

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

General Description of EUT	
Product Name:	Tractive Dog 6
Test Model:	TG6A
Sample ID:	HC-C-202403-0336-01-04#
Environmental Conditions	
Temperature:	22°C-25°C
Relative Humidity:	43%-55%
Test Voltage:	DC 3.87V
Test Engineer:	Mike Yan
Note: For a more detailed features description, please refer to the report TBR-C-202403-0336-91. The report only show the worst case data.	

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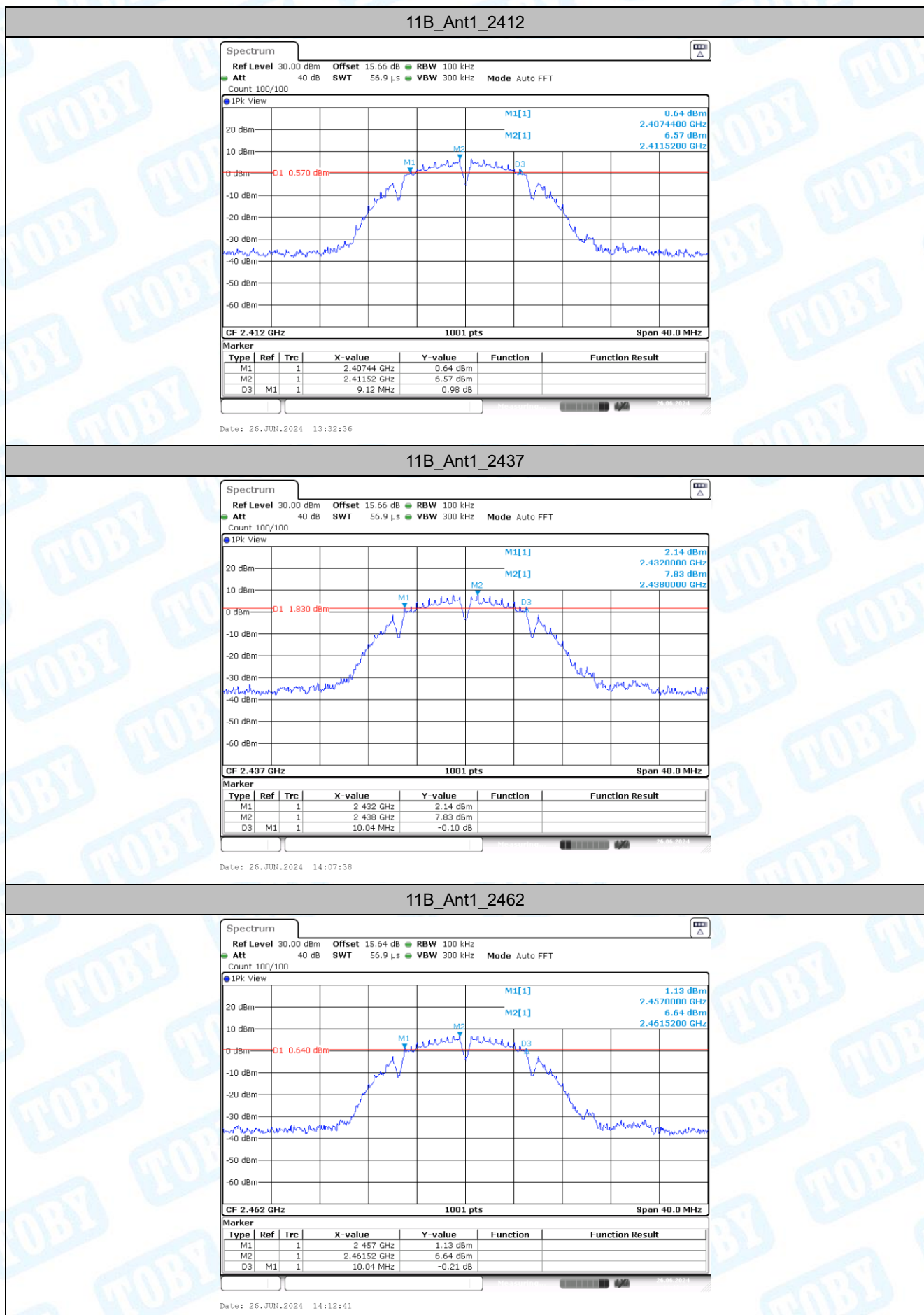
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1. DTS Bandwidth

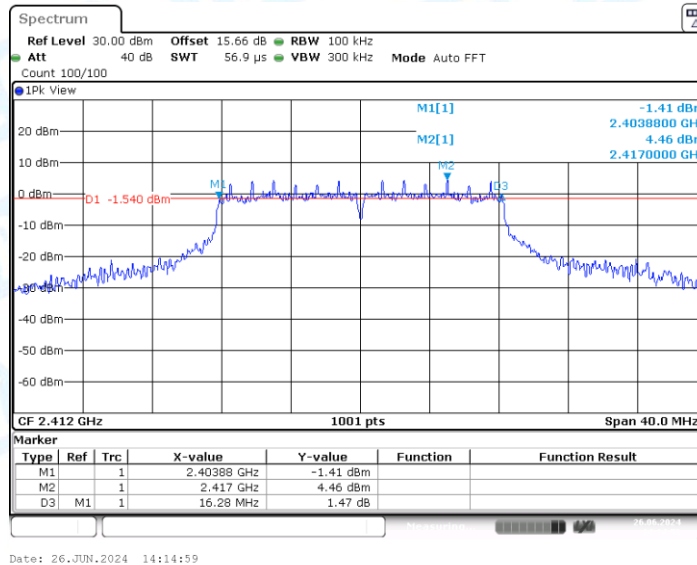
1.1. Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.12	2407.44	2416.56	0.5	PASS
		2437	10.04	2432.00	2442.04	0.5	PASS
		2462	10.04	2457.00	2467.04	0.5	PASS
11G	Ant1	2412	16.28	2403.88	2420.16	0.5	PASS
		2437	16.32	2428.84	2445.16	0.5	PASS
		2462	16.36	2453.84	2470.20	0.5	PASS
11N20SISO	Ant1	2412	17.56	2403.24	2420.80	0.5	PASS
		2437	17.60	2428.20	2445.80	0.5	PASS
		2462	17.56	2453.24	2470.80	0.5	PASS
11N40SISO	Ant1	2422	35.92	2404.24	2440.16	0.5	PASS
		2437	36.08	2419.08	2455.16	0.5	PASS
		2452	35.92	2434.24	2470.16	0.5	PASS

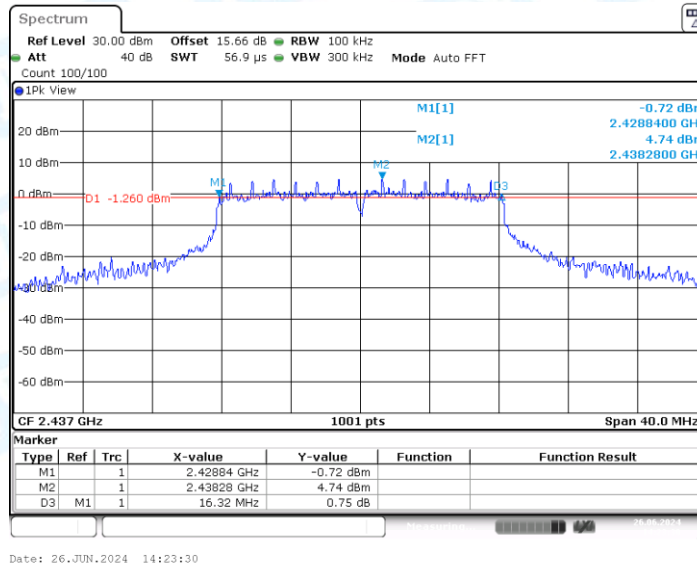
1.2. Test Graphs



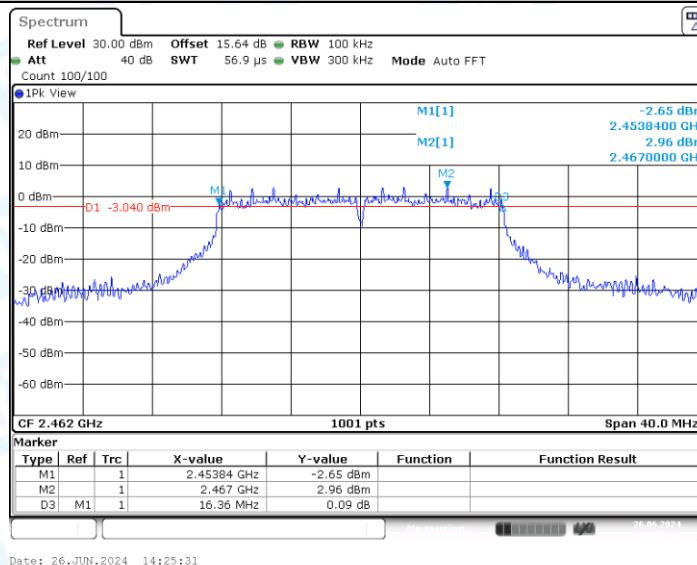
11G_Ant1_2412



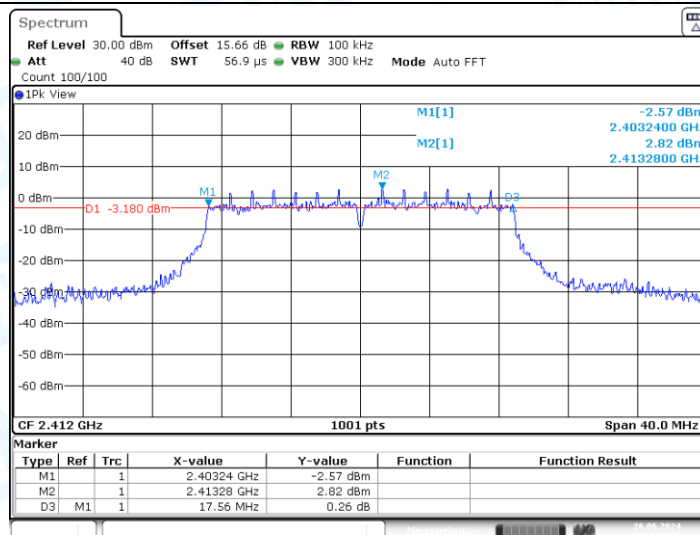
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11G_Ant1_2462

