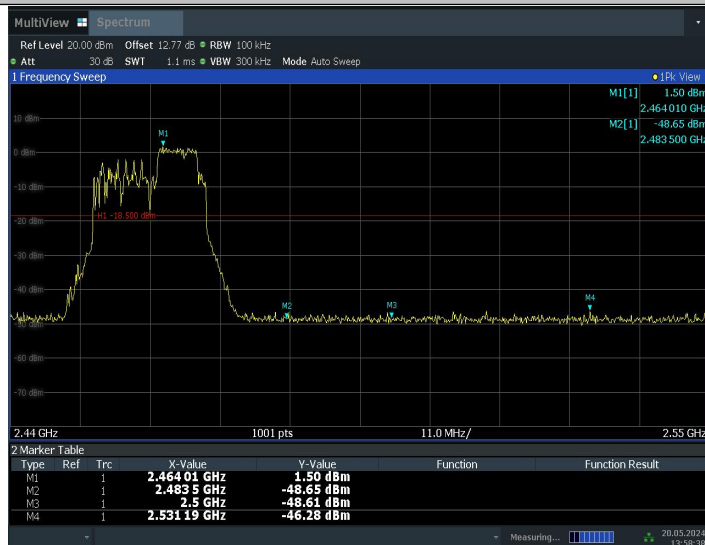


13:56:29 20.05.2024

## 11BE20MIMO\_Ant1\_High\_2462\_52+26\_OFDMA\_3



13:58:38 20.05.2024

## 11BE20MIMO\_Ant1\_High\_2462\_106+26\_OFDMA\_1



11BE20MIMO\_Ant1\_High\_2462\_106+26\_OFDMA\_2



Conclusion: Pass

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

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

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

Establish a reference level by using the following procedure:

- a) Set instrument center frequency to DTS channel center frequency
- b) Set the span to  $\geq 1.5$  times the DTS bandwidth
- c) Set the RBW= 100 kHz
- d) Set the VBW= 300 kHz
- e) Detector = Peak
- f) Sweep time = auto couple
- g) Trace mode = max hold
- h) Allow trace to fully stabilize
- i) Use the peak marker function to determine the maximum PSD level

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

Establish an emission level by using the following procedure:

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW = 300 kHz.
- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

#### **Measurement Limit:**

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

#### **EUT ID: UT11a**

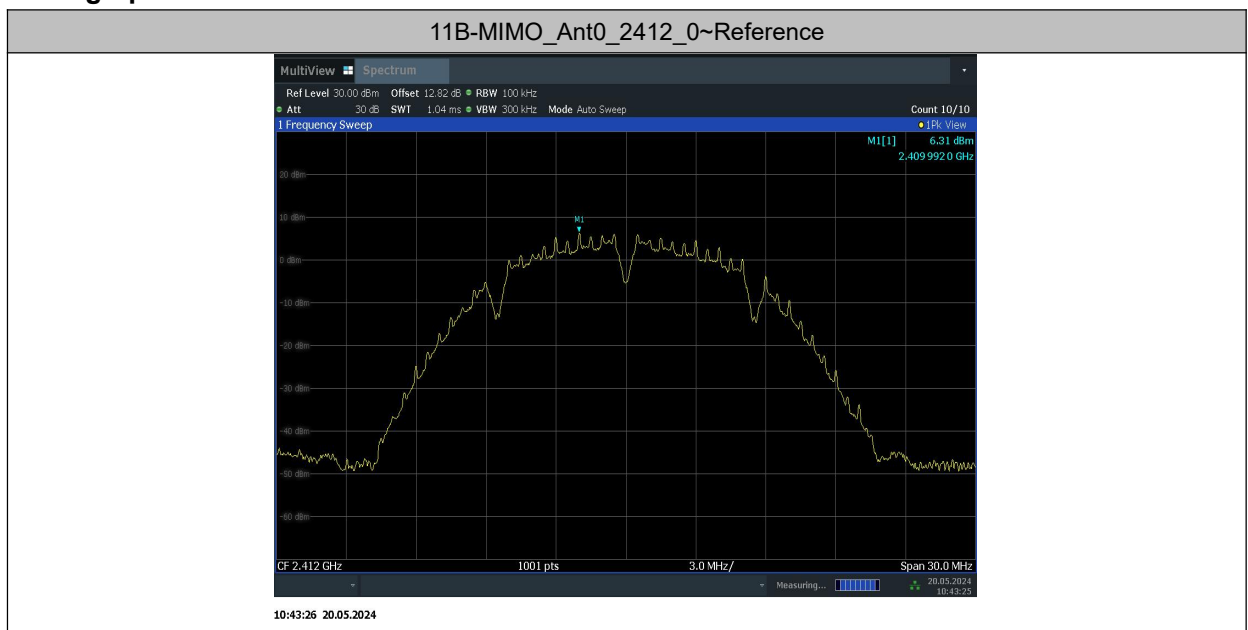
#### **Measurement Results:**

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B-MIMO	Ant0	2412	Reference	6.31	6.31	---	PASS
			30~1000	6.31	-57.13	$\leq -13.69$	PASS
			1000~26500	6.31	-43.7	$\leq -13.69$	PASS
	Ant1	2412	Reference	6.97	6.97	---	PASS
			30~1000	6.97	-56.27	$\leq -13.03$	PASS

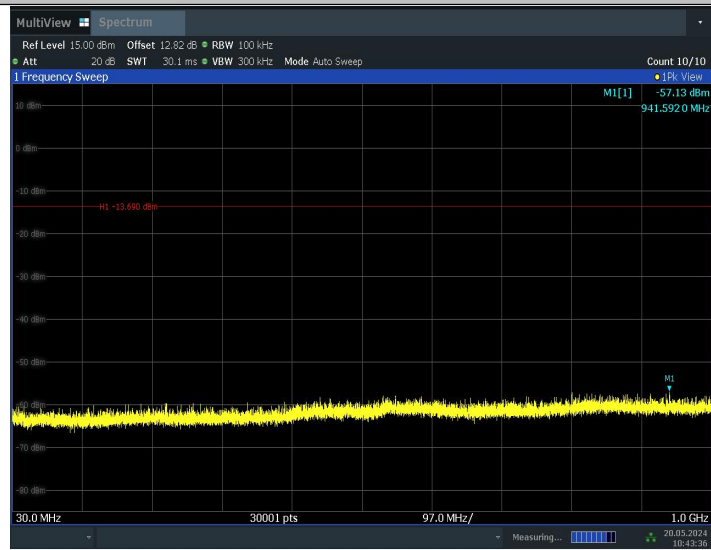
	Ant0	2437	1000~26500	6.97	-44.44	$\leq -13.03$	PASS
			Reference	7.85	7.85	---	PASS
			30~1000	7.85	-56.98	$\leq -12.15$	PASS
	Ant1	2437	1000~26500	7.85	-44.31	$\leq -12.15$	PASS
			Reference	8.25	8.25	---	PASS
			30~1000	8.25	-56.8	$\leq -11.75$	PASS
	Ant0	2462	1000~26500	8.25	-43.91	$\leq -11.75$	PASS
			Reference	7.51	7.51	---	PASS
			30~1000	7.51	-57.11	$\leq -12.49$	PASS
	Ant1	2462	1000~26500	7.51	-44.51	$\leq -12.49$	PASS
			Reference	7.87	7.87	---	PASS
			30~1000	7.87	-56.93	$\leq -12.13$	PASS
11G-MIMO	Ant0	2412	1000~26500	7.87	-42.6	$\leq -12.13$	PASS
			Reference	-0.89	-0.89	---	PASS
			30~1000	-0.89	-55.31	$\leq -20.89$	PASS
	Ant1	2412	1000~26500	-0.89	-43.93	$\leq -20.89$	PASS
			Reference	-0.88	-0.88	---	PASS
			30~1000	-0.88	-56.95	$\leq -20.88$	PASS
	Ant0	2437	1000~26500	-0.88	-44.18	$\leq -20.88$	PASS
			Reference	4.39	4.39	---	PASS
			30~1000	4.39	-57.26	$\leq -15.61$	PASS
	Ant1	2437	1000~26500	4.39	-44.85	$\leq -15.61$	PASS
			Reference	5.09	5.09	---	PASS
			30~1000	5.09	-56.73	$\leq -14.91$	PASS
Ant0	2462	1000~26500	5.09	-44.41	$\leq -14.91$	PASS	
		Reference	-0.75	-0.75	---	PASS	
		30~1000	-0.75	-56.58	$\leq -20.75$	PASS	
Ant1	2462	1000~26500	-0.75	-43.98	$\leq -20.75$	PASS	
		Reference	-1.29	-1.29	---	PASS	
		30~1000	-1.29	-56.67	$\leq -21.29$	PASS	
11AX20MIMO	Ant0	2412	1000~26500	-1.29	-43.83	$\leq -21.29$	PASS
			Reference	-0.71	-0.71	---	PASS
			30~1000	-0.71	-56.72	$\leq -20.71$	PASS
	Ant1	2412	1000~26500	-0.71	-44.27	$\leq -20.71$	PASS
			Reference	-1.18	-1.18	---	PASS
			30~1000	-1.18	-56.43	$\leq -21.18$	PASS
	Ant0	2437	1000~26500	-1.18	-44.06	$\leq -21.18$	PASS
			Reference	3.54	3.54	---	PASS
			30~1000	3.54	-56.5	$\leq -16.46$	PASS
	Ant1	2437	1000~26500	3.54	-44.4	$\leq -16.46$	PASS
			Reference	4.25	4.25	---	PASS
			30~1000	4.25	-56.59	$\leq -15.75$	PASS

