

## FCC PART 15.247

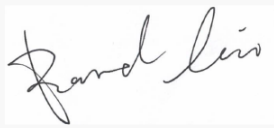
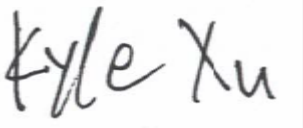
## TEST REPORT

For

### WISEASY TECHNOLOGY PTE. LTD.

70 Anson Road, #18-02, Hub Synergy Point, Singapore 079905

**FCC ID: 2BFPOP5LPINPAD**

|                                                                                                                                                                                                                                                     |                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>Report Type:</b><br>Original Report                                                                                                                                                                                                              | <b>Product Name:</b><br>Retail Smart PIN Pad                                         |
| <b>Report Number:</b> <u>RKSA250411002-00A</u>                                                                                                                                                                                                      |                                                                                      |
| <b>Report Date:</b> <u>2025-07-14</u>                                                                                                                                                                                                               |                                                                                      |
| <b>Reviewed By:</b> <u>Bard Liu</u>                                                                                                                                                                                                                 |  |
| <b>Approved By:</b> <u>Kyle Xu</u>                                                                                                                                                                                                                  |  |
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Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Kunshan). This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, or any agency of the U.S. Government.

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REPORT REVISION HISTORY

| Number of Revisions | Report No.        | Version | Issue Date | Description     |
|---------------------|-------------------|---------|------------|-----------------|
| 0                   | RKSA250411002-00A | R1V1    | 2025-07-14 | Initial Release |

## GENERAL INFORMATION

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

|                            |                                                                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Applicant                  | WISEASY TECHNOLOGY PTE. LTD.                                                                                                    |
| Tested Model               | P5L-PINPad                                                                                                                      |
| Product Name               | Retail Smart PIN Pad                                                                                                            |
| Power Supply               | DC 5V powered by adapter                                                                                                        |
| RF Function:               | 2.4G Wi-Fi; BLE                                                                                                                 |
| Operating Band/Frequency:  | 2.4G Wi-Fi:<br>2412~2462 MHz(802.11b/g/n20), 2422~2452 MHz(802.11n40)<br>BLE(1 Mbps): 2402-2480 MHz                             |
| Maximum Peak Output Power: | 2.4G Wi-Fi:<br>802.11b: 18.76 dBm<br>802.11g: 19.21 dBm<br>802.11n20: 18.33 dBm<br>802.11n40: 17.6 dBm<br>BLE(1 Mbps): 6.72 dBm |
| Channel Number:            | 2.4G Wi-Fi: 11(802.11b/g/n20), 7(802.11n40)<br>BLE(1Mbps): 40                                                                   |
| Channel Separation:        | 2.4G Wi-Fi: 5 MHz<br>BLE: 2 MHz                                                                                                 |
| Modulation Type:           | 2.4G Wi-Fi: DSSS, OFDM<br>BLE: GFSK                                                                                             |
| ★Maximum Antenna Gain:     | 0.69 dBi                                                                                                                        |

#### Adapter Information:

Model: TPA-418G050200UU01

Input: 100-240V, 50/60Hz, 0.3A

Output: 5.0V, 2.0A 10.0W

*Note: The maximum antenna gain was declared by the manufacturer.*

*All measurement and test data in this report was gathered from production sample serial number: RKSA250411002-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2025-04-11.)*

### Objective

This report is prepared for *WISEASY TECHNOLOGY PTE. 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, 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 BLE mode:

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

EUT was tested with channel 0, 19 and 39.

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.

For 802.11n-HT40 mode, EUT was tested with Channel 3, 6 and 9.

### Equipment Modifications

No modification was made to the EUT tested.

**EUT Exercise Software**

RF test software: engineering mode

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

| Mode         | Data Rate | ★Power Level |
|--------------|-----------|--------------|
| 802.11b      | 1 Mbps    | 15           |
| 802.11g      | 6 Mbps    | 18           |
| 802.11n-HT20 | MCS0      | 17           |
| 802.11n-HT40 | MCS0      | 14           |
| BLE(1Mbps)   | 1Mbps     | Default      |

Note: The power level was declared by the applicant.

**Environmental Conditions & Test Information**

|                           |                          |
|---------------------------|--------------------------|
| <b>Test Date:</b>         | 2025-04-25 to 2025-07-09 |
| <b>Temperature:</b>       | 25.7-26.5℃               |
| <b>Relative Humidity:</b> | 49-52 %                  |
| <b>ATM Pressure:</b>      | 102.1-102.7 kPa          |
| <b>Test Result:</b>       | Pass                     |
| <b>Test Engineer:</b>     | Neil Zhou                |

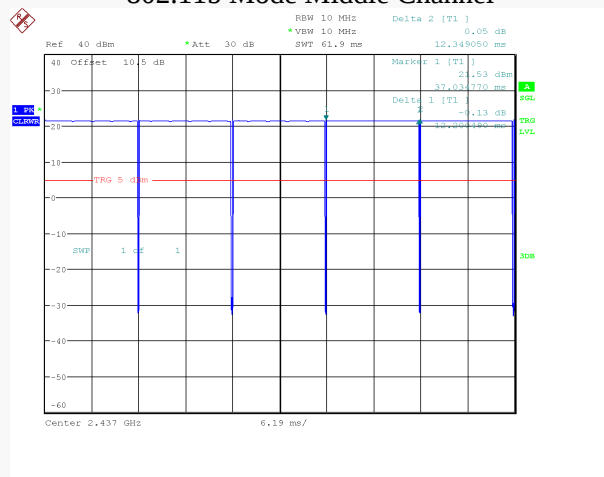
| <b>Mode</b>  | <b>Duty Cycle (%)</b> | <b>Ton(ms)</b> | <b>Ton+off(ms)</b> | <b>10log(1/x)<br/>(dB)</b> |
|--------------|-----------------------|----------------|--------------------|----------------------------|
| 802.11b      | 98.79                 | 12.200         | 12.349             | /                          |
| 802.11g      | 98.12                 | 2.033          | 2.072              | /                          |
| 802.11n-HT20 | 97.98                 | 1.887          | 1.926              | 0.09                       |
| 802.11n-HT40 | 94.69                 | 0.927          | 0.979              | 0.24                       |
| BLE(1Mbps)   | 61.90                 | 0.385          | 0.622              | 2.08                       |

**Note:**

1. “x” means the Duty Cycle.
2. Note: Offset (10.5dB) = Attenuator (10dB) + Cable Loss (0.5dB)

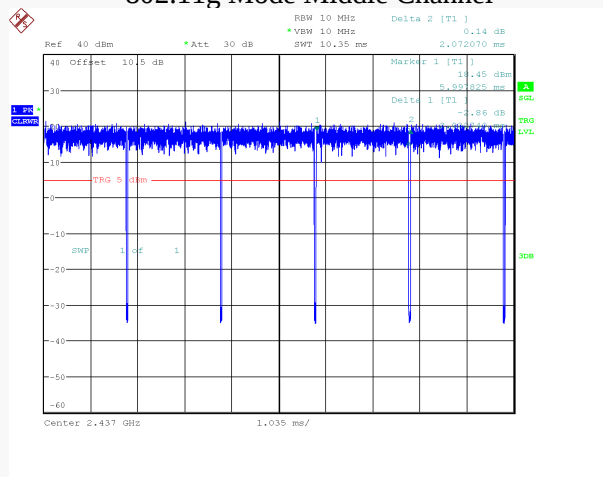
# Duty Cycle:

## 802.11b Mode Middle Channel



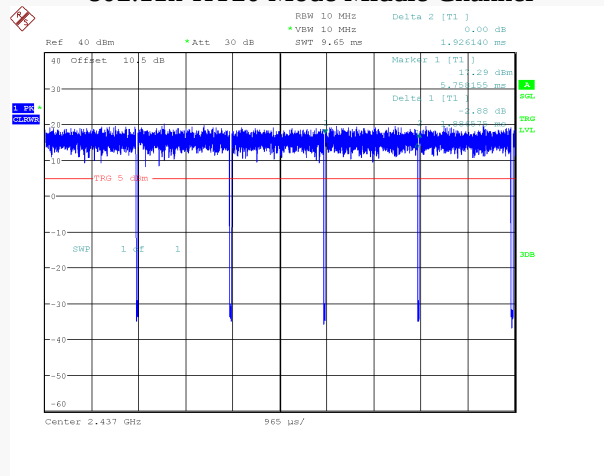
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 3.JUL.2025 17:30:44

## 802.11g Mode Middle Channel



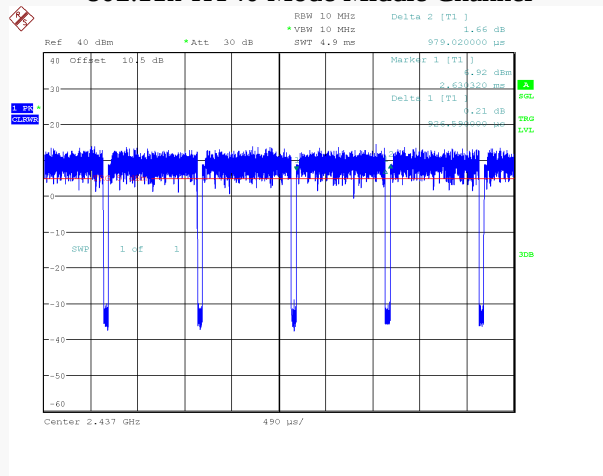
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 15:52:00

## 802.11n-HT20 Mode Middle Channel



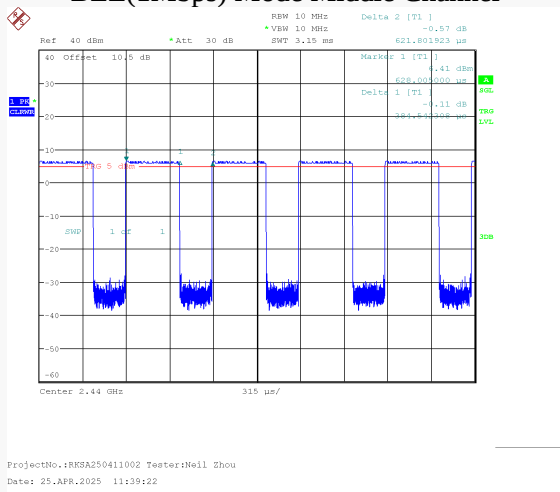
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 16:35:09

## 802.11n-HT40 Mode Middle Channel



ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 17:24:50

## BLE(1Mbps) Mode Middle Channel



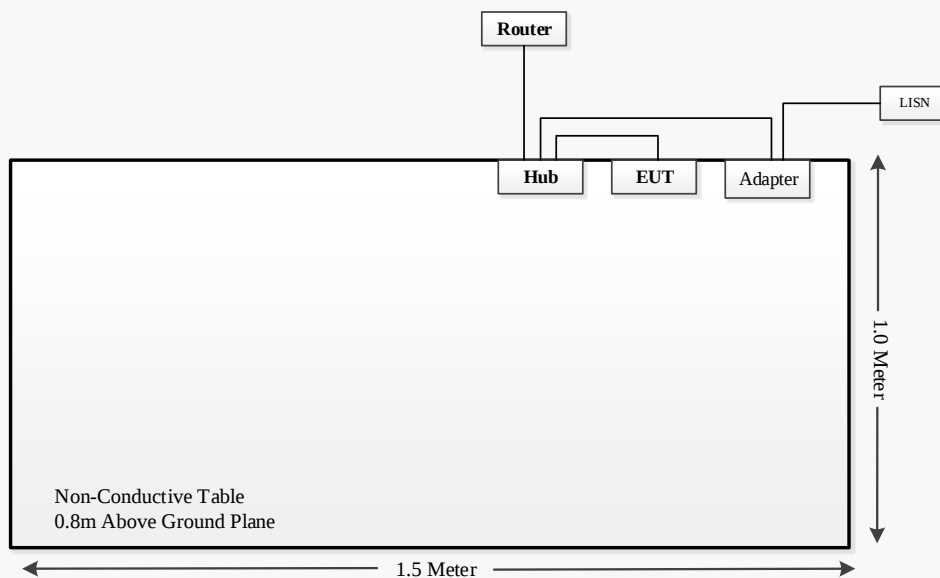
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 25.APR.2025 11:39:22

**Support Equipment List and Details**

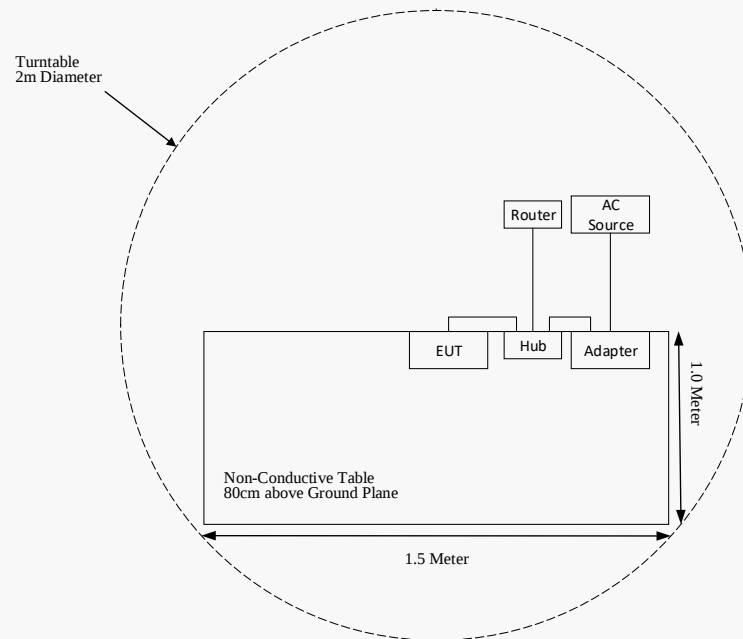
| Manufacturer | Description | Model      | Serial Number |
|--------------|-------------|------------|---------------|
| /            | Hub         | /          | /             |
| TP-LINK      | Router      | TL-XDR3010 | 12373X0002080 |

**External I/O Cable**

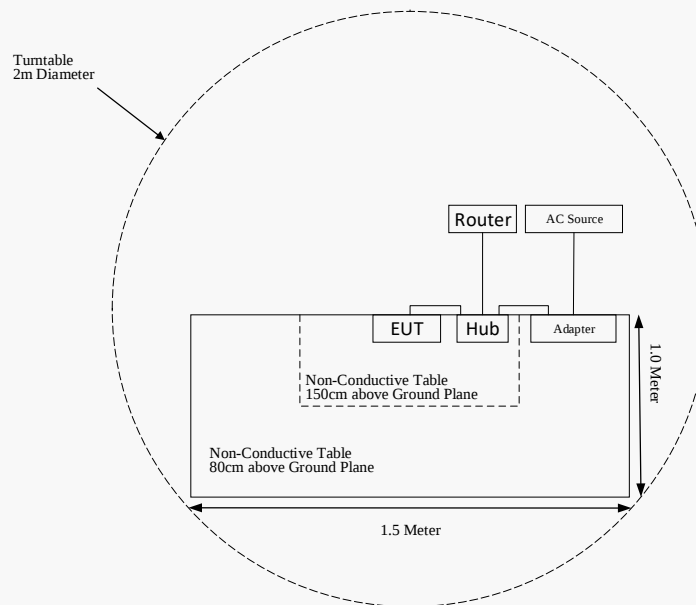
| Cable Description | Length (m) | From Port | To Port |
|-------------------|------------|-----------|---------|
| Power Cable 1     | 1.0        | Hub       | Adapter |
| Power Cable 2     | 1.0        | Adapter   | LISN    |
| Data Cable        | 0.3        | Hub       | EUT     |
| RJ45              | 5.0        | Hub       | Router  |

**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(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        | 2025-04-09       | 2026-04-08           |
| Sunol Sciences                             | Broadband Antenna   | JB3       | A090314-1     | 2024-11-08       | 2027-11-07           |
| Narda                                      | 6dB Attenuator      | 773-6     | 10690812-2-1  | 2024-10-29       | 2027-10-28           |
| BACL                                       | Active Loop Antenna | 1313-1A   | 4041511       | 2024-11-22       | 2027-11-21           |
| Sonoma Instrument                          | Pre-amplifier       | 310N      | 171205        | 2025-04-09       | 2026-04-08           |
| Rohde & Schwarz                            | Auto Test Software  | EMC32     | 100361        | N/A              | N/A                  |
| MICRO-COAX                                 | Coaxial Cable       | Cable-8   | 008           | 2025-04-09       | 2026-04-08           |
| MICRO-COAX                                 | Coaxial Cable       | Cable-9   | 009           | 2025-04-09       | 2026-04-08           |
| MICRO-COAX                                 | Coaxial Cable       | Cable-10  | 010           | 2025-04-09       | 2026-04-08           |
| <b>Radiated Emission Test (Chamber #2)</b> |                     |           |               |                  |                      |
| Rohde & Schwarz                            | EMI Test Receiver   | ESU40     | 100207/040    | 2025-04-09       | 2026-04-08           |
| ETS-LINDGREN                               | Horn Antenna        | 3115      | 9311-4159     | 2024-12-02       | 2025-12-01           |
| ETS-LINDGREN                               | Horn Antenna        | 3116      | 2516          | 2024-12-12       | 2027-12-11           |
| A.H.Systems, inc                           | Amplifier           | PAM-0118P | 512           | 2025-04-09       | 2026-04-08           |
| SELECTOR                                   | Amplifier           | EM18G40G  | 060726        | 2025-04-09       | 2026-04-08           |
| MICRO-TRONICS                              | Band Reject Filter  | BRM50702  | G024          | 2024-08-05       | 2025-08-04           |
| Narda                                      | Attenuator          | 10dB      | 010           | 2025-04-08       | 2026-04-07           |
| Rohde & Schwarz                            | Auto test Software  | EMC32     | 100361        | N/A              | N/A                  |
| MICRO-COAX                                 | Coaxial Cable       | Cable-6   | 006           | 2025-04-09       | 2026-04-08           |
| MICRO-COAX                                 | Coaxial Cable       | Cable-11  | 011           | 2025-04-09       | 2026-04-08           |
| MICRO-COAX                                 | Coaxial Cable       | Cable-12  | 012           | 2025-04-09       | 2026-04-08           |
| MICRO-COAX                                 | Coaxial Cable       | Cable-13  | 013           | 2025-04-09       | 2026-04-08           |
| <b>RF Conducted Test</b>                   |                     |           |               |                  |                      |
| Rohde & Schwarz                            | Spectrum Analyzer   | FSU26     | 200103        | 2025-04-09       | 2026-04-08           |
| Narda                                      | Attenuator          | 10dB      | 010           | 2025-04-08       | 2026-04-07           |
| XHFDZ                                      | RG316 Coaxial Cable | SMA-316   | XHF-1175      | Each time        | N/A                  |
| Anritsu                                    | Power Sensor        | MA24418A  | 12621         | 2025-04-09       | 2026-04-08           |

| Conducted Emission Test |                   |          |                        |            |            |
|-------------------------|-------------------|----------|------------------------|------------|------------|
| Rohde & Schwarz         | EMI Test Receiver | ESR      | 1316.3003K03-101746-zn | 2024-07-28 | 2025-07-27 |
| Rohde & Schwarz         | LISN              | ENV216   | 101115                 | 2025-04-08 | 2026-04-07 |
| Audix                   | Test Software     | e3       | V9                     | N/A        | N/A        |
| Rohde & Schwarz         | Pulse limiter     | ESH3-Z2  | 100552                 | 2025-04-08 | 2026-04-07 |
| MICRO-COAX              | Coaxial Cable     | Cable-15 | 015                    | 2025-04-08 | 2026-04-07 |

**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>(B) Limits for General Population/Uncontrolled Exposure</b> |                                      |                                      |                                          |                                 |
|----------------------------------------------------------------|--------------------------------------|--------------------------------------|------------------------------------------|---------------------------------|
| <b>Frequency Range (MHz)</b>                                   | <b>Electric Field Strength (V/m)</b> | <b>Magnetic Field Strength (A/m)</b> | <b>Power Density (mW/cm<sup>2</sup>)</b> | <b>Averaging Time (minutes)</b> |
| 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);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

**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> ) | MPE ratio |
|------------|-----------------------|--------------|-----------|-----------------------|--------|--------------------------|-------------------------------------|---------------------------------|-----------|
|            |                       | (dBi)        | (numeric) | (dBm)                 | (mW)   |                          |                                     |                                 |           |
| 2.4G Wi-Fi | 2412-2462             | 0.69         | 1.17      | 19.5                  | 89.13  | 20                       | 0.0207                              | 1.00                            | 0.0207    |
| BLE        | 2402-2480             | 0.69         | 1.17      | 7.0                   | 5.01   | 20                       | 0.0012                              | 1.00                            | 0.0012    |
| BT         | 2402-2480             | 0.69         | 1.17      | 10                    | 10     | 20                       | 0.0023                              | 1.00                            | 0.0023    |
| 5G Wi-Fi   | 5150-5250             | 0.96         | 1.25      | 17.0                  | 50.12  | 20                       | 0.0125                              | 1.00                            | 0.0125    |
|            | 5725-5850             | 1.11         | 1.29      | 16.0                  | 39.81  | 20                       | 0.0102                              | 1.00                            | 0.0102    |
| NFC        | 13.56                 | 0            | 1.00      | -20.5                 | 0.0089 | 20                       | 0.000002                            | 0.98                            | 0.000002  |

**Note:**

1. For the above tune up power were declared by the manufacturer.
2. For NFC, the power of EUT: E Field@3m is 74.35 dBuV/m = -20.85 dBm EIRP. That equal to antenna gain is 0 dBi and used the EIRP value as conducted power.
3.  $E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2$  for  $d = 3$  m.
4. NFC and 2.4G Wi-Fi/5G WIFI/BT/BLE can transmit simultaneously.

$$\sum_i \frac{S_i}{S_{\text{Limit},i}}$$

$$= S_{\text{NFC}}/S_{\text{limitNFC}} + S_{2.4\text{G Wi-Fi}}/S_{\text{limit2.4G Wi-Fi}}$$

$$= 0.000002 + 0.0207$$

$$= 0.020702$$

$$< 1.0$$

**Result:** The device meets MPE at distance 20cm.

---

## 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 have an FPC antenna which permanently attached to the unit. fulfill the requirement of this section. Please refer to the EUT photos.

