

RF Test Data for 2.4G Wi-Fi (Conducted Measurements)

General Description of EUT	
Product Name:	Wireless Monitor
Test Model:	M124EI
Sample ID:	HC-C-202405-0022-01-01
Environmental Conditions	
Temperature:	23.6°C
Relative Humidity:	48%
Test Voltage:	AC 120V/60Hz
Test Engineer:	Jolin Lee
Note: For a more detailed features description, please refer to the report TBR-C-202405-0022-6	

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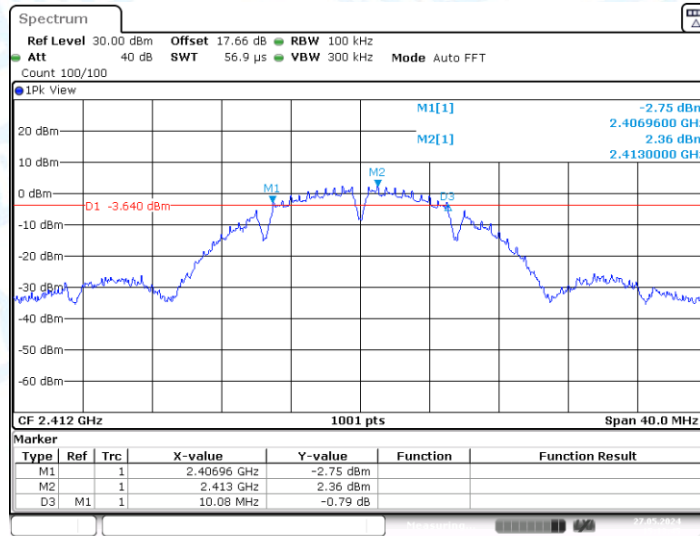
1. DTS Bandwidth

1.1. Test Result

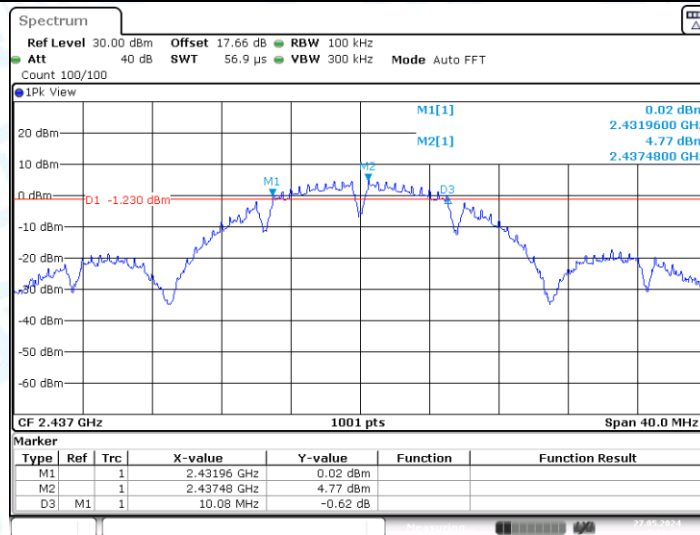
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.08	2406.96	2417.04	0.5	PASS
		2437	10.08	2431.96	2442.04	0.5	PASS
		2462	10.04	2456.96	2467.00	0.5	PASS
11G	Ant1	2412	16.32	2403.84	2420.16	0.5	PASS
		2437	16.32	2428.84	2445.16	0.5	PASS
		2462	16.32	2453.84	2470.16	0.5	PASS

1.2. Test Graphs

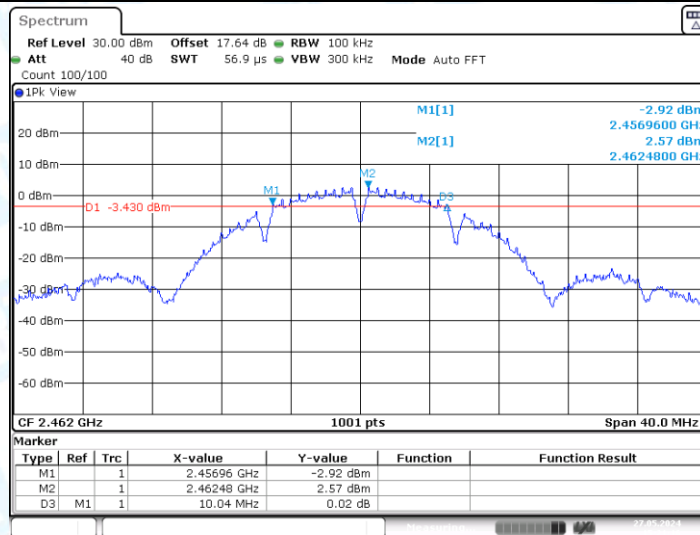
11B_Ant1_2412



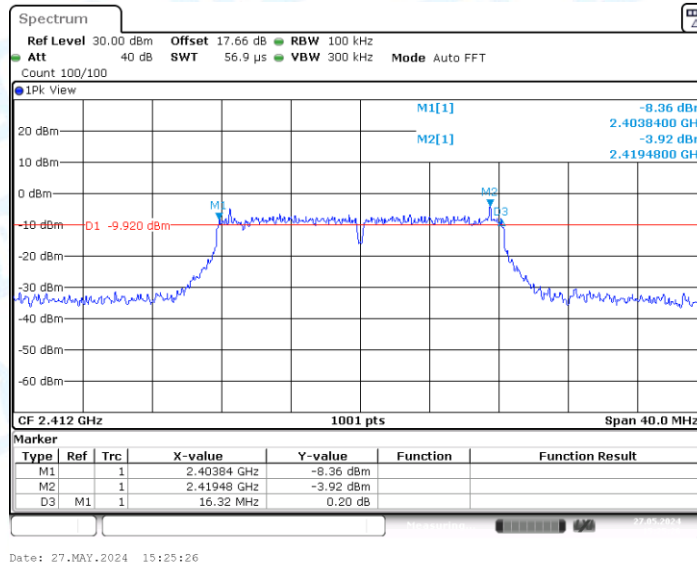
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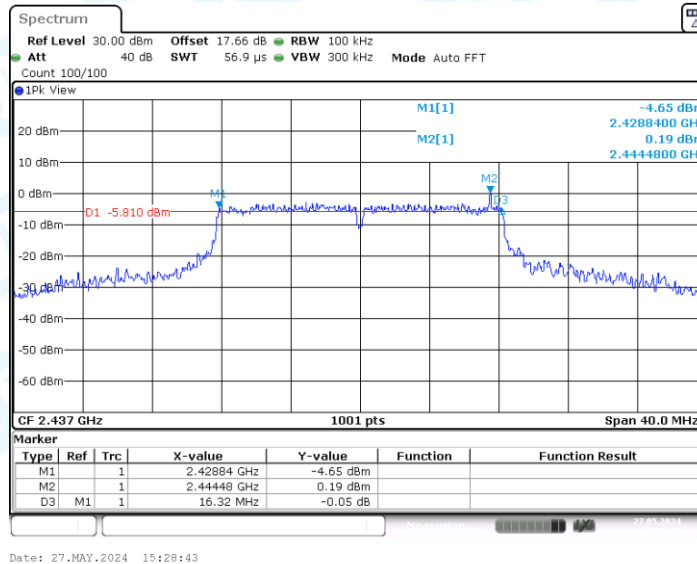
11B_Ant1_2462



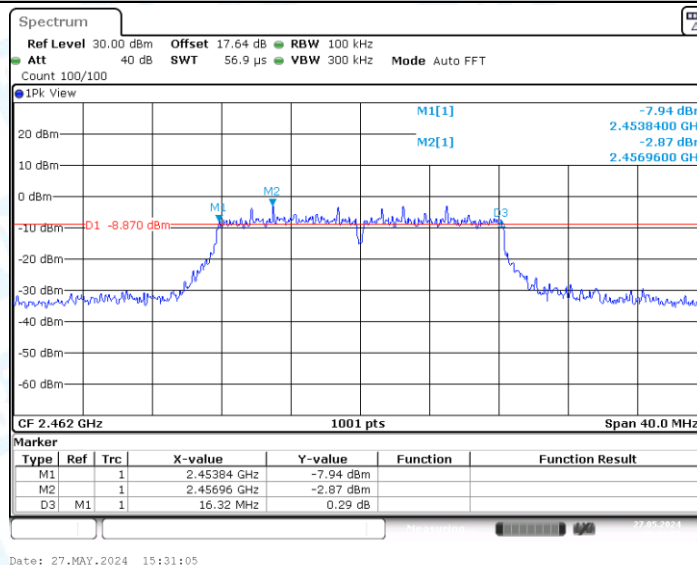
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462

