FCC Part 15.247

TEST REPORT

For

Renesas Design Korea Inc.

7th SiliconPark, 35 Pangyo-ro 255 beon-gil Bundang-gu, Seongnam-si, Gyeonggi-do, 13486, Republic of Korea

FCC ID: 2AU49-RRQ61051408

Report Type:	**Product Type:**
Original Report	RRQ61051 Module

Report Producer : Cedric Xu

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Prepared By:

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Revision History

Revision	No.	Report Number	Issue Date	Description	Author/ Revised by
0.0	RLK260119062	RLK260119062RF02	2026-02-26	Original Report	Cedric Xu

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1 General Information

1.1 Product Description for Equipment under Test (EUT)

Applicant	Renesas Design Korea Inc. 7th SiliconPark, 35 Pangyo-ro 255 beon-gil Bundang-gu, Seongnam-si, Gyeonggi-do, 13486, Republic of Korea
Manufacturer	Renesas Design Korea Inc. 7th SiliconPark, 35 Pangyo-ro 255 beon-gil Bundang-gu, Seongnam-si, Gyeonggi-do, 13486, Republic of Korea
Brand(Trade) Name	Renesas
Product (Equipment)	RRQ61051 Module
Main Model Name	RRQ61051-408
Series Model Name	RRQ61051-208
Model Discrepancy	RRQ61051-208：The software and Wi-Fi chip removed the 802.11ax function
Frequency Range	IEEE 802.11b/g/n HT20/ax HE20 Mode: 2412 ~ 2462 MHz BLE(1M): 2402 ~ 2480 MHz
Maximum Conducted Peak Output Power	IEEE 802.11b Mode: 19.85 dBm (0.097W) IEEE 802.11g Mode: 19.52 dBm (0.090W) IEEE 802.11n HT20 Mode: 19.91 dBm (0.098W) IEEE 802.11ax HE20 Mode: 19.79 dBm (0.095W) BLE(1M) Mode : 1.49 dBm (0.00141W)
Modulation Technique	IEEE 802.11b Mode: DSSS IEEE 802.11g Mode: OFDM IEEE 802.11n HT20 Mode: OFDM IEEE 802.11ax HE20 Mode: OFDMA BLE(1M) Mode: GFSK
Power Operation (Voltage Range)	☐ AC 120V/60Hz ☐ Adapter ☐ By AC Power Cord ☐ PoE
	☐ DC Type ☐ Battery ☐ DC Power Supply ☐ External from USB Cable ☐ External DC Adapter
	☒ 3.3Vdc
Received Date	Jan 19, 2026
Date of Test	Jan 21, 2026 ~ Feb 09, 2026

*All measurement and test data in this report was gathered from production sample serial number: RLK260119062-01 and RLK260119062-02 (Assigned by BACL, Linkou Laboratory).

**802.11ax mode only support full RU.

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1.2 Objective

This report is prepared on behalf of Renesas Design Korea Inc. in accordance with Part 2, Subpart J, Part 15, Subparts A and C of the Federal Communication Commission's rules.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020+Cor.1-2023, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and KDB 558074 D01 15.247 Meas Guidance v05r02.

1.4 Statement of Compliance

Decision Rule: No, (The test results do not include MU judgment)

1. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory).
2. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.
3. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
4. The determination of the test results does not require consideration of the uncertainty of the measurement, unless the assessment is required by customer agreement, regulation or standard document specification.
5. Bay Area Compliance Laboratories Corp. (Linkou Laboratory) is not responsible for the authenticity of the information provided by the applicant that affects the test results.

1.5 Measurement Uncertainty

Parameter		Uncertainty
AC Mains		±2.98 (dB)
RF output power, conducted		±3.73 (dB)
Power Spectral Density, conducted		±0.65 (dBm)
Occupied Bandwidth		±0.09 (%)
Unwanted Emissions, conducted		±1.03 (dB)
Emissions, radiated	9kHz~30MHz	+/- 3.13 dB
	30 MHz~1GHz	+/- 3.09 dB
	1 GHz~18 GHz	+/- 5.22 dB
	18 GHz~40 GHz	+/- 4.72 dB
Temperature		±0.04 (%)
Humidity		±0.78 (°C)

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

1.6 Environmental Conditions

Test Site	Test Data	Temperature (℃)	Relative Humidity (%)	Test Engineer
AC Line Conducted Emissions	2026/01/21	21.6	48	Charlie Li
Radiation Spurious Emissions	2026/01/21~2026/02/03	16~18	52~58	Yue Zheng
Conducted Spurious Emissions	2026/01/28	23.3	52	Alan Huang
6 dB Emission Bandwidth	2026/01/28~2026/02/09	20.6~23.3	40~52	Alan Huang
Maximum Output Power	2026/01/21	22.2	46	Alan Huang
100 kHz Bandwidth of Frequency Band Edge	2026/01/28	23.3	52	Alan Huang
Power Spectral Density	2026/01/28~2026/02/09	20.6~23.3	40~52	Alan Huang
Duty Cycle	2026/01/21	22.2	46	Alan Huang

1.7 Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Linkou Laboratory) to collect test data is located on

☒ No.6, Wende 2Rd., Guishan Dist., Taoyuan City 33382, Taiwan (R.O.C.).

Bay Area Compliance Laboratories Corp. (Linkou Laboratory) is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 3546) and the FCC designation No.TW3546 under the Mutual Recognition Agreement (MRA) in FCC Test.

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2 System Test Configuration

2.1 Description of Test Configuration

For WIFI mode, there are totally 11 channels.

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 802.11 b/g/n20/ax20 Modes were tested with channel 1, 6 and 11.

For BLE mode, there are totally 40 channels.

Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2442
1	2404	--	--
2	2406	--	--
3	2408	37	2476
--	--	38	2478
19	2440	39	2480

For BLE Modes were tested with channel 0, 19 and 39.

The system was configured for testing in engineering mode, which was provided by manufacturer.

2.2 EUT Exercise Software

WIFI 2.4G Used “TeraTerm5” software.

BLE Used “TeraTerm5” software. & SmartSnippets_Toolbox.exe

Test Frequency		Low	Mid	High
Power Level Setting	b Mode	12	13	11
	g Mode	11	12	10
	n20 Mode	9	12	9
	ax20 Mode	10	13	11
	BLE 1M	Default	Default	Default

The worst case data rates are as follows:

802.11b: 1Mbps

802.11g: 6Mbps

802.11n HT20: MCS0

802.11ax HE20: MCS0

BLE 1M : 1 Mbps

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2.3 Test Mode

Mode 1: Full System (model: RRQ61051-408) for all test item.

2.4 Support Equipment List and Details

No.	Description	Manufacturer	Model Number
1	Notebook (Lab provided)	DELL	E6410
2	Notebook (Lab provided)	Acer	N16Q1
3	Test Development Board (Customer provided)	RENESAS	EK-RQ61 565-11-C-0001 Ver 3.1
4	DaughterBoard (Customer provided)	RENESAS	RRQ610x1 565-16-B

2.5 External Cable List and Details

No.	Description	Manufacturer	Model Number
1	USB-A to Type-C cable (Customer provided)	VENTION	COZ

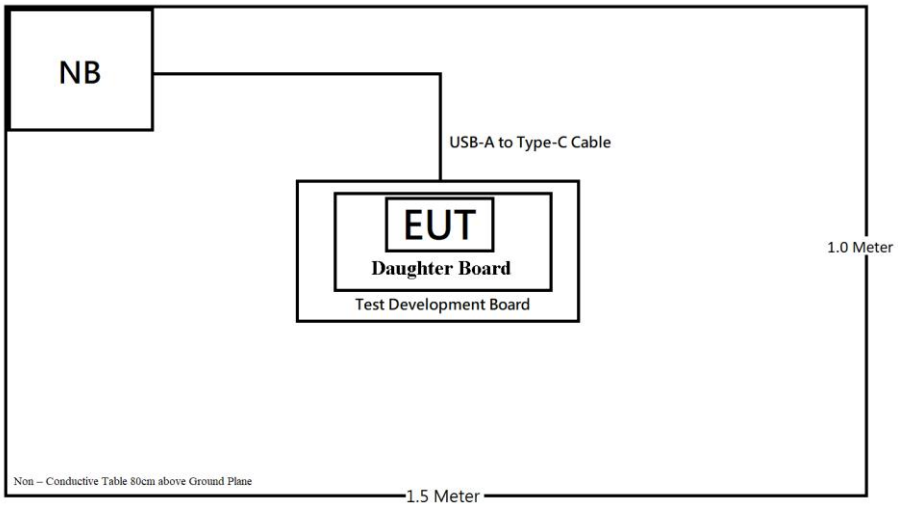
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2.6 Block Diagram of Test Setup

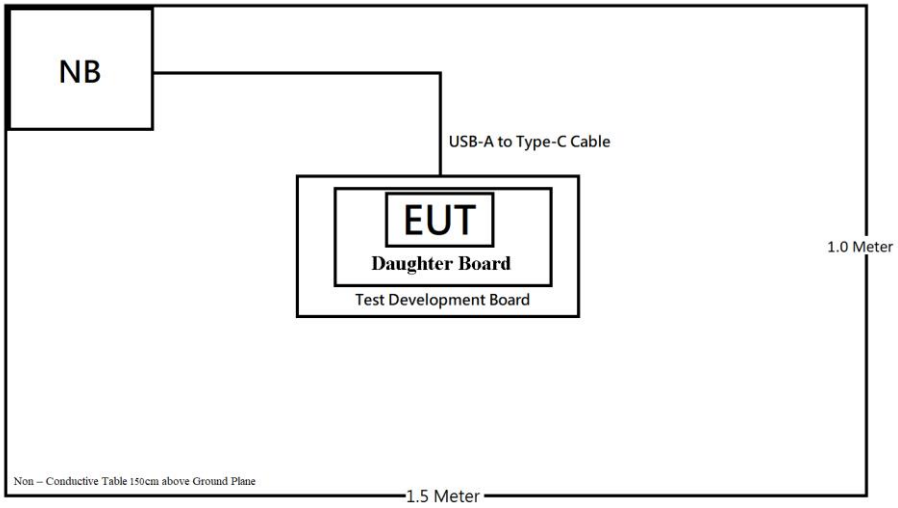
See test photographs attached in setup photos for the actual connections between EUT and support equipment.

Radiation:

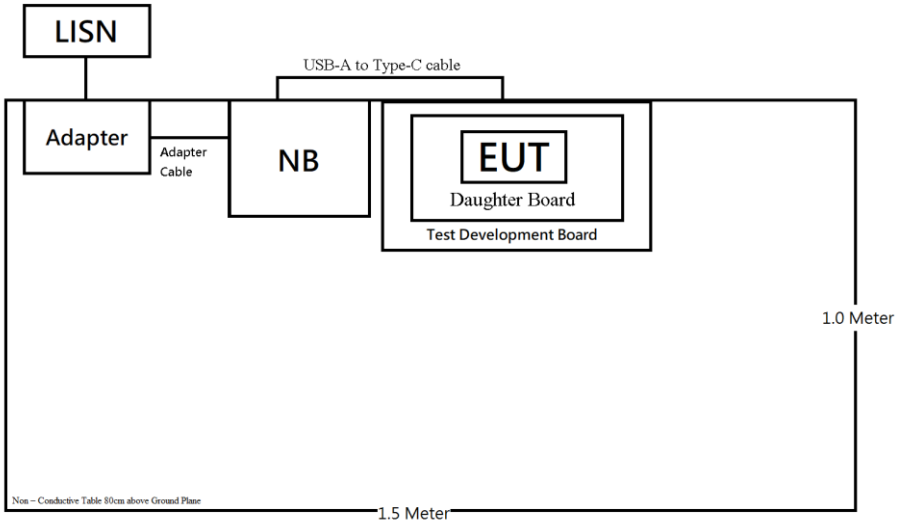
Below 1GHz:



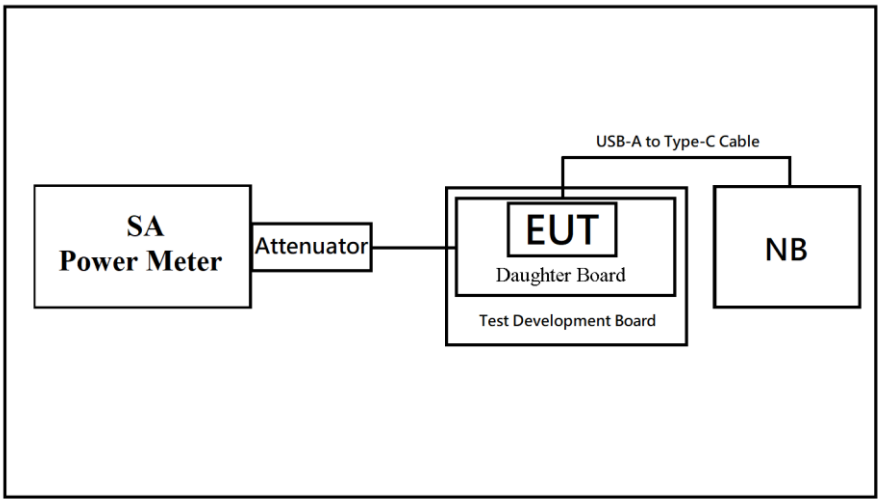
Above 1GHz:



Conduction:



Conducted:



2.7 Duty Cycle

According to KDB 558074 D01 15.247 Meas Guidance v05r02 section 6.0:

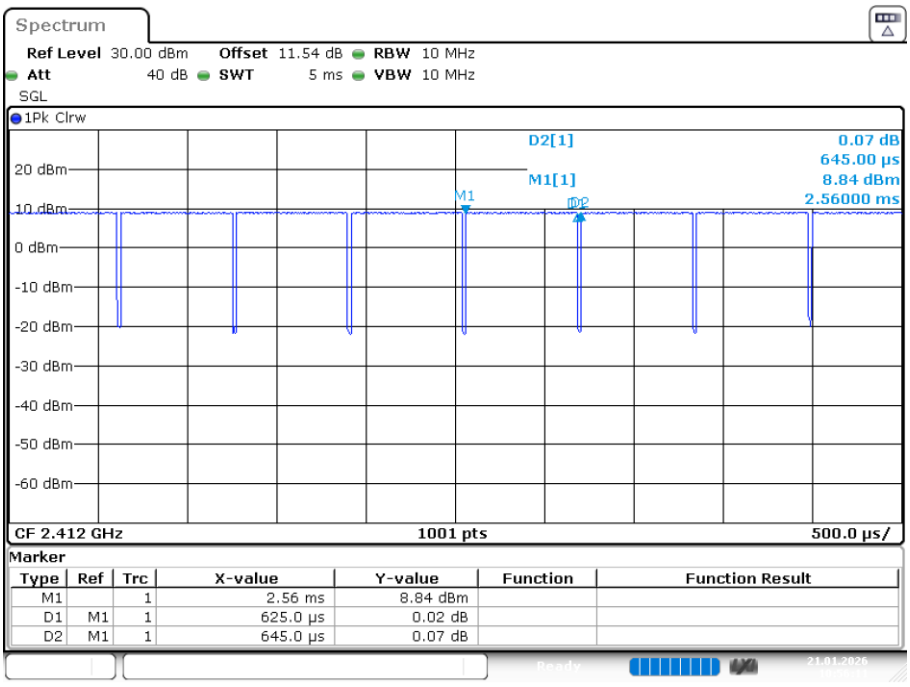
All measurements are to be performed with the EUT transmitting at 100% duty cycle at its maximum power control level; however, if 100% duty cycle cannot be achieved, measurements of duty cycle, x, and maximumpower transmission duration, T, are required for each tested mode of operation.

Radio Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T VBW Seting (kHz)	1/T (kHz)
802.11b	0.625	0.645	97	0.13	3	1.6
802.11g	0.697	0.726	96	0.18	3	1.43
802.11 n20	0.292	0.32	91	0.41	5	3.42
802.11 ax20	2.844	2.872	99	0	/	0.01
BLE(1M)	9.93	10.03	99	0	/	0.01

Note: Duty Cycle Correction Factor = 10*log(1/duty cycle)

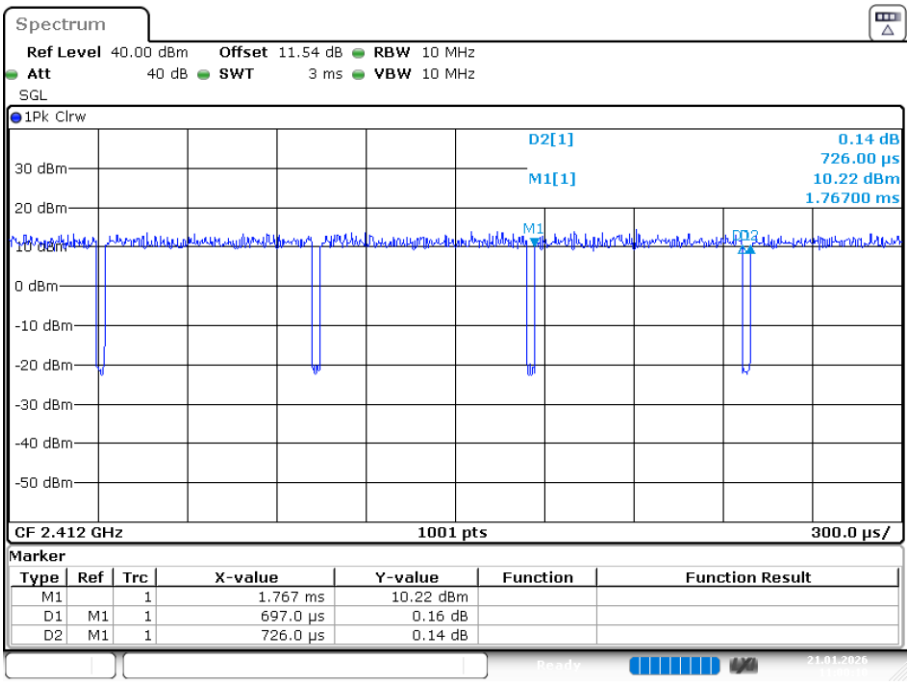
Please refer to the following plots.

b Mode



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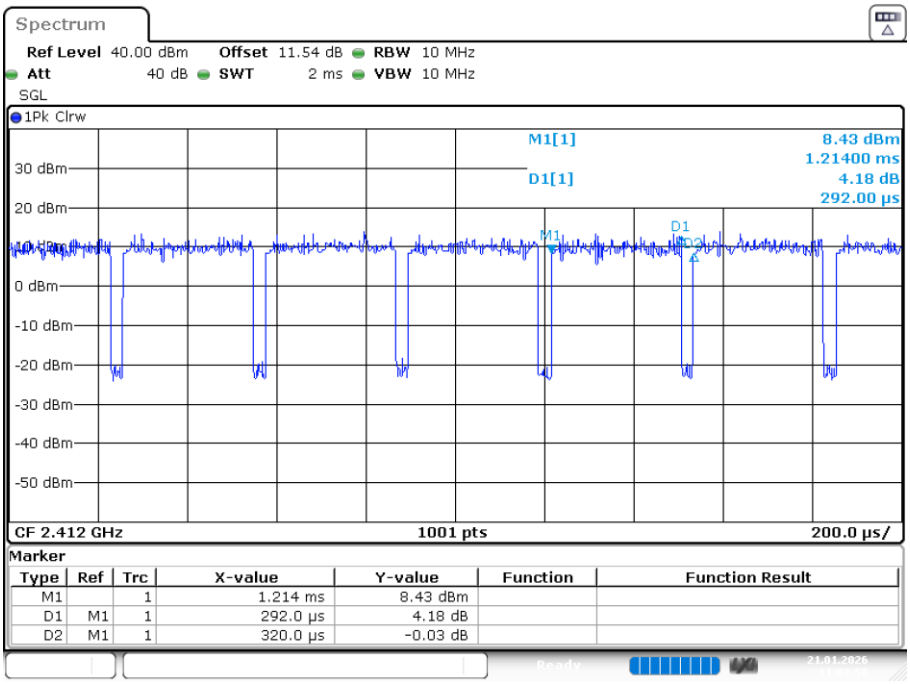
g Mode



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 21.JAN.2026 11:00:11

n20 Mode

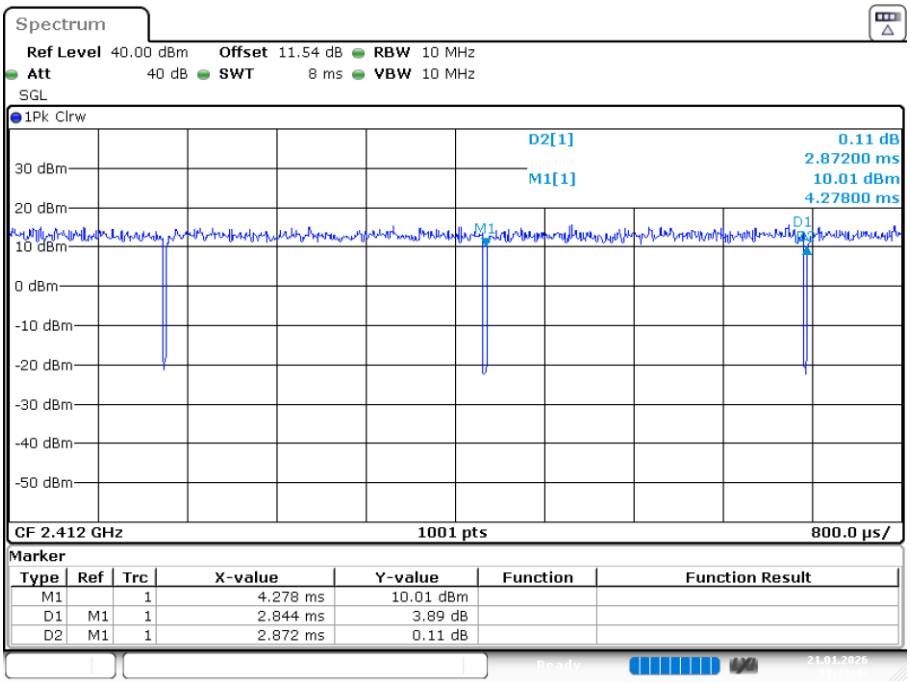


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 21.JAN.2026 11:02:58

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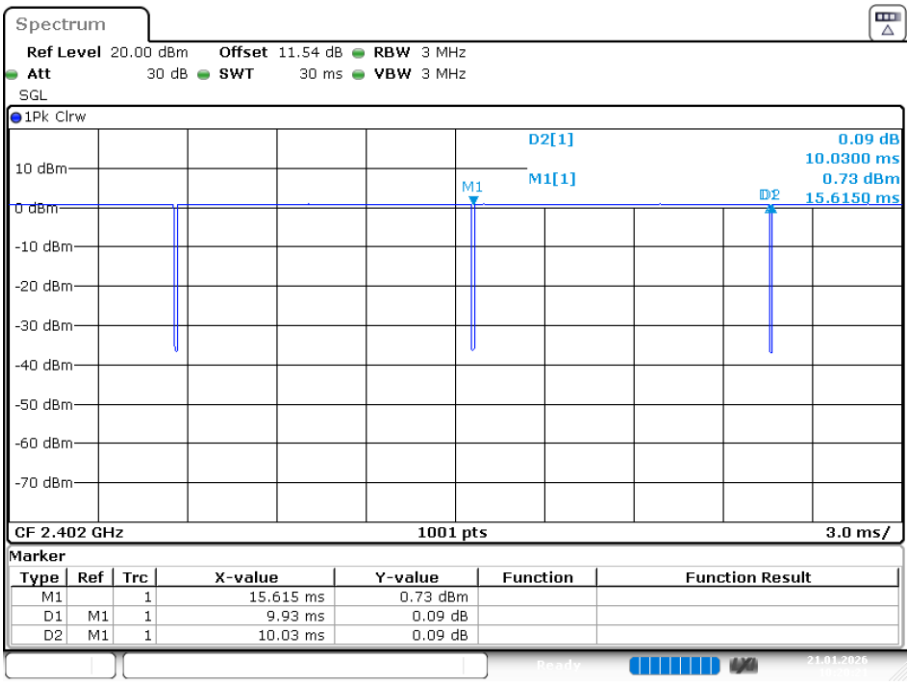
ax20 Mode



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 21.JAN.2026 11:19:43

BLE (1M) Mode



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 21.JAN.2026 10:20:22

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3 Summary of Test Results

FCC Rules	Description of Test	Results
§15.203	Antenna Requirement	Compliance
§15.207(a)	AC Line Conducted Emissions	Compliance
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliance
§15.247(a)(2)	6 dB Emission Bandwidth	Compliance
§15.247(b)(3)	Maximum Peak Output Power	Compliance
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliance
§15.247(e)	Power Spectral Density	Compliance

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4 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due Date
AC Line Conduction Room (CON-A)					
Pulse Limiter	SCHWARZBECK	VTSD 9561-F	00432	2025/08/14	2026/8/14
ESR EMI Test Receiver	Rohde & Schwarz	ESCI7	100769	2025/04/02	2026/4/2
RF Cable	EMCI	EMCCFD300-BM-BM-3000	221013	2025/10/16	2026/10/16
Two-Line V-Network	Rohde & Schwarz	ENV216	100037	2025/09/15	2026/9/15
Software	Audix	e3 v9	E3LK-03	N.C.R	N.C.R
Radiation 3M Room (966-A)					
Bilog Antenna & 6 dB Attenuator	SUNOL SCIENCES & EMCI	JB3 & N-6-06	A111513 & AT-N0668	2025/04/11	2026/04/11
Active Loop Antenna	ETS-Lindgren	6502	0001-3322	2025/03/27	2026/03/27
Horn Antenna	ETS-Lindgren	3115	109141	2025/08/22	2026/08/22
Horn Antenna	ETS-Lindgren	3160-09	123852	2025/07/18	2026/07/18
18-40GHz Preamplifier	GLOBAL	1313-A1840	5031382	2025/04/28	2026/04/28
30M-18GHz Preamplifier	A.H. Systems	PAM-0118P	470	2025/03/25	2026/03/25
ESR EMI Test Receiver	Rohde & Schwarz	ESR3	102448	2025/10/02	2026/10/02
Spectrum Analyzer	Rohde & Schwarz	FSV40	101940	2025/12/18	2026/12/18
Microflex Cable (1m)	UTiFLEX	UFB205A-0-0360-000000	W6103	2025/08/01	2026/08/01
Microflex Cable (2m)	EMCI	EMCI06-SM-SM-2000	180515	2025/08/01	2026/08/01
Microflex Cable (8m)	UTIFLEX	UFA210A-1-3149-300300	MFR 64639 232490-001	2025/08/01	2026/08/01
Software	AUDIX	E3 V9	E3LK-01	N.C.R	N.C.R
-10dB Attenuator	MTJ	MTJ604-10	004	2025/04/07	2026/04/07
Band Reject Filter	MICRO-TRONICS	BRM50702	G613	2025/04/30	2026/04/30
Conducted Room					

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Cable	MTJ	MT40S	620620-MT40S-100	2026/01/05	2027/01/05
Signal and Spectrum Analyzer	Rohde & Schwarz	FSV40	101457	2025/12/03	2026/12/03
USB Wideband Power Sensor	AGILENT	U2021XA	MY54080011	2025/08/26	2026/08/26
10dB Attenuator	MCL	BW-S10W5+	605	2025/04/14	2026/04/14

***Statement of Traceability:** BACL Corp. attests that all of the calibrations on the equipment items listed above were traceable to the SI System of Units via the R.O.C. Center for Measurement Standards of the Electronics Testing Center, Taiwan (ETC) or to another internationally recognized National Metrology Institute (NMI), and were compliant with the current Taiwan Accreditation Foundation (TAF) requirements

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5 FCC §15.203 – Antenna Requirements

5.1 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.

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 does not exceed 6dBi.

5.2 Antenna List and Details

Manufacturer	Model	Antenna Type	Antenna Gain
Renesas	RRQ610x1-008	PCB	-0.2 dBi

Unit use of a permanently attached antenna

Result: Compliance

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6 FCC §15.207(a) – AC Line Conducted Emissions

6.1 Applicable Standard

According to §15.207

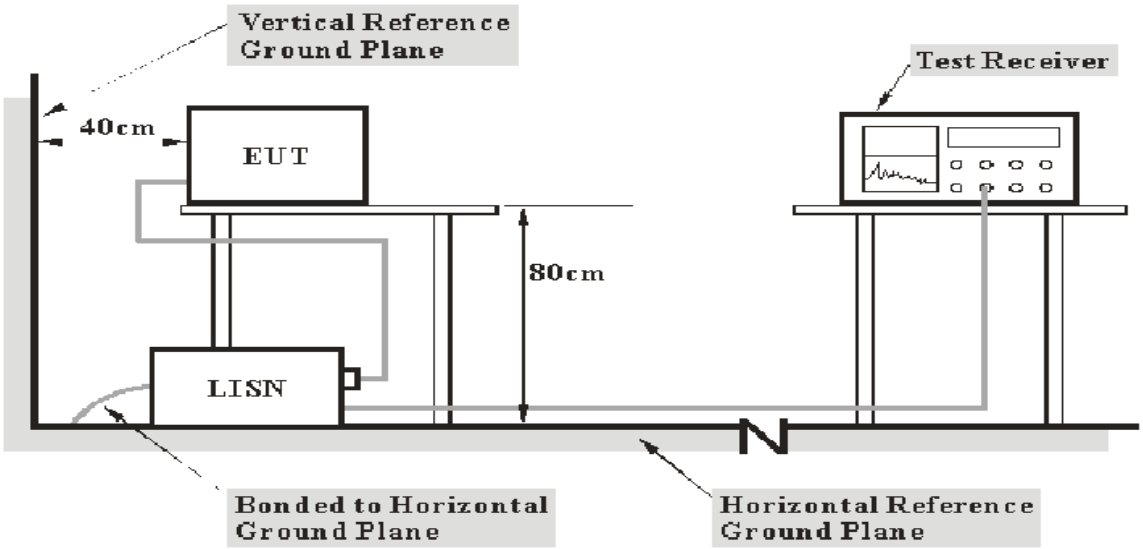
For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequencies ranges.

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56 Note 1	56 to 46 Note 2
0.5-5	56	46
5-30	60	50

Note 1: Decreases with the logarithm of the frequency.

Note 2: A linear average detector is required

6.2 EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2020+Cor.1-2023 measurement procedure. The specification used was with the FCC Part 15.207 limits.

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6.3 EMI Test Receiver Setup

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

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

Frequency Range	IF B/W
150kHz – 30MHz	9kHz

6.4 Test Procedure

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

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

All data was recorded in the Quasi-peak and average detection mode.

