FCC AND ISED CERTIFICATION TEST REPORT

Applicant	:	Nuvyyo Inc.
Address of Applicant	:	555 Legget Drive Tower B Suite 836, Kanata, ON K2K 2X3 Canada
Manufacturer	:	Shenzhen SDMC Technology Co., Ltd.
Address of Manufacturer	:	Room 1022, Floor 10, Building A, Customs Building, No. 2, Xin'an 3rd Road, Dalang Community, Xin'an Street, Bao'an District, Shenzhen
Equipment under Test	:	TABLO
Model No.	:	TF1282B-01-VN, TF1284B-01-VN
FCC ID	:	2AOR7-TABLOV01
IC	:	23569-TABV0
Test Standard(s)	:	FCC Rules and Regulations Part 15 Subpart C, RSS-247 Issue 3 August 2023, ANSI C63.10:2013, RSS-Gen Issue 5, Apr. 2018, Amendment 2 (February 2021)
Report No.	:	DDT-RE24092008-1E03
Issue Date	:	2024/10/22
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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Address of Manufacturer	:	Room 1022, Floor 10, Building A, Customs Building, No. 2, Xin'an 3rd Road, Dalang Community, Xin'an Street, Bao'an District, Shenzhen

Test Standard Used:

FCC Rules and Regulations Part 15 Subpart C,
RSS-247 Issue 3 August 2023,
ANSI C63.10:2013,
RSS-Gen Issue 5, Apr. 2018, Amendment 2 (February 2021)

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-RE24092008-1E03		
Date of Receipt:	2024/09/27	**Date of Test:**	2024/09/27 - 2024/10/22

Prepared By:

Tiger Mo

Tiger Mo/Engineer

Approved By:

Damon Hu

Certificate and Report Seal
检验检测专用章

Damon Hu/EMC Manager

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

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	2024/10/22	

1. Summary of Test Results

No.	Test Parameter	Clause No.	Condition	Result
1	6 dB Bandwidth and 99% Bandwidth	FCC Part 15: 15.247(a)(2), RSS-247 Issue 3 clause 5.2(a), RSS-Gen Issue 5 clause 6.7	/	Pass
2	Peak Output Power	FCC Part 15: 15.247(b)(3), RSS-247 Issue 3 clause 5.4(d)	/	Pass
3	Power Spectral Density	FCC Part 15:15.247(e), RSS-247 Issue 3 clause 5.2(b)	/	Pass
4	RF Conducted Spurious Emissions	FCC Part 15: 15.247(d), RSS-247 Issue 3 clause 5.5	/	Pass
5	Radiated Emission	FCC Part 15: 15.205, FCC Part 15: 15.209, FCC Part 15: 15.247(d), RSS-247 Issue 3 clause 5.5, RSS-Gen Issue 5 clause 8.9, RSS-Gen Issue 5 clause 8.10	/	Pass
6	Band Edge Compliance	FCC Part 15: 15.205, FCC Part 15: 15.209, FCC Part 15: 15.247(d), RSS-247 Issue 3 clause 5.5, RSS-Gen Issue 5 clause 8.9, RSS-Gen Issue 5 clause 8.10	/	Pass
7	Antenna Requirement	FCC Part 15: 15.203, RSS-Gen Issue 5 clause 6.8	/	Pass
8	Power Line Conducted Emissions	FCC Part 15: 15.207(a), RSS-Gen Issue 5 clause 8.8	/	Pass

Note1: 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.

Note2: TF1282B-01-VN is 2tuner, TF1284B-01-VN is 4tuner. TF1282B-01-VN, TF1284B-01-VN, DDR/ switching power supply/transformer has two different brands, Two versions are shipped with or without an external receiving antenna, All the influential items have been pretest, and only the worst mode is reported.

2. General Test Information

2.1. Description of EUT

EUT Name	:	TABLO
Model Number	:	TF1282B-01-VN, TF1284B-01-VN
Difference of model number	:	Above models are identical in schematic, appearance and structure, only the Model Number, tuner, DDR/switching power supply/ transformer brands are different for all the models. Two versions are shipped with or without an external receiving antenna, All the influential items have been pretest, and only the worst mode is reported.
EUT Function Description	:	Please reference user manual of this device
Power Supply	:	DC 12V From External adapter

Note: This EUT support Bluetooth BR/EDR/LE, 2.4 GHz WLAN, 5 GHz WLAN, this report only for 2.4 GHz WLAN.

Radio Technology	:	IEEE 802.11b/g/n
Operation frequency	:	IEEE 802.11b: 2412MHz-2462MHz IEEE 802.11g: 2412MHz-2462MHz IEEE 802.11n HT20: 2412MHz-2462MHz IEEE 802.11n HT40: 2422MHz-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)

Antenna information				
Antenna Type	Metal Antenna			
Max Antenna Gain(dBi)		Ant1 gain	Ant2 gain	Directional gain
	IEEE 802.11b	2.24	0.09	/
	IEEE 802.11g	2.24	0.09	/
	IEEE 802.11n HT20	2.24	0.09	4.24
	IEEE 802.11n HT40	2.24	0.09	4.24
Note: This EUT MIMO 2X2, any transmit signals are correlated with each other. So the Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2/2$] =4.24dBi				

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	/	/

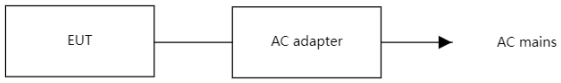
Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's 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
AC ADAPTER	SUNUN	SA180-120150U	INPUT: 100-240V~50/60Hz 0.6A OUTPUT:12V ⎓1.5A
Adapter	Chenzhou Frecom Electronics Co., Ltd.	FC018A03-120015U	Input: 100-240V~ 50/60Hz Output: 12V⎓1.5A
Internet cable	/	/	Length: 1.00m, Unshielded

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: Putty.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, channel, and data rate information					
Mode	Setting Tx Power		Data rate (Mbps) (see Note)	Channel	Frequency (MHz)
	ANT1	ANT2			
IEEE 802.11b	105	97	1	LCH: CH1	2412
	105	97	1	MCH: CH6	2437
	105	97	1	HCH: CH11	2462
IEEE 802.11g	72	65	6	LCH: CH1	2412
	72	65	6	MCH: CH6	2437
	72	65	6	HCH: CH11	2462
IEEE 802.11n HT20	72	65	MCS 8	LCH: CH1	2412
	72	65	MCS 8	MCH: CH6	2437
	72	65	MCS 8	HCH: CH11	2462
IEEE 802.11n HT40	62	55	MCS 8	LCH: CH3	2422
	62	55	MCS 8	MCH: CH6	2437
	62	55	MCS 8	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℃ to +35 ℃
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-20155, G-20118

2.8. Measurement uncertainty

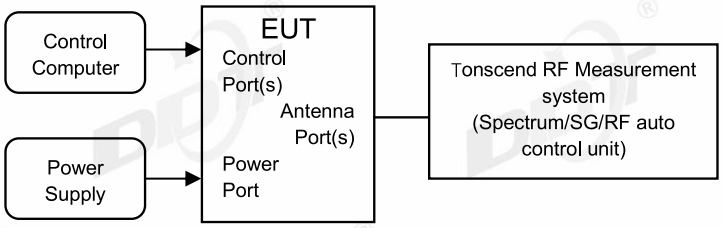
Test Item	Uncertainty
Bandwidth	1.1%
Peak Output Power (Conducted) (Spectrum analyzer)	0.86 dB (10 MHz ≤ f < 3.6 GHz);
	1.38 dB (3.6 GHz ≤ f < 8 GHz)
Peak Output Power (Conducted) (Power Sensor)	0.74 dB
Power Spectral Density	0.74 dB (10 MHz ≤ f < 3.6 GHz);
	1.38 dB (3.6 GHz ≤ f < 8 GHz)
Frequencies Stability	6.7×10^{-8} (Antenna couple method)
	5.5×10^{-8} (Conducted method)
Conducted spurious emissions	0.86 dB (10 MHz ≤ f < 3.6 GHz);
	1.40 dB (3.6 GHz ≤ f < 8 GHz)
	1.66 dB (8 GHz ≤ f < 26.5 GHz)
Uncertainty for radio frequency (RBW < 20 kHz)	3×10^{-8}
Temperature	0.4 ℃
Humidity	2 %
Uncertainty for Radiation Emission test (9 kHz – 30 MHz)	3.44 dB
Uncertainty for Radiation Emission test (30 MHz - 1 GHz)	4.70 dB (Antenna Polarize: V)
	4.84 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission test (1 GHz - 40 GHz)	4.10 dB (1 - 6 GHz)
	4.40 dB (6 GHz - 18 GHz)
	3.54 dB (18 GHz - 26 GHz)
	4.30 dB (26 GHz - 40 GHz)
Uncertainty for Power line conduction emission test	3.34dB (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	2025/07/08
Wideband Radio Communication Tester	R&S	CMW500	117491	2025/03/31
EXG Analog Signal Generator	KEYSIGHT	N5173B	MY62153058	2025/07/08
MXG Vector Signal Generator	Agilent	N5182A	MY48180912	2025/03/31
RF Control Unit	Tonscend	JS0806-2	20C8060230	2025/03/31
TEMP&HUMI Programmable Chamber	ZHIXIANG	ZXGDJS-150L	ZX170110-A	2025/04/22
Test Software	Tonscend	JS1120-3	Ver.3.2.22	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 C63.10-2013 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:	≥ [3 × 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

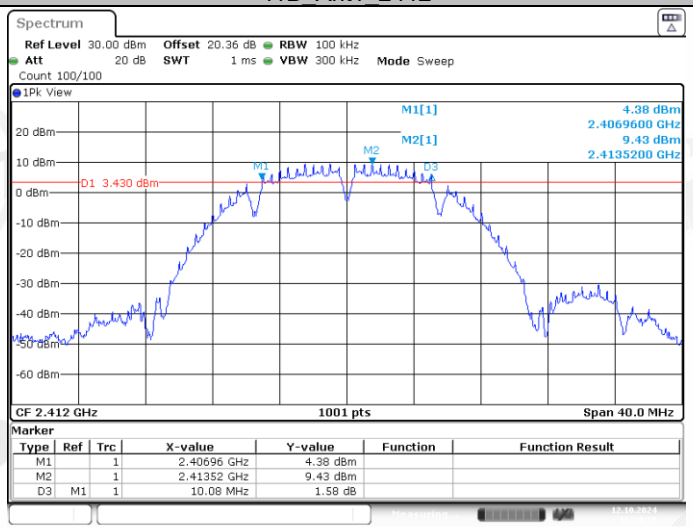
4.4. Test result

Test Engineer:	Zhongyao	Test Site:	RF Measurement System 3#
Ambient Condition:	26.4℃,46.9%RH	Test Date:	2024.10.12
Test Power Supply:	DC 12V	Sample Number:	S24092008-001

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	10.08	2406.96	2417.04	0.5	PASS
	Ant2	2412	10.08	2406.96	2417.04	0.5	PASS
	Ant1	2437	10.08	2431.96	2442.04	0.5	PASS
	Ant2	2437	10.08	2431.96	2442.04	0.5	PASS
	Ant1	2462	10.08	2456.96	2467.04	0.5	PASS
	Ant2	2462	10.08	2456.96	2467.04	0.5	PASS
11G	Ant1	2412	15.68	2404.24	2419.92	0.5	PASS
	Ant2	2412	15.72	2403.88	2419.60	0.5	PASS
	Ant1	2437	15.84	2429.08	2444.92	0.5	PASS
	Ant2	2437	15.76	2429.12	2444.88	0.5	PASS
	Ant1	2462	15.68	2454.08	2469.76	0.5	PASS
	Ant2	2462	15.80	2454.08	2469.88	0.5	PASS
11N20 MIMO	Ant1	2412	16.08	2404.48	2420.56	0.5	PASS
	Ant2	2412	15.48	2404.44	2419.92	0.5	PASS
	Ant1	2437	17.52	2428.24	2445.76	0.5	PASS
	Ant2	2437	16.84	2428.60	2445.44	0.5	PASS
	Ant1	2462	16.36	2453.84	2470.20	0.5	PASS
	Ant2	2462	15.68	2454.24	2469.92	0.5	PASS
11N40 MIMO	Ant1	2422	35.12	2404.48	2439.60	0.5	PASS
	Ant2	2422	35.12	2404.48	2439.60	0.5	PASS
	Ant1	2437	35.76	2418.84	2454.60	0.5	PASS
	Ant2	2437	35.12	2419.48	2454.60	0.5	PASS
	Ant1	2452	35.12	2434.48	2469.60	0.5	PASS
	Ant2	2452	35.12	2434.48	2469.60	0.5	PASS