	Ant0	2462	1000~26500	4.25	-44.13	$\leq -15.75$	PASS	
			Reference	-0.74	-0.74	---	PASS	
			30~1000	-0.74	-56.91	$\leq -20.74$	PASS	
	Ant1	2462	1000~26500	-0.74	-44.1	$\leq -20.74$	PASS	
			Reference	-1.52	-1.52	---	PASS	
			30~1000	-1.52	-56.8	$\leq -21.52$	PASS	
	11AX40MIMO	Ant0	2422	Reference	-3.55	-3.55	---	PASS
				30~1000	-3.55	-57.25	$\leq -23.55$	PASS
				1000~26500	-3.55	-44.47	$\leq -23.55$	PASS
Ant1		2422	Reference	-4.09	-4.09	---	PASS	
			30~1000	-4.09	-56.86	$\leq -24.09$	PASS	
			1000~26500	-4.09	-44.57	$\leq -24.09$	PASS	
Ant0		2437	Reference	0.79	0.79	---	PASS	
			30~1000	0.79	-57.01	$\leq -19.21$	PASS	
			1000~26500	0.79	-44.43	$\leq -19.21$	PASS	
Ant1		2437	Reference	1.37	1.37	---	PASS	
			30~1000	1.37	-56.93	$\leq -18.63$	PASS	
			1000~26500	1.37	-44.45	$\leq -18.63$	PASS	
Ant0		2452	Reference	-3.92	-3.92	---	PASS	
			30~1000	-3.92	-56.36	$\leq -23.92$	PASS	
			1000~26500	-3.92	-43.82	$\leq -23.92$	PASS	
Ant1		2452	Reference	-3.61	-3.61	---	PASS	
			30~1000	-3.61	-56.42	$\leq -23.61$	PASS	
			1000~26500	-3.61	-44.52	$\leq -23.61$	PASS	

Test graphs as below:

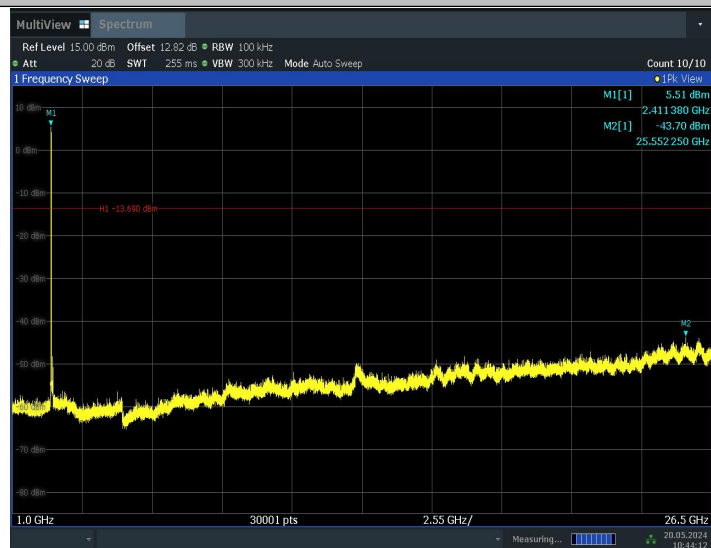


11B-MIMO\_Ant0\_2412\_30~1000



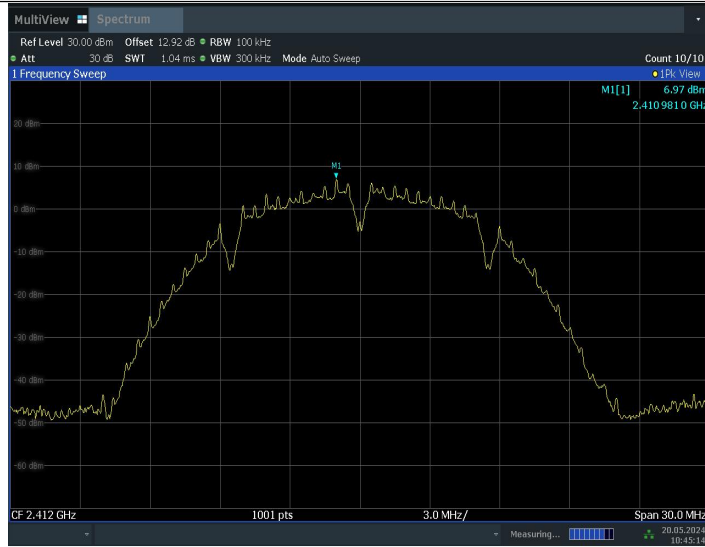
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11B-MIMO\_Ant0\_2412\_1000~26500