6.5 Factor & Over Limit Calculation

The factor is calculated by adding LISN/ISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation. The basic equation is as follows:

Factor = LISN VDF + Cable Loss + Transient Limiter Attenuation

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 below the limit. The equation for Over Limit calculation is as follows:

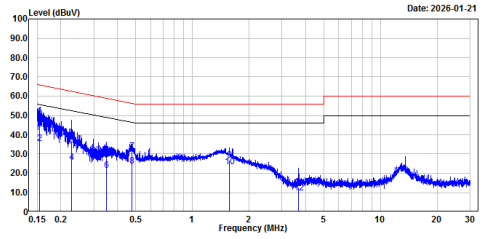
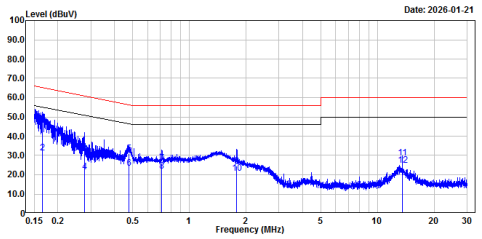
Over Limit = Level – Limit Line

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6.6 Test Results

Test Mode: Transmitting

(Worst case is 802.11n 20, High Channel)

Line	Neutral
	

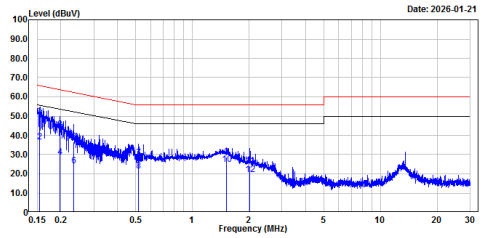
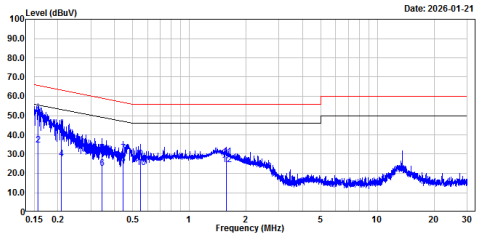
Site : Conduction
Condition: Line
Mode : WiFi-2.4G-N20-2462MHz
Job No : RLK260119062
Model : RRQ61051-408
Power : AC 120V/60Hz
Tester : Charlie Li
Temp./ Hum.: 21.6℃/48%

	Freq	Read Level	Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	
1	0.1539	29.87	49.85	19.98	65.78	-15.93	QP
2	0.1539	15.62	35.60	19.98	55.78	-20.18	Average
3	0.2282	17.05	37.03	19.98	62.51	-25.48	QP
4	0.2282	5.85	25.83	19.98	52.51	-26.68	Average
5	0.3501	8.50	28.52	20.02	58.96	-30.44	QP
6	0.3501	1.30	21.32	20.02	48.96	-27.64	Average
7	0.4763	11.41	31.44	20.03	56.40	-24.96	QP
8	0.4763	3.74	23.77	20.03	46.40	-22.63	Average
9	1.5788	6.87	26.93	20.06	56.00	-29.07	QP
10	1.5788	3.33	23.39	20.06	46.00	-22.61	Average
11	3.6703	-7.40	12.70	20.10	56.00	-43.30	QP
12	3.6703	-10.15	9.95	20.10	46.00	-36.05	Average

Site : Conduction
Condition: Neutral
Mode : WiFi-2.4G-N20-2462MHz
Job No : RLK260119062
Model : RRQ61051-408
Power : AC 120V/60Hz
Tester : Charlie Li
Temp./ Hum.: 21.6℃/48%

	Freq	Read Level	Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	
1	0.1663	26.98	46.98	20.00	65.14	-18.16	QP
2	0.1663	11.42	31.42	20.00	55.14	-23.72	Average
3	0.2776	10.90	30.88	19.98	60.89	-30.01	QP
4	0.2776	1.50	21.48	19.98	50.89	-29.41	Average
5	0.4763	11.09	31.08	19.99	56.40	-25.32	QP
6	0.4763	3.28	23.27	19.99	46.40	-23.13	Average
7	0.7154	6.04	26.04	20.00	56.00	-29.96	QP
8	0.7154	1.99	21.99	20.00	46.00	-24.01	Average
9	1.7854	4.35	24.40	20.05	56.00	-31.60	QP
10	1.7854	0.52	20.57	20.05	46.00	-25.43	Average
11	13.5664	8.26	28.76	20.50	60.00	-31.24	QP
12	13.5664	4.22	24.72	20.50	50.00	-25.28	Average

(Worst case is BLE 1M, Low Channel)

Line	Neutral
	

Site : Conduction
Condition: Line
Mode : BLE-1M-2402MHz
Job No : RLK260119062
Model : RRQ61051-408
Power : AC 120V/60Hz
Tester : Charlie Li
Temp./ Hum.: 21.6℃/48%

	Freq	Read Level	Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	
1	0.1549	30.23	50.21	19.98	65.73	-15.52	QP
2	0.1549	16.66	36.64	19.98	55.73	-19.09	Average
3	0.1976	22.92	42.90	19.98	63.71	-20.81	QP
4	0.1976	8.83	28.81	19.98	53.71	-24.90	Average
5	0.2343	16.57	36.56	19.99	62.30	-25.74	QP
6	0.2343	4.11	24.10	19.99	52.30	-28.20	Average
7	0.5170	8.16	28.19	20.03	56.00	-27.81	QP
8	0.5170	1.53	21.56	20.03	46.00	-24.44	Average
9	1.5246	8.50	28.56	20.06	56.00	-27.44	QP
10	1.5246	4.96	25.02	20.06	46.00	-20.98	Average
11	2.0189	3.99	24.05	20.06	56.00	-31.95	QP
12	2.0189	-0.40	19.66	20.06	46.00	-26.34	Average

Site : Conduction
Condition: Neutral
Mode : BLE-1M-2402MHz
Job No : RLK260119062
Model : RRQ61051-408
Power : AC 120V/60Hz
Tester : Charlie Li
Temp./ Hum.: 21.6℃/48%

	Freq	Read Level	Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	
1	0.1569	30.23	50.23	20.00	65.63	-15.40	QP
2	0.1569	14.87	34.87	20.00	55.63	-20.76	Average
3	0.2082	20.70	40.68	19.98	63.28	-22.60	QP
4	0.2082	7.43	27.41	19.98	53.28	-25.87	Average
5	0.3442	10.40	30.38	19.98	59.10	-28.72	QP
6	0.3442	2.76	22.74	19.98	49.10	-26.36	Average
7	0.4446	10.43	30.42	19.99	56.98	-26.56	QP
8	0.4446	5.04	25.03	19.99	46.98	-21.95	Average
9	0.5500	7.73	27.73	20.00	56.00	-28.27	QP
10	0.5500	3.07	23.07	20.00	46.00	-22.93	Average
11	1.5804	8.54	28.58	20.04	56.00	-27.42	QP
12	1.5804	4.56	24.60	20.04	46.00	-21.40	Average

Note:

Level = Read Level + Factor

Over Limit = Level – Limit Line

Factor = (LISN, ISN, PLC or current probe) Factor + Cable Loss + Attenuator

Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

7 FCC §15.209, §15.205 , §15.247(d) – Spurious Emissions

7.1 Applicable Standard

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

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

MHz	MHz	MHz	GHz
0.090 – 0.110	16.42 – 16.423	608 – 614	4. 5 – 5. 15
0.495 – 0.505	16.69475 – 16.69525	960 – 1240	5. 35 – 5. 46
2.1735 – 2.1905	16.80425 – 16.80475	1300 – 1427	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1435 – 1626.5	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1645.5 – 1646.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1660 – 1710	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1718.8 – 1722.2	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	2200 – 2300	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2310 – 2390	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2483.5 – 2500	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2690 – 2900	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	3260 – 3267	22.01 – 23.12
8.41425 – 8.41475	162.0125 –167.17	3.332 – 3.339	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3 3458 – 3 358	31.2 – 31.8
12.51975 – 12.52025	240 – 285	3.600 – 4.400	36.43 – 36.5
12.57675 – 12.57725	322 – 335.4		Above 38.6
13.36 – 13.41	399.9 – 410		

As per FCC §15.209(a): Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (micro volts/meter)	Measurement Distance (meters)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100**	3
88 - 216	150**	3
216 - 960	200**	3
Above 960	500	3

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

Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

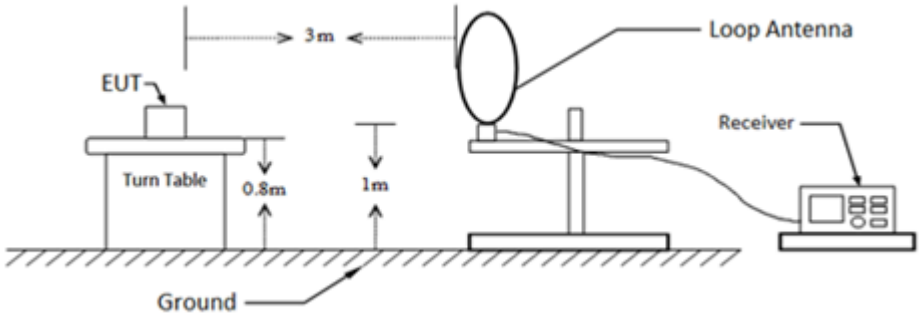
According to ANSI C63.10-2020+Cor.1-2023, section 5.3.3

Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field, and the emissions to be measured can be detected by the measurement equipment (see 4.3.4). Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. Measurements from 18 GHz to 40 GHz are typically made at distances significantly less than 3 m from the EUT. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade of distance (inverse of linear distance for field-strength measurements or inverse of linear distance-squared for power-density measurements).

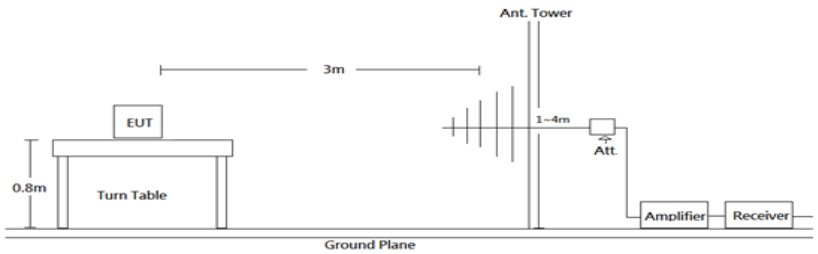
As per FCC §15.247 (d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance 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).

7.2 EUT Setup

9kHz-30MHz:

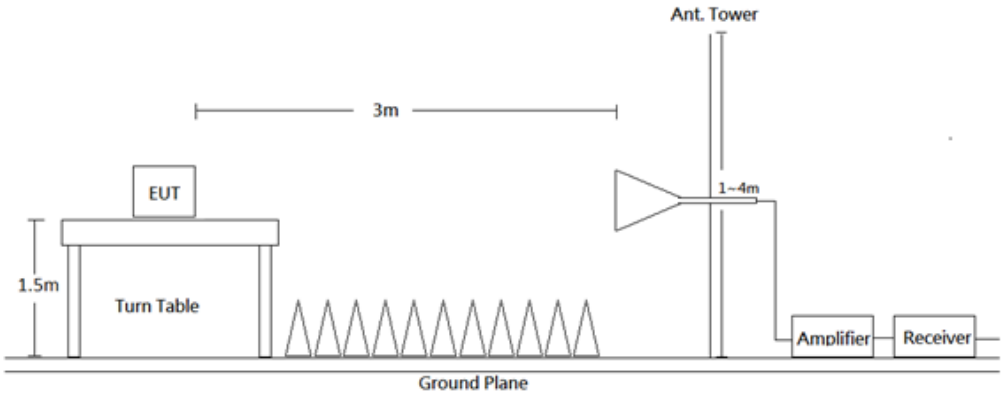


30MHz-1GHz:

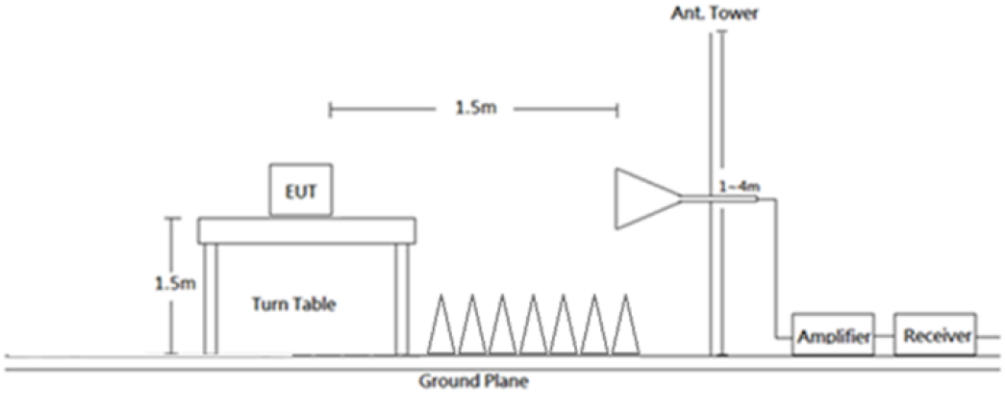


Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

1-18 GHz:



18-26.5 GHz:



Radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2020+Cor.1-2023. The specification used was the FCC Part 15.209 and FCC 15.247 Limits.

Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

7.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 26.5 GHz. During the radiated emission test, the EMI test receiver was set with the following configurations measurement method 6.3 in ANSI C63.10-2020+Cor.1-2023.

Frequency Range	RBW	VBW	Duty cycle	Measurement method	Detector
9 kHz - 150 kHz	200 Hz/300 Hz	1 kHz	/	QP/AV	QP/AV
150 kHz - 30 MHz	9 kHz/10 kHz	30 kHz	/	QP/AV	QP/AV
30-1000 MHz	120 kHz	500 kHz	/	QP	QP
Above 1 GHz	Pre-scan :				
	1 MHz	3 MHz	/	PK	PK
	1 MHz	3 kHz	>98%	Ave	PK
	1 MHz	≥ 1/Ton, not less than 1 Hz	<98%	Ave	PK
	Final measurement for emission identified during pre-scan :				
	1 MHz	3 MHz	/	PK	PK
	1 MHz	10 Hz	>98%	Ave	PK
	1 MHz	≥ 1/Ton	<98%	Ave	PK

Note: T is minimum transmission duration

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

7.4 Test Procedure

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

All data was recorded in Quasi-peak and average detector mode from 9 kHz to 30 MHz, Quasi-peak detector mode from 30 MHz to 1 GHz and PK and average detector modes for frequencies above 1 GHz.

7.5 Factor & Over Limit Calculation

The Factor 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:

Factor = Antenna Factor + Cable Loss – Amplifier Gain

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

Over Limit = Level – Limit Line

Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

7.6 Test Results

Test Mode: Transmitting

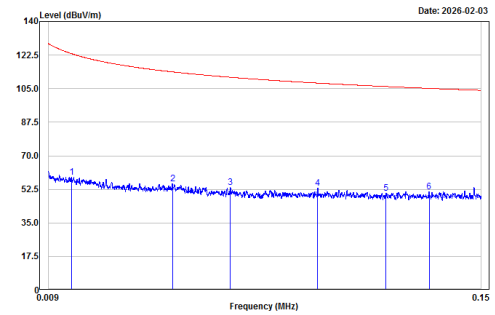
(Pre-scan with three orthogonal axis, and worse case as Y axis.)

9kHz-30MHz:

(Pre-scan using three directional polarities, worst case as parallel.)

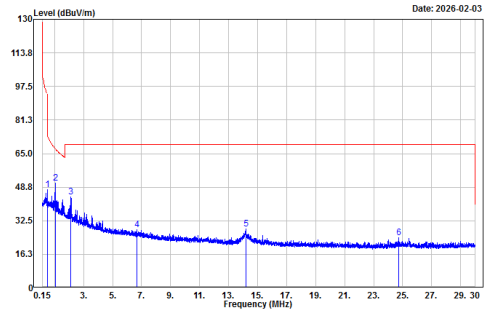
(Worst-case power mode)

9kHz-150kHz	150kHz-30MHz



Site : LK-966A
Condition: 3m
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 55%
Memo : N20-TX-2462
RBW/VBW : PK: 300Hz/1K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	0.017	44.96	13.69	58.65	123.24	-64.59	QP
2	0.049	42.11	13.25	55.36	113.72	-58.36	QP
3	0.068	41.81	11.72	53.53	110.92	-57.39	QP
4	0.097	41.41	11.66	53.07	107.89	-54.82	QP
5	0.119	38.90	11.69	50.59	106.09	-55.50	QP
6	0.133	39.46	11.77	51.23	105.12	-53.89	QP



Site : LK-966A
Condition: 3m
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 55%
Memo : N20-TX-2462
RBW/VBW : PK: 10K/30K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	0.511	35.86	11.69	47.55	73.43	-25.88	QP
2	1.066	39.40	11.48	50.88	67.05	-16.17	QP
3	2.135	33.06	10.98	44.04	69.54	-25.50	QP
4	6.684	16.27	11.98	28.25	69.54	-41.29	QP
5	14.185	16.95	11.56	28.51	69.54	-41.03	QP
6	24.731	12.93	11.42	24.35	69.54	-45.19	QP

Note:

Level = Read Level + Factor

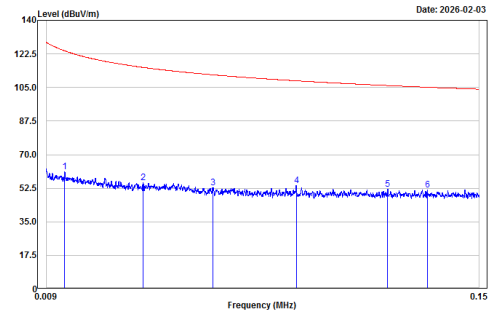
Over Limit = Level – Limit Line

Factor = Antenna Factor + Cable Loss – Amplifier Gain

Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

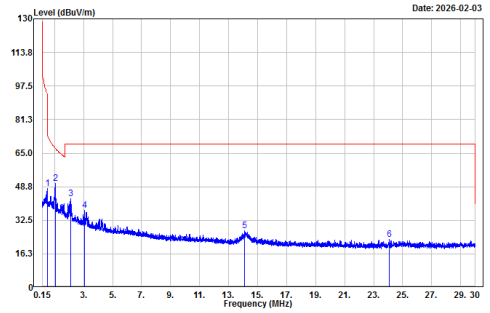
(Worst case is BLE(1M) mode)

9kHz-150kHz	150kHz-30MHz



Site : LK-966A
Condition: 3m
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 55%
Memo : BLE-1M-TX-2402
RBW/VBW : PK: 300Hz/1K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	0.015	47.33	13.60	60.93	124.08	-63.15	QP
2	0.041	42.97	12.45	55.42	115.45	-60.03	QP
3	0.063	41.02	11.77	52.79	111.59	-58.80	QP
4	0.090	42.27	11.79	54.06	108.48	-54.42	QP
5	0.120	40.18	11.70	51.88	106.00	-54.12	QP
6	0.133	39.82	11.77	51.59	105.12	-53.53	QP



Site : LK-966A
Condition: 3m
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 55%
Memo : BLE-1M-TX-2402
RBW/VBW : PK: 10K/30K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	0.517	36.32	11.68	48.00	73.33	-25.33	QP
2	1.069	38.84	11.48	50.32	67.02	-16.70	QP
3	2.120	31.85	10.99	42.84	69.54	-26.70	QP
4	3.066	26.63	10.83	37.46	69.54	-32.08	QP
5	14.117	15.92	11.56	27.48	69.54	-42.06	QP
6	24.057	12.37	10.95	23.32	69.54	-46.22	QP

Note:

Level = Read Level + Factor

Over Limit = Level – Limit Line

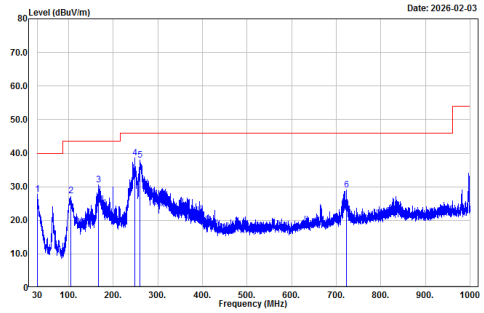
Factor = Antenna Factor + Cable Loss – Amplifier Gain

Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

30MHz-1GHz:

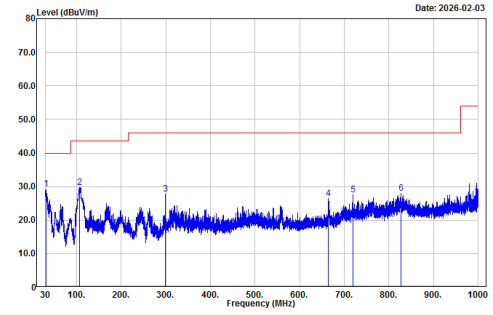
(Worst-case power mode)

Horizontal	Vertical




```
Site     : LK-966A
Condition: 3m horizontal
Job No   : RLK260119062
Model    : RRQ61051-408
Power    : From Test Development Board.
Tester   : Yue
Temp./ Hum.: 18℃/ 55%
Memo     : N20-TX-2462
RBW/VBW  : PK: 120K/500K
```

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	30.097	36.29	-8.62	27.67	40.00	-12.33	QP
2	104.496	47.55	-20.34	27.21	43.50	-16.29	QP
3	167.449	50.98	-20.49	30.49	43.50	-13.01	QP
4	248.444	59.96	-21.39	38.57	46.00	-7.43	QP
5	259.793	58.84	-20.99	37.85	46.00	-8.15	QP
6	722.774	40.55	-11.42	29.13	46.00	-16.87	QP




```
Site     : LK-966A
Condition: 3m vertical
Job No   : RLK260119062
Model    : RRQ61051-408
Power    : From Test Development Board.
Tester   : Yue
Temp./ Hum.: 18℃/ 55%
Memo     : N20-TX-2462
RBW/VBW  : PK: 120K/500K
```

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	31.067	38.09	-8.93	29.16	40.00	-10.84	QP
2	107.018	49.60	-19.80	29.80	43.50	-13.70	QP
3	299.466	47.61	-19.77	27.84	46.00	-18.16	QP
4	664.089	38.81	-12.43	26.38	46.00	-19.62	QP
5	720.058	39.00	-11.36	27.64	46.00	-18.36	QP
6	826.661	37.99	-10.07	27.92	46.00	-18.08	QP

Note:

Level = Read Level + Factor

Over Limit = Level – Limit Line

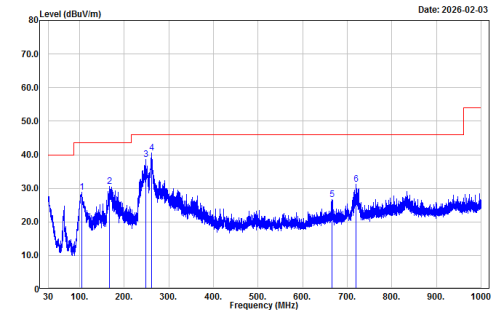
Factor = Antenna Factor + Cable Loss – Amplifier Gain

Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

(Worst case is BLE(1M) mode)

Low channel

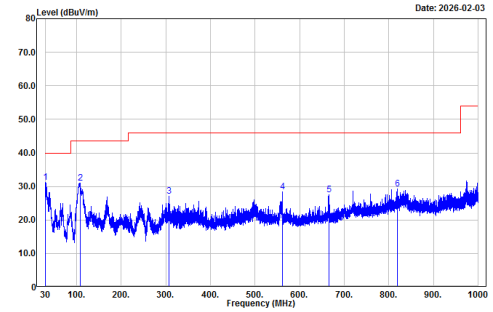
Horizontal




```
Site     : LK-966A
Condition: 3m horizontal
Job No   : RLK260119062
Model    : RRQ61051-408
Power    : From Test Development Board.
Tester   : Yue
Temp./ Hum.: 18℃/ 55%
Memo     : BLE-1M-TX-2402
RBW/VBW  : PK: 120K/500K
```

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	104.884	49.02	-20.23	28.79	43.50	-14.71	QP
2	167.643	51.12	-20.49	30.63	43.50	-12.87	QP
3	248.832	59.98	-21.40	38.58	46.00	-7.42	QP
4	261.733	61.17	-20.70	40.47	46.00	-5.53	QP
5	665.932	39.10	-12.40	26.70	46.00	-19.30	QP
6	720.058	42.55	-11.36	31.19	46.00	-14.81	QP

Vertical




```
Site     : LK-966A
Condition: 3m vertical
Job No   : RLK260119062
Model    : RRQ61051-408
Power    : From Test Development Board.
Tester   : Yue
Temp./ Hum.: 18℃/ 55%
Memo     : BLE-1M-TX-2402
RBW/VBW  : PK: 120K/500K
```

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	30.388	39.84	-8.69	31.15	40.00	-8.85	QP
2	107.697	50.82	-19.80	31.02	43.50	-12.48	QP
3	308.002	46.62	-19.55	27.07	46.00	-18.93	QP
4	561.075	42.45	-14.15	28.30	46.00	-17.70	QP
5	665.835	39.85	-12.40	27.45	46.00	-18.55	QP
6	818.707	39.47	-10.11	29.36	46.00	-16.64	QP

Note:

Level = Read Level + Factor

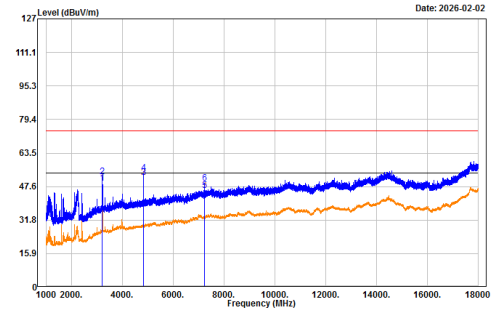
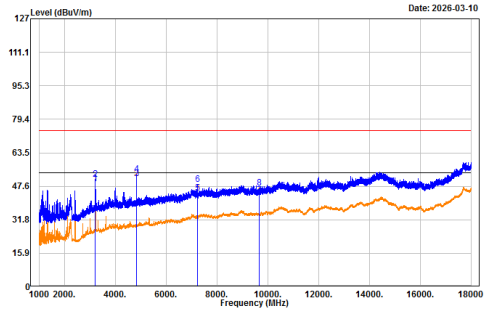
Over Limit = Level – Limit Line

Factor = Antenna Factor + Cable Loss – Amplifier Gain

Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

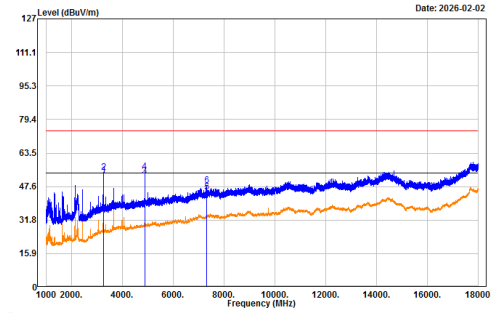
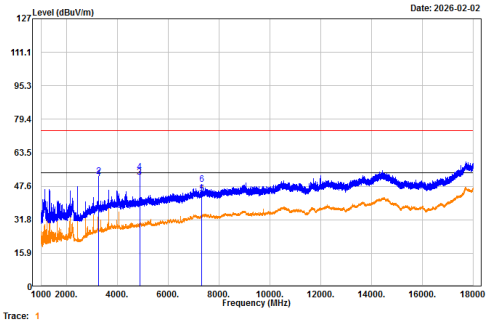
802.11b Mode:

1GHz-18GHz:

Horizontal	Vertical
	
Trace: 1 Site : LK-966A Condition: 3m horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : 11B-TX-2412 RBW/VBW : PK: 1M/3M; AV: 1M/3K	Trace: 1 Site : LK-966A Condition: 3m vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : 11B-TX-2412 RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3215.667	53.70	-4.36	49.34	54.00	-4.66	Average
2	3215.667	56.56	-4.36	52.20	74.00	-21.80	Peak
3	4824.000	52.48	-0.56	51.92	54.00	-2.08	Average
4	4824.000	54.72	-0.56	54.16	74.00	-19.84	Peak
5	7236.000	39.65	6.03	45.68	54.00	-8.32	Average
6	7236.000	43.29	6.03	49.32	74.00	-24.68	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3215.667	53.34	-4.36	48.98	54.00	-5.02	Average
2	3215.667	55.44	-4.36	51.08	74.00	-22.92	Peak
3	4824.000	51.88	-0.56	51.32	54.00	-2.68	Average
4	4824.000	53.74	-0.56	53.18	74.00	-20.82	Peak
5	7236.000	38.23	6.03	44.26	54.00	-9.74	Average
6	7236.000	42.66	6.03	48.69	74.00	-25.31	Peak
7	9648.000	34.86	8.36	43.22	54.00	-10.78	Average
8	9648.000	38.46	8.36	46.82	74.00	-27.18	Peak

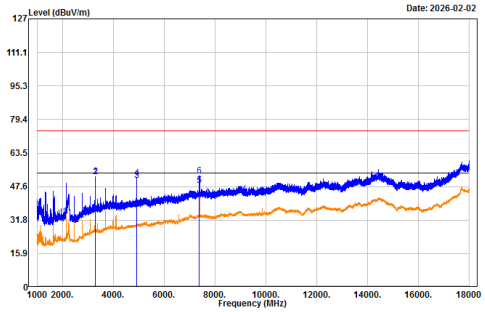
Horizontal	Vertical
	
Trace: 1 Site : LK-966A Condition: 3m horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : 11B-TX-2437 RBW/VBW : PK: 1M/3M; AV: 1M/3K	Trace: 1 Site : LK-966A Condition: 3m vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : 11B-TX-2437 RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3249.100	57.04	-4.15	52.89	54.00	-1.11	Average
2	3249.100	58.45	-4.15	54.30	74.00	-19.70	Peak
3	4874.000	52.88	-0.27	52.61	54.00	-1.39	Average
4	4874.000	55.14	-0.27	54.87	74.00	-19.13	Peak
5	7311.000	38.74	6.27	45.01	54.00	-8.99	Average
6	7311.000	41.75	6.27	48.02	74.00	-25.98	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3249.100	55.47	-4.15	51.32	54.00	-2.68	Average
2	3249.100	56.51	-4.15	52.36	74.00	-21.64	Peak
3	4874.000	52.35	-0.27	52.08	54.00	-1.92	Average
4	4874.000	54.78	-0.27	54.51	74.00	-19.49	Peak
5	7311.000	37.70	6.27	43.97	54.00	-10.03	Average
6	7311.000	42.30	6.27	48.57	74.00	-25.43	Peak

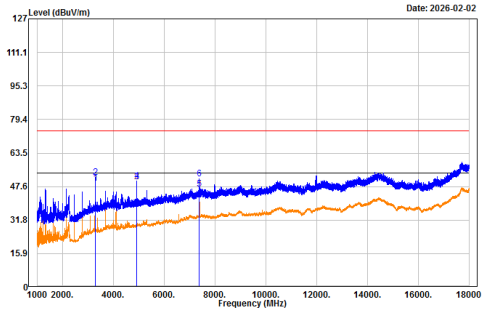
Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

Horizontal	Vertical



Trace: 1
Site : LK-966A
Condition: 3m horizontal
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 53%
Memo : 11B-TX-2462
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3282.533	56.31	-4.04	52.27	54.00	-1.73	Average
2	3282.533	56.26	-4.04	52.22	74.00	-21.78	Peak
3	4924.000	50.74	-0.08	50.66	54.00	-3.34	Average
4	4924.000	51.56	-0.08	51.48	74.00	-22.52	Peak
5	7386.000	41.68	6.39	48.07	54.00	-5.93	Average
6	7386.000	46.22	6.39	52.61	74.00	-21.39	Peak



Trace: 1
Site : LK-966A
Condition: 3m vertical
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 53%
Memo : 11B-TX-2462
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3282.533	53.30	-4.04	49.26	54.00	-4.74	Average
2	3282.533	55.96	-4.04	51.92	74.00	-22.08	Peak
3	4924.000	49.92	-0.08	49.84	54.00	-4.16	Average
4	4924.000	50.47	-0.08	50.39	74.00	-23.61	Peak
5	7386.000	39.96	6.39	46.35	54.00	-7.65	Average
6	7386.000	44.89	6.39	51.28	74.00	-22.72	Peak

Note:

Level = Read Level + Factor

Over Limit = Level – Limit Line

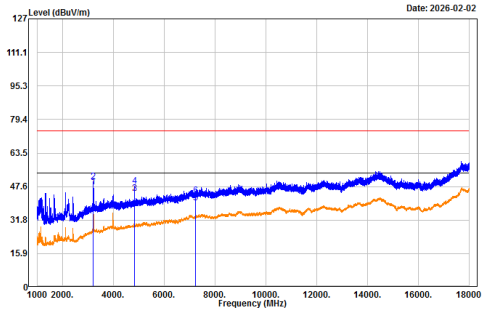
Factor = Antenna Factor + Cable Loss – Amplifier Gain

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802.11g Mode:

1GHz-18GHz:

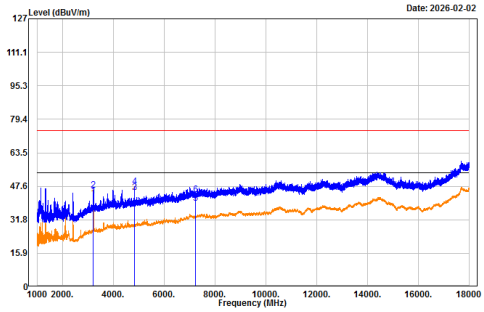
Horizontal



Trace: 1
Site : LK-966A
Condition: 3m horizontal
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 53%
Memo : 11G-TX-2412
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3216.233	51.89	-4.35	47.54	54.00	-6.46	Average
2	3216.233	54.23	-4.35	49.88	74.00	-24.12	Peak
3	4824.000	45.12	-0.56	44.56	54.00	-9.44	Average
4	4824.000	48.53	-0.56	47.97	74.00	-26.03	Peak
5	7236.000	33.91	6.03	39.94	54.00	-14.06	Average
6	7236.000	37.23	6.03	43.26	74.00	-30.74	Peak

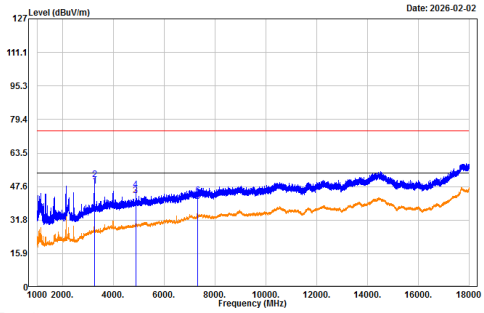
Vertical



Trace: 1
Site : LK-966A
Condition: 3m vertical
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 53%
Memo : 11G-TX-2412
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3216.233	47.41	-4.35	43.06	54.00	-10.94	Average
2	3216.233	50.23	-4.35	45.88	74.00	-28.12	Peak
3	4824.000	45.23	-0.56	44.67	54.00	-9.33	Average
4	4824.000	48.08	-0.56	47.52	74.00	-26.48	Peak
5	7236.000	33.43	6.03	39.46	54.00	-14.54	Average
6	7236.000	37.85	6.03	43.88	74.00	-30.12	Peak

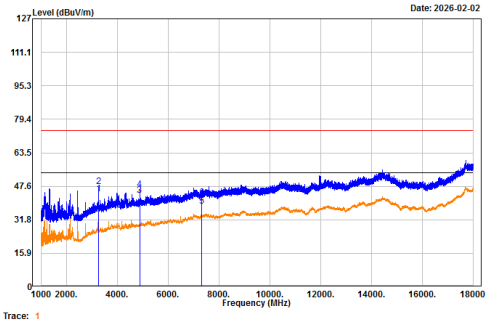
Horizontal



Trace: 1
Site : LK-966A
Condition: 3m horizontal
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 53%
Memo : 11G-TX-2437
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3249.100	52.09	-4.15	47.94	54.00	-6.06	Average
2	3249.100	55.00	-4.15	50.85	74.00	-23.15	Peak
3	4874.000	43.63	-0.27	43.36	54.00	-10.64	Average
4	4874.000	46.26	-0.27	45.99	74.00	-28.01	Peak
5	7311.000	34.18	6.27	40.45	54.00	-13.55	Average
6	7311.000	37.14	6.27	43.41	74.00	-30.59	Peak

