

September 4, 2025

Trackonomy
Priyanka Jantre
214 Devcon Dr.
San Jose, CA 95112

Dear Priyanka Jantre,

Enclosed is the Electromagnetic Compatibility for the Trackonomy, FBO-3001, tested to the requirements of:

- FCC Part 15.247 (per ANSI C63.10: 2020)
- Innovation, Science, and Economic Development (ISED) Canada RSS-247 Issue 3

Thank you for using the services of Eurofins E&E Testing NA, LLC. Please contact me if you have any questions regarding these results or if Eurofins E&E can be of further service to you.

Sincerely,

Rheine Nguyen

Documentation Department
Eurofins E&E Testing NA, LLC.

Reference: WIRS135654-FCC 15.247 Rev. 4



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Report Status Sheet

| Revision | Report Date | Reason for Revision |
|----------|-------------------|--|
| Ø | May 30, 2025 | Initial Issue. |
| 1 | June 6, 2025 | Photos transferred into a Photo File document. |
| 2 | June 30, 2025 | Company Contact Updated. |
| 3 | July 1, 2025 | Configuration Form Updated. |
| 4 | September 4, 2025 | Change Company Name to Trackonomy. |

Table of Contents

| | | |
|-----|--|----|
| 1.0 | Testing Summary | 6 |
| 2.0 | Overview | 7 |
| 2.1 | Test Site | 7 |
| 2.2 | Equipment Overview and Test Configuration | 7 |
| 2.3 | Modifications to the EUT | 9 |
| 2.4 | Modifications to the Standard | 9 |
| 2.5 | Disposition of EUT | 9 |
| 3.0 | Electromagnetic Compatibility Criteria for Intentional Radiators | 10 |
| 3.1 | Antenna-Port Conducted Measurements | 10 |
| 3.2 | Radiated Spurious Emissions | 24 |

List of Tables

| | |
|--|----|
| Table 1. Antenna-Port Conducted Measurements, Duty Cycle Test Results | 11 |
| Table 2. Antenna-Port Conducted Measurements, Duty Cycle, 6dB DTS Bandwidth Test Results | 12 |
| Table 3. Antenna-Port Conducted Measurements, 99% OBW Test Results | 14 |
| Table 4. Antenna-Port Conducted Measurements, Maximum Peak Conducted Output Power Test Results | 16 |
| Table 5. Antenna-Port Conducted Measurements, Maximum Peak Power Spectral Density Test Results | 18 |
| Table 6. Antenna-Port Conducted Measurements, Test Results | 20 |
| Table 7. Antenna-Port Conducted Measurements, Band Edge Test Results | 22 |
| Table 8. Antenna-Port Conducted Measurements, Test Equipment List | 23 |
| Table 9. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – (30 MHz – 1 GHz) Test Results | 26 |
| Table 10. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – (1 – 18 GHz) Test Results | 27 |
| Table 11. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – Lower Band Edge Test Results | 28 |
| Table 12. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – (18 – 26 GHz) Test Results | 29 |
| Table 13. Radiated Spurious Emissions, BLE Mid Channel 2440 MHz – (30 MHz – 1 GHz) Test Results | 30 |
| Table 14. Radiated Spurious Emissions, BLE Mid Channel 2440 MHz – (1 – 18 GHz) Test Results | 31 |
| Table 15. Radiated Spurious Emissions, BLE Mid Channel 2440 MHz – (18 – 26 GHz) Test Results | 32 |
| Table 16. Radiated Spurious Emissions, BLE High Channel 2480 MHz – (30 MHz – 1 GHz) Test Results | 33 |
| Table 17. Radiated Spurious Emissions, BLE High Channel 2480 MHz – (1 – 18 GHz) Test Results | 34 |
| Table 18. Radiated Spurious Emissions, BLE High Channel 2480 MHz – Upper Band Edge Test Results | 35 |
| Table 19. Radiated Spurious Emissions, BLE High Channel 2480 MHz – (18 – 26 GHz) Test Results | 36 |
| Table 20. Radiated Spurious Emissions, Test Equipment | 37 |

List of Figures

| | |
|--|----|
| Figure 1. Antenna-Port Conducted Measurements, Duty Cycle: Low Channel, 2402 MHz Plot | 11 |
| Figure 2. Antenna-Port Conducted Measurements, 6dB DTS Bandwidth: Low Channel, 2402 MHz Plot | 12 |
| Figure 3. Antenna-Port Conducted Measurements, 6dB DTS Bandwidth: Mid Channel, 2440 MHz Plot | 13 |
| Figure 4. Antenna-Port Conducted Measurements, 6dB DTS Bandwidth: High Channel, 2480 MHz Plot | 13 |
| Figure 5. Antenna-Port Conducted Measurements, 99% OBW: Low Channel, 2402 MHz Plot | 14 |
| Figure 6. Antenna-Port Conducted Measurements, 99% OBW: Mid Channel, 2440 MHz Plot | 15 |
| Figure 7. Antenna-Port Conducted Measurements, 99% OBW: High Channel, 2480 MHz Plot | 15 |
| Figure 8. Antenna-Port Conducted Measurements, Maximum Peak Conducted Output Power: Low Channel, 2402 MHz Plot | 16 |
| Figure 9. Antenna-Port Conducted Measurements, Maximum Peak Conducted Output Power: Mid Channel, 2440 MHz Plot | 17 |
| Figure 10. Antenna-Port Conducted Measurements, Maximum Peak Conducted Output Power: High Channel, 2480 MHz Plot | 17 |
| Figure 11. Antenna-Port Conducted Measurements, Maximum Peak Power Spectral Density: Low Channel, 2402 MHz Plot | 18 |
| Figure 12. Antenna-Port Conducted Measurements, Maximum Peak Power Spectral Density: Mid Channel, 2440 MHz Plot | 19 |
| Figure 13. Antenna-Port Conducted Measurements, Maximum Peak Power Spectral Density: High Channel, 2480 MHz Plot | 19 |
| Figure 14. Antenna-Port Conducted Measurements, Low Channel, 2402 MHz Plot | 20 |
| Figure 15. Antenna-Port Conducted Measurements, Mid Channel, 2440 MHz Plot | 21 |
| Figure 16. Antenna-Port Conducted Measurements, High Channel, 2480 MHz Plot | 21 |
| Figure 17. Antenna-Port Conducted Measurements, Lower Band Edge: Low Channel, 2402 MHz Plot | 22 |
| Figure 18. Antenna-Port Conducted Measurements, Upper Band Edge: High Channel, 2480 MHz Plot | 23 |
| Figure 19. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – (30 MHz – 1 GHz) Plot | 26 |
| Figure 20. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – (1 – 18 GHz) Plot | 27 |

| | |
|---|----|
| Figure 21. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – Lower Band Edge Plot | 28 |
| Figure 22. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – (18 – 26 GHz) Plot | 29 |
| Figure 23. Radiated Spurious Emissions, BLE Mid Channel 2440 MHz – (30 MHz – 1 GHz) Plot..... | 30 |
| Figure 24. Radiated Spurious Emissions, BLE Mid Channel 2440 MHz – (1 – 18 GHz) Plot..... | 31 |
| Figure 25. Radiated Spurious Emissions, BLE Mid Channel 2440 MHz – (18 – 26 GHz) Plot..... | 32 |
| Figure 26. Radiated Spurious Emissions, BLE High Channel 2480 MHz – (30 MHz – 1 GHz) Plot | 33 |
| Figure 27. Radiated Spurious Emissions, BLE High Channel 2480 MHz – (1 – 18 GHz) Plot | 34 |
| Figure 28. Radiated Spurious Emissions, BLE High Channel 2480 MHz – Upper Band Edge Plot | 35 |
| Figure 29. Radiated Spurious Emissions, BLE High Channel 2480 MHz – (18 – 26 GHz) Plot | 36 |

1.0 Testing Summary

The Trackonomy, FBO-3001 was found to be compliant to the following specification(s).

- FCC Part 15.247 (per ANSI C63.10: 2020)
- RSS-247 Issue 3



Chin Ming Lui
Senior Wireless Test Engineer

Engineering Statement: The measurements shown in this report were made in accordance with the procedures indicated. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements.



Brandon Quan
Senior Wireless Test Engineer

2.0 Overview

Eurofins E&E Testing NA, LLC. was contracted by Trackonomy to perform testing on the FBO-3001, under purchase order number 2037.

This document describes the test setups, test methods, required test equipment, and the test limit criteria used to perform compliance testing of Trackonomy, FBO-3001.

The results obtained relate only to the item(s) tested.

| | |
|-----------------------------------|----------|
| Model(s) Tested: | FBO-3001 |
| Equipment Emissions Class: | B |

2.1 Test Site

All testing was performed at Eurofins E&E Testing NA, LLC., 3162 Belick St. Santa Clara, CA 95054. All equipment used in making physical determinations is accurate and bears recent traceability to the National Institute of Standards and Technology. Eurofins E&E Testing NA, LLC. has been accredited by the American Association for Laboratory Accreditation (A2LA) (Certificate #: 0591.02) in accordance with ISO/IEC 17025:2017.

2.2 Equipment Overview and Test Configuration

| | |
|--|--|
| Name of EUT/Model: | FBO-3001 |
| Additional Models Covered, but not tested: | N/A |
| Description of EUT and Intended Use: | Multifunctional IoT Platform Sensor Device. It uses multi-radio multi-protocol consumer electronics wireless communication for multi-modal situational awareness and end-to-end reporting mechanism. Data is handled through the Trackonomy Ecosystem via multiple data paths including fixed and mobile infrastructure, mesh and cloud integration. The unit is powered by one or two non-rechargeable Lithium-Metal battery(ies) with nominal system voltage of 3.0V. The unit has optional External Temperature Device. |
| Mode(s) of Operation: | BLE |
| Rationale for the selection of the Operation Mode(s): | Bluetooth is based upon module capabilities with no modifications to the module |
| Monitoring Method(s): | There is no physical or electrical indication. Unit is monitored via Data received wirelessly. |
| Configuration(s): | Test mode |
| EUT Power Requirement | |
| Voltage: | 3V |
| AC or DC | DC |
| Voltage Frequency: | Not Applicable – Battery Operated |
| Number of Phases: | N/A |

| | |
|---|--|
| Amperage: | N/A |
| Uses an external AC/DC Adapter: | No |
| Battery Configuration | Primary battery powered only. Not user replaceable. |
| Physical Description | |
| EUT Arrangement: | Secured by adhesive to vertical or horizontal flat surface |
| System with Multiple Chassis: | No |
| Size (HxWxD) mm: | 140 x 100 x 6 |
| Weight (g): | 450 |
| Emissions Class Declaration: | B |
| Other Info: | |
| Highest frequency used in device: | 2480 MHz (highest channel frequency of BLE radio) |
| EUT Software (internal to EUT): | Custom firmware by Trackonomy |
| Support Software (used to exercise EUT): | Trackonomy App by Trackonomy |

Note: EUT information was provided by Trackonomy.

Equipment Configuration List

N/A

Support Equipment List

| Ref. ID | Name/Description | Manufacturer | Model Number | *Customer Supplied Calibration Data |
|---------|------------------|--------------|--------------|-------------------------------------|
| 1 | Trackonomy APK | Trackonomy | N/A | N/A |

Ports and Cabling List

N/A

Antenna Information

| Radio | Antenna Type | Manufacturer | Model No | Frequency Range | Peak Gain |
|-------|--------------|--------------|--------------|-----------------|-----------|
| BLE | Inverted F | Trackonomy | FBO-3001-ANT | 2.4 – 2.48 GHz | 2.07 dBi |

Note: Antenna information was provided by Trackonomy. Eurofins E&E Testing NA, LLC did not test or verify the accuracy of the antenna information.

Test Configuration

The BLE radio was configured to low, middle, and high channels as follows:

| Channel | Frequency (MHz) | Advertising Power Setting |
|---------|-----------------|---------------------------|
| Low | 2402 | 7 |
| Mid | 2440 | 7 |
| High | 2480 | 7 |

2.3 Modifications to the EUT

No modifications were made to the EUT.

2.4 Modifications to the Standard

No modifications were made to the Test Standard.

2.5 Disposition of EUT

The test sample including all support equipment (if any), submitted to the Electromagnetic Compatibility Lab for testing was returned to Trackonomy upon completion of testing.

3.0 Electromagnetic Compatibility Criteria for Intentional Radiators

3.1 Antenna-Port Conducted Measurements

Test Method: ANSI C63.10: 2020; FCC KDB 558074 D01 15.247 Meas Guidance v05r02

Test Requirements: The following standards are covered under this test:

- FCC Part 15 Subpart C §15.247
- ISSED RSS-247 Issue 3 §5.2, §5.4, §5.5

Test Procedure: Testing was conducted per Section 11 of ANSI C63.10: 2020, following procedures for testing DTS devices operating in the 2400 MHz to 2483.5 MHz band. The antenna-port conducted test configuration was used, where the EUT was connected to a spectrum analyzer using a U.FL-to-SMA RF cable.

