



RADIO TEST REPORT

Applicant	:	Amino Communications Ltd
Address of Applicant	:	Office 235, Regus, Vision Park, Chivers Way, Histon, Cambridge, CB24 9AD, United Kingdom
Manufacturer	:	Amino Communications Ltd
Address of Manufacturer	:	Office 235, Regus, Vision Park, Chivers Way, Histon, Cambridge, CB24 9AD, United Kingdom
Equipment under Test	:	AMIGO 7N
Model No.	:	AMIGO 7N
FCC ID	:	XVG500107RTBT
IC	:	6800A-500107RTBT
Test Standard(s)	:	FCC Rules and Regulations Part 15 Subpart C, ANSI C63.10-2020, RSS-247 Issue 4 July 24, 2025, RSS-Gen Issue 5, Apr. 2018, Amendment 2 (February 2021), ANSI C63.10-2020+Cor.1-2023+C63.10a- 2024+Errata to C63.10a-2024
Report No.	:	DDT-RE25120216-1E03
Issue Date	:	2026/01/06
Issue By	:	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

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Test Report Declare

Applicant	:	Amino Communications Ltd
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Equipment under Test	:	AMIGO 7N
Model No.	:	AMIGO 7N
Manufacturer	:	Amino Communications Ltd
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Test Standard Used:

FCC Rules and Regulations Part 15 Subpart C,
ANSI C63.10-2020,
RSS-247 Issue 4 July 24, 2025,
RSS-Gen Issue 5, Apr. 2018, Amendment 2 (February 2021),
ANSI C63.10-2020+Cor.1-2023+C63.10a-2024+Errata to C63.10a-2024

We Declare:

The equipment described above is tested by Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

Report No.:	DDT-RE25120216-1E03		
Date of Receipt:	2025/12/17	Date of Test:	2025/12/17 - 2025/12/30

Created: Tiger Mo	Reviewed: Johnson Huang	Approved: Damon Hu
		
2025/12/30	2026/01/06	2026/01/06

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Guangdong Dongdian Testing Service Co., Ltd.

Revision History

Version	Revision Content	Issue Date	Approved
V0	Initial issue	2026/01/06	Damon Hu

1. Summary of Test Results

No.	Test Parameter	Clause No.	Condition	Result
1	6 dB Bandwidth and 99% Bandwidth	47 CFR Part 15 15.247(a)(2), RSS-247 clause 6.3.1(a), RSS-Gen clause 6.7	/	Pass
2	Peak Output Power	47 CFR Part 15 15.247(b)(3), RSS-247 clause 6.3.2	/	Pass
3	Power Spectral Density	47 CFR Part 15 15.247(e), RSS-247 clause 6.3.1(b)	/	Pass
4	RF Conducted Spurious Emissions	47 CFR Part 15 15.247(d), RSS-247 clause 6.6	/	Pass
5	Radiated Emission	47 CFR Part 15 15.205, 47 CFR Part 15 15.209, 47 CFR Part 15 15.247(d), RSS-247 clause 6.6, RSS-Gen clause 8.9, RSS-Gen clause 8.10	/	Pass
6	Band Edge Compliance	47 CFR Part 15 15.205, 47 CFR Part 15 15.209, 47 CFR Part 15 15.247(d), RSS-247 clause 6.6, RSS-Gen clause 8.9, RSS-Gen clause 8.10	/	Pass
7	Power Line Conducted Emissions	47 CFR Part 15 15.207(a), RSS-Gen clause 8.8	/	Pass
8	Antenna Requirement	47 CFR Part 15 15.203, RSS-Gen clause 6.8	/	Pass

Note: N/A is an abbreviation for Not Applicable, and means this item is not applicable for this device or no need to test according to standard.

2. General Test Information

2.1. Description of EUT

EUT Name	: AMIGO 7N
Model Number	: AMIGO 7N
Difference of model number	: /
EUT Function Description	: Please reference user manual of this device
Power Supply	: DC 5V From the external adapter
Antenna Type	: built-in antenna
Max Antenna Gain(dBi)	: Ant1:3.56dBi, Ant2:2.37dBi

The product only supports Full RU.

