



## FCC PART 15.247

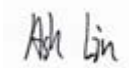
### TEST REPORT

For

## Midland Radio Corporation

5900 Parretta Drive, Kansas City, Missouri, United States

**FCC ID: MMACLIPTALK**

|                                        |                                                                                                                                                                                                                                                                                |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Report Type:</b><br>Original Report | <b>Product Name:</b><br>Transceiver                                                                                                                                                                                                                                            |
| <b>Report Number:</b>                  | 2507Z31947E-RF-03                                                                                                                                                                                                                                                              |
| <b>Report Date:</b>                    | 2026-02-05                                                                                                                                                                                                                                                                     |
| <b>Reviewed By:</b>                    | Ash Lin                                                                                                                                                                                     |
| <b>Approved By:</b>                    | Miles Chen                                                                                                                                                                                 |
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**REPORT REVISION HISTORY**

| Number of Revisions | Report No.        | Version | Issue Date | Description     |
|---------------------|-------------------|---------|------------|-----------------|
| 0                   | 2507Z31947E-RF-03 | R1V1    | 2026-02-05 | Initial Release |

## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

|                                                                                                                                                                                                                                                                                                                                                              |         |                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------------------------------------|
| Applicant:                                                                                                                                                                                                                                                                                                                                                   |         | Midland Radio Corporation                  |
| Product Name:                                                                                                                                                                                                                                                                                                                                                |         | Transceiver                                |
| Tested Model:                                                                                                                                                                                                                                                                                                                                                |         | ClipTalk                                   |
| Multiple Model(s):                                                                                                                                                                                                                                                                                                                                           |         | N/A                                        |
| Trade Name:                                                                                                                                                                                                                                                                                                                                                  |         | MIDLAND                                    |
| Power Supply:                                                                                                                                                                                                                                                                                                                                                |         | DC 5V from Adapter or DC 3.7V from battery |
| Adapter information                                                                                                                                                                                                                                                                                                                                          | Model:  | XZ0500-2400UU                              |
|                                                                                                                                                                                                                                                                                                                                                              | Input:  | AC 100-240V, 50/60Hz, 0.4A                 |
|                                                                                                                                                                                                                                                                                                                                                              | Output: | DC 5V, 2.4A, 12W                           |
| Maximum Peak Conducted Output Power:                                                                                                                                                                                                                                                                                                                         |         | 0.67 dBm                                   |
| Frequency Range:                                                                                                                                                                                                                                                                                                                                             |         | 2402~2480MHz                               |
| Modulation Technique:                                                                                                                                                                                                                                                                                                                                        |         | GFSK                                       |
| Antenna Type:                                                                                                                                                                                                                                                                                                                                                |         | PCB Antenna                                |
| ★Maximum Antenna Gain:                                                                                                                                                                                                                                                                                                                                       |         | 1 dBi                                      |
| EUT Received Status:                                                                                                                                                                                                                                                                                                                                         |         | Good                                       |
| <i>Note:</i><br>1. The Maximum Antenna Gain was declared by manufacturer.<br>2. All measurement and test data in this report was gathered from production sample serial number: 3D4O-6 (RF Conducted), 3D4O-5(Conducted Emission and Radiated Spurious Emission) Assigned by the BACL(Xiamen). The EUT supplied by the applicant was received on 2025-11-18) |         |                                            |

### Objective

This test report is prepared for *Midland Radio Corporation* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commissions's rules.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and KDB 558074 D01 15.247 Meas Guidance v05r02.

### Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Xiamen) to collect test data is located on the Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science and Technology Innovation Park, Torch High tech Zone XiaMen.

Bay Area Compliance Laboratories Corp. (Xiamen) Lab is accredited to ISO/IEC 17025 by A2LA (Certificate Number: 7134.01) and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN1384.

### Measurement Uncertainty

| Item                                            |               | $U_{lab}$     |
|-------------------------------------------------|---------------|---------------|
| Conducted Emissions                             | 150kHz-30MHz  | 2.45 dB       |
| Radiated Spurious Emission                      | 9kHz-150kHz   | 2.82dB        |
|                                                 | 150kHz-30MHz  | 2.74dB        |
|                                                 | 30MHz~1GHz    | 4.68dB        |
|                                                 | 1GHz~18GHz    | 5.00dB        |
|                                                 | 18GHz~26.5GHz | 4.90dB        |
| Occupied Channel Bandwidth                      |               | 2%            |
| Transmitter Conducted Power(Conducted RF power) |               | $\pm 1.49$ dB |
| Conducted Spurious Emission                     |               | $\pm 2.92$ dB |
| Power Spectral Density                          |               | 2.52 dB       |
| Duty Cycle                                      |               | 1 %           |
| Temperature                                     |               | 1 °C          |
| Humidity                                        |               | 5 %           |
| Supply voltages                                 |               | 1 %           |

*Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor  $K$  with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.*

## SYSTEM TEST CONFIGURATION

### Test Mode and Voltage

|                                                                                               |                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The system was configured for testing in a typical mode (as normally used by a typical user). |                                                                                                                                                                    |
| Test mode:                                                                                    | Test mode 1: Transmitting                                                                                                                                          |
| Test voltage:                                                                                 | DC 5V from Adapter (AC 120V/60Hz)                                                                                                                                  |
| Remark:                                                                                       | During all emission tests, the EUT was configured to measure its highest possible emission level and the worst case's test data was presented in this test report. |

### Description of Test Configuration

For BLE mode, 40 channels are provided to testing:

| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|
| 0       | 2402            | 20      | 2442            |
| 1       | 2404            | 21      | 2444            |
| 2       | 2406            | 22      | 2446            |
| 3       | 2408            | 23      | 2448            |
| 4       | 2410            | 24      | 2450            |
| 5       | 2412            | 25      | 2452            |
| 6       | 2414            | 26      | 2454            |
| 7       | 2416            | 27      | 2456            |
| 8       | 2418            | 28      | 2458            |
| 9       | 2420            | 29      | 2460            |
| 10      | 2422            | 30      | 2462            |
| 11      | 2424            | 31      | 2464            |
| 12      | 2426            | 32      | 2466            |
| 13      | 2428            | 33      | 2468            |
| 14      | 2430            | 34      | 2470            |
| 15      | 2432            | 35      | 2472            |
| 16      | 2434            | 36      | 2474            |
| 17      | 2436            | 37      | 2476            |
| 18      | 2438            | 38      | 2478            |
| 19      | 2440            | 39      | 2480            |

EUT was tested with Channel 0, 19 and 39.

### Equipment Modifications

No modification was made to the EUT tested.

### ★EUT Exercise Software

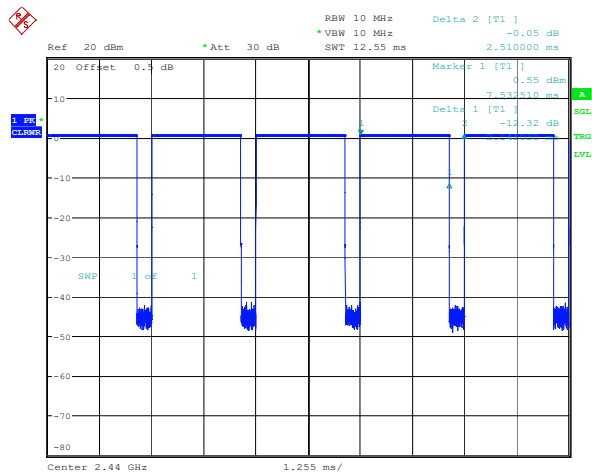
RF Test Tool: FCC\_assist1.0.4.exe

| Mode      | Power level |                |              |
|-----------|-------------|----------------|--------------|
|           | Low channel | Middle channel | High channel |
| BLE 1Mbps | Default     | Default        | Default      |

Duty Cycle

|              |                      |              |               |                |            |                                              |
|--------------|----------------------|--------------|---------------|----------------|------------|----------------------------------------------|
| Test Mode:   |                      | Transmitting |               | Test Engineer: |            | Jenphy Zeng                                  |
| Test Date:   |                      | 2025-12-21   |               | Test Voltage:  |            | AC 120V/60Hz                                 |
| Test Result: |                      | Compliance   |               | Environment:   |            | Temp.: 23.6°C<br>Humi.: 44%<br>Atm :100.2kPa |
| Mode         | Test Frequency (MHz) | Ton (ms)     | Ton+Toff (ms) | Duty Cycle (%) | 1/Ton (Hz) | VBW Setting (kHz)                            |
| BLE 1Mbps    | 2440                 | 2.14         | 2.51          | 85.30          | 467        | 0.50                                         |

BLE\_1M\_Middle\_Channel



ProjectNo.:2507Z31947E-RF Tester:Jenphy Zeng  
Date: 21.DEC.2025 09:28:29

Support Equipment List and Details

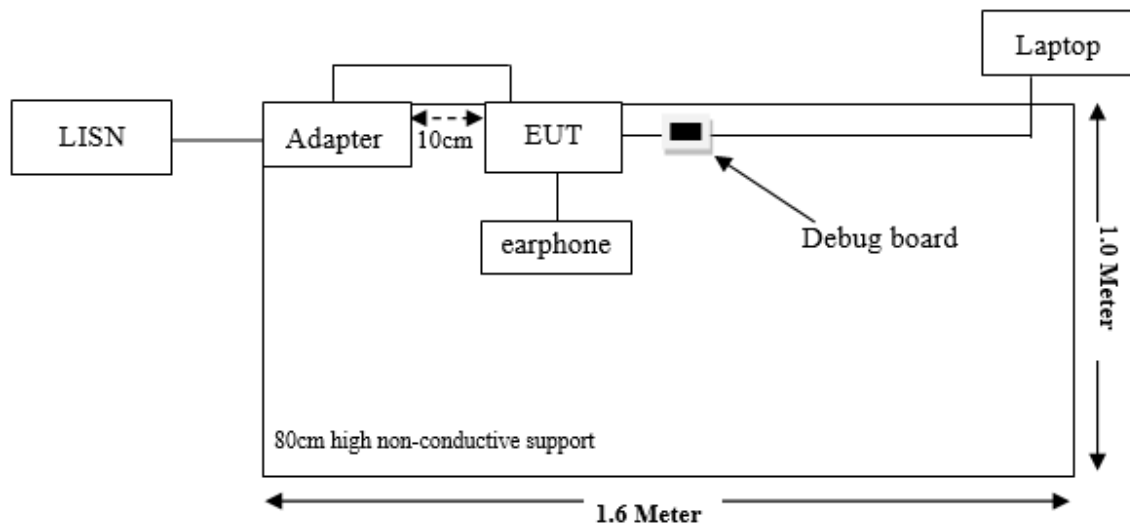
| Manufacturer | Description | Model   | Serial Number |
|--------------|-------------|---------|---------------|
| Lenovo       | Laptop      | T480    | PF1P5K4F      |
| Unknown      | Debug board | Unknown | Unknown       |

External I/O Cable

| Cable Description | Length (m) | From Port | To          |
|-------------------|------------|-----------|-------------|
| Jumper Wire       | 0.1        | EUT       | Debug board |
| USB cable         | 10         | Laptop    | Debug board |

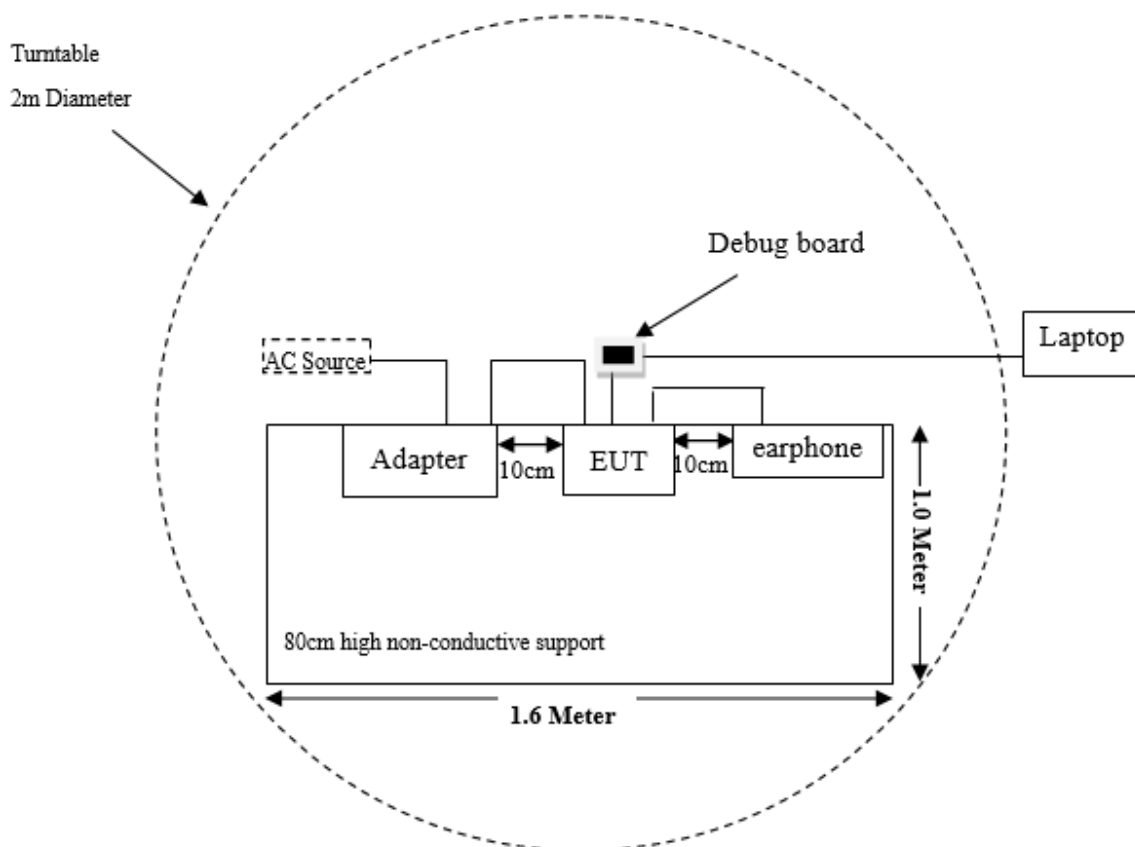
## Block Diagram of Test Setup

Conducted Emission:

