



# TEST REPORT

**APPLICANT** : Feit Electric Company Inc.

**PRODUCT NAME** : Onesync white remote

**MODEL NAME** : SYNC/REMOTE

**TRADE NAME** : FEIT

**BRAND NAME** : FEIT

**STANDARD(S)** : IEEE Std 149-2021

**RECEIPT DATE** : 2023-04-11

**TEST DATE** : 2023-04-12

**ISSUE DATE** : 2023-05-24

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Fang Jinshan(Rapporteur)

Approved by: Chi Shide  
Chi Shide(Supervisor)

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Change History		
Version	Date	Reason for change
1.0	2023-05-24	First edition



# 1. Technical Information

Note: Provide by applicant.

## 1.1. Applicant and Manufacturer Information

<b>Applicant:</b>	Feit Electric Company Inc.
<b>Applicant Address:</b>	4F., N4901 Gregg Road Pico Rivera, Ca 90660
<b>Manufacturer:</b>	NATIONAL STATE INDUSTRIES LTD.
<b>Manufacturer Address:</b>	Wulian Industrial Zone, Fenggang Town, Dongguan City, Guangdong, China.

## 1.2. Equipment Under Test (EUT) Description

<b>Wireless Type</b>	N/A
<b>Frequency</b>	2400MHz-2500MHz
<b>IMEI</b>	N/A
<b>Sample No.</b>	1#