Radio Technology	: IEEE 802.11b/g/n/ax
Operation frequency	: IEEE 802.11b: 2412MHz to 2462MHz IEEE 802.11g: 2412MHz to 2462MHz IEEE 802.11n HT20: 2412MHz to 2462MHz IEEE 802.11n HT40: 2422MHz to 2452MHz IEEE 802.11ax HE20: 2412MHz to 2462MHz IEEE 802.11ax HE40: 2422MHz to 2452MHz
Modulation	: IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax: OFDM, OFDMA (1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK)

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

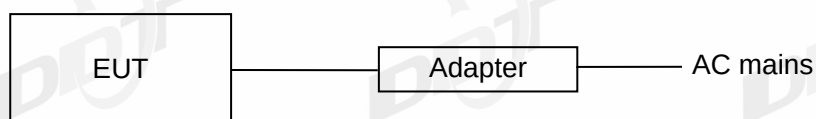
Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

“☑” means to be chosen or applicable; “☐” means don't to be chosen or not applicable; This note applies to entire report.

2.2. Accessories of EUT

Accessories	Manufacturer	Model number	Description	other
Adapter	Dongguan Sunun Power Co., Ltd	SA12BV-050200U	Input: 100-240V~50/60Hz 0.4A Output: DC 5V/2A	N/A
HDMI cable	HANRICO	N/A	Length: 1.50m, shielded	N/A
Remote control	N/A	N/A	N/A	N/A

2.3. Block diagram of EUT configuration for test



2.4. Decision of final test mode

According pre-test, the worst test modes were reported as below:

Test software: adb.exe

The test software was used to control EUT work in Continuous Tx mode and select test channel, wireless mode as below table.

The pathloss of external cable: 0.5dB (According to the manufacturer's claims)

Tested mode, Tx Power Setting, Data rate, Channel, and Frequency

Tested mode	Tx Power Setting		Data rate (Mbps) (see Note)	Test Channel	Frequency (MHz)
	ANT1	ANT2			
IEEE 802.11b	17	17	1	LCH: CH1	2412
	17	17	1	MCH: CH6	2437
	17	17	1	HCH: CH11	2462
IEEE 802.11g	16	16	6	LCH: CH1	2412
	16	16	6	MCH: CH6	2437
	16	16	6	HCH: CH11	2462
IEEE 802.11n HT20	15	15	MCS 8	LCH: CH1	2412
	15	15	MCS 8	MCH: CH6	2437
	15	15	MCS 8	HCH: CH11	2462
IEEE 802.11n HT40	13	13	MCS 8	LCH: CH3	2422
	13	13	MCS 8	MCH: CH6	2437
	13	13	MCS 8	HCH: CH9	2452
IEEE 802.11ax HE20	14	14	MCS 0	LCH: CH1	2412
	14	14	MCS 0	MCH: CH6	2437
	14	14	MCS 0	HCH: CH11	2462
IEEE 802.11ax HE40	13	13	MCS 0	LCH: CH3	2422
	13	13	MCS 0	MCH: CH6	2437

	13	13	MCS 0	HCH: CH9	2452
Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.					

2.5. Deviations of test standard

No deviation.

2.6. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	+15°C to +35 °C
Humidity range:	20% to 75%
Pressure range:	86 kPa to106 kPa

Note: The specific temperature and humidity information of each test item refers to the temperature and humidity record in the corresponding test data.

