TEST REPORT

APPLICANT	:	Shenzhen C&D Electronics Co., Ltd.
PRODUCT NAME	:	Bluetooth remote
MODEL NAME	:	RF510B
TRADE NAME	:	N/A
BRAND NAME	:	N/A
STANDARD(S)	:	IEEE Std 149-2021
RECEIPT DATE	:	2023-03-01
TEST DATE	:	2023-03-01
ISSUE DATE	:	2023-03-06

Edited by: Fang Jinshan

Fang Jinshan(Rapporteur)

Approved by: Chi Shide

Chi Shide(Supervisor)

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MORLAB

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Change History		
Version	Date	Reason for change
1.0	2023-03-06	First edition

1.Technical Information

Note: Provide by manufacturer.

1.1. Applicant and Manufacturer Information

Applicant:	Shenzhen C&D Electronics Co., Ltd.
Applicant Address:	9/F,Tower 9A, Baoneng Science&Technology Park, Qingxiang Road, Longhua New District, Shenzhen(518109) ,China
Manufacturer:	N/A
Manufacturer Address:	N/A

1.2. Equipment Under Test (EUT) Description

Wireless Type	Bluetooth
Test frequency band	2400MHz-2500MHz
IMEI	N/A
Sample No.	2#

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.

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

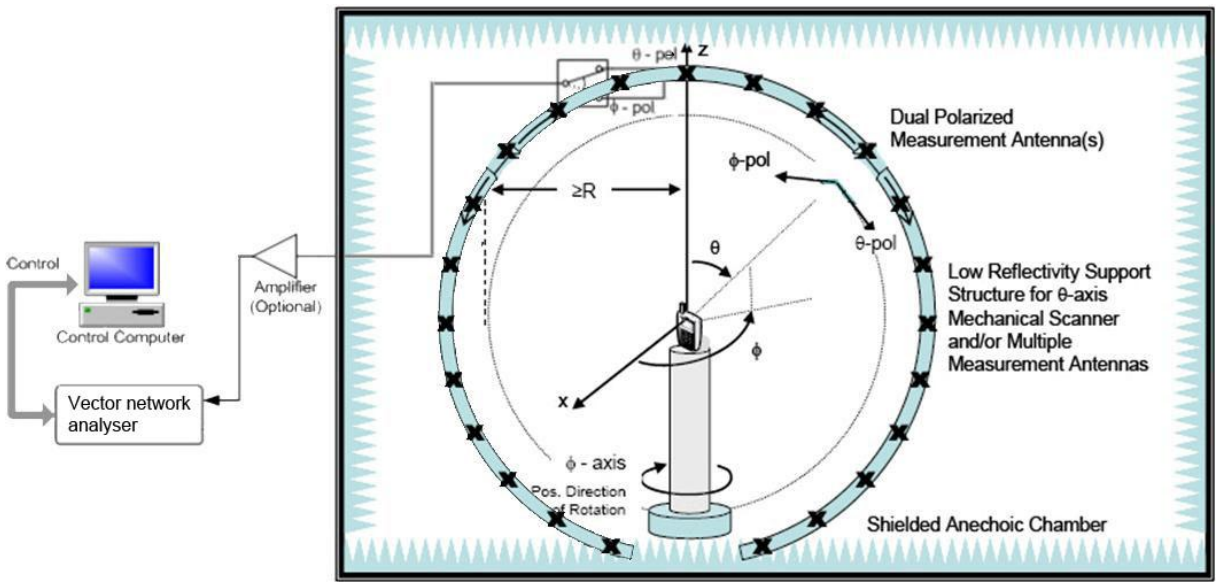
2.4. Test Results lists

2.4.1. Gain

Frequency	Gain(dBi)
2400MHz	2.44
2410MHz	2.59
2420MHz	2.65
2430MHz	2.66
2440MHz	2.61
2450MHz	2.84
2460MHz	2.77
2470MHz	2.54
2480MHz	2.40
2490MHz	2.42
2500MHz	2.41

