# FCC PART 15, SUBPART C, E
# ISEDC RSS-247, ISSUE 3, AUGUST 2023

## TEST REPORT

For

## VergeSense, Inc.

2261 Market Street, #5058
San Francisco, CA 94114, USA

**FCC ID: 2BFSEG400W**
**IC: 32309-G400W**

| | |
|---|---|
| **Report Type:**<br>Class II Permissive Change for FCC<br>Class IV Permissive Change for IC | **Model:** G400C |
| **Prepared By:** | Shankar Pangeni<br>Project Engineer |
| **Report Number:** | R2503042-FCCIC |
| **Report Date:** | 2025-04-07 |
| **Reviewed By:** | Christian McCaig<br>RF Lead Engineer |
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ACCREDITED
CERTIFICATE #3297.02



* This test report may contain data and test methods that are not covered by BACL's scope of accreditation as of the test report date shown above. These items are marked within the test report text with an asterisk "*"

# TABLE OF CONTENTS

# DOCUMENT REVISION HISTORY

| Revision Number | Report Number | Description of Revision | Date of Revision |
|---|---|---|---|
| 0 | R2503042-FCCIC | Class II Permissive Change for FCC<br>Class IV Permissive Change for IC | 2025-04-07 |

# 1 General Description

## 1.1 Product Description for Equipment Under Test (EUT)

This test report is prepared on behalf of VergeSense, Inc., and their product WLAN Module, FCC ID: 2BFSEG400W, IC: 32309-G400W. The module is placed inside the host device with model name G400C. The host device, or the "EUT" as referred to in this report is a gateway that supports 2.4 GHz and 5 GHz Wi-Fi capabilities. This report is to show continuance compliance with additional LTE and BLE modules added to the EUT.

| | |
|---|---|
| **Model Number** | G400C |
| **FCC ID** | 2BFSEG400W |
| **IC** | 32309-G400W |
| **Radio Type** | 2.4-5GHz Wi-Fi, LTE |

*Note: LTE Module FCC ID: XMR202212EG25GL, IC: 10224A-2022EG25GL*
*Note: BLE Module FCC ID:2BFSEG400B , IC: 32309-G400B*

## 1.2 Mechanical Description of EUT

The UUT measures approximately 9.7 cm (L) x 9.7 cm (W) x 2.6 cm (H) and weighs approximately 0.15 kg.

*The data gathered was from a production sample provided by VergeSense, Inc. with assigned S/N: HPA-ARI.*

## 1.3 Objective

This report is prepared on behalf of *VergeSense, Inc.* in accordance with Part 2, Subpart J, and Part 15, Subpart C & E of the Federal Communication Commission's rules and ISEDC RSS-247 Issue 3, August 2023.

The objective is to determine compliance with FCC part 15 subpart C, FCC part 15 subpart E and ISEDC RSS-247 for the Permissive Change on the Wi-Fi module to enable colocation with LTE module. The test items include RF Exposure and Radiated Spurious Emissions.

In order to determine compliance, the manufacturer or a contracted laboratory makes measurements and takes the necessary steps to ensure that the equipment complies with the appropriate technical standards.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product maybe which result in lowering the immunity should be checked to ensure compliance has been maintained (i.e., printed circuit board layout changes, different line filter, different power supply, harnessing and/or I/O cable changes, etc.).

## 1.4 Related Submittal(s)/Grant(s)

N/A

## 1.5 Test Methodology

All measurements contained in this report were conducted in accordance with ANSI C63.10-2020 , American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and FCC KDB 558074 D01 DTS Meas Guidance v05r02: Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247. FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Operating Under §15.407, FCC KDB 996369 D01 Module Certification Guide v04r02 Transmitter Module Equipment Authorization Guide.

## 1.6 Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in the field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

| Parameter | Measurement uncertainty |
|---|---|
| Occupied Channel Bandwidth | ±5% |
| RF output power, conducted | ±0.57 dB |
| Power Spectral Density, conducted | ±1.48 dB |
| Unwanted Emissions, conducted | ±1.57 dB |
| All emissions, radiated | ±4.0 dB |
| AC power line Conducted Emission | ±2.0 dB |
| Temperature | ±2ºC |
| Humidity | ±5% |
| DC and low frequency voltages | ±1.0% |
| Time | ±2% |
| Duty Cycle | ±3% |

## 1.7 Test Facility Registrations

BACLs test facilities that are used to perform Radiated and Conducted Emissions tests are currently recognized by the Federal Communications Commission as Accredited with NIST Designation Number US1129.

BACL's test facilities that are used to perform Radiated and Conducted Emissions tests are currently registered with Industry Canada under Registration Numbers: 3062A.

BACL is a Chinese Taipei Bureau of Standards Metrology and Inspection (BSMI) validated Conformity Assessment Body (CAB), under Appendix B, Phase I Procedures of the APEC Mutual Recognition Arrangement (MRA). BACL's BSMI Lab Code Number is: SL2-IN-E-1002R

BACL's test facilities that are used to perform AC Line Conducted Emissions, Telecommunications Line Conducted Emissions, Radiated Emissions from 30 MHz to 1 GHz, and Radiated Emissions from 1 GHz to 6 GHz are currently recognized as Accredited in accordance with the Voluntary Control Council for Interference [VCCI] Article 15 procedures under Registration Number A-428.

## 1.8 Test Facility Accreditations

Bay Area Compliance Laboratories Corp. (BACL) is:

**A-** ***An independent, 3rd-Party, Commercial Test Laboratory accredited to ISO/IEC 17025:2017 by A2LA (Test Laboratory Accreditation Certificate Number 3297.02),*** in the fields of: Electromagnetic Compatibility and Telecommunications. Unless noted by an Asterisk (*) in the Compliance Matrix (See Section 3 of this Test Report), BACL's ISO/IEC 17025:2017 Scope of Accreditation includes all of the Test Method Standards and/or the Product Family Standards detailed in this Test Report..

BACL's ISO/IEC 17025:2017 Scope of Accreditation includes a comprehensive suite of EMC Emissions, EMC Immunity, Radio, RF Exposure, Safety and wireline Telecommunications test methods applicable to a wide range of product categories. These product categories include Central Office Telecommunications Equipment [including NEBS - Network Equipment Building Systems], Unlicensed and Licensed Wireless and RF devices, Information Technology Equipment (ITE); Telecommunications Terminal Equipment (TTE); Medical Electrical Equipment; Industrial, Scientific and Medical Test Equipment; Professional Audio and Video Equipment; Industrial and Scientific Instruments and Laboratory Apparatus; Cable Distribution Systems, and Energy Efficient Lighting.

**B-** ***A Product Certification Body accredited to ISO/IEC 17065:2012 by A2LA (Product Certification Body Accreditation Certificate Number 3297.03)*** to certify

- For the USA (Federal Communications Commission):
  - 1- All Unlicensed radio frequency devices within FCC Scopes A1, A2, A3, and A4;
  - 2- All Licensed radio frequency devices within FCC Scopes B1, B2, B3, and B4;
  - 3- All Telephone Terminal Equipment within FCC Scope C.
- For the Canada (Industry Canada):
  - 1 All Scope 1-Licence-Exempt Radio Frequency Devices;
  - 2 All Scope 2-Licensed Personal Mobile Radio Services;
  - 3 All Scope 3-Licensed General Mobile & Fixed Radio Services;
  - 4 All Scope 4-Licensed Maritime & Aviation Radio Services;
  - 5 All Scope 5-Licensed Fixed Microwave Radio Services
  - 6 All Broadcasting Technical Standards (BETS) in the Category I Equipment Standards List.
- For Singapore (Info-Communications Development Authority (IDA)):
  - 1 All Line Terminal Equipment: All Technical Specifications for Line Terminal Equipment – Table 1 of IDA MRA Recognition Scheme: 2011, Annex 2
  - 2. All Radio-Communication Equipment: All Technical Specifications for Radio-Communication Equipment – Table 2 of IDA MRA Recognition Scheme: 2011, Annex 2
- For the Hong Kong Special Administrative Region:
  - 1 All Radio Equipment, per KHCA 10XX-series Specifications;
  - 2 All GMDSS Marine Radio Equipment, per HKCA 12XX-series Specifications;
  - 3 All Fixed Network Equipment, per HKCA 20XX-series Specifications.
- For Japan:
  - 1 MIC Telecommunication Business Law (Terminal Equipment):
    - All Scope A1 - Terminal Equipment for the Purpose of Calls;
    - All Scope A2 - Other Terminal Equipment
  - 2 Radio Law (Radio Equipment):
    - All Scope B1 - Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 1 of the Radio Law
    - All Scope B2 - Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 2 of the Radio Law
    - All Scope B3 - Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 3 of the Radio Law

**C-** ***A Product Certification Body accredited to ISO/IEC 17065:2012 by A2LA (Product Certification Body Accreditation Certificate Number 3297.01)*** to certify Products to USA's Environmental Protection Agency (EPA) ENERGY STAR Product Specifications for:

1 Electronics and Office Equipment:
- for Telephony (ver. 3.0)
- for Audio/Video (ver. 3.0)
- for Battery Charging Systems (ver. 1.1)
- for Set-top Boxes & Cable Boxes (ver. 4.1)
- for Televisions (ver. 6.1)
- for Computers (ver. 6.0)
- for Displays (ver. 6.0)
- for Imaging Equipment (ver. 2.0)
- for Computer Servers (ver. 2.0)

2 Commercial Food Service Equipment
- for Commercial Dishwashers (ver. 2.0)
- for Commercial Ice Machines (ver. 2.0)
- for Commercial Ovens (ver. 2.1)
- for Commercial Refrigerators and Freezers

3 Lighting Products
- For Decorative Light Strings (ver. 1.5)
- For Luminaires (including sub-components) and Lamps (ver. 1.2)
- For Compact Fluorescent Lamps (CFLs) (ver. 4.3)
- For Integral LED Lamps (ver. 1.4)

4 Heating, Ventilation, and AC Products
- for Residential Ceiling Fans (ver. 3.0)
- for Residential Ventilating Fans (ver. 3.2)

