



# FCC PART 15 TEST REPORT No.25T04Z100757-018

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.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

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## **REPORT HISTORY**

<b>Report Number</b>	<b>Revision</b>	<b>Description</b>	<b>Issue Date</b>
25T04Z100757-018	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 NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0, and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (ISED#: 24849). The detail accreditation scope can be found on NVLAP website.

### 1.2. Testing Location

Conducted testing Location:CTTL(Gaolizhang Road)

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

Radiated testing Location: CTTL(BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology  
Development Area, Beijing, P. R. China 100176

### 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

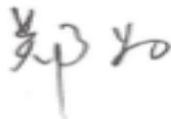
### 1.5. Signature



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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.  
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### **2.2. Manufacturer Information**

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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
WLAN Frequency Band	ISM Bands: -5925MHz~6425MHz -6425MHz~6525MHz -6525MHz~6875MHz -6875MHz~7125MHz
Type of modulation	OFDM/OFDMA
Antenna	Integral Antenna
Voltage	3.85V
Equipment class	Indoor Client

##### 3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	
UT36a	356448870204758/ 356448870204766	05	9ESH	2025-06-07
UT15a	356448870204303/ 356448870204360	05	9ESH	2025-04-28
UT24a	356448870204436/ 356448870204543	05	9ESH	2025-05-13
UT28a	356448870204477/ 356448870204584	05	9ESH	2025-05-13

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

UT36a and UT15a is used for Conduction test, UT24a and UT28a are used for Radiation test.

##### 3.3. Internal Identification of AE used during the test

AE ID*	Description	Note	Manufacturer
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 embedded 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.

FCC Part15	FCC CFR 47, Part 15, Subpart C and E: 15.205 Restricted bands of operation; 15.207 Conducted limits; 15.209 Radiated emission limits, general requirements; 15.407 General technical requirements.	2021
ANSI C63.10	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2013
UNII: KDB 789033 D02	General U-NII Test Procedures New Rules v02r01	2017-12
KDB 987594 D02	GUIDELINES FOR COMPLIANCE TESTING OF UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE 6 GHz (U-NII) DEVICES PART 15, SUBPART E	2021-02
KDB 662911 D01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band(e.g., MIMO, Smart Antenna, etc)	2013-10

Note:UNII: KDB 789033 D02、KDB 987594 D02、KDB 662911 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. SUMMARY OF TEST RESULTS

### 6.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15C/E	Sub-clause of IC	Verdict
Maximum Output Power	15.407	/	P
Peak Power Spectral Density	15.407	/	P
Occupied 26dB Bandwidth	15.403	/	P
99% Occupied bandwidth	/	/	P
Contention Based Protocol	/	/	P
In-Band Emissions	/	/	P
Radiated Unwanted Emission	15.209,15.407	/	P
AC Powerline Conducted Emission (150kHz- 30MHz)	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.
NM	Not measured, The test was not measured 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 requested by the client/matrix manufacturer 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 4.2.

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 EQUIPMENTS UTILIZED

### Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Vector Signal Analyzer	FSQ40	200089	Rohde & Schwarz	1 year	2025-08-11
2	Vector Signal Analyzer	FSW67	104051	Rohde & Schwarz	1 year	2026-06-09
3	Vector Signal Generator	SMW200A	103421	Rohde & Schwarz	1 year	2025-10-28
4	LISN	ENV216	101200	Rohde & Schwarz	1 year	2026-06-05
5	Test Receiver	ESCI	100344	Rohde & Schwarz	1 year	2026-04-01
6	Attenuator	10dB/2W	/	Rosenberger	/	/
7	Shielding Room	S81	/	ETS-Lindgren	/	/

Instrument	Brand Name	Model
WLAN AP	ASUS	GT-AXE11000

### Radiated emission test system

#### BDA SAC/FAC3

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver	ESR26	101372	R&S	1 year	2026-01-15
2	EMI Antenna	VULB 9163	01177	R&S	1 year	2025-11-19
3	EMI Antenna	3117	00119021	Schwarzbeck	1 year	2025-09-18
4	Test Receiver	FSV40	101047	R&S	1 year	2025-07-18
5	EMI Antenna	LB-180400 -25-C-KF	J211060826	A-INFO	1 year	2025-07-29

#### Huayuan North Road

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

## 8. Measurement Uncertainty

### 8.1 Transmitter Output Power

Measurement Uncertainty: 0.387dB, k=1.96

### 8.2 Peak Power Spectral Density

Measurement Uncertainty: 0.705dB, k=1.96

### 8.3 99% Occupied bandwidth

Measurement Uncertainty: 60.80Hz, k=1.96

### 8.4 Occupied Channel Bandwidth

Measurement Uncertainty: 60.80Hz, k=1.96

### 8.5 Band Edges Compliance

Measurement Uncertainty : 0.62dB,k=1.96

### 8.6 Spurious Emissions

#### 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	/
$30\text{MHz} \leq f \leq 1\text{GHz}$	5.73
$1\text{GHz} \leq f \leq 18\text{GHz}$	5.58
$18\text{GHz} \leq f \leq 40\text{GHz}$	3.37

### 8.7 AC Power-line Conducted Emission

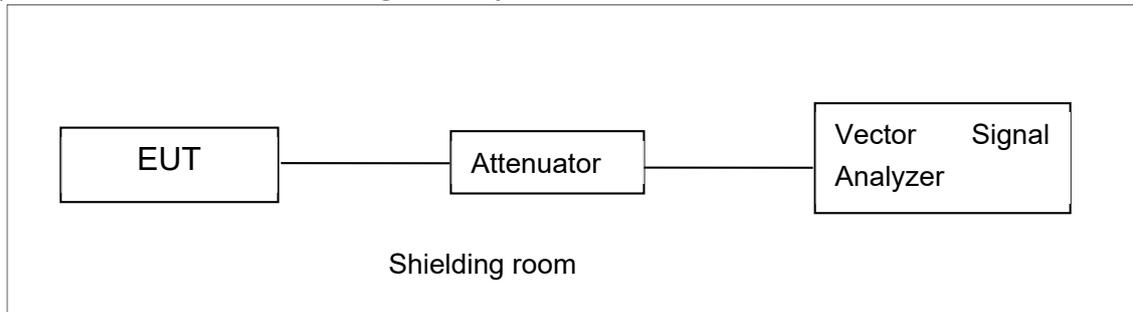
Measurement Uncertainty : 3.08dB,k=2

## ANNEX A: MEASUREMENT RESULTS

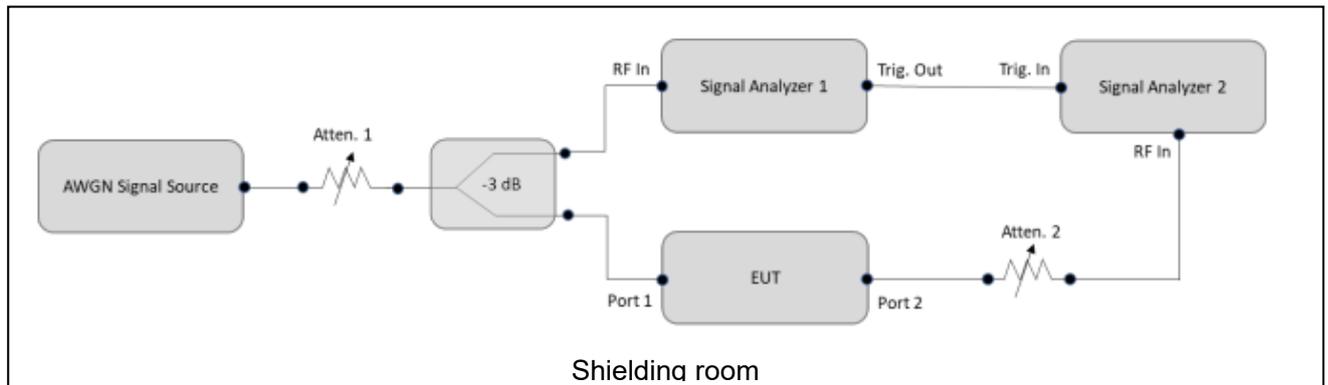
### A.1. Measurement Method

#### A.1.1. Conducted Measurements

- 1). Connect the EUT to the test system correctly.
- 2). Set the EUT to the required work mode.
- 3). Set the EUT to the required channel.
- 4). Set the spectrum analyzer to start measurement.
- 5). Record the values. Vector Signal Analyzer



Test Setup for Maximum Output Power, Peak Power Spectral Density, Occupied 26dB Bandwidth, 99% Occupied bandwidth, In-Band Emissions



Test Setup for Contention Based Protocol

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

Measurement performed according to Clause 6.4, 6.5, 6.6 in ANSI C63.10-2013 and II.G.4, II.G.5, II.G.6 in KDB 789033.

The radiated emission test is performed in semi-anechoic chamber. The EUT was placed on a non-conductive table with 80cm above the ground plane for measurement below 1GHz and 1.5m above the ground plane for measurement above 1GHz. The measurement antenna was placed at a distance of 3 meters from the EUT. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated from 0° to 360° and the measurement antenna is moved from 1m to 4m to get the maximization result. The maximization process was repeated with the EUT positioned in each of its three orthogonal orientation.

## A.2. Maximum output Power

### Measurement Limit and Method:

Standard	Frequency (MHz)	e.i.r.p Limit (dBm)
FCC CRF Part 15.407(a)	5925MHz~6425MHz	24dBm
	6425MHz~6525MHz	24dBm
	6525MHz~6875MHz	24dBm
	6875MHz~7125MHz	24dBm

The measurement method SA-2 is made according to KDB 987594 and KDB 789033.

### Antenna Gain

Mode	Ant6(dBi)	Ant9(dBi)	Power(dBi)	PSD(dBi)
CDD	-5.5	-6.1	-5.5	-2.78
BF	-5.5	-6.1	-2.78	-2.78

For BF transmissions, power and PSD directional gain is calculated as:

Directional gain =  $10 \log [(10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20})^2 / N_{ANT}]$  dBi, as following table for PSD.  
 NANT = number of transmit antennas NSS = number of spatial streams. (The worst case directional gain will occur when NSS = 1)

For CDD transmissions, directional gain is calculated as:

a) For power, the directional gain GANT is set equal to the antenna having the highest gain, i.e.,

Directional gain = GANT MAX (Ant.1 Gain, Ant.2 Gain, ...) + Array Gain, where Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;

b) For PSD, the directional gain calculation is following:

Directional gain =  $10 \log [(10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20})^2 / N_{ANT}]$  dBi. NANT = number of transmit antennas NSS = number of spatial streams. (The worst case directional gain will occur when NSS = 1)

As both of the CDD and BF use the same power setting, only eirp results of BF have been reported.

**Measurement Results:**
**Full RU MIMO**

Mode	Channel	Test Result (dBm)				
		Ant6	ant9	mimo	Directional Gain(dBi)	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
802.11a	5955MHz (Ch1)	8.82	8.65	11.75	-2.78	8.97
	6175MHz (Ch45)	8.30	8.00	11.16	-2.78	8.38
	6415MHz (Ch93)	8.47	8.10	11.30	-2.78	8.52
	6435MHz (Ch97)	8.65	8.01	11.35	-2.78	8.57
	6475MHz (Ch105)	8.69	8.02	11.38	-2.78	8.60
	6515MHz (Ch113)	8.49	8.08	11.30	-2.78	8.52
	6535MHz (Ch117)	8.57	8.06	11.33	-2.78	8.55
	6695MHz (Ch149)	8.37	8.00	11.20	-2.78	8.42
	6855MHz (Ch181)	8.27	8.03	11.16	-2.78	8.38
	6875MHz (Ch185)	8.62	8.02	11.34	-2.78	8.56
	6895MHz (ch189)	8.43	8.07	11.26	-2.78	8.48
	6995MHz (Ch209)	8.09	8.06	11.09	-2.78	8.31
	7115MHz (Ch233)	8.21	8.09	11.16	-2.78	8.38

The data rate 6Mbps is selected as worse condition, and the following cases are performed with this condition.

**802.11ax HE20(full RU) mode**

Mode	Channel	Test Result (dBm)				
		Ant6	ant9	mimo	Directional Gain(dBi)	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
802.11ax-20 full RU	5955MHz (Ch1)	8.31	8.40	11.37	-2.78	8.59
	6175MHz (Ch45)	7.73	7.50	10.63	-2.78	7.85
	6415MHz (Ch93)	8.16	8.30	11.24	-2.78	8.46
	6435MHz (Ch97)	8.08	7.83	10.97	-2.78	8.19
	6475MHz (Ch105)	8.36	7.89	11.14	-2.78	8.36
	6515MHz (Ch113)	8.21	7.72	10.98	-2.78	8.20
	6535MHz (Ch117)	8.05	7.69	10.88	-2.78	8.10
	6695MHz (Ch149)	8.02	7.58	10.82	-2.78	8.04
	6855MHz (Ch181)	7.82	7.56	10.70	-2.78	7.92
	6875MHz (Ch185)	8.03	7.62	10.84	-2.78	8.06
	6895MHz (ch189)	7.81	7.60	10.72	-2.78	7.94

	6995MHz (Ch209)	7.75	7.50	10.64	-2.78	7.86
	7115MHz (Ch233)	7.69	7.70	10.71	-2.78	7.93

The data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

### 802.11ax-HE40(full RU) mode

Mode	Channel	Test Result (dBm)				
		Ant6	ant9	mimo	Directional Gain(dBi)	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
802.11ax-40 full RU	5965MHz (Ch3)	8.22	7.92	11.08	-2.78	8.30
	6165MHz (Ch43)	7.80	7.78	10.80	-2.78	8.02
	6405MHz (Ch91)	7.74	7.62	10.69	-2.78	7.91
	6445MHz (Ch99)	7.93	7.56	10.76	-2.78	7.98
	6485MHz (Ch107)	7.51	7.53	10.53	-2.78	7.75
	6525MHz (Ch115)	7.58	7.59	10.60	-2.78	7.82
	6565MHz (Ch123)	8.01	7.67	10.85	-2.78	8.07
	6685MHz (Ch147)	7.78	7.61	10.71	-2.78	7.93
	6845MHz (Ch179)	7.82	7.53	10.69	-2.78	7.91
	6885MHz (Ch187)	7.79	7.58	10.70	-2.78	7.92
	6925MHz (ch195)	7.85	7.49	10.68	-2.78	7.90
	6965MHz (Ch203)	7.47	7.57	10.53	-2.78	7.75
	7085MHz (Ch227)	7.56	7.60	10.59	-2.78	7.81

The data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

### 802.11ax-HE80(full RU) mode

Mode	Channel	Test Result (dBm)				
		Ant6	ant9	Directional Gain(dBi)	mimo	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
802.11ax-80 full RU	5985MHz (Ch7)	8.06	7.62	10.86	-2.78	8.08
	6145MHz (Ch39)	7.63	7.72	10.69	-2.78	7.91
	6385MHz (Ch87)	7.57	7.74	10.67	-2.78	7.89
	6465MHz (Ch103)	7.78	7.55	10.68	-2.78	7.90
	6545MHz (Ch119)	7.51	7.59	10.56	-2.78	7.78

	6625MHz (Ch135)	7.66	7.63	10.66	-2.78	7.88
	6705MHz (Ch151)	7.52	7.62	10.58	-2.78	7.80
	6785MHz (Ch167)	7.56	7.60	10.59	-2.78	7.81
	6865MHz (Ch183)	7.53	7.65	10.60	-2.78	7.82
	6945MHz (Ch199)	7.55	7.56	10.57	-2.78	7.79
	7025MHz (Ch215)	7.58	7.67	10.64	-2.78	7.86

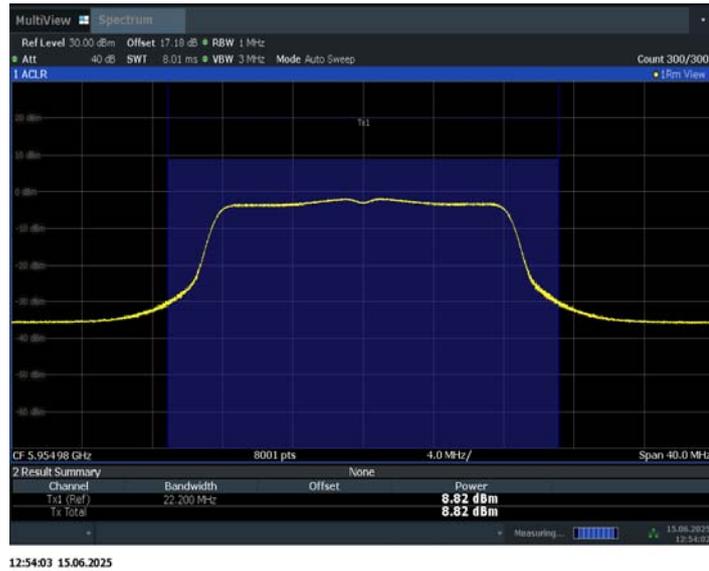
The data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

## RU MIMO

### 802.11ax-20 single RU

Mode	Channel	Test Result (dBm)				
		Ant6	ant9	mimo	Directional Gain(dBi)	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
RU26-I	5955MHz (Ch1)	0.95	0.13	3.57	-2.78	0.79
	6175MHz (Ch45)	0.34	-0.36	3.01	-2.78	0.23
	6415MHz (Ch93)	0.13	0.01	3.08	-2.78	0.30
	6435MHz (Ch97)	0.10	-0.23	2.95	-2.78	0.17
	6475MHz (Ch105)	0.03	-0.53	2.77	-2.78	-0.01
	6515MHz (Ch113)	-0.13	-0.64	2.63	-2.78	-0.15
RU26-R	6535MHz (Ch117)	0.10	-0.53	2.81	-2.78	0.03
	6695MHz (Ch149)	-0.27	-0.40	2.68	-2.78	-0.10
	6855MHz (Ch181)	0.17	-0.69	2.77	-2.78	-0.01
	6875MHz (Ch185)	0.62	-0.56	3.08	-2.78	0.30
	6895MHz (ch189)	0.53	-0.52	3.05	-2.78	0.27
	6995MHz (Ch209)	-0.39	-0.56	2.54	-2.78	-0.24
	7115MHz (Ch233)	-0.32	-0.66	2.52	-2.78	-0.26

Mode	Channel	Test Result (dBm)				
		Ant6	ant9	mimo	Directional Gain(dBi)	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
RU52-I	5955MHz (Ch1)	3.12	2.38	5.78	-2.78	3.00
	6175MHz (Ch45)	2.90	2.20	5.57	-2.78	2.79
	6415MHz (Ch93)	2.03	1.87	4.96	-2.78	2.18
	6435MHz (Ch97)	2.46	1.81	5.16	-2.78	2.38
	6475MHz (Ch105)	2.00	1.68	4.85	-2.78	2.07
	6515MHz (Ch113)	2.43	1.67	5.08	-2.78	2.30
RU52-R	6535MHz (Ch117)	2.01	1.52	4.78	-2.78	2.00
	6695MHz (Ch149)	2.15	1.56	4.88	-2.78	2.10
	6855MHz (Ch181)	2.59	1.65	5.16	-2.78	2.38
	6875MHz (Ch185)	2.81	1.85	5.37	-2.78	2.59
	6895MHz (ch189)	2.94	1.78	5.41	-2.78	2.63
	6995MHz (Ch209)	2.04	1.58	4.83	-2.78	2.05
	7115MHz (Ch233)	2.02	1.53	4.79	-2.78	2.01
Mode	Channel	Test Result (dBm)				
		Ant6	ant9	mimo	Directional Gain(dBi)	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
RU106-I	5955MHz (Ch1)	5.50	4.58	8.07	-2.78	5.29
	6175MHz (Ch45)	4.63	4.15	7.41	-2.78	4.63
	6415MHz (Ch93)	4.65	4.38	7.53	-2.78	4.75
	6435MHz (Ch97)	4.47	4.43	7.46	-2.78	4.68
	6475MHz (Ch105)	4.55	4.23	7.40	-2.78	4.62
	6515MHz (Ch113)	4.45	4.18	7.33	-2.78	4.55
RU106-R	6535MHz (Ch117)	4.40	4.16	7.29	-2.78	4.51
	6695MHz (Ch149)	4.20	4.31	7.27	-2.78	4.49
	6855MHz (Ch181)	4.54	4.16	7.36	-2.78	4.58
	6875MHz (Ch185)	4.92	4.35	7.65	-2.78	4.87
	6895MHz (ch189)	4.94	4.12	7.56	-2.78	4.78
	6995MHz (Ch209)	4.33	4.13	7.24	-2.78	4.46
	7115MHz (Ch233)	4.35	4.11	7.24	-2.78	4.46



### 11a CH1 Ant6

Note: The following cases are performed with this condition:

- a) As WLAN SISO & MIMO mode have the same power setting, the whole testing has assessed only MIMO mode.
- b) U-NII-5/-6/-7/-8 can't transmit simultaneously.
- c) CBP test with minimum antenna gain (Antenna 9 path, minimum gain = -6.1dBi)

#### Duty Cycle

Mode	11a					
Duty Cycle	100%					
Mode	11ax-HE 20M	11ax-HE 40M	11ax-HE 80M	11ax-HE 20M RU26	11ax-HE 20M RU52	11ax-HE 20M RU106
Duty Cycle	100%	100%	100%	88%	87%	78%



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Duty Cycle:RU26

Conclusion: PASS

### A.3. Peak Power Spectral Density (conducted)

#### Measurement Limit and Method:

Standard	Frequency (MHz)	e.i.r.p Limit (dBm/MHz)
FCC CRF Part 15.407(a)	5925MHz~6425MHz	-1
	6425MHz~6525MHz	-1
	6525MHz~6875MHz	-1
	6875MHz~7125MHz	-1

The output power measurement method Section F is made according to KDB 987594 and KDB 789033.

#### Measurement Results:

#### Full RU MIMO:

#### 802.11a mode

Mode	Channel	Test Result (dBm)				
		Ant6	ant9	mimo	Directional Gain(dBi)	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
802.11a	5955MHz (Ch1)	-2.23	-2.02	0.89	-2.78	-1.89
	6175MHz (Ch45)	-3.07	-2.88	0.04	-2.78	-2.74
	6415MHz (Ch93)	-2.79	-3.02	0.11	-2.78	-2.67
	6435MHz (Ch97)	-2.32	-3.16	0.29	-2.78	-2.49
	6475MHz (Ch105)	-2.52	-3.24	0.15	-2.78	-2.63
	6515MHz (Ch113)	-2.49	-3.18	0.19	-2.78	-2.59
	6535MHz (Ch117)	-2.86	-3.60	-0.20	-2.78	-2.98
	6695MHz (Ch149)	-2.47	-3.25	0.17	-2.78	-2.61
	6855MHz (Ch181)	-2.75	-3.65	-0.17	-2.78	-2.95
	6875MHz (Ch185)	-2.42	-3.52	0.08	-2.78	-2.70
	6895MHz (ch189)	-2.65	-3.69	-0.13	-2.78	-2.91
	6995MHz (Ch209)	-3.26	-3.52	-0.38	-2.78	-3.16
7115MHz (Ch233)	-2.93	-2.43	0.34	-2.78	-2.44	

**802.11ax HE20(full RU) mode**

Mode	Channel	Test Result (dBm)				
		Ant6	ant9	mimo	Directional Gain(dBi)	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
802.11ax-20 full RU	5955MHz (Ch1)	-3.07	-2.74	0.11	-2.78	-2.67
	6175MHz (Ch45)	-3.40	-3.37	-0.37	-2.78	-3.15
	6415MHz (Ch93)	-2.87	-2.54	0.31	-2.78	-2.47
	6435MHz (Ch97)	-2.87	-3.29	-0.06	-2.78	-2.84
	6475MHz (Ch105)	-2.52	-3.47	0.04	-2.78	-2.74
	6515MHz (Ch113)	-2.81	-3.71	-0.23	-2.78	-3.01
	6535MHz (Ch117)	-3.15	-3.57	-0.34	-2.78	-3.12
	6695MHz (Ch149)	-3.33	-3.99	-0.64	-2.78	-3.42
	6855MHz (Ch181)	-3.51	-3.52	-0.50	-2.78	-3.28
	6875MHz (Ch185)	-3.10	-3.90	-0.47	-2.78	-3.25
	6895MHz (ch189)	-3.38	-3.81	-0.58	-2.78	-3.36
	6995MHz (Ch209)	-3.57	-3.97	-0.76	-2.78	-3.54
	7115MHz (Ch233)	-3.52	-3.48	-0.49	-2.78	-3.27

**802.11ax HE40(full RU) mode**

Mode	Channel	Test Result (dBm)				
		Ant6	ant9	mimo	Directional Gain(dBi)	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
802.11ax-40 full RU	5965MHz (Ch3)	-5.22	-5.39	-2.29	-2.78	-5.07
	6165MHz (Ch43)	-5.90	-5.76	-2.82	-2.78	-5.60
	6405MHz (Ch91)	-5.90	-5.63	-2.75	-2.78	-5.53
	6445MHz (Ch99)	-5.52	-5.94	-2.71	-2.78	-5.49
	6485MHz (Ch107)	-5.98	-5.60	-2.78	-2.78	-5.56
	6525MHz (Ch115)	-5.79	-5.74	-2.75	-2.78	-5.53
	6565MHz (Ch123)	-5.29	-5.98	-2.61	-2.78	-5.39
	6685MHz (Ch147)	-5.66	-6.01	-2.82	-2.78	-5.60
	6845MHz (Ch179)	-5.70	-6.15	-2.91	-2.78	-5.69
	6885MHz (Ch187)	-5.68	-5.74	-2.70	-2.78	-5.48
	6925MHz (ch195)	-5.53	-6.22	-2.85	-2.78	-5.63
	6965MHz (Ch203)	-5.95	-6.11	-3.02	-2.78	-5.80
	7085MHz (Ch227)	-5.85	-5.81	-2.82	-2.78	-5.60

**802.11ax HE80(full RU) mode**

Mode	Channel	Test Result (dBm)				
		Ant6	ant9	mimo	Directional Gain(dBi)	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
802.11ax-80 full RU	5985MHz (Ch7)	-9.70	-10.31	-6.98	-2.78	-9.76
	6145MHz (Ch39)	-10.32	-10.20	-7.25	-2.78	-10.03
	6385MHz (Ch87)	-10.48	-10.08	-7.27	-2.78	-10.05
	6465MHz (Ch103)	-10.18	-10.62	-7.38	-2.78	-10.16
	6545MHz (Ch119)	-10.51	-10.29	-7.39	-2.78	-10.17
	6625MHz (Ch135)	-10.19	-10.49	-7.33	-2.78	-10.11
	6705MHz (Ch151)	-10.07	-10.53	-7.28	-2.78	-10.06
	6785MHz (Ch167)	-10.23	-10.59	-7.40	-2.78	-10.18
	6865MHz (Ch183)	-10.43	-10.52	-7.46	-2.78	-10.24
	6945MHz (Ch199)	-10.69	-10.58	-7.62	-2.78	-10.40
7025MHz (Ch215)	-10.66	-10.70	-7.67	-2.78	-10.45	

**RU MIMO**
**11ax-RU**

Mode	Channel	Test Result (dBm)				
		Ant6	ant9	mimo	Directional Gain(dBi)	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
RU26-I	5955MHz (Ch1)	-2.19	-2.89	0.48	-2.78	-2.30
	6175MHz (Ch45)	-2.70	-2.91	0.21	-2.78	-2.57
	6415MHz (Ch93)	-2.95	-2.95	0.06	-2.78	-2.72
	6435MHz (Ch97)	-2.97	-2.83	0.11	-2.78	-2.67
	6475MHz (Ch105)	-2.99	-3.08	-0.02	-2.78	-2.80
	6515MHz (Ch113)	-3.04	-3.43	-0.22	-2.78	-3.00
RU26-R	6535MHz (Ch117)	-2.78	-3.37	-0.05	-2.78	-2.83
	6695MHz (Ch149)	-3.13	-3.27	-0.19	-2.78	-2.97
	6855MHz (Ch181)	-2.74	-3.52	-0.10	-2.78	-2.88
	6875MHz (Ch185)	-2.27	-3.75	0.06	-2.78	-2.72
	6895MHz (ch189)	-2.32	-3.56	0.11	-2.78	-2.67

	6995MHz (Ch209)	-3.20	-3.39	-0.28	-2.78	-3.06
	7115MHz (Ch233)	-3.24	-3.47	-0.34	-2.78	-3.12

Mode	Channel	Test Result (dBm)				
		Ant6	ant9	mimo	Directional Gain(dBi)	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
RU52-I	5955MHz (Ch1)	-2.15	-2.92	0.49	-2.78	-2.29
	6175MHz (Ch45)	-2.42	-3.20	0.22	-2.78	-2.56
	6415MHz (Ch93)	-3.41	-3.42	-0.40	-2.78	-3.18
	6435MHz (Ch97)	-3.05	-3.60	-0.31	-2.78	-3.09
	6475MHz (Ch105)	-3.59	-3.92	-0.74	-2.78	-3.52
	6515MHz (Ch113)	-2.96	-3.74	-0.32	-2.78	-3.10
RU52-R	6535MHz (Ch117)	-3.52	-3.87	-0.68	-2.78	-3.46
	6695MHz (Ch149)	-3.30	-3.77	-0.52	-2.78	-3.30
	6855MHz (Ch181)	-2.77	-3.71	-0.20	-2.78	-2.98
	6875MHz (Ch185)	-2.63	-3.54	-0.05	-2.78	-2.83
	6895MHz (ch189)	-2.33	-3.52	0.13	-2.78	-2.65
	6995MHz (Ch209)	-3.44	-3.86	-0.63	-2.78	-3.41
	7115MHz (Ch233)	-3.44	-3.69	-0.55	-2.78	-3.33

Mode	Channel	Test Result (dBm)				
		Ant6	ant9	mimo	Directional Gain(dBi)	mimo eirp
		MCS0	MCS0	MCS0	MCS0	MCS0
RU106-I	5955MHz (Ch1)	-3.23	-3.65	-0.42	-2.78	-3.20
	6175MHz (Ch45)	-4.17	-4.42	-1.28	-2.78	-4.06
	6415MHz (Ch93)	-4.19	-4.32	-1.24	-2.78	-4.02
	6435MHz (Ch97)	-4.39	-4.18	-1.27	-2.78	-4.05
	6475MHz (Ch105)	-4.23	-4.43	-1.32	-2.78	-4.10
	6515MHz (Ch113)	-4.25	-4.77	-1.49	-2.78	-4.27
RU106-R	6535MHz (Ch117)	-4.37	-4.69	-1.52	-2.78	-4.30
	6695MHz (Ch149)	-4.72	-4.32	-1.51	-2.78	-4.29

	6855MHz (Ch181)	-4.31	-4.74	-1.51	-2.78	-4.29
	6875MHz (Ch185)	-3.66	-4.35	-0.98	-2.78	-3.76
	6895MHz (ch189)	-3.91	-4.56	-1.21	-2.78	-3.99
	6995MHz (Ch209)	-4.70	-4.50	-1.59	-2.78	-4.37
	7115MHz (Ch233)	-4.69	-4.83	-1.75	-2.78	-4.53



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**11a CH1 Ant9**

**Conclusion: PASS**



No.25T04Z100757-018

#### A.4. Occupied 26dB Bandwidth(conducted)

##### Measurement Limit and Method:

Standard	Limit (kHz)
FCC 47 CFR Part 15.403 (i)	/

The measurement is made according to KDB 987594 and KDB 789033

##### Measurement Result:

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant6	5955	22.20	5943.88	5966.08	---	---
	Ant9	5955	21.40	5944.32	5965.72	---	---
	Ant6	6175	22.04	6163.92	6185.96	---	---
	Ant9	6175	21.44	6164.12	6185.56	---	---
	Ant6	6415	21.84	6404.08	6425.92	---	---
	Ant9	6415	21.80	6403.92	6425.72	---	---
	Ant6	6435	21.16	6424.44	6445.60	---	---
	Ant9	6435	21.40	6424.36	6445.76	---	---
	Ant6	6475	21.96	6464.08	6486.04	---	---
	Ant9	6475	21.52	6464.08	6485.60	---	---
	Ant6	6515	21.32	6504.28	6525.60	---	---
	Ant9	6515	21.64	6504.12	6525.76	---	---
	Ant6	6535	21.72	6524.08	6545.80	---	---
	Ant9	6535	21.64	6524.00	6545.64	---	---
	Ant6	6695	21.08	6684.32	6705.40	---	---
	Ant9	6695	21.08	6684.44	6705.52	---	---
	Ant6	6855	21.28	6844.40	6865.68	---	---
	Ant9	6855	21.64	6844.16	6865.80	---	---
	Ant6	6875	21.80	6864.16	6885.96	---	---
	Ant9	6875	22.04	6864.08	6886.12	---	---
	Ant6	6895	21.76	6884.12	6905.88	---	---
	Ant9	6895	21.72	6884.12	6905.84	---	---
	Ant6	6995	22.12	6984.16	7006.28	---	---
	Ant9	6995	21.16	6984.48	7005.64	---	---
Ant6	7115	21.48	7104.28	7125.76	---	---	
Ant9	7115	21.68	7104.04	7125.72	---	---	
11AX20MIMO	Ant6	5955	22.92	5943.28	5966.20	---	---
	Ant9	5955	22.44	5943.92	5966.36	---	---
	Ant6	6175	22.28	6163.84	6186.12	---	---
	Ant9	6175	22.32	6163.88	6186.20	---	---
	Ant6	6415	22.44	6403.88	6426.32	---	---
	Ant9	6415	22.12	6403.84	6425.96	---	---
	Ant6	6435	22.72	6423.60	6446.32	---	---
	Ant9	6435	22.40	6423.84	6446.24	---	---

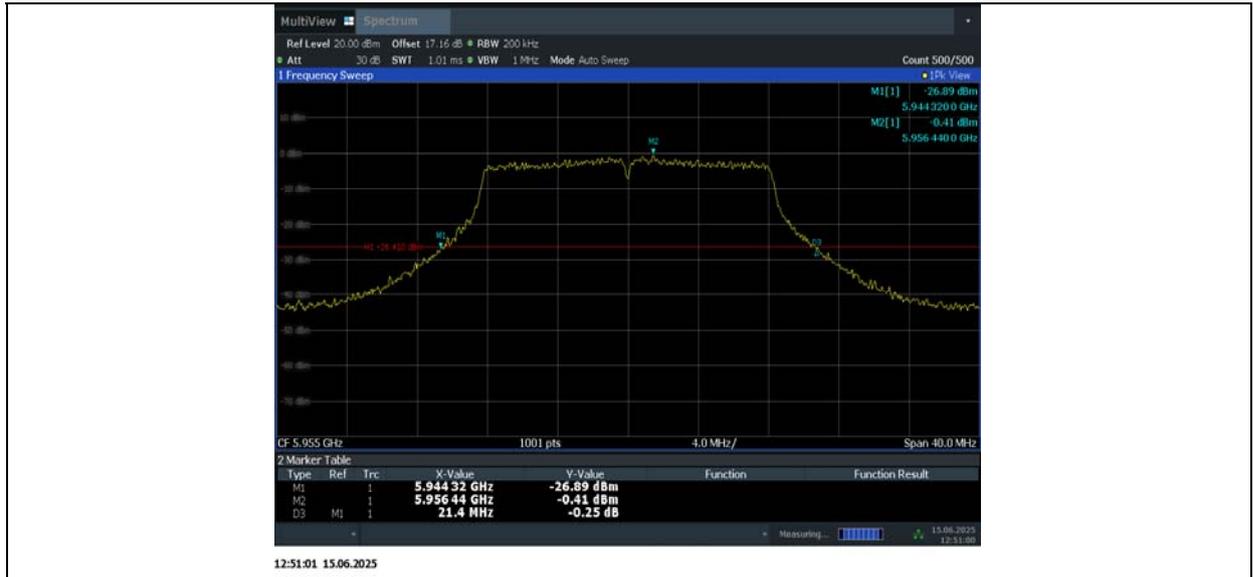
	Ant6	6475	22.76	6463.52	6486.28	---	---
	Ant9	6475	22.16	6463.92	6486.08	---	---
	Ant6	6515	22.76	6503.48	6526.24	---	---
	Ant9	6515	22.64	6503.68	6526.32	---	---
	Ant6	6535	22.72	6523.52	6546.24	---	---
	Ant9	6535	22.28	6523.68	6545.96	---	---
	Ant6	6695	22.20	6683.68	6705.88	---	---
	Ant9	6695	22.44	6683.44	6705.88	---	---
	Ant6	6855	22.48	6843.68	6866.16	---	---
	Ant9	6855	23.12	6843.28	6866.40	---	---
	Ant6	6875	23.16	6863.48	6886.64	---	---
	Ant9	6875	22.48	6863.60	6886.08	---	---
	Ant6	6895	22.72	6883.52	6906.24	---	---
	Ant9	6895	22.20	6883.84	6906.04	---	---
	Ant6	6995	22.80	6983.60	7006.40	---	---
	Ant9	6995	22.64	6983.56	7006.20	---	---
	Ant6	7115	23.52	7102.92	7126.44	---	---
	Ant9	7115	22.64	7103.76	7126.40	---	---
11AX40MIMO	Ant6	5965	39.68	5945.16	5984.84	---	---
	Ant9	5965	39.68	5945.08	5984.76	---	---
	Ant6	6165	39.76	6145.08	6184.84	---	---
	Ant9	6165	39.84	6145.08	6184.92	---	---
	Ant6	6405	39.92	6385.00	6424.92	---	---
	Ant9	6405	39.60	6385.16	6424.76	---	---
	Ant6	6445	39.84	6425.00	6464.84	---	---
	Ant9	6445	39.76	6425.08	6464.84	---	---
	Ant6	6485	39.76	6465.08	6504.84	---	---
	Ant9	6485	39.60	6465.16	6504.76	---	---
	Ant6	6525	39.76	6505.00	6544.76	---	---
	Ant9	6525	39.76	6505.08	6544.84	---	---
	Ant6	6565	39.84	6545.08	6584.92	---	---
	Ant9	6565	39.76	6545.08	6584.84	---	---
	Ant6	6685	39.68	6665.08	6704.76	---	---
	Ant9	6685	39.84	6665.00	6704.84	---	---
	Ant6	6845	39.68	6825.08	6864.76	---	---
	Ant9	6845	40.08	6824.92	6865.00	---	---
	Ant6	6885	39.76	6865.08	6904.84	---	---
	Ant9	6885	39.68	6865.08	6904.76	---	---
	Ant6	6925	39.76	6905.08	6944.84	---	---
	Ant9	6925	39.92	6905.00	6944.92	---	---
	Ant6	6965	39.76	6945.08	6984.84	---	---
	Ant9	6965	39.76	6945.08	6984.84	---	---
Ant6	7085	39.76	7065.08	7104.84	---	---	

	Ant9	7085	39.92	7065.00	7104.92	---	---
11AX80MIMO	Ant6	5985	81.12	5944.36	6025.48	---	---
	Ant9	5985	80.96	5944.52	6025.48	---	---
	Ant6	6145	81.12	6104.36	6185.48	---	---
	Ant9	6145	80.80	6104.52	6185.32	---	---
	Ant6	6385	80.96	6344.36	6425.32	---	---
	Ant9	6385	80.80	6344.52	6425.32	---	---
	Ant6	6465	81.12	6424.36	6505.48	---	---
	Ant9	6465	80.80	6424.52	6505.32	---	---
	Ant6	6545	80.96	6504.52	6585.48	---	---
	Ant9	6545	80.80	6504.52	6585.32	---	---
	Ant6	6625	80.96	6584.36	6665.32	---	---
	Ant9	6625	80.80	6584.52	6665.32	---	---
	Ant6	6705	81.12	6664.36	6745.48	---	---
	Ant9	6705	80.80	6664.52	6745.32	---	---
	Ant6	6785	81.28	6744.20	6825.48	---	---
	Ant9	6785	80.96	6744.36	6825.32	---	---
	Ant6	6865	81.12	6824.36	6905.48	---	---
	Ant9	6865	80.96	6824.36	6905.32	---	---
	Ant6	6945	80.96	6904.52	6985.48	---	---
	Ant9	6945	80.96	6904.36	6985.32	---	---
Ant6	7025	80.96	6984.36	7065.32	---	---	
Ant9	7025	80.96	6984.36	7065.32	---	---	

**Conclusion: PASS**

**Test graphs as below:**





11A\_Ant6\_6175



11A\_Ant9\_6175



## 11A\_Ant6\_6415



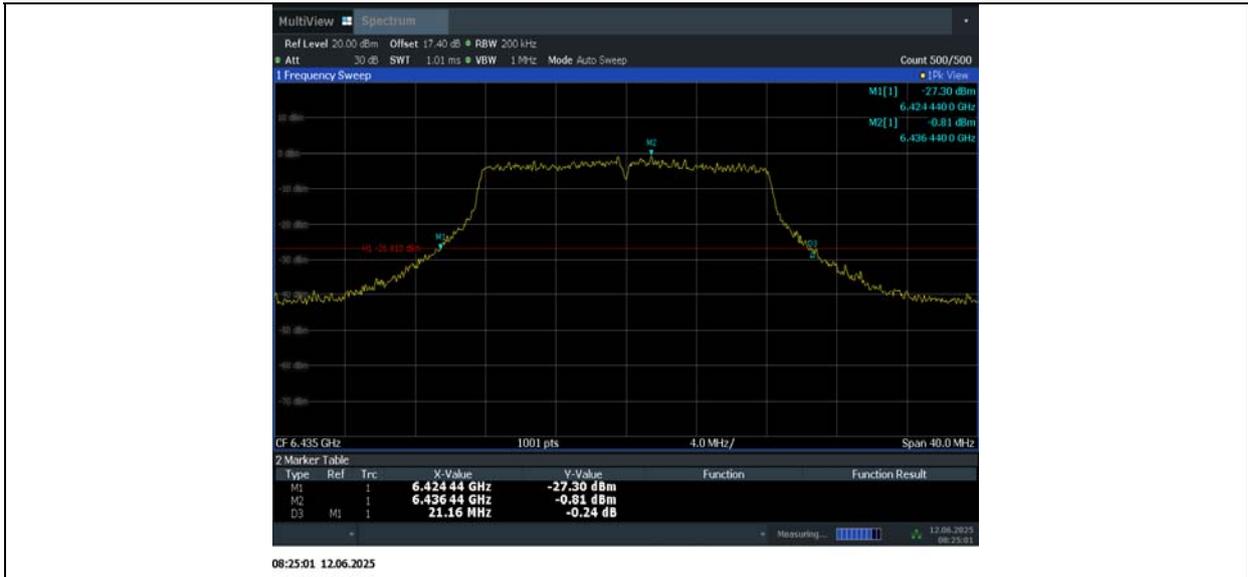
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## 11A\_Ant9\_6415



11:37:56 15.06.2025

## 11A\_Ant6\_6435



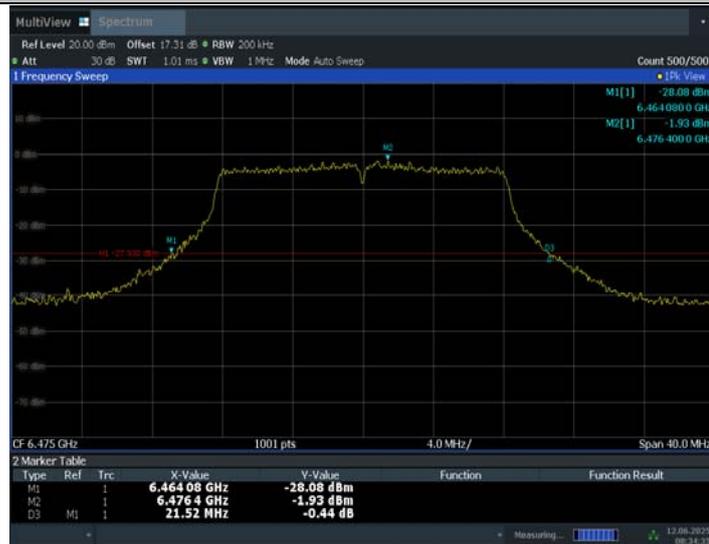
11A\_Ant9\_6435



11A\_Ant6\_6475

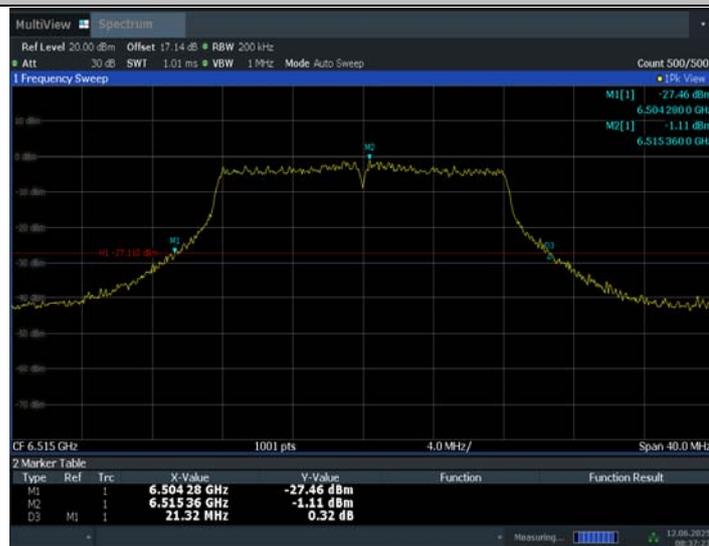


## 11A\_Ant9\_6475



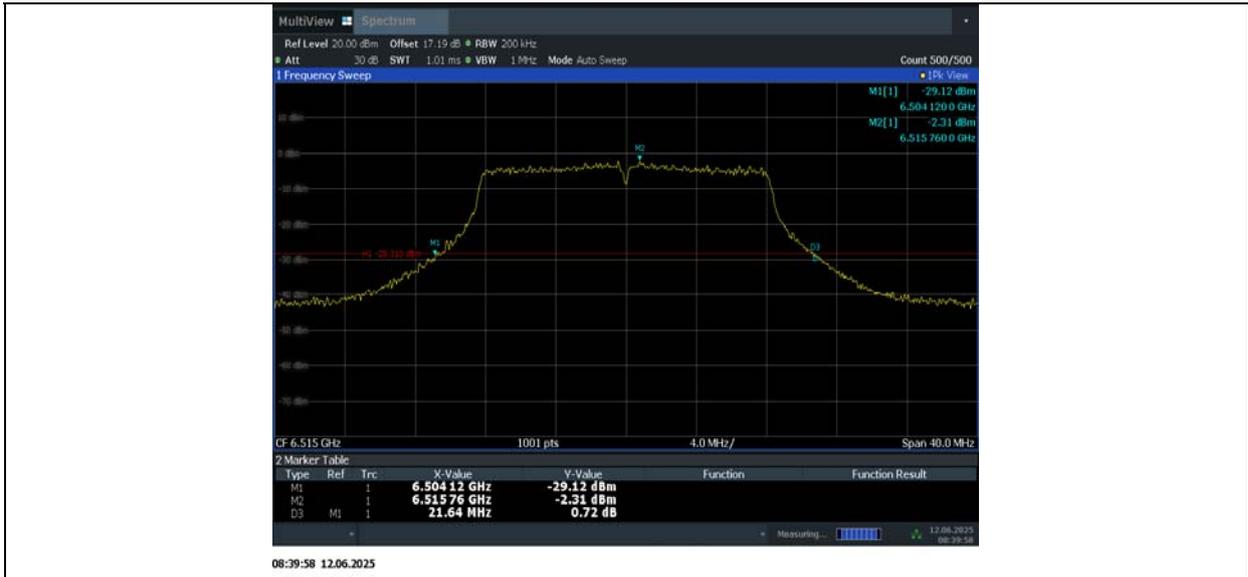
08:34:36 12.06.2025

## 11A\_Ant6\_6515



08:37:23 12.06.2025

## 11A\_Ant9\_6515



11A\_Ant6\_6535



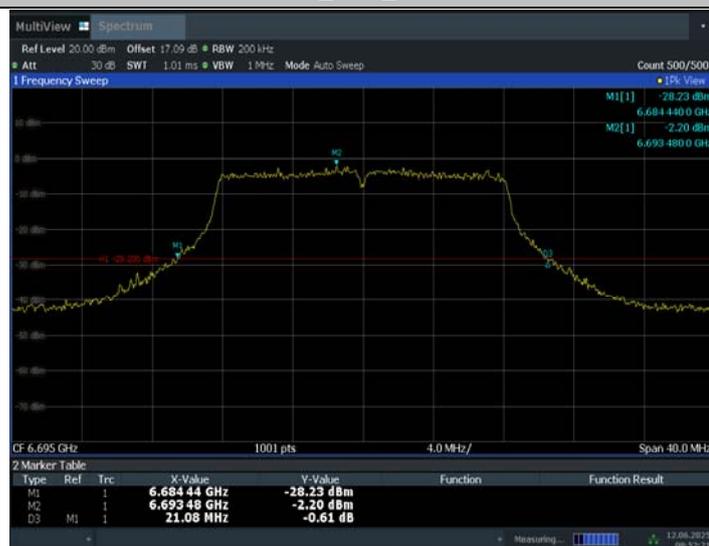
11A\_Ant9\_6535



## 11A\_Ant6\_6695



## 11A\_Ant9\_6695



## 11A\_Ant6\_6855



11A\_Ant9\_6855



11A\_Ant6\_6875



## 11A\_Ant9\_6875



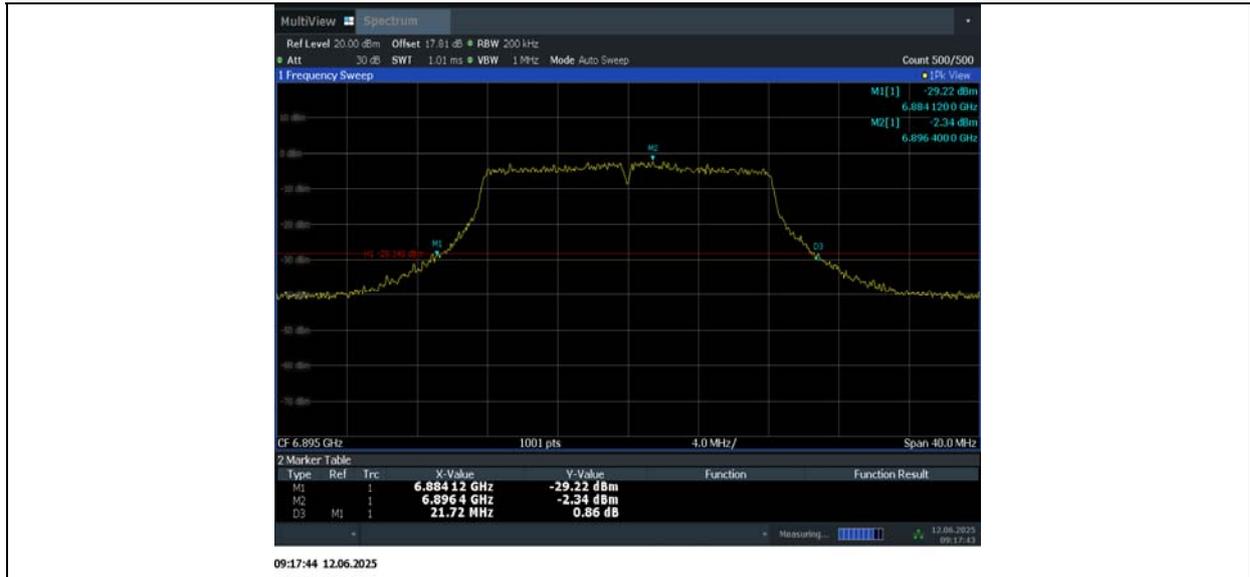
09:09:25 12.06.2025

## 11A\_Ant6\_6895



09:14:00 12.06.2025

## 11A\_Ant9\_6895



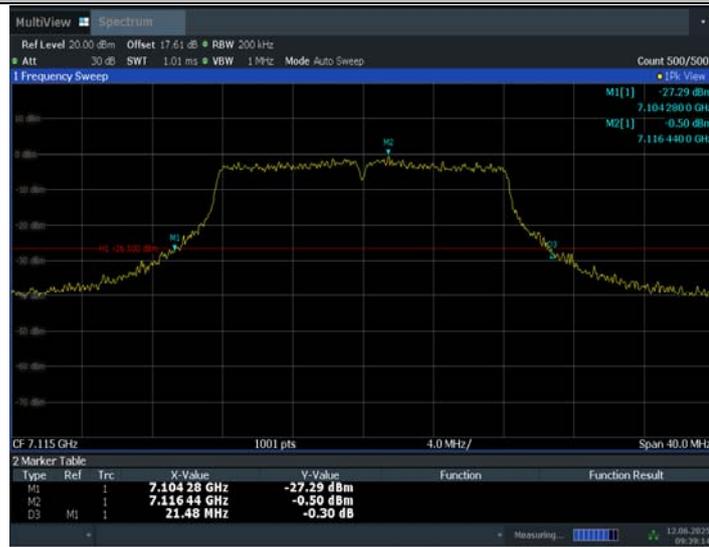
11A\_Ant6\_6995



11A\_Ant9\_6995



## 11A\_Ant6\_7115



09:39:15 12.06.2025

## 11A\_Ant9\_7115



09:41:48 12.06.2025

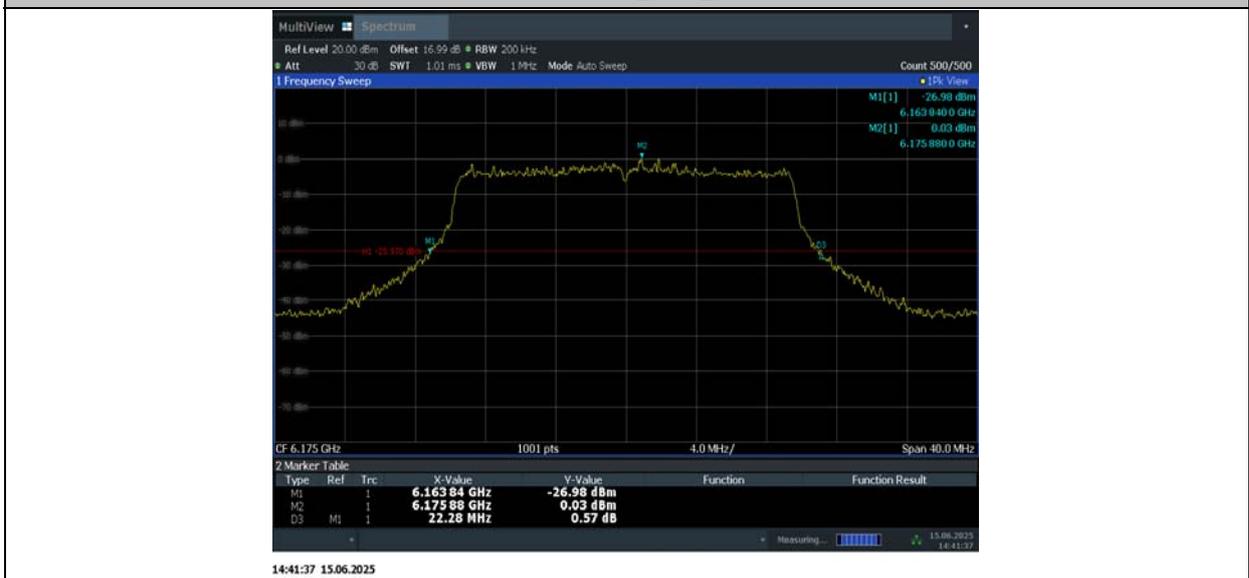
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11AX20MIMO\_Ant9\_5955



11AX20MIMO\_Ant6\_6175



## 11AX20MIMO\_Ant9\_6175



14:44:31 15.06.2025

## 11AX20MIMO\_Ant6\_6415



14:48:55 15.06.2025

## 11AX20MIMO\_Ant9\_6415



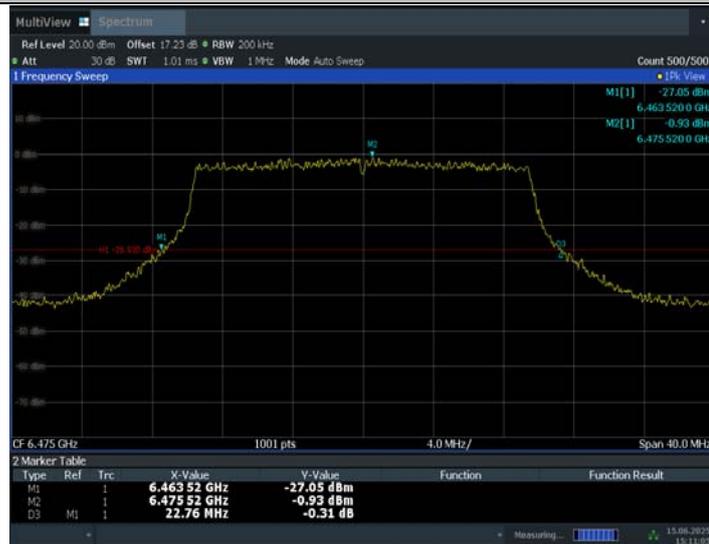
11AX20MIMO\_Ant6\_6435



11AX20MIMO\_Ant9\_6435



## 11AX20MIMO\_Ant6\_6475



15:11:05 15.06.2025

## 11AX20MIMO\_Ant9\_6475



15:11:49 15.06.2025

## 11AX20MIMO\_Ant6\_6515



11AX20MIMO\_Ant9\_6515



11AX20MIMO\_Ant6\_6535



## 11AX20MIMO\_Ant9\_6535



15:29:34 15.06.2025

## 11AX20MIMO\_Ant6\_6695



15:37:04 15.06.2025

## 11AX20MIMO\_Ant9\_6695



11AX20MIMO\_Ant6\_6855



11AX20MIMO\_Ant9\_6855



## 11AX20MIMO\_Ant6\_6875



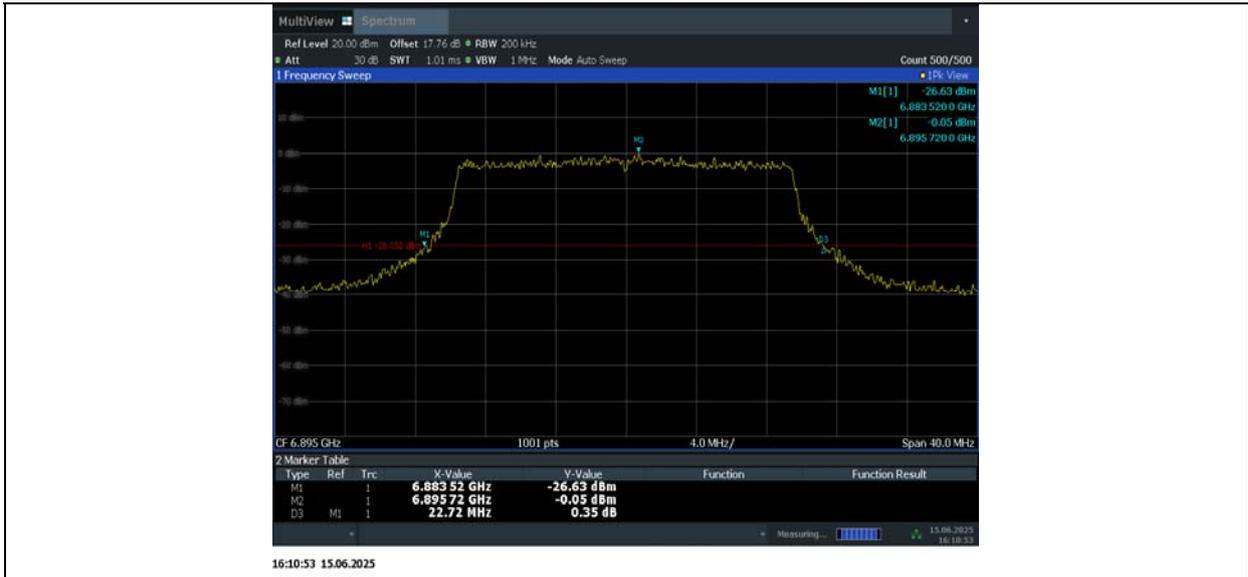
16:00:29 15.06.2025

## 11AX20MIMO\_Ant9\_6875



16:01:13 15.06.2025

## 11AX20MIMO\_Ant6\_6895



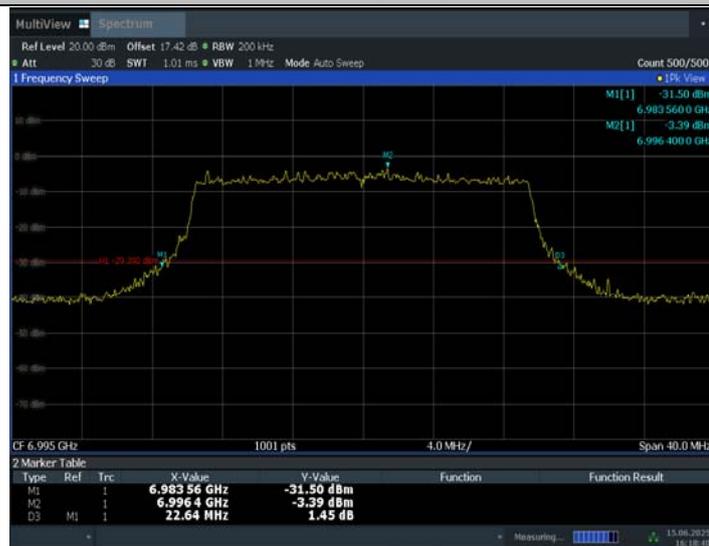
11AX20MIMO\_Ant9\_6895



11AX20MIMO\_Ant6\_6995



## 11AX20MIMO\_Ant9\_6995



16:18:41 15.06.2025

## 11AX20MIMO\_Ant6\_7115



16:26:05 15.06.2025

## 11AX20MIMO\_Ant9\_7115



11AX40MIMO\_Ant6\_5965



11AX40MIMO\_Ant9\_5965



## 11AX40MIMO\_Ant6\_6165



16:38:38 15.06.2025

## 11AX40MIMO\_Ant9\_6165



16:39:19 15.06.2025

## 11AX40MIMO\_Ant6\_6405



11AX40MIMO\_Ant9\_6405



11AX40MIMO\_Ant6\_6445



## 11AX40MIMO\_Ant9\_6445



16:43:26 15.06.2025

## 11AX40MIMO\_Ant6\_6485



16:44:27 15.06.2025

## 11AX40MIMO\_Ant9\_6485



11AX40MIMO\_Ant6\_6525



11AX40MIMO\_Ant9\_6525



## 11AX40MIMO\_Ant6\_6565



16:49:15 15.06.2025

## 11AX40MIMO\_Ant9\_6565



16:49:59 15.06.2025

## 11AX40MIMO\_Ant6\_6685



11AX40MIMO\_Ant9\_6685



11AX40MIMO\_Ant6\_6845



## 11AX40MIMO\_Ant9\_6845



16:57:03 15.06.2025

## 11AX40MIMO\_Ant6\_6885



16:58:14 15.06.2025

## 11AX40MIMO\_Ant9\_6885



11AX40MIMO\_Ant6\_6925



11AX40MIMO\_Ant9\_6925



## 11AX40MIMO\_Ant6\_6965



17:01:35 15.06.2025

## 11AX40MIMO\_Ant9\_6965



17:02:15 15.06.2025

## 11AX40MIMO\_Ant6\_7085



11AX40MIMO\_Ant9\_7085



11AX80MIMO\_Ant6\_5985



## 11AX80MIMO\_Ant9\_5985



17:05:32 15.06.2025

## 11AX80MIMO\_Ant6\_6145



17:06:22 15.06.2025

## 11AX80MIMO\_Ant9\_6145



11AX80MIMO\_Ant6\_6385



11AX80MIMO\_Ant9\_6385



## 11AX80MIMO\_Ant6\_6465



17:09:35 15.06.2025

## 11AX80MIMO\_Ant9\_6465



17:10:17 15.06.2025

## 11AX80MIMO\_Ant6\_6545



11AX80MIMO\_Ant9\_6545



11AX80MIMO\_Ant6\_6625



## 11AX80MIMO\_Ant9\_6625



17:13:30 15.06.2025

## 11AX80MIMO\_Ant6\_6705



17:14:29 15.06.2025

## 11AX80MIMO\_Ant9\_6705



11AX80MIMO\_Ant6\_6785



11AX80MIMO\_Ant9\_6785



## 11AX80MIMO\_Ant6\_6865



17:17:47 15.06.2025

## 11AX80MIMO\_Ant9\_6865



17:18:30 15.06.2025

## 11AX80MIMO\_Ant6\_6945



11AX80MIMO\_Ant9\_6945



11AX80MIMO\_Ant6\_7025



11AX80MIMO\_Ant9\_7025



### A.5. 99% Occupied bandwidth

**Method of Measurement: See ANSI C63.10-2013-clause 12.4.2.**

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than  $[10 \log (OBW/RBW)]$  below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

