

# TEST REPORT

Applicant Name : M5Stack Technology Co.,Ltd  
Address : Block A10, Expo Bay South Coast, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China  
Report Number: 2504S32884E-RF-00A  
FCC ID: 2AN3WM5SWITCHC6

## Test Standard (s)

FCC PART 15.247

## Sample Description

Product Type: M5SwitchC6  
Model No.: SwitchC6  
Trade Mark:



Date Received: 2025-04-21  
Date of Test: 2025-04-29 to 2025-05-22  
Report Date: 2025-05-28

|              |                                            |
|--------------|--------------------------------------------|
| Test Result: | The EUT complied with the standards above. |
|--------------|--------------------------------------------|

## Prepared and Checked By:

*Matt Liang*

Matt Liang  
EMC Engineer

## Approved By:

*Bob Liao*

Bob Liao  
EMC Engineer

Note: This report must not be used by the customer to claim product certification, approval, or endorsement by A2LA, or any agency of the Federal Government. 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 but no need marked. This report cannot be reproduced except in full, without prior written approval of the Company. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

## Shenzhen Accurate Technology Co., Ltd.

Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

Tel: +86 755-26503290

Web: www.atc-lab.com

# TABLE OF CONTENTS

**DOCUMENT REVISION HISTORY..... 4**

**GENERAL INFORMATION..... 5**

    PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) ..... 5

    OBJECTIVE ..... 5

    TEST METHODOLOGY ..... 5

    TEST FACILITY ..... 6

    MEASUREMENT UNCERTAINTY ..... 6

**SYSTEM TEST CONFIGURATION ..... 7**

    DESCRIPTION OF TEST CONFIGURATION..... 7

    EUT EXERCISE SOFTWARE AND POWER LEVEL<sup>#</sup> ..... 7

    SPECIAL ACCESSORIES ..... 7

    EQUIPMENT MODIFICATIONS..... 7

    SUPPORT EQUIPMENT LIST AND DETAILS ..... 7

    EXTERNAL I/O CABLE..... 7

    BLOCK DIAGRAM OF TEST SETUP ..... 8

**SUMMARY OF TEST RESULTS ..... 10**

**TEST EQUIPMENT LIST ..... 11**

**FCC §15.203-ANTENNA REQUIREMENT ..... 13**

    APPLICABLE STANDARD..... 13

    ANTENNA CONNECTOR CONSTRUCTION ..... 13

**FCC §15.207 (a)-AC LINE CONDUCTED EMISSIONS ..... 14**

    APPLICABLE STANDARD..... 14

    EUT SETUP..... 14

    EMI TEST RECEIVER SETUP..... 14

    TEST PROCEDURE ..... 14

    CALCULATION ..... 15

    TEST DATA ..... 15

**FCC §15.205, §15.209 & §15.247(d)-RADIATED EMISSIONS ..... 18**

    APPLICABLE STANDARD..... 18

    EUT SETUP..... 18

    EMI TEST RECEIVER & SPECTRUM ANALYZER SETUP ..... 20

    TEST PROCEDURE ..... 20

    CALCULATION ..... 21

    TEST DATA ..... 21

**FCC §15.247(a) (2)-6 dB EMISSION BANDWIDTH & OCCUPIED BANDWIDTH ..... 61**

    APPLICABLE STANDARD..... 61

    TEST PROCEDURE ..... 61

    TEST DATA ..... 61

**FCC §15.247(b) (3)-MAXIMUM CONDUCTED OUTPUT POWER..... 62**

    APPLICABLE STANDARD..... 62

    TEST PROCEDURE ..... 62

    TEST DATA ..... 62

**FCC §15.247(d)-100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE ..... 63**

    APPLICABLE STANDARD..... 63

    TEST PROCEDURE ..... 63

    TEST DATA ..... 63

**FCC §15.247(e)-POWER SPECTRAL DENSITY ..... 64**

    APPLICABLE STANDARD..... 64

    TEST PROCEDURE ..... 64

TEST DATA ..... 64

**APPENDIX (RF TEST RESULTS) ..... 65**

6dB EMISSION BANDWIDTH ..... 65

99% OCCUPIED BANDWIDTH ..... 68

MAXIMUM CONDUCTED OUTPUT POWER ..... 71

POWER SPECTRAL DENSITY ..... 74

100 KHz BANDWIDTH OF FREQUENCY BAND EDGE ..... 77

DUTY CYCLE..... 79

**EXHIBIT A-EUT PHOTOGRAPHS ..... 82**

**EXHIBIT B-TEST SETUP PHOTOGRAPHS ..... 83**

DOCUMENT REVISION HISTORY

| Revision Number | Report Number      | Description of Revision | Date of Revision |
|-----------------|--------------------|-------------------------|------------------|
| Rev.00          | 2504S32884E-RF-00A | Original Report         | 2025-05-28       |

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

|                                     |                                                                                          |
|-------------------------------------|------------------------------------------------------------------------------------------|
| Product                             | M5SwitchC6                                                                               |
| Tested Model                        | SwitchC6                                                                                 |
| Frequency Range                     | BLE 1M/2M: 2402-2480MHz                                                                  |
| Maximum Conducted Peak Output Power | 3.60dBm                                                                                  |
| Modulation Technique                | GFSK                                                                                     |
| Antenna Specification <sup>#</sup>  | 3.96dBi(It is provided by the applicant.)                                                |
| Voltage Range <sup>#</sup>          | AC 100-230V                                                                              |
| Sample Serial Number                | 31OL-1 (For CE & RE Test), 31OM-1 (For RF Conducted Test)<br>(Assigned by ATC, Shenzhen) |
| Sample/EUT Status                   | Good condition                                                                           |

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commission rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

And KDB 558074 D01 15.247 Meas Guidance v05r02.

Unless otherwise stated there are no any additions to, deviations, or exclusions from the method.

## Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

Accredited by American Association for Laboratory Accreditation (A2LA).The Certificate Number is 4297.01.

## Measurement Uncertainty

| Parameter                    |                 | Uncertainty            |
|------------------------------|-----------------|------------------------|
| Occupied Channel Bandwidth   |                 | 5%                     |
| RF Frequency                 |                 | $0.064 \times 10^{-7}$ |
| RF output power, conducted   |                 | 0.3 dB                 |
| Unwanted Emission, conducted |                 | 1.2 dB                 |
| Emissions,<br>Radiated       | 9kHz - 30MHz    | 2.1 dB                 |
|                              | 30MHz - 1GHz    | 4.3 dB                 |
|                              | 1GHz - 18GHz    | 4.9 dB                 |
|                              | 18GHz - 26.5GHz | 5.2 dB                 |
| Temperature                  |                 | 1°C                    |
| Humidity                     |                 | 7%                     |
| 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.*

SYSTEM TEST CONFIGURATION

Description of Test Configuration

For BLE,40 channels are provided to testing:

| Channel | Freq.<br>(MHz) | Channel | Freq.<br>(MHz) | Channel | Freq.<br>(MHz) | Channel | Freq.<br>(MHz) |
|---------|----------------|---------|----------------|---------|----------------|---------|----------------|
| 1       | 2402           | 11      | 2422           | 21      | 2442           | 31      | 2462           |
| 2       | 2404           | 12      | 2424           | 22      | 2444           | 32      | 2464           |
| ...     | ...            | ...     | ...            | ...     | ...            | ...     | ...            |
| ...     | ...            | ...     | ...            | ...     | ...            | ...     | ...            |
| 9       | 2418           | 19      | 2438           | 29      | 2458           | 39      | 2478           |
| 10      | 2420           | 20      | 2440           | 30      | 2460           | 40      | 2480           |

EUT was tested with Channel 0, 19 and 39.

EUT Exercise Software and Power Level<sup>#</sup>

|                    |                    |
|--------------------|--------------------|
| Exercise Software: | EspRFTestTool_v3.6 |
| Power Level:       | 9                  |

Note: The information in the above table is provided by the applicant.

Special Accessories

No special accessory.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

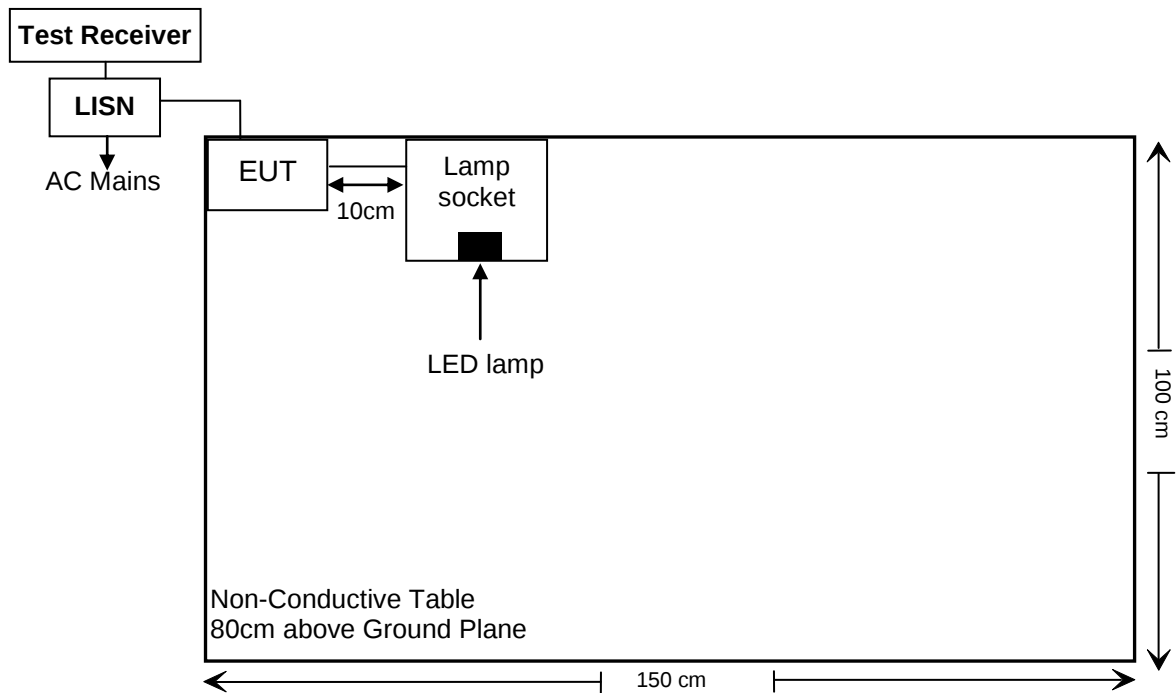
| Manufacturer | Description              | Model   | Serial Number |
|--------------|--------------------------|---------|---------------|
| Kodect       | LED lamp <sup>#</sup>    | Unknown | Unknown       |
| OPPLE        | Lamp socket <sup>#</sup> | 8602    | Unknown       |

External I/O Cable

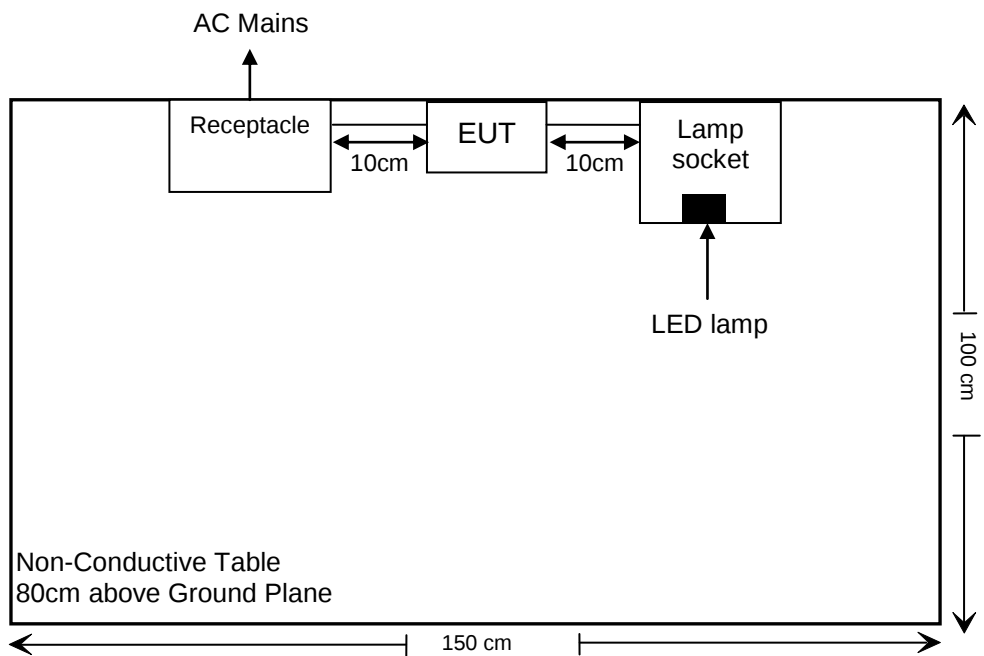
| Cable Description | Shielding Type | Length (m) | From Port | To          |
|-------------------|----------------|------------|-----------|-------------|
| AC Cable          | No             | 1          | AC Mains  | Receptacle  |
| AC Cable          | No             | 1.37       | EUT       | Receptacle  |
| AC Cable          | No             | 0.20       | EUT       | Lamp socket |

Block Diagram of Test Setup

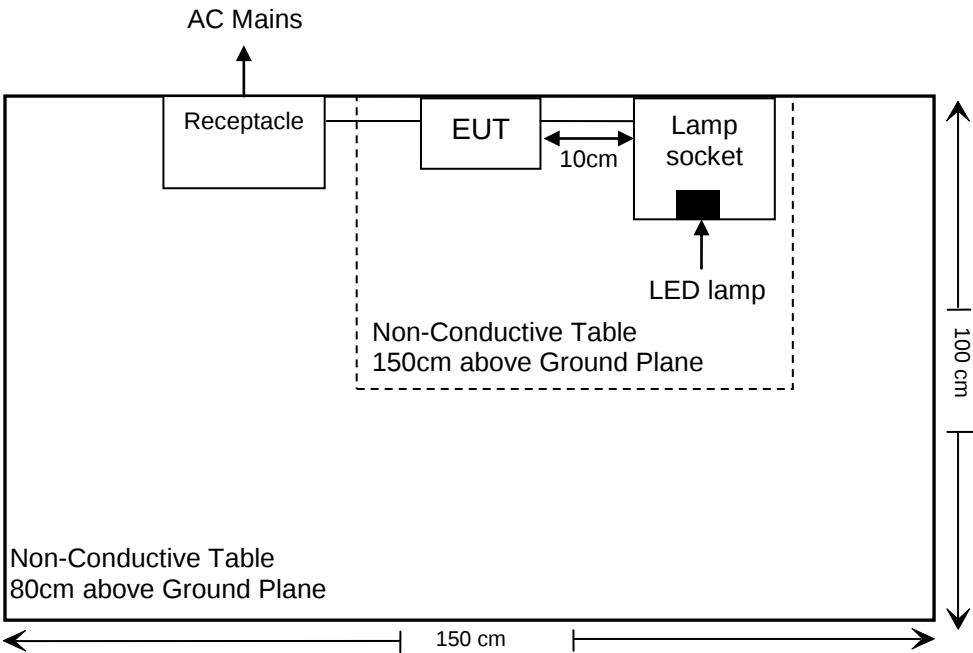
For Conducted Emission:



For Radiated Emission Below 1GHz:



For Radiated Emission Above 1GHz:



## SUMMARY OF TEST RESULTS

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

Note 1: For AC line conducted emissions, the maximum output power mode and channel was tested.

Note 2: For Radiated Spurious Emissions 9kHz~1GHz/18GHz~25GHz, the maximum output power mode and channel was tested.

Note 3: For Radiated Spurious Emissions, after pre-scan in the X, Y and Z axes of orientation, the worst case as setup photos was recorded.

Note 4: The cable loss is 0.5dB, which was added into the all RF test results.

**TEST EQUIPMENT LIST**

| Manufacturer                                       | Description                       | Model           | Serial Number | Calibration Date | Calibration Due Date |
|----------------------------------------------------|-----------------------------------|-----------------|---------------|------------------|----------------------|
| <b>Conducted Emissions Test</b>                    |                                   |                 |               |                  |                      |
| Rohde & Schwarz                                    | EMI Test Receiver                 | ESCI            | 100784        | 2024/11/08       | 2025/11/07           |
| Rohde & Schwarz                                    | L.I.S.N.                          | ENV216          | 101314        | 2024/11/08       | 2025/11/07           |
| Anritsu Corp                                       | 50 Coaxial Switch                 | MP59B           | 6100237248    | 2024/10/08       | 2025/10/07           |
| Rohde & Schwarz                                    | Pulse Limiter                     | ESH3-Z2         | 100312        | 2024/10/08       | 2025/10/07           |
| Unknown                                            | RF Coaxial Cable                  | No.17           | N0350         | 2024/10/08       | 2025/10/07           |
| Test Software: e3 191218 (V9)                      |                                   |                 |               |                  |                      |
| <b>Radiated Spurious Emission Test(Below 1GHz)</b> |                                   |                 |               |                  |                      |
| Rohde & Schwarz                                    | Test Receiver                     | ESR             | 102725        | 2024/11/08       | 2025/11/07           |
| SONOMA INSTRUMENT                                  | Amplifier                         | 310N            | 186131        | 2025/03/26       | 2026/03/25           |
| Schwarzbeck                                        | Bilog Antenna                     | VULB9163        | 9163-323      | 2024/08/08       | 2027/08/07           |
| Unknown                                            | RF Coaxial Cable                  | No.12           | N040          | 2024/10/08       | 2025/10/07           |
| Unknown                                            | RF Coaxial Cable                  | No.13           | N300          | 2024/10/08       | 2025/10/07           |
| Unknown                                            | RF Coaxial Cable                  | No.14           | N800          | 2024/10/08       | 2025/10/07           |
| BACL                                               | LOOP ANTENNA                      | 1313-1A         | 3110711       | 2024/01/16       | 2027/01/15           |
| Test Software: e3 191218 (V9)                      |                                   |                 |               |                  |                      |
| <b>Radiated Spurious Emission Test(Above 1GHz)</b> |                                   |                 |               |                  |                      |
| Rohde & Schwarz                                    | Spectrum Analyzer                 | FSV40           | 101949        | 2024/10/08       | 2025/10/07           |
| Decentest                                          | Filter Switch Unit                | DT7220FSU       | DQ77927       | 2024/10/08       | 2025/10/07           |
| Decentest                                          | Multiplex Switch Test Control Set | DT7220CSU       | DQ77924       | 2024/10/08       | 2025/10/07           |
| A.H. Systems, inc.                                 | Preamplifier                      | PAM-0118        | 226           | 2025/03/20       | 2026/03/19           |
| Schwarzbeck                                        | Horn Antenna                      | BBHA9120D       | 837           | 2023/02/22       | 2026/02/21           |
| Unknown                                            | RF Coaxial Cable                  | No.10           | N050          | 2024/10/08       | 2025/10/07           |
| Unknown                                            | RF Coaxial Cable                  | No.11           | N1000         | 2024/10/08       | 2025/10/07           |
| Unknown                                            | RF Coaxial Cable                  | No.19           | N500          | 2024/10/08       | 2025/10/07           |
| Schwarzbeck                                        | HORN ANTENNA                      | BBHA9170        | 9170-359      | 2023/12/12       | 2026/12/11           |
| BACL                                               | Amplifier                         | BACL-1313-A1840 | 4012521       | 2024/07/05       | 2025/07/04           |
| Unknown                                            | RF Coaxial Cable                  | No.15           | N600          | 2024/10/08       | 2025/10/07           |
| Unknown                                            | RF Coaxial Cable                  | No.16           | N650          | 2024/10/08       | 2025/10/07           |
| Test Software: e3 191218 (V9)                      |                                   |                 |               |                  |                      |

| Manufacturer                           | Description       | Model  | Serial Number | Calibration Date | Calibration Due Date |
|----------------------------------------|-------------------|--------|---------------|------------------|----------------------|
| RF Conducted test                      |                   |        |               |                  |                      |
| Rohde & Schwarz                        | Spectrum Analyzer | FSV-40 | 101590        | 2024/10/08       | 2025/10/07           |
| WEINSCHEL                              | 10dB Attenuator   | 5324   | AU 3842       | 2024/10/08       | 2025/10/07           |
| Test Software: JDAutoTestSystem V1.0.0 |                   |        |               |                  |                      |

**\* Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI)

## FCC §15.203-ANTENNA REQUIREMENT

### Applicable Standard

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

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

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

### Antenna Connector Construction

The EUT has one internal antenna arrangement, which were permanently attached to the EUT, fulfill the requirement of this section. Please refer to the EUT photos.

| Frequency Range | Antenna gain |
|-----------------|--------------|
| 2402-2480MHz    | 3.96dBi      |

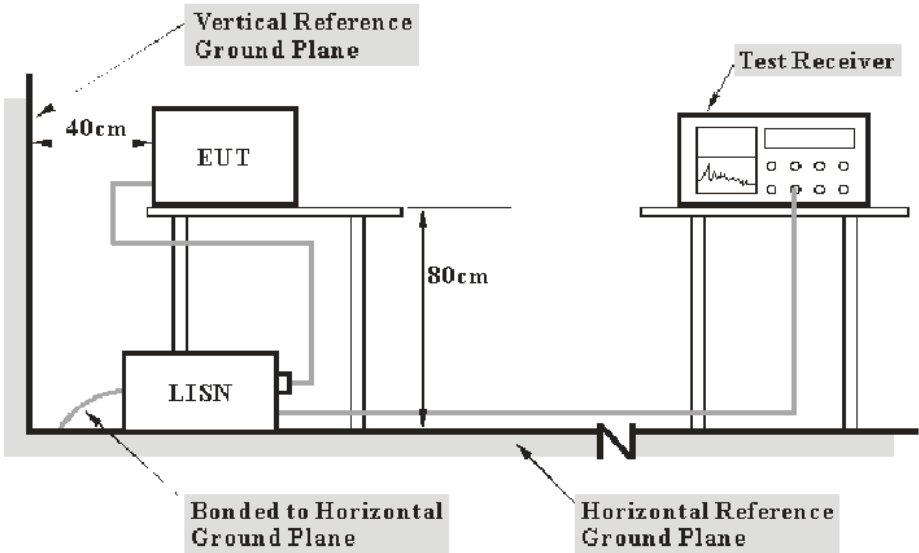
**Result:** Compliance.

FCC §15.207 (a)-AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a).

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 C63.10-2020. The related limit was specified in FCC Part 15.207.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.  
During the conducted emission test, the EMI test receiver was set with the following configurations:

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

Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.  
Maximizing procedure was performed on the six (6) highest emissions of the EUT.  
All final data was recorded in the Quasi-peak and average detection mode.