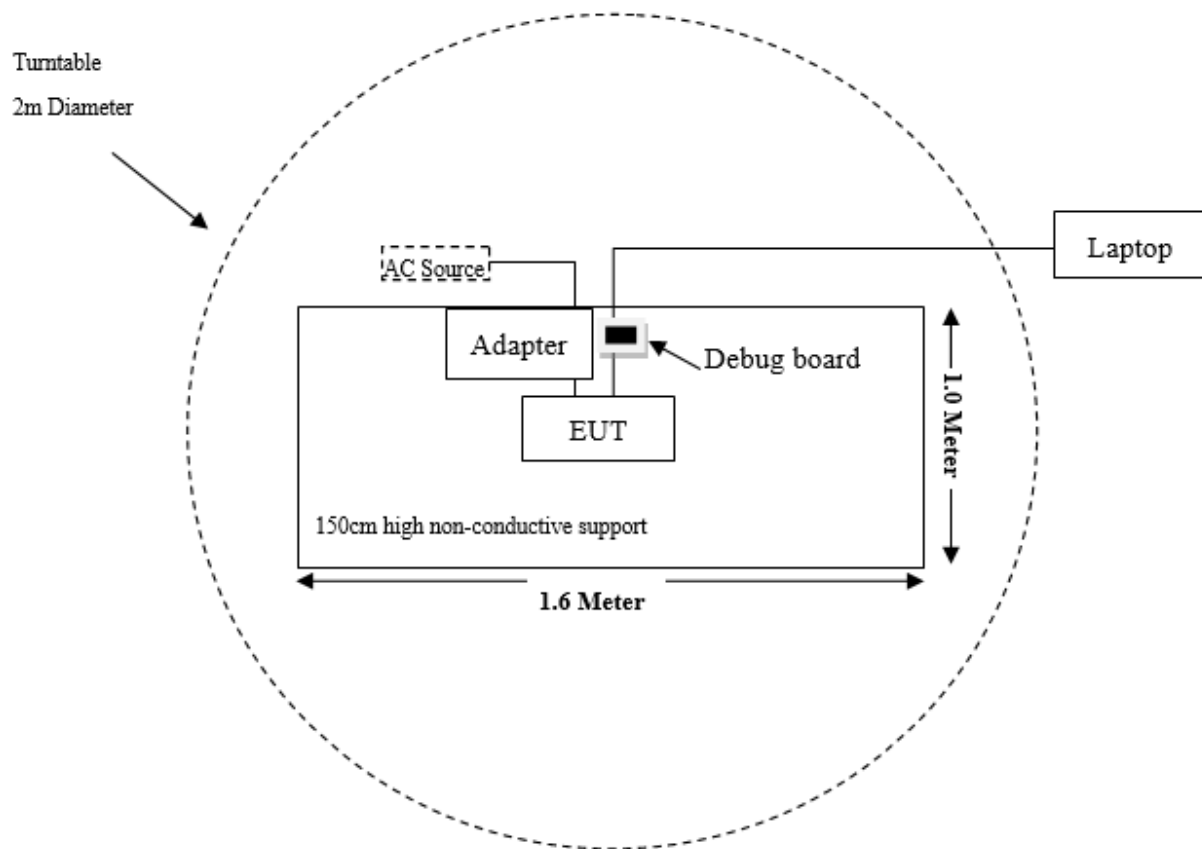


Radiated Spurious Emission:

Below 1GHz:



Above 1GHz:



**SUMMARY OF TEST RESULTS**

| Standard(s)/Rule(s)              | Description of Test                                                                  | Result     |
|----------------------------------|--------------------------------------------------------------------------------------|------------|
| FCC §15.203                      | Antenna Requirement                                                                  | Compliance |
| FCC §15.207 (a)                  | AC Line Conducted Emissions                                                          | Compliance |
| FCC §15.205, §15.209, §15.247(d) | Radiated Emissions & Restricted Bands Emissions<br>& Antenna-port conducted emission | Compliance |
| FCC §15.247 (a)(2)               | 6 dB Emission Bandwidth                                                              | Compliance |
| FCC §15.247(b)(3)                | Maximum Conducted Output Power                                                       | Compliance |
| FCC §15.247(d)                   | 100 kHz Bandwidth of Frequency Band Edge                                             | Compliance |
| FCC §15.247(e)                   | Power Spectral Density                                                               | Compliance |

**TEST EQUIPMENT LIST**

| Test Equipment                                | Manufacturer    | Model            | Serial Number | Calibration Date | Calibration Due Date |
|-----------------------------------------------|-----------------|------------------|---------------|------------------|----------------------|
| <b>Conducted Emissions</b>                    |                 |                  |               |                  |                      |
| EMI Test Receiver                             | Rohde & Schwarz | ESR3             | 103105        | 2025/2/20        | 2026/2/19            |
| LISN                                          | Rohde & Schwarz | ENV216           | 100129        | 2025/2/20        | 2026/2/19            |
| Pulse Limiter                                 | Rohde & Schwarz | ESH3-Z2          | 0357.8810.54  | 2025/2/20        | 2026/2/19            |
| Coaxial Cable                                 | XINHANGWEIBO    | XH400T-N-4M      | CC001         | 2025/2/20        | 2026/2/19            |
| EMI Test software                             | Audix           | E3               | 18621a        | N/A              | N/A                  |
| <b>Radiated Spurious Emission Below 1GHz</b>  |                 |                  |               |                  |                      |
| EMI Test Receiver                             | Rohde & Schwarz | ESR3             | 103103        | 2025/2/20        | 2026/2/19            |
| Loop Antenna                                  | Rohde & Schwarz | HFH2-Z2          | 830749/001    | 2023/7/27        | 2026/7/26            |
| Antenna                                       | Sunol Sciences  | JB6              | A122022-5     | 2023/7/27        | 2026/7/26            |
| Amplifier                                     | Sonoma          | 310B             | 120903        | 2025/2/20        | 2026/2/19            |
| Coaxial Cable                                 | XINHANGWEIBO    | XH400T-N-4M      | CC002         | 2025/2/20        | 2026/2/19            |
| Coaxial Cable                                 | XINHANGWEIBO    | XH460B-N-2M      | CC006         | 2025/2/20        | 2026/2/19            |
| Coaxial Cable                                 | XINHANGWEIBO    | XH460B-N-12M     | CC007         | 2025/2/20        | 2026/2/19            |
| Coaxial Cable                                 | XINHANGWEIBO    | HFH2-CC          | 335.3609      | 2025/2/20        | 2026/2/19            |
| Test Software                                 | Audix           | E3               | 18621a        | N/A              | N/A                  |
| <b>Radiated Spurious Emission Above 1 GHz</b> |                 |                  |               |                  |                      |
| Spectrum Analyzer                             | Rohde & Schwarz | FSV40-N          | 102051        | 2025/2/20        | 2026/2/19            |
| Filter Switch Unit                            | Decentest       | DT7220FSU        | DS79904       | 2025/2/21        | 2026/2/20            |
| Multiplex Switch Test Control Set             | Decentest       | DT7220SCU        | DS79901       | 2025/2/21        | 2026/2/20            |
| Horn Antenna                                  | EMCO            | 3115             | 9002-3355     | 2024/11/19       | 2027/11/18           |
| Preamplifier                                  | GLOBAL          | 1313-A100M18G    | 4121301       | 2026/1/14        | 2027/1/13            |
| Coaxial Cable                                 | XINHANGWEIBO    | XH800A-N-6M      | CC003         | 2025/2/20        | 2026/2/19            |
| Coaxial Cable                                 | XINHANGWEIBO    | XH800A-N-1M      | CC005         | 2025/2/20        | 2026/2/19            |
| Horn Antenna                                  | EMCO            | 3116             | 9407-2232     | 2023/7/31        | 2026/7/30            |
| Preamplifier                                  | A.H.Systems     | PAM-1840         | 200           | 2025/2/20        | 2026/2/19            |
| Coaxial Cable                                 | XINHANGWEIBO    | XH360A-2.92-3M   | CC008         | 2025/2/20        | 2026/2/19            |
| Coaxial Cable                                 | XINHANGWEIBO    | XH360A-2.92-1M   | CC009         | 2025/2/20        | 2026/2/19            |
| Test Software                                 | Audix           | E3               | 18621a        | N/A              | N/A                  |
| <b>RF Conducted Test</b>                      |                 |                  |               |                  |                      |
| Spectrum Analyzer                             | Rohde & Schwarz | FSU              | 100405        | 2025/2/20        | 2026/2/19            |
| Test Software                                 | JD              | JDAutoTestSystem | 1.0.0.3813    | N/A              | N/A                  |

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Xiamen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

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**FCC §15.203 - ANTENNA REQUIREMENT**

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**Applicable Standard**

According to FCC §15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.
- c. Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

**Antenna Connector Construction**

The EUT has one PCB antenna arrangement for BLE, which was permanently attached and the antenna gain is 1 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

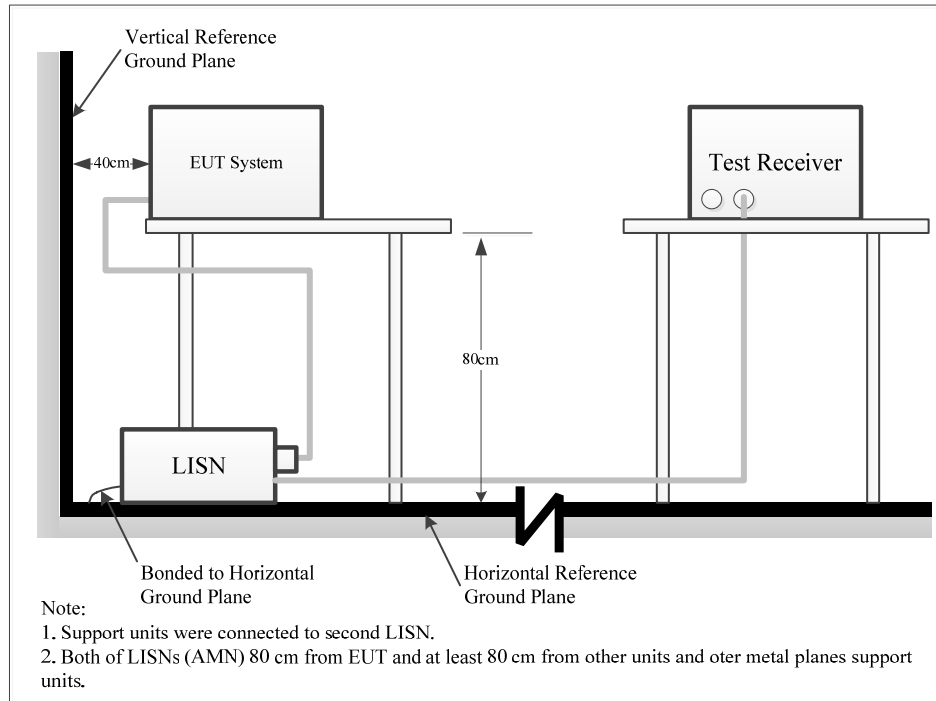
**Result: Compliance**

## FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

### Applicable Standard

FCC§15.207

### EUT Setup



The setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

### EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

| Frequency Range  | IF B/W |
|------------------|--------|
| 150 kHz – 30 MHz | 9 kHz  |

### Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

## Result & Margin Calculation

The result is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

$$\text{Factor (dB)} = \text{LISN VDF (dB)} + \text{Cable Loss (dB)} + \text{Transient Limiter Attenuation (dB)}$$

$$\text{Result (dB}\mu\text{V)} = \text{Reading (dB}\mu\text{V)} + \text{Factor (dB)}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V)} - \text{Result (dB}\mu\text{V)}$$

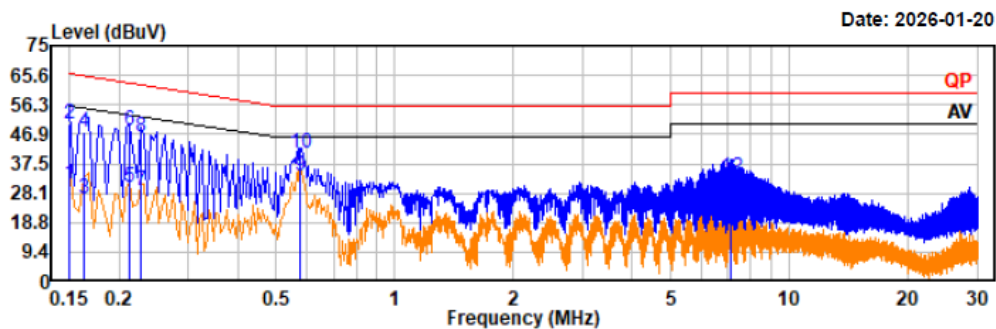
## Test Data

|                    |            |
|--------------------|------------|
| Temperature:       | 21.5 °C    |
| Relative Humidity: | 42 %       |
| ATM Pressure:      | 100.1 kPa  |
| Test Date:         | 2026-01-20 |
| Test Engineer:     | Spike Gao  |