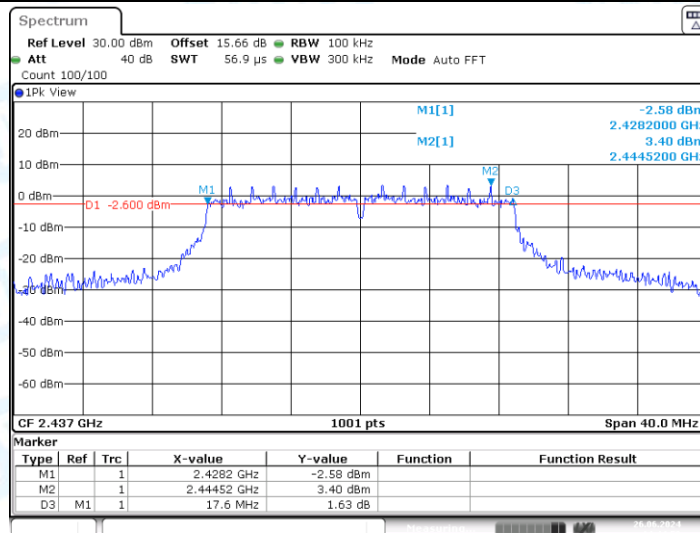


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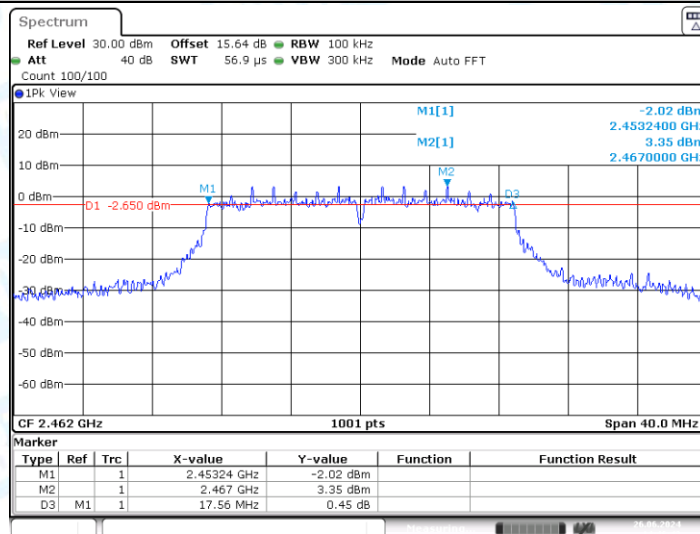
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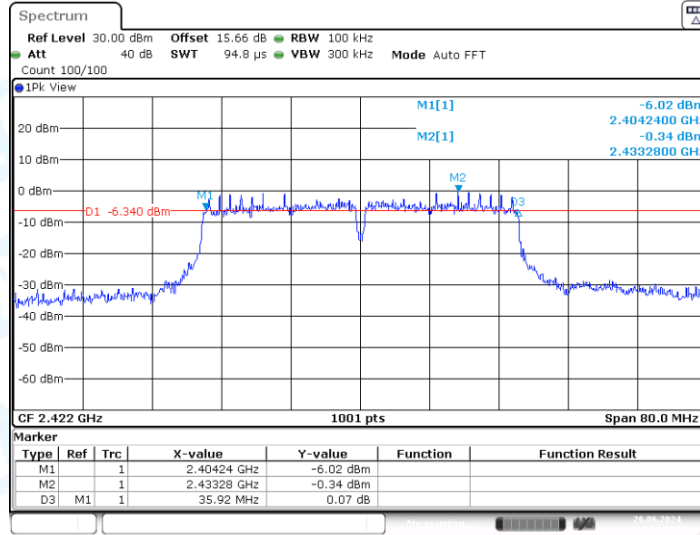
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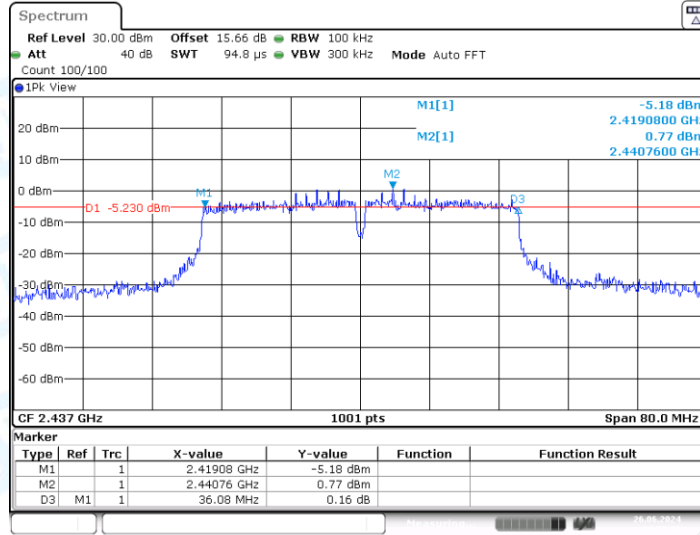
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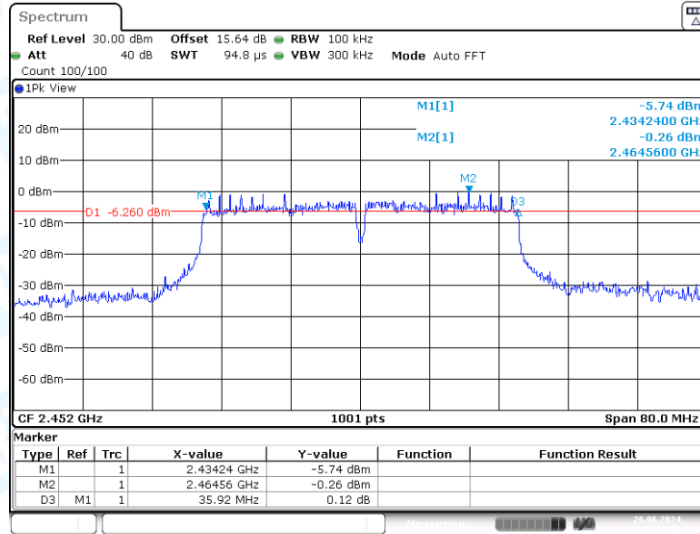
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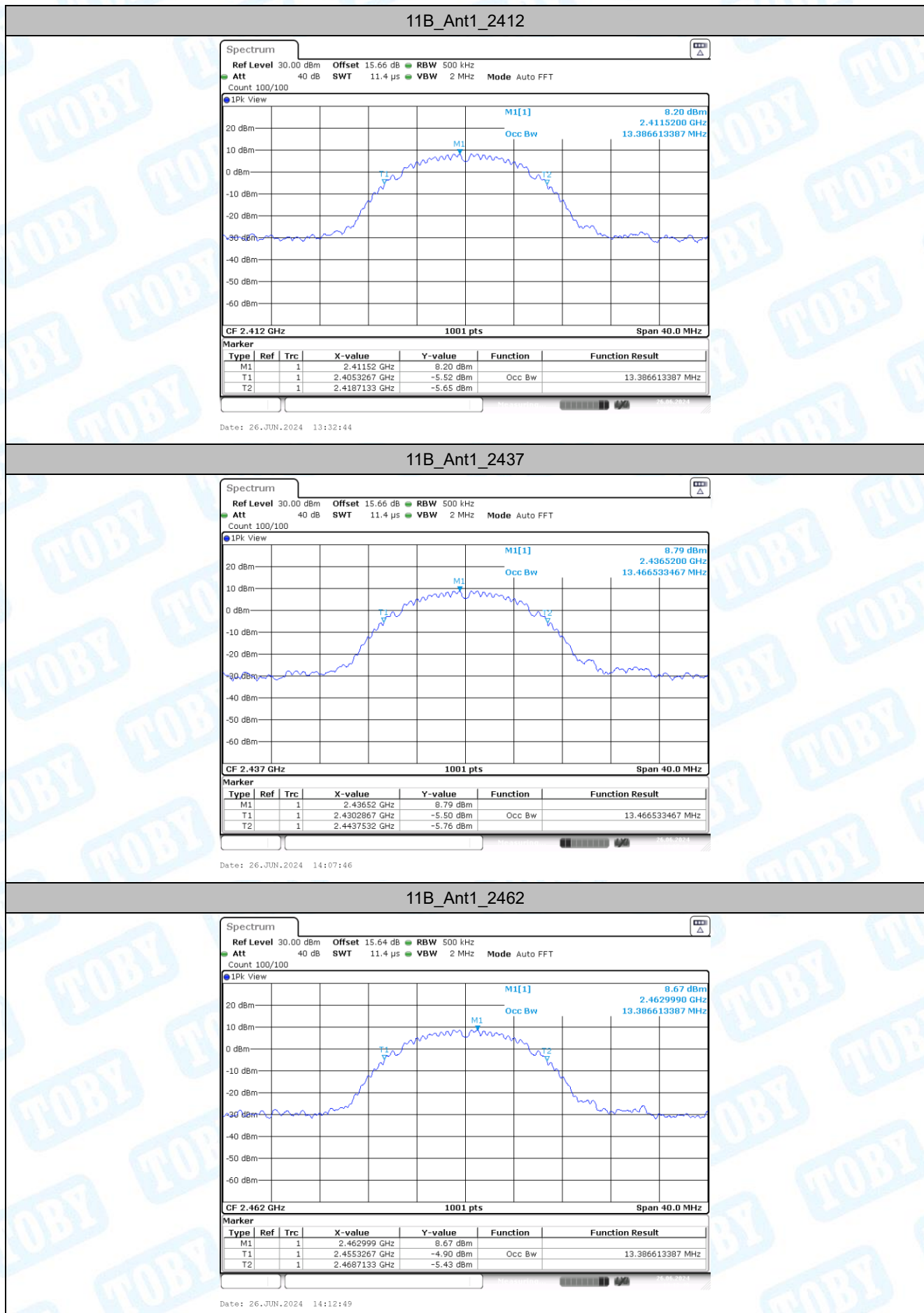
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2. Occupied Channel Bandwidth

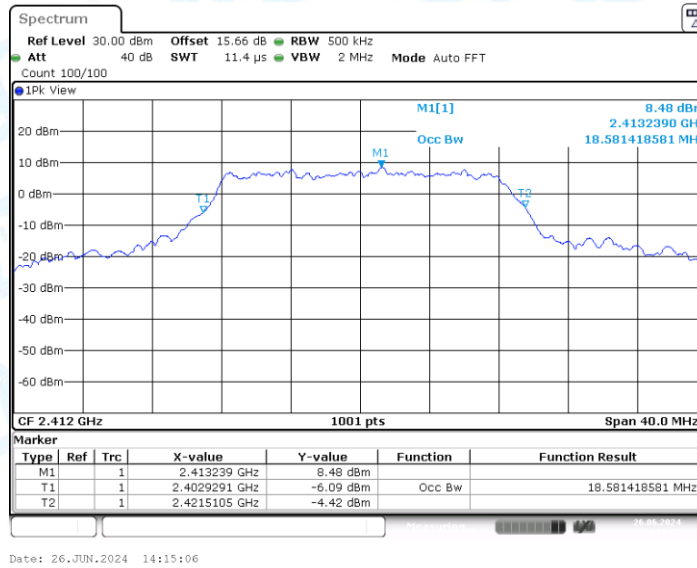
2.1. Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.387	2405.3267	2418.7133	---	---
		2437	13.467	2430.2867	2443.7532	---	---
		2462	13.387	2455.3267	2468.7133	---	---
11G	Ant1	2412	18.581	2402.9291	2421.5105	---	---
		2437	18.741	2427.8891	2446.6304	---	---
		2462	18.342	2452.8092	2471.1508	---	---
11N20SISO	Ant1	2412	18.581	2402.7692	2421.3506	---	---
		2437	18.581	2427.8092	2446.3906	---	---
		2462	18.462	2452.8891	2471.3506	---	---
11N40SISO	Ant1	2422	37.003	2403.5385	2440.5415	---	---
		2437	36.683	2418.6983	2455.3816	---	---
		2452	36.923	2433.4585	2470.3816	---	---