Calculation

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

Factor = LISN VDF + Cable Loss + 10dB Attenuation(Limiter)

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:

Over Limit = Level - Limit

Level = Read Level + Factor

Test Data

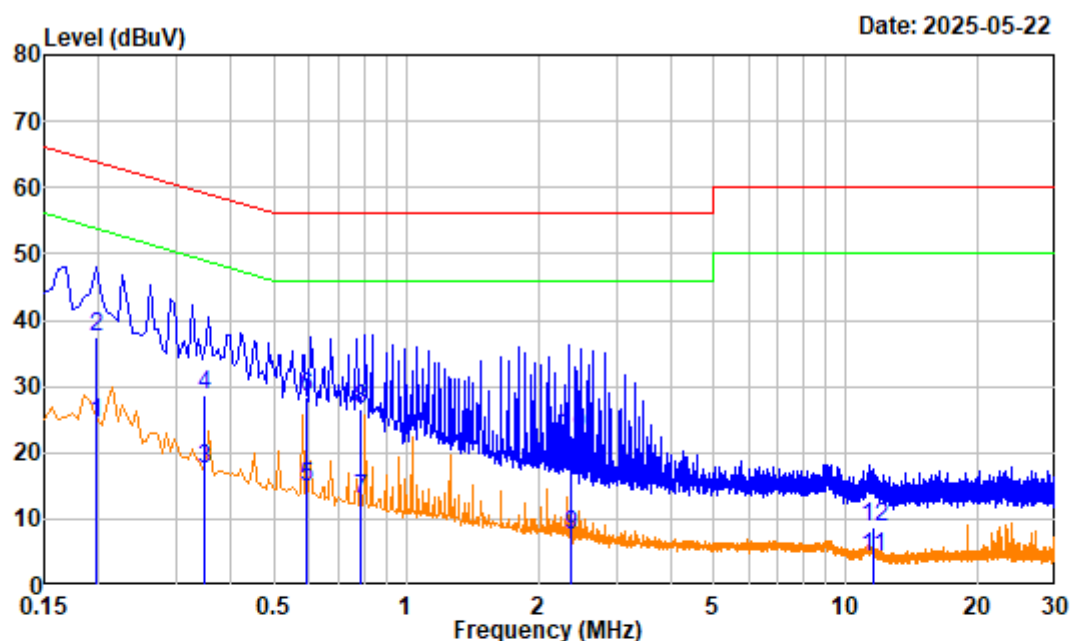
Environmental Conditions

|                     |                  |
|---------------------|------------------|
| Temperature:        | 24.6℃            |
| Relative Humidity:  | 56%              |
| ATM Pressure:       | 100.2kPa         |
| Test Engineer:      | Jason Fan        |
| Test Date:          | 2025-05-22       |
| EUT Operation Mode: | BLE Transmitting |

**Test Result:** Compliance, please refer to the below data.

*Note: The maximum output power mode and channel: BLE 2M High channel was tested.*

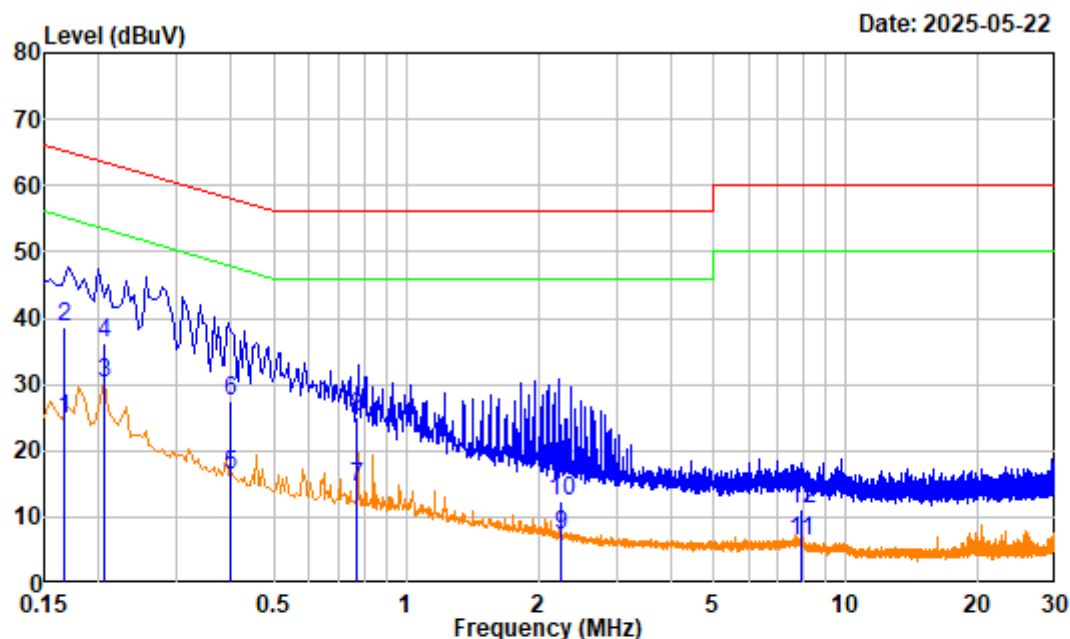
AC 120V/60Hz, Line:



Site : Shielding Room  
 Condition : Line  
 Project No. : 2504S32884E-RF Tester: Jason Fan  
 Test Mode : BLE Transmitting  
 Receiver Setting: IF B/W 9kHz PK/AV

|    | Freq   | Factor | Read Level | Level | Limit Line | Over Limit | Remark  |
|----|--------|--------|------------|-------|------------|------------|---------|
|    | MHz    | dB     | dBuV       | dBuV  | dBuV       | dB         |         |
| 1  | 0.196  | 20.21  | 4.29       | 24.50 | 53.76      | -29.26     | Average |
| 2  | 0.196  | 20.21  | 17.29      | 37.50 | 63.76      | -26.26     | QP      |
| 3  | 0.347  | 20.10  | -2.74      | 17.36 | 49.02      | -31.66     | Average |
| 4  | 0.347  | 20.10  | 8.45       | 28.55 | 59.02      | -30.47     | QP      |
| 5  | 0.595  | 20.11  | -5.35      | 14.76 | 46.00      | -31.24     | Average |
| 6  | 0.595  | 20.11  | 8.24       | 28.35 | 56.00      | -27.65     | QP      |
| 7  | 0.785  | 20.24  | -7.23      | 13.01 | 46.00      | -32.99     | Average |
| 8  | 0.785  | 20.24  | 6.20       | 26.44 | 56.00      | -29.56     | QP      |
| 9  | 2.366  | 20.41  | -12.81     | 7.60  | 46.00      | -38.40     | Average |
| 10 | 2.366  | 20.41  | 2.31       | 22.72 | 56.00      | -33.28     | QP      |
| 11 | 11.528 | 19.77  | -15.41     | 4.36  | 50.00      | -45.64     | Average |
| 12 | 11.528 | 19.77  | -10.89     | 8.88  | 60.00      | -51.12     | QP      |

## AC 120V/60Hz, Neutral:



Site : Shielding Room  
 Condition : neutral  
 Project No. : 2504S32884E-RF Tester: Jason Fan  
 Test Mode : BLE Transmitting  
 Receiver Setting: IF B/W 9kHz PK/AV

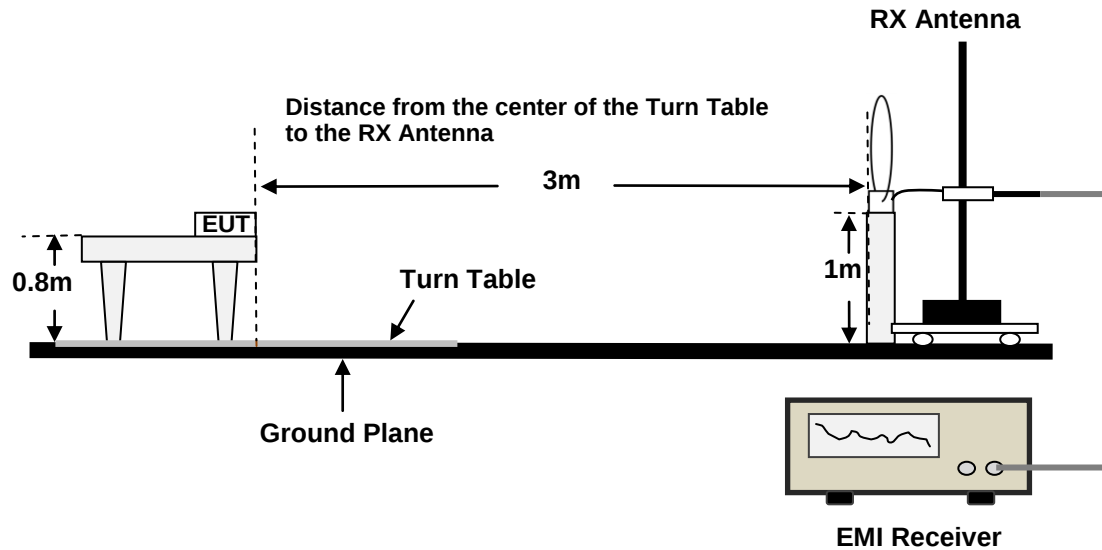
|    | Freq  | Factor | Read Level | Level | Limit Line | Over Limit | Remark  |
|----|-------|--------|------------|-------|------------|------------|---------|
|    | MHz   | dB     | dBuV       | dBuV  | dBuV       | dB         |         |
| 1  | 0.167 | 19.88  | 4.85       | 24.73 | 55.12      | -30.39     | Average |
| 2  | 0.167 | 19.88  | 18.77      | 38.65 | 65.12      | -26.47     | QP      |
| 3  | 0.206 | 19.82  | 10.27      | 30.09 | 53.37      | -23.28     | Average |
| 4  | 0.206 | 19.82  | 16.52      | 36.34 | 63.37      | -27.03     | QP      |
| 5  | 0.398 | 19.82  | -3.45      | 16.37 | 47.90      | -31.53     | Average |
| 6  | 0.398 | 19.82  | 7.73       | 27.55 | 57.90      | -30.35     | QP      |
| 7  | 0.774 | 20.34  | -5.90      | 14.44 | 46.00      | -31.56     | Average |
| 8  | 0.774 | 20.34  | 4.80       | 25.14 | 56.00      | -30.86     | QP      |
| 9  | 2.249 | 20.21  | -12.92     | 7.29  | 46.00      | -38.71     | Average |
| 10 | 2.249 | 20.21  | -7.71      | 12.50 | 56.00      | -43.50     | QP      |
| 11 | 7.917 | 20.43  | -13.98     | 6.45  | 50.00      | -43.55     | Average |
| 12 | 7.917 | 20.43  | -9.19      | 11.24 | 60.00      | -48.76     | QP      |

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

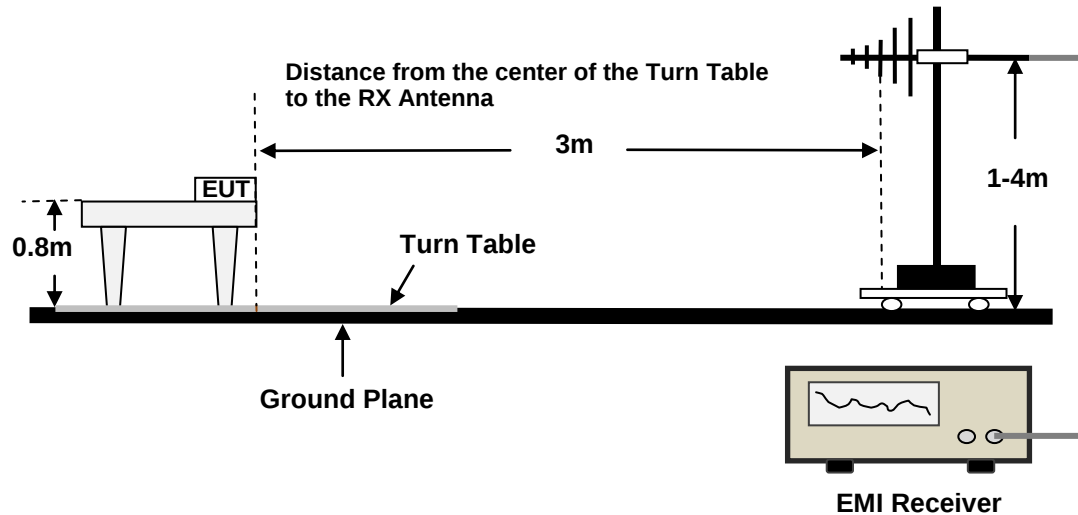
FCC §15.205; §15.209; §15.247(d)

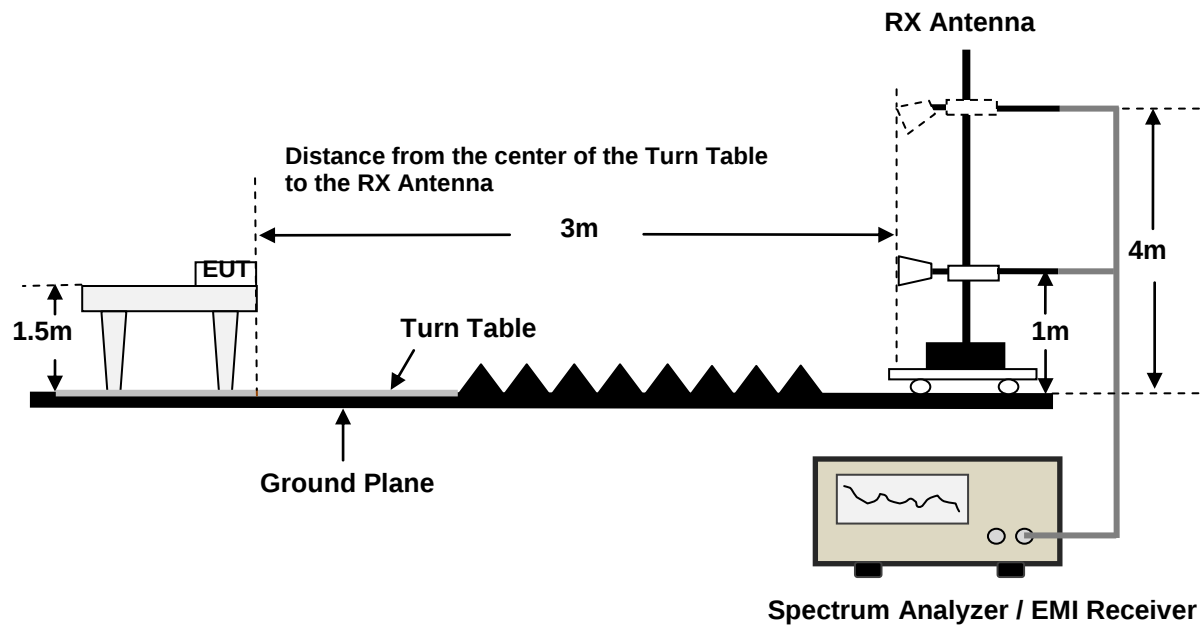
**EUT Setup**

9kHz - 30MHz:



30MHz - 1GHz:



**Above 1GHz:**

Boundary of the EUT, local AE and associated cabling and measurement distance for radiated emissions measurements:

The central point of the arrangement shall be positioned at the centre of the turntable. The measurement distance is the shortest horizontal distance between an imaginary circular periphery just encompassing this arrangement and the calibration point of the antenna. See as below Figure C.1 and C.2.

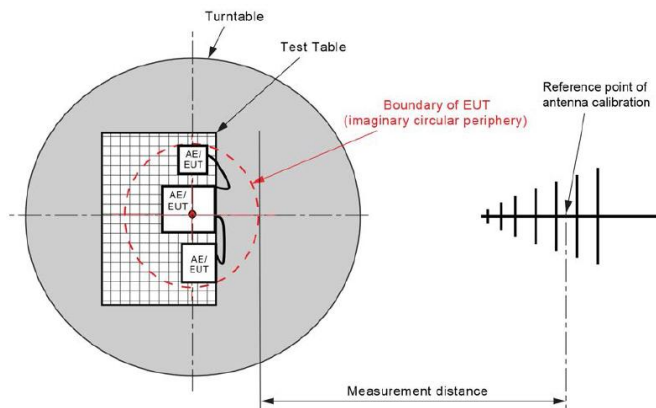


Figure C.1 – Measurement distance

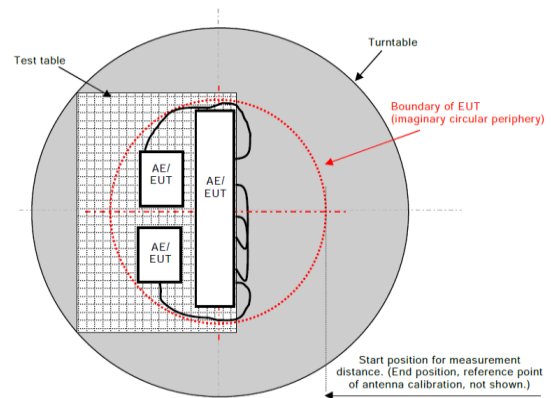


Figure C.2 – Boundary of EUT, Local AE and associated cabling

The radiated emission performed in the 3 meters, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209, FCC 15.247 limits.

## EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 25 GHz.

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

9kHz - 1000MHz:

| Frequency Range | Measurement | RBW    | Video B/W | IF B/W | Detector |
|-----------------|-------------|--------|-----------|--------|----------|
| 9kHz - 150kHz   | PK          | 0.3kHz | 1kHz      | /      | PK       |
|                 | QP/AV       | /      | /         | 200Hz  | QP/AV    |
| 150kHz - 30MHz  | PK          | 10kHz  | 30kHz     | /      | PK       |
|                 | QP/AV       | /      | /         | 9kHz   | QP/AV    |
| 30MHz - 1000MHz | PK          | 100kHz | 300kHz    | /      | PK       |
|                 | QP          | /      | /         | 120kHz | QP       |

1GHz - 25GHz:

Pre-scan:

| Measurement | Detector | Duty cycle | RBW  | Video B/W                |
|-------------|----------|------------|------|--------------------------|
| PK          | Peak     | Any        | 1MHz | 3MHz                     |
| Ave.        | Peak     | >98%       | 1MHz | 3kHz                     |
|             |          | <98%       | 1MHz | ≥1/T, no less than 5 kHz |

Final measurement for emission identified during the pre-scan:

| Measurement | Detector | Duty cycle | RBW  | Video B/W |
|-------------|----------|------------|------|-----------|
| PK          | Peak     | Any        | 1MHz | 3MHz      |
| Ave.        | Peak     | >98%       | 1MHz | 3kHz      |
|             |          | <98%       | 1MHz | ≥1/T      |

Note 1: T is minimum transmission duration

Note 2: The 1GHz-4GHz testing use the notch filter and the 4GHz-18GHz testing use high-pass filter.

Note 3: The band edge testing use 10dB attenuator.

Note 4: The filters and attenuators are all integrated within the filter switch unit.

## Test Procedure

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

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

According to ANSI C63.10-2020, 9.2: For field strength measurements made at other than the distance specified by the limit, extrapolate the measured field strength to the field strength at the distance specified by the limit using an inverse distance correction factor (20 dB/decade of distance).

$$E_{SpecLimit} = E_{Meas} + 20 \log \left( \frac{D_{Meas}}{D_{SpecLimit}} \right)$$

where

|                 |                                                                                         |
|-----------------|-----------------------------------------------------------------------------------------|
| $E_{SpecLimit}$ | is the field strength of the emission at the distance specified by the limit, in dBuV/m |
| $E_{Meas}$      | is the field strength of the emission at the measurement distance, in dBuV/m            |
| $D_{Meas}$      | is the measurement distance, in m                                                       |
| $D_{SpecLimit}$ | is the distance specified by the limit, in m                                            |

Note 1: If the maximized peak measured value is under the QP/Average limit by more than 6dB, then it is unnecessary to perform an QP/Average measurement.

Note 2: For above 1GHz, the test result of peak was 20dB below to the limit of peak, which can be compliant to the average limit, so just peak value was recorded.

Calculation

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

Factor = Antenna Factor + Cable Loss - 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:

Over Limit/Margin = Level / Corrected Amplitude – Limit  
Level / Corrected Amplitude = Read Level + Factor

Test Data

9kHz-1GHz

Environmental Conditions

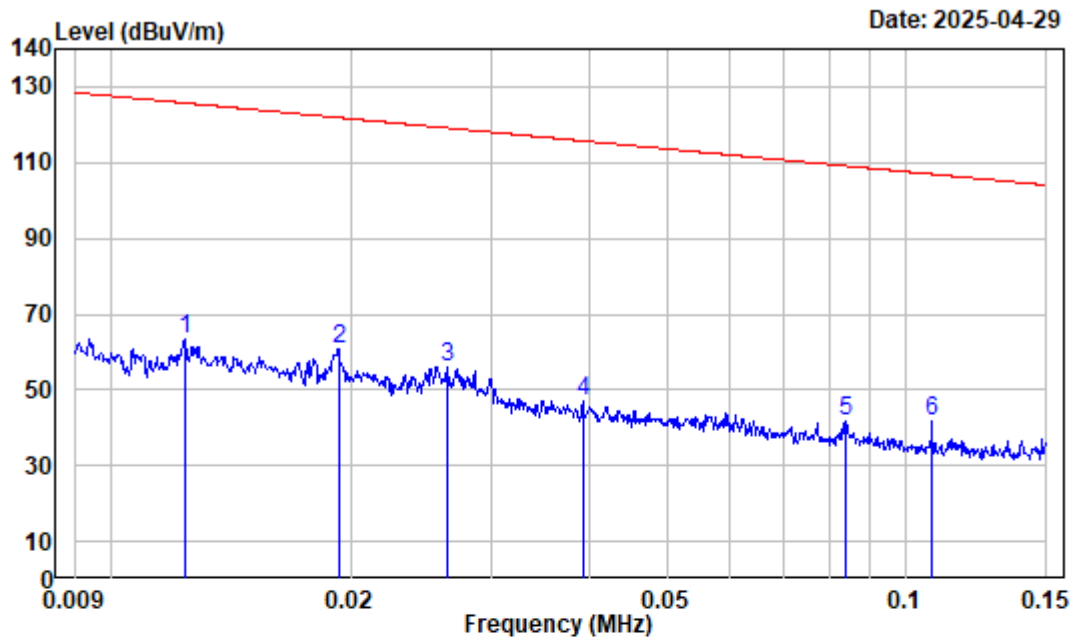
|                     |                     |
|---------------------|---------------------|
| Temperature:        | 23.2 °C             |
| Relative Humidity:  | 55 %                |
| ATM Pressure:       | 101.3 kPa           |
| Test Engineer:      | Roger Ling          |
| Test Date:          | 2025-04-29          |
| EUT Operation Mode: | BLE 2M Transmitting |

**Test Result:** Compliance, please refer to the below data.

*Note 1: The Loop Antenna were tested in parallel, perpendicular and ground-parallel. The worst orientation was parallel and the data was recorded in report.*

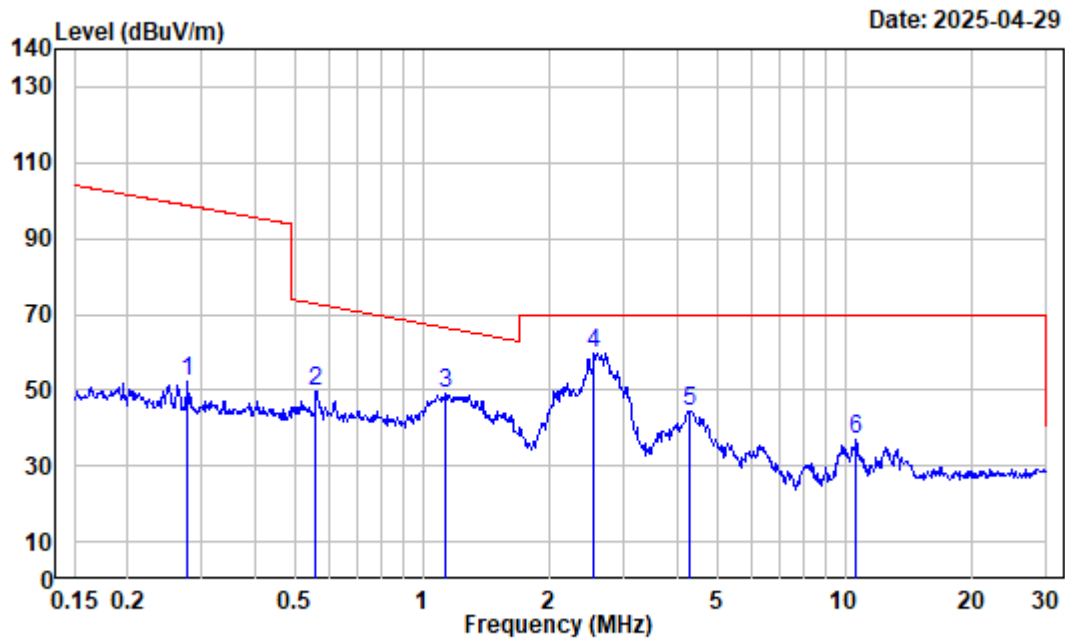
*Note 2: The maximum output power mode and channel: BLE 2M High channel was tested.*

9kHz~30MHz:



Site : Chamber  
Condition : 3m  
Project No. : 2504S32884E-RF  
Polarization : Parallel Tester: Roger Ling  
Test Mode : BLE 2M Transmitting  
Receiver Setting: RBW:300Hz VBW:1kHz

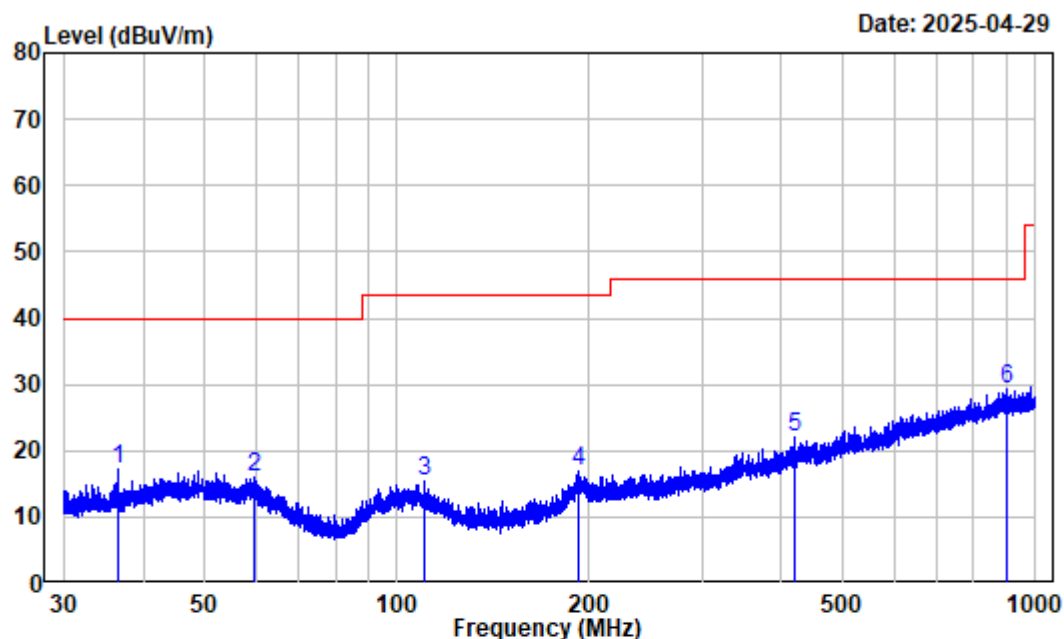
|   | Freq  | Factor | Read Level | Level  | Limit Line | Over Limit | Remark |
|---|-------|--------|------------|--------|------------|------------|--------|
|   | MHz   | dB/m   | dBuV       | dBuV/m | dBuV/m     | dB         |        |
| 1 | 0.012 | 34.78  | 28.69      | 63.47  | 125.76     | -62.29     | Peak   |
| 2 | 0.019 | 31.67  | 29.06      | 60.73  | 121.87     | -61.14     | Peak   |
| 3 | 0.026 | 28.53  | 27.68      | 56.21  | 119.16     | -62.95     | Peak   |
| 4 | 0.039 | 25.05  | 21.87      | 46.92  | 115.74     | -68.82     | Peak   |
| 5 | 0.084 | 18.13  | 23.68      | 41.81  | 109.12     | -67.31     | Peak   |
| 6 | 0.108 | 16.10  | 25.71      | 41.81  | 106.97     | -65.16     | Peak   |



