

**Conclusion: Pass**

**A.5. Band Edges Compliance**

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

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

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

**Measurement Limit:**

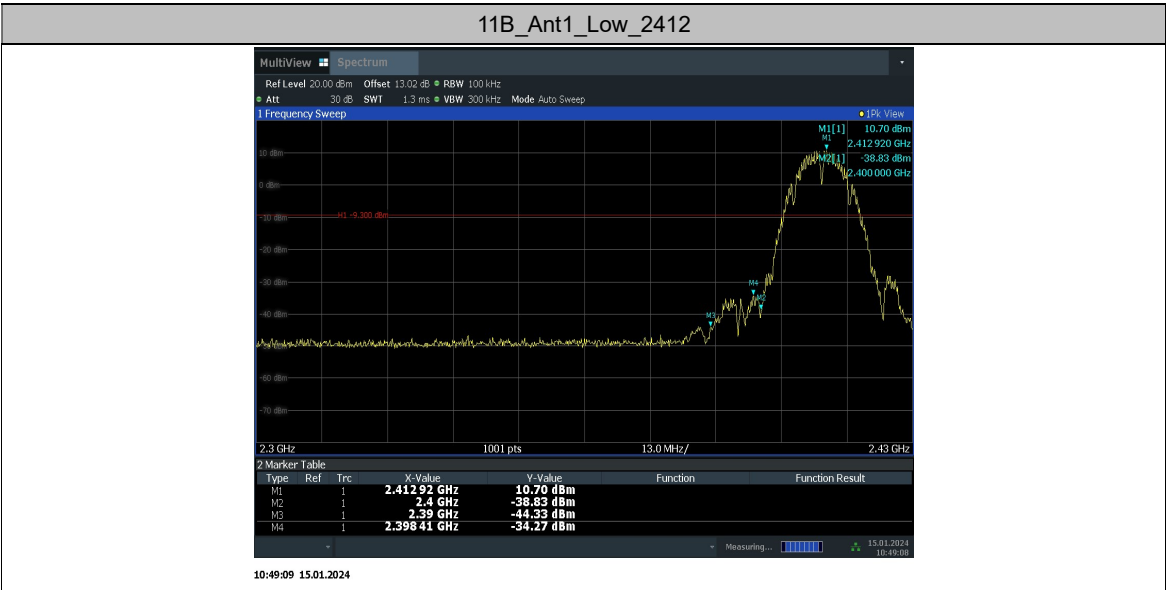
Standard	Limit (dBc)
FCC 47 CFR Part 15.247 (d)	> 20

**EUT ID: UT39a**

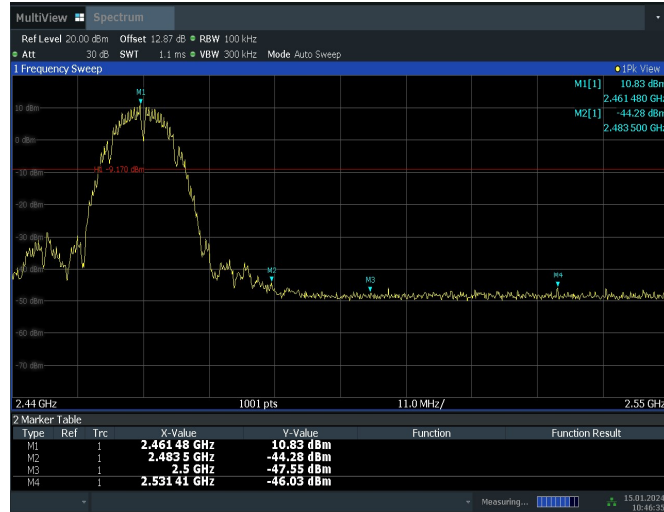
**Measurement Result:**

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Verdict
11B	Ant1	Low	2412	10.70	-34.27	PASS
		High	2462	10.83	-46.03	PASS
11G	Ant1	Low	2412	6.90	-19.55	PASS
		High	2462	6.63	-32.98	PASS
11N20SISO	Ant1	Low	2412	6.87	-20.12	PASS
		High	2462	6.75	-31.76	PASS
11N40SISO	Ant1	Low	2422	4.40	-22.89	PASS
		High	2452	4.21	-27.7	PASS