Test Results:

| | |
|------------------------------------|--|
| Test Standard: | FCC Part 15 Subpart C §15.247 (per ANSI C63.10: 2020), ISSED RSS-247 Issue 3 §5.2, §5.4, §5.5 |
| Test Name | Antenna-Port Conducted Measurements |
| Test Dates: | 04/20/2025 |
| Laboratory | Eurofins E&E Testing NA, LLC. |
| Test Engineer: | Chin Ming Lui |
| Test Results: | Compliant |
| Ambient Temperature (°C): | 23.1 |
| Relative Humidity (%): | 42 |
| Atmospheric Pressure (kPa): | 101.3 |

Test Data (FCC 15.247 & RSS-247 Antenna-Port Conducted Measurements)

| Frequency (MHz) | Channel | EUT Power Setting (dBm) | Duty Cycle | Duty Cycle Correction Factor |
|-----------------|---------|-------------------------|------------|------------------------------|
| 2402 | Low | 7 | 100% | 0 |

Table 1. Antenna-Port Conducted Measurements, Duty Cycle Test Results

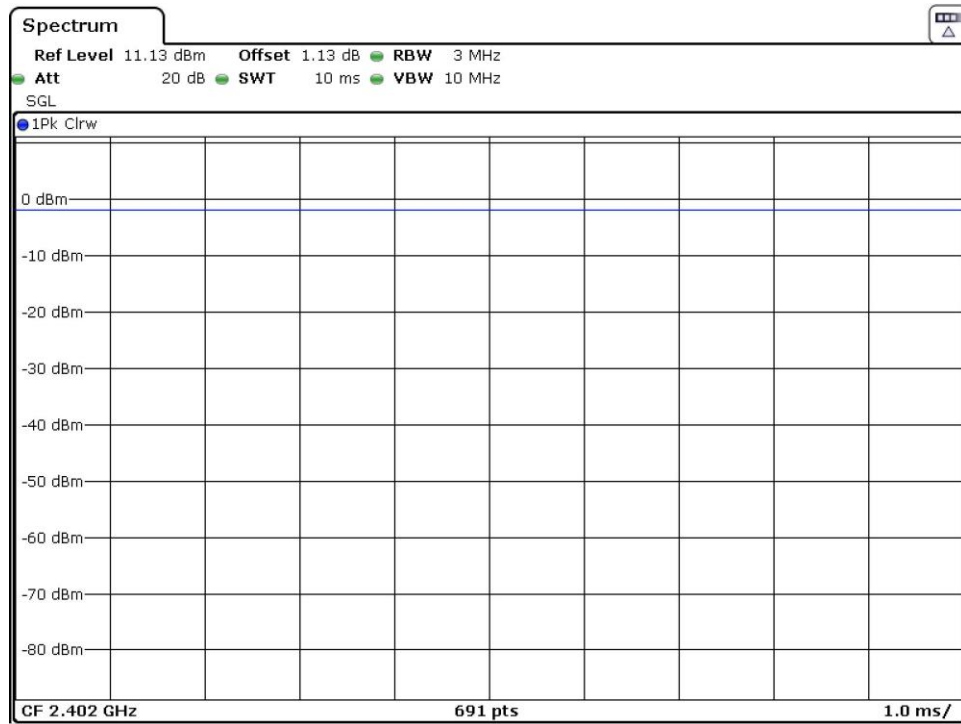


Figure 1. Antenna-Port Conducted Measurements, Duty Cycle: Low Channel, 2402 MHz Plot

| Frequency (MHz) | Channel | EUT Power Setting (dBm) | Measured 6dB BW (kHz) | Minimum 6dB BW (kHz) |
|-----------------|---------|-------------------------|-----------------------|----------------------|
| 2402 | Low | 7 | 1173.38 | ≥ 500 |
| 2440 | Mid | 7 | 1174.88 | ≥ 500 |
| 2480 | High | 7 | 1172.88 | ≥ 500 |

Table 2. Antenna-Port Conducted Measurements, Duty Cycle, 6dB DTS Bandwidth Test Results

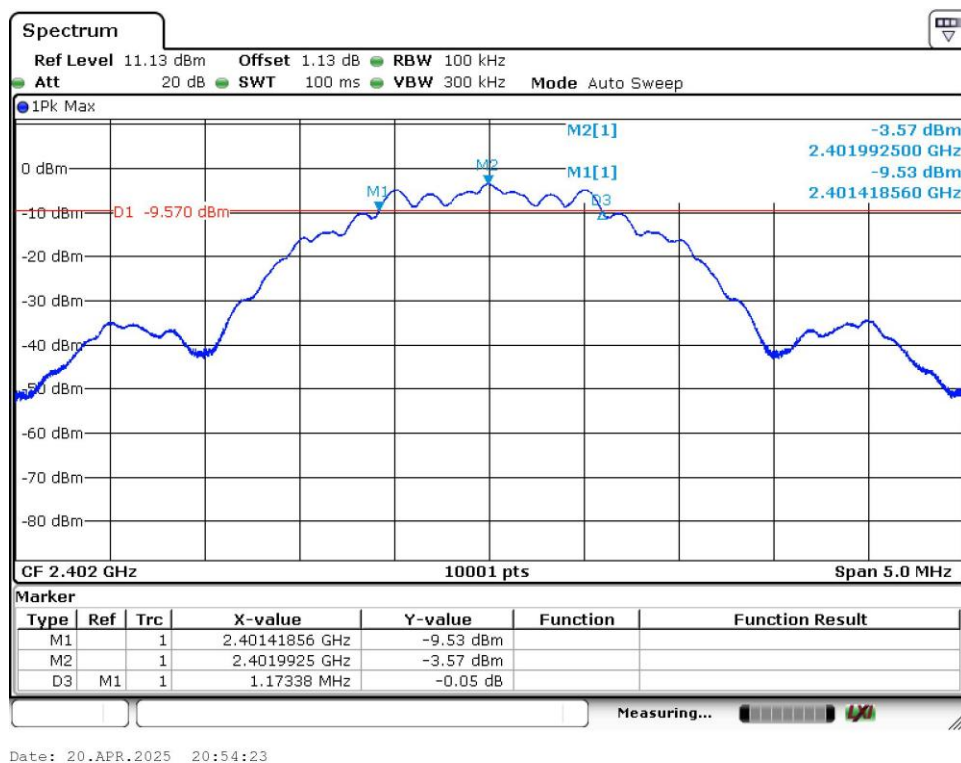


Figure 2. Antenna-Port Conducted Measurements, 6dB DTS Bandwidth: Low Channel, 2402 MHz Plot

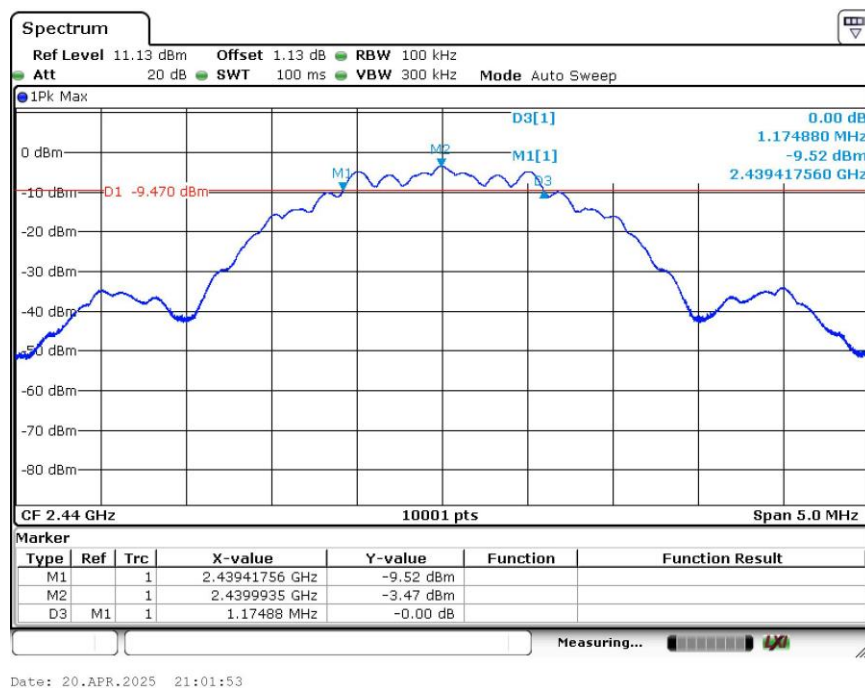


Figure 3. Antenna-Port Conducted Measurements, 6dB DTS Bandwidth: Mid Channel, 2440 MHz Plot

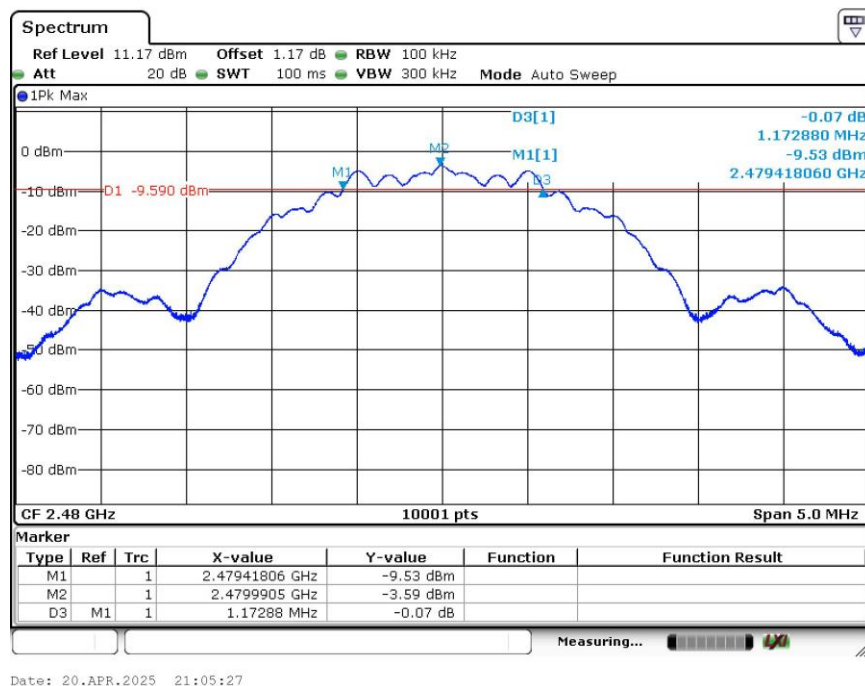
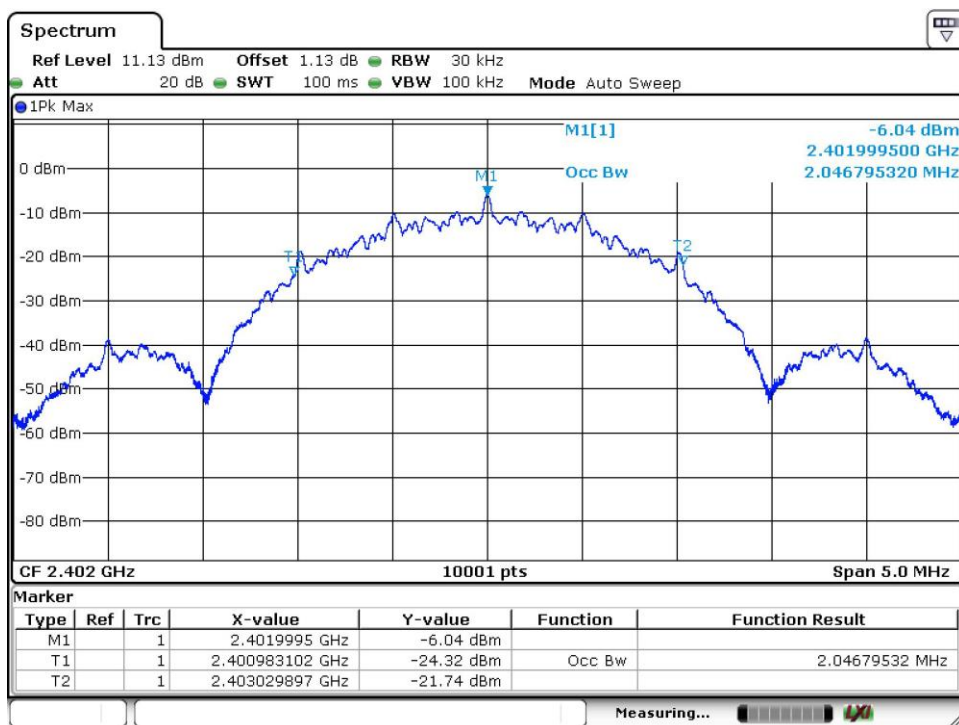


Figure 4. Antenna-Port Conducted Measurements, 6dB DTS Bandwidth: High Channel, 2480 MHz Plot

| Frequency (MHz) | Channel | EUT Power Setting (dBm) | 99% OBW (MHz) |
|-----------------|---------|-------------------------|---------------|
| 2402 | Low | 7 | 2.0468 |
| 2440 | Mid | 7 | 2.0478 |
| 2480 | High | 7 | 2.0493 |

Table 3. Antenna-Port Conducted Measurements, 99% OBW Test Results



Date: 20.APR.2025 22:12:00

Figure 5. Antenna-Port Conducted Measurements, 99% OBW: Low Channel, 2402 MHz Plot