4.5. Test graphs

11B_Ant1_2412



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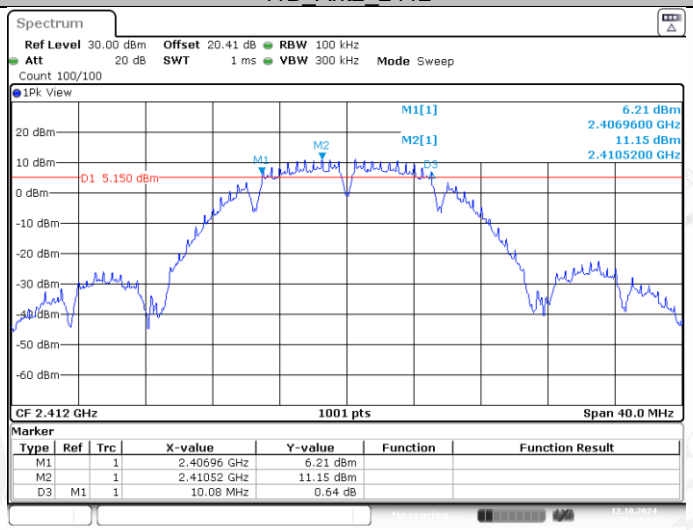

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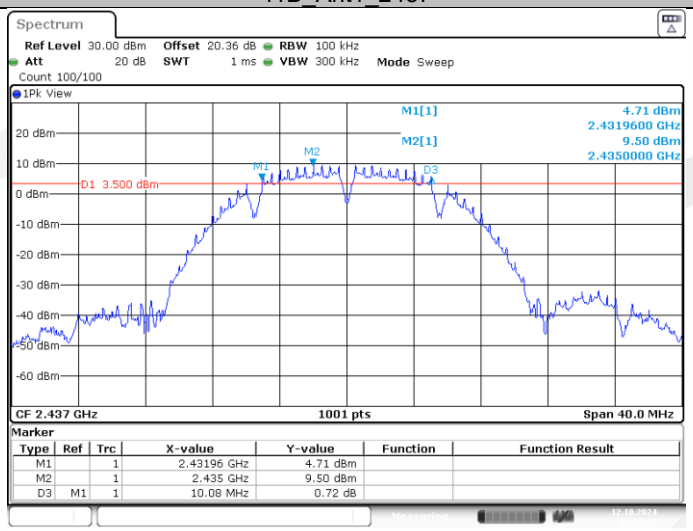

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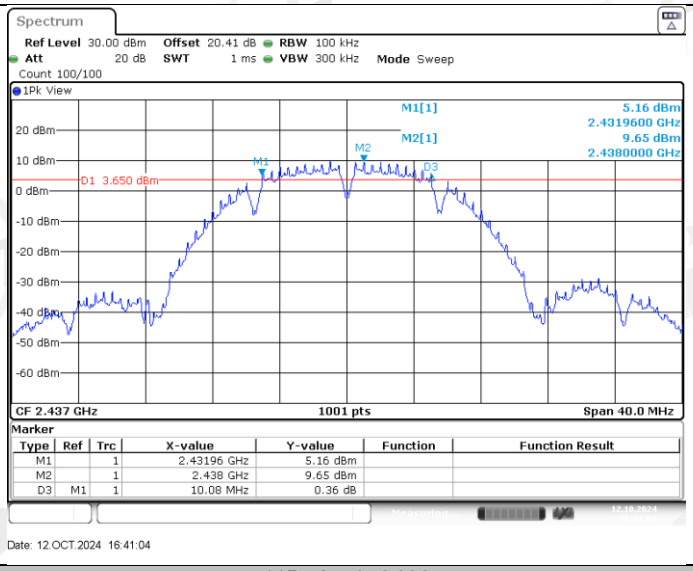

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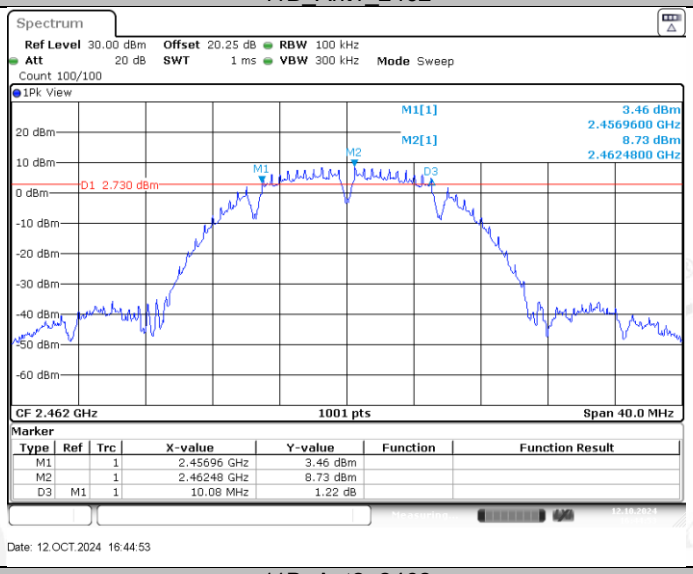

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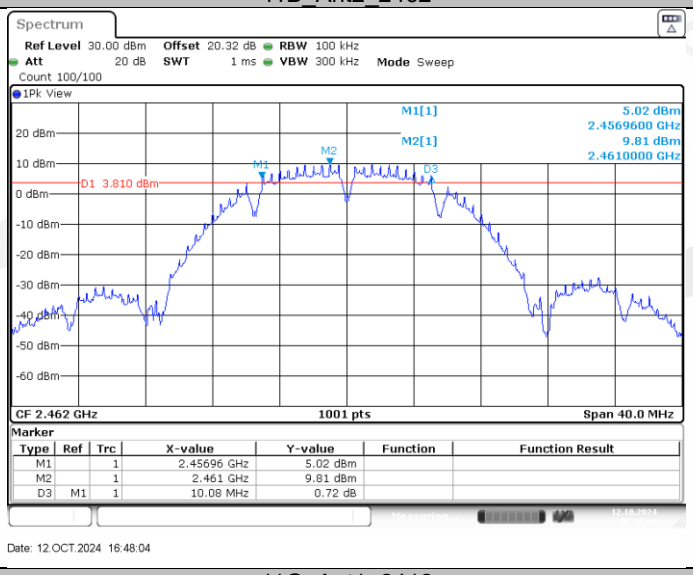

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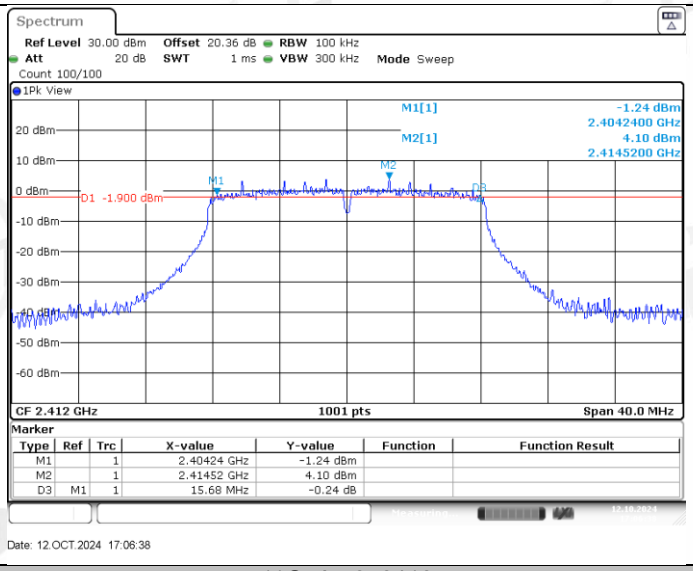

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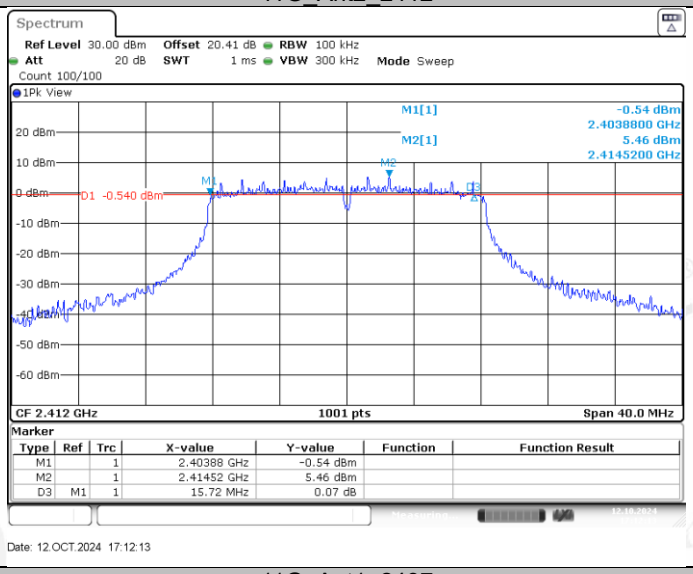

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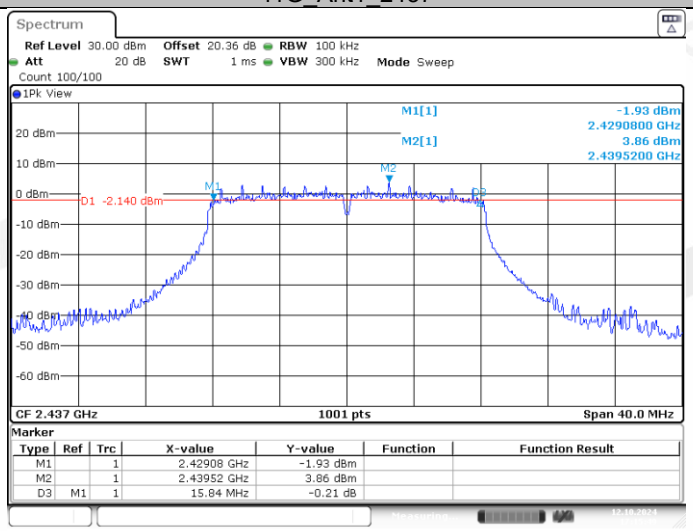

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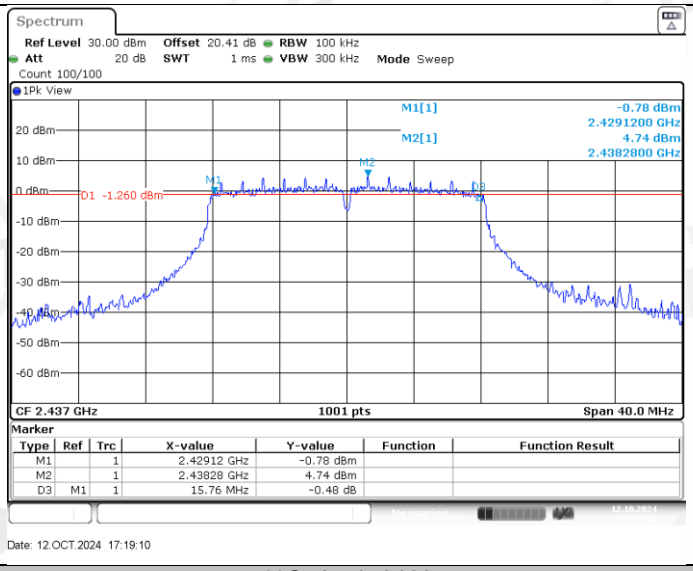