Vertical

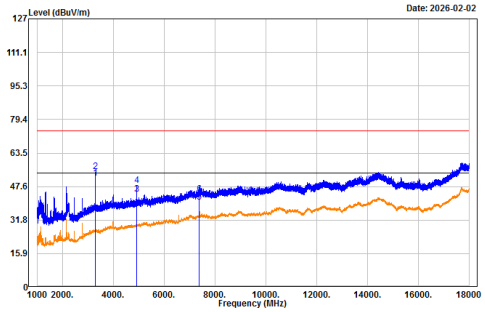


Trace: 1
Site : LK-966A
Condition: 3m vertical
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 53%
Memo : 11G-TX-2437
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3249.100	48.26	-4.15	44.11	54.00	-9.89	Average
2	3249.100	51.55	-4.15	47.40	74.00	-26.60	Peak
3	4874.000	43.72	-0.27	43.45	54.00	-10.55	Average
4	4874.000	46.32	-0.27	46.05	74.00	-27.95	Peak
5	7311.000	32.09	6.27	38.36	54.00	-15.64	Average
6	7311.000	36.16	6.27	42.43	74.00	-31.57	Peak

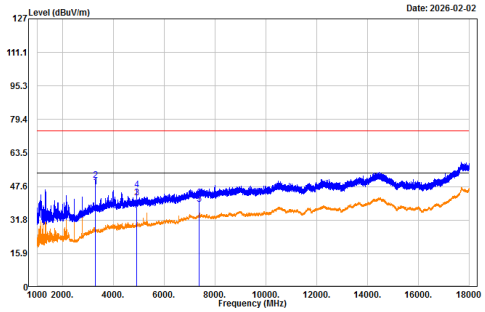
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Horizontal	Vertical



Trace: 1
Site : LK-966A
Condition: 3m horizontal
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 53%
Memo : 11G-TX-2462
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3281.967	55.63	-4.05	51.58	54.00	-2.42	Average
2	3281.967	58.82	-4.05	54.77	74.00	-19.23	Peak
3	4924.000	44.10	-0.08	44.02	54.00	-9.98	Average
4	4924.000	48.35	-0.08	48.27	74.00	-25.73	Peak
5	7386.000	33.97	6.39	40.36	54.00	-13.64	Average
6	7386.000	37.83	6.39	44.22	74.00	-29.78	Peak



Trace: 1
Site : LK-966A
Condition: 3m vertical
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 53%
Memo : 11G-TX-2462
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3282.533	51.48	-4.04	47.44	54.00	-6.56	Average
2	3282.533	54.63	-4.04	50.59	74.00	-23.41	Peak
3	4924.000	42.45	-0.08	42.37	54.00	-11.63	Average
4	4924.000	46.05	-0.08	45.97	74.00	-28.03	Peak
5	7386.000	32.76	6.39	39.15	54.00	-14.85	Average
6	7386.000	36.10	6.39	42.49	74.00	-31.51	Peak

Note:

Level = Read Level + Factor

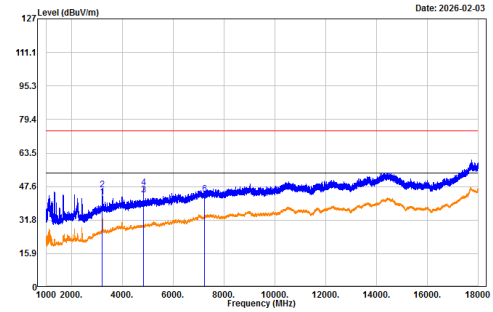
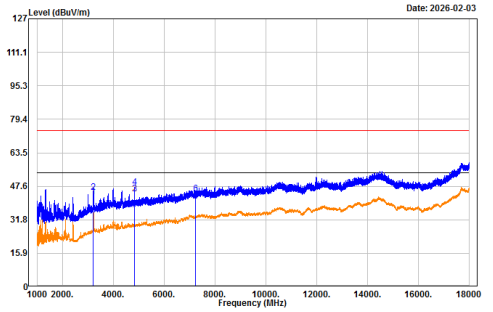
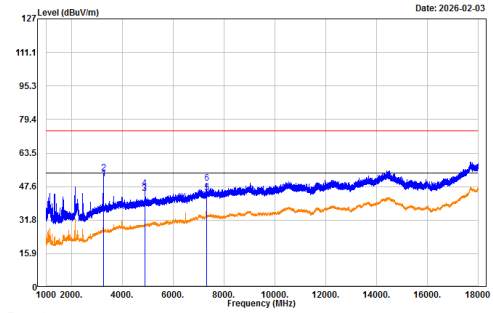
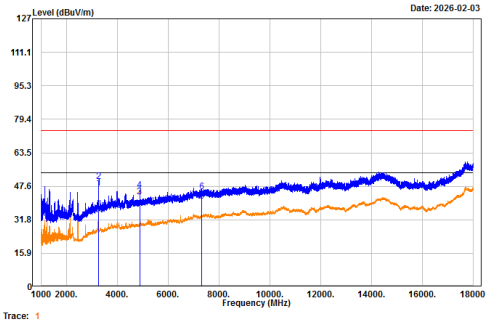
Over Limit = Level – Limit Line

Factor = Antenna Factor + Cable Loss – Amplifier Gain

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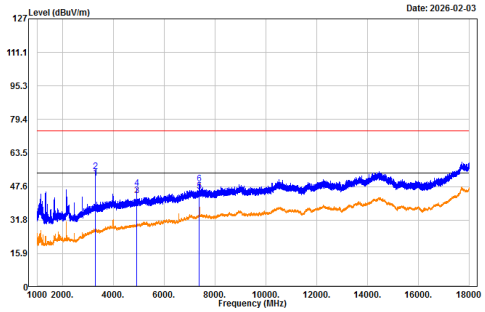
802.11n HT20 Mode:

1GHz-18GHz:

Horizontal	Vertical
 Trace: 1 Site : LK-966A Condition: 3m horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 55% Memo : N20-TX-2412 RBW/VBW : PK: 1M/3M; AV: 1M/5K Freq / Read Level / Factor / Level / Limit Line / Over Limit / Remark MHz / dBuV / dB/m / dBuV/m / dBuV/m / dB 1 3215.667 47.06 -4.36 42.70 54.00 -11.30 Average 2 3215.667 50.33 -4.36 45.97 74.00 -28.03 Peak 3 4824.000 44.44 -0.56 43.88 54.00 -10.12 Average 4 4824.000 47.72 -0.56 47.16 74.00 -26.84 Peak 5 7236.000 34.87 6.03 40.90 54.00 -13.10 Average 6 7236.000 38.08 6.03 44.11 74.00 -29.89 Peak	 Trace: 1 Site : LK-966A Condition: 3m vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 55% Memo : N20-TX-2412 RBW/VBW : PK: 1M/3M; AV: 1M/5K Freq / Read Level / Factor / Level / Limit Line / Over Limit / Remark MHz / dBuV / dB/m / dBuV/m / dBuV/m / dB 1 3215.667 46.93 -4.36 42.57 54.00 -11.43 Average 2 3215.667 49.17 -4.36 44.81 74.00 -29.19 Peak 3 4824.000 44.62 -0.56 44.06 54.00 -9.94 Average 4 4824.000 47.65 -0.56 47.09 74.00 -26.91 Peak 5 7236.000 34.70 6.03 40.73 54.00 -13.27 Average 6 7236.000 38.03 6.03 44.06 74.00 -29.94 Peak
Horizontal	**Vertical**
 Trace: 1 Site : LK-966A Condition: 3m horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 55% Memo : N20-TX-2437 RBW/VBW : PK: 1M/3M; AV: 1M/5K Freq / Read Level / Factor / Level / Limit Line / Over Limit / Remark MHz / dBuV / dB/m / dBuV/m / dBuV/m / dB 1 3249.667 55.44 -4.14 51.30 54.00 -2.70 Average 2 3249.667 58.06 -4.14 53.92 74.00 -20.08 Peak 3 4874.000 44.59 -0.27 44.32 54.00 -9.68 Average 4 4874.000 47.02 -0.27 46.75 74.00 -27.25 Peak 5 7311.000 38.36 6.27 44.63 54.00 -9.37 Average 6 7311.000 42.96 6.27 49.23 74.00 -24.77 Peak	 Trace: 1 Site : LK-966A Condition: 3m vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 55% Memo : N20-TX-2437 RBW/VBW : PK: 1M/3M; AV: 1M/5K Freq / Read Level / Factor / Level / Limit Line / Over Limit / Remark MHz / dBuV / dB/m / dBuV/m / dBuV/m / dB 1 3249.667 51.01 -4.14 46.87 54.00 -7.13 Average 2 3249.667 54.08 -4.14 49.94 74.00 -24.06 Peak 3 4874.000 43.11 -0.27 42.84 54.00 -11.16 Average 4 4874.000 46.09 -0.27 45.82 74.00 -28.18 Peak 5 7311.000 34.45 6.27 40.72 54.00 -13.28 Average 6 7311.000 38.68 6.27 44.95 74.00 -29.05 Peak

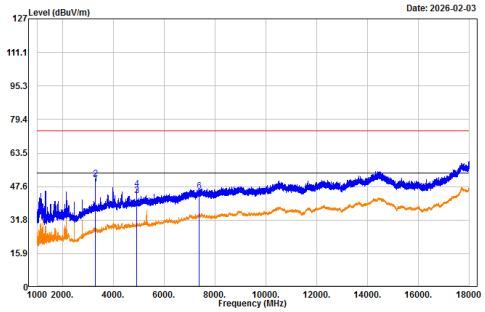
Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

Horizontal	Vertical



Trace: 1
Site : LK-966A
Condition: 3m horizontal
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 55%
Memo : N20-TX-2462
RBW/VBW : PK: 1M/3M; AV: 1M/5K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3282.533	55.67	-4.04	51.63	54.00	-2.37	Average
2	3282.533	58.93	-4.04	54.89	74.00	-19.11	Peak
3	4924.000	43.41	-0.08	43.33	54.00	-10.67	Average
4	4924.000	46.73	-0.08	46.65	74.00	-27.35	Peak
5	7386.000	38.94	6.39	45.33	54.00	-8.67	Average
6	7386.000	42.64	6.39	49.03	74.00	-24.97	Peak



Trace: 1
Site : LK-966A
Condition: 3m vertical
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 55%
Memo : N20-TX-2462
RBW/VBW : PK: 1M/3M; AV: 1M/5K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3282.533	52.93	-4.04	48.89	54.00	-5.11	Average
2	3282.533	55.22	-4.04	51.18	74.00	-22.82	Peak
3	4924.000	43.54	-0.08	43.46	54.00	-10.54	Average
4	4924.000	46.52	-0.08	46.44	74.00	-27.56	Peak
5	7386.000	35.53	6.39	41.92	54.00	-12.08	Average
6	7386.000	39.03	6.39	45.42	74.00	-28.58	Peak

Note:

Level = Read Level + Factor

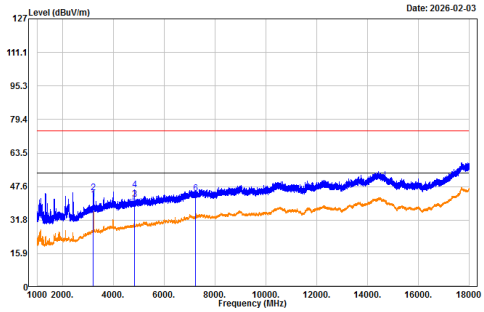
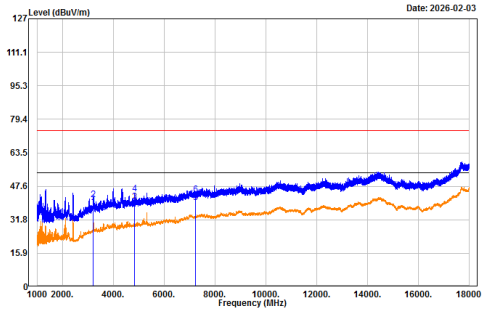
Over Limit = Level – Limit Line

Factor = Antenna Factor + Cable Loss – Amplifier Gain

Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

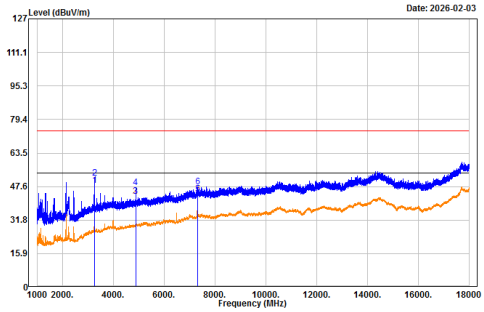
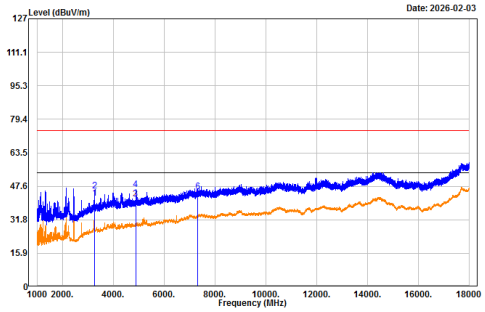
802.11ax HE20 Mode:

1GHz-18GHz:

Horizontal	Vertical
	
Trace: 1 Site : LK-966A Condition: 3m horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 55% Memo : AX20-TX-2412 RBW/VBW : PK: 1M/3M; AV: 1M/3K	Trace: 1 Site : LK-966A Condition: 3m vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 55% Memo : AX20-TX-2412 RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3215.667	46.14	-4.36	41.78	54.00	-12.22	Average
2	3215.667	49.04	-4.36	44.68	74.00	-29.32	Peak
3	4824.000	42.15	-0.56	41.59	54.00	-12.41	Average
4	4824.000	46.75	-0.56	46.19	74.00	-27.81	Peak
5	7236.000	34.89	6.03	40.92	54.00	-13.08	Average
6	7236.000	38.21	6.03	44.24	74.00	-29.76	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3215.667	42.28	-4.36	37.92	54.00	-16.08	Average
2	3215.667	45.51	-4.36	41.15	74.00	-32.85	Peak
3	4824.000	40.69	-0.56	40.13	54.00	-13.87	Average
4	4824.000	44.63	-0.56	44.07	74.00	-29.93	Peak
5	7236.000	33.87	6.03	39.90	54.00	-14.10	Average
6	7236.000	37.58	6.03	43.61	74.00	-30.39	Peak

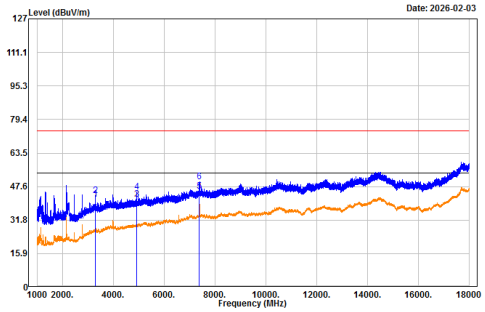
Horizontal	Vertical
	
Trace: 1 Site : LK-966A Condition: 3m horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 55% Memo : AX20-TX-2437 RBW/VBW : PK: 1M/3M; AV: 1M/3K	Trace: 1 Site : LK-966A Condition: 3m vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 55% Memo : AX20-TX-2437 RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3249.100	52.48	-4.15	48.33	54.00	-5.67	Average
2	3249.100	55.77	-4.15	51.62	74.00	-22.38	Peak
3	4874.000	43.31	-0.27	43.04	54.00	-10.96	Average
4	4874.000	47.49	-0.27	47.22	74.00	-26.78	Peak
5	7311.000	37.79	6.27	44.06	54.00	-9.94	Average
6	7311.000	41.31	6.27	47.58	74.00	-26.42	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3249.100	46.22	-4.15	42.07	54.00	-11.93	Average
2	3249.100	49.43	-4.15	45.28	74.00	-28.72	Peak
3	4874.000	42.08	-0.27	41.81	54.00	-12.19	Average
4	4874.000	46.32	-0.27	46.05	74.00	-27.95	Peak
5	7311.000	34.88	6.27	41.15	54.00	-12.85	Average
6	7311.000	38.76	6.27	45.03	74.00	-28.97	Peak

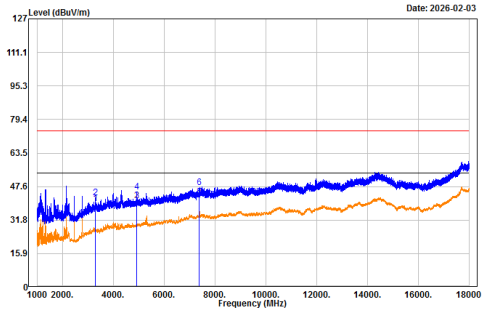
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Horizontal	Vertical



Trace: 1
Site : LK-966A
Condition: 3m horizontal
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 55%
Memo : AX20-TX-2462
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3282.533	45.82	-4.04	41.78	54.00	-12.22	Average
2	3282.533	47.38	-4.04	43.34	74.00	-30.66	Peak
3	4924.000	41.77	-0.08	41.69	54.00	-12.31	Average
4	4924.000	45.25	-0.08	45.17	74.00	-28.83	Peak
5	7386.000	39.01	6.39	45.40	54.00	-8.60	Average
6	7386.000	43.68	6.39	50.07	74.00	-23.93	Peak



Trace: 1
Site : LK-966A
Condition: 3m vertical
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 55%
Memo : AX20-TX-2462
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3282.533	43.62	-4.04	39.58	54.00	-14.42	Average
2	3282.533	46.49	-4.04	42.45	74.00	-31.55	Peak
3	4924.000	41.01	-0.08	40.93	54.00	-13.07	Average
4	4924.000	45.17	-0.08	45.09	74.00	-28.91	Peak
5	7386.000	36.33	6.39	42.72	54.00	-11.28	Average
6	7386.000	40.73	6.39	47.12	74.00	-26.88	Peak

Note:

Level = Read Level + Factor

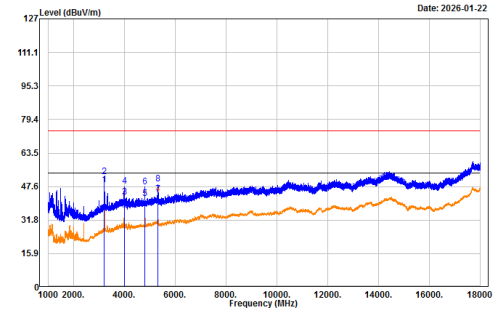
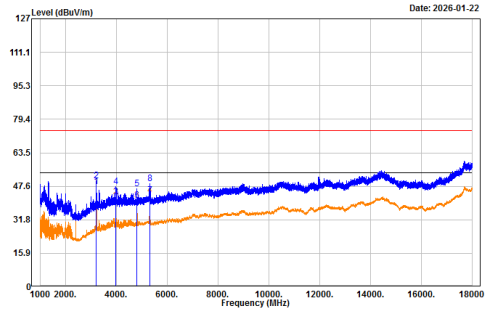
Over Limit = Level – Limit Line

Factor = Antenna Factor + Cable Loss – Amplifier Gain

Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

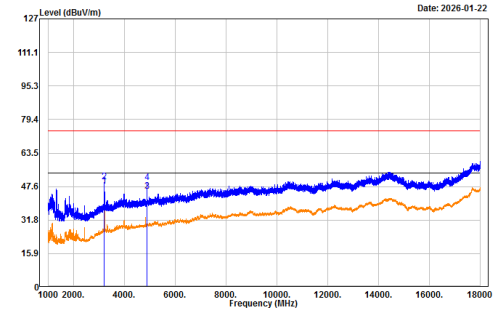
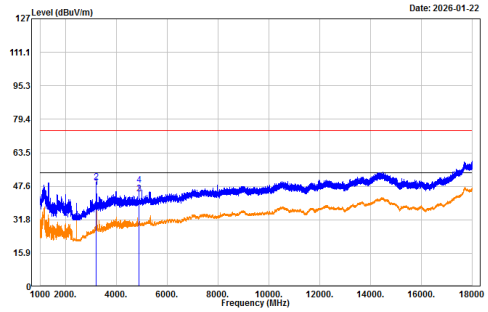
BLE(1M) Mode

1GHz-18GHz:

Horizontal	Vertical
	
Trace: 1 Site : LK-966A Condition: 3m horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 16℃/ 58% Memo : BLE-1M-TX-2402 RBW/VBW : PK: 1M/3M; AV: 1M/3K	Trace: 1 Site : LK-966A Condition: 3m vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 16℃/ 58% Memo : BLE-1M-TX-2402 RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3216.233	53.05	-4.35	48.70	54.00	-5.30	Average
2	3216.233	56.54	-4.35	52.19	74.00	-21.81	Peak
3	3993.700	44.65	-2.01	42.64	54.00	-11.36	Average
4	3993.700	49.74	-2.01	47.73	74.00	-26.27	Peak
5	4804.000	42.82	-0.67	42.15	54.00	-11.85	Average
6	4804.000	48.24	-0.67	47.57	74.00	-26.43	Peak
7	5318.567	43.61	0.55	44.16	54.00	-9.84	Average
8	5318.567	48.47	0.55	49.02	74.00	-24.98	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3215.667	51.84	-4.36	47.48	54.00	-6.52	Average
2	3215.667	54.66	-4.36	50.30	74.00	-23.70	Peak
3	3985.200	44.64	-2.02	42.62	54.00	-11.38	Average
4	3985.200	49.42	-2.02	47.40	74.00	-26.60	Peak
5	4804.000	47.05	-0.67	46.38	74.00	-27.62	Peak
6	4804.033	41.79	-0.67	41.12	54.00	-12.88	Average
7	5310.067	42.69	0.53	43.22	54.00	-10.78	Average
8	5310.067	48.36	0.53	48.89	74.00	-25.11	Peak

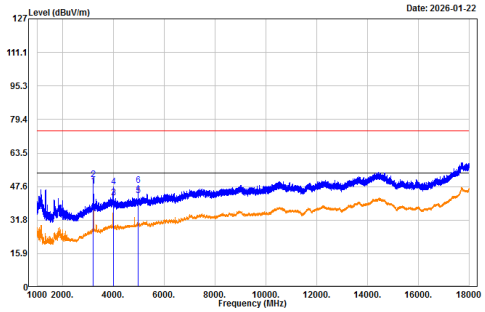
Horizontal	Vertical
	
Trace: 1 Site : LK-966A Condition: 3m horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 16℃/ 58% Memo : BLE-1M-TX-2440 RBW/VBW : PK: 1M/3M; AV: 1M/3K	Trace: 1 Site : LK-966A Condition: 3m vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 16℃/ 58% Memo : BLE-1M-TX-2440 RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3215.667	52.10	-4.36	47.74	54.00	-6.26	Average
2	3215.667	54.41	-4.36	50.05	74.00	-23.95	Peak
3	4880.000	45.54	-0.24	45.30	54.00	-8.70	Average
4	4880.000	49.90	-0.24	49.66	74.00	-24.34	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3215.667	51.61	-4.36	47.25	54.00	-6.75	Average
2	3215.667	53.90	-4.36	49.54	74.00	-24.46	Peak
3	4880.000	44.13	-0.24	43.89	54.00	-10.11	Average
4	4880.000	48.47	-0.24	48.23	74.00	-25.77	Peak

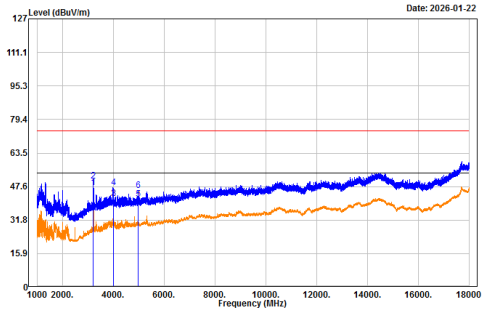
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Horizontal	Vertical



Trace: 1
Site : LK-966A
Condition: 3m horizontal
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 16℃/ 58%
Memo : BLE-1M-TX-2480
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3215.667	52.10	-4.36	47.74	54.00	-6.26	Average
2	3215.667	55.25	-4.36	50.89	74.00	-23.11	Peak
3	3990.300	44.26	-2.01	42.25	54.00	-11.75	Average
4	3990.300	49.38	-2.01	47.37	74.00	-26.63	Peak
5	4960.000	43.32	-0.02	43.30	54.00	-10.70	Average
6	4960.000	48.19	-0.02	48.17	74.00	-25.83	Peak



Trace: 1
Site : LK-966A
Condition: 3m vertical
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 16℃/ 58%
Memo : BLE-1M-TX-2480
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	3215.667	51.46	-4.36	47.10	54.00	-6.90	Average
2	3215.667	54.62	-4.36	50.26	74.00	-23.74	Peak
3	3990.300	44.08	-2.01	42.07	54.00	-11.93	Average
4	3990.300	49.05	-2.01	47.04	74.00	-26.96	Peak
5	4960.000	41.63	-0.02	41.61	54.00	-12.39	Average
6	4960.000	45.94	-0.02	45.92	74.00	-28.08	Peak

Note:

Level = Read Level + Factor

Over Limit = Level – Limit Line

Factor = Antenna Factor + Cable Loss – Amplifier Gain

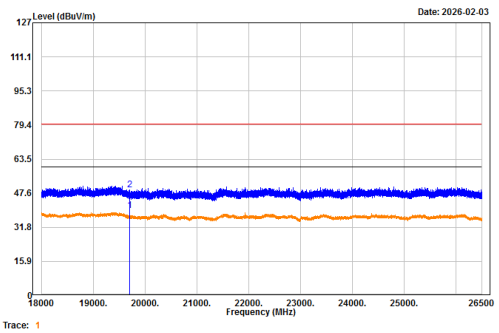
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18GHz-26.5GHz:

(Worst-case power mode)

WiFi 2.4G High channel

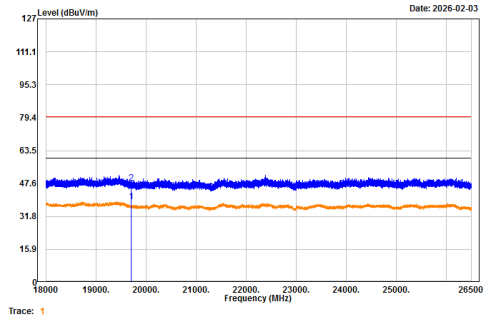
Horizontal



Trace: 1
Site : LK-966A
Condition: 1.5m horizontal
Job No : RLK260119062
Model : RRQ61051-208
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 55%
Memo : N20-TX-2462
RBW/VBW : PK: 1M/3M; AV: 1M/5K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	19696.000	41.02	-1.36	39.66	60.00	-20.34	Average
2	19696.000	50.57	-1.36	49.21	80.00	-30.79	Peak

Vertical

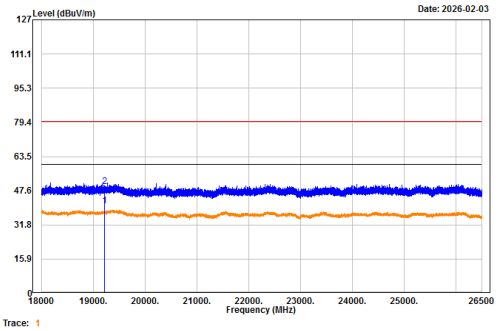


Trace: 1
Site : LK-966A
Condition: 1.5m vertical
Job No : RLK260119062
Model : RRQ61051-208
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 55%
Memo : N20-TX-2462
RBW/VBW : PK: 1M/3M; AV: 1M/5K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	19696.000	40.20	-1.36	38.84	60.00	-21.16	Average
2	19696.000	49.31	-1.36	47.95	80.00	-32.05	Peak

BLE(1M) Low channel

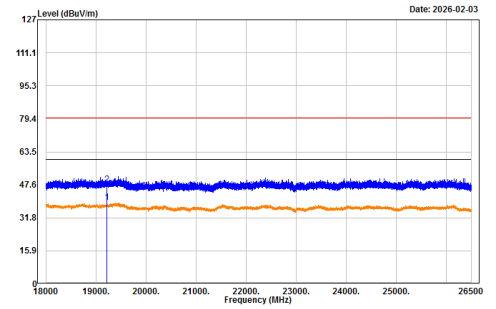
Horizontal



Trace: 1
Site : LK-966A
Condition: 1.5m horizontal
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 55%
Memo : BLE-1M-TX-2402
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	19216.000	41.83	-1.38	40.45	60.00	-19.55	Average
2	19216.000	50.82	-1.38	49.44	80.00	-30.56	Peak

Vertical



Trace: 1
Site : LK-966A
Condition: 1.5m vertical
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 55%
Memo : BLE-1M-TX-2402
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	19216.000	40.65	-1.38	39.27	60.00	-20.73	Average
2	19216.000	49.26	-1.38	47.88	80.00	-32.12	Peak

Note:

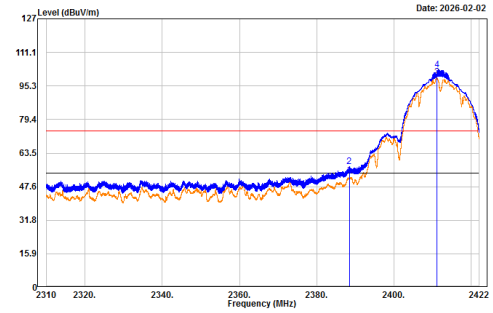
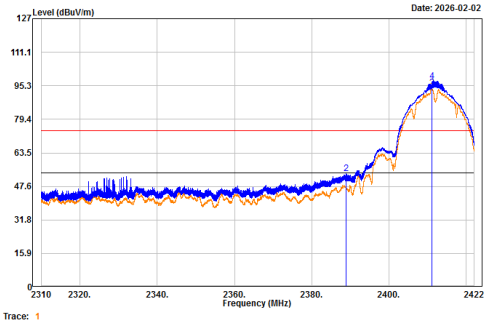
Level = Read Level + Factor
Over Limit = Level – Limit Line
Factor = Antenna Factor + Cable Loss – Amplifier Gain

For 18-26.5GHz Convert the test distance limit of 3 meters to a limit of 1.5 meter:
Conversion factor = 20 log (1.5m/3m) = 6 dB,
Average Limit = 54+6 = 60 dBuV/m@1.5m , Peak Limit = 60+20 = 80 dBuV/m@1.5m

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Band-Edge:

802.11b Mode

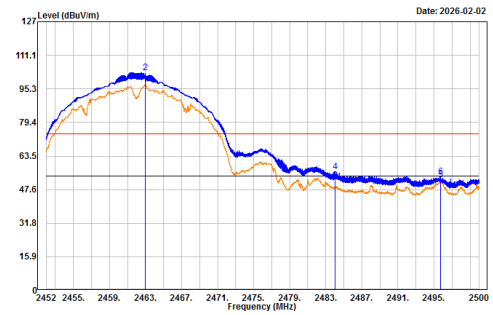
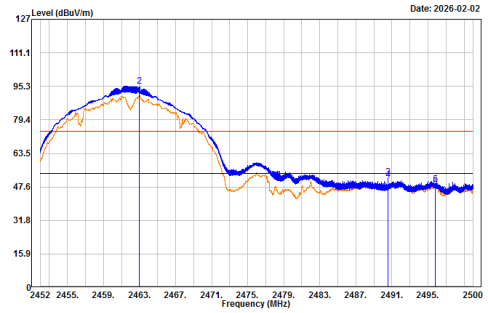
Horizontal	Vertical
	

Trace: 1
Site : LK-966A
Condition: 3m Horizontal
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 53%
Memo : 11B-TX-2412
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2388.396	60.73	-7.65	53.08	54.00	-0.92	Average
2	2388.396	64.67	-7.65	57.02	74.00	-16.98	Peak
3	2411.002	107.02	-7.56	99.46	------	------	Average
4	2411.002	110.37	-7.56	102.81	------	------	Peak

Trace: 1
Site : LK-966A
Condition: 3m Vertical
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 53%
Memo : 11B-TX-2412
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2388.945	56.55	-7.63	48.92	54.00	-5.08	Average
2	2388.945	61.27	-7.63	53.64	74.00	-20.36	Peak
3	2410.983	101.88	-7.56	94.32	------	------	Average
4	2410.983	105.06	-7.56	97.50	------	------	Peak

Horizontal	Vertical
	

Trace: 1
Site : LK-966A
Condition: 3m Horizontal
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 53%
Memo : 11B-TX-2462
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2462.998	104.70	-7.41	97.29	------	------	Average
2	2462.998	110.37	-7.41	102.96	------	------	Peak
3	2484.050	59.38	-7.34	52.04	54.00	-1.96	Average
4	2484.050	63.46	-7.34	56.12	74.00	-17.88	Peak
5	2495.731	59.58	-7.29	52.29	54.00	-1.71	Average
6	2495.731	61.07	-7.29	53.78	74.00	-20.22	Peak

Trace: 1
Site : LK-966A
Condition: 3m Vertical
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 18℃/ 53%
Memo : 11B-TX-2462
RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2463.005	98.22	-7.41	90.81	------	------	Average
2	2463.005	102.87	-7.41	95.46	------	------	Peak
3	2490.531	59.50	-7.31	52.19	54.00	-1.81	Average
4	2490.531	58.27	-7.31	50.96	74.00	-23.04	Peak
5	2495.800	56.08	-7.29	48.79	54.00	-5.21	Average
6	2495.800	55.20	-7.29	47.91	74.00	-26.09	Peak

Note:

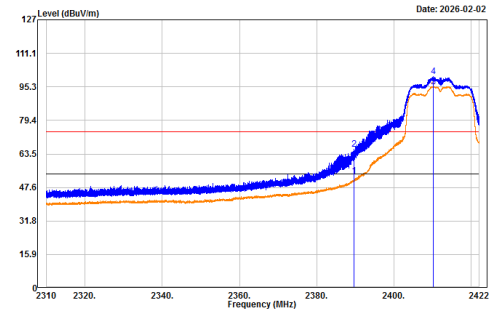
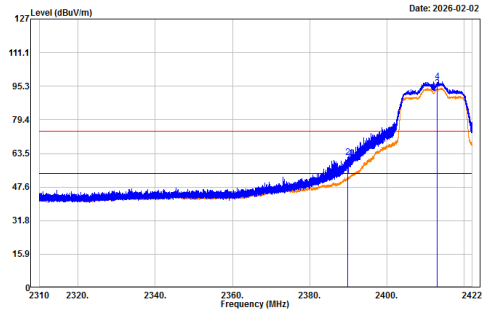
Level = Read Level + Factor

