



# FCC PART 15C TEST REPORT No.25T04Z100757-015

for

**TCL Communication Ltd.**

**GSM/UMTS/LTE/NR Mobile phone**

**T951P**

**FCC ID: 2ACCJH188**

with

**Hardware Version: 05**

**Software Version: 9ESH**

**Issued Date: 2025-06-25**

**Note:**

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

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## **REPORT HISTORY**

<b>Report Number</b>	<b>Revision</b>	<b>Description</b>	<b>Issue Date</b>
25T04Z100757-015	Rev.0	1st edition	2025-06-25

Note: the latest revision of the test report supersedes all previous version.

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## **1. Test Laboratory**

### **1.1. Introduction & Accreditation**

**Telecommunication Technology Labs, CAICT** is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

### **1.2. Testing Location**

Conducted testing Location:CTTL(Gaolizhang Road)

Address: Cuihu Cloud Center, No.1, Gaolizhang Road, Wenquan,  
Haidian District, Beijing, China

Location 2:CTTL(huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,  
100191, P. R. China

### **1.3. Testing Environment**

Normal Temperature: 15-35°C  
Relative Humidity: 20-75%

### **1.4. Project date**

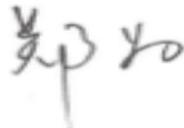
Testing Start Date: 2025-05-13  
Testing End Date: 2025-06-25

### **1.5. Signature**



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Yao Xingyu  
(Prepared this test report)



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Zheng Wei  
(Reviewed this test report)



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Pang Shuai  
(Approved this test report)



## **2. Client Information**

### **2.1. Applicant Information**

Company Name: TCL Communication Ltd.  
Address/Post: 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong  
City: Hong Kong  
Postal Code: /  
Country: China  
Contact Person: Ting Wang  
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### **2.2. Manufacturer Information**

Company Name: TCL Communication Ltd.  
Address/Post: 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong  
City: Hong Kong  
Postal Code: /  
Country: China  
Contact Person: Ting Wang  
Contact Email: ting.wang.hz@tcl.com  
Telephone: +86 752 2639091  
Fax: 0086-755-36612000-81722

### **3. Equipment Under Test (EUT) and Ancillary Equipment (AE)**

#### **3.1. About EUT**

Description	GSM/UMTS/LTE/NR Mobile phone
Model name	T951P
FCC ID	2ACCJH188
With WLAN Function	Yes
Frequency Band	ISM 2400MHz~2483.5MHz
Type of Modulation	DSSS/CCK/OFDM/OFDMA
Number of Channels	11
Antenna	Integral Antenna
MAX Conducted Power	29.48dBm
Normal Voltage	3.85V
Extreme High Voltage	4.4V
Extreme Low Voltage	3.6V

#### **3.2. Internal Identification of EUT**

<b>EUT ID*</b>	<b>SN or IMEI</b>	<b>HW Version</b>	<b>SW Version</b>	<b>Date of receipt</b>
UT36a	356448870204758/ 356448870204766	05	9ESH	2025-06-07
UT25a	356448870204451/ 356448870204568	05	9ESH	2025-05-13

\*EUT ID: is used to identify the test sample in the lab internally.

UT36a is used for Conduction test, UT25a is used for Radiation test.

#### **3.3. Internal Identification of AE**

<b>AE ID*</b>	<b>Description</b>	<b>Note</b>	<b>Manufacturer</b>
AE1	Battery	TLp050D7	VEKEN
AE2	Charger	QC16US	PUAN
AE2-2	Charger	QC16EU	BaiJunDa
AE3-1	USB cable	CDA0000308C1	JUWEI
AE3-1	USB cable	CDA0000305C1	JUWEI

\*AE ID: is used to identify the test sample in the lab internally.

### 3.4. General Description

The Equipment under Test (EUT) is a model of GSM/UMTS/LTE/NR Mobile phone with integrated antenna and inbuilt battery.

It consists of normal options: travel charger, USB cable.

Manual and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the client.

### 3.5. Interpretation of the Test Environment

For the test methods, the test environment uncertainty figures correspond to an expansion factor  $k=2$ .

Measurement Uncertainty

Parameter	Uncertainty
temperature	0.48°C
humidity	2 %
DC voltages	0.003V

## 4. Reference Documents

### 4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

### 4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part15	FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.207 Conducted limits; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902-928MHz, 2400-2483.5 MHz, and 5725-5850 MHz.	2021
ANSI C63.10	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices Federal Communications Commission Office of Engineering and Technology Laboratory Division GUIDANCE FOR COMPLIANCE MEASUREMENTS ON	2013
KDB 558074 D01	DIGITAL TRANSMISSION SYSTEM, FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM, AND HYBRID SYSTEM DEVICES OPERATING UNDER SECTION 15.247 OF THE FCC RULES	2019

Note: KDB 558074 D01 is not in the scope of ISO/IEC 17025 accreditation by A2LA.

## 5. LABORATORY ENVIRONMENT

Conducted RF performance testing is performed in shielding room.

EMC performance testing is performed in Semi-anechoic chamber.

## 6. Test Results

### 6.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15C	Sub-clause of IC	Verdict
Maximum Peak Output Power	15.247 (b)	/	P
Peak Power Spectral Density	15.247 (e)	/	P
DTS 6-dB Signal Bandwidth	15.247 (a)	/	P
Band Edges Compliance	15.247 (d)	/	P
Transmitter Spurious Emission - Conducted	15.247 (d)	/	P
Transmitter Spurious Emission - Radiated	15.247, 15.205, 15.209	/	P
AC Powerline Conducted Emission	15.207	/	P

Please refer to **ANNEX A** for detail.

Terms used in Verdict column

P	Pass, The EUT complies with the essential requirements in the standard.
NP	Not Perform, The test was not performed by CTTL
NA	Not Applicable, The test was not applicable
F	Fail, The EUT does not comply with the essential requirements in the standard

### 6.2. Statements

CTTL has evaluated the test cases as listed in section 6.1 of this report for the EUT specified in section 3 according to the standards or reference documents listed in section 4.

This report only deals with the WLAN function among the features described in section 3.

### 6.3. Test Conditions

For this report, all the test cases are tested under normal temperature and normal voltage, and also under norm humidity, the specific condition is shown as follows:

Temperature	26°C
Voltage	3.85V
Humidity	44%

## 7. Test Facilities Utilized

### Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Vector Signal Analyzer	FSW67	104051	Rohde & Schwarz	1 year	2026-06-09
2	LISN	ENV216	101200	Rohde & Schwarz	1 year	2026-06-05
3	Test Receiver	ESCI	100344	Rohde & Schwarz	1 year	2026-04-01
4	Attenuator	10dB/2W	/	Rosenberger	/	/
5	Shielding Room	S81	/	ETS-Lindgren	/	/
6	Data Acquisition Unit	U2531A	TW54433522	Agilent	/	/
7	Power Sensor	U2021XA	MY54460006	Agilent	1 year	2026-06-09

### Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver	ESW44	103023	Rohde & Schwarz	1 year	2026-05-07
2	EMI Antenna	VULB9163	01222	Schwarzbeck	1 year	2025-09-11
3	EMI Antenna	3115	6914	ETS-Lindgren	1 year	2026-03-31

### Huayuan North Road

Test Item	Test Software and Version	Software Vendor
Conducted emission	EMC32 V8.53.0	R&S
Radiated emission	EMC32 V11.50.00	R&S

## 8. Measurement Uncertainty

### 8.1. Maximum Output Power

Measurement Uncertainty: 0.387dB,k=1.96

### 8.2. Peak Power Spectral Density

Measurement Uncertainty: 0.705dB,k=1.96

### 8.3. DTS 6-dB Signal Bandwidth

Measurement Uncertainty: 60.80Hz,k=1.96

### 8.4. Band Edges Compliance

Measurement Uncertainty : 0.62dB,k=1.96

### 8.5. Transmitter Spurious Emission

#### Conducted (k=1.96)

Frequency Range	Uncertainty(dB)
$30\text{MHz} \leq f \leq 2\text{GHz}$	1.22
$2\text{GHz} \leq f \leq 3.6\text{GHz}$	1.22
$3.6\text{GHz} \leq f \leq 8\text{GHz}$	1.22
$8\text{GHz} \leq f \leq 12.75\text{GHz}$	1.51
$12.75\text{GHz} \leq f \leq 26\text{GHz}$	1.51
$26\text{GHz} \leq f \leq 40\text{GHz}$	1.59

#### Radiated (k=2)

Frequency Range	Uncertainty(dB)
9kHz-30MHz	/
$30\text{MHz} \leq f \leq 1\text{GHz}$	4.72
$1\text{GHz} \leq f \leq 18\text{GHz}$	4.84
$18\text{GHz} \leq f \leq 40\text{GHz}$	5.12

### 8.6. AC Power-line Conducted Emission

Measurement Uncertainty : 3.08dB,k=2

## **ANNEX A: Detailed Test Results**

### **A.1. Measurement Method**

#### **A.1.1. Conducted Measurements**

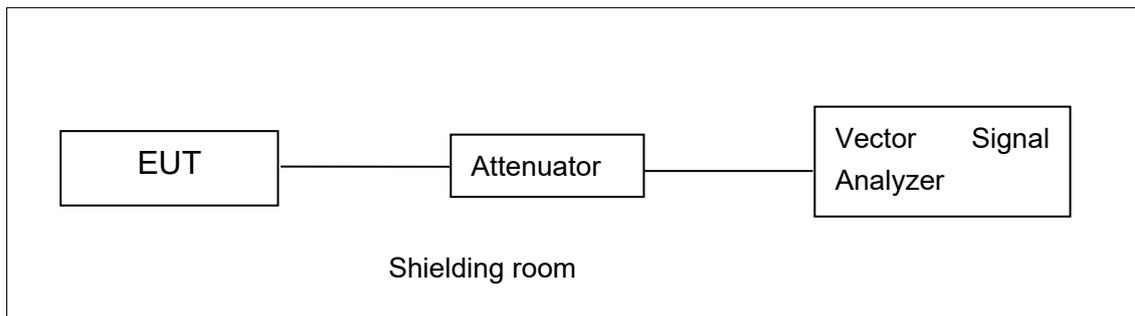
Connect the EUT to the test system as Fig.A.1.1.1 shows.

Set the EUT to the required work mode.

Set the EUT to the required channel.

Set the Vector Signal Analyzer and start measurement.

Record the values. Vector Signal Analyzer



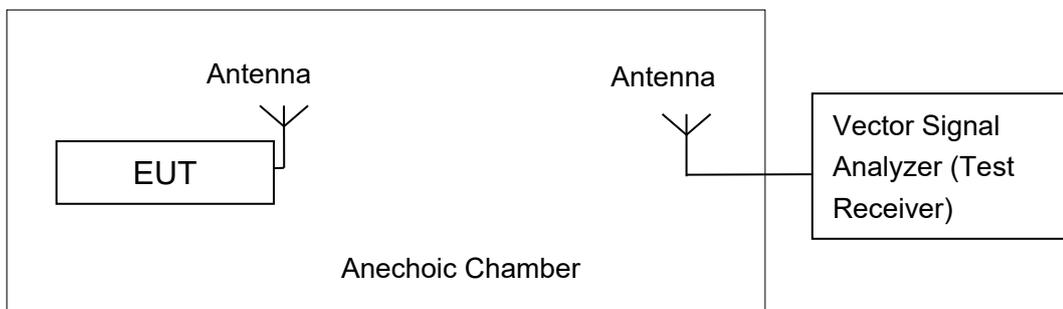
**Fig.A.1.1.1: Test Setup Diagram for Conducted Measurements**

#### **A.1.2. Radiated Emission Measurements**

In the case of radiated emission, the used settings are as follows,

Sweep frequency from 30 MHz to 1GHz, RBW = 100 kHz, VBW = 300 kHz;

Sweep frequency from 1 GHz to 26GHz, RBW = 1MHz, VBW = 3MHz;



**Fig.A.1.2.1: Test Setup Diagram for Radiated Measurements**

## A.2. Maximum Output Power

**Method of Measurement: See ANSI C63.10-2013-clause 11.9.1.3**

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.

**Measurement Limit:**

Standard	Limit (dBm)
FCC CRF Part 15.247(b)	< 30

### A.2.1 Antenna Gain

Antenna gain is -5.30dBi/-6.20dBi(ANT8/ANT9)and the value is supplied by the applicant or manufacturer.

### A.2.2. Peak Output Power-conducted

**EUT ID: UT36a**

**Measurement Results:**

#### **Full RU MIMO**

Mode	Data Rate (Mbps)	Test Result (dBm)								
		2412MHz(Ch1)			2437MHz(Ch6)			2462 MHz(Ch11)		
		Ant8	Ant9	MIMO	Ant8	Ant9	MIMO	Ant8	Ant9	MIMO
802.11b	1	22.35	22.39	25.38	22.32	22.42	25.38	22.02	21.75	24.90
802.11g	6	26.47	26.40	29.45	26.52	26.38	29.46	26.29	25.27	28.82
Mode	Data Rate (Mbps)	Test Result (dBm)								
		2412MHz(Ch1)			2437MHz(Ch6)			2462 MHz(Ch11)		
		Ant8	Ant9	MIMO	Ant8	Ant9	MIMO	Ant8	Ant9	MIMO
802.11n (20MHz)	MCS0	26.35	26.58	29.48	26.38	26.45	29.43	26.14	25.88	29.02
802.11ax (20MHz)	MCS0	25.67	25.72	28.71	25.73	26.10	28.93	25.64	25.68	28.67
Mode	Data Rate (Mbps)	Test Result (dBm)								
		2422MHz(Ch3)			2437MHz(Ch6)			2452 MHz(Ch9)		
		Ant8	Ant9	MIMO	Ant8	Ant9	MIMO	Ant8	Ant9	MIMO
802.11n (40MHz)	MCS0	25.40	25.68	28.55	25.45	25.33	28.40	25.17	25.49	28.34
802.11ax (40MHz)	MCS0	25.39	25.58	28.50	25.45	25.13	28.30	25.11	25.42	28.28

**RU MIMO**

Mode	Data Rate (Mbps)	Test Result (dBm)								
		2412MHz(Ch1)			2437MHz(Ch6)			2462 MHz(Ch11)		
		Ant8	Ant9	MIMO	Ant8	Ant9	MIMO	Ant8	Ant9	MIMO
802.11ax-HE20 RU26-left	MCS0	22.27	22.01	25.15	22.40	21.92	25.18	22.85	22.31	25.60
802.11ax-HE20 RU26-right	MCS0	22.32	22.08	25.21	22.51	21.52	25.05	22.82	21.98	25.43
802.11ax-HE20 RU52-left	MCS0	24.95	24.86	27.92	24.83	24.52	27.69	24.92	24.86	27.90
802.11ax-HE20 RU52-right	MCS0	24.75	25.05	27.91	24.72	24.58	27.66	24.89	24.67	27.79
802.11ax-HE20 RU106-left	MCS0	24.90	24.78	27.85	24.87	24.22	27.57	24.66	24.42	27.55
802.11ax-HE20 RU106-right	MCS0	25.00	24.91	27.97	24.65	24.64	27.66	24.72	24.58	27.66

The data rate 1Mbps (11b mode),6Mbps (11g mode), MCS0 (11n-HT20 mode) ,MCS0 (11ax-HE20 mode),MCS0 (11n-HT40 mode) ,MCS0 (11ax-HE40 mode)are selected as the worst condition; as the maximum power is got with these data rate. The following cases are performed with this condition.

**Duty Cycle**

Mode	802.11b	802.11g	802.11n20	802.11n40	802.11ax-20	802.11ax-40
Duty Cycle	100%	100%	100%	100%	100%	100%

Mode	802.11ax-20 RU26	802.11ax-20 RU52	802.11ax-20 RU106
Duty Cycle	87%	88%	78%



**Duty Cycle:RU26**

**Conclusion: Pass**

---

### **A.3. Peak Power Spectral Density**

**Method of Measurement: See ANSI C63.10-2013-clause 11.10.2**

- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span to 1.5 times the DTS bandwidth.
- c) Set the RBW to RBW = 3 kHz.
- d) Set the VBW = 10 kHz.
- 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.

**Measurement Limit:**

Standard	Limit
FCC CRF Part 15.247(e)	< 8 dBm/3 kHz

**EUT ID: UT36a**

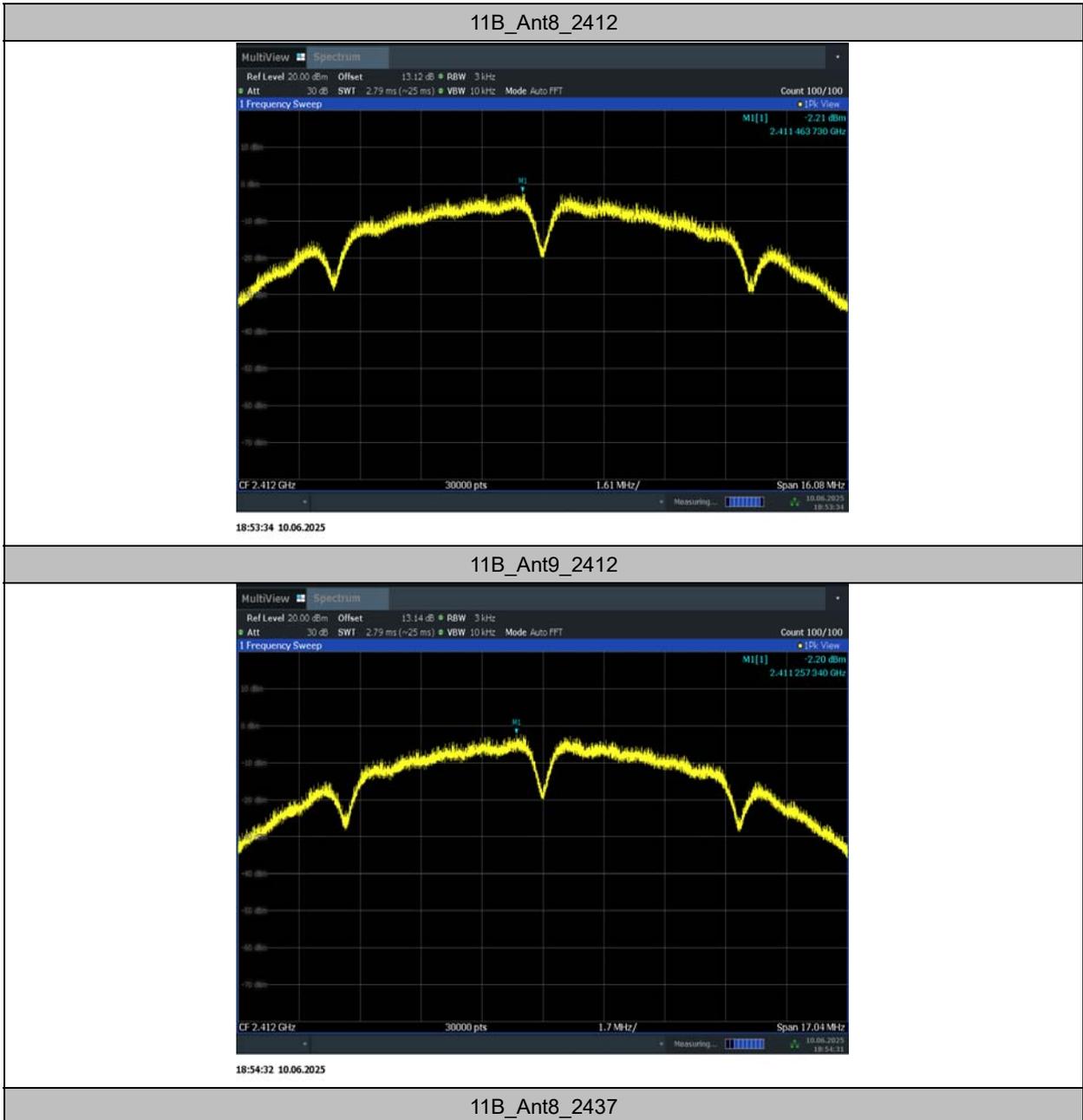
**Full RU MIMO**

**Measurement Results:**

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant8	2412	-2.21	≤8.00	PASS
	Ant9	2412	-2.20	≤8.00	PASS
	total	2412	0.81	≤8.00	PASS
	Ant8	2437	-2.42	≤8.00	PASS
	Ant9	2437	-2.40	≤8.00	PASS
	total	2437	0.60	≤8.00	PASS
	Ant8	2462	-2.36	≤8.00	PASS
	Ant9	2462	-2.73	≤8.00	PASS
	total	2462	0.47	≤8.00	PASS
11G	Ant8	2412	-5.74	≤8.00	PASS
	Ant9	2412	-5.64	≤8.00	PASS
	total	2412	-2.68	≤8.00	PASS
	Ant8	2437	-6.21	≤8.00	PASS
	Ant9	2437	-6.27	≤8.00	PASS
	total	2437	-3.23	≤8.00	PASS
	Ant8	2462	-6.02	≤8.00	PASS
	Ant9	2462	-6.30	≤8.00	PASS
	total	2462	-3.15	≤8.00	PASS
11N20MIMO	Ant8	2412	-5.41	≤8.00	PASS
	Ant9	2412	-5.49	≤8.00	PASS
	total	2412	-2.44	≤8.00	PASS
	Ant8	2437	-5.65	≤8.00	PASS

	Ant9	2437	-6.12	≤8.00	PASS
	total	2437	-2.87	≤8.00	PASS
	Ant8	2462	-6.21	≤8.00	PASS
	Ant9	2462	-6.51	≤8.00	PASS
	total	2462	-3.35	≤8.00	PASS
11N40MIMO	Ant8	2422	-10.20	≤8.00	PASS
	Ant9	2422	-10.24	≤8.00	PASS
	total	2422	-7.21	≤8.00	PASS
	Ant8	2437	-10.55	≤8.00	PASS
	Ant9	2437	-10.41	≤8.00	PASS
	total	2437	-7.47	≤8.00	PASS
	Ant8	2452	-10.64	≤8.00	PASS
	total	2452	-7.45	≤8.00	PASS
11AX20MIMO	Ant8	2412	-7.96	≤8.00	PASS
	Ant9	2412	-8.38	≤8.00	PASS
	total	2412	-5.15	≤8.00	PASS
	Ant8	2437	-8.76	≤8.00	PASS
	Ant9	2437	-8.04	≤8.00	PASS
	total	2437	-5.37	≤8.00	PASS
	Ant8	2462	-8.64	≤8.00	PASS
	Ant9	2462	-8.88	≤8.00	PASS
	total	2462	-5.75	≤8.00	PASS
11AX40MIMO	Ant8	2422	-12.30	≤8.00	PASS
	Ant9	2422	-12.57	≤8.00	PASS
	total	2422	-9.42	≤8.00	PASS
	Ant8	2437	-12.23	≤8.00	PASS
	Ant9	2437	-12.64	≤8.00	PASS
	total	2437	-9.42	≤8.00	PASS
	Ant8	2452	-12.27	≤8.00	PASS
	Ant9	2452	-12.23	≤8.00	PASS
	total	2452	-9.24	≤8.00	PASS

Test graphs as below:





11B\_Ant9\_2437



11B\_Ant8\_2462



11B\_Ant9\_2462



11G\_Ant8\_2412



11G\_Ant9\_2412



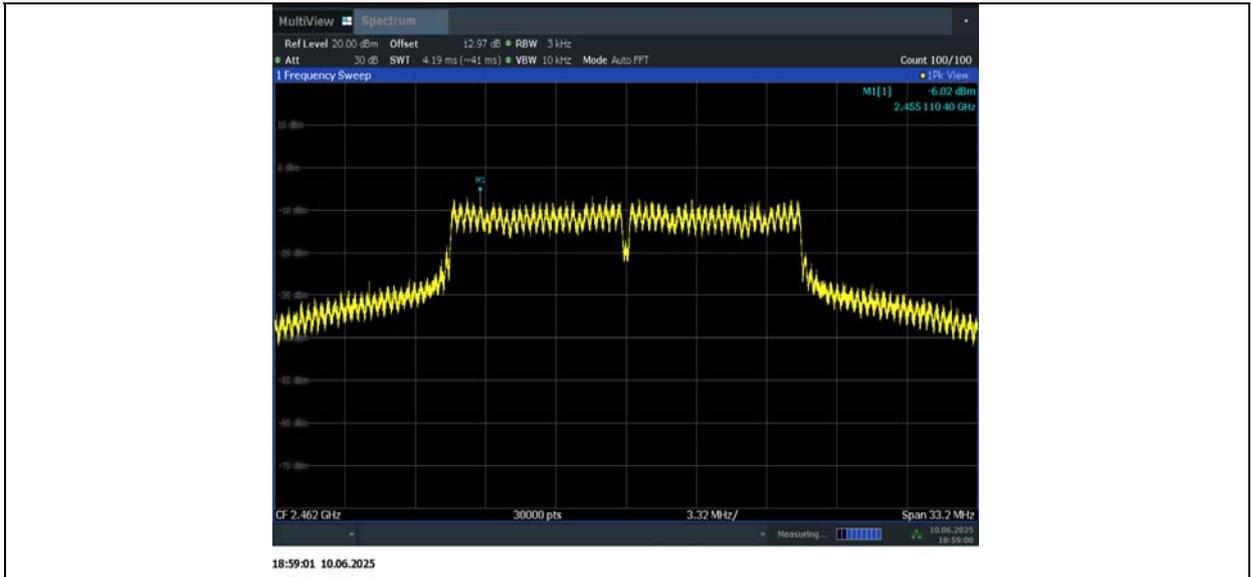
11G\_Ant8\_2437



11G\_Ant9\_2437



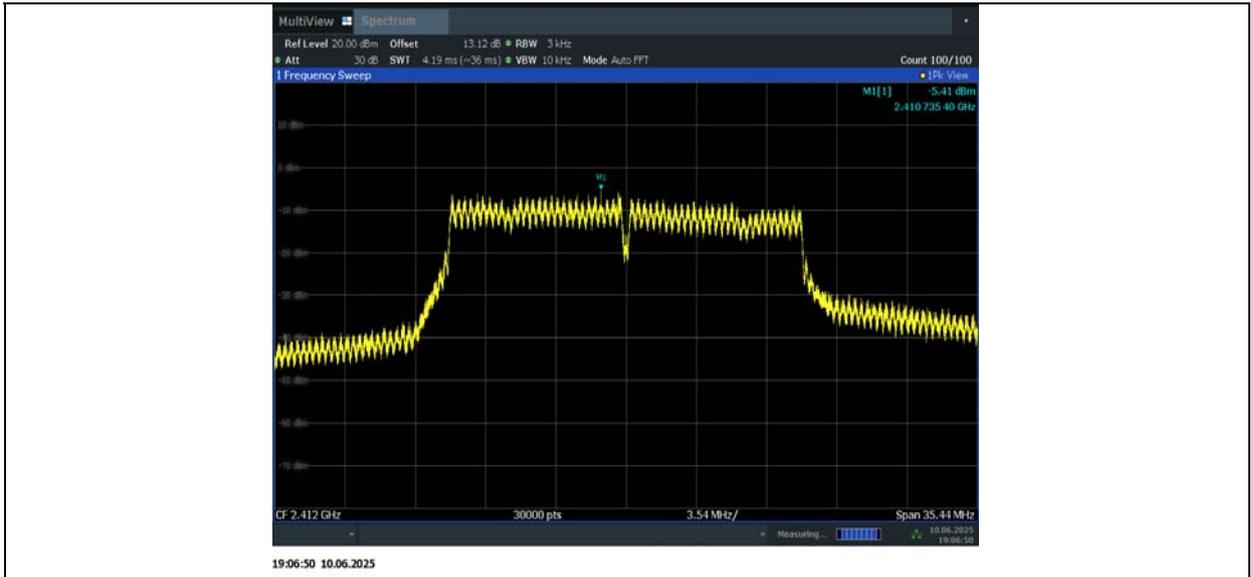
11G\_Ant8\_2462



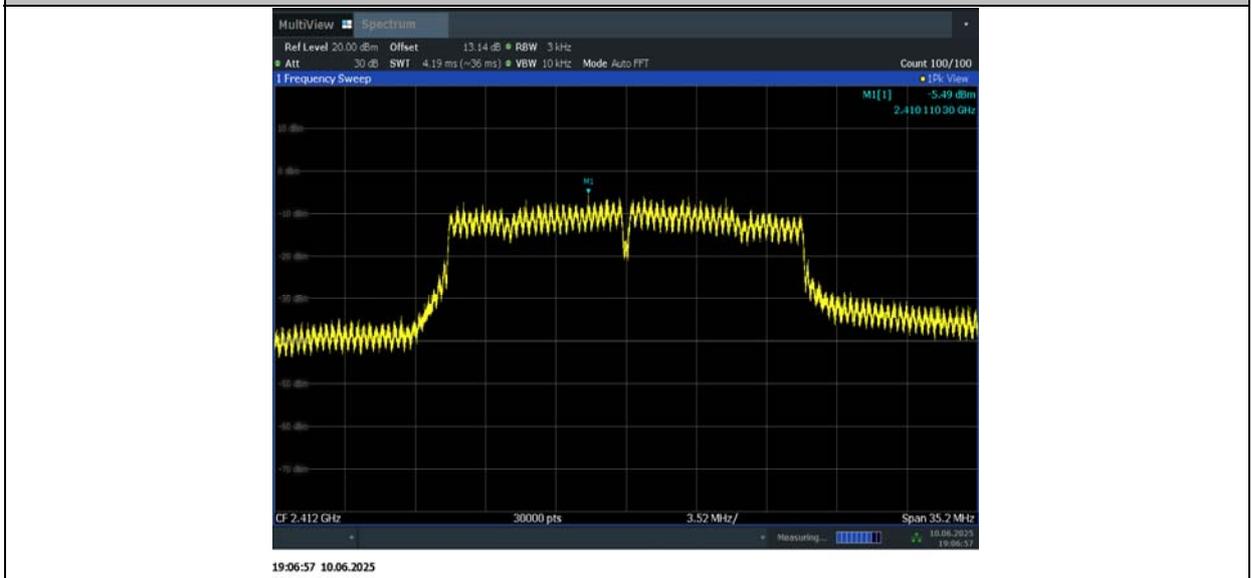
11G\_Ant9\_2462



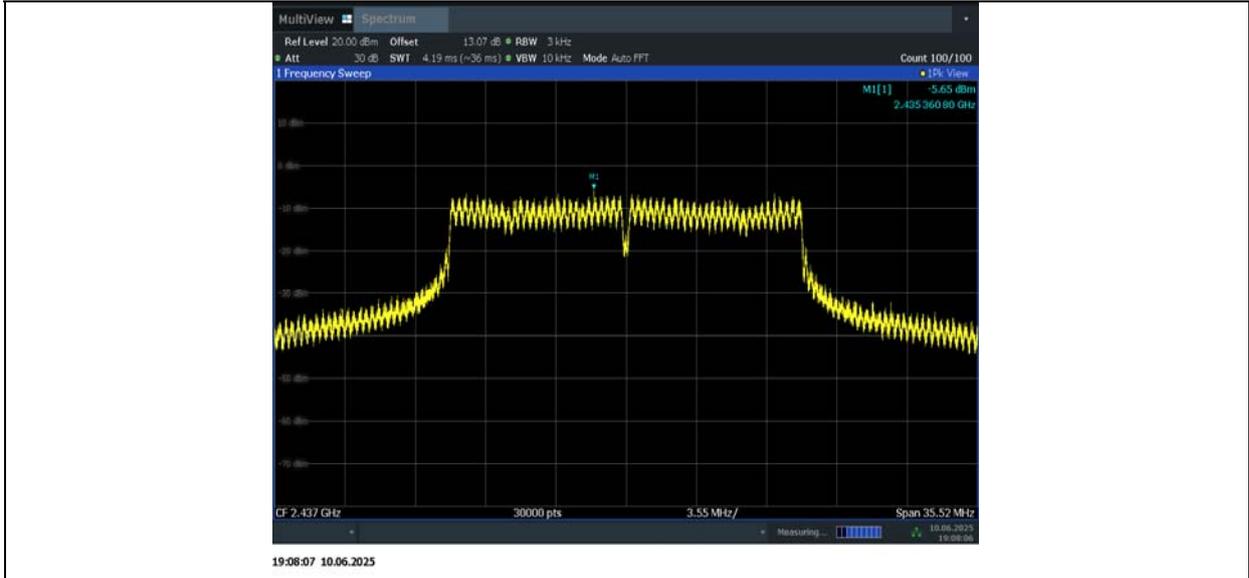
11N20MIMO\_Ant8\_2412



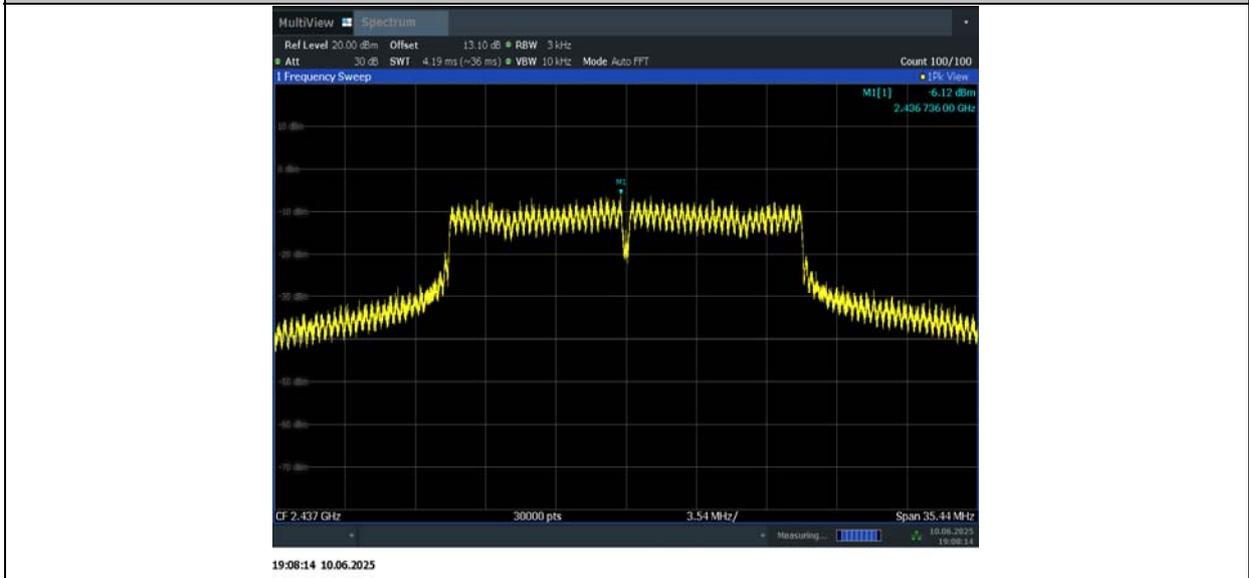
11N20MIMO\_Ant9\_2412



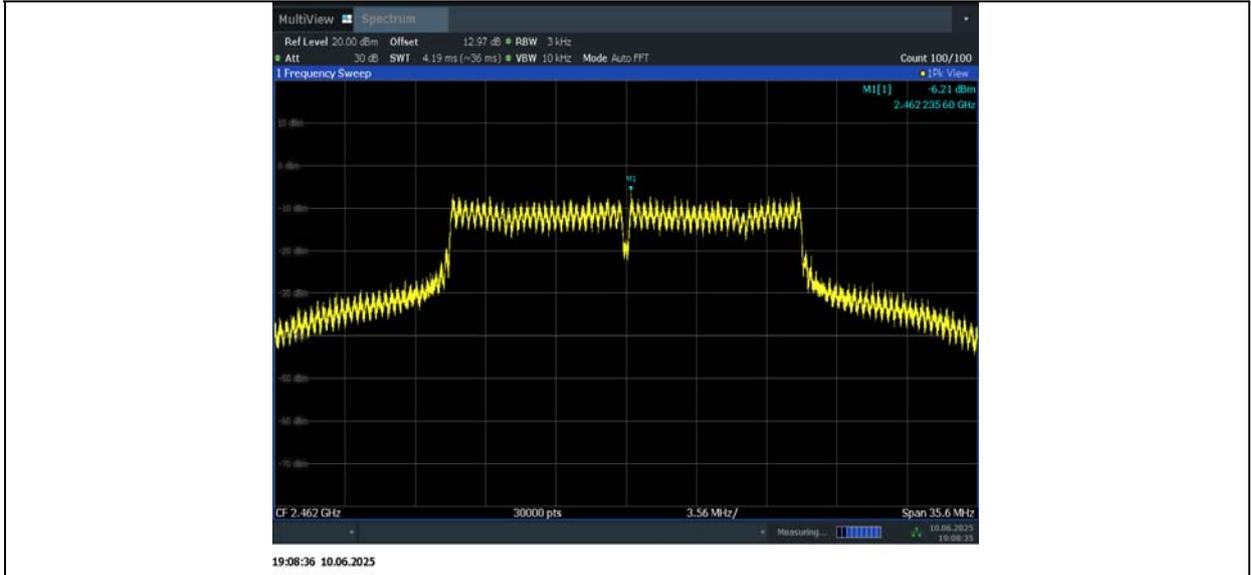
11N20MIMO\_Ant8\_2437



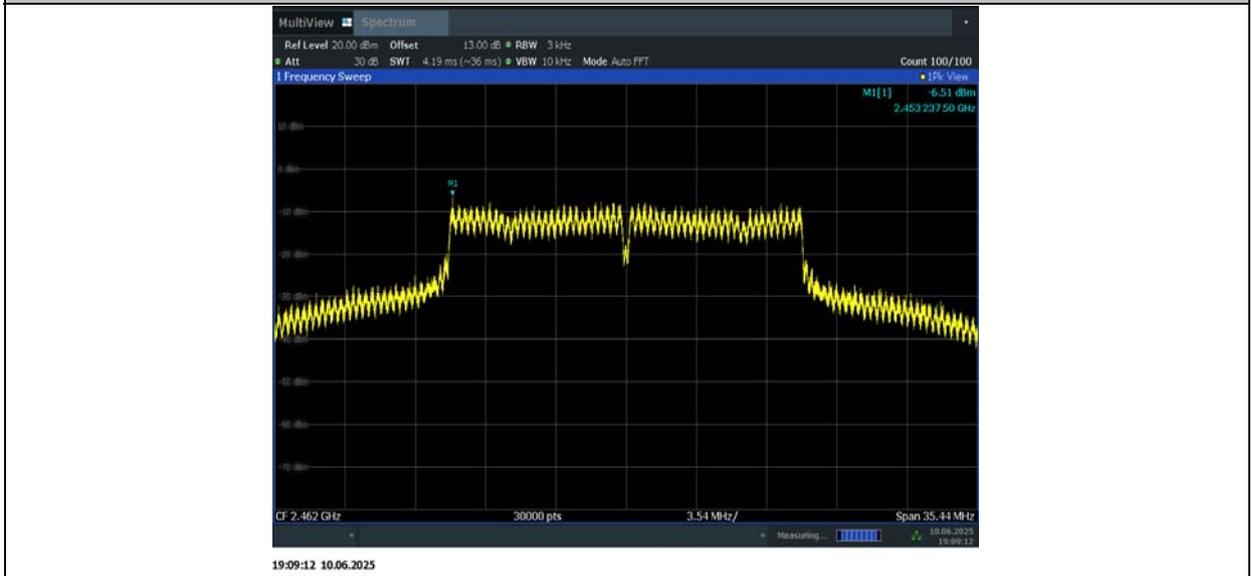
11N20MIMO\_Ant9\_2437



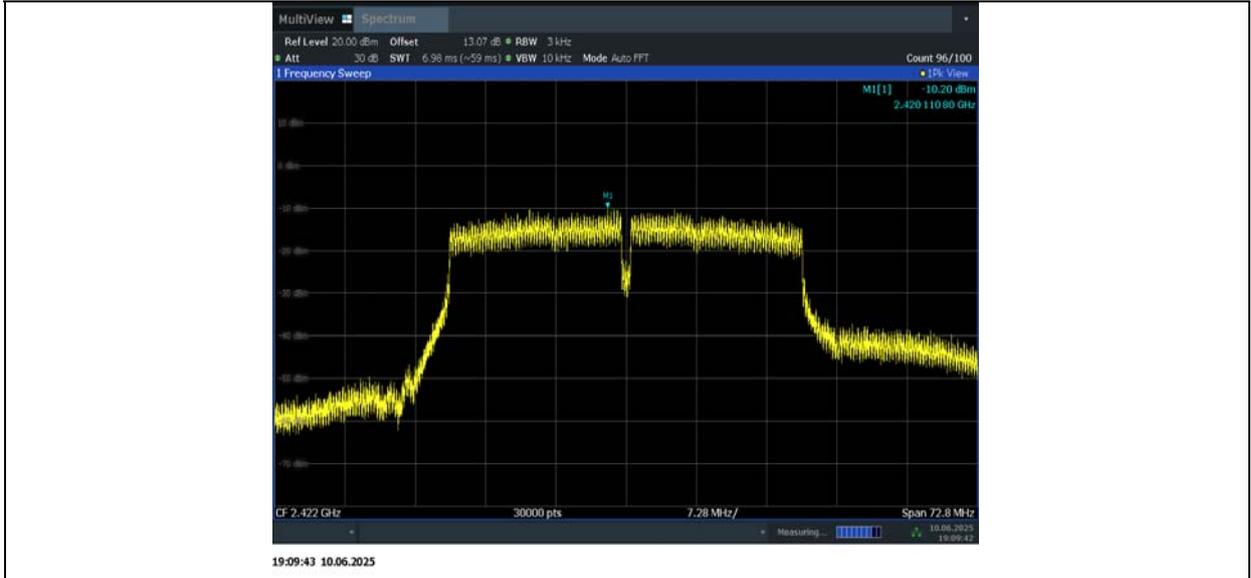
11N20MIMO\_Ant8\_2462



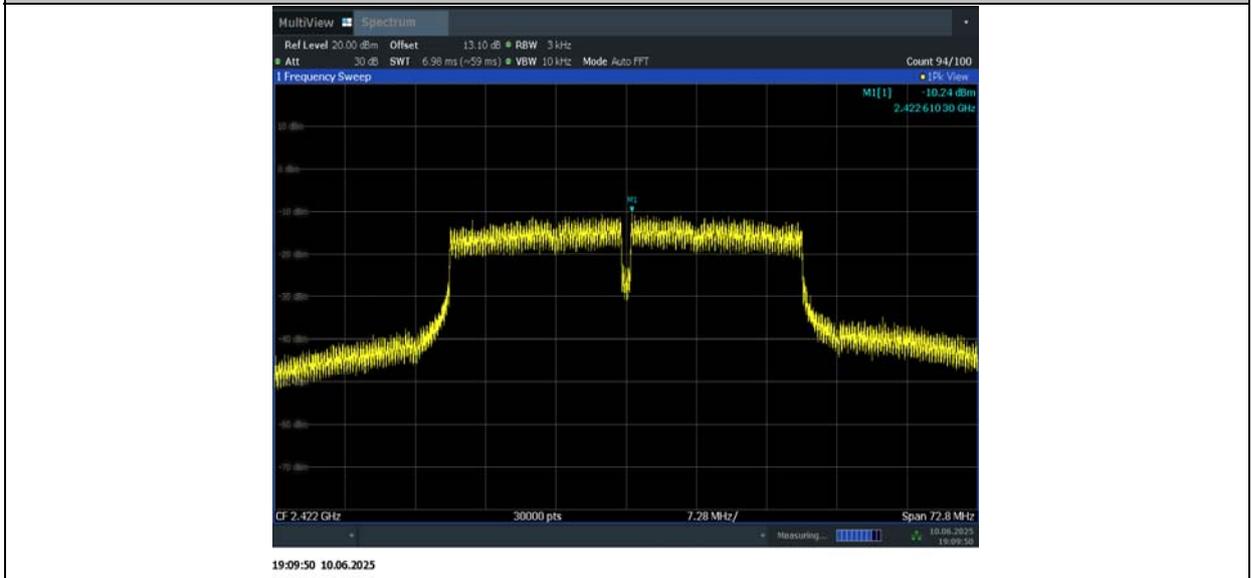
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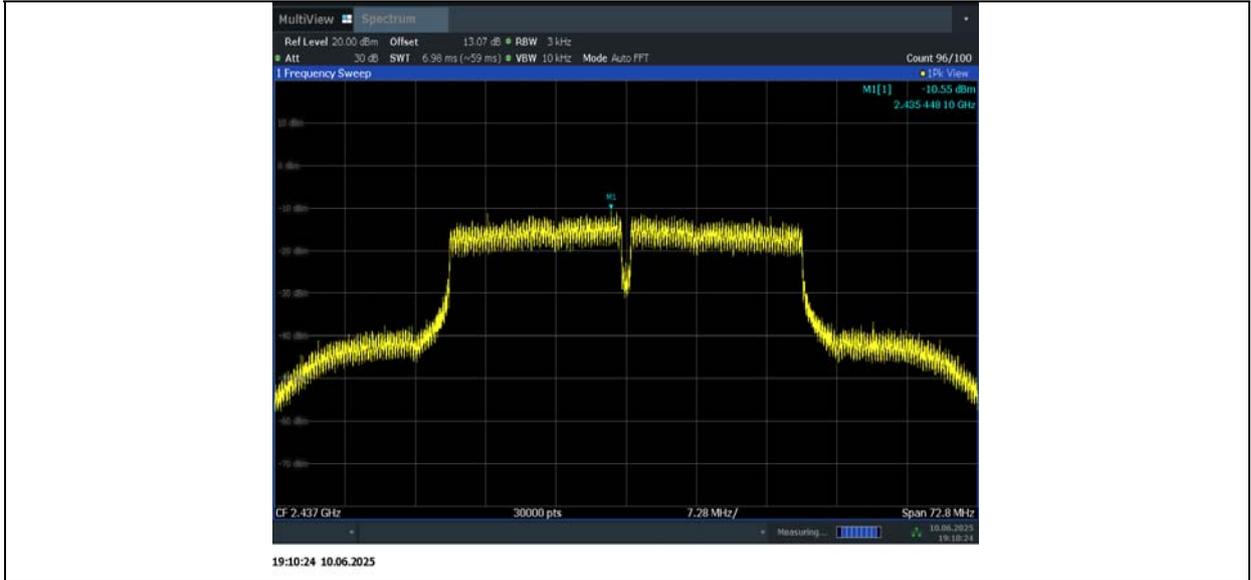
11N40MIMO\_Ant8\_2422