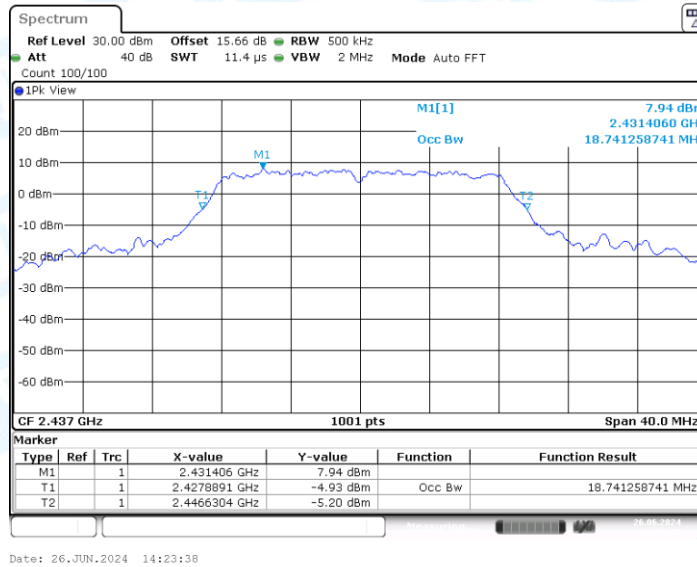
2.2. Test Graphs



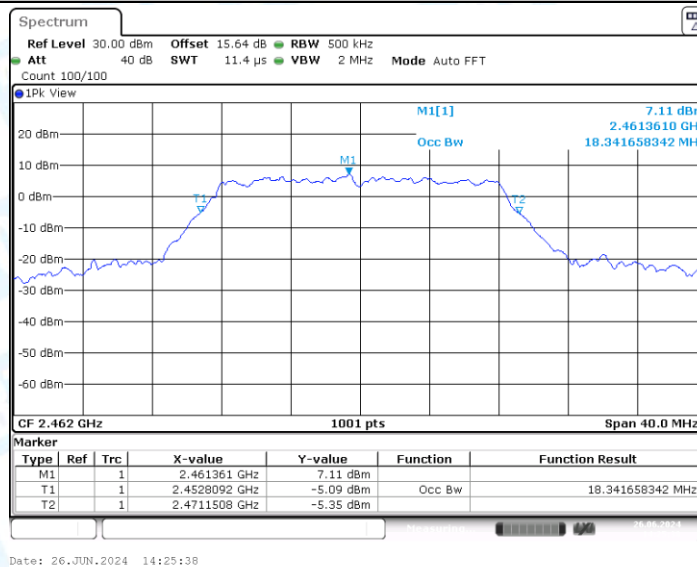
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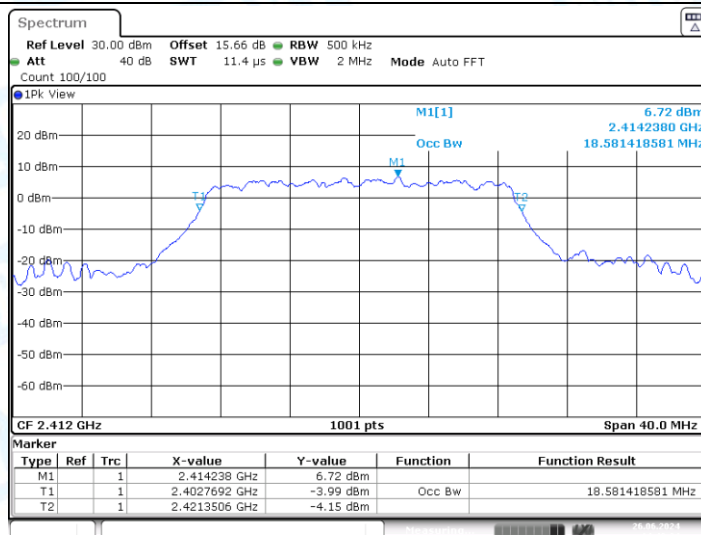
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11G_Ant1_2462

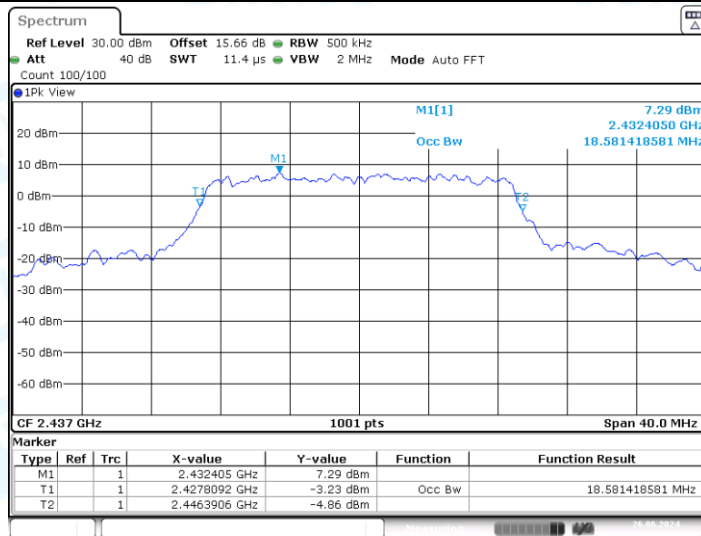


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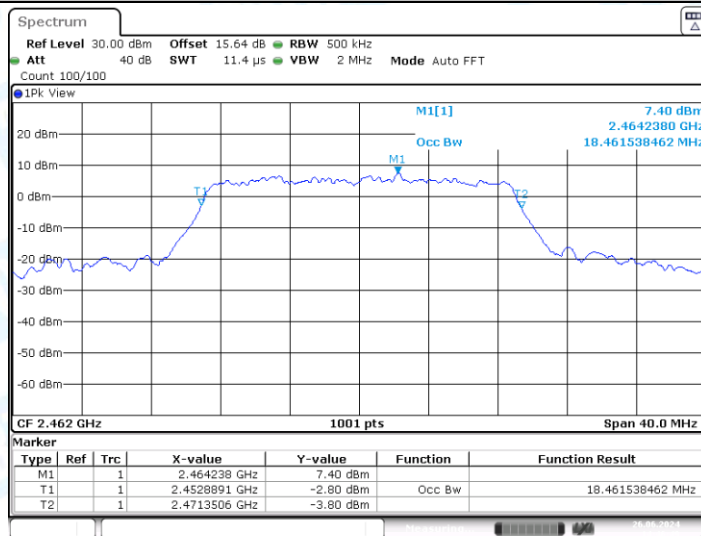
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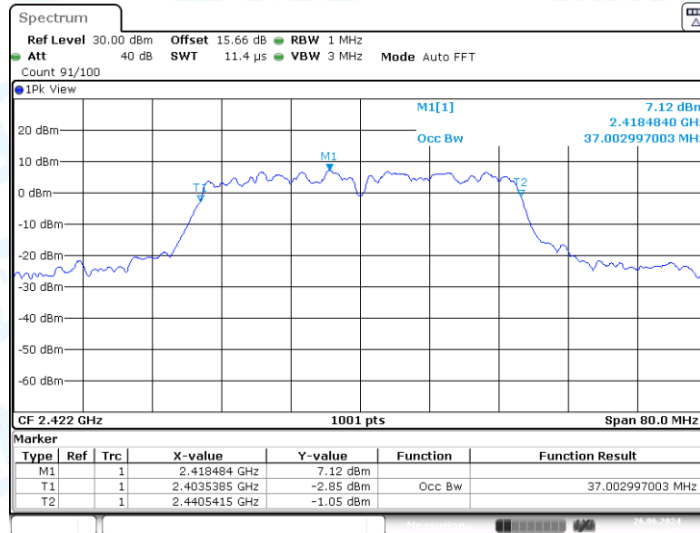
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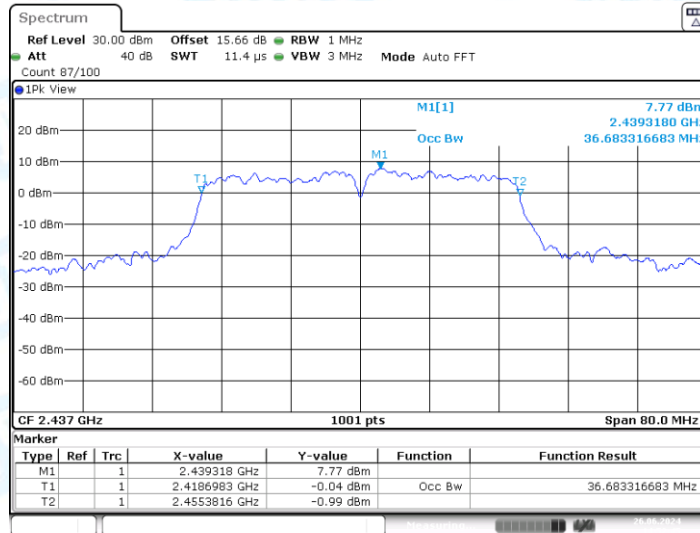
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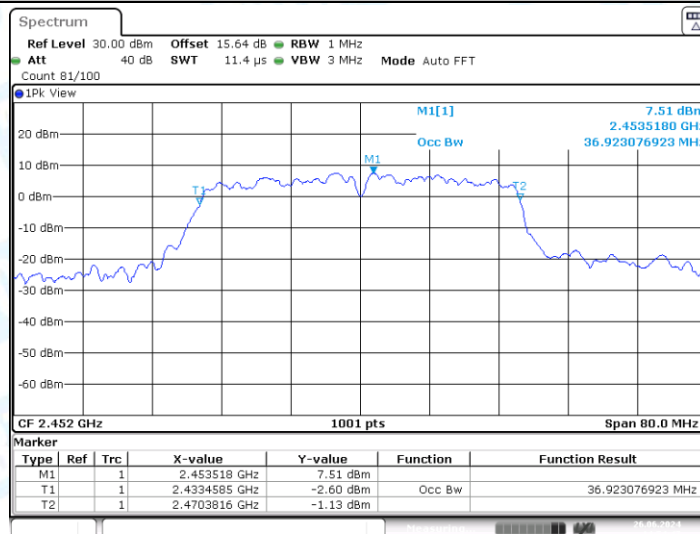
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11N40SISO_Ant1_2437



Date: 26.JUN.2024 14:52:45

11N40SISO_Ant1_2452



Date: 26.JUN.2024 14:54:47

3. Maximum conducted output power

3.1. Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	13.91	≤30.00	PASS
		2437	14.38	≤30.00	PASS
		2462	13.81	≤30.00	PASS
11G	Ant1	2412	14.17	≤30.00	PASS
		2437	16.18	≤30.00	PASS
		2462	16.03	≤30.00	PASS
11N20SISO	Ant1	2412	14.18	≤30.00	PASS
		2437	16.11	≤30.00	PASS
		2462	14.92	≤30.00	PASS
11N40SISO	Ant1	2422	14.07	≤30.00	PASS
		2437	14.96	≤30.00	PASS
		2452	14.45	≤30.00	PASS

Note: The duty factor has been compensated into the result.