2.7. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20240, G-20118

2.8. Measurement uncertainty

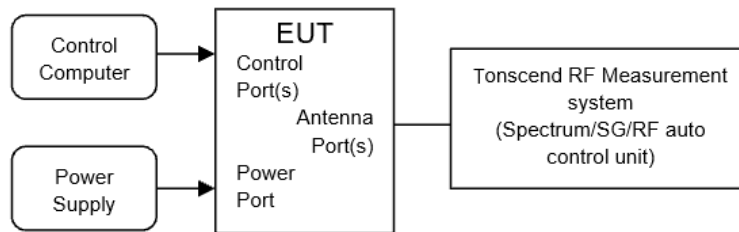
Test Item	Uncertainty
Bandwidth	1.9%
Peak Output Power (Conducted) (Spectrum analyzer)	0.98 dB
Peak Output Power (Conducted) (Power Sensor)	1.18 dB
Power Spectral Density (Base EIRP)	1.51 dB
Power Spectral Density (Spectrum analyzer)	0.98 dB
Frequencies Stability	1.9 kHz
Conducted spurious emissions	1.21 dB ($9\text{ kHz} \leq f < 7\text{ GHz}$);
	3.31 dB ($7\text{ GHz} \leq f < 40\text{ GHz}$)
Uncertainty for radio frequency (RBW < 20 kHz)	5.5×10^{-8}
Time	0.11%
Temperature	0.3 °C
Humidity	2 %
Uncertainty for Radiation Emission test (9 kHz – 30 MHz)	3.44 dB
Uncertainty for Radiation Emission test (30 MHz - 1 GHz)	4.28 dB (Antenna Polarize: V)
	4.14 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission test (1 GHz - 40 GHz)	4.22 dB (1 - 6 GHz)
	4.52 dB (6 GHz - 18 GHz)
	4.58 dB (18 GHz - 40 GHz)
Uncertainty for Power line conduction emission test	3.32dB (150KHz-30MHz)
	3.72dB (9KHz-150KHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

3. Equipment Used During Conductive Test

Equipment	Manufacturer	Model No.	Serial Number	Due Date
☒ RF Connected Test (RF Measurement System 3#)				
SIGNAL ANALYZER	R&S	FSV40	101407	2026/07/06
Wideband Radio Communication Tester	R&S	CMW500	117491	2026/03/28
EXG Analog Signal Generator	KEYSIGHT	N5173B	MY62153058	2026/07/06
MXG Vector Signal Generator	Agilent	N5182A	MY48180912	2026/03/28
RF Control Unit	Tonscend	JS0806-2	20C8060230	2026/03/28
TEMP&HUMI Programmable Chamber	ZHIXIANG	ZXGDJS-150L	ZX170110-A	2026/03/28
Test Software	Tonscend	JS1120-3	V3.6.21	N/A

4. 6dB Bandwidth

4.1. Block diagram of test setup



4.2. Limits

For direct sequence systems, the minimum 6 dB bandwidth shall be at least 500 kHz

4.3. Test procedure

- (1) The test according to ANSI C63.10 clause 11.8.
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously
- (4) Use the following spectrum analyzer settings for 6 dB Bandwidth:

RBW:	100 kHz
VBW:	$\geq [3 \times \text{RBW}]$
Detector Mode:	peak
Sweep time:	auto
Trace mode	max hold

Allow the trace to stabilize, measure the 6 dB bandwidth of signal, and record the results in the report

4.4. Test result

Test Engineer:	Zeng Zhongyao	Test Site:	RF Measurement System 3#
Ambient Condition:	25.2℃,38.6%RH	Test Date:	2025.12.22
Test Power Supply:	AC 120V	Sample Number:	S25120216-003

