

TEST REPORT

Product Name : CHAMPe Bingo Handset
Model Number : VK7B
FCC ID : 2AUX7-VK7B
IC : 25598-VK7B

Prepared for : Estone Technology LTD
Address : 2F,Building No.1, Jia'an Industrial Park, No.2 Long Chang Road, Bao'an, Shenzhen 518101, China.

Prepared by : EMTEK (SHENZHEN) CO., LTD.
Address : Building 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China

Tel: (0755) 26954280
Fax: (0755) 26954282

Report Number : ENS2311270028W00506R
Date(s) of Tests : November 28, 2023 to February 5, 2024
Date of Issue : February 6, 2024

TABLE OF CONTENTS

1 TEST RESULT CERTIFICATION.....	4
2 EUT TECHNICAL DESCRIPTION.....	5
3 SUMMARY OF TEST RESULTS.....	6
4 TEST METHODOLOGY.....	7
4.1 GENERAL DESCRIPTION OF APPLIED STANDARDS.....	7
4.2 MEASUREMENT EQUIPMENT USED.....	7
4.3 DESCRIPTION OF TEST MODES.....	8
5 FACILITIES AND ACCREDITATIONS.....	10
5.1 FACILITIES.....	10
5.2 EQUIPMENT.....	10
5.3 LABORATORY ACCREDITATIONS AND LISTINGS.....	10
6 TEST SYSTEM UNCERTAINTY.....	11
7 SETUP OF EQUIPMENT UNDER TEST.....	12
7.1 RADIO FREQUENCY TEST SETUP.....	12
7.2 RADIO FREQUENCY TEST SETUP.....	12
7.3 CONDUCTED EMISSION TEST SETUP.....	14
7.4 BLOCK DIAGRAM CONFIGURATION OF TEST SYSTEM.....	15
7.5 SUPPORT EQUIPMENT.....	15
8 TEST REQUIREMENTS.....	16
8.1 OCCUPIED BANDWIDTH.....	16
8.2 MAXIMUM CONDUCTED OUTPUT POWER.....	110
8.3 MAXIMUM POWER SPECTRAL DENSITY.....	191
8.4 IN-BAND EMISSIONS (EMISSION MASK).....	209
8.5 CONTENTION BASED PROTOCOL.....	287
8.6 RADIATED SPURIOUS EMISSION.....	299
8.7 POWER LINE CONDUCTED EMISSIONS.....	328
8.8 ANTENNA REQUIREMENT.....	331

Modified Information

Version	Report No.	Revision Date	Summary
Ver.1.0	ENS2311270028W00506R	/	Original Report

1 TEST RESULT CERTIFICATION

Applicant : Estone Technology LTD
Address : 2F,Building No.1, Jia'an Industrial Park, No.2 Long Chang Road, Bao'an, Shenzhen 518101, China.
Manufacturer : Estone Technology LTD
Address : 2F,Building No.1, Jia'an Industrial Park, No.2 Long Chang Road, Bao'an, Shenzhen 518101, China.
EUT : CHAMPe Bingo Handset
Model Name : VK7B
Trademark : 

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 47 CFR Part 2, Subpart J FCC 47 CFR Part 15, Subpart E	PASS
IC RSS-248 Issue 2(12-2022) IC RSS-GEN, Issue 5(04-2018)+A1(03-2019)+A2(02-2021)	PASS

The above equipment was tested by EMTEK (SHENZHEN) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with the above table standards requirement.

The test results of this report relate only to the tested sample identified in this report.

Date of Test : November 28, 2023 to February 5, 2024

Prepared by : 
Una Yu/Editor

Reviewer : 
Joe Xia/Supervisor

Approved & Authorized Signer : 
Lisa Wang/Manager

2 EUT TECHNICAL DESCRIPTION

Characteristics	Description
FCC Classification:	15E 6GHz Low Power Indoor Client (6XD)
Product:	CHAMPe Bingo Handset
Model Number:	VK7B
WiFi Type:	UNII-5 Band: 5925 ~ 6425 MHz UNII-6 Band: 6425 ~ 6525 MHz
WLAN Supported:	802.11ax(20)/ax(40)/ax(80)
Modulation:	OFDM, OFDMA
Channel Number:	For 5925 ~ 6425MHz band: Channel 1 - 93 For 6425 ~ 6525MHz Band: Channel 97 - 119
Antenna Type:	Integrated Antenna
Antenna Gain:	Ant1: 1.54dBi, Ant2: 1.54dBi (Note: The antenna information is provided by the customers, which will have a certain impact on the test results.)
Smart System	MIMO
Power Supply :	Rechargeable Li-ion polymer Battery 3.7V, 128000mAh, 47.36Wh AC 100-240V, 50/60Hz by adapter
Temperature Range:	0°C ~ 45°C
TPC Function:	Applicable
Beamforming Function:	Not Applicable
FVIN:	Android 12

Note: For more details, please refer to the User's manual of the EUT.

3 SUMMARY OF TEST RESULTS

FCC Part Clause	IC Part Clause	Test Parameter	Verdict	Remark
15.403(i) 2.1049	RSS-248 4.4 RSS-Gen 6.7	26dB Emission Bandwidth	PASS	-
15.407 (a) 2.1049	RSS-248 4.4 RSS-Gen 6.7	99% Occupied Bandwidth	Reporting only	-
15.407 (a) 2.1046	RSS-248 4.6	Maximum Conducted Output Power	Reporting only	-
15.407 (a) 2.1046	RSS-248 4.6	Fundamental Maximum EIRP	PASS	
15.407 (a)	RSS-248 4.6	Maximum Power Spectral Density	PASS	-
15.407 (b)	RSS-248 4.7	In-Band Emissions(Emission Mask)	PASS	-
15.407 (d)	RSS-248 4.8	Contention Based Protocol	PASS	-
15.407 (b) 15.209 15.205	RSS-248 4.7 RSS-Gen 8.9 RSS-Gen 8.10 RSS-Gen 6.13	Radiated Spurious Emission	PASS	-
15.207	RSS-Gen 8.8	Power Line Conducted Emissions	PASS	-
15.203	RSS-Gen 6.8	Antenna Requirement	PASS	-

NOTE1: The results of this report do not take into account the uncertainty.

NOTE2: The product supports OFDMA full RU tone and partial RU tone, both full RU and partial RU-left (for low CH) and partial RU-right (for high CH) test output power, the full RU power > partial RU, therefore the full RU perform full test to cover partial RU except for PSD and Duty cycle.

NOTE3: The product does not support 802.11be, so the Channel Puncturing or Bandwidth Reduction has not been tested.

RELATED SUBMITTAL(S) / GRANT(S):

This submittal(s) (test report) is intended for **FCC ID: 2AUX7-VK7B** and **IC: 25598-VK7B** filing to comply with the above table standards requirement.

4 TEST METHODOLOGY

4.1 GENERAL DESCRIPTION OF APPLIED STANDARDS

According to its specifications, the EUT must comply with the requirements of the following standards:

FCC 47 CFR Part 2, Subpart J

FCC 47 CFR Part 15, Subpart E

IC RSS-GEN, Issue 5(04-2018)+A1(03-2019)+A2(02-2021)

IC RSS-248 Issue 2(12-2022)

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

FCC KDB 789033 D2 General UNII Test Procedures New Rules v02r01

FCC KDB 987594 D01 U-NII 6GHz General Requirements v01r03

FCC KDB 987594 D02 U-NII 6GHz EMC Measurement v01r01

4.2 MEASUREMENT EQUIPMENT USED

For Conducted Emission Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
EMI Test Receiver	Rohde & Schwarz	ESCI	101384	2023/5/13	1Year
AMN	Rohde & Schwarz	ENV216	101161	2023/5/13	1Year

For Spurious Emissions Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
Pre-Amplifier	Bonn	BLMA 011001N	2213967A	2023/10/23	1Year
EMI Test Receiver	Rohde & Schwarz	ESR7	102551	2023/10/23	1Year
Bilog Antenna	Schwarzbeck	VULB9163	9163142	2022/7/24	2Year
Horn antenna	Schwarzbeck	BBHA9120D	9120D-1198	2023/6/2	2Year
Pre-Amplifier	Bonn	BLMA 0118-5G	2213967B-01	2023/10/23	1Year
Spectrum Analyzer	Rohde & Schwarz	FSV3044	101290	2023/10/23	1Year
Horn antenna	Schwarzbeck	BBHA9170	9170-399	2023/5/12	2Year
Pre-Amplifier	Lunar EM	LNA18G26-40	J1012131010001	2023/5/10	1Year
Pre-Amplifier	Lunar EM	LNA26G40-40	J1013131028001	2023/5/10	1Year
Loop Antenna	Schwarzbeck	FMZB1519	1519-012	2023/5/12	2Year
Thermometer	Hegao	HTC-1	\	2023/5/16	1Year

For Other Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
Wideband Radio Communication Tester	R&S	CMW500	171168	2023/9/14	1Year
Frequency Extender	R&S	CMW-Z800A	100430	2023/11/1	1Year
Spectrum Analyzer	R&S	FSV3044	101289	2023/9/14	1Year
Analog Signal Generator	R&S	SMB100A	183237	2023/9/16	1Year
Vector Signal Generator	R&S	SMM100A	101808	2023/9/16	1Year
RF Control Unit(Power Meter)	Tonscend	JS0806-2	22C8060567	2023/9/14	1Year
Temperature&Humidity Chamber	ESPEC	EL-02KA	12107166	2023/5/10	1 Year

4.3 DESCRIPTION OF TEST MODES

The EUT has been tested under its typical operating condition.

The EUT configuration for testing is installed on RF field strength measurement to meet the commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.

Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

U-NII 5 Band (5925 ~ 6425MHz)

802.11ax(20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	5955MHz	5	5975MHz	9	5995MHz	13	6015MHz
17	6035MHz	21	6055MHz	25	6075MHz	29	6095MHz
33	6115MHz	37	6135MHz	41	6155MHz	45	6175MHz
49	6195MHz	53	6215MHz	57	6235MHz	61	6255MHz
65	6275MHz	69	6295MHz	73	6315MHz	77	6335MHz
81	6355MHz	85	6375MHz	89	6395MHz	93	6415MHz

802.11ax(40)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
3	5965MHz	11	6005MHz	19	6045MHz	27	6085MHz
35	6125MHz	43	6165MHz	51	6205MHz	59	6245MHz
67	6285MHz	75	6325MHz	83	6365MHz	91	6405MHz

802.11ax(80)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
7	5985MHz	23	6065MHz	39	6145MHz	55	6225MHz
71	6305MHz	87	6385MHz	-	-	-	-

U-NII 6 Band (6425 ~ 6525MHz)

802.11ax(20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
97	6435MHz	101	6455MHz	105	6475MHz	109	6495MHz
113	6515MHz	-	-	-	-	-	-

802.11ax(40)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
99	6445MHz	107	6485MHz	115	6525MHz	-	-

802.11ax(80)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
103	6465MHz	119	6545MHz	-	-	-	-

Multi-antenna correlation:

☒	Transmit Signals are Correlated
	Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ dBi
☐	All Transmit Signals are Completely Uncorrelated
	Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10}) / N_{ANT}]$ dBi

Directional gain = $10 \log [(10^{1.54/20} + 10^{1.54/20})^2 / 2]$ dBi=4.55 dBi

5 FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at:

EMTEK (Shenzhen) Co., Ltd.

Building 69, Majialong Industry Zone District, Nanshan District, Shenzhen, China

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with preselectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers. Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

5.3 LABORATORY ACCREDITATIONS AND LISTINGS

Site Description

EMC Lab.

: **Accredited by CNAS**

The Certificate Registration Number is L2291.

The Laboratory has been assessed and proved to be in compliance with CNAS-CL01 (identical to ISO/IEC 17025:2017)

Accredited by FCC

Designation Number: CN1204

Test Firm Registration Number: 882943

Accredited by A2LA

The Certificate Number is 4321.01.

Accredited by Industry Canada

The Conformity Assessment Body Identifier is CN0008

Name of Firm

: EMTEK (SHENZHEN) CO., LTD.

Site Location

: Building 69, Majialong Industry Zone,
Nanshan District, Shenzhen, Guangdong, China

6 TEST SYSTEM UNCERTAINTY

The following measurement uncertainty levels have been estimated for tests performed on the apparatus:

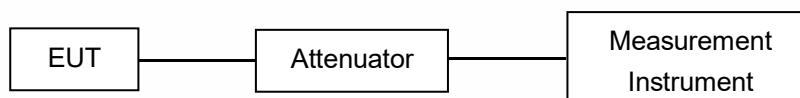
Test Parameter	Measurement Uncertainty
Radio Frequency	$\pm 1 \times 10^{-5}$
99%, 26dB Bandwidth	$\pm 1.0\text{dB}$
Conducted Output Power	$\pm 1.0\text{dB}$
Power Spectral Density	$\pm 1.0\text{dB}$
In-Band Emissions (Mask)	$\pm 1.0\text{dB}$
Contention Based Protocol	$\pm 1.0\text{dB}$
Dual Client- Proper Power Adjustment	$\pm 1.0\text{dB}$
Power Line Conducted Emission	$\pm 2.0\text{dB}$
Radiated Spurious Emission	$\pm 3\text{dB}$
Temperature	$\pm 0.5^{\circ}\text{C}$
Humidity	$\pm 3\%$

Measurement Uncertainty for a level of Confidence of 95%.

7 SETUP OF EQUIPMENT UNDER TEST

7.1 RADIO FREQUENCY TEST SETUP

The WLAN component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



7.2 RADIO FREQUENCY TEST SETUP

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

Below 30MHz:

The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna (loop antenna). The Antenna should be positioned with its plane vertical at the specified distance from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. The center of the loop shall be 1 m above the ground. For certain applications, the loop antenna plane may also need to be positioned horizontally at the specified distance from the EUT.

Above 30MHz:

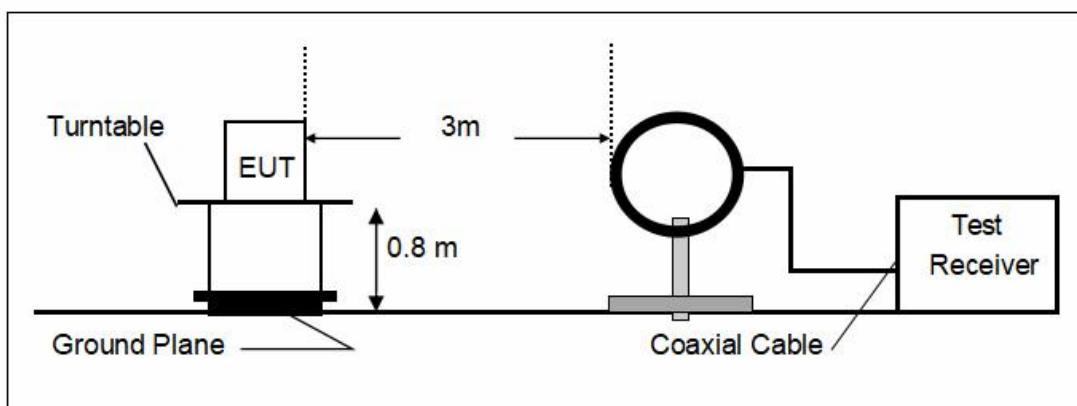
The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

Above 1GHz:

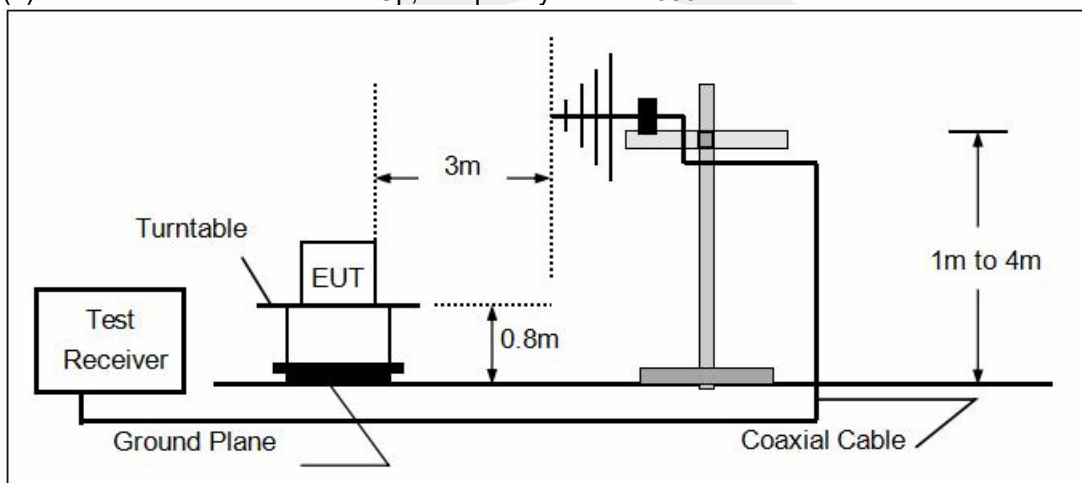
(Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.)

The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

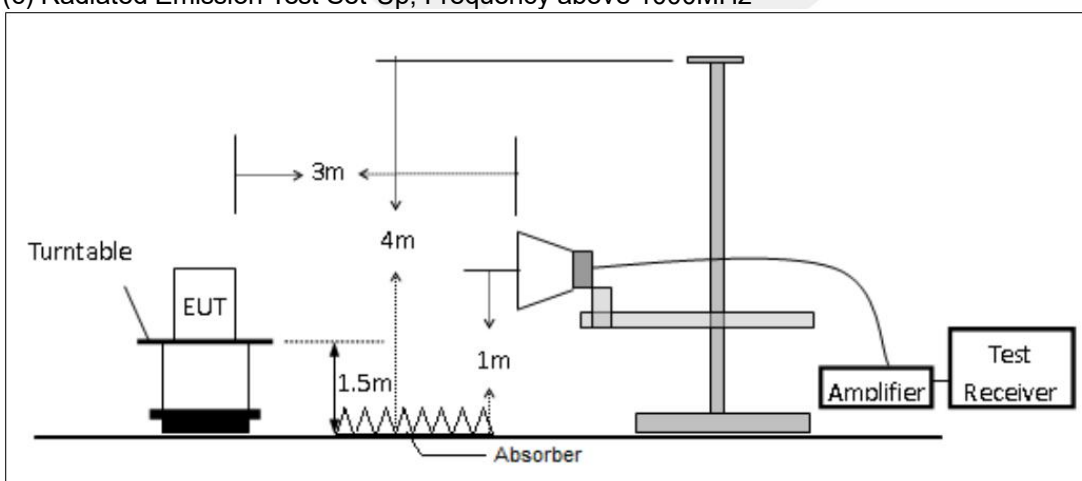
(a) Radiated Emission Test Set-Up, Frequency Below 30MHz



(b) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(c) Radiated Emission Test Set-Up, Frequency above 1000MHz

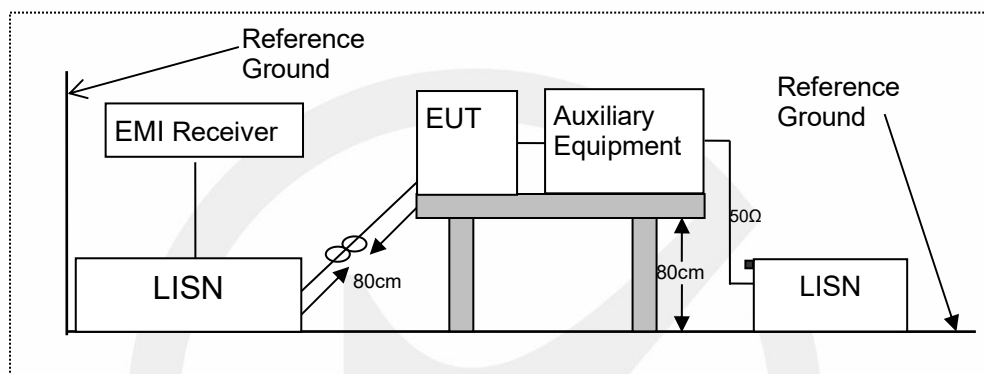


7.3 CONDUCTED EMISSION TEST SETUP

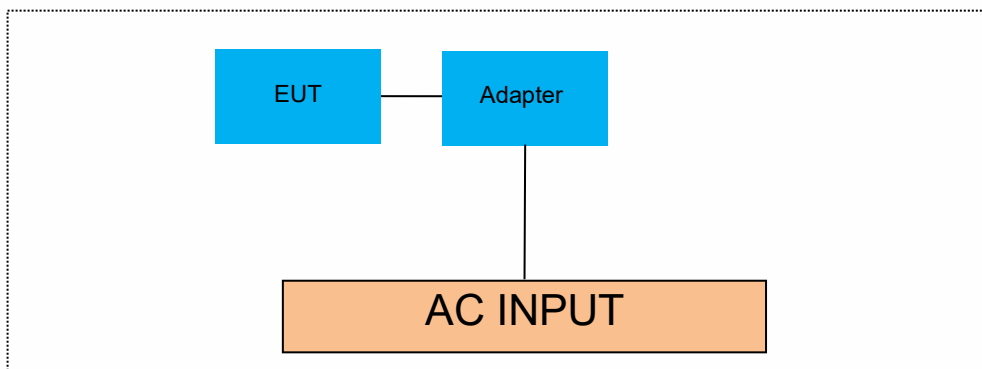
The mains cable of the EUT (maybe per AC/DC Adapter) must be connected to LISN. The LISN shall be placed 0.8 m from the boundary of EUT and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance is between the closest points of the LISN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8m from the LISN.