*Note: The maximum output power mode: BLE 1Mbps middle channel was tested.*

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2440MHz  
EUT Model: ClipTalk

Temp/Humi/ATM: 21.5°C/42%/100.1kPa  
Tested by: Spike Gao  
Power Source: AC 120V/60Hz



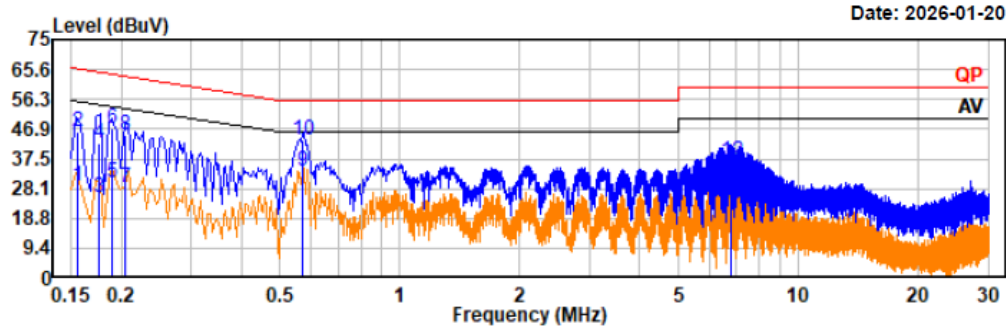
Trace: 1

Condition: IF B/W 9kHz PK/AV

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB | Result<br>dBuV | Limit<br>dBuV | Margin<br>dB | Phase | Remark  |
|-------------|-----------------|--------------|----------------|---------------|--------------|-------|---------|
| 0.150       | 10.67           | 20.57        | 31.24          | 55.98         | 24.74        | Line  | Average |
| 0.150       | 29.65           | 20.57        | 50.22          | 65.98         | 15.76        | Line  | QP      |
| 0.162       | 5.71            | 20.60        | 26.31          | 55.34         | 29.03        | Line  | Average |
| 0.162       | 26.78           | 20.60        | 47.38          | 65.34         | 17.96        | Line  | QP      |
| 0.212       | 9.29            | 20.65        | 29.94          | 53.13         | 23.19        | Line  | Average |
| 0.212       | 27.24           | 20.65        | 47.89          | 63.13         | 15.24        | Line  | QP      |
| 0.228       | 8.08            | 20.63        | 28.71          | 52.54         | 23.83        | Line  | Average |
| 0.228       | 25.41           | 20.63        | 46.04          | 62.54         | 16.50        | Line  | QP      |
| 0.577       | 13.19           | 20.47        | 33.66          | 46.00         | 12.34        | Line  | Average |
| 0.577       | 20.31           | 20.47        | 40.78          | 56.00         | 15.22        | Line  | QP      |
| 7.090       | -3.19           | 20.21        | 17.02          | 50.00         | 32.98        | Line  | Average |
| 7.090       | 12.82           | 20.21        | 33.03          | 60.00         | 26.97        | Line  | QP      |

Project No.: 2507Z31947E-RF  
 Test Mode: BLE 1M 2440MHz  
 EUT Model: ClipTalk

Temp/Humi/ATM: 21.5°C/42%/100.1kPa  
 Tested by: Spike Gao  
 Power Source: AC 120V/60Hz



Trace: 1

Condition: IF B/W 9kHz PK/AV

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB | Result<br>dBuV | Limit<br>dBuV | Margin<br>dB | Phase   | Remark  |
|-------------|-----------------|--------------|----------------|---------------|--------------|---------|---------|
| 0.156       | 8.52            | 20.61        | 29.13          | 55.69         | 26.56        | Neutral | Average |
| 0.156       | 25.42           | 20.61        | 46.03          | 65.69         | 19.66        | Neutral | QP      |
| 0.176       | 4.93            | 20.65        | 25.58          | 54.67         | 29.09        | Neutral | Average |
| 0.176       | 21.89           | 20.65        | 42.54          | 64.67         | 22.13        | Neutral | QP      |
| 0.190       | 9.33            | 20.68        | 30.01          | 54.02         | 24.01        | Neutral | Average |
| 0.190       | 26.39           | 20.68        | 47.07          | 64.02         | 16.95        | Neutral | QP      |
| 0.204       | 7.78            | 20.69        | 28.47          | 53.45         | 24.98        | Neutral | Average |
| 0.204       | 24.06           | 20.69        | 44.75          | 63.45         | 18.70        | Neutral | QP      |
| 0.573       | 13.41           | 20.42        | 33.83          | 46.00         | 12.17        | Neutral | Average |
| 0.573       | 23.26           | 20.42        | 43.68          | 56.00         | 12.32        | Neutral | QP      |
| 6.754       | 2.93            | 20.17        | 23.10          | 50.00         | 26.90        | Neutral | Average |
| 6.754       | 16.79           | 20.17        | 36.96          | 60.00         | 23.04        | Neutral | QP      |

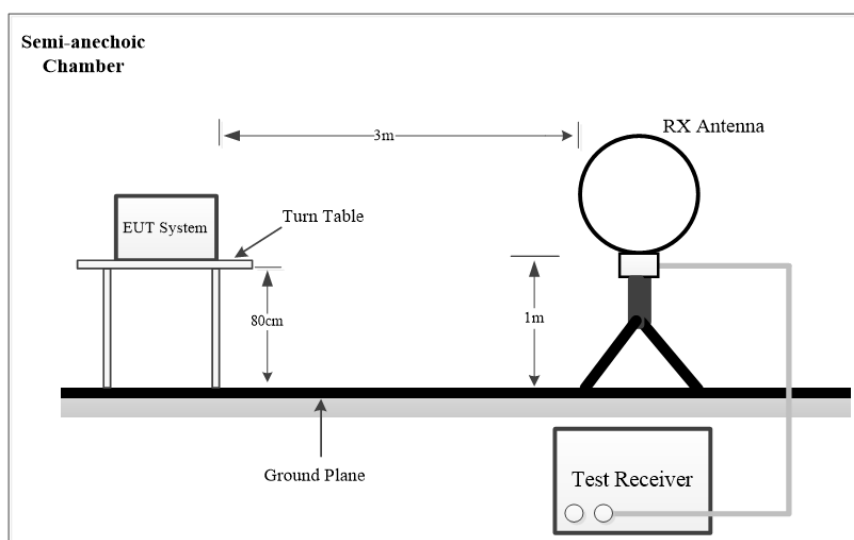
**FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS****Applicable Standard**

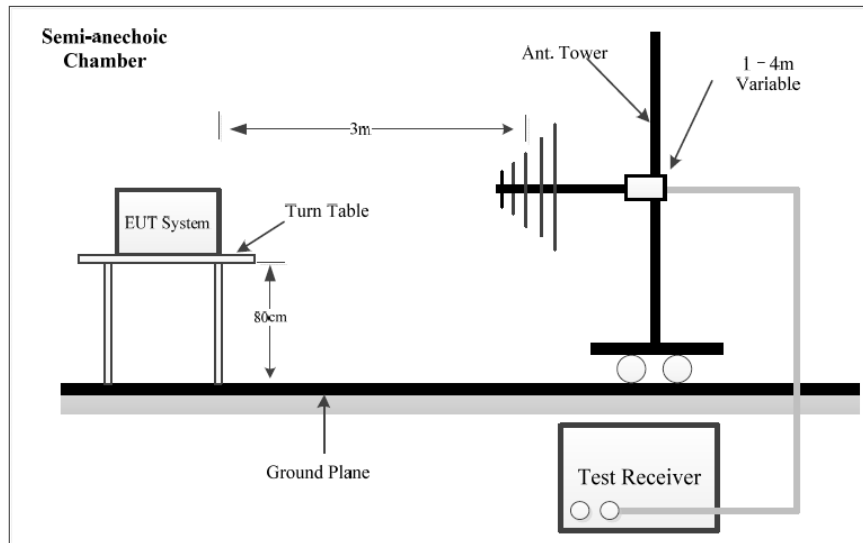
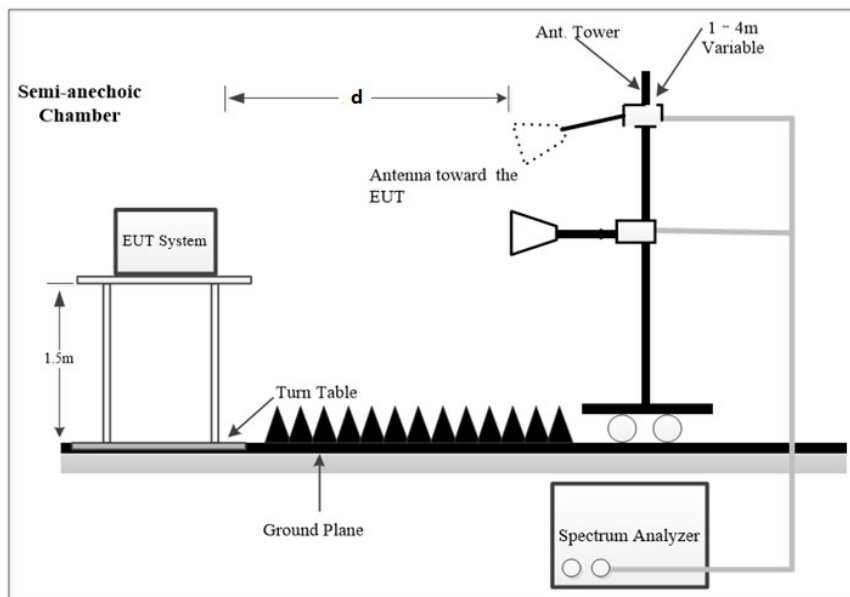
FCC §15.247 (d); §15.209; §15.205;

(d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

**EUT Setup**

9 kHz-30MHz:



**30MHz -1 GHz:****Above 1GHz:**

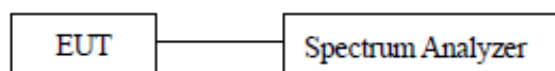
The radiated emission tests using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209, FCC 15.247 limits.

NOTE: d is testing distance;

For Radiated Emission test (1GHz-18GHz) and Bandedge Emission test, which was performed at 3 m distance.

For Radiated Emission test (18GHz-25GHz), which was performed at 1.5 m distance, according to ANSI C63.10-2020 the test result shall be extrapolated to the specified distance using an extrapolation Factor of 20dB/decade from 3m to 1.5m.

Distance extrapolation Factor =  $20 \log (\text{specific distance [3m]}/\text{test distance [1.5m]}) \text{ dB} = 6 \text{ dB}$

**Antenna-port conducted emission:**

Note: A short RF cable with low cable loss connected to the EUT antenna port. The insert loss of this RF cable was TDF into the setting of test equipment:

TDF = Insert loss of RF cable

★ The Insert loss was declared by manufacturer.

**EMI Test Receiver & Spectrum Analyzer Setup**

The system was investigated from 9 kHz to 25 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Below 1GHz:

| Frequency Range   | RBW     | VBW     | Measurement |
|-------------------|---------|---------|-------------|
| 9 kHz – 150 kHz   | 300Hz   | 1 kHz   | PK          |
|                   | 200Hz   | /       | QP          |
| 150 kHz – 30 MHz  | 10 kHz  | 30 kHz  | PK          |
|                   | 9kHz    | /       | QP          |
| 30 MHz – 1000 MHz | 100 kHz | 300 kHz | PK          |
|                   | 120kHz  | /       | QP          |

Above 1GHz:

Pre-scan:

| Duty Cycle | RBW  | VBW                     | Measurement | Detector |
|------------|------|-------------------------|-------------|----------|
| Any        | 1MHz | 3MHz                    | PK          | PK       |
| >98%       | 1MHz | 5kHz                    | AV          | PK       |
| <98%       | 1MHz | 1/T, not less than 5kHz | AV          | PK       |

Final measurement for emission identified during the pre-scan:

| Duty Cycle | RBW  | VBW  | Measurement | Detector |
|------------|------|------|-------------|----------|
| Any        | 1MHz | 3MHz | PK          | PK       |
| >98%       | 1MHz | 10Hz | AV          | PK       |
| <98%       | 1MHz | 1/T  | AV          | PK       |

Note: T is minimum transmission duration

**Test Procedure****Radiated Spurious Emission:**

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

For each measurement antenna alignment, the EUT shall be rotated through 0° to 360° on a turntable. The report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground parallel) unless the margin is greater than 20 dB, then the following statement shall be made: "all emissions were greater than 20 dB below the limit."

Below 1GHz, if the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is at least 6 dB below the QP emission limit, there's no need to record the measured QP level of the emissions in the report.

Above 1GHz, if the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is below the AV emission limit, there's no need to record the measured AV level of the emissions in the report.

#### **Antenna-port conducted emission:**

Connect the primary antenna port through an attenuator to the spectrum analyzer input; in the results, account for all losses between the unlicensed wireless device output and the spectrum analyzer. The frequency range of testing shall span 30 MHz to 10 times the operating frequency and this may be done in a single sweep or, to aid

resolution, across a number of sweeps. The resolution bandwidth shall be 100 kHz, video bandwidth 300 kHz, and a coupled sweep time with a peak detector.