## 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(°C):	10 - 30

### 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	

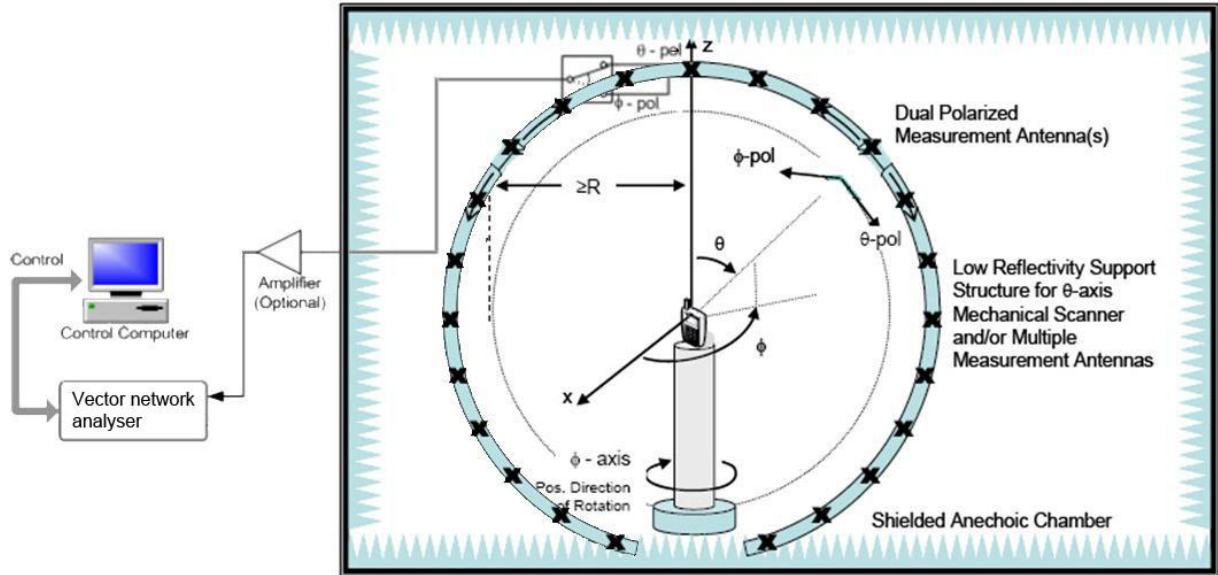


## 2.4. Test Results

### 2.4.1. Gain

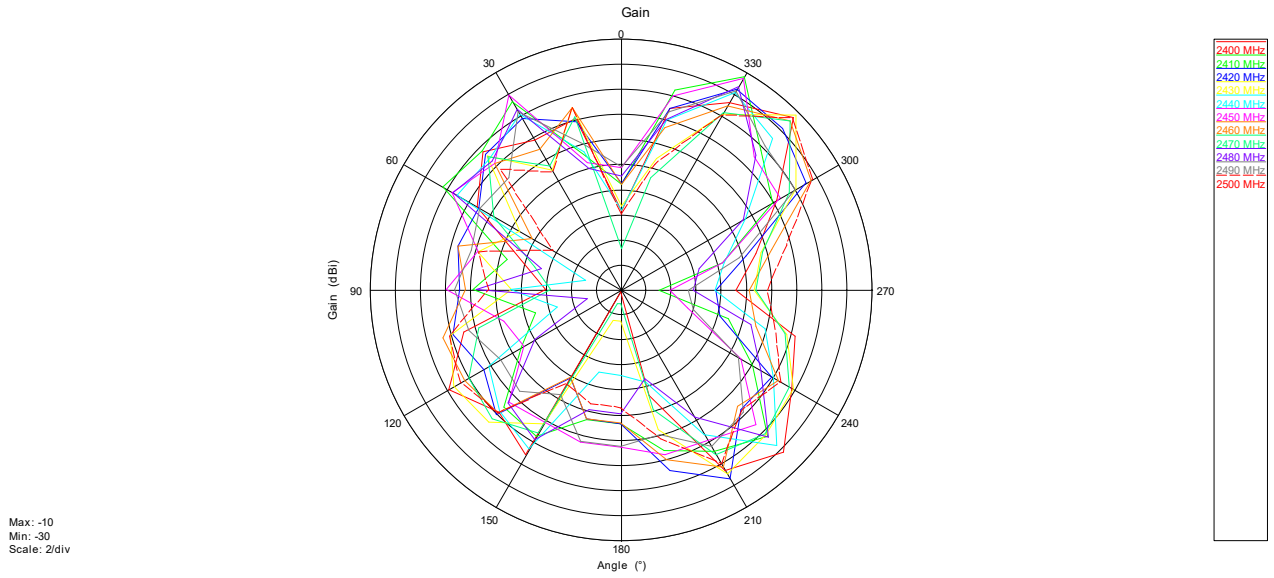
Frequency (MHz)	Gain(dBi)
2400	-7.18
2410	-8.19
2420	-8.04
2430	-8.66
2440	-7.92
2450	-8.44
2460	-9.13
2470	-8.73
2480	-8.40
2490	-8.95
2500	-9.13

