



TEST REPORT

APPLICANT : Zhong Wang Wireless Earphone Co., Limited

PRODUCT NAME : TWS Earbuds

MODEL NAME : Main model: 14656;
Series model: BB-T784;BB-T785;BB-T786;CY-6686;
CY-8782;ZW-T14;ZW-T26;ZW-T30;ZW-T31

TRADE NAME : AIRBUDS

BRAND NAME : N/A

STANDARD(S) : ANSI/IEEE Std 149-2021

RECEIPT DATE : 2022-08-31

TEST DATE : 2022-09-02

ISSUE DATE : 2022-09-06

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Approved by: Chi Shide
Chi Shide(Supervisor)

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Change History		
Version	Date	Reason for change
1.0	2022-09-06	First edition



1. Technical Information

Note: Provide by manufacturer.

1.1. Applicant and Manufacturer Information

Applicant:	Zhong Wang Wireless Earphone Co., Limited
Applicant Address:	A4 Building,Guixiang Garden,Qianjin Road,Huali village,Gurao Town,Chaoyang District,Shantou City,GuangDong Province.
Manufacturer:	Zhong Wang Wireless Earphone Co., Limited
Manufacturer Address:	A4 Building,Guixiang Garden,Qianjin Road,Huali village,Gurao Town,Chaoyang District,Shantou City,GuangDong Province.

1.2. Equipment Under Test (EUT) Description

Wireless Type	Bluetooth
Frequency	N/A
IMEI	N/A
Sample No.	3#

Note:

With regards to the application for Model:14656

According to the designer,Zhong Wang Wireless Earphone Co., Limited,we hereby declare that the models: BB-T784;BB-T785;BB-T786;CY-6686;CY-8782;ZW-T14;ZW-T26;ZW-T30;ZW-T31

The model is different, but everything else is the same.



2. Test Results

2.1. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	ANSI/IEEE Std 149-2021	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. 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	

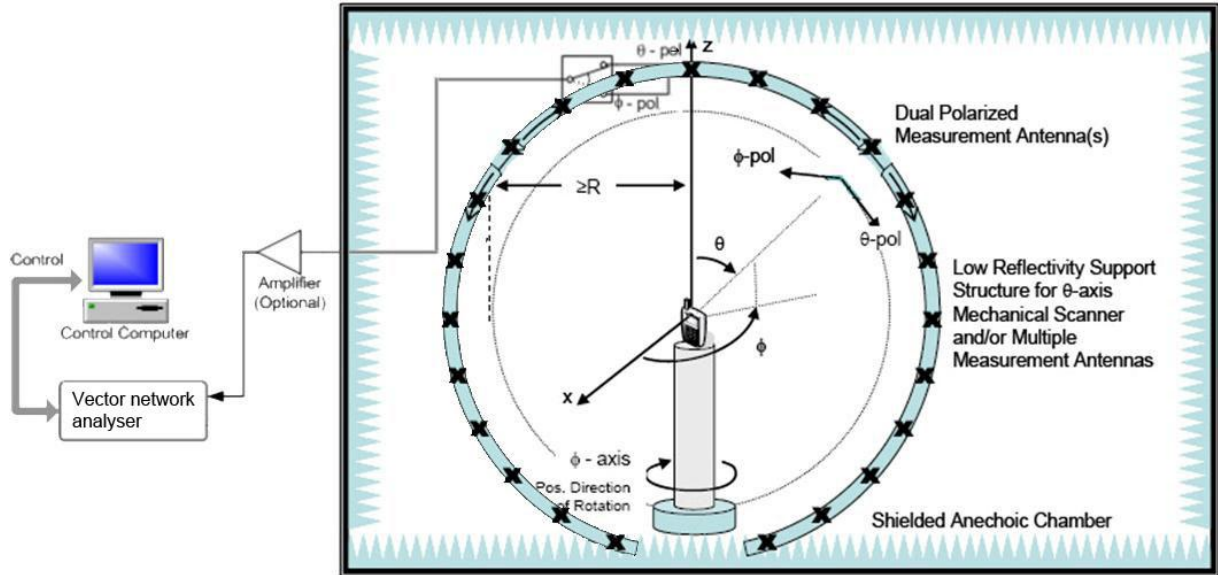


2.4. Test Results

Frequency	Gain(dBi)
2400 MHz	-0.73
2410 MHz	-0.86
2420 MHz	-1.12
2430 MHz	-1.31
2440 MHz	-1.36
2450 MHz	-1.59
2460 MHz	-1.93
2470 MHz	-2.37
2480 MHz	-2.61
2490 MHz	-2.76
2500MHz	-2.96