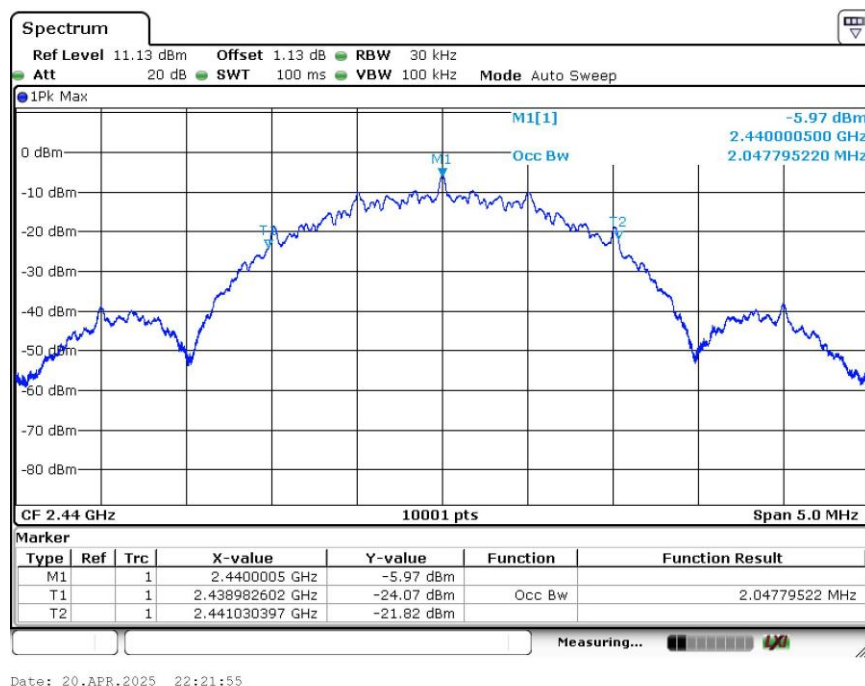


Figure 6. Antenna-Port Conducted Measurements, 99% OBW: Mid Channel, 2440 MHz Plot

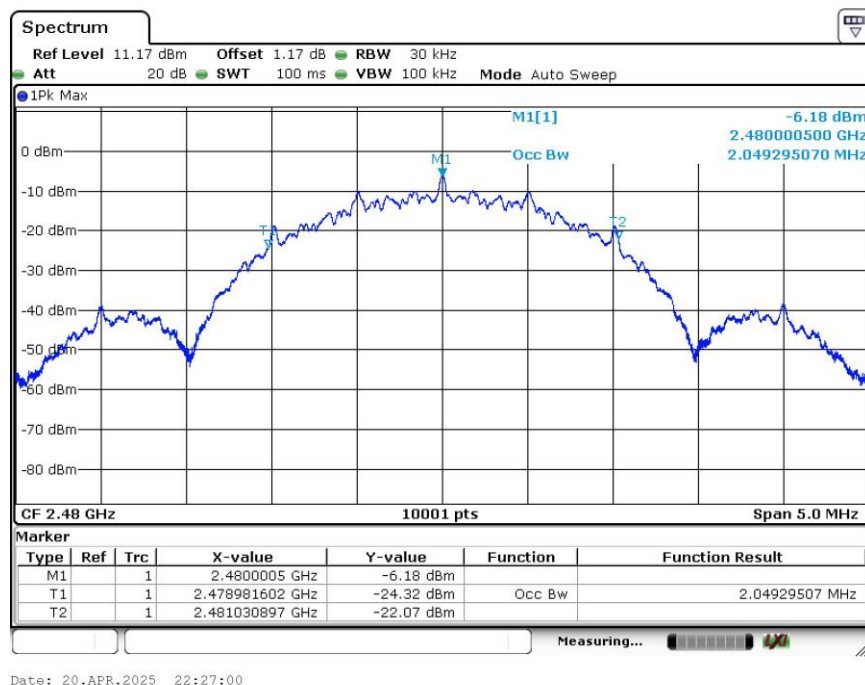


Figure 7. Antenna-Port Conducted Measurements, 99% OBW: High Channel, 2480 MHz Plot

| Frequency (MHz) | Channel | EUT Power Setting (dBm) | Cable Loss (dB) | Measured Max Peak Conducted Output Power (dBm) | Max Peak Conducted Output Power Limit (dBm) |
|-----------------|---------|-------------------------|-----------------|--|---|
| 2402 | Low | 7 | 0.90 | -1.08 | 30 |
| 2440 | Mid | 7 | 0.90 | -0.98 | 30 |
| 2480 | High | 7 | 0.90 | -1.17 | 30 |

Table 4. Antenna-Port Conducted Measurements, Maximum Peak Conducted Output Power Test Results

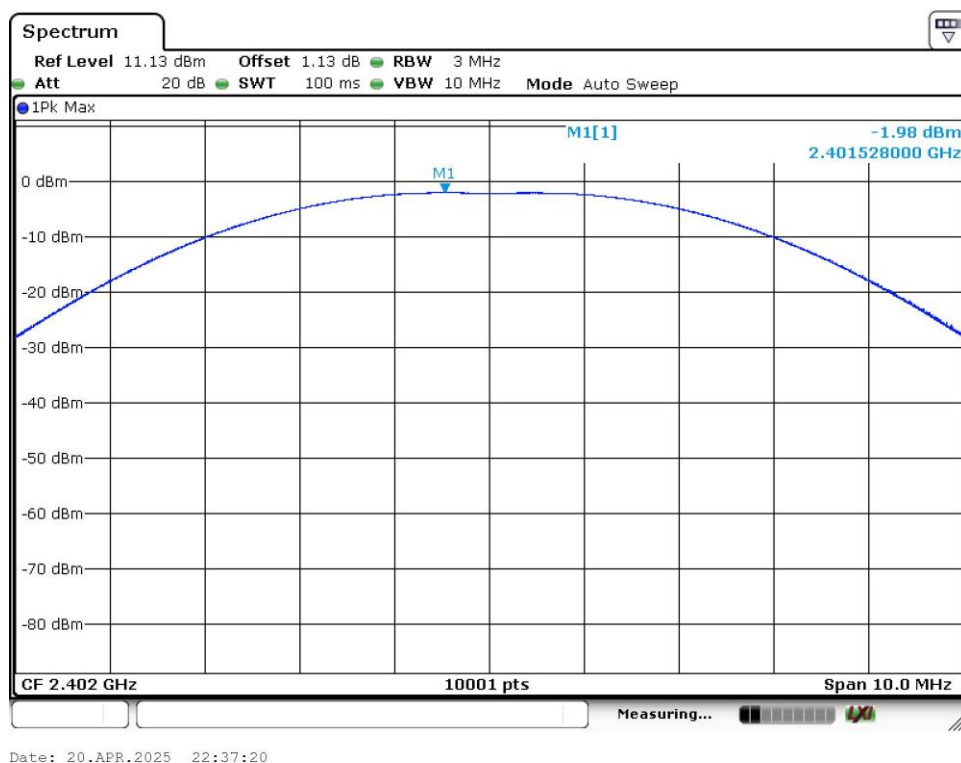


Figure 8. Antenna-Port Conducted Measurements, Maximum Peak Conducted Output Power: Low Channel, 2402 MHz Plot

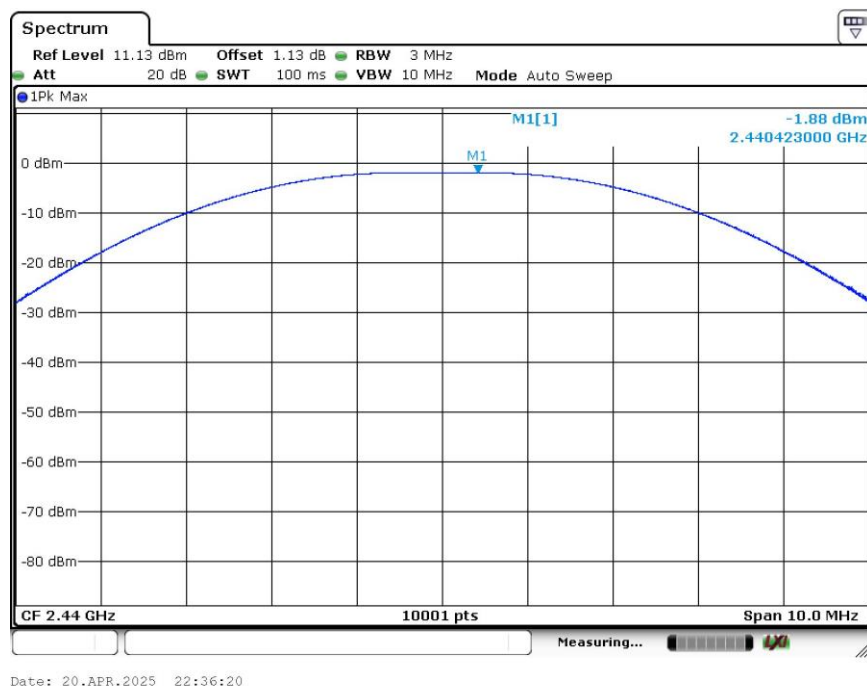


Figure 9. Antenna-Port Conducted Measurements, Maximum Peak Conducted Output Power: Mid Channel, 2440 MHz Plot

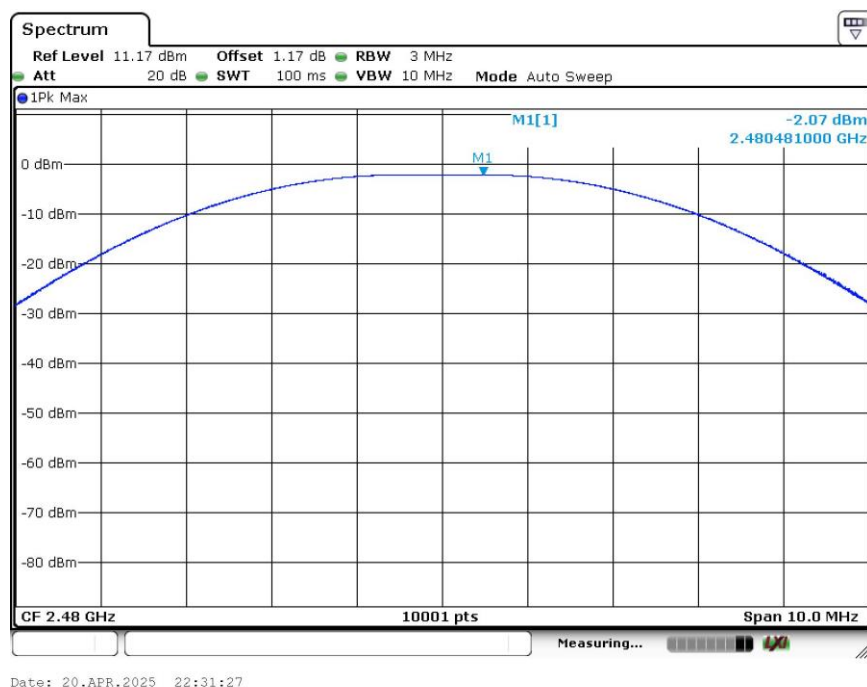


Figure 10. Antenna-Port Conducted Measurements, Maximum Peak Conducted Output Power: High Channel, 2480 MHz Plot

| Frequency (MHz) | Channel | EUT Power Setting (dBm) | Cable Loss (dB) | Measured Max Peak Conducted Power Spectral Density (dBm / 3 kHz) | Max Peak Conducted Power Spectral Density Limit (dBm / 3 kHz) |
|-----------------|---------|-------------------------|-----------------|--|---|
| 2402 | Low | 7 | 0.90 | -5.13 | 8 |
| 2440 | Mid | 7 | 0.90 | -5.07 | 8 |
| 2480 | High | 7 | 0.90 | -5.26 | 8 |

Table 5. Antenna-Port Conducted Measurements, Maximum Peak Power Spectral Density Test Results

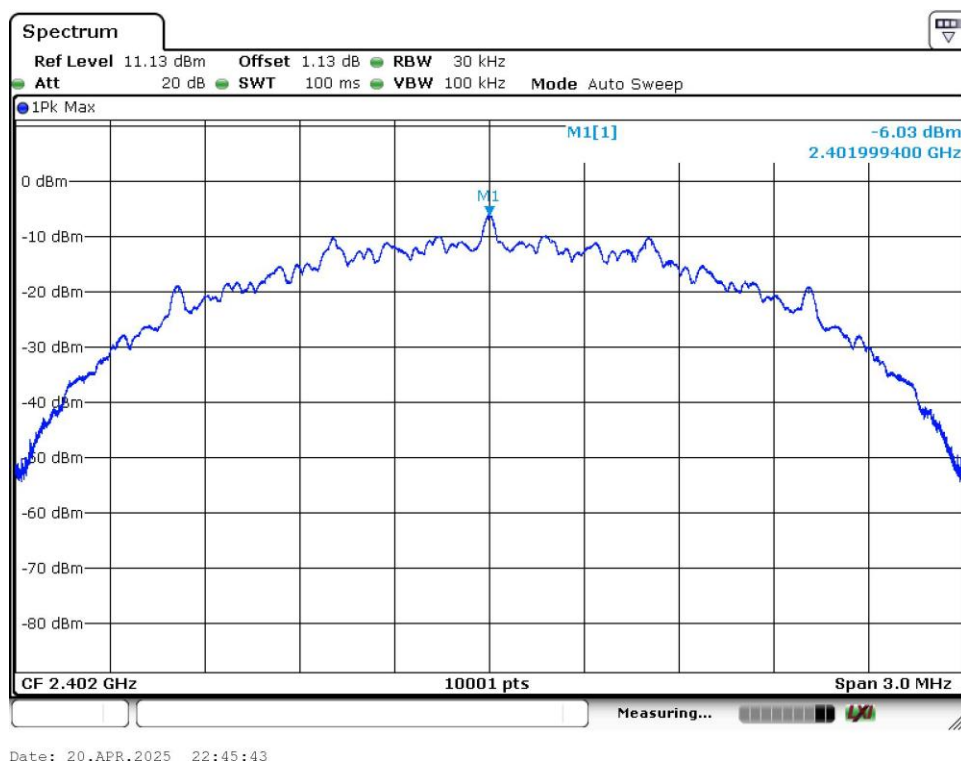


Figure 11. Antenna-Port Conducted Measurements, Maximum Peak Power Spectral Density: Low Channel, 2402 MHz Plot