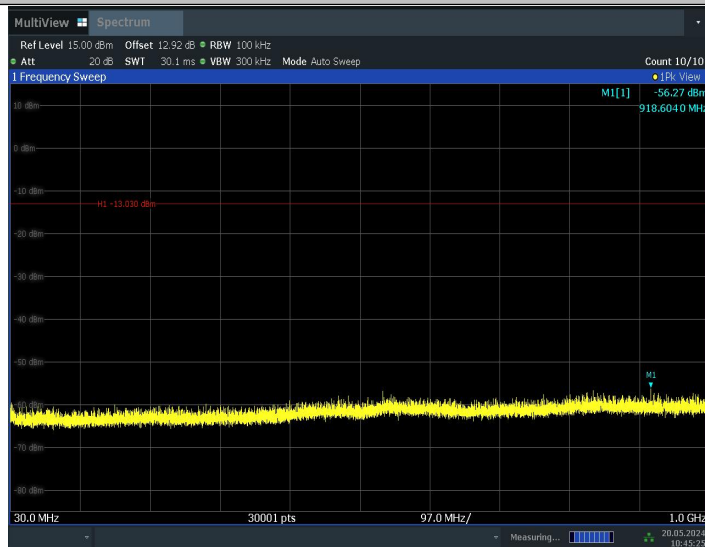
10:44:13 20.05.2024

11B-MIMO\_Ant1\_2412\_0~Reference



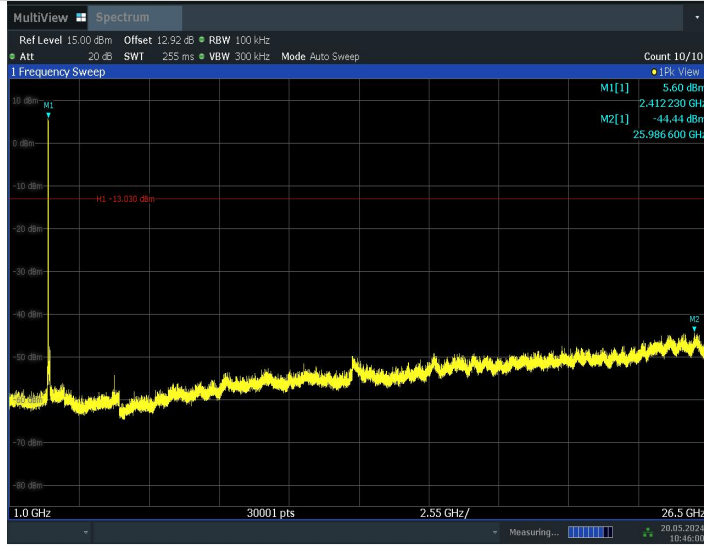
10:45:14 20.05.2024

11B-MIMO\_Ant1\_2412\_30~1000



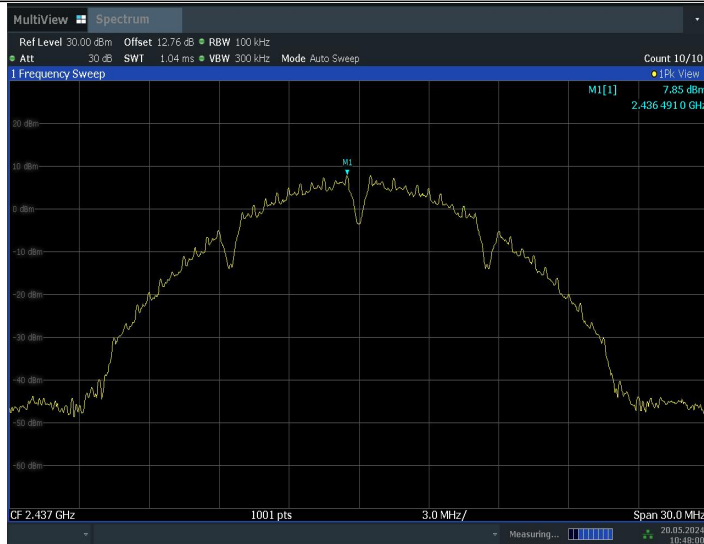
10:45:25 20.05.2024

11B-MIMO\_Ant1\_2412\_1000~26500



10:46:01 20.05.2024

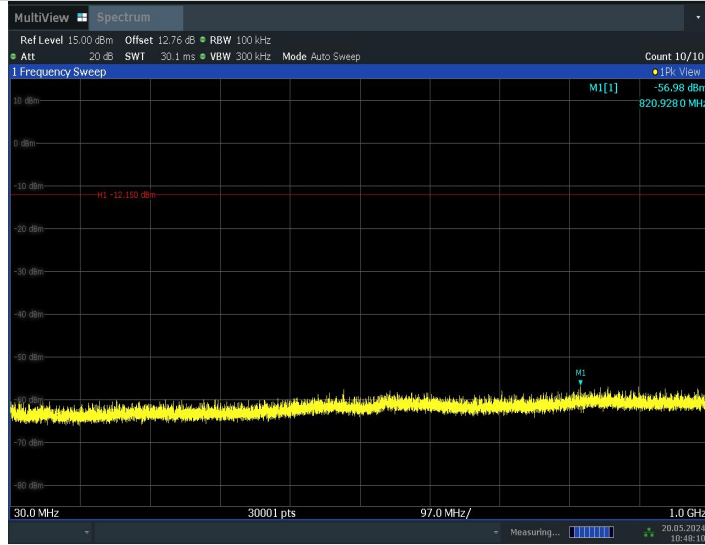
11B-MIMO\_Ant0\_2437\_0~Reference



10:48:00 20.05.2024

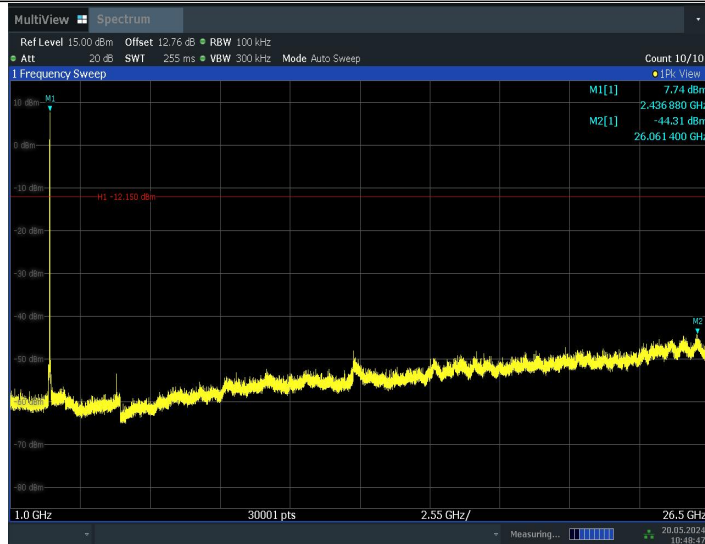
11B-MIMO\_Ant0\_2437\_30~1000





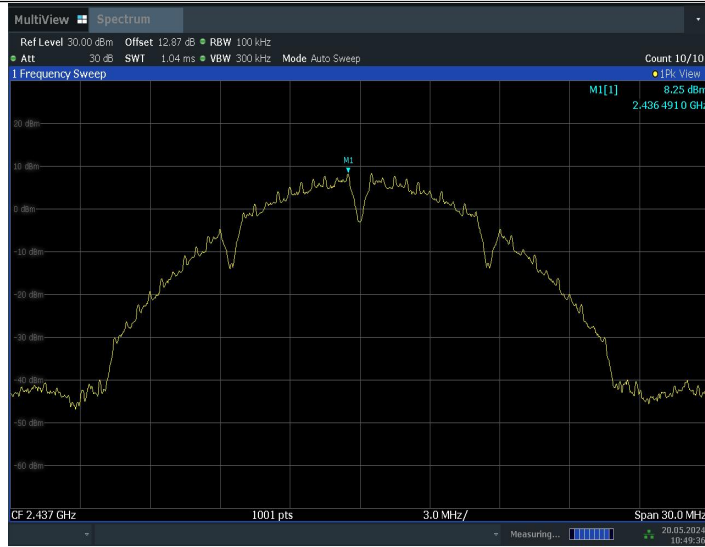