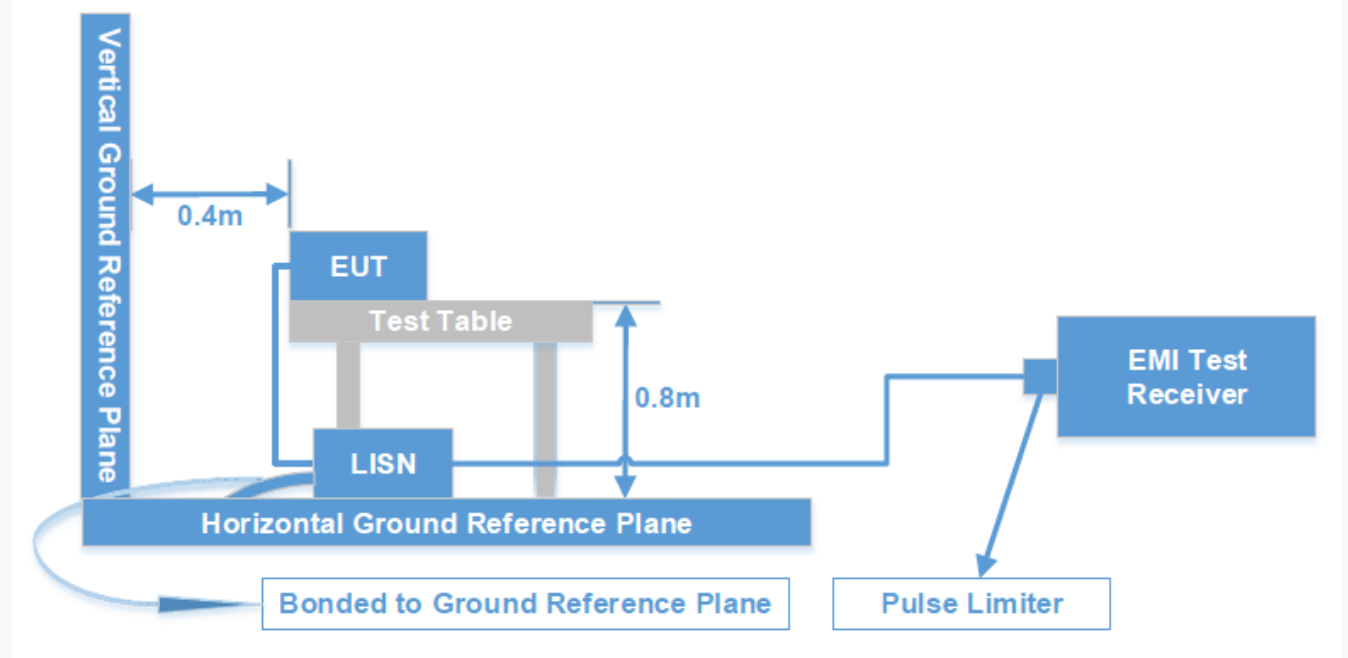
**Result:** Compliant.

## 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

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

| Frequency Range  | RBW   | VBW    |
|------------------|-------|--------|
| 150 kHz - 30 MHz | 9 kHz | 30 kHz |

**Test Procedure**

ANSI C63.10-2020 clause 6.2

During the conducted emission test, the EUT 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 (dB $\mu$ V) = Read level (dB $\mu$ V) + 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 (dB $\mu$ V) - Limit (dB $\mu$ V)

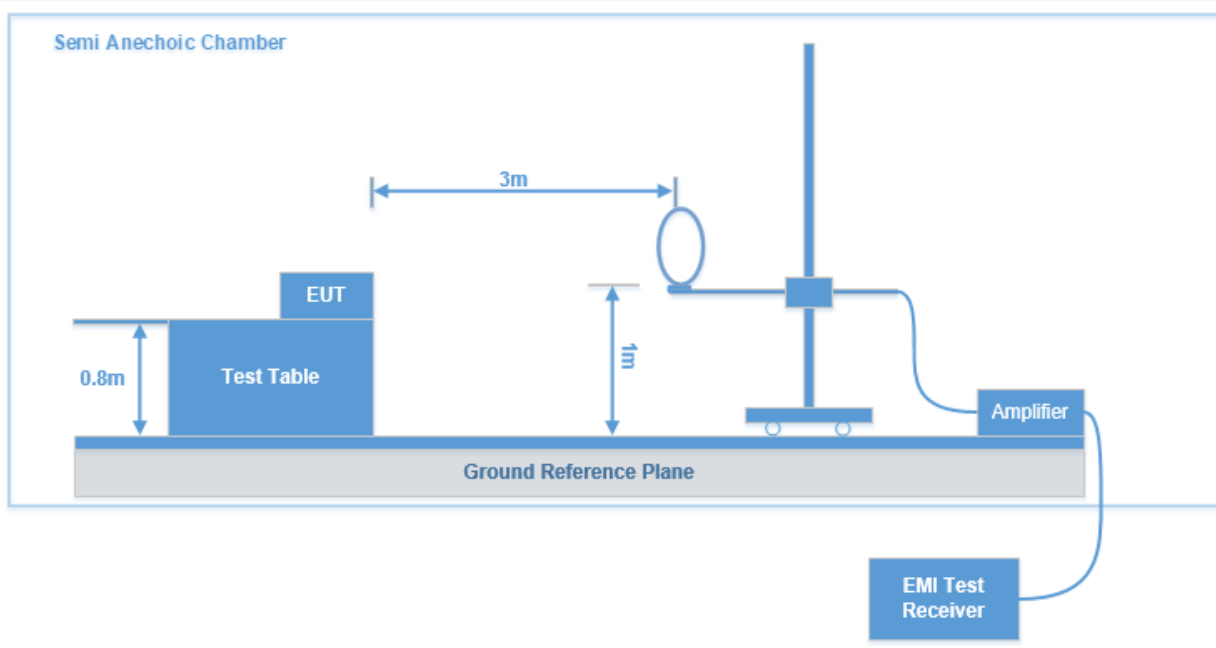
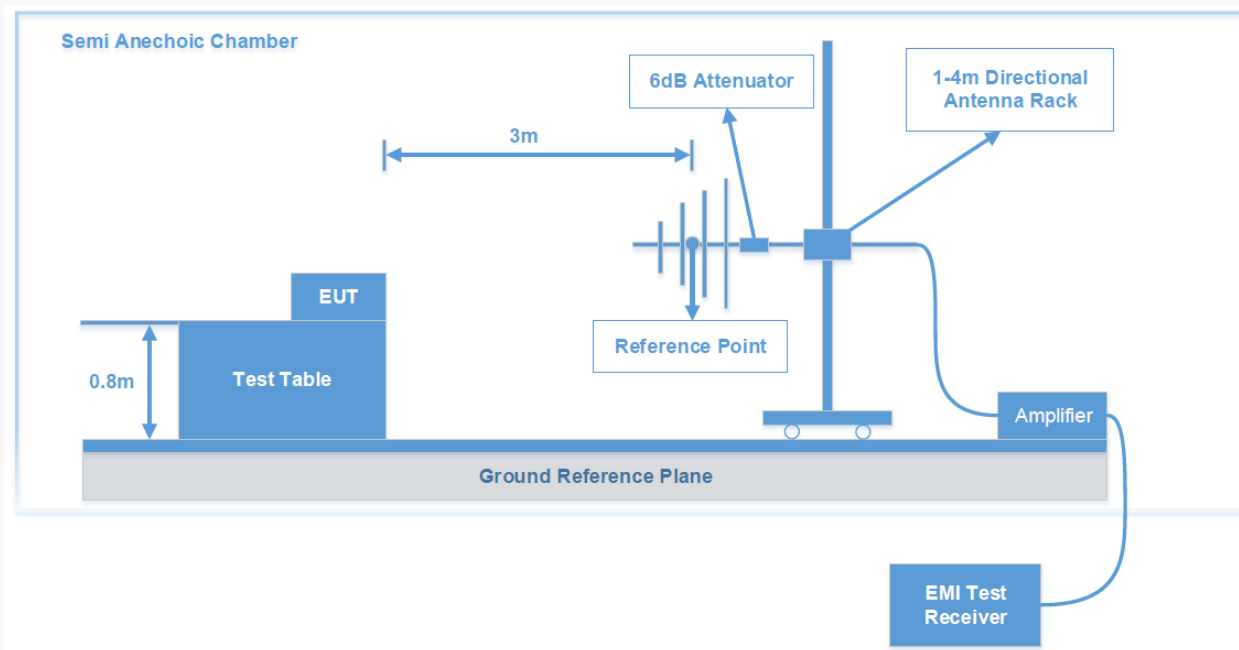
**Test Results Summary**

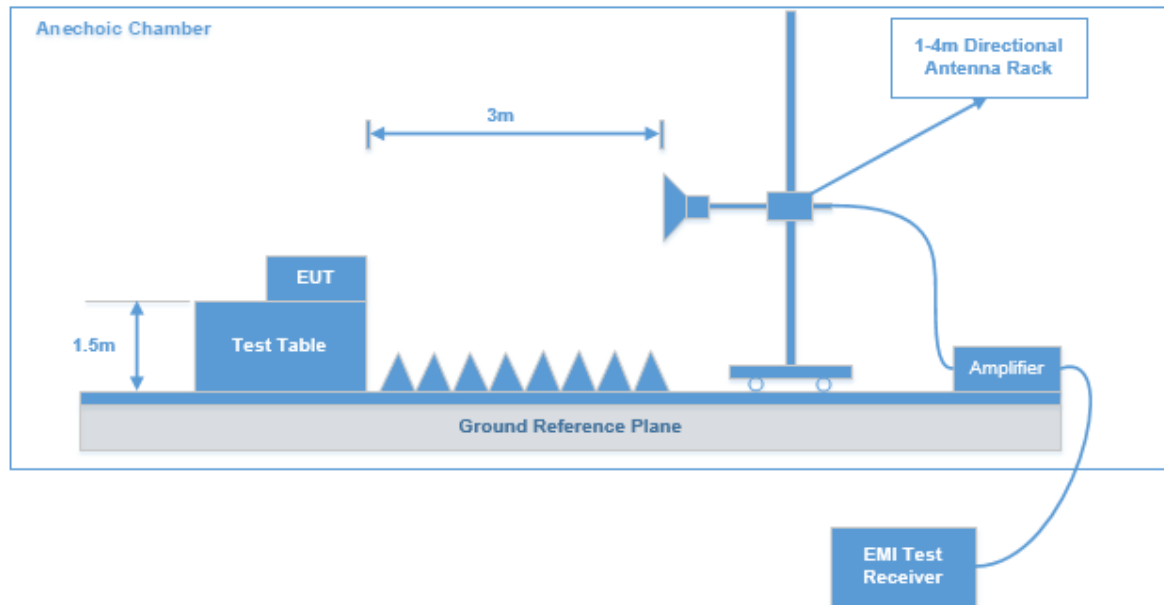
According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

**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**

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

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

**Test Procedure**

According to ANSI C63.10-2020 clause 6.4, 6.5 and 6.6.

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 (dB $\mu$ V/m) = Meter Reading (dB $\mu$ V) + 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 (dB $\mu$ V/m) – Corrected Amplitude (dB $\mu$ V/m)

Note: The QuasiPeak (dB $\mu$ V/m), MaxPeak (dB $\mu$ V/m), Average (dB $\mu$ V/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, and Subpart C, section 15.205, 15.209 and 15.247.

**Test Data: See Appendix**

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

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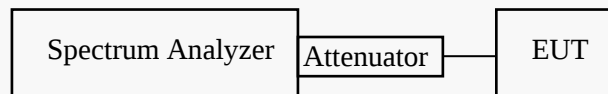
### Applicable Standard

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

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



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

**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

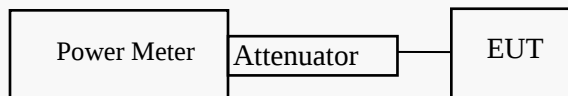
#### For 2.4G Wi-Fi:

According to ANSI C63.10-2020 sub-clause 11.9.1.2

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.

##### 11.9.2.3.2 Method AVGPM-G

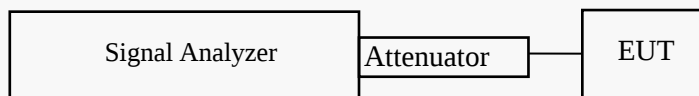
Method AVGPM-G is a measurement using a gated RF average power meter. Alternatively, measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level.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



#### For BLE:

According to ANSI C63.10-2020 sub-clause 11.9.1.1

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



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

**Test Data: See Appendix**

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

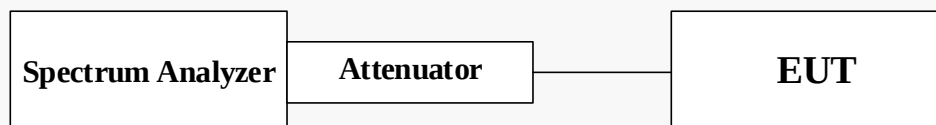
### **Applicable Standard**

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**

According to ANSI C63.10-2020 sub-clause 6.10.

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.



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

**Test Data: See Appendix**

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

### Applicable Standard

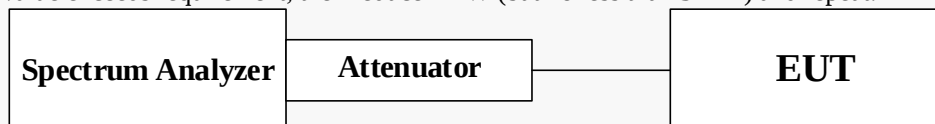
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of 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:

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



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

**Test Data: See Appendix**

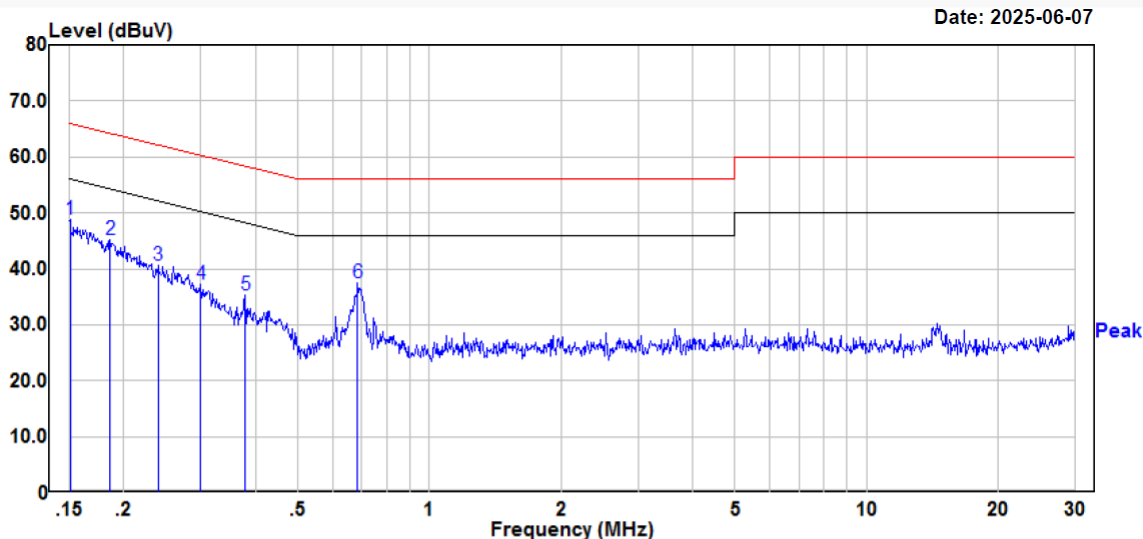
## APPENDIX - TEST DATA

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### AC LINE CONDUCTED EMISSIONS

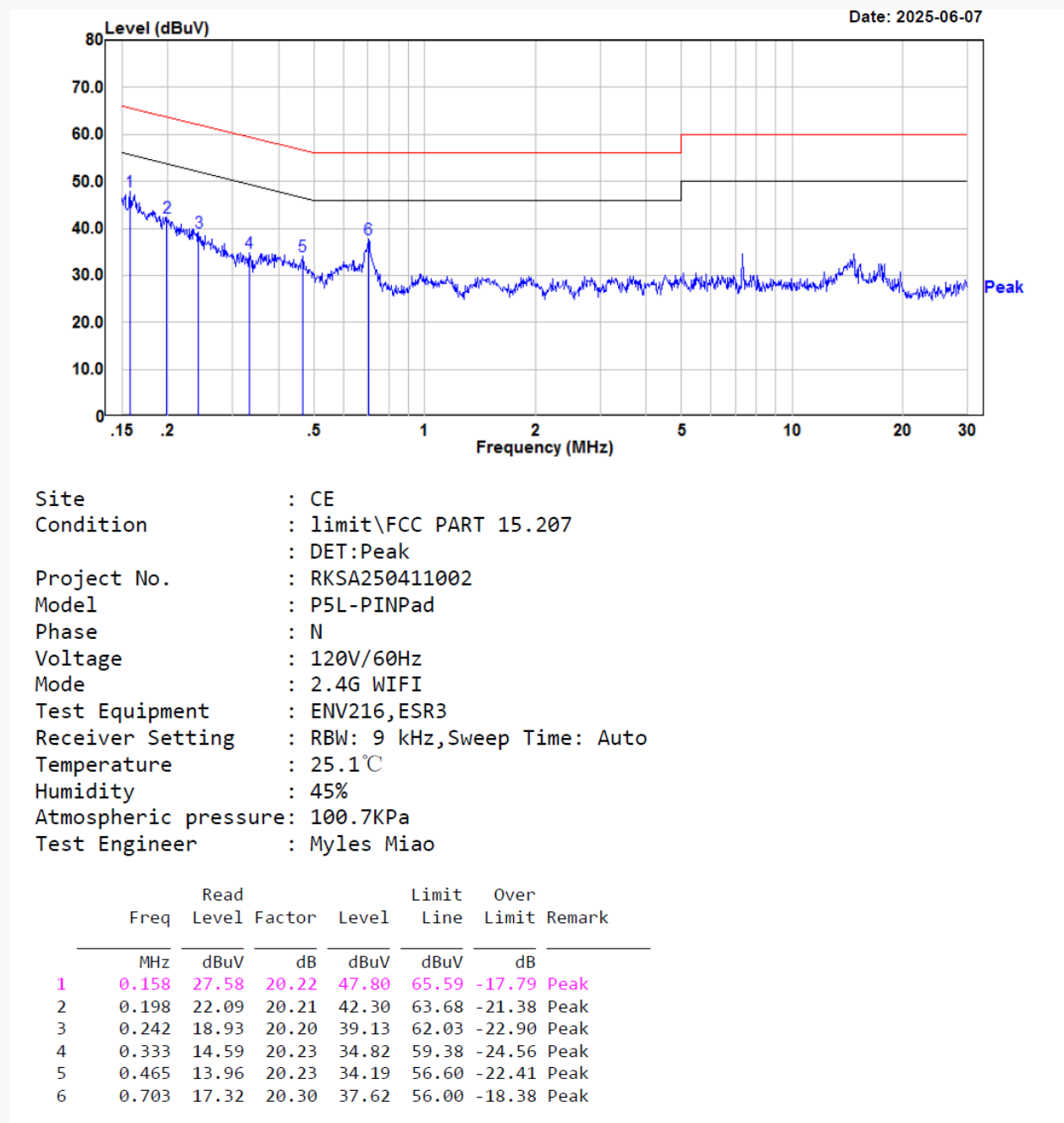
#### Environmental Conditions & Test Information

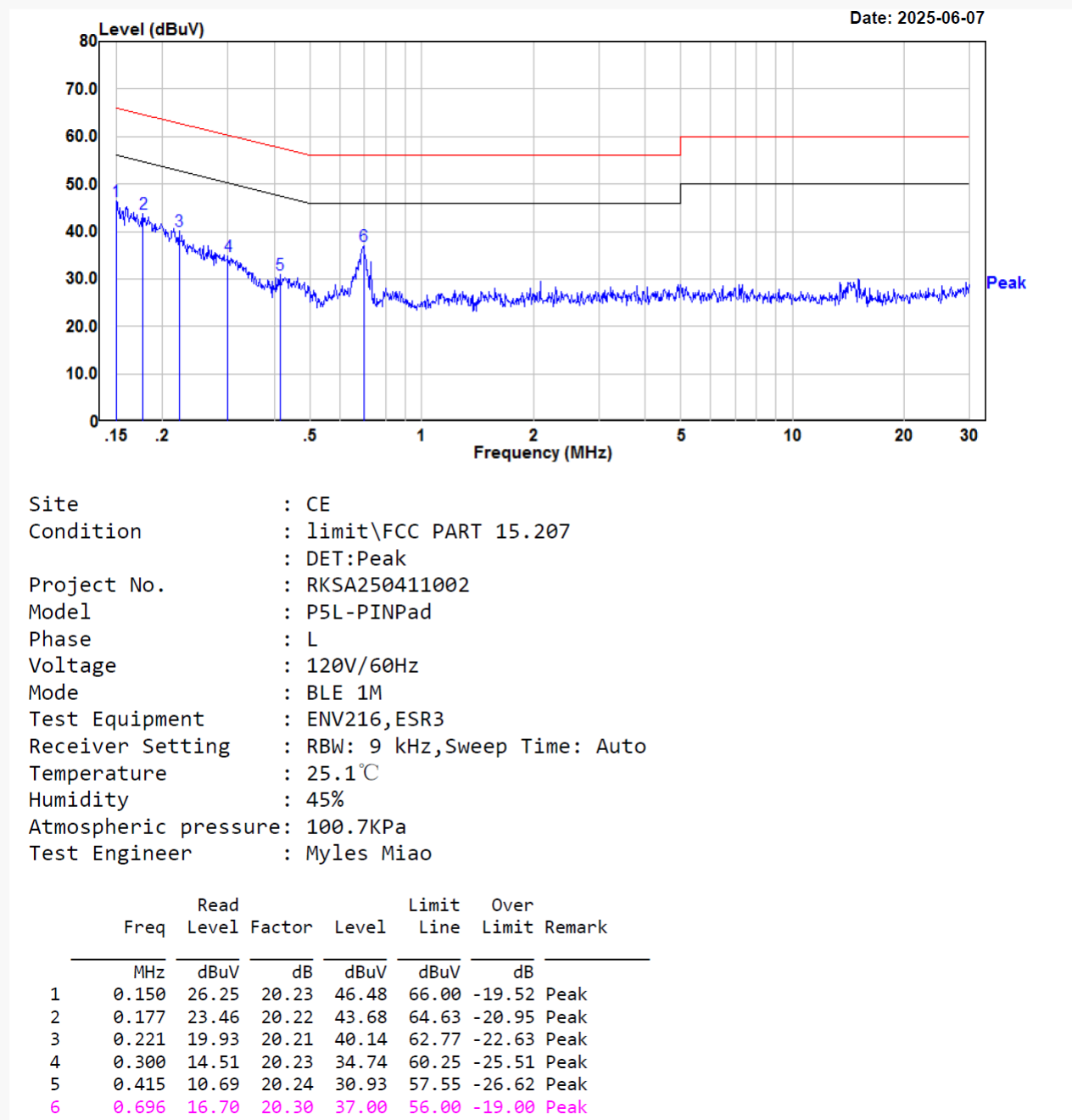
|                    |            |
|--------------------|------------|
| Test Date:         | 2025-06-07 |
| Temperature:       | 25.1 °C    |
| Relative Humidity: | 45 %       |
| ATM Pressure:      | 100.7 kPa  |
| Test Result:       | Pass       |
| Test Engineer:     | Myles Miao |

