

## FCC PART 15.247

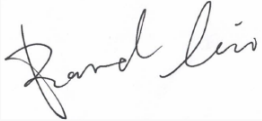
## TEST REPORT

For

### Deer Electric Appliance Co.,LTD

119 Moo 5 Soi 12, Highway 36, Makhankoo, Nikompattana Rayong, 21180, Thailand

**FCC ID: 2BRYR-DRS1969N**

|                                                                                                                                                                                                                                                 |                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Report Type:</b><br>Original Report                                                                                                                                                                                                          | <b>Product Name:</b><br>Wireless Plug-In Remote Control Adaptor                       |
| <b>Report Number:</b> RSHA240903001-00B                                                                                                                                                                                                         |                                                                                       |
| <b>Report Date:</b> 2026-09-03                                                                                                                                                                                                                  |                                                                                       |
| <b>Reviewed By:</b> Bard Liu                                                                                                                                                                                                                    |  |
| <b>Approved By:</b> Kyle Xu                                                                                                                                                                                                                     |  |
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REPORT REVISION HISTORY

| Number of Revisions | Report No.        | Version | Issue Date | Description     |
|---------------------|-------------------|---------|------------|-----------------|
| 0                   | RSHA240903001-00B | R1V1    | 2026-09-03 | Initial Release |

## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

|                            |                                                                                                                                |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Applicant & Manufacturer:  | Deer Electric Appliance Co.,LTD                                                                                                |
| Address:                   | 119 Moo 5 Soi 12, Highway 36, Makhamkoo, Nikompattana Rayong,21180,Thailand                                                    |
| Factory Name:              | 1. Ningbo Diya Electric Appliance Co.,Ltd.<br>2. Deer Electric Appliance Co.,LTD                                               |
| Factory Address:           | 1. Simen Town, Yuyao City, Zhejiang Province<br>2. 119 Moo 5 Soi 12, Highway 36, Makhamkoo, Nikompattana Rayong,21180,Thailand |
| Product Name:              | Wireless Plug-In Remote Control Adaptor                                                                                        |
| Tested Model:              | DR-S1969N                                                                                                                      |
| Series Model:              | MI-WW138-199W                                                                                                                  |
| Model Difference:          | Model name                                                                                                                     |
| Trade Mark:                | <br>MERKURY                                   |
| Power Supply:              | AC 125V/60 Hz                                                                                                                  |
| RF Function:               | 2.4G Wi-Fi                                                                                                                     |
| Operating Band/Frequency:  | 2.4G Wi-Fi: 2412~2462 MHz(802.11b/g/n20)                                                                                       |
| Maximum Peak Output Power: | 802.11b: 21.32 dBm<br>802.11g: 18.25 dBm<br>802.11n20: 18.28 dBm                                                               |
| Channel Number:            | 11(802.11b/g/n20)                                                                                                              |
| Channel Separation:        | 5 MHz                                                                                                                          |
| Modulation Type:           | DSSS, OFDM                                                                                                                     |
| Antenna Type:              | PCB Antenna                                                                                                                    |
| ★Maximum Antenna Gain:     | 3.17 dBi                                                                                                                       |

*Note: AC Line Conducted Emissions and Spurious Emissions are tested in Full Load.*

*All measurement and test data in this report was gathered from production sample serial number: RSHA240903001-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2024-09-03.)*

### Objective

This report is prepared for *Deer Electric Appliance Co.,LTD* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commissions' rules.

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

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024<sup>▲</sup>, American National Standard of Procedures for Compliant Testing of Unlicensed Wireless Devices and FCC 558074 D01 15.247 Meas Guidance v05r02.

### Measurement Uncertainty

| Item                               |                | Uncertainty |
|------------------------------------|----------------|-------------|
| AC Power Lines Conducted Emissions |                | 3.19dB      |
| RF conducted test with spectrum    |                | 0.9dB       |
| RF Output Power with Power meter   |                | 0.5dB       |
| Radiated emission                  | 9 kHz~150 kHz  | 3.8dB       |
|                                    | 150 kHz~30 MHz | 3.4dB       |
|                                    | 30MHz~1GHz     | 6.11dB      |
|                                    | 1GHz~6GHz      | 4.45dB      |
|                                    | 6GHz~18GHz     | 5.23dB      |
|                                    | 18GHz~40GHz    | 5.65dB      |
| Occupied Bandwidth                 |                | 0.5kHz      |
| Temperature                        |                | 1.0°C       |
| Humidity                           |                | 6%          |

### Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu Province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) is accredited in accordance with ISO/IEC 17025:2017 by NVLAP (Lab code: 600338-0), and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No.: CN5055.

## SYSTEM TEST CONFIGURATION

### Description of Test Configuration

Channel List for Wi-Fi Mode:

| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|
| 1       | 2412            | 7       | 2442            |
| 2       | 2417            | 8       | 2447            |
| 3       | 2422            | 9       | 2452            |
| 4       | 2427            | 10      | 2457            |
| 5       | 2432            | 11      | 2462            |
| 6       | 2437            | /       | /               |

For 802.11b, 802.11g and 802.11n-HT20 mode, EUT was tested with Channel 1, 6 and 11.

### Equipment Modifications

No modification was made to the EUT tested.

**EUT Exercise Software**

RF test software: WiFi Test Toolv1.4.1.exe

Pre-scan with all the data rates, and the worst case was performed as below:

| Mode         | Data Rate | Channel | ★Power Level |
|--------------|-----------|---------|--------------|
| 802.11b      | 1 Mbps    | 2412    | 31           |
|              |           | 2437    | 31           |
|              |           | 2462    | 31           |
| 802.11g      | 6 Mbps    | 2412    | 31           |
|              |           | 2437    | 31           |
|              |           | 2462    | 31           |
| 802.11n-HT20 | MCS0      | 2412    | 31           |
|              |           | 2437    | 31           |
|              |           | 2462    | 31           |

Note: The power level was declared by the applicant.

## 802.11b Mode Middle Channel



| Mode        | Ton<br>(ms) | Ton+Toff<br>(ms) | Duty Cycle<br>(%) | Duty Cycle<br>Factor<br>(dB) |
|-------------|-------------|------------------|-------------------|------------------------------|
| b_2437MHz   | 8.304       | 8.452            | 98.25             | /                            |
| g_2437MHz   | 1.378       | 1.405            | 98.08             | /                            |
| n20_2437MHz | 1.286       | 1.311            | 98.09             | /                            |

$$\text{Duty Cycle} = T_{on}/(T_{on}+T_{off}) \times 100\%$$

**Support Equipment List and Details**

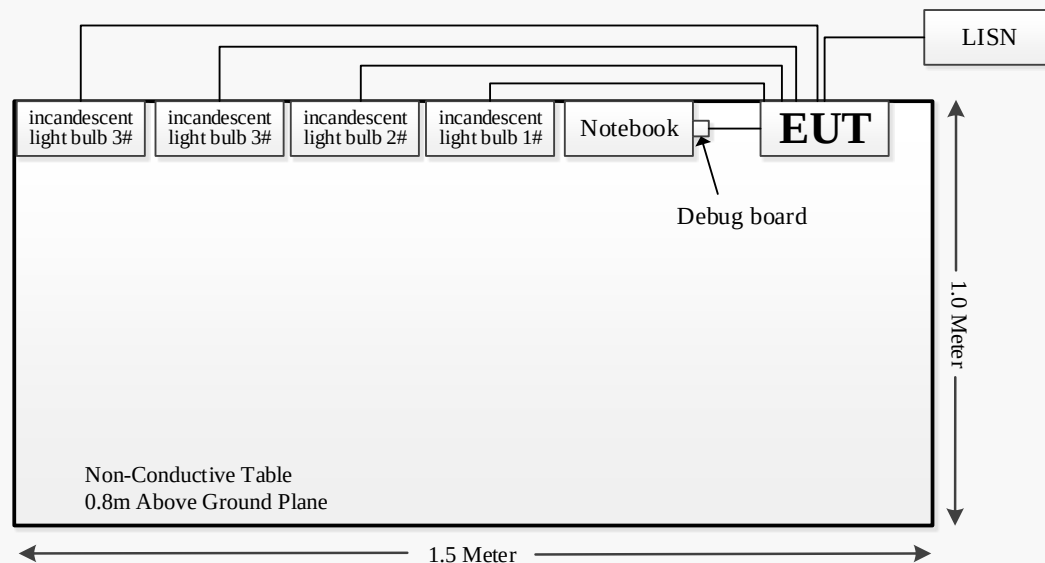
| Manufacturer | Description                | Model   | Serial Number |
|--------------|----------------------------|---------|---------------|
| Unknown      | Debug board                | Unknown | Unknown       |
| Lenovo       | Notebook                   | Y700P   | PF2B7PL5      |
| Unknown      | incandescent light bulb 1# | Unknown | Unknown       |
| Unknown      | incandescent light bulb 2# | Unknown | Unknown       |
| Unknown      | incandescent light bulb 3# | Unknown | Unknown       |
| Unknown      | incandescent light bulb 4# | Unknown | Unknown       |
| Unknown      | extension cord             | Unknown | Unknown       |

**External I/O Cable**

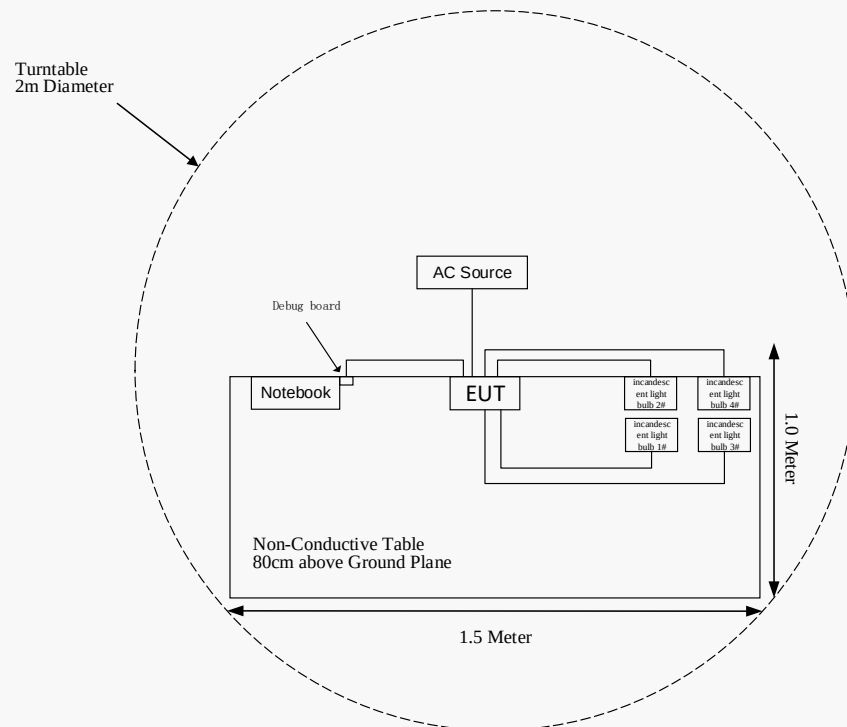
| Cable Description | Length (m) | From Port      | To Port                    |
|-------------------|------------|----------------|----------------------------|
| Power Cable 1     | 1.5        | AC Source/LISN | EUT                        |
| Power Cable 2     | 0.5        | EUT            | incandescent light bulb 1# |
| Power Cable 3     | 0.5        | EUT            | incandescent light bulb 2# |
| Power Cable 4     | 1.0        | EUT            | incandescent light bulb 3# |
| Power Cable 5     | 1.0        | EUT            | incandescent light bulb 4# |
| Power Cable 6     | 1.0        | Debug board    | Notebook                   |
| USB Cable         | 0.1        | EUT            | Debug board                |

**Block Diagram of Test Setup**

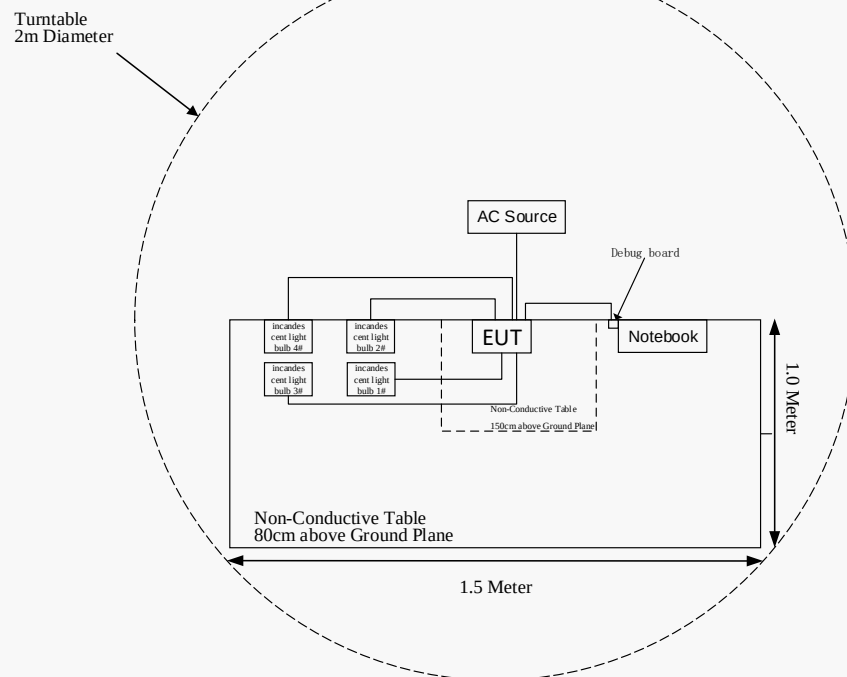
For Conducted Emissions:



For Radiated Emissions(Below 1GHz):



For Radiated Emissions(Above 1GHz):



**SUMMARY OF TEST RESULTS**

| FCC Rules                    | Description of Test                      | Result    |
|------------------------------|------------------------------------------|-----------|
| §1.1310 & §2.1091            | MAXIMUM PERMISSIBLE EXPOSURE (MPE)       | Compliant |
| §15.203                      | Antenna Requirement                      | Compliant |
| §15.207 (a)                  | AC Line Conducted Emissions              | Compliant |
| §15.205, §15.209, §15.247(d) | Spurious Emissions                       | Compliant |
| §15.247 (a)(2)               | 6 dB Emission Bandwidth                  | Compliant |
| §15.247(b)(3)                | Maximum Conducted Output Power           | Compliant |
| §15.247(d)                   | 100 kHz Bandwidth of Frequency Band Edge | Compliant |
| §15.247(d)                   | Conducted Spurious Emission              | Compliant |
| §15.247(e)                   | Power Spectral Density                   | Compliant |