Site : Chamber  
Condition : 3m  
Project No. : 2504S32884E-RF  
Polarization : Parallel      Tester: Roger Ling  
Test Mode : BLE 2M Transmitting  
Receiver Setting: RBW:10kHz VBW:30kHz

|   | Freq   | Factor | Read Level | Level  | Limit Line | Over Limit | Remark |
|---|--------|--------|------------|--------|------------|------------|--------|
|   | MHz    | dB/m   | dBuV       | dBuV/m | dBuV/m     | dB         |        |
| 1 | 0.277  | 8.31   | 43.94      | 52.25  | 98.74      | -46.49     | Peak   |
| 2 | 0.558  | 2.59   | 47.00      | 49.59  | 72.65      | -23.06     | Peak   |
| 3 | 1.135  | -2.35  | 51.46      | 49.11  | 66.35      | -17.24     | Peak   |
| 4 | 2.540  | -5.67  | 65.46      | 59.79  | 69.54      | -9.75      | Peak   |
| 5 | 4.269  | -6.32  | 50.85      | 44.53  | 69.54      | -25.01     | Peak   |
| 6 | 10.620 | -5.29  | 42.30      | 37.01  | 69.54      | -32.53     | Peak   |

## 30MHz~1GHz:



Site : Chamber

Condition : 3m HORIZONTAL

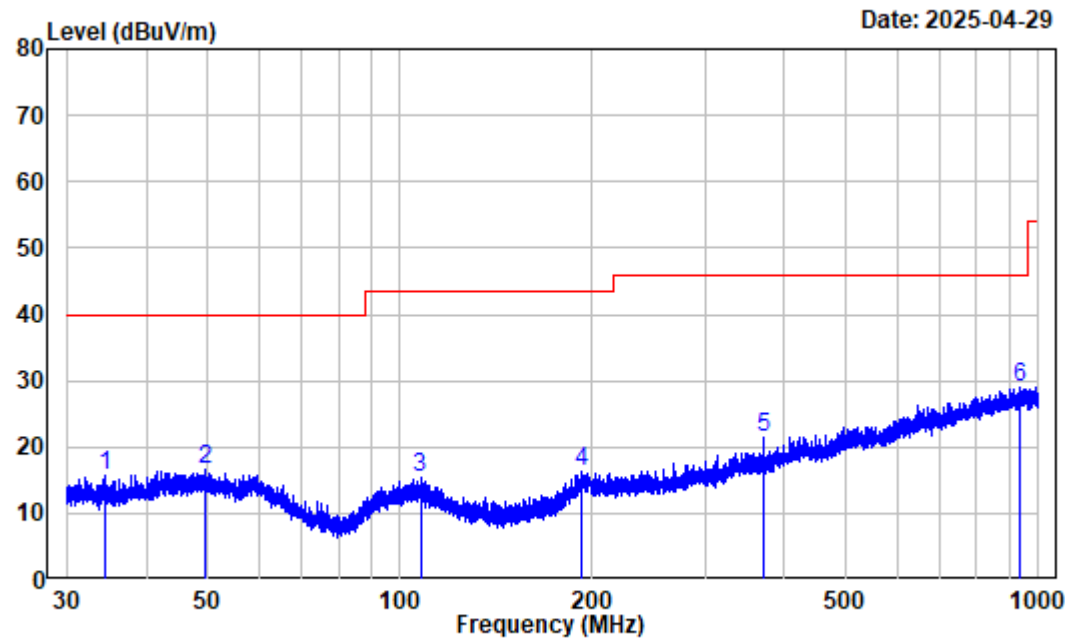
Project No. : 2504S32884E-RF

Tester: Roger Ling

Test Mode : BLE 2M Transmitting

Receiver Setting: RBW:100kHz VBW:300kHz

|   | Freq    | Factor | Read<br>Level | Limit<br>Level | Limit<br>Line | Over<br>Limit | Remark |
|---|---------|--------|---------------|----------------|---------------|---------------|--------|
|   | MHz     | dB/m   | dBuV          | dBuV/m         | dBuV/m        | dB            |        |
| 1 | 36.621  | -11.95 | 29.24         | 17.29          | 40.00         | -22.71        | Peak   |
| 2 | 59.806  | -10.85 | 26.83         | 15.98          | 40.00         | -24.02        | Peak   |
| 3 | 110.182 | -12.15 | 27.50         | 15.35          | 43.50         | -28.15        | Peak   |
| 4 | 192.841 | -10.53 | 27.35         | 16.82          | 43.50         | -26.68        | Peak   |
| 5 | 420.212 | -5.80  | 27.70         | 21.90          | 46.00         | -24.10        | Peak   |
| 6 | 904.102 | 0.79   | 28.53         | 29.32          | 46.00         | -16.68        | Peak   |



Site : Chamber

Condition : 3m VERTICAL

Project No. : 2504S32884E-RF

Test Mode : BLE 2M Transmitting

Receiver Setting: RBW:100kHz VBW:300kHz

Tester: Roger Ling

|   | Freq    | Factor | Read Level | Level  | Limit Line | Over Limit | Remark |
|---|---------|--------|------------|--------|------------|------------|--------|
|   | MHz     | dB/m   | dBuV       | dBuV/m | dBuV/m     | dB         |        |
| 1 | 34.608  | -12.26 | 27.87      | 15.61  | 40.00      | -24.39     | Peak   |
| 2 | 49.598  | -10.39 | 27.05      | 16.66  | 40.00      | -23.34     | Peak   |
| 3 | 107.557 | -11.74 | 27.19      | 15.45  | 43.50      | -28.05     | Peak   |
| 4 | 192.503 | -10.60 | 26.94      | 16.34  | 43.50      | -27.16     | Peak   |
| 5 | 371.027 | -7.58  | 28.93      | 21.35  | 46.00      | -24.65     | Peak   |
| 6 | 932.272 | 0.84   | 28.05      | 28.89  | 46.00      | -17.11     | Peak   |

1GHz-25GHz

Environmental Conditions

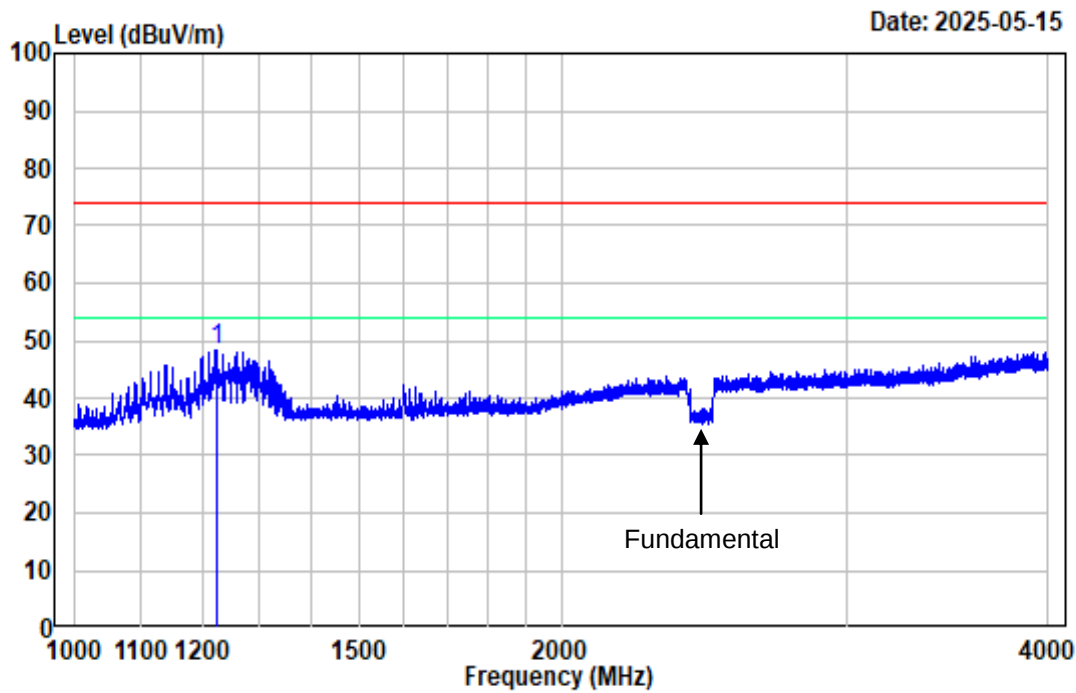
|                     |                          |
|---------------------|--------------------------|
| Temperature:        | 23.6 to 24.3 °C          |
| Relative Humidity:  | 55 to 56 %               |
| ATM Pressure:       | 100.2 kPa                |
| Test Engineer:      | Roger Ling               |
| Test Date:          | 2025-05-10 to 2025-05-15 |
| EUT Operation Mode: | Transmitting             |

**Test Result:** Compliance, please refer to the below data.

*Note 1: For 1GHz-4GHz, the fundamental test with filter switch unit.*

*Note 2: For 18GHz-25GHz, the maximum output power mode and channel: BLE 2M High channel was tested.*

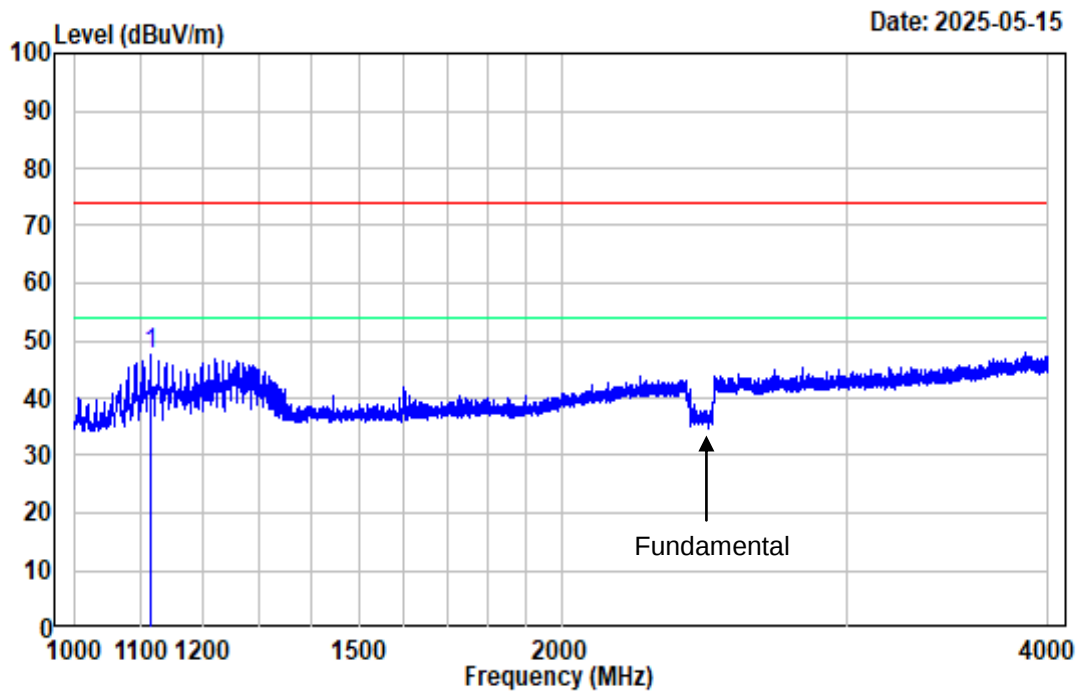
BLE1M Low Channel 1GHz-4GHz\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE1M Low Channel 2402MHz 1GHz-4GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 1224.250 | -14.16 | 62.49 | 48.33  | 74.00  | -25.67 | Peak   |

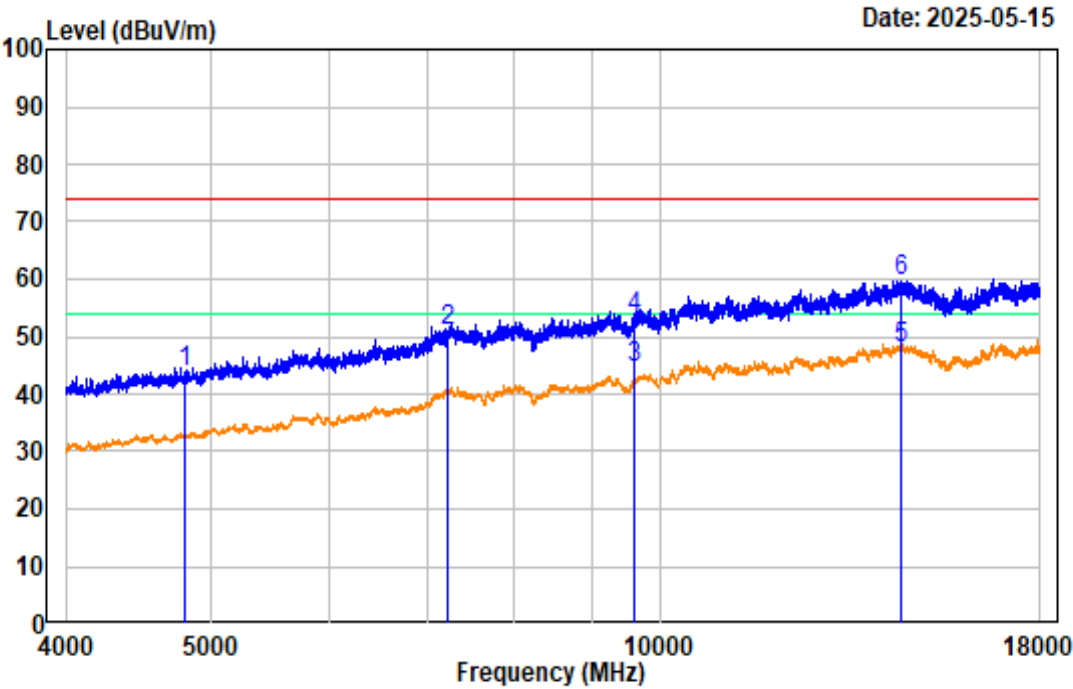
BLE1M Low Channel 1GHz-4GHz\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE1M Low Channel 2402MHz 1GHz-4GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 1115.500 | -14.33 | 62.02 | 47.69  | 74.00  | -26.31 | Peak   |

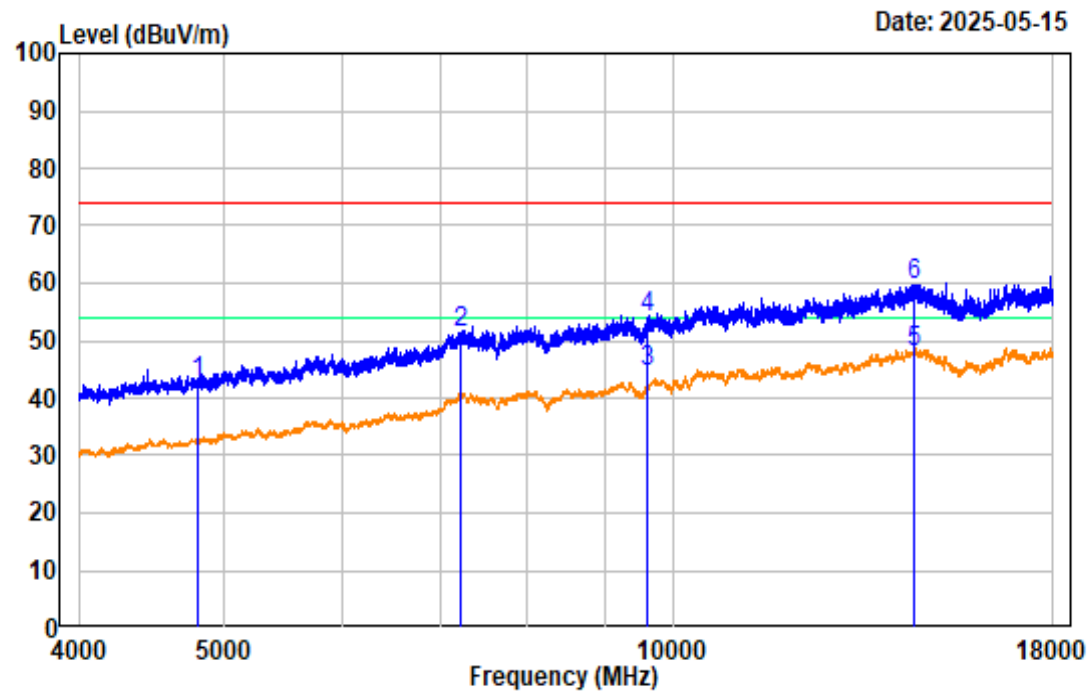
BLE 1M Low Channel 4GHz-18GHz\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE 1M Low Channel 2402MHz 4GHz-18GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

|             |        | Read  |        | Limit  | Over   | Remark  |
|-------------|--------|-------|--------|--------|--------|---------|
| Freq        | Factor | Level | Level  | Line   | Limit  |         |
| MHz         | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |         |
| 1 4804.000  | -6.59  | 50.33 | 43.74  | 74.00  | -30.26 | peak    |
| 2 7206.000  | -1.33  | 52.26 | 50.93  | 74.00  | -23.07 | peak    |
| 3 9608.750  | 1.57   | 43.11 | 44.68  | 54.00  | -9.32  | Average |
| 4 9608.750  | 1.57   | 51.53 | 53.10  | 74.00  | -20.90 | Peak    |
| 5 14522.750 | 8.60   | 39.28 | 47.88  | 54.00  | -6.12  | Average |
| 6 14522.750 | 8.60   | 51.12 | 59.72  | 74.00  | -14.28 | Peak    |

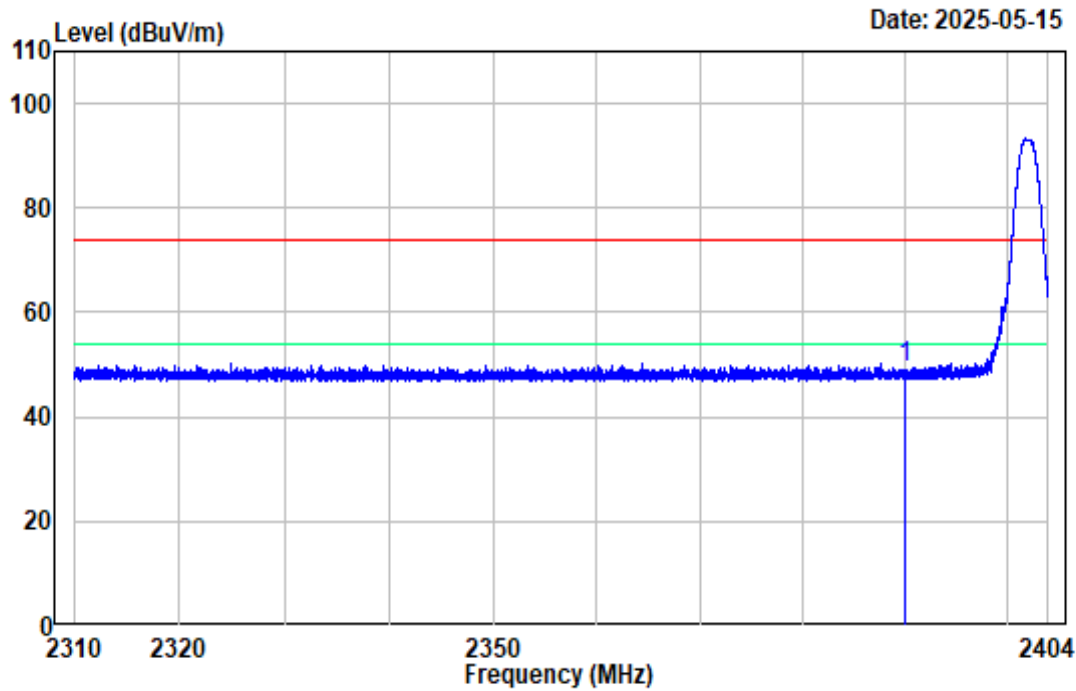
BLE 1M Low Channel 4GHz-18GHz\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE 1M Low Channel 2402MHz 4GHz-18GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

|   | Freq      | Factor | Read Level | Level  | Limit  | Over Limit | Remark  |
|---|-----------|--------|------------|--------|--------|------------|---------|
|   | MHz       | dB/m   | dBuV       | dBuV/m | dBuV/m | dB         |         |
| 1 | 4804.000  | -6.59  | 49.36      | 42.77  | 74.00  | -31.23     | peak    |
| 2 | 7206.000  | -1.33  | 52.76      | 51.43  | 74.00  | -22.57     | peak    |
| 3 | 9608.000  | 1.57   | 43.05      | 44.62  | 54.00  | -9.38      | Average |
| 4 | 9608.000  | 1.57   | 52.30      | 53.87  | 74.00  | -20.13     | Peak    |
| 5 | 14536.750 | 8.84   | 39.09      | 47.93  | 54.00  | -6.07      | Average |
| 6 | 14536.750 | 8.84   | 50.97      | 59.81  | 74.00  | -14.19     | Peak    |

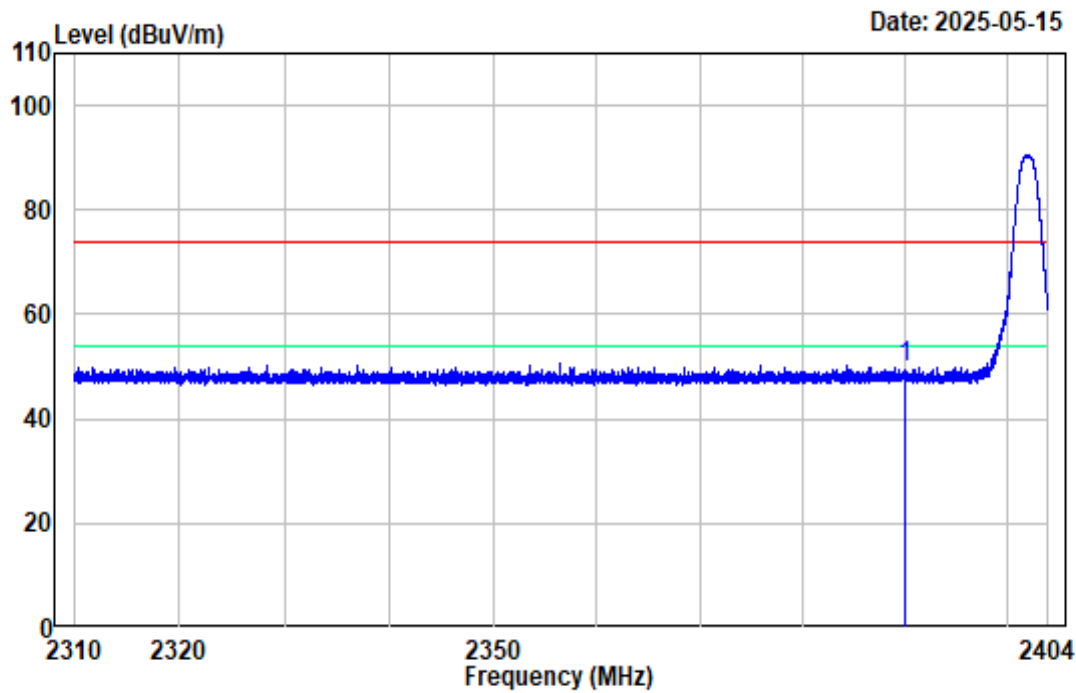
BLE1M Low Channel Bandedge\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE1M Low Channel 2402MHz Bandedge  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 2390.000 | -10.24 | 59.48 | 49.24  | 74.00  | -24.76 | peak   |