Over Limit = Level – Limit Line

Factor = Antenna Factor + Cable Loss – Amplifier Gain

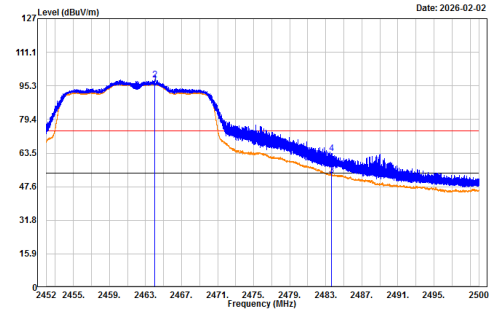
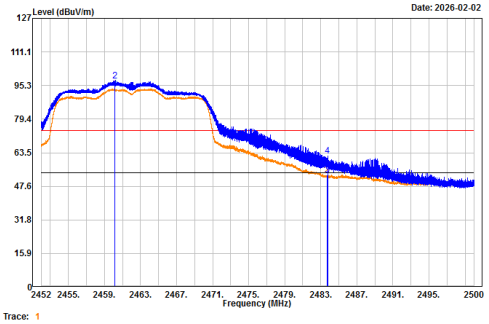
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802.11g Mode

Horizontal	Vertical
	
Trace: 1 Site : LK-966A Condition: 3m Horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : 11G-TX-2412 RBW/VBW : PK: 1M/3M; AV: 1M/3K	Trace: 1 Site : LK-966A Condition: 3m Vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : 11G-TX-2412 RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2389.654	60.78	-7.63	53.15	54.00	-0.85	Average
2	2389.654	73.26	-7.63	65.63	74.00	-8.37	Peak
3	2410.165	103.05	-7.56	95.49	------	------	Average
4	2410.165	107.75	-7.56	100.19	------	------	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2389.725	60.57	-7.63	52.94	54.00	-1.06	Average
2	2389.725	69.35	-7.63	61.72	74.00	-12.28	Peak
3	2412.917	102.01	-7.54	94.47	------	------	Average
4	2412.917	104.79	-7.54	97.25	------	------	Peak

Horizontal	Vertical
	
Trace: 1 Site : LK-966A Condition: 3m Horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : 11G-TX-2462 RBW/VBW : PK: 1M/3M; AV: 1M/3K	Trace: 1 Site : LK-966A Condition: 3m Vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : 11G-TX-2462 RBW/VBW : PK: 1M/3M; AV: 1M/3K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2464.058	103.38	-7.41	95.97	------	------	Average
2	2464.058	105.64	-7.41	98.23	------	------	Peak
3	2483.594	60.40	-7.34	53.06	54.00	-0.94	Average
4	2483.594	70.83	-7.34	63.49	74.00	-10.51	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2460.131	101.04	-7.44	93.60	------	------	Average
2	2460.131	104.85	-7.44	97.41	------	------	Peak
3	2483.742	60.32	-7.34	52.98	54.00	-1.02	Average
4	2483.742	69.13	-7.34	61.79	74.00	-12.21	Peak

Note:

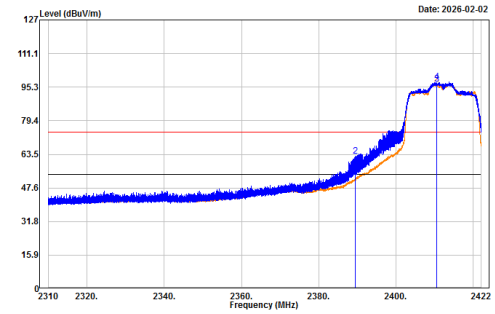
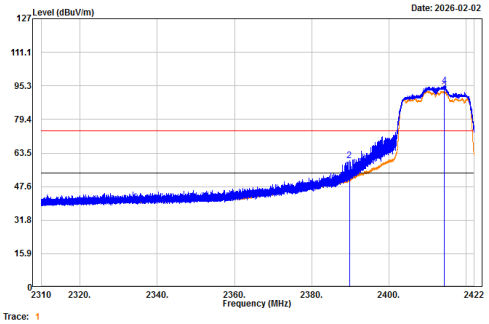
Level = Read Level + Factor

Over Limit = Level – Limit Line

Factor = Antenna Factor + Cable Loss – Amplifier Gain

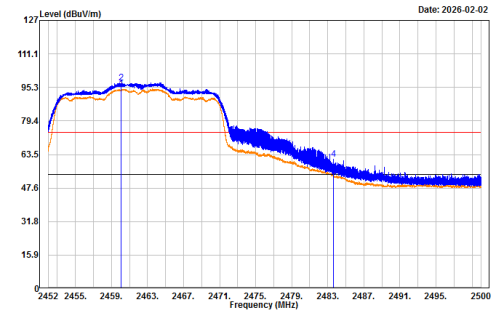
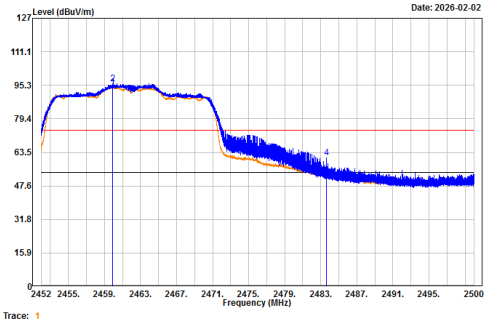
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802.11n HT20 Mode

Horizontal	Vertical
	
Trace: 1 Site : LK-966A Condition: 3m Horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : N20-TX-2412 RBW/VBW : PK: 1M/3M; AV: 1M/5K	Trace: 1 Site : LK-966A Condition: 3m Vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : N20-TX-2412 RBW/VBW : PK: 1M/3M; AV: 1M/5K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2389.378	60.62	-7.63	52.99	54.00	-1.01	Average
2	2389.378	70.20	-7.63	62.57	74.00	-11.43	Peak
3	2410.419	104.20	-7.56	96.64	------	------	Average
4	2410.419	105.15	-7.56	97.59	------	------	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2389.718	58.72	-7.63	51.09	54.00	-2.91	Average
2	2389.718	67.60	-7.63	59.97	74.00	-14.03	Peak
3	2414.257	100.20	-7.54	92.66	------	------	Average
4	2414.257	102.81	-7.54	95.27	------	------	Peak

Horizontal	Vertical
	
Trace: 1 Site : LK-966A Condition: 3m Horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : N20-TX-2462 RBW/VBW : PK: 1M/3M; AV: 1M/5K	Trace: 1 Site : LK-966A Condition: 3m Vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : N20-TX-2462 RBW/VBW : PK: 1M/3M; AV: 1M/5K

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2460.099	102.12	-7.44	94.68	------	------	Average
2	2460.099	104.99	-7.44	97.55	------	------	Peak
3	2483.629	60.49	-7.34	53.15	54.00	-0.85	Average
4	2483.629	68.59	-7.34	61.25	74.00	-12.75	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2459.941	101.89	-7.44	94.45	------	------	Average
2	2459.941	103.62	-7.44	96.18	------	------	Peak
3	2483.634	59.53	-7.34	52.19	54.00	-1.81	Average
4	2483.634	68.36	-7.34	61.02	74.00	-12.98	Peak

Note:

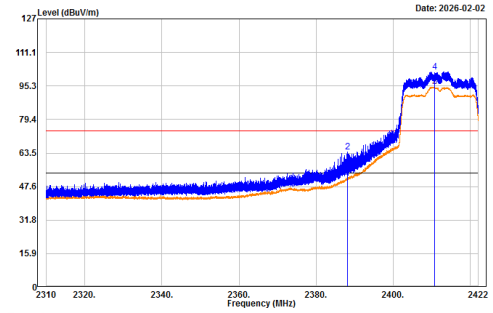
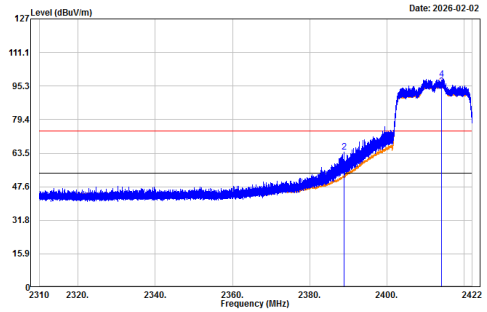
Level = Read Level + Factor

Over Limit = Level – Limit Line

Factor = Antenna Factor + Cable Loss – Amplifier Gain

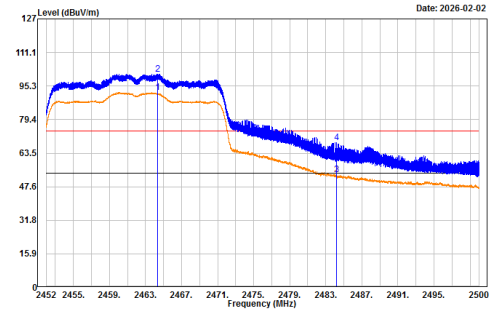
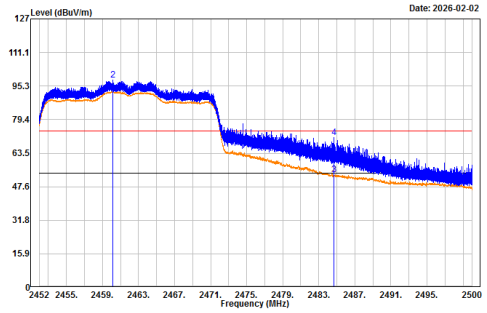
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802.11ax HE20 Mode

Horizontal	Vertical
	
Trace: 1 Site : LK-966A Condition: 3m Horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : AX20-TX-2412 RBW/VBW : PK: 1M/3M; AV: 1M/10Hz	Trace: 1 Site : LK-966A Condition: 3m Vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : AX20-TX-2412 RBW/VBW : PK: 1M/3M; AV: 1M/10Hz

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2388.053	60.70	-7.65	53.05	54.00	-0.95	Average
2	2388.053	71.54	-7.65	63.89	74.00	-10.11	Peak
3	2410.625	102.38	-7.56	94.82	------	------	Average
4	2410.625	109.49	-7.56	101.93	------	------	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2388.829	60.38	-7.63	52.75	54.00	-1.25	Average
2	2388.829	71.60	-7.63	63.97	74.00	-10.03	Peak
3	2414.041	102.62	-7.54	95.08	------	------	Average
4	2414.041	106.13	-7.54	98.59	------	------	Peak

Horizontal	Vertical
	
Trace: 1 Site : LK-966A Condition: 3m Horizontal Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : AX20-TX-2462 RBW/VBW : PK: 1M/3M; AV: 1M/10Hz	Trace: 1 Site : LK-966A Condition: 3m Vertical Job No : RLK260119062 Model : RRQ61051-408 Power : From Test Development Board. Tester : Yue Temp./ Hum.: 18℃/ 53% Memo : AX20-TX-2462 RBW/VBW : PK: 1M/3M; AV: 1M/10Hz

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2464.346	99.67	-7.41	92.26	------	------	Average
2	2464.346	108.29	-7.41	100.88	------	------	Peak
3	2484.154	60.73	-7.34	53.39	54.00	-0.61	Average
4	2484.154	75.92	-7.34	68.58	74.00	-5.42	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2460.146	100.10	-7.44	92.66	------	------	Average
2	2460.146	105.60	-7.44	98.16	------	------	Peak
3	2484.659	60.60	-7.34	53.26	54.00	-0.74	Average
4	2484.659	78.41	-7.34	71.07	74.00	-2.93	Peak

Note:

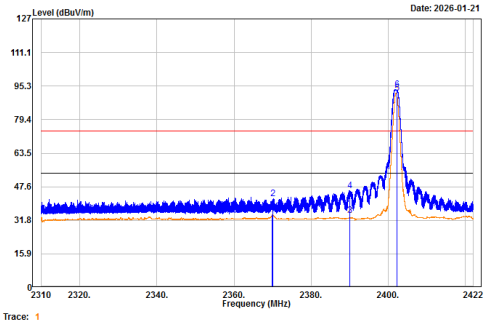
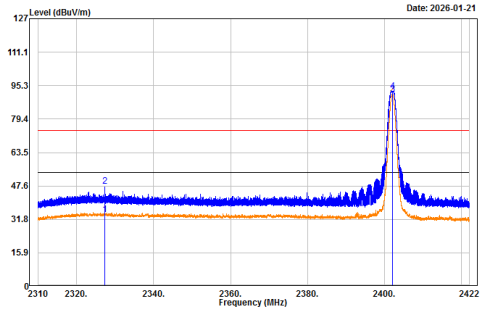
Level = Read Level + Factor

Over Limit = Level – Limit Line

Factor = Antenna Factor + Cable Loss – Amplifier Gain

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BLE(1M) Mode

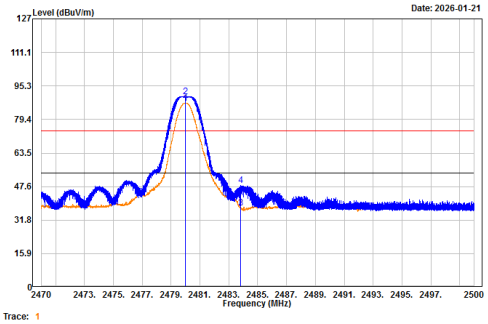
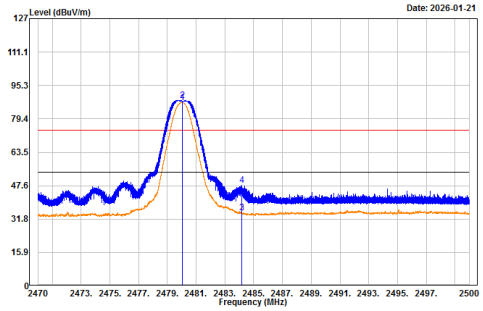
Horizontal	Vertical
	

Trace: 1
Site : LK-966A
Condition: 3m Horizontal
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 17℃/ 52%
Memo : BLE-1M-TX-2402
RBW/VBW : PK: 1M/3M; AV: 1M/10Hz

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2369.905	42.14	-7.76	34.38	54.00	-19.62	Average
2	2369.965	49.79	-7.76	42.03	74.00	-31.97	Peak
3	2389.919	41.68	-7.63	34.05	54.00	-19.95	Average
4	2389.919	53.47	-7.63	45.84	74.00	-28.16	Peak
5	2402.266	99.63	-7.57	92.06	------	------	Average
6	2402.266	101.06	-7.57	93.49	------	------	Peak

Trace: 1
Site : LK-966A
Condition: 3m Vertical
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 17℃/ 52%
Memo : BLE-1M-TX-2402
RBW/VBW : PK: 1M/3M; AV: 1M/10Hz

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2327.293	42.33	-8.11	34.22	54.00	-19.78	Average
2	2327.293	55.72	-8.11	47.61	74.00	-26.39	Peak
3	2402.023	98.82	-7.57	91.25	------	------	Average
4	2402.023	100.08	-7.57	92.51	------	------	Peak

Horizontal	Vertical
	

Trace: 1
Site : LK-966A
Condition: 3m Horizontal
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 17℃/ 52%
Memo : BLE-1M-TX-2480
RBW/VBW : PK: 1M/3M; AV: 1M/10Hz

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2480.006	94.56	-7.35	87.21	------	------	Average
2	2480.006	97.43	-7.35	90.08	------	------	Peak
3	2483.808	44.92	-7.34	37.58	54.00	-16.42	Average
4	2483.808	55.43	-7.34	48.09	74.00	-25.91	Peak

Trace: 1
Site : LK-966A
Condition: 3m Vertical
Job No : RLK260119062
Model : RRQ61051-408
Power : From Test Development Board.
Tester : Yue
Temp./ Hum.: 17℃/ 52%
Memo : BLE-1M-TX-2480
RBW/VBW : PK: 1M/3M; AV: 1M/10Hz

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2480.025	94.51	-7.35	87.16	------	------	Average
2	2480.025	95.39	-7.35	88.04	------	------	Peak
3	2484.163	42.16	-7.34	34.82	54.00	-19.18	Average
4	2484.163	55.14	-7.34	47.80	74.00	-26.20	Peak

Note:

Level = Read Level + Factor

Over Limit = Level – Limit Line

Factor = Antenna Factor + Cable Loss – Amplifier Gain

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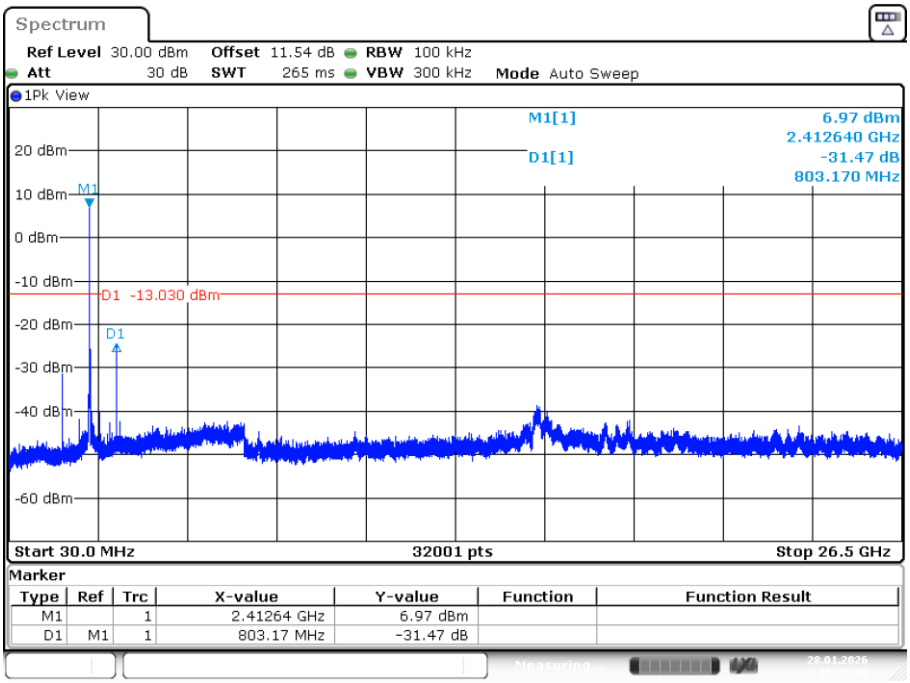
Conducted Spurious Emissions:

Channel	Frequency (MHz)	Delta Peak to Band Emission (dBc)	Limit (dBc)	Result
b Mode				
Low	2412	31.47	≥ 20	PASS
Mid	2437	32.44	≥ 20	PASS
High	2462	32.52	≥ 20	PASS
g Mode				
Low	2412	34.40	≥ 20	PASS
Mid	2437	32.93	≥ 20	PASS
High	2462	33.27	≥ 20	PASS
n20 Mode				
Low	2412	36.94	≥ 20	PASS
Mid	2437	32.51	≥ 20	PASS
High	2462	35.90	≥ 20	PASS
ax20 Mode				
Low	2412	33.30	≥ 20	PASS
Mid	2437	29.15	≥ 20	PASS
High	2462	32.61	≥ 20	PASS
BLE(1M) Mode				
Low	2402	38.50	≥ 20	PASS
Mid	2440	39.19	≥ 20	PASS
High	2480	38.09	≥ 20	PASS

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b Mode

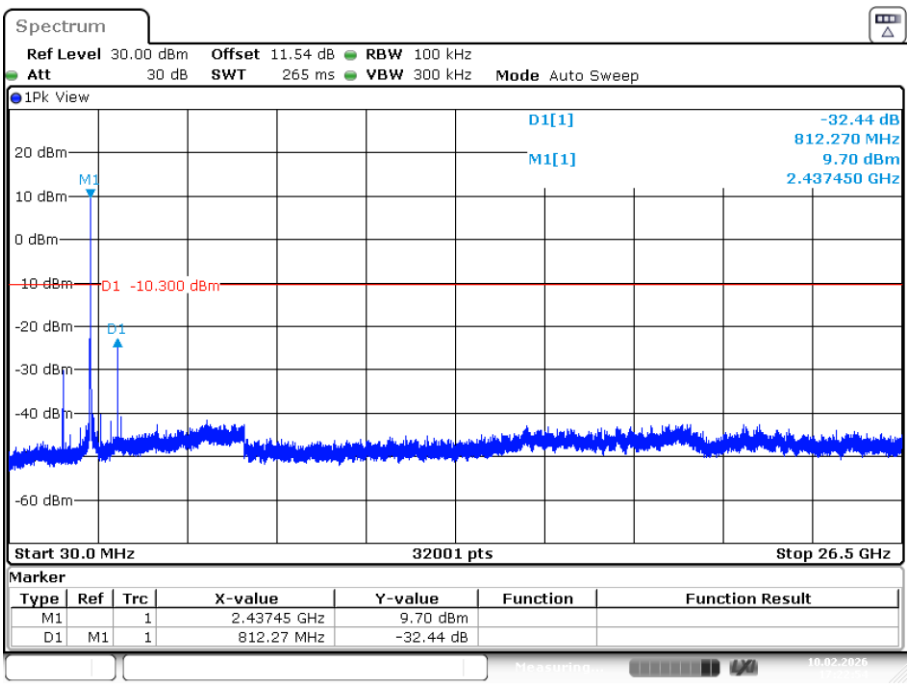
Low Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 10:29:36

Middle Channel

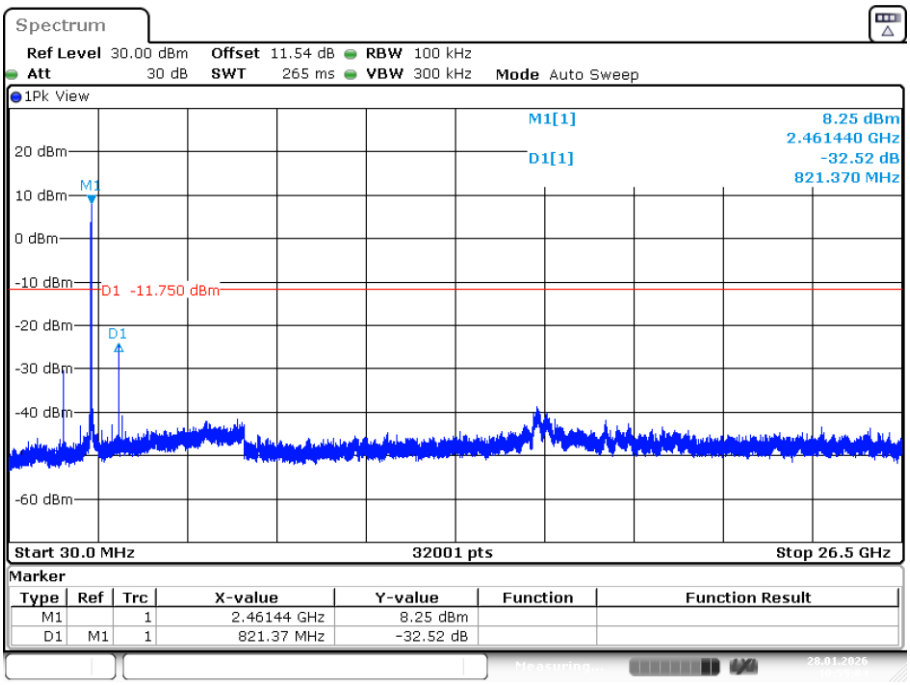


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 17:22:54

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High Channel

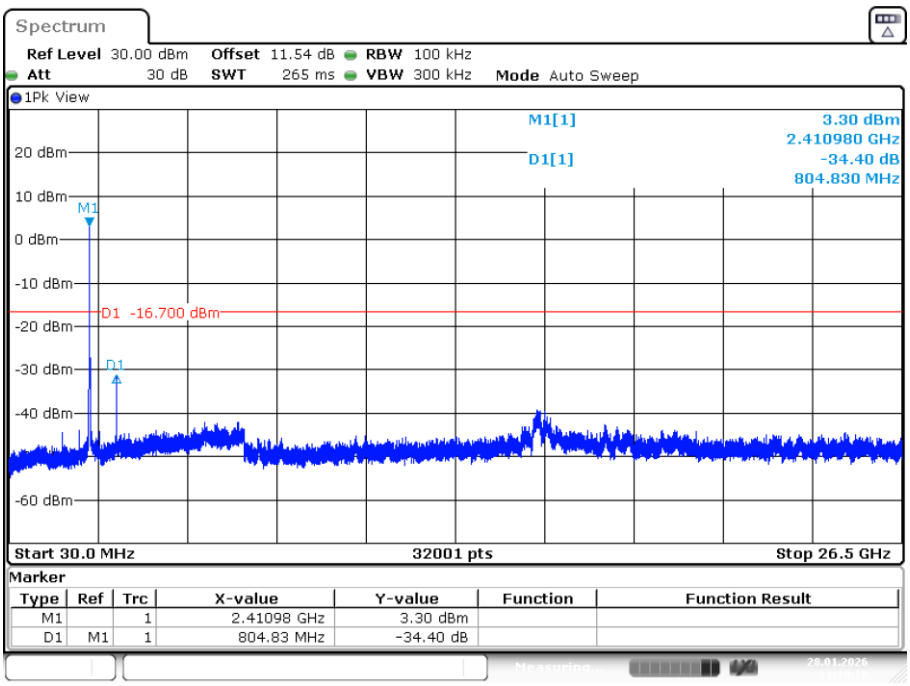


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 10:55:04

g Mode

Low Channel

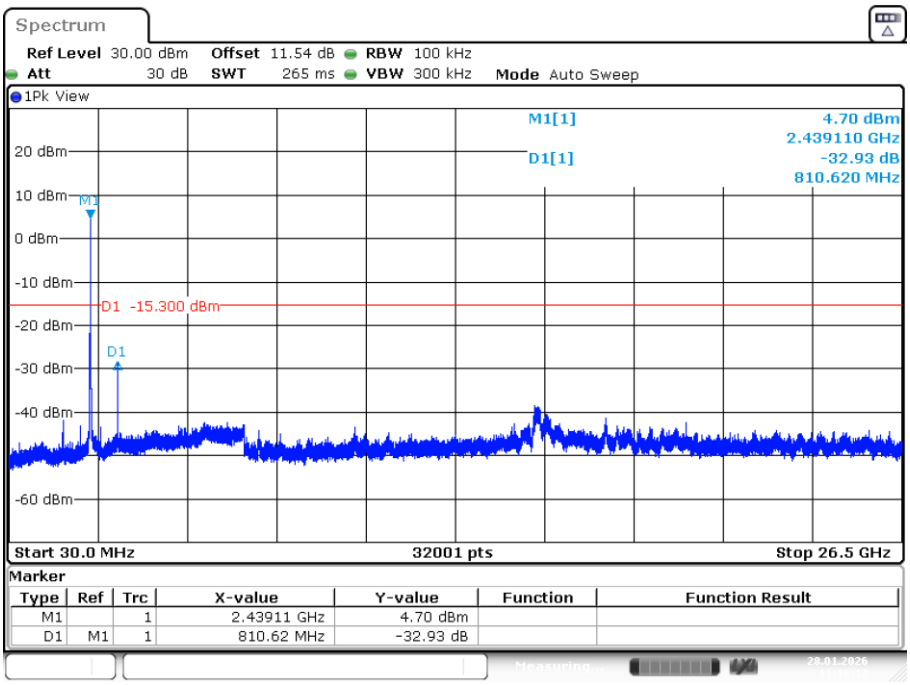


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Date: 28.JAN.2026 11:10:19

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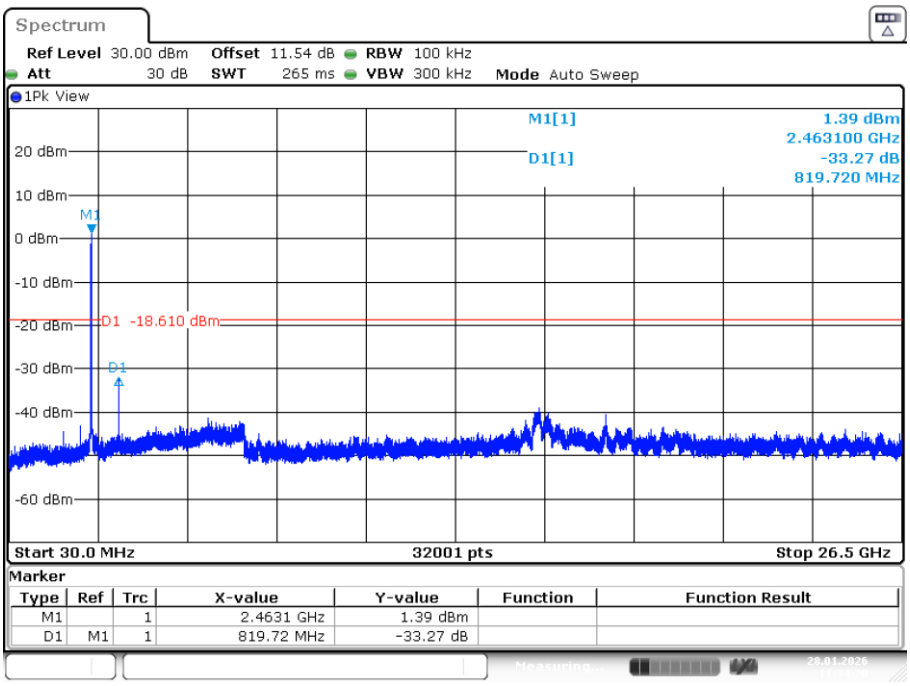
Middle Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 11:16:12

High Channel



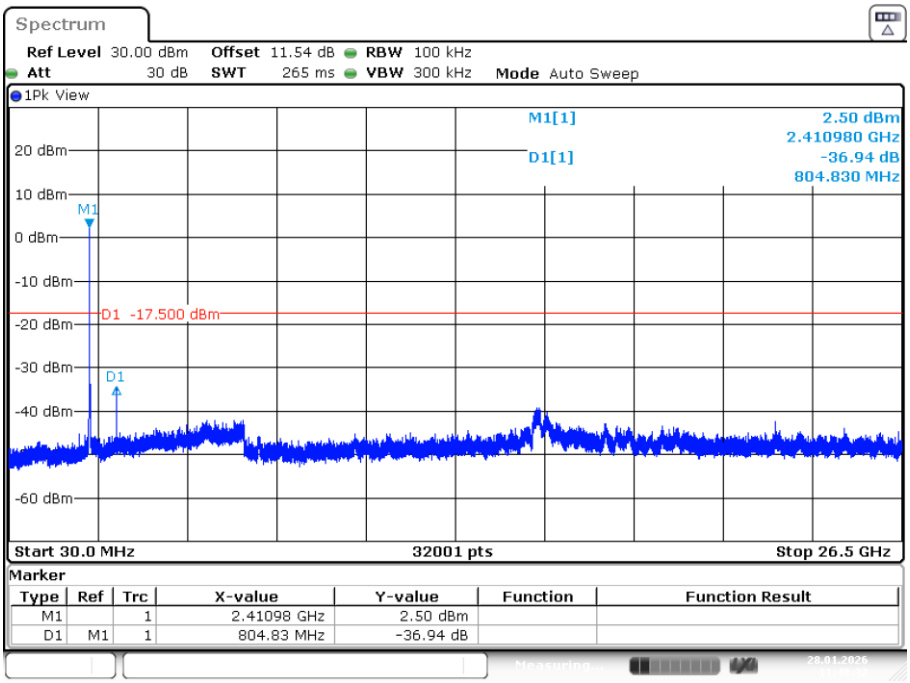
ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 11:34:20

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n20 Mode

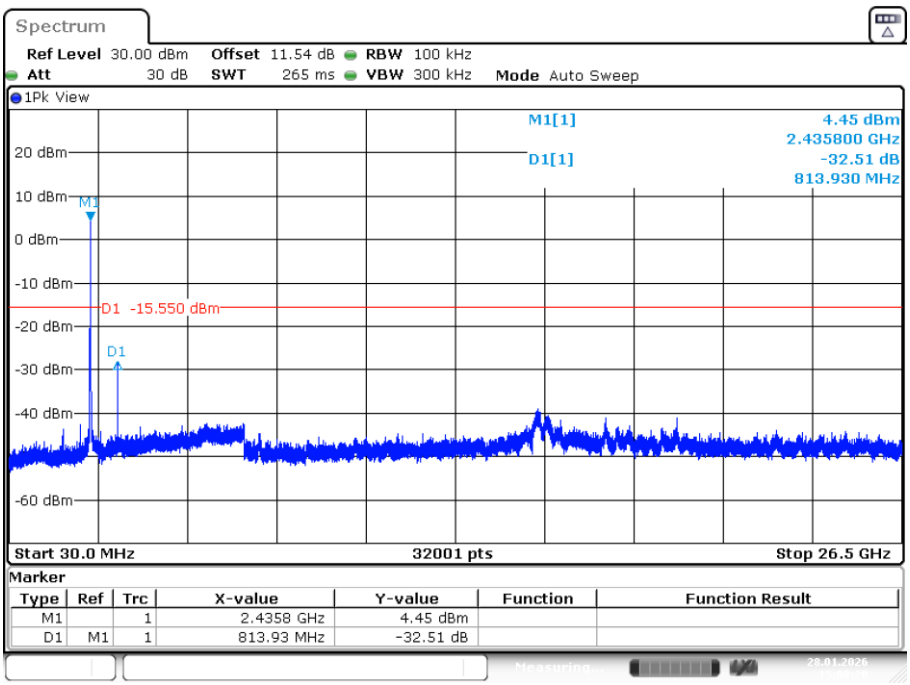
Low Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 11:48:32