## TEST EQUIPMENT LIST

| Manufacturer                               | Description        | Model     | Serial Number | Calibration Date | Calibration Due Date |
|--------------------------------------------|--------------------|-----------|---------------|------------------|----------------------|
| <b>Radiated Emission Test (Chamber #1)</b> |                    |           |               |                  |                      |
| Rohde & Schwarz                            | EMI Test Receiver  | ESCI      | 100195        | 2024-04-23       | 2025-04-22           |
| Sunol Sciences                             | Hybrid Antenna     | JB3       | A090314-1     | 2023-11-11       | 2024-11-10           |
| ETS-LINDGREN                               | Loop Antenna       | 6512      | 108100        | 2023-11-09       | 2024-11-08           |
| Narda                                      | 6dB Attenuator     | 773-6     | 10690812-2-1  | 2023-11-11       | 2024-11-10           |
| Sonoma Instrument                          | Amplifier          | 310N      | 171205        | 2024-04-23       | 2025-04-22           |
| MICRO-COAX                                 | Coaxial Cable      | Cable-8   | 008           | 2024-04-23       | 2025-04-22           |
| MICRO-COAX                                 | Coaxial Cable      | Cable-9   | 009           | 2024-04-23       | 2025-04-22           |
| MICRO-COAX                                 | Coaxial Cable      | Cable-10  | 010           | 2024-04-23       | 2025-04-22           |
| <b>Radiated Emission Test (Chamber #2)</b> |                    |           |               |                  |                      |
| Rohde & Schwarz                            | EMI Test Receiver  | ESU40     | 100207        | 2024-04-25       | 2025-04-24           |
| ETS-LINDGREN                               | Horn Antenna       | 3115      | 9207-3900     | 2024-06-27       | 2025-06-26           |
| ETS-LINDGREN                               | Horn Antenna       | 3116      | 2516          | 2023-12-08       | 2024-12-07           |
| A.H.Systems, inc                           | Amplifier          | PAM-0118P | 512           | 2024-04-25       | 2025-04-24           |
| EM Electronics Corporation                 | Amplifier          | EM18G40G  | 060726        | 2024-04-25       | 2025-04-24           |
| MICRO-TRONICS                              | Band Reject Filter | BRM50702  | G024          | 2024-04-25       | 2025-04-24           |
| Narda                                      | Attenuator         | 20dB      | 020           | 2024-04-25       | 2025-04-24           |
| Rohde & Schwarz                            | Auto Test Software | EMC32     | 100361        | N/A              | N/A                  |
| MICRO-COAX                                 | Coaxial Cable      | Cable-6   | 006           | 2024-04-23       | 2025-04-22           |
| MICRO-COAX                                 | Coaxial Cable      | Cable-11  | 011           | 2024-04-25       | 2025-04-24           |
| MICRO-COAX                                 | Coaxial Cable      | Cable-12  | 012           | 2024-04-25       | 2025-04-24           |
| MICRO-COAX                                 | Coaxial Cable      | Cable-13  | 013           | 2024-04-25       | 2025-04-24           |
| <b>RF Conducted Test</b>                   |                    |           |               |                  |                      |
| Rohde & Schwarz                            | Spectrum Analyzer  | FSU26     | 200103        | 2024-04-24       | 2025-04-23           |
| Rohde & Schwarz                            | Spectrum Analyzer  | FSU26     | 200103        | 2025-04-09       | 2026-04-08           |
| Anritsu                                    | Power Sensor       | MA24418A  | 12621         | 2024-04-23       | 2025-04-22           |
| Narda                                      | Attenuator         | 10dB      | N/A           | 2024-04-23       | 2025-04-22           |
| Narda                                      | Attenuator         | 10dB      | N/A           | 2025-04-08       | 2026-04-07           |
| <b>Conducted Emission Test</b>             |                    |           |               |                  |                      |
| Rohde & Schwarz                            | EMI Test Receiver  | ESR       | 101746        | 2024-04-23       | 2025-04-22           |
| Rohde & Schwarz                            | LISN               | ENV216    | 101115        | 2024-04-23       | 2025-04-22           |
| Audix                                      | Test Software      | e3        | V9            | N/A              | N/A                  |
| Rohde & Schwarz                            | Pulse Limiter      | ESH3-Z2   | 0357.8810.54  | 2024-04-23       | 2025-04-22           |
| MICRO-COAX                                 | Coaxial Cable      | Cable-15  | 015           | 2024-04-23       | 2025-04-22           |

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

## FCC §1.1310 & §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### Applicable Standard

According to subpart §2.1091 and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

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

f = frequency in MHz; \* = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

### Calculated Formulary

Predication of MPE limit at a given distance

$S = PG/4\pi R^2$  = power density (in appropriate units, e.g. mW/cm<sup>2</sup>);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

### Calculated Data:

| Mode       | Frequency Range (MHz) | Antenna Gain |           | ★Tune-up Output Power |        | Evaluation Distance (cm) | Power Density (mW/cm <sup>2</sup> ) | MPE Limit (mW/cm <sup>2</sup> ) |
|------------|-----------------------|--------------|-----------|-----------------------|--------|--------------------------|-------------------------------------|---------------------------------|
|            |                       | (dBi)        | (numeric) | (dBm)                 | (mW)   |                          |                                     |                                 |
| 2.4G Wi-Fi | 2412~2462             | 3.17         | 2.07      | 21.5                  | 141.25 | 20                       | 0.0583                              | 1.0                             |

### Note:

1. For the above tune up power were declared by the manufacturer.

**Result:** The device meet FCC MPE at 20 cm distance.

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## FCC §15.203 - ANTENNA REQUIREMENT

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### Applicable Standard

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

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

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

### Antenna Connector Construction

The EUT has a PCB antenna for 2.4G Wi-Fi, and the antenna gain is 3.17 dBi, which is permanently attached to the unit, fulfill the requirement of this section. Please refer to the EUT photos.

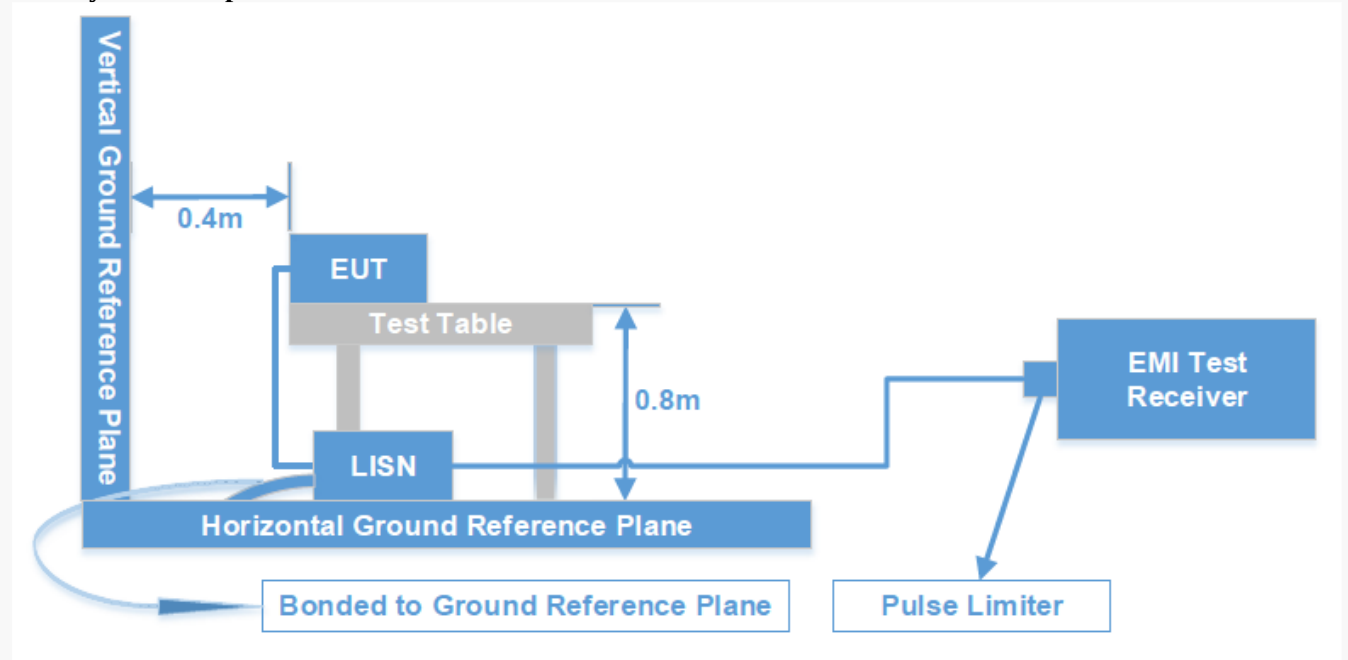
**Result:** Compliant.

## FCC §15.207 (a) - AC LINE CONDUCTED EMISSIONS

### Applicable Standard

FCC §15.207(a)

### Test System Setup



The measurement procedure of EUT setup is according with ANSI C63.10-2020. The related limit was specified in FCC Part 15.207.

The spacing between the peripherals was 10 cm.

### EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

| Frequency Range  | VBW    |
|------------------|--------|
| 150 kHz - 30 MHz | 30 kHz |

**Test Procedure**

ANSI C63.10-2020 clause 6.2

During the conducted emission test, the EUT or adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

If the maximum peak value of the emissions is below the average limit, the QP value and average value measurement will not need to be performed and only record the maximum peak measured value to meet the requirements.

**Level & Over Limit Calculation**

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

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

Level (dBμV) = Read level (dBμV) + Factor (dB)

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

Over Limit (dB) = Level (dBμV) - Limit (dBμV)

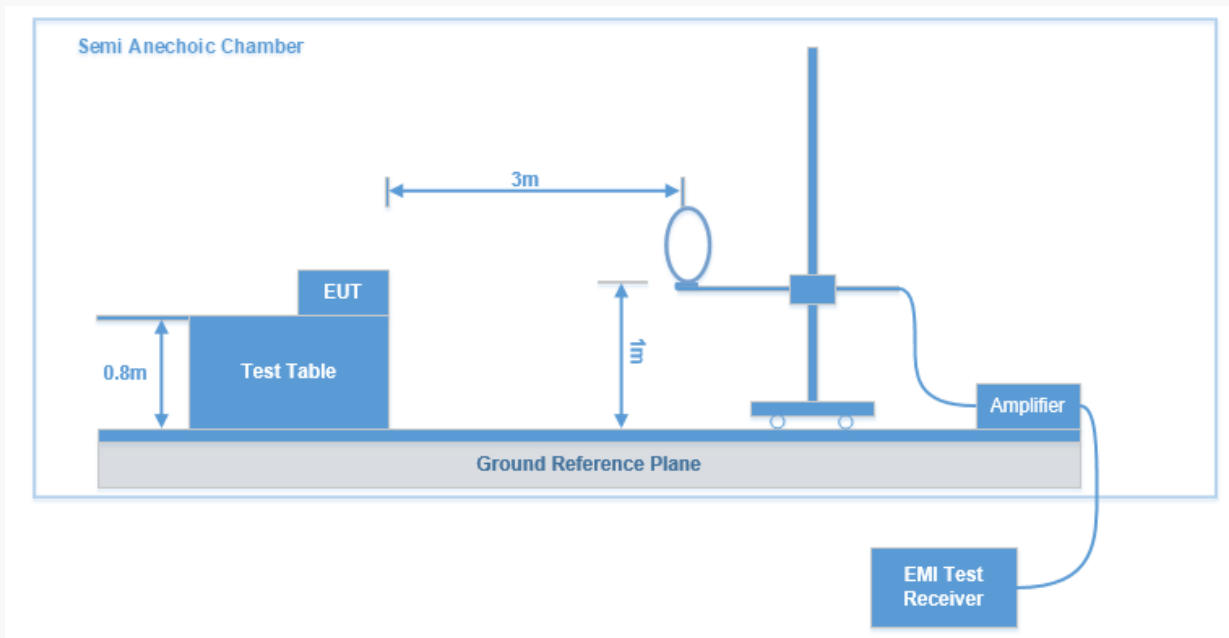
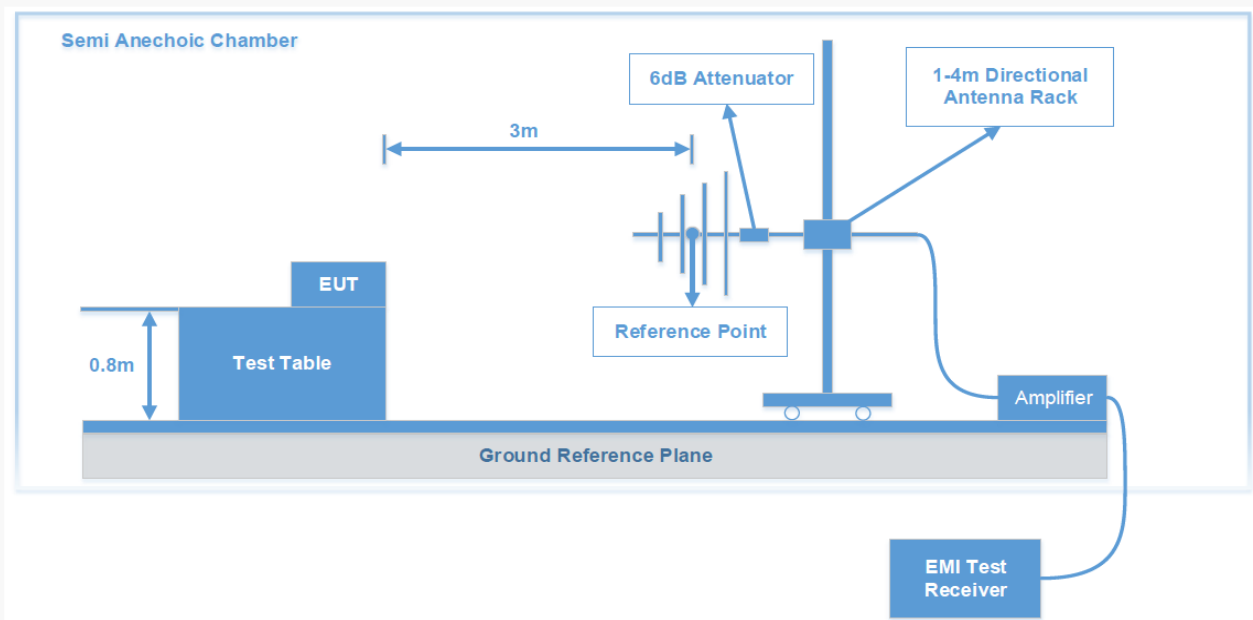
**Test Results Summary**

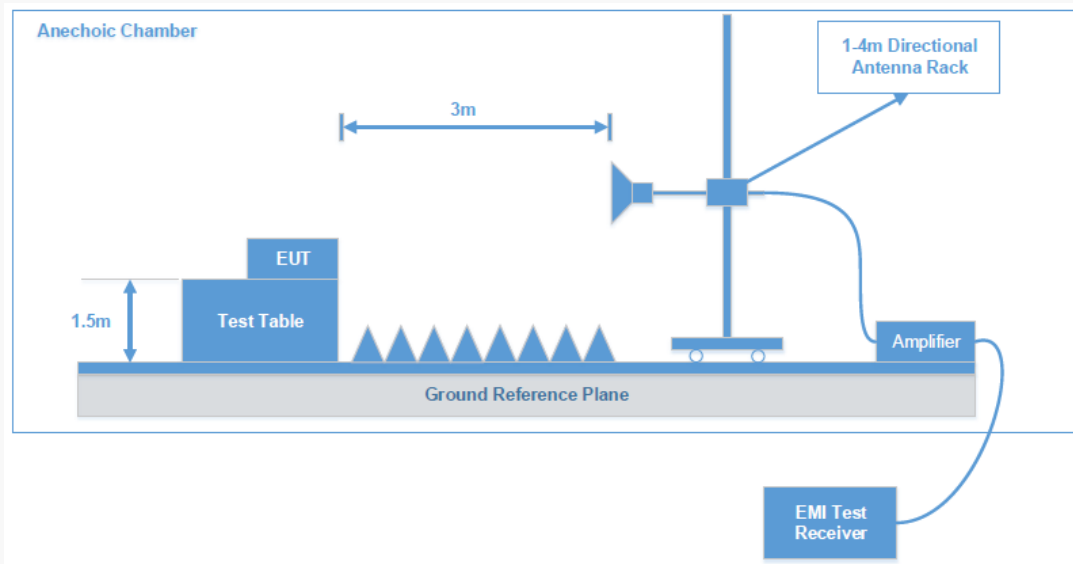
According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

**Test Data: See Appendix**

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

FCC §15.247 (d); §15.209; §15.205;

**Test System Setup****9 kHz – 30 MHz:****30 MHz - 1 GHz:**

**Above 1 GHz:**

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

### EMI Test Receiver Setup

The system was investigated from 9 kHz to 25 GHz.

During the radiated emission test, the EMI test receiver setup was set with the following configurations:

| Frequency Range   | RBW     | VBW     | IF B/W  | Measurement | Detector |
|-------------------|---------|---------|---------|-------------|----------|
| 9 kHz – 150 kHz   | 200 Hz  | 1 kHz   | 200 Hz  | Peak/QP     | Peak/QP  |
| 150 kHz – 30 MHz  | 9 kHz   | 30 kHz  | 9 kHz   | Peak/QP     | Peak/QP  |
| 30 MHz – 1000 MHz | 100 kHz | 300 kHz | /       | Peak        | Peak     |
|                   | /       | /       | 120 kHz | QP          | QP       |
| Above 1GHz        | 1 MHz   | 3 MHz   | /       | Peak        | Peak     |
|                   | 1 MHz   | 3 MHz   | /       | Average     | Average  |

### Test Procedure

According to ANSI C63.10-2020 clause 6.5, 6.6 and 6.7.

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

If the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is at least 6 dB below the QP emission limit, there's no need to record the measured QP level of the emissions in the report.

For 9 kHz-30MHz test, the lowest height of the magnetic antenna shall be 1 m above the ground and three antenna orientations (parallel, perpendicular, and ground-parallel) shall be measured.

### Corrected Amplitude & Margin Calculation

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

Corrected Amplitude (dBμV/m) = Meter Reading (dBμV) + Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

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

Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Note: The QuasiPeak (dBμV/m), MaxPeak (dBμV/m), Average (dBμV/m) which shown in the data table are all Corrected Amplitude.

### Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, section 15.205, 15.209 and 15.247.

**Test Data: See Appendix**

## FCC §15.247(A) (2) - 6 DB EMISSION BANDWIDTH

---

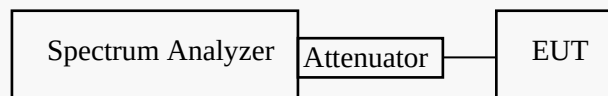
### Applicable Standard

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

### Test Procedure

According to ANSI C63.10-2020 sub-clause 11.8.1

1. Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.
2. Set the video bandwidth (VBW)  $\geq 3 * \text{RBW}$ .
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



Note: Offset (10.5 dB) = Attenuator (10 dB) + Cable loss (0.5 dB)

**Test Data: See Appendix**

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

### **Applicable Standard**

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

### **Test Procedure**

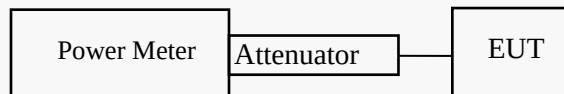
According to ANSI C63.10-2020 sub-clause 11.9.1.3

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.

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

#### **11.9.2.3.2 Method AVGPM-G**

Method AVGPM-G is a measurement using a gated RF average power meter. Alternatively, measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.



**Test Data: See Appendix**

## **FCC §15.247(D) – 100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE**

### **Applicable Standard**

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates Compliant with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

### **Test Procedure**

Test Method: ANSI C63.10-2020 Clause 11.11.3

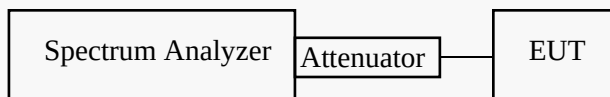
Establish an emission level by using the following procedure:

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

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

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

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



Note: Offset (10.5 dB) = Attenuator (10 dB) + Cable loss (0.5 dB)

## **FCC §15.247(D) –CONDUCTED SPURIOUS EMISSION**

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

### **Test Procedure**

Test Method: ANSI C63.10-2020 Clause 11.11.3

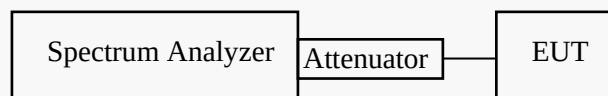
Establish an emission level by using the following procedure:

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

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

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

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



**Test Data: See Appendix**

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

### Applicable Standard

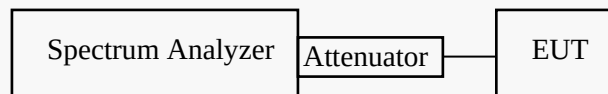
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of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

### Test Procedure

According to ANSI C63.10-2020 sub-clause 11.10.2

The following procedure shall be used if maximum peak conducted output power was used to determine Compliant, and it is optional if the maximum conducted (average) output power was used to determine Compliant:

1. Set the RBW to:  $3\text{kHz} \leq \text{RBW} \leq 100\text{ kHz}$ .
2. Set the VBW  $\geq 3 * \text{RBW}$ .
3. Set the span  $> 1.5$  times the DTS bandwidth.
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the maximum amplitude level within the RBW.
9. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.



Note: Offset (10.5 dB) = Attenuator (10 dB) + Cable loss (0.5 dB)

**Test Data: See Appendix**

# APPENDIX - TEST DATA

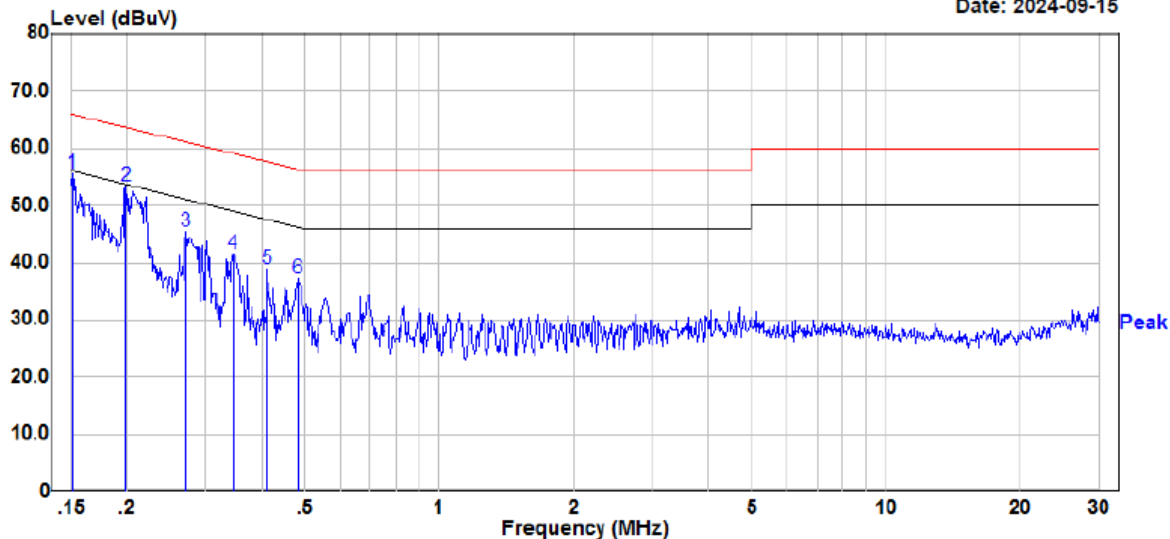
## Environmental Conditions & Test Information

| Test Item:         | AC LINE<br>CONDUCTED<br>EMISSIONS | RADIATED EMISSIONS |                |                | DUTY CYCLE |
|--------------------|-----------------------------------|--------------------|----------------|----------------|------------|
|                    |                                   | 9 kHz-1 GHz        | 1 GHz - 18 GHz | 18 GHz -25 GHz |            |
| Test Date:         | 2024-09-15                        | 2024-09-24         | 2024-09-10     | 2024-09-26     | 2024-09-23 |
| Temperature:       | 27.0 °C                           | 25.6 °C            | 24.9 °C        | 25.3 °C        | 25.8 °C    |
| Relative Humidity: | 51 %                              | 56 %               | 48 %           | 52 %           | 50 %       |
| ATM Pressure:      | 100.7 kPa                         | 101.4 kPa          | 100.3 kPa      | 101.4 kPa      | 101.3 kPa  |
| Test Result:       | Pass                              | Pass               | Pass           | Pass           | /          |
| Test Engineer:     | Leah Li                           | Richard Wen        | Klein Zhu      | Hugh Wu        | Neil Zhou  |

| Test Item:         | 6 DB EMISSION<br>BANDWIDTH        | OCCUPIED<br>BANDWIDTH | POWER<br>SPECTRAL<br>DENSITY | TRANSMITTER<br>OUTPUT POWER<br>MEASUREMENT | OUT OF<br>BAND<br>EMISSIONS |
|--------------------|-----------------------------------|-----------------------|------------------------------|--------------------------------------------|-----------------------------|
| Test Date:         | 2025-10-14                        | 2025-10-14            | 2024-09-23/<br>2025-10-14    | 2024-09-23                                 | 2024-09-23                  |
| Temperature:       | 24.8 °C                           | 24.8 °C               | 25.8 °C/24.8 °C              | 25.8 °C                                    | 25.8 °C                     |
| Relative Humidity: | 46 %                              | 46 %                  | 50 %/46 %                    | 50 %                                       | 50 %                        |
| ATM Pressure:      | 101.7 kPa                         | 101.7 kPa             | 101.3 kPa<br>/101.7 kPa      | 101.3 kPa                                  | 101.3 kPa                   |
| Test Result:       | Pass                              | /                     | Pass                         | Pass                                       | Pass                        |
| Test Engineer:     | Neil Zhou                         | Neil Zhou             | Neil Zhou                    | Neil Zhou                                  | Neil Zhou                   |
| Test Item:         | CONDUCTED<br>SPURIOUS<br>EMISSION |                       |                              |                                            |                             |
| Test Date:         | 2025-10-14                        |                       |                              |                                            |                             |
| Temperature:       | 24.8 °C                           |                       |                              |                                            |                             |
| Relative Humidity: | 46 %                              |                       |                              |                                            |                             |
| ATM Pressure:      | 101.7 kPa                         |                       |                              |                                            |                             |
| Test Result:       | Pass                              |                       |                              |                                            |                             |
| Test Engineer:     | Neil Zhou                         |                       |                              |                                            |                             |

**AC LINE CONDUCTED EMISSIONS***EUT operation mode: Transmitting in maximum output power mode 802.11b mode low channel***Line:**

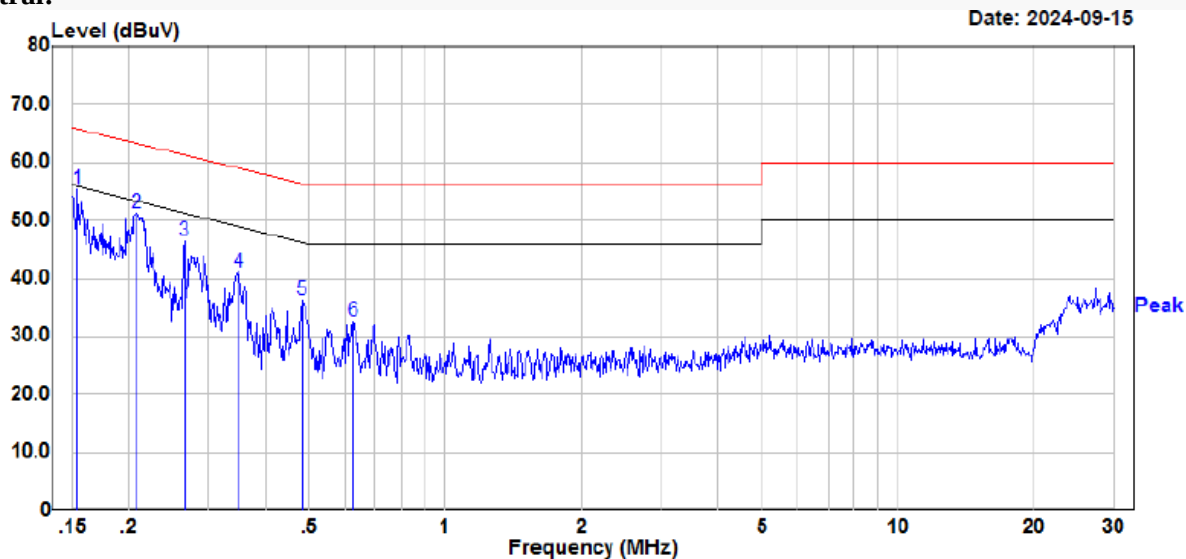
Date: 2024-09-15



Site : CE  
Condition : limit\FCC PART 15.207  
Project No. : RSHA240903001  
Model : DR-S1969N  
Phase : L  
Voltage : 120V/60Hz  
Mode : 2.4G WIFI  
Test Equipment : ENV216, ESR  
Temperature : 27.0°C  
Humidity : 51%  
Atmospheric pressure: 100.7kPa  
Test Engineer : Leah Li

|      | Read  |        | Limit | Over  |                   |
|------|-------|--------|-------|-------|-------------------|
| Freq | Level | Factor | Level | Line  | Limit Remark      |
| MHz  | dBuV  | dB     | dBuV  | dBuV  | dB                |
| 1    | 0.151 | 35.55  | 20.12 | 55.67 | 65.96 -10.29 Peak |
| 2    | 0.198 | 33.27  | 20.11 | 53.38 | 63.68 -10.30 Peak |
| 3    | 0.270 | 25.37  | 20.15 | 45.52 | 61.11 -15.59 Peak |
| 4    | 0.345 | 21.32  | 20.19 | 41.51 | 59.09 -17.58 Peak |
| 5    | 0.411 | 18.81  | 20.21 | 39.02 | 57.64 -18.62 Peak |
| 6    | 0.482 | 17.10  | 20.16 | 37.26 | 56.31 -19.05 Peak |

## Neutral:



Site : CE  
Condition : limit\FCC PART 15.207  
Project No. : RSHA240903001  
Model : DR-S1969N  
Phase : N  
Voltage : 120V/60Hz  
Mode : 2.4G WIFI  
Test Equipment : ENV216, ESR  
Temperature : 27.0°C  
Humidity : 51%  
Atmospheric pressure: 100.7kPa  
Test Engineer : Leah Li

|   | Freq  | Read Level | Factor | Level | Limit Line | Over Limit | Remark |
|---|-------|------------|--------|-------|------------|------------|--------|
|   | MHz   | dBuV       | dB     | dBuV  | dBuV       | dB         |        |
| 1 | 0.154 | 35.16      | 20.12  | 55.28 | 65.79      | -10.51     | Peak   |
| 2 | 0.207 | 31.24      | 20.12  | 51.36 | 63.31      | -11.95     | Peak   |
| 3 | 0.265 | 26.24      | 20.15  | 46.39 | 61.28      | -14.89     | Peak   |
| 4 | 0.348 | 20.80      | 20.19  | 40.99 | 59.00      | -18.01     | Peak   |
| 5 | 0.482 | 15.99      | 20.16  | 36.15 | 56.31      | -20.16     | Peak   |
| 6 | 0.624 | 12.64      | 20.08  | 32.72 | 56.00      | -23.28     | Peak   |

## SPURIOUS EMISSIONS

**Test Result:** Compliant

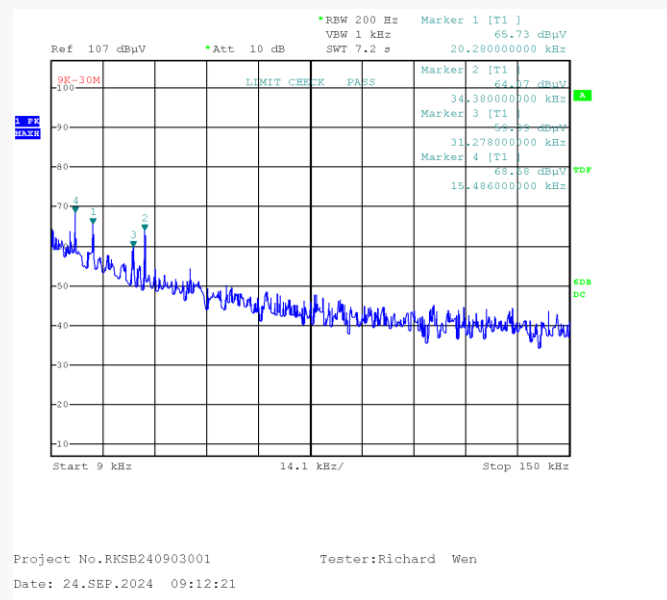
*EUT operation mode: Transmitting*

*After pre-scan in the X, Y and Z axes of orientation, the worst case in the X axes of orientation is below:*

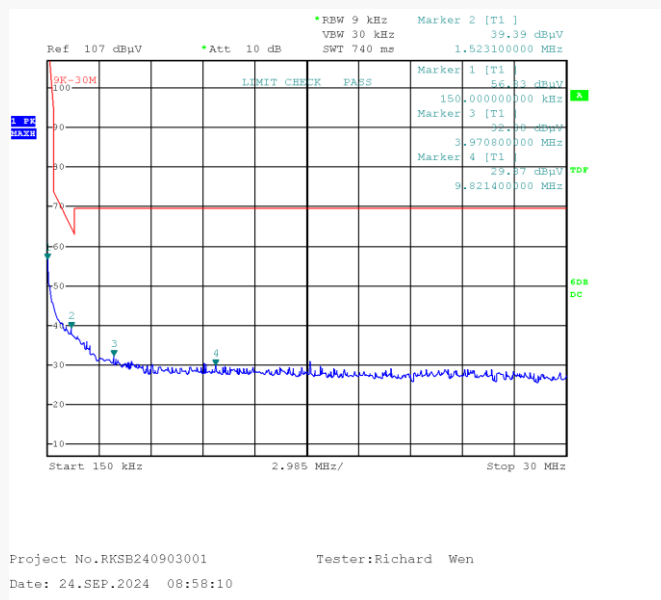
**9 kHz-30 MHz:** (Transmitting in maximum output power 802.11b mode and low channel)

**Parallel (worst case):**

### 9 kHz-150kHz



### 150 kHz -30 MHz



### 9 kHz-150 kHz

| Frequency (MHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 0.02028         | 65.73                            | PK                  | 49.92                   | 121.46             | 55.73       |
| 0.03438         | 64.07                            | PK                  | 46.06                   | 116.88             | 52.81       |
| 0.031278        | 59.99                            | PK                  | 46.87                   | 117.70             | 57.71       |
| 0.015486        | 68.58                            | PK                  | 52.87                   | 123.81             | 55.23       |