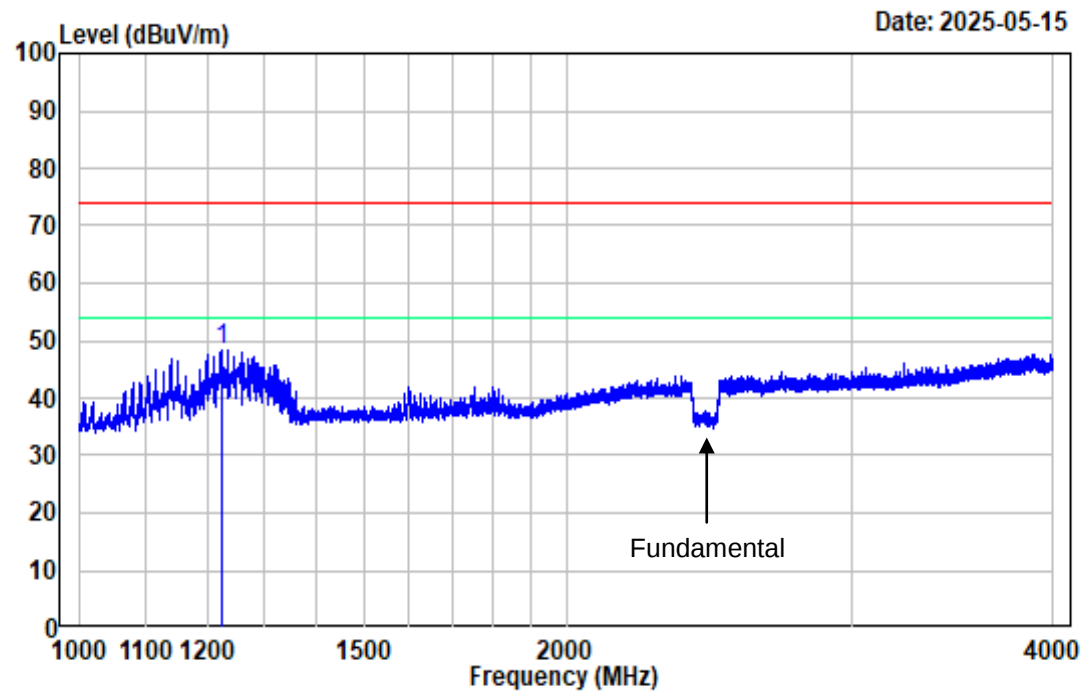
BLE1M Low Channel Bandedge\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE1M Low Channel 2402MHz Bandedge  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 2390.000 | -10.24 | 59.98 | 49.74  | 74.00  | -24.26 | peak   |

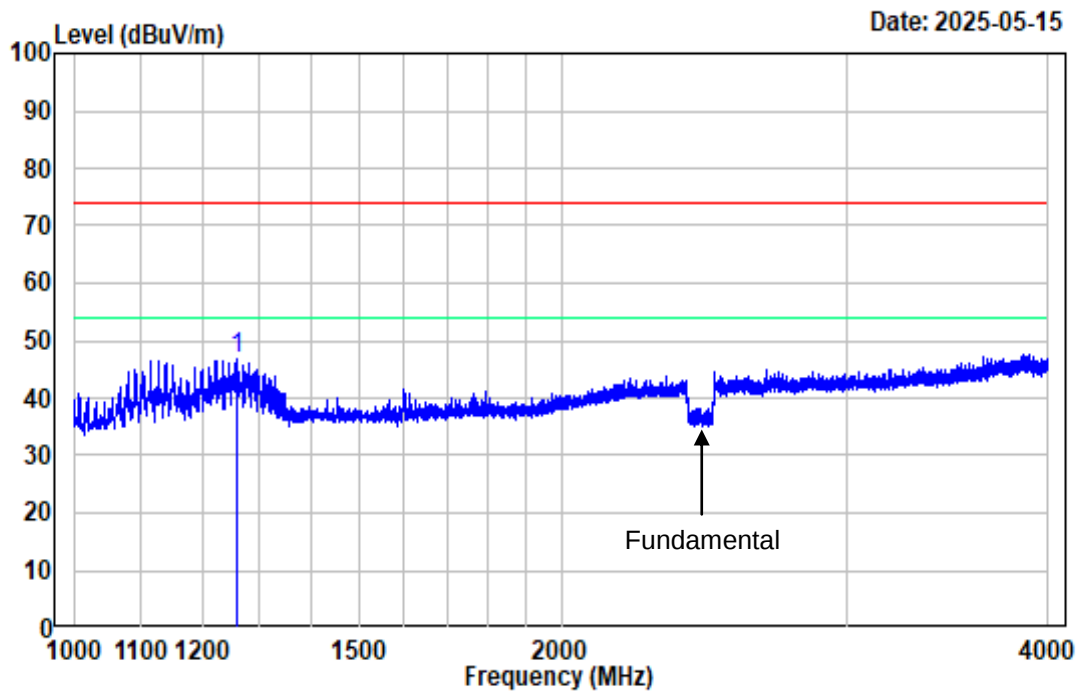
BLE1M Middle Channel 1GHz-4GHz\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE1M Middle Channel 2440MHz 1GHz-4GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 1224.250 | -14.16 | 62.57 | 48.41  | 74.00  | -25.59 | Peak   |

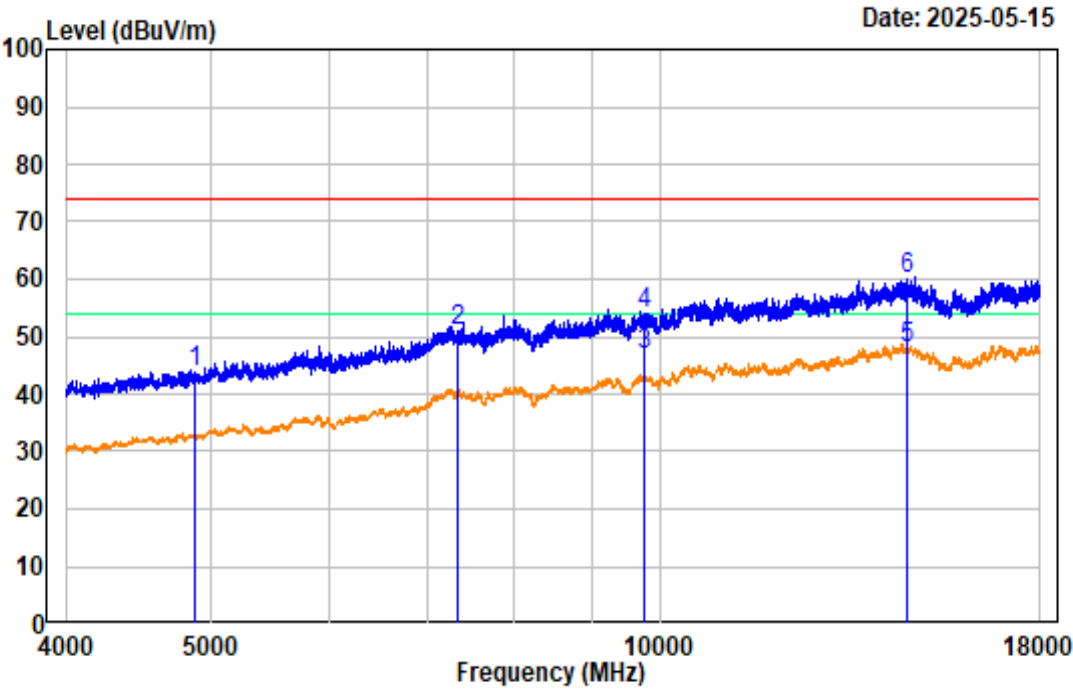
BLE1M Middle Channel 1GHz-4GHz\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE1M Middle Channel 2440MHz 1GHz-4GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 1259.875 | -13.84 | 60.74 | 46.90  | 74.00  | -27.10 | Peak   |

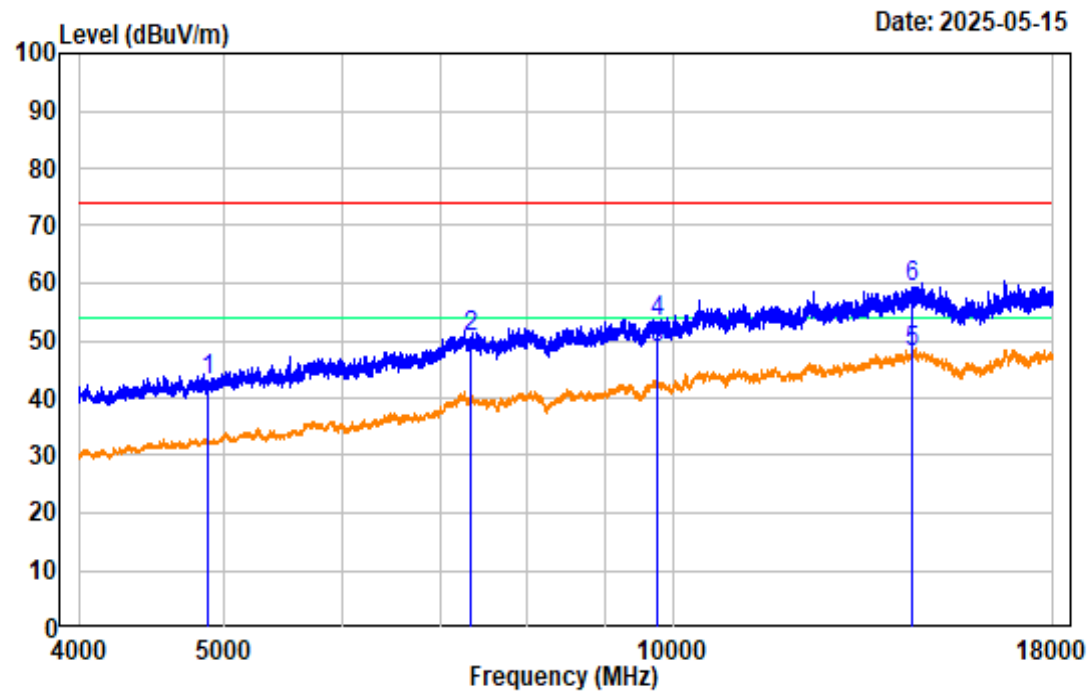
BLE 1M Middle Channel 4GHz-18GHz\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting                      Tester:Roger Ling  
Note : BLE 1M Mid Channel 2440MHz 4GHz-18GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

|   | Freq      | Factor | Read Level | Level  | Limit  | Over Limit | Remark  |
|---|-----------|--------|------------|--------|--------|------------|---------|
|   | MHz       | dB/m   | dBuV       | dBuV/m | dBuV/m | dB         |         |
| 1 | 4880.000  | -6.63  | 50.31      | 43.68  | 74.00  | -30.32     | peak    |
| 2 | 7320.000  | -1.22  | 52.20      | 50.98  | 74.00  | -23.02     | peak    |
| 3 | 9760.000  | 1.89   | 44.86      | 46.75  | 54.00  | -7.25      | Average |
| 4 | 9760.000  | 1.89   | 52.05      | 53.94  | 74.00  | -20.06     | Peak    |
| 5 | 14659.250 | 8.49   | 39.40      | 47.89  | 54.00  | -6.11      | Average |
| 6 | 14659.250 | 8.49   | 51.52      | 60.01  | 74.00  | -13.99     | Peak    |

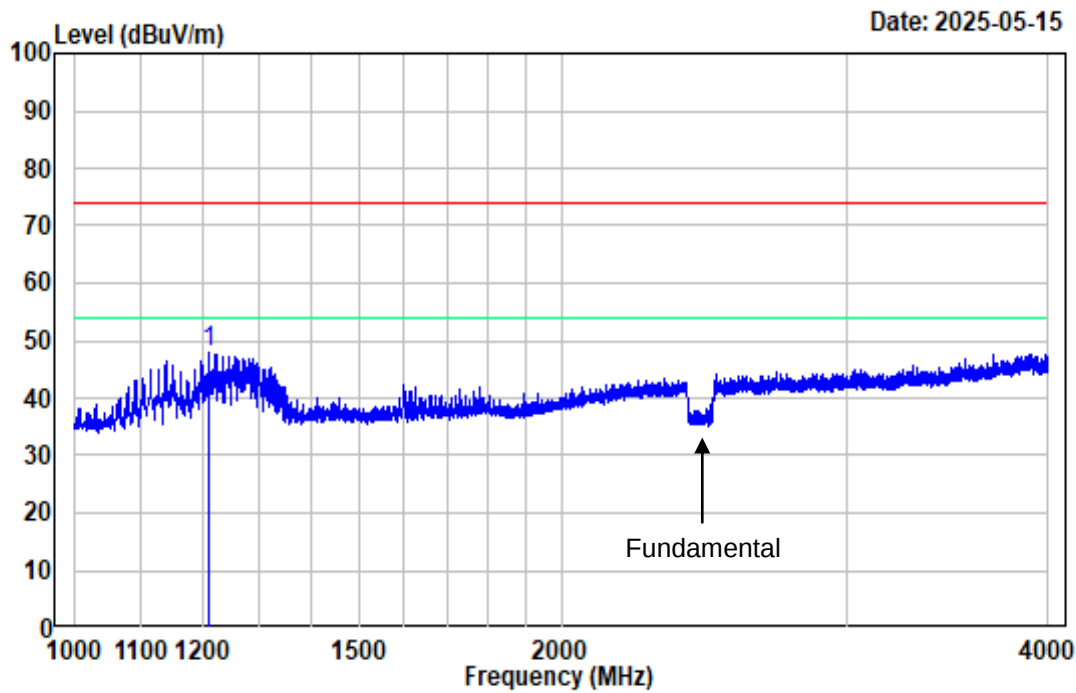
BLE 1M Middle Channel 4GHz-18GHz\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE 1M Mid Channel 2440MHz 4GHz-18GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

|   | Freq      | Factor | Read Level | Level  | Limit  | Over Limit | Remark  |
|---|-----------|--------|------------|--------|--------|------------|---------|
|   | MHz       | dB/m   | dBuV       | dBuV/m | dBuV/m | dB         |         |
| 1 | 4880.000  | -6.63  | 49.80      | 43.17  | 74.00  | -30.83     | peak    |
| 2 | 7320.000  | -1.22  | 51.92      | 50.70  | 74.00  | -23.30     | peak    |
| 3 | 9760.000  | 1.89   | 46.66      | 48.55  | 54.00  | -5.45      | Average |
| 4 | 9760.000  | 1.89   | 51.22      | 53.11  | 74.00  | -20.89     | Peak    |
| 5 | 14468.500 | 8.39   | 39.48      | 47.87  | 54.00  | -6.13      | Average |
| 6 | 14468.500 | 8.39   | 50.95      | 59.34  | 74.00  | -14.66     | Peak    |

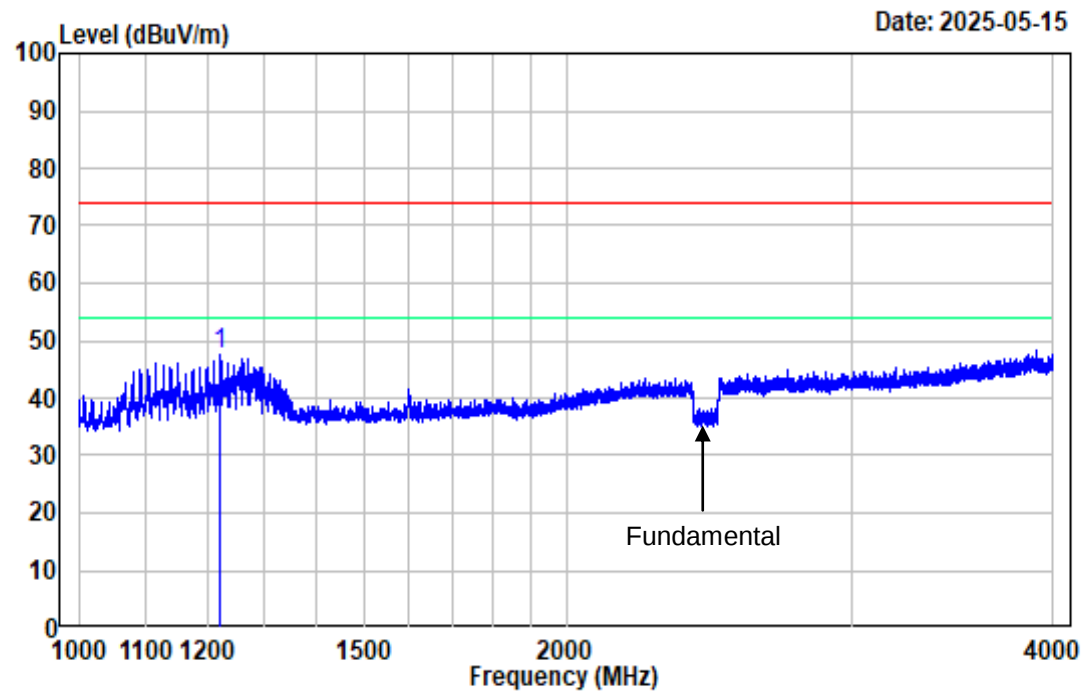
BLE1M High Channel 1GHz-4GHz\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE1M High Channel 2480MHz 1GHz-4GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 1212.250 | -14.30 | 62.11 | 47.81  | 74.00  | -26.19 | Peak   |

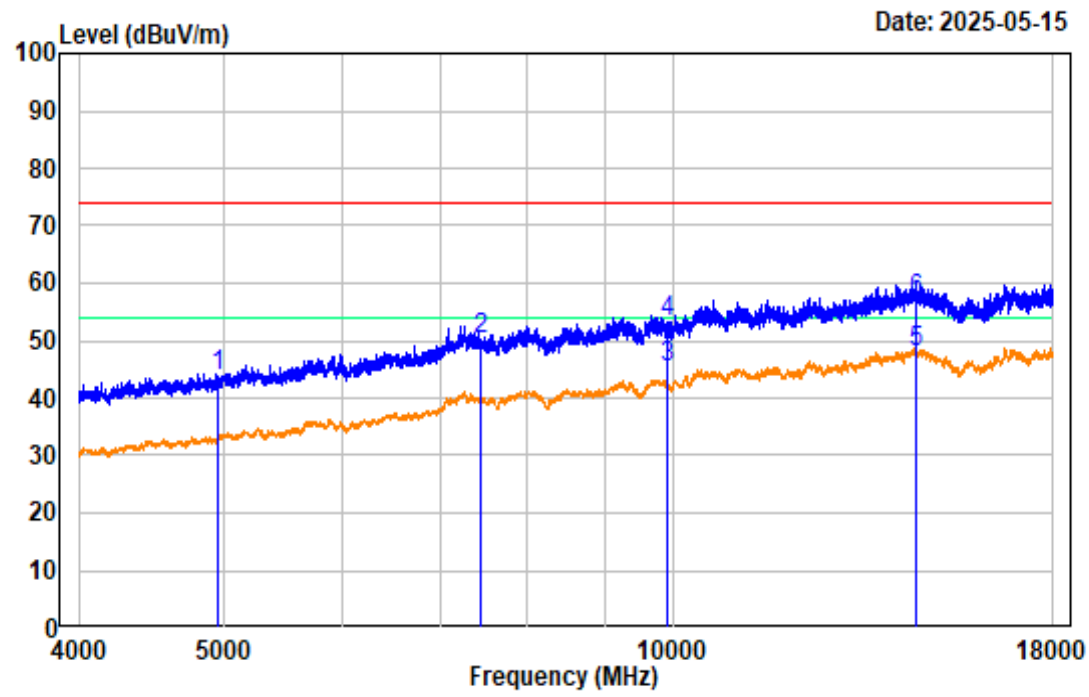
BLE1M High Channel 1GHz-4GHz\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE1M High Channel 2480MHz 1GHz-4GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 1223.875 | -14.16 | 61.52 | 47.36  | 74.00  | -26.64 | Peak   |

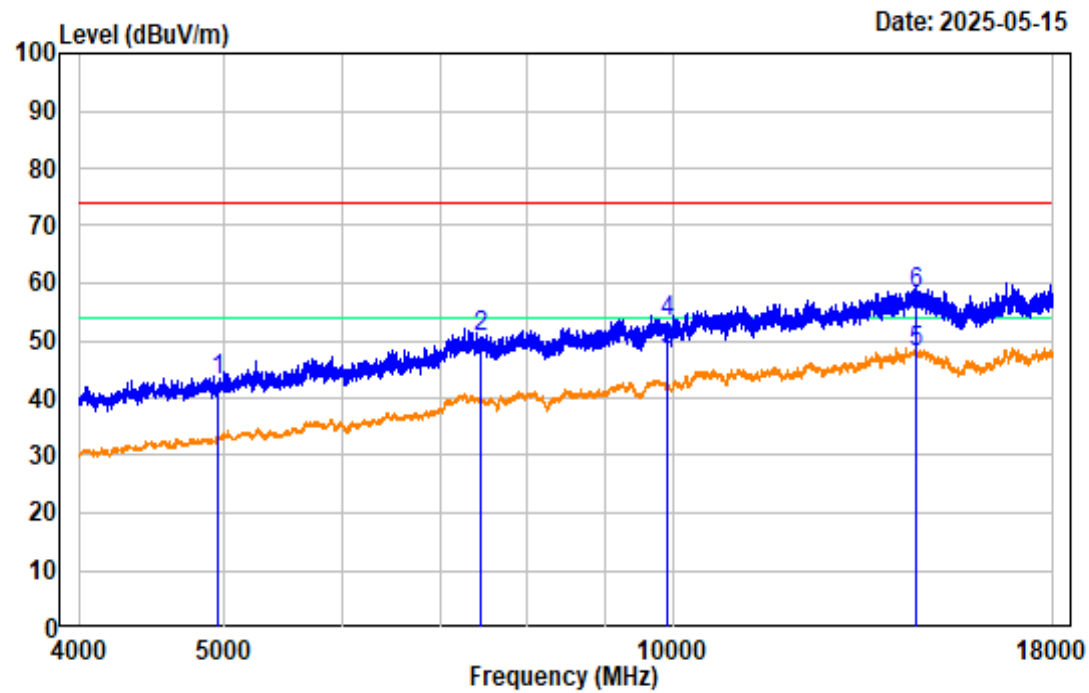
BLE 1M High Channel 4GHz-18GHz\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting      Tester:Roger Ling  
Note : BLE 1M High Channel 2480MHz 4GHz-18GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

|   | Freq      | Factor | Read Level | Level  | Limit Line | Over Limit | Remark  |
|---|-----------|--------|------------|--------|------------|------------|---------|
|   | MHz       | dB/m   | dBuV       | dBuV/m | dBuV/m     | dB         |         |
| 1 | 4960.000  | -6.44  | 50.23      | 43.79  | 74.00      | -30.21     | peak    |
| 2 | 7440.000  | -1.07  | 51.27      | 50.20  | 74.00      | -23.80     | peak    |
| 3 | 9920.250  | 2.11   | 43.26      | 45.37  | 54.00      | -8.63      | Average |
| 4 | 9920.250  | 2.11   | 50.93      | 53.04  | 74.00      | -20.96     | Peak    |
| 5 | 14584.000 | 8.39   | 39.43      | 47.82  | 54.00      | -6.18      | Average |
| 6 | 14584.000 | 8.39   | 48.65      | 57.04  | 74.00      | -16.96     | Peak    |

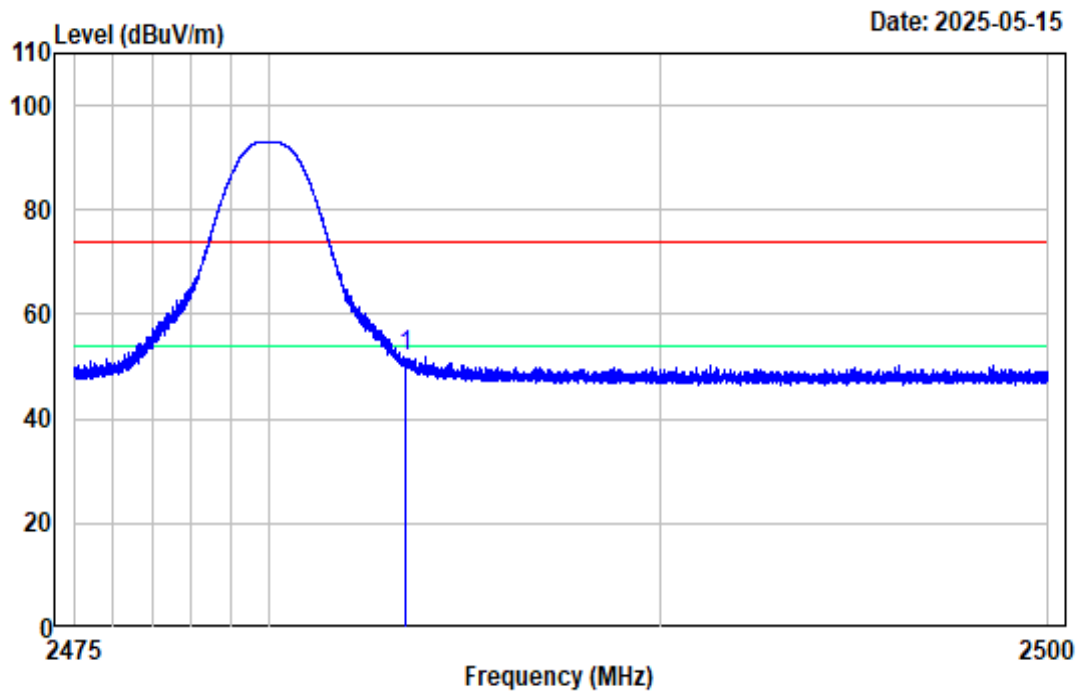
BLE 1M High Channel 4GHz-18GHz\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE 1M High Channel 2480MHz 4GHz-18GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

|   | Freq      | Factor | Read Level | Level  | Limit Line | Over Limit | Remark  |
|---|-----------|--------|------------|--------|------------|------------|---------|
|   | MHz       | dB/m   | dBuV       | dBuV/m | dBuV/m     | dB         |         |
| 1 | 4960.000  | -6.44  | 49.45      | 43.01  | 74.00      | -30.99     | peak    |
| 2 | 7440.000  | -1.07  | 51.50      | 50.43  | 74.00      | -23.57     | peak    |
| 3 | 9920.250  | 2.11   | 46.23      | 48.34  | 54.00      | -5.66      | Average |
| 4 | 9920.250  | 2.11   | 51.05      | 53.16  | 74.00      | -20.84     | Peak    |
| 5 | 14552.500 | 9.00   | 38.90      | 47.90  | 54.00      | -6.10      | Average |
| 6 | 14552.500 | 9.00   | 49.22      | 58.22  | 74.00      | -15.78     | Peak    |

