Prüfbericht-Nr.: *Test report no.*:	**CN25SA2P 001**	**Auftrags-Nr.:** *Order no.*:	180334608	Seite 1 von 51 *Page 1 of 51*
Kunden-Referenz-Nr.: *Client reference no.*:	N/A	**Auftragsdatum:** *Order date:*	2025.05.23	
Auftraggeber: *Client*:	Hefei Hualing Co., Ltd. No.176 JinXiu Road, Hefei Economy & Technology Development Area, 230601, Hefei, Anhui, P.R. China			
Prüfgegenstand: *Test item*:	2.4GHz WLAN/Bluetooth Module			
Bezeichnung / Typ-Nr.: *Identification / Type no.*:	MBL7238			
Auftrags-Inhalt: *Order content*:	TÜV Rheinland – FCC Service			
Prüfgrundlage: *Test specification*:	**FCC 47 CFR Part 15.203** **FCC 47 CFR Part 15.247**			

Wareneingangsdatum: *Date of sample receipt*:	2025.05.14	Refer to Photo Documentation
Prüfmuster-Nr.: *Test sample no:*	A004007147-001	
Prüfzeitraum: *Testing period*:	2025.06.05 - 2025.06.13	
Ort der Prüfung: *Place of testing*:	Refer to section 1.1	
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland / CCIC (Ningbo) Co., Ltd.	
Prüfergebnis*: *Test result**:	**Pass**	

geprüft von: *tested by*:	Chonghai Liang	**genehmigt von:** *authorized by*:	Keda Zhou
Datum: *Date*: 2025.06.27		**Ausstelldatum:** *Issue date*: 2025.06.27	
Stellung / Position:	Chonghai Liang/PE	**Stellung** / Position:	Keda Zhou/Authorizer

Sonstiges / *Other*: FCC ID: 2BPVSMBL7238

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

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

Anmerkungen
Remarks

Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.

Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.

The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system.

Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.

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Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben.
Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.

*Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report.*

Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.

Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnisen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.

The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the “Zero Guard Band Rule” and “Simple Acceptance” in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.

Test Summary

4.1.1 ANTENNA REQUIREMENT
Result:
Pass
4.1.2 6DB BANDWIDTH
Result:
Pass
4.1.3 MAXIMUM CONDUCTED OUTPUT POWER
Result:
Pass
4.1.4 POWER SPECTRAL DENSITY
Result:
Pass
4.1.5 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHZ BANDWIDTH
Result:
Pass
4.1.6 CONDUCTED EMISSION (AC POWER-LINE)
Result:
Pass
4.1.7 RADIATED EMISSION
Result:
Pass

Contents

1. Test Sites

1.1 Test Facilities

Laboratory: TÜV Rheinland /CCIC (Ningbo) Co., Ltd.

1st Floor, Building 11, Scholar Innovation Park, No.1188 Zhongguan Road, Zhenhai District, Ningbo 315200 P.R. China

The tests were conducted by TÜV Rheinland/CCIC's engineer directly in the above laboratory.

1.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Type	Serial No.	Last cal. date	Cal. due date
EMI test receiver	ESR7	101929	2024.10.23	2025.10.22
Spectrum analyzer	FSV40	101412	2024.10.23	2025.10.22
Bilog Antenna	CBL6112D	49033	2024.03.17	2027.03.16
Horn antenna	HF907	102653	2023.07.20	2026.07.19
Broad-Band Horn Antenna	BBHA 9170	899	2024.01.05	2027.01.04
Pre-amplifier	SCU-18F	180051	2024.10.23	2025.10.22
Pre-amplifier	LNPA_1840G-50	SK2021040801	2024.10.28	2025.10.27
EMI test receiver	ESR3	102331	2024.10.23	2025.10.22
LISN	ENV216	102250	2024.10.23	2025.10.22
RF control Unit	JS0806-2	22G8060598	2024.10.25	2025.10.24
Mains control unit	JS0806-4ADC	21L8060536	2024.10.23	2025.10.22

1.3 Uncertainty of Measurement

Table 2: Measurement Uncertainty

Test Item	Expanded Measurement Uncertainty (k=2)
Conducted Emission (9-150kHz)	3.70dB
Conducted Emission (150k-30MHz)	3.30dB
Occupied Channel Bandwidth	±5 %
Radiated Emission (30-1000MHz)	4.39dB
Radiated Emission (1-18GHz)	4.67dB

2. General Product Information

2.1 Product Function and Intended Use

The EUT (equipment under test) is a 2.4GHz WLAN/Bluetooth Module operated at 2400-2483.5MHz.

For more detail information, refer to the user's manual.

2.2 Ratings and System Details

Table 3: General Description of EUT

General Description of EUT	
Operating Voltage:	DC 5.0V
Protection Class:	Class III
Technical Specification of 2.4GHz Wi-Fi	
Operating Frequency:	2412 - 2462 MHz for 802.11b/g/n(HT20)
Modulation Type:	802.11b: DSSS 802.11g/n(HT20): OFDM
Data Rate:	1/2/5.5/11 Mbps for 802.11b 6/9/12/18/24/36/48/54 Mbps for 802.11g MCS0 ~ MCS7 for 802.11n(HT20)
Channel Number:	11 channels
Antenna Type:	PCB Antenna
Antenna Number:	1
Antenna Gain:	Max. 2.51 dBi
Technical Specification of Bluetooth LE	
Frequency Range:	2402 – 2480 MHz
Modulation Type:	GFSK
Channel Number:	40 channels
Data Rate:	1 Mbps
Antenna Type:	PCB antenna
Antenna Number:	1
Antenna Gain:	Max. 2.51 dBi

Table 4: RF Channel and Frequency of 2.4GHz Wi-Fi

RF Channel	802.11 b/g/n(HT20)
	Frequency (MHz)
1	2412
2	2417
3	2422

4	2427
5	2432
6	2437
7	2442
8	2447
9	2452
10	2457
11	2462

Test frequencies are lowest channel: 2412 MHz, middle channel: 2437 MHz and highest channel: 2462 MHz for 2.4GHz Wi-Fi.

Table 5: RF Channel and Frequency of Bluetooth LE

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

Test frequencies are lowest channel: 2402 MHz, middle channel: 2440 MHz and highest channel: 2480 MHz for Bluetooth LE.

2.3 Independent Operation Modes

The basic operation modes are:

A. 2.4GHz Wi-Fi Transmitting continuously (Low / Middle / High channel)

B. Bluetooth LE Transmitting continuously (Low / Middle / High channel)

C. Normal Working

Refer to the user's manual for further information.

2.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram for further information.

2.5 Submitted Documents

Circuit diagram, label, user manual etc.

3. Test Set-up and Operation Modes

3.1 Principle of Configuration Selection

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

Refer to the related paragraph of this report.

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

Refer to the related paragraph of this report.

3.2 Test Operation and Test Software

During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power was selected according to the instruction given by the manufacturer. The setting of the RF output power expected by the customer shall be fixed on the firmware of the final end product.

All testing were performed according to the procedures in ANSI C63.10: 2020.

Test Software EMC32 V10.30 was used in the radiated emission test.

More details refer to the related paragraph of this report.

3.3 Special Accessories and Auxiliary Equipment

Table 6: List of Auxiliary Equipment

Description	Manufacturer	Model No.
Adapter	Apple	A1443
Notebook	Lenovo	ThinkPad X380 Yoga

3.4 Countermeasures to Achieve ERM Compliance

The test sample which has been tested contained the noise suppression parts as described in the Circuit Diagram. No additional measures were employed to achieve compliance.

