| | | | | |
|---|---|---|---|---|
| **Prüfbericht-Nr.:** *Test report no.*: | **CN24717I 002** | **Auftrags-Nr.:** *Order no.*: | **168492002** | Seite 1 von 21 *Page 1 of* 21 |
| **Kunden-Referenz-Nr.:** *Client reference no.*: | N/A | **Auftragsdatum:** *Order date:* | 2024-07-01 | |
| **Auftraggeber:** *Client*: | Harman International Industries, Incorporated<br>8500 Balboa Blvd, Northridge, California, 91329, United States | | | |
| **Prüfgegenstand:** *Test item*: | LEGEND 700 HEAD UNIT | | | |
| **Bezeichnung / Typ-Nr.:** *Identification / Type no.*: | JBLLEGEND700 (Trademark: JBL) | | | |
| **Auftrags-Inhalt:** *Order content*: | Test Report | | | |
| **Prüfgrundlage:** *Test specification*: | CFR47 FCC Part 15: Subpart C Section 15.247<br>CFR47 FCC Part 15: Subpart C Section 15.209 | | RSS-247-Issue 3 August 2023<br>RSS-Gen Issue 5 March 2019 | |

| | | |
|---|---|---|
| **Wareneingangsdatum:** *Date of sample receipt*: | 2024-07-08 | Refer to photos document |
| **Prüfmuster-Nr.:** *Test sample no:* | A003797988 006 | |
| **Prüfzeitraum:** *Testing period*: | 2024-07-08 - 2024-07-19 | |
| **Ort der Prüfung:** *Place of testing*: | TÜV Rheinland (Shenzhen) Co., Ltd. | |
| **Prüflaboratorium:** *Testing laboratory:* | TÜV Rheinland (Shenzhen) Co., Ltd. | |
| **Prüfergebnis*:** *Test result**: | Pass | |

| | | | |
|---|---|---|---|
| **geprüft von:** tested by: | x<br>Signed by: Harry W. C. Wu | **genehmigt von:** *authorized by*: | x<br>Signed by: Alex Lan |
| **Datum:** *Date:* 2024-09-12 | | **Ausstellungsdatum:** *Issue date:* 2024-09-12 | |
| **Stellung** / Position: | Sachverständige(r)/Expert | **Stellung** / Position: | Sachverständige(r)/Expert |

**Sonstiges /** *Other*: FCC ID: APILEGEND700 IC: 6132A-LEGEND700 HVIN: JBLLEGEND700

**Zustand des Prüfgegenstandes bei Anlieferung:** *Condition of the test item at delivery*: Prüfmuster vollständig und unbeschädigt *Test item complete and undamaged*

| | | | | |
|---|---|---|---|---|
| * Legende: | P(ass) = entspricht o.g. Prüfgrundlage(n) | F(ail) = entspricht nicht o.g. Prüfgrundlage(n) | N/A = nicht anwendbar | N/T = nicht getestet |
| * *Legend:* | *P(ass) = passed a.m. test specification(s)* | *F(ail) = failed a.m. test specification(s)* | *N/A = not applicable* | *N/T = not tested* |

**Prüfbericht-Nr.: CN24717I 002**
*Test report no.:*



## Anmerkungen
*Remarks*

| | |
|---|---|
| **1** | Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.<br>Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.<br><br>*The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.* |
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| **3** | Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben.<br>Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.<br><br>*Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report.*<br>*Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.* |
| **4** | Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnisen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.<br><br>*The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the “Zero Guard Band Rule” and “Simple Acceptance” in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.* |

# *Test Summary*

**5.1.1 ANTENNA REQUIREMENT**
*RESULT: Pass*

**5.1.2 MAXIMUM CONDUCTED OUTPUT POWER**
*RESULT: Pass*

**5.1.3 CONDUCTED POWER SPECTRAL DENSITY**
*RESULT: Pass*

**5.1.4 6DB BANDWIDTH**
*RESULT: Pass*

**5.1.5 99% BANDWIDTH**
*RESULT: Pass*

**5.1.6 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHZ BANDWIDTH**
*RESULT: Pass*

**5.1.7 RADIATED SPURIOUS EMISSION**
*RESULT: Pass*

**5.1.8 CONDUCTED EMISSION ON AC MAINS**
*RESULT: Pass*

# *Contents*

# 1 General Remarks

## 1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of Bluetooth BLE;

Appendix B: Test Results of 2.4GHz Wi-Fi;

Appendix C: Photographs of Test Set-up.

# 2 Test Sites

## 2.1 Test Facilities

**TÜV Rheinland (Shenzhen) Co., Ltd.**
No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. China.

FCC Registration No.: 694916

ISED Wireless Device Testing Laboratory: 25069

## 2.2 List of Test and Measurement Instruments

**Table 1: List of Test and Measurement Equipment**

| **Radio Spectrum Testing** | | | | |
|---|---|---|---|---|
| **Equipment** | **Manufacturer** | **Model** | **Serial No.** | **Cal. until** |
| Wireless Connectivity Tester | R&S | CMW270 | 101375 | 25.07.2024 |
| Signal Analyzer | R&S | FSV 40 | 101441 | 25.07.2024 |
| Vector Signal Generator | R&S | SMBV100A | 263301 | 25.07.2024 |
| Signal Generator | R&S | SMB100A | 115186 | 25.07.2024 |
| OSP | R&S | OSP 150 | 101017 | 13.11.2024 |
| Control PC | DELL | OptiPlex 7050 | FTJZ9P2 | N/A |
| Test Software | R&S | WMS32 (V11.00.00) | N/A | N/A |
| Power Meter | R&S | NRP2 | 107105 | 13.11.2024 |
| Power Sensor | R&S | NRP-Z81 | 105677 | 25.07.2024 |
| Humid & Temp Programmable Tester | BOST | NTH090-60 | 19040801 | 28.02.2025 |
| Shielding Room 8# | Albatross | SR8 | APC17151-SR8 | 21.06.2025 |
| **Unwanted Emission Testing (TS9975)** | | | | |
| **Equipment** | **Manufacturer** | **Model** | **Serial No.** | **Cal. until** |
| EMI Test Receiver | R&S | ESR 7 | 102021 | 25.07.2024 |
| Signal Analyzer | R&S | FSV 40 | 101439 | 25.07.2024 |
| System Controller Interface | R&S | SCI-100 | S10010038 | N/A |
| Filterbank | R&S | Wlan | 100759 | 25.07.2024 |
| OSP | R&S | OSP 120 | 102040 | N/A |
| Pre-amplifier | R&S | SCU08F1 | 08320031 | 25.07.2024 |
| Amplifier | R&S | SCU-18F | 180070 | 25.07.2024 |
| Amplifier | R&S | SCU40A | 100475 | 25.07.2024 |
| Trilog Broadband Antenna (30 MHz - 7 GHz) | Schwarzbeck | VULB 9162 | 193 | 06.08.2024 |
| Double-Ridged Antenna (1 -18 GHz) | ETS-LINDGREN | 3117 | 00218717 | 06.08.2024 |
| Wideband Ridged Horn Antenna (18-40 GHz) | Steatite | QMS-00880 | 19067 | 27.08.2024 |
| Active Loop Antenna | Schwarzbeck | FMZB 1513 | 302 | 06.08.2024 |

| | | | | |
|---|---|---|---|---|
| Test software | R&S | EMC32 (V10.60.10) | N/A | N/A |
| Control PC | Dell | OptiPlex 7050 | 36NV9P2 | N/A |

## 2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

## 2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

## 2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

**Table 2: Measurement Uncertainty**

| Parameter | Uncertainty (k=2) |
|---|---|
| RF output power, conducted | ± 0.99 dB |
| Occupied Channel Bandwidth | ± 2.08 % |
| RF power density, conducted | ± 0.99 dB |
| Unwanted Emissions, conducted | ± 0.89 dB |
| All emissions, radiated | ± 4.17 dB |

## 2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B & C of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

## 2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. China. is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

# 3 General Product Information

## 3.1 Product Function and Intended Use

The product is LEGEND 700 HEAD UNIT, which supports Bluetooth, 2.4GHz Wi-Fi, 5GHz Wi-Fi, GPS, AM and FM technologies.

This report is for Bluetooth BLE & 2.4GHz Wi-Fi operation only.
For details refer to the User Manual, Technical Description and Circuit Diagram.

## 3.2 Ratings and System Details

**Table 3: Technical Specification of EUT**

| General Information of EUT | Value |
|---|---|
| Kind of Equipment: | LEGEND 700 HEAD UNIT |
| Type Designation: | JBLLEGEND700 |
| Trademark: | JBL |
| FCC ID: | APILEGEND700 |
| IC: | 6132A-LEGEND700 |
| HVIN: | JBLLEGEND700 |
| Operating Voltage: | 12Vdc, 9A |
| Operating Temperature Range: | 0 °C ~ +70 °C |
| **Technical Specification of Bluetooth BLE** | |
| Operating Frequency | 2402-2480MHz |
| Type of Modulation | GFSK |
| Data Rate | 1Mbps |
| Channel Number | 40 channels for Bluetooth BLE |
| Channel Separation | 1MHz |
| Antenna Type | FPC Antenna |
| Antenna Number | 1Tx1Rx |
| Antenna Gain | 6.0 dBi (Provided by the Client) |
| The type of wideband data transmission equipment | Non-FHSS for Bluetooth BLE |
| **Technical Specification of 2.4GHz Wi-Fi** | |
| Operating Frequency | 2412 - 2462MHz for 802.11b/g/n(HT20)<br>2422 - 2452MHz for 802.11n(HT40) |
| Type of Modulation | DSSS(DBPSK/DQPSK/CCK)<br>OFDM(BPSK/QPSK/16QAM/64QAM) |
| Data Rate | 1/2/5.5/11 Mbps for 802.11b<br>6/9/12/18/24/36/48/54 Mbps for 802.11g<br>MCS0 ~ MCS7 for 802.11n |
| Channel Number | 11 channels for 802.11b/g/n(HT20)<br>7 channels for 802.11n(HT40) |
| Channel Separation | 5 MHz |
| Antenna Type | FPC Antenna |

| | |
|---|---|
| Antenna Number | 1Tx1Rx |
| Antenna Gain | 6.0 dBi (Provided by the Client) |
| The type of wideband data transmission equipment | DTS |

**Table 4: RF Channel and Frequency of Bluetooth LE**

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

**Table 5: RF Channel and Frequency of 2.4GHz Wi-Fi 802.11 b/g/n**

| RF Channel | 802.11 b/g/n(HT20) | 802.11 n(HT40) |
|---|---|---|
| | Frequency (MHz) | Frequency (MHz) |
| 01 | 2412 | |
| 02 | 2417 | |
| 03 | 2422 | 2422 |
| 04 | 2427 | 2427 |
| 05 | 2432 | 2432 |
| 06 | 2437 | 2437 |
| 07 | 2442 | 2442 |
| 08 | 2447 | 2447 |
| 09 | 2452 | 2452 |
| 10 | 2457 | |
| 11 | 2462 | |

## 3.3 Independent Operation Modes

The basic operation modes are:

A. On, Bluetooth BLE wireless transmitting mode
   1) Low Channel
   2) Middle Channel
   3) High Channel

B. On, 2.4GHz Wi-Fi wireless transmitting mode
   1) Low Channel
   2) Middle Channel
   3) High Channel

C. On, Normal Operation

D. Off

## 3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

## 3.5 Submitted Documents

- Application Form
- ID Label and Location Info
- Schematics
- Operation Description
- Block Diagram
- PCB Layout

# 4 Test Set-up and Operation Modes

## 4.1 Principle of Configuration Selection

**Radio Spectrum:** The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

## 4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model JBLLEGEND700 in this report.

## 4.3 Special Accessories and Auxiliary Equipment

**Table 6: Auxiliary Equipment Used during Test**

| Description | Manufacturer | Model | S/N |
|---|---|---|---|
| Laptop | Lenovo | T480 | PF-16A6N8 |

## 4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

## 4.5 Test Setup Diagram

**Diagram of Measurement Configuration for Radiation Test (Below 1GHz)**

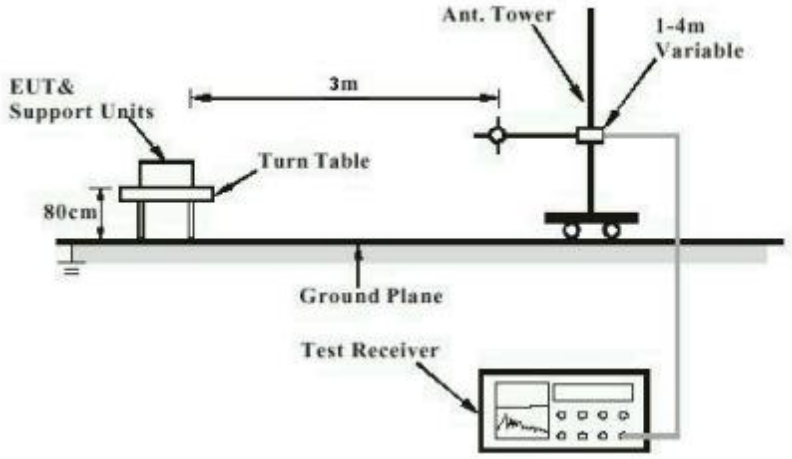



**Diagram of Measurement Configuration for Radiation Test (Above 1GHz)**

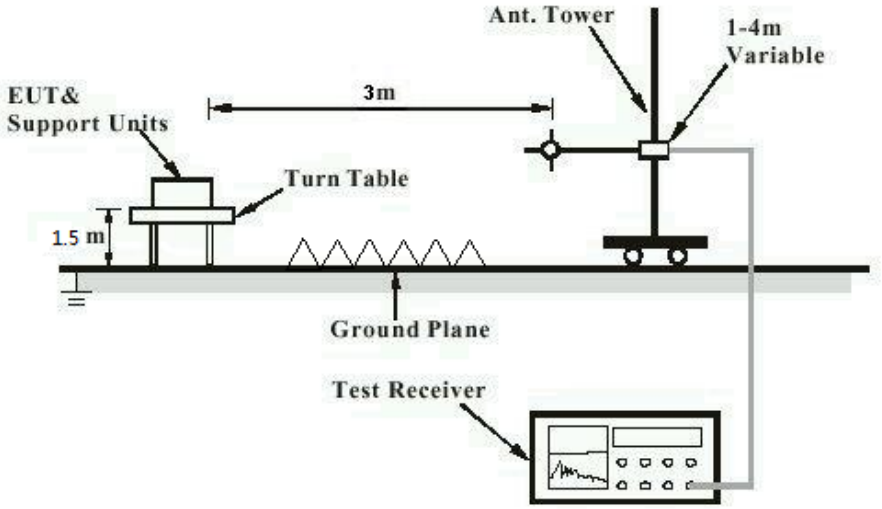
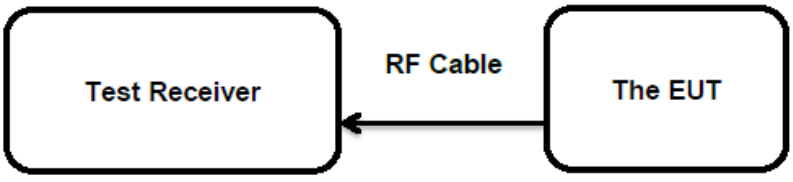



**Diagram of Measurement Configuration for Conducted Transmitter Measurement**



# 5 Test Results

## 5.1 Transmitter Requirement & Test Suites

### 5.1.1 Antenna Requirement

**RESULT:** **Pass**

**Test Specification**

Test standard : FCC Part 15.247(b)(4) and Part 15.203
RSS-Gen Clause 6.8

According to the manufacturer declared, the EUT has a FPC antenna, the directional gain of antenna is 6.0dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement.

Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

## 5.1.2 Maximum Conducted Output Power

**RESULT:** **Pass**

**Test Specification**

| | | |
|---|---|---|
| Test standard | : | FCC Part 15.247(b)(3)<br>RSS-247 Clause 5.4(d) |
| Basic standard | : | ANSI C63.10: 2013 |
| Limits | : | 1.0 Watts |
| Kind of test site | : | Shielded Room |

**Test Setup**

| | | |
|---|---|---|
| Date of testing | : | 2024-07-08 to 2024-07-19 |
| Input voltage | : | DC 12V |
| Operation mode | : | A, B |
| Test channel | : | Low / Middle / High |
| Ambient temperature | : | 24.5 ℃ |
| Relative humidity | : | 51.2 % |
| Atmospheric pressure | : | 101 kPa |

For details refer to following test result.

**Table 7: Test Result of Maximum Conducted Output Power, Bluetooth LE**

| Test Mode | Data Rate | Test Channel (MHz) | Measured Peak Power | | Limit (W) |
|---|---|---|---|---|---|
| | | | (dBm) | (W) | |
| GFSK (BLE) | 1 Mbps | 2402 | 9.3 | 0.0085 | < 1.0 |
| | | 2440 | 10.1 | 0.0102 | |
| | | 2480 | 10.0 | 0.0100 | |
| Max. e.i.r.p.=10.1dBm+6.0dBi=16.1dBm, which is less than 36dBm=4W. | | | | | |

**Table 8: Test Result of Maximum Conducted Output Power, Wi-Fi 802.11 b/g/n**

| Test Mode | Data Rate | Test Channel (MHz) | Measured Average Power | | Limit (W) |
|---|---|---|---|---|---|
| | | | (dBm) | (W) | |
| 802.11b | 1 Mbps | 2412 | 15.08 | 0.0322 | < 1.0 |
| | | 2437 | 14.62 | 0.0290 | |
| | | 2462 | 13.41 | 0.0219 | |
| 802.11g | 6 Mbps | 2412 | 19.10 | 0.0813 | |
| | | 2437 | 19.28 | 0.0847 | |
| | | 2462 | 18.24 | 0.0667 | |
| 802.11n (HT20) | MCS0 | 2412 | 19.20 | 0.0832 | |
| | | 2437 | 18.39 | 0.0690 | |
| | | 2462 | 17.96 | 0.0625 | |
| 802.11n (HT40) | MCS0 | 2422 | 16.97 | 0.0498 | |
| | | 2437 | 16.22 | 0.0419 | |
| | | 2452 | 16.80 | 0.0479 | |
| Max. e.i.r.p.= 19.28dBm+6.0dBi=25.28dBm, which is less than 36dBm=4W. | | | | | |

Note:

1) The cable loss is taken into account in results.
2) Antenna gain(G) : 6.0dBi
   e.i.r.p.=$P_{(Conducted\ power)}$+ G, which is far below the 4 W

## 5.1.3 Conducted Power Spectral Density

**RESULT:** **Pass**

**Test Specification**

| | | |
|---|---|---|
| Test standard | : | FCC Part 15.247(e)<br>RSS-247 Clause 5.2(b) |
| Basic standard | : | ANSI C63.10: 2013 |
| Limits | : | < 8 dBm / 3kHz |
| Kind of test site | : | Shielded Room |

**Test Setup**

| | | |
|---|---|---|
| Date of testing | : | 2024-07-08 to 2024-07-19 |
| Input voltage | : | DC 12V |
| Operation mode | : | A, B |
| Test channel | : | Low / Middle / High |
| Ambient temperature | : | 24.5 ℃ |
| Relative humidity | : | 51.2 % |
| Atmospheric pressure | : | 101 kPa |

For the measurement records, refer to the appendix A, B.

## 5.1.4 6dB Bandwidth

**RESULT:** **Pass**

**Test Specification**

| | | |
|---|---|---|
| Test standard | : | FCC Part 15.247(a)(2)<br>RSS-247 Clause 5.2(a) |
| Basic standard | : | ANSI C63.10: 2013 |
| Limits | : | > 500 KHz |
| Kind of test site | : | Shielded Room |

**Test Setup**

| | | |
|---|---|---|
| Date of testing | : | 2024-07-08 to 2024-07-19 |
| Input voltage | : | DC 12V |
| Operation mode | : | A, B |
| Test channel | : | Low / Middle / High |
| Ambient temperature | : | 24.5 ℃ |
| Relative humidity | : | 51.2 % |
| Atmospheric pressure | : | 101 kPa |

For the measurement records, refer to the appendix A, B.

## 5.1.5 99% Bandwidth

**RESULT:** **Pass**

**Test Specification**

| | | |
|---|---|---|
| Test standard | : | RSS-Gen Clause 6.7 |
| Basic standard | : | ANSI C63.10: 2013 |
| Kind of test site | : | Shielded Room |

**Test Setup**

| | | |
|---|---|---|
| Date of testing | : | 2024-07-08 to 2024-07-19 |
| Input voltage | : | DC 12V |
| Operation mode | : | A, B |
| Test channel | : | Low / Middle / High |
| Ambient temperature | : | 24.5 ℃ |
| Relative humidity | : | 51.2 % |
| Atmospheric pressure | : | 101 kPa |

For the measurement records, refer to the appendix A, B.

## 5.1.6 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

**RESULT:** **Pass**

**Test Specification**

| | | |
|---|---|---|
| Test standard | : | FCC Part 15.247(d)<br>RSS-247 Clause 5.5 |
| Basic standard | : | ANSI C63.10: 2013 |
| Limits | : | 20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power);<br>In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a) |
| Kind of test site | : | Shielded Room |

**Test Setup**

| | | |
|---|---|---|
| Date of testing | : | 2024-07-08 to 2024-07-19 |
| Input voltage | : | DC 12V |
| Operation mode | : | A, B |
| Test channel | : | Low / Middle / High |
| Ambient temperature | : | 24.5 ℃ |
| Relative humidity | : | 51.2 % |
| Atmospheric pressure | : | 101 kPa |

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to test plots, and compliance is achieved as well.

For the measurement records, refer to the appendix A, B.

## 5.1.7 Radiated Spurious Emission

**RESULT:** **Pass**

**Test Specification**

| | | |
|---|---|---|
| Test standard | : | FCC Part 15.247(d) & FCC Part 15.205<br>RSS-247 Clause 3.3 |
| Basic standard | : | ANSI C63.10: 2013 |
| Limits | : | Refer to 15.209(a) of FCC part 15.247(d)<br>RSS-Gen Section 8.9 & 8.10 |
| Kind of test site | : | 3m Semi-anechoic Chamber |

**Test Setup**

| | | |
|---|---|---|
| Date of testing | : | 2024-07-08 to 2024-07-19 |
| Input voltage | : | DC 12V |
| Operation mode | : | A, B |
| Test channel | : | Low / Middle / High |
| Ambient temperature | : | Refer to test result |
| Relative humidity | : | Refer to test result |
| Atmospheric pressure | : | 101 kPa |

Remark:
Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

For the measurement records, refer to the appendix A, B.

# 6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix C.

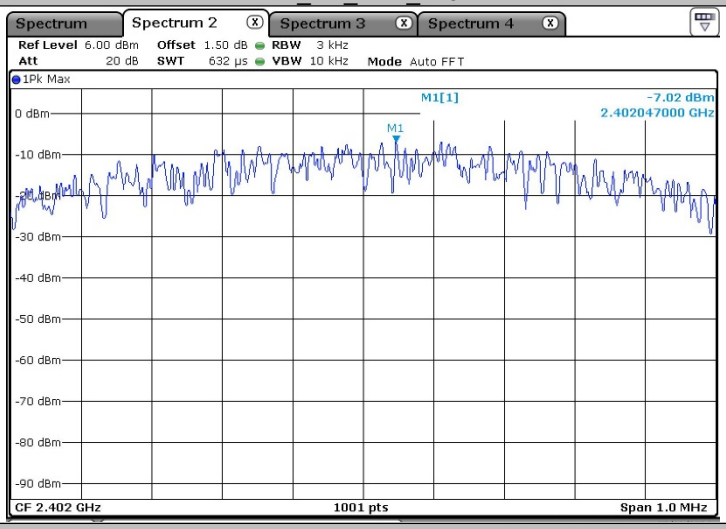
# 7 List of Tables

# Appendix A: Test Results of Bluetooth LE & Conducted Emission

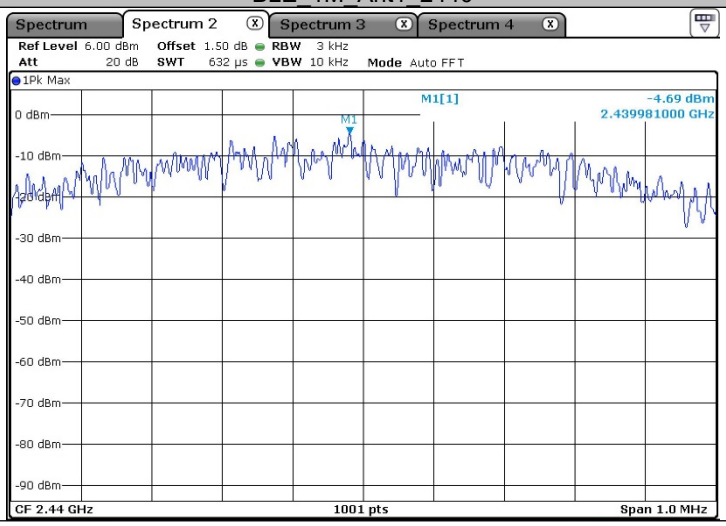
## Appendix A1: Test Results of Conducted Power Spectral Density

| TestMode | Antenna | Channel | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|---|---|---|---|---|---|
| BLE_1M | Ant1 | 2402 | -7.02 | ≤8.00 | PASS |
| | | 2440 | -4.69 | ≤8.00 | PASS |
| | | 2480 | -4.75 | ≤8.00 | PASS |

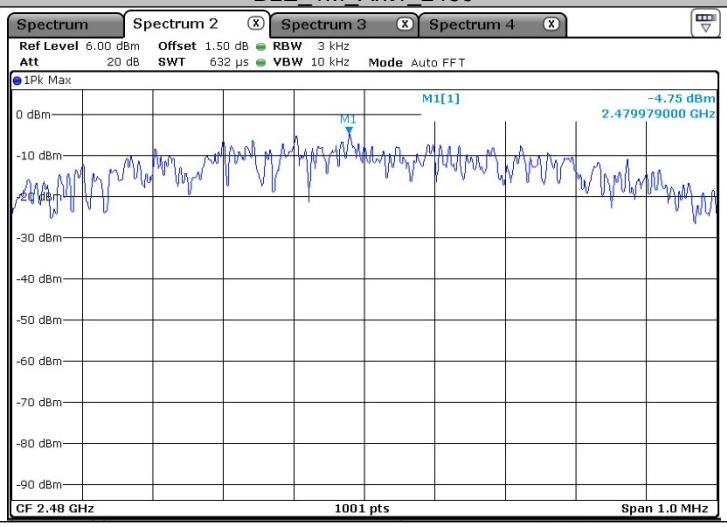
BLE_1M_Ant1_2402




BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

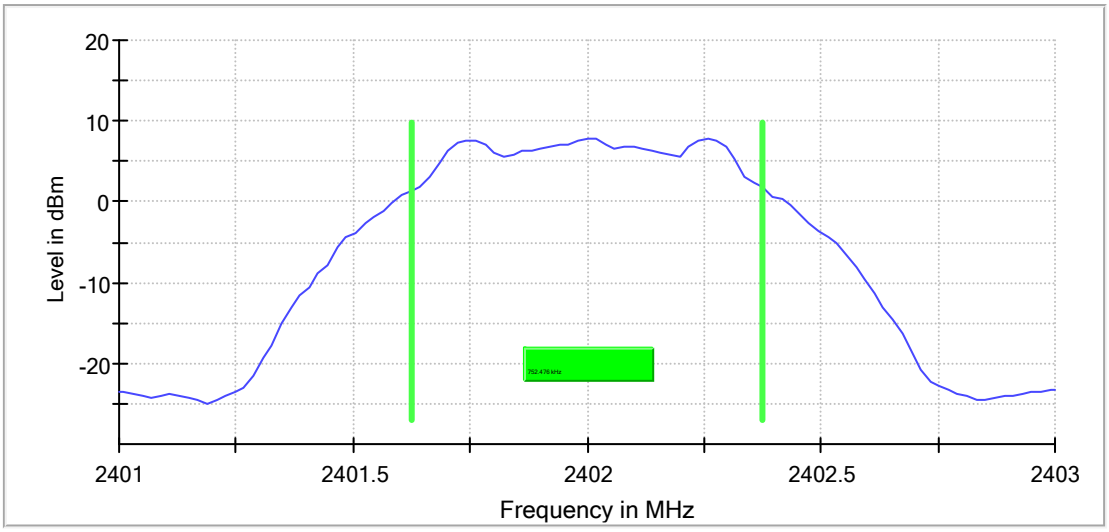


## Appendix A.2: Test Results of 6dB Bandwidth

| Test Mode | Channel Frequency (MHz) | Measured 6dB Bandwidth (MHz) | Limit |
|---|---|---|---|
| BLE 1Mbps | 2402 | 0.752 | >500kHz |
| | 2440 | 0.772 | |
| | 2480 | 0.752 | |

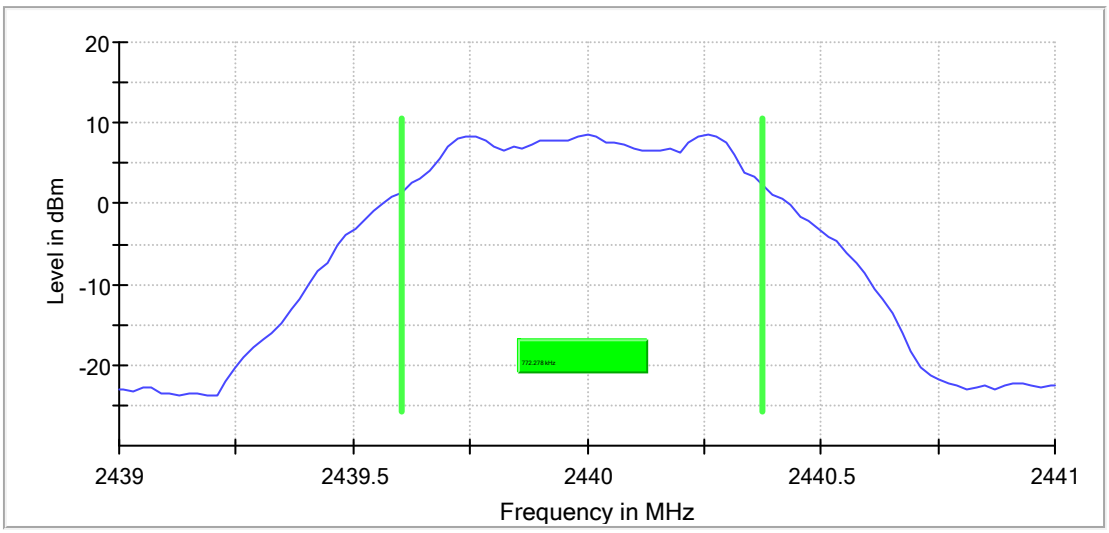
BLE_1M_Ant1_2402

6 dB Bandwidth



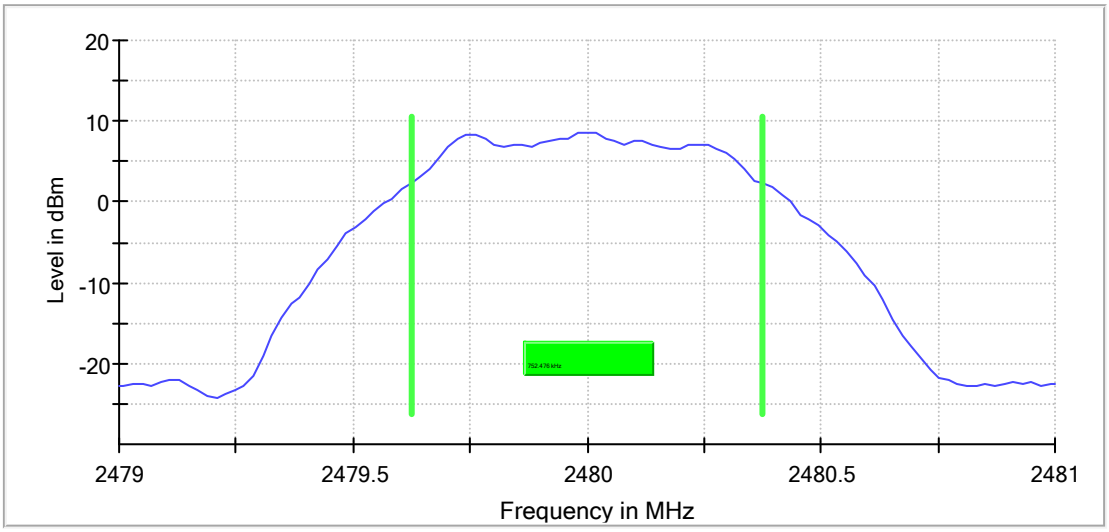

BLE_1M_Ant1_2440

6 dB Bandwidth



BLE_1M_Ant1_2480

6 dB Bandwidth




## Measurement

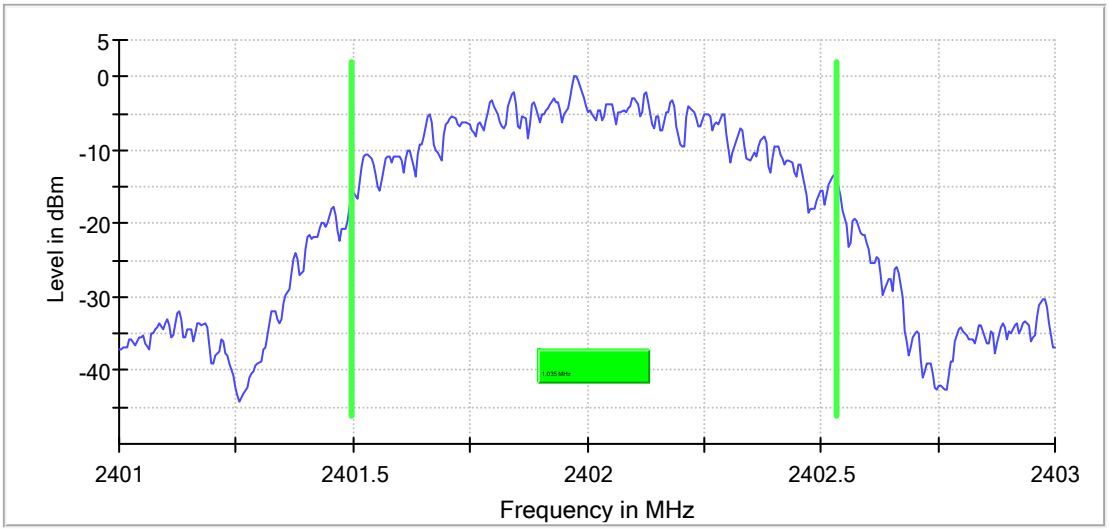
| Setting | Instrument Value |
|---|---|
| Span | 2.000 MHz |
| RBW | 100.000 kHz |
| VBW | 300.000 kHz |
| SweepPoints | 101 |
| Sweeptime | 18.938 µs |
| Reference Level | 0.000 dBm |
| Attenuation | 20.000 dB |
| Detector | MaxPeak |
| SweepCount | 100 |
| Filter | 3 dB |
| Trace Mode | Max Hold |

## Appendix A.3: Test Results of 99% Bandwidth

| Test Mode | Channel Frequency (MHz) | Measured 99% Bandwidth (MHz) | Limit |
|---|---|---|---|
| BLE 1Mbps | 2402 | 1.020 | / |
| | 2440 | 1.015 | |
| | 2480 | 1.015 | |