Annex A Photographs

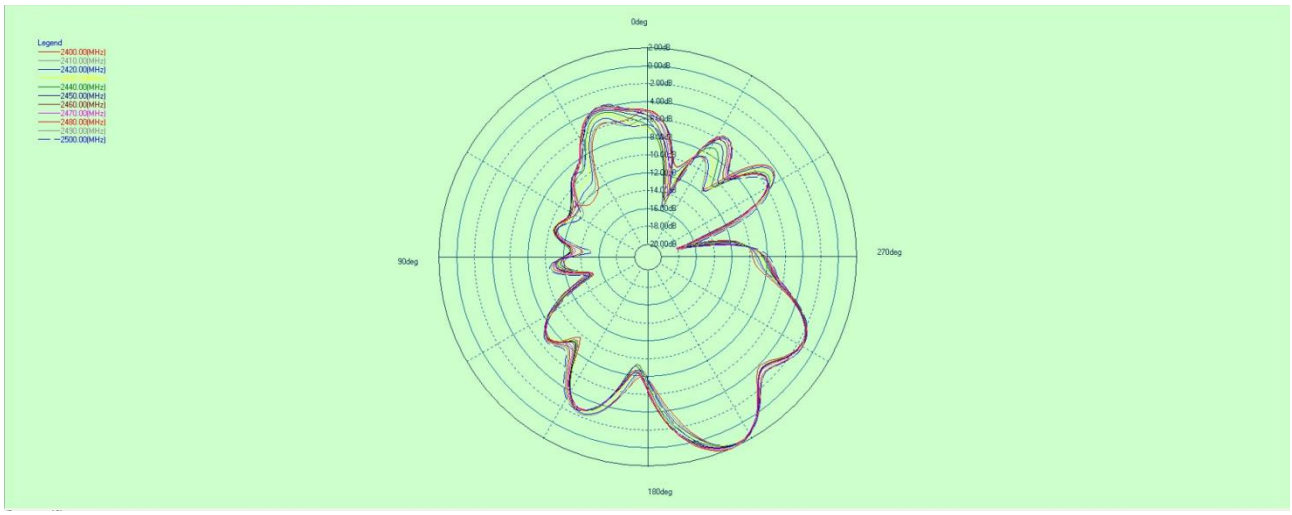
1. Test Setup



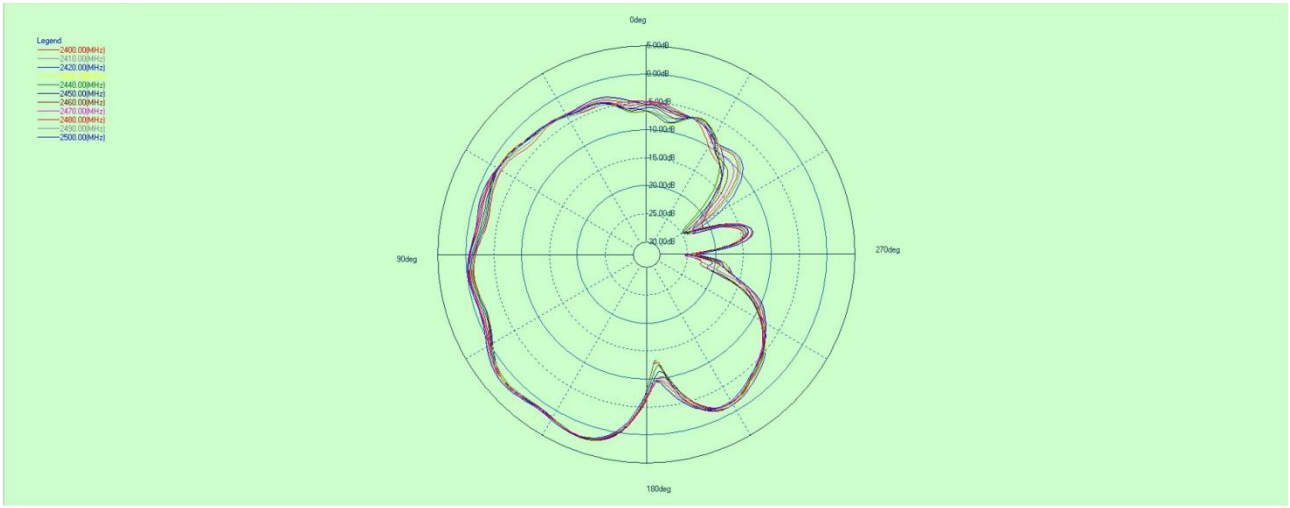
Annex B Figures

1. 2D Radiation Pattern

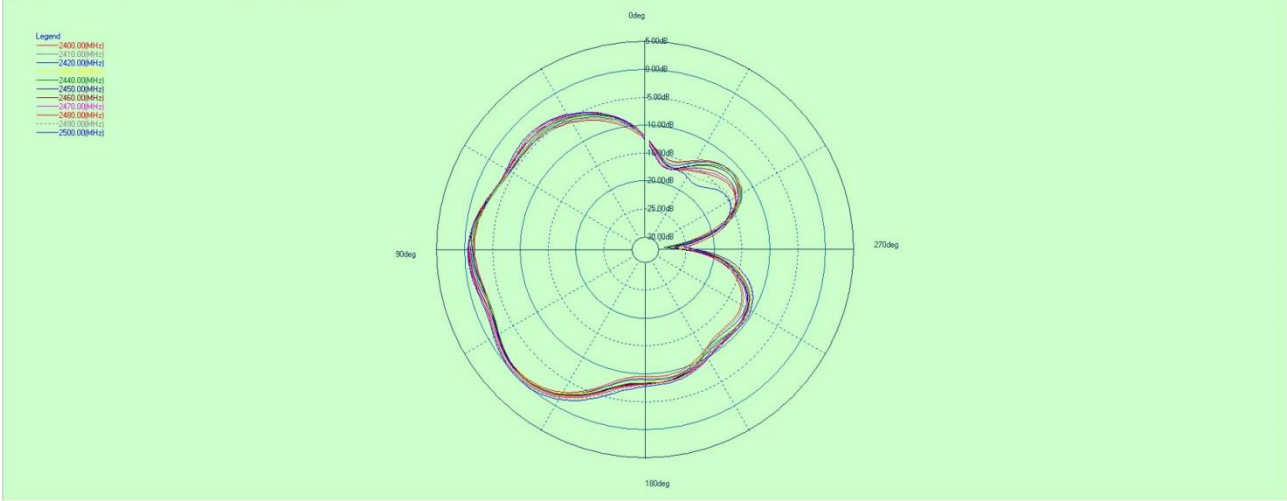