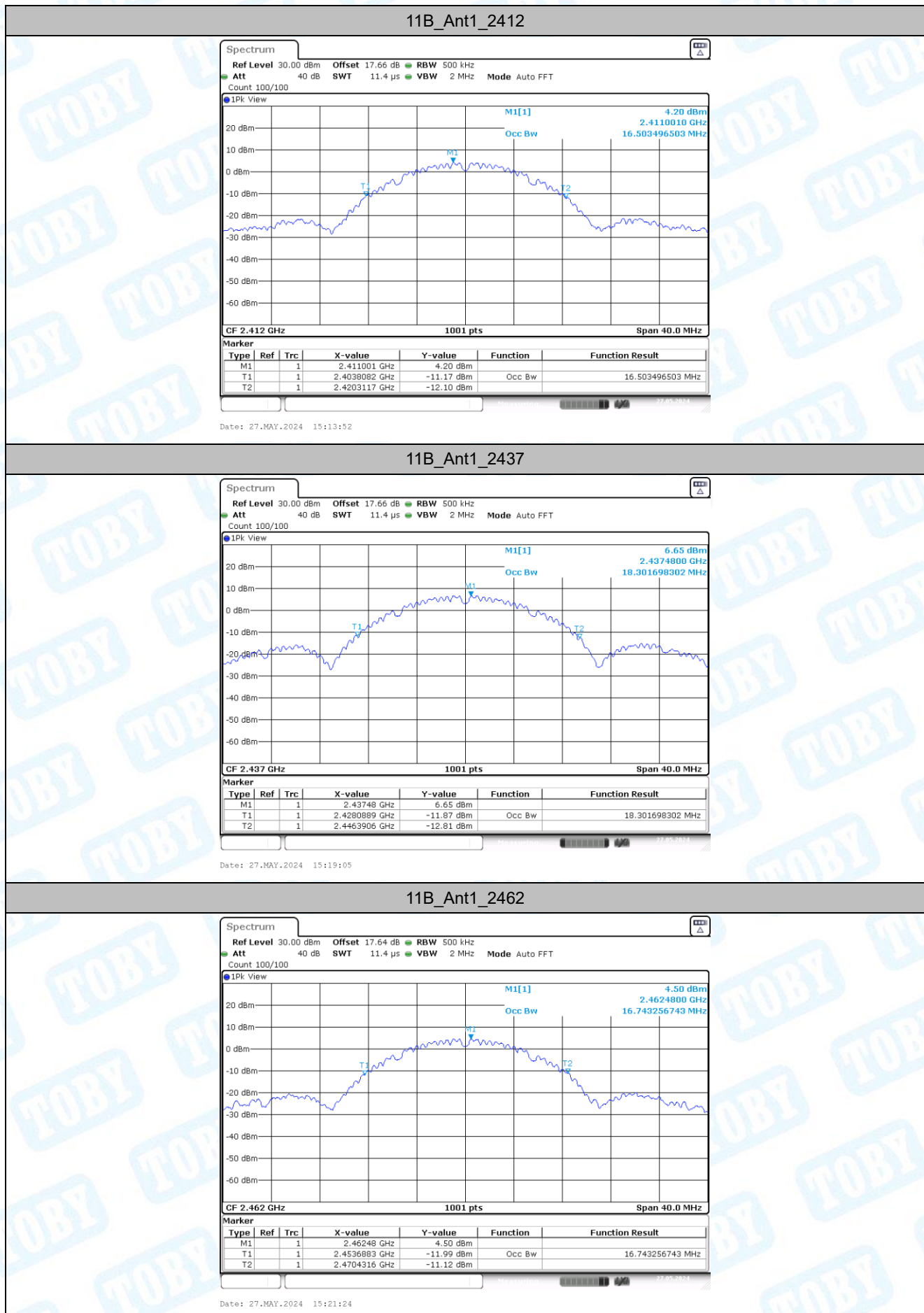


2. Occupied Channel Bandwidth

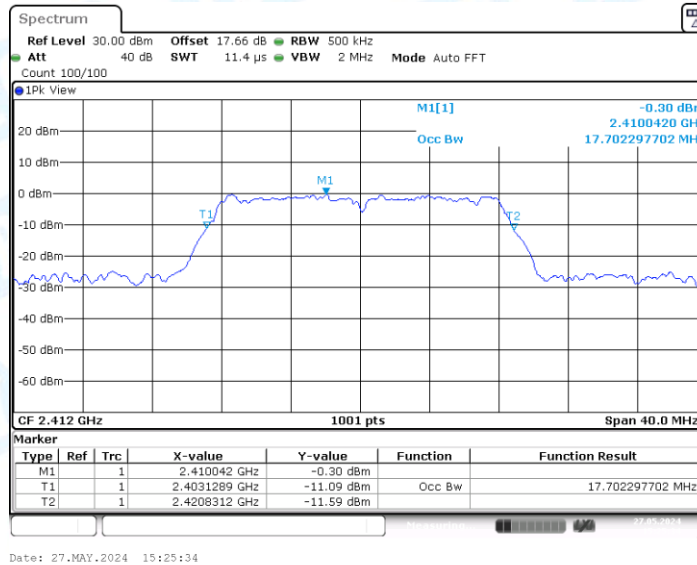
2.1. Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	16.503	2403.8082	2420.3117	---	---
		2437	18.302	2428.0889	2446.3906	---	---
		2462	16.743	2453.6883	2470.4316	---	---
11G	Ant1	2412	17.702	2403.1289	2420.8312	---	---
		2437	18.781	2427.9690	2446.7502	---	---
		2462	17.383	2453.3287	2470.7113	---	---

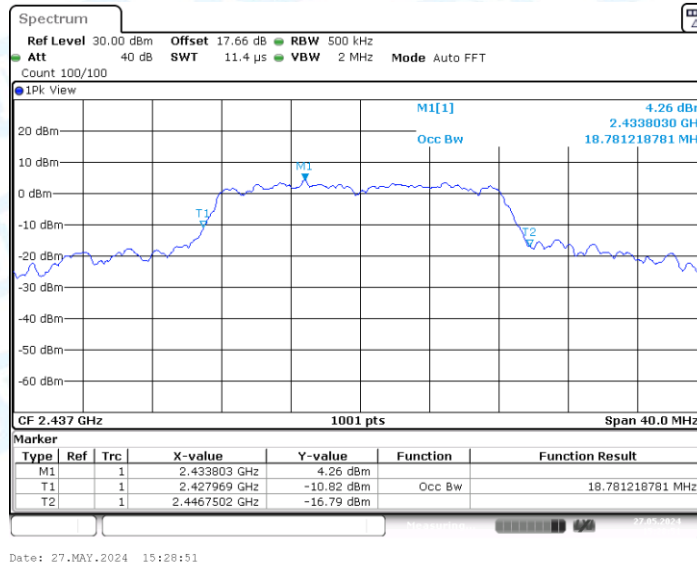
2.2. Test Graphs



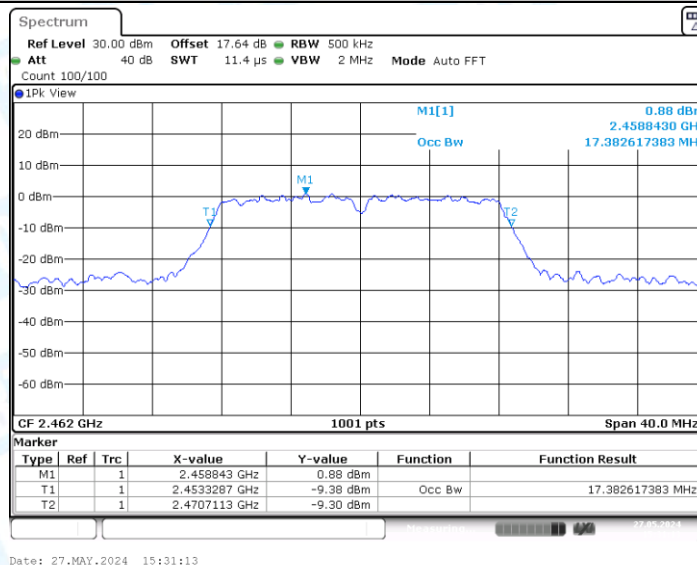
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



3. Maximum conducted output power

3.1. Test Result

TestMode	Antenna	Channel	Power [dBm]	Limit [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	11.19	≤30.00	15.89	≤36.00	PASS
		2437	13.89	≤30.00	18.59	≤36.00	PASS
		2462	11.73	≤30.00	16.43	≤36.00	PASS
11G	Ant1	2412	7.81	≤30.00	12.51	≤36.00	PASS
		2437	11.26	≤30.00	15.96	≤36.00	PASS
		2462	8.63	≤30.00	13.33	≤36.00	PASS