## Annex A Test Setup Photos

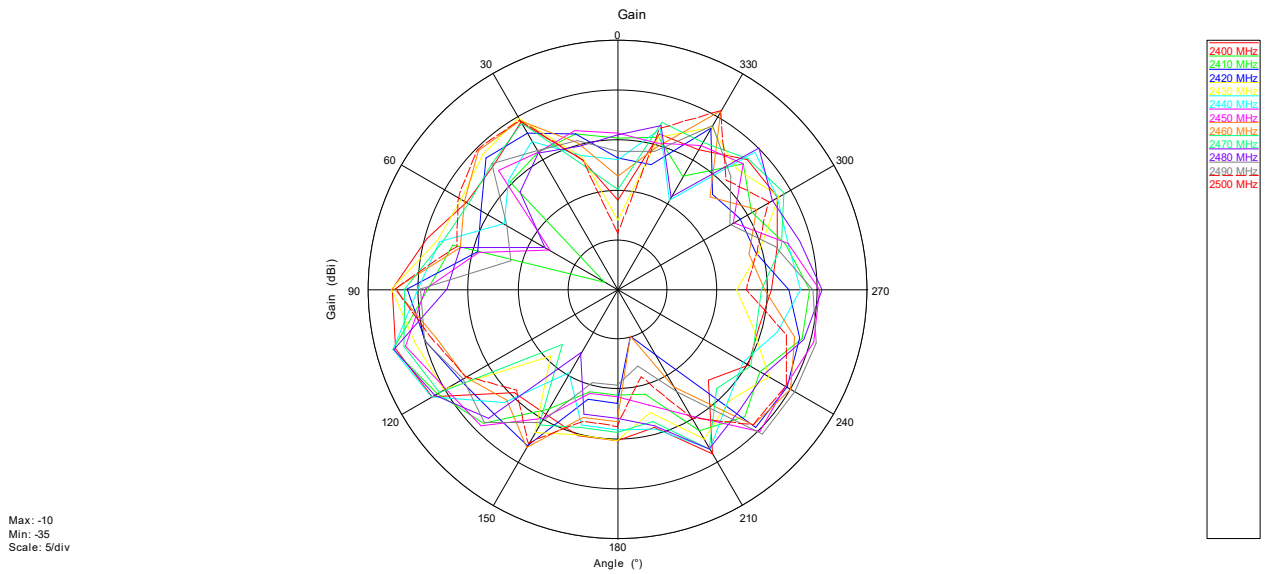


## Annex B Figures

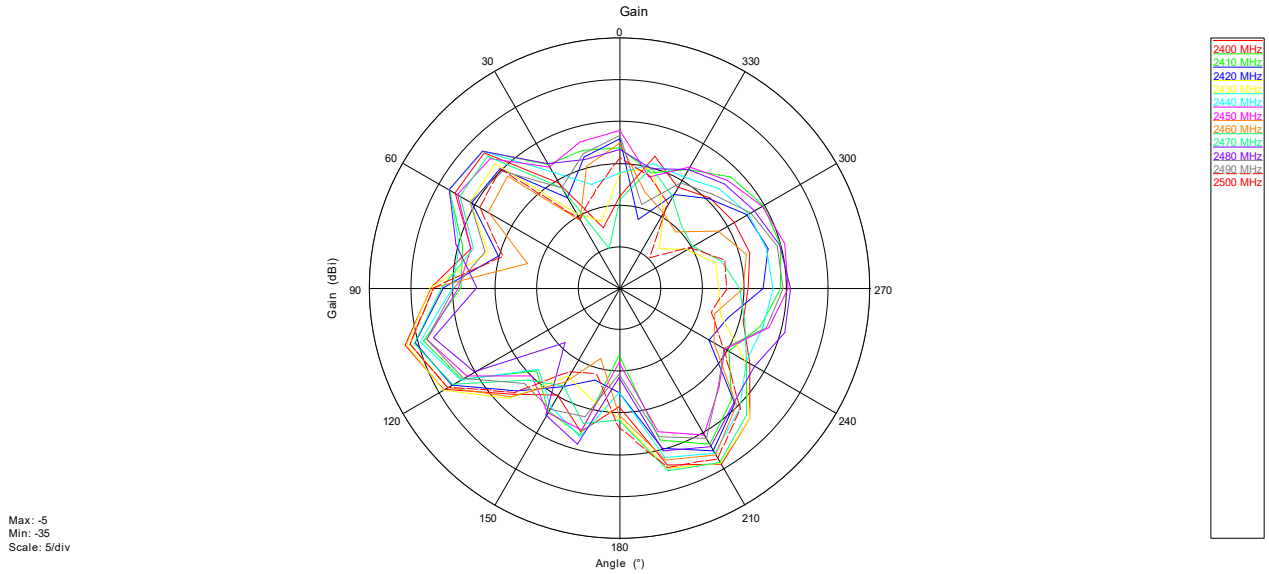