Phi=0°



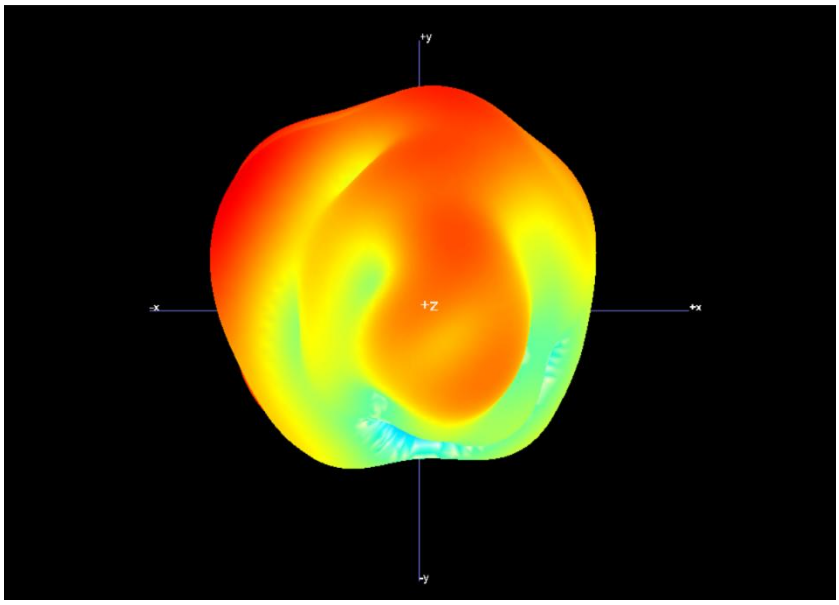
Phi=90°



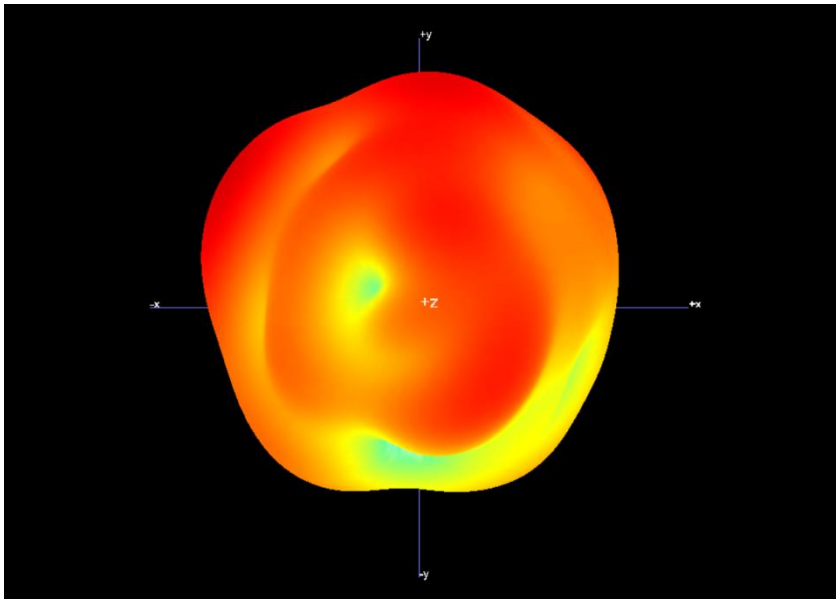
Theta=90°



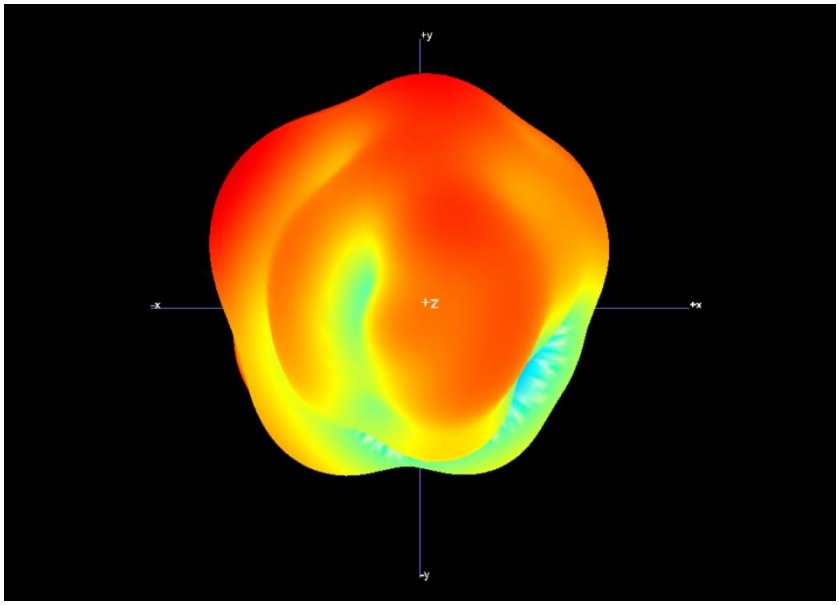
2. 3D Radiation Pattern