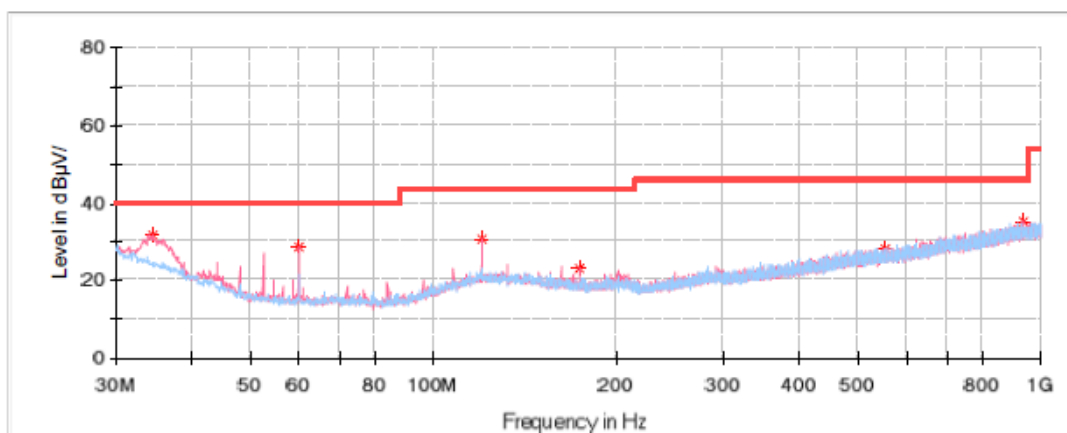
### 150 kHz -30 MHz

| Frequency (MHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 0.15000         | 56.83                            | PK                  | 50.90                   | 104.08             | 47.25       |
| 1.52310         | 39.39                            | PK                  | 8.20                    | 63.95              | 24.56       |
| 3.97080         | 32.38                            | PK                  | 18.74                   | 69.54              | 37.16       |
| 9.82140         | 29.87                            | PK                  | 6.40                    | 69.54              | 39.67       |

**30MHz-1GHz (Transmitting in maximum output power 802.11b mode and low channel):**  
**Low channel: 2412MHz**

### Common Information

|                      |                                                     |
|----------------------|-----------------------------------------------------|
| Project No:          | RSHA240903001                                       |
| EUT Model:           | DR-S1969N                                           |
| Test Mode:           | Transmitting in 802.11b mode low channel            |
| Standard:            | FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247 |
| Test Equipment:      | ESCI, JB3, 310N                                     |
| Temperature:         | 25.6°C                                              |
| Humidity:            | 56%                                                 |
| Barometric Pressure: | 101.4 kPa                                           |
| Test Engineer:       | Richard Wen                                         |
| Test Date:           | 2024/09/24                                          |



### Critical\_Freqs

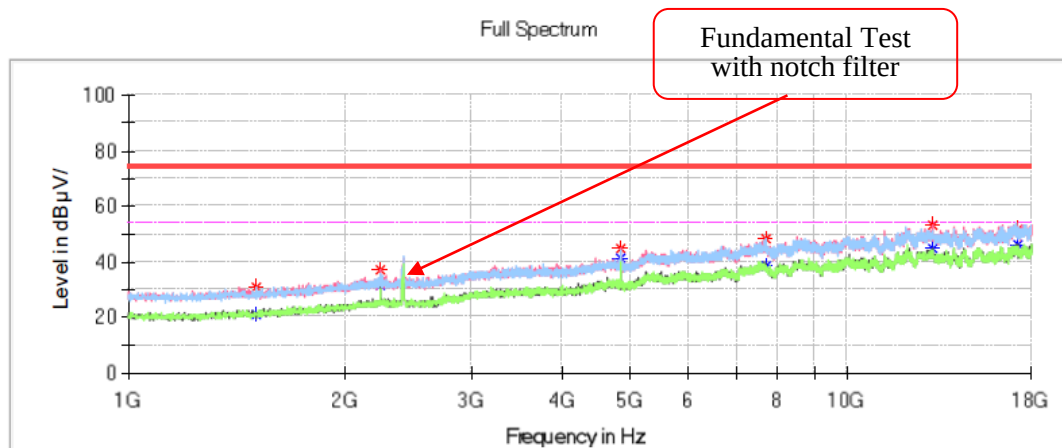
| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-----|--------------|
| 554.285000      | 28.36            | 46.00          | 17.64       | V   | -4.8         |
| 119.967500      | 30.90            | 43.50          | 12.60       | V   | -10.9        |
| 34.486250       | 31.62            | 40.00          | 8.38        | V   | -7.7         |
| 59.948750       | 28.44            | 40.00          | 11.56       | V   | -17.6        |
| 934.161250      | 35.44            | 46.00          | 10.56       | V   | 1.5          |
| 174.045000      | 23.03            | 43.50          | 20.47       | V   | -12.8        |

**1GHz-18GHz:**  
**802.11b Mode:**

**Low Channel: 2412MHz**

## Common Information

|                |                                                     |
|----------------|-----------------------------------------------------|
| Project No.:   | RSHA240903001                                       |
| Test Mode:     | 2.4G WIFI 802.11b low channel                       |
| Standard:      | FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209 |
| Test Engineer: | Klein Zhu                                           |

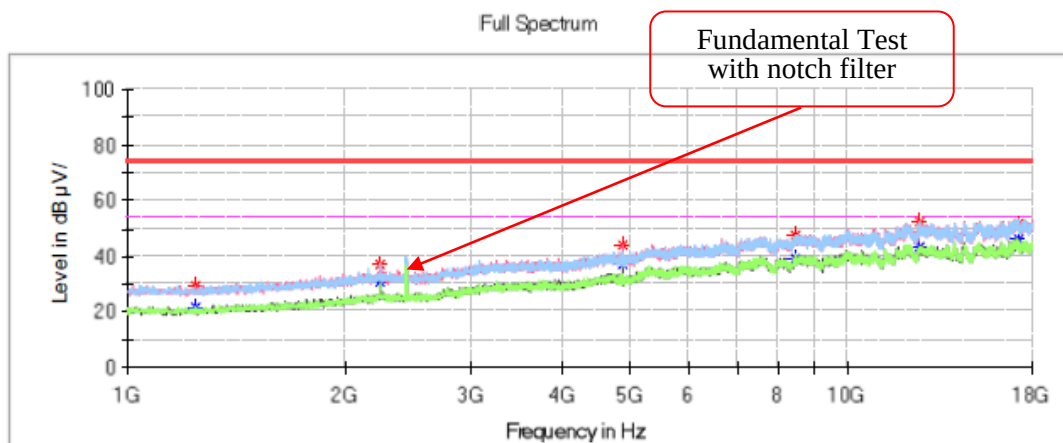


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dB $\mu$ V/m) | Average (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|------------------------|----------------------|-------------|-----|--------------|
| 1503.200000     | 30.45                  | ---                    | 74.00                | 43.55       | H   | -14.7        |
| 1503.200000     | ---                    | 21.08                  | 54.00                | 32.92       | H   | -14.7        |
| 2239.300000     | ---                    | 31.14                  | 54.00                | 22.86       | V   | -11.0        |
| 2239.300000     | 37.37                  | ---                    | 74.00                | 36.63       | V   | -11.0        |
| 4823.300000     | 44.93                  | ---                    | 74.00                | 29.07       | V   | -3.1         |
| 4823.300000     | ---                    | 41.45                  | 54.00                | 12.55       | V   | -3.1         |
| 7686.100000     | 48.24                  | ---                    | 74.00                | 25.76       | H   | 3.9          |
| 7686.100000     | ---                    | 38.13                  | 54.00                | 15.87       | H   | 3.9          |
| 13114.200000    | ---                    | 44.66                  | 54.00                | 9.34        | V   | 9.7          |
| 13114.200000    | 53.42                  | ---                    | 74.00                | 20.58       | V   | 9.7          |
| 17187.400000    | 51.79                  | ---                    | 74.00                | 22.21       | V   | 12.0         |
| 17187.400000    | ---                    | 46.24                  | 54.00                | 7.76        | V   | 12.0         |

**Middle Channel: 2437MHz****Common Information**

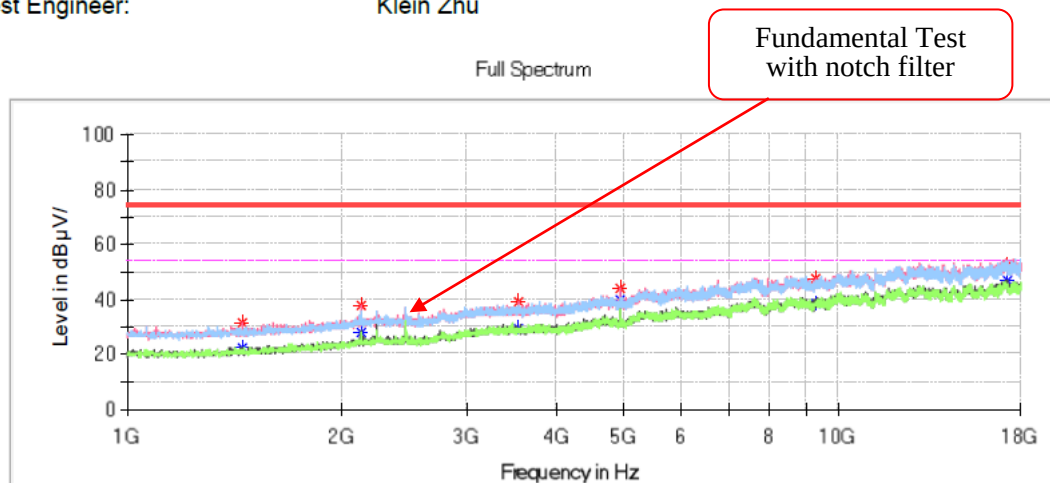
Project No.: RSHA240903001  
Test Mode: 2.4G WIFI 802.11b middle channel  
Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
Test Engineer: Klein Zhu

**Critical Freqs**

| Frequency (MHz) | MaxPeak (dB $\mu$ V/m) | Average (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|------------------------|----------------------|-------------|-----|--------------|
| 1243.100000     | 29.26                  | ---                    | 74.00                | 44.74       | V   | -15.1        |
| 1243.100000     | ---                    | 21.63                  | 54.00                | 32.37       | V   | -15.1        |
| 2239.300000     | ---                    | 31.08                  | 54.00                | 22.92       | V   | -11.0        |
| 2239.300000     | 37.15                  | ---                    | 74.00                | 36.85       | V   | -11.0        |
| 4872.600000     | ---                    | 36.80                  | 54.00                | 17.20       | V   | -2.9         |
| 4872.600000     | 44.23                  | ---                    | 74.00                | 29.77       | V   | -2.9         |
| 8471.500000     | 47.58                  | ---                    | 74.00                | 26.42       | H   | 5.3          |
| 8471.500000     | ---                    | 39.20                  | 54.00                | 14.80       | H   | 5.3          |
| 12546.400000    | 52.32                  | ---                    | 74.00                | 21.68       | H   | 9.7          |
| 12546.400000    | ---                    | 43.15                  | 54.00                | 10.85       | H   | 9.7          |
| 17212.900000    | 51.60                  | ---                    | 74.00                | 22.40       | V   | 12.0         |
| 17212.900000    | ---                    | 46.26                  | 54.00                | 7.74        | V   | 12.0         |

**High Channel: 2462MHz****Common Information**

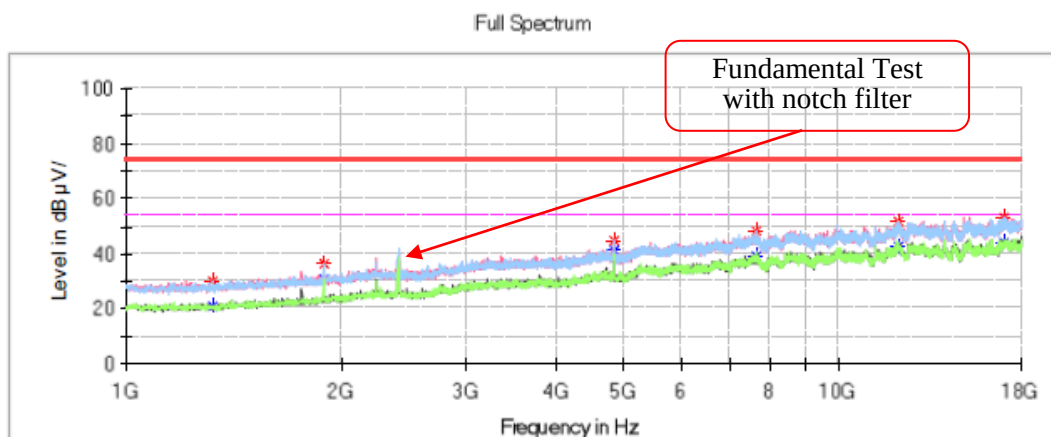
Project No.: RSHA240903001  
Test Mode: 2.4G WIFI 802.11b high channel  
Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
Test Engineer: Klein Zhu

**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dB µ V/m) | Average (dB µ V/m) | Limit (dB µ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1450.500000     | ---                | 22.42              | 54.00            | 31.58       | V   | -14.8        |
| 1450.500000     | 31.45              | ---                | 74.00            | 42.55       | V   | -14.8        |
| 2128.800000     | 37.79              | ---                | 74.00            | 36.21       | V   | -11.3        |
| 2128.800000     | ---                | 27.92              | 54.00            | 26.08       | V   | -11.3        |
| 3539.800000     | ---                | 29.46              | 54.00            | 24.54       | H   | -6.3         |
| 3539.800000     | 38.93              | ---                | 74.00            | 35.07       | H   | -6.3         |
| 4923.600000     | ---                | 39.76              | 54.00            | 14.24       | V   | -2.7         |
| 4923.600000     | 44.16              | ---                | 74.00            | 29.84       | V   | -2.7         |
| 9250.100000     | 47.65              | ---                | 74.00            | 26.35       | V   | 5.4          |
| 9250.100000     | ---                | 38.39              | 54.00            | 15.61       | V   | 5.4          |
| 17212.900000    | 52.76              | ---                | 74.00            | 21.24       | V   | 12.0         |
| 17212.900000    | ---                | 46.84              | 54.00            | 7.16        | V   | 12.0         |

**802.11g Mode:****Low Channel: 2412MHz****Common Information**

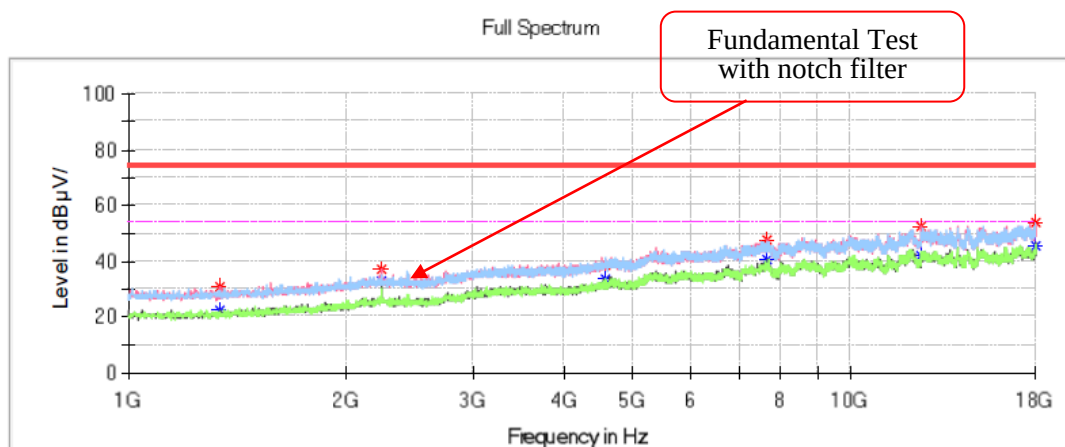
Project No.: RSHA240903001  
 Test Mode: 2.4G WIFI 802.11g low channel  
 Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
 Test Engineer: Klein Zhu