#### Measurement Result:

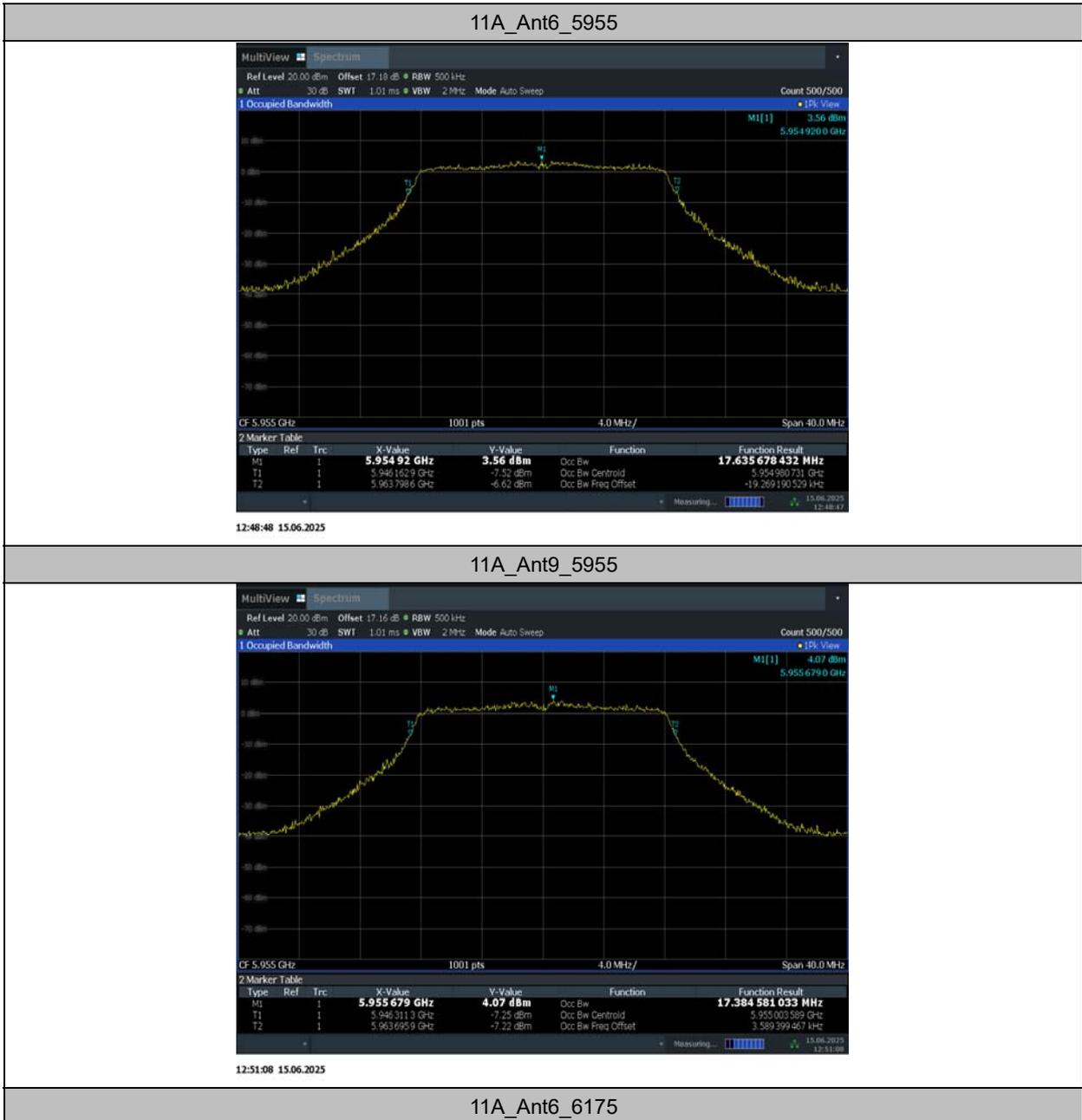
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant6	5955	17.636	5946.1629	5963.7986	≤320	PASS
	Ant9	5955	17.385	5946.3113	5963.6959	≤320	PASS
	Ant6	6175	17.634	6166.1314	6183.7650	≤320	PASS
	Ant9	6175	17.432	6166.2103	6183.6427	≤320	PASS
	Ant6	6415	17.610	6406.1829	6423.7934	≤320	PASS
	Ant9	6415	17.336	6406.2663	6423.6026	≤320	PASS
	Ant6	6435	17.597	6426.1283	6443.7257	≤320	PASS
	Ant9	6435	17.382	6426.2795	6443.6616	≤320	PASS
	Ant6	6475	17.550	6466.1654	6483.7154	≤320	PASS
	Ant9	6475	17.451	6466.2405	6483.6915	≤320	PASS
	Ant6	6515	17.567	6506.1734	6523.7400	≤320	PASS
	Ant9	6515	17.391	6506.2496	6523.6408	≤320	PASS
	Ant6	6535	17.551	6526.1370	6543.6881	≤320	PASS
	Ant9	6535	17.432	6526.2158	6543.6477	≤320	PASS
	Ant6	6695	17.591	6686.0936	6703.6841	≤320	PASS
	Ant9	6695	17.487	6686.2285	6703.7157	≤320	PASS

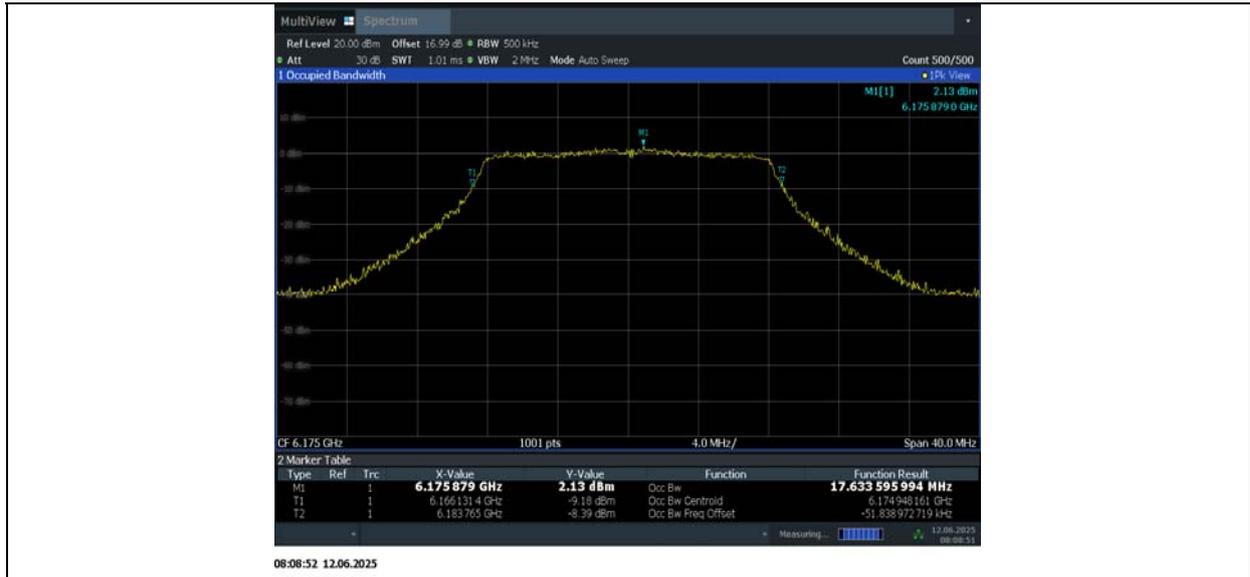
	Ant6	6855	17.602	6846.1510	6863.7525	≤320	PASS
	Ant9	6855	17.413	6846.2485	6863.6610	≤320	PASS
	Ant6	6875	17.604	6866.1532	6883.7570	≤320	PASS
	Ant9	6875	17.481	6866.2373	6883.7178	≤320	PASS
	Ant6	6895	17.593	6886.0718	6903.6650	≤320	PASS
	Ant9	6895	17.402	6886.2571	6903.6588	≤320	PASS
	Ant6	6995	17.605	6986.1447	7003.7499	≤320	PASS
	Ant9	6995	17.464	6986.2185	7003.6830	≤320	PASS
	Ant6	7115	17.590	7106.1646	7123.7545	≤320	PASS
	Ant9	7115	17.423	7106.2178	7123.6411	≤320	PASS
11AX20MIMO	Ant6	5955	19.412	5945.2922	5964.7038	≤320	PASS
	Ant9	5955	19.340	5945.3309	5964.6713	≤320	PASS
	Ant6	6175	19.382	6165.2524	6184.6349	≤320	PASS
	Ant9	6175	19.332	6165.2841	6184.6163	≤320	PASS
	Ant6	6415	19.420	6405.2588	6424.6787	≤320	PASS
	Ant9	6415	19.328	6405.3332	6424.6615	≤320	PASS
	Ant6	6435	19.413	6425.1961	6444.6086	≤320	PASS
	Ant9	6435	19.324	6425.2929	6444.6166	≤320	PASS
	Ant6	6475	19.406	6465.2449	6484.6513	≤320	PASS
	Ant9	6475	19.341	6465.2809	6484.6217	≤320	PASS
	Ant6	6515	19.387	6505.2795	6524.6661	≤320	PASS
	Ant9	6515	19.356	6505.2859	6524.6423	≤320	PASS
	Ant6	6535	19.386	6525.2206	6544.6065	≤320	PASS
	Ant9	6535	19.364	6525.2857	6544.6501	≤320	PASS
	Ant6	6695	19.451	6685.1956	6704.6469	≤320	PASS
	Ant9	6695	19.329	6685.2762	6704.6055	≤320	PASS
	Ant6	6855	19.434	6845.2148	6864.6485	≤320	PASS
	Ant9	6855	19.347	6845.2685	6864.6158	≤320	PASS
	Ant6	6875	19.428	6865.2665	6884.6941	≤320	PASS
	Ant9	6875	19.376	6865.2713	6884.6469	≤320	PASS
	Ant6	6895	19.416	6885.2419	6904.6584	≤320	PASS
	Ant9	6895	19.315	6885.2630	6904.5785	≤320	PASS
	Ant6	6995	19.507	6985.2449	7004.7517	≤320	PASS
	Ant9	6995	19.348	6985.2840	7004.6317	≤320	PASS
Ant6	7115	19.482	7105.2513	7124.7336	≤320	PASS	
Ant9	7115	19.325	7105.2781	7124.6027	≤320	PASS	
11AX40MIMO	Ant6	5965	37.805	5946.0581	5983.8626	≤320	PASS
	Ant9	5965	37.573	5946.1481	5983.7213	≤320	PASS
	Ant6	6165	37.683	6146.1201	6183.8032	≤320	PASS
	Ant9	6165	37.546	6146.1903	6183.7359	≤320	PASS
	Ant6	6405	37.721	6386.0973	6423.8180	≤320	PASS
	Ant9	6405	37.650	6386.0729	6423.7228	≤320	PASS
	Ant6	6445	37.742	6426.0464	6463.7882	≤320	PASS

	Ant9	6445	37.581	6426.1600	6463.7412	≤320	PASS
	Ant6	6485	37.662	6466.1121	6503.7739	≤320	PASS
	Ant9	6485	37.509	6466.1803	6503.6898	≤320	PASS
	Ant6	6525	37.757	6506.0699	6543.8272	≤320	PASS
	Ant9	6525	37.713	6506.0573	6543.7703	≤320	PASS
	Ant6	6565	37.681	6546.1019	6583.7826	≤320	PASS
	Ant9	6565	37.539	6546.1530	6583.6922	≤320	PASS
	Ant6	6685	37.704	6666.0499	6703.7534	≤320	PASS
	Ant9	6685	37.664	6666.0789	6703.7428	≤320	PASS
	Ant6	6845	37.771	6826.0711	6863.8418	≤320	PASS
	Ant9	6845	37.654	6826.0881	6863.7423	≤320	PASS
	Ant6	6885	37.674	6866.1096	6903.7835	≤320	PASS
	Ant9	6885	37.591	6866.1332	6903.7247	≤320	PASS
	Ant6	6925	37.628	6906.1148	6943.7430	≤320	PASS
	Ant9	6925	37.656	6906.1109	6943.7673	≤320	PASS
	Ant6	6965	37.689	6946.0979	6983.7865	≤320	PASS
	Ant9	6965	37.672	6946.0554	6983.7277	≤320	PASS
	Ant6	7085	37.770	7066.0163	7103.7867	≤320	PASS
	Ant9	7085	37.726	7066.0764	7103.8029	≤320	PASS
11AX80MIMO	Ant6	5985	77.972	5945.9234	6023.8951	≤320	PASS
	Ant9	5985	77.787	5946.0166	6023.8039	≤320	PASS
	Ant6	6145	77.967	6105.9392	6183.9065	≤320	PASS
	Ant9	6145	77.443	6106.1725	6183.6152	≤320	PASS
	Ant6	6385	77.882	6345.9265	6423.8088	≤320	PASS
	Ant9	6385	77.539	6346.2064	6423.7451	≤320	PASS
	Ant6	6465	77.809	6425.9759	6503.7848	≤320	PASS
	Ant9	6465	77.456	6426.1650	6503.6210	≤320	PASS
	Ant6	6545	77.813	6505.9563	6583.7689	≤320	PASS
	Ant9	6545	77.462	6506.1046	6583.5666	≤320	PASS
	Ant6	6625	77.808	6586.0099	6663.8181	≤320	PASS
	Ant9	6625	77.611	6586.1304	6663.7415	≤320	PASS
	Ant6	6705	77.879	6665.8723	6743.7510	≤320	PASS
	Ant9	6705	77.568	6666.0063	6743.5740	≤320	PASS
	Ant6	6785	77.961	6745.8644	6823.8253	≤320	PASS
	Ant9	6785	77.593	6745.9967	6823.5897	≤320	PASS
	Ant6	6865	77.809	6825.9913	6903.8005	≤320	PASS
	Ant9	6865	77.803	6825.9032	6903.7066	≤320	PASS
	Ant6	6945	77.790	6906.0494	6983.8396	≤320	PASS
	Ant9	6945	77.686	6905.9775	6983.6639	≤320	PASS
	Ant6	7025	77.981	6986.0250	7064.0063	≤320	PASS
	Ant9	7025	77.747	6985.9928	7063.7394	≤320	PASS

**Conclusion: PASS**

Test graphs as below:





11A\_Ant9\_6175



11A\_Ant6\_6415



## 11A\_Ant9\_6415



08:18:22 12.06.2025

## 11A\_Ant6\_6435



08:25:08 12.06.2025

## 11A\_Ant9\_6435



11A\_Ant6\_6475



11A\_Ant9\_6475



## 11A\_Ant6\_6515



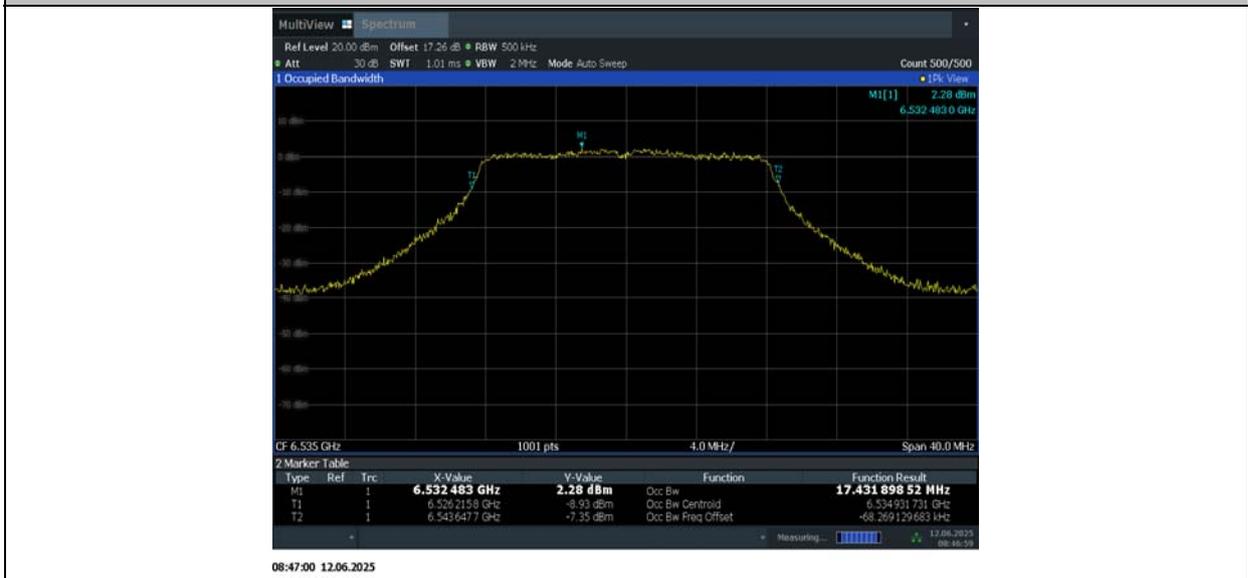
## 11A\_Ant9\_6515



## 11A\_Ant6\_6535



11A\_Ant9\_6535



11A\_Ant6\_6695



## 11A\_Ant9\_6695



## 11A\_Ant6\_6855



## 11A\_Ant9\_6855



11A\_Ant6\_6875



11A\_Ant9\_6875

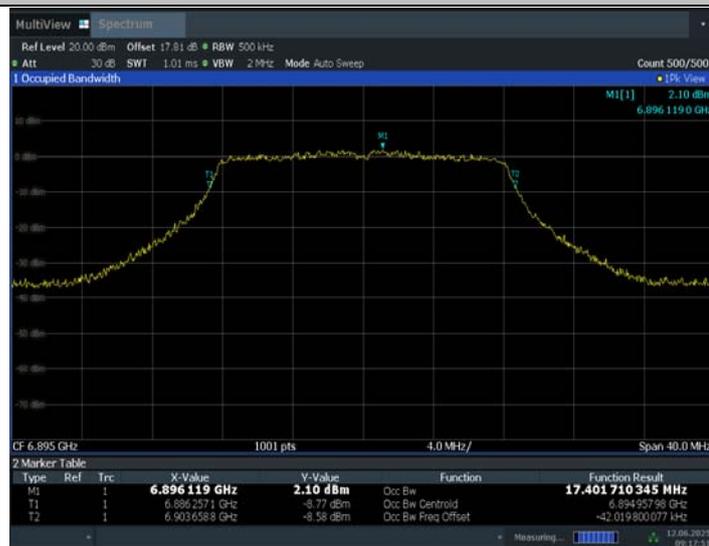


## 11A\_Ant6\_6895



09:14:08 12.06.2025

## 11A\_Ant9\_6895

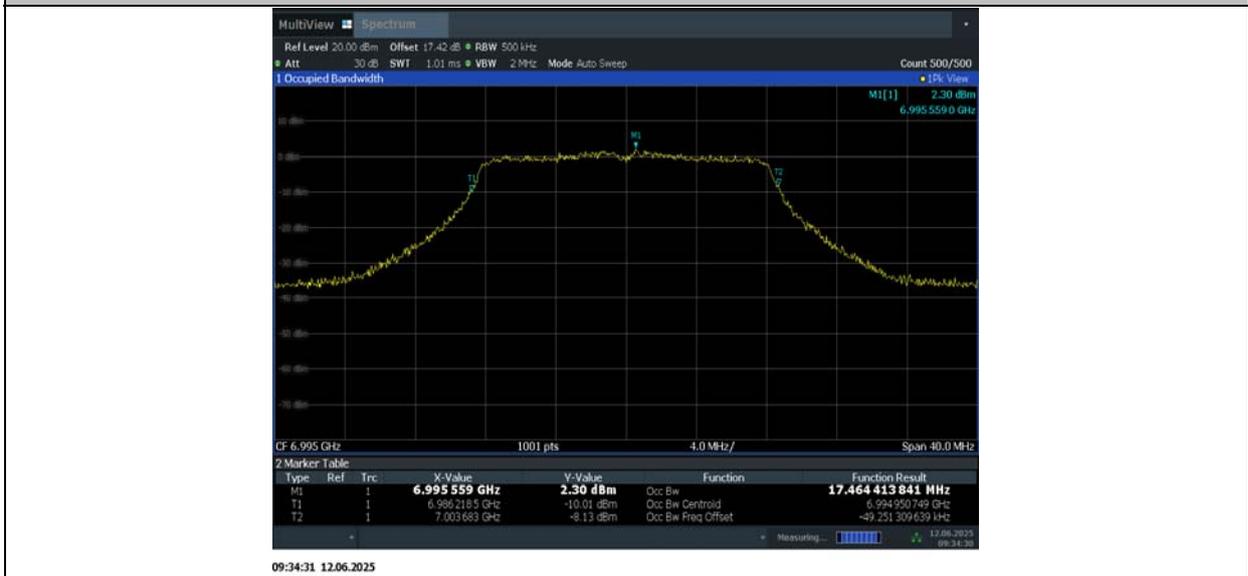


09:17:52 12.06.2025

## 11A\_Ant6\_6995



11A\_Ant9\_6995



11A\_Ant6\_7115



## 11A\_Ant9\_7115



09:41:55 12.06.2025

## 11AX20MIMO\_Ant6\_5955



12:43:44 15.06.2025

## 11AX20MIMO\_Ant9\_5955



11AX20MIMO\_Ant6\_6175



11AX20MIMO\_Ant9\_6175



## 11AX20MIMO\_Ant6\_6415



## 11AX20MIMO\_Ant9\_6415



## 11AX20MIMO\_Ant6\_6435



11AX20MIMO\_Ant9\_6435



11AX20MIMO\_Ant6\_6475



## 11AX20MIMO\_Ant9\_6475



15:11:56 15.06.2025

## 11AX20MIMO\_Ant6\_6515



15:19:37 15.06.2025

## 11AX20MIMO\_Ant9\_6515



11AX20MIMO\_Ant6\_6535



11AX20MIMO\_Ant9\_6535



## 11AX20MIMO\_Ant6\_6695



15:37:12 15.06.2025

## 11AX20MIMO\_Ant9\_6695



15:37:56 15.06.2025

## 11AX20MIMO\_Ant6\_6855



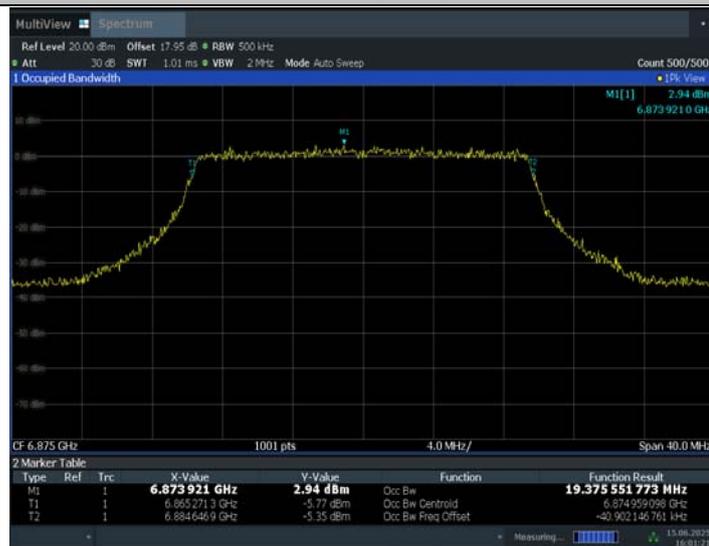
11AX20MIMO\_Ant9\_6855



11AX20MIMO\_Ant6\_6875



## 11AX20MIMO\_Ant9\_6875



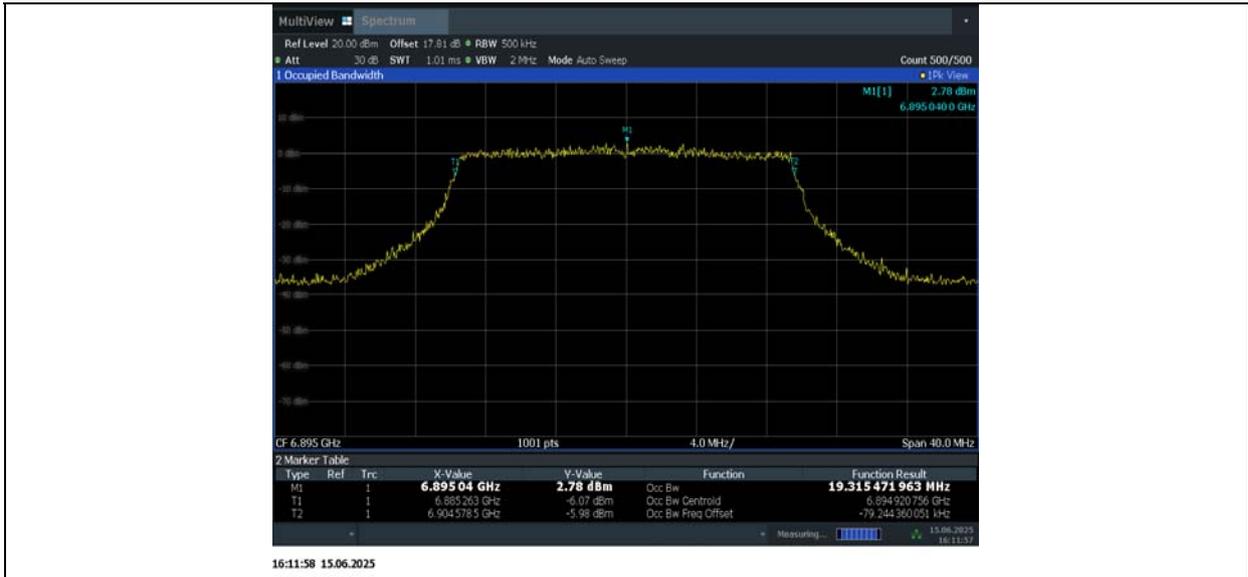
16:01:21 15.06.2025

## 11AX20MIMO\_Ant6\_6895

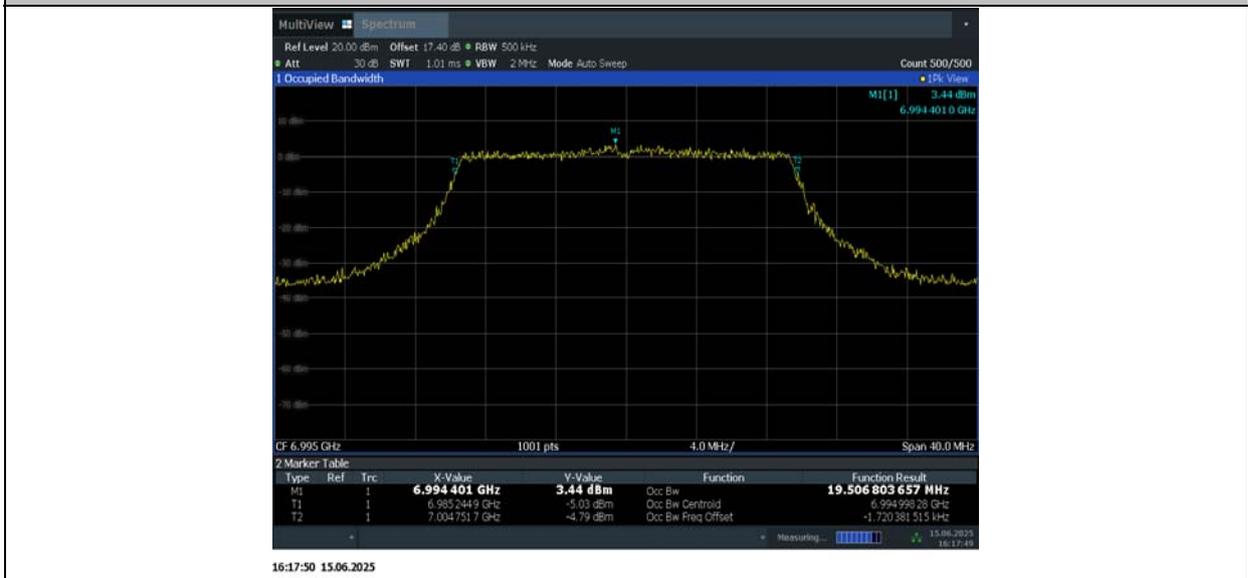


16:11:00 15.06.2025

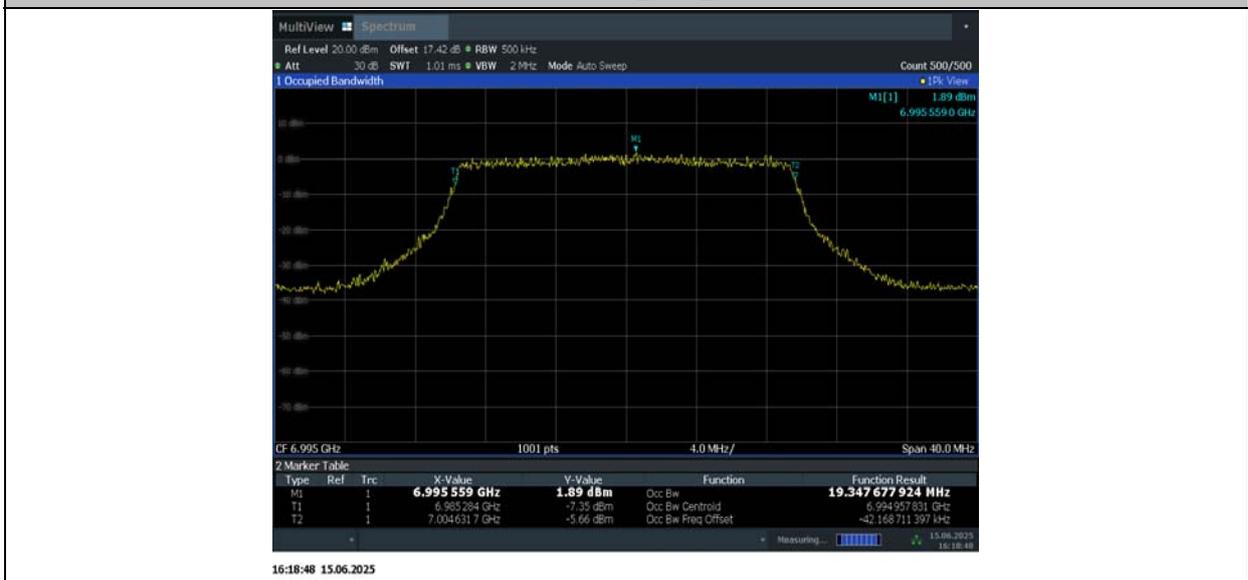
## 11AX20MIMO\_Ant9\_6895



11AX20MIMO\_Ant6\_6995



11AX20MIMO\_Ant9\_6995



## 11AX20MIMO\_Ant6\_7115



16:26:12 15.06.2025

## 11AX20MIMO\_Ant9\_7115



16:28:33 15.06.2025

## 11AX40MIMO\_Ant6\_5965



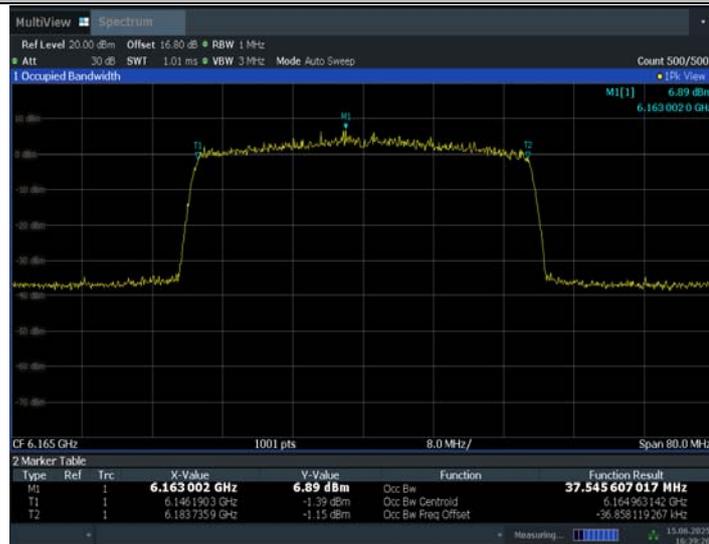
11AX40MIMO\_Ant9\_5965



11AX40MIMO\_Ant6\_6165



## 11AX40MIMO\_Ant9\_6165



16:39:26 15.06.2025

## 11AX40MIMO\_Ant6\_6405

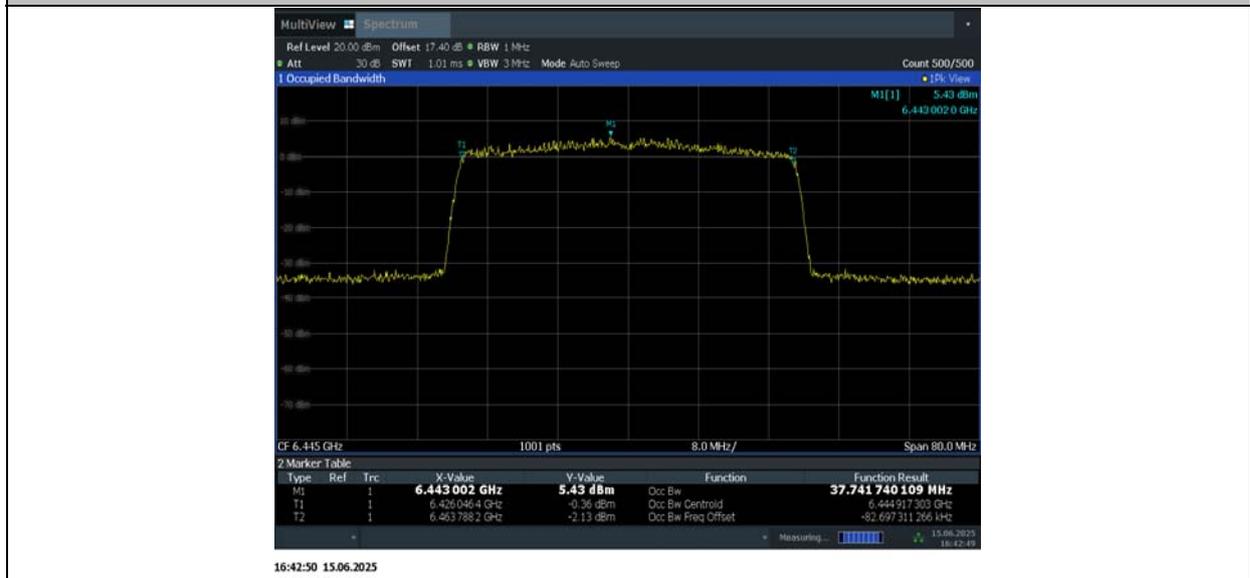


16:41:09 15.06.2025

## 11AX40MIMO\_Ant9\_6405



11AX40MIMO\_Ant6\_6445



11AX40MIMO\_Ant9\_6445



## 11AX40MIMO\_Ant6\_6485



16:44:35 15.06.2025

## 11AX40MIMO\_Ant9\_6485



16:45:19 15.06.2025

## 11AX40MIMO\_Ant6\_6525



11AX40MIMO\_Ant9\_6525



11AX40MIMO\_Ant6\_6565

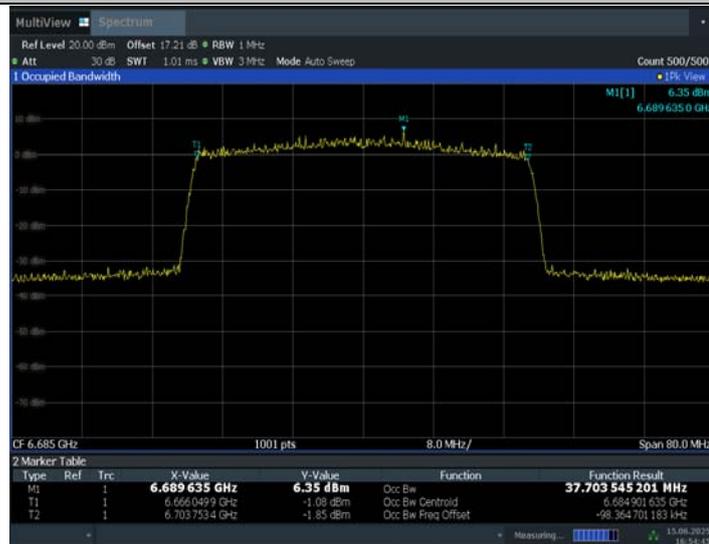


## 11AX40MIMO\_Ant9\_6565



16:50:06 15.06.2025

## 11AX40MIMO\_Ant6\_6685



16:54:45 15.06.2025

## 11AX40MIMO\_Ant9\_6685



11AX40MIMO\_Ant6\_6845



11AX40MIMO\_Ant9\_6845



## 11AX40MIMO\_Ant6\_6885



16:58:21 15.06.2025

## 11AX40MIMO\_Ant9\_6885



16:59:04 15.06.2025

## 11AX40MIMO\_Ant6\_6925



11AX40MIMO\_Ant9\_6925



11AX40MIMO\_Ant6\_6965



## 11AX40MIMO\_Ant9\_6965



17:02:23 15.06.2025

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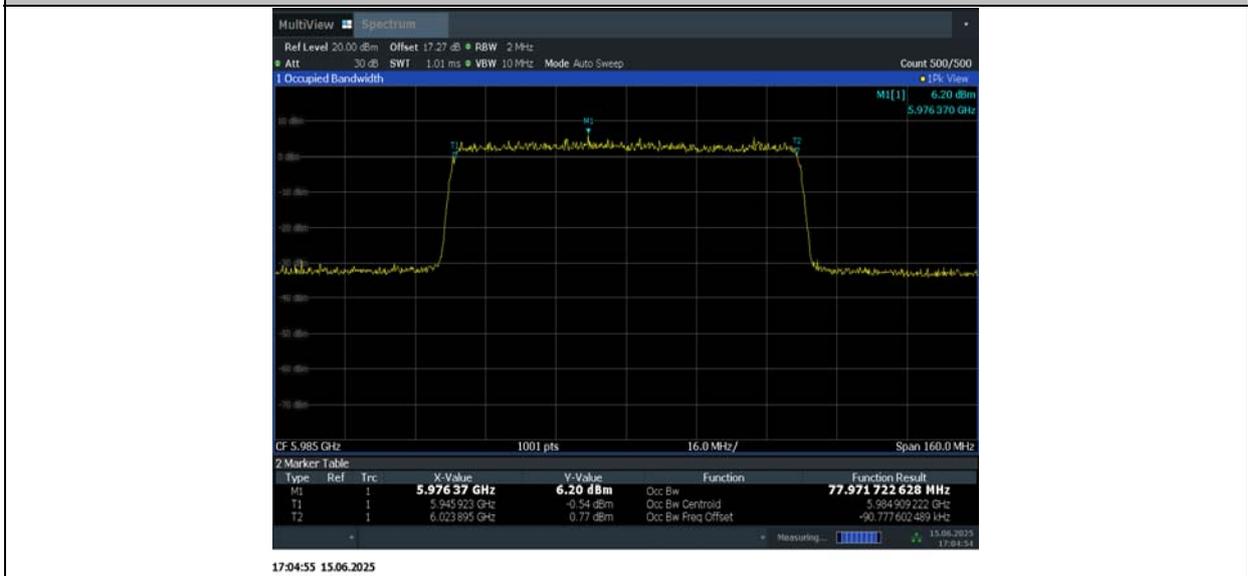


17:03:13 15.06.2025

## 11AX40MIMO\_Ant9\_7085



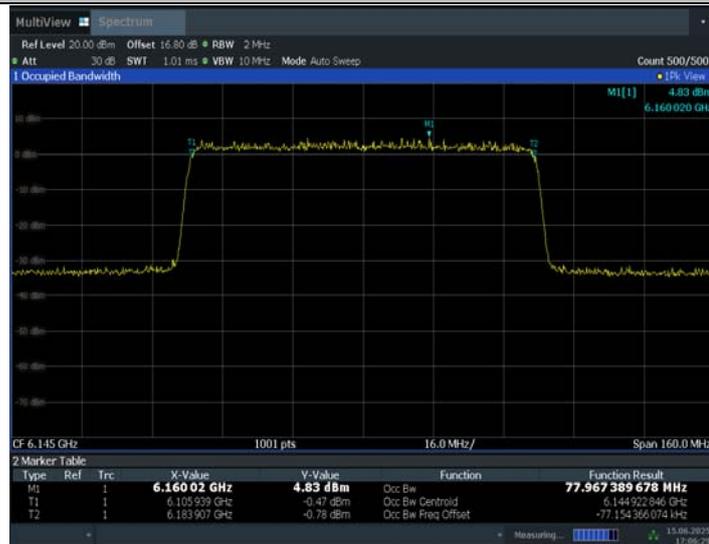
11AX80MIMO\_Ant6\_5985



11AX80MIMO\_Ant9\_5985



## 11AX80MIMO\_Ant6\_6145



17:06:29 15.06.2025

## 11AX80MIMO\_Ant9\_6145



17:07:12 15.06.2025

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11AX80MIMO\_Ant9\_6385



11AX80MIMO\_Ant6\_6465

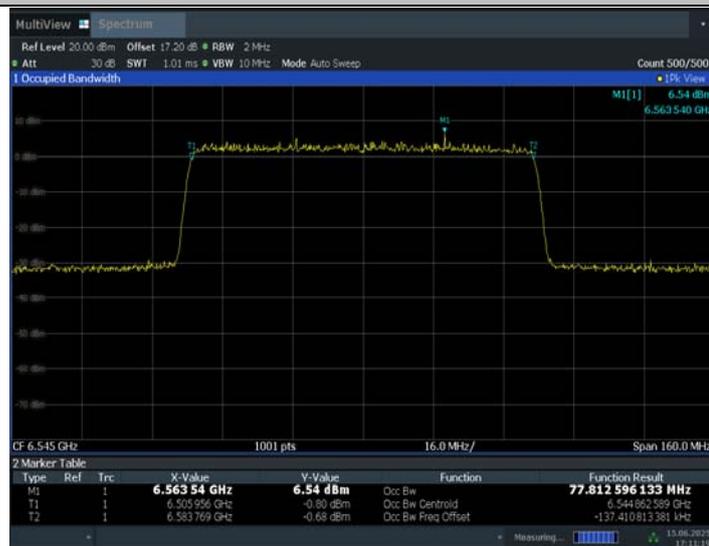


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17:10:24 15.06.2025

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17:11:19 15.06.2025

## 11AX80MIMO\_Ant9\_6545



11AX80MIMO\_Ant6\_6625



11AX80MIMO\_Ant9\_6625



## 11AX80MIMO\_Ant6\_6705



17:14:36 15.06.2025

## 11AX80MIMO\_Ant9\_6705



17:15:19 15.06.2025

## 11AX80MIMO\_Ant6\_6785



11AX80MIMO\_Ant9\_6785



11AX80MIMO\_Ant6\_6865



## 11AX80MIMO\_Ant9\_6865



17:18:37 15.06.2025

## 11AX80MIMO\_Ant6\_6945



17:19:29 15.06.2025

## 11AX80MIMO\_Ant9\_6945



11AX80MIMO\_Ant6\_7025



11AX80MIMO\_Ant9\_7025



## A.6. Contention Based Protocol

### Measurement Limit and Method:

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band must employ a contention-based protocol.

Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel (in which incumbent signal is transmitted) and stay off the incumbent channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm)<sup>1</sup>. The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain.

To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

The measurement is made according to KDB 987594.

EUT does not use channel puncturing for incumbent avoidance. The EUT use bandwidth reduction for incumbent avoidance. Following figure illustrates an example scenarios of an 80MHz channel centered at 6145 MHz.

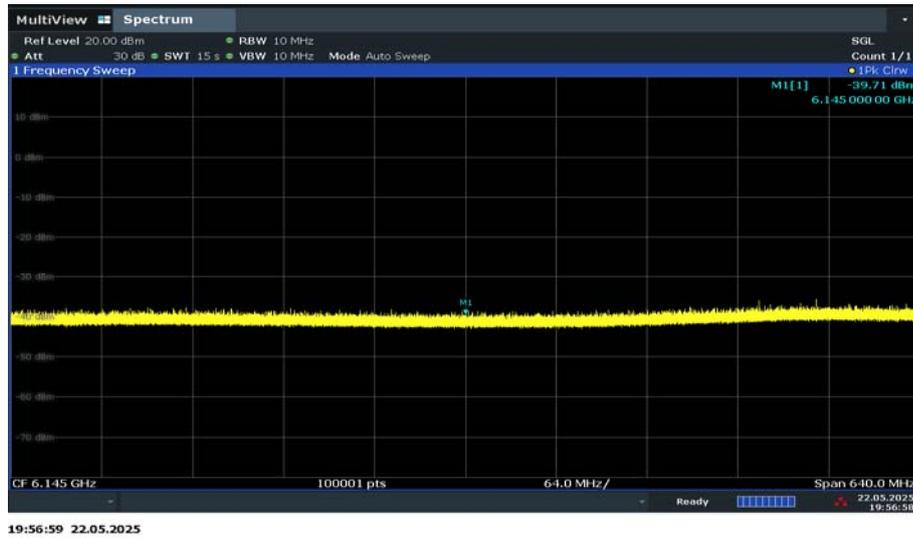
For the lower edge:

A 10 MHz AWGN signal (center frequency is 6110MHz) is injected.



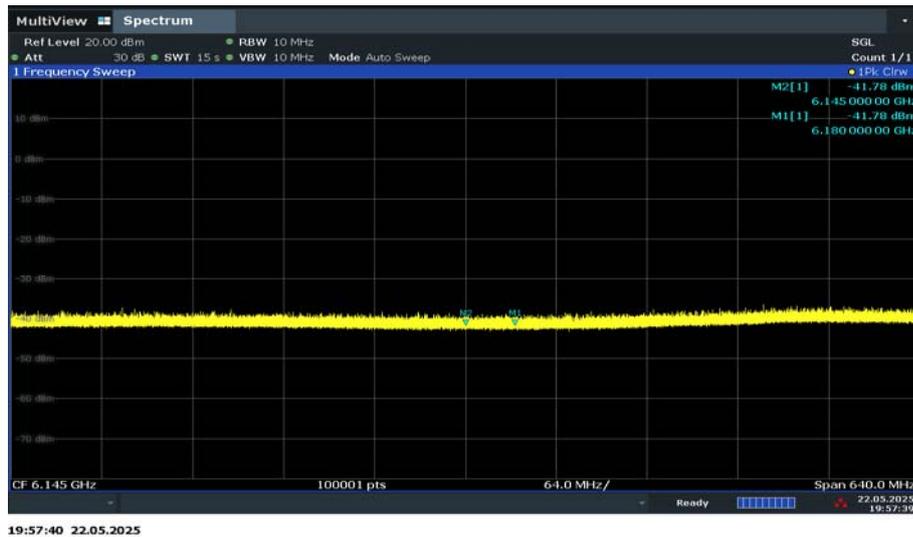
For the center frequency

A 10 MHz AWGN signal (center frequency is 6145MHz) is injected.



For the upper edge:

A 10 MHz AWGN signal (center frequency is 6180MHz) is injected.



**Measurement Results:**

Note: The test evaluated the minimum antenna gain, which is reflected in the Ant Gain column.

Band	BW (MHz)	Fre. (MHz)	Incumbent Freq (MHz)	AWGN Signal Level (at Antenna Port) (dBm)	Incumbent Signal Level (Refer to 0dBi Antenna) (dBm)	Detection Rate(%)	Threshold Level(dBm)
UNII Band 5	20	6135	6135 fc1 = fc2	-69.5	-63.4	100	-62
					Cease transmission		
				/	/	/	-62
					Minimal transmission		
				-70	-63.9	0	-62
					Normal transmission		
	80	6145	6110Lower Edge	-68	-61.9	100	-62
					Cease transmission		
				/	/	/	/
					Minimal transmission		
				-69	-62.9	0	-62
					Normal transmission		
			6145 fc1 = fc2	-70	-63.9	90	-62
					Cease transmission		
				/	/	/	-62
					Minimal transmission		
-70.5	-64.4	0	-62				
	Normal transmission						
6180 Upper	-68	-61.9	100	-62			
		Cease transmission					

Band	BW (MHz)	Fre. (MHz)	Incumbent Freq (MHz)	AWGN Signal Level (at Antenna Port) (dBm)	Incumbent Signal Level (Refer to 0dBi Antenna) (dBm)	Detection Rate(%)	Threshold Level(dBm)			
								Edge	Minimal transmission	Normal transmission
UNII Band 6	20	6455	6455 fc1 = fc2	-72	-65.9	100	-62			
								Edge	Minimal transmission	Normal transmission
								Edge	Minimal transmission	Normal transmission
								Edge	Minimal transmission	Normal transmission
80 UNII Band 6	80	6465	6430 Lower Edge	-70.5	-64.4	90	-62			
								Edge	Minimal transmission	Normal transmission
								Edge	Minimal transmission	Normal transmission
								Edge	Minimal transmission	Normal transmission
								Edge	Minimal transmission	Normal transmission
								Edge	Minimal transmission	Normal transmission
			6465 fc1 = fc2	-72	-65.9	90	-62			
								Edge	Minimal transmission	Normal transmission
								Edge	Minimal transmission	Normal transmission
								Edge	Minimal transmission	Normal transmission
								Edge	Minimal transmission	Normal transmission
								Edge	Minimal transmission	Normal transmission
6500 Upper	-70.5	-64.4	100	-62						
					Edge	Minimal transmission	Normal transmission			

Band	BW (MHz)	Fre. (MHz)	Incumbent Freq (MHz)	AWGN Signal Level (at Antenna Port) (dBm)	Incumbent Signal Level (Refer to 0dBi Antenna) (dBm)	Detection Rate(%)	Threshold Level(dBm)
				/	/	/	-62
					Minimal transmission		
				-71	-64.9	0	-62
					Normal transmission		
Band	BW (MHz)	Fre. (MHz)	Incumbent Freq (MHz)	AWGN Signal Level (at Antenna Port) (dBm)	Incumbent Signal Level (Refer to 0dBi Antenna) (dBm)	Detection Rate(%)	Threshold Level(dBm)
UNII Band 7	20	6855	6855 fc1 = fc2	-72.5	-66.4	100	-62
					Cease transmission		
				/	/	/	-62
					Minimal transmission		
				-73	-66.9	0	-62
					Normal transmission		
80 UNII Band 7	80	6625	6590 Lower Edge	-71.5	-65.4	90	-62
					Cease transmission		
				/	/	/	-62
					Minimal transmission		
				-72	-65.9	0	-62
					Normal transmission		
			6625 fc1 = fc2	-72.5	-66.4	100	-62
					Cease transmission		
				/	/	/	-62
					Minimal transmission		
			-73	-66.9	0	-62	
				Normal transmission			
			6660 Upper	-71.5	-65.4	90	-62
					Cease transmission		

Band	BW (MHz)	Fre. (MHz)	Incumbent Freq (MHz)	AWGN Signal Level (at Antenna Port) (dBm)	Incumbent Signal Level (Refer to 0dBi Antenna) (dBm)	Detection Rate(%)	Threshold Level(dBm)
				/	/	/	-62
					Minimal transmission		
				-72	-65.9	0	-62
					Normal transmission		
Band	BW (MHz)	Fre. (MHz)	Incumbent Freq (MHz)	AWGN Signal Level (at Antenna Port) (dBm)	Incumbent Signal Level (Refer to 0dBi Antenna) (dBm)	Detection Rate(%)	Threshold Level(dBm)
UNII Band 8	20	7015	7015 fc1 = fc2	-73.5	-67.4	100	-62
					Cease transmission		
				/	/	/	-62
					Minimal transmission		
				-74	-67.9	0	-62
					Normal transmission		
80 UNII Band 8	80	6945	6910 Lower Edge	-72.5	-66.4	90	-62
					Cease transmission		
				/	/	/	-62
					Minimal transmission		
				-73	-66.9	0	-62
					Normal transmission		
			6945 fc1 = fc2	-73.5	-67.4	100	-62
					Cease transmission		
				/	/	/	-62
					Minimal transmission		
			-74	-67.9	0	-62	
				Normal transmission			
			6980 Upper	-72.5	-66.4	100	-62
					Cease transmission		

			Edge	/	/	/	-62
					Minimal transmission		
				-73	-66.9	0	-62
					Normal transmission		

Note: Incumbent signal level (dBm) = AWGN Signal power Level (dBm)-Antenna Gain (dBi),

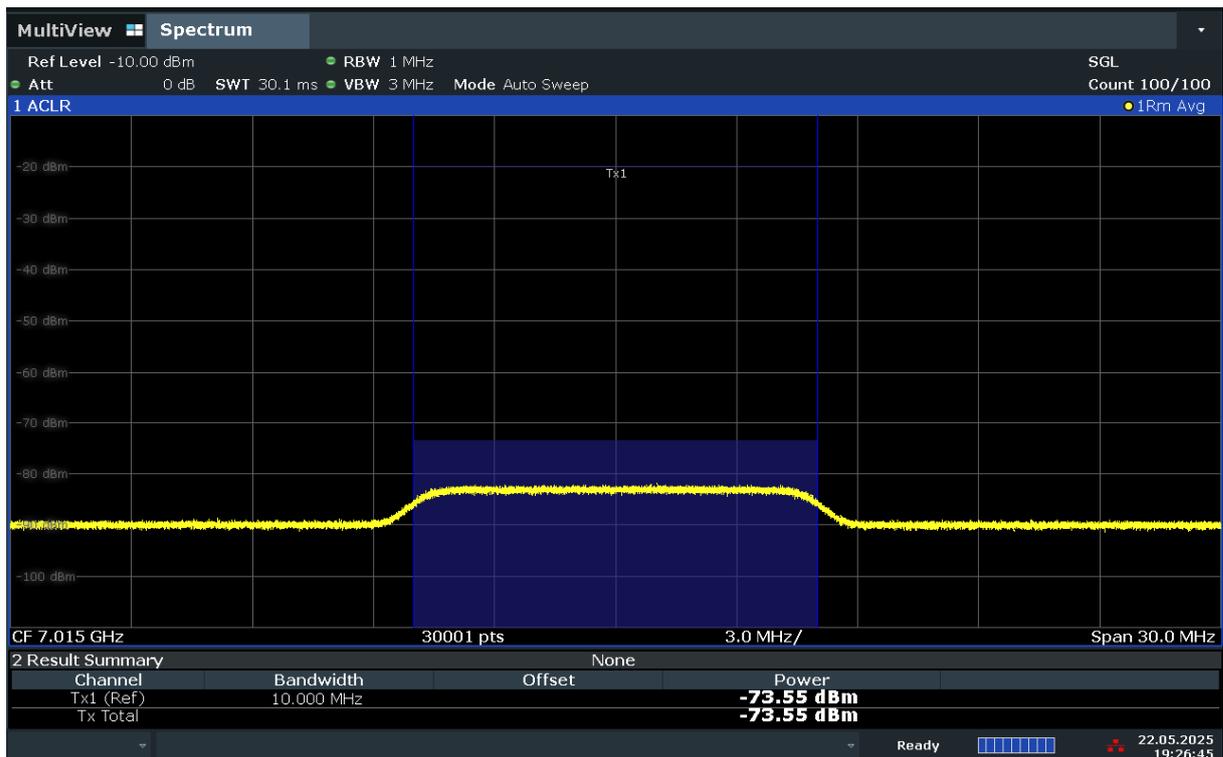
The EUT encounters the incumbent signal that its power level is less than or equal to the detection threshold (-62dBm) with reference to 0dBi antenna gain. Path loss is negligible (0dB).

EUT support bandwidth reduction mechanism.

**Conclusion: PASS**

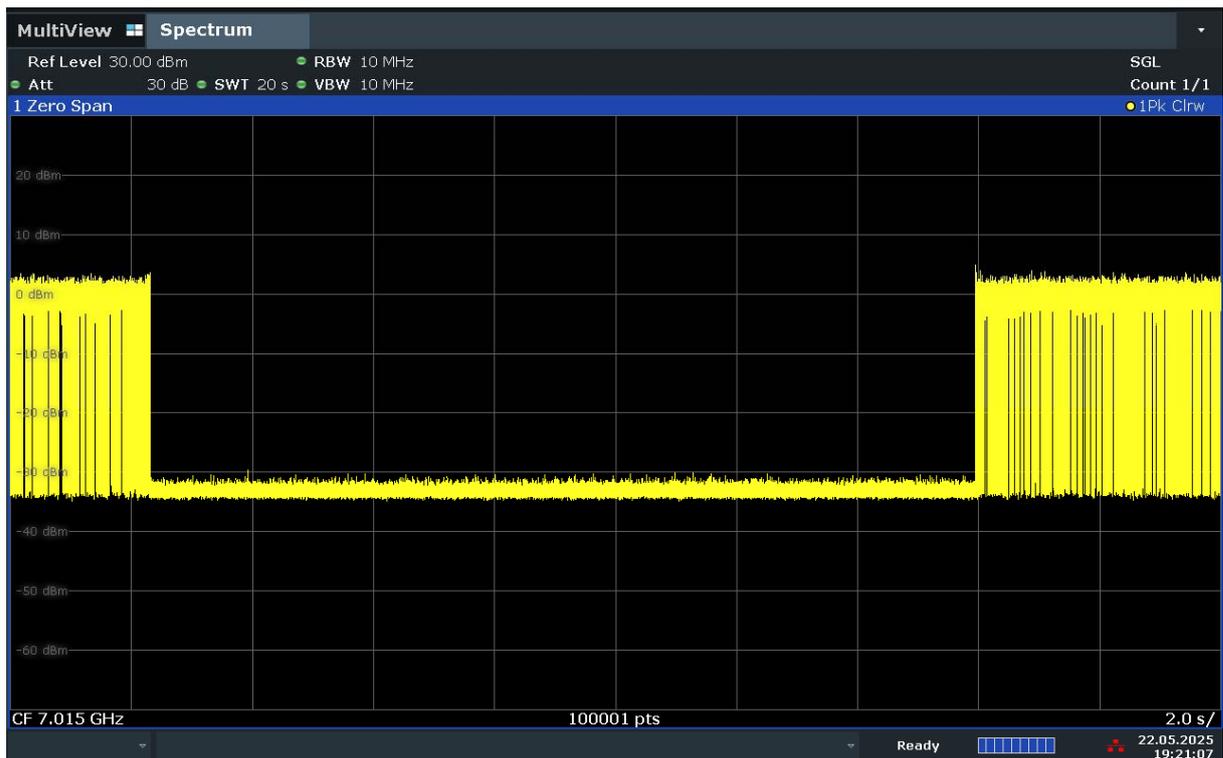
Test graphs as below:

Mode	AWGN Signal Level	ceased transmission
802.1ax-HE20-7015MHz	See test graph	See test graph
802.11ax-HE80-6145MHz(middle)	See test graph	See test graph



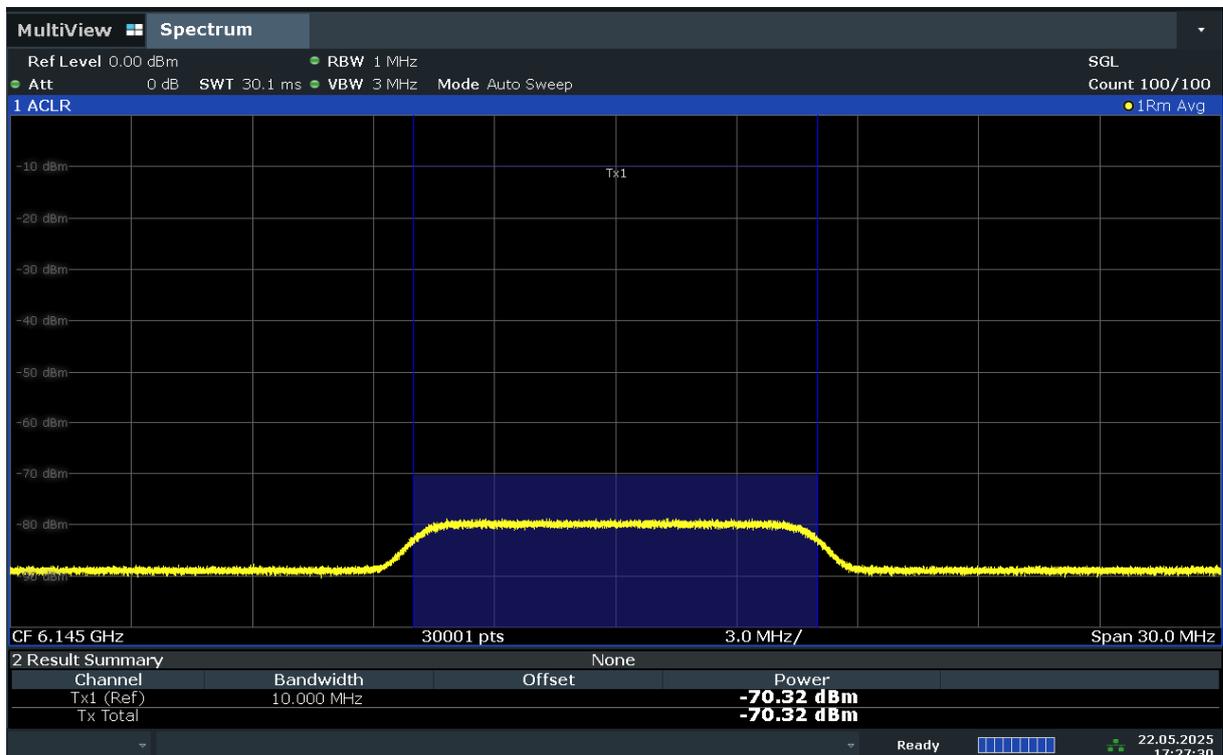
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**Fig.1 Contention Based Protocol 802.11ax-HE20(ch7015MHz-AWGN Signal Level)**



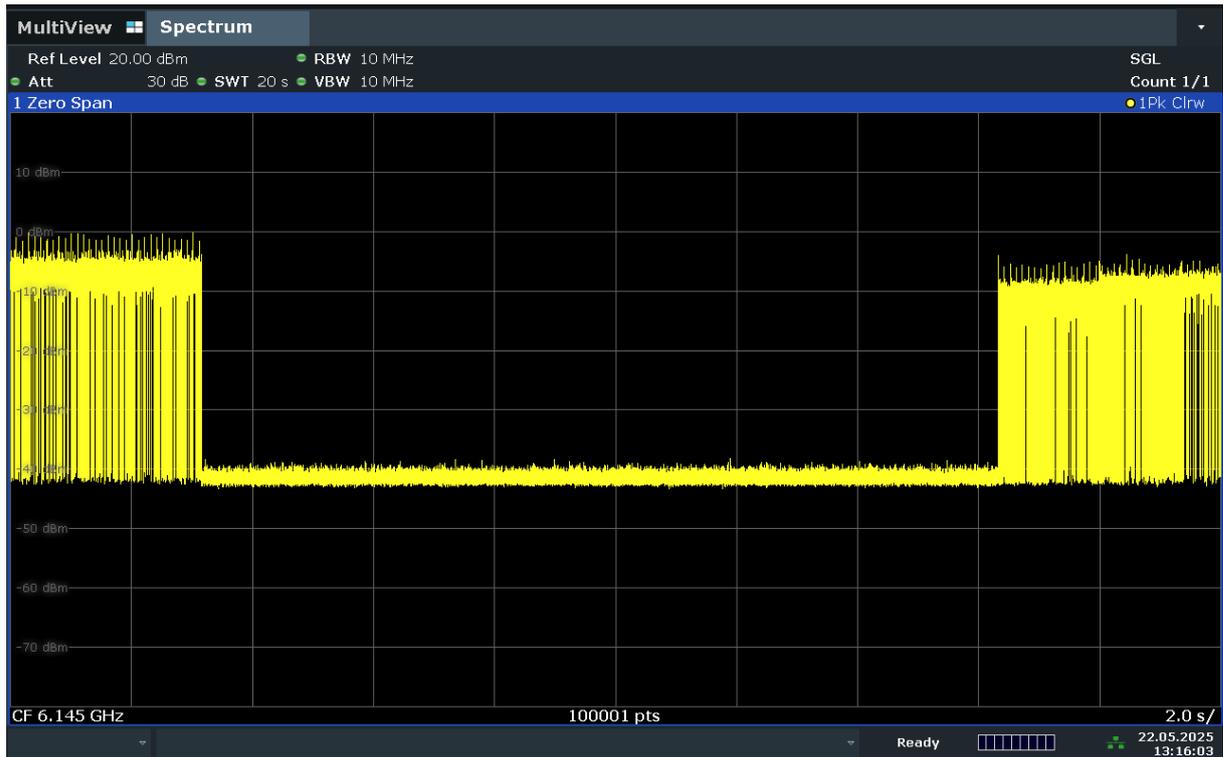
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**Fig.2 Contention Based Protocol 802.11ax-HE20 (ch7015MHz-ceased transmission)**



17:27:30 22.05.2025

**Fig.3 Contention Based Protocol 802.11ax-HE80 (ch6145MHz-middle-AWGN Signal Level)**



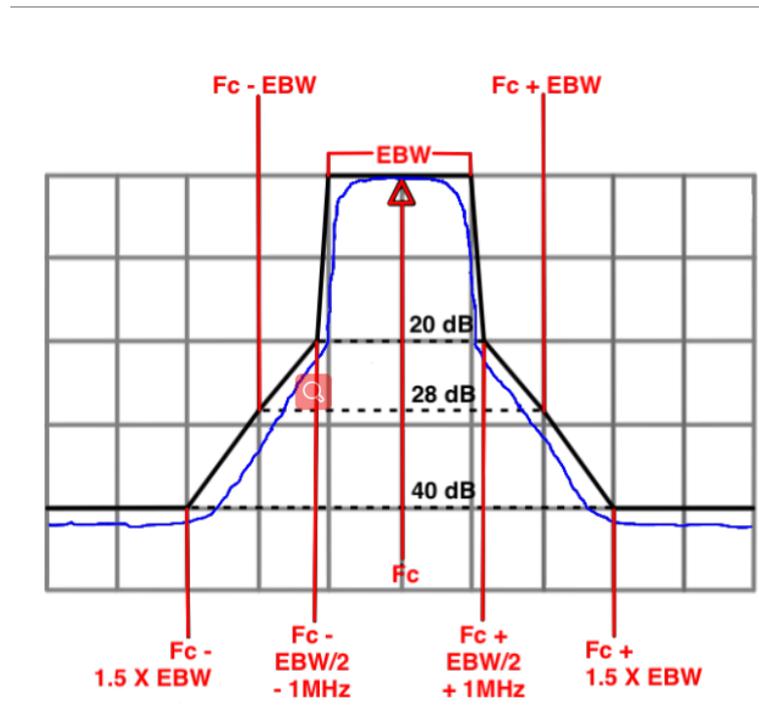
13:16:04 22.05.2025

**Fig.4 Contention Based Protocol 802.11ax-HE80 (ch6145MHz-middle-ceased transmission)**

## A.7. In-Band Emissions

### Measurement Limit and Method:

1. Take nominal bandwidth as reference channel bandwidth provided that 26 dB emission bandwidth is always larger than nominal bandwidth
2. Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:
  - a) Set the span to encompass the entire 26 dB EBW of the signal.
  - b) Set RBW = same RBW used for 26 dB EBW measurement.
  - c) Set VBW  $\geq 3 \times$  RBW
  - d) Number of points in sweep  $\geq [2 \times \text{span} / \text{RBW}]$ .
  - e) Sweep time = auto.
  - f) Detector = RMS (i.e., power averaging)
  - g) Trace average at least 100 traces in power averaging (rms) mode.
  - h) Use the peak search function on the instrument to find the peak of the spectrum.
3. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
  - a. Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
  - b. Suppressed by 28 dB at one channel bandwidth from the channel center.
  - c. Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
4. Adjust the span to encompass the entire mask as necessary.
5. Clear trace.
6. Trace average at least 100 traces in power averaging (rms) mode.
7. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.