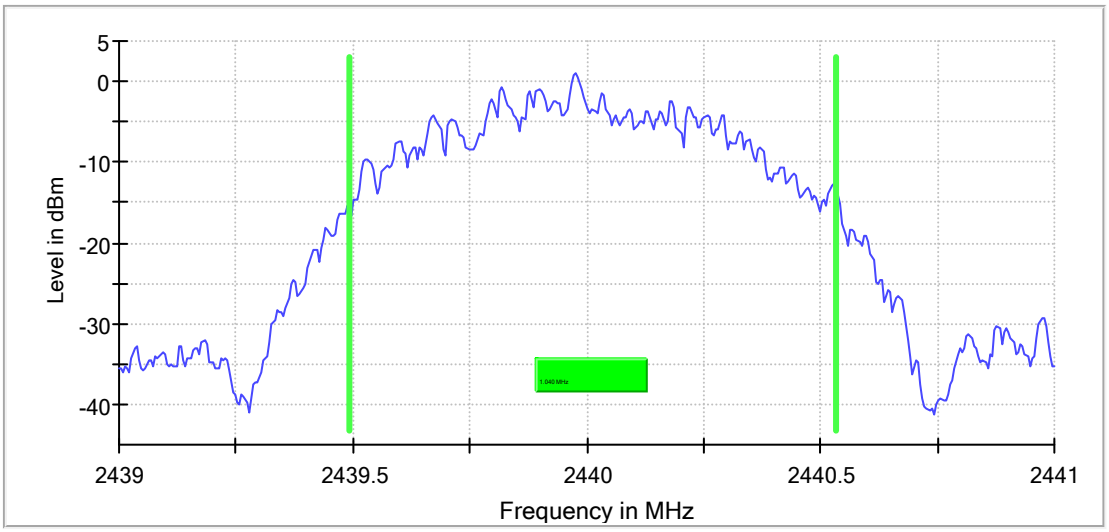
BLE_1M_Ant1_2402

99 % Bandwidth



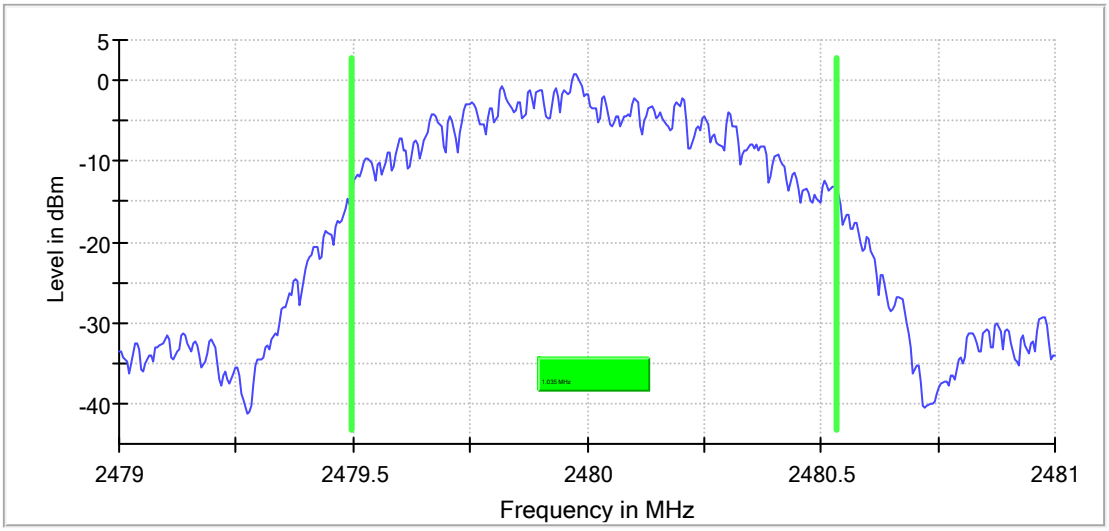

BLE_1M_Ant1_2440

99 % Bandwidth



BLE_1M_Ant1_2480

99 % Bandwidth




## Measurement

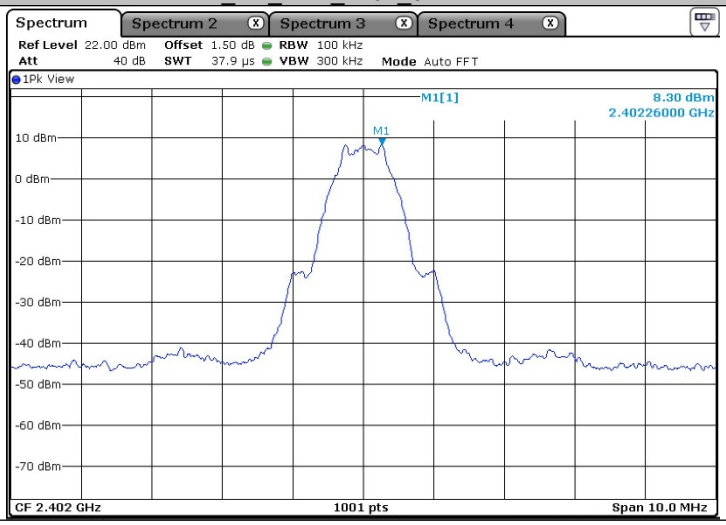
| Setting | Instrument Value |
|---|---|
| Span | 2.000 MHz |
| RBW | 10.000 kHz |
| VBW | 30.000 kHz |
| SweepPoints | 400 |
| Sweeptime | 189.648 µs |
| Reference Level | 0.000 dBm |
| Attenuation | 20.000 dB |
| Detector | MaxPeak |
| SweepCount | 100 |
| Filter | 3 dB |
| Trace Mode | Max Hold |

# Appendix A.4: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

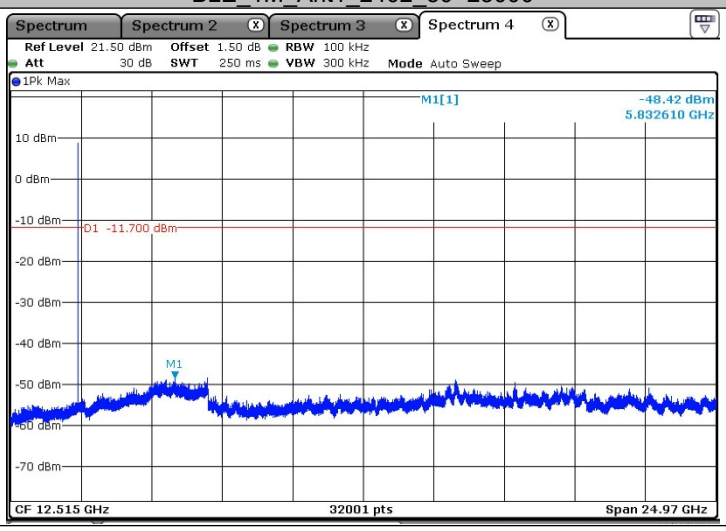
## Conducted measurements

| TestMode | Antenna | Channel | FreqRange [MHz] | RefLevel [dBm] | Result[dBm] | Limit[dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| BLE_1M | Ant1 | 2402 | Reference | 8.30 | 8.30 | --- | PASS |
| | | | 30~25000 | 8.30 | -48.42 | ≤-11.70 | PASS |
| | | 2440 | Reference | 9.54 | 9.54 | --- | PASS |
| | | | 30~25000 | 9.54 | -49.10 | ≤-10.46 | PASS |
| | | 2480 | Reference | 6.22 | 6.22 | --- | PASS |
| | | | 30~25000 | 6.22 | -48.55 | ≤-10.53 | PASS |

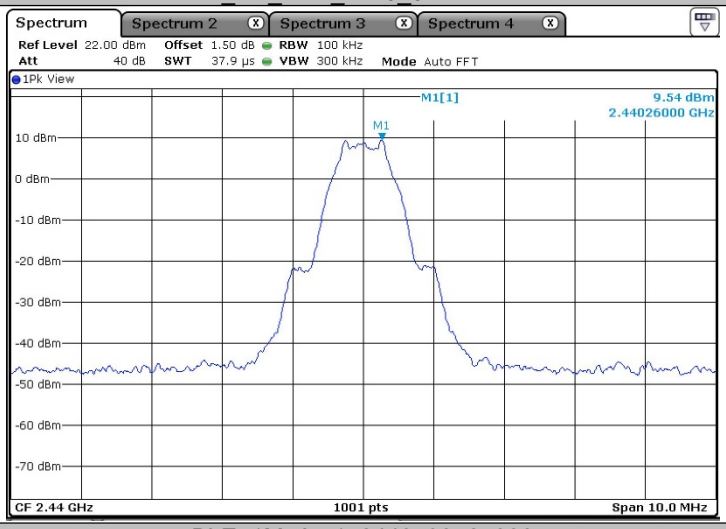
BLE_1M_Ant1_2402_0~Reference



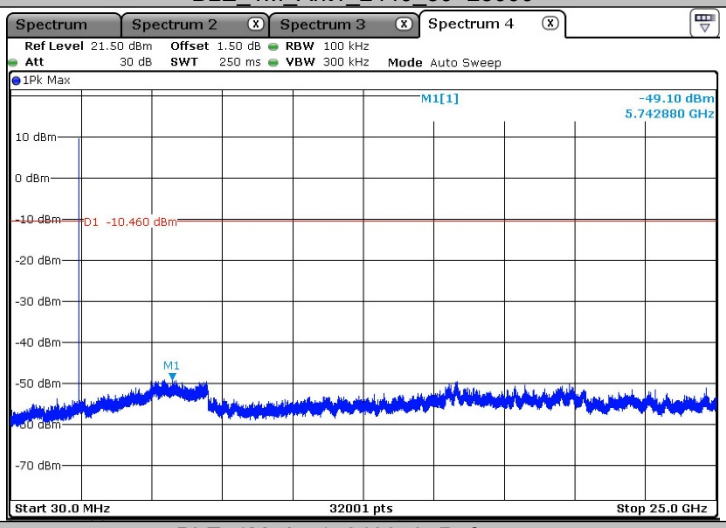

BLE_1M_Ant1_2402_30~25000



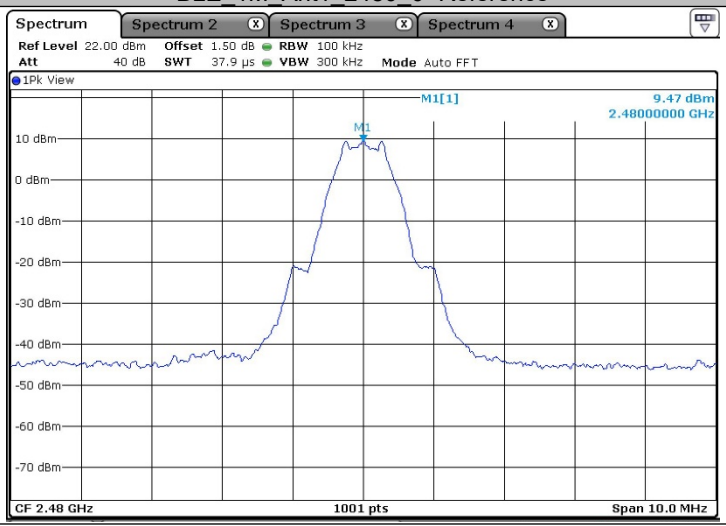
BLE_1M_Ant1_2440_0~Reference



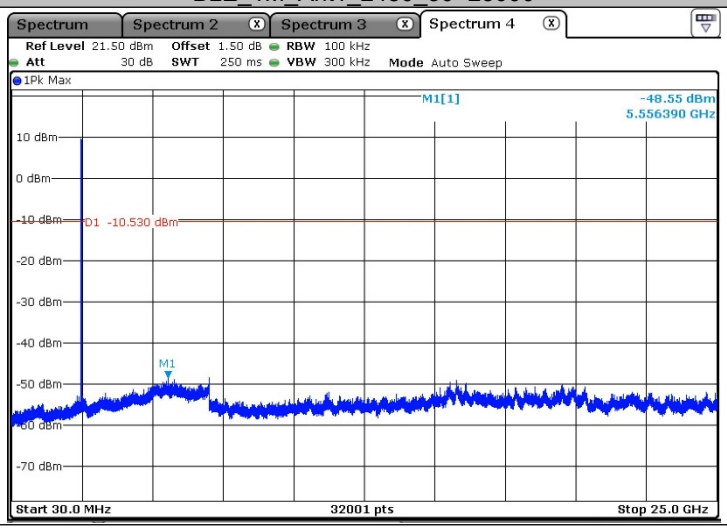

BLE_1M_Ant1_2440_30~25000




BLE_1M_Ant1_2480_0~Reference



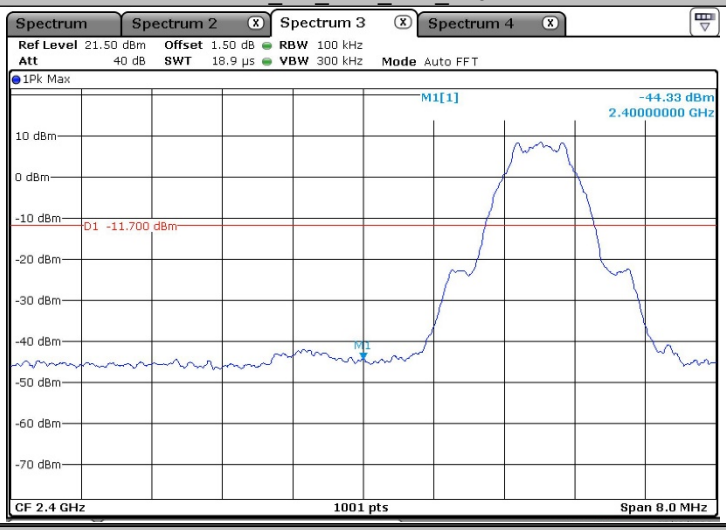
BLE_1M_Ant1_2480_30~25000



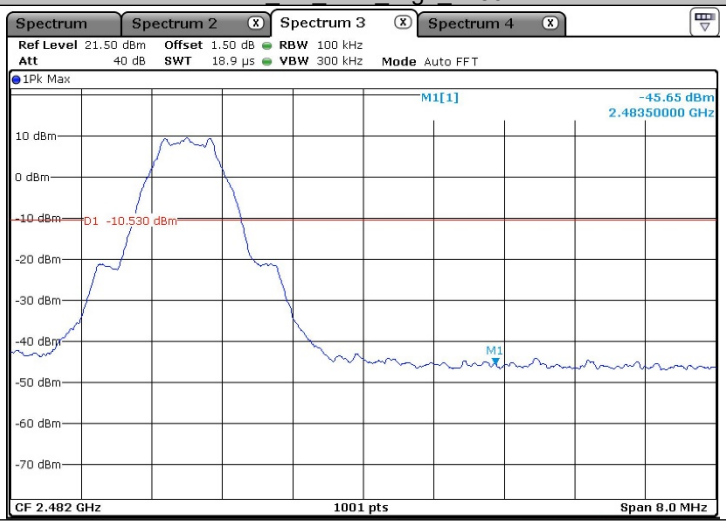
## Band edge measurements

| TestMode | Antenna | ChName | Channel | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| BLE_1M | Ant1 | Low | 2402 | 5.86 | -44.33 | ≤-11.70 | PASS |
| | | High | 2480 | 6.22 | -45.65 | ≤-10.53 | PASS |

BLE_1M_Ant1_Low_2402




BLE_1M_Ant1_High_2480



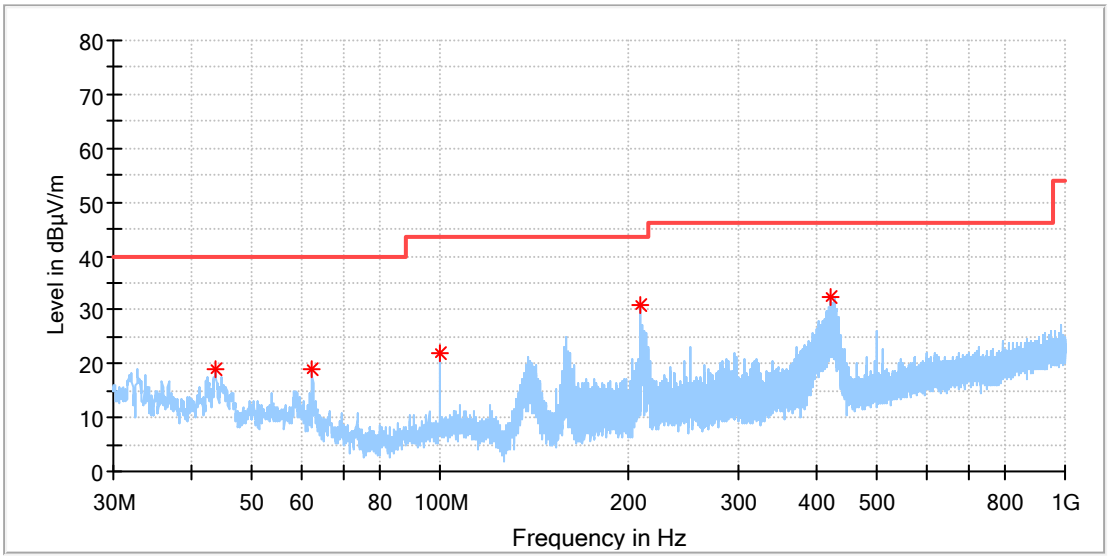
## Appendix A.5: Test Results of Radiated Spurious Emissions

Note:
1) This testing was carried out on different modulations, but only the worst case was presented in this report.
2) Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

**30 MHz to 1GHz**

## EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_Mid channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

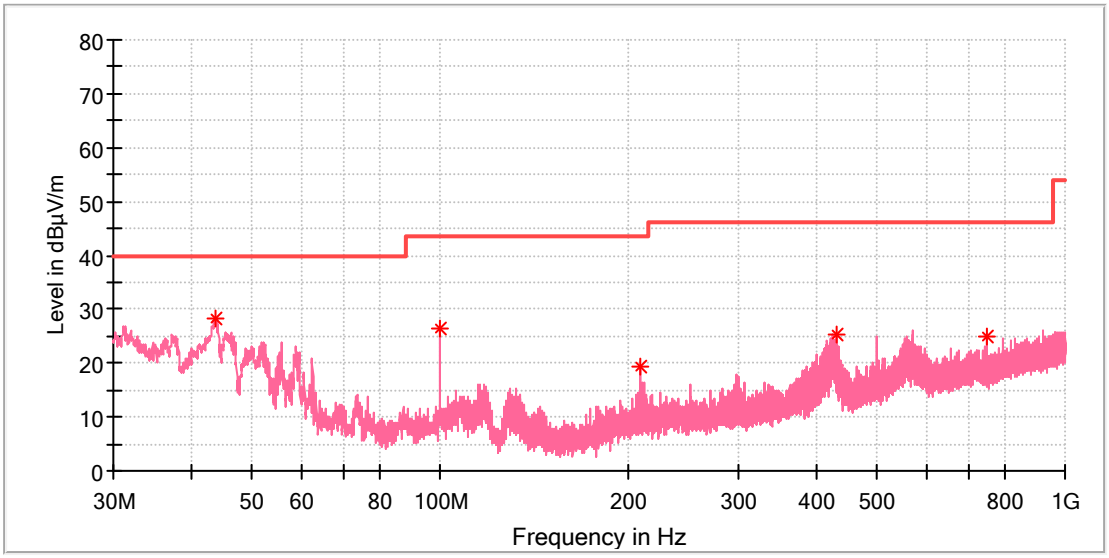



## Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|
| 43.691923 | 19.00 | 40.00 | 21.00 | 100.0 | H | 296.0 | -19.4 |
| 62.495000 | 18.80 | 40.00 | 21.20 | 100.0 | H | 335.0 | -19.9 |
| 99.989231 | 21.84 | 43.50 | 21.66 | 100.0 | H | 89.0 | -19.3 |
| 208.890385 | 30.82 | 43.50 | 12.68 | 100.0 | H | 270.0 | -19.2 |
| 420.163846 | 32.45 | 46.00 | 13.55 | 100.0 | H | 351.0 | -13.7 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_Mid channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |




# Critical_Freqs

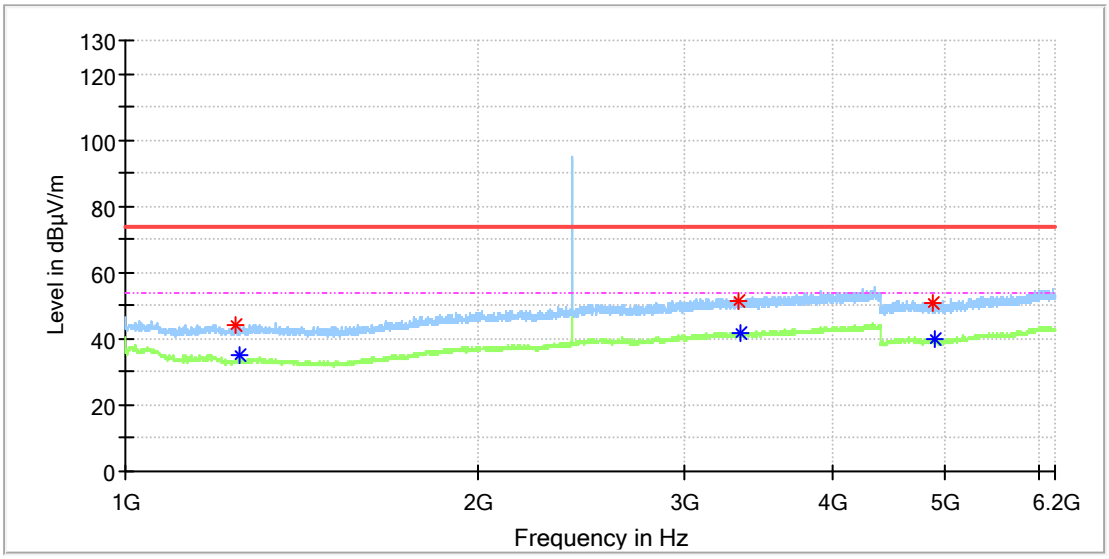
| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|
| 43.841154 | 28.22 | 40.00 | 11.78 | 100.0 | V | 140.0 | -19.4 |
| 99.989231 | 26.53 | 43.50 | 16.97 | 100.0 | V | 63.0 | -19.3 |
| 208.853077 | 19.41 | 43.50 | 24.09 | 100.0 | V | 311.0 | -19.2 |
| 429.751923 | 25.21 | 46.00 | 20.79 | 100.0 | V | 131.0 | -13.6 |
| 750.038462 | 24.96 | 46.00 | 21.04 | 100.0 | V | 357.0 | -7.6 |

**1GHz-18GHz**

Note: The highest waveform in the figure is Bluetooth Fundamental.

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_Low channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

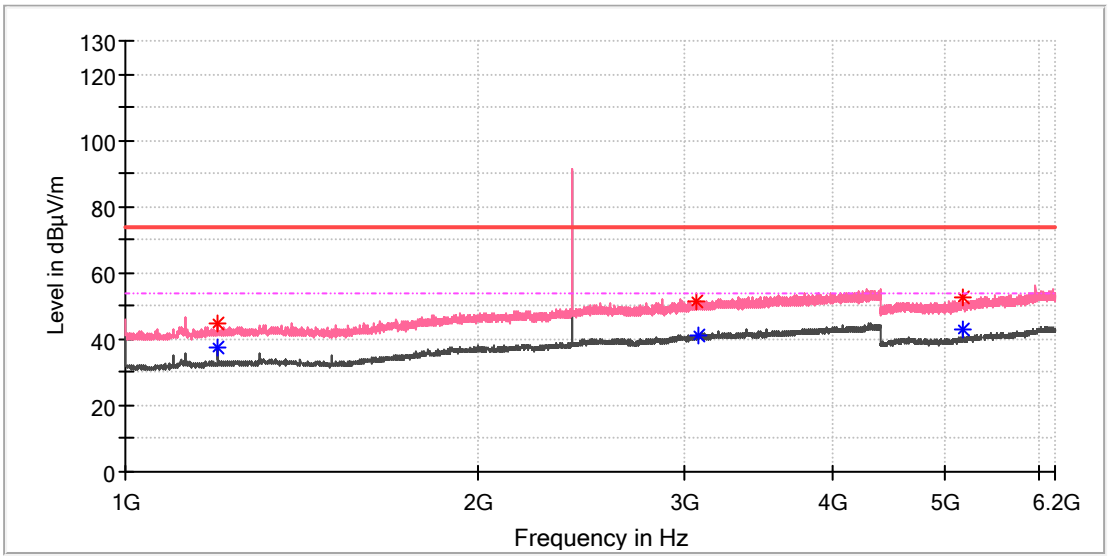



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 1243.000000 | 43.95 | --- | 74.00 | 30.05 | 150.0 | H | 89.0 | 1.8 |
| 1250.000000 | --- | 35.02 | 54.00 | 18.98 | 150.0 | H | 32.0 | 1.9 |
| 3327.000000 | 51.64 | --- | 74.00 | 22.36 | 150.0 | H | 55.0 | 8.6 |
| 3339.500000 | --- | 41.95 | 54.00 | 12.05 | 150.0 | H | 213.0 | 8.6 |
| 4875.000000 | 50.99 | --- | 74.00 | 23.01 | 150.0 | H | 72.0 | 11.8 |
| 4905.000000 | --- | 39.88 | 54.00 | 14.12 | 150.0 | H | 11.0 | 11.8 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_Low channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

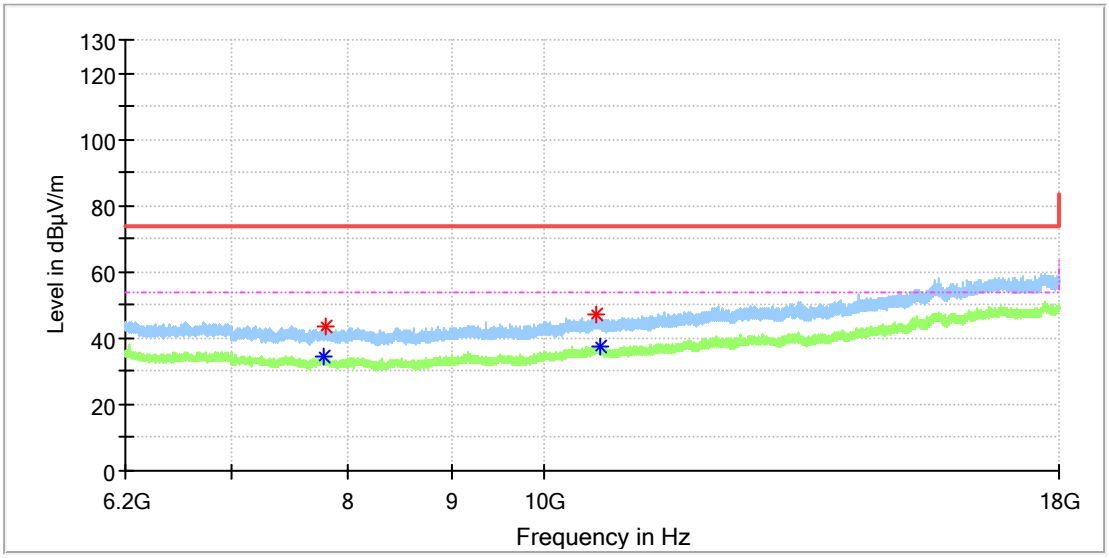



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 1200.000000 | 44.83 | --- | 74.00 | 29.17 | 150.0 | V | 359.0 | 1.1 |
| 1200.000000 | --- | 37.78 | 54.00 | 16.22 | 150.0 | V | 359.0 | 1.1 |
| 3069.500000 | 51.66 | --- | 74.00 | 22.34 | 150.0 | V | 247.0 | 8.6 |
| 3080.000000 | --- | 41.28 | 54.00 | 12.73 | 150.0 | V | 195.0 | 8.6 |
| 5176.500000 | 52.40 | --- | 74.00 | 21.60 | 150.0 | V | 177.0 | 12.5 |
| 5177.000000 | --- | 42.81 | 54.00 | 11.19 | 150.0 | V | 256.0 | 12.5 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_Low channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

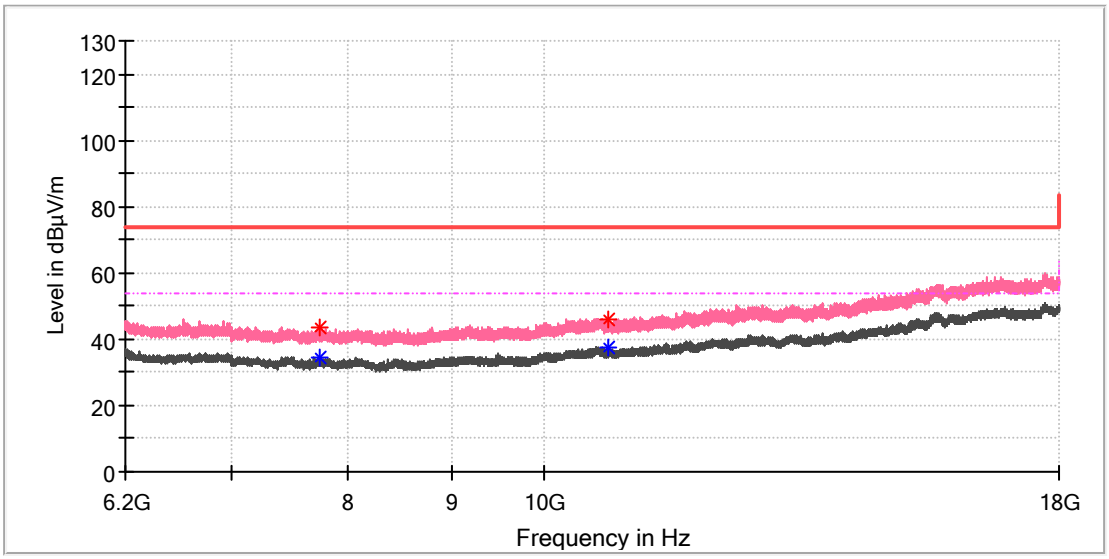



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 7782.675000 | --- | 34.23 | 54.00 | 19.77 | 150.0 | H | 307.0 | 8.9 |
| 7798.900000 | 43.54 | --- | 74.00 | 30.46 | 150.0 | H | 0.0 | 8.9 |
| 10609.758333 | 47.26 | --- | 74.00 | 26.74 | 150.0 | H | 317.0 | 12.0 |
| 10649.583333 | --- | 37.50 | 54.00 | 16.50 | 150.0 | H | 286.0 | 12.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_Low channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

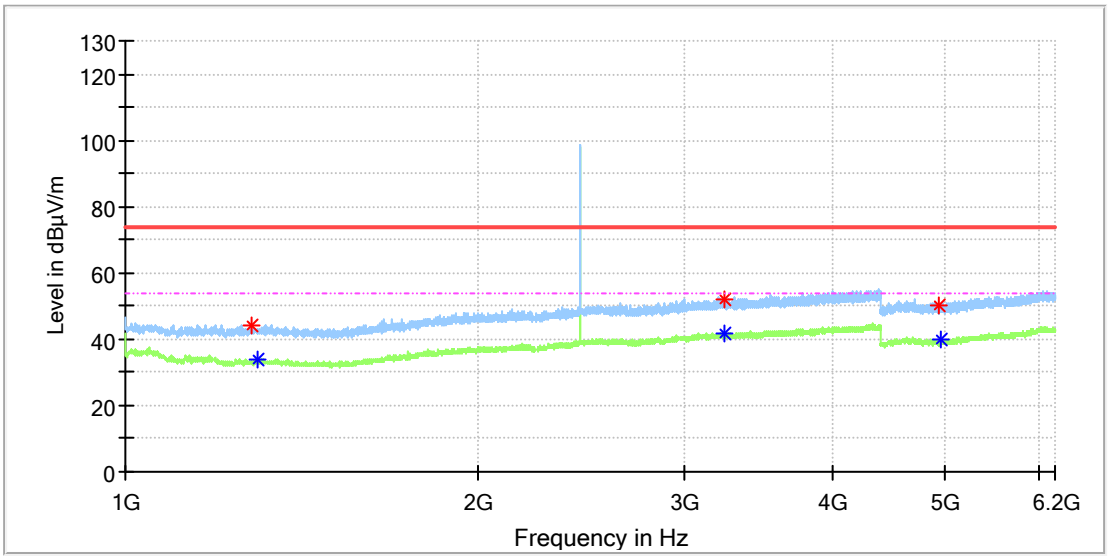



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 7741.375000 | 43.52 | --- | 74.00 | 30.48 | 150.0 | V | 106.0 | 8.8 |
| 7747.275000 | --- | 34.23 | 54.00 | 19.77 | 150.0 | V | 249.0 | 8.8 |
| 10748.408333 | 46.20 | --- | 74.00 | 27.80 | 150.0 | V | 272.0 | 12.0 |
| 10760.700000 | --- | 37.26 | 54.00 | 16.74 | 150.0 | V | 180.0 | 12.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_Mid channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

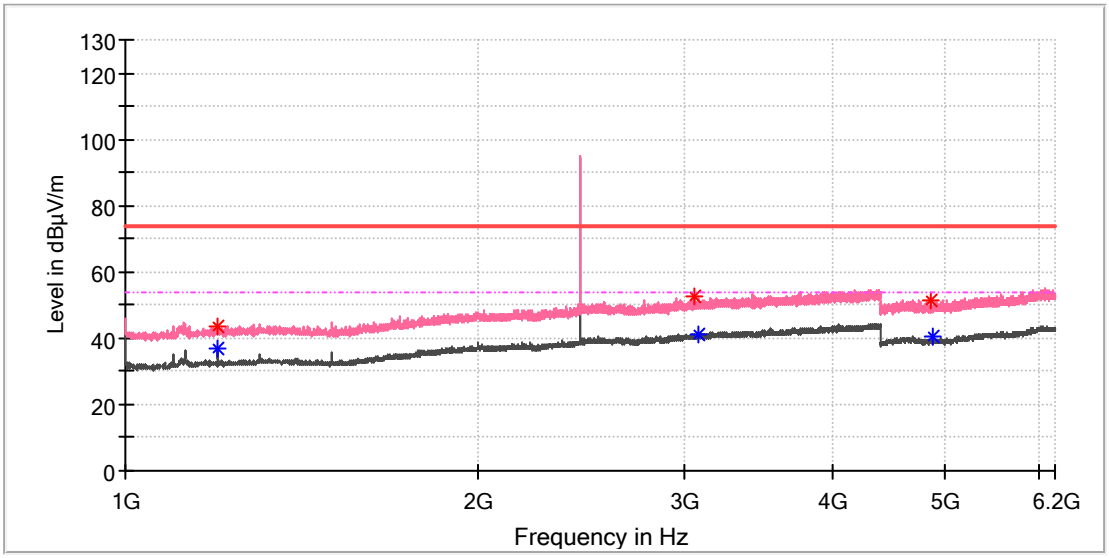



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 1280.000000 | 44.26 | --- | 74.00 | 29.74 | 150.0 | H | 359.0 | 1.9 |
| 1294.000000 | --- | 34.11 | 54.00 | 19.89 | 150.0 | H | 220.0 | 1.9 |
| 3240.000000 | 52.00 | --- | 74.00 | 22.00 | 150.0 | H | 101.0 | 8.5 |
| 3245.000000 | --- | 41.97 | 54.00 | 12.03 | 150.0 | H | 270.0 | 8.5 |
| 4944.000000 | 50.48 | --- | 74.00 | 23.52 | 150.0 | H | 24.0 | 11.8 |
| 4951.500000 | --- | 39.61 | 54.00 | 14.39 | 150.0 | H | 60.0 | 11.8 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_Mid channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

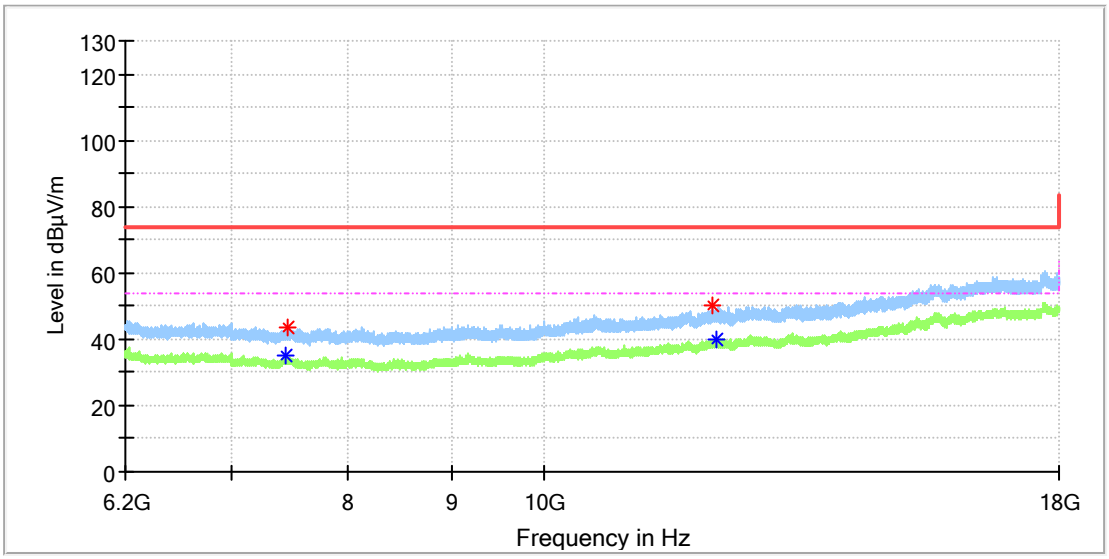



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 1200.000000 | 43.58 | --- | 74.00 | 30.42 | 150.0 | V | 313.0 | 1.1 |
| 1200.000000 | --- | 36.59 | 54.00 | 17.41 | 150.0 | V | 313.0 | 1.1 |
| 3060.000000 | 52.37 | --- | 74.00 | 21.63 | 150.0 | V | 113.0 | 8.6 |
| 3084.000000 | --- | 41.33 | 54.00 | 12.67 | 150.0 | V | 324.0 | 8.6 |
| 4852.500000 | 51.53 | --- | 74.00 | 22.47 | 150.0 | V | 272.0 | 11.8 |
| 4880.000000 | --- | 40.22 | 54.00 | 13.78 | 150.0 | V | 161.0 | 11.8 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_Mid channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

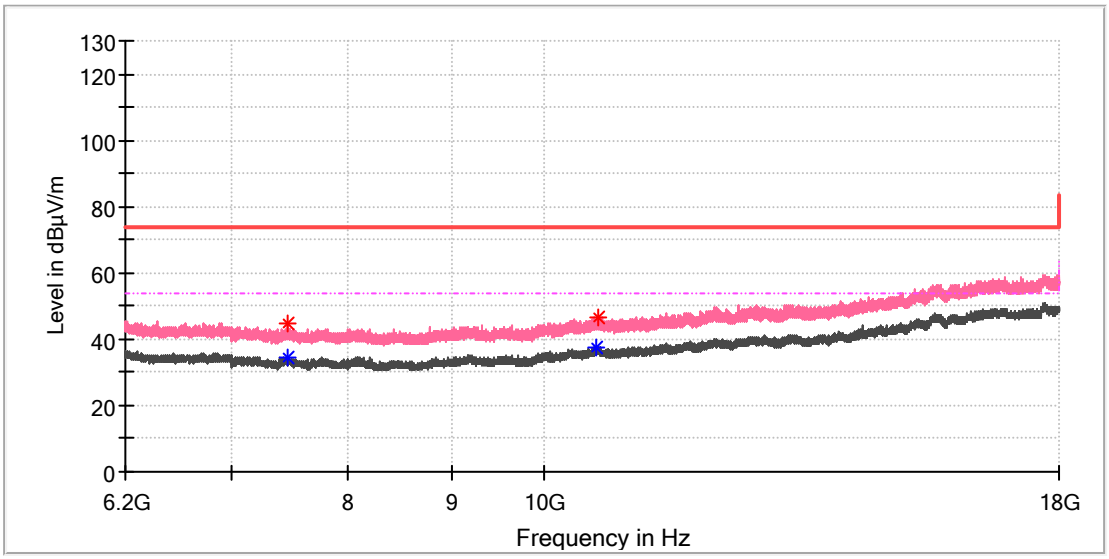



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 7452.766667 | --- | 35.21 | 54.00 | 18.79 | 150.0 | H | 192.0 | 8.5 |
| 7458.666667 | 43.69 | --- | 74.00 | 30.31 | 150.0 | H | 61.0 | 8.5 |
| 12114.258333 | 50.34 | --- | 74.00 | 23.66 | 150.0 | H | 61.0 | 14.2 |
| 12183.583333 | --- | 39.84 | 54.00 | 14.16 | 150.0 | H | 8.0 | 14.6 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_Mid channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