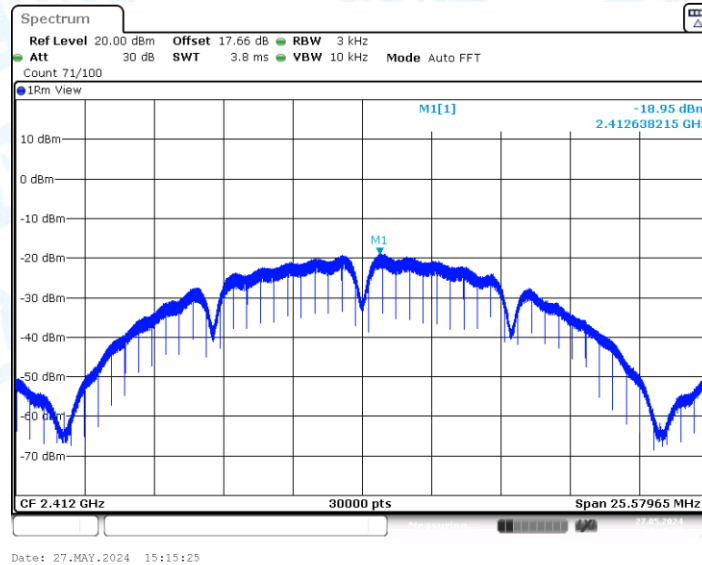
4. Maximum power spectral density

4.1. Test Result

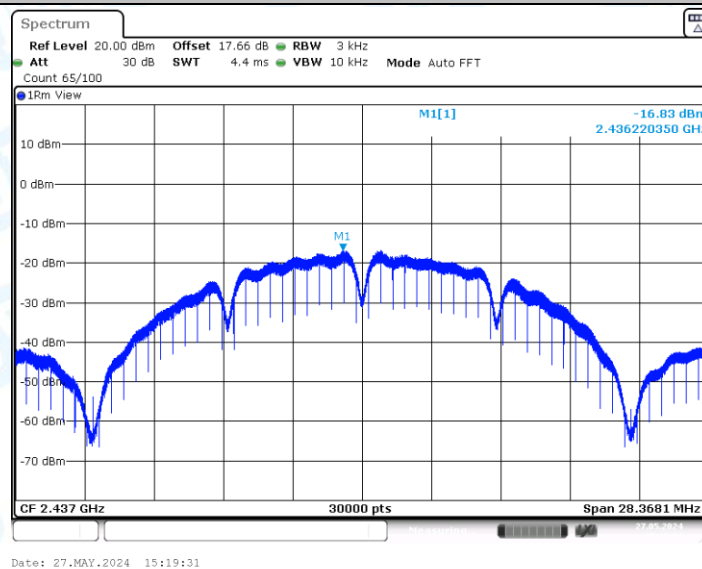
TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-18.62	≤8.00	PASS
		2437	-16.50	≤8.00	PASS
		2462	-18.54	≤8.00	PASS
11G	Ant1	2412	-23.30	≤8.00	PASS
		2437	-20.22	≤8.00	PASS
		2462	-23.45	≤8.00	PASS

4.2. Test Graphs

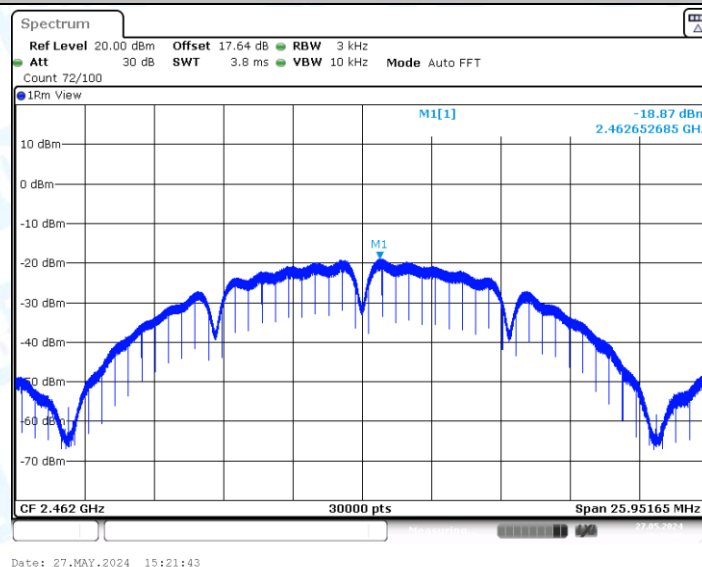
11B_Ant1_2412



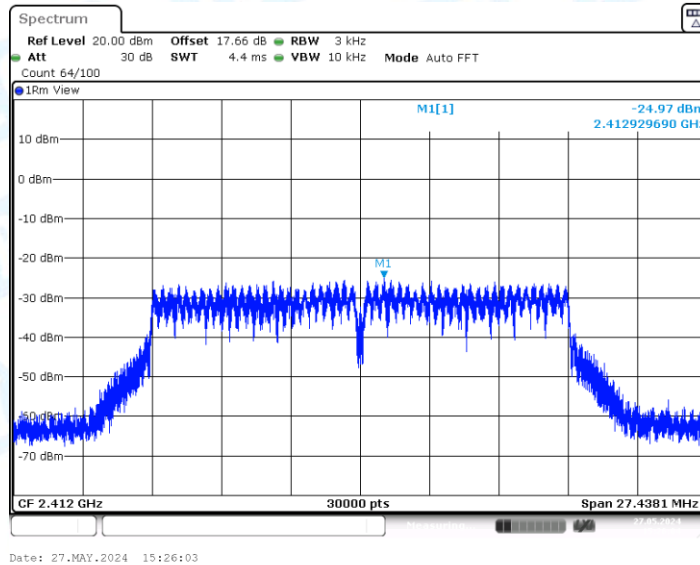
11B_Ant1_2437



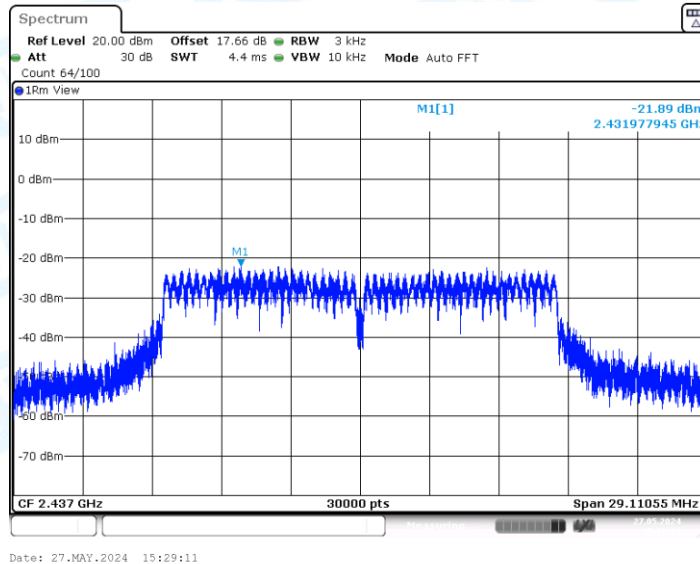
11B_Ant1_2462



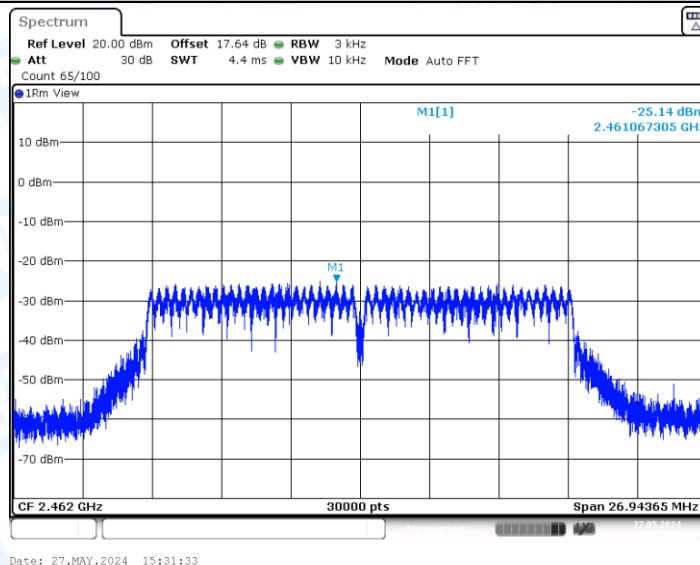
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462