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	10.48	2406.76	2417.24	0.5	PASS
	Ant2	2412	10.52	2406.76	2417.28	0.5	PASS
	Ant1	2437	10.52	2431.72	2442.24	0.5	PASS
	Ant2	2437	10.48	2431.76	2442.24	0.5	PASS
	Ant1	2462	10.48	2456.80	2467.28	0.5	PASS
	Ant2	2462	10.48	2456.76	2467.24	0.5	PASS
11G	Ant1	2412	16.40	2403.80	2420.20	0.5	PASS
	Ant2	2412	16.40	2403.80	2420.20	0.5	PASS
	Ant1	2437	16.40	2428.80	2445.20	0.5	PASS
	Ant2	2437	16.40	2428.80	2445.20	0.5	PASS
	Ant1	2462	16.44	2453.80	2470.24	0.5	PASS
	Ant2	2462	16.40	2453.80	2470.20	0.5	PASS
11N20MI MO	Ant1	2412	17.56	2403.20	2420.76	0.5	PASS
	Ant2	2412	17.52	2403.24	2420.76	0.5	PASS
	Ant1	2437	17.60	2428.20	2445.80	0.5	PASS
	Ant2	2437	17.48	2428.28	2445.76	0.5	PASS
	Ant1	2462	17.64	2453.20	2470.84	0.5	PASS
	Ant2	2462	17.52	2453.24	2470.76	0.5	PASS
11N40MI MO	Ant1	2422	36.24	2403.92	2440.16	0.5	PASS
	Ant2	2422	36.00	2404.08	2440.08	0.5	PASS
	Ant1	2437	36.32	2418.92	2455.24	0.5	PASS
	Ant2	2437	36.00	2419.08	2455.08	0.5	PASS
	Ant1	2452	36.24	2434.00	2470.24	0.5	PASS
	Ant2	2452	36.08	2434.00	2470.08	0.5	PASS
11AX20M IMO	Ant1	2412	19.08	2402.48	2421.56	0.5	PASS
	Ant2	2412	19.08	2402.48	2421.56	0.5	PASS
	Ant1	2437	19.08	2427.48	2446.56	0.5	PASS
	Ant2	2437	19.08	2427.48	2446.56	0.5	PASS
	Ant1	2462	19.12	2452.48	2471.60	0.5	PASS
	Ant2	2462	19.08	2452.48	2471.56	0.5	PASS
11AX40M IMO	Ant1	2422	37.76	2403.12	2440.88	0.5	PASS
	Ant2	2422	37.92	2403.04	2440.96	0.5	PASS
	Ant1	2437	37.84	2418.12	2455.96	0.5	PASS
	Ant2	2437	37.84	2418.12	2455.96	0.5	PASS
	Ant1	2452	37.92	2433.04	2470.96	0.5	PASS
	Ant2	2452	37.76	2433.12	2470.88	0.5	PASS

4.5. Test graphs



















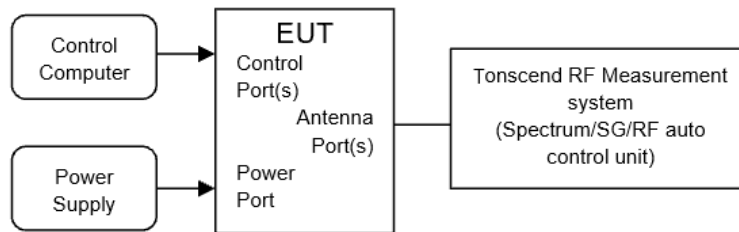






5. 99% Bandwidth

5.1. Block diagram of test setup



5.2. Limits

Just for Report.

5.3. Test procedure

- (1) The test according to ANSI C63.10 clause 6.9.3.
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously
- (4) Use the following spectrum analyzer settings for the 99% Bandwidth:

RBW:	1% to 5% of the OBW
VBW:	approximately three times RBW
Span:	between 1.5 times and 5.0 times the OBW
Detector Mode:	peak
Sweep time:	auto
Trace mode	max hold