3.5 Test set-up

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

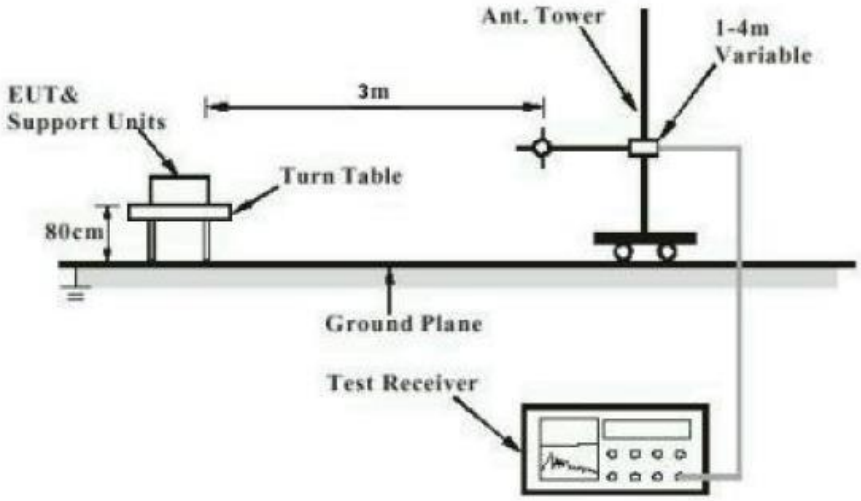


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

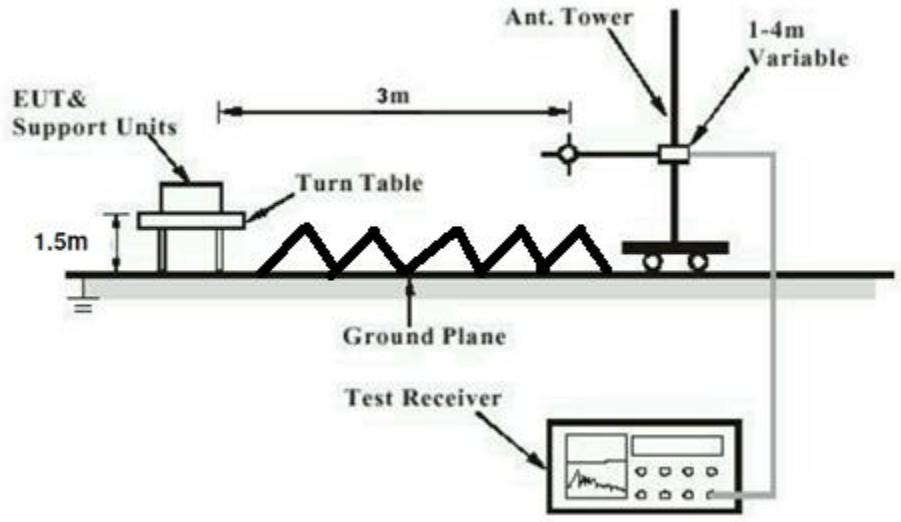
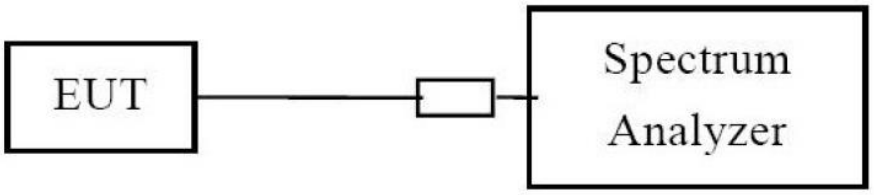


Diagram of Measurement Configuration for Conducted Transmitter Measurement



4. Test Results

4.1 Transmitter Requirement & Test Suites

4.1.1 Antenna Requirement

Result: **Pass**

Test Specification

Test standard	:	FCC 47 CFR Part 15.203
Limit	:	the use of antennas with directional gains that do not exceed 6 dBi

The EUT has an integral antenna (PCB Antenna, Antenna Gain: Max. 2.51dBi), and no consideration of replacement. Therefore, the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

4.1.2 6dB Bandwidth

Result: **Pass**

Test Specification

Test standard	:	FCC 47 CFR Part 15.247 (a)(2)
Basic standard	:	ANSI C63.10: 2020, Clause 11.8.1
Limits	:	At least 500kHz
Kind of test site	:	Shielded Room

Test Setup

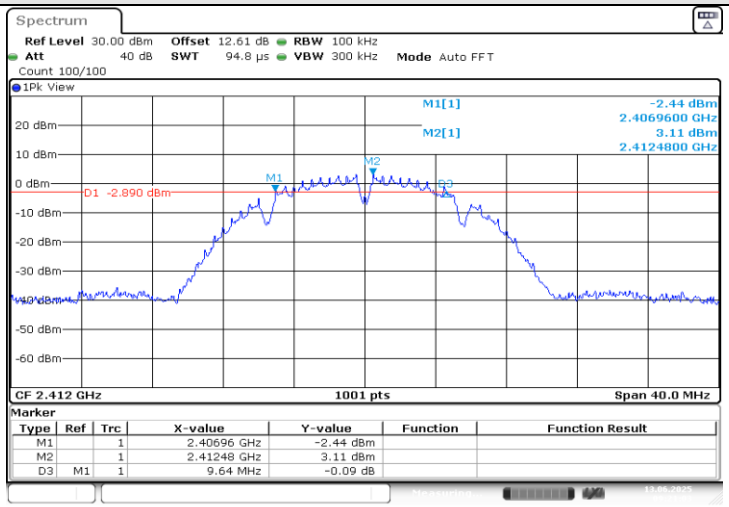
Date of testing	:	2025.06.13
Input voltage	:	DC 5.0V
Operational mode	:	A, B
Temperature	:	23°C
Relative humidity	:	56%
Atmospheric pressure	:	101.2 kPa

Table 7: Test result of 6dB Bandwidth

Test Mode	Frequency [MHz]	DTS BW [MHz]	F_L [MHz]	F_H [MHz]	Limit [MHz]	Verdict
11B	2412	9.64	2406.96	2416.60	≥0.5	PASS
11B	2437	9.60	2431.96	2441.56	≥0.5	PASS
11B	2462	9.16	2457.44	2466.60	≥0.5	PASS
11G	2412	9.44	2406.92	2416.36	≥0.5	PASS
11G	2437	8.76	2432.60	2441.36	≥0.5	PASS
11G	2462	8.24	2457.60	2465.84	≥0.5	PASS
11N20	2412	15.16	2404.40	2419.56	≥0.5	PASS
11N20	2437	15.12	2429.44	2444.56	≥0.5	PASS
11N20	2462	15.12	2454.40	2469.52	≥0.5	PASS
BLE_1M	2402	0.72	2401.64	2402.36	≥0.5	PASS
BLE_1M	2440	0.73	2439.63	2440.36	≥0.5	PASS
BLE_1M	2480	0.72	2479.64	2480.36	≥0.5	PASS