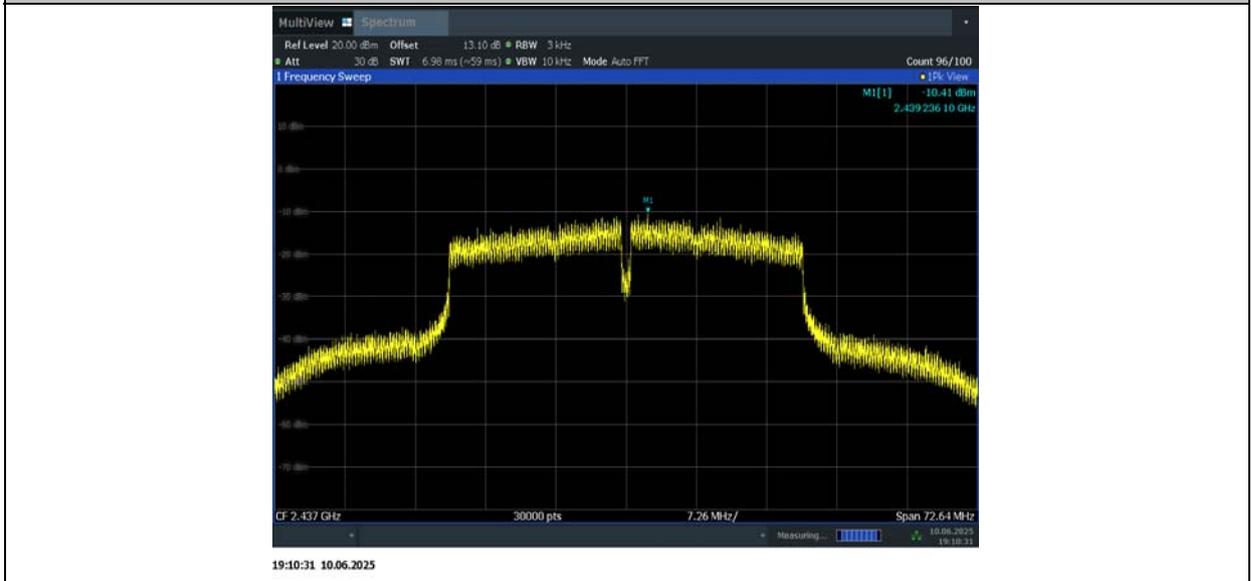
11N40MIMO\_Ant9\_2422



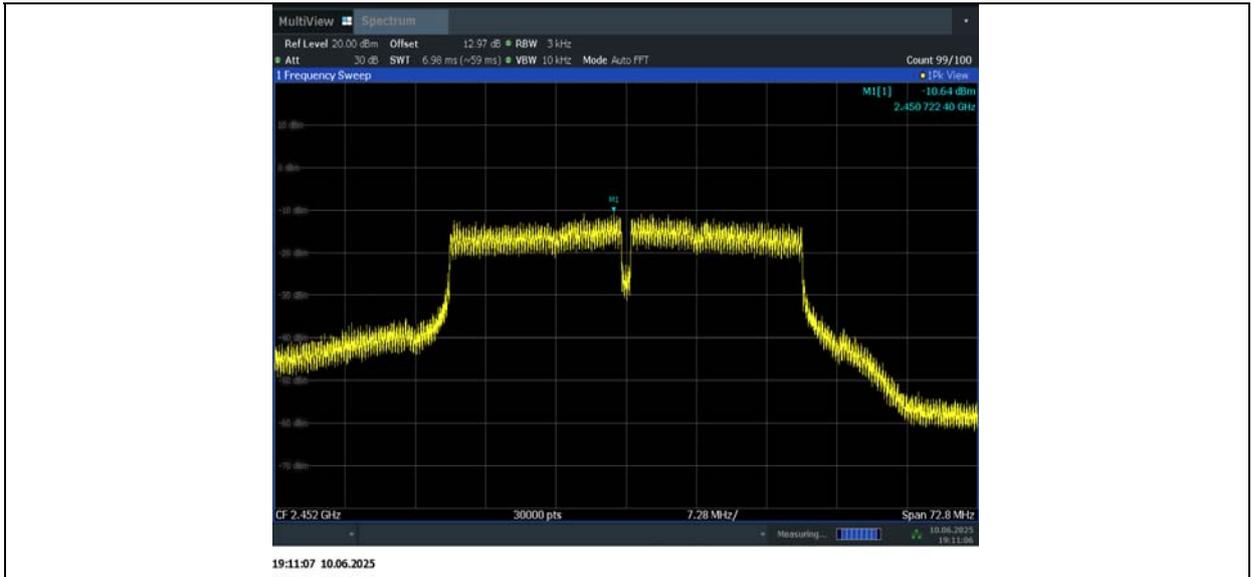
11N40MIMO\_Ant8\_2437



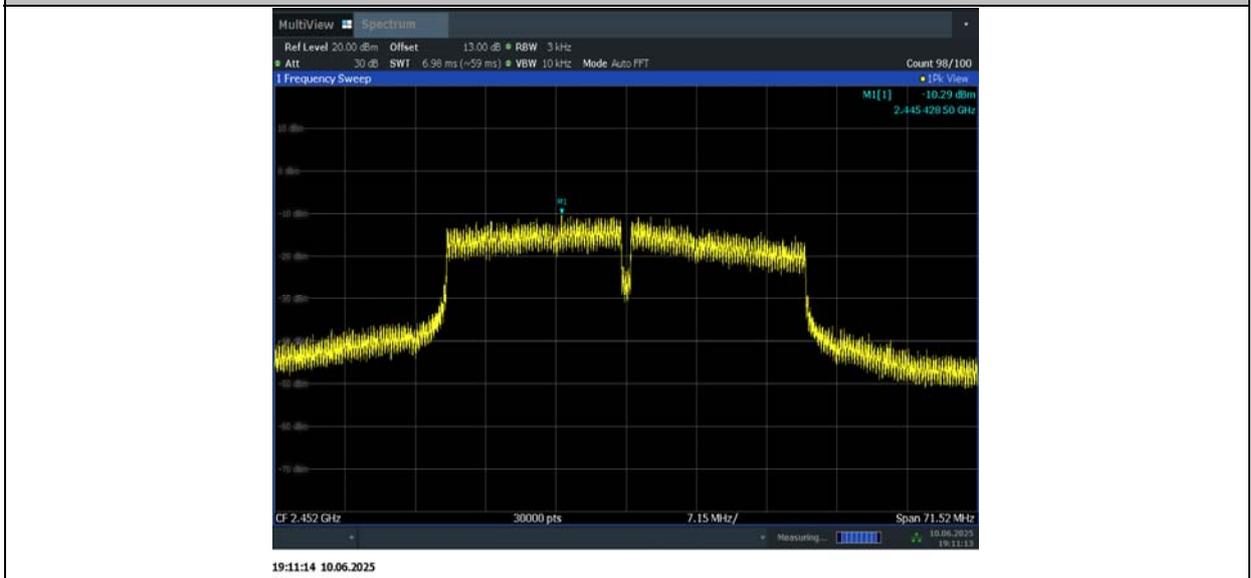
11N40MIMO\_Ant9\_2437



11N40MIMO\_Ant8\_2452



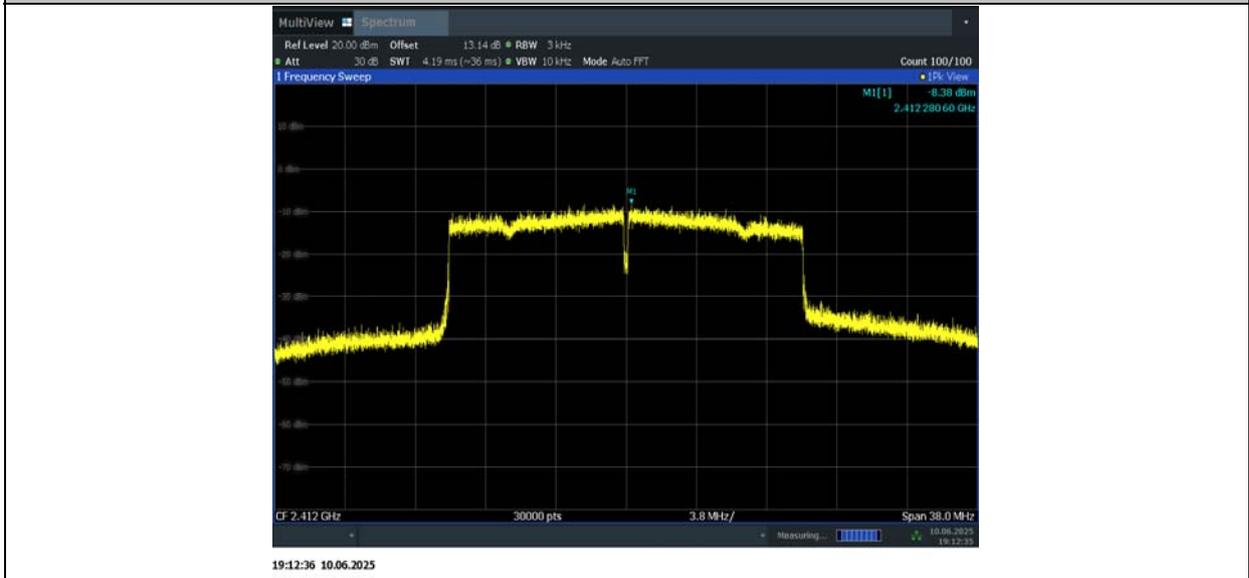
11N40MIMO\_Ant9\_2452



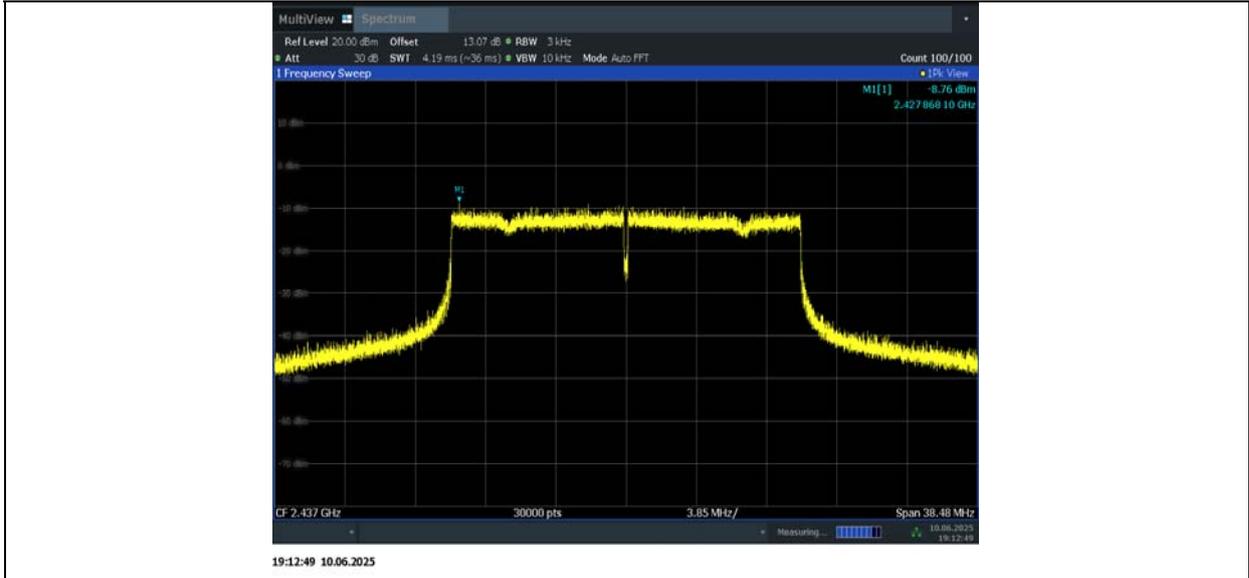
11AX20MIMO\_Ant8\_2412



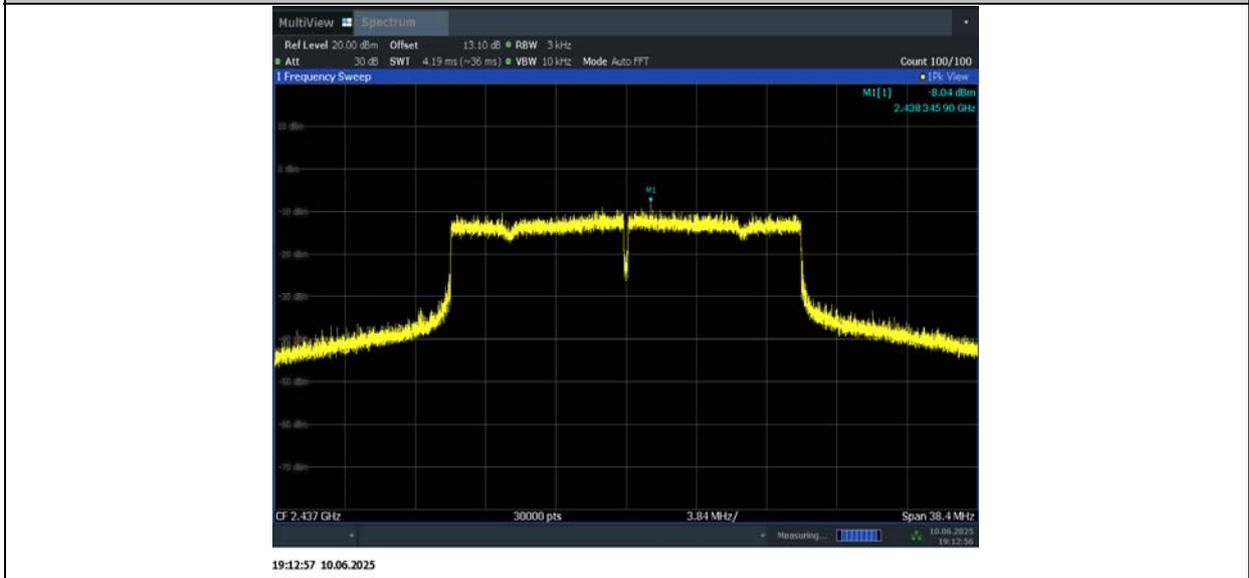
11AX20MIMO\_Ant9\_2412



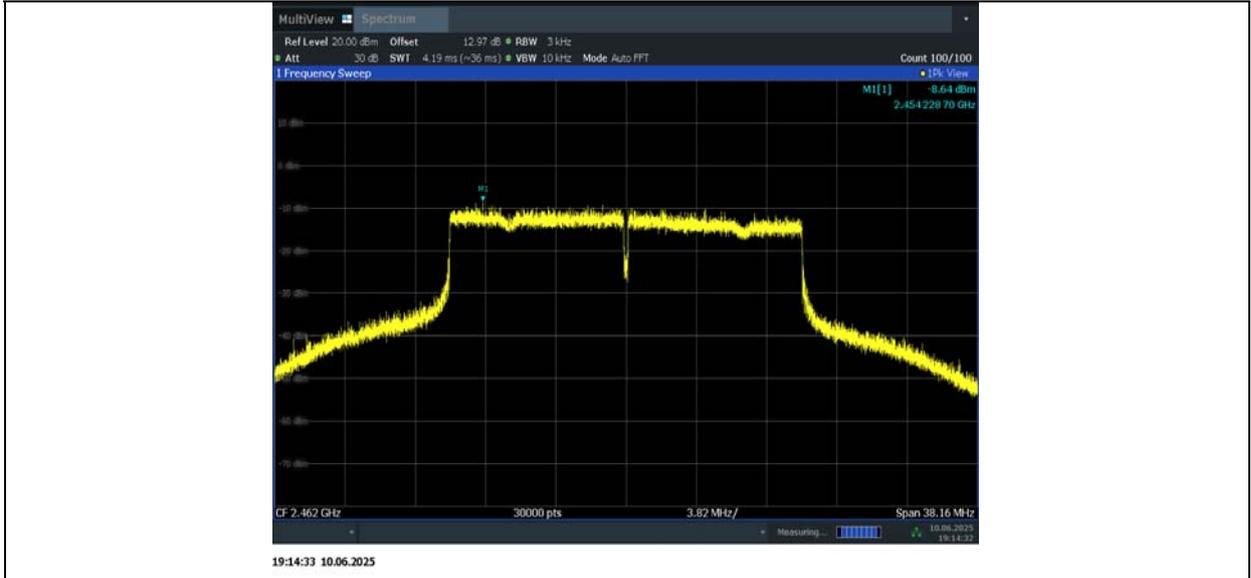
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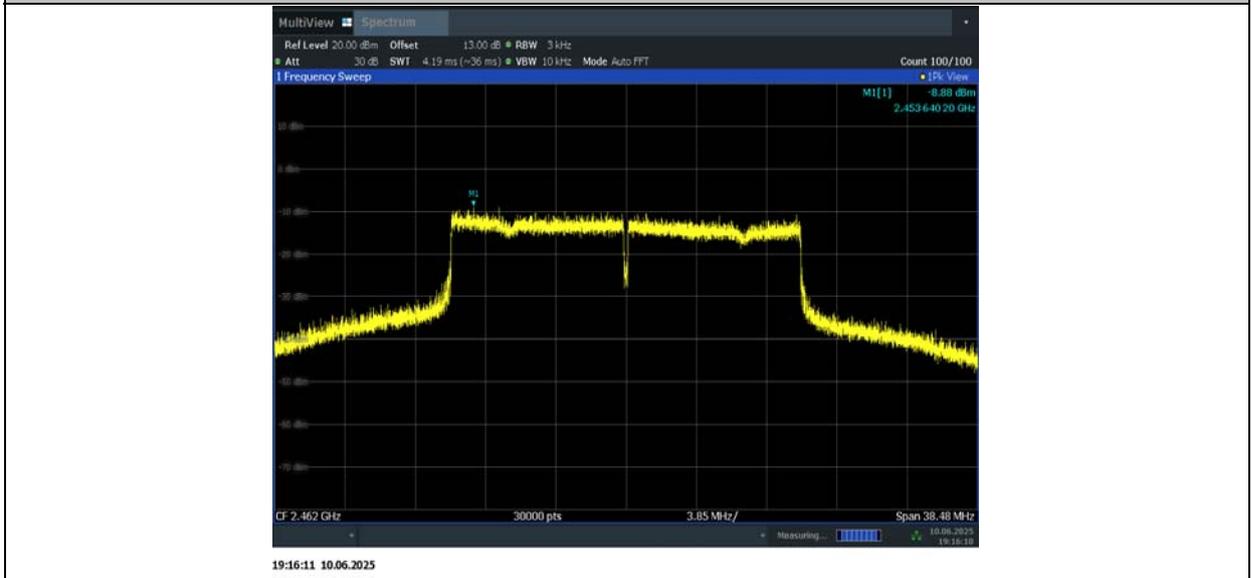
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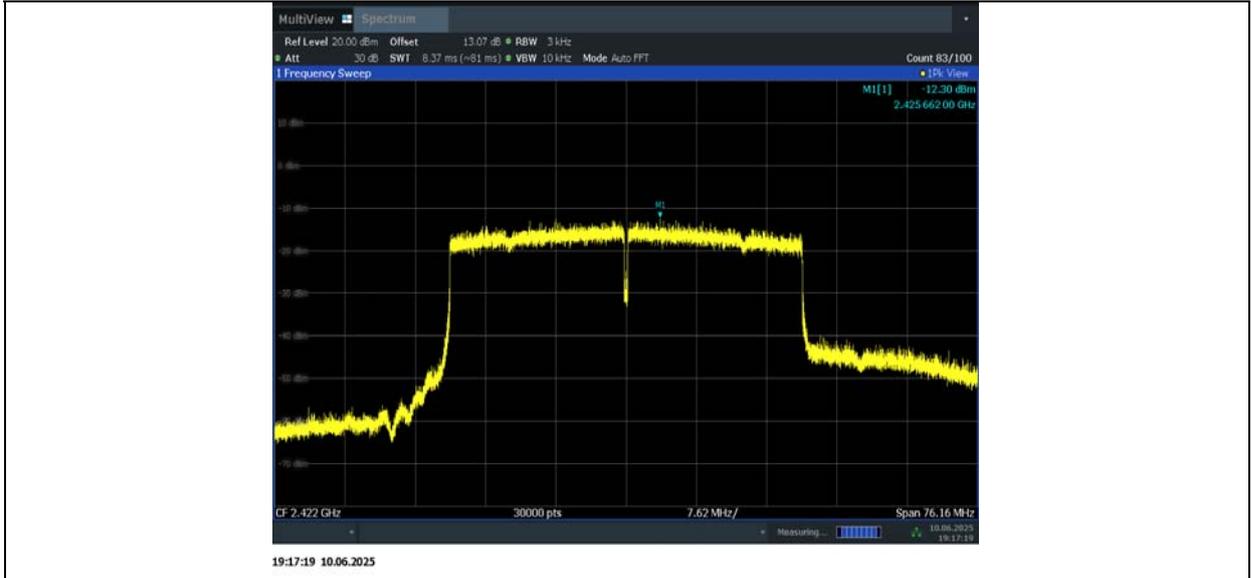
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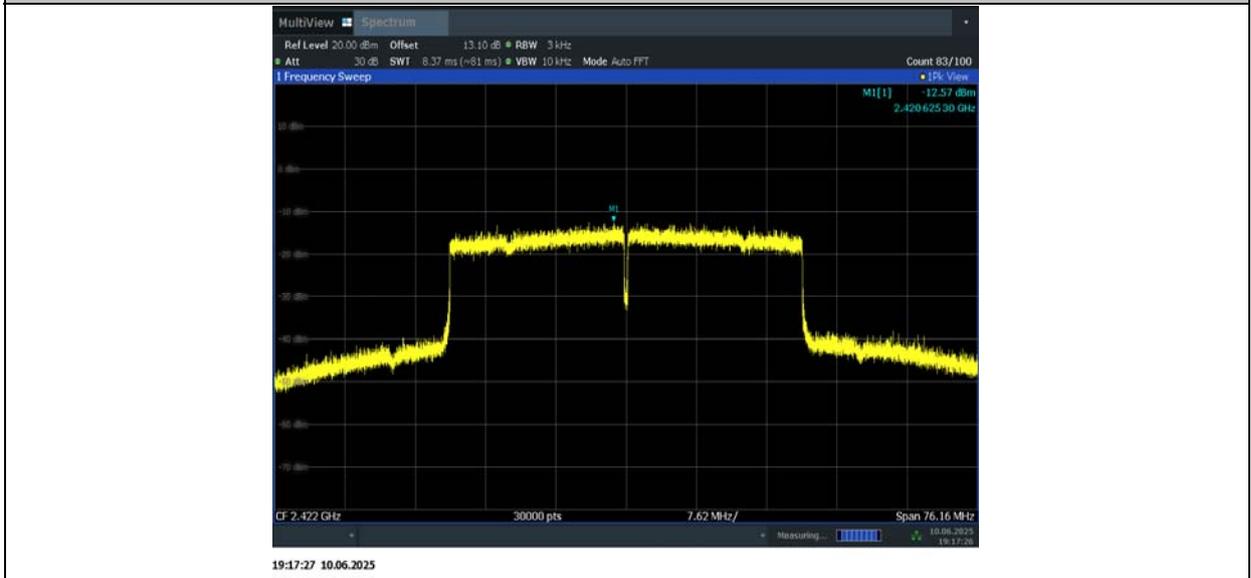
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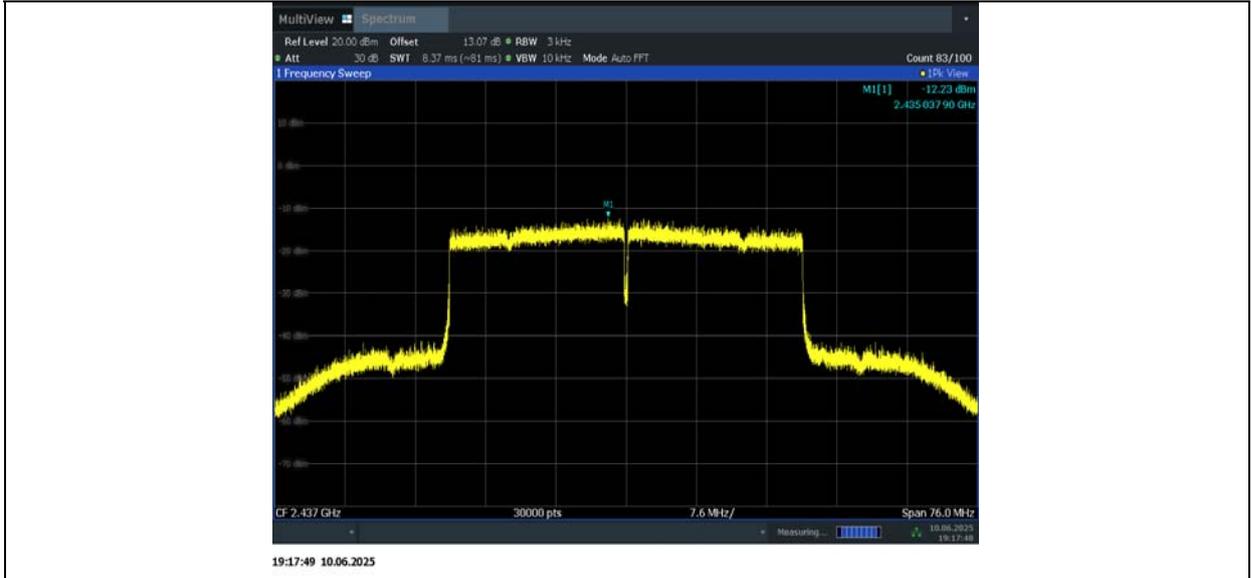
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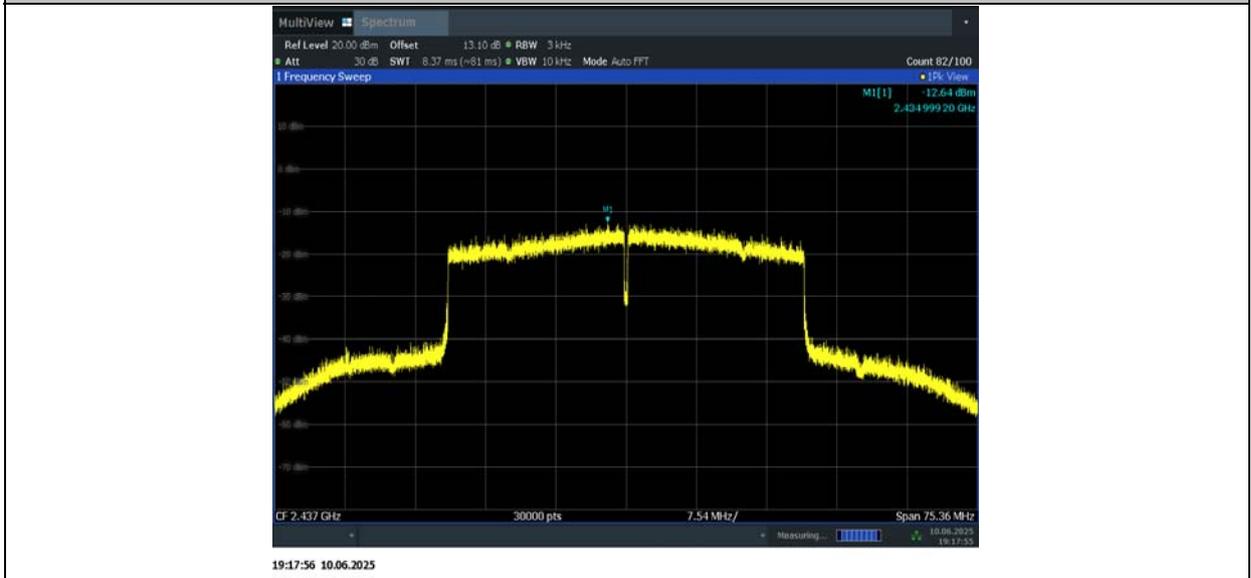
11AX40MIMO\_Ant9\_2422



11AX40MIMO\_Ant8\_2437



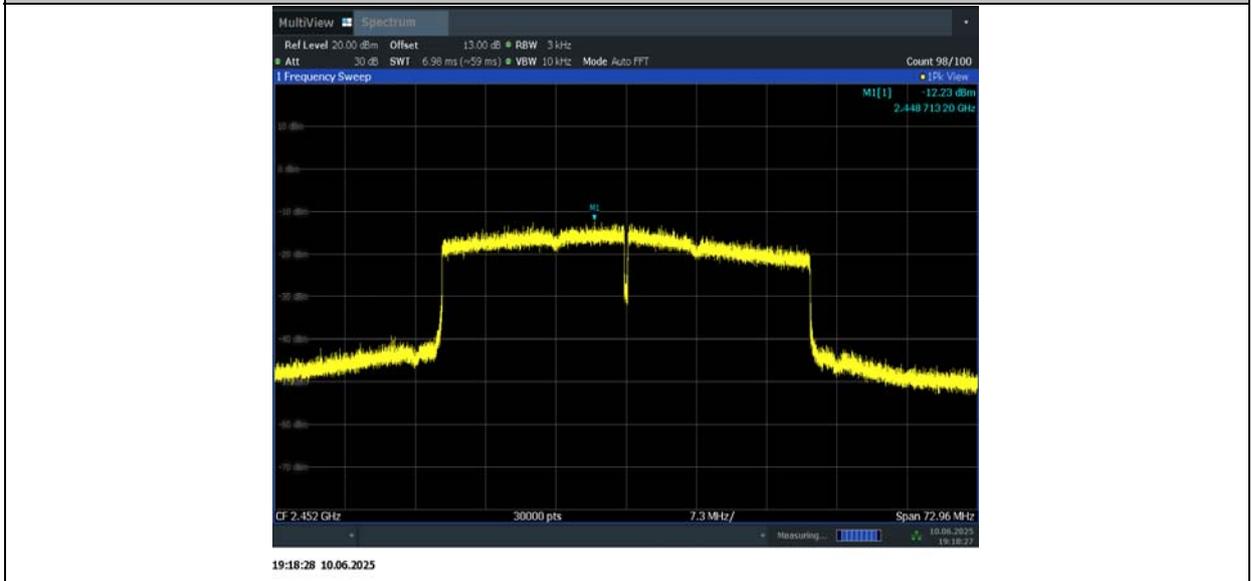
11AX40MIMO\_Ant9\_2437



11AX40MIMO\_Ant8\_2452



11AX40MIMO\_Ant9\_2452

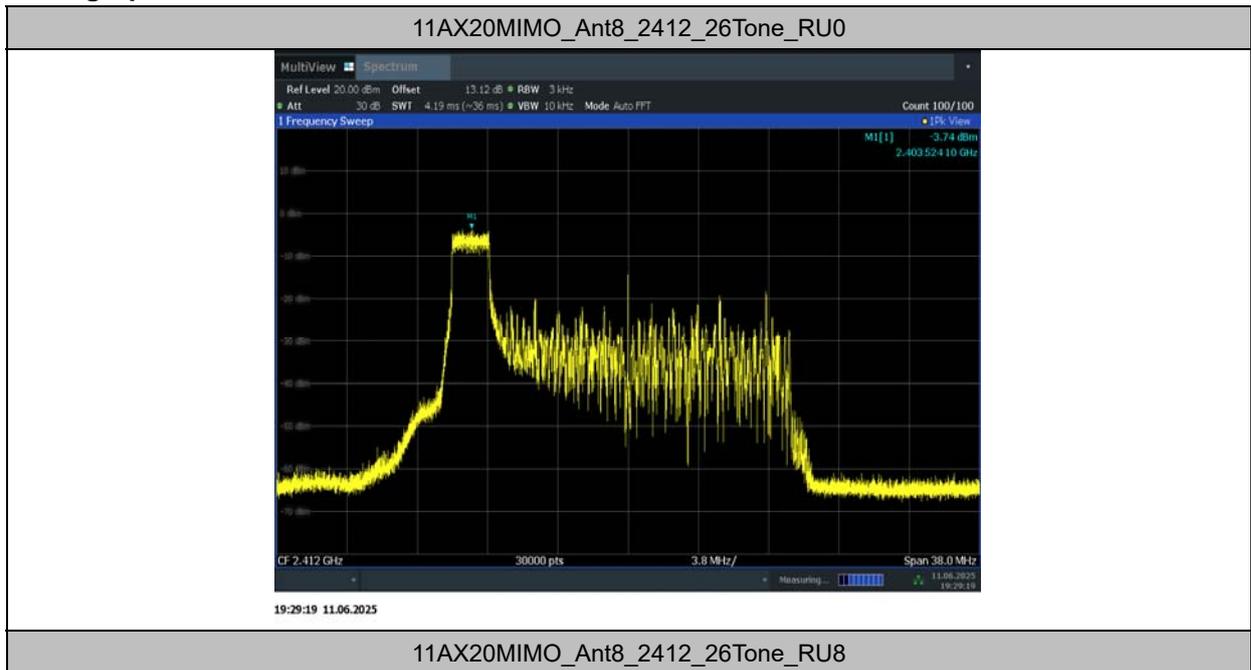


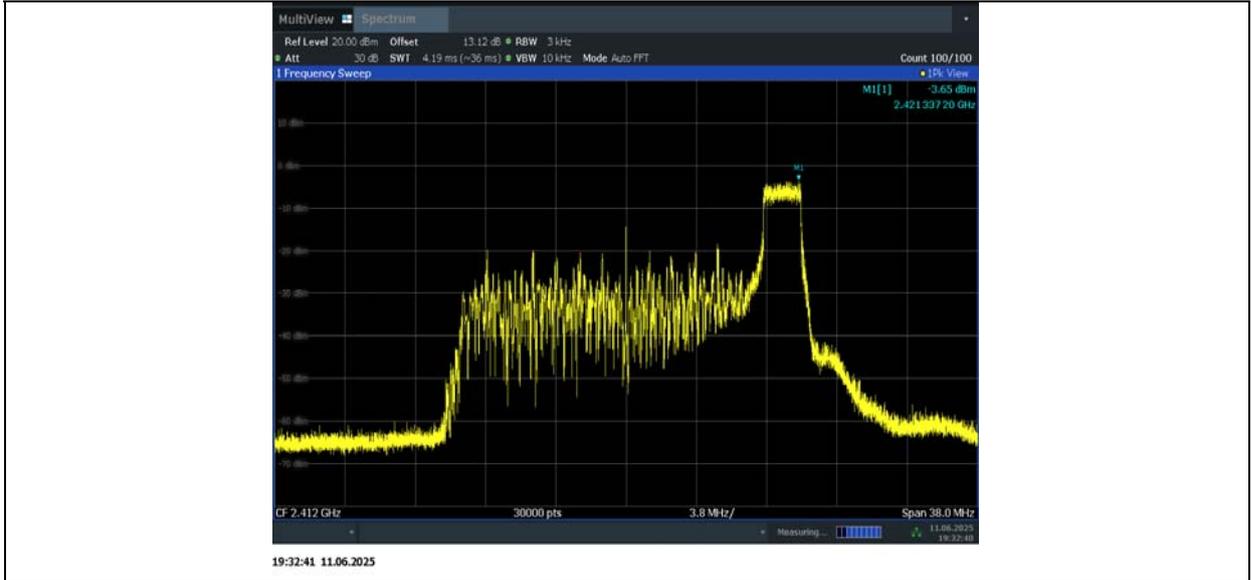
**RU MIMO**

TestMode	Antenna	Frequency[MHz]	RuSize	RuIndex	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11AX20MIMO	Ant8	2412	26Tone	RU0	-3.74	≤8.00	PASS
				RU8	-3.65	≤8.00	PASS
			52Tone	RU37	-3.28	≤8.00	PASS
				RU40	-3.81	≤8.00	PASS
			106Tone	RU53	-6.13	≤8.00	PASS
				RU54	-6.41	≤8.00	PASS
	Ant9	2412	26Tone	RU0	-3.38	≤8.00	PASS
				RU8	-3.82	≤8.00	PASS
			52Tone	RU37	-3.41	≤8.00	PASS
				RU40	-3.58	≤8.00	PASS
			106Tone	RU53	-6.91	≤8.00	PASS
				RU54	-6.89	≤8.00	PASS
	total	2412	26Tone	RU0	-0.55	≤8.00	PASS
				RU8	-0.72	≤8.00	PASS
			52Tone	RU37	-0.33	≤8.00	PASS
				RU40	-0.68	≤8.00	PASS
			106Tone	RU53	-3.49	≤8.00	PASS
				RU54	-3.63	≤8.00	PASS
	Ant8	2437	26Tone	RU0	-3.17	≤8.00	PASS
				RU8	-3.47	≤8.00	PASS
			52Tone	RU37	-3.80	≤8.00	PASS
				RU40	-3.75	≤8.00	PASS
			106Tone	RU53	-6.33	≤8.00	PASS
				RU54	-6.69	≤8.00	PASS
	Ant9	2437	26Tone	RU0	-3.60	≤8.00	PASS
				RU8	-3.39	≤8.00	PASS
			52Tone	RU37	-3.77	≤8.00	PASS
				RU40	-3.98	≤8.00	PASS
			106Tone	RU53	-7.26	≤8.00	PASS
				RU54	-6.97	≤8.00	PASS
	total	2437	26Tone	RU0	-0.37	≤8.00	PASS
				RU8	-0.42	≤8.00	PASS
			52Tone	RU37	-0.77	≤8.00	PASS
				RU40	-0.85	≤8.00	PASS
			106Tone	RU53	-3.76	≤8.00	PASS
				RU54	-3.82	≤8.00	PASS
Ant8	2462	26Tone	RU0	-3.11	≤8.00	PASS	
			RU8	-3.05	≤8.00	PASS	
		52Tone	RU37	-3.63	≤8.00	PASS	

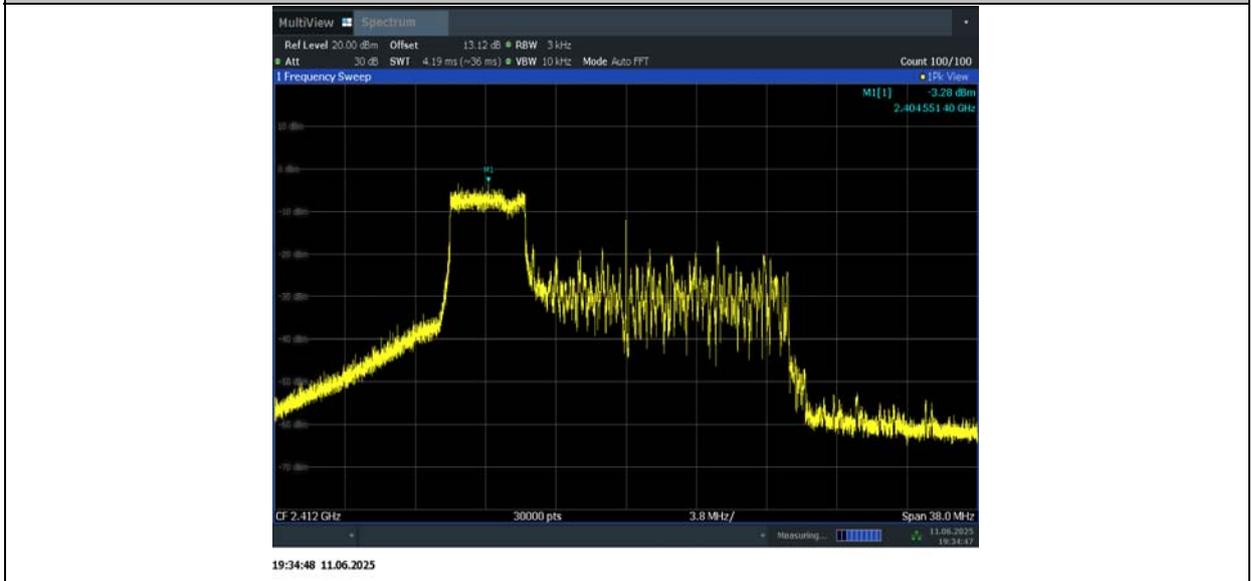
	Ant9	2462	106Tone	RU40	-3.86	≤8.00	PASS
				RU53	-6.21	≤8.00	PASS
				RU54	-6.21	≤8.00	PASS
			26Tone	RU0	-3.00	≤8.00	PASS
				RU8	-3.98	≤8.00	PASS
				52Tone	RU37	-3.60	≤8.00
	RU40	-3.99	≤8.00		PASS		
	total	2462	106Tone	RU53	-6.78	≤8.00	PASS
				RU54	-6.78	≤8.00	PASS
				26Tone	RU0	-0.04	≤8.00
			RU8		-0.48	≤8.00	PASS
			52Tone		RU37	-0.60	≤8.00
				RU40	-0.91	≤8.00	PASS
	106Tone	RU53	-3.48	≤8.00	PASS		
RU54		-3.48	≤8.00	PASS			

Test graphs as below:

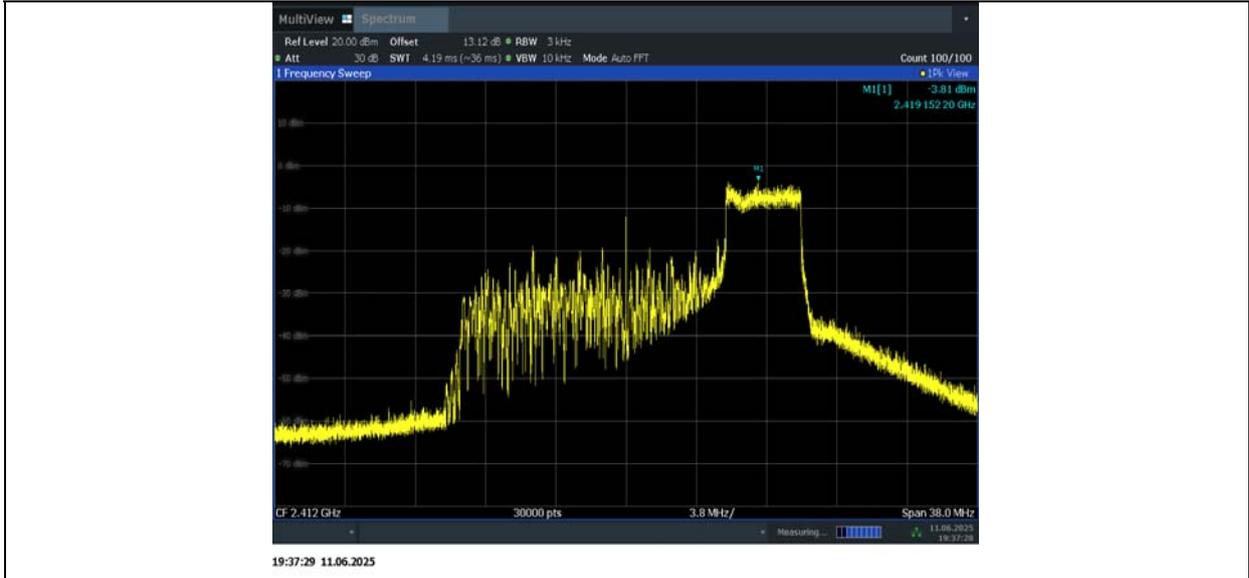




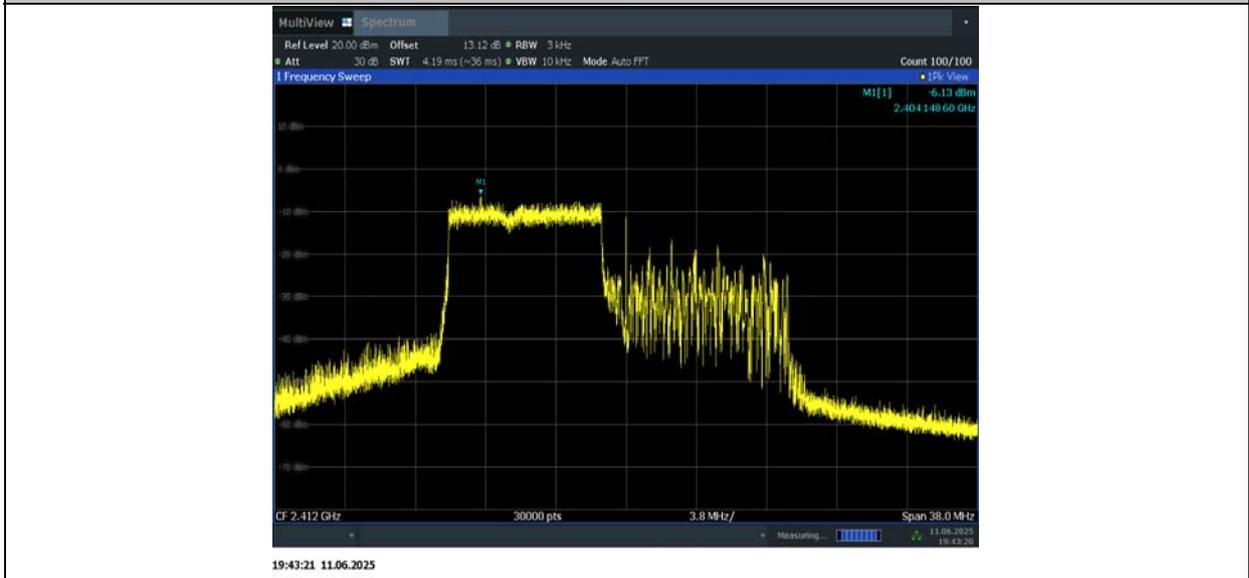
11AX20MIMO\_Ant8\_2412\_52Tone\_RU37



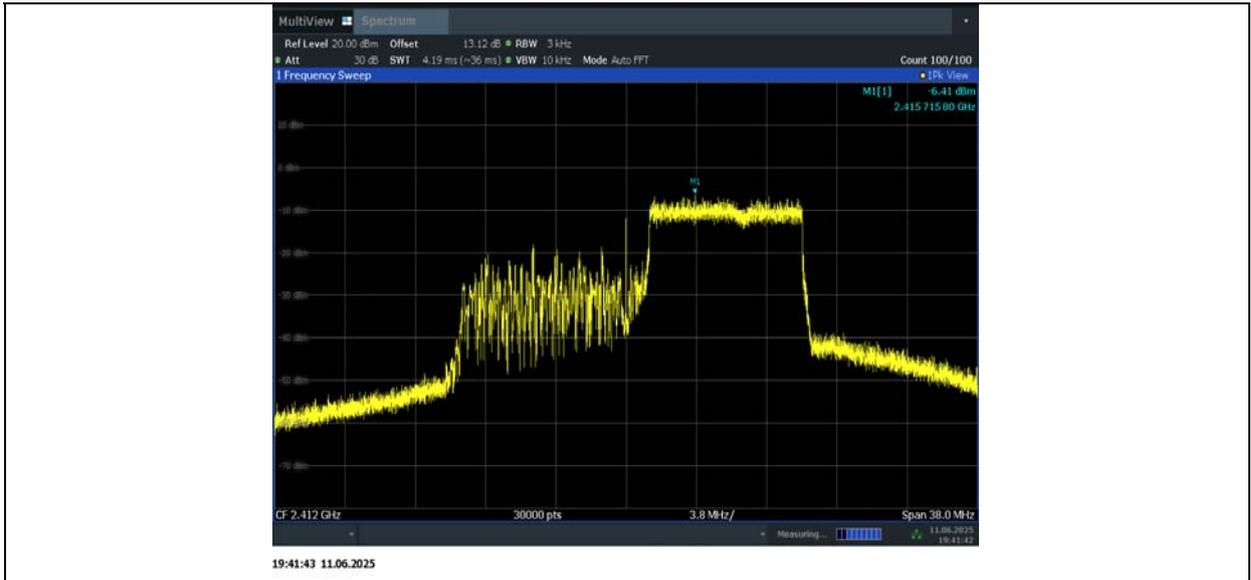
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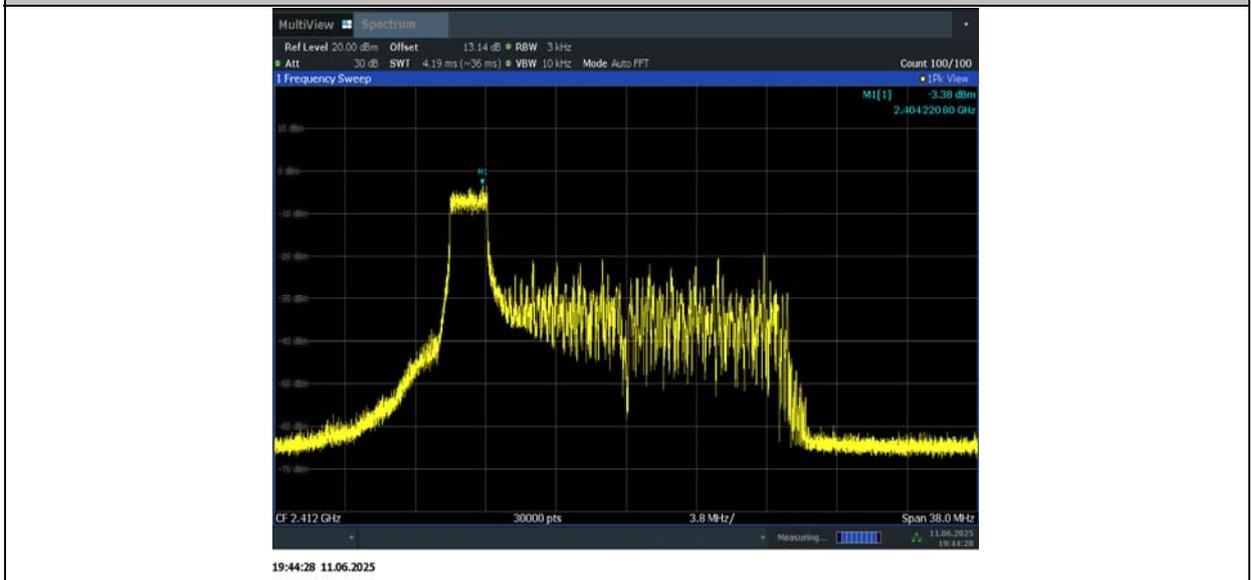
11AX20MIMO\_Ant8\_2412\_106Tone\_RU53



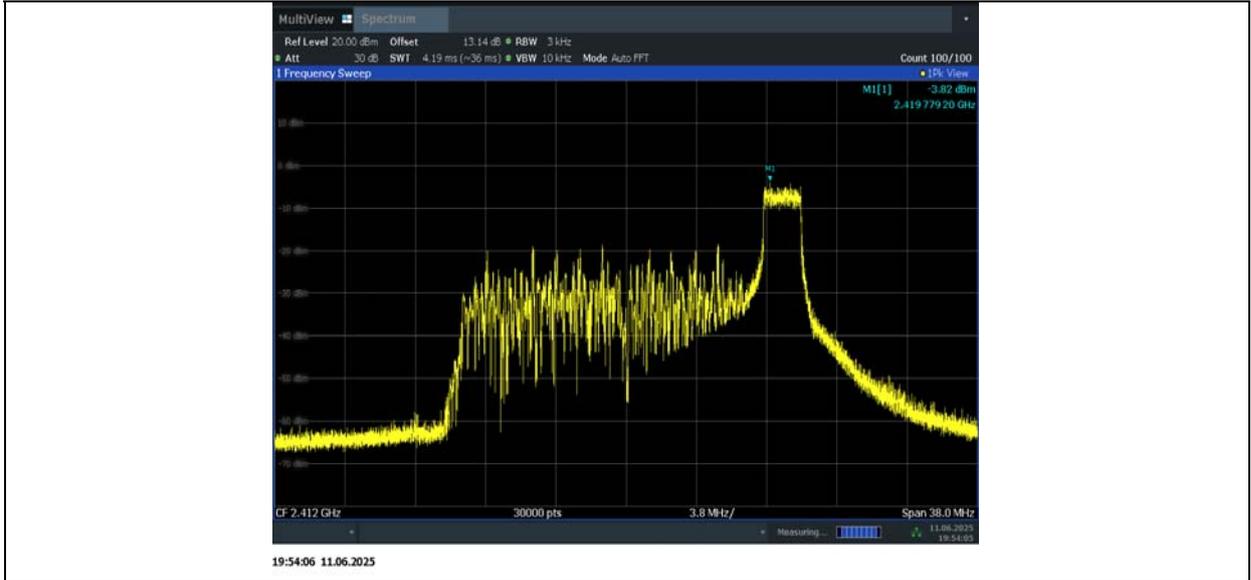
11AX20MIMO\_Ant8\_2412\_106Tone\_RU54



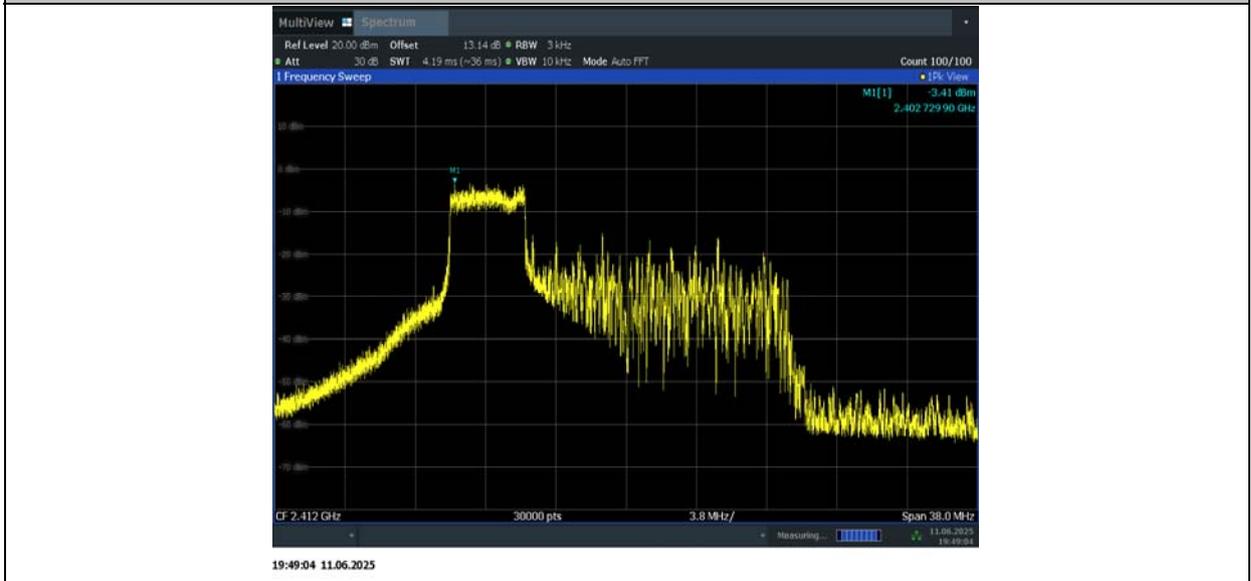
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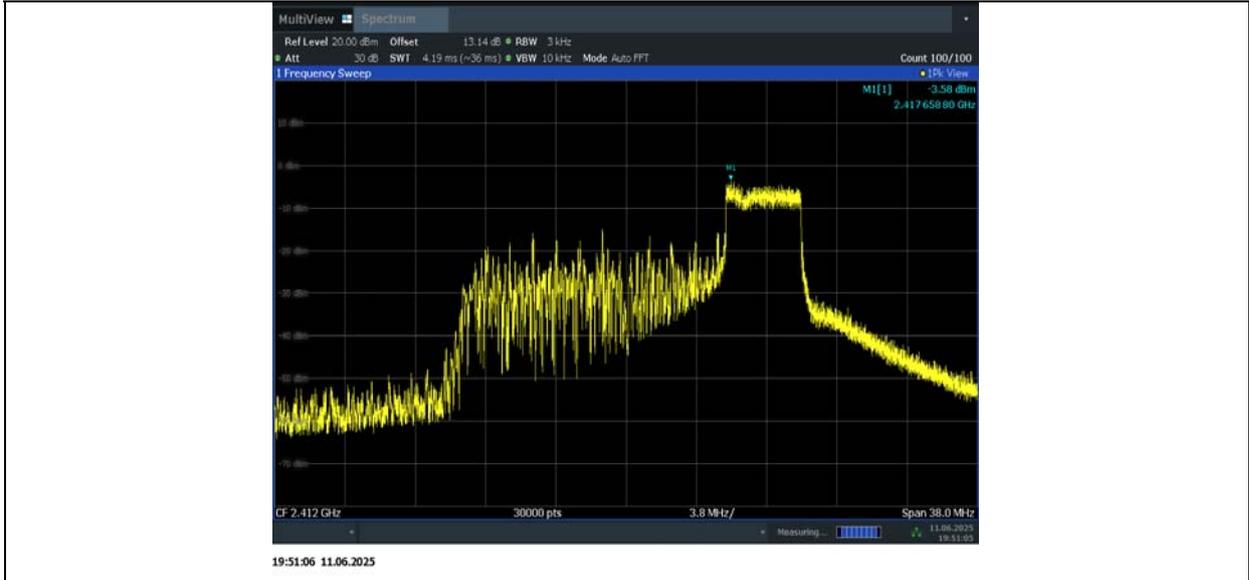
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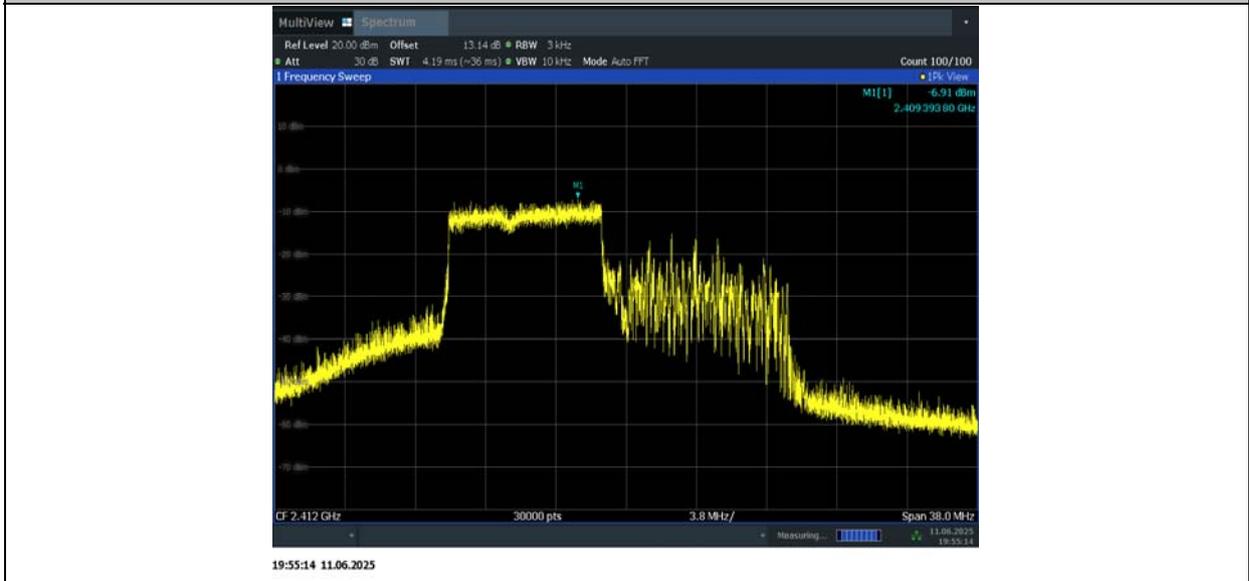
11AX20MIMO\_Ant9\_2412\_52Tone\_RU37



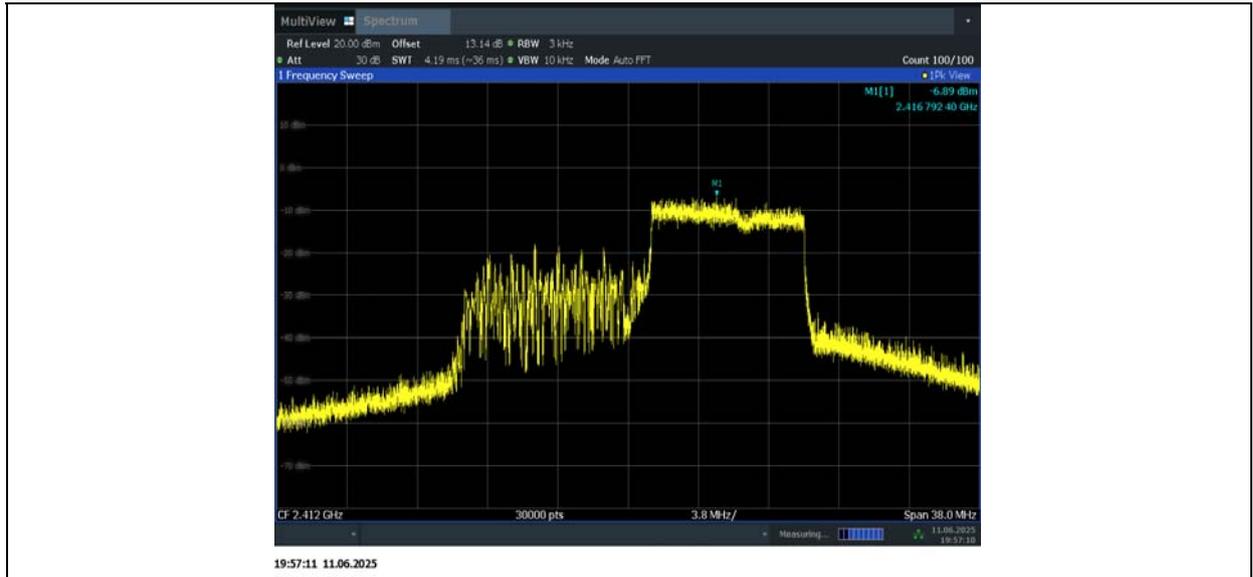
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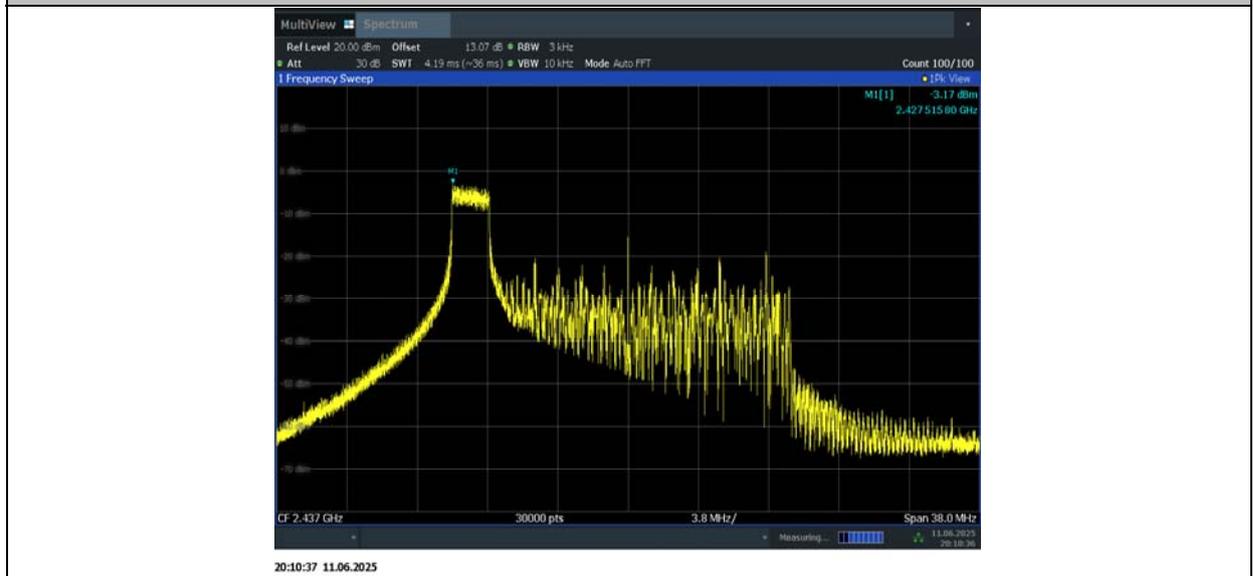
11AX20MIMO\_Ant9\_2412\_106Tone\_RU53