Annex A Photographs

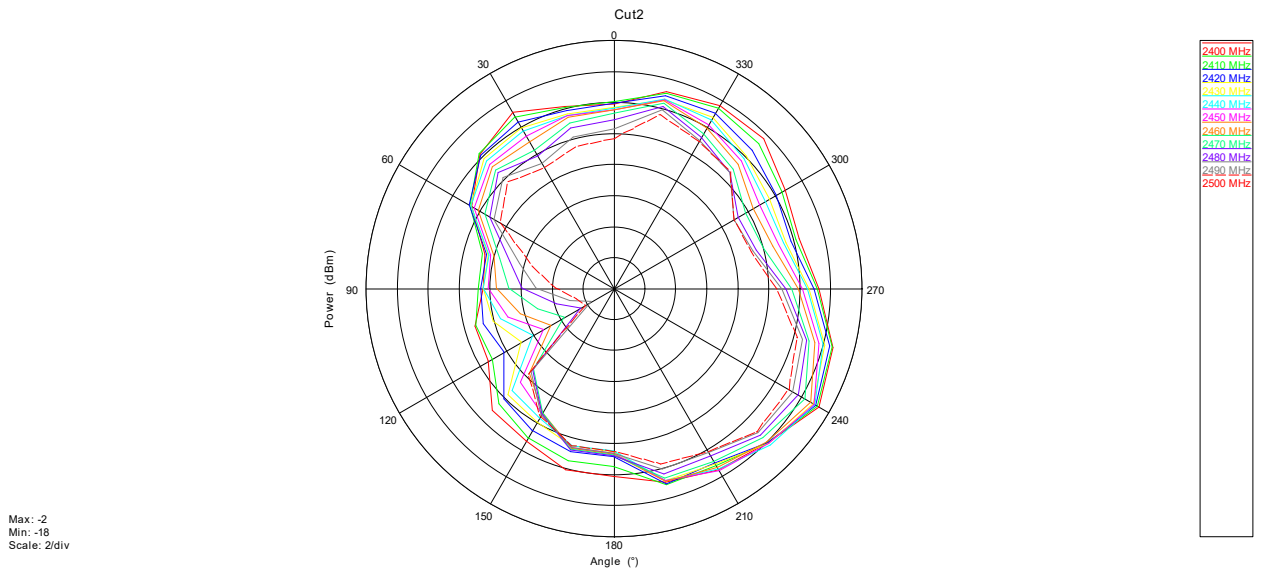
1. Test Setup



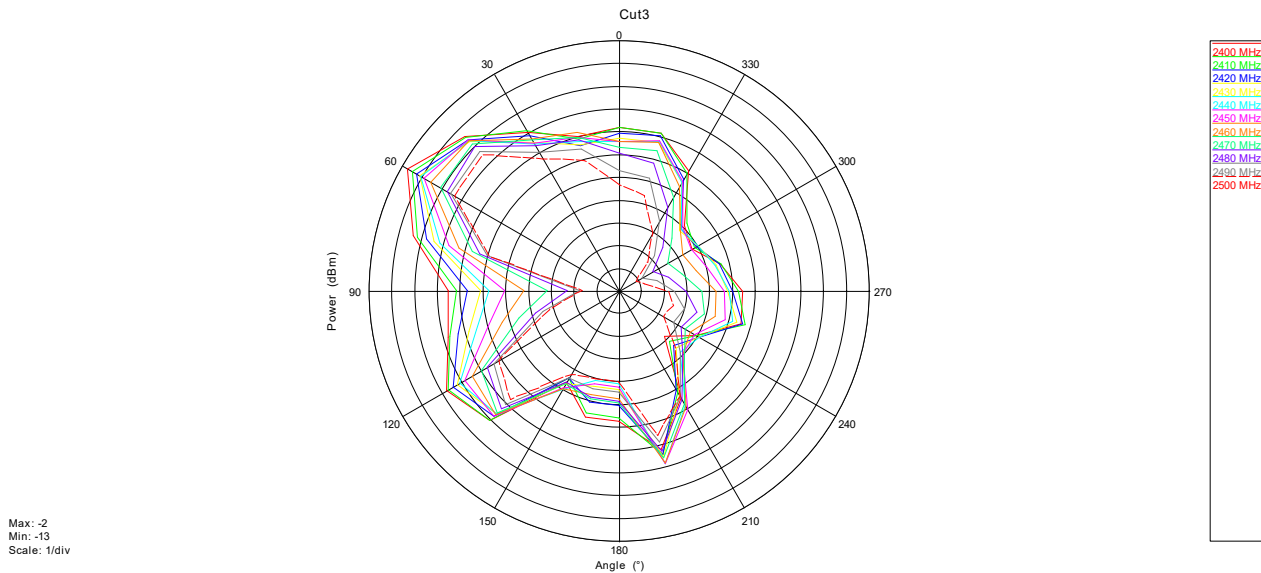