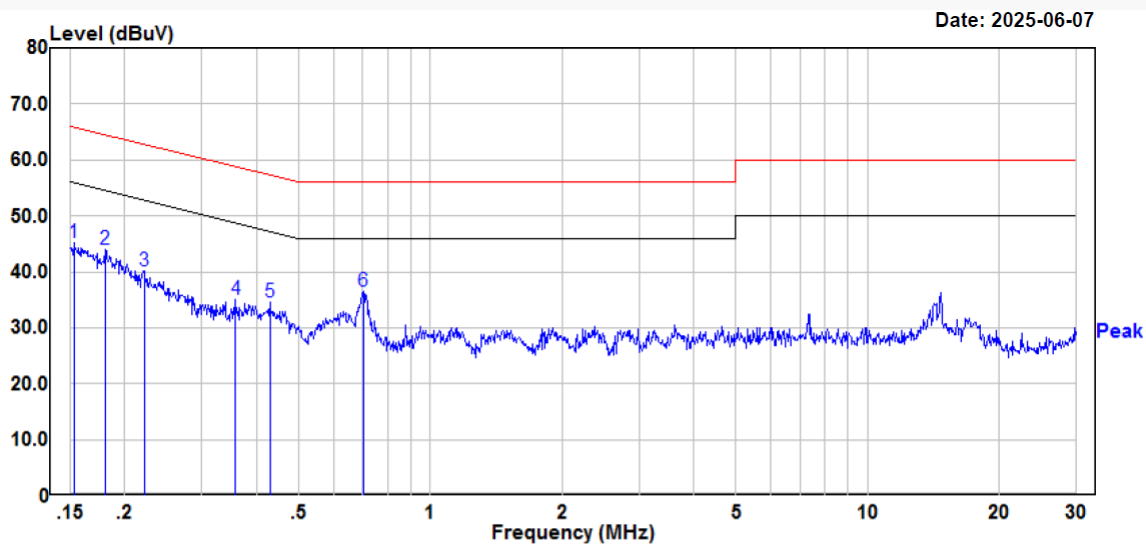
**For Wi-Fi Mode:***EUT operation mode: Transmitting in maximum output power mode and 802.11g mode high channel*

Site : CE  
Condition : limit\FCC PART 15.207  
: DET:Peak  
Project No. : RKSA250411002  
Model : P5L-PINPad  
Phase : L  
Voltage : 120V/60Hz  
Mode : 2.4G WIFI  
Test Equipment : ENV216,ESR3  
Receiver Setting : RBW: 9 kHz,Sweep Time: Auto  
Temperature : 25.1℃  
Humidity : 45%  
Atmospheric pressure: 100.7KPa  
Test Engineer : Myles Miao

|   | Freq  | Read Level | Factor | Level | Limit Line | Over Limit | Remark |
|---|-------|------------|--------|-------|------------|------------|--------|
|   | MHz   | dBUV       | dB     | dBUV  | dBUV       | dB         |        |
| 1 | 0.151 | 28.69      | 20.23  | 48.92 | 65.96      | -17.04     | Peak   |
| 2 | 0.186 | 25.04      | 20.21  | 45.25 | 64.22      | -18.97     | Peak   |
| 3 | 0.240 | 20.48      | 20.20  | 40.68 | 62.11      | -21.43     | Peak   |
| 4 | 0.300 | 16.91      | 20.23  | 37.14 | 60.25      | -23.11     | Peak   |
| 5 | 0.379 | 15.03      | 20.23  | 35.26 | 58.30      | -23.04     | Peak   |
| 6 | 0.686 | 17.13      | 20.29  | 37.42 | 56.00      | -18.58     | Peak   |



**For BLE Mode:***EUT operation mode: Transmitting in BLE (1 Mbps) middle channel (maximum output power)*

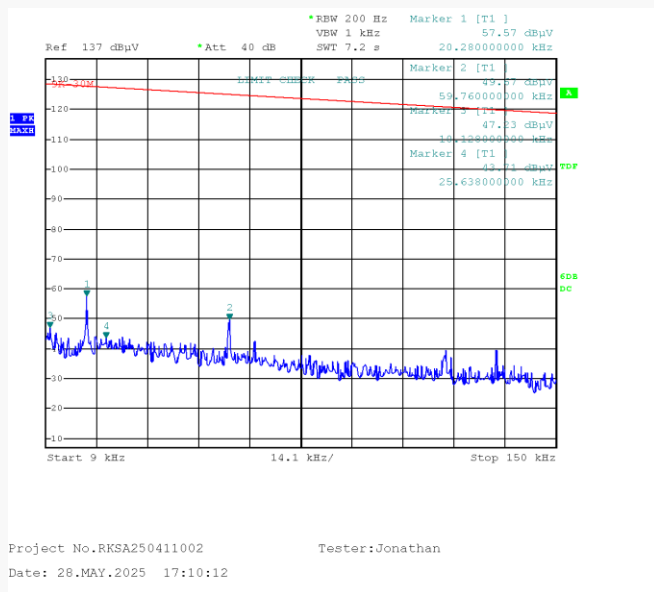
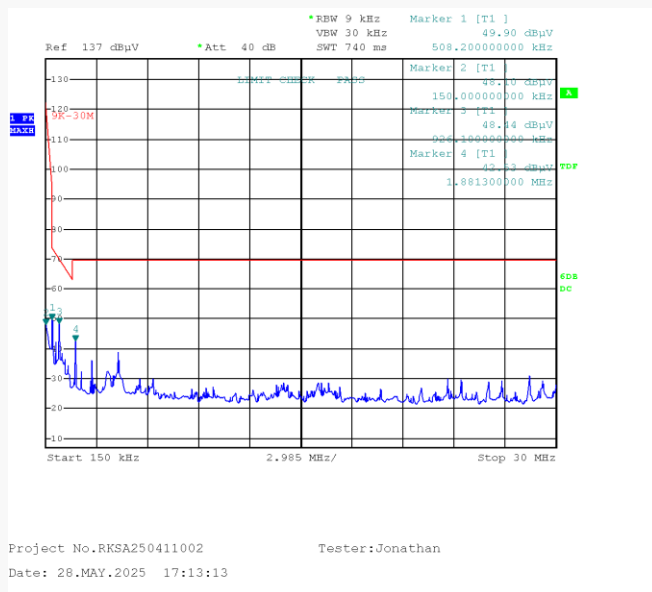


Site : CE  
 Condition : limit\FCC PART 15.207  
 : DET:Peak  
 Project No. : RKSA250411002  
 Model : P5L-PINPad  
 Phase : N  
 Voltage : 120V/60Hz  
 Mode : BLE 1M  
 Test Equipment : ENV216,ESR3  
 Receiver Setting : RBW: 9 kHz,Sweep Time: Auto  
 Temperature : 25.1℃  
 Humidity : 45%  
 Atmospheric pressure: 100.7KPa  
 Test Engineer : Myles Miao

|   | Freq  | Read<br>Level | Factor | Level | Limit<br>Line | Over<br>Limit | Remark |
|---|-------|---------------|--------|-------|---------------|---------------|--------|
|   | MHz   | dBuV          | dB     | dBuV  | dBuV          | dB            |        |
| 1 | 0.153 | 24.98         | 20.23  | 45.21 | 65.83         | -20.62        | Peak   |
| 2 | 0.180 | 23.76         | 20.21  | 43.97 | 64.47         | -20.50        | Peak   |
| 3 | 0.221 | 20.02         | 20.21  | 40.23 | 62.77         | -22.54        | Peak   |
| 4 | 0.359 | 14.81         | 20.24  | 35.05 | 58.76         | -23.71        | Peak   |
| 5 | 0.429 | 14.36         | 20.25  | 34.61 | 57.26         | -22.65        | Peak   |
| 6 | 0.703 | 16.12         | 20.30  | 36.42 | 56.00         | -19.58        | Peak   |

**SPURIOUS EMISSIONS****Environmental Conditions & Test Information**

| Test Item:         | SPURIOUS EMISSIONS |                          |                          |                 |
|--------------------|--------------------|--------------------------|--------------------------|-----------------|
|                    | 9kHz – 30MHz       | 30MHz - 1GHz             | 1 GHz - 18 GHz           | 18 GHz - 25 GHz |
| Test Date:         | 2025-05-28         | 2025-04-24 to 2025-04-27 | 2025-04-24 to 2025-07-08 | 2025-06-07      |
| Temperature:       | 24.2 °C            | 22.6-25.5 °C             | 25.5-27.2 °C             | 25.1 °C         |
| Relative Humidity: | 51 %               | 45-46 %                  | 46-54 %                  | 45 %            |
| ATM Pressure:      | 102.7 kPa          | 101.2-101.3 kPa          | 100.6-101.3 kPa          | 100.7 kPa       |
| Test Result:       | Pass               | Pass                     | Pass                     | Pass            |
| Test Engineer:     | Jonathan           | Jerry Yan                | Destine Hu               | Hugh Wu         |

**Test Result:** Compliant*EUT operation mode: Transmitting***For Wi-Fi Mode:****9 kHz-30MHz:** (Transmitting in maximum output power mode and 802.11g mode high channel)**Parallel(worst case)****9kHz-150kHz****150kHz-30MHz**

**9kHz-150kHz**

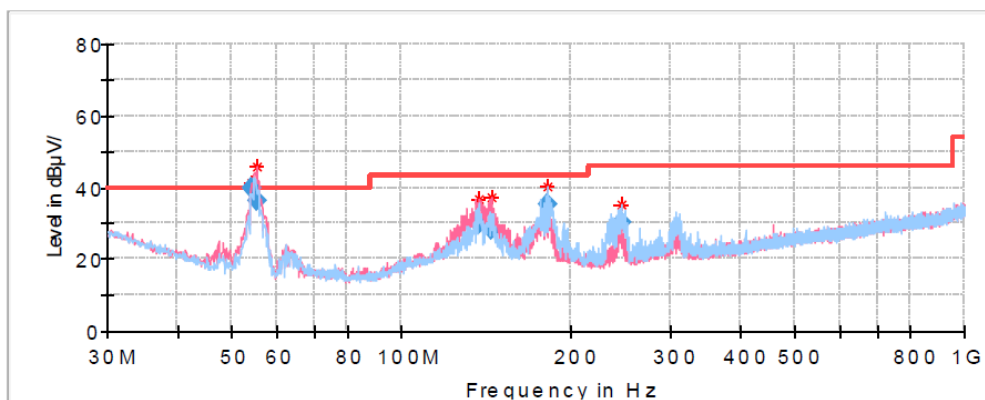
| Frequency<br>(MHz) | Corrected<br>Amplitude<br>(dB $\mu$ V/m)<br>@3m | Detector<br>PK/QP/Ave. | Corrected<br>Factor<br>(dB/m) | Limit<br>(dB $\mu$ V/m)<br>@3m | Margin<br>(dB) |
|--------------------|-------------------------------------------------|------------------------|-------------------------------|--------------------------------|----------------|
| 0.010128           | 47.23                                           | PK                     | -0.51                         | 127.49                         | 80.26          |
| 0.020280           | 57.57                                           | PK                     | -0.56                         | 121.46                         | 63.89          |
| 0.025638           | 43.71                                           | PK                     | -0.59                         | 119.43                         | 75.72          |
| 0.059760           | 49.67                                           | PK                     | -4.95                         | 112.08                         | 62.41          |

**150kHz-30MHz**

| Frequency<br>(MHz) | Corrected<br>Amplitude<br>(dB $\mu$ V/m)<br>@3m | Detector<br>PK/QP/Ave. | Corrected<br>Factor<br>(dB/m) | Limit<br>(dB $\mu$ V/m)<br>@3m | Margin<br>(dB) |
|--------------------|-------------------------------------------------|------------------------|-------------------------------|--------------------------------|----------------|
| 0.1500             | 48.10                                           | PK                     | -11.34                        | 104.08                         | 55.98          |
| 0.5082             | 49.90                                           | PK                     | -22.51                        | 93.48                          | 43.58          |
| 0.9261             | 48.44                                           | PK                     | -27.09                        | 68.27                          | 19.83          |
| 1.8813             | 42.53                                           | PK                     | -30.51                        | 69.54                          | 27.01          |

**30MHz-1GHz (Transmitting in maximum output power mode and channel 802.11g mode):****High Channel: 2462MHz****Common Information**

Project No: RKSA250411002  
EUT Model: P5L PINPad  
Test Mode: Transmitting in 802.11g mode high channel  
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247  
Test Equipment: ESCI, JB3, 310N  
Receiver Setting: RBW:100 kHz, VBW: 300 kHz, Sweep Time: Auto  
Temperature: 25.5°C  
Humidity: 46%  
Barometric Pressure: 101.3kPa  
Test Engineer: Jerry Yan  
Test Date: 2025/4/24

**Final Result**

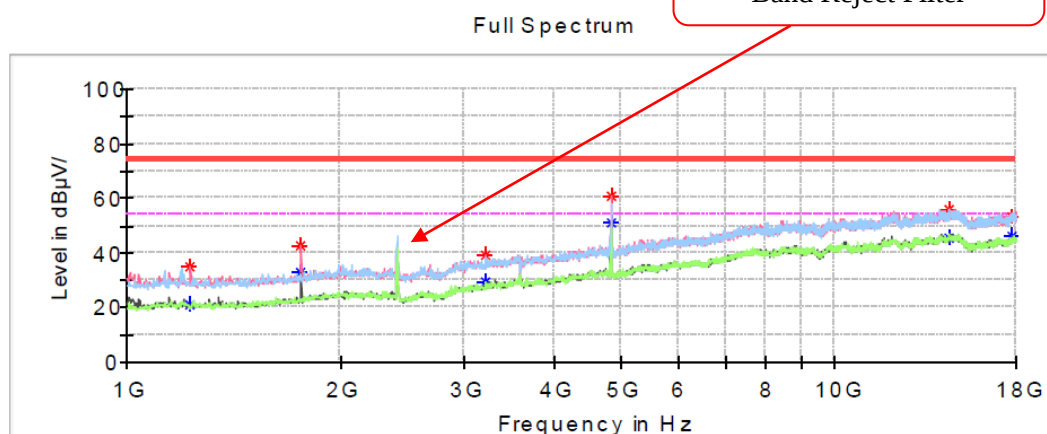
| Frequency (MHz) | QuasiPeak (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|----------------------|------------------|-------------|-----|--------------|
| 54.094250       | 39.62                | 40.00            | 0.38        | V   | -17.0        |
| 55.367050       | 36.29                | 40.00            | 3.71        | V   | -17.0        |
| 136.946100      | 29.86                | 43.50            | 13.64       | V   | -11.2        |
| 144.467900      | 28.02                | 43.50            | 15.48       | V   | -11.5        |
| 181.199650      | 35.33                | 43.50            | 8.17        | H   | -12.8        |
| 246.557400      | 30.22                | 46.00            | 15.78       | H   | -12.2        |

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

**Low Channel: 2412MHz**

### Common Information

|                       |                                                   |
|-----------------------|---------------------------------------------------|
| Project No.:          | RKSA250411002                                     |
| EUT Model:            | P5L-PINPad                                        |
| Test Mode:            | Transmitting in 802.11b mode 2412 channel         |
| Standard:             | FCC Part 15.247& FCC Part 15.205& FCC Part 15.209 |
| Test Equipment:       | ESU40,3115,PAM-0118P                              |
| Receiver Setting:     | RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto            |
| Temperature:          | 27.2°C                                            |
| Humidity:             | 54%                                               |
| Atmospheric Pressure: | 100.6kPa                                          |
| Test Engineer:        | Destine Hu                                        |
| Test Date:            | 2025/7/8                                          |



### Critical\_Freqs

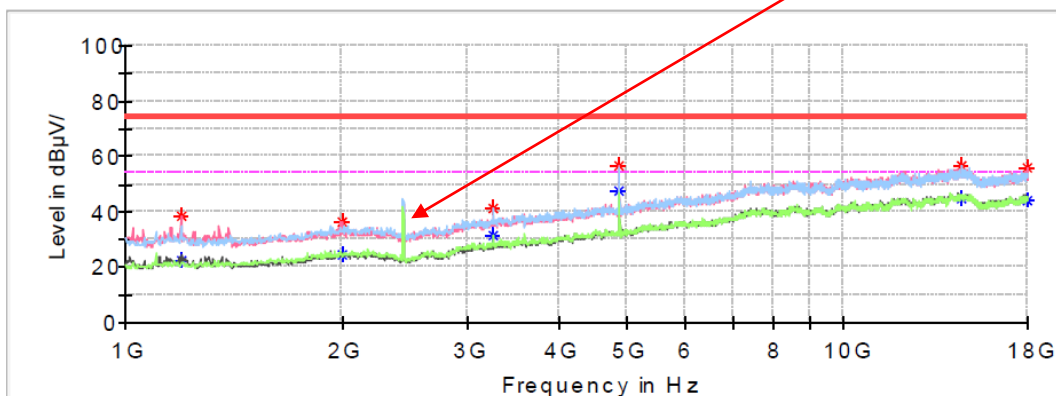
| Frequency (MHz) | MaxPeak (dB µ V/m) | Average (dB µ V/m) | Limit (dB µ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1227.800000     | ---                | 20.92              | 54.00            | 33.08       | V   | -14.4        |
| 1227.800000     | 34.92              | ---                | 74.00            | 39.08       | V   | -14.4        |
| 1761.600000     | ---                | 33.03              | 54.00            | 20.97       | V   | -11.6        |
| 1761.600000     | 42.96              | ---                | 74.00            | 31.04       | V   | -11.6        |
| 3213.400000     | 39.46              | ---                | 74.00            | 34.54       | V   | -7.3         |
| 3213.400000     | ---                | 29.70              | 54.00            | 24.30       | V   | -7.3         |
| 4821.600000     | ---                | 51.06              | 54.00            | 2.94        | V   | -3.4         |
| 4821.600000     | 60.60              | ---                | 74.00            | 13.40       | V   | -3.4         |
| 14484.400000    | ---                | 45.45              | 54.00            | 8.55        | H   | 11.9         |
| 14484.400000    | 55.80              | ---                | 74.00            | 18.20       | H   | 11.9         |
| 17830.000000    | ---                | 45.87              | 54.00            | 8.13        | V   | 11.3         |
| 17830.000000    | 53.42              | ---                | 74.00            | 20.58       | V   | 11.3         |

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

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11b mode 2437 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

Fundamental Test with  
Band Reject Filter

Full Spectrum

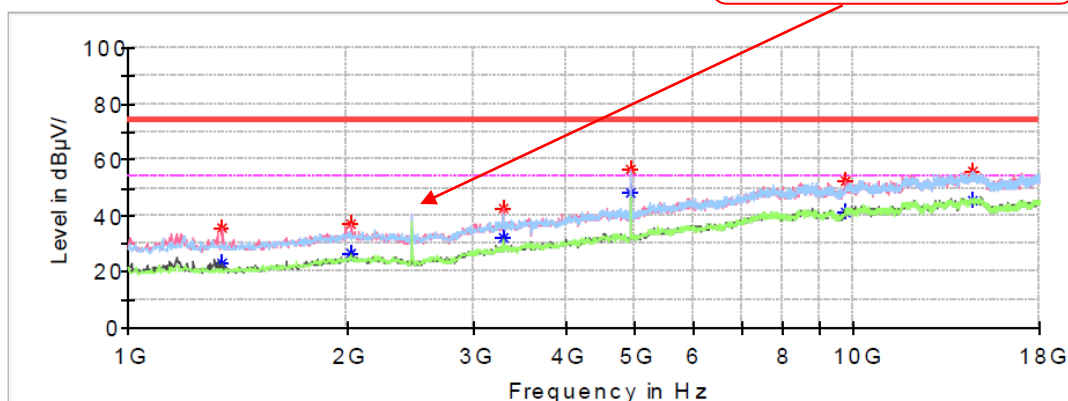
**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dB μ V/m) | Average (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1193.800000     | 38.71              | ---                | 74.00            | 35.29       | V   | -14.5        |
| 1193.800000     | ---                | 22.59              | 54.00            | 31.41       | V   | -14.5        |
| 1999.600000     | 36.59              | ---                | 74.00            | 37.41       | V   | -10.0        |
| 1999.600000     | ---                | 24.15              | 54.00            | 29.85       | V   | -10.0        |
| 3247.400000     | 41.04              | ---                | 74.00            | 32.96       | H   | -7.2         |
| 3247.400000     | ---                | 31.35              | 54.00            | 22.65       | H   | -7.2         |
| 4872.600000     | ---                | 47.68              | 54.00            | 6.32        | V   | -3.2         |
| 4872.600000     | 56.33              | ---                | 74.00            | 17.67       | V   | -3.2         |
| 14552.400000    | ---                | 45.01              | 54.00            | 8.99        | H   | 11.8         |
| 14552.400000    | 56.87              | ---                | 74.00            | 17.13       | H   | 11.8         |
| 17976.200000    | 56.07              | ---                | 74.00            | 17.93       | V   | 11.7         |
| 17976.200000    | ---                | 44.00              | 54.00            | 10.00       | V   | 11.7         |

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

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11b mode 2462 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

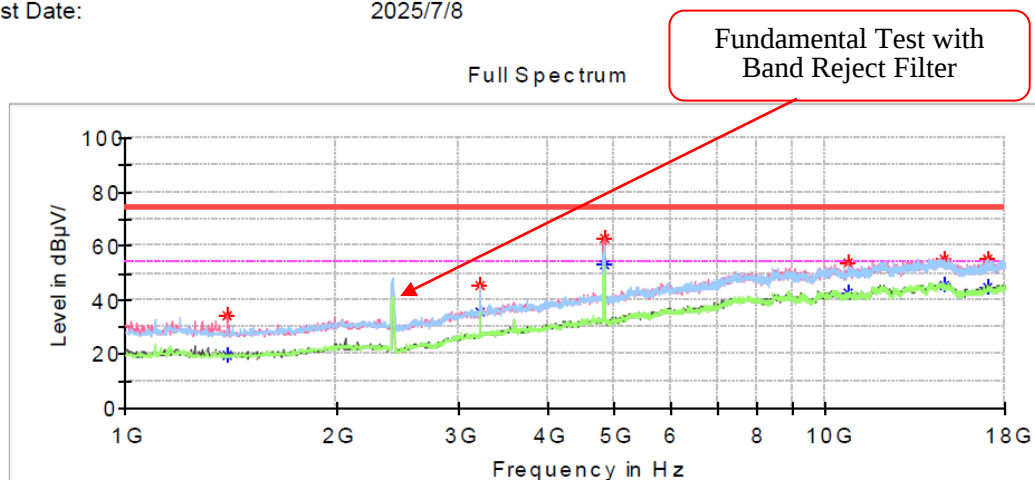
Full Spectrum

Fundamental Test with  
Band Reject Filter**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) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1350.200000     | ---                | 22.81              | 54.00            | 31.19       | V   | -14.0        |
| 1350.200000     | 35.54              | ---                | 74.00            | 38.46       | V   | -14.0        |
| 2033.600000     | ---                | 26.41              | 54.00            | 27.59       | V   | -10.0        |
| 2033.600000     | 36.99              | ---                | 74.00            | 37.01       | V   | -10.0        |
| 3281.400000     | ---                | 32.41              | 54.00            | 21.59       | V   | -7.1         |
| 3281.400000     | 42.92              | ---                | 74.00            | 31.08       | V   | -7.1         |
| 4923.600000     | ---                | 47.91              | 54.00            | 6.09        | V   | -3.1         |
| 4923.600000     | 56.39              | ---                | 74.00            | 17.61       | V   | -3.1         |
| 9751.600000     | ---                | 41.31              | 54.00            | 12.69       | V   | 5.6          |
| 9751.600000     | 52.60              | ---                | 74.00            | 21.40       | V   | 5.6          |
| 14579.600000    | ---                | 45.41              | 54.00            | 8.59        | H   | 11.7         |
| 14579.600000    | 55.63              | ---                | 74.00            | 18.37       | H   | 11.7         |