Ground connections, where required for safety purposes, shall be connected to the reference ground point of the LISN and, where not otherwise provided or specified by the manufacturer, shall be of same length as the mains cable and run parallel to the mains connection at a separation distance of not more than 0.1 m.

According to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.



7.4 BLOCK DIAGRAM CONFIGURATION OF TEST SYSTEM



7.5 SUPPORT EQUIPMENT

N/A

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

8 TEST REQUIREMENTS

8.1 OCCUPIED BANDWIDTH

8.1.1 Applicable Standard

According to FCC Part 15.407(a)
 According to 789033 D02 Section II.C.1 and Section II.D
 According to 987594 D02 Section II.C and Section II.D
 According to RSS-Gen 6.7, RSS-248 4.4

8.1.2 Conformance Limit

The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.

8.1.3 Test Configuration

Test according to clause 7.1 radio frequency test setup.

8.1.4 Test Procedure

Emission Bandwidth (EBW)

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

99% Occupied Bandwidth

The following procedure shall be used for measuring (99 %) power bandwidth:

- Set center frequency to the nominal EUT channel center frequency.
- Set span = 1.5 times to 5.0 times the OBW.
- Set RBW = 1 % to 5 % of the OBW
- Set VBW $\geq 3 \times$ RBW
- 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.
- Use the 99 % power bandwidth function of the instrument.

8.1.5 Test Results

PASS

Temperature :	25°C	ATM Pressure:	1011 mbar
Humidity :	60 %	Test Engineer:	XXH

26dB Bandwidth

Partial RU modes:

Test Mode	Antenna	Frequency[dbm]	Ru Size	Ru Index	26db BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11AX20MIMO	Ant1	5955	26Tone	RU0	20.08	5944.20	5964.28	320	Pass
			52Tone	RU37	20.48	5944.12	5964.60	320	Pass
			106Tone	RU53	21.36	5944.12	5965.48	320	Pass
	Ant2	5955	26Tone	RU0	19.80	5944.32	5964.12	320	Pass
			52Tone	RU37	19.80	5944.32	5964.12	320	Pass
			106Tone	RU53	20.36	5944.12	5964.48	320	Pass
	Ant1	6175	26Tone	RU0	19.96	6164.24	6184.20	320	Pass
			52Tone	RU37	20.04	6164.20	6184.24	320	Pass
			106Tone	RU53	21.64	6163.84	6185.48	320	Pass
	Ant2	6175	26Tone	RU0	19.88	6164.28	6184.16	320	Pass
			52Tone	RU37	20.04	6164.12	6184.16	320	Pass
			106Tone	RU53	20.36	6164.16	6184.52	320	Pass
	Ant1	6415	26Tone	RU0	19.84	6404.24	6424.08	320	Pass
			52Tone	RU37	20.36	6404.20	6424.56	320	Pass
			106Tone	RU53	21.72	6404.08	6425.80	320	Pass
	Ant2	6415	26Tone	RU0	19.84	6404.24	6424.08	320	Pass
			52Tone	RU37	19.96	6404.32	6424.28	320	Pass
			106Tone	RU53	20.80	6404.04	6424.84	320	Pass
	Ant1	6435	26Tone	RU0	19.84	6424.28	6444.12	320	Pass
			52Tone	RU4	20.48	6424.16	6444.64	320	Pass
			106Tone	RU53	20.72	6424.16	6444.88	320	Pass
	Ant2	6435	26Tone	RU0	21.04	6424.28	6445.32	320	Pass
			52Tone	RU4	19.88	6424.28	6444.16	320	Pass
			106Tone	RU53	19.88	6424.24	6444.12	320	Pass
	Ant1	6475	26Tone	RU0	19.80	6424.32	6444.12	320	Pass
			52Tone	RU37	19.80	6424.32	6444.12	320	Pass
			106Tone	RU53	20.20	6424.16	6444.36	320	Pass
	Ant2	6475	26Tone	RU0	19.76	6464.32	6484.08	320	Pass
			52Tone	RU37	19.76	6464.16	6484.92	320	Pass
			106Tone	RU53	21.12	6464.12	6485.24	320	Pass
	Ant1	6515	26Tone	RU0	19.96	6464.20	6484.16	320	Pass
			52Tone	RU37	19.76	6464.36	6484.12	320	Pass
			106Tone	RU53	20.12	6464.28	6484.40	320	Pass
	Ant2	6515	26Tone	RU0	20.04	6504.24	6524.28	320	Pass
			52Tone	RU37	20.60	6504.16	6524.76	320	Pass
			106Tone	RU53	21.08	6504.28	6525.36	320	Pass
11AX40MIMO	Ant1	5965	26Tone	RU0	19.72	5944.32	5965.08	320	Pass
			52Tone	RU37	19.88	5944.20	5965.48	320	Pass
			106Tone	RU53	20.04	5944.92	5965.32	320	Pass
	Ant2	5965	26Tone	RU0	20.40	5944.92	5967.24	320	Pass
			52Tone	RU37	22.40	5944.84	5967.24	320	Pass
			106Tone	RU53	21.28	5944.20	5965.48	320	Pass
	Ant1	6165	26Tone	RU0	32.00	5944.76	5976.76	320	Pass
			52Tone	RU37	20.48	5944.84	5965.32	320	Pass
			106Tone	RU53	20.96	5944.12	5965.08	320	Pass
	Ant2	6165	26Tone	RU0	30.96	5944.92	5975.88	320	Pass
			52Tone	RU37	20.48	5944.84	5965.32	320	Pass
			106Tone	RU53	20.96	5944.12	5965.08	320	Pass
	Ant1	6405	26Tone	RU0	20.56	6144.84	6165.40	320	Pass
			52Tone	RU37	22.32	6144.76	6167.08	320	Pass
			106Tone	RU53	21.28	6144.20	6165.48	320	Pass
	Ant2	6405	26Tone	RU0	32.32	6144.92	6177.24	320	Pass
			52Tone	RU37	19.68	6144.92	6164.60	320	Pass
			106Tone	RU53	20.16	6144.92	6165.08	320	Pass
	Ant1	6445	26Tone	RU0	20.96	6144.28	6165.24	320	Pass
			52Tone	RU37	20.96	6144.28	6165.24	320	Pass
			106Tone	RU53	20.96	6144.28	6165.24	320	Pass
	Ant2	6445	26Tone	RU0	28.32	6144.76	6173.08	320	Pass
			52Tone	RU37	20.32	6384.84	6405.16	320	Pass
			106Tone	RU53	22.88	6384.76	6407.64	320	Pass
	Ant1	6485	26Tone	RU0	21.36	6384.20	6405.56	320	Pass
			52Tone	RU37	34.64	6384.84	6419.48	320	Pass
			106Tone	RU53	19.52	6385.00	6404.52	320	Pass
	Ant2	6485	26Tone	RU0	20.24	6384.92	6405.16	320	Pass
			52Tone	RU37	21.04	6384.12	6405.16	320	Pass
			106Tone	RU53	21.04	6384.12	6405.16	320	Pass
	Ant1	6445	26Tone	RU0	28.64	6384.84	6413.48	320	Pass
			52Tone	RU37	20.40	6424.84	6445.24	320	Pass
			106Tone	RU53	23.20	6424.76	6447.96	320	Pass
	Ant2	6445	26Tone	RU0	21.44	6424.12	6445.56	320	Pass
			52Tone	RU37	38.00	6424.68	6462.68	320	Pass
			106Tone	RU53	20.08	6424.92	6445.00	320	Pass
	Ant1	6485	26Tone	RU0	20.48	6424.84	6445.32	320	Pass
			52Tone	RU37	20.88	6424.20	6445.08	320	Pass
			106Tone	RU53	30.32	6424.92	6455.24	320	Pass
	Ant2	6485	26Tone	RU0	21.12	6464.60	6485.72	320	Pass
			52Tone	RU37	22.08	6464.76	6486.84	320	Pass
			106Tone	RU53	21.44	6464.12	6485.56	320	Pass
	Ant1	6485	26Tone	RU0	31.36	6464.76	6496.12	320	Pass
			52Tone	RU37	19.92	6464.92	6484.84	320	Pass
			106Tone	RU53	20.64	6464.84	6485.48	320	Pass
	Ant2	6485	26Tone	RU0	21.04	6464.20	6485.24	320	Pass
			52Tone	RU37	21.04	6464.20	6485.24	320	Pass
			106Tone	RU53	29.20	6464.76	6493.96	320	Pass

11AX80MIMO	Ant1	5985	26Tone	RU0	22.08	5943.88	5965.96	320	Pass
			52Tone	RU37	24.00	5944.04	5968.04	320	Pass
			106Tone	RU53	22.40	5963.72	5986.12	320	Pass
			242Tone	RU61	42.40	5943.72	5986.12	320	Pass
			484Tone	RU65	56.00	5944.04	6000.04	320	Pass
	Ant2	5985	26Tone	RU0	20.32	5944.20	5964.52	320	Pass
			52Tone	RU37	21.28	5943.88	5965.16	320	Pass
			106Tone	RU53	21.44	5963.72	5985.16	320	Pass
			242Tone	RU61	41.12	5943.88	5985.00	320	Pass
			484Tone	RU65	64.00	5944.20	6008.20	320	Pass
	Ant1	6145	26Tone	RU0	22.24	6103.72	6125.96	320	Pass
			52Tone	RU37	23.36	6104.04	6127.40	320	Pass
			106Tone	RU53	22.88	6123.40	6146.28	320	Pass
			242Tone	RU61	41.92	6103.88	6145.80	320	Pass
			484Tone	RU65	56.96	6104.04	6161.00	320	Pass
	Ant2	6145	26Tone	RU0	21.44	6104.04	6125.48	320	Pass
			52Tone	RU37	21.76	6103.88	6125.64	320	Pass
			106Tone	RU53	21.44	6123.72	6145.16	320	Pass
			242Tone	RU61	41.44	6103.72	6145.16	320	Pass
			484Tone	RU65	53.44	6104.20	6157.64	320	Pass
	Ant1	6385	26Tone	RU0	21.12	6343.88	6365.00	320	Pass
			52Tone	RU37	21.92	6344.04	6365.96	320	Pass
			106Tone	RU53	22.56	6363.40	6385.96	320	Pass
			242Tone	RU61	42.40	6343.72	6386.12	320	Pass
			484Tone	RU65	54.88	6343.88	6398.76	320	Pass
	Ant2	6385	26Tone	RU0	22.24	6343.72	6365.96	320	Pass
			52Tone	RU37	21.28	6344.04	6365.32	320	Pass
			106Tone	RU53	21.76	6363.56	6385.32	320	Pass
			242Tone	RU61	38.56	6343.72	6382.28	320	Pass
			484Tone	RU65	55.20	6343.72	6398.92	320	Pass
	Ant1	6465	26Tone	RU0	20.64	6424.20	6444.84	320	Pass
			52Tone	RU37	22.88	6424.04	6446.92	320	Pass
			106Tone	RU53	22.72	6443.56	6466.28	320	Pass
			242Tone	RU61	42.40	6423.40	6465.80	320	Pass
			484Tone	RU65	61.44	6423.56	6485.00	320	Pass
	Ant2	6465	26Tone	RU0	21.76	6424.04	6445.80	320	Pass
			52Tone	RU37	22.40	6423.72	6446.12	320	Pass
			106Tone	RU53	21.60	6443.72	6465.32	320	Pass
			242Tone	RU61	33.92	6424.20	6458.12	320	Pass
			484Tone	RU65	66.56	6424.04	6490.60	320	Pass

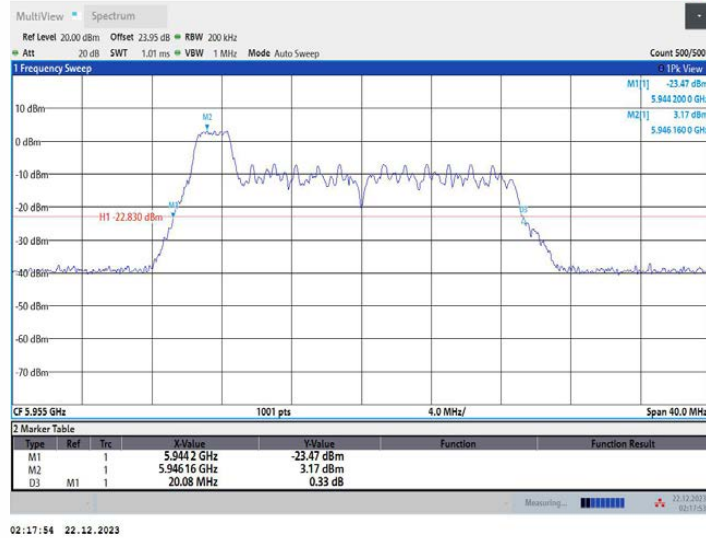
Full RU modes:

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11AX20MIM O	Ant1	5955	21.32	5944.40	5965.72	320	Pass
	Ant2	5955	21.12	5944.40	5965.52	320	Pass
	Ant1	6175	21.24	6164.40	6185.64	320	Pass
	Ant2	6175	21.40	6164.32	6185.72	320	Pass
	Ant1	6415	21.28	6404.44	6425.72	320	Pass
	Ant2	6415	21.32	6404.36	6425.68	320	Pass
	Ant1	6435	21.72	6424.20	6445.92	320	Pass
	Ant2	6435	21.24	6424.40	6445.64	320	Pass
	Ant1	6475	21.20	6464.44	6485.64	320	Pass
	Ant2	6475	21.32	6464.32	6485.64	320	Pass
11AX40MIM O	Ant1	6515	21.32	6504.28	6525.60	320	Pass
	Ant2	6515	21.28	6504.40	6525.68	320	Pass
	Ant1	5965	40.72	5944.84	5985.56	320	Pass
	Ant2	5965	40.56	5944.60	5985.16	320	Pass
	Ant1	6165	40.64	6144.76	6185.40	320	Pass
	Ant2	6165	40.80	6144.52	6185.32	320	Pass
	Ant1	6405	40.40	6384.76	6425.16	320	Pass
	Ant2	6405	40.40	6384.84	6425.24	320	Pass
	Ant1	6445	41.12	6424.36	6465.48	320	Pass
	Ant2	6445	40.56	6424.84	6465.40	320	Pass
11AX80MIM O	Ant1	6485	40.72	6464.52	6505.24	320	Pass
	Ant2	6485	40.40	6464.76	6505.16	320	Pass
	Ant1	5985	81.92	5944.04	6025.96	320	Pass
	Ant2	5985	82.24	5944.04	6026.28	320	Pass
	Ant1	6145	82.08	6103.88	6185.96	320	Pass
	Ant2	6145	82.24	6103.72	6185.96	320	Pass
	Ant1	6385	81.60	6344.20	6425.80	320	Pass
	Ant2	6385	82.08	6344.04	6426.12	320	Pass
	Ant1	6465	82.72	6423.56	6506.28	320	Pass
	Ant2	6465	82.08	6423.72	6505.80	320	Pass