5 Other
- For Water Coolers (ver. 3.0)

**D-** ***A NIST Designated Phase-I and Phase-II Conformity Assessment Body (CAB) for the following economies and regulatory authorities under the terms of the stated MRAs/Treaties:***

- Australia: ACMA (Australian Communication and Media Authority) – APEC Tel MRA -Phase I;
- Canada: (Innovation, Science and Economic development Canada - ISED) Foreign Certification Body – FCB – APEC Tel MRA -Phase I & Phase II;
- Chinese Taipei (Republic of China – Taiwan):
  - BSMI (Bureau of Standards, Metrology and Inspection) APEC Tel MRA -Phase I;
  - NCC (National Communications Commission) APEC Tel MRA -Phase I;
- European Union:
  - EMC Directive 2014/30/EU US-EU EMC & Telecom MRA CAB (NB)
  - Radio Equipment (RE) Directive 2014/53/EU US-EU EMC & Telecom MRA CAB (NB)
  - Low Voltage Directive (LVD) 2014/35/EU
- Hong Kong Special Administrative Region: (Office of the Telecommunications Authority – OFTA) APEC Tel MRA -Phase I & Phase II
- Israel – US-Israel MRA Phase I
- Republic of Korea (Ministry of Communications - Radio Research Laboratory) APEC Tel MRA -Phase I
- Singapore: (Infocomm Media Development Authority - IMDA) APEC Tel MRA -Phase I & Phase II;
- Japan: VCCI - Voluntary Control Council for Interference US-Japan Telecom Treaty VCCI Side Letter-
- USA:
  - ENERGY STAR Recognized Test Laboratory – US EPA
  - Telecommunications Certification Body (TCB) – US FCC;
  - Nationally Recognized Test Laboratory (NRTL) – US OSHA
- Vietnam: APEC Tel MRA -Phase I;

# 2 System Test Configuration

## 2.1 Justification

The EUT was configured for testing according to ANSI C63.10-2020, FCC KDB 558074 D01 DTS Meas Guidance v05r02, FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01, and FCC KDB 996369 D01 Module Certification Guide v04r02.

The EUT was tested in a testing mode to represent worst-case results during the final qualification test.

## 2.2 EUT Exercise Software

The exercising software used during testing was "Tera Term", the software is compliant with the standard requirements being tested against.

| Radio | Mode | Frequency (MHz) |
|---|---|---|
| 2.4 GHz Wi-Fi | 802.11b | 2412 |
| 5 GHz Wi-Fi | 802.11a | 5180 |
| LTE | Band 2 | 1850 ~ 1910 |
| BLE | 1MBPS | 2402 |

## 2.3 Local Support Equipment

| Manufacturer | Description | Model | Serial Number |
|---|---|---|---|
| Dell | Laptop | Latitude E7440 | - |

## 2.4 Remote Support Equipment

N/A

## 2.5 Power Supply and Line Filters

N/A

## 2.6 Interface Ports and Cabling

| Cable Description | Length (m) | From | To |
|---|---|---|---|
| USB Cable | < 1 m | Laptop | EUT |
| RF Cable | < 1 m | EUT | PSA |

# 3 Summary of Test Results

| FCC & ISEDC Rules | Description of Test | Results |
|---|---|---|
| FCC §2.1091, §15.247(i), §15.407(f), ISEDC RSS-102 | RF Exposure | Compliant |
| FCC §2.1053, §15.35(b), §15.205, §15.209, ISEDC RSS-Gen §8.9, §8.10 | Radiated Spurious Emissions | Compliant |

*BACL is responsible for all the information provided in this report, except when information is provided by the customer as identified in this report. Information provided by the customer, e.g., antenna gain, can affect the validity of results.*

# 4 FCC §2.1091, FCC §15.247(i), FCC §15.407(h) & ISEDC RSS-102 – RF Exposure

## 4.1 Applicable Standards

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

According to KDB 447 498 Section (7.2), "simultaneous transmission of MPE test exclusion applies when the sum of the MPE ratios for all simultaneous transmitting antennas incorporated in a host device, based on calculated or measured field strengths or power density, is ≤ 1.0. The MPE ratio of each antenna is determined at the minimum *test separation distance* required by the operating configurations and exposure conditions of the host device, according to the ratio of field strengths or power density to MPE limit, at the test frequency.

**Limits for General Population/Uncontrolled Exposure**

| Frequency Range (MHz) | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density ($mW/cm^2$) | Averaging Time (minutes) |
|---|---|---|---|---|
| **Limits for General Population/Uncontrolled Exposure** | | | | |
| 0.3-1.34 | 614 | 1.63 | * (100) | 30 |
| 1.34-30 | 824/f | 2.19/f | * ($180/f^2$) | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1500 | / | / | f/1500 | 30 |
| 1500-100,000 | / | / | 1.0 | 30 |

Where: f = frequency in MHz
* = Plane-wave equivalent power density

Before equipment certification is granted, the procedure of IC RSS-102 must be followed concerning the exposure of humans to RF field.

According to ISED RSS-102 Issue 6:

### 6.6 Field reference level exposure exemption limits

Field reference level (FRL) exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm (i.e. mobile devices), except when the device operates as follows:

- below 20 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 1 W (adjusted for tune-up tolerance)
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than $4.49/f^{0.5} W$ (adjusted for tune-up tolerance), where $f$ is in MHz
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance)
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834} W$ (adjusted for tune-up tolerance), where $f$ is in MHz
- at or above 6 GHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 5 W (adjusted for tune-up tolerance)

In these cases, the information contained in the RF exposure technical brief may be limited to information that demonstrates how the EIRP was derived.

## 4.2 MPE Prediction

Predication of MPE limit at a given distance, Equation from OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

Where: S = power density
P = power input to antenna
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna

## 4.3 RF exposure evaluation for FCC

**For 2.4 GHz Wi-Fi:**

***Worst Case: 2412 MHz***

| | |
|---|---|
| Maximum output power at antenna input terminal (dBm): | 23.50 |
| Maximum output power at antenna input terminal (mW): | 223.87 |
| Prediction distance (cm): | 20 |
| Prediction frequency (MHz): | 2412 |
| Maximum Directional Antenna Gain, typical (dBi): | 2.6 |
| Maximum Antenna Gain (numeric): | 1.82 |
| Power density of prediction frequency at 20.0 cm ($mW/cm^2$): | 0.08 |
| FCC MPE limit for uncontrolled exposure at prediction frequency ($mW/cm^2$): | 1.0 |

The device is compliant with the requirement FCC MPE limit for uncontrolled exposure. The maximum power density at the distance of 20cm is 0.08$mW/cm^2$. Limit is 1.0 $mW/cm^2$.

**For 5 GHz Wi-Fi:**

***Worst Case: 5745 MHz***

| | |
|---|---|
| Maximum output power at antenna input terminal (dBm): | 17.8 |
| Maximum output power at antenna input terminal (mW): | 60.26 |
| Prediction distance (cm): | 20 |
| Prediction frequency (MHz): | 5745 |
| Maximum Directional Antenna Gain, typical (dBi): | 4.8 |
| Maximum Antenna Gain (numeric): | 3.02 |
| Power density of prediction frequency at 20.0 cm ($mW/cm^2$): | 0.04 |
| FCC MPE limit for uncontrolled exposure at prediction frequency ($mW/cm^2$): | 1.0 |

The device is compliant with the requirement FCC MPE limit for uncontrolled exposure. The maximum power density at the distance of 20cm is 0.04$mW/cm^2$. Limit is 1.0 $mW/cm^2$.

**For BLE:**

***Worst Case: 2402 MHz***

| | |
|---|---|
| Maximum output power at antenna input terminal (dBm): | 8.90 |
| Maximum output power at antenna input terminal (mW): | 7.76 |
| Prediction distance (cm): | 20 |
| Prediction frequency (MHz): | 2402 |
| Maximum Directional Antenna Gain, typical (dBi): | 1.9 |
| Maximum Antenna Gain (numeric): | 1.55 |
| Power density of prediction frequency at 20.0 cm ($mW/cm^2$): | 0.002 |
| FCC MPE limit for uncontrolled exposure at prediction frequency ($mW/cm^2$): | 1.0 |

The device is compliant with the requirement FCC MPE limit for uncontrolled exposure. The maximum power density at the distance of 20cm is 0.002$mW/cm^2$. Limit is 1.0 $mW/cm^2$.

*Note: The highest EIRP was referenced from test report: R2402274-247-02 issued by BACL.*

**For LTE:**

***Worst Case: LTE, Band 2, 1850 ~ 1910 MHz***

| | |
|---|---|
| Maximum output power at antenna input terminal (dBm): | 25 |
| Maximum output power at antenna input terminal (mW): | 316.228 |
| Prediction distance (cm): | 20 |
| Prediction frequency (MHz): | 1892 |
| Maximum Directional Antenna Gain, typical (dBi): | 5 |
| Maximum Antenna Gain (numeric): | 3.162 |
| Power density of prediction frequency at 20.0 cm ($mW/cm^2$): | 0.199 |
| FCC MPE limit for uncontrolled exposure at prediction frequency ($mW/cm^2$): | 1.0 |

The device is compliant with the requirement FCC MPE limit for uncontrolled exposure. The maximum power density at the distance of 20cm is 0.199 $mW/cm^2$. Limit is 1.0 $mW/cm^2$.

*Note: The highest LTE EIRP was referenced from radio test report: 2211RSU065-E7 issued by MRT Technology (Suzhou) Co., Ltd.*
*Note: Antenna gain for the LTE module was provided by the customer <=5dBi. Referring to the antenna datasheet from www.quectel.com product OC: YE0001BA V.3 date: 2024-01-10.*

## Colocation Measurement:

This device has ability to simultaneously transmit LTE and Wi-Fi and BLE together.