The limit is based on the highest in-band level across all channels measured using the same instrument settings (resolution bandwidth of 100 kHz, video bandwidth of 300 kHz, and a coupled sweep time with a peak detector). To help clearly demonstrate compliance a display line may be set at the required offset (typically 20 dB) below the highest in-band level. Where the highest in-band level is not clearly identified in the out-of-band measurements a separate spectral plot showing the in-band level shall be provided. When conducted measurements cannot be made (for example a device with integrated, non-removable antenna) radiated measurements shall be used. The reference level for determining the limit shall be established by maximizing the field strength from the highest power channel and measuring using the resolution and video bandwidth settings and peak detector as described above. The field strength limit for spurious emissions outside of restricted-bands shall then be set at the required offset (typically 20 dB) below the highest in-band level. Radiated measurements will follow the standards measurement procedures described in Clause 6 with the exception that the resolution bandwidth shall be 100 kHz, video bandwidth 300 kHz, and a coupled sweep time with a peak detector. Note that use of wider measurement bandwidths are acceptable for measuring the spurious emissions provided that the peak detector is used and that the measured value of spurious emissions are compared to the highest in-band level measured with the 100 kHz / 300 kHz bandwidth settings to determine compliance.

#### **Result & Margin Calculation**

The Result is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

For 9 kHz to 18GHz Radiated emission test and Bandedge emissions test

Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

For 18GHz to 25GHz Radiated emission test

Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB) - Extrapolation factor (dB)

Extrapolation factor = 6 dB (distance = 1.5m)

$$\text{Result (dB}\mu\text{V/m)} = \text{Reading (dB}\mu\text{V)} + \text{Factor (dB/m)}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V/m)} - \text{Result (dB}\mu\text{V/m)}$$

### Test Data

Please refer to the below table and plots.

|                           |             |             |                                 |
|---------------------------|-------------|-------------|---------------------------------|
| <b>Frequency Range:</b>   | Below 1 GHz | Above 1 GHz | Antenna-port conducted emission |
| <b>Temperature:</b>       | 21.1 °C     | 21.1 °C     | 23.6 °C                         |
| <b>Relative Humidity:</b> | 41 %        | 41 %        | 44%                             |
| <b>ATM Pressure:</b>      | 100.1kPa    | 100.1kPa    | 100.2 kPa                       |
| <b>Test Date:</b>         | 2026-01-20  | 2026-01-20  | 2025-12-21                      |
| <b>Test Engineer:</b>     | Wlif Wu     | Wlif Wu     | Jenphy Zeng                     |

Pre-scan in the X, Y and Z axes of orientation, the worst case X-axis of orientation was recorded.

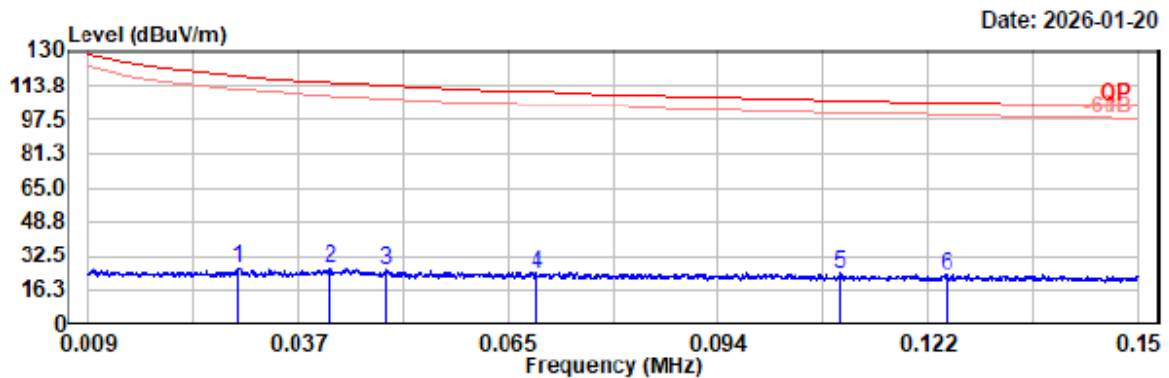
**1) 9 kHz~30MHz**

Pre-scan in parallel, ground-parallel and perpendicular of orientation of loop antenna, parallel is worst case.

Note: The maximum output power mode: BLE 1Mbps middle channel was tested.

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2440MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz

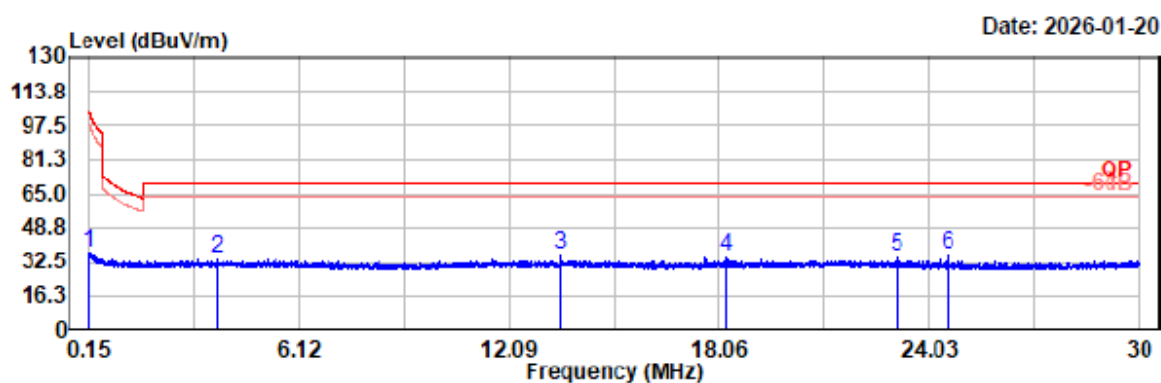


Condition: PK RBW:300Hz VBW:1kHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|--------|
| 0.029       | 7.37            | 19.90          | 27.27            | 118.28          | 91.01        | Peak   |
| 0.042       | 6.90            | 19.91          | 26.81            | 115.25          | 88.44        | Peak   |
| 0.049       | 6.04            | 19.91          | 25.95            | 113.78          | 87.83        | Peak   |
| 0.069       | 4.51            | 19.82          | 24.33            | 110.80          | 86.47        | Peak   |
| 0.110       | 4.14            | 19.73          | 23.87            | 106.78          | 82.91        | Peak   |
| 0.124       | 3.81            | 19.73          | 23.54            | 105.72          | 82.18        | Peak   |

Project No.: 2507Z31947E-RF  
 Test Mode: BLE 1M 2440MHz  
 EUT Model: ClipTalk  
 Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
 Tested by: Wlif Wu  
 Power Source: AC 120V/60Hz



Condition: PK RBW:10kHz VBW:30kHz SWT:auto

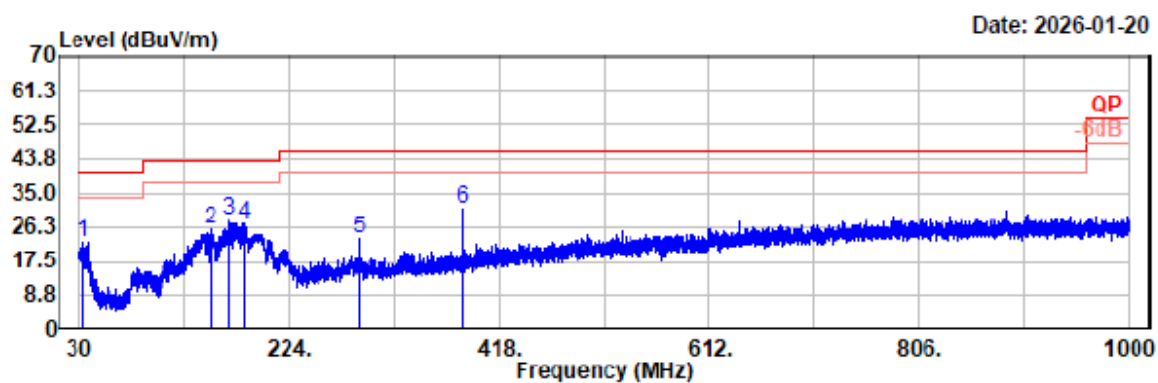
| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|--------|
| 0.162       | 17.23           | 19.72          | 36.95            | 103.42          | 66.47        | Peak   |
| 3.792       | 14.62           | 19.78          | 34.40            | 69.54           | 35.14        | Peak   |
| 13.559      | 16.55           | 19.74          | 36.29            | 69.54           | 33.25        | Peak   |
| 18.245      | 15.22           | 19.97          | 35.19            | 69.54           | 34.35        | Peak   |
| 23.129      | 14.84           | 20.17          | 35.01            | 69.54           | 34.53        | Peak   |
| 24.576      | 15.40           | 20.21          | 35.61            | 69.54           | 33.93        | Peak   |

## 2) 30MHz -1GHz

Note: The maximum output power mode: BLE 1Mbps middle channel was tested.

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2440MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz

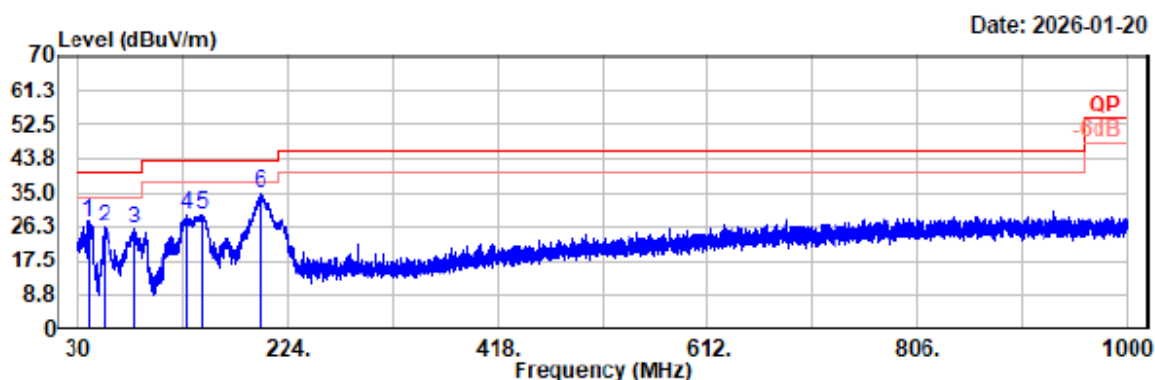


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity   | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|------------|--------|
| 33.59       | 29.59           | -7.27          | 22.32            | 40.00           | 17.68        | Horizontal | Peak   |
| 150.47      | 36.67           | -11.18         | 25.49            | 43.50           | 18.01        | Horizontal | Peak   |
| 168.81      | 39.68           | -11.82         | 27.86            | 43.50           | 15.64        | Horizontal | Peak   |
| 182.00      | 39.24           | -12.36         | 26.88            | 43.50           | 16.62        | Horizontal | Peak   |
| 287.92      | 32.42           | -9.25          | 23.17            | 46.00           | 22.83        | Horizontal | Peak   |
| 383.95      | 38.07           | -6.94          | 31.13            | 46.00           | 14.87        | Horizontal | Peak   |

Project No.: 2507Z31947E-RF  
 Test Mode: BLE 1M 2440MHz  
 EUT Model: ClipTalk  
 Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
 Tested by: Wlif Wu  
 Power Source: AC 120V/60Hz



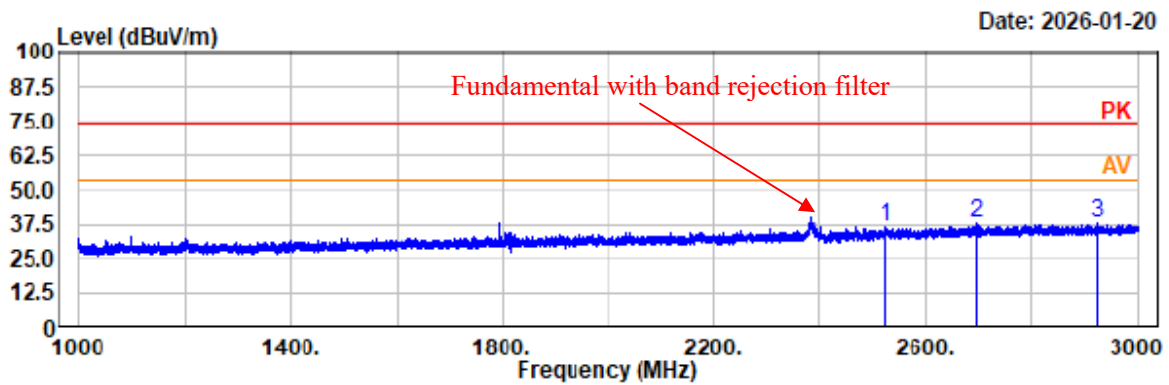
Condition: PK RBW:100kHz VBW:300kHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|----------|--------|
| 39.31       | 38.64           | -11.13         | 27.51            | 40.00           | 12.49        | Vertical | Peak   |
| 54.44       | 43.80           | -17.81         | 25.99            | 40.00           | 14.01        | Vertical | Peak   |
| 81.41       | 42.88           | -17.10         | 25.78            | 40.00           | 14.22        | Vertical | Peak   |
| 129.91      | 39.35           | -10.10         | 29.25            | 43.50           | 14.25        | Vertical | Peak   |
| 143.68      | 40.32           | -10.95         | 29.37            | 43.50           | 14.13        | Vertical | Peak   |
| 197.71      | 46.61           | -11.73         | 34.88            | 43.50           | 8.62         | Vertical | Peak   |

### 3) 1GHz~3GHz

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2402MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz

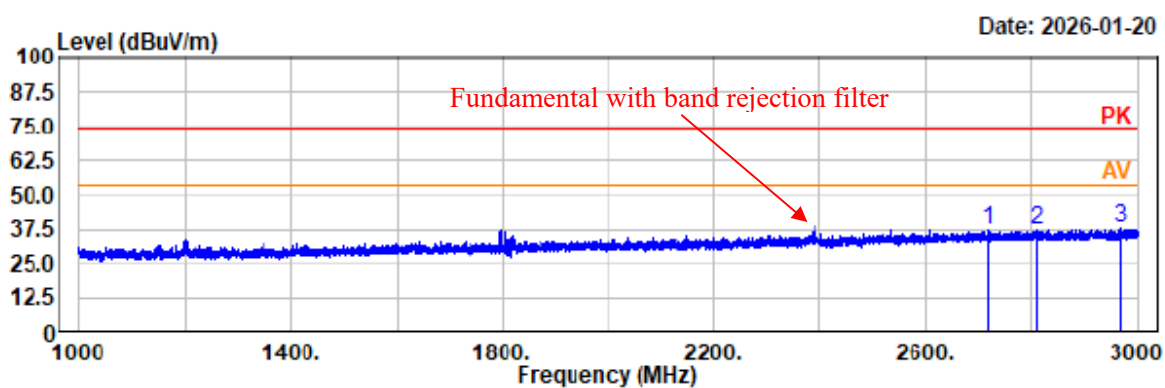


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity   | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|------------|--------|
| 2523.40     | 47.12           | -10.65         | 36.47            | 74.00           | 37.53        | horizontal | Peak   |
| 2695.80     | 47.81           | -10.02         | 37.79            | 74.00           | 36.21        | horizontal | Peak   |
| 2926.00     | 46.97           | -9.37          | 37.60            | 74.00           | 36.40        | horizontal | Peak   |

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2402MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz

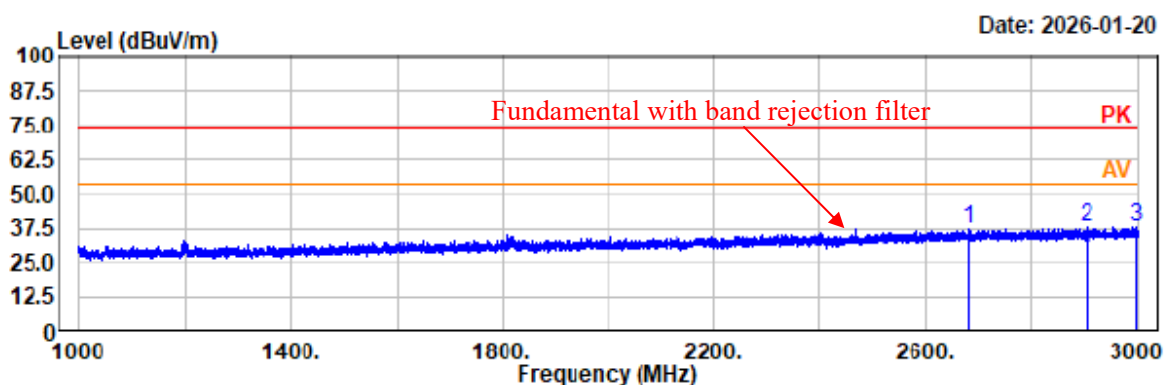


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|----------|--------|
| 2719.20     | 47.28           | -9.98          | 37.30            | 74.00           | 36.70        | vertical | Peak   |
| 2811.80     | 47.23           | -9.75          | 37.48            | 74.00           | 36.52        | vertical | Peak   |
| 2967.80     | 46.71           | -9.11          | 37.60            | 74.00           | 36.40        | vertical | Peak   |

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2440MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz



Condition: PK RBW:1MHz VBW:3MHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity   | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|------------|--------|
| 2681.20     | 47.22           | -10.08         | 37.14            | 74.00           | 36.86        | horizontal | Peak   |
| 2902.80     | 47.42           | -9.53          | 37.89            | 74.00           | 36.11        | horizontal | Peak   |
| 2998.40     | 46.96           | -8.96          | 38.00            | 74.00           | 36.00        | horizontal | Peak   |

Project No.: 2507Z31947E-RF

Test Mode: BLE 1M 2440MHz

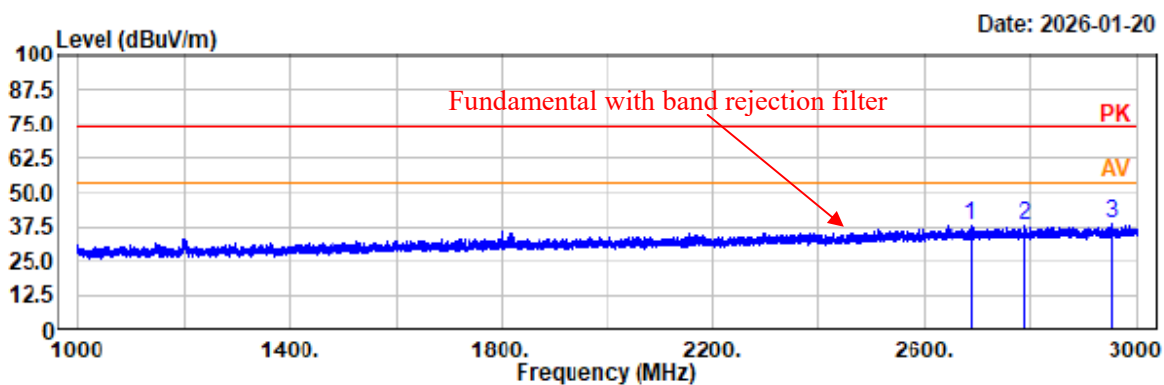
EUT Model: ClipTalk

Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa

Tested by: Wlif Wu

Power Source: AC 120V/60Hz

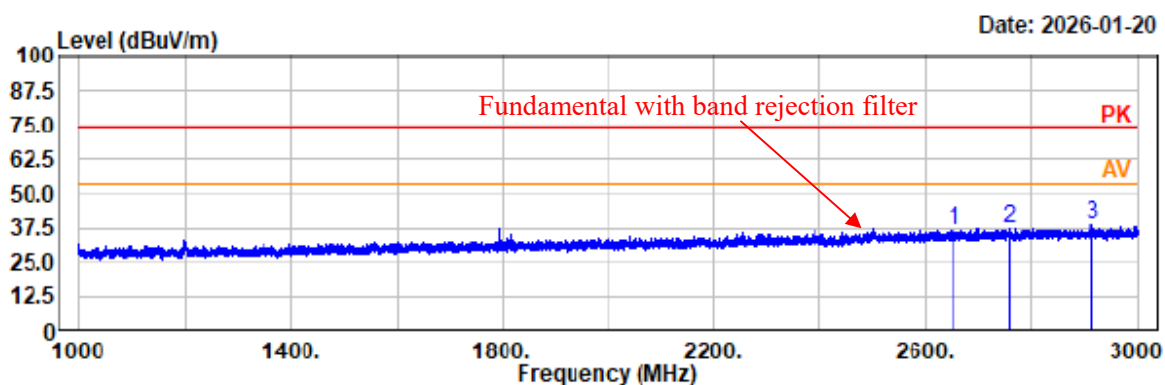


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

| Freq<br>MHz | Reading<br>dBUV | Factor<br>dB/m | Result<br>dBUV/m | Limit<br>dBUV/m | Margin<br>dB | Polarity | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|----------|--------|
| 2687.40     | 48.21           | -10.05         | 38.16            | 74.00           | 35.84        | vertical | Peak   |
| 2788.60     | 47.51           | -9.83          | 37.68            | 74.00           | 36.32        | vertical | Peak   |
| 2955.80     | 47.55           | -9.18          | 38.37            | 74.00           | 35.63        | vertical | Peak   |

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2480MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz

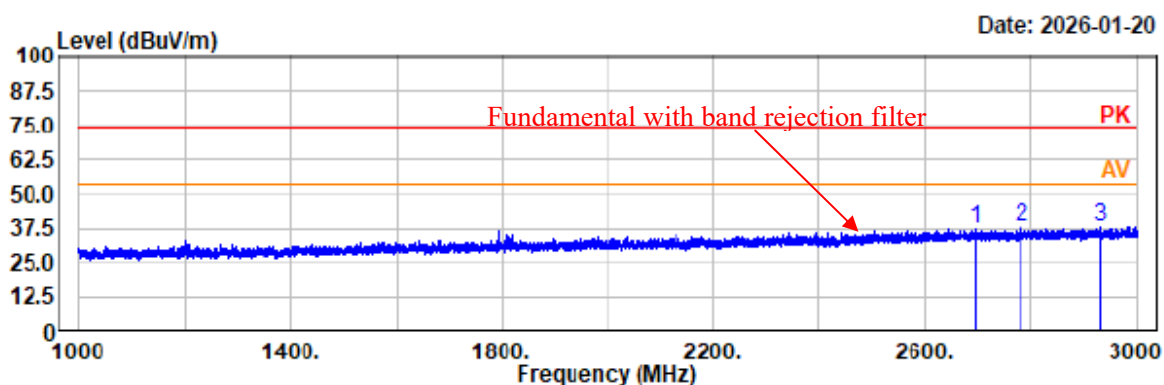


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity   | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|------------|--------|
| 2654.00     | 46.86           | -10.18         | 36.68            | 74.00           | 37.32        | horizontal | Peak   |
| 2757.80     | 47.47           | -9.92          | 37.55            | 74.00           | 36.45        | horizontal | Peak   |
| 2914.60     | 48.26           | -9.45          | 38.81            | 74.00           | 35.19        | horizontal | Peak   |

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2480MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz



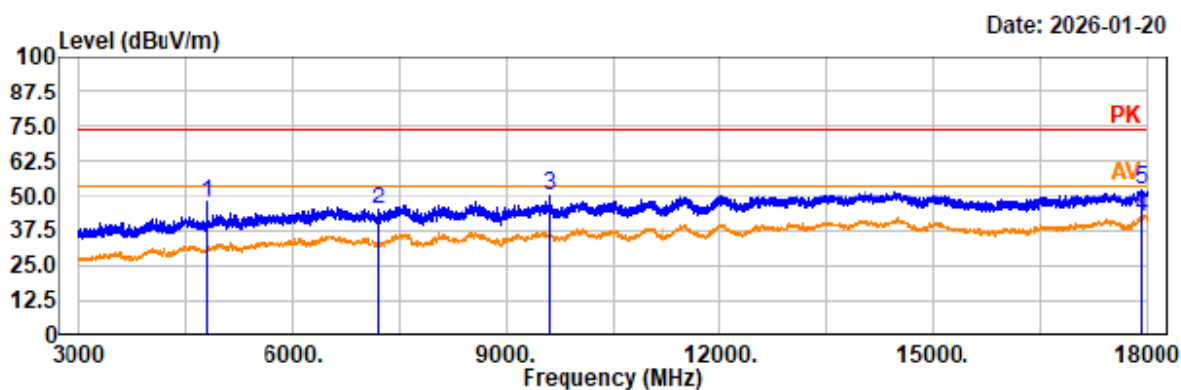
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

| Freq<br>MHz | Reading<br>dBUV | Factor<br>dB/m | Result<br>dBUV/m | Limit<br>dBUV/m | Margin<br>dB | Polarity | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|----------|--------|
| 2696.80     | 47.39           | -10.01         | 37.38            | 74.00           | 36.62        | vertical | Peak   |
| 2782.60     | 47.43           | -9.84          | 37.59            | 74.00           | 36.41        | vertical | Peak   |
| 2932.20     | 47.17           | -9.33          | 37.84            | 74.00           | 36.16        | vertical | Peak   |

## 4) 3GHz~18GHz

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2402MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz



Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto

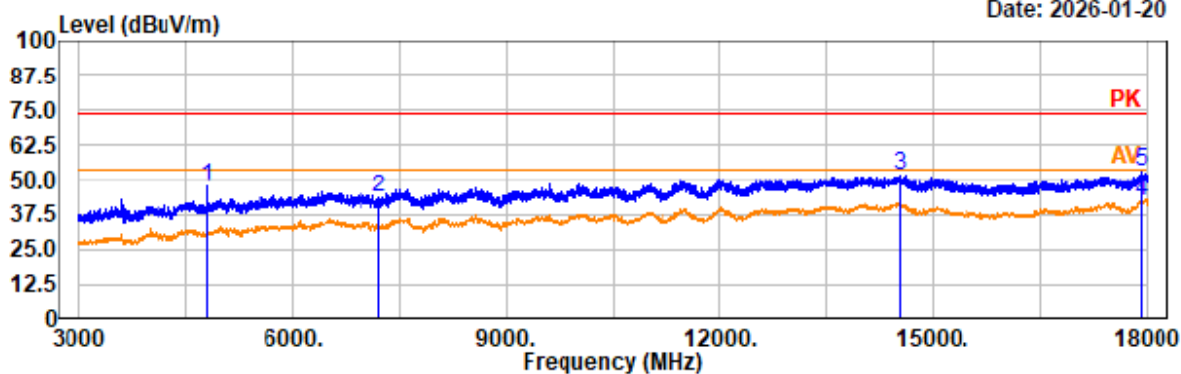
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity   | Remark  |
|-------------|-----------------|----------------|------------------|-----------------|--------------|------------|---------|
| 4803.00     | 52.91           | -5.24          | 47.67            | 74.00           | 26.33        | horizontal | Peak    |
| 7206.00     | 47.25           | -2.55          | 44.70            | 74.00           | 29.30        | horizontal | Peak    |
| 9607.50     | 49.54           | 1.01           | 50.55            | 74.00           | 23.45        | horizontal | Peak    |
| 17917.50    | 35.21           | 6.82           | 42.03            | 54.00           | 11.97        | horizontal | Average |
| 17917.50    | 45.47           | 6.82           | 52.29            | 74.00           | 21.71        | horizontal | Peak    |