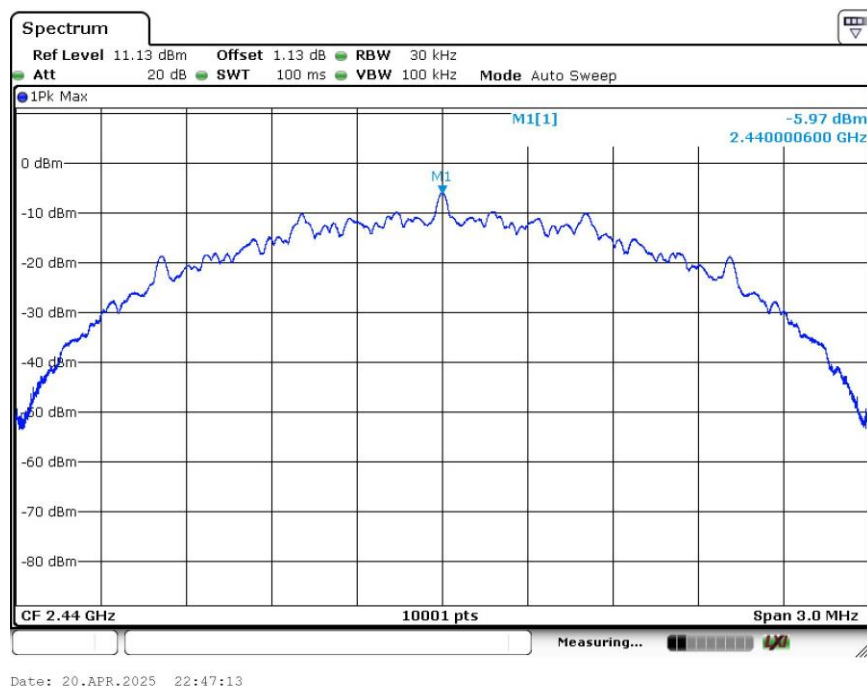


Figure 12. Antenna-Port Conducted Measurements, Maximum Peak Power Spectral Density: Mid Channel, 2440 MHz Plot

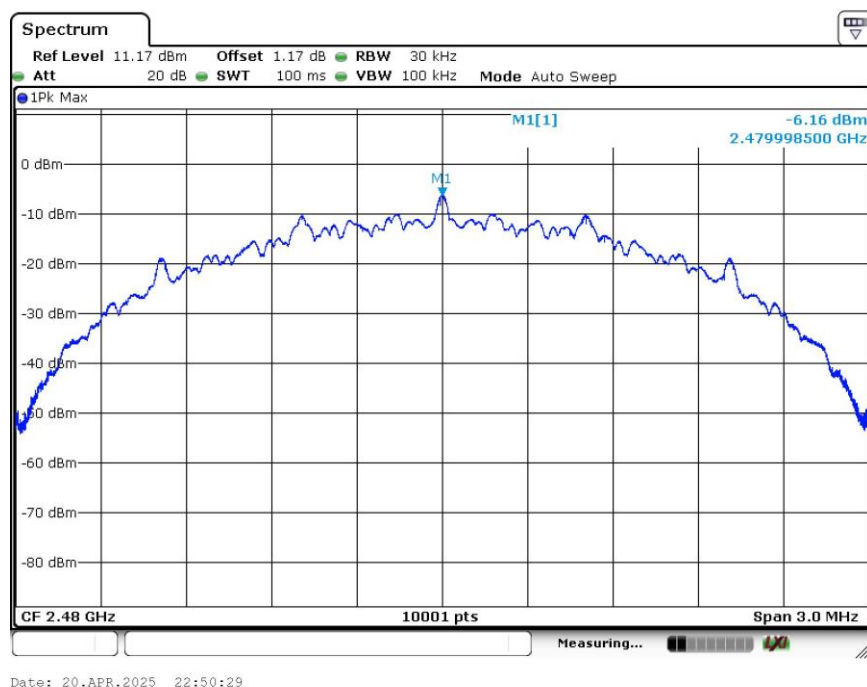


Figure 13. Antenna-Port Conducted Measurements, Maximum Peak Power Spectral Density: High Channel, 2480 MHz Plot

| Frequency (MHz) | Channel | EUT Power Setting (dBm) | Fundamental Peak (dBm) | Max Spurious Emission Freq (MHz) | Max Spurious Emission Level (dBm) | Emissions Limit (dBm) |
|-----------------|---------|-------------------------|------------------------|----------------------------------|-----------------------------------|-----------------------|
| 2402 | Low | 7 | -4.58 | 7204.36 | -37.23 | -24.580 |
| 2440 | Mid | 7 | -4.47 | 7321.4 | -36.84 | -24.470 |
| 2480 | High | 7 | -4.68 | 7441.57 | -36.48 | -24.680 |

Table 6. Antenna-Port Conducted Measurements, Test Results

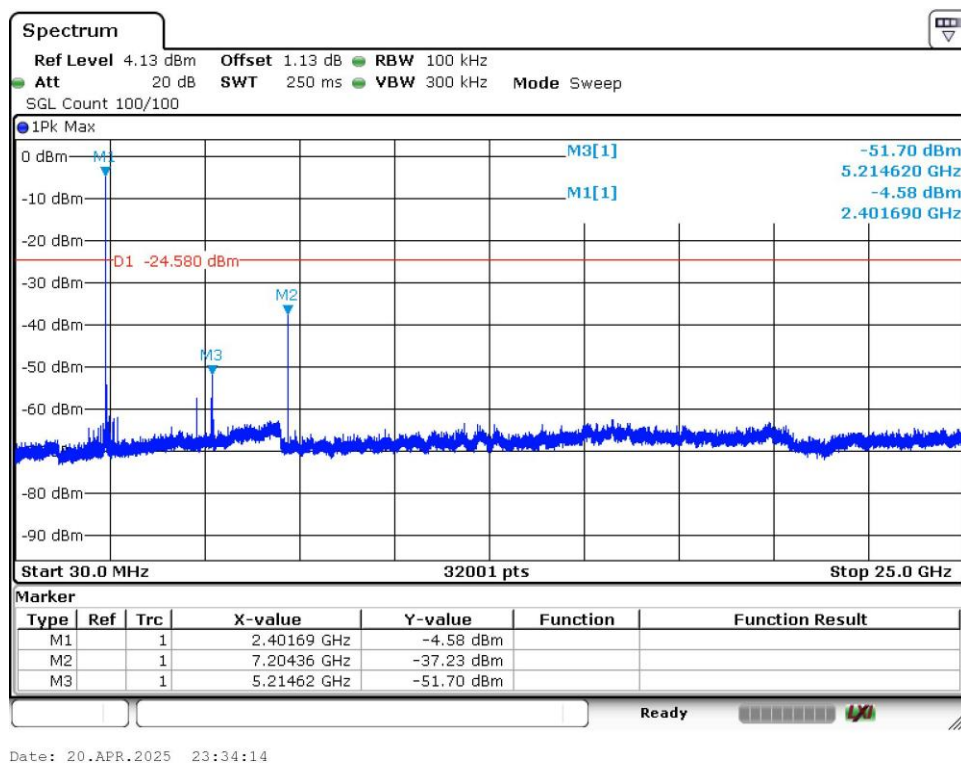


Figure 14. Antenna-Port Conducted Measurements, Low Channel, 2402 MHz Plot

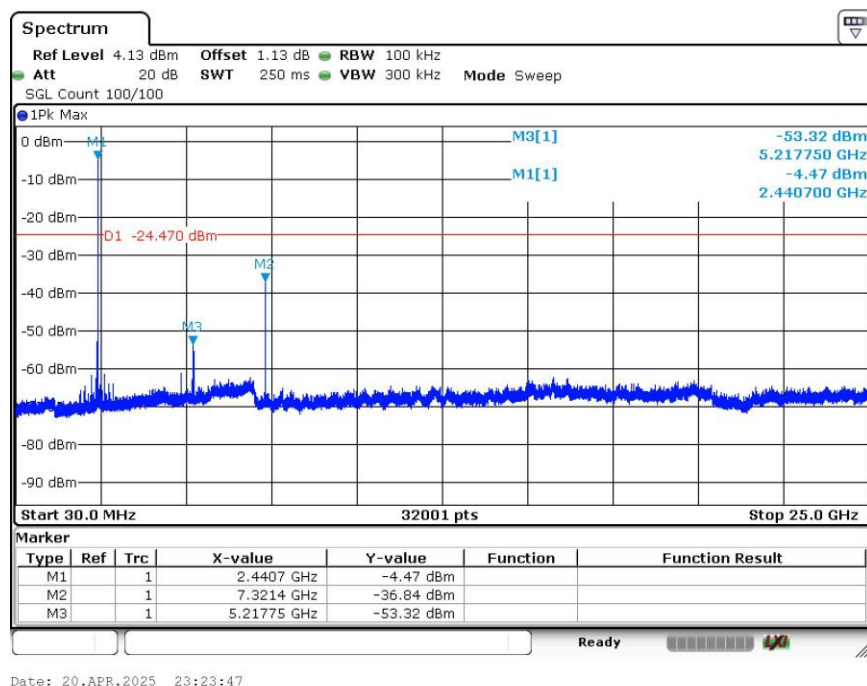


Figure 15. Antenna-Port Conducted Measurements, Mid Channel, 2440 MHz Plot

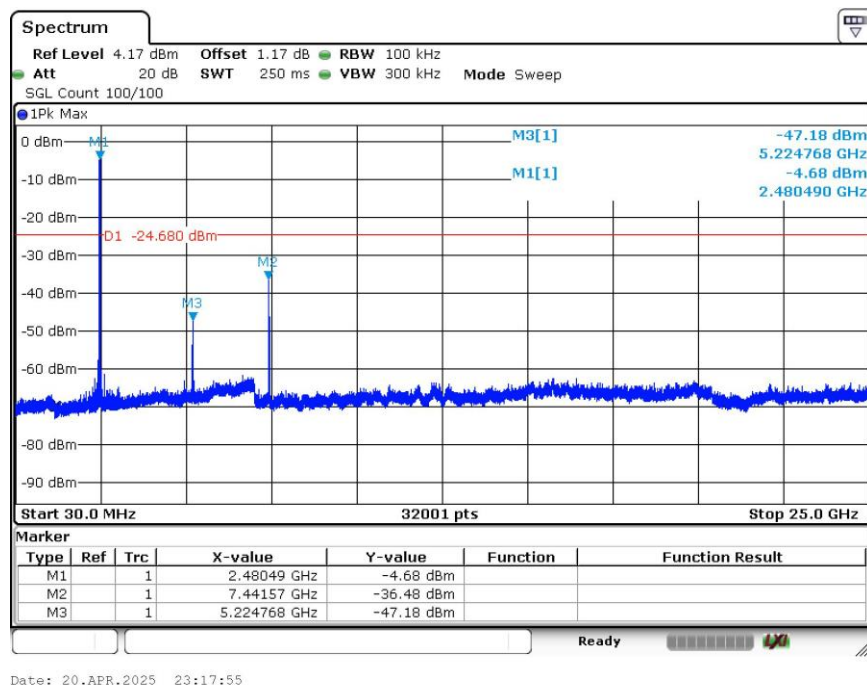
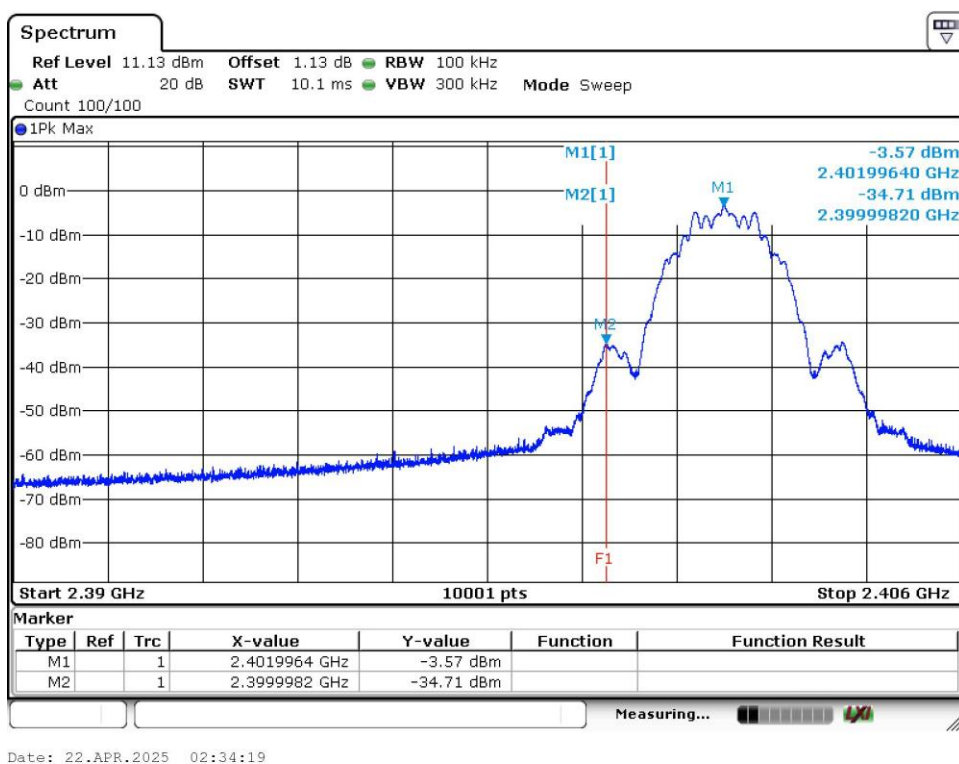