10:48:11 20.05.2024

11B-MIMO\_Ant0\_2437\_1000~26500



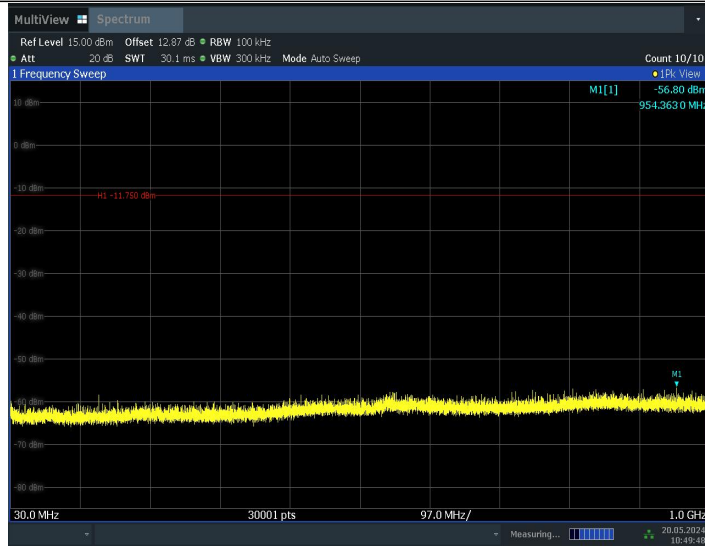
10:48:47 20.05.2024

11B-MIMO\_Ant1\_2437\_0~Reference



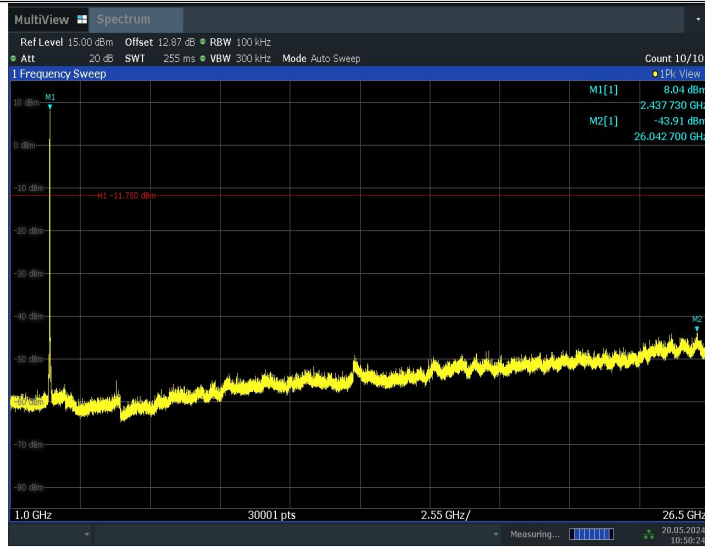
10:49:37 20.05.2024

11B-MIMO\_Ant1\_2437\_30~1000



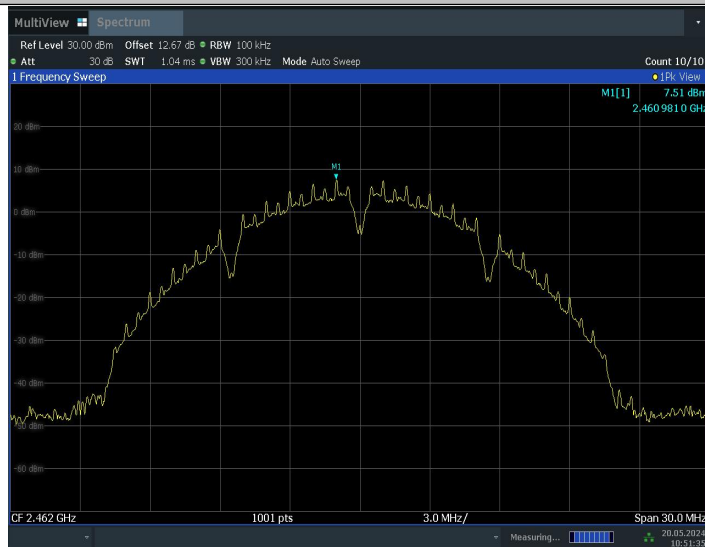
10:49:48 20.05.2024

11B-MIMO\_Ant1\_2437\_1000~26500



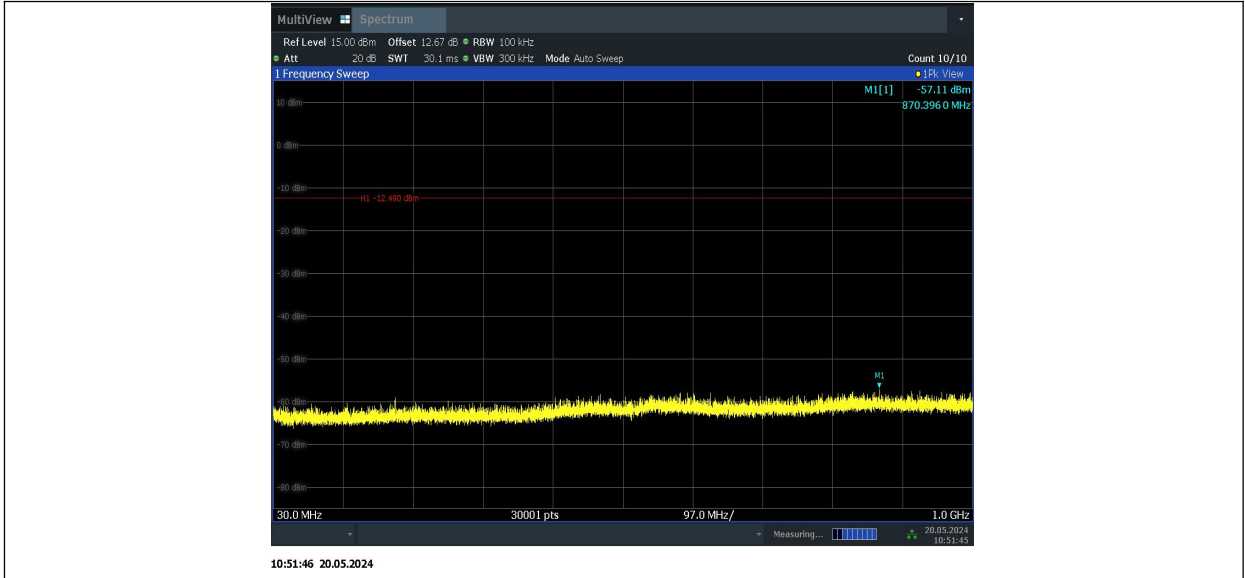
10:50:24 20.05.2024

11B-MIMO\_Ant0\_2462\_0~Reference



10:51:35 20.05.2024

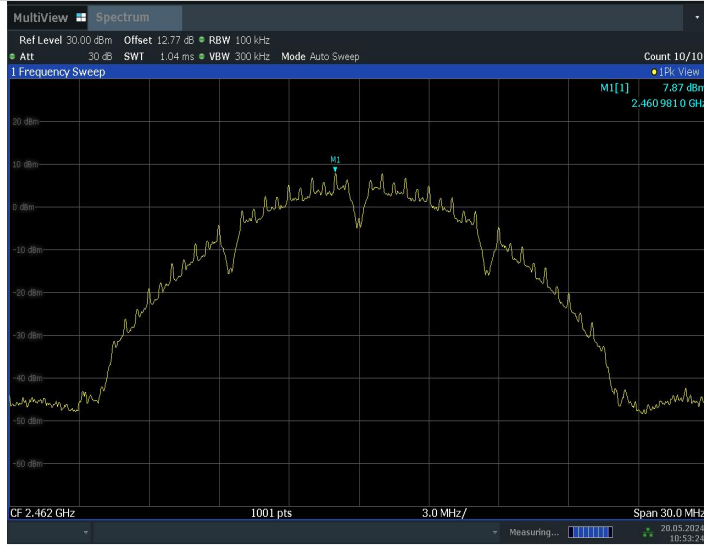
11B-MIMO\_Ant0\_2462\_30~1000