Annex B Figures

1. 2D Radiation Pattern

Phi=0°

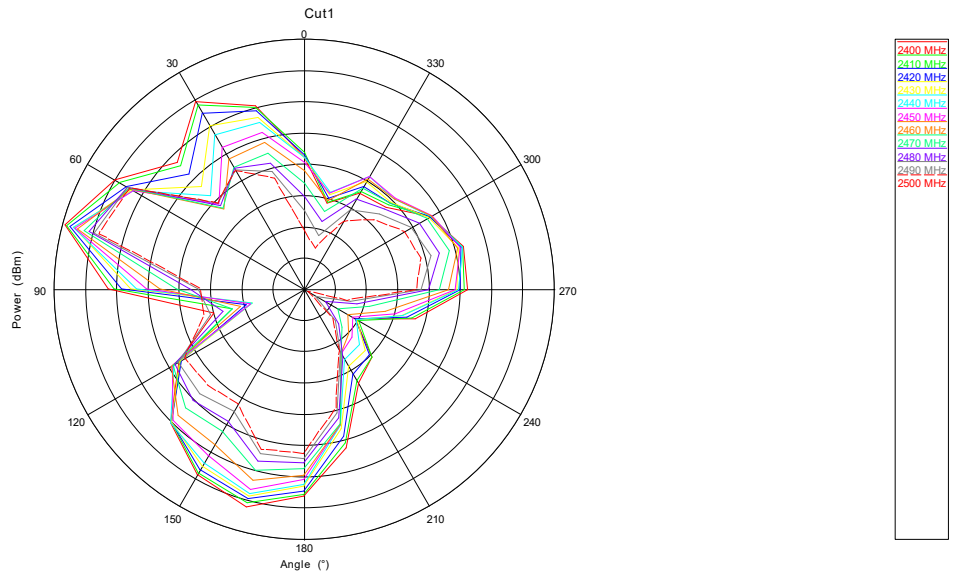


Phi=90°

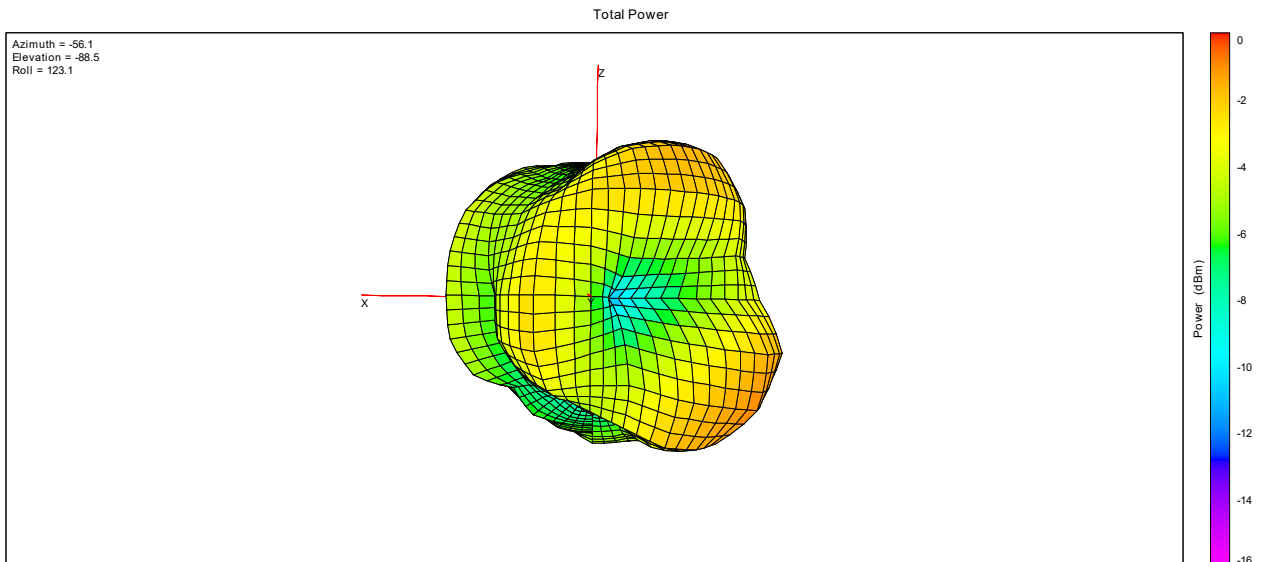