Project No.: 2507Z31947E-RF  
 Test Mode: BLE 1M 2402MHz  
 EUT Model: ClipTalk  
 Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
 Tested by: Wlif Wu  
 Power Source: AC 120V/60Hz

Date: 2026-01-20



Trace: 1

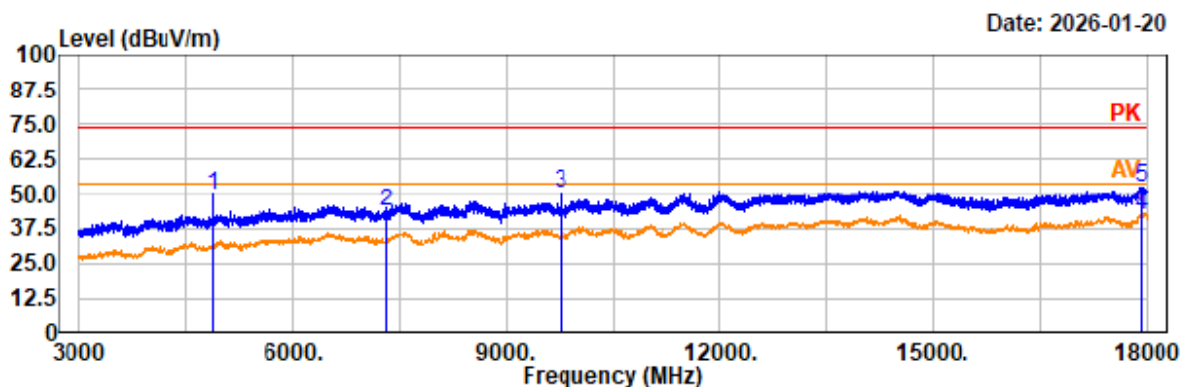
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity | Remark  |
|-------------|-----------------|----------------|------------------|-----------------|--------------|----------|---------|
| 4803.00     | 52.53           | -5.24          | 47.29            | 74.00           | 26.71        | vertical | Peak    |
| 7206.00     | 45.72           | -2.55          | 43.17            | 74.00           | 30.83        | vertical | Peak    |
| 14532.00    | 47.01           | 5.05           | 52.06            | 74.00           | 21.94        | vertical | Peak    |
| 17926.50    | 35.54           | 6.84           | 42.38            | 54.00           | 11.62        | vertical | Average |
| 17926.50    | 46.16           | 6.84           | 53.00            | 74.00           | 21.00        | vertical | Peak    |

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2440MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz



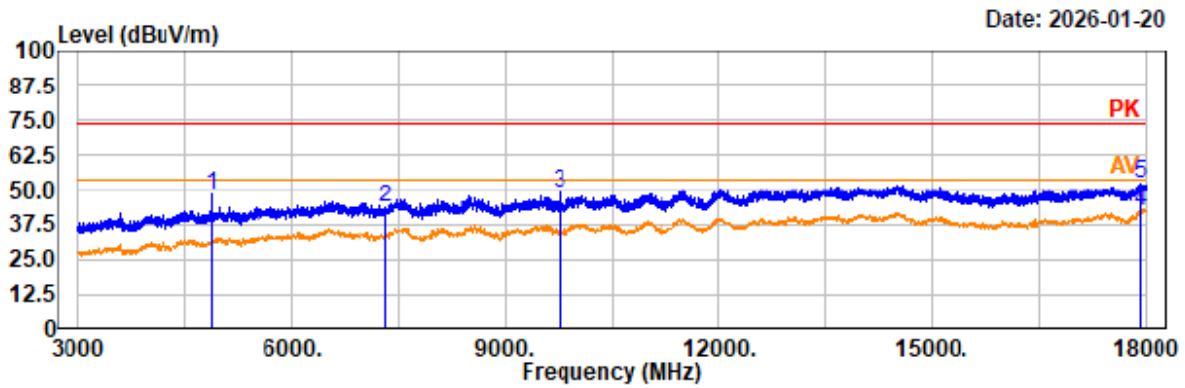
Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto  
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity   | Remark  |
|-------------|-----------------|----------------|------------------|-----------------|--------------|------------|---------|
| 4880.00     | 55.30           | -5.30          | 50.00            | 74.00           | 24.00        | horizontal | Peak    |
| 7320.00     | 45.56           | -2.25          | 43.31            | 74.00           | 30.69        | horizontal | Peak    |
| 9763.50     | 49.08           | 1.19           | 50.27            | 74.00           | 23.73        | horizontal | Peak    |
| 17913.00    | 35.30           | 6.81           | 42.11            | 54.00           | 11.89        | horizontal | Average |
| 17913.00    | 45.67           | 6.81           | 52.48            | 74.00           | 21.52        | horizontal | Peak    |

Project No.: 2507Z31947E-RF  
 Test Mode: BLE 1M 2440MHz  
 EUT Model: ClipTalk  
 Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
 Tested by: Wlif Wu  
 Power Source: AC 120V/60Hz



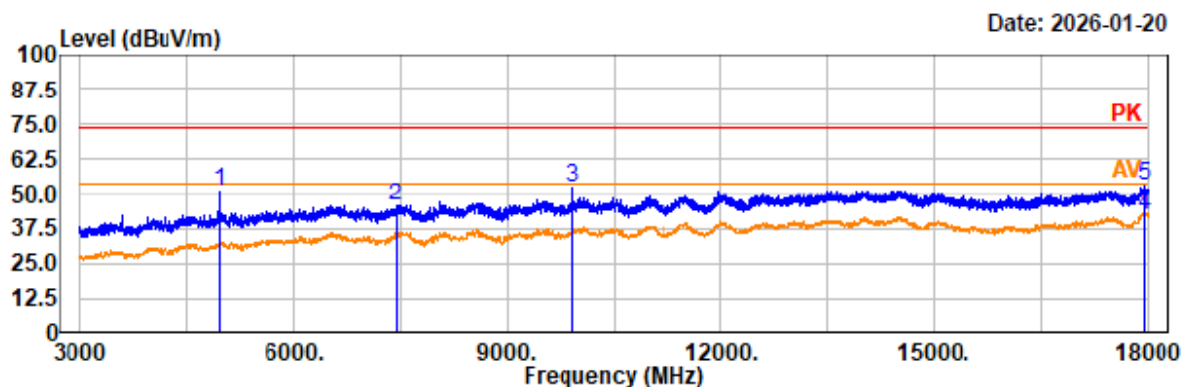
Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto  
 AV RBW:1MHz VBW:5kHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity | Remark  |
|-------------|-----------------|----------------|------------------|-----------------|--------------|----------|---------|
| 4881.00     | 53.72           | -5.31          | 48.41            | 74.00           | 25.59        | vertical | Peak    |
| 7320.00     | 46.03           | -2.25          | 43.78            | 74.00           | 30.22        | vertical | Peak    |
| 9763.50     | 47.90           | 1.19           | 49.09            | 74.00           | 24.91        | vertical | Peak    |
| 17937.00    | 35.02           | 6.84           | 41.86            | 54.00           | 12.14        | vertical | Average |
| 17937.00    | 45.80           | 6.84           | 52.64            | 74.00           | 21.36        | vertical | Peak    |

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2480MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz



Trace: 1

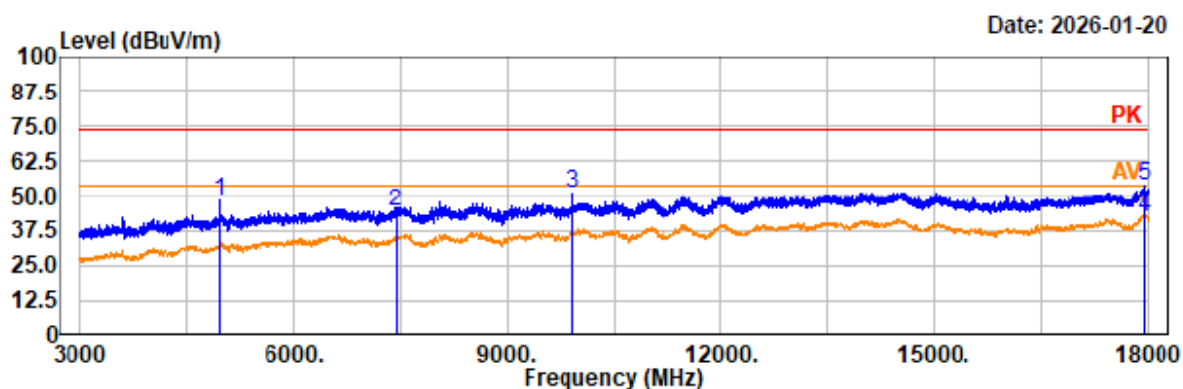
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity   | Remark  |
|-------------|-----------------|----------------|------------------|-----------------|--------------|------------|---------|
| 4960.50     | 55.83           | -5.11          | 50.72            | 74.00           | 23.28        | horizontal | Peak    |
| 7440.00     | 47.74           | -2.03          | 45.71            | 74.00           | 28.29        | horizontal | Peak    |
| 9919.50     | 50.97           | 1.36           | 52.33            | 74.00           | 21.67        | horizontal | Peak    |
| 17944.50    | 35.16           | 6.85           | 42.01            | 54.00           | 11.99        | horizontal | Average |
| 17944.50    | 46.35           | 6.85           | 53.20            | 74.00           | 20.80        | horizontal | Peak    |

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2480MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz



Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

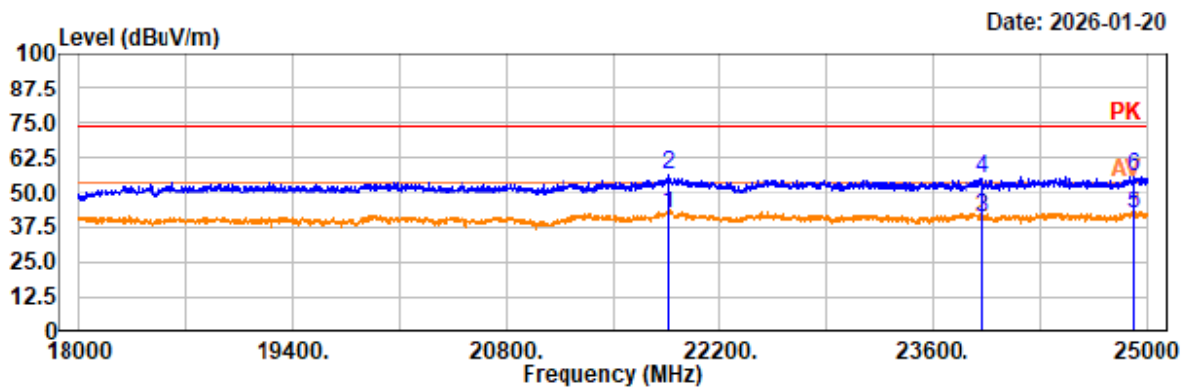
| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity | Remark  |
|-------------|-----------------|----------------|------------------|-----------------|--------------|----------|---------|
| 4959.00     | 53.30           | -5.11          | 48.19            | 74.00           | 25.81        | vertical | Peak    |
| 7440.00     | 46.26           | -2.03          | 44.23            | 74.00           | 29.77        | vertical | Peak    |
| 9919.50     | 49.87           | 1.36           | 51.23            | 74.00           | 22.77        | vertical | Peak    |
| 17943.00    | 35.40           | 6.84           | 42.24            | 54.00           | 11.76        | vertical | Average |
| 17943.00    | 46.62           | 6.84           | 53.46            | 74.00           | 20.54        | vertical | Peak    |

## 5) Above 18GHz

Note: The maximum output power mode: BLE 1Mbps middle channel was tested.