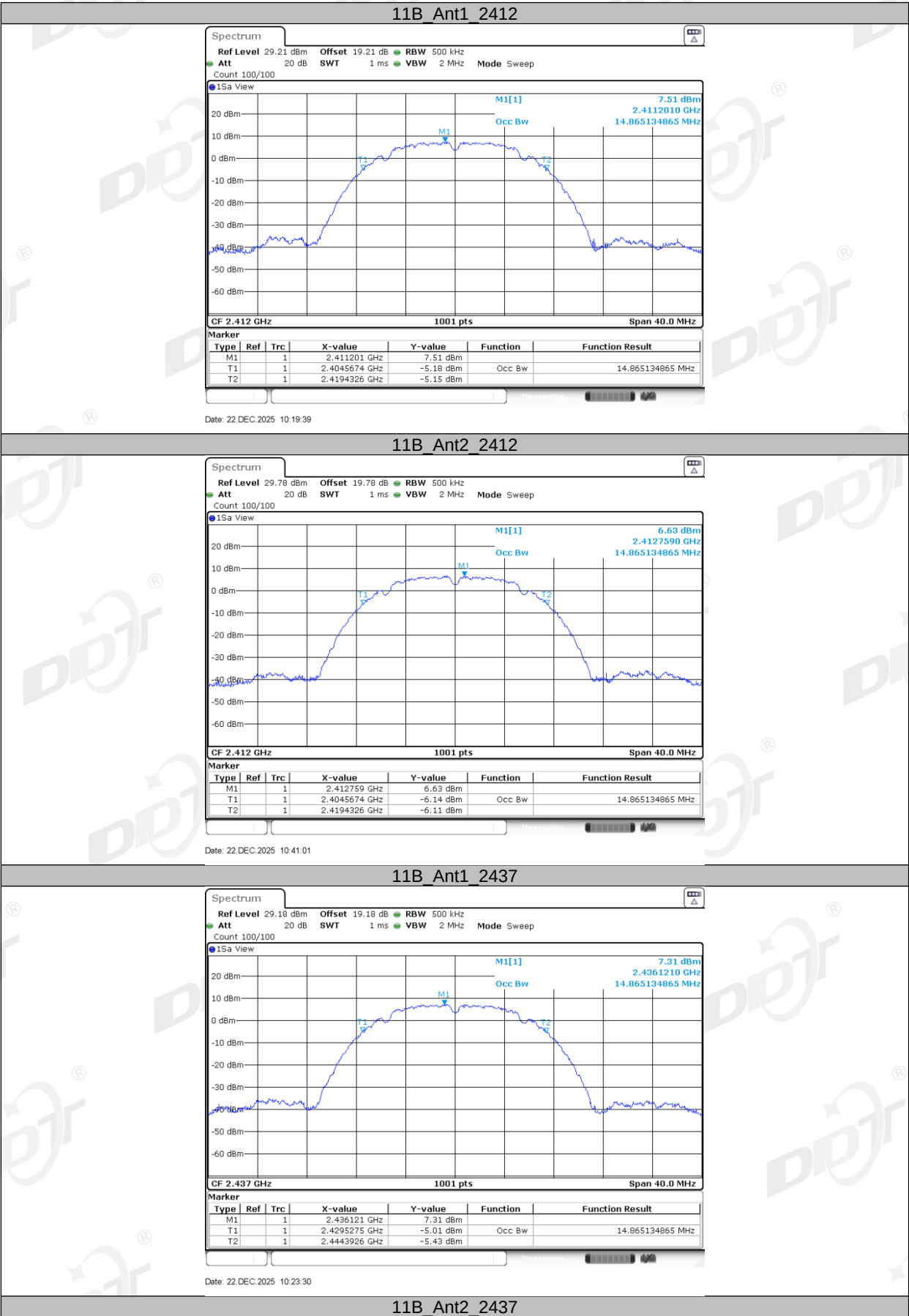
Allow the trace to stabilize, measure the 99% bandwidth of signal, and record the results in the report.