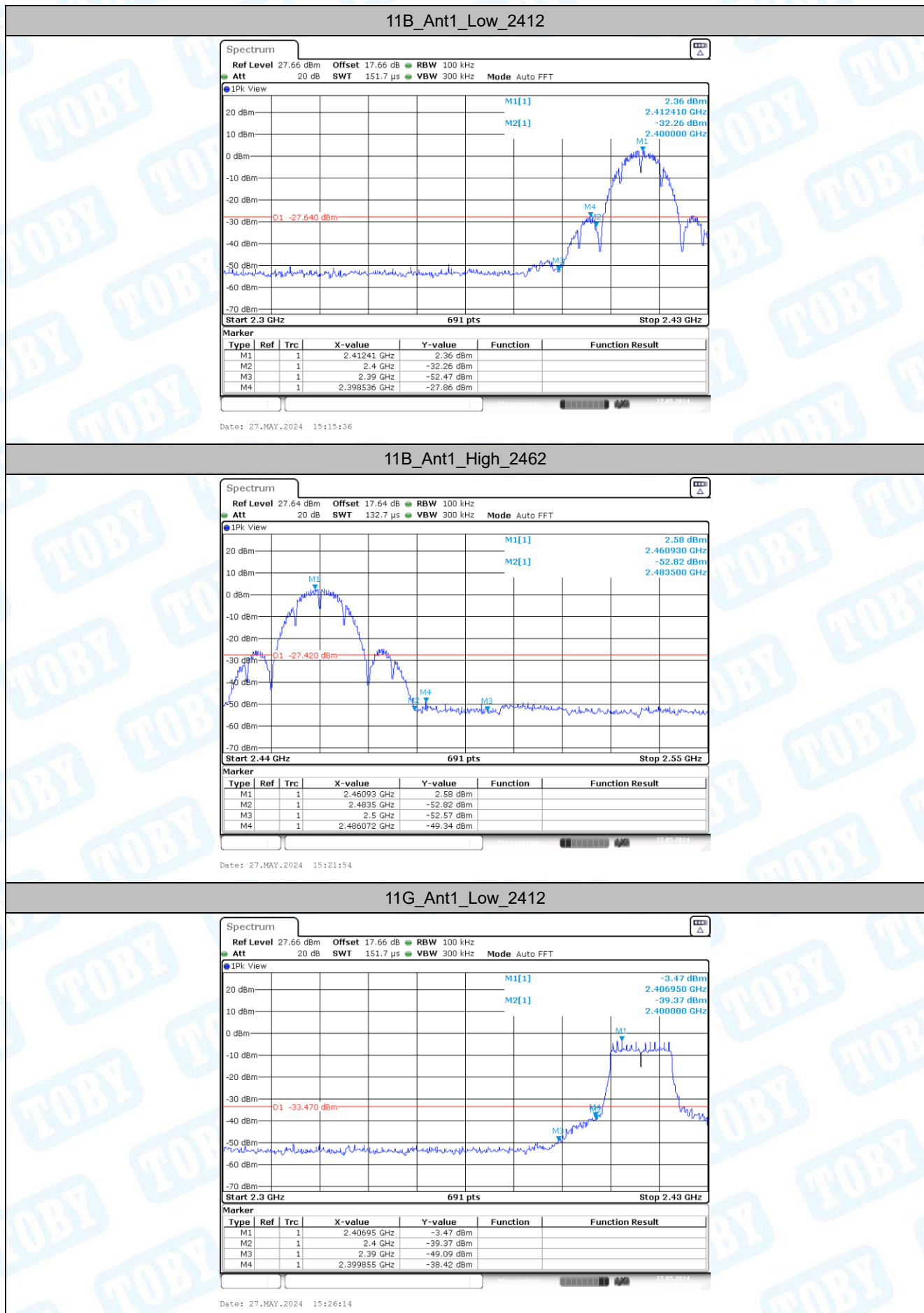


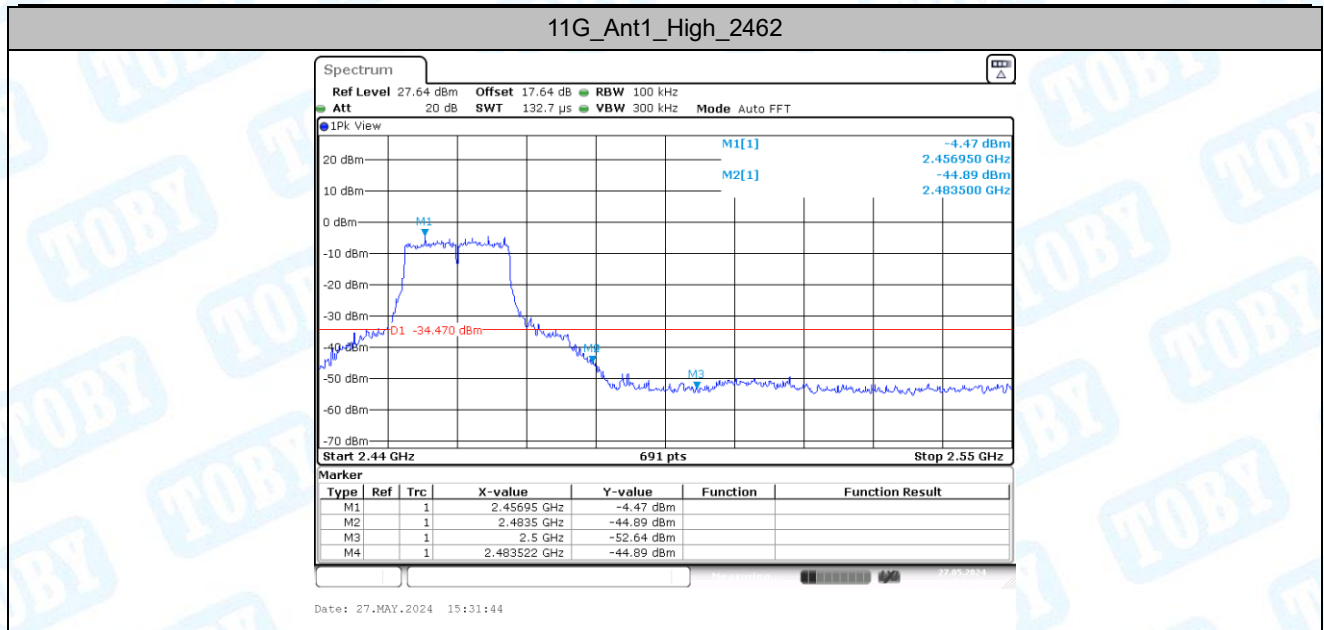
5. Band edge measurements

5.1. Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.36	-27.86	≤-27.64	PASS
		High	2462	2.58	-49.34	≤-27.42	PASS
11G	Ant1	Low	2412	-3.47	-38.42	≤-33.47	PASS
		High	2462	-4.47	-44.89	≤-34.47	PASS