### 1. 2D Radiation Pattern



Phi=0°

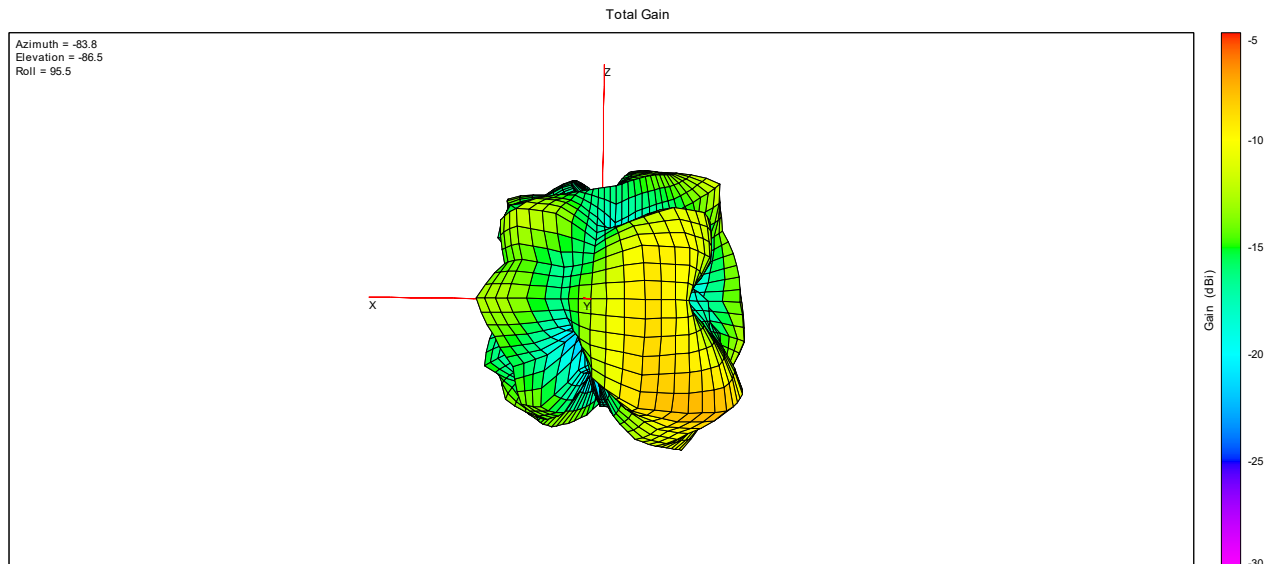


Phi=90°



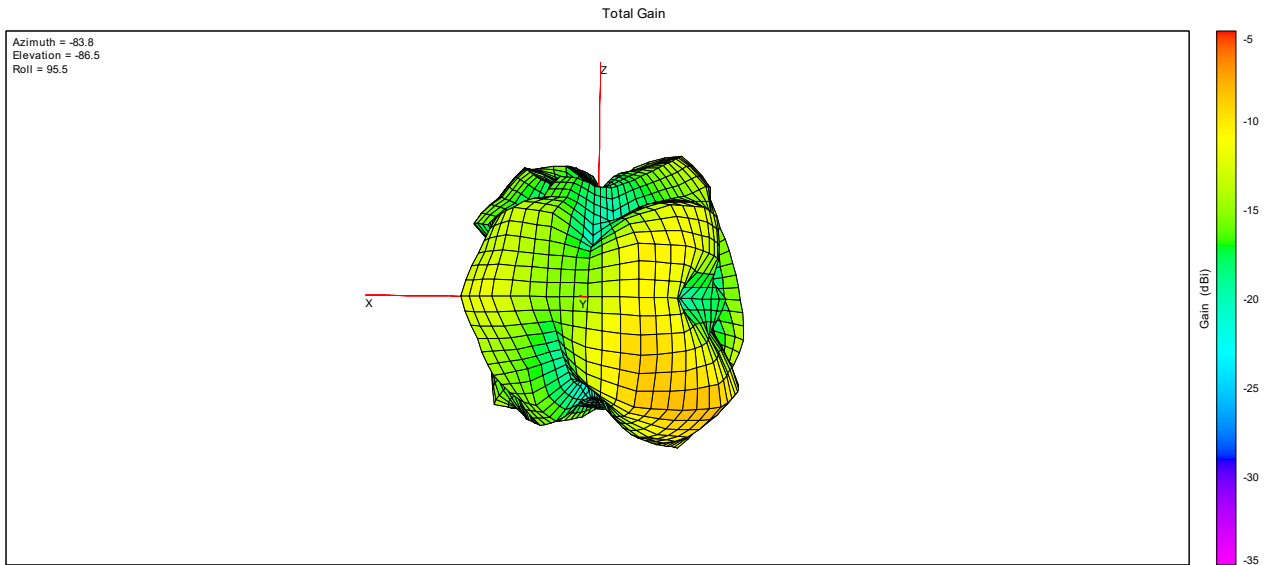
Theta=90°