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2440MHz  
EUT Model: ClipTalk  
Test distance: 1.5m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz



Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto  
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity   | Remark  |
|-------------|-----------------|----------------|------------------|-----------------|--------------|------------|---------|
| 21865.40    | 37.23           | 5.16           | 42.39            | 54.00           | 11.61        | horizontal | Average |
| 21865.40    | 51.25           | 5.16           | 56.41            | 74.00           | 17.59        | horizontal | Peak    |
| 23922.40    | 35.47           | 5.40           | 40.87            | 54.00           | 13.13        | horizontal | Average |
| 23922.40    | 49.87           | 5.40           | 55.27            | 74.00           | 18.73        | horizontal | Peak    |
| 24919.00    | 35.52           | 6.31           | 41.83            | 54.00           | 12.17        | horizontal | Average |
| 24919.00    | 49.62           | 6.31           | 55.93            | 74.00           | 18.07        | horizontal | Peak    |

Project No.: 2507Z31947E-RF

Test Mode: BLE 1M 2440MHz

EUT Model: ClipTalk

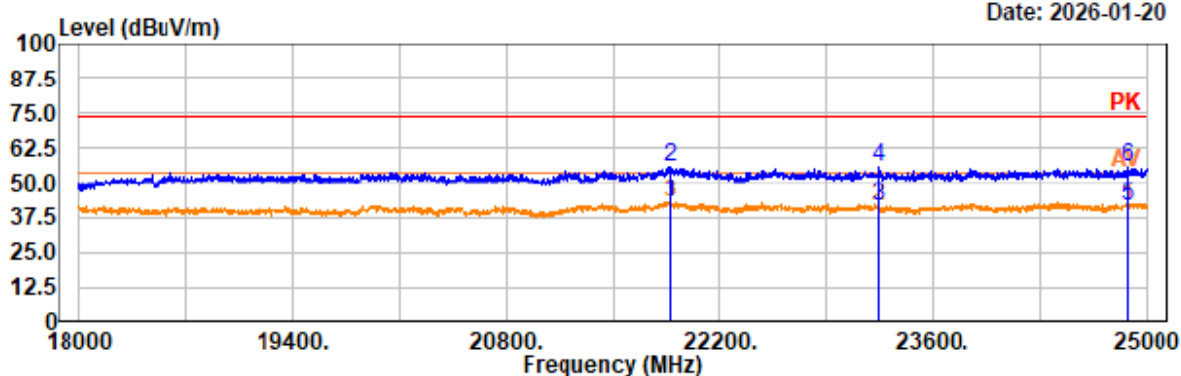
Test distance: 1.5m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa

Tested by: Wlif Wu

Power Source: AC 120V/60Hz

Date: 2026-01-20



Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto

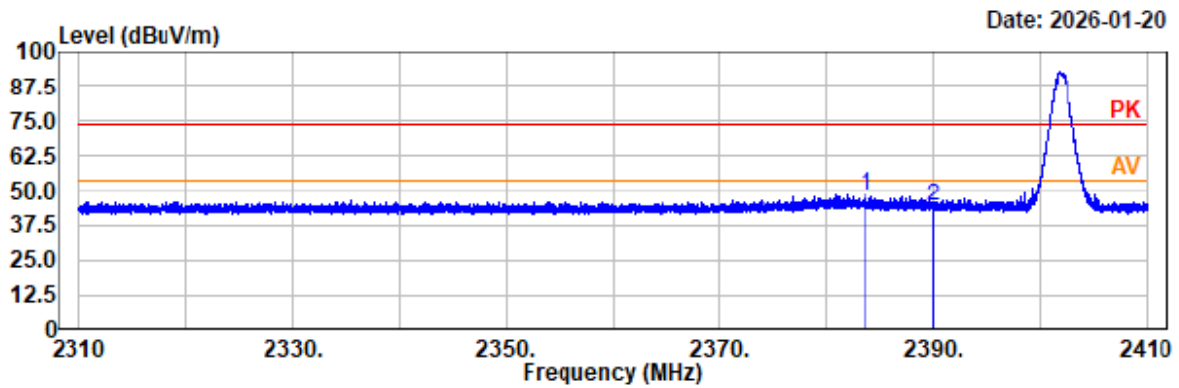
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq<br>MHz | Reading<br>dBUV | Factor<br>dB/m | Result<br>dBUV/m | Limit<br>dBUV/m | Margin<br>dB | Polarity | Remark  |
|-------------|-----------------|----------------|------------------|-----------------|--------------|----------|---------|
| 21887.40    | 37.45           | 5.21           | 42.66            | 54.00           | 11.34        | vertical | Average |
| 21887.40    | 50.50           | 5.21           | 55.71            | 74.00           | 18.29        | vertical | Peak    |
| 23244.80    | 36.33           | 4.89           | 41.22            | 54.00           | 12.78        | vertical | Average |
| 23244.80    | 50.68           | 4.89           | 55.57            | 74.00           | 18.43        | vertical | Peak    |
| 24875.00    | 35.37           | 6.31           | 41.68            | 54.00           | 12.32        | vertical | Average |
| 24875.00    | 49.40           | 6.31           | 55.71            | 74.00           | 18.29        | vertical | Peak    |

**Restricted Bands Emissions:**

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2402MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz

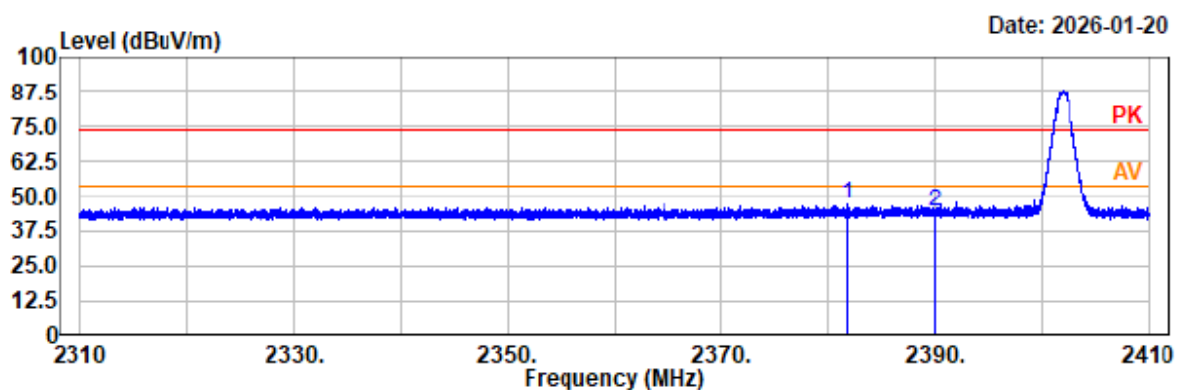


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity   | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|------------|--------|
| 2383.69     | 49.57           | -1.19          | 48.38            | 74.00           | 25.62        | horizontal | Peak   |
| 2390.00     | 45.21           | -1.15          | 44.06            | 74.00           | 29.94        | horizontal | Peak   |

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2402MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz

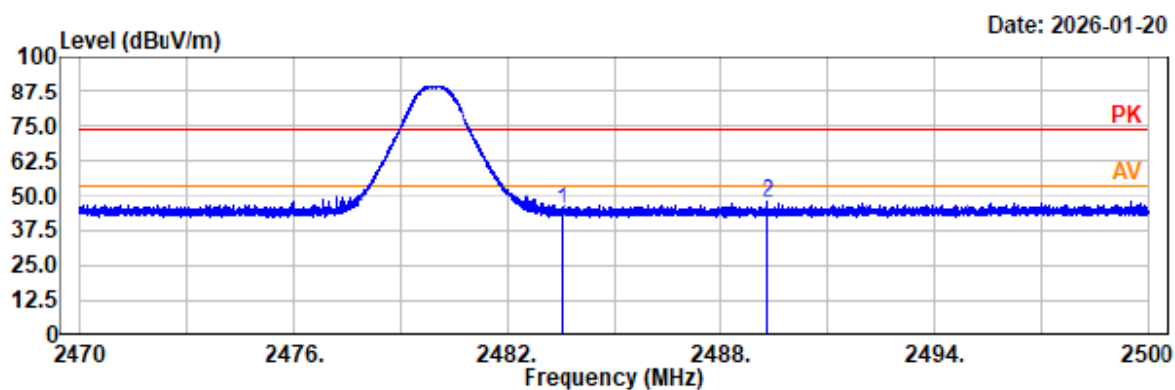


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|----------|--------|
| 2381.76     | 47.96           | -1.19          | 46.77            | 74.00           | 27.23        | vertical | Peak   |
| 2390.00     | 45.23           | -1.15          | 44.08            | 74.00           | 29.92        | vertical | Peak   |

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2480MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz

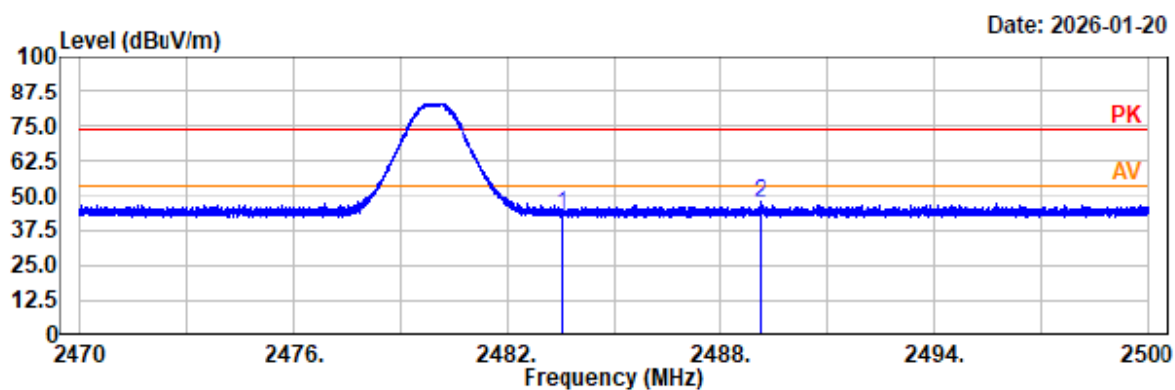


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity   | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|------------|--------|
| 2483.50     | 45.42           | -0.77          | 44.65            | 74.00           | 29.35        | horizontal | Peak   |
| 2489.34     | 48.62           | -0.75          | 47.87            | 74.00           | 26.13        | horizontal | Peak   |

Project No.: 2507Z31947E-RF  
Test Mode: BLE 1M 2480MHz  
EUT Model: ClipTalk  
Test distance: 3m

Temp/Humi/ATM: 21.1°C/41%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz

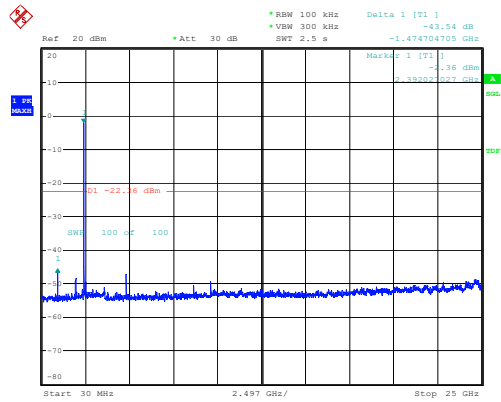


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

| Freq<br>MHz | Reading<br>dBuV | Factor<br>dB/m | Result<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Polarity | Remark |
|-------------|-----------------|----------------|------------------|-----------------|--------------|----------|--------|
| 2483.50     | 44.24           | -0.77          | 43.47            | 74.00           | 30.53        | vertical | Peak   |
| 2489.12     | 48.24           | -0.75          | 47.49            | 74.00           | 26.51        | vertical | Peak   |

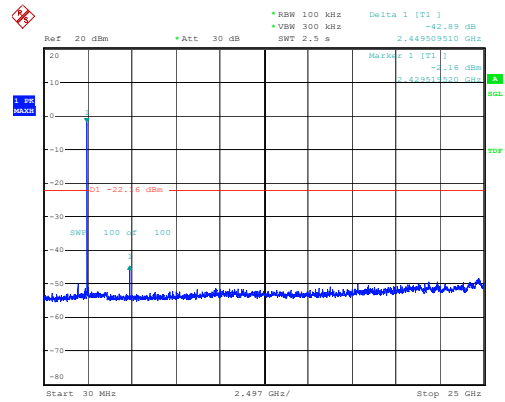
## Antenna-port conducted emission

BLE\_1M\_Low\_Channel



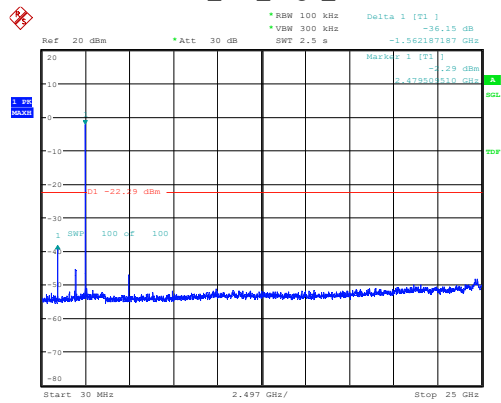
ProjectNo.:2507Z31947E-RF Tester:Jenphy Seng  
Date: 21.DEC.2025 09:50:10

BLE\_1M\_Middle\_Channel



ProjectNo.:2507Z31947E-RF Tester:Jenphy Seng  
Date: 21.DEC.2025 09:56:15

BLE\_1M\_High\_Channel



ProjectNo.:2507Z31947E-RF Tester:Jenphy Seng  
Date: 21.DEC.2025 10:00:58

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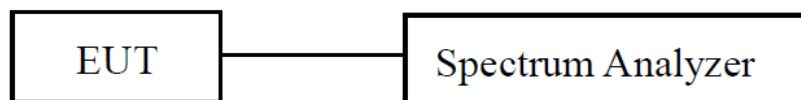
**FCC §15.247(a) (2) - 6 dB EMISSION BANDWIDTH**

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**Applicable Standard**

FCC§15.247 (a)(2)

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

**EUT Setup**

Note: A short RF cable with low cable loss connected to the EUT antenna port. The insert loss of this RF cable was Offset into the setting of test equipment:

Offset = Insert loss of RF cable

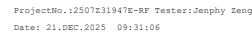
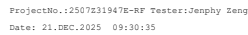
★The Insert loss was declared by manufacturer.