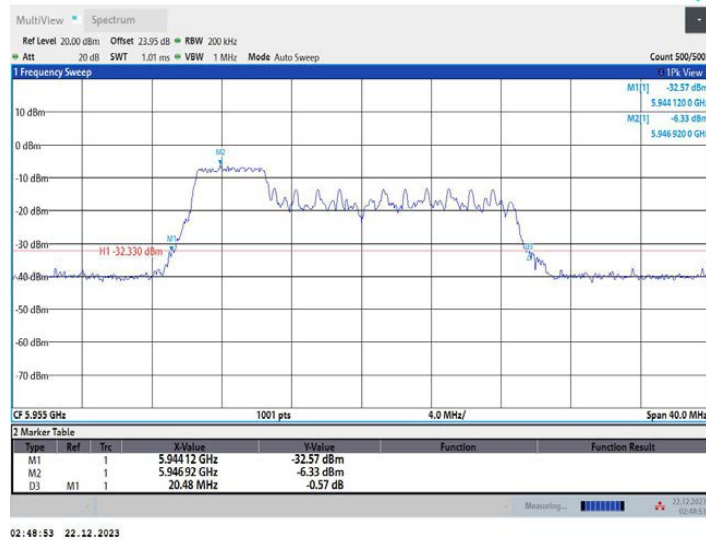
26dB Bandwidth Test Graphs

Partial RU modes

11AX20MIMO_Ant1_5955_26Tone_RU0



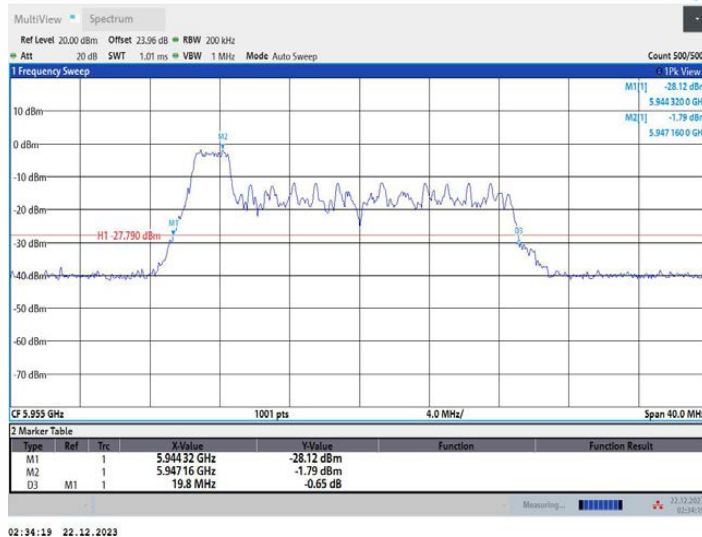
11AX20MIMO_Ant1_5955_52Tone_RU37



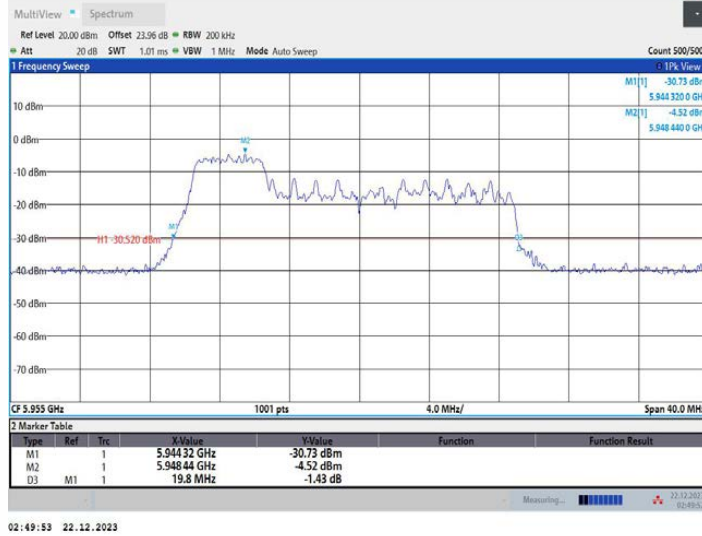
11AX20MIMO_Ant1_5955_106Tone_RU53



11AX20MIMO_Ant2_5955_26Tone_RU0



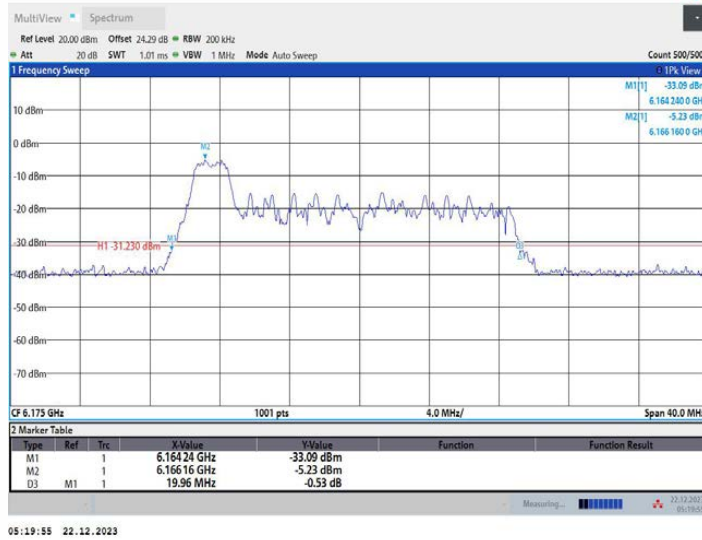
11AX20MIMO_Ant2_5955_52Tone_RU37



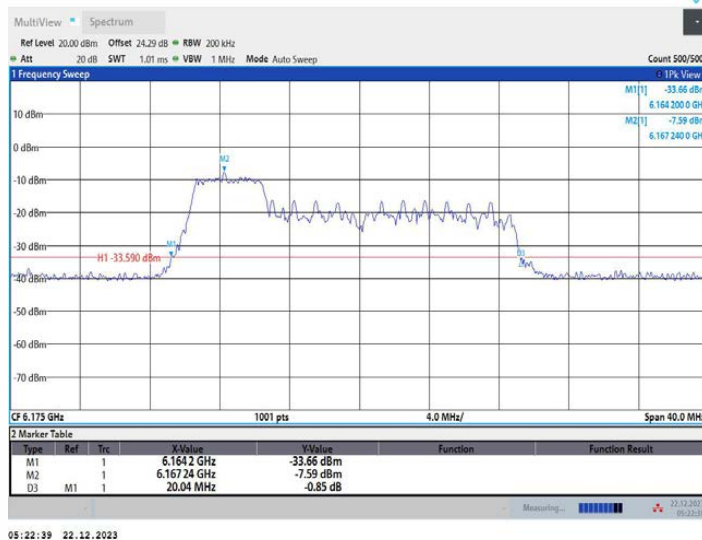
11AX20MIMO_Ant2_5955_106Tone_RU53



11AX20MIMO_Ant1_6175_26Tone_RU0



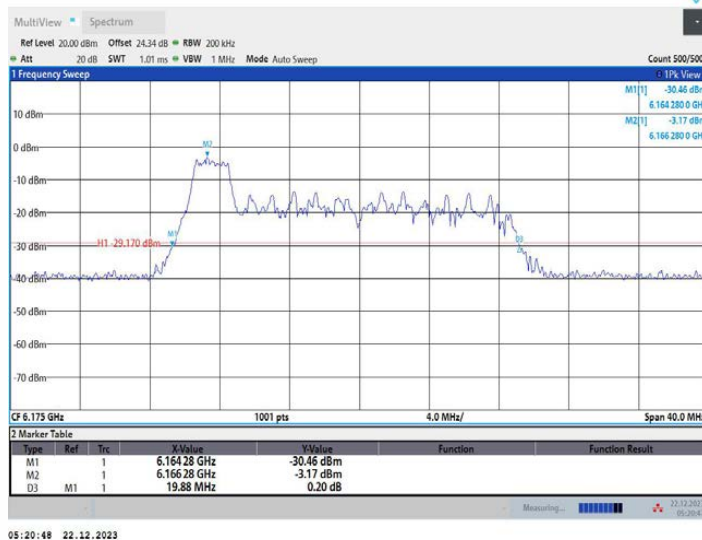
11AX20MIMO_Ant1_6175_52Tone_RU37



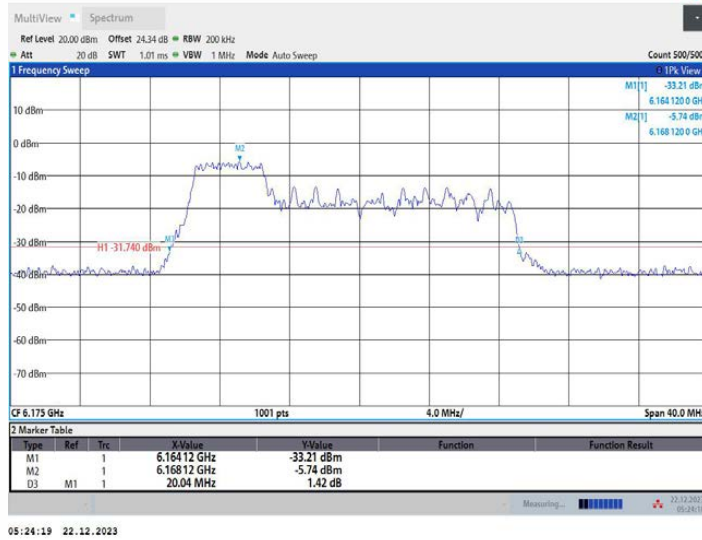
11AX20MIMO_Ant1_6175_106Tone_RU53



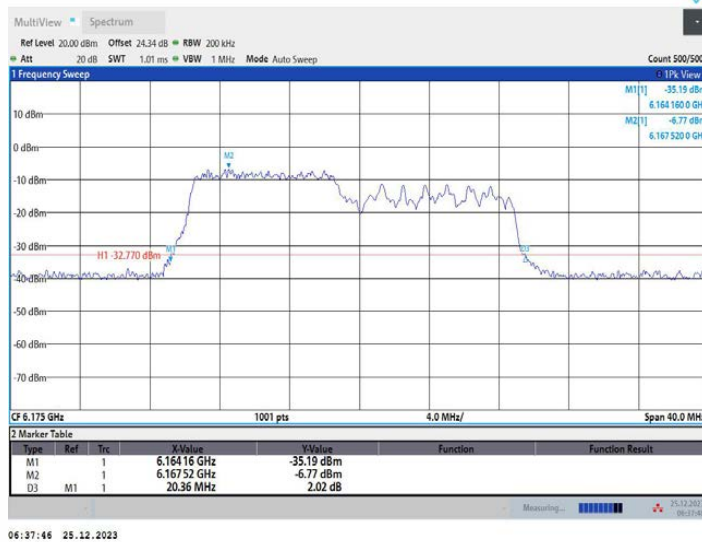
11AX20MIMO_Ant2_6175_26Tone_RU0



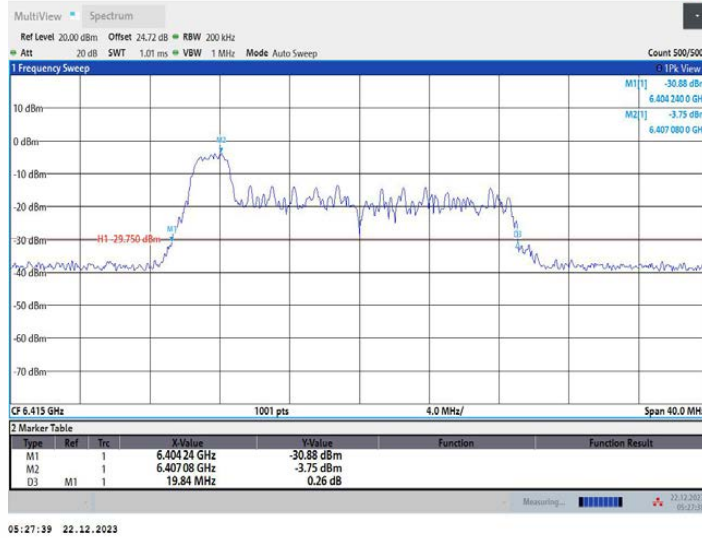
11AX20MIMO_Ant2_6175_52Tone_RU37



11AX20MIMO_Ant2_6175_106Tone_RU53



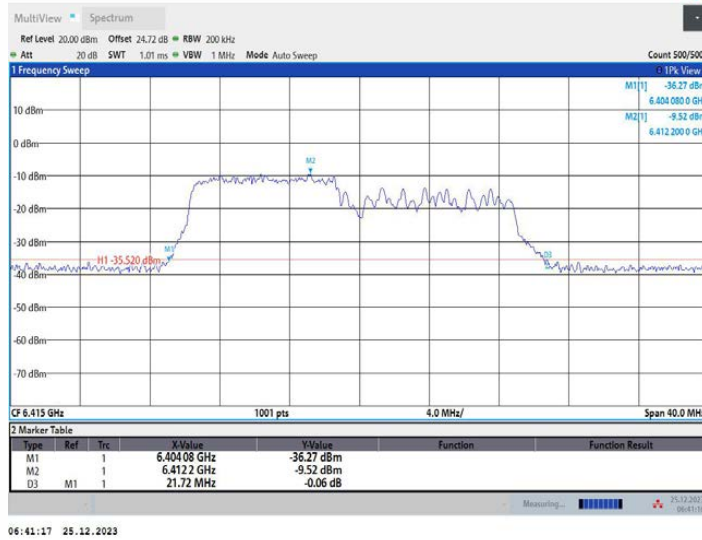
11AX20MIMO_Ant1_6415_26Tone_RU0



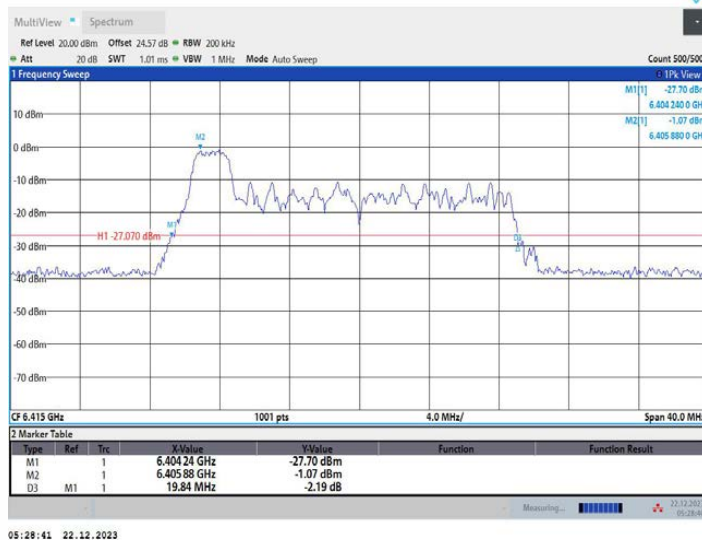
11AX20MIMO_Ant1_6415_52Tone_RU37



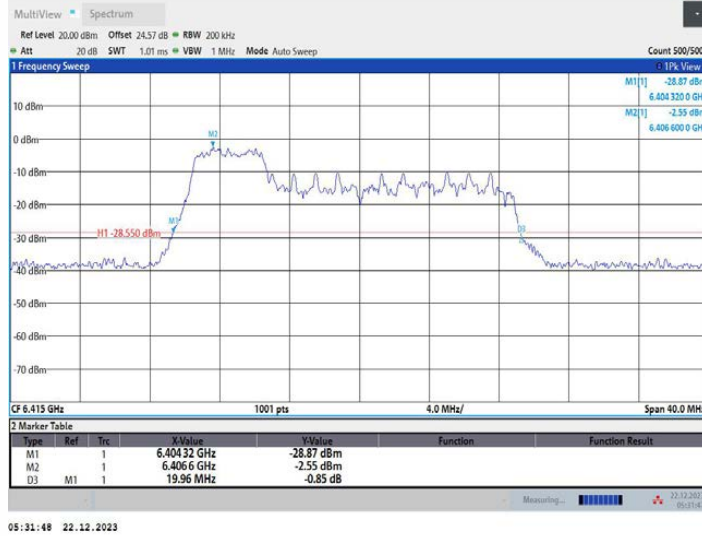
11AX20MIMO_Ant1_6415_106Tone_RU53



11AX20MIMO_Ant2_6415_26Tone_RU0



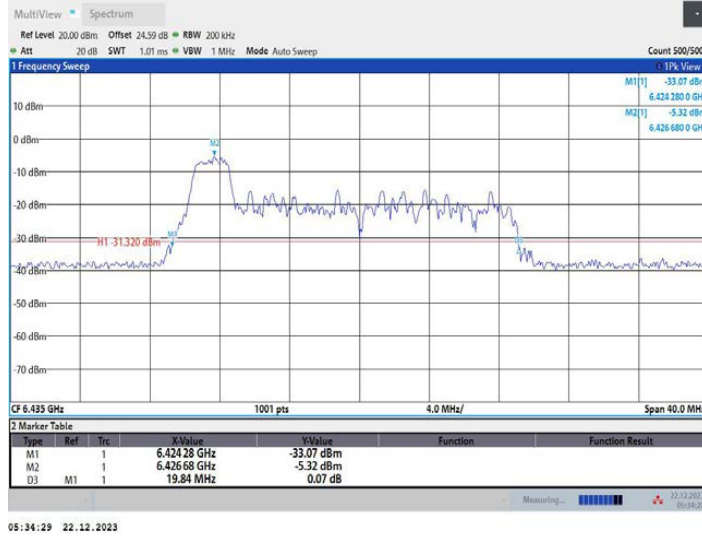
11AX20MIMO_Ant2_6415_52Tone_RU37



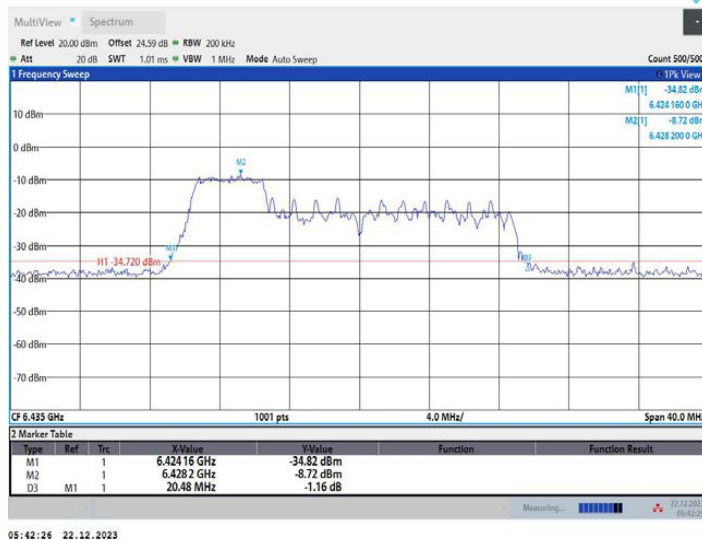
11AX20MIMO_Ant2_6415_106Tone_RU53



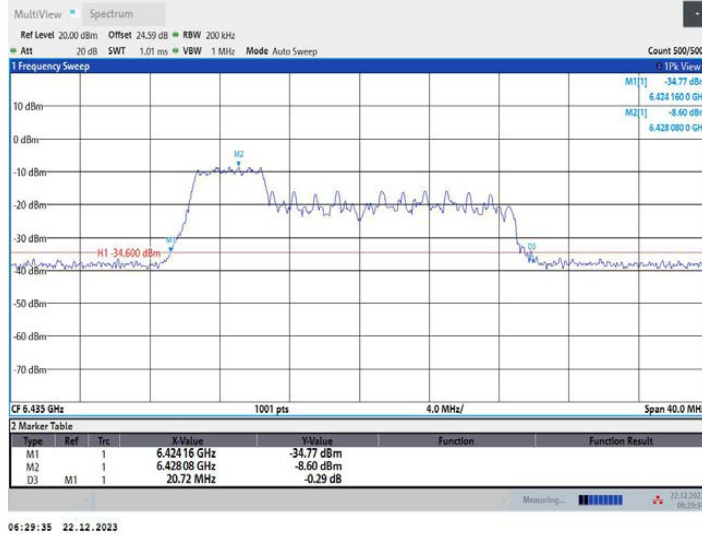