Middle Channel

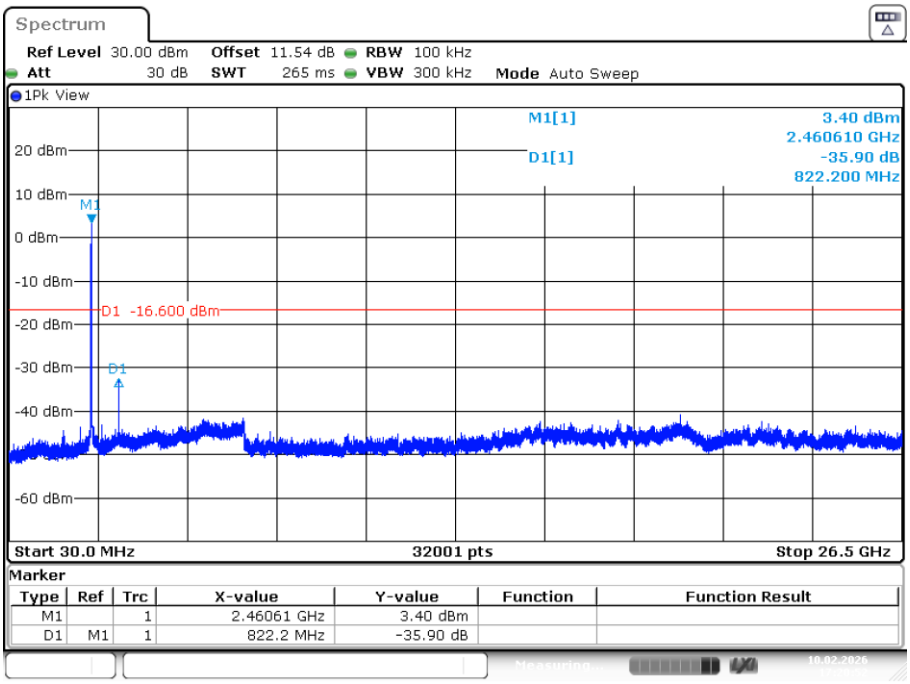


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 15:08:20

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High Channel

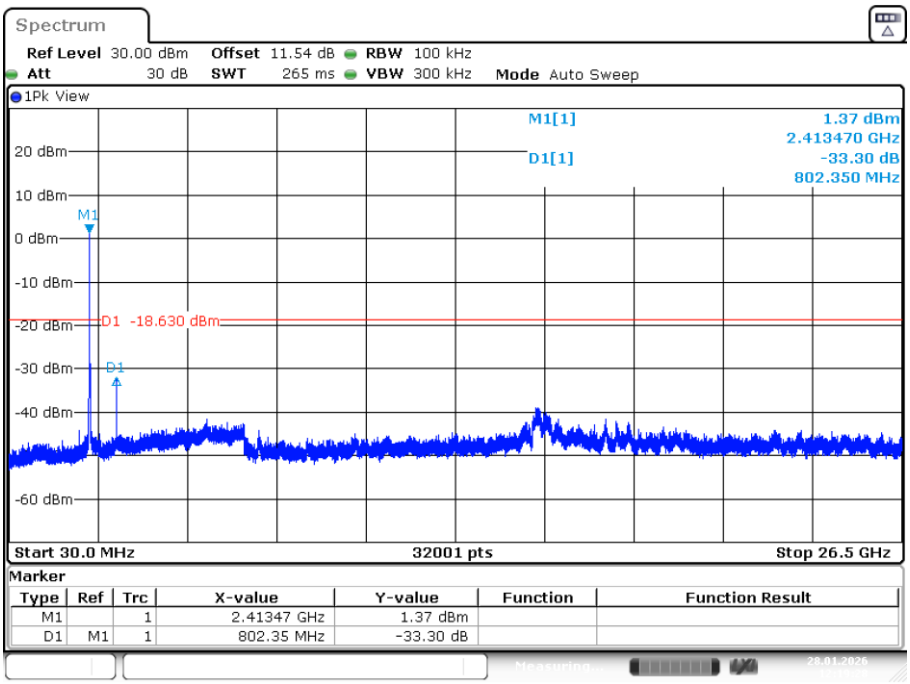


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 17:20:53

ax20 Mode

Low Channel

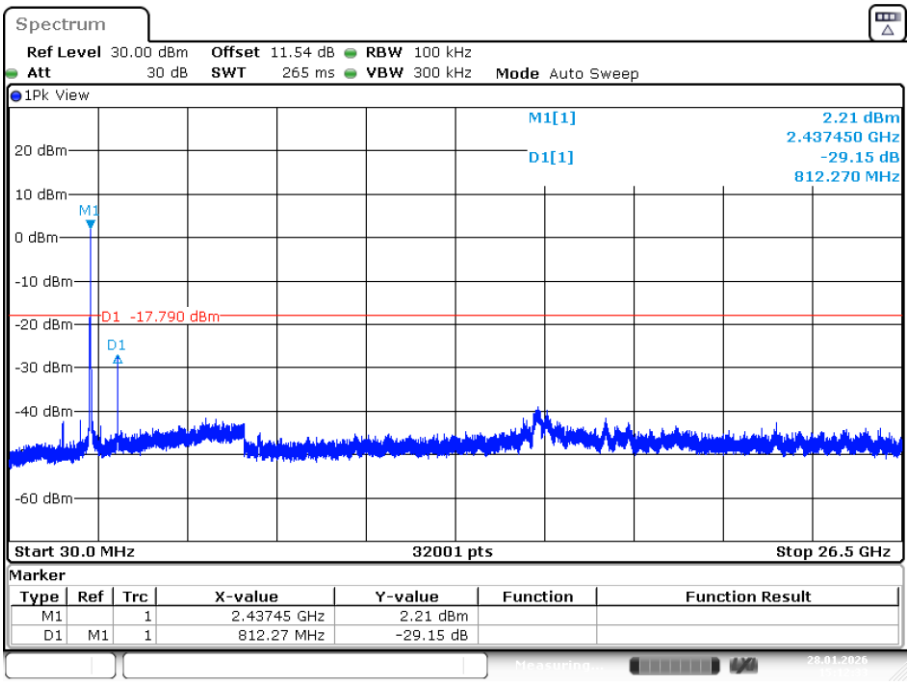


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 12:19:28

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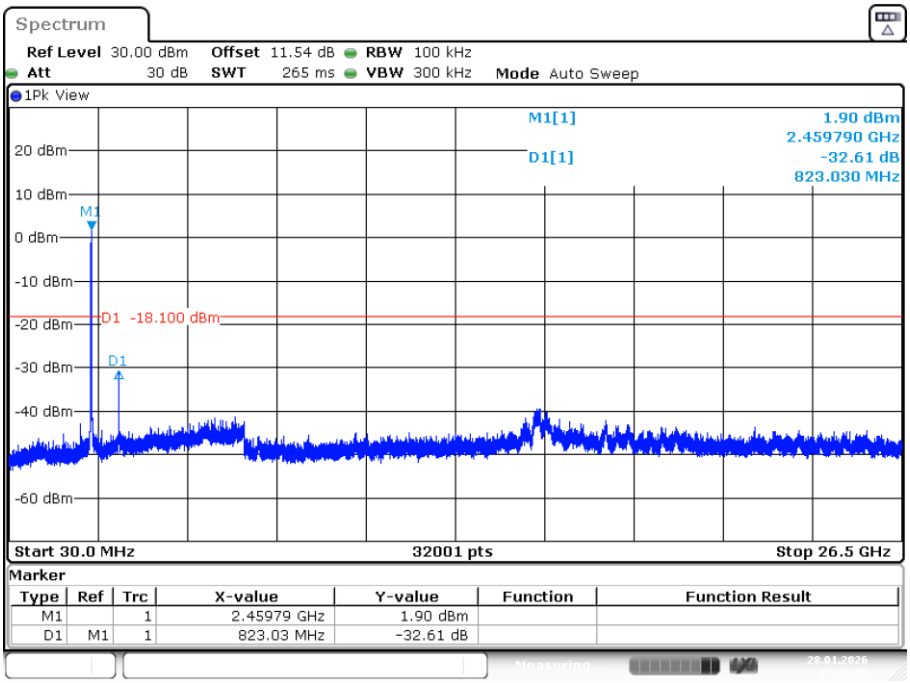
Middle Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 15:12:34

High Channel



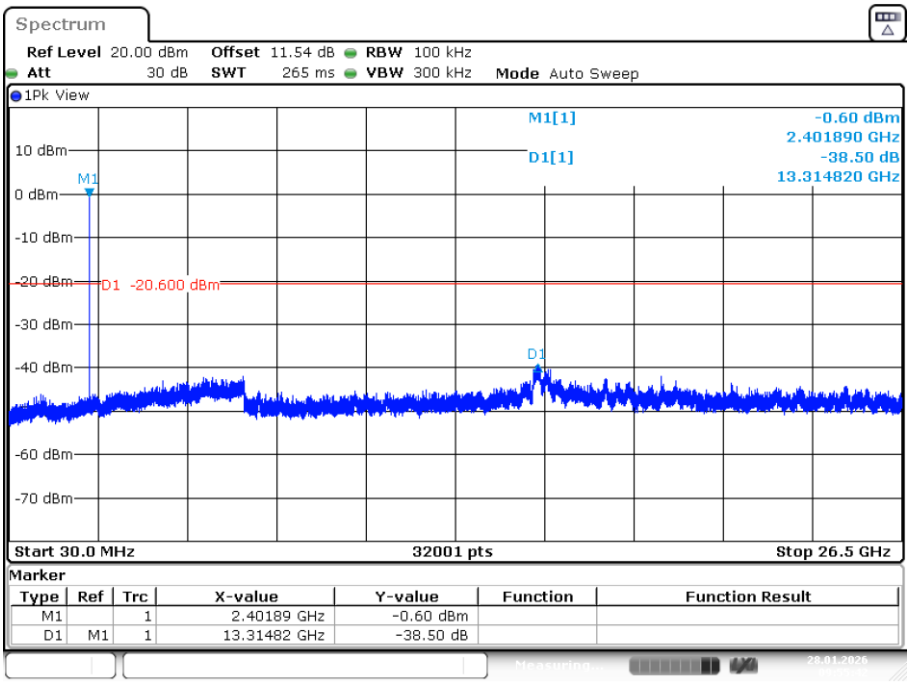
ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 12:53:16

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BLE (1M) Mode

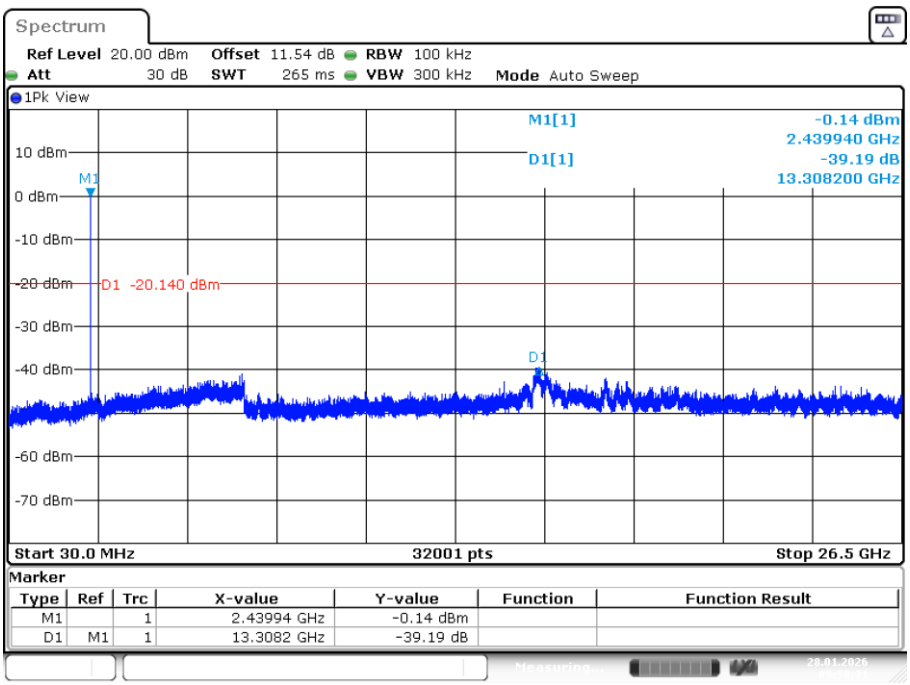
Low Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 09:55:42

Middle Channel

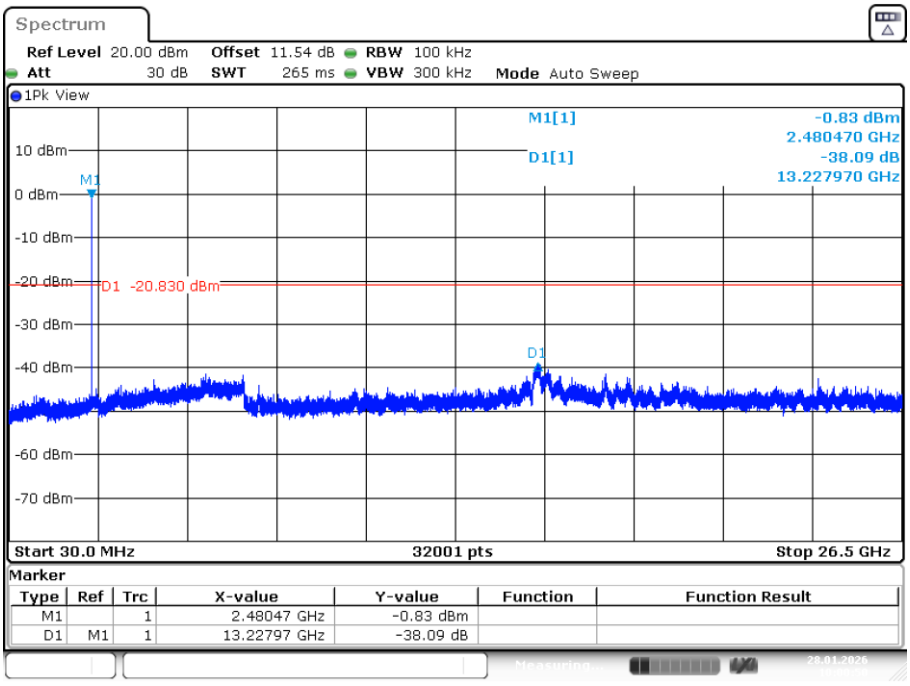


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 09:58:32

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High Channel



ProjectNo.:RLK260119062 Tester:Alan Huang
Date: 28.JAN.2026 10:00:50

8 FCC §15.247(a)(2) – 6 dB Emission Bandwidth And Occupied Bandwidth

8.1 Applicable Standard

According to FCC §15.247(a)(2).

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.

8.2 Test Procedure

For – 6 dB Emission Bandwidth:

According to ANSI C63.10-2020+Cor.1-2023 ,section 11.8

The steps for the first option are as follows:

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 ≥ [3 × 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.

For 99% Occupied Bandwidth

According to ANSI C63.10-2020+Cor.1-2023 ,section 6.9.3

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

The following procedure shall be used for measuring 99% power bandwidth:

a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be at least three times the RBW, unless otherwise specified by the applicable requirement.

c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.6.2.

d) Step a) through step c) might require iteration to adjust within the specified range.

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e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max-hold mode (until the trace stabilizes) shall be used.
f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
h) The occupied bandwidth shall be reported by providing spectral plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

8.3 Test Results

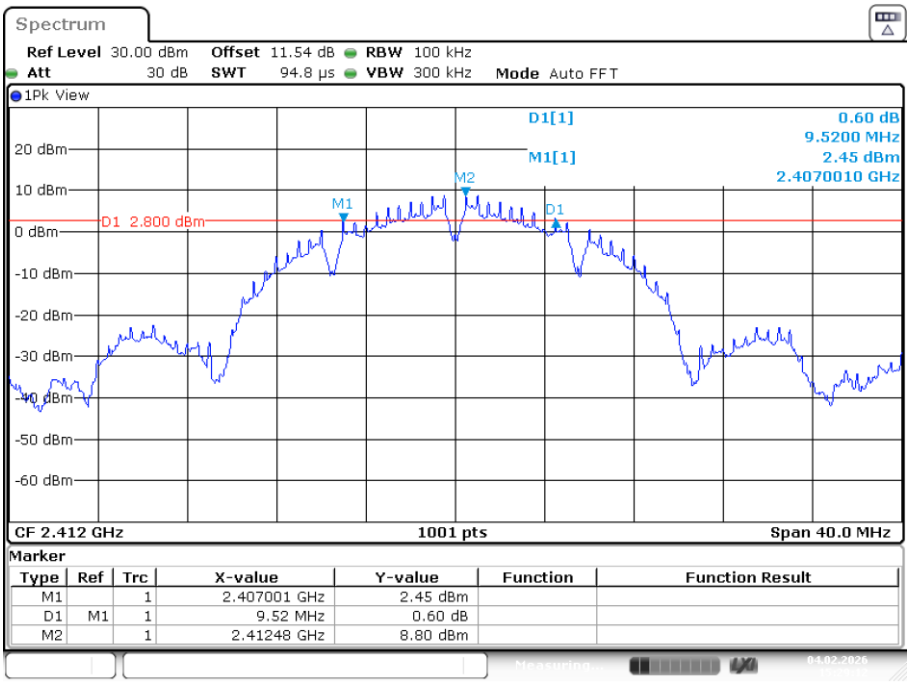
Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	99% Emission Bandwidth (MHz)	Limit (kHz)	Result
b Mode					
Low	2412	9.52	15.94	> 500	PASS
Middle	2437	5.08	13.99	> 500	PASS
High	2462	9.51	15.14	> 500	PASS
g Mode					
Low	2412	16.30	16.86	> 500	PASS
Middle	2437	15.98	17.06	> 500	PASS
High	2462	15.90	16.62	> 500	PASS
n20 Mode					
Low	2412	17.18	17.66	> 500	PASS
Middle	2437	16.86	18.26	> 500	PASS
High	2462	17.10	17.66	> 500	PASS
ax20 Mode					
Low	2412	18.50	18.90	> 500	PASS
Middle	2437	18.50	19.50	> 500	PASS
High	2462	18.35	18.94	> 500	PASS
BLE(1M) Mode					
Low	2402	0.74	1.05	> 500	PASS
Middle	2440	0.75	1.05	> 500	PASS
High	2480	0.75	1.05	> 500	PASS

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6db Bandwidth:

b Mode

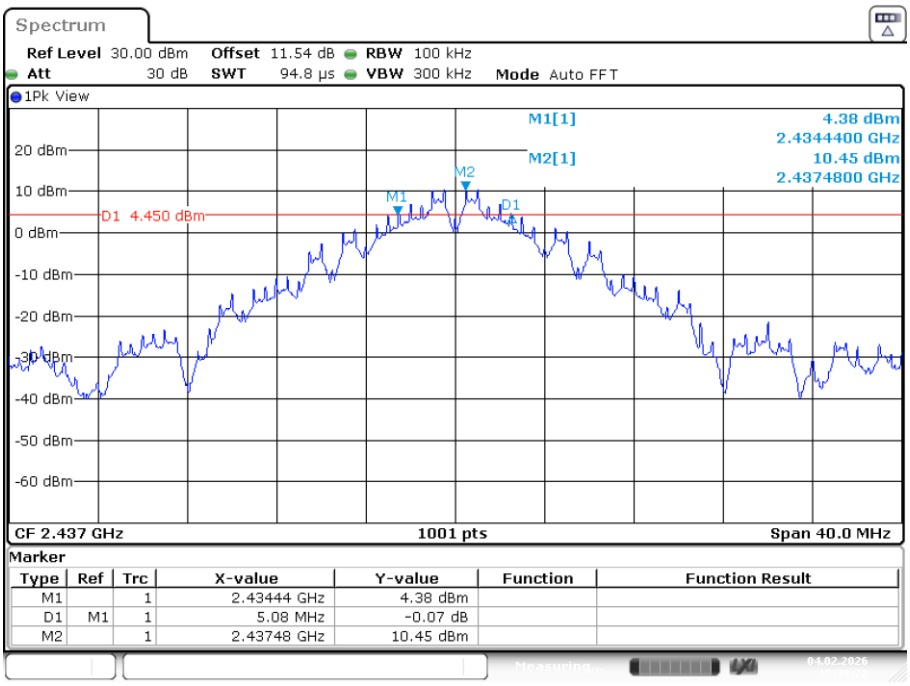
Low Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 15:29:12

Middle Channel

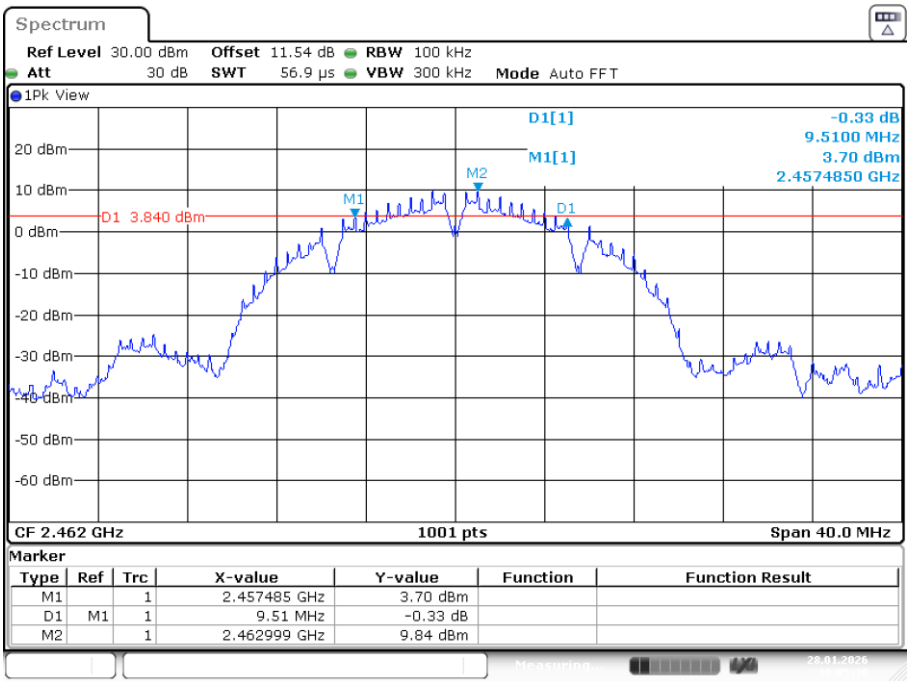


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 15:39:22

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High Channel

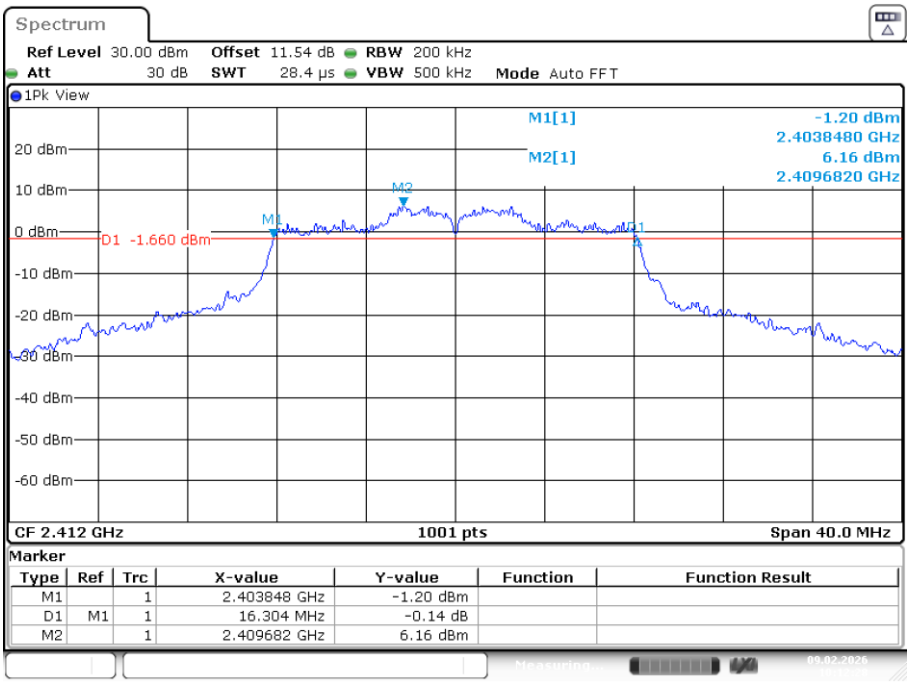


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 10:05:30

g Mode

Low Channel

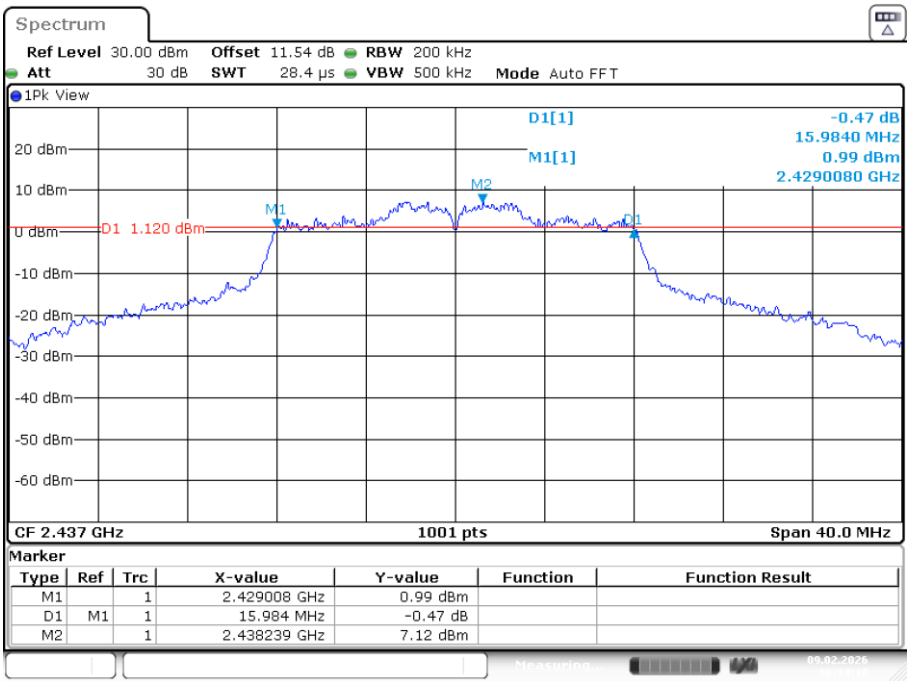


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 10:12:28

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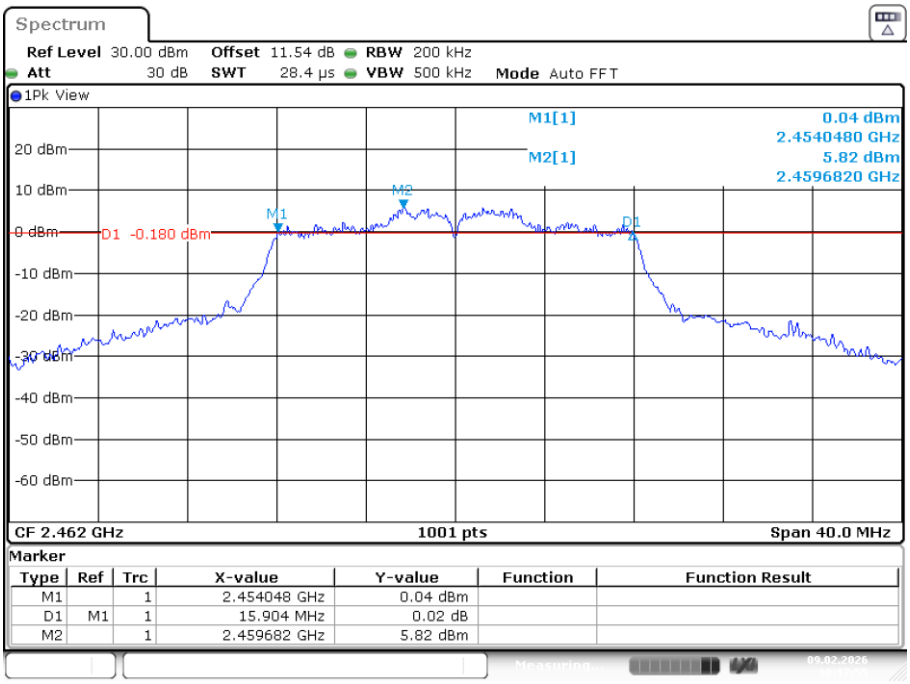
Middle Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 10:14:18

High Channel



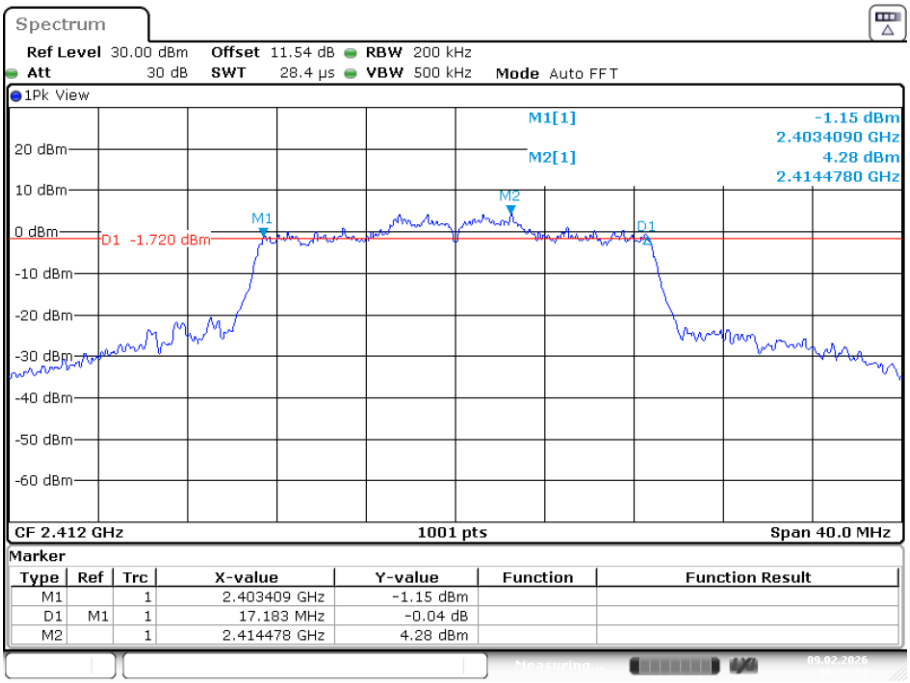
ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 10:17:56

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n20 Mode

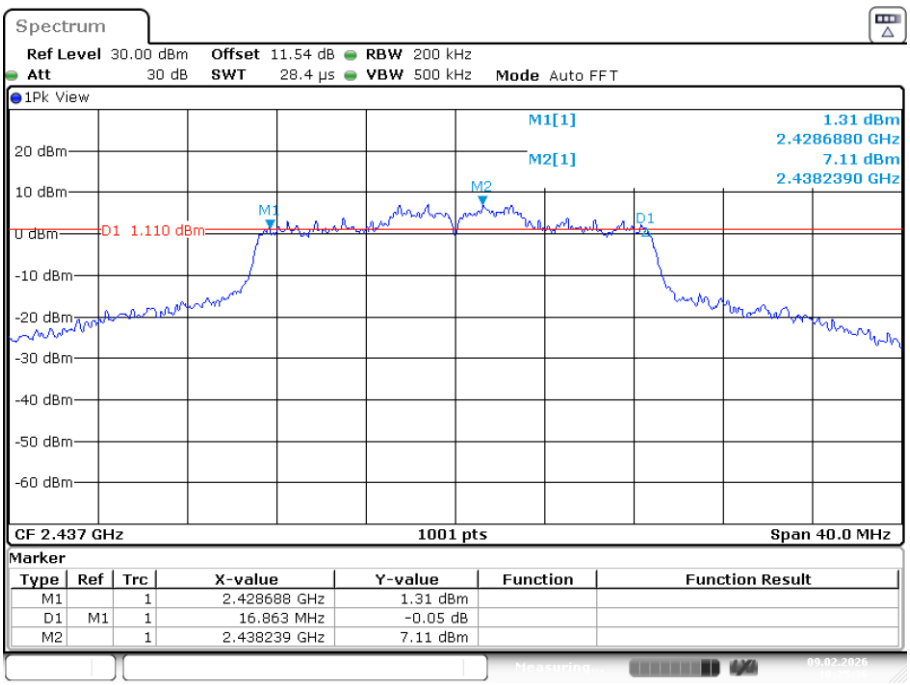
Low Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 10:20:13