11B-MIMO\_Ant0\_2462\_1000~26500

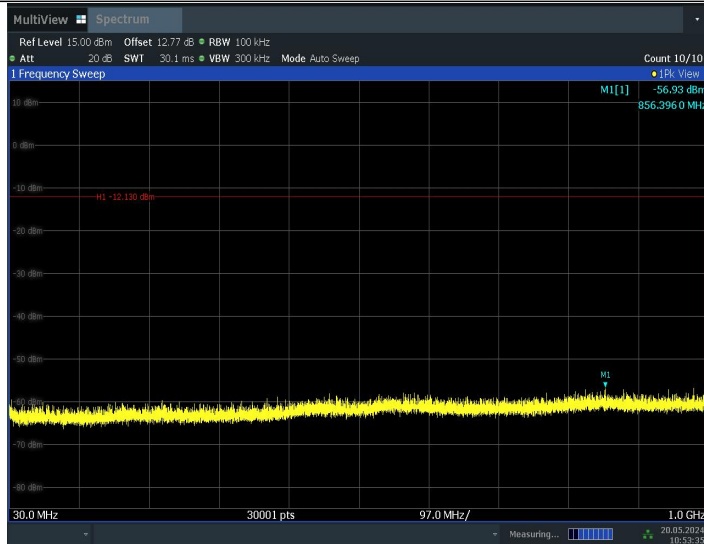


11B-MIMO\_Ant1\_2462\_0~Reference



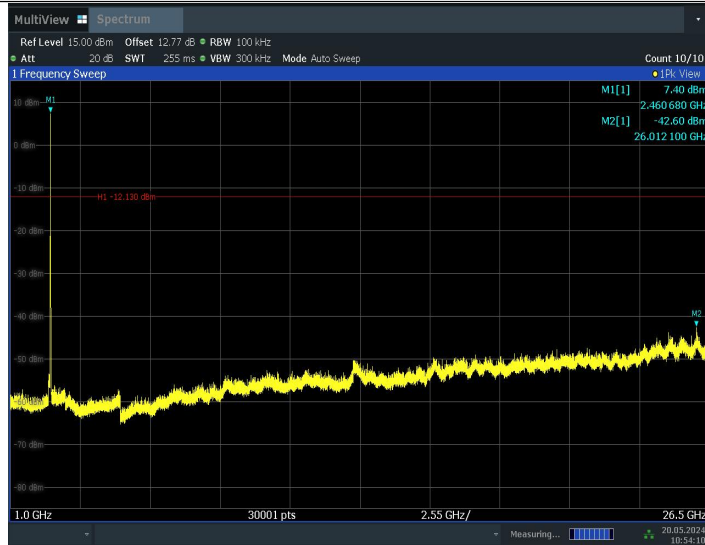
10:53:24 20.05.2024

11B-MIMO\_Ant1\_2462\_30~1000

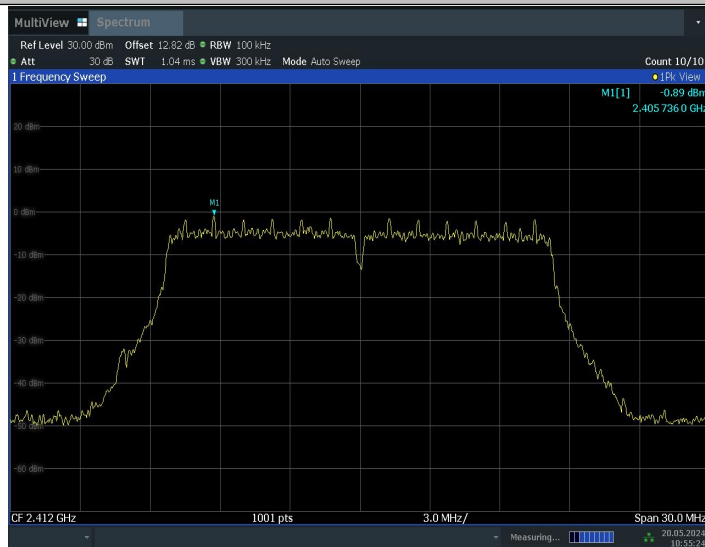


10:53:35 20.05.2024

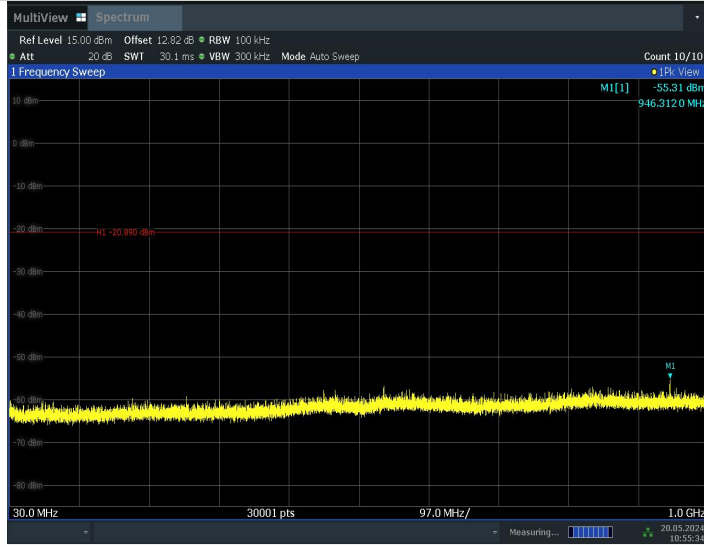
11B-MIMO\_Ant1\_2462\_1000~26500



11G-MIMO\_Ant0\_2412\_0~Reference

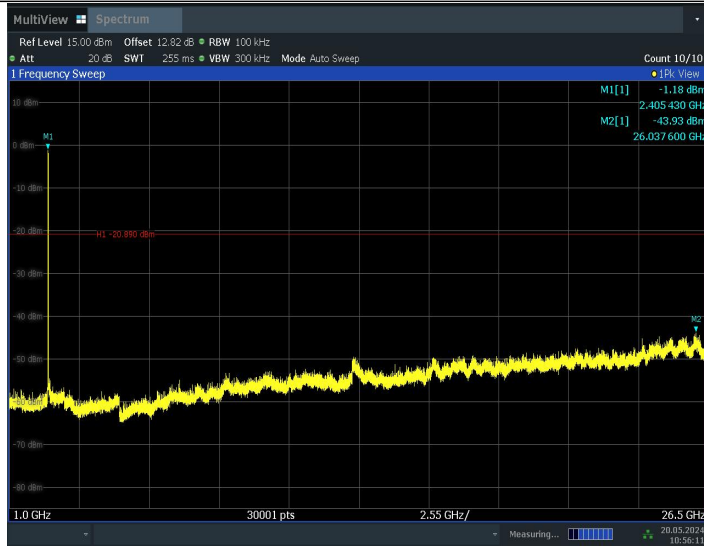


11G-MIMO\_Ant0\_2412\_30~1000



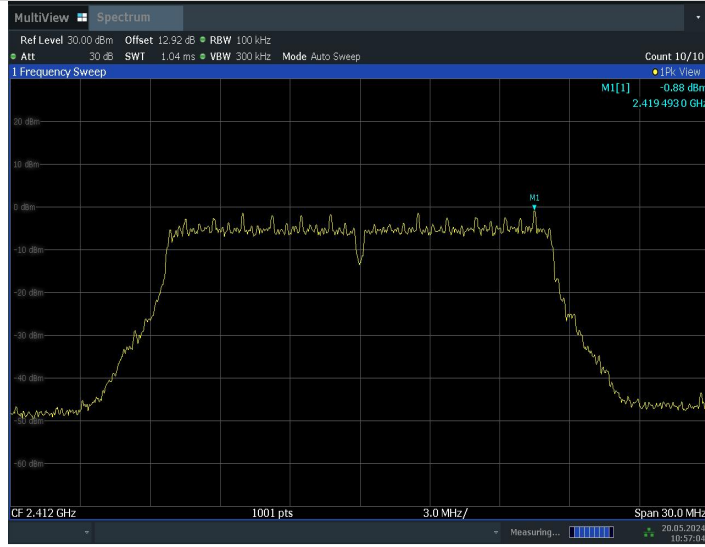
10:55:35 20.05.2024