**Critical Freqs**

| Frequency (MHz) | MaxPeak (dB $\mu$ V/m) | Average (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|------------------------|----------------------|-------------|-----|--------------|
| 1323.000000     | ---                    | 21.10                  | 54.00                | 32.90       | H   | -15.0        |
| 1323.000000     | 29.95                  | ---                    | 74.00                | 44.05       | H   | -15.0        |
| 1889.100000     | 36.33                  | ---                    | 74.00                | 37.67       | H   | -12.4        |
| 1889.100000     | ---                    | 30.98                  | 54.00                | 23.02       | H   | -12.4        |
| 4823.300000     | 45.04                  | ---                    | 74.00                | 28.96       | V   | -3.1         |
| 4823.300000     | ---                    | 41.07                  | 54.00                | 12.93       | V   | -3.1         |
| 7641.900000     | ---                    | 39.26                  | 54.00                | 14.74       | H   | 3.9          |
| 7641.900000     | 48.19                  | ---                    | 74.00                | 25.81       | H   | 3.9          |
| 12133.300000    | ---                    | 42.83                  | 54.00                | 11.17       | V   | 9.2          |
| 12133.300000    | 51.48                  | ---                    | 74.00                | 22.52       | V   | 9.2          |
| 17000.400000    | ---                    | 44.11                  | 54.00                | 9.89        | H   | 12.3         |
| 17000.400000    | 52.95                  | ---                    | 74.00                | 21.05       | H   | 12.3         |

**Middle Channel: 2437MHz****Common Information**

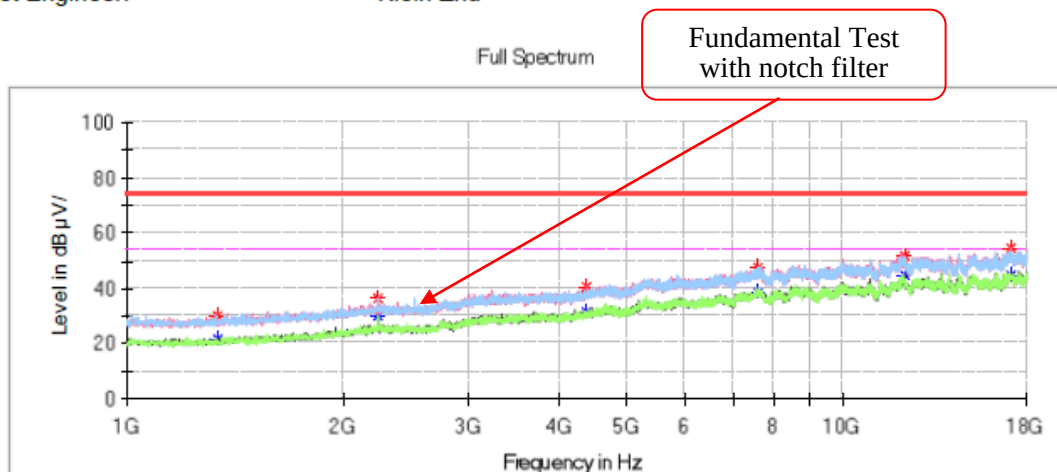
Project No.: RSHA240903001  
 Test Mode: 2.4G WIFI 802.11g middle channel  
 Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
 Test Engineer: Klein Zhu

**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dB $\mu$ V/m) | Average (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|------------------------|----------------------|-------------|-----|--------------|
| 1341.700000     | ---                    | 22.03                  | 54.00                | 31.97       | V   | -15.0        |
| 1341.700000     | 30.81                  | ---                    | 74.00                | 43.19       | V   | -15.0        |
| 2239.300000     | ---                    | 32.74                  | 54.00                | 21.26       | V   | -11.0        |
| 2239.300000     | 36.75                  | ---                    | 74.00                | 37.25       | V   | -11.0        |
| 4583.600000     | ---                    | 33.87                  | 54.00                | 20.13       | H   | -4.0         |
| 4583.600000     | 38.30                  | ---                    | 74.00                | 35.70       | H   | -4.0         |
| 7641.900000     | 47.86                  | ---                    | 74.00                | 26.14       | V   | 3.9          |
| 7641.900000     | ---                    | 40.30                  | 54.00                | 13.70       | V   | 3.9          |
| 12510.700000    | 52.26                  | ---                    | 74.00                | 21.74       | V   | 9.7          |
| 12510.700000    | ---                    | 41.71                  | 54.00                | 12.29       | V   | 9.7          |
| 17998.300000    | ---                    | 45.70                  | 54.00                | 8.30        | H   | 12.0         |
| 17998.300000    | 54.02                  | ---                    | 74.00                | 19.98       | H   | 12.0         |

**High Channel: 2462MHz****Common Information**

Project No.: RSHA240903001  
Test Mode: 2.4G WIFI 802.11g High channel  
Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
Test Engineer: Klein Zhu

**Critical Freqs**

| Frequency (MHz) | MaxPeak (dB $\mu$ V/m) | Average (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|------------------------|----------------------|-------------|-----|--------------|
| 1340.000000     | 30.32                  | ---                    | 74.00                | 43.68       | V   | -15.0        |
| 1340.000000     | ---                    | 21.53                  | 54.00                | 32.47       | V   | -15.0        |
| 2239.300000     | ---                    | 30.41                  | 54.00                | 23.59       | V   | -11.0        |
| 2239.300000     | 36.22                  | ---                    | 74.00                | 37.78       | V   | -11.0        |
| 4376.200000     | 40.76                  | ---                    | 74.00                | 33.24       | V   | -4.7         |
| 4376.200000     | ---                    | 31.80                  | 54.00                | 22.20       | V   | -4.7         |
| 7616.400000     | 47.64                  | ---                    | 74.00                | 26.36       | H   | 3.9          |
| 7616.400000     | ---                    | 38.62                  | 54.00                | 15.38       | H   | 3.9          |
| 12162.200000    | 51.57                  | ---                    | 74.00                | 22.43       | V   | 9.2          |
| 12162.200000    | ---                    | 44.69                  | 54.00                | 9.31        | V   | 9.2          |
| 17082.000000    | ---                    | 44.60                  | 54.00                | 9.40        | V   | 12.2         |
| 17082.000000    | 54.20                  | ---                    | 74.00                | 19.80       | V   | 12.2         |

**802.11n-HT20 Mode :****Low Channel: 2412MHz****Common Information**

Project No.:

RSHA240903001

Test Mode:

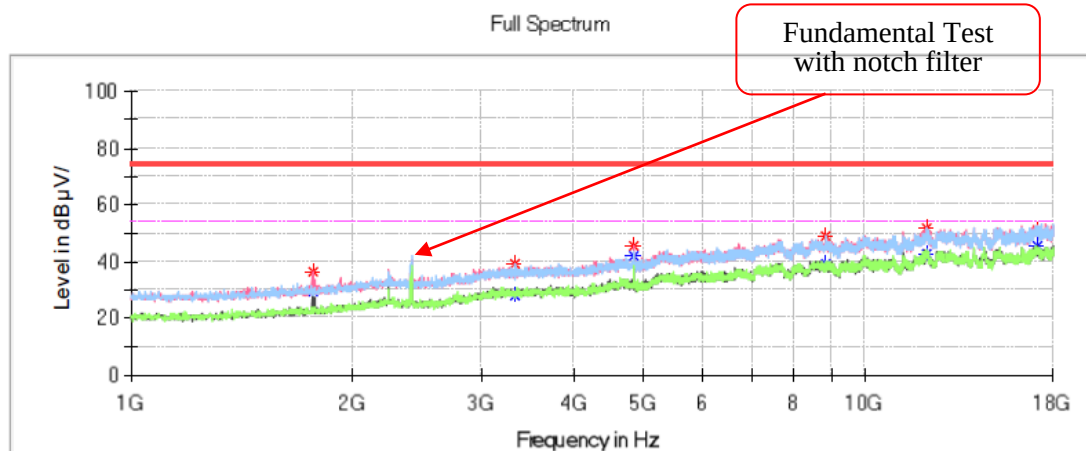
2.4G WIFI 802.11n20 low channel

Standard:

FCC Part 15.247 &amp; FCC Part 15.205 &amp; FCC Part 15.209

Test Engineer:

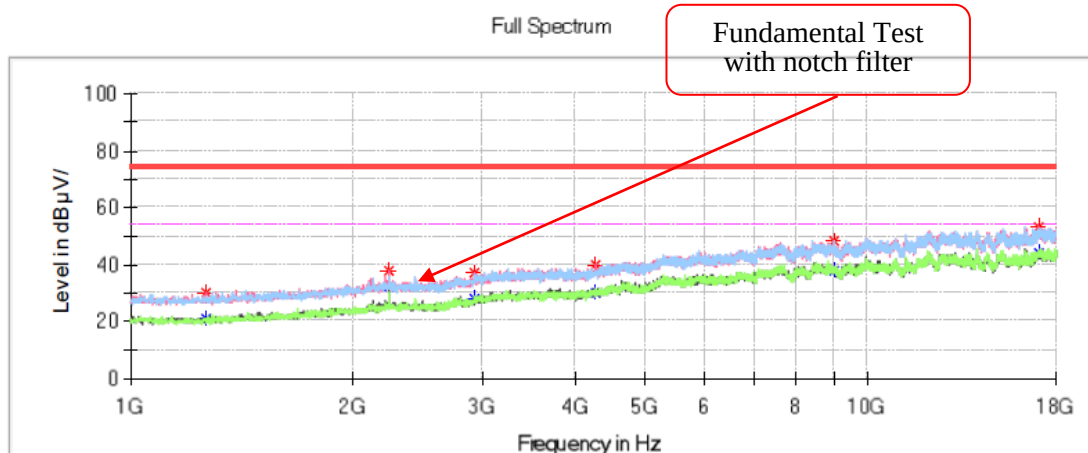
Klein Zhu

**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dB μ V/m) | Average (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1765.000000     | 36.63              | ---                | 74.00            | 37.37       | V   | -13.1        |
| 1765.000000     | ---                | 29.12              | 54.00            | 24.88       | V   | -13.1        |
| 3340.900000     | ---                | 28.19              | 54.00            | 25.81       | H   | -7.0         |
| 3340.900000     | 38.91              | ---                | 74.00            | 35.09       | H   | -7.0         |
| 4823.300000     | ---                | 41.82              | 54.00            | 12.18       | V   | -3.1         |
| 4823.300000     | 45.60              | ---                | 74.00            | 28.40       | V   | -3.1         |
| 8801.300000     | 48.65              | ---                | 74.00            | 25.35       | H   | 5.4          |
| 8801.300000     | ---                | 39.33              | 54.00            | 14.67       | H   | 5.4          |
| 12111.200000    | 51.61              | ---                | 74.00            | 22.39       | V   | 9.1          |
| 12111.200000    | ---                | 42.45              | 54.00            | 11.55       | V   | 9.1          |
| 17158.500000    | 51.37              | ---                | 74.00            | 22.63       | V   | 12.0         |
| 17158.500000    | ---                | 45.59              | 54.00            | 8.41        | V   | 12.0         |

**Middle Channel: 2437MHz****Common Information**

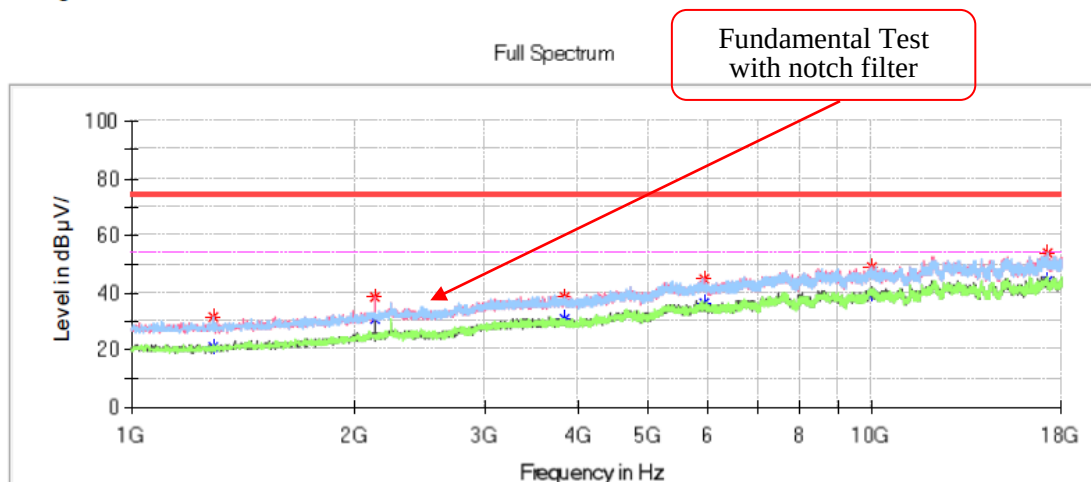
Project No.: RSHA240903001  
Test Mode: 2.4G WIFI 802.11n20 middle channel  
Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
Test Engineer: Klein Zhu

**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dB µ V/m) | Average (dB µ V/m) | Limit (dB µ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1263.500000     | ---                | 20.92              | 54.00            | 33.08       | H   | -15.1        |
| 1263.500000     | 30.20              | ---                | 74.00            | 43.80       | H   | -15.1        |
| 2239.300000     | ---                | 32.09              | 54.00            | 21.91       | V   | -11.0        |
| 2239.300000     | 38.07              | ---                | 74.00            | 35.93       | V   | -11.0        |
| 2921.000000     | ---                | 27.71              | 54.00            | 26.29       | V   | -8.7         |
| 2921.000000     | 36.84              | ---                | 74.00            | 37.16       | V   | -8.7         |
| 4275.900000     | 40.16              | ---                | 74.00            | 33.84       | V   | -5.0         |
| 4275.900000     | ---                | 30.36              | 54.00            | 23.64       | V   | -5.0         |
| 9007.000000     | 48.37              | ---                | 74.00            | 25.63       | H   | 5.4          |
| 9007.000000     | ---                | 37.69              | 54.00            | 16.31       | H   | 5.4          |
| 17056.500000    | ---                | 44.28              | 54.00            | 9.72        | H   | 12.2         |
| 17056.500000    | 53.28              | ---                | 74.00            | 20.72       | H   | 12.2         |

**High Channel: 2462MHz****Common Information**

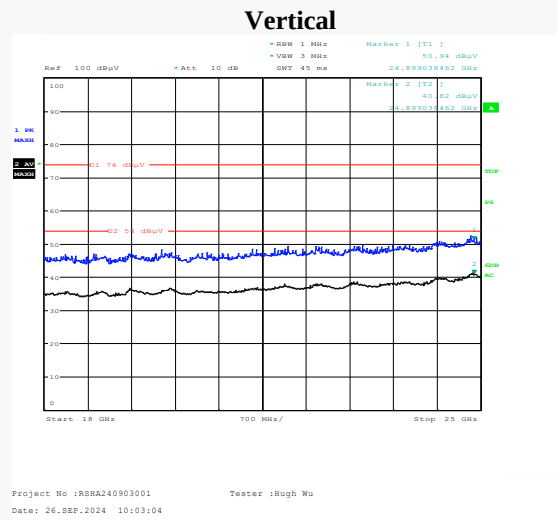
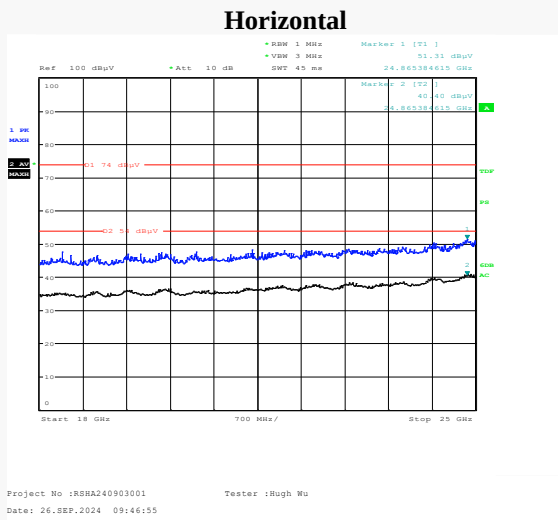
Project No.: RSHA240903001  
 Test Mode: 2.4G WIFI 802.11n20 high channel  
 Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
 Test Engineer: Klein Zhu

