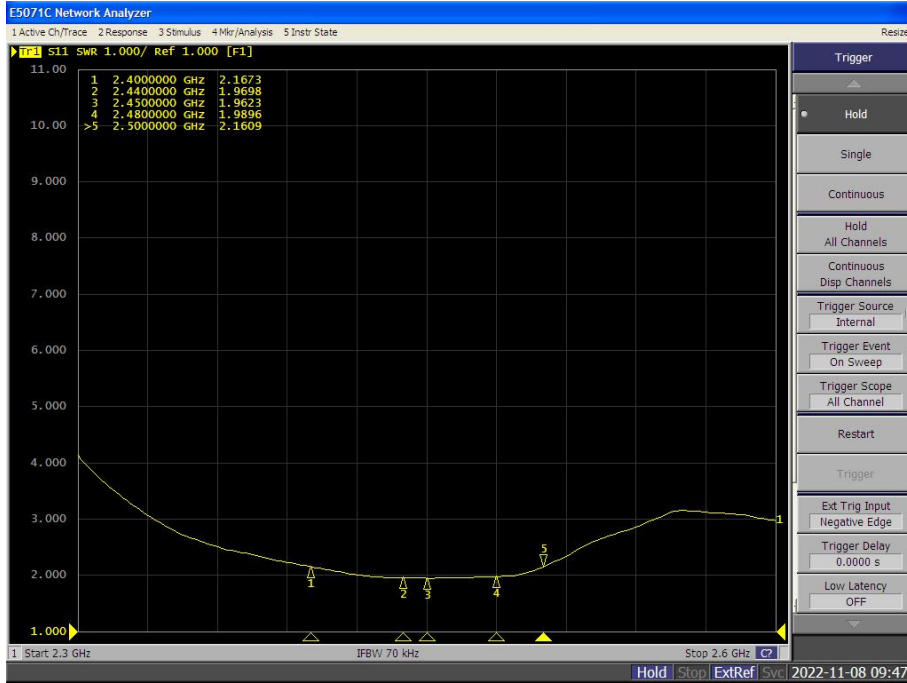
2440MHz



2480MHz

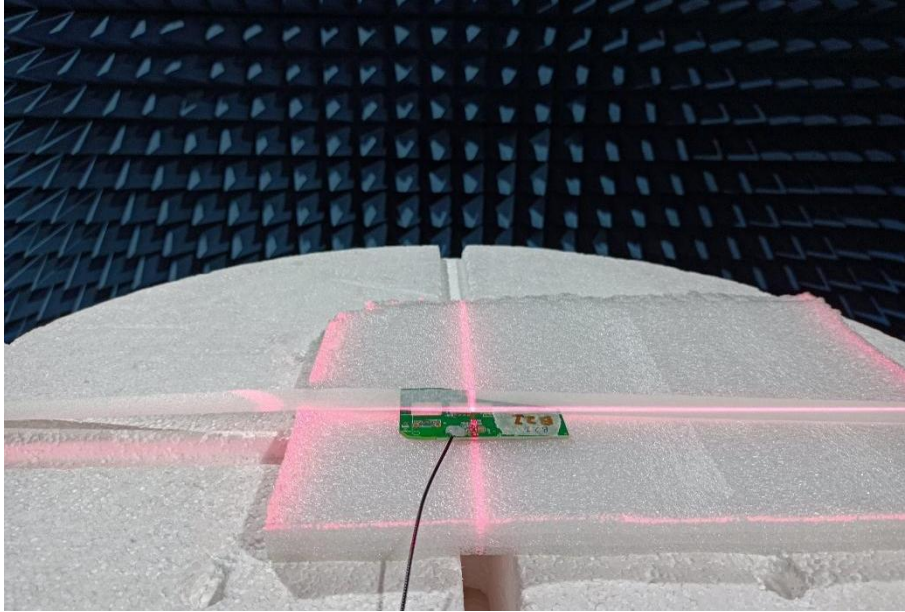


3. VSWR

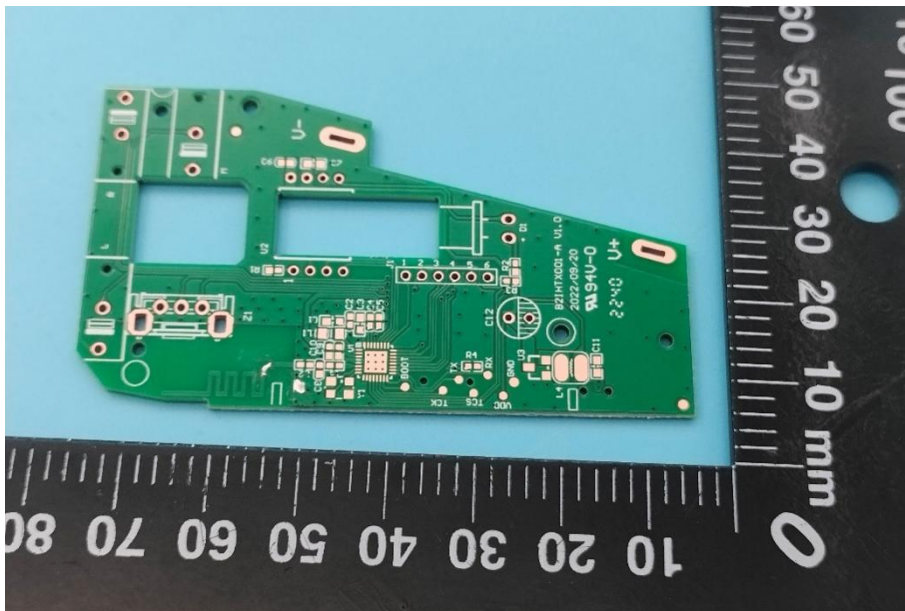


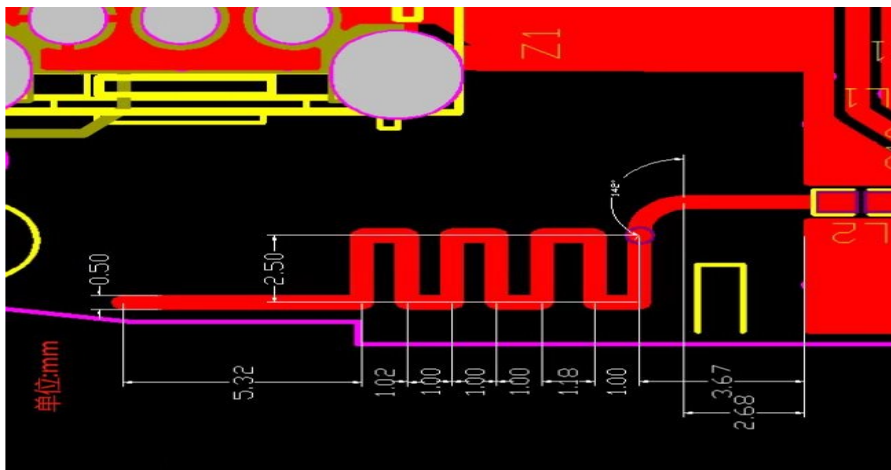
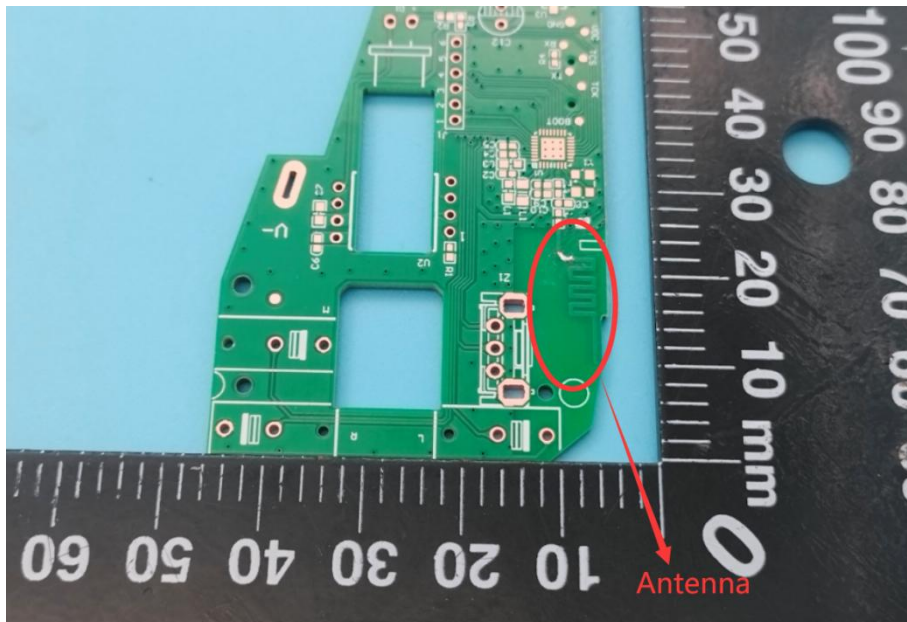
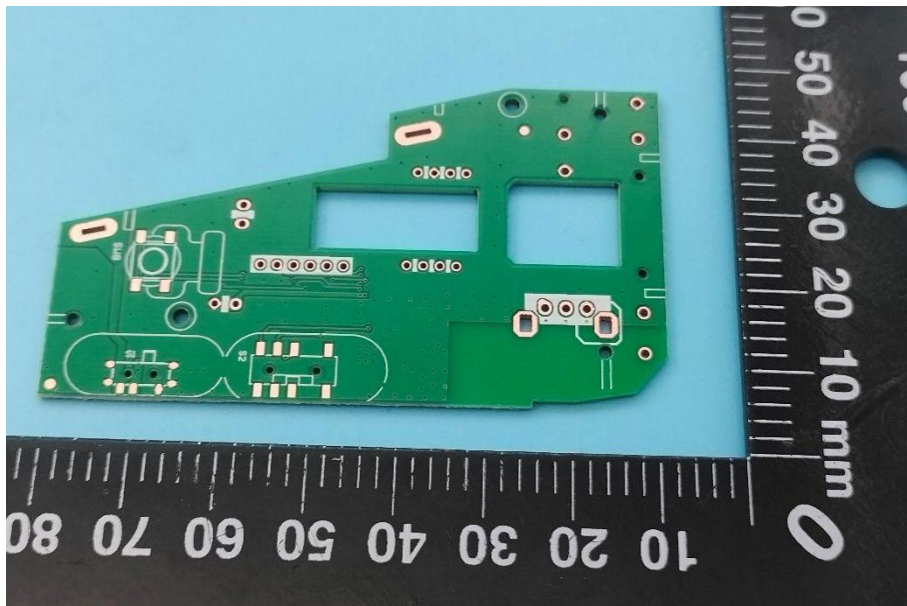
Annex C Photographs

1. Test environment



2. EUT







Annex D General Information

1.1 Identification of the Responsible Testing Laboratory

| | |
|---------------------|--|
| Laboratory Name: | Shenzhen Morlab Communications Technology Co., Ltd. |
| Laboratory Address: | FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen, GuangDong Province, P. R. China |
| Telephone: | +86 755 36698555 |
| Facsimile: | +86 755 36698525 |

1.2 Identification of the Responsible Testing Location

| | |
|----------|--|
| Name: | Shenzhen Morlab Communications Technology Co., Ltd. |
| Address: | FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen, GuangDong Province, P. R. China |

1.3 Test Equipments Utilized

| No. | Equipement Name | Serial No. | Type | Manufa cturer | Cal.Date | Cal.Due Date |
|-----|----------------------------------|------------------|---|---------------|------------|--------------|
| 1 | Network Analyzer | MY46110140 | E5071C | Agilent | 2022.07.04 | 2023.07.03 |
| 2 | OTA Chamber | TJ2235-Q17 93 | AMS-8923-1 50 | ETS | 2020.01.06 | 2023.01.05 |
| 3 | Antenna Measurement System | 1685 | EMQuest EMQ-100 V 1.13 Build 21267 | ETS | N/A | N/A |

————— END OF REPORT —————