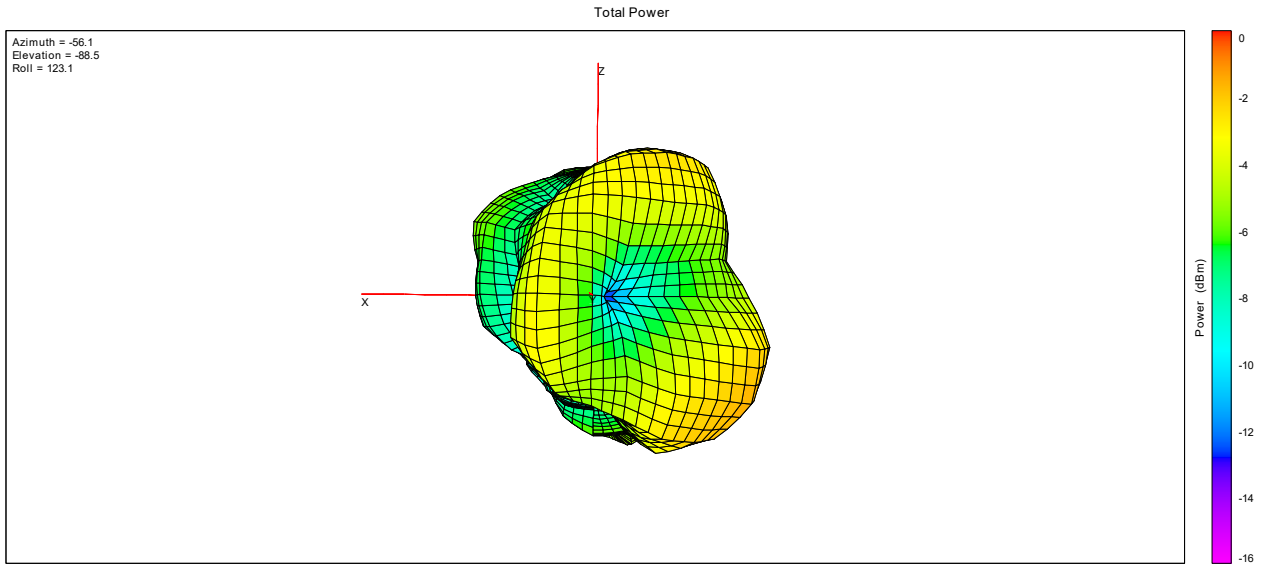
Theta=90°



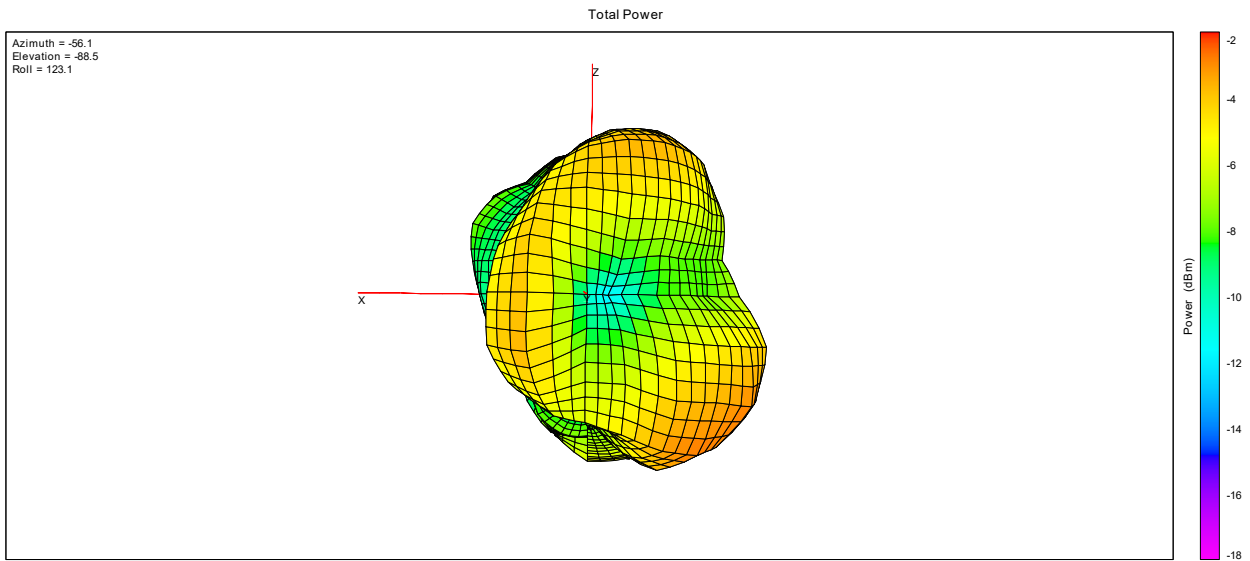