11AX20MIMO\_Ant9\_2412\_106Tone\_RU54



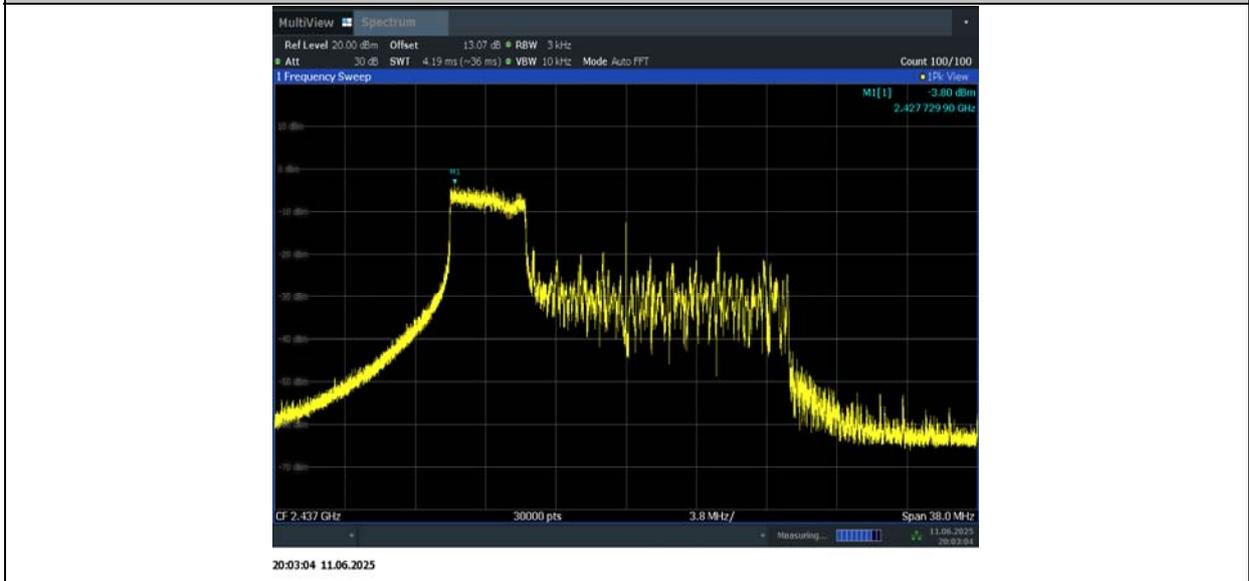
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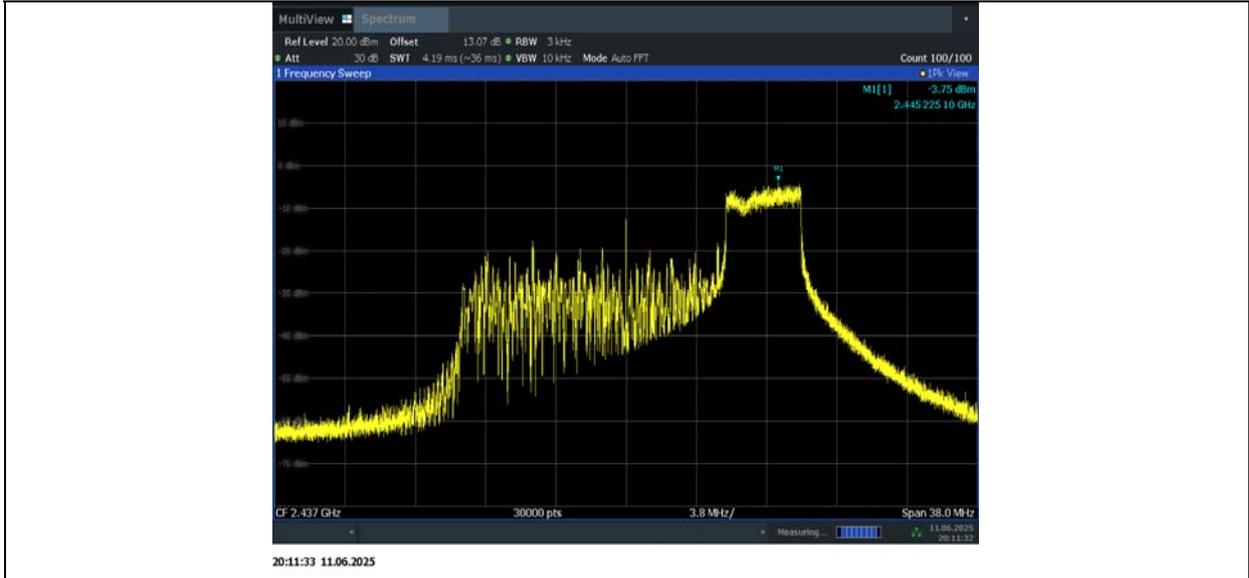
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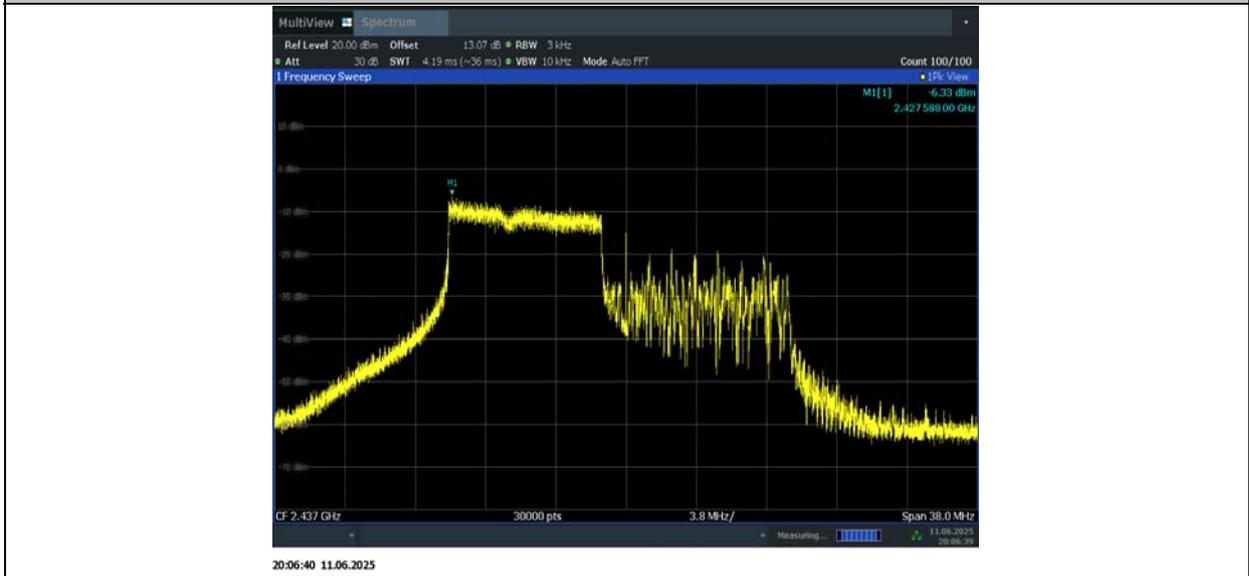
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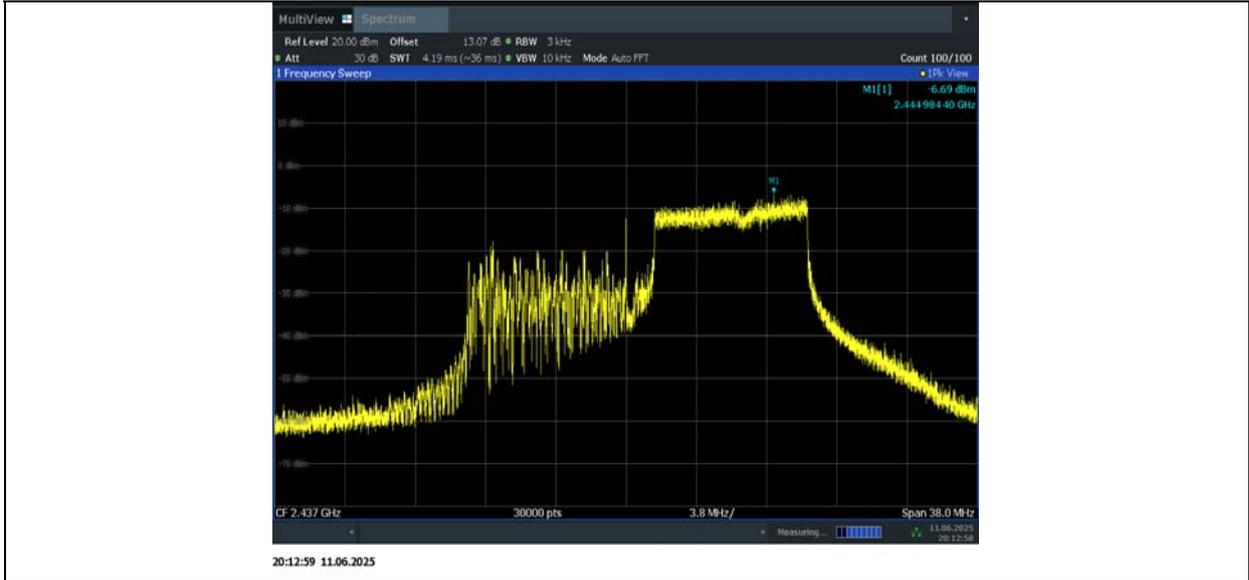
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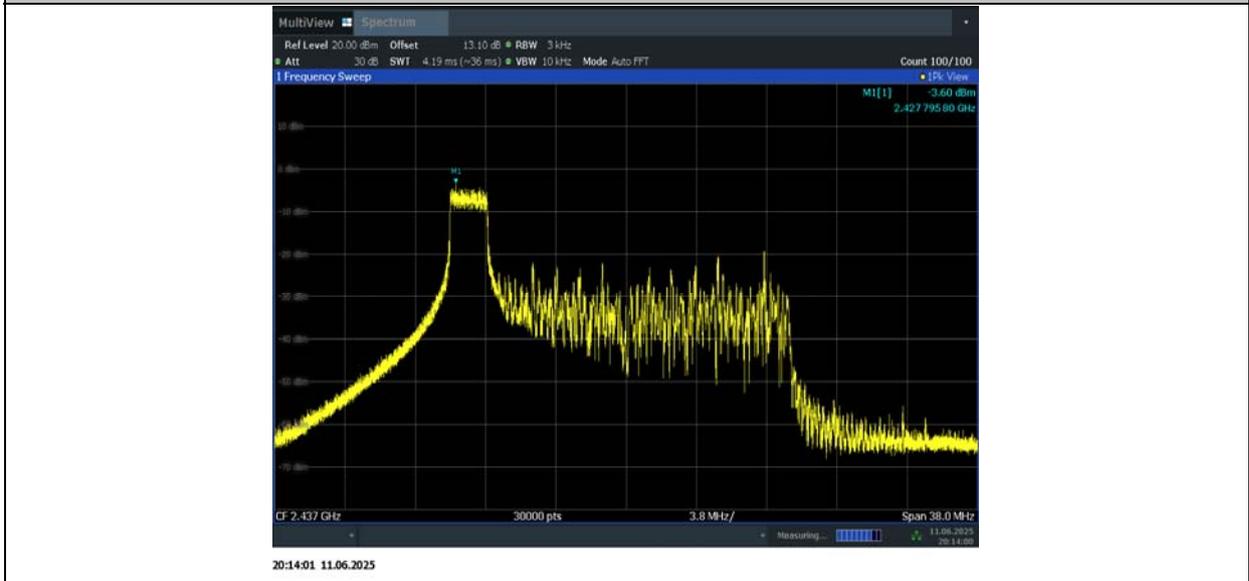
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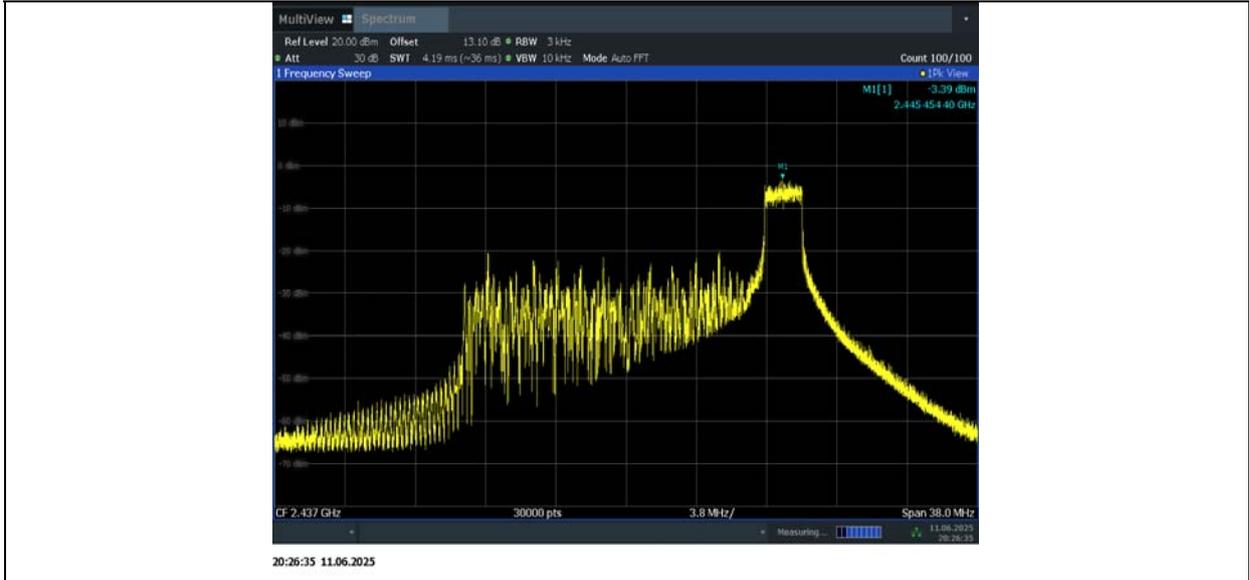
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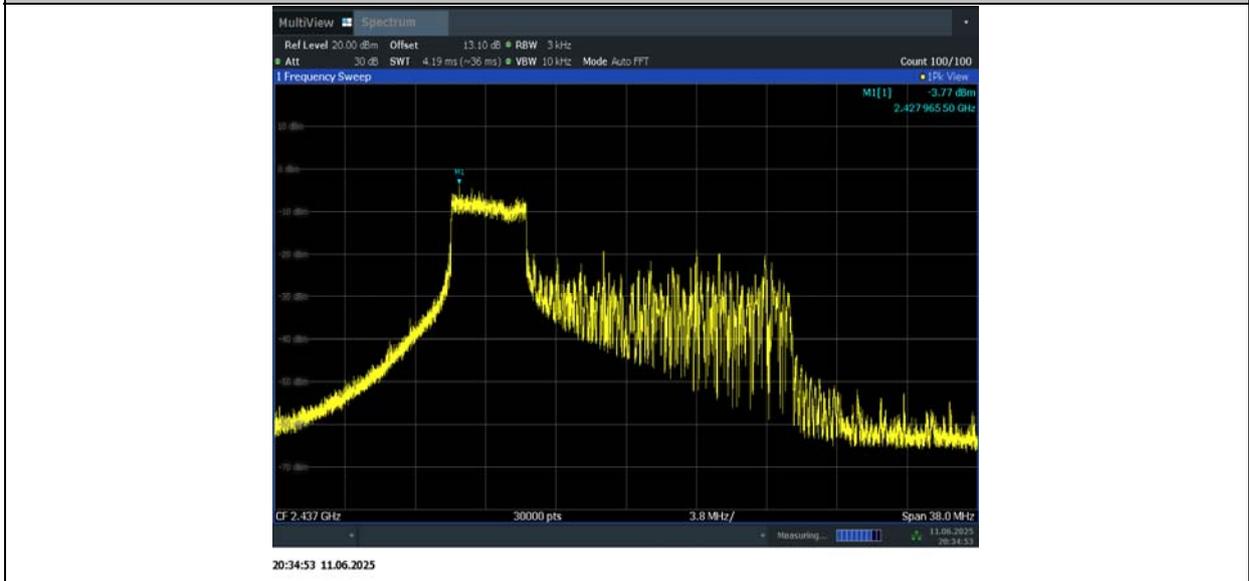
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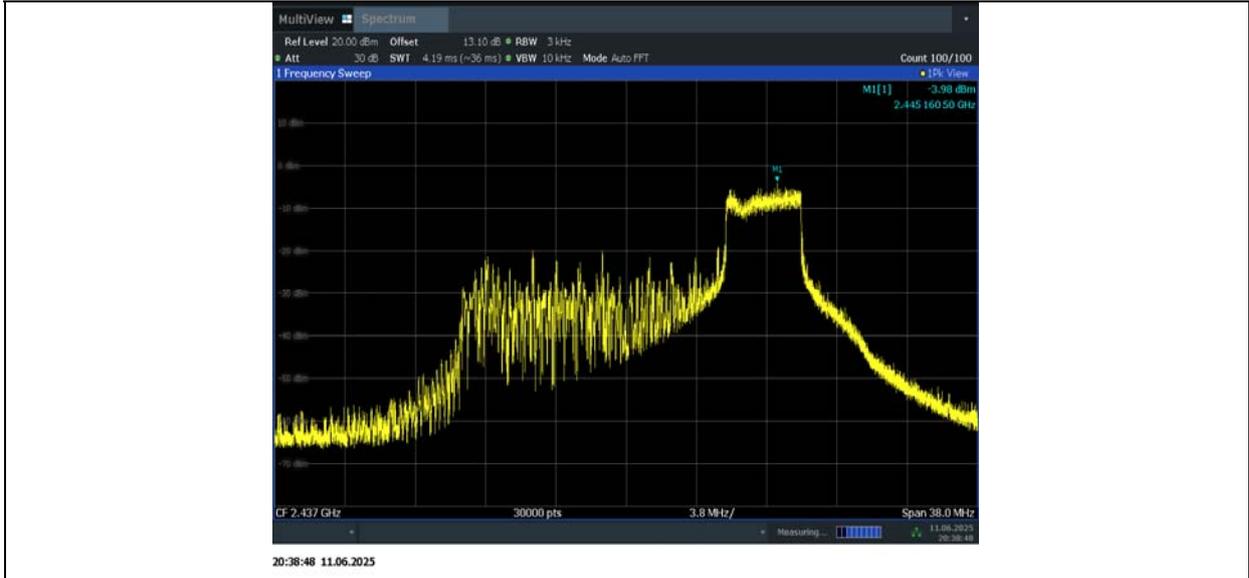
11AX20MIMO\_Ant9\_2437\_26Tone\_RU8



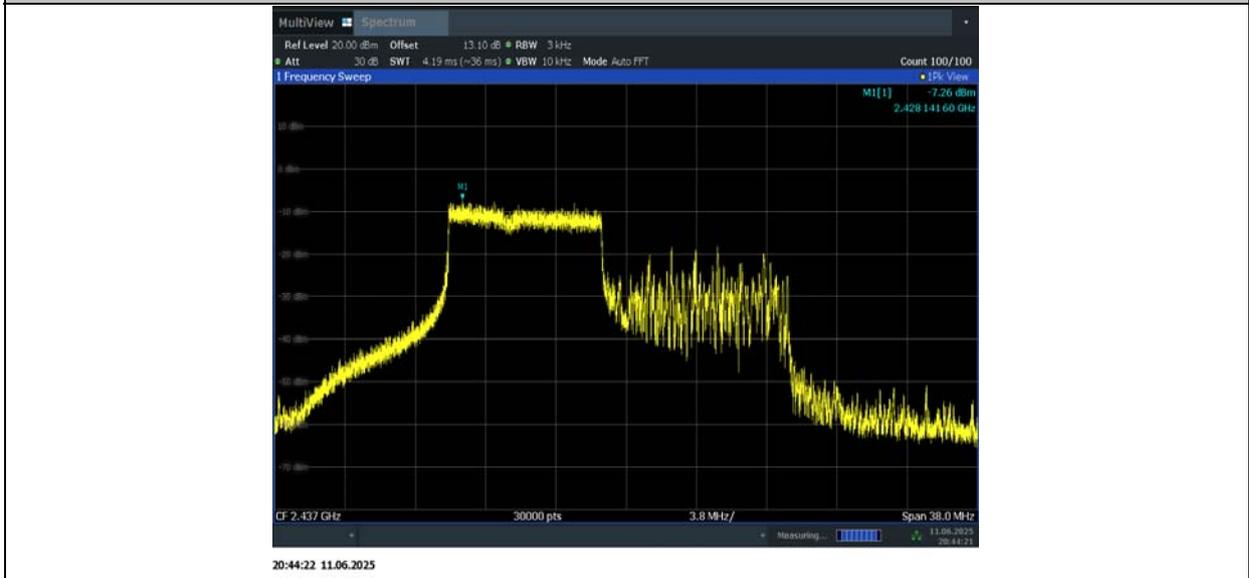
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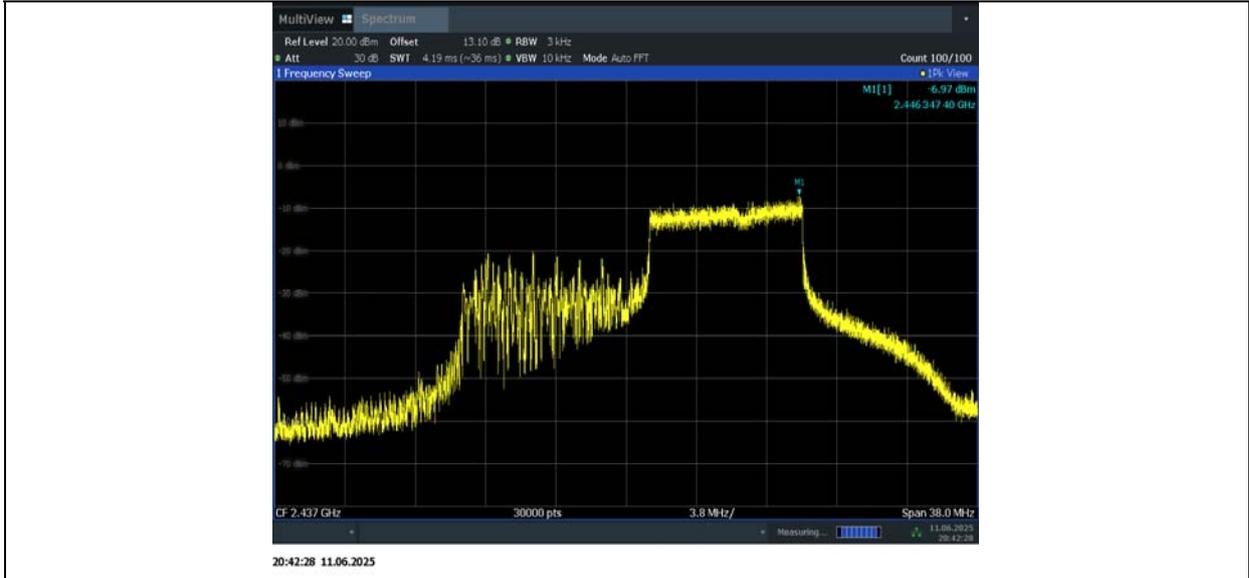
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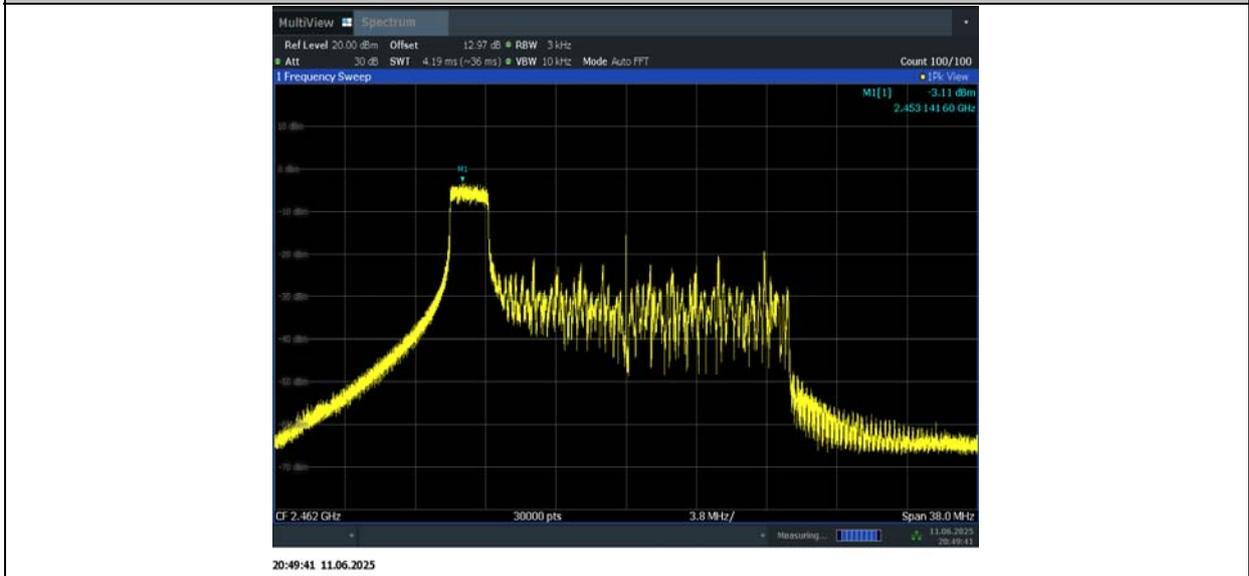
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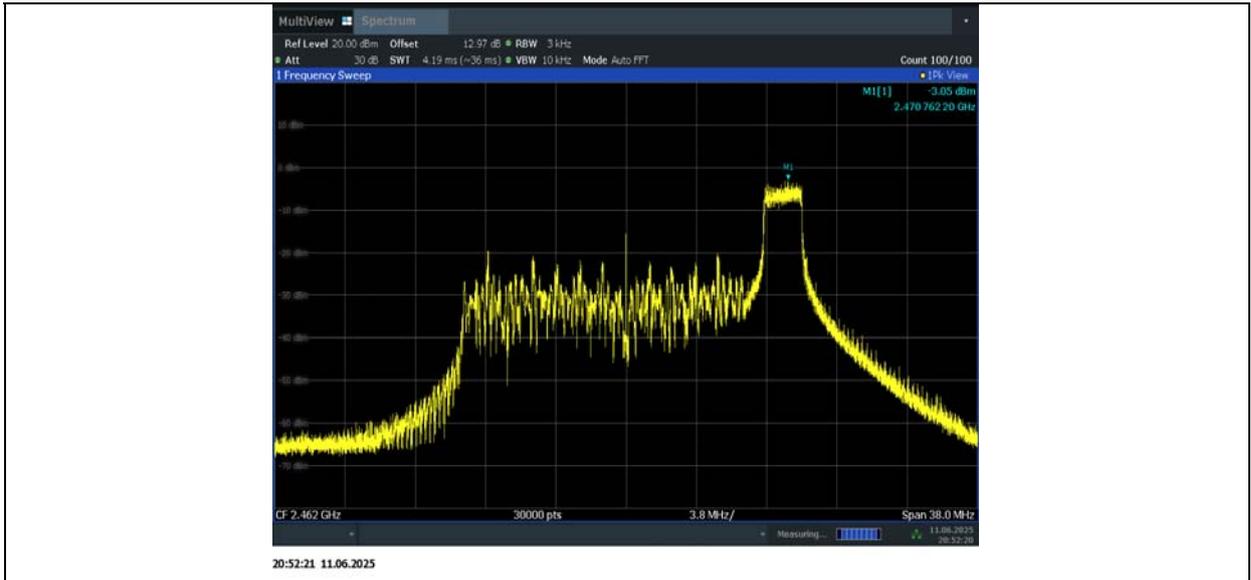
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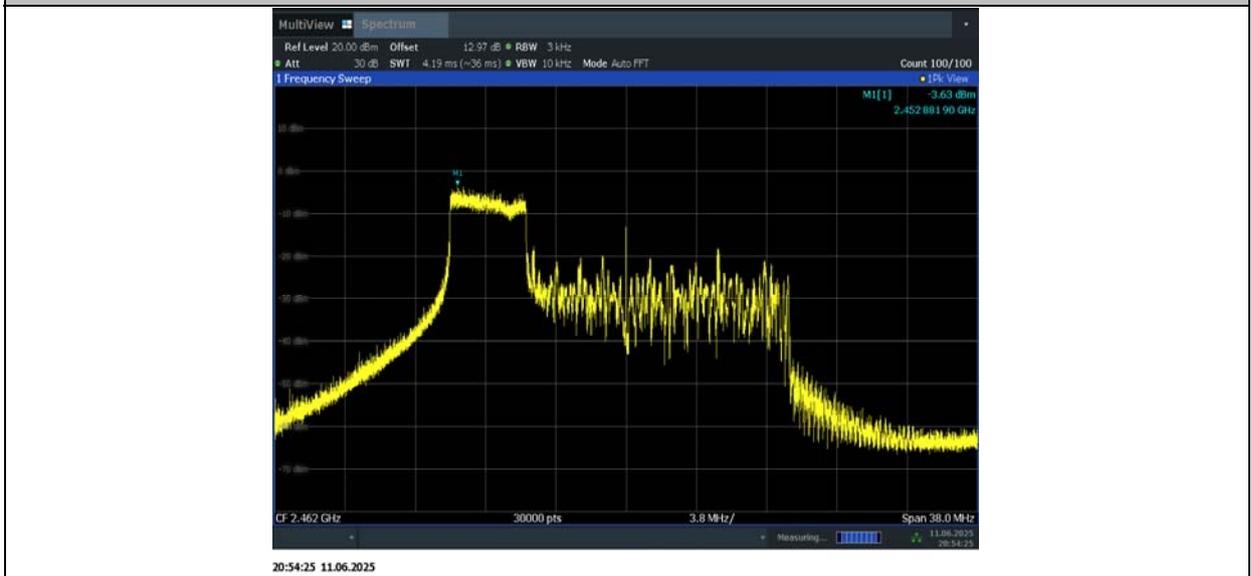
11AX20MIMO\_Ant8\_2462\_26Tone\_RU0



11AX20MIMO\_Ant8\_2462\_26Tone\_RU8



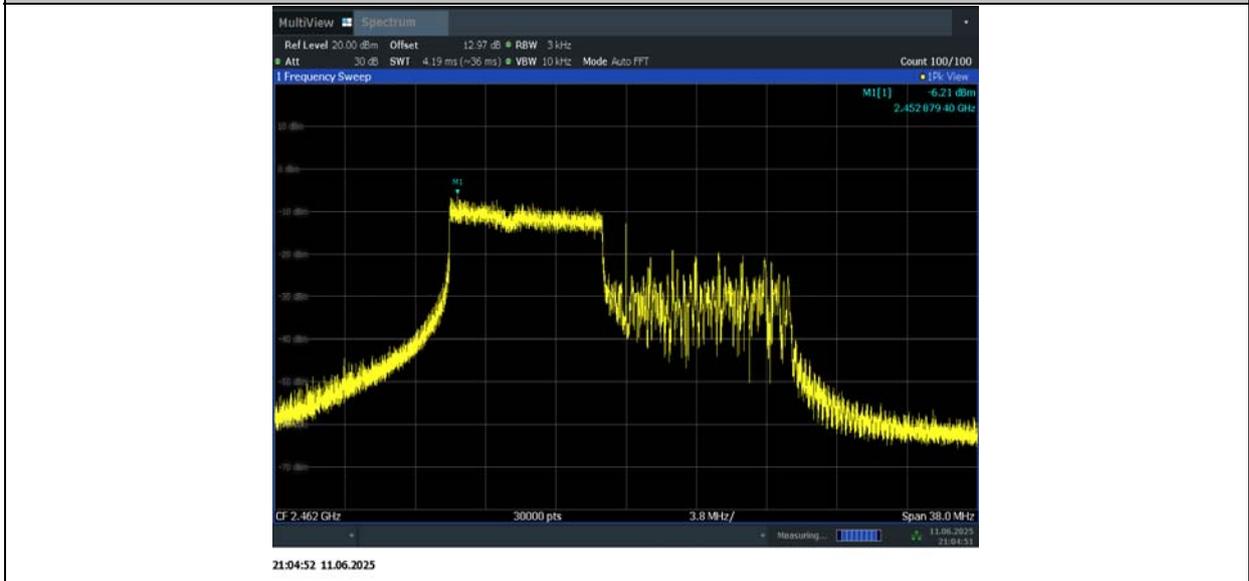
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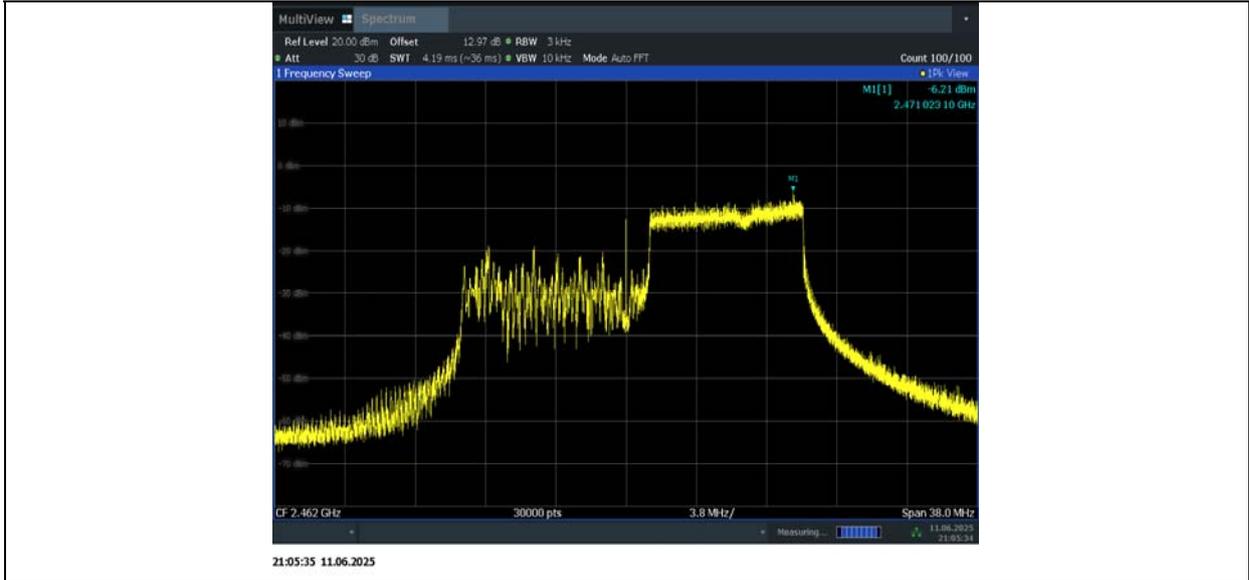
11AX20MIMO\_Ant8\_2462\_52Tone\_RU40



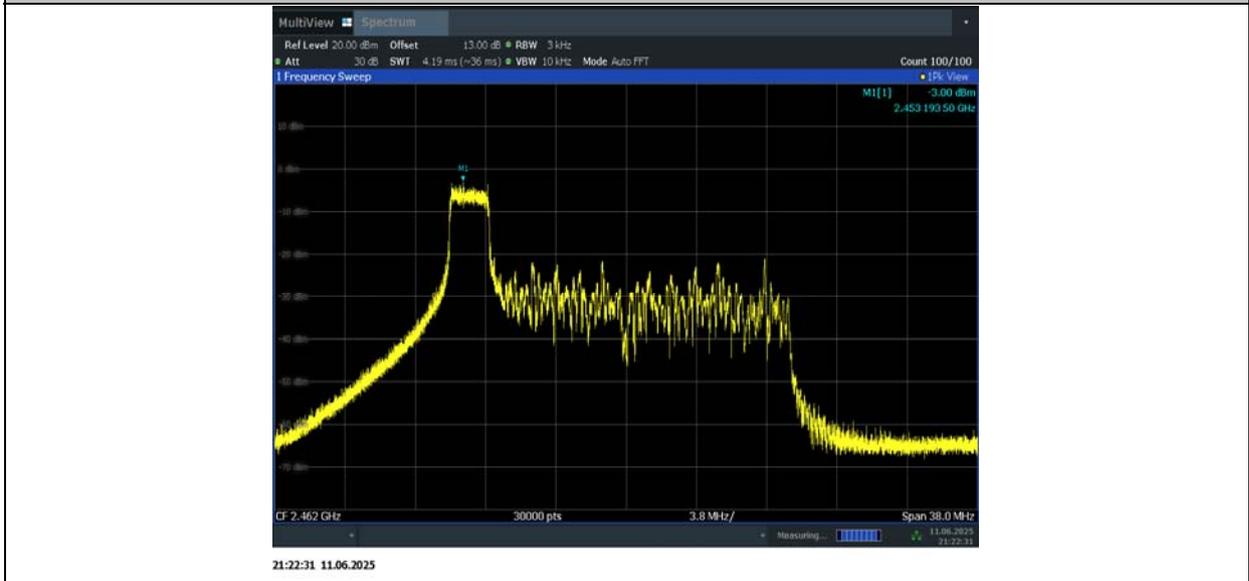
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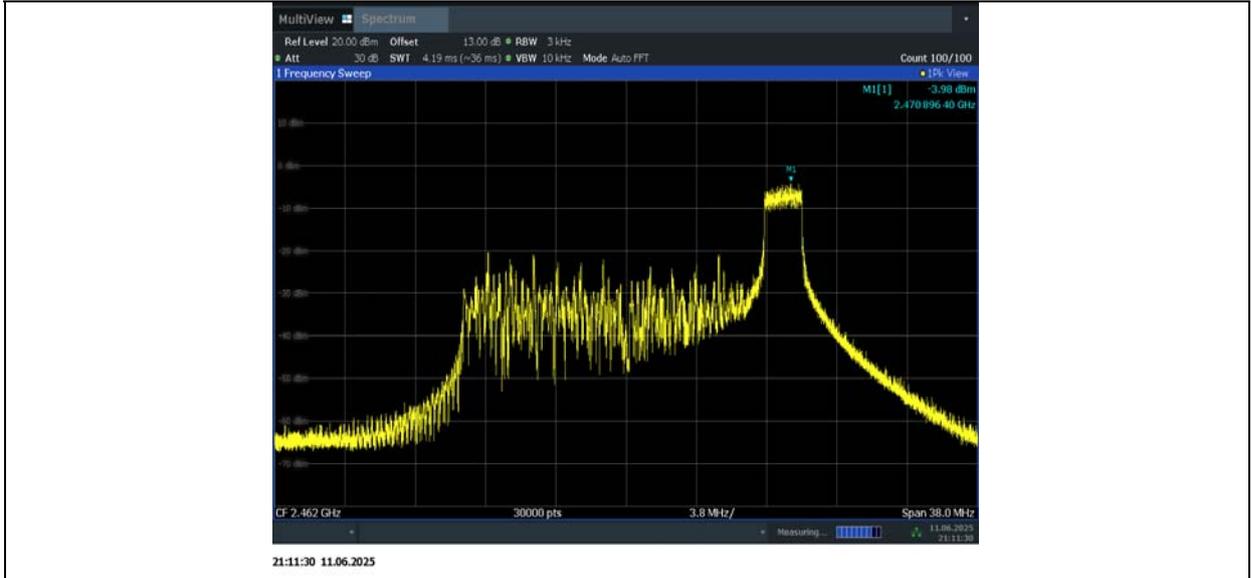
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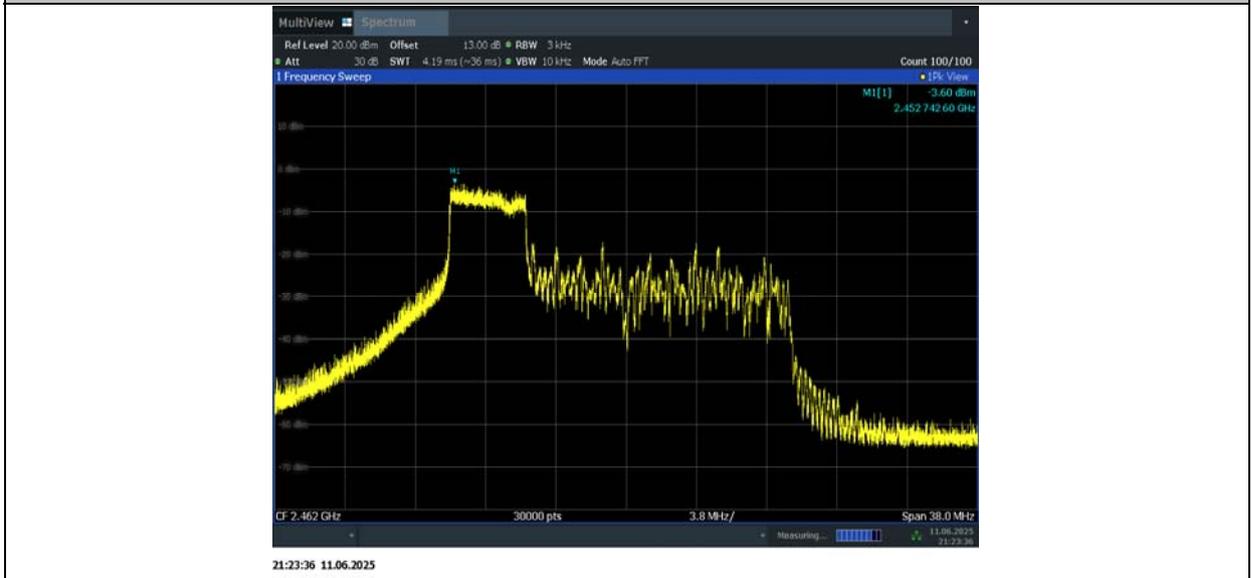
11AX20MIMO\_Ant9\_2462\_26Tone\_RU0



11AX20MIMO\_Ant9\_2462\_26Tone\_RU8



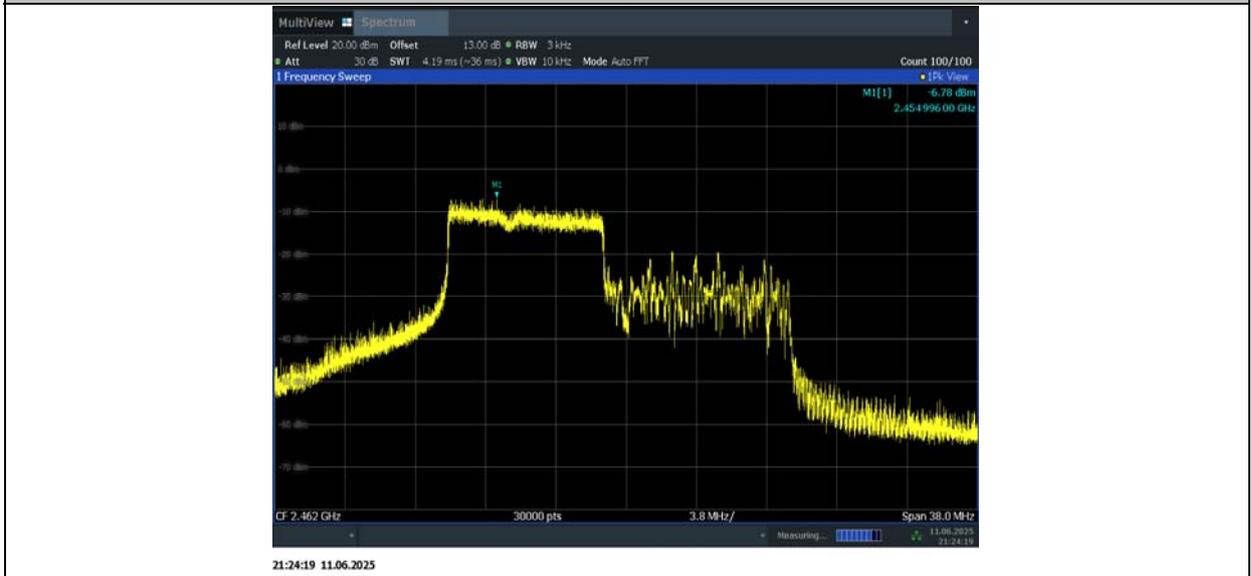
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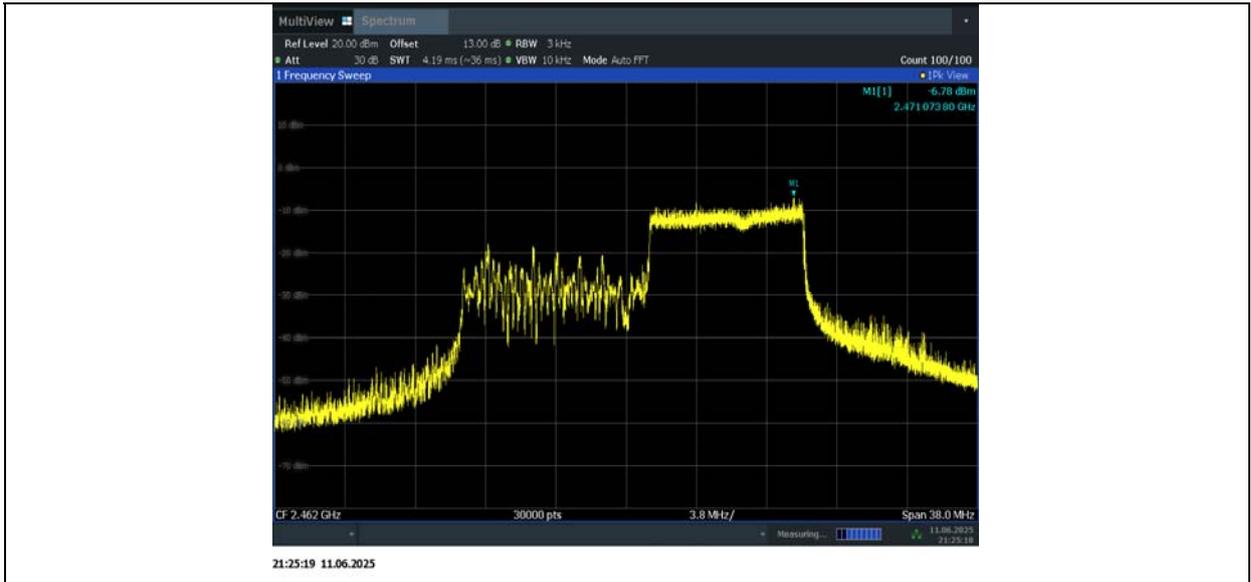
11AX20MIMO\_Ant9\_2462\_52Tone\_RU40



11AX20MIMO\_Ant9\_2462\_106Tone\_RU53



11AX20MIMO\_Ant9\_2462\_106Tone\_RU54



**Conclusion: Pass**

#### **A.4. DTS 6-dB Signal Bandwidth**

**Method of Measurement: See ANSI C63.10-2013 section 11.8.1.**

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) = 300 kHz.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

**Measurement Limit:**

Standard	Limit (kHz)
FCC 47 CFR Part 15.247 (a)	≥ 500

**EUT ID: UT36a**

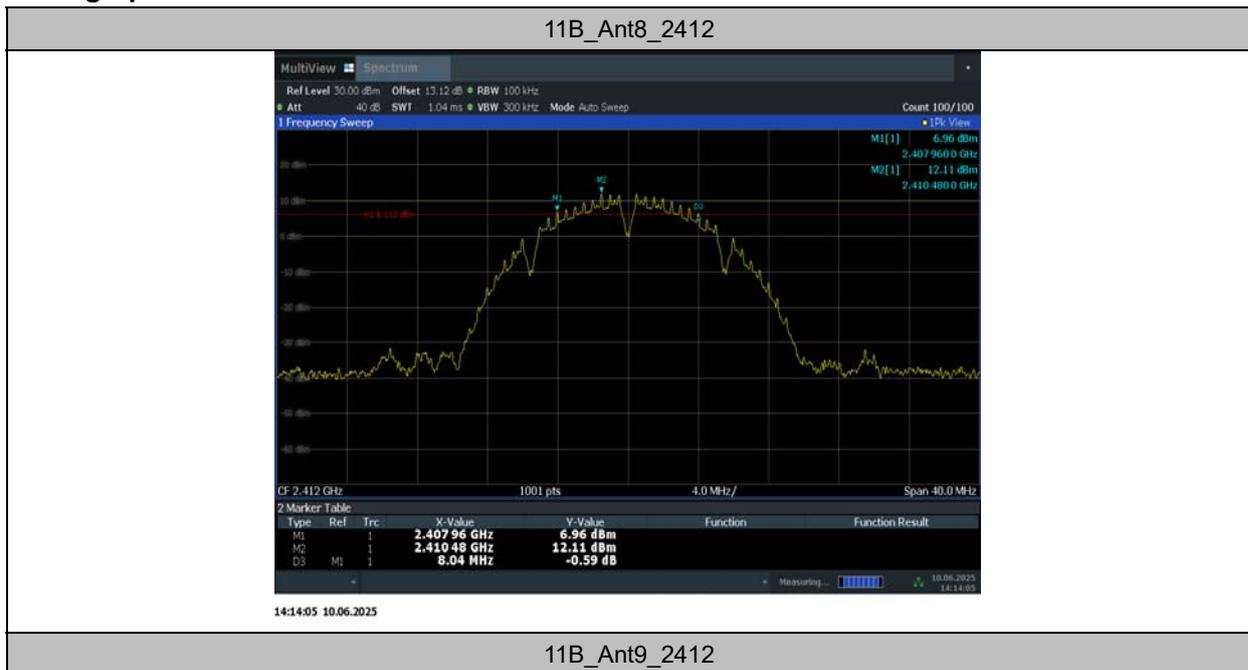
**Full RU MIMO**

**Measurement Result:**

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant8	2412	8.04	2407.96	2416.00	0.5	PASS
	Ant9	2412	8.52	2407.48	2416.00	0.5	PASS
	Ant8	2437	8.04	2432.96	2441.00	0.5	PASS
	Ant9	2437	8.04	2432.96	2441.00	0.5	PASS
	Ant8	2462	8.04	2457.96	2466.00	0.5	PASS
	Ant9	2462	7.56	2457.92	2465.48	0.5	PASS
11G	Ant8	2412	16.44	2403.76	2420.20	0.5	PASS
	Ant9	2412	15.64	2403.84	2419.48	0.5	PASS
	Ant8	2437	16.48	2428.68	2445.16	0.5	PASS
	Ant9	2437	16.52	2428.72	2445.24	0.5	PASS
	Ant8	2462	16.60	2453.68	2470.28	0.5	PASS
	Ant9	2462	16.56	2453.68	2470.24	0.5	PASS
11N20MIMO	Ant8	2412	17.72	2403.08	2420.80	0.5	PASS
	Ant9	2412	17.60	2403.16	2420.76	0.5	PASS
	Ant8	2437	17.76	2428.04	2445.80	0.5	PASS
	Ant9	2437	17.72	2428.16	2445.88	0.5	PASS
	Ant8	2462	17.80	2453.08	2470.88	0.5	PASS
	Ant9	2462	17.72	2453.08	2470.80	0.5	PASS
11N40MIMO	Ant8	2422	36.40	2403.76	2440.16	0.5	PASS
	Ant9	2422	36.40	2403.76	2440.16	0.5	PASS
	Ant8	2437	36.40	2418.76	2455.16	0.5	PASS

	Ant9	2437	36.32	2418.84	2455.16	0.5	PASS
	Ant8	2452	36.40	2433.76	2470.16	0.5	PASS
	Ant9	2452	35.76	2433.76	2469.52	0.5	PASS
11AX20MIMO	Ant8	2412	19.00	2402.48	2421.48	0.5	PASS
	Ant9	2412	19.00	2402.44	2421.44	0.5	PASS
	Ant8	2437	19.24	2427.36	2446.60	0.5	PASS
	Ant9	2437	19.20	2427.40	2446.60	0.5	PASS
	Ant8	2462	19.08	2452.44	2471.52	0.5	PASS
	Ant9	2462	19.24	2452.32	2471.56	0.5	PASS
11AX40MIMO	Ant8	2422	38.08	2402.88	2440.96	0.5	PASS
	Ant9	2422	38.08	2402.96	2441.04	0.5	PASS
	Ant8	2437	38.00	2417.96	2455.96	0.5	PASS
	Ant9	2437	37.68	2418.12	2455.80	0.5	PASS
	Ant8	2452	38.00	2432.96	2470.96	0.5	PASS
	Ant9	2452	36.48	2432.96	2469.44	0.5	PASS

Test graphs as below:





11B\_Ant8\_2437



11B\_Ant9\_2437



11B\_Ant8\_2462



11B\_Ant9\_2462



11G\_Ant8\_2412



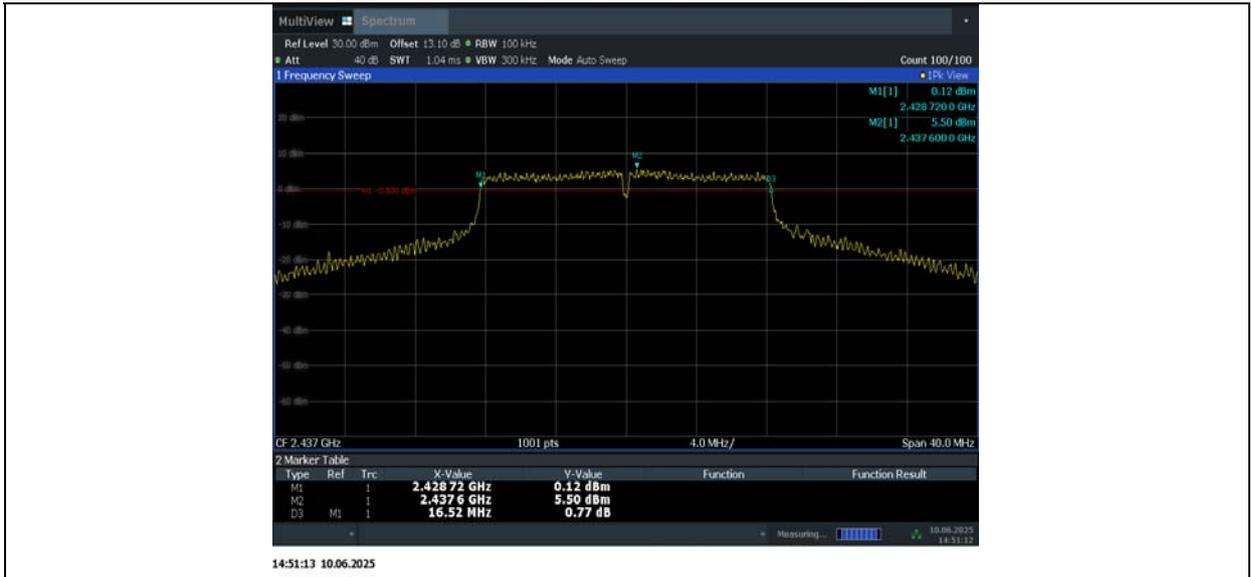
11G\_Ant9\_2412



11G\_Ant8\_2437



11G\_Ant9\_2437



11G\_Ant8\_2462



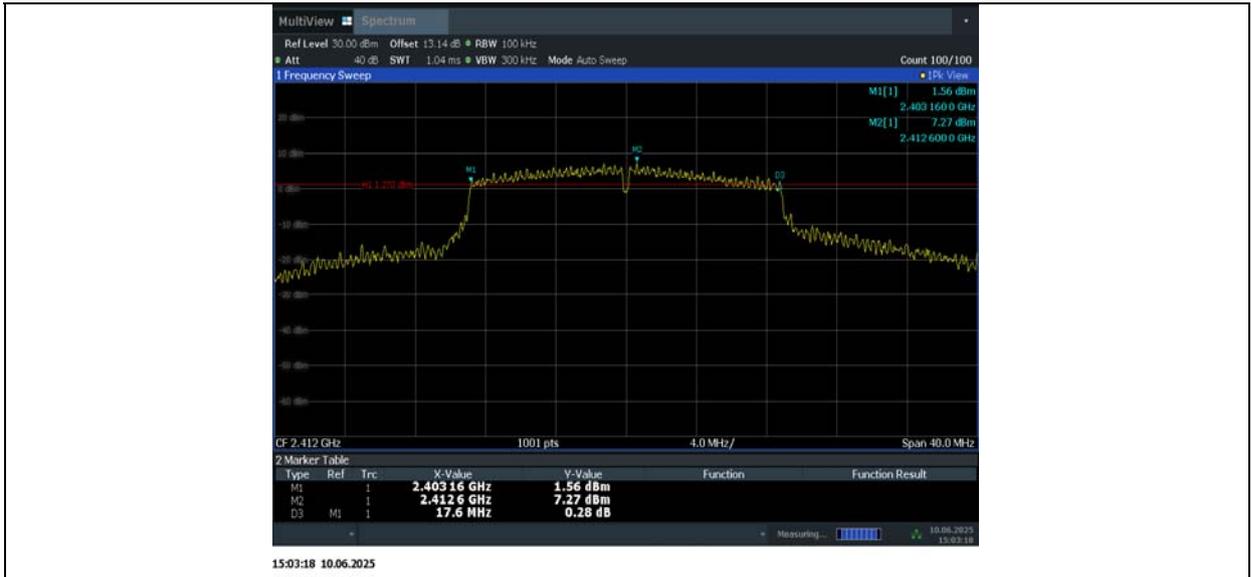
11G\_Ant9\_2462



11N20MIMO\_Ant8\_2412



11N20MIMO\_Ant9\_2412



11N20MIMO\_Ant8\_2437



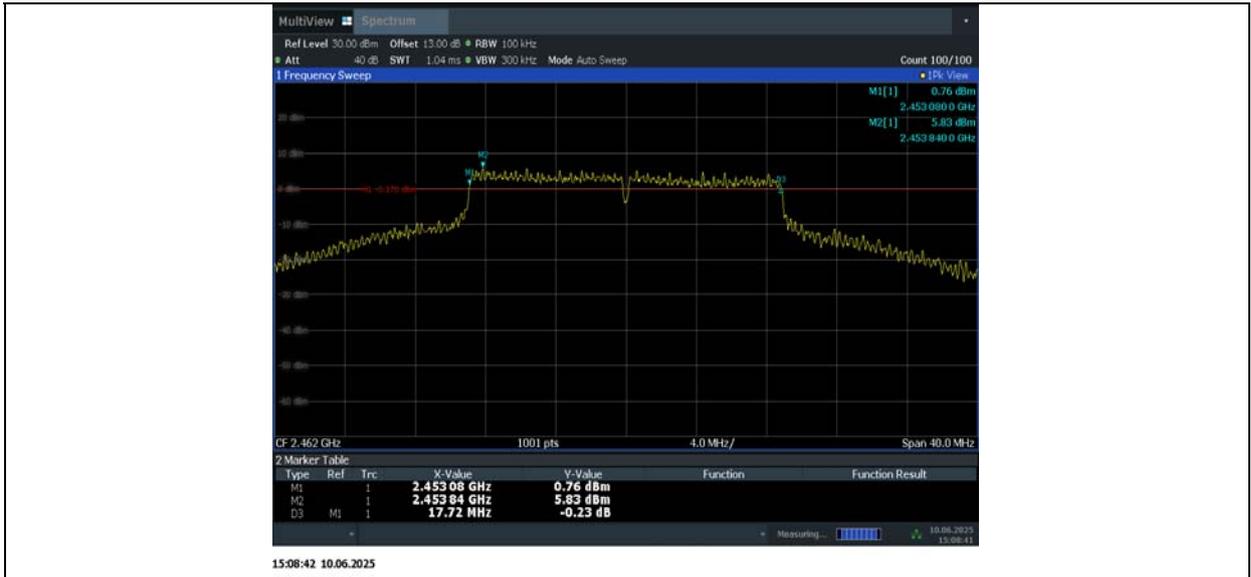
11N20MIMO\_Ant9\_2437



11N20MIMO\_Ant8\_2462



11N20MIMO\_Ant9\_2462



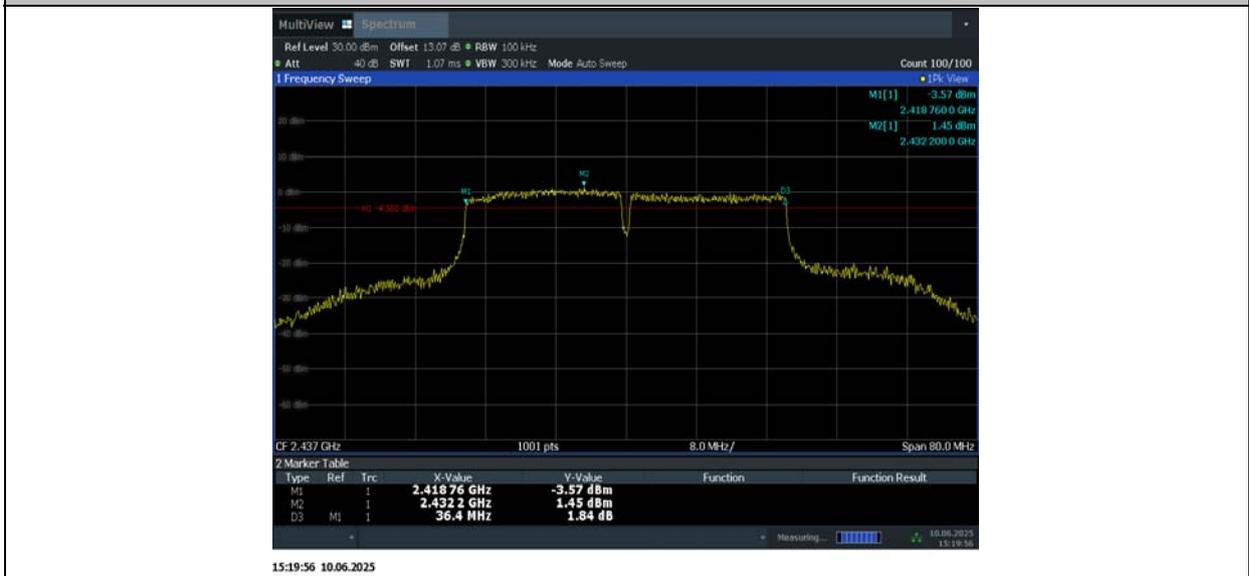
11N40MIMO\_Ant8\_2422



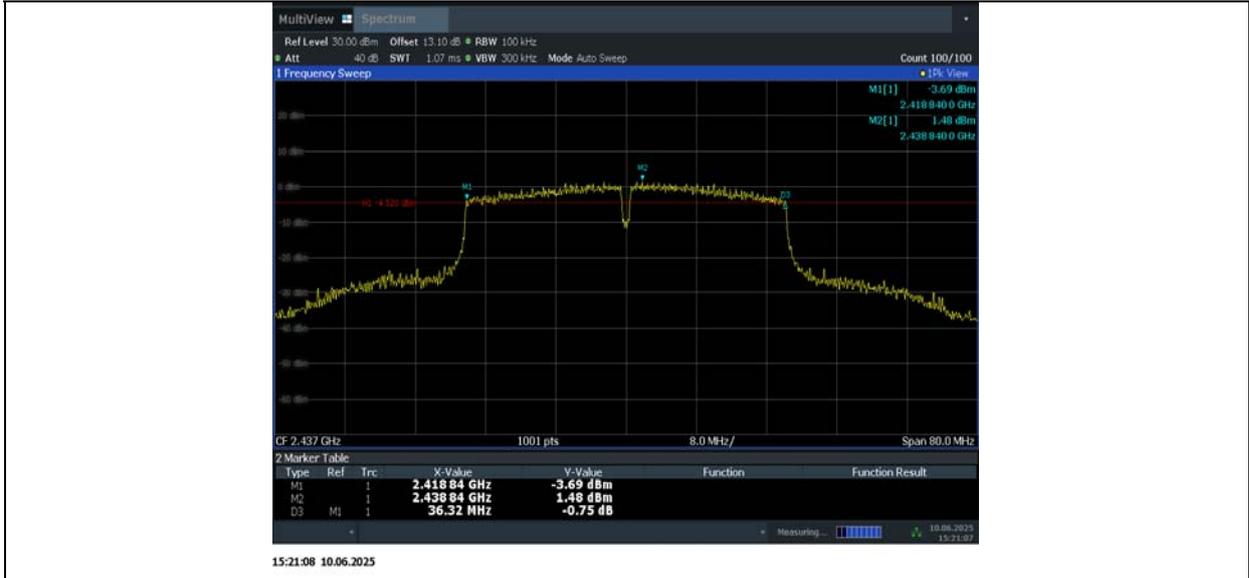
11N40MIMO\_Ant9\_2422



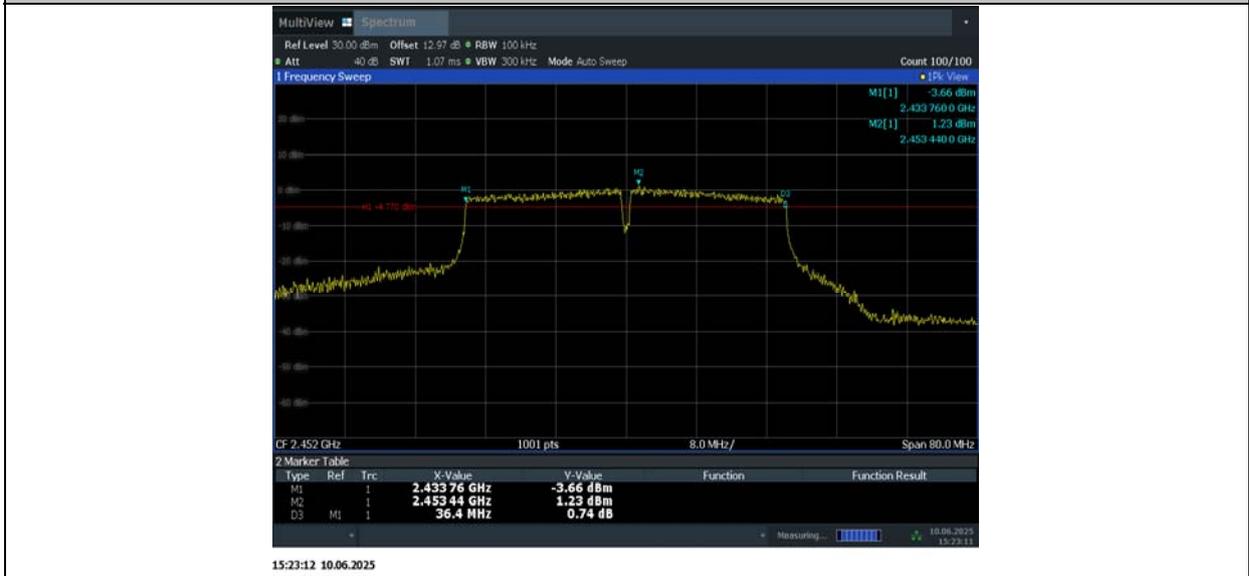
11N40MIMO\_Ant8\_2437



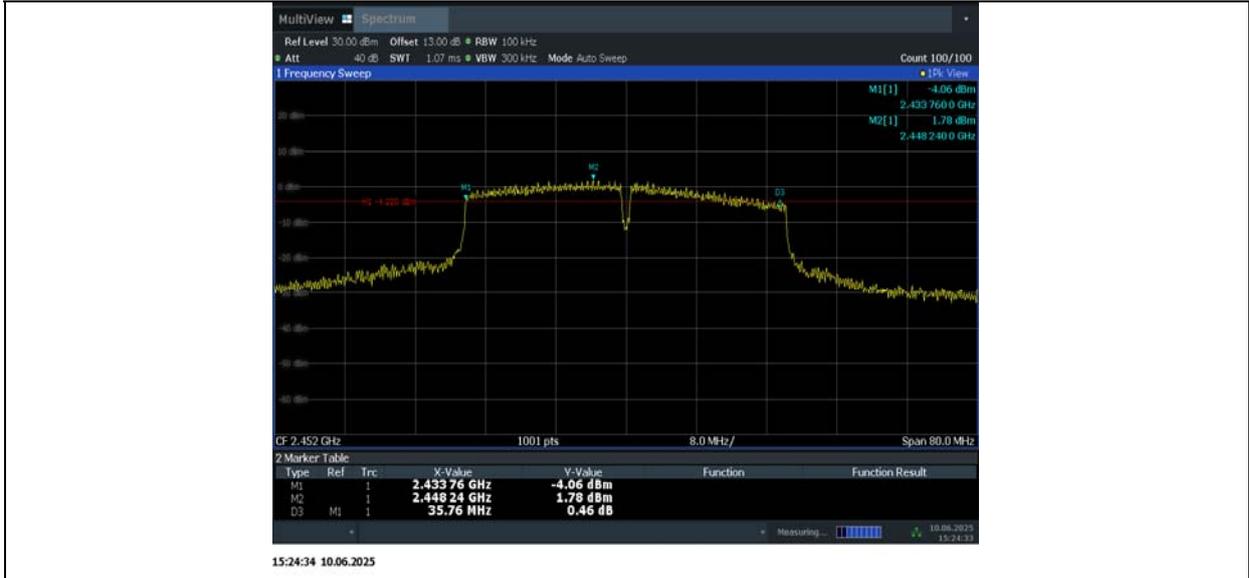
11N40MIMO\_Ant9\_2437



11N40MIMO\_Ant8\_2452



11N40MIMO\_Ant9\_2452



11AX20MIMO\_Ant8\_2412



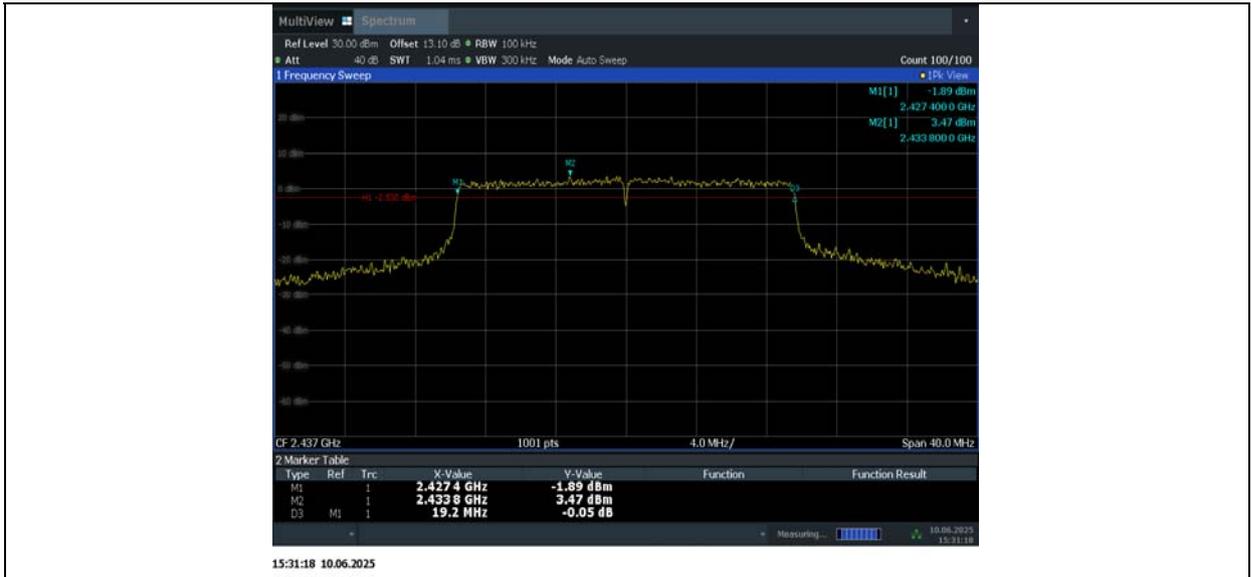
11AX20MIMO\_Ant9\_2412



11AX20MIMO\_Ant8\_2437



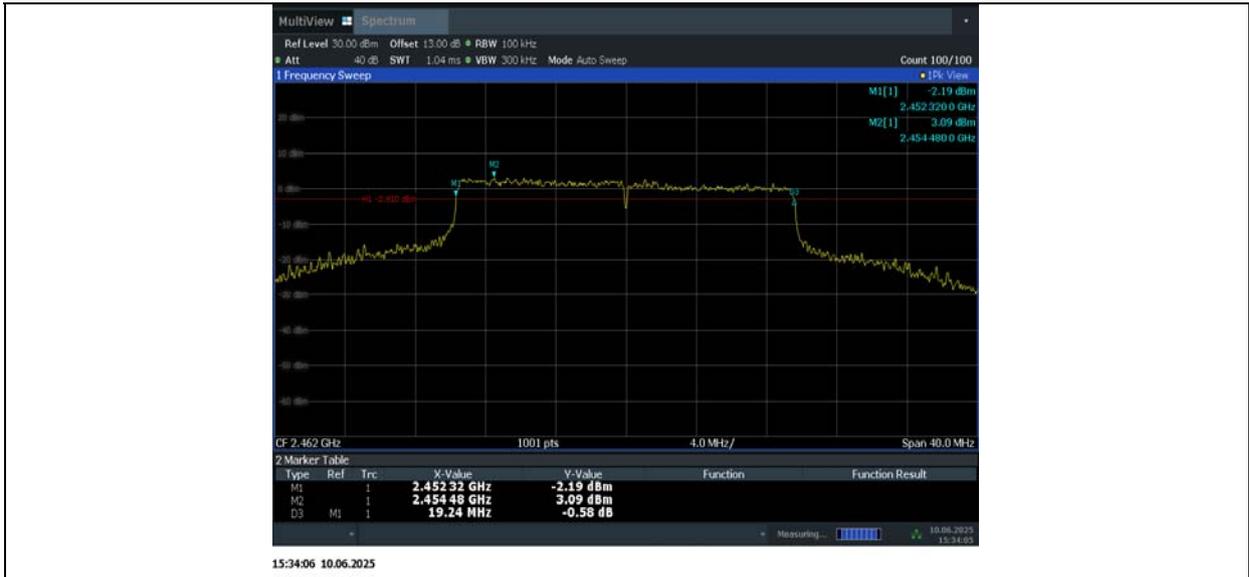
11AX20MIMO\_Ant9\_2437



11AX20MIMO\_Ant8\_2462



11AX20MIMO\_Ant9\_2462



11AX40MIMO\_Ant8\_2422



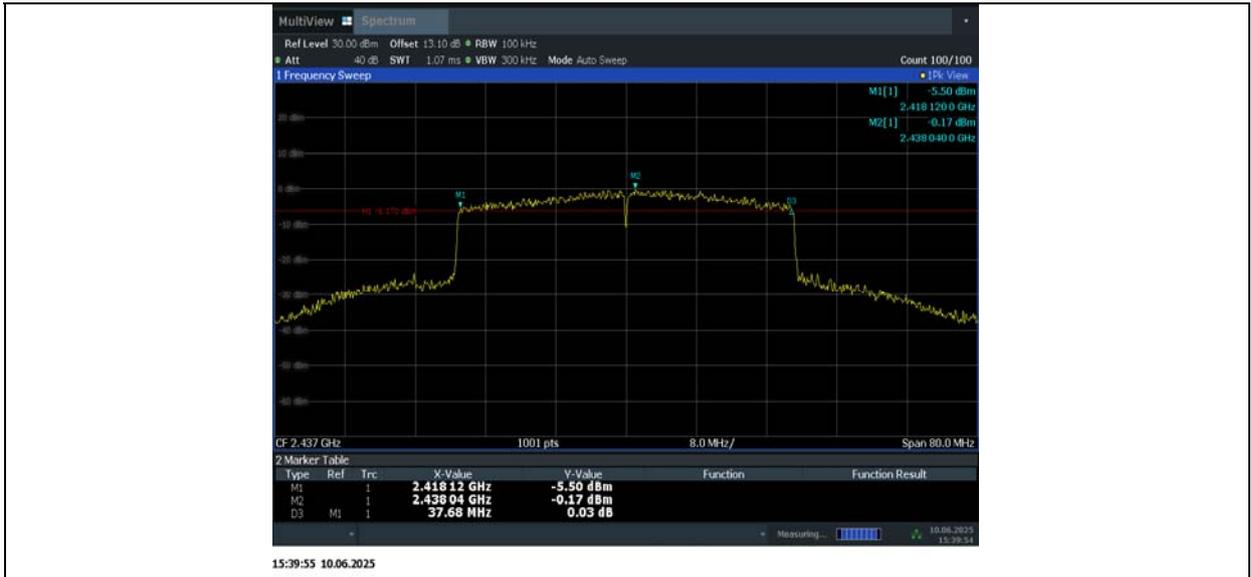
11AX40MIMO\_Ant9\_2422



11AX40MIMO\_Ant8\_2437



11AX40MIMO\_Ant9\_2437



11AX40MIMO\_Ant8\_2452



11AX40MIMO\_Ant9\_2452



**Conclusion: Pass**

## A.5. Band Edges Compliance

### Method of Measurement: See ANSI C63.10-2013-clause 6.10.4

Connect the spectrum analyzer to the EUT using an appropriate RF cable connected to the EUT output. Configure the spectrum analyzer settings as described below.

- a) Set Span = 100MHz
- b) Sweep Time: coupled
- c) Set the RBW= 100 kHz
- c) Set the VBW= 300 kHz
- d) Detector: Peak
- e) Trace: Max hold

### Measurement Limit:

Standard	Limit (dBc)
FCC 47 CFR Part 15.247 (d)	> 20

EUT ID: UT36a

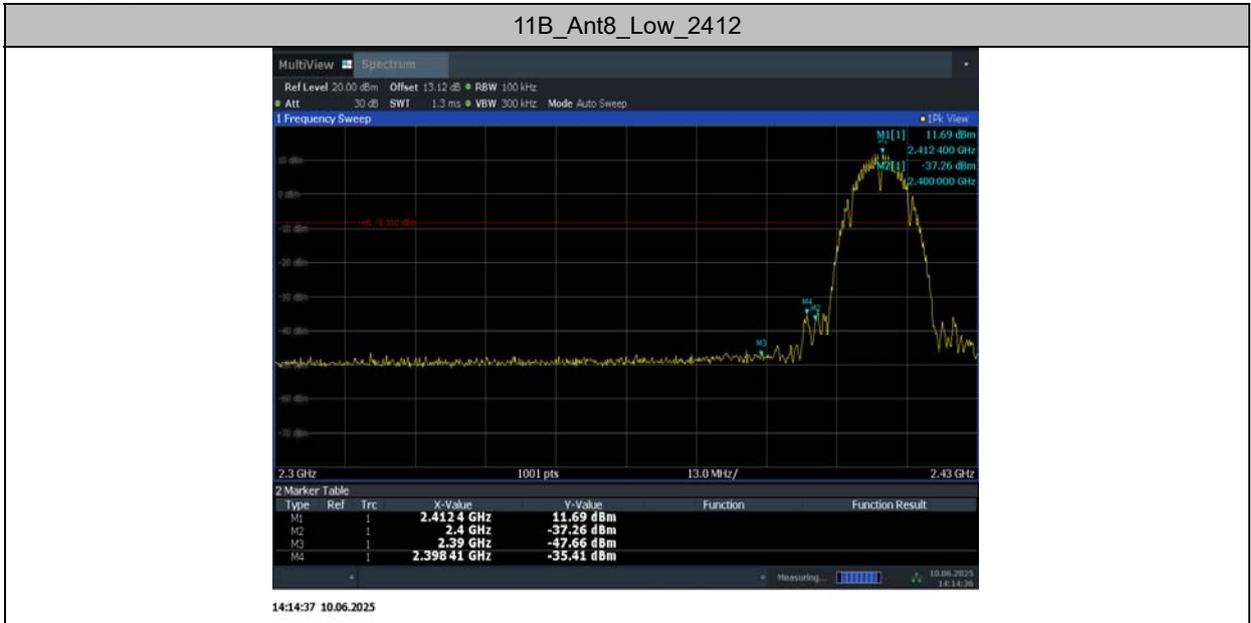
### Full RU MIMO

### Measurement Result:

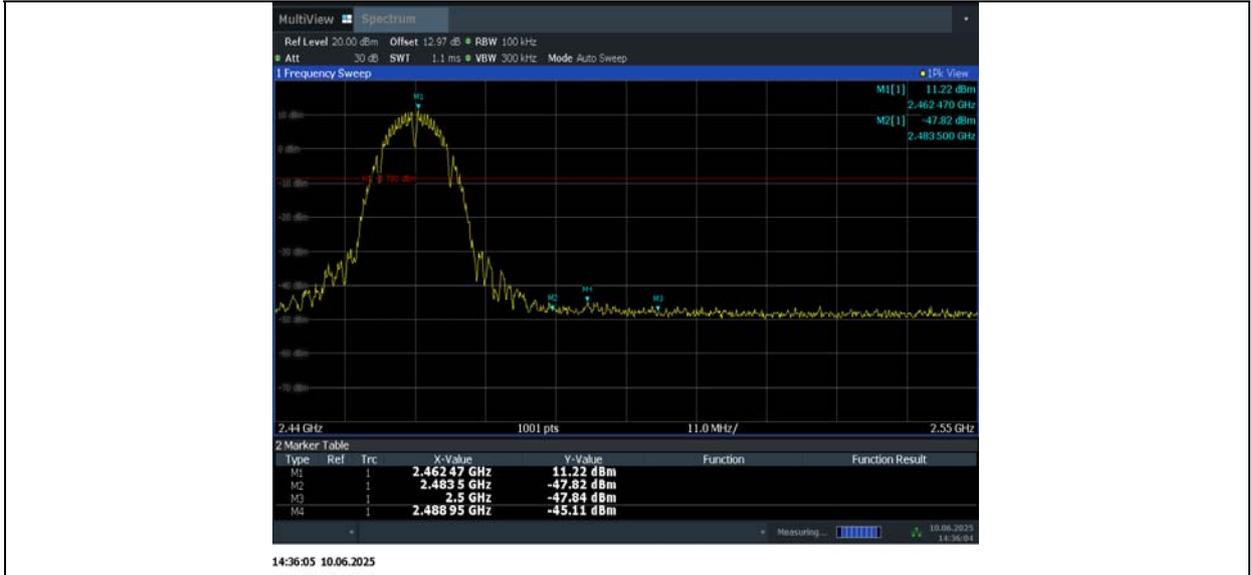
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant8	Low	2412	11.69	-35.41	≤-8.31	PASS
	Ant9	Low	2412	11.25	-28.12	≤-8.75	PASS
	Ant8	High	2462	11.22	-45.11	≤-8.78	PASS
	Ant9	High	2462	10.18	-45.33	≤-9.82	PASS
11G	Ant8	Low	2412	6.47	-23.36	≤-13.53	PASS
	Ant9	Low	2412	6.94	-14.57	≤-13.06	PASS
	Ant8	High	2462	4.94	-35.84	≤-15.06	PASS
	Ant9	High	2462	4.49	-31.79	≤-15.51	PASS
11N20MIMO	Ant8	Low	2412	5.37	-25.5	≤-14.63	PASS
	Ant9	Low	2412	7.77	-16.05	≤-12.23	PASS
	Ant8	High	2462	5.35	-32.64	≤-14.65	PASS
	Ant9	High	2462	5.32	-26.16	≤-14.68	PASS
11N40MIMO	Ant8	Low	2422	0.43	-32.5	≤-19.57	PASS
	Ant9	Low	2422	2.14	-24.91	≤-17.86	PASS
	Ant8	High	2452	0.94	-36.5	≤-19.06	PASS
	Ant9	High	2452	1.81	-27.82	≤-18.19	PASS
11AX20MIMO	Ant8	Low	2412	5.44	-27.94	≤-14.56	PASS
	Ant9	Low	2412	4.50	-19.86	≤-15.5	PASS
	Ant8	High	2462	3.85	-39.13	≤-16.15	PASS
	Ant9	High	2462	3.02	-30.64	≤-16.98	PASS
11AX40MIMO	Ant8	Low	2422	0.71	-37.86	≤-19.29	PASS
	Ant9	Low	2422	0.47	-25.05	≤-19.53	PASS

	Ant8	High	2452	1.85	-38.3	≤-18.15	PASS
	Ant9	High	2452	0.73	-26.8	≤-19.27	PASS

Test graphs as below:



11B\_Ant8\_High\_2462



11B\_Ant9\_High\_2462



11G\_Ant8\_Low\_2412



11G\_Ant9\_Low\_2412



11G\_Ant8\_High\_2462



11G\_Ant9\_High\_2462



11N20MIMO\_Ant8\_Low\_2412



11N20MIMO\_Ant9\_Low\_2412



11N20MIMO\_Ant8\_High\_2462



11N20MIMO\_Ant9\_High\_2462



11N40MIMO\_Ant8\_Low\_2422



11N40MIMO\_Ant9\_Low\_2422



11N40MIMO\_Ant8\_High\_2452



11N40MIMO\_Ant9\_High\_2452



11AX20MIMO\_Ant8\_Low\_2412



11AX20MIMO\_Ant9\_Low\_2412



11AX20MIMO\_Ant8\_High\_2462



11AX20MIMO\_Ant9\_High\_2462



11AX40MIMO\_Ant8\_Low\_2422



11AX40MIMO\_Ant9\_Low\_2422



11AX40MIMO\_Ant8\_High\_2452



## 11AX40MIMO\_Ant9\_High\_2452



**RU MIMO**

TestMode	Antenna	ChName	Frequency[MHz]	Ru Size	Ru Index	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11AX20MIMO	Ant8	Low	2412	26Tone	RU0	9.62	-27.94	≤-10.38	PASS
					RU8	10.63	-40.45	≤-9.37	PASS
				52Tone	RU37	9.52	-22.23	≤-10.48	PASS
					RU40	9.77	-33.4	≤-10.23	PASS
				106Tone	RU53	7.19	-22.1	≤-12.81	PASS
					RU54	6.62	-32.07	≤-13.38	PASS
	Ant9	Low	2412	26Tone	RU0	8.77	-30.13	≤-11.23	PASS
					RU8	9.28	-38.79	≤-10.72	PASS
				52Tone	RU37	9.37	-18.91	≤-10.63	PASS
					RU40	9.87	-27.63	≤-10.13	PASS
				106Tone	RU53	6.27	-19.13	≤-13.73	PASS
					RU54	6.38	-32.24	≤-13.62	PASS
	Ant8	High	2462	26Tone	RU0	11.34	-42.07	≤-8.66	PASS
					RU8	10.94	-45	≤-9.06	PASS
				52Tone	RU37	9.74	-39.98	≤-10.26	PASS
					RU40	9.95	-41.12	≤-10.05	PASS
				106Tone	RU53	6.27	-41.72	≤-13.73	PASS
					RU54	7.35	-33.52	≤-12.65	PASS
	Ant9	High	2462	26Tone	RU0	10.13	-40.93	≤-9.87	PASS
					RU8	9.30	-39.62	≤-10.7	PASS
52Tone				RU37	8.78	-39.74	≤-11.22	PASS	
				RU40	8.51	-36.96	≤-11.49	PASS	
106Tone				RU53	5.52	-37.81	≤-14.48	PASS	
				RU54	4.42	-37.21	≤-15.58	PASS	

Test graphs as below:





11AX20MIMO\_Ant8\_Low\_2412\_52Tone\_RU40



11AX20MIMO\_Ant8\_Low\_2412\_106Tone\_RU53



11AX20MIMO\_Ant8\_Low\_2412\_106Tone\_RU54



11AX20MIMO\_Ant9\_Low\_2412\_26Tone\_RU0



11AX20MIMO\_Ant9\_Low\_2412\_26Tone\_RU8



11AX20MIMO\_Ant9\_Low\_2412\_52Tone\_RU37



11AX20MIMO\_Ant9\_Low\_2412\_52Tone\_RU40



11AX20MIMO\_Ant9\_Low\_2412\_106Tone\_RU53



11AX20MIMO\_Ant9\_Low\_2412\_106Tone\_RU54



11AX20MIMO\_Ant8\_High\_2462\_26Tone\_RU0



11AX20MIMO\_Ant8\_High\_2462\_26Tone\_RU8



11AX20MIMO\_Ant8\_High\_2462\_52Tone\_RU37



11AX20MIMO\_Ant8\_High\_2462\_52Tone\_RU40



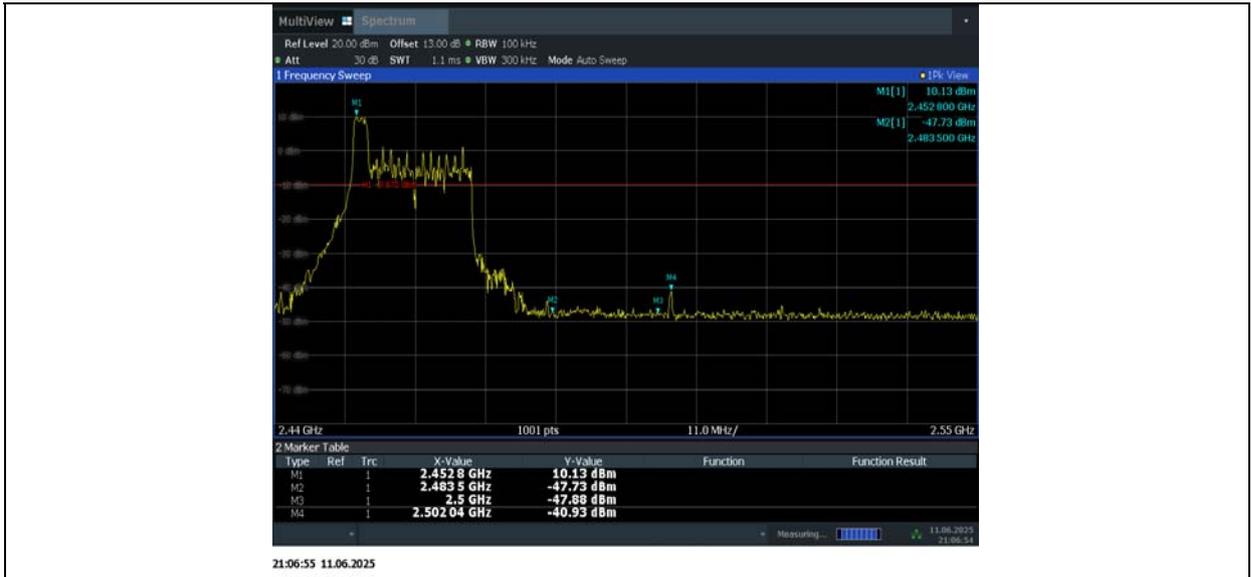
11AX20MIMO\_Ant8\_High\_2462\_106Tone\_RU53



11AX20MIMO\_Ant8\_High\_2462\_106Tone\_RU54



11AX20MIMO\_Ant9\_High\_2462\_26Tone\_RU0



11AX20MIMO\_Ant9\_High\_2462\_26Tone\_RU8



11AX20MIMO\_Ant9\_High\_2462\_52Tone\_RU37



11AX20MIMO\_Ant9\_High\_2462\_52Tone\_RU40



11AX20MIMO\_Ant9\_High\_2462\_106Tone\_RU53



**Conclusion: Pass**

## **A.6. Transmitter Spurious Emission**

### **A.6.1 Transmitter Spurious Emission – Conducted**

#### **Method of Measurement: See ANSI C63.10-2013-clause 11.11**

Establish a reference level by using the following procedure:

- a) Set instrument center frequency to DTS channel center frequency
- b) Set the span to  $\geq 1.5$  times the DTS bandwidth
- c) Set the RBW= 100 kHz
- d) Set the VBW= 300 kHz
- 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 PSD level

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

Establish an emission level by using the following procedure:

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW = 300 kHz.
- d) Detector = peak.
- e) Sweep time = auto couple.
- 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.

#### **Measurement Limit:**

<b>Standard</b>	<b>Limit</b>
FCC 47 CFR Part 15.247 (d)	20dB below peak output power in 100 kHz bandwidth

#### **EUT ID: UT36a**

#### **Measurement Results:**

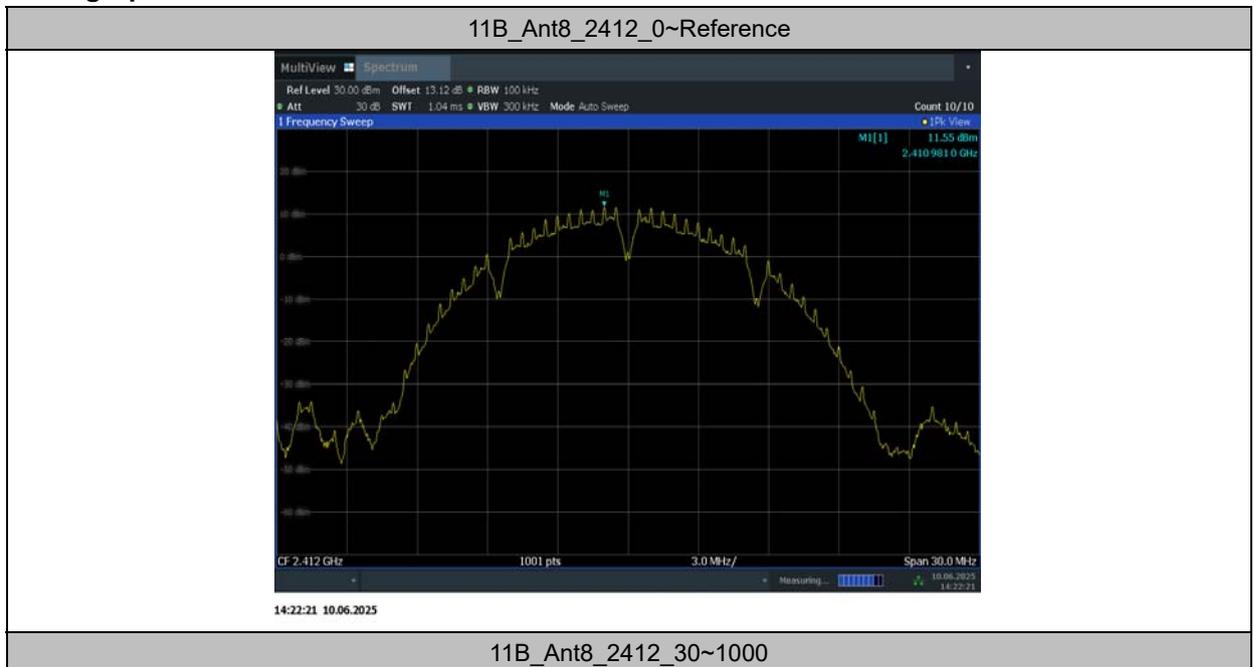
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant8	2412	Reference	11.55	11.55	---	PASS
			30~1000	11.55	-56.65	$\leq -8.45$	PASS
			1000~26500	11.55	-44.25	$\leq -8.45$	PASS
	Ant9	2412	Reference	11.47	11.47	---	PASS
			30~1000	11.47	-57	$\leq -8.53$	PASS

	Ant8	2437	1000~26500	11.47	-44.04	$\leq -8.53$	PASS
			Reference	11.22	11.22	---	PASS
			30~1000	11.22	-57.06	$\leq -8.78$	PASS
	Ant9	2437	1000~26500	11.22	-43.67	$\leq -8.78$	PASS
			Reference	10.73	10.73	---	PASS
			30~1000	10.73	-56.07	$\leq -9.27$	PASS
	Ant8	2462	1000~26500	10.73	-43.72	$\leq -9.27$	PASS
			Reference	10.83	10.83	---	PASS
			30~1000	10.83	-54.93	$\leq -9.17$	PASS
	Ant9	2462	1000~26500	10.83	-44.59	$\leq -9.17$	PASS
			Reference	10.64	10.64	---	PASS
			30~1000	10.64	-56.74	$\leq -9.36$	PASS
11G	Ant8	2412	1000~26500	10.64	-43.94	$\leq -9.36$	PASS
			Reference	6.65	6.65	---	PASS
			30~1000	6.65	-56.81	$\leq -13.35$	PASS
	Ant9	2412	1000~26500	6.65	-43.67	$\leq -13.35$	PASS
			Reference	7.60	7.60	---	PASS
			30~1000	7.60	-55.93	$\leq -12.4$	PASS
	Ant8	2437	1000~26500	7.60	-43.3	$\leq -12.4$	PASS
			Reference	4.62	4.62	---	PASS
			30~1000	4.62	-56.94	$\leq -15.38$	PASS
	Ant9	2437	1000~26500	4.62	-44.13	$\leq -15.38$	PASS
			Reference	5.92	5.92	---	PASS
			30~1000	5.92	-56.98	$\leq -14.08$	PASS
Ant8	2462	1000~26500	5.92	-44.28	$\leq -14.08$	PASS	
		Reference	4.68	4.68	---	PASS	
		30~1000	4.68	-56.55	$\leq -15.32$	PASS	
Ant9	2462	1000~26500	4.68	-43.87	$\leq -15.32$	PASS	
		Reference	4.62	4.62	---	PASS	
		30~1000	4.62	-57.03	$\leq -15.38$	PASS	
11N20MIMO	Ant8	2412	1000~26500	4.62	-44.32	$\leq -15.38$	PASS
			Reference	5.90	5.90	---	PASS
			30~1000	5.90	-56.92	$\leq -14.1$	PASS
	Ant9	2412	1000~26500	5.90	-44.27	$\leq -14.1$	PASS
			Reference	7.26	7.26	---	PASS
			30~1000	7.26	-56.65	$\leq -12.74$	PASS
	Ant8	2437	1000~26500	7.26	-44.31	$\leq -12.74$	PASS
			Reference	5.90	5.90	---	PASS
			30~1000	5.90	-56.68	$\leq -14.1$	PASS
	Ant9	2437	1000~26500	5.90	-44.78	$\leq -14.1$	PASS
			Reference	6.99	6.99	---	PASS
				30~1000	6.99	-56.5	$\leq -13.01$

	Ant8	2462	1000~26500	6.99	-44.33	$\leq -13.01$	PASS	
			Reference	4.94	4.94	---	PASS	
			30~1000	4.94	-57.3	$\leq -15.06$	PASS	
	Ant9	2462	1000~26500	4.94	-44.05	$\leq -15.06$	PASS	
			Reference	5.55	5.55	---	PASS	
			30~1000	5.55	-56.42	$\leq -14.45$	PASS	
11N40MIMO	Ant8	2422	Reference	0.42	0.42	---	PASS	
			30~1000	0.42	-56.41	$\leq -19.58$	PASS	
			1000~26500	0.42	-44.22	$\leq -19.58$	PASS	
	Ant9	2422	Reference	2.21	2.21	---	PASS	
			30~1000	2.21	-56.52	$\leq -17.79$	PASS	
			1000~26500	2.21	-44.53	$\leq -17.79$	PASS	
	Ant8	2437	Reference	0.90	0.90	---	PASS	
			30~1000	0.90	-56.38	$\leq -19.1$	PASS	
			1000~26500	0.90	-44.12	$\leq -19.1$	PASS	
	Ant9	2437	Reference	2.48	2.48	---	PASS	
			30~1000	2.48	-56.42	$\leq -17.52$	PASS	
			1000~26500	2.48	-42.86	$\leq -17.52$	PASS	
	Ant8	2452	Reference	0.62	0.62	---	PASS	
			30~1000	0.62	-56.88	$\leq -19.38$	PASS	
			1000~26500	0.62	-43.75	$\leq -19.38$	PASS	
	Ant9	2452	Reference	1.69	1.69	---	PASS	
			30~1000	1.69	-56.8	$\leq -18.31$	PASS	
			1000~26500	1.69	-44.32	$\leq -18.31$	PASS	
	11AX20MIMO	Ant8	2412	Reference	6.30	6.30	---	PASS
				30~1000	6.30	-56.58	$\leq -13.7$	PASS
				1000~26500	6.30	-44.06	$\leq -13.7$	PASS
		Ant9	2412	Reference	5.06	5.06	---	PASS
				30~1000	5.06	-56	$\leq -14.94$	PASS
				1000~26500	5.06	-43.24	$\leq -14.94$	PASS
Ant8		2437	Reference	4.61	4.61	---	PASS	
			30~1000	4.61	-56.88	$\leq -15.39$	PASS	
			1000~26500	4.61	-44.06	$\leq -15.39$	PASS	
Ant9		2437	Reference	3.79	3.79	---	PASS	
			30~1000	3.79	-56.66	$\leq -16.21$	PASS	
			1000~26500	3.79	-43.78	$\leq -16.21$	PASS	
Ant8		2462	Reference	4.15	4.15	---	PASS	
			30~1000	4.15	-57.03	$\leq -15.85$	PASS	
			1000~26500	4.15	-43.39	$\leq -15.85$	PASS	
Ant9		2462	Reference	3.72	3.72	---	PASS	
			30~1000	3.72	-56.38	$\leq -16.28$	PASS	

			1000~26500	3.72	-44.23	≤-16.28	PASS
11AX40MIMO	Ant8	2422	Reference	1.00	1.00	---	PASS
			30~1000	1.00	-56.56	≤-19	PASS
			1000~26500	1.00	-43.53	≤-19	PASS
	Ant9	2422	Reference	0.59	0.59	---	PASS
			30~1000	0.59	-56.57	≤-19.41	PASS
			1000~26500	0.59	-43.68	≤-19.41	PASS
	Ant8	2437	Reference	1.43	1.43	---	PASS
			30~1000	1.43	-56.72	≤-18.57	PASS
			1000~26500	1.43	-41.97	≤-18.57	PASS
	Ant9	2437	Reference	0.74	0.74	---	PASS
			30~1000	0.74	-55.93	≤-19.26	PASS
			1000~26500	0.74	-44.16	≤-19.26	PASS
	Ant8	2452	Reference	1.32	1.32	---	PASS
			30~1000	1.32	-56.72	≤-18.68	PASS
			1000~26500	1.32	-44.21	≤-18.68	PASS
Ant9	2452	Reference	0.94	0.94	---	PASS	
		30~1000	0.94	-56.72	≤-19.06	PASS	
		1000~26500	0.94	-43.96	≤-19.06	PASS	

Test graphs as below:





11B\_Ant8\_2412\_1000~26500



11B\_Ant9\_2412\_0~Reference



11B\_Ant9\_2412\_30~1000



11B\_Ant9\_2412\_1000~26500



11B\_Ant8\_2437\_0~Reference



11B\_Ant8\_2437\_30~1000



11B\_Ant8\_2437\_1000~26500



11B\_Ant9\_2437\_0~Reference



11B\_Ant9\_2437\_30~1000



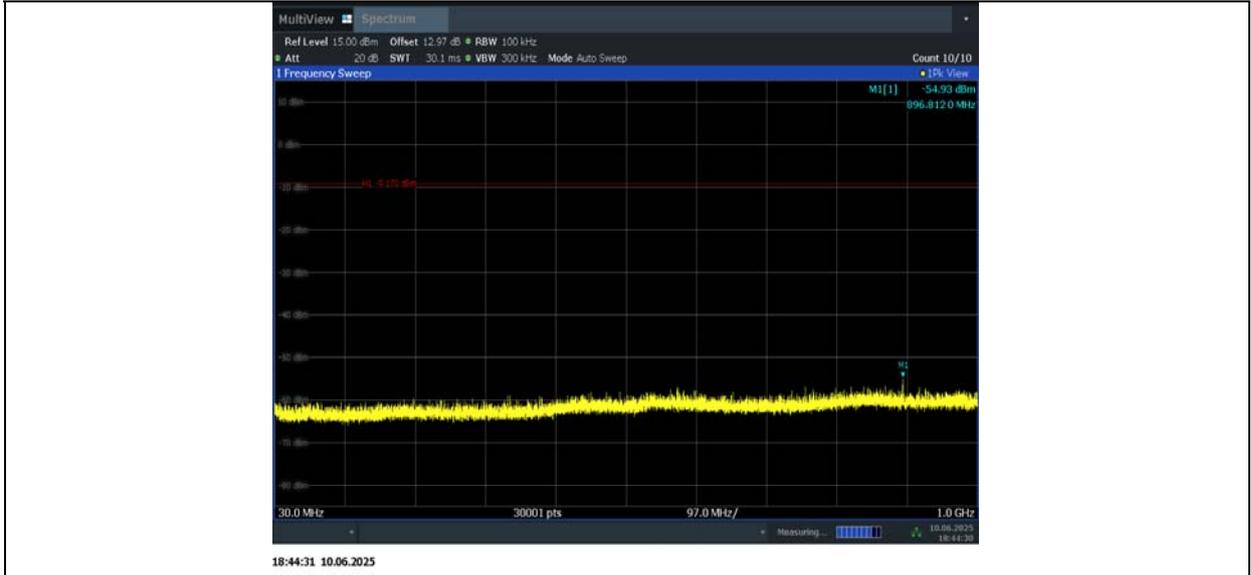
11B\_Ant9\_2437\_1000~26500



11B\_Ant8\_2462\_0~Reference



11B\_Ant8\_2462\_30~1000



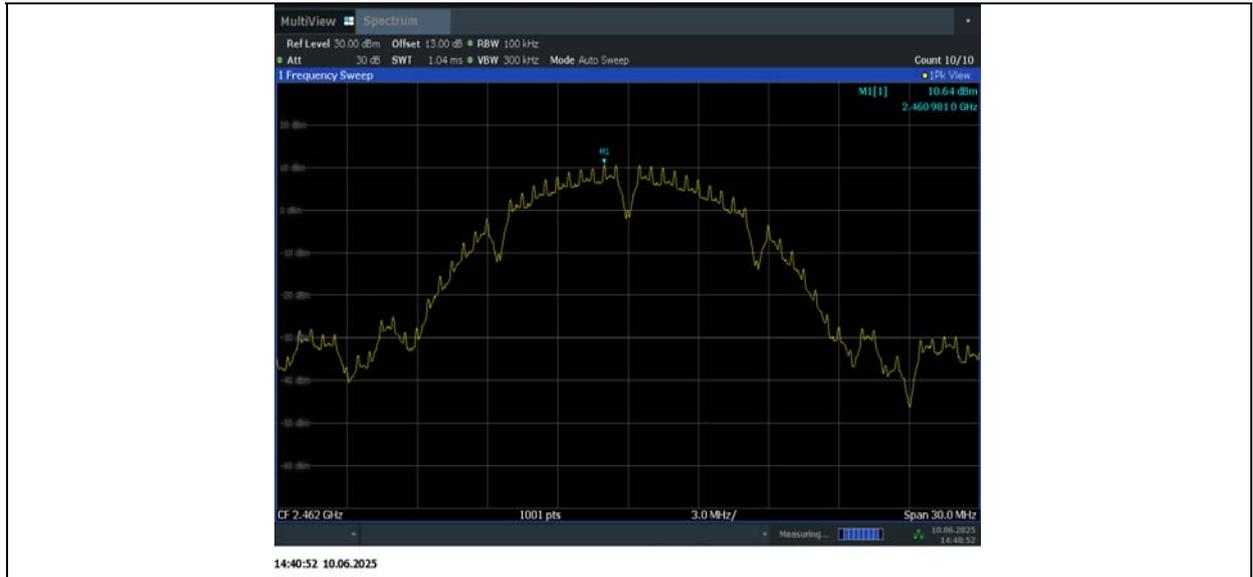
18:44:31 10.06.2025

11B\_Ant8\_2462\_1000~26500



18:45:07 10.06.2025

11B\_Ant9\_2462\_0~Reference



11B\_Ant9\_2462\_30~1000



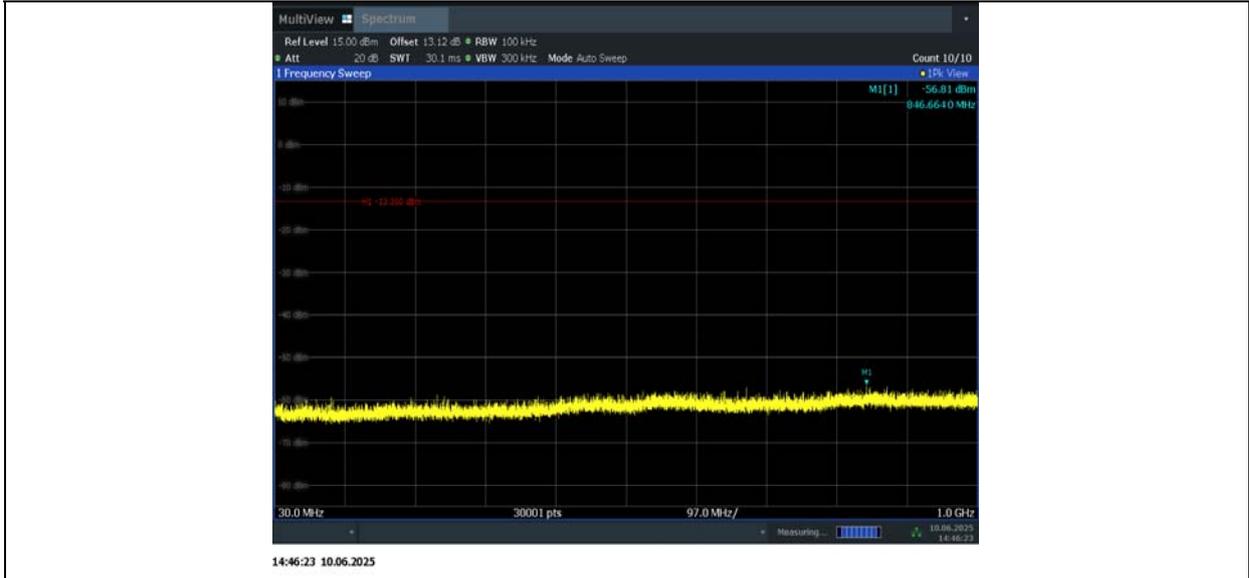
11B\_Ant9\_2462\_1000~26500



11G\_Ant8\_2412\_0~Reference



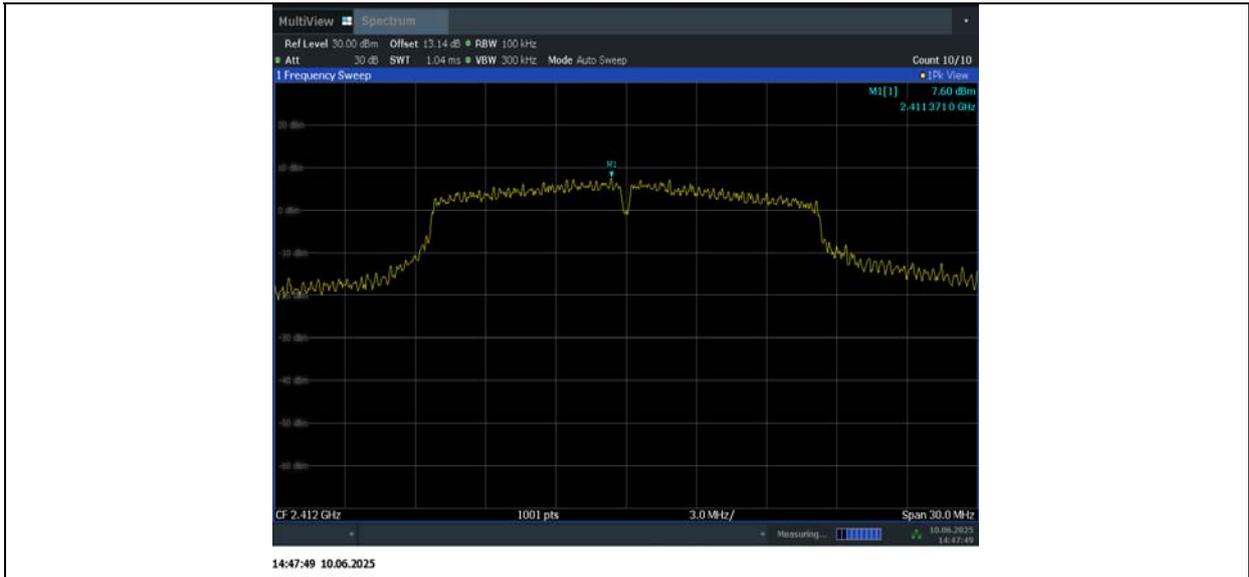
11G\_Ant8\_2412\_30~1000



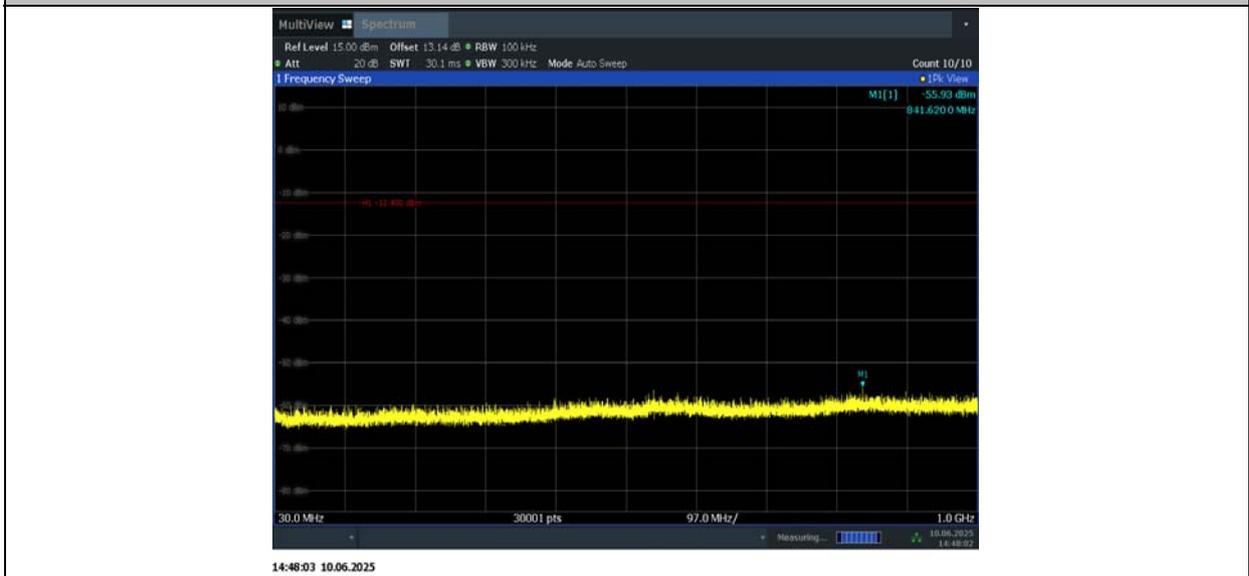
11G\_Ant8\_2412\_1000~26500



11G\_Ant9\_2412\_0~Reference



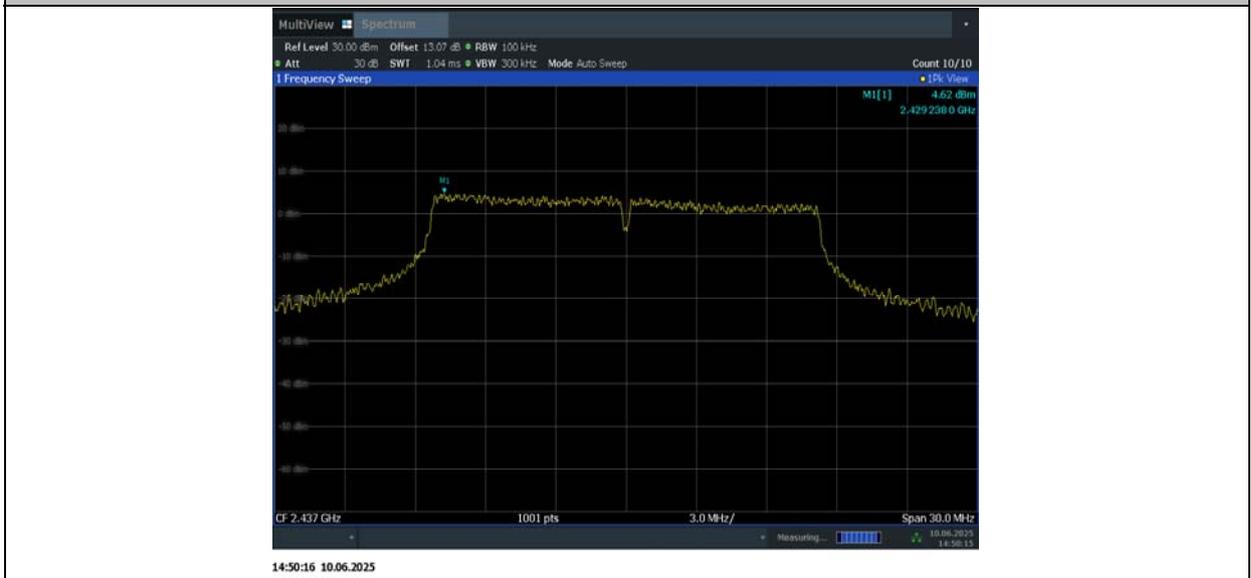
11G\_Ant9\_2412\_30~1000



11G\_Ant9\_2412\_1000~26500



11G\_Ant8\_2437\_0~Reference



11G\_Ant8\_2437\_30~1000



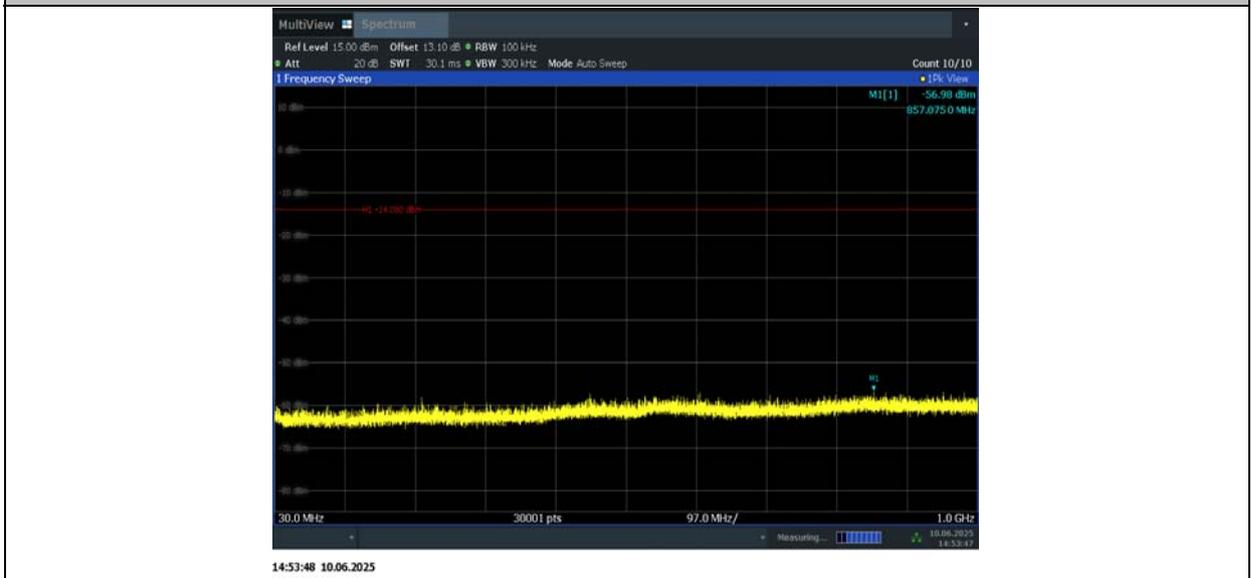
11G\_Ant8\_2437\_1000~26500



11G\_Ant9\_2437\_0~Reference



11G\_Ant9\_2437\_30~1000



11G\_Ant9\_2437\_1000~26500



11G\_Ant8\_2462\_0~Reference



11G\_Ant8\_2462\_30~1000



11G\_Ant8\_2462\_1000~26500



11G\_Ant9\_2462\_0~Reference



11G\_Ant9\_2462\_30~1000



11G\_Ant9\_2462\_1000~26500



11N20MIMO\_Ant8\_2412\_0~Reference



11N20MIMO\_Ant8\_2412\_30~1000



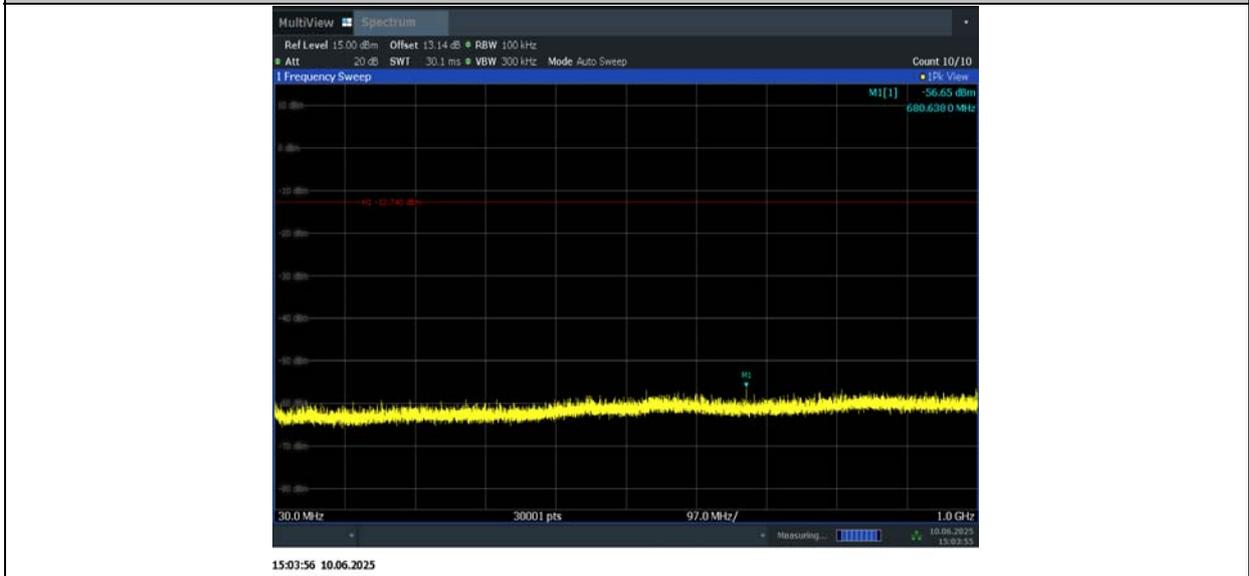
11N20MIMO\_Ant8\_2412\_1000~26500



11N20MIMO\_Ant9\_2412\_0~Reference



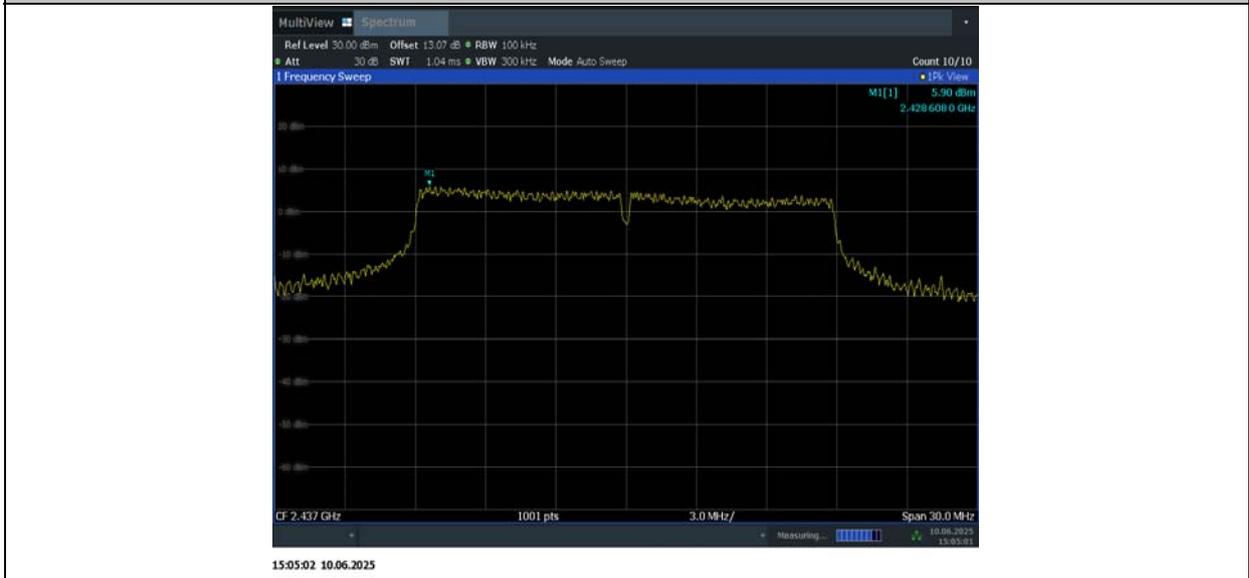
11N20MIMO\_Ant9\_2412\_30~1000



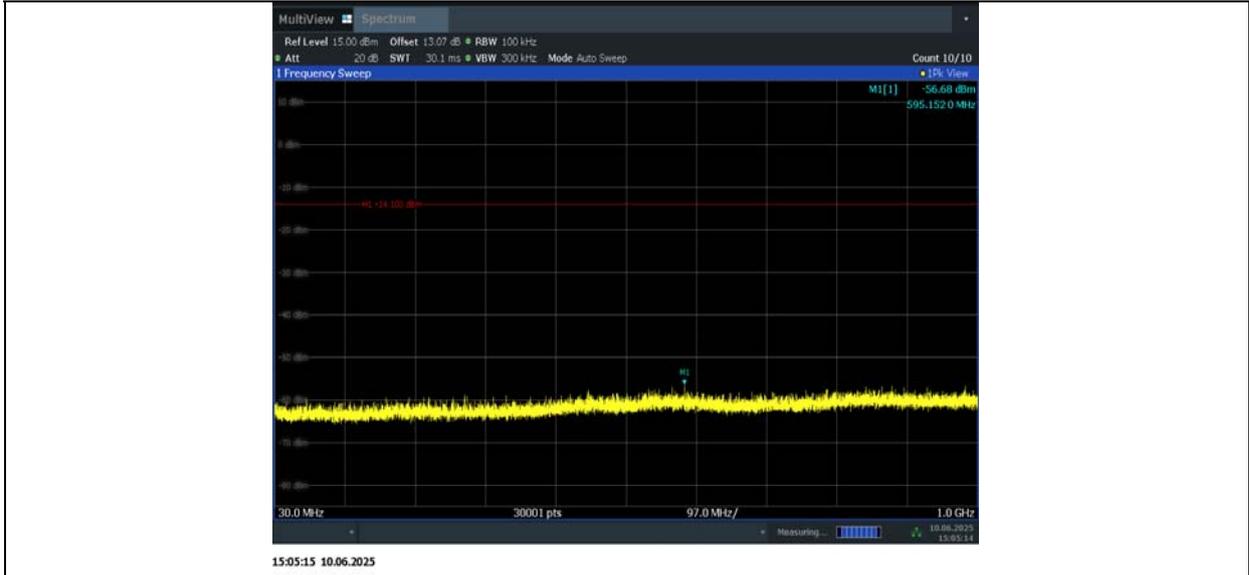
11N20MIMO\_Ant9\_2412\_1000~26500



11N20MIMO\_Ant8\_2437\_0~Reference



11N20MIMO\_Ant8\_2437\_30~1000



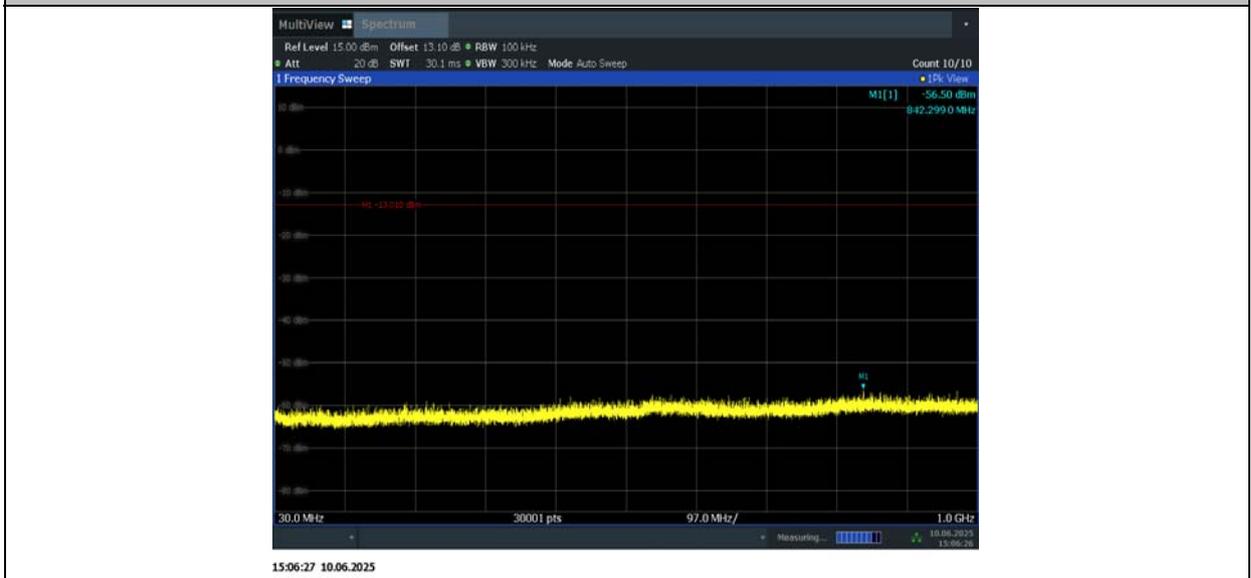
11N20MIMO\_Ant8\_2437\_1000~26500



11N20MIMO\_Ant9\_2437\_0~Reference



11N20MIMO\_Ant9\_2437\_30~1000



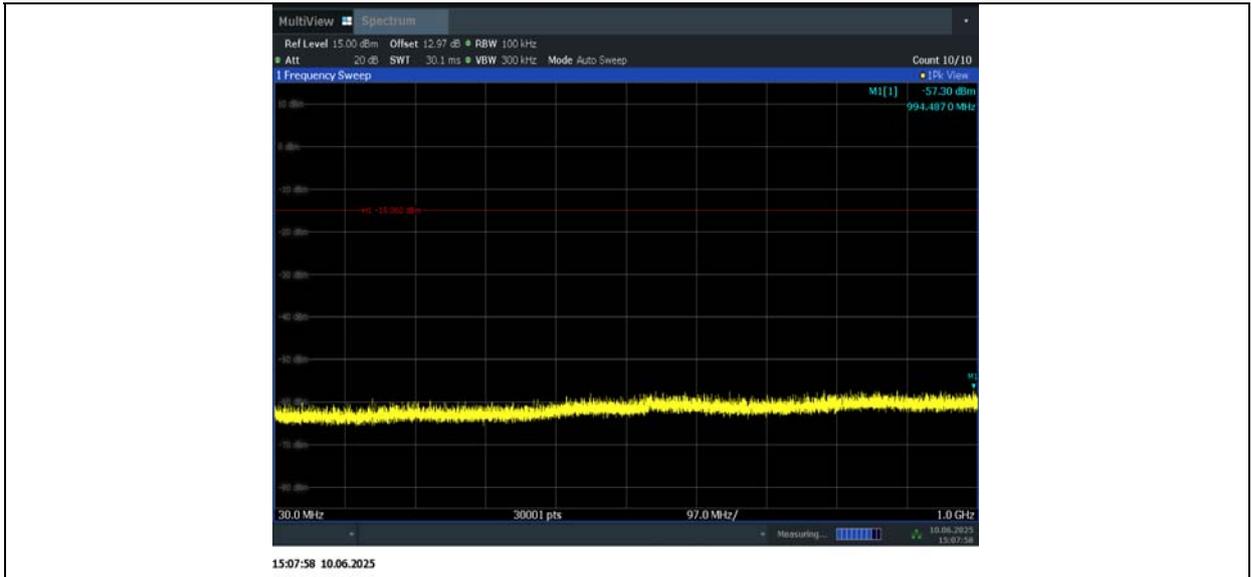
11N20MIMO\_Ant9\_2437\_1000~26500



11N20MIMO\_Ant8\_2462\_0~Reference



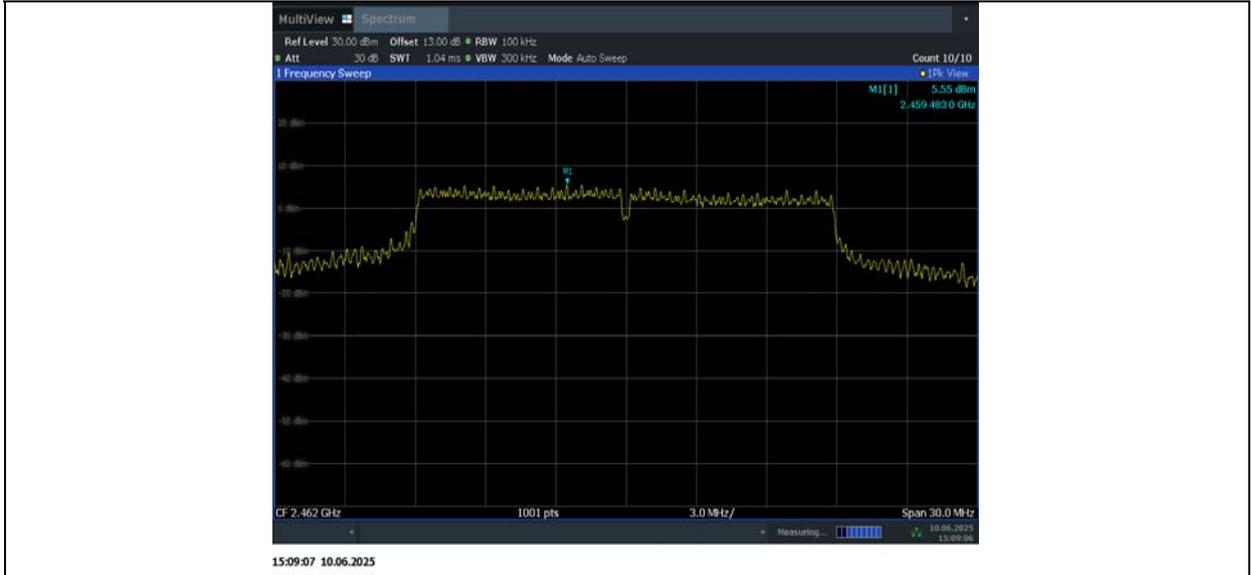
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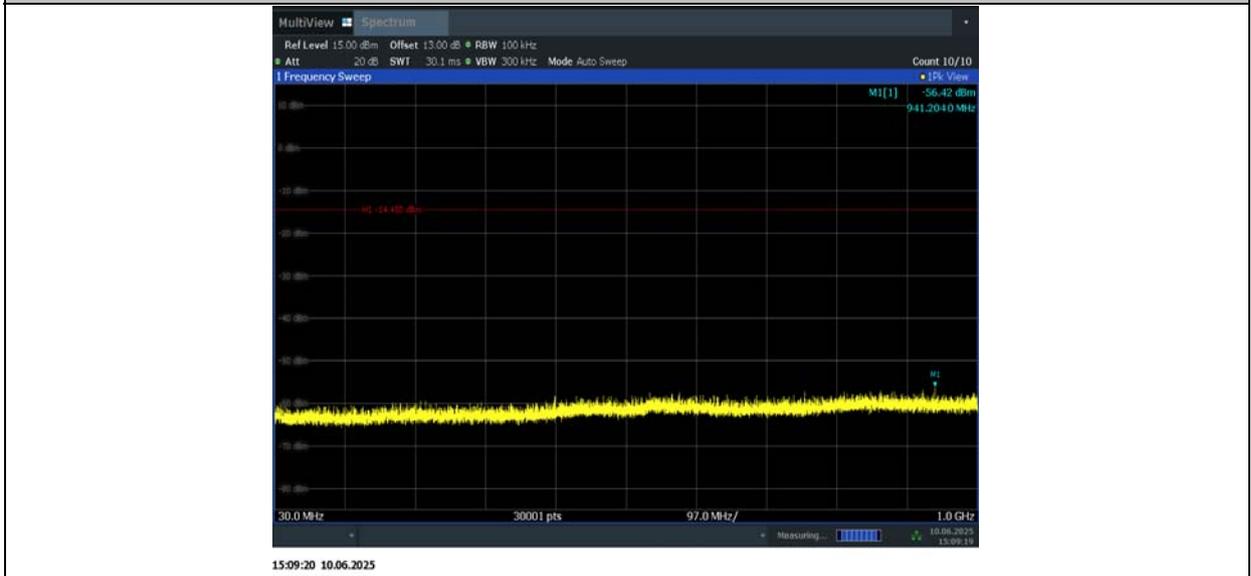
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11N20MIMO\_Ant9\_2462\_0~Reference



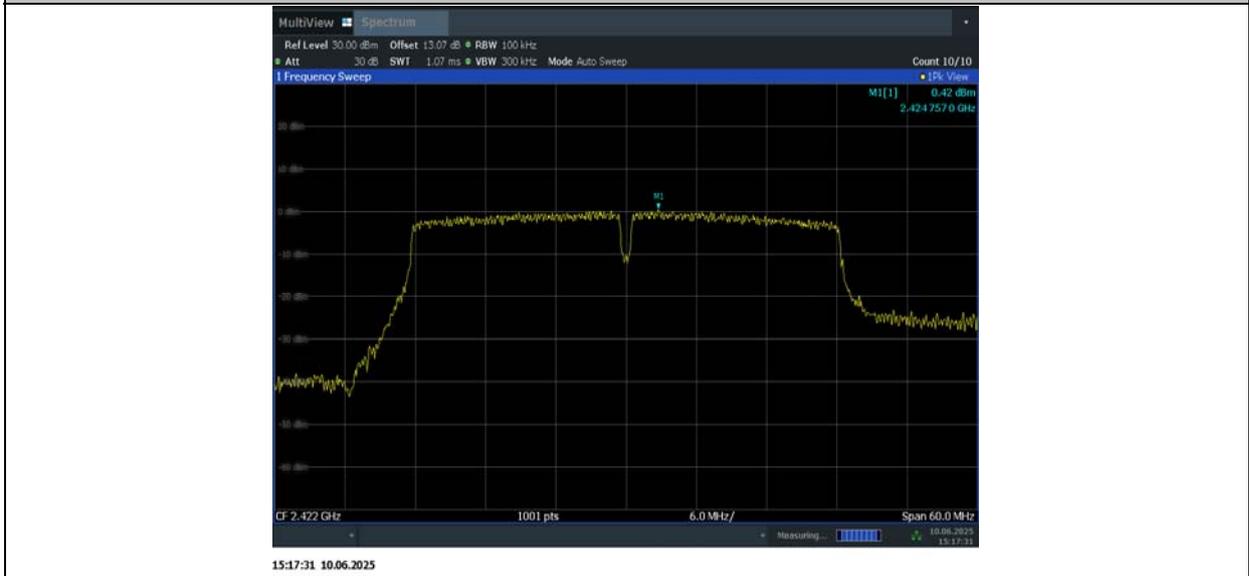
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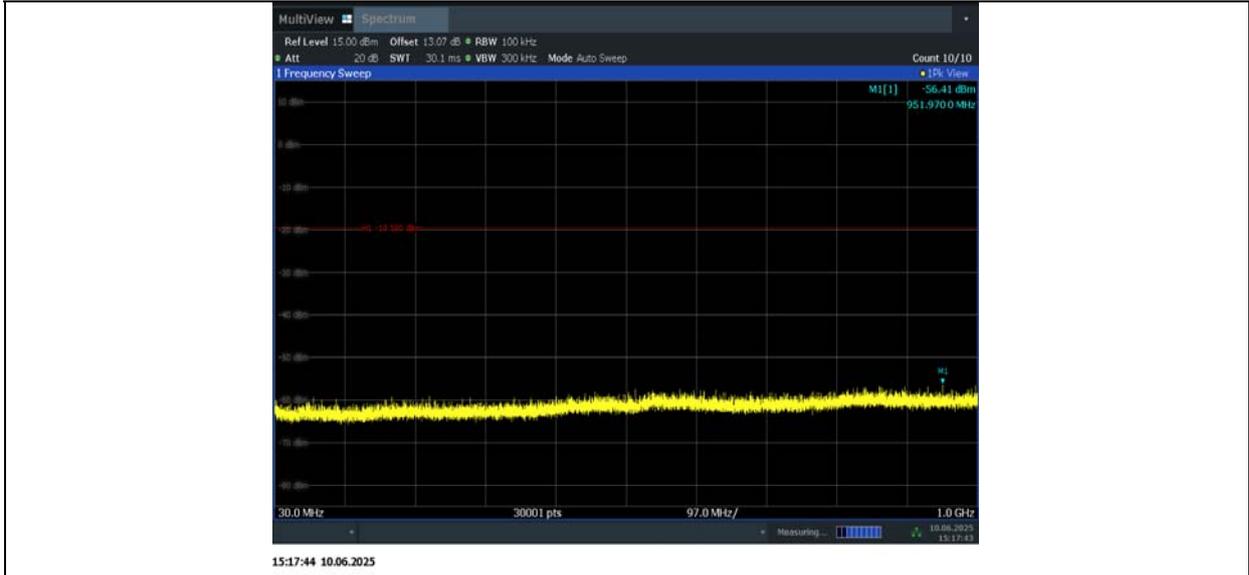
11N20MIMO\_Ant9\_2462\_1000~26500



11N40MIMO\_Ant8\_2422\_0~Reference



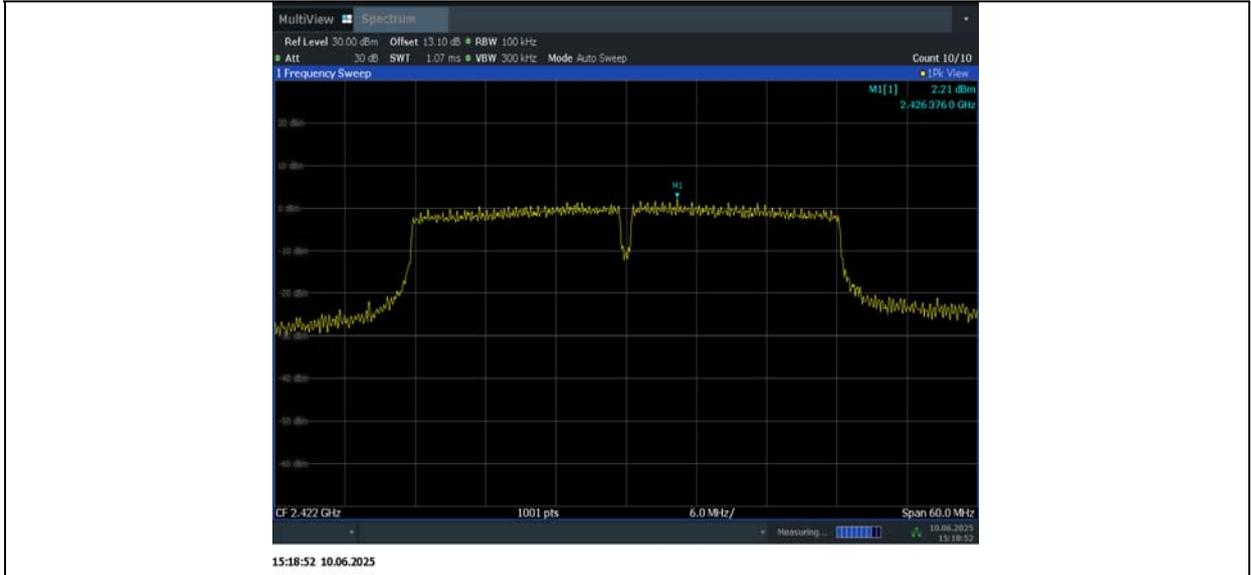
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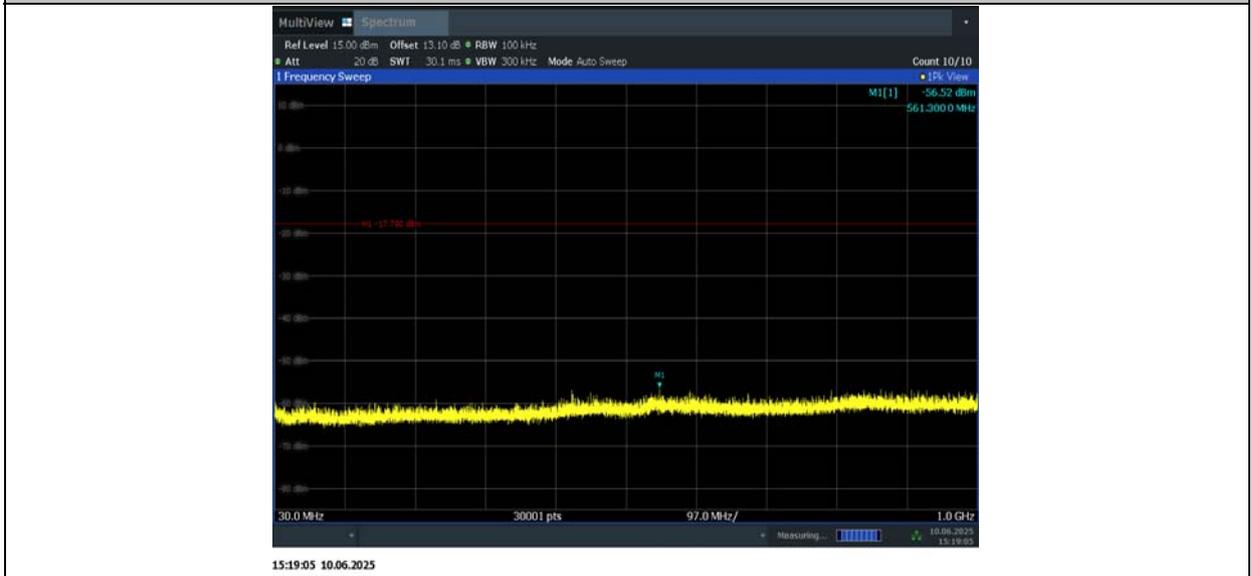
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11N40MIMO\_Ant9\_2422\_0~Reference



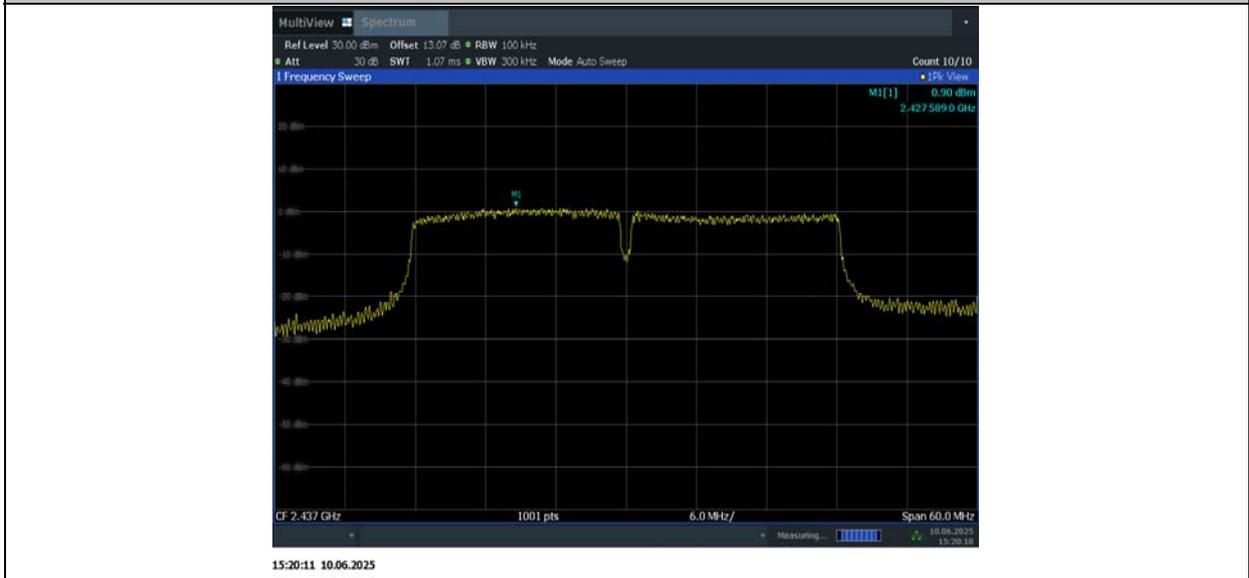
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11N40MIMO\_Ant9\_2422\_1000~26500



11N40MIMO\_Ant8\_2437\_0~Reference



11N40MIMO\_Ant8\_2437\_30~1000



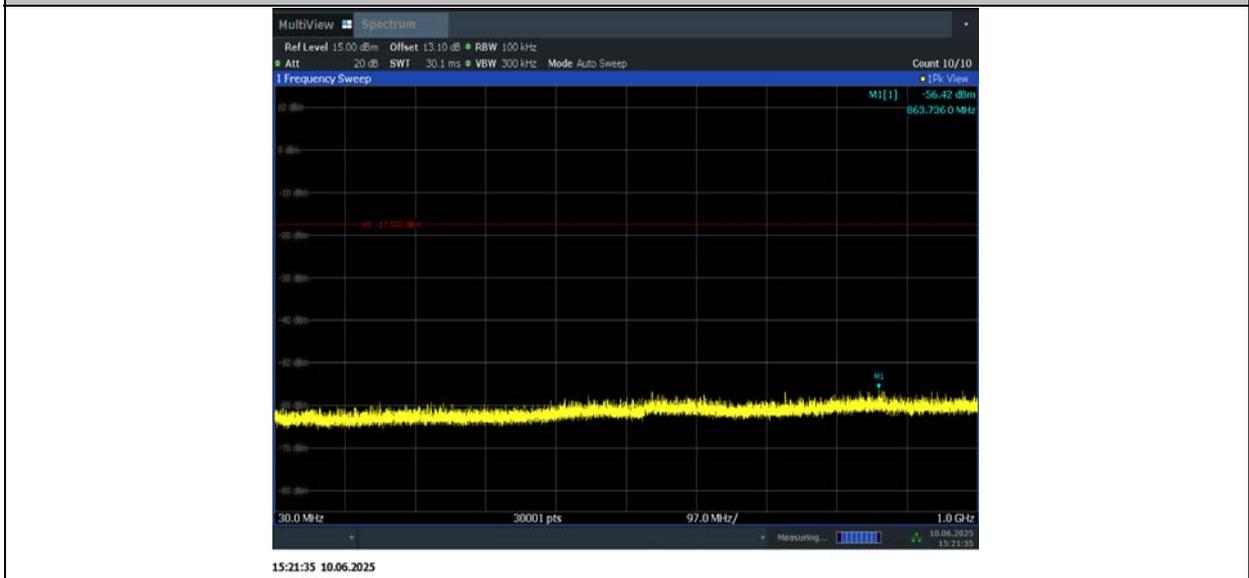
11N40MIMO\_Ant8\_2437\_1000~26500



11N40MIMO\_Ant9\_2437\_0~Reference



11N40MIMO\_Ant9\_2437\_30~1000



11N40MIMO\_Ant9\_2437\_1000~26500



11N40MIMO\_Ant8\_2452\_0~Reference



11N40MIMO\_Ant8\_2452\_30~1000



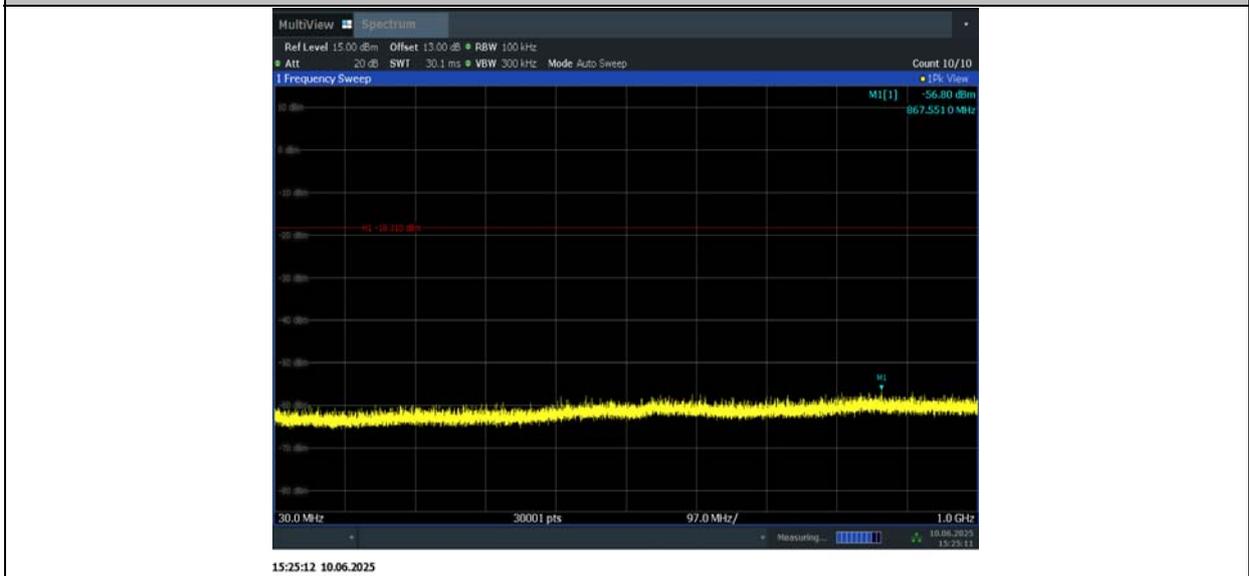
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11N40MIMO\_Ant9\_2452\_0~Reference



11N40MIMO\_Ant9\_2452\_30~1000



11N40MIMO\_Ant9\_2452\_1000~26500



11AX20MIMO\_Ant8\_2412\_0~Reference



11AX20MIMO\_Ant8\_2412\_30~1000



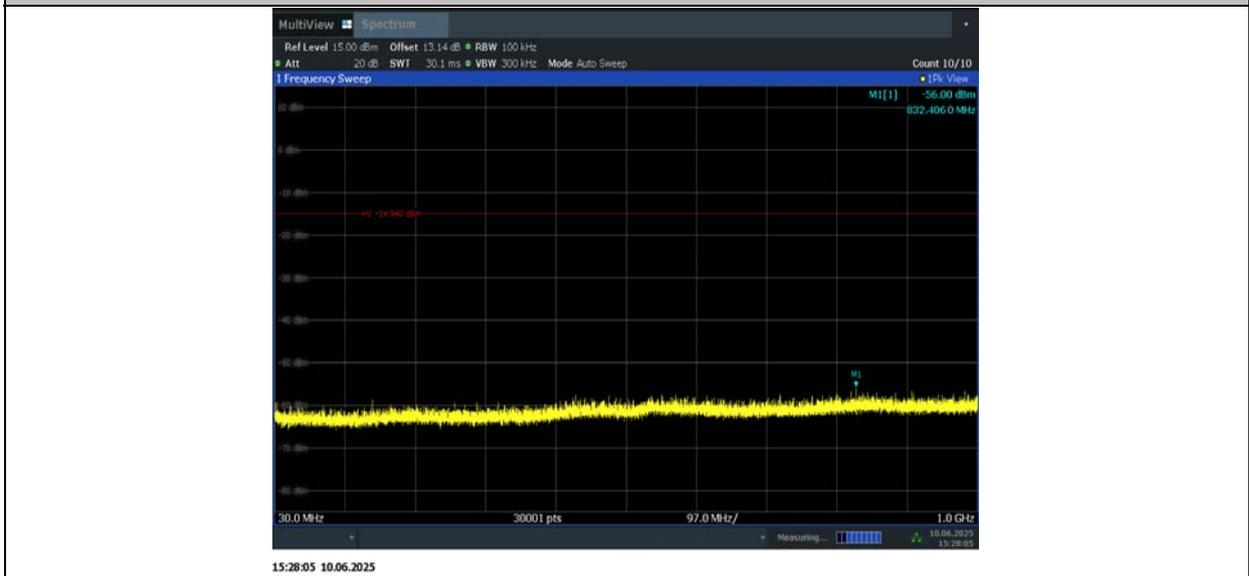
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11AX20MIMO\_Ant9\_2412\_0~Reference



11AX20MIMO\_Ant9\_2412\_30~1000



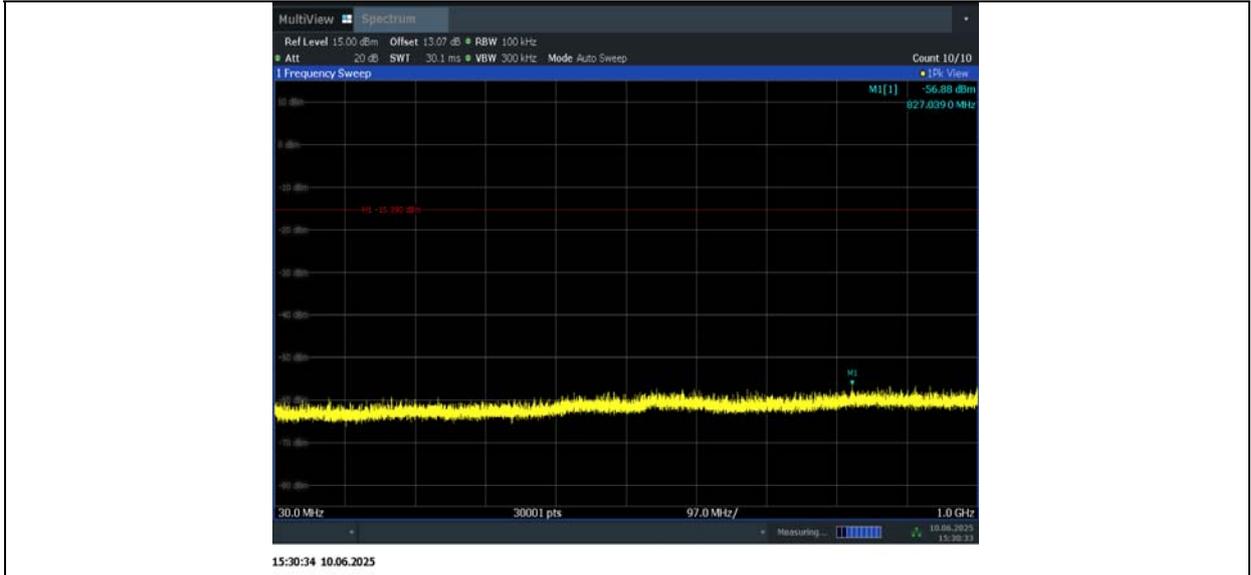
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11AX20MIMO\_Ant8\_2437\_0~Reference



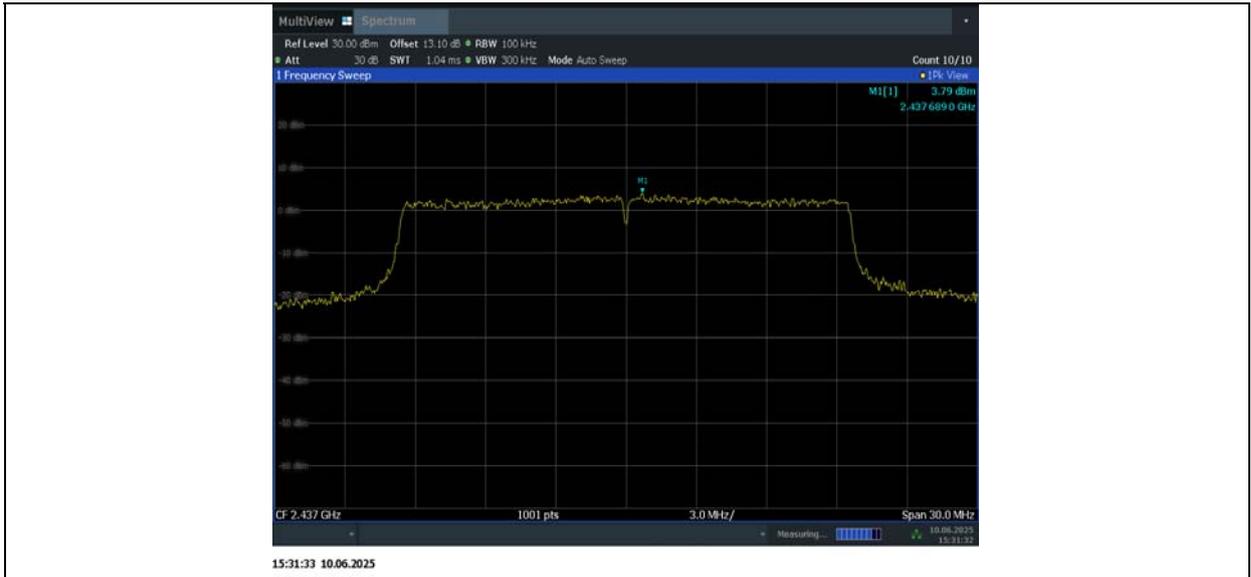
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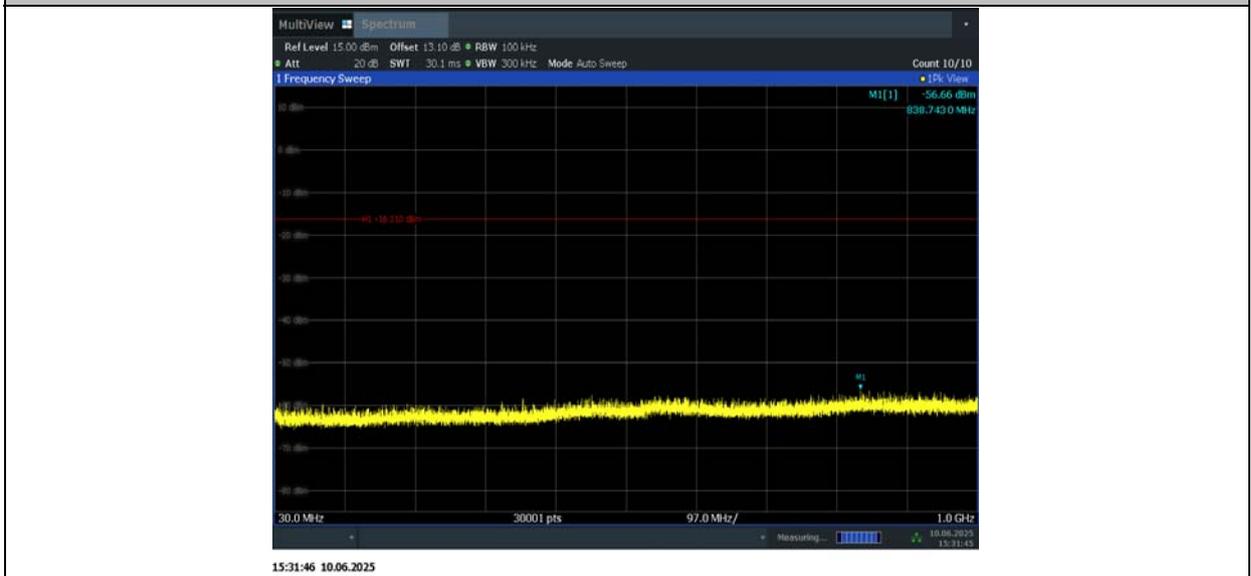
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11AX20MIMO\_Ant9\_2437\_0~Reference



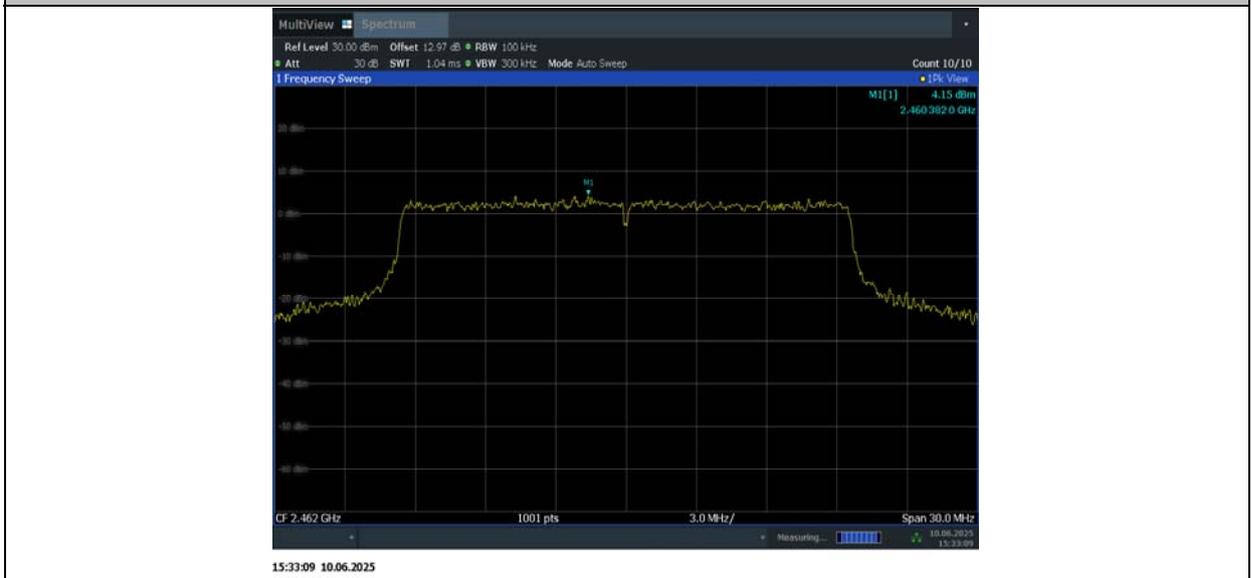
11AX20MIMO\_Ant9\_2437\_30~1000



11AX20MIMO\_Ant9\_2437\_1000~26500



11AX20MIMO\_Ant8\_2462\_0~Reference



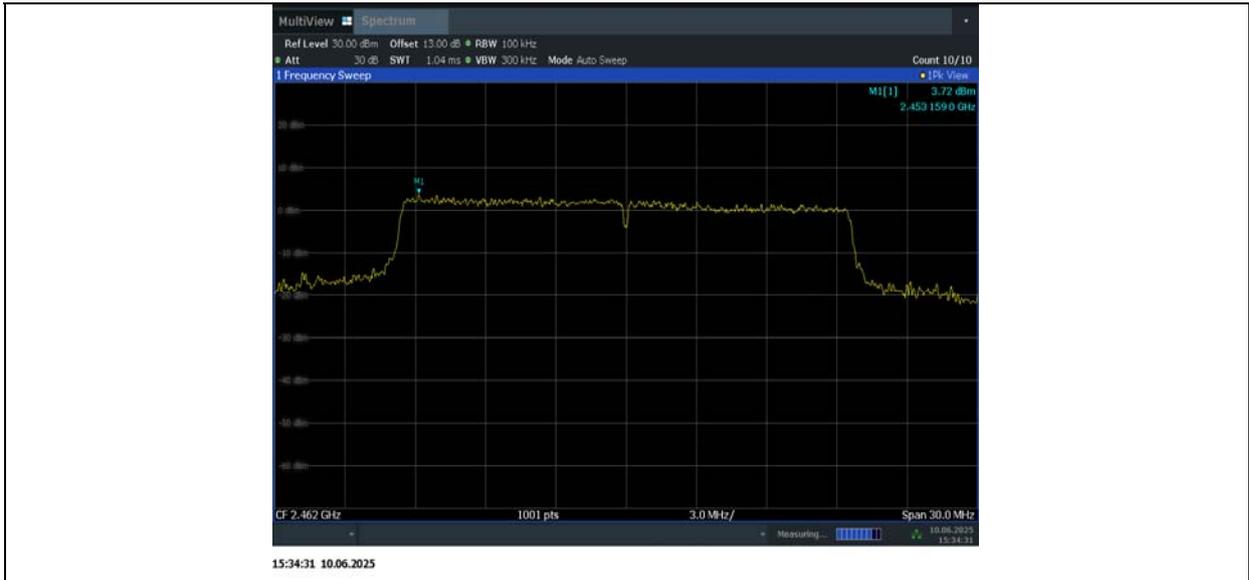
11AX20MIMO\_Ant8\_2462\_30~1000



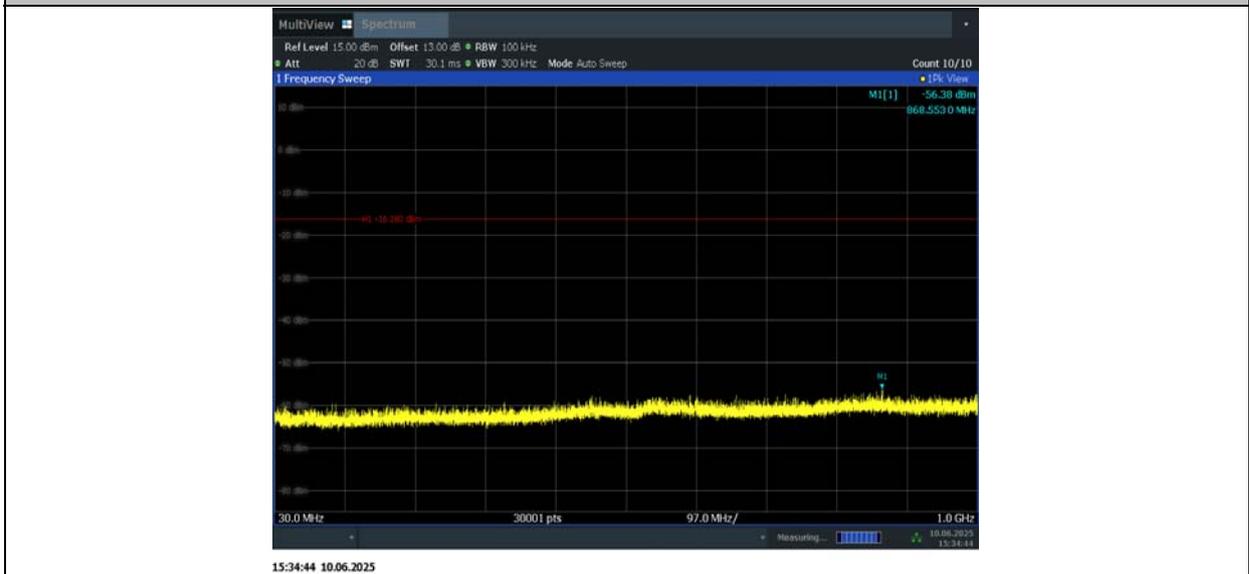
11AX20MIMO\_Ant8\_2462\_1000~26500



11AX20MIMO\_Ant9\_2462\_0~Reference



11AX20MIMO\_Ant9\_2462\_30~1000



11AX20MIMO\_Ant9\_2462\_1000~26500



11AX40MIMO\_Ant8\_2422\_0~Reference



11AX40MIMO\_Ant8\_2422\_30~1000



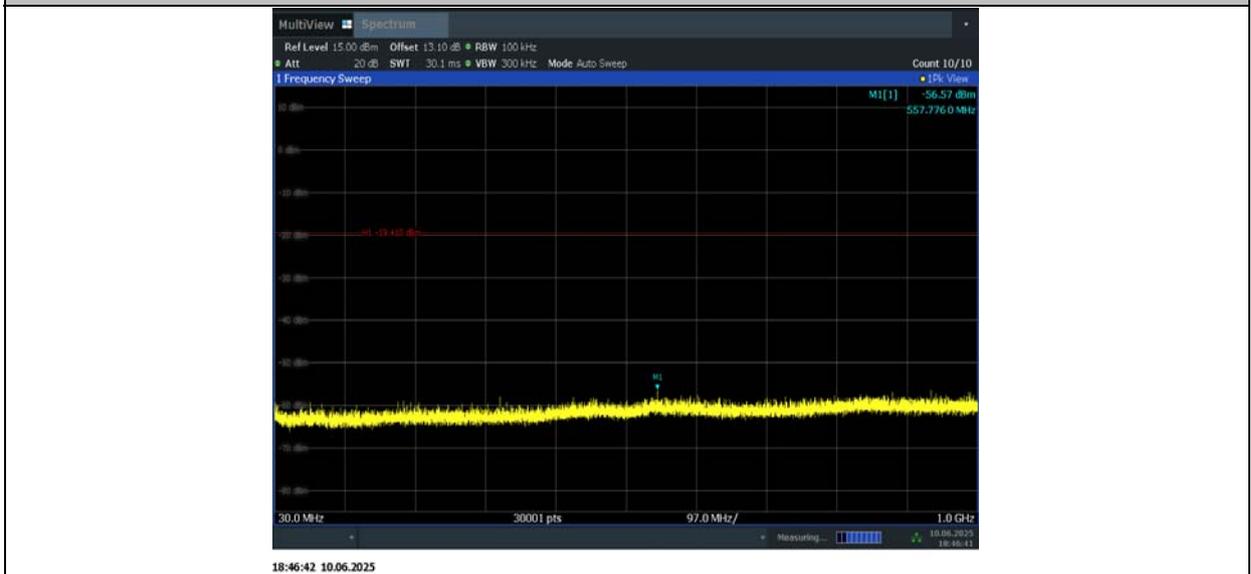
11AX40MIMO\_Ant8\_2422\_1000~26500



11AX40MIMO\_Ant9\_2422\_0~Reference



11AX40MIMO\_Ant9\_2422\_30~1000

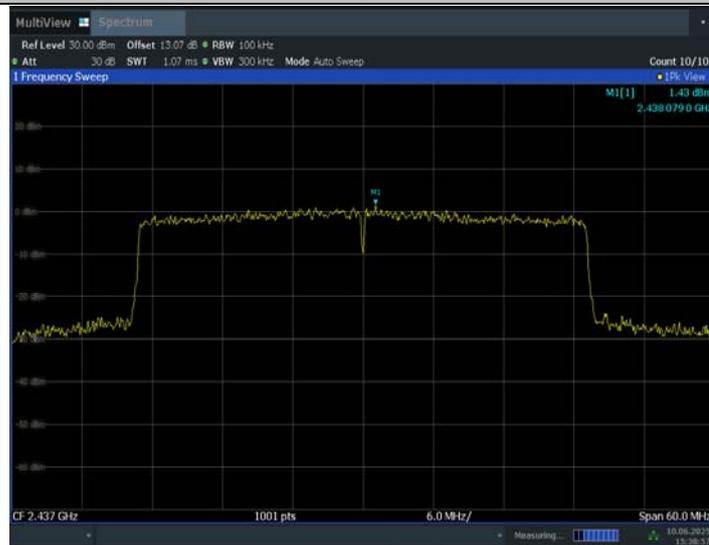


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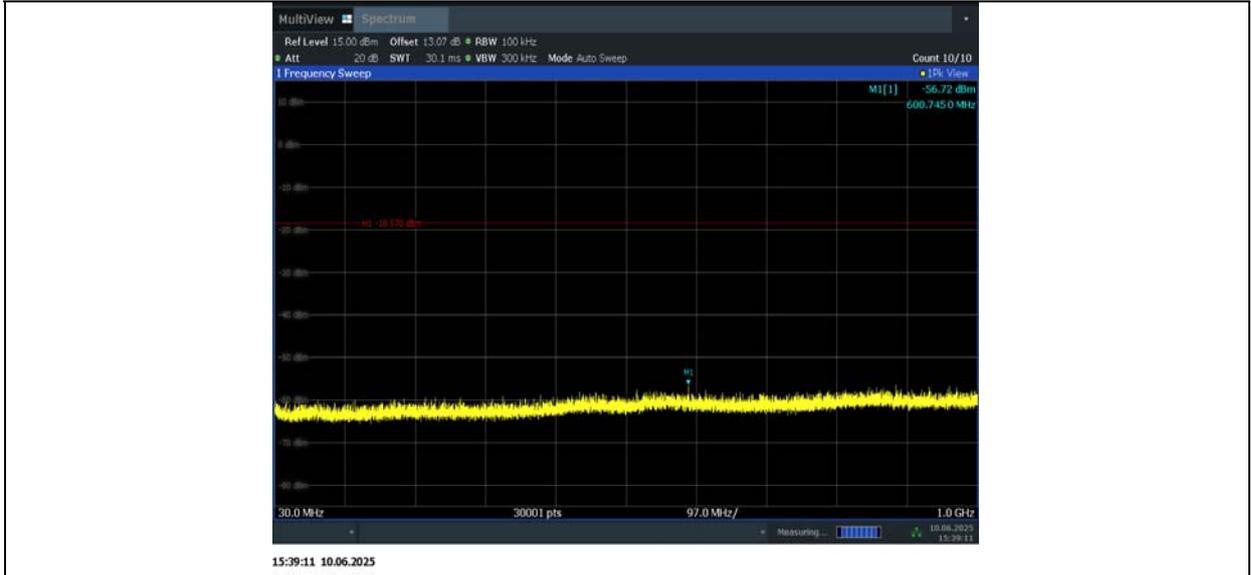
18:47:18 10.06.2025