Figure 16. Antenna-Port Conducted Measurements, High Channel, 2480 MHz Plot

| Frequency (MHz) | Channel | EUT Power Setting (dBm) | Fundamental Peak (dBm) | Unwanted Emission Level (dBm) | Peak-to-Unwanted Emission Delta (Δ) (dBc) | Limit (dBc) |
|-----------------|---------|-------------------------|------------------------|-------------------------------|--|-------------|
| 2402 | Low | 7 | -3.57 | -34.71 | 31.14 | ≥ 20 |
| 2480 | High | 7 | -3.77 | -57.19 | 53.42 | ≥ 20 |

Table 7. Antenna-Port Conducted Measurements, Band Edge Test Results

Figure 17. Antenna-Port Conducted Measurements, Lower Band Edge: Low Channel, 2402 MHz Plot

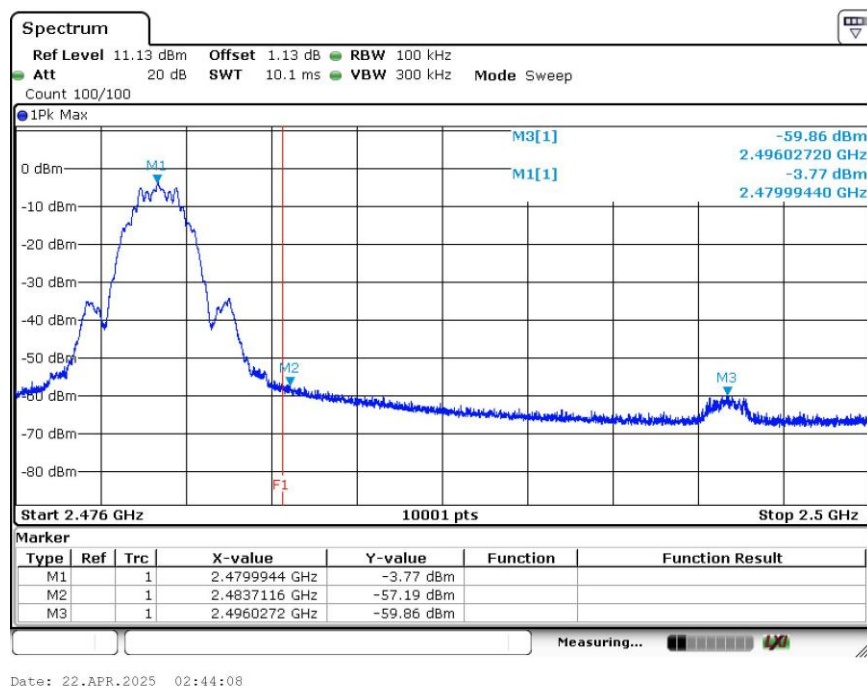


Figure 18. Antenna-Port Conducted Measurements, Upper Band Edge: High Channel, 2480 MHz Plot

Calibrated test equipment utilized during testing was maintained in a current state of calibration per the requirements of ISO/IEC 17025:2017.

| Test Name: FCC 15.247 & RSS-247 Antenna-Port Conducted Measurements | | | Test Date(s): 04/20/2025 | | |
|--|-----------------|-----------------|--------------------------|---------------|--------------|
| MET Asset # | Equipment | Manufacturer | Model | Last Cal Date | Cal Due Date |
| 1S3812 | Signal Analyzer | Rohde & Schwarz | FSV | 01/10/2025 | 01/10/2027 |
| Note 1: Functionally tested equipment is verified using calibrated instrumentation at the time of testing. | | | | | |
| Note 2: Latest NSA and VSWR data available upon request. | | | | | |

Table 8. Antenna-Port Conducted Measurements, Test Equipment List

3.2 Radiated Spurious Emissions

Test Method: ANSI C63.10: 2020; FCC KDB 558074 D01 15.247 Meas Guidance v05r02

Test Requirement(s): The following standards specified below are covered in the scope of this section of the test report:

- FCC Part 15 Subpart C §15.247
- RSS-247 Issue 3

§15.209 (a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency (MHz) | Field Strength (dBμV/m) | Measurement Distance (m) |
|-----------------|-------------------------|--------------------------|
| 30 - 88 | 40 | 3 |
| 88 - 216 | 43.5 | 3 |
| 216 - 960 | 46 | 3 |
| Above 960 | 54 | 3 |

RSS-Gen: Refer to Section 8.9 Transmitter emission limits Table 5 – General field strength limits at frequencies above 30 MHz

Sample Calculation for Distance Correction factor (DCF) measurement:

$$F_d = 20 \cdot \log_{10} (D_m/D_s)$$

where:

$$F_d = \text{Distance Factor in dB}$$

$$D_m = \text{Measurement Distance in meters}$$

$$D_s = \text{Specification Distance in meters}$$

Sample formula for calculating the Corrected Data for the Radiated Emissions Measurements:

| Frequency (MHz) | Antenna Polarity | EUT Azimuth (Degrees) | Antenna Height (cm) | Uncorrected Amplitude (dBμV) | ACF (dB/m) (+) | Pre Amp Gain (dB)(-) | CBL (dB) (+) | DCF (dB) (+) | Corrected Amplitude (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|-----------------|------------------|-----------------------|---------------------|------------------------------|----------------|----------------------|--------------|--------------|------------------------------|----------------|-------------|
| 249.99 | V | 359.9 | 240.7 | 55.46 | 11.4 | 28.335 | 0 | 0 | 38.505 | 47 | -8.495 |

$$\begin{aligned} \text{Corrected Amplitude (dBμV/m)} &= \text{Uncorrected Amplitude (dBμV)} + \text{ACF (dB/m)} - \text{Preamp Gain (dB)} + \text{CBL (dB)} + \text{DCF (dB)} \\ &= 55.46 + 11.4 - 28.335 + 0 + 0 = \mathbf{38.505} \end{aligned}$$

Test Procedure:

The method of testing, test conditions, and test procedures of ANSI C63.10: 2020 were used in addition to FCC KDB 558074 D01 15.247 Meas Guidance v05r02. Any measured frequency that exhibits a margin of compliance that is less than 3 dB below the specification limit is marked. Eurofins E&E recommends that every emission measured, has at least a 3 dB margin to allow for deviations in the emission characteristics that may occur during the production process.

For emissions between 30 MHz and 1000 MHz, the EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber a biconilog antenna was located 3m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1 m and 4 m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. Unless otherwise specified, measurements were made using a quasi-peak detector with a 120 kHz resolution bandwidth.

For emissions between 1 GHz and 18 GHz, a double ridged guide horn was located 3 m from the EUT on an adjustable mast. The EUT as placed on a non-metallic table 150 cm above the ground plane inside a semi-anechoic chamber. A pre-scan was performed and used to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied depending on the geometry of the EUT. In order to ensure maximized emissions, the horn antenna was positioned both vertically and horizontally. Unless otherwise specified, measurements were made using a peak and average detector with a 1 MHz resolution bandwidth.

For emission between 18 GHz and 26 GHz, a high frequency standard gain horn antenna was located 3 m from the EUT on an adjustable mast. The EUT as placed on a non-metallic table 150 cm above the ground plane inside a semi-anechoic chamber. A pre-scan was performed and used to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT was rotated, and the antenna height was varied depending on the geometry of the EUT. In order to ensure maximized emissions, the horn antenna was positioned both vertically and horizontally. Unless otherwise specified, measurements were made using a peak and average detector with a 1 MHz resolution bandwidth.

Due to the size of the EUT, pre-liminary measurements were performed with the EUT rotated on different axis (X, Y, Z). The worst-case data is presented in this report.

Test Software Used:

Nexio BAT-EMC was used to perform this test.

Test Results:

| | |
|-----------------------|---|
| Test Standard: | FCC Part 15.247 (Per FCC KDB 558074 D01 15.247 Meas Guidance v05r02; ANSI C63.10-2020) RSS-247 Issue 3 |
| Test Name | Radiated Spurious Emissions |
| Test Dates: | 04/12/2025 – 04/19/2025 |
| Laboratory | Eurofins E&E Testing NA, LLC. |
| Test Engineer: | Chin Ming Lui |
| Test Results: | Compliant |

Test Data (FCC 15.247 & RSS-247 Radiated Spurious Emissions)

BLE Low Channel 2402 MHz

QuasiPeak (PASS)

| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (m) | Azimuth (°) | Pol. | RBW (Hz) | Meas.Time (s) | Correction (dB) |
|-----------------|----------------|----------------|-------------|------------|-------------|------------|----------|---------------|-----------------|
| 35.805 | 15.822 | 40 | -24.178 | 2.362 | 168 | Vertical | 120000 | 0.1 | -10.183 |
| 54.797 | 18.328 | 40 | -21.672 | 4 | 338 | Vertical | 120000 | 0.1 | -16.78 |
| 57.126 | 21.762 | 40 | -18.238 | 1.465 | 7 | Vertical | 120000 | 0.1 | -16.516 |
| 137.045 | 11.02 | 43.5 | -32.48 | 3.483 | 96 | Vertical | 120000 | 0.1 | -9.592 |
| 188.076 | 19.878 | 43.5 | -23.622 | 2.699 | 233 | Horizontal | 120000 | 0.1 | -12.706 |
| 348.559 | 26.91 | 46 | -19.09 | 1.58 | 219 | Horizontal | 120000 | 0.1 | -6.596 |

Table 9. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – (30 MHz – 1 GHz) Test Results

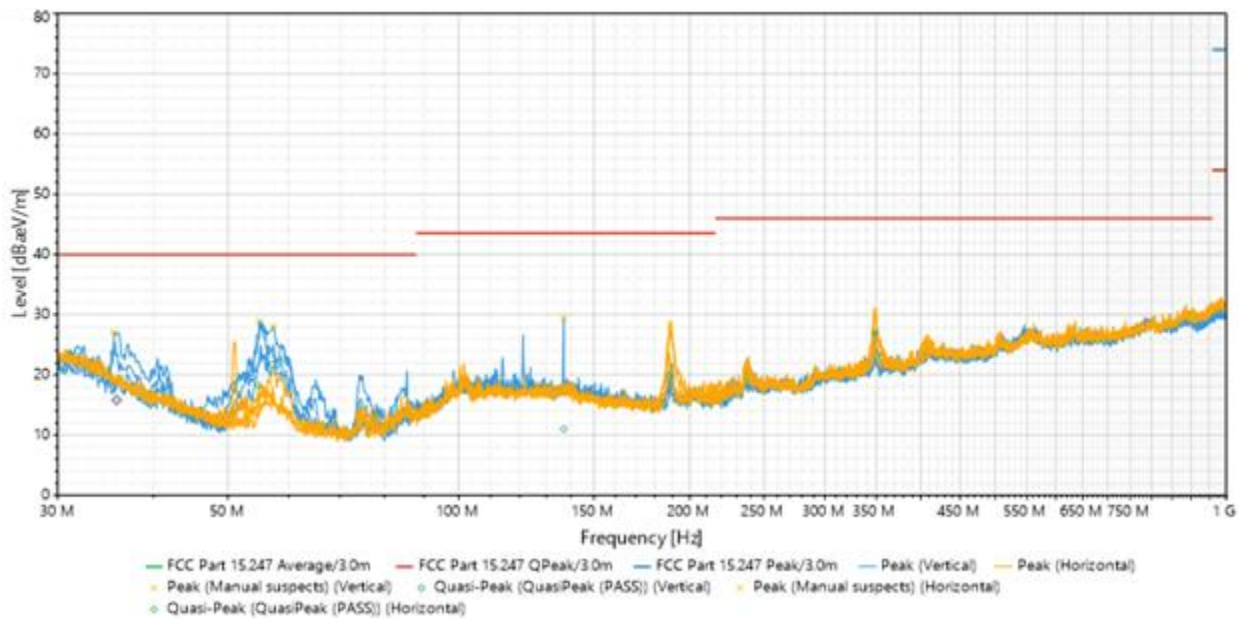


Figure 19. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – (30 MHz – 1 GHz) Plot

| Frequency (MHz) | Source | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (m) | Azimuth (°) | Pol. | RBW (Hz) | Meas. Time (s) | Correction (dB) |
|-----------------|----------------|----------------|----------------|-------------|------------|-------------|------------|----------|----------------|-----------------|
| 15618.2 | Peak (PASS) | 53.109 | 74 | -20.891 | 3.748 | 137 | Vertical | 1000000 | 0.1 | 53.109 |
| 15618.2 | Average (PASS) | 39.411 | 54 | -14.589 | 3.748 | 137 | Vertical | 1000000 | 0.1 | 6.989 |
| 15737.6 | Peak (PASS) | 53.094 | 74 | -20.906 | 2.849 | 249 | Horizontal | 1000000 | 0.1 | 53.094 |
| 15737.6 | Average (PASS) | 39.076 | 54 | -14.924 | 2.849 | 249 | Horizontal | 1000000 | 0.1 | 6.855 |

Table 10. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – (1 – 18 GHz) Test Results