2. 3D Radiation Pattern



2400MHz



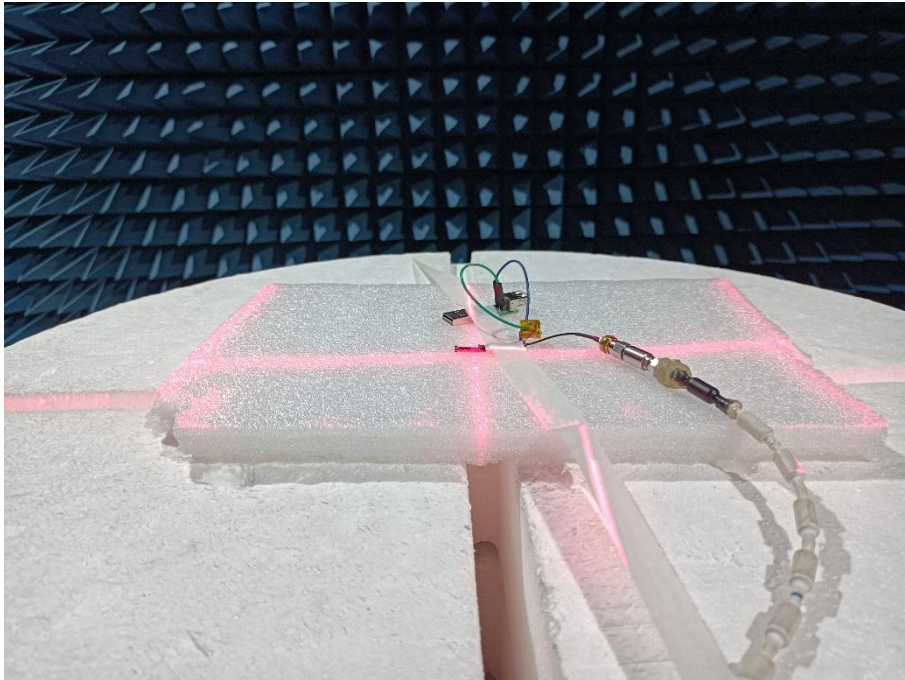
2440MHz



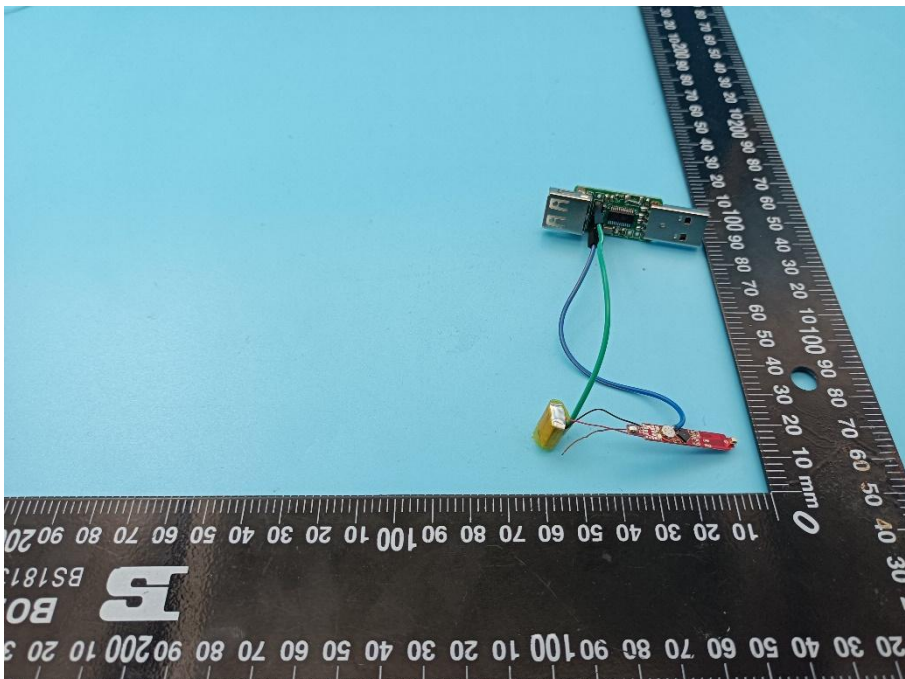