Worst case colocation: LTE + 2.4 Wifi ratio+BLE. 0.199/1 +0.08/1 +0.002/1= 0.281 < 1
Worst case colocation: LTE + 5 Wifi ratio+BLE. 0.199/1 +0.04/1+0.002/1 = 0.241 < 1

## 4.4 RF exposure evaluation exemption for IC

**For 2.4 GHz Wi-Fi:**

*Worst Case: 2412MHz frequency used for formula*

Maximum EIRP power = 23.5 dBm +2.6 dBi = 26.1 dBm which is less than $1.31\times10^{-2}f^{0.6834}$ = 2.68 W= 34.28 dBm.

Therefore the RF exposure Evaluation is not required.

**For 5 GHz Wi-Fi:**

*Worst Case: 5745MHz frequency used for formula*

Maximum EIRP power = 23.5 dBm +2.6 dBi = 26.1 dBm which is less than $1.31\times10^{-2}f^{0.6834}$ = 2.68 W= 34.28 dBm.

Therefore the RF exposure Evaluation is not required.

**For BLE:**

*Worst Case: 2402MHz frequency used for formula*

Maximum EIRP power = 8.9 dBm + 1.9 dBi = 10.8 dBm which is less than $1.31\times10^{-2}f^{0.6834}$ = 2.68 W= 34.28 dBm.

Therefore the RF exposure Evaluation is not required.

**For LTE:**

*Worst Case: LTE Band 2, 1892 MHz frequency used for formula*

Maximum EIRP power = 25 dBm + 5 dBi = 30 dBm which is less than $1.31\times10^{-2}f^{0.6834}$ = 2.27 W=33.56dBm

Therefore the RF exposure Evaluation is not required.

*Note: Please refer to the reports R2402274-247-01 and R2402274-407 issued by BACL for 2.4 GHz and 5 GHz Wi-Fi details and report 2211RSU065-U4 published by MRT Technology (Suzhou) Co., Ltd for the LTE details.*
*Note: Please refer to the reports R2402274-247-02 issued by BACL for BLE*

# 5 FCC §15.35(b), §15.205, §15.209, & RSS-Gen §8.9, §8.10 – Spurious Radiated Emissions

## 5.1 Applicable Standards

As per FCC §15.35(b): Unless otherwise specified, on any frequency or frequencies above 1000 MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000 MHz shall be performed using a minimum resolution bandwidth of 1 MHz

As Per FCC §15.205(a) except as show in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

| MHz | MHz | MHz | GHz |
|---|---|---|---|
| 0.090 – 0.110<br>0.495 – 0.505<br>2.1735 – 2.1905<br>4.125 – 4.128<br>4.17725 – 4.17775<br>4.20725 – 4.20775<br>6.215 – 6.218<br>6.26775 – 6.26825<br>6.31175 – 6.31225<br>8.291 – 8.294<br>8.362 – 8.366<br>8.37625 – 8.38675<br>8.41425 – 8.41475<br>12.29 – 12.293<br>12.51975 – 12.52025<br>12.57675 – 12.57725<br>13.36 – 13.41 | 16.42 – 16.423<br>16.69475 – 16.69525<br>25.5 – 25.67<br>37.5 – 38.25<br>73 – 74.6<br>74.8 – 75.2<br>108 – 121.94<br>123 – 138<br>149.9 – 150.05<br>156.52475 – 156.52525<br>156.7 – 156.9<br>162.0125 –167.17<br>167.72 – 173.2<br>240 – 285<br>322 – 335.4<br>399.9 – 410<br>608 – 614 | 960 – 1240<br>1300 – 1427<br>1435 – 1626.5<br>1645.5 – 1646.5<br>1660 – 1710<br>1718.8 – 1722.2<br>2200 – 2300<br>2310 – 2390<br>2483.5 – 2500<br>2690 – 2900<br>3260 – 3267<br>3.332 – 3.339<br>3 3458 – 3 358<br>3.600 – 4.400 | 4. 5 – 5. 15<br>5. 35 – 5. 46<br>7.25 – 7.75<br>8.025 – 8.5<br>9.0 – 9.2<br>9.3 – 9.5<br>10.6 – 12.7<br>13.25 – 13.4<br>14.47 – 14.5<br>15.35 – 16.2<br>17.7 – 21.4<br>22.01 – 23.12<br>23.6 – 24.0<br>31.2 – 31.8<br>36.43 – 36.5<br>Above 38.6 |

As per FCC §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 (micro volts/meter) | Measurement Distance (meters) |
|---|---|---|
| 0.009 - 0.490 | 2400/F (kHz) | 300 |
| 0.490 - 1.705 | 24000/F (kHz) | 30 |
| 1.705 - 30.0 | 30 | 30 |
| 30 - 88 | 100** | 3 |
| 88 - 216 | 150** | 3 |
| 216 - 960 | 200** | 3 |
| Above 960 | 500 | 3 |

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

As per ISEDC RSS-Gen §8.9,

Except where otherwise indicated in the applicable RSS, radiated emissions shall comply with the field strength limits shown in table 5 and table 6. Additionally, the level of any transmitter unwanted emission shall not exceed the level of the transmitter's fundamental emission.

**Table 5 – General field strength limits at frequencies above 30 MHz**

| Frequency (MHz) | Field Strength (µV/m at 3 m) |
|---|---|
| 30 – 88 | 100 |
| 88 – 216 | 150 |
| 216 – 960 | 200 |
| Above 960 | 500 |

**Table 6 – General field strength limits at frequencies below 30 MHz**

| Frequency | Field Strength (micro volts/meter) | Measurement Distance (meters) |
|---|---|---|
| 9 – 490 kHz[Note 1] | 6.37/F (F in kHz) | 300 |
| 490 – 1705 kHz | 63.7/F (F in kHz) | 30 |
| 1.705 – 30 MHz | 0.08 | 30 |

*Note 1: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.*

As per ISEDC RSS-Gen §8.10(c),

Unwanted emissions that do not fall within the restricted frequency bands listed in table 7 shall comply either with the limits specified in the applicable RSS or with those specified in table 5 and table 6.

**Table 7 – Restricted frequency bands[Note 1]**

| MHz | MHz | GHz |
|---|---|---|
| 0.090 – 0.110 | 149.9 – 150.05 | 9.0 – 9.2 |
| 0.495 – 0.505 | 156.52475 – 156.52525 | 9.3 – 9.5 |
| 2.1735 – 2.1905 | 156.7 – 156.9 | 10.6 – 12.7 |
| 3.020 – 3.026 | 162.0125 –167.17 | 13.25 – 13.4 |
| 4.125 – 4.128 | 167.72 – 173.2 | 14.47 – 14.5 |
| 4.17725 – 4.17775 | 240 – 285 | 15.35 – 16.2 |
| 4.20725 – 4.20775 | 322 – 335.4 | 17.7 – 21.4 |
| 5.677 – 5.683 | 399.9 – 410 | 22.01 – 23.12 |
| 6.215 – 6.218 | 608 – 614 | 23.6 – 24.0 |
| 6.26775 – 6.26825 | 960 – 1427 | 31.2 – 31.8 |
| 6.31175 – 6.31225 | 1435 – 1626.5 | 36.43 – 36.5 |
| 8.291 – 8.294 | 1645.5 – 1646.5 | Above 38.6 |
| 8.362 – 8.366 | 1660 – 1710 | |
| 8.37625 – 8.38675 | 1718.8 – 1722.2 | |
| 8.41425 – 8.41475 | 2200 – 2300 | |
| 12.29 – 12.293 | 2310 – 2390 | |
| 12.51975 – 12.52025 | 2483.5 – 2500 | |
| 12.57675 – 12.57725 | 2655 – 2900 | |
| 13.36 – 13.41 | 3260 – 3267 | |
| 16.42 – 16.423 | 3332 – 3339 | |
| 16.69475 – 16.69525 | 3345.8 – 3358 | |
| 16.80425 – 16.80475 | 3500 – 4400 | |
| 25.5 – 25.67 | 4500 – 5150 | |
| 37.5 – 38.25 | 5350 – 5460 | |
| 73 – 74.6 | 7250 – 7750 | |
| 74.8 – 75.2 | 8025 – 8500 | |
| 108 – 138 | | |

*Note 1: Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.*

## 5.2 Test Setup

The radiated emissions tests were performed in the 5-meter chamber, using the setup in accordance with ANSI C63.10-2020. The specification used was the FCC §15.247, FCC §15.407 and ISEDC RSS-247 limits.

The spacing between the peripherals was 10 centimeters.

External I/O cables were draped along the edge of the test table and bundled when necessary.

## 5.3 Test Procedure

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

The EUT was set 3 meter away from the testing antenna, which was varied from 1-4 meters, and the EUT was placed on a turntable, which was 0.8 meters and 1.5 meters above the ground plane for below and above 1000 MHz measurements, the table shall be rotated for 360 degrees to find out the highest emission. The receiving antenna's polarity should be changed between horizontal and vertical.