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

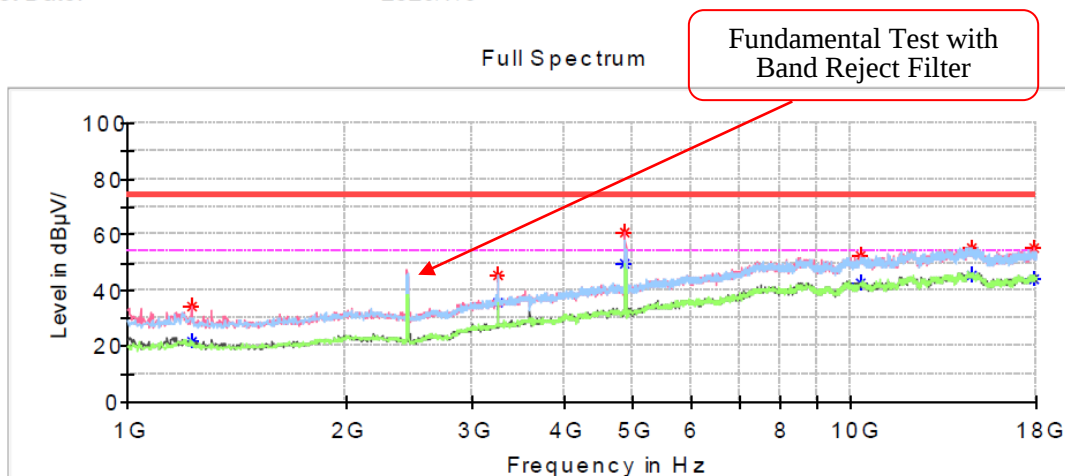
Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11g mode 2412 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

**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) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1397.800000     | ---                | 19.52              | 54.00            | 34.48       | V   | -13.8        |
| 1397.800000     | 34.55              | ---                | 74.00            | 39.45       | V   | -13.8        |
| 3213.400000     | ---                | 35.74              | 54.00            | 18.26       | H   | -7.3         |
| 3213.400000     | 45.57              | ---                | 74.00            | 28.43       | H   | -7.3         |
| 4821.600000     | ---                | 53.21              | 54.00            | 0.79        | V   | -3.4         |
| 4821.600000     | 62.67              | ---                | 74.00            | 11.33       | V   | -3.4         |
| 10730.800000    | ---                | 42.80              | 54.00            | 11.20       | V   | 6.7          |
| 10730.800000    | 54.10              | ---                | 74.00            | 19.90       | V   | 6.7          |
| 14746.200000    | ---                | 45.54              | 54.00            | 8.46        | H   | 11.1         |
| 14746.200000    | 55.56              | ---                | 74.00            | 18.44       | H   | 11.1         |
| 17000.400000    | ---                | 44.59              | 54.00            | 9.41        | H   | 11.0         |
| 17000.400000    | 55.11              | ---                | 74.00            | 18.89       | H   | 11.0         |

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

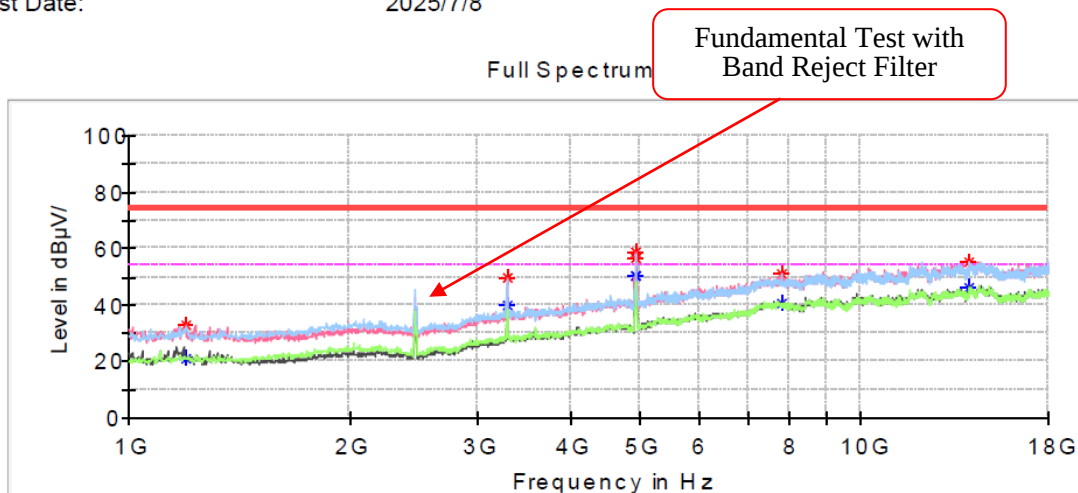
Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11g mode 2437 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

**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) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1224.400000     | ---                | 21.37              | 54.00            | 32.63       | V   | -14.4        |
| 1224.400000     | 34.61              | ---                | 74.00            | 39.39       | V   | -14.4        |
| 3247.400000     | ---                | 35.55              | 54.00            | 18.45       | H   | -7.2         |
| 3247.400000     | 45.12              | ---                | 74.00            | 28.88       | H   | -7.2         |
| 4869.200000     | ---                | 49.41              | 54.00            | 4.59        | V   | -3.2         |
| 4869.200000     | 60.71              | ---                | 74.00            | 13.29       | V   | -3.2         |
| 10292.200000    | ---                | 42.95              | 54.00            | 11.05       | V   | 6.6          |
| 10292.200000    | 52.64              | ---                | 74.00            | 21.36       | V   | 6.6          |
| 14630.600000    | ---                | 45.63              | 54.00            | 8.37        | H   | 11.5         |
| 14630.600000    | 55.51              | ---                | 74.00            | 18.49       | H   | 11.5         |
| 17843.600000    | ---                | 44.27              | 54.00            | 9.73        | V   | 11.3         |
| 17843.600000    | 55.13              | ---                | 74.00            | 18.87       | V   | 11.3         |

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

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11g mode 2462 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

**Critical\_Freqs**

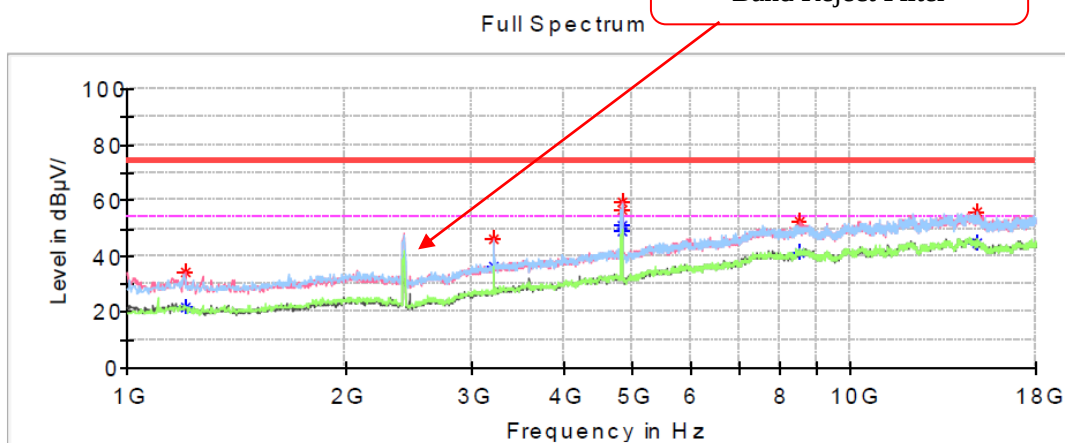
| Frequency (MHz) | MaxPeak (dB $\mu$ V/m) | Average (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|------------------------|----------------------|-------------|-----|--------------|
| 1197.200000     | ---                    | 21.28                  | 54.00                | 32.72       | H   | -14.5        |
| 1197.200000     | 33.02                  | ---                    | 74.00                | 40.98       | H   | -14.5        |
| 3281.400000     | ---                    | 39.98                  | 54.00                | 14.02       | V   | -7.1         |
| 3281.400000     | 49.65                  | ---                    | 74.00                | 24.35       | V   | -7.1         |
| 4920.200000     | ---                    | 50.42                  | 54.00                | 3.58        | V   | -3.1         |
| 4920.200000     | 56.60                  | ---                    | 74.00                | 17.40       | V   | -3.1         |
| 4927.000000     | ---                    | 50.25                  | 54.00                | 3.75        | V   | -3.1         |
| 4927.000000     | 58.60                  | ---                    | 74.00                | 15.40       | V   | -3.1         |
| 7772.800000     | ---                    | 40.37                  | 54.00                | 13.63       | H   | 3.1          |
| 7772.800000     | 51.11                  | ---                    | 74.00                | 22.89       | H   | 3.1          |
| 14062.800000    | ---                    | 45.98                  | 54.00                | 8.02        | V   | 11.2         |
| 14062.800000    | 55.56                  | ---                    | 74.00                | 18.44       | V   | 11.2         |

## 802.11n-HT20 Mode :

## Low Channel: 2412MHz

## Common Information

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11n20 mode 2412 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

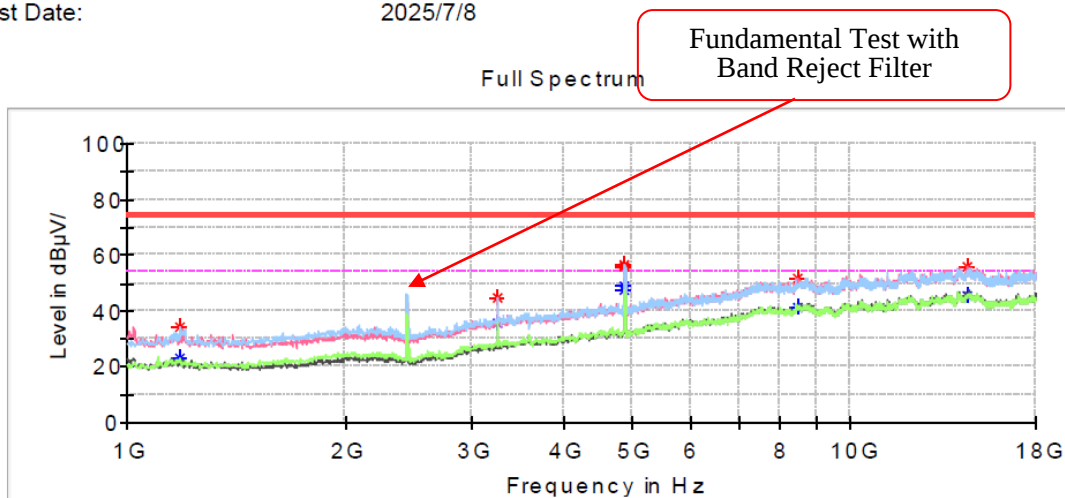


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dB $\mu$ V/m) | Average (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|------------------------|----------------------|-------------|-----|--------------|
| 1204.000000     | 34.06                  | ---                    | 74.00                | 39.94       | V   | -14.5        |
| 1204.000000     | ---                    | 21.57                  | 54.00                | 32.43       | V   | -14.5        |
| 3213.400000     | 46.22                  | ---                    | 74.00                | 27.78       | V   | -7.3         |
| 3213.400000     | ---                    | 36.08                  | 54.00                | 17.92       | V   | -7.3         |
| 4818.200000     | ---                    | 50.81                  | 54.00                | 3.19        | V   | -3.4         |
| 4818.200000     | 56.77                  | ---                    | 74.00                | 17.23       | V   | -3.4         |
| 4821.600000     | ---                    | 49.05                  | 54.00                | 4.95        | V   | -3.4         |
| 4821.600000     | 59.76                  | ---                    | 74.00                | 14.24       | V   | -3.4         |
| 8503.800000     | 52.13                  | ---                    | 74.00                | 21.87       | H   | 4.7          |
| 8503.800000     | ---                    | 41.41                  | 54.00                | 12.59       | H   | 4.7          |
| 14987.600000    | ---                    | 44.55                  | 54.00                | 9.45        | H   | 10.3         |
| 14987.600000    | 55.73                  | ---                    | 74.00                | 18.27       | H   | 10.3         |

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

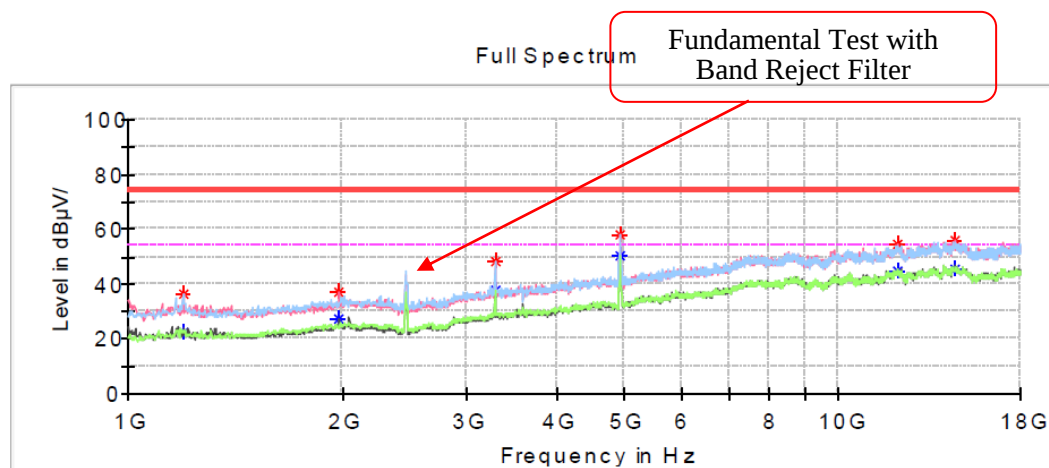
Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11n20 mode 2437 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2℃  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

**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) |
|-----------------|------------------------|------------------------|----------------------|-------------|-----|--------------|
| 1183.600000     | ---                    | 23.13                  | 54.00                | 30.87       | V   | -14.6        |
| 1183.600000     | 34.01                  | ---                    | 74.00                | 39.99       | V   | -14.6        |
| 3247.400000     | 44.72                  | ---                    | 74.00                | 29.28       | V   | -7.2         |
| 3247.400000     | ---                    | 35.60                  | 54.00                | 18.40       | V   | -7.2         |
| 4869.200000     | 55.75                  | ---                    | 74.00                | 18.25       | V   | -3.2         |
| 4869.200000     | ---                    | 48.82                  | 54.00                | 5.18        | V   | -3.2         |
| 4872.600000     | 56.47                  | ---                    | 74.00                | 17.53       | H   | -3.2         |
| 4872.600000     | ---                    | 47.84                  | 54.00                | 6.16        | H   | -3.2         |
| 8459.600000     | ---                    | 41.56                  | 54.00                | 12.44       | V   | 4.6          |
| 8459.600000     | 51.78                  | ---                    | 74.00                | 22.22       | V   | 4.6          |
| 14498.000000    | ---                    | 45.67                  | 54.00                | 8.33        | V   | 12.0         |
| 14498.000000    | 56.04                  | ---                    | 74.00                | 17.96       | V   | 12.0         |

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

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11n20 mode 2462 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

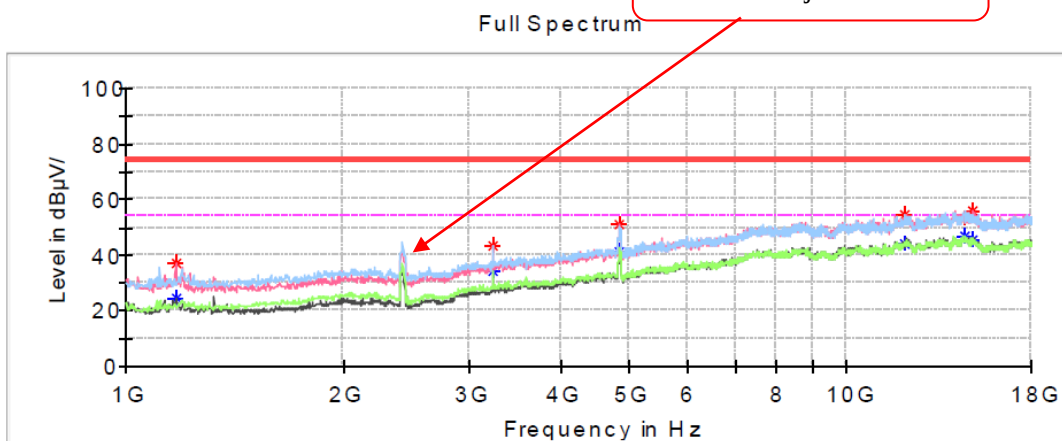
**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dB µV/m) | Average (dB µV/m) | Limit (dB µV/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|-------------------|-------------------|-----------------|-------------|-----|--------------|
| 1193.800000     | ---               | 22.69             | 54.00           | 31.31       | H   | -14.5        |
| 1193.800000     | 36.51             | ---               | 74.00           | 37.49       | H   | -14.5        |
| 1982.600000     | ---               | 27.41             | 54.00           | 26.59       | V   | -10.1        |
| 1982.600000     | 36.89             | ---               | 74.00           | 37.11       | V   | -10.1        |
| 3281.400000     | ---               | 38.04             | 54.00           | 15.96       | V   | -7.1         |
| 3281.400000     | 47.92             | ---               | 74.00           | 26.08       | V   | -7.1         |
| 4923.600000     | ---               | 50.32             | 54.00           | 3.68        | H   | -3.1         |
| 4923.600000     | 58.11             | ---               | 74.00           | 15.89       | H   | -3.1         |
| 12087.400000    | ---               | 44.76             | 54.00           | 9.24        | H   | 9.0          |
| 12087.400000    | 54.75             | ---               | 74.00           | 19.25       | H   | 9.0          |
| 14542.200000    | ---               | 45.59             | 54.00           | 8.41        | V   | 11.8         |
| 14542.200000    | 55.63             | ---               | 74.00           | 18.37       | V   | 11.8         |

**802.11n-HT40 Mode :****Low Channel: 2422MHz****Common Information**

Project No.: RKSA250411002  
 EUT Model: P5L-PINPad  
 Test Mode: Transmitting in 802.11n40 mode 2422 channel  
 Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
 Test Equipment: ESU40,3115,PAM-0118P  
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
 Temperature: 27.2°C  
 Humidity: 54%  
 Atmospheric Pressure: 100.6kPa  
 Test Engineer: Destine Hu  
 Test Date: 2025/7/8

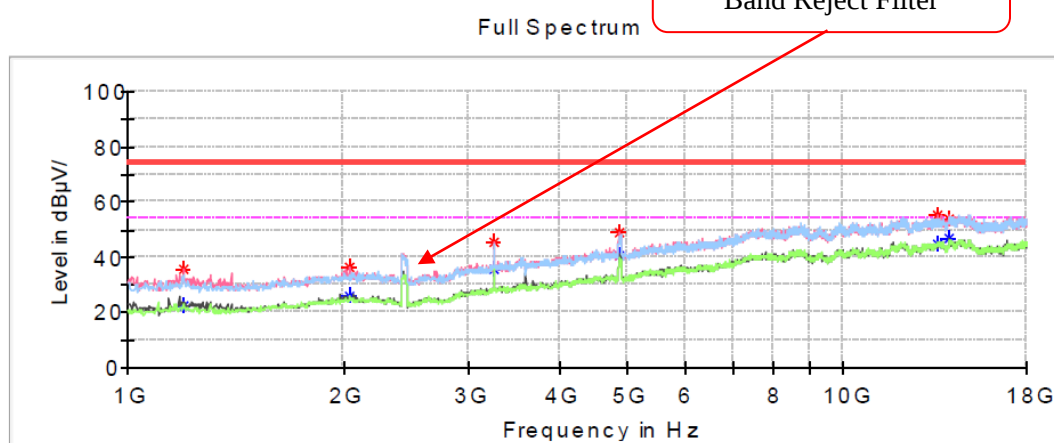
Fundamental Test with  
Band Reject Filter

**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) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1173.400000     | ---                | 24.35              | 54.00            | 29.65       | V   | -14.6        |
| 1173.400000     | 36.75              | ---                | 74.00            | 37.25       | V   | -14.6        |
| 3227.000000     | 43.43              | ---                | 74.00            | 30.57       | V   | -7.3         |
| 3227.000000     | ---                | 34.49              | 54.00            | 19.51       | V   | -7.3         |
| 4825.000000     | ---                | 40.91              | 54.00            | 13.09       | V   | -3.4         |
| 4825.000000     | 50.82              | ---                | 74.00            | 23.18       | V   | -3.4         |
| 12036.400000    | ---                | 43.77              | 54.00            | 10.23       | H   | 9.0          |
| 12036.400000    | 54.84              | ---                | 74.00            | 19.16       | H   | 9.0          |
| 14606.800000    | ---                | 46.56              | 54.00            | 7.44        | H   | 11.6         |
| 14606.800000    | 53.22              | ---                | 74.00            | 20.78       | H   | 11.6         |
| 14909.400000    | ---                | 45.54              | 54.00            | 8.46        | V   | 10.6         |
| 14909.400000    | 55.96              | ---                | 74.00            | 18.04       | V   | 10.6         |

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

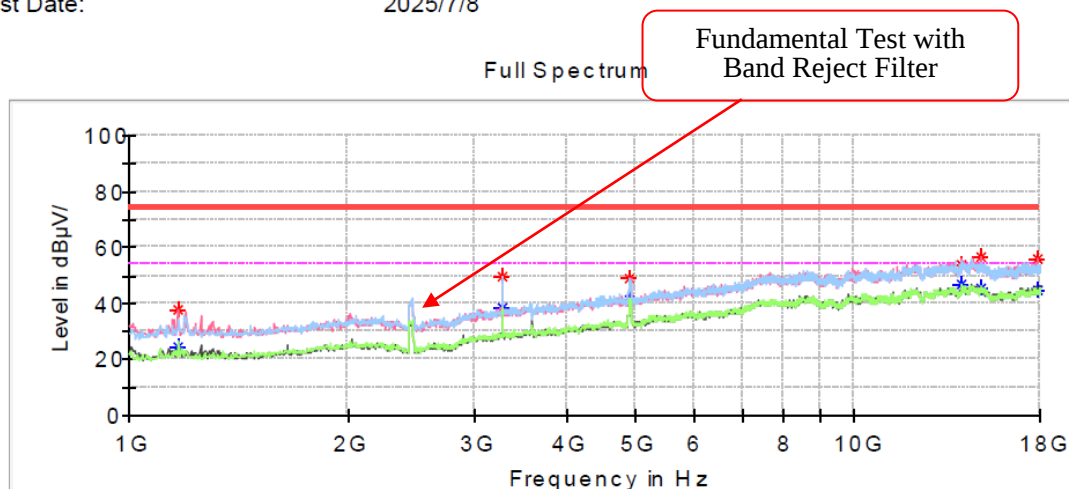
Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11n40 mode 2437 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