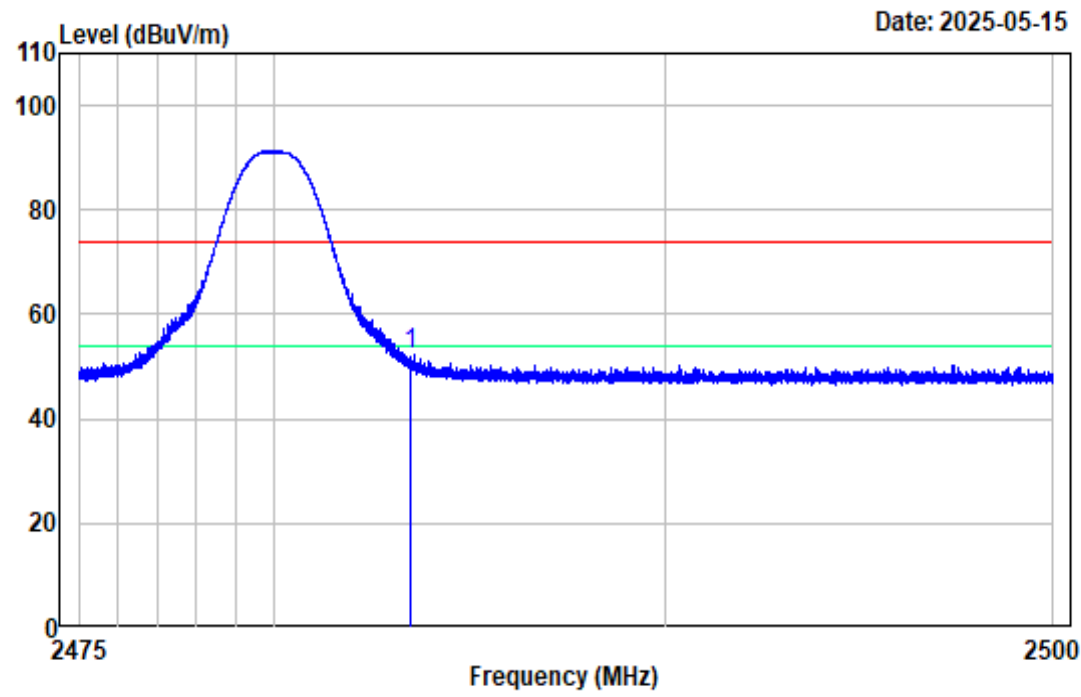
BLE1M High Channel Bandedge\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE1M High Channel 2480MHz Bandedge  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 2483.500 | -10.22 | 61.92 | 51.70  | 74.00  | -22.30 | peak   |

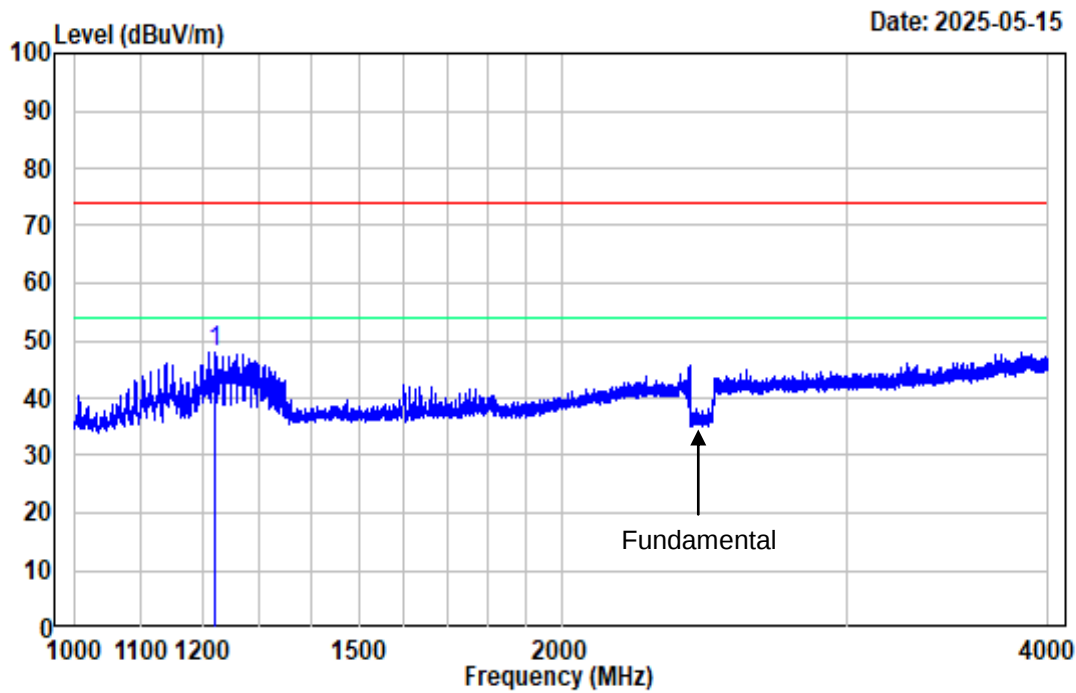
BLE1M High Channel Bandedge\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE1M High Channel 2480MHz Bandedge  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 2483.500 | -10.22 | 62.40 | 52.18  | 74.00  | -21.82 | peak   |

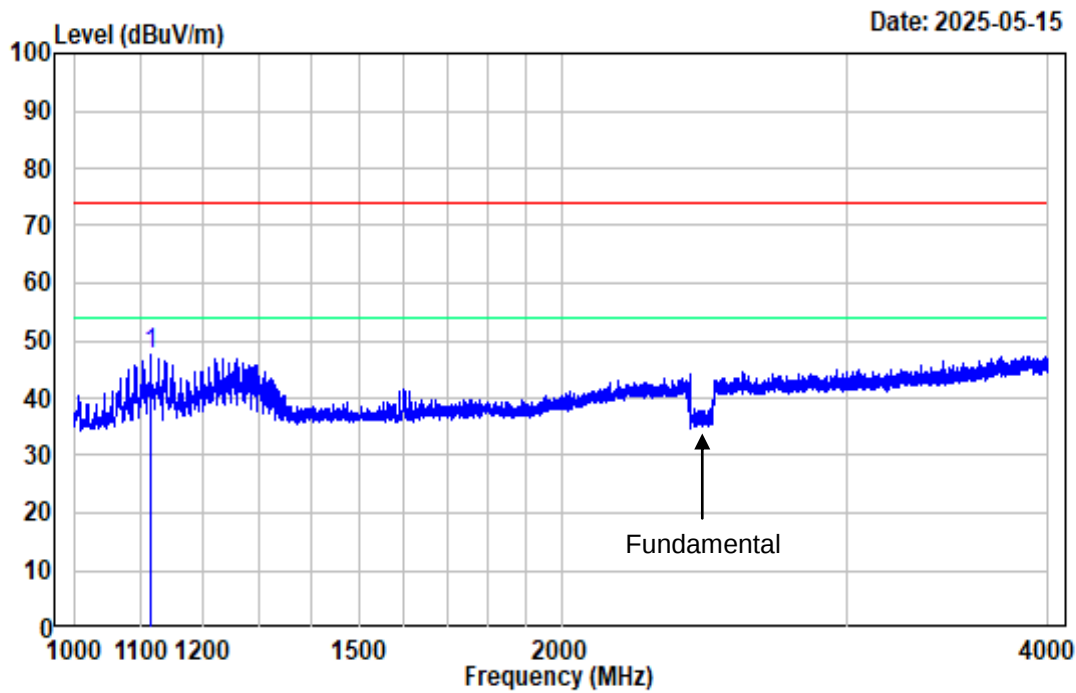
BLE2M Low Channel 1GHz-4GHz\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE2M Low Channel 2402MHz 1GHz-4GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 1223.875 | -14.16 | 62.21 | 48.05  | 74.00  | -25.95 | Peak   |

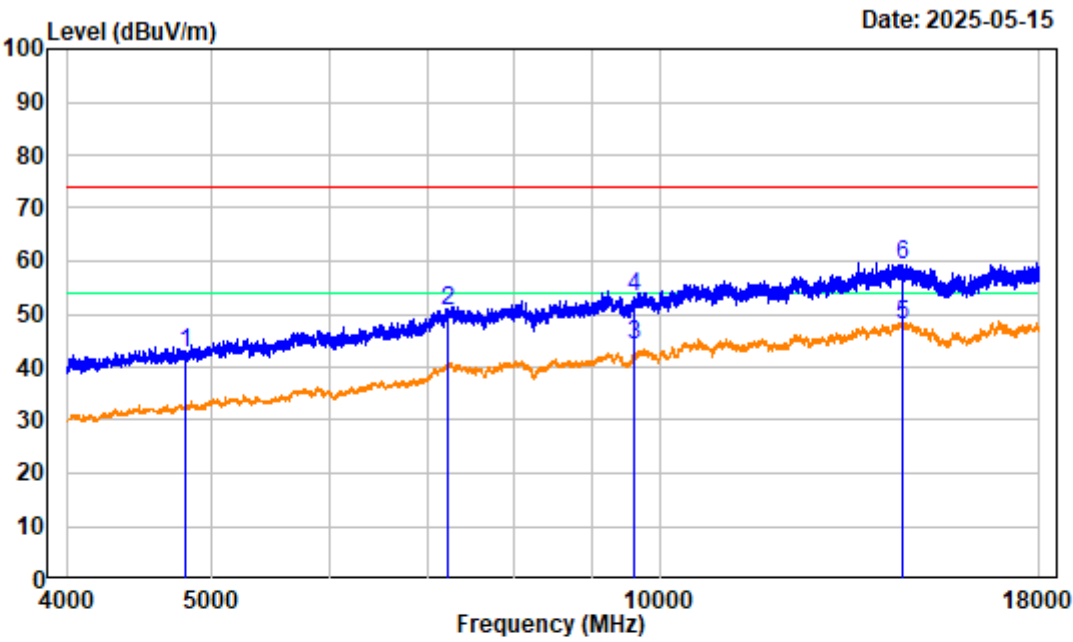
BLE2M Low Channel 1GHz-4GHz\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE2M Low Channel 2402MHz 1GHz-4GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 1115.500 | -14.33 | 61.74 | 47.41  | 74.00  | -26.59 | Peak   |

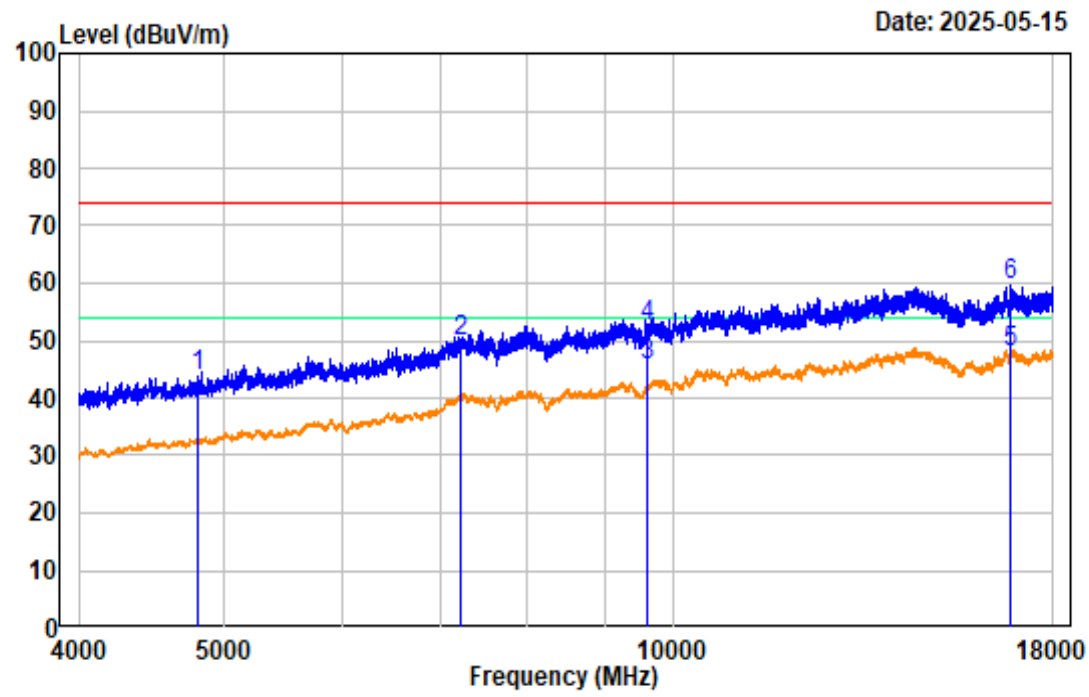
BLE 2M Low Channel 4GHz-18GHz\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting                      Tester:Roger Ling  
Note : BLE 2M Low Channel 2402MHz 4GHz-18GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

|   | Freq      | Factor | Read Level | Level  | Limit Line | Over Limit | Remark  |
|---|-----------|--------|------------|--------|------------|------------|---------|
|   | MHz       | dB/m   | dBuV       | dBuV/m | dBuV/m     | dB         |         |
| 1 | 4804.000  | -6.59  | 49.32      | 42.73  | 74.00      | -31.27     | peak    |
| 2 | 7206.000  | -1.33  | 51.72      | 50.39  | 74.00      | -23.61     | peak    |
| 3 | 9608.750  | 1.57   | 42.61      | 44.18  | 54.00      | -9.82      | Average |
| 4 | 9608.750  | 1.57   | 51.74      | 53.31  | 74.00      | -20.69     | Peak    |
| 5 | 14589.250 | 8.29   | 39.59      | 47.88  | 54.00      | -6.12      | Average |
| 6 | 14589.250 | 8.29   | 50.88      | 59.17  | 74.00      | -14.83     | Peak    |

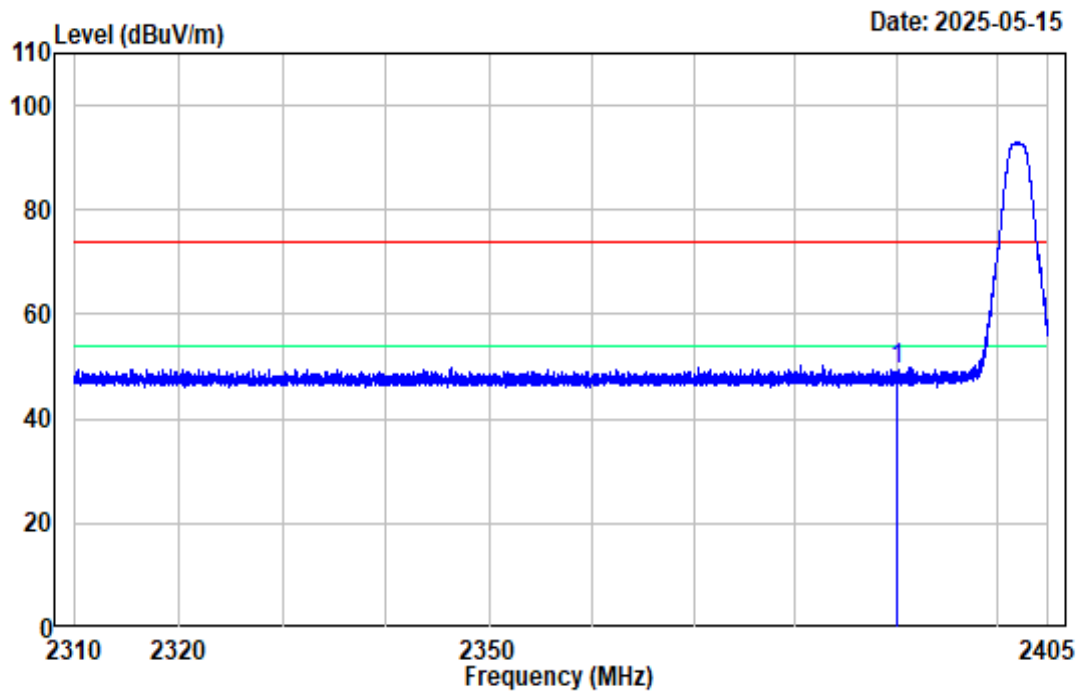
BLE 2M Low Channel 4GHz-18GHz\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE 2M Low Channel 2402MHz 4GHz-18GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

|   | Freq      | Factor | Read Level | Level  | Limit Line | Over Limit | Remark  |
|---|-----------|--------|------------|--------|------------|------------|---------|
|   | MHz       | dB/m   | dBuV       | dBuV/m | dBuV/m     | dB         |         |
| 1 | 4804.000  | -6.59  | 50.42      | 43.83  | 74.00      | -30.17     | peak    |
| 2 | 7206.000  | -1.33  | 51.32      | 49.99  | 74.00      | -24.01     | peak    |
| 3 | 9608.750  | 1.57   | 44.02      | 45.59  | 54.00      | -8.41      | Average |
| 4 | 9608.750  | 1.57   | 50.73      | 52.30  | 74.00      | -21.70     | Peak    |
| 5 | 16846.750 | 8.01   | 39.75      | 47.76  | 54.00      | -6.24      | Average |
| 6 | 16846.750 | 8.01   | 51.76      | 59.77  | 74.00      | -14.23     | Peak    |

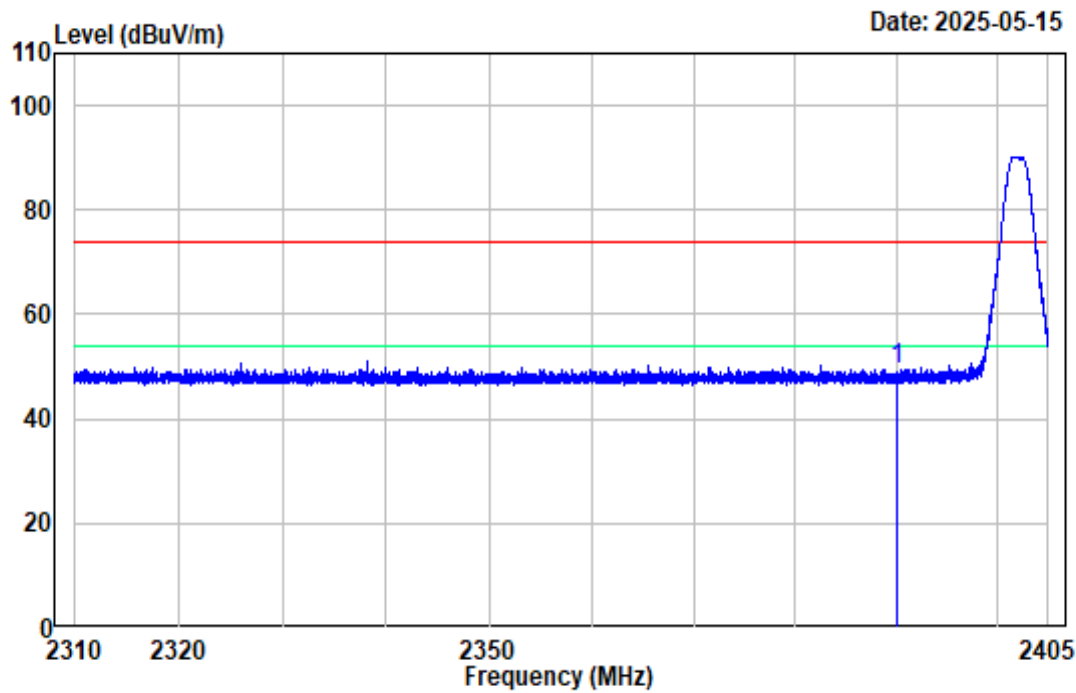
BLE2M Low Channel Bandedge\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE2M Low Channel 2402MHz Bandedge  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 2390.000 | -10.24 | 59.69 | 49.45  | 74.00  | -24.55 | peak   |

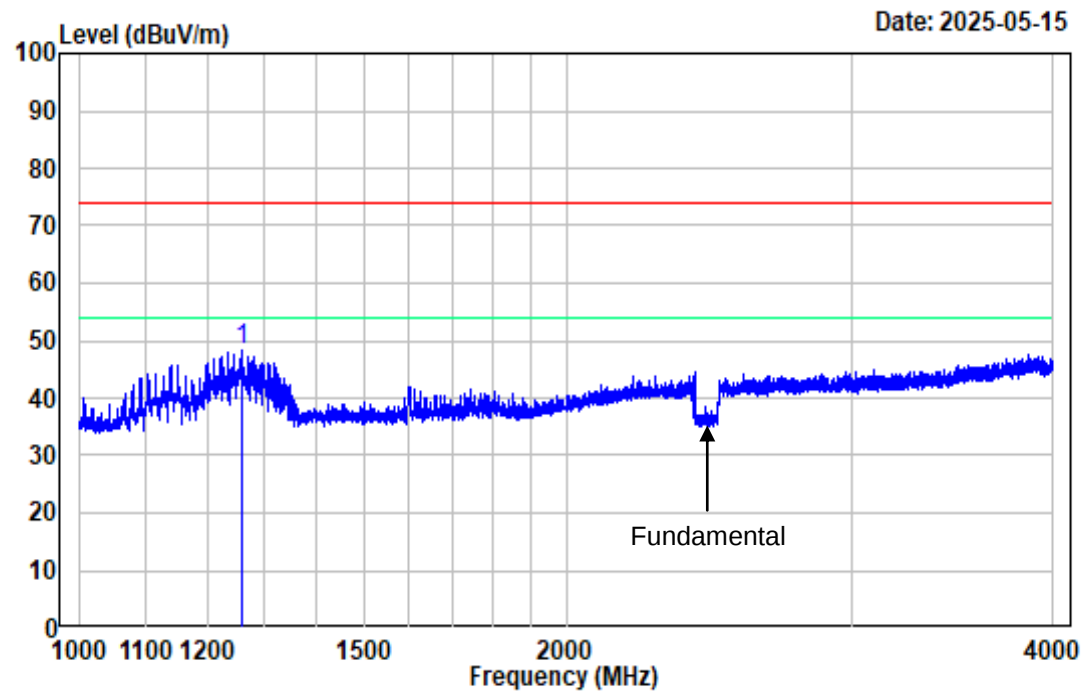
BLE2M Low Channel Bandedge\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE2M Low Channel 2402MHz Bandedge  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 2390.000 | -10.24 | 59.80 | 49.56  | 74.00  | -24.44 | peak   |