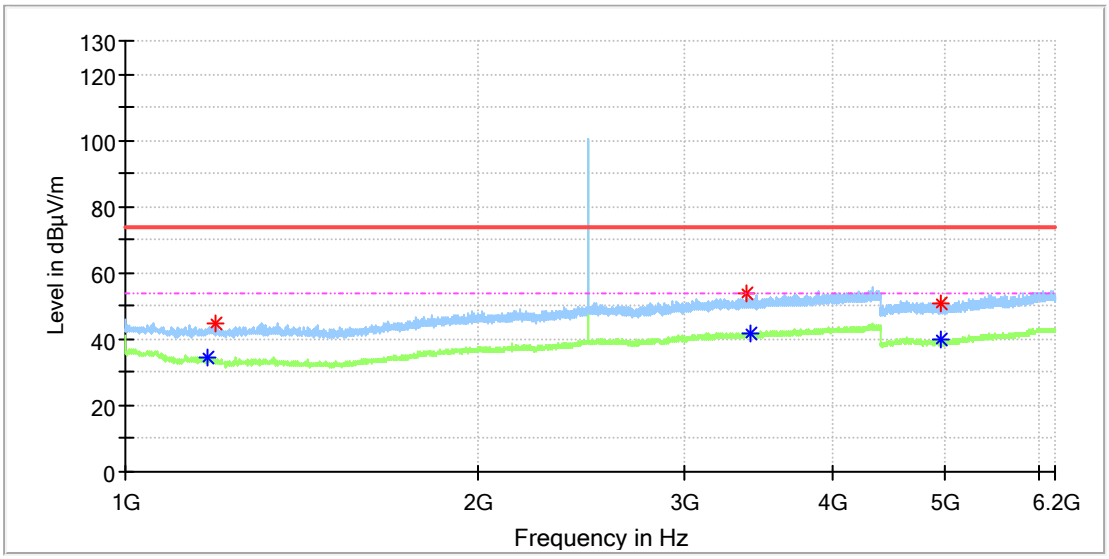



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 7462.600000 | 44.58 | --- | 74.00 | 29.42 | 150.0 | V | 0.0 | 8.6 |
| 7463.583333 | --- | 34.59 | 54.00 | 19.41 | 150.0 | V | 159.0 | 8.6 |
| 10612.216667 | --- | 37.60 | 54.00 | 16.40 | 150.0 | V | 111.0 | 12.0 |
| 10634.341667 | 46.55 | --- | 74.00 | 27.45 | 150.0 | V | 17.0 | 12.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_High channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

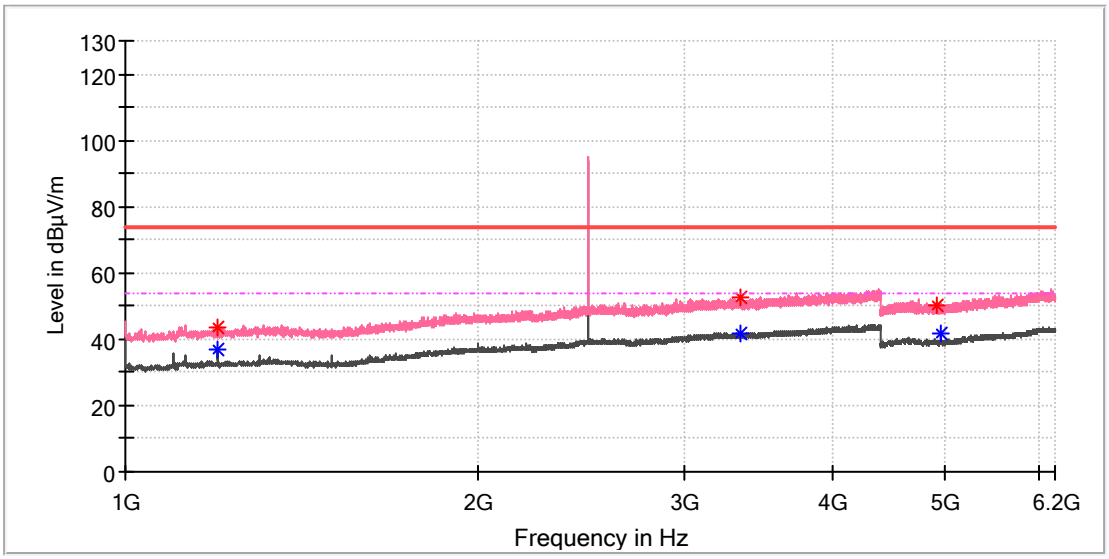



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 1176.000000 | --- | 34.64 | 54.00 | 19.36 | 150.0 | H | 301.0 | 1.0 |
| 1195.500000 | 44.59 | --- | 74.00 | 29.41 | 150.0 | H | 97.0 | 1.1 |
| 3389.000000 | 53.98 | --- | 74.00 | 20.02 | 150.0 | H | 227.0 | 8.7 |
| 3417.000000 | --- | 41.61 | 54.00 | 12.39 | 150.0 | H | 255.0 | 8.7 |
| 4946.500000 | --- | 39.89 | 54.00 | 14.11 | 150.0 | H | 152.0 | 11.8 |
| 4958.500000 | 51.09 | --- | 74.00 | 22.91 | 150.0 | H | 90.0 | 11.8 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_High channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

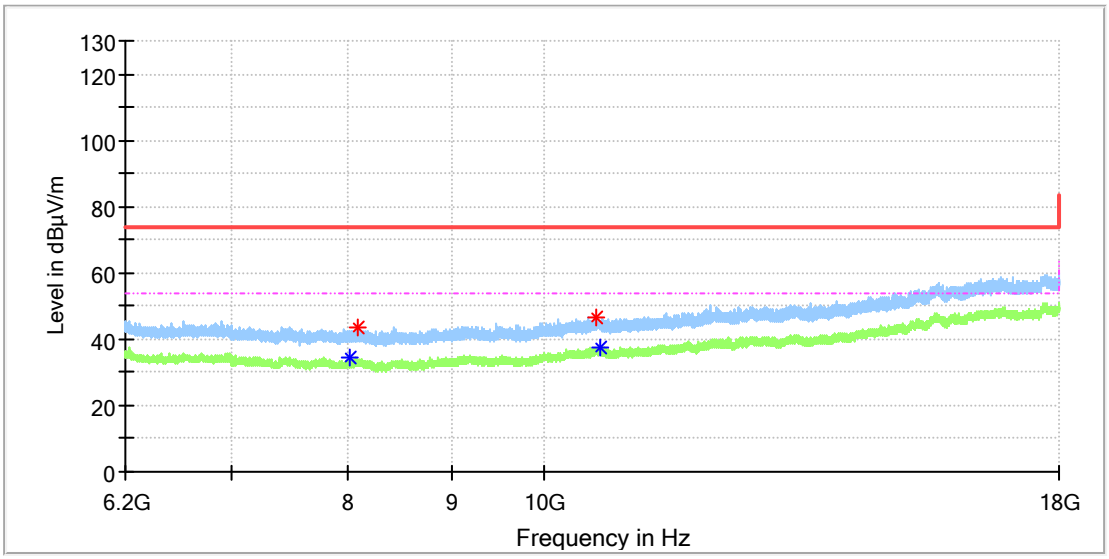



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 1199.000000 | 43.52 | --- | 74.00 | 30.48 | 150.0 | V | 272.0 | 1.1 |
| 1200.000000 | --- | 36.65 | 54.00 | 17.35 | 150.0 | V | 210.0 | 1.1 |
| 3342.000000 | 52.90 | --- | 74.00 | 21.10 | 150.0 | V | 250.0 | 8.5 |
| 3344.500000 | --- | 41.91 | 54.00 | 12.09 | 150.0 | V | 340.0 | 8.5 |
| 4918.000000 | 50.48 | --- | 74.00 | 23.52 | 150.0 | V | 81.0 | 11.8 |
| 4960.000000 | --- | 41.72 | 54.00 | 12.28 | 150.0 | V | 153.0 | 11.8 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_High channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

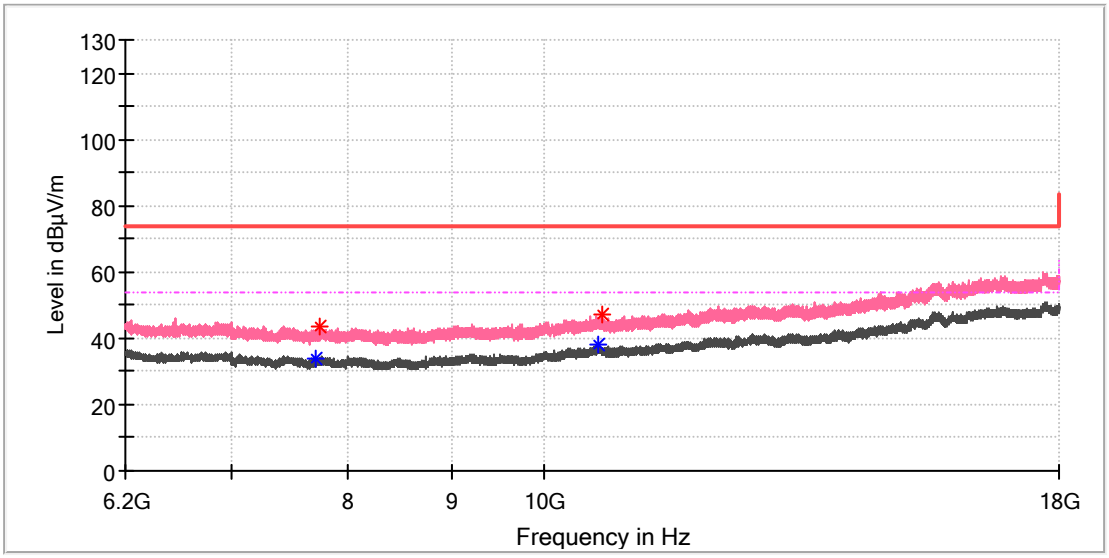



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 8006.383333 | --- | 34.69 | 54.00 | 19.31 | 150.0 | H | 39.0 | 8.8 |
| 8088.491667 | 43.35 | --- | 74.00 | 30.65 | 150.0 | H | 84.0 | 8.9 |
| 10602.383333 | 46.42 | --- | 74.00 | 27.58 | 150.0 | H | 250.0 | 12.1 |
| 10651.550000 | --- | 37.46 | 54.00 | 16.54 | 150.0 | H | 1.0 | 12.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_High channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |



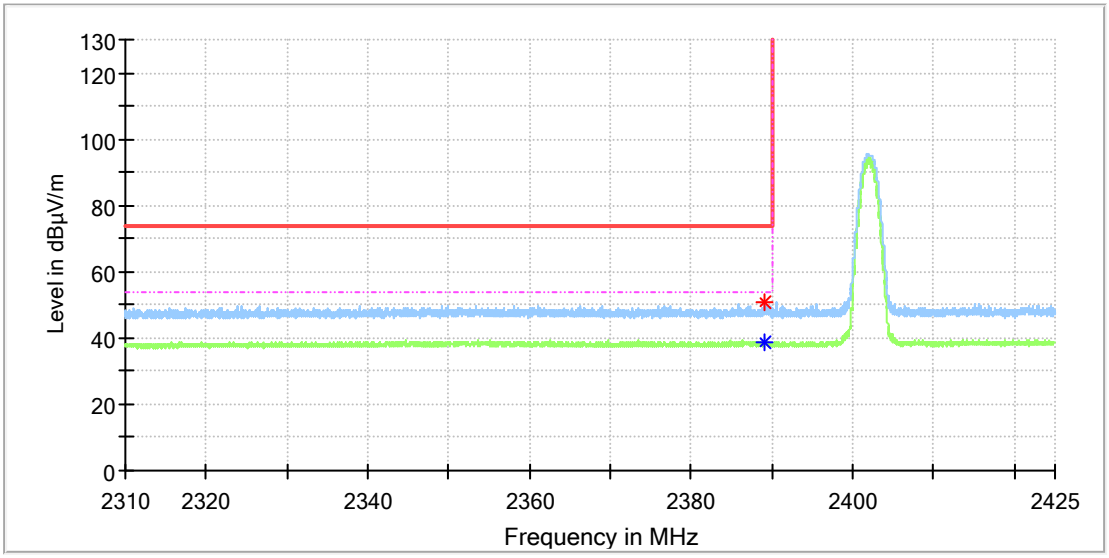

# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 7704.500000 | --- | 33.93 | 54.00 | 20.07 | 150.0 | V | 169.0 | 8.7 |
| 7735.966667 | 43.65 | --- | 74.00 | 30.35 | 150.0 | V | 331.0 | 8.8 |
| 10631.883333 | --- | 37.93 | 54.00 | 16.07 | 150.0 | V | 112.0 | 12.0 |
| 10682.033333 | 46.96 | --- | 74.00 | 27.04 | 150.0 | V | 190.0 | 11.9 |

## Appendix A.6: Test Results of Radiated Emissions in Restricted Bands

## EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_Low channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

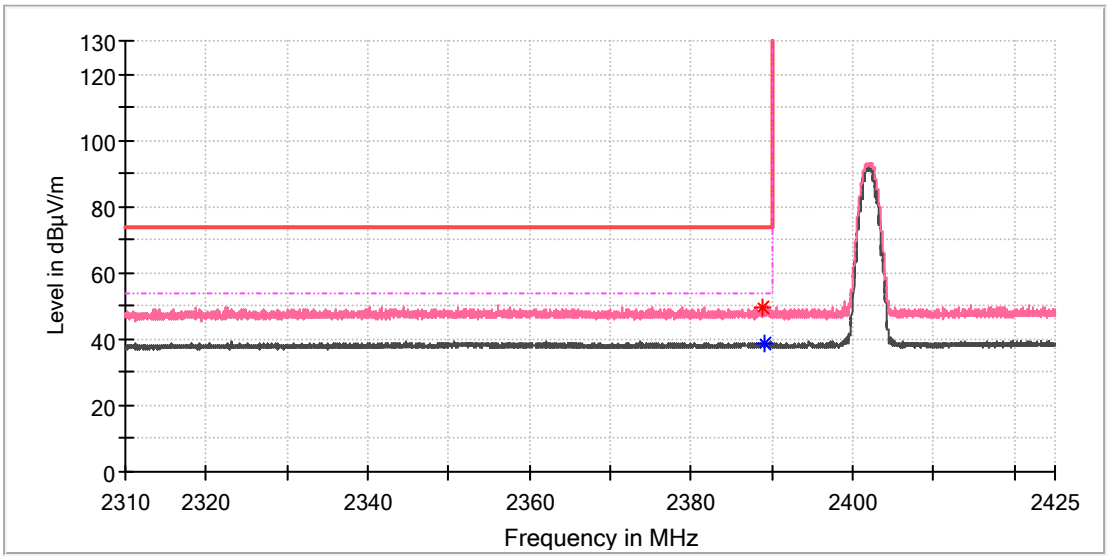



## Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2389.130147 | 51.07 | --- | 74.00 | 22.93 | 150.0 | H | 311.0 | 7.0 |
| 2389.147059 | --- | 38.52 | 54.00 | 15.48 | 150.0 | H | 316.0 | 7.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_Low channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

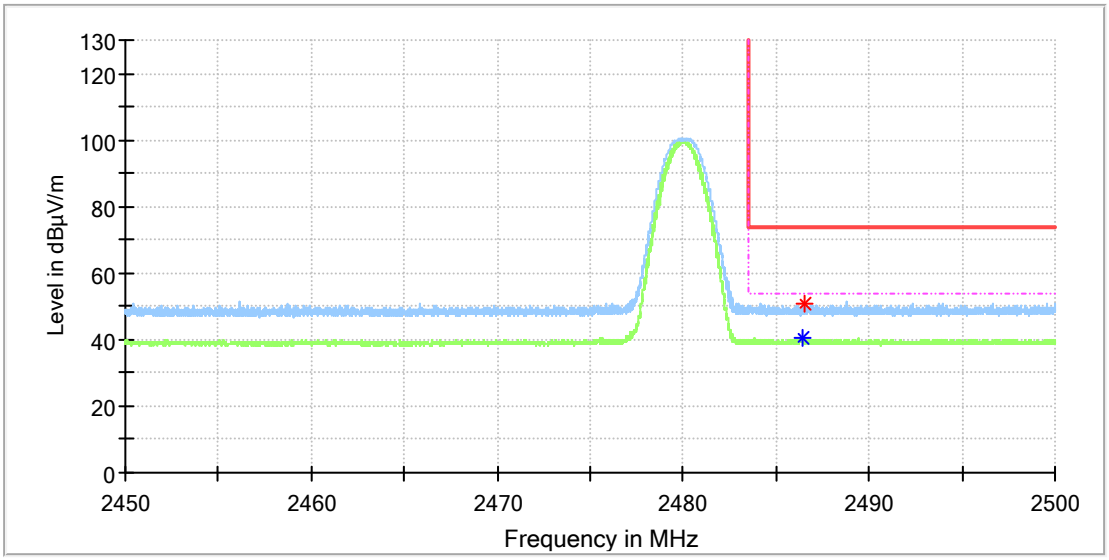



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2388.876471 | 49.82 | --- | 74.00 | 24.18 | 150.0 | V | 291.0 | 7.0 |
| 2389.113235 | --- | 38.62 | 54.00 | 15.38 | 150.0 | V | 73.0 | 7.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_High channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

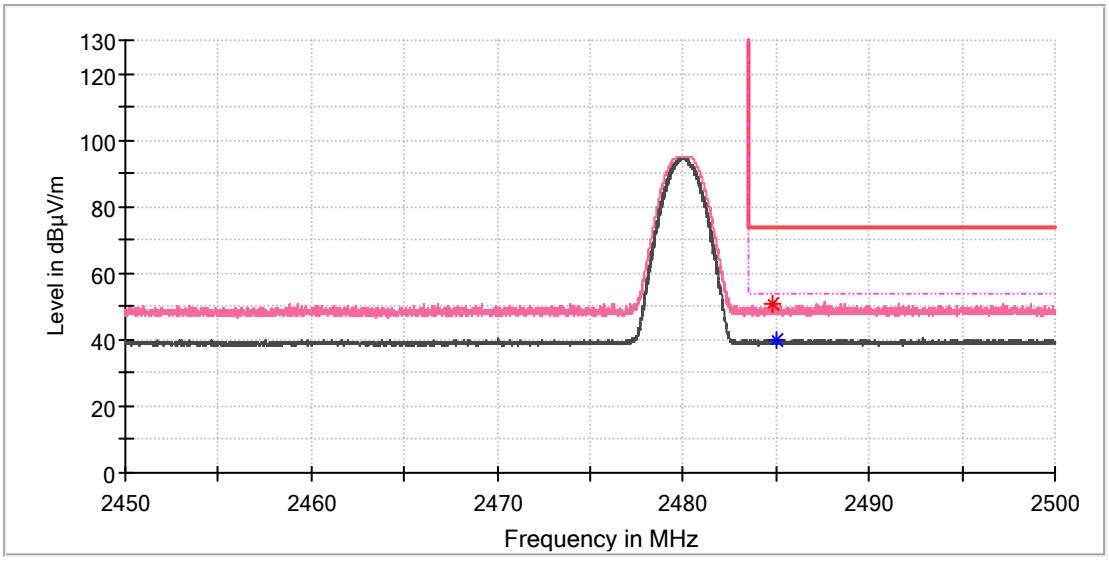



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2486.426471 | --- | 40.26 | 54.00 | 13.74 | 150.0 | H | 324.0 | 7.4 |
| 2486.551471 | 50.75 | --- | 74.00 | 23.25 | 150.0 | H | 224.0 | 7.4 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | BLE 1M_High channel |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |



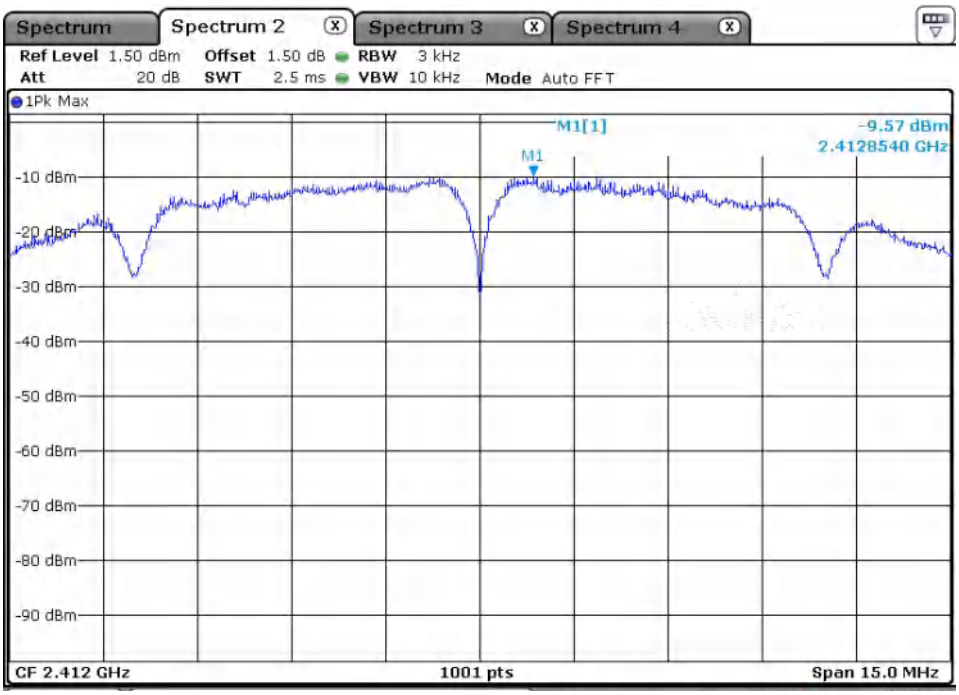

# Critical_Freqs

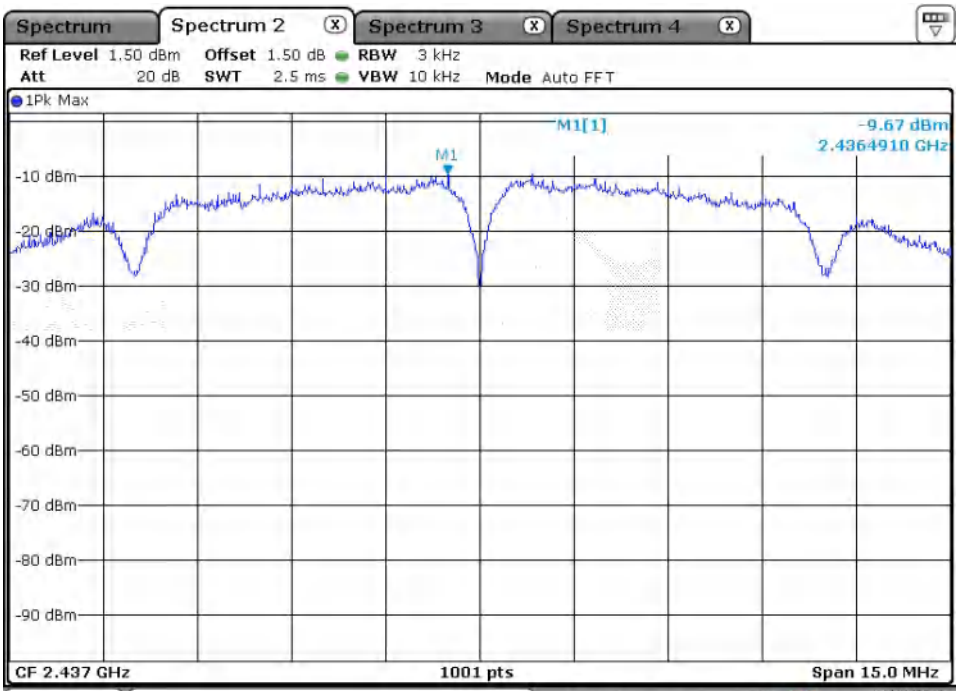
| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2484.845588 | 51.05 | --- | 74.00 | 22.95 | 150.0 | V | 185.0 | 7.4 |
| 2485.051471 | --- | 39.61 | 54.00 | 14.39 | 150.0 | V | 46.0 | 7.4 |

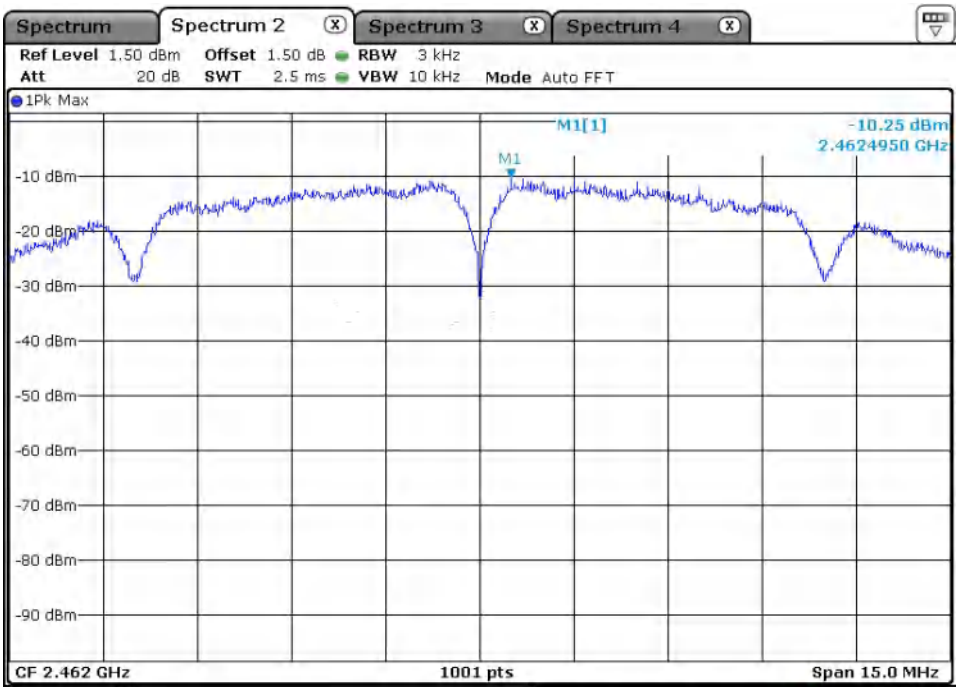
# Appendix B: Test Results of 2.4GHz Wi-Fi

## Appendix B.1: Test Results of Conducted Power Spectral Density

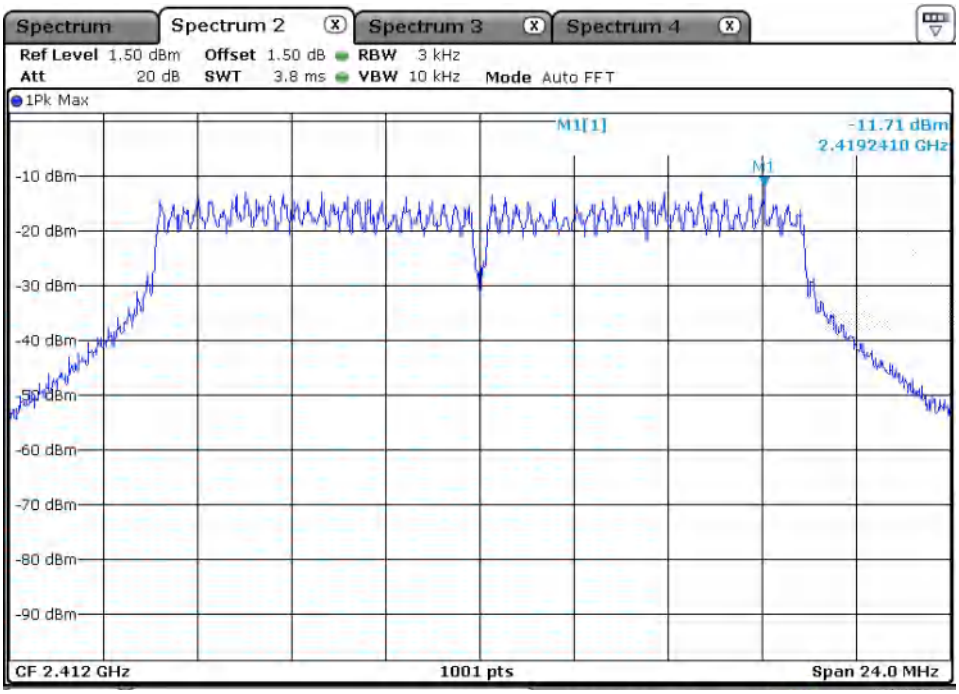
**Wi-Fi 802.11 b mode**

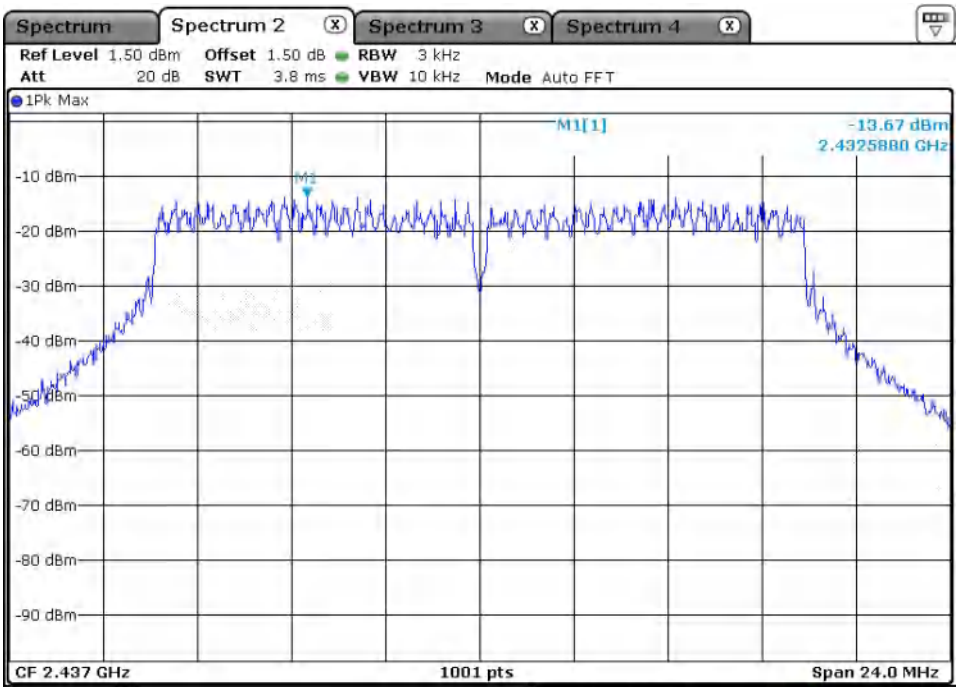


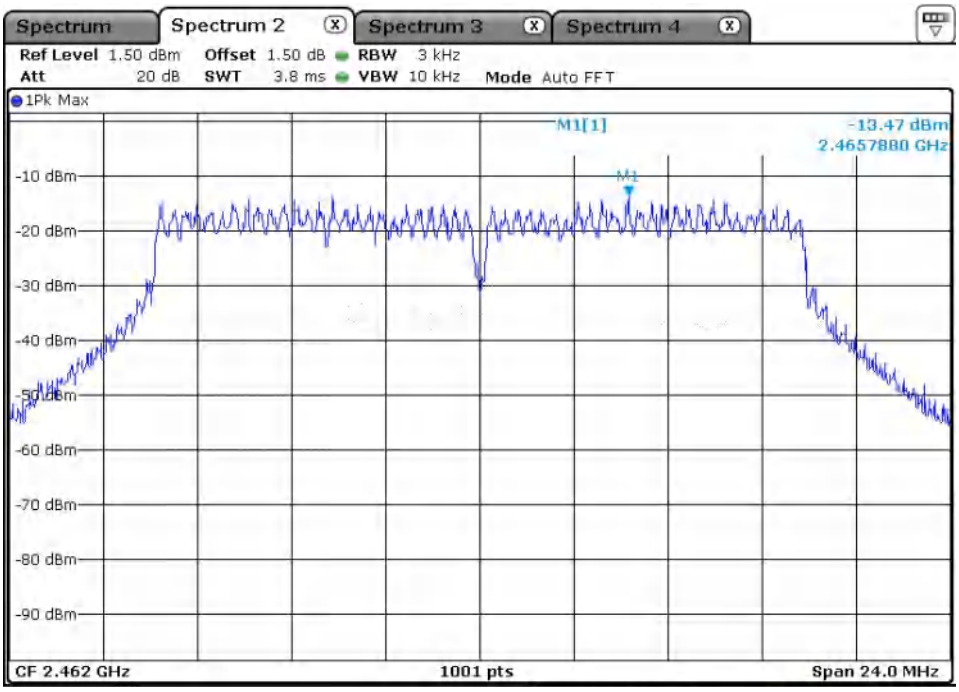





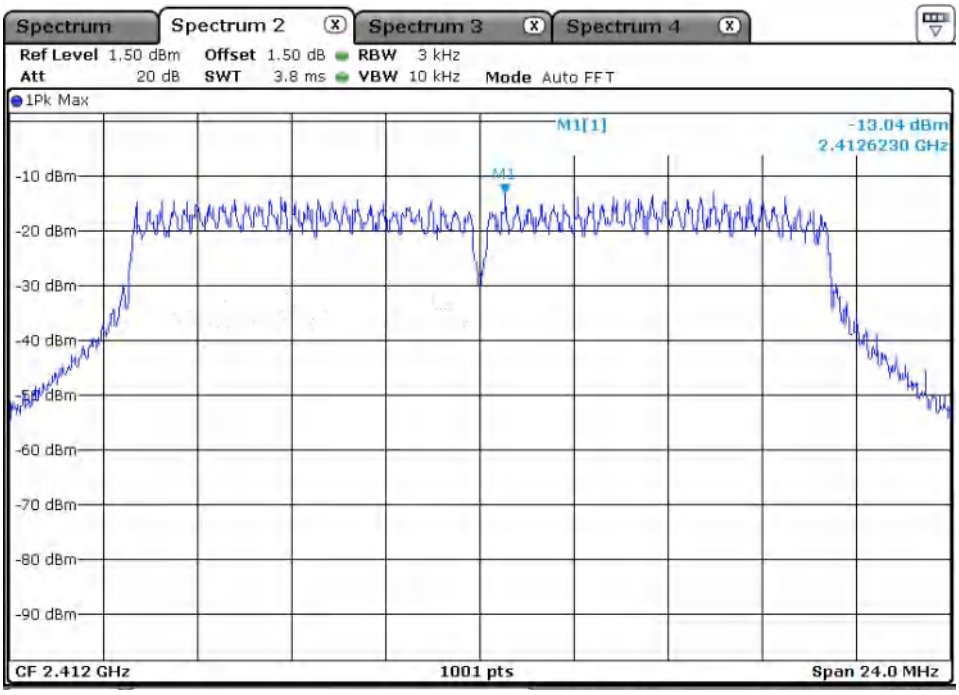

**Wi-Fi 802.11 g mode**

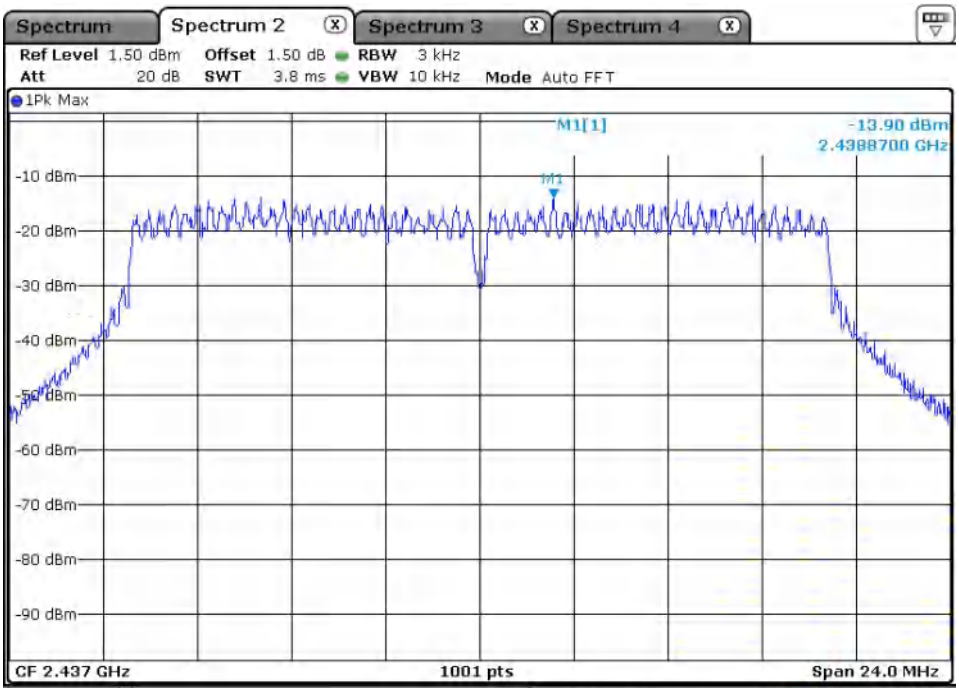


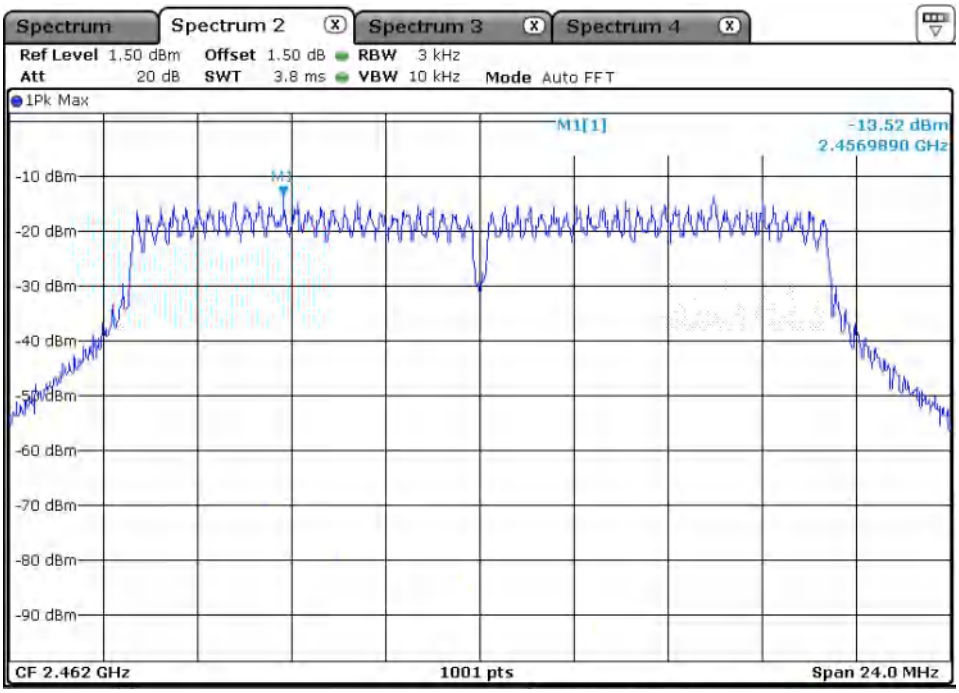

Spectrum
Spectrum 2
Spectrum 3
Spectrum 4
Ref Level 1.50 dBm Offset 1.50 dB RBW 3 kHz
Att 20 dB SWT 3.8 ms VBW 10 kHz Mode Auto FFT
1Pk Max
M1[1]
-13.67 dBm
2.4325880 GHz
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
CF 2.437 GHz
1001 pts
Span 24.0 MHz