11AX20MIMO_Ant1_6435_26Tone_RU0



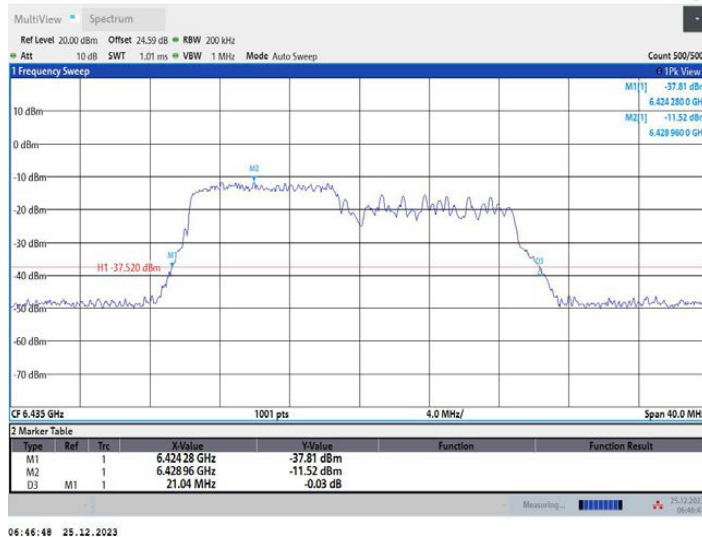
11AX20MIMO_Ant1_6435_26Tone_RU4



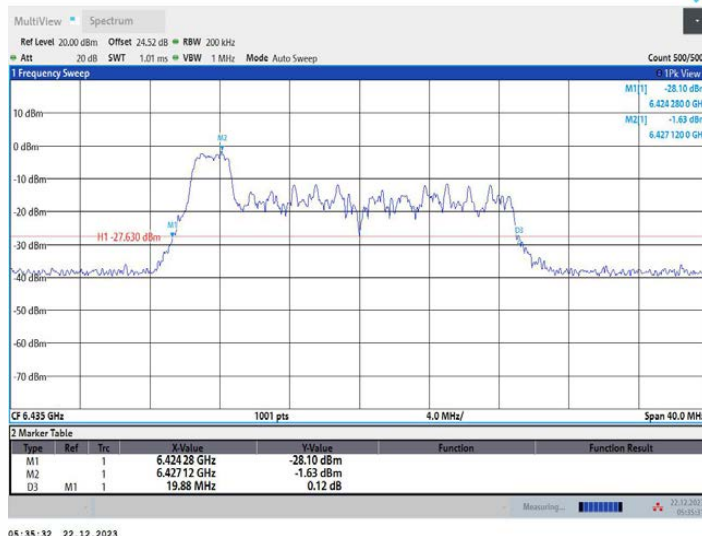
11AX20MIMO_Ant1_6435_52Tone_RU37



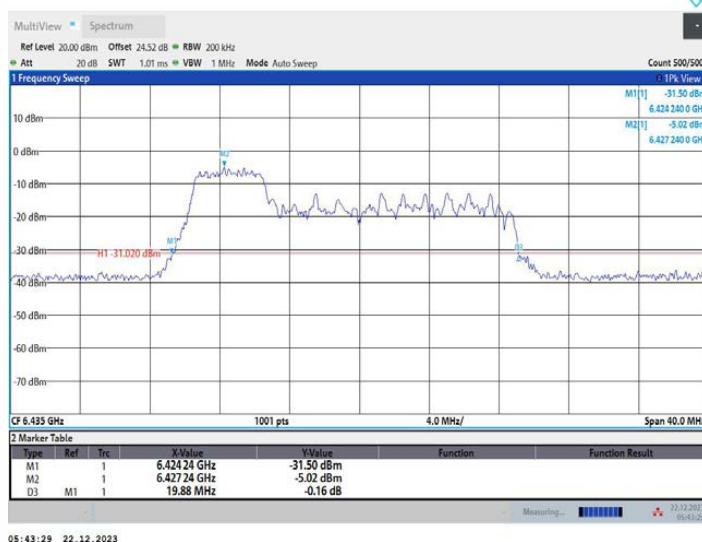
11AX20MIMO_Ant1_6435_106Tone_RU53



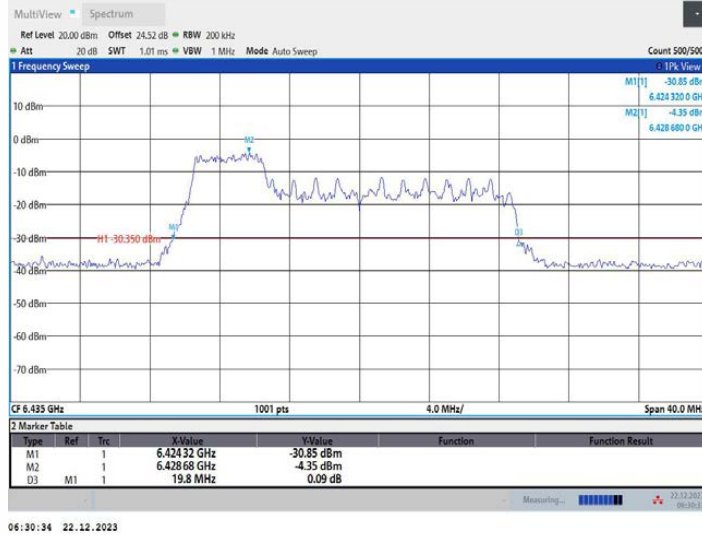
11AX20MIMO_Ant2_6435_26Tone_RU0



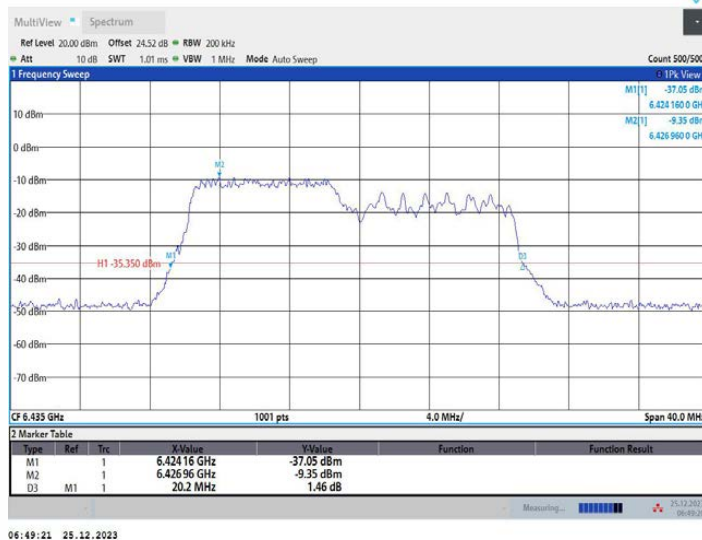
11AX20MIMO_Ant2_6435_26Tone_RU4



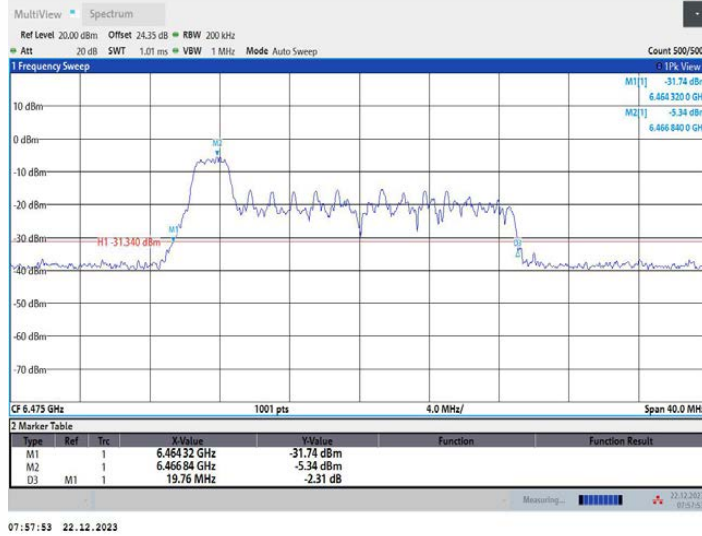
11AX20MIMO_Ant2_6435_52Tone_RU37



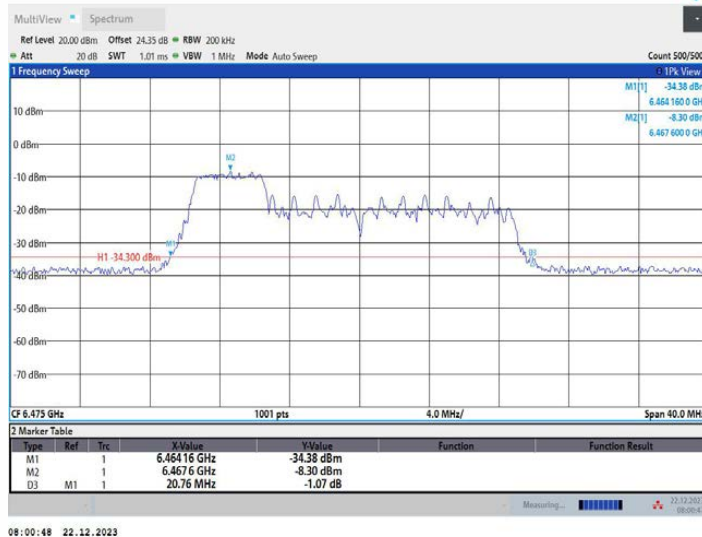
11AX20MIMO_Ant2_6435_106Tone_RU53



11AX20MIMO_Ant1_6475_26Tone_RU0



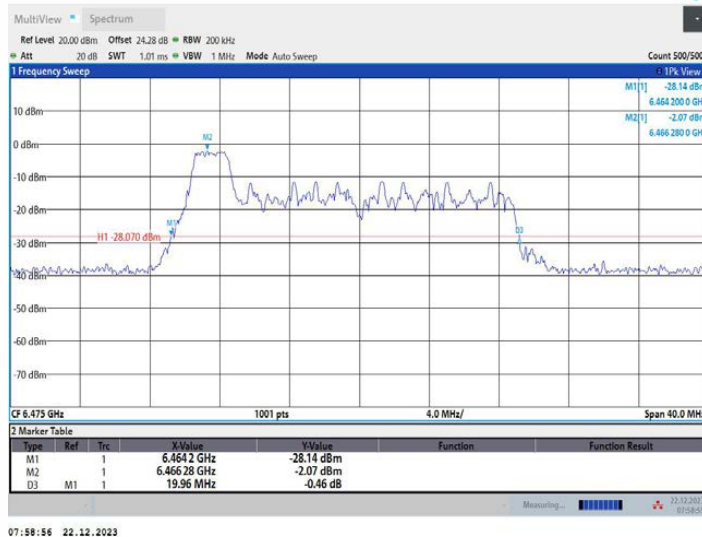
11AX20MIMO_Ant1_6475_52Tone_RU37



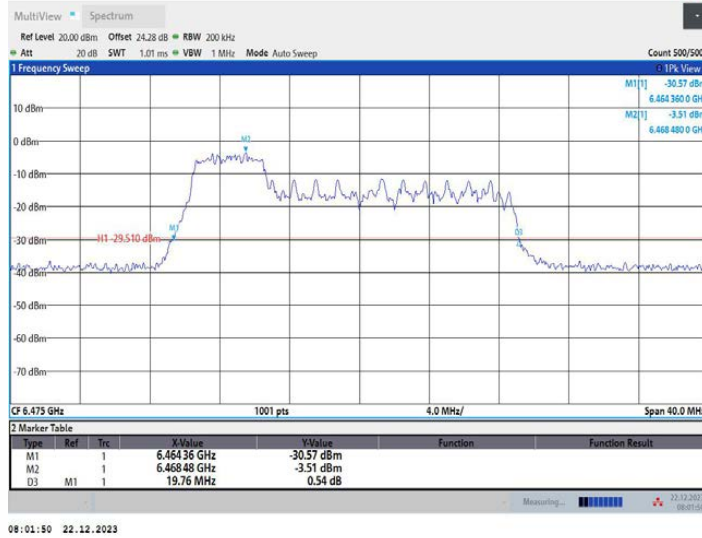
11AX20MIMO_Ant1_6475_106Tone_RU53



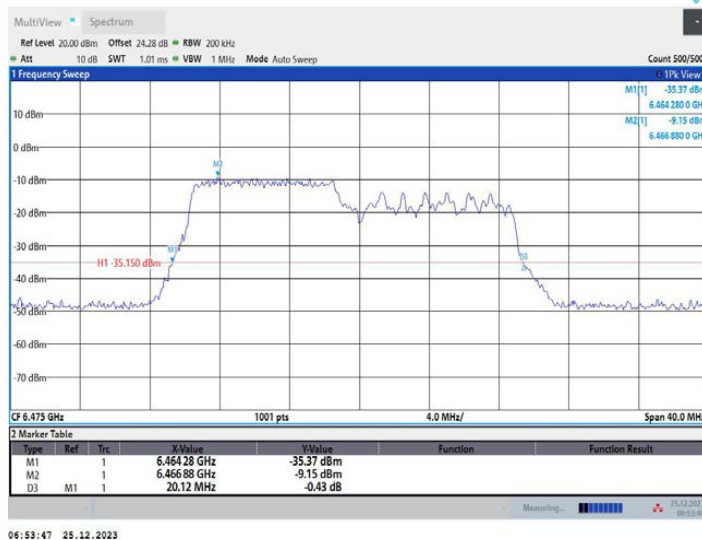
11AX20MIMO_Ant2_6475_26Tone_RU0



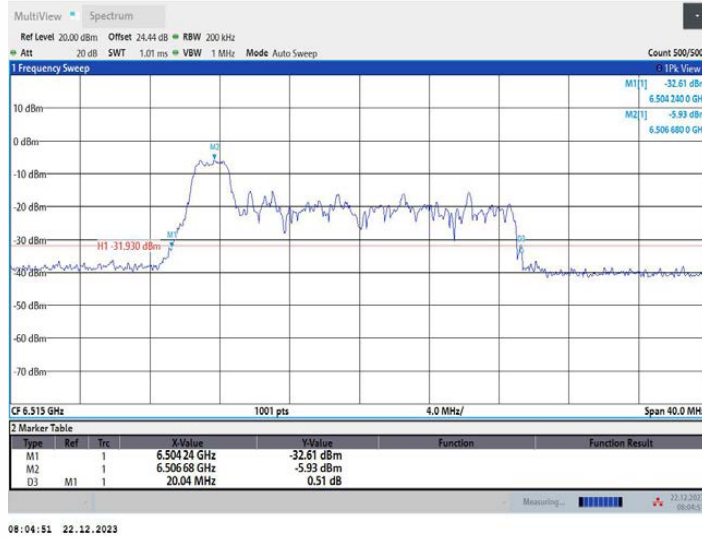
11AX20MIMO_Ant2_6475_52Tone_RU37



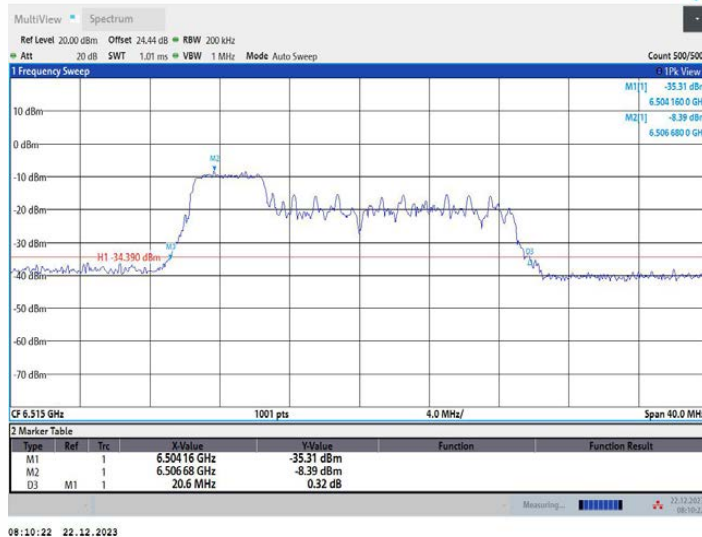
11AX20MIMO_Ant2_6475_106Tone_RU53



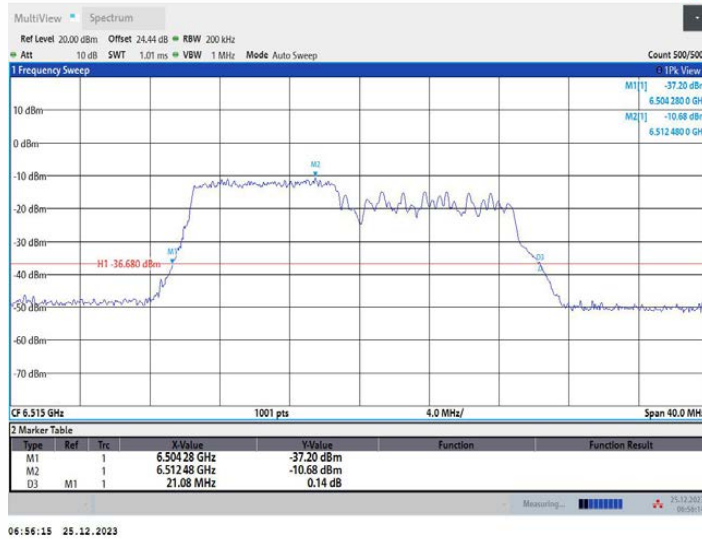
11AX20MIMO_Ant1_6515_26Tone_RU0



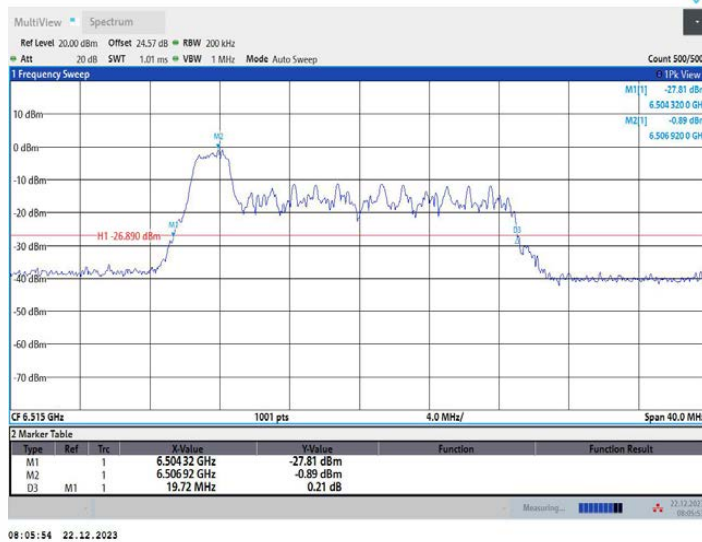
11AX20MIMO_Ant1_6515_52Tone_RU37



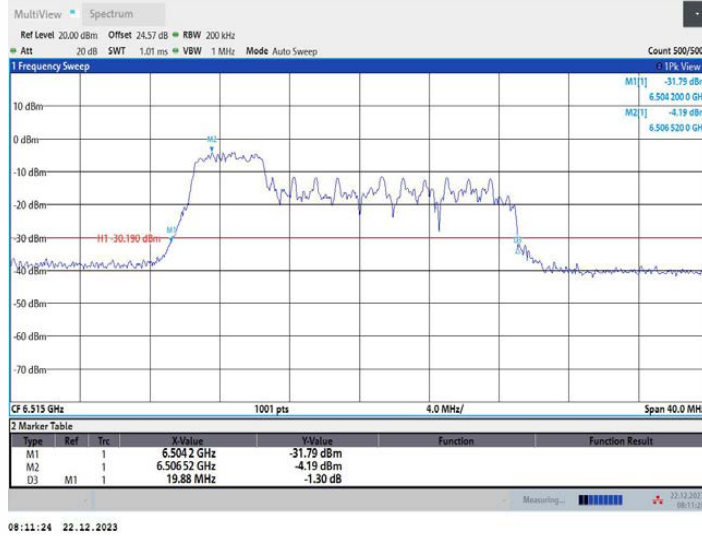
11AX20MIMO_Ant1_6515_106Tone_RU53



11AX20MIMO_Ant2_6515_26Tone_RU0

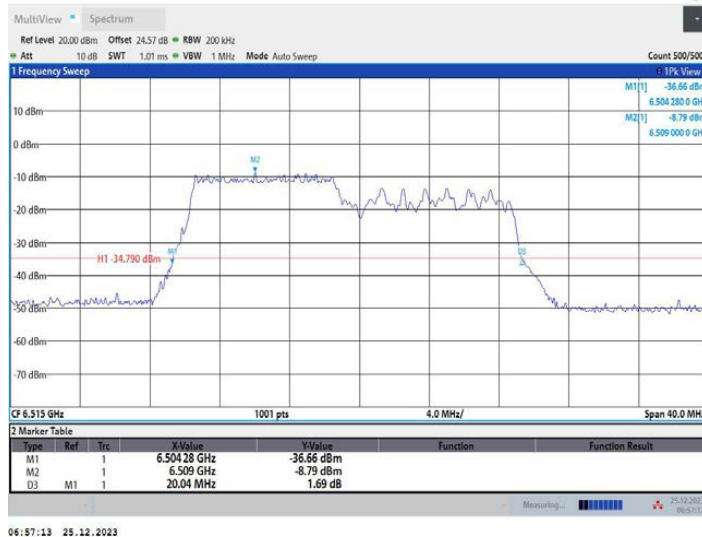