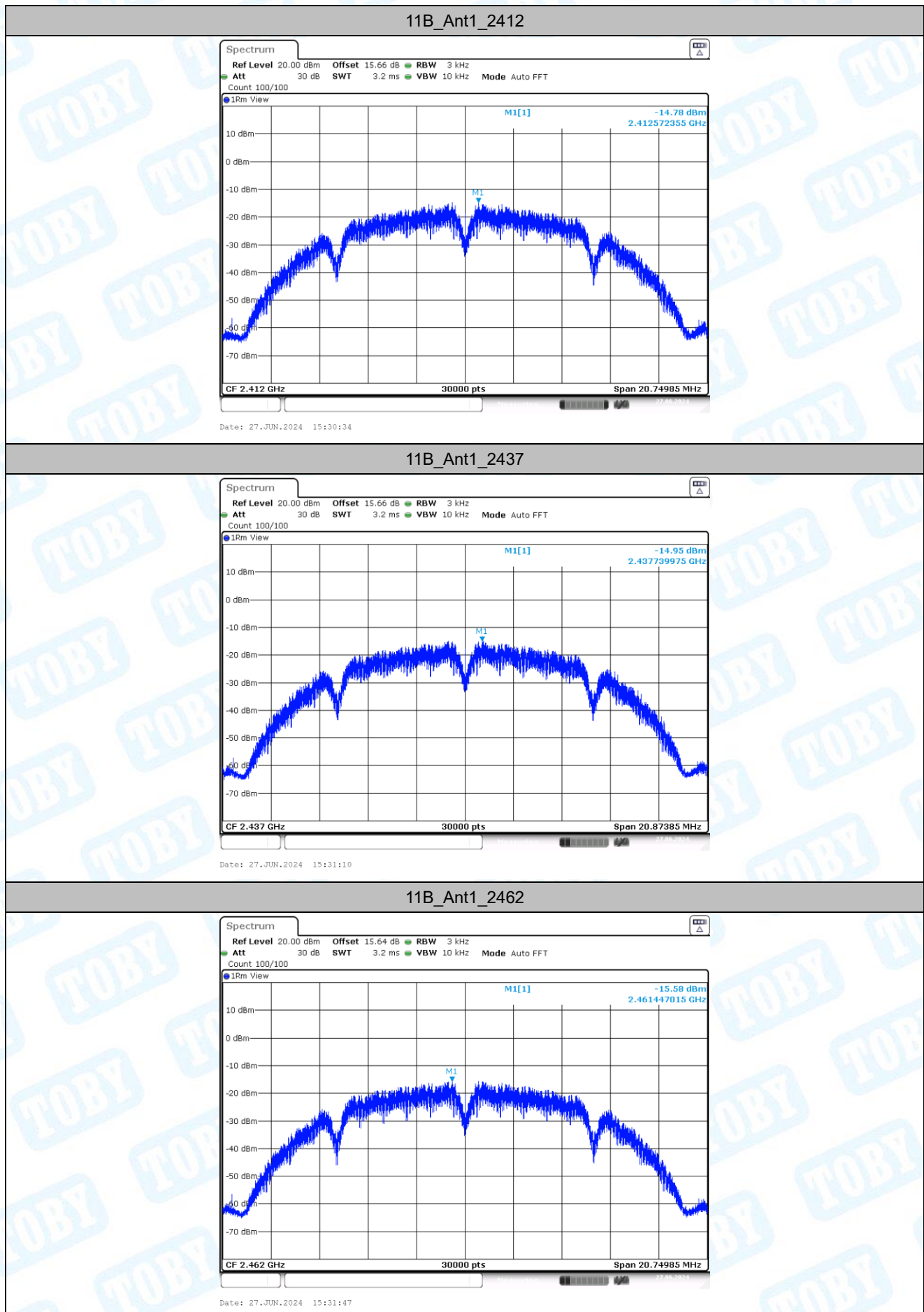
4. Maximum power spectral density

4.1. Test Result

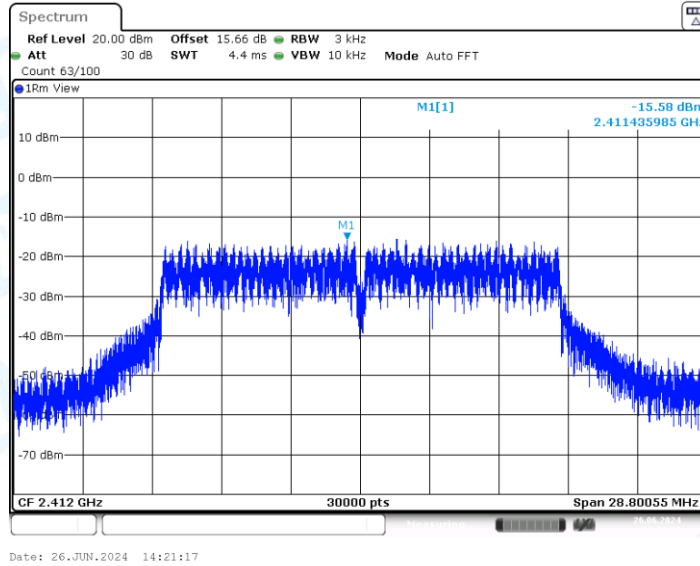
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-14.41	≤8.00	PASS
		2437	-14.66	≤8.00	PASS
		2462	-15.29	≤8.00	PASS
11G	Ant1	2412	-15.37	≤8.00	PASS
		2437	-13.54	≤8.00	PASS
		2462	-13.75	≤8.00	PASS
11N20SISO	Ant1	2412	-15.17	≤8.00	PASS
		2437	-13.20	≤8.00	PASS
		2462	-14.77	≤8.00	PASS
11N40SISO	Ant1	2422	-17.06	≤8.00	PASS
		2437	-16.80	≤8.00	PASS
		2452	-17.42	≤8.00	PASS

Note: The duty factor has been compensated into the result.

