

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

General Description of EUT	
Product Name:	Flight Controller
Test Model:	F405-V3
Sample ID:	202308-0226-4-2#
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 5V
Test Engineer:	Yan zhen ming
Note: For a more detailed features description, please refer to the report TBR-C-202308-0226-61 The report only show the worst case data.	

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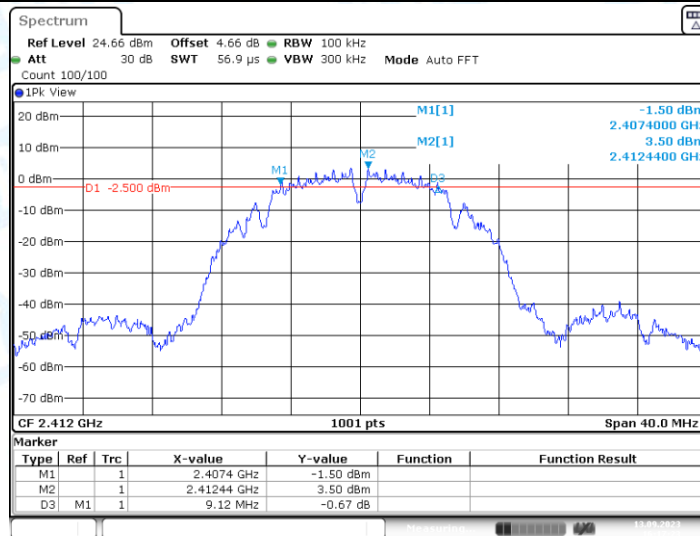
1. DTS Bandwidth

1.1. Test Result

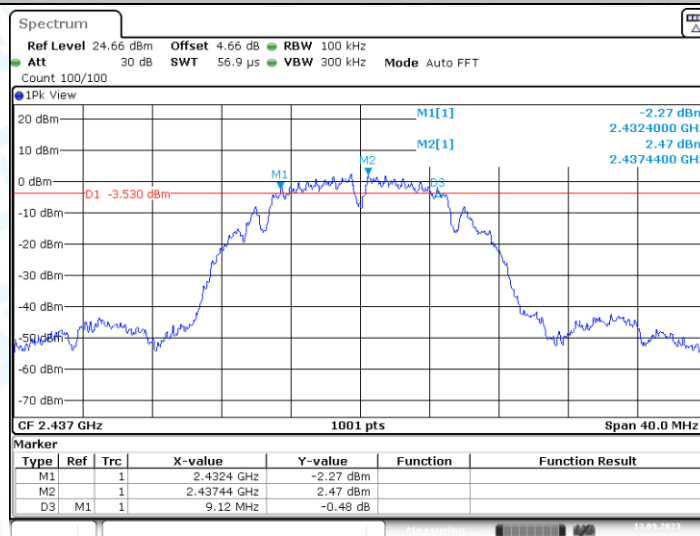
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.12	2407.40	2416.52	0.5	PASS
		2437	9.12	2432.40	2441.52	0.5	PASS
		2462	9.12	2457.40	2466.52	0.5	PASS
11G	Ant1	2412	16.36	2403.76	2420.12	0.5	PASS
		2437	16.40	2428.76	2445.16	0.5	PASS
		2462	16.36	2453.76	2470.12	0.5	PASS
11N20SISO	Ant1	2412	16.84	2403.52	2420.36	0.5	PASS
		2437	17.00	2428.48	2445.48	0.5	PASS
		2462	17.56	2453.16	2470.72	0.5	PASS
11N40SISO	Ant1	2422	34.80	2404.40	2439.20	0.5	PASS
		2437	35.36	2419.16	2454.52	0.5	PASS
		2452	36.40	2433.76	2470.16	0.5	PASS

1.2. Test Graphs

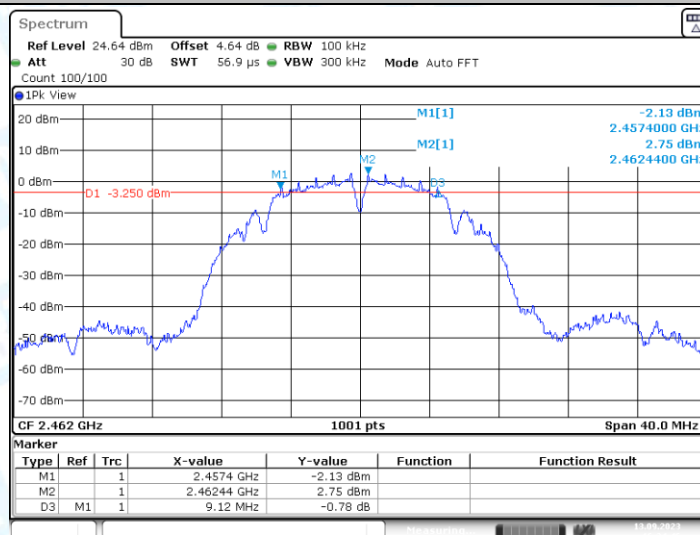
11B_Ant1_2412



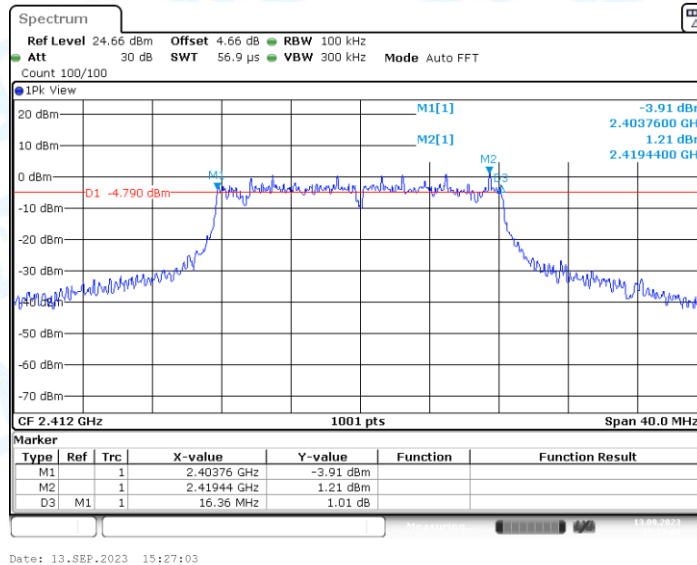
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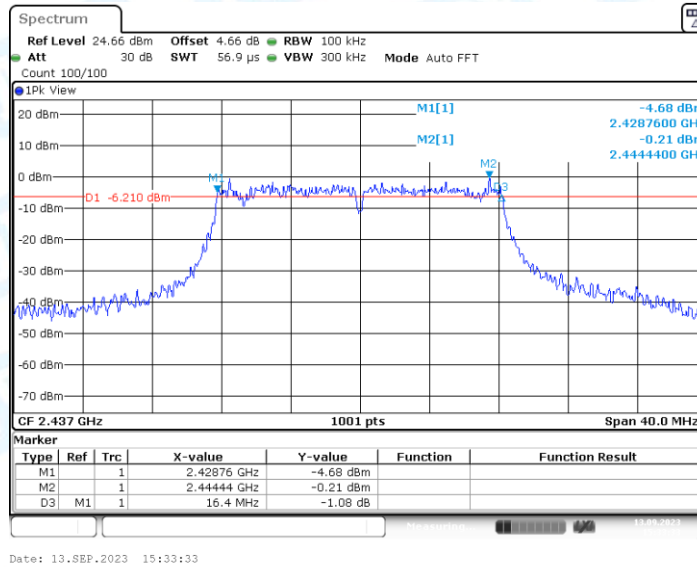
11B_Ant1_2462