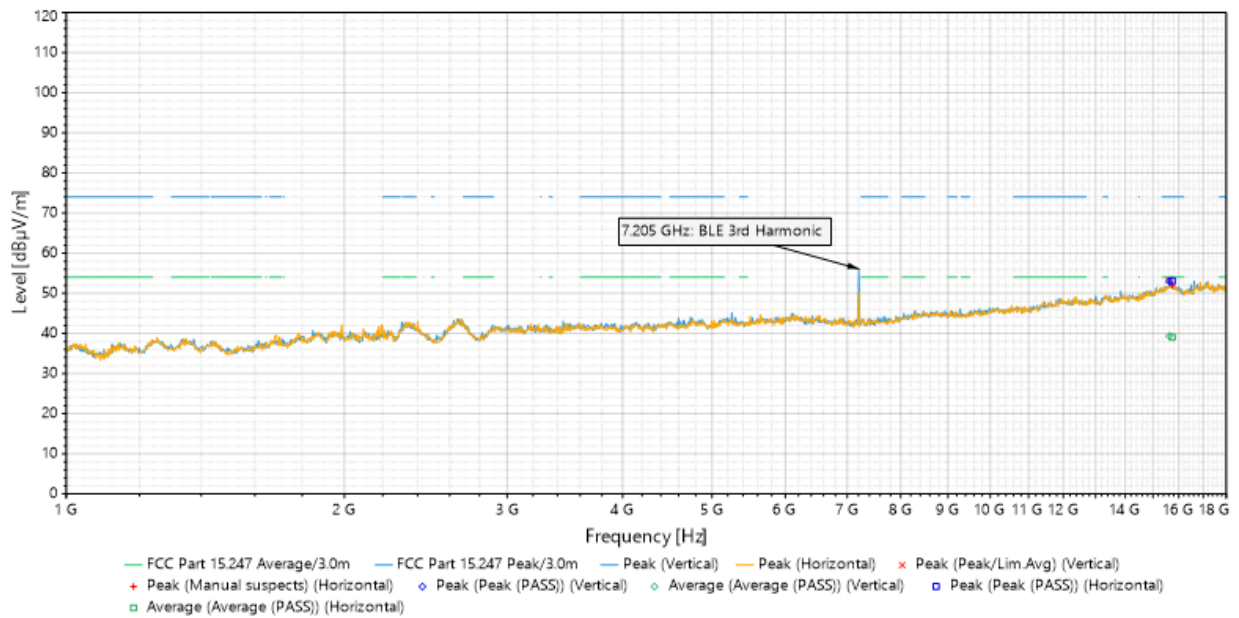


Figure 20. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – (1 – 18 GHz) Plot

Note: BLE 3rd Harmonic at 7.205 GHz for both vertical and horizontal polarizations do not fall within any restricted band per FCC §15.205 Restricted bands of operation and RSS-Gen Issue 5 section 8.10 Restricted frequency bands. Therefore, according to §15.247(d) and RSS-247 Section 5.5, attenuation below the general limits specified in §15.209(a) and RSS-Gen, respectively, is not required.

| Frequency (MHz) | Source | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (m) | Azimuth (°) | Pol. | RBW (Hz) | Meas. Time (s) | Correction (dB) |
|-----------------|----------------|----------------|----------------|-------------|------------|-------------|------------|----------|----------------|-----------------|
| 2313.82 | Peak (PASS) | 57.702 | 74 | -16.298 | 1 | 87 | Horizontal | 1000000 | 0.1 | 35.571 |
| 2313.82 | Average (PASS) | 40.591 | 54 | -13.409 | 1 | 87 | Horizontal | 1000000 | 0.1 | 35.571 |
| 2323.6 | Peak (PASS) | 58.106 | 74 | -15.894 | 1.58 | 104 | Vertical | 1000000 | 0.1 | 35.668 |
| 2323.6 | Average (PASS) | 40.742 | 54 | -13.258 | 1.58 | 104 | Vertical | 1000000 | 0.1 | 35.668 |
| 2370.22 | Peak (PASS) | 58.161 | 74 | -15.839 | 3.077 | 268 | Vertical | 1000000 | 0.1 | 35.95 |
| 2370.22 | Average (PASS) | 41.071 | 54 | -12.929 | 3.077 | 268 | Vertical | 1000000 | 0.1 | 35.95 |
| 2380.16 | Peak (PASS) | 57.758 | 74 | -16.242 | 3.26 | 0 | Horizontal | 1000000 | 0.1 | 36.146 |
| 2380.16 | Average (PASS) | 41.138 | 54 | -12.862 | 3.26 | 0 | Horizontal | 1000000 | 0.1 | 36.146 |
| 2380.49 | Peak (PASS) | 58.148 | 74 | -15.852 | 1.241 | 200 | Vertical | 1000000 | 0.1 | 35.986 |
| 2380.49 | Average (PASS) | 40.976 | 54 | -13.024 | 1.241 | 200 | Vertical | 1000000 | 0.1 | 35.986 |
| 2387.56 | Peak (PASS) | 57.941 | 74 | -16.059 | 3.638 | 19 | Horizontal | 1000000 | 0.1 | 36.159 |
| 2387.56 | Average (PASS) | 41.116 | 54 | -12.884 | 3.638 | 19 | Horizontal | 1000000 | 0.1 | 36.159 |

Table 11. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – Lower Band Edge Test Results

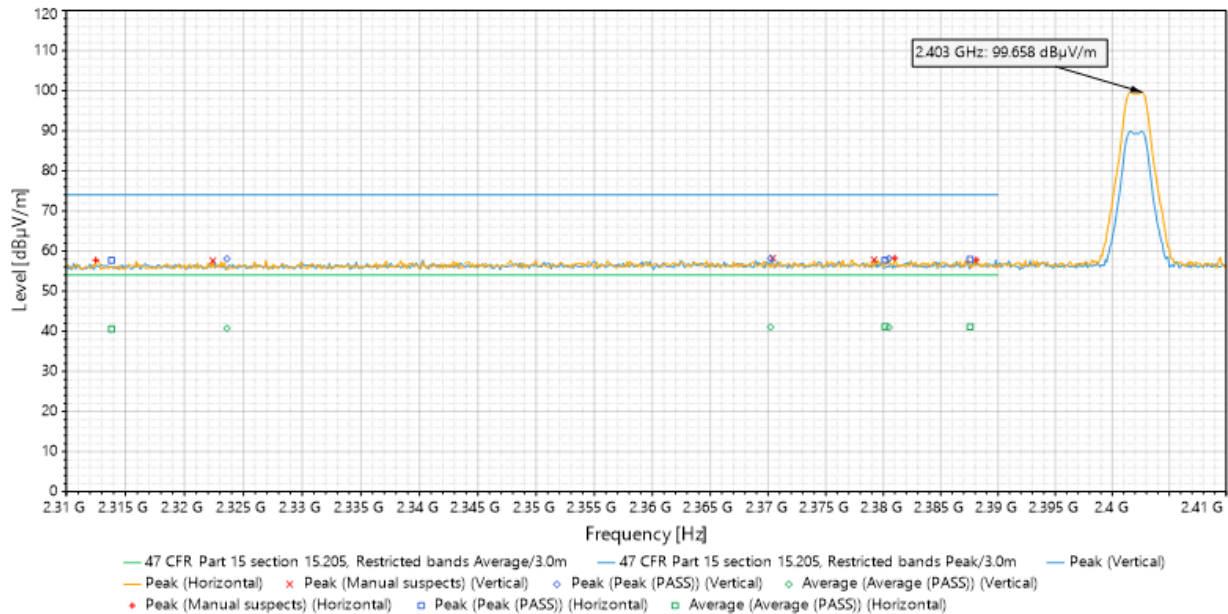


Figure 21. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – Lower Band Edge Plot

| Frequency (MHz) | Source | Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Height (m) | Azimuth (°) | Pol. | RBW (Hz) | Meas. Time (s) | Correction (dB) |
|-----------------|----------------|----------------------|----------------------|-------------|------------|-------------|----------|----------|----------------|-----------------|
| 18070.9 | Peak (PASS) | 53.559 | 74 | -20.441 | 1.242 | 133 | Vertical | 1000000 | 0.1 | 3.939 |
| 18070.9 | Average (PASS) | 39.888 | 54 | -14.112 | 1.242 | 133 | Vertical | 1000000 | 0.1 | 3.939 |
| 20703.1 | Peak (PASS) | 51.73 | 74 | -22.27 | 3.863 | 0 | Vertical | 1000000 | 0.1 | 2.53 |
| 20703.1 | Average (PASS) | 38.047 | 54 | -15.953 | 3.863 | 0 | Vertical | 1000000 | 0.1 | 2.53 |

Table 12. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – (18 – 26 GHz) Test Results

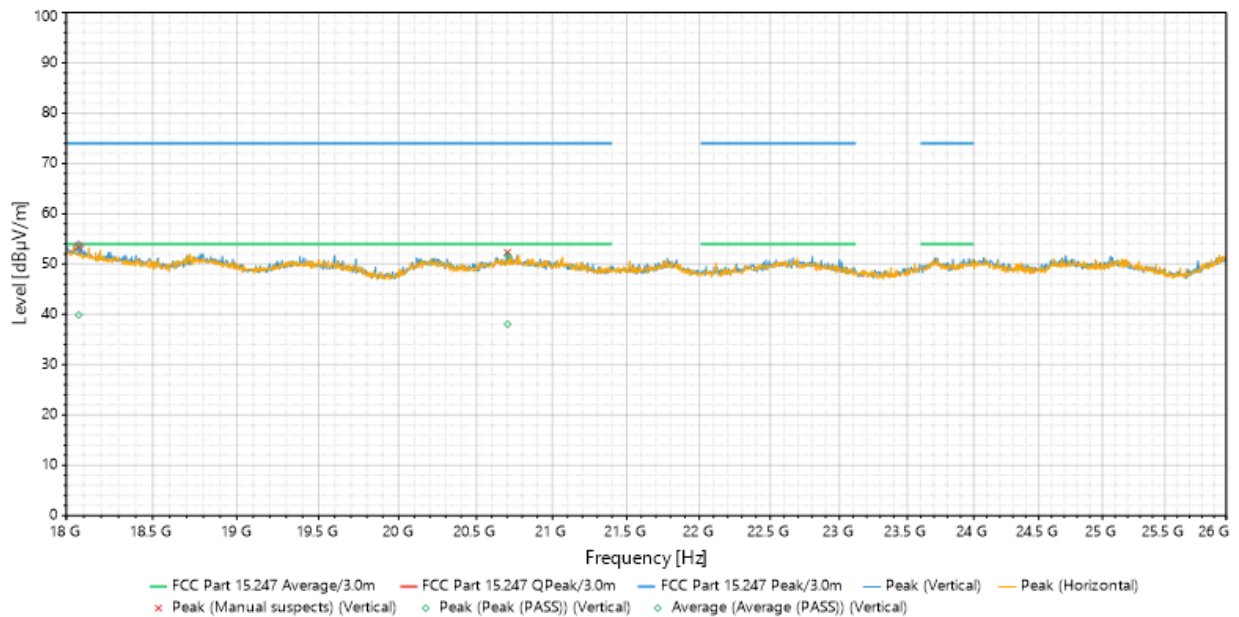


Figure 22. Radiated Spurious Emissions, BLE Low Channel 2402 MHz – (18 – 26 GHz) Plot

| Frequency (MHz) | Source | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (m) | Azimuth (°) | Pol. | RBW (Hz) | Meas. Time (s) | Correction (dB) |
|-----------------|------------------|----------------|----------------|-------------|------------|-------------|------------|----------|----------------|-----------------|
| 35.421 | QuasiPeak (PASS) | 15.517 | 40 | -24.483 | 2.138 | 223 | Vertical | 120000 | 0.1 | -9.923 |
| 55.316 | QuasiPeak (PASS) | 19.045 | 40 | -20.955 | 3.935 | 115 | Vertical | 120000 | 0.1 | -16.739 |
| 121.127 | QuasiPeak (PASS) | 10.82 | 43.5 | -32.68 | 2.286 | 265 | Horizontal | 120000 | 0.1 | -10.191 |
| 187.634 | QuasiPeak (PASS) | 18.106 | 43.5 | -25.394 | 1.69 | 232 | Horizontal | 120000 | 0.1 | -12.734 |
| 197.993 | QuasiPeak (PASS) | 9.389 | 43.5 | -34.111 | 3.521 | 163 | Horizontal | 120000 | 0.1 | -11.642 |
| 347.795 | QuasiPeak (PASS) | 25.003 | 46 | -20.997 | 1.359 | 16 | Horizontal | 120000 | 0.1 | -6.606 |

Table 13. Radiated Spurious Emissions, BLE Mid Channel 2440 MHz – (30 MHz – 1 GHz) Test Results