2400MHz



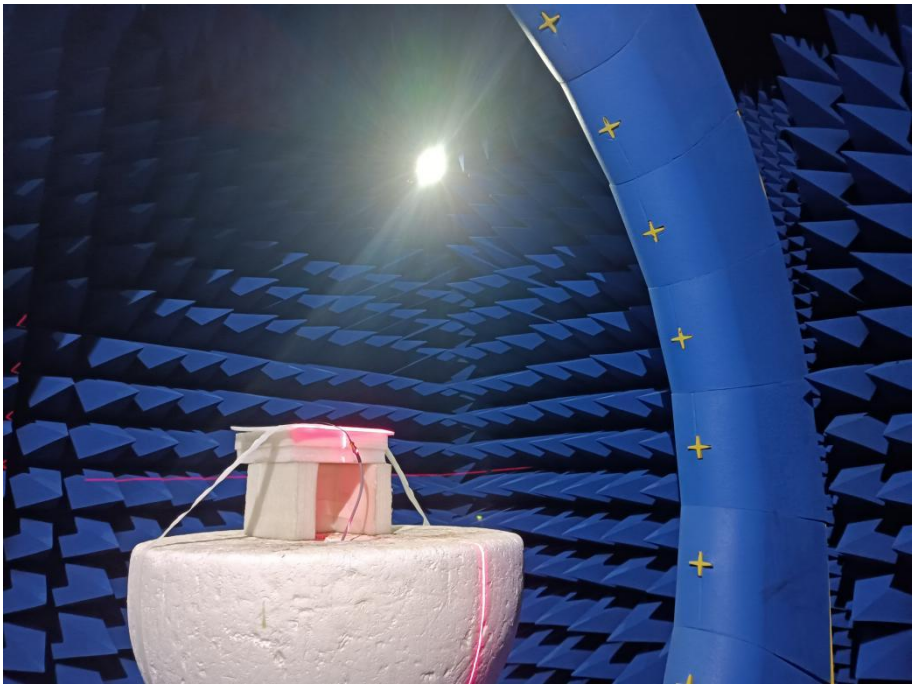
2440MHz

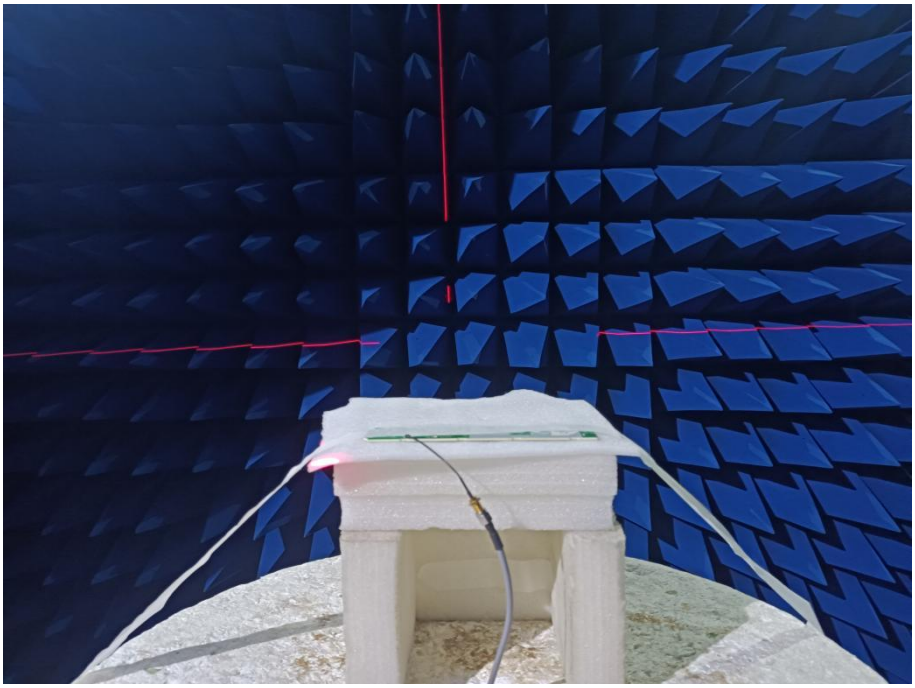


2480MHz

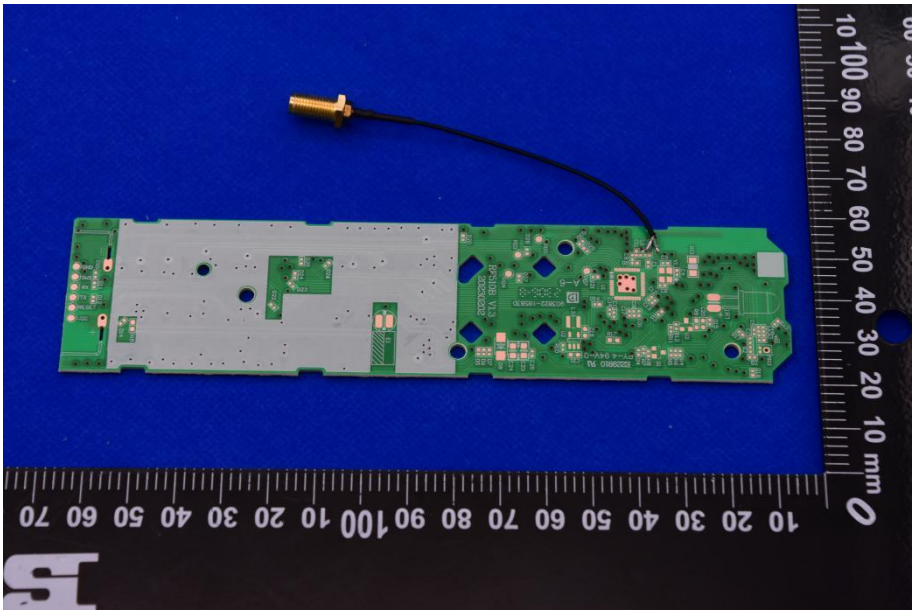
Annex C Photographs

