

TEST REPORT

Applicant Name: Meizhou Guo Wei Electronics Co., Ltd.
Address: AD1 Section, Economic Development Area, Dongsheng Industrial District, Meizhou, Guangdong, China.
Report Number: 2401W88467E-RFB
FCC ID: 2ARRB-XT800
IC: 20353-XT800

Test Standard (s)

FCC PART 15.247; RSS-GEN ISSUE 5, FEBRUARY 2021 AMENDMENT 2;
RSS-247 ISSUE 3, AUGUST 2023

Sample Description

Product Type: Wireless over-ear headphones
Model No.: MOTO XT800 ANC
Multiple Model(s) No.: N/A
Trade Mark: Motorola
Date Received: 2024-08-01
Issue Date: 2024-12-31

| | |
|--------------|-------|
| Test Result: | Pass▲ |
|--------------|-------|

▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:GaLa Liu

GaLa Liu
RF Engineer

Approved By:Nancy Wang

Nancy Wang
RF Supervisor

Note: The information marked[#] is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

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DOCUMENT REVISION HISTORY

| Revision Number | Report Number | Description of Revision | Date of Revision |
|-----------------|-----------------|-------------------------|------------------|
| 0 | 2401W88467E-RFB | Original Report | 2024-12-31 |

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

| | |
|--|---|
| HVIN | MOTO XT800 ANC |
| FVIN | N/A |
| Frequency Range | 2402~2480MHz |
| Transmit Peak Power | 3.63dBm |
| Modulation Technique | Bluetooth: GFSK, $\pi/4$ -DQPSK, 8DPSK |
| Antenna Specification[#] | -0.68dBi (provided by the applicant) |
| Voltage Range | DC 5.0V from USB Port or DC 3.8V from Battery |
| Sample serial number | 2PC5-5 for Radiated Emissions Test 2PC5-1 for RF Conducted Test (Assigned by BACL, Shenzhen) |
| Sample/EUT Status | Good condition |
| Adapter Information | N/A |

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commissions rules and RSS-247 Issue 3, August 2023, RSS-GEN Issue 5, Feb. 2021Amendment 2 of the Innovation, Science and Economic Development Canada rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and RSS-247 Issue 3, August 2023, RSS-GEN Issue 5, Feb. 2021Amendment 2 of the Innovation, Science and Economic Development Canada rules.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

Measurement Uncertainty

| Parameter | | Uncertainty |
|------------------------------------|-----------------------------|--|
| Occupied Channel Bandwidth | | 109.2kHz(k=2, 95% level of confidence) |
| RF output power, conducted | | 0.86dB(k=2, 95% level of confidence) |
| AC Power Lines Conducted Emissions | 9kHz-150kHz | 3.63dB(k=2, 95% level of confidence) |
| | 150kHz-30MHz | 3.66dB(k=2, 95% level of confidence) |
| Radiated Emissions | 0.009MHz~30MHz | 3.60dB(k=2, 95% level of confidence) |
| | 30MHz~200MHz (Horizontal) | 5.32dB(k=2, 95% level of confidence) |
| | 30MHz~200MHz (Vertical) | 5.43dB(k=2, 95% level of confidence) |
| | 200MHz~1000MHz (Horizontal) | 5.77dB(k=2, 95% level of confidence) |
| | 200MHz~1000MHz (Vertical) | 5.73dB(k=2, 95% level of confidence) |
| | 1GHz - 6GHz | 5.34dB(k=2, 95% level of confidence) |
| | 6GHz - 18GHz | 5.40dB(k=2, 95% level of confidence) |
| | 18GHz - 40GHz | 5.64dB(k=2, 95% level of confidence) |
| Temperature | | ±1°C |
| Humidity | | ±1% |
| Supply voltages | | ±0.4% |

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.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 715558, the FCC Designation No. : CN5045.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0023.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in an engineering mode.

| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|
| 0 | 2402 | 40 | 2442 |
| 1 | 2403 | 41 | 2443 |
| 2 | 2404 | 42 | 2444 |
| ... | ... | ... | ... |
| ... | ... | ... | ... |
| 36 | 2438 | 75 | 2477 |
| 37 | 2439 | 76 | 2478 |
| 38 | 2440 | 77 | 2479 |
| 39 | 2441 | 78 | 2480 |

EUT was tested with Channel 0, 39 and 78.

EUT Exercise Software

| | |
|--------------------------------|------------------------|
| Exercise Software [#] | FCC-assist-1.0.2.2.exe |
| Power Level [#] | 6 |

Special Accessories

No special accessory.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

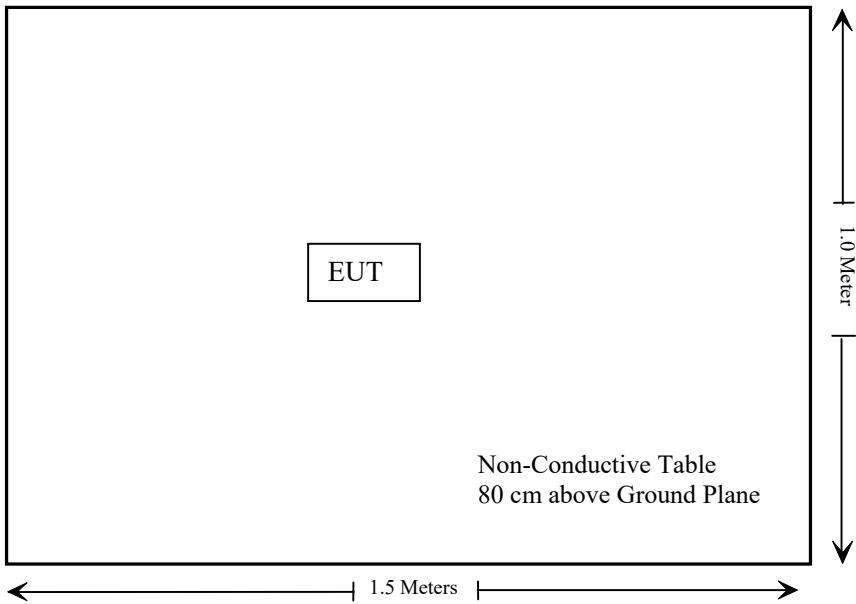
| Manufacturer | Description | Model | Serial Number |
|--------------|-------------|-------|---------------|
| / | / | / | / |

External I/O Cable

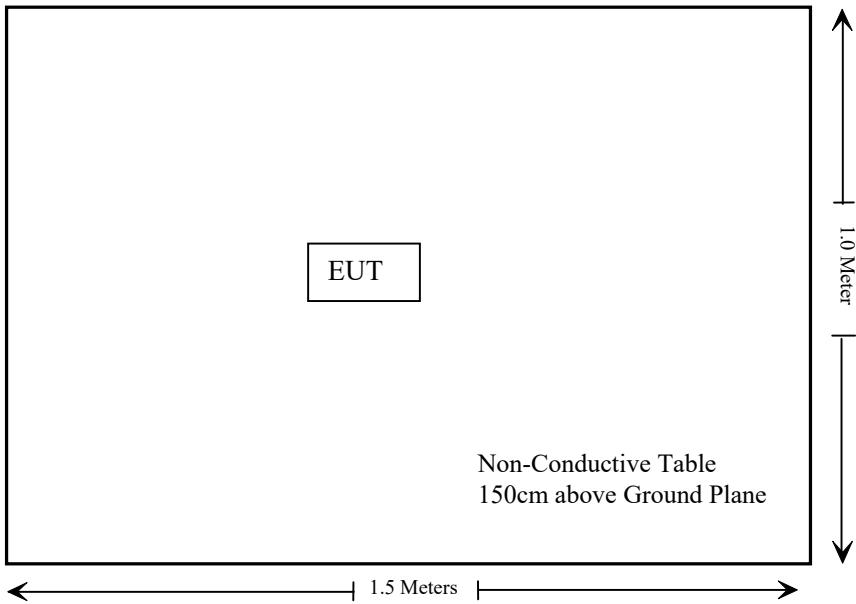
| Cable Description | Length (m) | From Port | To |
|-------------------|------------|-----------|----|
| / | / | / | / |

Block Diagram of Test Setup

For Radiated Emissions below 1GHz:



For Radiated Emissions above 1GHz:



SUMMARY OF TEST RESULTS

| FCC Rules | RSS Rules | Description of Test | Result |
|----------------------------------|---------------------------------|---|----------------|
| FCC §15.203 | RSS-Gen §6.8 | Antenna Requirement | Compliant |
| FCC §15.207(a) | RSS-Gen §8.8 | AC Line Conducted Emissions | Not Applicable |
| FCC §15.205, §15.209, §15.247(d) | RSS-247 § 5.5, RSS-GEN § 8.10 | Radiated Spurious Emission | Compliant |
| FCC §15.247(a)(1) | RSS-247 § 5.1(a), RSS-GEN § 6.7 | 20 dB Emission Bandwidth & 99% Occupied Bandwidth | Compliant |
| FCC §15.247(a)(1) | RSS-247 § 5.1 (b) | Channel Separation | Compliant |
| FCC §15.247(a)(1)(iii) | RSS-247 § 5.1 (d) | Number of Hopping Frequency | Compliant |
| FCC §15.247(a)(1)(iii) | RSS-247 § 5.1 (d) | Time of Occupancy (dwell time) | Compliant |
| FCC §15.247(b)(1) | RSS-247 § 5.1(b) & § 5.4(b) | Maximum Conducted Output Power | Compliant |
| FCC §15.247(d) | RSS-247 § 5.5 | 100 kHz Bandwidth of Frequency Band Edge | Compliant |
| FCC §1.1307&§2.1093 | RSS-102§6.3 | RF Exposure & SAR Exemption Limits | Compliant |

Not Applicable, the device was powered by battery when operating.