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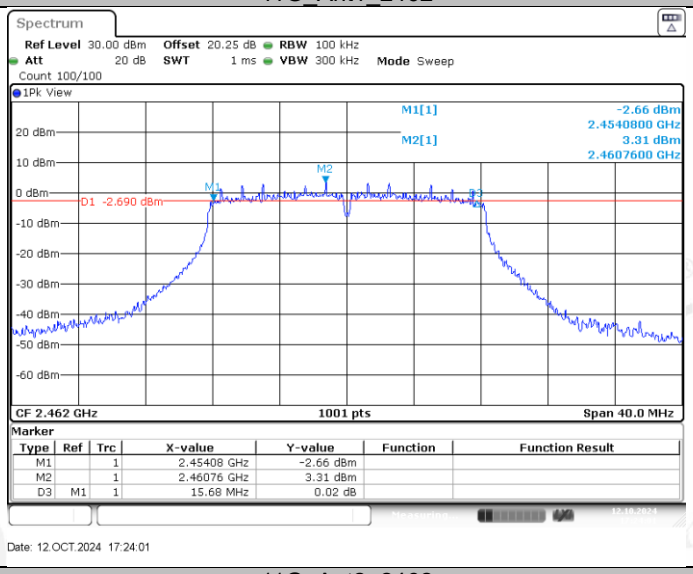

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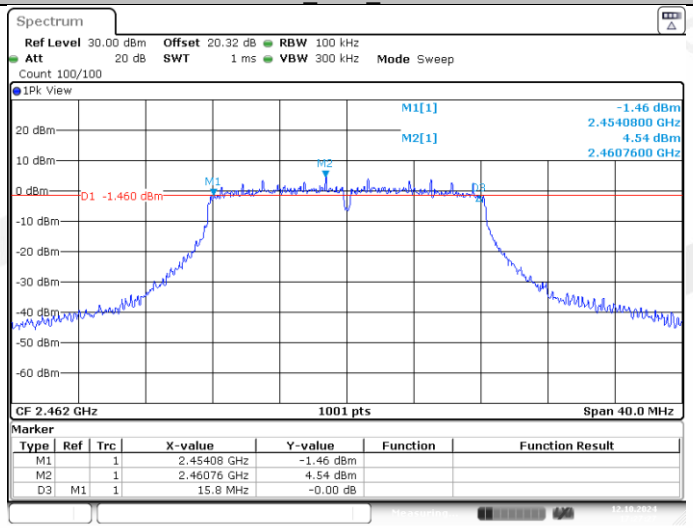

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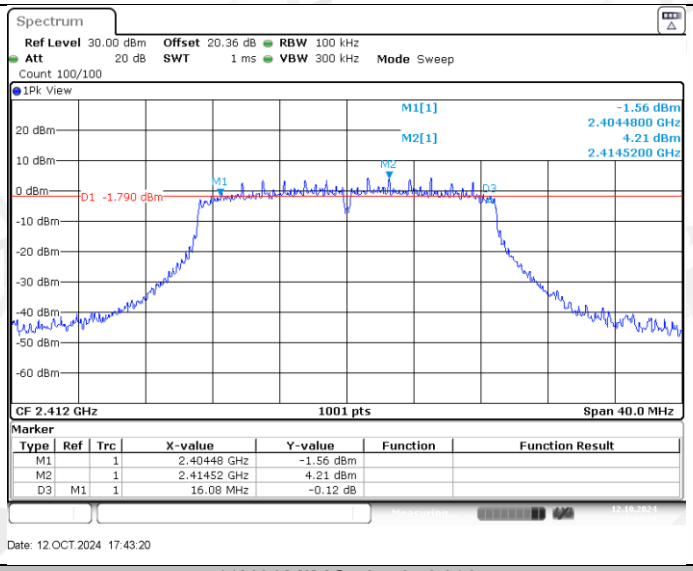

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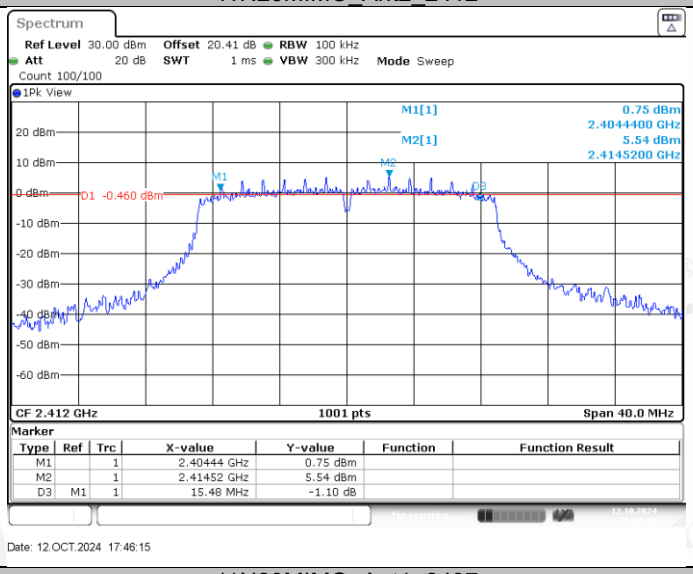

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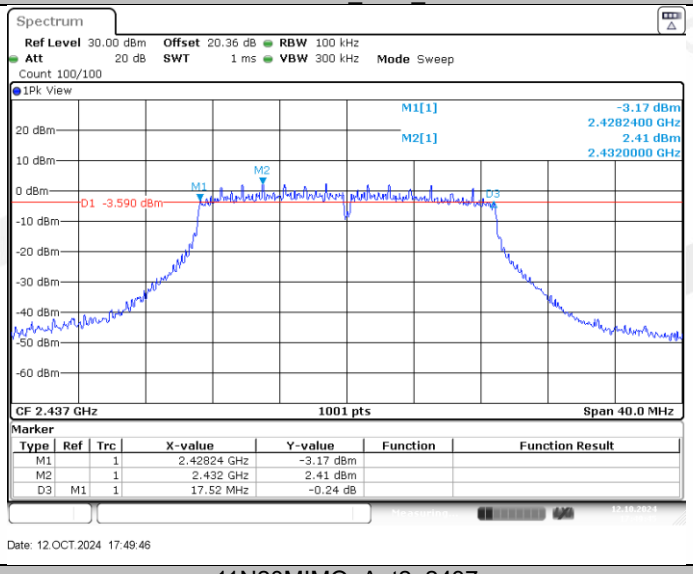

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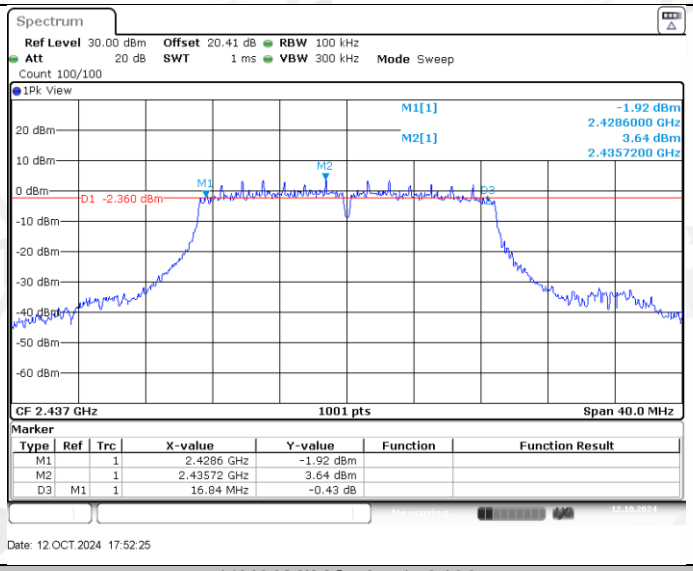

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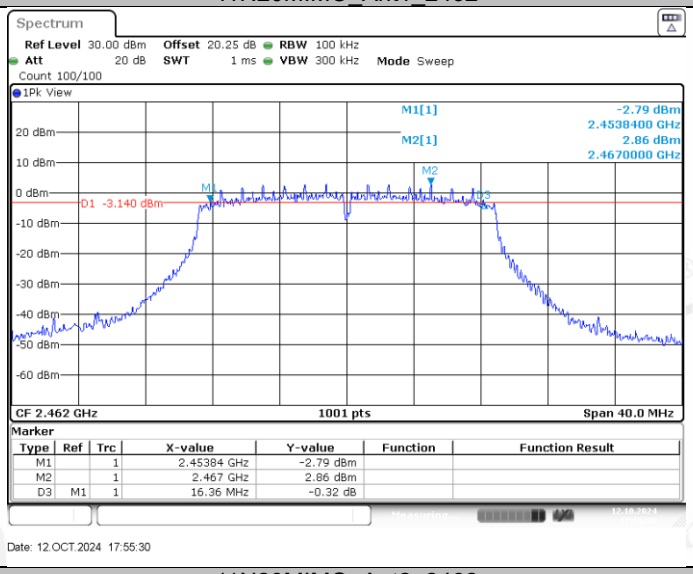

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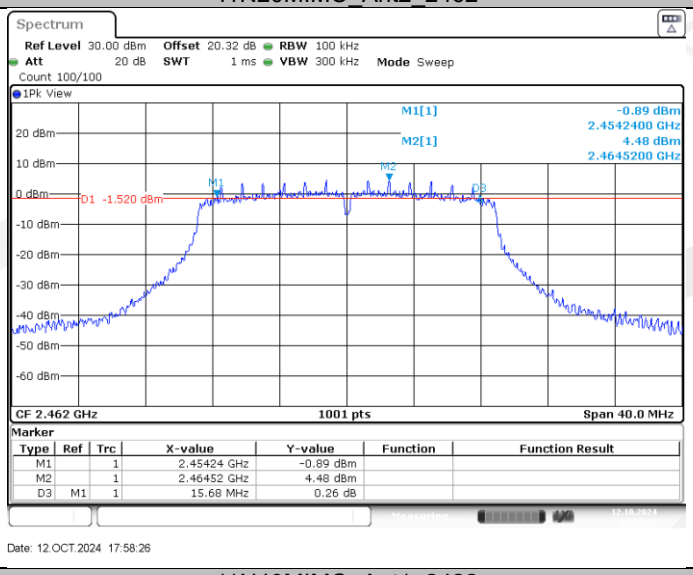

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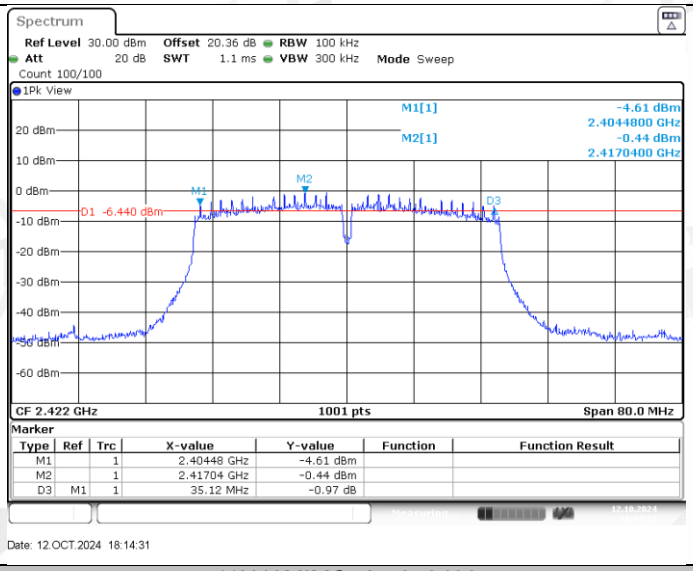

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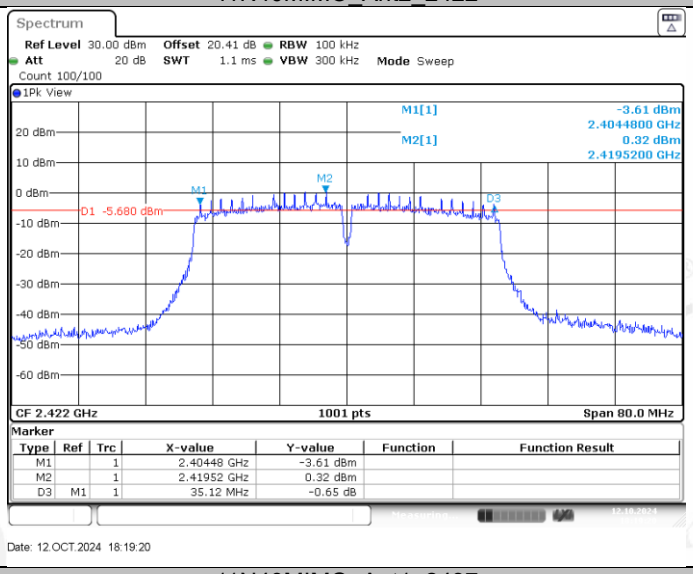