11G-MIMO\_Ant0\_2412\_1000~26500



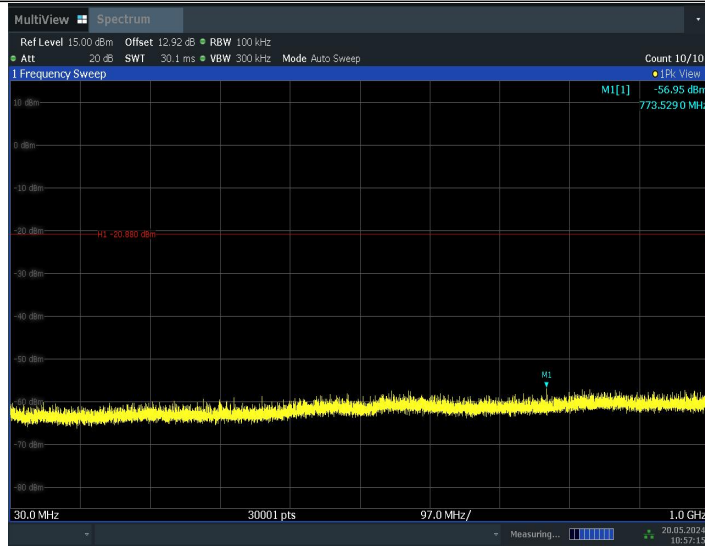
10:56:11 20.05.2024

11G-MIMO\_Ant1\_2412\_0~Reference



10:57:04 20.05.2024

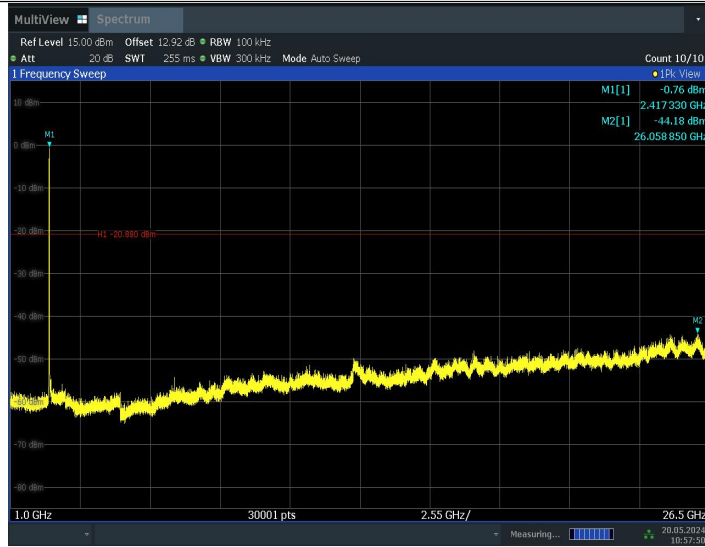
11G-MIMO\_Ant1\_2412\_30~1000



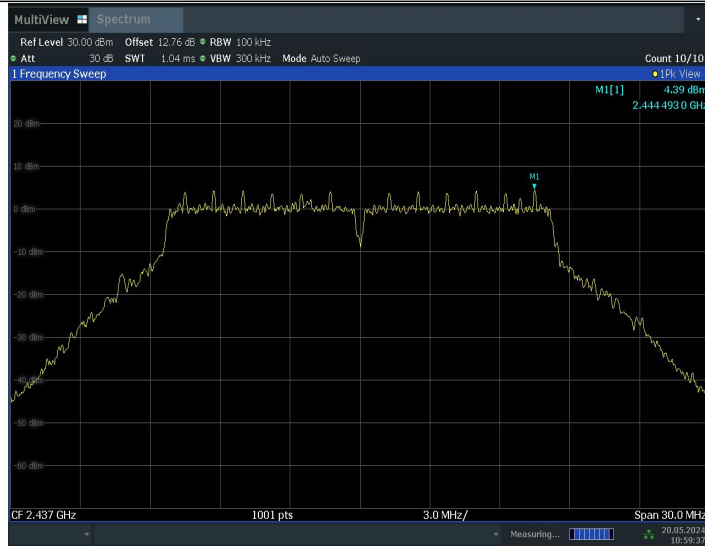
10:57:15 20.05.2024

11G-MIMO\_Ant1\_2412\_1000~26500

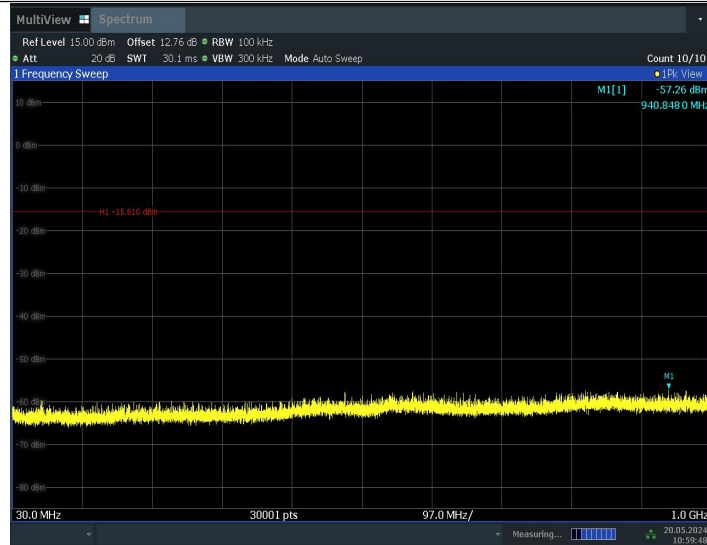




11G-MIMO\_Ant0\_2437\_0~Reference

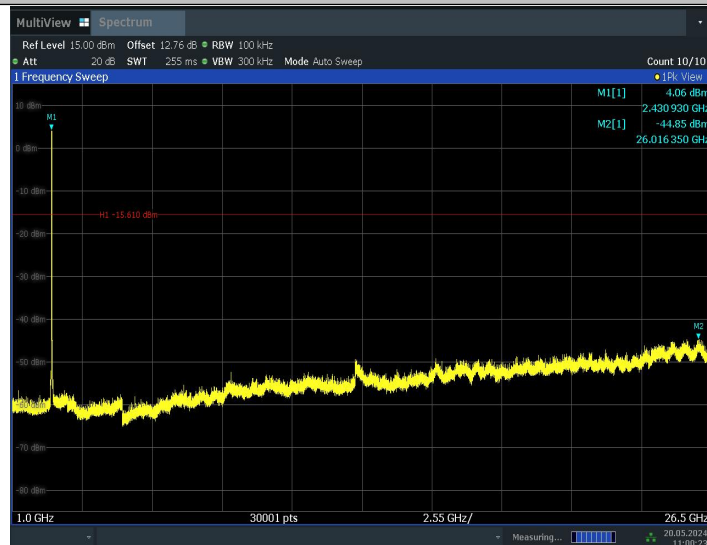


11G-MIMO\_Ant0\_2437\_30~1000



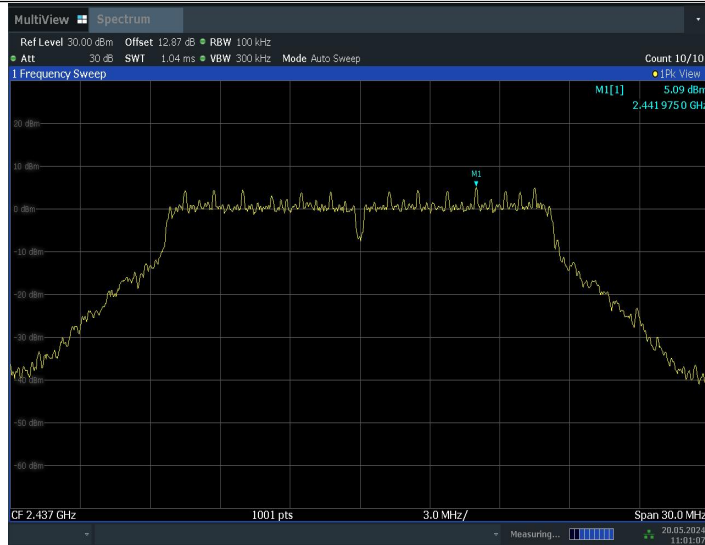
10:59:48 20.05.2024