TEST EQUIPMENT LIST

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|-------------------------------|-----------------------------------|-------------------|---------------|------------------|----------------------|
| Radiated Emission Test | | | | | |
| Rohde & Schwarz | EMI Test Receiver | ESR3 | 102455 | 2024/01/16 | 2025/01/15 |
| Sonoma instrument | Pre-amplifier | 310 N | 186238 | 2024/05/21 | 2025/05/20 |
| Sunol Sciences | Broadband Antenna | JB1 | A040904-1 | 2023/07/20 | 2026/07/19 |
| Unknown | Cable | Chamber A Cable 1 | N/A | 2024/06/18 | 2025/06/17 |
| Unknown | Cable | XH500C | J-10M-A | 2024/06/18 | 2025/06/17 |
| BACL | Active Loop Antenna | 1313-1A | 4031911 | 2024/05/14 | 2027/05/13 |
| Unknown | Cable | 2Y194 | 0735 | 2024/05/21 | 2025/05/20 |
| Unknown | Cable | PNG214 | 1354 | 2024/05/21 | 2025/05/20 |
| Audix | EMI Test software | E3 | 19821b(V9) | NCR | NCR |
| Rohde & Schwarz | Spectrum Analyzer | FSV40 | 101605 | 2024/03/27 | 2025/03/26 |
| A.H.System | Preamplifier | PAM-0118P | 489 | 2024/11/15 | 2025/11/14 |
| Schwarzbeck | Horn Antenna | BBHA9120D(12 01) | 1143 | 2023/07/26 | 2026/07/25 |
| Unknown | RF Cable | KMSE | 735 | 2024/06/18 | 2025/06/17 |
| Unknown | RF Cable | UFA147 | 219661 | 2024/06/18 | 2025/06/17 |
| Unknown | RF Cable | XH750A-N | J-10M | 2024/06/18 | 2025/06/17 |
| JD | Multiplex Switch Test Control Set | DT7220FSU | DQ77926 | 2024/06/18 | 2025/06/17 |
| A.H.System | Pre-amplifier | PAM-1840VH | 190 | 2024/06/18 | 2025/06/17 |
| Electro-Mechanics Co | Horn Antenna | 3116 | 9510-2270 | 2023/09/18 | 2026/09/17 |
| UTIFLEX | RF Cable | NO. 13 | 232308-001 | 2024/06/18 | 2025/06/17 |
| Audix | EMI Test software | E3 | 191218(V9) | NCR | NCR |
| RF Conducted Test | | | | | |
| Tonscend | RF control Unit | JS0806-2 | 19D8060154 | 2024/08/06 | 2025/08/05 |
| Rohde & Schwarz | Spectrum Analyzer | FSV40 | 101473 | 2024/12/04 | 2025/12/03 |
| Unknown | 10dB Attenuator | Unknown | F-03-EM190 | 2024/06/27 | 2025/06/26 |

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

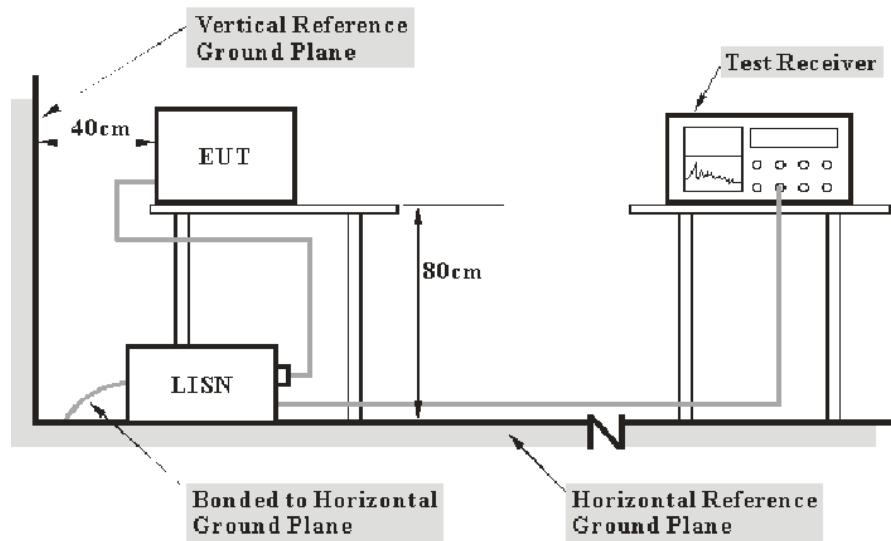
REQUIREMENTS AND TEST PROCEDURES

AC Line Conducted Emissions

Applicable Standard

FCC §15.207(a), RSS-GEN § 8.8

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The measurement procedure of EUT setup is according with ANSI C63.10-2013. The related limit was specified in FCC Part 15.207 & RSS-Gen.

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

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.

Factor & Over Limit Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

$$\text{Factor} = \text{LISN VDF} + \text{Cable Loss}$$

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

$$\text{Over Limit} = \text{Level} - \text{Limit}$$

$$\text{Level} = \text{Read Level} + \text{Factor}$$

Note: The term "cable loss" refers to the combination of a cable and a 10dB transient limiter (attenuator).

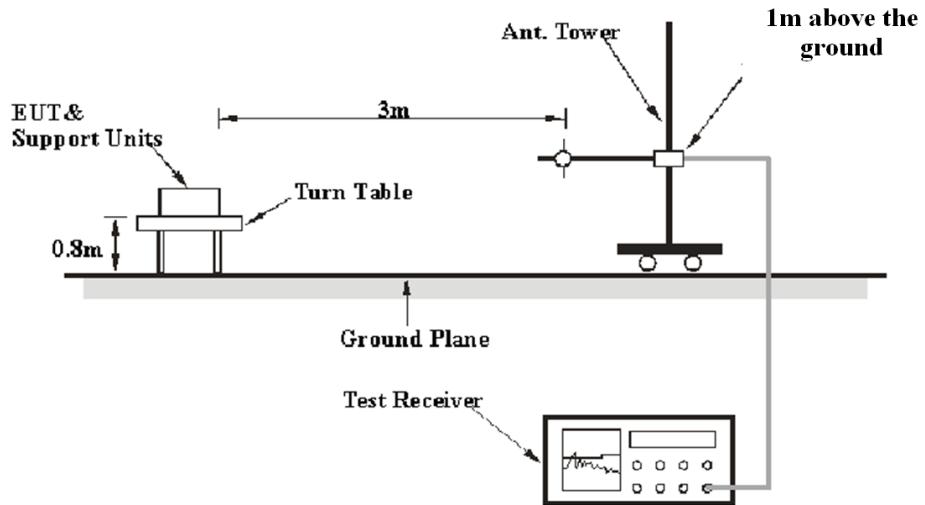
Radiated Emissions

Applicable Standard

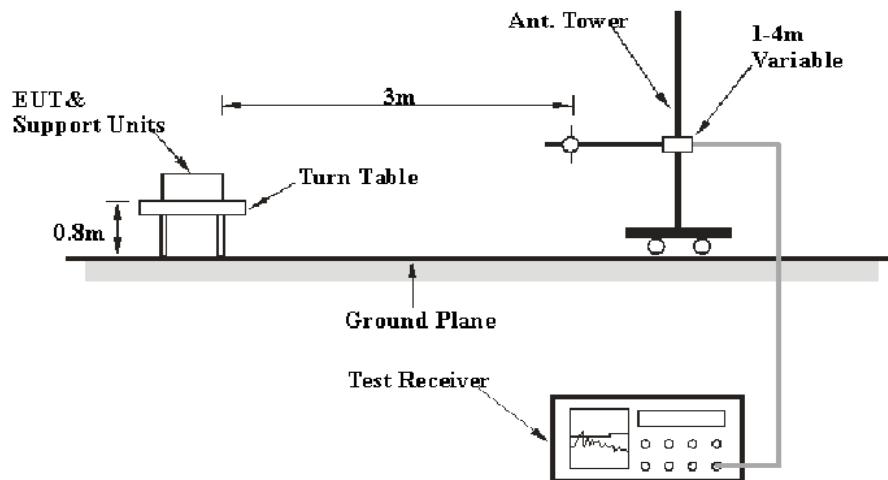
FCC §15.205; §15.209; §15.247(d); RSS-247§ 5.5; RSS-GEN § 8.10

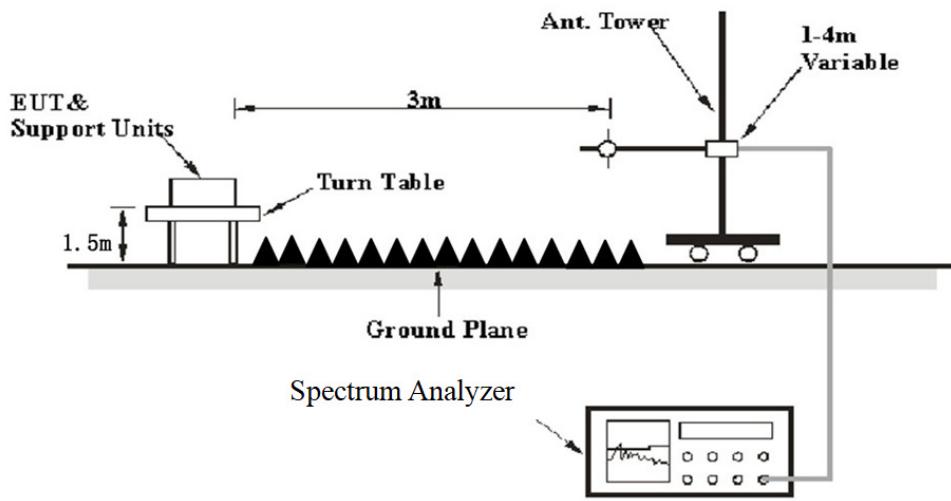
EUT Setup

9 kHz-30MHz:



30MHz-1GHz:



Above 1GHz:

The radiated emission performed in the 3 meters, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, FCC 15.247, RSS-247, RSS-Gen limits.