**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) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1197.200000     | ---                | 22.09              | 54.00            | 31.91       | V   | -14.5        |
| 1197.200000     | 35.47              | ---                | 74.00            | 38.53       | V   | -14.5        |
| 2043.800000     | ---                | 25.72              | 54.00            | 28.28       | V   | -10.0        |
| 2043.800000     | 36.42              | ---                | 74.00            | 37.58       | V   | -10.0        |
| 3247.400000     | ---                | 35.67              | 54.00            | 18.33       | V   | -7.2         |
| 3247.400000     | 45.20              | ---                | 74.00            | 28.80       | V   | -7.2         |
| 4869.200000     | ---                | 40.39              | 54.00            | 13.61       | V   | -3.2         |
| 4869.200000     | 49.05              | ---                | 74.00            | 24.95       | V   | -3.2         |
| 13518.800000    | 55.42              | ---                | 74.00            | 18.58       | H   | 10.0         |
| 13518.800000    | ---                | 44.95              | 54.00            | 9.05        | H   | 10.0         |
| 14018.600000    | 53.50              | ---                | 74.00            | 20.50       | V   | 11.1         |
| 14018.600000    | ---                | 46.63              | 54.00            | 7.37        | V   | 11.1         |

**High Channel: 2452MHz****Common Information**

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11n40 mode 2452 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2℃  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

**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) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1166.600000     | ---                | 24.54              | 54.00            | 29.46       | V   | -14.6        |
| 1166.600000     | 37.44              | ---                | 74.00            | 36.56       | V   | -14.6        |
| 3267.800000     | ---                | 38.71              | 54.00            | 15.29       | H   | -7.1         |
| 3267.800000     | 49.47              | ---                | 74.00            | 24.53       | H   | -7.1         |
| 4903.200000     | ---                | 41.42              | 54.00            | 12.58       | V   | -3.2         |
| 4903.200000     | 49.05              | ---                | 74.00            | 24.95       | V   | -3.2         |
| 14052.600000    | ---                | 46.66              | 54.00            | 7.34        | H   | 11.2         |
| 14052.600000    | 54.17              | ---                | 74.00            | 19.83       | H   | 11.2         |
| 14919.600000    | ---                | 45.70              | 54.00            | 8.30        | H   | 10.6         |
| 14919.600000    | 56.44              | ---                | 74.00            | 17.56       | H   | 10.6         |
| 17843.600000    | ---                | 44.82              | 54.00            | 9.18        | V   | 11.3         |
| 17843.600000    | 55.77              | ---                | 74.00            | 18.23       | V   | 11.3         |

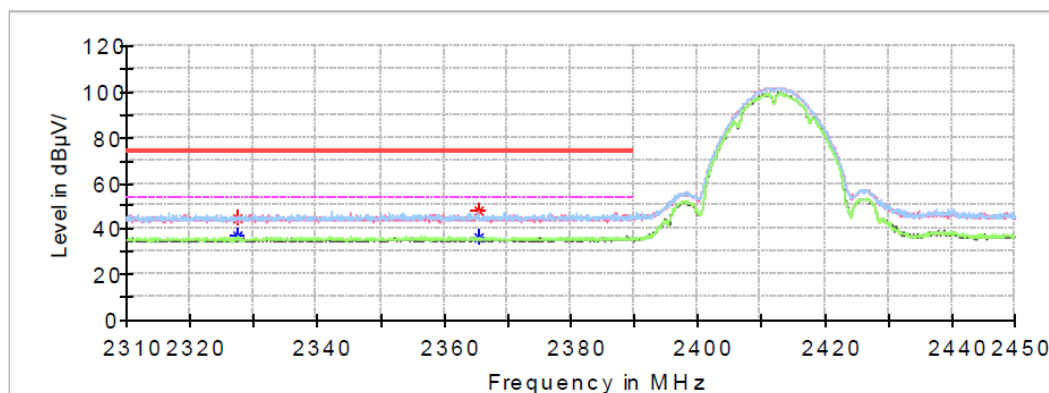
**Band Edge:**  
**802.11b Mode:**

### Low Channel

#### Common Information

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11b mode 2412 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

Full Spectrum



#### Critical\_Freqs

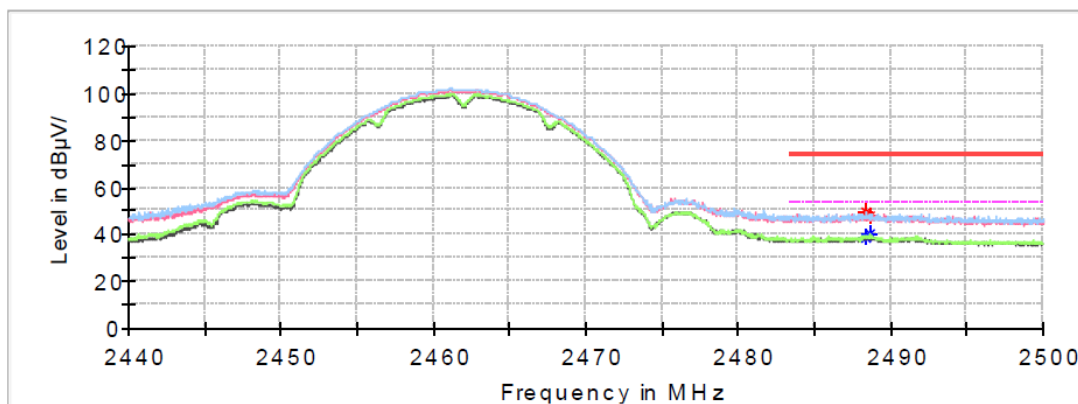
| Frequency (MHz) | MaxPeak (dB µ V/m) | Average (dB µ V/m) | Limit (dB µ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2327.640000     | 44.45              | ---                | 74.00            | 29.55       | H   | 0.2          |
| 2327.640000     | ---                | 36.94              | 54.00            | 17.06       | H   | 0.2          |
| 2365.608000     | ---                | 35.96              | 54.00            | 18.04       | V   | 0.2          |
| 2365.608000     | 47.86              | ---                | 74.00            | 26.14       | V   | 0.2          |

## High Channel

### Common Information

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11b mode 2462 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

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) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2488.384000     | 49.40              | ---                | 74.00            | 24.60       | V   | 0.4          |
| 2488.384000     | ---                | 38.81              | 54.00            | 15.19       | V   | 0.4          |
| 2488.624000     | 47.99              | ---                | 74.00            | 26.01       | H   | 0.4          |
| 2488.624000     | ---                | 39.88              | 54.00            | 14.12       | H   | 0.4          |

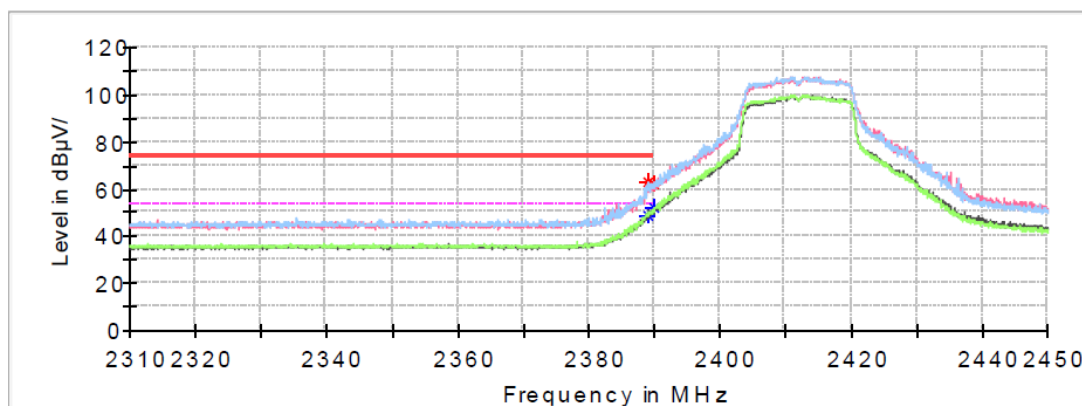
## 802.11g Mode :

## Low Channel

## Common Information

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11g mode 2412 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

## Full Spectrum



## Critical\_Freqs

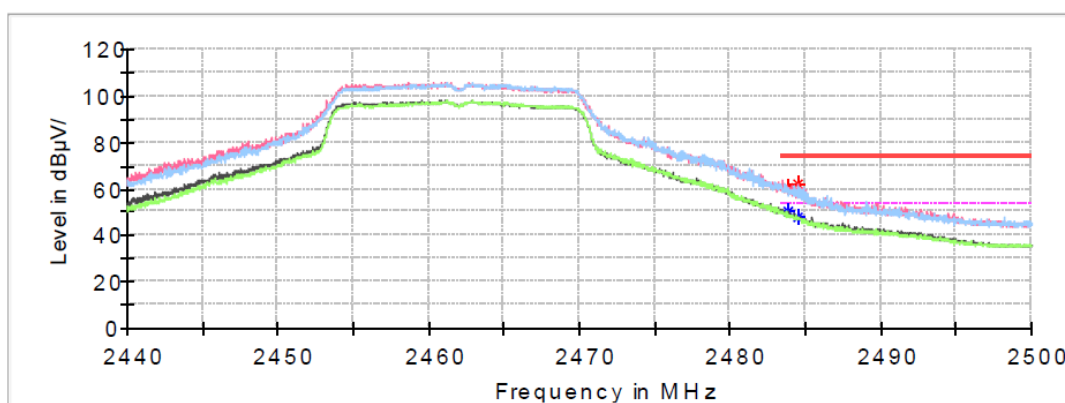
| Frequency (MHz) | MaxPeak (dB μ V/m) | Average (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2388.904000     | 62.74              | ---                | 74.00            | 11.26       | H   | 0.2          |
| 2388.904000     | ---                | 49.01              | 54.00            | 4.99        | H   | 0.2          |
| 2389.912000     | 62.33              | ---                | 74.00            | 11.67       | H   | 0.2          |
| 2389.912000     | ---                | 51.64              | 54.00            | 2.36        | H   | 0.2          |

## High Channel

### Common Information

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11g mode 2462 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

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) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2483.872000     | ---                | 50.48              | 54.00            | 3.52        | H   | 0.4          |
| 2483.872000     | 60.06              | ---                | 74.00            | 13.94       | H   | 0.4          |
| 2484.520000     | ---                | 48.16              | 54.00            | 5.84        | V   | 0.4          |
| 2484.520000     | 62.16              | ---                | 74.00            | 11.84       | V   | 0.4          |

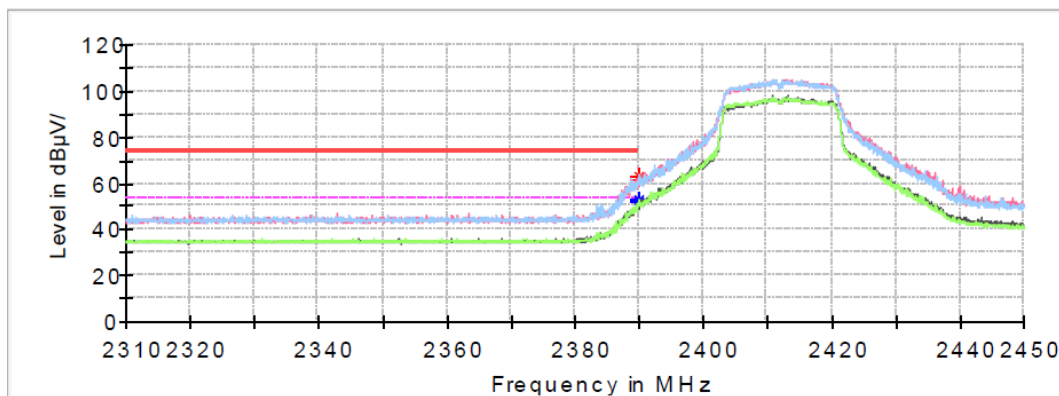
## 802.11n-HT20 Mode:

## Low Channel

## Common Information

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11n20 mode 2412 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

## Full Spectrum

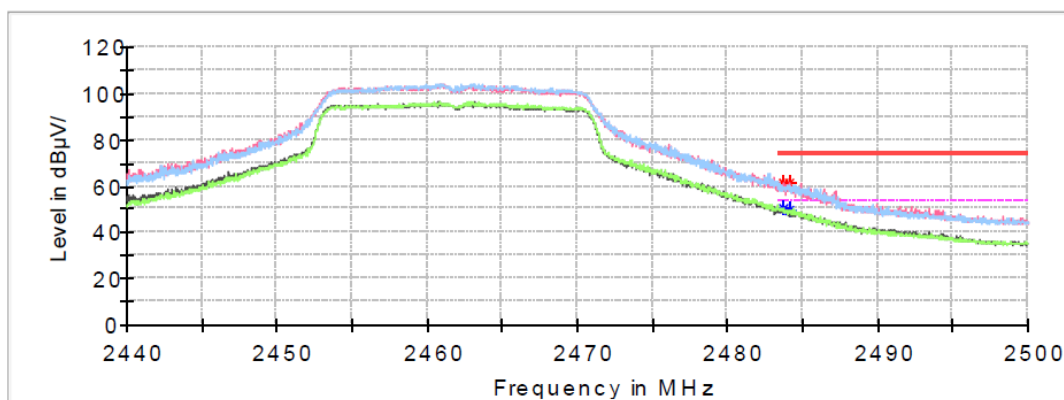


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dB µ V/m) | Average (dB µ V/m) | Limit (dB µ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2389.856000     | 63.08              | ---                | 74.00            | 10.92       | H   | 0.2          |
| 2389.856000     | ---                | 51.86              | 54.00            | 2.14        | H   | 0.2          |
| 2389.968000     | 61.08              | ---                | 74.00            | 12.92       | H   | 0.2          |
| 2389.968000     | ---                | 52.46              | 54.00            | 1.54        | H   | 0.2          |

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

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11n20 mode 2462 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

**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) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2483.728000     | ---                | 50.40              | 54.00            | 3.60        | H   | 0.4          |
| 2483.728000     | 61.28              | ---                | 74.00            | 12.72       | H   | 0.4          |
| 2484.088000     | ---                | 49.16              | 54.00            | 4.84        | V   | 0.4          |
| 2484.088000     | 61.29              | ---                | 74.00            | 12.71       | V   | 0.4          |

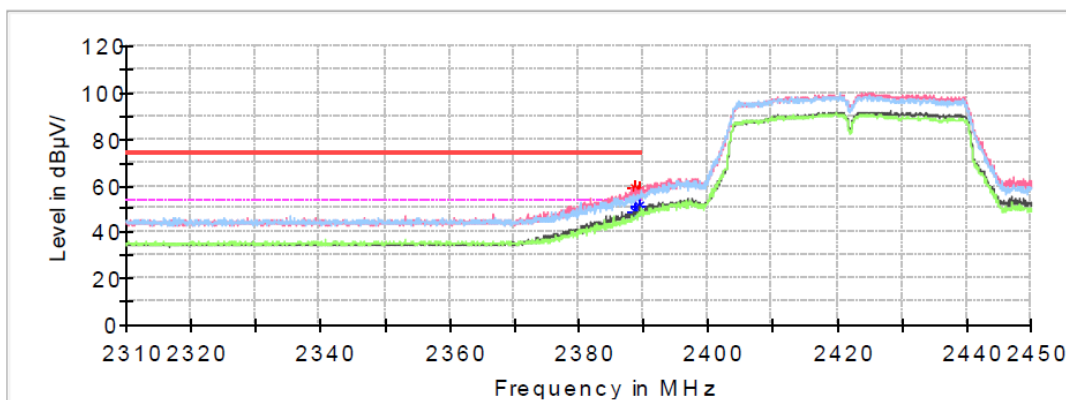
## 802.11n-HT40 Mode:

## Low Channel

## Common Information

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11n40 mode 2422 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

## Full Spectrum

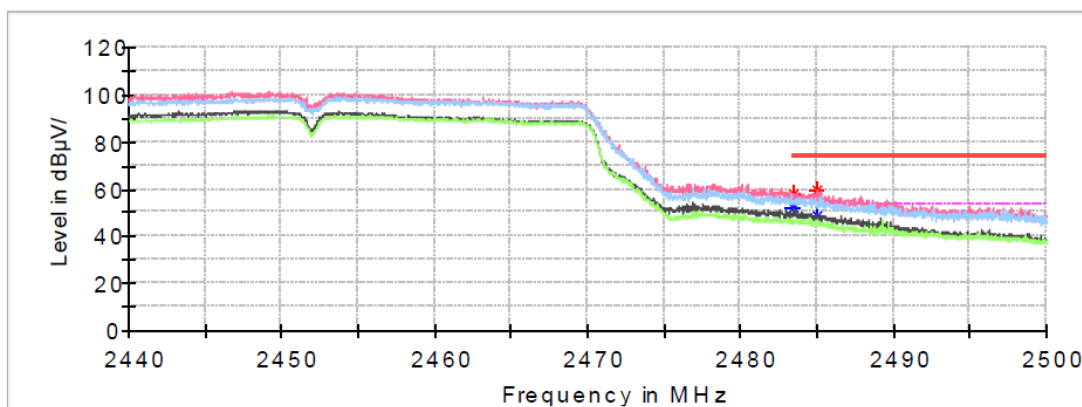


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dB μ V/m) | Average (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2388.792000     | 58.63              | ---                | 74.00            | 15.37       | V   | 0.2          |
| 2388.792000     | ---                | 48.73              | 54.00            | 5.27        | V   | 0.2          |
| 2389.464000     | 57.72              | ---                | 74.00            | 16.28       | V   | 0.2          |
| 2389.464000     | ---                | 51.20              | 54.00            | 2.80        | V   | 0.2          |

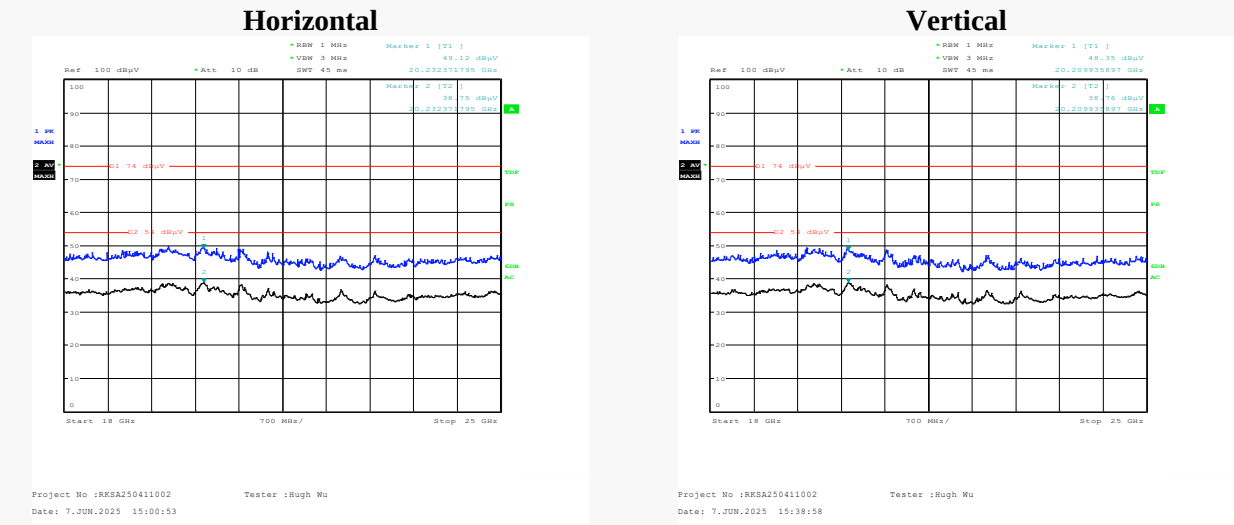
**High Channel****Common Information**

Project No.: RKSA250411002  
EUT Model: P5L-PINPad  
Test Mode: Transmitting in 802.11n40 mode 2452 channel  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 27.2°C  
Humidity: 54%  
Atmospheric Pressure: 100.6kPa  
Test Engineer: Destine Hu  
Test Date: 2025/7/8

**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) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2483.512000     | ---                | 51.88              | 54.00            | 2.12        | V   | 0.4          |
| 2483.512000     | 57.87              | ---                | 74.00            | 16.13       | V   | 0.4          |
| 2484.952000     | ---                | 48.87              | 54.00            | 5.13        | V   | 0.4          |
| 2484.952000     | 59.43              | ---                | 74.00            | 14.57       | V   | 0.4          |

18GHz-25GHz: Transmitting in maximum output power mode and 802.11g mode high channel

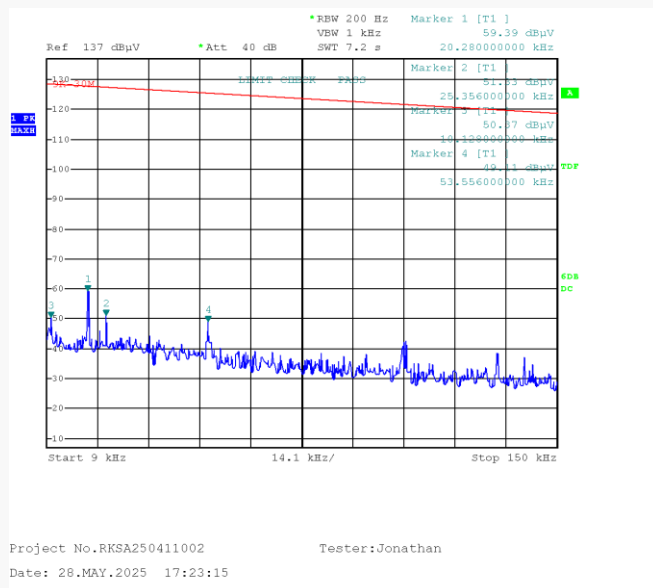
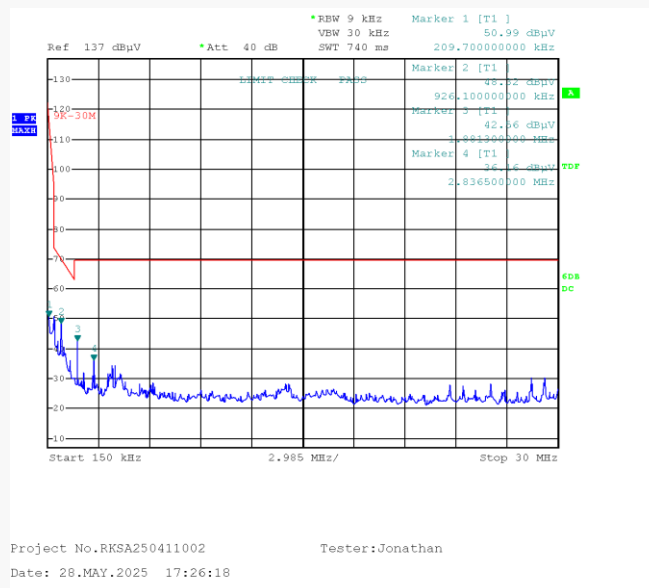


| Frequency (GHz) | MaxPeak (dB $\mu$ V/m) | Average (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|------------------------|----------------------|-------------|-----|--------------|
| 20.21           | ---                    | 38.76                  | 54                   | 15.24       | V   | 12.47        |
| 20.21           | 48.35                  | ---                    | 74                   | 25.65       | V   | 12.47        |
| 20.23           | ---                    | 38.75                  | 54                   | 15.25       | H   | 12.49        |
| 20.23           | 49.12                  | ---                    | 74                   | 24.88       | H   | 12.49        |

Note: The test distance is 3m. The limit is 74dB $\mu$ V/m (Peak) and 54dB $\mu$ V/m (Average).