The spectrum analyzer or receiver was set as:

**Below 1000 MHz:**

RBW = 100 kHz / VBW = 300 kHz / Sweep = Auto

**Above 1000 MHz:**

(1) Peak: RBW = 1MHz / VBW = 1MHz / Sweep = Auto
(2) Average: RBW = 1MHz / VBW = 3MHz / Sweep = Auto / Trace averaging for 100 traces

## 5.4 Corrected Amplitude and Margin Calculation

For emissions below 1 GHz,

The Corrected Amplitude (CA) is calculated by adding the Correction Factor to the S.A. Reading. The basic equation is as follows:

CA = S.A. Reading + Correction Factor

For example, a corrected amplitude of 40.3 dBuV/m = S.A. Reading (32.5 dBuV) + Correction Factor (7.8 dB/m)

The Correction Factor is calculated by adding the Antenna Factor (AF), the Cable Loss (CL), the Attenuator Factor (Atten) and subtracting the Amplifier Gain (Ga) together. This calculation is done in the measurement software, and reported in the test result section. The basic equation is as follows:

Correction Factor = AF + CL + Atten – Ga

The "Margin" column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of -7 dB means the emission is 7 dB below the maximum limit. The equation for margin calculation is as follows:

Margin = Corrected Amplitude – Limit

For emission above 1 GHz,

The Corrected Amplitude (CA) is calculated by adding the Antenna Factor (AF), the Cable Loss (CL), the Attenuator Factor (Atten) and subtracting the Amplifier Gain (Ga) to indicated Amplitude (Ai) reading. The basic equation is as follows:

CA = Ai + AF + CL + Atten – Ga

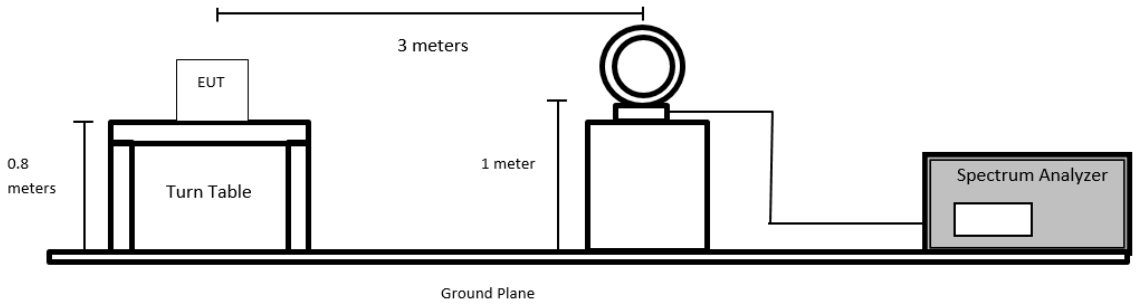
For example, a corrected amplitude of 40.3 dBuV/m = Indicated Reading (32.5 dBuV) + Antenna Factor (+23.5dB) + Cable Loss (3.7 dB) + Attenuator (10 dB) - Amplifier Gain (29.4 dB)

The "Margin" column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of -7 dB means the emission is 7 dB below the maximum limit. The equation for margin calculation is as follows:

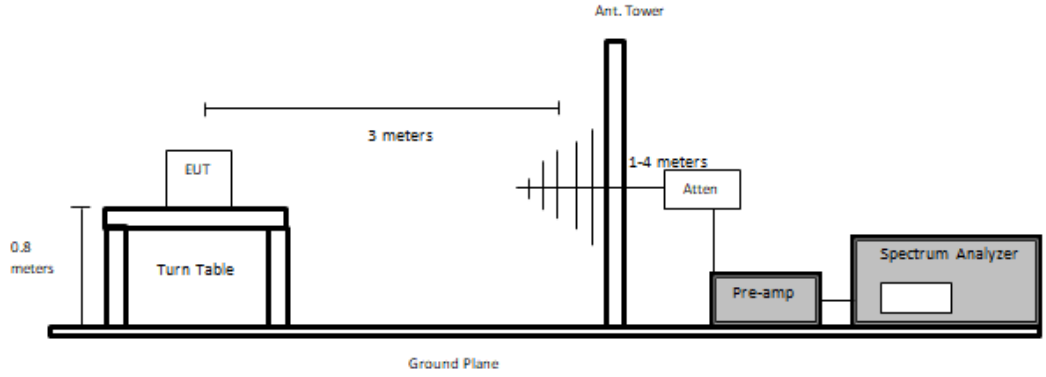
Margin = Corrected Amplitude – Limit

## 5.5 Test Setup Block Diagram

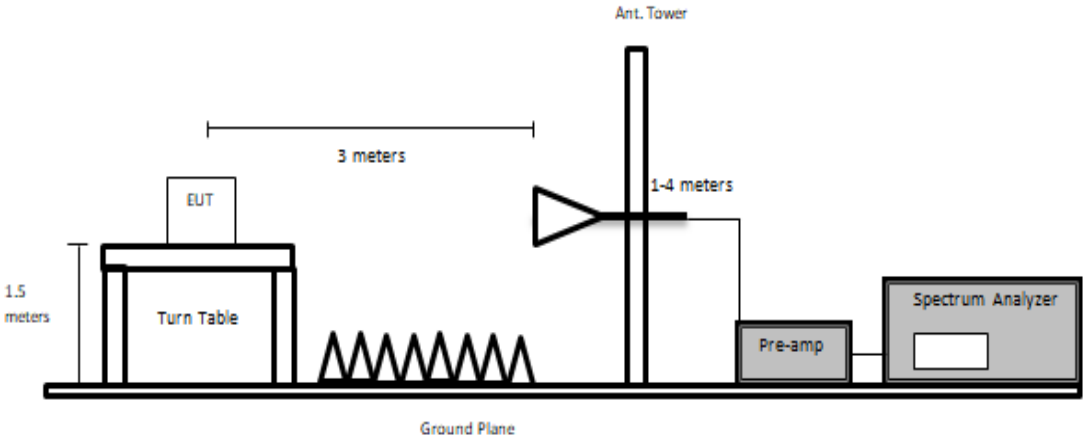
**9 kHz to 30 MHz**




**30 MHz to 1 GHz**




**Above 1 GHz**



## 5.6 Test Equipment List and Details

| BACL No. | Manufacturer | Description | Model No. | Serial No. | Calibration Date | Calibration Interval |
|---|---|---|---|---|---|---|
| 327 | Sunol Sciences | System Controller | SC110V | 122303-1 | N/R | N/R |
| 1075 | Sunol Sciences | Boresight Tower | TLT3 | 050119-7 | N/R | N/R |
| 1388 | Sunol Sciences | Flush Mount Turntable | FM | 112005-2 | N/R | N/R |
| 1427 | Keysight Technologies | PXE EMI Receiver | N9048B | MY59500006 | 2024-12-23 | 1 year |
| 1432 | Keysight Technologies | MXE EMI Receiver, Multi-touch | N9038B | MY60180008 | 2025-01-03 | 1 year |
| 316 | Sonoma Instruments | Preamplifier 10 kHz - 2.5 GHz | 317 | 260406 | 2025-02-20 | 6 months |
| 321 | Sunol Sciences | Biconilog Antenna | JB3 | A020106-2; 1504 | 2023-12-18 | 2 years |
| 1245 | - | 6dB Attenuator | PE7390-6 | 01182018A | 2023-12-18 | 2 years |
| 1246 | Hewlet Packard | RF Limiter | 11867A | 1734 | 2024-04-09 | 1 year |
| 1248 | Pasternack | RG214 COAX Cable | PE3062 | - | 2024-10-01 | 6 months |
| 1249 | Time microwave | LMR-400 Cable Dc-3 GHz | AE13684 | 2k80612-5 6fts | 2024-04-09 | 1 year |
| 1295 | Carlisle Interconnected Technologies | 10m Coaxial Cable | UFB142A-1-3937-200200 | 64639890912-001 | 2024-10-16 | 6 months |
| 1456 | Pasternack | 11m LMR-400 RF Cable | PE3C0033-1100CM | NA | 2025-01-27 | 6 months |
| 1533 | Pasternack | Coaxial Cable | NA | NA | 2024-12-31 | 6 months |
| 1192 | ETS Lindgren | Horn Antenna | 3117 | 218973 | 2024-10-23 | 2 years |
| 1449 | BACL | Preamplifier | BACL1313-A100M18G | 4052472 | 2025-02-19 | 6 months |
| 90 | Wisewave | Horn Antenna | ARH-4223-02 | 10555-01 | 2023-05-02 | 2 years |
| 393 | Com-Power | Loop Antenna, Active | AL-130 | 17043 | 2023-05-26 | 2 years |
| 1451 | BACL | Preamplifier | BACL-1313-A1840 | 4052432 | 2025-02-19 | 6 months |
| 920 | Knowles Precision Devices | UMTS Notch Filter | 938147 | 60656 0944 | 2025-03-18 | 1 year |
| 387 | Micro-Tronics | Notch Filter 5.15 - 5.35 GHz | BRC50703 | 006 | 2025-03-05 | 1 year |
| 672 | Micro-Tronics | Notch Filter 2.4 - 2.6 GHz | BRM50701 | 160 | 2025-03-07 | 1 year |
| 1546 | Megaphase | SMA coax cable | TM26-S1S3-12 | 20869602 001 | 2025-03-05 | 6 months |
| 92 | Wisewave | Horn Antenna | ARH-2823-02 | 10555-01 | 2024-06-26 | 2 years |
| 1545 | Megaphase | K-type coax cable | TM40-K1K3-12 | 20869601 001 | 2025-03-05 | 6 months |

***Statement of Traceability: BACL Corp.*** *attests that all of the calibrations on the equipment items listed above were traceable to NIST or to another internationally recognized National Metrology Institute (NMI), and were compliant with the latest version of A2LA policy P102 "A2LA Policy on Metrological Traceability".*

## 5.7 Test Environmental Conditions

| | |
|---|---|
| **Temperature:** | 20 – 22.5°C |
| **Relative Humidity:** | 50-55% |
| **ATM Pressure:** | 99.89-101.85 kPa |

*The testing was performed by Shankar Pangeni on 2025-03-27 to 2025-03-29 in 5m chamber 3.*

## 5.8 Summary of Test Results

According to the data hereinafter, the EUT complied with the FCC Part 15.209, 15.205, 15.247, 15.407 and ISEDC RSS-247 standards' radiated emissions limits, and had the worst margin of:

| **Worst Case – Mode: Transmitting** | | | |
|---|---|---|---|
| **Margin (dB)** | **Frequency (MHz)** | **Polarization (Horizontal/Vertical)** | **Module** |
| -0.4 | 599.9856 | Vertical | LTE+5GHzWifi |

Please refer to the tables and plots in the next section for detailed test results.