**Test graphs as below:**



## 11B\_Ant1\_High\_2462



10:46:35 15.01.2024

## 11G\_Ant1\_Low\_2412



10:53:22 15.01.2024

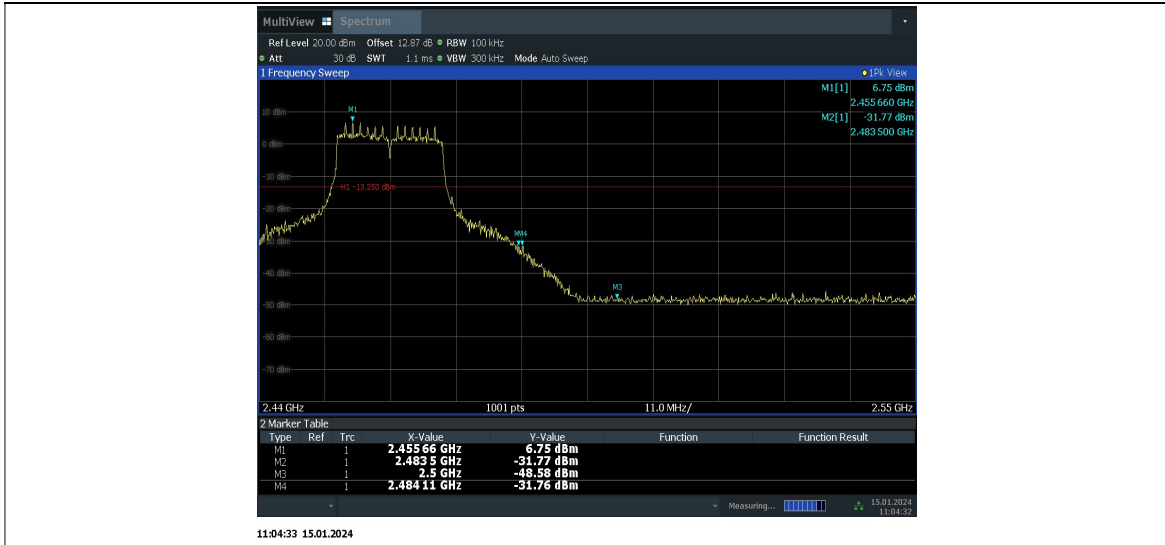
## 11G\_Ant1\_High\_2462



11N20SISO\_Ant1\_Low\_2412



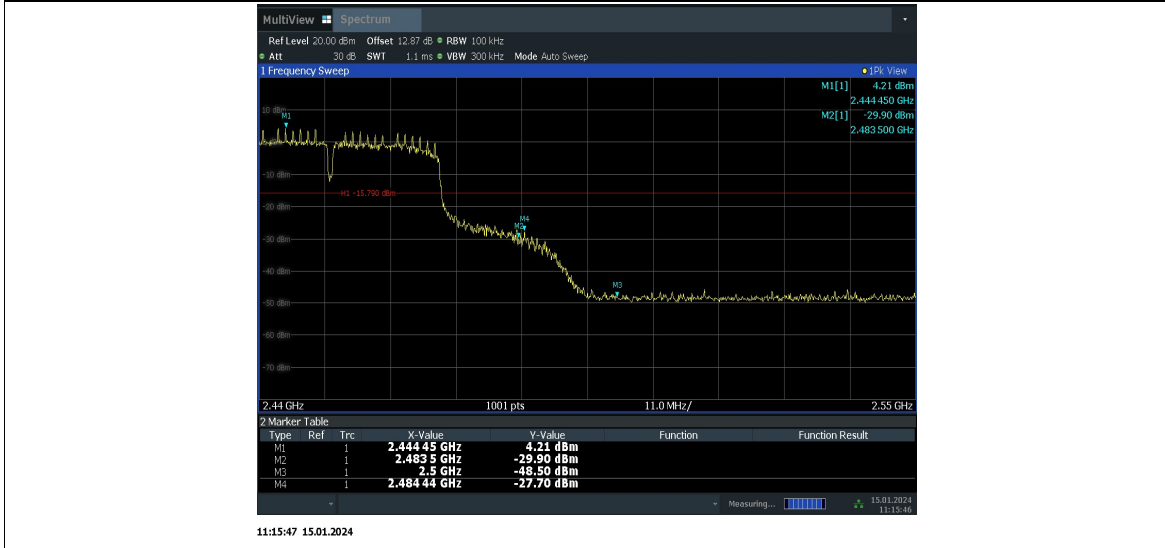
11N20SISO\_Ant1\_High\_2462



11N40SISO\_Ant1\_Low\_2422



11N40SISO\_Ant1\_High\_2452



**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: UT39a**

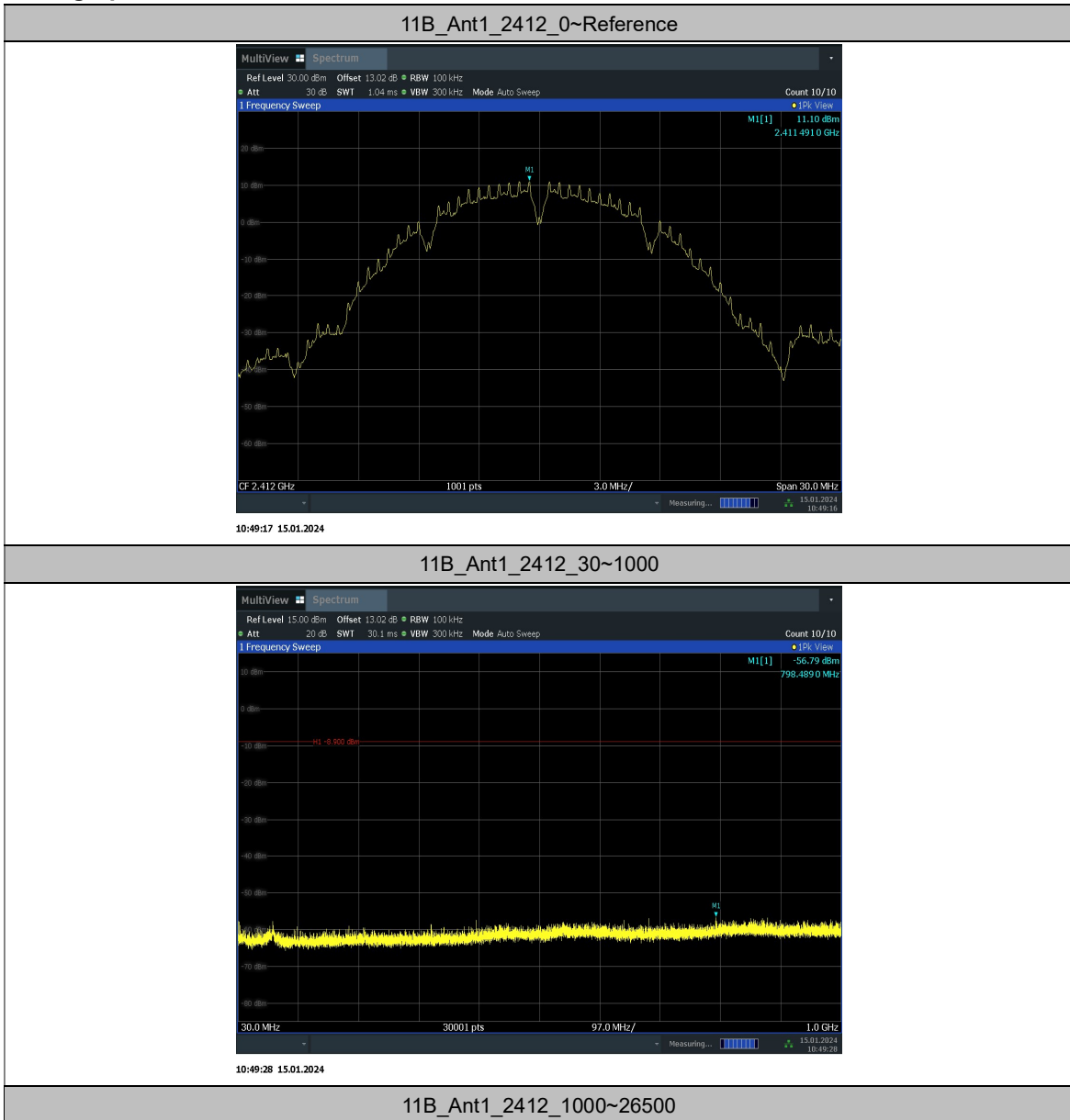
**Measurement Results:**

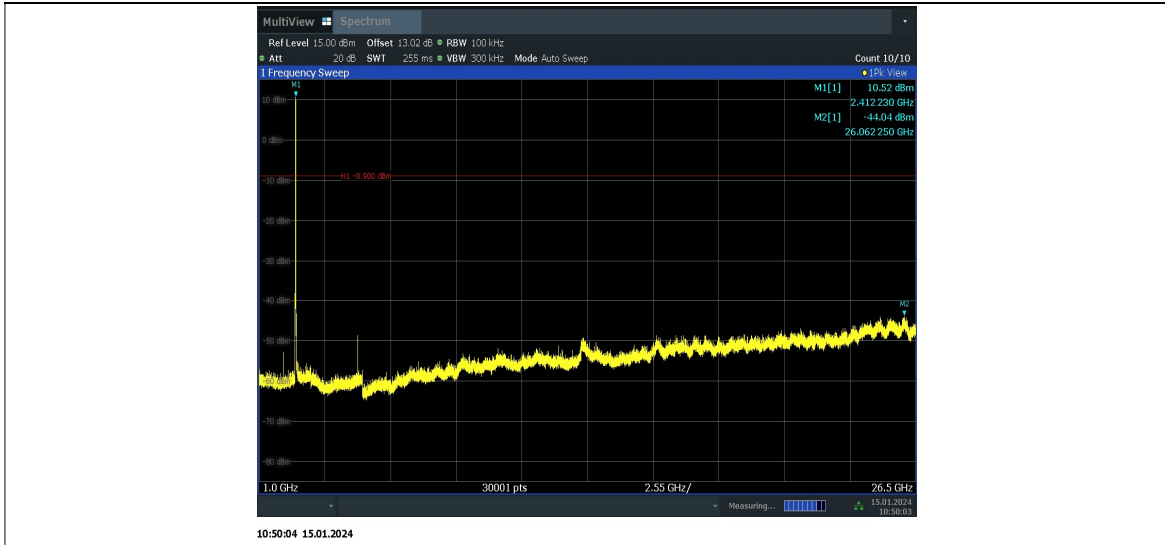
**802.11b mode**

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Verdict
11B	Ant1	2412	Reference	11.10	11.10	PASS
			30~1000	11.10	-56.79	PASS
			1000~26500	11.10	-44.04	PASS
		2437	Reference	11.15	11.15	PASS
			30~1000	11.15	-56.46	PASS
			1000~26500	11.15	-43.33	PASS
		2462	Reference	10.85	10.85	PASS
			30~1000	10.85	-56.59	PASS