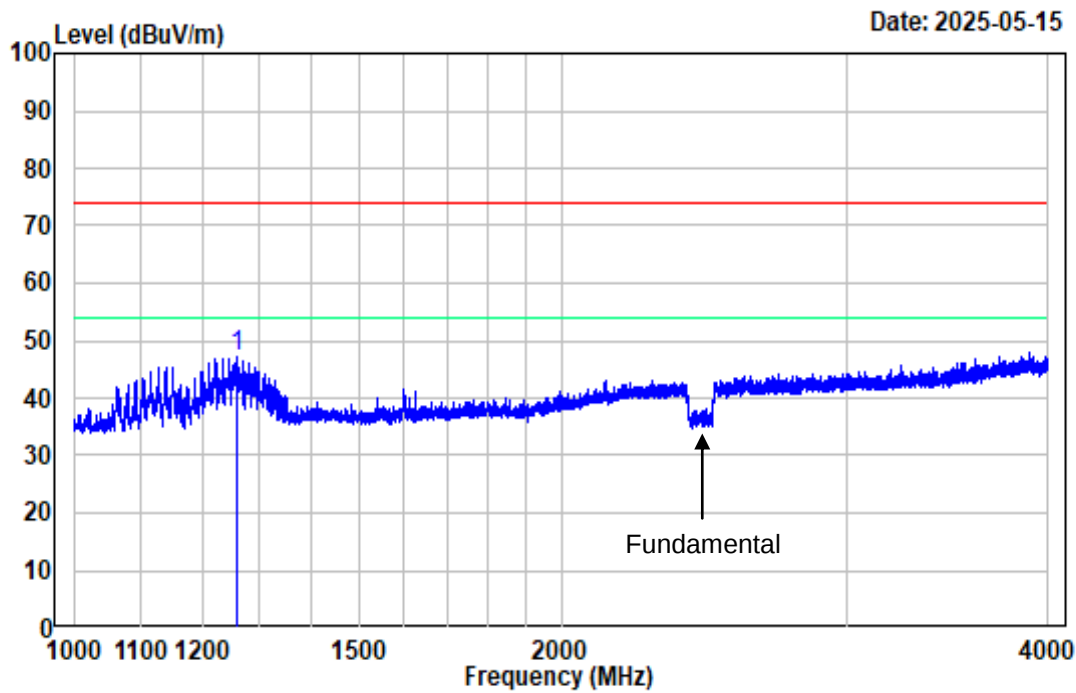
BLE2M Middle Channel 1GHz-4GHz\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE2M Middle Channel 2440MHz 1GHz-4GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 1259.875 | -13.84 | 62.16 | 48.32  | 74.00  | -25.68 | Peak   |

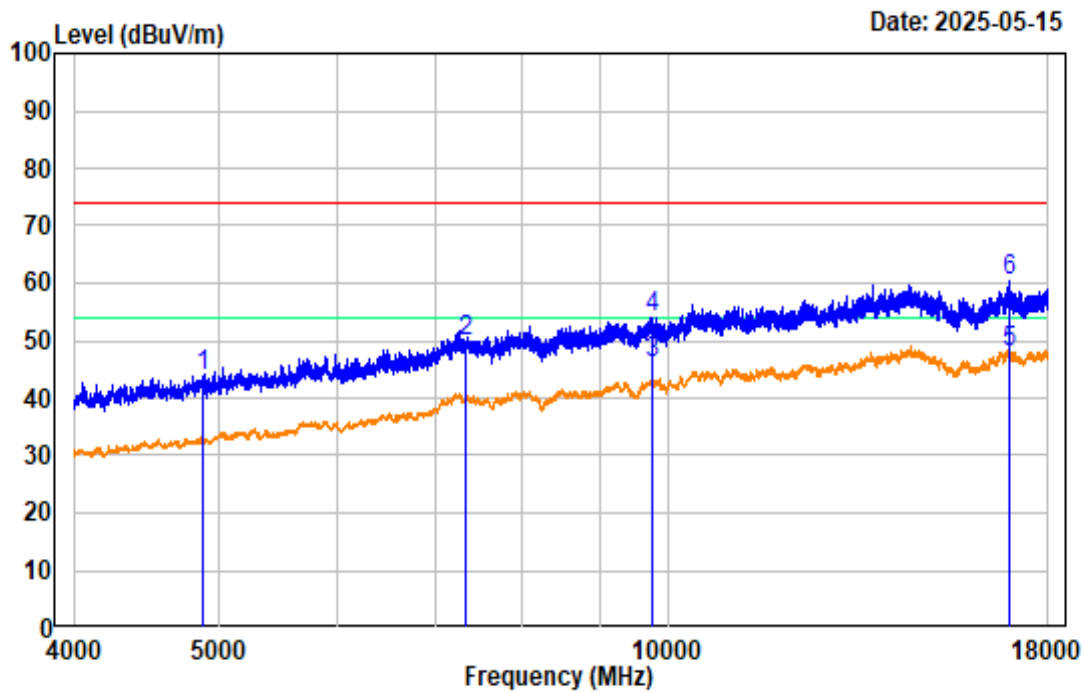
BLE2M Middle Channel 1GHz-4GHz\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE2M Middle Channel 2440MHz 1GHz-4GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 1259.875 | -13.84 | 61.06 | 47.22  | 74.00  | -26.78 | Peak   |

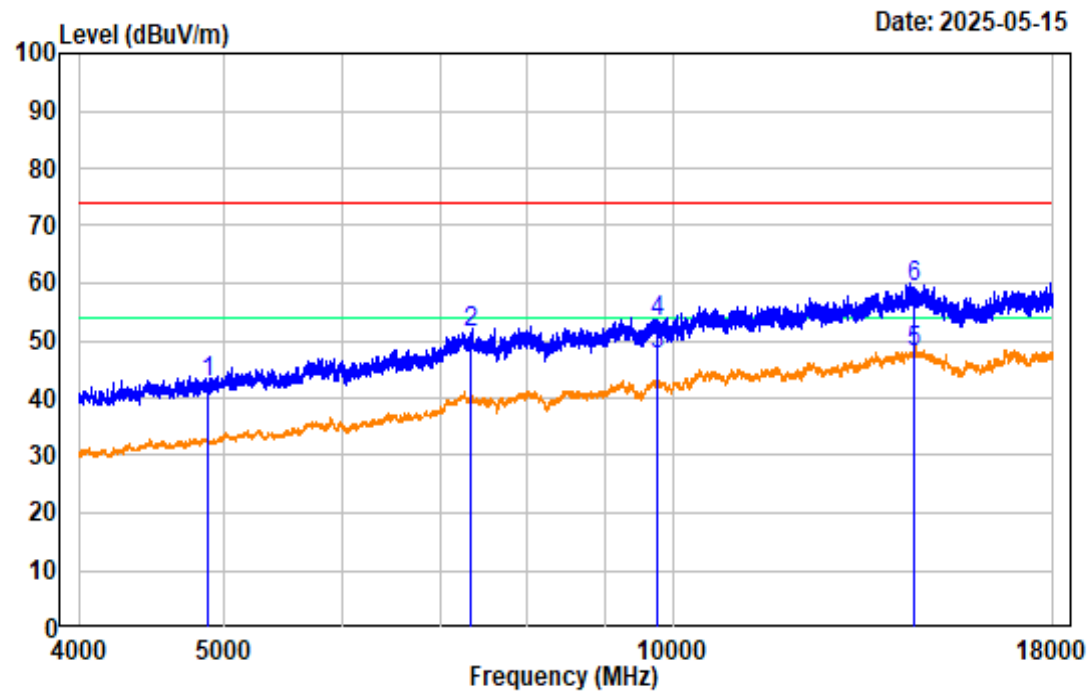
BLE 2M Middle Channel 4GHz-18GHz\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE 2M Mid Channel 2440MHz 4GHz-18GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

|   | Freq      | Factor | Read Level | Level  | Limit  | Over Limit | Remark  |
|---|-----------|--------|------------|--------|--------|------------|---------|
|   | MHz       | dB/m   | dBuV       | dBuV/m | dBuV/m | dB         |         |
| 1 | 4880.000  | -6.63  | 50.32      | 43.69  | 74.00  | -30.31     | peak    |
| 2 | 7320.000  | -1.22  | 51.05      | 49.83  | 74.00  | -24.17     | peak    |
| 3 | 9759.250  | 1.89   | 44.33      | 46.22  | 54.00  | -7.78      | Average |
| 4 | 9759.250  | 1.89   | 51.90      | 53.79  | 74.00  | -20.21     | Peak    |
| 5 | 16946.500 | 8.01   | 39.80      | 47.81  | 54.00  | -6.19      | Average |
| 6 | 16946.500 | 8.01   | 52.38      | 60.39  | 74.00  | -13.61     | Peak    |

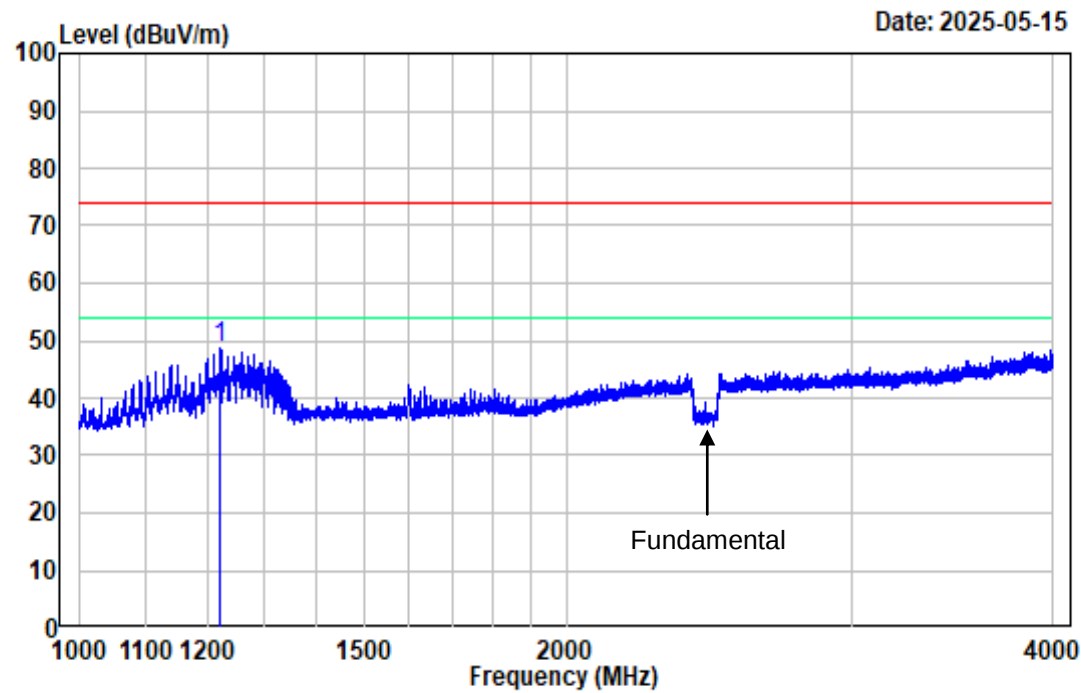
BLE 2M Middle Channel 4GHz-18GHz\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE 2M Mid Channel 2440MHz 4GHz-18GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

|   | Freq      | Factor | Read Level | Level  | Limit  | Over Limit | Remark  |
|---|-----------|--------|------------|--------|--------|------------|---------|
|   | MHz       | dB/m   | dBuV       | dBuV/m | dBuV/m | dB         |         |
| 1 | 4880.000  | -6.63  | 49.13      | 42.50  | 74.00  | -31.50     | peak    |
| 2 | 7320.000  | -1.22  | 52.42      | 51.20  | 74.00  | -22.80     | peak    |
| 3 | 9759.250  | 1.89   | 45.49      | 47.38  | 54.00  | -6.62      | Average |
| 4 | 9759.250  | 1.89   | 51.25      | 53.14  | 74.00  | -20.86     | Peak    |
| 5 | 14538.500 | 8.87   | 38.98      | 47.85  | 54.00  | -6.15      | Average |
| 6 | 14538.500 | 8.87   | 50.47      | 59.34  | 74.00  | -14.66     | Peak    |

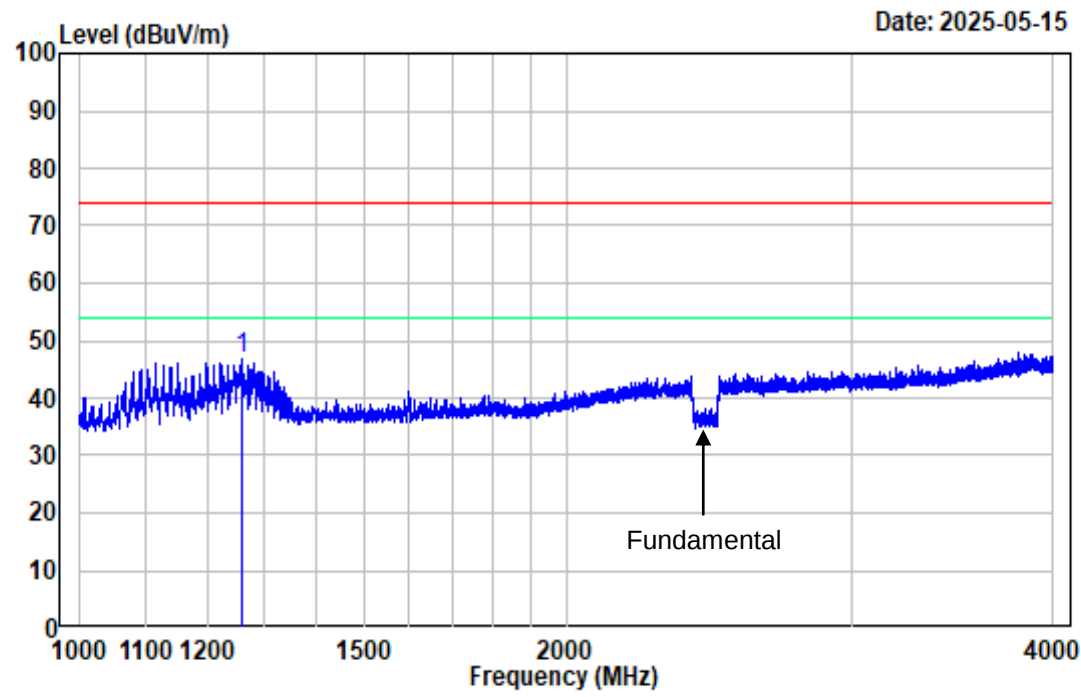
BLE2M High Channel 1GHz-4GHz\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE2M High Channel 2480MHz 1GHz-4GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 1223.875 | -14.16 | 62.96 | 48.80  | 74.00  | -25.20 | Peak   |

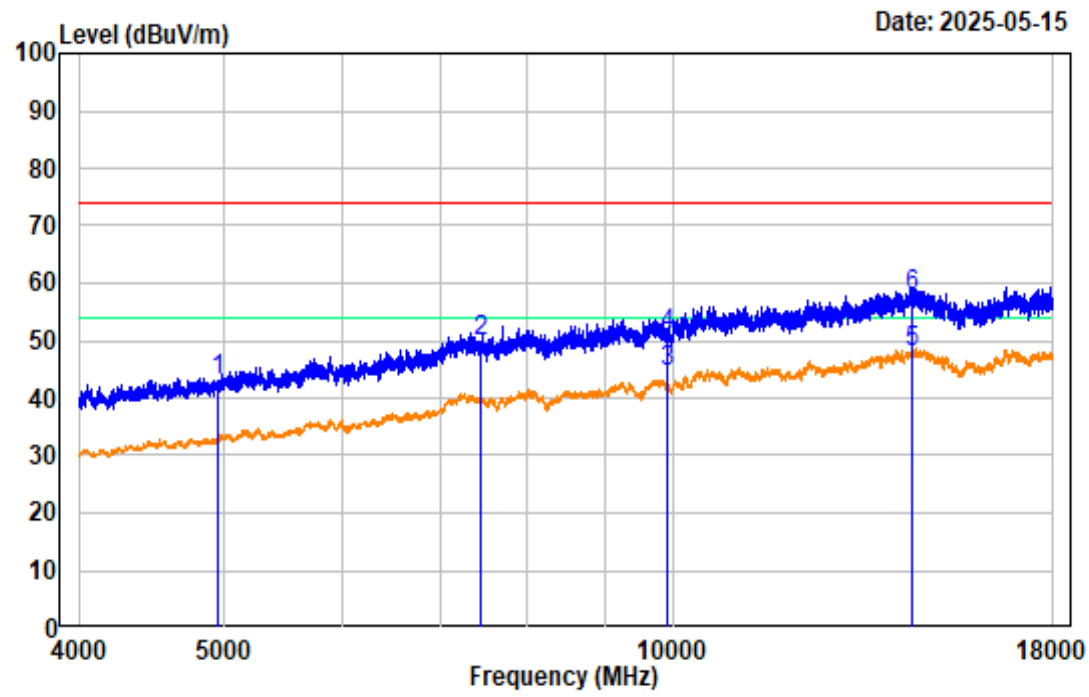
BLE2M High Channel 1GHz-4GHz\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE2M High Channel 2480MHz 1GHz-4GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 1259.875 | -13.84 | 60.55 | 46.71  | 74.00  | -27.29 | Peak   |

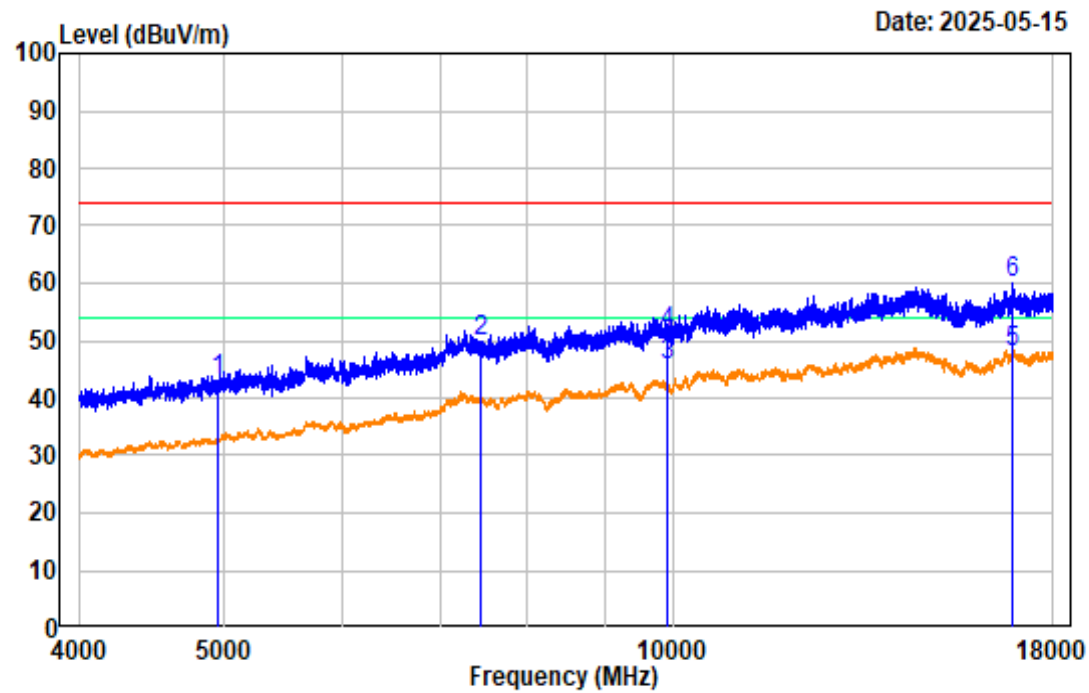
BLE 2M High Channel 4GHz-18GHz\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE 2M High Channel 2480MHz 4GHz-18GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

|   | Freq      | Factor | Read Level | Level  | Limit Line | Over Limit | Remark  |
|---|-----------|--------|------------|--------|------------|------------|---------|
|   | MHz       | dB/m   | dBuV       | dBuV/m | dBuV/m     | dB         |         |
| 1 | 4960.000  | -6.44  | 49.47      | 43.03  | 74.00      | -30.97     | peak    |
| 2 | 7440.000  | -1.07  | 50.81      | 49.74  | 74.00      | -24.26     | peak    |
| 3 | 9920.250  | 2.11   | 42.54      | 44.65  | 54.00      | -9.35      | Average |
| 4 | 9920.250  | 2.11   | 48.99      | 51.10  | 74.00      | -22.90     | Peak    |
| 5 | 14489.500 | 8.28   | 39.62      | 47.90  | 54.00      | -6.10      | Average |
| 6 | 14489.500 | 8.28   | 49.55      | 57.83  | 74.00      | -16.17     | Peak    |

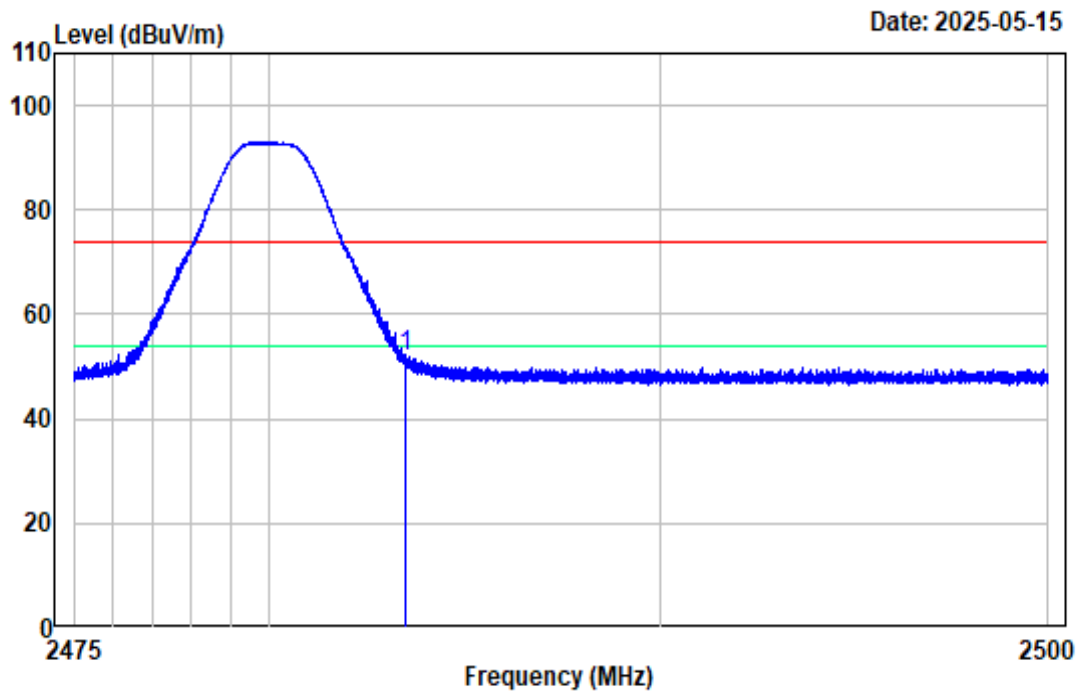
BLE 2M High Channel 4GHz-18GHz\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE 2M High Channel 2480MHz 4GHz-18GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz

|   | Freq      | Factor | Read Level | Level  | Limit  | Over Limit | Remark  |
|---|-----------|--------|------------|--------|--------|------------|---------|
|   | MHz       | dB/m   | dBuV       | dBuV/m | dBuV/m | dB         |         |
| 1 | 4960.000  | -6.44  | 49.53      | 43.09  | 74.00  | -30.91     | peak    |
| 2 | 7440.000  | -1.07  | 50.75      | 49.68  | 74.00  | -24.32     | peak    |
| 3 | 9920.250  | 2.11   | 43.40      | 45.51  | 54.00  | -8.49      | Average |
| 4 | 9920.250  | 2.11   | 49.26      | 51.37  | 74.00  | -22.63     | Peak    |
| 5 | 16923.750 | 7.87   | 39.95      | 47.82  | 54.00  | -6.18      | Average |
| 6 | 16923.750 | 7.87   | 52.21      | 60.08  | 74.00  | -13.92     | Peak    |

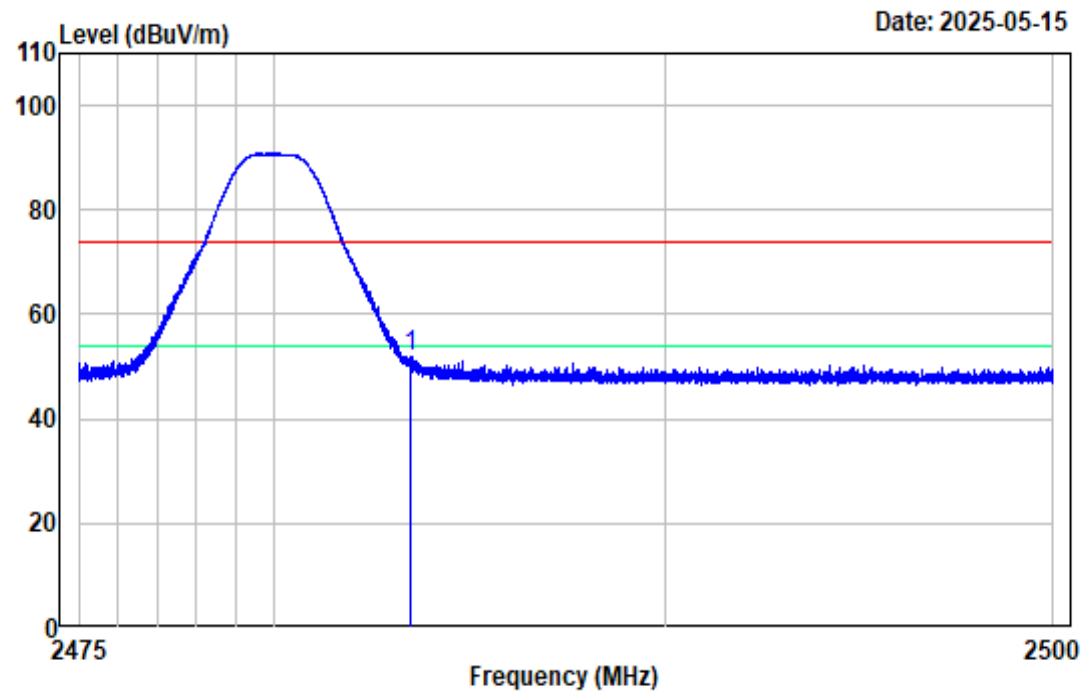
BLE2M High Channel Bandedge\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE2M High Channel 2480MHz Bandedge  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 2483.500 | -10.22 | 62.01 | 51.79  | 74.00  | -22.21 | peak   |