11AX20MIMO_Ant2_6515_52Tone_RU37



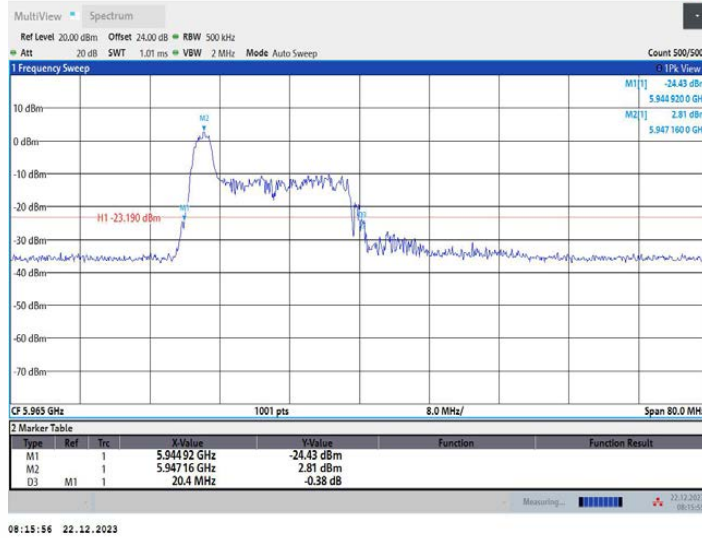
08:11:24 22.12.2023

11AX20MIMO_Ant2_6515_106Tone_RU53

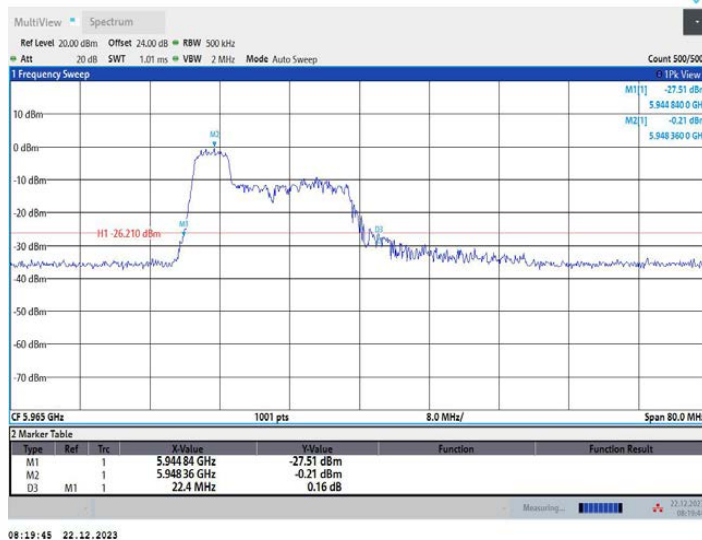


06:57:13 25.12.2023

11AX40MIMO_Ant1_5965_26Tone_RU0



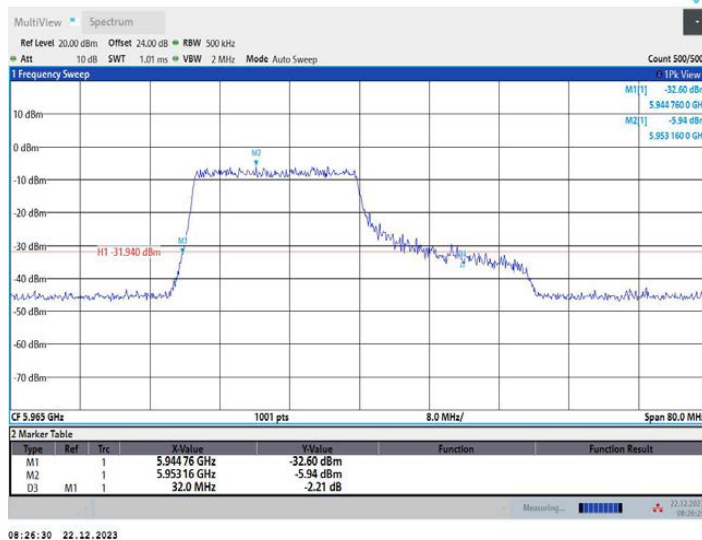
11AX40MIMO_Ant1_5965_52Tone_RU37



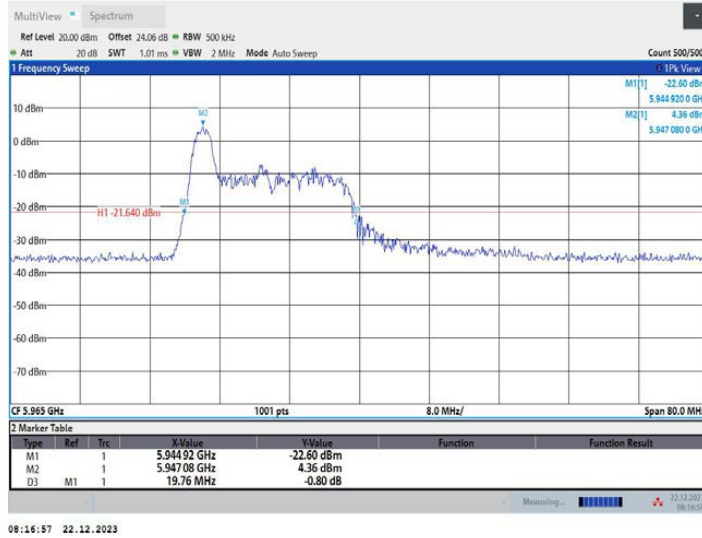
11AX40MIMO_Ant1_5965_106Tone_RU53



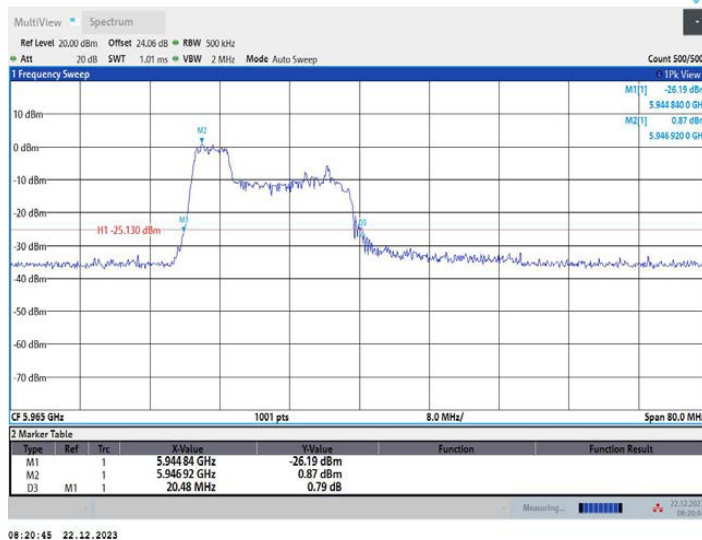
11AX40MIMO_Ant1_5965_242Tone_RU61



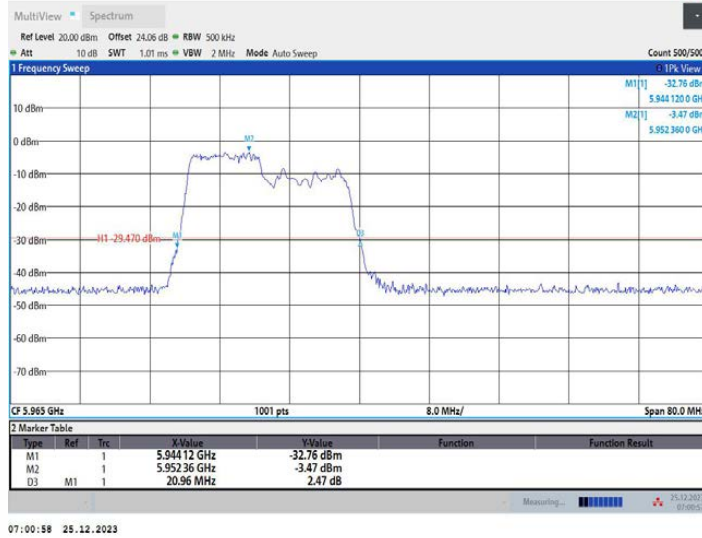
11AX40MIMO_Ant2_5965_26Tone_RU0



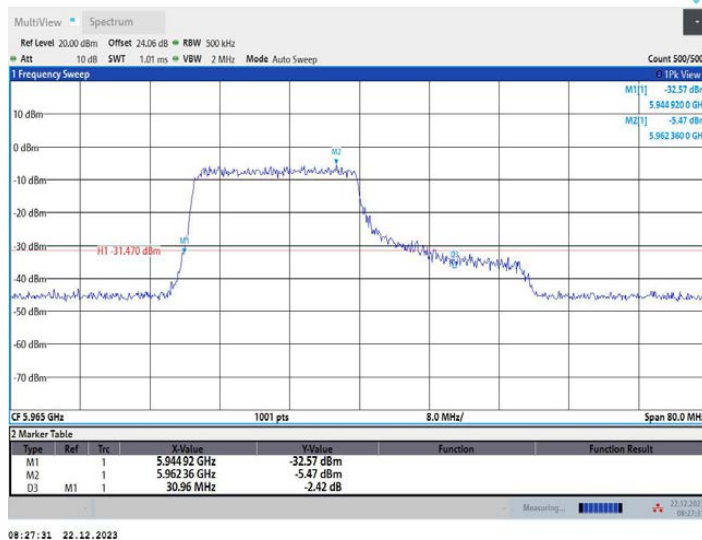
11AX40MIMO_Ant2_5965_52Tone_RU37



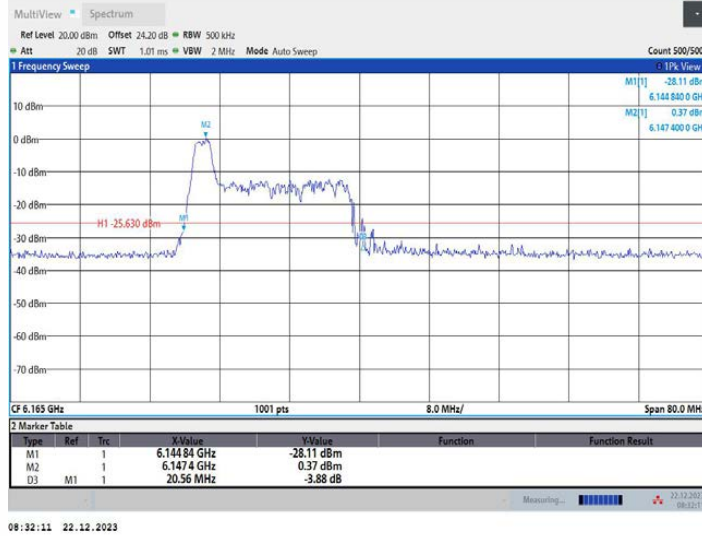
11AX40MIMO_Ant2_5965_106Tone_RU53



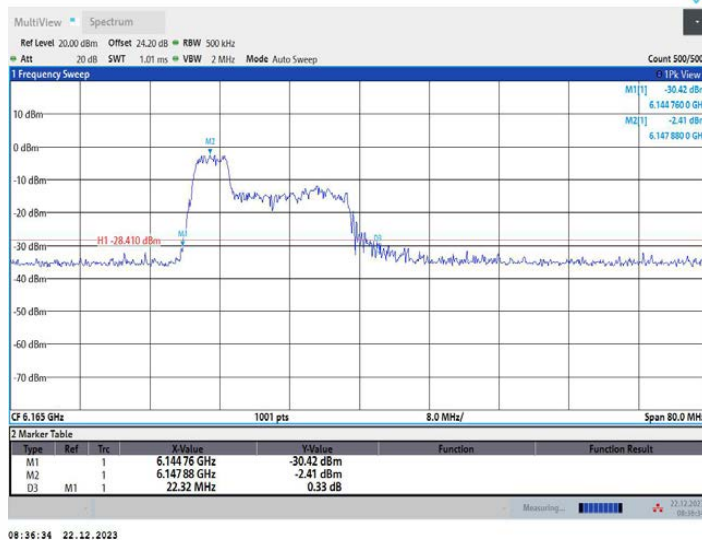
11AX40MIMO_Ant2_5965_242Tone_RU61



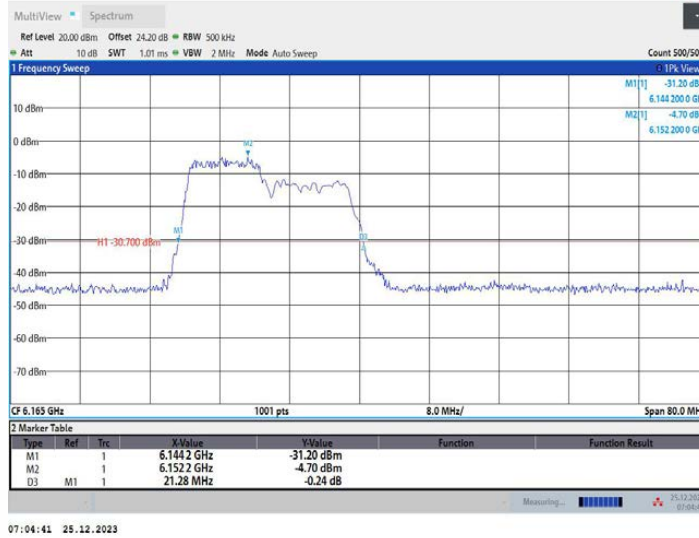
11AX40MIMO_Ant1_6165_26Tone_RU0



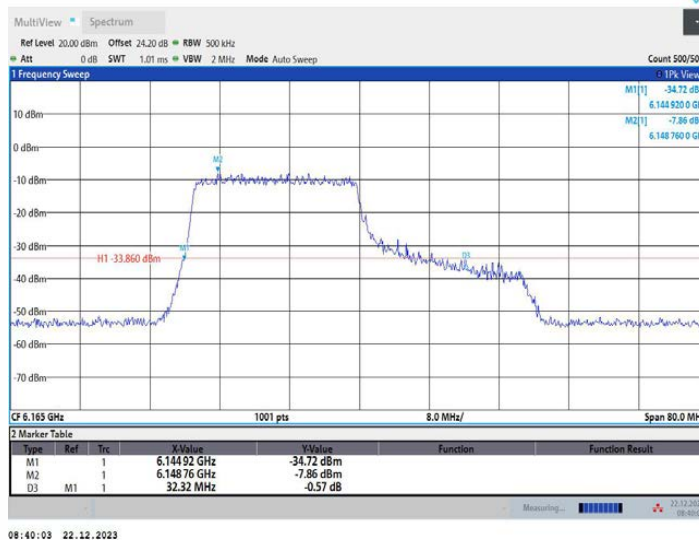
11AX40MIMO_Ant1_6165_52Tone_RU37



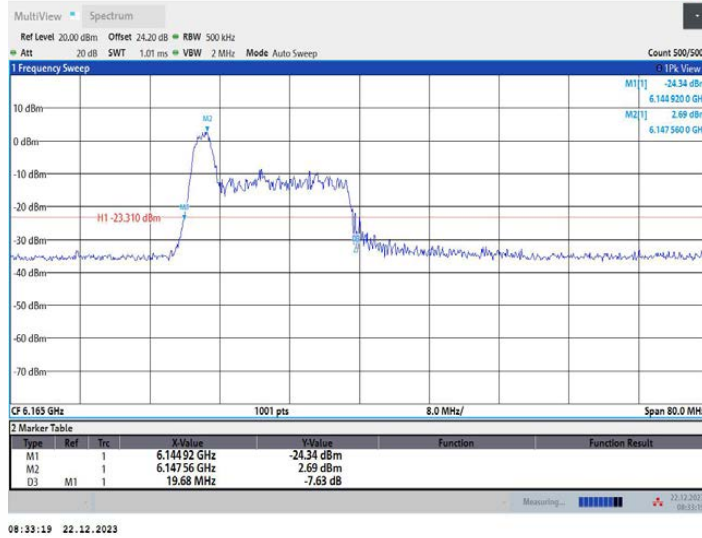
11AX40MIMO_Ant1_6165_106Tone_RU53



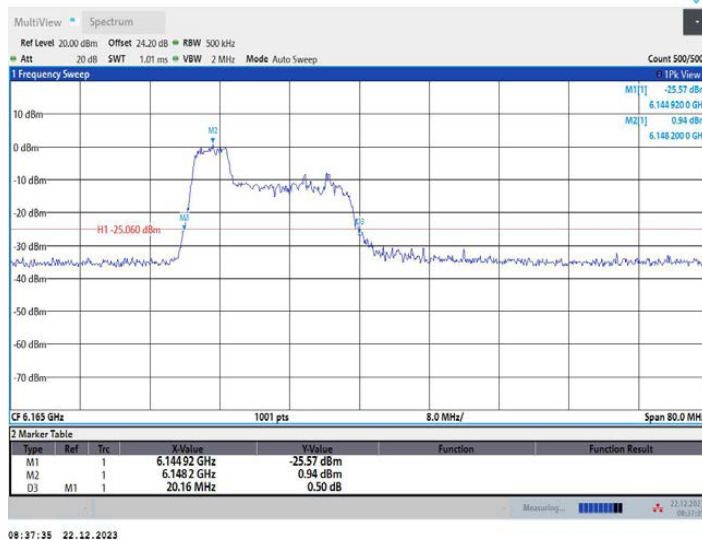
11AX40MIMO_Ant1_6165_242Tone_RU61



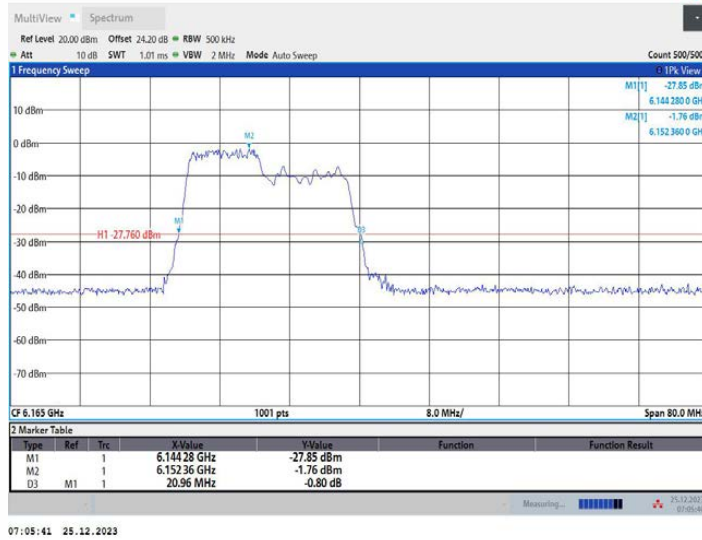
11AX40MIMO_Ant2_6165_26Tone_RU0



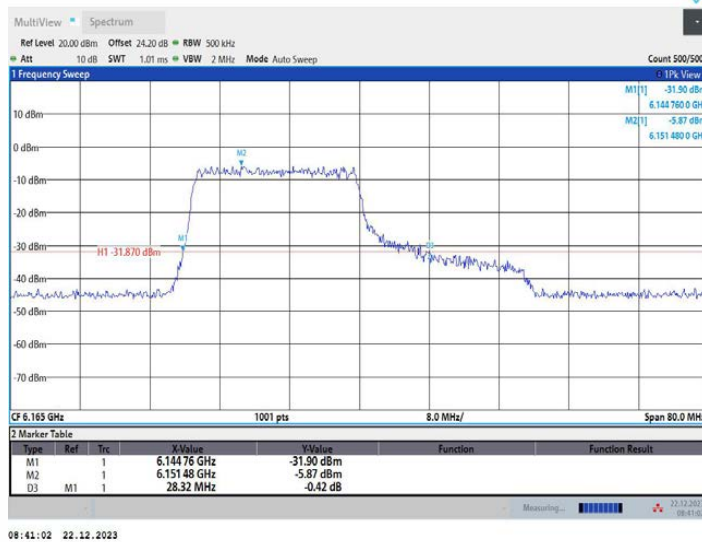
11AX40MIMO_Ant2_6165_52Tone_RU37



11AX40MIMO_Ant2_6165_106Tone_RU53



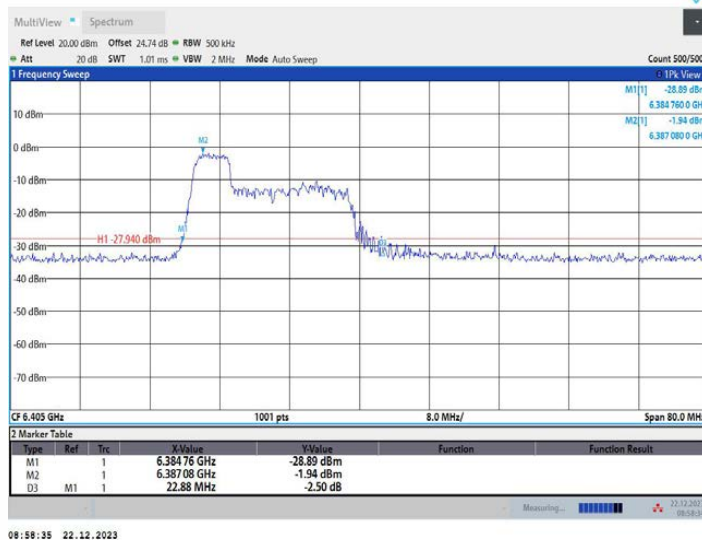