11AX40MIMO\_Ant8\_2437\_0~Reference



15:38:58 10.06.2025

11AX40MIMO\_Ant8\_2437\_30~1000



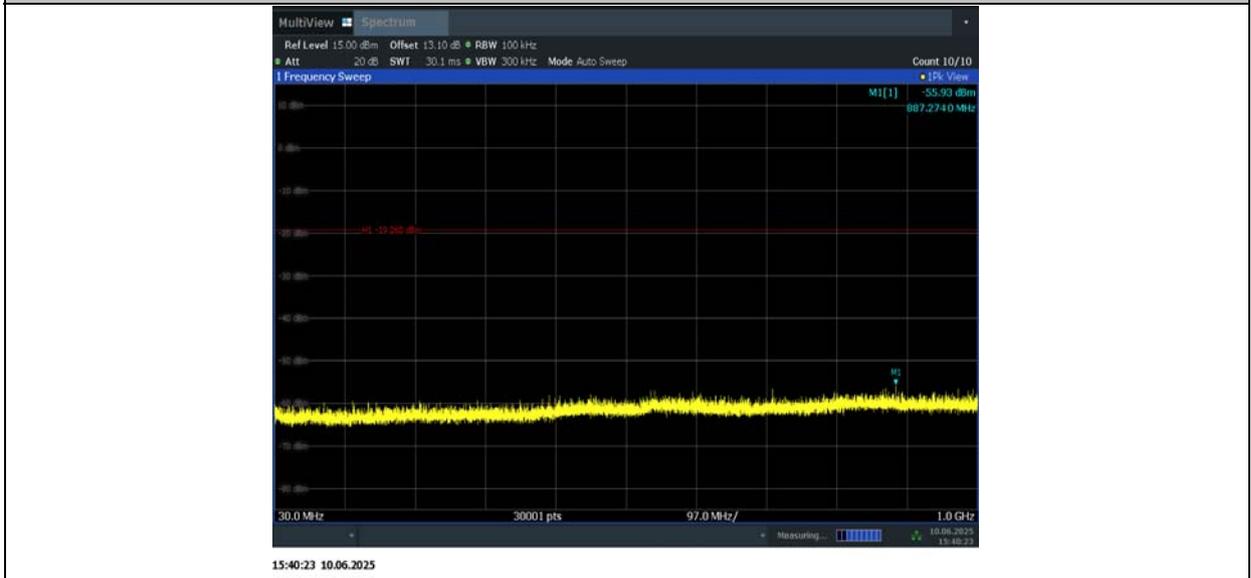
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11AX40MIMO\_Ant9\_2437\_0~Reference



11AX40MIMO\_Ant9\_2437\_30~1000



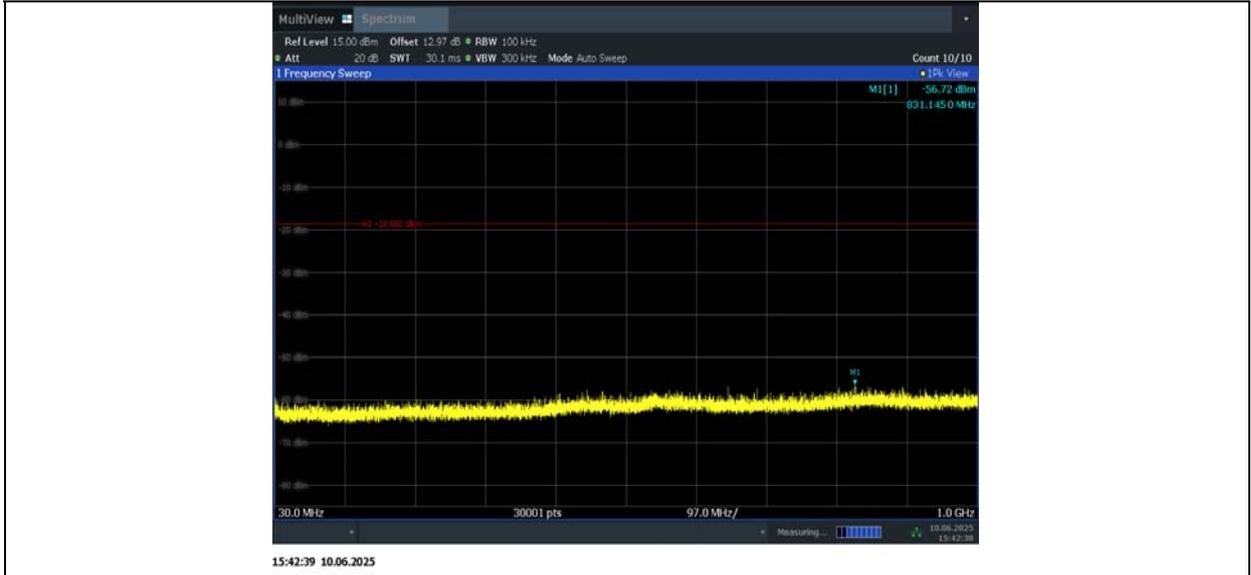
11AX40MIMO\_Ant9\_2437\_1000~26500



11AX40MIMO\_Ant8\_2452\_0~Reference



11AX40MIMO\_Ant8\_2452\_30~1000



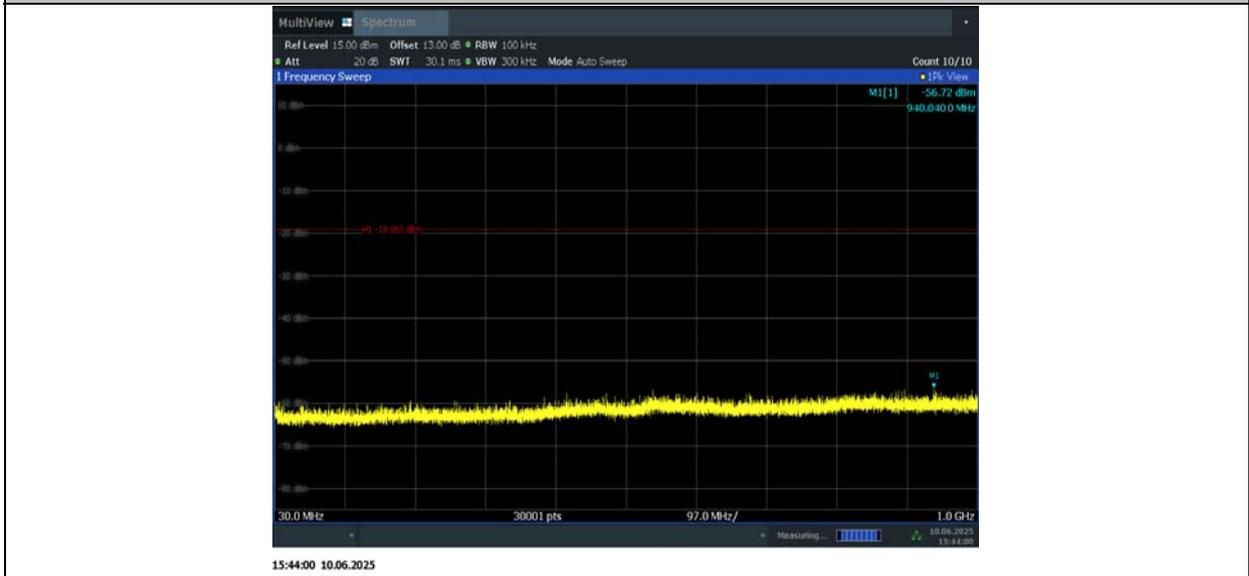
11AX40MIMO\_Ant8\_2452\_1000~26500



11AX40MIMO\_Ant9\_2452\_0~Reference



11AX40MIMO\_Ant9\_2452\_30~1000



11AX40MIMO\_Ant9\_2452\_1000~26500



### RU MIMO

#### Measurement Result:

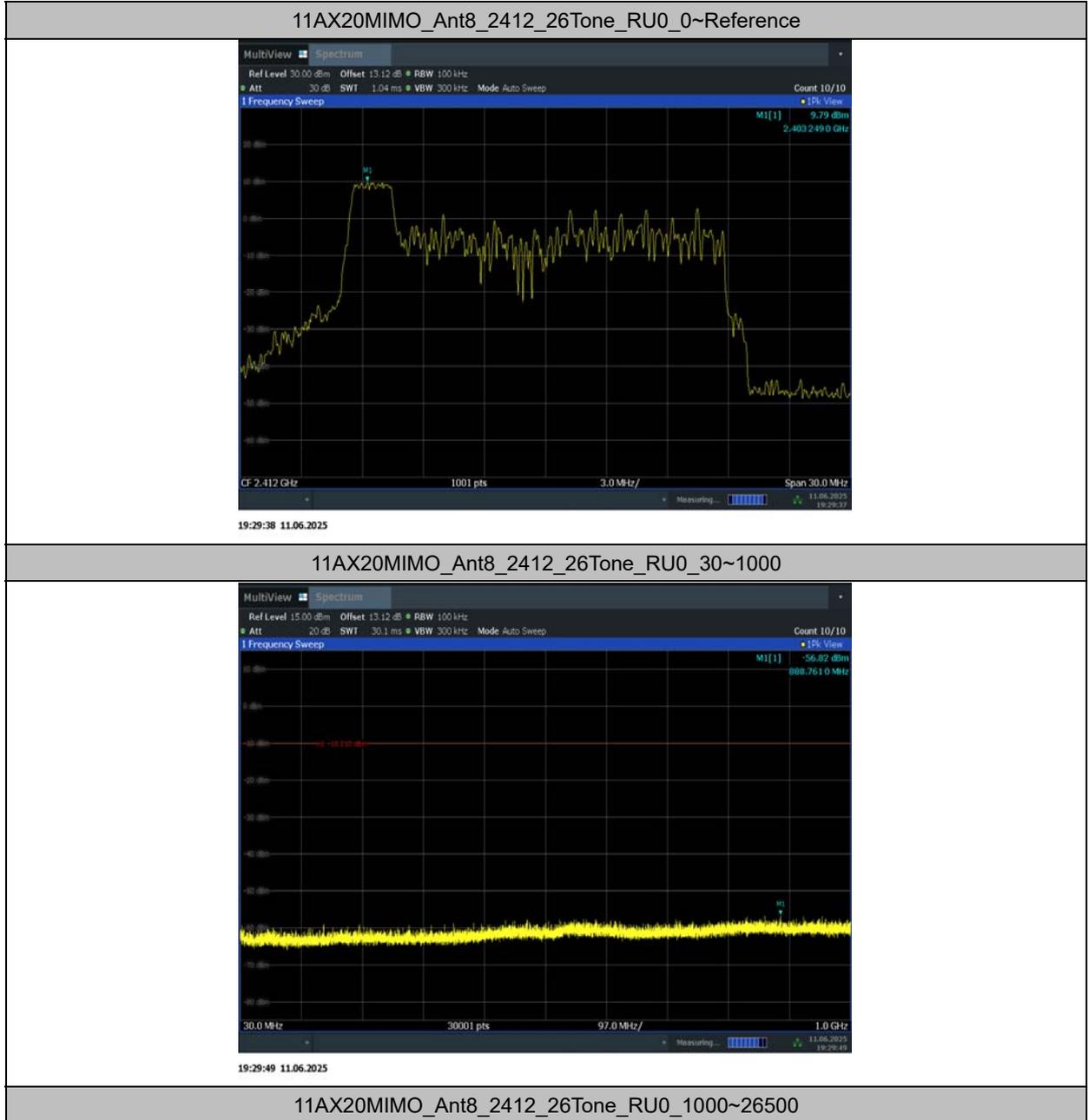
TestMode	Antenna	Frequency[MHz]	Ru Size	Ru Index	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11AX20MIMO	Ant8	2412	26Tone	RU0	Reference	9.79	9.79	---	PASS
				RU0	30~1000	9.79	-56.82	≤-10.21	PASS
				RU0	1000~26500	9.79	-43.79	≤-10.21	PASS
				RU8	Reference	10.90	10.90	---	PASS
				RU8	30~1000	10.90	-56.51	≤-9.1	PASS
				RU8	1000~26500	10.90	-43.75	≤-9.1	PASS
			52Tone	RU37	Reference	9.97	9.97	---	PASS
				RU37	30~1000	9.97	-56.77	≤-10.03	PASS
				RU37	1000~26500	9.97	-44.23	≤-10.03	PASS
				RU40	Reference	9.75	9.75	---	PASS
				RU40	30~1000	9.75	-56.78	≤-10.25	PASS
				RU40	1000~26500	9.75	-44.26	≤-10.25	PASS
			106Tone	RU53	Reference	6.99	6.99	---	PASS
				RU53	30~1000	6.99	-56.00	≤-13.01	PASS
				RU53	1000~26500	6.99	-43.77	≤-13.01	PASS
				RU54	Reference	6.79	6.79	---	PASS
				RU54	30~1000	6.79	-56.25	≤-13.21	PASS
				RU54	1000~26500	6.79	-43.40	≤-13.21	PASS
	Ant9	2412	26Tone	RU0	Reference	9.72	9.72	---	PASS
				RU0	30~1000	9.72	-56.24	≤-10.28	PASS
RU0				1000~26500	9.72	-43.64	≤-10.28	PASS	
RU8				Reference	8.94	8.94	---	PASS	

				RU8	30~1000	8.94	-56.29	≤-11.06	PASS
				RU8	1000~26500	8.94	-43.51	≤-11.06	PASS
			52Tone	RU37	Reference	9.91	9.91	---	PASS
				RU37	30~1000	9.91	-55.72	≤-10.09	PASS
				RU37	1000~26500	9.91	-44.46	≤-10.09	PASS
				RU40	Reference	9.76	9.76	---	PASS
				RU40	30~1000	9.76	-57.07	≤-10.24	PASS
				RU40	1000~26500	9.76	-44.19	≤-10.24	PASS
			106Tone	RU53	Reference	7.54	7.54	---	PASS
				RU53	30~1000	7.54	-56.28	≤-12.46	PASS
				RU53	1000~26500	7.54	-43.67	≤-12.46	PASS
				RU54	Reference	6.46	6.46	---	PASS
	RU54	30~1000		6.46	-56.86	≤-13.54	PASS		
	RU54	1000~26500		6.46	-43.83	≤-13.54	PASS		
	Ant8	2437	26Tone	RU0	Reference	11.46	11.46	---	PASS
				RU0	30~1000	11.46	-56.97	≤-8.54	PASS
				RU0	1000~26500	11.46	-44.46	≤-8.54	PASS
				RU8	Reference	11.23	11.23	---	PASS
				RU8	30~1000	11.23	-56.82	≤-8.77	PASS
				RU8	1000~26500	11.23	-43.72	≤-8.77	PASS
			52Tone	RU37	Reference	10.08	10.08	---	PASS
				RU37	30~1000	10.08	-56.37	≤-9.92	PASS
				RU37	1000~26500	10.08	-43.99	≤-9.92	PASS
				RU40	Reference	9.73	9.73	---	PASS
RU40				30~1000	9.73	-56.91	≤-10.27	PASS	
RU40				1000~26500	9.73	-42.85	≤-10.27	PASS	
106Tone	RU53	Reference	7.34	7.34	---	PASS			
	RU53	30~1000	7.34	-56.63	≤-12.66	PASS			
	RU53	1000~26500	7.34	-44.17	≤-12.66	PASS			
	RU54	Reference	6.15	6.15	---	PASS			
	RU54	30~1000	6.15	-56.91	≤-13.85	PASS			
	RU54	1000~26500	6.15	-44.44	≤-13.85	PASS			
Ant9	2437	26Tone	RU0	Reference	9.77	9.77	---	PASS	
			RU0	30~1000	9.77	-56.81	≤-10.23	PASS	
			RU0	1000~26500	9.77	-43.66	≤-10.23	PASS	
			RU8	Reference	10.08	10.08	---	PASS	
			RU8	30~1000	10.08	-56.10	≤-9.92	PASS	
			RU8	1000~26500	10.08	-44.38	≤-9.92	PASS	
		52Tone	RU37	Reference	9.25	9.25	---	PASS	
			RU37	30~1000	9.25	-56.37	≤-10.75	PASS	
			RU37	1000~26500	9.25	-43.69	≤-10.75	PASS	
			RU40	Reference	8.75	8.75	---	PASS	

				RU40	30~1000	8.75	-56.26	$\leq -11.25$	PASS		
				RU40	1000~26500	8.75	-43.68	$\leq -11.25$	PASS		
			106Tone	RU53	Reference	6.16	6.16	---	PASS		
				RU53	30~1000	6.16	-56.69	$\leq -13.84$	PASS		
				RU53	1000~26500	6.16	-44.34	$\leq -13.84$	PASS		
				RU54	Reference	5.66	5.66	---	PASS		
				RU54	30~1000	5.66	-56.77	$\leq -14.34$	PASS		
				RU54	1000~26500	5.66	-43.95	$\leq -14.34$	PASS		
			Ant8	2462	26Tone	RU0	Reference	11.74	11.74	---	PASS
						RU0	30~1000	11.74	-56.67	$\leq -8.26$	PASS
						RU0	1000~26500	11.74	-44.12	$\leq -8.26$	PASS
						RU8	Reference	11.97	11.97	---	PASS
						RU8	30~1000	11.97	-56.90	$\leq -8.03$	PASS
						RU8	1000~26500	11.97	-44.12	$\leq -8.03$	PASS
	52Tone	RU37			Reference	9.67	9.67	---	PASS		
		RU37			30~1000	9.67	-56.71	$\leq -10.33$	PASS		
		RU37			1000~26500	9.67	-44.33	$\leq -10.33$	PASS		
		RU40			Reference	9.85	9.85	---	PASS		
		RU40			30~1000	9.85	-56.47	$\leq -10.15$	PASS		
		RU40			1000~26500	9.85	-44.33	$\leq -10.15$	PASS		
	106Tone	RU53			Reference	6.86	6.86	---	PASS		
		RU53			30~1000	6.86	-56.57	$\leq -13.14$	PASS		
		RU53	1000~26500	6.86	-44.01	$\leq -13.14$	PASS				
		RU54	Reference	6.69	6.69	---	PASS				
		RU54	30~1000	6.69	-56.78	$\leq -13.31$	PASS				
		RU54	1000~26500	6.69	-44.59	$\leq -13.31$	PASS				
	Ant9	2462	26Tone	RU0	Reference	10.85	10.85	---	PASS		
				RU0	30~1000	10.85	-56.55	$\leq -9.15$	PASS		
RU0				1000~26500	10.85	-42.94	$\leq -9.15$	PASS			
RU8				Reference	9.85	9.85	---	PASS			
RU8				30~1000	9.85	-56.95	$\leq -10.15$	PASS			
RU8				1000~26500	9.85	-43.77	$\leq -10.15$	PASS			
52Tone			RU37	Reference	9.47	9.47	---	PASS			
			RU37	30~1000	9.47	-56.89	$\leq -10.53$	PASS			
			RU37	1000~26500	9.47	-43.90	$\leq -10.53$	PASS			
			RU40	Reference	9.71	9.71	---	PASS			
			RU40	30~1000	9.71	-57.01	$\leq -10.29$	PASS			
			RU40	1000~26500	9.71	-43.65	$\leq -10.29$	PASS			
106Tone			RU53	Reference	5.56	5.56	---	PASS			
			RU53	30~1000	5.56	-57.07	$\leq -14.44$	PASS			
	RU53	1000~26500	5.56	-44.10	$\leq -14.44$	PASS					
	RU54	Reference	4.80	4.80	---	PASS					

				RU54	30~1000	4.80	-56.84	≤-15.2	PASS
				RU54	1000~26500	4.80	-44.34	≤-15.2	PASS

Test graphs as below:

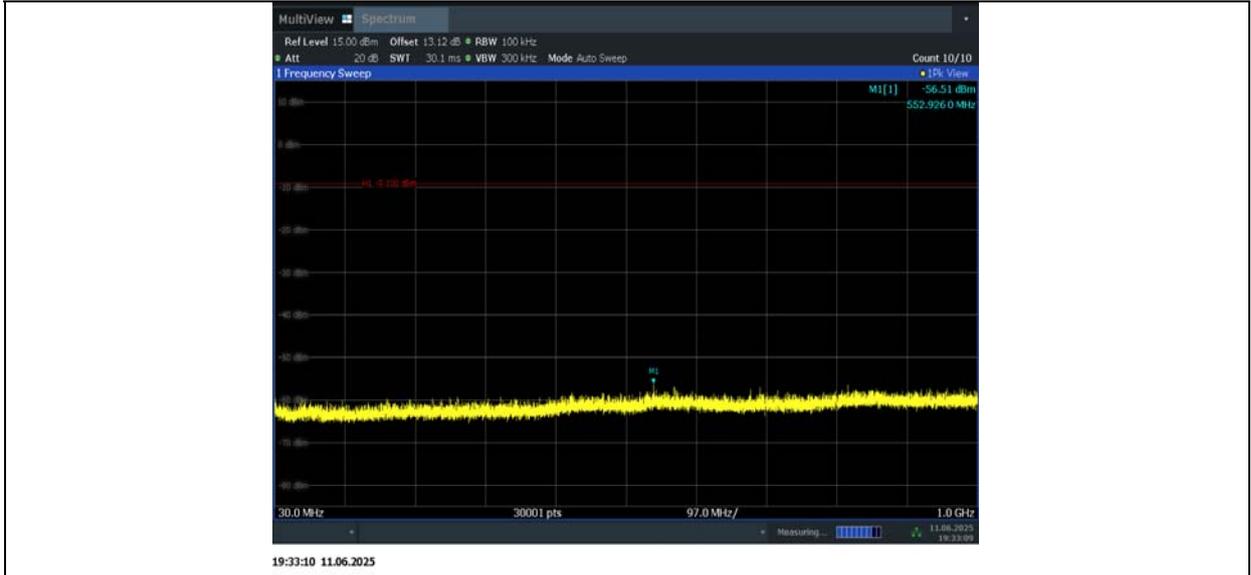




11AX20MIMO\_Ant8\_2412\_26Tone\_RU8\_0~Reference



11AX20MIMO\_Ant8\_2412\_26Tone\_RU8\_30~1000



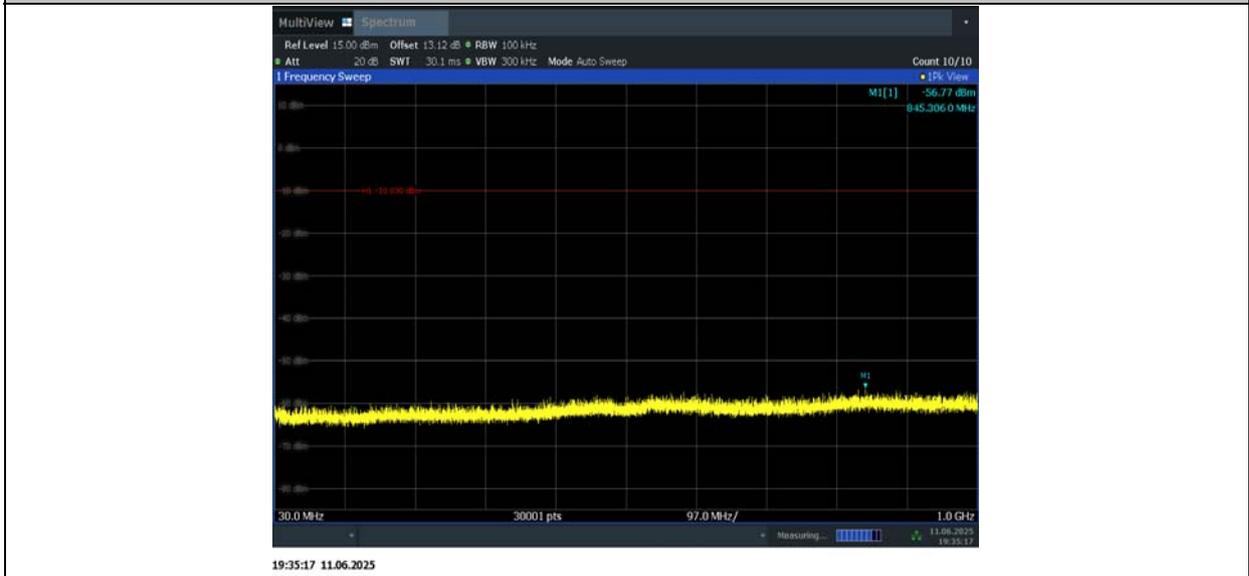
11AX20MIMO\_Ant8\_2412\_26Tone\_RU8\_1000~26500



11AX20MIMO\_Ant8\_2412\_52Tone\_RU37\_0~Reference



11AX20MIMO\_Ant8\_2412\_52Tone\_RU37\_30~1000



11AX20MIMO\_Ant8\_2412\_52Tone\_RU37\_1000~26500



11AX20MIMO\_Ant8\_2412\_52Tone\_RU40\_0~Reference



11AX20MIMO\_Ant8\_2412\_52Tone\_RU40\_30~1000



11AX20MIMO\_Ant8\_2412\_52Tone\_RU40\_1000~26500



11AX20MIMO\_Ant8\_2412\_106Tone\_RU53\_0~Reference



11AX20MIMO\_Ant8\_2412\_106Tone\_RU53\_30~1000



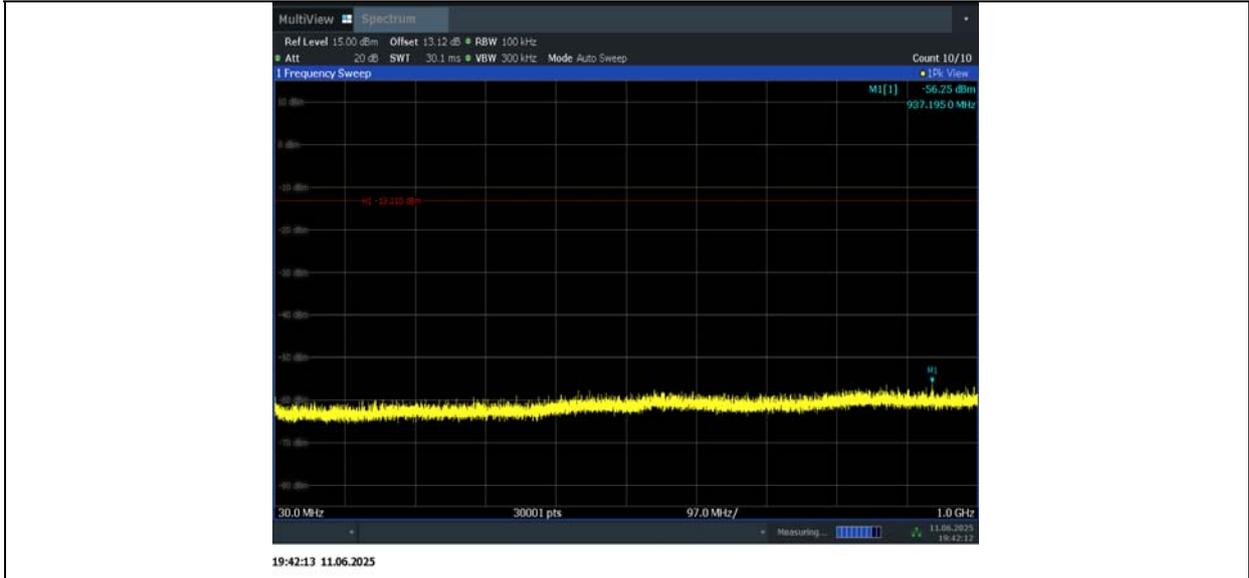
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11AX20MIMO\_Ant8\_2412\_106Tone\_RU54\_0~Reference



11AX20MIMO\_Ant8\_2412\_106Tone\_RU54\_30~1000



11AX20MIMO\_Ant8\_2412\_106Tone\_RU54\_1000~26500



11AX20MIMO\_Ant9\_2412\_26Tone\_RU0\_0~Reference



11AX20MIMO\_Ant9\_2412\_26Tone\_RU0\_30~1000



11AX20MIMO\_Ant9\_2412\_26Tone\_RU0\_1000~26500



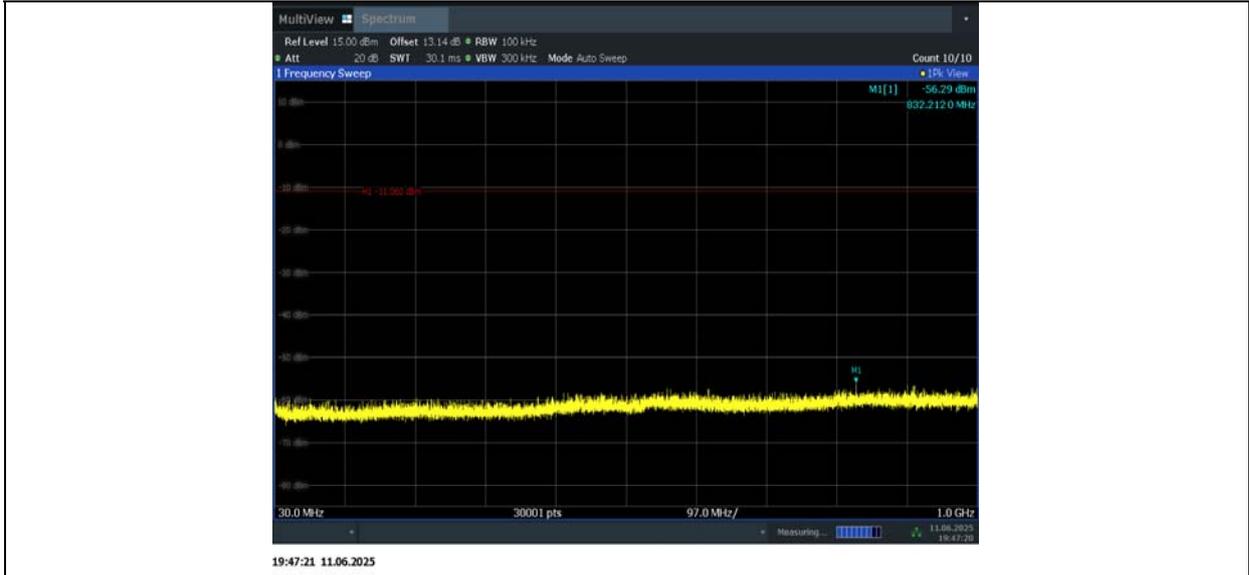
19:45:34 11.06.2025

11AX20MIMO\_Ant9\_2412\_26Tone\_RU8\_0~Reference



19:47:10 11.06.2025

11AX20MIMO\_Ant9\_2412\_26Tone\_RU8\_30~1000



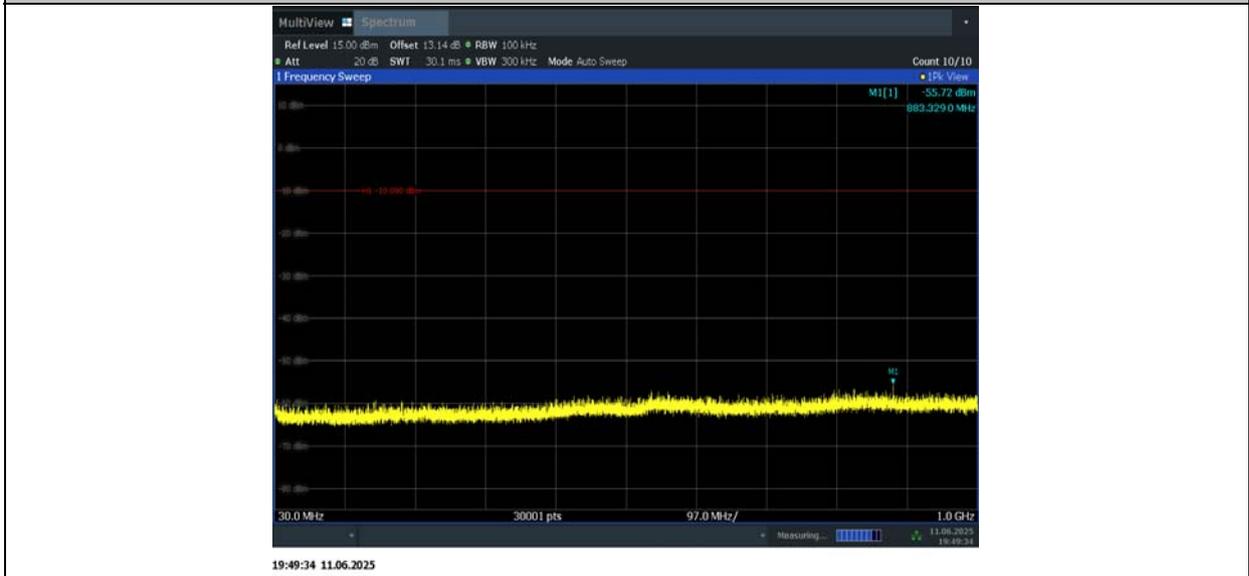
11AX20MIMO\_Ant9\_2412\_26Tone\_RU8\_1000~26500



11AX20MIMO\_Ant9\_2412\_52Tone\_RU37\_0~Reference



11AX20MIMO\_Ant9\_2412\_52Tone\_RU37\_30~1000



11AX20MIMO\_Ant9\_2412\_52Tone\_RU37\_1000~26500



11AX20MIMO\_Ant9\_2412\_52Tone\_RU40\_0~Reference



11AX20MIMO\_Ant9\_2412\_52Tone\_RU40\_30~1000



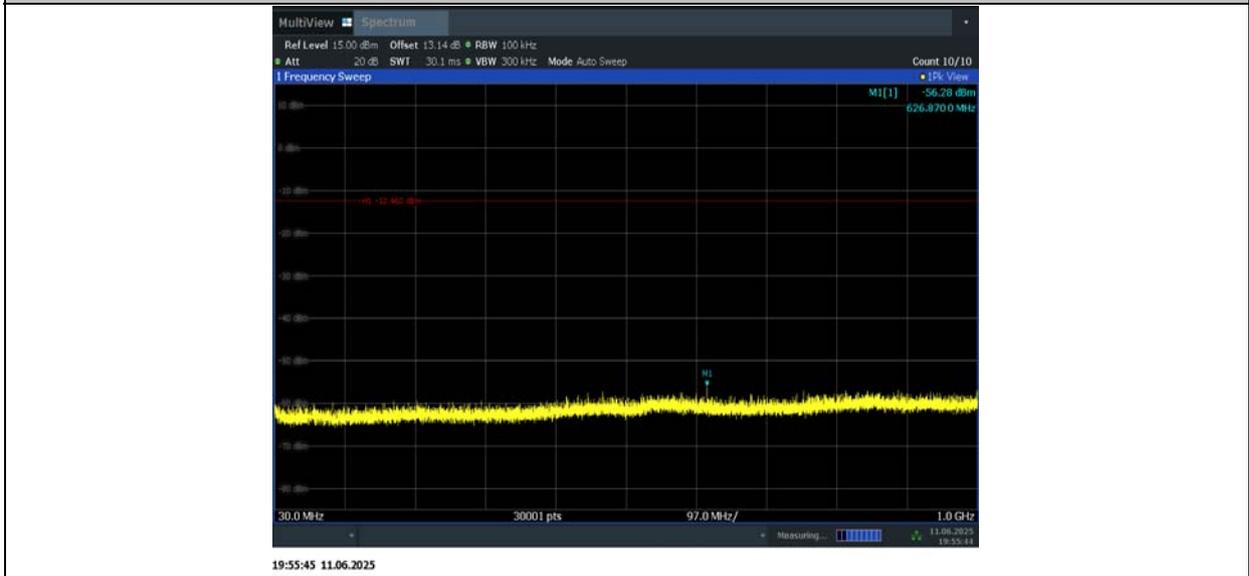
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11AX20MIMO\_Ant9\_2412\_106Tone\_RU53\_30~1000



11AX20MIMO\_Ant9\_2412\_106Tone\_RU53\_1000~26500



11AX20MIMO\_Ant9\_2412\_106Tone\_RU54\_0~Reference



11AX20MIMO\_Ant9\_2412\_106Tone\_RU54\_30~1000



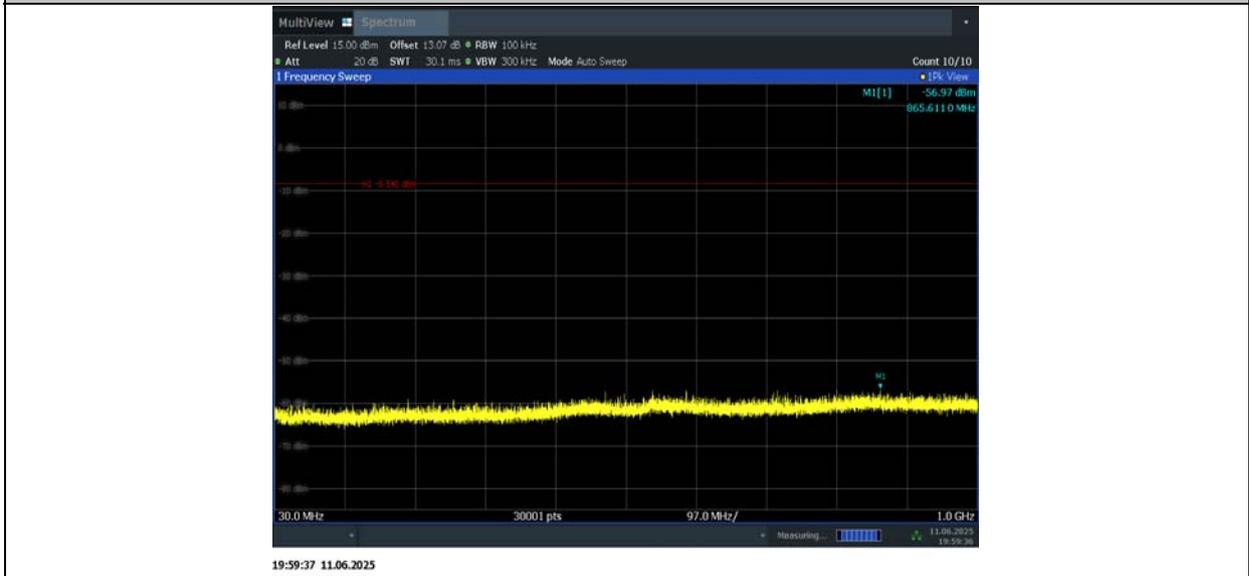
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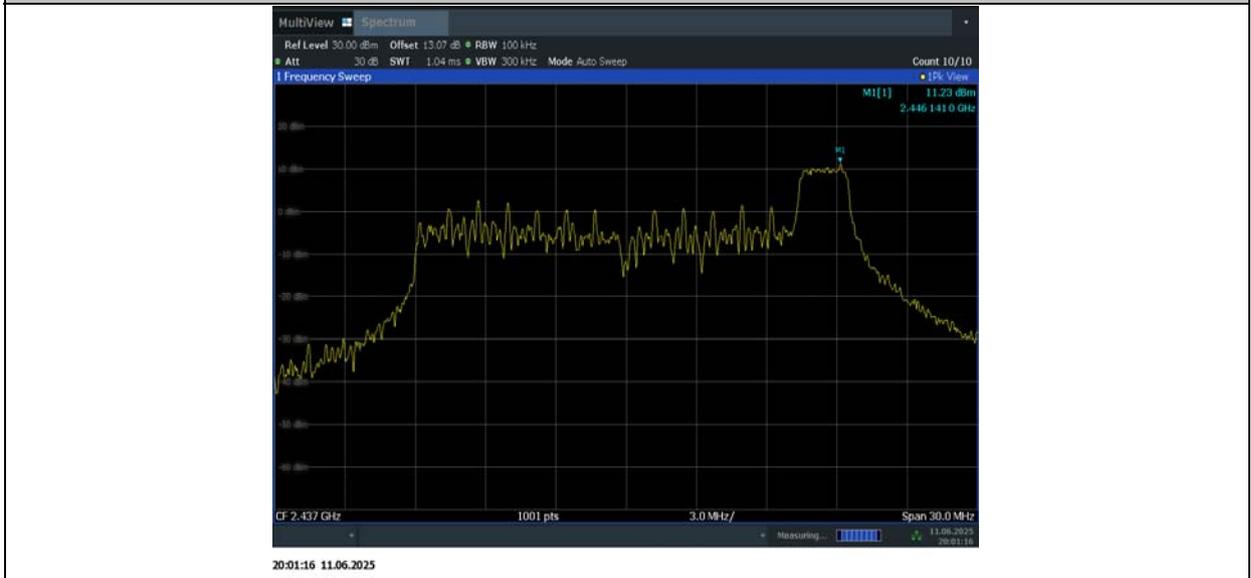
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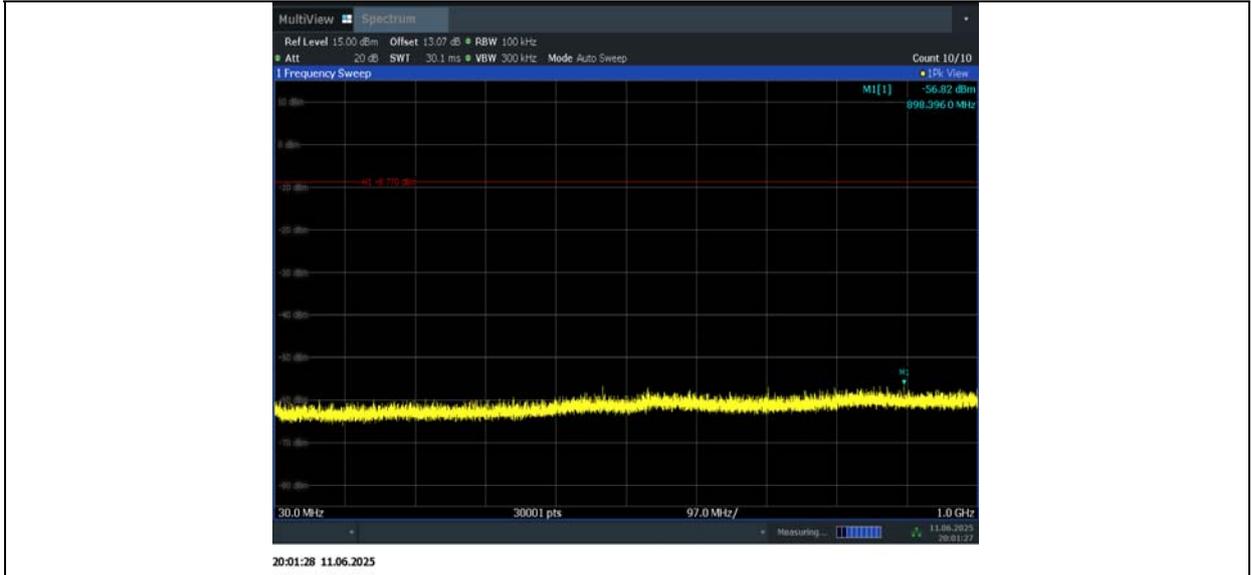
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11AX20MIMO\_Ant8\_2437\_26Tone\_RU8\_0~Reference



11AX20MIMO\_Ant8\_2437\_26Tone\_RU8\_30~1000



11AX20MIMO\_Ant8\_2437\_26Tone\_RU8\_1000~26500



11AX20MIMO\_Ant8\_2437\_52Tone\_RU37\_0~Reference



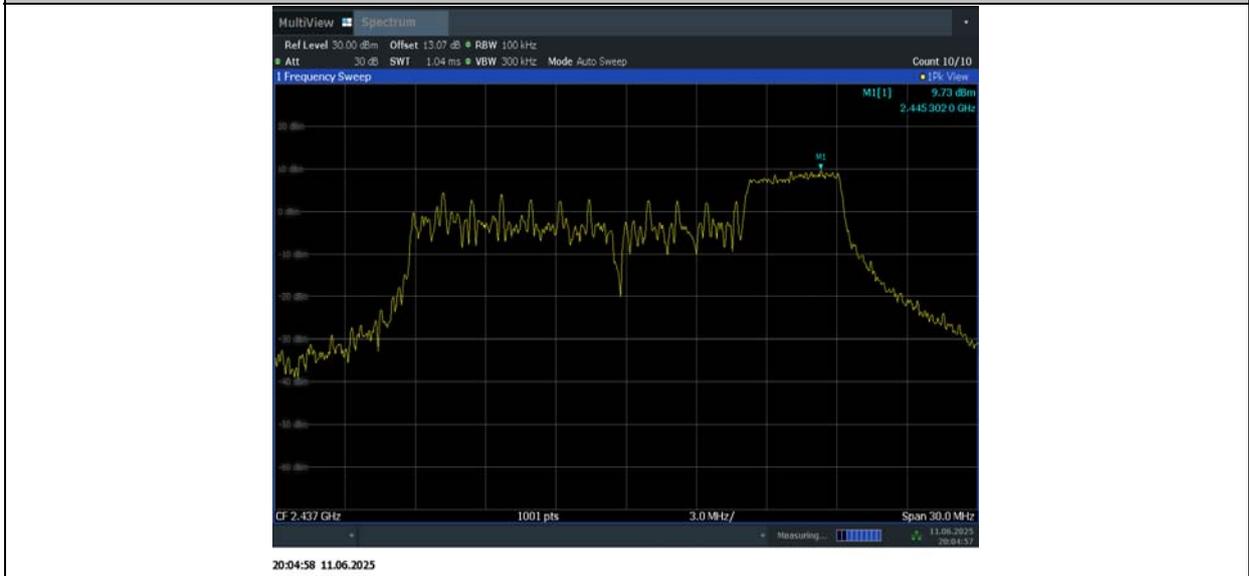
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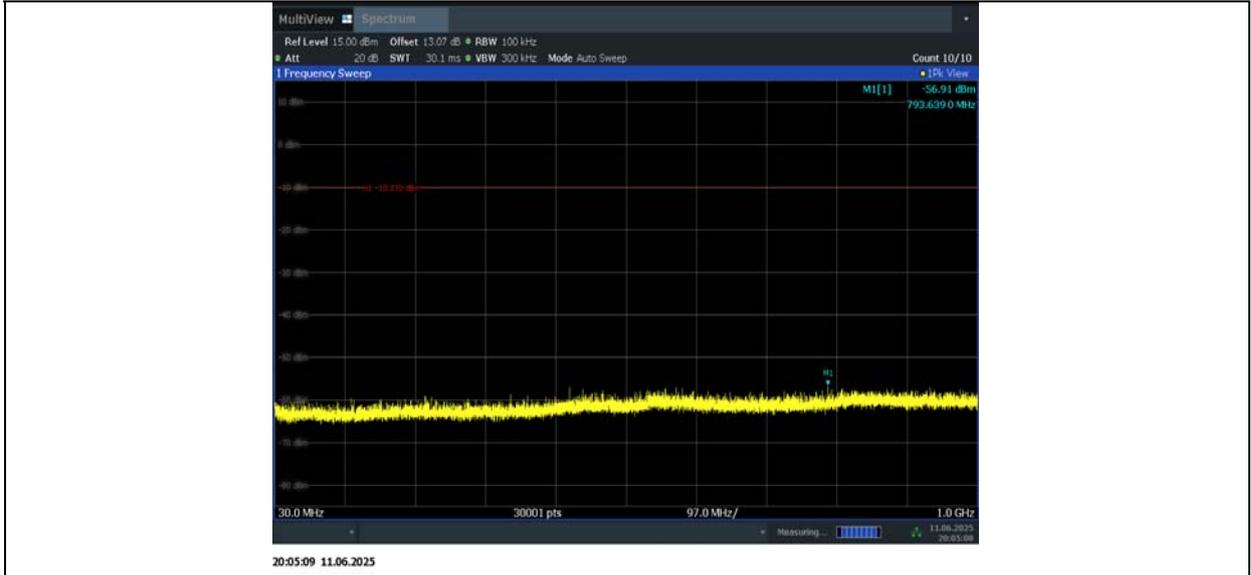
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11AX20MIMO\_Ant8\_2437\_52Tone\_RU40\_30~1000



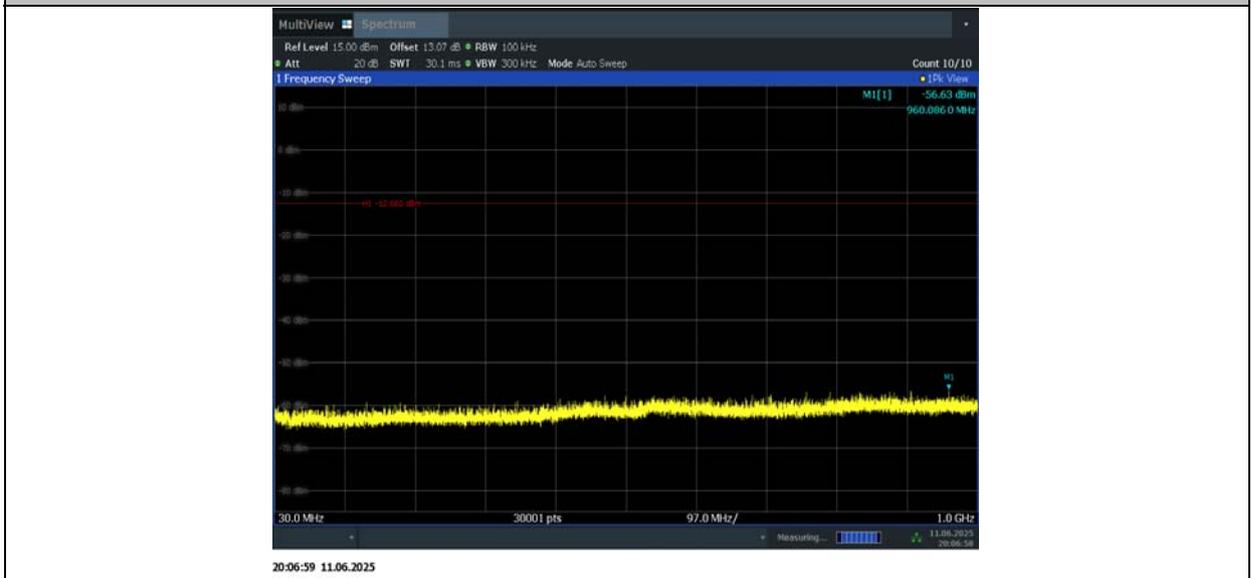
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11AX20MIMO\_Ant8\_2437\_106Tone\_RU53\_30~1000



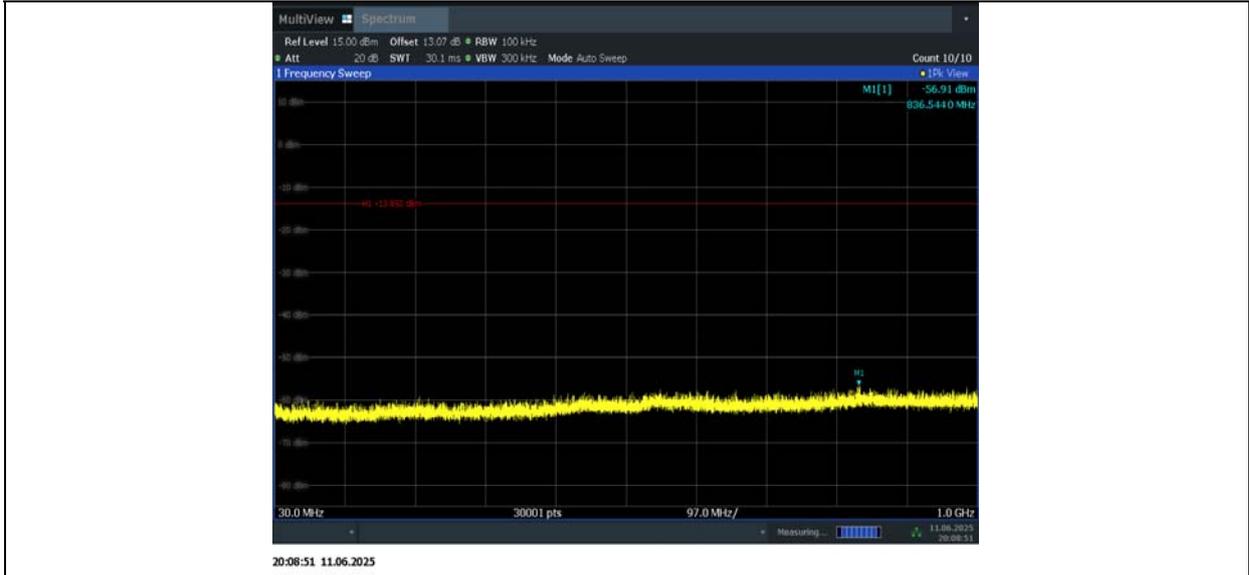
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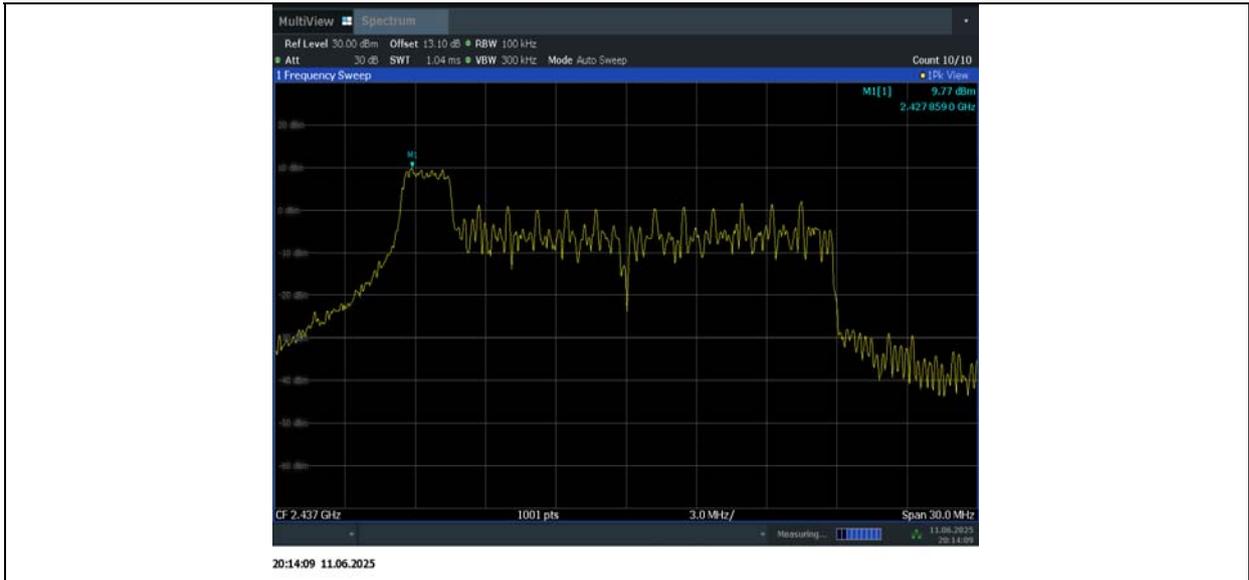
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11AX20MIMO\_Ant9\_2437\_26Tone\_RU0\_0~Reference