**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dB µ V/m) | Average (dB µ V/m) | Limit (dB µ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1285.600000     | 31.27              | ---                | 74.00            | 42.73       | H   | -15.0        |
| 1285.600000     | ---                | 21.28              | 54.00            | 32.72       | H   | -15.0        |
| 2132.200000     | ---                | 30.82              | 54.00            | 23.18       | V   | -11.3        |
| 2132.200000     | 38.30              | ---                | 74.00            | 35.70       | V   | -11.3        |
| 3845.800000     | 38.27              | ---                | 74.00            | 35.73       | V   | -6.0         |
| 3845.800000     | ---                | 30.51              | 54.00            | 23.49       | V   | -6.0         |
| 5913.000000     | 44.64              | ---                | 74.00            | 29.36       | V   | 0.0          |
| 5913.000000     | ---                | 36.27              | 54.00            | 17.73       | V   | 0.0          |
| 9974.300000     | 48.66              | ---                | 74.00            | 25.34       | H   | 7.1          |
| 9974.300000     | ---                | 39.01              | 54.00            | 14.99       | H   | 7.1          |
| 17209.500000    | ---                | 43.96              | 54.00            | 10.04       | H   | 12.0         |
| 17209.500000    | 53.89              | ---                | 74.00            | 20.11       | H   | 12.0         |

**18GHz-25GHz: Transmitting in 802.11b mode low channel is worst case**

| Frequency (MHz) | Max Peak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|-------------------|------------------|----------------|-------------|-----|--------------|
| 24865.38        | ---               | 40.4             | 54             | 13.6        | H   | 15.29        |
| 24865.38        | 51.31             | ---              | 74             | 22.69       | H   | 15.29        |
| 24899.04        | ---               | 40.82            | 54             | 13.18       | V   | 15.34        |
| 24899.04        | 50.94             | ---              | 74             | 23.06       | V   | 15.34        |

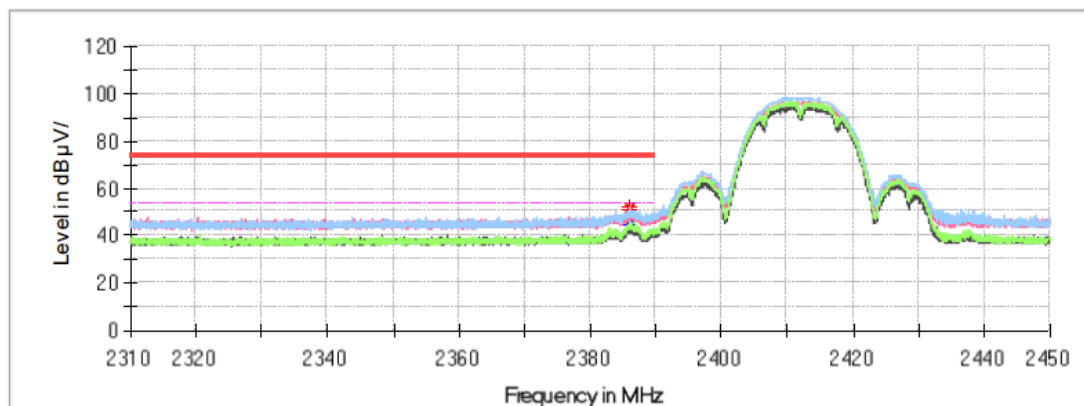


Note: The test distance is 3m. The limit is 74dBμV/m(Peak) and 54dBμV/m(Average).

**Restricted Bands Emission:  
802.11b Mode:****Low Channel****Common Information**

Project No.: RSHA240903001  
Test Mode: 2.4G WIFI 802.11b low channel  
Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
Test Engineer: Klein Zhu

Full Spectrum

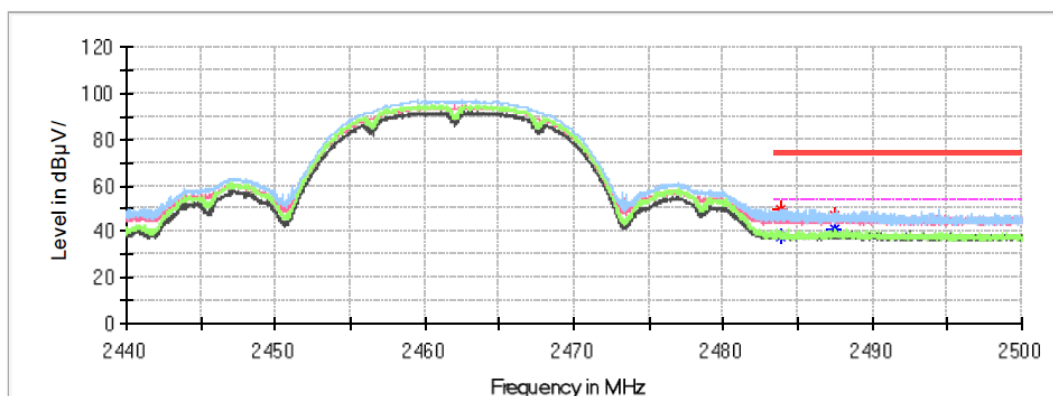
**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dB µ V/m) | Average (dB µ V/m) | Limit (dB µ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2386.006000     | ---                | 45.77              | 54.00            | 8.23        | H   | -0.6         |
| 2386.006000     | 50.94              | ---                | 74.00            | 23.06       | H   | -0.6         |
| 2386.076000     | ---                | 44.62              | 54.00            | 9.38        | V   | -0.6         |
| 2386.076000     | 51.73              | ---                | 74.00            | 22.27       | V   | -0.6         |

**High Channel****Common Information**

Project No.: RSHA240903001  
Test Mode: 2.4G WIFI 802.11b high channel  
Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
Test Engineer: Klein Zhu

Full Spectrum

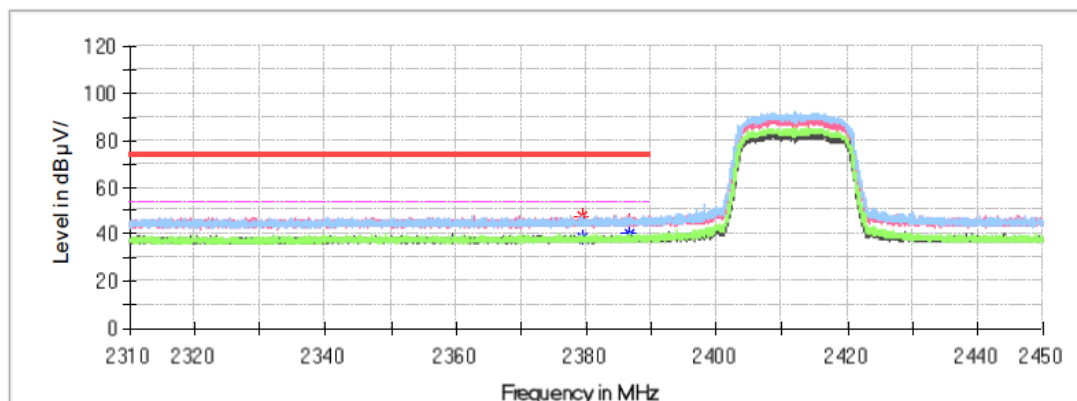
**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dB µ V/m) | Average (dB µ V/m) | Limit (dB µ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2483.848000     | 49.92              | ---                | 74.00            | 24.08       | H   | -0.3         |
| 2483.848000     | ---                | 37.36              | 54.00            | 16.64       | H   | -0.3         |
| 2487.520000     | 46.77              | ---                | 74.00            | 27.23       | H   | -0.2         |
| 2487.520000     | ---                | 41.06              | 54.00            | 12.94       | H   | -0.2         |

**802.11g Mode :****Low Channel****Common Information**

Project No.: RSHA240903001  
Test Mode: 2.4G WIFI 802.11g low channel  
Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
Test Engineer: Klein Zhu

Full Spectrum

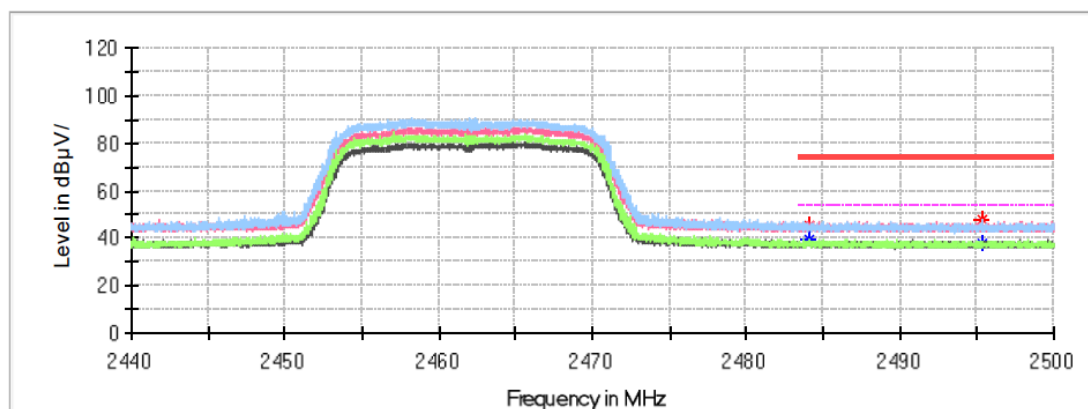
**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dB μ V/m) | Average (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2379.258000     | 48.08              | ---                | 74.00            | 25.92       | H   | -0.6         |
| 2379.258000     | ---                | 38.67              | 54.00            | 15.33       | H   | -0.6         |
| 2386.650000     | 45.52              | ---                | 74.00            | 28.48       | H   | -0.6         |
| 2386.650000     | ---                | 40.28              | 54.00            | 13.72       | H   | -0.6         |

**High Channel****Common Information**

Project No.: RSHA240903001  
Test Mode: 2.4G WIFI 802.11g high channel  
Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
Test Engineer: Klein Zhu

Full Spectrum

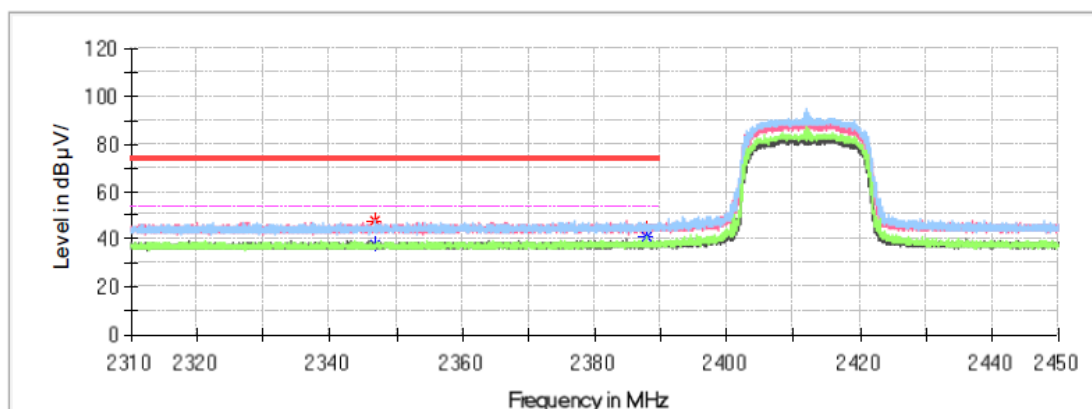
**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dB μ V/m) | Average (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2484.124000     | ---                | 39.70              | 54.00            | 14.30       | H   | -0.3         |
| 2484.124000     | 44.96              | ---                | 74.00            | 29.04       | H   | -0.3         |
| 2495.398000     | ---                | 37.66              | 54.00            | 16.34       | H   | -0.2         |
| 2495.398000     | 47.49              | ---                | 74.00            | 26.51       | H   | -0.2         |

**802.11n-HT20 Mode:****Low Channel****Common Information**

Project No.: RSHA240903001  
Test Mode: 2.4G WIFI 802.11n20 low channel  
Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
Test Engineer: Klein Zhu

Full Spectrum

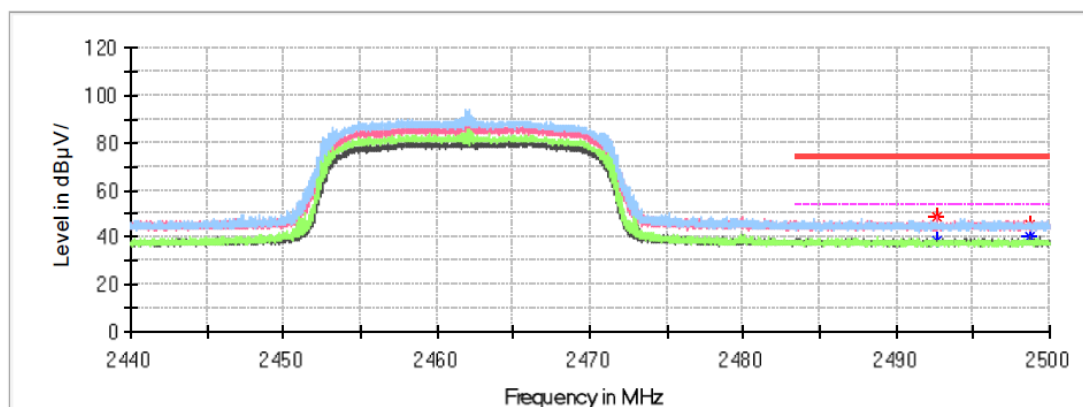
**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dB μ V/m) | Average (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2346.932000     | 47.84              | ---                | 74.00            | 26.16       | H   | -0.7         |
| 2346.932000     | ---                | 37.46              | 54.00            | 16.54       | H   | -0.7         |
| 2387.910000     | 44.40              | ---                | 74.00            | 29.60       | H   | -0.6         |
| 2387.910000     | ---                | 40.92              | 54.00            | 13.08       | H   | -0.6         |

**High Channel****Common Information**

Project No.: RSHA240903001  
Test Mode: 2.4G WIFI 802.11n20 high channel  
Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
Test Engineer: Klein Zhu

Full Spectrum

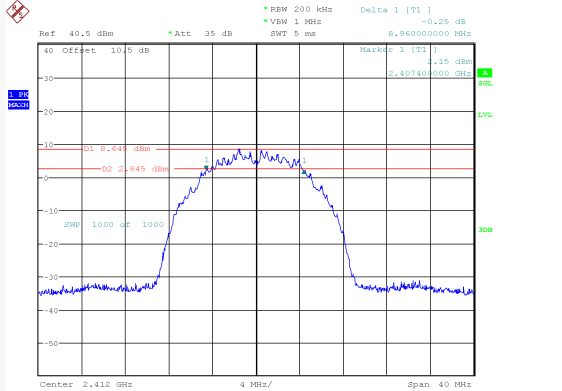
**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dB µ V/m) | Average (dB µ V/m) | Limit (dB µ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2492.632000     | 48.26              | ---                | 74.00            | 25.74       | V   | -0.2         |
| 2492.632000     | ---                | 38.71              | 54.00            | 15.29       | V   | -0.2         |
| 2498.758000     | 45.24              | ---                | 74.00            | 28.76       | V   | -0.2         |
| 2498.758000     | ---                | 40.01              | 54.00            | 13.99       | V   | -0.2         |

**6 dB EMISSION BANDWIDTH****Test Result:** Compliant.*EUT operation mode: Transmitting*

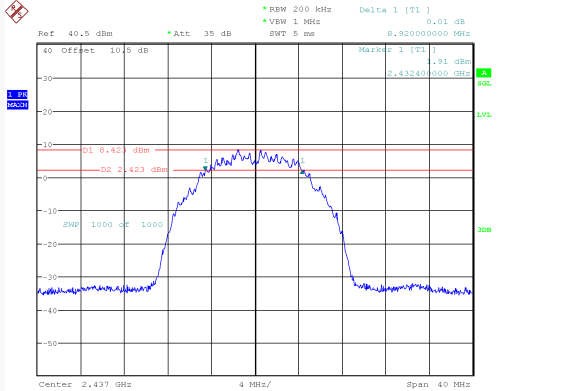
| Channel                  | Frequency (MHz) | 6 dB Emission Bandwidth (MHz) | Limit (MHz) |
|--------------------------|-----------------|-------------------------------|-------------|
| <b>802.11b Mode</b>      |                 |                               |             |
| Low                      | 2412            | 8.960                         | $\geq 0.5$  |
| Middle                   | 2437            | 8.920                         | $\geq 0.5$  |
| High                     | 2462            | 8.920                         | $\geq 0.5$  |
| <b>802.11g Mode</b>      |                 |                               |             |
| Low                      | 2412            | 16.360                        | $\geq 0.5$  |
| Middle                   | 2437            | 16.400                        | $\geq 0.5$  |
| High                     | 2462            | 16.440                        | $\geq 0.5$  |
| <b>802.11n-HT20 Mode</b> |                 |                               |             |
| Low                      | 2412            | 17.240                        | $\geq 0.5$  |
| Middle                   | 2437            | 17.240                        | $\geq 0.5$  |
| High                     | 2462            | 17.240                        | $\geq 0.5$  |