### Generic Emission Mask

The measurement is made according to KDB 987594.

### Measurement Results:

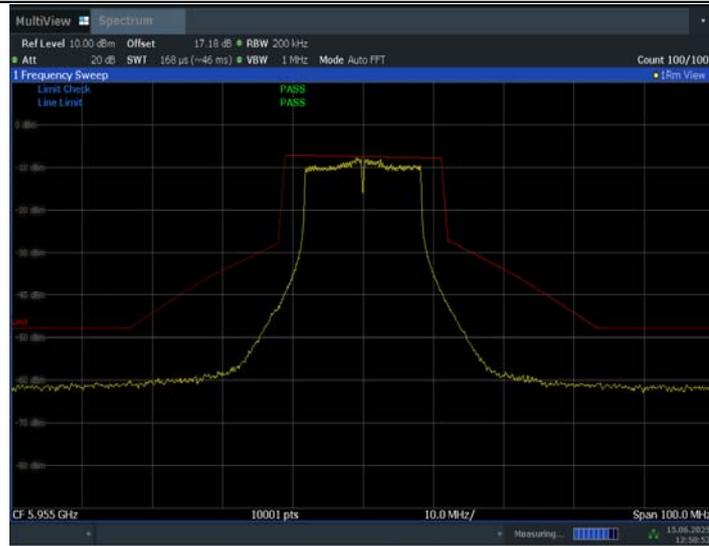
TestMode	Antenna	Channel	Result	Limit	Verdict
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	Ant9	5955	See test graph	See test graph	PASS
	Ant6	6175	See test graph	See test graph	PASS
	Ant9	6175	See test graph	See test graph	PASS
	Ant6	6415	See test graph	See test graph	PASS
	Ant9	6415	See test graph	See test graph	PASS
	Ant6	6435	See test graph	See test graph	PASS
	Ant9	6435	See test graph	See test graph	PASS
	Ant6	6475	See test graph	See test graph	PASS
	Ant9	6475	See test graph	See test graph	PASS
	Ant6	6515	See test graph	See test graph	PASS
	Ant9	6515	See test graph	See test graph	PASS
	Ant6	6535	See test graph	See test graph	PASS
	Ant9	6535	See test graph	See test graph	PASS
	Ant6	6695	See test graph	See test graph	PASS
	Ant9	6695	See test graph	See test graph	PASS
	Ant6	6855	See test graph	See test graph	PASS
	Ant9	6855	See test graph	See test graph	PASS
	Ant6	6875	See test graph	See test graph	PASS
	Ant9	6875	See test graph	See test graph	PASS
Ant6	6895	See test graph	See test graph	PASS	

	Ant9	6895	See test graph	See test graph	PASS
	Ant6	6995	See test graph	See test graph	PASS
	Ant9	6995	See test graph	See test graph	PASS
	Ant6	7115	See test graph	See test graph	PASS
	Ant9	7115	See test graph	See test graph	PASS
11AX20MIMO	Ant6	5955	See test graph	See test graph	PASS
	Ant9	5955	See test graph	See test graph	PASS
	Ant6	6175	See test graph	See test graph	PASS
	Ant9	6175	See test graph	See test graph	PASS
	Ant6	6415	See test graph	See test graph	PASS
	Ant9	6415	See test graph	See test graph	PASS
	Ant6	6435	See test graph	See test graph	PASS
	Ant9	6435	See test graph	See test graph	PASS
	Ant6	6475	See test graph	See test graph	PASS
	Ant9	6475	See test graph	See test graph	PASS
	Ant6	6515	See test graph	See test graph	PASS
	Ant9	6515	See test graph	See test graph	PASS
	Ant6	6535	See test graph	See test graph	PASS
	Ant9	6535	See test graph	See test graph	PASS
	Ant6	6695	See test graph	See test graph	PASS
	Ant9	6695	See test graph	See test graph	PASS
	Ant6	6855	See test graph	See test graph	PASS
	Ant9	6855	See test graph	See test graph	PASS
	Ant6	6875	See test graph	See test graph	PASS
	Ant9	6875	See test graph	See test graph	PASS
	Ant6	6895	See test graph	See test graph	PASS
	Ant9	6895	See test graph	See test graph	PASS
	Ant6	6995	See test graph	See test graph	PASS
	Ant9	6995	See test graph	See test graph	PASS
Ant6	7115	See test graph	See test graph	PASS	
Ant9	7115	See test graph	See test graph	PASS	
11AX40MIMO	Ant6	5965	See test graph	See test graph	PASS
	Ant9	5965	See test graph	See test graph	PASS
	Ant6	6165	See test graph	See test graph	PASS
	Ant9	6165	See test graph	See test graph	PASS
	Ant6	6405	See test graph	See test graph	PASS
	Ant9	6405	See test graph	See test graph	PASS
	Ant6	6445	See test graph	See test graph	PASS
	Ant9	6445	See test graph	See test graph	PASS
	Ant6	6485	See test graph	See test graph	PASS
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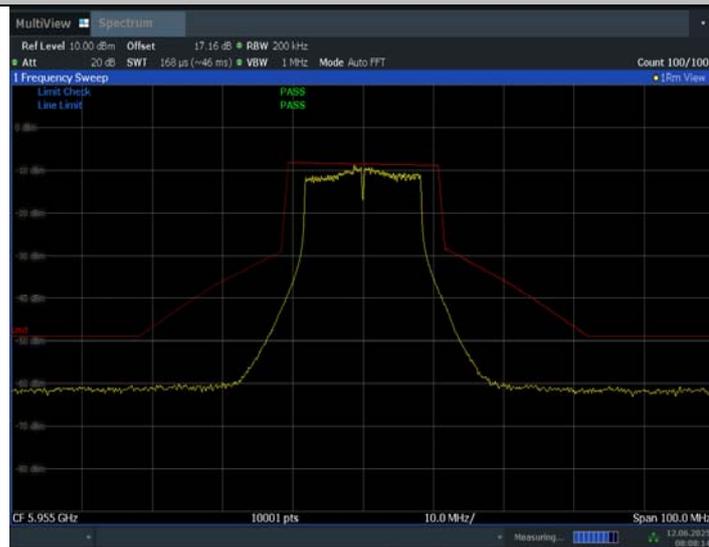
	Ant6	6565	See test graph	See test graph	PASS
	Ant9	6565	See test graph	See test graph	PASS
	Ant6	6685	See test graph	See test graph	PASS
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	Ant6	6845	See test graph	See test graph	PASS
	Ant9	6845	See test graph	See test graph	PASS
	Ant6	6885	See test graph	See test graph	PASS
	Ant9	6885	See test graph	See test graph	PASS
	Ant6	6925	See test graph	See test graph	PASS
	Ant9	6925	See test graph	See test graph	PASS
	Ant6	6965	See test graph	See test graph	PASS
	Ant9	6965	See test graph	See test graph	PASS
	Ant6	7085	See test graph	See test graph	PASS
	Ant9	7085	See test graph	See test graph	PASS
11AX80MIMO	Ant6	5985	See test graph	See test graph	PASS
	Ant9	5985	See test graph	See test graph	PASS
	Ant6	6145	See test graph	See test graph	PASS
	Ant9	6145	See test graph	See test graph	PASS
	Ant6	6385	See test graph	See test graph	PASS
	Ant9	6385	See test graph	See test graph	PASS
	Ant6	6465	See test graph	See test graph	PASS
	Ant9	6465	See test graph	See test graph	PASS
	Ant6	6545	See test graph	See test graph	PASS
	Ant9	6545	See test graph	See test graph	PASS
	Ant6	6625	See test graph	See test graph	PASS
	Ant9	6625	See test graph	See test graph	PASS
	Ant6	6705	See test graph	See test graph	PASS
	Ant9	6705	See test graph	See test graph	PASS
	Ant6	6785	See test graph	See test graph	PASS
	Ant9	6785	See test graph	See test graph	PASS
	Ant6	6865	See test graph	See test graph	PASS
	Ant9	6865	See test graph	See test graph	PASS
	Ant6	6945	See test graph	See test graph	PASS
	Ant9	6945	See test graph	See test graph	PASS
Ant6	7025	See test graph	See test graph	PASS	
Ant9	7025	See test graph	See test graph	PASS	

Test graphs as below:

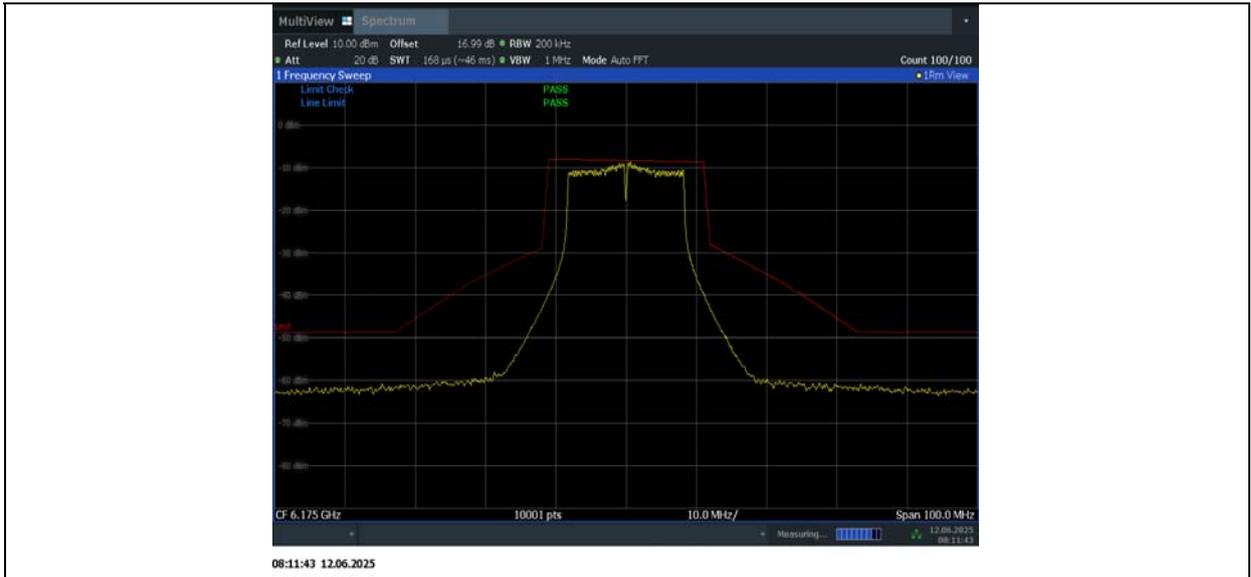
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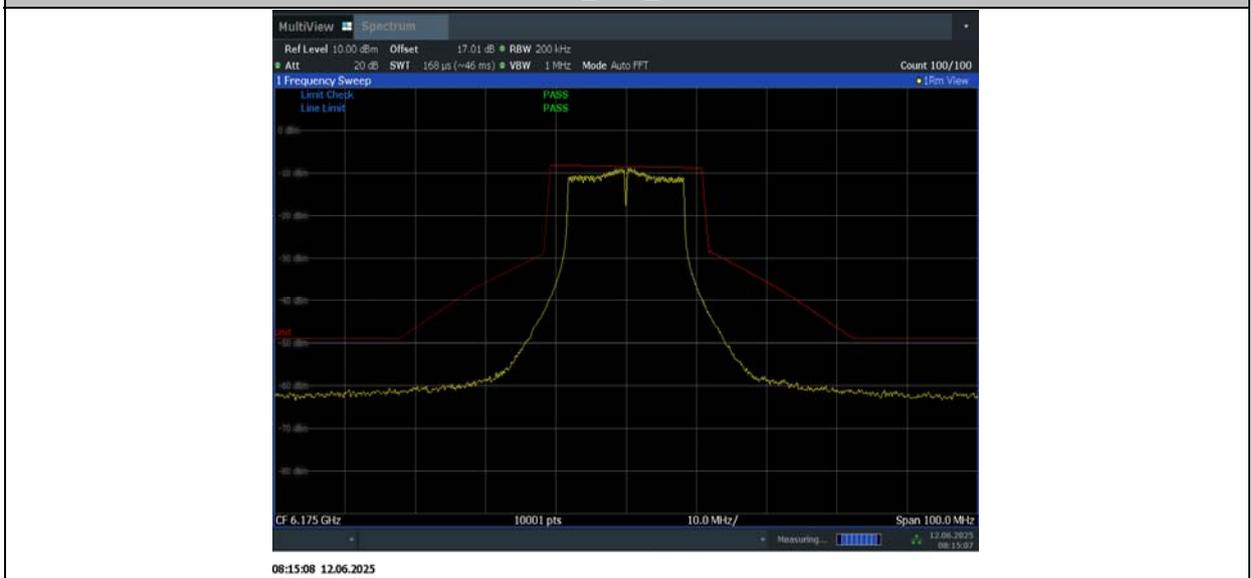
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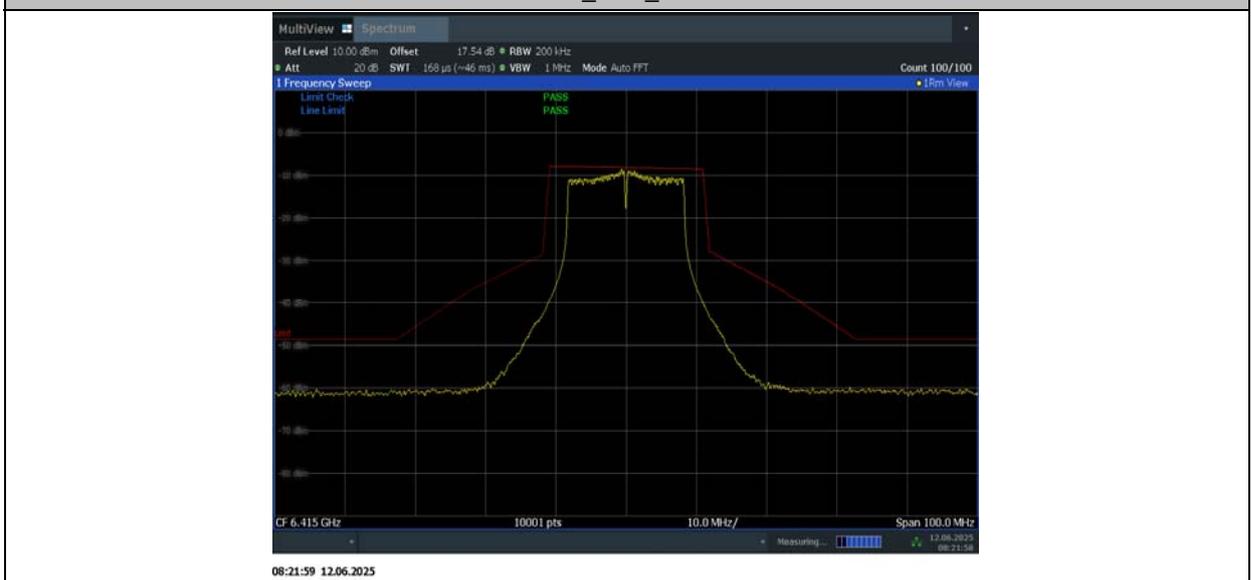
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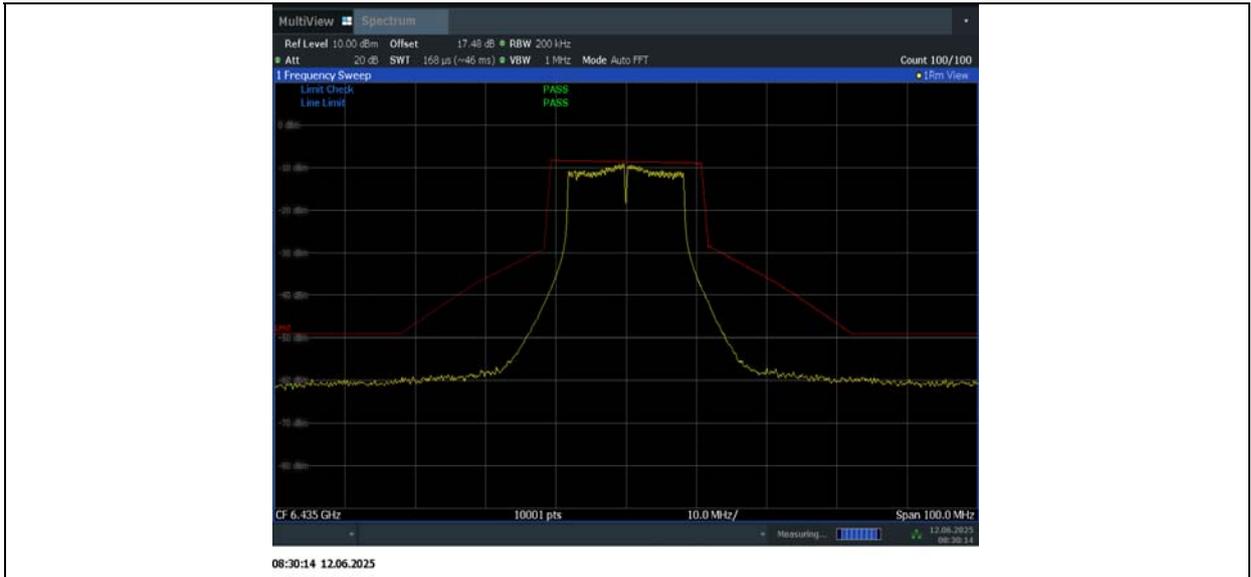
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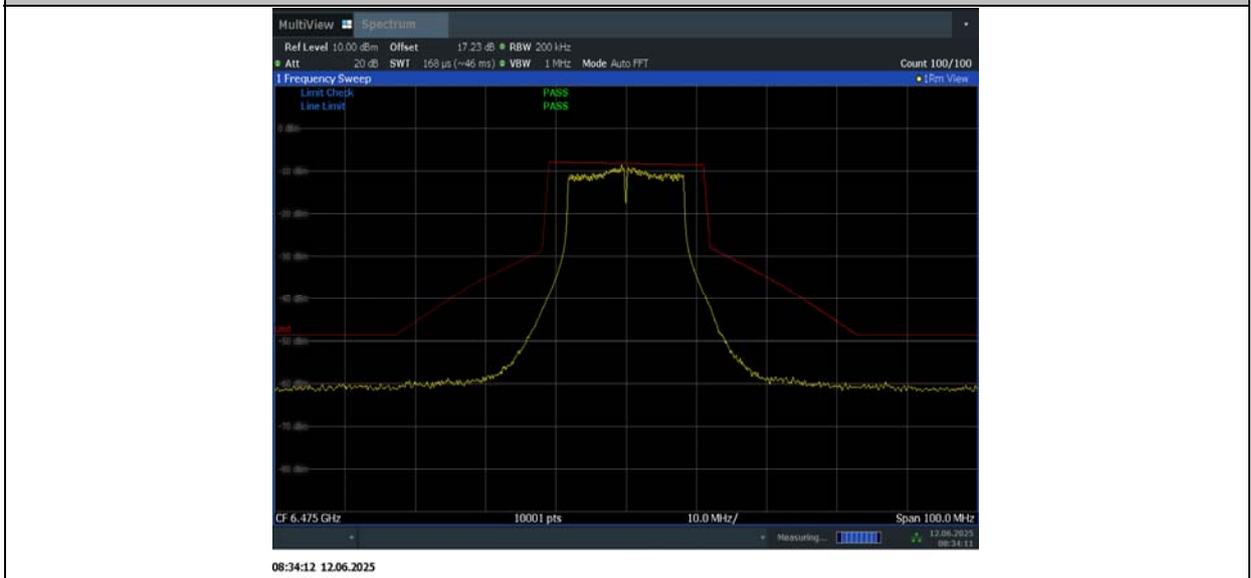
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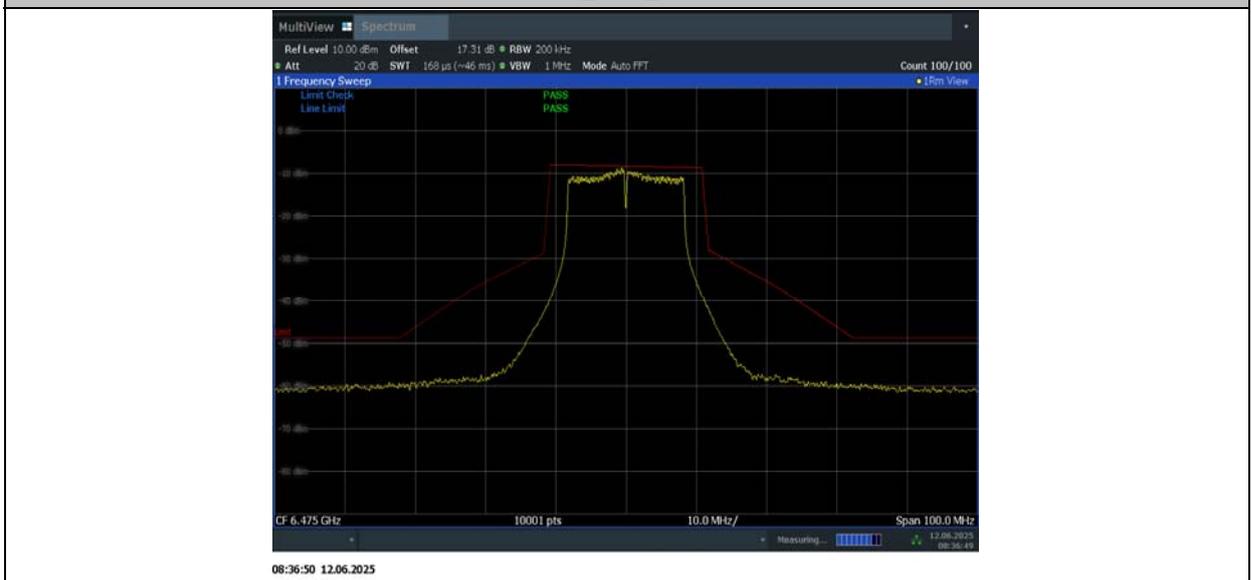




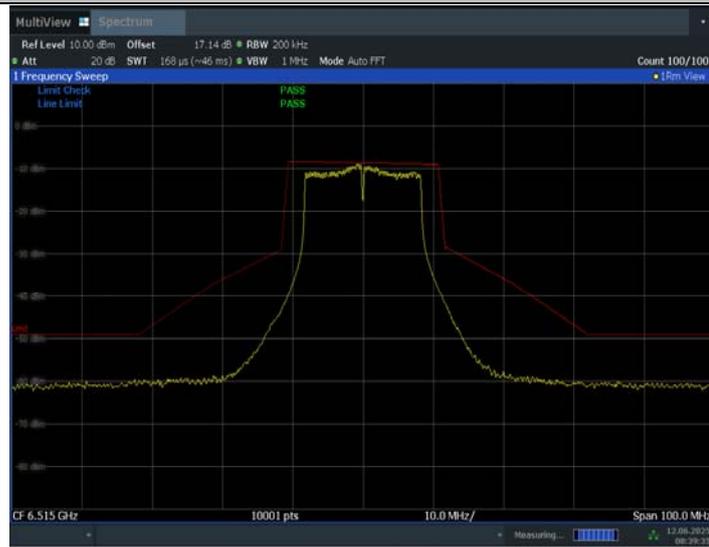
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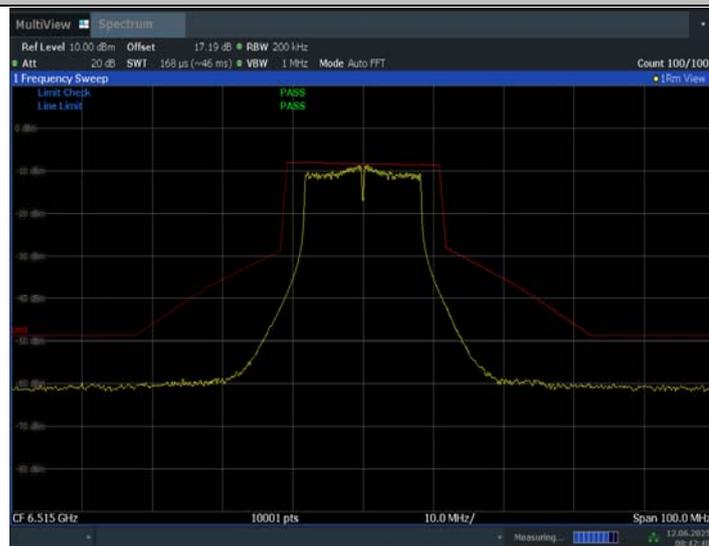
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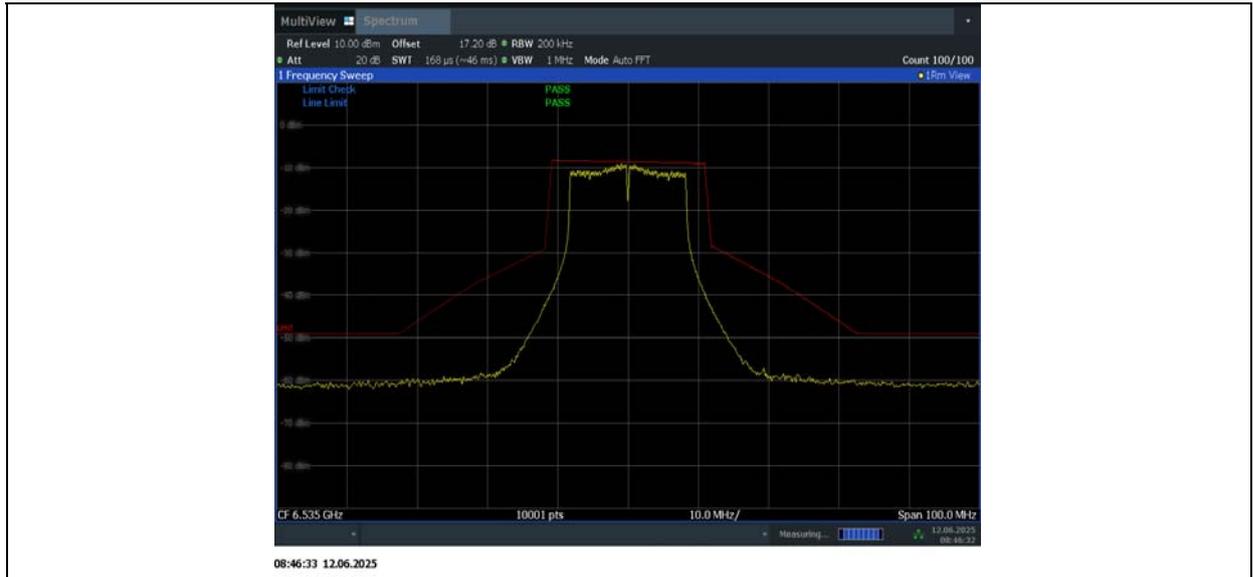
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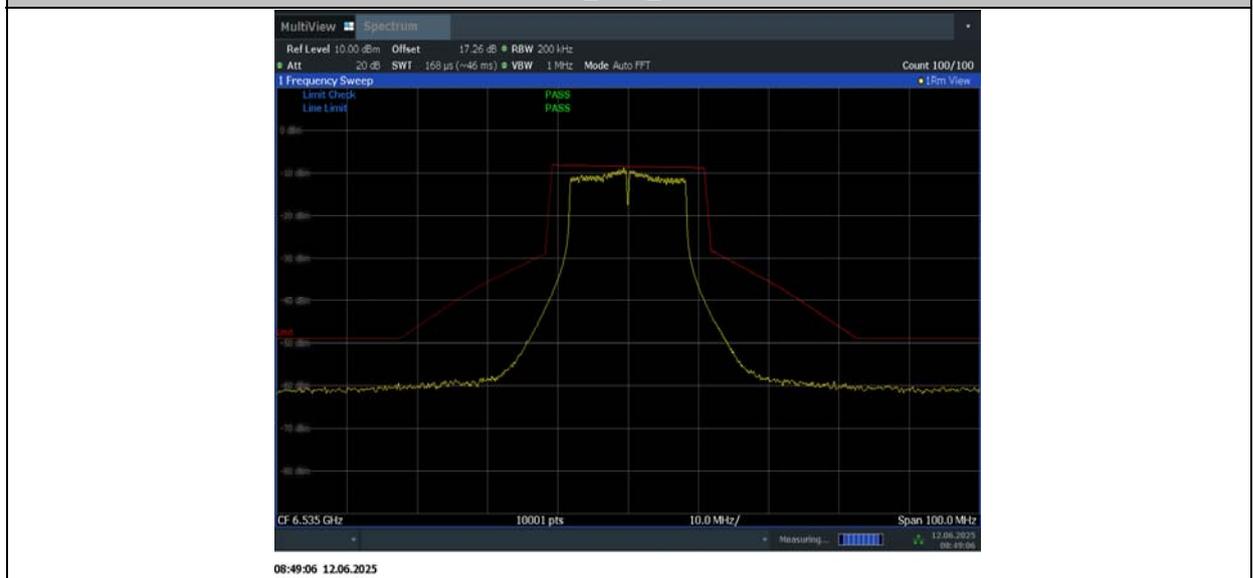
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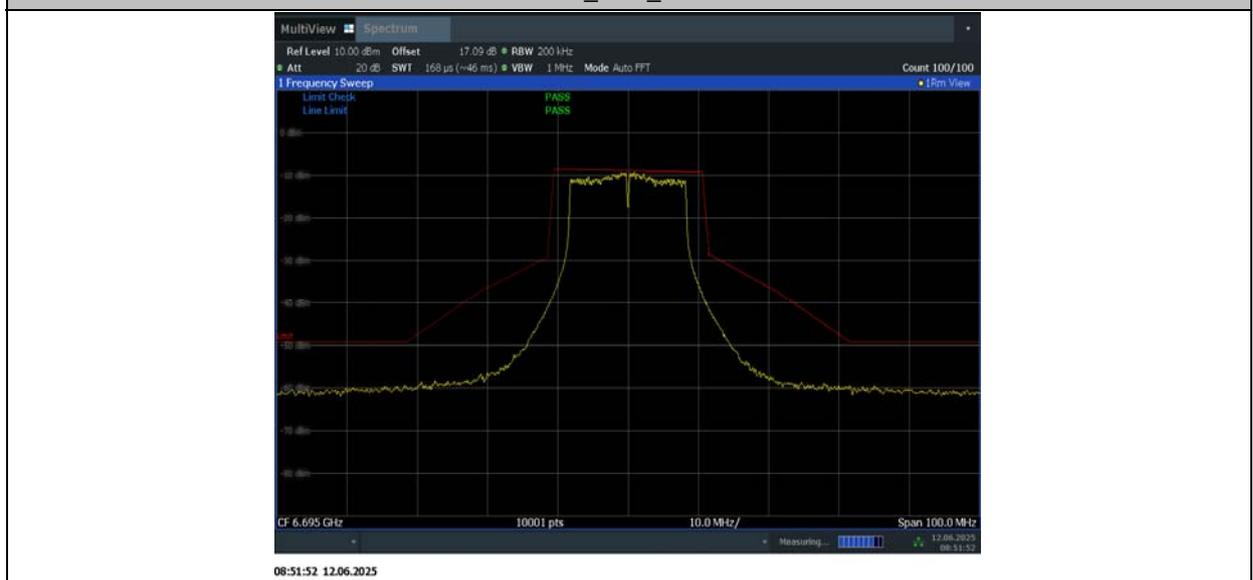
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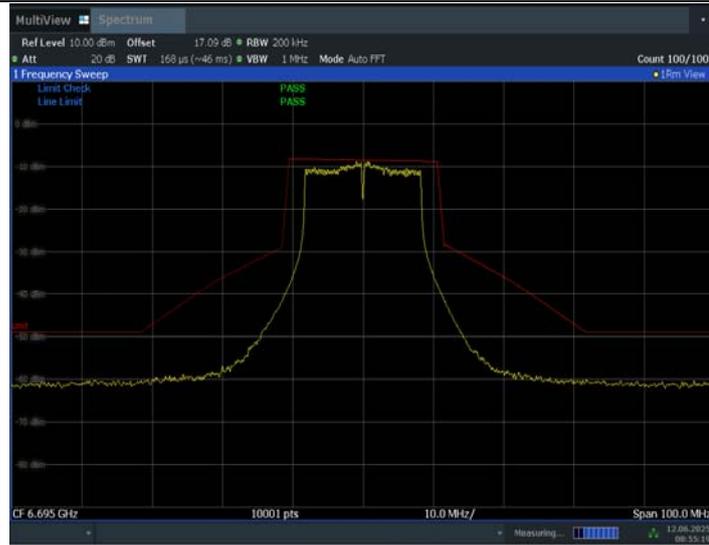
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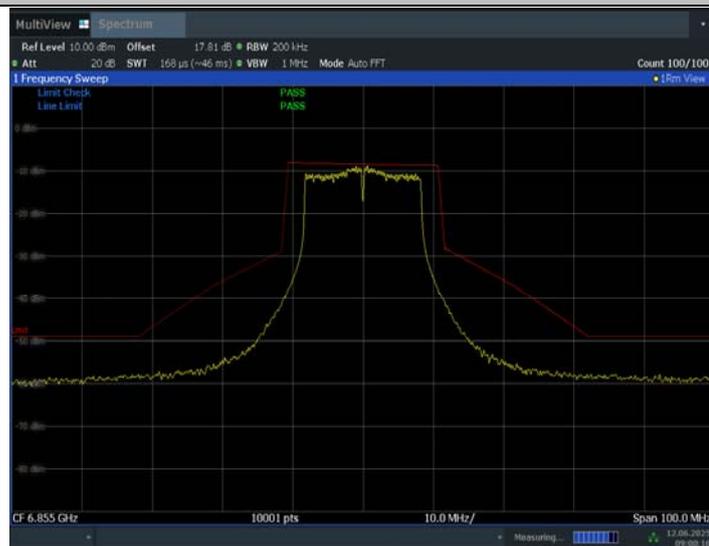


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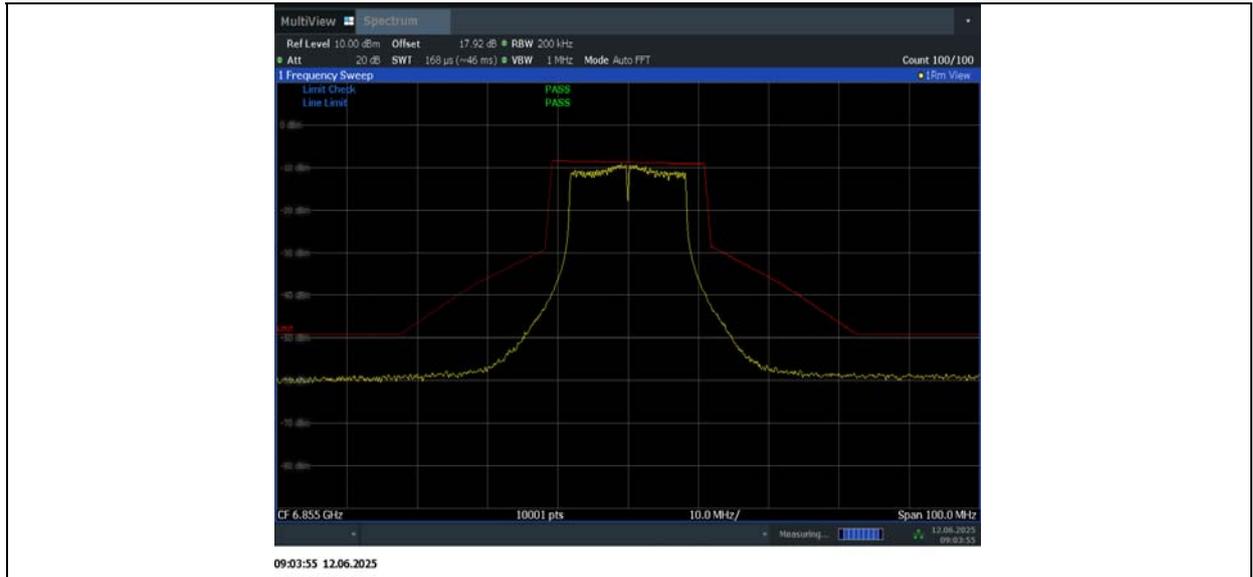
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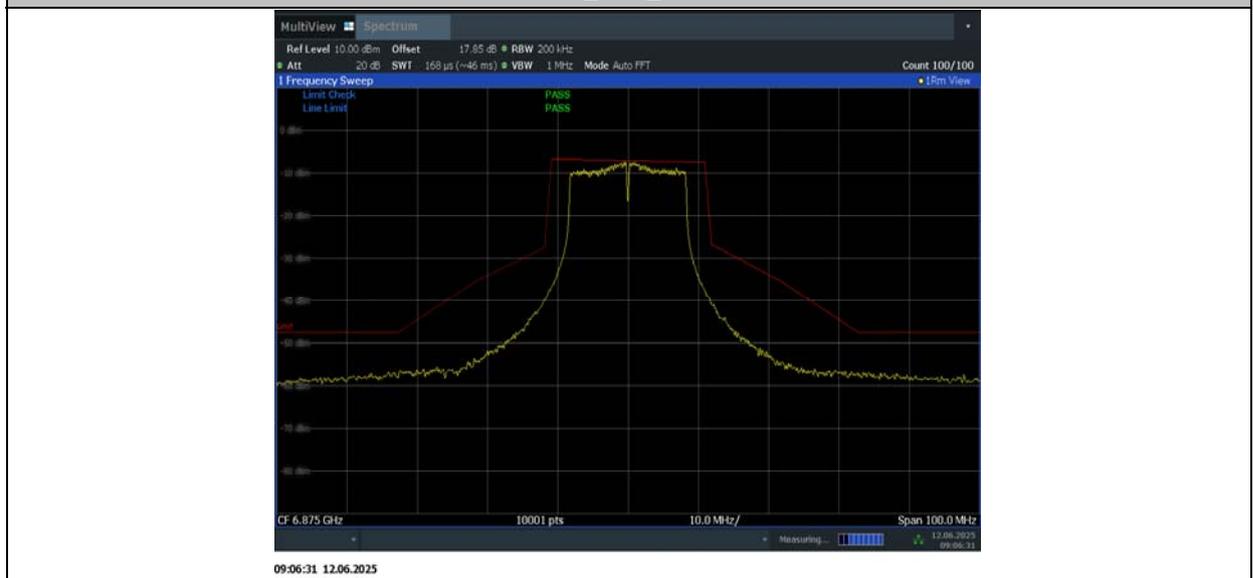


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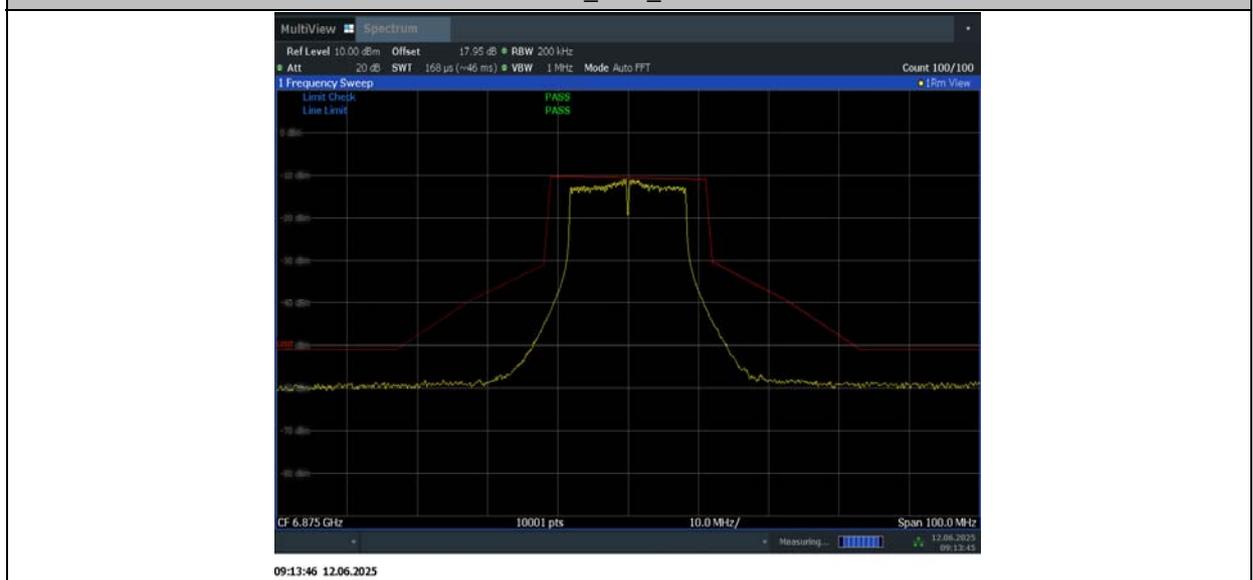
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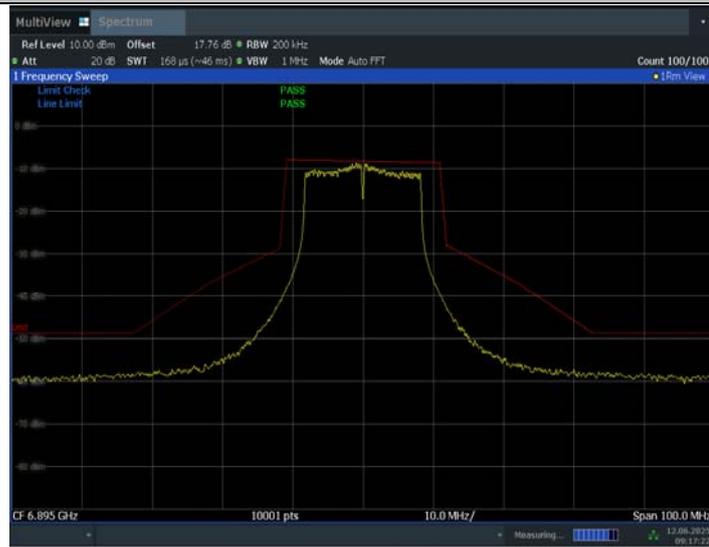
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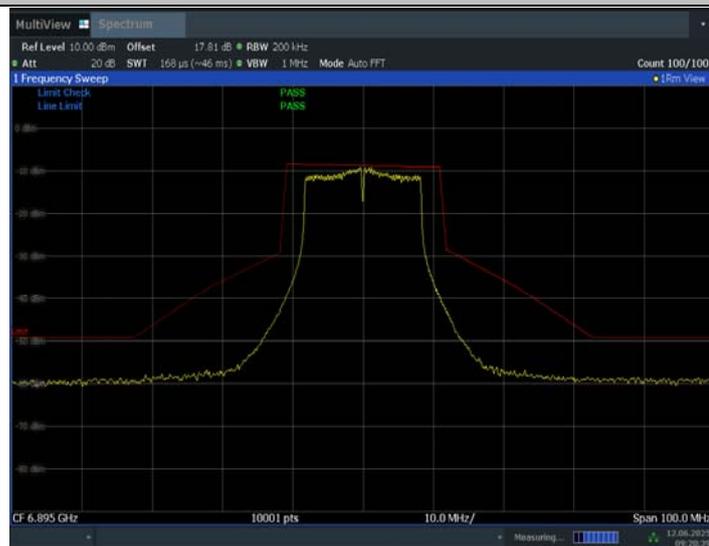
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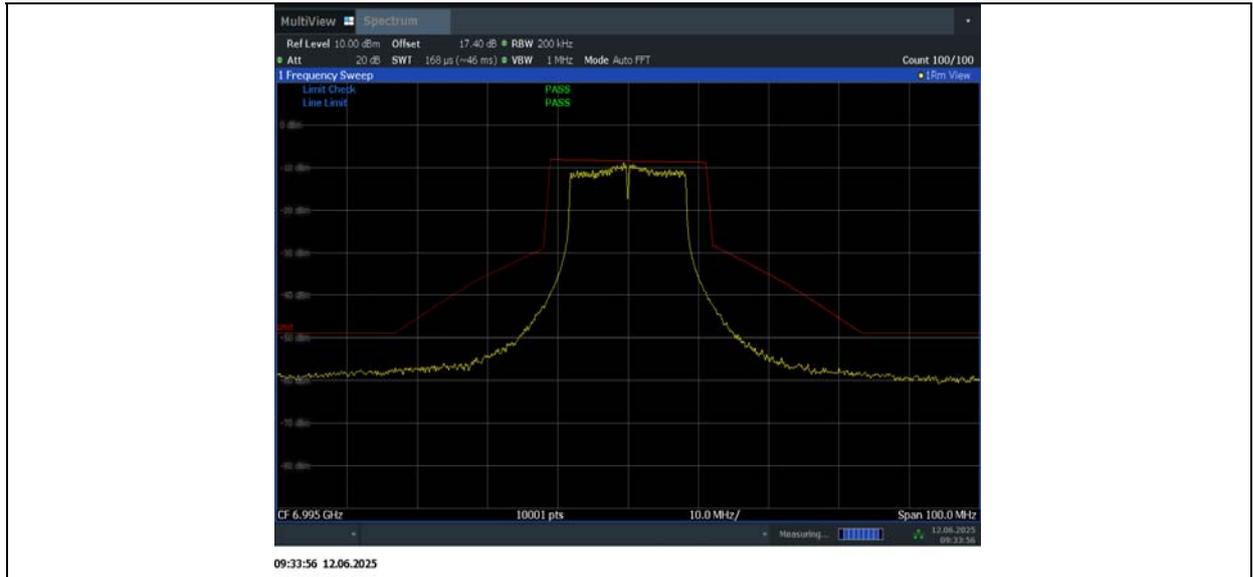
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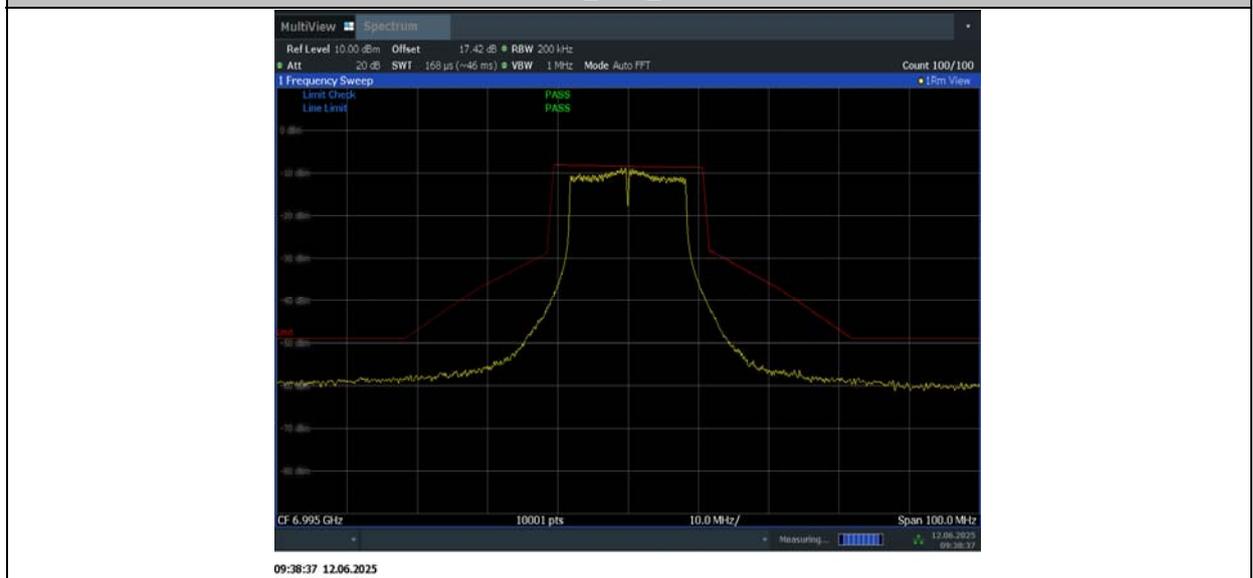
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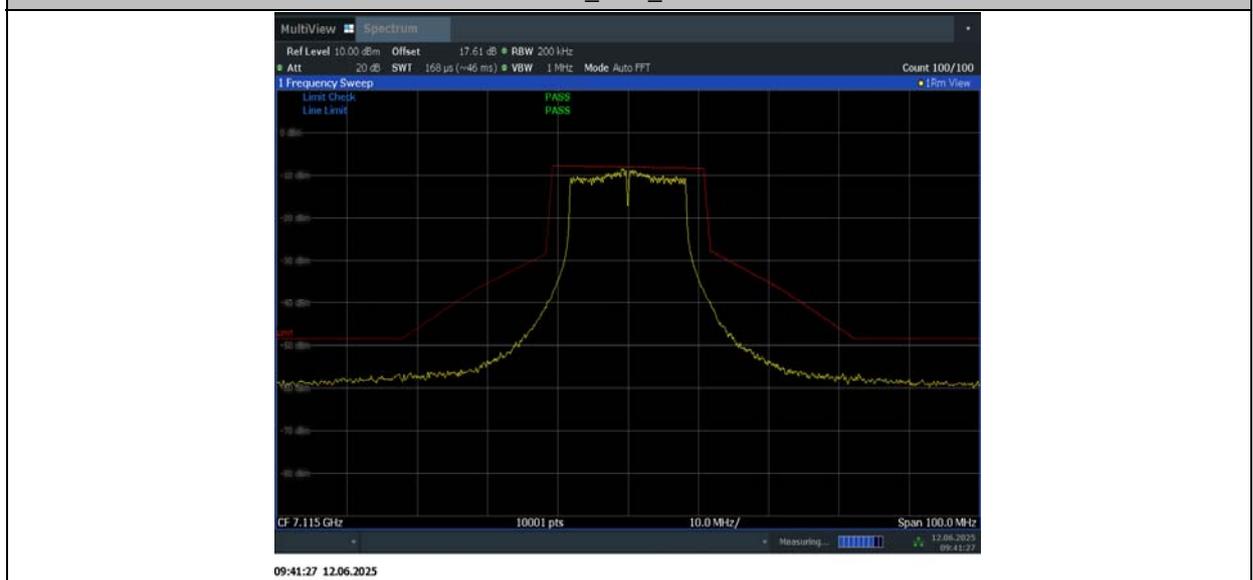
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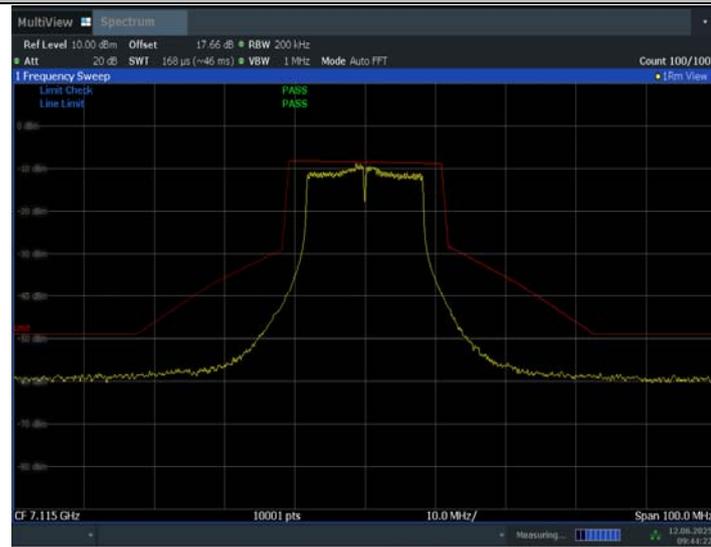
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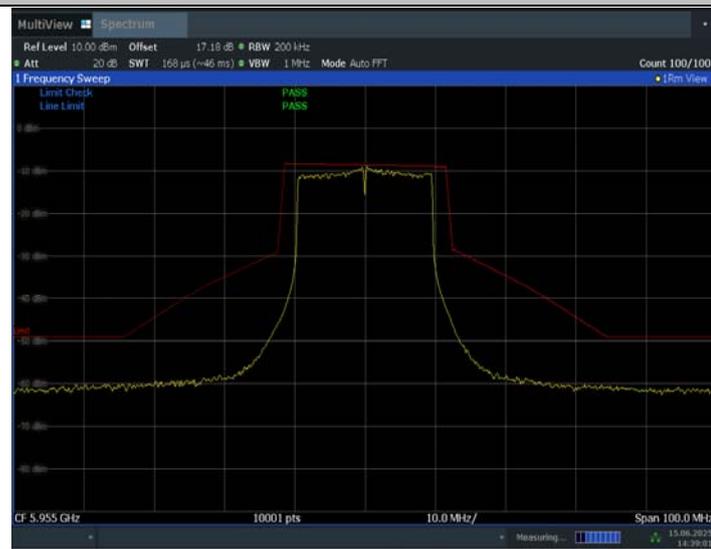
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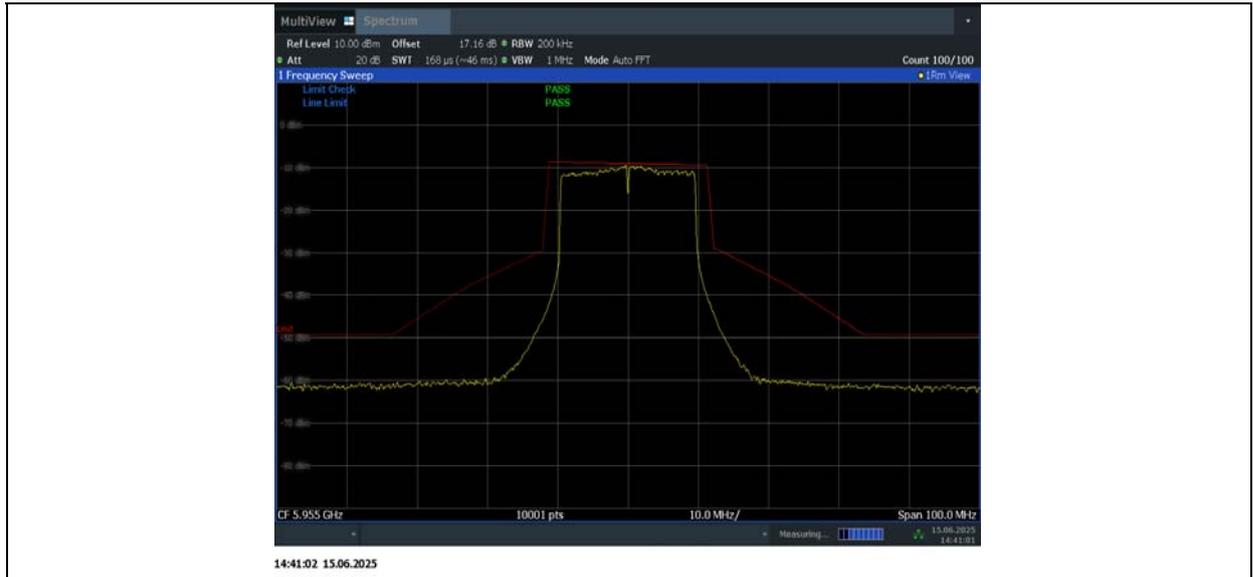
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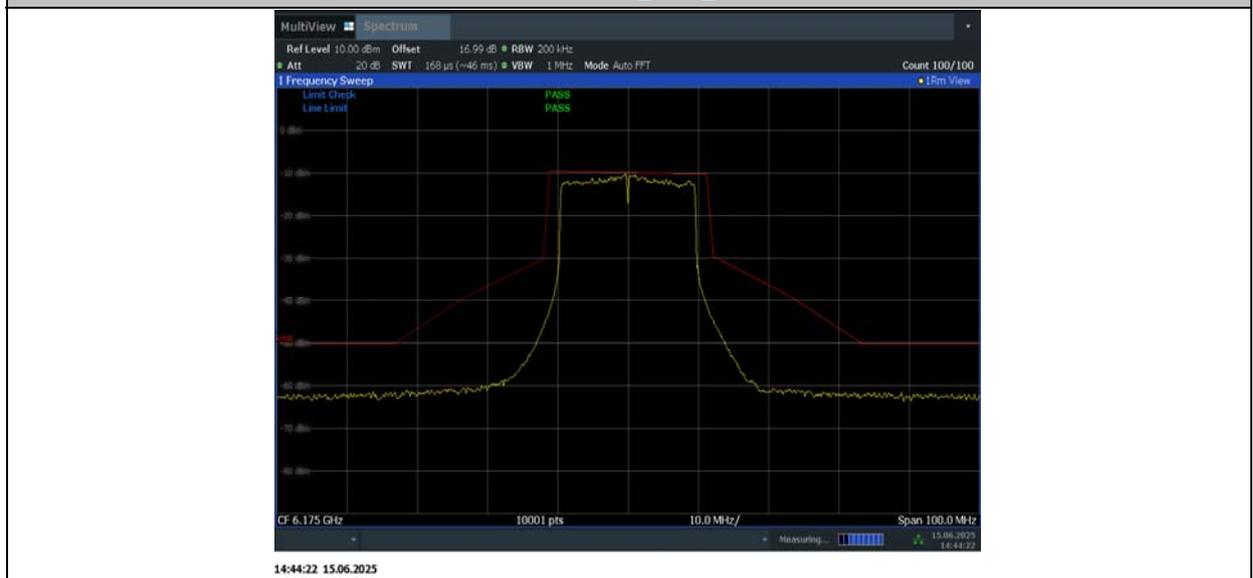
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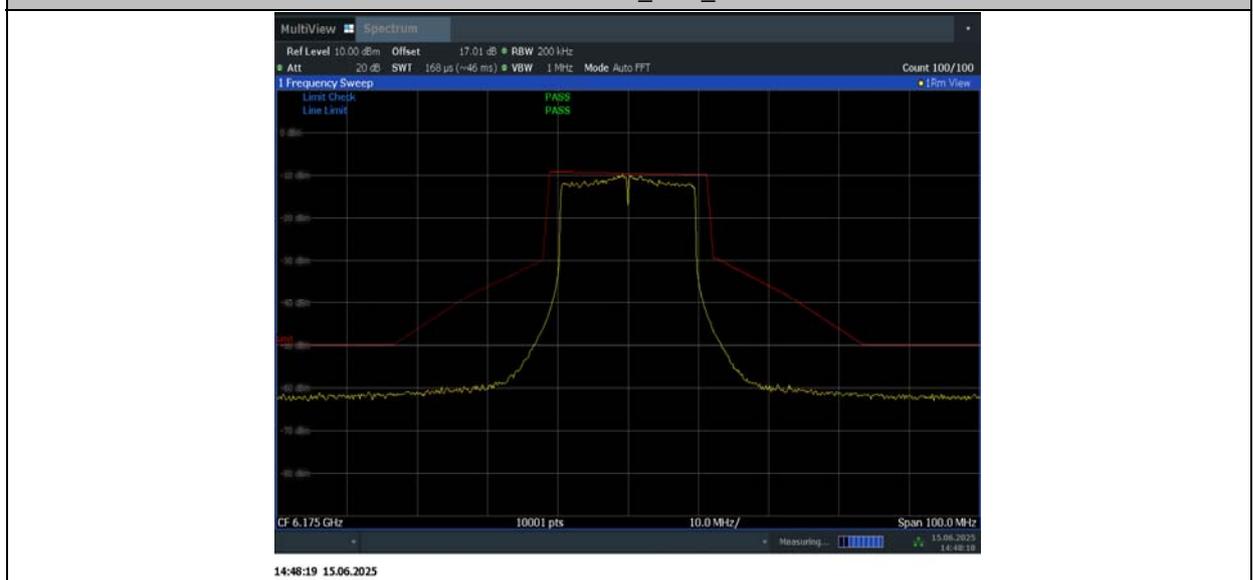
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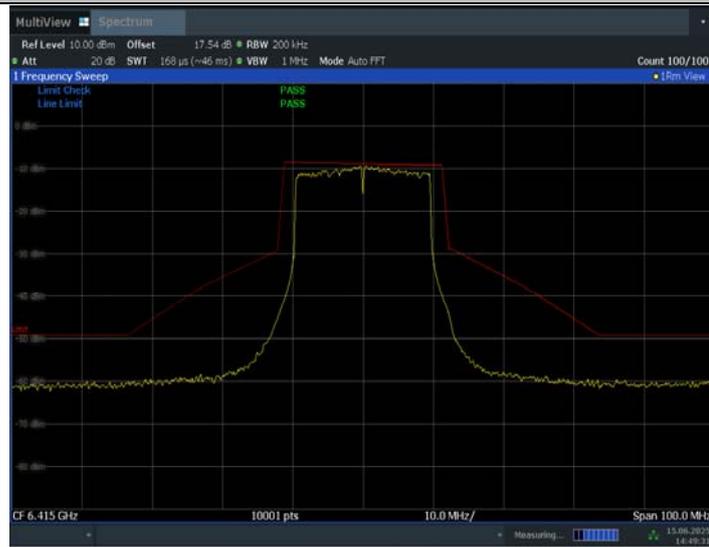
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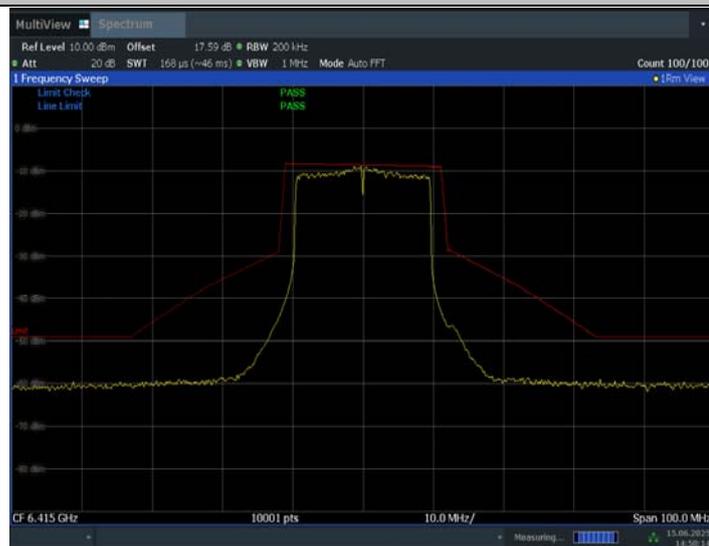
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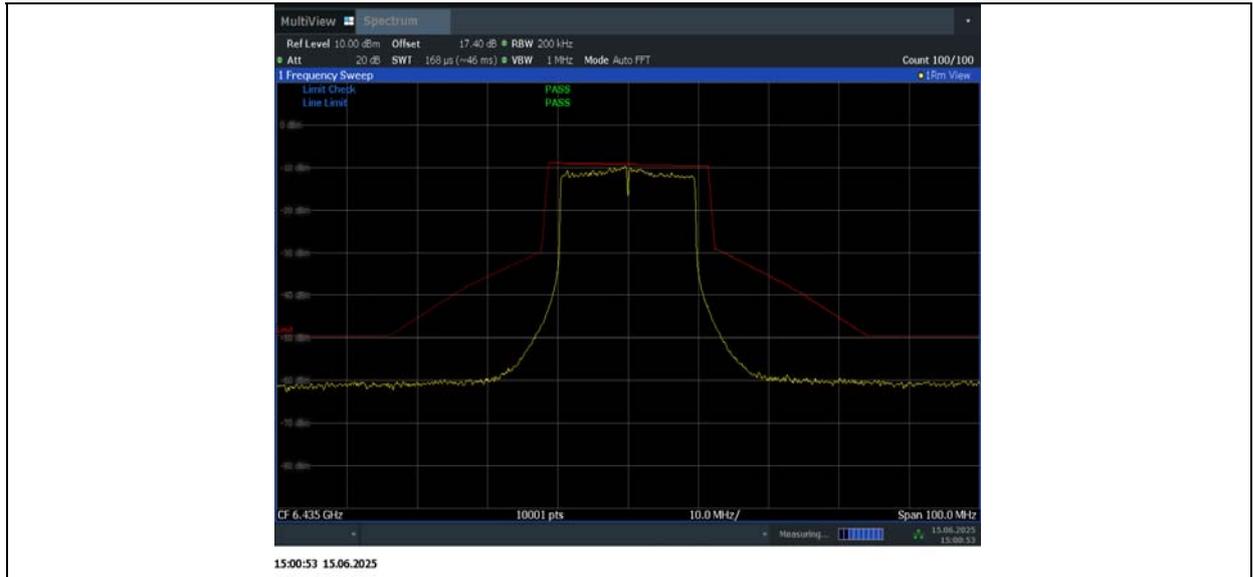
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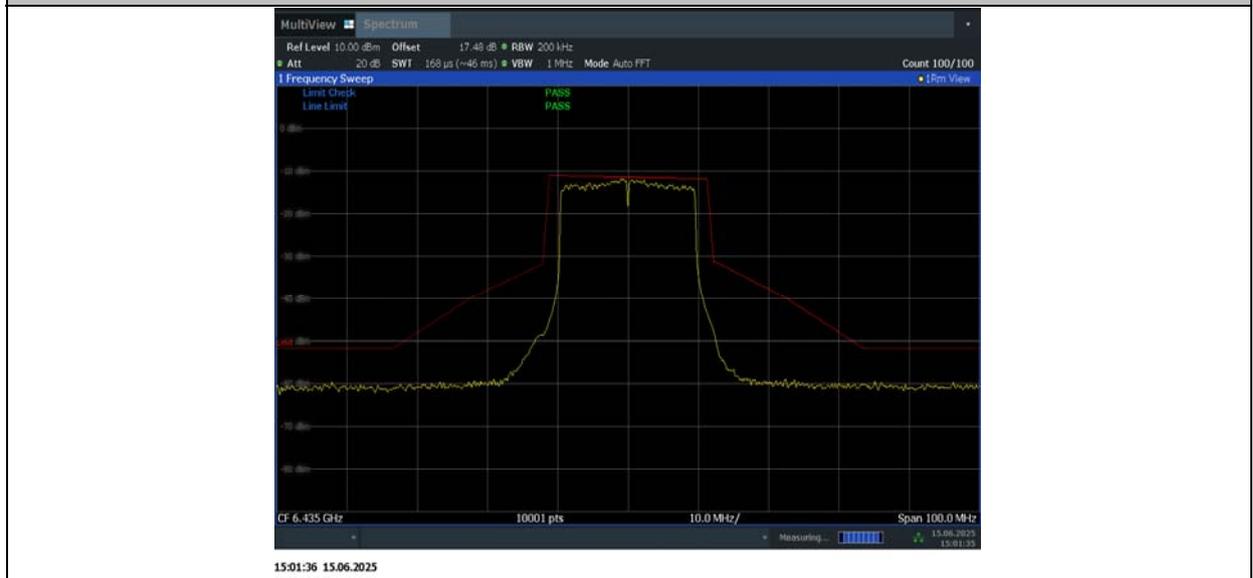
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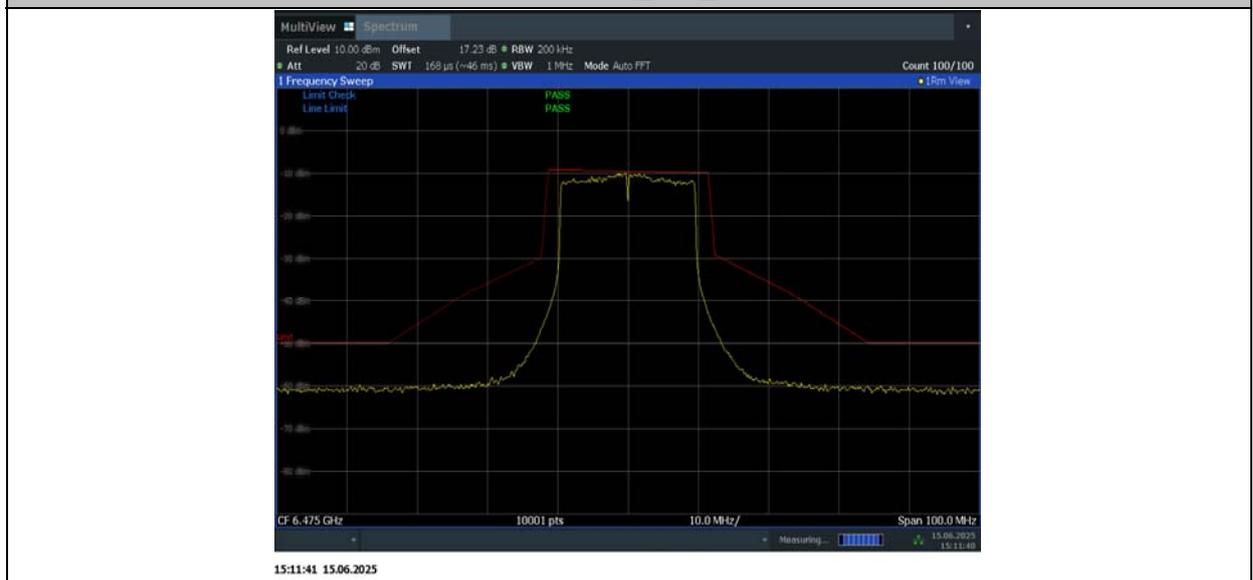
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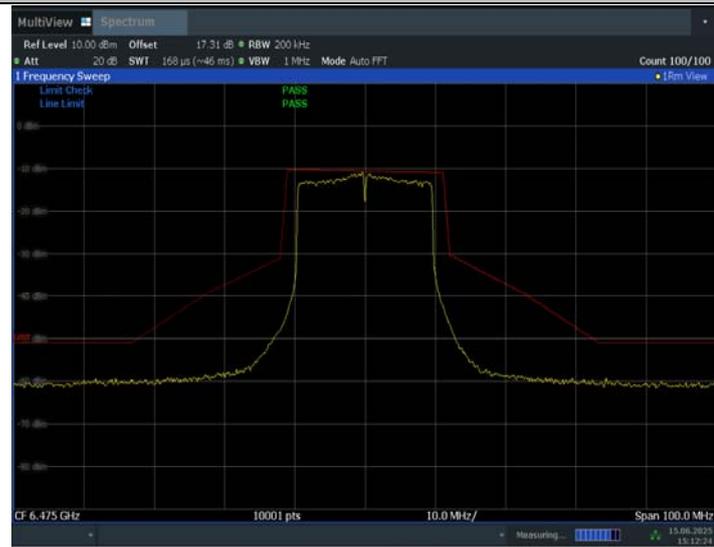
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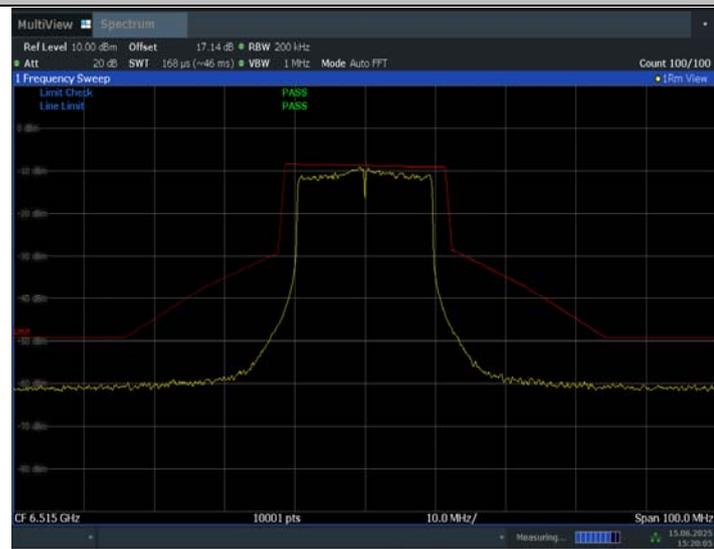