Spectrum
Spectrum 2
Spectrum 3
Spectrum 4
Ref Level 1.50 dBm Offset 1.50 dB RBW 3 kHz
Att 20 dB SWT 3.8 ms VBW 10 kHz Mode Auto FFT
1Pk Max
M1[1]
-13.47 dBm
2.4657880 GHz
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
CF 2.462 GHz
1001 pts
Span 24.0 MHz

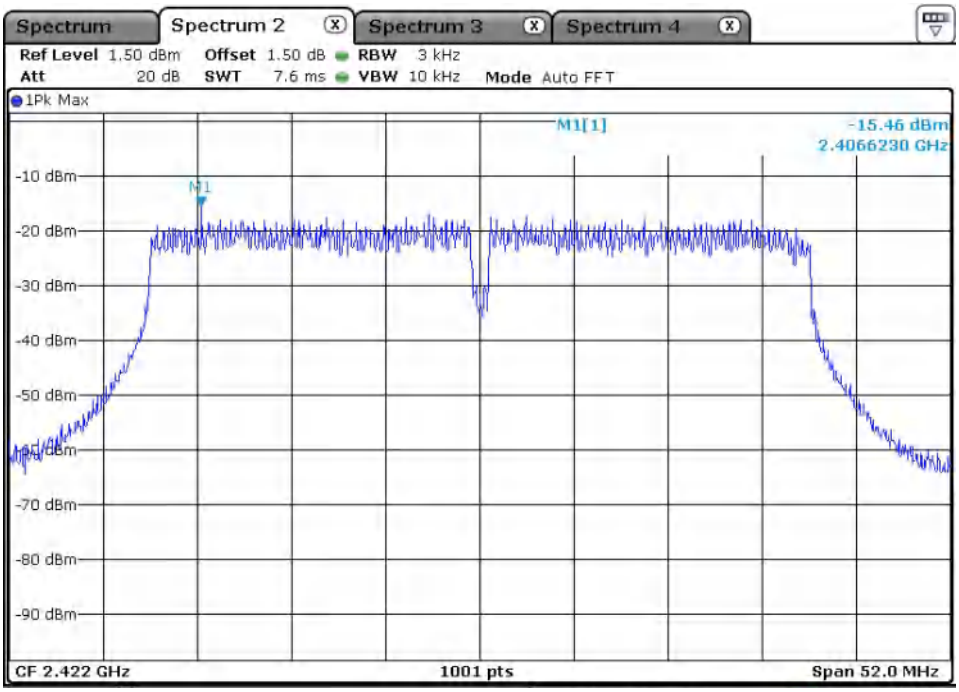
**Wi-Fi 802.11 n(HT20) mode**

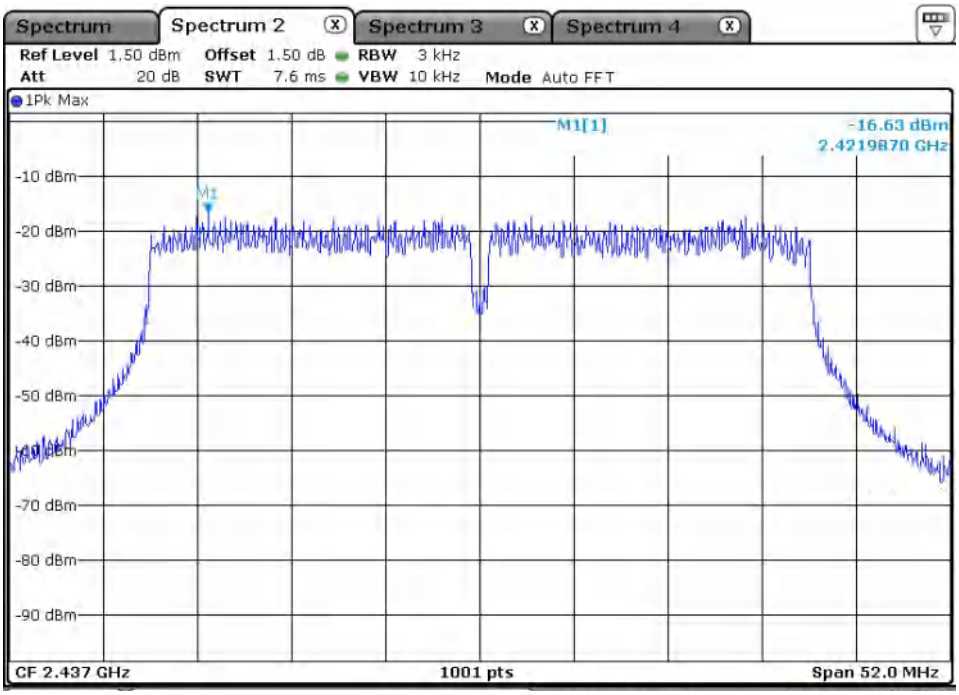


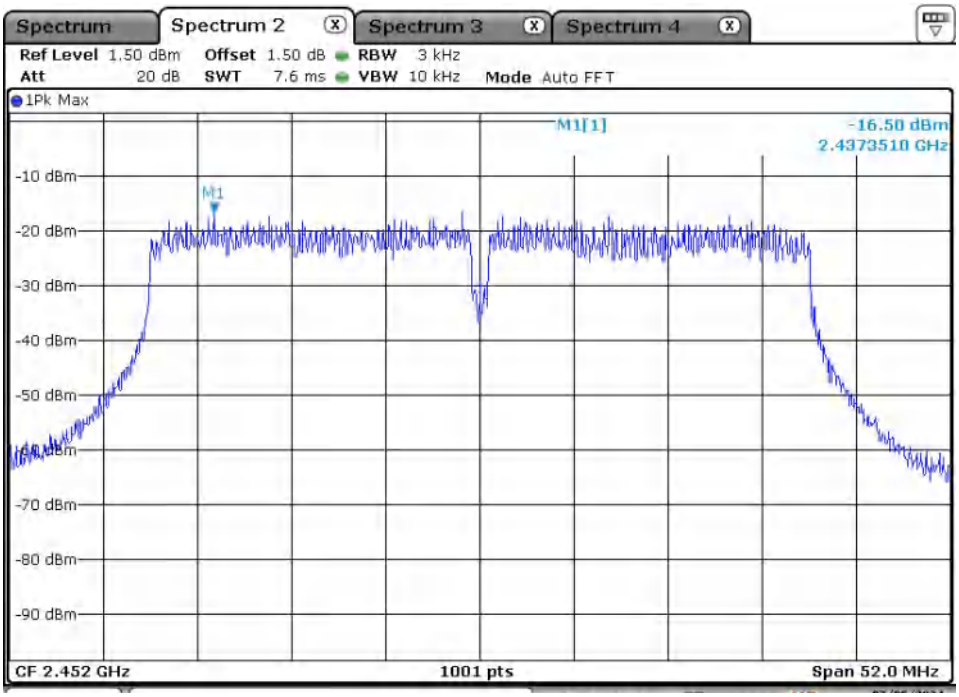






**Wi-Fi 802.11 n(HT40) mode**




Spectrum
Spectrum 2
Spectrum 3
Spectrum 4
Ref Level 1.50 dBm Offset 1.50 dB RBW 3 kHz
Att 20 dB SWT 7.6 ms VBW 10 kHz Mode Auto FFT
1Pk Max
M1[1]
-16.63 dBm
2.4219870 GHz
M1
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
CF 2.437 GHz
1001 pts
Span 52.0 MHz


Spectrum
Spectrum 2
Spectrum 3
Spectrum 4
Ref Level 1.50 dBm Offset 1.50 dB RBW 3 kHz
Att 20 dB SWT 7.6 ms VBW 10 kHz Mode Auto FFT
1Pk Max
M1[1]
-16.50 dBm
2.4373510 GHz
M1
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
CF 2.452 GHz
1001 pts
Span 52.0 MHz

## Appendix B.2: Test Results of 6dB Bandwidth

**Wi-Fi 802.11 b mode**

**Minimum Emission Bandwidth 6 dB (2412 MHz; 30.000 dBm; 20 MHz(11b_20Mhz))**

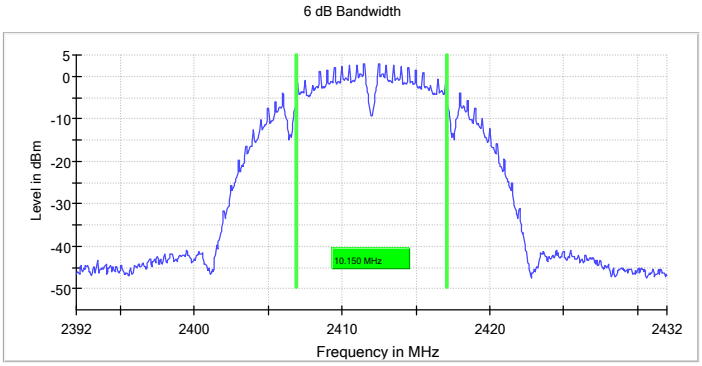
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2412.000000 | 10.150000 | 0.500000 | --- | 2406.925000 | 2417.075000 |

**(continuation of the "6 dB Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 2412.000000 | 2.9 | PASS |




### Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.39200 GHz | 2.39200 GHz |
| Stop Frequency | 2.43200 GHz | 2.43200 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 100.000 kHz | ~ 100.000 kHz |
| VBW | 300.000 kHz | ~ 300.000 kHz |
| SweepPoints | 800 | ~ 800 |
| Sweeptime | 94.922 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.50 dB | 0.50 dB |
| Run | 18 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |
| Max Stable Difference | 0.23 dB | 0.50 dB |

**Minimum Emission Bandwidth 6 dB (2437 MHz; 30.000 dBm; 20 MHz(11b_20Mhz))**

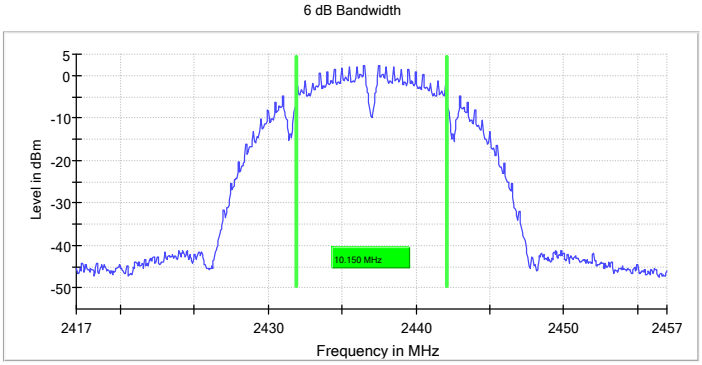
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2437.000000 | 10.150000 | 0.500000 | --- | 2431.925000 | 2442.075000 |

**(continuation of the "6 dB Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 2437.000000 | 2.4 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.41700 GHz | 2.41700 GHz |
| Stop Frequency | 2.45700 GHz | 2.45700 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 100.000 kHz | ~ 100.000 kHz |
| VBW | 300.000 kHz | ~ 300.000 kHz |
| SweepPoints | 800 | ~ 800 |
| Sweeptime | 94.922 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.50 dB | 0.50 dB |
| Run | 18 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |
| Max Stable Difference | 0.16 dB | 0.50 dB |

**Minimum Emission Bandwidth 6 dB (2462 MHz; 30.000 dBm; 20 MHz(11b_20Mhz))**

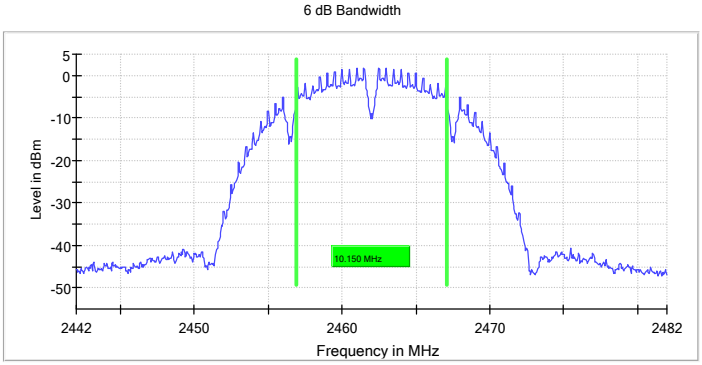
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2462.000000 | 10.150000 | 0.500000 | --- | 2456.925000 | 2467.075000 |

**(continuation of the "6 dB Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 2462.000000 | 1.8 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.44200 GHz | 2.44200 GHz |
| Stop Frequency | 2.48200 GHz | 2.48200 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 100.000 kHz | ~ 100.000 kHz |
| VBW | 300.000 kHz | ~ 300.000 kHz |
| SweepPoints | 800 | ~ 800 |
| Sweeptime | 94.922 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.50 dB | 0.50 dB |
| Run | 26 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |
| Max Stable Difference | 0.11 dB | 0.50 dB |

**Wi-Fi 802.11 g mode**

**Minimum Emission Bandwidth 6 dB (2412 MHz; 30.000 dBm; 20 MHz(11g_20Mhz))**

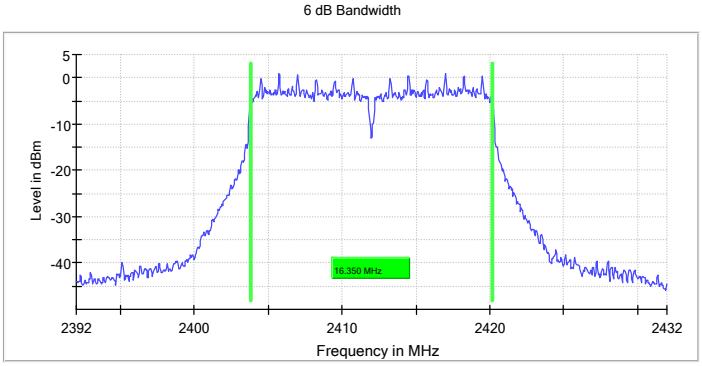
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2412.000000 | 16.350000 | 0.500000 | --- | 2403.825000 | 2420.175000 |

**(continuation of the "6 dB Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 2412.000000 | 1.0 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.39200 GHz | 2.39200 GHz |
| Stop Frequency | 2.43200 GHz | 2.43200 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 100.000 kHz | ~ 100.000 kHz |
| VBW | 300.000 kHz | ~ 300.000 kHz |
| SweepPoints | 800 | ~ 800 |
| Sweeptime | 94.922 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.50 dB | 0.50 dB |
| Run | 48 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |
| Max Stable Difference | 0.38 dB | 0.50 dB |

**Minimum Emission Bandwidth 6 dB (2437 MHz; 30.000 dBm; 20 MHz(11g_20Mhz))**

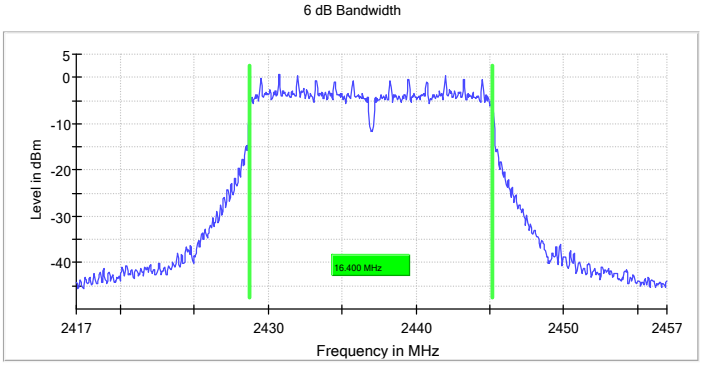
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2437.000000 | 16.400000 | 0.500000 | --- | 2428.775000 | 2445.175000 |

**(continuation of the "6 dB Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 2437.000000 | 0.7 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.41700 GHz | 2.41700 GHz |
| Stop Frequency | 2.45700 GHz | 2.45700 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 100.000 kHz | ~ 100.000 kHz |
| VBW | 300.000 kHz | ~ 300.000 kHz |
| SweepPoints | 800 | ~ 800 |
| Sweeptime | 94.922 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.50 dB | 0.50 dB |
| Run | 40 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |
| Max Stable Difference | 0.38 dB | 0.50 dB |

**Minimum Emission Bandwidth 6 dB (2462 MHz; 30.000 dBm; 20 MHz(11g_20Mhz))**

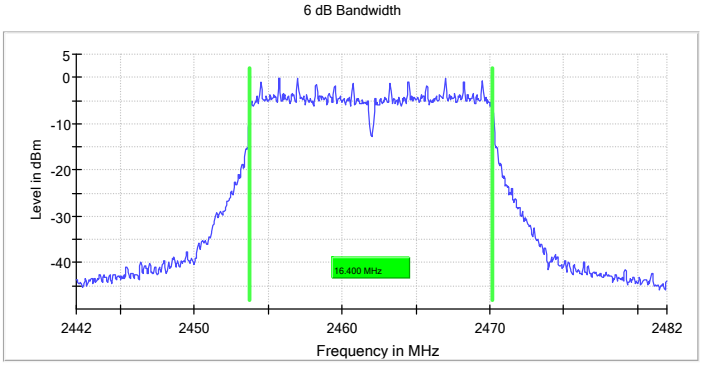
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2462.000000 | 16.400000 | 0.500000 | --- | 2453.775000 | 2470.175000 |

**(continuation of the "6 dB Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 2462.000000 | -0.1 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.44200 GHz | 2.44200 GHz |
| Stop Frequency | 2.48200 GHz | 2.48200 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 100.000 kHz | ~ 100.000 kHz |
| VBW | 300.000 kHz | ~ 300.000 kHz |
| SweepPoints | 800 | ~ 800 |
| Sweeptime | 94.922 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.50 dB | 0.50 dB |
| Run | 81 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |
| Max Stable Difference | 0.13 dB | 0.50 dB |

**Wi-Fi 802.11 n(HT20) mode**

**Minimum Emission Bandwidth 6 dB (2412 MHz; 30.000 dBm; 20 MHz(11n_20Mhz))**

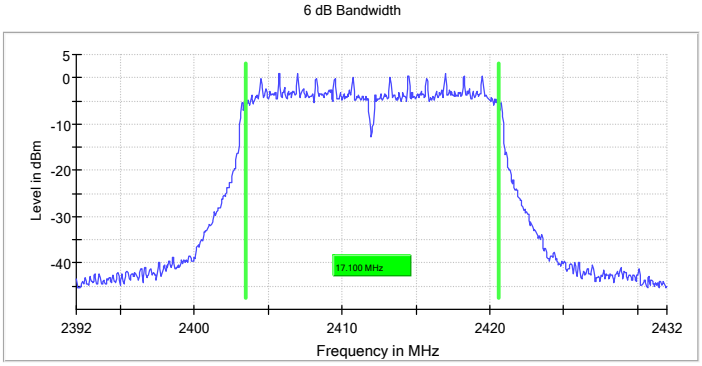
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2412.000000 | 17.100000 | 0.500000 | --- | 2403.475000 | 2420.575000 |

**(continuation of the "6 dB Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 2412.000000 | 1.0 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.39200 GHz | 2.39200 GHz |
| Stop Frequency | 2.43200 GHz | 2.43200 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 100.000 kHz | ~ 100.000 kHz |
| VBW | 300.000 kHz | ~ 300.000 kHz |
| SweepPoints | 800 | ~ 800 |
| Sweeptime | 94.922 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.50 dB | 0.50 dB |
| Run | 49 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |
| Max Stable Difference | 0.48 dB | 0.50 dB |

**Minimum Emission Bandwidth 6 dB (2437 MHz; 30.000 dBm; 20 MHz(11n_20Mhz))**

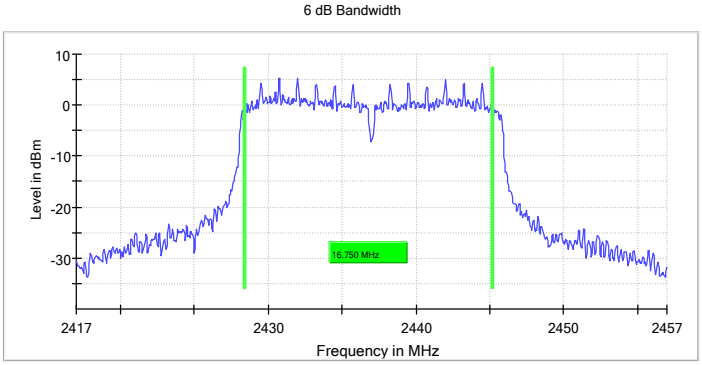
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2437.000000 | 16.750000 | 0.500000 | --- | 2428.425000 | 2445.175000 |

**(continuation of the "6 dB Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 2437.000000 | 5.4 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.41700 GHz | 2.41700 GHz |
| Stop Frequency | 2.45700 GHz | 2.45700 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 100.000 kHz | ~ 100.000 kHz |
| VBW | 300.000 kHz | ~ 300.000 kHz |
| SweepPoints | 800 | ~ 800 |
| Sweeptime | 94.922 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.50 dB | 0.50 dB |
| Run | 69 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |
| Max Stable Difference | 0.40 dB | 0.50 dB |

**Minimum Emission Bandwidth 6 dB (2462 MHz; 30.000 dBm; 20 MHz(11n_20Mhz))**

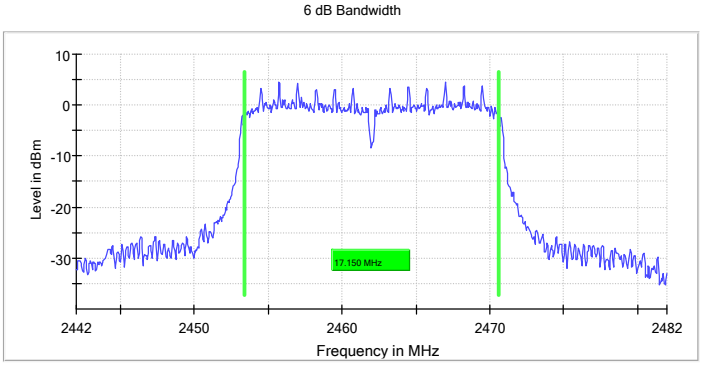
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2462.000000 | 17.150000 | 0.500000 | --- | 2453.425000 | 2470.575000 |

**(continuation of the "6 dB Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 2462.000000 | 4.5 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.44200 GHz | 2.44200 GHz |
| Stop Frequency | 2.48200 GHz | 2.48200 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 100.000 kHz | ~ 100.000 kHz |
| VBW | 300.000 kHz | ~ 300.000 kHz |
| SweepPoints | 800 | ~ 800 |
| Sweeptime | 94.922 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.50 dB | 0.50 dB |
| Run | 40 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |
| Max Stable Difference | 0.39 dB | 0.50 dB |

**Wi-Fi 802.11 n(HT40) mode**

**Minimum Emission Bandwidth 6 dB (2422 MHz; 30.000 dBm; 11n_40 MHz)**

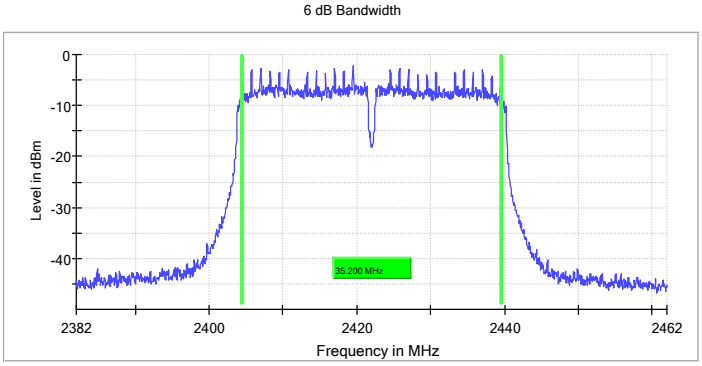
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2422.000000 | 35.200000 | 0.500000 | --- | 2404.425000 | 2439.625000 |

**(continuation of the "6 dB Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 2422.000000 | -2.3 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.38200 GHz | 2.38200 GHz |
| Stop Frequency | 2.46200 GHz | 2.46200 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 100.000 kHz | ~ 100.000 kHz |
| VBW | 300.000 kHz | ~ 300.000 kHz |
| SweepPoints | 1600 | ~ 1600 |
| Sweeptime | 1.600 ms | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.50 dB | 0.50 dB |
| Run | 91 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |
| Max Stable Difference | 0.17 dB | 0.50 dB |

**Minimum Emission Bandwidth 6 dB (2437 MHz; 30.000 dBm; 11n_40 MHz)**

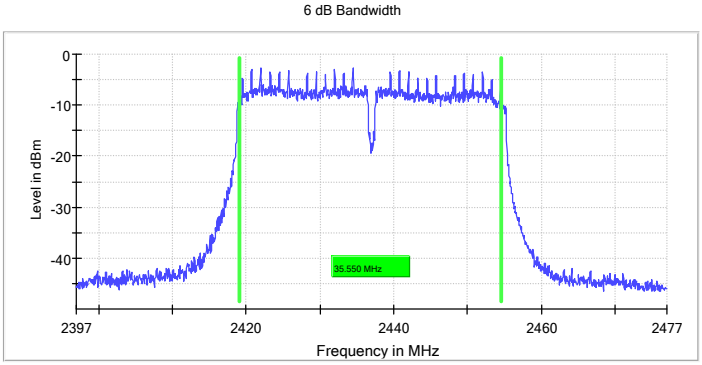
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2437.000000 | 35.550000 | 0.500000 | --- | 2419.075000 | 2454.625000 |

**(continuation of the "6 dB Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 2437.000000 | -2.8 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.39700 GHz | 2.39700 GHz |
| Stop Frequency | 2.47700 GHz | 2.47700 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 100.000 kHz | ~ 100.000 kHz |
| VBW | 300.000 kHz | ~ 300.000 kHz |
| SweepPoints | 1600 | ~ 1600 |
| Sweeptime | 1.600 ms | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.50 dB | 0.50 dB |
| Run | 90 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |
| Max Stable Difference | 0.15 dB | 0.50 dB |

**Minimum Emission Bandwidth 6 dB (2452 MHz; 30.000 dBm; 11n_40 MHz)**

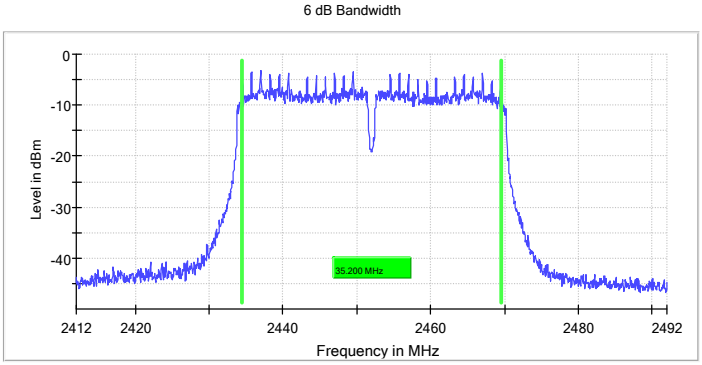
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2452.000000 | 35.200000 | 0.500000 | --- | 2434.425000 | 2469.625000 |

**(continuation of the "6 dB Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 2452.000000 | -3.2 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.41200 GHz | 2.41200 GHz |
| Stop Frequency | 2.49200 GHz | 2.49200 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 100.000 kHz | ~ 100.000 kHz |
| VBW | 300.000 kHz | ~ 300.000 kHz |
| SweepPoints | 1600 | ~ 1600 |
| Sweeptime | 1.600 ms | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.50 dB | 0.50 dB |
| Run | 63 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |
| Max Stable Difference | 0.10 dB | 0.50 dB |

## Appendix B.3: Test Results of 99% Bandwidth

**Wi-Fi 802.11 b mode**

**Occupied Channel Bandwidth 99% (2412 MHz; 30.000 dBm; 20 MHz(11b_20Mhz))**

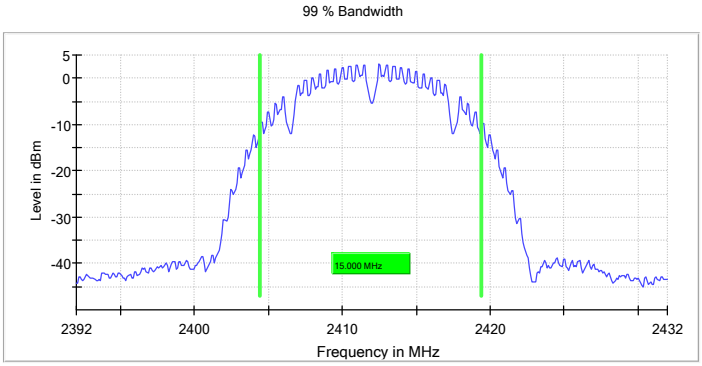
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2412.000000 | 15.000000 | --- | --- | 2404.450000 | 2419.450000 |

**(continuation of the "99 % Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Result |
|---|---|
| 2412.000000 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.39200 GHz | 2.39200 GHz |
| Stop Frequency | 2.43200 GHz | 2.43200 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | >= 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 400 | ~ 400 |
| Sweeptime | 47.266 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 dB | 0.30 dB |
| Run | 9 / max. 150 | max. 150 |
| Stable | 3 / 3 | 3 |
| Max Stable Difference | 0.04 dB | 0.30 dB |

**Occupied Channel Bandwidth 99% (2437 MHz; 30.000 dBm; 20 MHz(11b_20Mhz))**

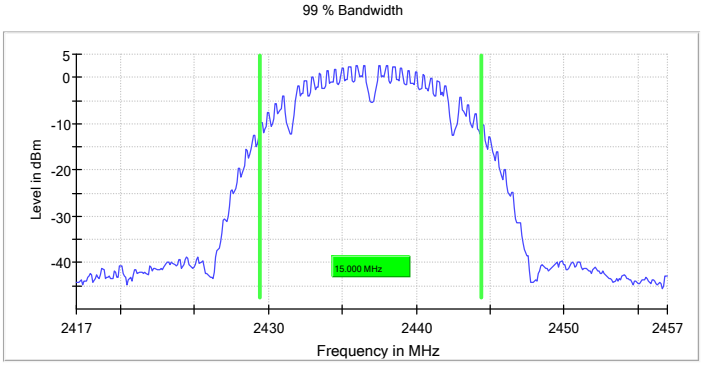
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2437.000000 | 15.000000 | --- | --- | 2429.450000 | 2444.450000 |

**(continuation of the "99 % Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Result |
|---|---|
| 2437.000000 | PASS |




### Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.41700 GHz | 2.41700 GHz |
| Stop Frequency | 2.45700 GHz | 2.45700 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | >= 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 400 | ~ 400 |
| Sweeptime | 47.266 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 dB | 0.30 dB |
| Run | 5 / max. 150 | max. 150 |
| Stable | 3 / 3 | 3 |
| Max Stable Difference | 0.17 dB | 0.30 dB |

**Occupied Channel Bandwidth 99% (2462 MHz; 30.000 dBm; 20 MHz(11b_20Mhz))**

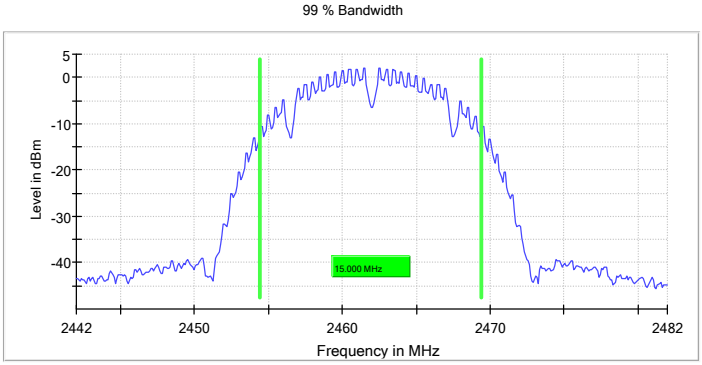
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2462.000000 | 15.000000 | --- | --- | 2454.450000 | 2469.450000 |

**(continuation of the "99 % Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Result |
|---|---|
| 2462.000000 | PASS |




### Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.44200 GHz | 2.44200 GHz |
| Stop Frequency | 2.48200 GHz | 2.48200 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | >= 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 400 | ~ 400 |
| Sweeptime | 47.266 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 dB | 0.30 dB |
| Run | 7 / max. 150 | max. 150 |
| Stable | 3 / 3 | 3 |
| Max Stable Difference | 0.06 dB | 0.30 dB |

**Wi-Fi 802.11 g mode**

**Occupied Channel Bandwidth 99% (2412 MHz; 30.000 dBm; 20 MHz(11g_20Mhz))**

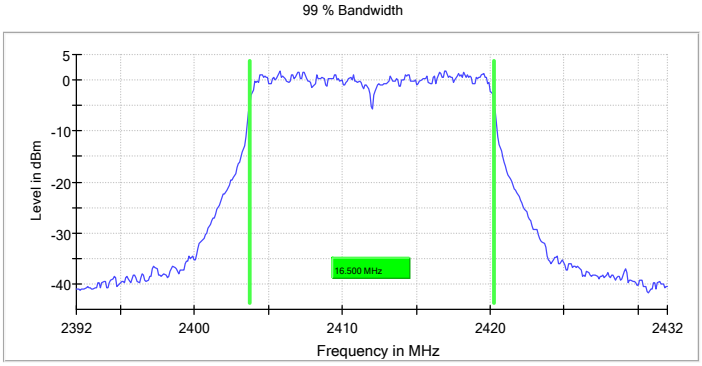
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2412.000000 | 16.500000 | --- | --- | 2403.750000 | 2420.250000 |

**(continuation of the "99 % Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Result |
|---|---|
| 2412.000000 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.39200 GHz | 2.39200 GHz |
| Stop Frequency | 2.43200 GHz | 2.43200 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | >= 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 400 | ~ 400 |
| Sweeptime | 47.266 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 dB | 0.30 dB |
| Run | 48 / max. 150 | max. 150 |
| Stable | 3 / 3 | 3 |
| Max Stable Difference | 0.12 dB | 0.30 dB |

**Occupied Channel Bandwidth 99% (2437 MHz; 30.000 dBm; 20 MHz(11g_20Mhz))**

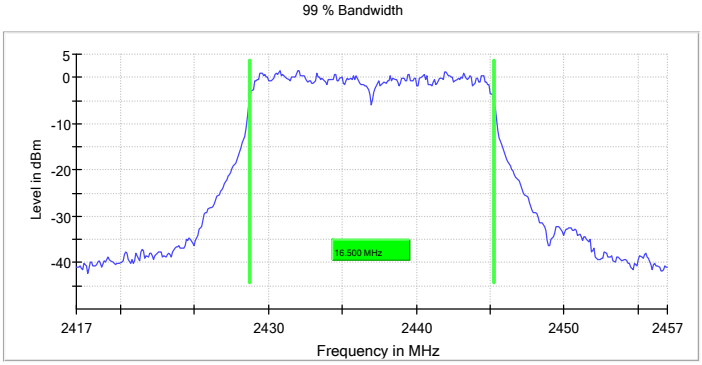
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2437.000000 | 16.500000 | --- | --- | 2428.750000 | 2445.250000 |

**(continuation of the "99 % Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Result |
|---|---|
| 2437.000000 | PASS |




### Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.41700 GHz | 2.41700 GHz |
| Stop Frequency | 2.45700 GHz | 2.45700 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | >= 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 400 | ~ 400 |
| Sweeptime | 47.266 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 dB | 0.30 dB |
| Run | 90 / max. 150 | max. 150 |
| Stable | 3 / 3 | 3 |
| Max Stable Difference | 0.00 dB | 0.30 dB |

**Occupied Channel Bandwidth 99% (2462 MHz; 30.000 dBm; 20 MHz(11g_20Mhz))**

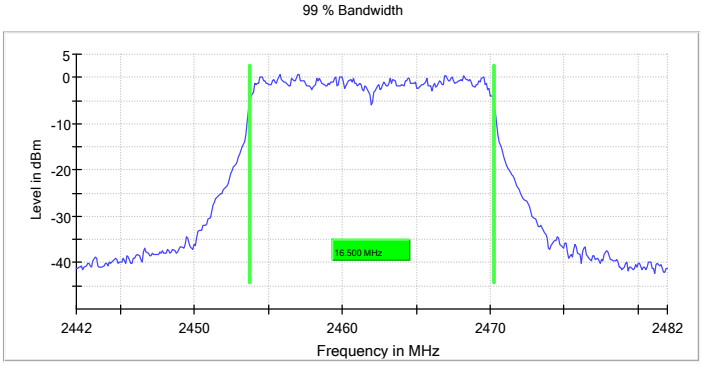
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2462.000000 | 16.500000 | --- | --- | 2453.750000 | 2470.250000 |