## 2. 3D Radiation Pattern

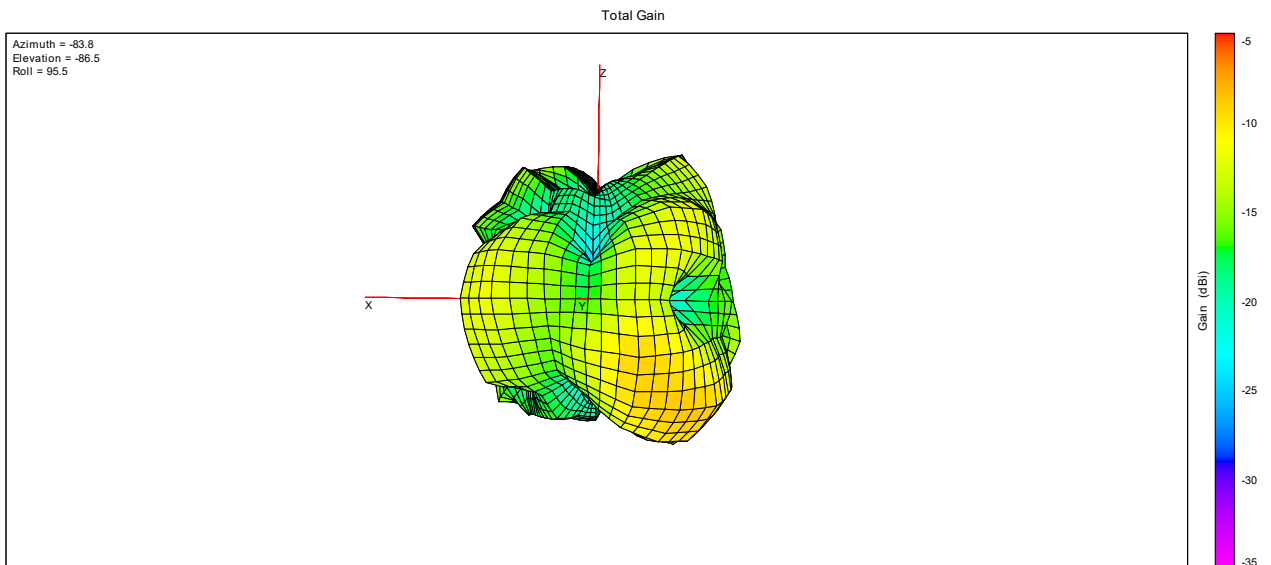


2400MHz





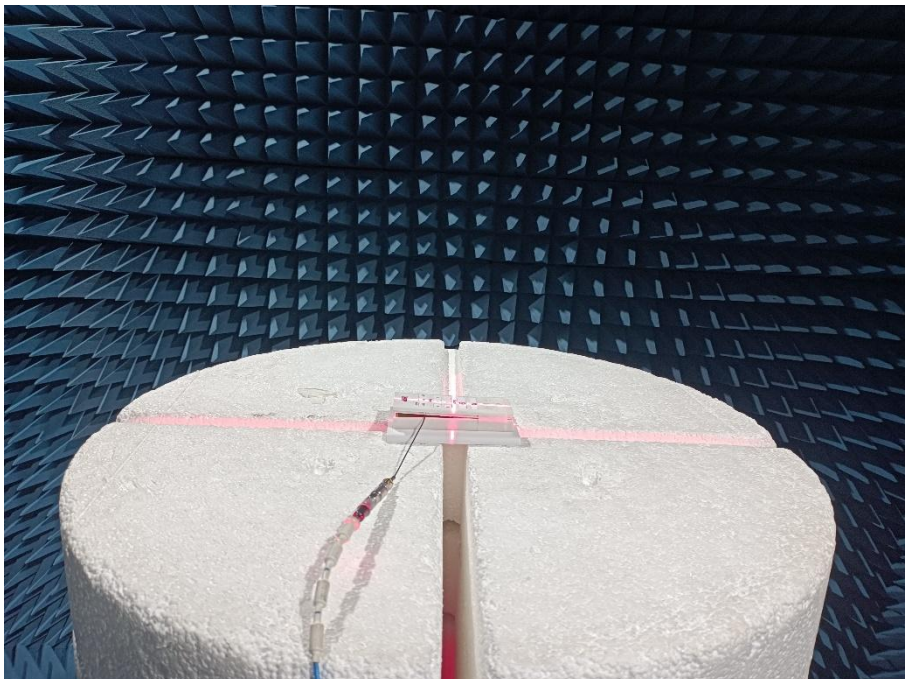
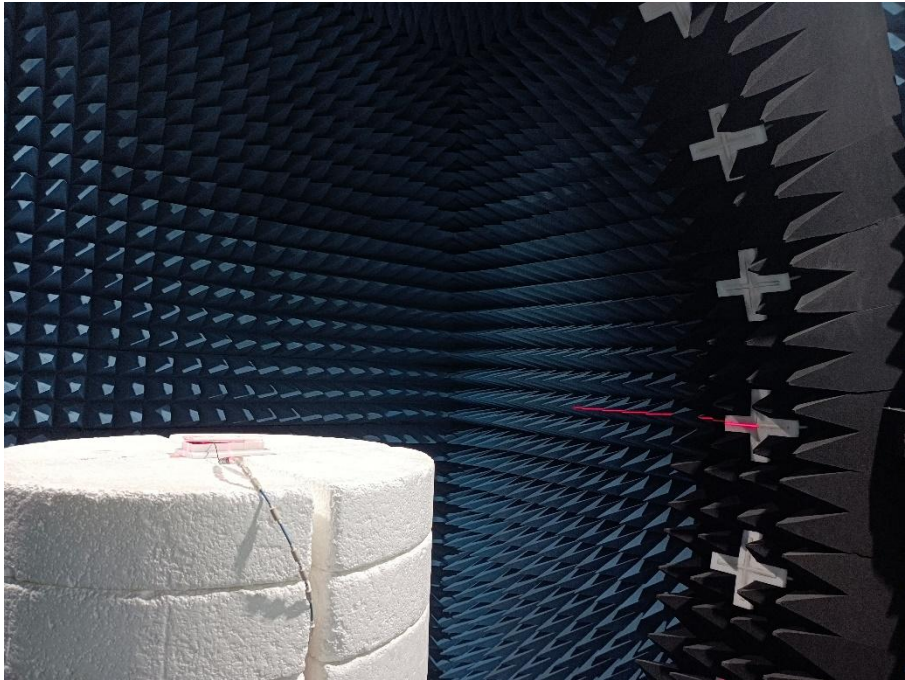