Middle Channel

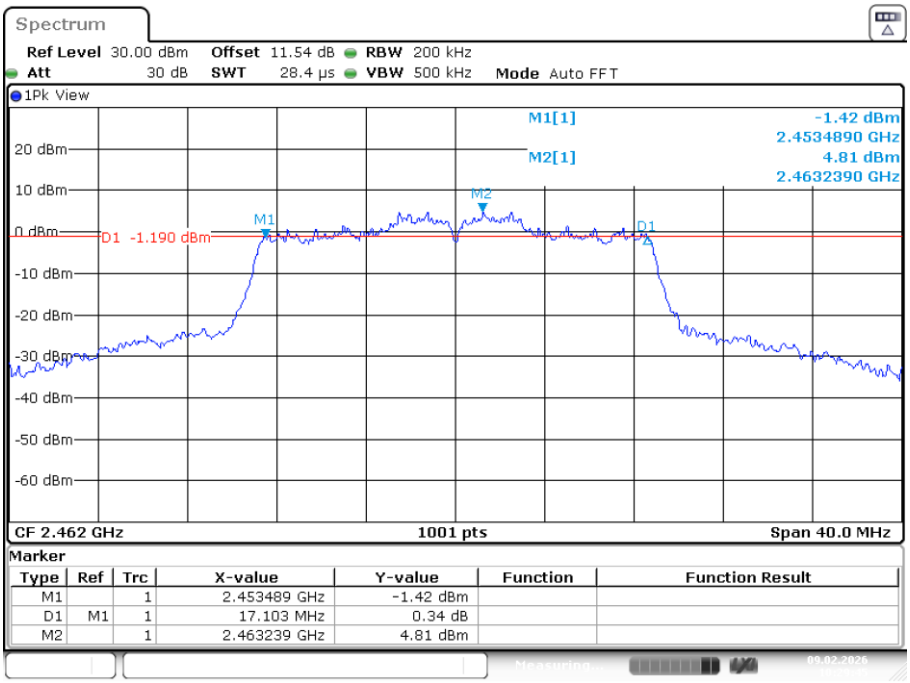


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 10:25:37

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High Channel

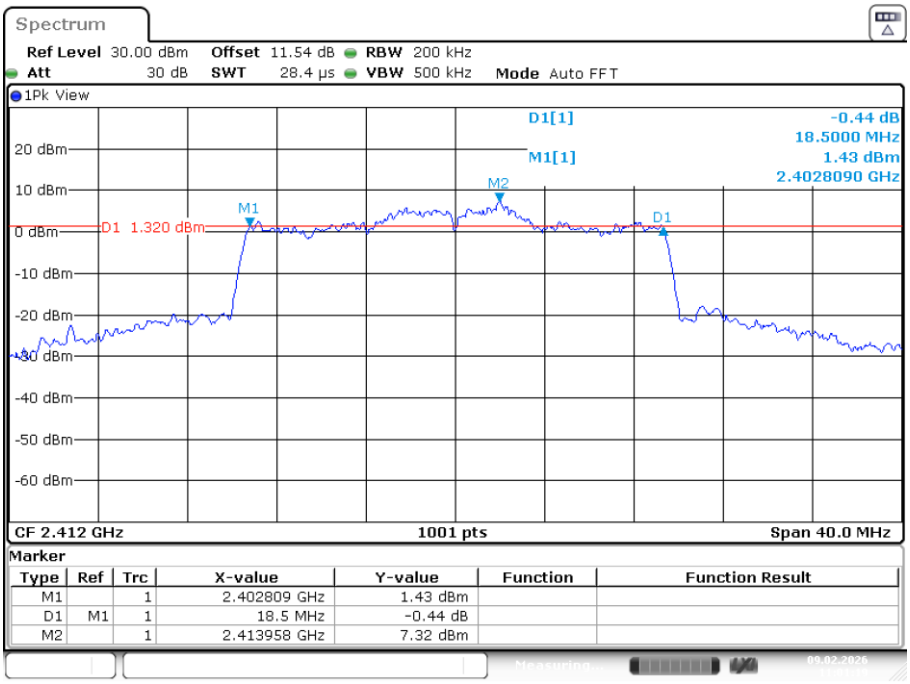


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 10:29:46

ax20 Mode

Low Channel

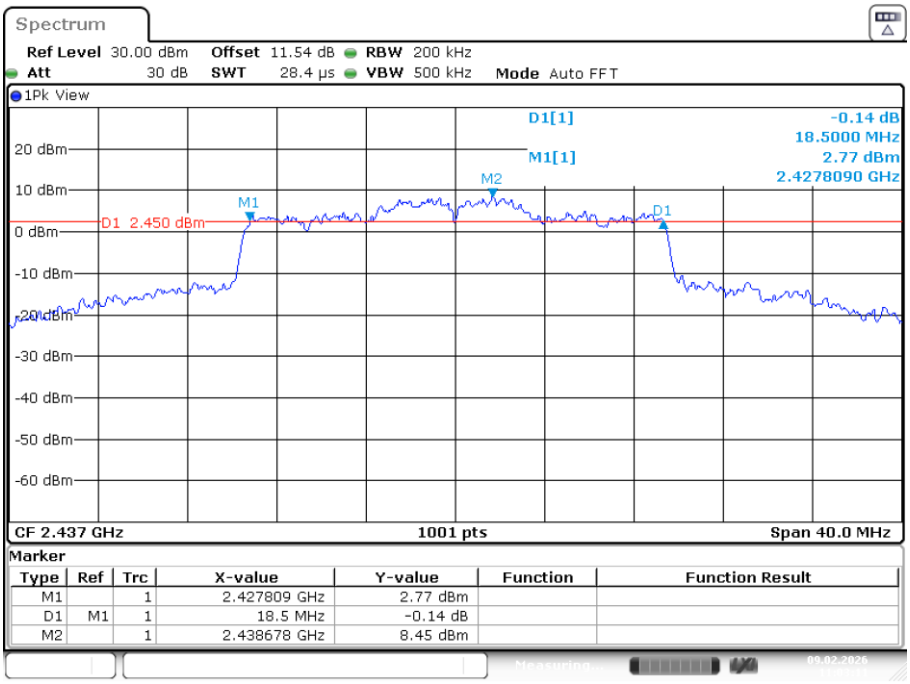


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 11:01:20

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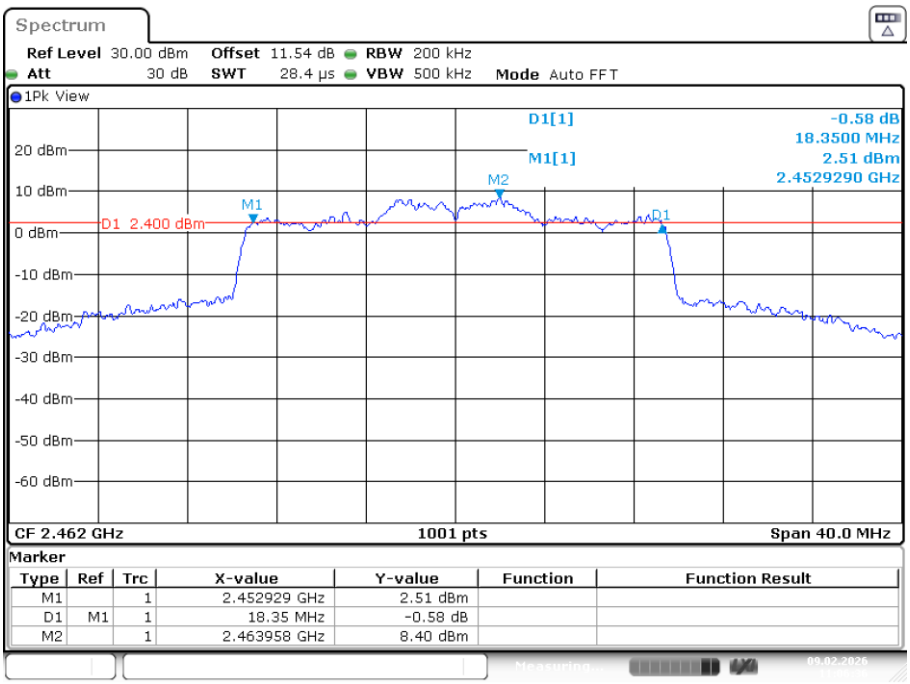
Middle Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 11:03:11

High Channel



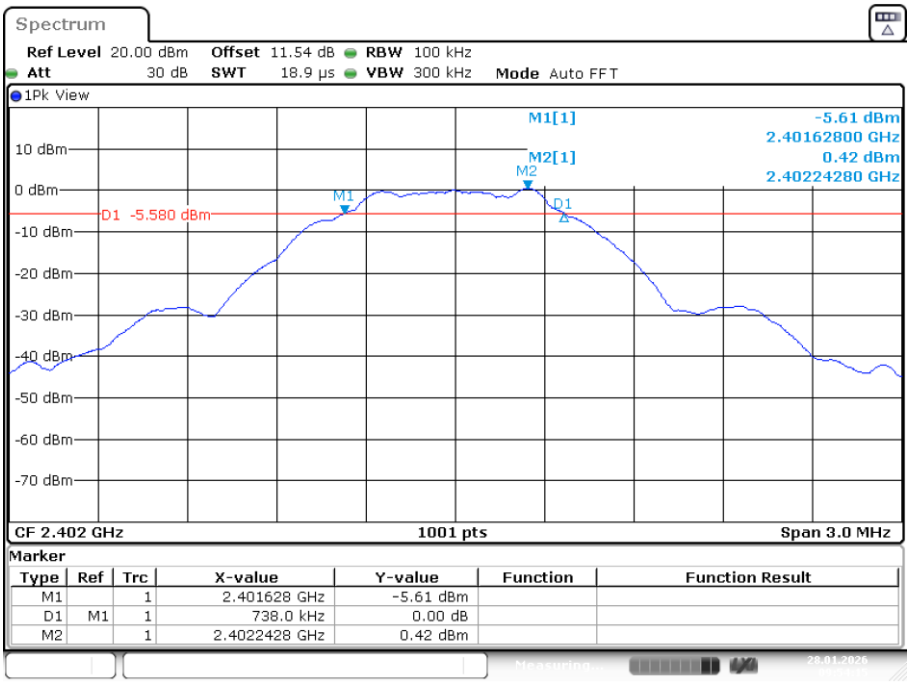
ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 11:06:36

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BLE (1M) Mode

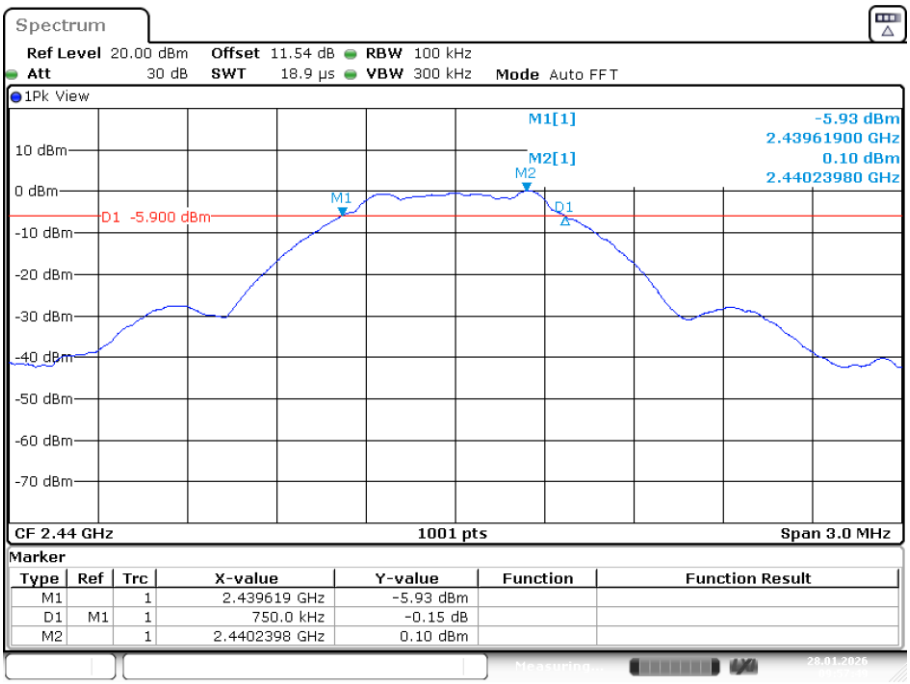
Low Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 09:54:15

Middle Channel

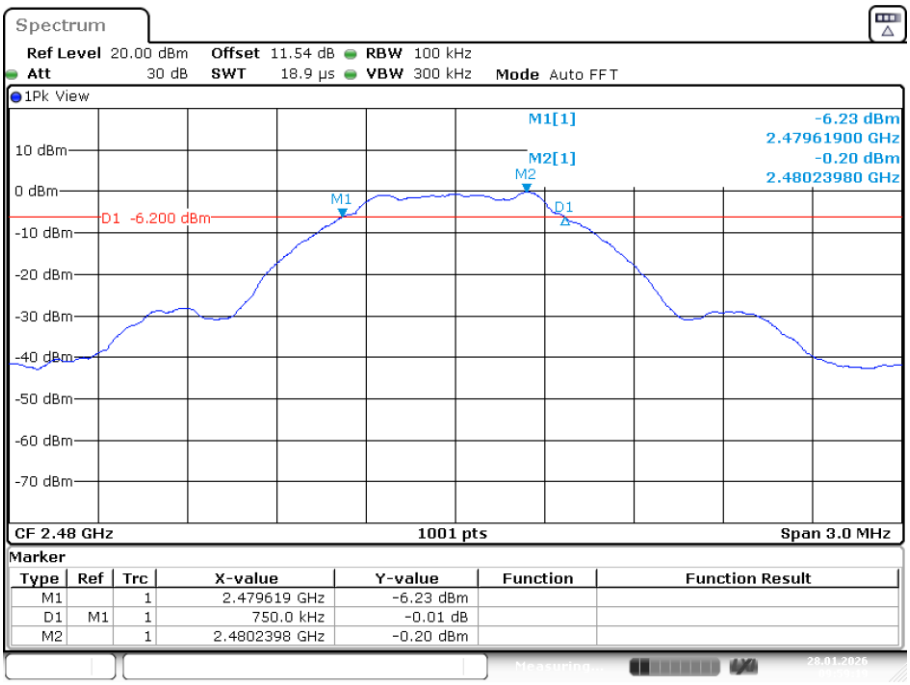


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 09:57:49

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High Channel



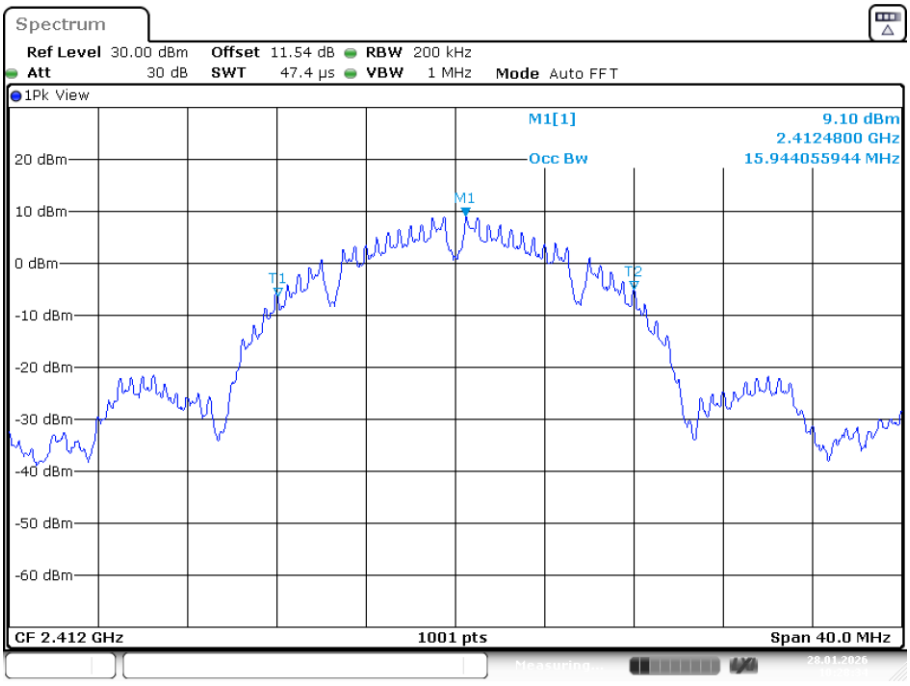
ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 09:59:19

99% Occupied Bandwidth:

b Mode

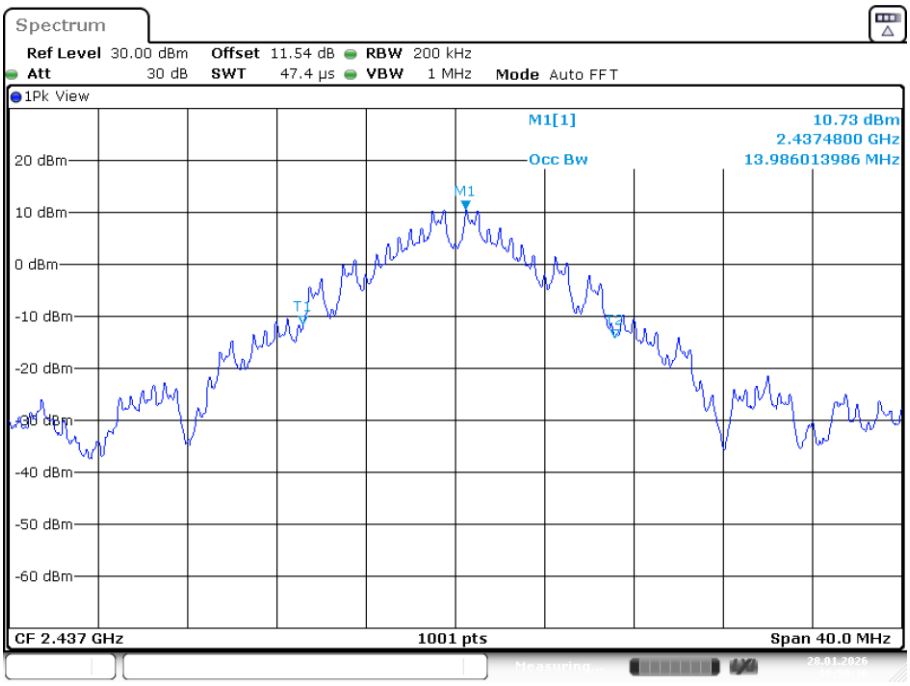
Low Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 10:28:34

Middle Channel

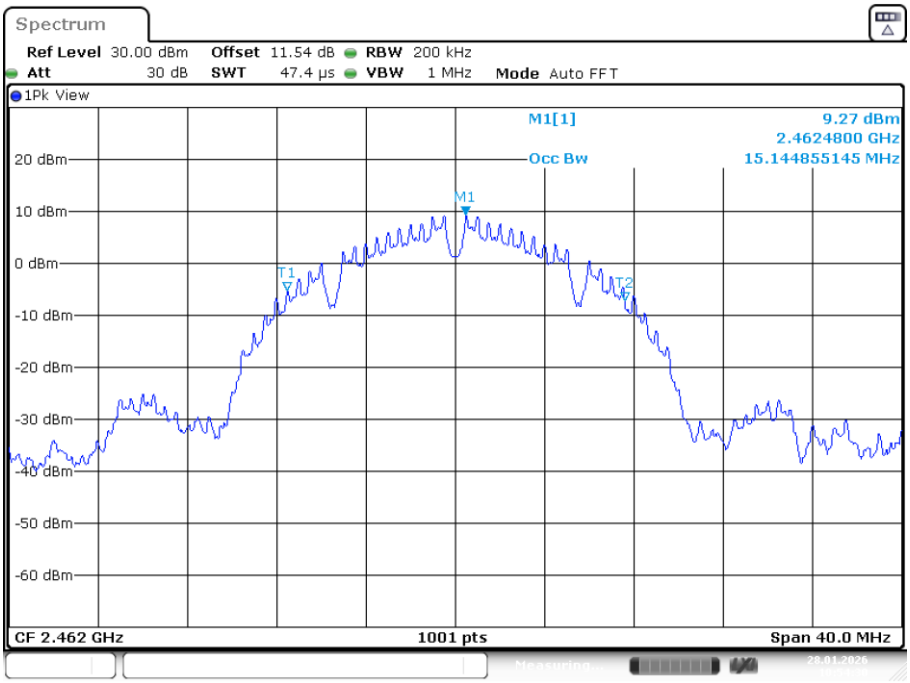


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 10:50:37

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High Channel

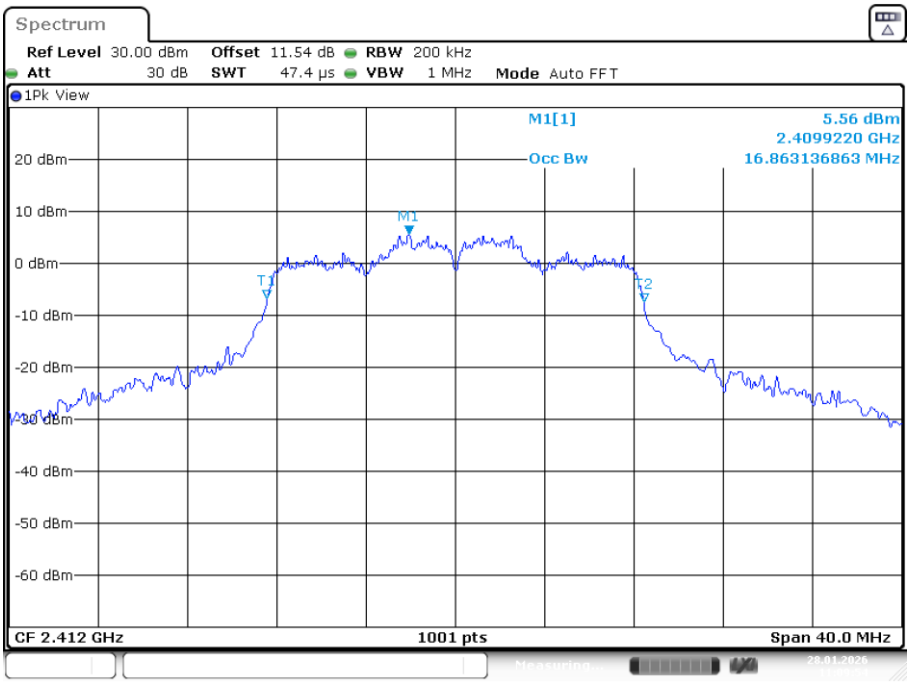


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 10:54:30

g Mode

Low Channel

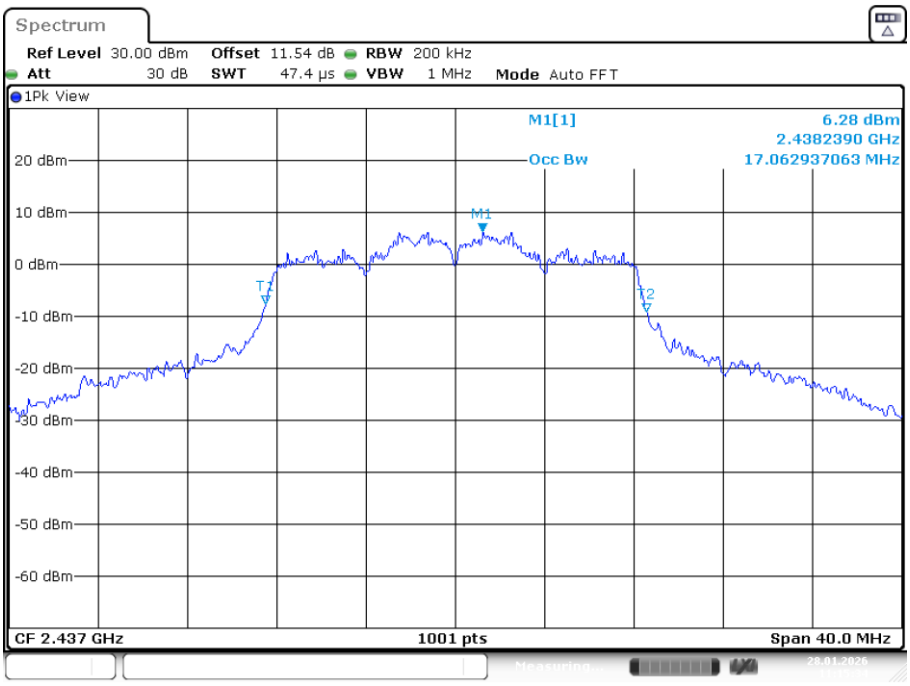


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 11:09:54

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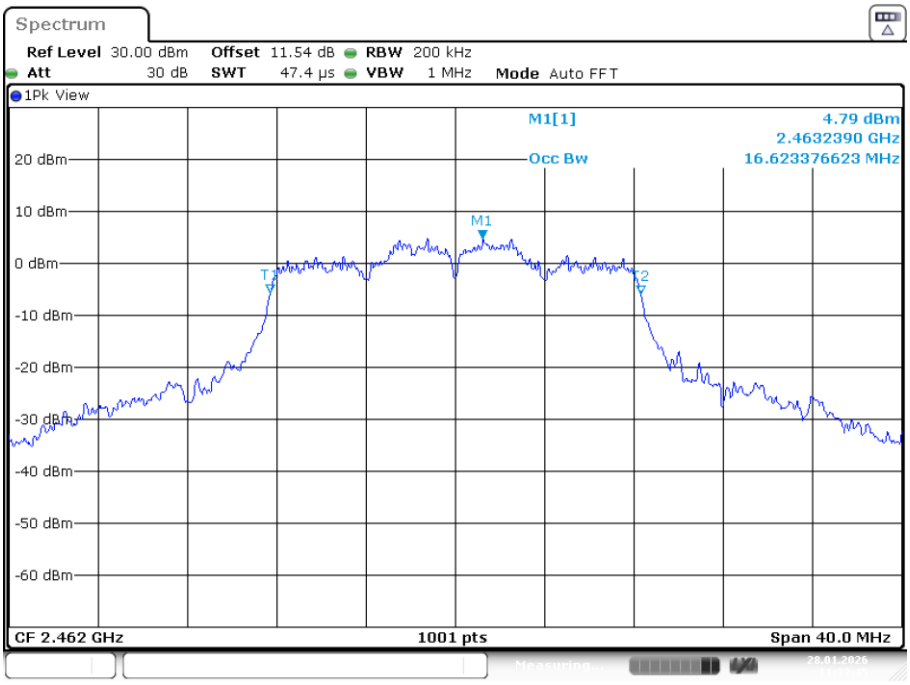
Middle Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 11:15:34

High Channel



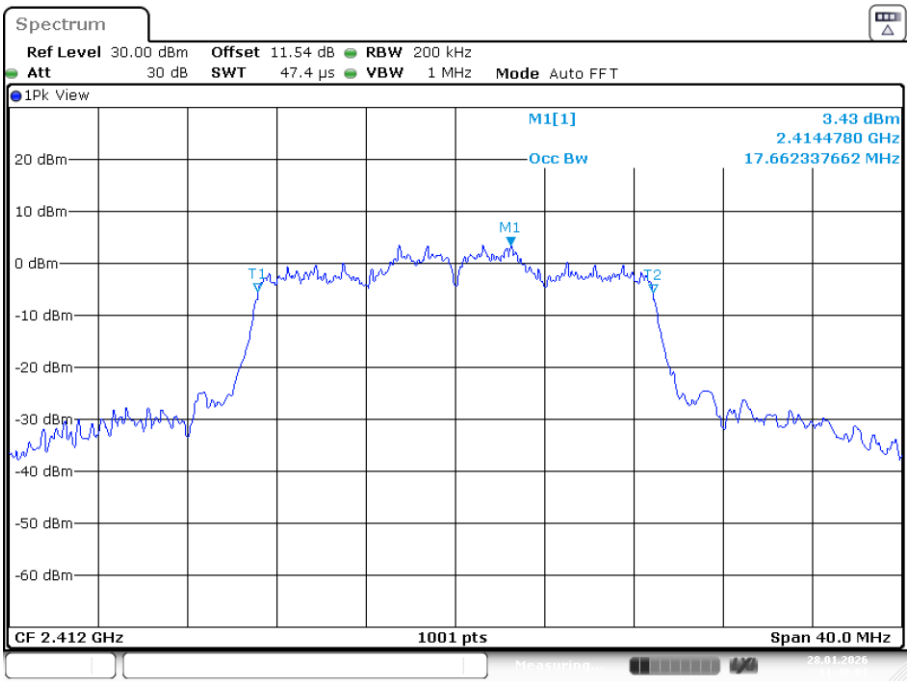
ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 11:33:45

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n20 Mode

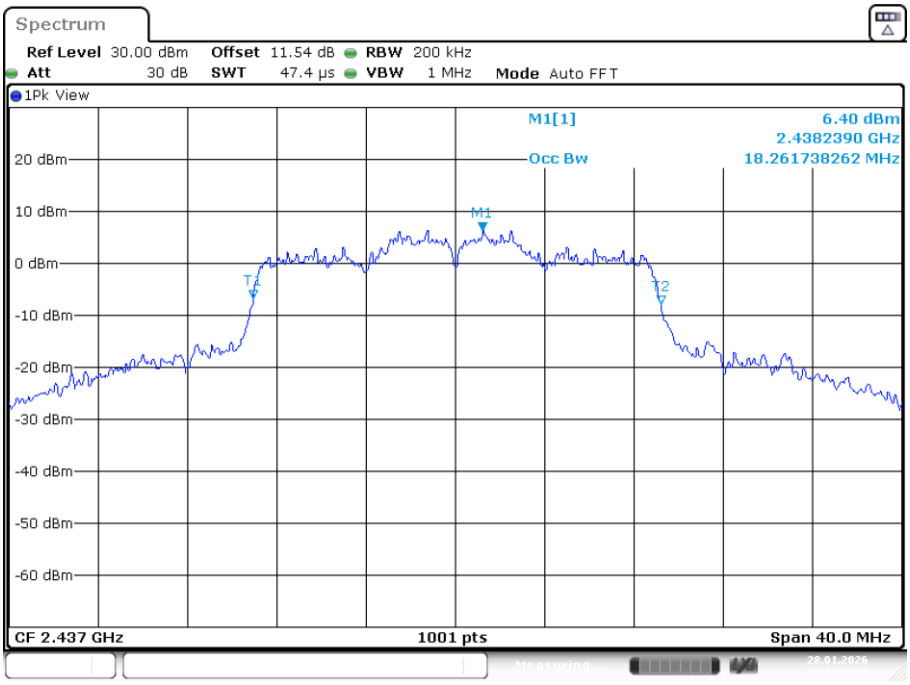
Low Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 11:48:01