11G-MIMO\_Ant0\_2437\_1000~26500



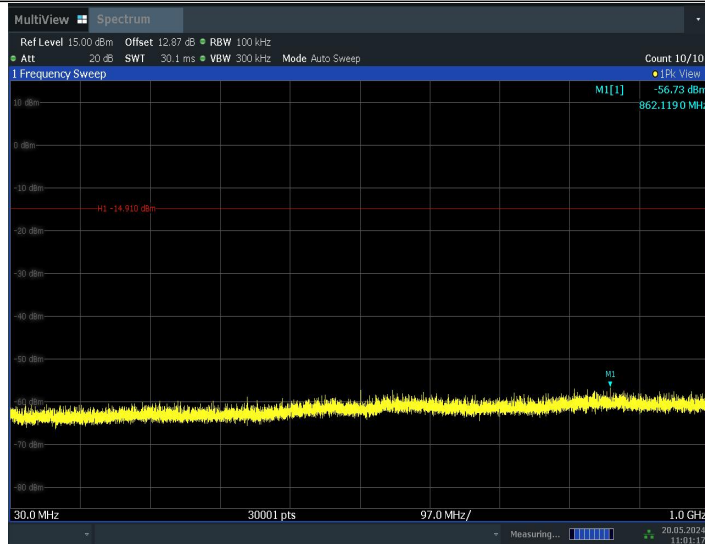
11:00:24 20.05.2024

11G-MIMO\_Ant1\_2437\_0~Reference



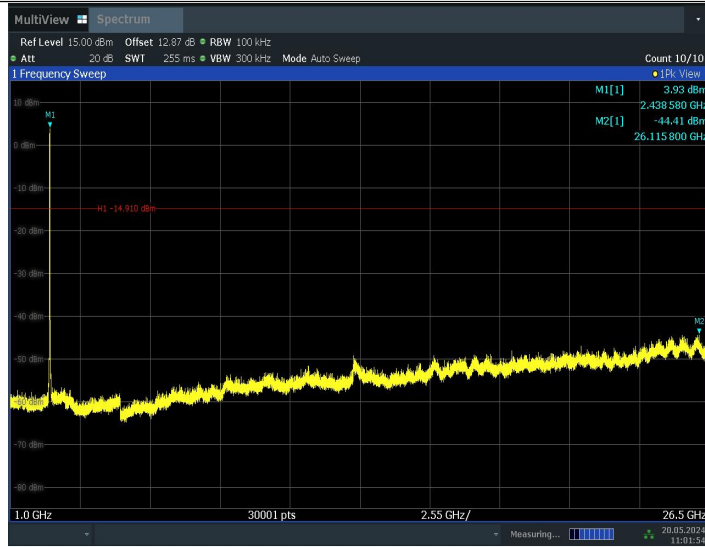
11:01:07 20.05.2024

11G-MIMO\_Ant1\_2437\_30~1000

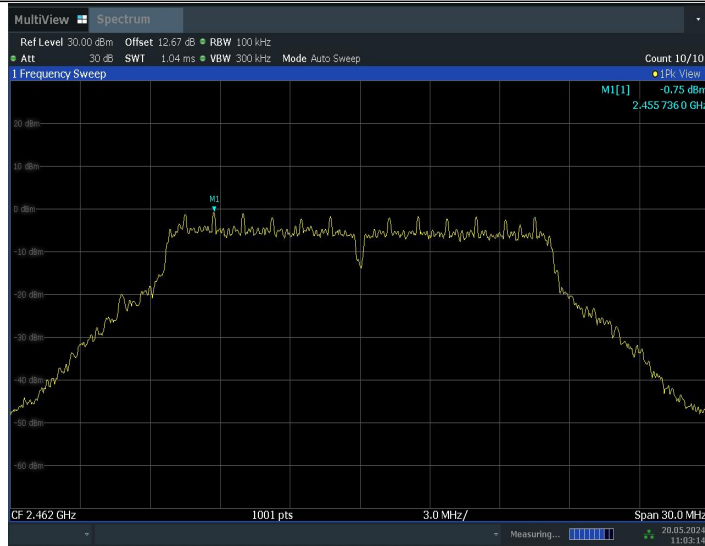


11:01:18 20.05.2024

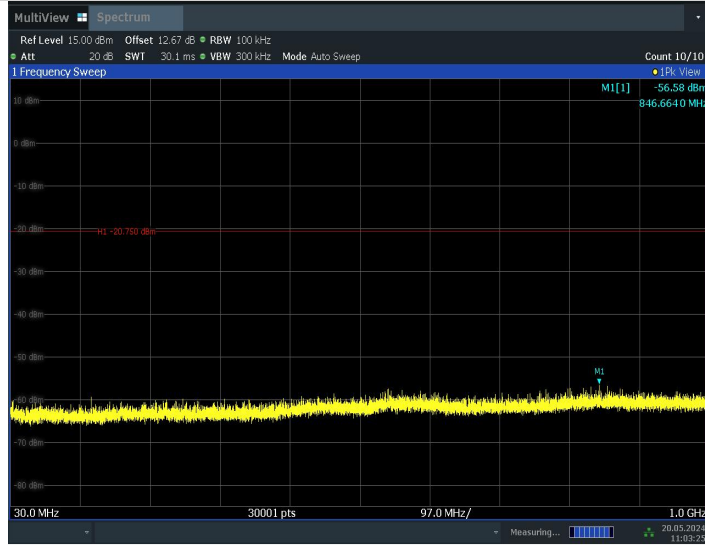
11G-MIMO\_Ant1\_2437\_1000~26500



11G-MIMO\_Ant0\_2462\_0~Reference



11G-MIMO\_Ant0\_2462\_30~1000



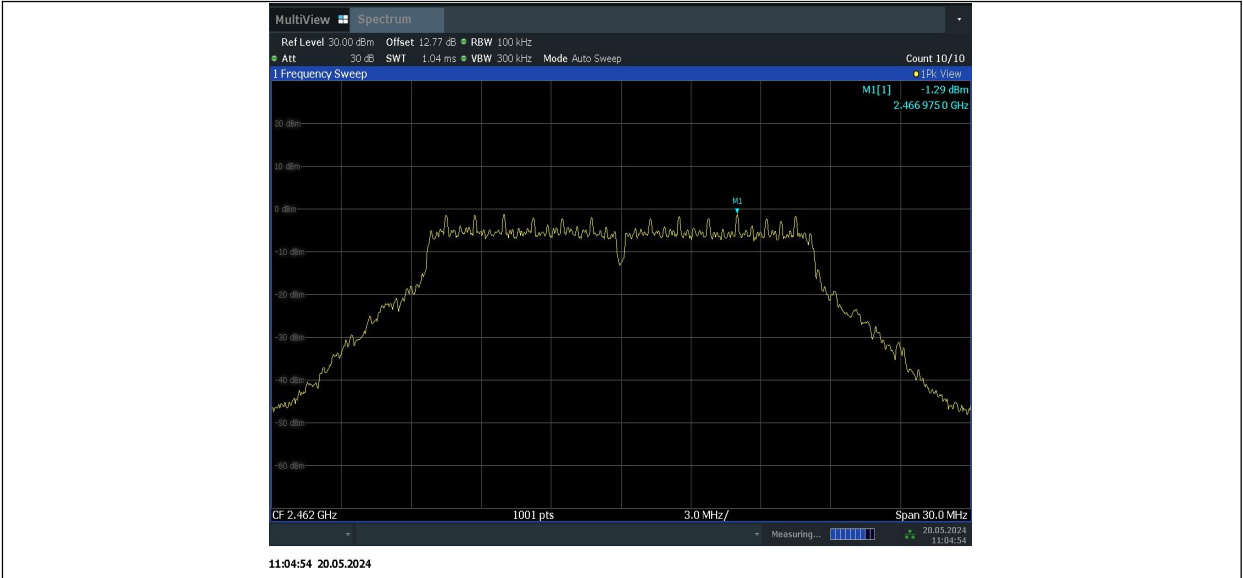
11:03:25 20.05.2024

11G-MIMO\_Ant0\_2462\_1000~26500