5.2. Test Graphs



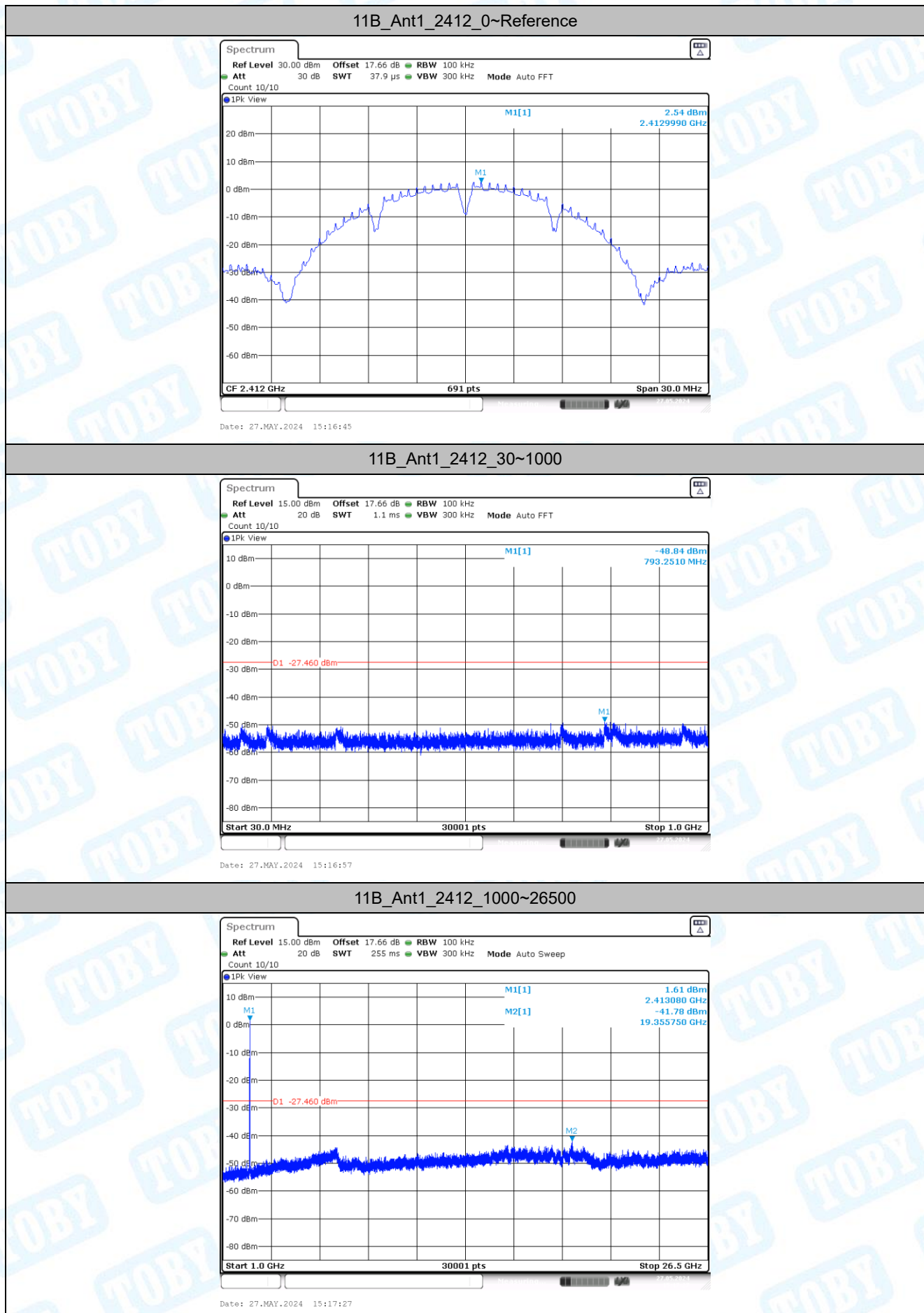


6. Conducted Spurious Emission

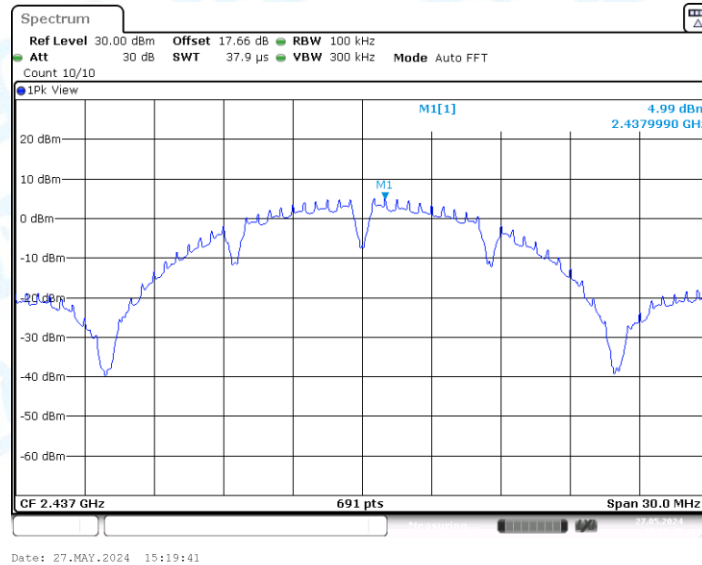
6.1. Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.54	2.54	---	PASS
			30~1000	2.54	-48.84	≤-27.46	PASS
			1000~26500	2.54	-41.78	≤-27.46	PASS
		2437	Reference	4.99	4.99	---	PASS
			30~1000	4.99	-49.04	≤-25.01	PASS
			1000~26500	4.99	-42.69	≤-25.01	PASS
		2462	Reference	3.01	3.01	---	PASS
			30~1000	3.01	-47.87	≤-26.99	PASS
			1000~26500	3.01	-42.63	≤-26.99	PASS
11G	Ant1	2412	Reference	-3.29	-3.29	---	PASS
			30~1000	-3.29	-46.72	≤-33.29	PASS
			1000~26500	-3.29	-42.95	≤-33.29	PASS
		2437	Reference	0.77	0.77	---	PASS
			30~1000	0.77	-46.95	≤-29.23	PASS
			1000~26500	0.77	-43.01	≤-29.23	PASS
		2462	Reference	-2.41	-2.41	---	PASS
			30~1000	-2.41	-46.95	≤-32.41	PASS
			1000~26500	-2.41	-43.1	≤-32.41	PASS