**For BLE Mode:**

**9 kHz-30MHz:** Transmitting in maximum output power mode BLE (1 Mbps) middle channel  
**Parallel(worst case)**

**9kHz-150kHz****150kHz-30MHz****9 kHz-150 kHz**

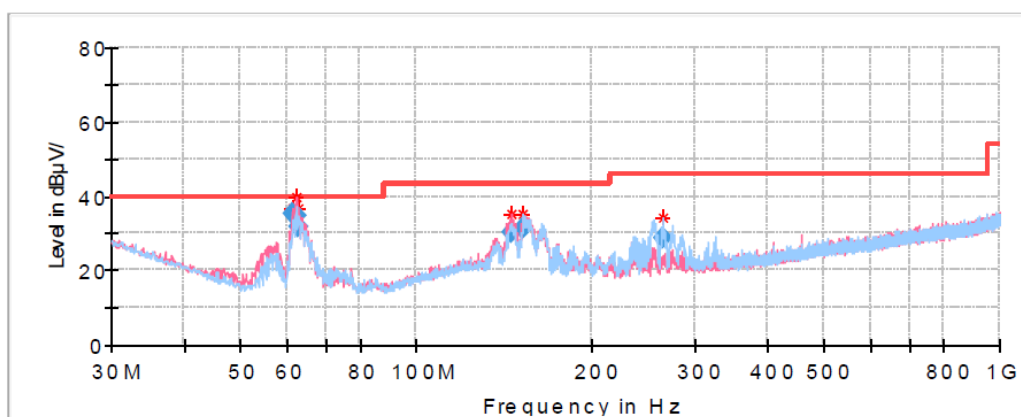
| Frequency (MHz) | Corrected Amplitude (dB $\mu$ V/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dB $\mu$ V/m) @3m | Margin (dB) |
|-----------------|----------------------------------------|---------------------|-------------------------|--------------------------|-------------|
| 0.010128        | 50.37                                  | PK                  | -0.51                   | 127.49                   | 77.12       |
| 0.020280        | 59.39                                  | PK                  | -0.56                   | 121.46                   | 62.07       |
| 0.025356        | 51.33                                  | PK                  | -0.59                   | 119.52                   | 68.19       |
| 0.053556        | 49.11                                  | PK                  | -4.23                   | 13.03                    | -36.08      |

**150 kHz-30 MHz**

| Frequency (MHz) | Corrected Amplitude (dB $\mu$ V/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dB $\mu$ V/m) @3m | Margin (dB) |
|-----------------|----------------------------------------|---------------------|-------------------------|--------------------------|-------------|
| 0.2097          | 50.99                                  | PK                  | -13.87                  | 101.17                   | 50.18       |
| 0.9261          | 48.32                                  | PK                  | -27.09                  | 68.27                    | 19.95       |
| 1.8813          | 42.66                                  | PK                  | -30.51                  | 69.54                    | 26.88       |
| 2.8365          | 36.16                                  | PK                  | -31.33                  | 69.54                    | 33.38       |

**BLE (1 Mbps) (Transmitting in maximum output power BLE (1 Mbps) middle channel)**  
**30MHz-1GHz****Middle Channel: 2440MHz****Common Information**

Project No: RKSA250411002  
EUT Model: P5L PINPad  
Test Mode: Transmitting in BLE-1M mode middle channel  
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247  
Test Equipment: ESCI, JB3, 310N  
Receiver Setting: RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto  
Temperature: 22.6°C  
Humidity: 45%  
Barometric Pressure: 101.2kPa  
Test Engineer: Jonathan  
Test Date: 2025/4/27

**Final Result**

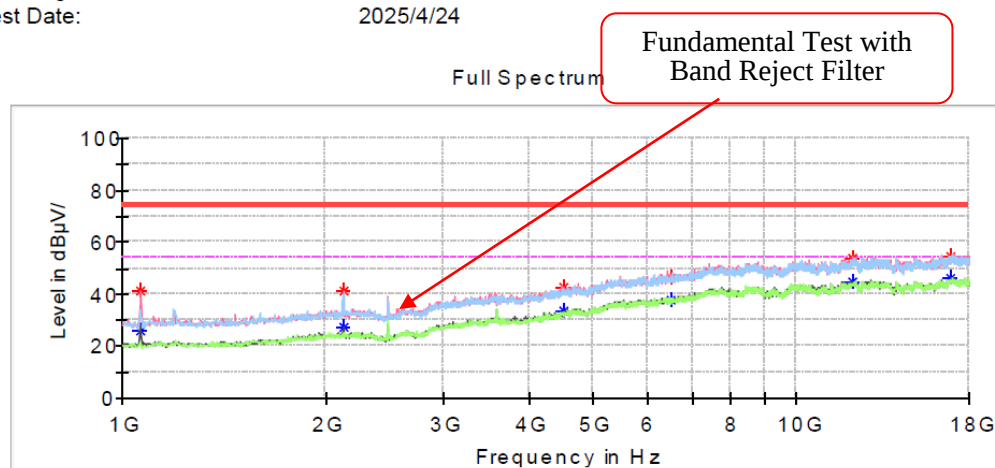
| Frequency (MHz) | QuasiPeak (dB µV/m) | Limit (dB µV/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|---------------------|-----------------|-------------|-----|--------------|
| 61.286250       | 35.08               | 40.00           | 4.92        | V   | -17.0        |
| 62.136600       | 34.53               | 40.00           | 5.47        | V   | -16.9        |
| 62.850300       | 31.49               | 40.00           | 8.51        | V   | -16.9        |
| 145.911900      | 30.42               | 43.50           | 13.08       | V   | -11.5        |
| 152.584850      | 31.01               | 43.50           | 12.49       | H   | -11.8        |
| 264.493600      | 28.53               | 46.00           | 17.47       | H   | -11.6        |

**BLE (1 Mbps)**  
**1GHz-18GHz:**

**Low Channel: 2402MHz**

**Common Information**

|                       |                                                   |
|-----------------------|---------------------------------------------------|
| Project No.:          | RKSA250411002                                     |
| EUT Model:            | P5L-PINPPad                                       |
| Test Mode:            | BLE                                               |
| Standard:             | FCC Part 15.247& FCC Part 15.205& FCC Part 15.209 |
| Test Equipment:       | ESU40,3115,PAM-0118P                              |
| Receiver Setting:     | RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto            |
| Temperature:          | 25.5°C                                            |
| Humidity:             | 46%                                               |
| Atmospheric Pressure: | 101.3kPa                                          |
| Test Engineer:        | Destine Hu                                        |
| Test Date:            | 2025/4/24                                         |

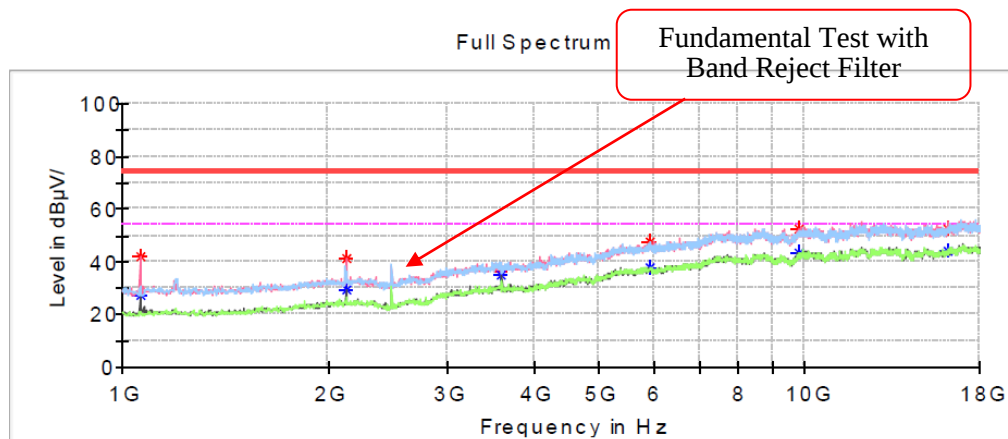


**Critical Freqs**

| Frequency (MHz) | MaxPeak (dB µV/m) | Average (dB µV/m) | Limit (dB µV/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|-------------------|-------------------|-----------------|-------------|-----|--------------|
| 1064.600000     | ---               | 25.92             | 54.00           | 28.08       | V   | -15.4        |
| 1064.600000     | 40.98             | ---               | 74.00           | 33.02       | V   | -15.4        |
| 2125.400000     | ---               | 27.02             | 54.00           | 26.98       | V   | -11.3        |
| 2125.400000     | 41.59             | ---               | 74.00           | 32.41       | V   | -11.3        |
| 4505.400000     | ---               | 33.76             | 54.00           | 20.24       | V   | -4.2         |
| 4505.400000     | 42.53             | ---               | 74.00           | 31.47       | V   | -4.2         |
| 6497.800000     | ---               | 37.73             | 54.00           | 16.27       | H   | 0.5          |
| 6497.800000     | 46.29             | ---               | 74.00           | 27.71       | H   | 0.5          |
| 12077.200000    | ---               | 44.50             | 54.00           | 9.50        | V   | 9.1          |
| 12077.200000    | 53.91             | ---               | 74.00           | 20.09       | V   | 9.1          |
| 16966.400000    | ---               | 46.43             | 54.00           | 7.57        | V   | 12.2         |
| 16966.400000    | 54.49             | ---               | 74.00           | 19.51       | V   | 12.2         |

**Middle Channel: 2440MHz****Common Information**

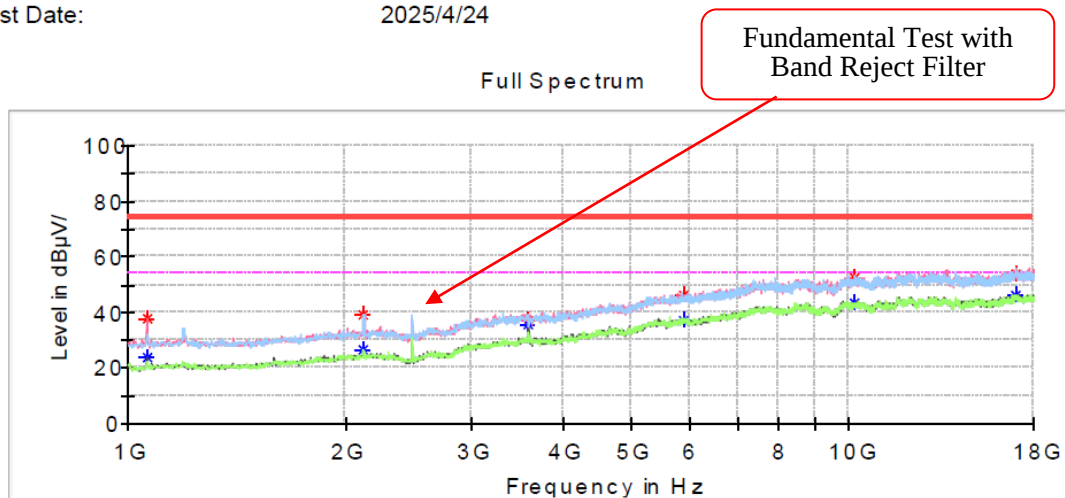
Project No.: RKSA250411002  
EUT Model: P5L-PINPPad  
Test Mode: BLE  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 25.5°C  
Humidity: 46%  
Atmospheric Pressure: 101.3kPa  
Test Engineer: Destine Hu  
Test Date: 2025/4/24

**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) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1061.200000     | ---                | 27.60              | 54.00            | 26.40       | V   | -15.4        |
| 1061.200000     | 42.12              | ---                | 74.00            | 31.88       | V   | -15.4        |
| 2125.400000     | ---                | 29.29              | 54.00            | 24.71       | V   | -11.3        |
| 2125.400000     | 40.96              | ---                | 74.00            | 33.04       | V   | -11.3        |
| 3597.600000     | 36.66              | ---                | 74.00            | 37.34       | V   | -6.3         |
| 3597.600000     | ---                | 35.00              | 54.00            | 19.00       | V   | -6.3         |
| 5916.400000     | ---                | 37.67              | 54.00            | 16.33       | H   | 0.0          |
| 5916.400000     | 47.22              | ---                | 74.00            | 26.78       | H   | 0.0          |
| 9829.800000     | ---                | 43.47              | 54.00            | 10.53       | V   | 6.6          |
| 9829.800000     | 52.50              | ---                | 74.00            | 21.50       | V   | 6.6          |
| 16198.000000    | ---                | 43.88              | 54.00            | 10.12       | V   | 10.0         |
| 16198.000000    | 52.72              | ---                | 74.00            | 21.28       | V   | 10.0         |

**High Channel: 2480MHz****Common Information**

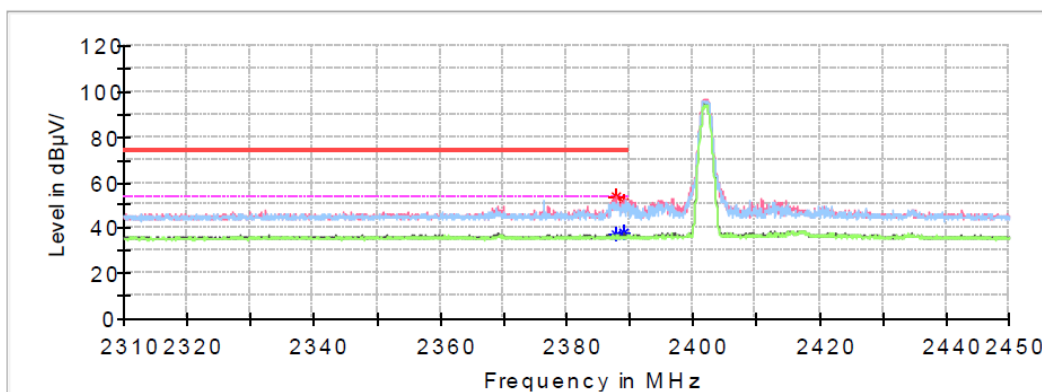
Project No.: RKSA250411002  
EUT Model: P5L-PINPPad  
Test Mode: BLE  
Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 25.5°C  
Humidity: 46%  
Atmospheric Pressure: 101.3kPa  
Test Engineer: Destine Hu  
Test Date: 2025/4/24

**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) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 1061.200000     | ---                | 23.65              | 54.00            | 30.35       | V   | -15.4        |
| 1061.200000     | 37.45              | ---                | 74.00            | 36.55       | V   | -15.4        |
| 2122.000000     | ---                | 26.71              | 54.00            | 27.29       | H   | -11.4        |
| 2122.000000     | 39.20              | ---                | 74.00            | 34.80       | H   | -11.4        |
| 3597.600000     | 37.04              | ---                | 74.00            | 36.96       | V   | -6.3         |
| 3597.600000     | ---                | 35.65              | 54.00            | 18.35       | V   | -6.3         |
| 5885.800000     | ---                | 37.05              | 54.00            | 16.95       | V   | -0.1         |
| 5885.800000     | 45.93              | ---                | 74.00            | 28.07       | V   | -0.1         |
| 10183.400000    | ---                | 43.18              | 54.00            | 10.82       | H   | 7.1          |
| 10183.400000    | 52.31              | ---                | 74.00            | 21.69       | H   | 7.1          |
| 17037.800000    | ---                | 46.04              | 54.00            | 7.96        | H   | 12.2         |
| 17037.800000    | 53.92              | ---                | 74.00            | 20.08       | H   | 12.2         |

**Band Edge:****Low Channel****Common Information**

Project No.: RKSA250411002  
EUT Model: P5L-PINPPad  
Test Mode: BLE  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 25.5°C  
Humidity: 46%  
Atmospheric Pressure: 101.3kPa  
Test Engineer: Destine Hu  
Test Date: 2025/4/24

**Full Spectrum****Critical\_Freqs**

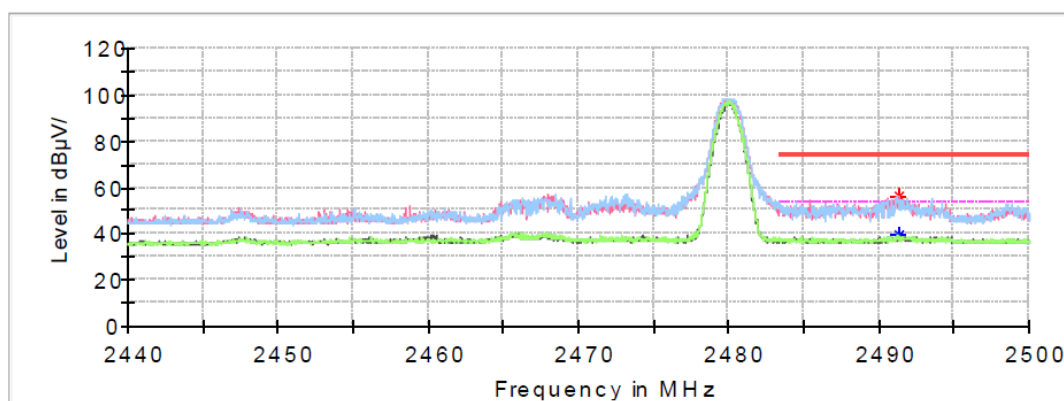
| Frequency (MHz) | MaxPeak (dB μ V/m) | Average (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2387.840000     | ---                | 37.29              | 54.00            | 16.71       | V   | -0.6         |
| 2387.840000     | 53.33              | ---                | 74.00            | 20.67       | V   | -0.6         |
| 2389.072000     | ---                | 37.55              | 54.00            | 16.45       | V   | -0.6         |
| 2389.072000     | 51.16              | ---                | 74.00            | 22.84       | V   | -0.6         |

## High Channel

### Common Information

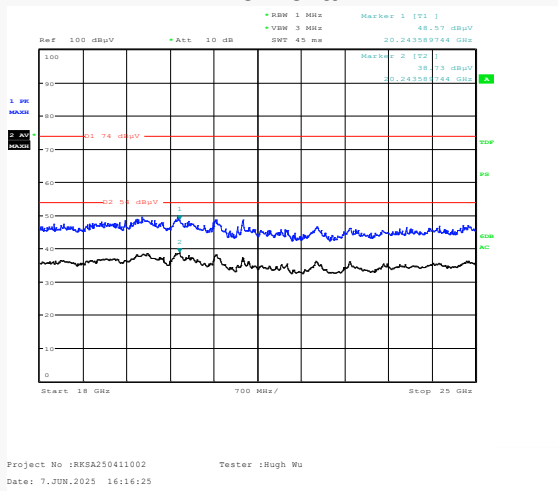
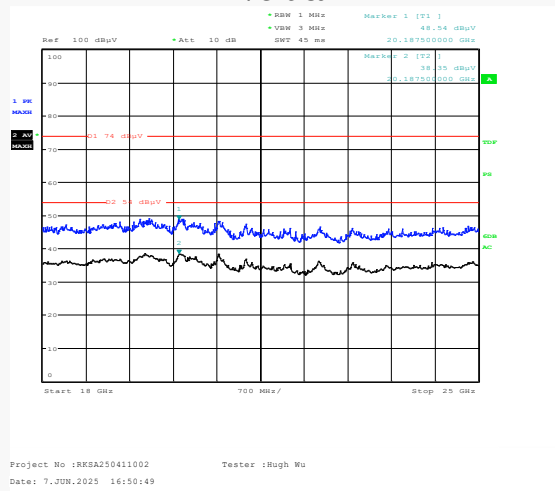
Project No.: RKSA250411002  
EUT Model: P5L-PINPPad  
Test Mode: BLE  
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
Test Equipment: ESU40,3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 25.5°C  
Humidity: 46%  
Atmospheric Pressure: 101.3kPa  
Test Engineer: Destine Hu  
Test Date: 2025/4/24

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) |
|-----------------|--------------------|--------------------|------------------|-------------|-----|--------------|
| 2491.336000     | ---                | 39.40              | 54.00            | 14.60       | V   | -0.2         |
| 2491.336000     | 56.28              | ---                | 74.00            | 17.72       | V   | -0.2         |

**18GHz-25GHz: Transmitting in maximum output power mode and BLE 1M middle channel****Horizontal****Vertical**

| Frequency (GHz) | MaxPeak (dB $\mu$ V/m) | Average (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|------------------------|----------------------|-------------|-----|--------------|
| 20.19           | ---                    | 38.35                  | 54                   | 15.65       | V   | 12.45        |
| 20.19           | 48.54                  | ---                    | 74                   | 25.46       | V   | 12.45        |
| 20.24           | ---                    | 38.73                  | 54                   | 15.27       | H   | 12.5         |
| 20.24           | 48.57                  | ---                    | 74                   | 25.43       | H   | 12.5         |

Note: The test distance is 3m. The limit is 74dB $\mu$ V/m(Peak) and 54dB $\mu$ V/m(Average).