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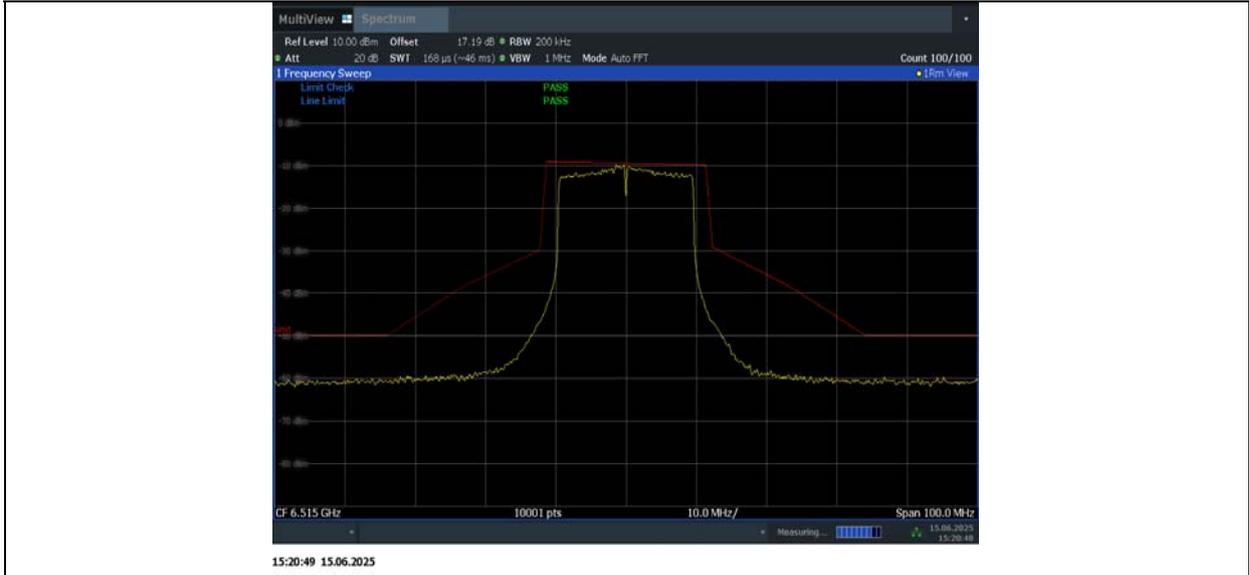
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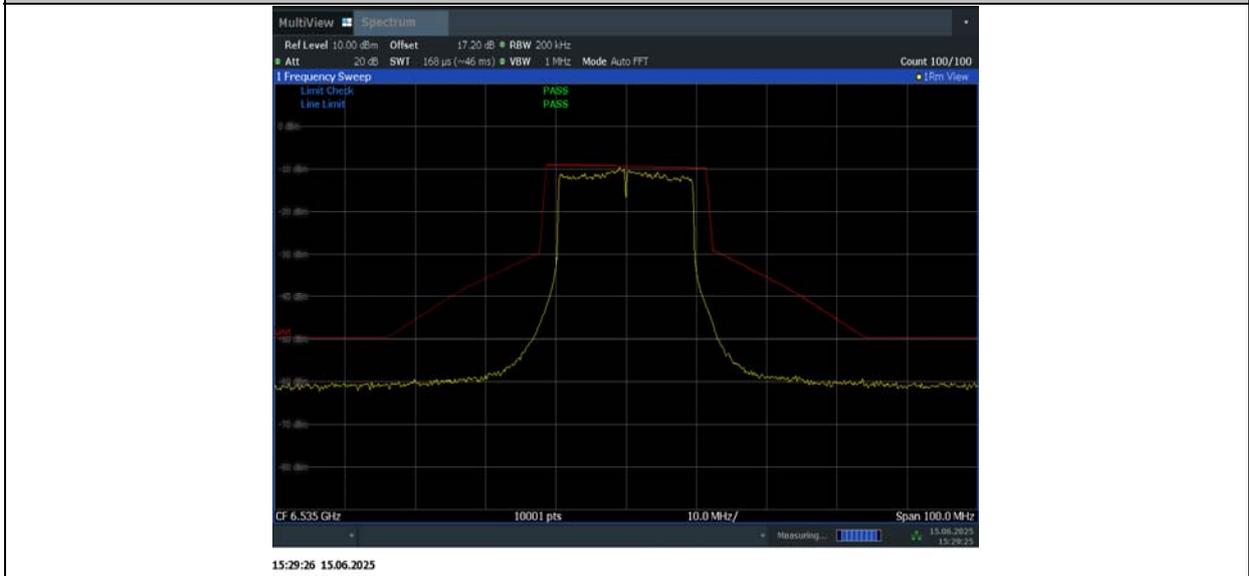


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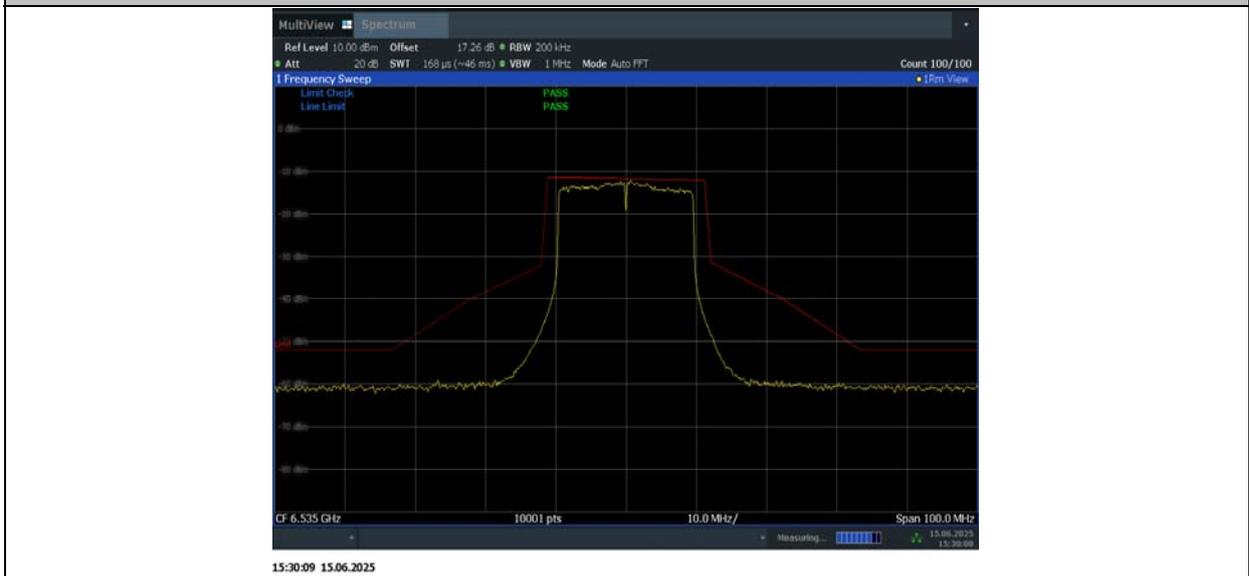
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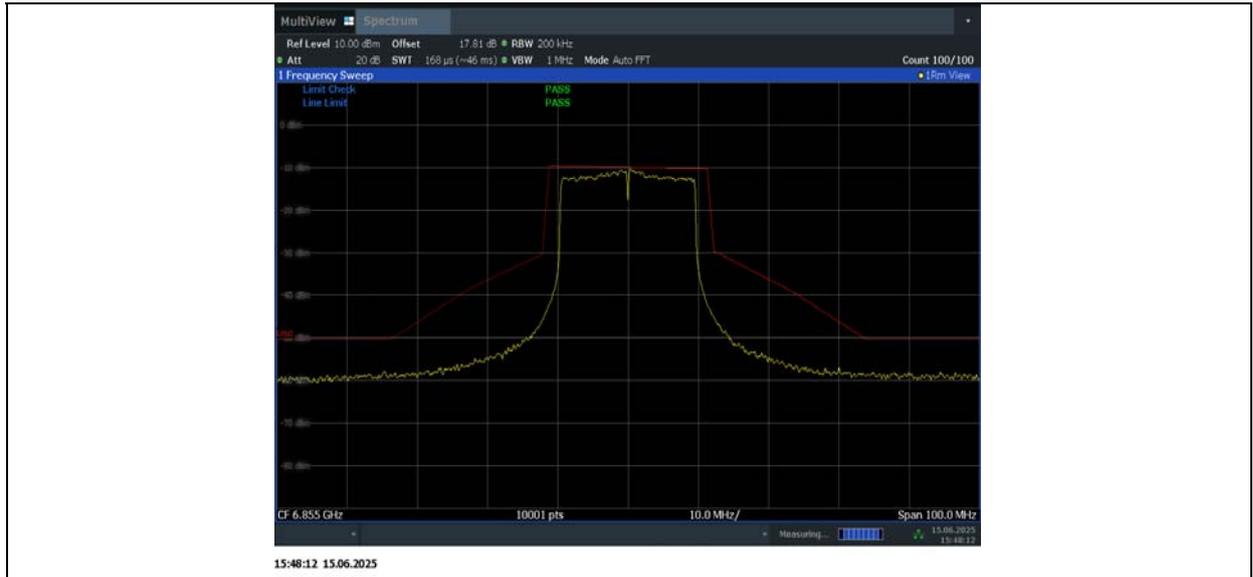
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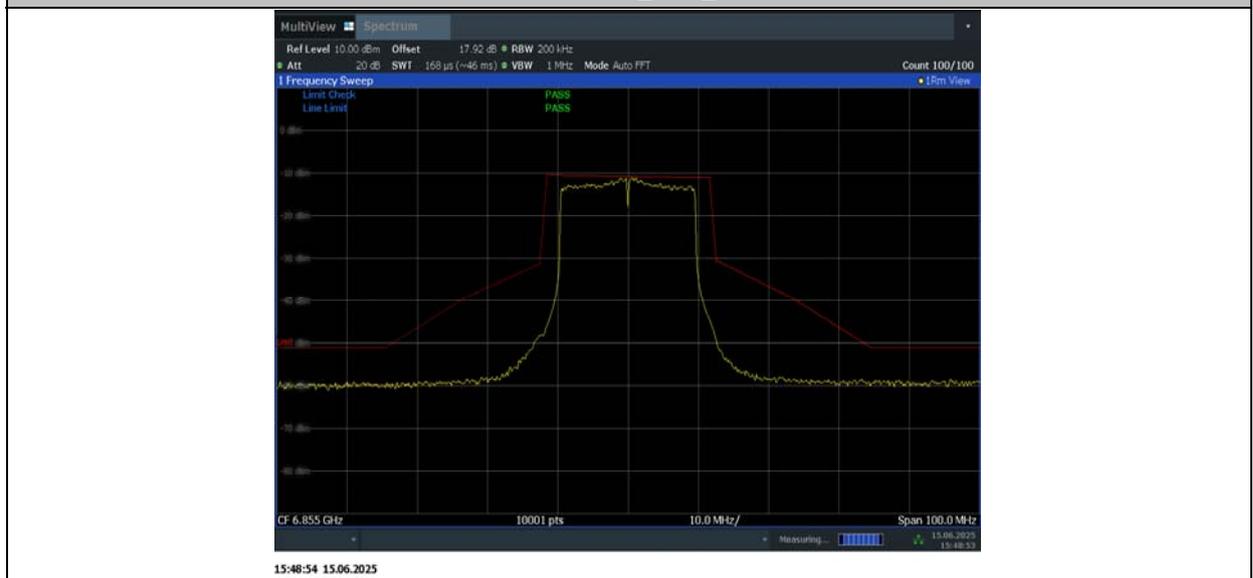
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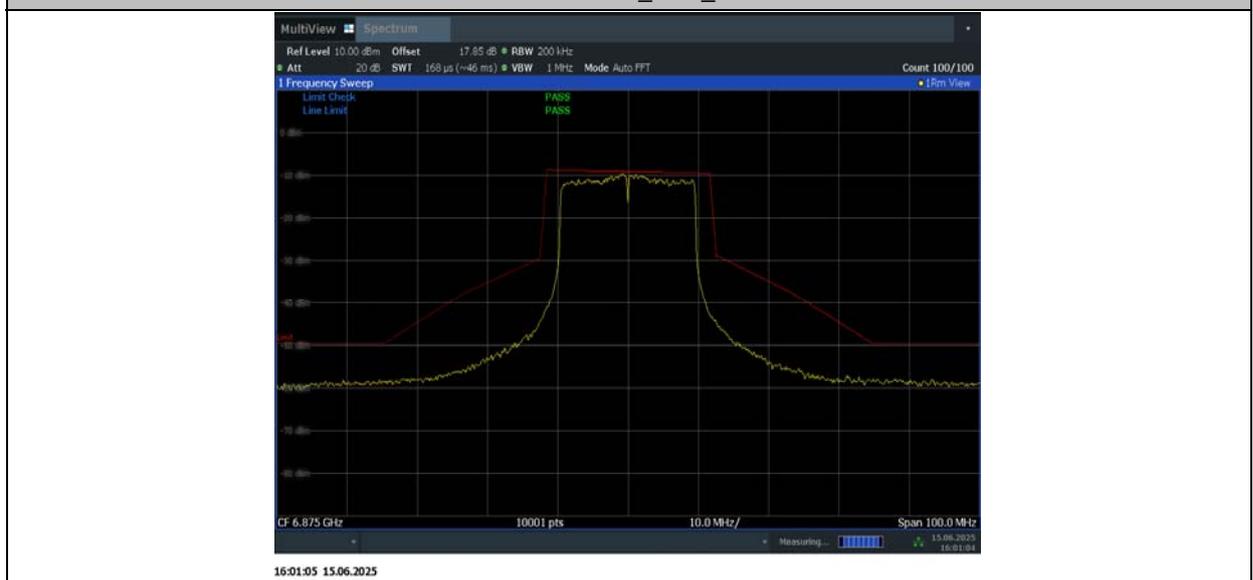




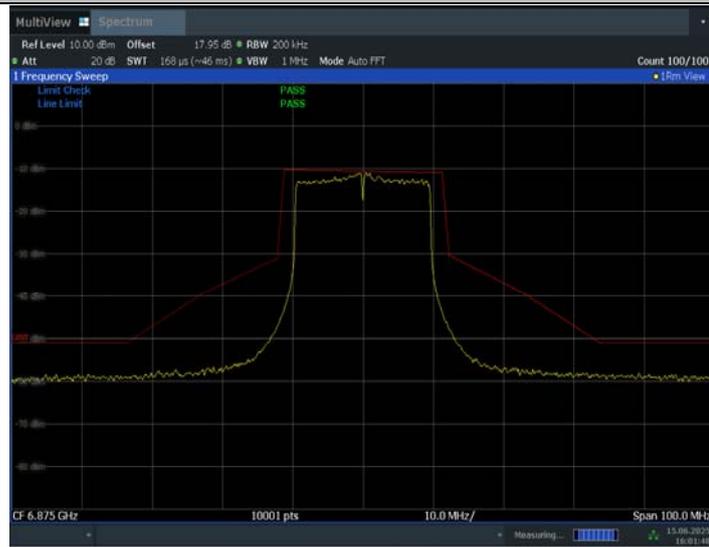
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11AX20MIMO\_Ant6\_6875

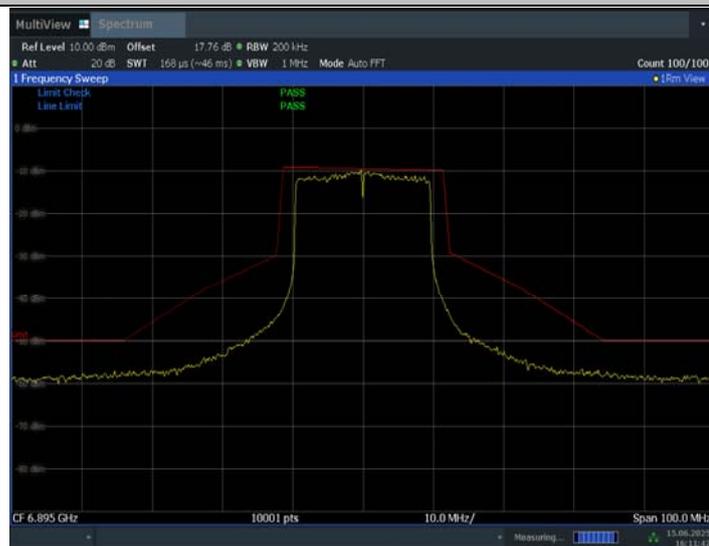


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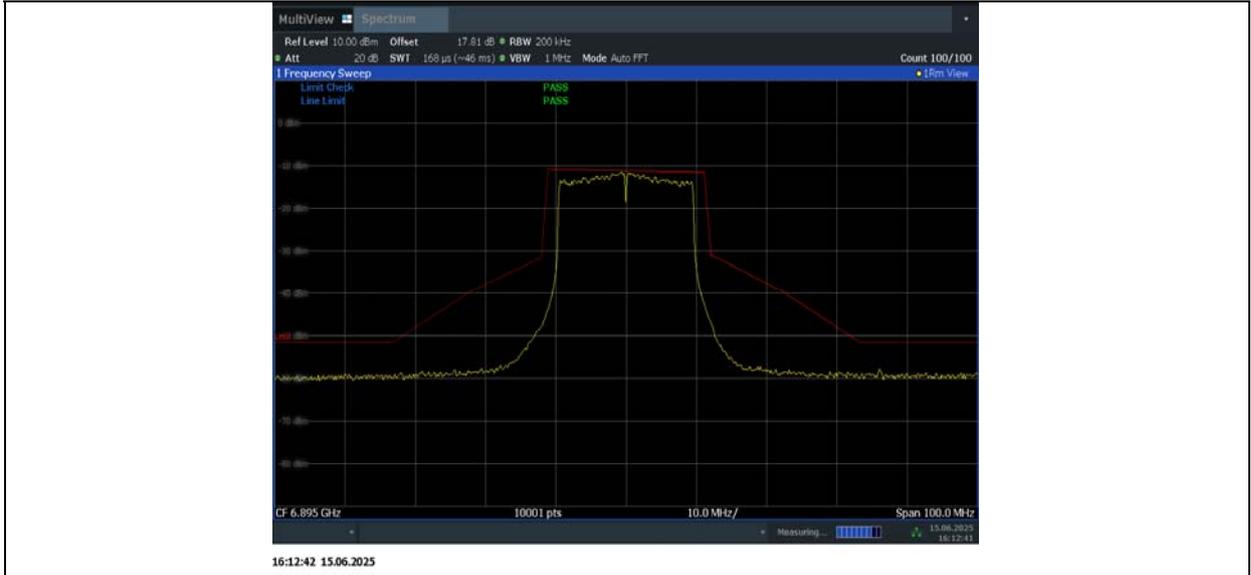
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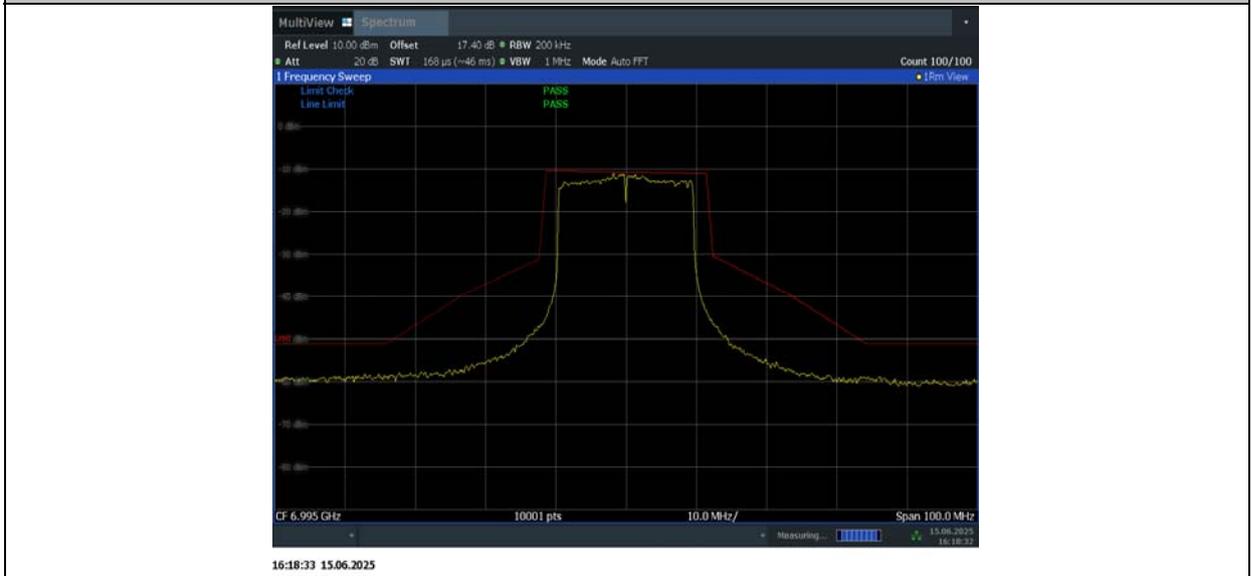


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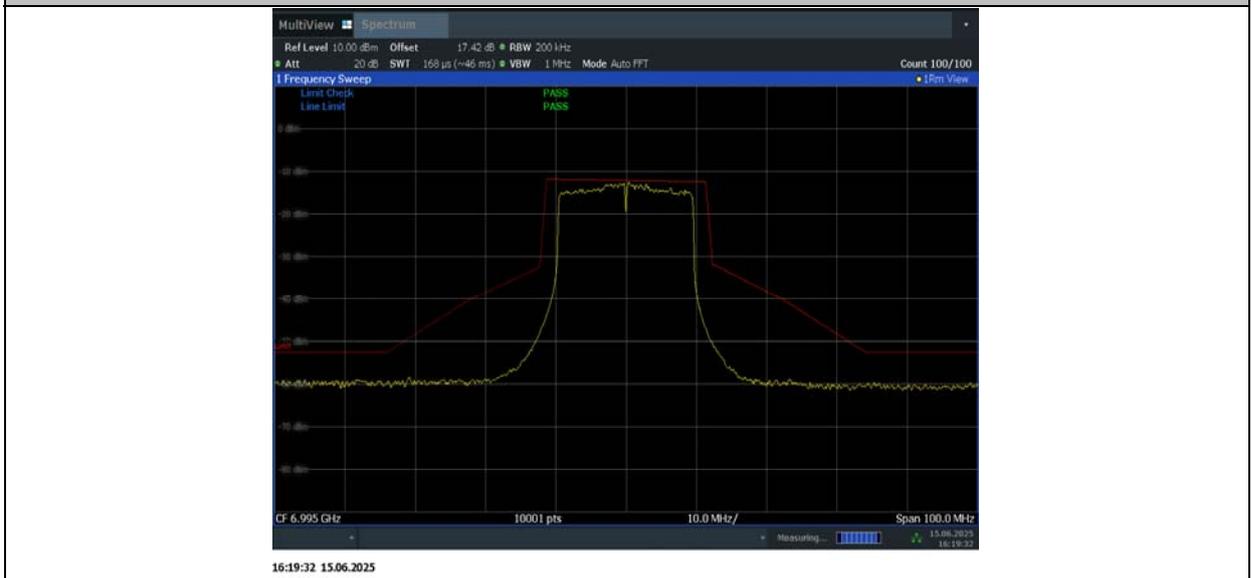
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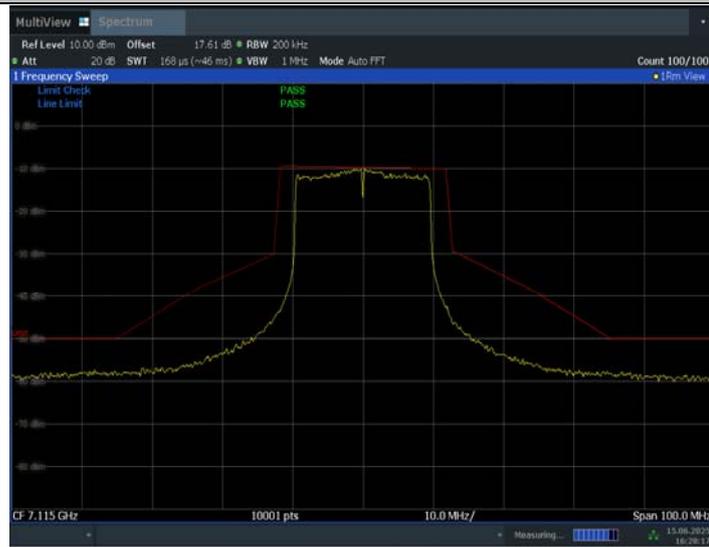
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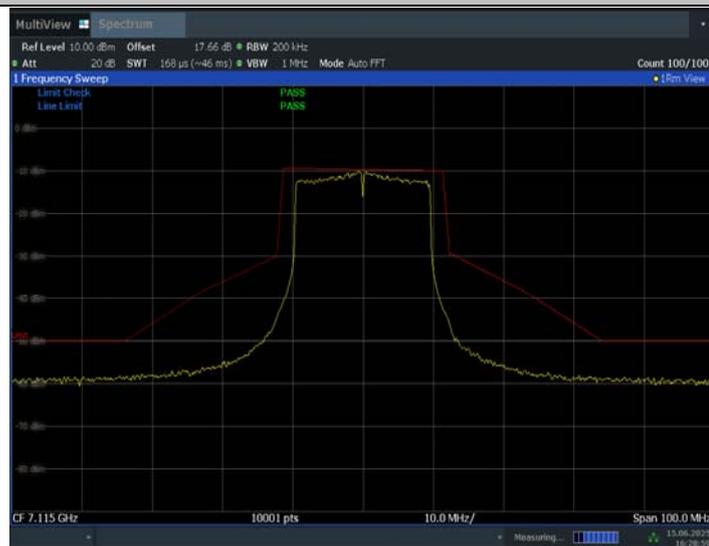


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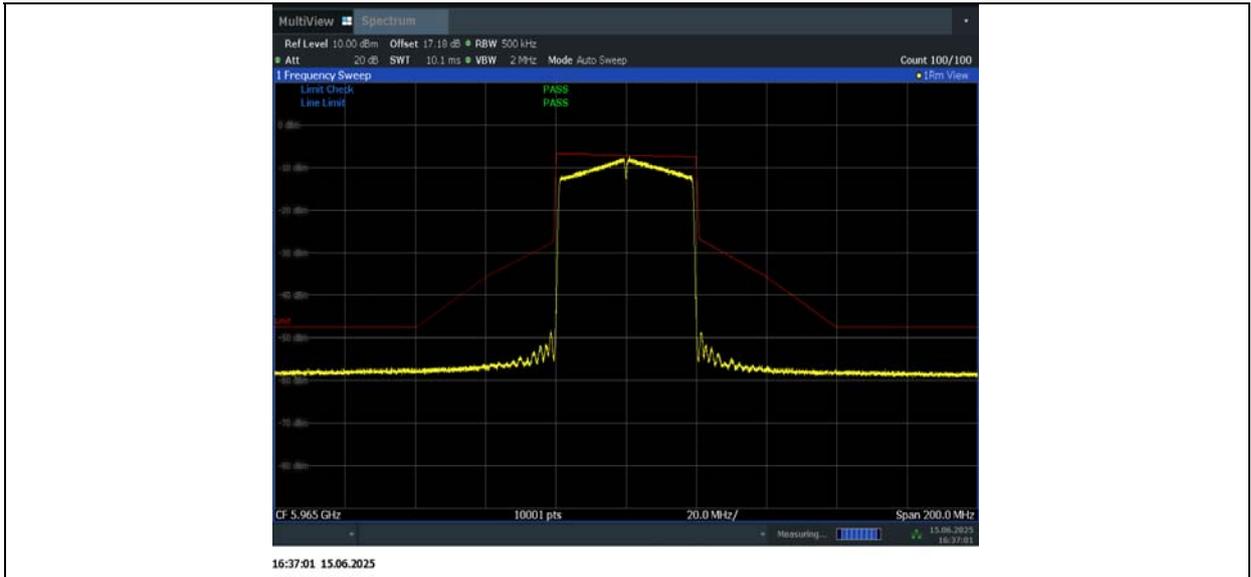
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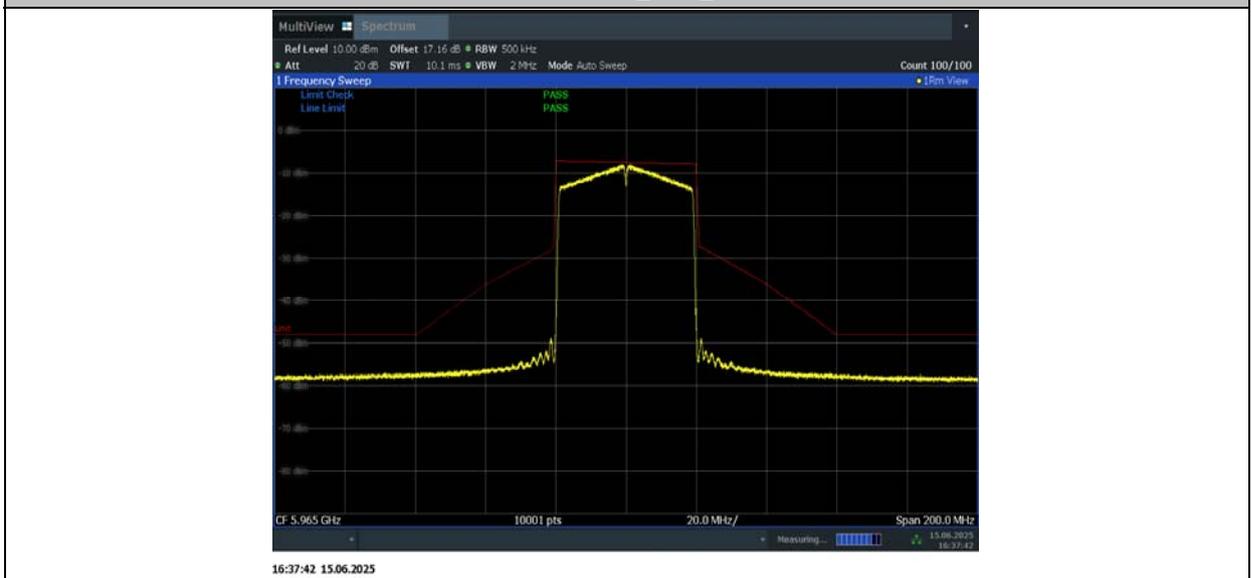


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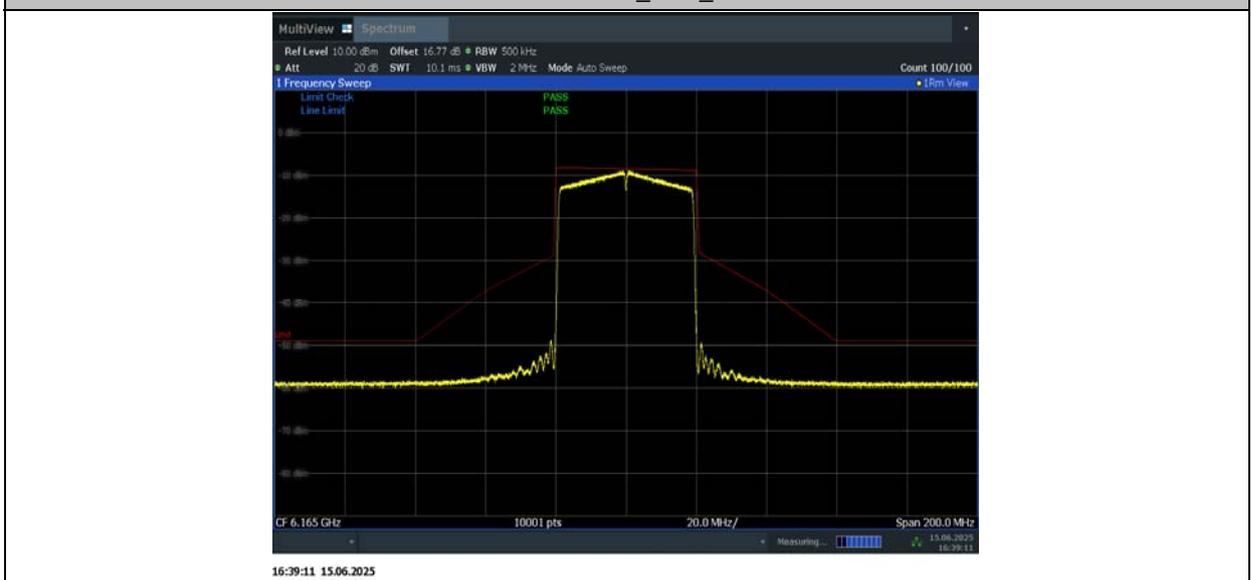
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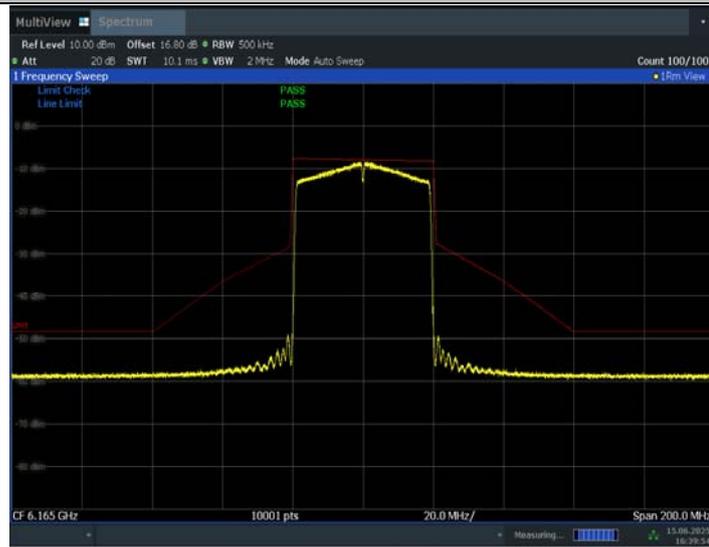
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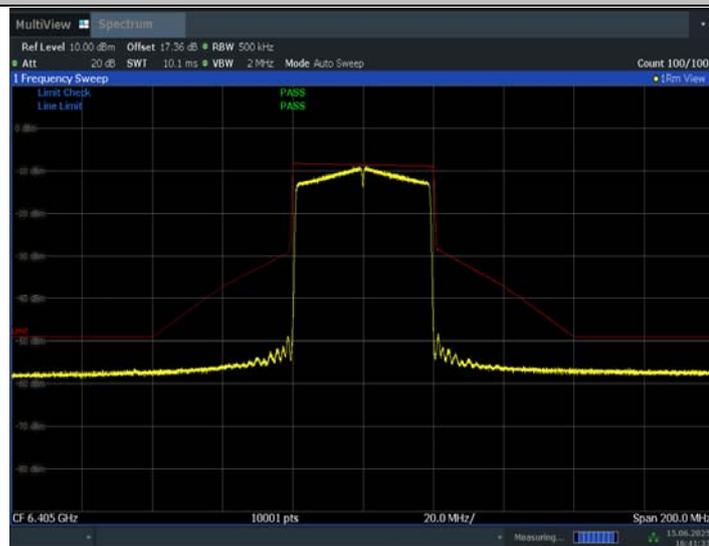


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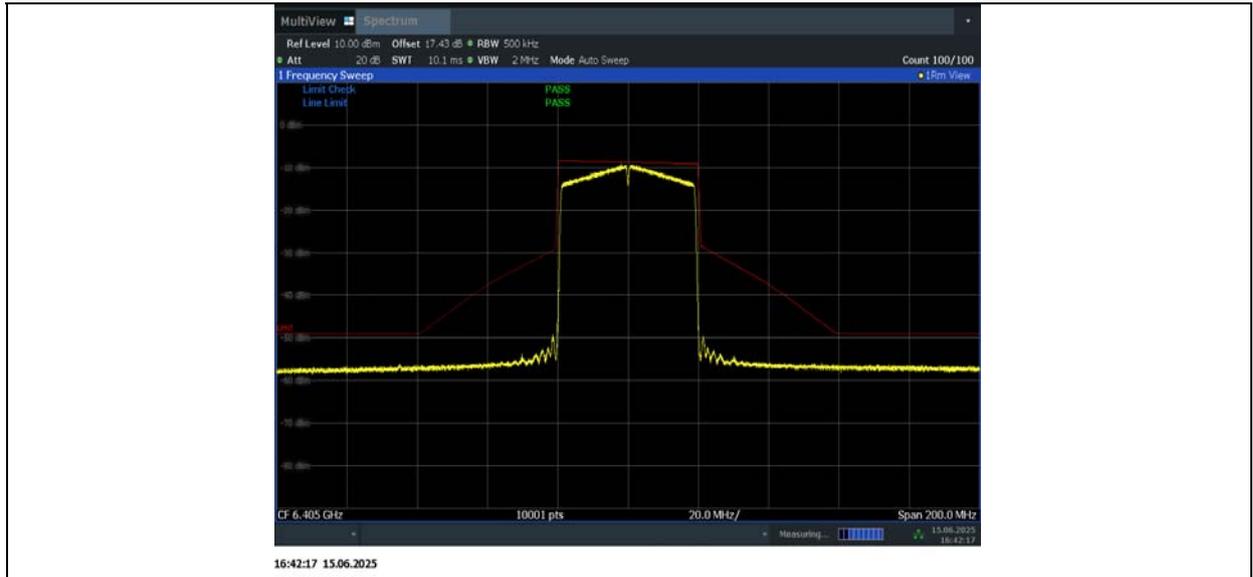
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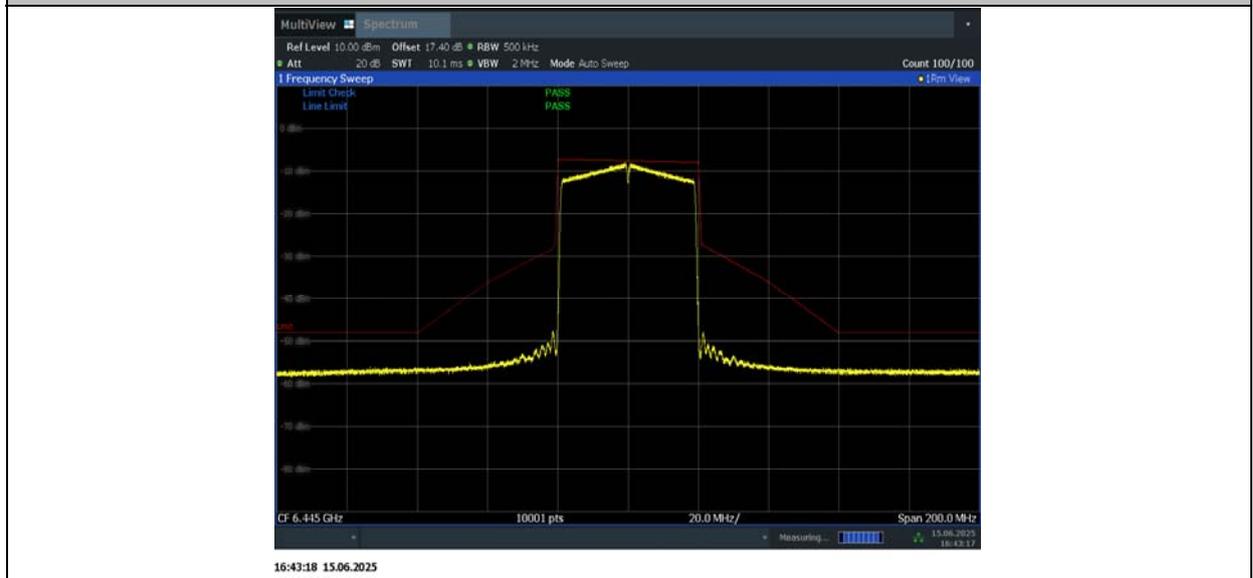


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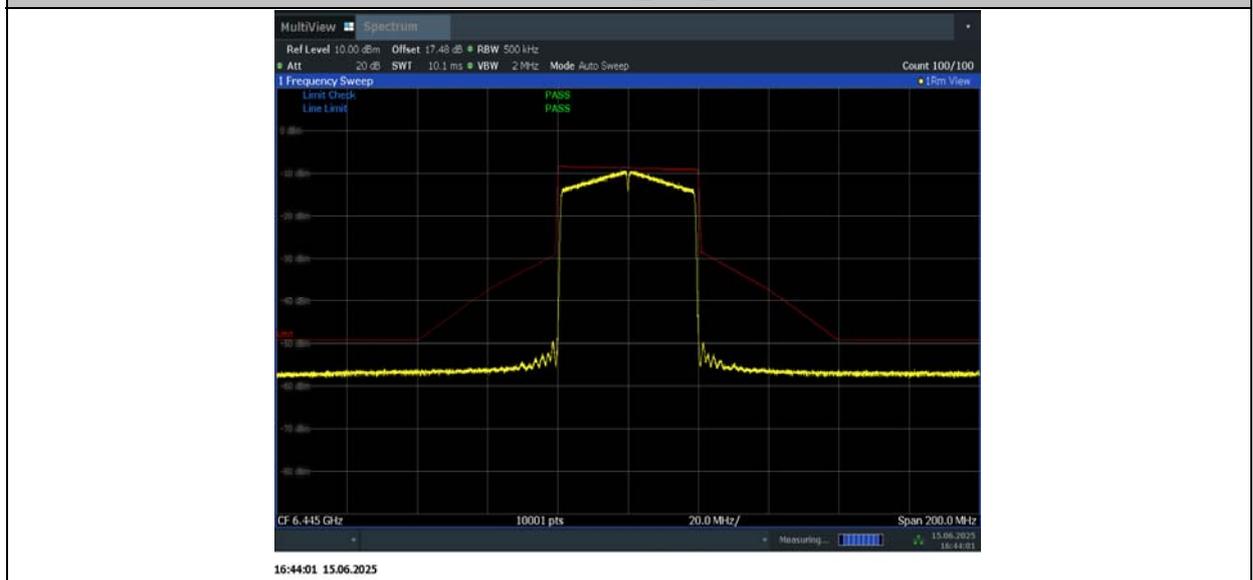
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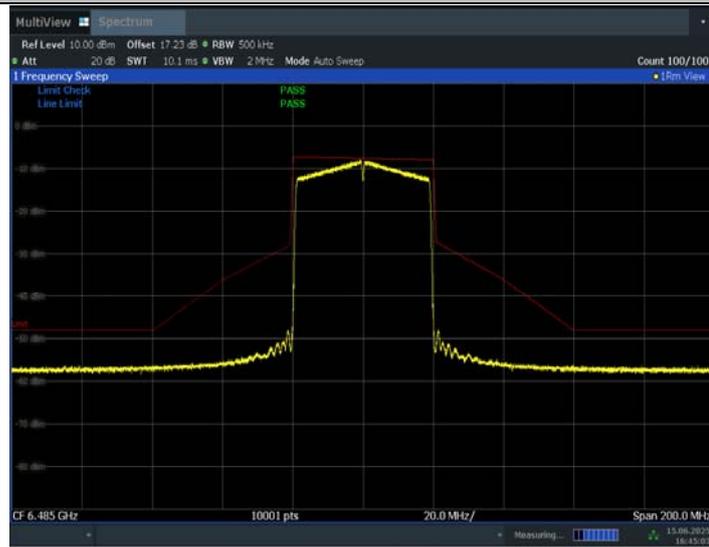
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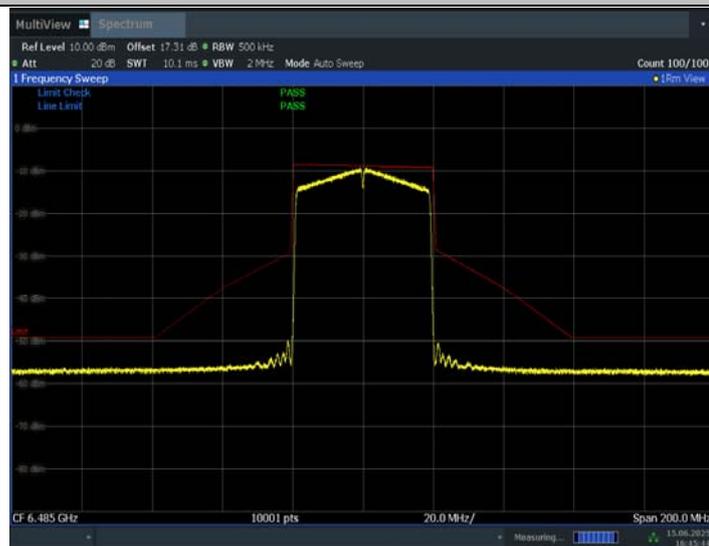


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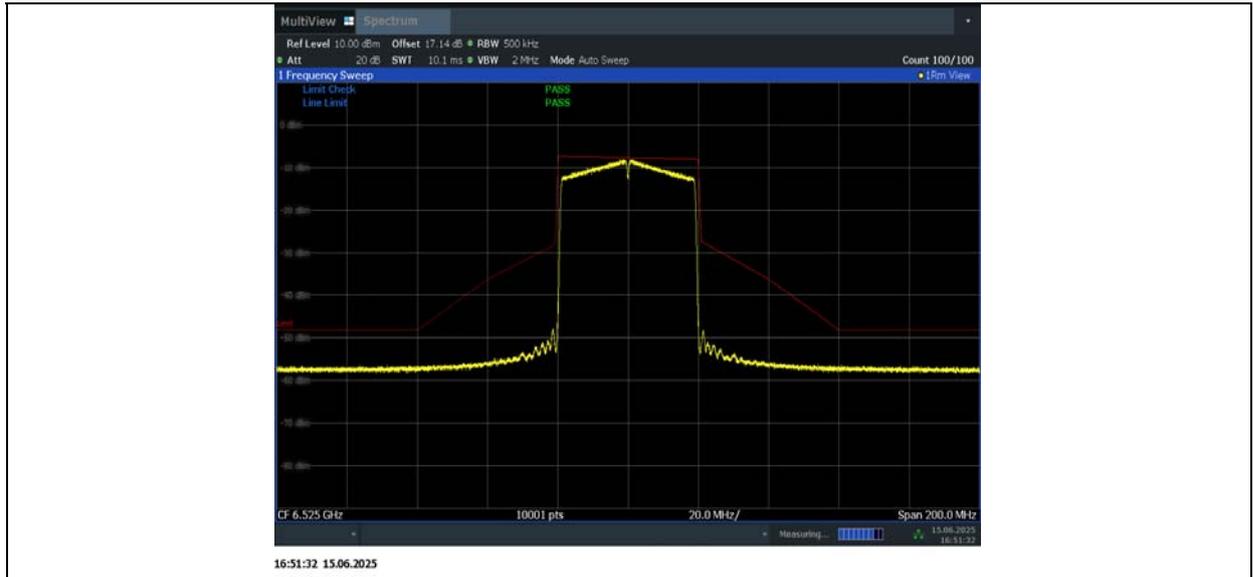
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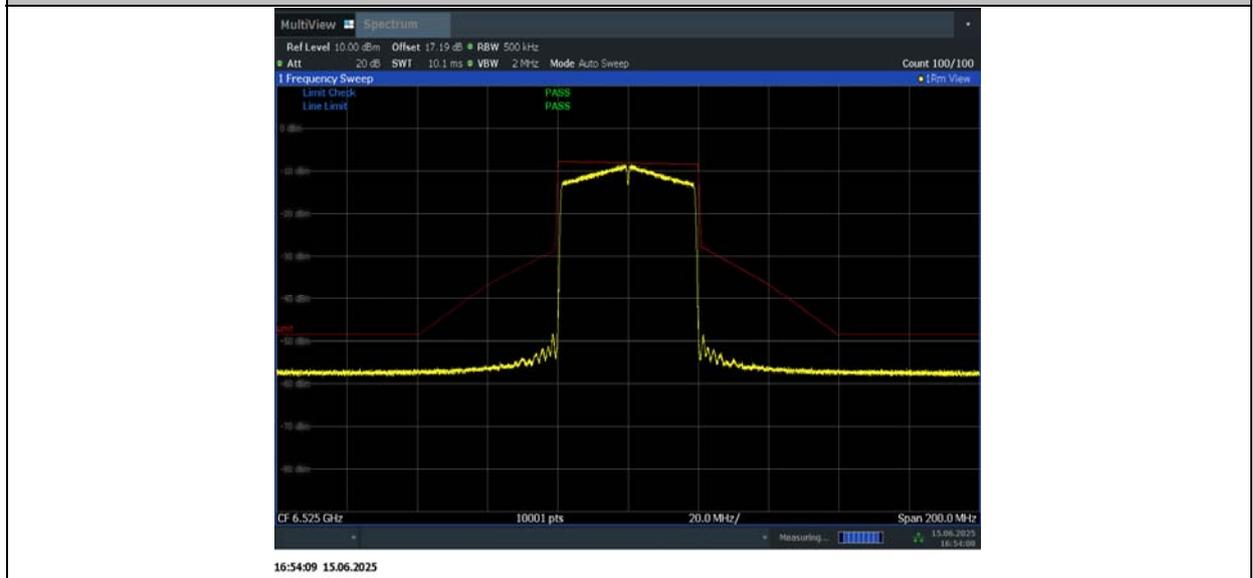


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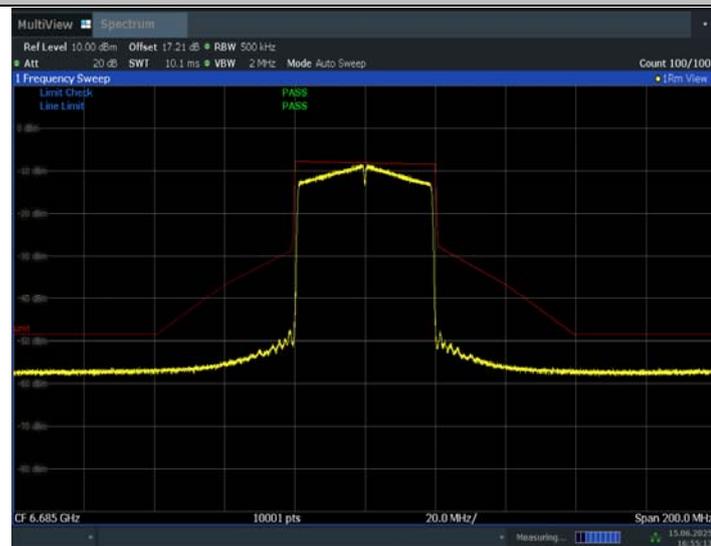