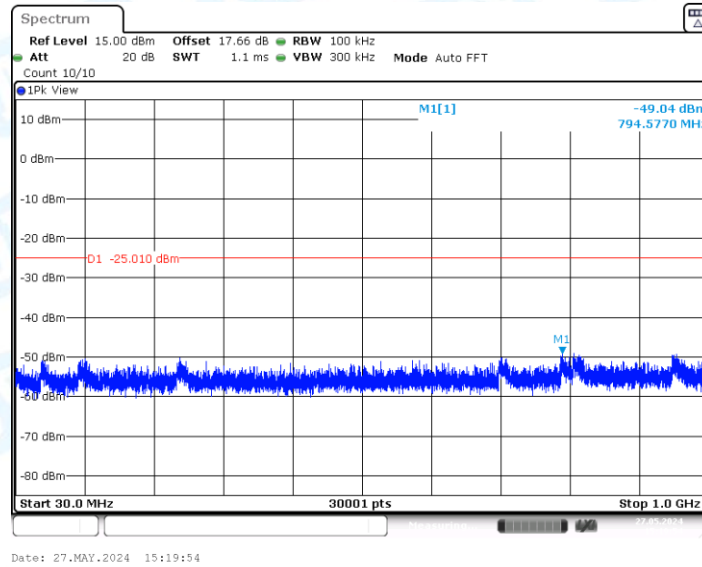
6.2. Test Graphs



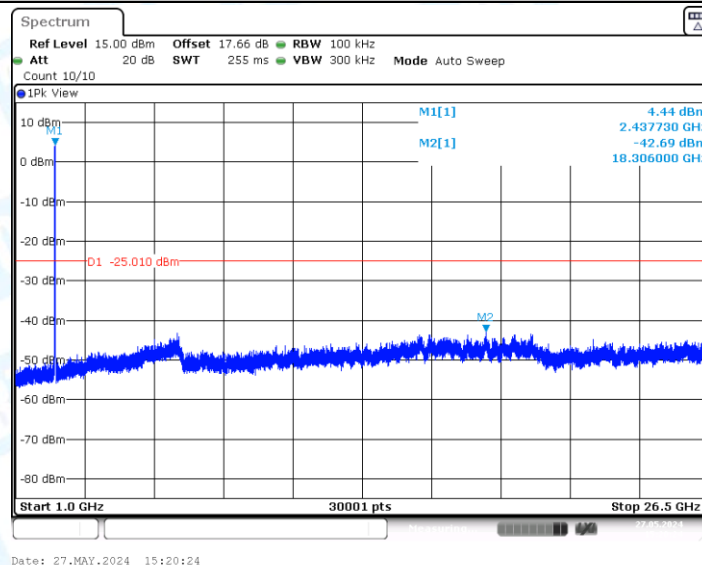
11B_Ant1_2437_0~Reference



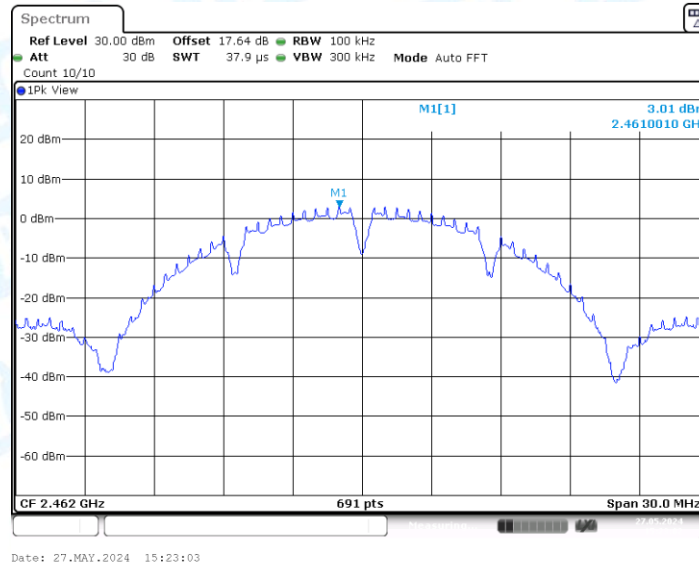
11B_Ant1_2437_30~1000



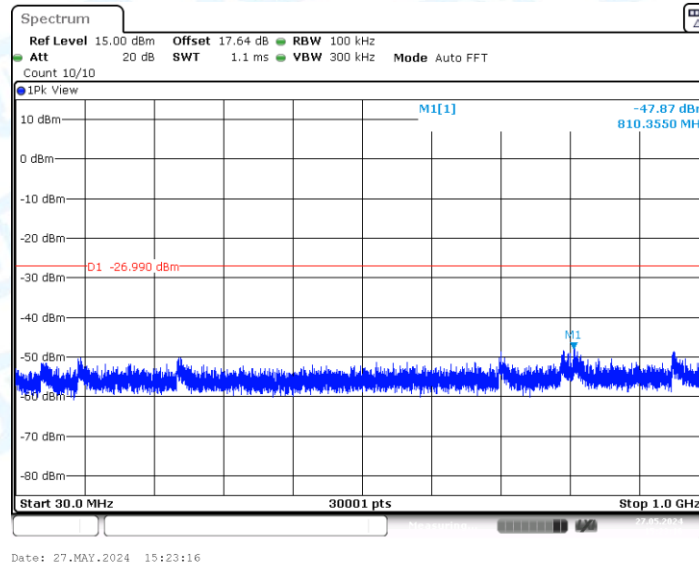
11B_Ant1_2437_1000~26500



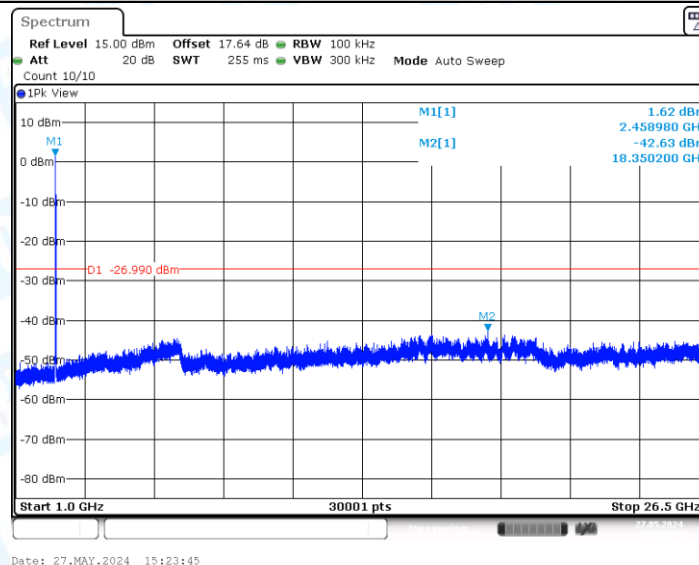
11B_Ant1_2462_0~Reference



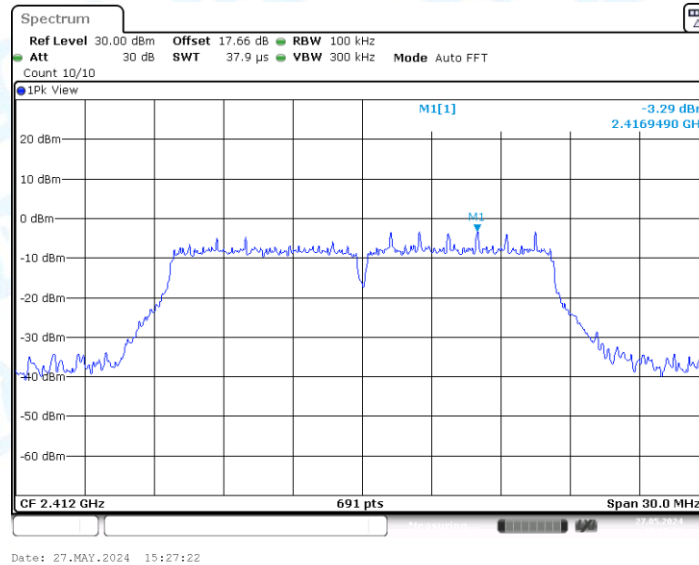
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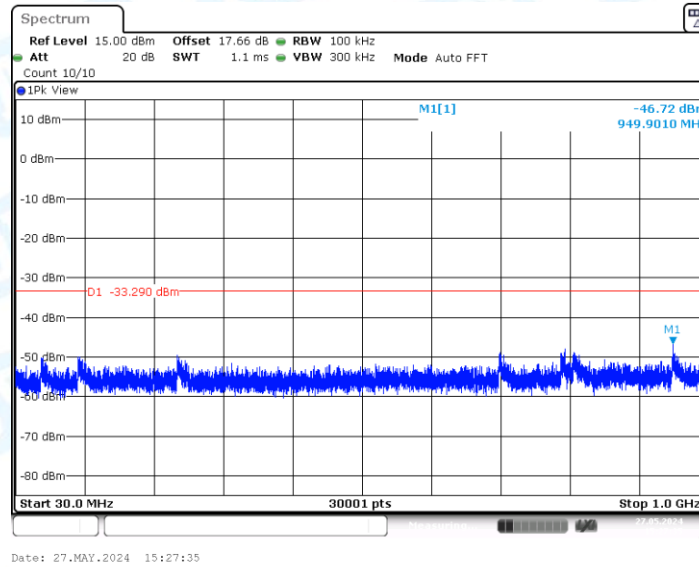
11B_Ant1_2462_1000~26500