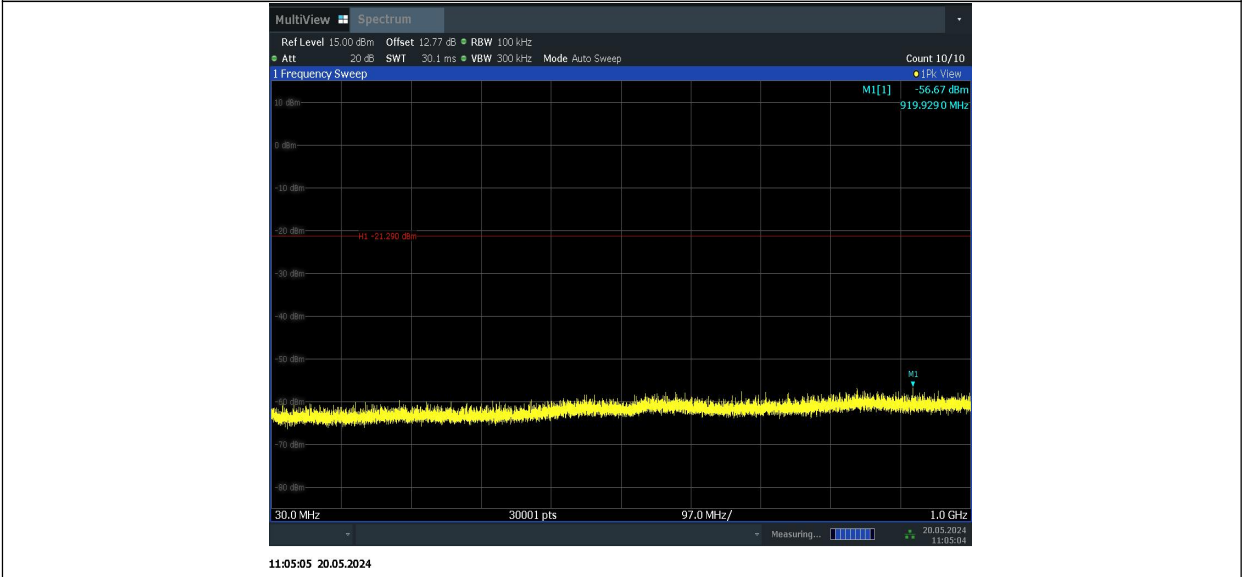


11:04:01 20.05.2024

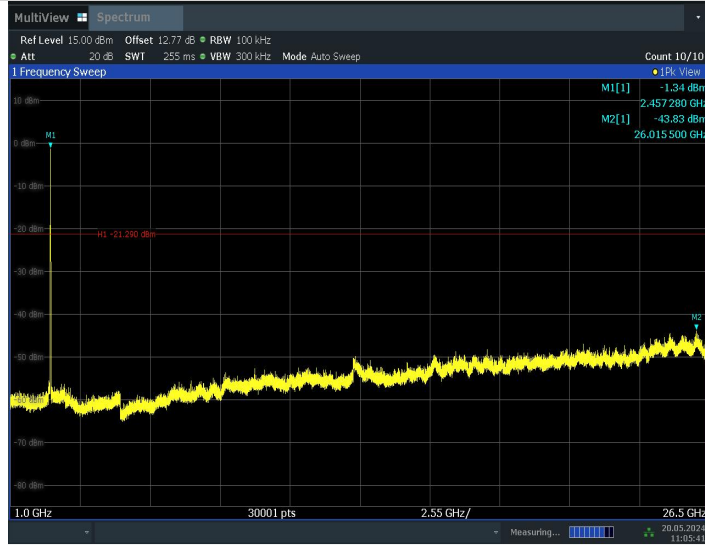
11G-MIMO\_Ant1\_2462\_0~Reference



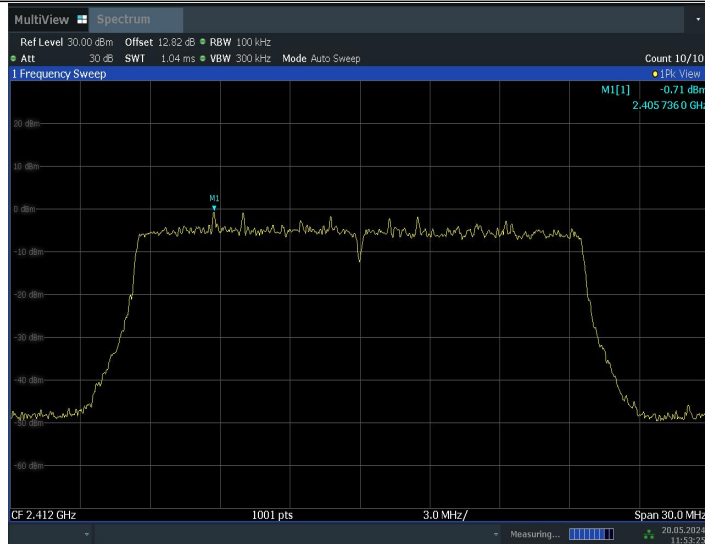
11G-MIMO\_Ant1\_2462\_30~1000



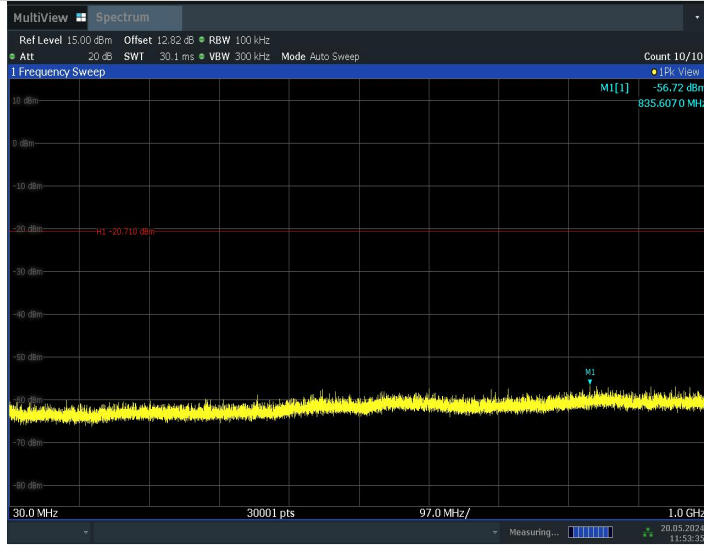
11G-MIMO\_Ant1\_2462\_1000~26500



11AX20MIMO\_Ant0\_2412\_0~Reference

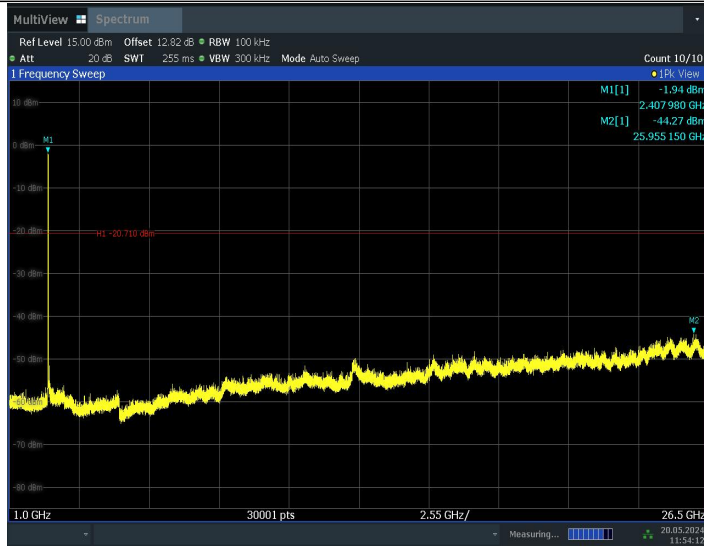


11AX20MIMO\_Ant0\_2412\_30~1000



11:53:36 20.05.2024

11AX20MIMO\_Ant0\_2412\_1000~26500



11:54:12 20.05.2024

11AX20MIMO\_Ant1\_2412\_0~Reference