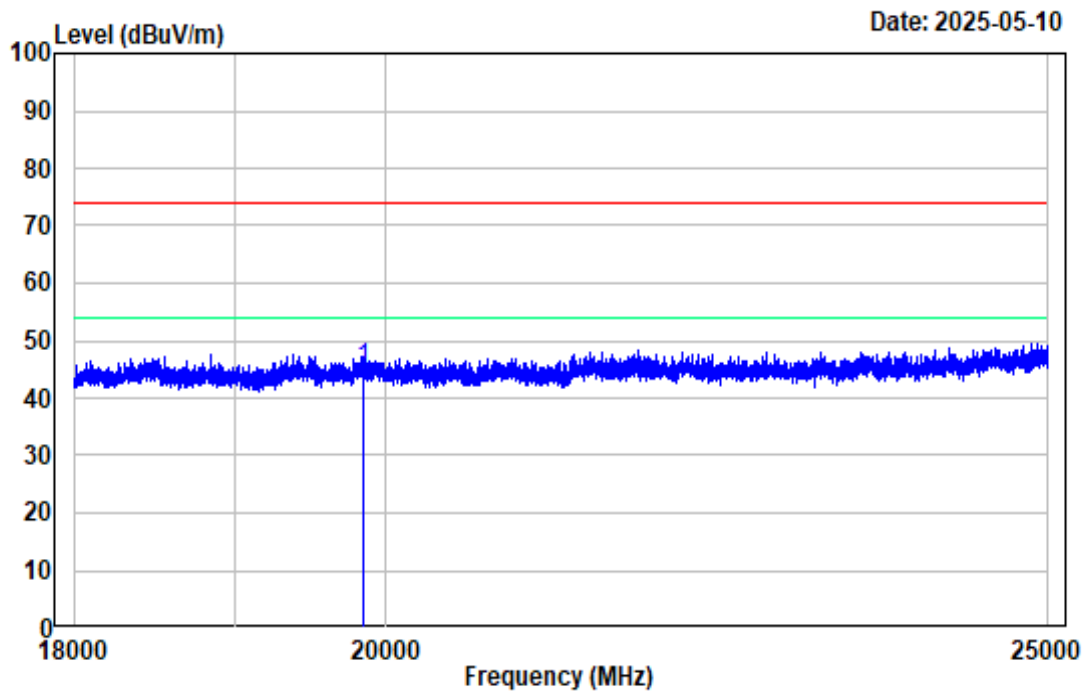
BLE2M High Channel Bandedge\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE2M High Channel 2480MHz Bandedge  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|            |        | Read  |        | Limit  | Over   | Remark |
|------------|--------|-------|--------|--------|--------|--------|
| Freq       | Factor | Level | Level  | Line   | Limit  |        |
| MHz        | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 2483.500 | -10.22 | 62.03 | 51.81  | 74.00  | -22.19 | peak   |

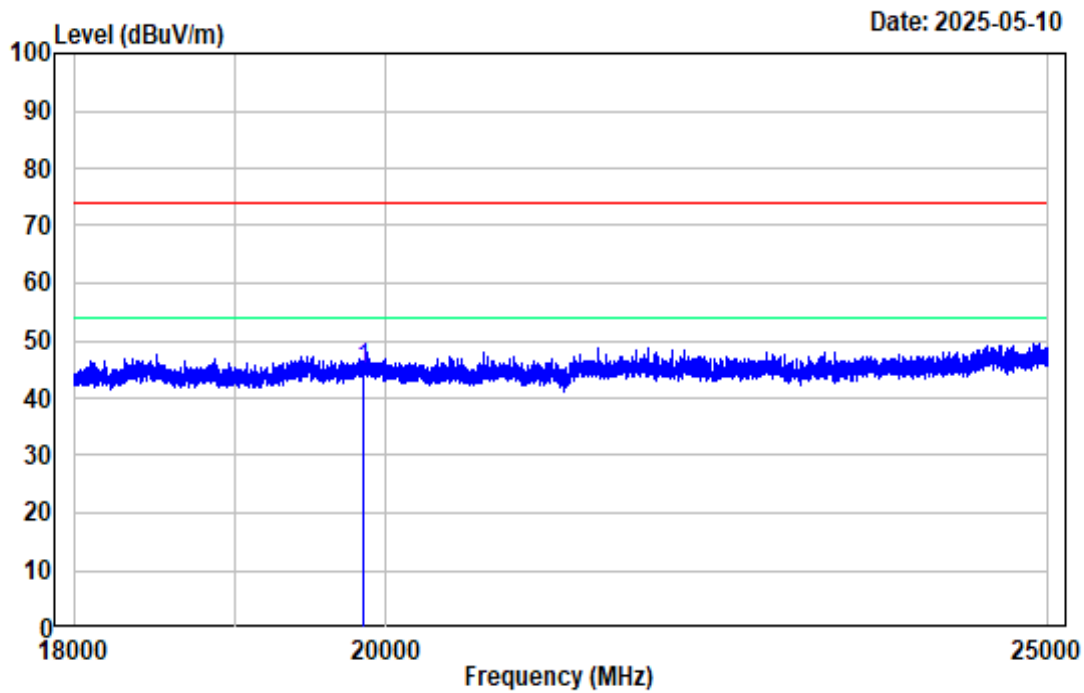
BLE2M High Channel 18GHz-25GHz\_HORIZONTAL



Site : chamber  
Condition : 3m HORIZONTAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE2M High Channel 2480MHz 18GHz-25GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|             |        | Read  |        | Limit  | Over   | Remark |
|-------------|--------|-------|--------|--------|--------|--------|
| Freq        | Factor | Level | Level  | Line   | Limit  |        |
| MHz         | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 19840.130 | -7.47  | 52.29 | 44.82  | 74.00  | -29.18 | Peak   |

BLE2M High Channel 18GHz-25GHz\_VERTICAL



Site : chamber  
Condition : 3m VERTICAL  
Project No.: 2504S32884E-RF  
Test Mode : Transmitting Tester:Roger Ling  
Note : BLE2M High Channel 2480MHz 18GHz-25GHz  
SA setting : Peak:RBW:1MHz,VBW:3MHz

|             |        | Read  |        | Limit  | Over   | Remark |
|-------------|--------|-------|--------|--------|--------|--------|
| Freq        | Factor | Level | Level  | Line   | Limit  |        |
| MHz         | dB/m   | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1 19840.130 | -7.47  | 52.45 | 44.98  | 74.00  | -29.02 | Peak   |

## FCC §15.247(a) (2)-6 dB EMISSION BANDWIDTH & OCCUPIED BANDWIDTH

### Applicable Standard

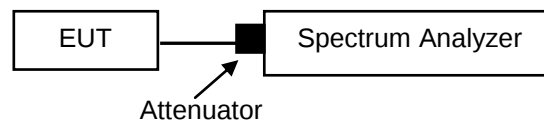
Systems using digital modulation techniques may operate in the 902–928MHz, 2400–2483.5MHz, and 5725–5850MHz bands. The minimum 6 dB bandwidth shall be at least 500kHz.

### Test Procedure

According to ANSI C63.10-2020, section 11.8 and section 6.9

The steps for the first option are as follows:

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



### Test Data

Please refer to the Appendix.

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

### Applicable Standard

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

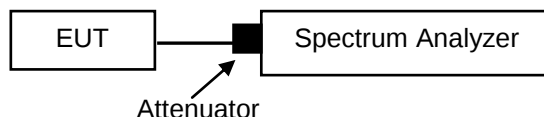
### Test Procedure

According to ANSI C63.10-2020, section 11.9.1.1

- Measurement using a spectrum analyzer (SA)

The following procedure shall be used when an instrument with a resolution bandwidth that is greater than the DTS bandwidth is available to perform the measurement:

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



### Test Data

Please refer to the Appendix.

## FCC §15.247(d)-100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE

### Applicable Standard

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)).

### Test Procedure

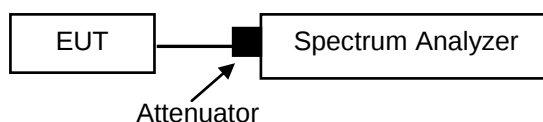
According to ANSI C63.10-2020, section 11.11

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

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

- b) Set the RBW = 100 kHz.  
c) Set the VBW  $\geq [3 \times \text{RBW}]$ .  
d) Detector = peak.  
e) Sweep time = No faster than coupled (auto) time.  
f) Trace mode = max-hold.  
g) Allow trace to fully stabilize.  
h) Use the peak marker function to determine the maximum amplitude level.

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



### Test Data

Please refer to the Appendix.

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

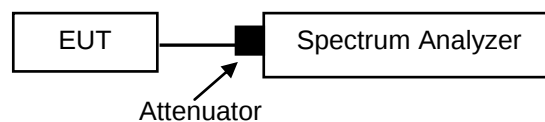
### Applicable Standard

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

### Test Procedure

According to ANSI C63.10-2020, section 11.10.2

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



### Test Data

Please refer to the Appendix.

APPENDIX (RF TEST RESULTS)

6dB Emission Bandwidth

Test Information:

|             |           |              |              |
|-------------|-----------|--------------|--------------|
| Sample No.: | 31OM-1    | Test Date:   | 2025/05/07   |
| Test Site:  | RF        | Test Mode:   | Transmitting |
| Tester:     | Cayde Hou | Test Result: | Pass         |

Environmental Conditions:

|                      |      |                              |    |                        |       |
|----------------------|------|------------------------------|----|------------------------|-------|
| Temperature:<br>(°C) | 25.6 | Relative<br>Humidity:<br>(%) | 56 | ATM Pressure:<br>(kPa) | 100.2 |
|----------------------|------|------------------------------|----|------------------------|-------|

Test Data:

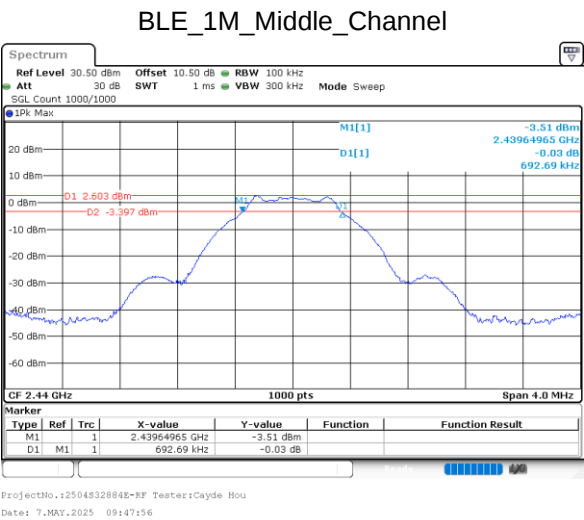
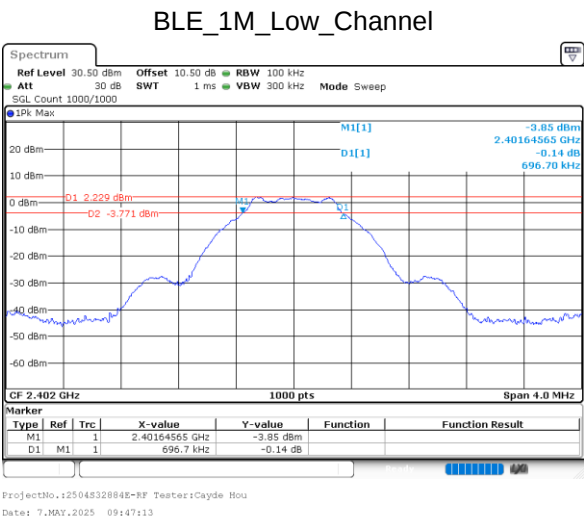
BLE 1M

| Channel | Result (MHz) | Limit (MHz) | Verdict |
|---------|--------------|-------------|---------|
| Low     | 0.697        | ≥0.5        | Pass    |
| Middle  | 0.693        | ≥0.5        | Pass    |
| High    | 0.685        | ≥0.5        | Pass    |

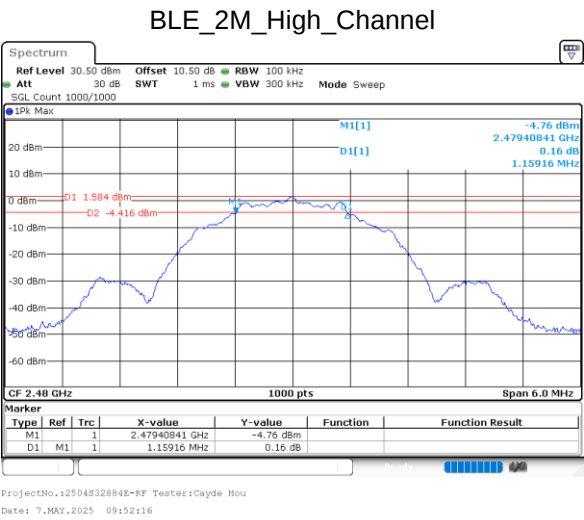
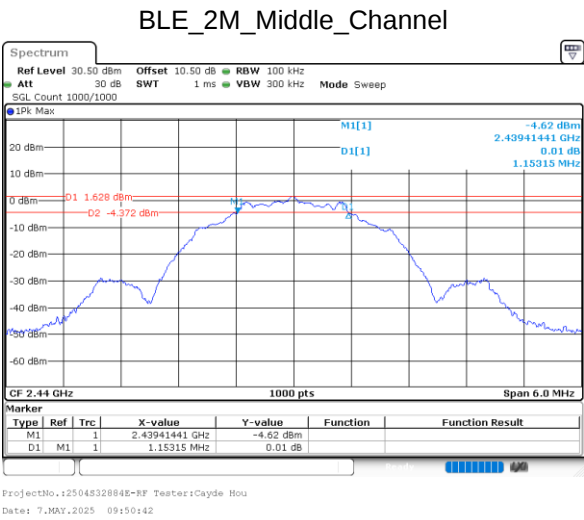
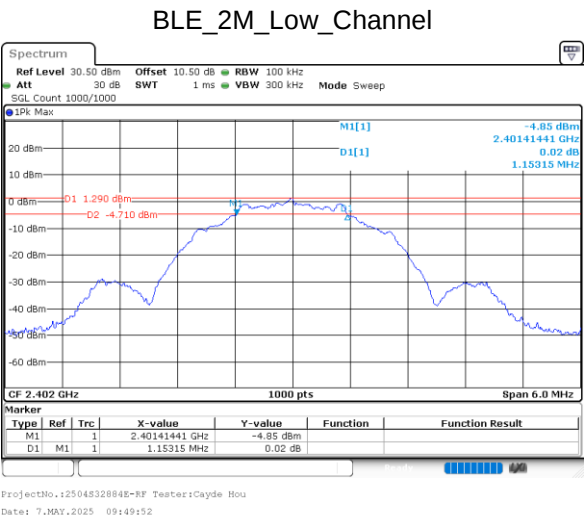
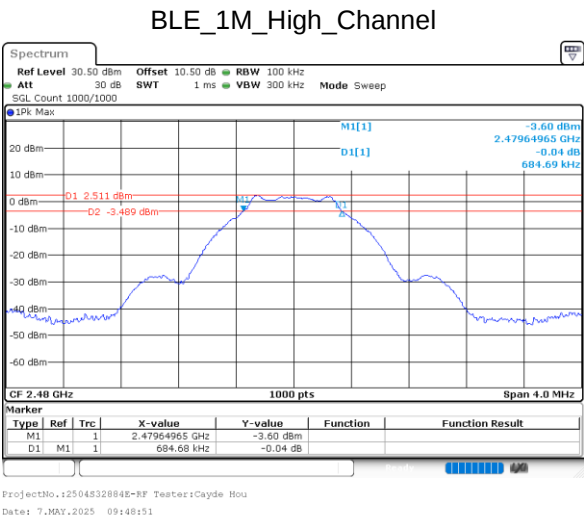
BLE 2M

| Channel | Result (MHz) | Limit (MHz) | Verdict |
|---------|--------------|-------------|---------|
| Low     | 1.153        | ≥0.5        | Pass    |
| Middle  | 1.153        | ≥0.5        | Pass    |
| High    | 1.159        | ≥0.5        | Pass    |

BLE 1M



BLE 2M



99% Occupied Bandwidth

Test Information:

|             |           |              |              |
|-------------|-----------|--------------|--------------|
| Sample No.: | 31OM-1    | Test Date:   | 2025/05/07   |
| Test Site:  | RF        | Test Mode:   | Transmitting |
| Tester:     | Cayde Hou | Test Result: | /            |

Environmental Conditions:

|                      |      |                              |    |                        |       |
|----------------------|------|------------------------------|----|------------------------|-------|
| Temperature:<br>(°C) | 25.6 | Relative<br>Humidity:<br>(%) | 56 | ATM Pressure:<br>(kPa) | 100.2 |
|----------------------|------|------------------------------|----|------------------------|-------|

Test Data:

BLE 1M

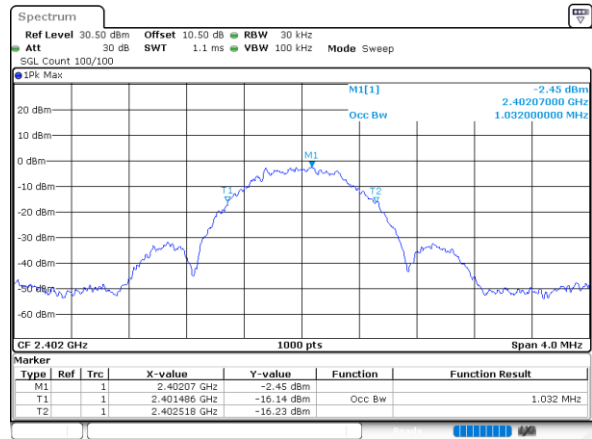
| Channel | 99% OBW (MHz) |
|---------|---------------|
| Low     | 1.032         |
| Middle  | 1.032         |
| High    | 1.040         |

BLE 2M

| Channel | 99% OBW (MHz) |
|---------|---------------|
| Low     | 2.076         |
| Middle  | 2.076         |
| High    | 2.082         |

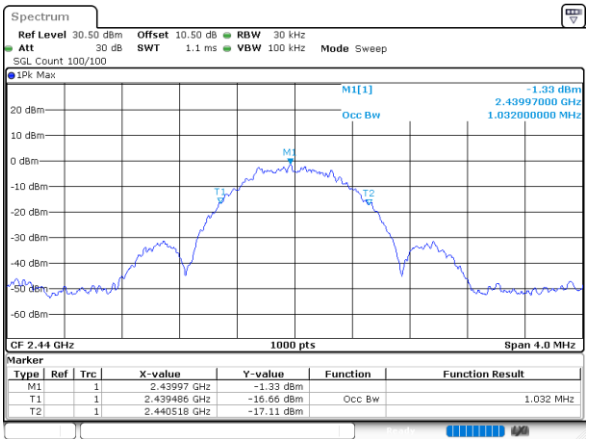
BLE 1M

BLE\_1M\_Low\_Channel



ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:47:17

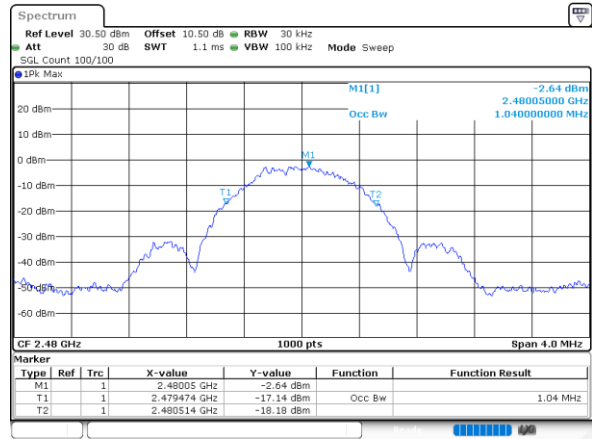
BLE\_1M\_Middle\_Channel



ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:48:00

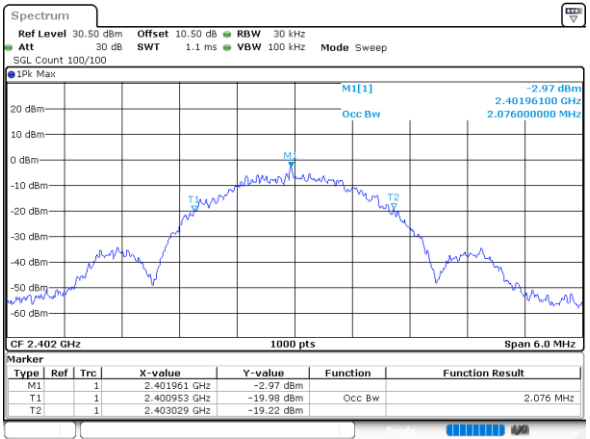
BLE 2M

BLE\_1M\_High\_Channel



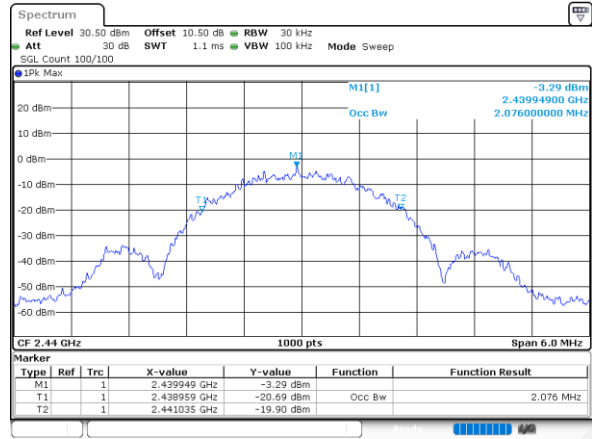
ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:48:55

BLE\_2M\_Low\_Channel



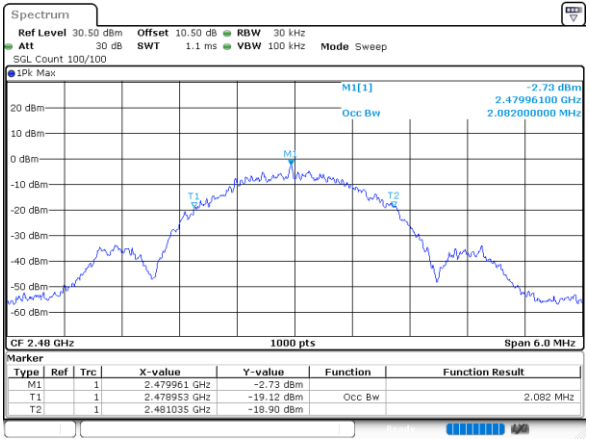
ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:49:56

BLE\_2M\_Middle\_Channel



ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:50:45

BLE\_2M\_High\_Channel



ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:52:20

Maximum Conducted Output Power

Test Information:

|             |           |              |              |
|-------------|-----------|--------------|--------------|
| Sample No.: | 31OM-1    | Test Date:   | 2025/05/07   |
| Test Site:  | RF        | Test Mode:   | Transmitting |
| Tester:     | Cayde Hou | Test Result: | Pass         |

Environmental Conditions:

|                      |      |                              |    |                        |       |
|----------------------|------|------------------------------|----|------------------------|-------|
| Temperature:<br>(°C) | 25.6 | Relative<br>Humidity:<br>(%) | 56 | ATM Pressure:<br>(kPa) | 100.2 |
|----------------------|------|------------------------------|----|------------------------|-------|

Test Data:

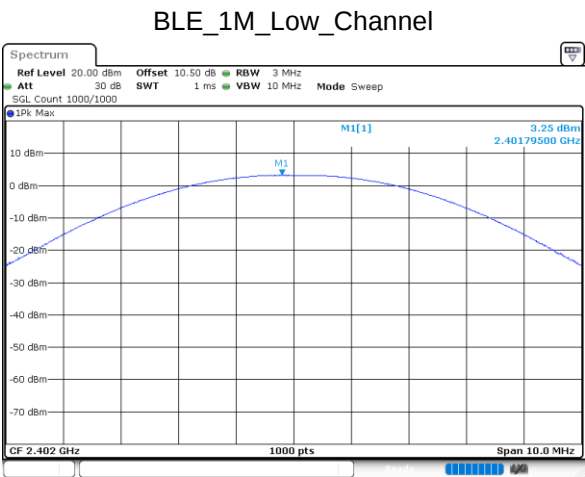
BLE 1M

| Channel | Peak Output Power (dBm) | Limit (dBm) | Verdict |
|---------|-------------------------|-------------|---------|
| Low     | 3.25                    | 30.00       | Pass    |
| Middle  | 3.51                    | 30.00       | Pass    |
| High    | 3.52                    | 30.00       | Pass    |