802.11b Mode Low Channel



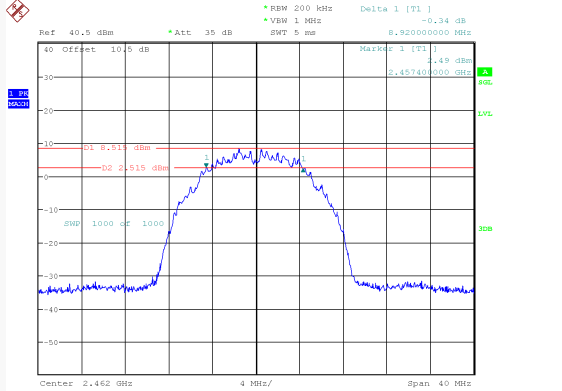
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:25:57

802.11b Mode Middle Channel



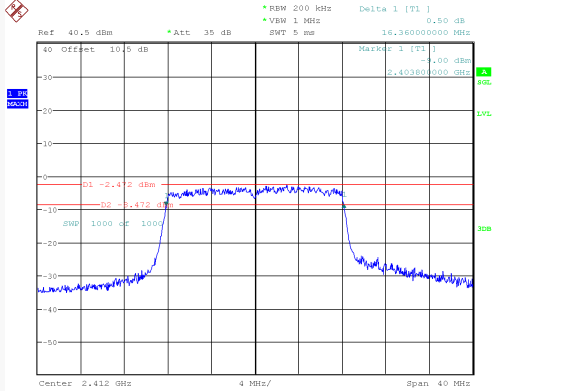
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:28:13

802.11b Mode High Channel



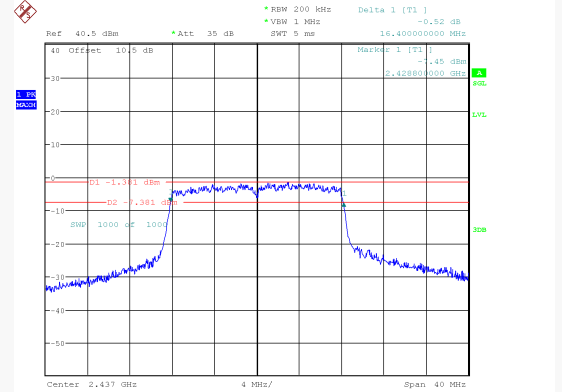
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:30:38

802.11g Mode Low Channel



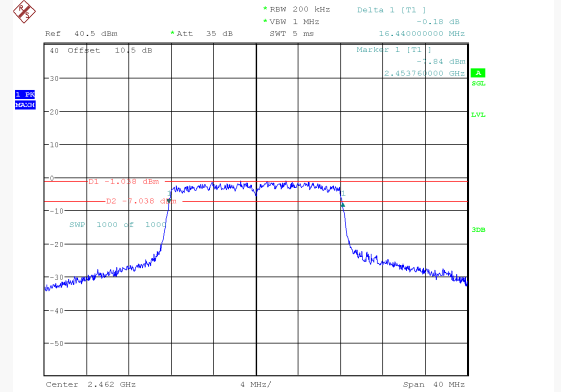
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:10:17

802.11g Mode Middle Channel



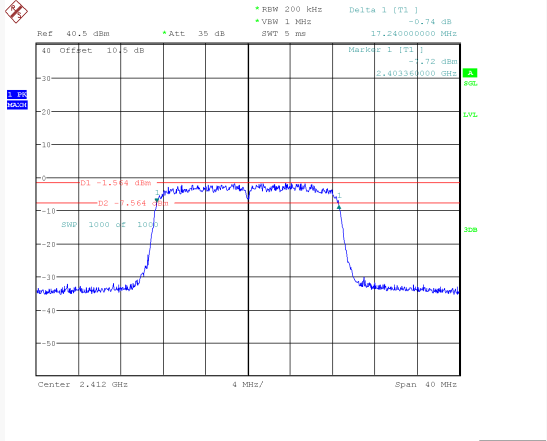
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:11:55

802.11g Mode High Channel



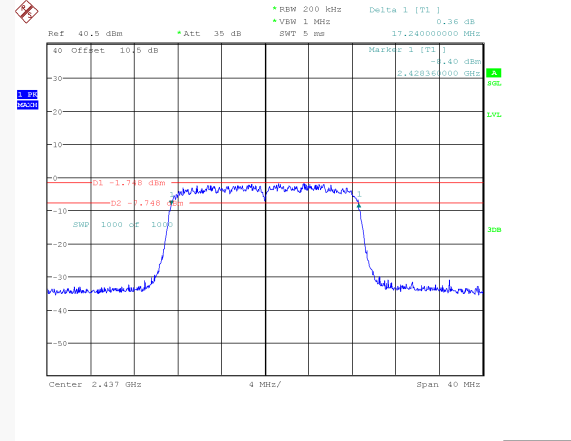
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:14:06

802.11n-HT20 Mode Low Channel



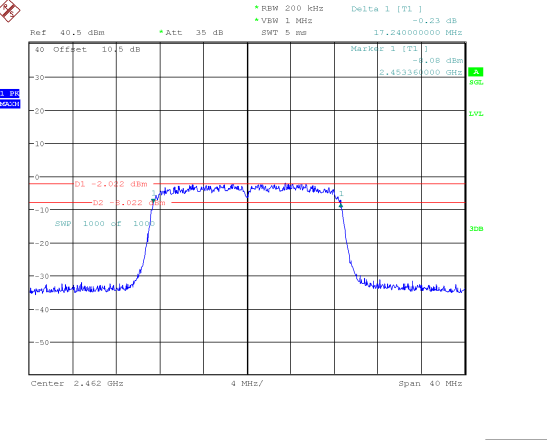
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:18:15

802.11n-HT20 Mode Middle Channel



ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:19:43

802.11n-HT20 Mode High Channel

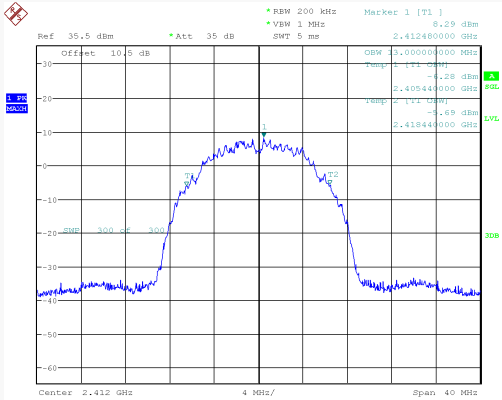


ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:21:57

**OCCUPIED BANDWIDTH***EUT operation mode: Transmitting*

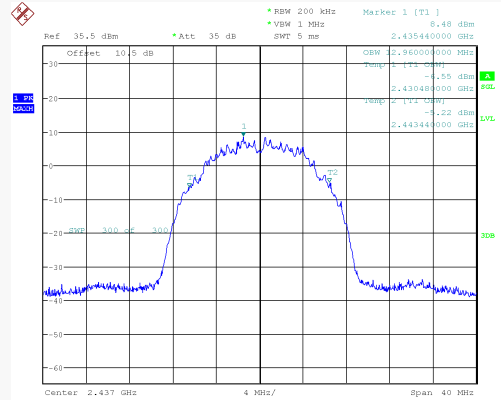
| Channel                  | Frequency<br>(MHz) | 99% Occupied Bandwidth<br>(MHz) |
|--------------------------|--------------------|---------------------------------|
| <b>802.11b Mode</b>      |                    |                                 |
| Low                      | 2412               | 13.000                          |
| Middle                   | 2437               | 12.960                          |
| High                     | 2462               | 13.000                          |
| <b>802.11g Mode</b>      |                    |                                 |
| Low                      | 2412               | 16.480                          |
| Middle                   | 2437               | 16.680                          |
| High                     | 2462               | 16.560                          |
| <b>802.11n-HT20 mode</b> |                    |                                 |
| Low                      | 2412               | 17.240                          |
| Middle                   | 2437               | 17.240                          |
| High                     | 2462               | 17.240                          |

802.11b Mode Low Channel



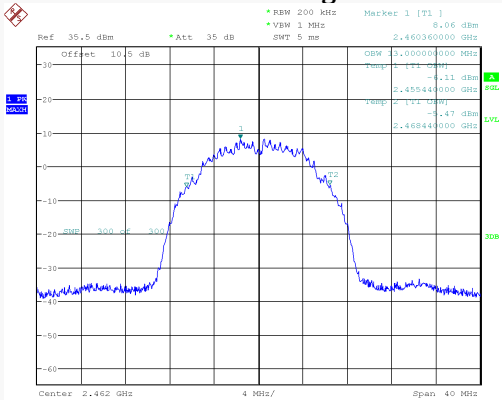
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:24:55

802.11b Mode Middle Channel



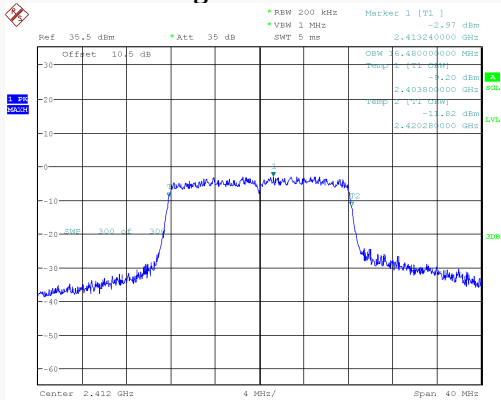
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:27:19

802.11b Mode High Channel



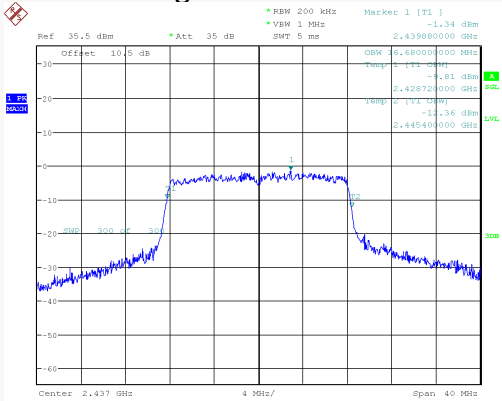
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:29:12

802.11g Mode Low Channel



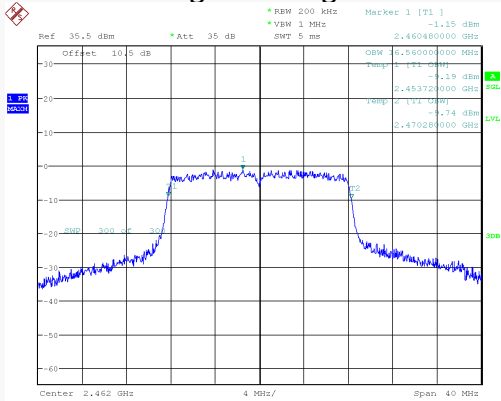
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:09:15

802.11g Mode Middle Channel



ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:11:01

802.11g Mode High Channel



ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:12:40

ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:17:12

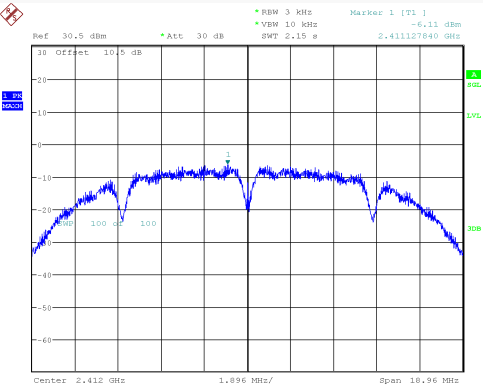
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:18:49

ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:20:31

**POWER SPECTRAL DENSITY****Test Result:** Compliant.*EUT operation mode: Transmitting*

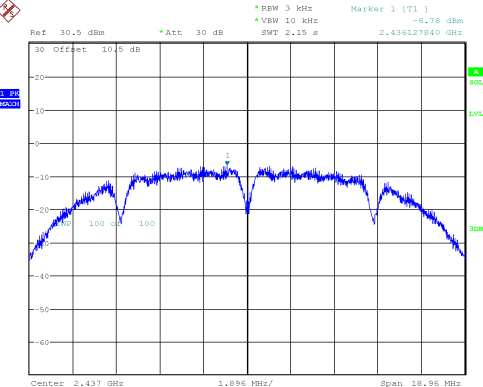
| Channel                  | Frequency<br>(MHz) | PSD<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) |
|--------------------------|--------------------|-------------------|---------------------|
| <b>802.11b Mode</b>      |                    |                   |                     |
| Low                      | 2412               | -6.11             | $\leq 8$            |
| Middle                   | 2437               | -6.78             | $\leq 8$            |
| High                     | 2462               | -7.25             | $\leq 8$            |
| <b>802.11g Mode</b>      |                    |                   |                     |
| Low                      | 2412               | -16.41            | $\leq 8$            |
| Middle                   | 2437               | -16.87            | $\leq 8$            |
| High                     | 2462               | -17.37            | $\leq 8$            |
| <b>802.11n-HT20 mode</b> |                    |                   |                     |
| Low                      | 2412               | -16.24            | $\leq 8$            |
| Middle                   | 2437               | -16.58            | $\leq 8$            |
| High                     | 2462               | -16.82            | $\leq 8$            |

802.11b Low Channel



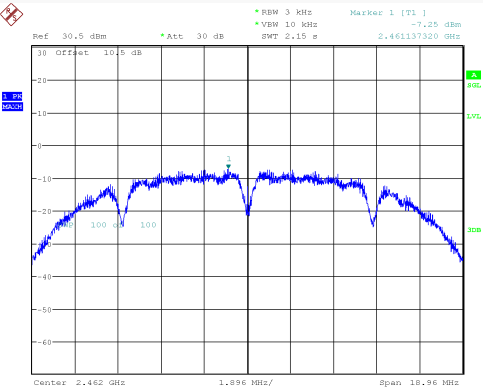
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 23.SEP.2024 16:44:40

802.11b Middle Channel



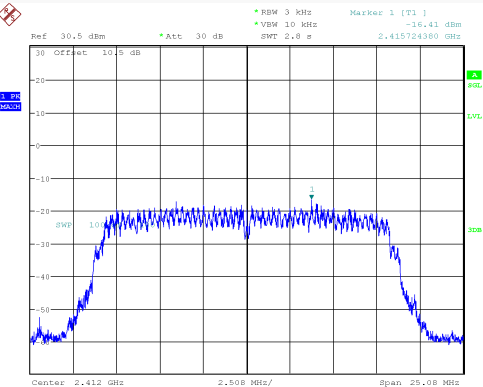
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 23.SEP.2024 16:56:35

802.11b High Channel



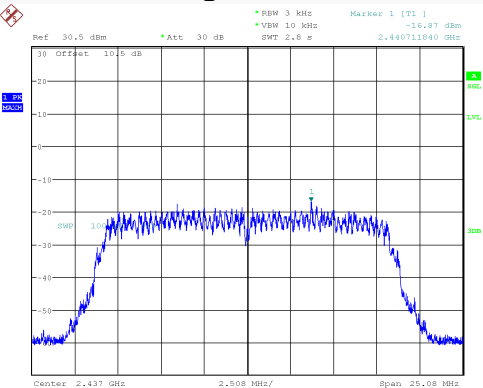
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 23.SEP.2024 17:05:51

802.11g Low Channel



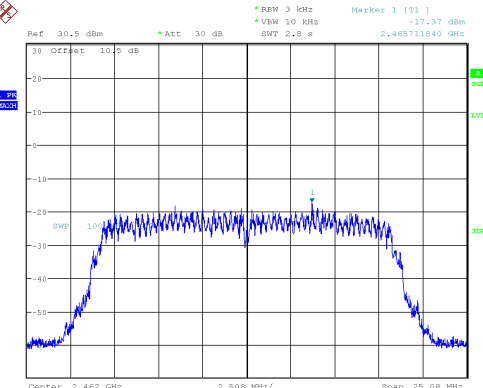
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 23.SEP.2024 17:21:14

802.11g Middle Channel



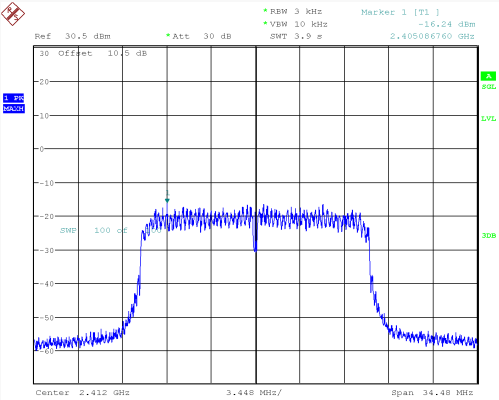
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 23.SEP.2024 17:31:06