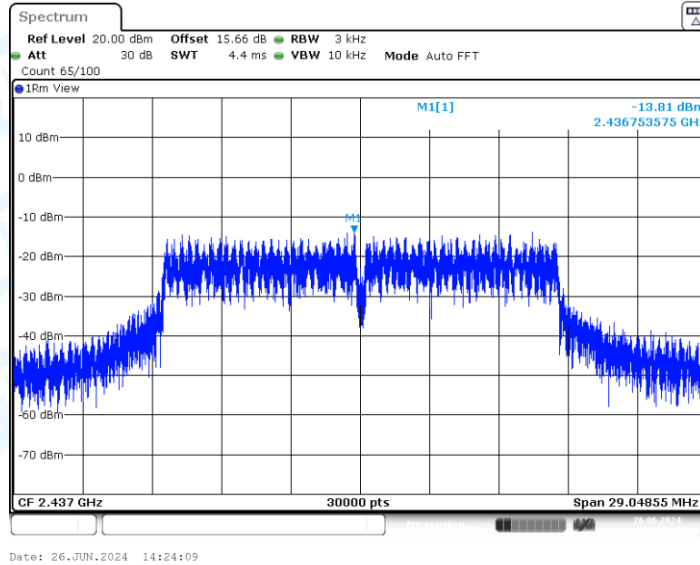
4.2. Test Graphs



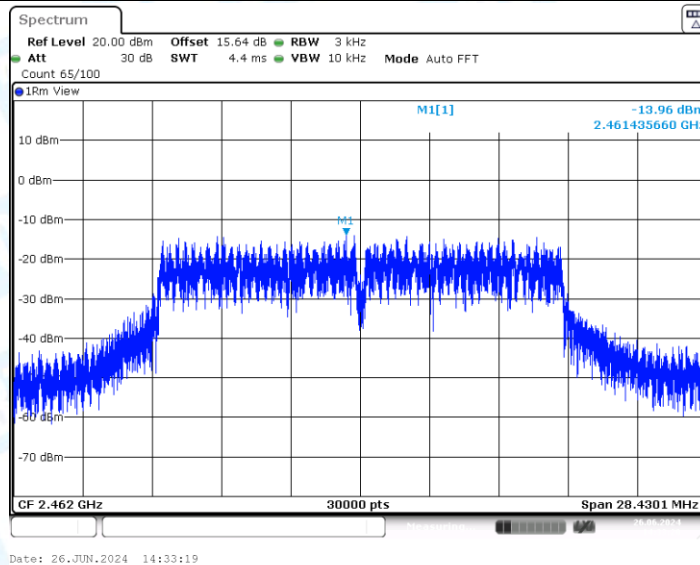
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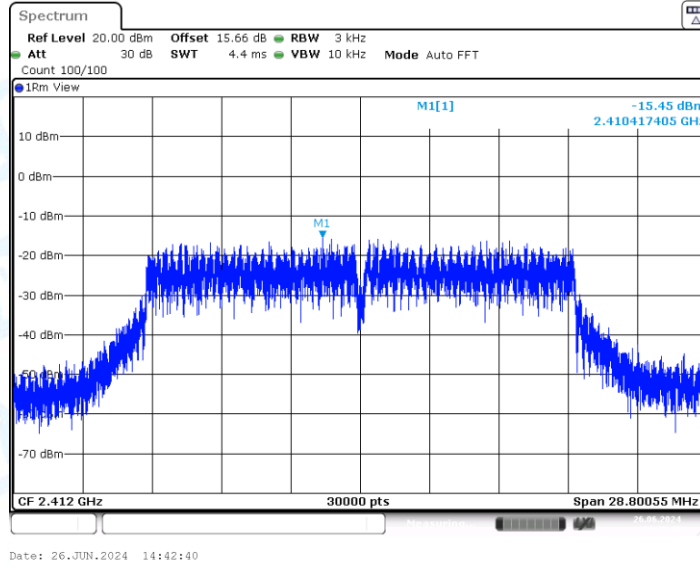
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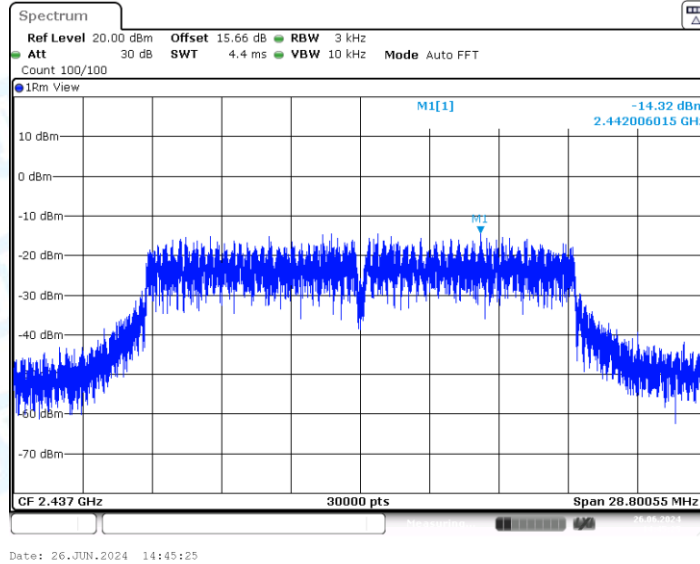
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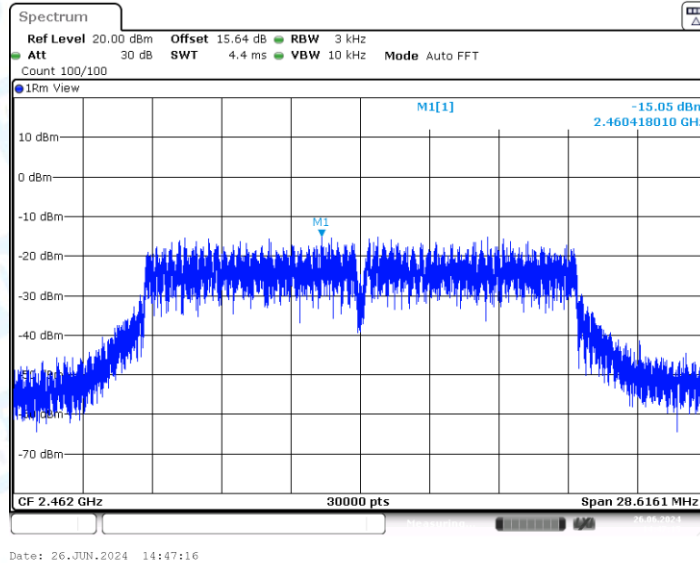
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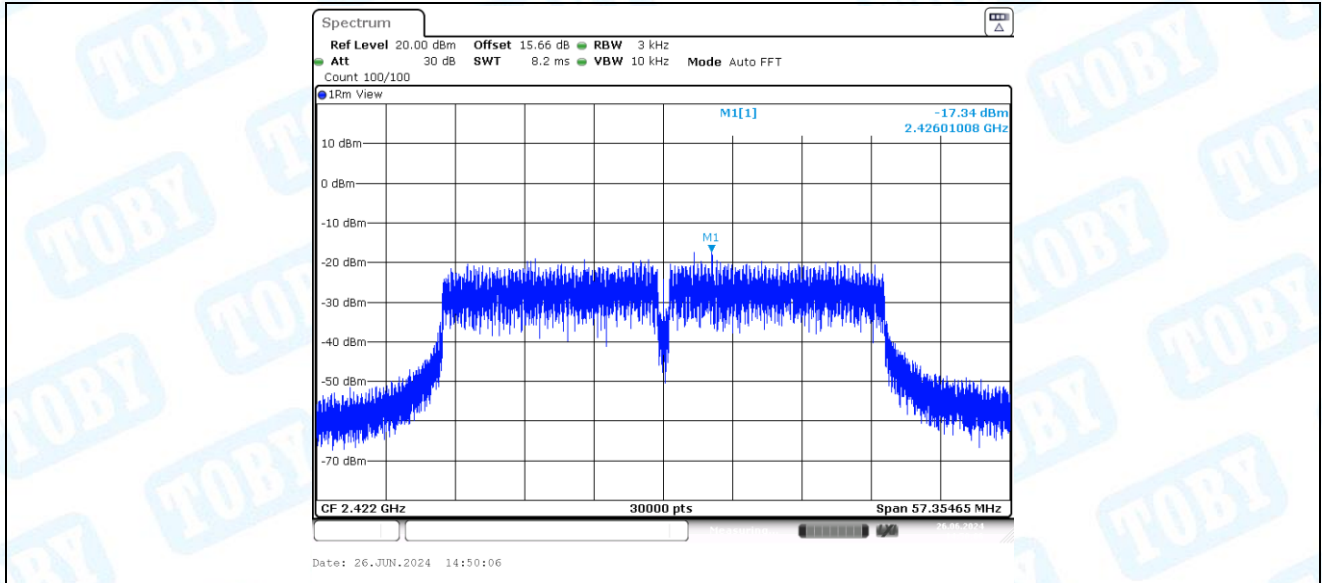
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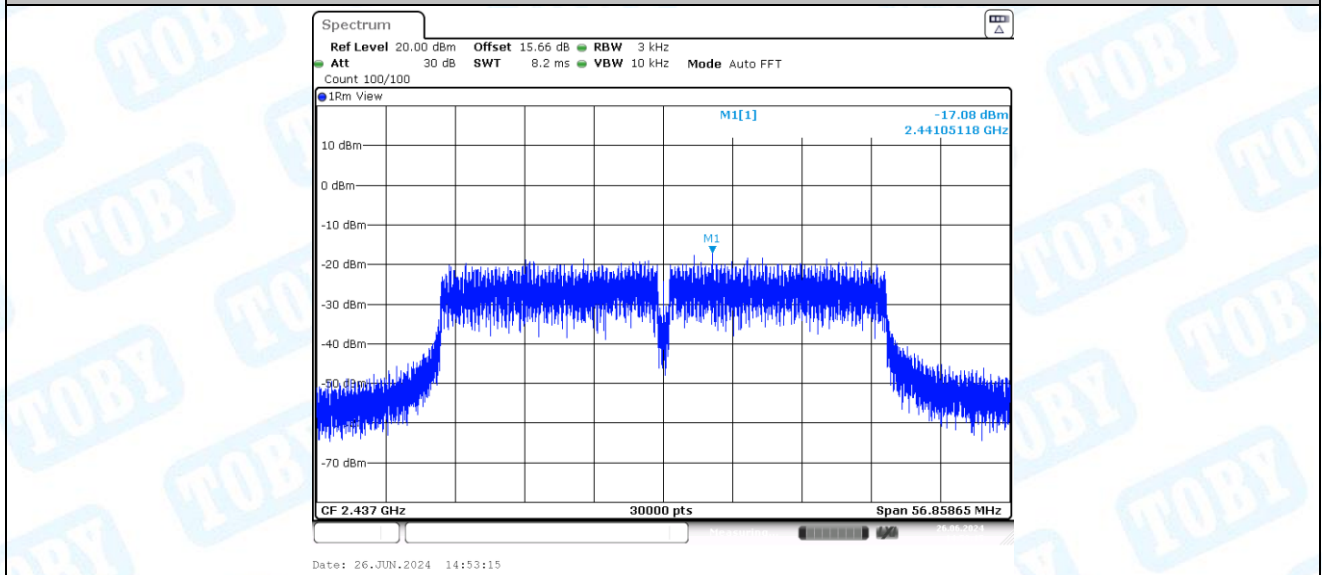
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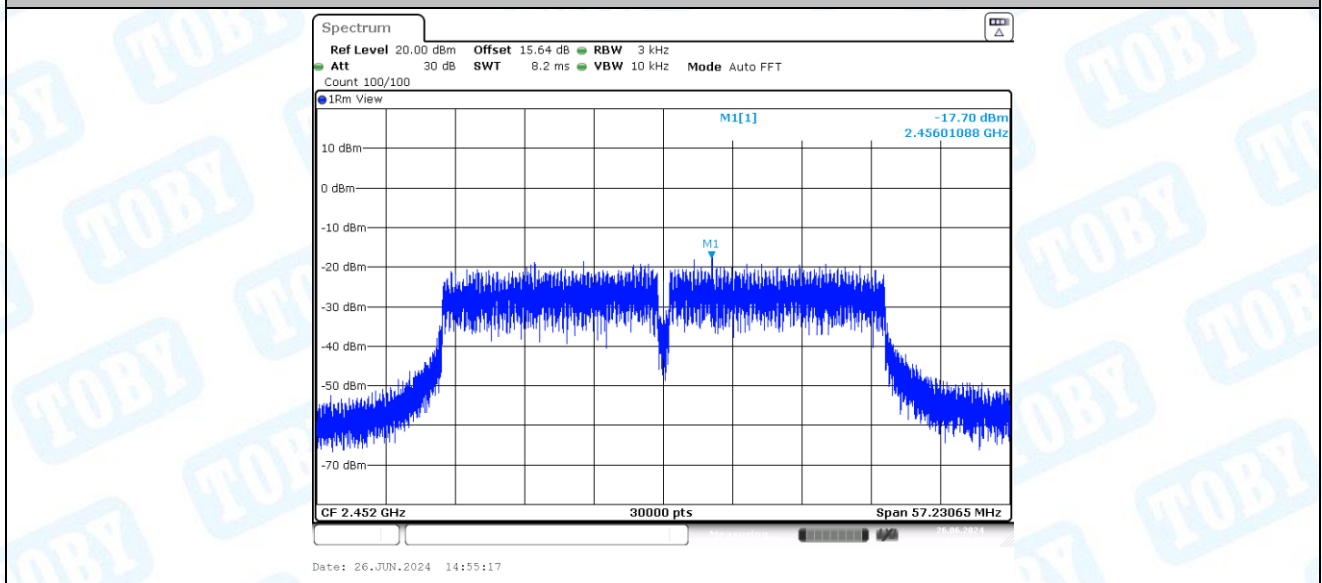
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

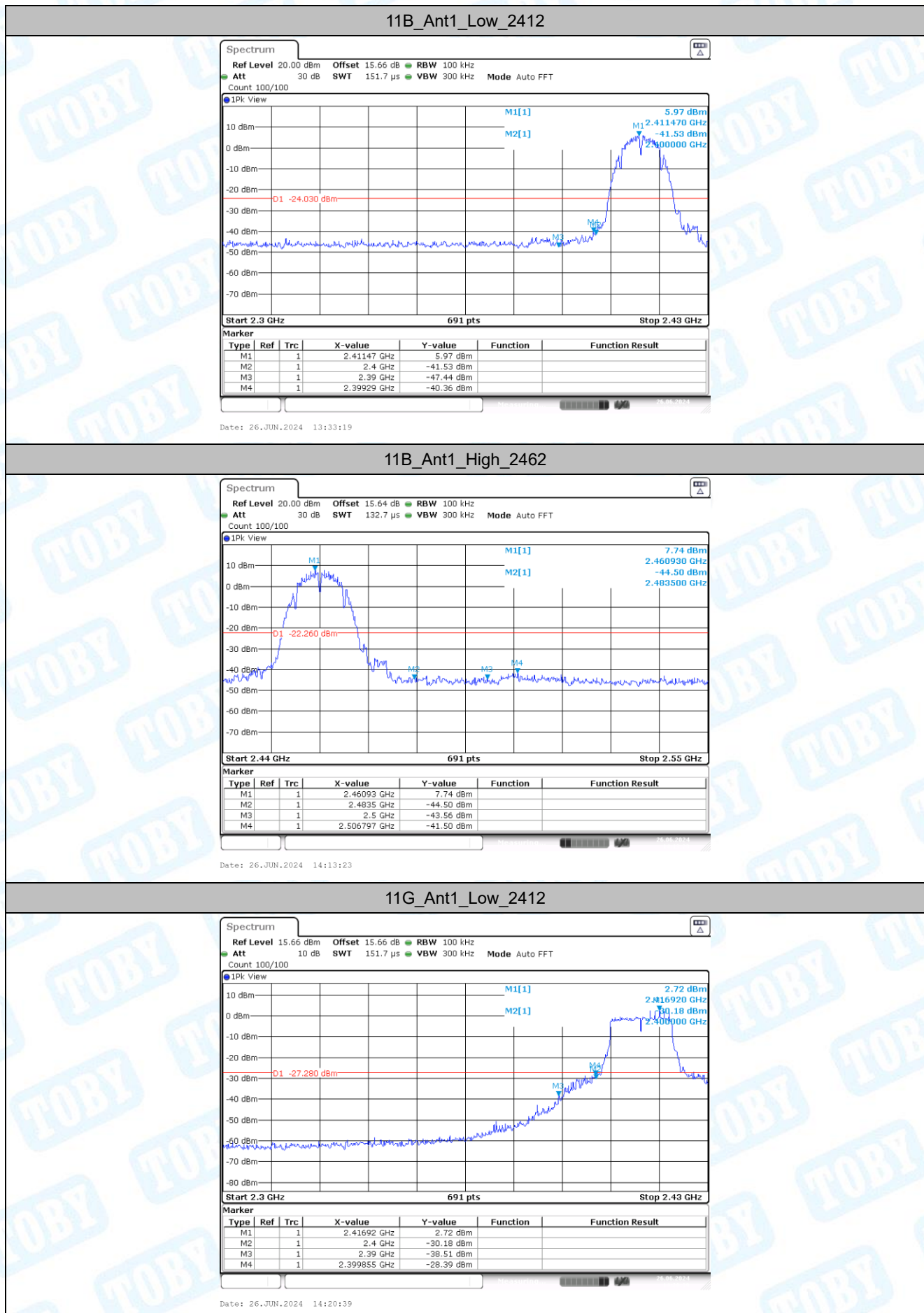


5. Band edge measurements

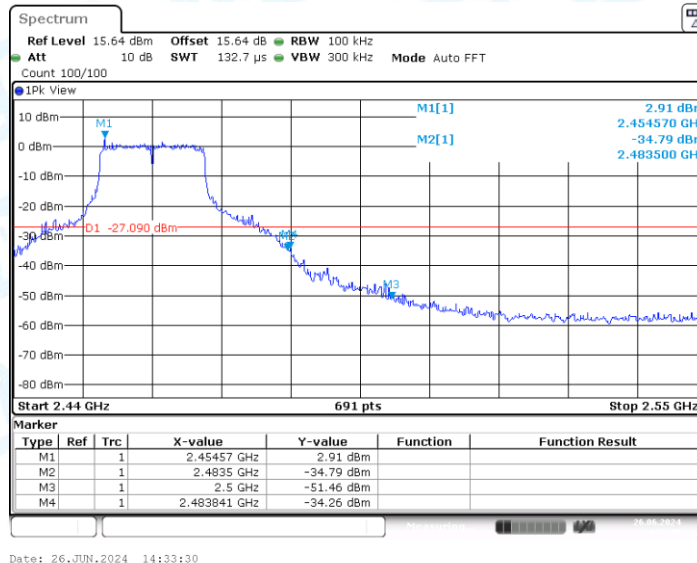
5.1. Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.97	-40.36	≤-24.03	PASS
		High	2462	7.74	-41.5	≤-22.26	PASS
11G	Ant1	Low	2412	2.72	-28.39	≤-27.28	PASS
		High	2462	2.91	-34.26	≤-27.09	PASS
11N20SISO	Ant1	Low	2412	2.96	-27.35	≤-27.04	PASS
		High	2462	1.93	-32.32	≤-28.07	PASS
11N40SISO	Ant1	Low	2422	-0.20	-30.49	≤-30.2	PASS
		High	2452	-0.14	-31.32	≤-30.14	PASS