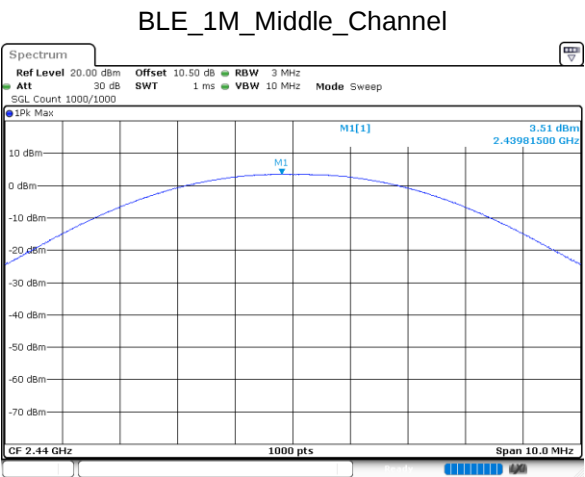
BLE 2M

| Channel | Peak Output Power (dBm) | Limit (dBm) | Verdict |
|---------|-------------------------|-------------|---------|
| Low     | 3.33                    | 30.00       | Pass    |
| Middle  | 3.59                    | 30.00       | Pass    |
| High    | 3.60                    | 30.00       | Pass    |

BLE 1M

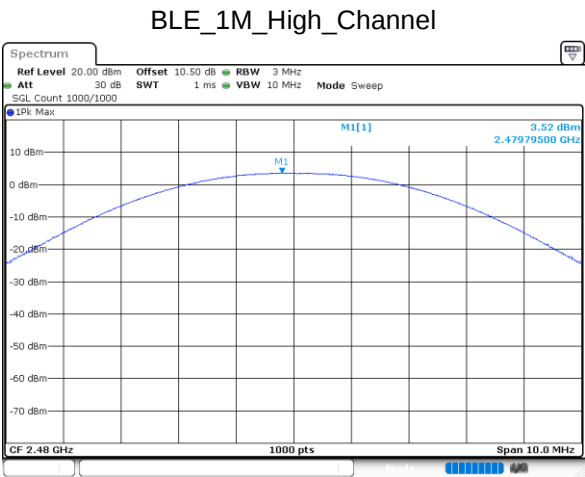


ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:44:26

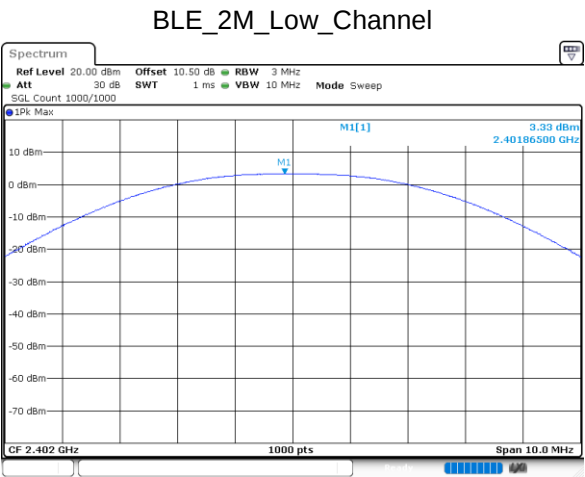


ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:44:51

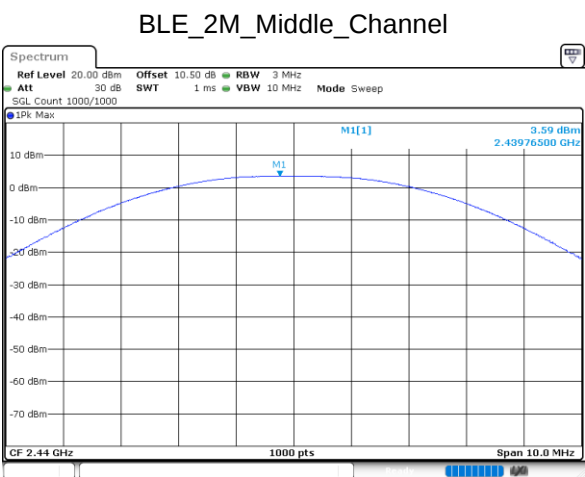
BLE 2M



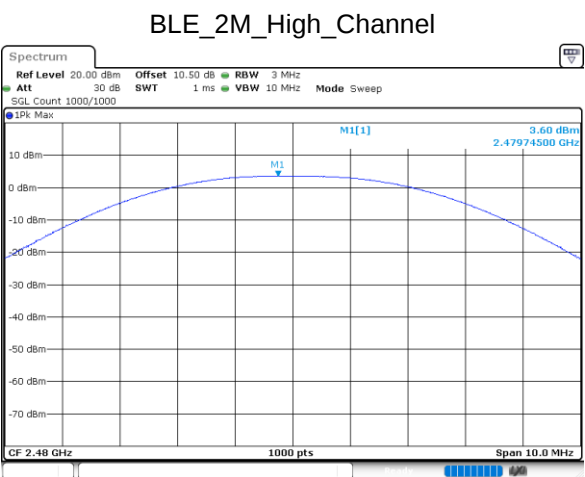
ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:45:10



ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:45:33



ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:45:53



ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:46:08

Power Spectral Density

Test Information:

|             |           |              |              |
|-------------|-----------|--------------|--------------|
| Sample No.: | 31OM-1    | Test Date:   | 2025/05/07   |
| Test Site:  | RF        | Test Mode:   | Transmitting |
| Tester:     | Cayde Hou | Test Result: | Pass         |

Environmental Conditions:

|                      |      |                              |    |                        |       |
|----------------------|------|------------------------------|----|------------------------|-------|
| Temperature:<br>(°C) | 25.6 | Relative<br>Humidity:<br>(%) | 56 | ATM Pressure:<br>(kPa) | 100.2 |
|----------------------|------|------------------------------|----|------------------------|-------|

Test Data:

BLE 1M

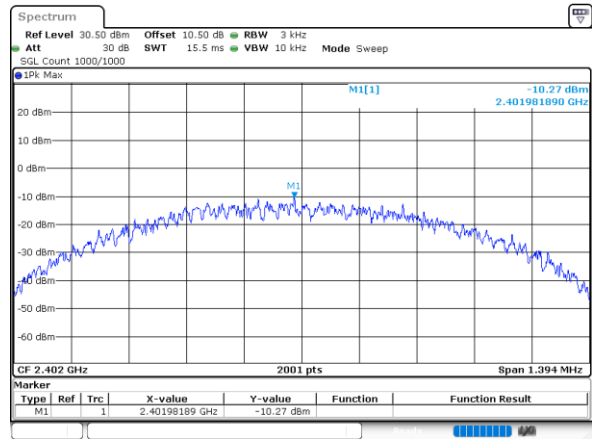
| Channel | Result<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) | Verdict |
|---------|----------------------|---------------------|---------|
| Low     | -10.27               | 8                   | Pass    |
| Middle  | -10.08               | 8                   | Pass    |
| High    | -10.13               | 8                   | Pass    |

BLE 2M

| Channel | Result<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) | Verdict |
|---------|----------------------|---------------------|---------|
| Low     | -13.14               | 8                   | Pass    |
| Middle  | -12.86               | 8                   | Pass    |
| High    | -12.86               | 8                   | Pass    |

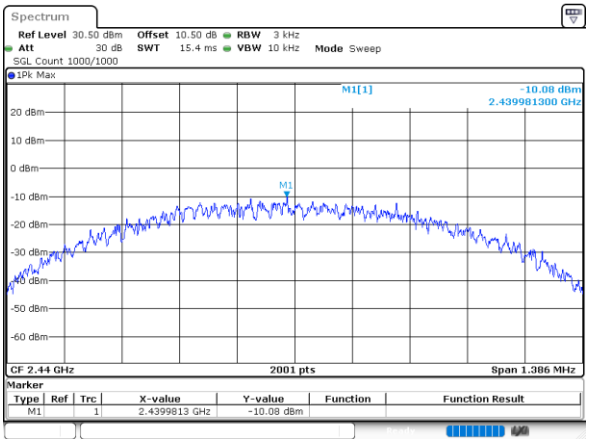
BLE 1M

BLE\_1M\_Low\_Channel



ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:47:42

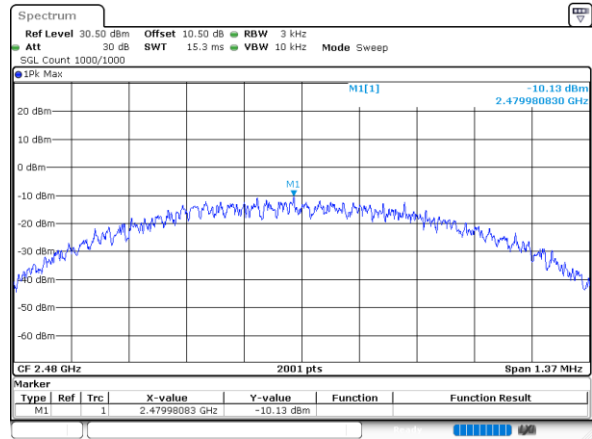
BLE\_1M\_Middle\_Channel



ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:48:24

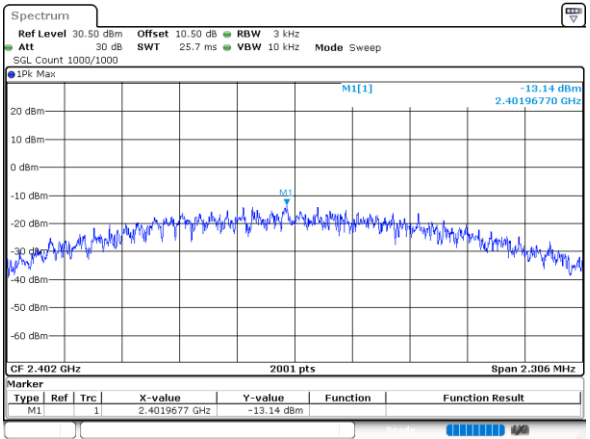
BLE 2M

BLE\_1M\_High\_Channel



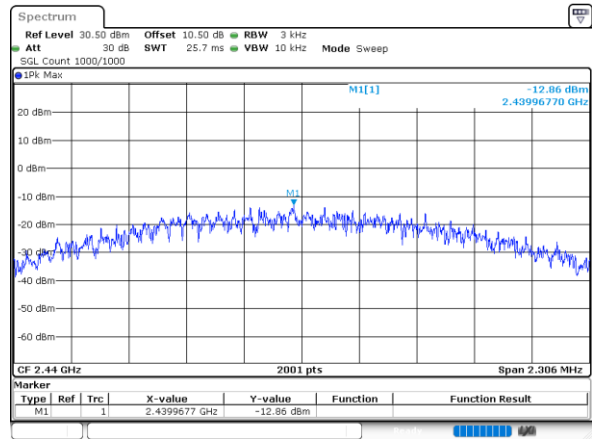
ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:49:20

BLE\_2M\_Low\_Channel



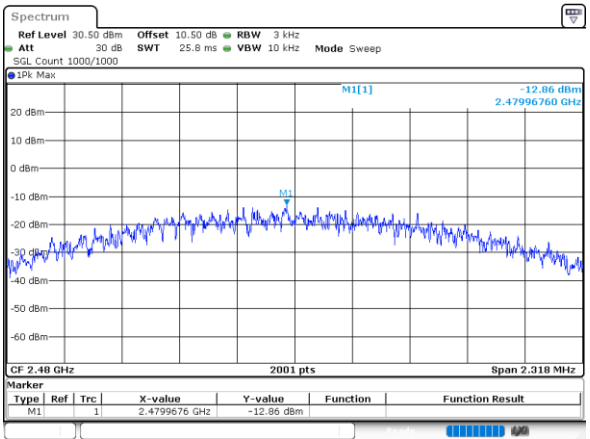
ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:50:32

BLE\_2M\_Middle\_Channel



ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:51:21

BLE\_2M\_High\_Channel



ProjectNo.:2504S32884E-RF Tester:Cayde Hou  
Date: 7.MAY.2025 09:52:56

100 kHz Bandwidth of Frequency Band Edge

Test Information:

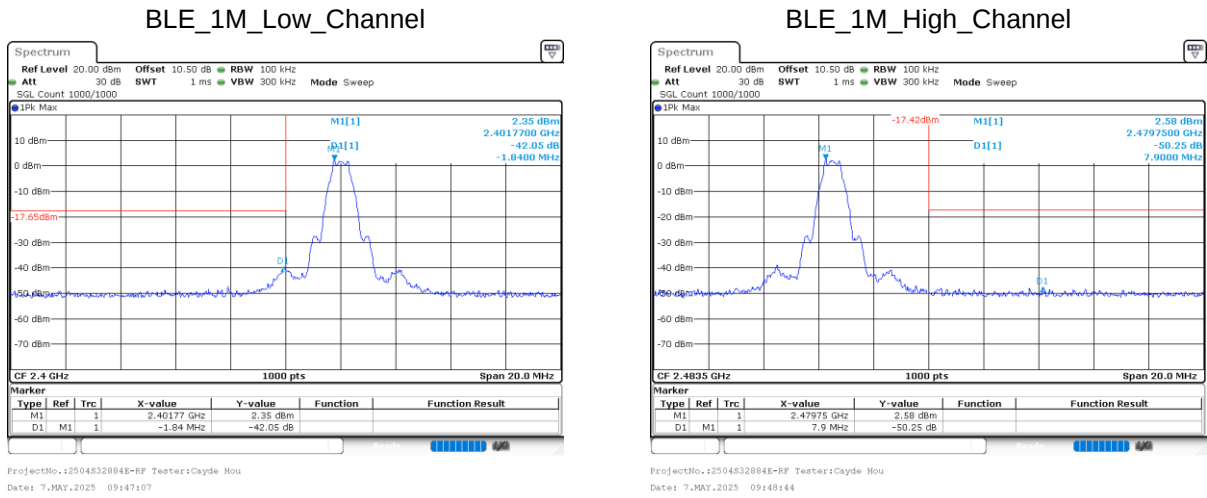
|             |           |              |              |
|-------------|-----------|--------------|--------------|
| Sample No.: | 31OM-1    | Test Date:   | 2025/05/07   |
| Test Site:  | RF        | Test Mode:   | Transmitting |
| Tester:     | Cayde Hou | Test Result: | Pass         |

Environmental Conditions:

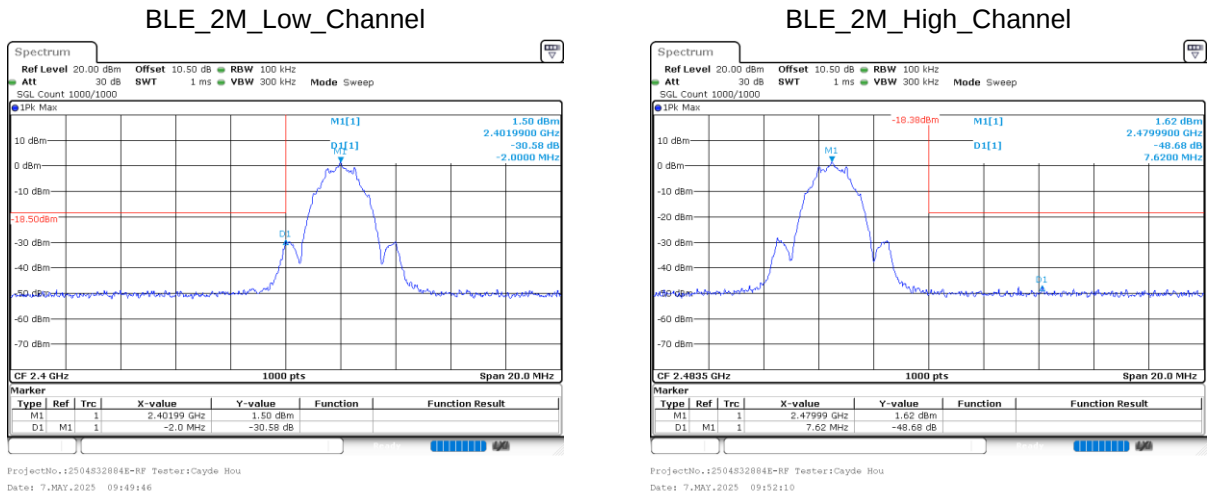
|                      |      |                              |    |                        |       |
|----------------------|------|------------------------------|----|------------------------|-------|
| Temperature:<br>(°C) | 25.6 | Relative<br>Humidity:<br>(%) | 56 | ATM Pressure:<br>(kPa) | 100.2 |
|----------------------|------|------------------------------|----|------------------------|-------|

Test Data:

BLE 1M



BLE 2M



Duty Cycle

Test Information:

|             |           |              |              |
|-------------|-----------|--------------|--------------|
| Sample No.: | 31OM-1    | Test Date:   | 2025/05/07   |
| Test Site:  | RF        | Test Mode:   | Transmitting |
| Tester:     | Cayde Hou | Test Result: | Pass         |

Environmental Conditions:

|                      |      |                              |    |                        |       |
|----------------------|------|------------------------------|----|------------------------|-------|
| Temperature:<br>(°C) | 25.6 | Relative<br>Humidity:<br>(%) | 56 | ATM Pressure:<br>(kPa) | 100.2 |
|----------------------|------|------------------------------|----|------------------------|-------|

Test Data:

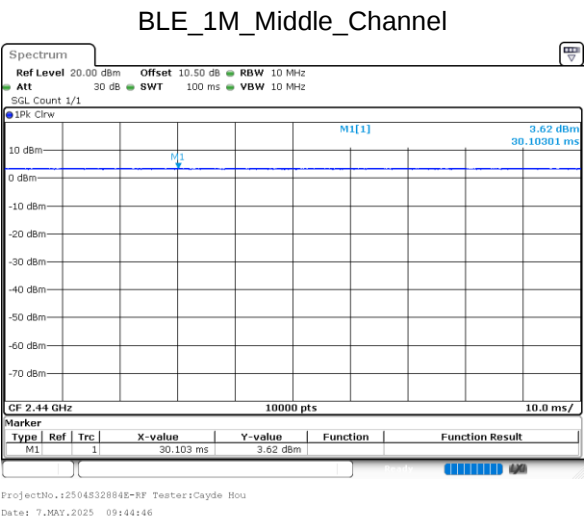
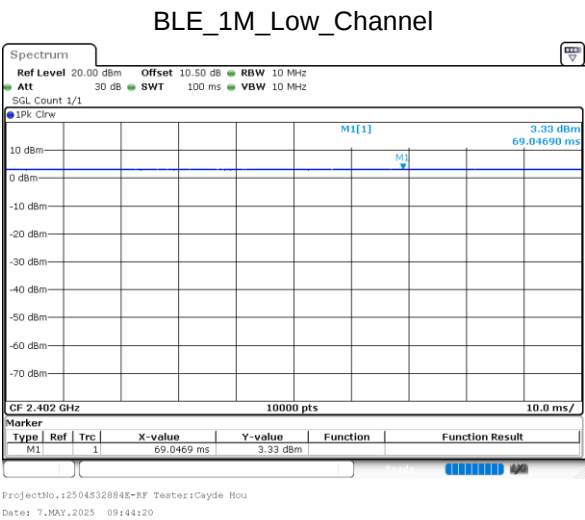
BLE 1M

| Channel | Ton (ms) | Ton+Toff (ms) | Duty Cycle (%) | Duty Cycle Factor(dB) | 1/Ton (Hz) | VBW Setting (kHz) |
|---------|----------|---------------|----------------|-----------------------|------------|-------------------|
| Low     | 100      | 100           | 100            | 0                     | NA         | 0.010             |
| Middle  | 100      | 100           | 100            | 0                     | NA         | 0.010             |
| High    | 100      | 100           | 100            | 0                     | NA         | 0.010             |

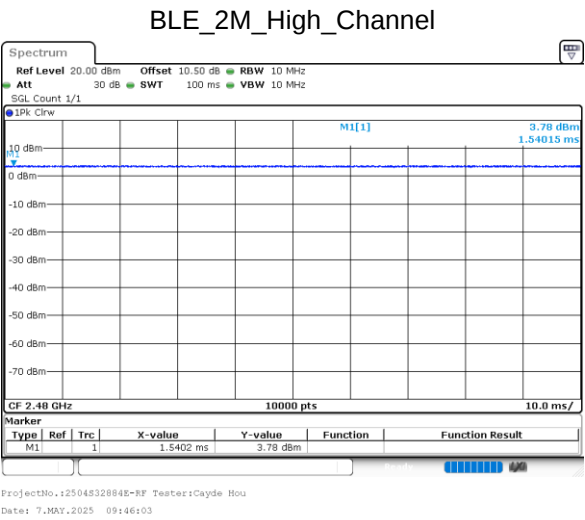
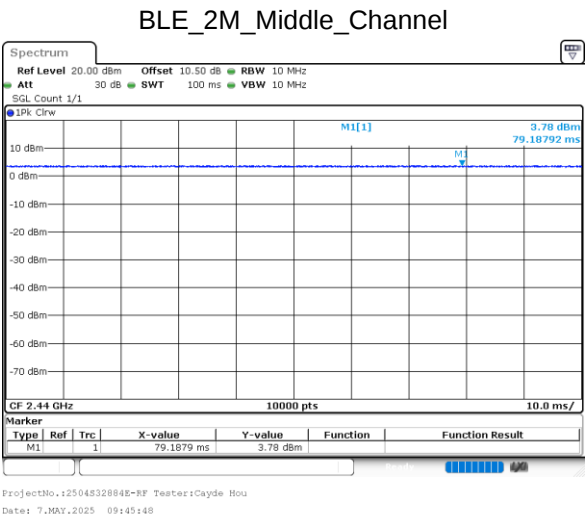
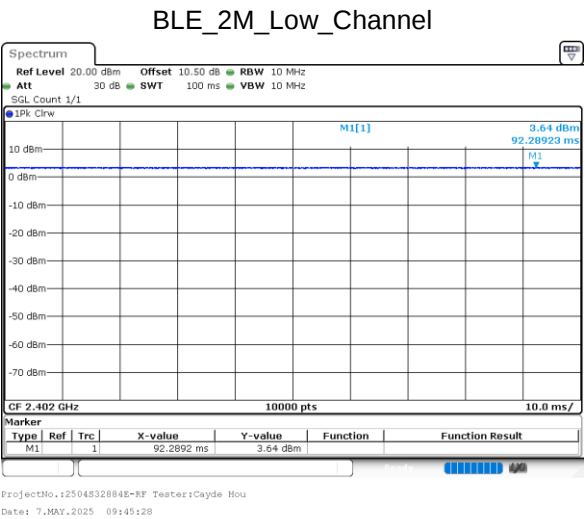
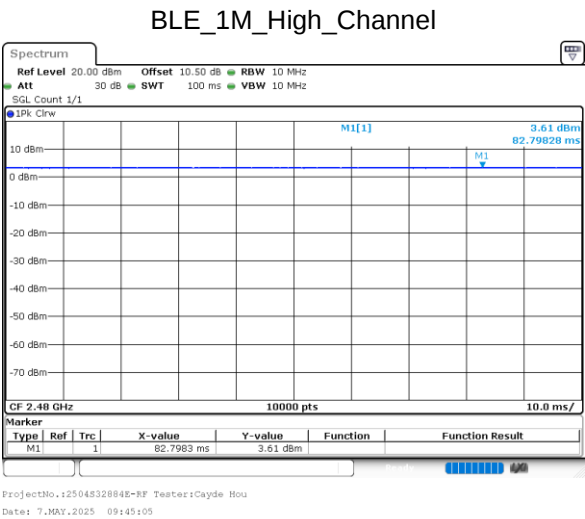
BLE 2M

| Channel | Ton (ms) | Ton+Toff (ms) | Duty Cycle (%) | Duty Cycle Factor(dB) | 1/Ton (Hz) | VBW Setting (kHz) |
|---------|----------|---------------|----------------|-----------------------|------------|-------------------|
| Low     | 100      | 100           | 100            | 0                     | NA         | 0.010             |
| Middle  | 100      | 100           | 100            | 0                     | NA         | 0.010             |
| High    | 100      | 100           | 100            | 0                     | NA         | 0.010             |

BLE 1M



BLE 2M



**EXHIBIT A-EUT PHOTOGRAPHS**

Please refer to the Annex: 2504S32884E-RF EUT EXTERNAL PHOTOGRAPHS and 2504S32884E-RF EUT INTERNAL PHOTOGRAPHS.

## EXHIBIT B-TEST SETUP PHOTOGRAPHS

---

Please refer to the Attachment: 2504S32884E-RF-00A TEST SETUP PHOTOGRAPHS.

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