Figure 1: 6dB Bandwidth

11B-Ant1-2412



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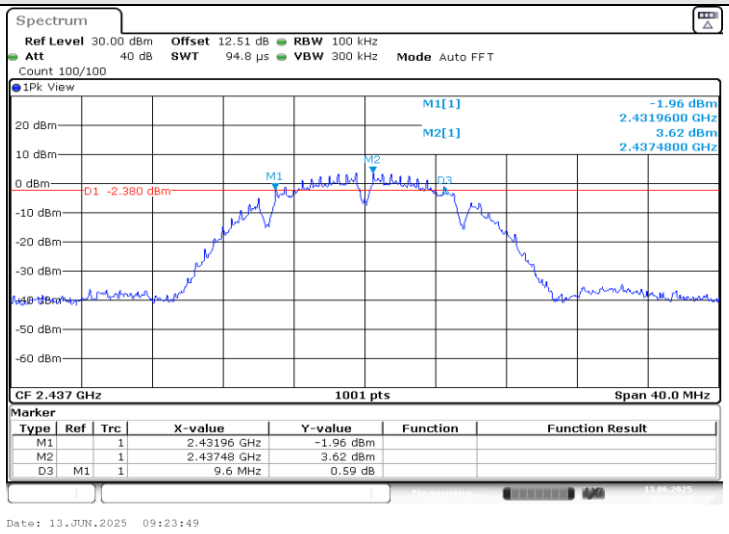
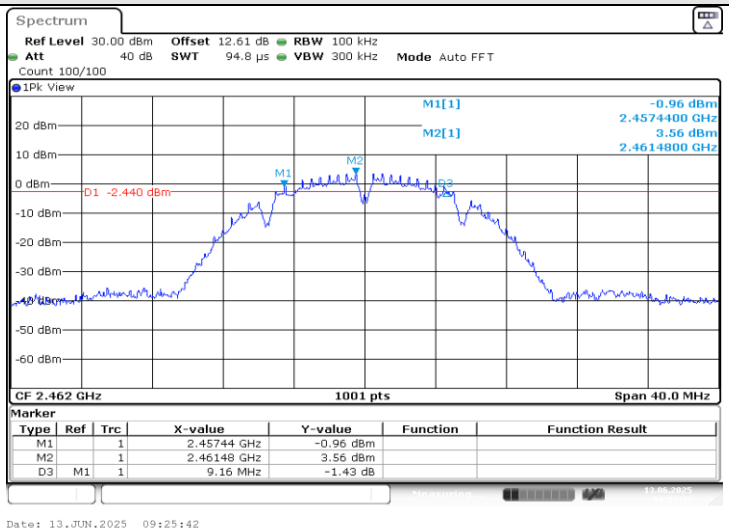
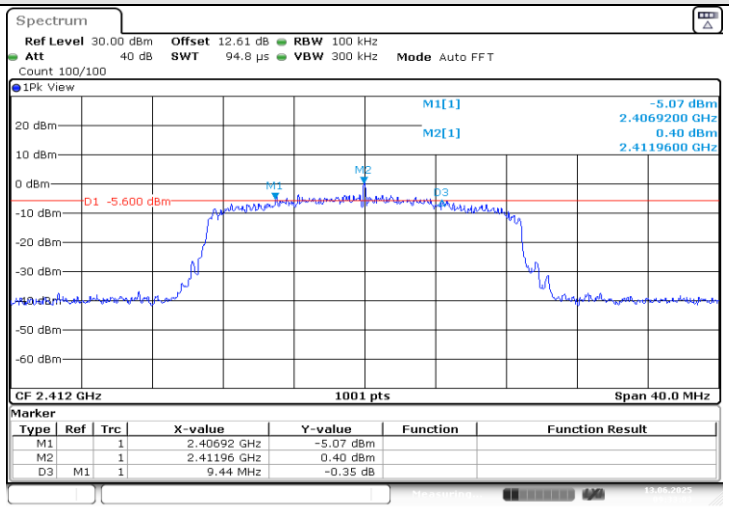


11B-Ant1-2462



11G-Ant1-2412



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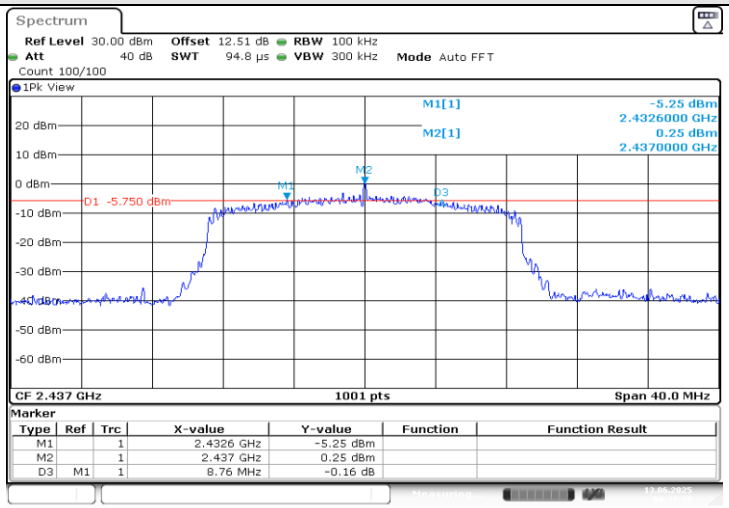

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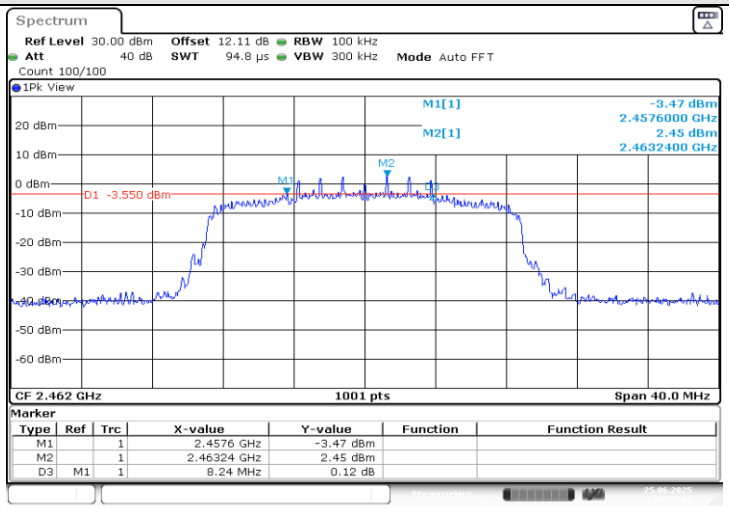
11G-Ant1-2462



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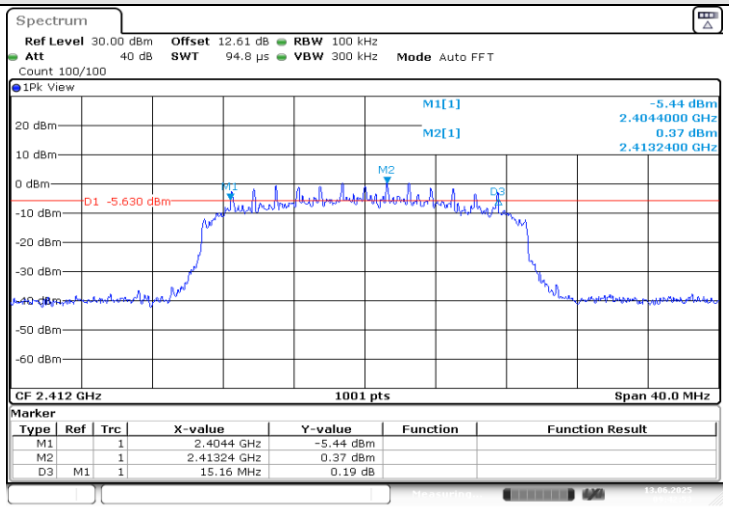

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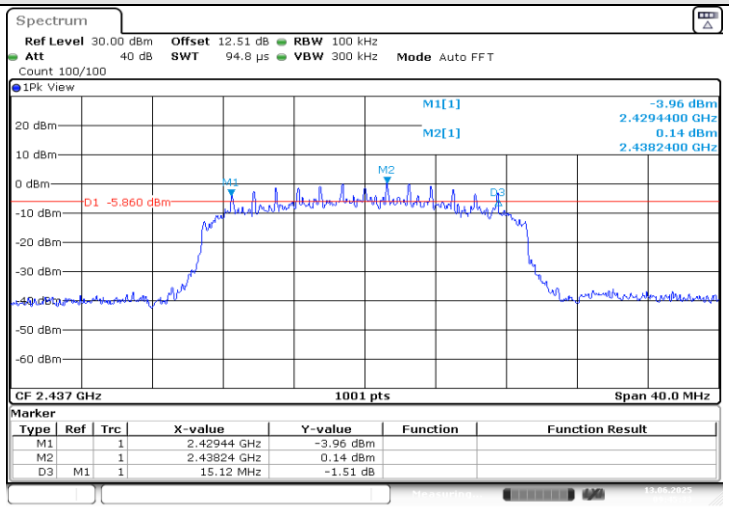