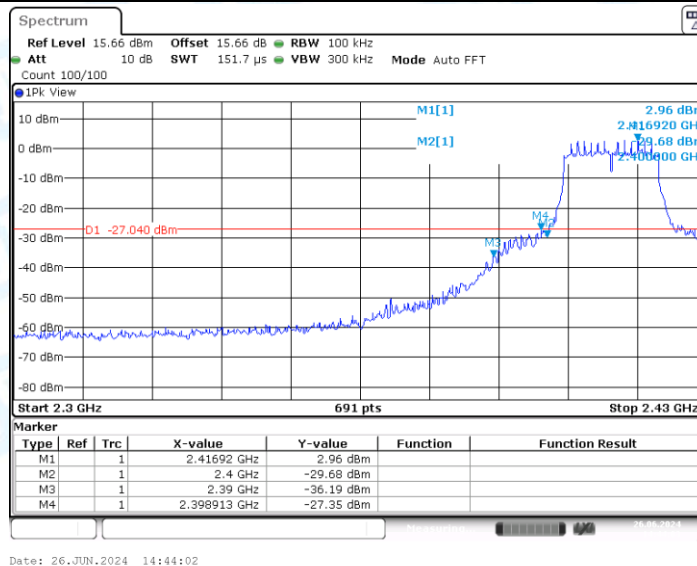
5.2. Test Graphs



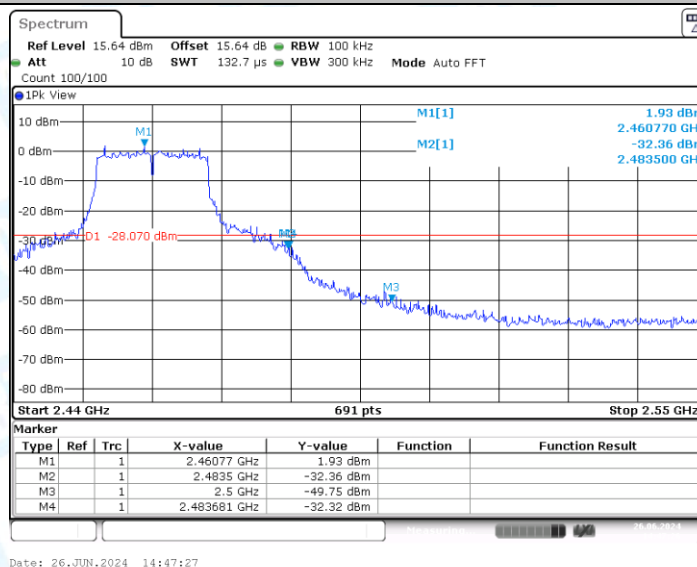
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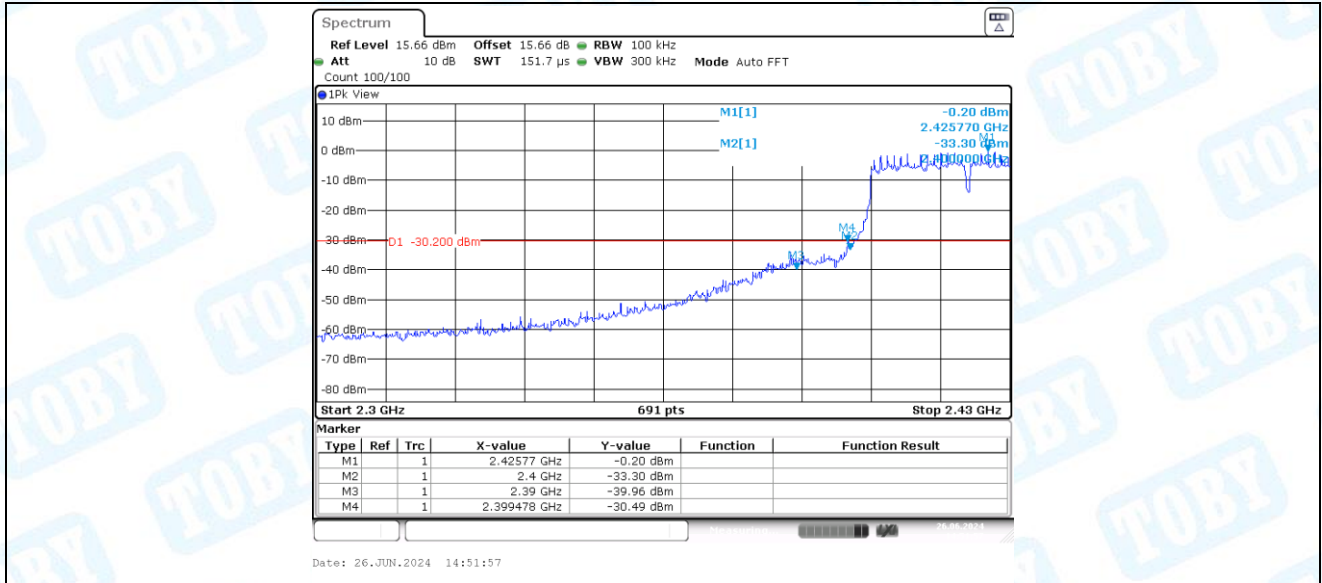
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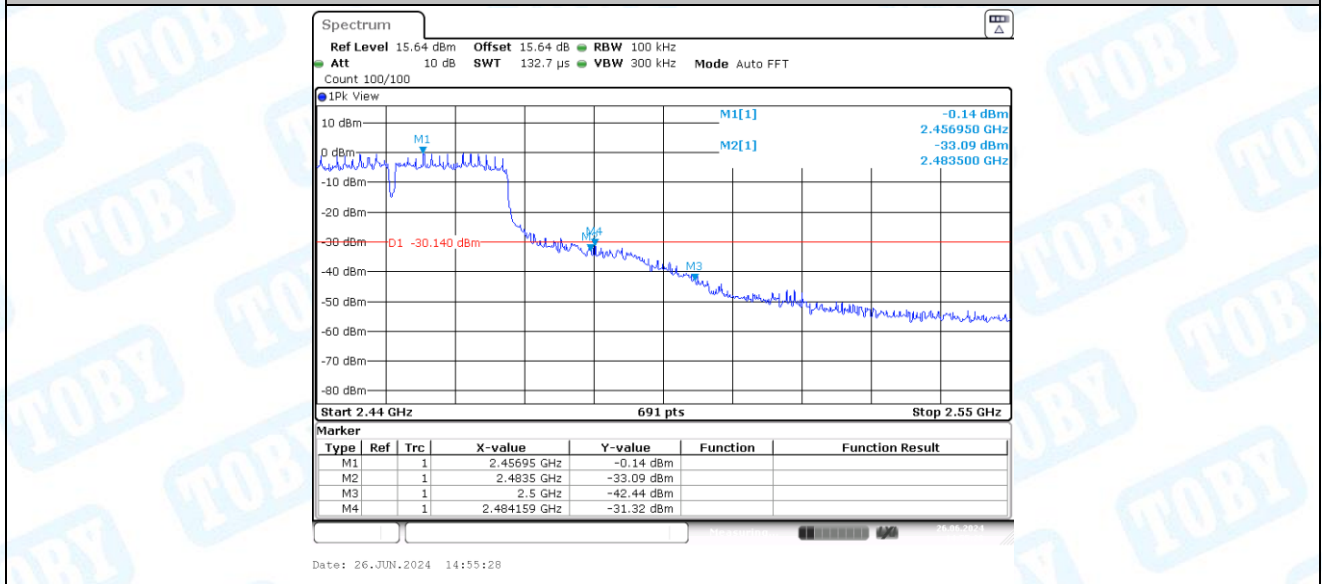
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11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