11AX40MIMO_Ant2_6165_242Tone_RU61



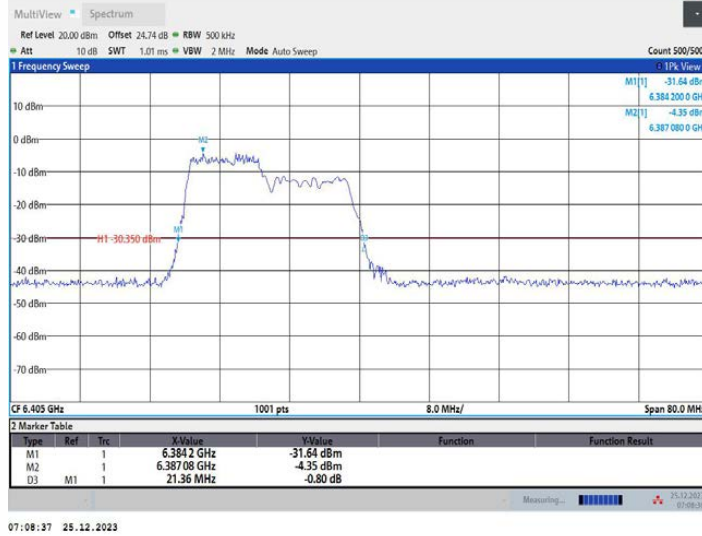
11AX40MIMO_Ant1_6405_26Tone_RU0



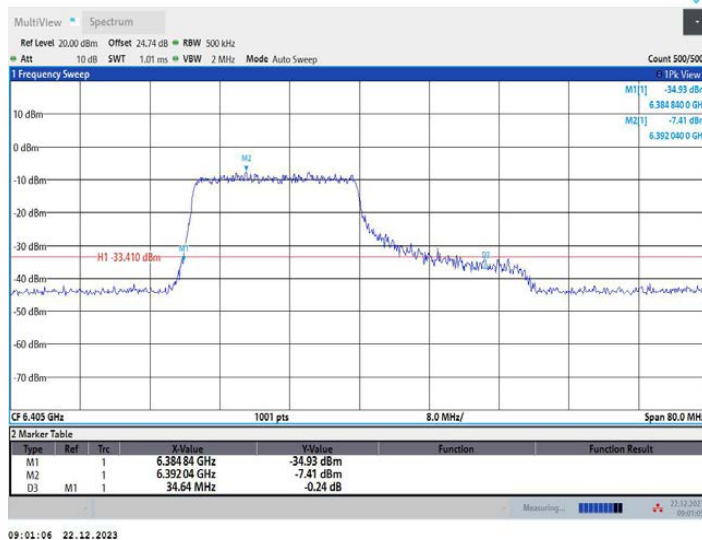
11AX40MIMO_Ant1_6405_52Tone_RU37



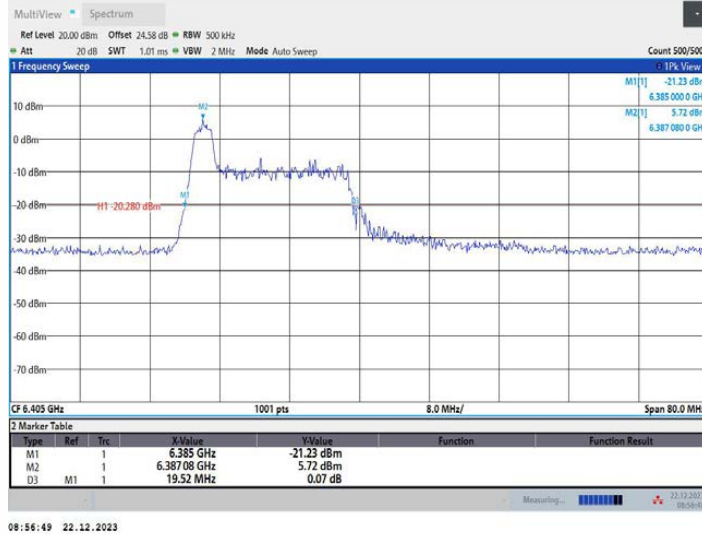
11AX40MIMO_Ant1_6405_106Tone_RU53



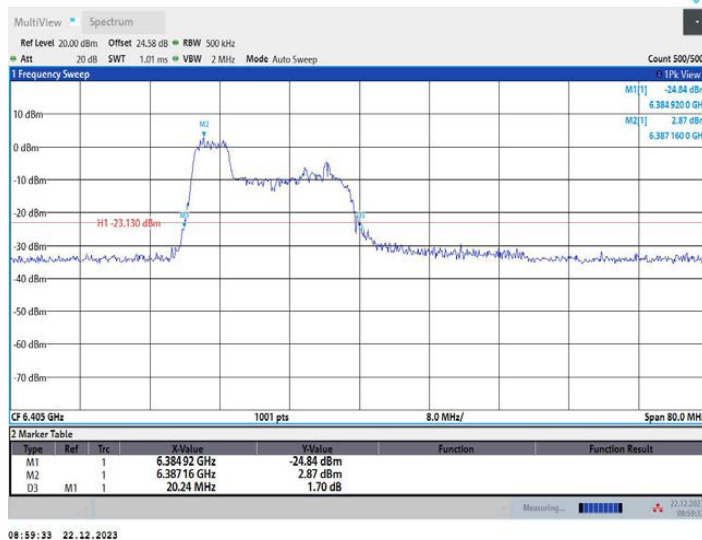
11AX40MIMO_Ant1_6405_242Tone_RU61



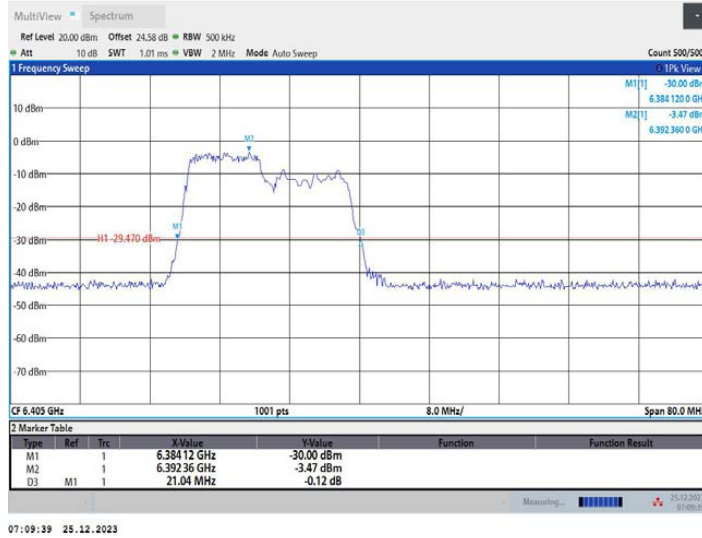
11AX40MIMO_Ant2_6405_26Tone_RU0



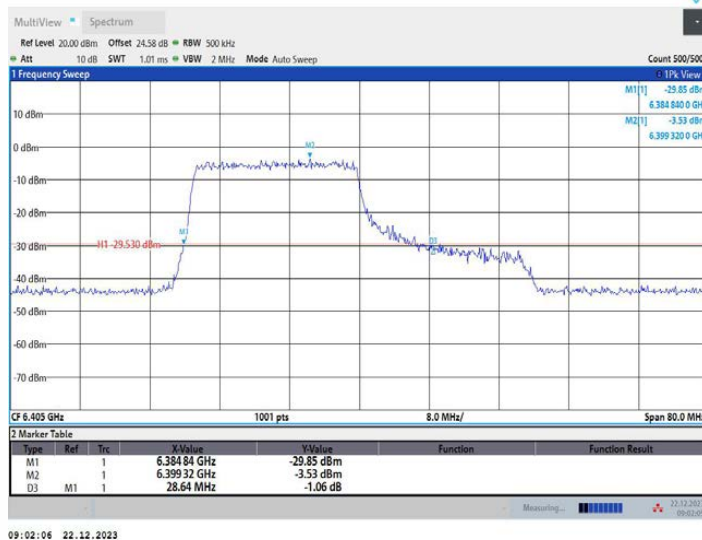
11AX40MIMO_Ant2_6405_52Tone_RU37



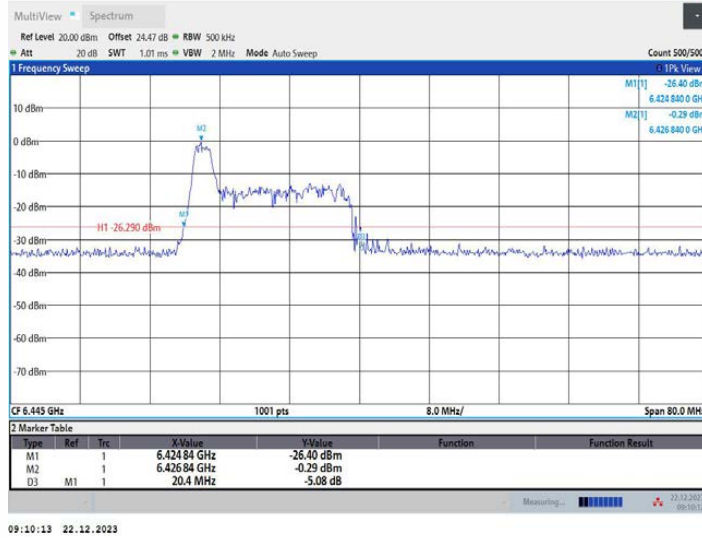
11AX40MIMO_Ant2_6405_106Tone_RU53



11AX40MIMO_Ant2_6405_242Tone_RU61



11AX40MIMO_Ant1_6445_26Tone_RU0



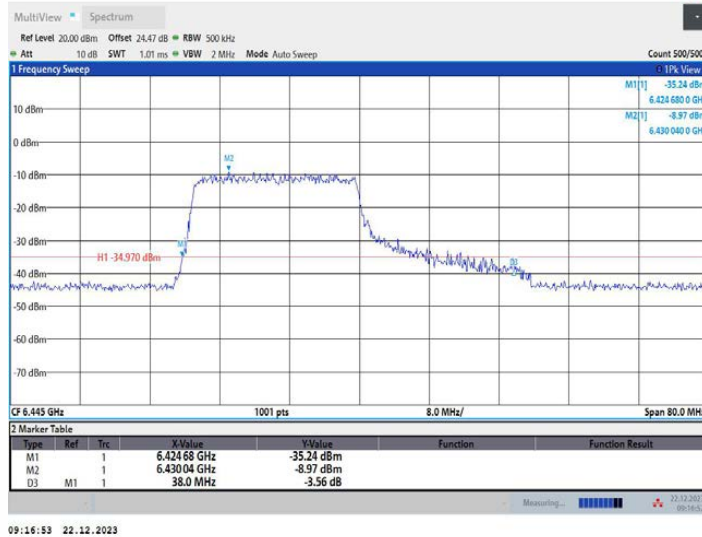
11AX40MIMO_Ant1_6445_52Tone_RU37



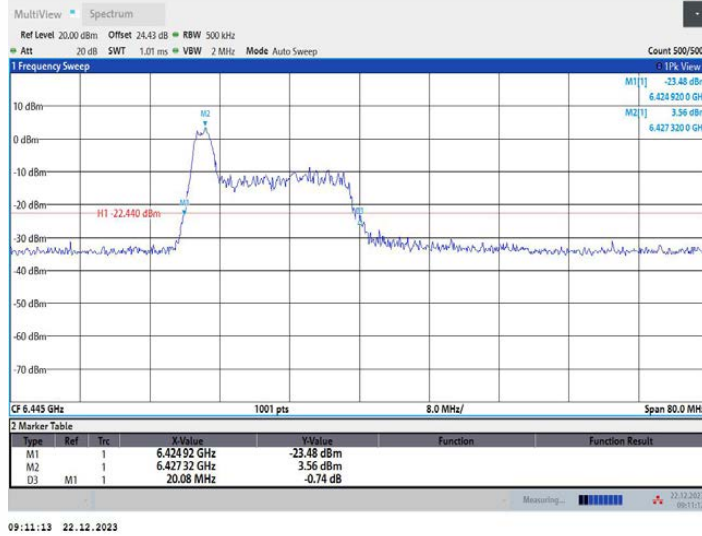
11AX40MIMO_Ant1_6445_106Tone_RU53



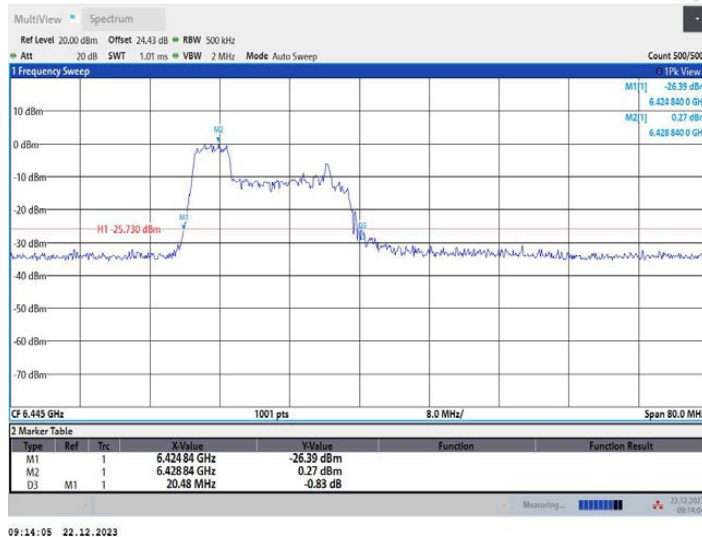
11AX40MIMO_Ant1_6445_242Tone_RU61



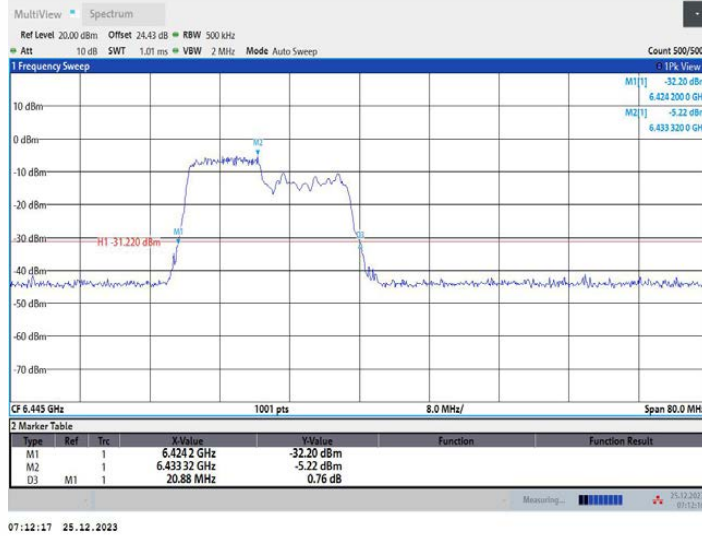
11AX40MIMO_Ant2_6445_26Tone_RU0



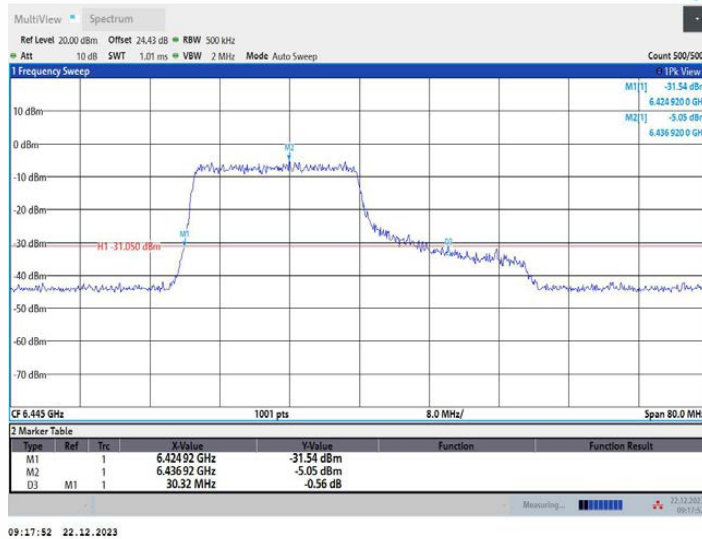
11AX40MIMO_Ant2_6445_52Tone_RU37



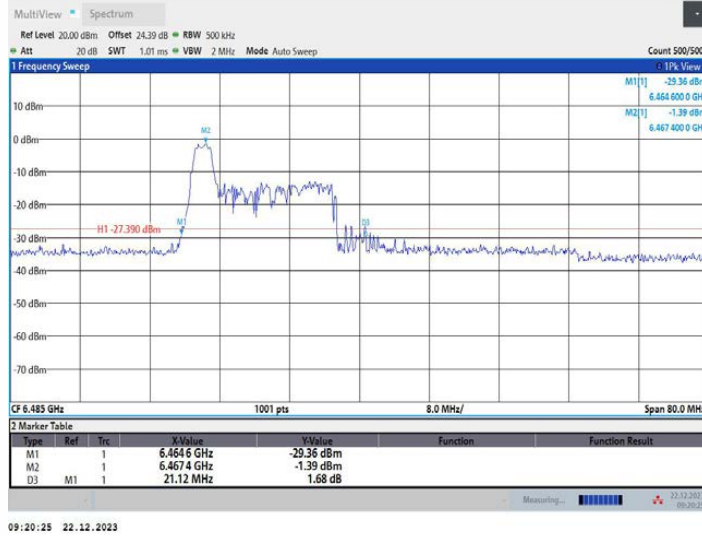
11AX40MIMO_Ant2_6445_106Tone_RU53



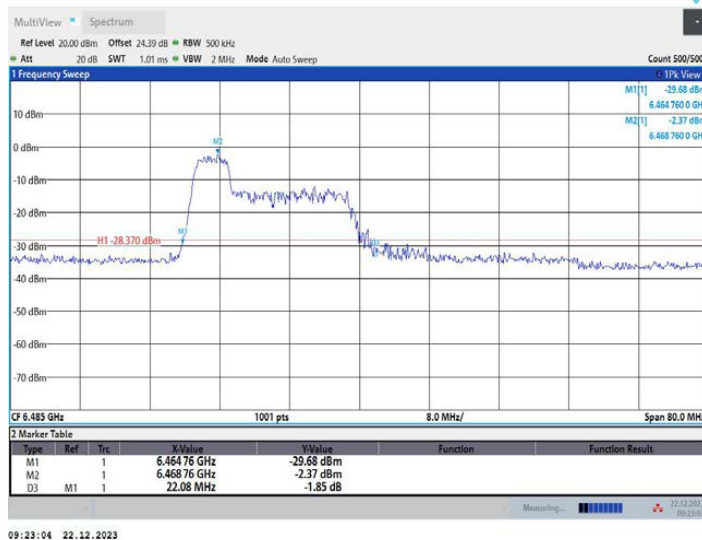
11AX40MIMO_Ant2_6445_242Tone_RU61



11AX40MIMO_Ant1_6485_26Tone_RU0



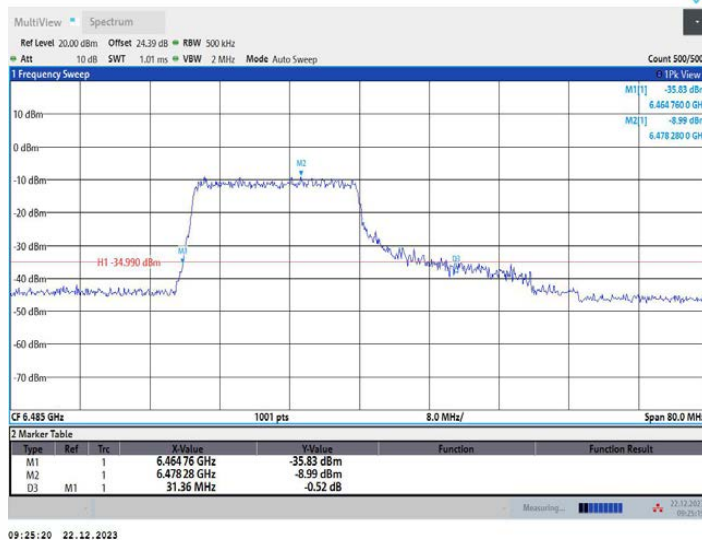
11AX40MIMO_Ant1_6485_52Tone_RU37



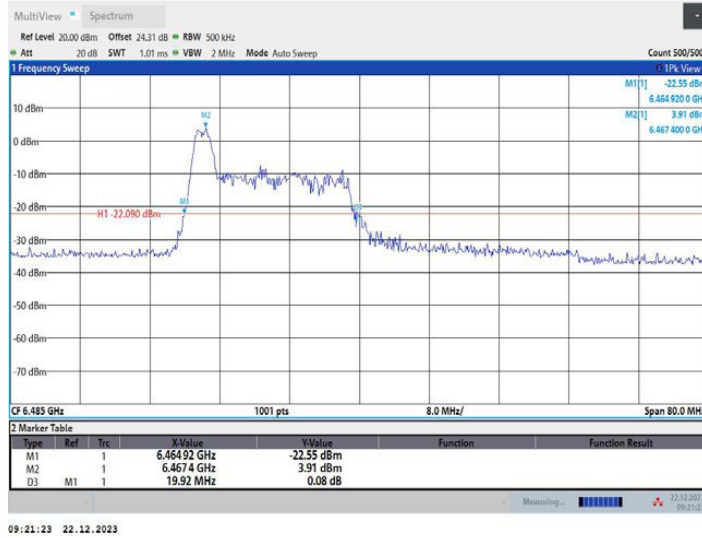