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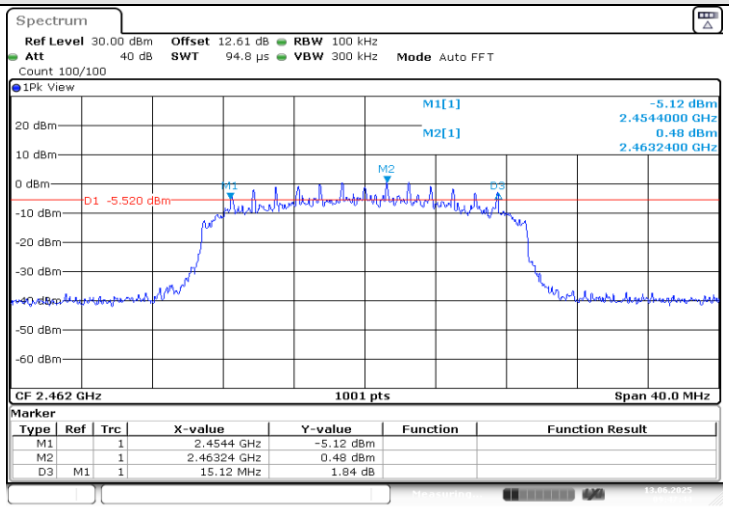

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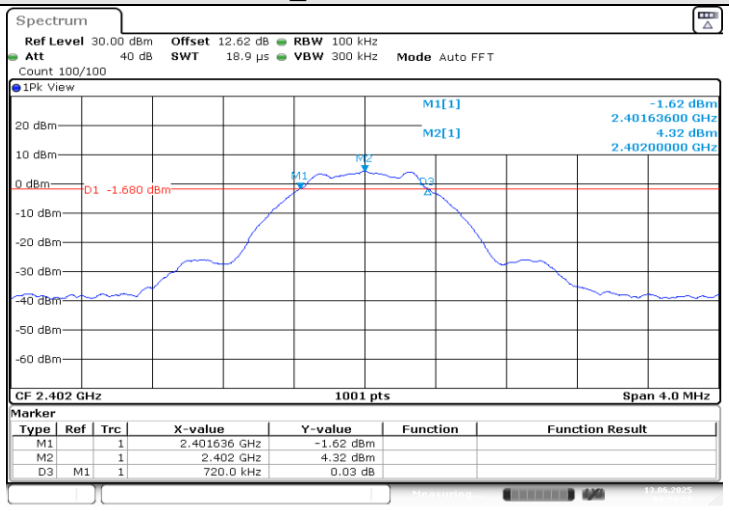
BLE_1M-Ant1-2402



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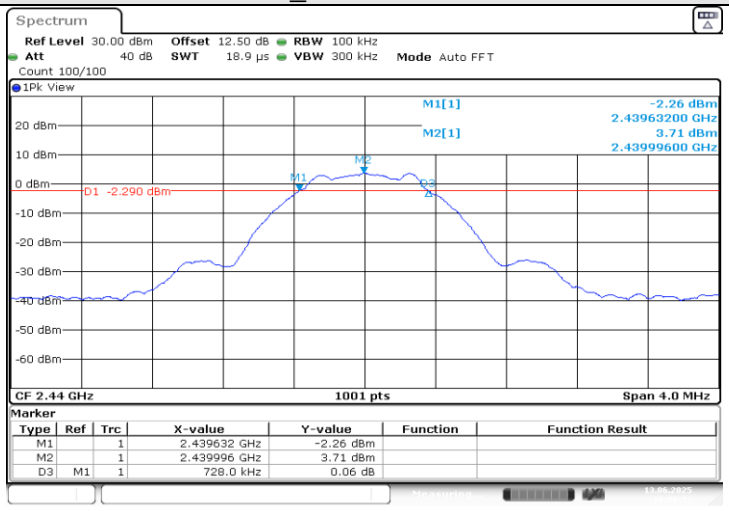
BLE_1M-Ant1-2440



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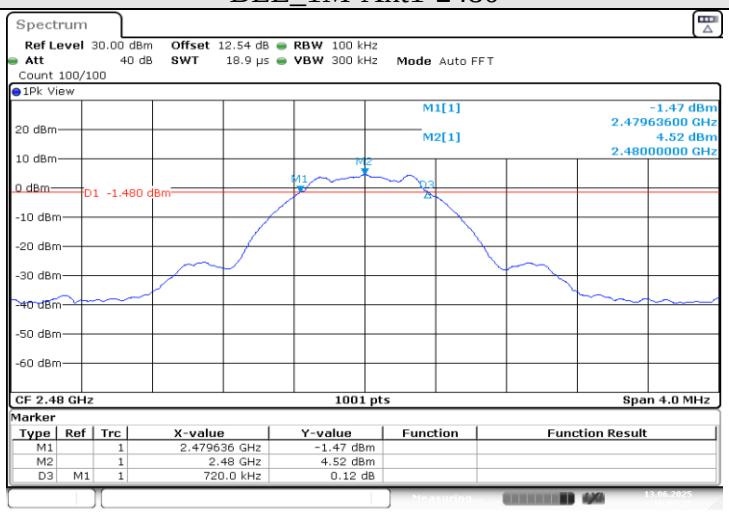


Date: 13.JUN.2025 10:05:26

4.1.3 Maximum Conducted Output Power

Result: **Pass**

Test Specification

Test standard	:	FCC 47 CFR Part 15.247 (b)(3)
Basic standard	:	ANSI C63.10: 2020, Clause 11.9.1.2 & 11.9.2.2
Limits	:	Not more than 1Watt(30dBm)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2025.06.13
Input voltage	:	DC 5.0V
Operational mode	:	A, B
Temperature	:	23°C
Relative humidity	:	56%
Atmospheric pressure	:	101.2 kPa

Table 8: Test result of Maximum Conducted Output Power

Test Result Average

Test Mode	Frequency [MHz]	Conducted Average Power [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11B	2412	12.86	≤30.00	2.51	15.37	≤36.00	PASS
11B	2437	12.83	≤30.00	2.51	15.34	≤36.00	PASS
11B	2462	13.16	≤30.00	2.51	15.67	≤36.00	PASS
11G	2412	9.60	≤30.00	2.51	12.11	≤36.00	PASS
11G	2437	9.32	≤30.00	2.51	11.83	≤36.00	PASS
11G	2462	9.58	≤30.00	2.51	12.09	≤36.00	PASS
11N20	2412	9.83	≤30.00	2.51	12.34	≤36.00	PASS
11N20	2437	9.66	≤30.00	2.51	12.17	≤36.00	PASS
11N20	2462	10.06	≤30.00	2.51	12.57	≤36.00	PASS

Test Result Peak

Test Mode	Frequency [MHz]	Conducted Peak Power [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
BLE_1M	2402	5.63	≤30.00	2.51	8.14	≤36.00	PASS
BLE_1M	2440	5.08	≤30.00	2.51	7.59	≤36.00	PASS
BLE_1M	2480	5.76	≤30.00	2.51	8.27	≤36.00	PASS

4.1.4 Power Spectral Density

Result: **Pass**

Test Specification

Test standard	:	FCC 47 CFR Part 15.247 (e)
Basic standard	:	ANSI C63.10: 2020, Clause 11.10.3
Limits	:	Not more than 8 dBm in any 3 kHz band
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2025.06.13
Input voltage	:	DC 5.0V
Operational mode	:	A, B
Temperature	:	23°C
Relative humidity	:	56%
Atmospheric pressure	:	101.2 kPa