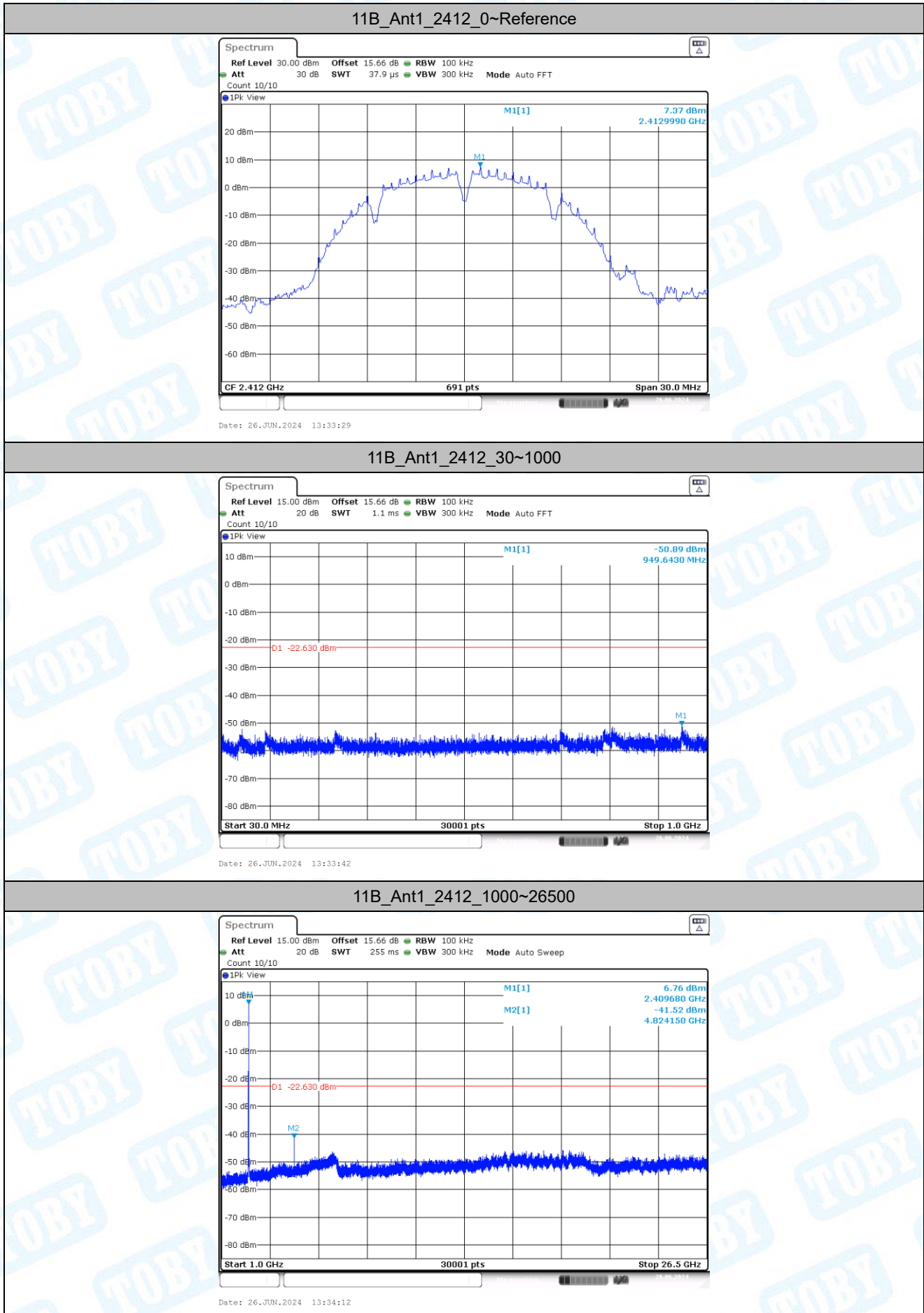


6. Conducted Spurious Emission

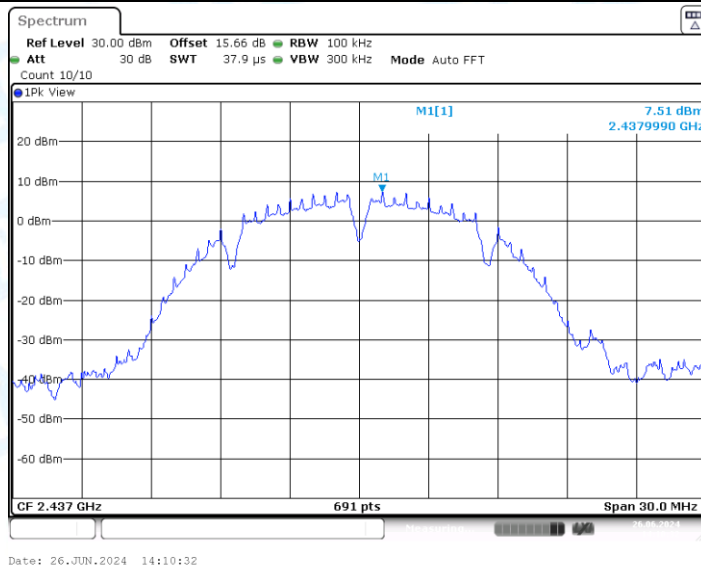
6.1. Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	7.37	7.37	---	PASS
			30~1000	7.37	-50.89	≤-22.63	PASS
			1000~26500	7.37	-41.52	≤-22.63	PASS
		2437	Reference	7.51	7.51	---	PASS
			30~1000	7.51	-51.73	≤-22.49	PASS
			1000~26500	7.51	-40.65	≤-22.49	PASS
		2462	Reference	7.69	7.69	---	PASS
			30~1000	7.69	-51.12	≤-22.31	PASS
			1000~26500	7.69	-39.84	≤-22.31	PASS
11G	Ant1	2412	Reference	4.52	4.52	---	PASS
			30~1000	4.52	-51.25	≤-25.48	PASS
			1000~26500	4.52	-45.51	≤-25.48	PASS
		2437	Reference	4.78	4.78	---	PASS
			30~1000	4.78	-50.85	≤-25.22	PASS
			1000~26500	4.78	-45.85	≤-25.22	PASS
		2462	Reference	4.37	4.37	---	PASS
			30~1000	4.37	-51.25	≤-25.63	PASS
			1000~26500	4.37	-45.38	≤-25.63	PASS
11N20SISO	Ant1	2412	Reference	3.20	3.20	---	PASS
			30~1000	3.20	-50.2	≤-26.8	PASS
			1000~26500	3.20	-45.65	≤-26.8	PASS
		2437	Reference	4.10	4.10	---	PASS
			30~1000	4.10	-51.39	≤-25.9	PASS
			1000~26500	4.10	-45.94	≤-25.9	PASS
		2462	Reference	3.28	3.28	---	PASS
			30~1000	3.28	-51.19	≤-26.72	PASS
			1000~26500	3.28	-45.02	≤-26.72	PASS
11N40SISO	Ant1	2422	Reference	-0.51	-0.51	---	PASS
			30~1000	-0.51	-49.54	≤-30.51	PASS
			1000~26500	-0.51	-41.14	≤-30.51	PASS
		2437	Reference	1.00	1.00	---	PASS
			30~1000	1.00	-46.45	≤-29	PASS
			1000~26500	1.00	-45.57	≤-29	PASS
		2452	Reference	-0.23	-0.23	---	PASS
			30~1000	-0.23	-51.01	≤-30.23	PASS
			1000~26500	-0.23	-44.93	≤-30.23	PASS

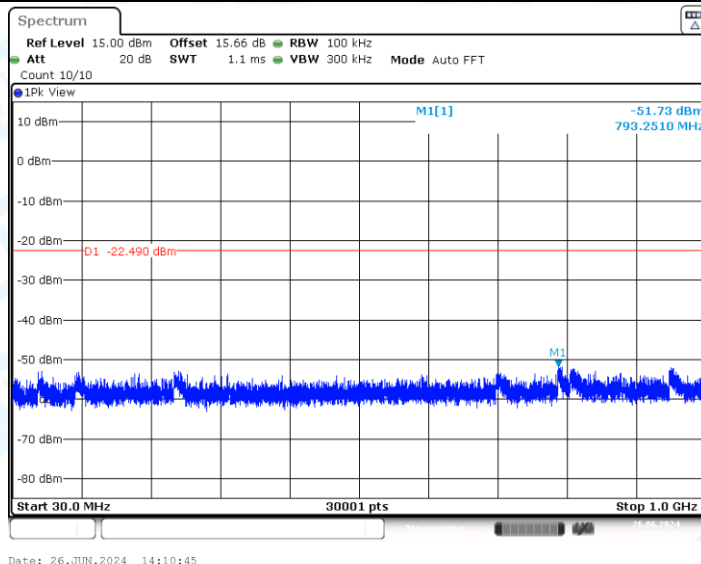
6.2. Test Graphs



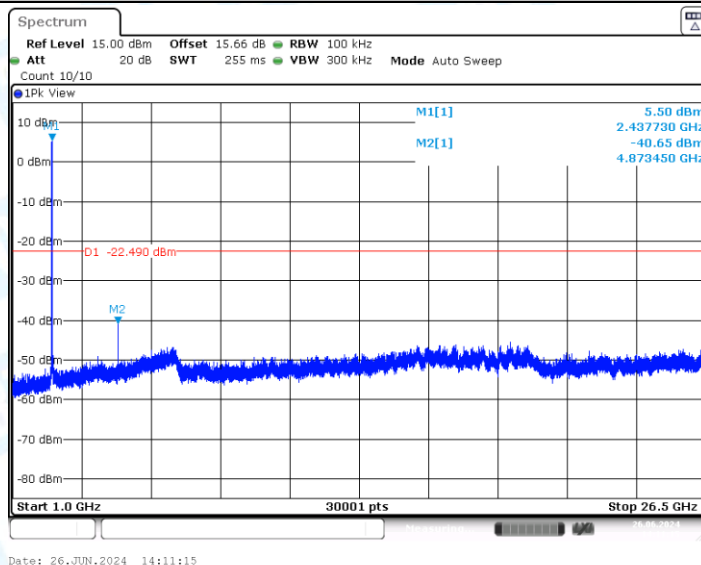
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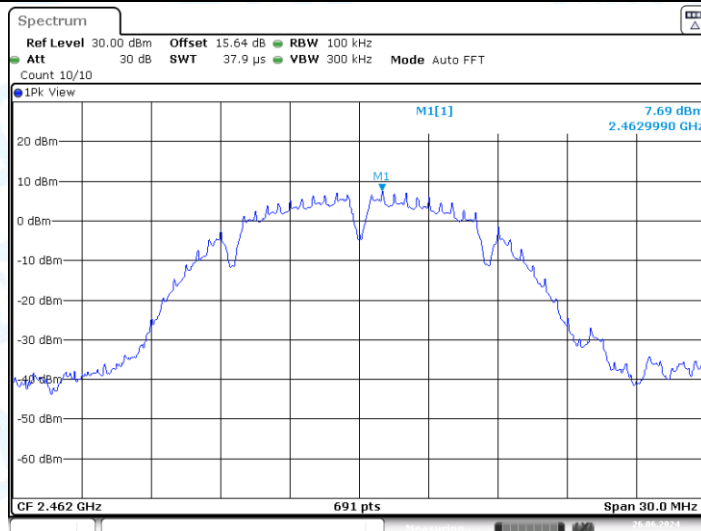
11B_Ant1_2437_30~1000