11AX40MIMO_Ant1_6485_106Tone_RU53



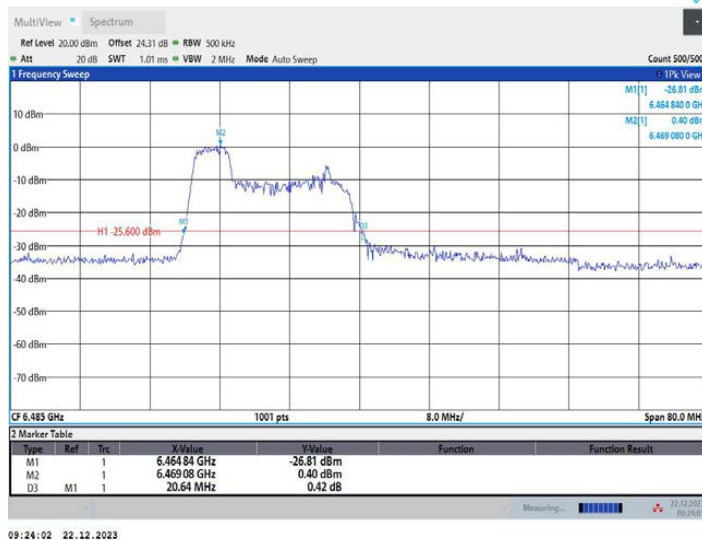
11AX40MIMO_Ant1_6485_242Tone_RU61



11AX40MIMO_Ant2_6485_26Tone_RU0



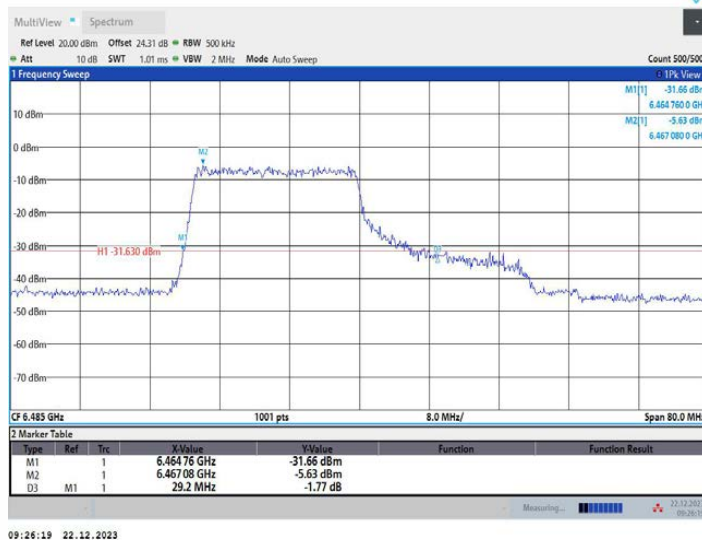
11AX40MIMO_Ant2_6485_52Tone_RU37



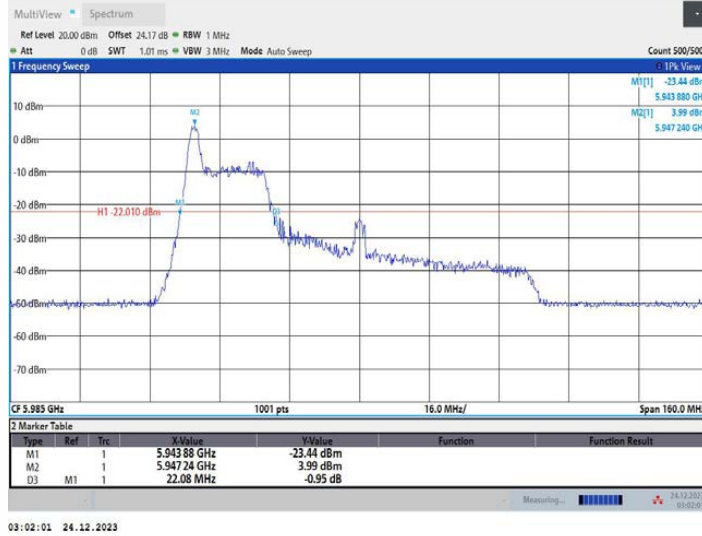
11AX40MIMO_Ant2_6485_106Tone_RU53



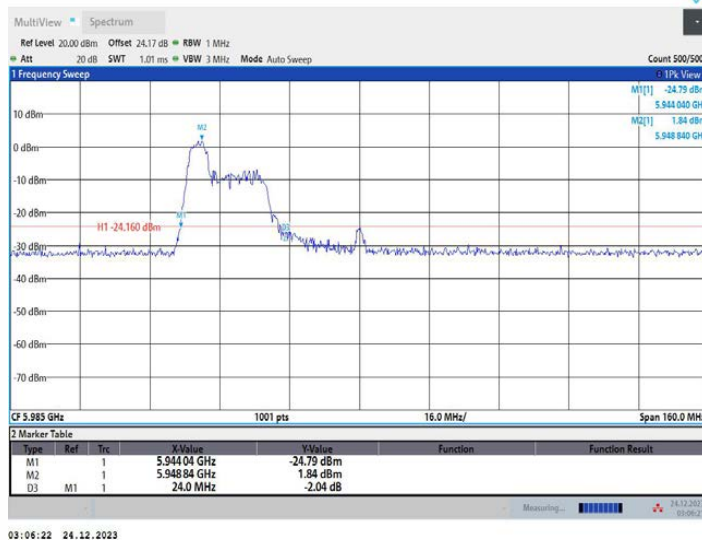
11AX40MIMO_Ant2_6485_242Tone_RU61



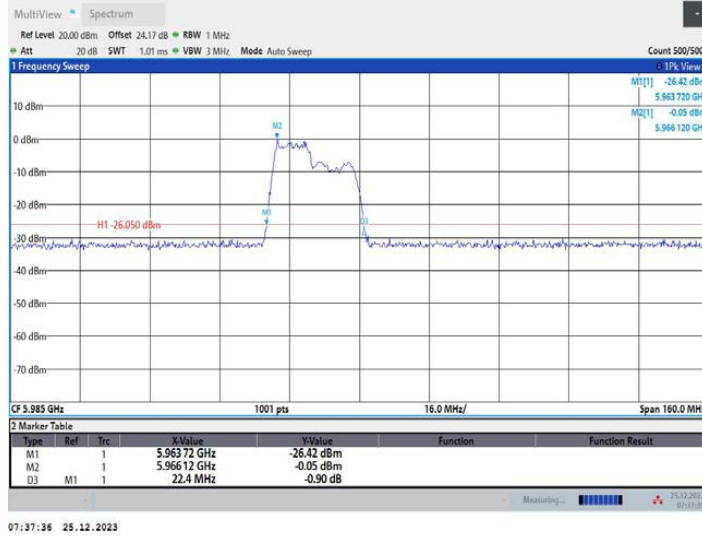
11AX80MIMO_Ant1_5985_26Tone_RU0



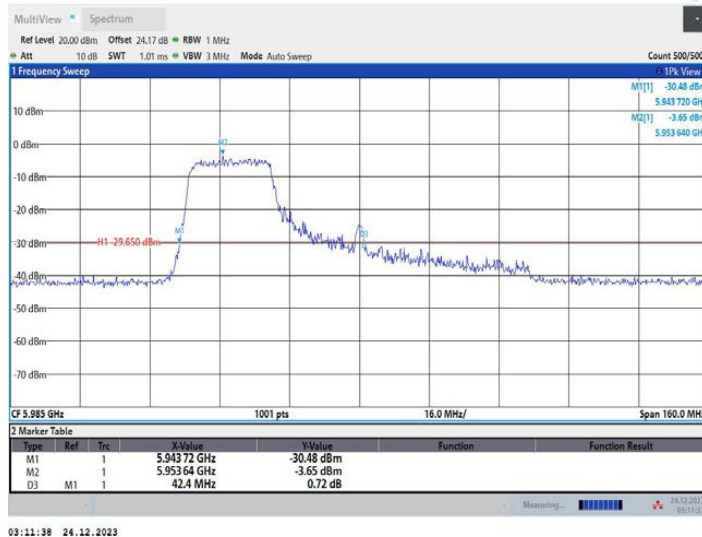
11AX80MIMO_Ant1_5985_52Tone_RU37



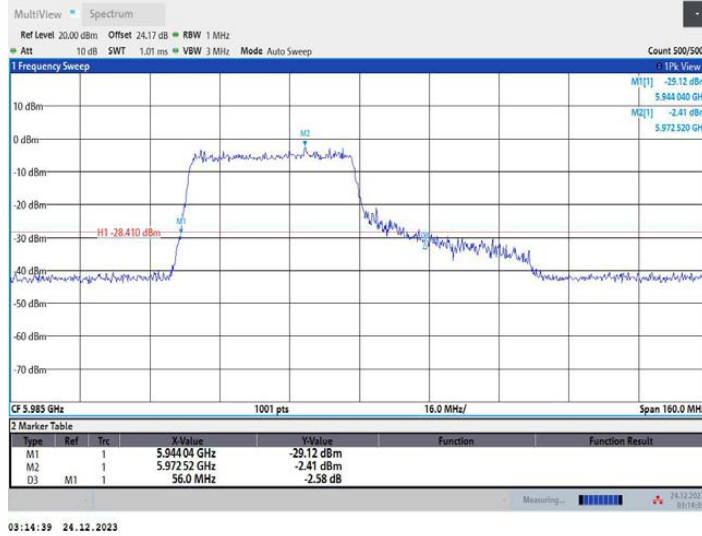
11AX80MIMO_Ant1_5985_106Tone_RU53



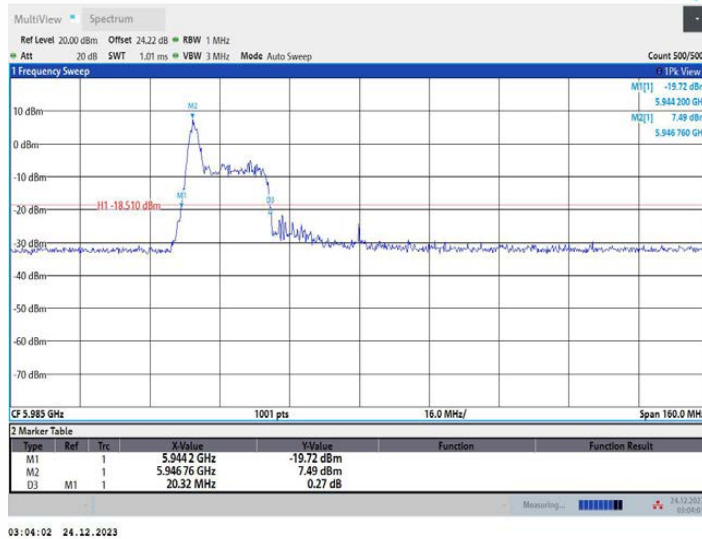
11AX80MIMO_Ant1_5985_242Tone_RU61



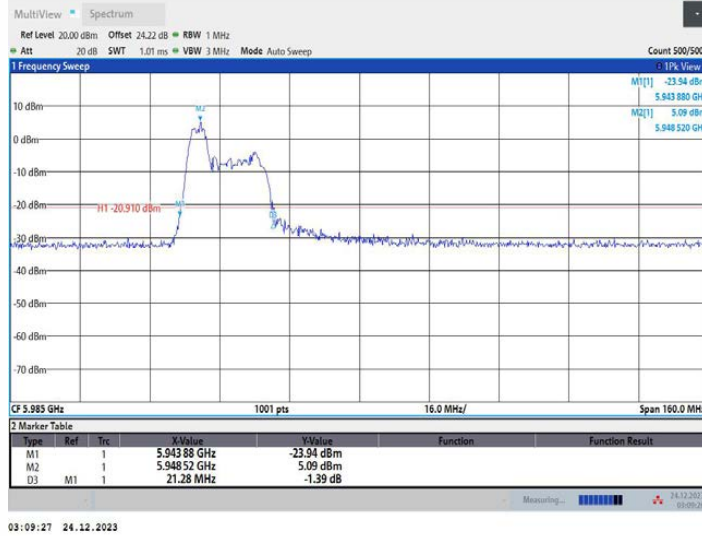
11AX80MIMO_Ant1_5985_484Tone_RU65



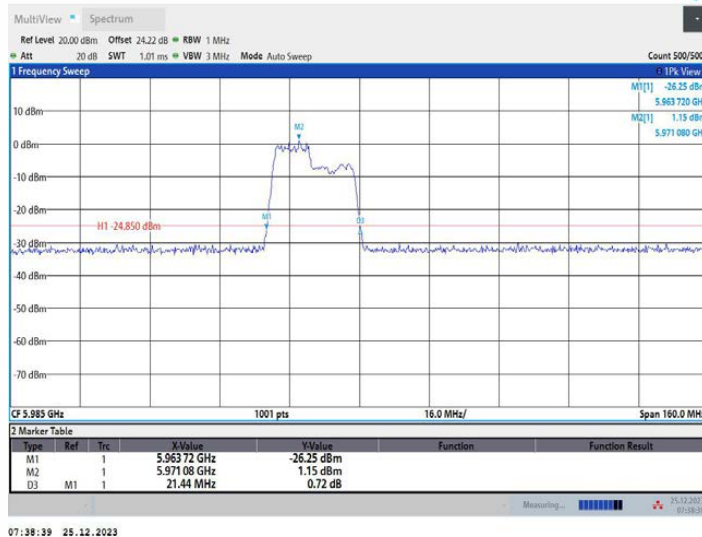
11AX80MIMO_Ant2_5985_26Tone_RU0



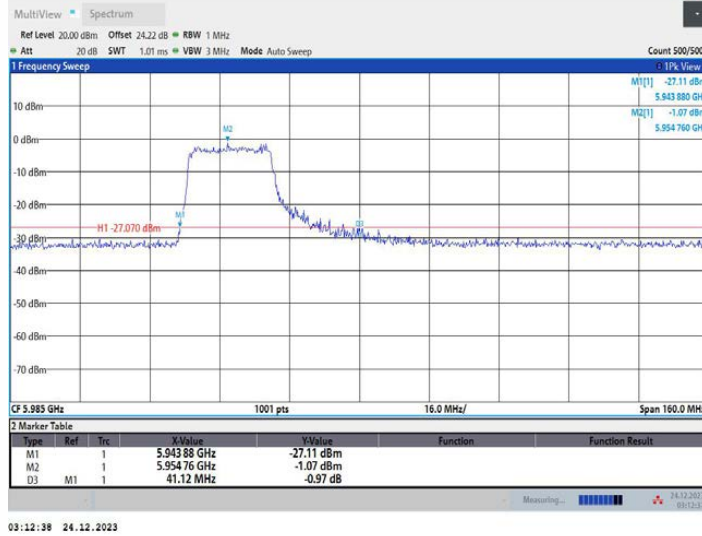
11AX80MIMO_Ant2_5985_52Tone_RU37



11AX80MIMO_Ant2_5985_106Tone_RU53

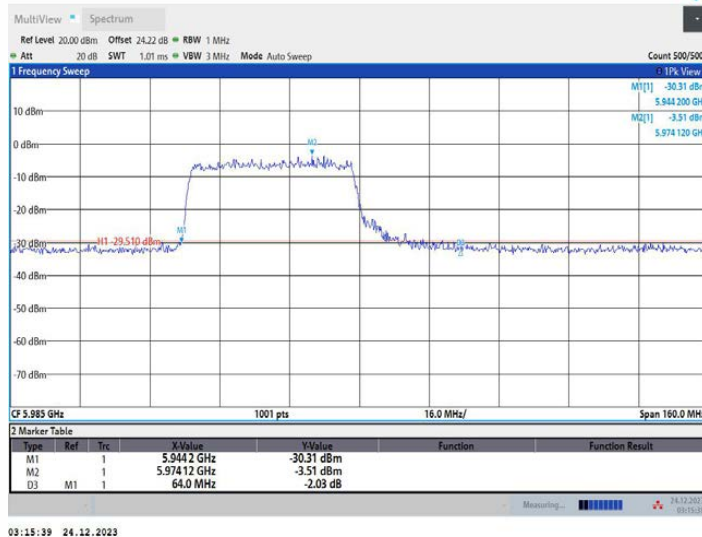


11AX80MIMO_Ant2_5985_242Tone_RU61



03:12:38 24.12.2023

11AX80MIMO_Ant2_5985_484Tone_RU65



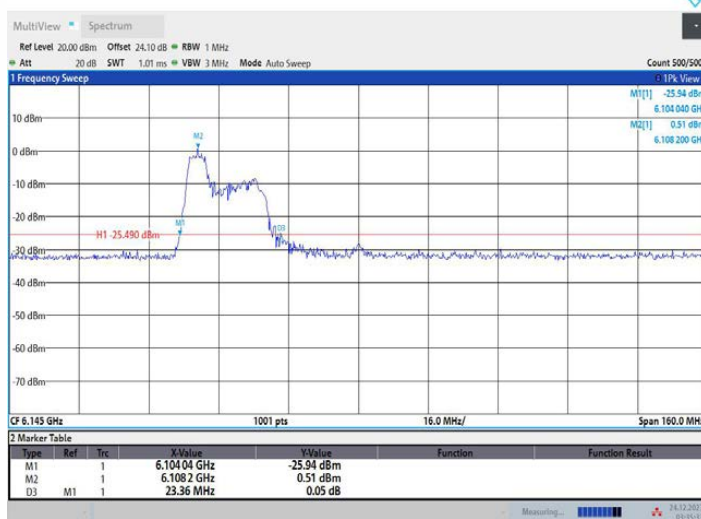
03:15:39 24.12.2023

11AX80MIMO_Ant1_6145_26Tone_RU0



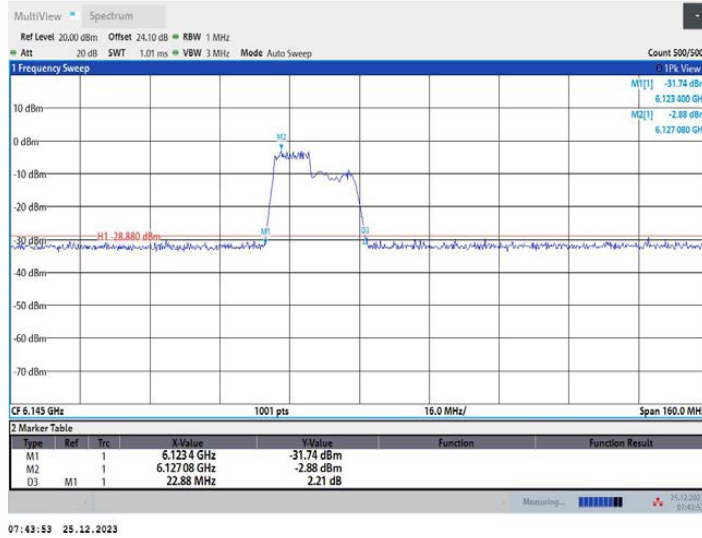
03:34:01 24.12.2023

11AX80MIMO_Ant1_6145_52Tone_RU37