Table 9: Test result of Peak Power Spectral Density

Test Mode	Frequency [MHz]	Result [dBm/3-100kHz]	Limit [dBm/3kHz]	Verdict
11B	2412	-12.35	≤8.00	PASS
11B	2437	-13.26	≤8.00	PASS
11B	2462	-12.54	≤8.00	PASS
11G	2412	-7.93	≤8.00	PASS
11G	2437	-8.85	≤8.00	PASS
11G	2462	-8.49	≤8.00	PASS
11N20	2412	-7.77	≤8.00	PASS
11N20	2437	-8.20	≤8.00	PASS
11N20	2462	-8.39	≤8.00	PASS
BLE_1M	2402	-9.68	≤8.00	PASS
BLE_1M	2440	-10.30	≤8.00	PASS
BLE_1M	2480	-9.62	≤8.00	PASS

4.1.5 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

Result: **Pass**

Test Specification

Test standard	:	FCC 47 CFR Part 15.247 (d)
Basic standard	:	ANSI C63.10: 2020, Clause 11.11
Limits	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power)
Kind of test site	:	Shielded Room

Test Setup

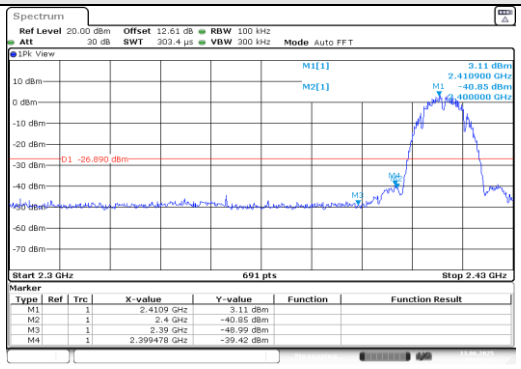
Date of testing	:	2025.06.13
Input voltage	:	DC 5.0V
Operational mode	:	A, B
Temperature	:	23°C
Relative humidity	:	56%
Atmospheric pressure	:	101.2 kPa

Table 10: Test result of Band Edge

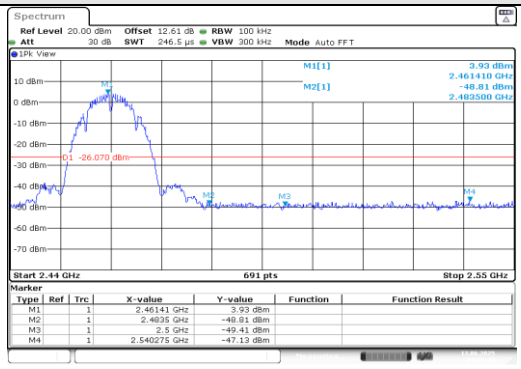
Test Mode	Ch Name	Frequency [MHz]	Result [dBm]	Limit [dBm]	Verdict
11B	Low	2412	-39.42	≤-26.89	PASS
11B	High	2462	-47.13	≤-26.07	PASS
11G	Low	2412	-42.7	≤-28.57	PASS
11G	High	2462	-46.63	≤-30.94	PASS
11N20	Low	2412	-42.59	≤-29.46	PASS
11N20	High	2462	-46.98	≤-29.65	PASS
BLE_1M	Low	2402	-44.7	≤-16.10	PASS
BLE_1M	High	2480	-44.43	≤-15.29	PASS