2440MHz



2480MHz

## Annex C EUT Photos

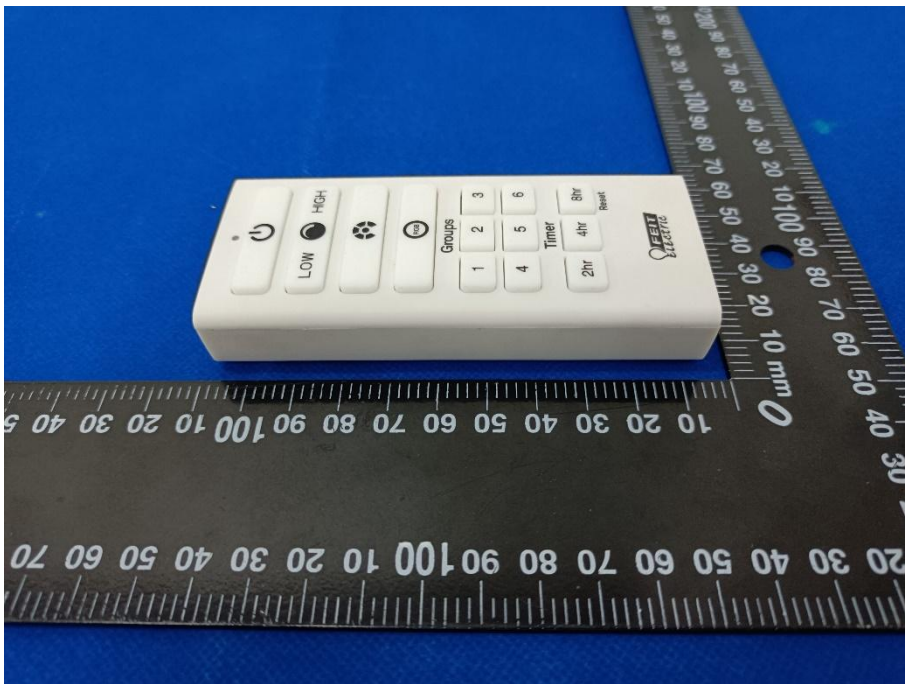
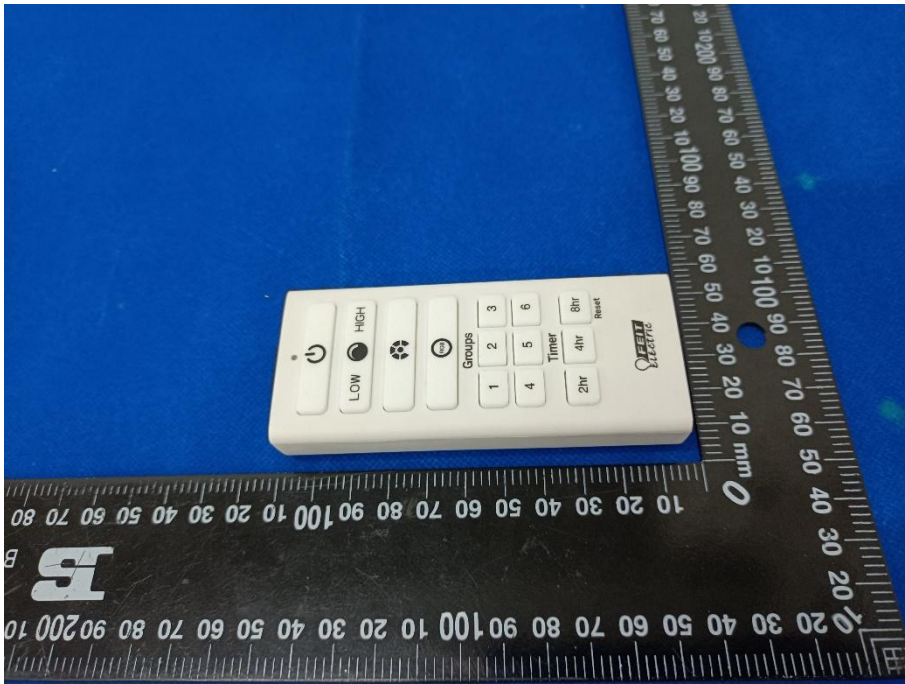
### 1. Test environment