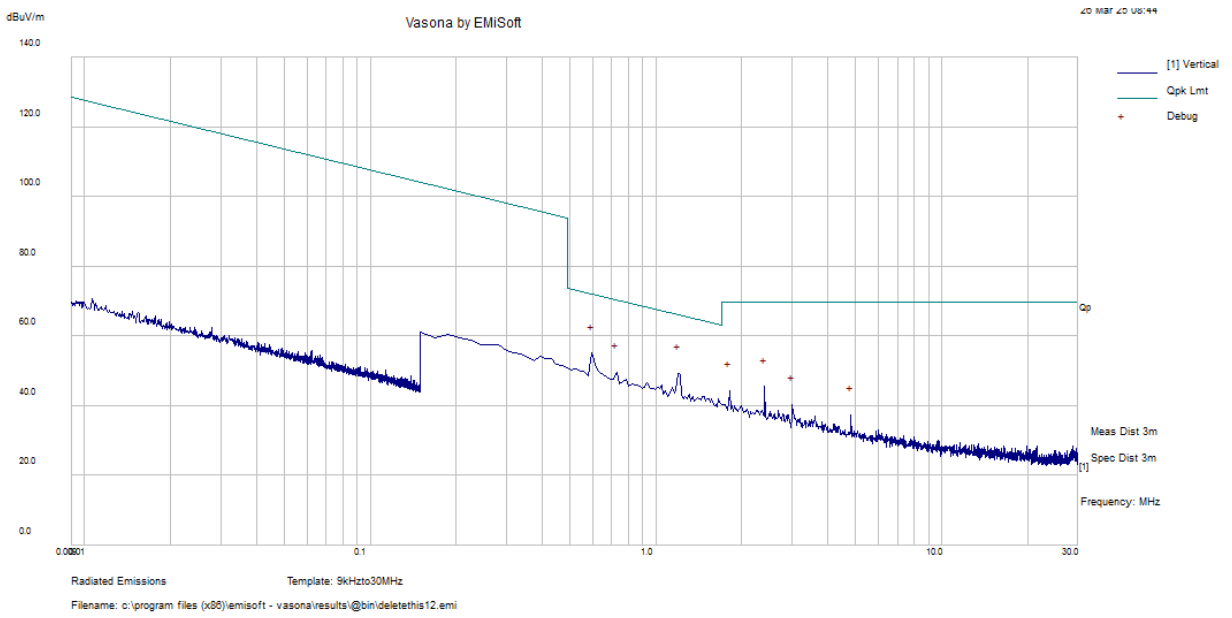
## 5.9 Radiated Emissions Test Results

***Note:*** *Pre-scan was performed in order to determine worst-case orientation of device with respect to measurement antenna in the X/Y/Z axis. Plots/data shown represent measurements made in worst-case orientation.*
***Note:*** *Test performed on worst-case config per radio.*

### 1) 9 kHz – 30 MHz, Measured at 3 meters

**LTE+2.4 GHz Wi-Fi+ BLE(FCC ID: 2BFSEG400B)**

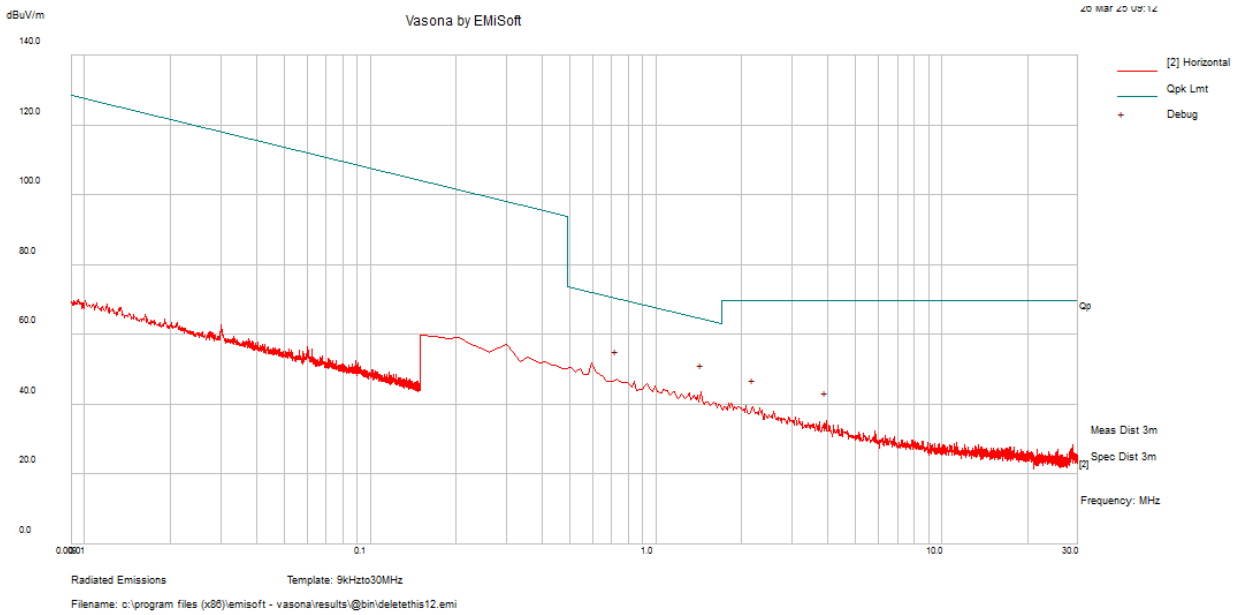
**Parallel**




| Frequency (MHz) | S.A. Reading (dBuV) | Correction Factor (dB/m) | Corrected Amplitude (dBµV/m) | Antenna Polarity (H/V) | Limit (dBµV/m) | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|
| 1.19475 | 39.1 | 10.12 | 49.23 | V | 66.06 | -16.83 | Peak |
| 0.59775 | 44.82 | 10.16 | 54.99 | V | 72.08 | -17.09 | Peak |
| 0.728344 | 39.44 | 10.13 | 49.57 | V | 70.36 | -20.79 | Peak |
| 2.407406 | 35.04 | 10.37 | 45.41 | V | 69.54 | -24.13 | Peak |
| 1.810406 | 34.05 | 10.3 | 44.35 | V | 69.54 | -25.19 | Peak |
| 3.004406 | 29.9 | 10.41 | 40.31 | V | 69.54 | -29.23 | Peak |
| 4.814063 | 27.2 | 10.25 | 37.44 | V | 69.54 | -32.1 | Peak |

*Note: Peak emissions are compared to QP limits to show worst-case compliance.*

**Perpendicular**

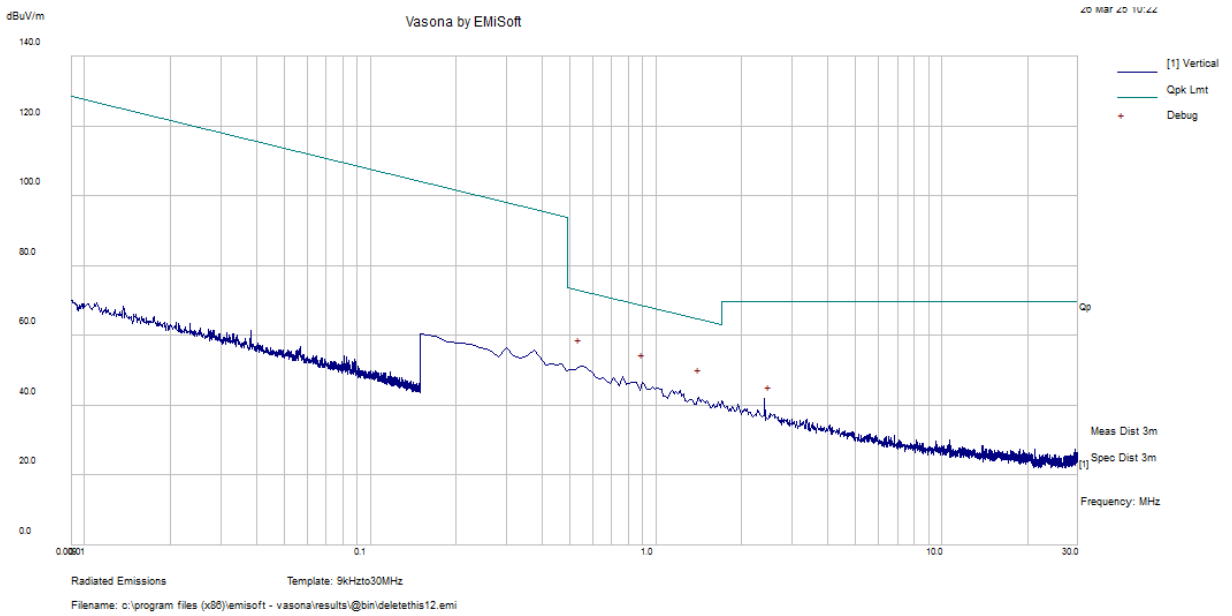



| Frequency (MHz) | S.A. Reading (dBuV) | Correction Factor (dB/m) | Corrected Amplitude (dBµV/m) | Antenna Polarity (H/V) | Limit (dBµV/m) | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|
| 1.437281 | 33.21 | 10.21 | 43.41 | H | 64.45 | -21.04 | Peak |
| 0.728344 | 37.13 | 10.13 | 47.26 | H | 70.36 | -23.1 | Peak |
| 2.183531 | 28.76 | 10.35 | 39.12 | H | 69.54 | -30.42 | Peak |
| 3.937219 | 24.95 | 10.36 | 35.32 | H | 69.54 | -34.22 | Peak |