11AX20MIMO\_Ant9\_2437\_26Tone\_RU0\_30~1000



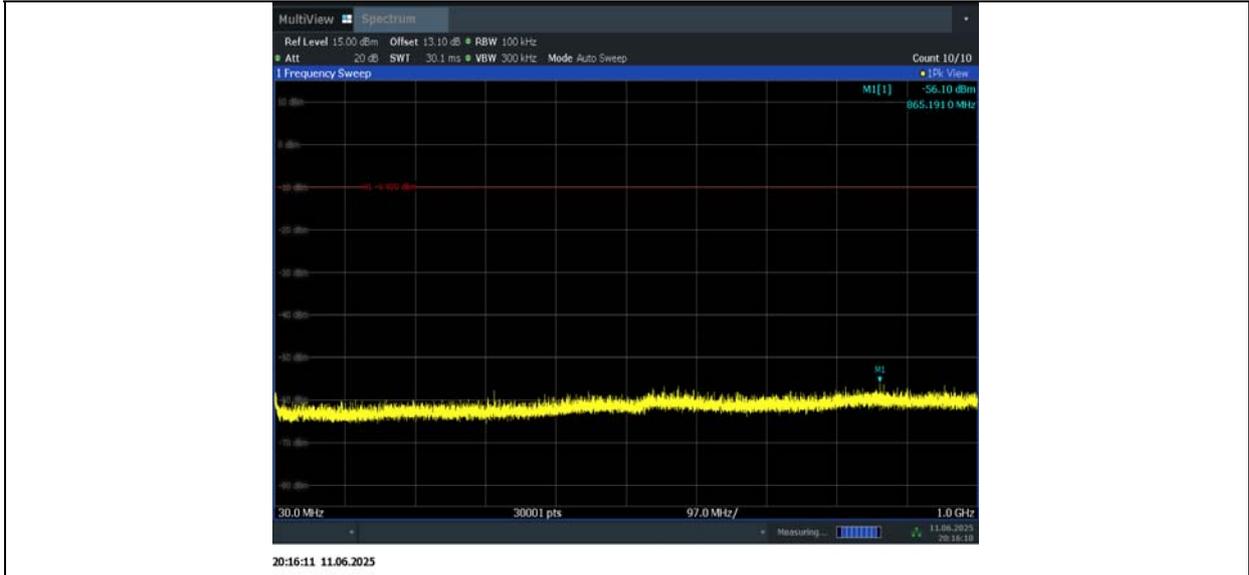
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11AX20MIMO\_Ant9\_2437\_26Tone\_RU8\_30~1000



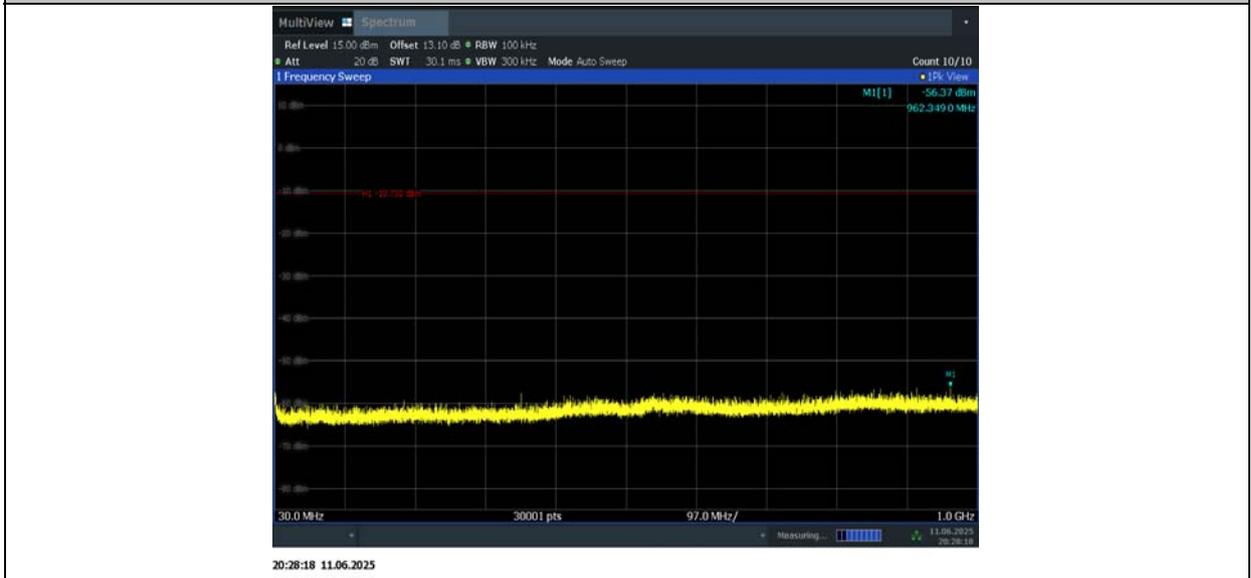
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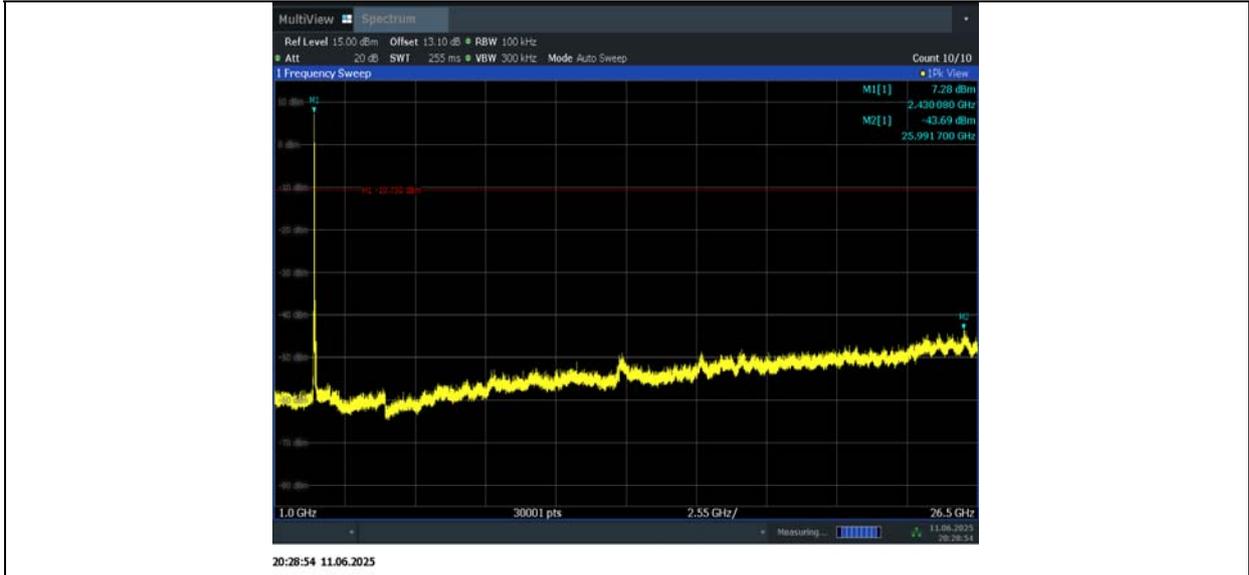
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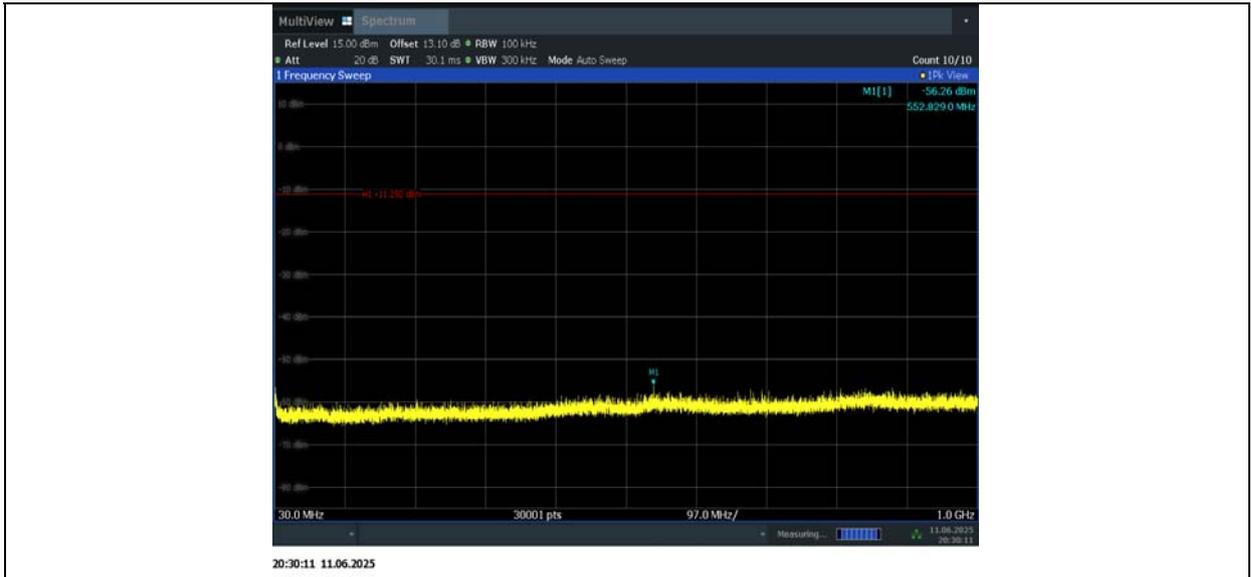
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11AX20MIMO\_Ant9\_2437\_52Tone\_RU40\_30~1000



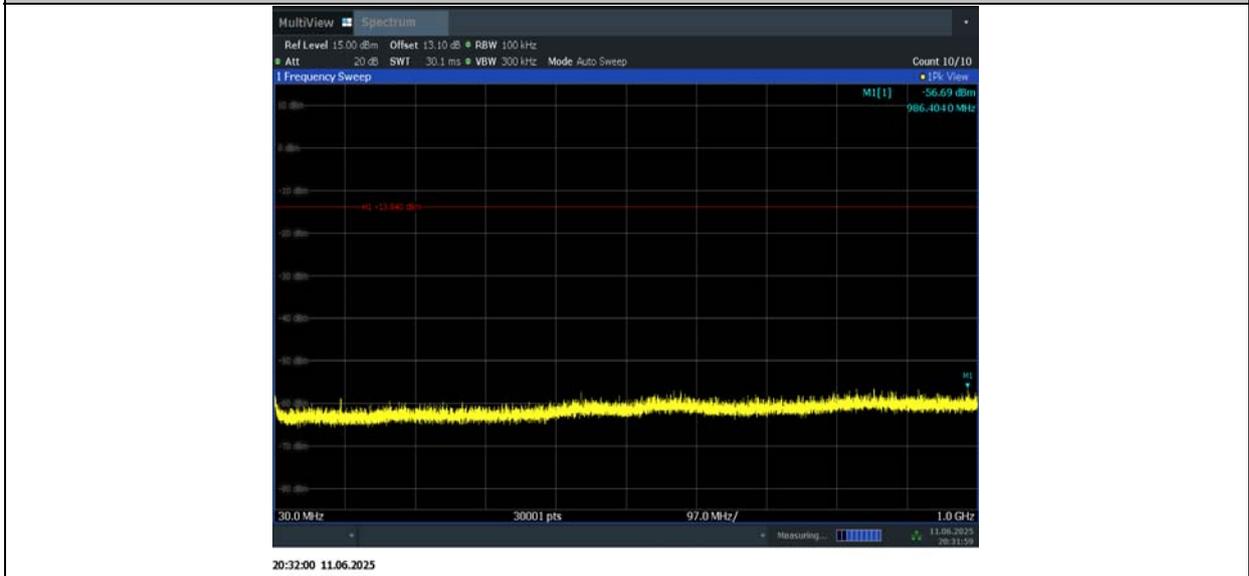
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11AX20MIMO\_Ant9\_2437\_106Tone\_RU53\_0~Reference



11AX20MIMO\_Ant9\_2437\_106Tone\_RU53\_30~1000



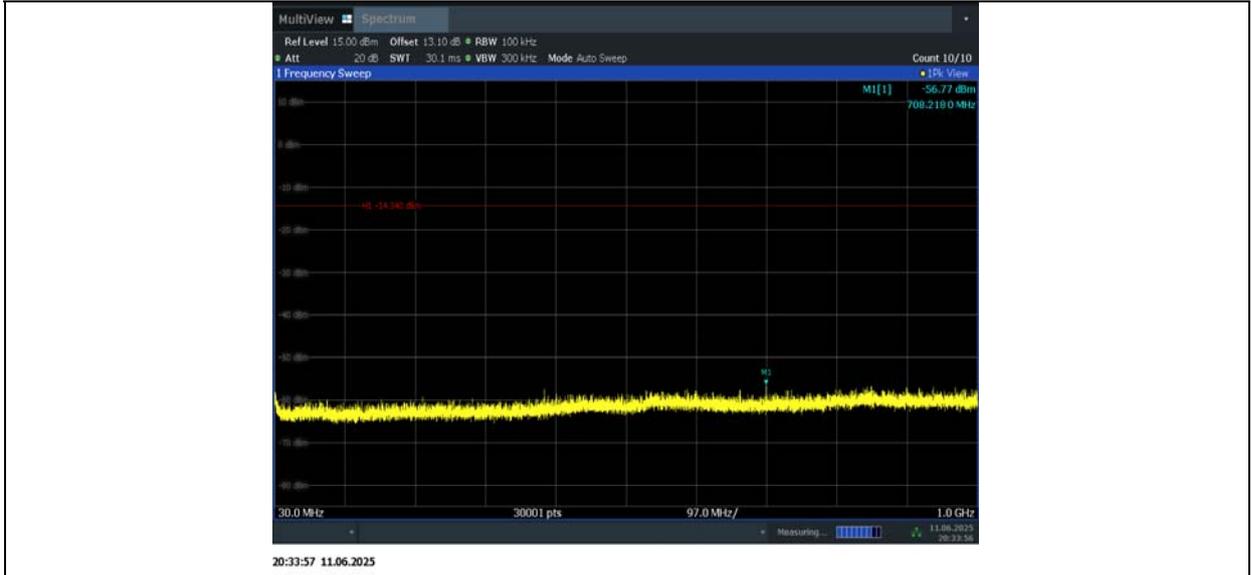
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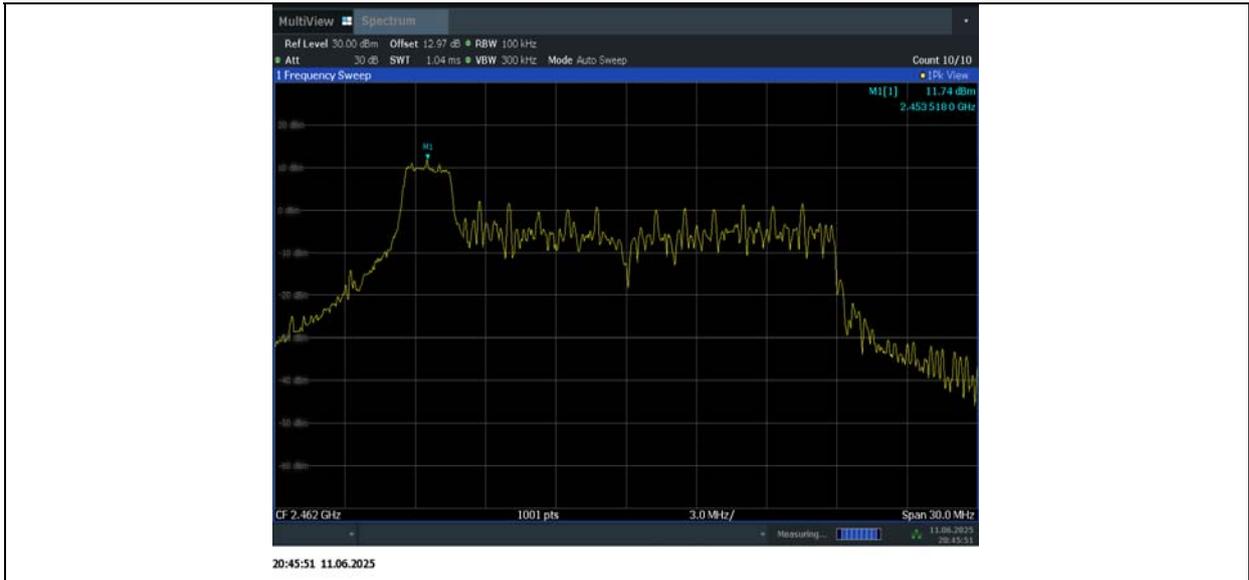
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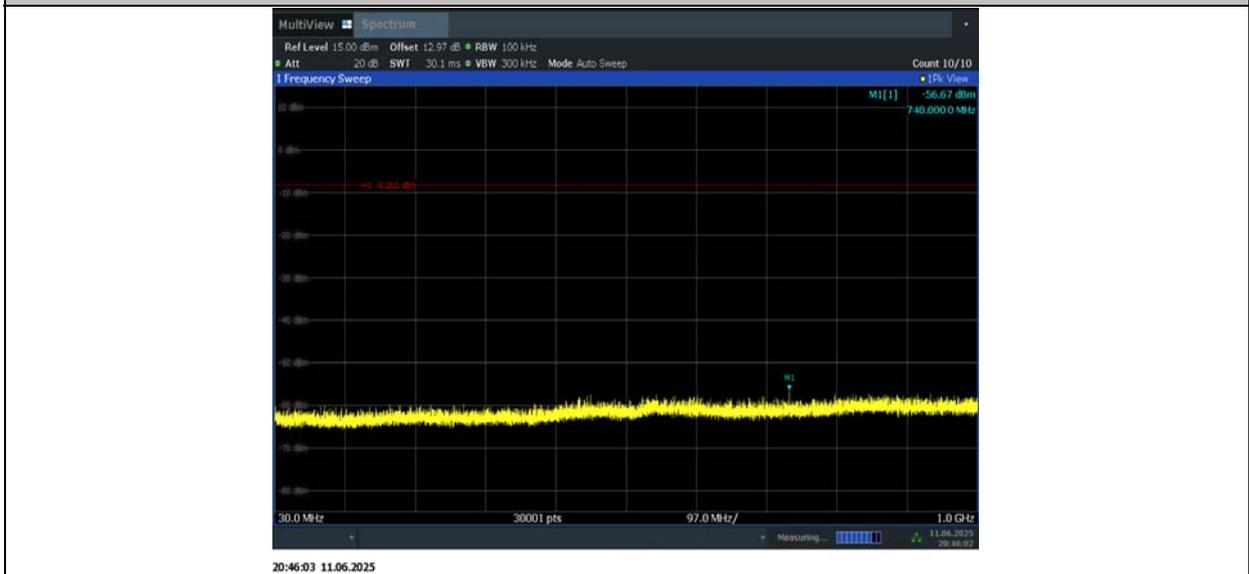
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11AX20MIMO\_Ant8\_2462\_26Tone\_RU0\_0~Reference



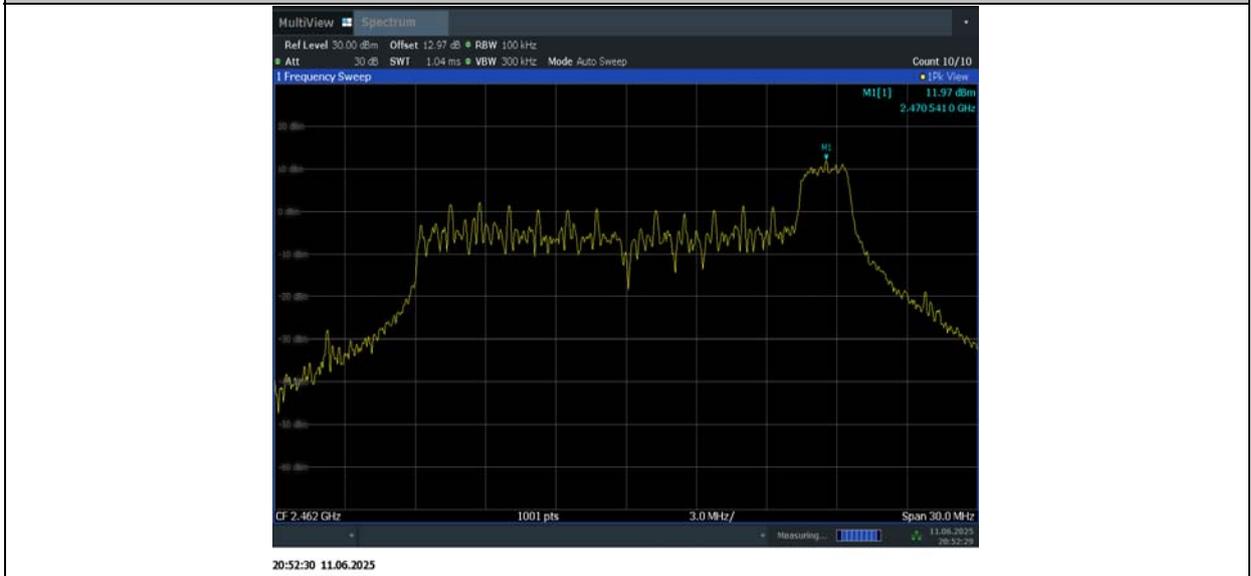
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11AX20MIMO\_Ant8\_2462\_26Tone\_RU0\_1000~26500



11AX20MIMO\_Ant8\_2462\_26Tone\_RU8\_0~Reference



11AX20MIMO\_Ant8\_2462\_26Tone\_RU8\_30~1000



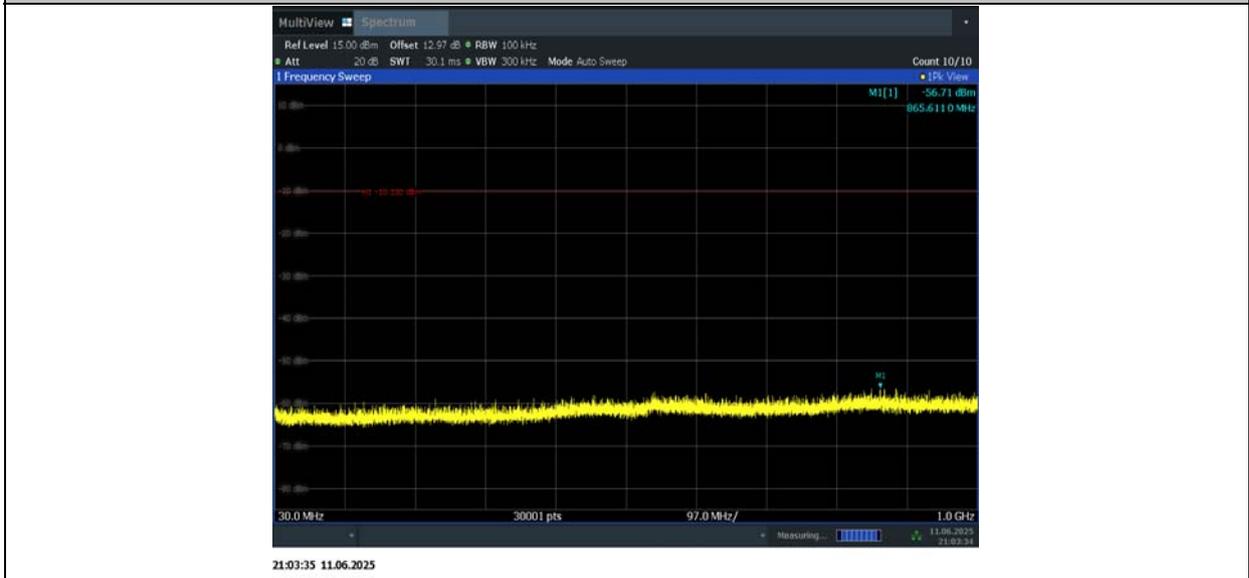
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11AX20MIMO\_Ant8\_2462\_52Tone\_RU37\_30~1000



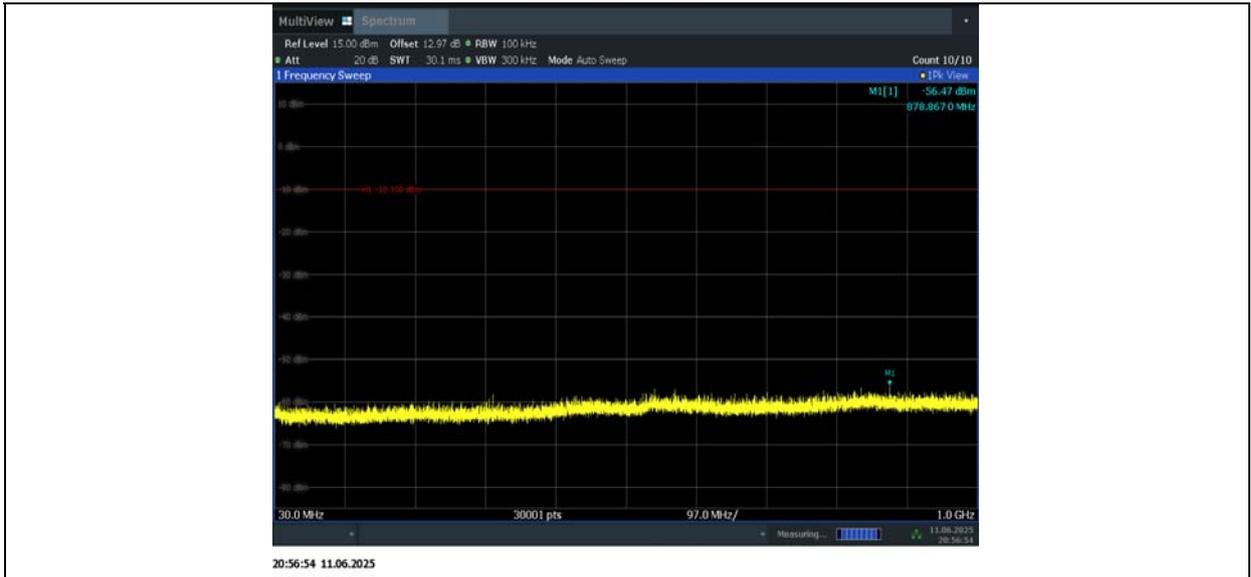
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11AX20MIMO\_Ant8\_2462\_52Tone\_RU40\_30~1000



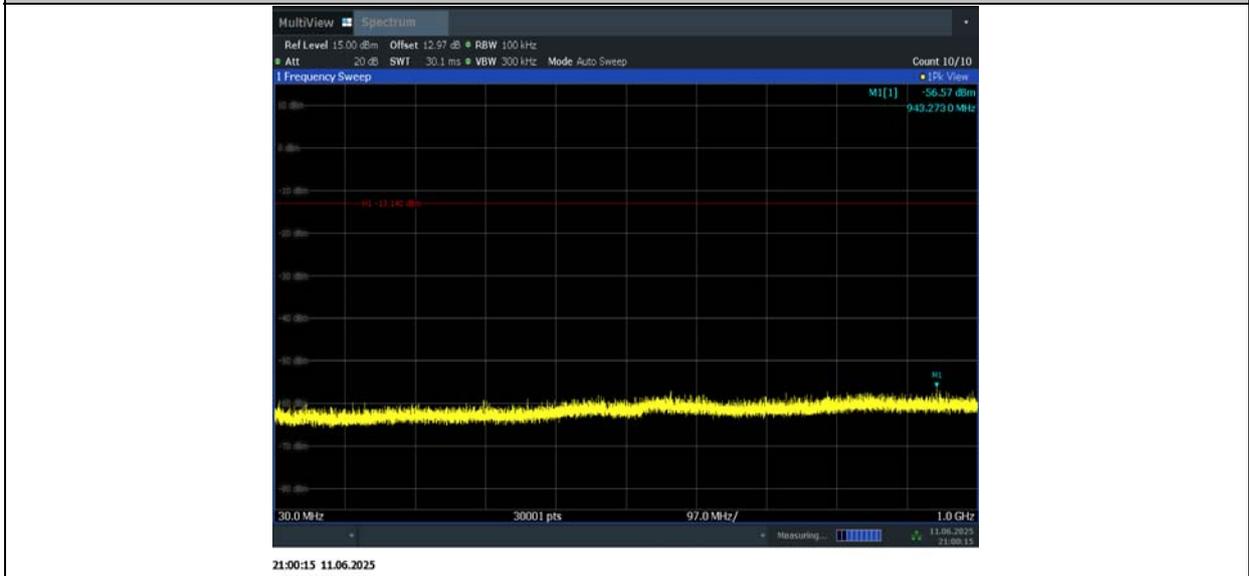
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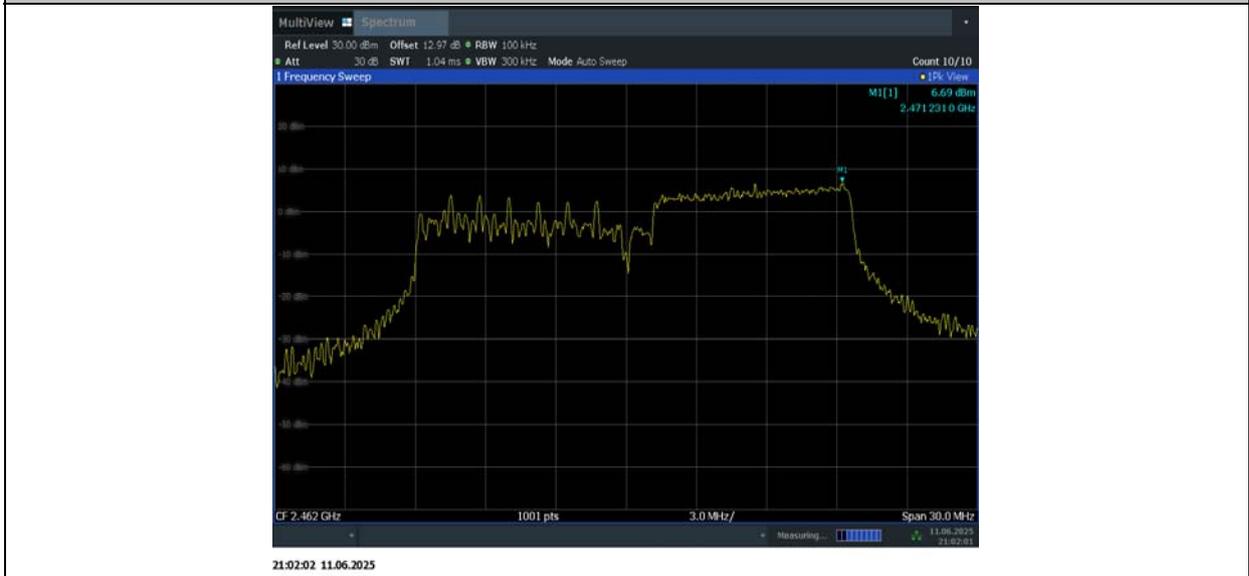
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11AX20MIMO\_Ant8\_2462\_106Tone\_RU53\_1000~26500



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11AX20MIMO\_Ant8\_2462\_106Tone\_RU54\_30~1000



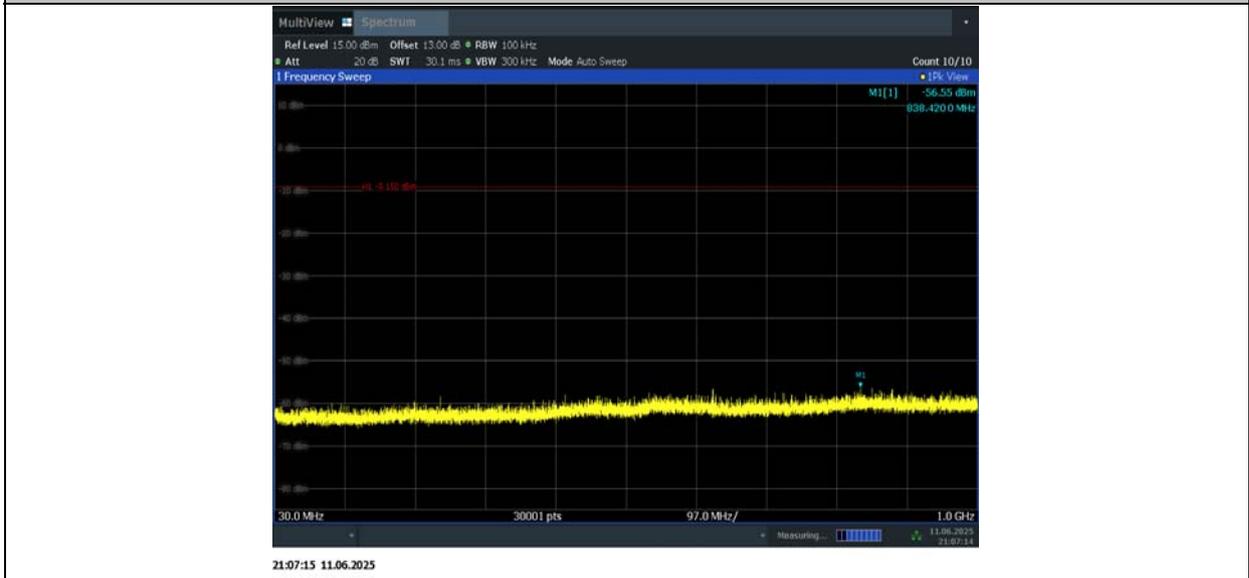
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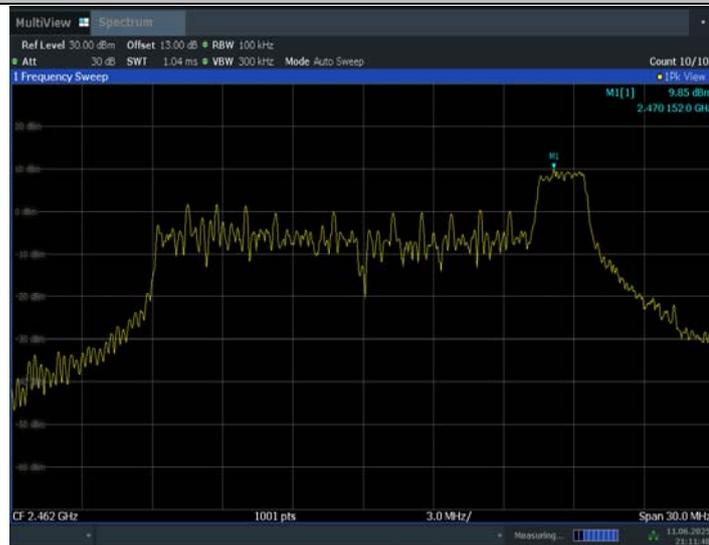


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21:07:51 11.06.2025

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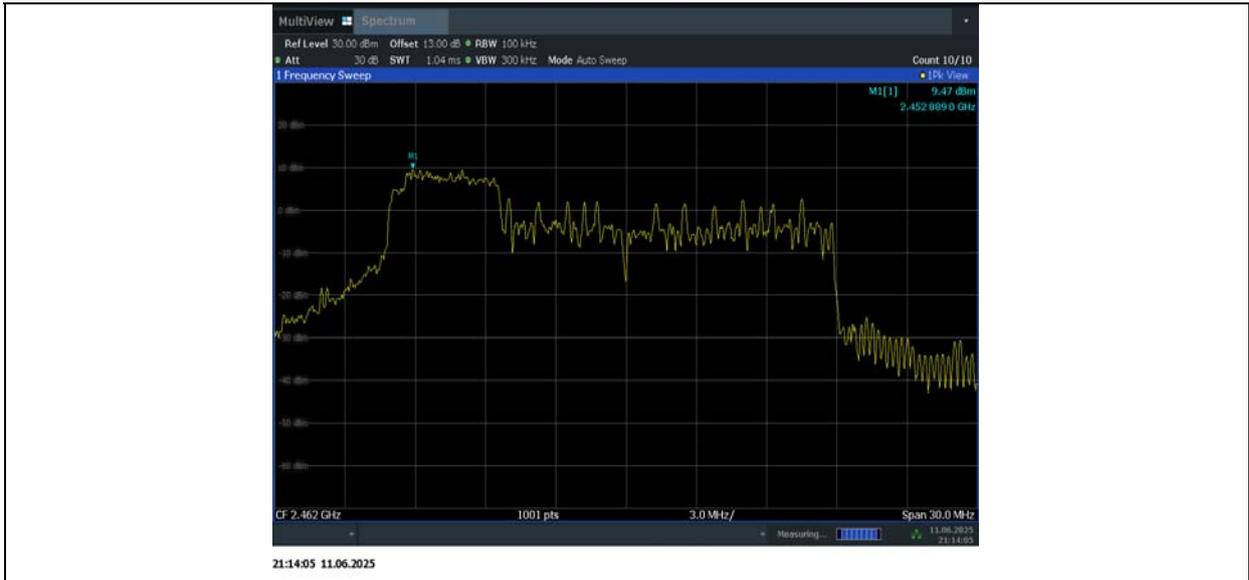
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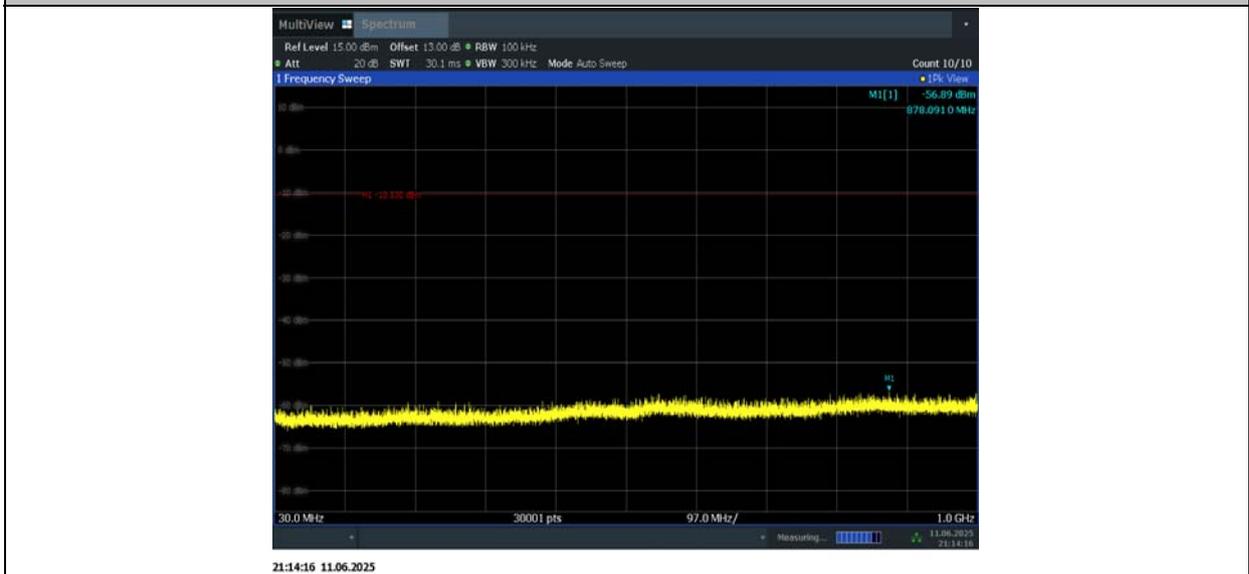
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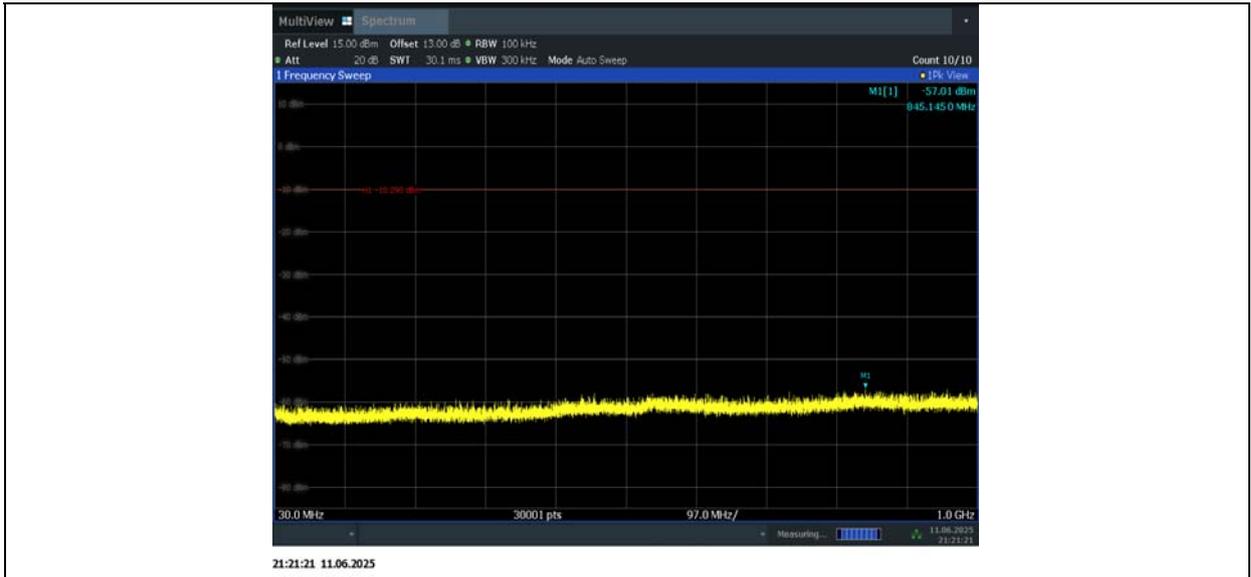
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11AX20MIMO\_Ant9\_2462\_52Tone\_RU40\_30~1000



11AX20MIMO\_Ant9\_2462\_52Tone\_RU40\_1000~26500



11AX20MIMO\_Ant9\_2462\_106Tone\_RU53\_0~Reference



11AX20MIMO\_Ant9\_2462\_106Tone\_RU53\_30~1000



11AX20MIMO\_Ant9\_2462\_106Tone\_RU53\_1000~26500



11AX20MIMO\_Ant9\_2462\_106Tone\_RU54\_0~Reference



11AX20MIMO\_Ant9\_2462\_106Tone\_RU54\_30~1000



11AX20MIMO\_Ant9\_2462\_106Tone\_RU54\_1000~26500



**Conclusion: Pass**

### **A.6.2 Transmitter Spurious Emission - Radiated**

**Method of Measurement: See ANSI C63.10-2013-clause 6.4 & 6.5 & 6.6**

**Measurement Limit:**

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power

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)).

**Limit in restricted band:**

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Frequency (MHz)	Field strength(μV/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30

### **Test Condition**

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100KHz/300KHz	5
1000-4000	1MHz/1MHz	15
4000-18000	1MHz/1MHz	40
18000-26500	1MHz/1MHz	20

**EUT ID: UT25a**

**Measurement Results:**
**FULL RB**
**802.11b mode**

Mode	Channel	Test Results	Conclusion
802.11b	1	Fig.A.6.2.1	<b>P</b>
	11	Fig.A.6.2.2	<b>P</b>

**802.11g mode**

Mode	Channel	Test Results	Conclusion
802.11g	1	Fig.A.6.2.3	<b>P</b>
	11	Fig.A.6.2.4	<b>P</b>

**802.11n-HT20 mode**

Mode	Channel	Test Results	Conclusion
802.11n (HT20)	1	Fig.A.6.2.5	<b>P</b>
	11	Fig.A.6.2.6	<b>P</b>

**802.11n-HT40 mode**

Mode	Channel	Test Results	Conclusion
802.11n (HT40)	3	Fig.A.6.2.7	<b>P</b>
	9	Fig.A.6.2.8	<b>P</b>

**802.11ax-HT20 mode**

Mode	Channel	Test Results	Conclusion
802.11n (HT20)	1	Fig.A.6.2.9	<b>P</b>
	11	Fig.A.6.2.10	<b>P</b>

**802.11ax-HT40 mode**

Mode	Channel	Test Results	Conclusion
802.11n (HT40)	3	Fig.A.6.2.11	<b>P</b>
	9	Fig.A.6.2.12	<b>P</b>

**Partial RB**

Mode	Channel	RU size and index	Test Results	Conclusion
802.11ax HT20	1	52RU-index37	Fig.A.6.2.13	<b>P</b>
	11	52RU-index40	Fig.A.6.2.14	<b>P</b>

Mode	Channel	RU size and index	Test Results	Conclusion
802.11ax HT40	1	242RU-index61	Fig.A.6.2.15	<b>P</b>
	11	242RU-index62	Fig.A.6.2.16	<b>P</b>



Note1: All partial RU and full RU have been tested, in spurious domain there are basically noises with suspicious emission, and thus only the full RU results were reported.

Note2: All SISO and MIMO emissions have been checked, only the worst cases were reported.

**Conclusion: Pass**

**Note:**

A "reference path loss" is established and the  $A_{Rpl}$  is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

$P_{Mea}$  is the field strength recorded from the instrument.

The measurement results are obtained as described below:

Result= $P_{Mea}+A_{Rpl}= P_{Mea}+Cable\ Loss+Antenna\ Factor$

**Peak**  
**802.11b**

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17906.500	59.30	-25.40	45.40	39.30	74.00	14.70	H
14299.000	52.74	-29.10	41.70	40.14	74.00	21.26	H
12252.500	49.95	-30.90	39.70	41.15	74.00	24.05	V
9444.000	46.39	-33.60	37.90	42.09	74.00	27.61	H
7507.000	45.47	-34.60	36.40	43.67	74.00	28.53	V
2363.100	57.81	-19.20	28.40	48.61	74.00	16.19	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17914.000	59.72	-25.40	45.40	39.72	74.00	14.28	H
14207.500	52.60	-29.40	41.70	40.30	74.00	21.40	H
11836.500	50.07	-31.00	39.80	41.27	74.00	23.93	H
9725.500	46.38	-33.10	37.70	41.78	74.00	27.62	V
7191.000	45.87	-34.50	36.30	44.07	74.00	28.13	H
4873.500	44.79	-36.90	33.40	48.29	74.00	29.21	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17907.500	59.16	-25.40	45.40	39.16	74.00	14.84	H
14681.000	52.33	-28.30	41.40	39.23	74.00	21.67	V
12357.000	49.63	-30.10	39.60	40.13	74.00	24.37	H
9176.500	46.97	-33.70	37.90	42.77	74.00	27.03	V
7503.500	44.53	-34.60	36.40	42.73	74.00	29.47	H
2486.000	57.53	-19.00	28.50	48.03	74.00	16.47	V

**Peak**  
**802.11g**  
 Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17944.000	58.94	-25.40	45.40	38.94	74.00	15.06	H
14116.500	52.06	-29.40	41.80	39.66	74.00	21.94	H
12790.500	49.33	-30.40	39.80	39.93	74.00	24.67	V
9170.000	47.43	-33.70	37.90	43.23	74.00	26.57	V
7994.500	45.03	-34.70	37.00	42.73	74.00	28.97	H
2389.000	63.52	-19.20	28.40	54.32	74.00	10.48	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17914.500	58.96	-25.40	45.40	38.96	74.00	15.04	H
14742.000	52.48	-28.40	41.40	39.48	74.00	21.52	H
12363.000	49.84	-30.10	39.60	40.34	74.00	24.16	H
9755.500	46.47	-33.10	38.00	41.57	74.00	27.53	V
7461.000	44.56	-34.30	36.60	42.26	74.00	29.44	H
4876.000	42.71	-36.90	33.40	46.21	74.00	31.29	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17995.000	59.11	-25.40	45.40	39.11	74.00	14.89	H
14126.500	52.40	-29.40	41.80	40.00	74.00	21.60	V
12424.500	50.12	-30.10	39.50	40.72	74.00	23.88	V
9795.500	46.50	-33.10	38.00	41.60	74.00	27.50	H
7198.500	44.62	-34.50	36.30	42.82	74.00	29.38	H
2485.300	62.08	-19.00	28.50	52.58	74.00	11.92	H

**Peak**  
**802.11n-HT20**

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17918.000	59.42	-25.40	45.40	39.42	74.00	14.58	H
14551.000	52.30	-28.70	41.80	39.20	74.00	21.70	H
11901.500	50.07	-31.00	39.80	41.27	74.00	23.93	H
9068.000	46.87	-33.50	37.70	42.67	74.00	27.13	V
7960.000	44.97	-34.60	36.90	42.67	74.00	29.03	V
2389.100	63.98	-19.20	28.40	54.78	74.00	10.02	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17919.000	59.34	-25.40	45.40	39.34	74.00	14.66	H
14521.000	52.54	-28.70	41.80	39.44	74.00	21.46	H
12385.000	49.41	-30.10	39.50	40.01	74.00	24.59	V
8941.500	46.75	-33.60	37.70	42.65	74.00	27.25	V
7961.000	44.78	-34.60	36.90	42.48	74.00	29.22	V
4878.000	42.29	-36.90	33.40	45.79	74.00	31.71	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17914.500	59.01	-25.40	45.40	39.01	74.00	14.99	H
14665.500	52.70	-28.30	41.40	39.60	74.00	21.30	V
12363.500	49.62	-30.10	39.60	40.12	74.00	24.38	H
9146.000	46.78	-33.70	37.80	42.68	74.00	27.22	V
7492.000	44.99	-34.60	36.40	43.19	74.00	29.01	V
2485.000	61.42	-19.00	28.50	51.92	74.00	12.58	H

**Peak**  
**802.11n-HT40**

Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17928.500	59.78	-25.40	45.40	39.78	74.00	14.22	H
14566.000	52.19	-28.30	41.70	38.79	74.00	21.81	H
12345.500	49.66	-30.10	39.60	40.16	74.00	24.34	H
9009.000	47.29	-33.60	37.70	43.19	74.00	26.71	V
7893.000	44.97	-34.60	36.90	42.67	74.00	29.03	V
2388.800	62.20	-19.20	28.40	53.00	74.00	11.80	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17907.000	59.69	-25.40	45.40	39.69	74.00	14.31	H
14697.000	53.67	-28.30	41.40	40.57	74.00	20.33	H
12388.500	49.61	-30.10	39.50	40.21	74.00	24.39	H
9458.000	46.83	-33.60	37.70	42.73	74.00	27.17	H
7511.500	44.70	-34.60	36.40	42.90	74.00	29.30	H
4955.000	41.46	-36.70	33.50	44.66	74.00	32.54	V

Ch9

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17902.500	59.43	-25.40	45.40	39.43	74.00	14.57	H
14191.000	52.10	-29.40	41.70	39.80	74.00	21.90	H
12373.500	49.86	-30.10	39.60	40.36	74.00	24.14	V
8898.500	46.89	-33.60	38.00	42.49	74.00	27.11	V
7964.000	45.58	-34.60	36.90	43.28	74.00	28.42	H
2487.900	62.50	-19.00	28.50	53.00	74.00	11.50	H

**Peak**
**802.11ax-HT20**

## Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17958.500	59.80	-25.40	45.40	39.80	74.00	14.20	V
14188.500	52.37	-29.40	41.70	40.07	74.00	21.63	V
12451.500	50.31	-30.10	39.50	40.91	74.00	23.69	V
8942.500	46.82	-33.60	37.70	42.72	74.00	27.18	V
7488.500	44.70	-34.60	36.40	42.90	74.00	29.30	H
2390.000	66.22	-19.20	28.40	57.02	74.00	7.78	H

## Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17926.000	59.16	-25.40	45.40	39.16	74.00	14.84	V
14151.000	52.22	-29.40	41.80	39.82	74.00	21.78	V
12404.500	49.72	-30.10	39.50	40.32	74.00	24.28	H
9912.000	47.13	-33.20	38.10	42.23	74.00	26.87	V
7940.500	45.01	-34.60	36.90	42.71	74.00	28.99	H
4945.500	42.08	-36.90	33.50	45.48	74.00	31.92	V

## Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17889.500	59.46	-25.40	45.40	39.46	74.00	14.54	H
14142.000	52.11	-29.40	41.80	39.71	74.00	21.89	V
12424.000	50.12	-30.10	39.50	40.72	74.00	23.88	V
8576.000	47.13	-33.60	37.60	43.13	74.00	26.87	V
7811.500	44.54	-34.70	36.60	42.64	74.00	29.46	V
2485.600	62.61	-19.00	28.50	53.11	74.00	11.39	H

**Peak**
**802.11ax-HT40**

## Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17926.500	59.77	-25.40	45.40	39.77	74.00	14.23	H
14648.000	52.82	-28.30	41.70	39.42	74.00	21.18	H
12337.000	49.69	-30.10	39.60	40.19	74.00	24.31	H
9031.500	46.93	-33.60	37.70	42.83	74.00	27.07	H
7508.500	45.40	-34.60	36.40	43.60	74.00	28.60	V
2386.200	61.73	-19.20	28.40	52.53	74.00	12.27	H

## Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17914.000	59.21	-25.40	45.40	39.21	74.00	14.79	V
14094.500	52.10	-28.70	41.80	39.00	74.00	21.90	H
12759.000	49.92	-30.40	39.80	40.52	74.00	24.08	H
9044.000	46.72	-33.60	37.70	42.62	74.00	27.28	V
7406.500	44.90	-34.90	36.60	43.20	74.00	29.10	H
4674.000	41.86	-37.10	33.00	45.96	74.00	32.14	H

## Ch9

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17955.500	59.32	-25.40	45.40	39.32	74.00	14.68	H
14688.000	52.35	-28.30	41.40	39.25	74.00	21.65	H
12799.500	49.27	-30.40	39.80	39.87	74.00	24.73	V
8982.500	46.67	-33.60	37.70	42.57	74.00	27.33	V
7901.000	44.97	-34.60	36.90	42.67	74.00	29.03	V
2495.600	62.52	-19.00	28.50	53.02	74.00	11.48	H

**Average**
**802.11b**
**Ch1**

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17917.500	50.06	-25.40	45.40	30.06	54.00	3.94	V
14174.500	42.69	-29.40	41.70	30.39	54.00	11.31	H
12391.500	40.16	-30.10	39.50	30.76	54.00	13.84	V
8954.500	37.35	-33.60	37.70	33.25	54.00	16.65	H
7237.000	37.00	-34.50	36.60	34.90	54.00	17.00	H
2385.500	46.92	-19.20	28.40	37.72	54.00	7.08	H

**Ch6**

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17934.500	49.76	-25.40	45.40	29.76	54.00	4.24	H
14588.000	42.67	-28.30	41.70	29.27	54.00	11.33	H
12262.500	39.80	-30.90	39.70	31.00	54.00	14.20	H
4873.500	39.70	-36.90	33.40	43.20	54.00	14.30	V
9146.000	37.13	-33.70	37.80	33.03	54.00	16.87	V
7943.500	35.13	-34.60	36.90	32.83	54.00	18.87	V

**Ch11**

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17986.000	49.45	-25.40	45.40	29.45	54.00	4.55	H
14200.000	42.81	-29.40	41.70	30.51	54.00	11.19	V
12361.500	40.30	-30.10	39.60	30.80	54.00	13.70	V
4924.000	39.89	-36.90	33.50	43.29	54.00	14.11	V
8942.000	37.08	-33.60	37.70	32.98	54.00	16.92	V
2497.100	46.24	-19.00	28.50	36.74	54.00	7.76	H