**(continuation of the "99 % Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Result |
|---|---|
| 2462.000000 | PASS |




### Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.44200 GHz | 2.44200 GHz |
| Stop Frequency | 2.48200 GHz | 2.48200 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | >= 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 400 | ~ 400 |
| Sweeptime | 47.266 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 dB | 0.30 dB |
| Run | 26 / max. 150 | max. 150 |
| Stable | 3 / 3 | 3 |
| Max Stable Difference | 0.18 dB | 0.30 dB |

**Wi-Fi 802.11 n(HT20) mode**

**Occupied Channel Bandwidth 99% (2412 MHz; 30.000 dBm; 20 MHz(11n_20Mhz))**

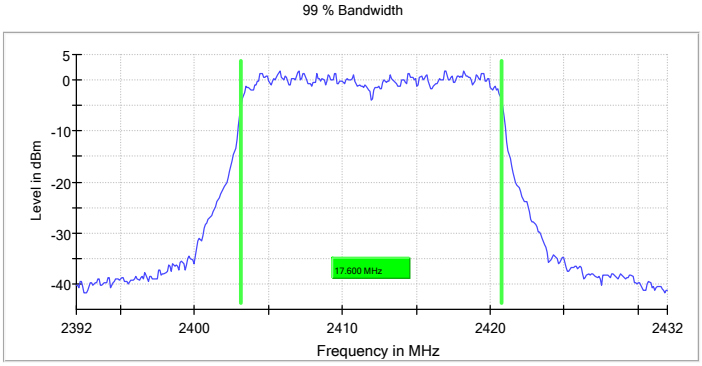
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2412.000000 | 17.600000 | --- | --- | 2403.150000 | 2420.750000 |

**(continuation of the "99 % Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Result |
|---|---|
| 2412.000000 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.39200 GHz | 2.39200 GHz |
| Stop Frequency | 2.43200 GHz | 2.43200 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | >= 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 400 | ~ 400 |
| Sweeptime | 47.266 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 dB | 0.30 dB |
| Run | 42 / max. 150 | max. 150 |
| Stable | 3 / 3 | 3 |
| Max Stable Difference | 0.25 dB | 0.30 dB |

**Occupied Channel Bandwidth 99% (2437 MHz; 30.000 dBm; 20 MHz(11n_20Mhz))**

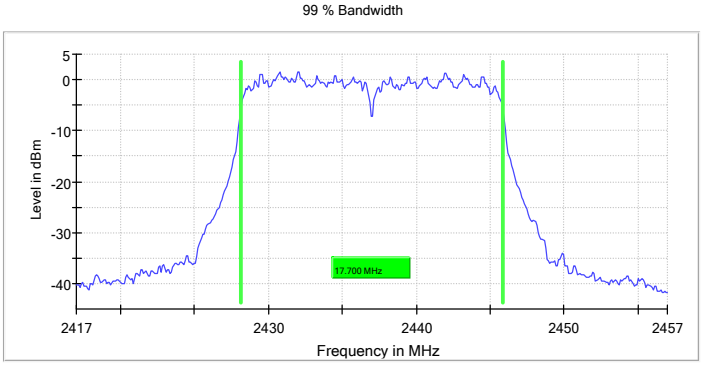
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2437.000000 | 17.700000 | --- | --- | 2428.150000 | 2445.850000 |

**(continuation of the "99 % Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Result |
|---|---|
| 2437.000000 | PASS |




### Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.41700 GHz | 2.41700 GHz |
| Stop Frequency | 2.45700 GHz | 2.45700 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | >= 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 400 | ~ 400 |
| Sweeptime | 47.266 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 dB | 0.30 dB |
| Run | 49 / max. 150 | max. 150 |
| Stable | 3 / 3 | 3 |
| Max Stable Difference | 0.06 dB | 0.30 dB |

**Occupied Channel Bandwidth 99% (2462 MHz; 30.000 dBm; 20 MHz(11n_20Mhz))**

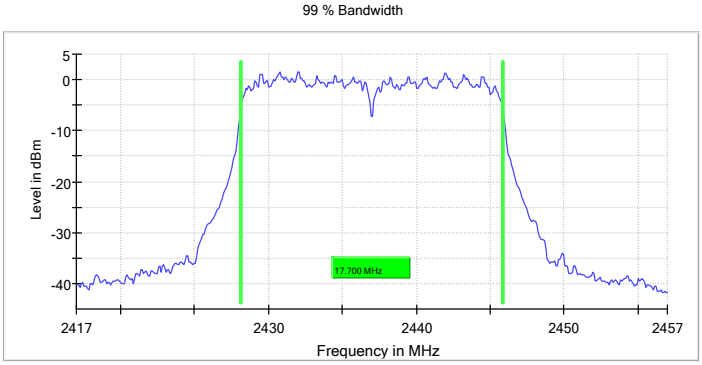
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2437.000000 | 17.700000 | --- | --- | 2428.150000 | 2445.850000 |

**(continuation of the "99 % Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Result |
|---|---|
| 2437.000000 | PASS |




### Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.44200 GHz | 2.44200 GHz |
| Stop Frequency | 2.48200 GHz | 2.48200 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | >= 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 400 | ~ 400 |
| Sweeptime | 47.266 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 dB | 0.30 dB |
| Run | 58 / max. 150 | max. 150 |
| Stable | 3 / 3 | 3 |
| Max Stable Difference | 0.27 dB | 0.30 dB |

**Wi-Fi 802.11 n(HT40) mode**

**Occupied Channel Bandwidth 99% (2422 MHz; 30.000 dBm; 11n_40 MHz)**

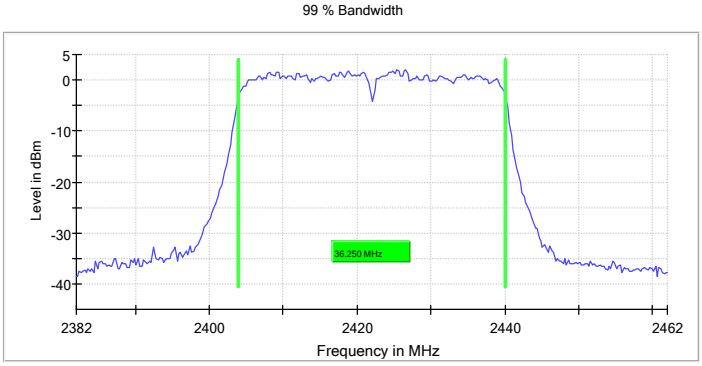
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

# 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2422.000000 | 36.250000 | --- | --- | 2403.875000 | 2440.125000 |

**(continuation of the "99 % Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Result |
|---|---|
| 2422.000000 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.38200 GHz | 2.38200 GHz |
| Stop Frequency | 2.46200 GHz | 2.46200 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 500.000 kHz | >= 400.000 kHz |
| VBW | 2.000 MHz | >= 1.500 MHz |
| SweepPoints | 320 | ~ 320 |
| Sweeptime | 1.000 ms | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 dB | 0.30 dB |
| Run | 55 / max. 150 | max. 150 |
| Stable | 3 / 3 | 3 |
| Max Stable Difference | 0.23 dB | 0.30 dB |

### Occupied Channel Bandwidth 99% (2437 MHz; 30.000 dBm; 11n_40 MHz)

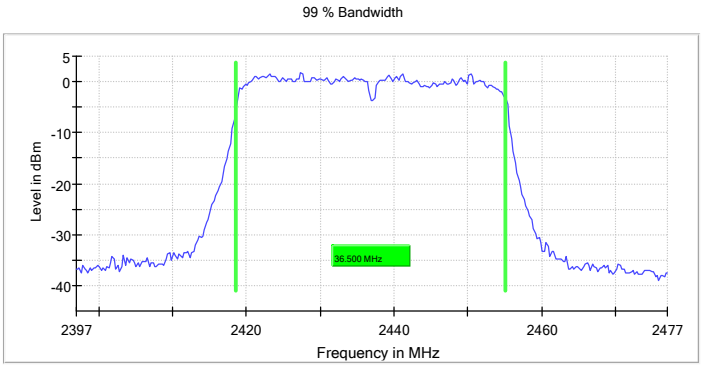
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2437.000000 | 36.500000 | --- | --- | 2418.625000 | 2455.125000 |

**(continuation of the "99 % Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Result |
|---|---|
| 2437.000000 | PASS |




### Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.39700 GHz | 2.39700 GHz |
| Stop Frequency | 2.47700 GHz | 2.47700 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 500.000 kHz | >= 400.000 kHz |
| VBW | 2.000 MHz | >= 1.500 MHz |
| SweepPoints | 320 | ~ 320 |
| Sweeptime | 1.000 ms | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 dB | 0.30 dB |
| Run | 48 / max. 150 | max. 150 |
| Stable | 3 / 3 | 3 |
| Max Stable Difference | 0.23 dB | 0.30 dB |

**Occupied Channel Bandwidth 99% (2452 MHz; 30.000 dBm; 11n_40 MHz)**

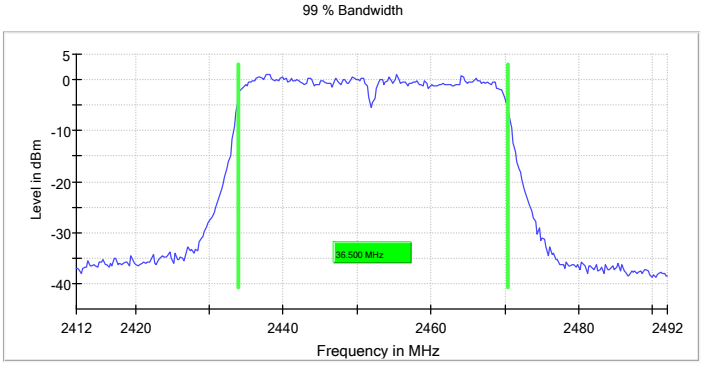
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 2452.000000 | 36.500000 | --- | --- | 2433.875000 | 2470.375000 |

**(continuation of the "99 % Bandwidth" table from column 6 ...)**

| DUT Frequency (MHz) | Result |
|---|---|
| 2452.000000 | PASS |



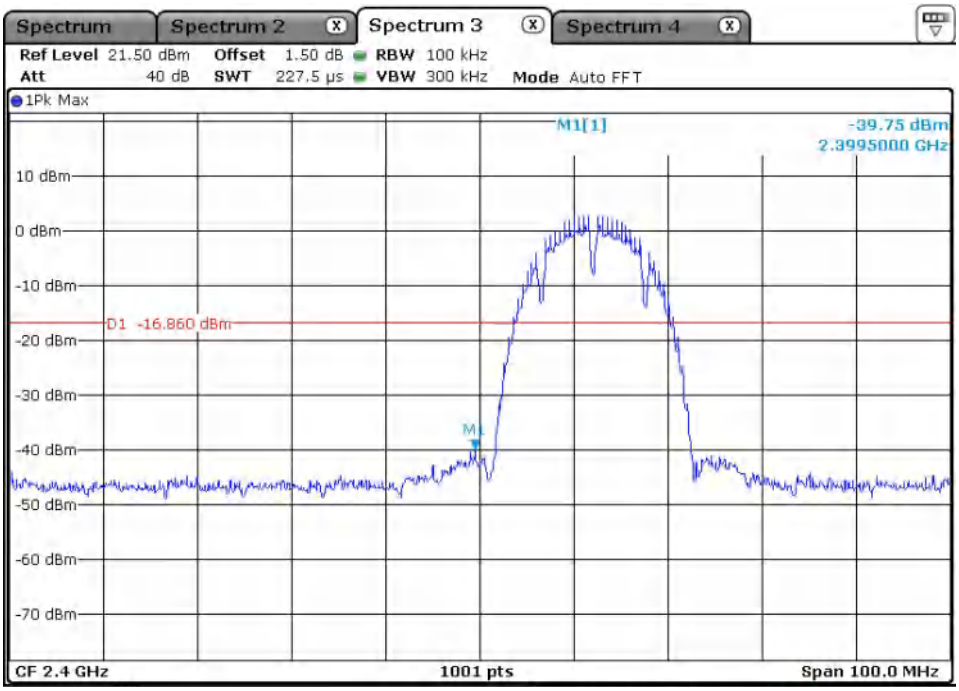

### Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 2.41200 GHz | 2.41200 GHz |
| Stop Frequency | 2.49200 GHz | 2.49200 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 500.000 kHz | >= 400.000 kHz |
| VBW | 2.000 MHz | >= 1.500 MHz |
| SweepPoints | 320 | ~ 320 |
| Sweeptime | 1.000 ms | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 100 | 100 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 dB | 0.30 dB |
| Run | 48 / max. 150 | max. 150 |
| Stable | 3 / 3 | 3 |
| Max Stable Difference | 0.08 dB | 0.30 dB |

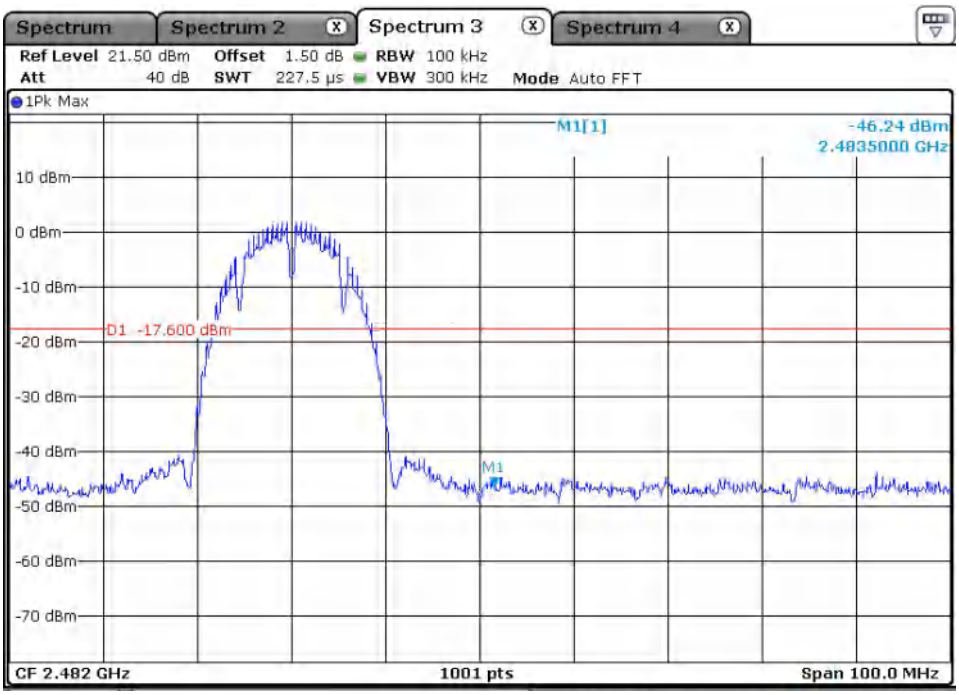
## Appendix B.4: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

**Wi-Fi 802.11 b mode, Band Edge**

Low Channel:

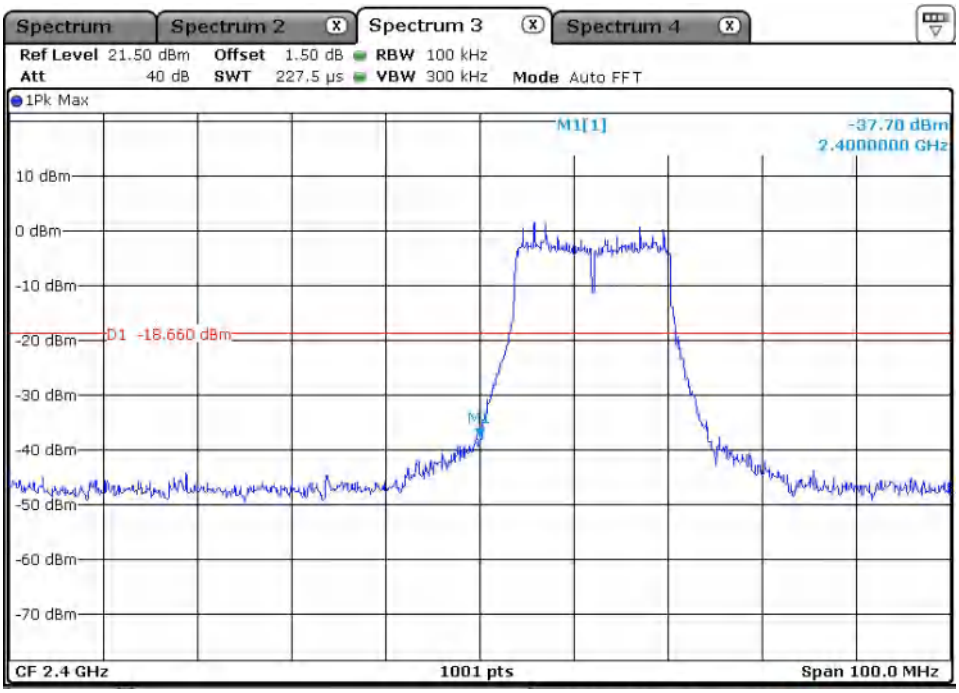



High Channel:

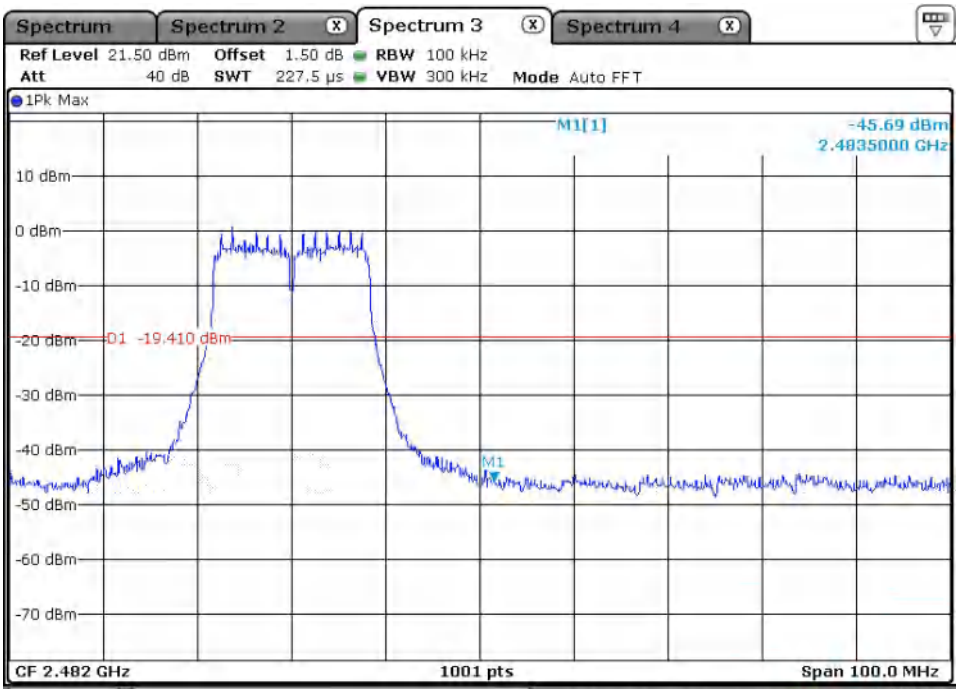


**Wi-Fi 802.11 g mode, Band Edge**

Low Channel:

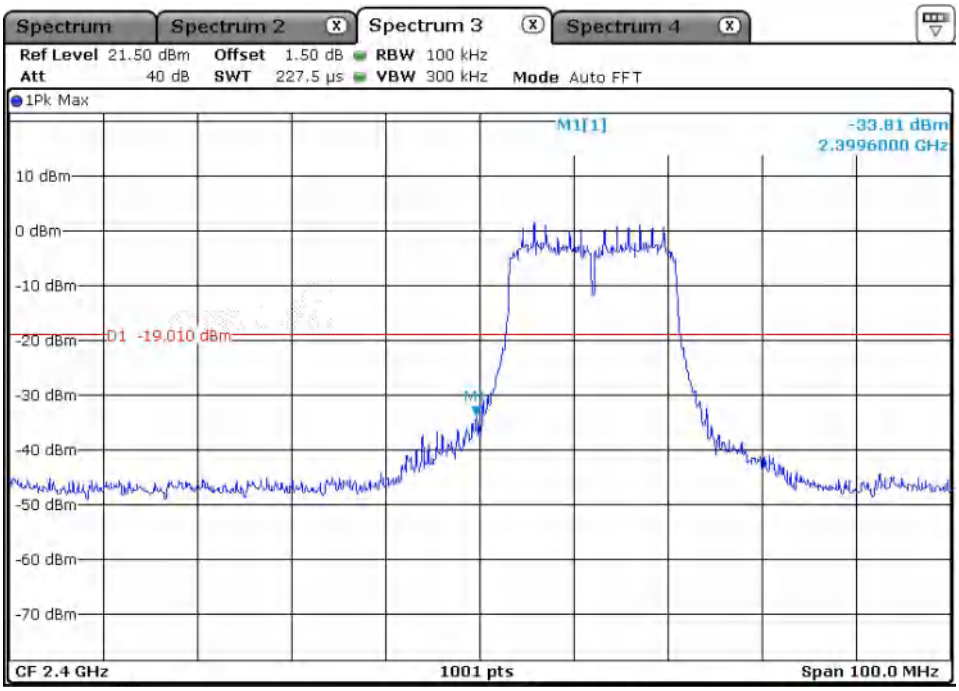



High Channel:

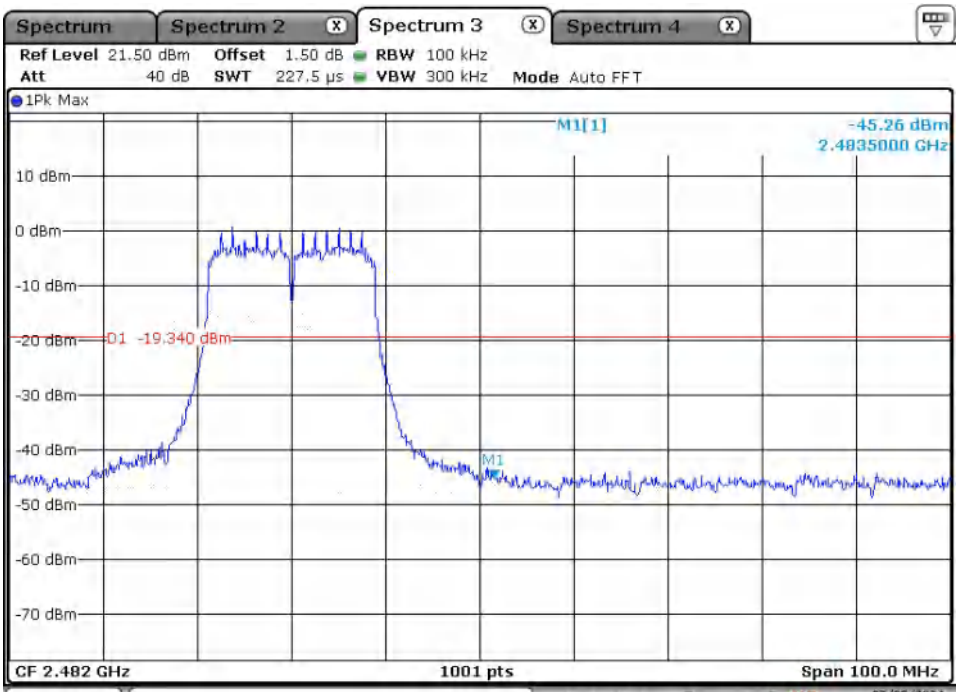


**Wi-Fi 802.11 n(HT20) mode, Band Edge**

Low Channel:

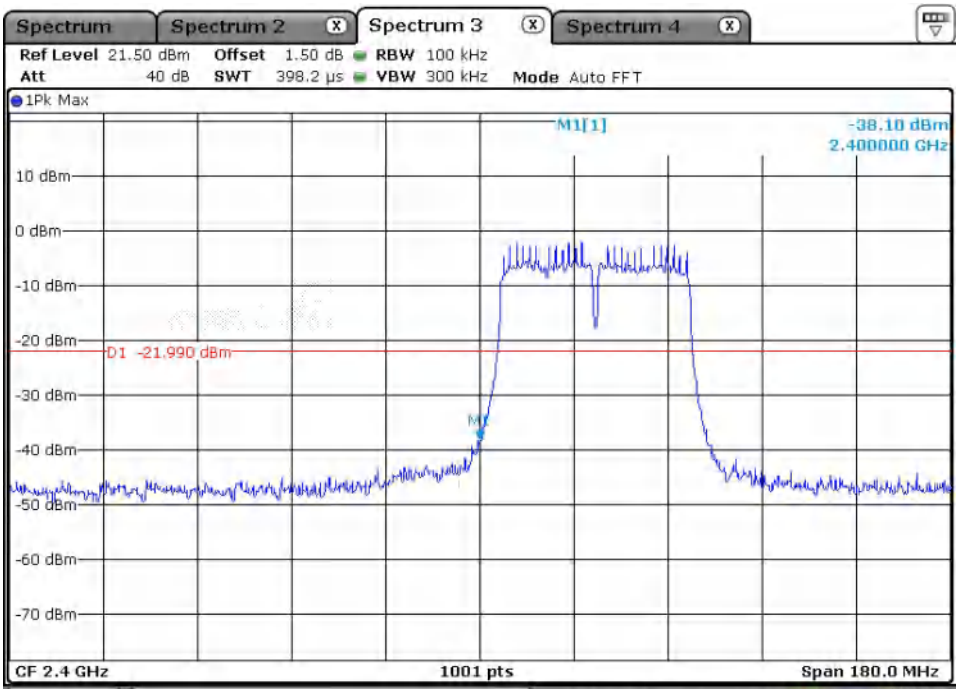



High Channel:

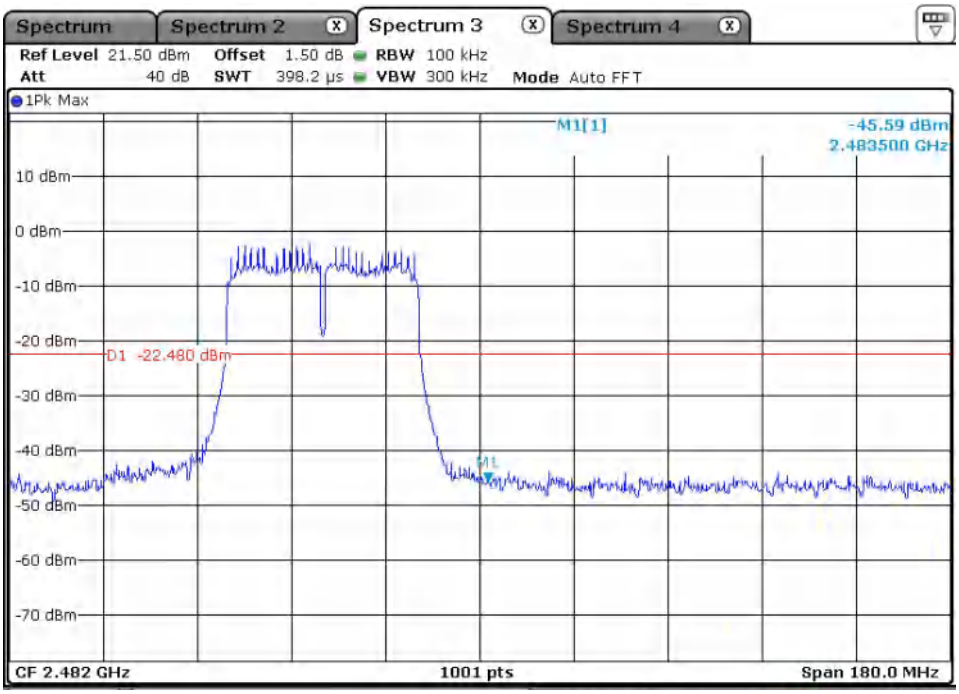


**Wi-Fi 802.11 n(HT40) mode, Band Edge**

Low Channel:

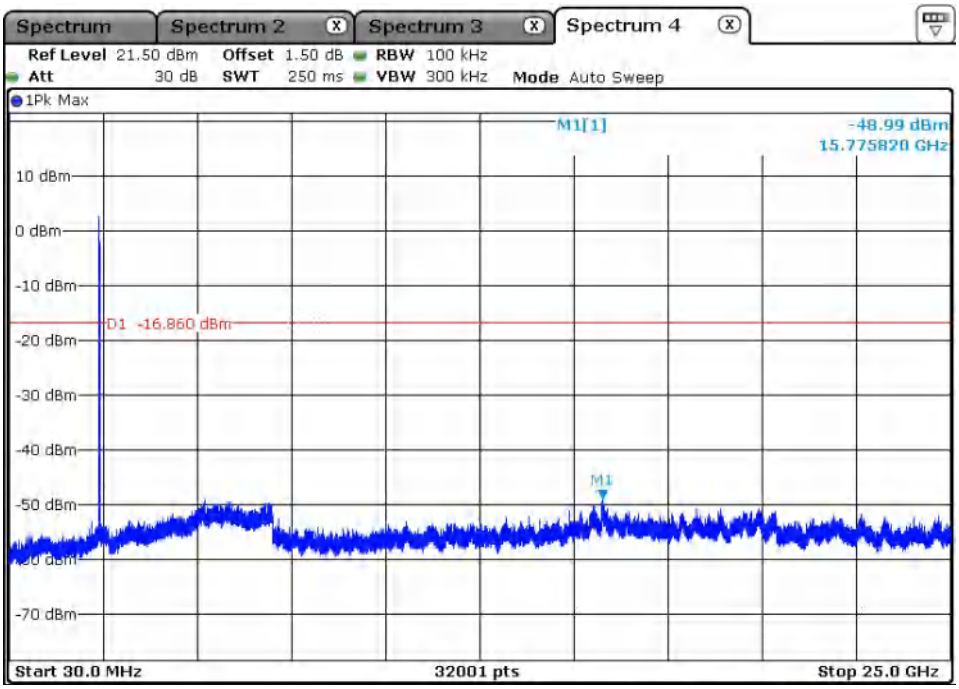


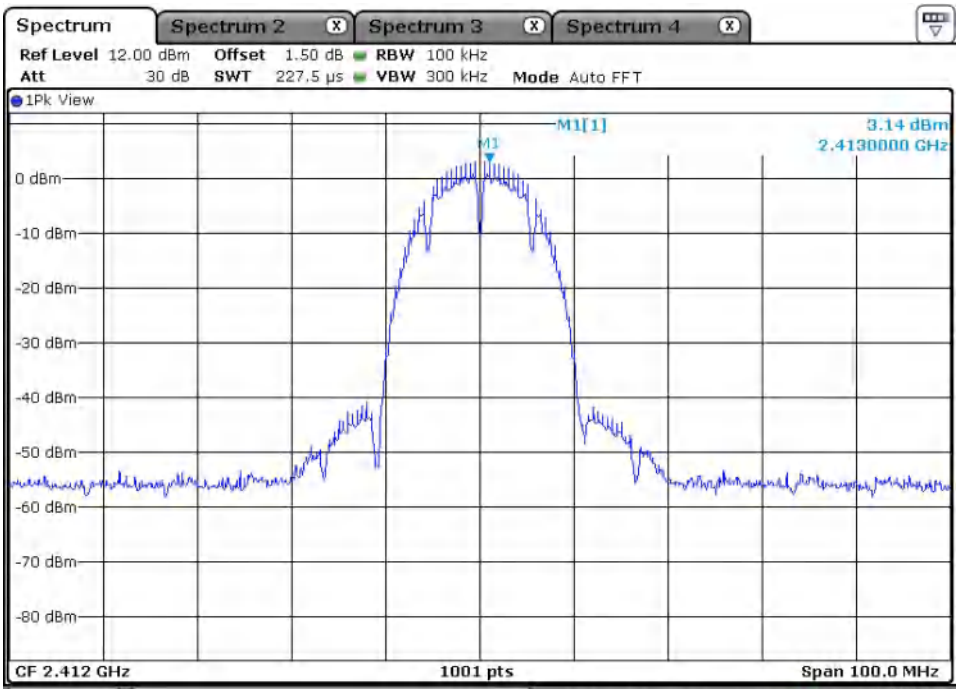

High Channel:



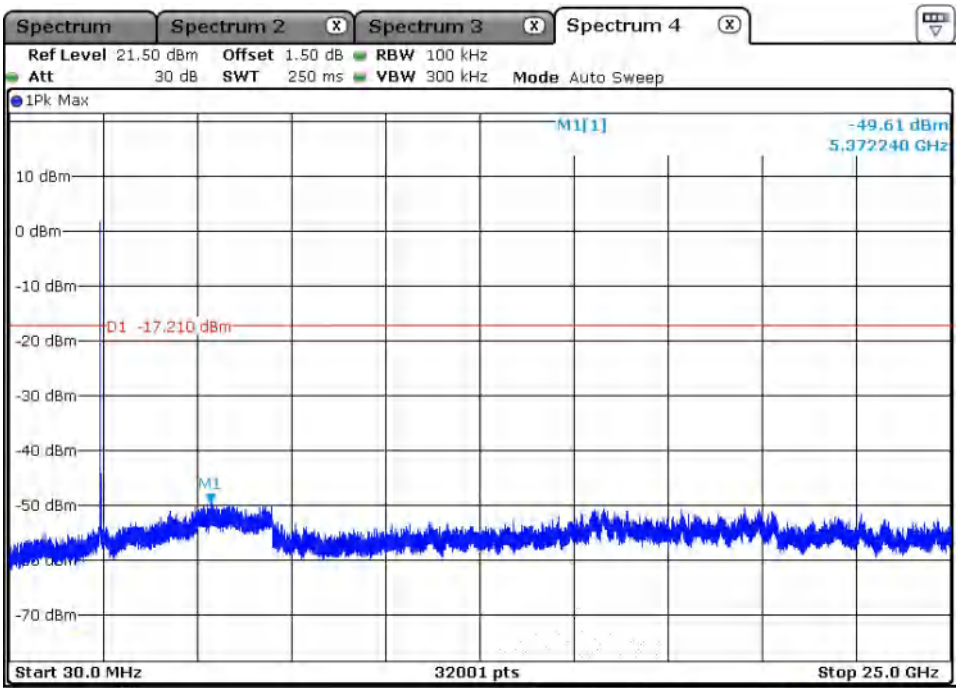
**Wi-Fi 802.11 b mode, Conducted Spurious Emission**

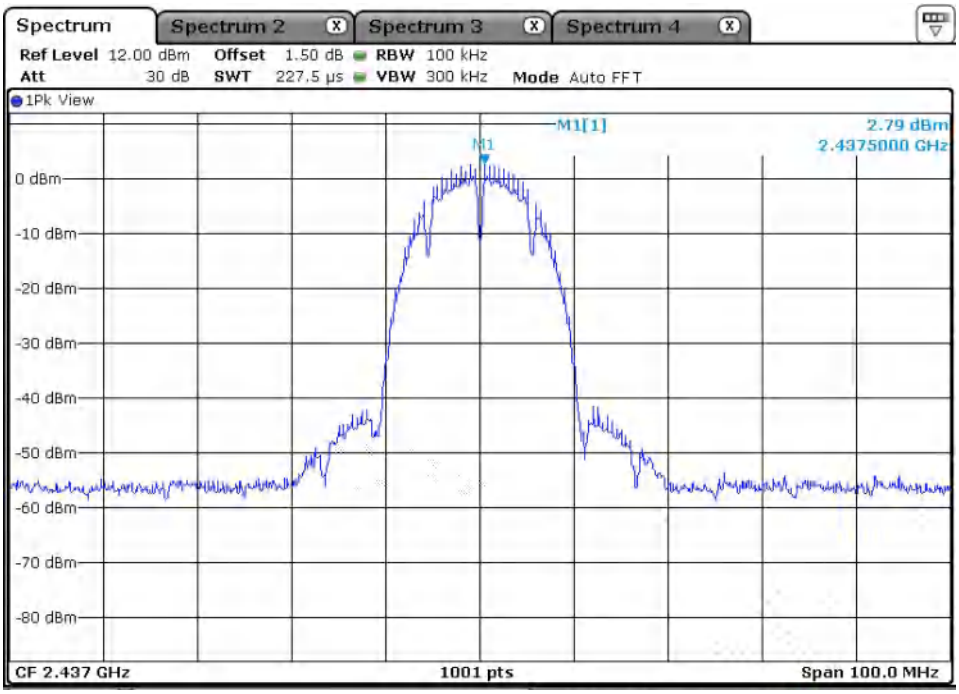
Low Channel:



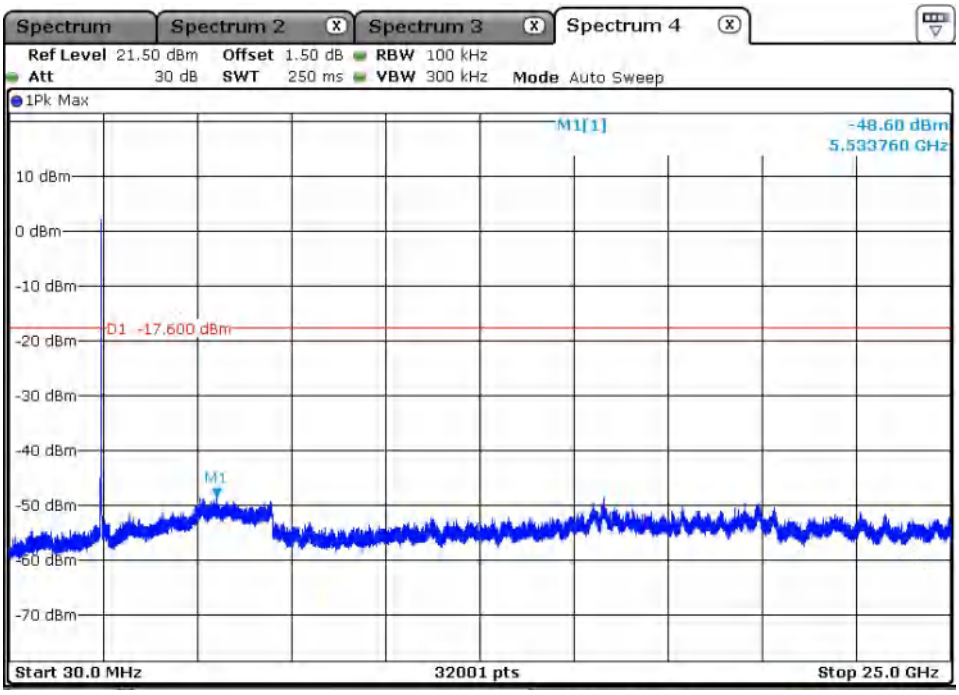



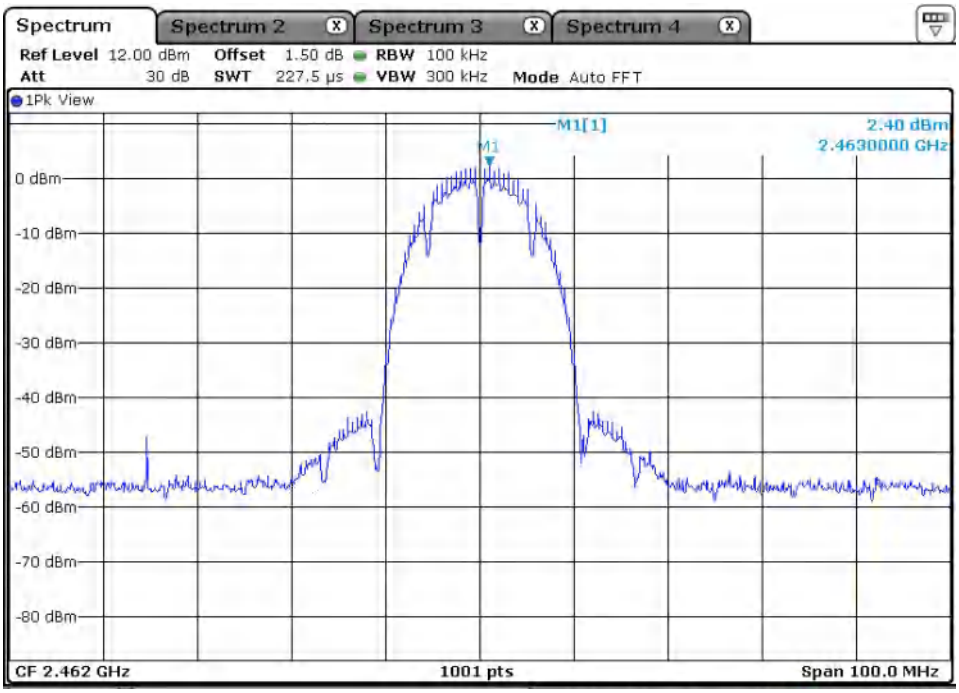
Middle Channel:



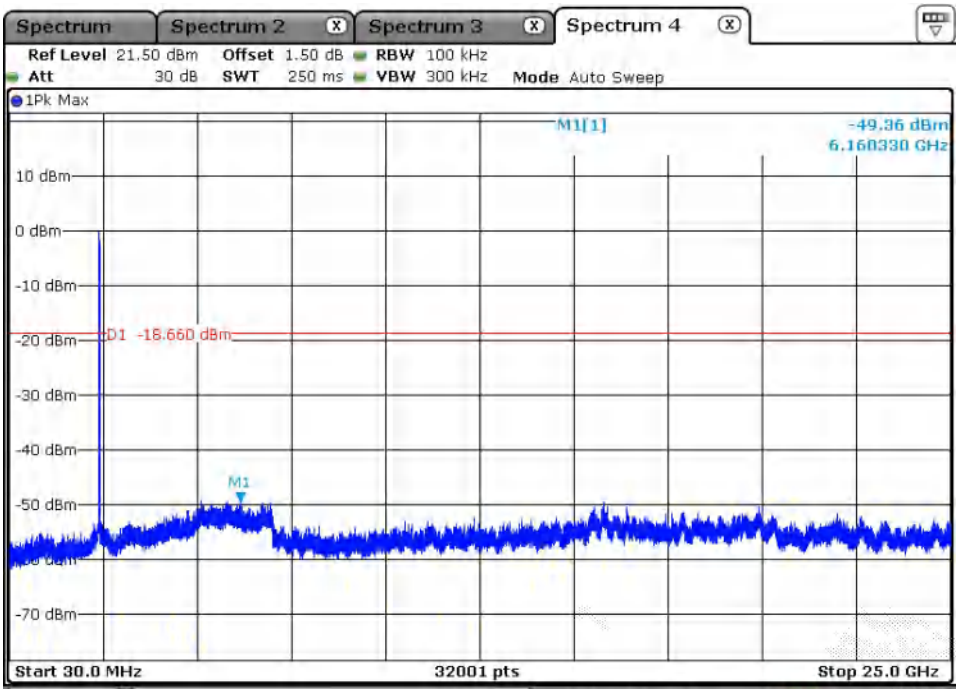
High Channel:

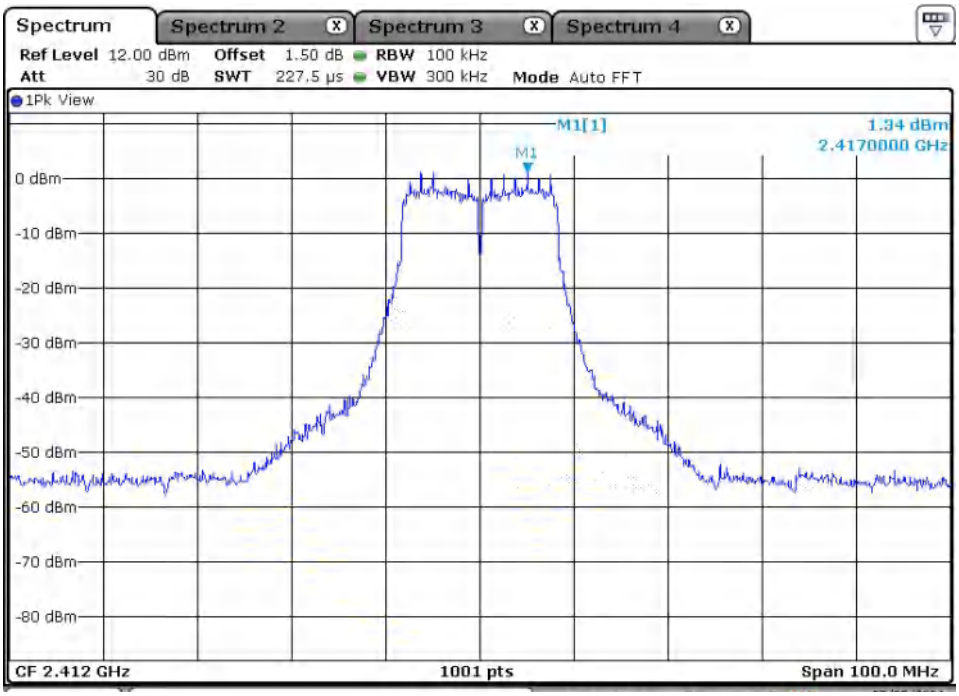


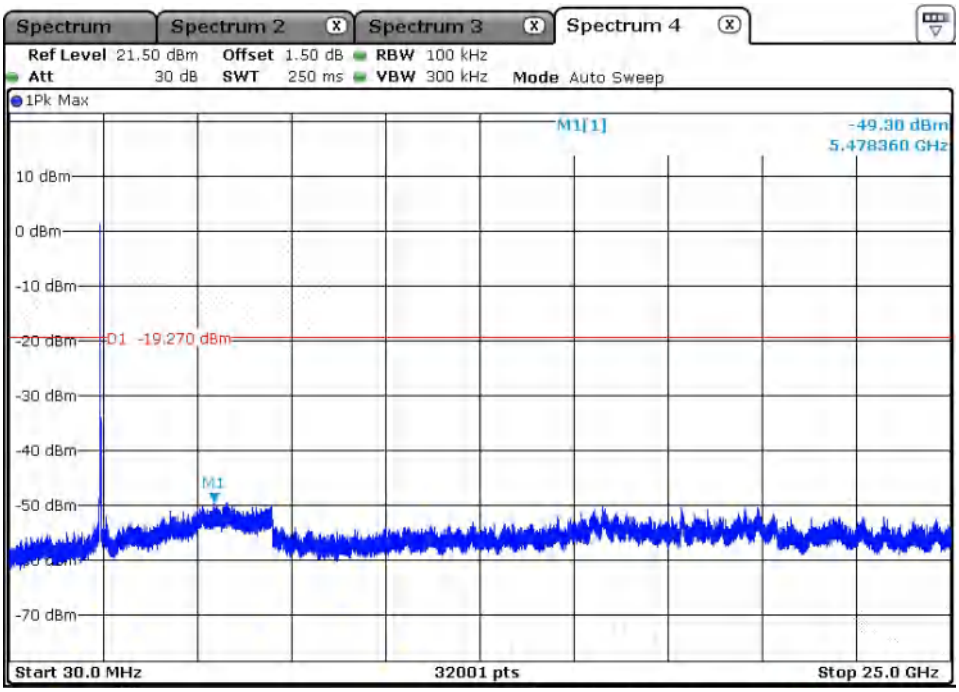
**Wi-Fi 802.11 g mode, Conducted Spurious Emission**

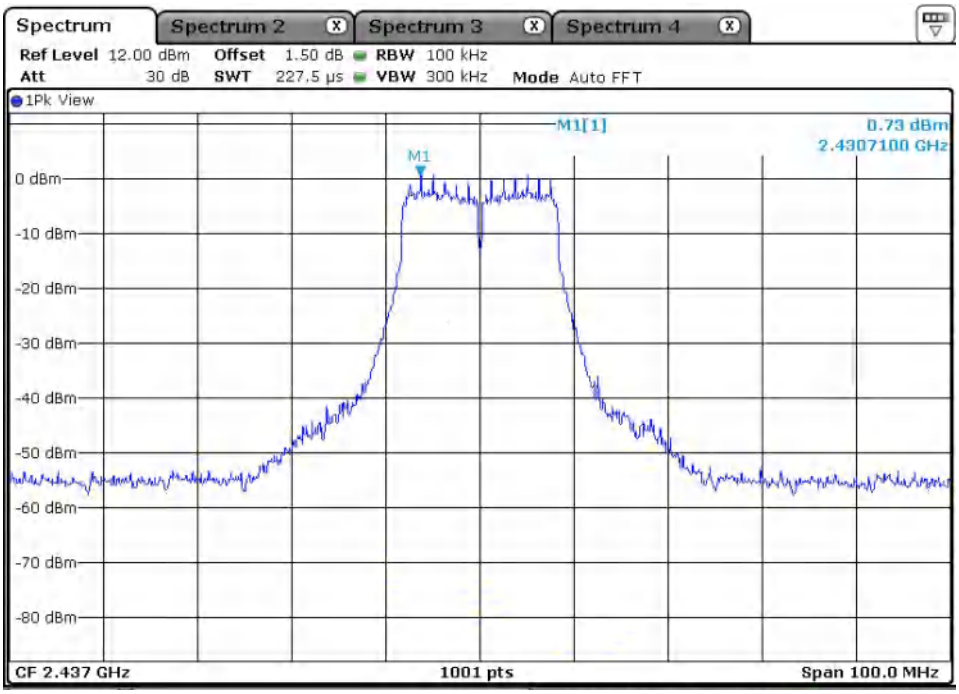
Low Channel:



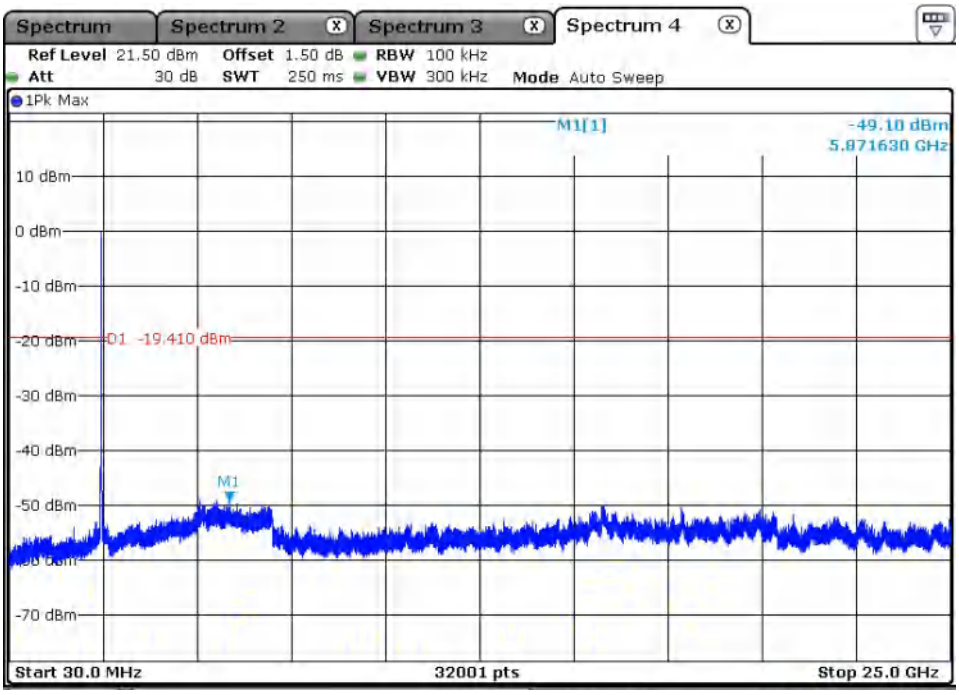



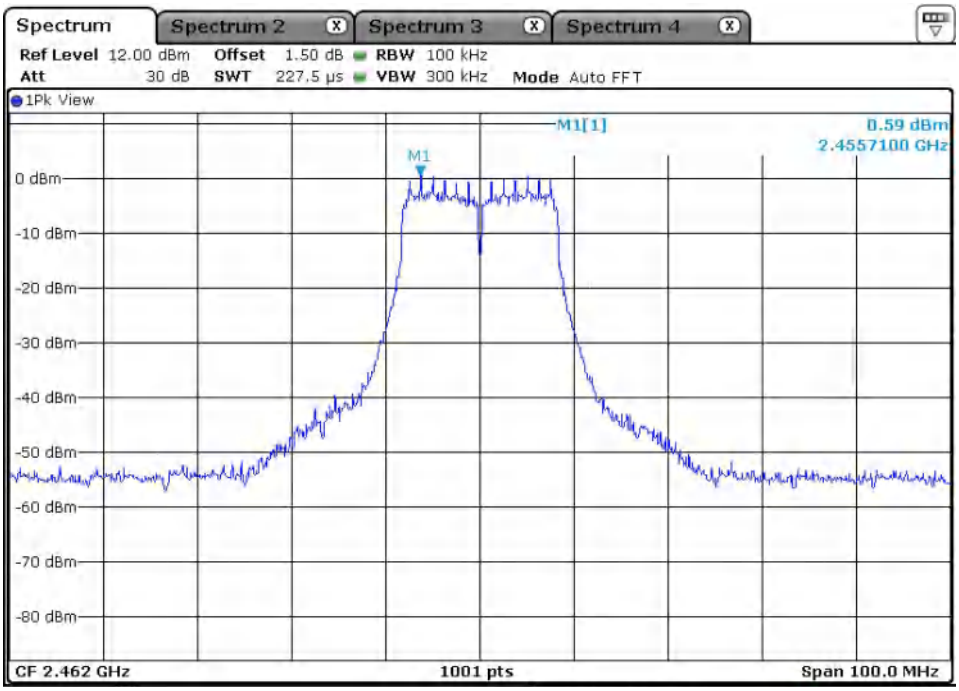
Middle Channel:



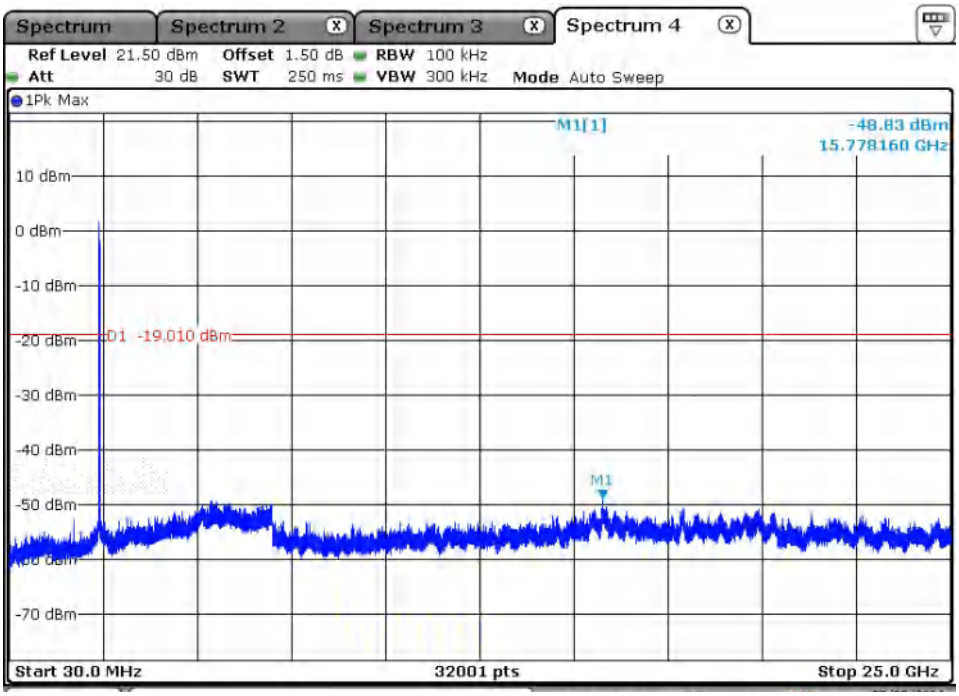
High Channel:

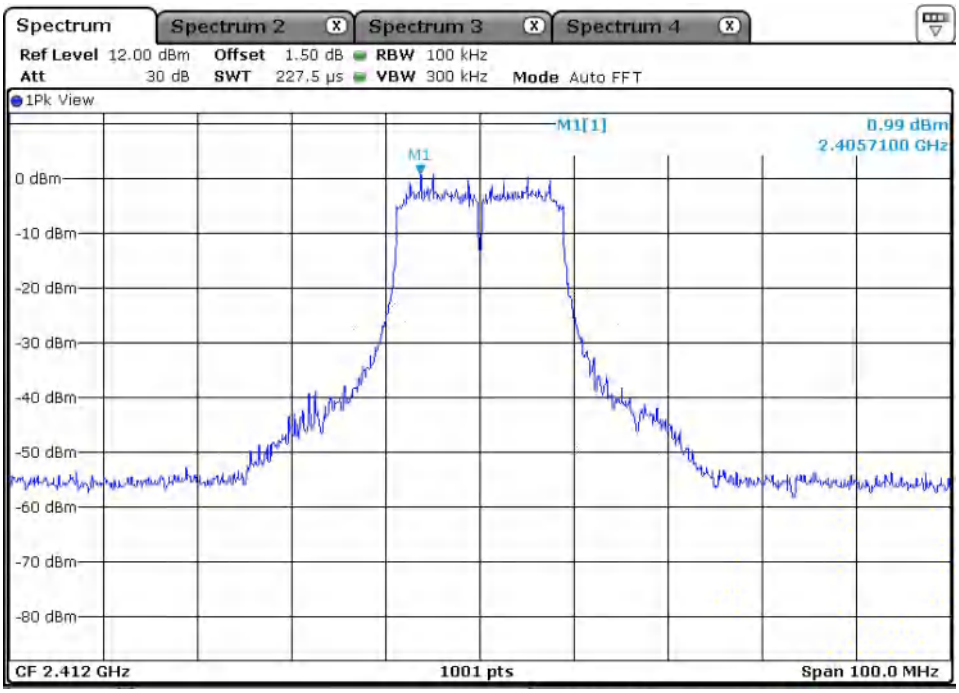


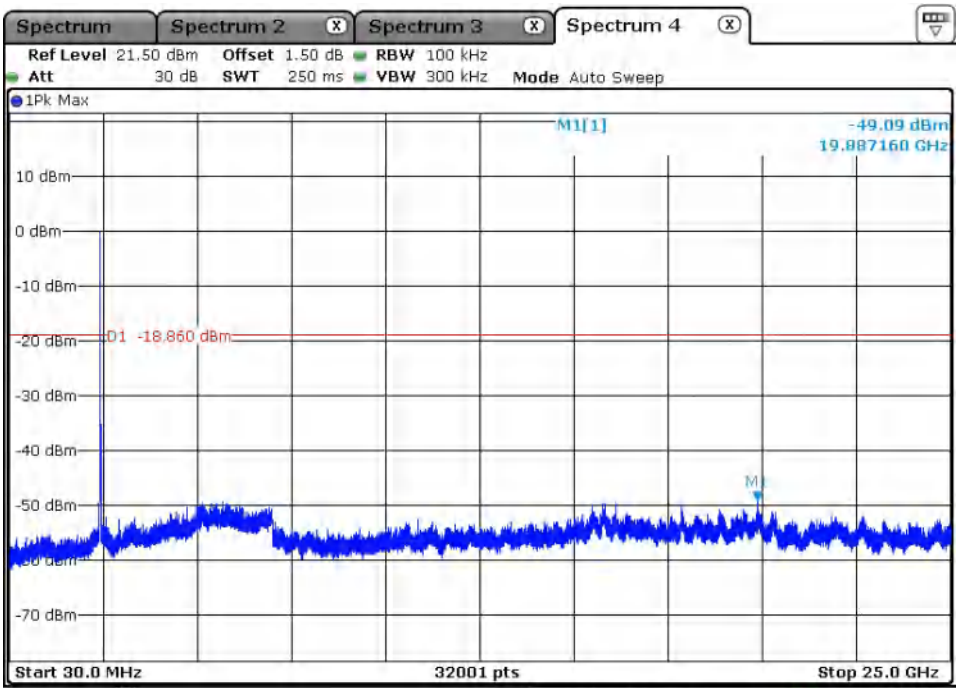
**Wi-Fi 802.11 n(HT20) mode, Conducted Spurious Emission**

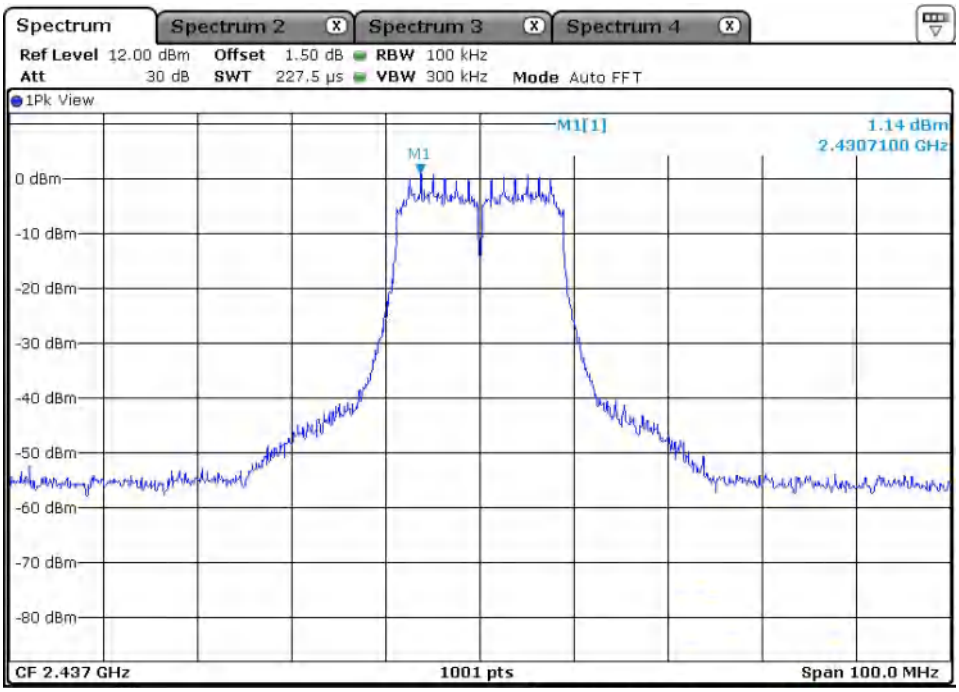
Low Channel:



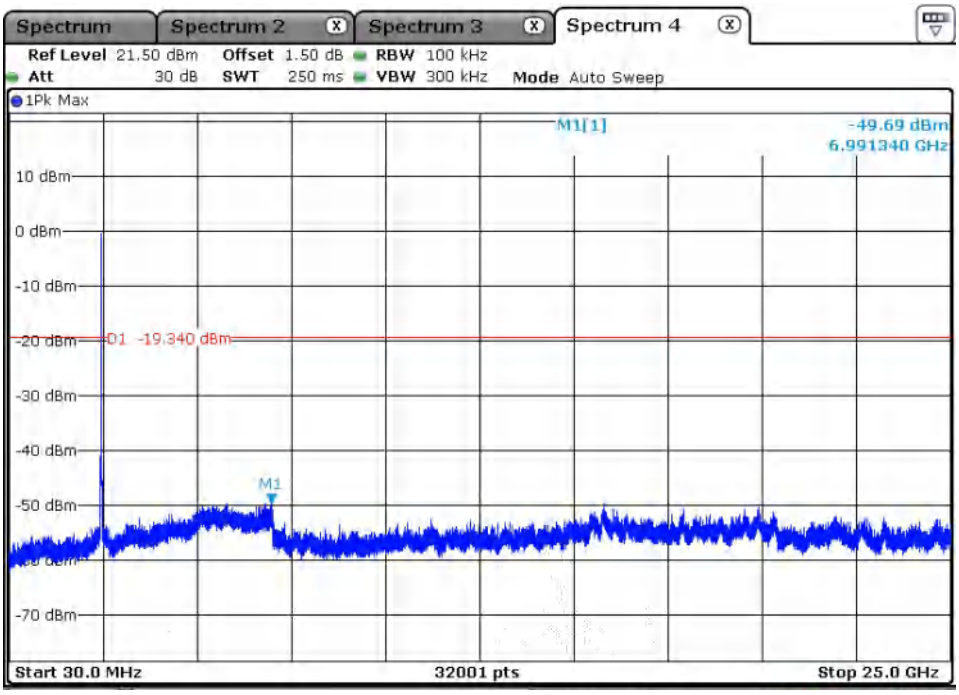



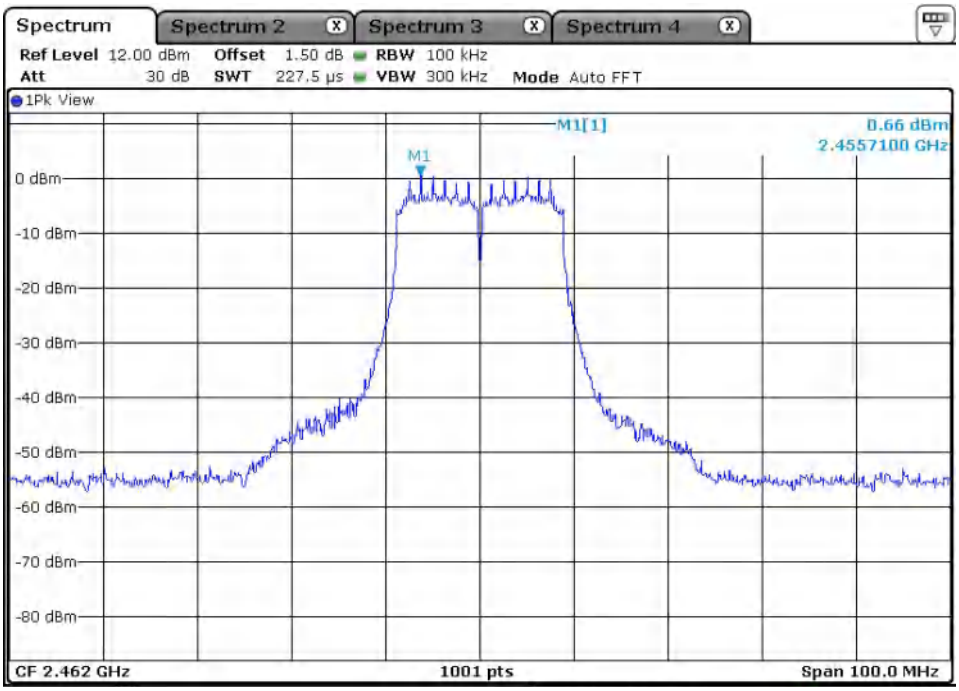
Middle Channel:



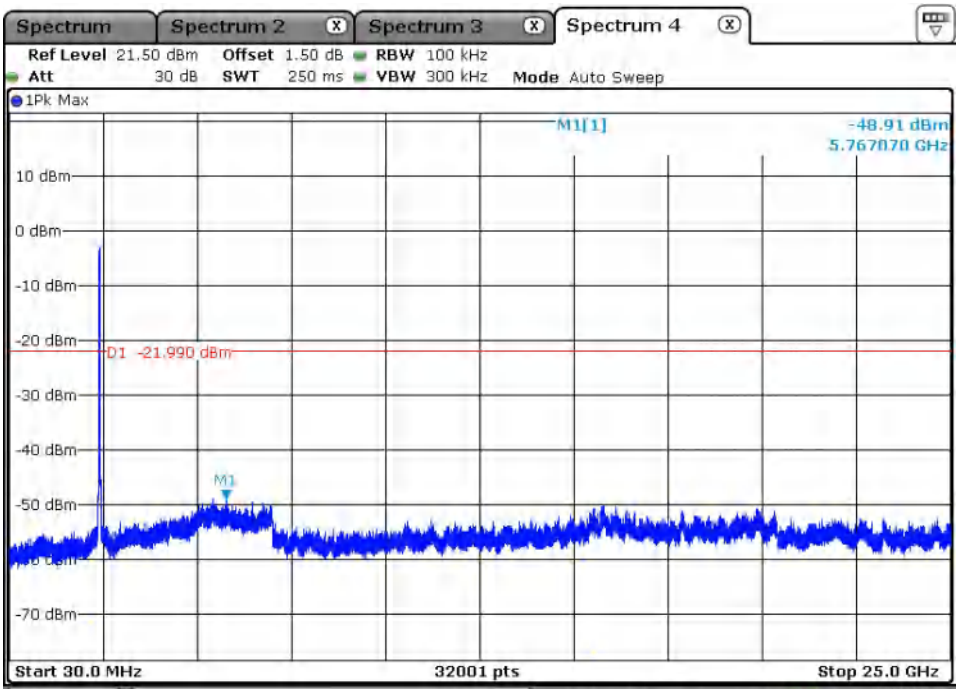
High Channel:

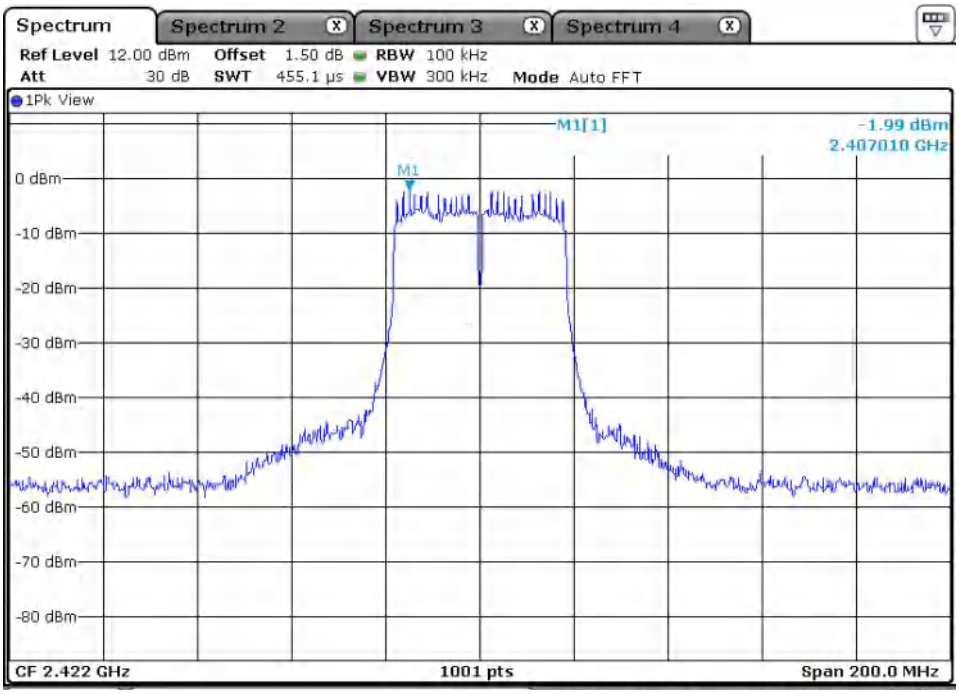


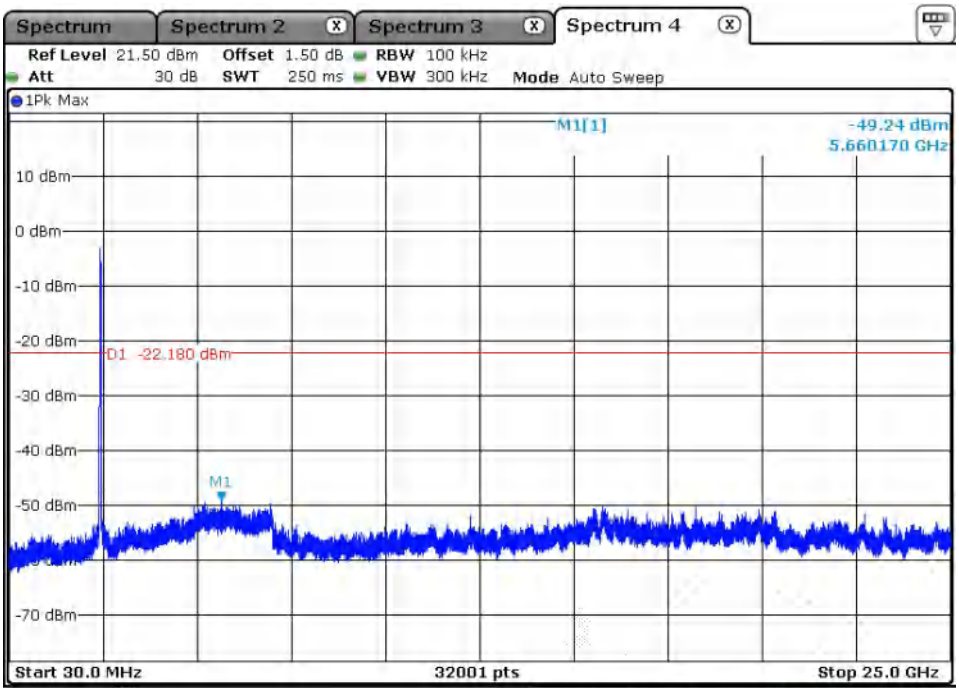
**Wi-Fi 802.11 n(HT40) mode, Conducted Spurious Emission**

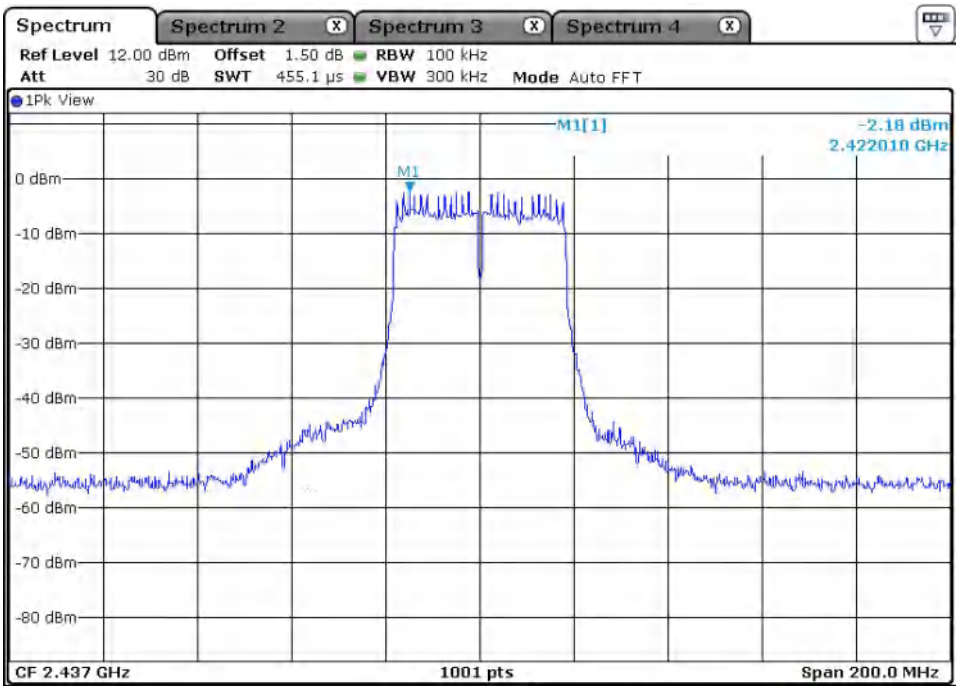
Low Channel:



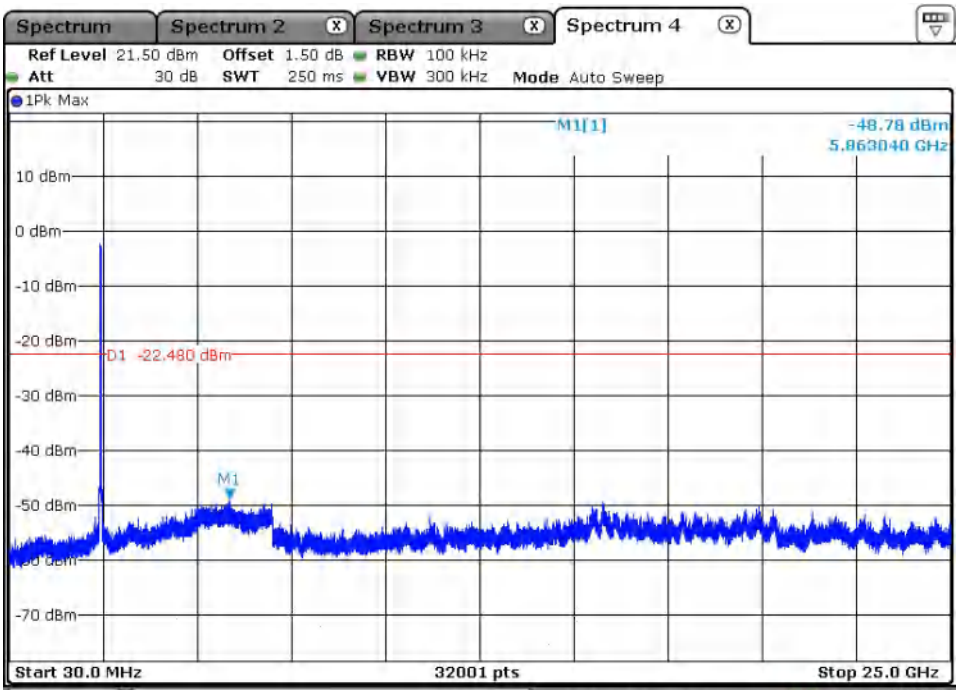



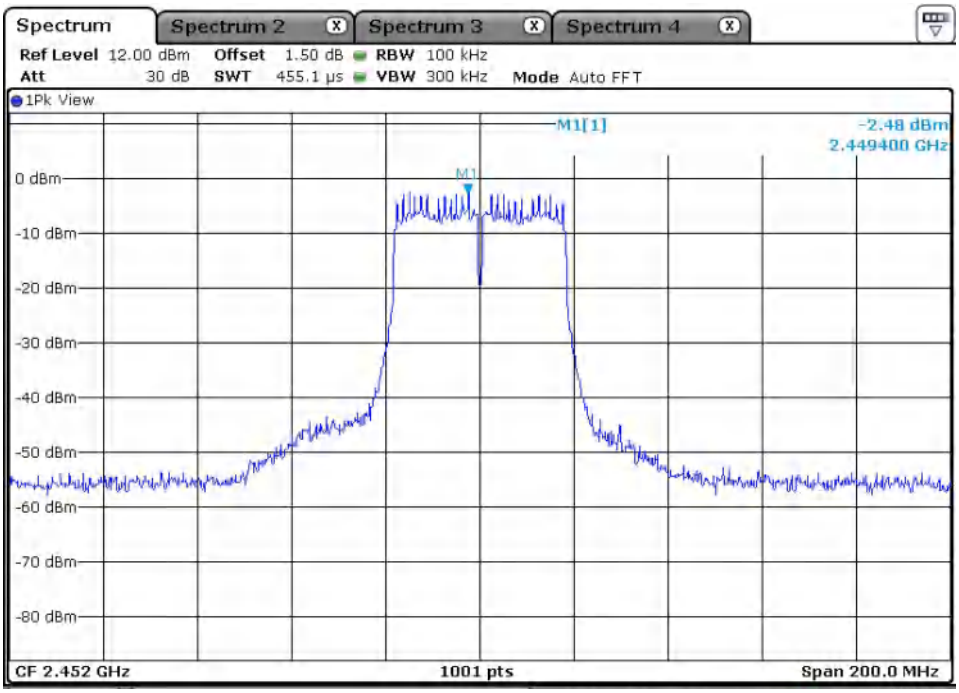
Middle Channel:



High Channel:



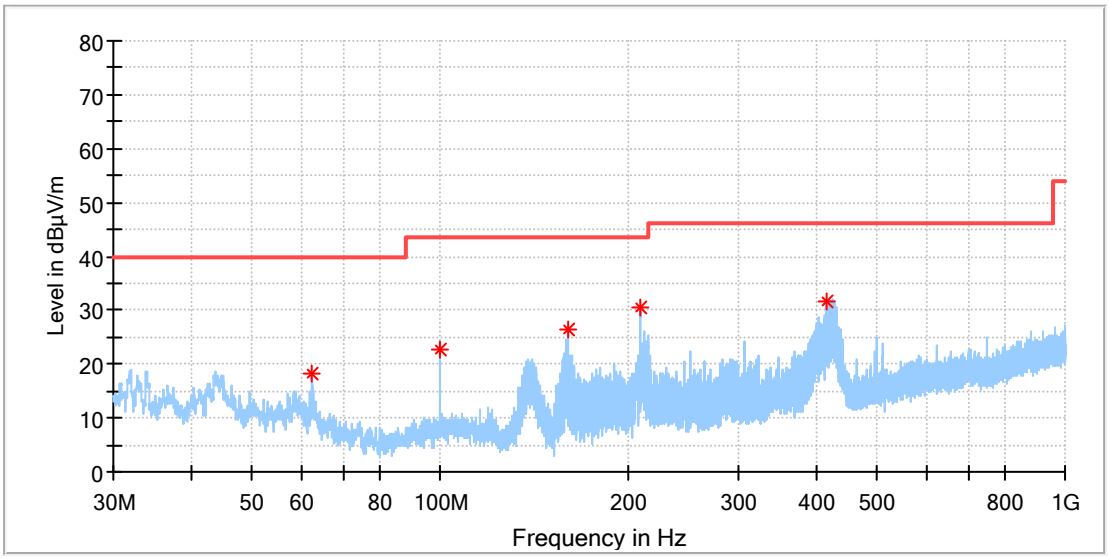
## Appendix B.5: Test Results of Radiated Spurious Emissions

Note:
1) This testing was carried out on different modulations, but only the worst case was presented in this report.
2) Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

**30MHz - 1GHz (Worst case)**

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch6 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

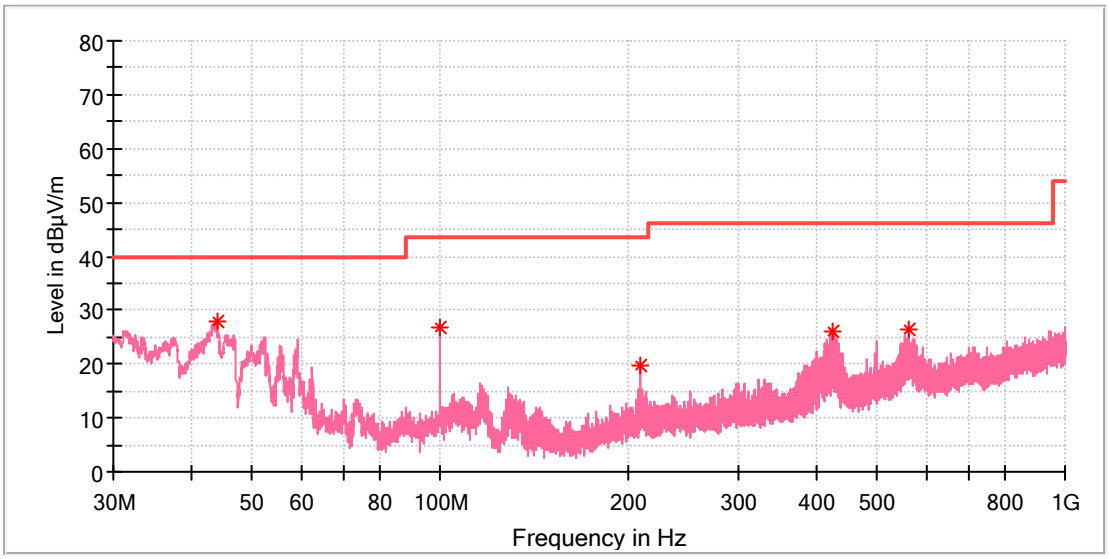



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|
| 62.495000 | 18.28 | 40.00 | 21.72 | 100.0 | H | 219.0 | -19.9 |
| 99.989231 | 22.64 | 43.50 | 20.86 | 100.0 | H | 268.0 | -19.3 |
| 159.756154 | 26.26 | 43.50 | 17.24 | 100.0 | H | 50.0 | -22.0 |
| 209.002308 | 30.60 | 43.50 | 12.90 | 100.0 | H | 227.0 | -19.2 |
| 414.493077 | 31.56 | 46.00 | 14.44 | 100.0 | H | 341.0 | -13.8 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch6 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |




# Critical_Freqs

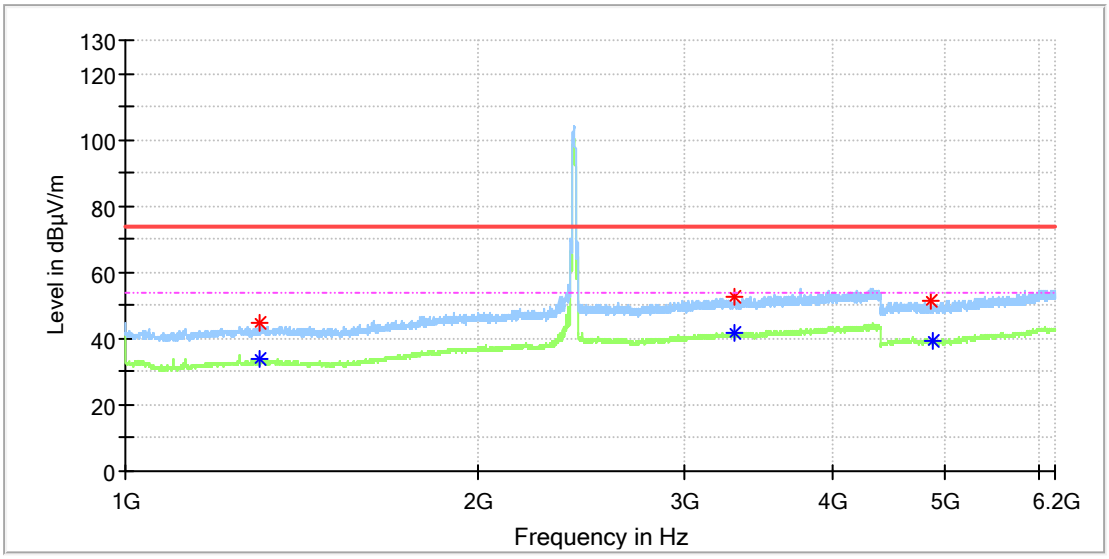
| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|
| 44.027692 | 28.03 | 40.00 | 11.97 | 100.0 | V | 79.0 | -19.3 |
| 99.989231 | 26.91 | 43.50 | 16.59 | 100.0 | V | 310.0 | -19.3 |
| 208.890385 | 19.81 | 43.50 | 23.69 | 100.0 | V | 334.0 | -19.2 |
| 425.200385 | 26.10 | 46.00 | 19.90 | 100.0 | V | 137.0 | -13.7 |
| 561.000385 | 26.33 | 46.00 | 19.67 | 100.0 | V | 182.0 | -10.9 |

**1GHz - 18GHz**

Note: The highest waveform in the figure is Wi-Fi Fundamental.

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch6 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

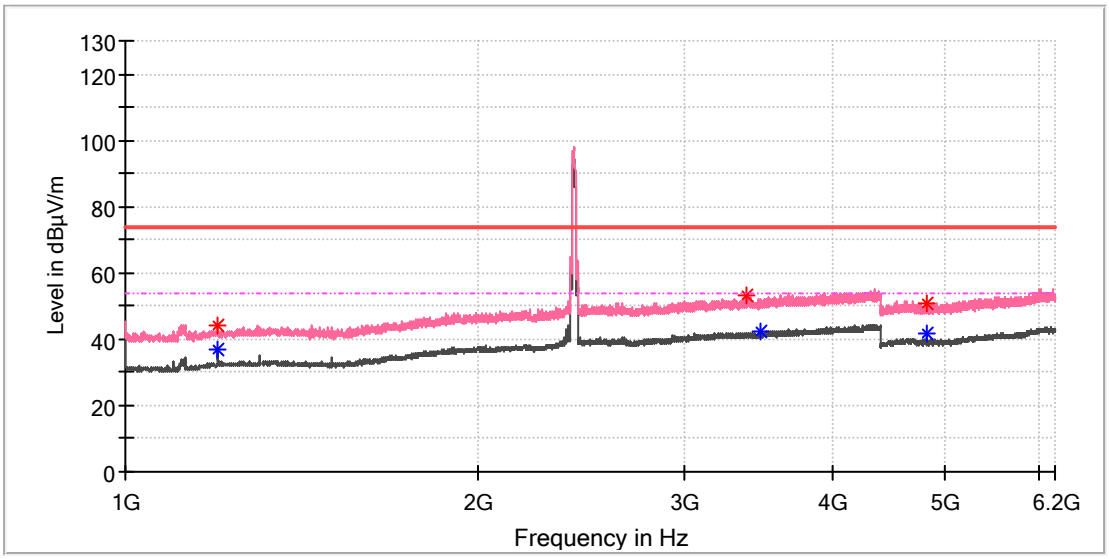



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 1299.000000 | 44.74 | --- | 74.00 | 29.26 | 150.0 | H | 0.0 | 1.9 |
| 1300.000000 | --- | 33.76 | 54.00 | 20.24 | 150.0 | H | 340.0 | 1.9 |
| 3302.000000 | 52.38 | --- | 74.00 | 21.62 | 150.0 | H | 241.0 | 8.6 |
| 3308.000000 | --- | 41.70 | 54.00 | 12.30 | 150.0 | H | 224.0 | 8.6 |
| 4857.500000 | 51.26 | --- | 74.00 | 22.74 | 150.0 | H | 98.0 | 11.8 |
| 4870.000000 | --- | 39.44 | 54.00 | 14.56 | 150.0 | H | 33.0 | 11.8 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch6 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

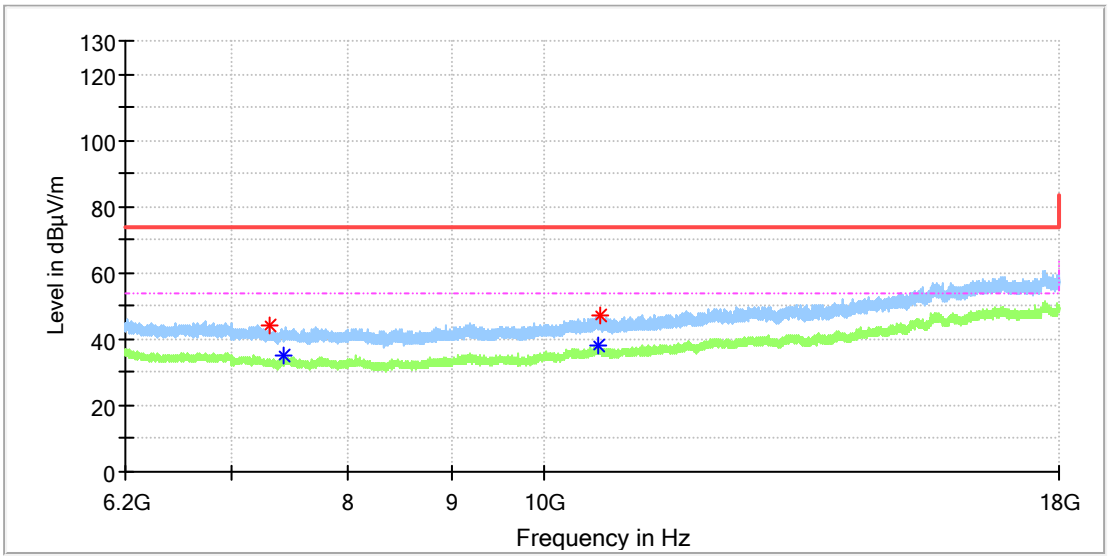



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 1200.000000 | --- | 36.87 | 54.00 | 17.13 | 150.0 | V | 198.0 | 1.1 |
| 1200.000000 | 44.05 | --- | 74.00 | 29.95 | 150.0 | V | 198.0 | 1.1 |
| 3385.000000 | 52.95 | --- | 74.00 | 21.05 | 150.0 | V | 277.0 | 8.7 |
| 3484.500000 | --- | 42.33 | 54.00 | 11.67 | 150.0 | V | 0.0 | 8.9 |
| 4824.000000 | --- | 41.64 | 54.00 | 12.36 | 150.0 | V | 198.0 | 11.8 |
| 4825.000000 | 50.87 | --- | 74.00 | 23.13 | 150.0 | V | 187.0 | 11.8 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch6 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

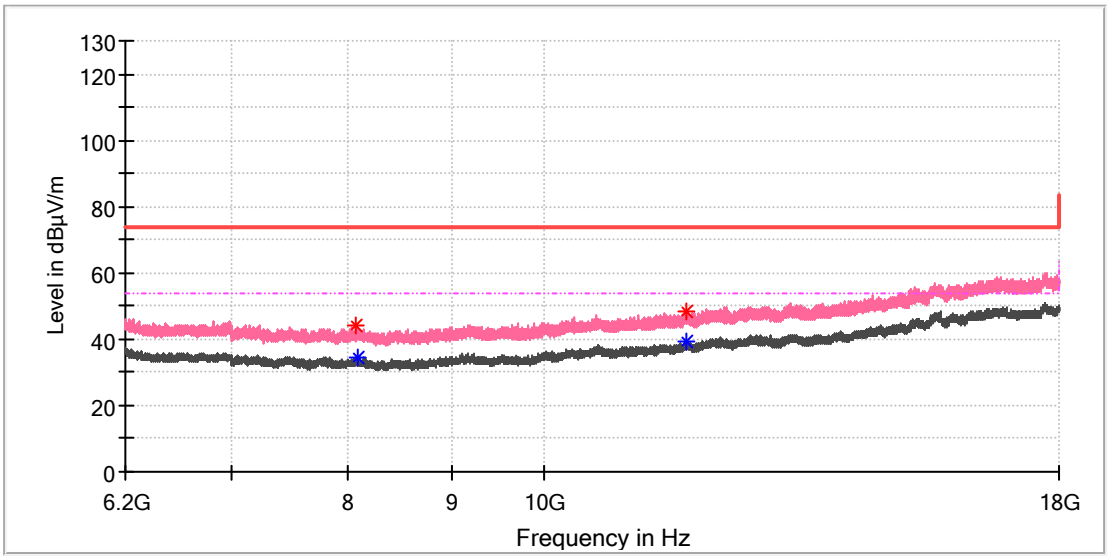



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 7304.775000 | 44.08 | --- | 74.00 | 29.92 | 150.0 | H | 90.0 | 8.3 |
| 7424.741667 | --- | 34.82 | 54.00 | 19.18 | 150.0 | H | 296.0 | 8.4 |
| 10629.916667 | --- | 38.06 | 54.00 | 15.94 | 150.0 | H | 296.0 | 12.0 |
| 10667.283333 | 47.28 | --- | 74.00 | 26.72 | 150.0 | H | 136.0 | 11.9 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch6 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

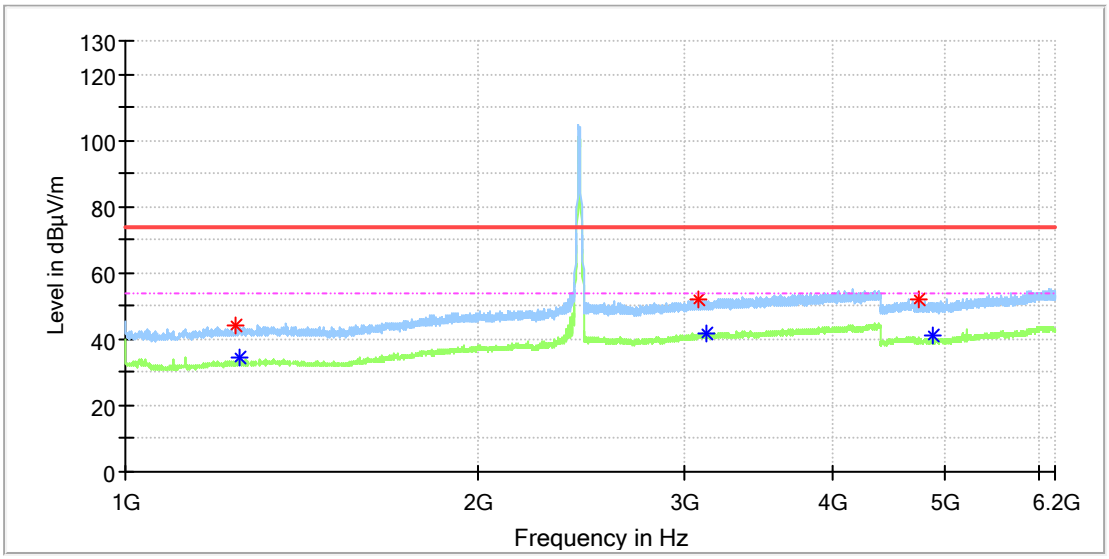



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 8070.300000 | 44.12 | --- | 74.00 | 29.88 | 150.0 | V | 126.0 | 8.9 |
| 8086.033333 | --- | 34.53 | 54.00 | 19.47 | 150.0 | V | 318.0 | 8.9 |
| 11767.141667 | --- | 39.54 | 54.00 | 14.46 | 150.0 | V | 249.0 | 13.4 |
| 11775.008333 | 48.43 | --- | 74.00 | 25.57 | 150.0 | V | 168.0 | 13.4 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch6 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

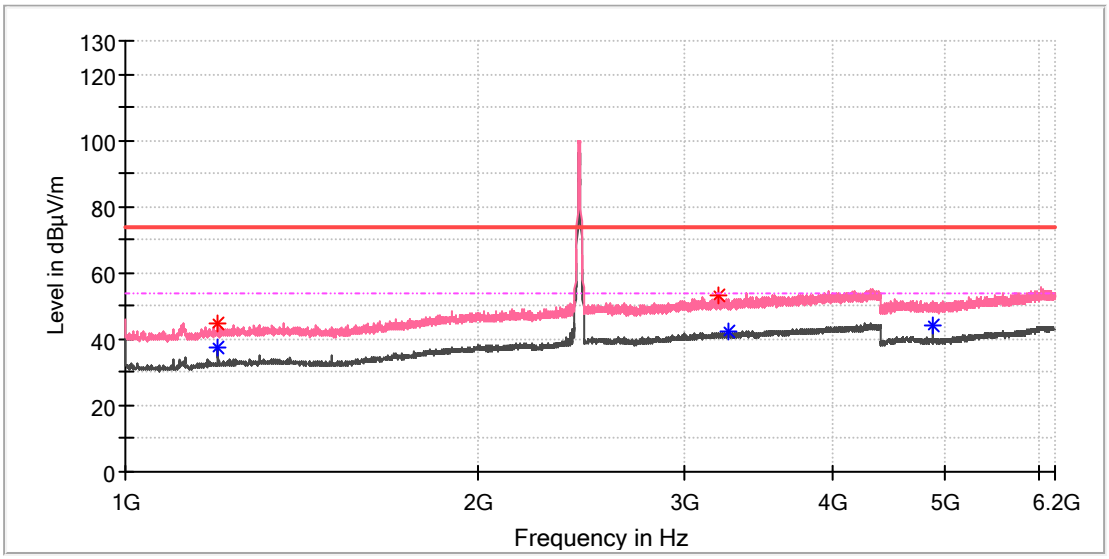



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 1242.500000 | 43.84 | --- | 74.00 | 30.16 | 150.0 | H | 137.0 | 1.8 |
| 1250.000000 | --- | 34.42 | 54.00 | 19.58 | 150.0 | H | 211.0 | 1.9 |
| 3084.000000 | 52.26 | --- | 74.00 | 21.74 | 150.0 | H | 239.0 | 8.6 |
| 3130.000000 | --- | 41.49 | 54.00 | 12.51 | 150.0 | H | 256.0 | 8.6 |
| 4747.000000 | 52.30 | --- | 74.00 | 21.70 | 150.0 | H | 74.0 | 11.9 |
| 4874.000000 | --- | 41.38 | 54.00 | 12.62 | 150.0 | H | 250.0 | 11.8 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch6 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

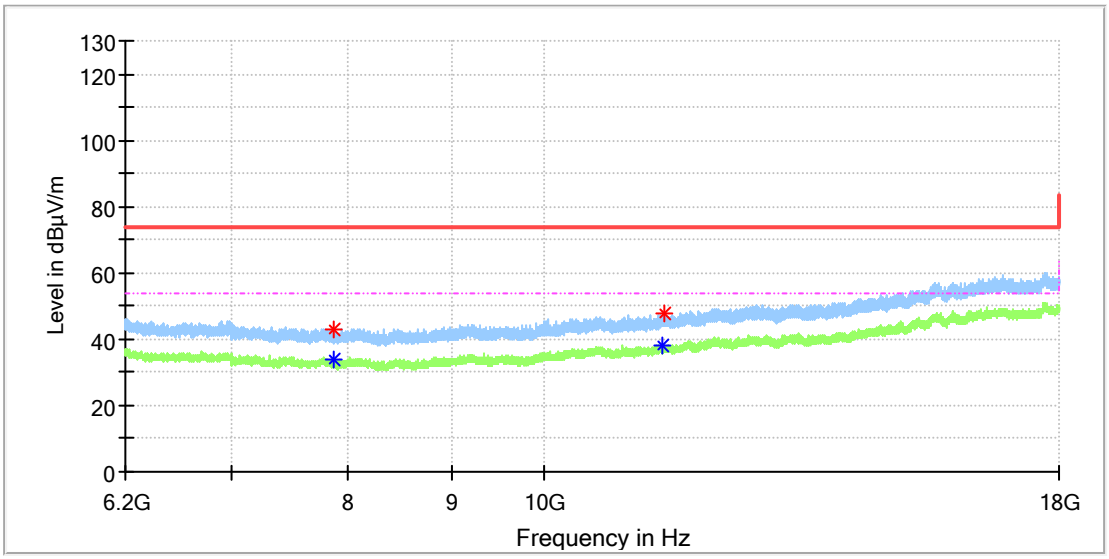



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 1200.000000 | --- | 37.36 | 54.00 | 16.64 | 150.0 | V | 226.0 | 1.1 |
| 1200.000000 | 44.56 | --- | 74.00 | 29.44 | 150.0 | V | 226.0 | 1.1 |
| 3200.000000 | 52.98 | --- | 74.00 | 21.02 | 150.0 | V | 128.0 | 8.6 |
| 3262.500000 | --- | 42.24 | 54.00 | 11.76 | 150.0 | V | 100.0 | 8.5 |
| 4874.000000 | --- | 44.04 | 54.00 | 9.96 | 150.0 | V | 180.0 | 11.8 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch6 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

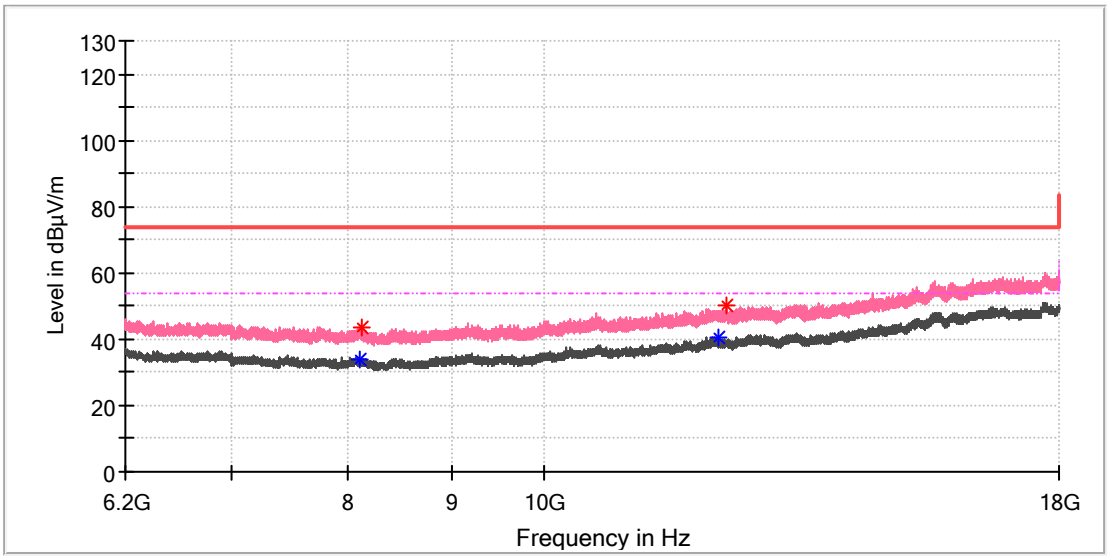



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 7869.700000 | 43.16 | --- | 74.00 | 30.84 | 150.0 | H | 269.0 | 8.6 |
| 7872.650000 | --- | 33.61 | 54.00 | 20.39 | 150.0 | H | 332.0 | 8.6 |
| 11453.458333 | --- | 38.19 | 54.00 | 15.81 | 150.0 | H | 215.0 | 13.4 |
| 11476.075000 | 47.98 | --- | 74.00 | 26.02 | 150.0 | H | 300.0 | 13.7 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch6 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

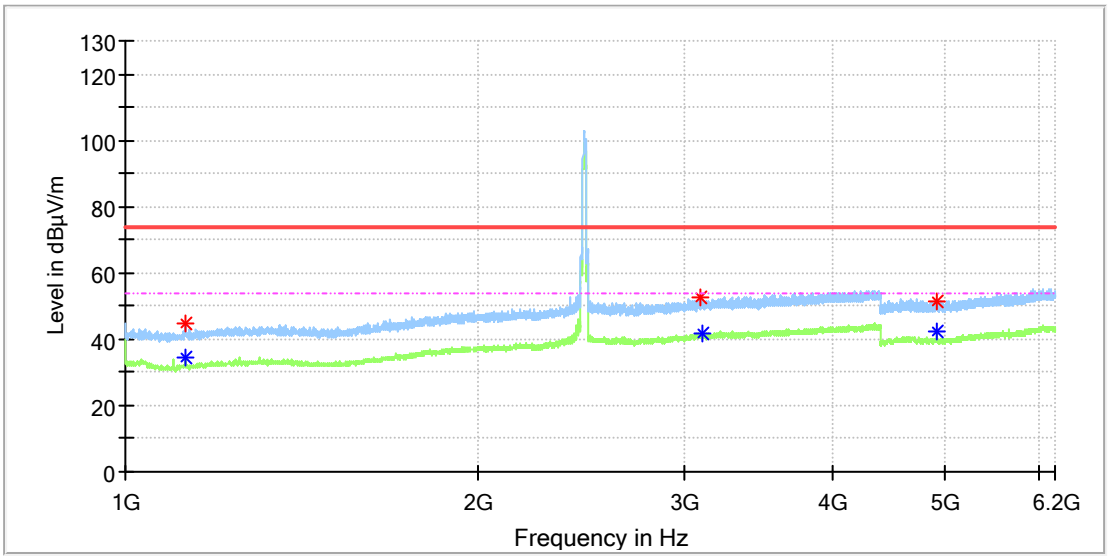



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 8100.783333 | --- | 33.95 | 54.00 | 20.05 | 150.0 | V | 0.0 | 8.9 |
| 8122.416667 | 43.53 | --- | 74.00 | 30.47 | 150.0 | V | 343.0 | 8.9 |
| 12212.100000 | --- | 40.79 | 54.00 | 13.21 | 150.0 | V | 136.0 | 14.7 |
| 12304.041667 | 49.89 | --- | 74.00 | 24.11 | 150.0 | V | 84.0 | 14.9 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch11 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

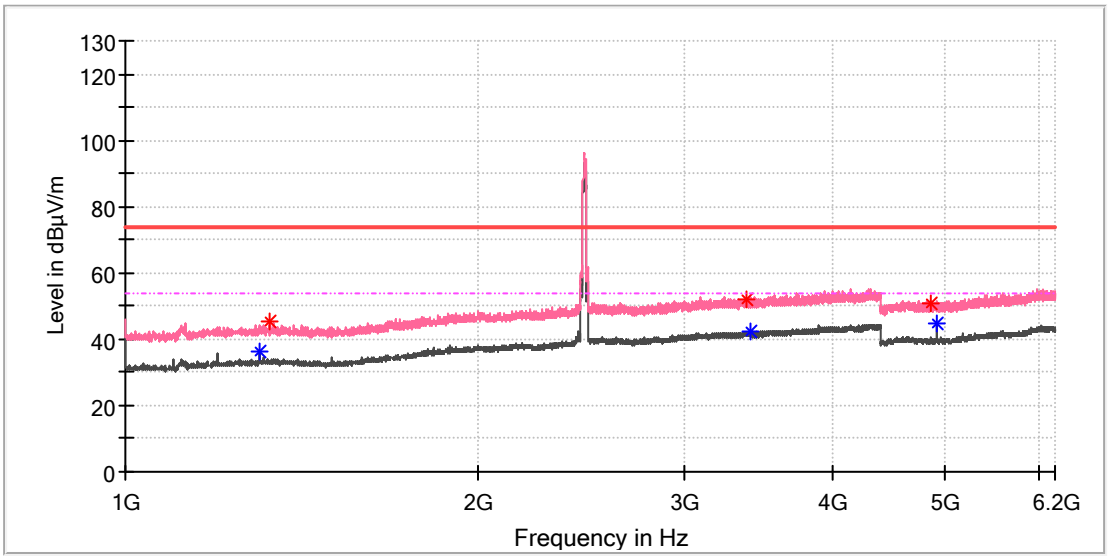



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 1124.500000 | --- | 34.40 | 54.00 | 19.60 | 150.0 | H | 316.0 | 0.3 |
| 1124.500000 | 44.51 | --- | 74.00 | 29.49 | 150.0 | H | 316.0 | 0.3 |
| 3095.000000 | 52.46 | --- | 74.00 | 21.54 | 150.0 | H | 130.0 | 8.7 |
| 3099.500000 | --- | 41.44 | 54.00 | 12.56 | 150.0 | H | 124.0 | 8.7 |
| 4913.000000 | 51.23 | --- | 74.00 | 22.77 | 150.0 | H | 237.0 | 11.8 |
| 4924.000000 | --- | 42.36 | 54.00 | 11.64 | 150.0 | H | 159.0 | 11.8 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch11 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

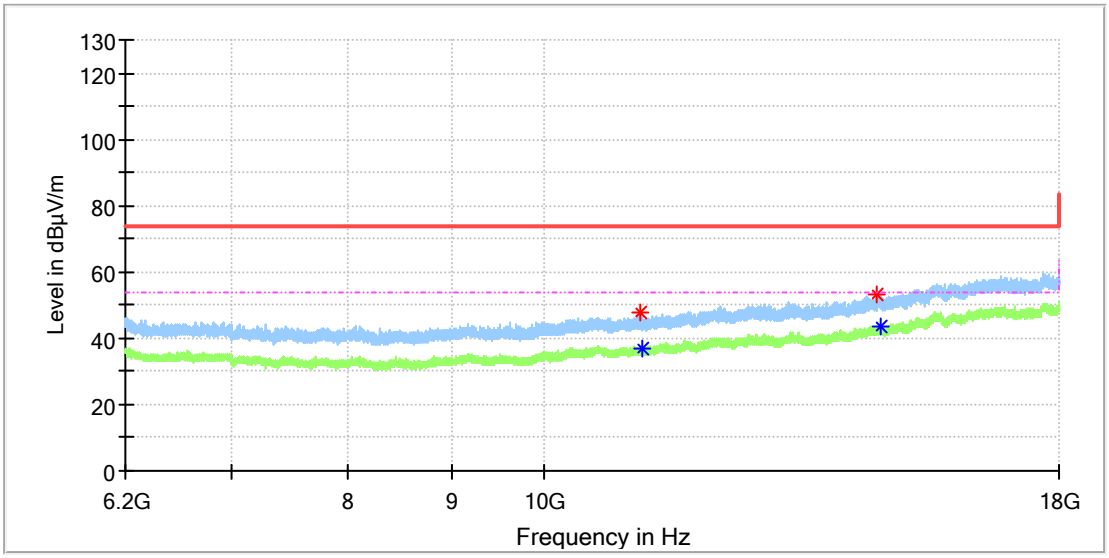



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 1299.500000 | --- | 36.35 | 54.00 | 17.65 | 150.0 | V | 265.0 | 1.9 |
| 1329.500000 | 45.13 | --- | 74.00 | 28.87 | 150.0 | V | 311.0 | 2.0 |
| 3378.500000 | 52.20 | --- | 74.00 | 21.80 | 150.0 | V | 175.0 | 8.6 |
| 3407.500000 | --- | 42.39 | 54.00 | 11.61 | 150.0 | V | 136.0 | 8.7 |
| 4857.000000 | 51.06 | --- | 74.00 | 22.94 | 150.0 | V | 142.0 | 11.8 |
| 4924.000000 | --- | 44.82 | 54.00 | 9.18 | 150.0 | V | 181.0 | 11.8 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch11 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.407 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