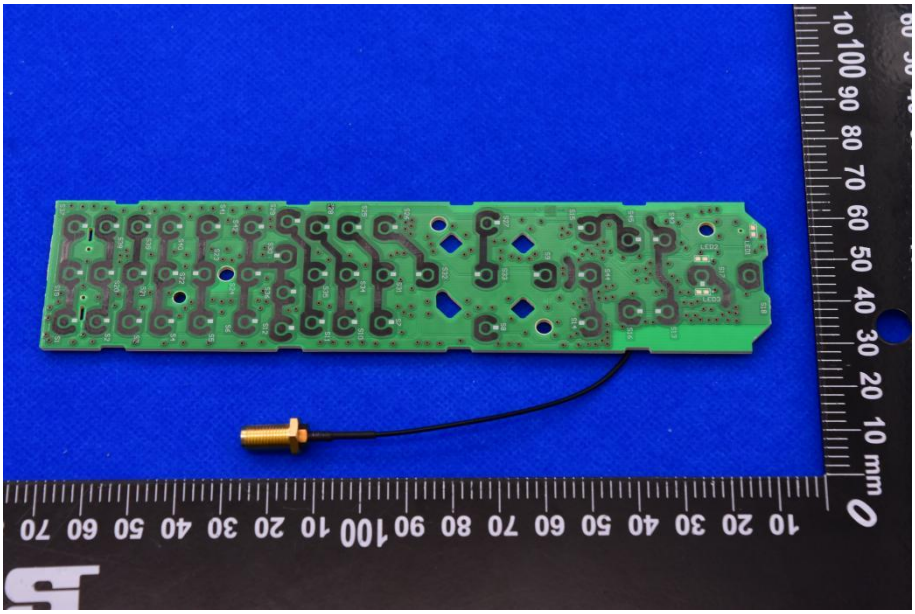
1. Test environment

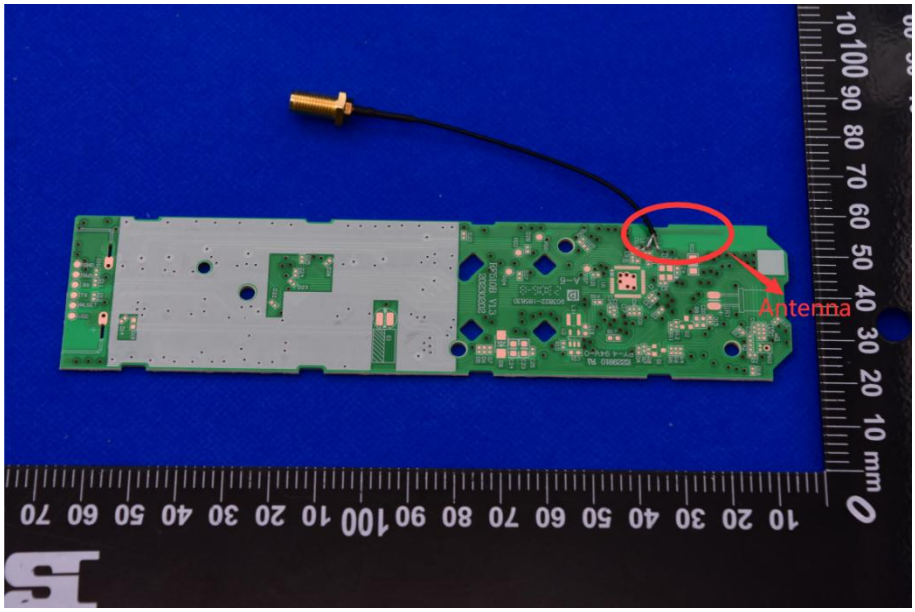




2. EUT






Antenna

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	Vector Network Analyzer	MY46214666	E5071C	Agilent	2023.02.09	2024.02.08
2	OTA Chamber	N/A	SG24	Satimo	2021.01.12	2024.01.11
3	SatEnv	N/A	2.0.1.5 build 12	Satimo	N/A	N/A
4	SPM	N/A	1.11	Satimo	N/A	N/A

——— END OF REPORT ———