*Note: Peak emissions are compared to QP limits to show worst-case compliance.*

**LTE+5 GHz Wi-Fi+ BLE(FCC ID: 2BFSEG400B)**

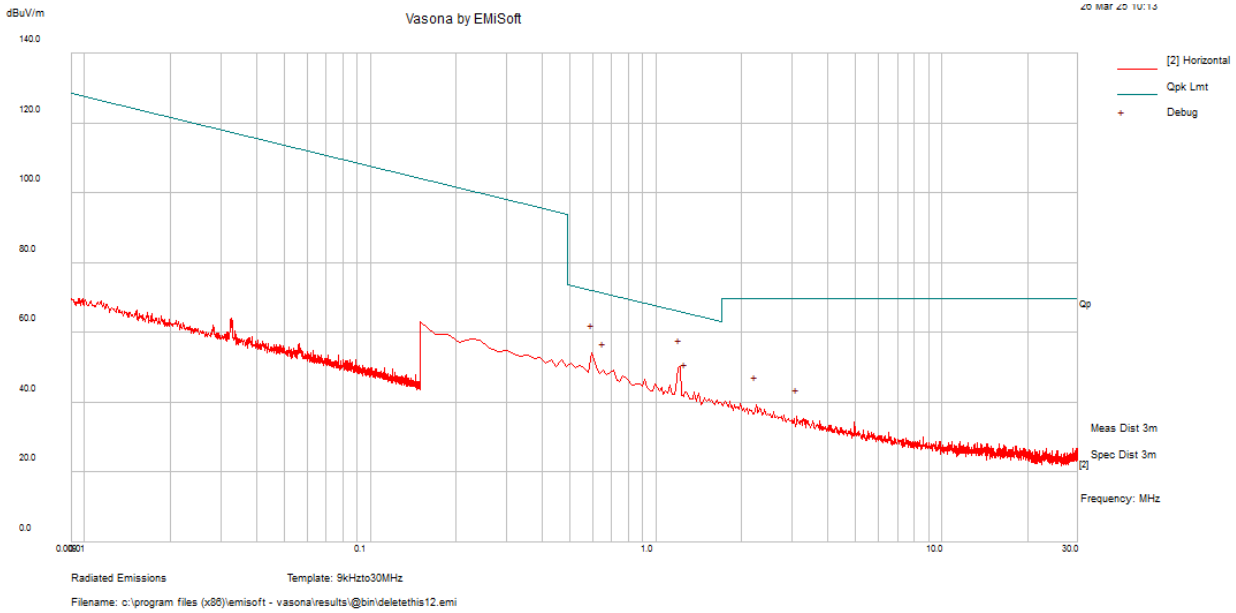
**Parallel**




| Frequency (MHz) | S.A. Reading (dBuV) | Correction Factor (dB/m) | Corrected Amplitude (dBµV/m) | Antenna Polarity (H/V) | Limit (dBµV/m) | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|
| 0.541781 | 40.87 | 10.19 | 51.05 | V | 72.93 | -21.88 | Peak |
| 0.89625 | 36.47 | 10.06 | 46.53 | V | 68.56 | -22.02 | Peak |
| 1.418625 | 32.15 | 10.2 | 42.35 | V | 64.57 | -22.22 | Peak |
| 2.500688 | 27.17 | 10.38 | 37.55 | V | 69.54 | -31.99 | Peak |

*Note: Peak emissions are compared to QP limits to show worst-case compliance.*

**Perpendicular**

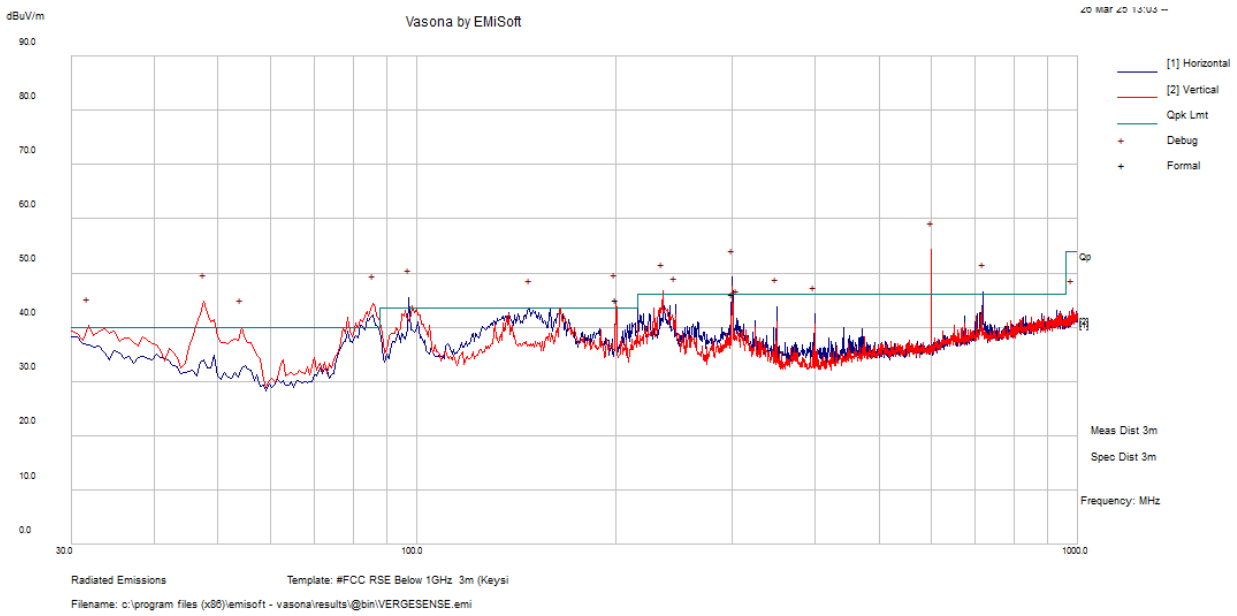



| Frequency (MHz) | S.A. Reading (dBuV) | Correction Factor (dB/m) | Corrected Amplitude (dBµV/m) | Antenna Polarity (H/V) | Limit (dBµV/m) | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|
| 1.213406 | 39.96 | 10.13 | 50.09 | H | 65.92 | -15.84 | Peak |
| 0.59775 | 44.15 | 10.16 | 54.31 | H | 72.08 | -17.76 | Peak |
| 0.653719 | 38.99 | 10.14 | 49.14 | H | 71.3 | -22.16 | Peak |
| 1.269375 | 32.84 | 10.15 | 42.99 | H | 65.53 | -22.54 | Peak |
| 2.2395 | 28.94 | 10.36 | 39.3 | H | 69.54 | -30.24 | Peak |
| 3.116344 | 25.4 | 10.4 | 35.8 | H | 69.54 | -33.74 | Peak |

*Note: Peak emissions are compared to QP limits to show worst-case compliance.*

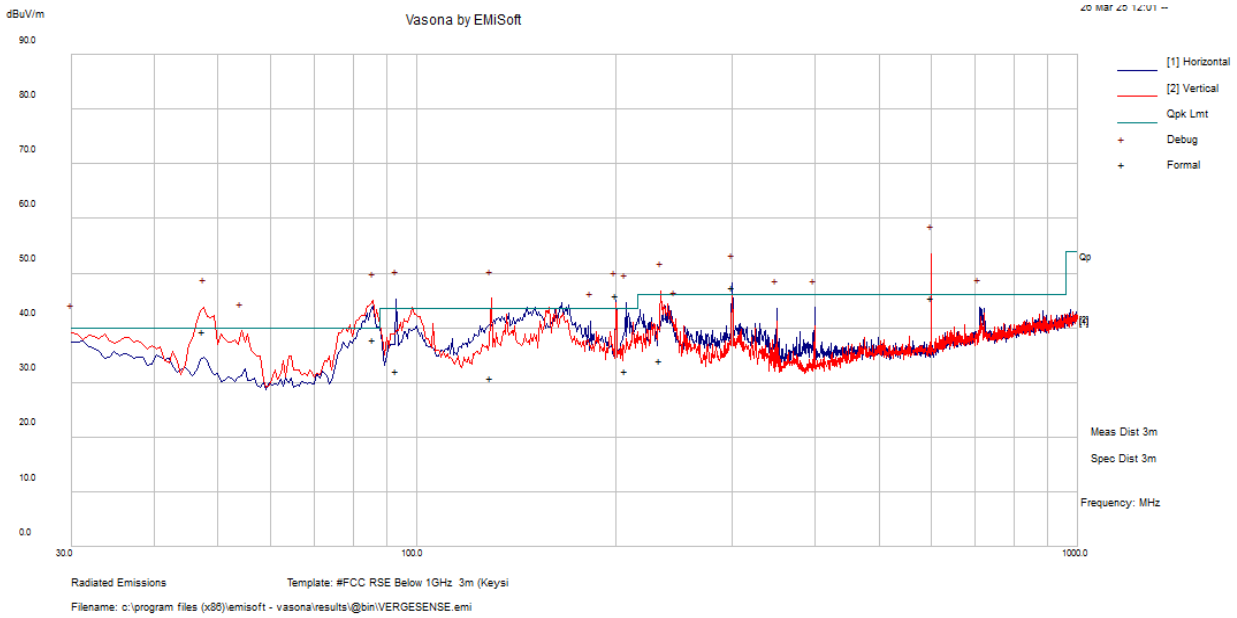
## 2) 30 MHz – 1 GHz, Measured at 3 meters

**LTE+2.4 GHz Wi-Fi+ BLE(FCC ID: 2BFSEG400B)**




| Frequency (MHz) | S.A. Reading (dBuV) | Correction Factor (dB/m) | Corrected Amplitude (dBµV/m) | Antenna Height (cm) | Antenna Polarity (H/V) | Turntable Azimuth (degrees) | Limit (dBµV/m) | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|---|---|
| 599.9988 | 44.32 | -0.68 | 43.64 | 102 | V | 344 | 46 | -2.36 | QP |
| 47.55719 | 50.93 | -12.28 | 38.65 | 100 | V | 23 | 40 | -1.35 | QP |
| 85.5325 | 52.78 | -13.71 | 39.07 | 157 | V | 237 | 40 | -0.93 | QP |
| 300.0038 | 52.09 | -6.58 | 45.5 | 254 | H | 104 | 46 | -0.50 | QP |
| 97.44344 | 44.7 | -10.58 | 34.12 | 206 | H | 250 | 43.5 | -9.38 | QP |
| 199.9828 | 50.27 | -8.03 | 42.23 | 100 | V | 169 | 43.5 | -1.27 | QP |
| 235.7103 | 48.2 | -8.95 | 39.25 | 100 | V | 160 | 46 | -6.75 | QP |
| 719.1547 | 29.57 | 1.73 | 31.29 | 202 | H | 177 | 46 | -14.71 | QP |
| 31.915 | 34.99 | -2.1 | 32.89 | 209 | V | 201 | 40 | -7.11 | QP |
| 148.1013 | 44.92 | -7.93 | 36.99 | 273 | H | 221 | 43.5 | -6.51 | QP |