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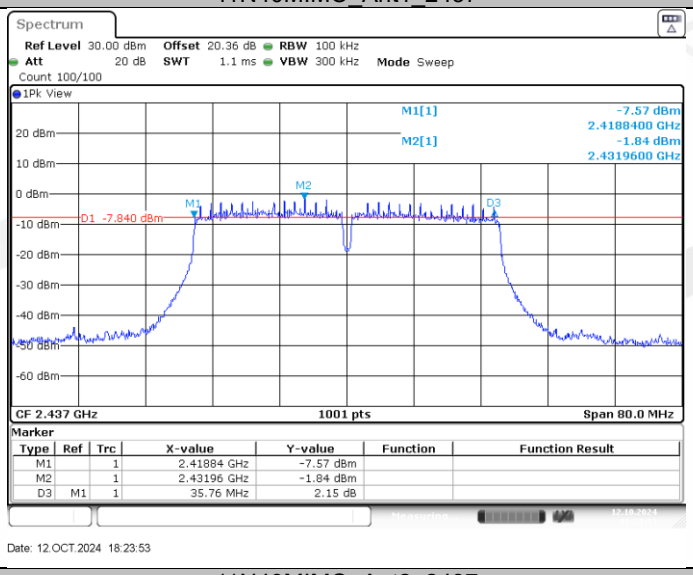

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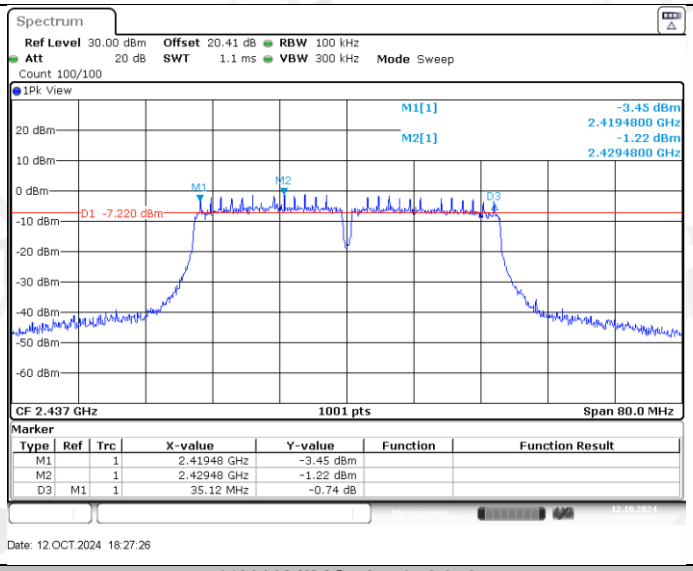
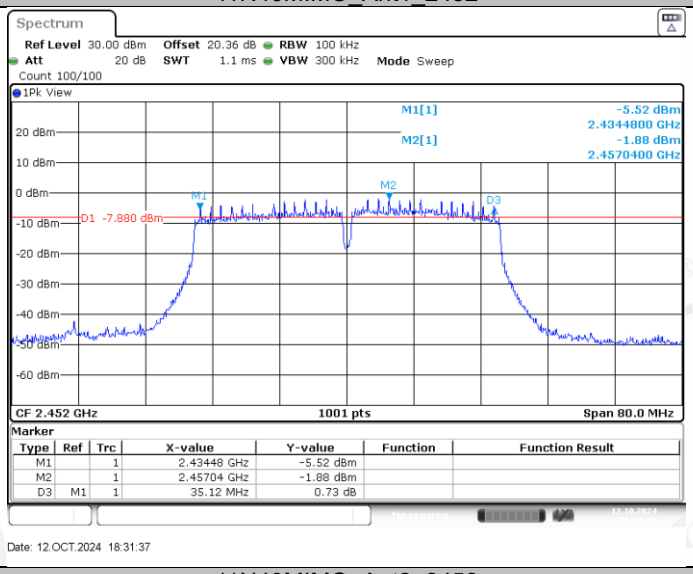
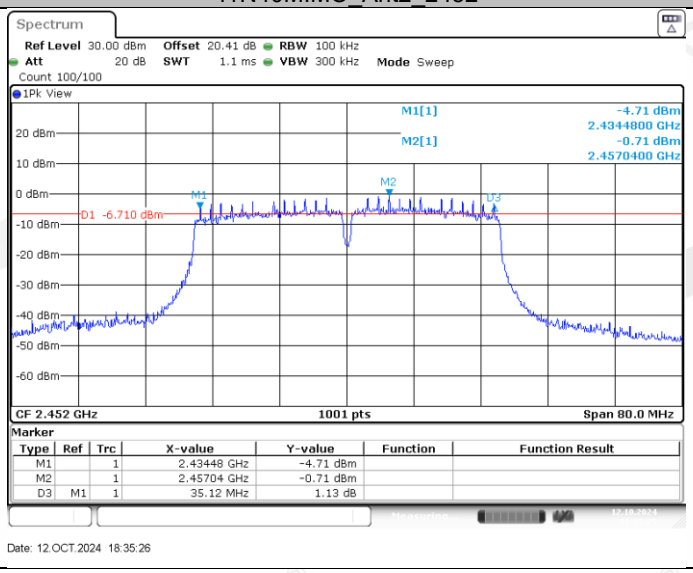


11N40MIMO_Ant1_2452

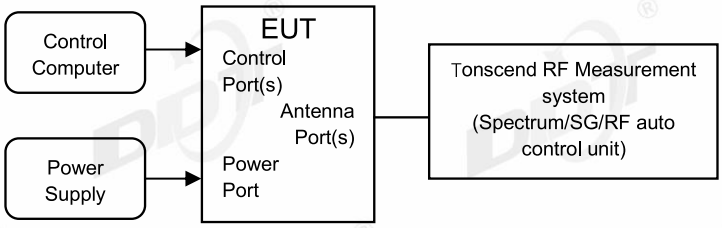


11N40MIMO_Ant2_2452



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 C63.10-2013 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.

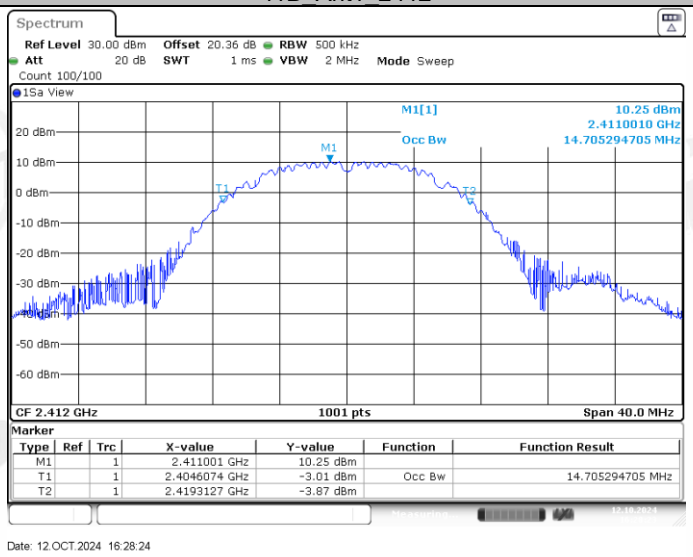
5.4. Test result

Test Engineer:	Zhongyao	Test Site:	RF Measurement System 3#
Ambient Condition:	26.4℃,46.9%RH	Test Date:	2024.10.12
Test Power Supply:	DC 12V	Sample Number:	S24092008-001

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.705	2404.6074	2419.3127	---	---
	Ant2	2412	14.905	2404.5275	2419.4326	---	---
	Ant1	2437	14.705	2429.6474	2444.3526	---	---
	Ant2	2437	14.785	2429.6074	2444.3926	---	---
	Ant1	2462	14.745	2454.6074	2469.3526	---	---
	Ant2	2462	14.865	2454.5275	2469.3926	---	---
11G	Ant1	2412	17.143	2403.4486	2420.5914	---	---
	Ant2	2412	17.103	2403.5285	2420.6314	---	---
	Ant1	2437	16.983	2428.4486	2445.4316	---	---
	Ant2	2437	17.103	2428.4885	2445.5914	---	---
	Ant1	2462	16.943	2453.4885	2470.4316	---	---
	Ant2	2462	17.063	2453.4486	2470.5115	---	---
11N20 MIMO	Ant1	2412	17.742	2403.1688	2420.9111	---	---
	Ant2	2412	18.102	2403.0490	2421.1508	---	---
	Ant1	2437	17.902	2428.0090	2445.9111	---	---
	Ant2	2437	18.262	2427.8492	2446.1109	---	---
	Ant1	2462	17.822	2453.0889	2470.9111	---	---
	Ant2	2462	18.062	2452.9291	2470.9910	---	---
11N40 MIMO	Ant1	2422	36.204	2403.8581	2440.0619	---	---
	Ant2	2422	36.044	2403.9381	2439.9820	---	---
	Ant1	2437	36.444	2418.6184	2455.0619	---	---
	Ant2	2437	36.444	2418.7782	2455.2218	---	---
	Ant1	2452	36.364	2433.8581	2470.2218	---	---
	Ant2	2452	36.284	2433.8581	2470.1419	---	---