Middle Channel

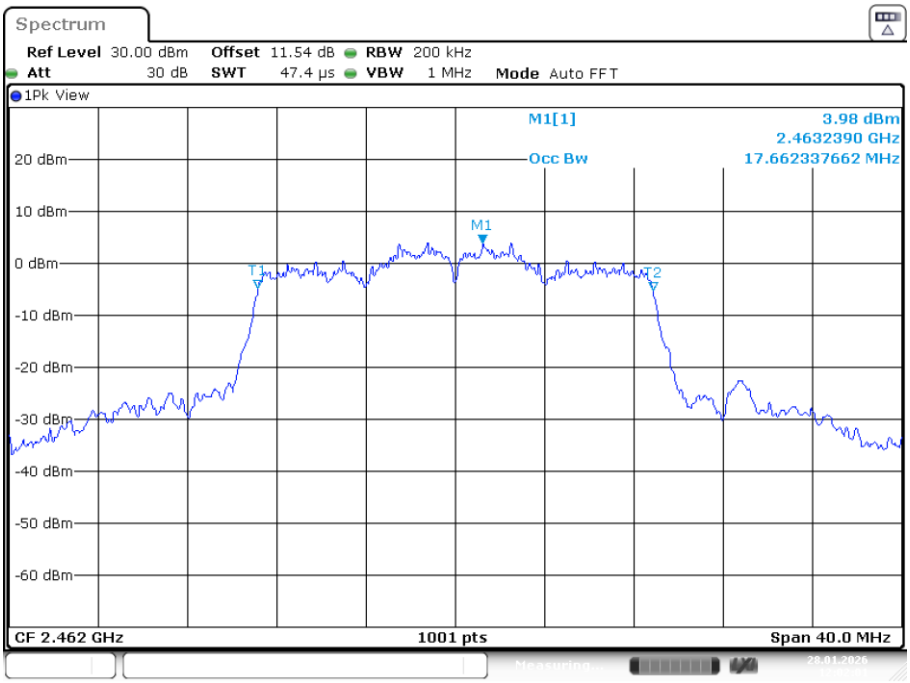


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 15:07:39

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High Channel

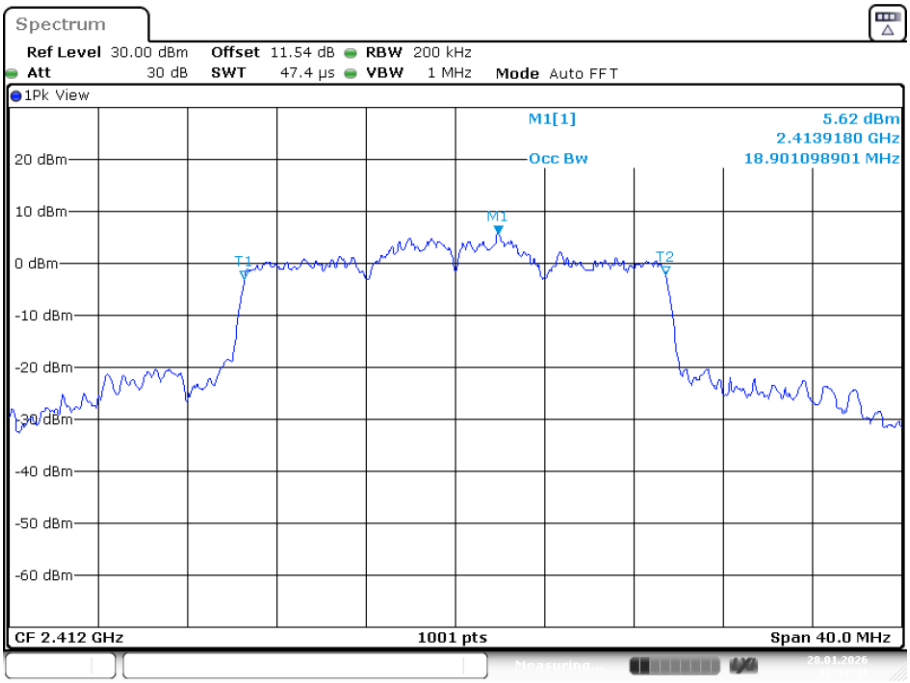


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 12:02:02

ax20 Mode

Low Channel

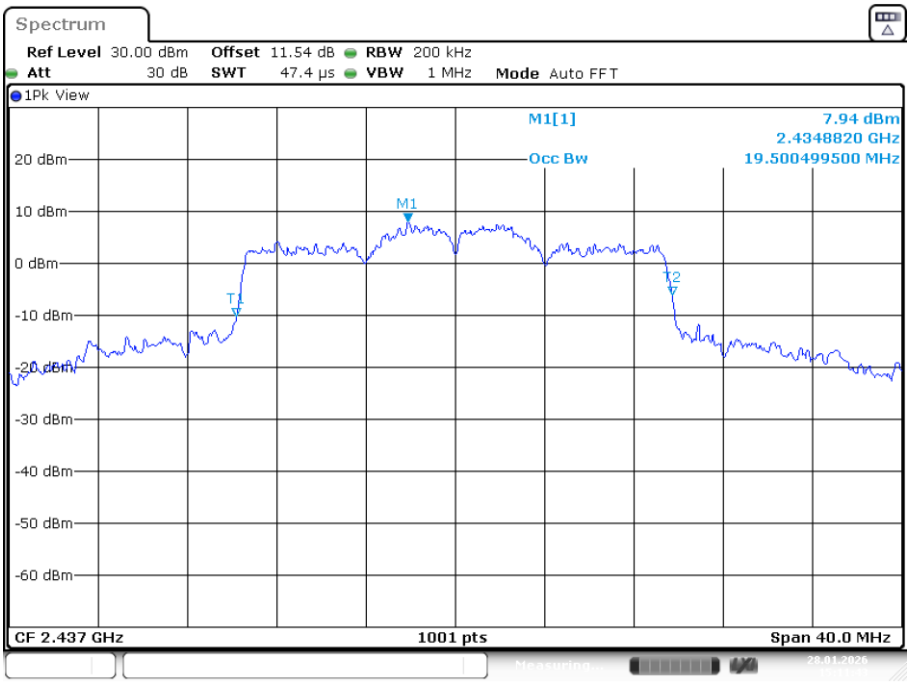


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 12:18:42

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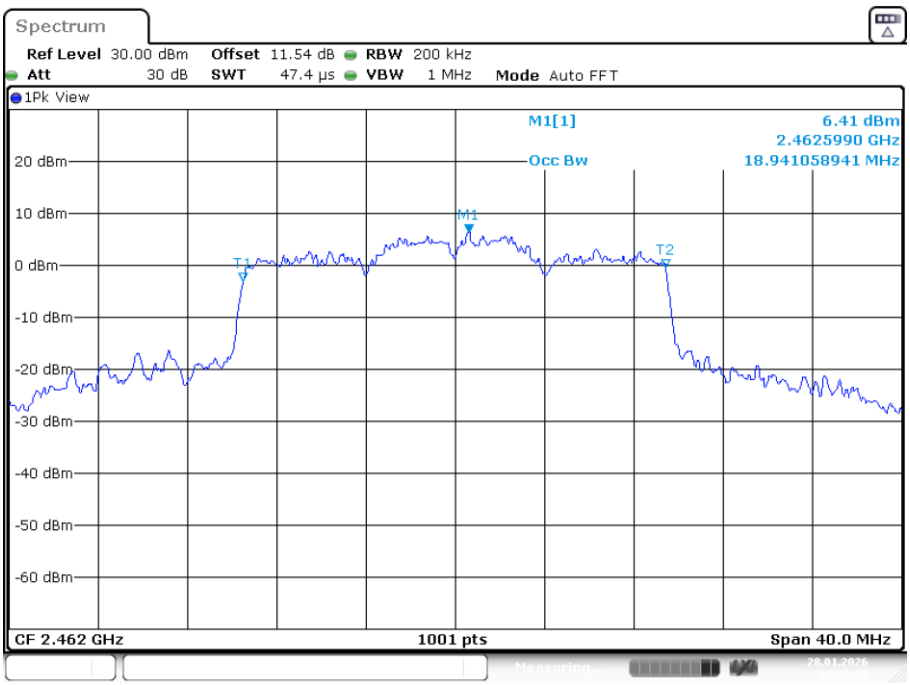
Middle Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 15:11:44

High Channel



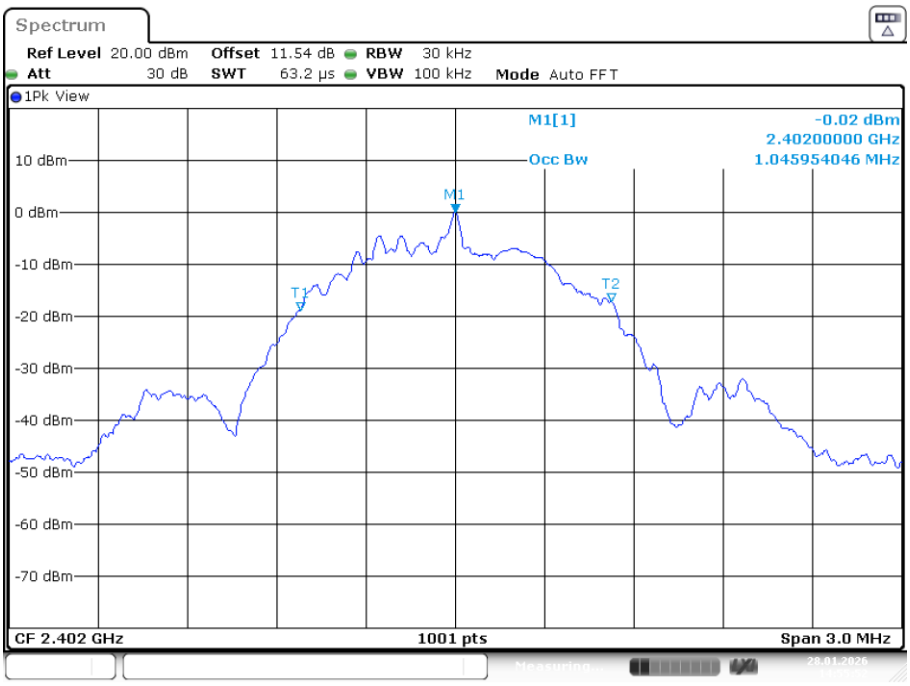
ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 12:52:38

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BLE (1M) Mode

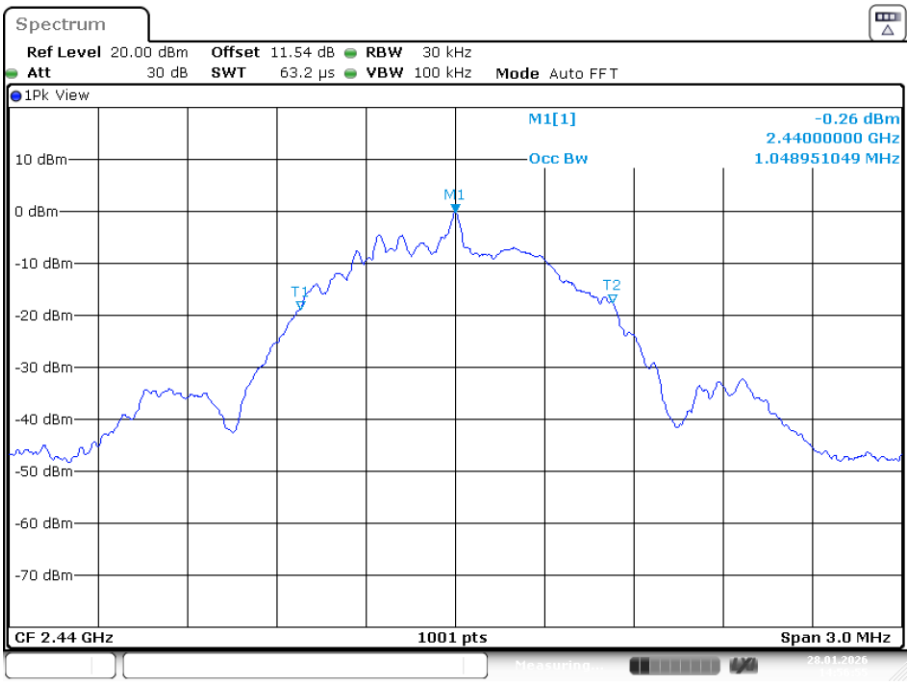
Low Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 14:55:52

Middle Channel

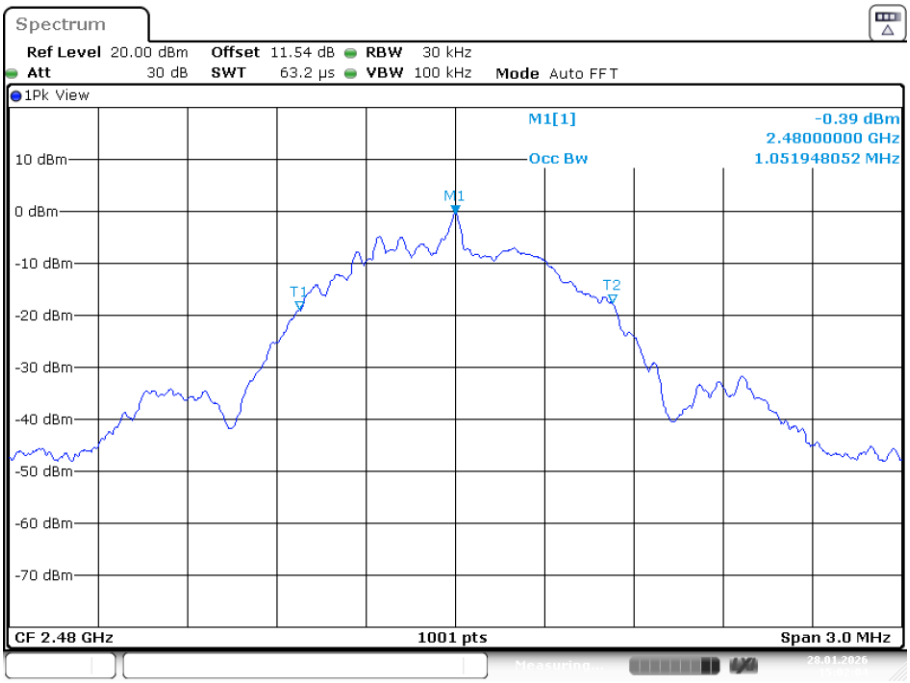


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 14:56:55

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High Channel



ProjectNo.:RLK260119062 Tester:Alan Huang
Date: 28.JAN.2026 15:02:05

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9 FCC §15.247(b)(3) – Maximum Output Power

9.1 Applicable Standard

According to FCC §15.247(b).

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

For frequency hopping systems operating in the 902-928 MHz band: 1 watt for systems employing at least 50 hopping channels; and, 0.25 watts for systems employing less than 50 hopping channels, but at least 25 hopping channels, as permitted under paragraph (a)(1)(i) of this section.

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, compliance 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.

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

9.2 Test Procedure

According to ANSI C63.10-2020+Cor.1-2023 ,section 11.9.1.2

According to ANSI C63.10-2020+Cor.1-2023 ,section 11.9.2.3.1

1. Place the EUT on a bench and set it in transmitting mode.

2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to measuring equipment.

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9.3 Test Results

Conducted Peak Output Power

RRQ61051-408

Channel	Frequency (MHz)	Average Power (dBm)	Peak Power (dBm)	Power (W)	Limit (W)	Result
b Mode						
Low	2412	17.59	19.61	0.091	1	PASS
Middle	2437	17.84	19.85	0.097	1	PASS
High	2462	17.50	19.45	0.088	1	PASS
g Mode						
Low	2412	14.63	19.39	0.087	1	PASS
Middle	2437	14.91	19.42	0.087	1	PASS
High	2462	15.07	19.52	0.090	1	PASS
n20 Mode						
Low	2412	13.10	19.31	0.085	1	PASS
Middle	2437	14.29	19.73	0.094	1	PASS
High	2462	13.90	19.91	0.098	1	PASS
ax20 Mode						
Low	2412	13.91	19.31	0.085	1	PASS
Middle	2437	15.08	19.37	0.086	1	PASS
High	2462	15.09	19.79	0.095	1	PASS
BLE(1M) Mode						
Low	2402	1.41	1.49	0.00141	1	PASS
Middle	2440	1.34	1.43	0.00139	1	PASS
High	2480	1.27	1.35	0.00136	1	PASS

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RRQ61051-208

Channel	Frequency (MHz)	Average Power (dBm)	Peak Power (dBm)	Power (W)	Limit (W)	Result
b Mode						
Low	2412	17.49	19.41	0.087	1	PASS
Middle	2437	17.64	19.49	0.089	1	PASS
High	2462	17.48	19.38	0.087	1	PASS
g Mode						
Low	2412	14.52	19.11	0.081	1	PASS
Middle	2437	14.85	19.24	0.084	1	PASS
High	2462	15.03	19.47	0.089	1	PASS
n20 Mode						
Low	2412	13.10	19.29	0.085	1	PASS
Middle	2437	14.18	19.42	0.087	1	PASS
High	2462	13.82	19.89	0.097	1	PASS
BLE(1M) Mode						
Low	2402	1.33	1.44	0.00139	1	PASS
Middle	2440	1.22	1.34	0.00136	1	PASS
High	2480	1.11	1.19	0.00132	1	PASS

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10 FCC§15.247(d) – 100 kHz Bandwidth of Frequency Band Edge

10.1 Applicable Standard

According to FCC §15.247(d).

In any 100kHz 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 20dB below that in the 100kHz 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 compliance 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 30dB instead of 20dB. 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)).

10.2 Test Procedure

According to ANSI C63.10-2020+Cor.1-2023 ,Section 11.11

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

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

b) Set the RBW = 100 kHz.

c) Set the VBW ≥ [3 × RBW].

d) Detector = peak.

e) Sweep time = No faster than coupled (auto) time.

f) Trace mode = max-hold.

g) Allow trace to fully stabilize.

h) Use the peak marker function to determine the maximum amplitude level.

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

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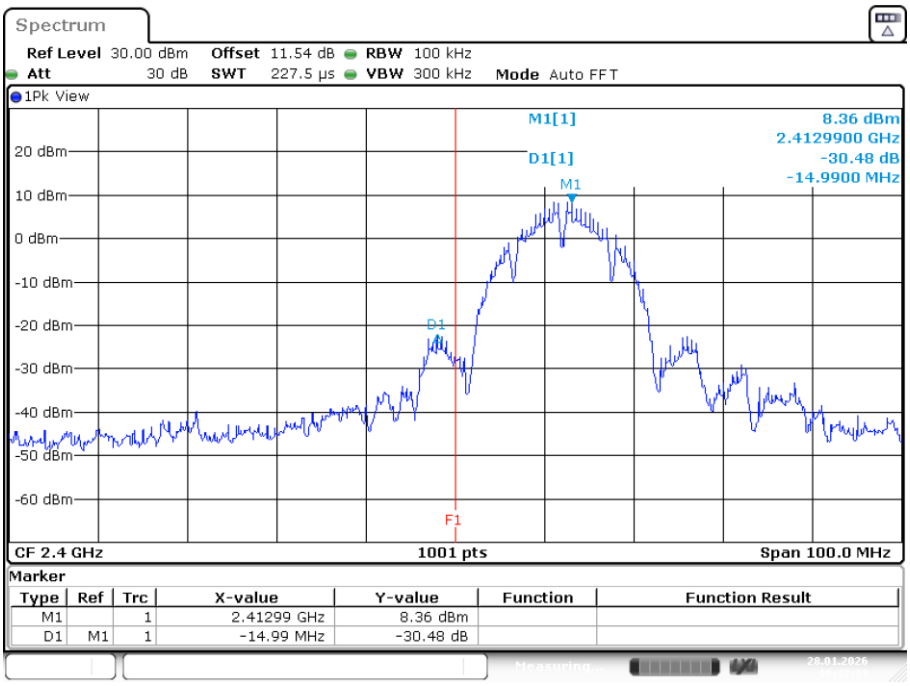
10.3 Test Results

Channel	Frequency (MHz)	Delta Peak to Band Emission (dBc)	Limit (dBc)	Result
b Mode				
Low	2412	30.48	≥ 20	PASS
High	2462	47.22	≥ 20	PASS
g Mode				
Low	2412	28.17	≥ 20	PASS
High	2462	40.63	≥ 20	PASS
n20 Mode				
Low	2412	32.43	≥ 20	PASS
High	2462	41.63	≥ 20	PASS
ax20 Mode				
Low	2412	27.95	≥ 20	PASS
High	2462	36.42	≥ 20	PASS
BLE(1M) Mode				
Low	2402	43.60	≥ 20	PASS
High	2480	45.72	≥ 20	PASS

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b Mode

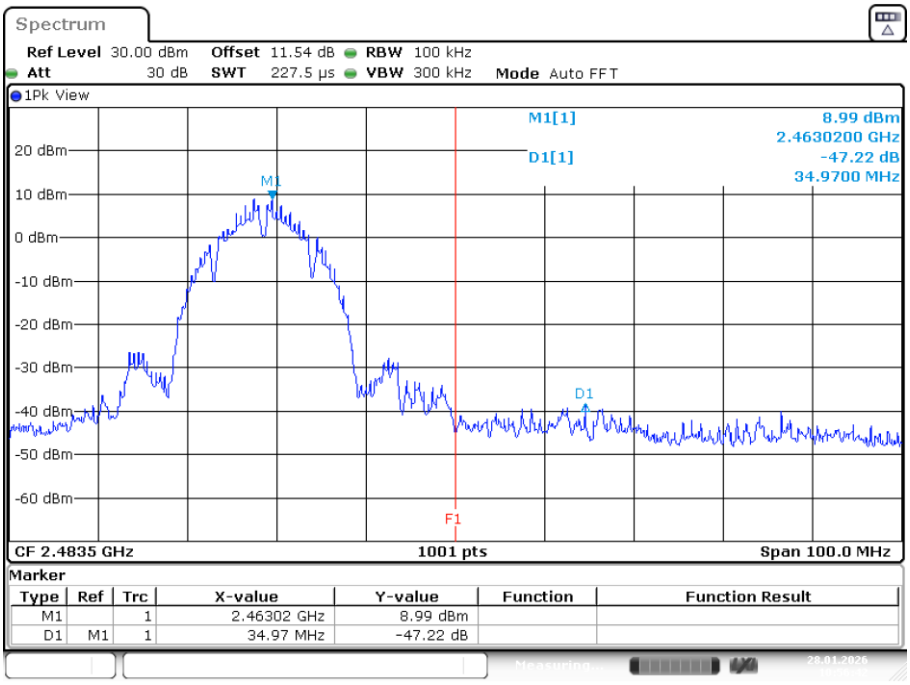
Band Edge, Left Side



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 10:42:33

Band Edge, Right Side



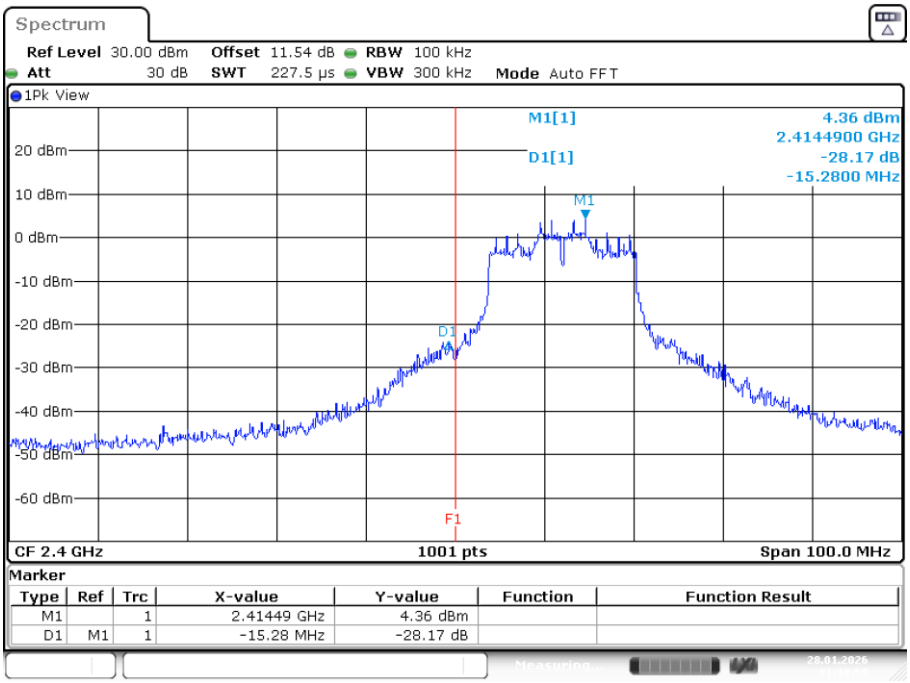
ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 10:56:42

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g Mode

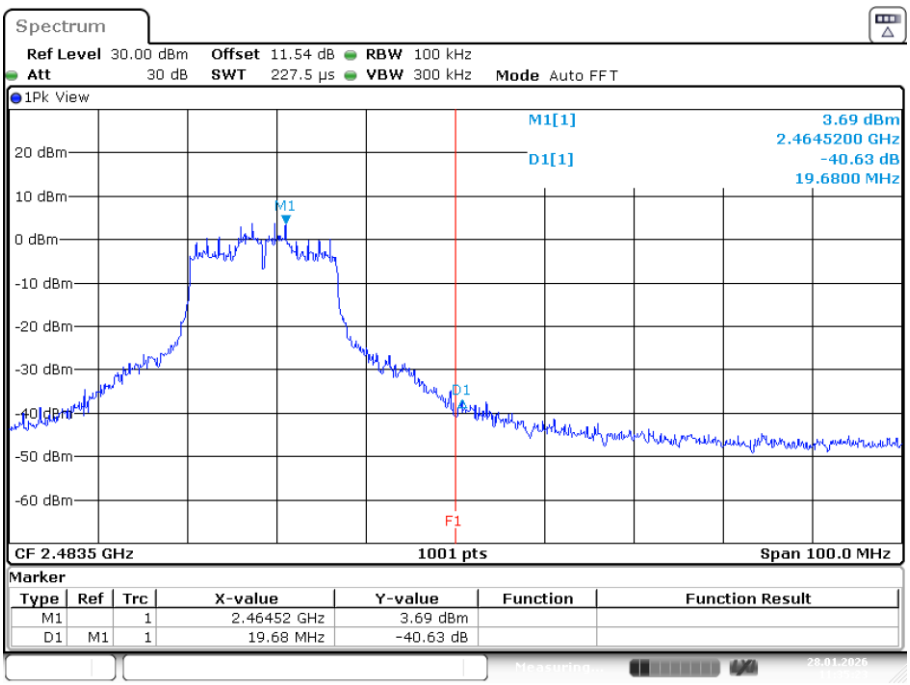
Band Edge, Left Side



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 11:10:59

Band Edge, Right Side



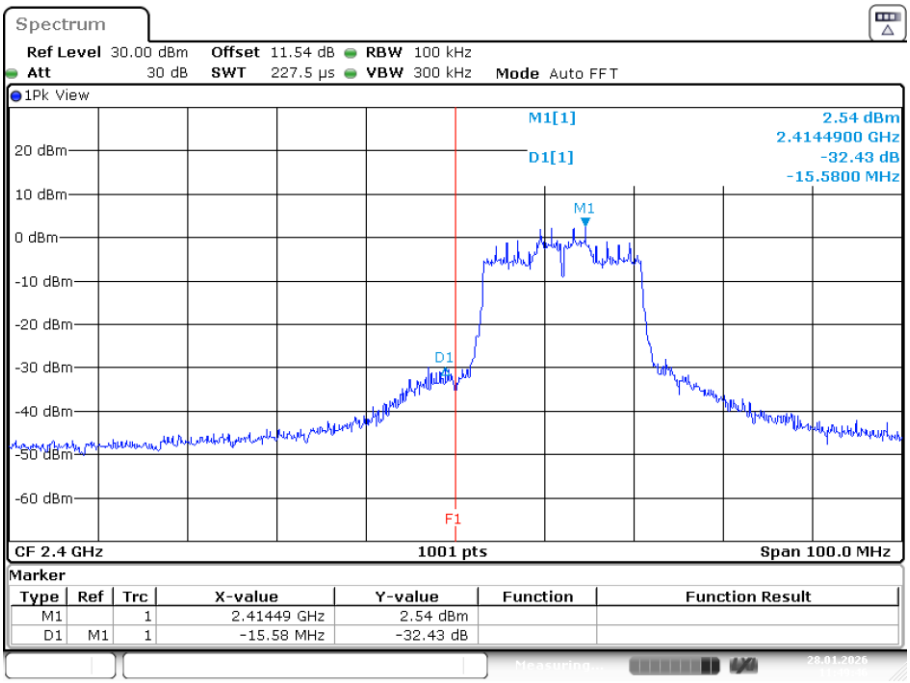
ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 11:35:23

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n20 Mode

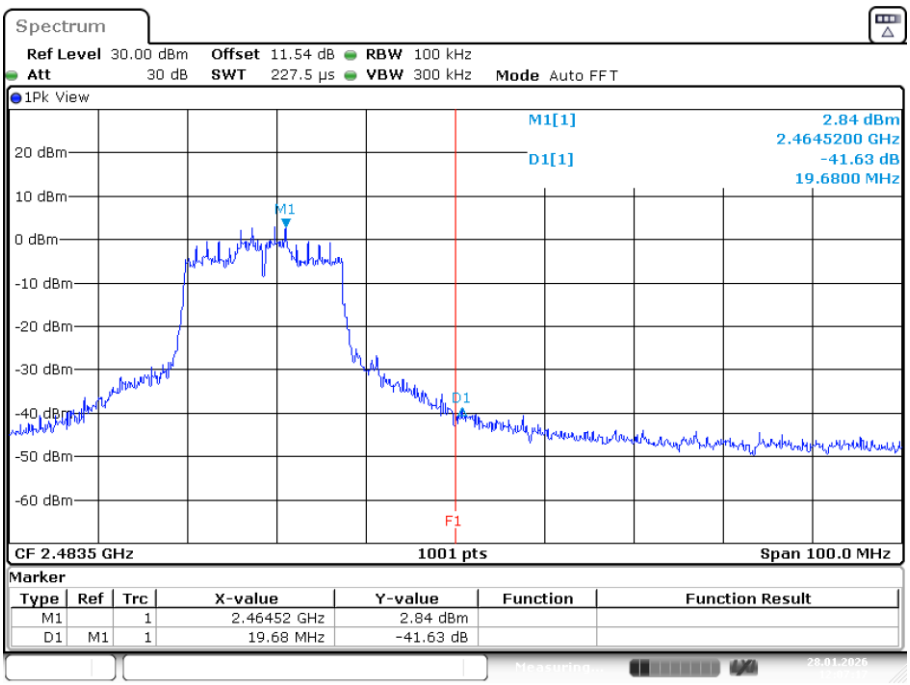
Band Edge, Left Side



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 11:49:46

Band Edge, Right Side



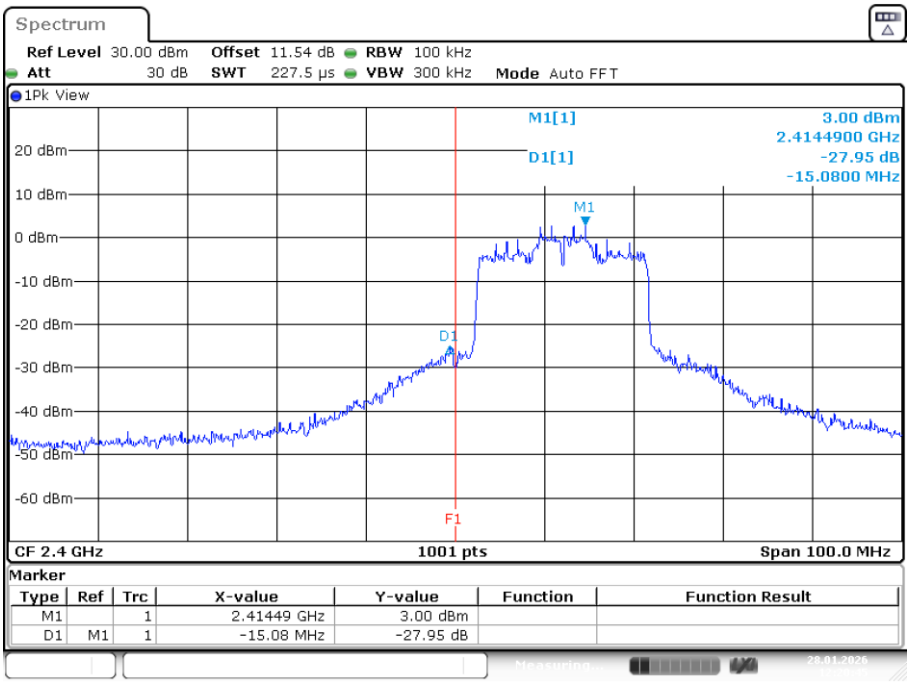
ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 12:07:17

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ax20 Mode

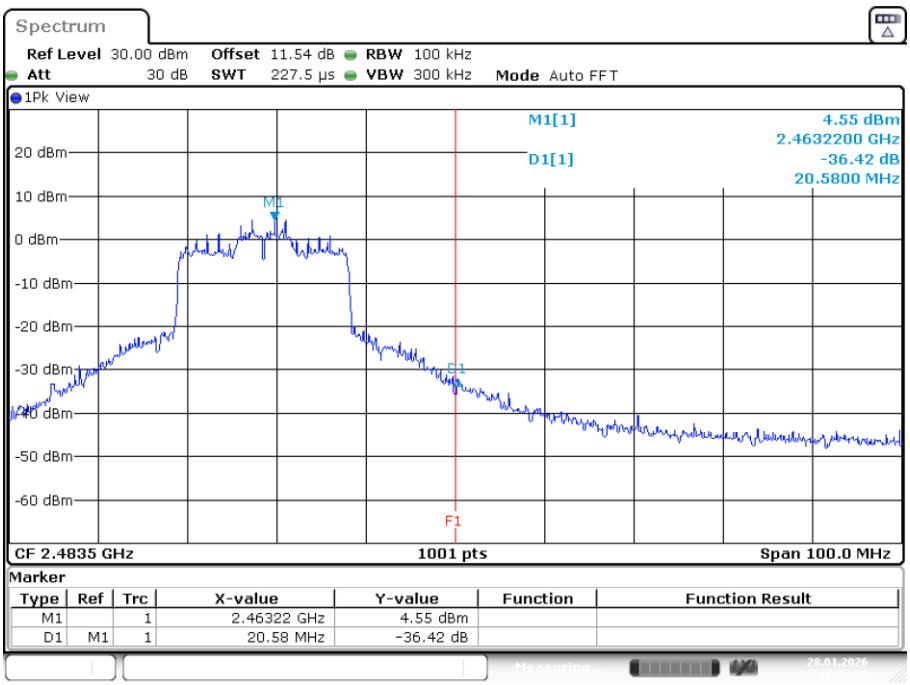
Band Edge, Left Side



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 12:20:45

Band Edge, Right Side



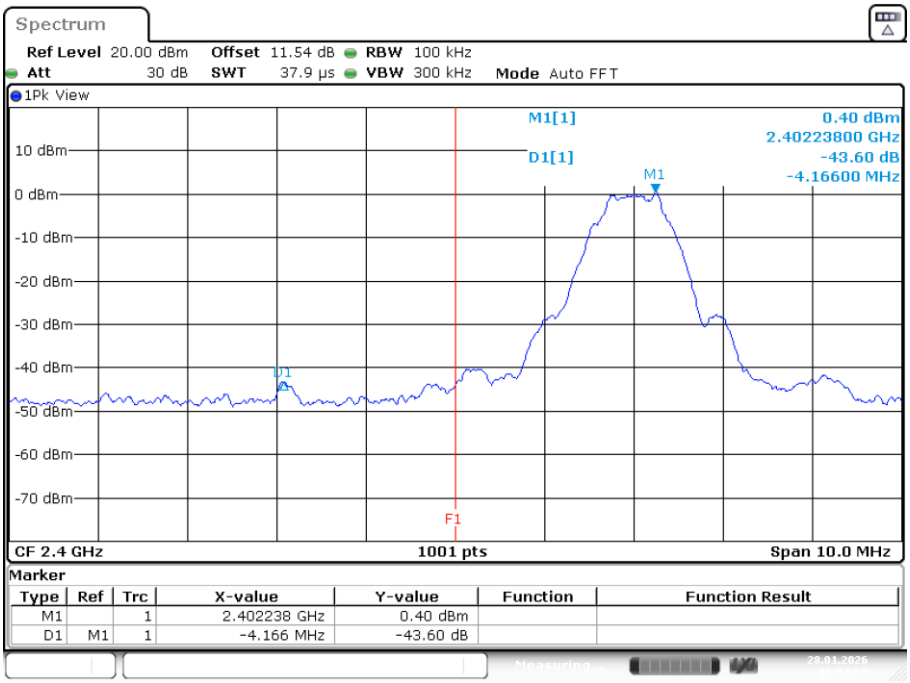
ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 12:54:27

Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

BLE (1M) Mode

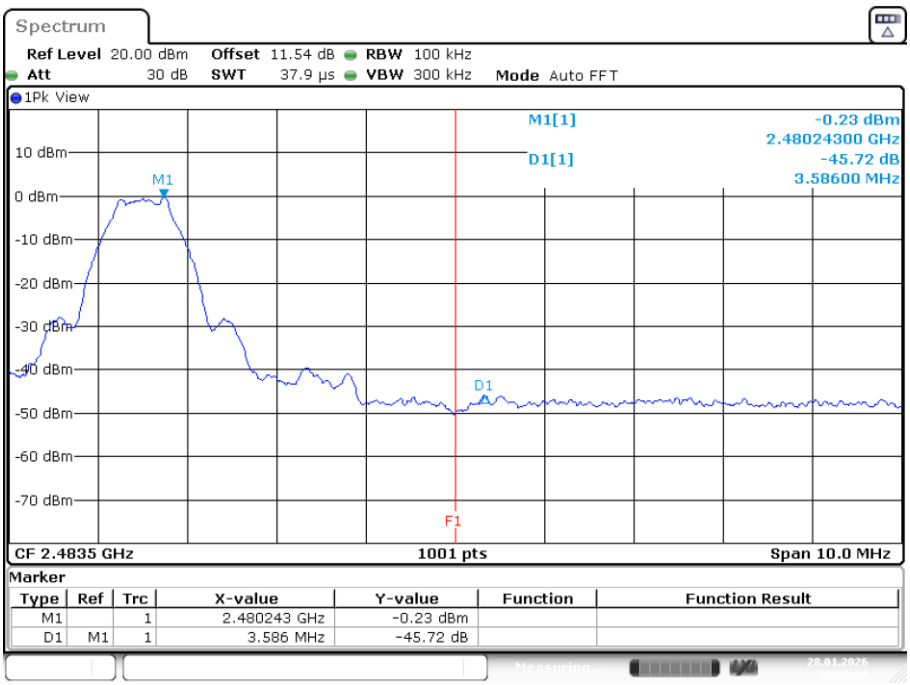
Band Edge, Left Side



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 09:54:56

Band Edge, Right Side



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 09:59:54

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11 FCC §15.247(e) – Power Spectral Density

11.1 Applicable Standard

According to FCC §15.247(e).

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.

11.2 Test Procedure

According to ANSI C63.10-2020+Cor.1-2023

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 kHz ≤ RBW ≤ 100 kHz.

d) Set the VBW ≥ [3 × RBW].

e) Detector = peak.

f) Sweep time = auto couple.

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: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

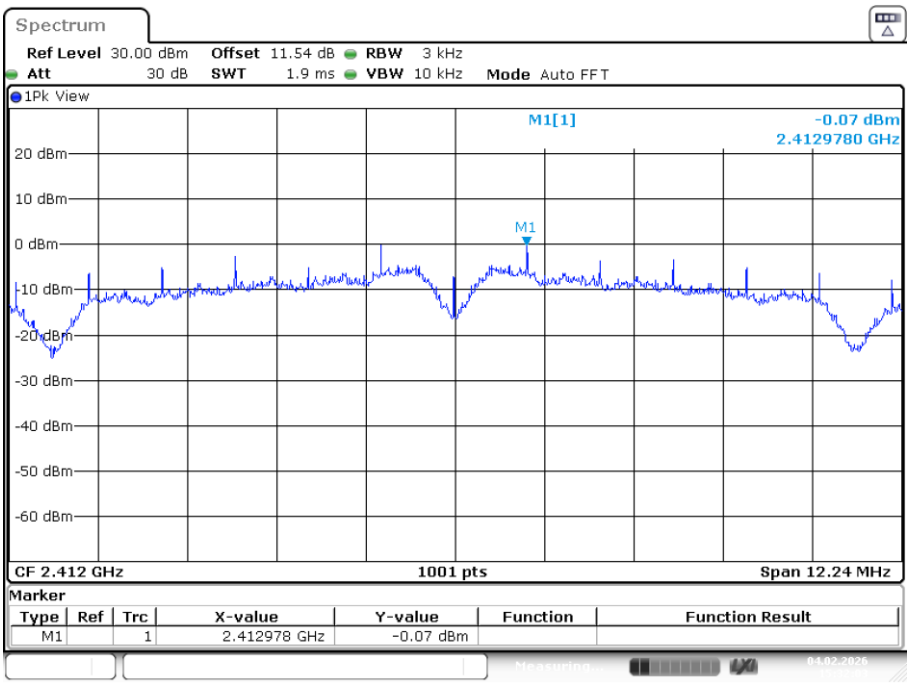
11.3 Test Results

Channel	Frequency (MHz)	Power Spectral Density (dBm/3 kHz)	Limit (dBm/3 kHz)	Result
b Mode				
Low	2412	-0.07	8	PASS
Middle	2437	1.10	8	PASS
High	2462	0.53	8	PASS
g Mode				
Low	2412	-8.21	8	PASS
Middle	2437	-6.92	8	PASS
High	2462	-8.66	8	PASS
n20 Mode				
Low	2412	-9.62	8	PASS
Middle	2437	-7.26	8	PASS
High	2462	-9.09	8	PASS
ax20 Mode				
Low	2412	-9.15	8	PASS
Middle	2437	-7.42	8	PASS
High	2462	-8.57	8	PASS
BLE(1M) Mode				
Low	2402	-15.55	8	PASS
Middle	2440	-15.85	8	PASS
High	2480	-16.02	8	PASS

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b Mode

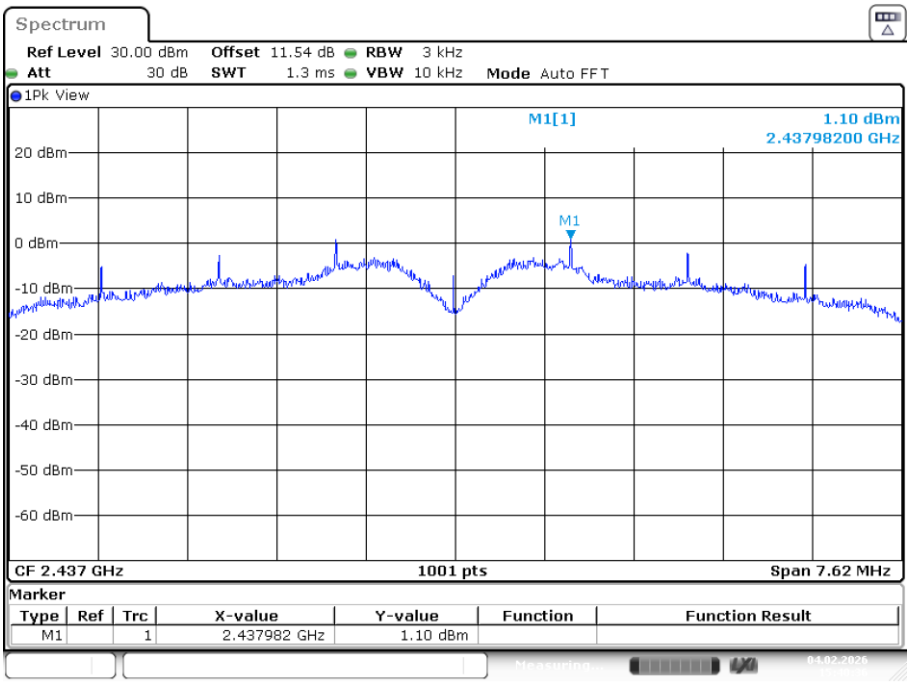
Low Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 15:32:03

Middle Channel

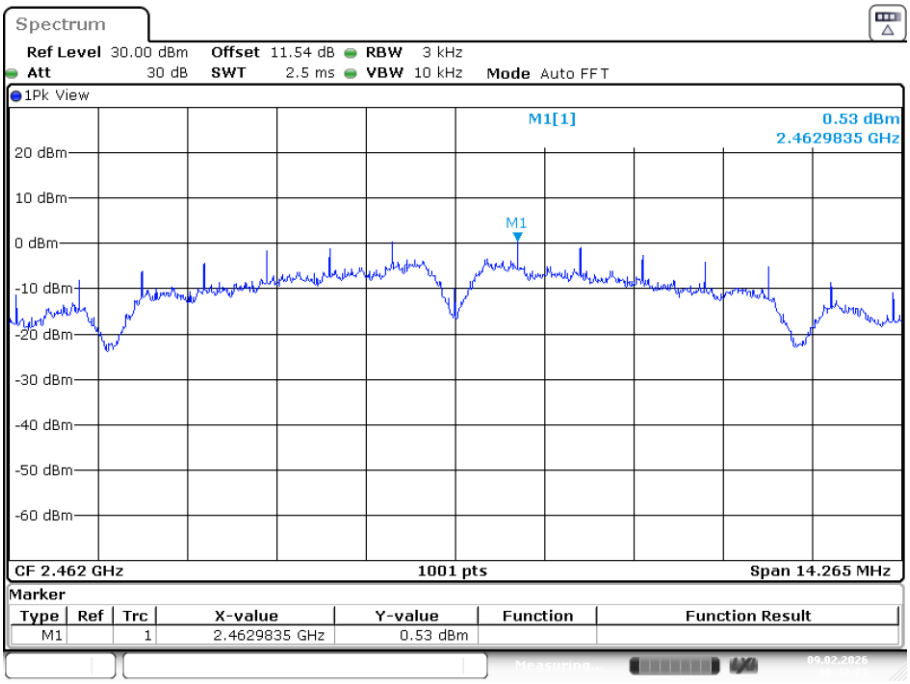


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 15:40:36

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High Channel

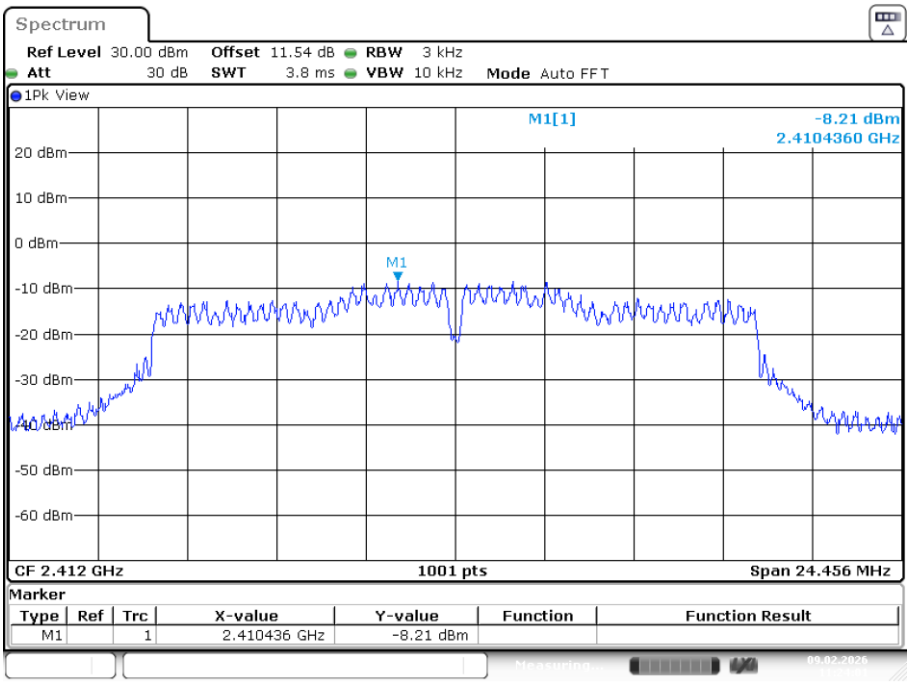


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 10:42:23

g Mode

Low Channel

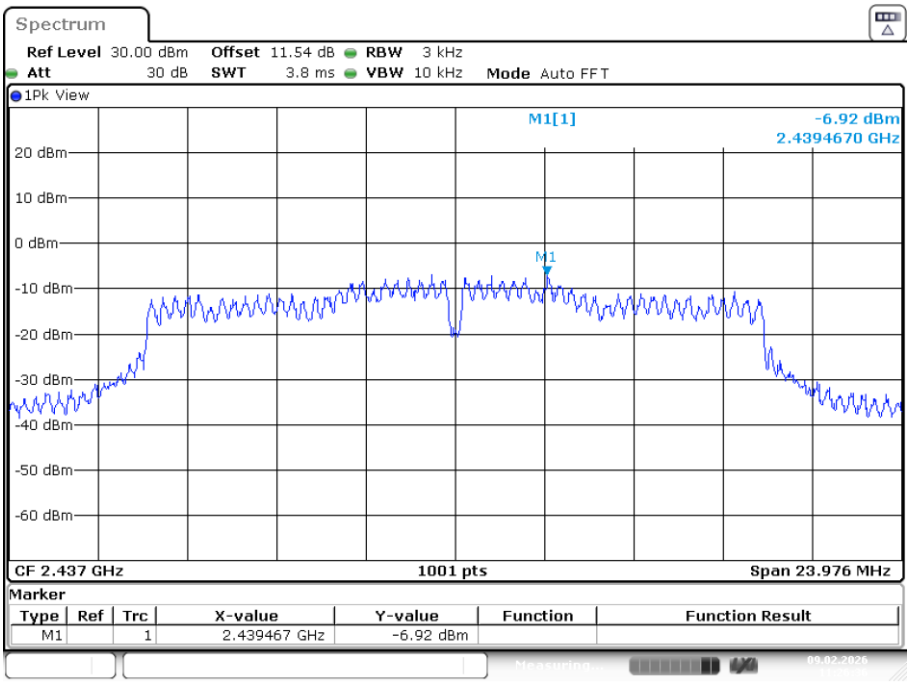


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 11:24:01

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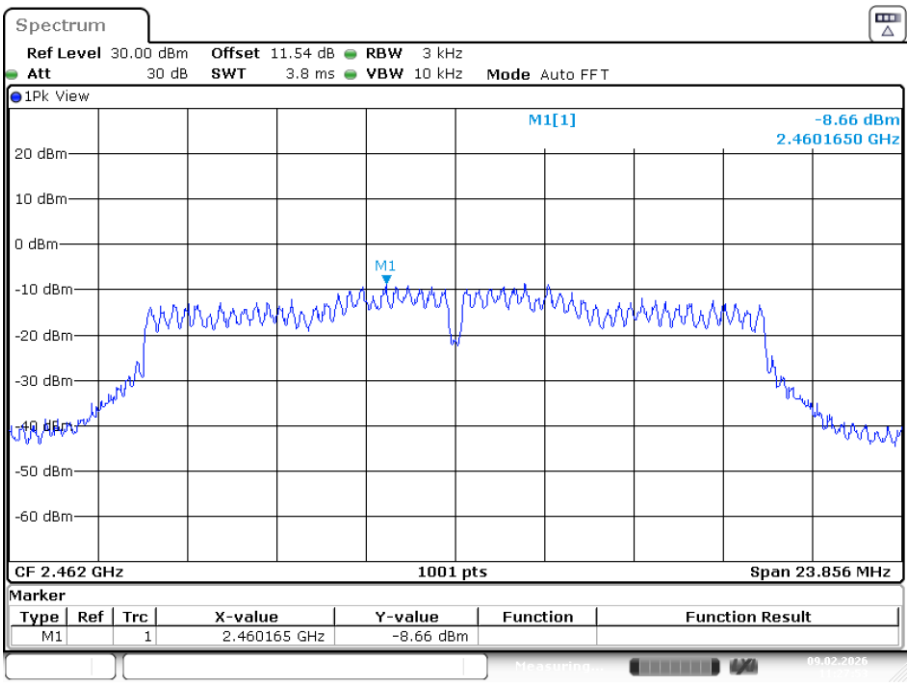
Middle Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 11:26:36

High Channel



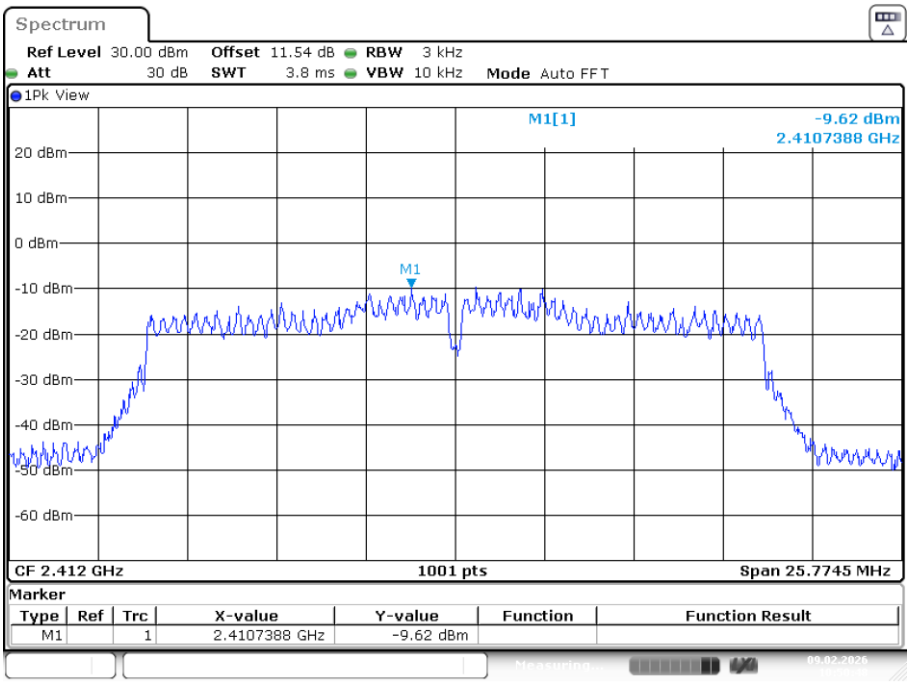
ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 11:27:53

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n20 Mode

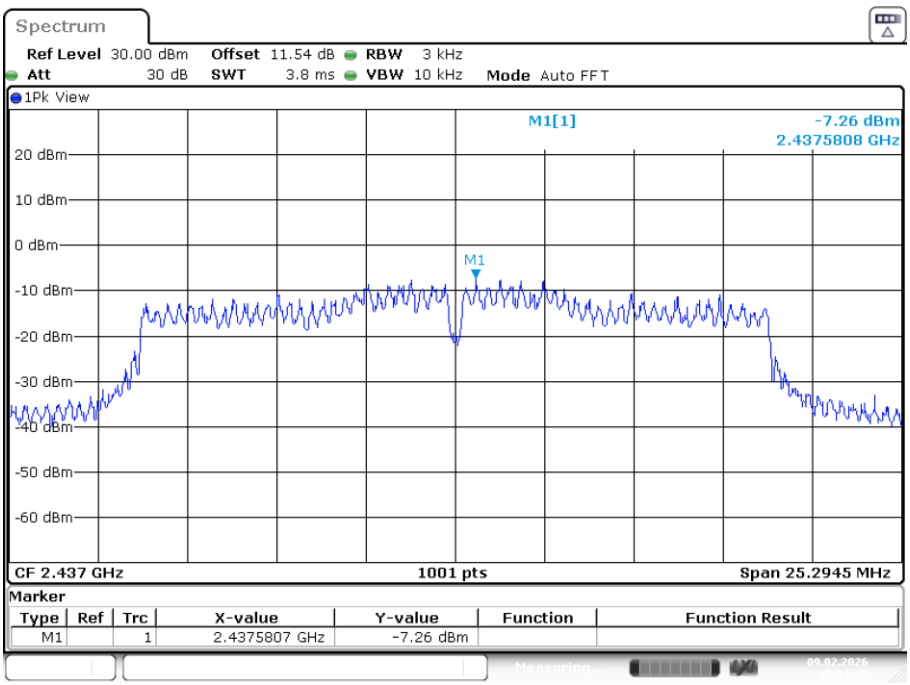
Low Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 10:50:48

Middle Channel

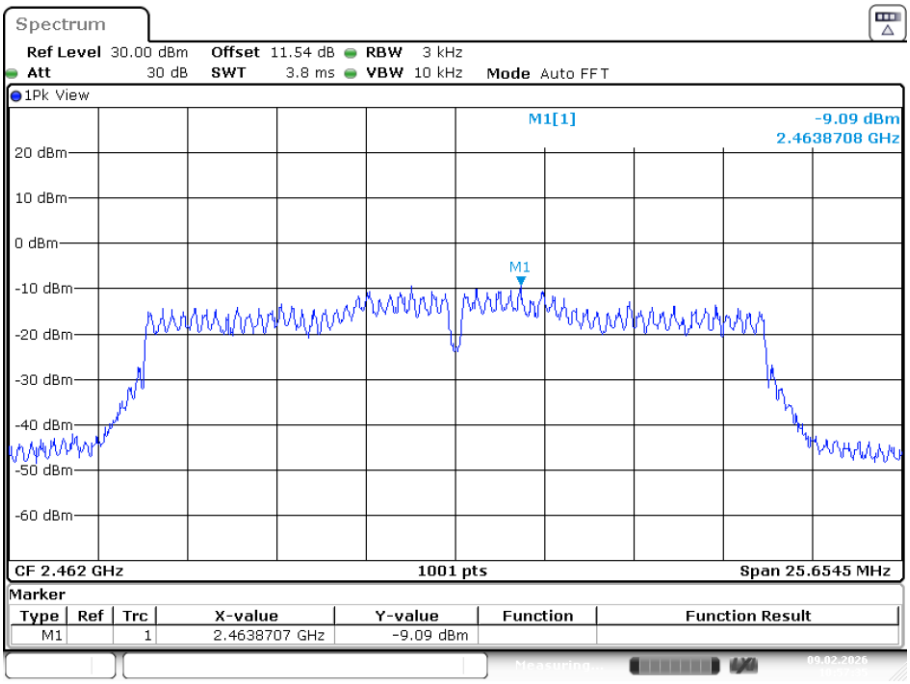


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 10:51:46

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High Channel

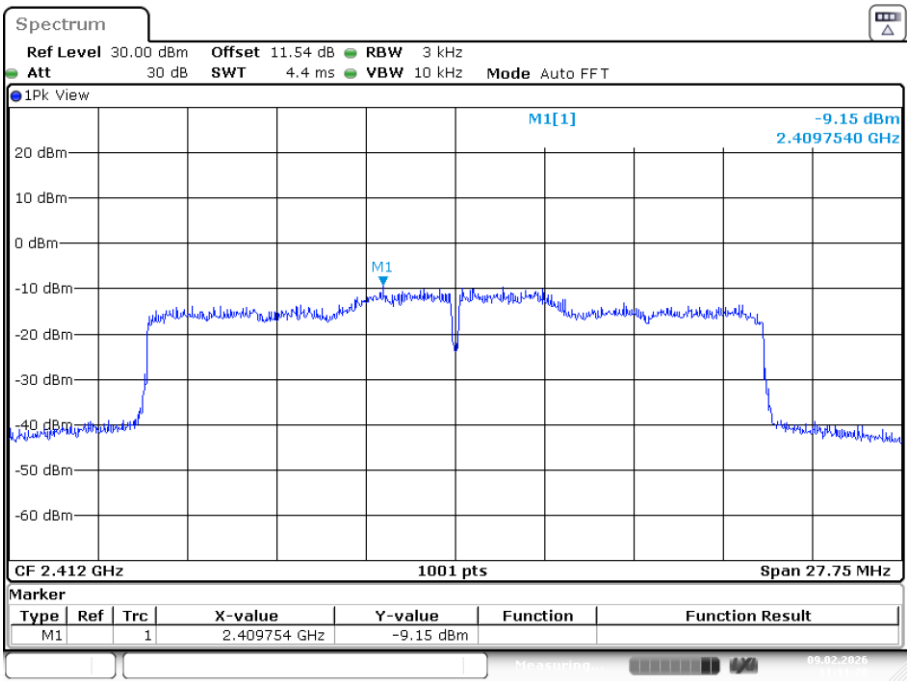


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 10:57:36

ax20 Mode

Low Channel

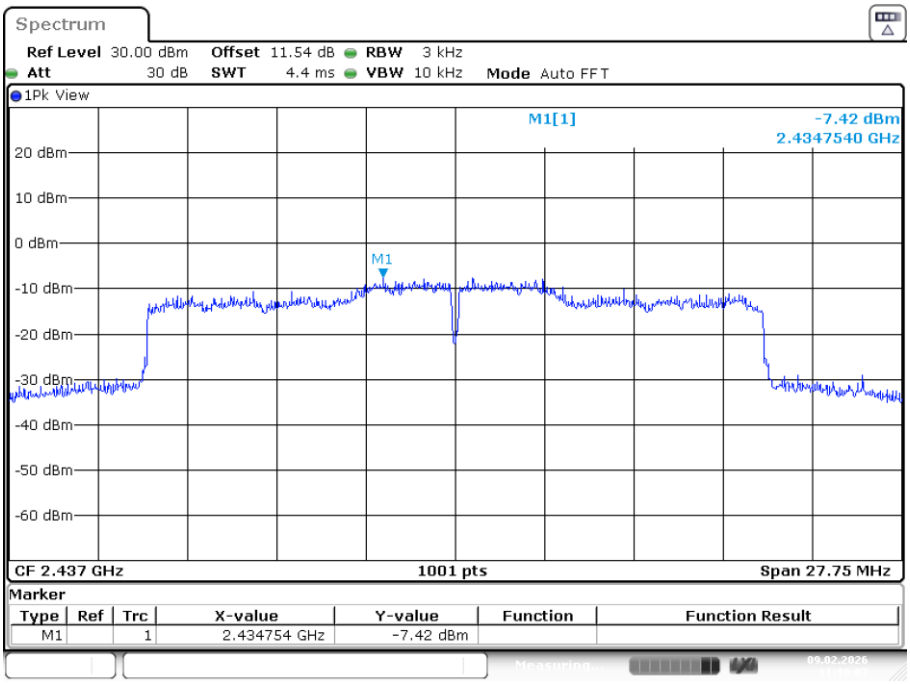


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 11:11:28

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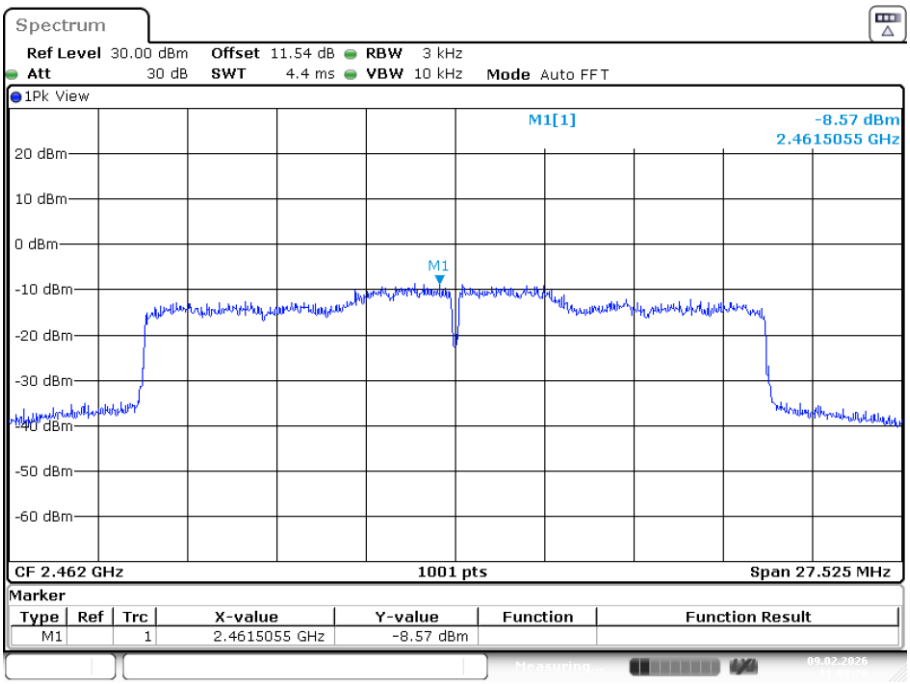
Middle Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 11:10:06

High Channel



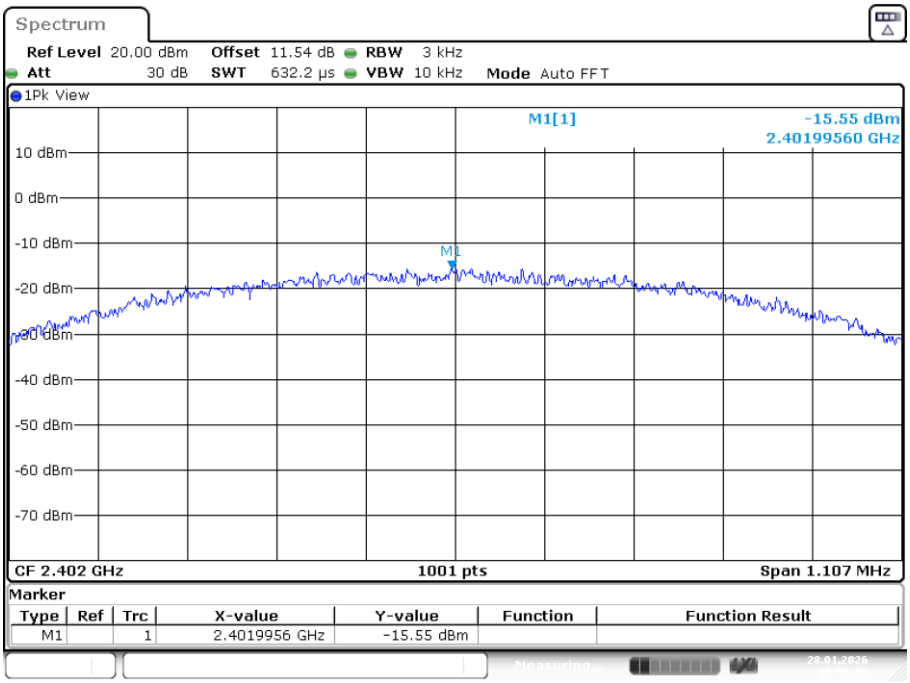
ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 9.FEB.2026 11:08:26

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BLE (1M) Mode

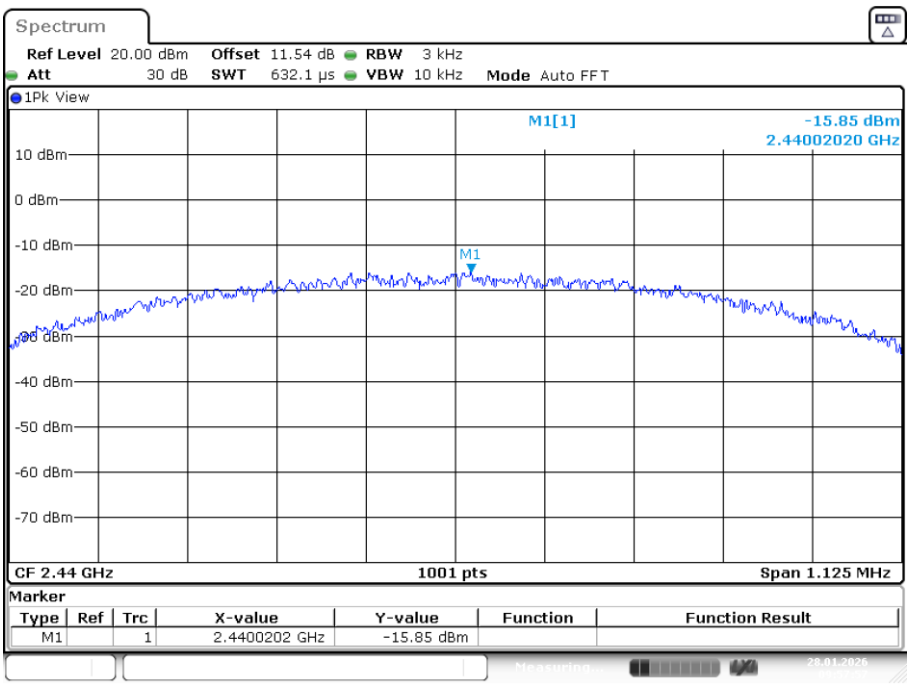
Low Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 09:55:04

Middle Channel

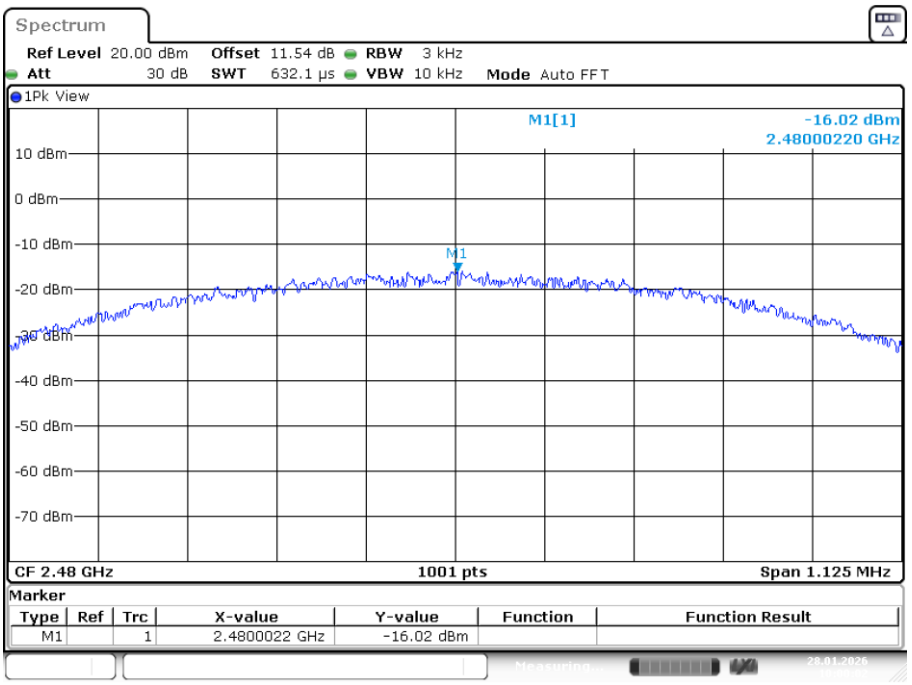


ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 09:57:57

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High Channel



ProjectNo.:RLK260119062 Tester:Alan Huang

Date: 28.JAN.2026 10:00:02

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