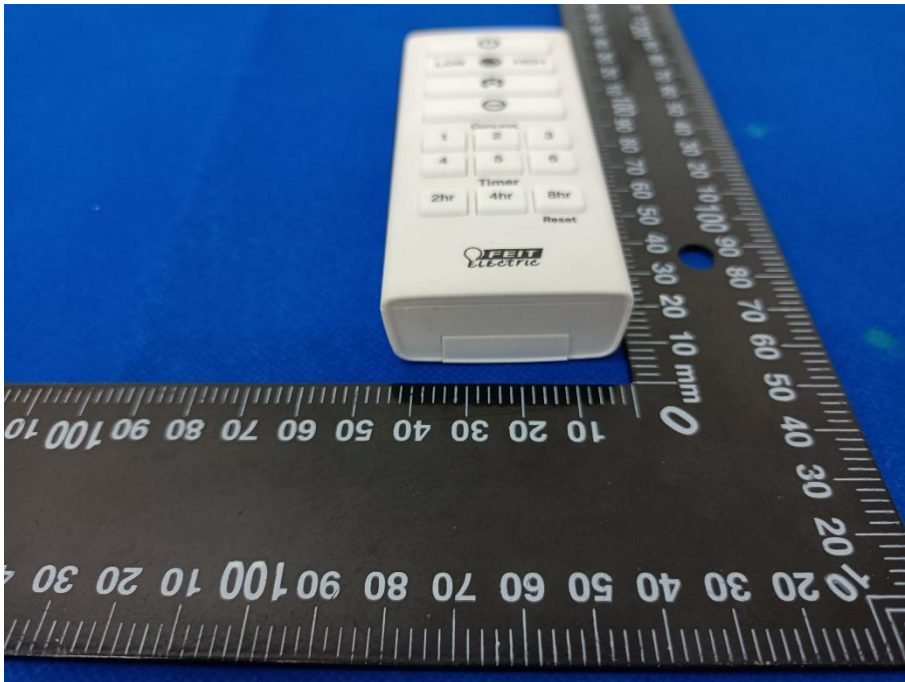


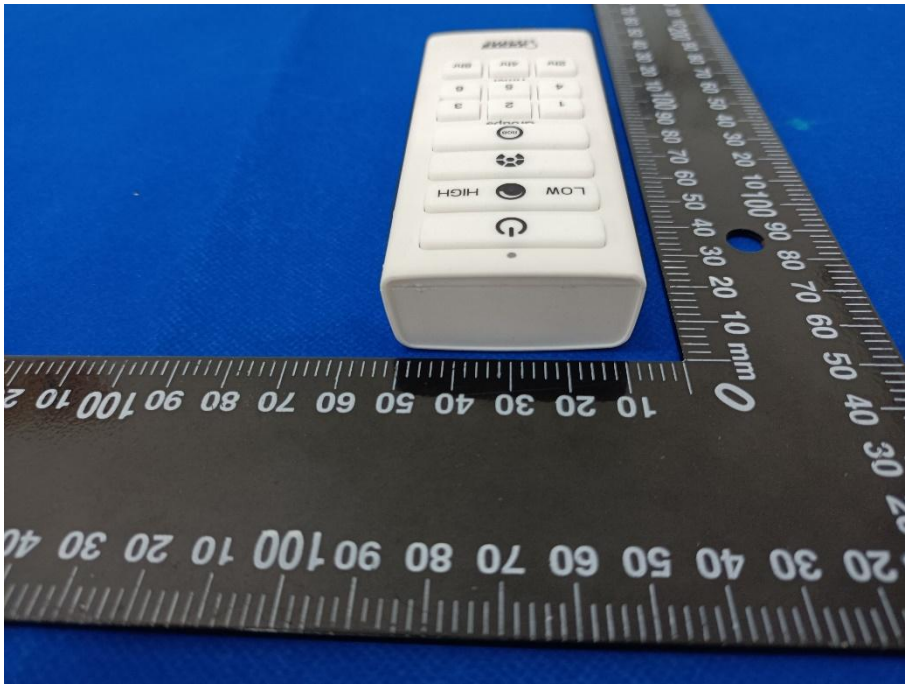
2. EUT



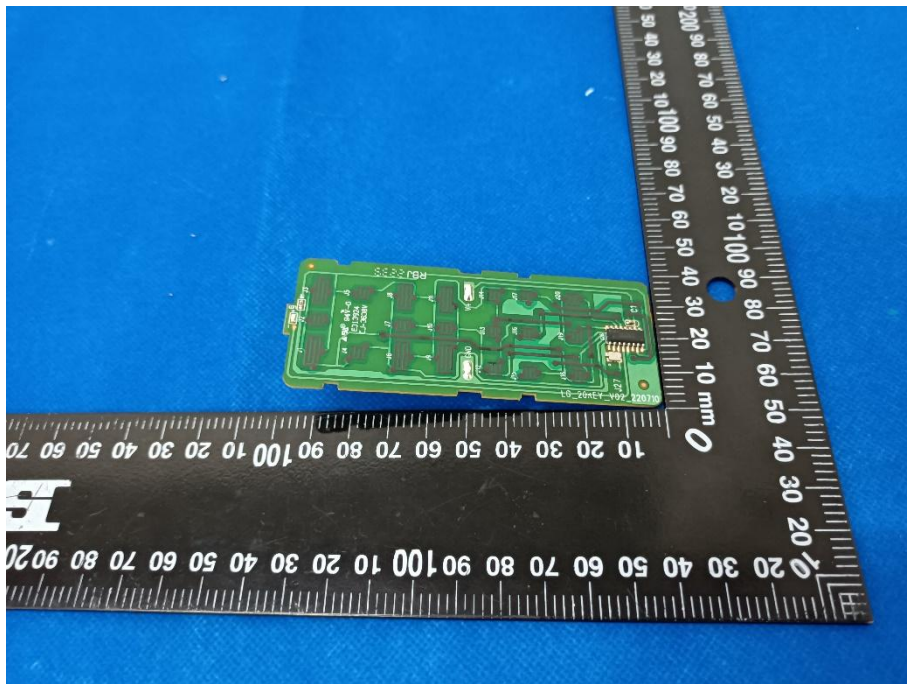
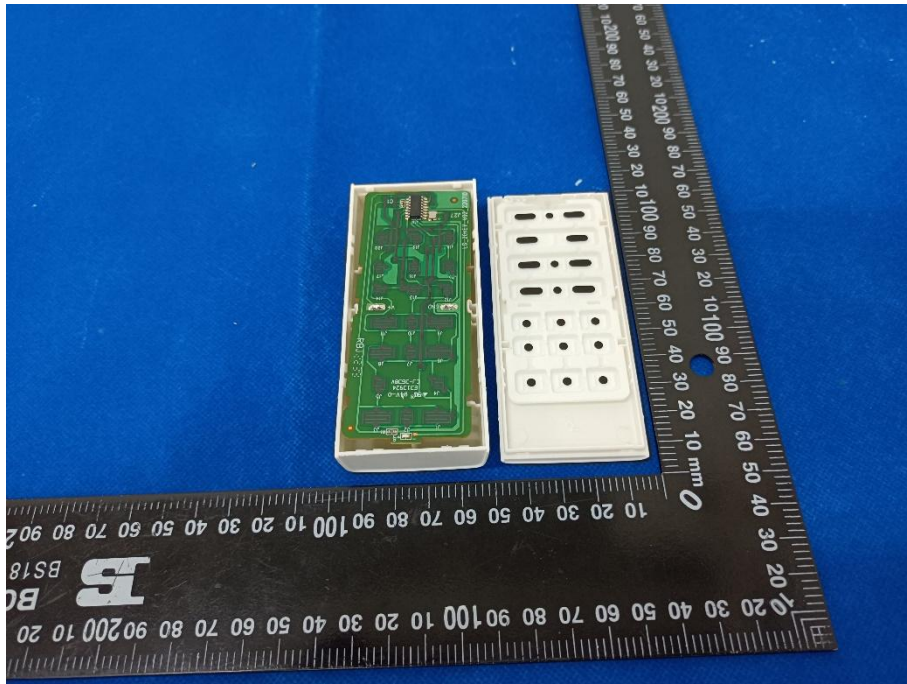