			1000~26500	10.85	-43.53	PASS
11G	Ant1	2412	Reference	7.13	7.13	PASS
			30~1000	7.13	-56.7	PASS
			1000~26500	7.13	-43.15	PASS
		2437	Reference	7.50	7.50	PASS
			30~1000	7.50	-56.15	PASS
			1000~26500	7.50	-44.04	PASS
		2462	Reference	6.80	6.80	PASS
			30~1000	6.80	-56.75	PASS
			1000~26500	6.80	-43.92	PASS
11N20SISO	Ant1	2412	Reference	7.16	7.16	PASS
			30~1000	7.16	-55.51	PASS
			1000~26500	7.16	-43.3	PASS
		2437	Reference	7.45	7.45	PASS
			30~1000	7.45	-56.65	PASS
			1000~26500	7.45	-43.97	PASS
		2462	Reference	6.64	6.64	PASS
			30~1000	6.64	-57.01	PASS
			1000~26500	6.64	-44.17	PASS
11N40SISO	Ant1	2422	Reference	4.43	4.43	PASS
			30~1000	4.43	-56.75	PASS
			1000~26500	4.43	-43.91	PASS
		2437	Reference	4.44	4.44	PASS
			30~1000	4.44	-57.02	PASS
			1000~26500	4.44	-44.15	PASS
		2452	Reference	4.17	4.17	PASS
			30~1000	4.17	-56.76	PASS
			1000~26500	4.17	-38.31	PASS