**Average**  
**802.11g**

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17908.000	49.99	-25.40	45.40	29.99	54.00	4.01	H
14179.000	43.12	-29.40	41.70	30.82	54.00	10.88	V
11871.500	39.93	-31.00	39.80	31.13	54.00	14.07	V
9110.000	37.09	-33.70	37.80	32.99	54.00	16.91	V
7928.500	35.03	-34.60	36.90	32.73	54.00	18.97	H
2389.700	48.98	-19.20	28.40	39.78	54.00	5.02	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17968.500	49.60	-25.40	45.40	29.60	54.00	4.40	H
14195.500	43.03	-29.40	41.70	30.73	54.00	10.97	H
12391.000	39.89	-30.10	39.50	30.49	54.00	14.11	H
9661.000	36.94	-33.00	37.80	32.14	54.00	17.06	H
7311.000	35.30	-35.10	36.70	33.70	54.00	18.70	H
4876.000	33.78	-36.90	33.40	37.28	54.00	20.22	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17926.500	49.99	-25.40	45.40	29.99	54.00	4.01	H
14601.500	43.21	-28.30	41.70	29.81	54.00	10.79	V
12404.000	39.87	-30.10	39.50	30.47	54.00	14.13	V
9128.500	37.28	-33.70	37.80	33.18	54.00	16.72	V
7900.500	35.47	-34.60	36.90	33.17	54.00	18.53	V
2485.400	47.93	-19.00	28.50	38.43	54.00	6.07	H

**Average**  
**802.11n-HT20**

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17910.000	49.59	-25.40	45.40	29.59	54.00	4.41	H
14070.000	42.65	-28.70	41.80	29.55	54.00	11.35	V
11870.000	39.80	-31.00	39.80	31.00	54.00	14.20	V
8940.000	36.98	-33.60	37.70	32.88	54.00	17.02	H
7824.500	35.28	-34.70	36.90	33.08	54.00	18.72	H
2389.800	48.88	-19.20	28.40	39.68	54.00	5.12	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17931.500	50.12	-25.40	45.40	30.12	54.00	3.88	H
14677.000	42.87	-28.30	41.40	29.77	54.00	11.13	H
12399.500	40.00	-30.10	39.50	30.60	54.00	14.00	H
9107.000	36.96	-33.50	37.70	32.76	54.00	17.04	H
7930.000	35.40	-34.60	36.90	33.10	54.00	18.60	V
4877.500	33.08	-36.90	33.40	36.58	54.00	20.92	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17912.500	49.97	-25.40	45.40	29.97	54.00	4.03	V
14175.000	42.71	-29.40	41.70	30.41	54.00	11.29	H
12389.000	39.97	-30.10	39.50	30.57	54.00	14.03	V
9160.500	37.09	-33.70	37.90	32.89	54.00	16.91	H
7407.500	35.17	-34.90	36.60	33.47	54.00	18.83	H
2485.100	47.44	-19.00	28.50	37.94	54.00	6.56	H

**Average**  
**802.11n-HT40**

Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17924.500	49.69	-25.40	45.40	29.69	54.00	4.31	V
14632.500	42.89	-28.30	41.70	29.49	54.00	11.11	H
12393.000	39.86	-30.10	39.50	30.46	54.00	14.14	H
8911.500	37.36	-33.60	37.70	33.26	54.00	16.64	H
7910.000	35.00	-34.60	36.90	32.70	54.00	19.00	H
2388.500	50.95	-19.20	28.40	41.75	54.00	3.05	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17959.000	49.69	-25.40	45.40	29.69	54.00	4.31	H
14162.500	42.76	-29.40	41.70	30.46	54.00	11.24	V
12355.500	39.77	-30.10	39.60	30.27	54.00	14.23	H
9731.500	37.09	-33.10	37.70	32.49	54.00	16.91	V
7413.500	35.45	-34.90	36.60	33.75	54.00	18.55	H
4955.000	32.63	-36.70	33.50	35.83	54.00	21.37	V

Ch9

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17901.000	50.67	-25.40	45.40	30.67	54.00	3.33	V
14105.000	42.81	-28.70	41.80	29.71	54.00	11.19	H
12384.500	39.59	-30.10	39.50	30.19	54.00	14.41	H
9038.500	37.04	-33.60	37.70	32.94	54.00	16.96	H
8000.000	35.37	-34.70	37.00	33.07	54.00	18.63	H
2485.400	50.67	-19.00	28.50	41.17	54.00	3.33	H

**Average**  
**802.11ax-HT20**

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17903.500	50.38	-25.40	45.40	30.38	54.00	3.62	V
14149.000	42.53	-29.40	41.80	30.13	54.00	11.47	H
12429.500	39.53	-30.10	39.50	30.13	54.00	14.47	H
8934.000	36.86	-33.60	37.70	32.76	54.00	17.14	V
7892.000	35.13	-34.60	36.90	32.83	54.00	18.87	V
2389.300	49.60	-19.20	28.40	40.40	54.00	4.40	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17950.000	50.09	-25.40	45.40	30.09	54.00	3.91	H
14197.000	42.59	-29.40	41.70	30.29	54.00	11.41	H
12354.000	39.88	-30.10	39.60	30.38	54.00	14.12	V
8943.500	36.90	-33.60	37.70	32.80	54.00	17.10	H
7903.500	35.46	-34.60	36.90	33.16	54.00	18.54	V
4874.500	32.50	-36.90	33.40	36.00	54.00	21.50	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17940.000	49.53	-25.40	45.40	29.53	54.00	4.47	V
14592.000	42.54	-28.30	41.70	29.14	54.00	11.46	H
11867.500	39.81	-31.00	39.80	31.01	54.00	14.19	V
8944.000	36.76	-33.60	37.70	32.66	54.00	17.24	V
7968.000	35.02	-34.60	36.90	32.72	54.00	18.98	H
2486.100	47.57	-19.00	28.50	38.07	54.00	6.43	H

**Average**  
**802.11ax-HT40**

Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17933.000	49.91	-25.40	45.40	29.91	54.00	4.09	H
14635.000	42.99	-28.30	41.70	29.59	54.00	11.01	V
12366.000	40.13	-30.10	39.60	30.63	54.00	13.87	H
8935.500	37.21	-33.60	37.70	33.11	54.00	16.79	V
7473.000	35.24	-34.30	36.60	32.94	54.00	18.76	H
2389.800	49.87	-19.20	28.40	40.67	54.00	4.13	H

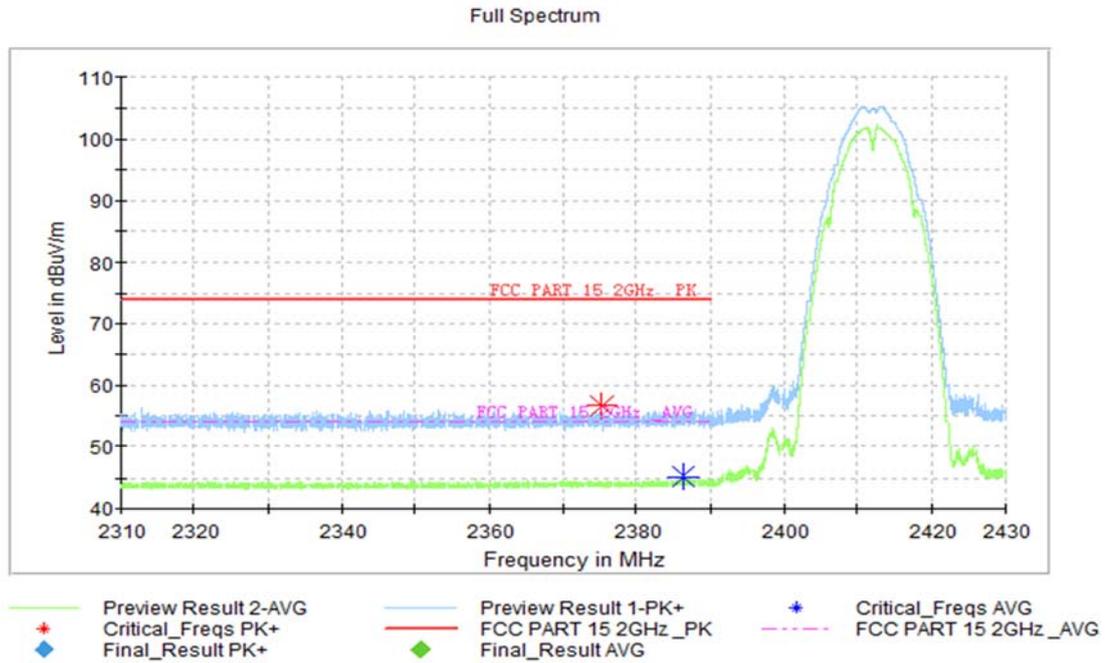
Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17926.000	50.04	-25.40	45.40	30.04	54.00	3.96	V
14682.500	43.22	-28.30	41.40	30.12	54.00	10.78	V
12768.500	39.60	-30.40	39.80	30.20	54.00	14.40	V
9243.500	37.24	-33.90	37.80	33.34	54.00	16.76	H
7884.000	35.12	-34.60	36.90	32.82	54.00	18.88	H
4943.000	32.12	-36.90	33.50	35.52	54.00	21.88	H

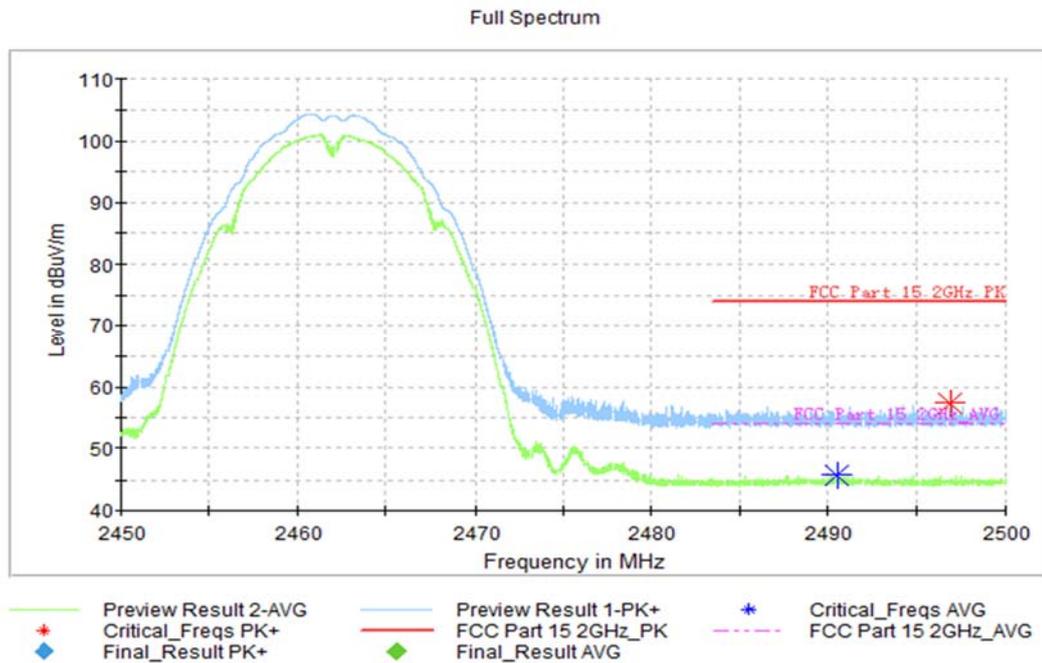
Ch9

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17926.000	49.69	-25.40	45.40	29.69	54.00	4.31	V
14107.500	43.00	-28.70	41.80	29.90	54.00	11.00	V
12308.500	40.57	-30.10	39.60	31.07	54.00	13.43	V
9658.500	37.07	-33.00	37.80	32.27	54.00	16.93	V
7940.500	35.45	-34.60	36.90	33.15	54.00	18.55	V
2485.200	49.41	-19.00	28.50	39.91	54.00	4.59	H

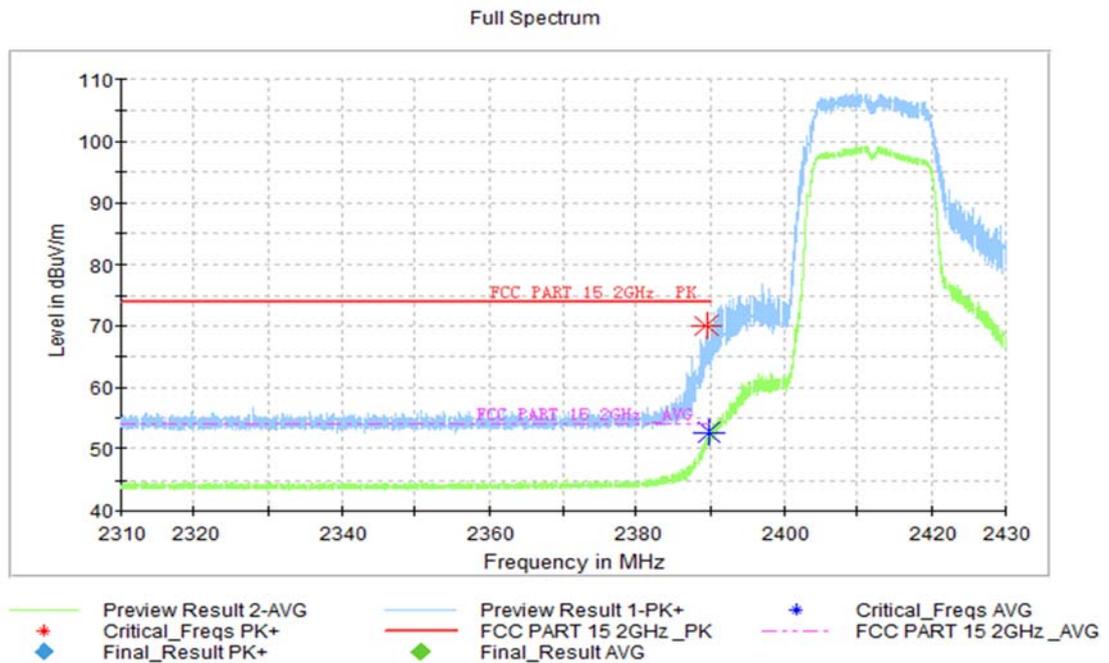
Test graphs as below:



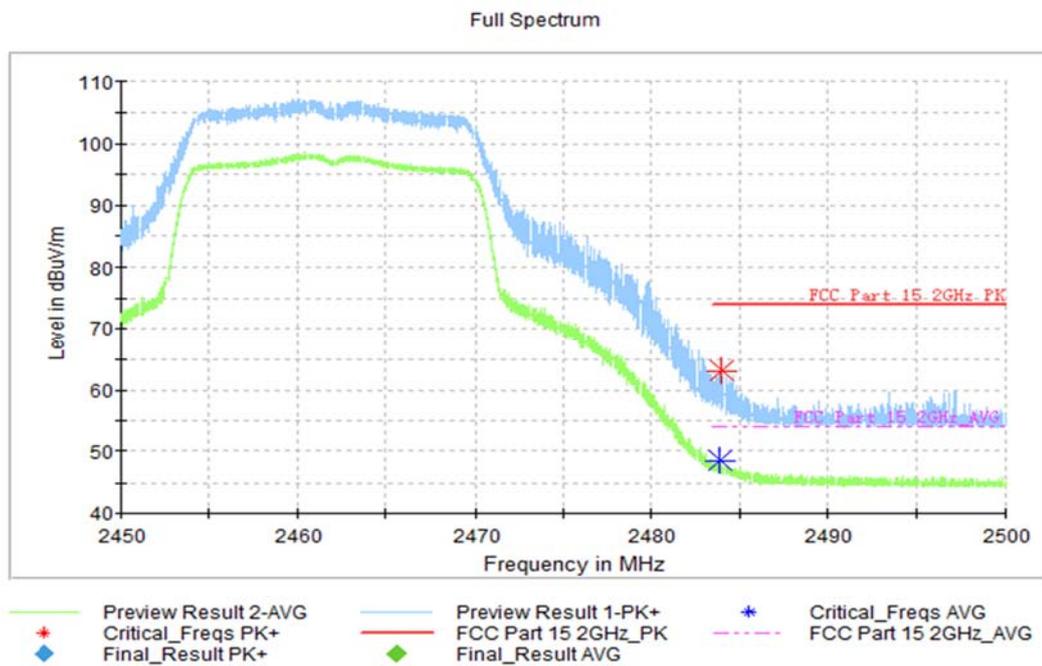
**Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.31 GHz – 2.43GHz, FULL RU**



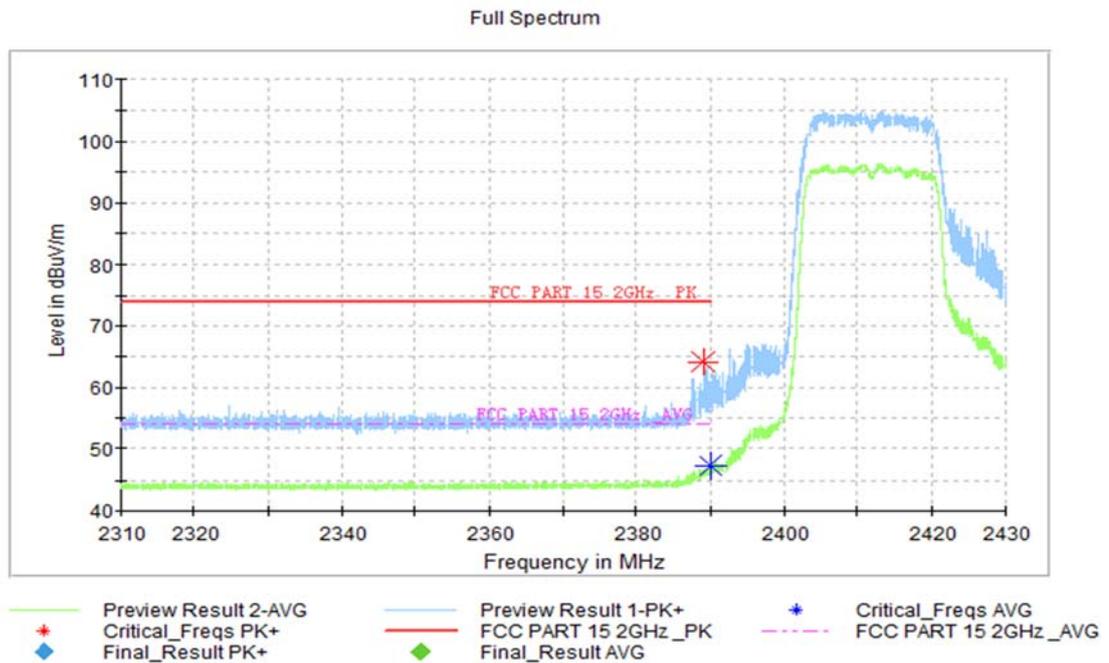
**Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz, FULL RU**



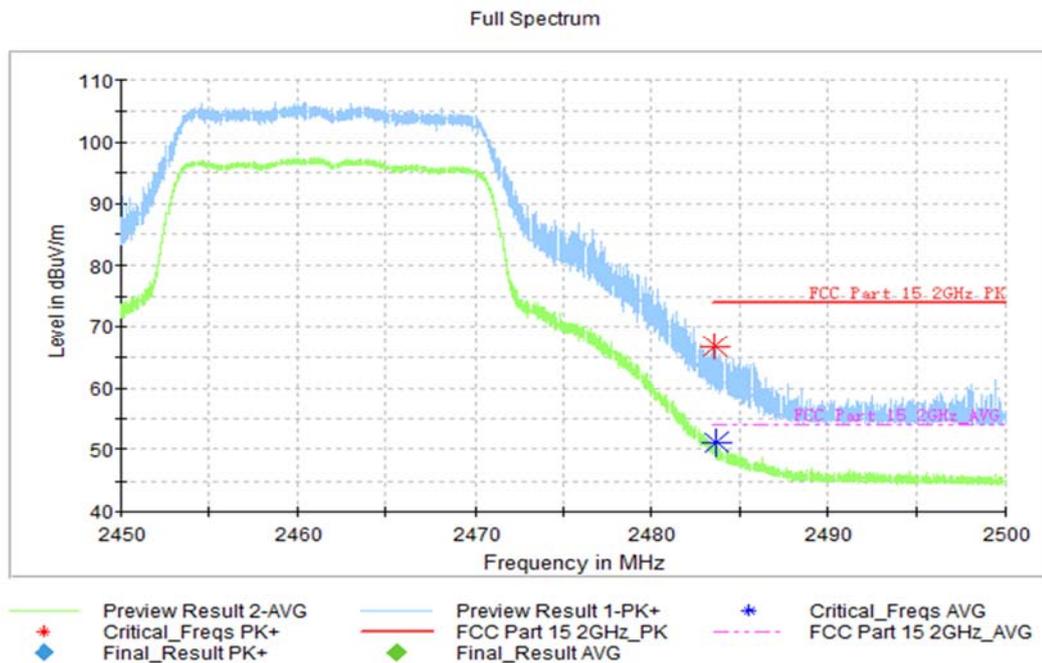
**Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.31 GHz - 2.43GHz, FULL RU**



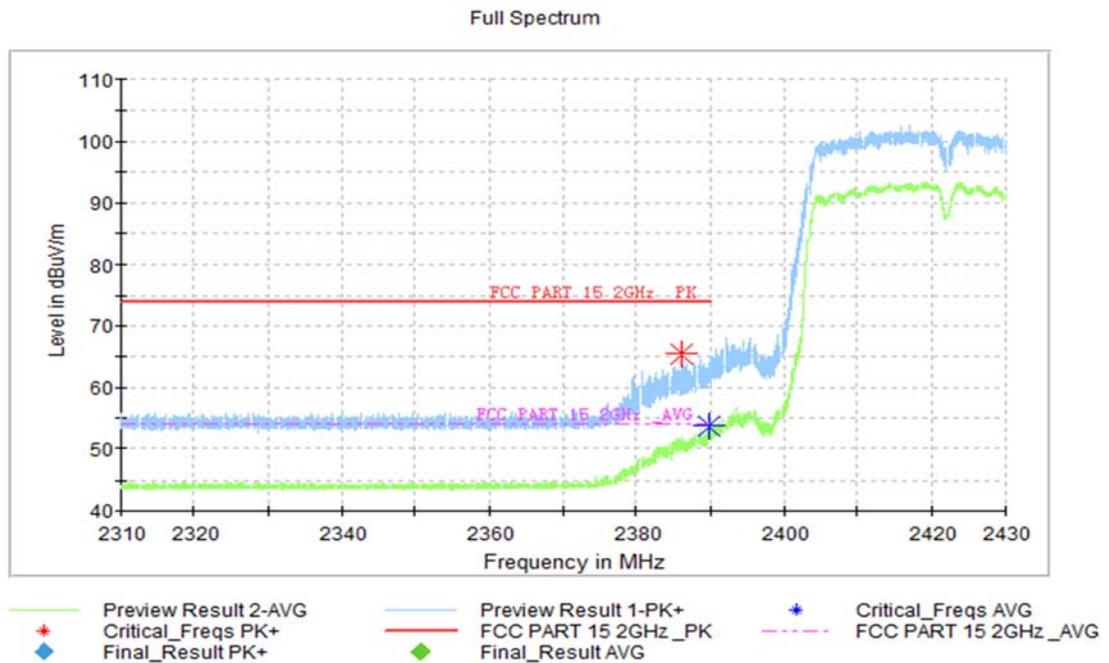
**Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz, FULL RU**



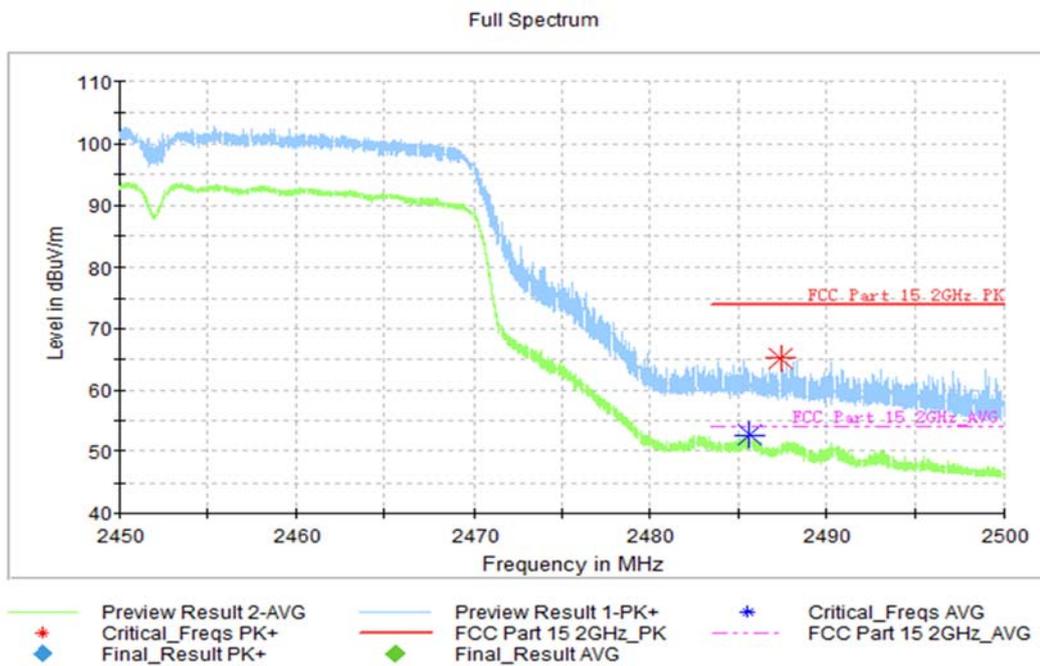
**Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.31 GHz - 2.43GHz, FULL RU**



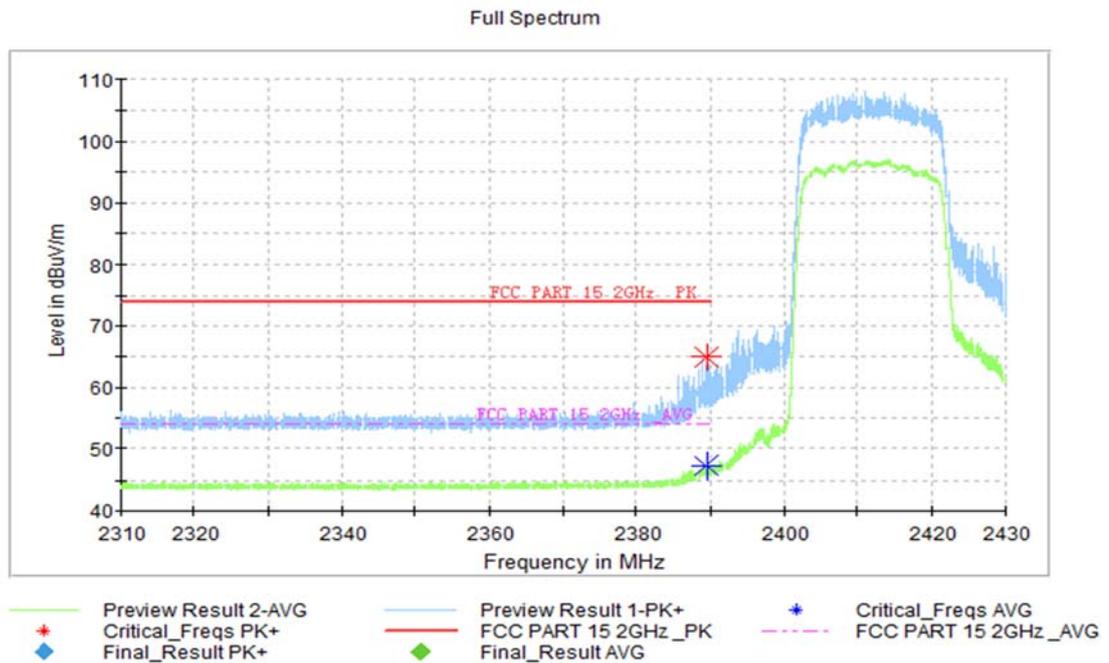
**Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz, FULL RU**



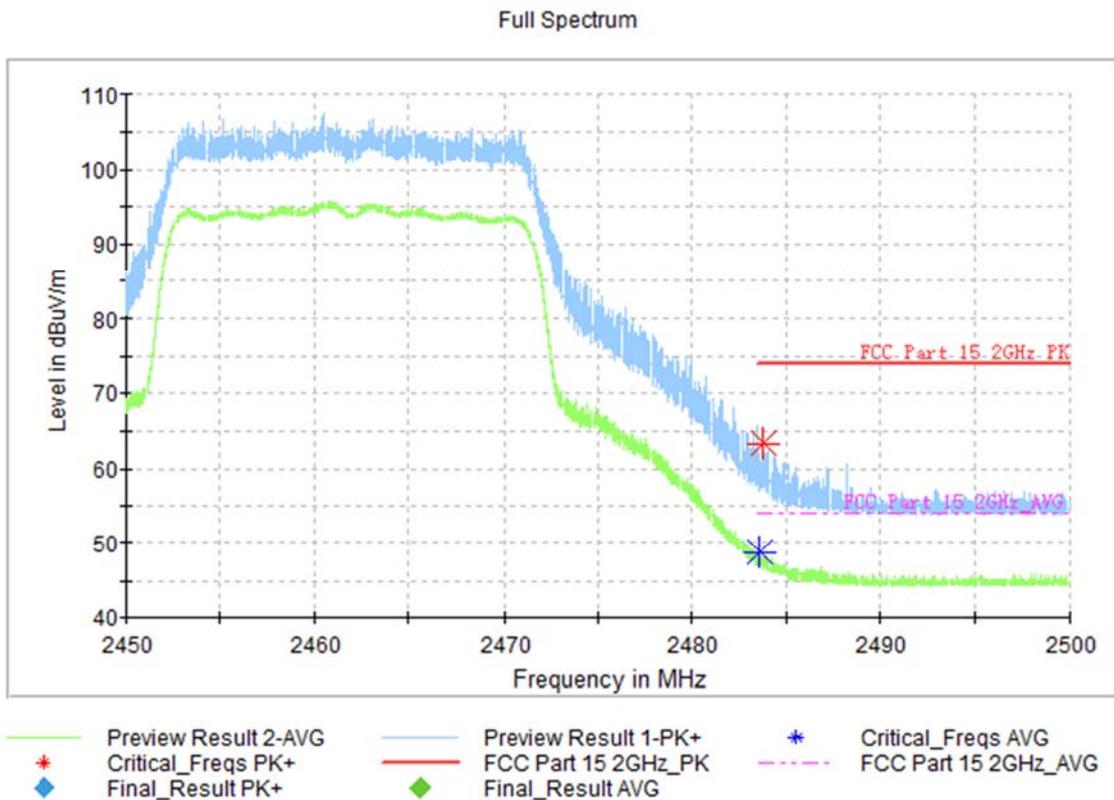
**Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.31 GHz - 2.43GHz, FULL RU**



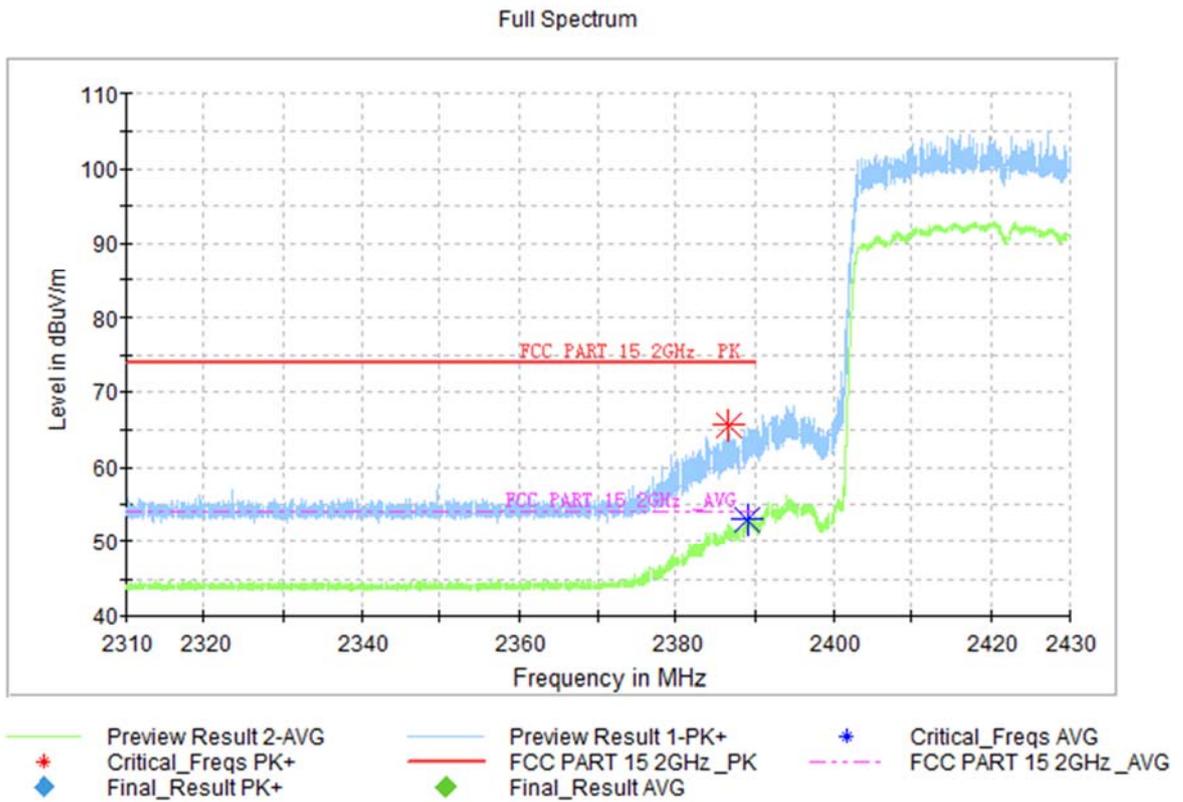
**Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz, FULL RU**



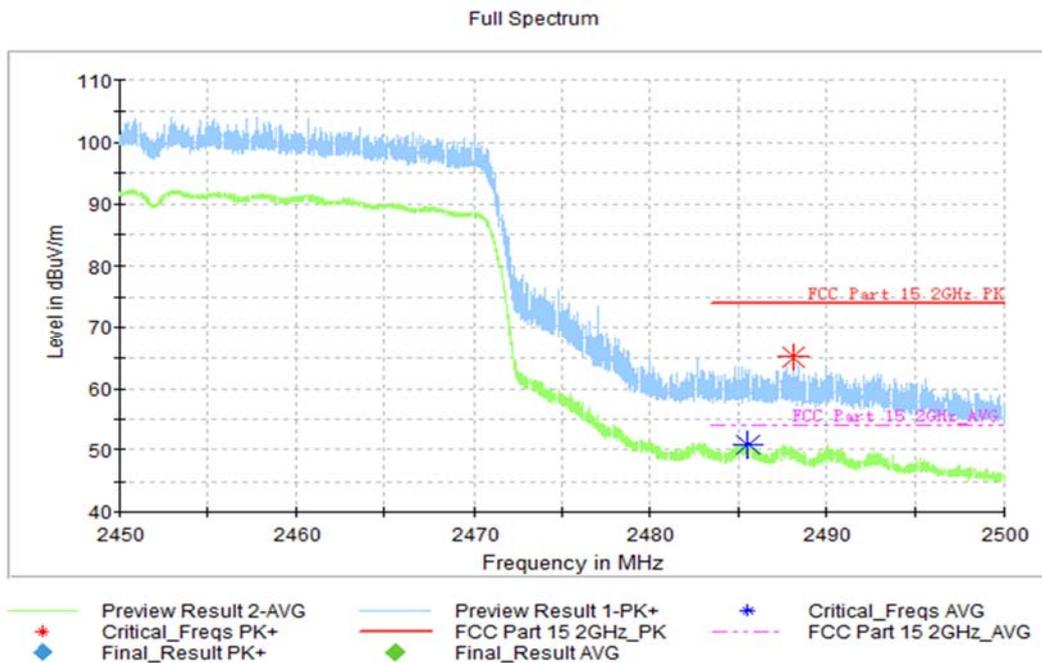
**Fig.A.6.2.9 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT20, ch1, 2.31 GHz - 2.43GHz, FULL RU**



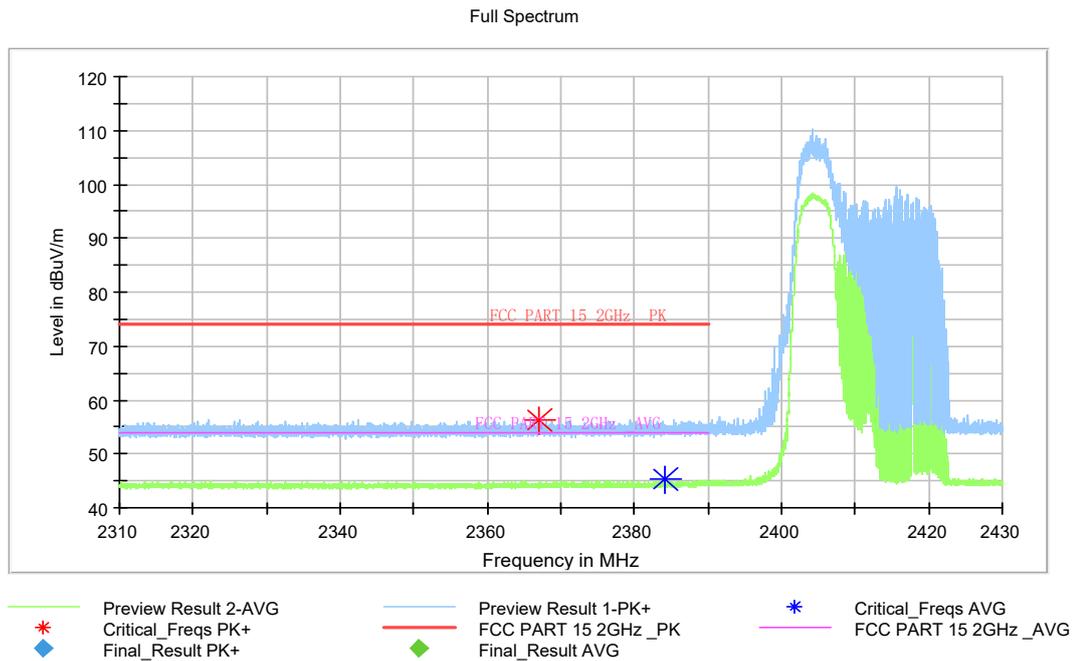
**Fig.A.6.2.10 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT20, ch11, 2.45 GHz - 2.50GHz, FULL RU**



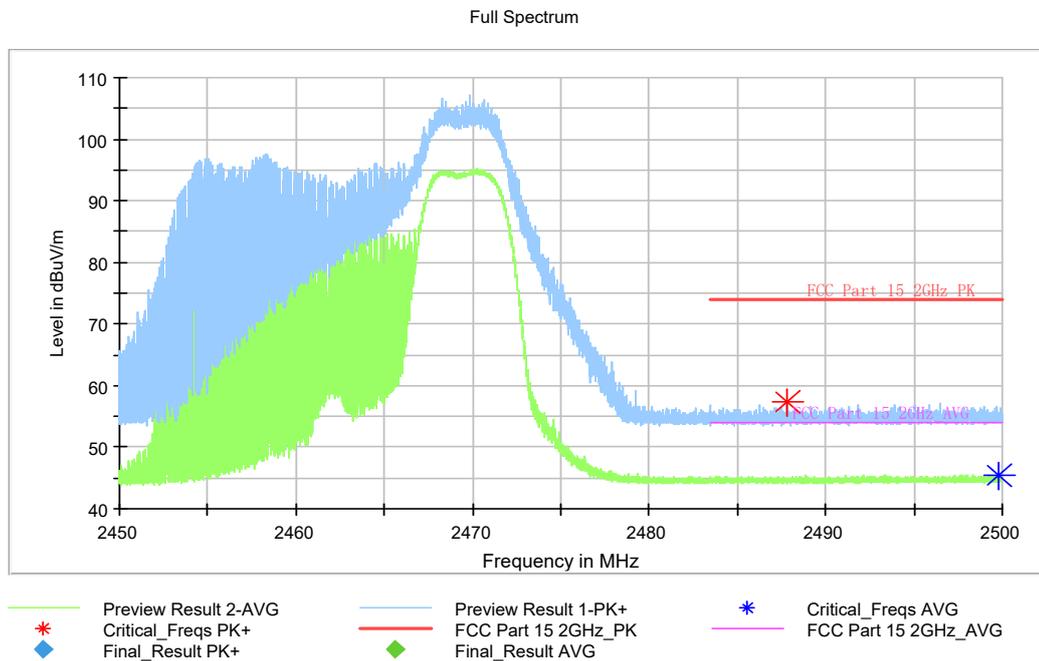
**Fig.A.6.2.11 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT40, ch3, 2.31 GHz - 2.43GHz, FULL RU**



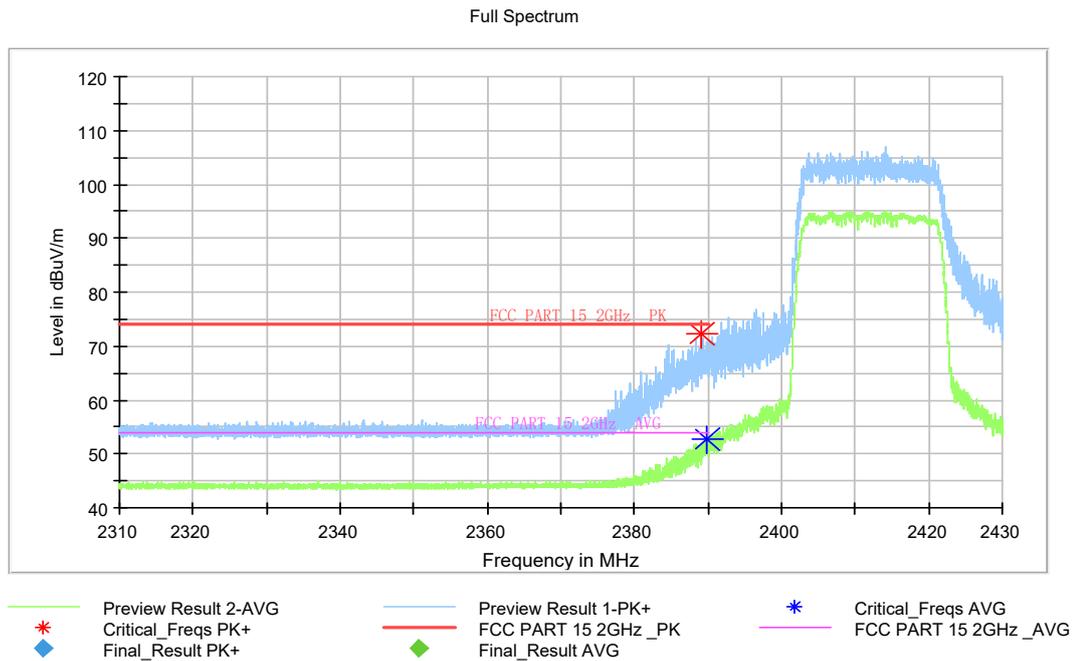
**Fig.A.6.2.12 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT40, ch9, 2.45 GHz - 2.50GHz, FULL RU**



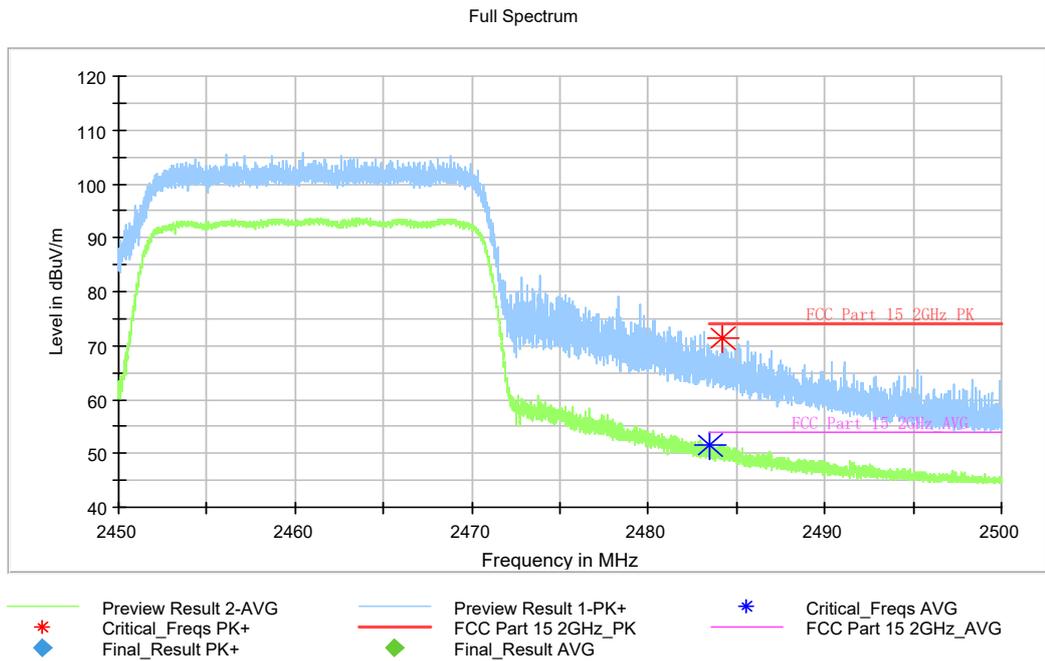
**Fig.A.6.2.13 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT20, ch1, 2.31 GHz - 2.43GHz, Partial RU**



**Fig.A.6.2.14 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT20, ch11, 2.45 GHz - 2.50GHz, Partial RU**



**Fig.A.6.2.15 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT40, ch3, 2.31 GHz - 2.43GHz, Partial RU**



**Fig.A.6.2.16 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT40, ch9, 2.45 GHz - 2.50GHz, Partial RU**

## **A.7. AC Power-line Conducted Emission**

### **Method of Measurement: See ANSI C63.10-2013-clause 6.2**

- 1 The one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT.
- 2 If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed.
- 3 The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation.
- 4 If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.
- 5 If the EUT uses a detachable antenna, these measurements shall be made with a suitable dummy load connected to the antenna output terminals; otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. When measuring the ac conducted emissions from a device that operates between 150 kHz and 30 MHz a non-detachable antenna may be replaced with a dummy load for the measurements within the fundamental emission band of the transmitter, but only for those measurements.<sup>36</sup> Record the six highest EUT emissions relative to the limit of each of the current-carrying conductors of the power cords of the equipment that comprises the EUT over the frequency range specified by the procuring or regulatory agency. Diagram or photograph the test setup that was used. See Clause 8 for full reporting requirements.

### **Test Condition:**

<b>Voltage (V)</b>	<b>Frequency (Hz)</b>
120	60

**Measurement Result and limit:**

## WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		With charger QC16US		
		802.11b	Idle	
0.15 to 0.5	66 to 56	Fig.A.7.1	Fig.A.7.2	<b>P</b>
0.5 to 5	56			
5 to 30	60			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

## WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		With charger QC16US		
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.A.7.1	Fig.A.7.2	<b>P</b>
0.5 to 5	46			
5 to 30	50			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

## WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		With charger QC16EU		
		802.11b	Idle	
0.15 to 0.5	67 to 56	Fig.A.7.3	/	<b>P</b>
0.5 to 5	56			
5 to 30	60			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

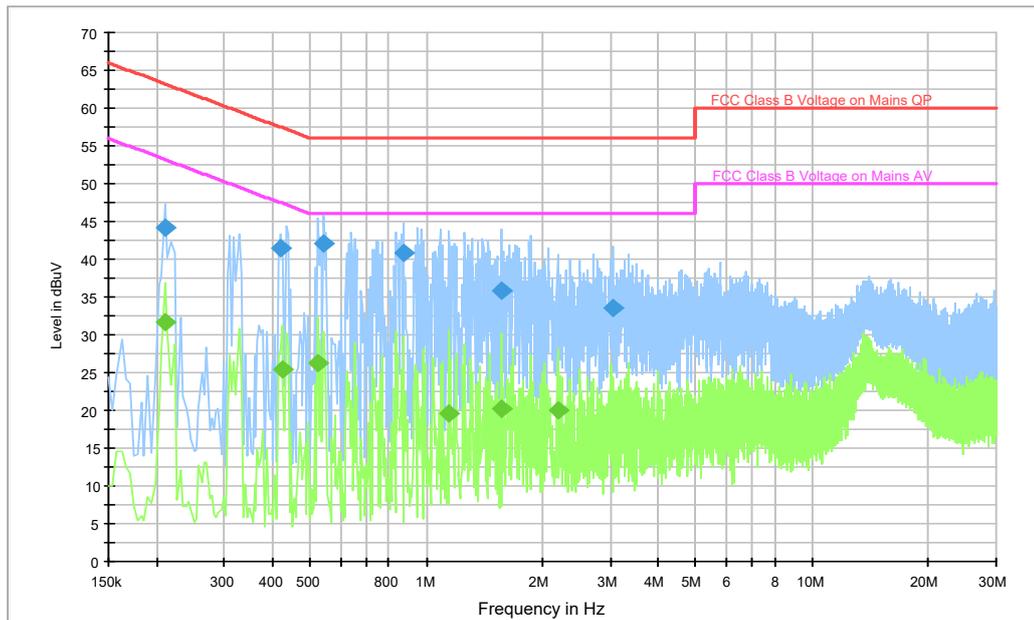
## WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		With charger QC16EU		
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.A.7.3	//	<b>P</b>
0.5 to 5	46			
5 to 30	50			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

**Conclusion: Pass**

**Test graphs as below:**



**Fig.A.7.1 AC Powerline Conducted Emission-802.11b With charger QC16US**

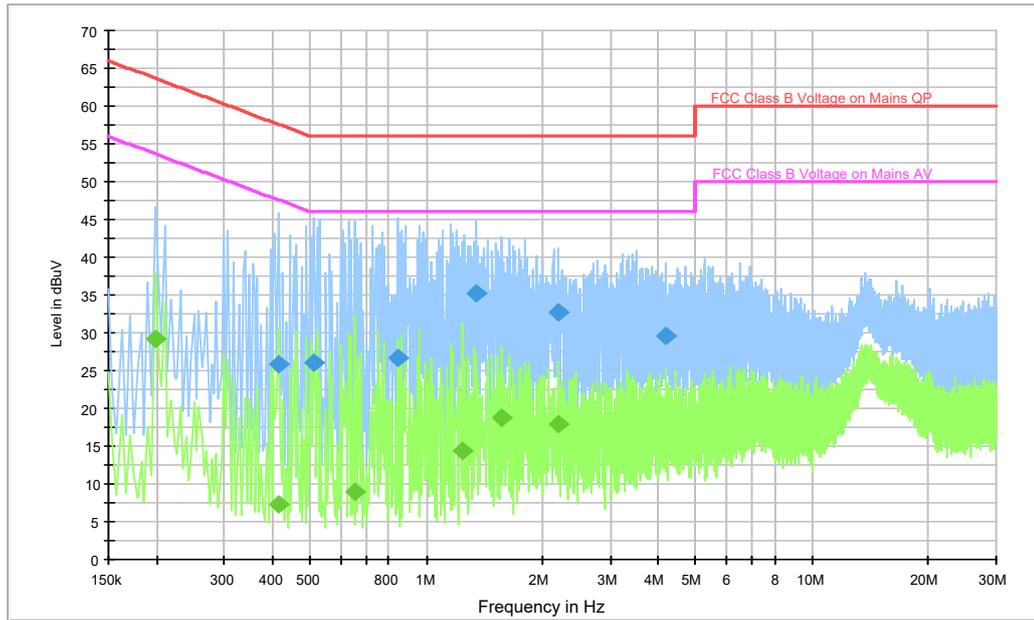
Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.210000	44.2	L1	19.84	19.0	63.2
0.418000	41.5	N	19.86	16.0	57.5
0.542000	42.1	L1	20.00	13.9	56.0
0.874000	40.9	L1	19.92	15.1	56.0
1.566000	35.8	L1	19.85	20.2	56.0
3.050000	33.4	L1	19.83	22.6	56.0

Final Result 2

Frequency (MHz)	Average (dB $\mu$ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.210000	31.8	L1	19.84	21.4	53.2
0.422000	25.4	L1	19.97	22.1	47.4
0.522000	26.3	L1	20.01	19.7	46.0
1.146000	19.5	L1	19.88	26.5	46.0
1.566000	20.2	L1	19.85	25.8	46.0
2.186000	20.0	L1	19.82	26.0	46.0



**Fig.A.7.2 AC Powerline Conducted Emission-Idle With charger QC16US**

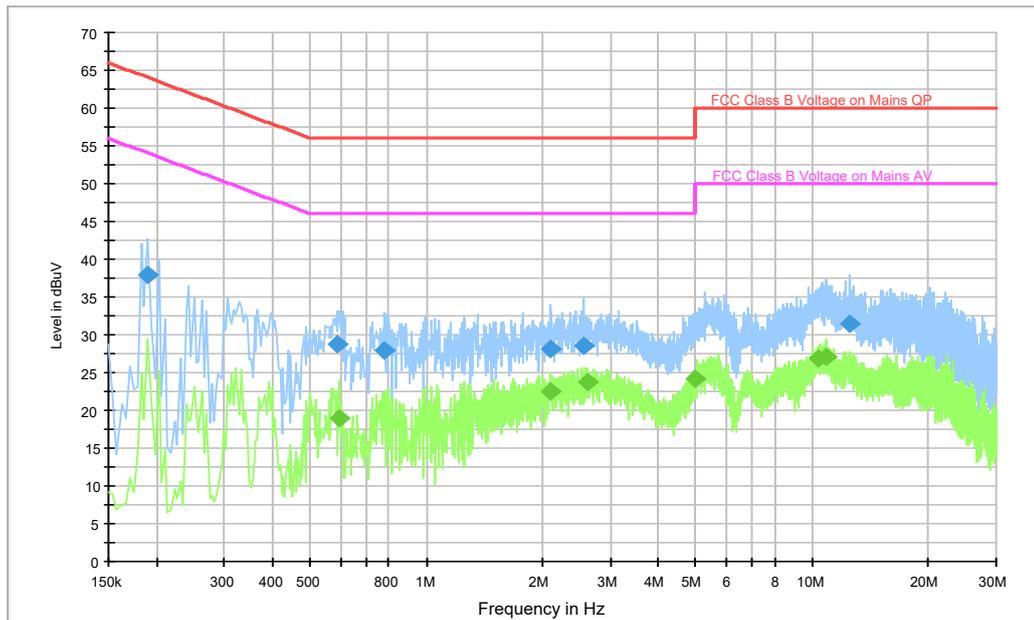
Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.414000	25.8	L1	19.96	31.8	57.6
0.510000	25.9	L1	20.01	30.1	56.0
0.842000	26.7	L1	19.93	29.3	56.0
1.350000	35.2	L1	19.86	20.8	56.0
2.186000	32.7	L1	19.82	23.3	56.0
4.158000	29.6	L1	19.84	26.4	56.0

Final Result 2

Frequency (MHz)	Average (dB $\mu$ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.198000	29.2	L1	19.84	24.5	53.7
0.414000	7.2	L1	19.96	40.4	47.6
0.650000	9.0	L1	19.98	37.0	46.0
1.242000	14.4	L1	19.87	31.6	46.0
1.574000	18.7	L1	19.85	27.3	46.0
2.186000	18.0	L1	19.82	28.0	46.0



**Fig.A.7.3 AC Powerline Conducted Emission-802.11b With charger QC16EU**

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.190000	37.8	L1	19.9	26.2	64.0
0.586000	28.7	L1	20.0	27.3	56.0
0.782000	28.0	L1	19.9	28.0	56.0
2.106000	28.2	L1	19.8	27.8	56.0
2.550000	28.6	L1	19.8	27.4	56.0
12.446000	31.5	L1	20.0	28.5	60.0

Final Result 2

Frequency (MHz)	Average (dB $\mu$ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.594000	19.0	L1	20.0	27.0	46.0
2.106000	22.6	L1	19.8	23.4	46.0
2.630000	23.7	L1	19.8	22.3	46.0
4.962000	24.1	L1	19.8	21.9	46.0
10.354000	26.8	L1	19.9	23.2	50.0
10.906000	27.0	L1	19.9	23.0	50.0



### **A.8. Antenna Requirement**

The antenna of the device is permanently attached. There are no provisions for connection to an external antenna.

The unit complies with the requirement of FCC Part 15.203.

### **ANNEX B: EUT parameters**

Disclaimer: The antenna gain and worse case provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

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## ANNEX C: Accreditation Certificate



### Accredited Laboratory

A2LA has accredited

### TELECOMMUNICATION TECHNOLOGY LABS, CAICT

Beijing, People's Republic of China

for technical competence in the field of

### Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 23<sup>rd</sup> day of July 2024.



Mr. Trace McInturf, Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 7049.01  
Valid to July 31, 2026

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

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