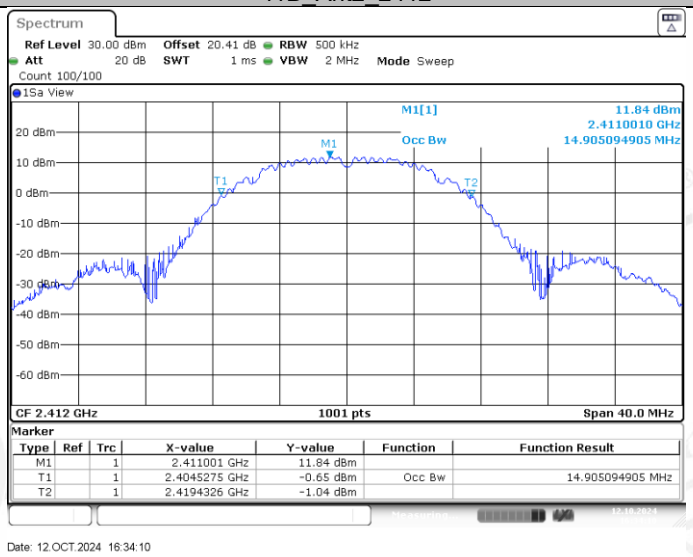
5.5. Test graphs

11B_Ant1_2412



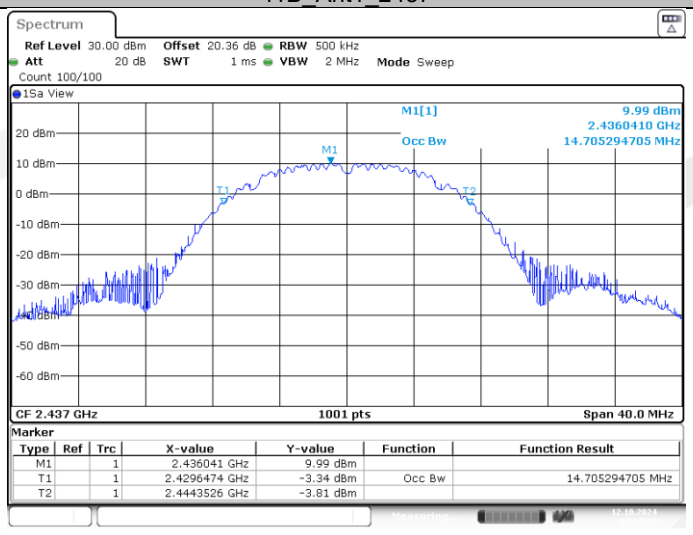
Date: 12.OCT.2024 16:28:24

11B_Ant2_2412



Date: 12.OCT.2024 16:34:10

11B_Ant1_2437



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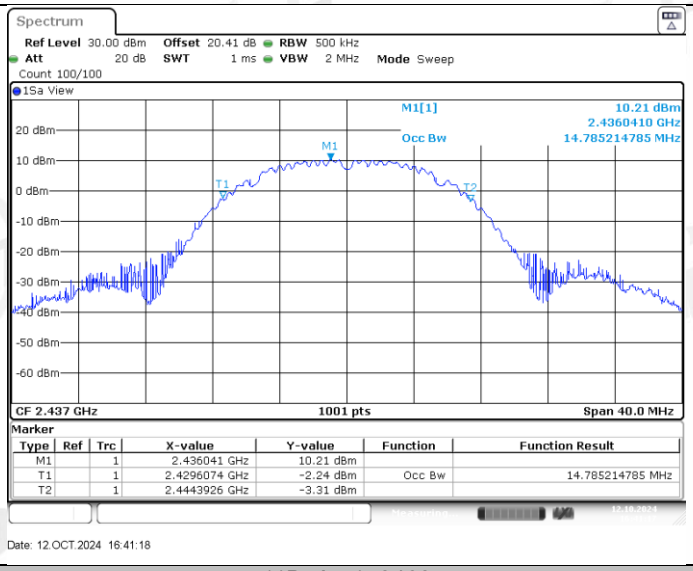
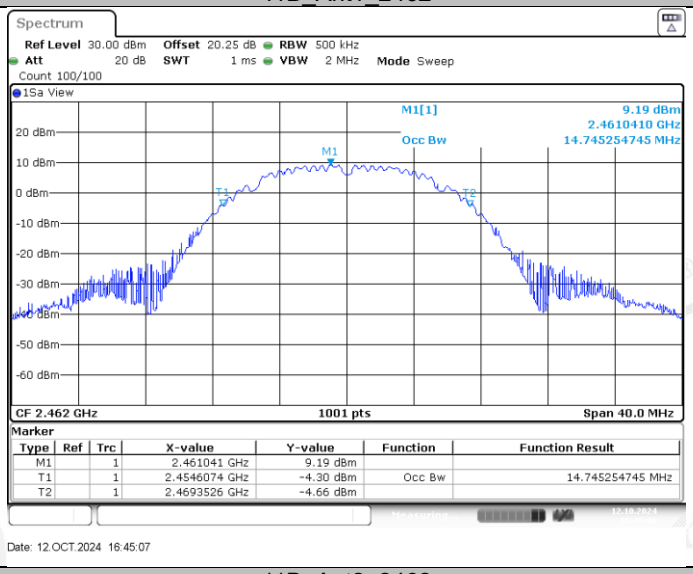
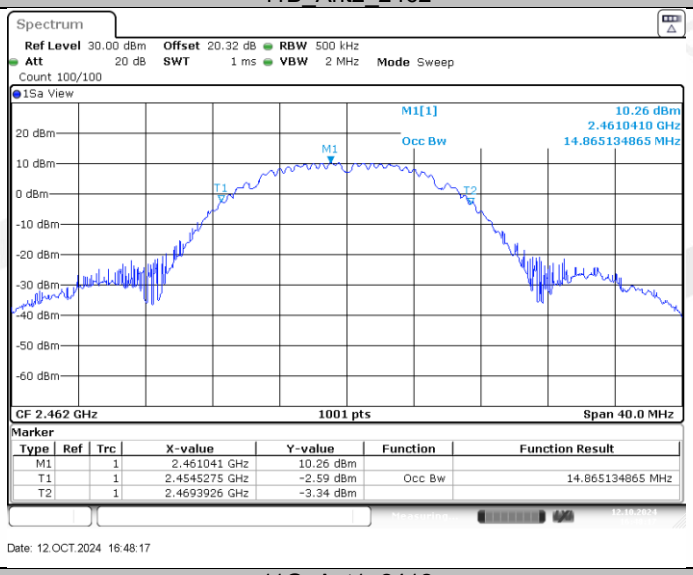
11B_Ant2_2437



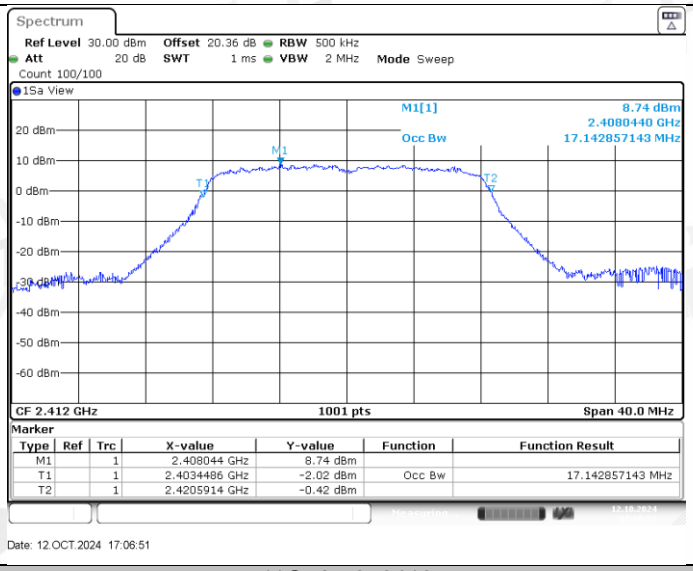
11B_Ant1_2462



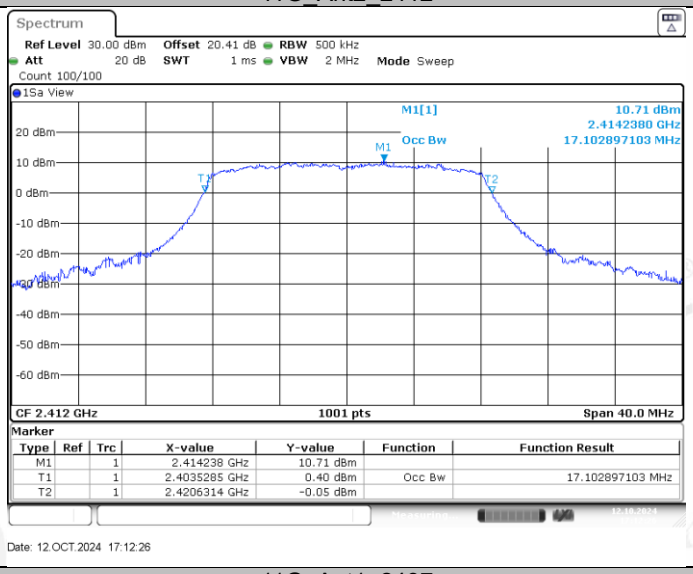
11B_Ant2_2462



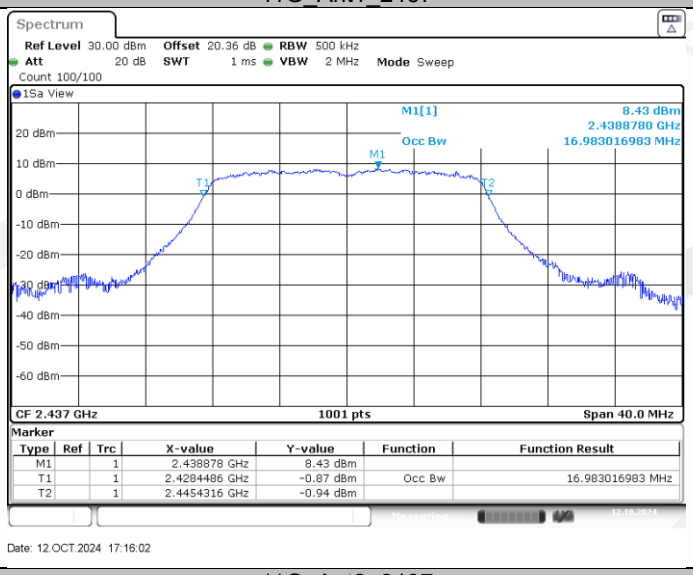
11G_Ant1_2412



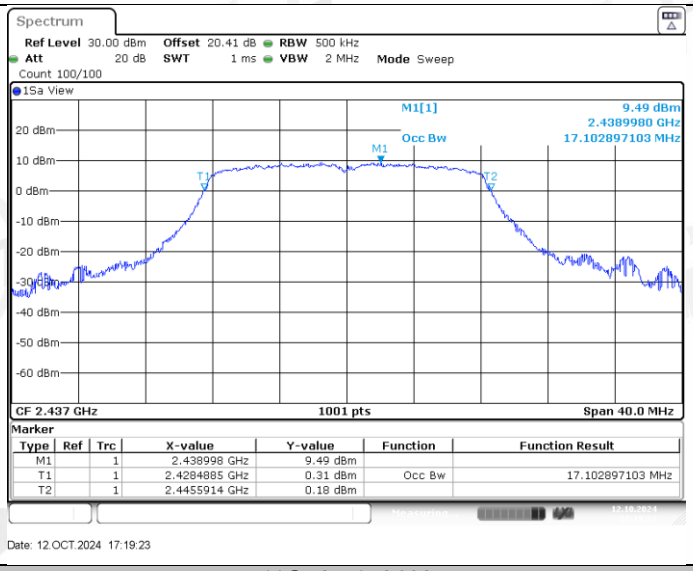
11G_Ant2_2412



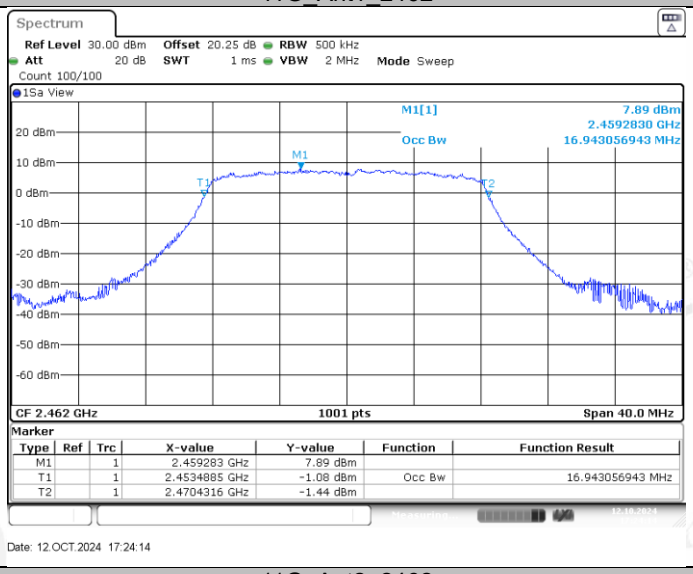
11G_Ant1_2437



11G_Ant2_2437



11G_Ant1_2462



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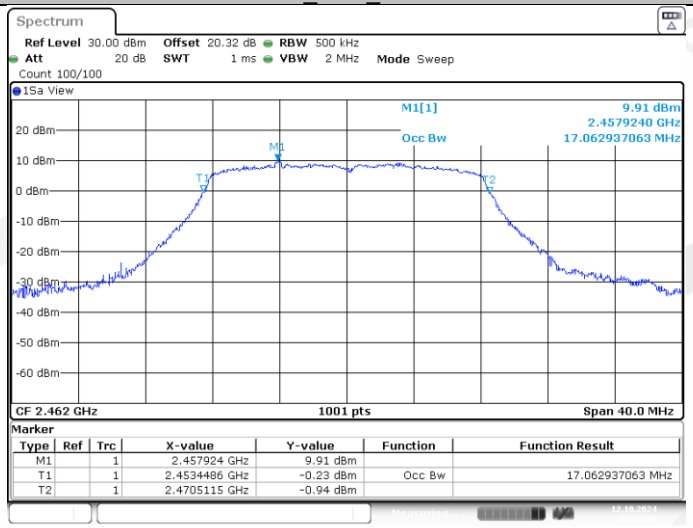
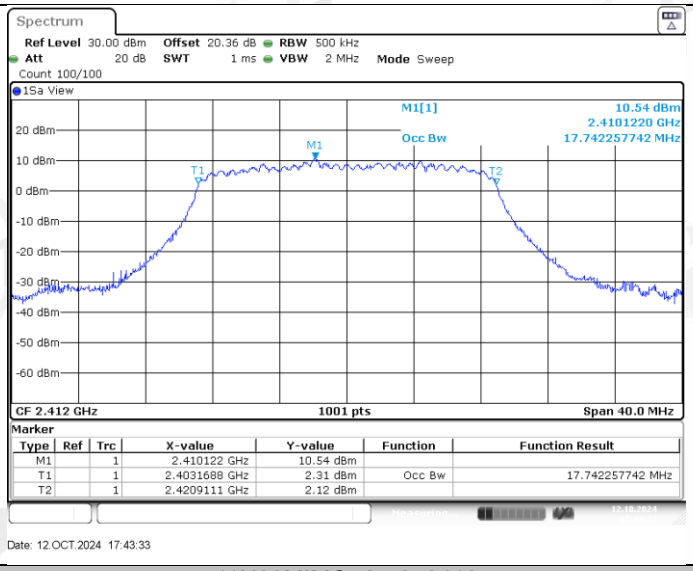
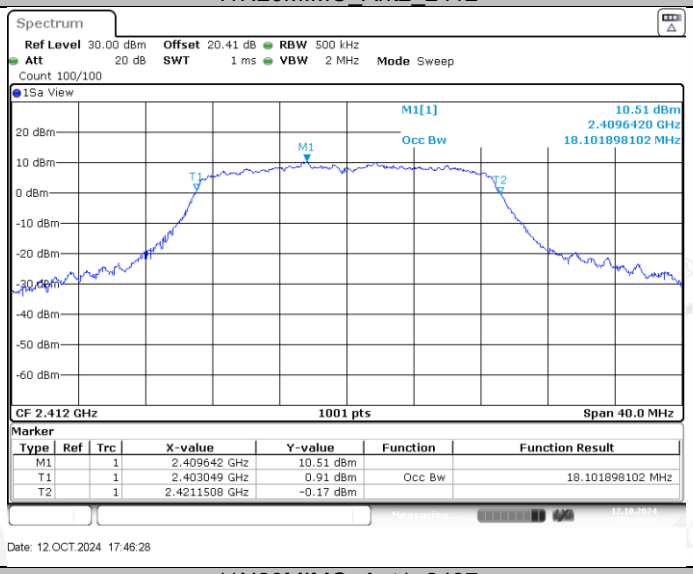