11B_Ant1_2437_1000~26500

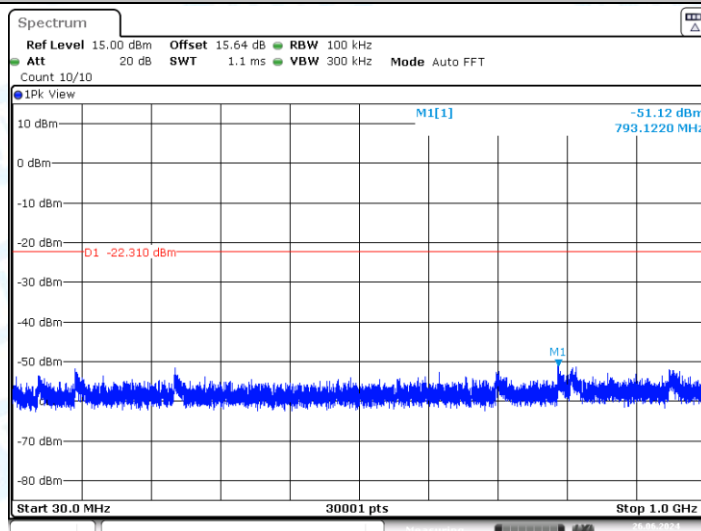


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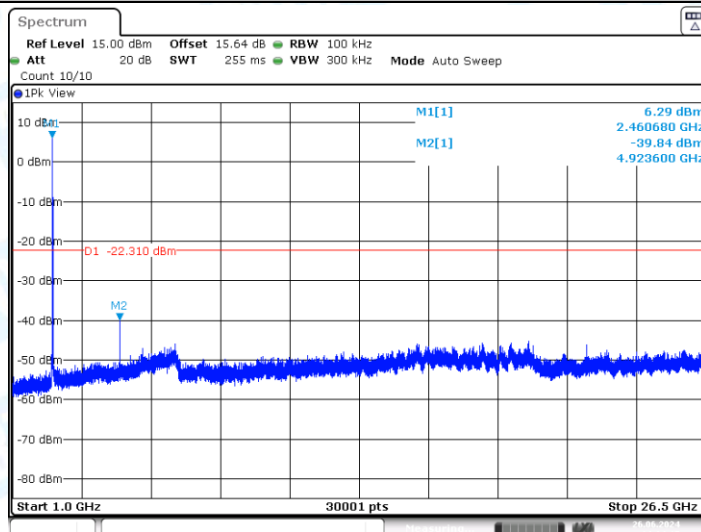
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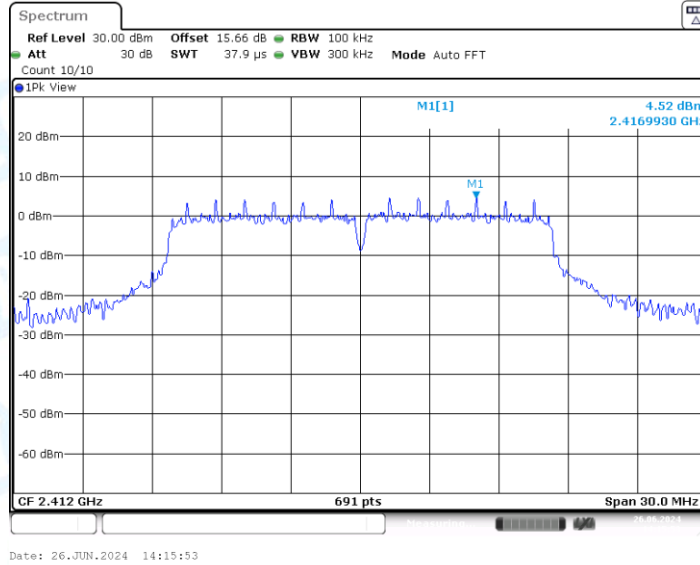
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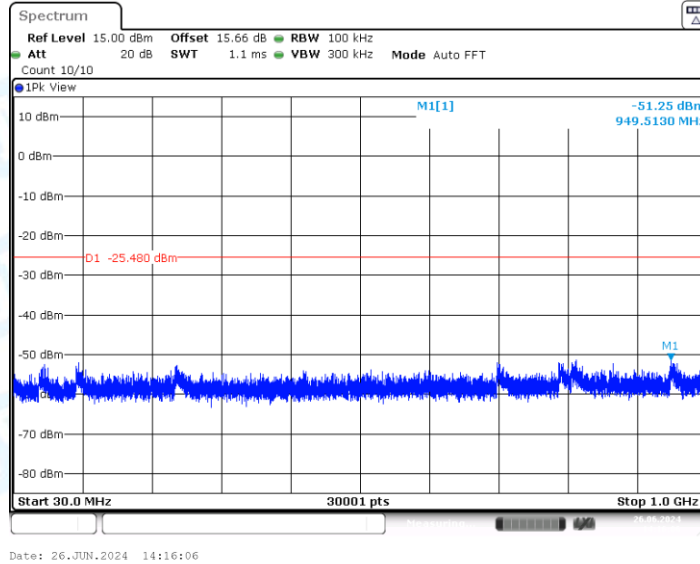


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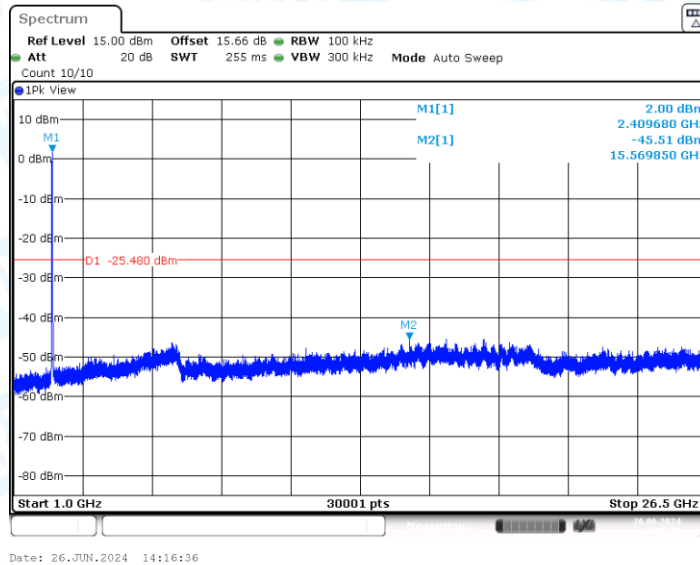
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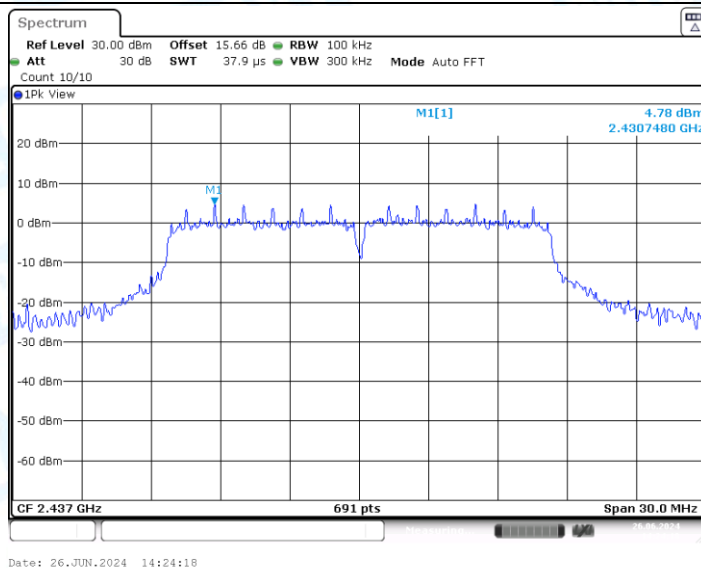
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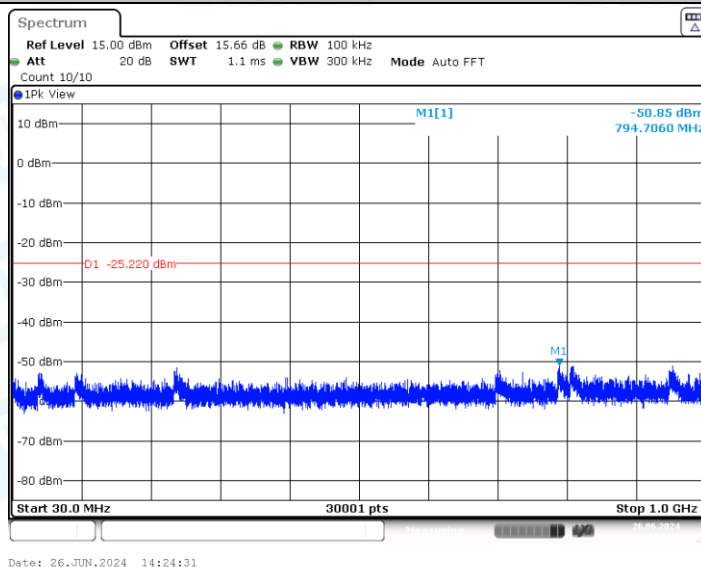
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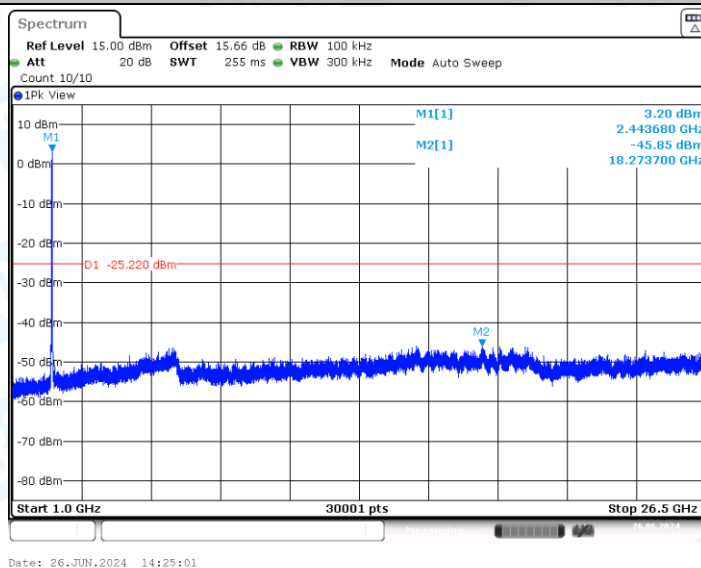
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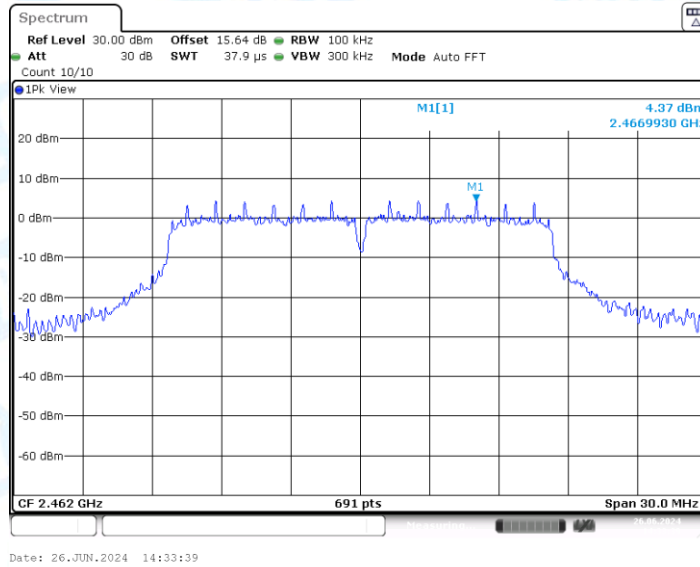
11G_Ant1_2437_30~1000



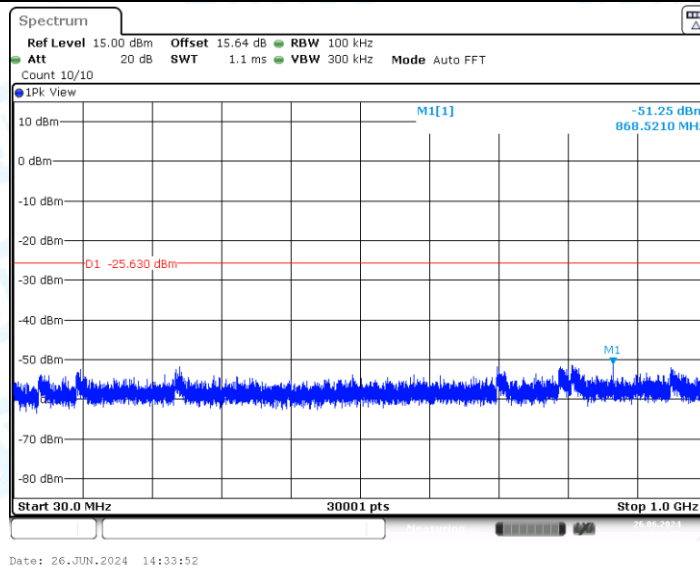
11G_Ant1_2437_1000~26500



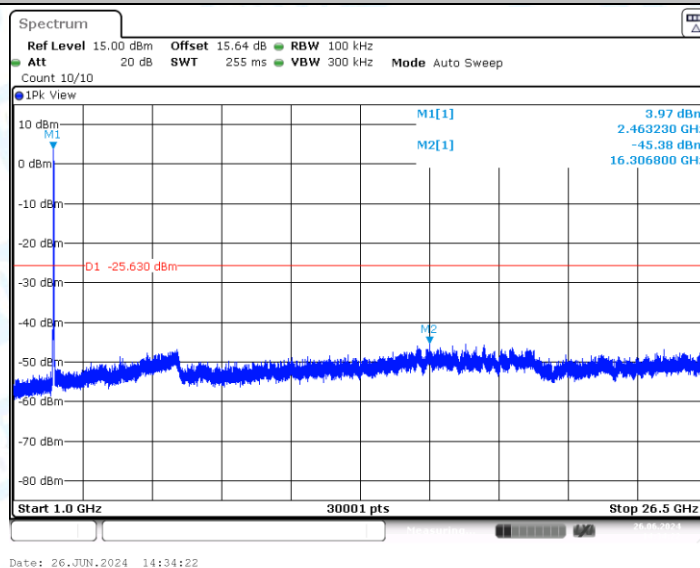
11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference