



RADIO TEST REPORT

Applicant	:	Empowerment Technologies Inc.
Address of Applicant	:	590 York Rd., Unit 2 Niagara-on-the-Lake, ON Canada, L0S 1J0
Manufacturer	:	Empowerment Technologies Inc.
Address of Manufacturer	:	590 York Rd., Unit 2 Niagara-on-the-Lake, ON Canada, L0S 1J0
Equipment under Test	:	DEFENDER GO CONTINUOUS 24/7 RECORDING 2.5K WIRELESS CAMERA
Model No.	:	BGO4MCB1
FCC ID	:	2AV6B-BGO4MCB1
IC	:	26035-BGO4MCB1
Test Standard(s)	:	FCC Rules and Regulations Part 15 Subpart C, 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-RE26010628-1E02
Issue Date	:	2026/08/21
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

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Equipment under Test	:	DEFENDER GO CONTINUOUS 24/7 RECORDING 2.5K WIRELESS CAMERA
Model No.	:	BGO4MCB1
Manufacturer	:	Empowerment Technologies Inc.
Address of Manufacturer	:	590 York Rd., Unit 2 Niagara-on-the-Lake, ON Canada, L0S 1J0

Test Standard Used:
FCC Rules and Regulations Part 15 Subpart C,
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-RE26010628-1E02		
Date of Receipt:	2026/05/27	Date of Test:	2026/05/27 - 2026/08/14

Created: Zoe Peng	Reviewed: Chen Ziqin	Approved: Damon Hu
		
2026/06/16	2026/08/21	2026/08/21

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	2026/08/21	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	Antenna Requirement	47 CFR Part 15 15.203, RSS-Gen clause 6.8	/	Pass
8	Power Line Conducted Emissions	47 CFR Part 15 15.207(a), RSS-Gen clause 8.8	/	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	:	DEFENDER GO CONTINUOUS 24/7 RECORDING 2.5K WIRELESS CAMERA
Model Number	:	BGO4MCB1
Difference of model number	:	/
EUT Function Description	:	Please reference user manual of this device
Power Supply	:	Input: DC 5V=1A from adaptor or DC 3.6V from battery
Antenna Type	:	FPC
Max Antenna Gain(dBi)	:	1.97

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
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	/	/

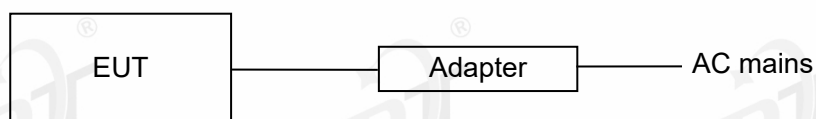
Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's 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
Cable	/	/	1m

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: Hi3853_ALTX_TB.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)
IEEE 802.11b	18	1	LCH: CH1	2412
	18	1	MCH: CH6	2437
	18	1	HCH: CH11	2462
IEEE 802.11g	17	6	LCH: CH1	2412
	17	6	MCH: CH6	2437
	17	6	HCH: CH11	2462
IEEE 802.11n HT20	16	MCS 0	LCH: CH1	2412
	16	MCS 0	MCH: CH6	2437
	16	MCS 0	HCH: CH11	2462
IEEE 802.11n HT40	13	MCS 0	LCH: CH3	2422
	13	MCS 0	MCH: CH6	2437
	13	MCS 0	HCH: CH9	2452
IEEE 802.11ax HE20	SU: 13 RU: 18	MCS 0	LCH: CH1	2412
	SU: 13 RU: 18	MCS 0	MCH: CH6	2437
	SU: 13 RU: 18	MCS 0	HCH: CH11	2462
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

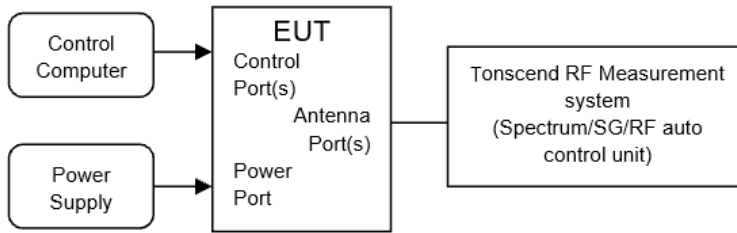
Test Item	Uncertainty
Bandwidth	1.9%
Peak Output Power (Conducted) (Spectrum analyzer)	0.98 dB
Peak Output Power (Conducted) (Power Sensor)	1.18 dB
Power Spectral Density (Base EIRP)	1.51 dB
Power Spectral Density (Spectrum analyzer)	0.98 dB
Frequencies Stability	1.9 kHz
Conducted spurious emissions	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 5#)				
Spectrum Analyzer	R&S	FSV40	101903	2026/07/04
Wideband Radio Communication Tester	R&S	CMW500	132871	2027/01/15
EXG Vector Generator	Agilent	N5172B	MY53051914	2027/01/07
Signal Generator	Agilent	E4432B	WS40052489	2026/06/18
RF Control Unit	Tonscend	JS0806-2	23180620727	2027/03/17
TEMP&HUMI Programmable Chamber	ZHIXIANG	ZXGDJS-150L	ZX170110-A	2027/02/27
Test Software	Tonscend	JS1120-3	V3.6.21	N/A
☑RF Connected Test (RF Measurement System 4#)				
Signal &Spectrum Analyzer	R&S	FSV3044	101173	2027/02/28
Wideband Radio Communication Tester	R&S	CMW500	168801	2027/02/28
MXG Vector Signal Generator	Agilent	N5182A	MY48180737	2026/08/28
PSG Vector Signal Generator	Agilent	E8267D	US49060192	2026/08/10
RF Control Unit	Tonscend	JS0806-2	2118060485	2027/02/28
TEMP&HUMI Programmable Chamber	ZHIXIANG	ZXGDJS-150L	ZX170110-A	2027/02/28
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

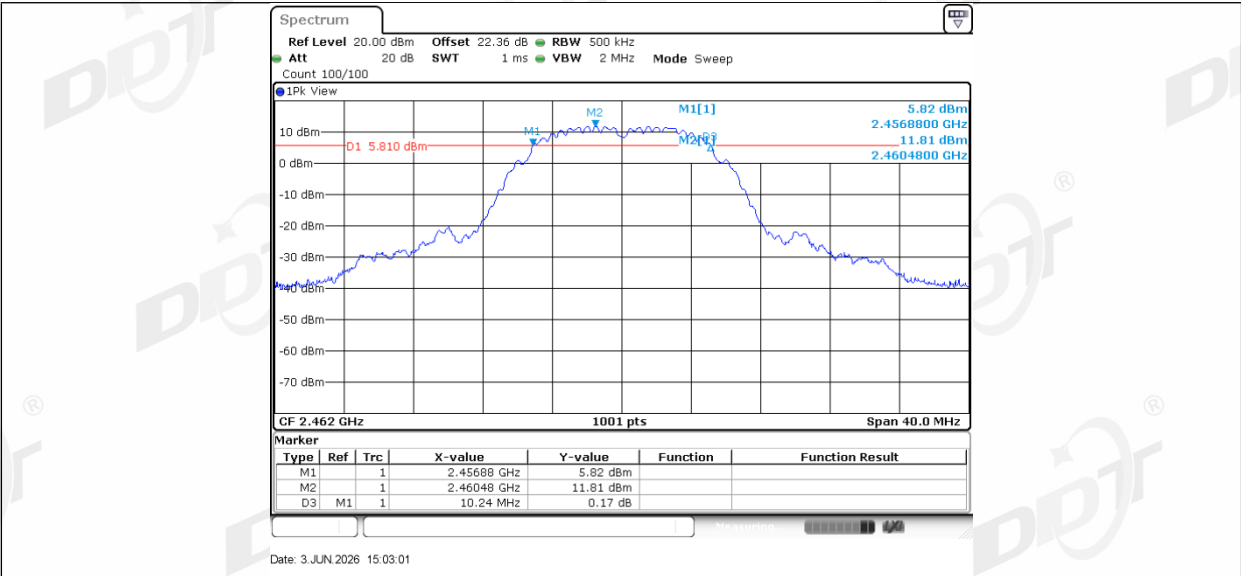
Test Engineer:	Zora Zhang	Test Site:	RF Measurement System 5#
Ambient Condition:	25.3-26.4℃,45.2-46.5%RH	Test Date:	2026.06.03-2026.08.14
Test Power Supply:	Battery	Sample Number:	S26010628-011

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	10.24	2406.92	2417.16	0.5	PASS
		2437	10.20	2431.92	2442.12	0.5	PASS
		2462	10.24	2456.88	2467.12	0.5	PASS
11G	Ant1	2412	16.36	2403.88	2420.24	0.5	PASS
		2437	16.40	2428.84	2445.24	0.5	PASS
		2462	16.40	2453.84	2470.24	0.5	PASS
11N20SISO	Ant1	2412	17.48	2403.28	2420.76	0.5	PASS
		2437	17.48	2428.28	2445.76	0.5	PASS
		2462	17.48	2453.28	2470.76	0.5	PASS
11N40SISO	Ant1	2422	35.60	2404.32	2439.92	0.5	PASS
		2437	36.00	2419.00	2455.00	0.5	PASS
		2452	35.92	2434.08	2470.00	0.5	PASS
11AX20SISO	Ant1	2412	19.00	2402.52	2421.52	0.5	PASS
		2437	19.00	2427.52	2446.52	0.5	PASS
		2462	18.96	2452.56	2471.52	0.5	PASS

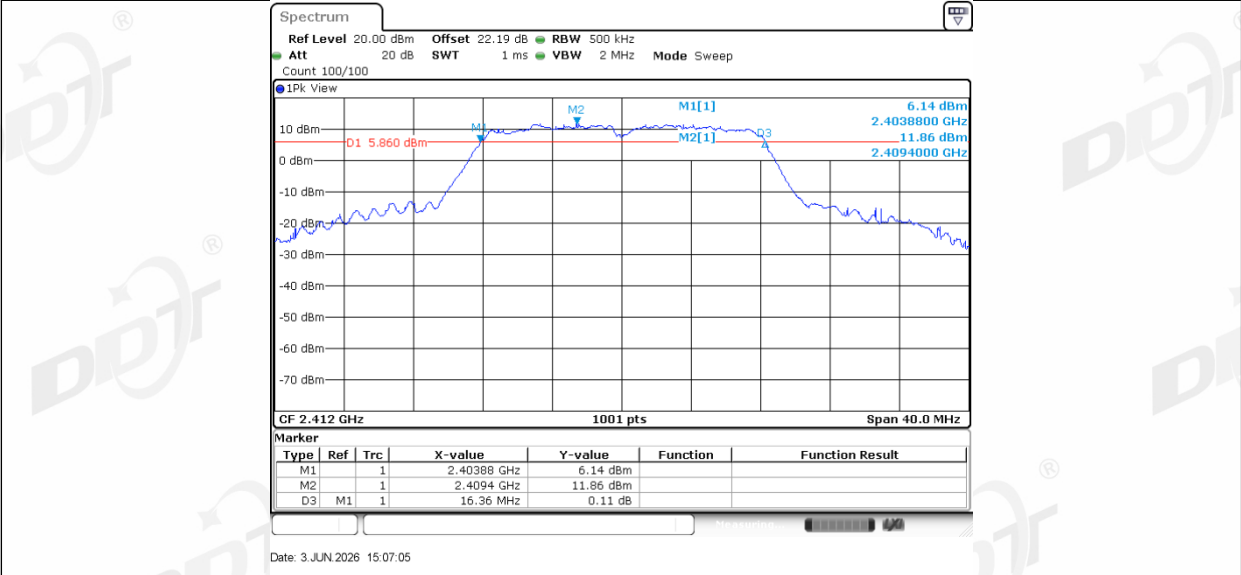
Test Mode	Antenna	Frequency[MHz]	Ru Size	Ru Index	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11AX20SISO	Ant1	2412	26Tone	RU0	2.08	2402.48	2404.56	0.5	PASS
				RU4	2.64	2410.68	2413.32	0.5	PASS
				RU8	2.04	2419.44	2421.48	0.5	PASS
			52Tone	RU37	17.00	2402.52	2419.52	0.5	PASS
				RU39	13.80	2405.72	2419.52	0.5	PASS
				RU40	14.52	2406.96	2421.48	0.5	PASS
			106Tone	RU53	18.08	2402.44	2420.52	0.5	PASS
				RU54	17.12	2404.44	2421.56	0.5	PASS
				RU0	2.08	2427.48	2429.56	0.5	PASS
		2437	26Tone	RU4	2.64	2435.68	2438.32	0.5	PASS
				RU8	2.04	2444.44	2446.48	0.5	PASS
				RU37	17.00	2427.52	2444.52	0.5	PASS
			52Tone	RU39	13.80	2430.72	2444.52	0.5	PASS
				RU40	17.00	2429.48	2446.48	0.5	PASS
				RU53	17.32	2427.44	2444.76	0.5	PASS
			106Tone	RU54	17.08	2429.44	2446.52	0.5	PASS
				RU0	2.08	2452.48	2454.56	0.5	PASS
			26Tone	RU4	2.60	2460.68	2463.28	0.5	PASS
				RU8	2.04	2469.44	2471.48	0.5	PASS
				RU37	17.04	2452.48	2469.52	0.5	PASS
		2462	52Tone	RU39	12.56	2456.96	2469.52	0.5	PASS
				RU40	17.00	2454.48	2471.48	0.5	PASS
				RU53	18.04	2452.44	2470.48	0.5	PASS
			106Tone	RU54	17.16	2454.40	2471.56	0.5	PASS

4.5. Test graphs

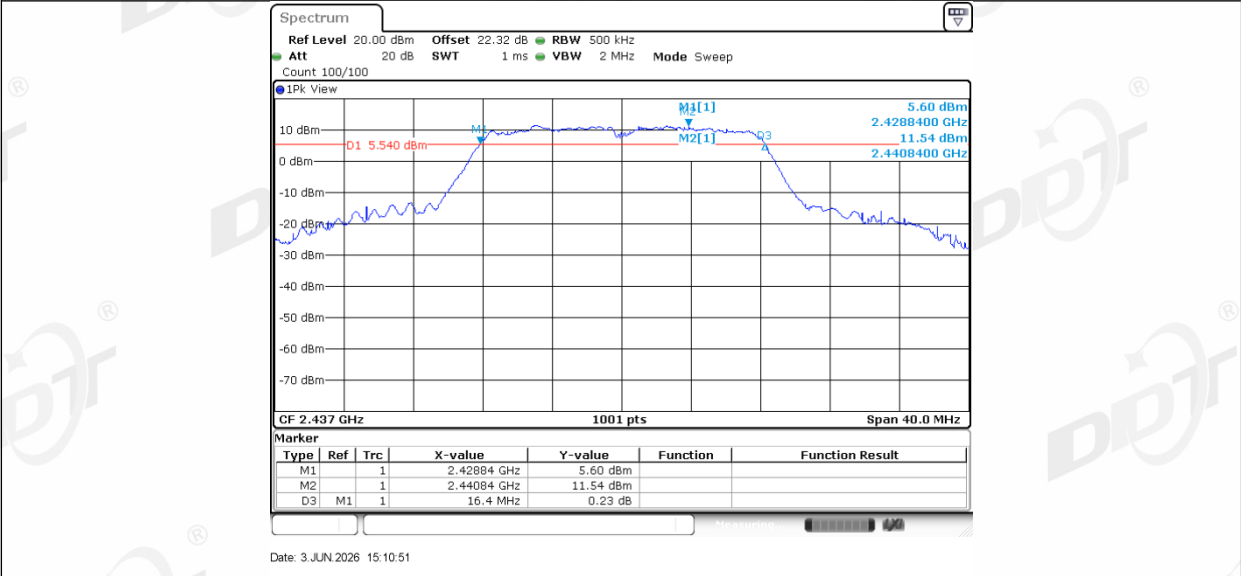




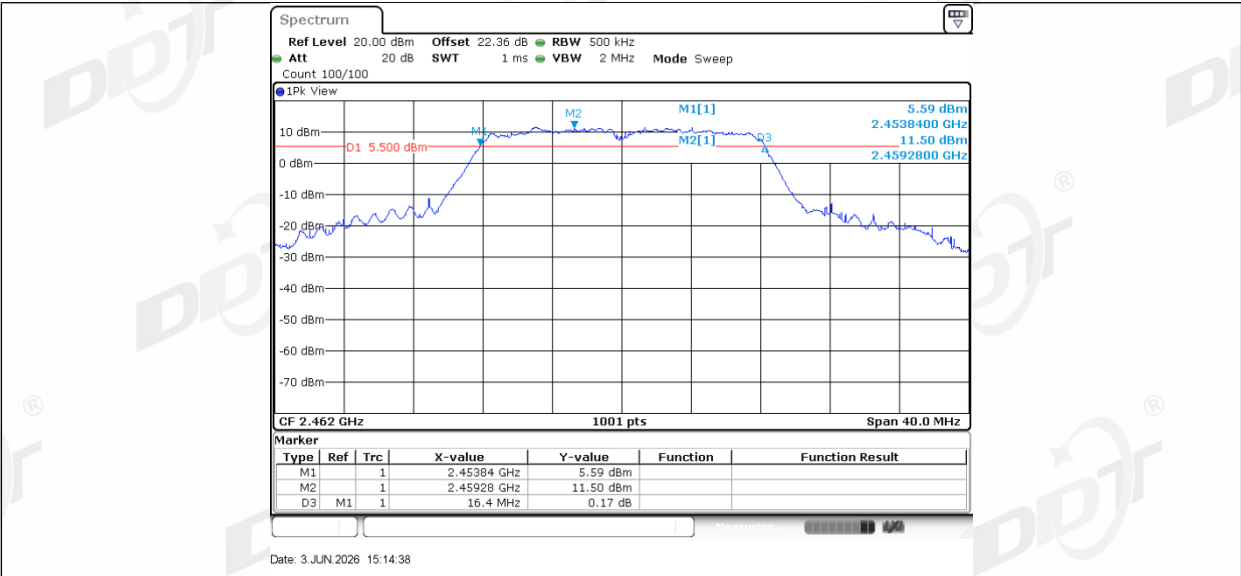
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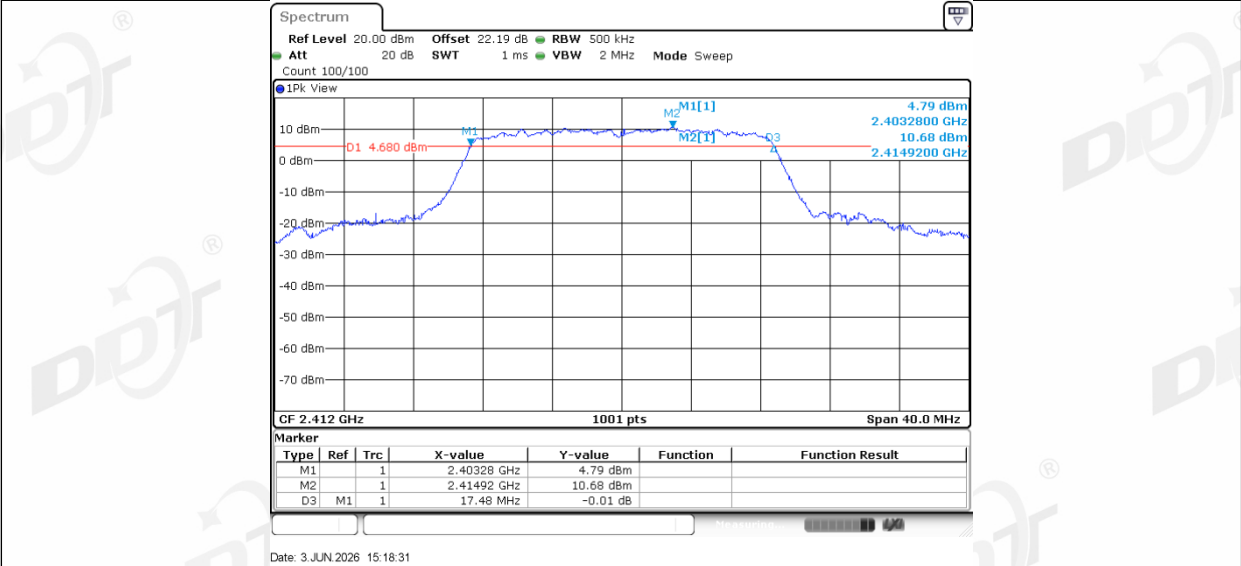
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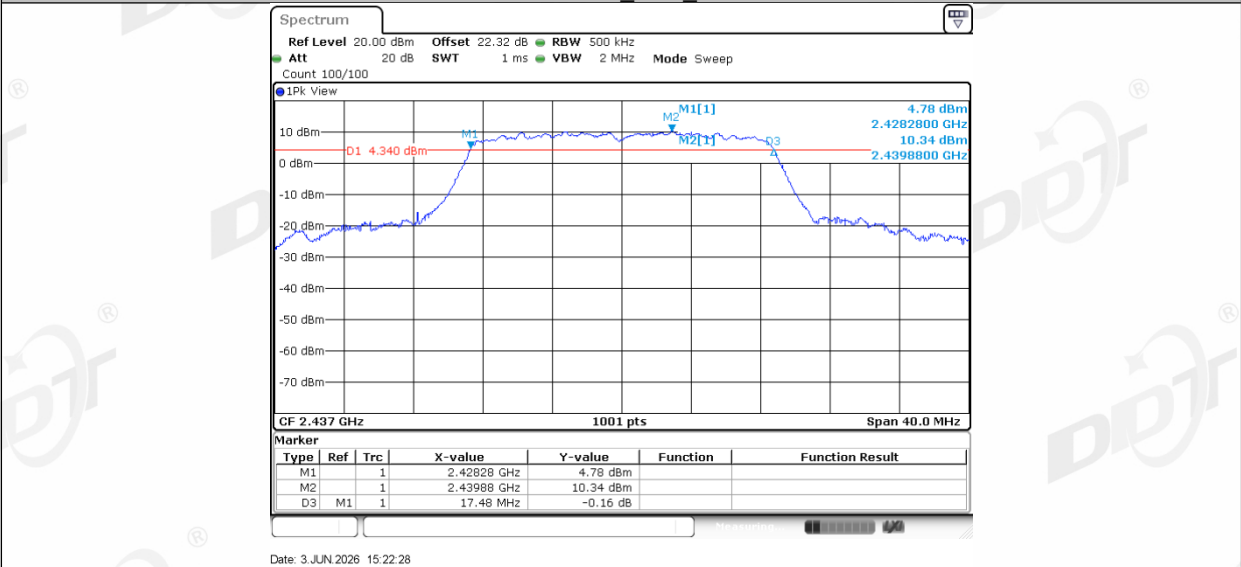
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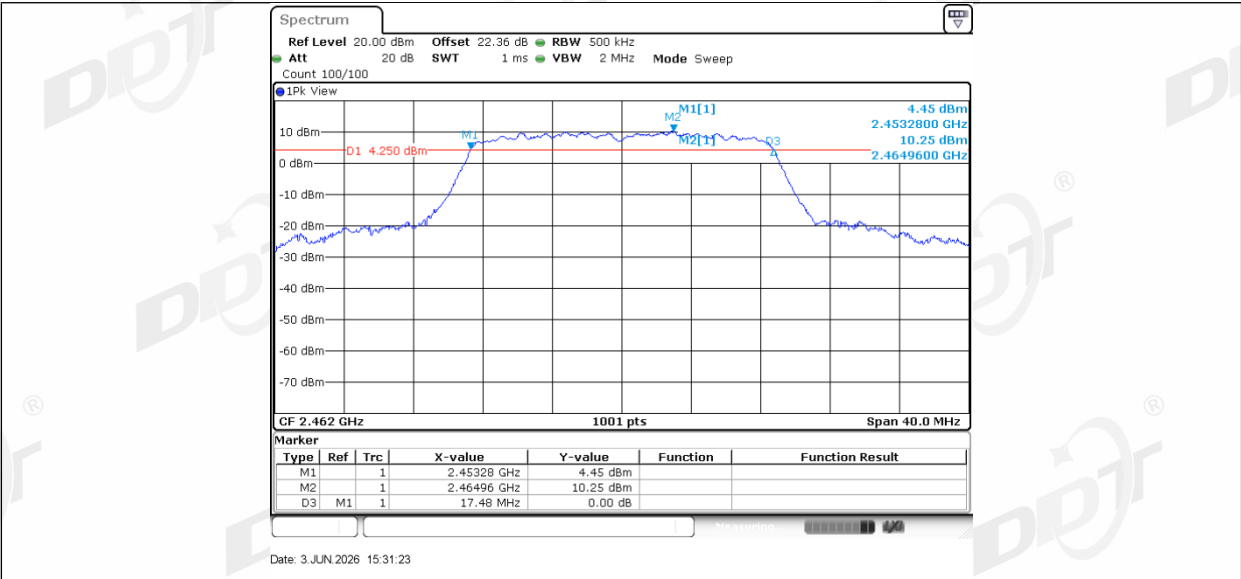
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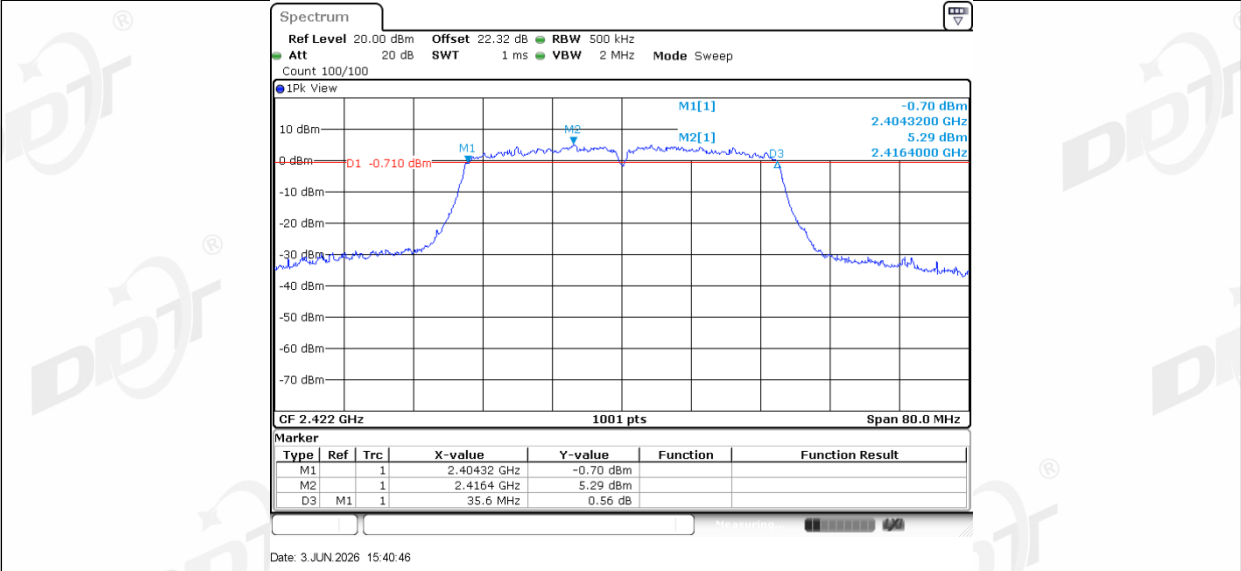
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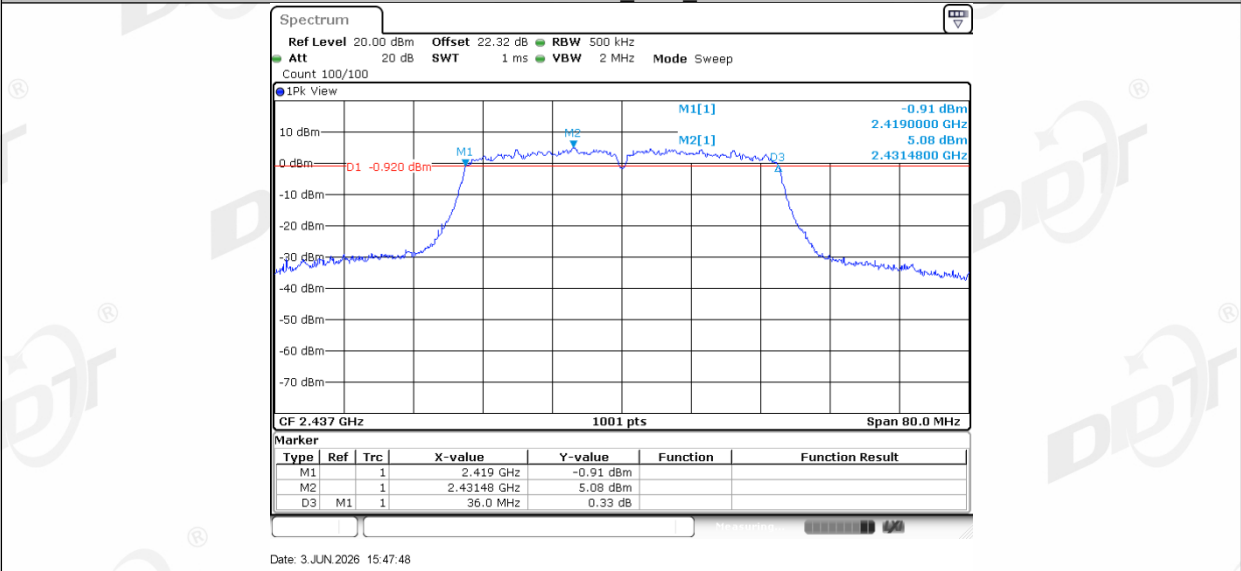
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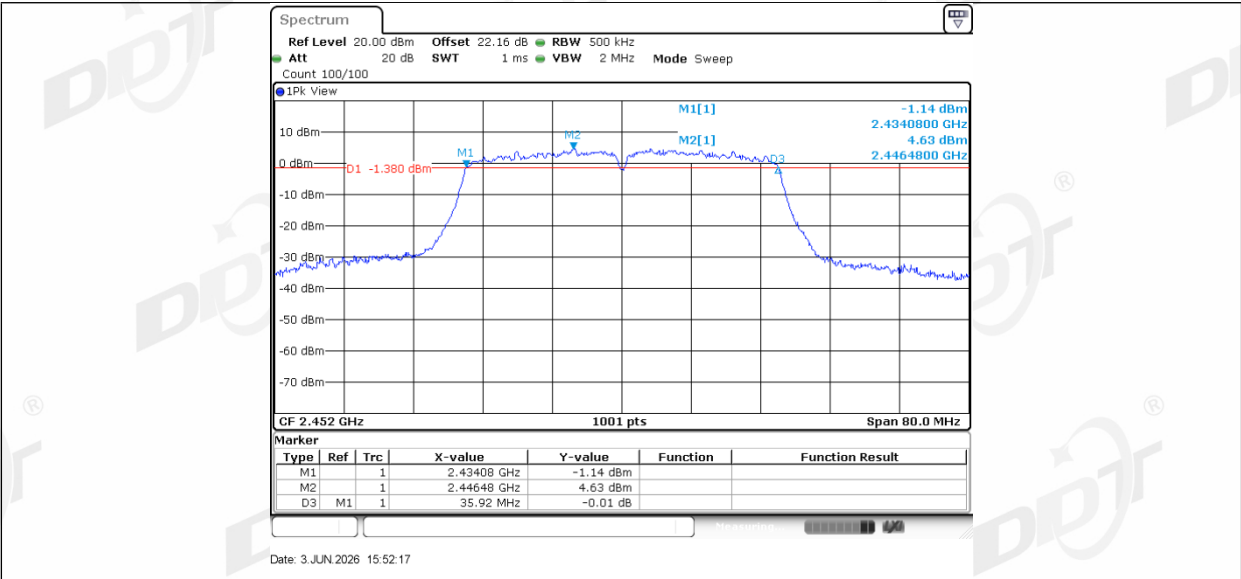
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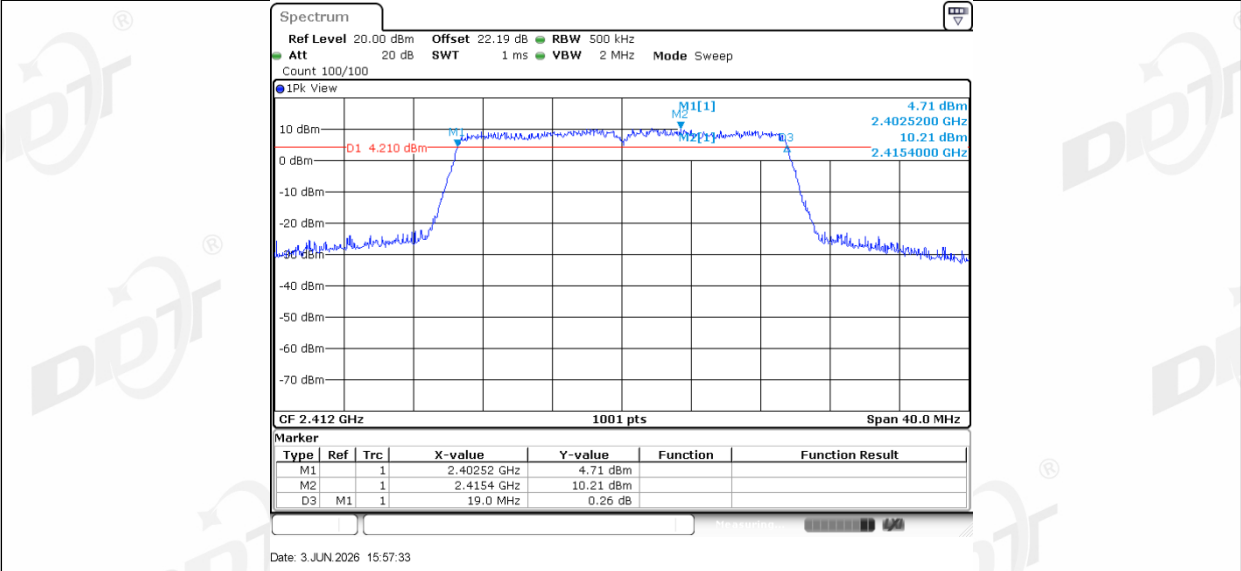
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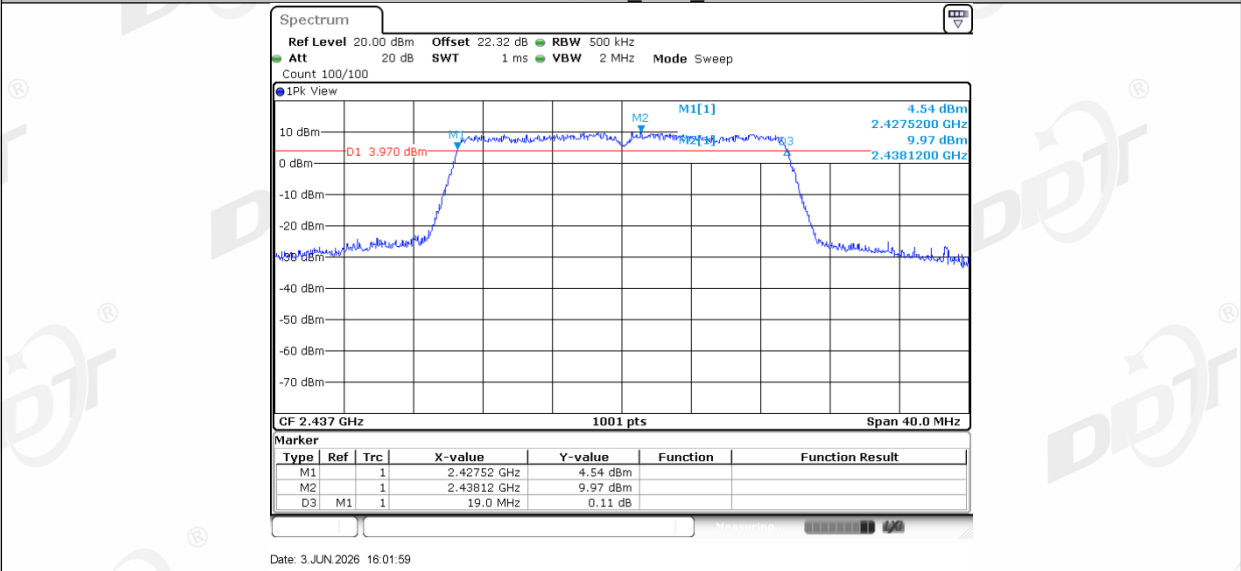
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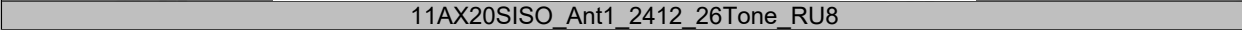
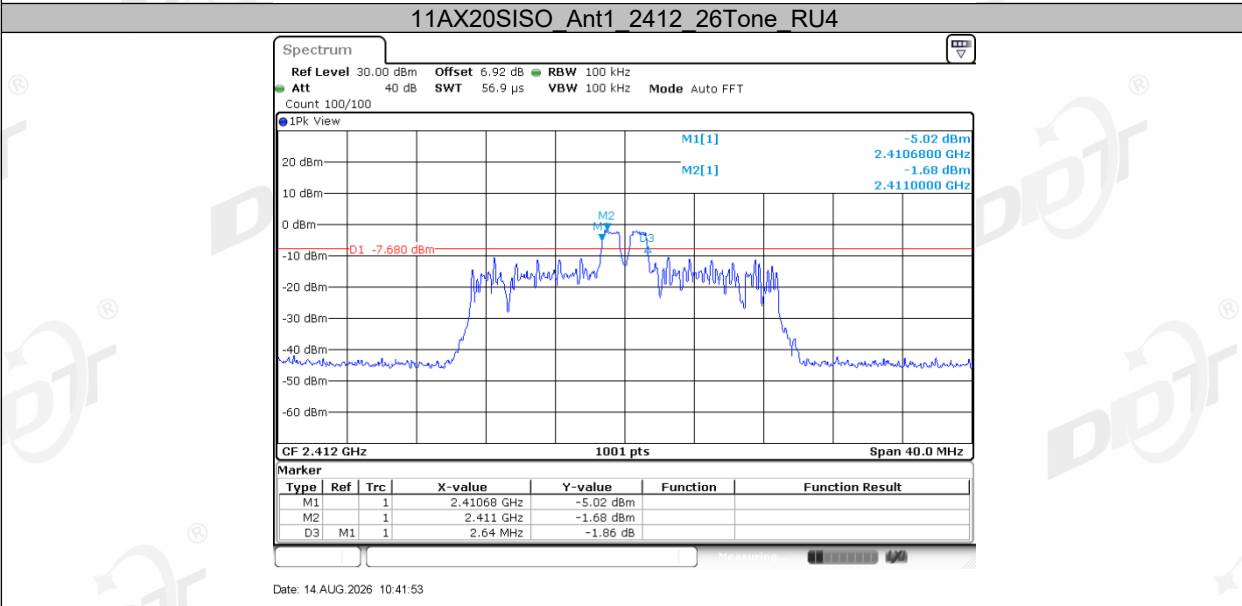
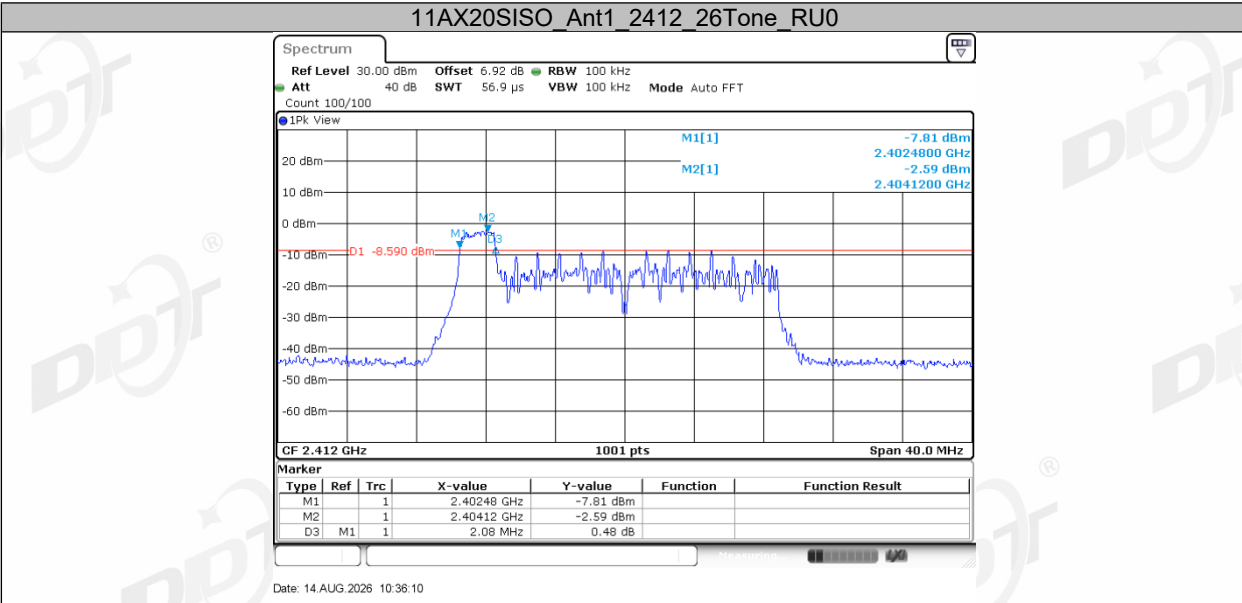
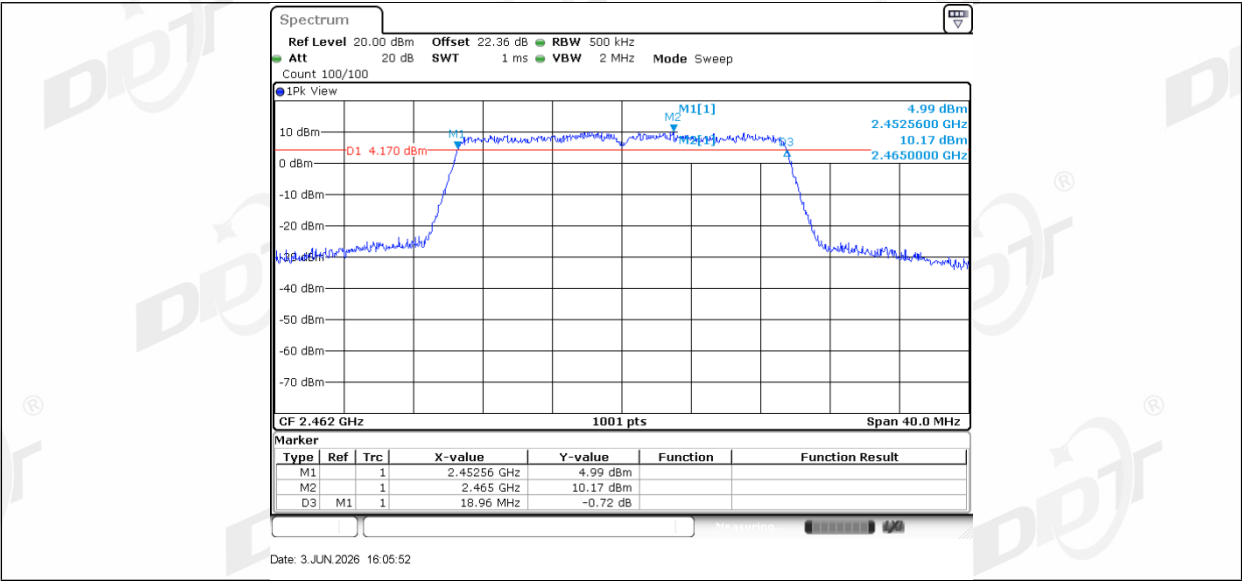
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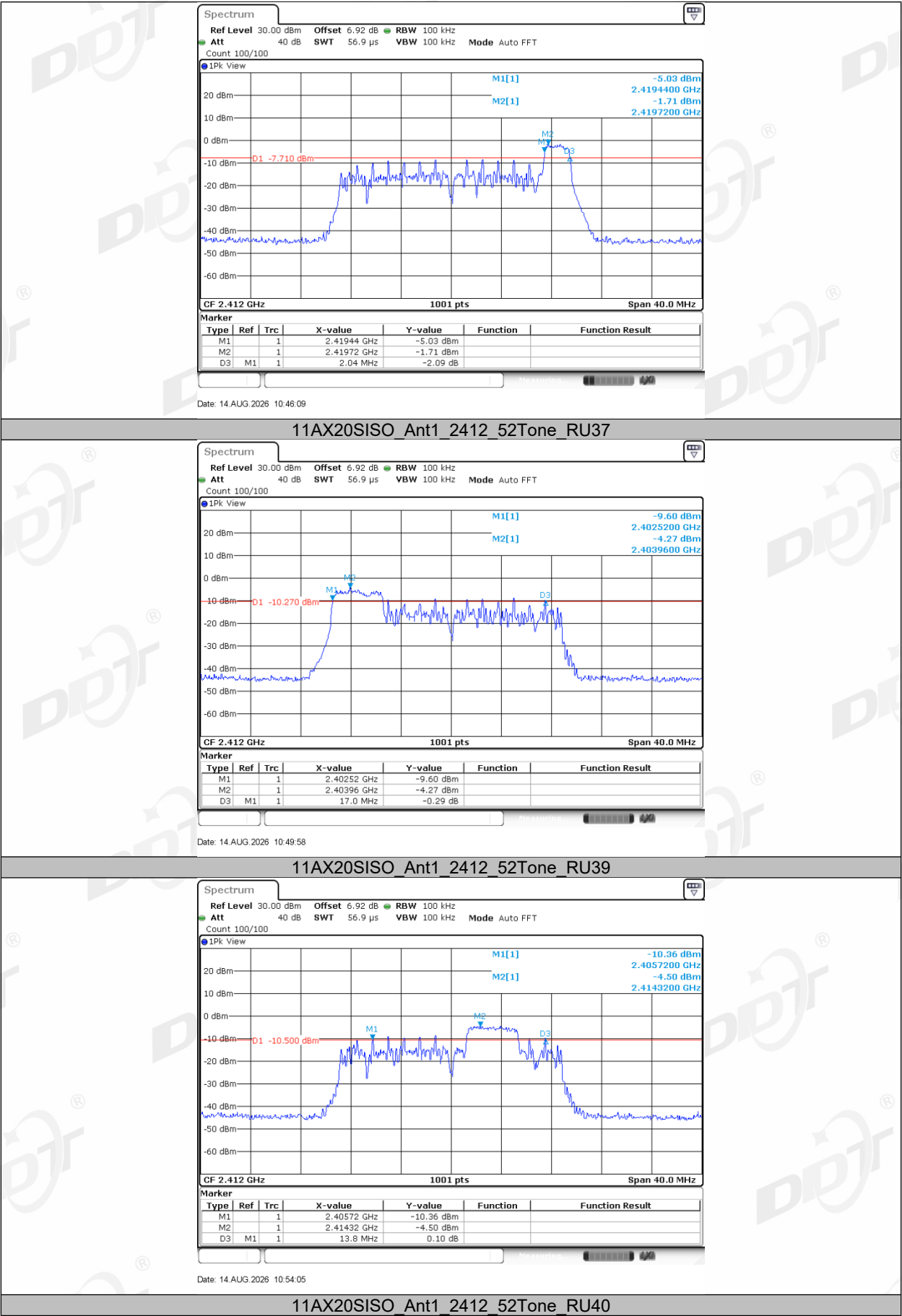


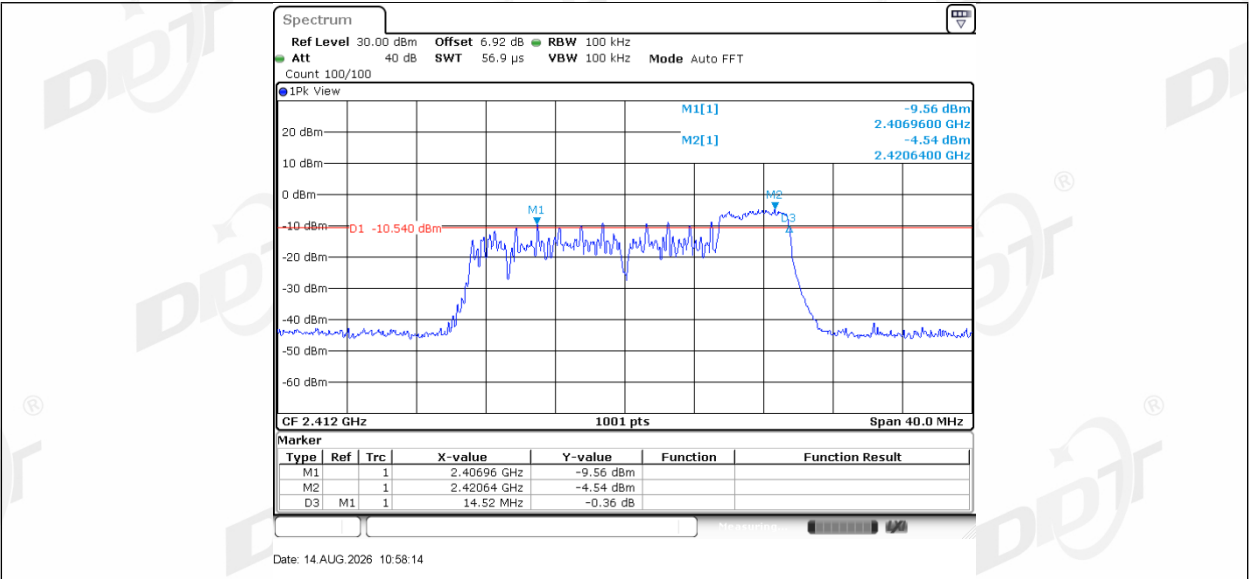
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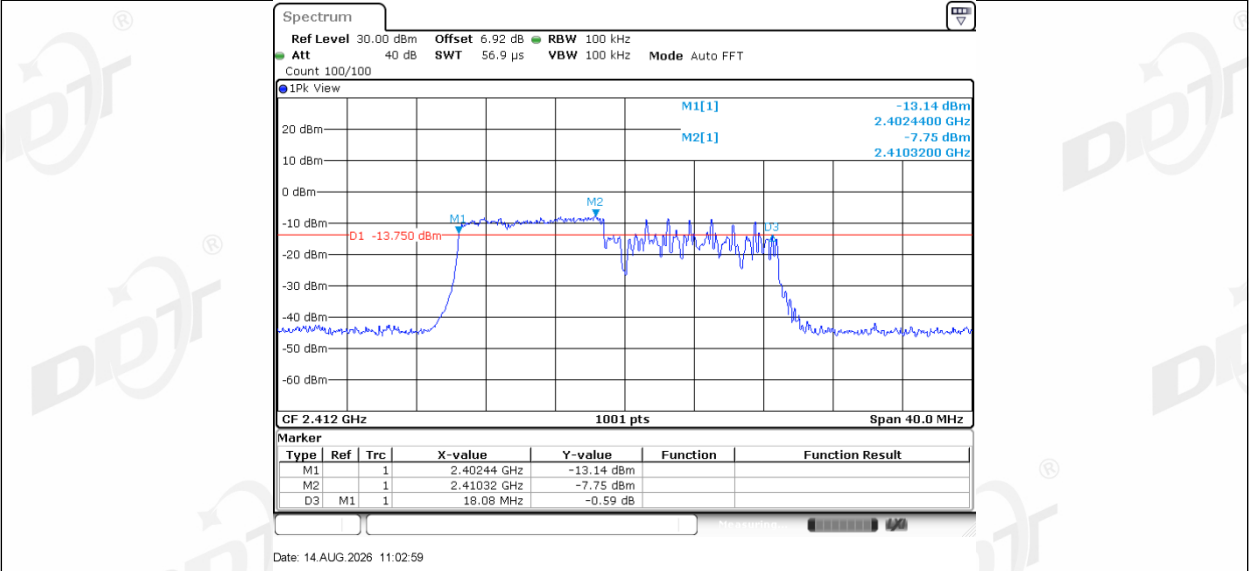
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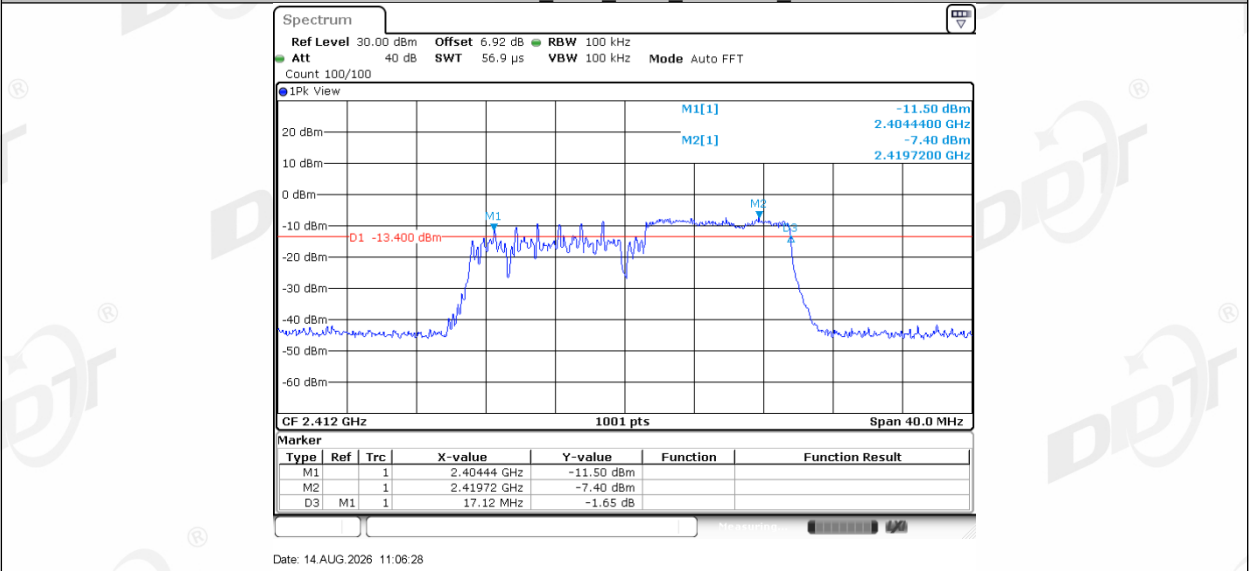




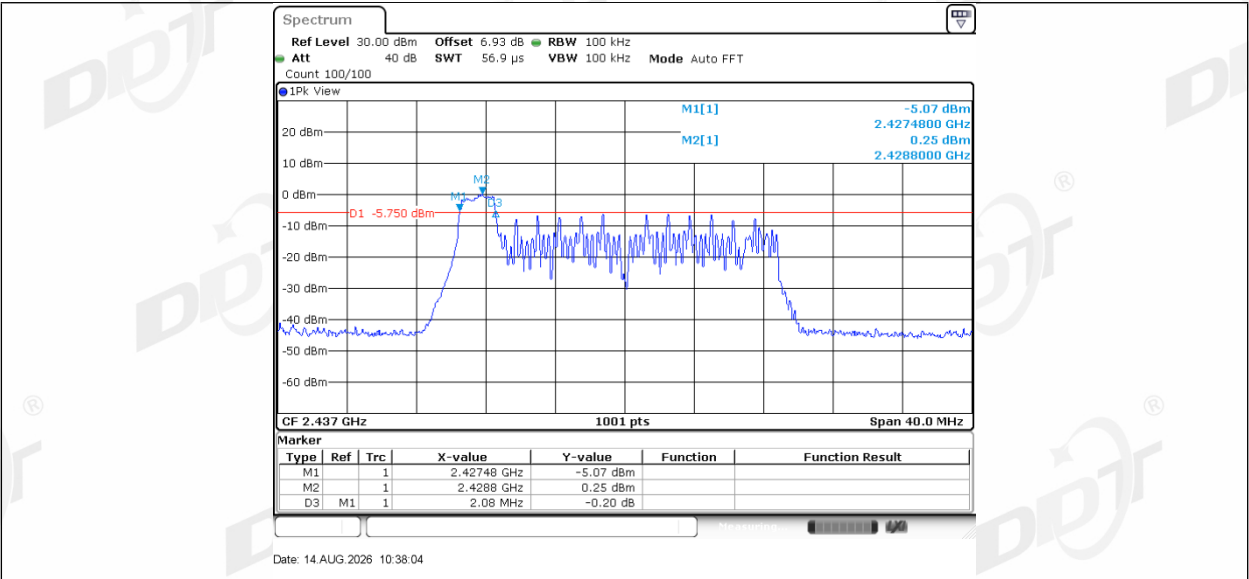
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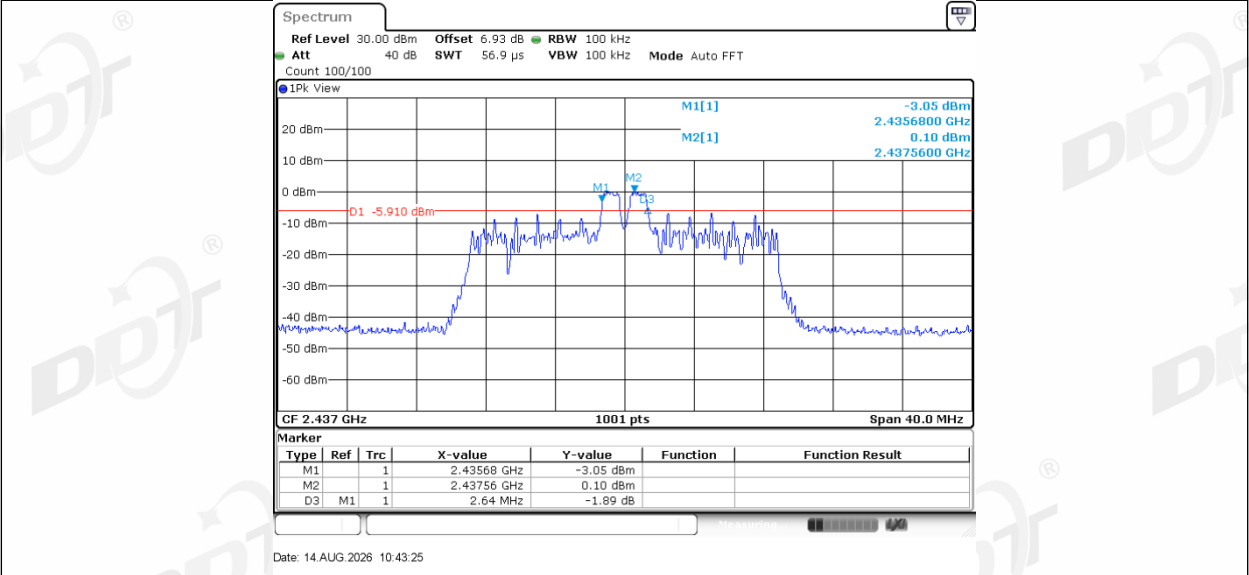
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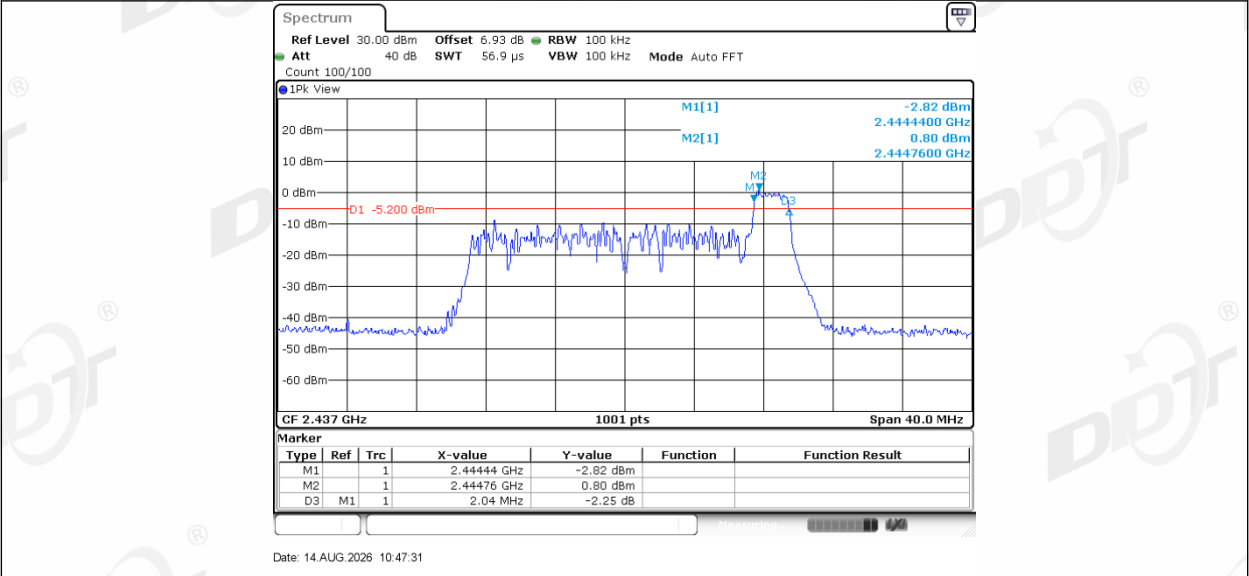
11AX20SISO Ant1_2437_26Tone_RU0



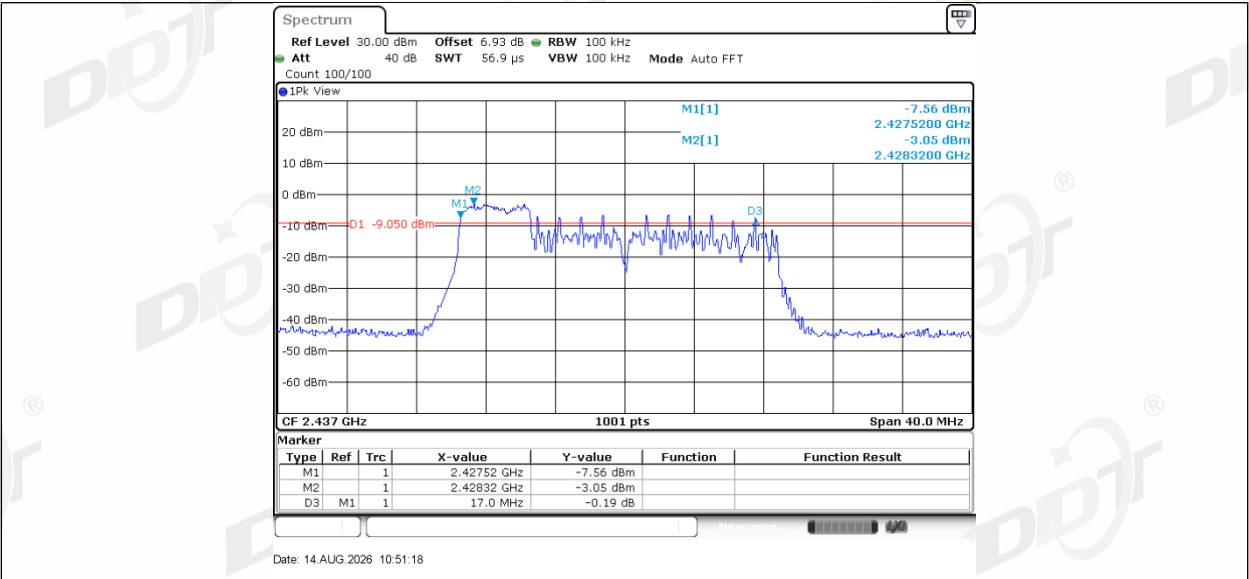
11AX20SISO Ant1 2437 26Tone RU4



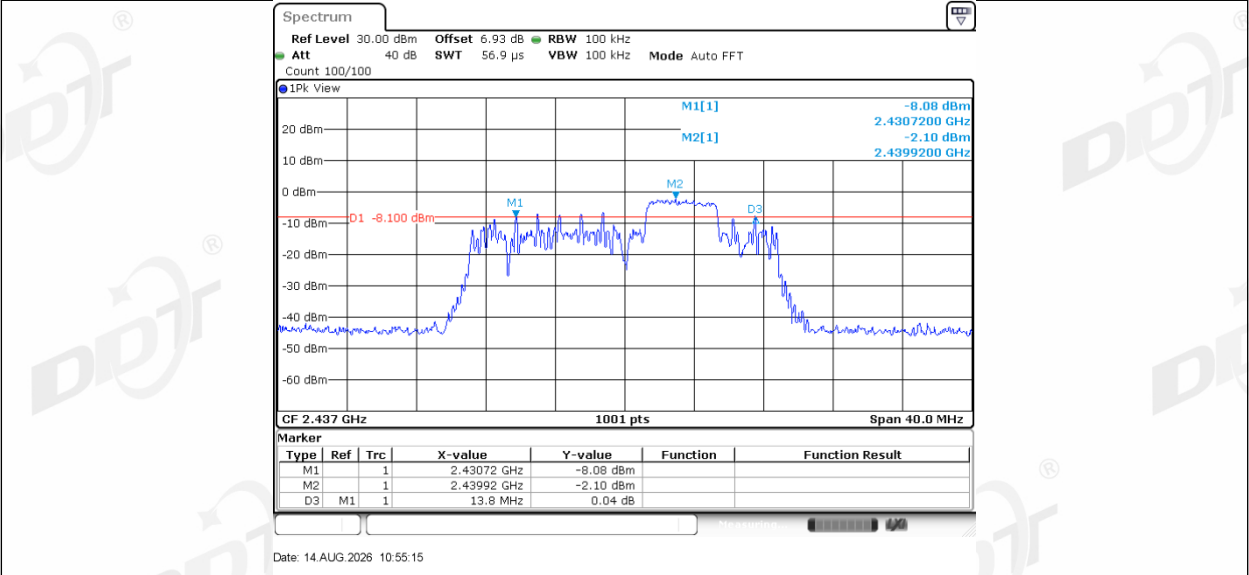
11AX20SISO Ant1 2437 26Tone RU8



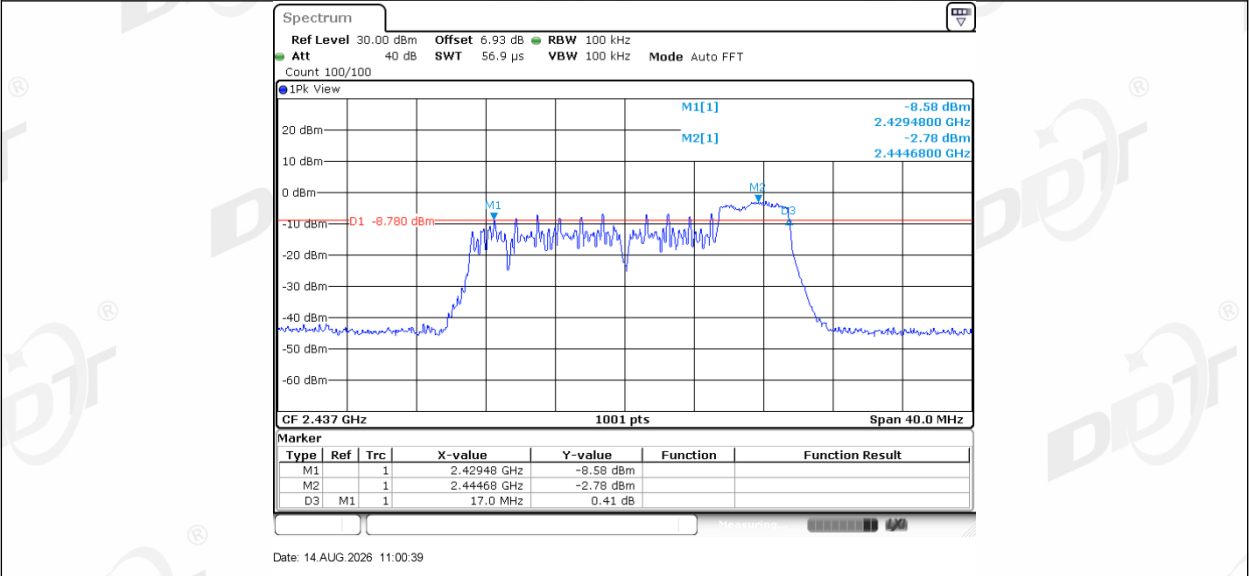
11AX20SISO Ant1 2437 52Tone RU37



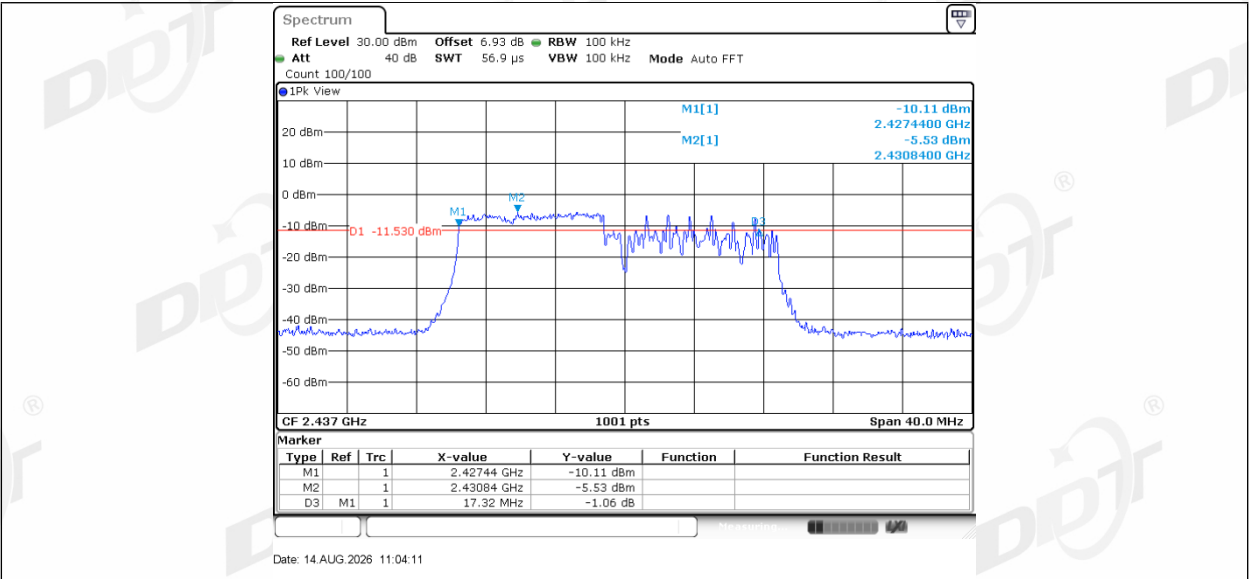
11AX20SISO Ant1 2437 52Tone RU39



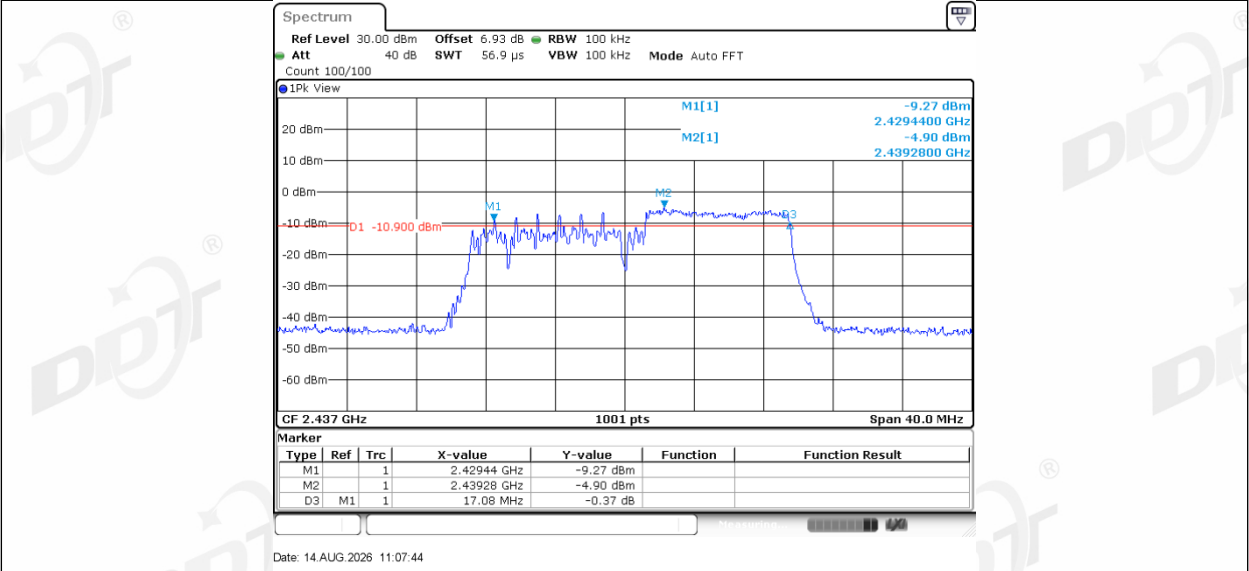
11AX20SISO Ant1 2437 52Tone RU40



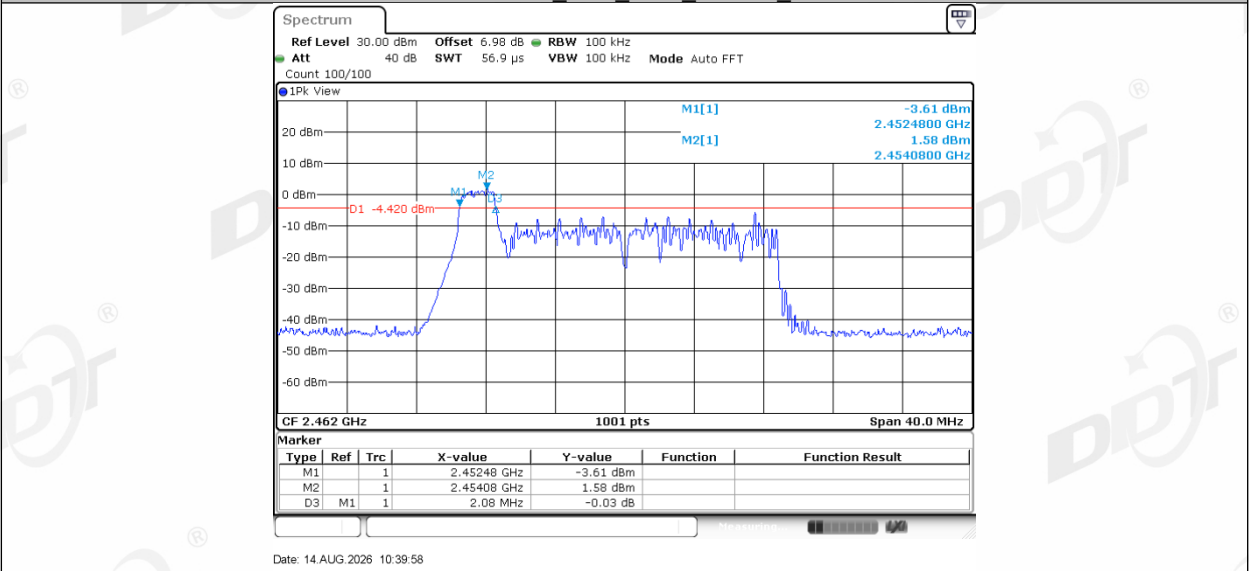
11AX20SISO Ant1 2437 106Tone RU53



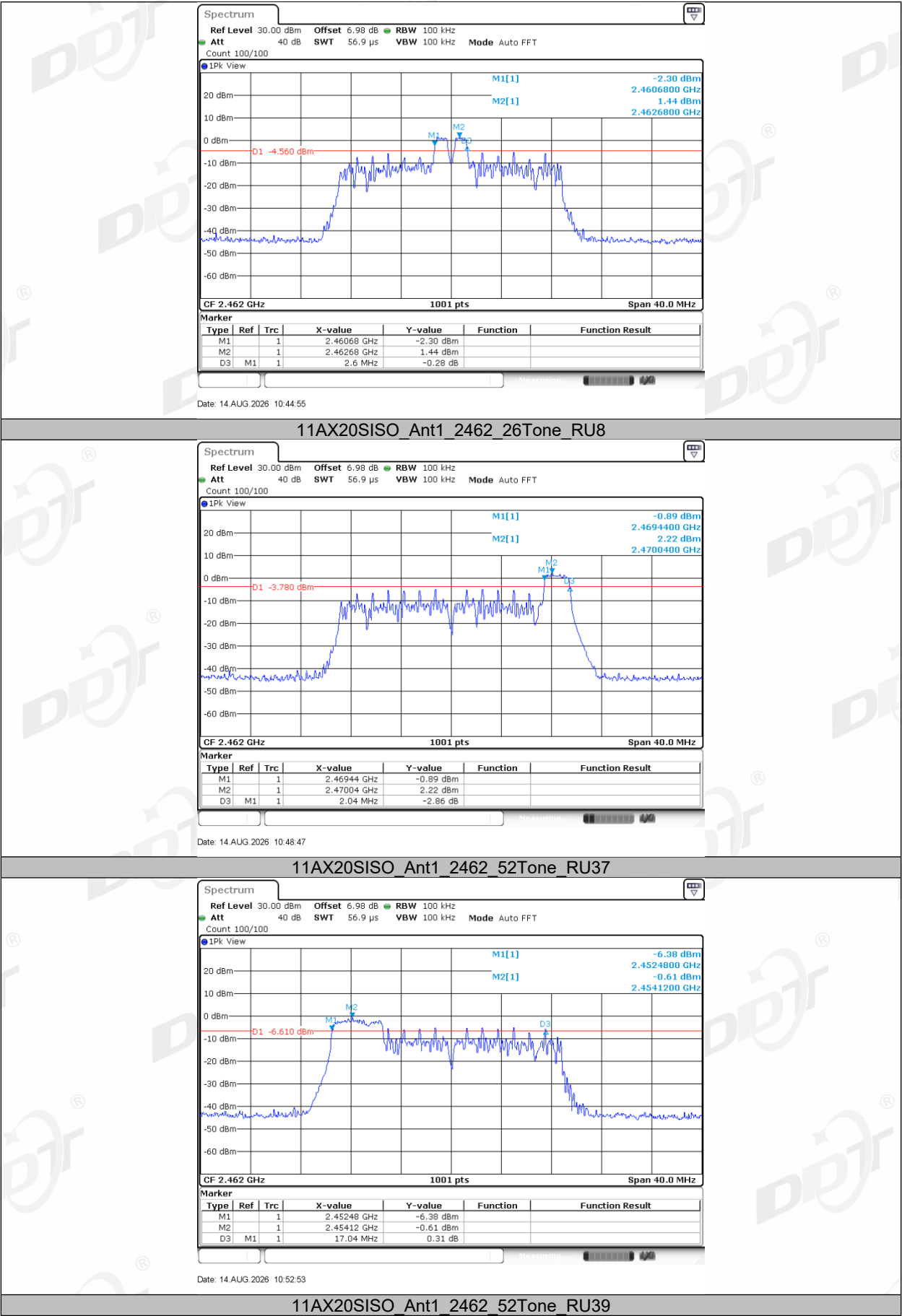
11AX20SISO Ant1_2437_106Tone_RU54

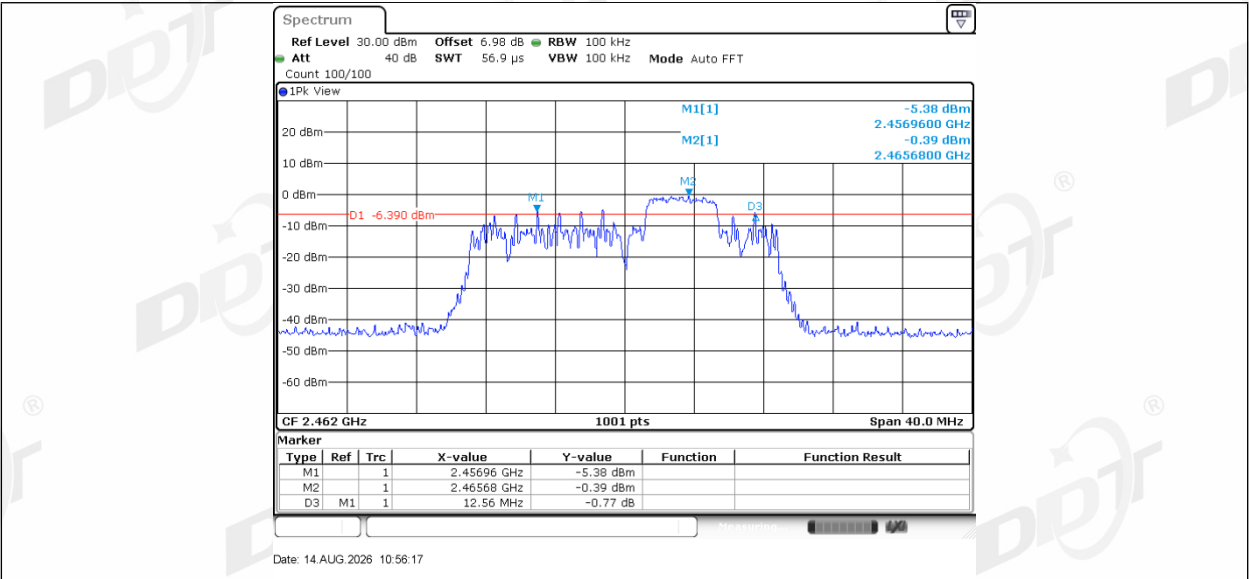


11AX20SISO Ant1_2462_26Tone_RU0

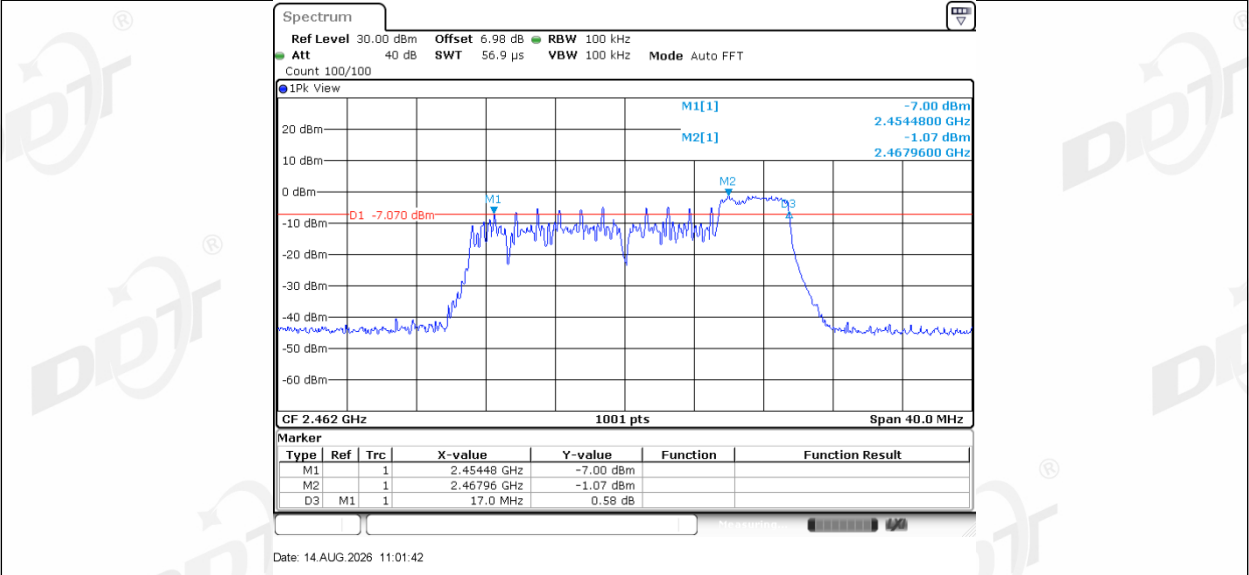


11AX20SISO Ant1_2462_26Tone_RU4

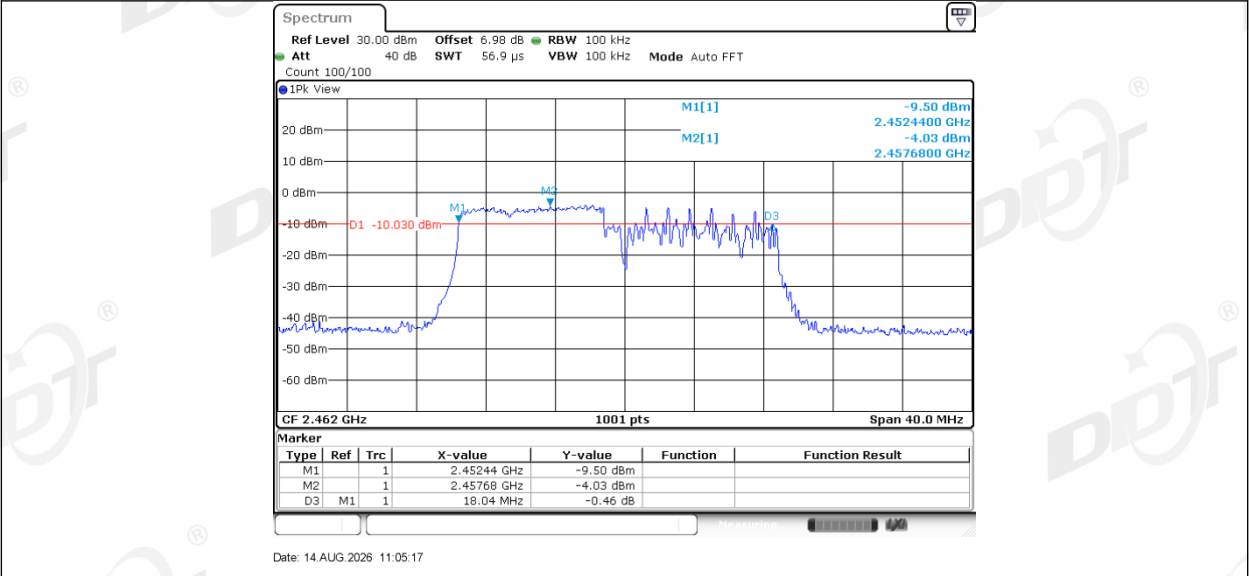




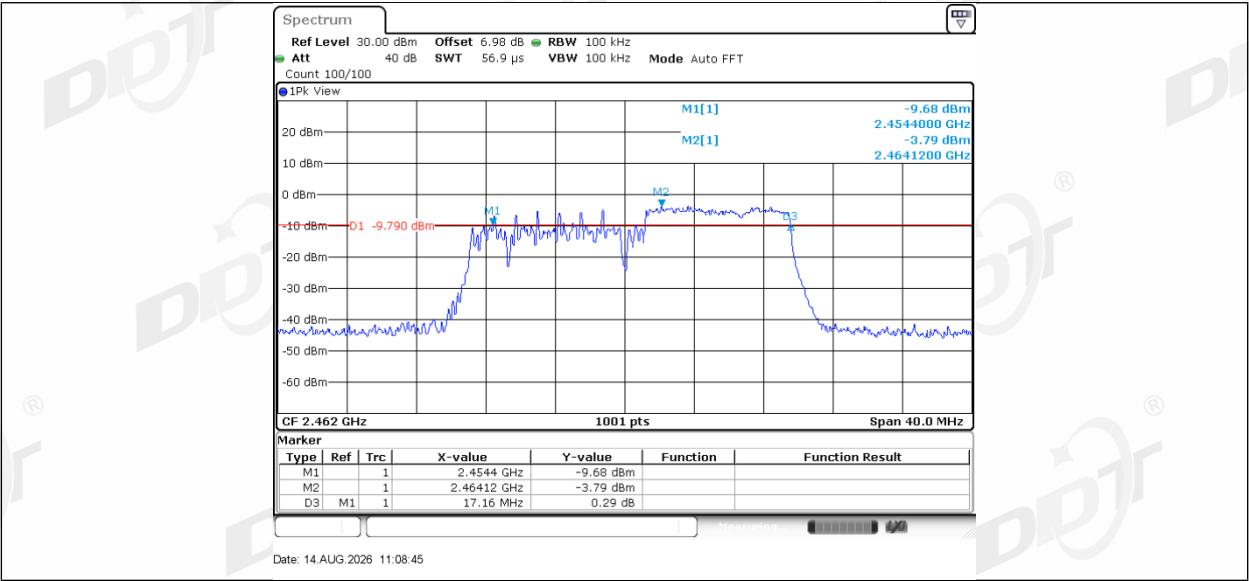
11AX20SISO_Ant1_2462_52Tone_RU40



11AX20SISO_Ant1_2462_106Tone_RU53

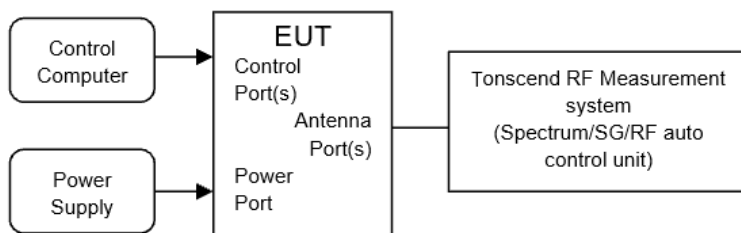


11AX20SISO_Ant1_2462_106Tone_RU54



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

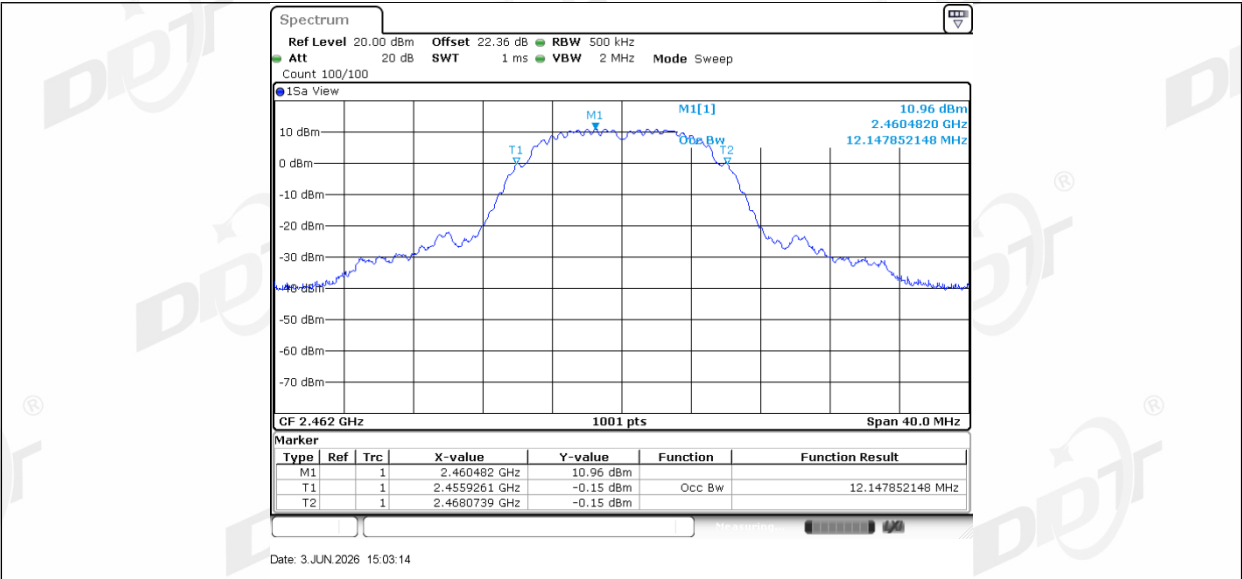
Test Engineer:	Zora Zhang	Test Site:	RF Measurement System 5#
Ambient Condition:	26.1-26.4℃,45.2-48.5%RH	Test Date:	2026.06.03-2026.06.04
Test Power Supply:	Battery	Sample Number:	S26010628-011

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.108	2405.9660	2418.0739	---	---
		2437	12.148	2430.9261	2443.0739	---	---
		2462	12.148	2455.9261	2468.0739	---	---
11G	Ant1	2412	17.263	2403.3287	2420.5914	---	---
		2437	17.303	2428.2887	2445.5914	---	---
		2462	17.223	2453.3287	2470.5514	---	---
11N20SISO	Ant1	2412	17.902	2403.0490	2420.9510	---	---
		2437	17.902	2428.0490	2445.9510	---	---
		2462	17.822	2453.0889	2470.9111	---	---
11N40SISO	Ant1	2422	36.124	2403.9381	2440.0619	---	---
		2437	36.204	2418.8581	2455.0619	---	---
		2452	36.124	2433.9381	2470.0619	---	---
11AX20SISO	Ant1	2412	19.021	2402.4895	2421.5105	---	---
		2437	19.021	2427.4895	2446.5105	---	---
		2462	19.021	2452.4895	2471.5105	---	---

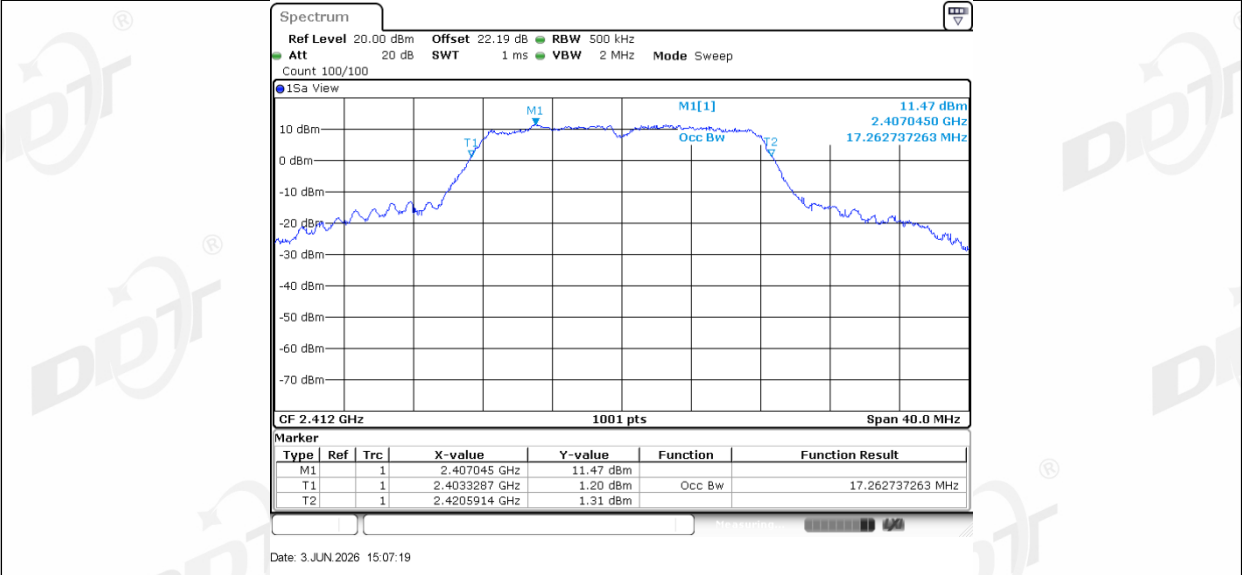
Test Mode	Antenna	Frequency [MHz]	Ru Size	Ru Index	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11AX20SISO	Ant1	2412	26Tone	RU0	18.501	2402.0500	2420.5514	---	---
				RU4	17.023	2403.4885	2420.5115	---	---
				RU8	18.462	2403.4486	2421.9101	---	---
			52Tone	RU37	18.262	2402.2498	2420.5115	---	---
				RU39	17.023	2403.4486	2420.4715	---	---
				RU40	18.382	2403.4086	2421.7902	---	---
			106Tone	RU53	18.262	2402.3297	2420.5914	---	---
				RU54	18.342	2403.3287	2421.6703	---	---
				RU0	18.581	2427.0100	2445.5914	---	---
		2437	26Tone	RU4	17.143	2428.3686	2445.5115	---	---
				RU8	18.501	2428.4086	2446.9101	---	---
				RU37	18.342	2427.2098	2445.5514	---	---
			52Tone	RU39	17.143	2428.3686	2445.5115	---	---
				RU40	18.462	2428.3287	2446.7902	---	---
				RU53	18.342	2427.2897	2445.6314	---	---
			106Tone	RU54	18.382	2428.2887	2446.6703	---	---
				RU0	18.501	2452.0500	2470.5514	---	---
		2462	26Tone	RU4	17.063	2453.4486	2470.5115	---	---
				RU8	18.462	2453.4086	2471.8701	---	---
				RU37	18.302	2452.2098	2470.5115	---	---
			52Tone	RU39	17.063	2453.4086	2470.4715	---	---
				RU40	18.342	2453.4086	2471.7502	---	---
				RU53	18.262	2452.3297	2470.5914	---	---
			106Tone	RU54	18.342	2453.3287	2471.6703	---	---

5.5. Test graphs

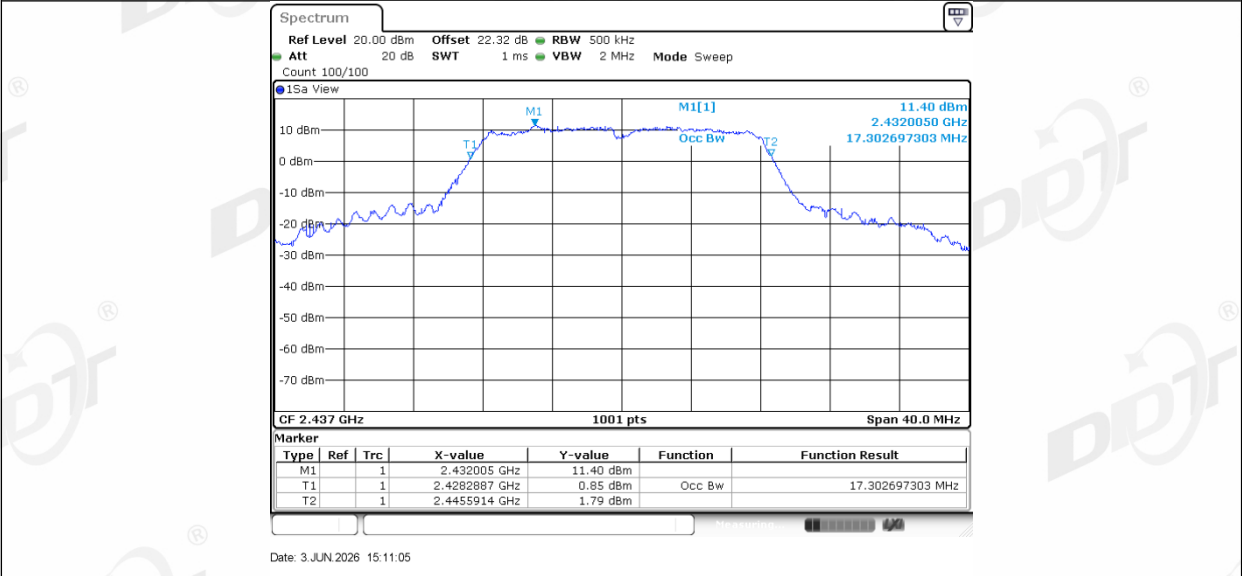




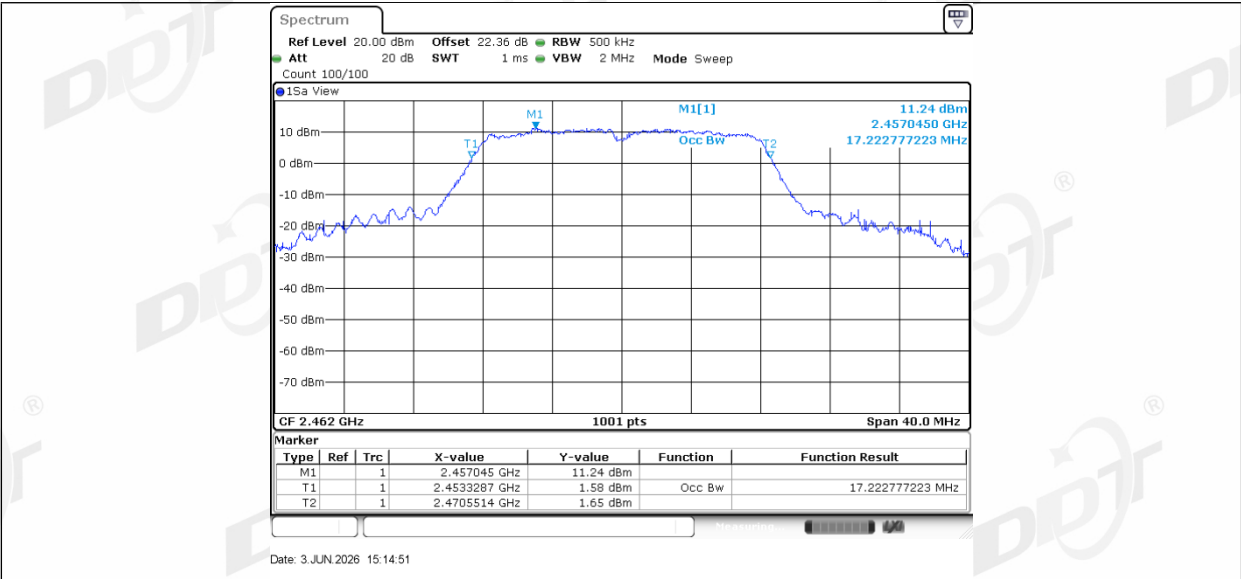
11G Ant1_2412



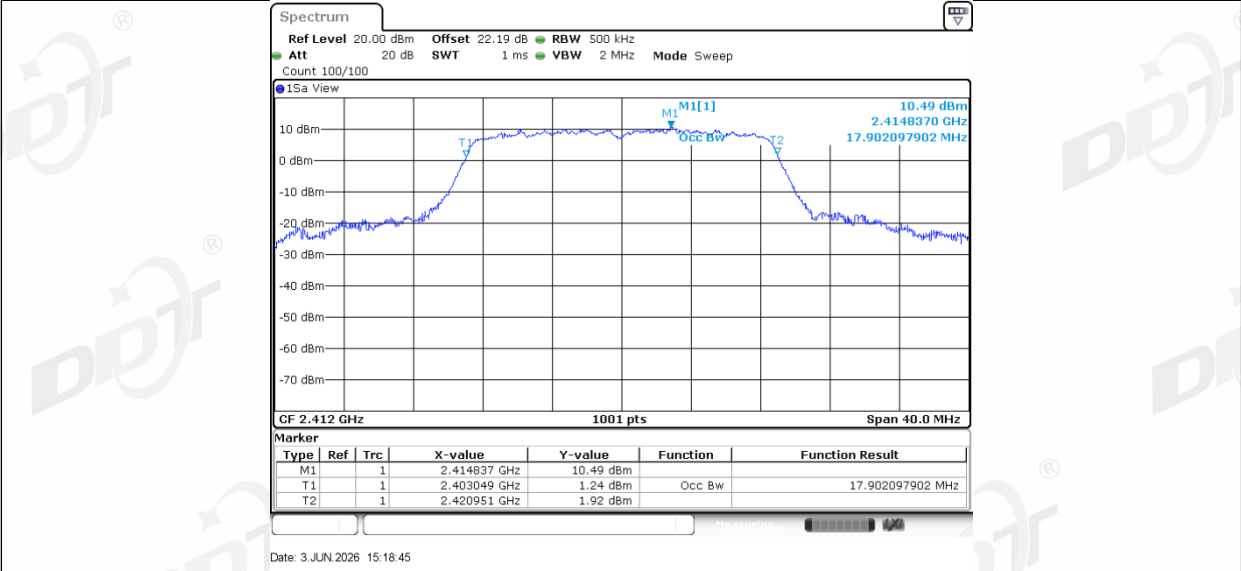
11G Ant1_2437



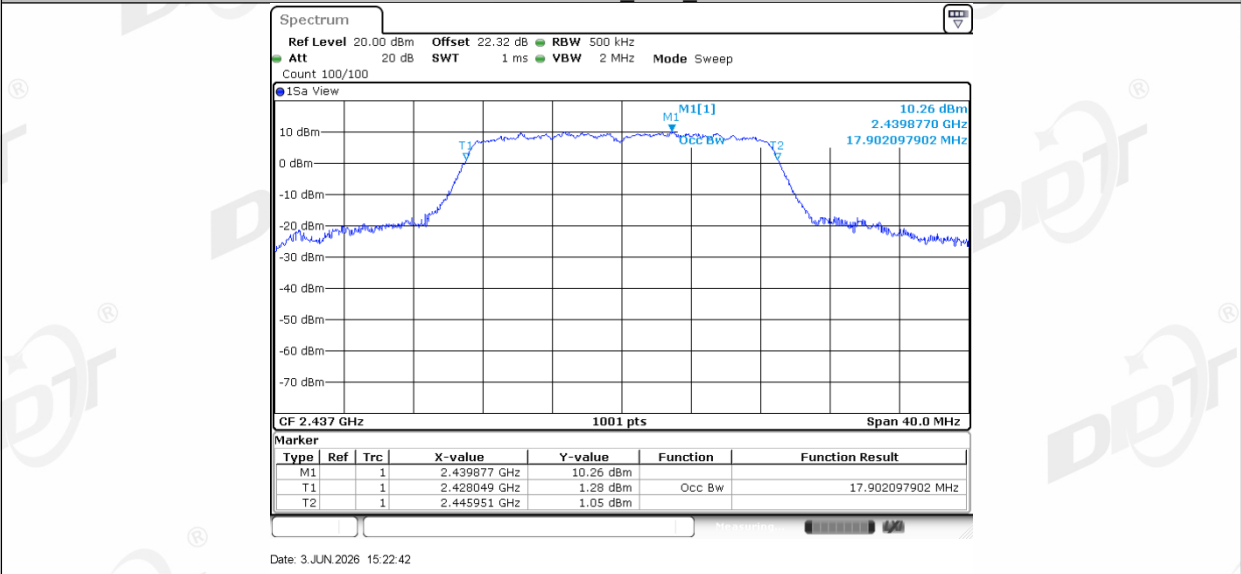
11G Ant1_2462



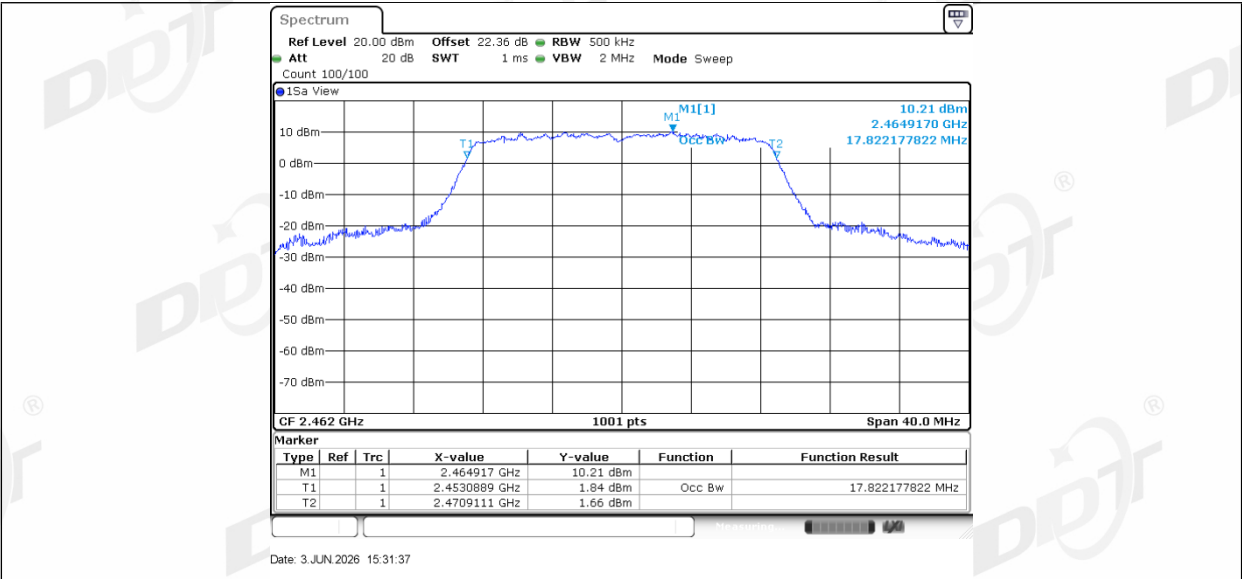
11N20SISO_Ant1_2412



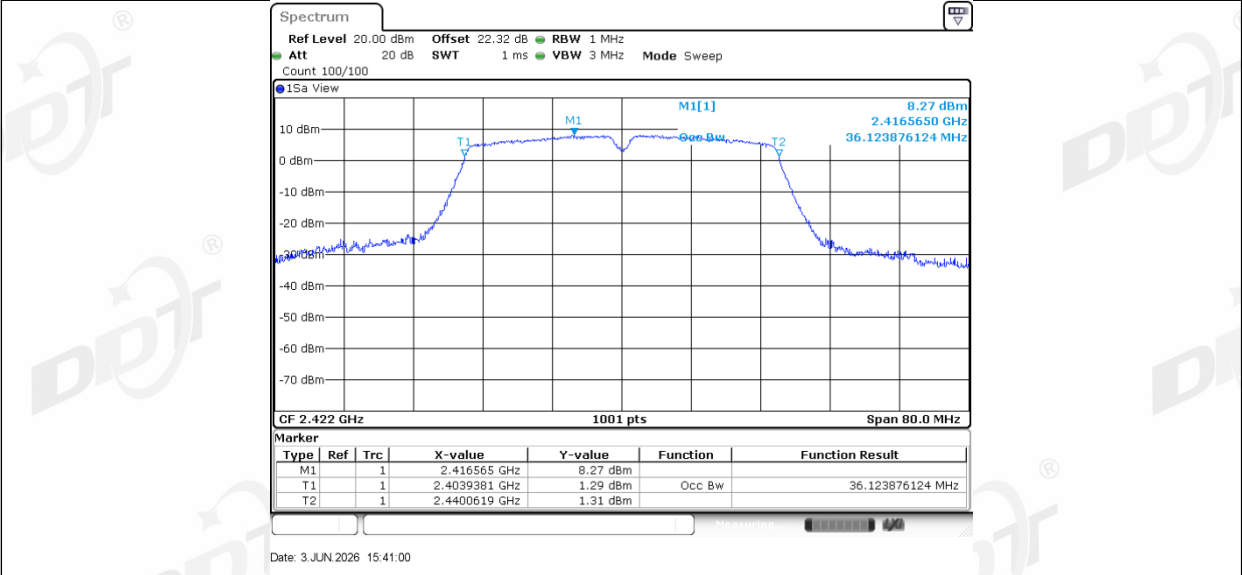
11N20SISO_Ant1_2437



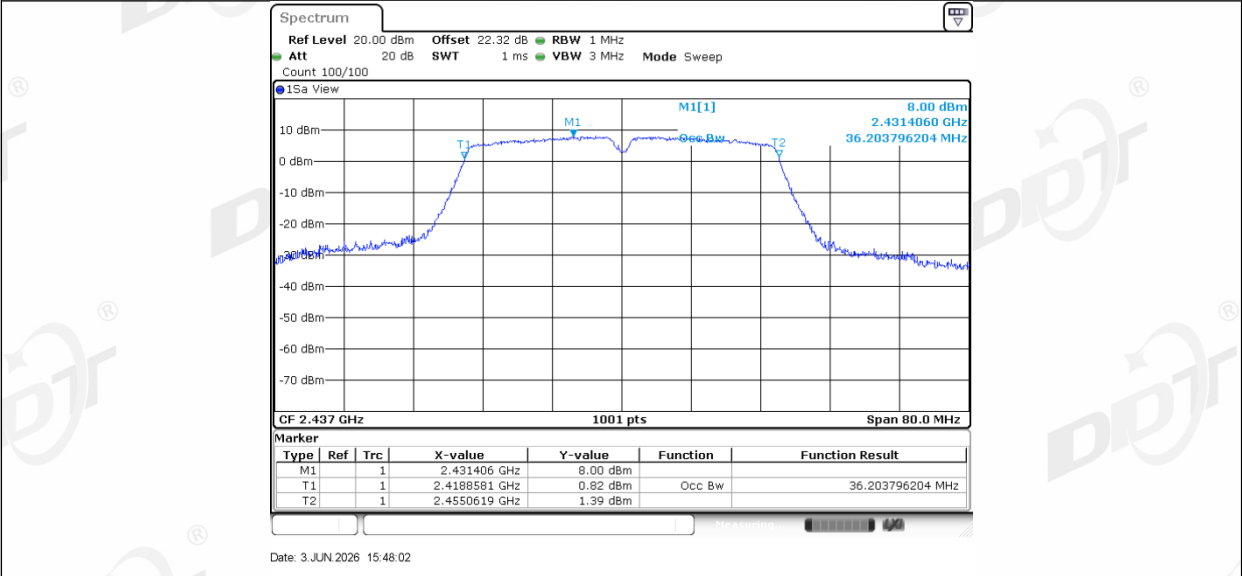
11N20SISO_Ant1_2462



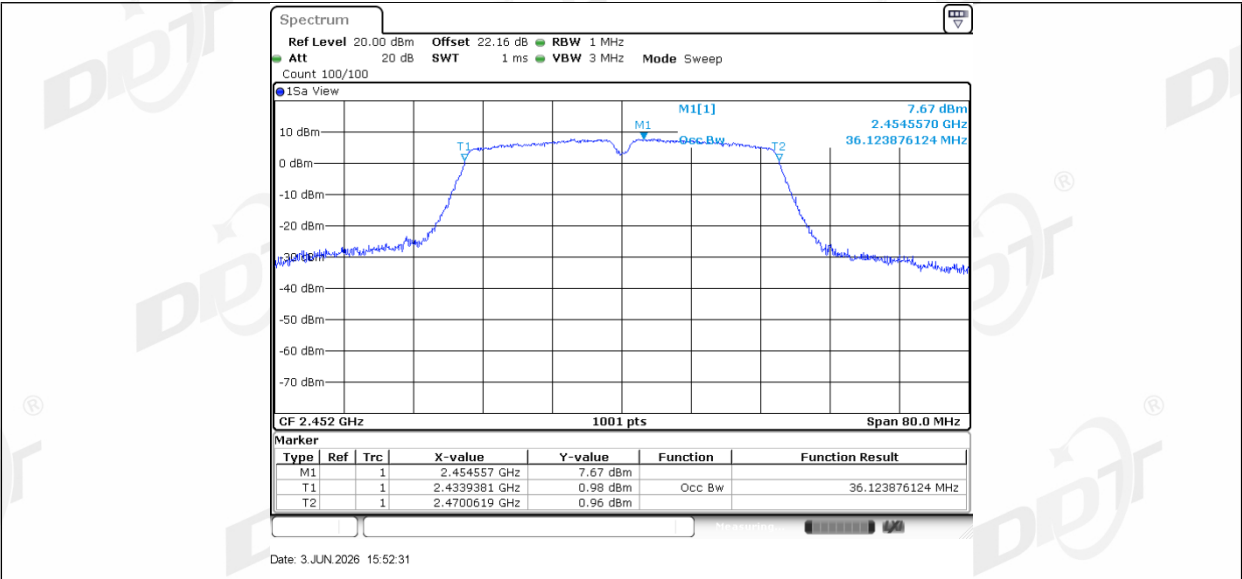
11N40SISO_Ant1_2422



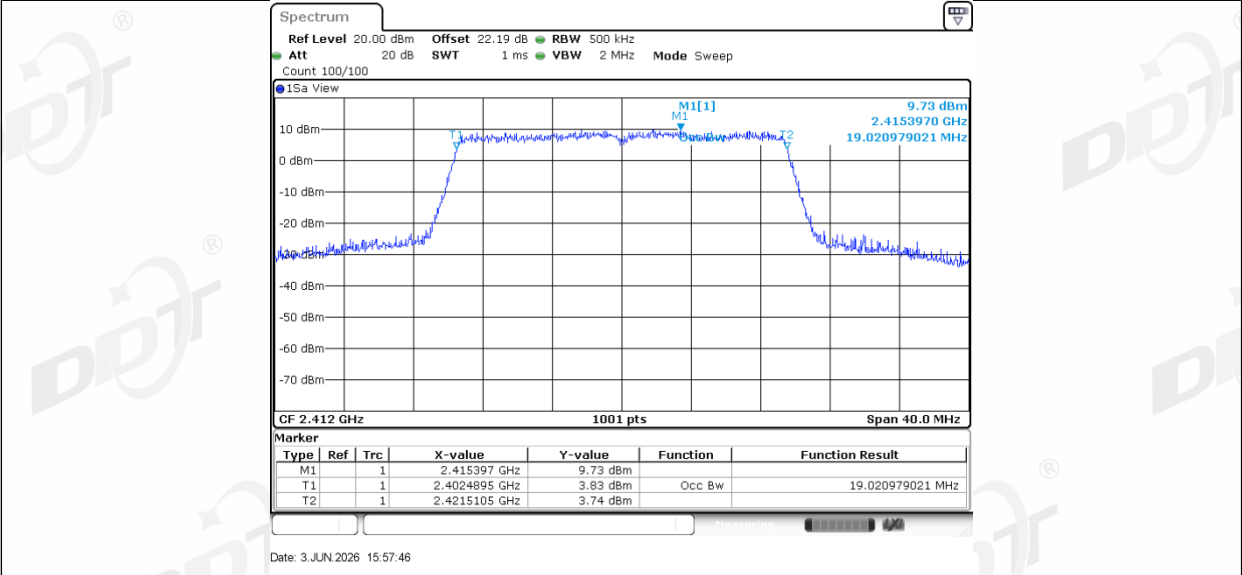
11N40SISO_Ant1_2437



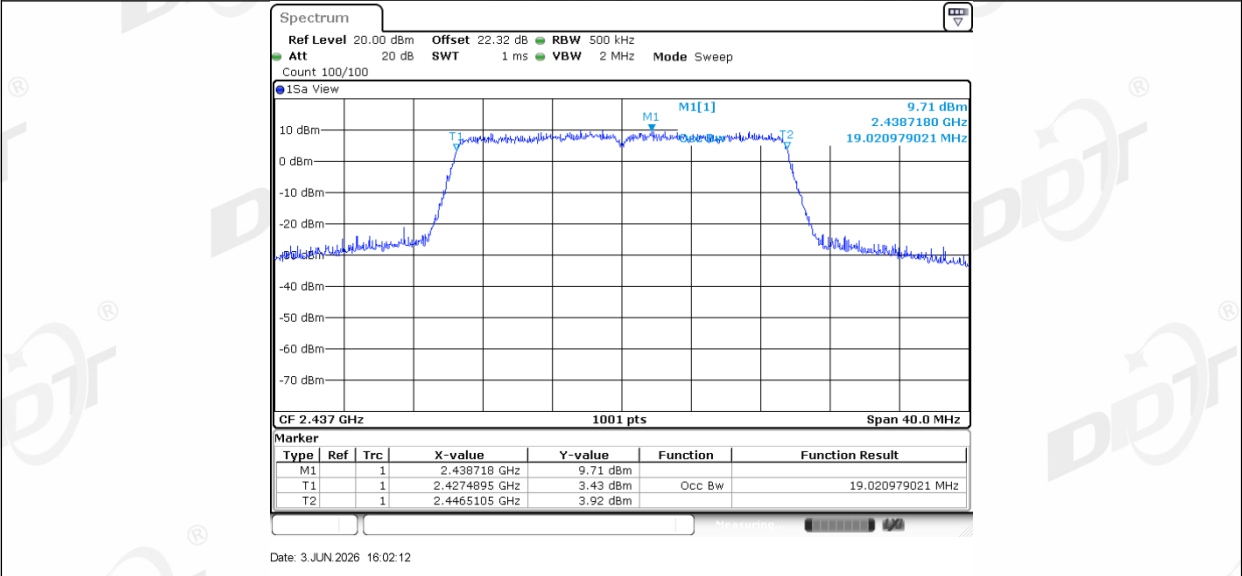
11N40SISO_Ant1_2452



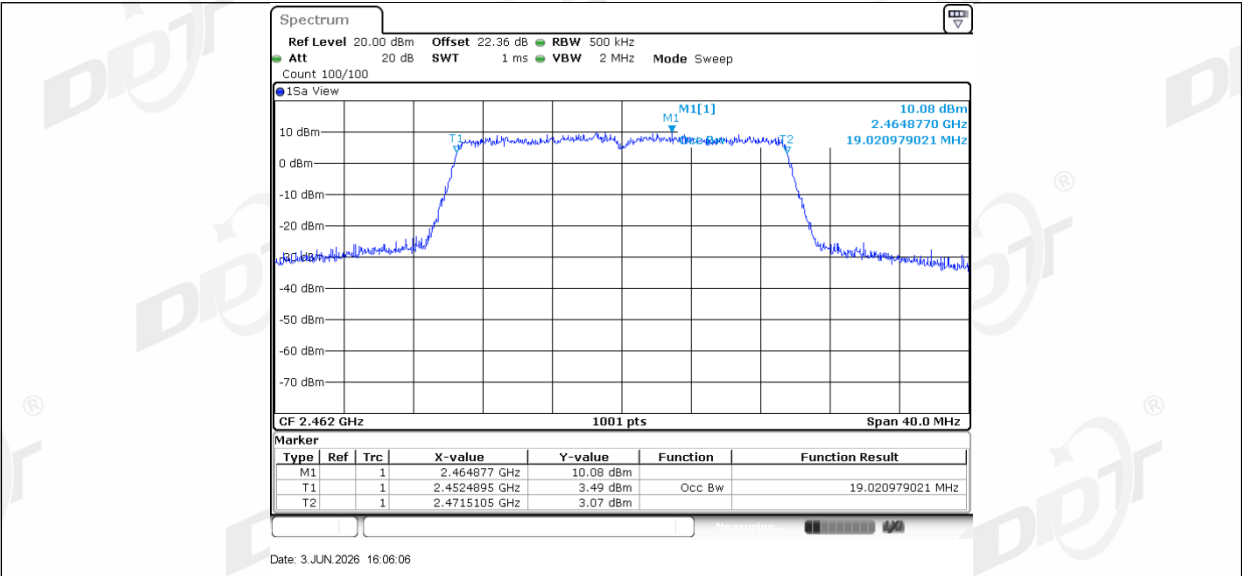
11AX20SISO_Ant1_2412



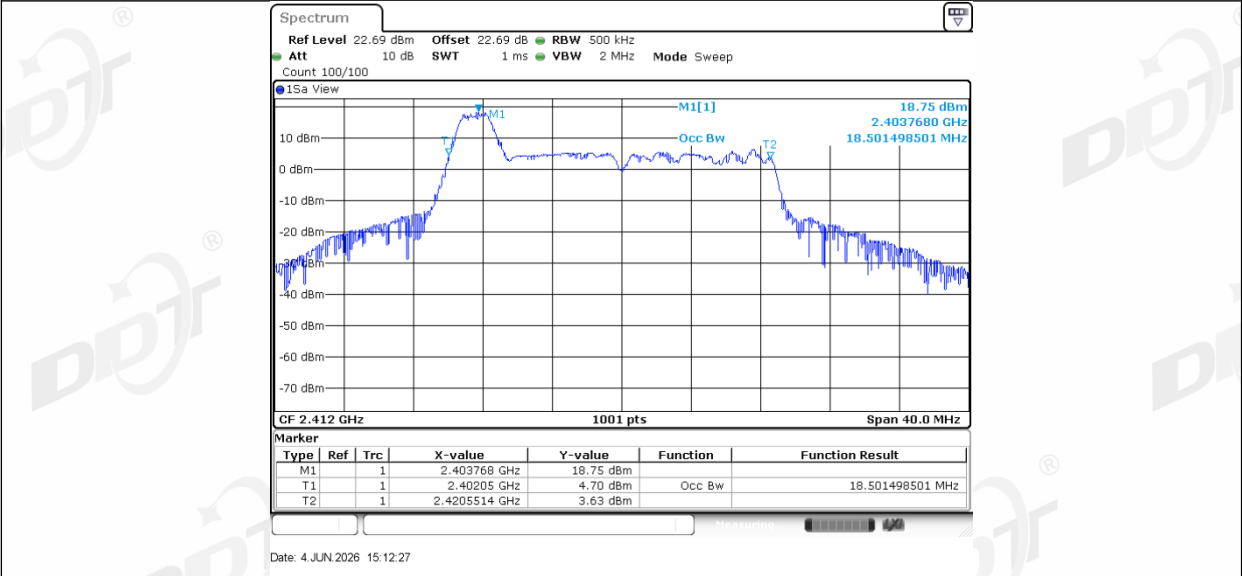
11AX20SISO_Ant1_2437



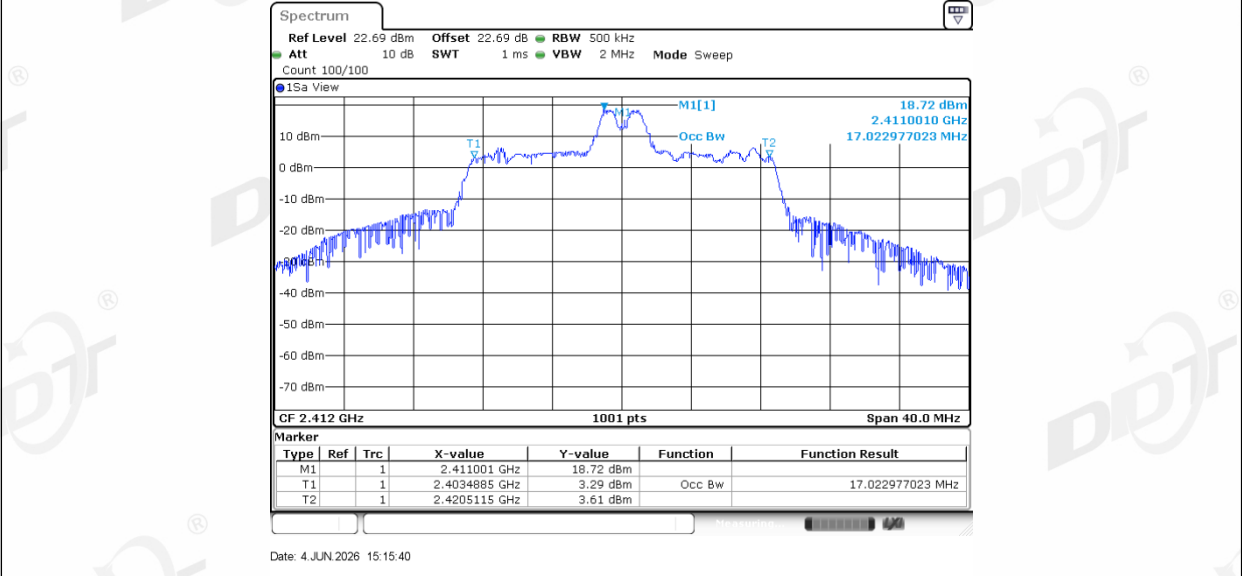
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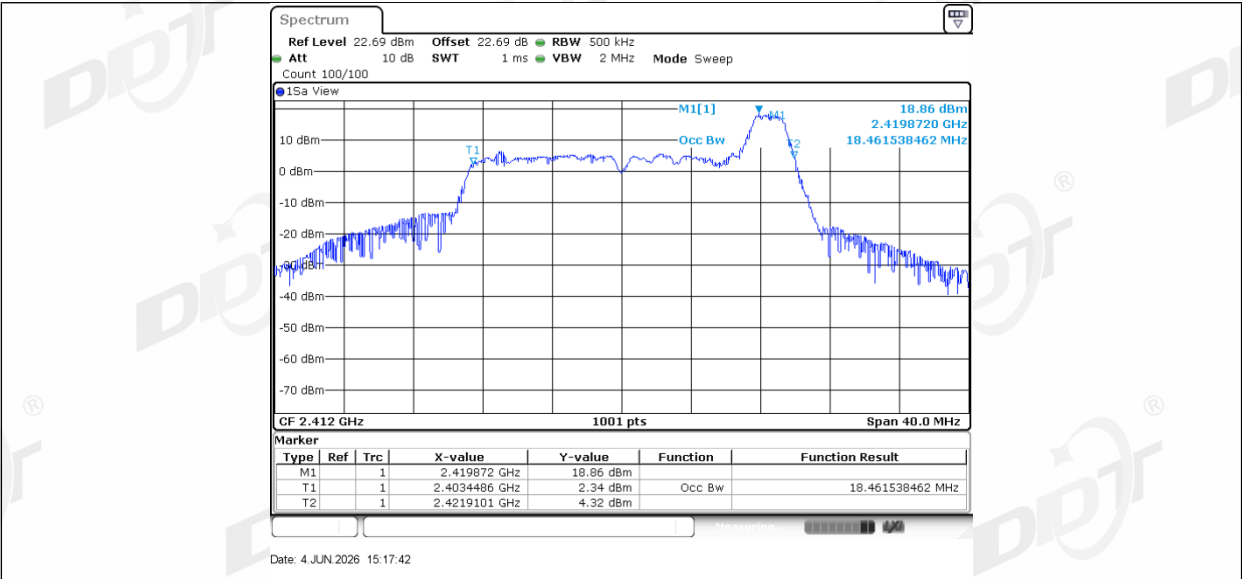
11AX20SISO_Ant1_2412_26Tone_RU0



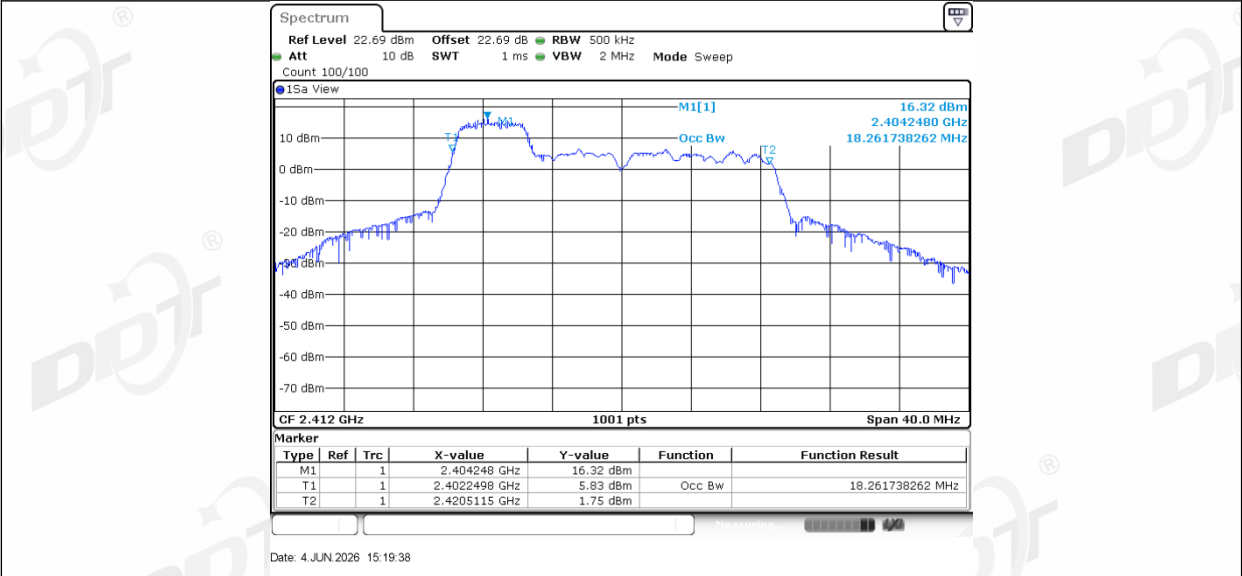
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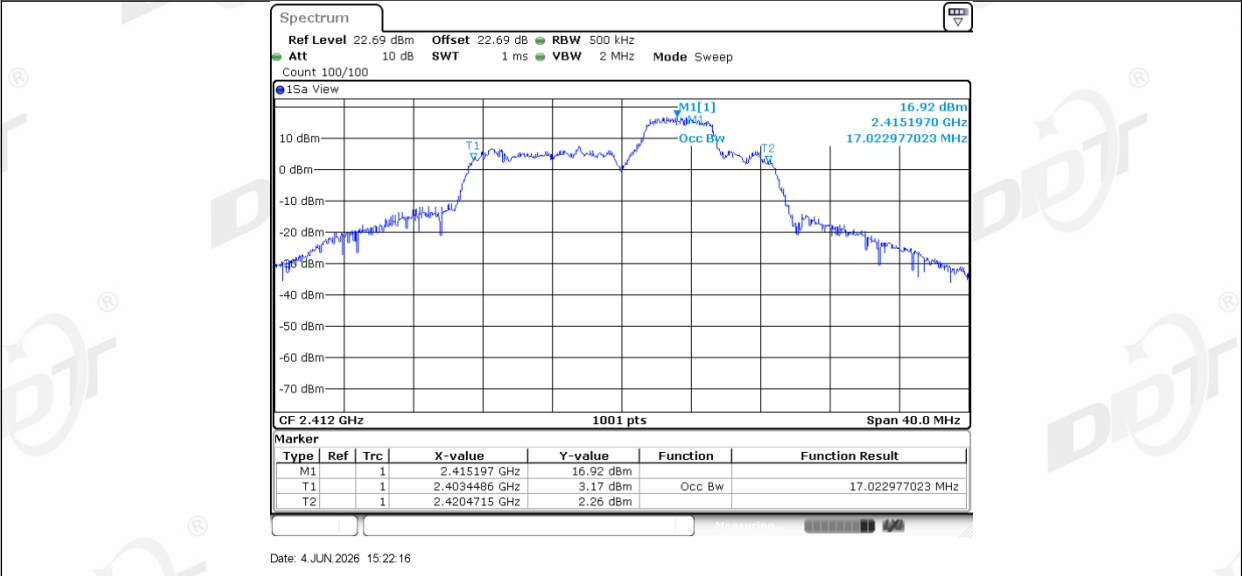
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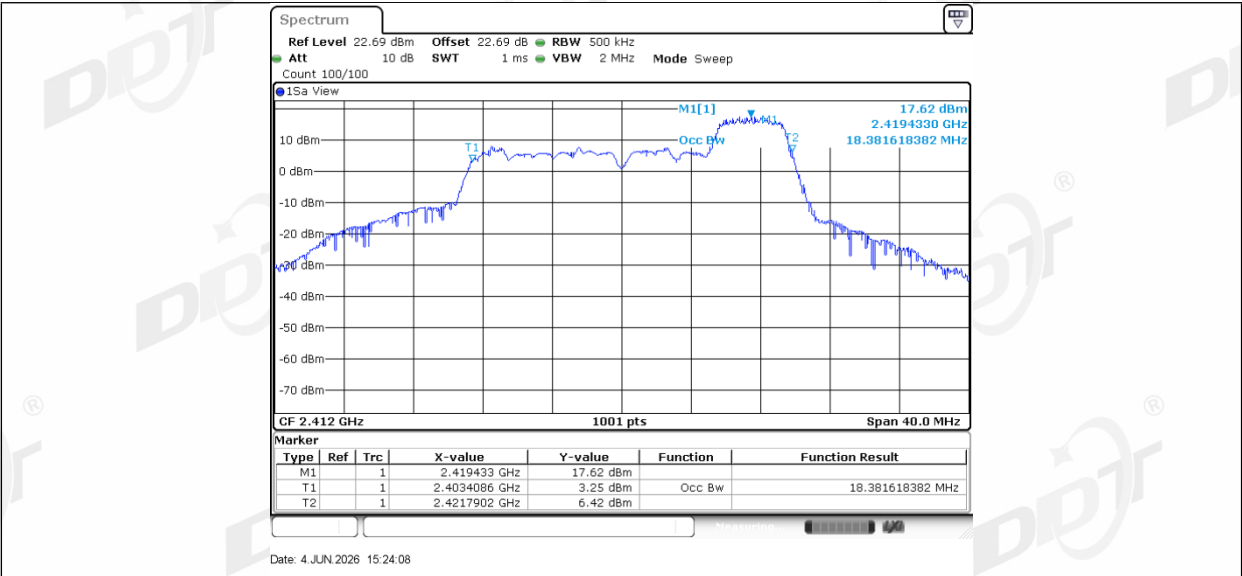
11AX20SISO_Ant1_2412_52Tone_RU37



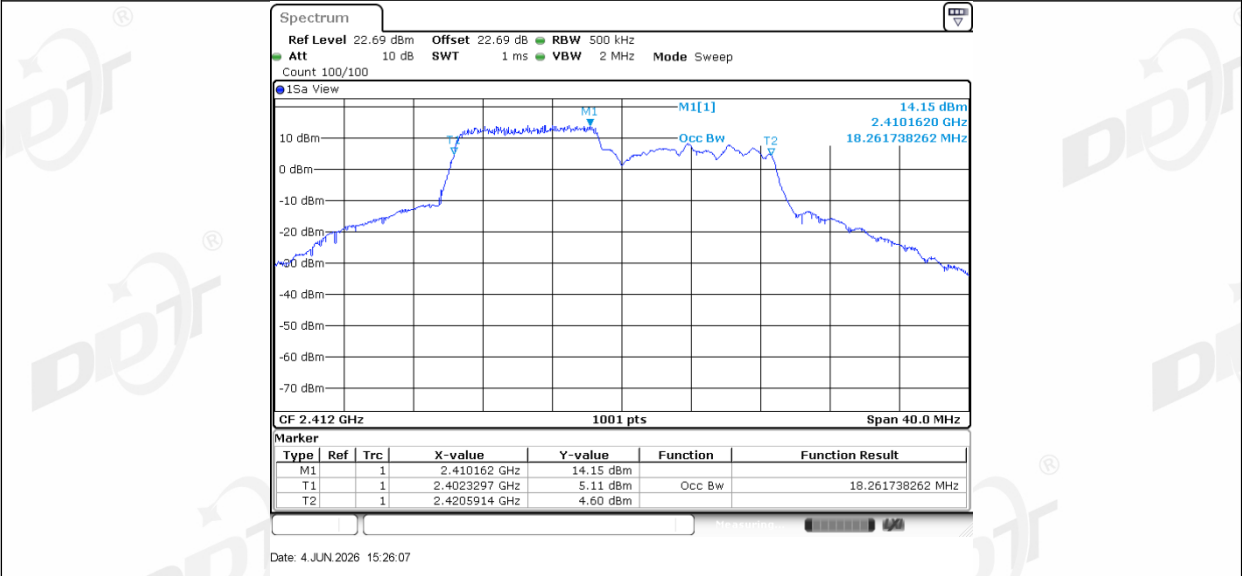
11AX20SISO_Ant1_2412_52Tone_RU39



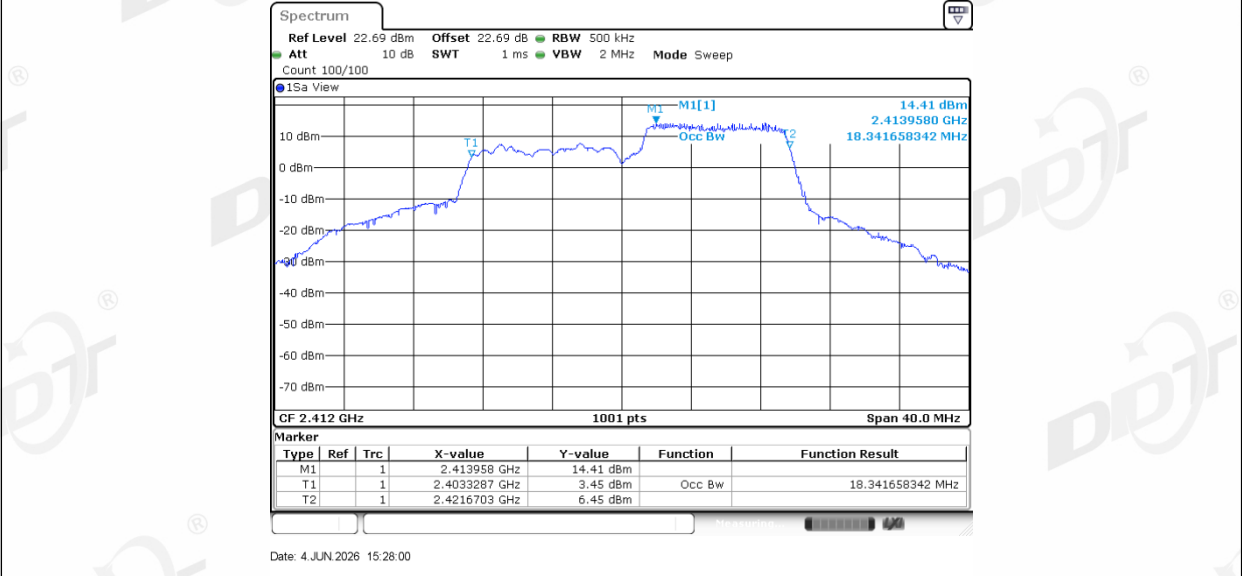
11AX20SISO_Ant1_2412_52Tone_RU40



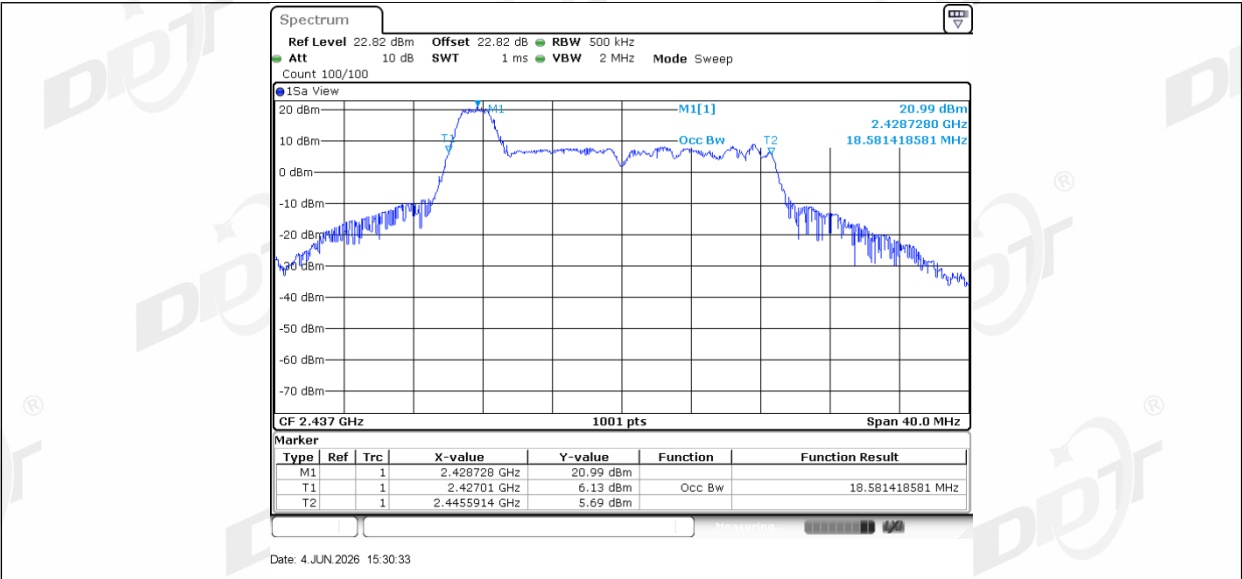
11AX20SISO_Ant1_2412_106Tone_RU53



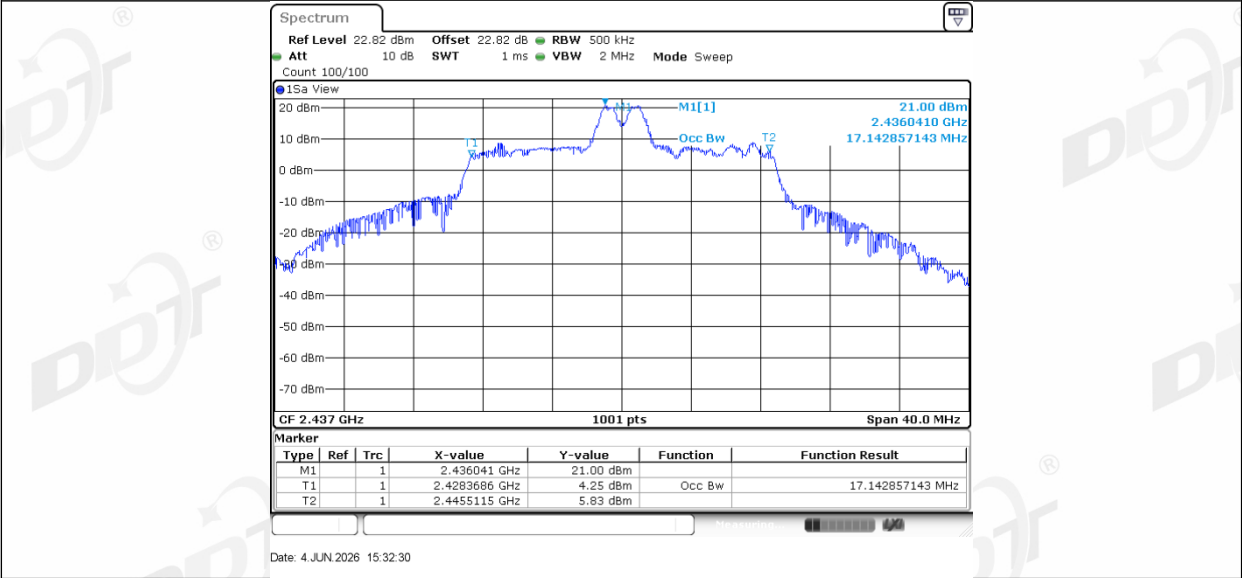
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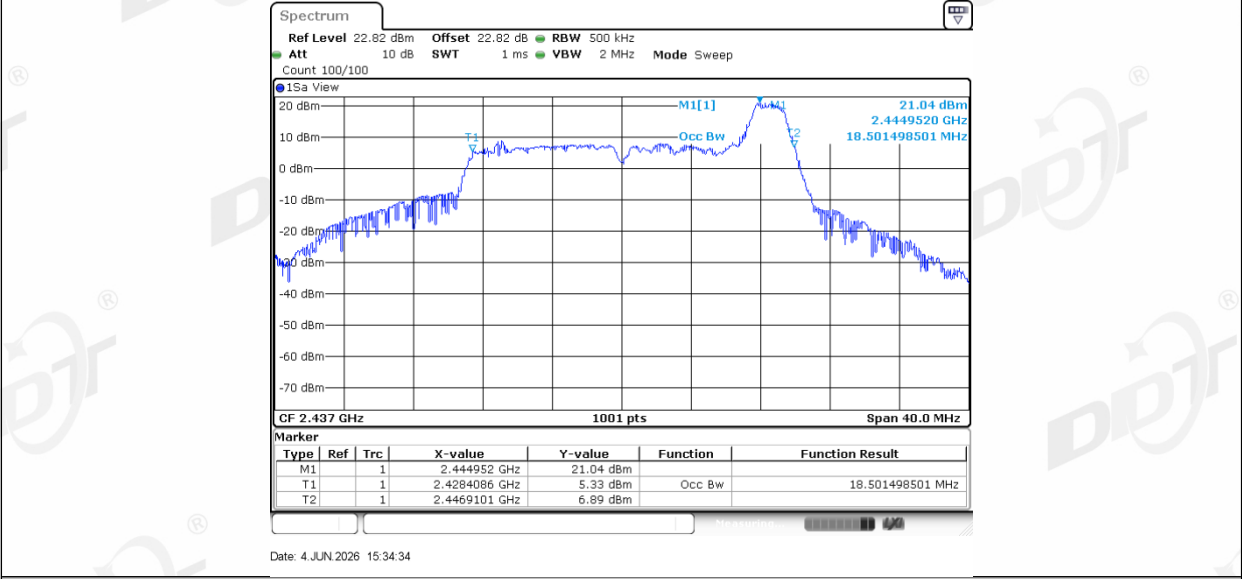
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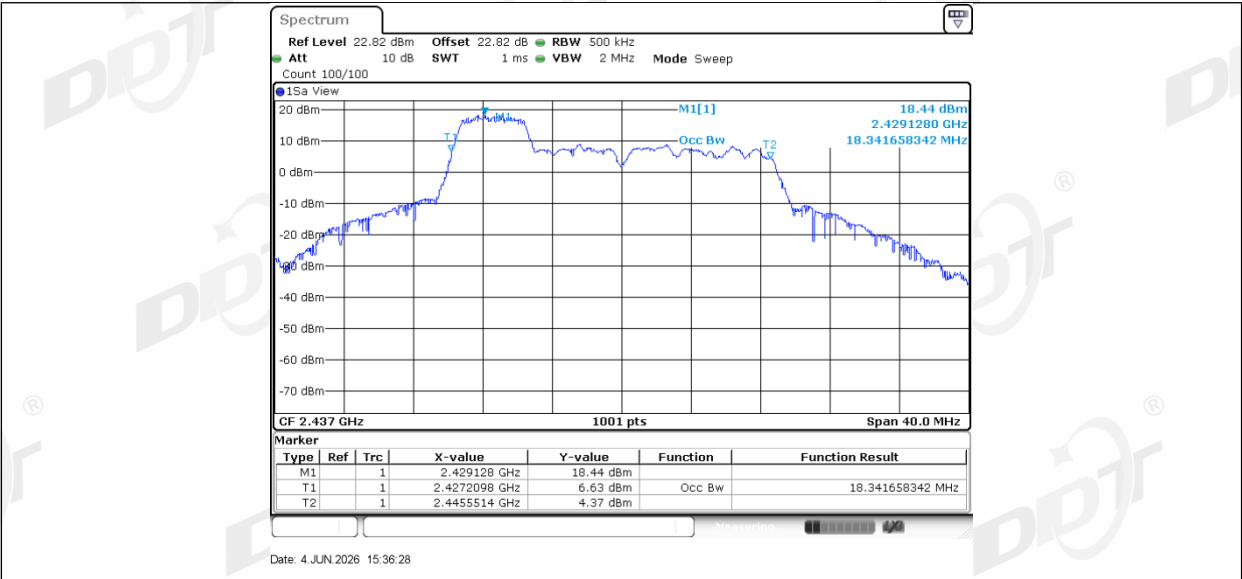
11AX20SISO_Ant1_2437_26Tone_RU4



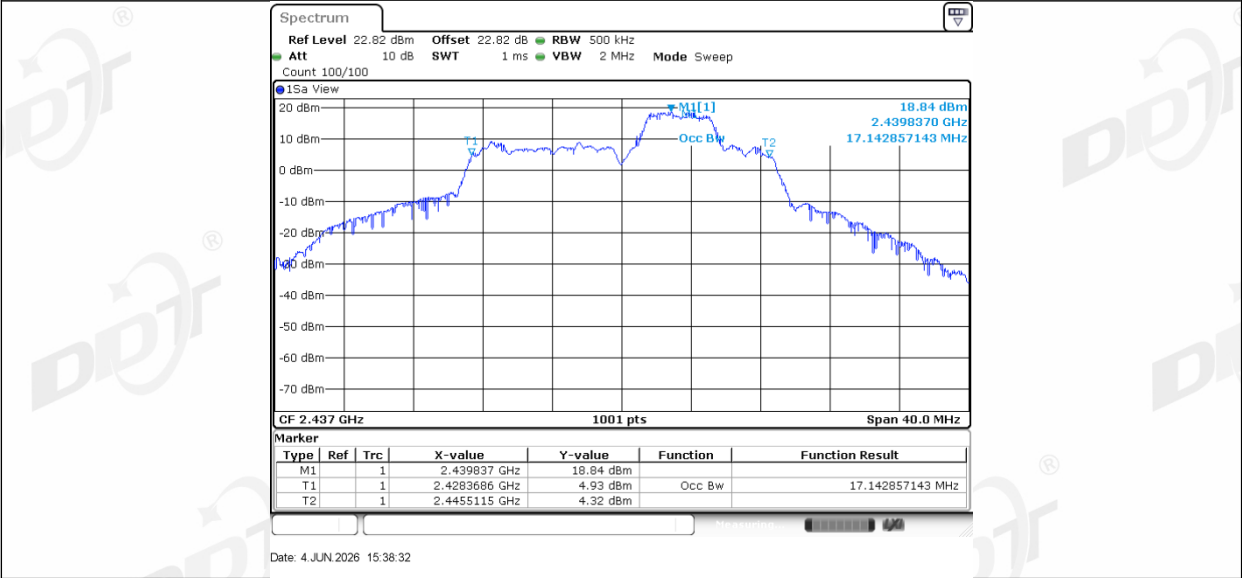
11AX20SISO_Ant1_2437_26Tone_RU8



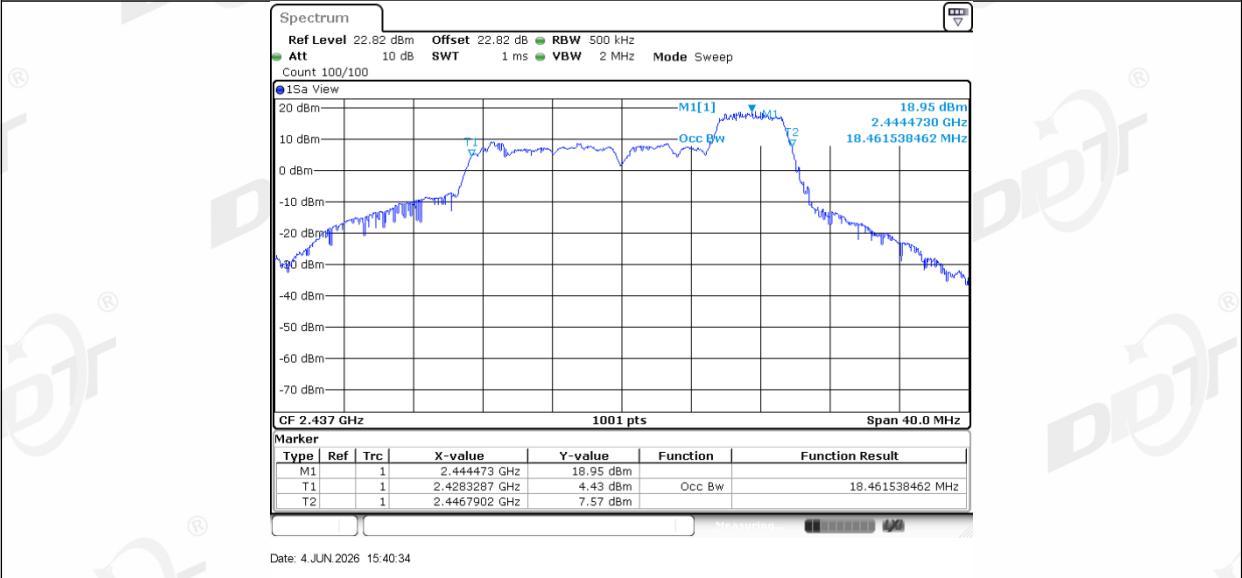
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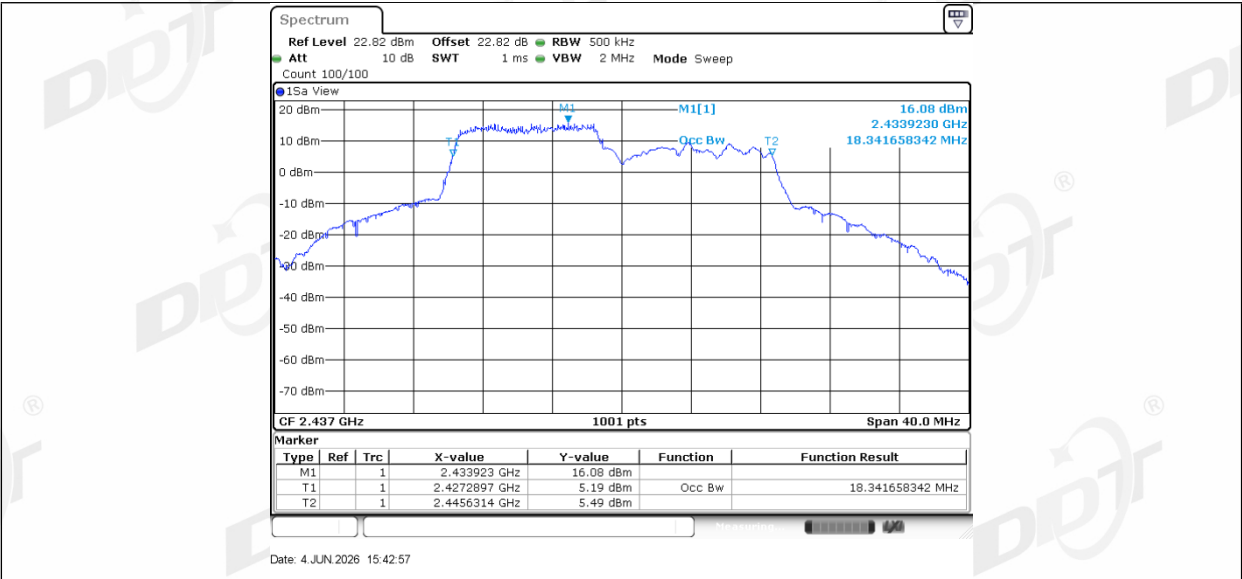
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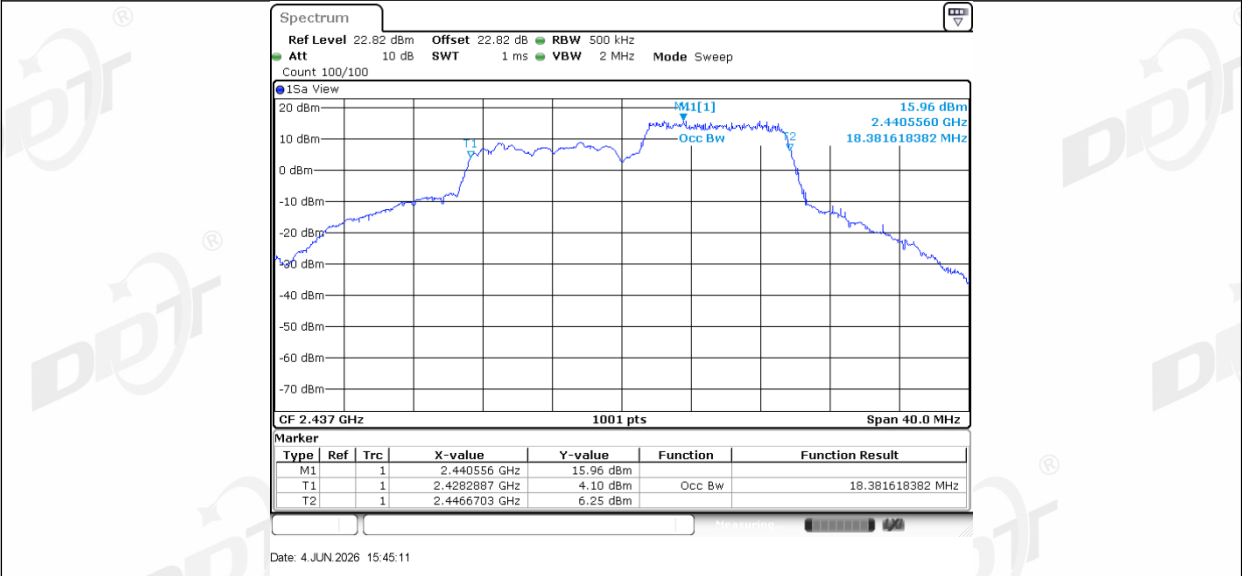
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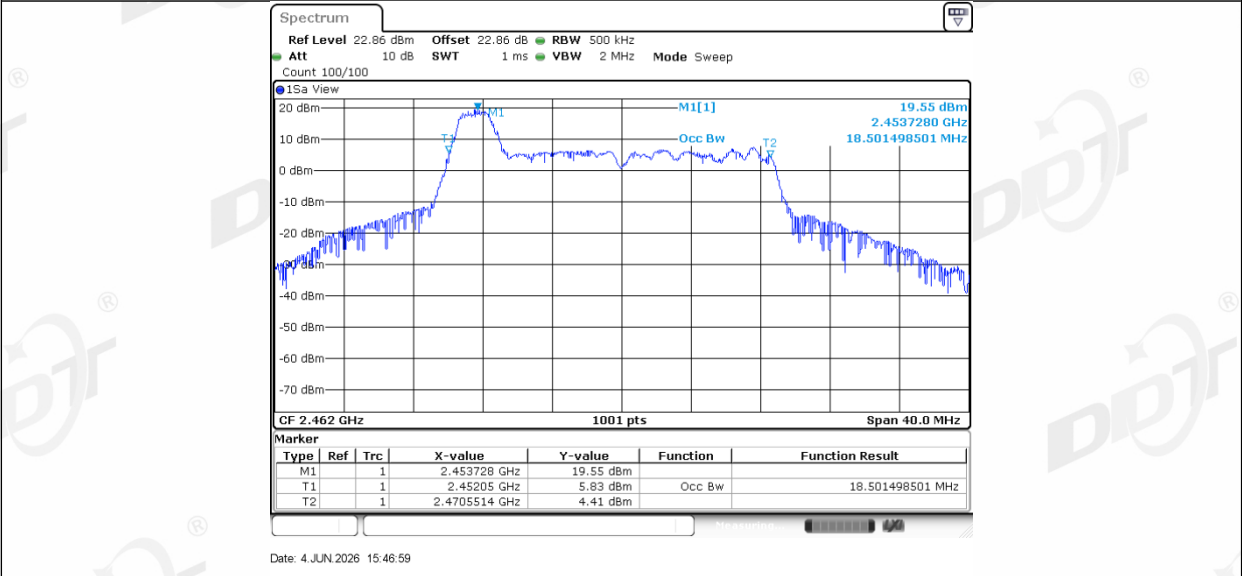
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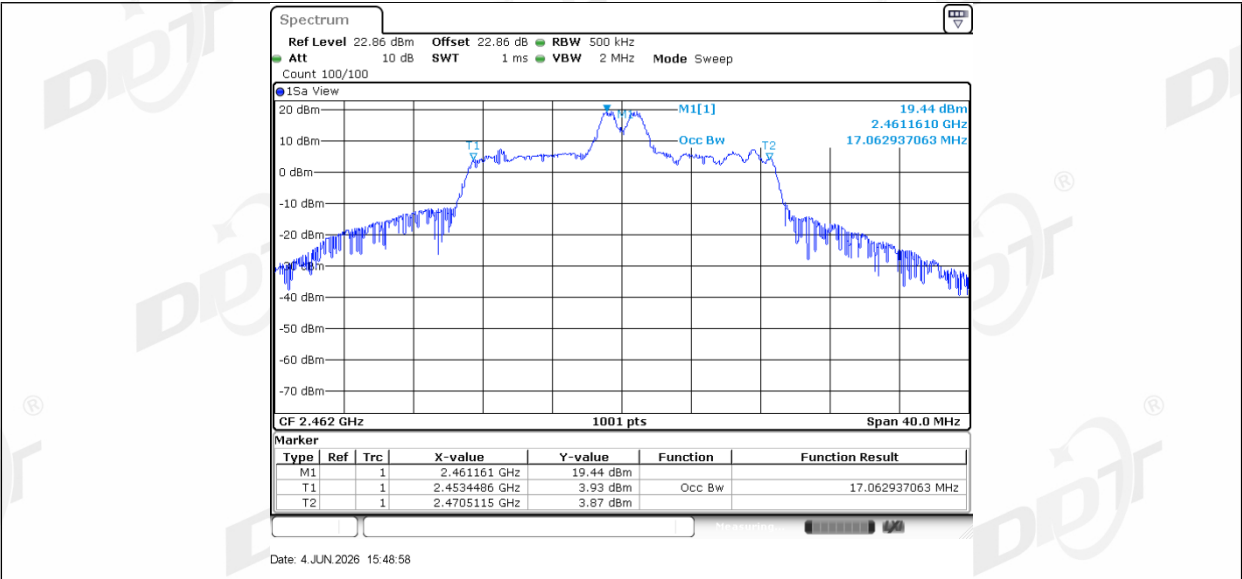
11AX20SISO_Ant1_2437_106Tone_RU54



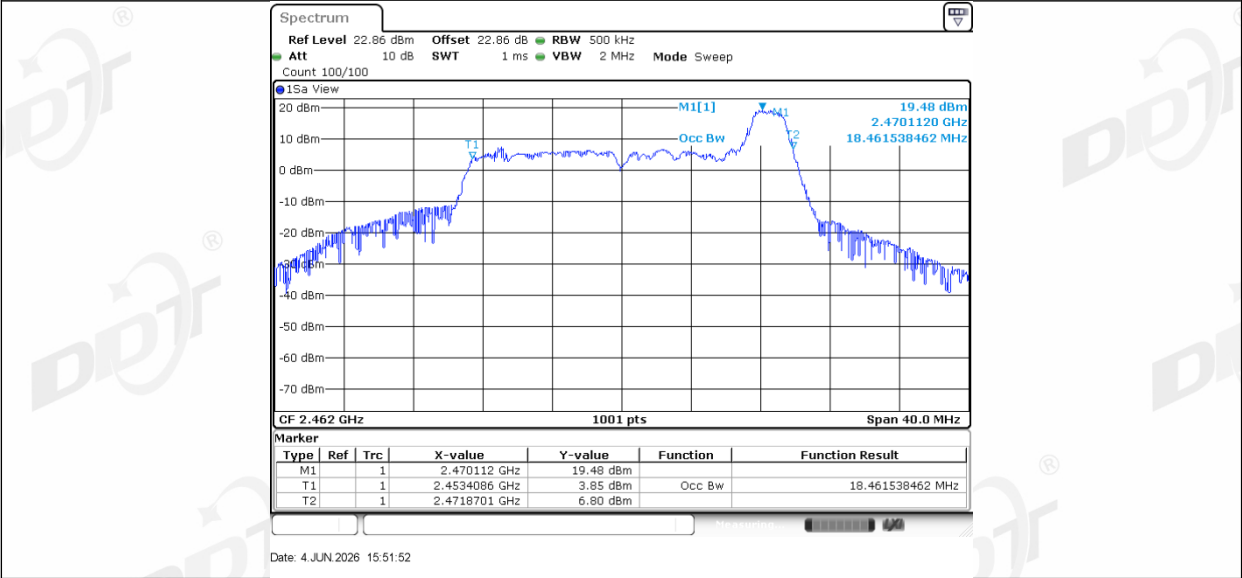
11AX20SISO_Ant1_2462_26Tone_RU0



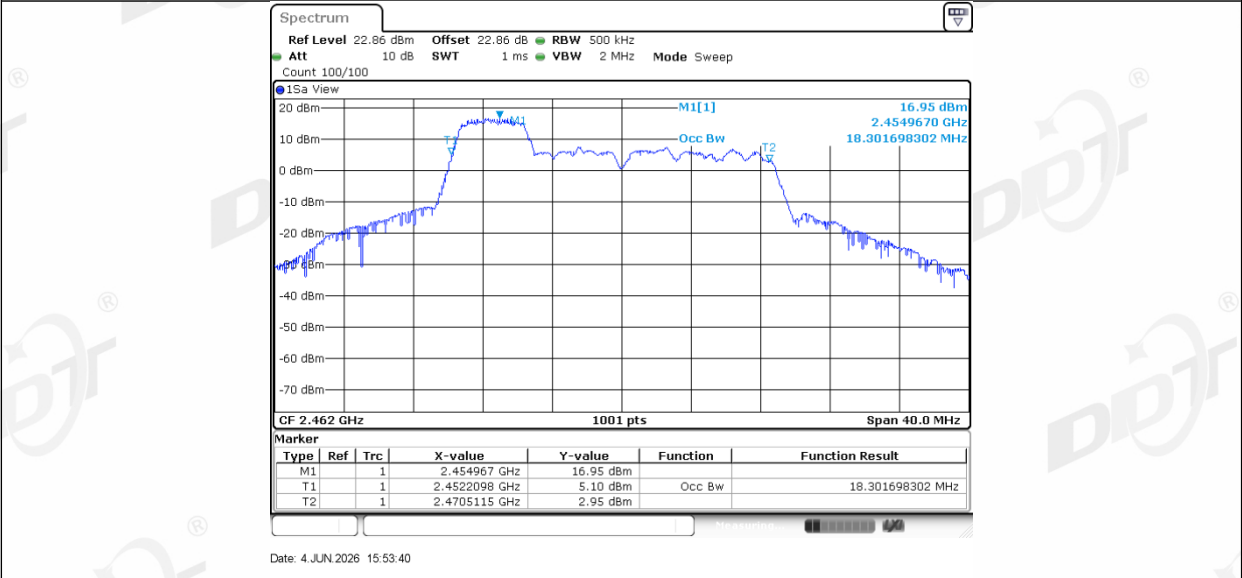
11AX20SISO_Ant1_2462_26Tone_RU4



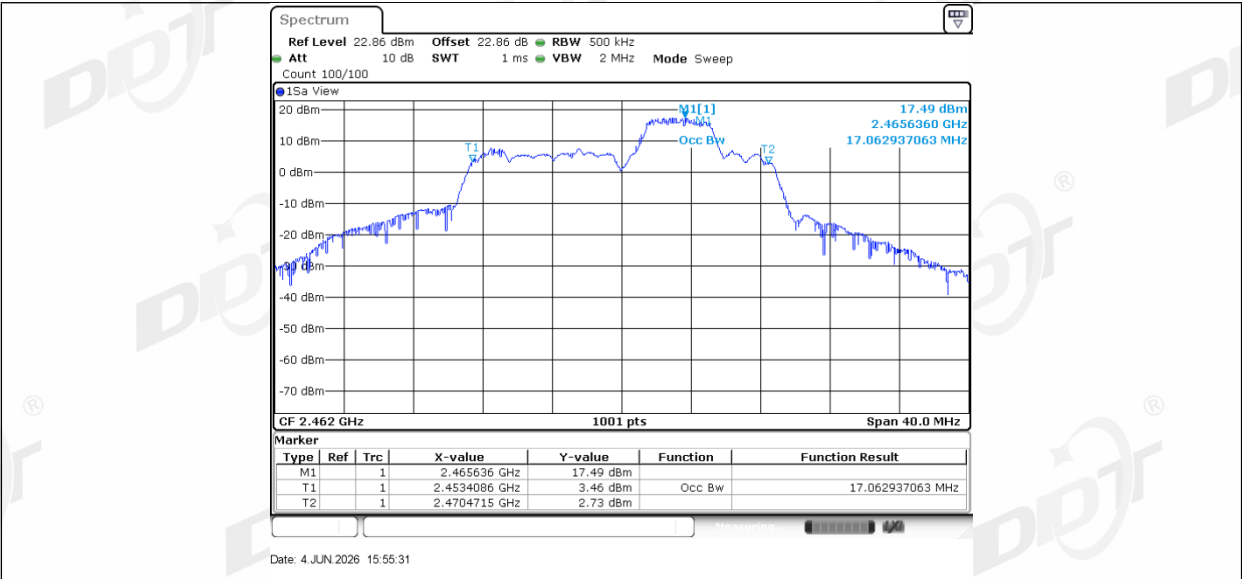
11AX20SISO_Ant1_2462_26Tone_RU8



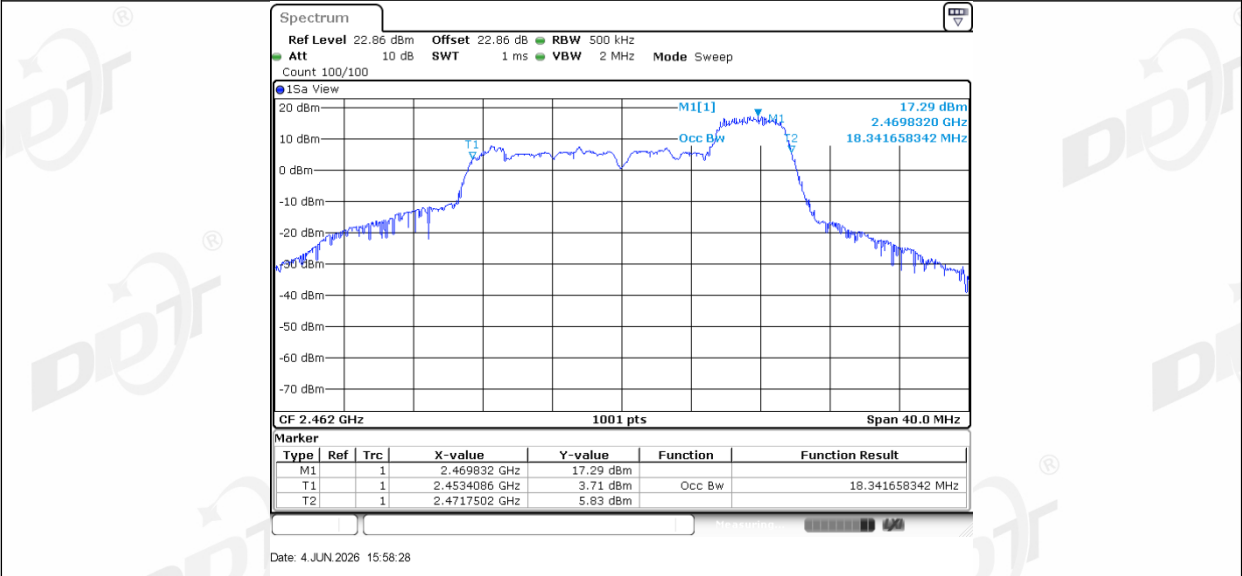
11AX20SISO_Ant1_2462_52Tone_RU37



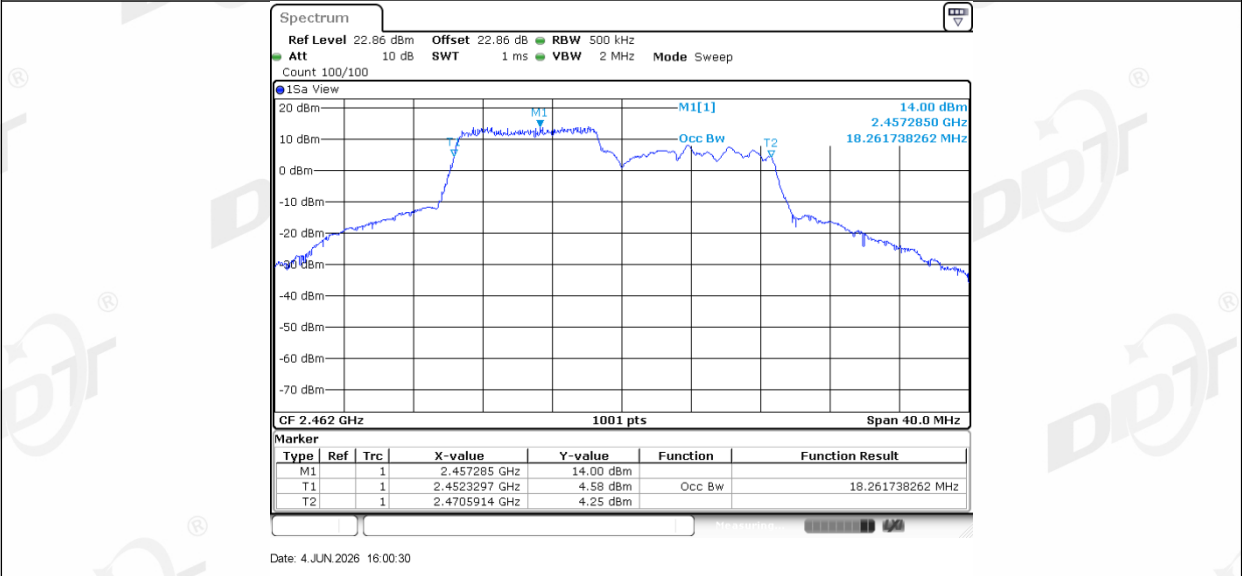
11AX20SISO_Ant1_2462_52Tone_RU39



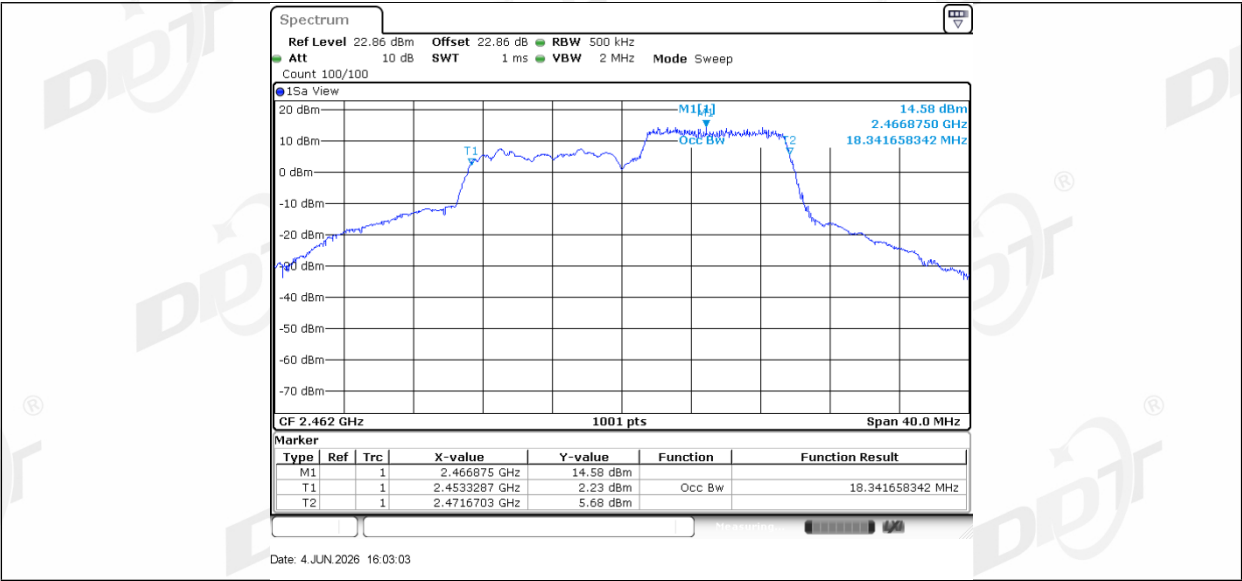
11AX20SISO_Ant1_2462_52Tone_RU40



11AX20SISO_Ant1_2462_106Tone_RU53

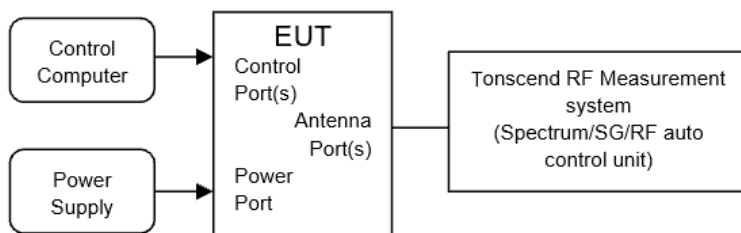


11AX20SISO_Ant1_2462_106Tone_RU54



6. Conducted Output Power

6.1. Block diagram of test setup



6.2. Limits

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. 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 as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

6.3. Test procedure

- (1) The test according to ANSI C63.10 clause 11.9.2.3.
- (2) Connect EUT's antenna output to RF power meter 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, If the transmitter does not transmit continuously, measure the duty cycle, D, of the transmitter output signal.
- (4) Measure the average power of the transmitter. This measurement is an average over both the ON and OFF periods of the transmitter.
- (5) Adjust the measurement in dBm by adding $[10 \log (1 / D)]$, where D is the duty cycle.
- (6) Record the RF average power of each antenna port.

6.4. Test result average

Test Engineer:	Zora Zhang	Test Site:	RF Measurement System 5#
Ambient Condition:	26.1-26.4℃,45.2-48.5%RH	Test Date:	2026.06.03-2026.06.04
Test Power Supply:	Battery	Sample Number:	S26010628-011

Test Mode	Antenna	Frequency [MHz]	Average power [dBm]	Duty Cycle [%]	DC Factor [dB]	Result [dBm]	Limit [dBm]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11B	Ant1	2412	18.74	99.04	0.04	18.78	≤30.00	20.75	≤36.00	PASS
		2437	18.47	99.36	0.03	18.50	≤30.00	20.47	≤36.00	PASS
		2462	18.10	99.04	0.04	18.14	≤30.00	20.11	≤36.00	PASS
11G	Ant1	2412	17.11	94.52	0.24	17.35	≤30.00	19.32	≤36.00	PASS
		2437	16.84	94.09	0.26	17.10	≤30.00	19.07	≤36.00	PASS
		2462	16.62	94.09	0.26	16.88	≤30.00	18.85	≤36.00	PASS
11N20SISO	Ant1	2412	16.28	95.05	0.22	16.50	≤30.00	18.47	≤36.00	PASS
		2437	15.62	95.05	0.22	15.84	≤30.00	17.81	≤36.00	PASS
		2462	15.42	94.58	0.24	15.66	≤30.00	17.63	≤36.00	PASS
11N40SISO	Ant1	2422	13.17	87.85	0.56	13.73	≤30.00	15.70	≤36.00	PASS
		2437	13.20	89.62	0.48	13.68	≤30.00	15.65	≤36.00	PASS
		2452	12.95	88.79	0.52	13.47	≤30.00	15.44	≤36.00	PASS
11AX20SISO	Ant1	2412	13.90	94.57	0.24	14.14	≤30.00	16.11	≤36.00	PASS
		2437	13.53	94.05	0.27	13.80	≤30.00	15.77	≤36.00	PASS
		2462	12.99	93.51	0.29	13.28	≤30.00	15.25	≤36.00	PASS

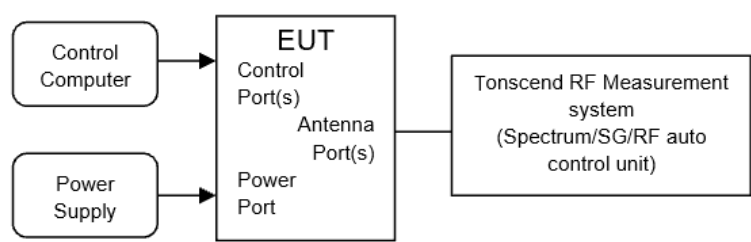
Test Engineer:	Zora Zhang	Test Site:	RF Measurement System 4#
Ambient Condition:	27.1℃,46.0%RH	Test Date:	2026.06.16
Test Power Supply:	Battery	Sample Number:	S26010628-008

Test Mode	Ant.	Freq. [MHz]	Ru Size	Ru Index	Average Power [dBm]	Duty Cycle [%]	DC Factor [dB]	Result [dBm]	Limit [dBm]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11AX20 SISO	Ant1	2412	26Tone	RU0	11.99	99.3	0.03	12.02	≤30.00	13.99	≤36.00	PASS
				RU4	12.83	99.3	0.03	12.86	≤30.00	14.83	≤36.00	PASS
				RU8	12.25	99.3	0.03	12.28	≤30.00	14.25	≤36.00	PASS
			52Tone	RU37	12.11	98.64	0.06	12.17	≤30.00	14.14	≤36.00	PASS
				RU39	12.72	98.64	0.06	12.78	≤30.00	14.75	≤36.00	PASS
				RU40	12.34	98.64	0.06	12.4	≤30.00	14.37	≤36.00	PASS
			106Tone	RU53	12.63	97.3	0.12	12.75	≤30.00	14.72	≤36.00	PASS
				RU54	12.77	97.3	0.12	12.89	≤30.00	14.86	≤36.00	PASS
				RU0	12.82	99.65	0.02	12.84	≤30.00	14.81	≤36.00	PASS
		2437	26Tone	RU4	13.69	99.65	0.02	13.71	≤30.00	15.68	≤36.00	PASS
				RU8	13.09	99.65	0.02	13.11	≤30.00	15.08	≤36.00	PASS
				RU37	12.95	98.64	0.06	13.01	≤30.00	14.98	≤36.00	PASS
			52Tone	RU39	13.58	98.64	0.06	13.64	≤30.00	15.61	≤36.00	PASS
				RU40	13.20	98.64	0.06	13.26	≤30.00	15.23	≤36.00	PASS
				RU53	13.44	97.3	0.12	13.56	≤30.00	15.53	≤36.00	PASS
			106Tone	RU54	13.69	97.3	0.12	13.81	≤30.00	15.78	≤36.00	PASS
				RU0	12.61	99.3	0.03	12.64	≤30.00	14.61	≤36.00	PASS
			26Tone	RU4	13.35	99.3	0.03	13.38	≤30.00	15.35	≤36.00	PASS
				RU8	12.28	99.3	0.03	12.31	≤30.00	14.28	≤36.00	PASS
				RU37	12.29	98.65	0.06	12.35	≤30.00	14.32	≤36.00	PASS
		2462	52Tone	RU39	12.86	98.64	0.06	12.92	≤30.00	14.89	≤36.00	PASS
				RU40	12.46	98.64	0.06	12.52	≤30.00	14.49	≤36.00	PASS
				RU53	12.87	97.3	0.12	12.99	≤30.00	14.96	≤36.00	PASS
			106Tone	RU54	12.90	97.3	0.12	13.02	≤30.00	14.99	≤36.00	PASS

Note: EIRP (dBm)=Conducted Output Power (dBm)+ Antenna Gain (dBi)

7. Power Spectral Density

7.1. Block diagram of test setup



7.2. Limits

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.

7.3. Test procedure

- (1) The test according to ANSI C63.10 clause 11.10.5.

(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 Power Spectral Density measurement:
- | | |
|------------------|--|
| Center frequency | DTS Channel center frequency |
| RBW: | $3\text{ kHz} \leq \text{RBW} \leq 100\text{ kHz}$ |
| VBW: | $\geq 3\text{RBW}$ |
| Span | 1.5 times the DTS bandwidth |
| Detector Mode: | RMS |
| Sweep time: | auto |
| Trace mode | max hold |
| | Employ trace averaging (rms) |
| Trace | mode over a minimum of 100 traces. |

- (5) Add $[10 \log (1 / D)]$, where D is the duty cycle measured in step a), to the measured PSD to compute the average PSD during the actual transmission time.
- If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

7.4. Test result

Test Engineer:	Zora Zhang	Test Site:	RF Measurement System 5#
Ambient Condition:	26.1-26.6℃,45.5-48.5%RH	Test Date:	2026.06.04-2026.06.16
Test Power Supply:	Battery	Sample Number:	S26010628-011

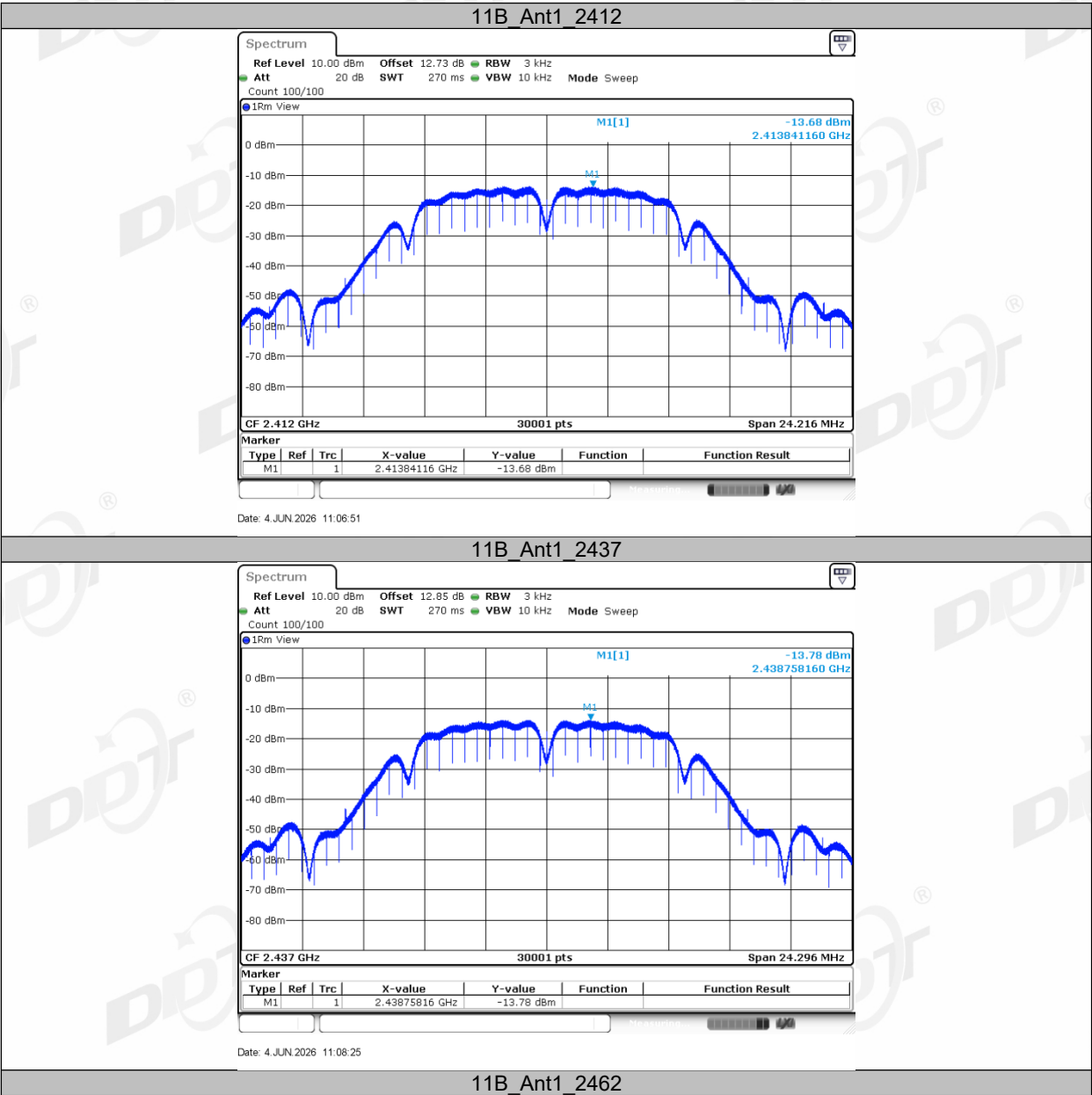
Test Mode	Antenna	Frequency [MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-13.68	≤8.00	PASS
		2437	-13.78	≤8.00	PASS
		2462	-13.89	≤8.00	PASS
11G	Ant1	2412	-14.86	≤8.00	PASS
		2437	-15.24	≤8.00	PASS
		2462	-14.73	≤8.00	PASS
11N20SISO	Ant1	2412	-16.66	≤8.00	PASS
		2437	-16.75	≤8.00	PASS
		2462	-16.64	≤8.00	PASS
11N40SISO	Ant1	2422	-20.32	≤8.00	PASS
		2437	-20.52	≤8.00	PASS
		2452	-22.22	≤8.00	PASS
11AX20SISO	Ant1	2412	-18.53	≤8.00	PASS
		2437	-19.34	≤8.00	PASS
		2462	-18.87	≤8.00	PASS

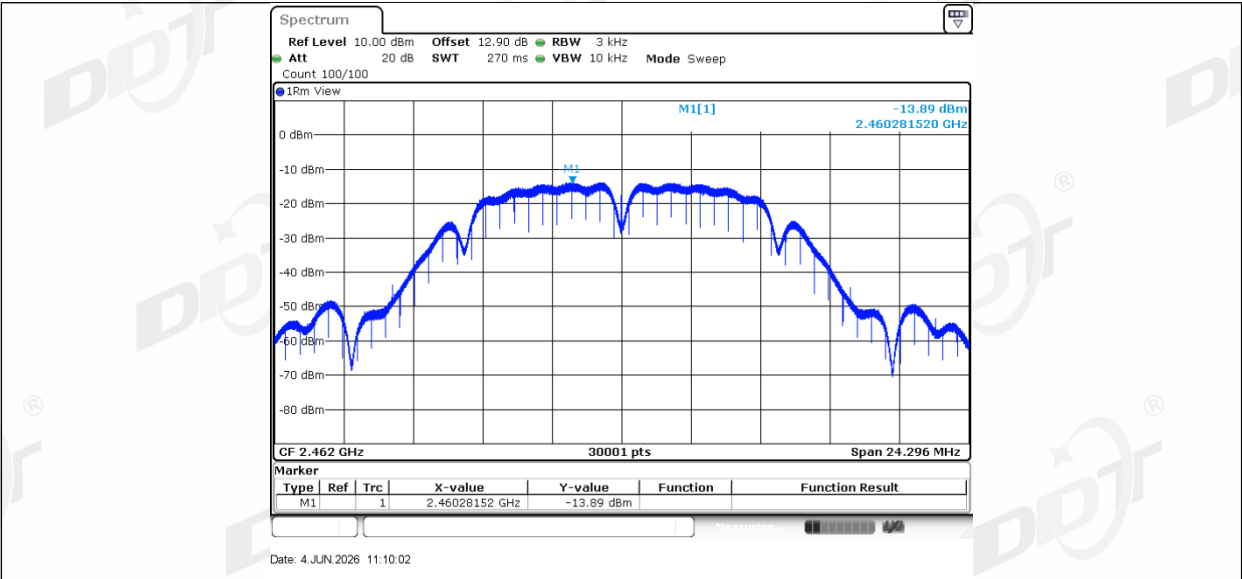
Test Engineer:	Zora Zhang	Test Site:	RF Measurement System 4#
Ambient Condition:	27.1℃,46.0%RH	Test Date:	2026.06.16
Test Power Supply:	Battery	Sample Number:	S26010628-008

TestMode	Antenna	Frequency[MHz]	RuSize	RuIndex	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11AX20SISO	Ant1	2412	26Tone	RU0	-12.12	≤8.00	PASS
				RU4	-11.79	≤8.00	PASS
				RU8	-11.93	≤8.00	PASS
			52Tone	RU37	-14.89	≤8.00	PASS
				RU39	-13.17	≤8.00	PASS
				RU40	-14.49	≤8.00	PASS
			106Tone	RU53	-14.43	≤8.00	PASS
				RU54	-14.26	≤8.00	PASS
		2437	26Tone	RU0	-11.16	≤8.00	PASS
				RU4	-10.42	≤8.00	PASS
				RU8	-11.10	≤8.00	PASS
			52Tone	RU37	-14.07	≤8.00	PASS
				RU39	-11.94	≤8.00	PASS
				RU40	-13.95	≤8.00	PASS
			106Tone	RU53	-13.88	≤8.00	PASS
				RU54	-13.30	≤8.00	PASS
		2462	26Tone	RU0	-12.09	≤8.00	PASS
				RU4	-11.19	≤8.00	PASS
				RU8	-11.72	≤8.00	PASS
			52Tone	RU37	-14.97	≤8.00	PASS
				RU39	-12.32	≤8.00	PASS
				RU40	-14.46	≤8.00	PASS
			106Tone	RU53	-14.16	≤8.00	PASS
				RU54	-13.24	≤8.00	PASS

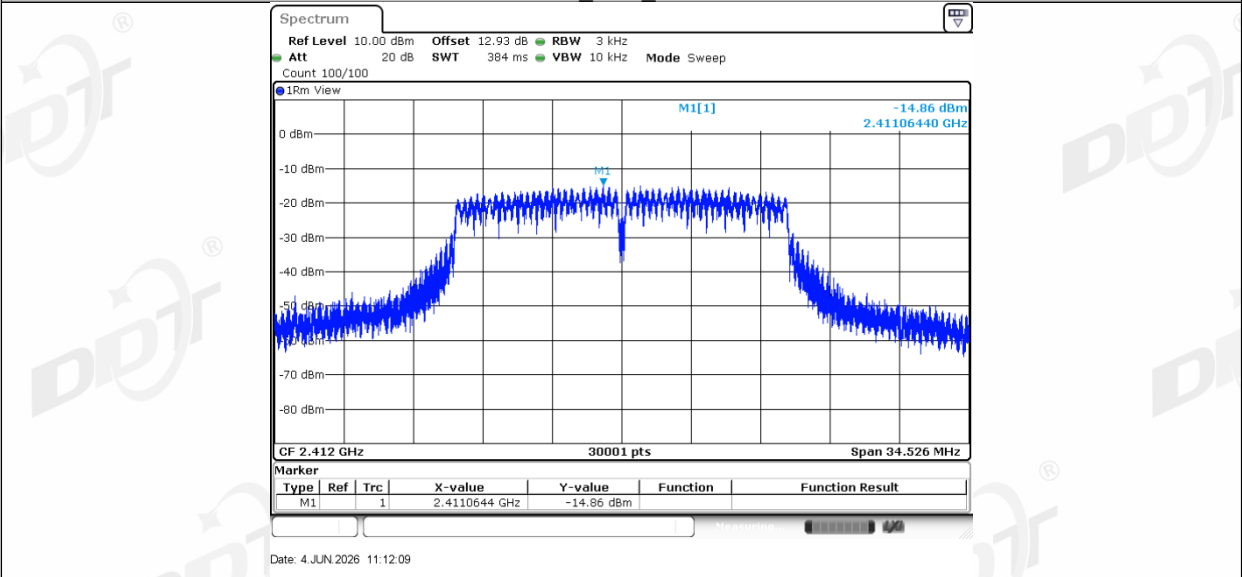
Note: The Duty Cycle Factor is compensated in the graph.

7.5. Test graphs

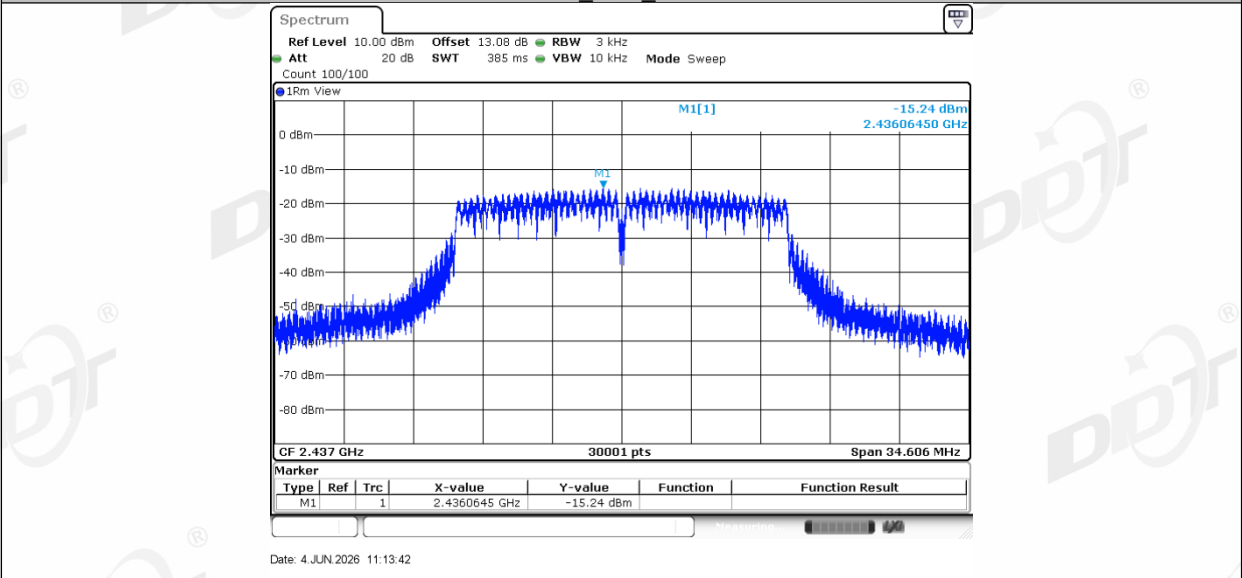




11G Ant1_2412



11G Ant1_2437



11G Ant1_2462