**6 dB EMISSION BANDWIDTH****Environmental Conditions & Test Information**

|                           |                          |
|---------------------------|--------------------------|
| <b>Test Date:</b>         | 2025-04-25 to 2025-07-09 |
| <b>Temperature:</b>       | 25.7-26.5°C              |
| <b>Relative Humidity:</b> | 49-52 %                  |
| <b>ATM Pressure:</b>      | 102.1-102.7 kPa          |
| <b>Test Result:</b>       | Pass                     |
| <b>Test Engineer:</b>     | Neil Zhou                |

**Test Result:** Compliant.

*EUT operation mode: Transmitting*

**For Wi-Fi Mode:**

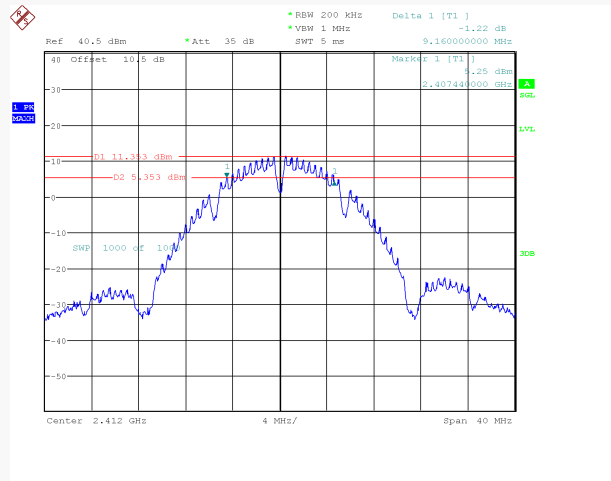
| Channel                  | Frequency (MHz) | 6 dB Emission Bandwidth (MHz) | Limit (MHz) | Result |
|--------------------------|-----------------|-------------------------------|-------------|--------|
| <b>802.11b Mode</b>      |                 |                               |             |        |
| Low                      | 2412            | 9.160                         | $\geq 0.5$  | Pass   |
| Middle                   | 2437            | 9.160                         | $\geq 0.5$  | Pass   |
| High                     | 2462            | 9.160                         | $\geq 0.5$  | Pass   |
| <b>802.11g Mode</b>      |                 |                               |             |        |
| Low                      | 2412            | 16.160                        | $\geq 0.5$  | Pass   |
| Middle                   | 2437            | 16.400                        | $\geq 0.5$  | Pass   |
| High                     | 2462            | 16.160                        | $\geq 0.5$  | Pass   |
| <b>802.11n-HT20 Mode</b> |                 |                               |             |        |
| Low                      | 2412            | 17.200                        | $\geq 0.5$  | Pass   |
| Middle                   | 2437            | 17.600                        | $\geq 0.5$  | Pass   |
| High                     | 2462            | 17.240                        | $\geq 0.5$  | Pass   |
| <b>802.11n-HT40 Mode</b> |                 |                               |             |        |
| Low                      | 2422            | 35.760                        | $\geq 0.5$  | Pass   |
| Middle                   | 2437            | 36.720                        | $\geq 0.5$  | Pass   |
| High                     | 2452            | 36.080                        | $\geq 0.5$  | Pass   |

**For BLE Mode:**

| Mode         | Channel | Frequency (MHz) | 6 dB Emission Bandwidth (MHz) | Limit (MHz) | Result |
|--------------|---------|-----------------|-------------------------------|-------------|--------|
| BLE (1 Mbps) | Low     | 2402            | 0.668                         | $\geq 0.5$  | Pass   |
|              | Middle  | 2440            | 0.668                         | $\geq 0.5$  | Pass   |
|              | High    | 2480            | 0.672                         | $\geq 0.5$  | Pass   |

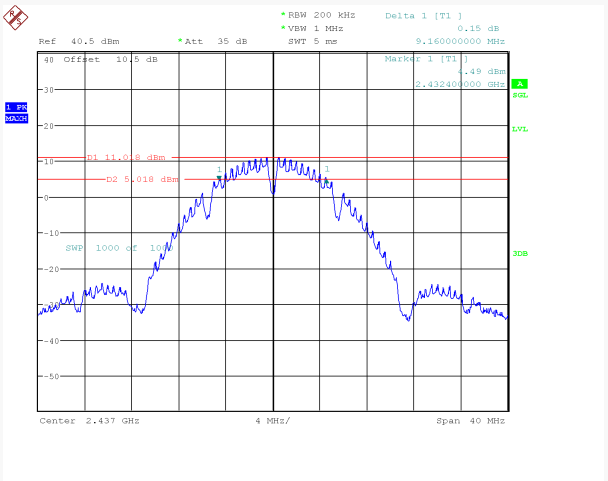
For Wi-Fi Mode:

802.11b\_2412MHz



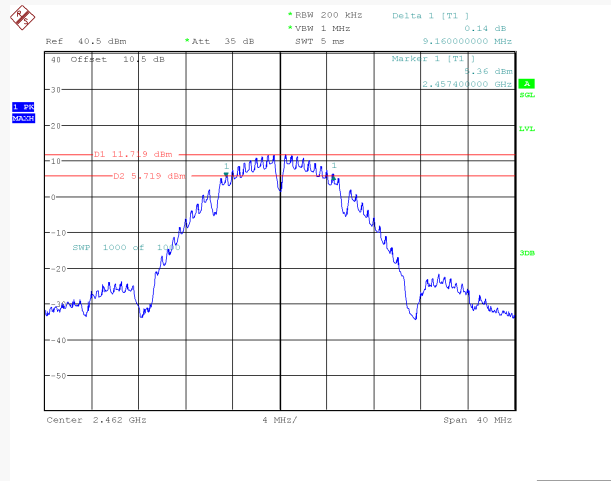
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 3.JUL.2025 17:12:28

802.11b\_2437MHz



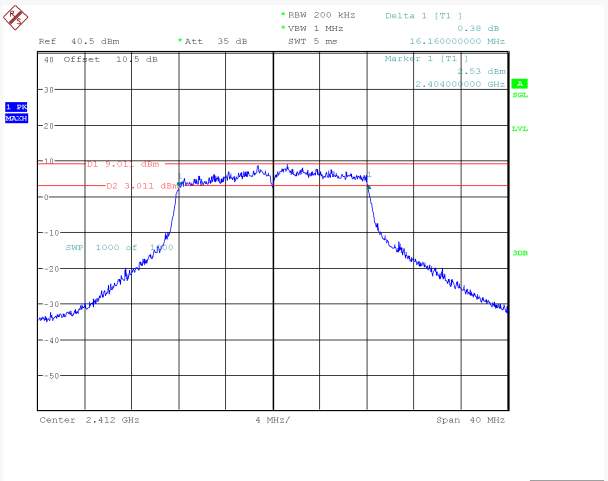
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 3.JUL.2025 17:32:01

802.11b\_2462MHz



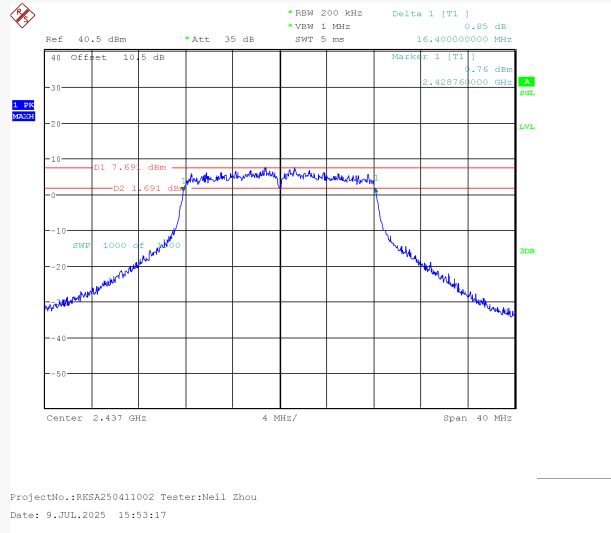
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 3.JUL.2025 17:43:57

802.11g\_2412MHz

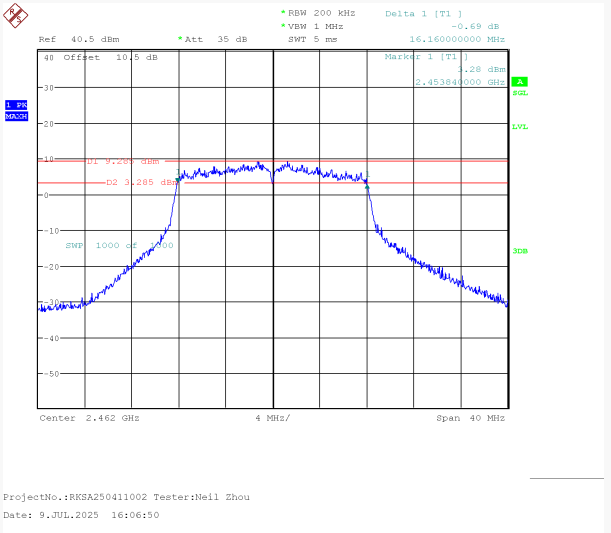


ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 15:39:17

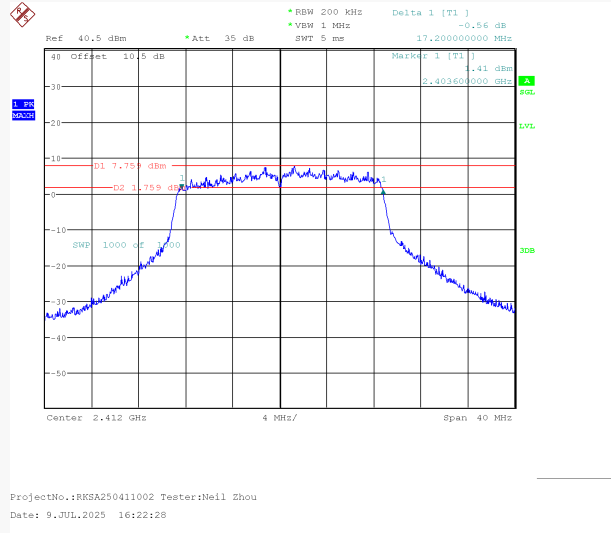
802.11g\_2437MHz



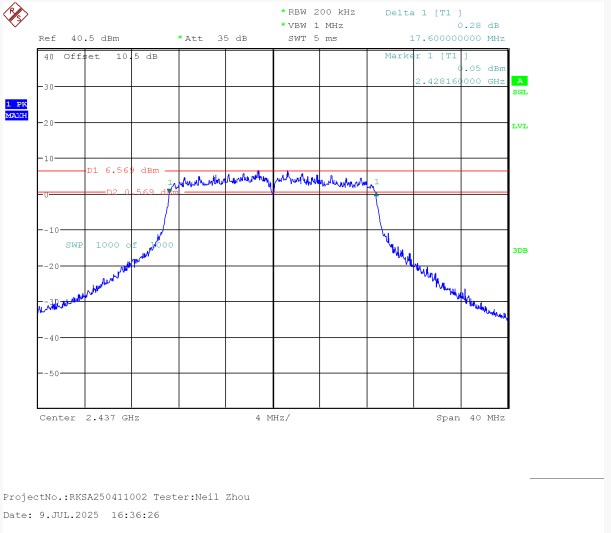
802.11g\_2462MHz



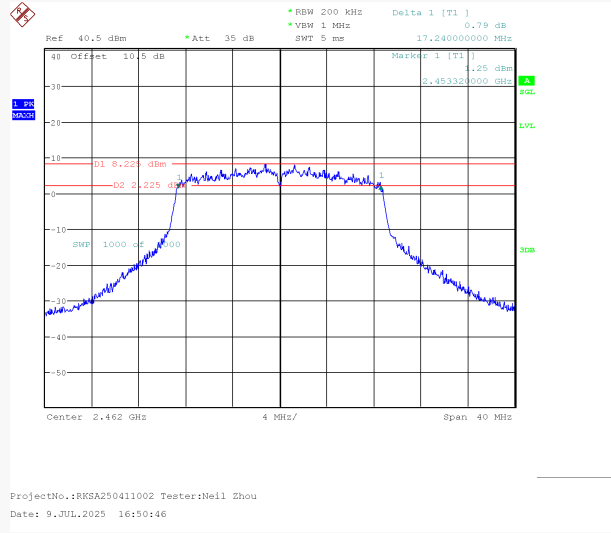
802.11n20\_2412MHz



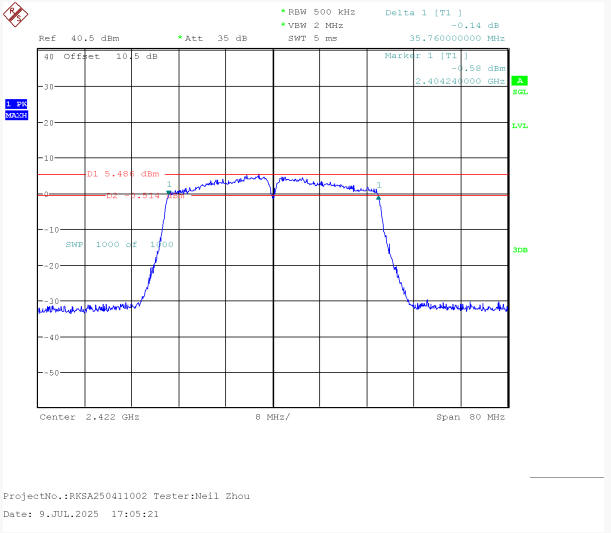
802.11n20\_2437MHz



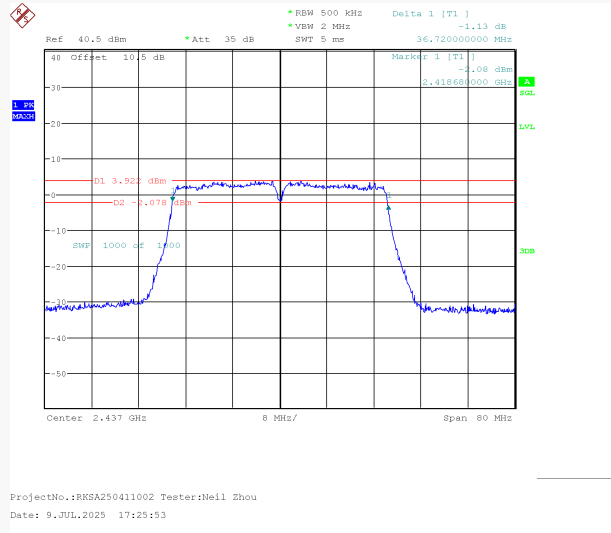
802.11n20\_2462MHz



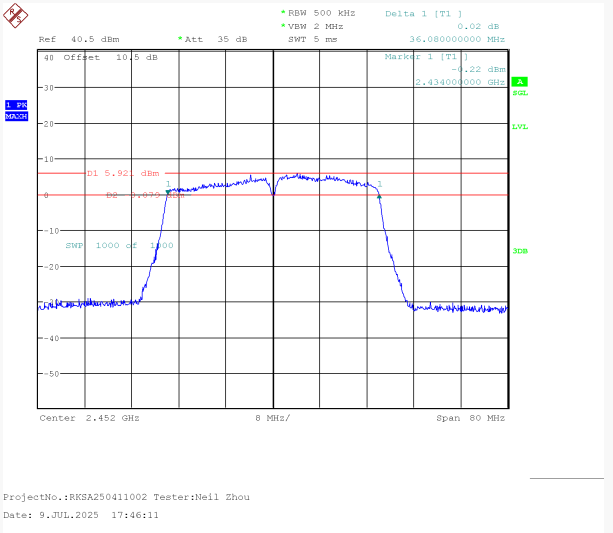
802.11n40\_2422MHz



802.11n40\_2437MHz

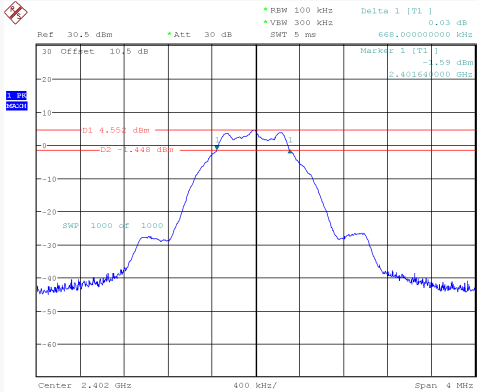


802.11n40\_2452MHz



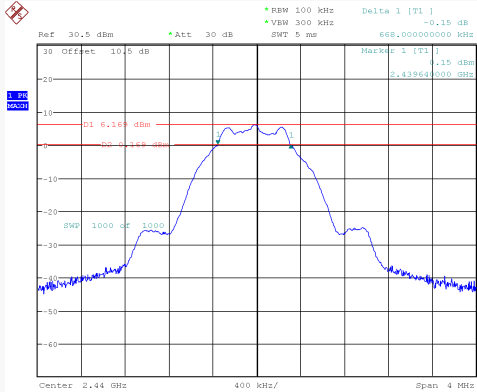
For BLE Mode:  
BLE (1 Mbps)

Low Channel



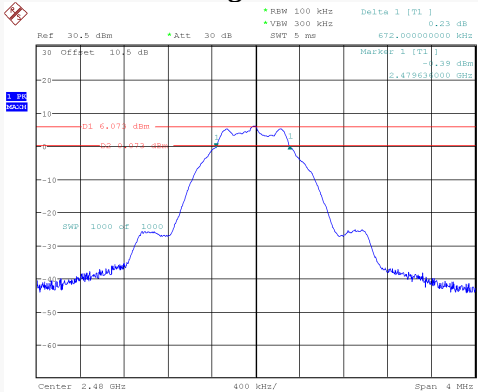
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 25.APR.2025 11:23:24

Middle Channel



ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 25.APR.2025 11:33:06

High Channel



ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 25.APR.2025 11:43:40

**MAXIMUM CONDUCTED OUTPUT POWER****Environmental Conditions & Test Information**

|                           |                          |
|---------------------------|--------------------------|
| <b>Test Date:</b>         | 2025-04-25 to 2025-07-09 |
| <b>Temperature:</b>       | 25.7-26.5°C              |
| <b>Relative Humidity:</b> | 49-52 %                  |
| <b>ATM Pressure:</b>      | 102.1-102.7 kPa          |
| <b>Test Result:</b>       | Pass                     |
| <b>Test Engineer:</b>     | Neil Zhou                |

**Test Result:** Compliant.

*EUT operation mode: Transmitting*

**For Wi-Fi Mode:**

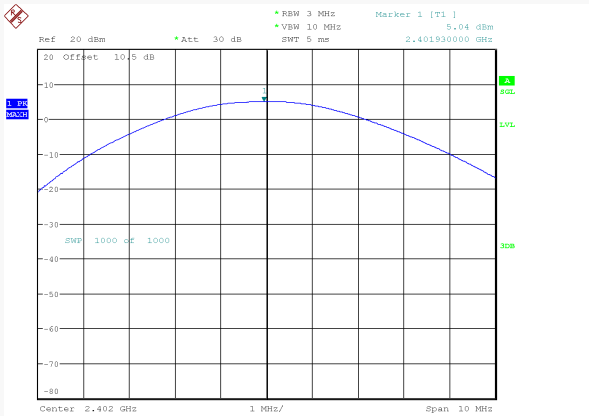
| Channel                  | Frequency (MHz) | Max Conducted Peak Output Power (dBm) | Peak Output Power Limit (dBm) |
|--------------------------|-----------------|---------------------------------------|-------------------------------|
| <b>802.11b Mode</b>      |                 |                                       |                               |
| Low                      | 2412            | 18.51                                 | ≤30                           |
| Middle                   | 2437            | 17.73                                 | ≤30                           |
| High                     | 2462            | 18.76                                 | ≤30                           |
| <b>802.11g Mode</b>      |                 |                                       |                               |
| Low                      | 2412            | 18.80                                 | ≤30                           |
| Middle                   | 2437            | 18.07                                 | ≤30                           |
| High                     | 2462            | 19.21                                 | ≤30                           |
| <b>802.11n-HT20 Mode</b> |                 |                                       |                               |
| Low                      | 2412            | 17.93                                 | ≤30                           |
| Middle                   | 2437            | 16.87                                 | ≤30                           |
| High                     | 2462            | 18.33                                 | ≤30                           |
| <b>802.11n-HT40 Mode</b> |                 |                                       |                               |
| Low                      | 2422            | 16.69                                 | ≤30                           |
| Middle                   | 2437            | 16.70                                 | ≤30                           |
| High                     | 2452            | 17.60                                 | ≤30                           |

BLE Mode:

| Mode         | Channel | Frequency (MHz) | Max Conducted Peak Output Power (dBm) | Limit (dBm) | Result |
|--------------|---------|-----------------|---------------------------------------|-------------|--------|
| BLE (1 Mbps) | Low     | 2402            | 5.04                                  | ≤30         | Pass   |
|              | Middle  | 2440            | 6.72                                  | ≤30         | Pass   |
|              | High    | 2480            | 6.55                                  | ≤30         | Pass   |

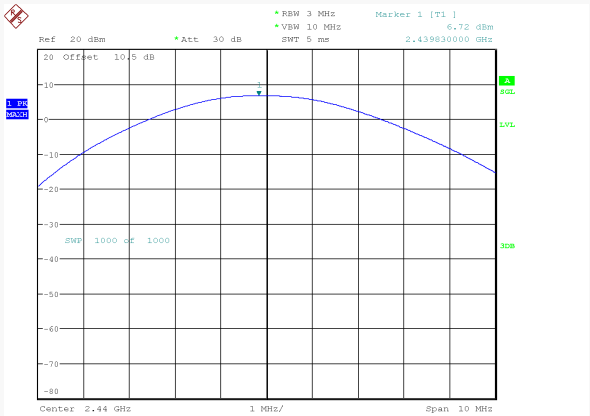
BLE (1 Mbps)

Low Channel



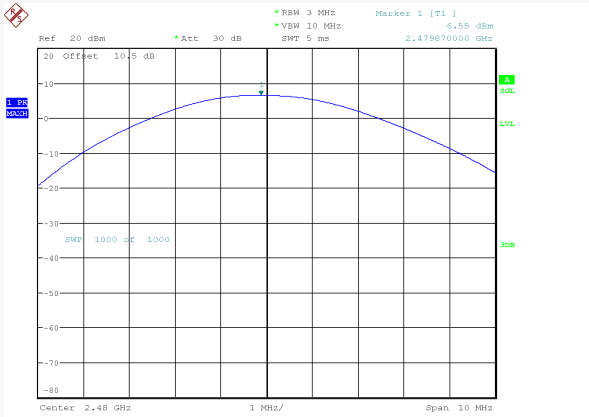
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 25.APR.2025 11:31:31

Middle Channel



ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 25.APR.2025 11:41:08

High Channel



ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 25.APR.2025 11:50:28

**100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE****Environmental Conditions & Test Information**

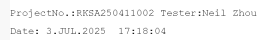
|                           |                          |
|---------------------------|--------------------------|
| <b>Test Date:</b>         | 2025-04-25 to 2025-07-09 |
| <b>Temperature:</b>       | 25.7-26.5°C              |
| <b>Relative Humidity:</b> | 49-52 %                  |
| <b>ATM Pressure:</b>      | 102.1-102.7 kPa          |
| <b>Test Result:</b>       | Pass                     |
| <b>Test Engineer:</b>     | Neil Zhou                |

*EUT operation mode: Transmitting***Test Result:** Compliant

| Mode      | Channel | Test Frequency (MHz) | Result (dB) | Limit (dB) |
|-----------|---------|----------------------|-------------|------------|
| 802.11b   | Low     | 2412                 | 38.46       | 20         |
|           | High    | 2462                 | 50.82       | 20         |
| 802.11g   | Low     | 2412                 | 32.57       | 20         |
|           | High    | 2462                 | 44.77       | 20         |
| 802.11n20 | Low     | 2412                 | 31.05       | 20         |
|           | High    | 2462                 | 44.99       | 20         |
| 802.11n40 | Low     | 2422                 | 38.16       | 20         |
|           | High    | 2452                 | 41.34       | 20         |

| Mode         | Channel | Frequency (MHz) | Result (dB) | Limit (dB) |
|--------------|---------|-----------------|-------------|------------|
| BLE (1 Mbps) | Low     | 2402            | 47.99       | 20         |
|              | High    | 2480            | 50.74       |            |