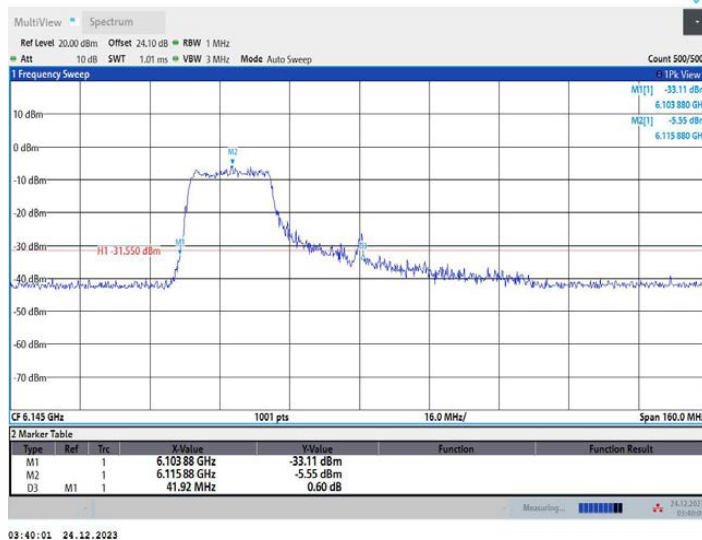


03:35:34 24.12.2023

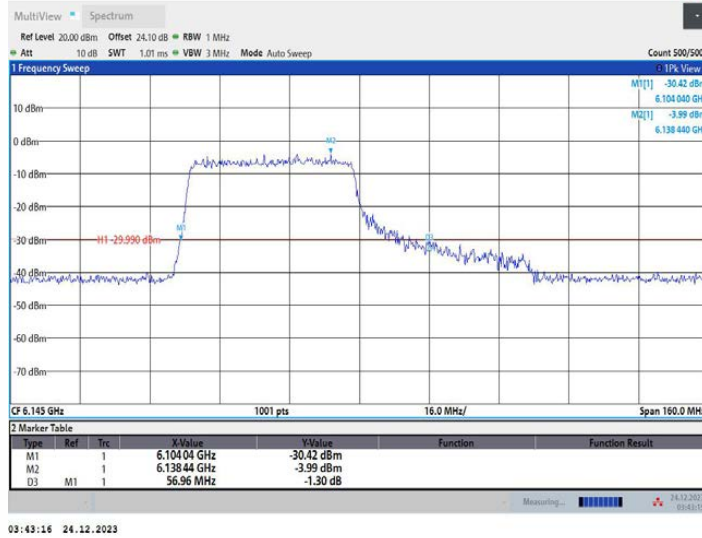
11AX80MIMO_Ant1_6145_106Tone_RU53



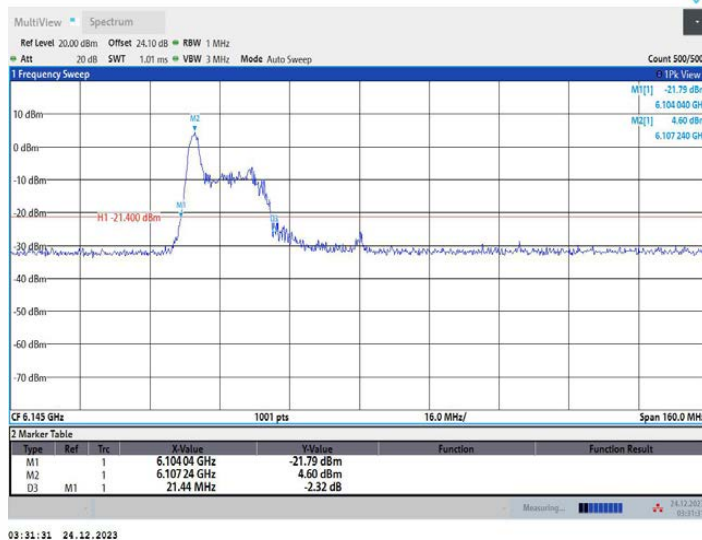
11AX80MIMO_Ant1_6145_242Tone_RU61



11AX80MIMO_Ant1_6145_484Tone_RU65



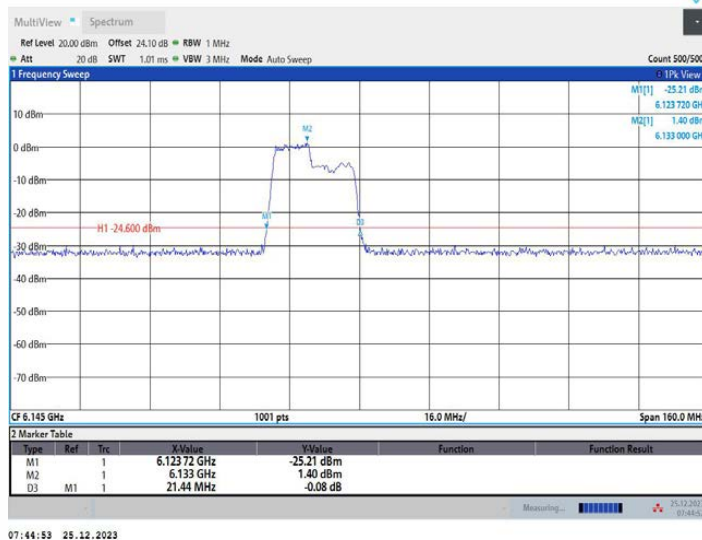
11AX80MIMO_Ant2_6145_26Tone_RU0



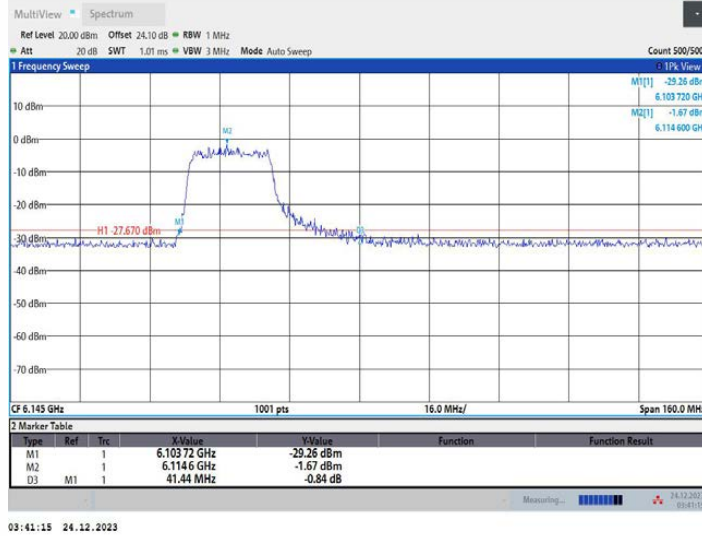
11AX80MIMO_Ant2_6145_52Tone_RU37



11AX80MIMO_Ant2_6145_106Tone_RU53



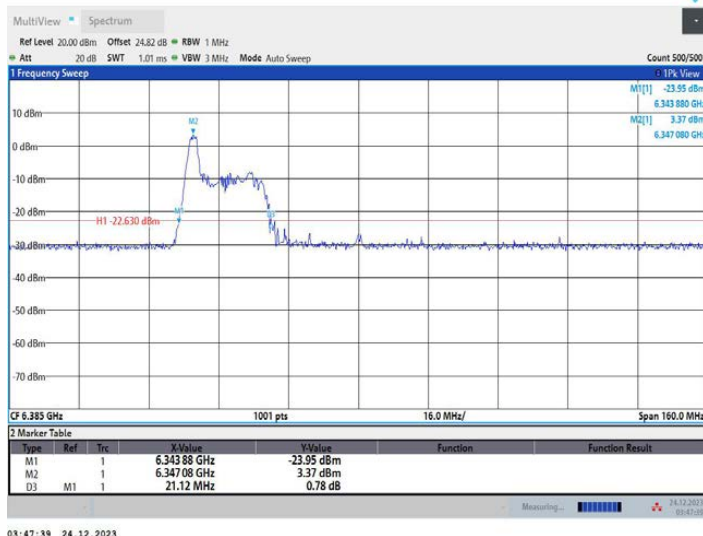
11AX80MIMO_Ant2_6145_242Tone_RU61



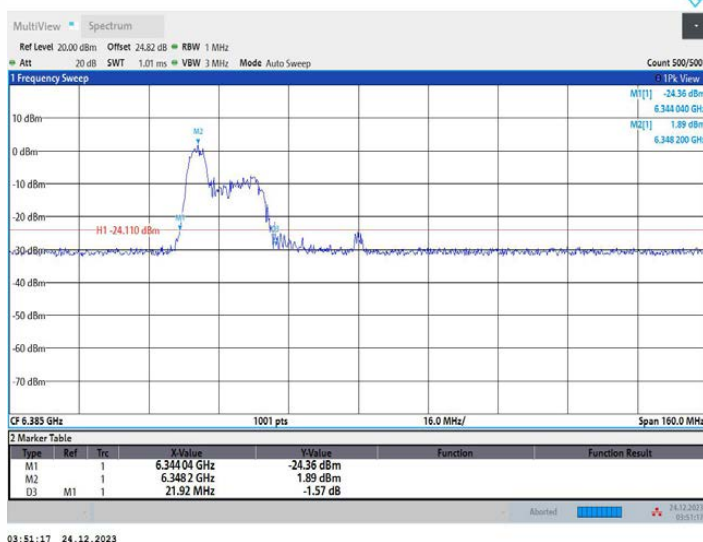
11AX80MIMO_Ant2_6145_484Tone_RU65



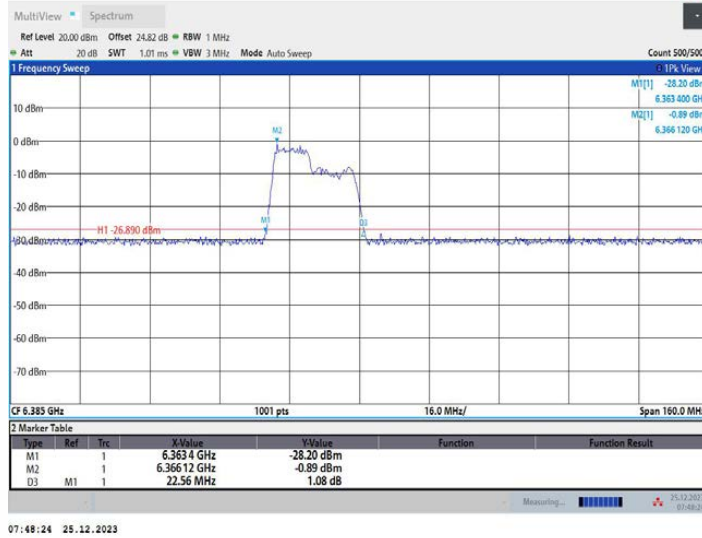
11AX80MIMO_Ant1_6385_26Tone_RU0



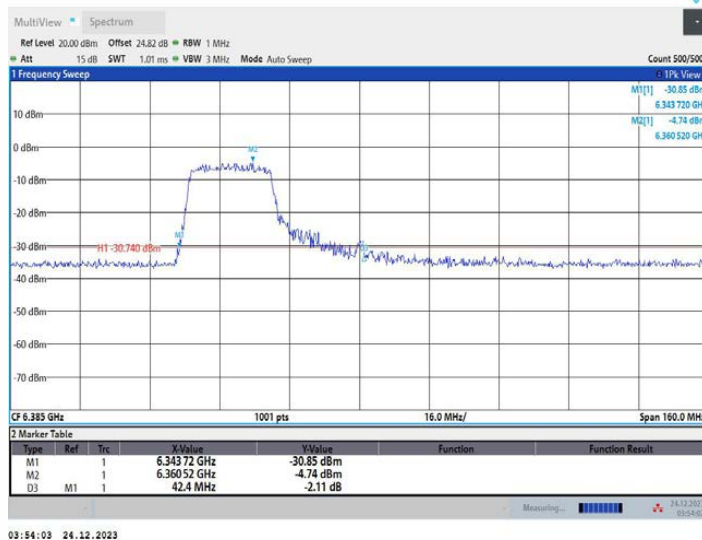
11AX80MIMO_Ant1_6385_52Tone_RU37



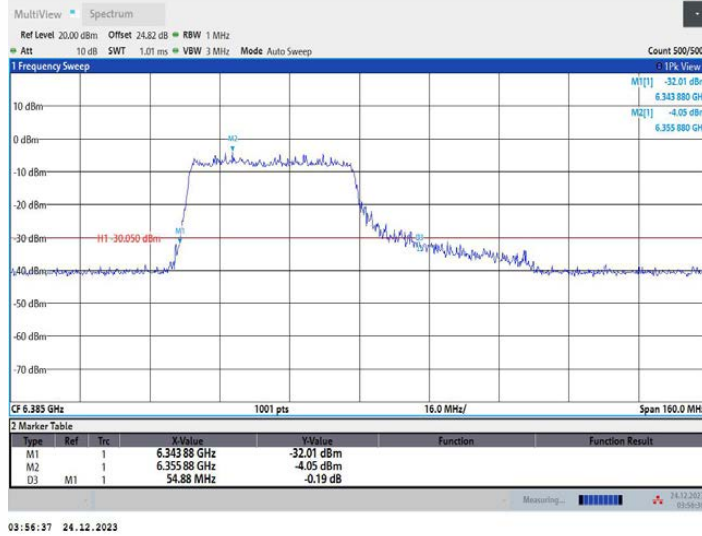
11AX80MIMO_Ant1_6385_106Tone_RU53



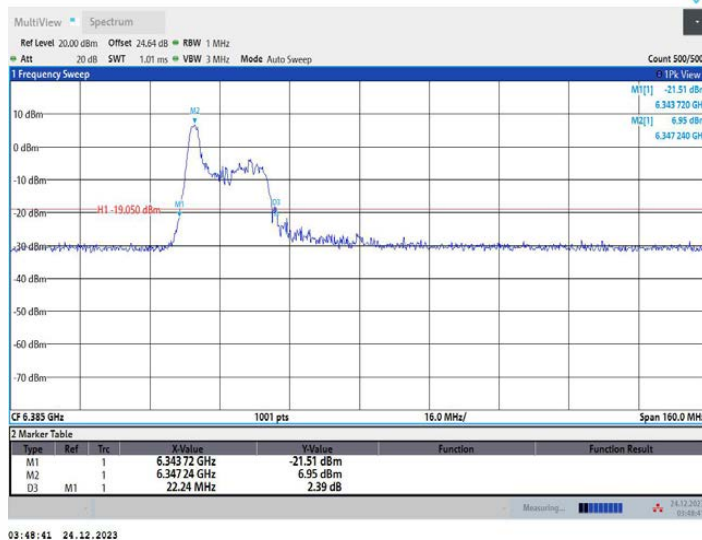
11AX80MIMO_Ant1_6385_242Tone_RU61



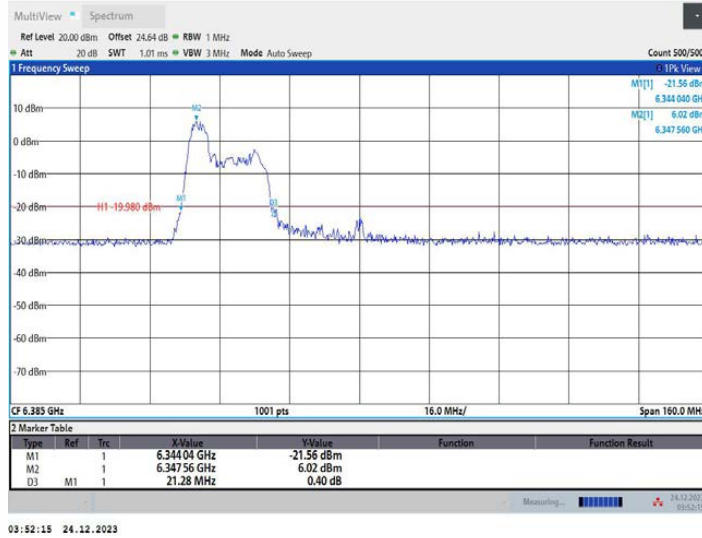
11AX80MIMO_Ant1_6385_484Tone_RU65



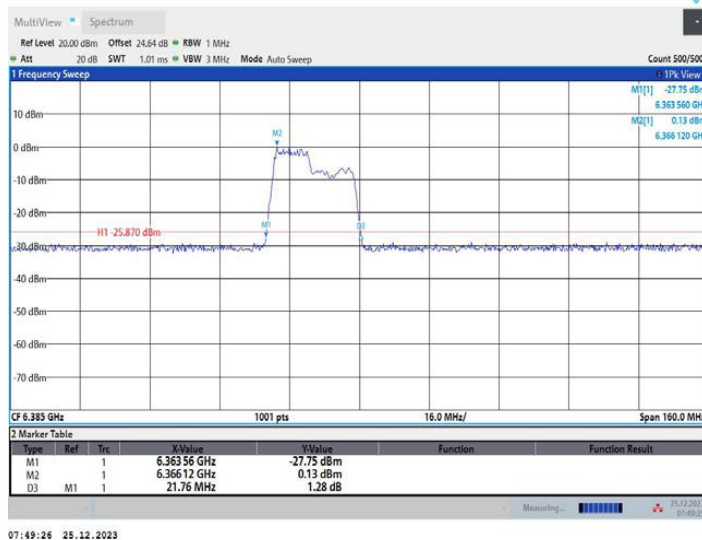
11AX80MIMO_Ant2_6385_26Tone_RU0



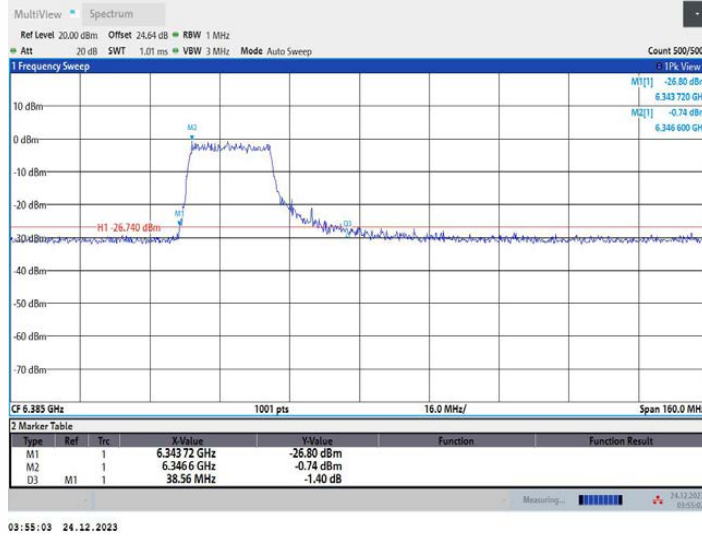
11AX80MIMO_Ant2_6385_52Tone_RU37



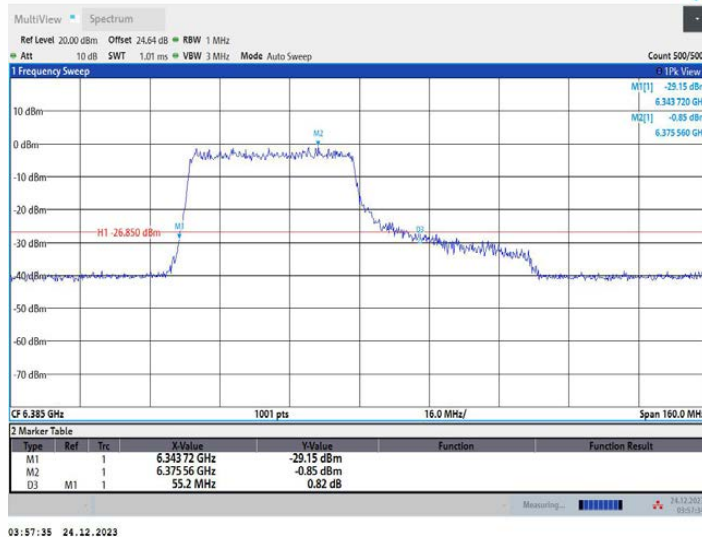
11AX80MIMO_Ant2_6385_106Tone_RU53



11AX80MIMO_Ant2_6385_242Tone_RU61



11AX80MIMO_Ant2_6385_484Tone_RU65



11AX80MIMO_Ant1_6465_26Tone_RU0