Figure 2: Band Edge

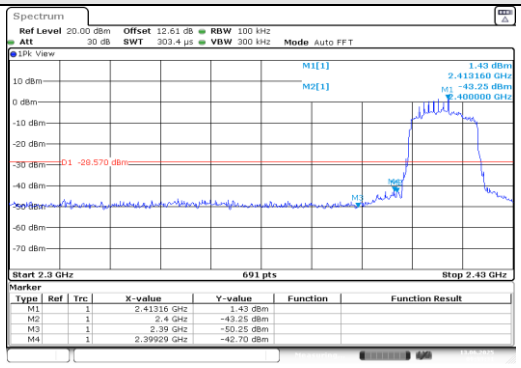
11B-Ant1-2412



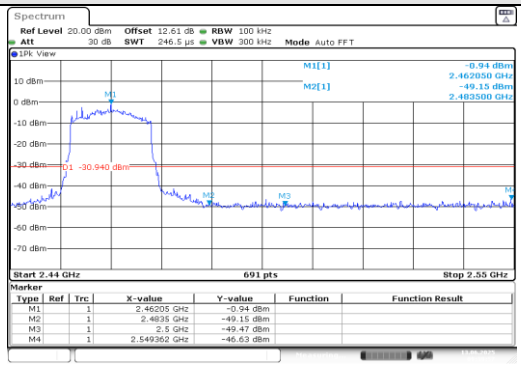
11B-Ant1-2462



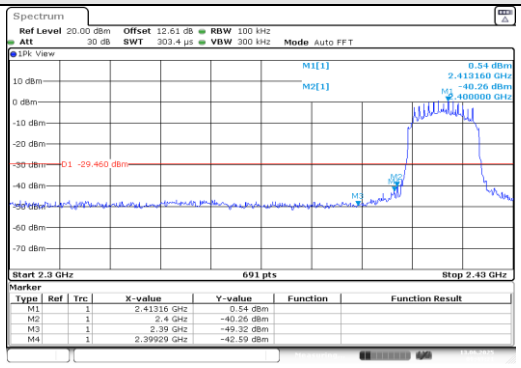
11G-Ant1-2412



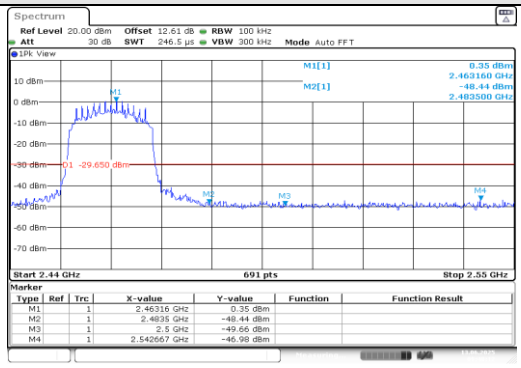
11G-Ant1-2462



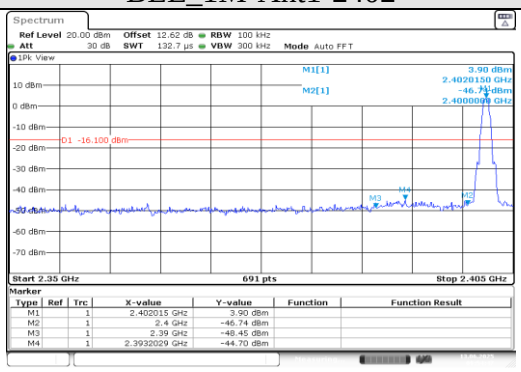
11N20-Ant1-2412



11N20-Ant1-2462



BLE_1M-Ant1-2402



BLE_1M-Ant1-2480

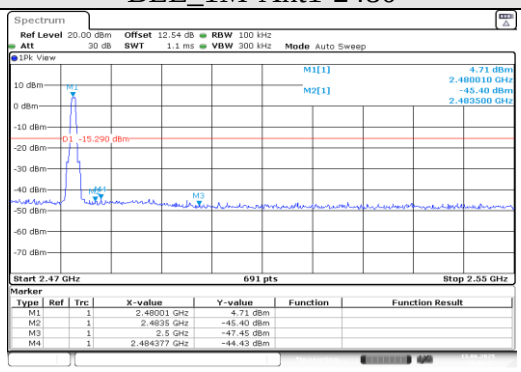
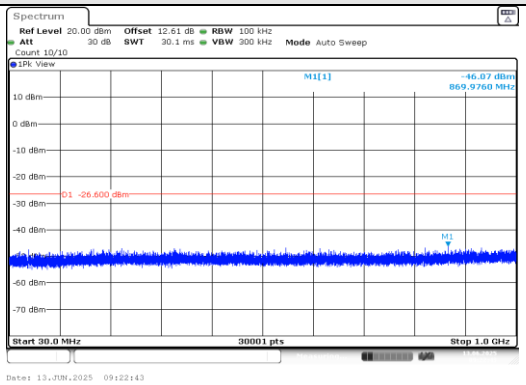
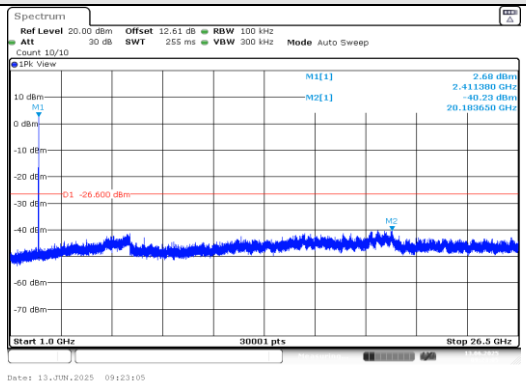
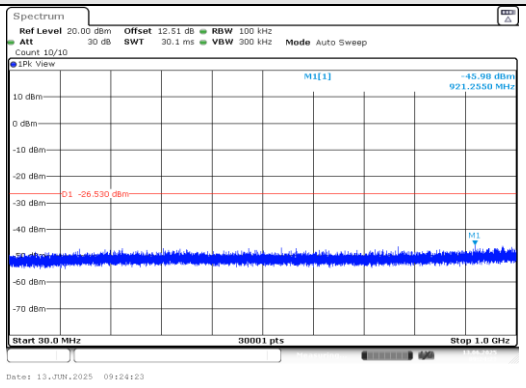
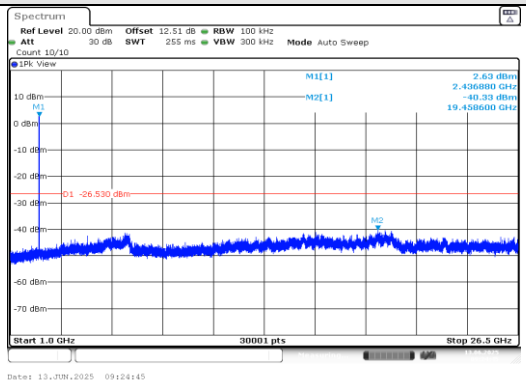
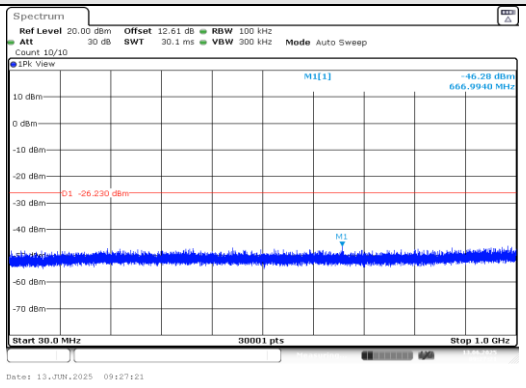
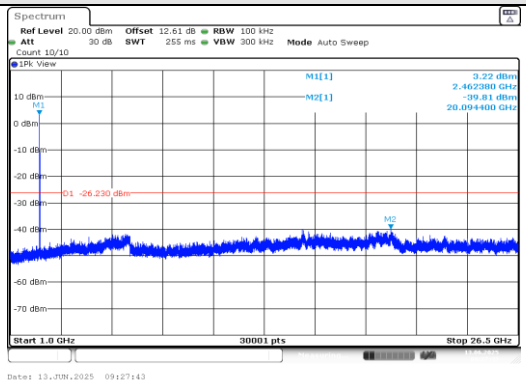
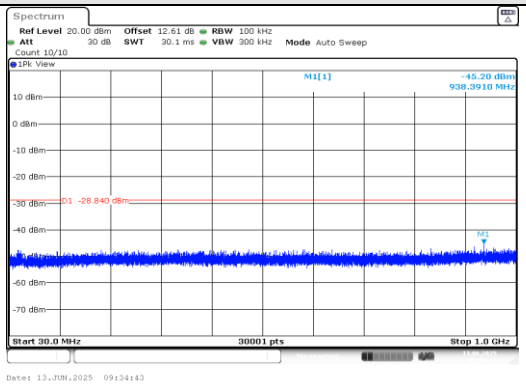
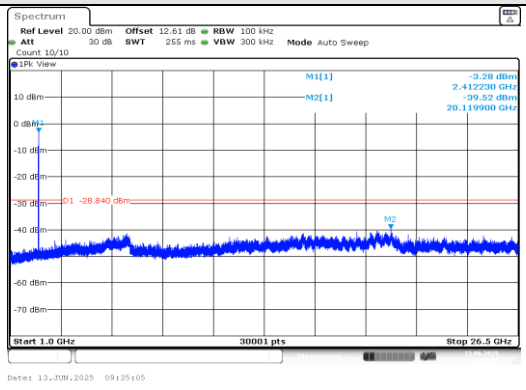
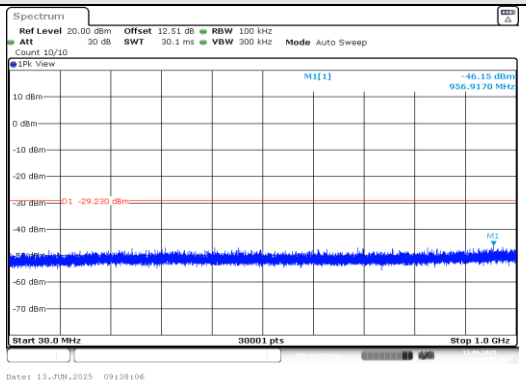
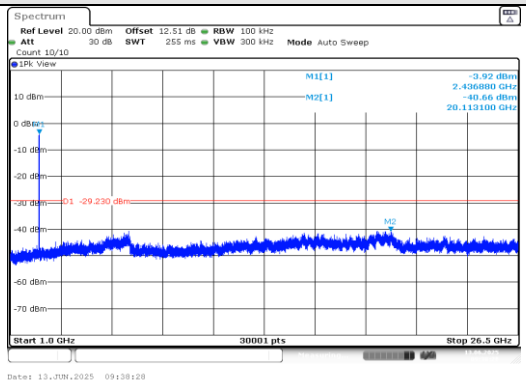
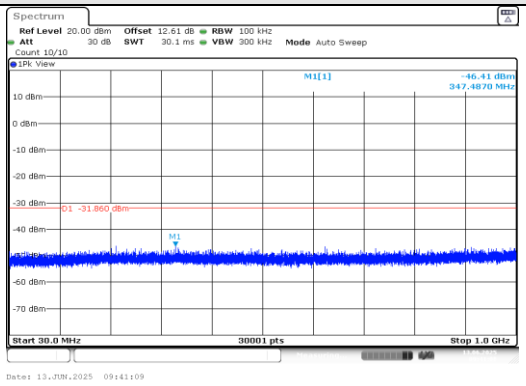
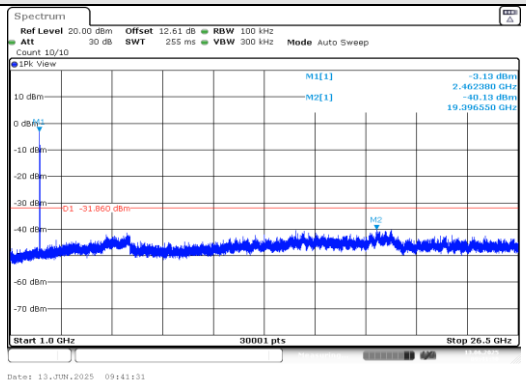
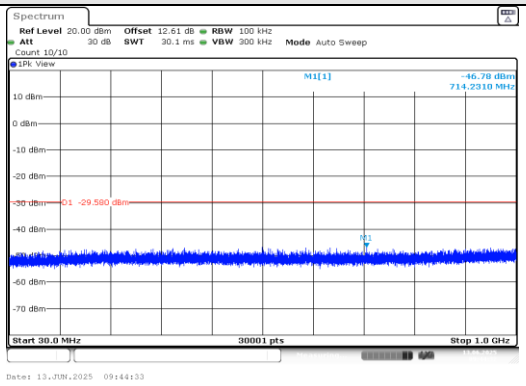
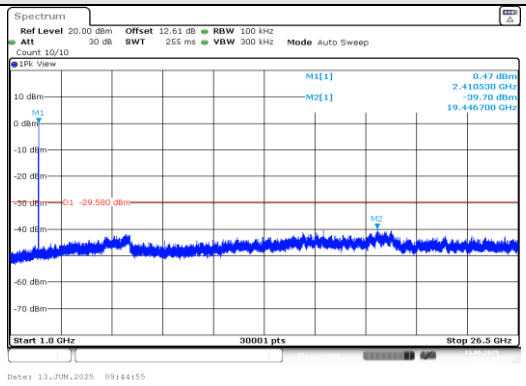
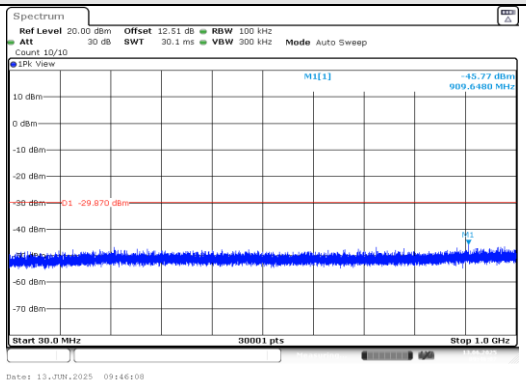
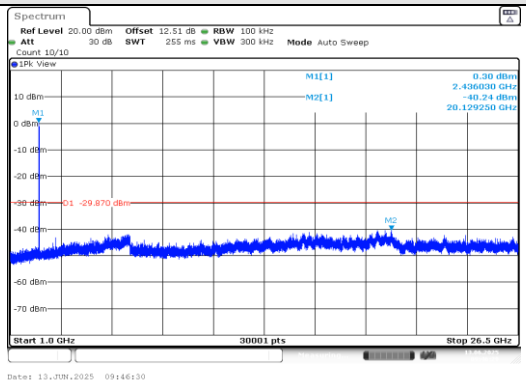