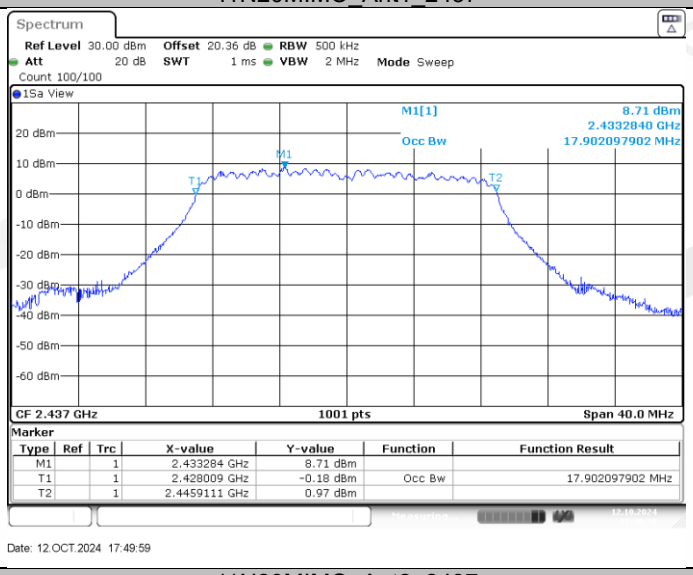
11N20MIMO_Ant1_2412



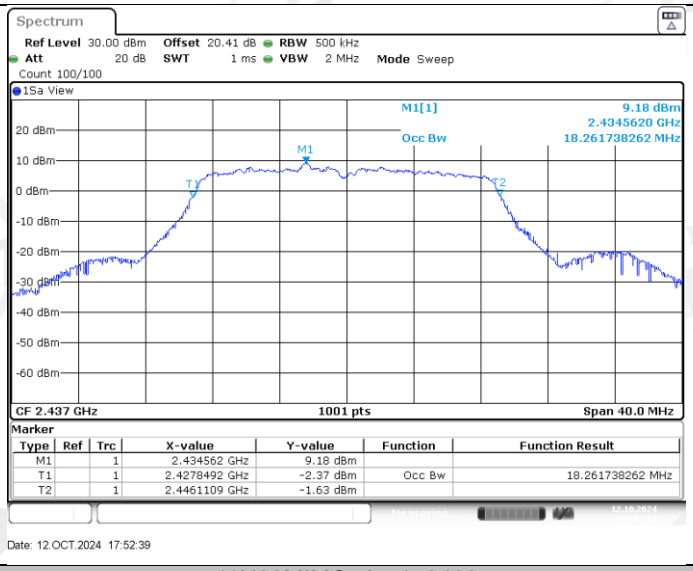
11N20MIMO_Ant2_2412



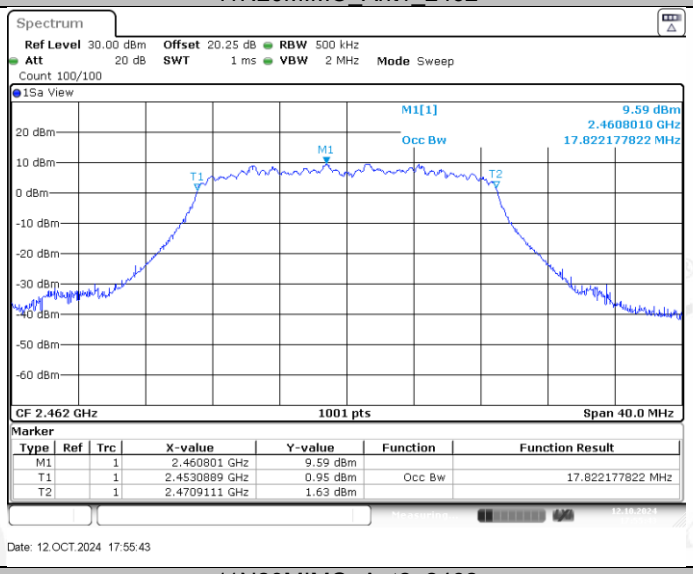
11N20MIMO_Ant1_2437



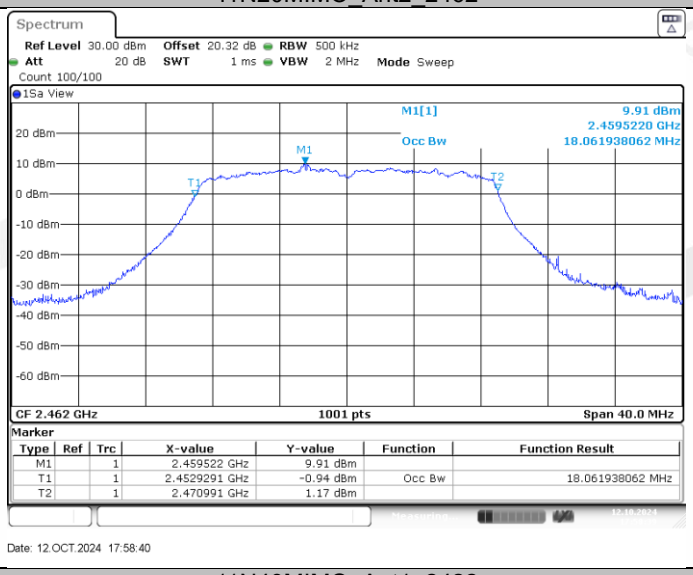
11N20MIMO_Ant2_2437



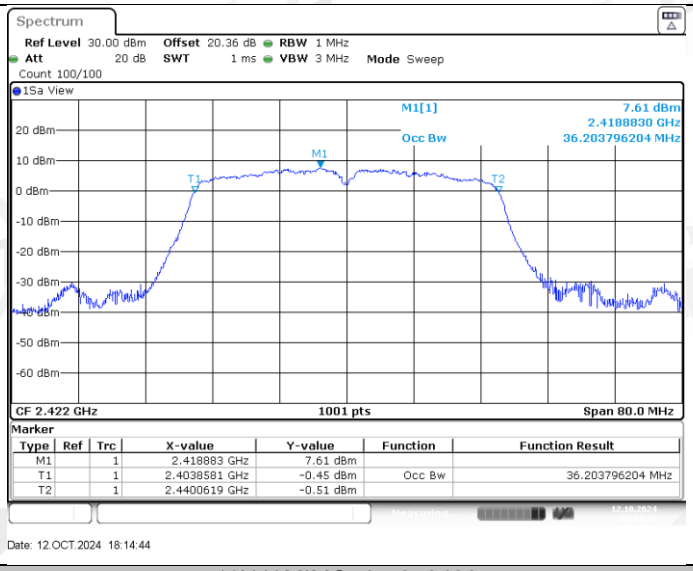
11N20MIMO_Ant1_2462



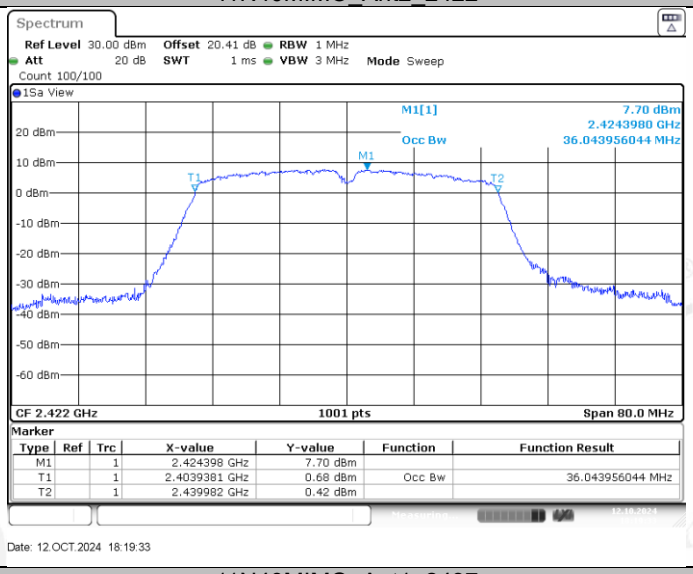
11N20MIMO_Ant2_2462



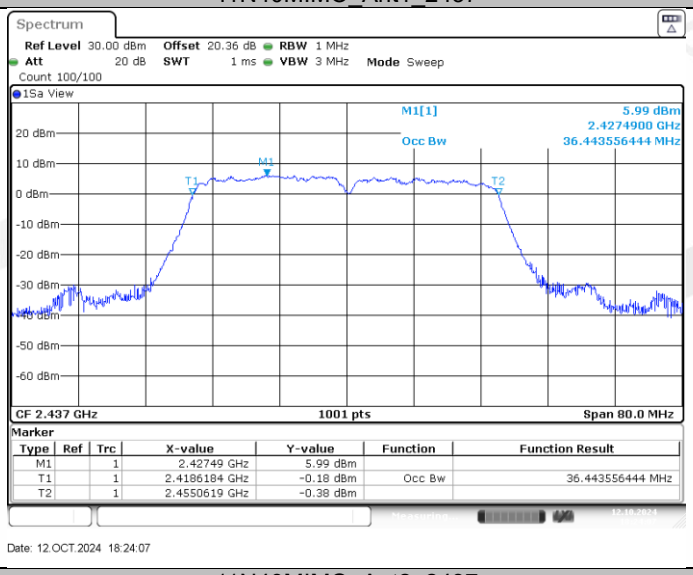
11N40MIMO_Ant1_2422



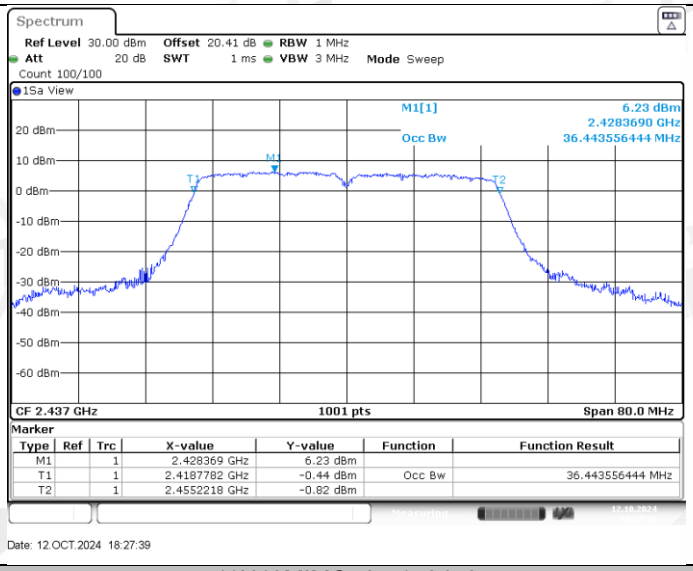
11N40MIMO_Ant2_2422



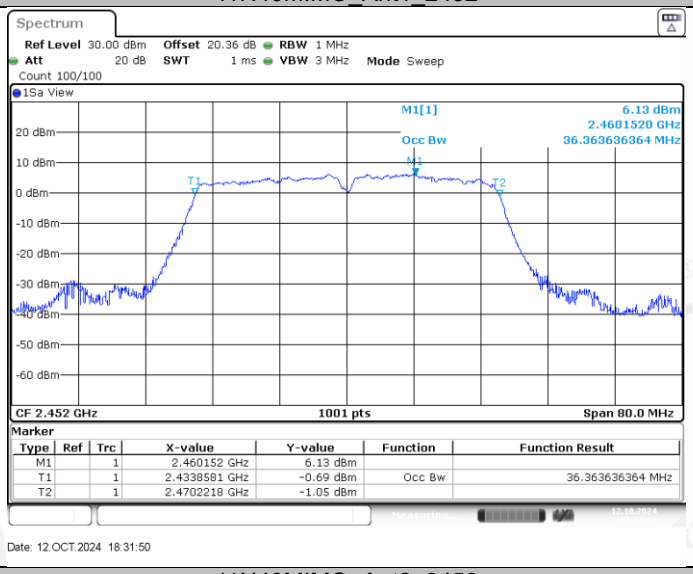
11N40MIMO_Ant1_2437



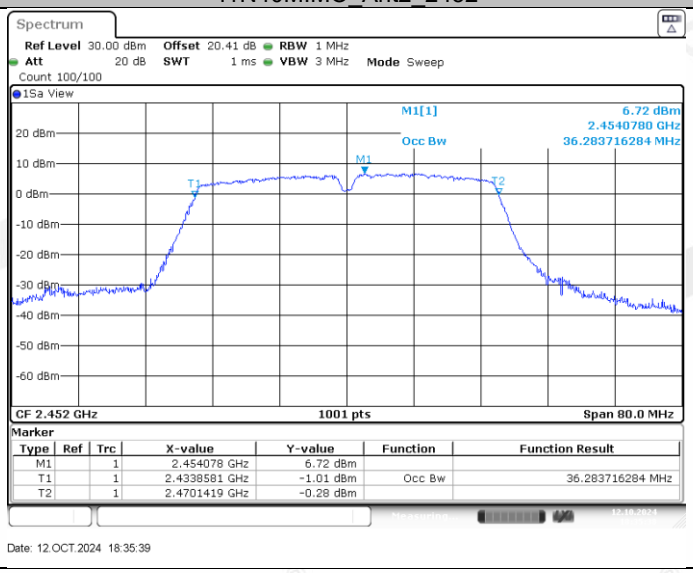
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452

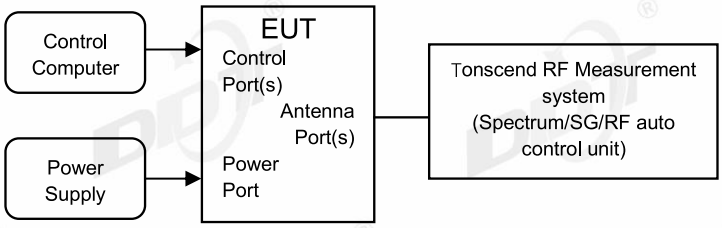


11N40MIMO_Ant2_2452



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 C63.10-2013 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

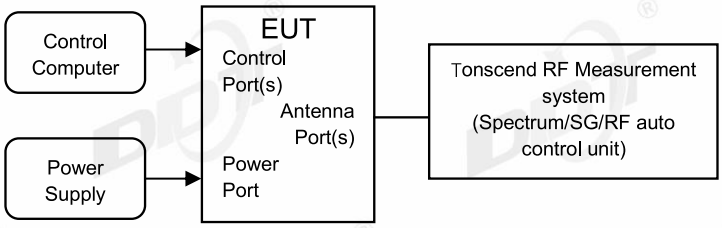
Test Engineer:	Zhongyao	Test Site:	RF Measurement System 3#
Ambient Condition:	26.4℃,46.9%RH	Test Date:	2024.10.12
Test Power Supply:	DC 12V	Sample Number:	S24092008-001

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	20.16	97.11	0.13	20.29	≤30.00	22.53	≤36.00	PASS
	Ant2	2412	21.69	96.51	0.15	21.84	≤30.00	21.93	≤36.00	PASS
	Ant1	2437	20.01	96.88	0.14	20.15	≤30.00	22.39	≤36.00	PASS
	Ant2	2437	20.22	97.19	0.12	20.34	≤30.00	20.43	≤36.00	PASS
	Ant1	2462	19.22	96.88	0.14	19.36	≤30.00	21.60	≤36.00	PASS
	Ant2	2462	20.29	97.26	0.12	20.41	≤30.00	20.50	≤36.00	PASS
11G	Ant1	2412	16.02	94.52	0.24	16.26	≤30.00	18.50	≤36.00	PASS
	Ant2	2412	17.24	90.79	0.42	17.66	≤30.00	17.75	≤36.00	PASS
	Ant1	2437	15.64	93.67	0.28	15.92	≤30.00	18.16	≤36.00	PASS
	Ant2	2437	16.67	91.59	0.38	17.05	≤30.00	17.14	≤36.00	PASS
	Ant1	2462	15.15	92.83	0.32	15.47	≤30.00	17.71	≤36.00	PASS
	Ant2	2462	16.36	90.00	0.46	16.82	≤30.00	16.91	≤36.00	PASS
11N20MIMO	Ant1	2412	15.04	82.50	0.84	15.88	≤30.00	18.12	≤36.00	PASS
	Ant2	2412	16.32	82.50	0.84	17.16	≤30.00	17.25	≤36.00	PASS
	total	2412	---	---	---	19.58	≤30.00	23.82	≤36.00	PASS
	Ant1	2437	14.57	85.34	0.69	15.26	≤30.00	17.50	≤36.00	PASS
	Ant2	2437	15.66	82.35	0.84	16.50	≤30.00	16.59	≤36.00	PASS
	total	2437	---	---	---	18.93	≤30.00	23.17	≤36.00	PASS
	Ant1	2462	13.97	80.99	0.92	14.89	≤30.00	17.13	≤36.00	PASS