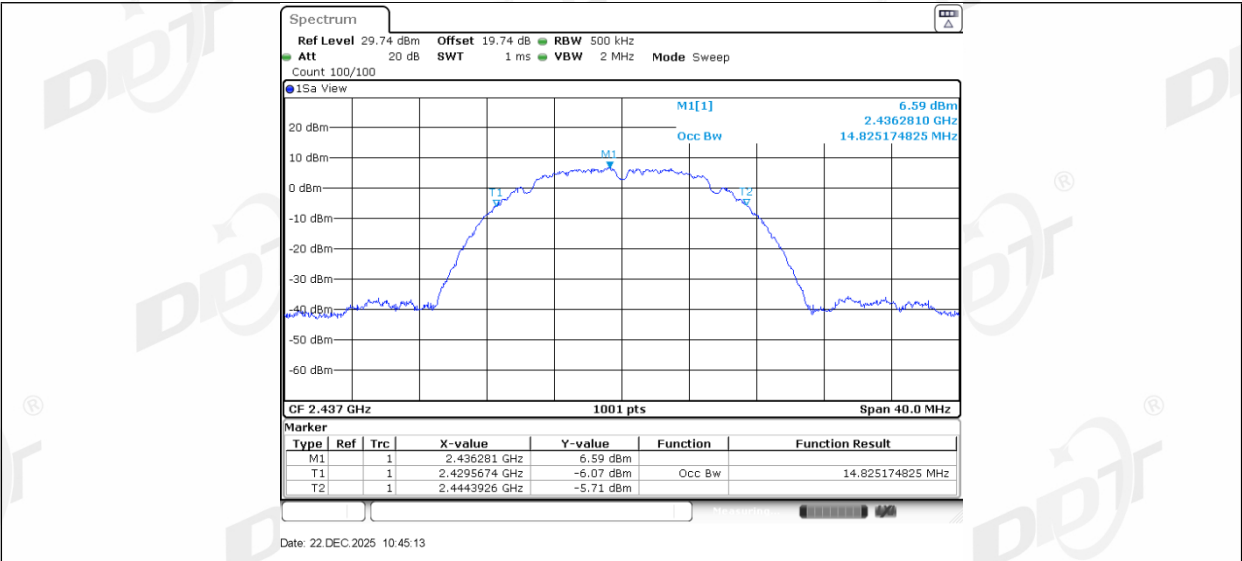
5.4. Test result

Test Engineer:	Zeng Zhongyao	Test Site:	RF Measurement System 3#
Ambient Condition:	25.2℃,38.6%RH	Test Date:	2025.12.22
Test Power Supply:	AC 120V	Sample Number:	S25120216-003

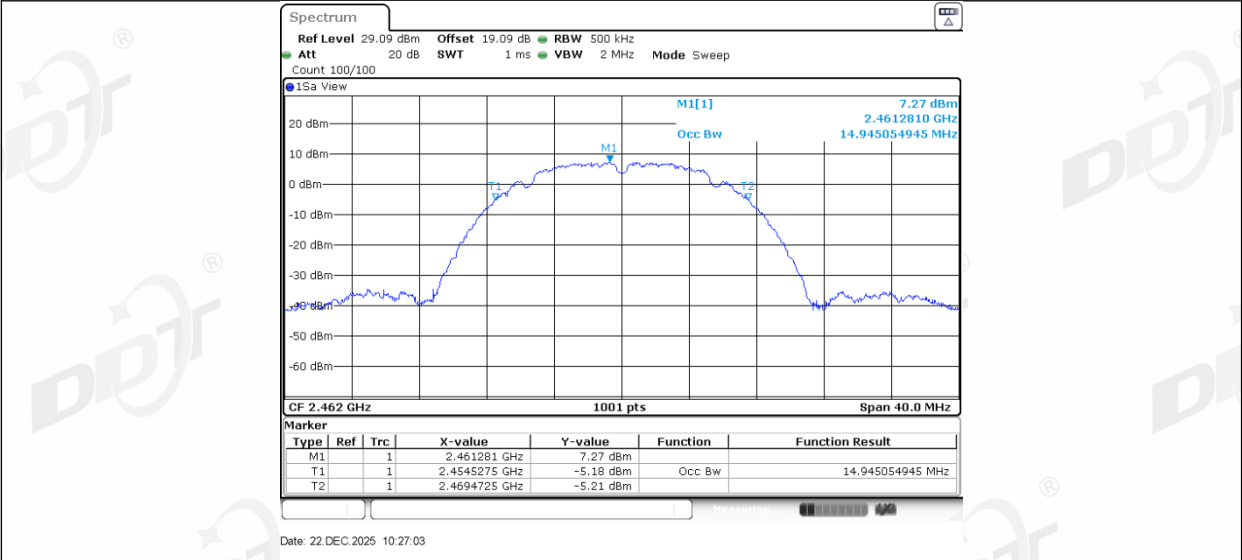
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.865	2404.5674	2419.4326	---	---
	Ant2	2412	14.865	2404.5674	2419.4326	---	---
	Ant1	2437	14.865	2429.5275	2444.3926	---	---
	Ant2	2437	14.825	2429.5674	2444.3926	---	---
	Ant1	2462	14.945	2454.5275	2469.4725	---	---
	Ant2	2462	14.825	2454.5674	2469.3926	---	---
11G	Ant1	2412	16.623	2403.6883	2420.3117	---	---
	Ant2	2412	16.583	2403.7283	2420.3117	---	---
	Ant1	2437	16.623	2428.6883	2445.3117	---	---
	Ant2	2437	16.623	2428.6883	2445.3117	---	---
	Ant1	2462	16.623	2453.7283	2470.3516	---	---
	Ant2	2462	16.623	2453.6883	2470.3117	---	---
11N20MI MO	Ant1	2412	17.622	2403.1289	2420.7512	---	---
	Ant2	2412	17.622	2403.1688	2420.7912	---	---
	Ant1	2437	17.622	2428.1688	2445.7912	---	---
	Ant2	2437	17.582	2428.2088	2445.7912	---	---
	Ant1	2462	17.662	2453.1688	2470.8312	---	---
	Ant2	2462	17.622	2453.1688	2470.7912	---	---
11N40MI MO	Ant1	2422	36.204	2403.8581	2440.0619	---	---
	Ant2	2422	36.284	2403.8581	2440.1419	---	---
	Ant1	2437	36.204	2418.8581	2455.0619	---	---
	Ant2	2437	36.204	2418.9381	2455.1419	---	---
	Ant1	2452	36.204	2433.9381	2470.1419	---	---
	Ant2	2452	36.204	2433.8581	2470.0619	---	---
11AX20M IMO	Ant1	2412	19.061	2402.4496	2421.5105	---	---
	Ant2	2412	19.021	2402.4895	2421.5105	---	---
	Ant1	2437	19.021	2427.4895	2446.5105	---	---
	Ant2	2437	19.021	2427.4895	2446.5105	---	---
	Ant1	2462	19.021	2452.4895	2471.5105	---	---
	Ant2	2462	19.061	2452.4496	2471.5105	---	---
11AX40M IMO	Ant1	2422	37.882	2402.9790	2440.8611	---	---
	Ant2	2422	37.882	2403.0589	2440.9411	---	---
	Ant1	2437	37.962	2417.9790	2455.9411	---	---
	Ant2	2437	37.882	2418.0589	2455.9411	---	---
	Ant1	2452	37.882	2433.0589	2470.9411	---	---
	Ant2	2452	37.802	2433.0589	2470.8611	---	---