2480MHz

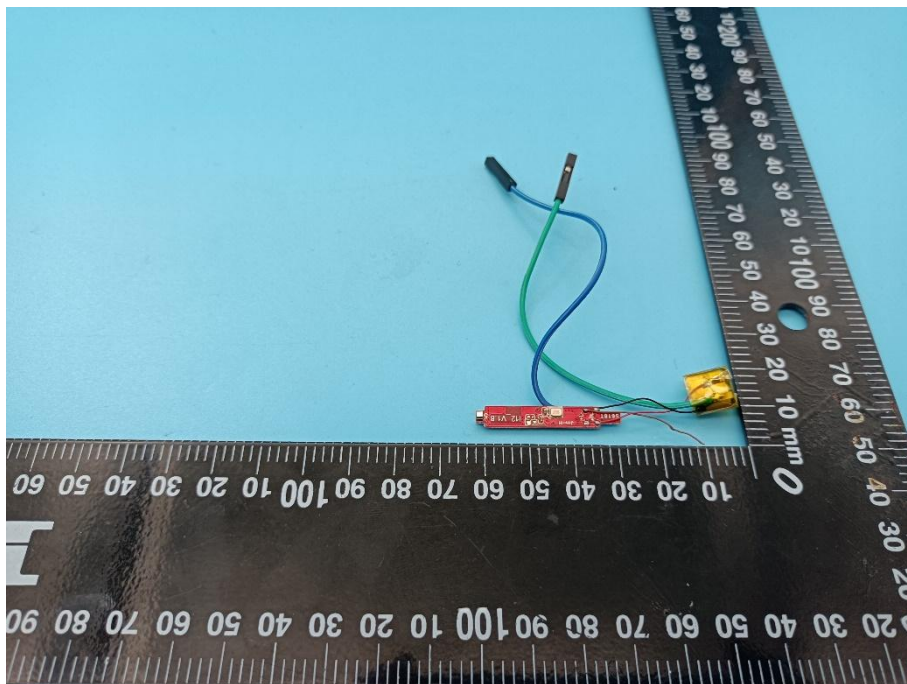
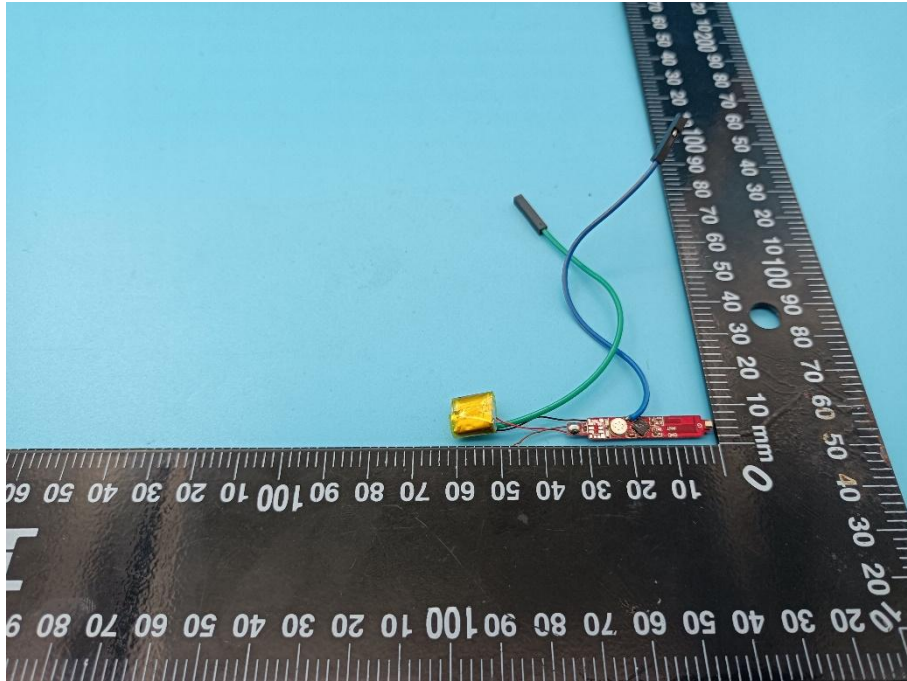
Annex C Photographs