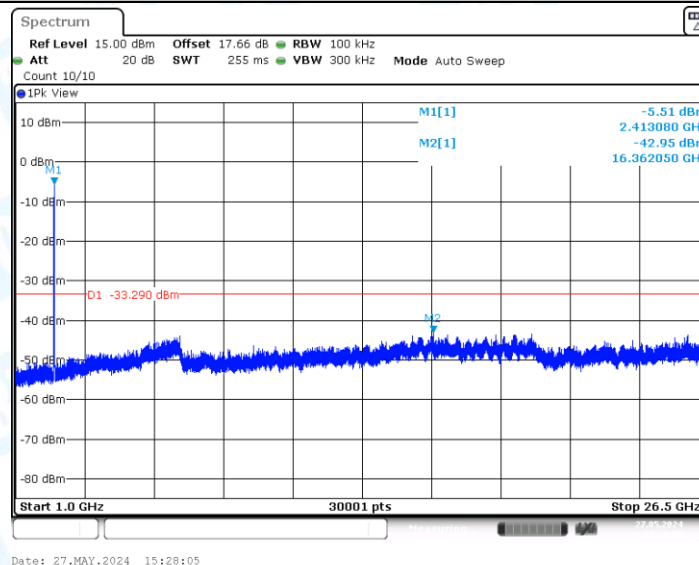
11G_Ant1_2412_0~Reference



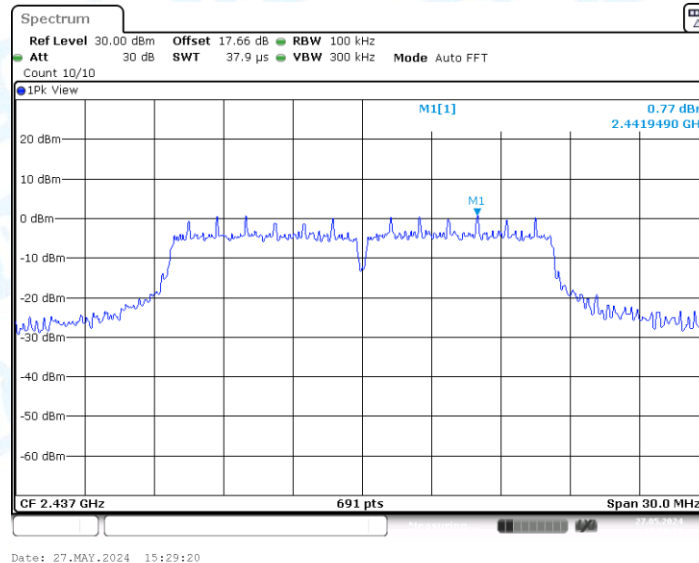
11G_Ant1_2412_30~1000



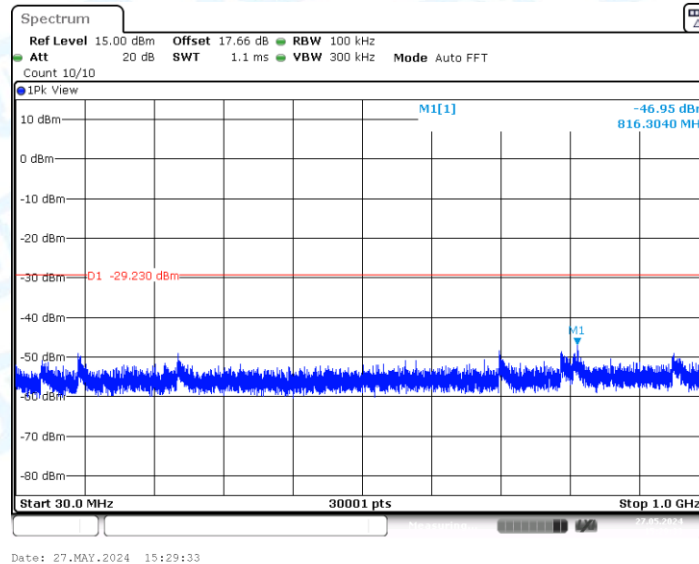
11G_Ant1_2412_1000~26500



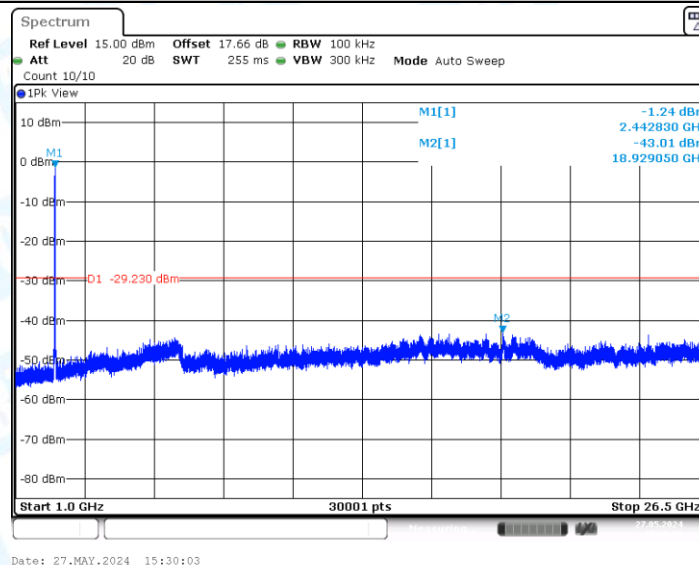
11G_Ant1_2437_0~Reference



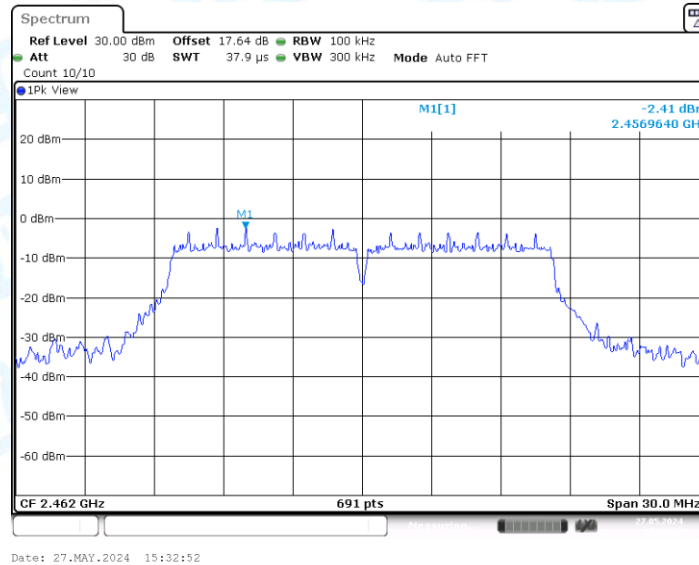
11G_Ant1_2437_30~1000



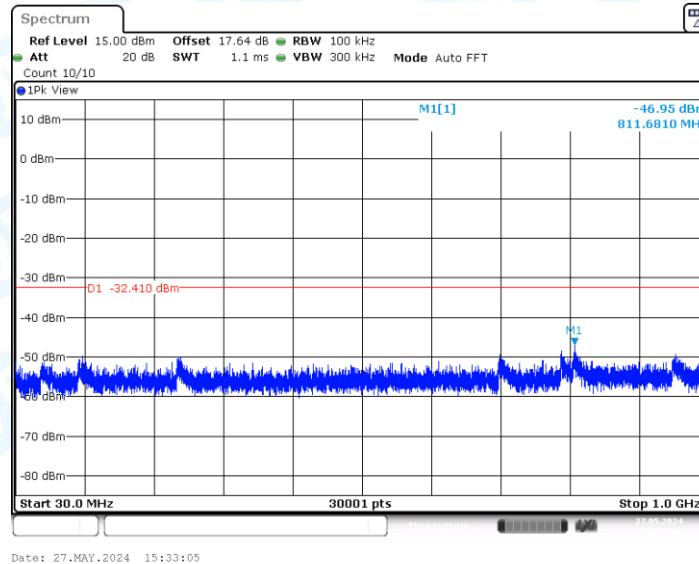
11G_Ant1_2437_1000~26500



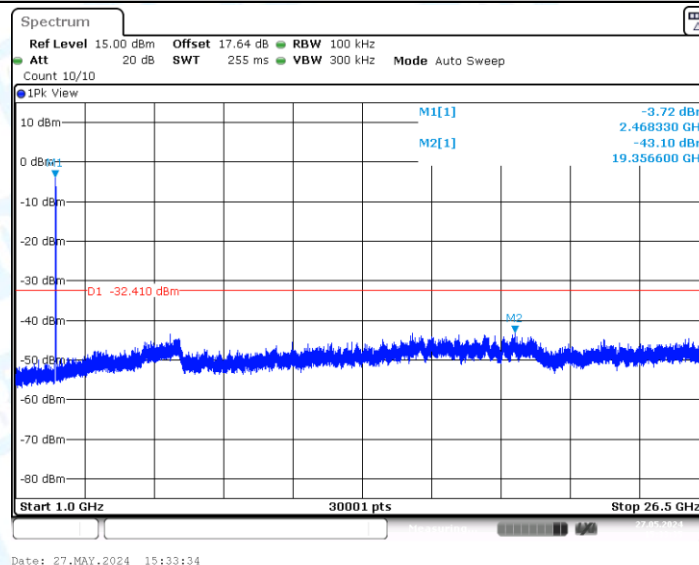
11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



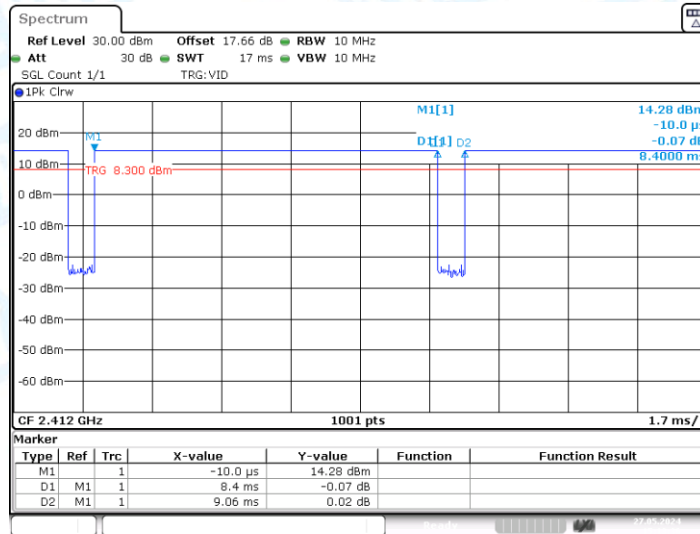
7. Duty Cycle

7.1. Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	8.40	9.06	92.72	---	---
		2437	8.38	9.04	92.70	---	---
		2462	8.39	9.05	92.71	---	---
11G	Ant1	2412	1.39	2.04	68.14	---	---
		2437	1.39	2.04	68.14	---	---
		2462	1.39	2.05	67.80	---	---

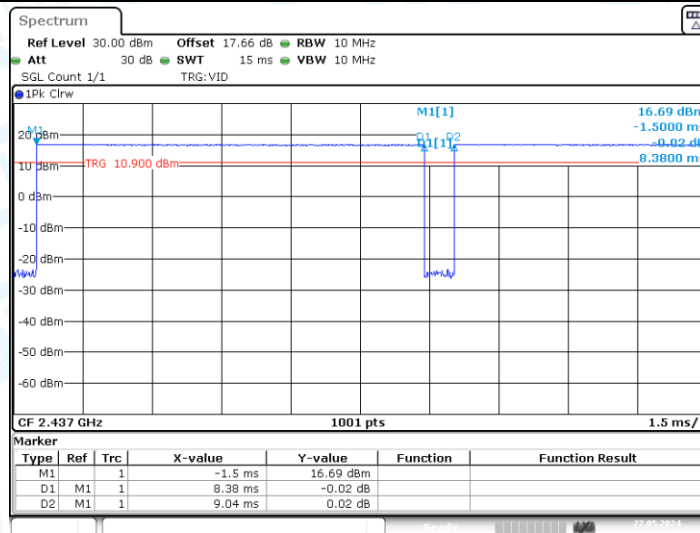
7.2. Test Graphs

11B_Ant1_2412



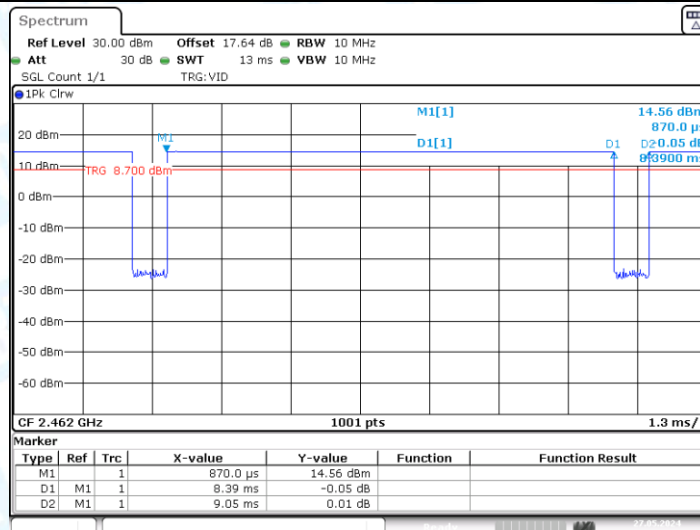
Date: 27.MAY.2024 15:13:35

11B_Ant1_2437



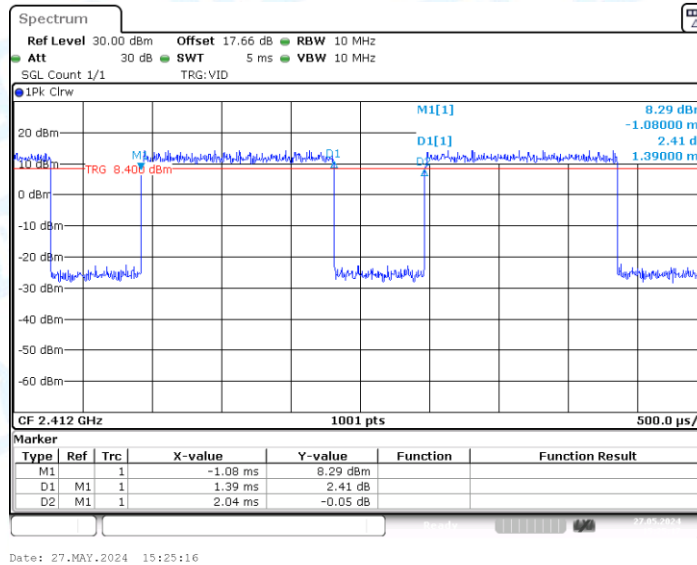
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11B_Ant1_2462

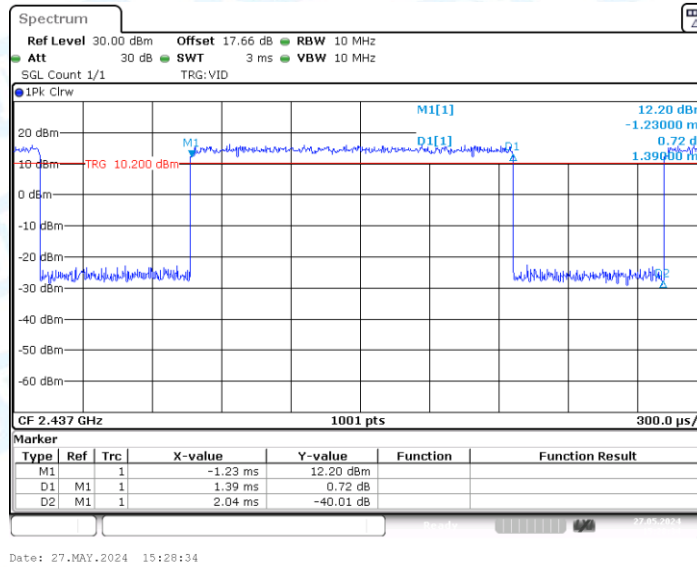


Date: 27.MAY.2024 15:21:07

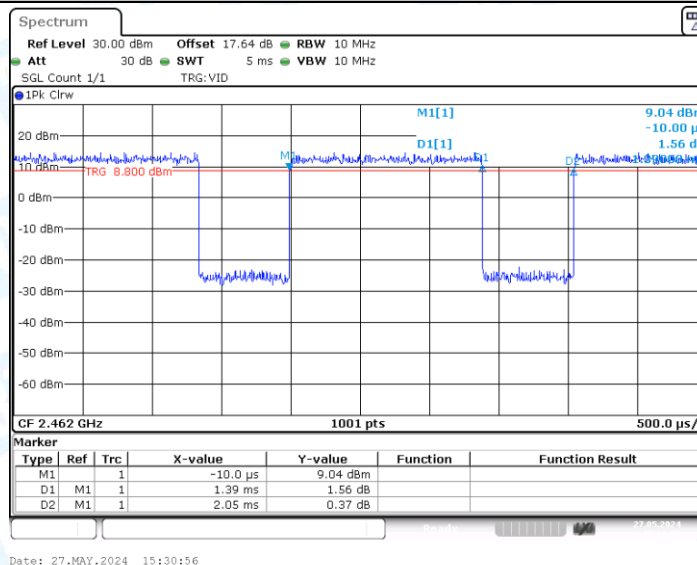
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