## 802.11b Mode Left Side



ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 3.JUL.2025 17:44:49

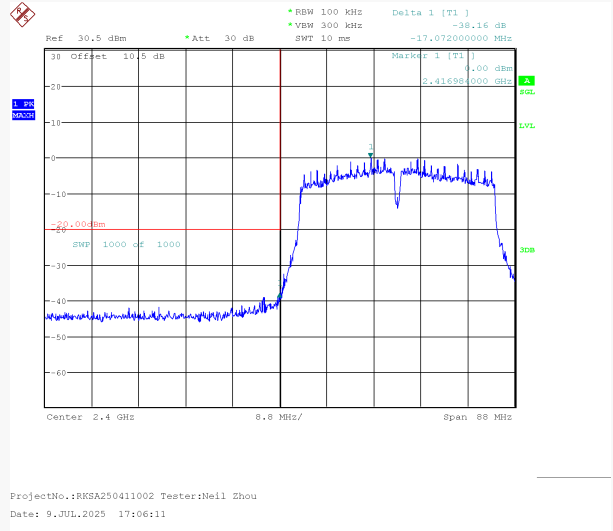
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 15:40:44

ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 16:07:39

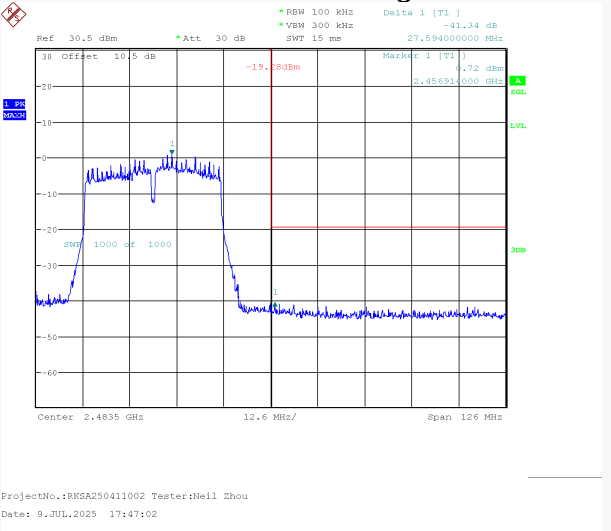
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 16:23:17

ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 16:51:36

802.11n-HT40 Mode Left Side

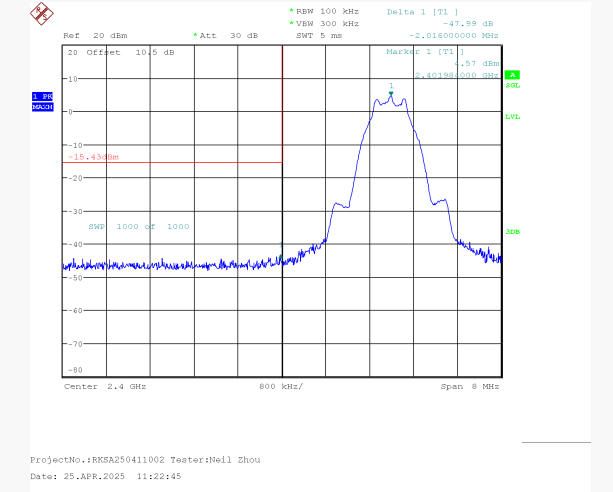


802.11n-HT40 Mode Right Side

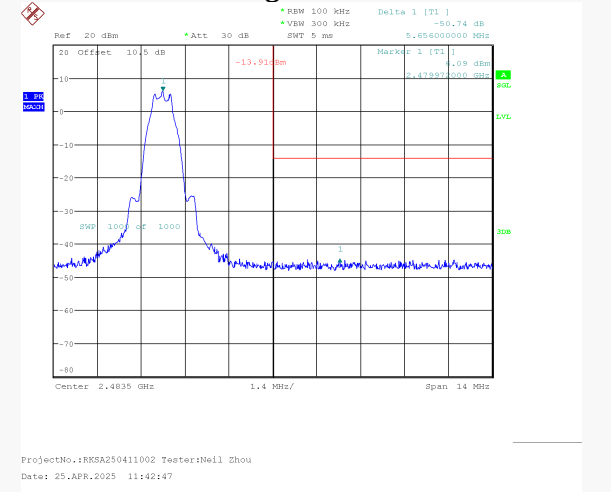


For BLE Mode:  
BLE (1 Mbps)

Left Side



Right Side



**POWER SPECTRAL DENSITY****Environmental Conditions & Test Information**

|                           |                          |
|---------------------------|--------------------------|
| <b>Test Date:</b>         | 2025-04-25 to 2025-07-09 |
| <b>Temperature:</b>       | 25.7-26.5℃               |
| <b>Relative Humidity:</b> | 49-52 %                  |
| <b>ATM Pressure:</b>      | 102.1-102.7 kPa          |
| <b>Test Result:</b>       | Pass                     |
| <b>Test Engineer:</b>     | Neil Zhou                |

**Test Result:** Compliant.

*EUT operation mode: Transmitting*

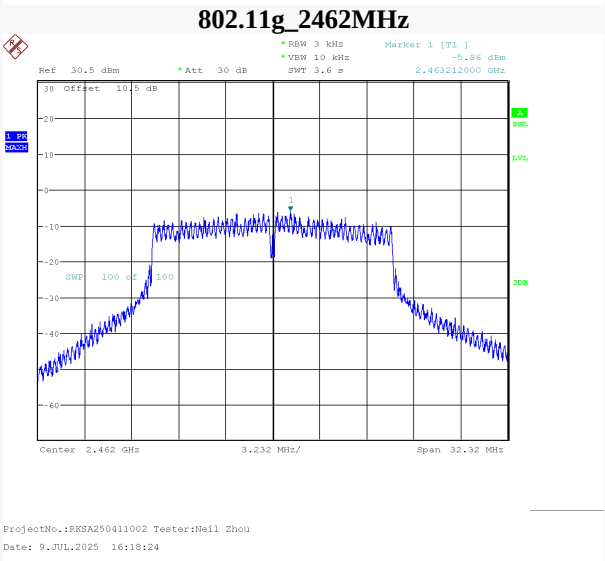
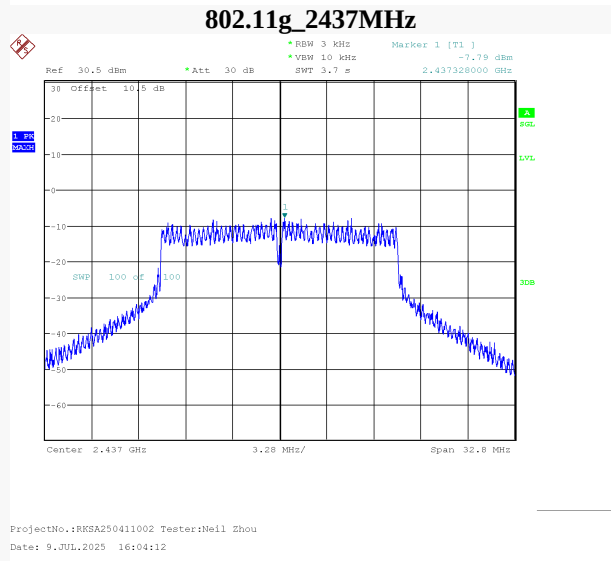
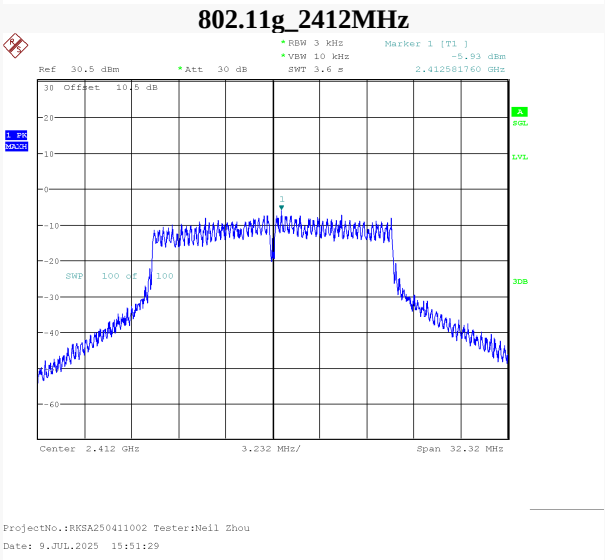
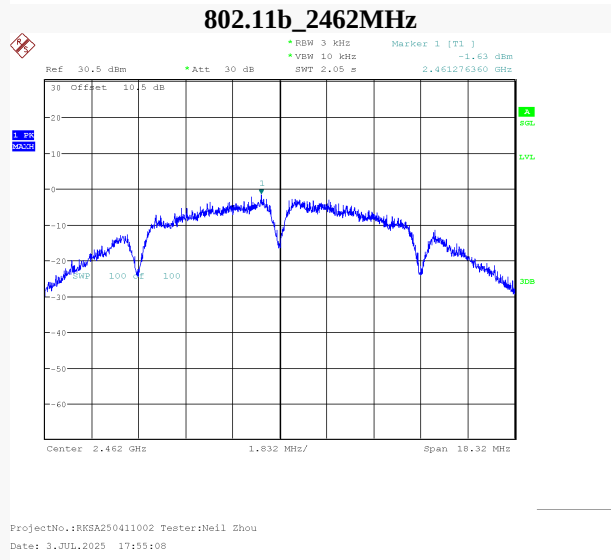
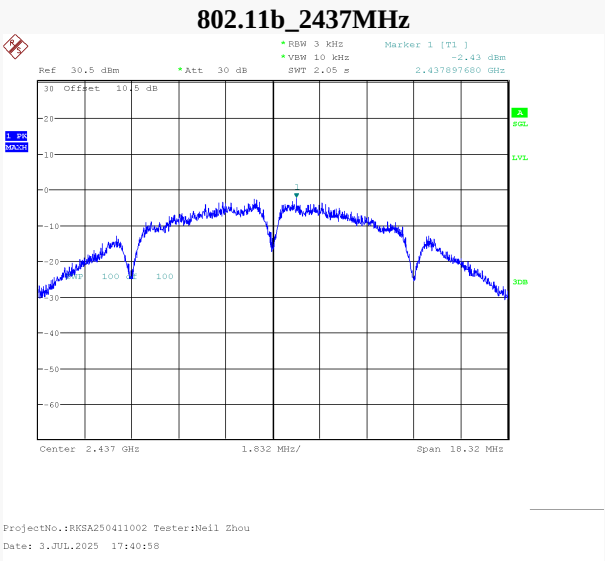
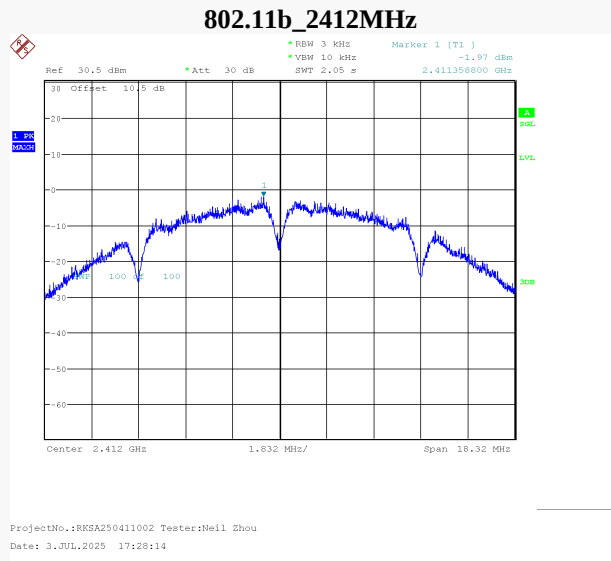
**For Wi-Fi Mode:**

| Channel                  | Frequency (MHz) | PSD (dBm/3kHz) | Limit (dBm/3kHz) | Result |
|--------------------------|-----------------|----------------|------------------|--------|
| <b>802.11b Mode</b>      |                 |                |                  |        |
| Low                      | 2412            | -1.97          | ≤8               | Pass   |
| Middle                   | 2437            | -2.43          | ≤8               | Pass   |
| High                     | 2462            | -1.63          | ≤8               | Pass   |
| <b>802.11g Mode</b>      |                 |                |                  |        |
| Low                      | 2412            | -5.93          | ≤8               | Pass   |
| Middle                   | 2437            | -7.79          | ≤8               | Pass   |
| High                     | 2462            | -5.86          | ≤8               | Pass   |
| <b>802.11n-HT20 Mode</b> |                 |                |                  |        |
| Low                      | 2412            | -7.97          | ≤8               | Pass   |
| Middle                   | 2437            | -9.21          | ≤8               | Pass   |
| High                     | 2462            | -7.72          | ≤8               | Pass   |
| <b>802.11n-HT40 Mode</b> |                 |                |                  |        |
| Low                      | 2422            | -13.26         | ≤8               | Pass   |
| Middle                   | 2437            | -14.92         | ≤8               | Pass   |
| High                     | 2452            | -12.82         | ≤8               | Pass   |

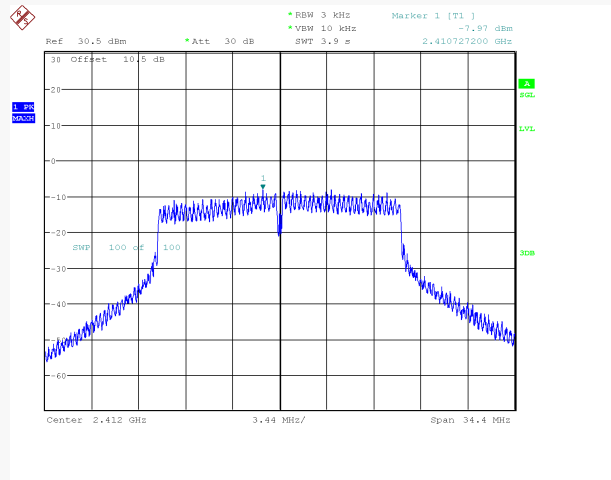
**For BLE Mode:**

| Mode         | Channel | Frequency<br>(MHz) | PSD<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) | Result |
|--------------|---------|--------------------|-------------------|---------------------|--------|
| BLE (1 Mbps) | Low     | 2402               | -10.33            | $\leq 8$            | Pass   |
|              | Middle  | 2440               | -8.63             | $\leq 8$            | Pass   |
|              | High    | 2480               | -8.81             | $\leq 8$            | Pass   |

For Wi-Fi Mode:

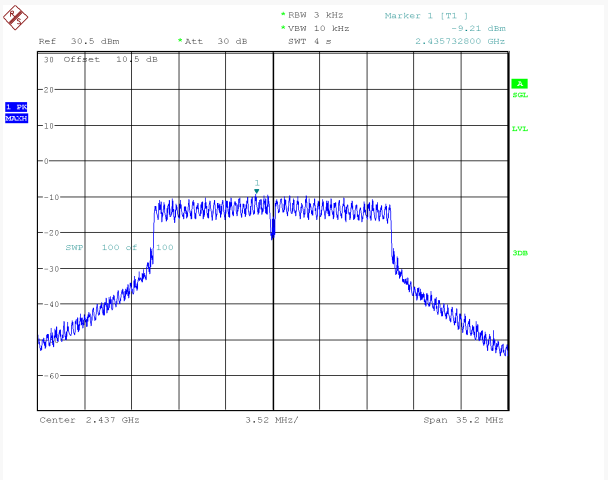


802.11n20\_2412MHz



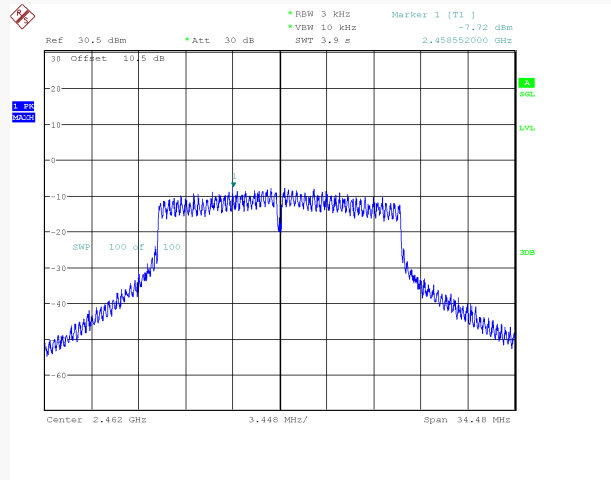
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 16:34:32

802.11n20\_2437MHz



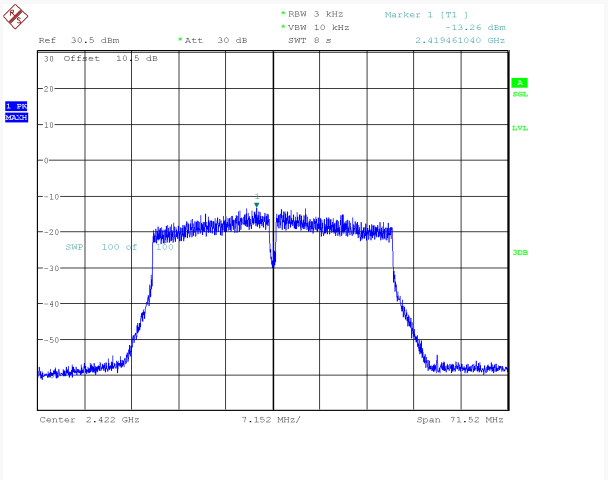
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 16:47:51

802.11n20\_2462MHz



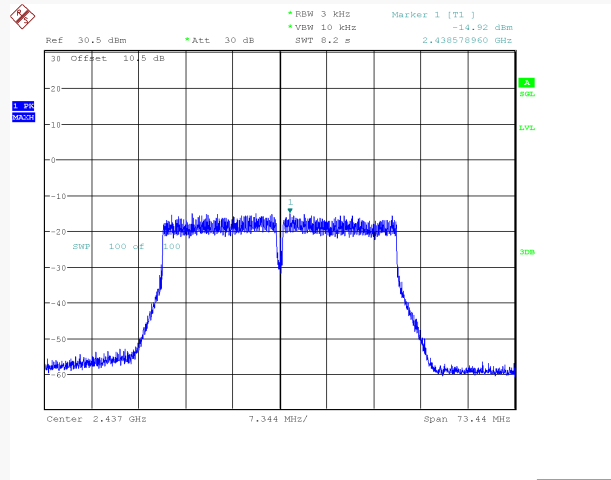
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 17:02:54

802.11n40\_2422MHz



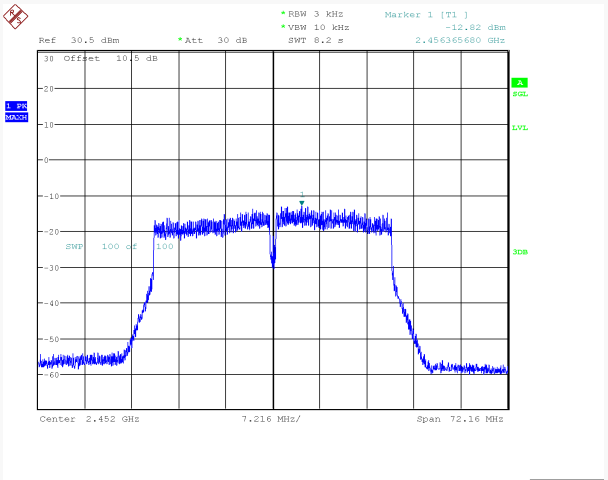
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 17:24:18

802.11n40\_2437MHz



ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 17:44:23

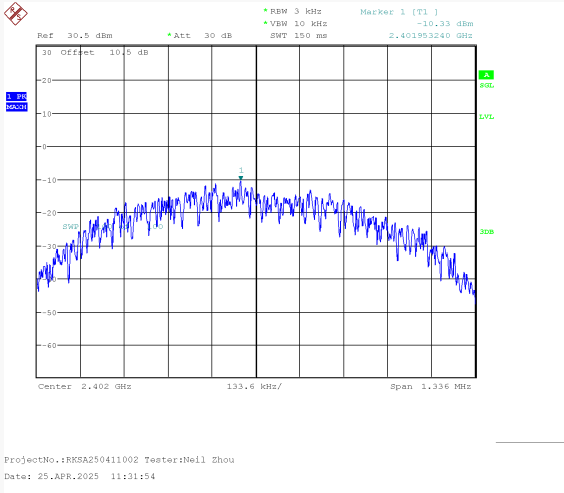
802.11n40\_2452MHz



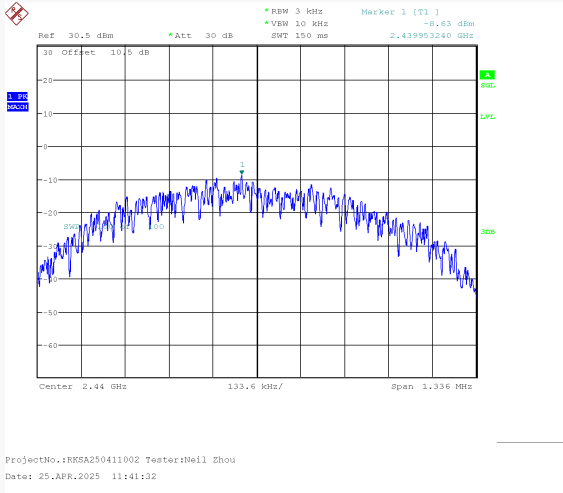
ProjectNo.:RKSA250411002 Tester:Neil Zhou  
Date: 9.JUL.2025 18:05:33

For BLE Mode:  
BLE (1 Mbps)

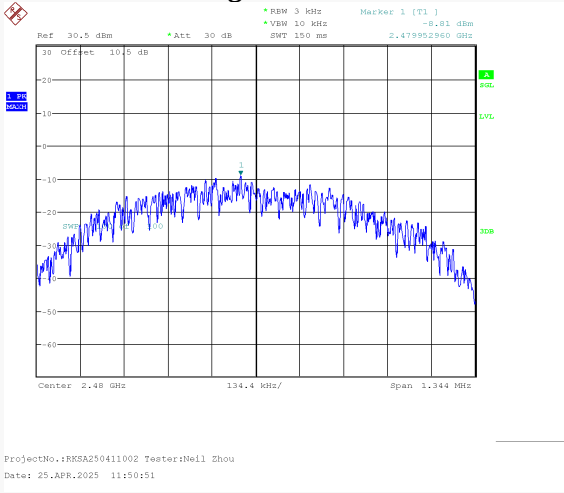
Low Channel



Middle Channel



High Channel



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## **EUT PHOTOGRAPHS**

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

## **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.

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