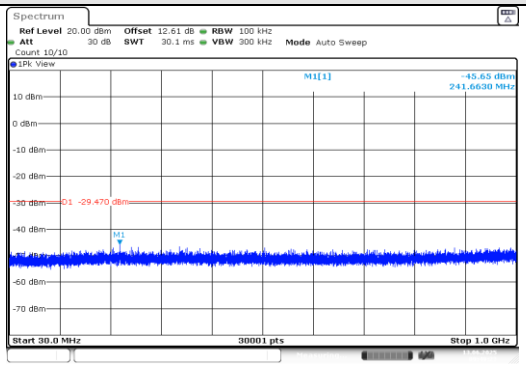
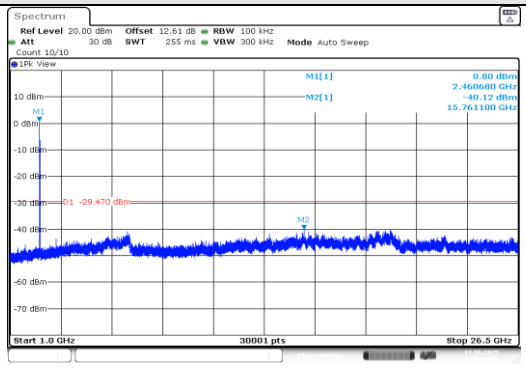
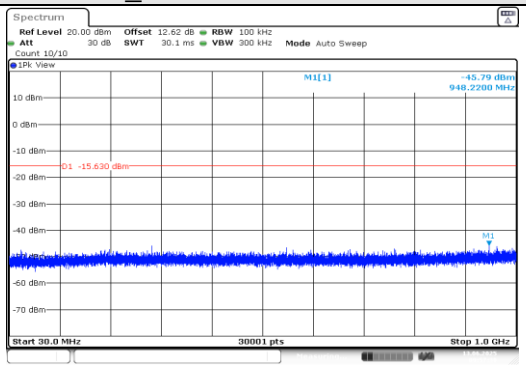
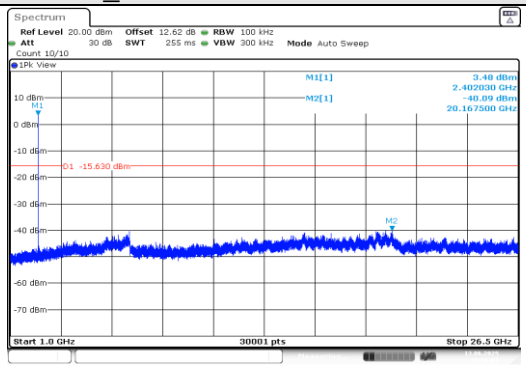
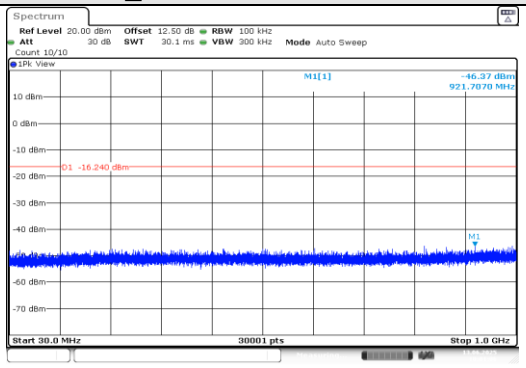
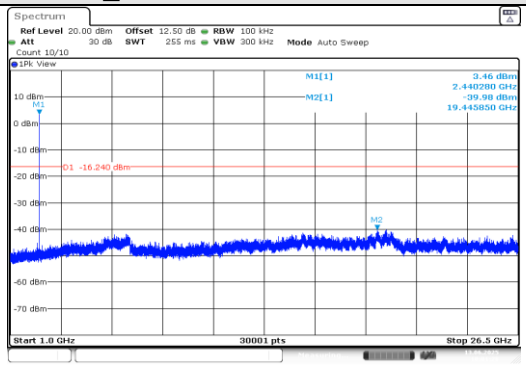
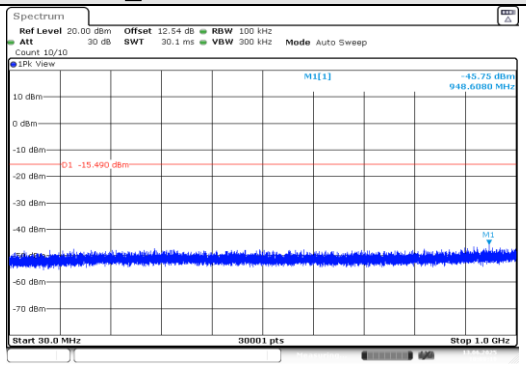
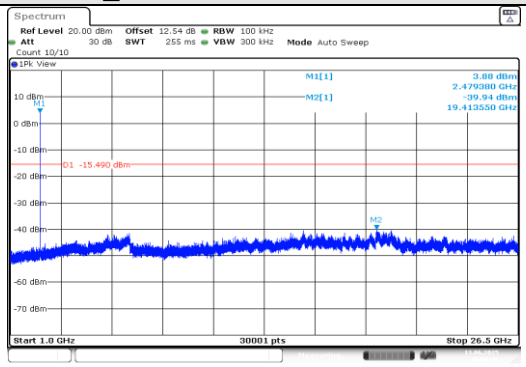
Table 11: Test result of Conducted Spurious Emission