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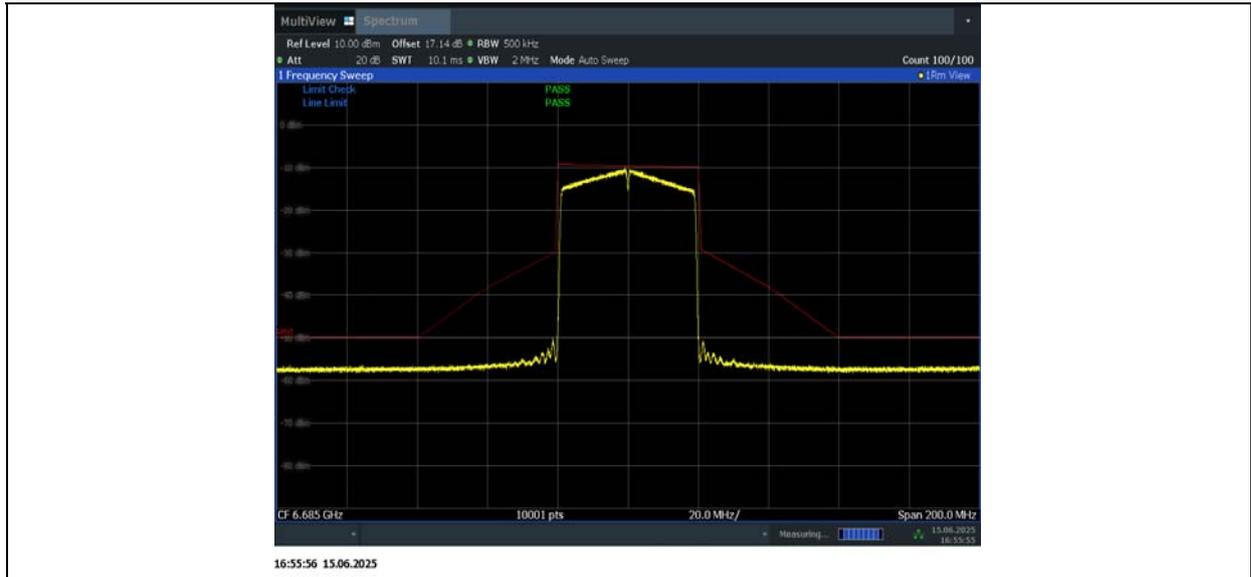
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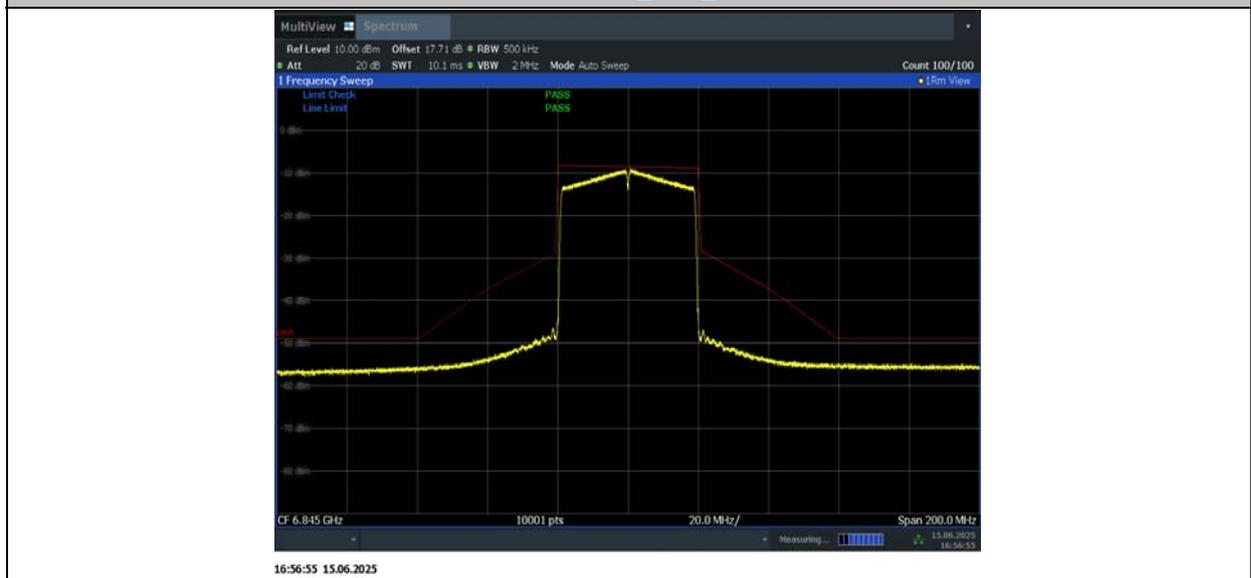


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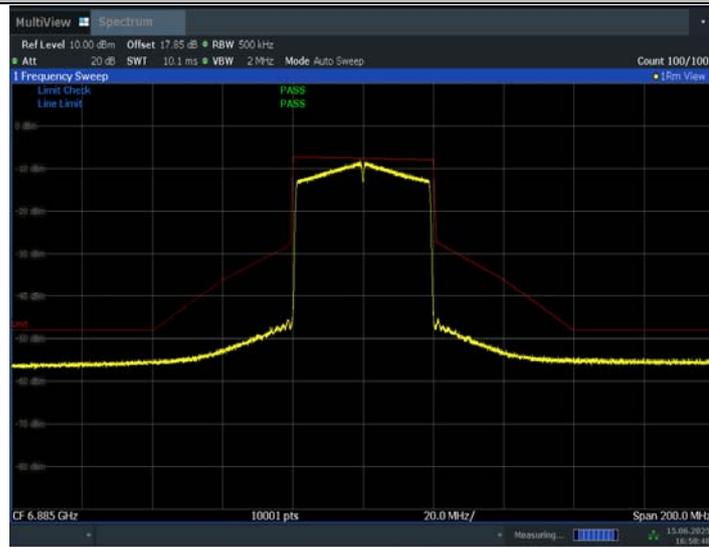
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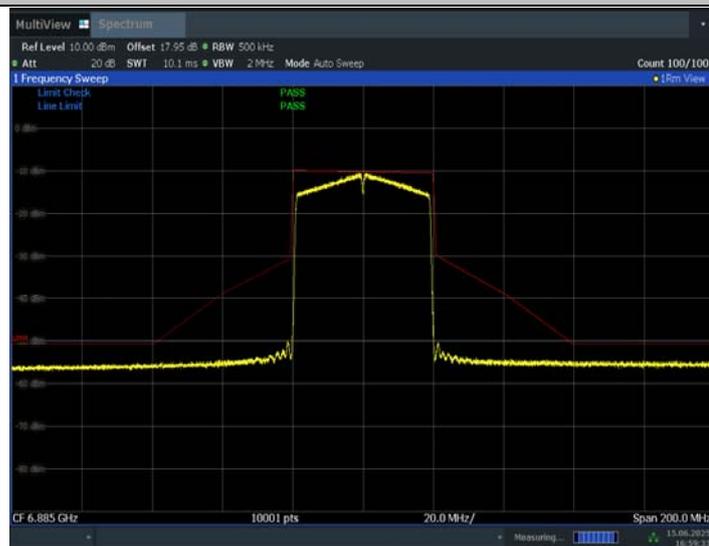


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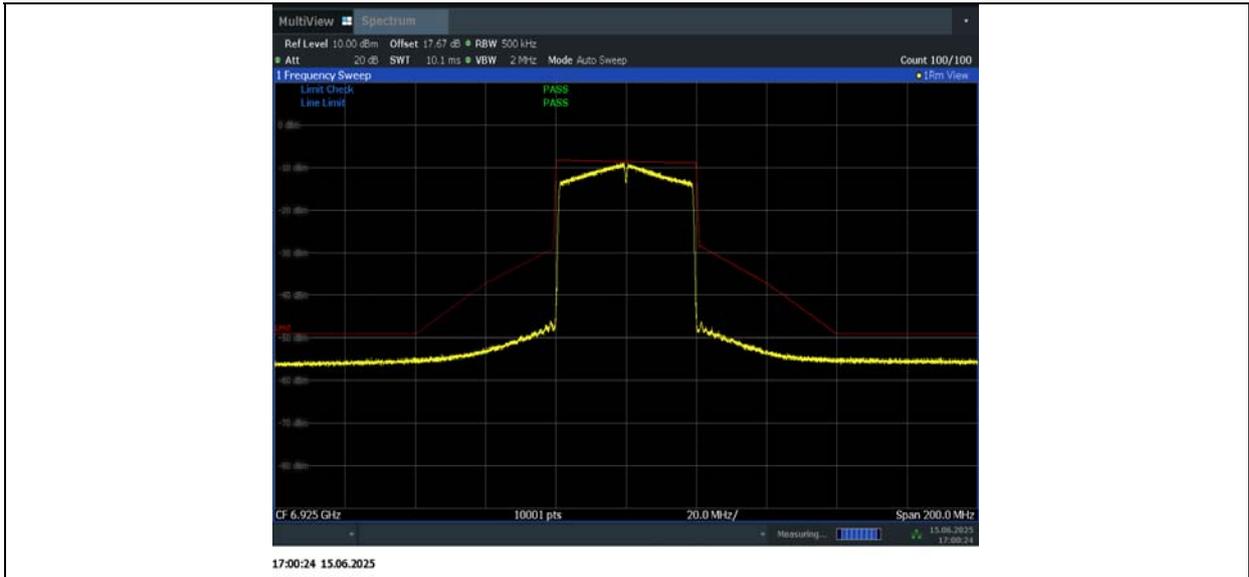
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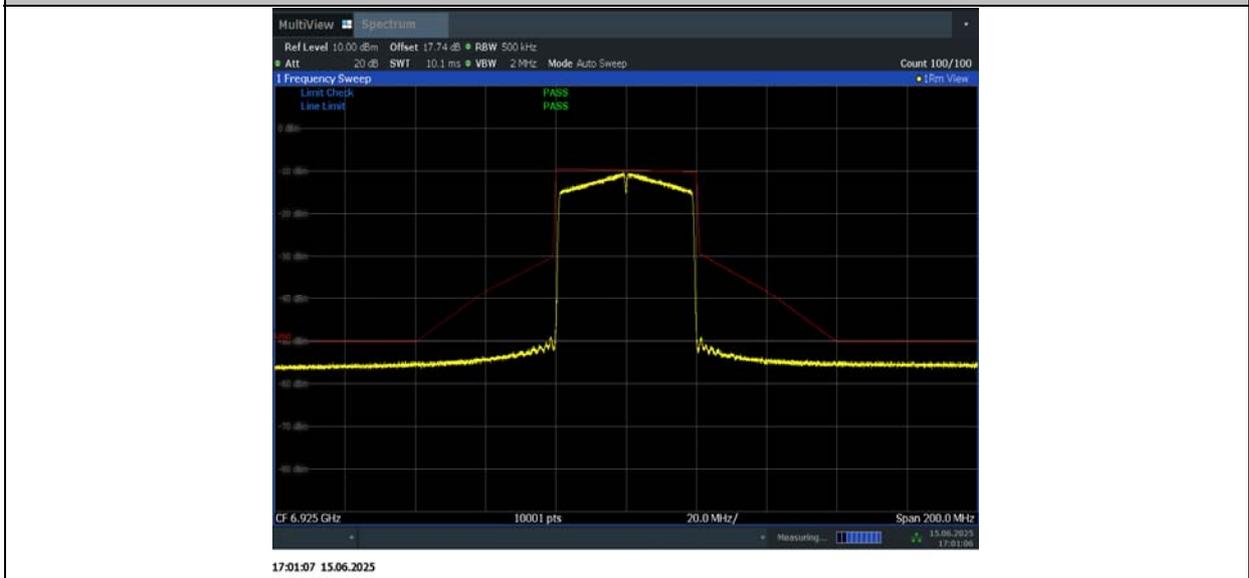


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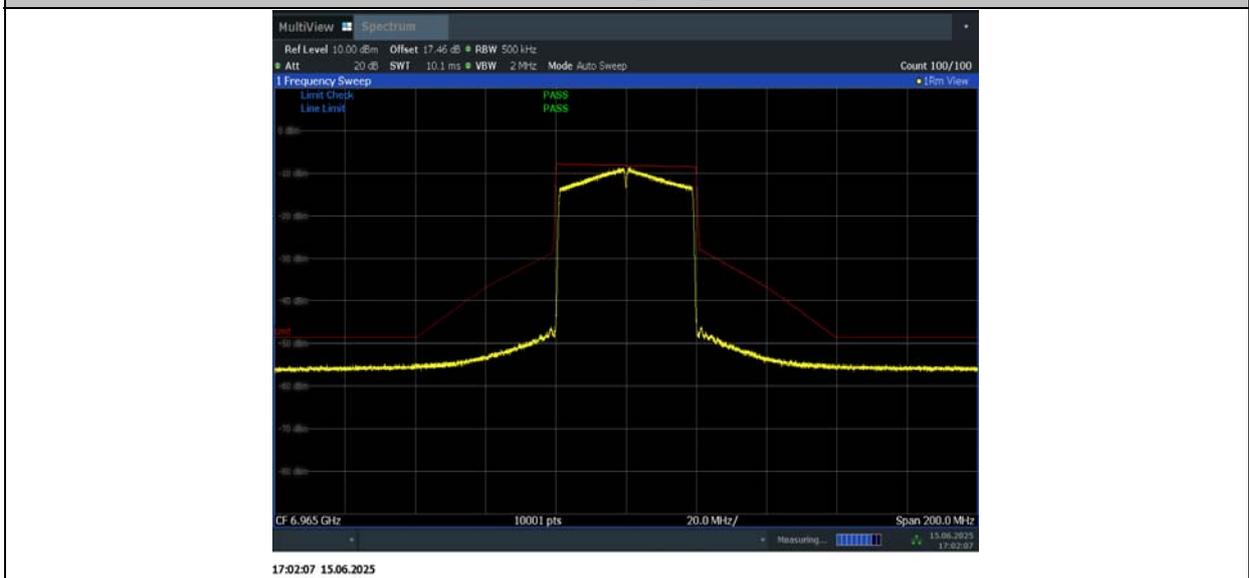
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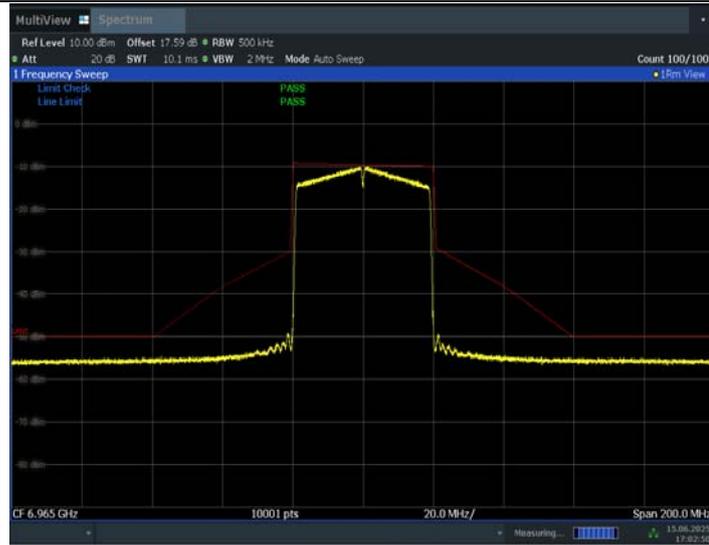
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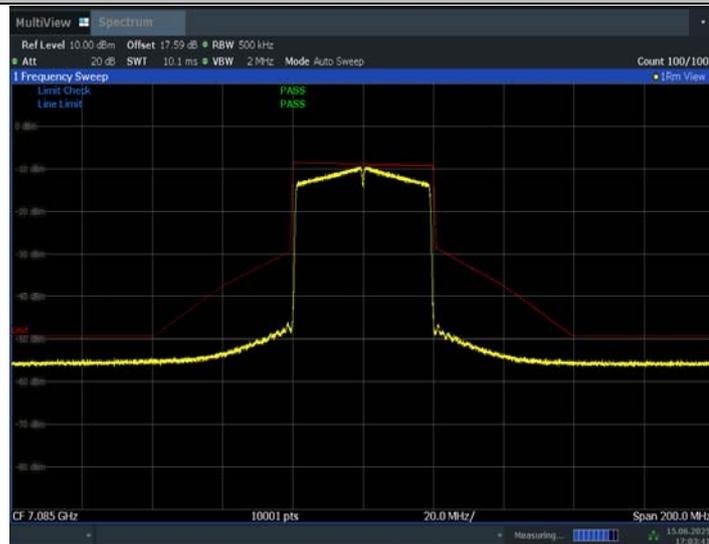


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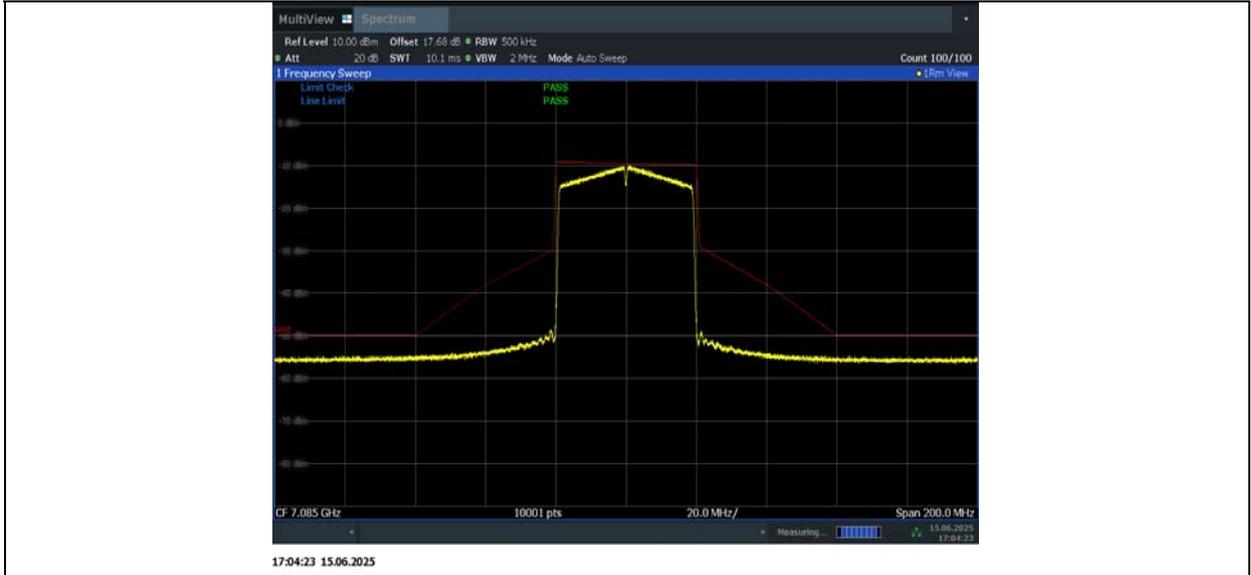
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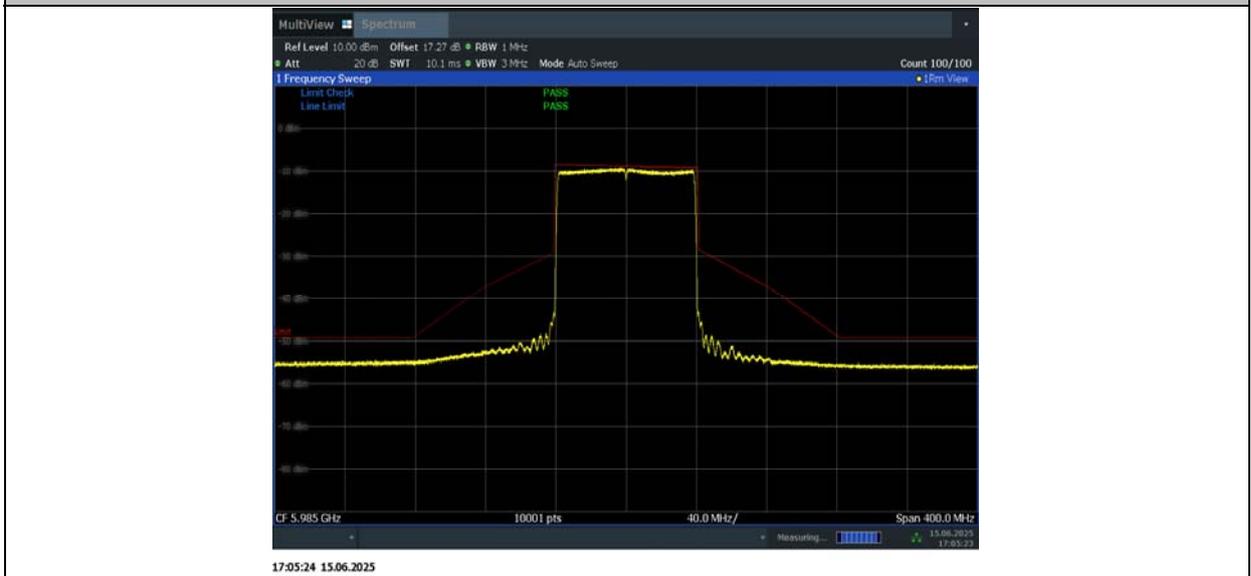


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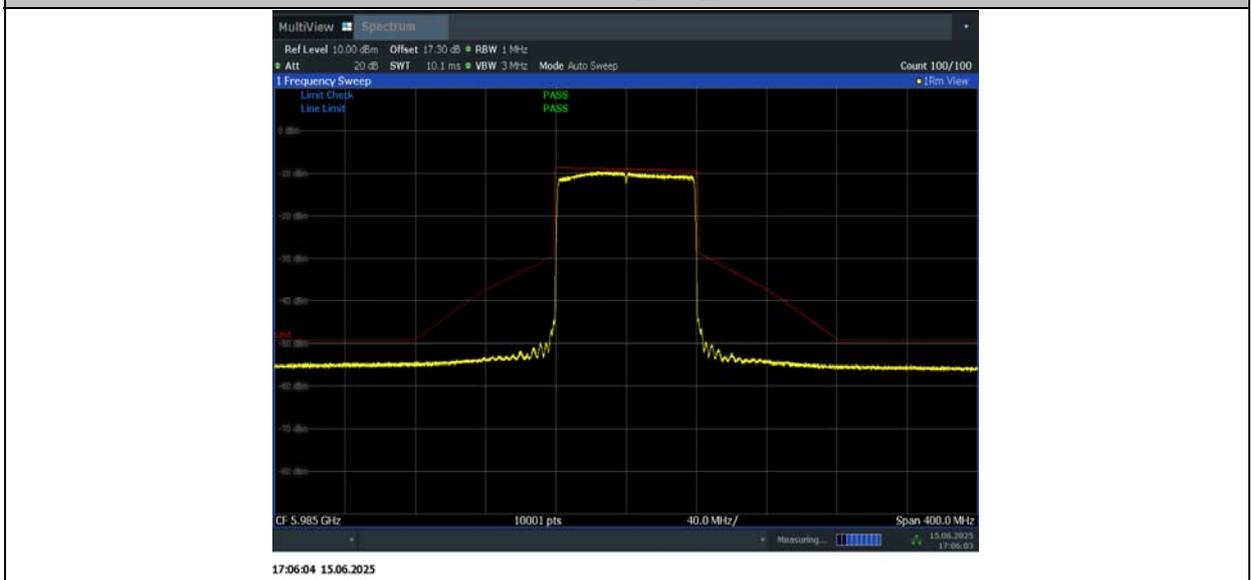
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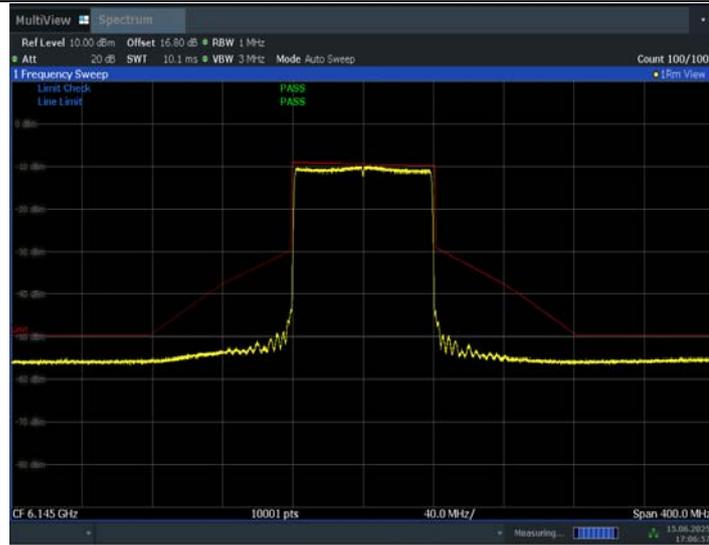
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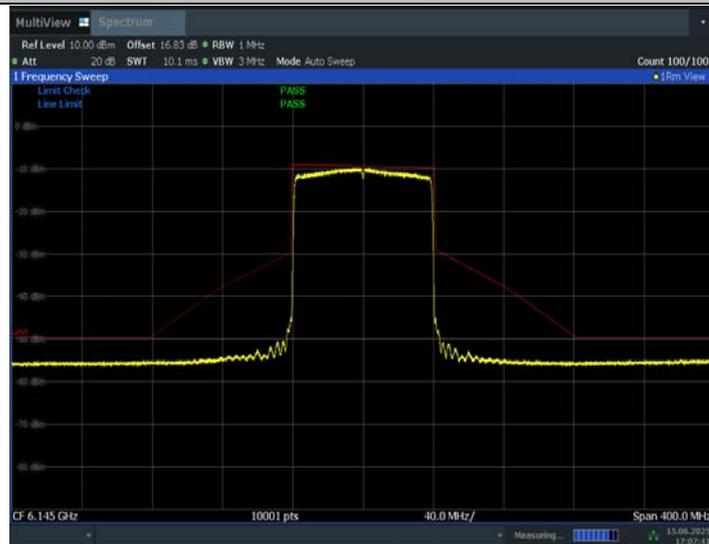
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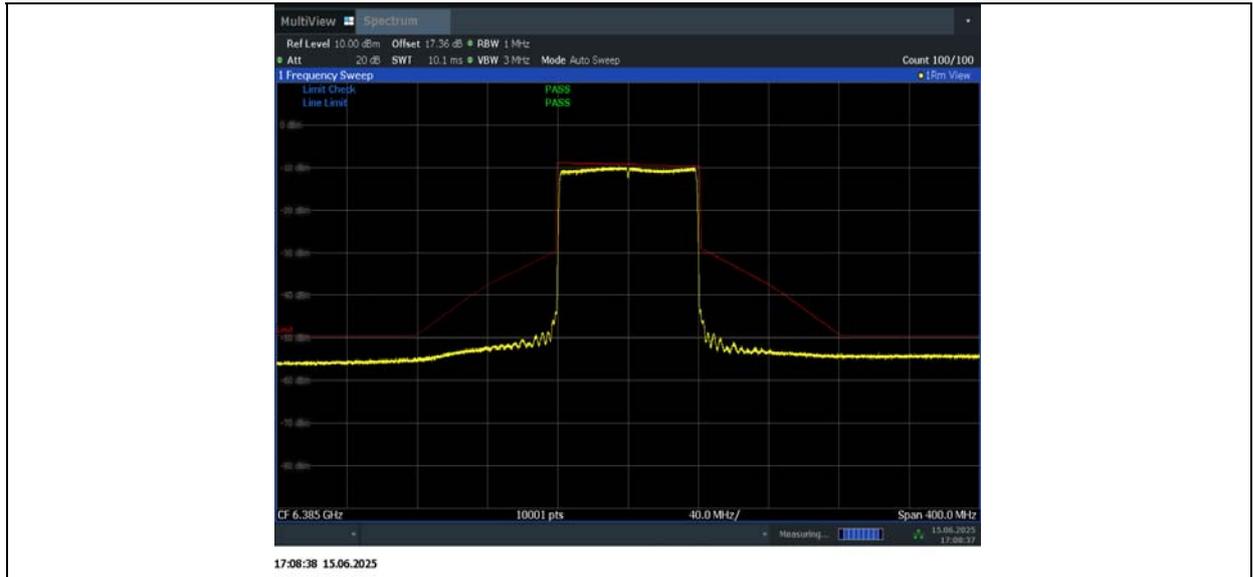
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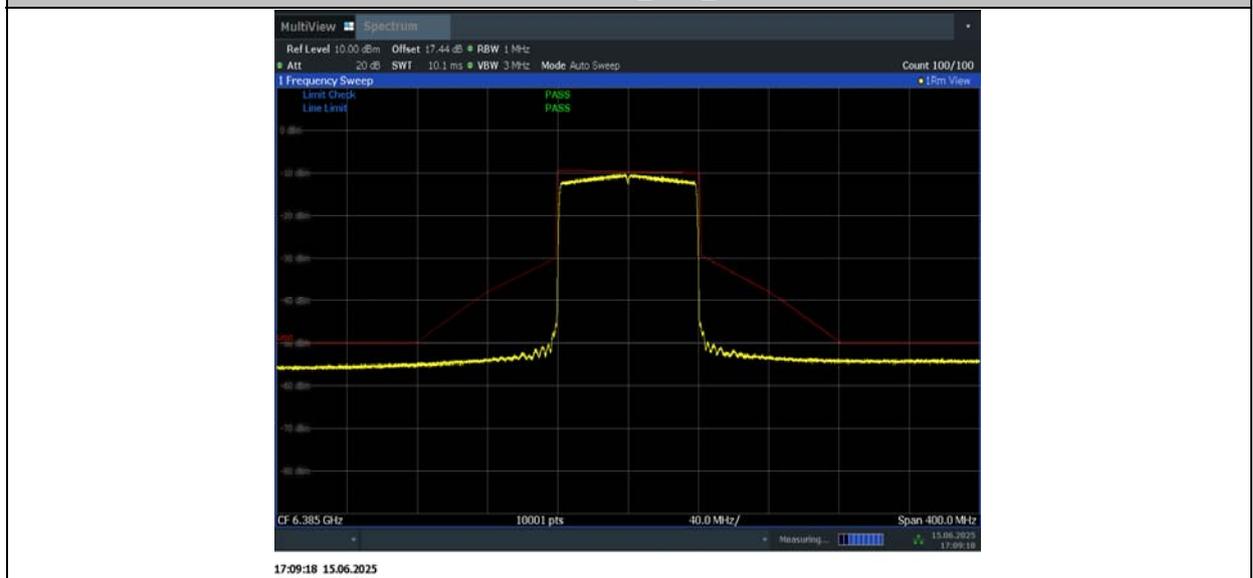
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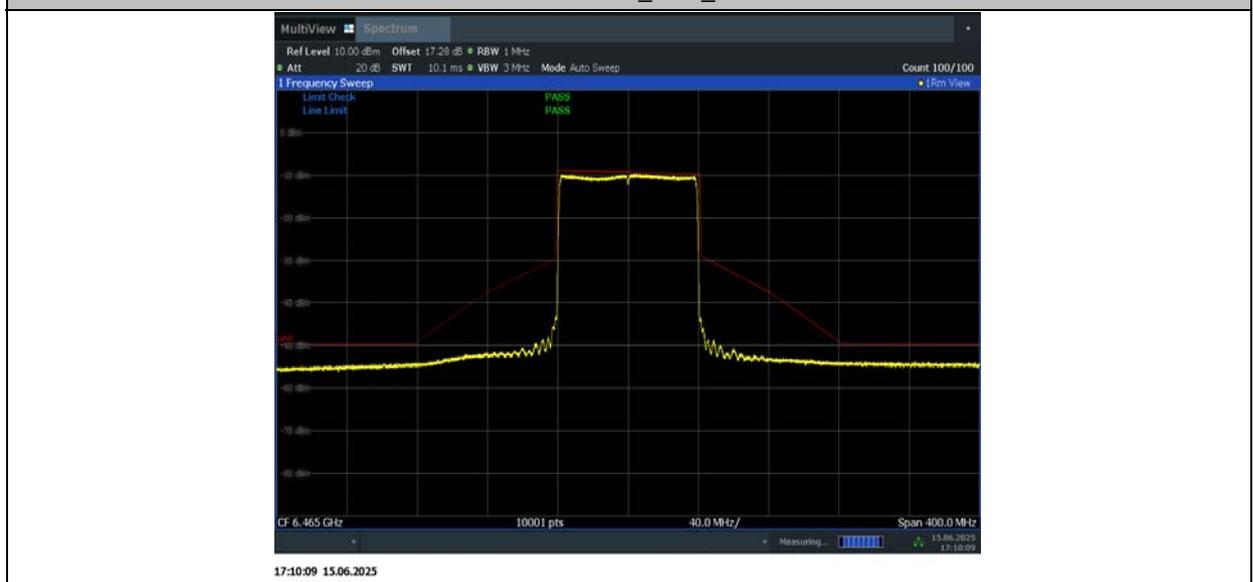
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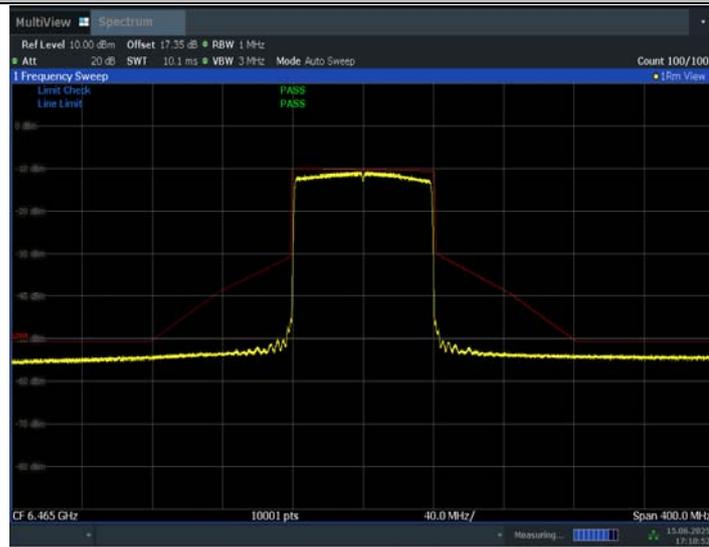
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11AX80MIMO\_Ant6\_6465

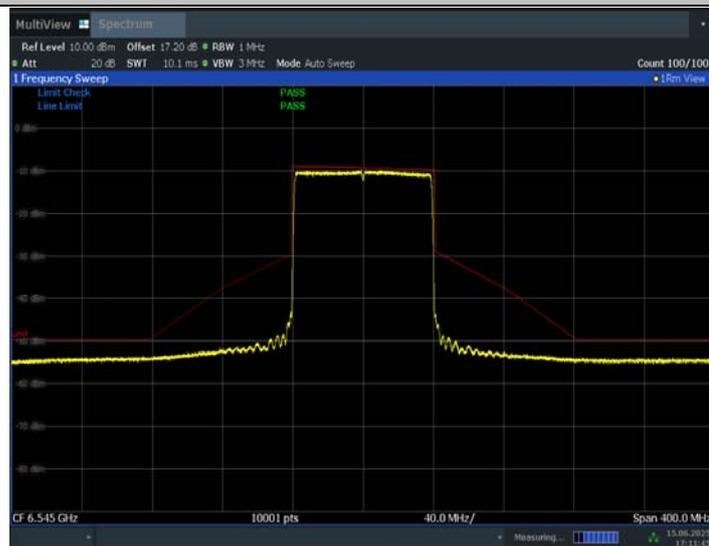


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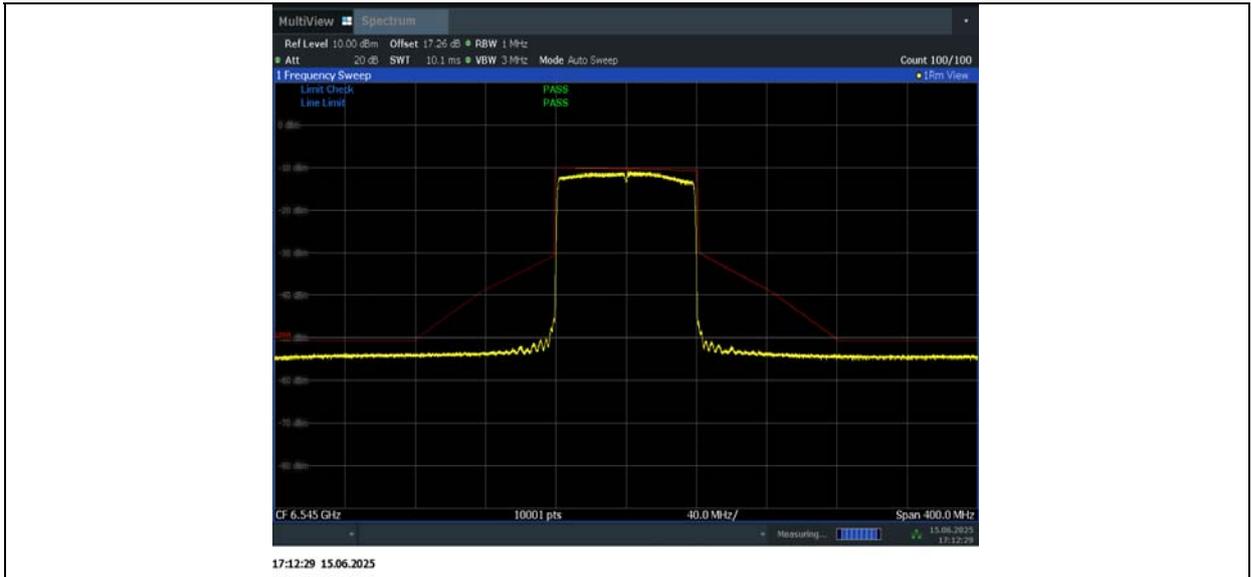
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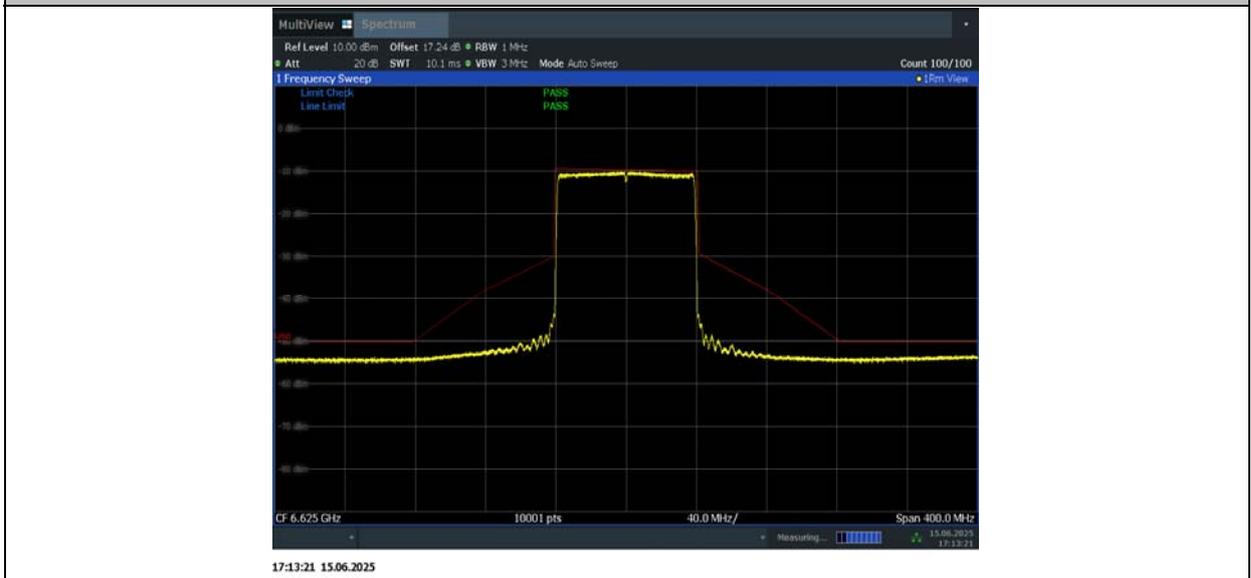


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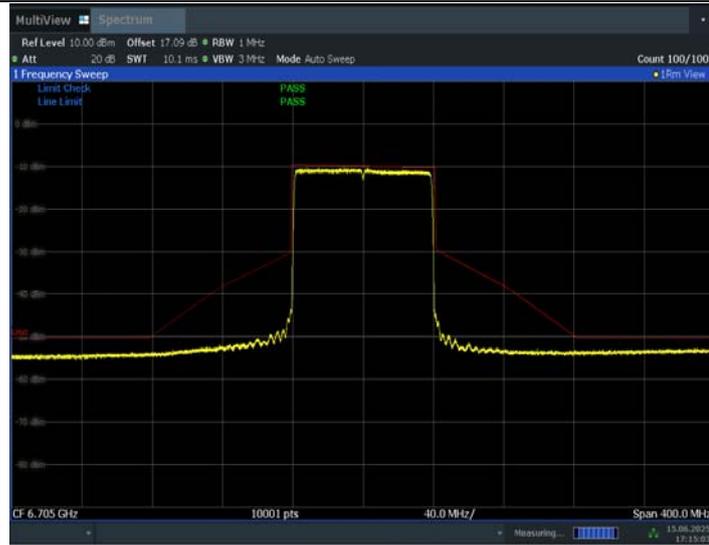
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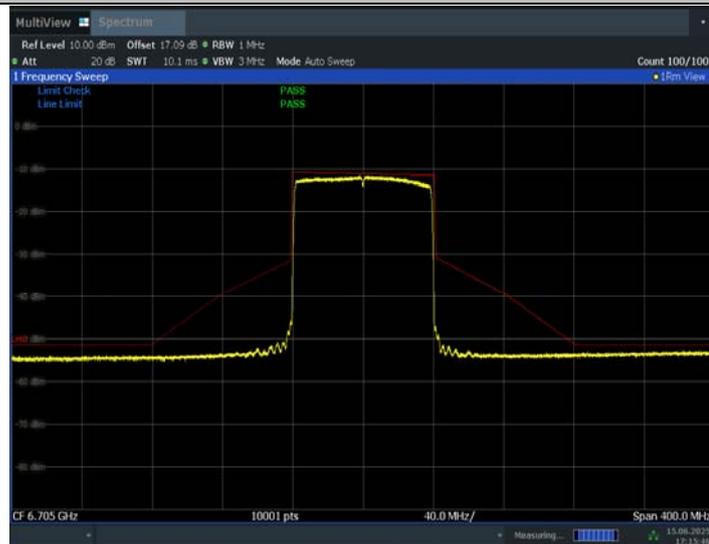
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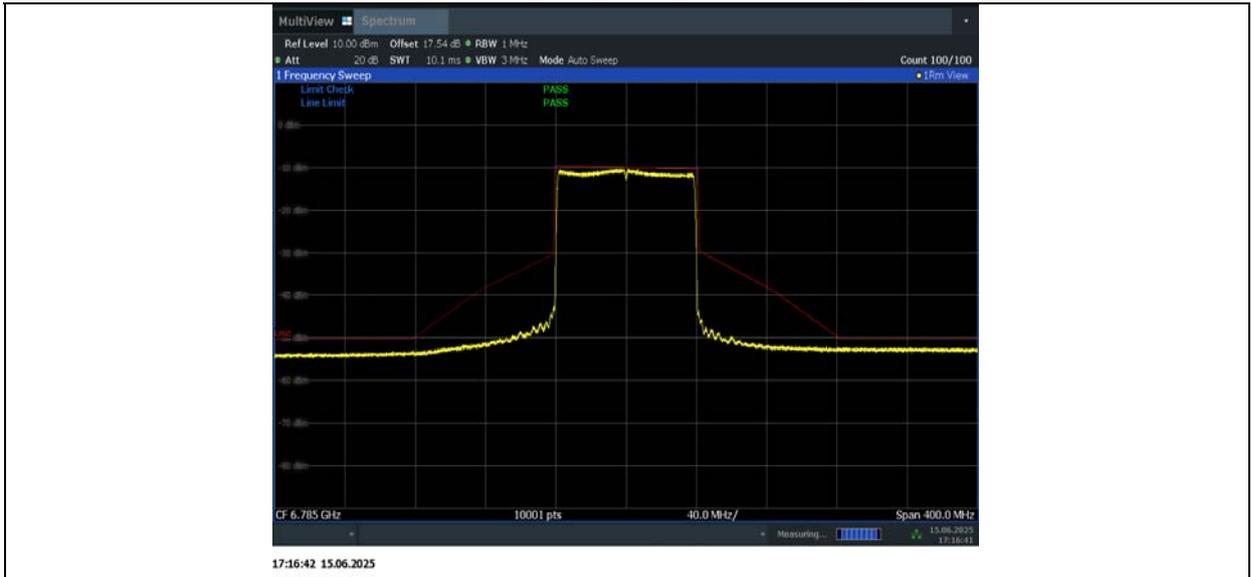
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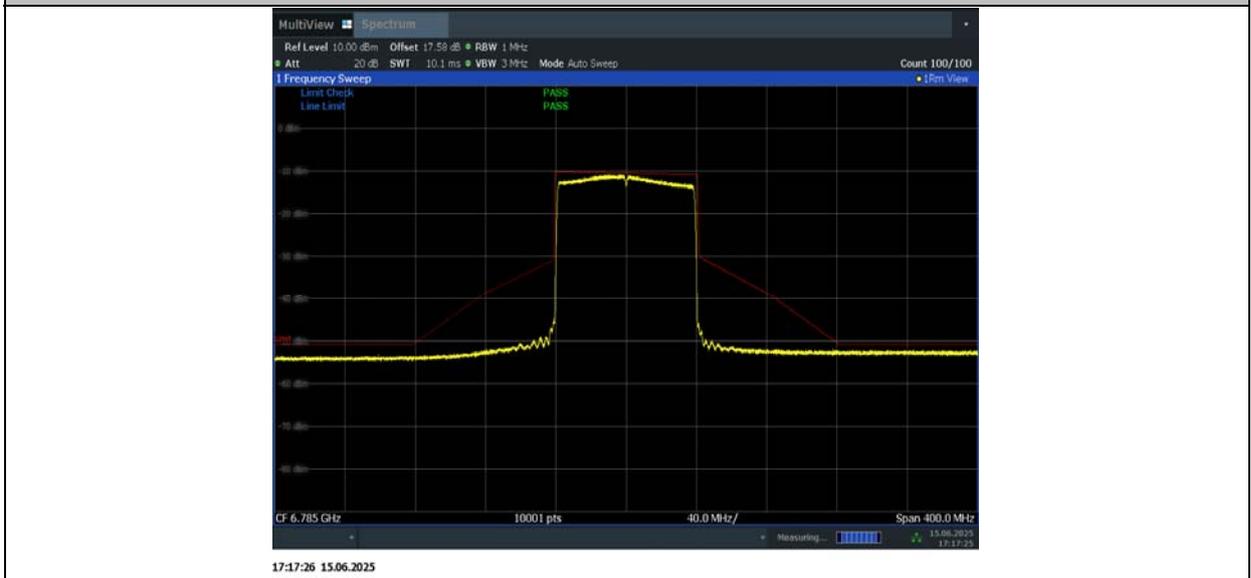
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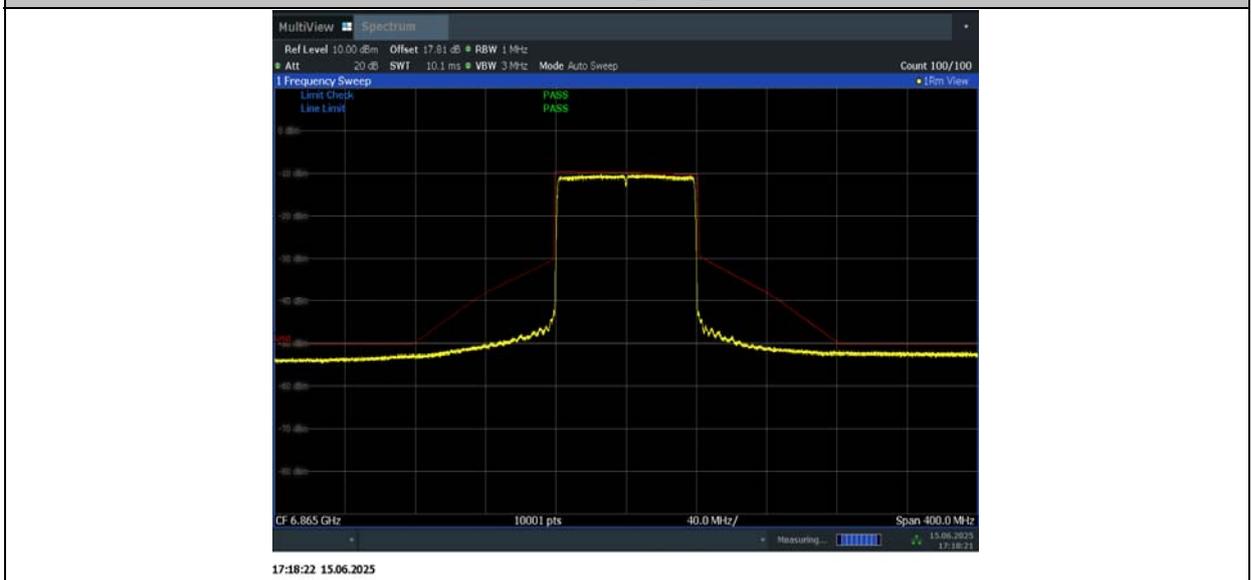
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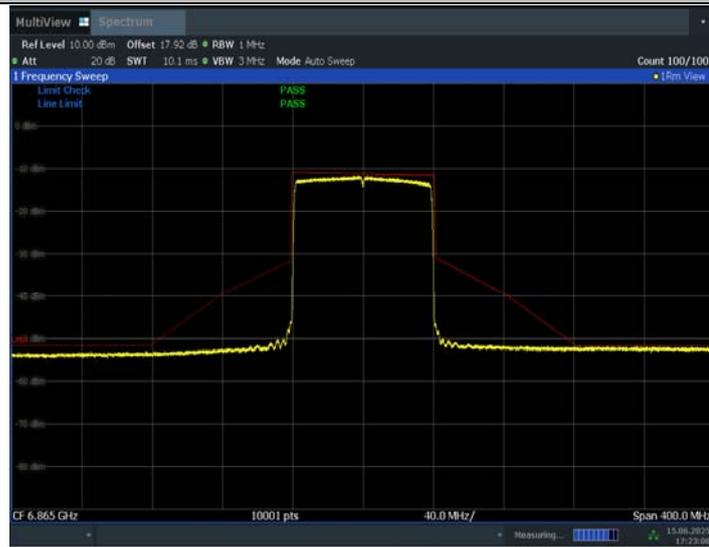
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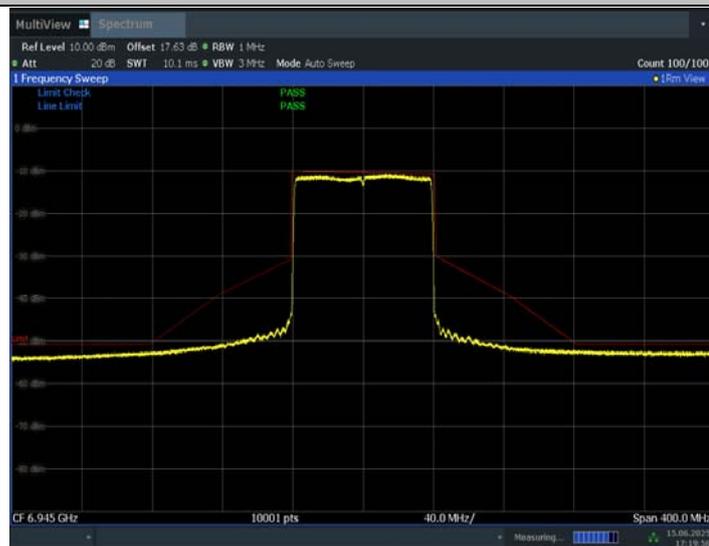
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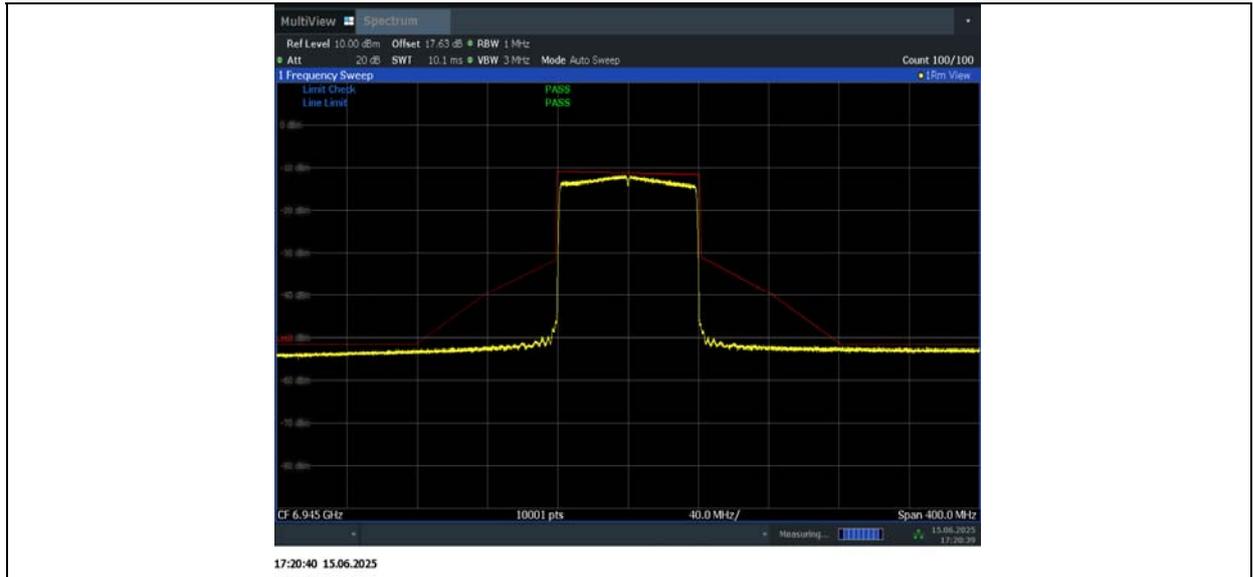
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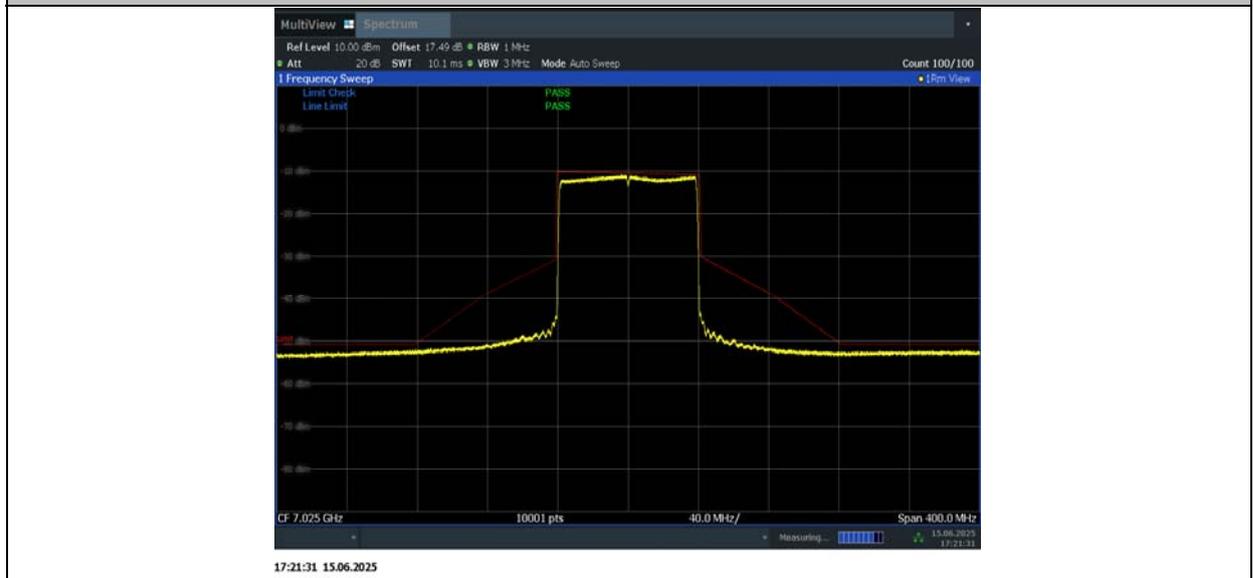
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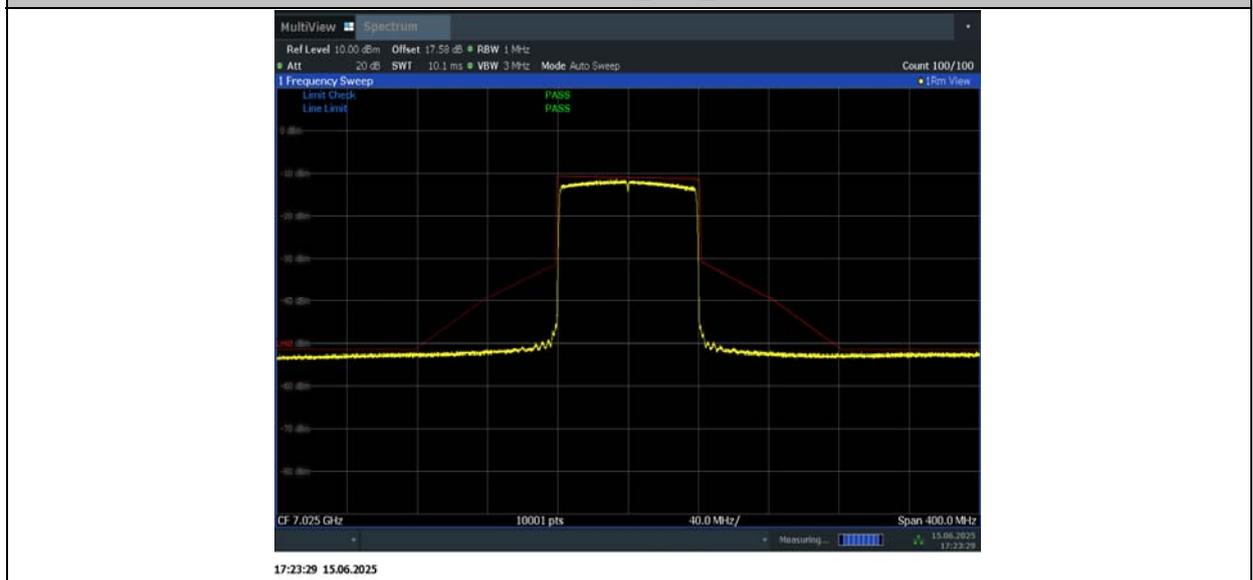
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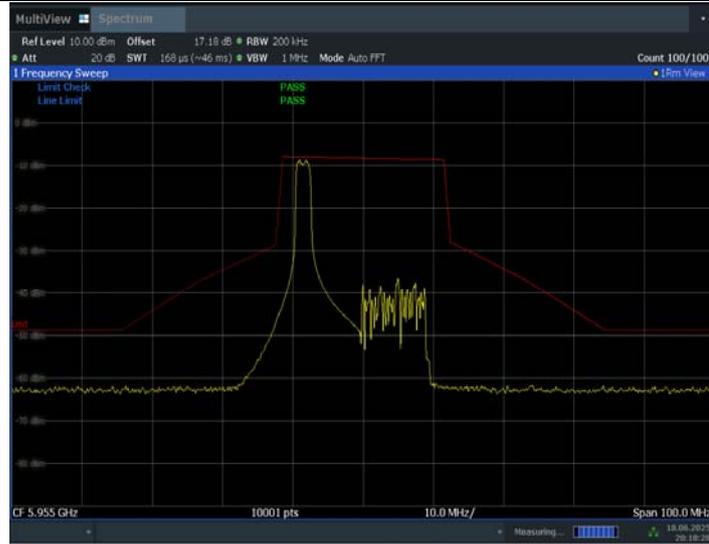
**11ax-RU**

Test Mode	Antenna	Frequency [MHz]	RU Size	RU Index	Result	Limit	Verdict
11AX20MIMO	Ant6	5955	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant9	5955	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant6	6175	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant9	6175	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant6	6415	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant9	6415	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant6	6435	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant9	6435	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant6	6475	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant9	6475	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant6	6515	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant9	6515	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
Ant6	6535	26Tone	RU8	See test graph	See test graph	PASS	
		52Tone	RU40	See test graph	See test graph	PASS	
		106Tone	RU54	See test graph	See test graph	PASS	
Ant9	6535	26Tone	RU8	See test graph	See test graph	PASS	