**LTE+5 GHz Wi-Fi+ BLE(FCC ID: 2BFSEG400B)**




| Frequency (MHz) | S.A. Reading (dBuV) | Correction Factor (dB/m) | Corrected Amplitude (dBµV/m) | Antenna Height (cm) | Antenna Polarity (H/V) | Turntable Azimuth (degrees) | Limit (dBµV/m) | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|---|---|
| **599.9856** | **46.28** | **-0.68** | **45.6** | **100** | **V** | **16** | **46** | **-0.4** | QP |
| 85.89938 | 51.57 | -13.68 | 37.9 | 201 | V | 89 | 40 | -2.1 | QP |
| 47.38375 | 51.47 | -12.19 | 39.27 | 100 | V | 352 | 40 | -0.73 | QP |
| 300.0072 | 52.05 | -6.58 | 45.47 | 237 | H | 98 | 46 | -0.53 | QP |
| 129.3847 | 37.41 | -6.63 | 30.78 | 234 | V | 207 | 43.5 | -12.72 | QP |
| 92.96375 | 44.11 | -11.95 | 32.16 | 207 | H | 274 | 43.5 | -11.34 | QP |
| 199.9953 | 50.95 | -8.03 | 42.92 | 170 | H | 187 | 43.5 | -0.58 | QP |
| 207.0366 | 41.81 | -9.68 | 32.13 | 169 | H | 292 | 43.5 | -11.37 | QP |
| 233.4788 | 43.21 | -9.08 | 34.13 | 100 | V | 230 | 46 | -11.87 | QP |

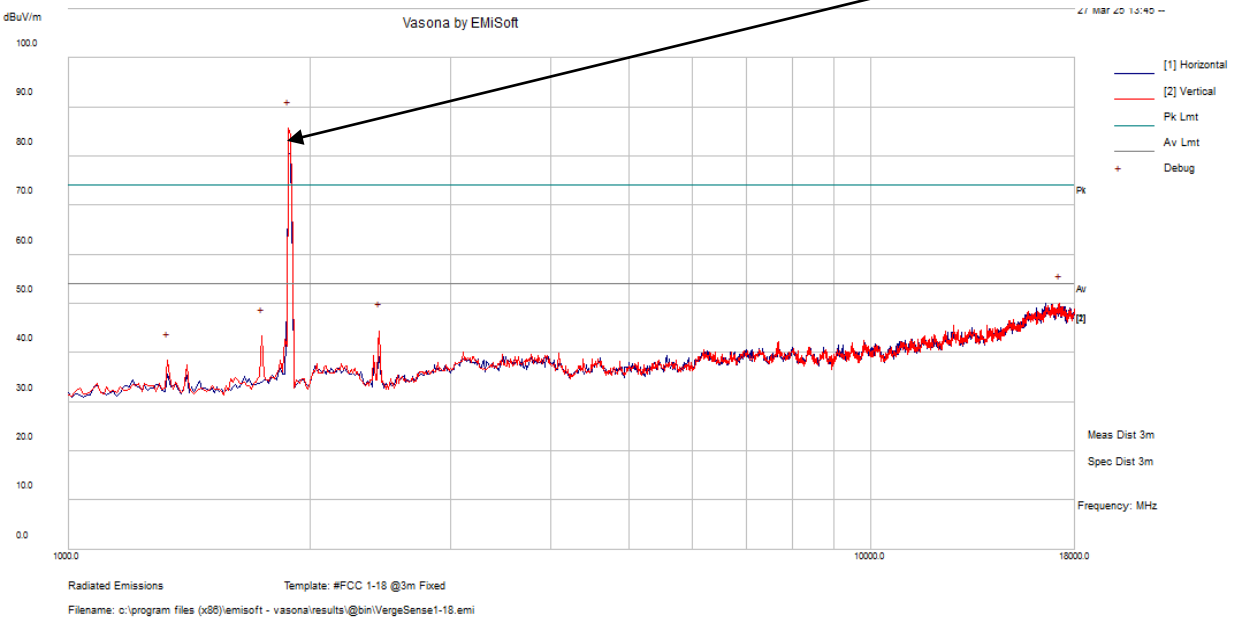
| FCC/IC Limits for 1 GHz to 40 GHz | | | |
|---|---|---|---|
| **Applicability** | **(dBm)** | **(uV/m at 3meters)** | **(dBuV/m at 3meters)** |
| Restricted Band Average Limit | - | 500 | 54 |
| Restricted Band Peak Limit[1] | - | - | 74 |

Note[1]: Restricted Band Peak Limit is defined to be 20dB higher than Average Limit.

### 3) 1 GHz – 18 GHz, Measured at 3 meters

LTE: Fundamental Frequency

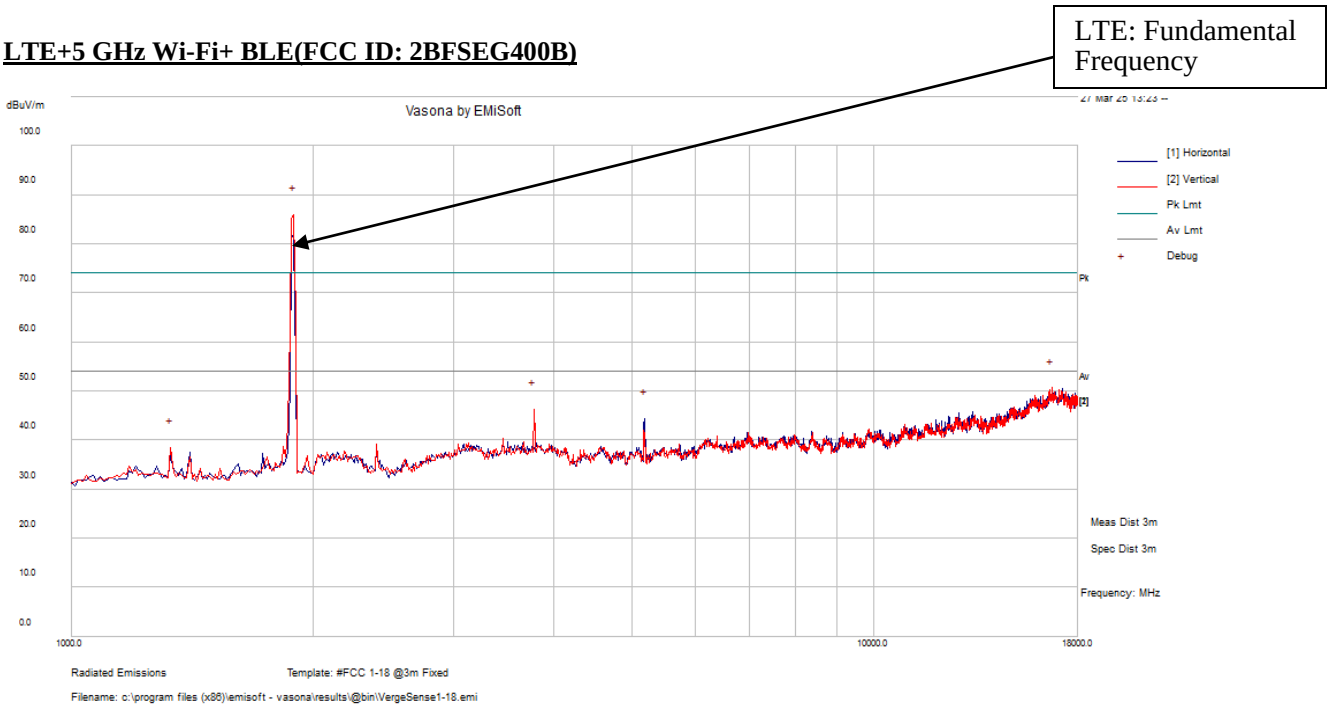
**LTE+2.4 GHz Wi-Fi+ BLE(FCC ID: 2BFSEG400B)**




| Frequency (MHz) | S.A. Reading (dBuV) | Correction Factor (dB/m) | Corrected Amplitude (dBµV/m) | Antenna Height (cm) | Antenna Polarity (H/V) | Turntable Azimuth (degrees) | Limit (dBµV/m) | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|---|---|
| 17235 | 33.16 | 16.92 | 50.09 | 100 | V | 291 | 54 | -3.92 | Peak |
| 2445 | 48.84 | -4.39 | 44.46 | 200 | V | 32 | 54 | -9.54 | Peak |
| 1743.75 | 50.25 | -6.89 | 43.36 | 300 | V | 294 | 54 | -10.64 | Peak |
| 1329.375 | 46.61 | -8.25 | 38.36 | 100 | V | 200 | 54 | -15.64 | Peak |

*Note: The Highest emission peak is the fundamental frequency for LTE.*
*Note: Peak measurement is used to compare to the average limit*