Test Mode	Frequency [MHz]	Freq Range [Mhz]	Result [dBm]	Limit [dBm]	Verdict
11B	2412	30~1000	-46.07	≤-26.6	PASS
11B	2412	1000~26500	-40.23	≤-26.6	PASS
11B	2437	30~1000	-45.98	≤-26.53	PASS
11B	2437	1000~26500	-40.33	≤-26.53	PASS
11B	2462	30~1000	-46.28	≤-26.23	PASS
11B	2462	1000~26500	-39.81	≤-26.23	PASS
11G	2412	30~1000	-45.2	≤-28.84	PASS
11G	2412	1000~26500	-39.52	≤-28.84	PASS
11G	2437	30~1000	-46.15	≤-29.23	PASS
11G	2437	1000~26500	-40.66	≤-29.23	PASS
11G	2462	30~1000	-46.41	≤-31.86	PASS
11G	2462	1000~26500	-40.13	≤-31.86	PASS
11N20	2412	30~1000	-46.78	≤-29.58	PASS
11N20	2412	1000~26500	-39.7	≤-29.58	PASS
11N20	2437	30~1000	-45.77	≤-29.87	PASS
11N20	2437	1000~26500	-40.24	≤-29.87	PASS
11N20	2462	30~1000	-45.65	≤-29.47	PASS
11N20	2462	1000~26500	-40.12	≤-29.47	PASS
BLE_1M	2402	30~1000	-45.79	≤-15.63	PASS
BLE_1M	2402	1000~26500	-40.09	≤-15.63	PASS
BLE_1M	2440	30~1000	-46.37	≤-16.24	PASS
BLE_1M	2440	1000~26500	-39.98	≤-16.24	PASS
BLE_1M	2480	30~1000	-45.75	≤-15.49	PASS
BLE_1M	2480	1000~26500	-39.94	≤-15.49	PASS

Figure 3: Conducted Spurious Emission

11B-Ant1-2412-30~1000	11B-Ant1-2412-1000~26500
	
11B-Ant1-2437-30~1000	11B-Ant1-2437-1000~26500
	
11B-Ant1-2462-30~1000	11B-Ant1-2462-1000~26500
	
11G-Ant1-2412-30~1000	11G-Ant1-2412-1000~26500
	

11G-Ant1-2437-30~1000	11G-Ant1-2437-1000~26500
	
11G-Ant1-2462-30~1000	**11G-Ant1-2462-1000~26500**
	
11N20-Ant1-2412-30~1000	**11N20-Ant1-2412-1000~26500**
	
11N20-Ant1-2437-30~1000	**11N20-Ant1-2437-1000~26500**
	

11N20-Ant1-2462-30~1000	11N20-Ant1-2462-1000~26500
	
BLE_1M-Ant1-2402-30~1000	BLE_1M-Ant1-2402-1000~26500
	
BLE_1M-Ant1-2440-30~1000	BLE_1M-Ant1-2440-1000~26500
	
BLE_1M-Ant1-2480-30~1000	BLE_1M-Ant1-2480-1000~26500
	

4.1.6 Conducted Emission (AC power-line)

Result: **Pass**

Test Specification

Test standard	:	FCC Part 15.207(a)
Basic standard	:	ANSI C63.10: 2020, Clause 6.2
Port	:	Mains
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.207(a)
Kind of test site	:	Shielding Room

Test Setup

Date of testing	:	2025.06.05
Input voltage	:	AC 110V to DC 5.0V
Operational mode	:	C
Temperature	:	22°C
Relative humidity	:	58%
Atmospheric pressure	:	101.2 kPa

The measurement setup was made according to ANSI C63.10: 2020 in a shielded room.

The measurement equipment like test receivers, quasi-peak detector and artificial mains network (AMN) are in compliance with ANSI C63.10: 2020 and CISPR 16-1 series standards.

The tested object was set-up on a wooden table. The EUT was set 0.8m away from the AMN. The cord longer than necessary to be connected to the AMN was folded forth and back parallel so as to form a bundle with a length between 0.3m and 0.4m.

The disturbance voltage test was performed on the neutral line and phase line of the power supply of the EUT respectively.

Before measurement, a survey was made to determine in which state the maximum disturbance was obtained. And the measurement was made in the state the maximum disturbance was obtained.

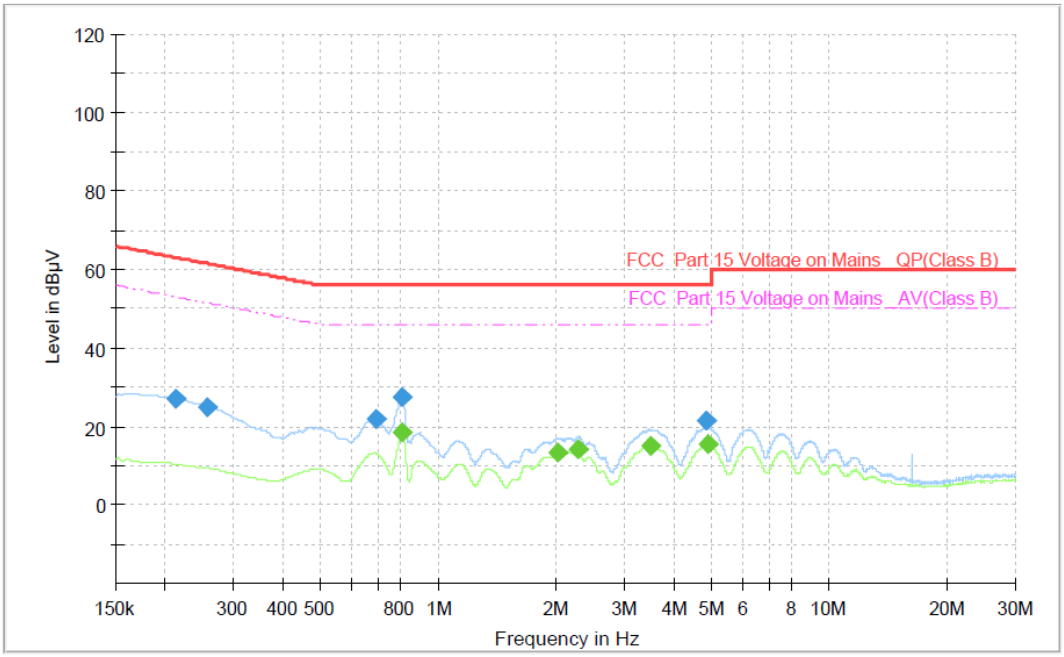
The following figures and tables were those measured by an automatic measuring system. Both Quasi Peak and Average Value were measured. Quasi-Peak and Average Value were measured and listed respectively where they had a maximum in previous scanning survey. In the Figures, "•" means Quasi-Peak Value and Average Value which were measured in final measurement.

The measurement result is calculated based on the following formula by the test software:

Emission Level = Reading level + Correction (LISN factor + cable loss)

Figure 4: Spectral Diagrams, Conducted Emission, 150KHz - 30MHz, L

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.213000	27.14	---	63.09	35.95	1000.0	9.000	L1	ON	9.6
0.255750	24.99	---	61.57	36.58	1000.0	9.000	L1	ON	9.7
0.690000	22.01	---	56.00	33.99	1000.0	9.000	L1	ON	9.7
0.807000	---	18.64	46.00	27.36	1000.0	9.000	L1	ON	9.7
0.807000	27.34	---	56.00	28.66	1000.0	9.000	L1	ON	9.7
2.022000	---	13.44	46.00	32.56	1000.0	9.000	L1	ON	9.8
2.278500	---	14.42	46.00	31.58	1000.0	9.000	L1	ON	9.8
3.468750	---	15.04	46.00	30.96	1000.0	9.000	L1	ON	9.8
4.839000	21.51	---	56.00	34.49	1000.0	9.000	L1	ON	9.9
4.877250	---	15.37	46.00	30.63	1000.0	9.000	L1	ON	9.9