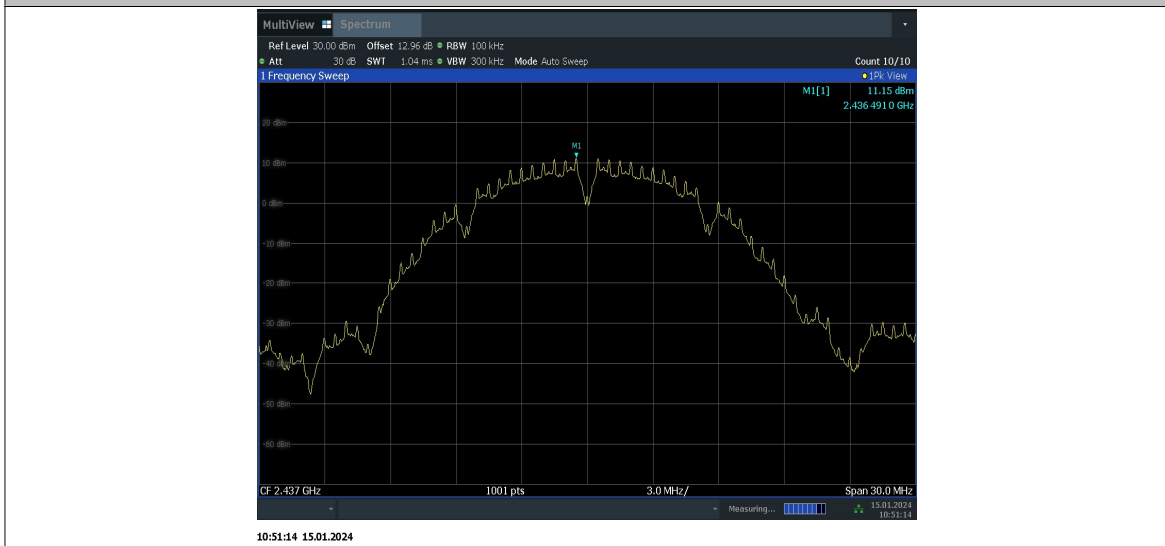


Test graphs as below:

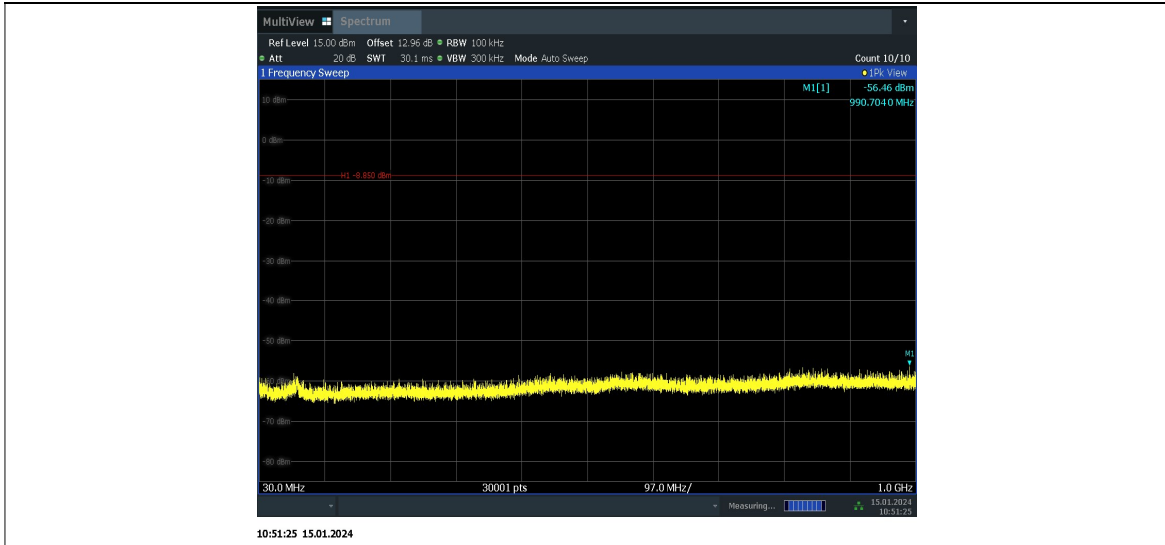




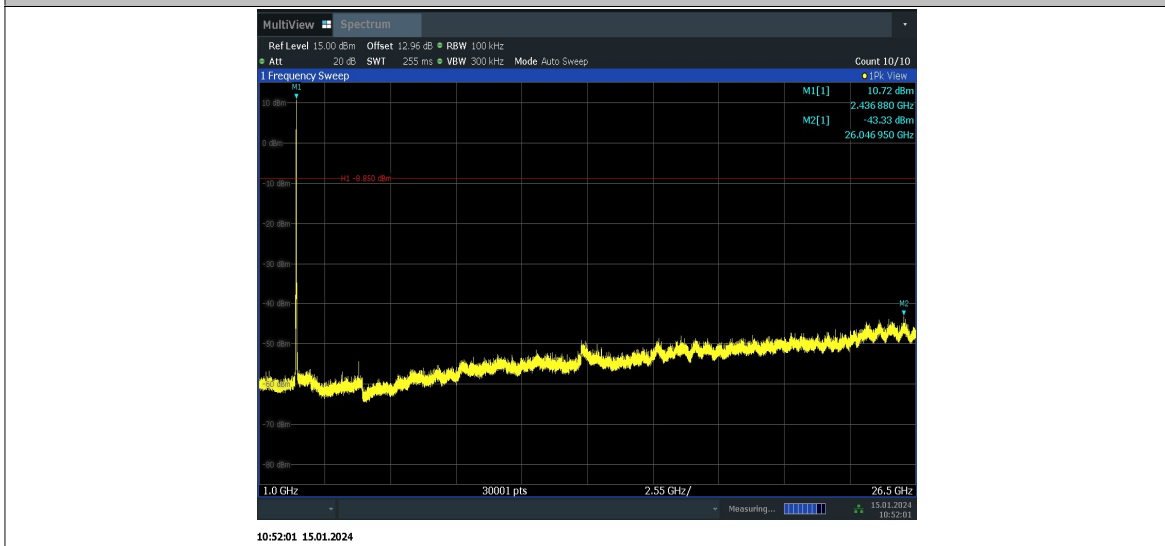
11B\_Ant1\_2437\_0~Reference



11B\_Ant1\_2437\_30~1000



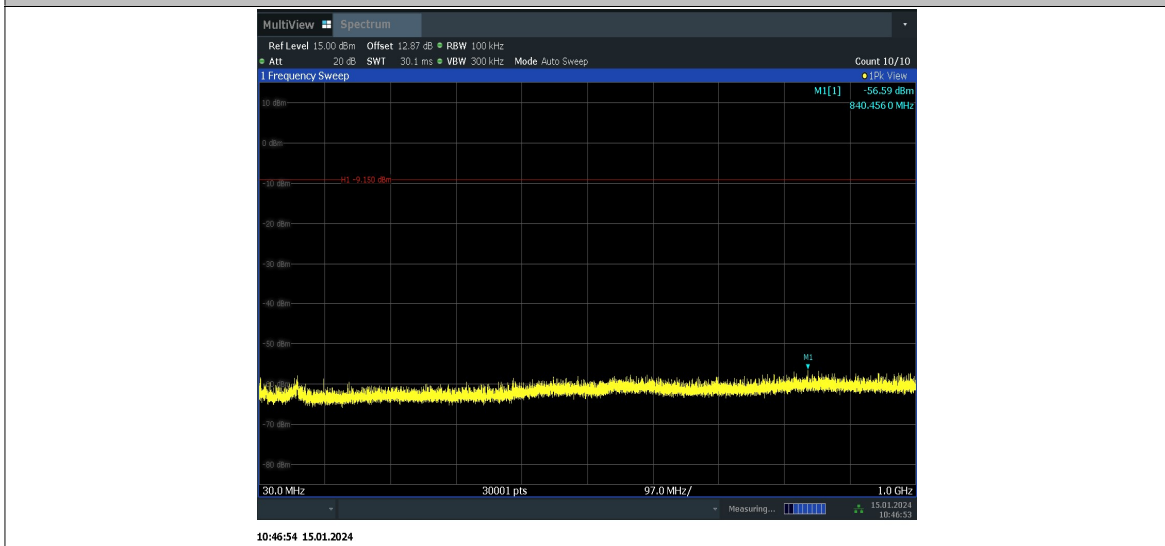
11B\_Ant1\_2437\_1000~26500