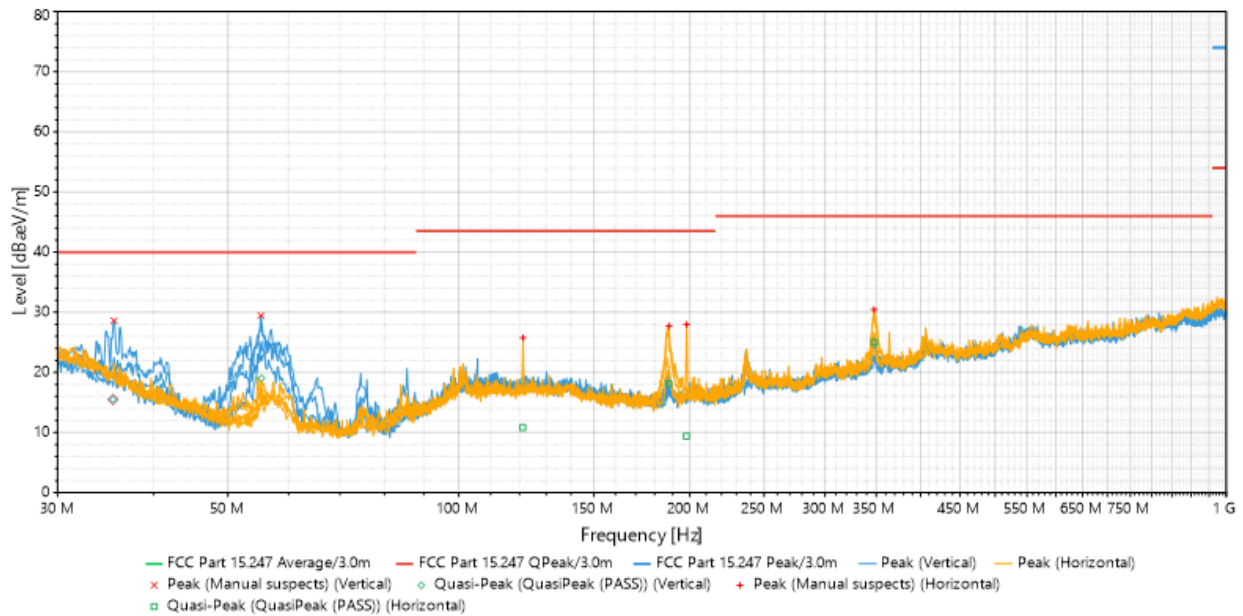


Figure 23. Radiated Spurious Emissions, BLE Mid Channel 2440 MHz – (30 MHz – 1 GHz) Plot

| Frequency (MHz) | Source | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (m) | Azimuth (°) | Pol. | RBW (Hz) | Meas. Time (s) | Correction (dB) |
|-----------------|----------------|----------------|----------------|-------------|------------|-------------|------------|----------|----------------|-----------------|
| 7318.5 | Peak (PASS) | 53.877 | 74 | -20.123 | 1.47 | 207 | Horizontal | 1000000 | 0.1 | 2.993 |
| 7318.5 | Average (PASS) | 43.657 | 54 | -10.343 | 1.47 | 207 | Horizontal | 1000000 | 0.1 | 2.993 |
| 7318.6 | Peak (PASS) | 59.625 | 74 | -14.375 | 1.466 | 347 | Vertical | 1000000 | 0.1 | 3.086 |
| 7318.6 | Average (PASS) | 51.301 | 54 | -2.699 | 1.466 | 347 | Vertical | 1000000 | 0.1 | 3.086 |
| 17798.3 | Peak (PASS) | 52.518 | 74 | -21.482 | 3.177 | 177 | Horizontal | 1000000 | 0.1 | 3.709 |
| 17798.3 | Average (PASS) | 38.949 | 54 | -15.051 | 3.177 | 177 | Horizontal | 1000000 | 0.1 | 3.709 |
| 17802.4 | Peak (PASS) | 53.178 | 74 | -20.822 | 3.519 | 259 | Vertical | 1000000 | 0.1 | 3.793 |
| 17802.4 | Average (PASS) | 39.222 | 54 | -14.778 | 3.519 | 259 | Vertical | 1000000 | 0.1 | 3.793 |

Table 14. Radiated Spurious Emissions, BLE Mid Channel 2440 MHz – (1 – 18 GHz) Test Results

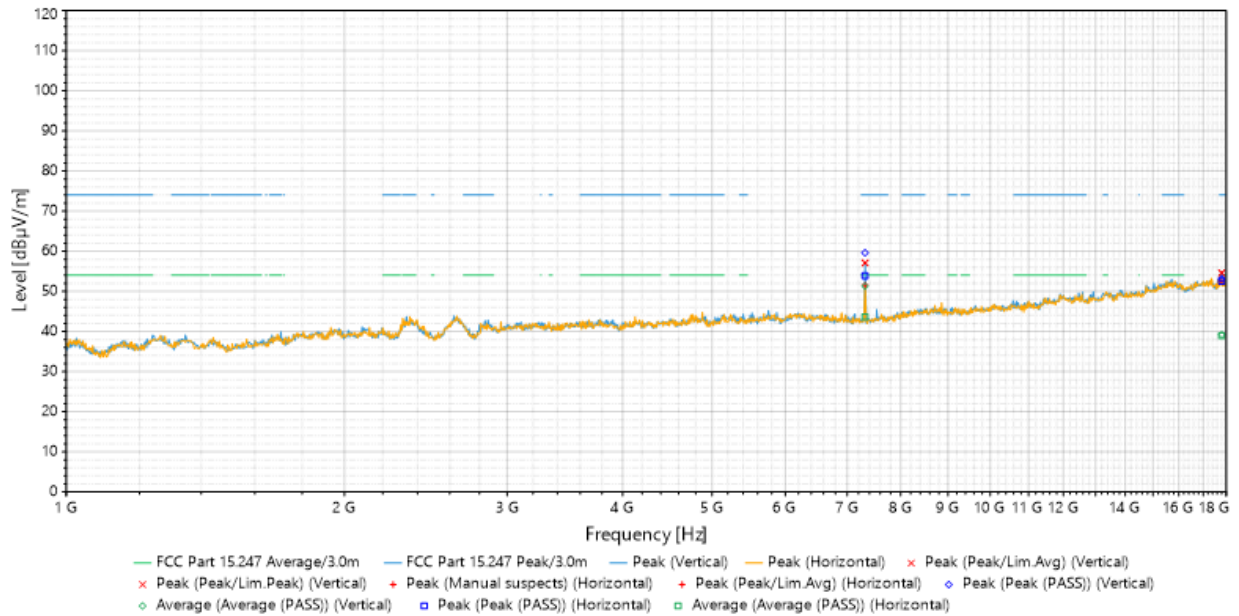


Figure 24. Radiated Spurious Emissions, BLE Mid Channel 2440 MHz – (1 – 18 GHz) Plot

| Frequency (MHz) | Source | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (m) | Azimuth (°) | Pol. | RBW (Hz) | Meas. Time (s) | Correction (dB) |
|-----------------|----------------|----------------|----------------|-------------|------------|-------------|------------|----------|----------------|-----------------|
| 18010.9 | Peak (PASS) | 53.937 | 74 | -20.063 | 2.158 | 214 | Vertical | 1000000 | 0.1 | 4.15 |
| 18010.9 | Average (PASS) | 40.097 | 54 | -13.903 | 2.158 | 214 | Vertical | 1000000 | 0.1 | 4.15 |
| 20894.4 | Peak (PASS) | 52.011 | 74 | -21.989 | 1.253 | 222 | Horizontal | 1000000 | 0.1 | 2.368 |
| 20894.4 | Average (PASS) | 38.101 | 54 | -15.899 | 1.253 | 222 | Horizontal | 1000000 | 0.1 | 2.368 |

Table 15. Radiated Spurious Emissions, BLE Mid Channel 2440 MHz – (18 – 26 GHz) Test Results

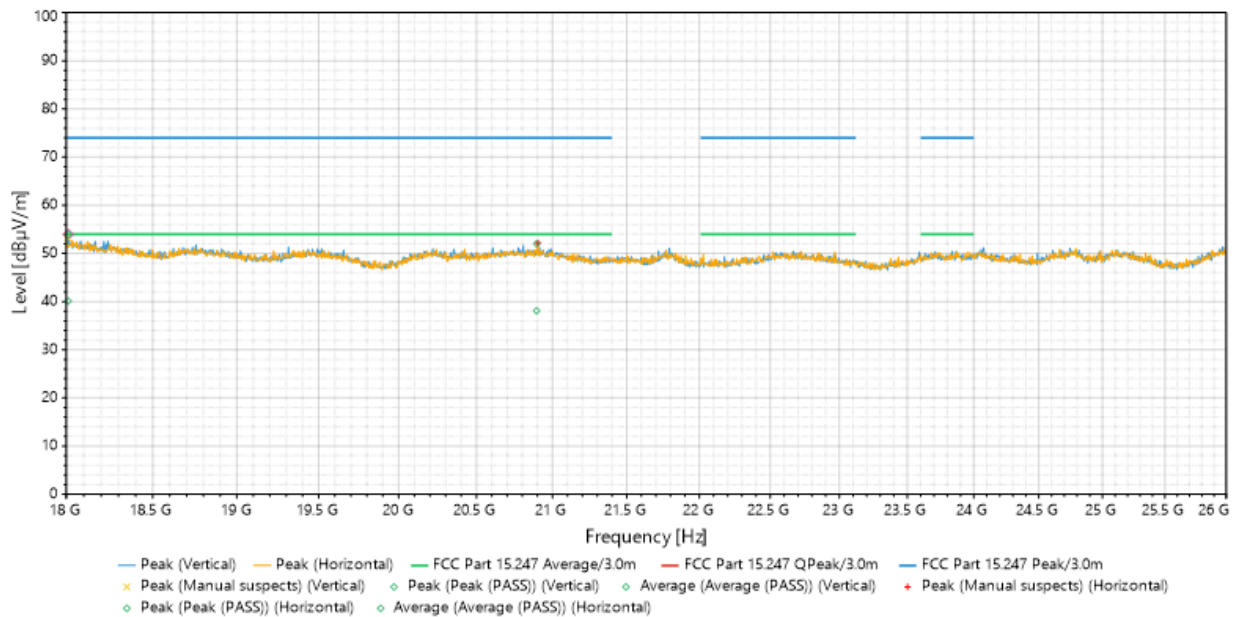


Figure 25. Radiated Spurious Emissions, BLE Mid Channel 2440 MHz – (18 – 26 GHz) Plot

| Frequency (MHz) | Source | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (m) | Azimuth (°) | Pol. | RBW (Hz) | Meas. Time (s) | Correction (dB) |
|-----------------|------------------|----------------|----------------|-------------|------------|-------------|------------|----------|----------------|-----------------|
| 34.1 | QuasiPeak (PASS) | 13.039 | 40 | -26.961 | 3.947 | 91 | Vertical | 120000 | 0.1 | -9.11 |
| 54.968 | QuasiPeak (PASS) | 22.696 | 40 | -17.304 | 2.371 | 180 | Vertical | 120000 | 0.1 | -16.764 |
| 71.768 | QuasiPeak (PASS) | 4.121 | 40 | -35.879 | 2.915 | 4 | Horizontal | 120000 | 0.1 | -17.137 |
| 186.265 | QuasiPeak (PASS) | 16.386 | 43.5 | -27.114 | 2.354 | 252 | Horizontal | 120000 | 0.1 | -12.82 |
| 237.198 | QuasiPeak (PASS) | 19.511 | 46 | -26.489 | 2.923 | 290 | Horizontal | 120000 | 0.1 | -9.614 |
| 346.645 | QuasiPeak (PASS) | 26.957 | 46 | -19.043 | 1.131 | 22 | Horizontal | 120000 | 0.1 | -6.67 |

Table 16. Radiated Spurious Emissions, BLE High Channel 2480 MHz – (30 MHz – 1 GHz) Test Results

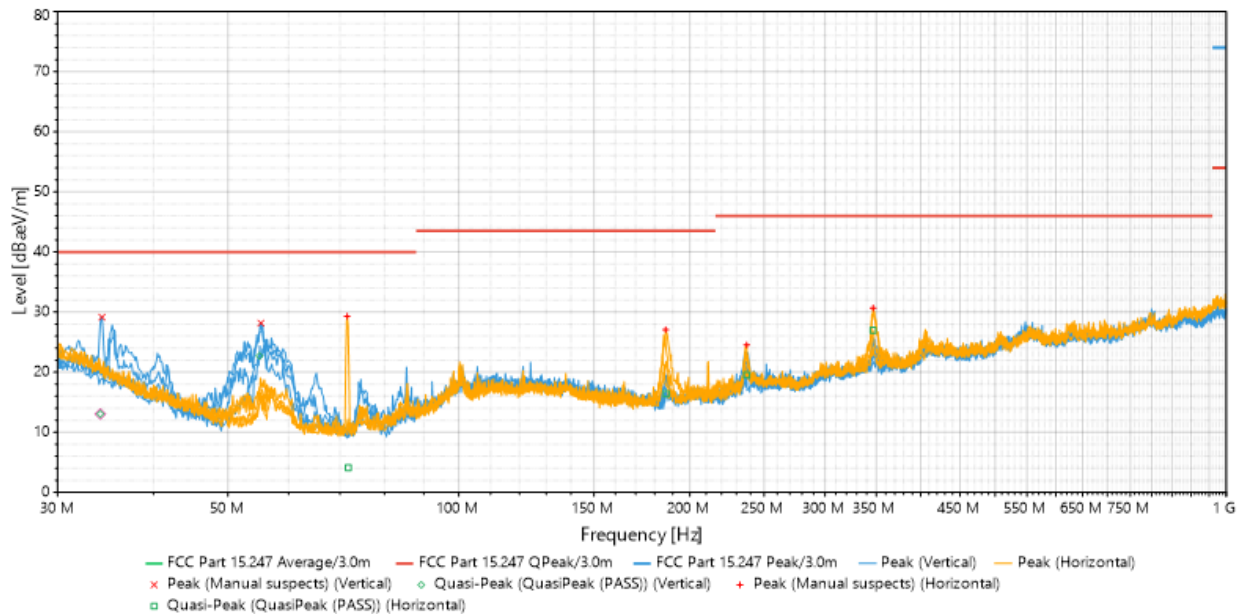


Figure 26. Radiated Spurious Emissions, BLE High Channel 2480 MHz – (30 MHz – 1 GHz) Plot

| Frequency (MHz) | Source | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (m) | Azimuth (°) | Pol. | RBW (Hz) | Meas. Time (s) | Correction (dB) |
|-----------------|----------------|----------------|----------------|-------------|------------|-------------|------------|----------|----------------|-----------------|
| 7438.6 | Peak (PASS) | 55.919 | 74 | -18.081 | 1.359 | 332 | Vertical | 1000000 | 0.1 | 3.115 |
| 7438.6 | Average (PASS) | 46.79 | 54 | -7.21 | 1.359 | 332 | Vertical | 1000000 | 0.1 | 3.115 |
| 7441.6 | Peak (PASS) | 52.715 | 74 | -21.285 | 1.356 | 199 | Horizontal | 1000000 | 0.1 | 3.035 |
| 7441.6 | Average (PASS) | 41.776 | 54 | -12.224 | 1.356 | 199 | Horizontal | 1000000 | 0.1 | 3.035 |