	Ant2	2462	15.07	82.50	0.84	15.91	≤30.00	16.00	≤36.00	PASS
	total	2462	---	---	---	18.44	≤30.00	22.68	≤36.00	PASS
11N40MIMO	Ant1	2422	12.20	69.44	1.58	13.78	≤30.00	16.02	≤36.00	PASS
	Ant2	2422	13.39	68.06	1.67	15.06	≤30.00	15.15	≤36.00	PASS
	total	2422	---	---	---	17.48	≤30.00	21.72	≤36.00	PASS
	Ant1	2437	11.78	70.42	1.52	13.30	≤30.00	15.54	≤36.00	PASS
	Ant2	2437	12.79	69.44	1.58	14.37	≤30.00	14.46	≤36.00	PASS
	total	2437	---	---	---	16.88	≤30.00	21.12	≤36.00	PASS
	Ant1	2452	11.50	69.44	1.58	13.08	≤30.00	15.32	≤36.00	PASS
	Ant2	2452	12.59	68.49	1.64	14.23	≤30.00	14.32	≤36.00	PASS
	total	2452	---	---	---	16.70	≤30.00	20.94	≤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 C63.10-2013 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 kHz ≤ RBW ≤ 100 kHz
VBW:	≥ 3RBW
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

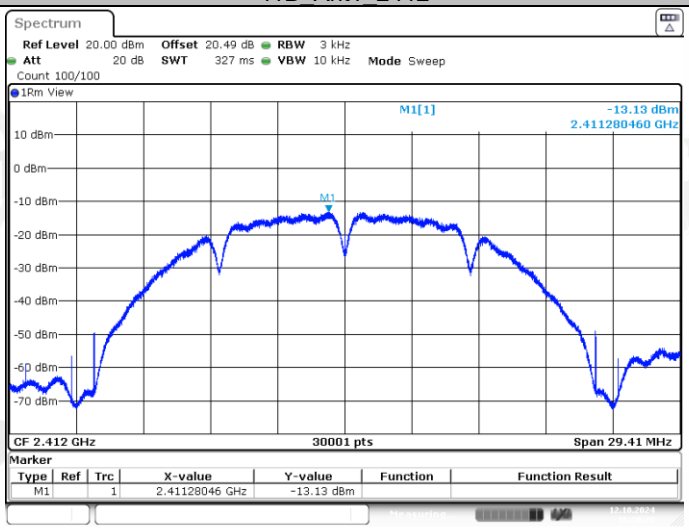
Test Engineer:	Zhongyao	Test Site:	RF Measurement System 3#
Ambient Condition:	26.4℃,46.9%RH	Test Date:	2024.10.12
Test Power Supply:	DC 12V	Sample Number:	S24092008-001

Test Mode	Antenna	Frequency [MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-13.13	≤8.00	PASS
	Ant2	2412	-11.30	≤8.00	PASS
	Ant1	2437	-13.18	≤8.00	PASS
	Ant2	2437	-12.92	≤8.00	PASS
	Ant1	2462	-14.15	≤8.00	PASS
	Ant2	2462	-12.73	≤8.00	PASS
11G	Ant1	2412	-15.57	≤8.00	PASS
	Ant2	2412	-14.11	≤8.00	PASS
	Ant1	2437	-16.62	≤8.00	PASS
	Ant2	2437	-14.59	≤8.00	PASS
	Ant1	2462	-16.47	≤8.00	PASS
	Ant2	2462	-15.52	≤8.00	PASS
11N20MIMO	Ant1	2412	-14.56	≤8.00	PASS
	Ant2	2412	-13.96	≤8.00	PASS
	total	2412	-11.24	≤8.00	PASS
	Ant1	2437	-15.67	≤8.00	PASS
	Ant2	2437	-15.05	≤8.00	PASS
	total	2437	-12.34	≤8.00	PASS
	Ant1	2462	-15.62	≤8.00	PASS
	Ant2	2462	-14.69	≤8.00	PASS
	total	2462	-12.12	≤8.00	PASS
11N40MIMO	Ant1	2422	-19.11	≤8.00	PASS
	Ant2	2422	-17.31	≤8.00	PASS
	total	2422	-15.11	≤8.00	PASS
	Ant1	2437	-19.24	≤8.00	PASS
	Ant2	2437	-19.23	≤8.00	PASS
	total	2437	-16.22	≤8.00	PASS
	Ant1	2452	-19.49	≤8.00	PASS
	Ant2	2452	-18.46	≤8.00	PASS
	total	2452	-15.93	≤8.00	PASS

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

7.5. Test graphs

11B_Ant1_2412



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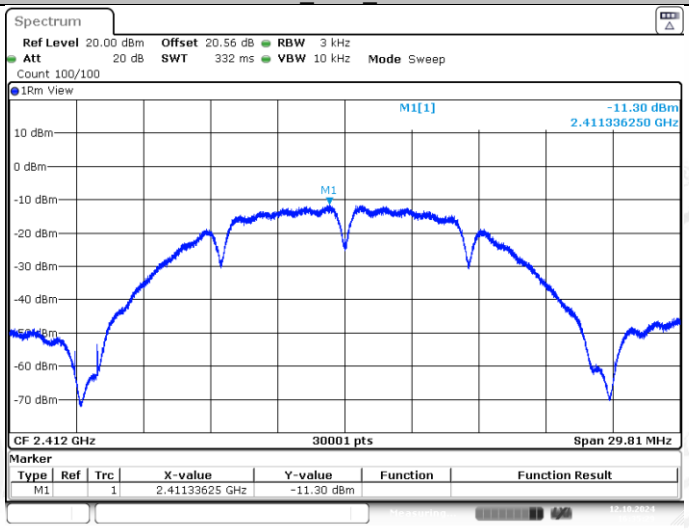