EMI Test Receiver & Spectrum Analyzer Setup

The EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

| Frequency Range | RBW | Video B/W | IF B/W | Detector | Measurement |
|-------------------|---|--------------|---------|----------|-------------|
| 9 kHz – 150 kHz | / | / | 200 Hz | QP | QP |
| | 300 Hz | 1 kHz | / | Peak | PK |
| 150 kHz – 30 MHz | / | / | 9 kHz | QP | QP |
| | 10 kHz | 30 kHz | / | Peak | PK |
| 30 MHz – 1000 MHz | / | / | 120 kHz | QP | QP |
| | 100 kHz | 300 kHz | / | Peak | PK |
| Above 1 GHz | Harmonics & Band Edge | | | | |
| | 1MHz | 3 MHz | / | Peak | PK |
| | Average Emission Level=Peak Emission Level+20*log(Duty cycle) | | | | |
| | Other Emissions | | | | |
| | 1MHz | 3 MHz | / | Peak | PK |
| | 1MHz | ≥ 10 Hz | / | Peak | Average |

For Duty cycle measurement:

Use the duty cycle factor correction factor method per 15.35(c).

Duty cycle=On time/100milliseconds, On time=N1*L1+N2*L2+...Nn-1*Ln-1+Nn*Ln,
Where N1 is number of type 1 pulses, L1 is length of type 1 pulse, etc.

Test Procedure

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

All final data was recorded in Quasi-peak detection mode except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz, average detection modes for frequency bands 9–90 kHz and 110–490 kHz, peak and average detection modes for frequencies above 1 GHz.

For 9 kHz-30MHz, 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.

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

All emissions under the average limit and under the noise floor have not recorded in the report.

Factor & Over Limit/Margin Calculation

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

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

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

$$\begin{aligned} \text{Over Limit/Margin} &= \text{Level/Corrected Amplitude} - \text{Limit} \\ \text{Level / Corrected Amplitude} &= \text{Read Level} + \text{Factor} \end{aligned}$$

20 dB Emission Bandwidth & 99% Occupied Bandwidth

According to FCC §15.247(a) (1):

Alternatively, frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

According to RSS-247 § 5.1 (a), RSS-GEN § 6.7:

The occupied bandwidth or the “99% emission bandwidth” is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

In some cases, the “20 dB bandwidth” is required, which is defined as the frequency range between two points, one at the lowest frequency below and one at the highest frequency above the carrier frequency, at which the maximum power level of the transmitted emission is attenuated 20 dB below the maximum in-band power level of the modulated signal, where the two points are on the outskirts of the in-band emission.

Test Procedure

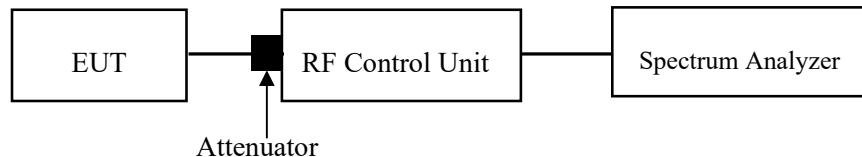
Test Method: ANSI C63.10-2013 Clause 7.8.7 & Clause 6.9.2

The following conditions shall be observed for measuring the occupied bandwidth and 20 dB bandwidth:

- The transmitter shall be operated at its maximum carrier power measured under normal test conditions.
- The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.
- The detector of the spectrum analyzer shall be set to “Sample”. However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or “Max Hold”) may be necessary to determine the occupied / 20 dB bandwidth if the device is not transmitting continuously.
- The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the actual occupied / 20 dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value. Video averaging is not permitted.

Note: It may be necessary to repeat the measurement a few times until the RBW and VBW are in compliance with the above requirement.

For the 99% emission bandwidth, the trace data points are recovered and directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached, and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded. The difference between the two recorded frequencies is the occupied bandwidth (or the 99% emission bandwidth).



Channel Separation Test

According to FCC §15.247(a) (1):

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

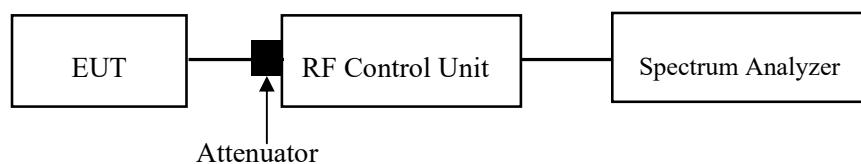
According to RSS-247 § 5.1 (b):

Frequency hopping systems (FHSs) shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the -20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, FHSs operating in the band 2400-2483.5 MHz may have hopping channel carrier frequencies that are separated by 25 kHz or two thirds of the -20 dB bandwidth of the hopping channel, whichever is greater, provided that the systems operate with an output power no greater than 0.125 W. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

Test Procedure

Test Method: ANSI C63.10-2013 Clause 7.8.2

1. Set the EUT in transmitting mode, max hold the channel.
2. Set the adjacent channel of the EUT and max hold another trace.
3. Measure the channel separation.



Quantity of Hopping Channel Test

Applicable Standard

According to FCC §15.247(a) (1) (iii):

Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

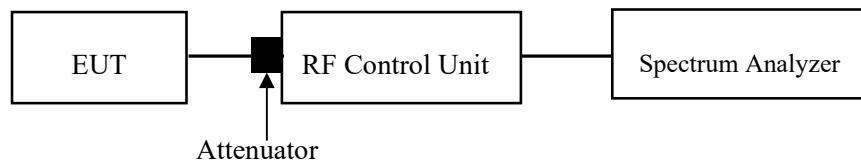
According to RSS-247 § 5.1 (d):

Frequency hopping systems (FHSS) operating in the band 2400-2483.5 MHz shall use at least 15 hopping channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds, multiplied by the number of hopping channels employed. Transmissions on particular hopping frequencies may be avoided or suppressed provided that at least 15 hopping channels are used.

Test Procedure

Test Method: ANSI C63.10-2013 Clause 7.8.3

1. Check the calibration of the measuring instrument (SA) using either an internal calibrator or a known signal from an external generator.
2. Set the EUT in hopping mode from first channel to last.
3. By using the max-hold function record the quantity of the channel.



Time of Occupancy (Dwell Time)

Applicable Standard

According to FCC §15.247(a) (1) (iii):

Frequency hopping systems in the 2400-2483.5 MHz shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

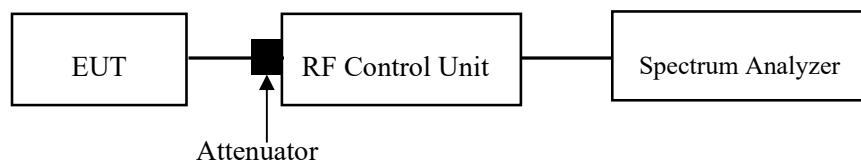
According to RSS-247 § 5.1 (d):

Frequency hopping systems (FHSs) operating in the band 2400-2483.5 MHz shall use at least 15 hopping channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds, multiplied by the number of hopping channels employed. Transmissions on particular hopping frequencies may be avoided or suppressed provided that at least 15 hopping channels are used.

Test Procedure

Test Method: ANSI C63.10-2013 Clause 7.8.4

1. The EUT was worked in channel hopping.
2. Set the RBW to: 1MHz.
3. Set the VBW $\geq 3 \times$ RBW.
4. Set the span to 0Hz.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Recorded the time of single pulses



Peak Output Power Measurement

Applicable Standard

According to FCC §15.247(b) (1):

For frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. And for all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts.

According to RSS-247§ 5.1(b) &§ 5.4(b):

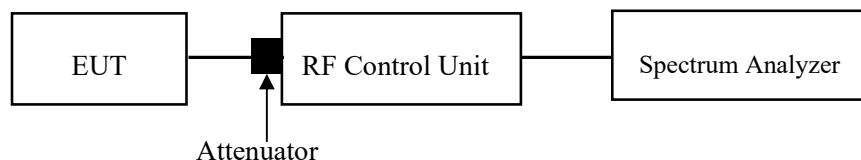
For frequency hopping systems (FHSs) operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1.0 W if the hopset uses 75 or more hopping channels; the maximum peak conducted output power shall not exceed 0.125 W if the hopset uses less than 75 hopping channels. The e.i.r.p. shall not exceed 4 W (see Section 5.4(e) for exceptions).

Frequency hopping systems (FHSs) shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the -20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, FHSs operating in the band 2400-2483.5 MHz may have hopping channel carrier frequencies that are separated by 25 kHz or two thirds of the -20 dB bandwidth of the hopping channel, whichever is greater, provided that the systems operate with an output power no greater than 0.125 W.

Test Procedure

Test Method: ANSI C63.10-2013 Clause 7.8.5

1. Place the EUT on a bench and set in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
3. Add a correction factor to the display.



Note: A short RF cable with low cable loss connected to the EUT antenna port, which was provided by client or lab, the cable loss was add with offset into test equipment, the total offset consists of attenuator and/or RF cable loss

Band Edges

Applicable Standard

According to 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)).

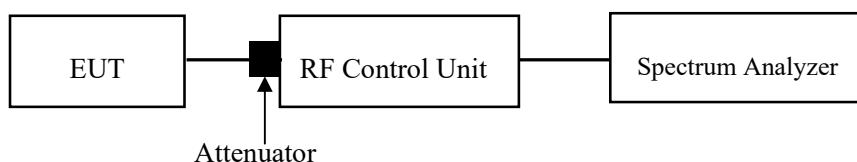
According to RSS-247 § 5.5.

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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 that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(e), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

Test Procedure

Test Method: ANSI C63.10-2013 Clause 7.8.6 & Clause 6.10

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Remove the antenna from the EUT and then connect to a low loss RF cable from the antenna port to a EMI test receiver, then turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.



ANTENNA REQUIREMENT

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 use of a standard antenna jack or electrical connector is prohibited.

According to FCC § 15.203, the applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).

When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer. The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested.

For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:

This radio transmitter [enter the device's ISED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device. Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.

Antenna Connector Construction

The EUT has one internal antenna arrangement, which was permanently attached, the antenna gain[#] is -0.68dBi, fulfill the requirement of this section. Please refer to the EUT photos.

| Antenna Type | Antenna Gain [#] | Impedance | Frequency Range |
|--------------|---------------------------|-----------|-----------------|
| PCB | -0.68dBi | 50Ω | 2.4~2.5GHz |

Result: Compliant

TEST DATA AND RESULTS

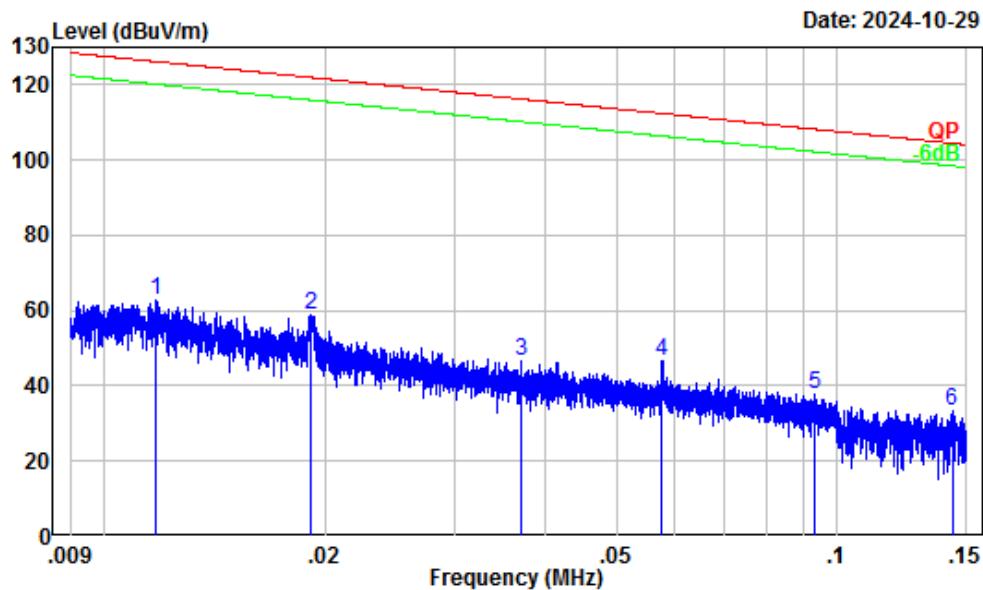
Radiated Emissions

Environmental Conditions

| | | | |
|----------------------------|---|------------------------------|--------------------|
| Temperature (°C) | 24-25 | Relative Humidity (%) | 50-52 |
| ATM Pressure (kPa): | 101 | Test engineer: | Anson Su & Karl Xu |
| Test date: | 2024.10.29-2024.12.12 | | |
| EUT operation mode: | Below 1GHz: Transmitting (Maximum output power mode, 8DPSK Low Channel) Above 1GHz: Transmitting (Maximum output power mode, 8DPSK Mode) | | |
| Note: | 1. Pre-scan in the X, Y and Z axes of orientation, the worst case z-axis of orientation was recorded. 2. For the radiated spurious emission below 30MHz, only the worst case (parallel) was recorded. 3. For the radiated spurious emission below 30MHz, When the test result of peak was less than the limit of QP/Average more than 6dB, just peak value were recorded. 4. The spurious emission from 9 kHz-30MHz of IC RSS-GEN standard, the unit of final result on the test plots are dB μ V/m, so the limit should be added by 51,5 dB from dB μ A/m to dB μ V/m | | |

Below 1GHz:

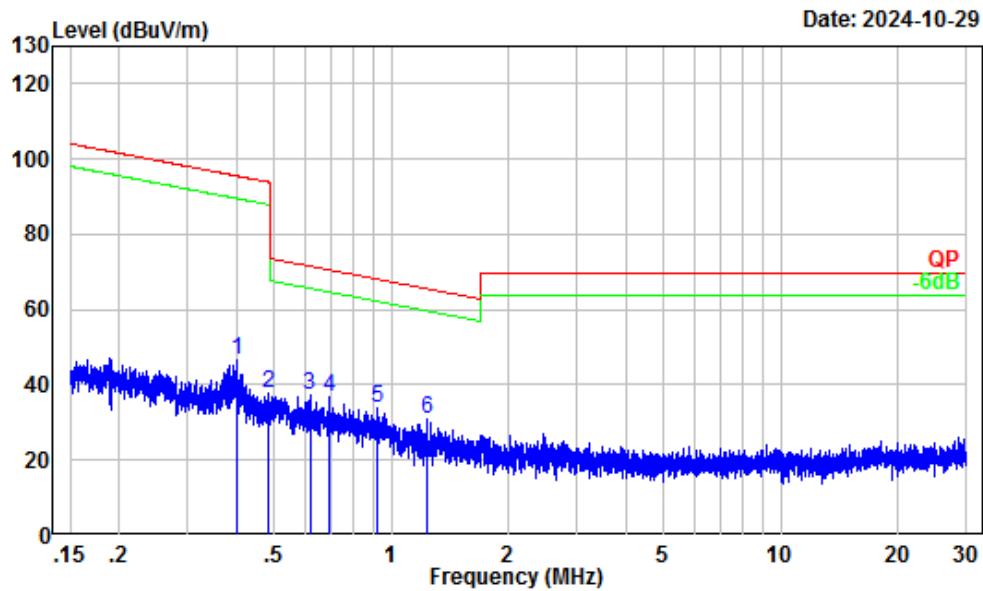
9kHz-150kHz



Site : Chamber A
Condition : 3m
Project Number: 2401W88467E-RF
Test Mode : BT Transmitting
Tester : Anson Su

| | Freq | Factor | Read Level | Limit Level | Over Line | Over Limit | Remark |
|---|------|--------|------------|-------------|-----------|------------|--------|
| | MHz | dB/m | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 0.01 | 36.78 | 25.89 | 62.67 | 126.18 | -63.51 | Peak |
| 2 | 0.02 | 33.03 | 25.69 | 58.72 | 121.97 | -63.25 | Peak |
| 3 | 0.04 | 25.92 | 20.62 | 46.54 | 116.22 | -69.68 | Peak |
| 4 | 0.06 | 22.03 | 24.67 | 46.70 | 112.38 | -65.68 | Peak |
| 5 | 0.09 | 17.75 | 19.84 | 37.59 | 108.24 | -70.65 | Peak |
| 6 | 0.14 | 15.03 | 18.11 | 33.14 | 104.47 | -71.33 | Peak |

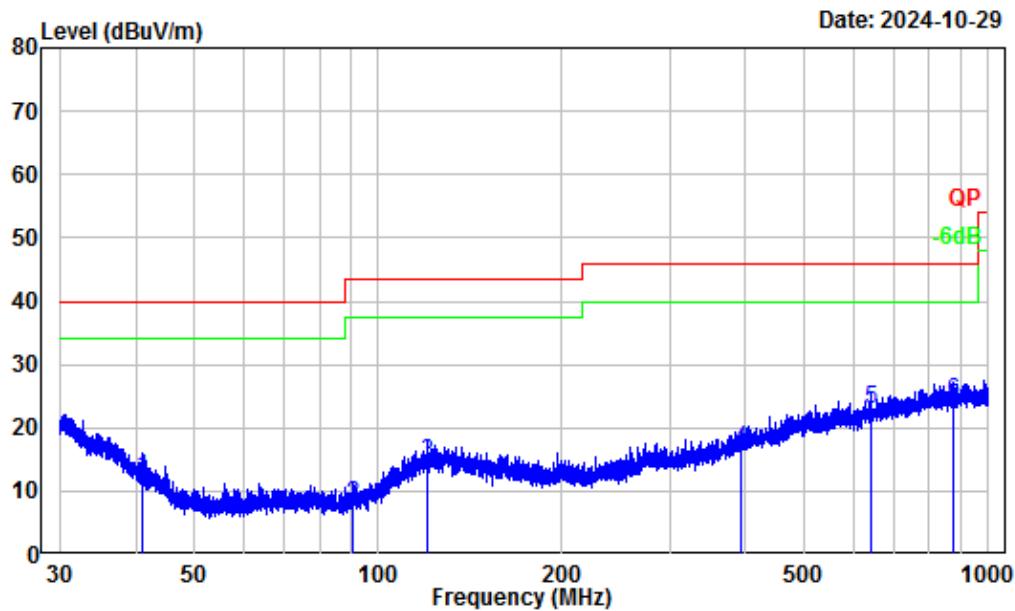
150KHz-30MHz



Site : Chamber A
Condition : 3m
Project Number: 2401W88467E-RF
Test Mode : BT Transmitting
Tester : Anson Su

| | Freq | Read Factor | Limit Level | Limit Level | Over Line | Over Limit | Remark |
|---|------|-------------|-------------|-------------|-----------|------------|--------|
| | MHz | dB/m | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 0.40 | 5.60 | 41.21 | 46.81 | 95.56 | -48.75 | Peak |
| 2 | 0.48 | 3.81 | 34.03 | 37.84 | 93.90 | -56.06 | Peak |
| 3 | 0.62 | 2.06 | 35.46 | 37.52 | 71.73 | -34.21 | Peak |
| 4 | 0.70 | 1.14 | 35.89 | 37.03 | 70.69 | -33.66 | Peak |
| 5 | 0.92 | -1.01 | 34.98 | 33.97 | 68.20 | -34.23 | Peak |
| 6 | 1.23 | -2.40 | 33.28 | 30.88 | 65.61 | -34.73 | Peak |

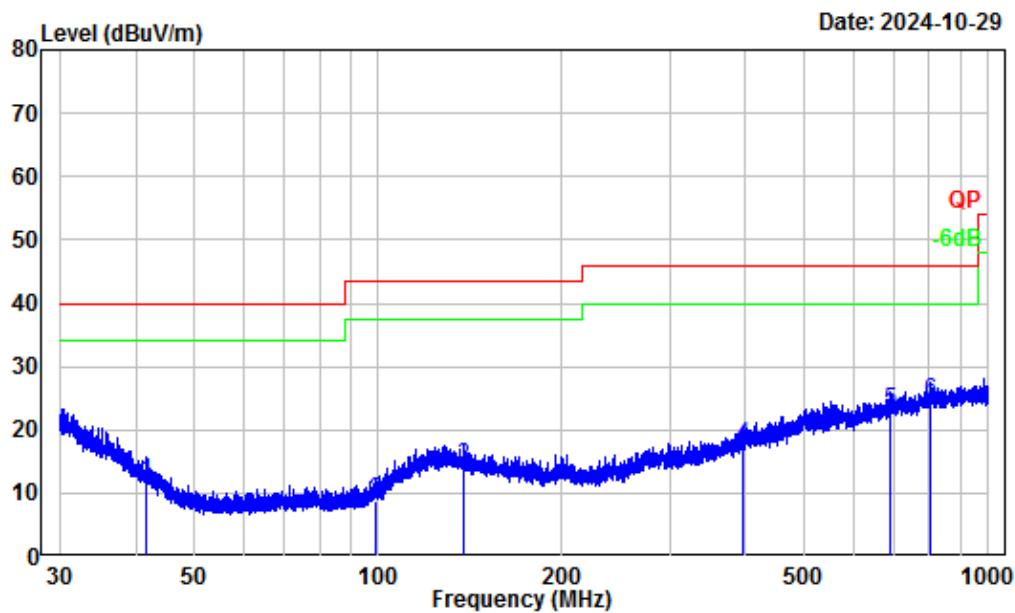
30MHz-1GHz_Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number: 2401W88467E-RF
Test Mode : BLE Transmitting
Tester : Anson Su

| Freq | Factor | Read | | Limit | | Over | Remark |
|------|--------|--------|-------|------------------|--------------------|--------|--------|
| | | MHz | dB/m | dB _{uV} | dB _{uV/m} | | |
| 1 | 41.04 | -13.11 | 25.08 | 11.97 | 40.00 | -28.03 | QP |
| 2 | 90.70 | -17.96 | 25.80 | 7.84 | 43.50 | -35.66 | QP |
| 3 | 120.22 | -11.43 | 26.00 | 14.57 | 43.50 | -28.93 | QP |
| 4 | 392.44 | -8.77 | 25.23 | 16.46 | 46.00 | -29.54 | QP |
| 5 | 640.61 | -4.24 | 27.09 | 22.85 | 46.00 | -23.15 | QP |
| 6 | 877.94 | -1.52 | 25.64 | 24.12 | 46.00 | -21.88 | QP |

30MHz-1GHz_Verical



Site : Chamber A
Condition : 3m Vertical
Project Number: 2401W88467E-RF
Test Mode : BLE Transmitting
Tester : Anson Su

| Freq | Factor | Read | | Limit | | Over | Remark |
|------|--------|--------|-------|-------|--------|--------|--------|
| | | MHz | dB/m | dBuV | dBuV/m | dBuV/m | |
| 1 | 41.51 | -13.48 | 25.11 | 11.63 | 40.00 | -28.37 | QP |
| 2 | 98.75 | -16.28 | 24.90 | 8.62 | 43.50 | -34.88 | QP |
| 3 | 137.72 | -11.67 | 25.97 | 14.30 | 43.50 | -29.20 | QP |
| 4 | 395.55 | -8.62 | 26.17 | 17.55 | 46.00 | -28.45 | QP |
| 5 | 689.56 | -3.67 | 26.75 | 23.08 | 46.00 | -22.92 | QP |
| 6 | 804.60 | -2.14 | 26.68 | 24.54 | 46.00 | -21.46 | QP |

Above 1GHz:

| Frequency (MHz) | Receiver | | Polar (H/V) | Factor (dB/m) | Corrected Amplitude (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
|--------------------|-------------------------|--------|----------------|------------------|--|-------------------------|----------------|
| | Reading (dB μ V) | PK/Ave | | | | | |
| Low Channel | | | | | | | |
| 4804 | 56.1 | PK | H | -7.97 | 48.13 | 74 | -25.87 |
| 4804 | 58.23 | PK | V | -7.97 | 50.26 | 74 | -23.74 |
| Middle Channel | | | | | | | |
| 4882 | 56.53 | PK | H | -7.7 | 48.83 | 74 | -25.17 |
| 4882 | 56.27 | PK | V | -7.7 | 48.57 | 74 | -25.43 |
| High Channel | | | | | | | |
| 4960 | 57.69 | PK | H | -7.6 | 50.09 | 74 | -23.91 |
| 4960 | 55.86 | PK | V | -7.6 | 48.26 | 74 | -25.74 |

Note:

Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

Corrected Amplitude = Factor + Reading

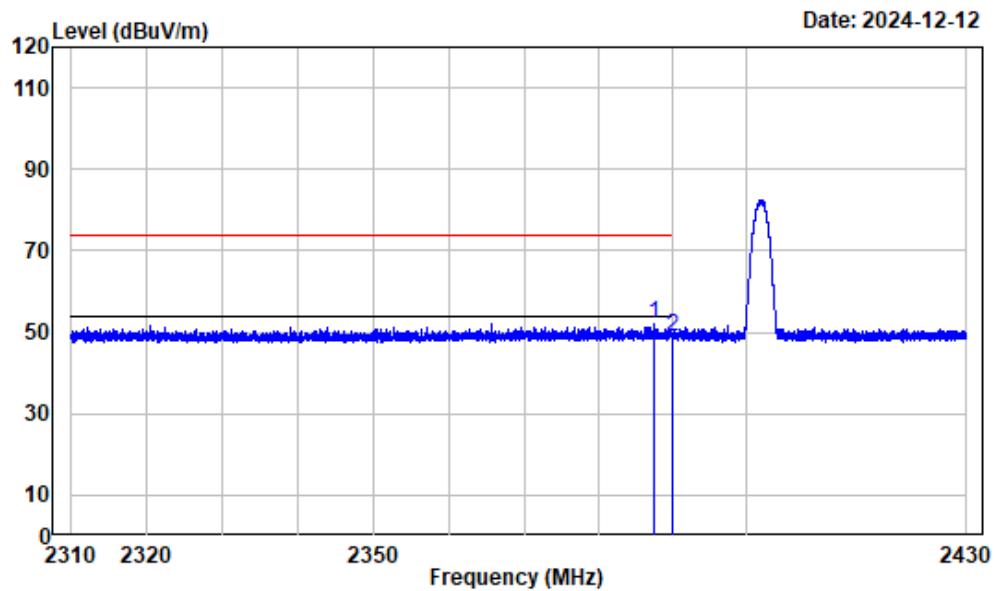
Margin = Corrected. Amplitude - Limit

The other spurious emission which is in the noise floor level was not recorded.

The test result of peak was less than the limit of average, so just peak values were recorded.

Test plots

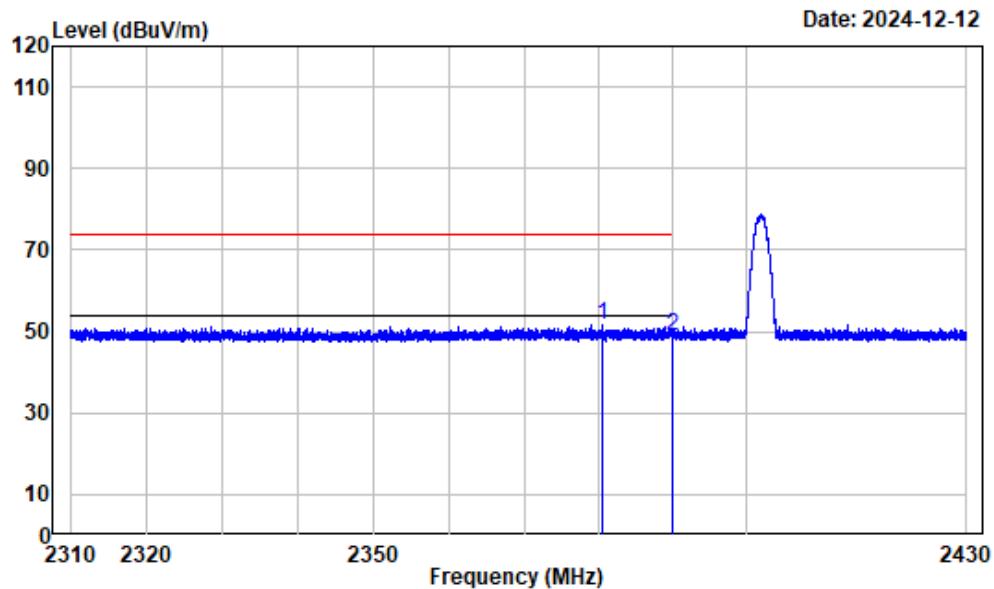
Left Band edge_Horizontal



Condition : Horizontal
Project Number : 2401W88467E-RF
Tester : Karl Xu
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : BT_2402

| Freq | Factor | Read | | Limit | | Over | Remark |
|------|----------|--------|-------|-------|--------|--------|--------|
| | | MHz | dB/m | dBuV | dBuV/m | | |
| 1 | 2387.530 | -10.86 | 62.82 | 51.96 | 74.00 | -22.04 | Peak |
| 2 | 2390.000 | -10.86 | 59.56 | 48.70 | 74.00 | -25.30 | Peak |

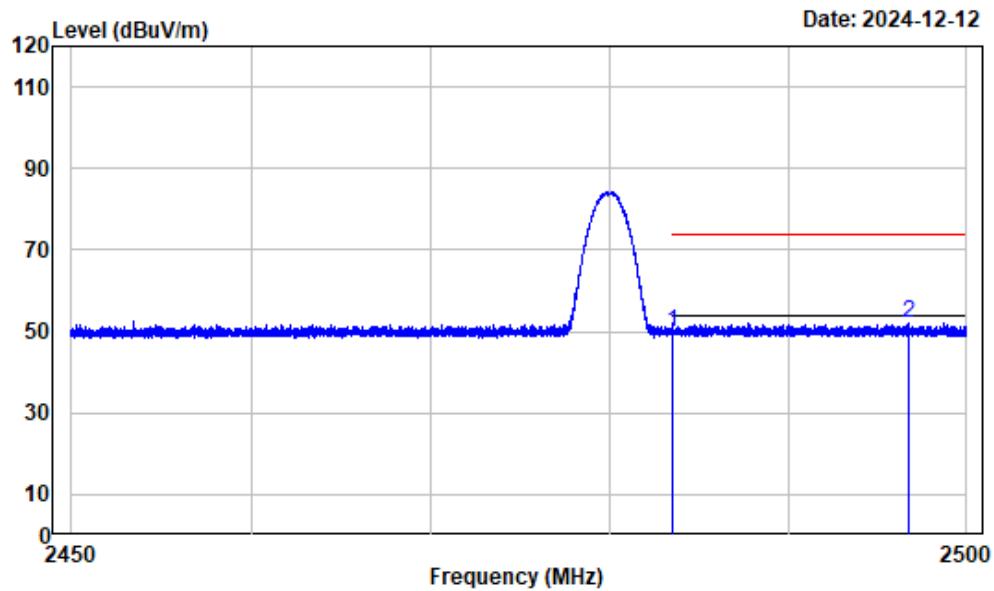
Left Band edge_Verical



Condition : Vertical
Project Number : 2401W88467E-RF
Tester : Karl Xu
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : BT_2402

| | Freq | Read Factor | Level | Limit Level | Over Line | Limit | Remark |
|---|----------|-------------|-------|-------------|-----------|--------|--------|
| | MHz | dB/m | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 2380.404 | -10.84 | 62.33 | 51.49 | 74.00 | -22.51 | Peak |
| 2 | 2390.000 | -10.86 | 59.67 | 48.81 | 74.00 | -25.19 | Peak |

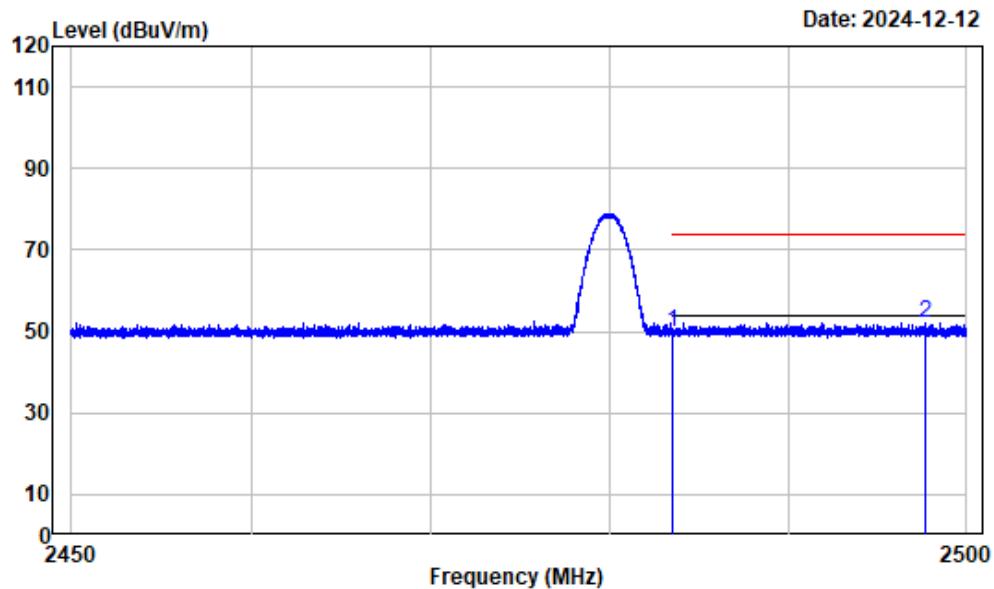
Right Band edge_Horizontal



Condition : Horizontal
Project Number : 2401W88467E-RF
Tester : Karl Xu
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : BT_2480

| | Freq | Read Factor | Level | Limit Level | Over Line | Limit | Remark |
|---|----------|-------------|-------|-------------|-----------|--------|--------|
| 1 | 2483.500 | -10.81 | 60.74 | 49.93 | 74.00 | -24.07 | Peak |
| 2 | 2496.756 | -10.83 | 62.87 | 52.04 | 74.00 | -21.96 | Peak |

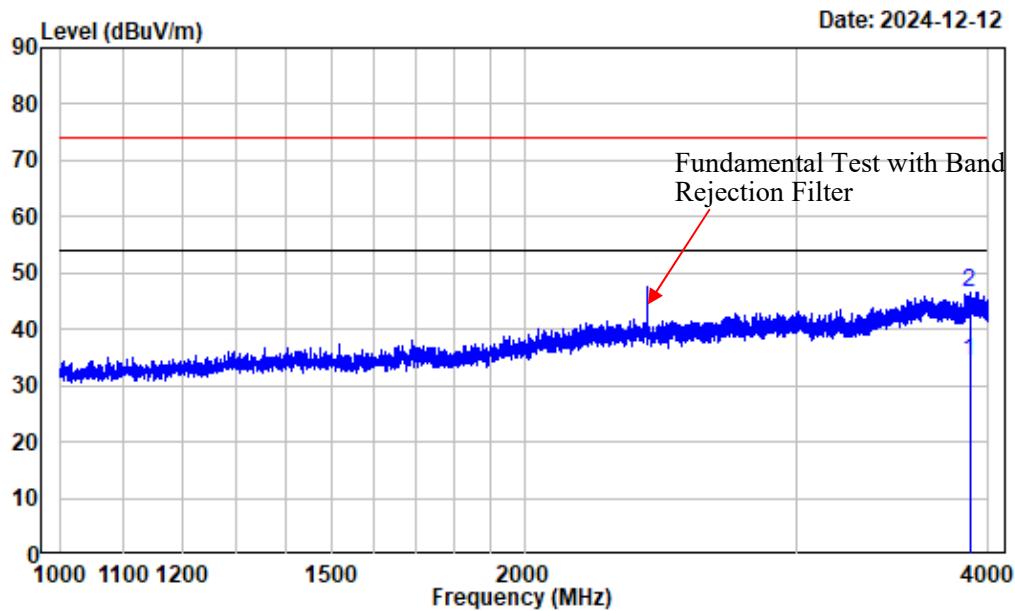
Right Band edge_Vertical



Condition : Vertical
Project Number : 2401W88467E-RF
Tester : Karl Xu
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : BT_2480

| | Freq | Read Factor | Level | Limit Level | Over Line | Limit | Remark |
|---|----------|-------------|-------|-------------|-----------|--------|--------|
| | MHz | dB/m | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 2483.500 | -10.81 | 60.42 | 49.61 | 74.00 | -24.39 | Peak |
| 2 | 2497.700 | -10.84 | 63.10 | 52.26 | 74.00 | -21.74 | Peak |

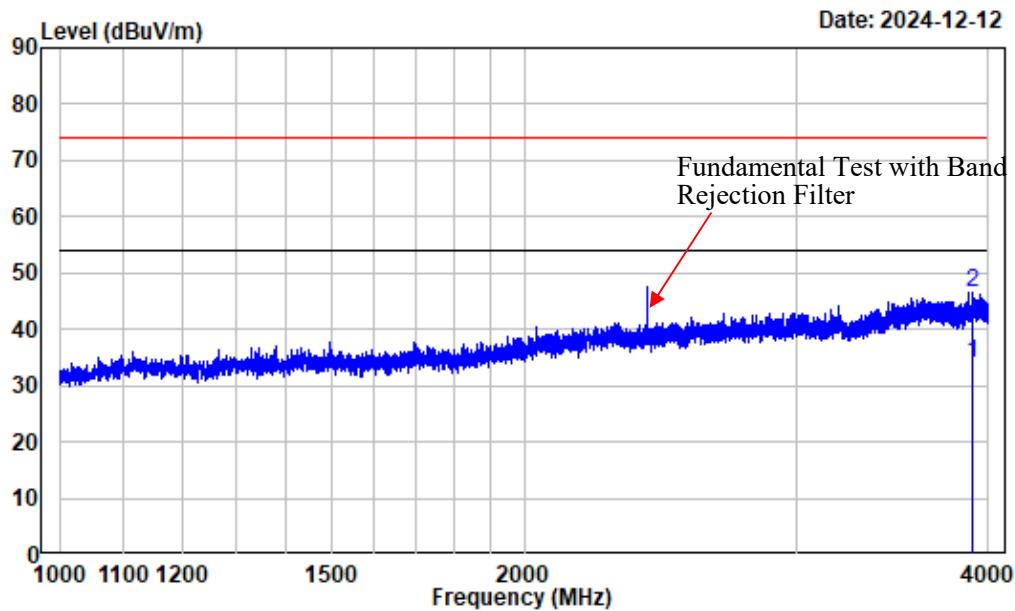
1-4GHz_Horizontal



Condition : Horizontal
Project Number : 2401W88467E-RF
Tester : Karl Xu
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak
Note : BT_2402

| Freq | Factor | Read | Limit | Over | Remark | |
|------|----------|-------|-------|-------|--------|----------------|
| | | Level | Level | Line | | |
| 1 | | MHz | dB/m | dBuV | dBuV/m | dB |
| 1 | 3890.111 | -9.97 | 44.39 | 34.42 | 54.00 | -19.58 Average |
| 2 | 3890.111 | -9.97 | 56.67 | 46.70 | 74.00 | -27.30 Peak |

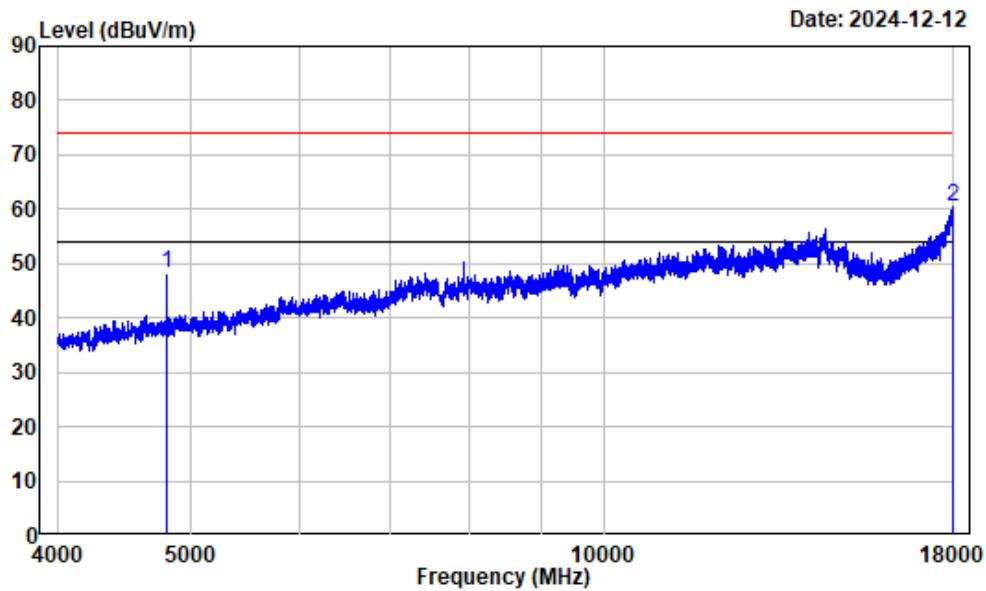
1-4GHz_Vertical



Condition : Vertical
Project Number : 2401W88467E-RF
Tester : Karl Xu
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak
Note : BT_2402

| Freq | Factor | Read | Limit | Over | Remark |
|------|----------|-------|-------|-------|----------------------|
| | | Level | Level | Line | |
| 1 | 3910.364 | -9.82 | 43.84 | 34.02 | 54.00 -19.98 Average |
| 2 | 3910.364 | -9.82 | 56.36 | 46.54 | 74.00 -27.46 Peak |

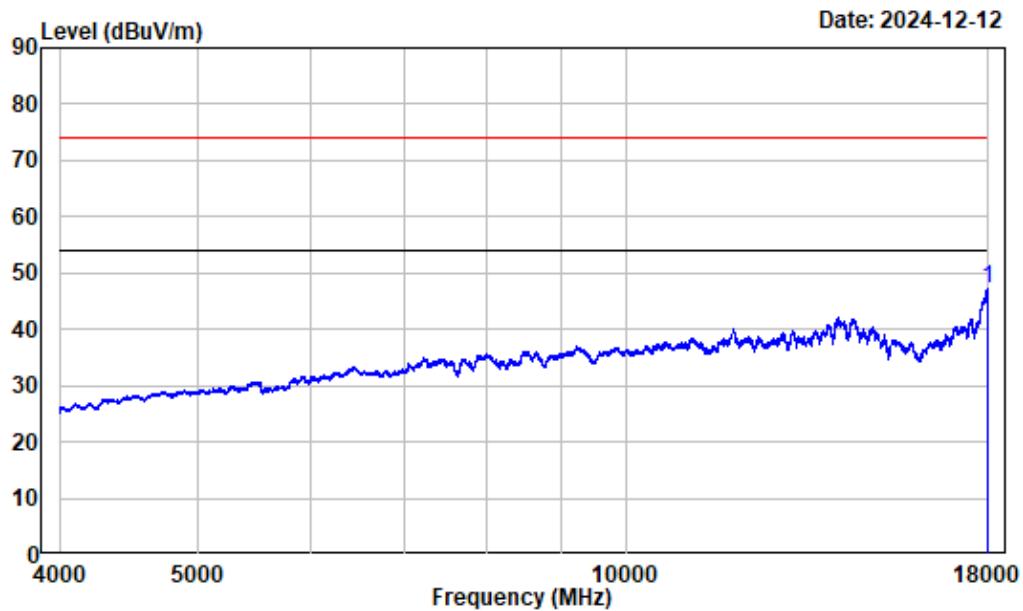
4-18GHz_Horizontal_Peak



Condition : Horizontal
Project Number : 2401W88467E-RF
Tester : Karl Xu
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : BT_2402

| | Freq | Read Factor | Limit Level | Over Line | Limit | Remark |
|---|-----------|-------------|-------------|-----------|--------|-------------|
| | MHz | dB/m | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 4804.000 | -7.97 | 56.10 | 48.13 | 74.00 | -25.87 Peak |
| 2 | 17961.500 | 13.01 | 47.56 | 60.57 | 74.00 | -13.43 Peak |

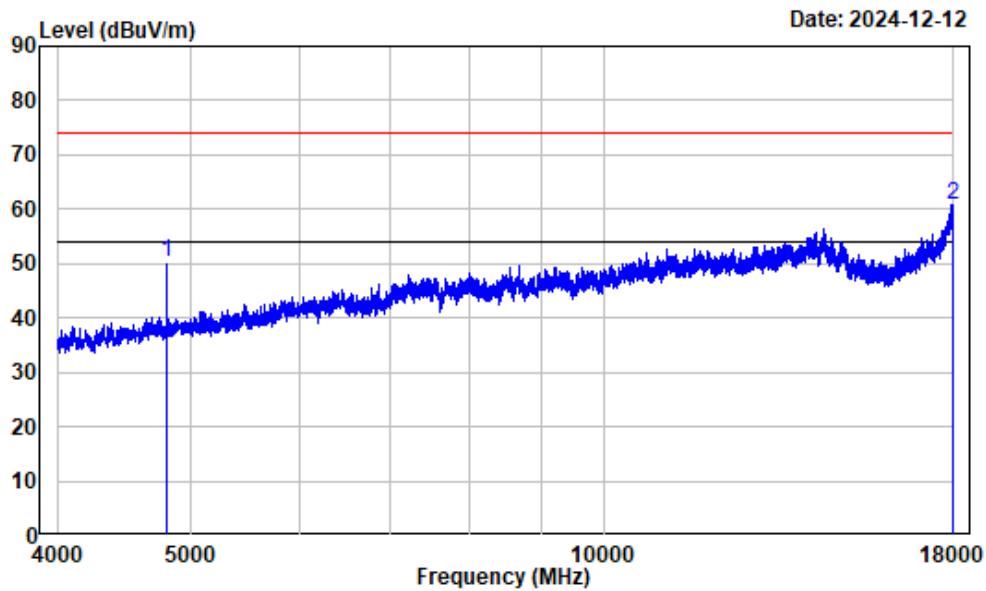
4-18GHz_Horizontal_Average



Condition : Horizontal
Project No. : 2401W88467E-RF
Tester : Karl Xu
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : BT_2402

| Freq | Factor | Read | | Limit | | Over | Remark |
|------|-----------|-------|-------|------------------|--------------------|-------|---------|
| | | MHz | dB/m | dB _{uV} | dB _{uV/m} | | |
| 1 | 17998.630 | 13.20 | 34.03 | 47.23 | 54.00 | -6.77 | Average |

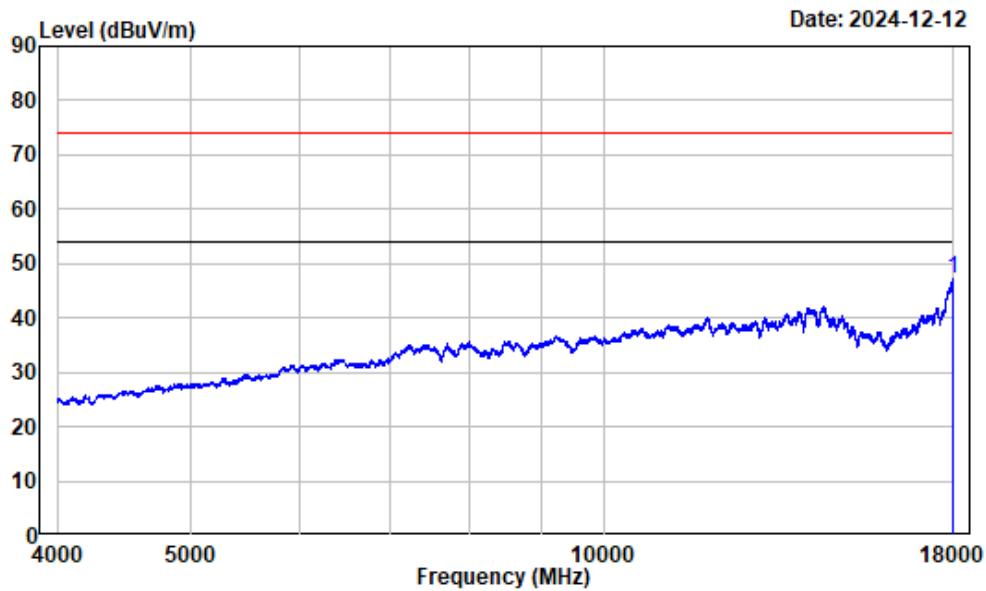
4-18GHz_Vertical_Peak



Condition : Vertical
Project Number : 2401W88467E-RF
Tester : Karl Xu
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : BT_2402

| | Freq | Read Factor | Limit Level | Over Line | Limit | Remark |
|---|-----------|-------------|-------------|-----------|--------|-------------|
| | MHz | dB/m | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 4804.000 | -7.97 | 58.23 | 50.26 | 74.00 | -23.74 Peak |
| 2 | 17994.750 | 13.17 | 47.69 | 60.86 | 74.00 | -13.14 Peak |

4-18GHz_Vertical_Average



Condition : Vertical
Project Number : 2401W88467E-RF

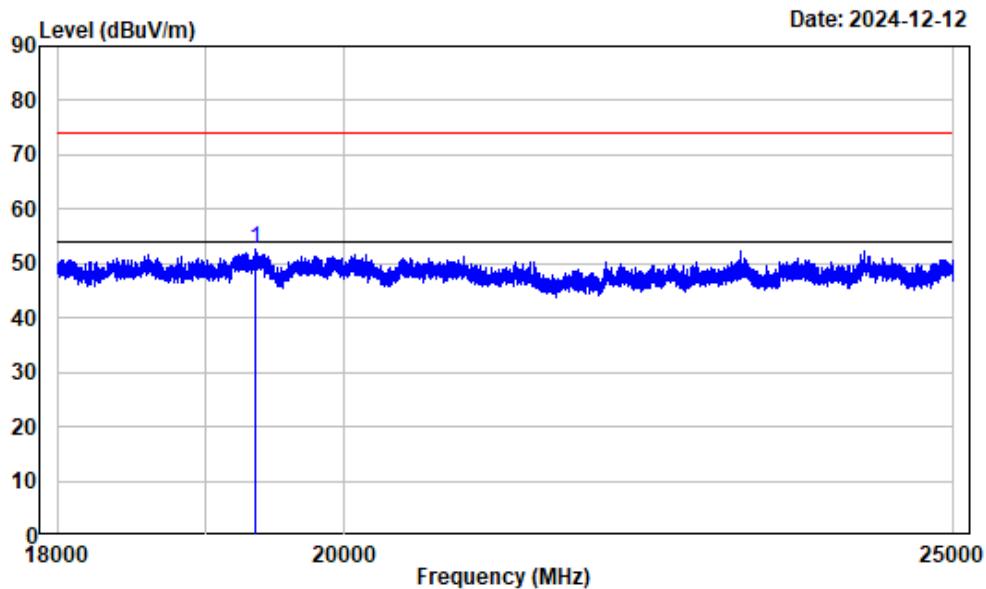
Tester : Karl Xu

Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak

Note : BT_2402

| | Freq | Read Factor | Level | Limit Level | Over Line | Over Limit | Remark |
|---|-----------|-------------|-------|-------------|-----------|------------|---------|
| | MHz | dB/m | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 17994.750 | 13.17 | 34.00 | 47.17 | 54.00 | -6.83 | Average |

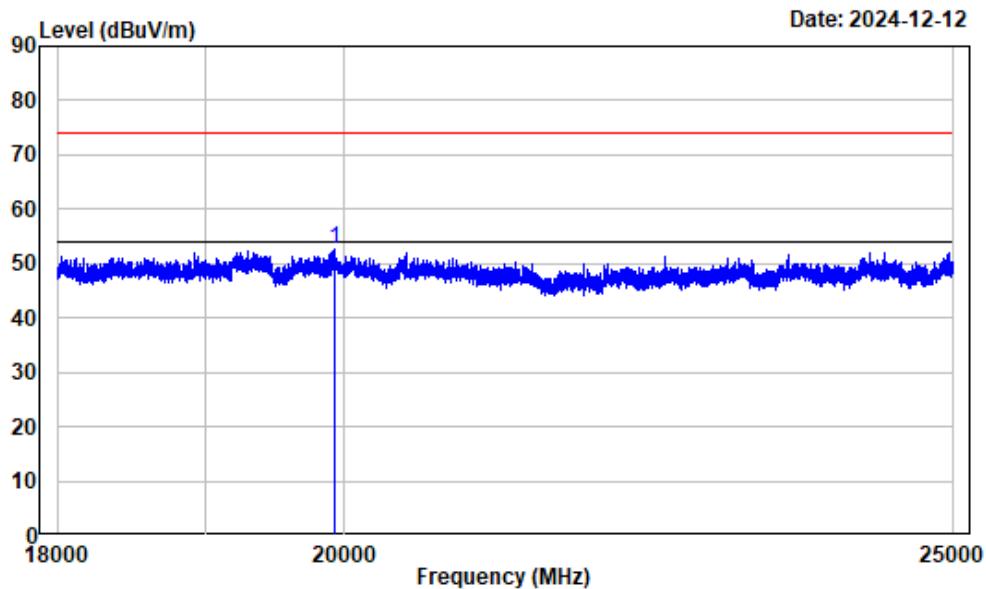
18-25GHz_Horizontal



Condition : Horizontal
Project Number : 2401W88467E-RF
Tester : Karl Xu
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : BT_2402

| | Freq | Read Factor | Level | Limit Level | Over Line | Limit | Remark |
|---|-----------|-------------|-------|-------------|-----------|--------|--------|
| | MHz | dB/m | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 19352.920 | 15.14 | 37.51 | 52.65 | 74.00 | -21.35 | Peak |

18-25GHz_Vertical



Condition : Vertical
Project Number : 2401W88467E-RF
Tester : Karl Xu
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : BT_2402

| Freq | Read Factor | Level | Limit Level | Over Line | Over Limit | Remark |
|-------------|-------------|-------|-------------|-----------|------------|--------|
| 1 19932.240 | 15.43 | 37.12 | 52.55 | 74.00 | -21.45 | Peak |

RF Conducted data

Please refer to Annex "Appendix B" for detail test data.

RF EXPOSURE EVALUATION

RF EXPOSURE

Applicable Standard

According to FCC §2.1093 and §1.1307(b) (1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D01 General RF Exposure Guidance v06.

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$

1. $f(\text{GHz})$ is the RF channel transmit frequency in GHz.
2. Power and distance are rounded to the nearest mW and mm before calculation.
3. The result is rounded to one decimal place for comparison.
4. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.

Measurement Result

For worst case:

| Mode | Frequency (MHz) | Max tune-up conducted power [#] (dBm) | Max tune-up conducted power [#] (mW) | Distance (mm) | Calculated value | Threshold (1-g SAR) | SAR Test Exclusion |
|------|-----------------|--|---|---------------|------------------|---------------------|--------------------|
| BT | 2402-2480 | 4.0 | 2.51 | 5 | 0.8 | 3.0 | Yes |
| BLE | 2402-2480 | 4.6 | 2.88 | 5 | 0.9 | 3.0 | Yes |

Result: Compliant

RSS-102 § 6.3 -SAR EXEMPTION LIMITS

Applicable Standard

According to RSS-102 Issue 6 §6.3 - SAR exemption limits. Devices operating at or below the applicable output power levels (adjusted for tune-up tolerance) specified in table 11, based on the separation distance, are exempt from SAR evaluation. The separation distance, defined as the distance between the user and/or bystander and the antenna and/or radiating element of the device or the outer surface of the device, shall be less than or equal to 20 cm for these exemption limits to apply.

Table 11: Power limits for exemption from routine SAR evaluation based on the separation distance

| Frequency (MHz) | ≤ 5 mm (mW) | 10 mm (mW) | 15 mm (mW) | 20 mm (mW) | 25 mm (mW) | 30 mm (mW) | 35 mm (mW) | 40 mm (mW) | 45 mm (mW) | > 50 mm (mW) |
|-----------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|
| ≤ 300 | 45 | 116 | 139 | 163 | 189 | 216 | 246 | 280 | 319 | 362 |
| 450 | 32 | 71 | 87 | 104 | 124 | 147 | 175 | 208 | 248 | 296 |
| 835 | 21 | 32 | 41 | 54 | 72 | 96 | 129 | 172 | 228 | 298 |
| 1900 | 6 | 10 | 18 | 33 | 57 | 92 | 138 | 194 | 257 | 323 |
| 2450 | 3 | 7 | 16 | 32 | 56 | 89 | 128 | 170 | 209 | 245 |
| 3500 | 2 | 6 | 15 | 29 | 50 | 72 | 94 | 114 | 134 | 158 |
| 5800 | 1 | 5 | 13 | 23 | 32 | 41 | 54 | 74 | 102 | 128 |

The exemption limits in table 11 are based on measurements and simulations of half-wave dipole antennas at separation distances of 5 mm to 50 mm from a flat phantom, which provides a SAR value of approximately 0.4 W/kg for 1 g of tissue.

For limb-worn devices where the 10 gram of tissue applies, the exemption limits for routine evaluation in table 11 are multiplied by a factor of 2.5.

For controlled-use devices where the 8 W/kg for 1 gram of tissue applies, the exemption limits for routine evaluation in table 11 are multiplied by a factor of 5.

When the operating frequency of the device is between two frequencies located in table 11, linear interpolation shall be applied for the applicable separation distance. If the separation distance of the device is between two distances located in table 11, linear interpolation may be applied for the applicable frequency. Alternatively, the limit corresponding to the smaller distance may be employed. For example, in case of a 7 mm separation distance, either use the exception value for a 5 mm separation distance or interpolate between the limits corresponding to 5 mm and 10 mm separation distances.

For implanted medical devices, the exemption limit for routine SAR evaluation is set at an output power of 1 mW, regardless of frequency.

The SAR levels from exempted transmitters shall be included in the compliance assessment and the determination of the TER. Detailed guidance is included in sections 7.1.8 and 8.2.2.1.

Test Result:

For worst case:

| Mode | Frequency (MHz) | Antenna Gain [#] (dBi) | Max tune-up conducted power [#] | | Max Tune-up EIRP [#] | | Distance (mm) | Exemption Limit (mW) | SAR Evaluation Exemption |
|------|-----------------|---------------------------------|--|------|-------------------------------|------|---------------|----------------------|--------------------------|
| | | | (dBm) | (mW) | (dBm) | (mW) | | | |
| BT | 2402-2480 | -0.68 | 4.0 | 2.51 | 3.32 | 2.15 | 5 | 2.97 | Yes |
| BLE | 2402-2480 | -0.68 | 4.6 | 2.88 | 3.92 | 2.47 | 5 | 2.97 | Yes |

Note 1: (2480-2450)/(3500-2450)= (3-P)/(3-2), the exemption limit of 2480MHz is P= 2.97mW

Note 2: The max tune-up conducted power[#] and antenna gain[#] were declared by the applicant

EUT PHOTOGRAPHS

Please refer to the attachment 2401W88467E-RF External photo and 2401W88467E-RF Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2401W88467E-RFA Test Setup photo.

******* END OF REPORT *******