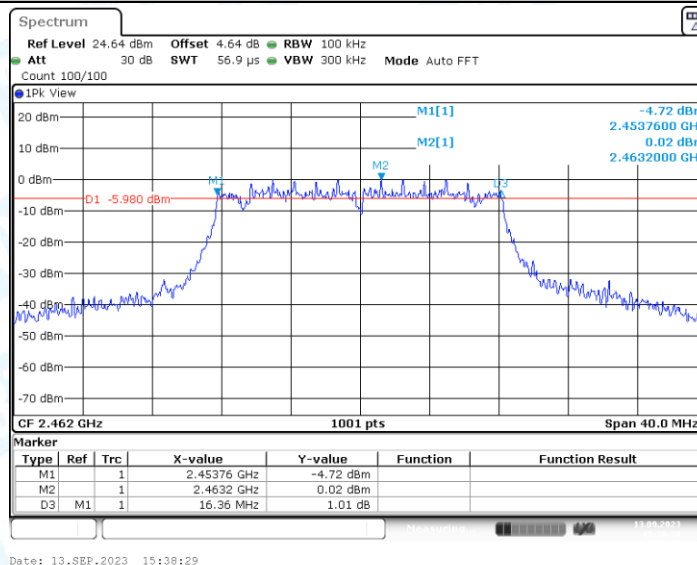
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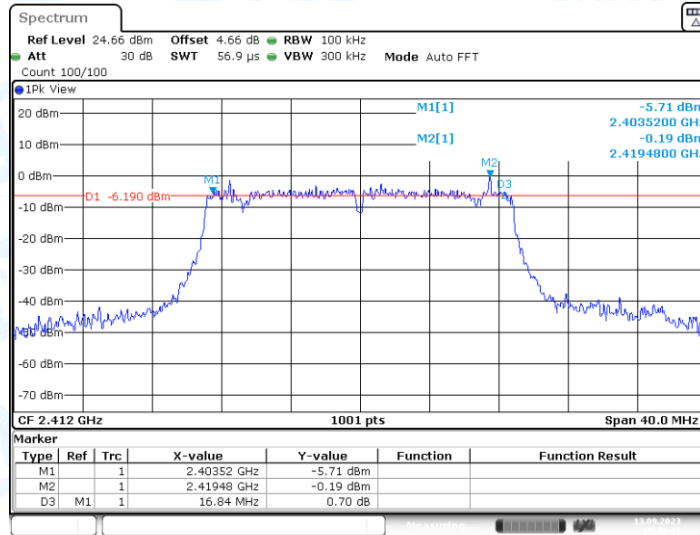
11G_Ant1_2437



11G_Ant1_2462

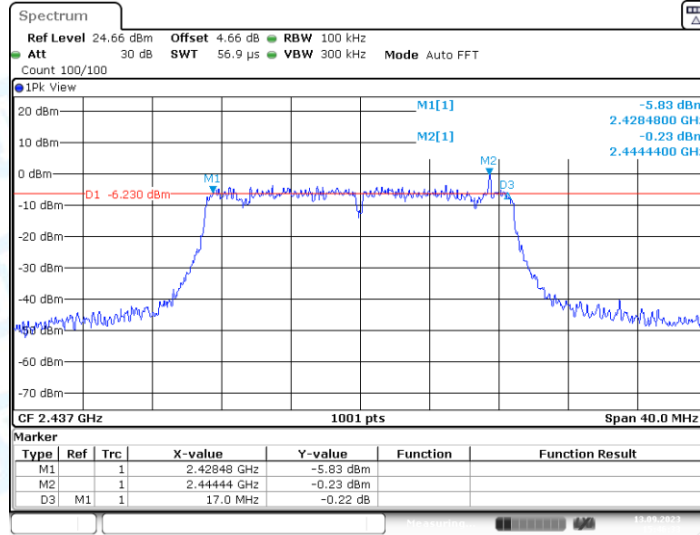


11N20SISO_Ant1_2412



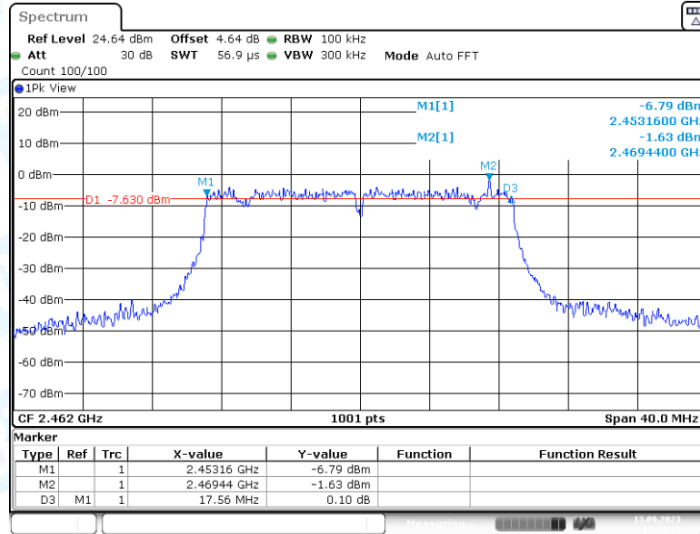
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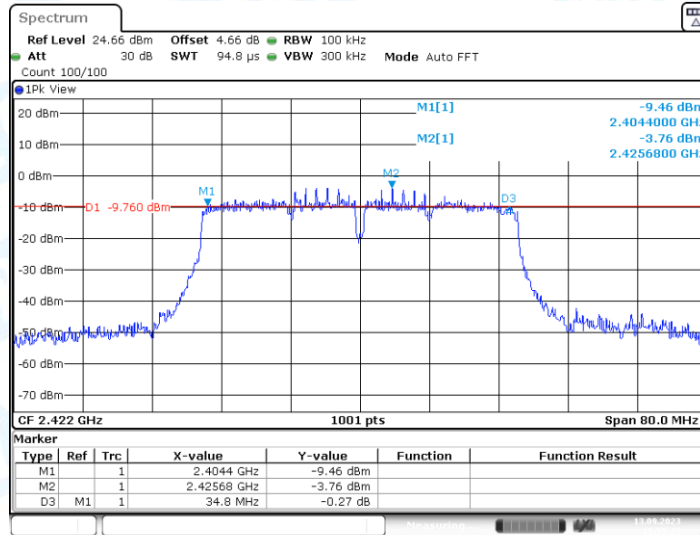
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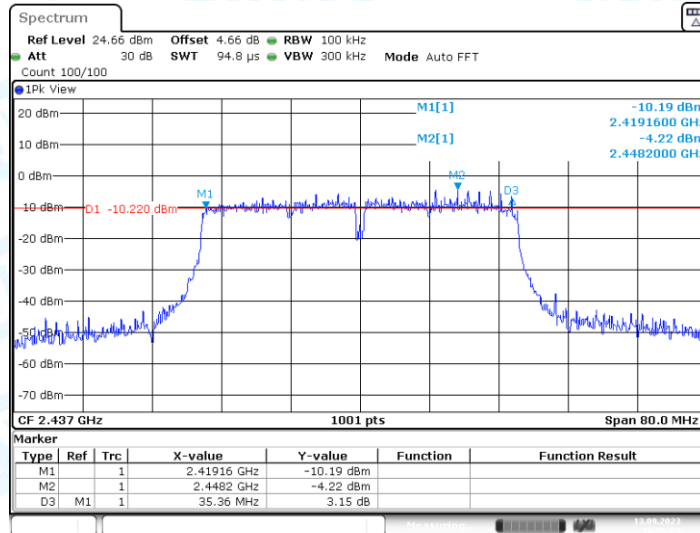
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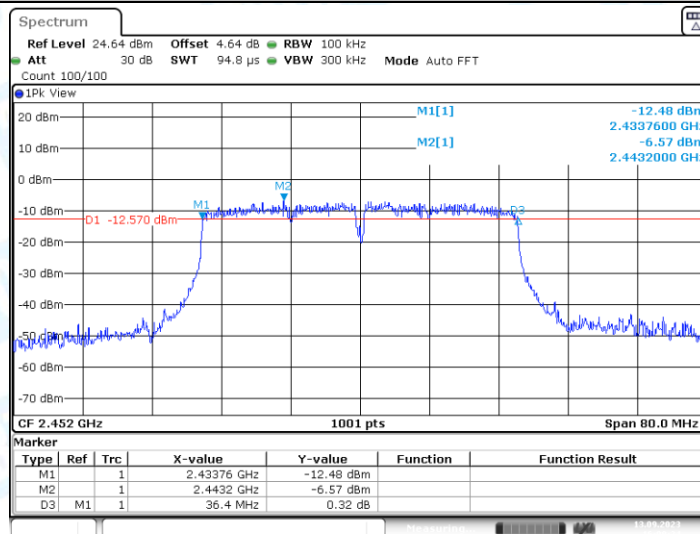
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11N40SISO_Ant1_2437



Date: 13.SEP.2023 16:06:53

11N40SISO_Ant1_2452



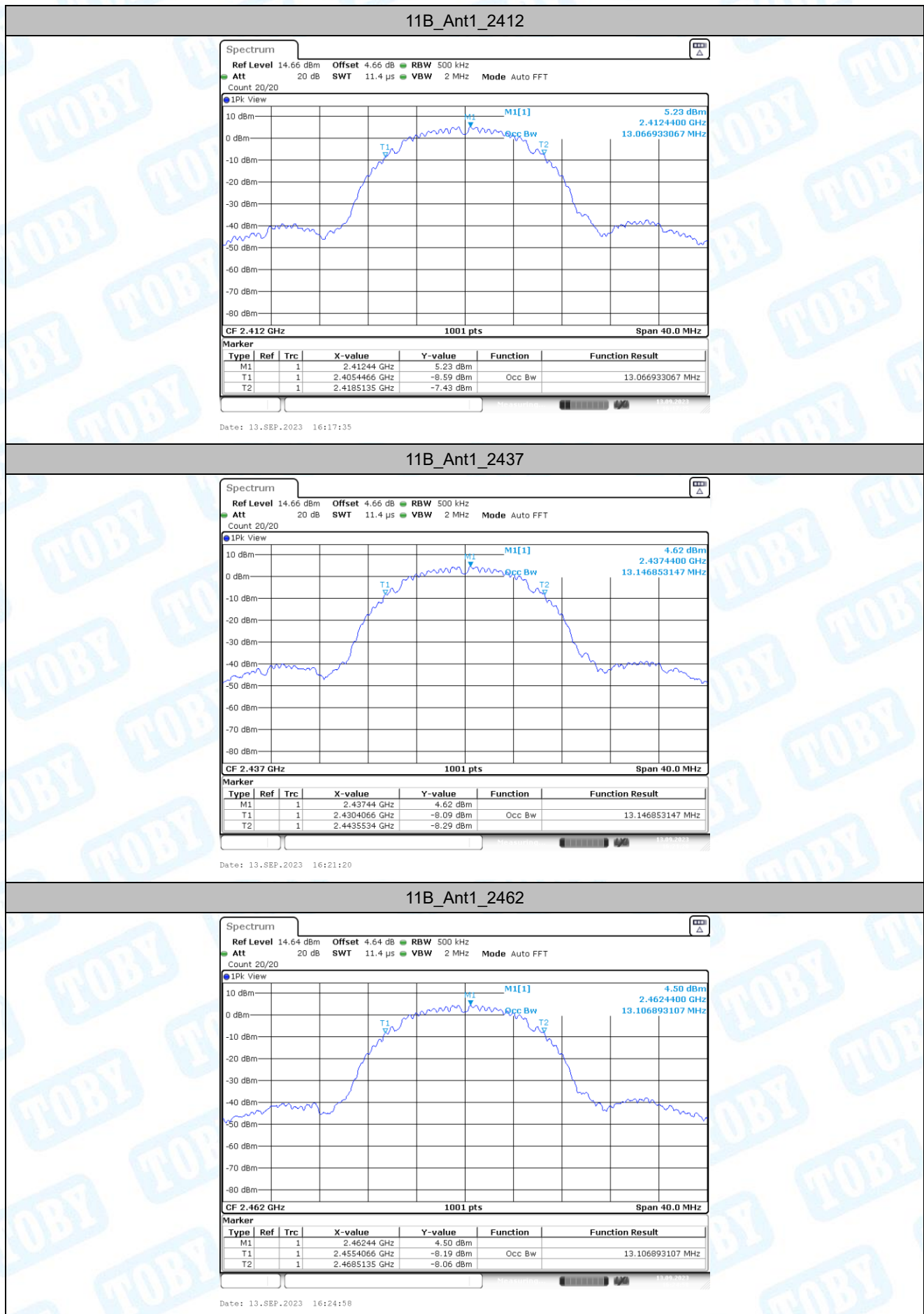
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2. Occupied Channel Bandwidth

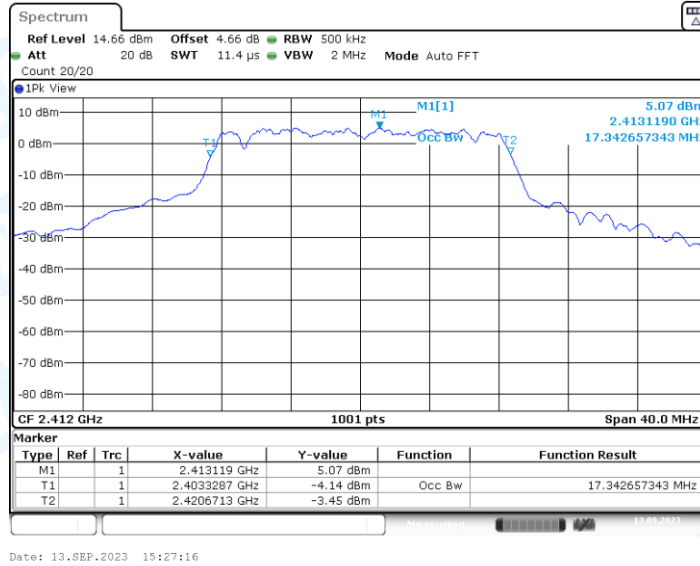
2.1. Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.067	2405.4466	2418.5135	---	---
		2437	13.147	2430.4066	2443.5534	---	---
		2462	13.107	2455.4066	2468.5135	---	---
11G	Ant1	2412	17.343	2403.3287	2420.6713	---	---
		2437	17.143	2428.3686	2445.5115	---	---
		2462	17.263	2453.3686	2470.6314	---	---
11N20SISO	Ant1	2412	17.622	2403.1289	2420.7512	---	---
		2437	17.822	2428.0490	2445.8711	---	---
		2462	17.742	2453.0889	2470.8312	---	---
11N40SISO	Ant1	2422	36.044	2403.9381	2439.9820	---	---
		2437	36.044	2418.8581	2454.9021	---	---
		2452	36.044	2433.9381	2469.9820	---	---

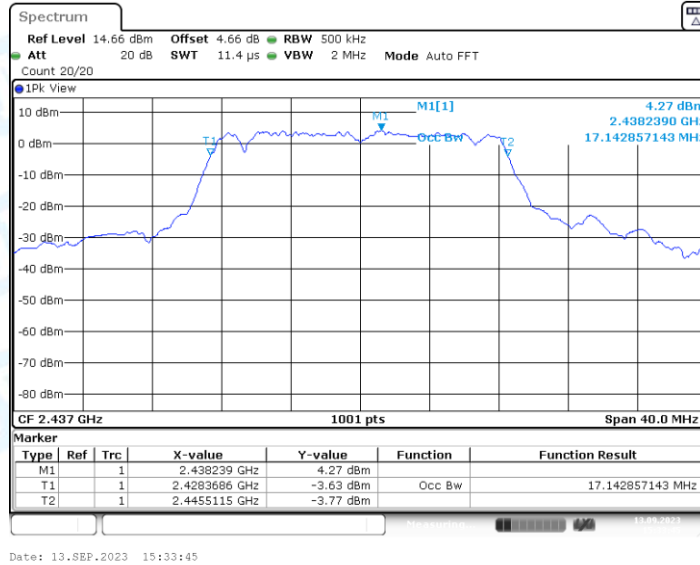
2.2. Test Graphs



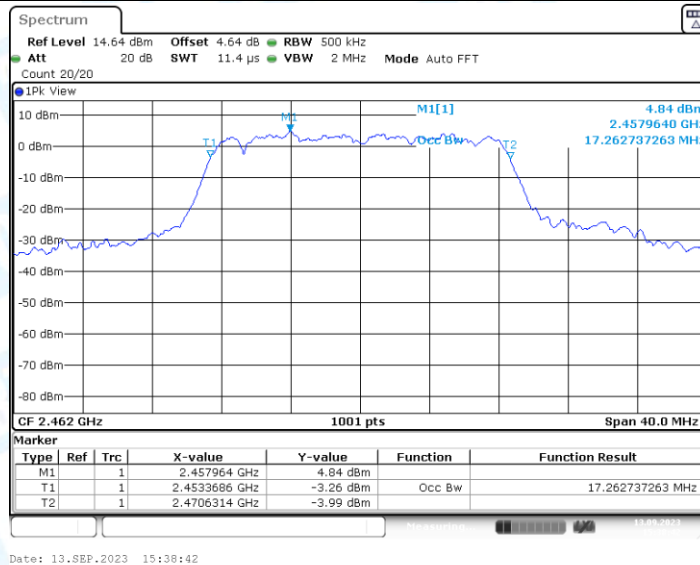
11G_Ant1_2412



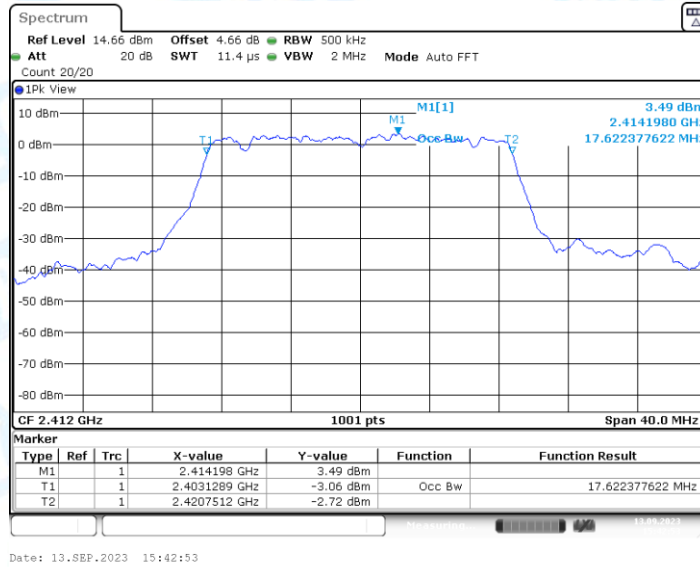
11G_Ant1_2437



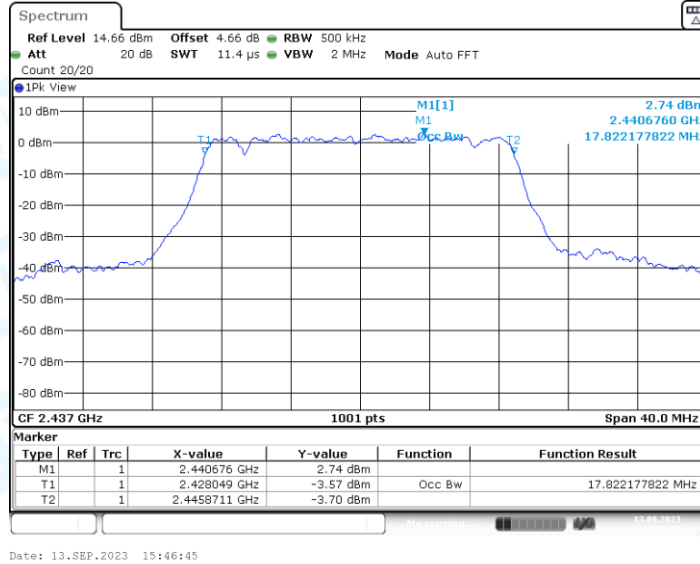
11G_Ant1_2462



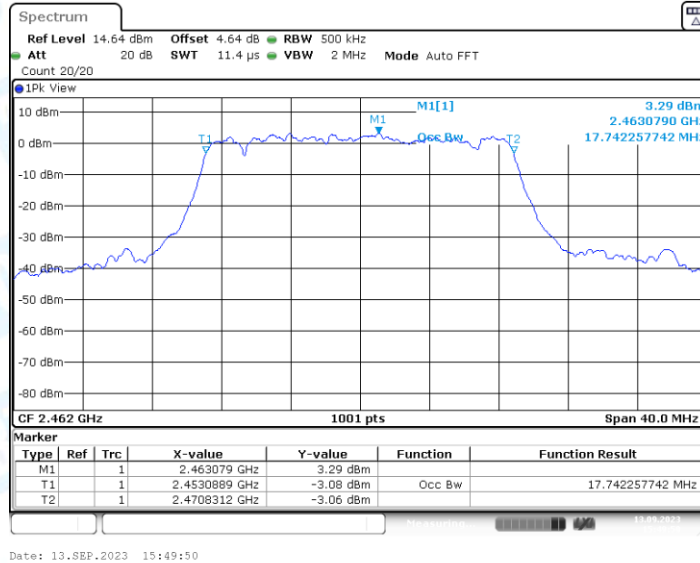
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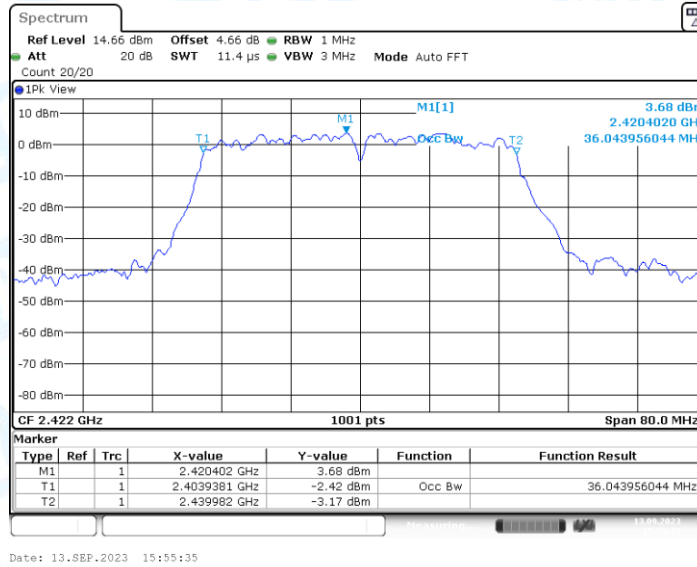
11N20SISO_Ant1_2437



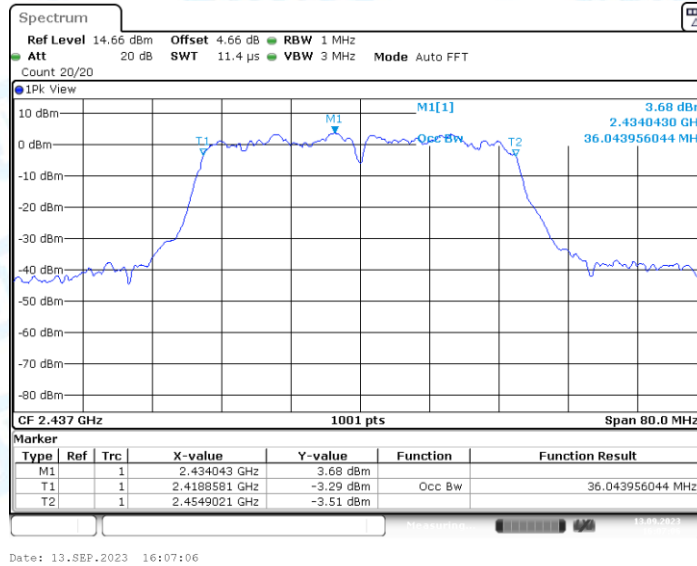
11N20SISO_Ant1_2462



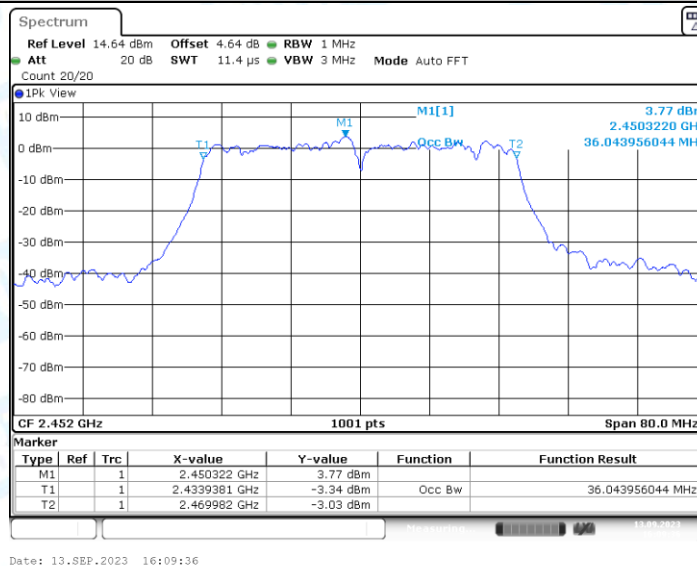
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



3. Maximum conducted output power

3.1. Test Result

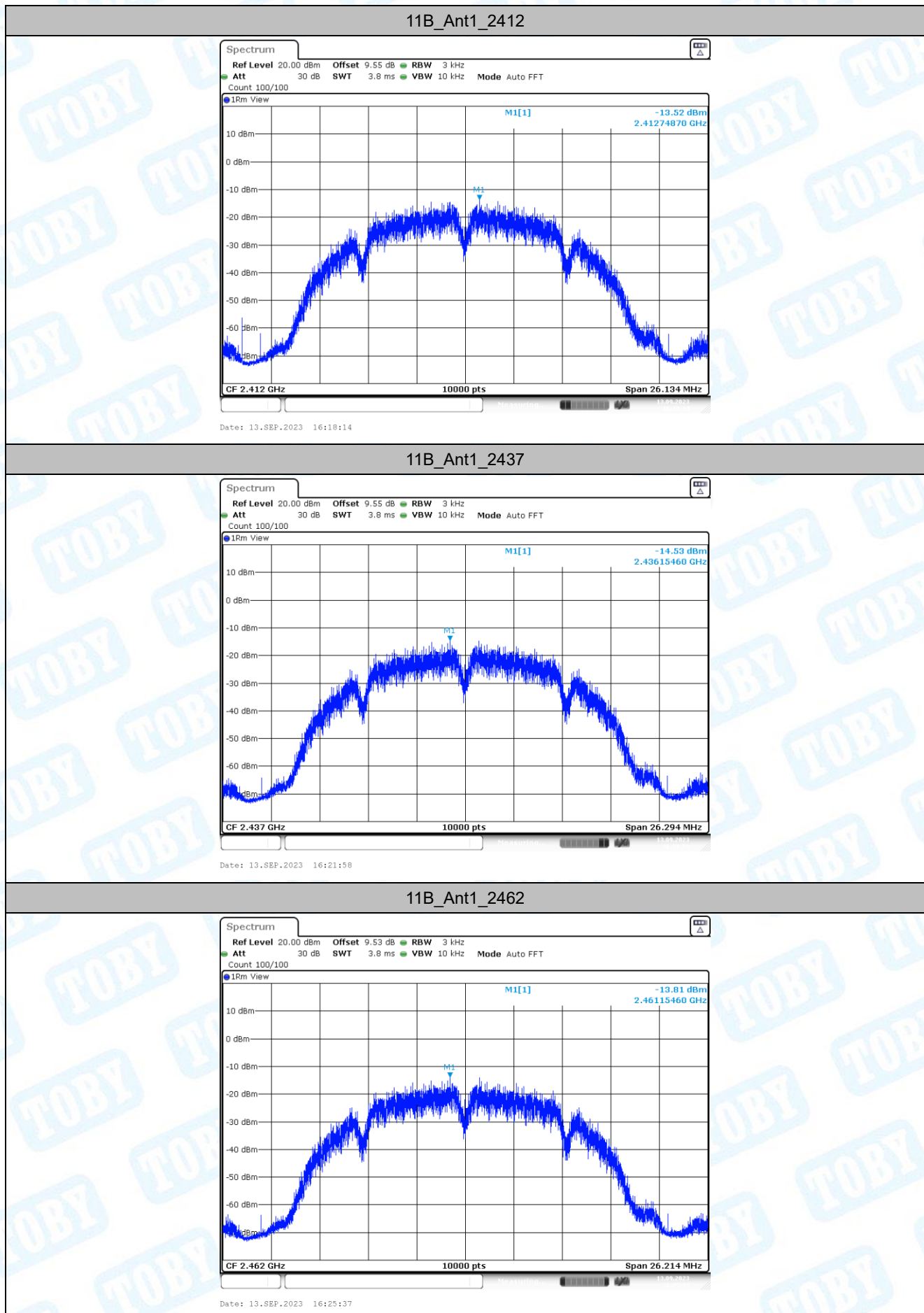
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	14.14	≤30.00	PASS
		2437	13.56	≤30.00	PASS
		2462	13.39	≤30.00	PASS
11G	Ant1	2412	13.69	≤30.00	PASS
		2437	13.11	≤30.00	PASS
		2462	12.95	≤30.00	PASS
11N20SISO	Ant1	2412	12.29	≤30.00	PASS
		2437	11.74	≤30.00	PASS
		2462	11.59	≤30.00	PASS
11N40SISO	Ant1	2422	11.76	≤30.00	PASS
		2437	11.45	≤30.00	PASS
		2452	11.43	≤30.00	PASS

4. Maximum power spectral density

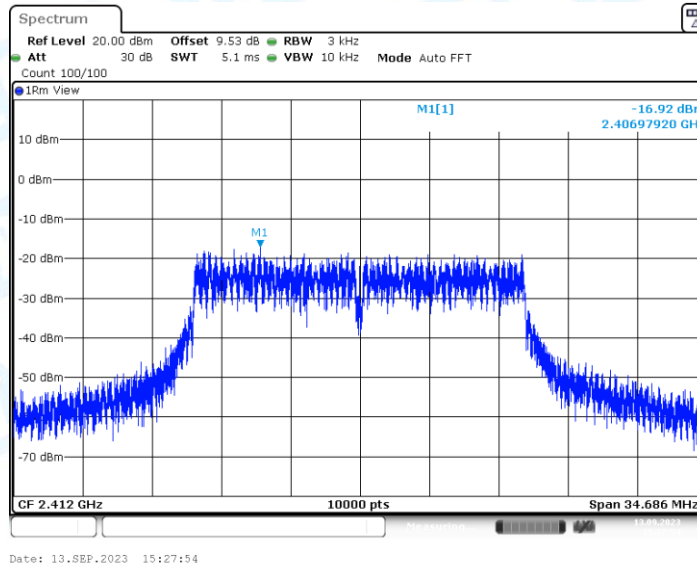
4.1. Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-13.52	≤8.00	PASS
		2437	-14.53	≤8.00	PASS
		2462	-13.81	≤8.00	PASS
11G	Ant1	2412	-16.92	≤8.00	PASS
		2437	-17.79	≤8.00	PASS
		2462	-18.01	≤8.00	PASS
11N20SISO	Ant1	2412	-18.17	≤8.00	PASS
		2437	-18.35	≤8.00	PASS
		2462	-18.30	≤8.00	PASS
11N40SISO	Ant1	2422	-23.46	≤8.00	PASS
		2437	-24.12	≤8.00	PASS
		2452	-23.93	≤8.00	PASS

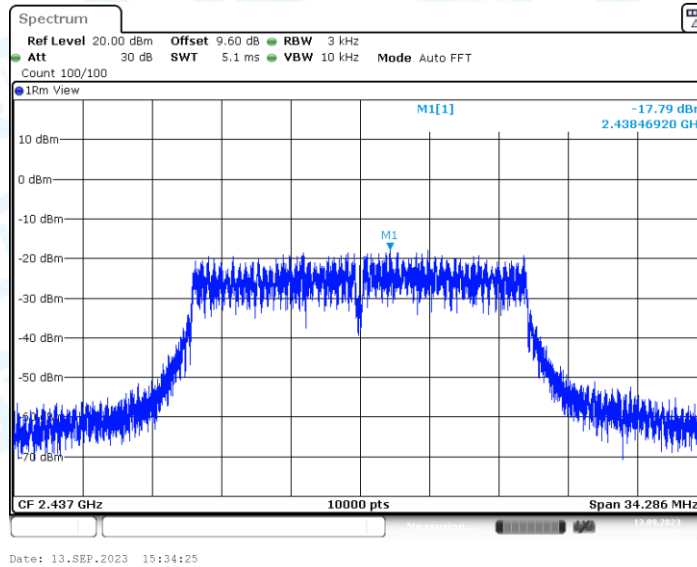
4.2. Test Graphs



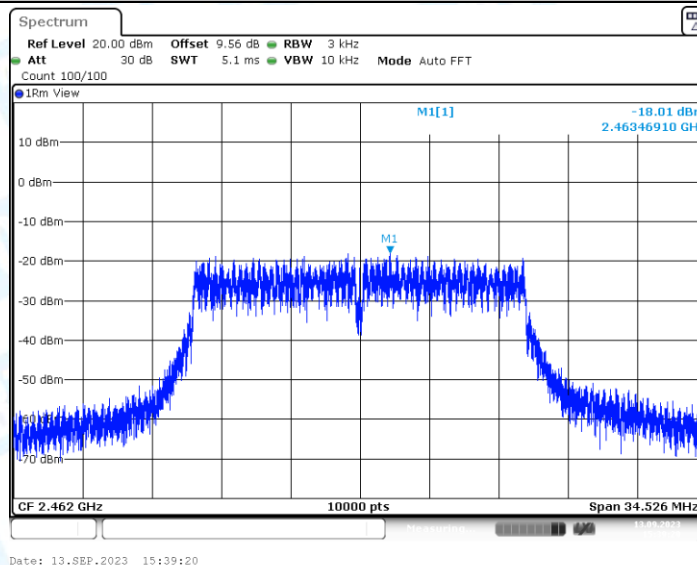
11G_Ant1_2412



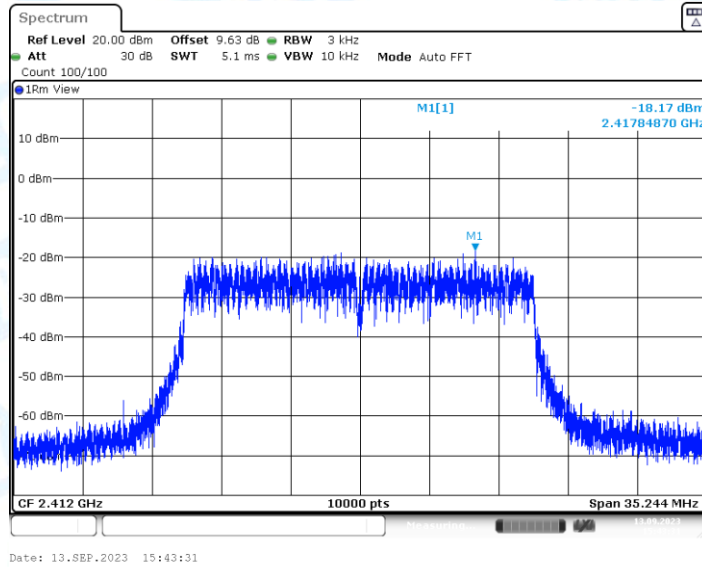
11G_Ant1_2437



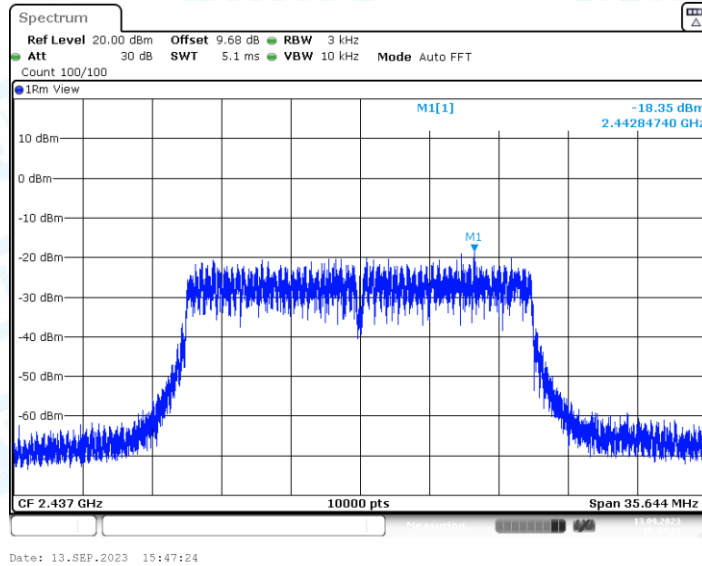
11G_Ant1_2462



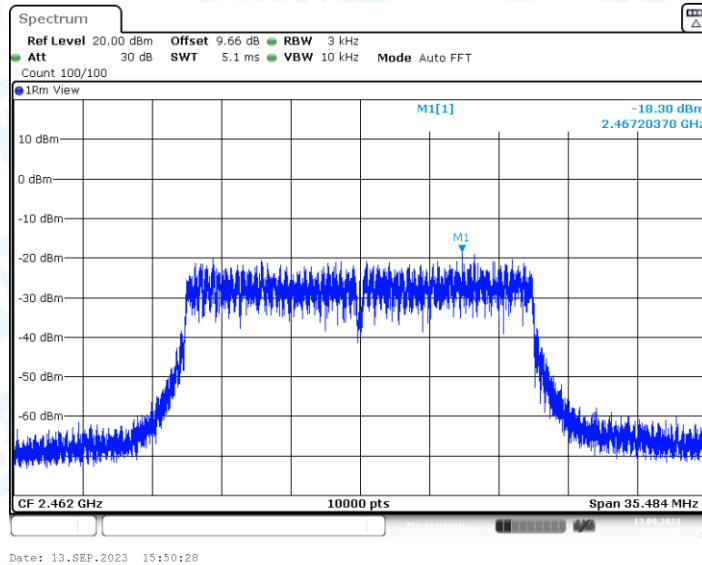
11N20SISO_Ant1_2412



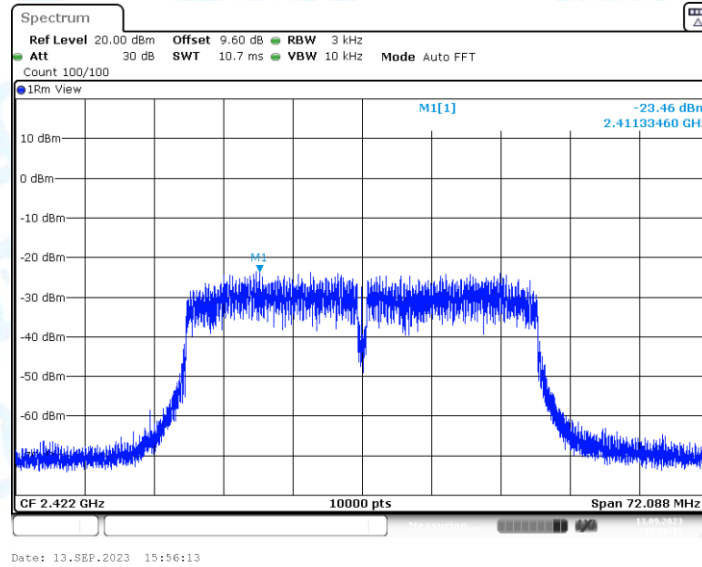
11N20SISO_Ant1_2437



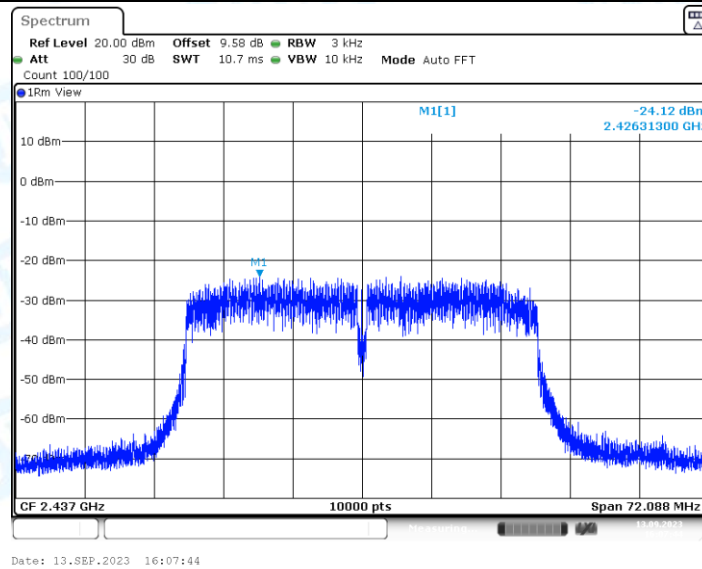
11N20SISO_Ant1_2462



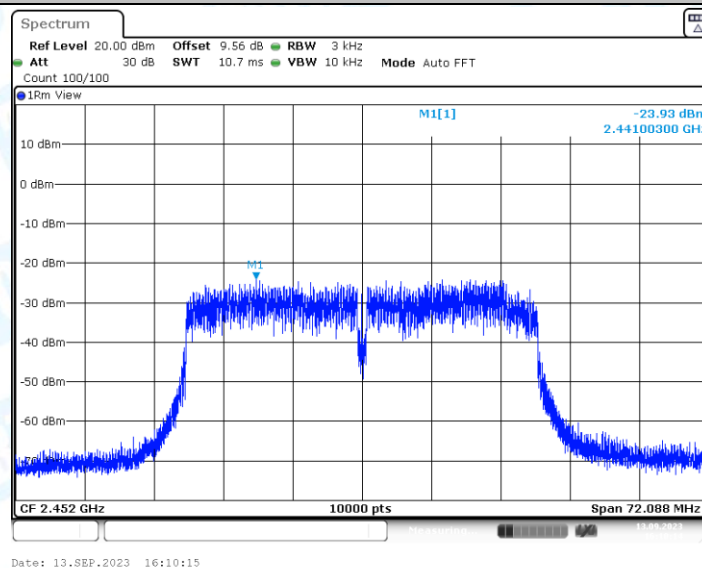
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

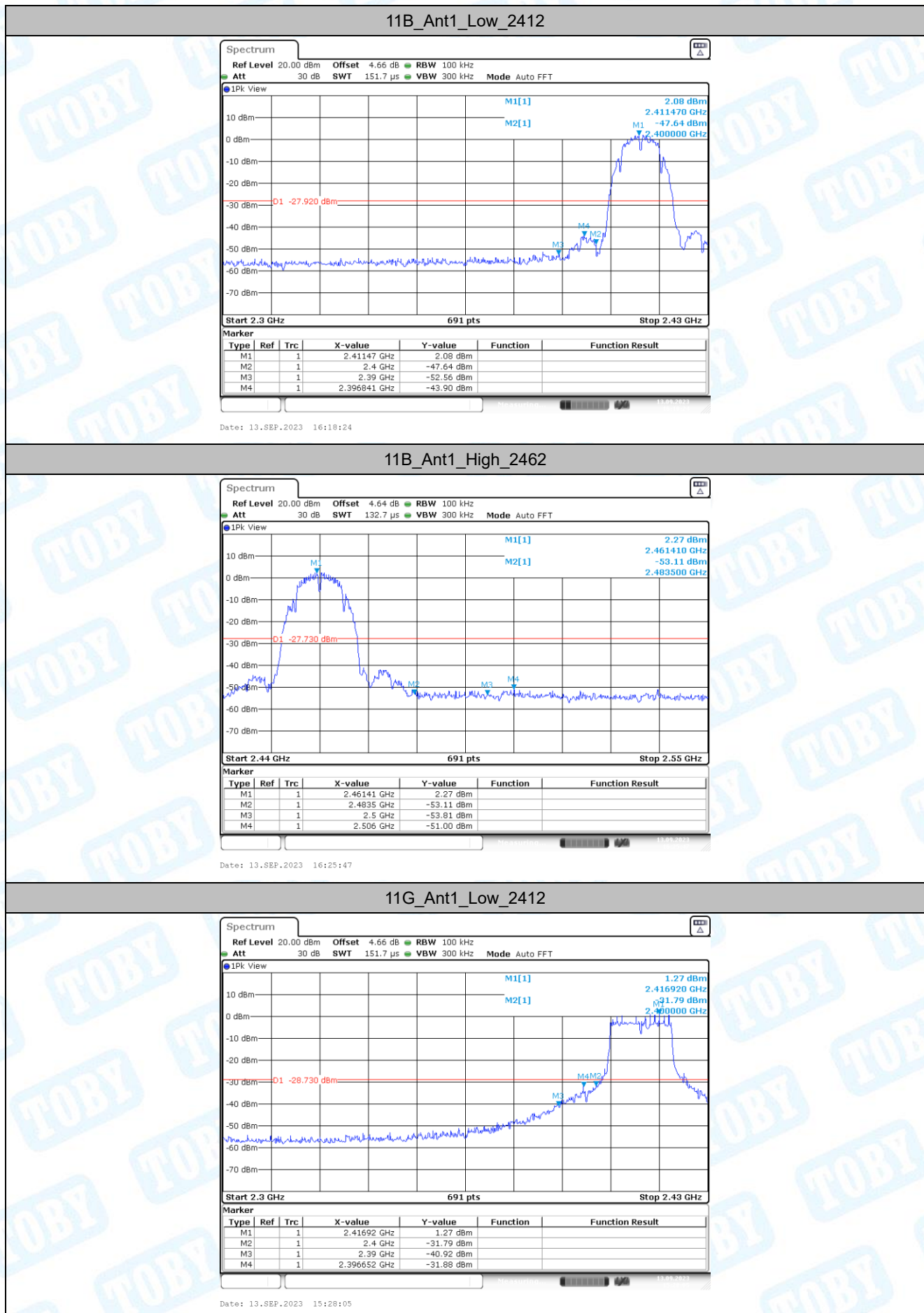


5. Band edge measurements

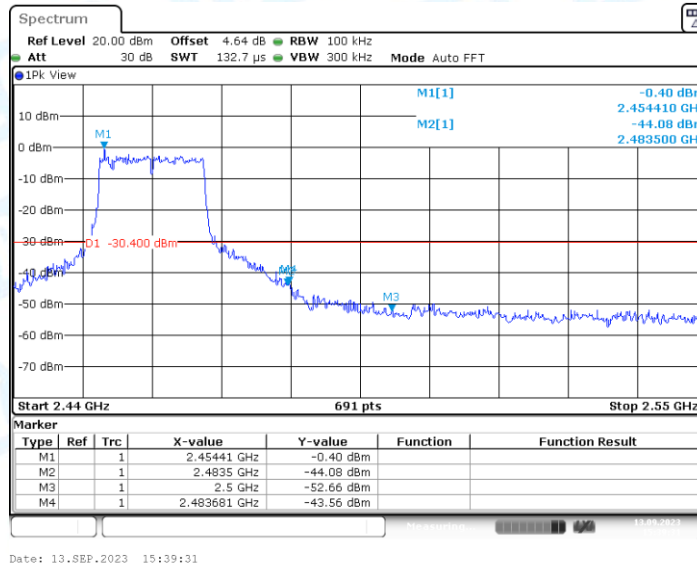
5.1. Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.08	-43.9	≤ -27.92	PASS
		High	2462	2.27	-51	≤ -27.73	PASS
11G	Ant1	Low	2412	1.27	-31.88	≤ -28.73	PASS
		High	2462	-0.40	-43.56	≤ -30.4	PASS
11N20SISO	Ant1	Low	2412	0.35	-39.83	≤ -29.65	PASS
		High	2462	-2.38	-47.5	≤ -32.38	PASS
11N40SISO	Ant1	Low	2422	-5.28	-41.73	≤ -35.28	PASS
		High	2452	-4.03	-41.27	≤ -34.03	PASS

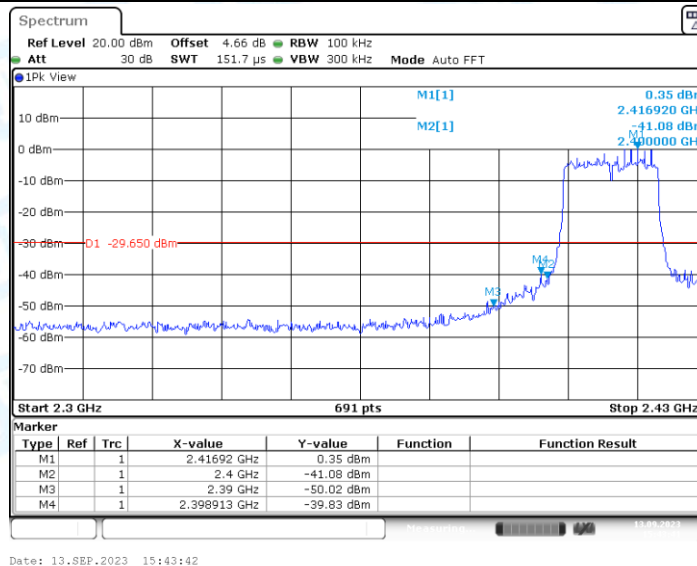
5.2. Test Graphs



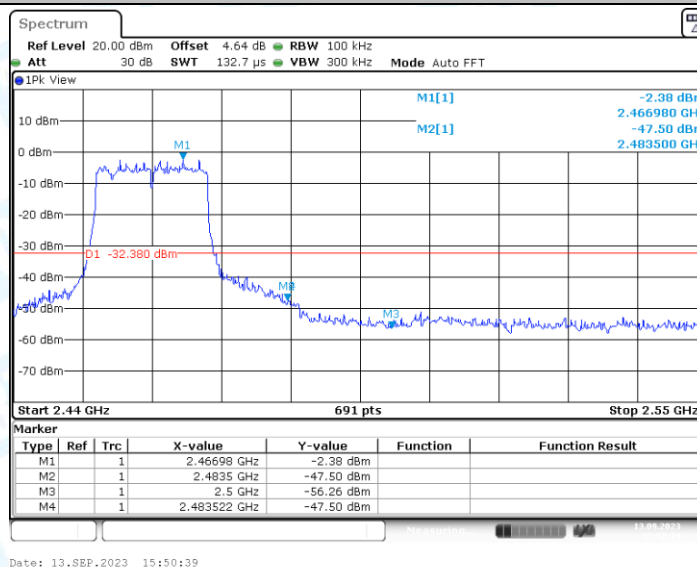
11G_Ant1_High_2462



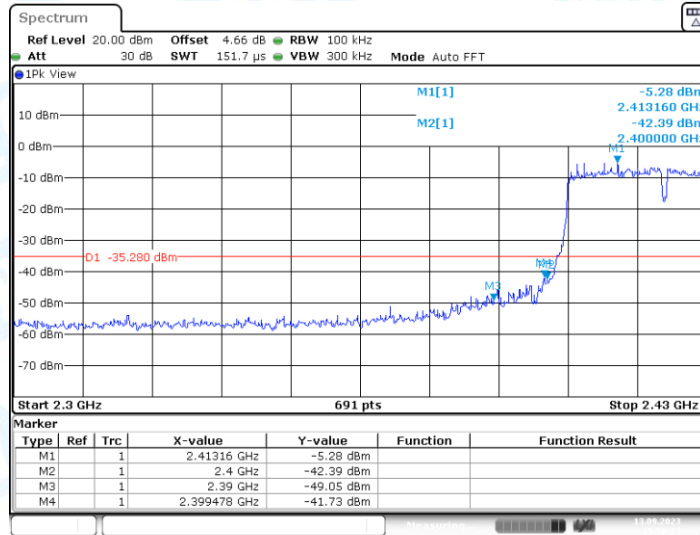
11N20SISO_Ant1_Low_2412



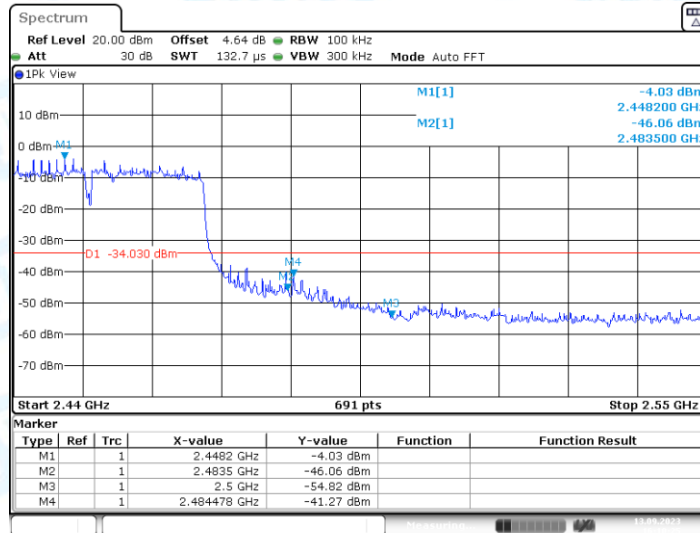
11N20SISO_Ant1_High_2462



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	3.26	3.26	---	PASS
			30~1000	3.26	-63.99	≤-26.74	PASS
			1000~26500	3.26	-44.91	≤-26.74	PASS
		2437	Reference	2.73	2.73	---	PASS
			30~1000	2.73	-63.86	≤-27.27	PASS
			1000~26500	2.73	-48.79	≤-27.27	PASS
		2462	Reference	2.47	2.47	---	PASS
			30~1000	2.47	-64.59	≤-27.53	PASS
			1000~26500	2.47	-49.35	≤-27.53	PASS
11G	Ant1	2412	Reference	1.45	1.45	---	PASS
			30~1000	1.45	-63.73	≤-28.55	PASS
			1000~26500	1.45	-47.96	≤-28.55	PASS
		2437	Reference	0.78	0.78	---	PASS
			30~1000	0.78	-64.01	≤-29.22	PASS
			1000~26500	0.78	-49.01	≤-29.22	PASS
		2462	Reference	-0.03	-0.03	---	PASS
			30~1000	-0.03	-63.82	≤-30.03	PASS
			1000~26500	-0.03	-48.95	≤-30.03	PASS
11N20SISO	Ant1	2412	Reference	0.16	0.16	---	PASS
			30~1000	0.16	-64.63	≤-29.84	PASS
			1000~26500	0.16	-48.12	≤-29.84	PASS
		2437	Reference	-0.06	-0.06	---	PASS
			30~1000	-0.06	-54.57	≤-30.06	PASS
			1000~26500	-0.06	-48.69	≤-30.06	PASS
		2462	Reference	-0.44	-0.44	---	PASS
			30~1000	-0.44	-64.13	≤-30.44	PASS
			1000~26500	-0.44	-49.1	≤-30.44	PASS
11N40SISO	Ant1	2422	Reference	-3.28	-3.28	---	PASS
			30~1000	-3.28	-63.97	≤-33.28	PASS
			1000~26500	-3.28	-48.59	≤-33.28	PASS
		2437	Reference	-4.64	-4.64	---	PASS
			30~1000	-4.64	-49.63	≤-34.64	PASS
			1000~26500	-4.64	-48.71	≤-34.64	PASS
		2452	Reference	-5.29	-5.29	---	PASS
			30~1000	-5.29	-62.6	≤-35.29	PASS
			1000~26500	-5.29	-48.41	≤-35.29	PASS

6.2. Test Graphs