**LTE+5 GHz Wi-Fi+ BLE(FCC ID: 2BFSEG400B)**

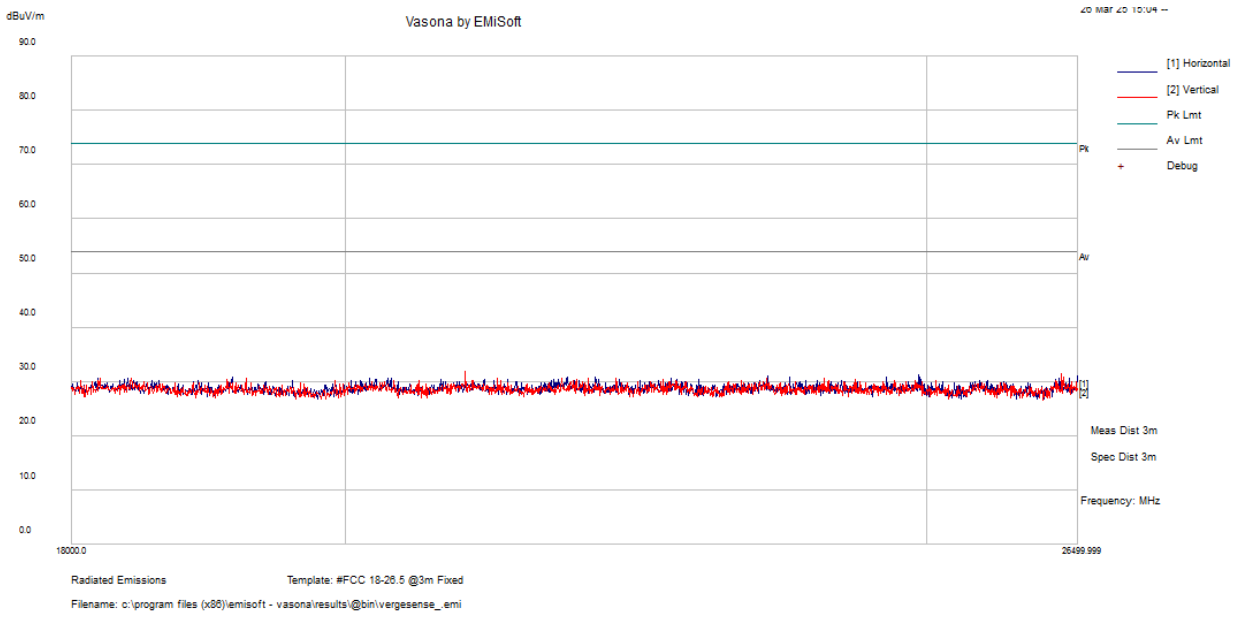



| Frequency (MHz) | S.A. Reading (dBuV) | Correction Factor (dB/m) | Corrected Amplitude (dBµV/m) | Antenna Height (cm) | Antenna Polarity (H/V) | Turntable Azimuth (degrees) | Limit (dBµV/m) | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|---|---|
| 16703.75 | 33.47 | 17.21 | 50.68 | 100 | V | 14 | 54 | -3.32 | Peak |
| 3773.125 | 47.76 | -1.42 | 46.33 | 100 | V | 264 | 54 | -7.67 | Peak |
| 5186.25 | 44.73 | -0.33 | 44.4 | 100 | H | 92 | 54 | -9.6 | Peak |
| 1329.375 | 46.71 | -8.25 | 38.46 | 100 | V | 187 | 54 | -15.54 | Peak |

*Note: The Highest emission peak is the fundamental frequency for LTE.*
*Note: Peak measurement is used to compare to the average limit*

### 4) 18 GHz – 26.5 GHz, Measured at 3 meters

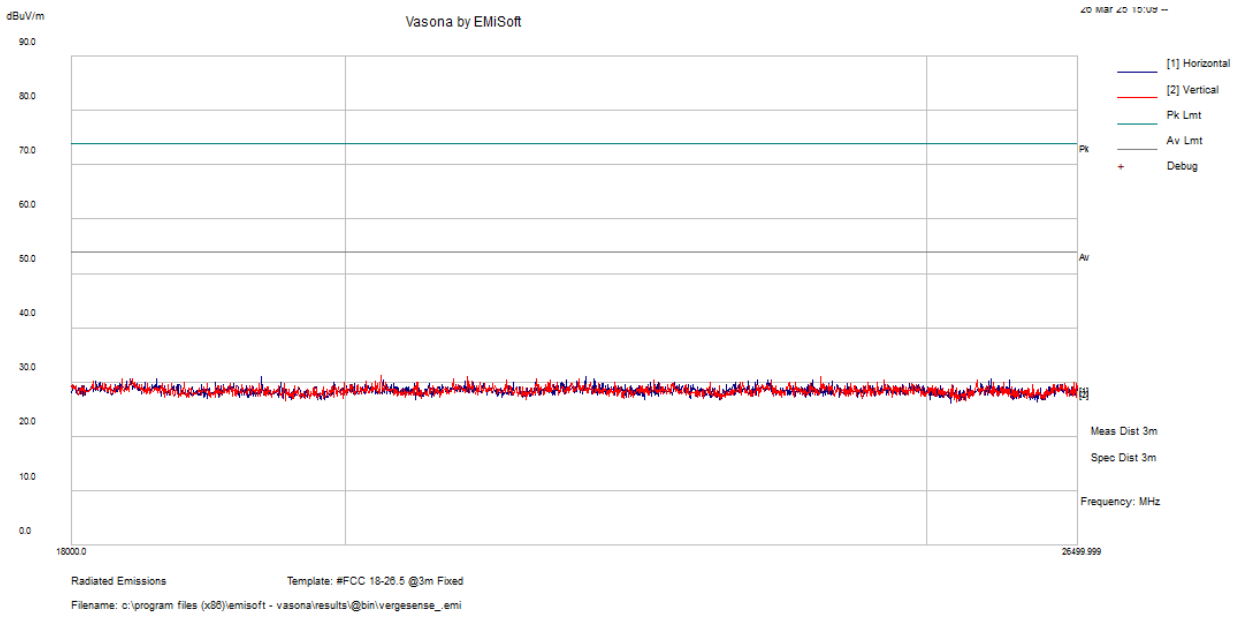
**LTE+2.4 GHz Wi-Fi+ BLE(FCC ID: 2BFSEG400B)**




| Frequency (MHz) | S.A. Reading (dBuV) | Correction Factor (dB/m) | Corrected Amplitude (dBµV/m) | Antenna Height (cm) | Antenna Polarity (H/V) | Turntable Azimuth (degrees) | Limit (dBµV/m) | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|---|---|
| 20975.193 | 28.18 | 1.836 | 30.016 | 170 | H | 0 | 54 | -23.984 | Peak |

*Note: Peak measurement is used to compare to the average limit*

**LTE+5 GHz Wi-Fi+ BLE(FCC ID: 2BFSEG400B)**

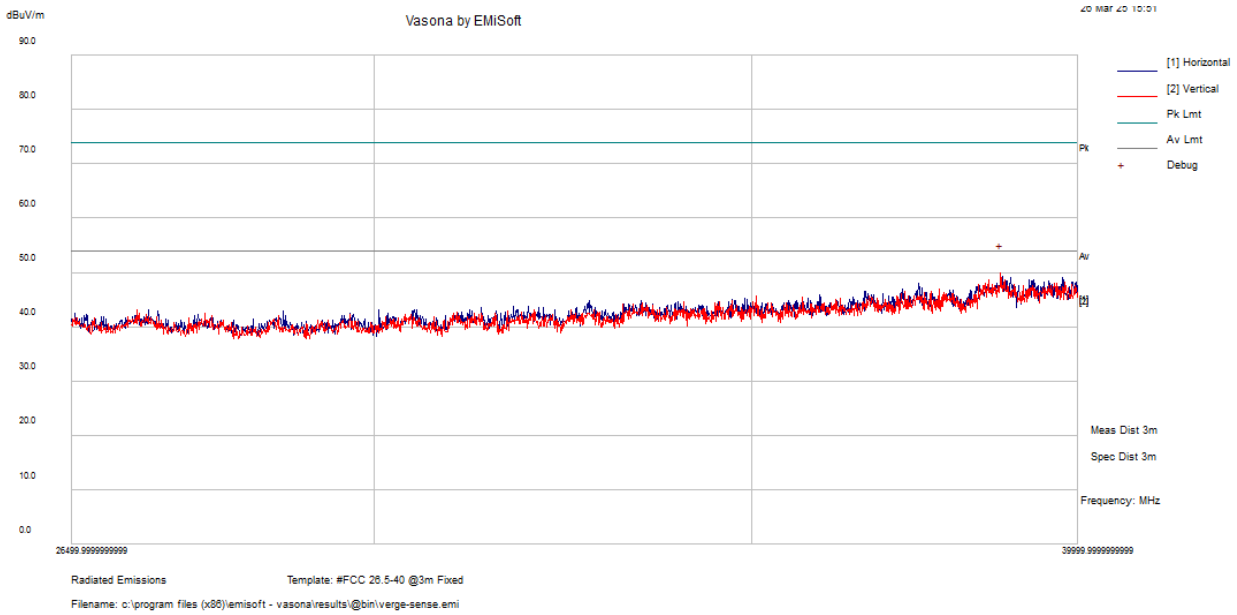



| Frequency (MHz) | S.A. Reading (dBuV) | Correction Factor (dB/m) | Corrected Amplitude (dBµV/m) | Antenna Height (cm) | Antenna Polarity (H/V) | Turntable Azimuth (degrees) | Limit (dBµV/m) | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|---|---|
| 24048.31 | 28.12 | 2.277 | 30.397 | 168 | H | 15 | 54 | -23.603 | Peak |

*Note: Peak measurement is used to compare to the average limit*

## 5) 26.5 GHz – 40 GHz, Measured at 3 meters

**LTE+5 GHz Wi-Fi+ BLE(FCC ID: 2BFSEG400B)**




| Frequency (MHz) | S.A. Reading (dBuV) | Correction Factor (dB/m) | Corrected Amplitude (dBµV/m) | Antenna Height (cm) | Antenna Polarity (H/V) | Turntable Azimuth (degrees) | Limit (dBµV/m) | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|---|---|
| 38751.25 | 38.36 | 11.57 | 49.92 | 200 | V | 0 | 54 | -4.08 | Peak |

*Note: Peak measurement is used to compare to the average limit*

# 6 Appendix A (Normative) – EUT Test Setup Photographs

Please refer to the attachment.

# 7 Appendix B (Normative) – EUT External Photographs

Please refer to the attachment.

# 8 Appendix C (Normative) – EUT Internal Photographs

Please refer to the attachment.

# 9 Appendix D (Normative) – A2LA Electrical Testing Certificate

**Accredited Laboratory**

A2LA has accredited

**BAY AREA COMPLIANCE LABORATORIES CORP.**

*Sunnyvale, CA*

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets A2LA R222 - Specific Requirements EPA ENERGY STAR Accreditation Program. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 13th day of September 2024.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3297.02
Valid to September 30, 2026

*For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.*

Please follow the web link below for a full ISO 17025 scope.

https://www.a2la.org/scopepdf/3297-02.pdf

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