			52Tone	RU40	See test graph	See test graph	PASS
			106Tone	RU54	See test graph	See test graph	PASS
	Ant6	6695	26Tone	RU8	See test graph	See test graph	PASS
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	Ant6	6875	26Tone	RU8	See test graph	See test graph	PASS
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	Ant9	7115	26Tone	RU8	See test graph	See test graph	PASS
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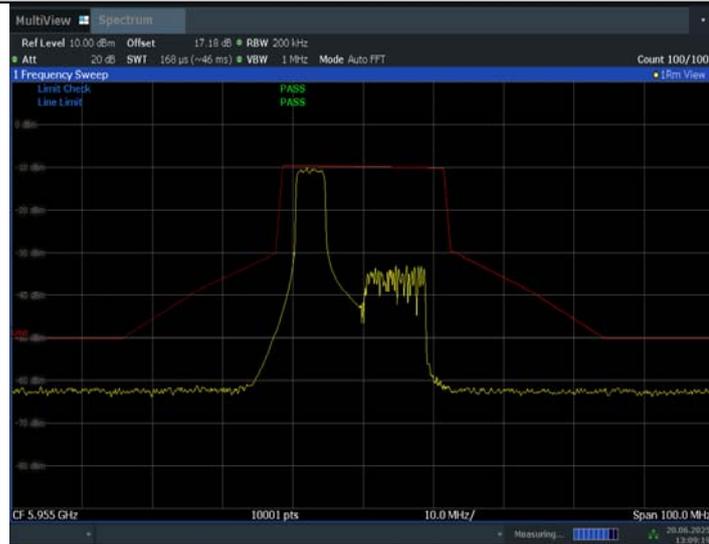
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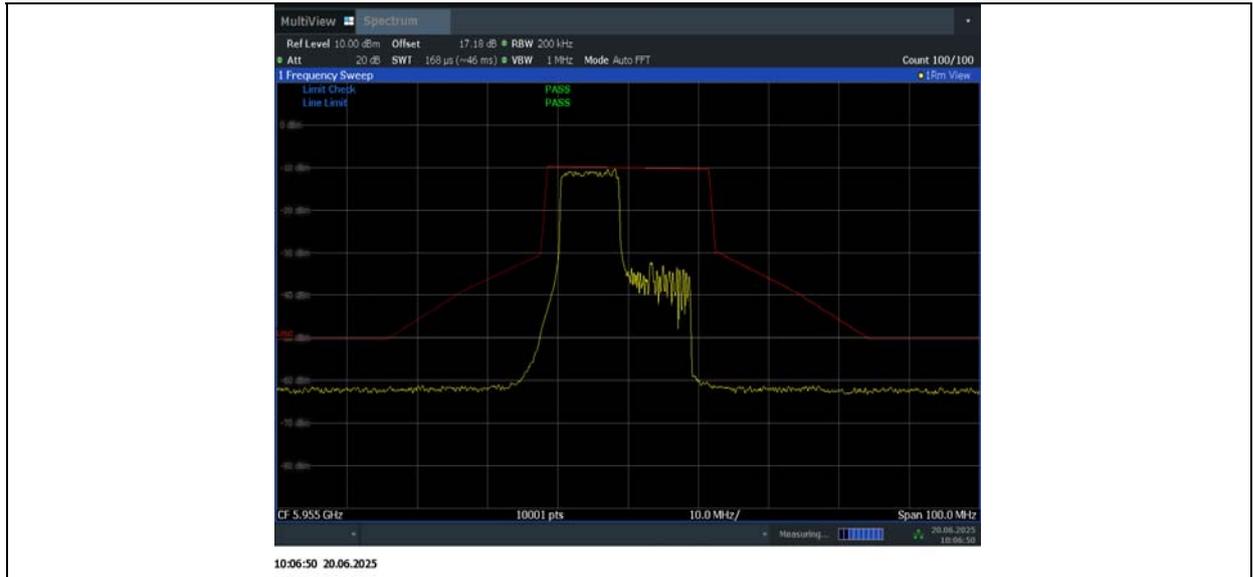
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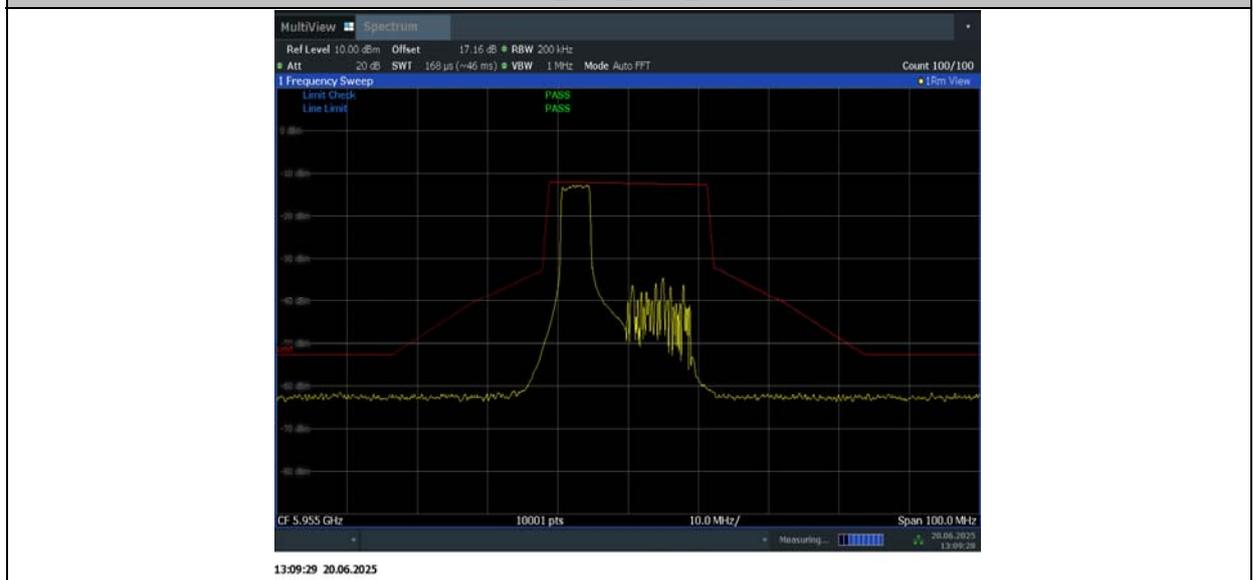
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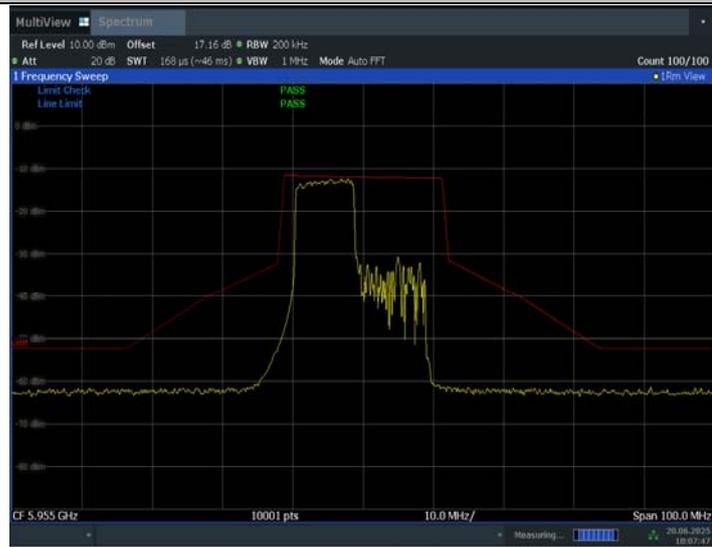
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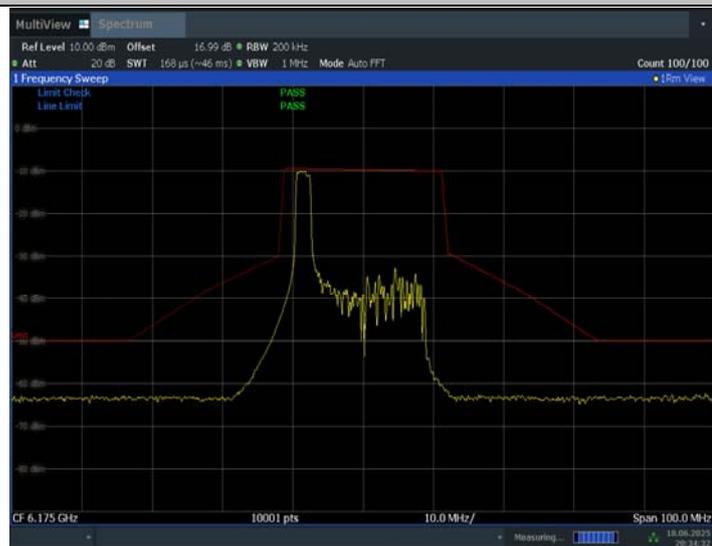


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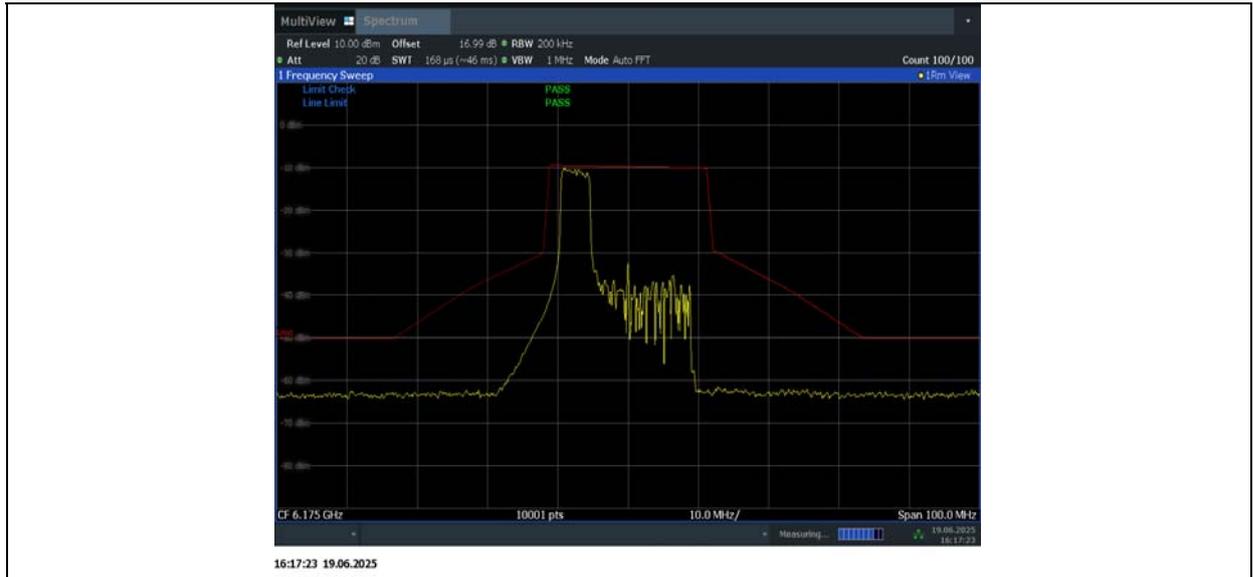
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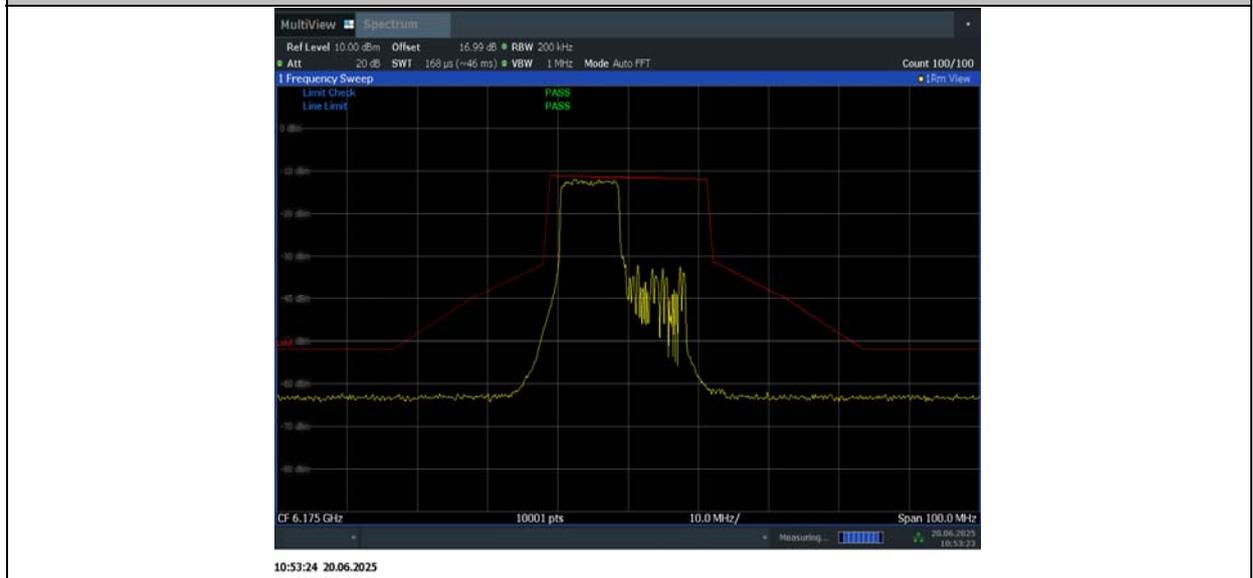


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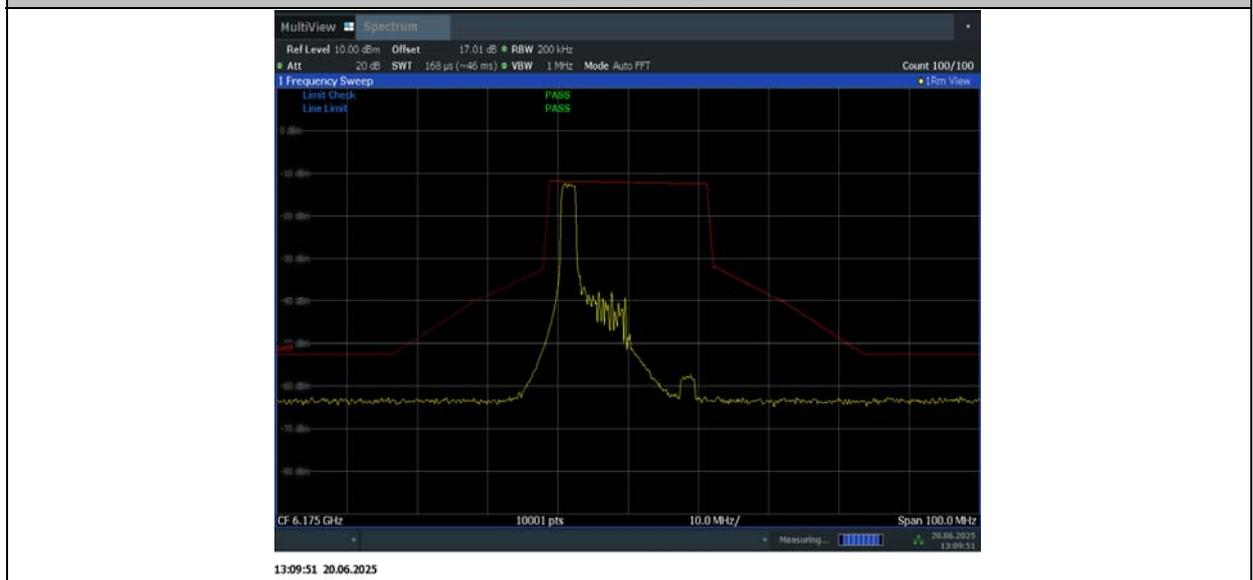
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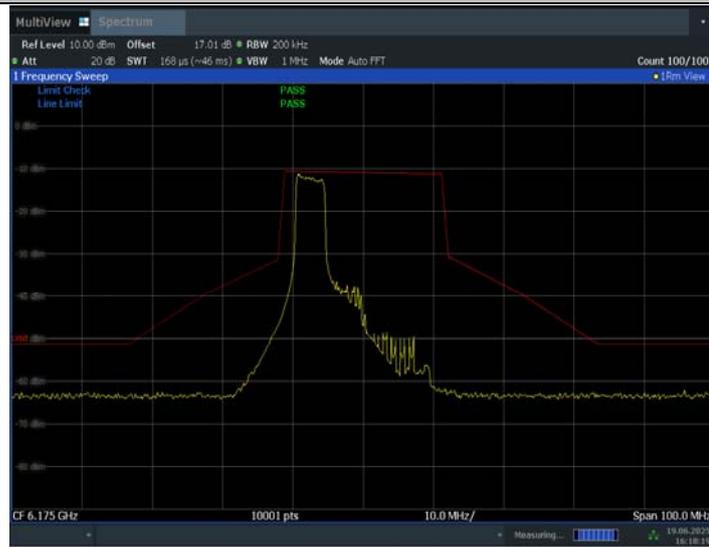
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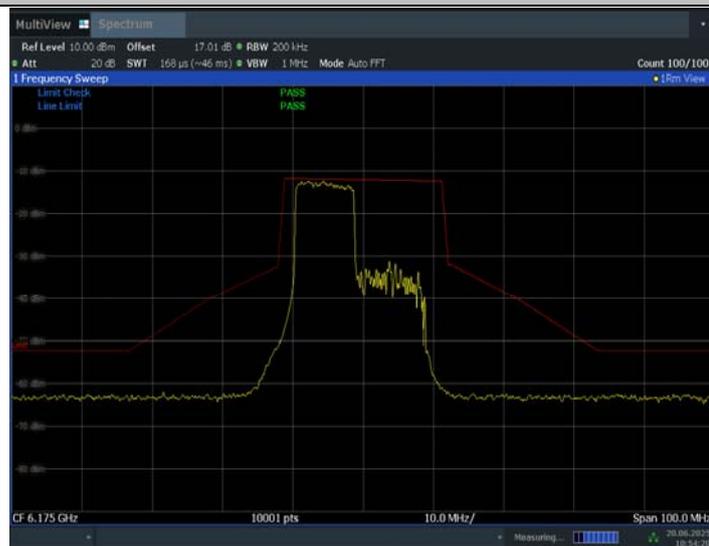


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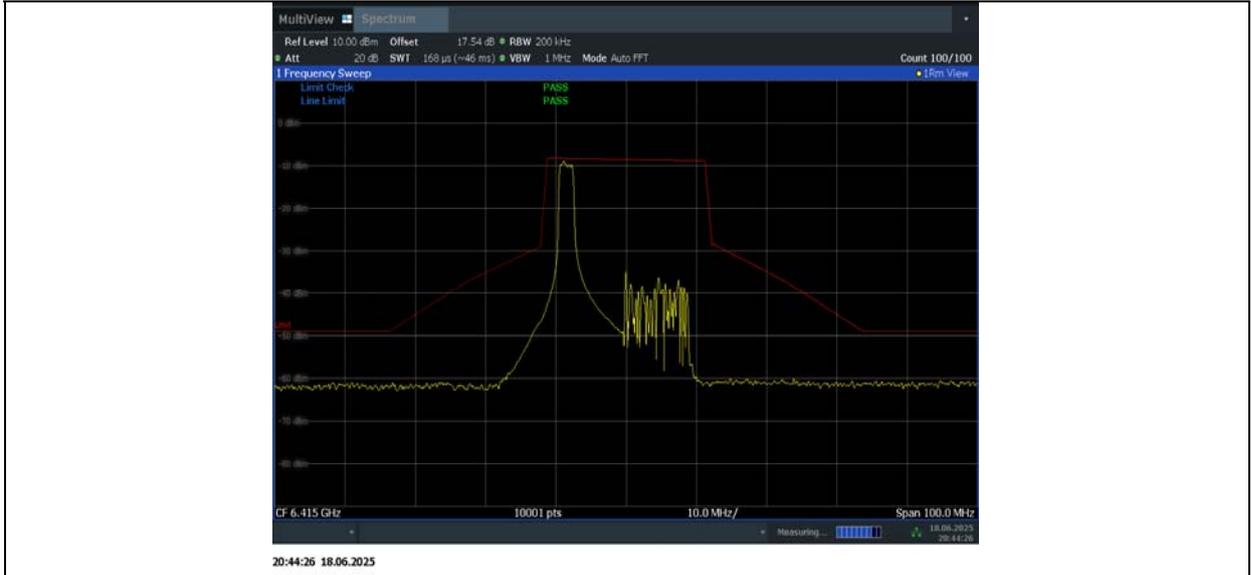
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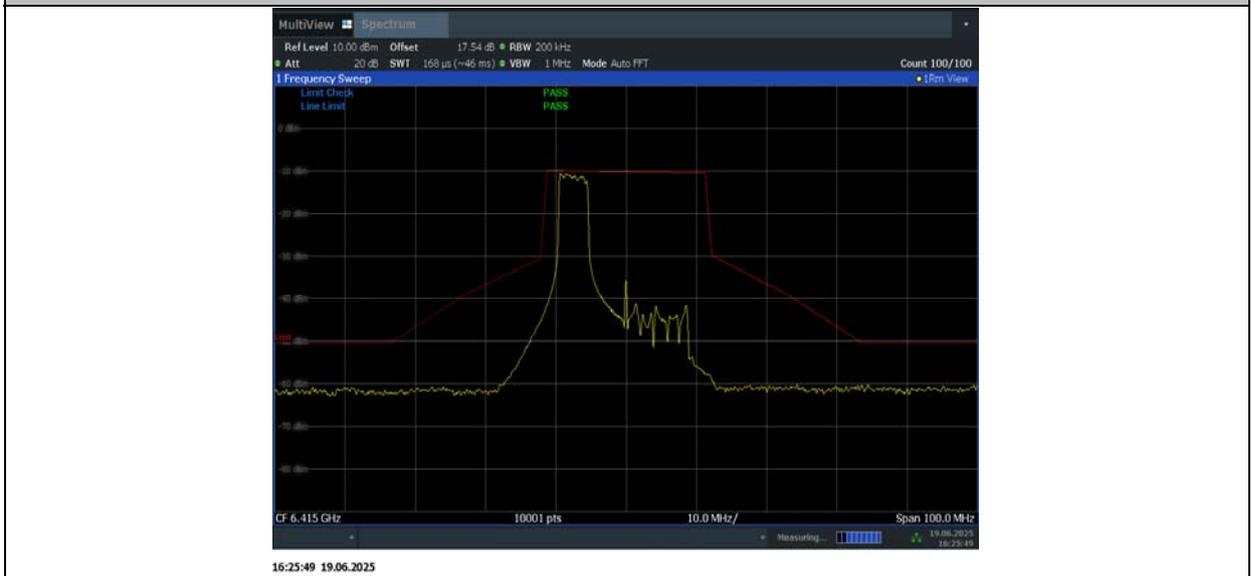


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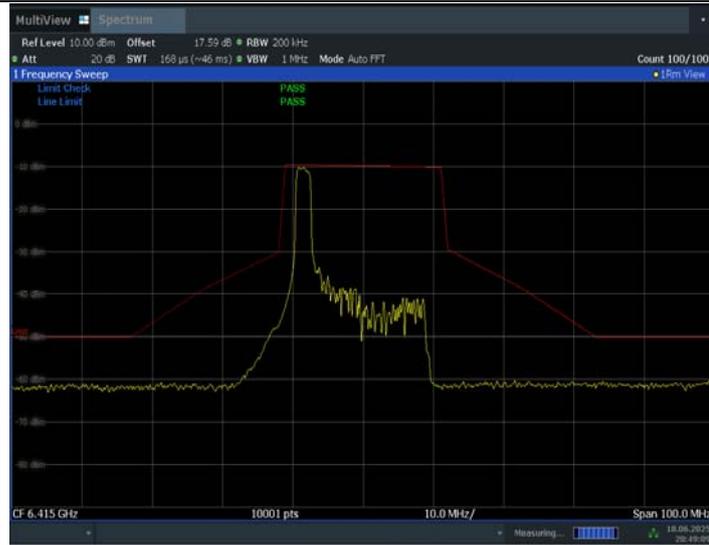
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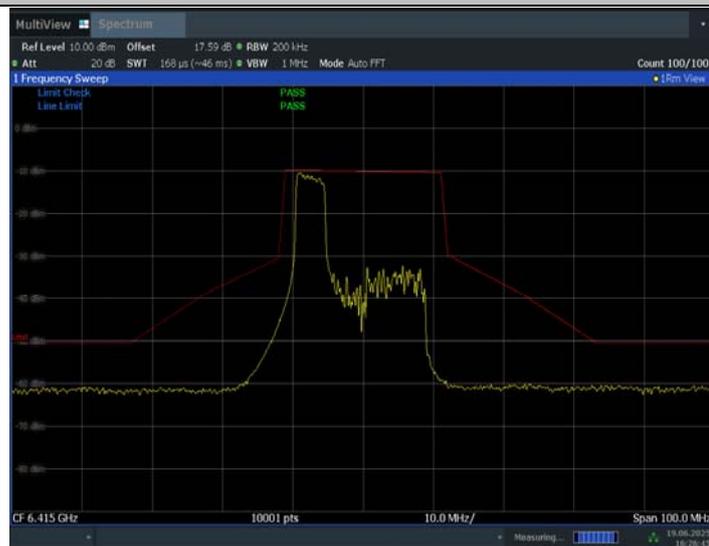
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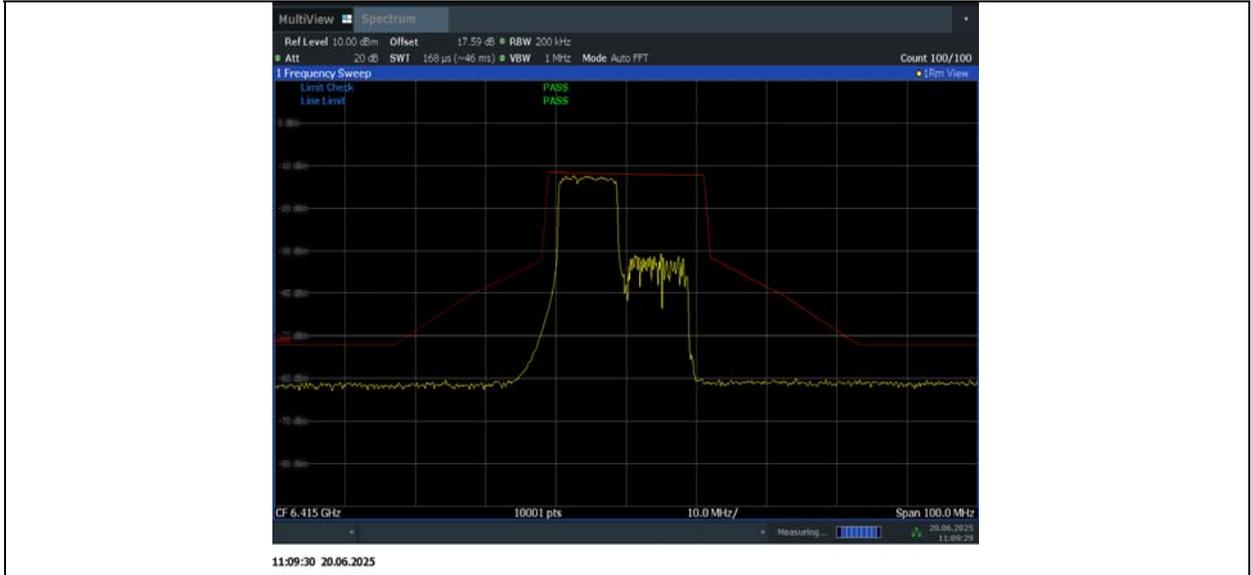
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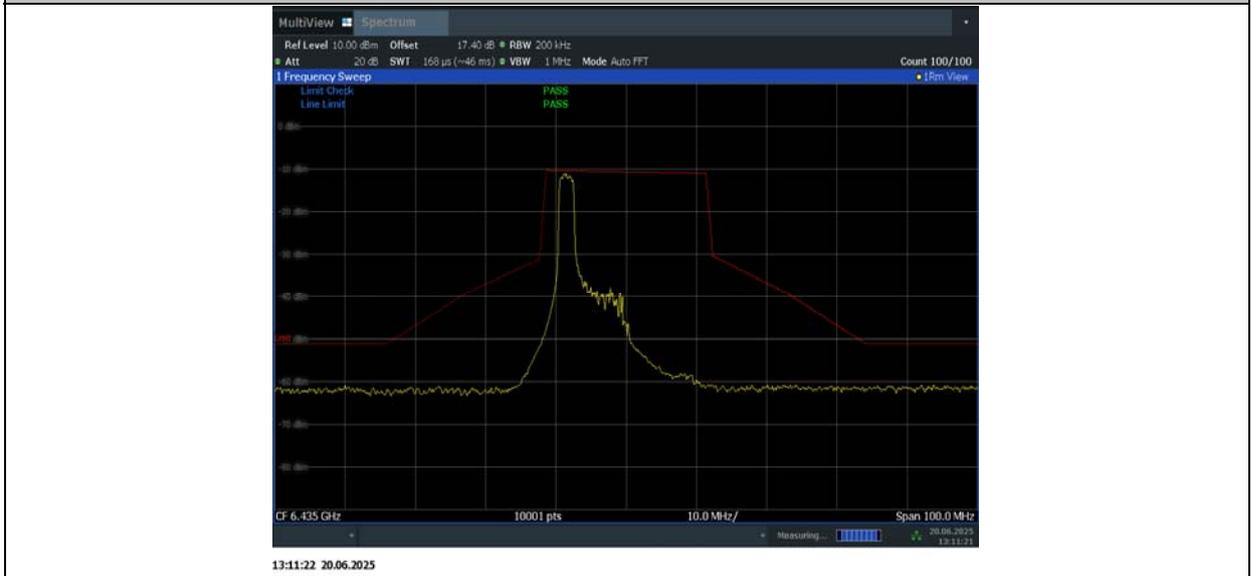
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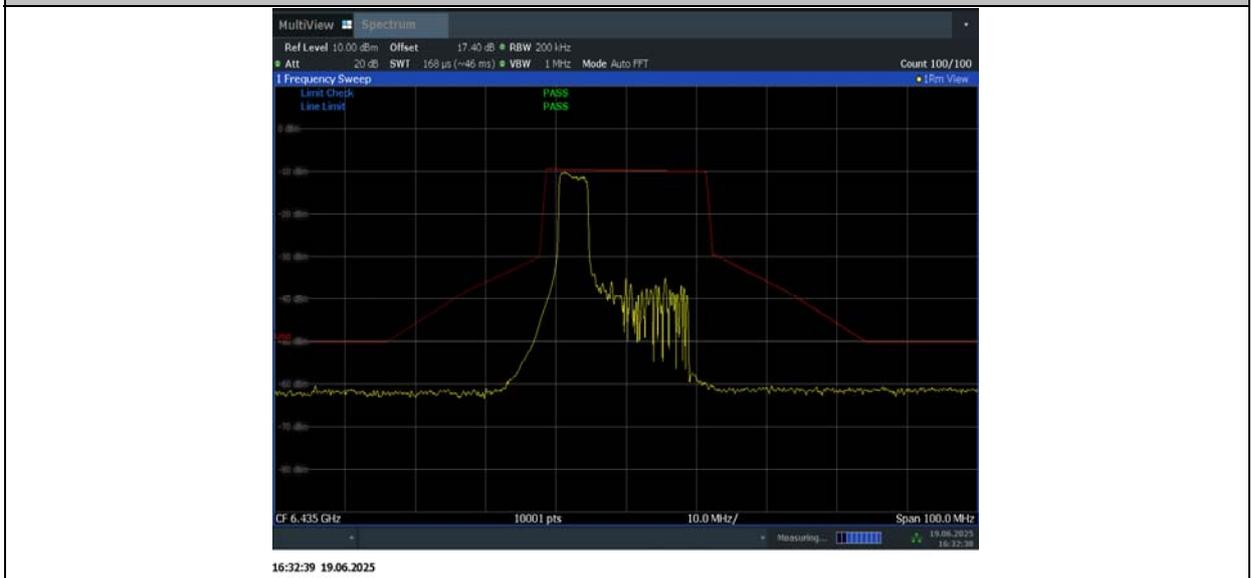
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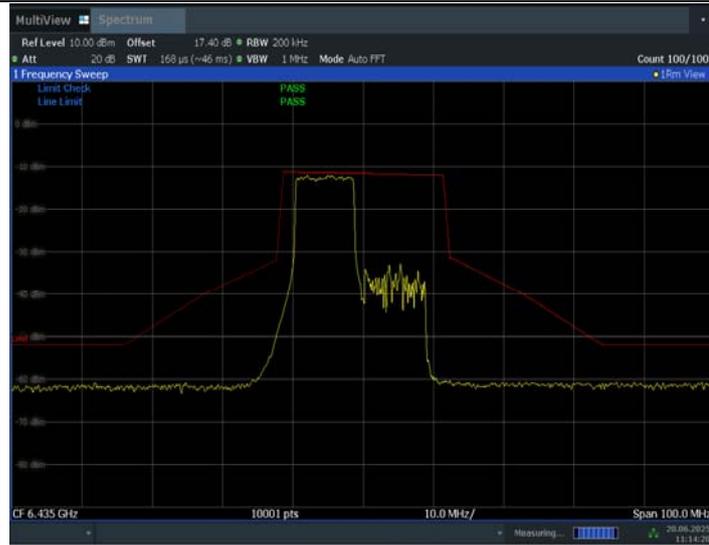
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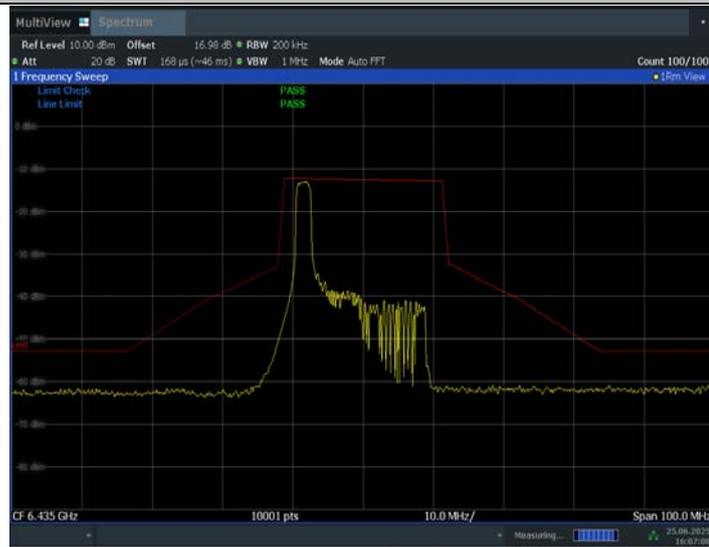


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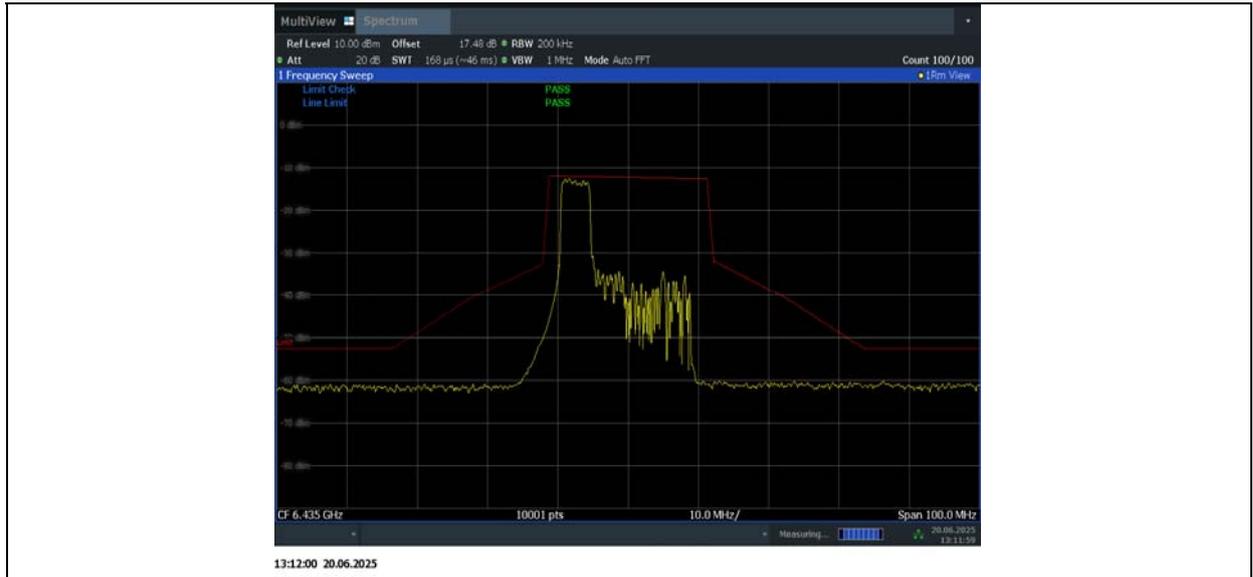
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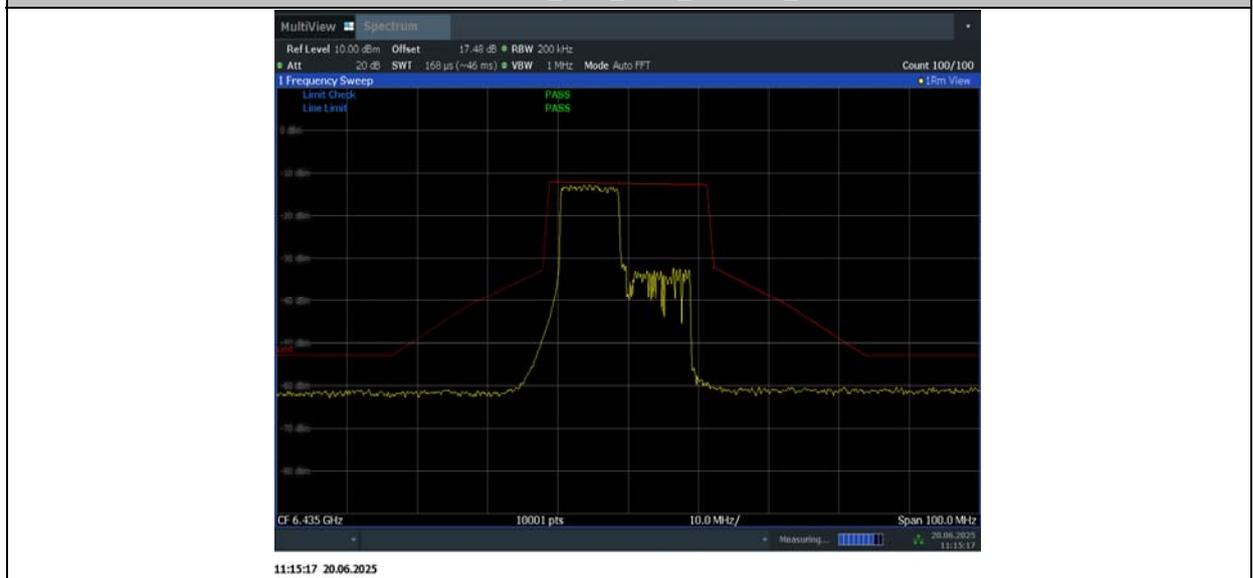


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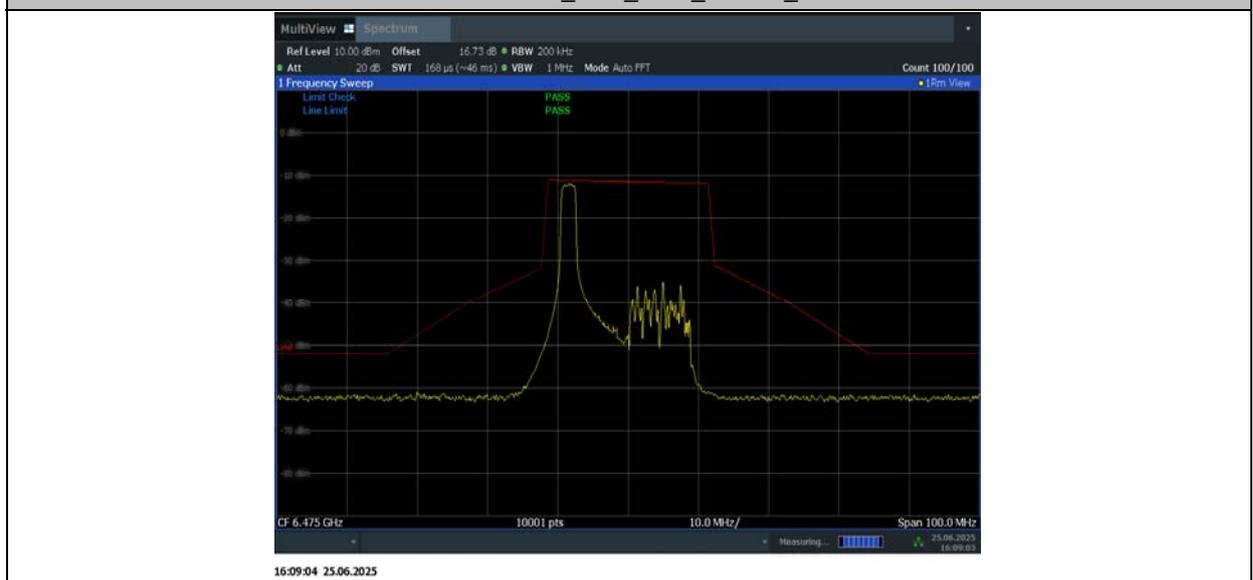
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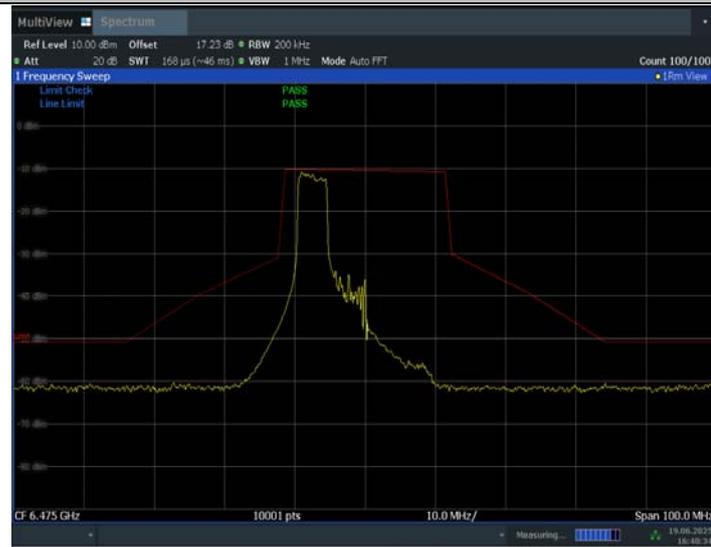
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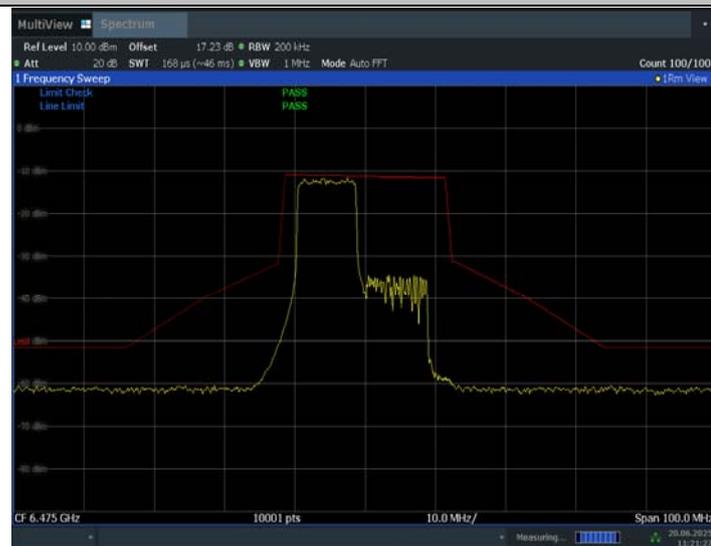


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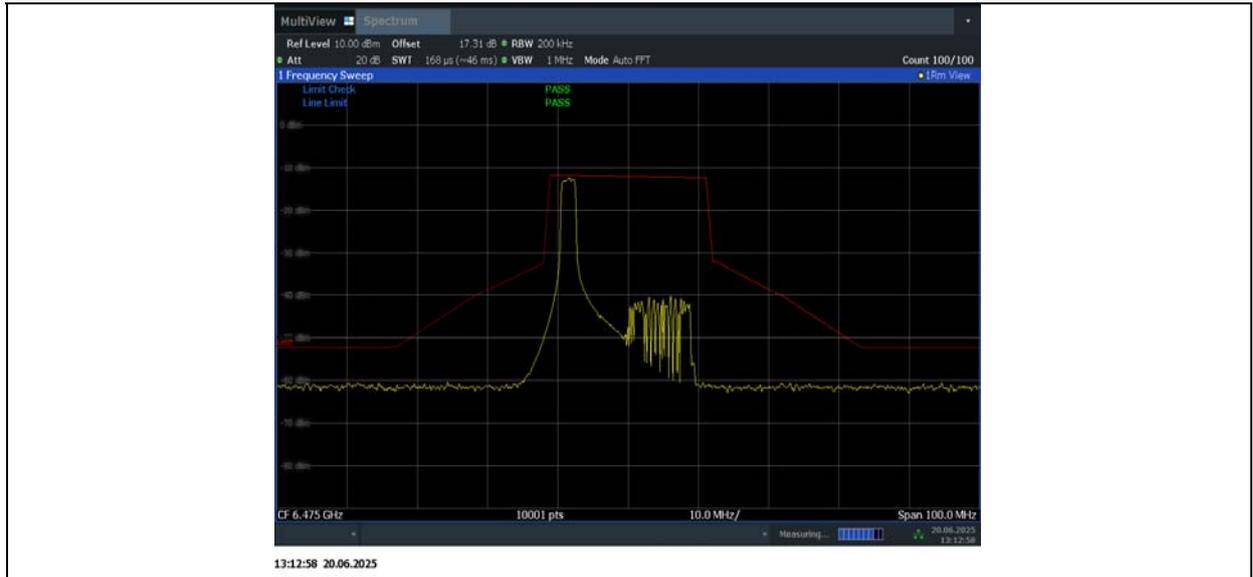
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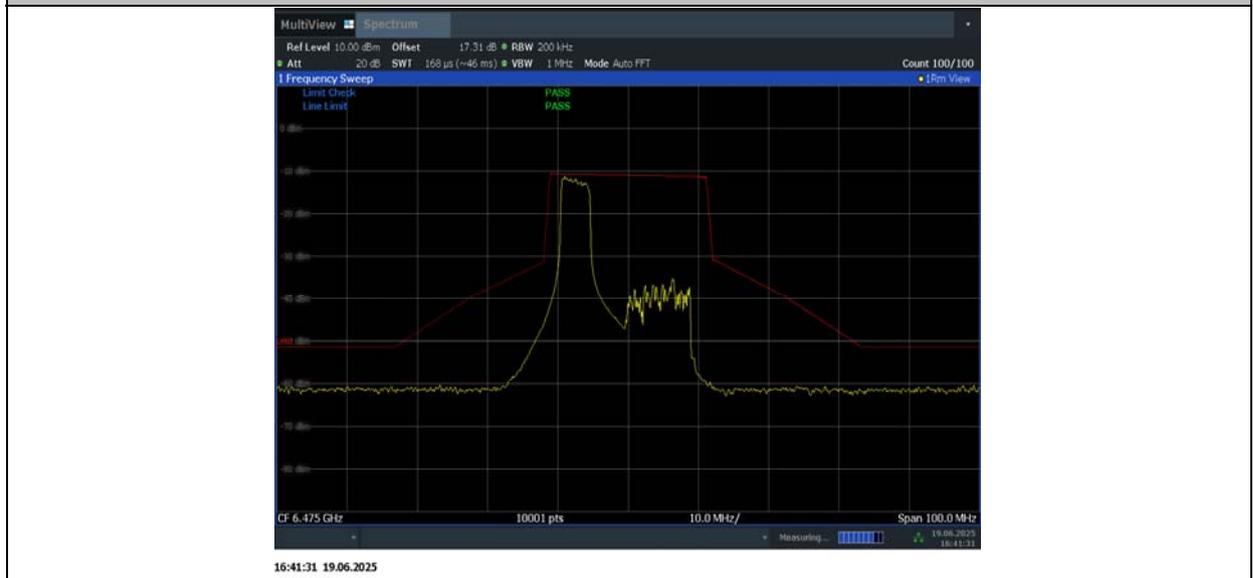


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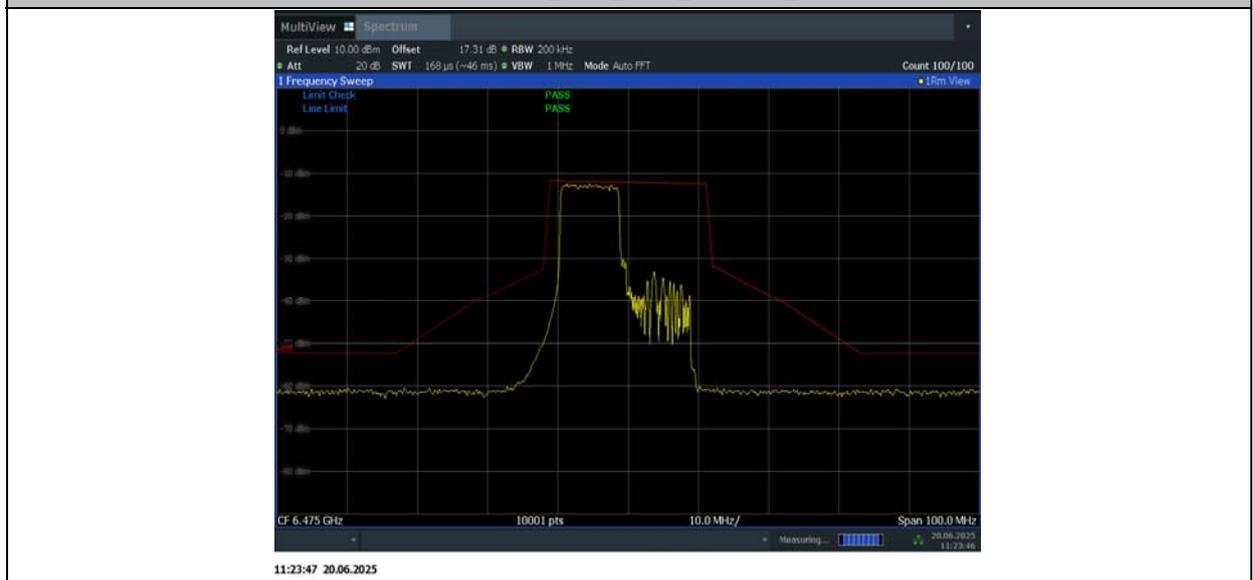
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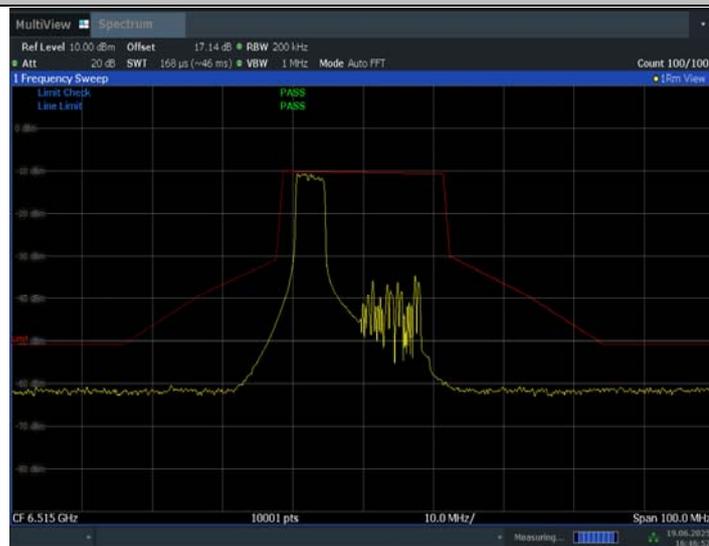


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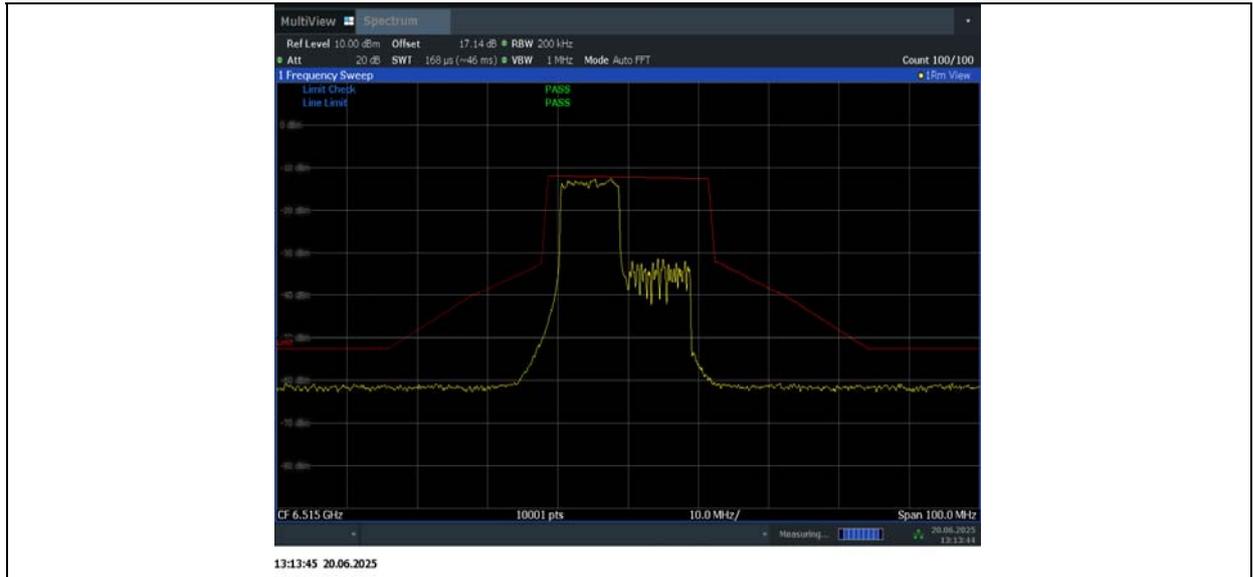
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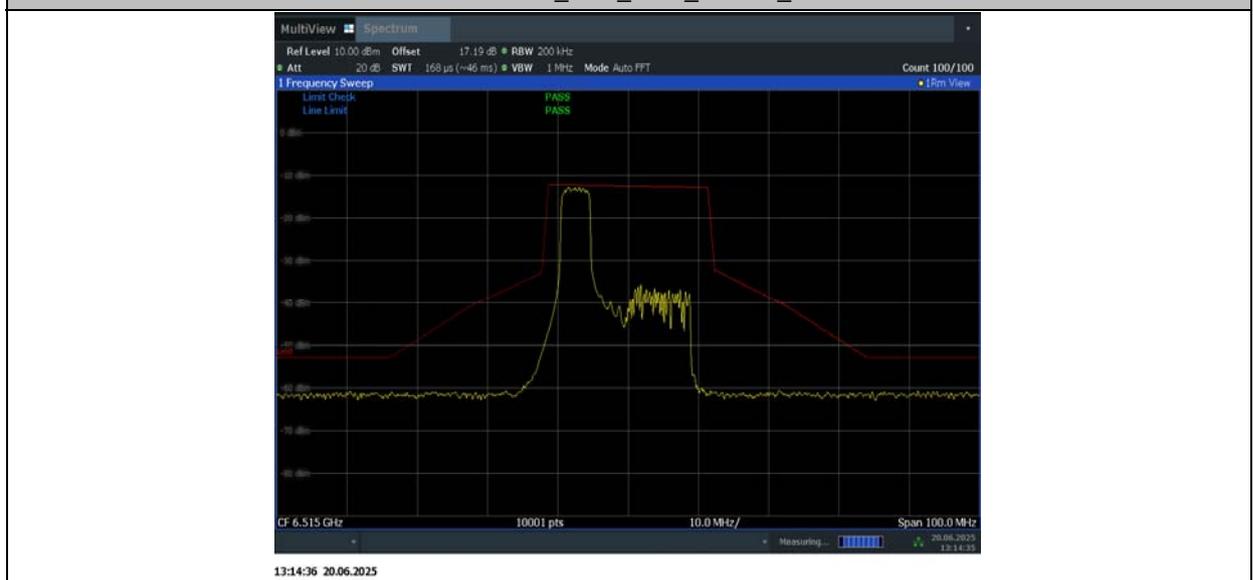
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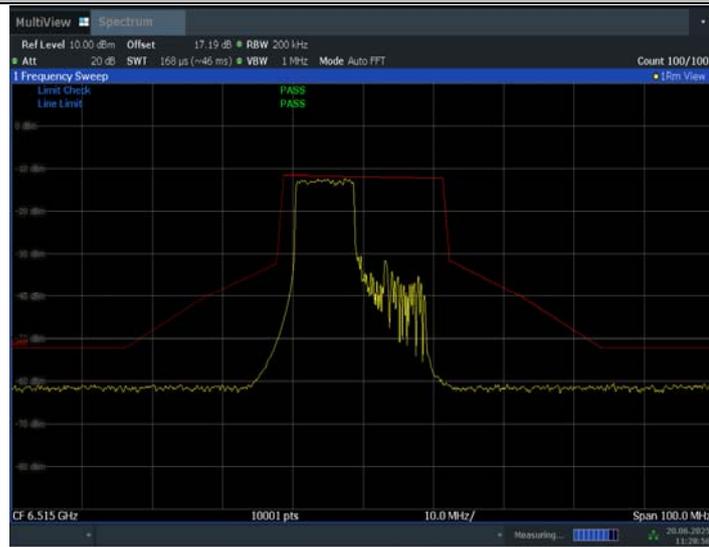
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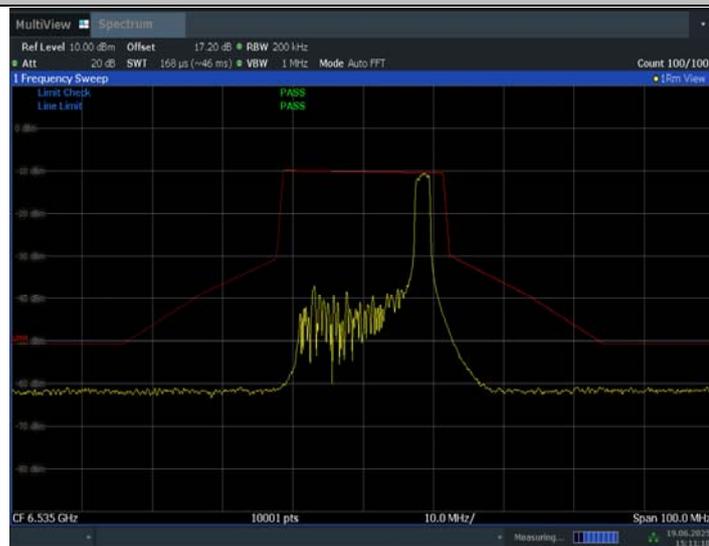


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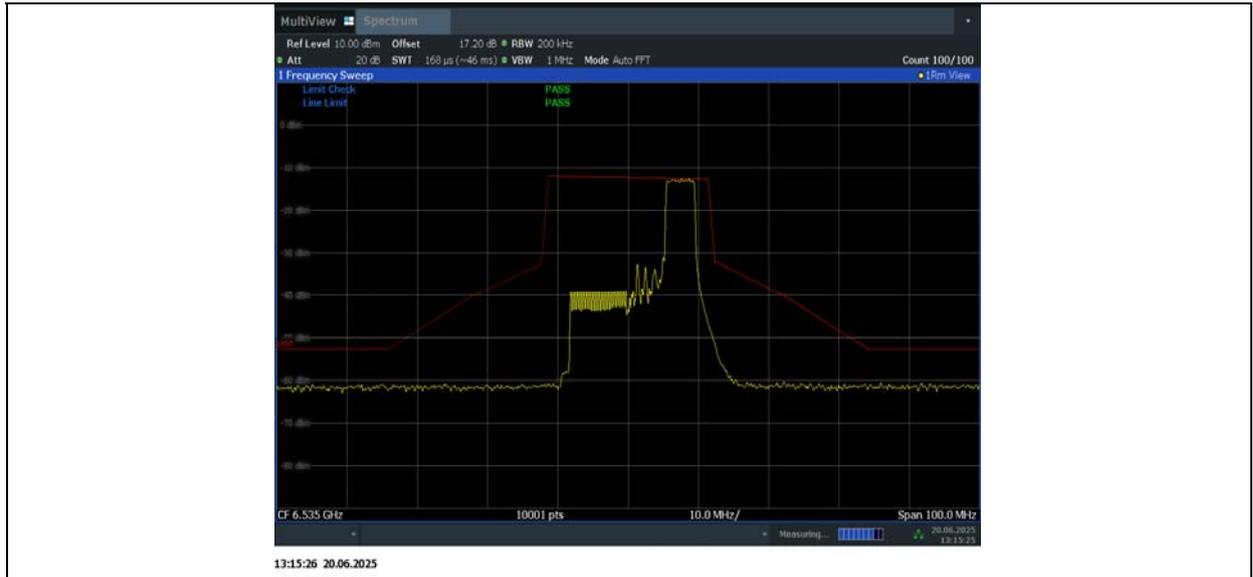
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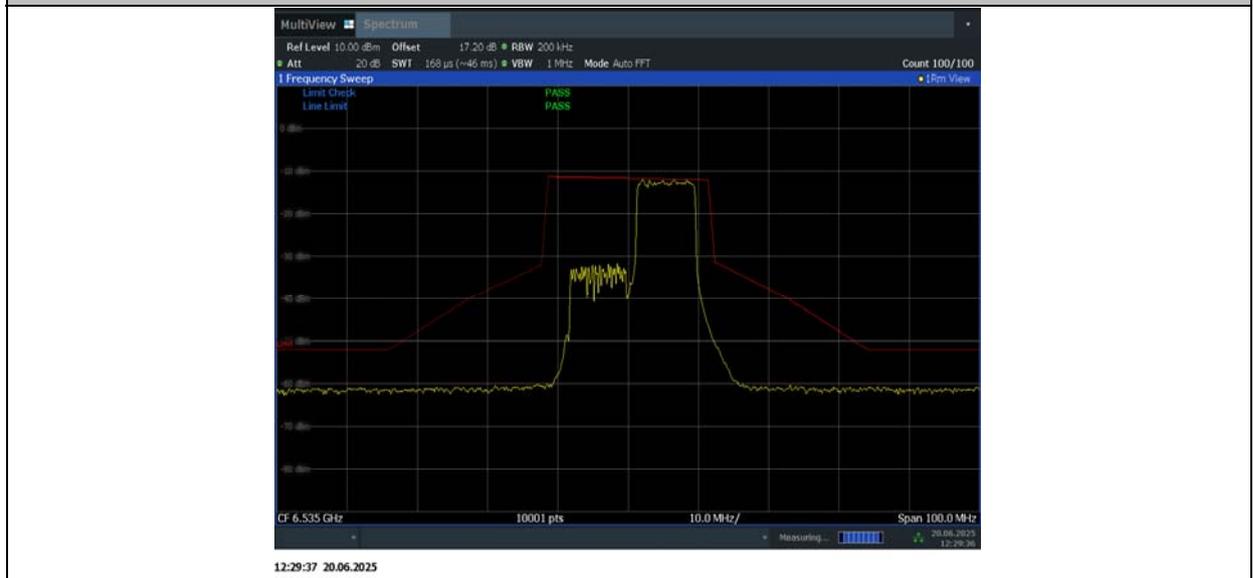