5.5. Test graphs

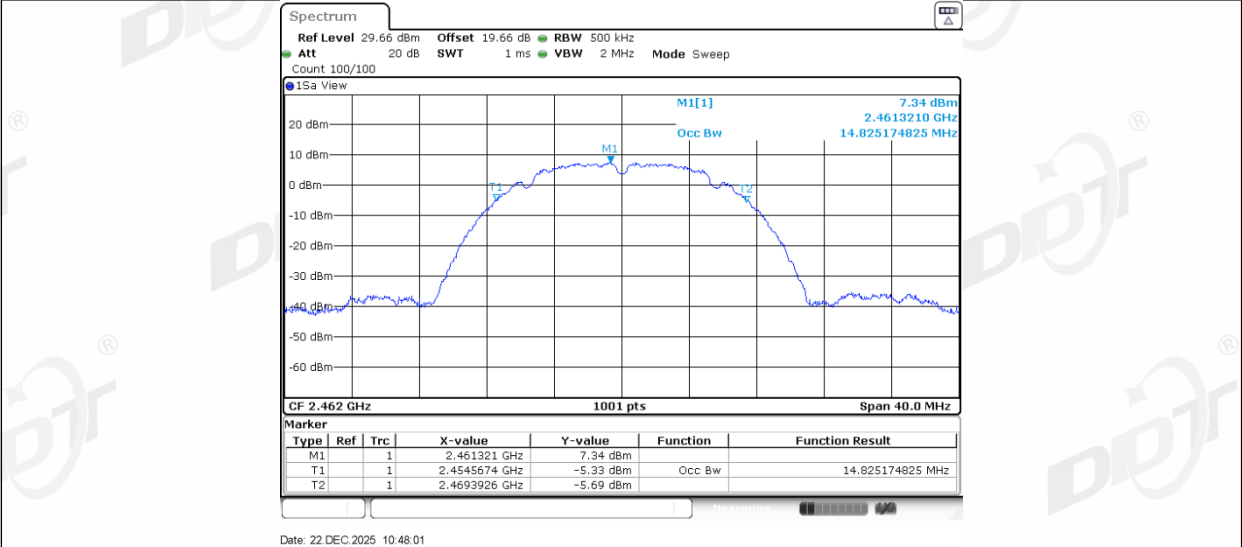




11B_Ant1_2462



11B_Ant2_2462



11G_Ant1_2412