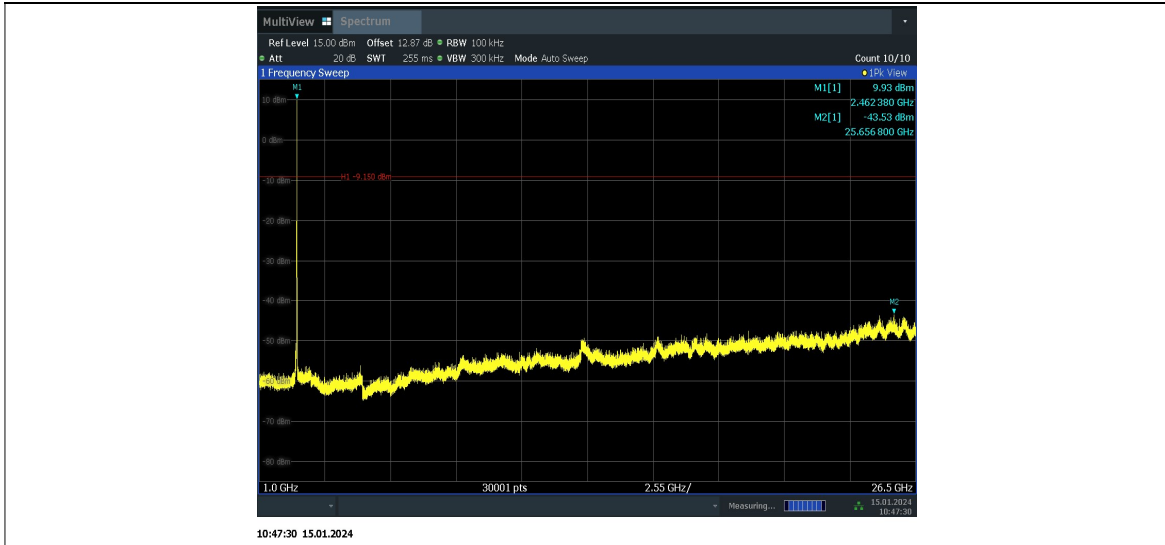
11B\_Ant1\_2462\_0~Reference



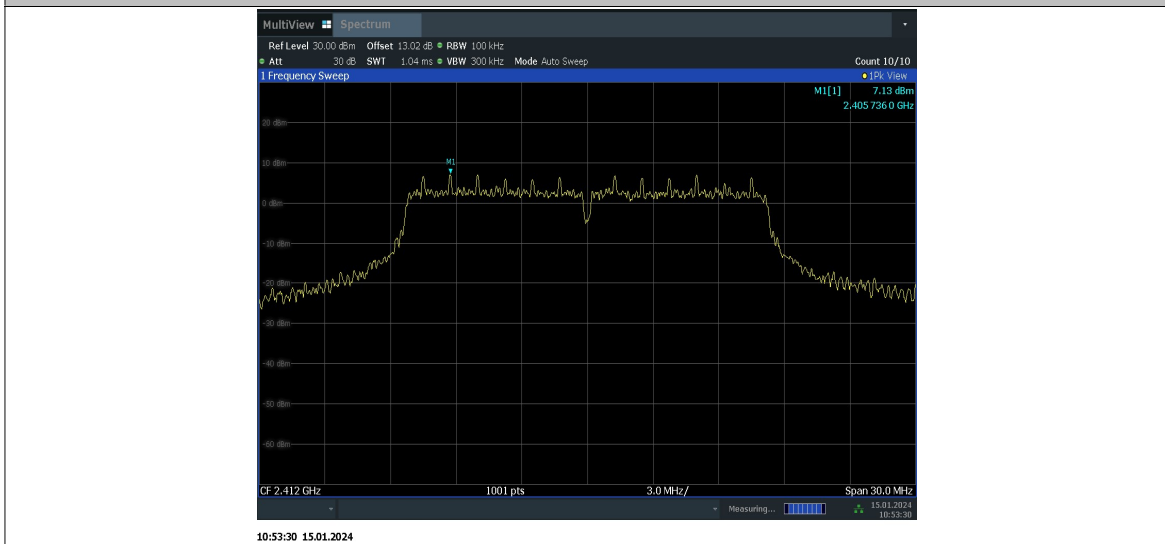
11B\_Ant1\_2462\_30~1000



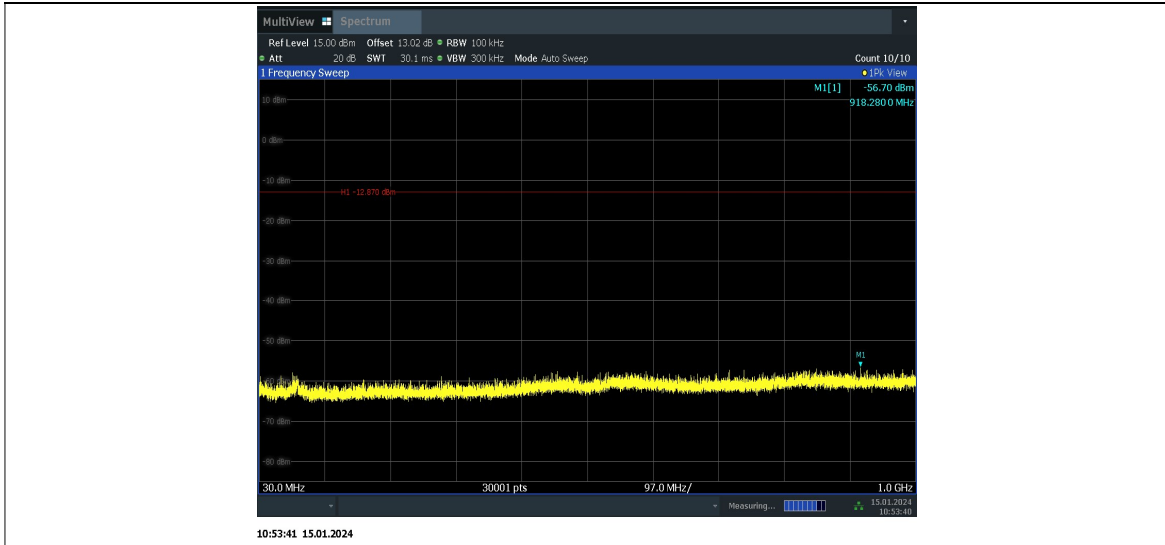
11B\_Ant1\_2462\_1000~26500