8. Emissions in Restricted Bands

8.1. Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-51.92	≤-41.20	PASS
				AV	2386.667	-43.66	≤-41.20	PASS
				AV	2390.000	-48.85	≤-41.20	PASS
				Peak	2310.000	-39.59	≤-21.20	PASS
				Peak	2385.159	-35.48	≤-21.20	PASS
				Peak	2390.000	-38.22	≤-21.20	PASS
		High	2462	AV	2483.500	-45.19	≤-41.20	PASS
				AV	2487.029	-45.06	≤-41.20	PASS
				AV	2500.000	-47.02	≤-41.20	PASS
				Peak	2483.500	-35.86	≤-21.20	PASS
				Peak	2483.522	-35.86	≤-21.20	PASS
				Peak	2500.000	-37.98	≤-21.20	PASS
11G	Ant1	Low	2412	AV	2310.000	-47.65	≤-41.20	PASS
				AV	2344.841	-44.68	≤-41.20	PASS
				AV	2390.000	-45.09	≤-41.20	PASS
				Peak	2310.000	-39.56	≤-21.20	PASS
				Peak	2387.043	-31.44	≤-21.20	PASS
				Peak	2390.000	-32.5	≤-21.20	PASS
		High	2462	AV	2483.500	-42.25	≤-41.20	PASS
				AV	2483.522	-42.25	≤-41.20	PASS
				AV	2500.000	-51.01	≤-41.20	PASS
				Peak	2483.500	-28.09	≤-21.20	PASS
				Peak	2484.319	-26.06	≤-21.20	PASS
				Peak	2500.000	-37.93	≤-21.20	PASS

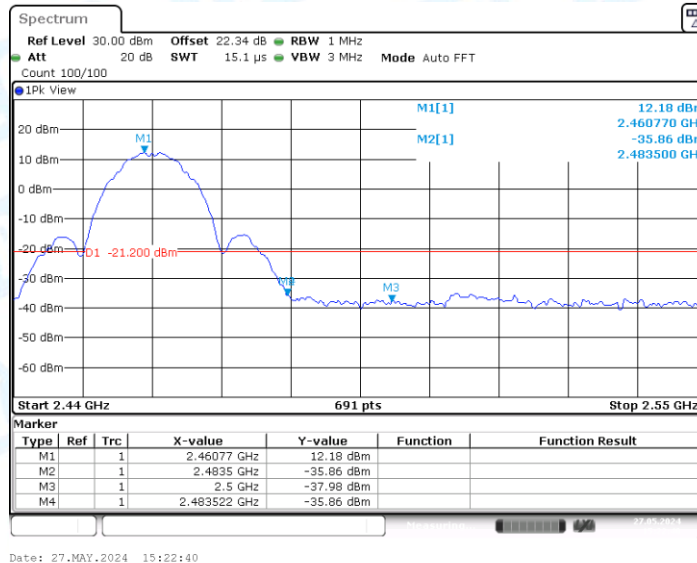
Note:

- The Antenna Gain is compensated in the graph.
- The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a) or RSS-Gen 8.10. The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

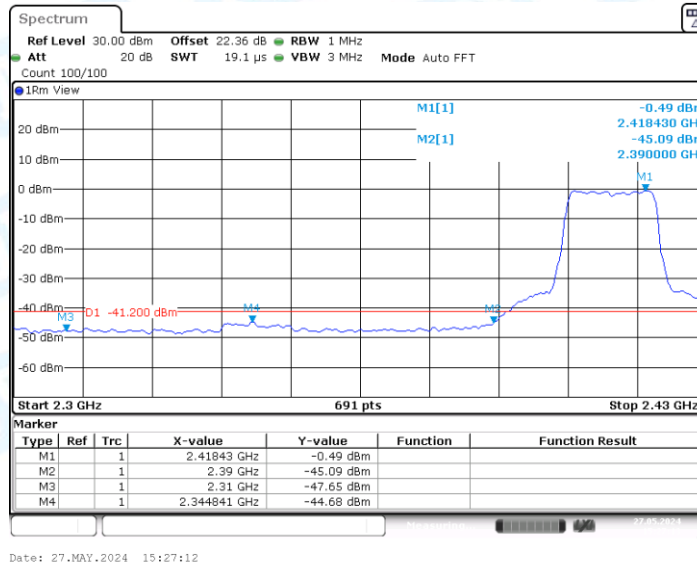
8.2.Test Graphs



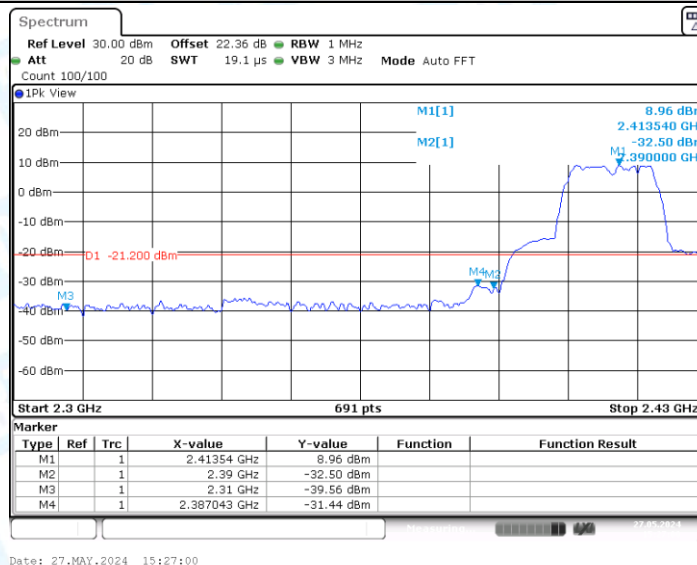
11B_Ant1_High_2462_Peak



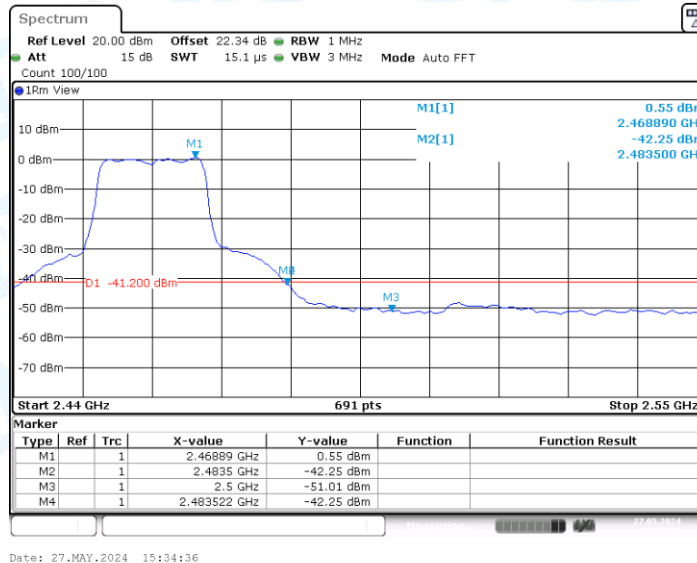
11G_Ant1_Low_2412_AV



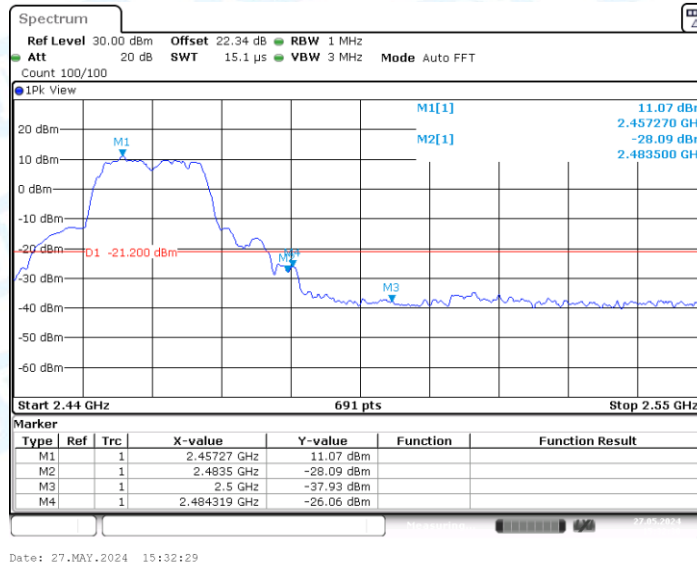
11G_Ant1_Low_2412_Peak



11G_Ant1_High_2462_AV



11G_Ant1_High_2462_Peak



-----End of the report-----