**Test Procedure**

According to ANSI C63.10-2020 Section 11.8

- a) Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.
- b) Set the VBW  $\geq [3 \times \text{RBW}]$ .
- c) Detector = peak.
- d) Trace mode = max-hold.
- e) Sweep = No faster than coupled (auto) time.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “–6 dB down amplitude”. If a marker is below this “–6 dB down amplitude” value, then it shall be as close as possible to this value.

|              |                      |                      |                                               |
|--------------|----------------------|----------------------|-----------------------------------------------|
| Test Mode:   | Transmitting         | Test Engineer:       | Jenphy Zeng                                   |
| Test Date:   | 2025-12-21           | Test Voltage:        | AC 120V/60Hz                                  |
| Test Result: | Compliance           | Environment:         | Temp.: 23.6°C<br>Humi.: 44%<br>Atm : 100.2kPa |
| Test Modes   | Test Frequency (MHz) | 6 dB Bandwidth (MHz) | Limit (MHz)                                   |
| BLE 1Mbps    | 2402                 | 0.673                | ≥0.5                                          |
|              | 2440                 | 0.673                | ≥0.5                                          |
|              | 2480                 | 0.679                | ≥0.5                                          |

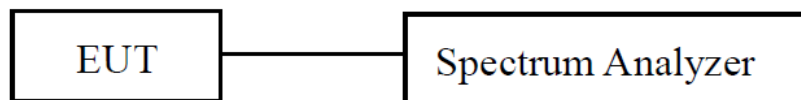


## FCC §15.247(b) (3) – MAXIMUM CONDUCTED OUTPUT POWER

### Applicable Standard

According to FCC §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

### EUT Setup



Note: A short RF cable with low cable loss connected to the EUT antenna port. The insert loss of this RF cable was Offset into the setting of test equipment:

Offset = Insert loss of RF cable

★The Insert loss was declared by manufacturer.

### Test Procedure

According to ANSI C63.10-2020 Section 11.9.1.1 the DTS bandwidth is available to perform the measurement:

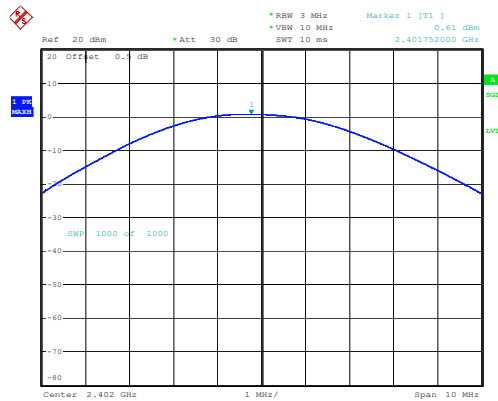
- Set the  $RBW \geq DTS$  bandwidth.
- Set  $VBW \geq [3 \times RBW]$ .
- Set  $span \geq [3 \times RBW]$ .
- Sweep time = No faster than coupled (auto) time.
- Detector = peak.
- Trace mode = max-hold.
- Allow trace to fully stabilize.
- Use peak marker function to determine the peak amplitude level.

## Test Data

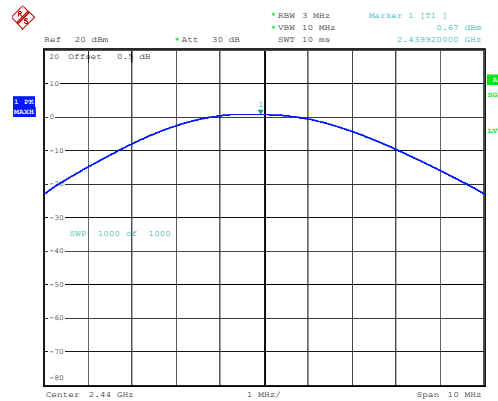
|              |                      |                                          |                                               |
|--------------|----------------------|------------------------------------------|-----------------------------------------------|
| Test Mode:   | Transmitting         | Test Engineer:                           | Jenphy Zeng                                   |
| Test Date:   | 2025-12-21           | Test Voltage:                            | AC 120V/60Hz                                  |
| Test Result: | Compliance           | Environment:                             | Temp.: 23.6°C<br>Humi.: 44%<br>Atm : 100.2kPa |
| Test Modes   | Test Frequency (MHz) | Maximum Peak Conducted Output Power(dBm) | Limit (dBm)                                   |
| BLE 1Mbps    | 2402                 | 0.61                                     | ≤30                                           |
|              | 2440                 | 0.67                                     | ≤30                                           |
|              | 2480                 | 0.27                                     | ≤30                                           |

Please refer to the below plots:

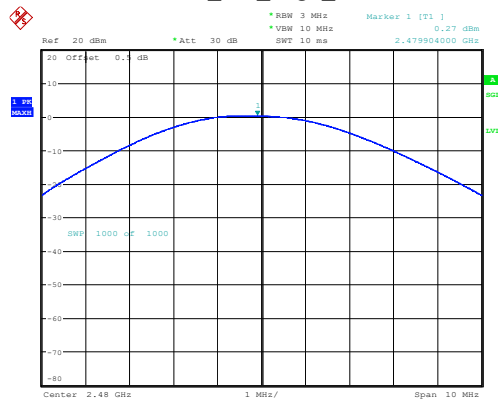
BLE\_1M\_Low\_Channel

ProjectNo.:2507Z31947E-RF Tester:Jenphy Zeng  
Date: 21.DEC.2025 09:31:01

BLE\_1M\_Middle\_Channel

ProjectNo.:2507Z31947E-RF Tester:Jenphy Zeng  
Date: 21.DEC.2025 09:38:15

BLE\_1M\_High\_Channel

ProjectNo.:2507Z31947E-RF Tester:Jenphy Zeng  
Date: 21.DEC.2025 09:40:44

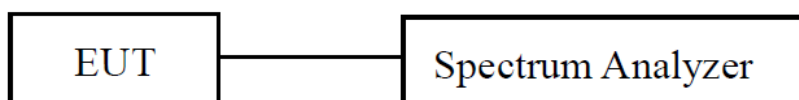
## FCC §15.247(d) – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE

### Applicable Standard

#### FCC §15.247 (d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

### EUT Setup



Note: A short RF cable with low cable loss connected to the EUT antenna port. The insert loss of this RF cable was Offset into the setting of test equipment:

Offset = Insert loss of RF cable

★The Insert loss was declared by manufacturer.

### Test Procedure

According to ANSI C63.10-2020 Section 11.11

a) Set the center frequency and span to encompass frequency range to be measured. Note that the frequency range might need to be divided into multiple frequency ranges to retain frequency resolution.

NOTE—the number of points can also be increased for large spans to retain frequency resolution

b) Set the RBW = 100 kHz.

c) Set the VBW  $\geq [3 \times \text{RBW}]$ .

d) Detector = peak.

e) Sweep time = No faster than coupled (auto) time.

f) Trace mode = max-hold.

g) Allow trace to fully stabilize.

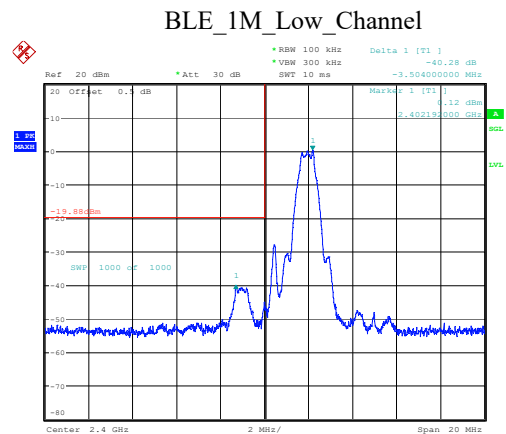
h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

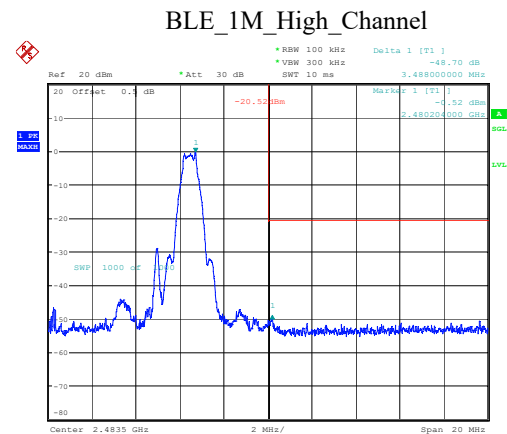
Test Data

|              |              |                |                                               |
|--------------|--------------|----------------|-----------------------------------------------|
| Test Mode:   | Transmitting | Test Engineer: | Jenphy Zeng                                   |
| Test Date:   | 2025-12-21   | Test Voltage:  | AC 120V/60Hz                                  |
| Test Result: | Compliance   | Environment:   | Temp.: 23.6°C<br>Humi.: 44%<br>Atm : 100.2kPa |

Please refer to the below plots:



ProjectNo.:2507Z31947E-RF Tester:Jenphy Zeng  
Date: 21.DEC.2025 09:32:05



ProjectNo.:2507Z31947E-RF Tester:Jenphy Zeng  
Date: 21.DEC.2025 09:41:48

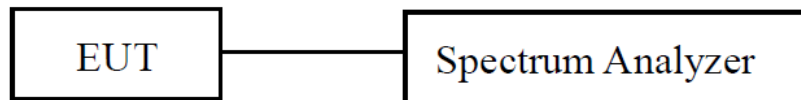
## FCC §15.247(e) - POWER SPECTRAL DENSITY

### Applicable Standard

FCC §15.247 (e)

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

### EUT Setup



Note: A short RF cable with low cable loss connected to the EUT antenna port. The insert loss of this RF cable was Offset into the setting of test equipment:

Offset = Insert loss of RF cable

★The Insert loss was declared by manufacturer.

### Test Procedure

According to ANSI C63.10-2020 Section 11.10.2

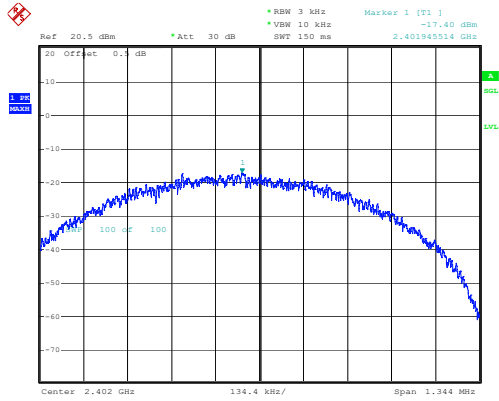
- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span >1.5 times the DTS bandwidth.
- c) Set the RBW to  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .
- d) Set the VBW  $\geq [3 \times \text{RBW}]$ .
- e) Detector = peak.
- f) Sweep time = No faster than coupled (auto) time.
- g) Trace mode = max-hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW.
- j) If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

Test Data

|              |                      |                                   |                                               |
|--------------|----------------------|-----------------------------------|-----------------------------------------------|
| Test Mode:   | Transmitting         | Test Engineer:                    | Jenphy Zeng                                   |
| Test Date:   | 2025-12-21           | Test Voltage:                     | AC 120V/60Hz                                  |
| Test Result: | Compliance           | Environment:                      | Temp.: 23.6°C<br>Humi.: 44%<br>Atm : 100.2kPa |
| Test Modes   | Test Frequency (MHz) | Power Spectral Density (dBm/3kHz) | Limit (dBm/3kHz)                              |
| BLE 1Mbps    | 2402                 | -17.4                             | ≤8.00                                         |
|              | 2440                 | -17.18                            | ≤8.00                                         |
|              | 2480                 | -17.37                            | ≤8.00                                         |

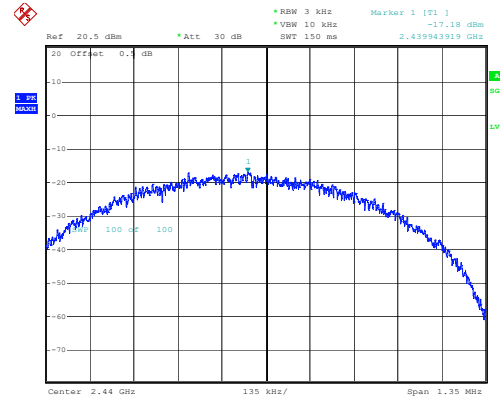
BLE 1M

BLE\_1M\_Low\_Channel



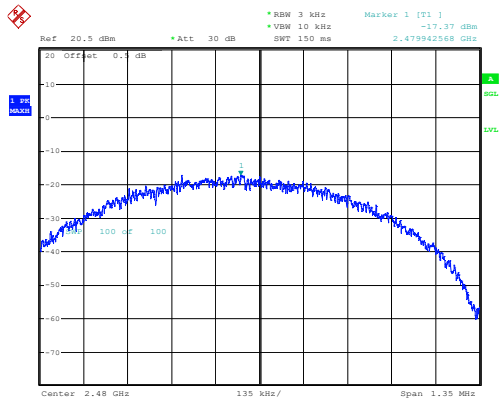
ProjectNo.:2507Z31947E-RF Tester:Jenphy Zeng  
Date: 21.DEC.2025 09:43:28

BLE\_1M\_Middle\_Channel



ProjectNo.:2507Z31947E-RF Tester:Jenphy Zeng  
Date: 21.DEC.2025 09:44:27

BLE\_1M\_High\_Channel



ProjectNo.:2507Z31947E-RF Tester:Jenphy Zeng  
Date: 21.DEC.2025 09:44:56

## **EUT PHOTOGRAPHS**

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Please refer to the attachment 2507Z31947E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2507Z31947E-RF-INP EUT INTERNAL PHOTOGRAPHS.

## **TEST SETUP PHOTOGRAPHS**

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Please refer to the attachment 2507Z31947E-TSP-RF-03 TEST SETUP PHOTOGRAPHS.

### Declarations

1. Bay Area Compliance Laboratories Corp. (Xiamen) is not responsible for authenticity of any information provided by the applicant. Information from the applicant that may affect test results are marked with an asterisk “★”.
2. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.
3. Unless required by the rule provided by the applicant or product regulations, then decision rule in this report did not consider the uncertainty.
4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor  $k=2$  with the 95% confidence interval.
5. This report cannot be reproduced except in full, without prior written approval of Bay Area Compliance Laboratories Corp. (Xiamen).
6. This report is valid only with a valid digital signature. The digital signature may be available only under the adobe software above version 7.0.
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**\*\*\*\*\* END OF REPORT \*\*\*\*\***