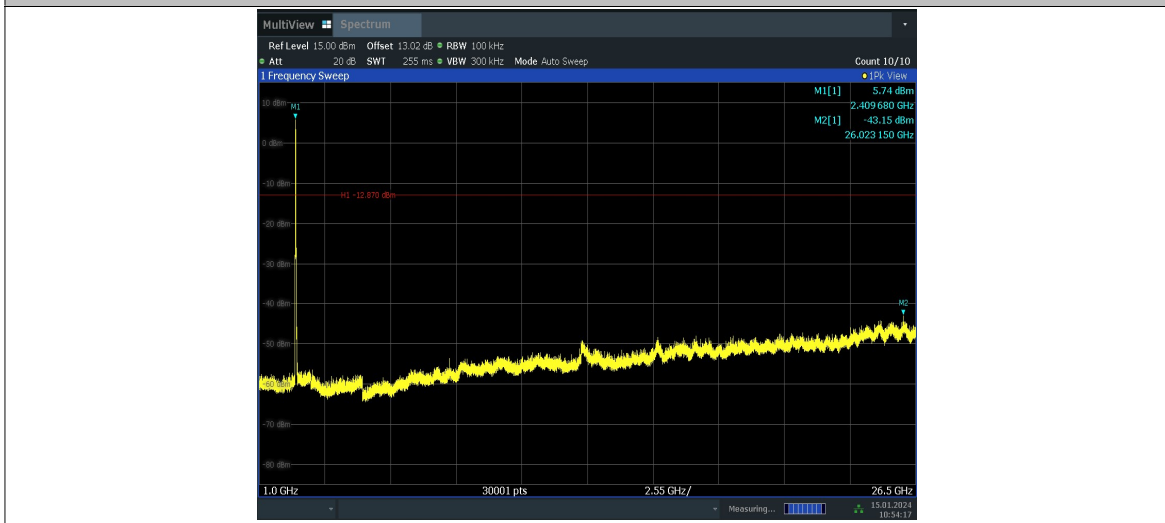
11G\_Ant1\_2412\_0~Reference



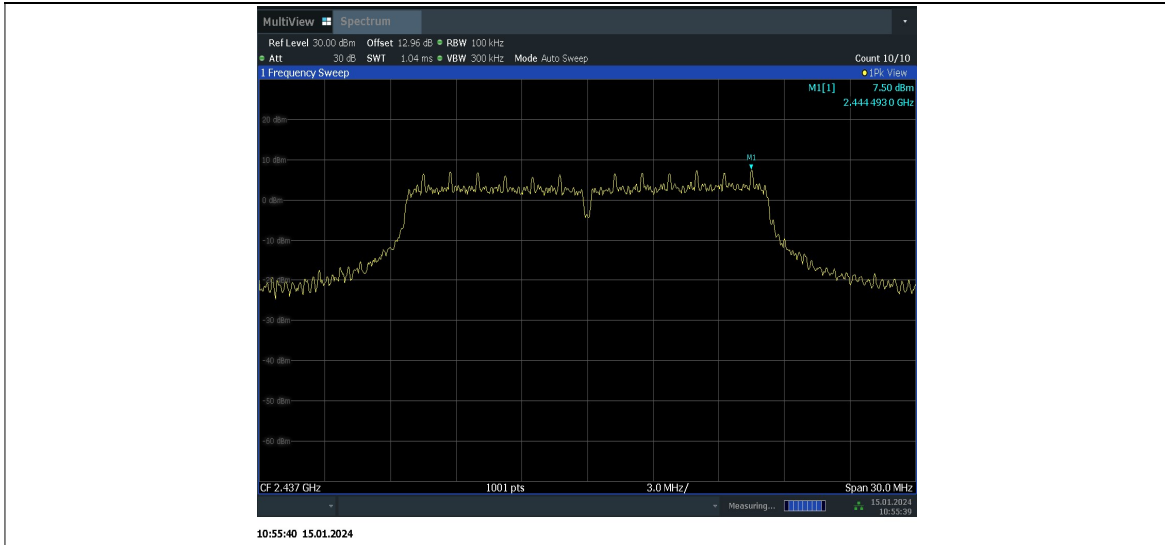
11G\_Ant1\_2412\_30~1000



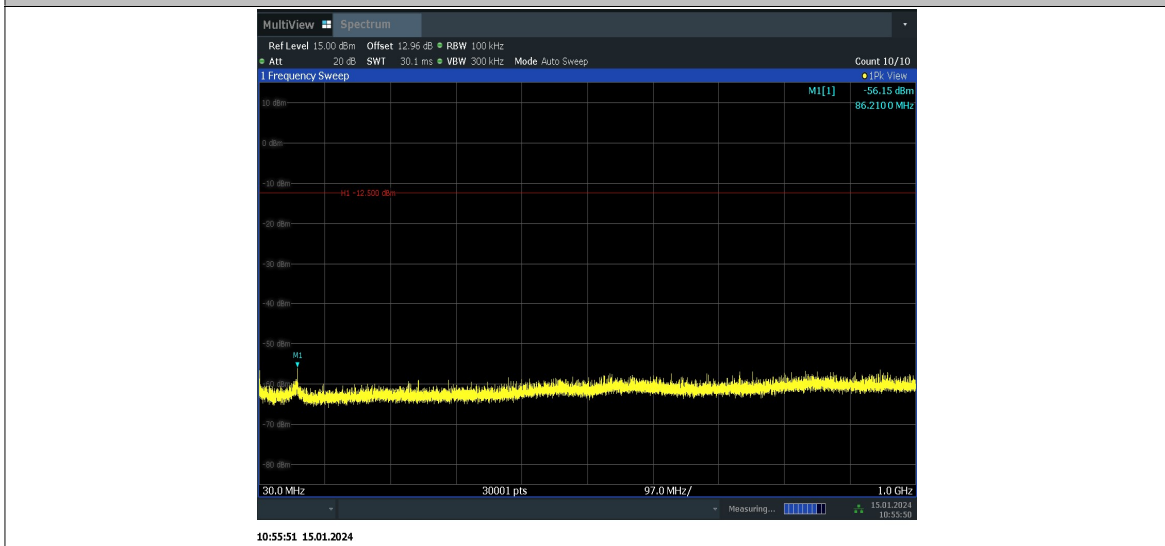
11G\_Ant1\_2412\_1000~26500