802.11g High Channel



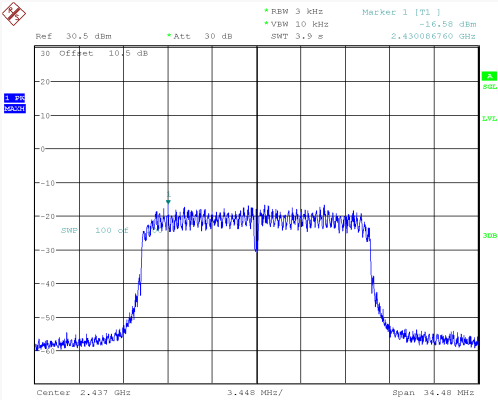
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 23.SEP.2024 17:42:23

802.11n-HT20 Low Channel



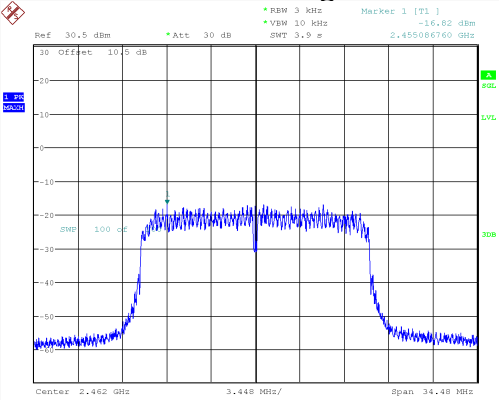
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:49:02

802.11n-HT20 Middle Channel



ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 14:56:34

802.11n-HT20 High Channel



ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 15:05:28

**TRANSMITTER OUTPUT POWER MEASUREMENT**

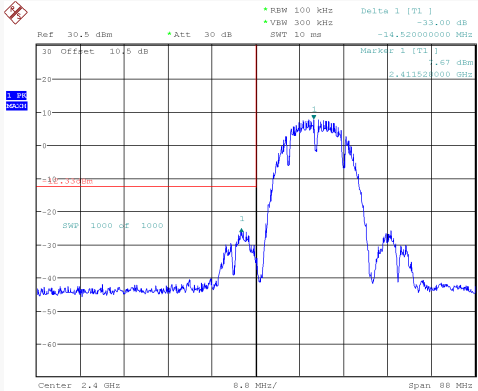
| Channel                  | Frequency (MHz) | Max Conducted Peak Output Power (dBm) | Peak Output Power Limit (dBm) |
|--------------------------|-----------------|---------------------------------------|-------------------------------|
| <b>802.11b Mode</b>      |                 |                                       |                               |
| Low                      | 2412            | 21.32                                 | ≤30                           |
| Middle                   | 2437            | 21.07                                 | ≤30                           |
| High                     | 2462            | 20.73                                 | ≤30                           |
| <b>802.11g Mode</b>      |                 |                                       |                               |
| Low                      | 2412            | 18.25                                 | ≤30                           |
| Middle                   | 2437            | 17.80                                 | ≤30                           |
| High                     | 2462            | 17.44                                 | ≤30                           |
| <b>802.11n-HT20 Mode</b> |                 |                                       |                               |
| Low                      | 2412            | 18.28                                 | ≤30                           |
| Middle                   | 2437            | 17.72                                 | ≤30                           |
| High                     | 2462            | 17.23                                 | ≤30                           |

**OUT OF BAND EMISSIONS**

| Mode        | Value<br>(dB) | Limit<br>(dB) | Result |
|-------------|---------------|---------------|--------|
| b_2412MHz   | 33.00         | 20            | Pass   |
| b_2462MHz   | 47.00         | 20            | Pass   |
| g_2412MHz   | 38.36         | 20            | Pass   |
| g_2462MHz   | 37.57         | 20            | Pass   |
| n20_2412MHz | 42.38         | 20            | Pass   |
| n20_2462MHz | 40.38         | 20            | Pass   |

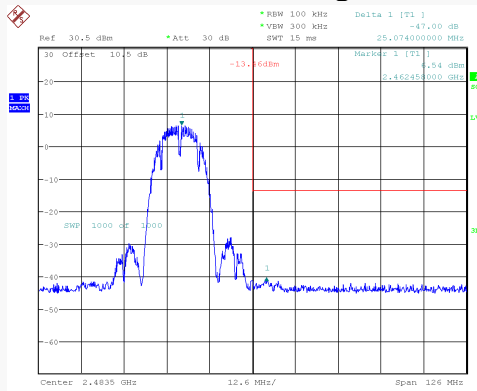
EUT operation mode: Transmitting

802.11b Mode Left Side



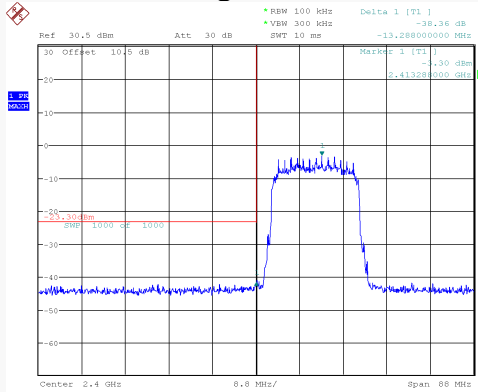
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 23.SEP.2024 16:38:10

802.11b Mode Right Side



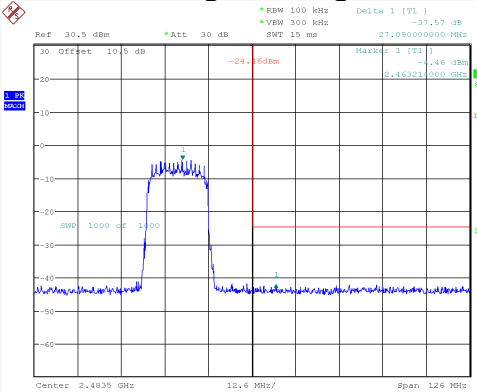
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 23.SEP.2024 17:00:10

802.11g Mode Left Side



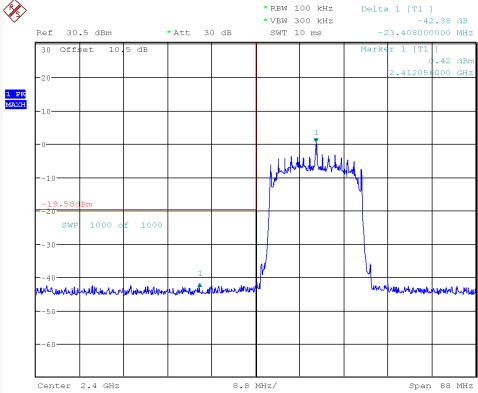
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 23.SEP.2024 17:09:39

802.11g Mode Right Side



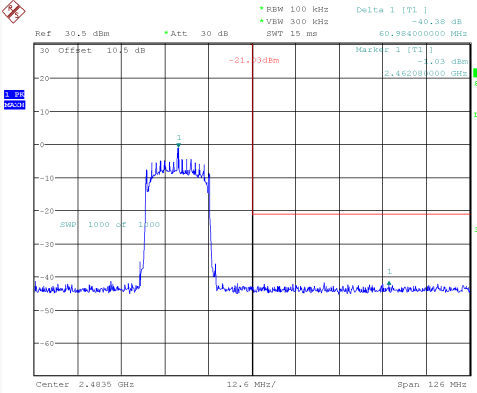
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 23.SEP.2024 17:35:14

802.11n-HT20 Mode Left Side



ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 23.SEP.2024 17:46:28

802.11n-HT20 Mode Right Side



ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 23.SEP.2024 18:07:15

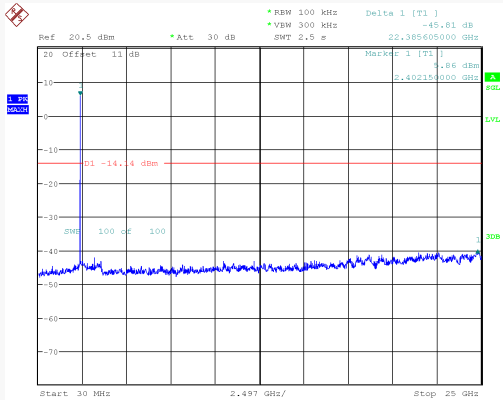
**CONDUCTED SPURIOUS EMISSION**

| <b>Mode</b> | <b>Test Frequency<br/>(MHz)</b> | <b>Result<br/>(dB)</b> | <b>Limit<br/>(dB)</b> | <b>Verdict</b> |
|-------------|---------------------------------|------------------------|-----------------------|----------------|
| 802.11b     | 2412                            | 45.81                  | 20                    | Pass           |
|             | 2437                            | 44.99                  | 20                    | Pass           |
|             | 2462                            | 45.27                  | 20                    | Pass           |
| 802.11g     | 2412                            | 37.72                  | 20                    | Pass           |
|             | 2437                            | 36.72                  | 20                    | Pass           |
|             | 2462                            | 35.23                  | 20                    | Pass           |
| 802.11n20   | 2412                            | 34.91                  | 20                    | Pass           |
|             | 2437                            | 36.12                  | 20                    | Pass           |
|             | 2462                            | 34.27                  | 20                    | Pass           |

Note: the maximum path attenuation of 30MHz~25GHz was added into the offset

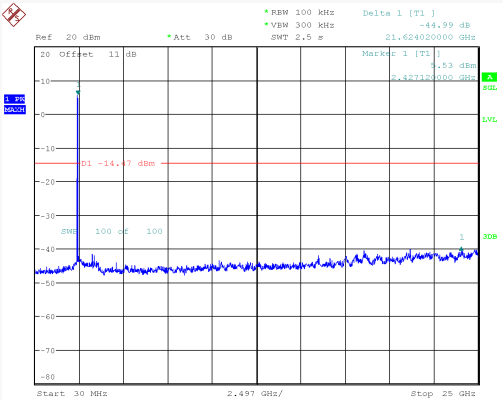
EUT operation mode: Transmitting

802.11b\_2412MHz



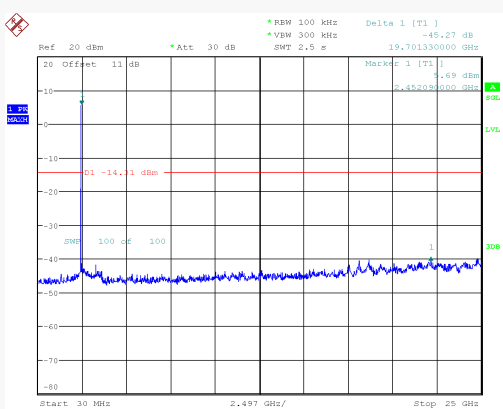
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 16:26:50

802.11b\_2437MHz



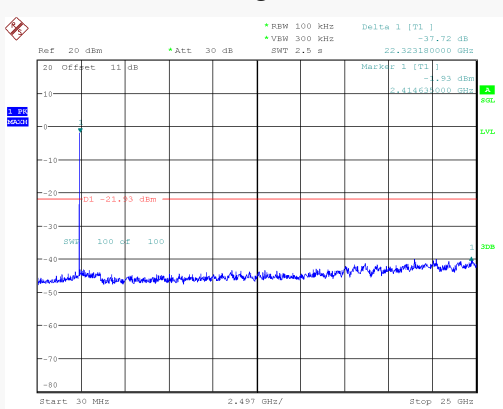
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 16:31:41

802.11b\_2462MHz



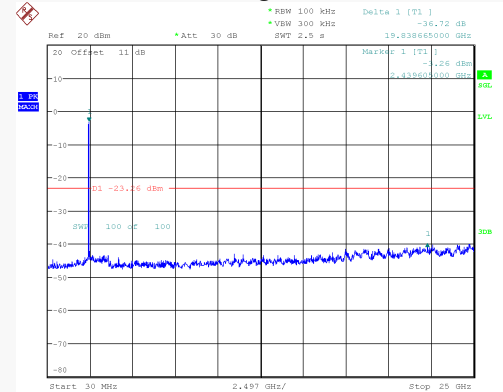
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 16:37:24

802.11g\_2412MHz



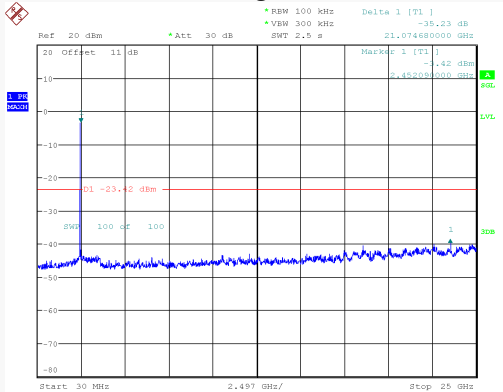
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 16:47:09

802.11g\_2437MHz



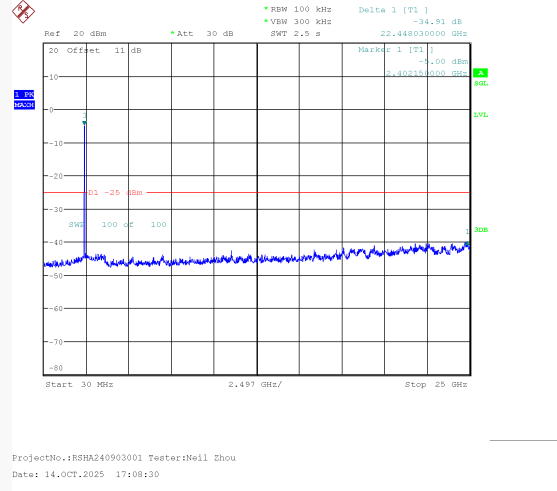
ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 16:51:57

802.11g\_2462MHz

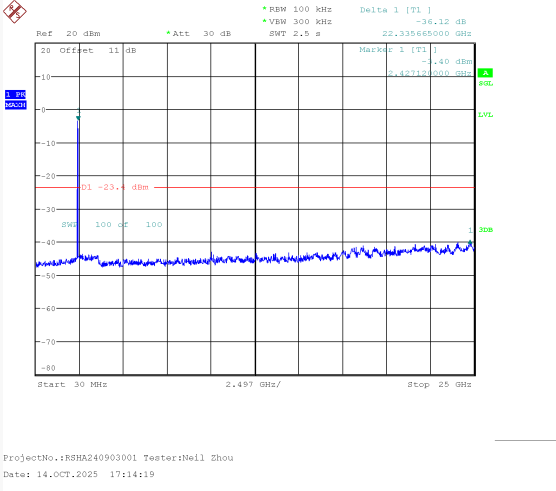


ProjectNo.:RSHA240903001 Tester:Neil Zhou  
Date: 14.OCT.2025 16:57:24

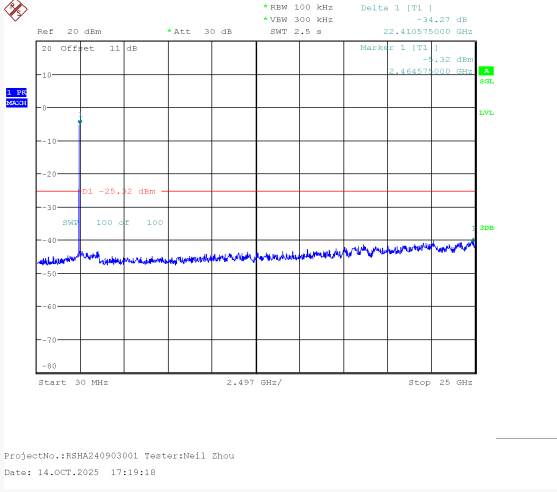
802.11n20\_2412MHz



802.11n20\_2437MHz



802.11n20\_2462MHz



## **EUT PHOTOGRAPHS**

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Please refer to the attachment EXHIBIT A - EUT EXTERNAL PHOTOGRAPHS and EXHIBIT B - EUT INTERNAL PHOTOGRAPHS.

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## **TEST SETUP PHOTOGRAPHS**

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Please refer to the attachment EXHIBIT C - TEST SETUP PHOTOGRAPHS.

### **Declarations**

1. The laboratory is not responsible for the authenticity of any information provided by the applicant. Information from the applicant that may affect test results is marked with “★”.
2. The test data was only valid for the test sample(s).
3. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.
4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor  $k=2$  with the 95.45% confidence interval.
6. This report may contain standards and test items that are not covered by the accreditation scope and shall be marked with an asterisk “▲” .

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