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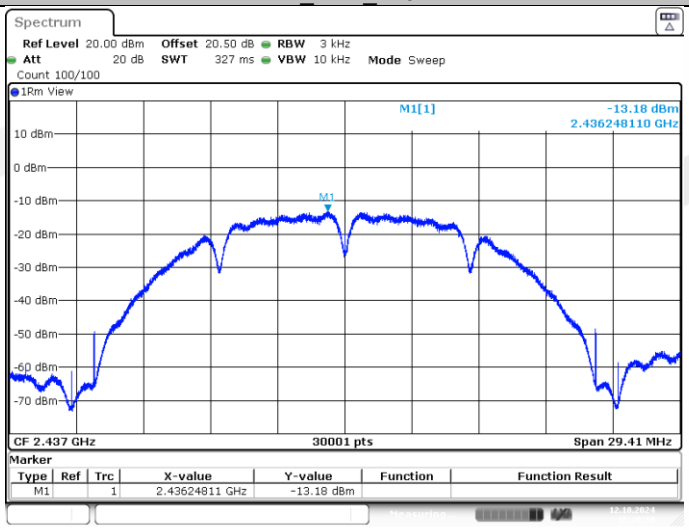

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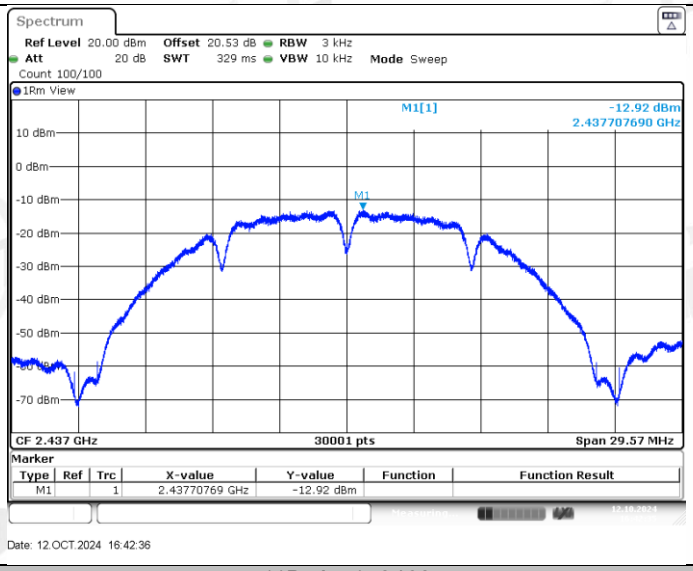

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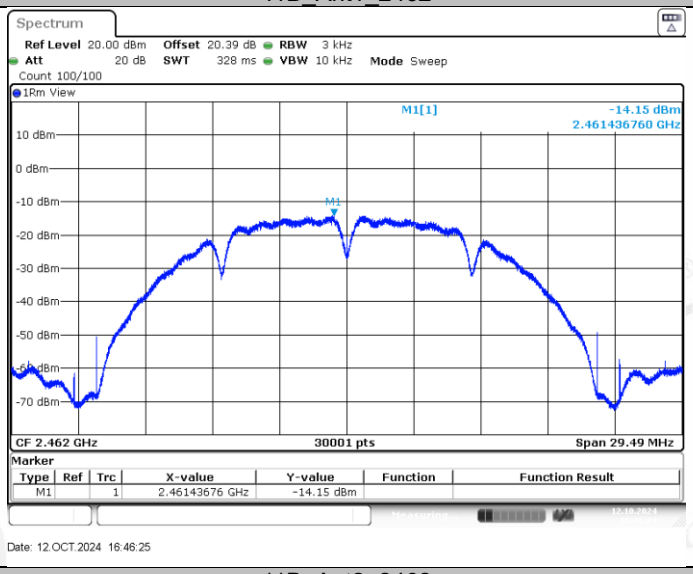

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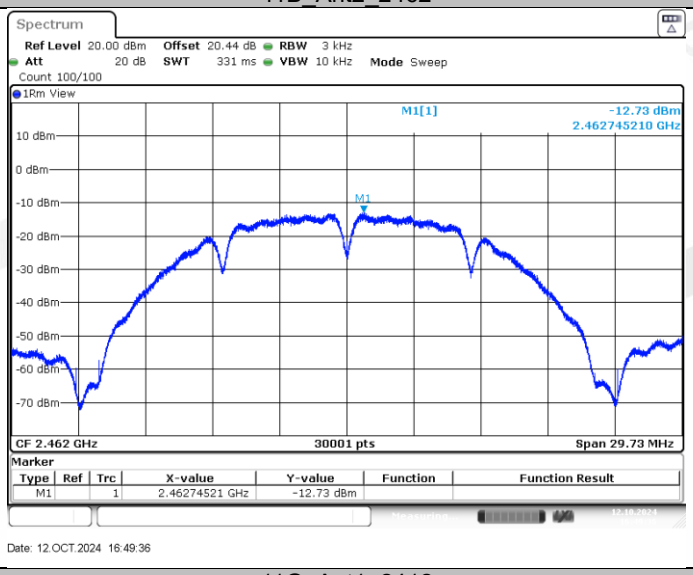

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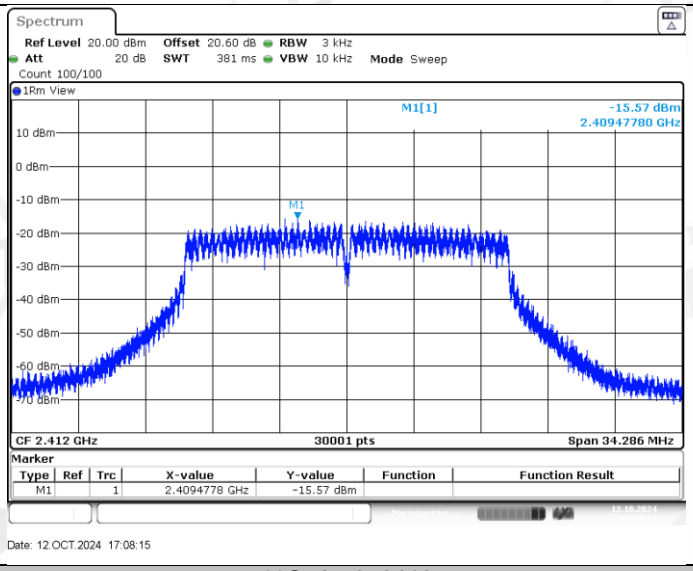

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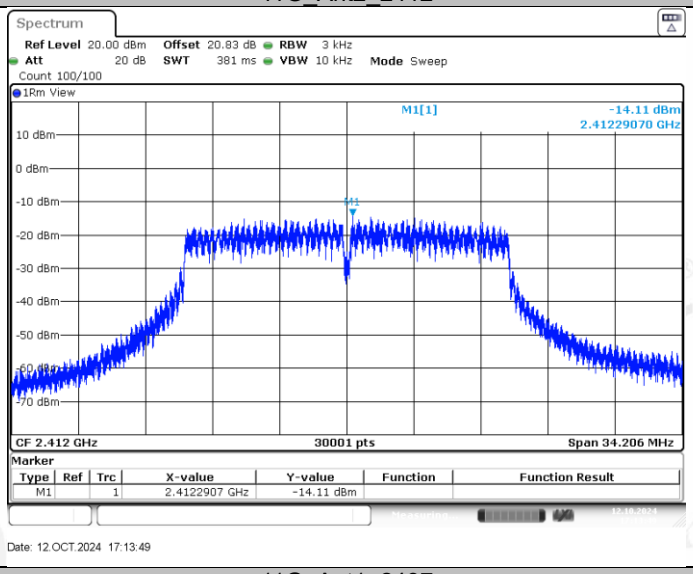

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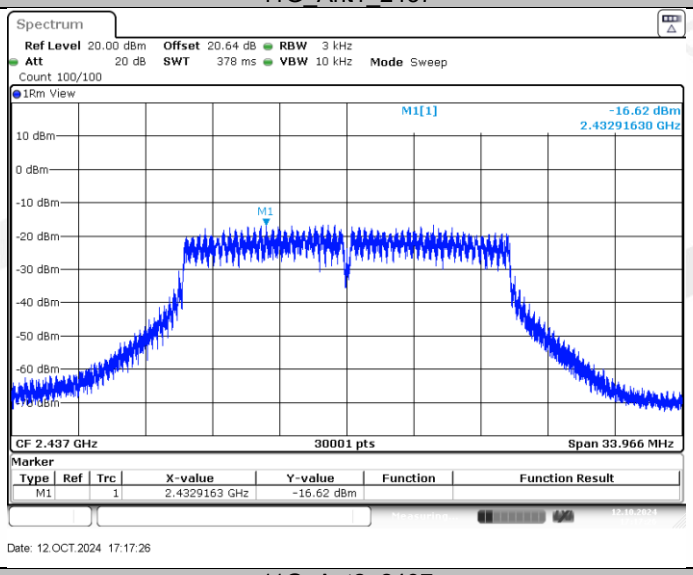

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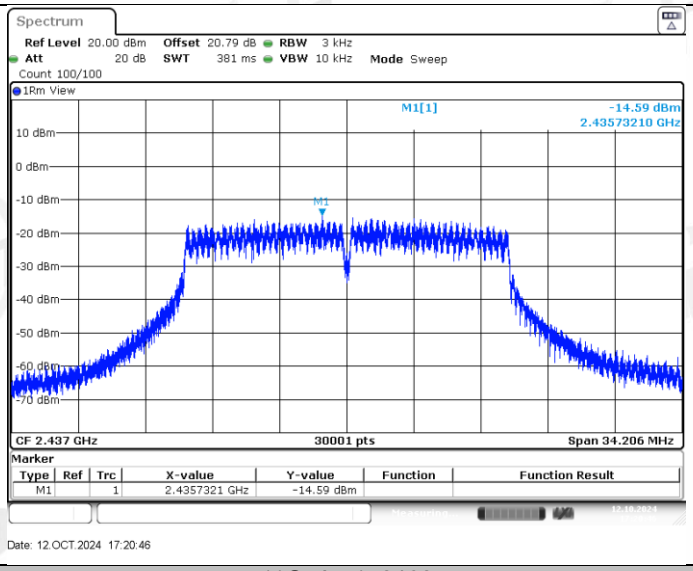

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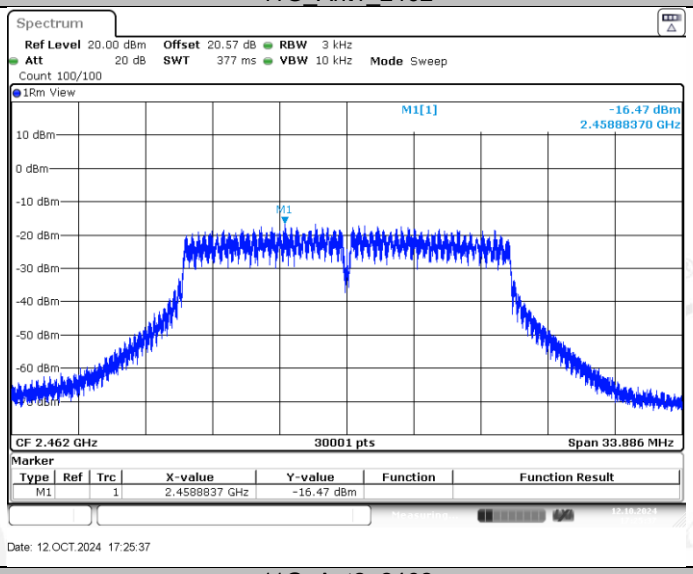

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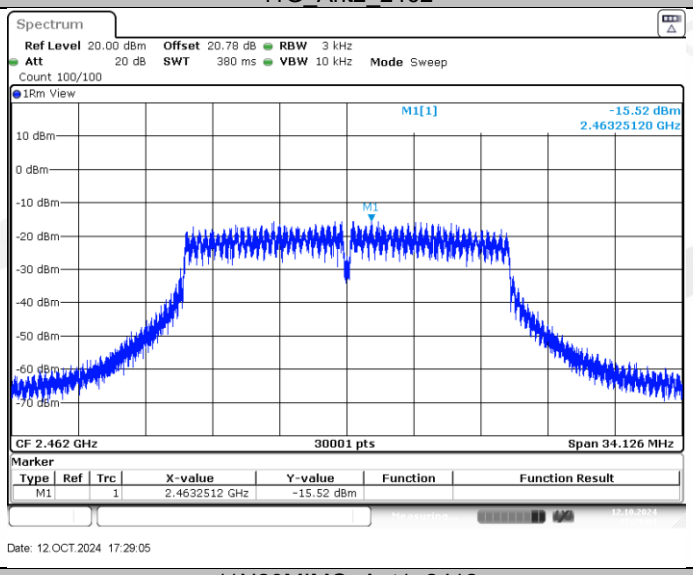

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