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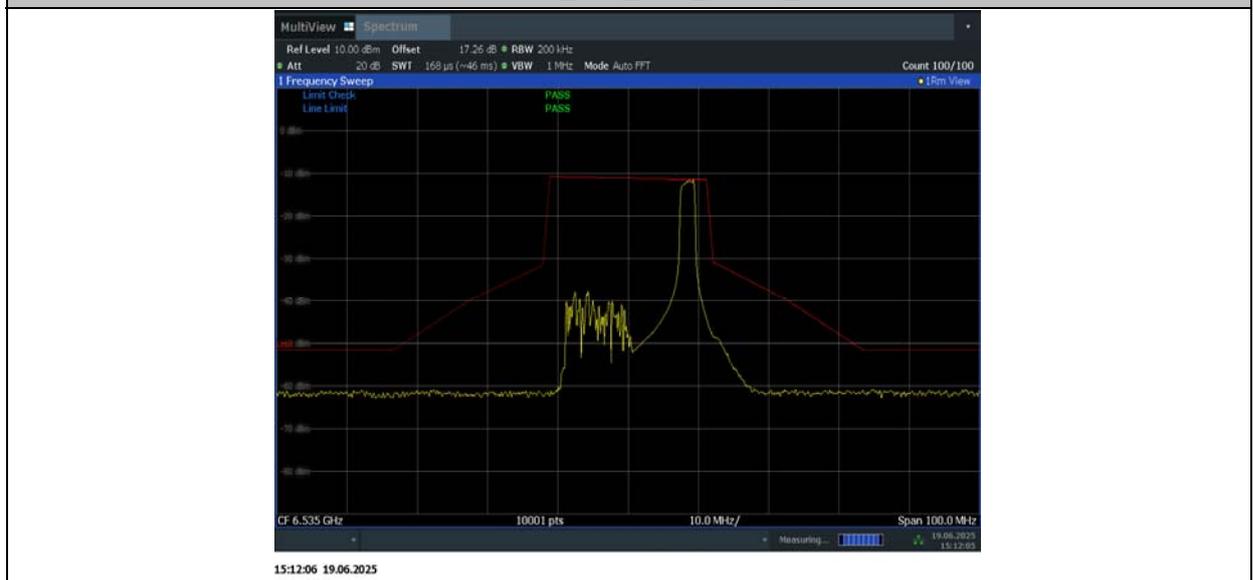
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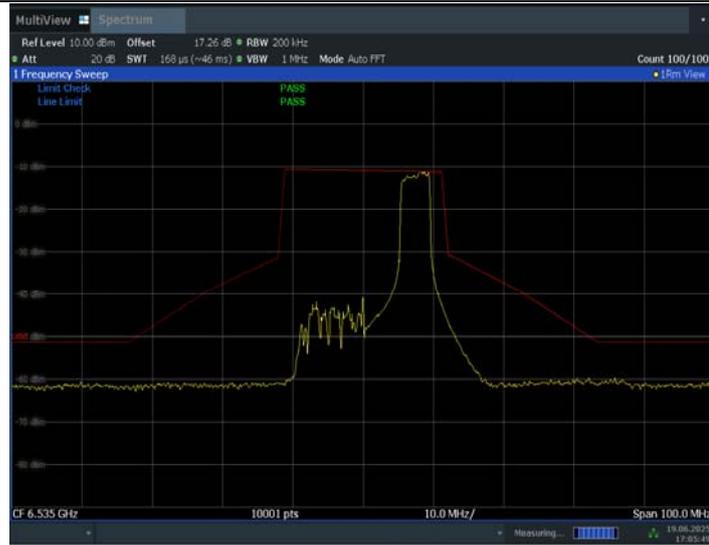
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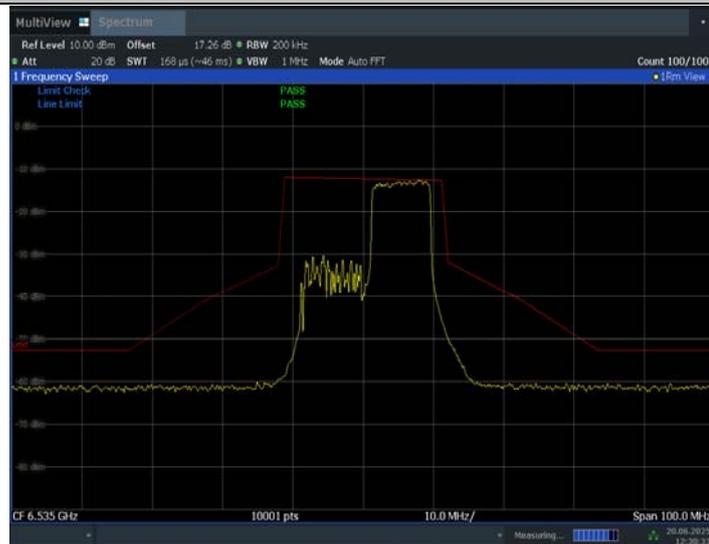
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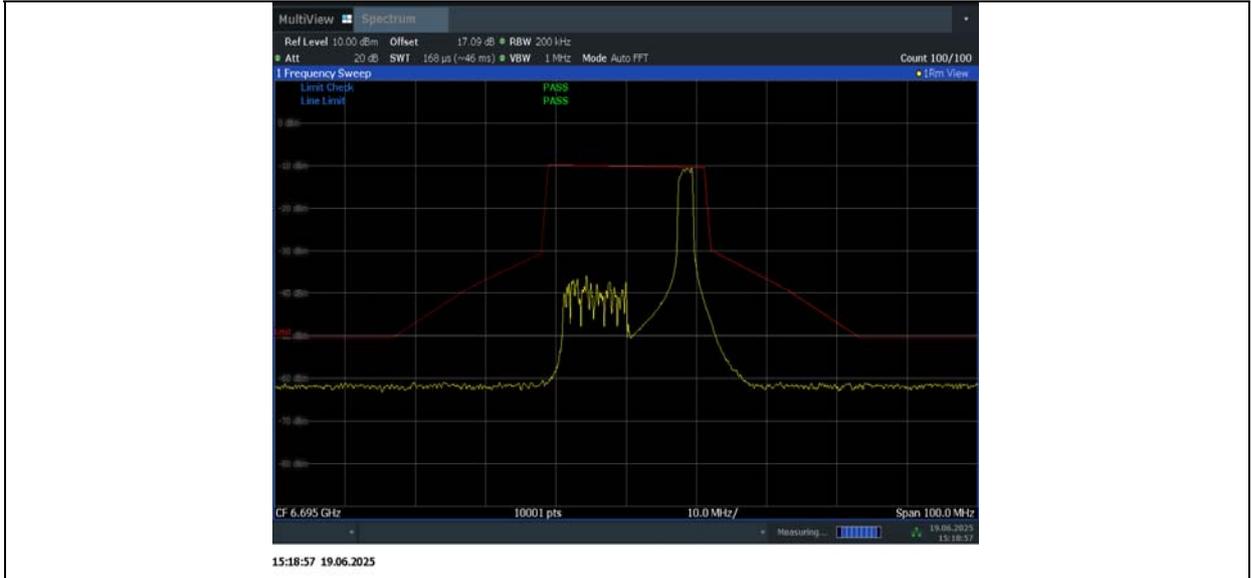
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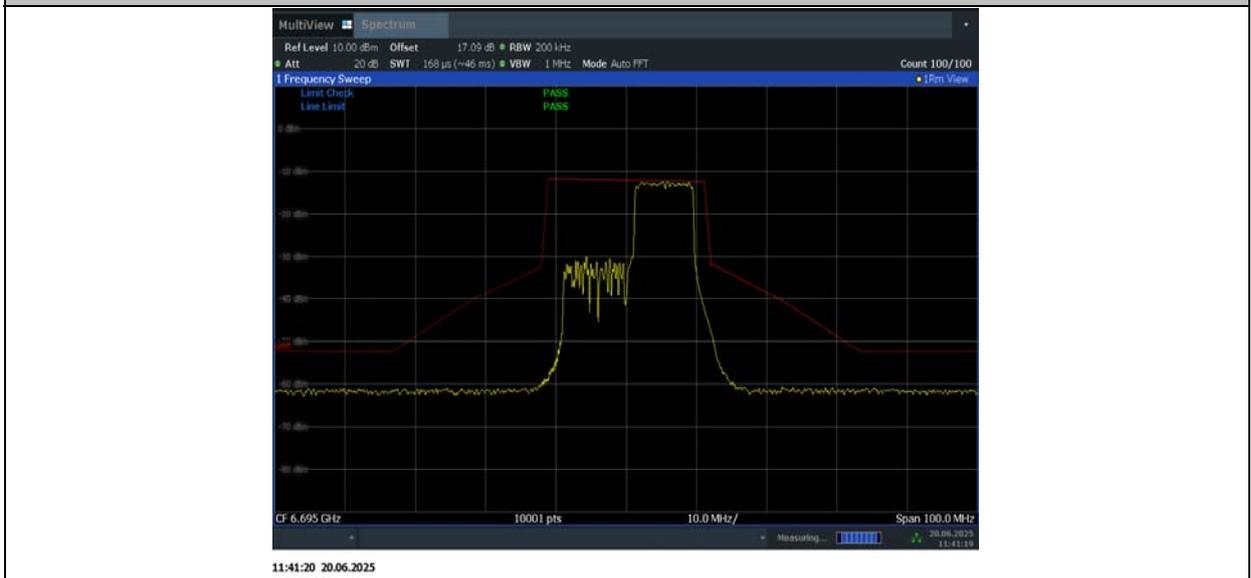
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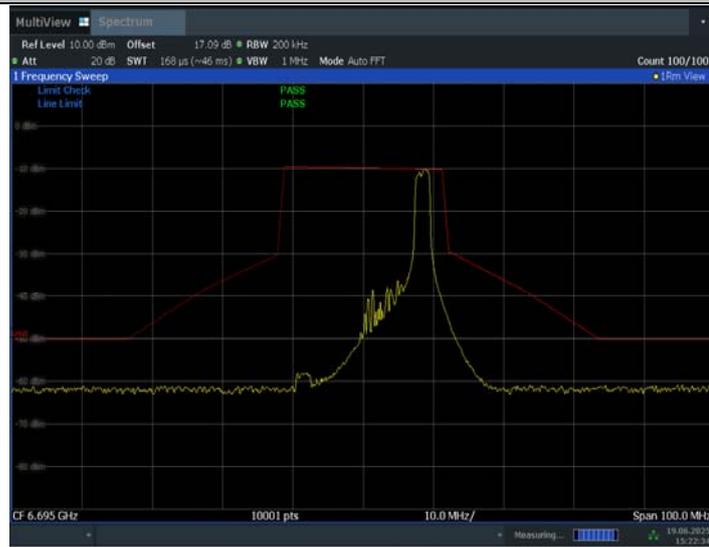
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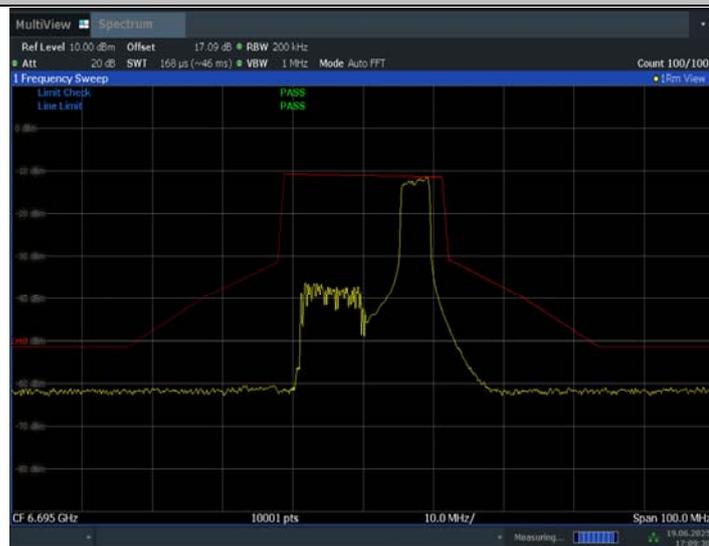
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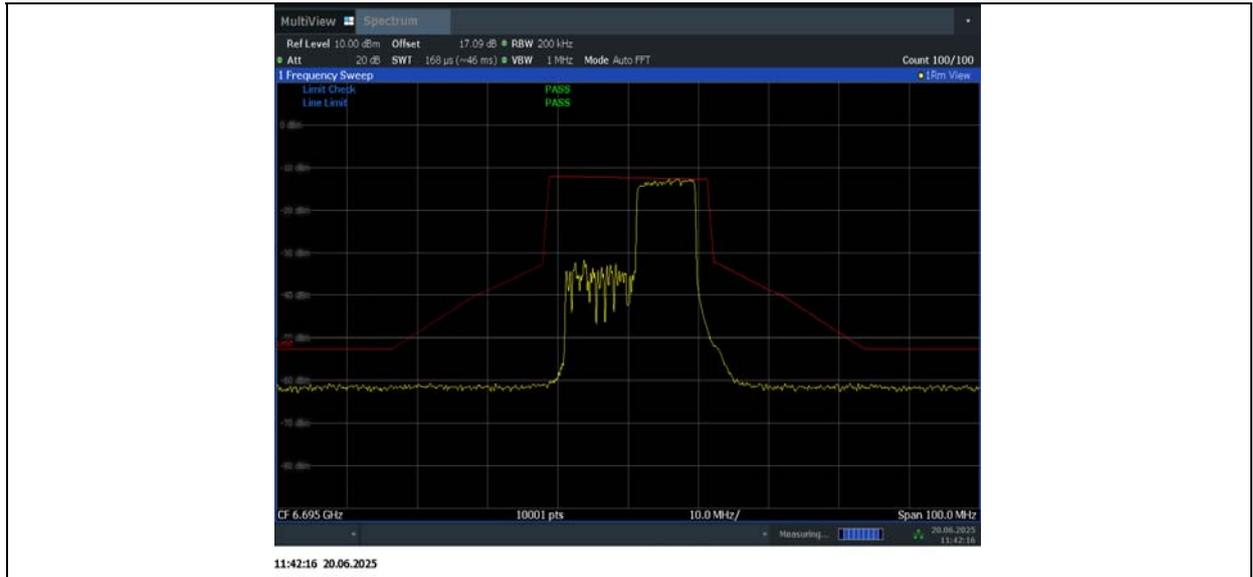
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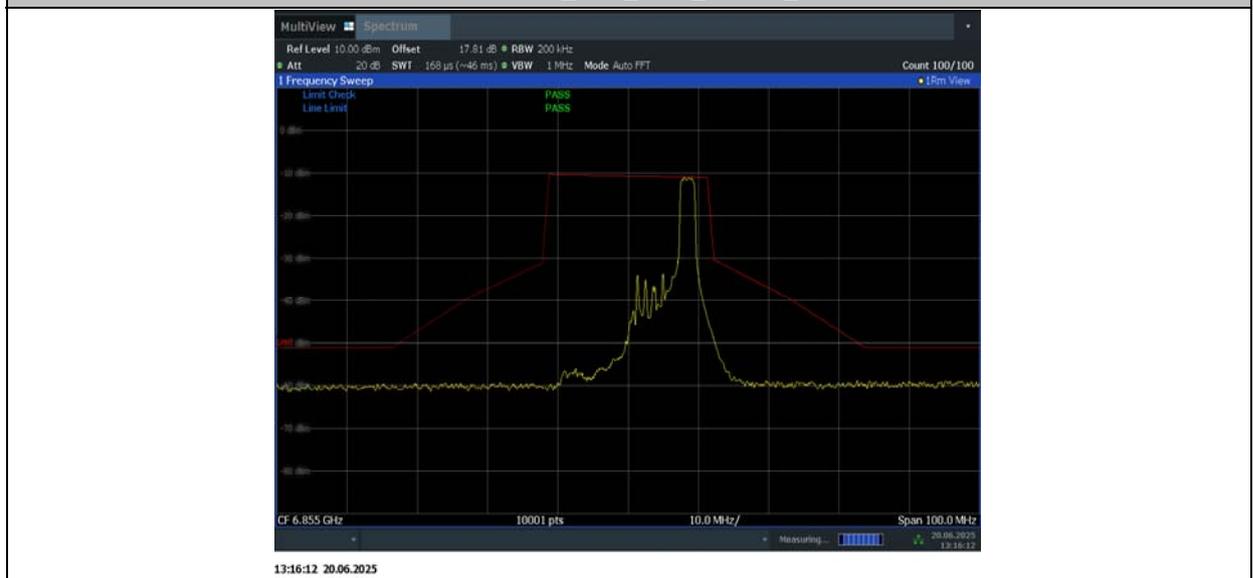
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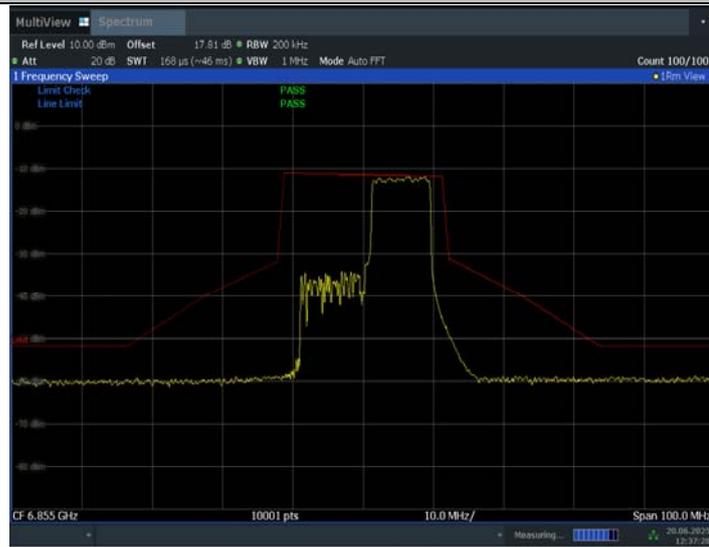
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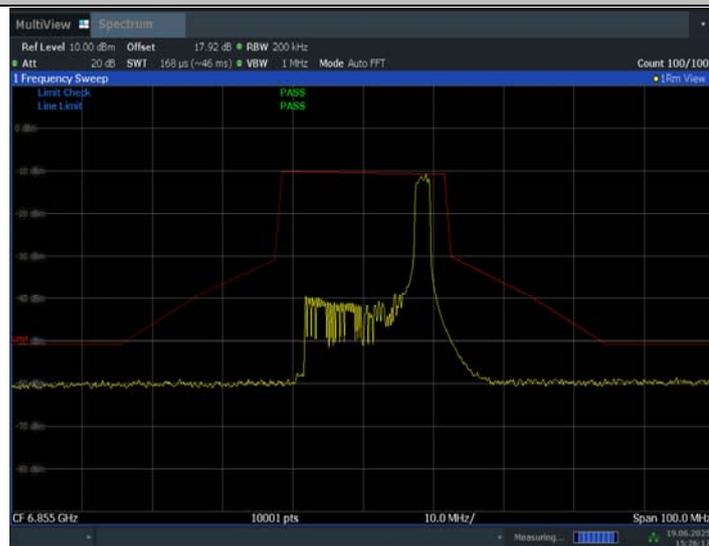


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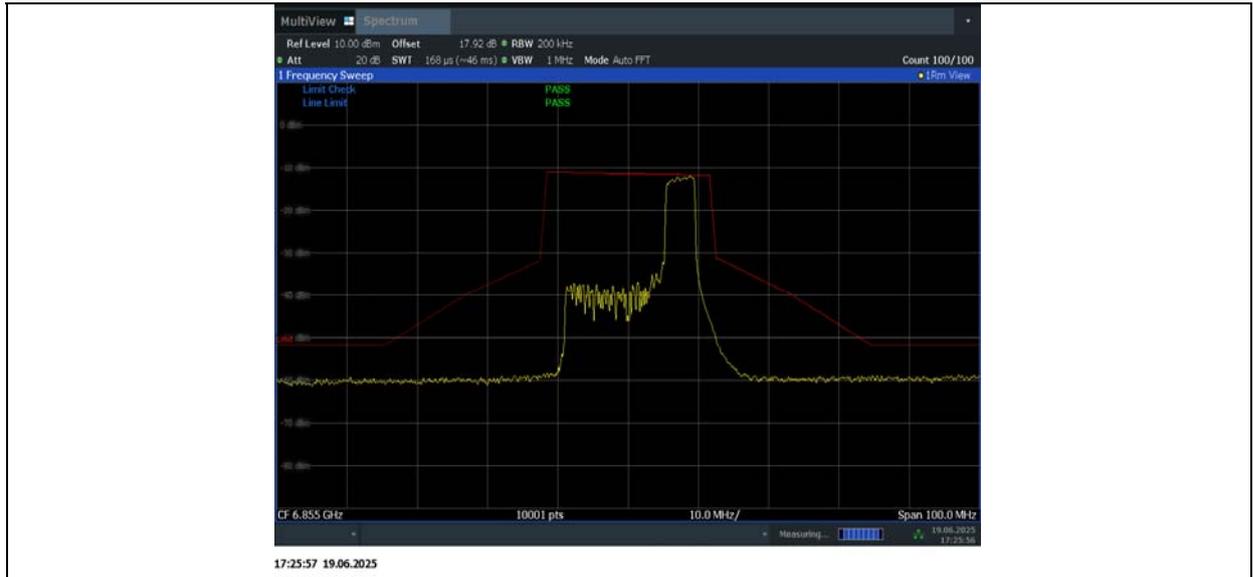
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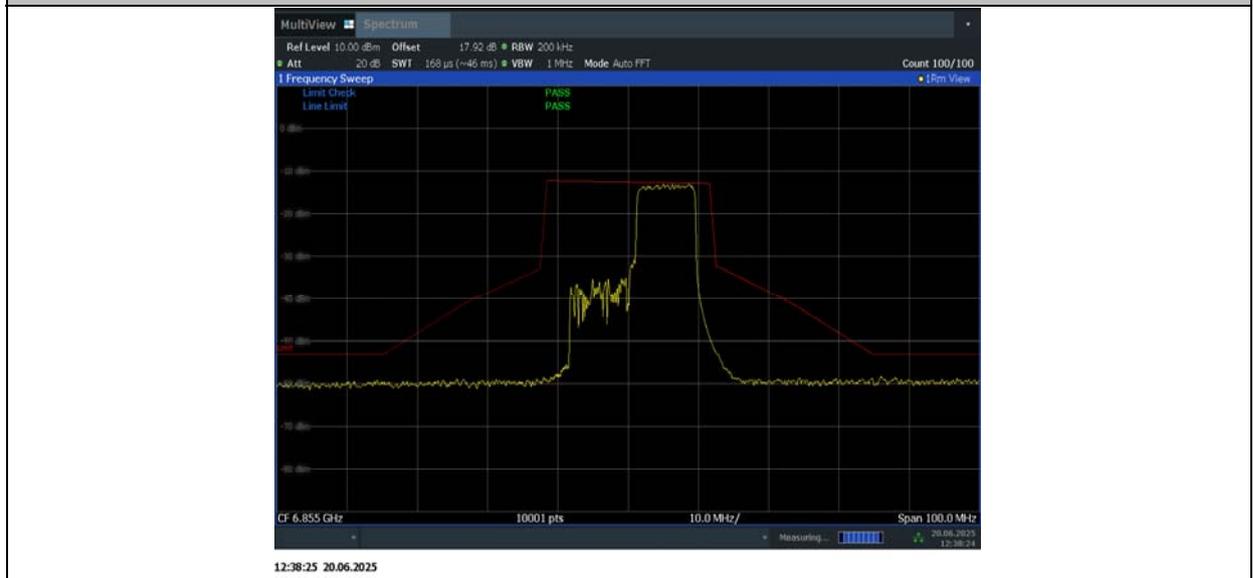


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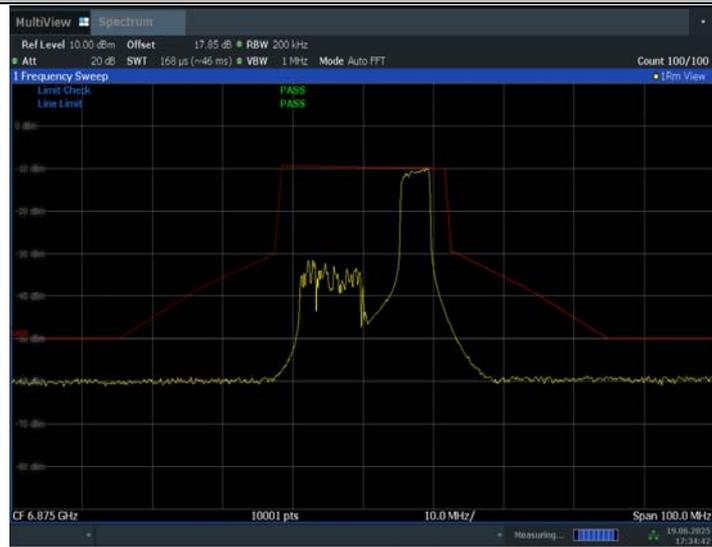
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11AX20MIMO\_Ant6\_6875\_26Tone\_RU8

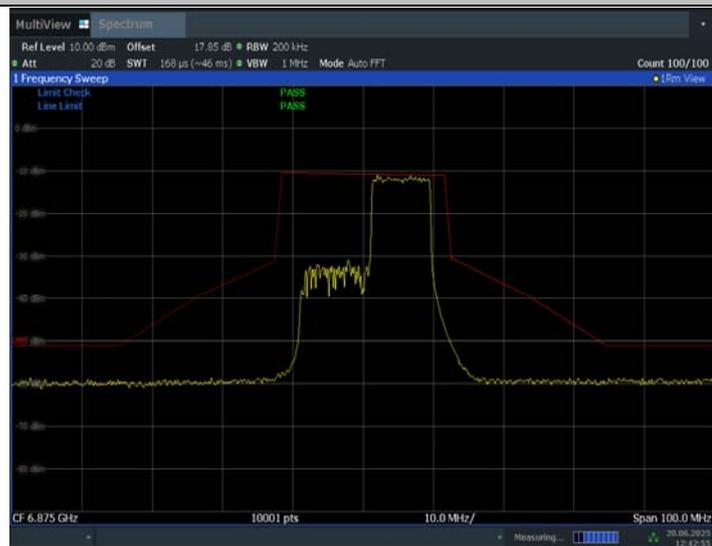


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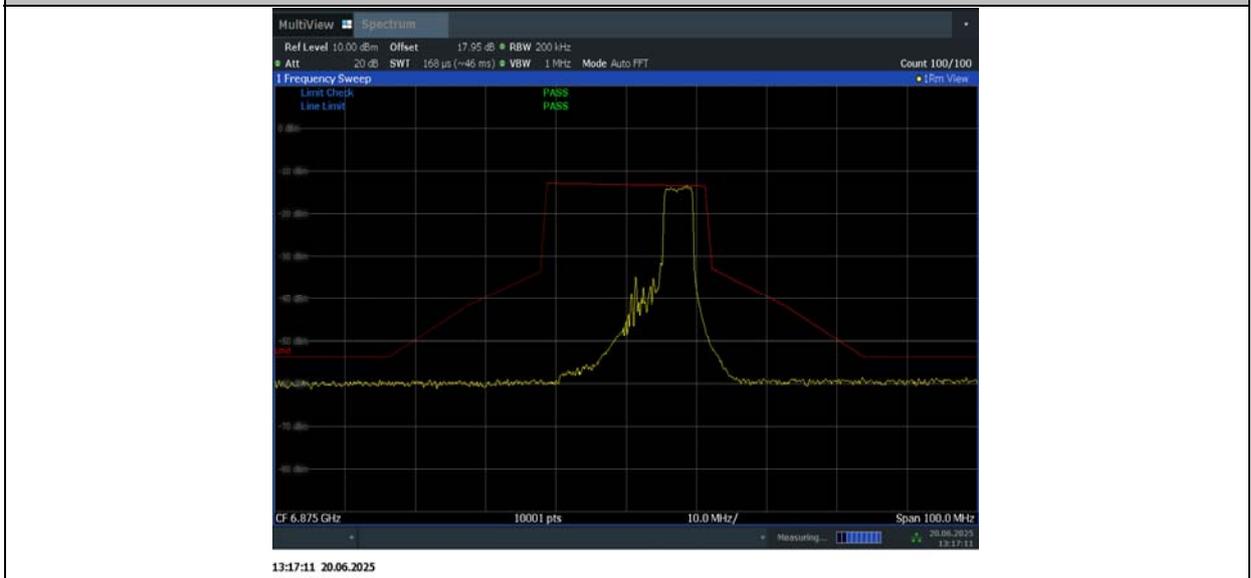


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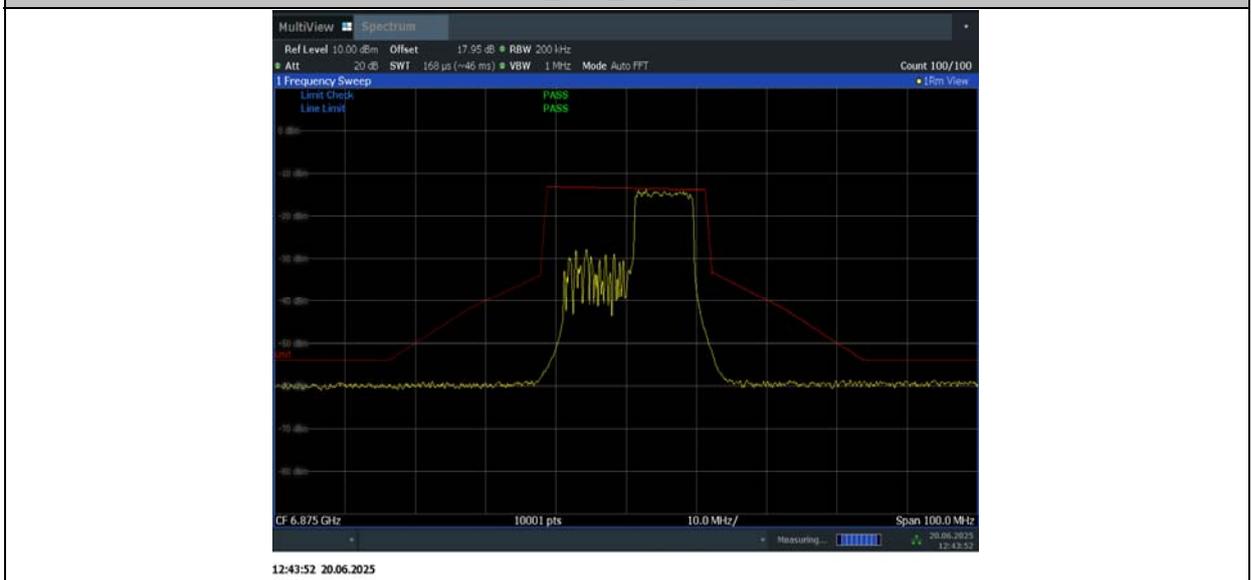
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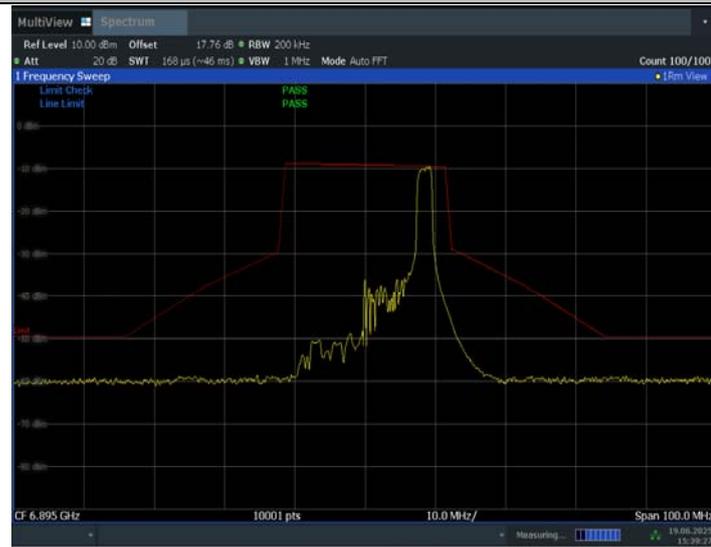
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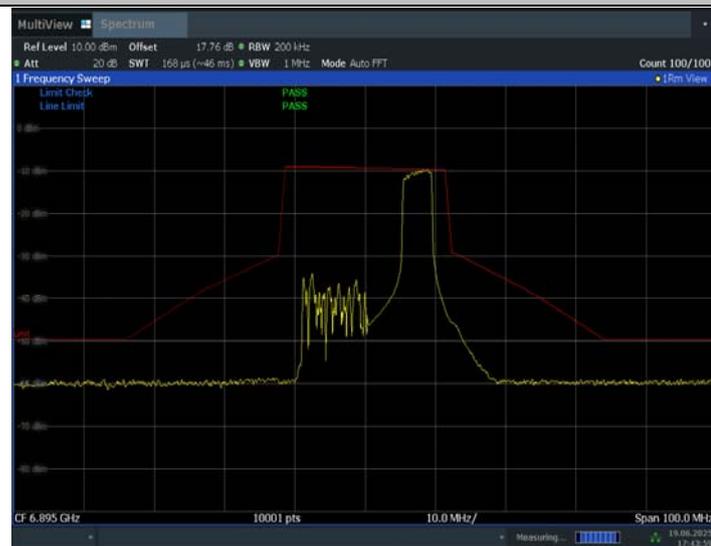


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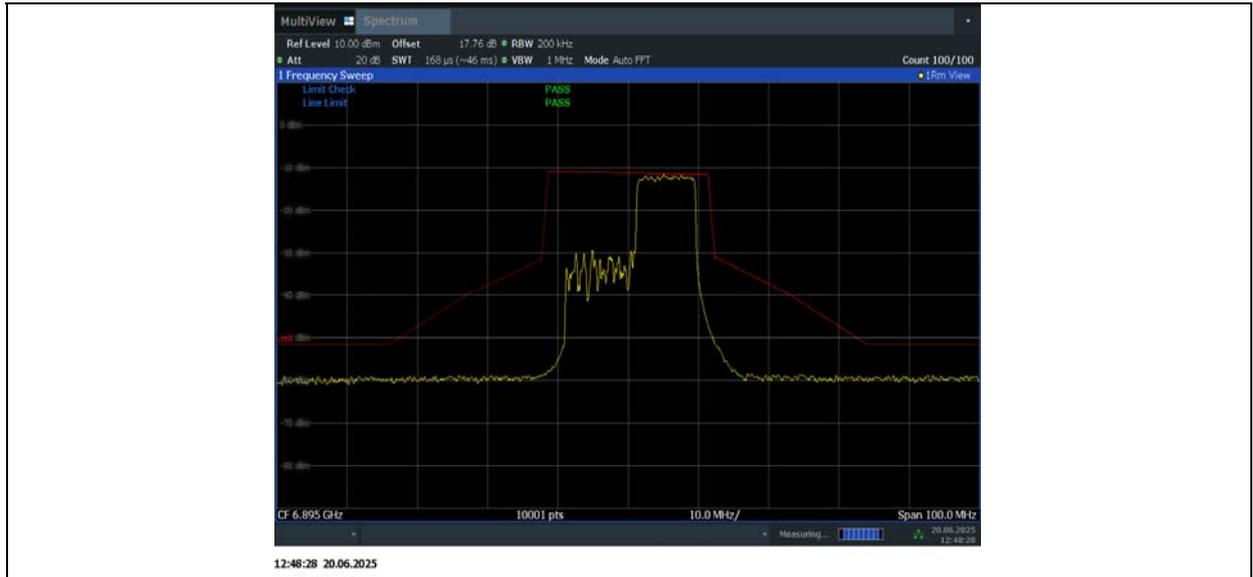
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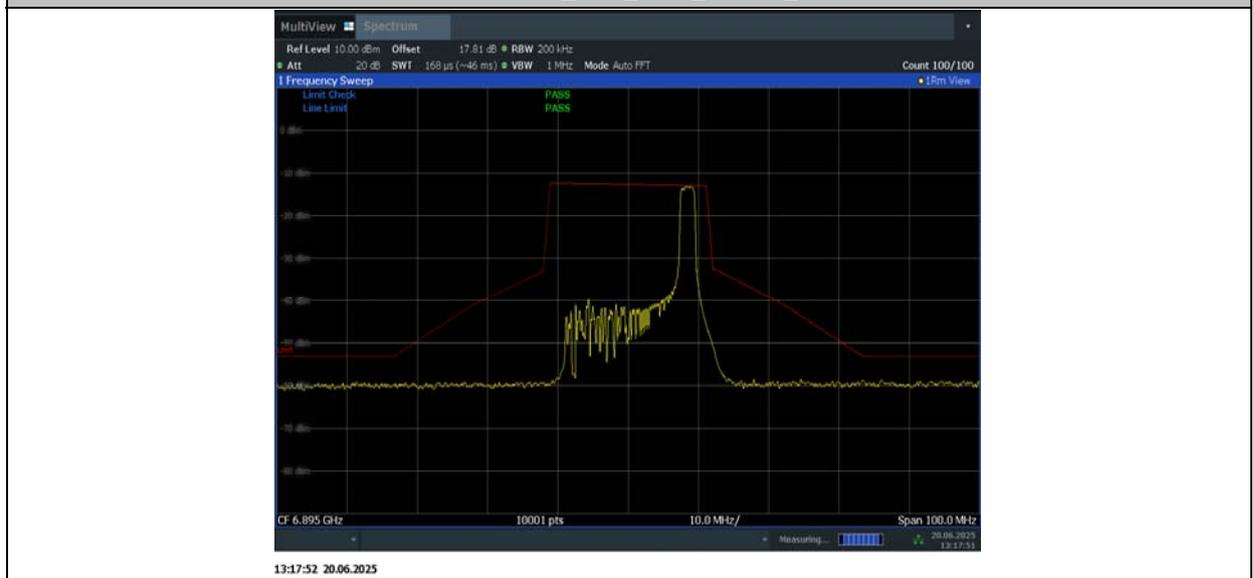


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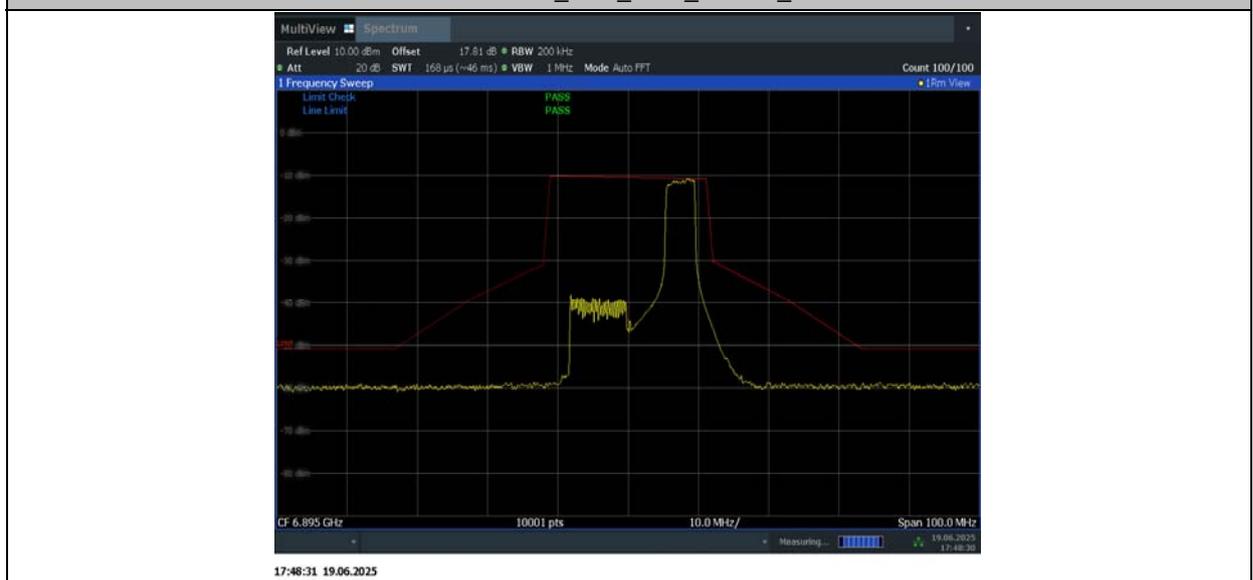
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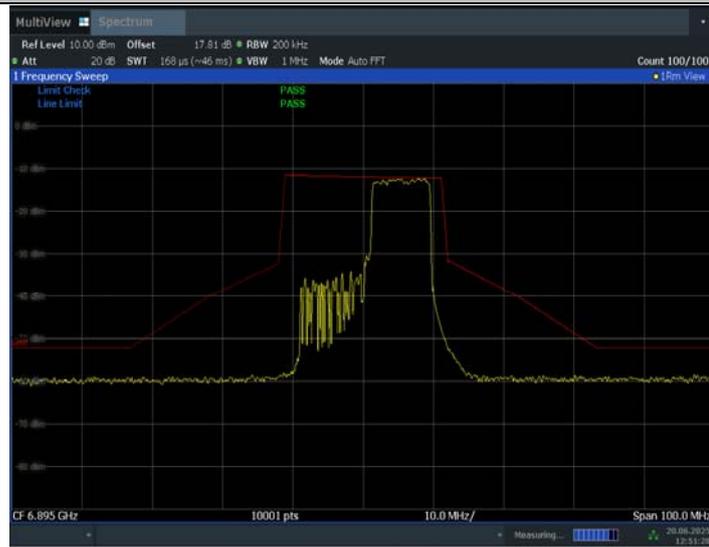
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11AX20MIMO\_Ant9\_6895\_52Tone\_RU40

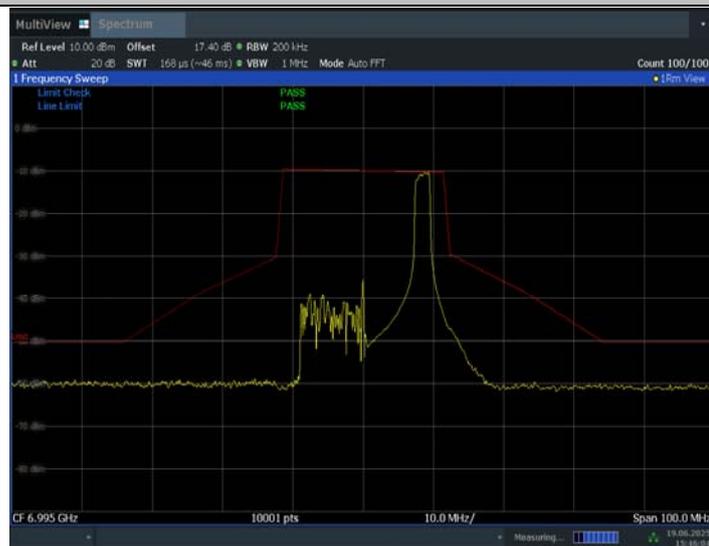


11AX20MIMO\_Ant9\_6895\_106Tone\_RU54



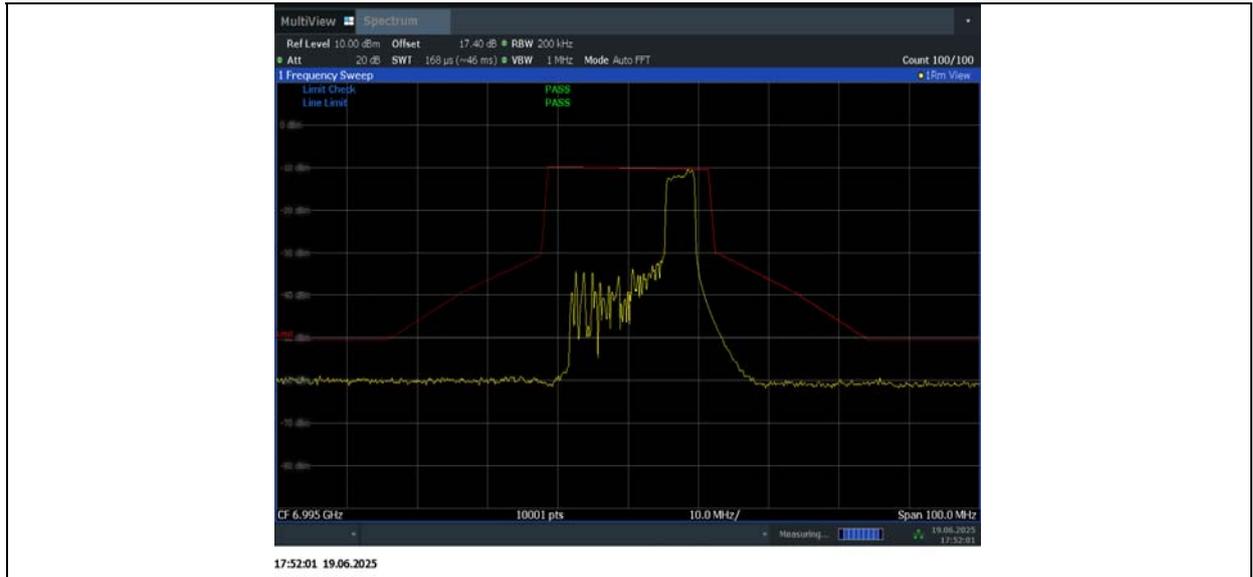
12:51:28 20.06.2025

11AX20MIMO\_Ant6\_6995\_26Tone\_RU8

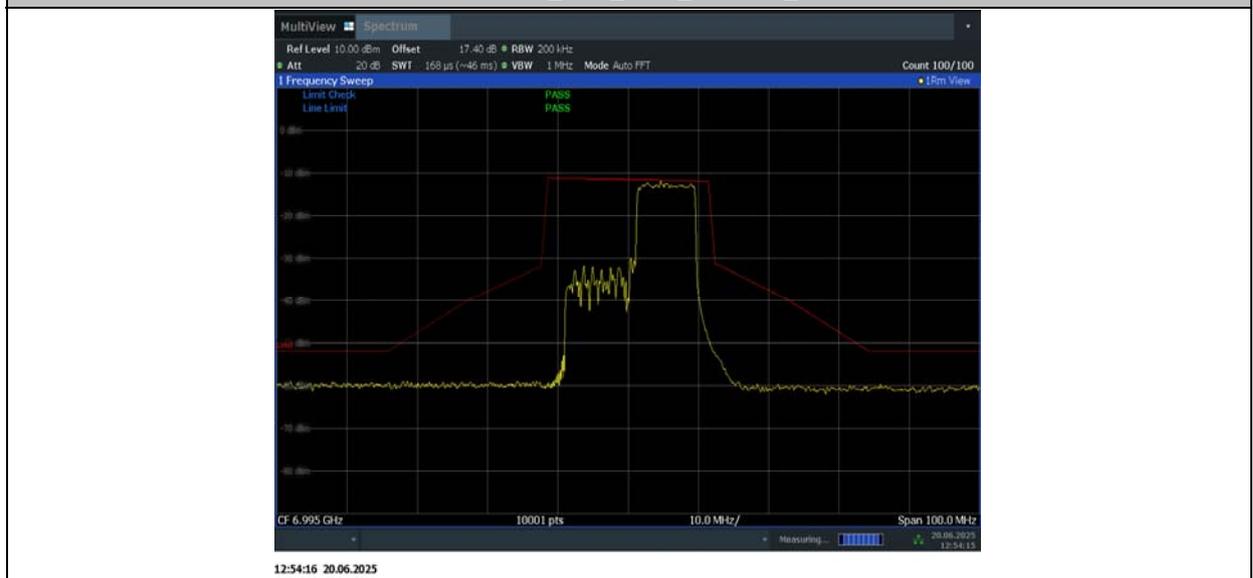


15:46:05 19.06.2025

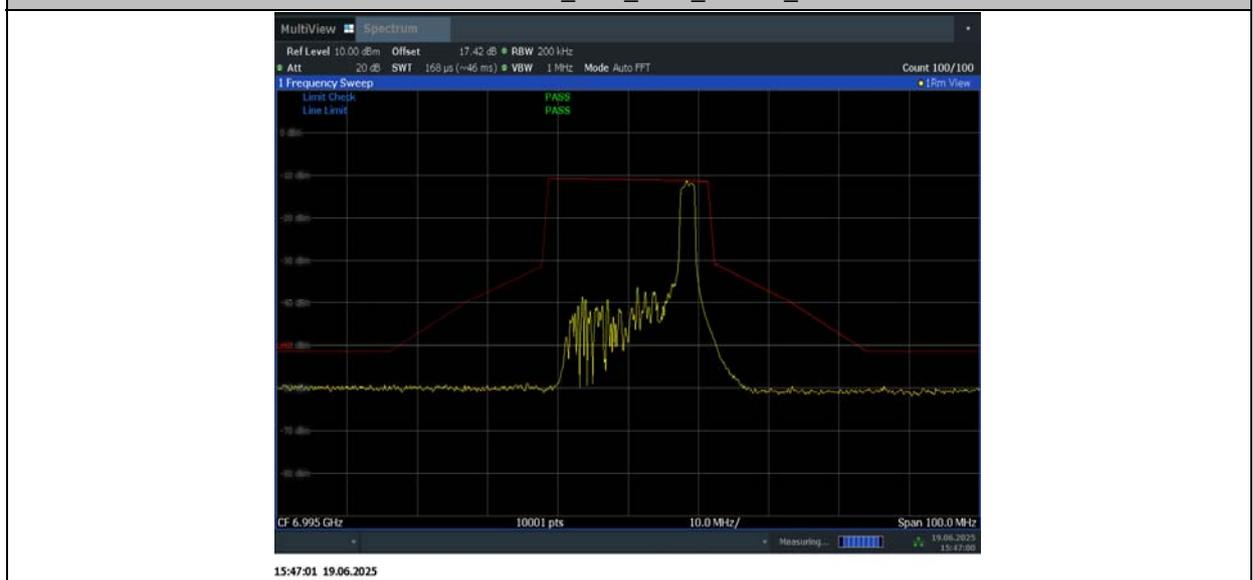
11AX20MIMO\_Ant6\_6995\_52Tone\_RU40



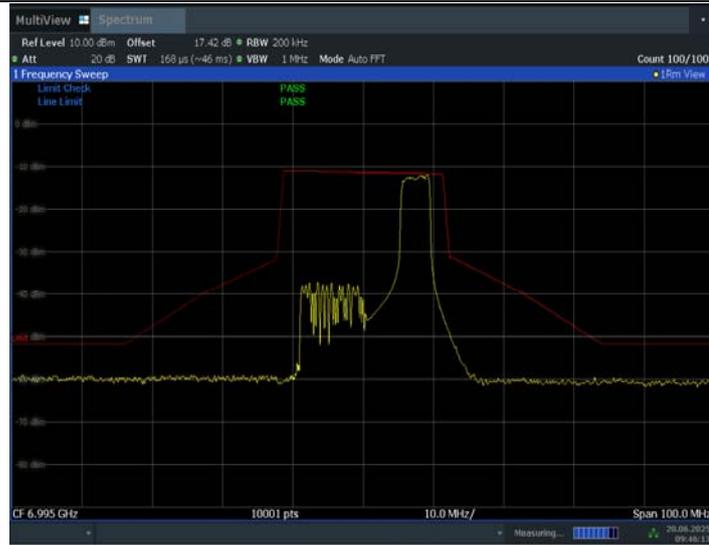
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11AX20MIMO\_Ant9\_6995\_26Tone\_RU8

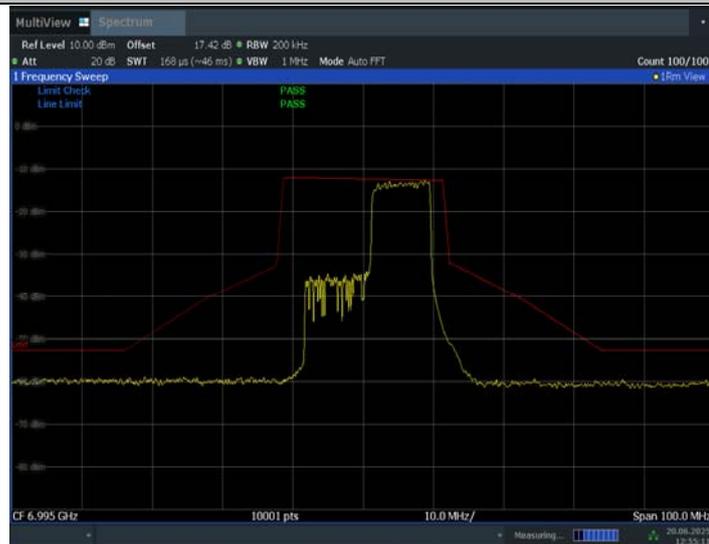


11AX20MIMO\_Ant9\_6995\_52Tone\_RU40



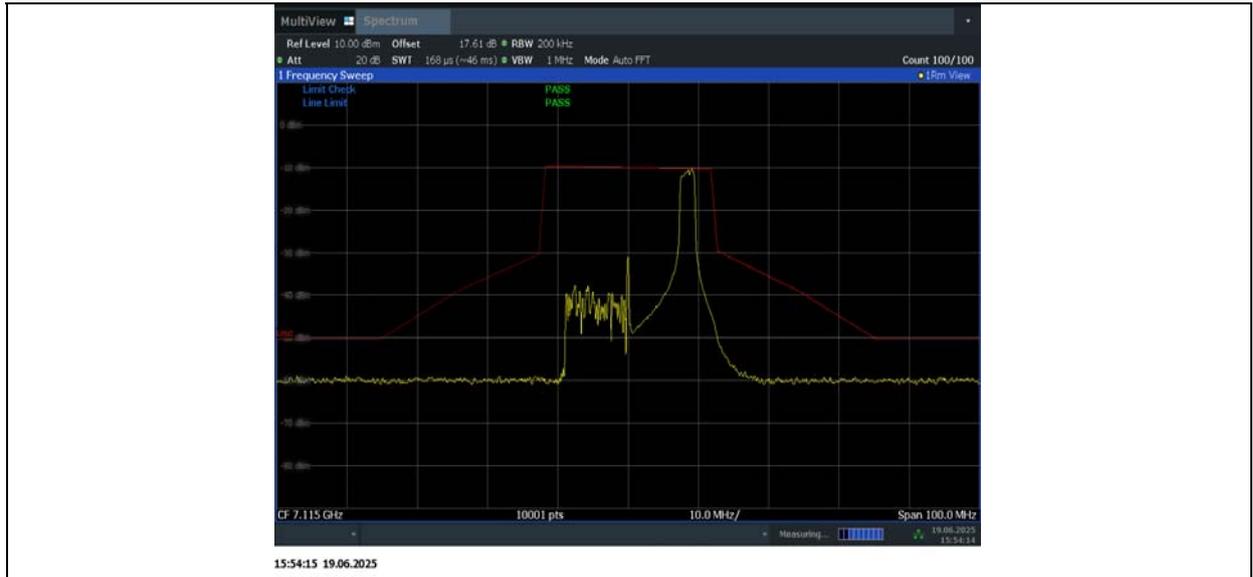
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11AX20MIMO\_Ant9\_6995\_106Tone\_RU54

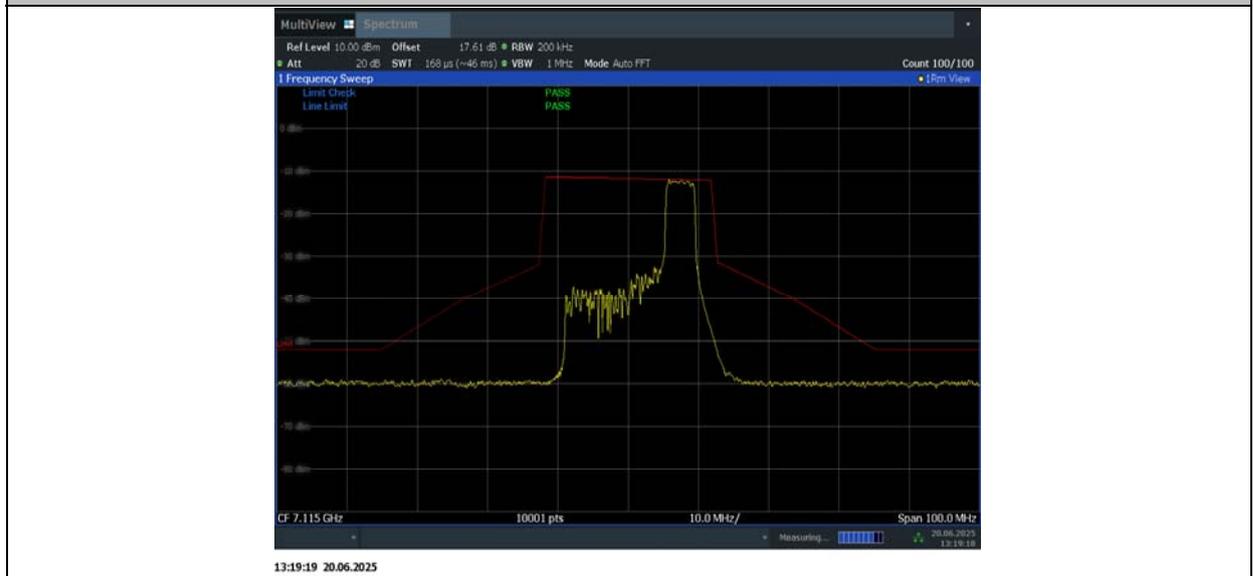


12:55:12 20.06.2025

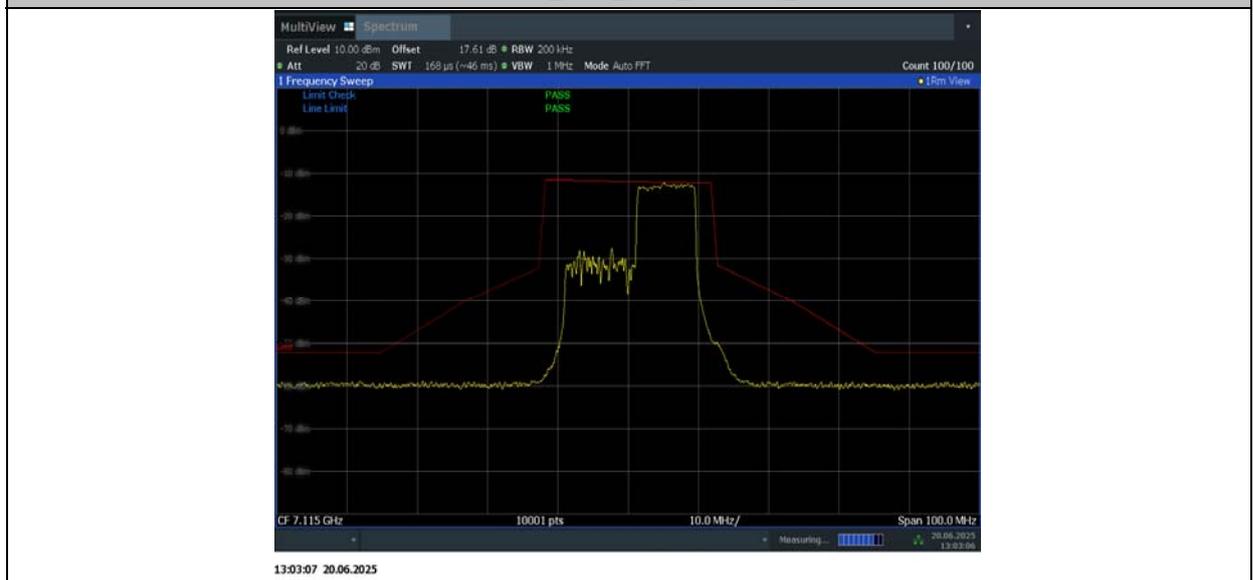
11AX20MIMO\_Ant6\_7115\_26Tone\_RU8



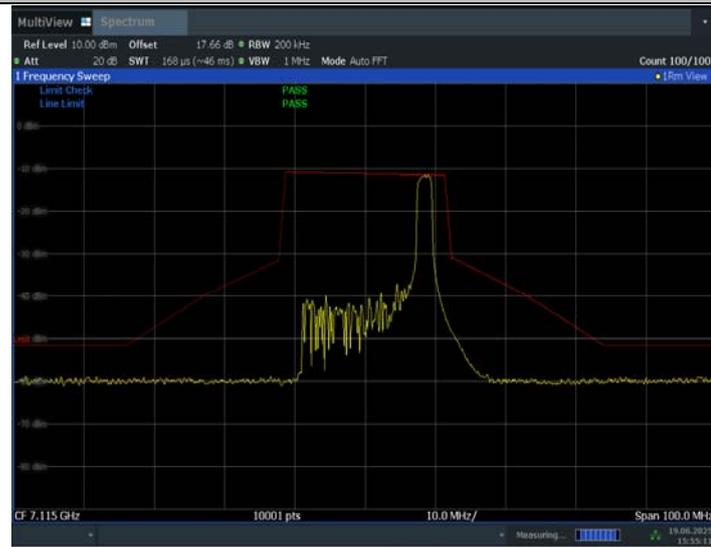
11AX20MIMO\_Ant6\_7115\_52Tone\_RU40



11AX20MIMO\_Ant6\_7115\_106Tone\_RU54

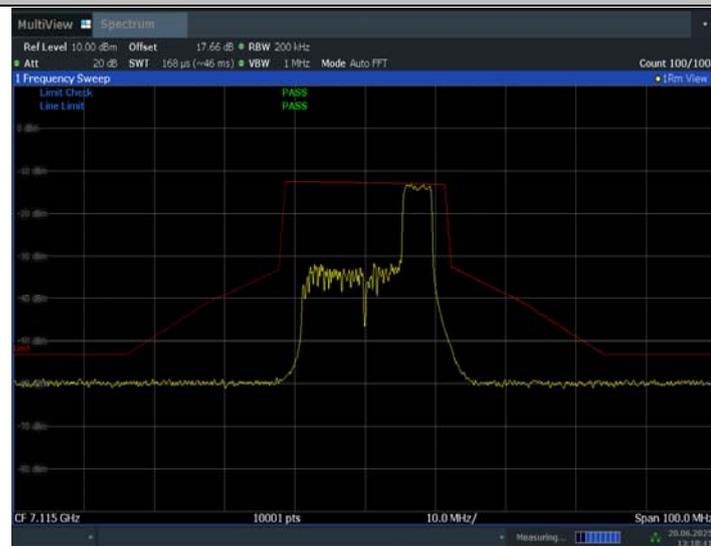


## 11AX20MIMO\_Ant9\_7115\_26Tone\_RU8



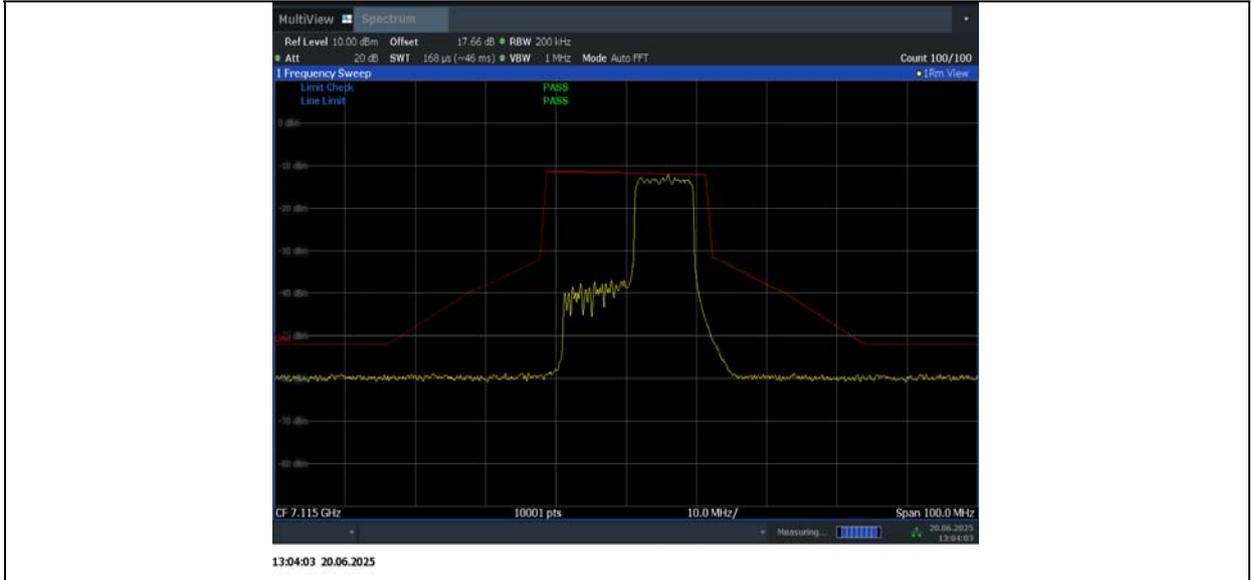
15:55:12 19.06.2025

## 11AX20MIMO\_Ant9\_7115\_52Tone\_RU40



13:18:41 20.06.2025

## 11AX20MIMO\_Ant9\_7115\_106Tone\_RU54



**Conclusion: PASS**

## A.8. Radiated Unwanted Emission

### Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.407	-27 dBm/MHz

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)).