Table 17. Radiated Spurious Emissions, BLE High Channel 2480 MHz – (1 – 18 GHz) Test Results

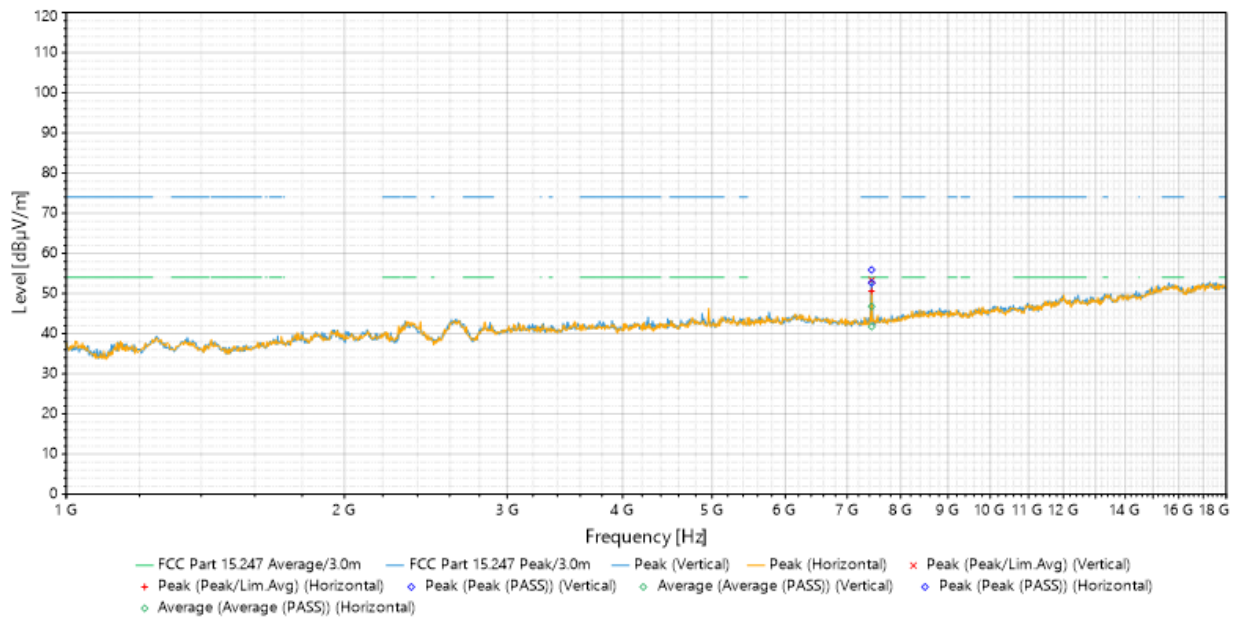


Figure 27. Radiated Spurious Emissions, BLE High Channel 2480 MHz – (1 – 18 GHz) Plot

| Frequency (MHz) | Source | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (m) | Azimuth (°) | Pol. | RBW (Hz) | Meas. Time (s) | Correction (dB) |
|-----------------|----------------|----------------|----------------|-------------|------------|-------------|------------|----------|----------------|-----------------|
| 2484.7 | Peak (PASS) | 58.949 | 74 | -15.051 | 1.351 | 14 | Horizontal | 1000000 | 0.1 | 36.13 |
| 2484.7 | Average (PASS) | 42.531 | 54 | -11.469 | 1.351 | 14 | Horizontal | 1000000 | 0.1 | 36.13 |
| 2487.16 | Peak (PASS) | 58.984 | 74 | -15.016 | 3.396 | 353 | Vertical | 1000000 | 0.1 | 36.338 |
| 2487.16 | Average (PASS) | 42.187 | 54 | -11.813 | 3.396 | 353 | Vertical | 1000000 | 0.1 | 36.338 |
| 2489.38 | Peak (PASS) | 58.666 | 74 | -15.334 | 2.835 | 224 | Vertical | 1000000 | 0.1 | 36.351 |
| 2489.38 | Average (PASS) | 42.227 | 54 | -11.773 | 2.835 | 224 | Vertical | 1000000 | 0.1 | 36.351 |
| 2492.8 | Peak (PASS) | 58.987 | 74 | -15.013 | 2.734 | 149 | Horizontal | 1000000 | 0.1 | 36.158 |
| 2492.8 | Average (PASS) | 42.13 | 54 | -11.87 | 2.734 | 149 | Horizontal | 1000000 | 0.1 | 36.158 |
| 2495.59 | Peak (PASS) | 59.201 | 74 | -14.799 | 2.17 | 7 | Vertical | 1000000 | 0.1 | 36.374 |
| 2495.59 | Average (PASS) | 42.364 | 54 | -11.636 | 2.17 | 7 | Vertical | 1000000 | 0.1 | 36.374 |
| 2496.91 | Peak (PASS) | 58.988 | 74 | -15.012 | 1.279 | 245 | Horizontal | 1000000 | 0.1 | 36.165 |
| 2496.91 | Average (PASS) | 42.252 | 54 | -11.748 | 1.279 | 245 | Horizontal | 1000000 | 0.1 | 36.165 |

Table 18. Radiated Spurious Emissions, BLE High Channel 2480 MHz – Upper Band Edge Test Results

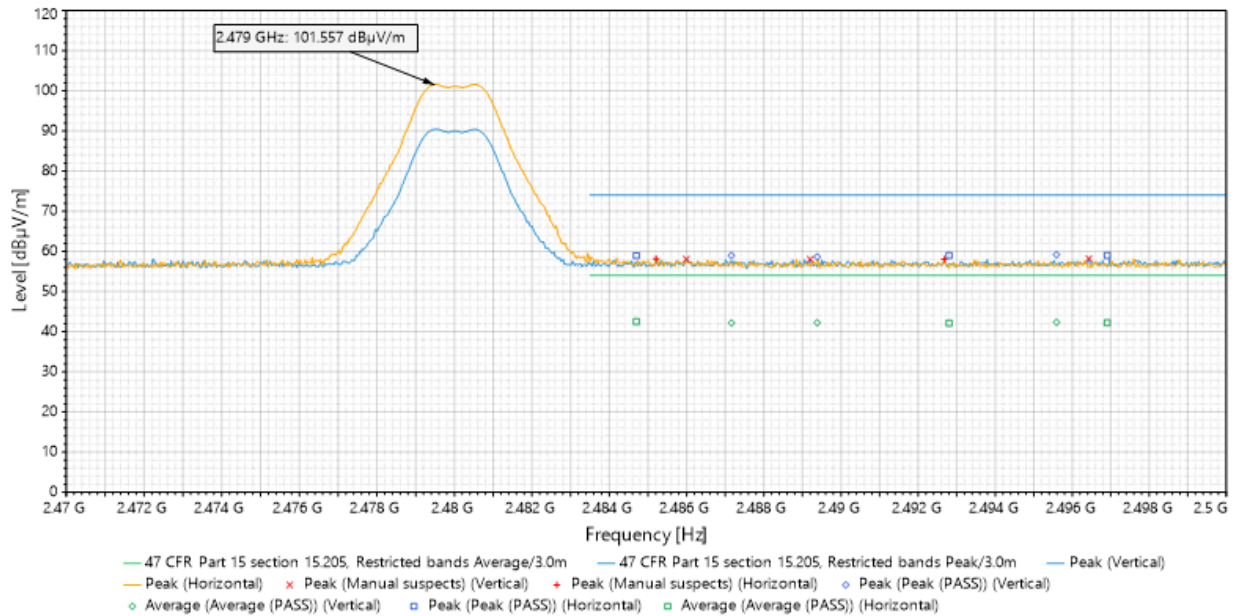


Figure 28. Radiated Spurious Emissions, BLE High Channel 2480 MHz – Upper Band Edge Plot

| Frequency (MHz) | Source | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (m) | Azimuth (°) | Pol. | RBW (Hz) | Meas. Time (s) | Correction (dB) |
|-----------------|----------------|----------------|----------------|-------------|------------|-------------|----------|----------|----------------|-----------------|
| 18003.4 | Peak (PASS) | 40.317 | 74 | -33.683 | 1.035 | 226 | Vertical | 1000000 | 0.1 | 4.176 |
| 18003.4 | Average (PASS) | 26.83 | 54 | -27.17 | 1.035 | 226 | Vertical | 1000000 | 0.1 | 4.176 |
| 20777 | Peak (PASS) | 39.631 | 74 | -34.369 | 1.593 | 154 | Vertical | 1000000 | 0.1 | 2.584 |
| 20777 | Average (PASS) | 26.239 | 54 | -27.761 | 1.593 | 154 | Vertical | 1000000 | 0.1 | 2.584 |

Table 19. Radiated Spurious Emissions, BLE High Channel 2480 MHz – (18 – 26 GHz) Test Results

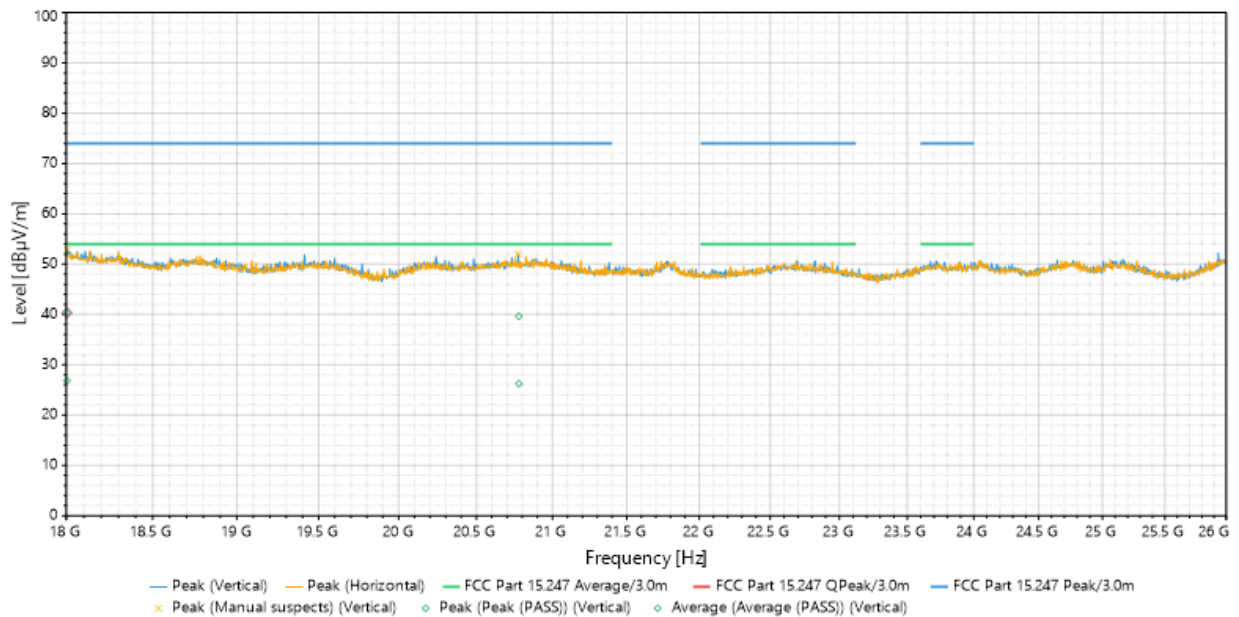


Figure 29. Radiated Spurious Emissions, BLE High Channel 2480 MHz – (18 – 26 GHz) Plot

Calibrated test equipment utilized during testing was maintained in a current state of calibration per the requirements of ISO/IEC 17025:2017.

| Test Name: FCC 15.247 & RSS-247 Radiated Spurious Emissions | | | Test Date(s): 04/12/2025 – 04/19/2025 | | |
|--|---------------------------|-----------------------------|---------------------------------------|---------------|--------------|
| MET Asset # | Equipment | Manufacturer | Model | Last Cal Date | Cal Due Date |
| 1S2399 | Turntable Controller | Sunol Sciences | SC99V | See Note 1 | |
| 1S4856 | Antenna Positioning Tower | ETS-Lindgren | 2171B | See Note 1 | |
| 1S2482 | 5 Meter Chamber | Panashield - ETS | 5 Meter Semi-Anechoic Chamber | See Note 2 | |
| 1S4804 | EMI Test Receiver | Rohde & Schwarz | ESW44 | 08/07/2024 | 08/07/2025 |
| 1S2600 | Bilog Antenna | Teseq | CBL6112D | 04/19/2023 | 04/19/2025 |
| 1S2435 | Horn Antenna | ETS-Lindgren | 3117 | 03/17/2025 | 03/17/2027 |
| 1S3818 | DRG Horn Antenna | A.H. Systems, Inc. | SAS-574 | 05/24/2023 | 05/24/2025 |
| 1S2668 | Pre-Amplifier | Sonoma Instruments | 310 N | 03/18/2025 | 03/18/2027 |
| 1S4802 | Pre-Amplifier | EMC Instruments Corporation | EMC118A45SE | See Note 1 | |
| 1S3865 | Table Top Amplifier | MITEQ | TTA1840-35-HG | See Note 1 | |
| Note 1: Functionally tested equipment is verified using calibrated instrumentation at the time of testing. | | | | | |
| Note 2: Latest NSA and VSWR data available upon request. | | | | | |

Table 20. Radiated Spurious Emissions, Test Equipment

END OF REPORT