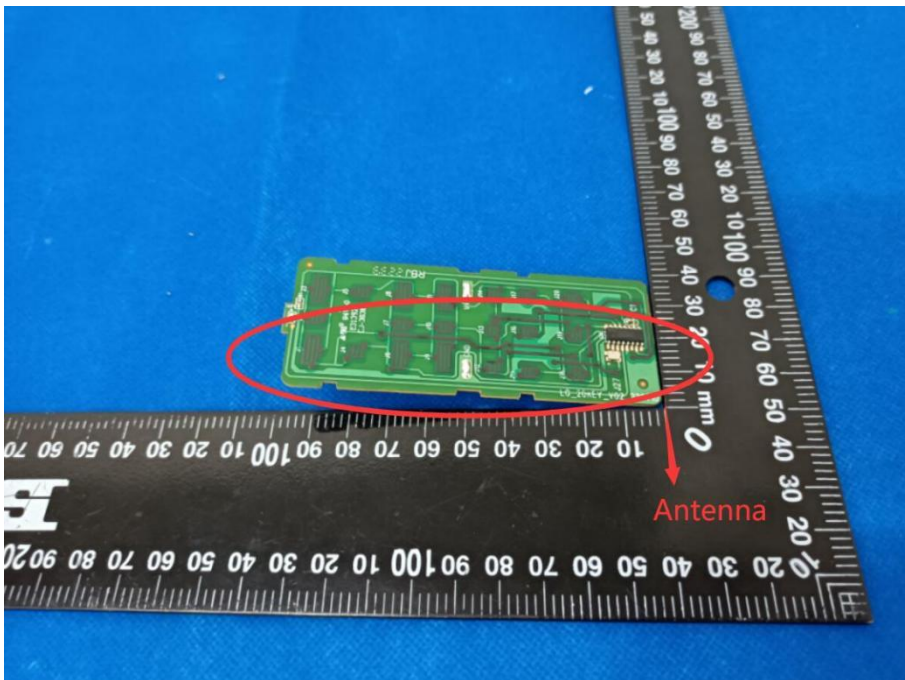
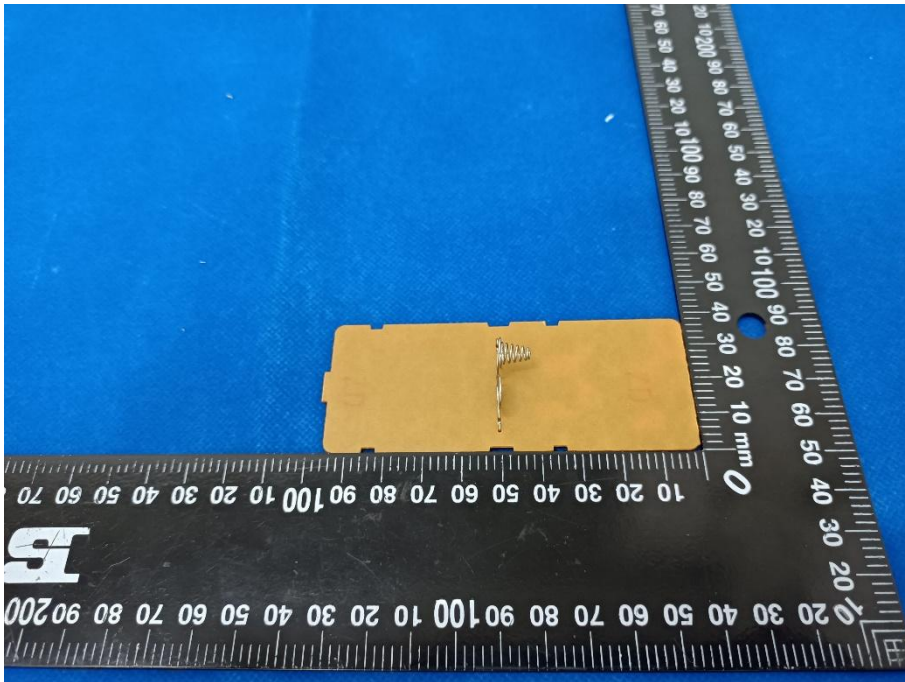
















## Annex D General Information

### 1.1 Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.1-3, 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:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

### 1.3 Test Equipments Utilized

No.	Equipment Name	Serial No.	Type	Manufacturer	Cal.Date	Cal.Due Date
1	Network Analyzer	MY46110140	E5071C	Agilent	2022.07.04	2023.07.03
2	OTA Chamber	TJ2235-Q1793	AMS-892 3-150	ETS	2022.11.30	2025.11.29
3	Antenna Measurement System	1685	EMQuest EMQ-100 V 1.13 Build 21267	ETS	N/A	N/A

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