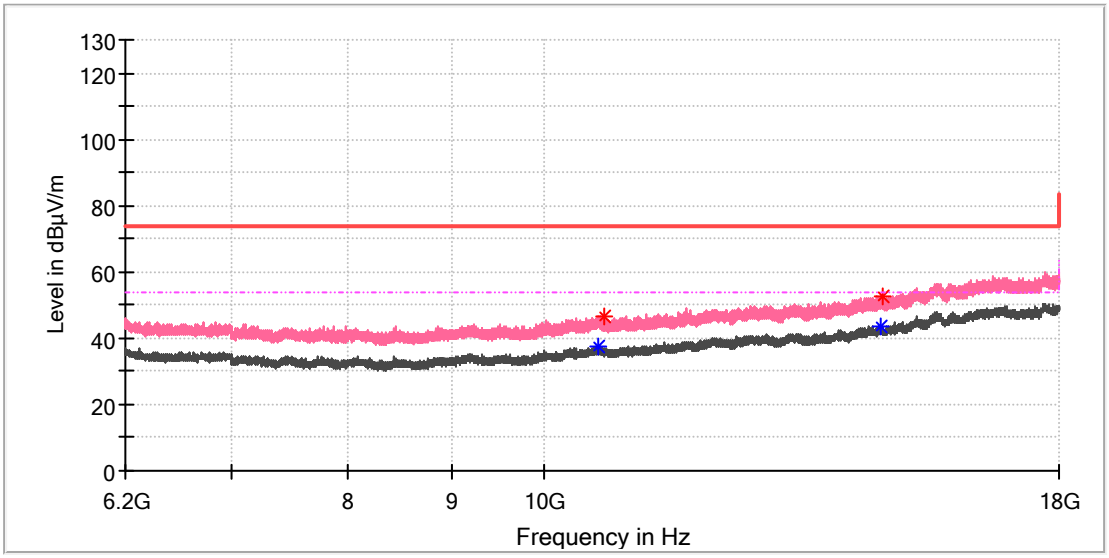



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 11149.608333 | 47.64 | --- | 74.00 | 26.36 | 150.0 | H | 44.0 | 12.5 |
| 11184.516667 | --- | 37.03 | 54.00 | 16.97 | 150.0 | H | 129.0 | 12.6 |
| 14631.100000 | 53.29 | --- | 74.00 | 20.71 | 150.0 | H | 341.0 | 17.2 |
| 14695.508333 | --- | 43.65 | 54.00 | 10.35 | 150.0 | H | 275.0 | 17.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch11 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.407 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |



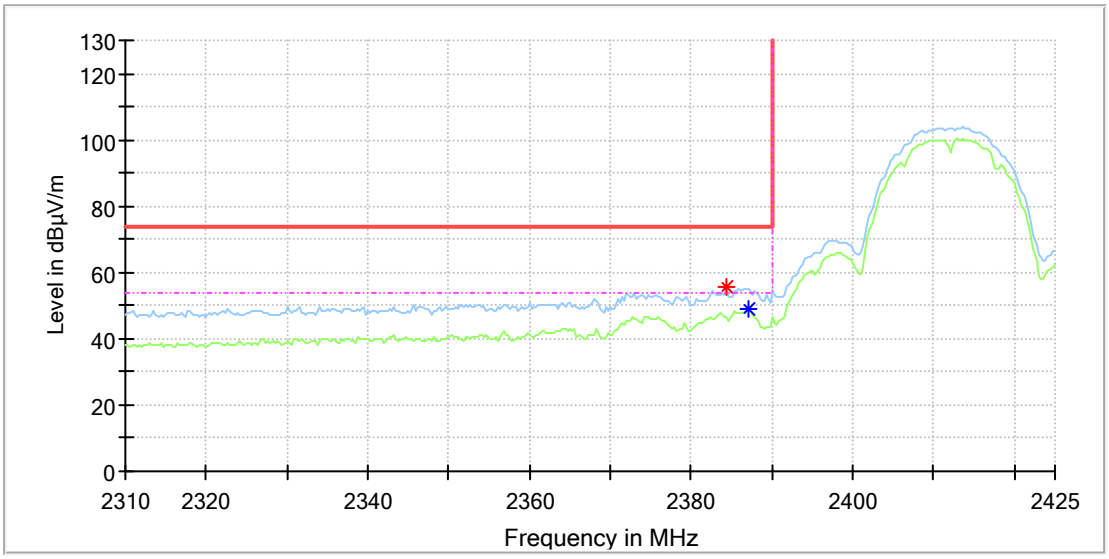

# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 10647.616667 | --- | 37.54 | 54.00 | 16.46 | 150.0 | V | 203.0 | 12.0 |
| 10707.108333 | 46.63 | --- | 74.00 | 27.37 | 150.0 | V | 349.0 | 11.9 |
| 14676.333333 | --- | 43.79 | 54.00 | 10.21 | 150.0 | V | 203.0 | 17.1 |
| 14721.566667 | 52.66 | --- | 74.00 | 21.34 | 150.0 | V | 290.0 | 17.0 |

## Appendix B.6: Test Results of Radiated Emissions in Restricted Bands

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch6 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

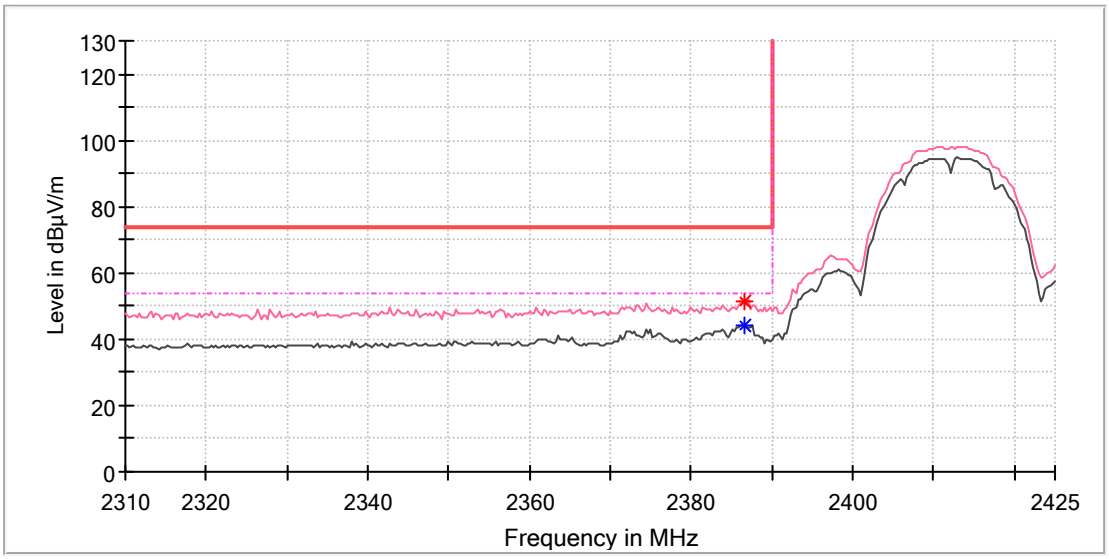



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2384.411765 | 55.68 | --- | 74.00 | 18.32 | 150.0 | H | 171.0 | 7.0 |
| 2387.058824 | --- | 48.81 | 54.00 | 5.19 | 150.0 | H | 229.0 | 7.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch6 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

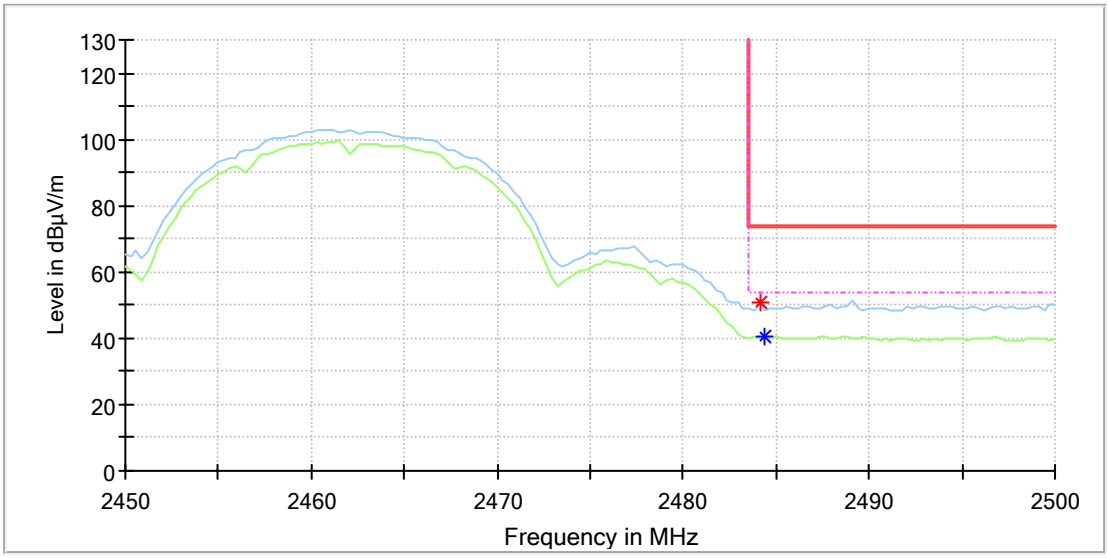



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2386.470588 | --- | 44.19 | 54.00 | 9.81 | 150.0 | V | 191.0 | 7.0 |
| 2386.470588 | 51.58 | --- | 74.00 | 22.42 | 150.0 | V | 191.0 | 7.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch11 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

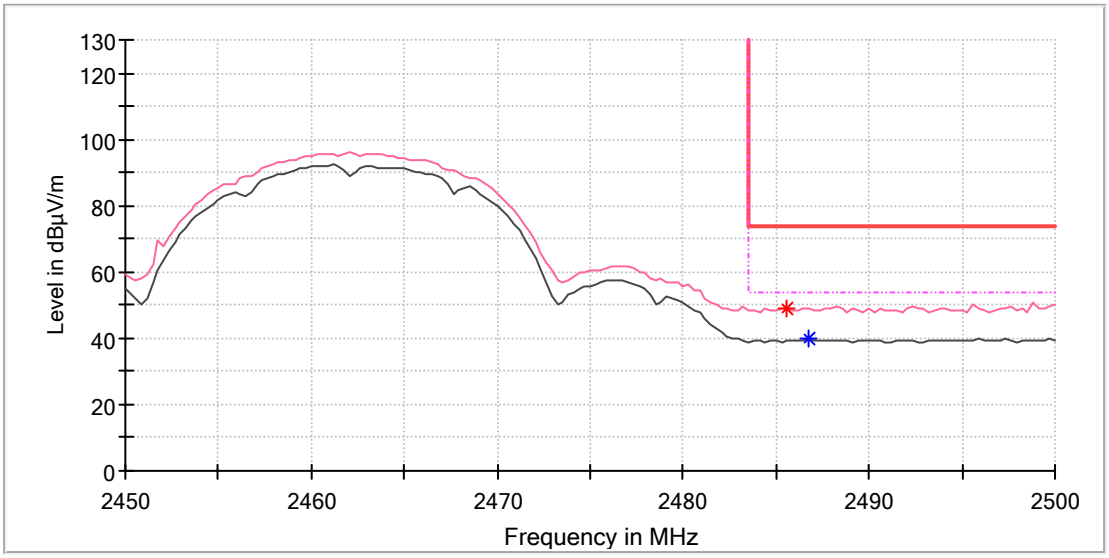



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2484.117647 | 50.54 | --- | 74.00 | 23.46 | 150.0 | H | 226.0 | 7.4 |
| 2484.411765 | --- | 40.42 | 54.00 | 13.58 | 150.0 | H | 212.0 | 7.4 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11B_Ch11 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

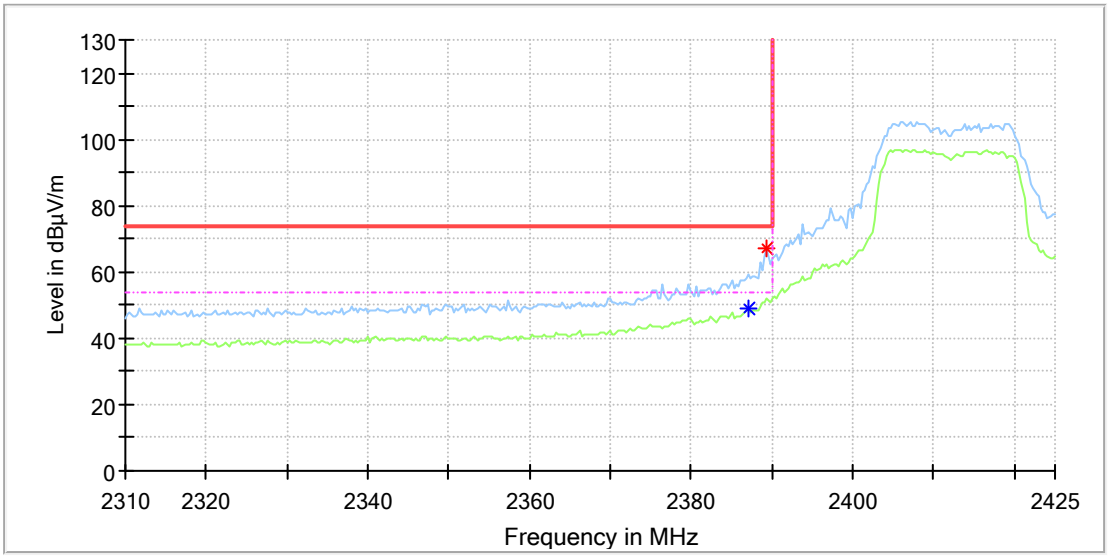



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2485.588235 | 49.12 | --- | 74.00 | 24.88 | 150.0 | V | 170.0 | 7.4 |
| 2486.764706 | --- | 39.77 | 54.00 | 14.23 | 150.0 | V | 259.0 | 7.4 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11G_Ch1 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

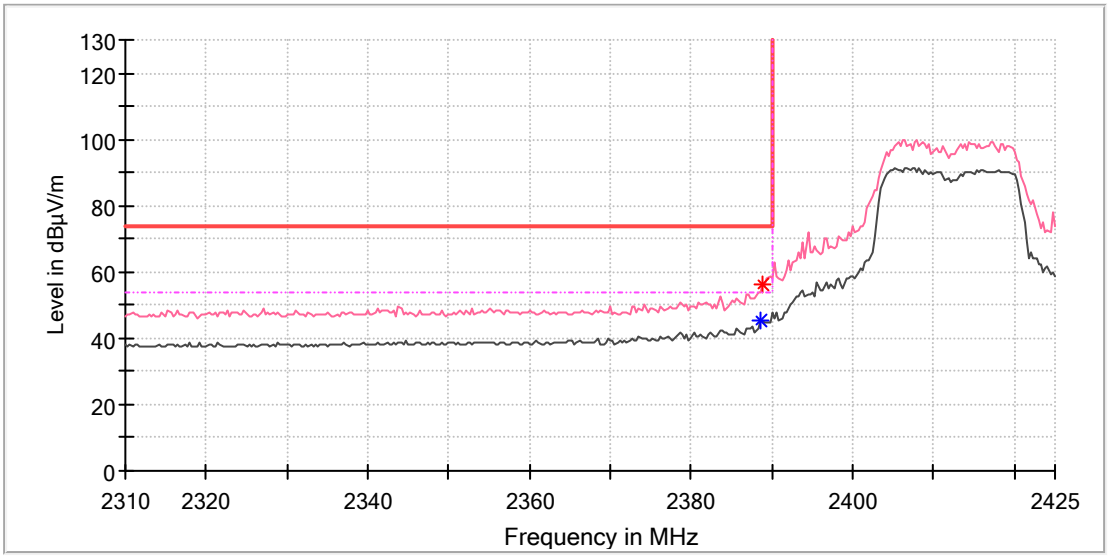



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2387.058824 | --- | 49.04 | 54.00 | 4.96 | 150.0 | H | 207.0 | 7.0 |
| 2389.411765 | 66.90 | --- | 74.00 | 7.10 | 150.0 | H | 178.0 | 7.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11G_Ch1 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

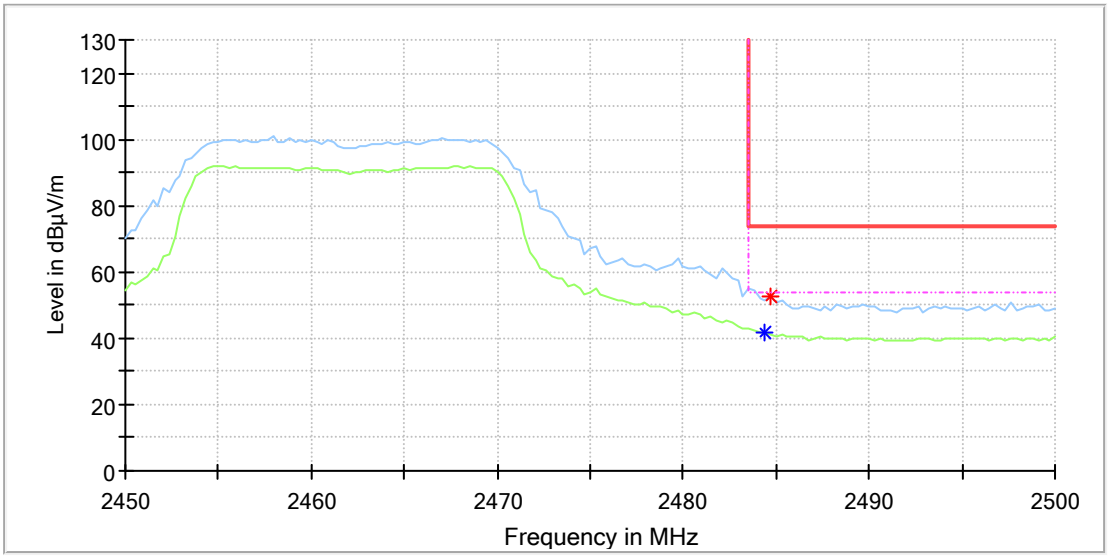



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2388.529412 | --- | 45.12 | 54.00 | 8.88 | 150.0 | V | 188.0 | 7.0 |
| 2388.823529 | 56.51 | --- | 74.00 | 17.49 | 150.0 | V | 188.0 | 7.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11G_Ch11 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

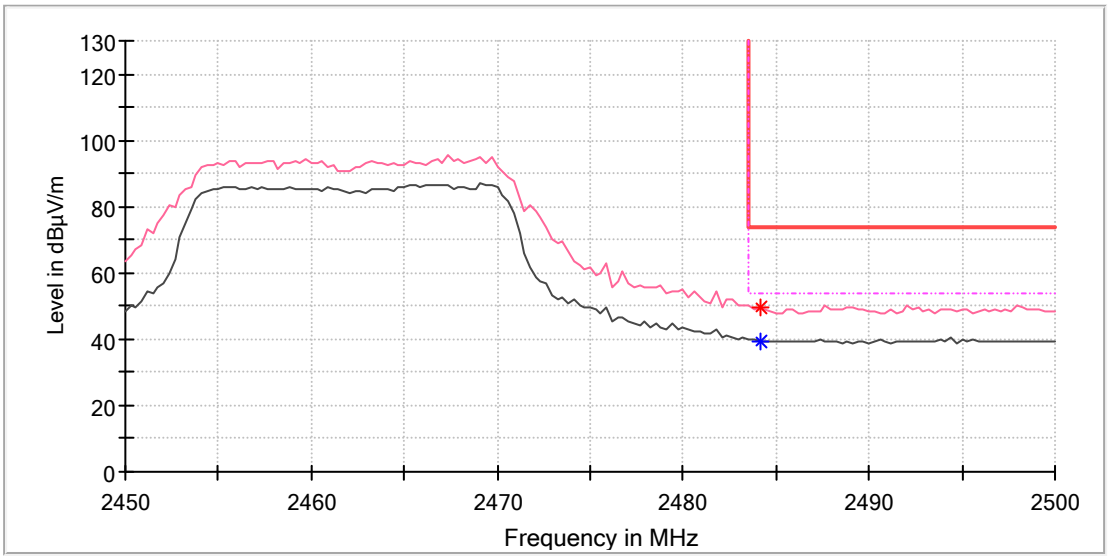



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2484.411765 | --- | 41.95 | 54.00 | 12.05 | 150.0 | H | 203.0 | 7.4 |
| 2484.705882 | 52.49 | --- | 74.00 | 21.51 | 150.0 | H | 214.0 | 7.4 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11G_Ch11 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

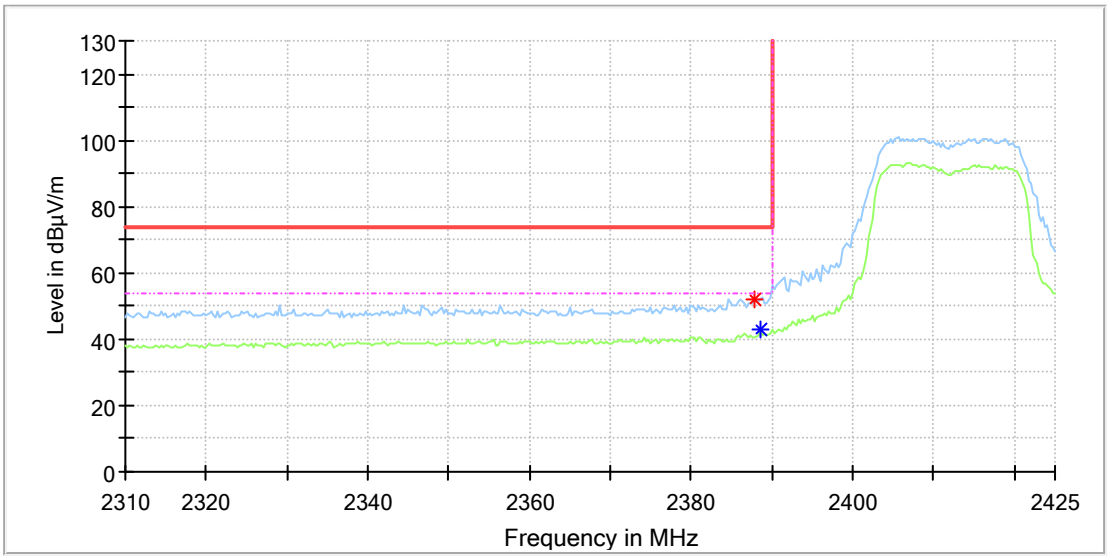



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2484.117647 | --- | 39.60 | 54.00 | 14.40 | 150.0 | V | 254.0 | 7.4 |
| 2484.117647 | 49.79 | --- | 74.00 | 24.21 | 150.0 | V | 254.0 | 7.4 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11N20_Ch1 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

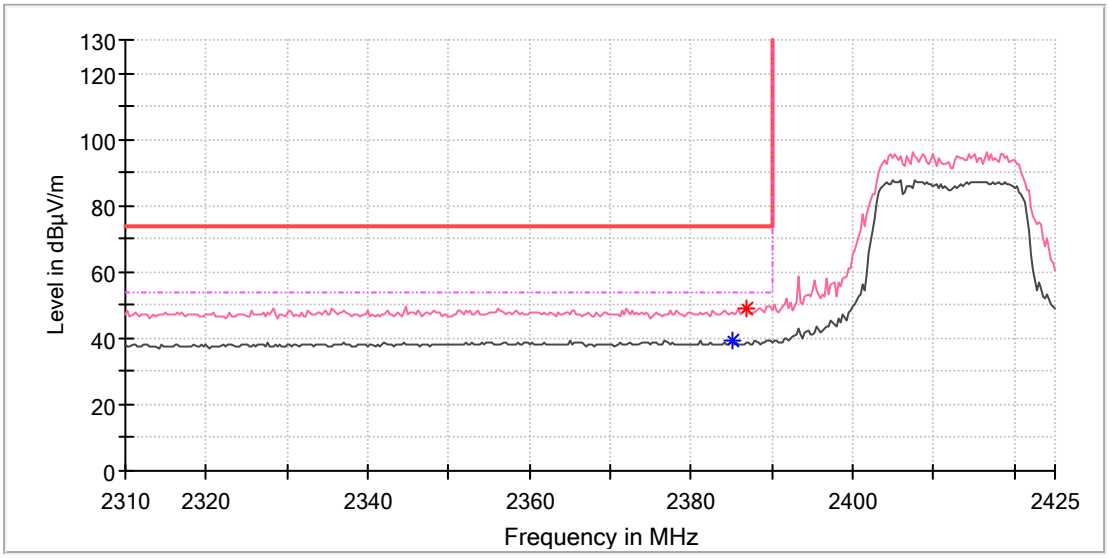



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2387.941177 | 52.14 | --- | 74.00 | 21.86 | 150.0 | H | 225.0 | 7.0 |
| 2388.529412 | --- | 43.07 | 54.00 | 10.93 | 150.0 | H | 225.0 | 7.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11N20_Ch1 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

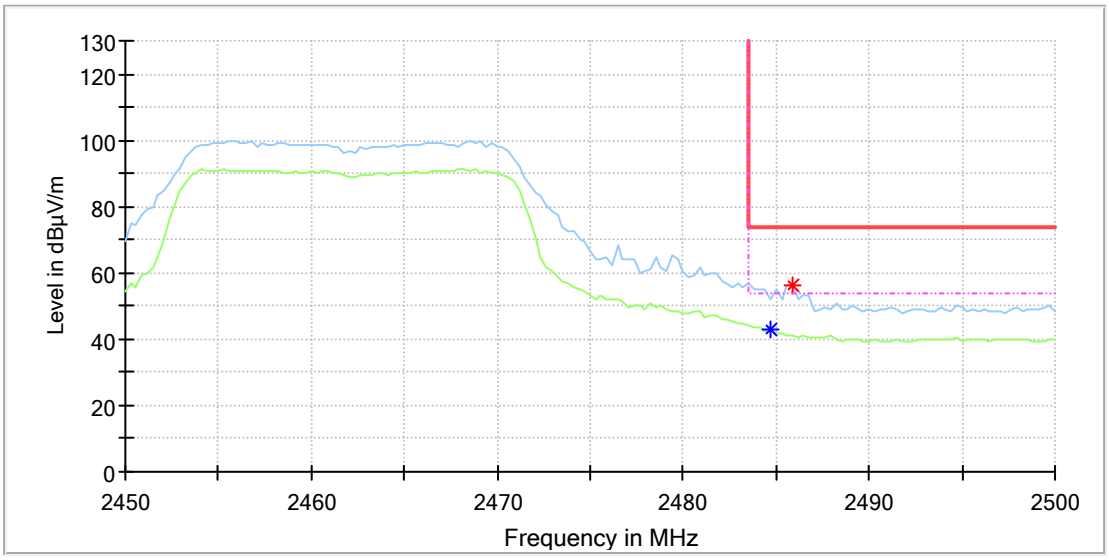



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2385.000000 | --- | 39.13 | 54.00 | 14.87 | 150.0 | V | 142.0 | 7.0 |
| 2386.764706 | 49.02 | --- | 74.00 | 24.98 | 150.0 | V | 104.0 | 7.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11N20_Ch11 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

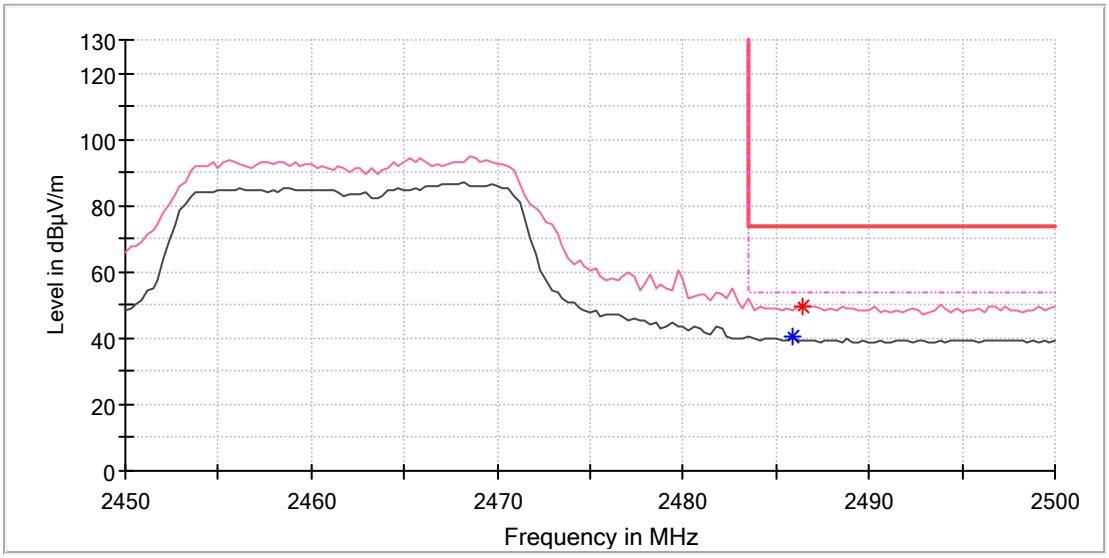



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2484.705882 | --- | 42.69 | 54.00 | 11.31 | 150.0 | H | 187.0 | 7.4 |
| 2485.882353 | 56.01 | --- | 74.00 | 17.99 | 150.0 | H | 198.0 | 7.4 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11N20_Ch11 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

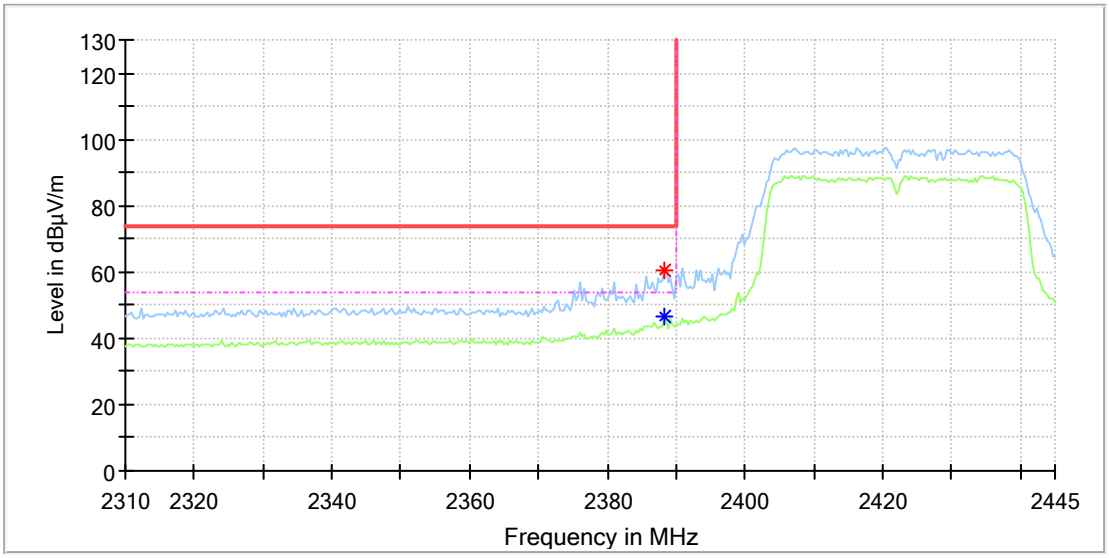



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2485.882353 | --- | 40.70 | 54.00 | 13.30 | 150.0 | V | 255.0 | 7.4 |
| 2486.470588 | 49.79 | --- | 74.00 | 24.21 | 150.0 | V | 182.0 | 7.4 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11N40_Ch3 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

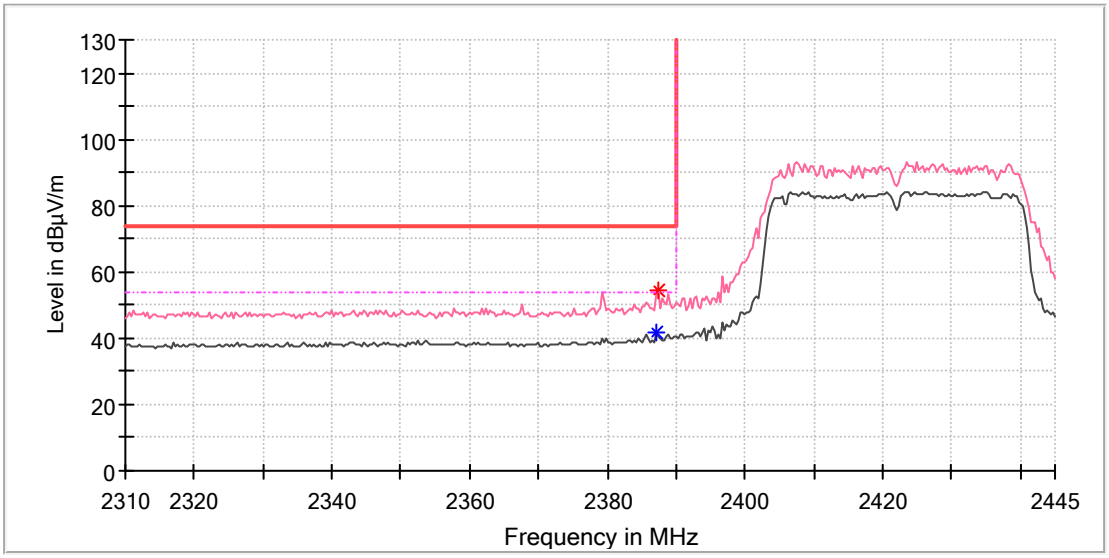



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2388.235294 | --- | 46.33 | 54.00 | 7.67 | 150.0 | H | 228.0 | 7.0 |
| 2388.235294 | 60.48 | --- | 74.00 | 13.52 | 150.0 | H | 228.0 | 7.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11N40_Ch3 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

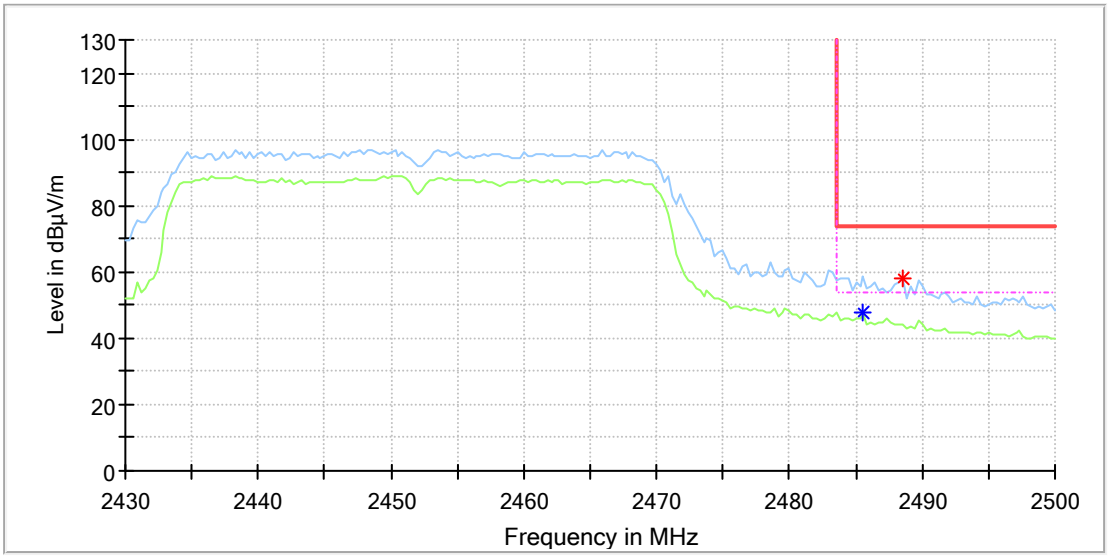



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2387.058824 | --- | 41.63 | 54.00 | 12.37 | 150.0 | V | 187.0 | 7.0 |
| 2387.352941 | 54.41 | --- | 74.00 | 19.59 | 150.0 | V | 257.0 | 7.0 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11N40_Ch9 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |

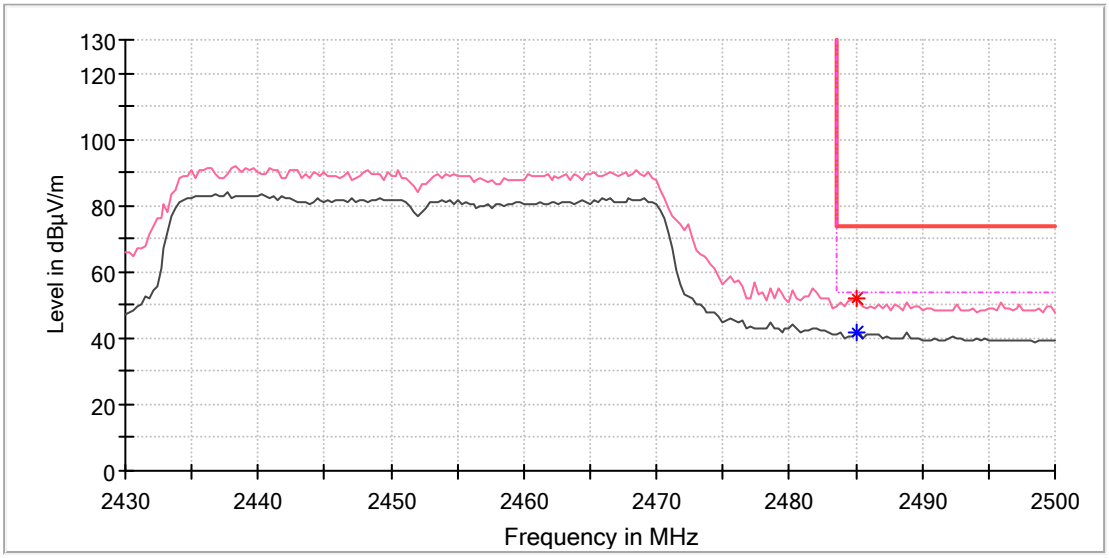



# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2485.588235 | --- | 47.89 | 54.00 | 6.11 | 150.0 | H | 210.0 | 7.4 |
| 2488.529412 | 57.92 | --- | 74.00 | 16.08 | 150.0 | H | 217.0 | 7.4 |

# EUT Information

| | |
|---|---|
| EUT Name: | LEGEND 700 HEAD UNIT |
| Model: | JBLLEGEND700 |
| Test Mode: | WIFI 2.4G_11N40_Ch9 |
| Order No/Sample No: | 168492002/A003757812-006 |
| Test Voltage:: | DC 12V From DC Source |
| Remark: | Temp 23 Humi:58% |
| Test Standard: | FCC 15.247 |
| Tested By: | Lich Chen |
| Reviewed By: | Terry Yin |




# Critical_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|
| 2485.000000 | --- | 41.82 | 54.00 | 12.18 | 150.0 | V | 254.0 | 7.4 |
| 2485.000000 | 52.04 | --- | 74.00 | 21.96 | 150.0 | V | 254.0 | 7.4 |