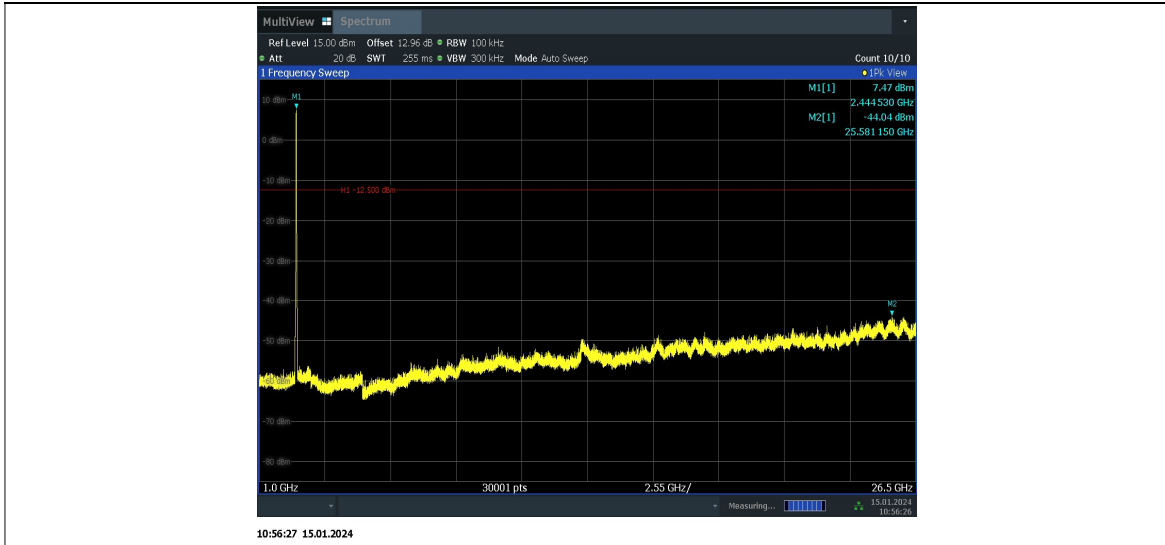
11G\_Ant1\_2437\_0~Reference



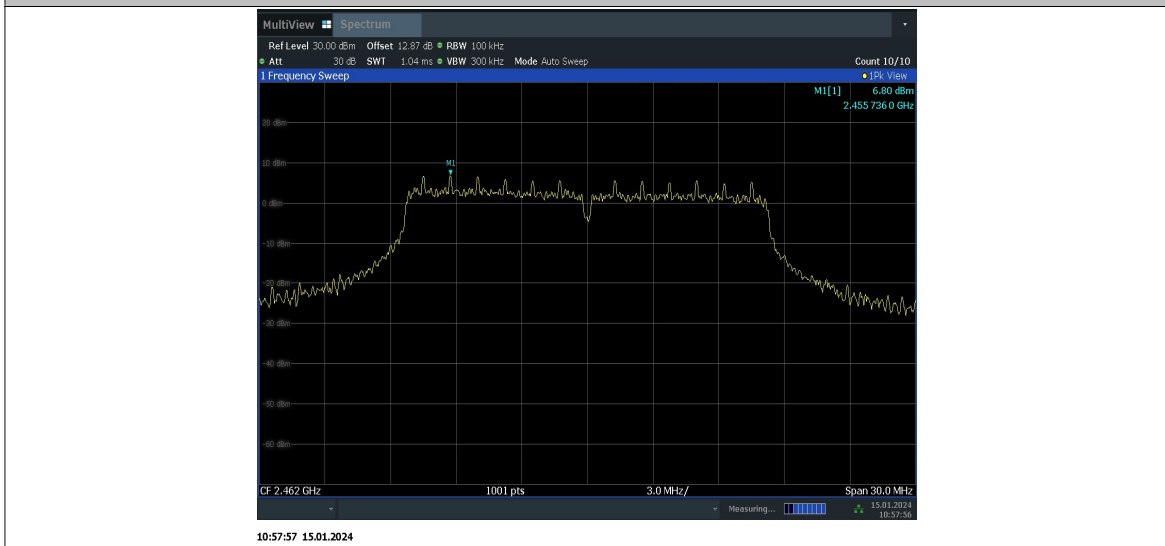
11G\_Ant1\_2437\_30~1000



11G\_Ant1\_2437\_1000~26500



11G\_Ant1\_2462\_0~Reference



11G\_Ant1\_2462\_30~1000