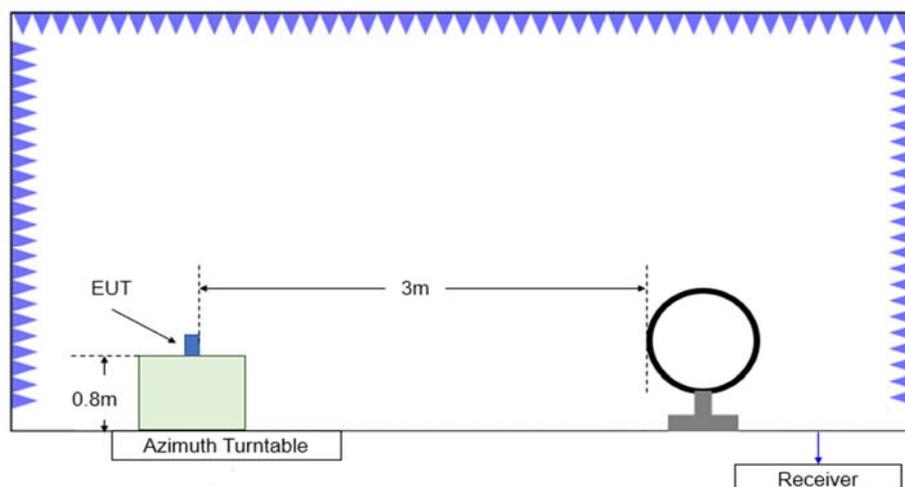
### Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)	Measurement distance(m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

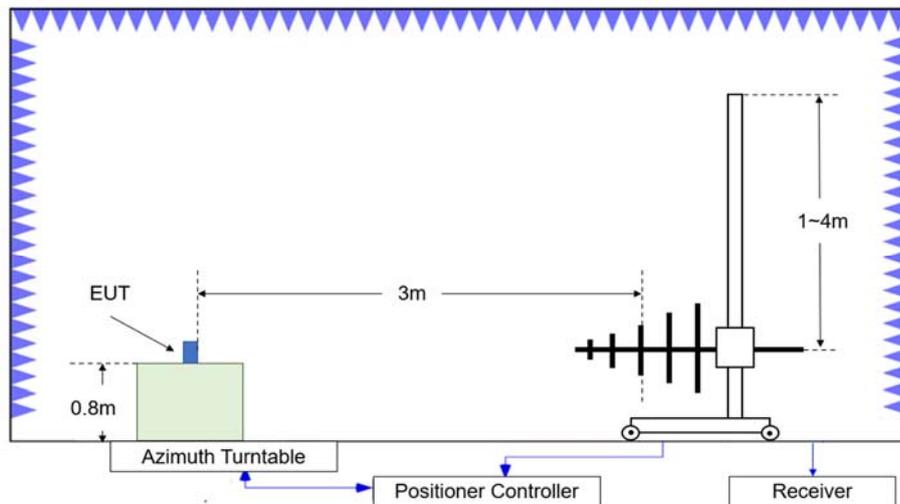
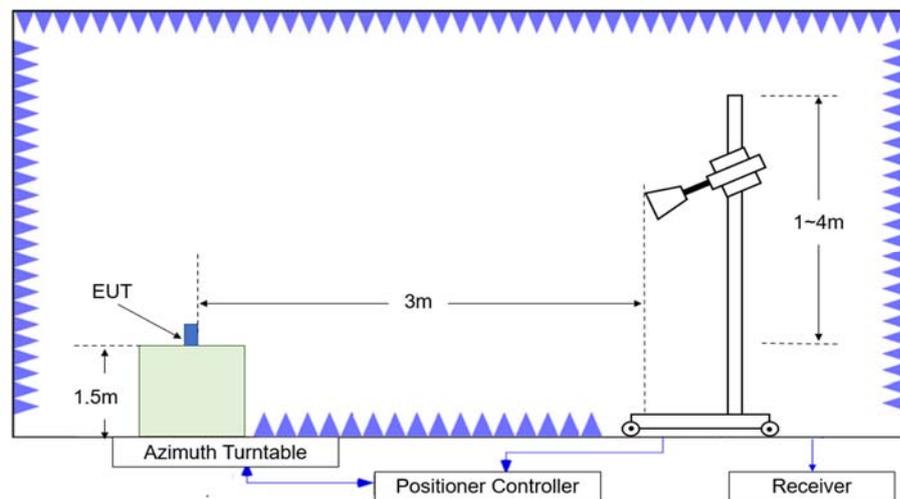
Frequency of emission (MHz)	Field strength (uV/m)	Field strength (dBuV/m)	Measurement distance (m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Note: When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor.

### Test setup



Test Site Diagram (9kHz-30MHz)


**Test Site Diagram (30MHz-1GHz)**

**Test Site Diagram (1GHz-40GHz)**

### Test Procedures

Radiated unwanted emissions from the EUT were measured according to ANSI C63.10.

### Test setting

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100kHz/300kHz	5
1000-3000	1MHz/3MHz	15
3000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

### Sample Calculation

A "reference path loss" is established and the  $A_{Rp}$  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= $P_{\text{Mea}}+A_{\text{Rpl}}= P_{\text{Mea}}+\text{Cable Loss}+\text{Antenna Factor}$

**Test note**

1. The EUT is operating at its maximum duty cycle and its maximum power control level.
2. Investigation has been done on all modes and modulations/data rates. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.
3. Spurious emissions for all channels were investigated and almost the same below 1GHz. According to FCC 47 CFR §15.31, emission levels are not report much lower than the limit by over 20dB
4. Measurement frequencies were performed from 9 kHz to the 10<sup>th</sup> harmonic of highest fundamental frequency or 40GHz, whichever is lower.
5. Both full RU and partial RU spurious emission was tested. And the results are basically noises with no suspicious emission. In this case, the measurement results of full RU were reported and represented worst cases.

**Measurement Results:**
**AVERAGE Results:**
**802.11a, FULL RU**

Channel 1

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)
5924.450	46.1	-22.0	34.8	33.29	68.3	22.2	H
5924.900	46.1	-22.0	34.8	33.34	68.3	22.2	H
11909.600	37.1	-28.0	38.7	26.38	54.0	16.9	H
17788.800	39.7	-21.3	40.6	20.45	68.4	28.7	H
17864.800	39.8	-21.3	40.5	20.52	54.0	14.2	H
17888.800	40.2	-21.0	40.5	20.64	54.0	13.8	H

**AVERAGE Results:**
**802.11a, FULL RU**

Channel 105

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)
12119.400	37.0	-27.1	39.0	25.15	54.0	17.0	V
12331.350	36.9	-27.3	38.9	25.23	54.0	17.1	V
12949.900	35.7	-27.6	38.8	24.49	68.3	32.6	H
15862.150	39.9	-23.3	40.9	22.35	54.0	14.1	H
17788.250	40.6	-21.3	40.6	21.36	54.0	13.4	H
17879.550	40.9	-21.0	40.5	21.35	54.0	13.1	H

**AVERAGE Results:**
**802.11a, FULL RU**

Channel 149

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)
11952.000	37.0	-27.6	38.8	25.80	54.0	17.0	H
12331.350	37.5	-27.3	38.9	25.90	54.0	16.5	V
13389.900	36.1	-27.1	38.4	24.76	54.0	17.9	H
15845.100	39.6	-23.7	40.8	22.37	54.0	14.4	H
17885.050	40.7	-21.0	40.5	21.19	54.0	13.3	V
17948.300	40.4	-20.9	40.5	20.78	54.0	13.6	V

**AVERAGE Results:**
**802.11a, FULL RU**

Channel 233

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)
7125.027	49.9	-31.7	35.7	45.87	68.3	18.4	H
7125.687	49.1	-31.6	35.7	45.05	68.3	19.2	H
14229.750	37.3	-25.5	39.1	23.80	68.3	31.0	H
15981.500	39.8	-23.4	40.8	22.34	54.0	14.2	H
17882.850	40.9	-21.0	40.5	21.31	54.0	13.1	H
17950.500	40.7	-20.8	40.6	20.94	54.0	13.3	V

**AVERAGE Results:**
**802.11ax-20M, FULL RU**

Channel 1

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)
5923.850	45.9	-22.0	34.8	33.12	54.0	8.1	V
5924.600	45.9	-22.0	34.8	33.09	54.0	8.1	V
11910.950	37.8	-28.0	38.7	27.02	54.0	16.2	H
15981.500	39.9	-23.4	40.8	22.45	54.0	14.1	V
17865.000	40.5	-21.3	40.5	21.29	54.0	13.5	H
17987.900	40.8	-21.0	40.6	21.23	54.0	13.2	V

**AVERAGE Results:**
**802.11ax-20M, FULL RU**

Channel 105

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)
6453.050	46.8	-31.1	35.3	42.67	68.3	21.5	V
6491.300	46.3	-31.7	35.2	42.70	68.3	22.0	V
12949.900	35.7	-27.6	38.8	24.50	68.3	32.6	H
15862.150	39.9	-23.3	40.9	22.34	54.0	14.1	V
17886.700	41.0	-21.0	40.5	21.49	54.0	13.0	V
17989.550	40.8	-21.0	40.6	21.27	54.0	13.2	H

**AVERAGE Results:**
**802.11ax-20M, FULL RU**

Channel 149

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)
12119.400	37.2	-27.1	39.0	25.41	68.3	31.1	V
12347.550	37.6	-27.2	38.9	25.91	68.3	30.7	V
13389.900	36.1	-27.1	38.4	24.76	54.0	17.9	V
16002.400	39.8	-23.4	40.8	22.39	54.0	14.2	V
17883.400	40.8	-21.0	40.5	21.25	54.0	13.2	H
17990.650	40.7	-21.0	40.6	21.17	54.0	13.3	H

**AVERAGE Results:**
**802.11ax-20M, FULL RU**

Channel 233

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)
7125.011	65.5	-31.7	35.7	61.45	68.3	2.8	V
7125.110	64.4	-31.7	35.7	60.37	68.3	3.9	V
14229.750	37.2	-25.5	39.1	23.63	68.3	31.1	H
15989.200	40.0	-23.3	40.8	22.53	54.0	14.0	V
17892.200	40.5	-21.0	40.5	21.01	54.0	13.5	H
17948.850	40.1	-20.9	40.5	20.49	54.0	13.9	V

**AVERAGE Results:**
**802.11ax-40M, FULL RU**

Channel 3

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)
5921.300	46.7	-22.0	34.8	33.89	68.3	21.6	V
5923.850	47.0	-22.0	34.8	34.23	68.3	21.3	V
11930.200	37.1	-28.0	38.8	26.31	54.0	16.9	H
15862.150	39.8	-23.3	40.9	22.22	54.0	14.2	H
17894.950	40.6	-21.1	40.5	21.17	54.0	13.4	H
17986.800	40.5	-21.1	40.6	20.97	54.0	13.5	H

**AVERAGE Results:**
**802.11ax-40M, FULL RU**

Channel 107

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)
11961.900	38.4	-27.8	38.8	27.40	54.0	15.6	V
12333.150	38.5	-27.2	38.9	26.86	54.0	15.5	V
12970.250	35.7	-27.7	38.8	24.62	68.3	32.6	H
15861.050	39.8	-23.3	40.9	22.26	54.0	14.2	H
17882.850	40.9	-21.0	40.5	21.30	54.0	13.1	H
17986.250	40.6	-21.1	40.6	21.12	54.0	13.4	H

**AVERAGE Results:**
**802.11ax-40M, FULL RU**

Channel 155

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)
12054.150	27.0	-27.7	39.0	15.76	54.0	27.0	H
12333.150	37.5	-27.2	38.9	25.84	54.0	16.5	H
13449.850	37.0	-26.4	38.4	25.07	68.3	31.3	V
15984.250	40.0	-23.4	40.8	22.57	54.0	14.0	H
17878.450	40.9	-21.0	40.5	21.37	54.0	13.1	V
17985.150	40.6	-21.1	40.6	21.12	54.0	13.4	V

**AVERAGE Results:**
**802.11ax-40M, FULL RU**

Channel 227

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)
7126.250	51.3	-31.6	35.7	47.26	68.3	17.0	V
7128.800	50.2	-31.6	35.7	46.07	68.3	18.1	V
14169.800	37.2	-25.1	38.9	23.33	68.3	31.1	H
15984.250	40.2	-23.4	40.8	22.73	54.0	13.8	V
17883.950	41.0	-21.0	40.5	21.44	54.0	13.0	H
17987.350	40.7	-21.1	40.6	21.20	54.0	13.3	V

**AVERAGE Results:**
**802.11ax-80M, FULL RU**

Channel 7

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)
5921.450	46.4	-22.0	34.8	33.68	68.3	21.9	V
5924.150	46.6	-22.0	34.8	33.81	68.3	21.7	V
11969.800	36.9	-28.1	38.8	26.10	54.0	17.1	V
15982.600	40.1	-23.4	40.8	22.60	54.0	13.9	V
17886.700	41.0	-21.0	40.5	21.50	54.0	13.0	V
17956.550	40.6	-20.9	40.6	20.98	54.0	13.4	V

**AVERAGE Results:**
**802.11ax-80M, FULL RU**

Channel 103

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)
11956.950	38.4	-27.7	38.8	27.30	68.3	29.9	V
12347.550	38.6	-27.2	38.9	26.86	68.3	29.7	V
12930.100	35.6	-28.0	38.8	24.81	68.3	32.7	V
15984.800	40.2	-23.4	40.8	22.78	54.0	13.8	V
17890.000	41.3	-21.0	40.5	21.74	54.0	12.7	V
17949.950	40.9	-20.8	40.6	21.13	54.0	13.1	V

**AVERAGE Results:**
**802.11ax-80M, FULL RU**

Channel 151

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)
11959.200	36.9	-27.7	38.8	25.83	54.0	17.1	V
12334.050	37.6	-27.2	38.9	25.94	54.0	16.4	V
13410.250	36.1	-27.1	38.4	24.79	68.3	32.2	V
15983.150	40.0	-23.4	40.8	22.57	54.0	14.0	V
17882.850	41.0	-21.0	40.5	21.45	54.0	13.0	V
17986.250	40.7	-21.1	40.6	21.23	54.0	13.3	V

**AVERAGE Results:**
**802.11ax-80M, FULL RU**

Channel 215

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)
7125.050	47.0	-31.7	35.7	42.93	68.3	21.3	V
7169.150	47.5	-30.8	35.7	42.58	68.3	20.8	V
14049.900	36.8	-25.8	38.7	23.81	68.3	31.5	V
15986.450	40.0	-23.3	40.8	22.53	54.0	14.0	V
17886.700	41.0	-21.0	40.5	21.44	54.0	13.0	V
17949.950	40.7	-20.8	40.6	21.02	54.0	13.3	V

**PEAK Results:**
**802.11a-20M, FULL RU**

Channel 1

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)
5924.252	59.8	-22.0	34.8	47.00	88.3	28.5	V
5924.840	46.7	-22.0	34.8	33.89	88.3	41.6	V
11909.250	50.7	-28.0	38.7	39.98	74.0	23.3	H
17743.500	54.5	-21.7	40.5	35.60	74.0	19.5	H
17865.000	53.3	-21.3	40.5	34.10	74.0	20.7	H
17973.450	54.3	-21.1	40.6	34.79	74.0	19.7	H

**PEAK Results:**
**802.11a-20M, FULL RU**

Channel 105

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)
11764.800	51.2	-27.7	38.6	40.32	74.0	22.8	V
12349.350	51.8	-27.4	38.9	40.24	74.0	22.2	V
12950.100	47.9	-27.6	38.8	36.64	88.3	40.4	V
16080.750	54.2	-23.6	41.0	36.73	74.0	19.8	H
17829.650	54.8	-21.4	40.6	35.63	74.0	19.2	V
17951.400	55.0	-20.8	40.6	35.28	74.0	19.0	H

**PEAK Results:**
**802.11a-20M, FULL RU**

Channel 149

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)
10787.850	51.1	-27.2	39.0	39.36	74.0	22.9	H
12057.300	51.2	-27.2	38.9	39.51	74.0	22.8	V
13390.200	47.6	-27.1	38.4	36.32	74.0	26.4	V
15849.450	54.2	-23.6	40.8	36.98	74.0	19.8	H
17797.050	53.8	-21.4	40.6	34.62	74.0	20.2	H
17896.050	54.4	-21.1	40.5	34.99	74.0	19.6	V

**PEAK Results:**
**802.11a-20M, FULL RU**

Channel 233

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)
7125.060	71.2	-31.7	35.7	67.13	88.3	17.1	V
7125.143	71.4	-31.7	35.7	67.35	88.3	16.9	V
14229.900	50.3	-25.5	39.1	36.79	88.3	38.0	V
15755.400	53.3	-23.5	40.7	36.02	74.0	20.7	V
17859.150	54.1	-21.3	40.5	34.80	74.0	19.9	V
17962.200	53.8	-21.0	40.6	34.26	74.0	20.2	H

**PEAK Results:**
**802.11ax-20M, FULL RU**

Channel 1

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)
5922.614	58.1	-22.0	34.8	45.36	88.3	30.2	H
5923.622	58.0	-22.0	34.8	45.18	88.3	30.3	H
11910.150	49.3	-28.0	38.7	38.49	74.0	24.7	H
16038.900	53.8	-23.3	40.9	36.21	74.0	20.2	H
17803.350	53.9	-21.4	40.6	34.72	74.0	20.1	H
17865.000	52.4	-21.3	40.5	33.16	74.0	21.6	H

**PEAK Results:**
**802.11ax-20M, FULL RU**

Channel 105

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)
6423.000	58.1	-31.6	35.2	54.53	88.3	30.2	H
6504.000	57.3	-31.7	35.2	53.75	88.3	31.0	V
12950.100	47.6	-27.6	38.8	36.34	88.3	40.7	V
15984.450	54.6	-23.4	40.8	37.18	74.0	19.4	V
17836.650	54.5	-21.3	40.6	35.30	74.0	19.5	H
17854.200	54.7	-21.3	40.5	35.45	74.0	19.3	H

**PEAK Results:**
**802.11ax-20M, FULL RU**

Channel 149

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)
12118.500	51.1	-27.2	39.0	39.32	74.0	22.9	V
12354.300	51.3	-27.2	38.9	39.61	74.0	22.7	V
13390.200	48.8	-27.1	38.4	37.52	74.0	25.2	H
15661.350	53.9	-23.8	40.5	37.21	74.0	20.1	H
17879.400	53.9	-21.0	40.5	34.40	74.0	20.1	H
17960.850	54.4	-21.0	40.6	34.82	74.0	19.6	H

**PEAK Results:**
**802.11ax-20M, FULL RU**

Channel 233

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)
7125.044	77.6	-31.7	35.7	73.54	88.3	10.7	H
7125.126	76.7	-31.7	35.7	72.67	88.3	11.6	H
14229.900	48.9	-25.5	39.1	35.36	88.3	39.4	H
15984.900	53.3	-23.4	40.8	35.80	74.0	20.7	V
17858.700	53.6	-21.3	40.5	34.33	74.0	20.4	V
17882.100	54.1	-21.0	40.5	34.52	74.0	19.9	V

**PEAK Results:**
**802.11ax-40M, FULL RU**

Channel 3

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)
5921.438	61.4	-22.0	34.8	48.62	88.3	26.9	H
5924.336	60.9	-22.0	34.8	48.13	88.3	27.4	H
11929.950	50.5	-28.0	38.8	39.66	74.0	23.5	V
15991.650	53.8	-23.3	40.8	36.37	74.0	20.2	H
17895.150	52.4	-21.1	40.5	32.94	74.0	21.6	V
17928.000	54.8	-21.6	40.5	35.83	74.0	19.2	H

**PEAK Results:**
**802.11ax-40M, FULL RU**

Channel 107

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)
11946.600	50.7	-27.7	38.8	39.55	74.0	23.3	V
12223.350	51.4	-27.7	38.8	40.29	74.0	22.6	H
12969.900	47.5	-27.7	38.8	36.46	88.3	40.8	V
15855.750	53.5	-23.5	40.9	36.11	74.0	20.5	V
17796.600	54.1	-21.4	40.6	34.86	74.0	19.9	V
17899.200	54.2	-21.1	40.5	34.88	74.0	19.8	V

**PEAK Results:**
**802.11ax-40M, FULL RU**

Channel 155

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)
12024.000	51.7	-27.7	38.9	40.45	74.0	22.3	H
12116.700	51.5	-27.3	39.0	39.86	74.0	22.5	V
13450.050	48.8	-26.4	38.4	36.77	88.3	39.5	V
15868.350	53.6	-23.2	40.9	35.94	74.0	20.4	V
17785.800	54.5	-21.3	40.6	35.24	74.0	19.5	V
17849.250	54.5	-21.2	40.6	35.18	74.0	19.5	H

**PEAK Results:**
**802.11ax-40M, FULL RU**

Channel 227

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)
7128.509	68.1	-31.6	35.7	63.94	88.3	20.2	V
7128.723	67.6	-31.6	35.7	63.45	88.3	20.7	H
14170.050	49.5	-25.1	38.9	35.68	88.3	38.8	H
15997.050	53.3	-23.3	40.8	35.87	74.0	20.7	V
17787.150	54.6	-21.3	40.6	35.34	74.0	19.4	V
17892.900	54.6	-21.0	40.5	35.17	74.0	19.4	V

**PEAK Results:**
**802.11ax-80M, FULL RU**

Channel 7

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)
5886.886	59.1	-21.9	34.8	46.22	88.3	29.2	V
5924.476	59.2	-22.0	34.8	46.42	88.3	29.1	V
11970.000	49.3	-28.1	38.8	38.50	74.0	24.7	V
15842.700	53.9	-23.7	40.8	36.75	74.0	20.1	V
17947.350	54.9	-21.0	40.5	35.35	74.0	19.1	H
17955.000	53.2	-20.9	40.6	33.56	74.0	20.8	H

**PEAK Results:**
**802.11ax-80M, FULL RU**

Channel 103

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)
11951.100	52.0	-27.6	38.8	40.78	74.0	22.0	V
12418.200	51.5	-27.6	38.8	40.28	74.0	22.5	V
12929.850	48.2	-28.0	38.8	37.35	88.3	40.1	H
15969.150	53.6	-23.3	40.8	36.11	74.0	20.4	V
17784.450	54.2	-21.3	40.6	34.93	74.0	19.8	V
17940.600	54.4	-21.4	40.5	35.27	74.0	19.6	H

**PEAK Results:**
**802.11ax-80M, FULL RU**

Channel 151

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)
12117.600	51.5	-27.2	39.0	39.76	74.0	22.5	V
12352.950	51.5	-27.2	38.9	39.76	74.0	22.5	V
13410.000	48.1	-27.1	38.4	36.80	88.3	40.2	H
15869.250	53.7	-23.1	40.9	36.00	74.0	20.3	V
17800.650	55.0	-21.4	40.6	35.77	74.0	19.0	V
17892.450	55.0	-21.0	40.5	35.50	74.0	19.0	H

**PEAK Results:**

**802.11ax-80M, FULL RU**

Channel 215

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)
7126.001	59.1	-31.6	35.7	54.98	88.3	29.2	V
7166.574	59.7	-30.9	35.7	54.90	88.3	28.6	V
14049.900	48.8	-25.8	38.7	35.76	88.3	39.5	H
16005.150	54.2	-23.4	40.8	36.80	74.0	19.8	V
17800.200	55.8	-21.4	40.6	36.54	74.0	18.2	V
17896.050	54.6	-21.1	40.5	35.23	74.0	19.4	H

**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:

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

Note: The measurement results showed here are worst cases

## A.9. Band Edges Compliance

### A9.1 Band Edges - Radiated

#### Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.407	-27 dBm/MHz

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)	Measurement distance(m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

The measurement is made according to ANSI C63.10-2013 and KDB 789033

#### Measurement Result for full RU:

Mode	Channel	Test Results	Conclusion
802.11a 20M	CH1	Fig.1	P
	CH233	Fig.2	P
802.11ax 20M	CH1	Fig.3	P
	CH233	Fig.4	P
802.11ax 40M	CH3	Fig.5	P
	CH227	Fig.6	P
802.11ax 80M	CH7	Fig.7	P
	CH215	Fig.8	P

#### Measurement Result for Partial RU:

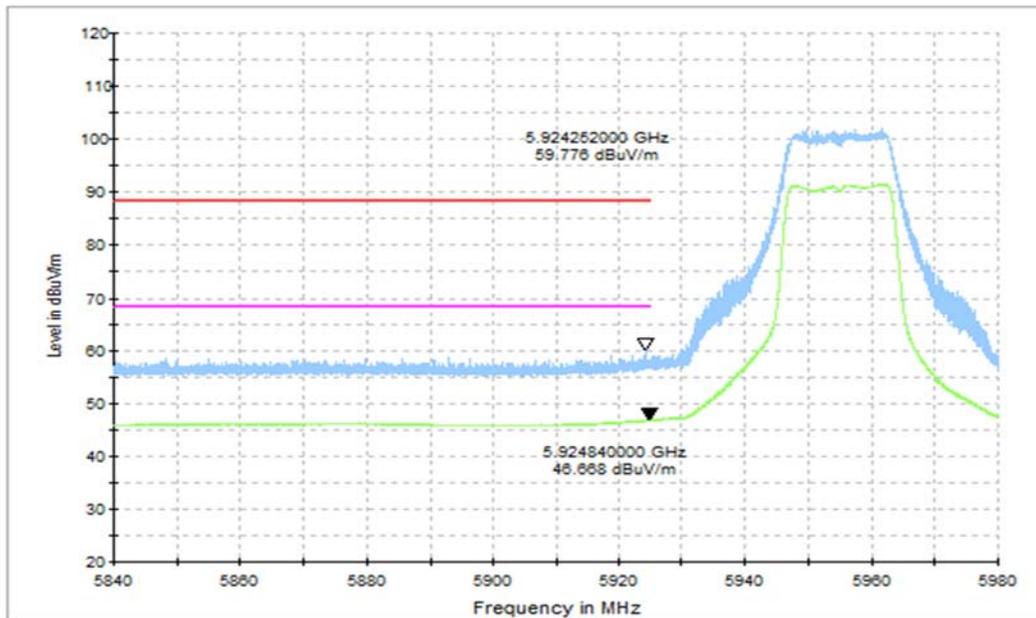
Mode	Channel	RU size and index	Test Results	Conclusion
802.11ax 20M	CH1	106RU-index53	Fig.9	P
	CH233	106RU-index54	Fig.10	P
802.11ax 40M	CH3	242RU-index61	Fig.11	P
	CH227	242RU-index62	Fig.12	P
802.11ax 80M	CH7	242RU-index61	Fig.13	P
	CH215	242RU-index62	Fig.14	P

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

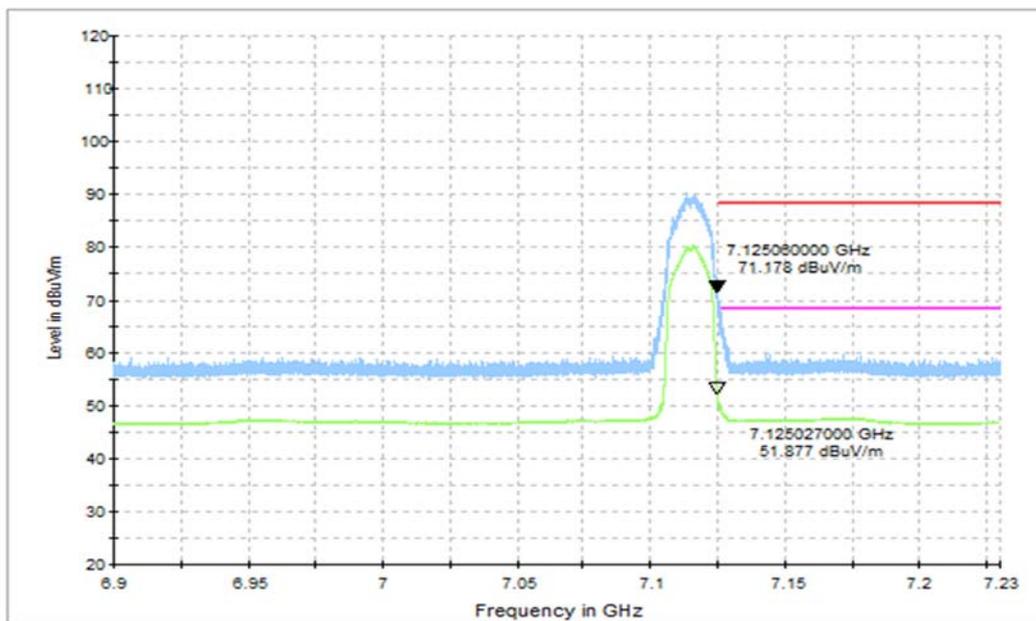
Note2: All SISO and MIMO emissions have been checked, only the worst cases were reported.

**Conclusion: PASS**

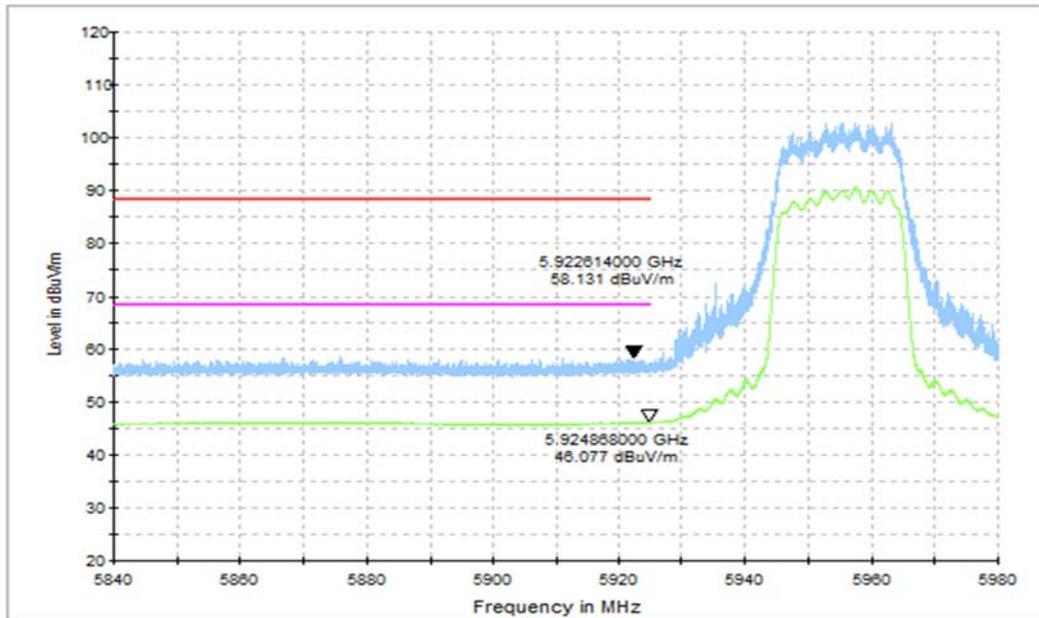
Test graphs as below:



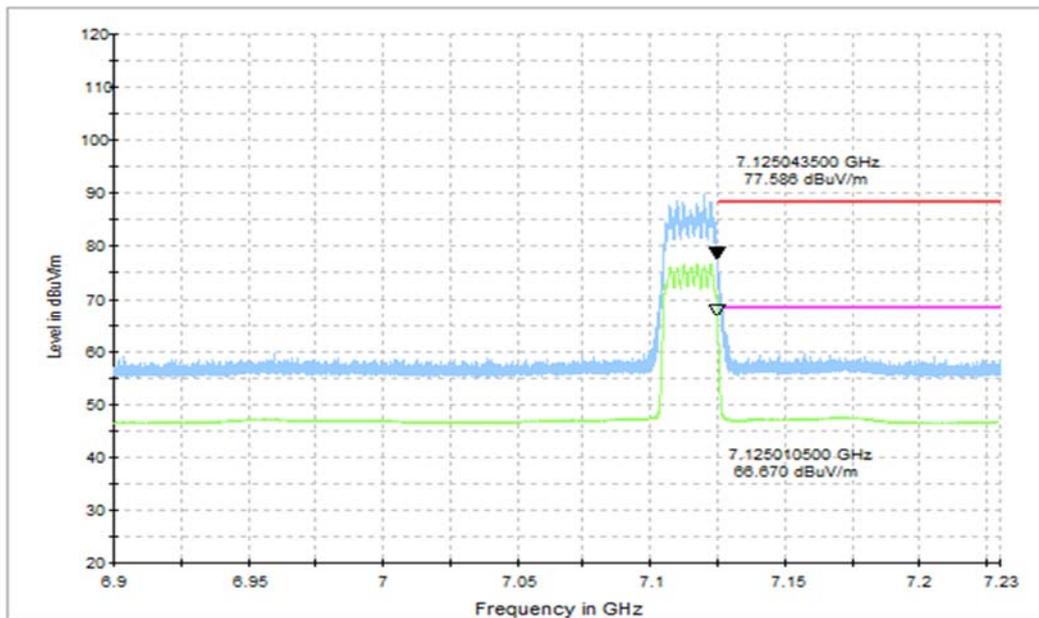
**Fig.1 Band Edges (802.11a 20M Ch1 MIMO)**



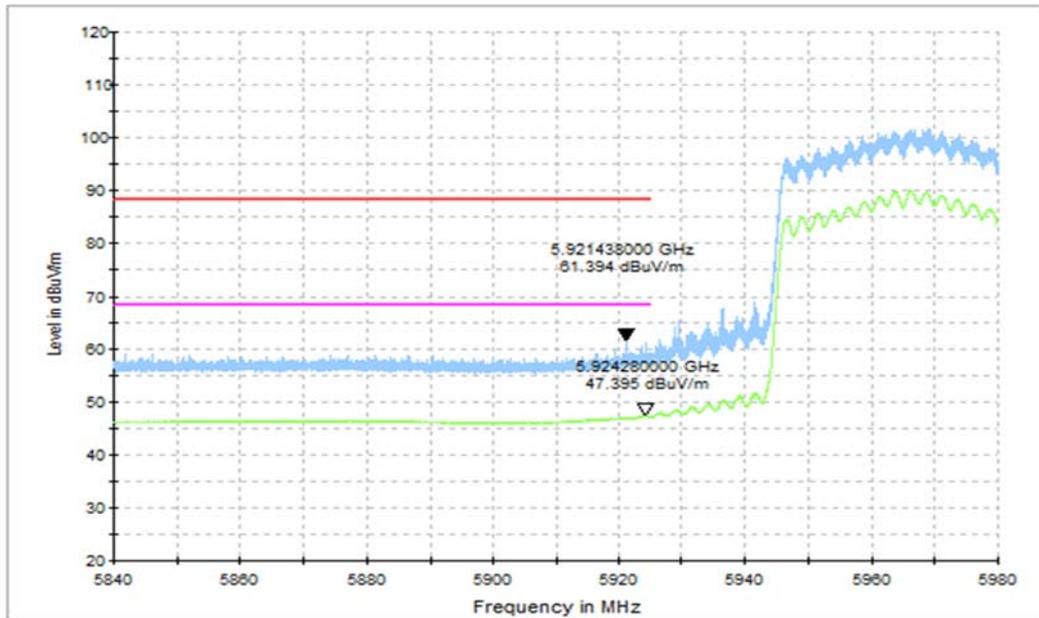
**Fig.2 Band Edges (802.11a 20M Ch233 MIMO)**



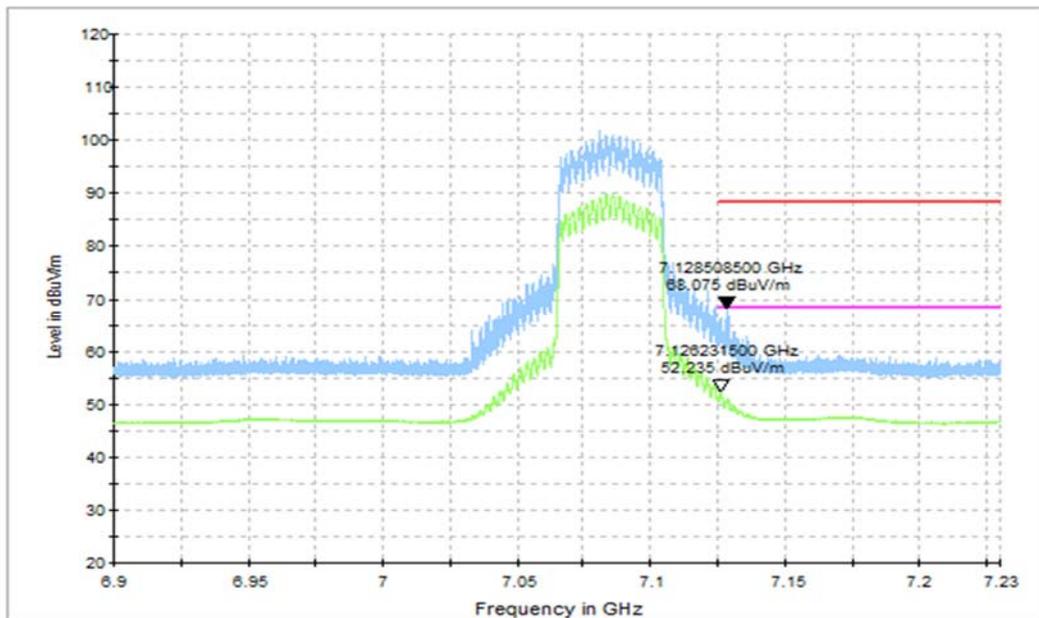
**Fig.3 Band Edges (802.11ax 20M Ch1 full RU MIMO)**



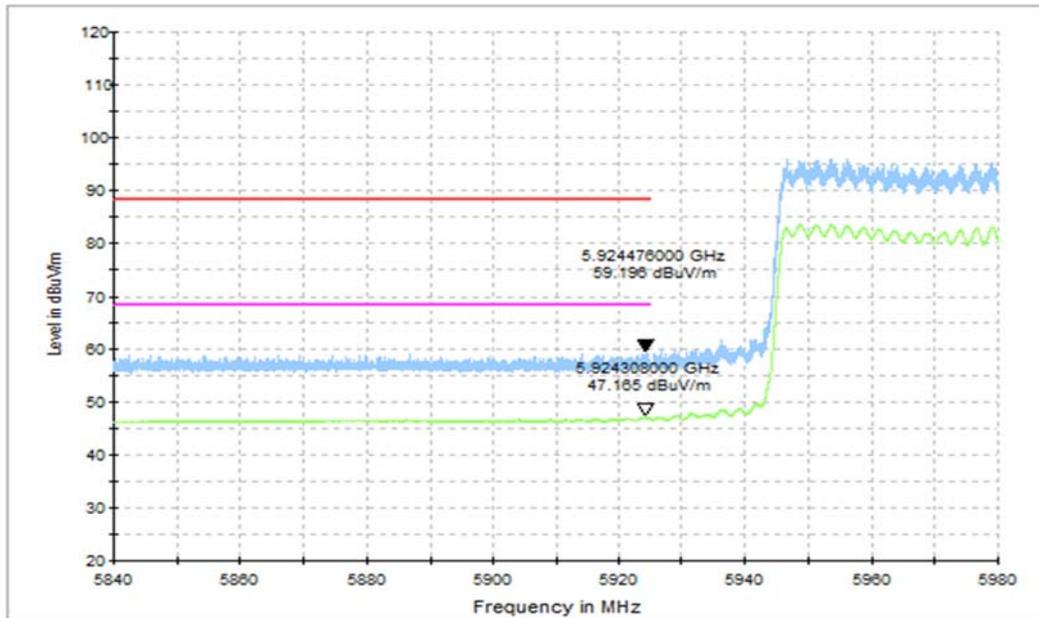
**Fig.4 Band Edges (802.11ax 20M Ch233 full RU MIMO)**



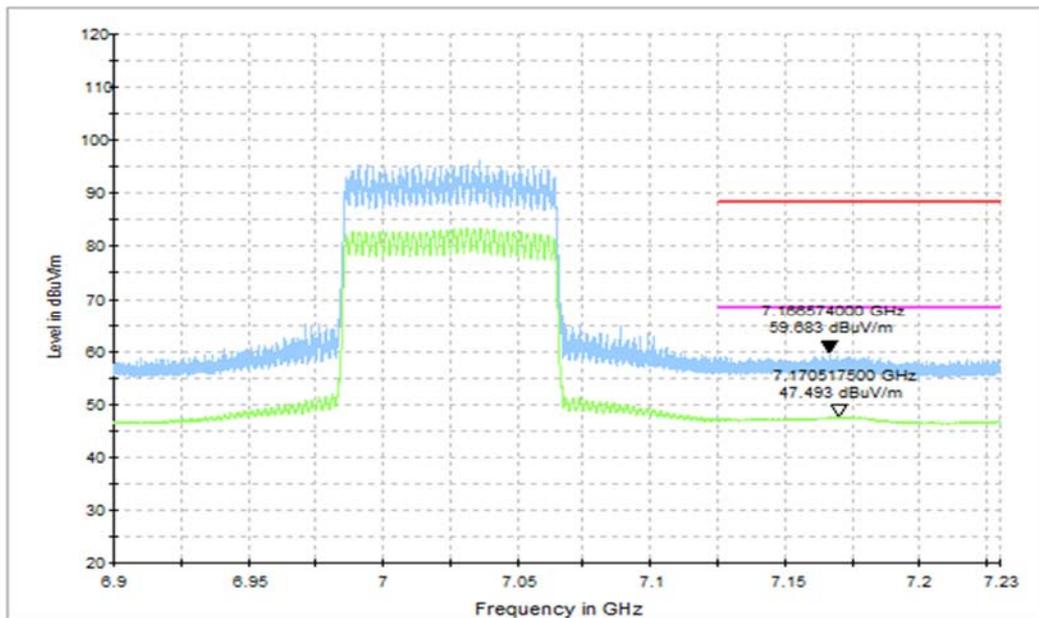
**Fig.5 Band Edges (802.11ax 40M Ch3 full RU MIMO)**



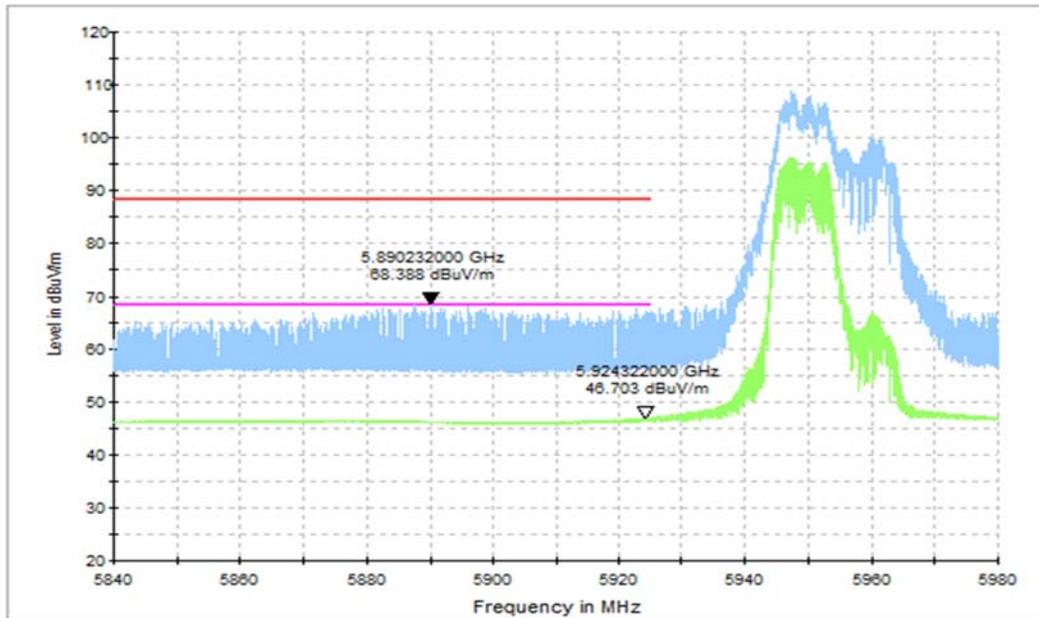
**Fig.6 Band Edges (802.11ax 40M Ch227 full RU MIMO)**



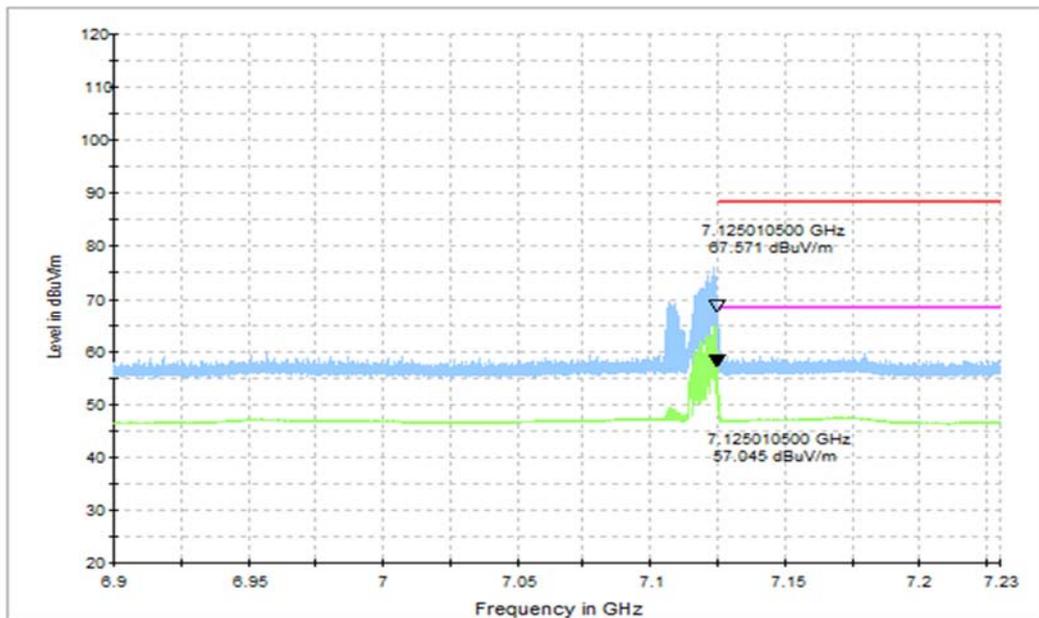
**Fig.7 Band Edges (802.11ax 80M Ch7 full RU MIMO)**



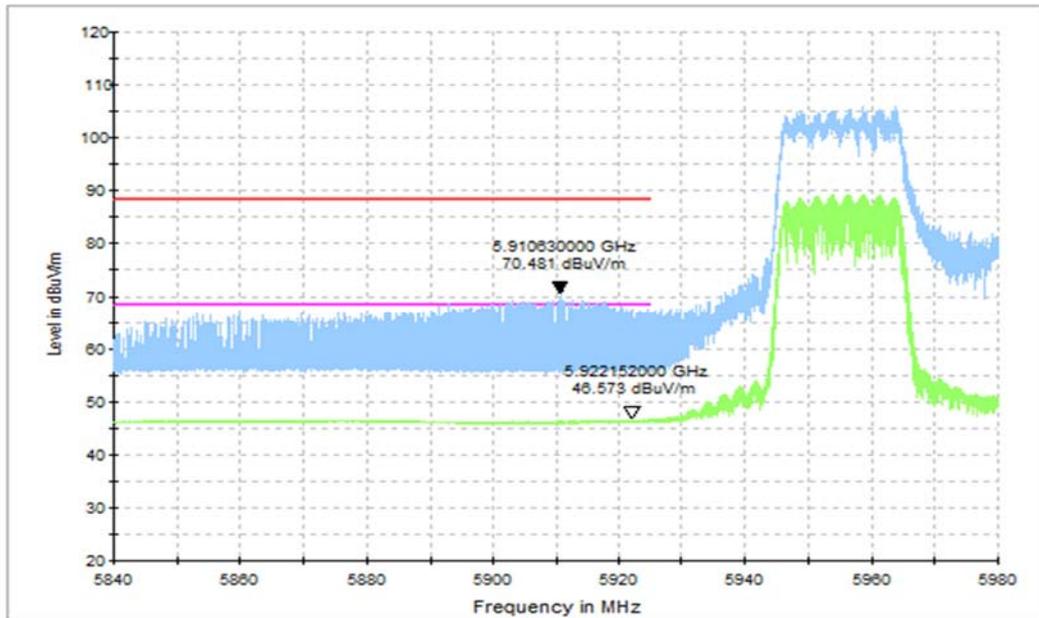
**Fig.8 Band Edges (802.11ax 80M Ch215 full RU MIMO)**



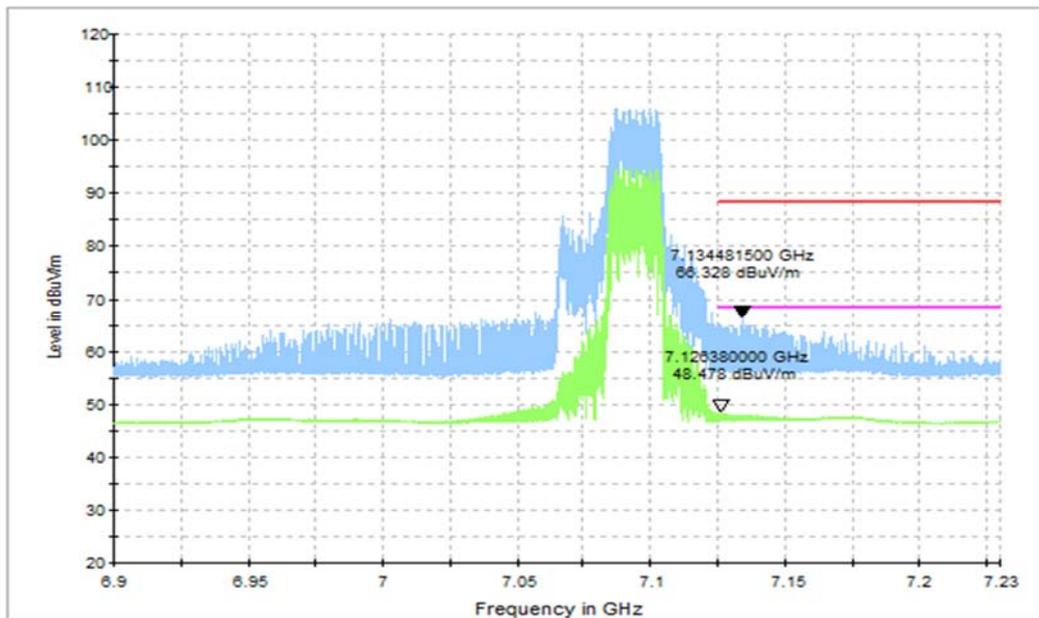
**Fig.9 Band Edges (802.11ax 20M Ch1 partial RU MIMO)**



**Fig.10 Band Edges (802.11ax 20M Ch233 partial RU MIMO)**



**Fig.11 Band Edges (802.11ax 40M Ch3 partial RU MIMO)**



**Fig.12 Band Edges (802.11ax 40M Ch227 partial RU MIMO)**

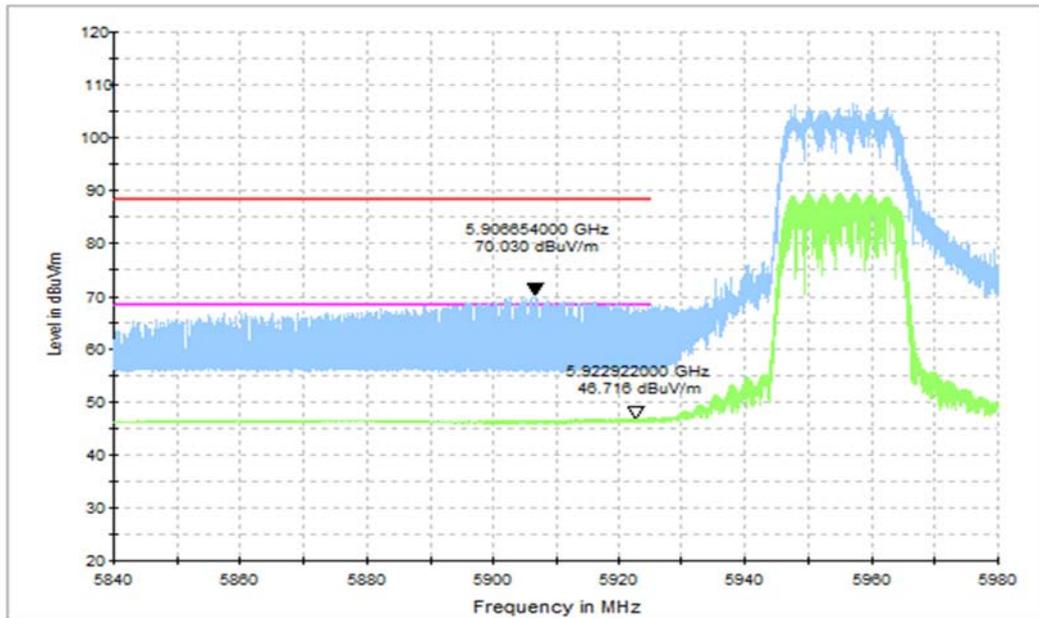


Fig.13 Band Edges (802.11ax 80M Ch7 partial RU MIMO)

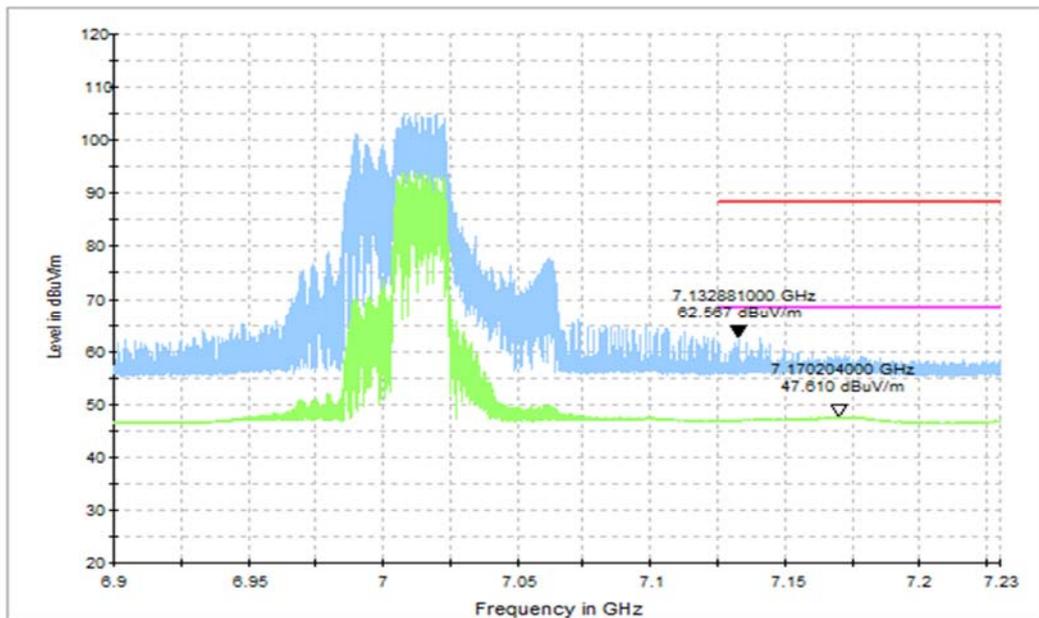


Fig.14 Band Edges (802.11ax 80M Ch215 partial RU MIMO)

## A.10. AC Powerline Conducted Emission (150kHz- 30MHz)

### 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:

Voltage (V)	Frequency (Hz)
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		
		802.11ax	Idle	
0.15 to 0.5	66 to 56	Fig.15	Fig.16	<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		
		802.11ax	Idle	
0.15 to 0.5	67 56 to 46	Fig.15	Fig.16	<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		
		802.11ax	Idle	
0.15 to 0.5	68 to 56	Fig.17	/	<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)**

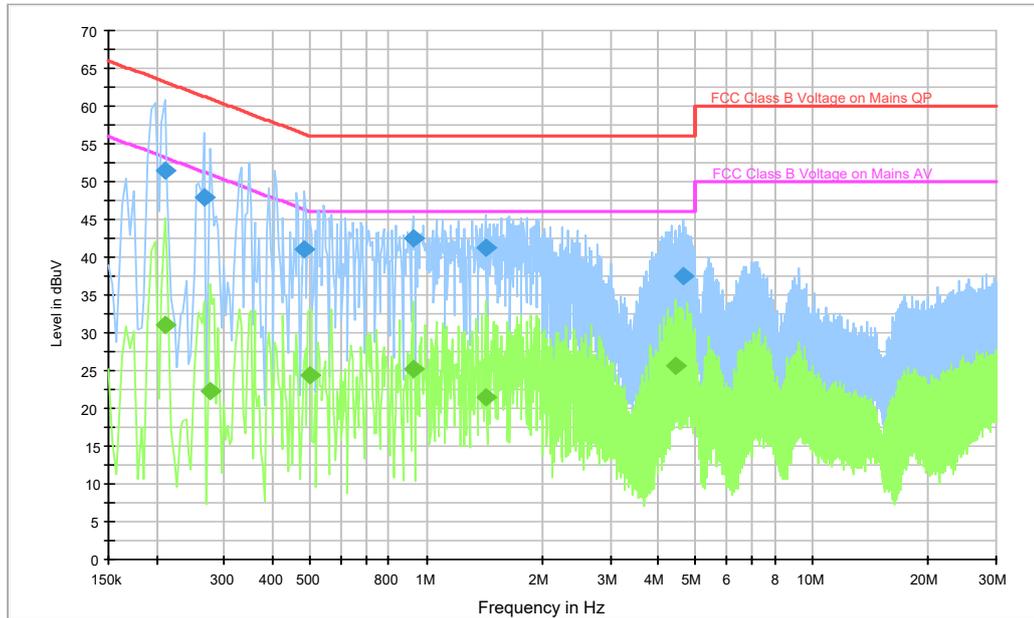
Frequency range (MHz)	Average Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		With charger QC16EU		
		802.11ax	Idle	
0.15 to 0.5	69 56 to 46	Fig.17	/	<b>P</b>
0.5 to 5	46			
5 to 30	50			

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:**

**Traffic:**



**Fig.15 Conducted Emission (802.11ax, Ch1, TX, With charger QC16US)**

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

**Final Result 1**

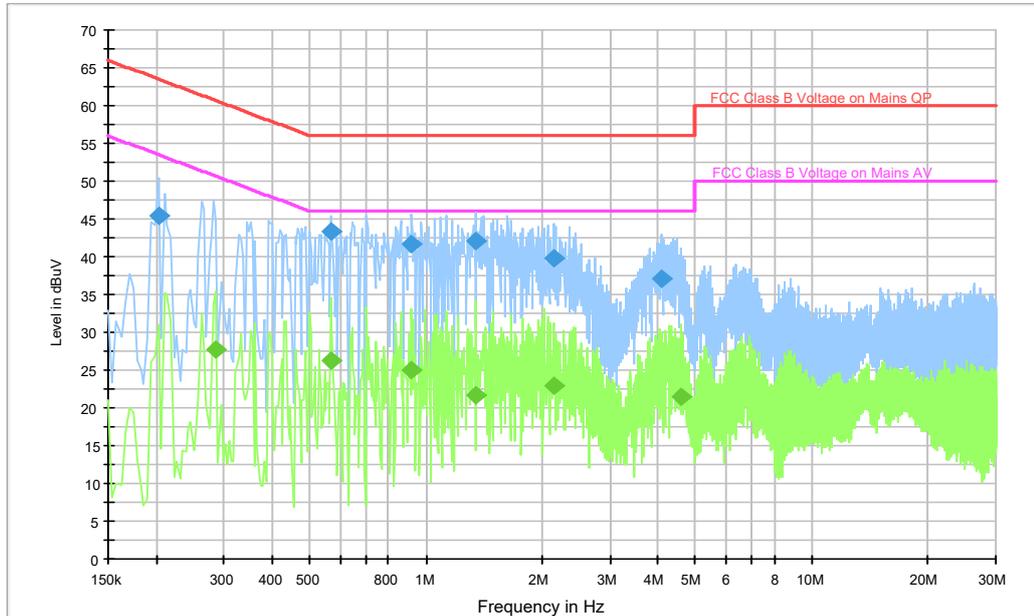
Frequency (MHz)	QuasiPeak (dB $\mu$ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.210000	51.5	L1	19.8	11.7	63.2
0.266000	48.0	L1	19.9	13.2	61.2
0.482000	41.0	L1	20.0	15.3	56.3
0.922000	42.6	L1	19.9	13.4	56.0
1.422000	41.2	L1	19.9	14.8	56.0
4.642000	37.5	L1	19.8	18.5	56.0

**Final Result 2**

Frequency (MHz)	Average (dB $\mu$ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.210000	31.1	L1	19.8	22.1	53.2
0.274000	22.3	N	19.8	28.7	51.0
0.498000	24.5	N	19.9	21.6	46.0
0.922000	25.1	L1	19.9	20.9	46.0
1.426000	21.5	N	19.7	24.5	46.0
4.446000	25.6	L1	19.8	20.4	46.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers

Idle:



**Fig.16 Conducted Emission(802.11ax, CH1 IDLE, With charger QC16US)**

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

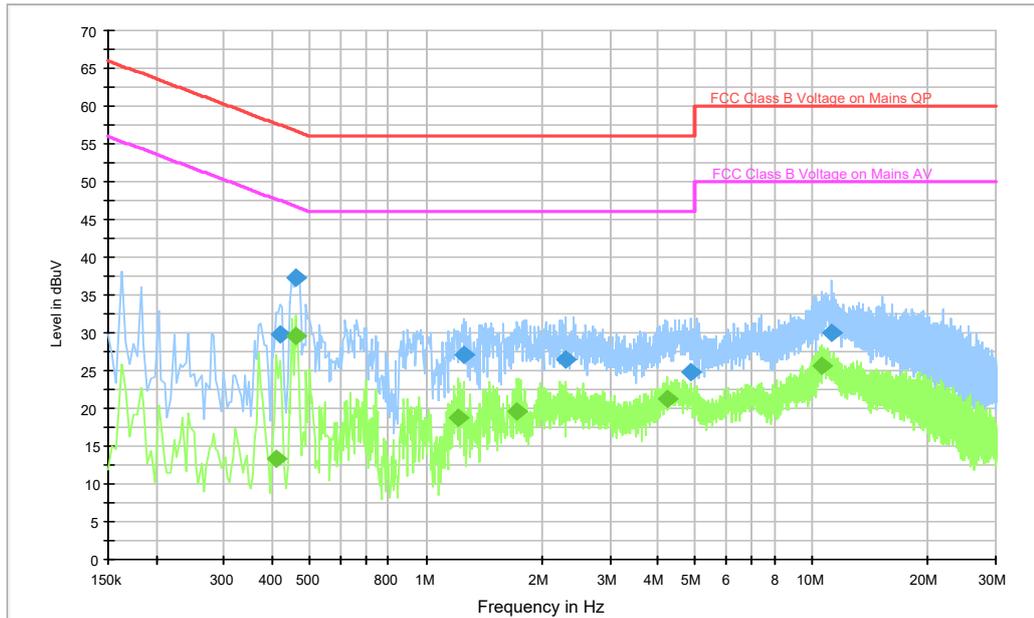
Final Result 1

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.202000	45.5	L1	19.8	18.0	63.5
0.566000	43.4	L1	20.0	12.6	56.0
0.918000	41.7	L1	19.9	14.3	56.0
1.346000	42.1	L1	19.9	13.9	56.0
2.134000	39.9	L1	19.8	16.1	56.0
4.070000	37.0	L1	19.8	19.0	56.0

Final Result 2

Frequency (MHz)	Average (dB $\mu$ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.286000	27.7	N	19.8	23.0	50.6
0.566000	26.3	L1	20.0	19.7	46.0
0.918000	25.0	L1	19.9	21.0	46.0
1.346000	21.6	L1	19.9	24.4	46.0
2.134000	22.9	L1	19.8	23.1	46.0
4.586000	21.5	L1	19.8	24.5	46.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers



**Fig.17 Conducted Emission (802.11ax, Ch1, TX, With charger QC16EU)**

Note1: 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)
0.418000	29.7	L1	20.0	27.8	57.5
0.462000	37.2	L1	20.0	19.5	56.7
1.250000	27.1	L1	19.9	28.9	56.0
2.302000	26.4	L1	19.8	29.6	56.0
4.850000	24.8	L1	19.8	31.2	56.0
11.254000	29.9	L1	20.0	30.1	60.0

**Final Result 2**

Frequency (MHz)	Average (dB $\mu$ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.410000	13.4	L1	20.0	34.2	47.6
0.458000	29.7	L1	20.0	17.1	46.7
1.210000	18.8	L1	19.9	27.2	46.0
1.726000	19.6	L1	19.8	26.4	46.0
4.214000	21.2	L1	19.8	24.8	46.0
10.574000	25.6	L1	19.9	24.4	50.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers



### **A.11. 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 BODY \*\*\*