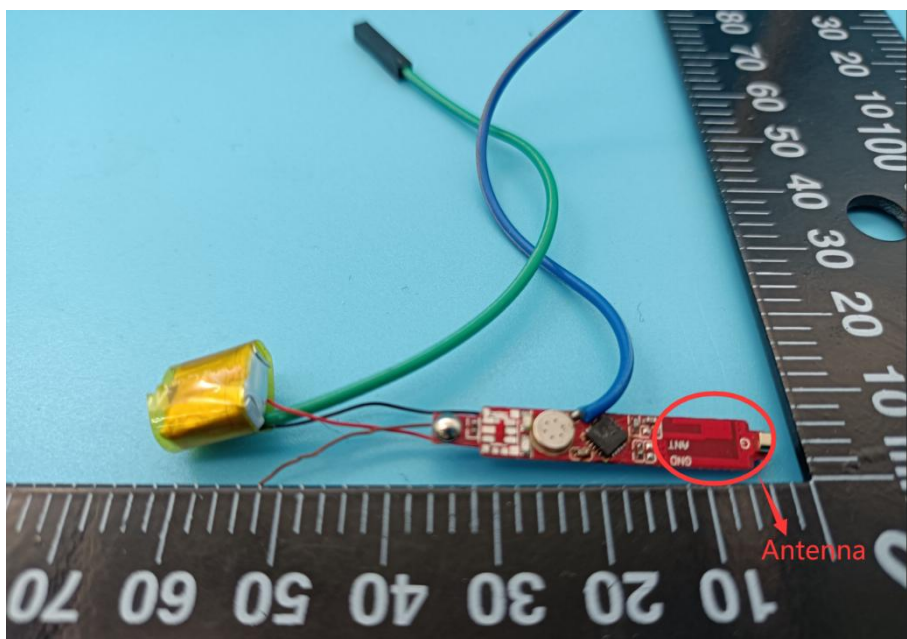
1. Test environment



2. EUT









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 —————