

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

General Description of EUT	
Product Name:	Nooie Pet Feeder
Test Model:	NPF01
Sample ID:	RW-C-202203-0202-7-2#
Environmental Conditions	
Temperature:	23.8°C
Relative Humidity:	48%
Test Voltage:	DC 5V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202203-0202-91	

Contents

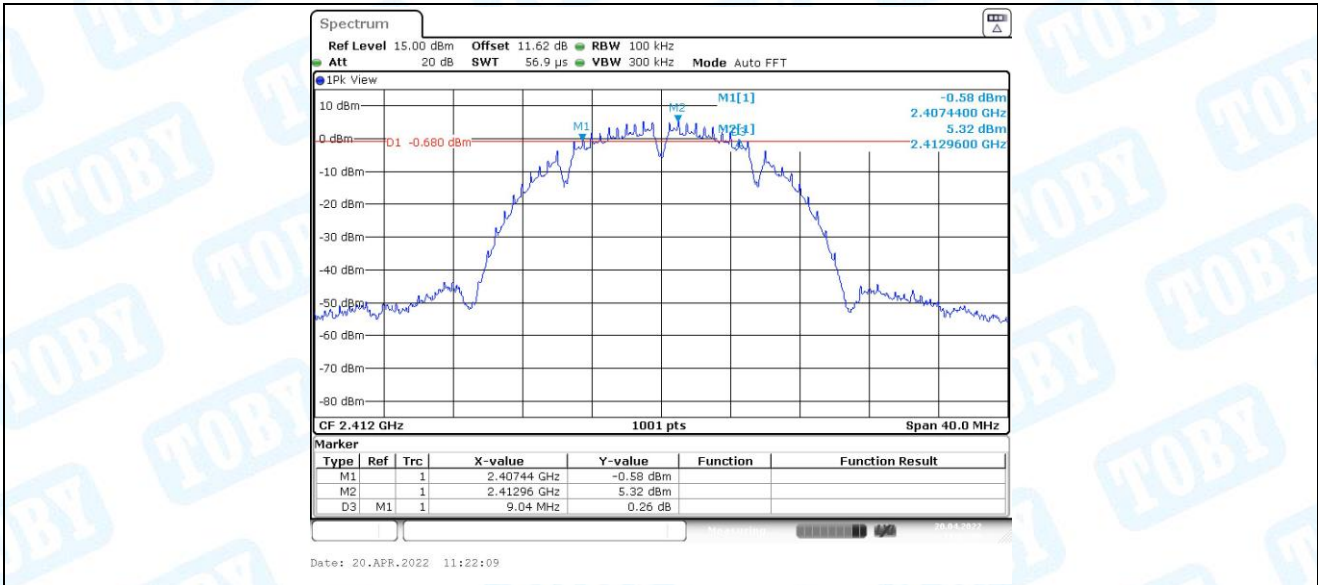
1. DTS Bandwidth.....	3
1.1. Test Result.....	3
1.2. Test Graphs.....	4
2. Occupied Channel Bandwidth.....	7
2.1. Test Result.....	7
2.2. Test Graphs.....	8
3. Maximum conducted output power.....	11
3.1. Test Result.....	11
4. Maximum power spectral density.....	12
4.1. Test Result.....	12
4.2. Test Graphs.....	13
5. Band edge measurements.....	16
5.1. Test Result.....	16
5.2. Test Graphs.....	17
6. Conducted Spurious Emission.....	19
6.1. Test Result.....	19
6.2. Test Graphs.....	20
7. Duty Cycle.....	29
7.1. Test Result.....	29
7.2. Test Graphs.....	30
8. Emissions in Restricted Bands.....	33
8.1. Test Result.....	33
8.2. Test Graphs.....	34

1. DTS Bandwidth

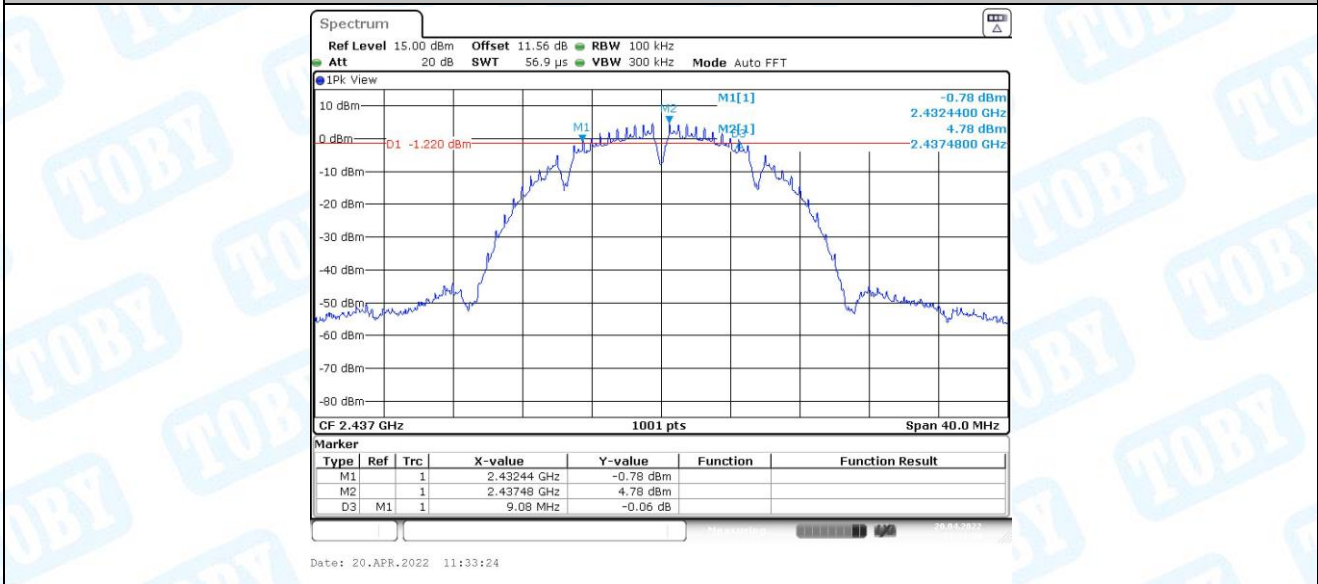
1.1. Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.04	2407.44	2416.48	0.5	PASS
		2437	9.08	2432.44	2441.52	0.5	PASS
		2462	9.08	2457.44	2466.52	0.5	PASS
11G	Ant1	2412	16.36	2403.80	2420.16	0.5	PASS
		2437	16.32	2428.84	2445.16	0.5	PASS
		2462	16.36	2453.80	2470.16	0.5	PASS
11N20SISO	Ant1	2412	17.56	2403.20	2420.76	0.5	PASS
		2437	17.56	2428.20	2445.76	0.5	PASS
		2462	17.56	2453.20	2470.76	0.5	PASS

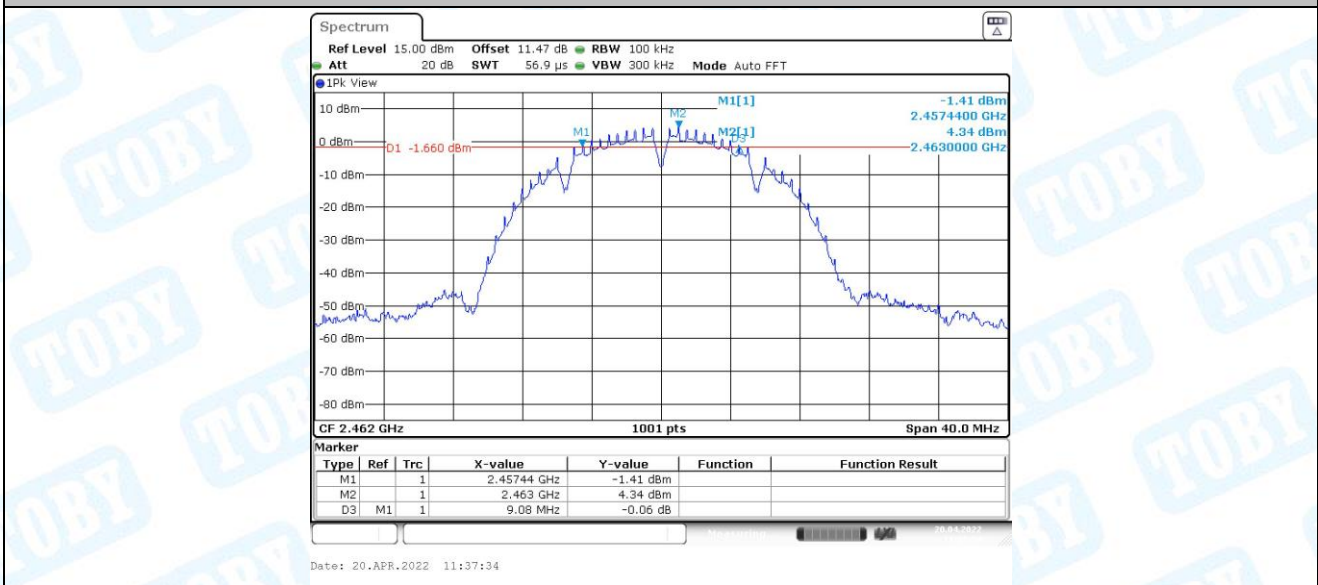
1.2. Test Graphs



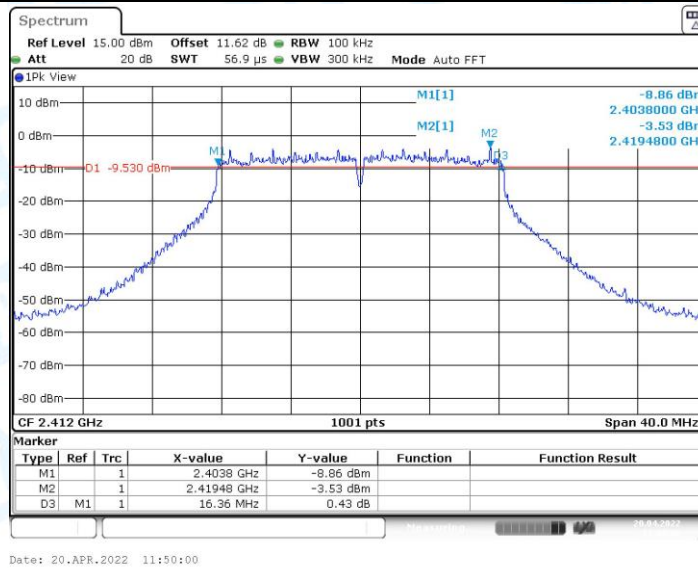
11B_Ant1_2412



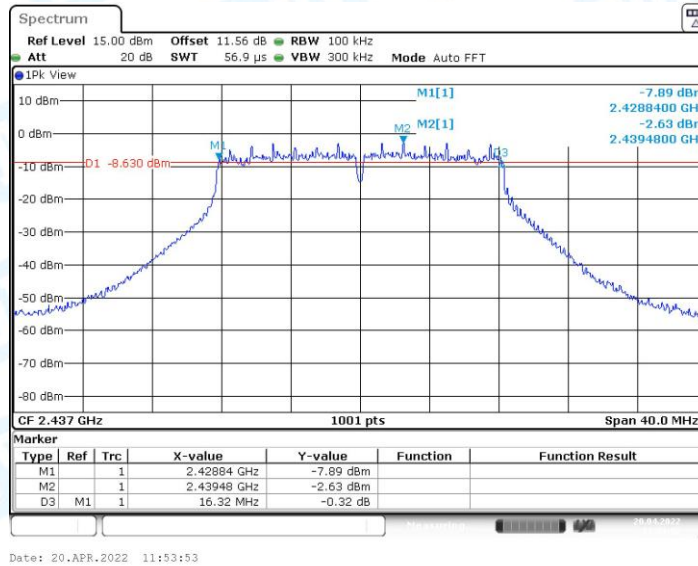
11B_Ant1_2437



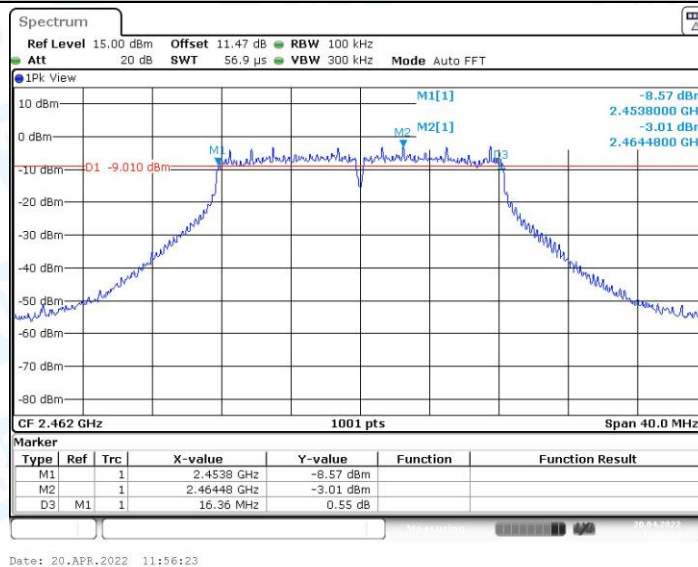
11B_Ant1_2462



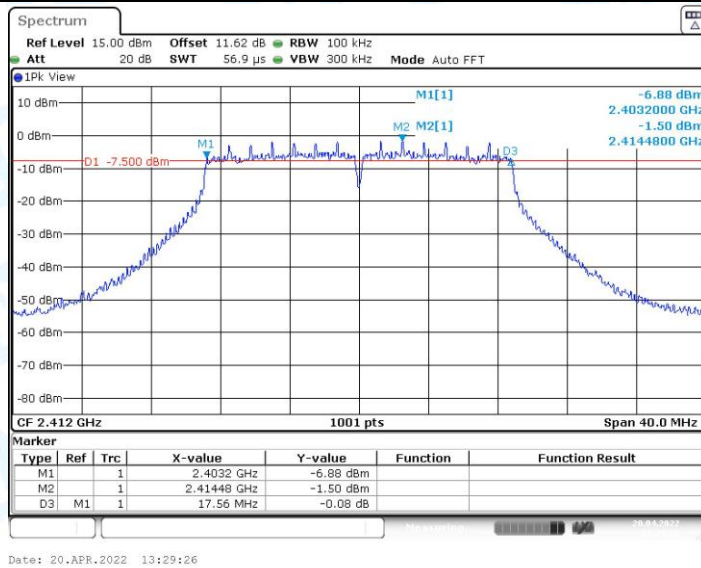
11G_Ant1_2412



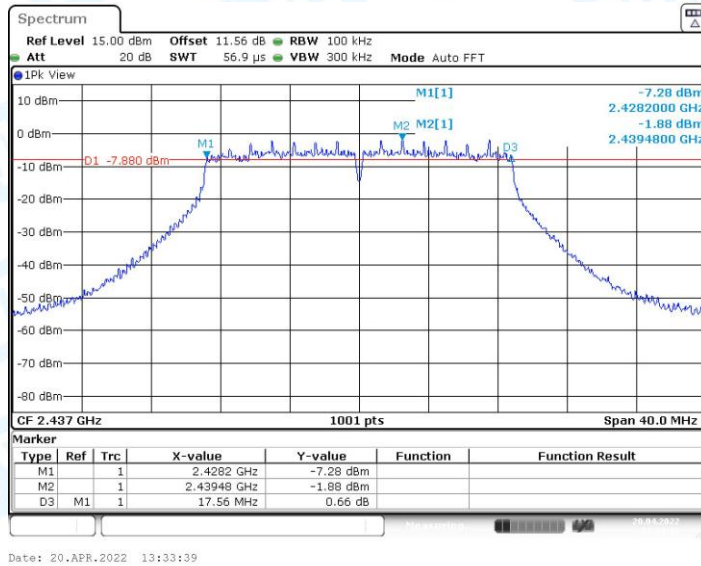
11G_Ant1_2437



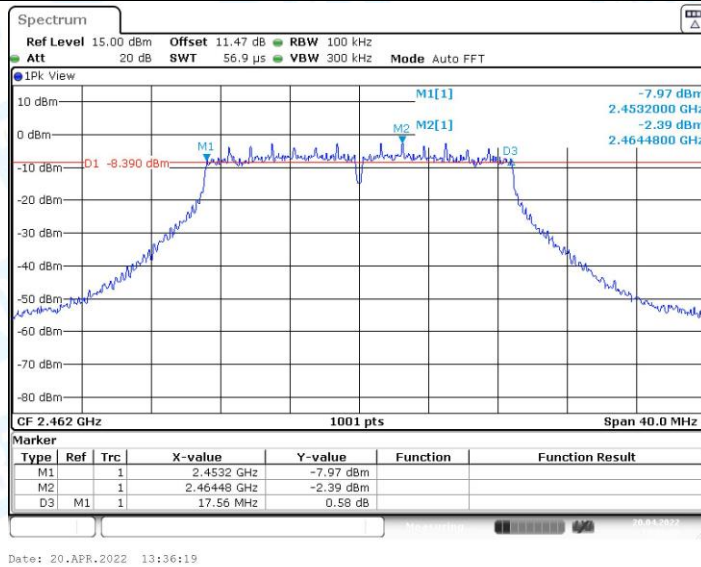
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

2. Occupied Channel Bandwidth

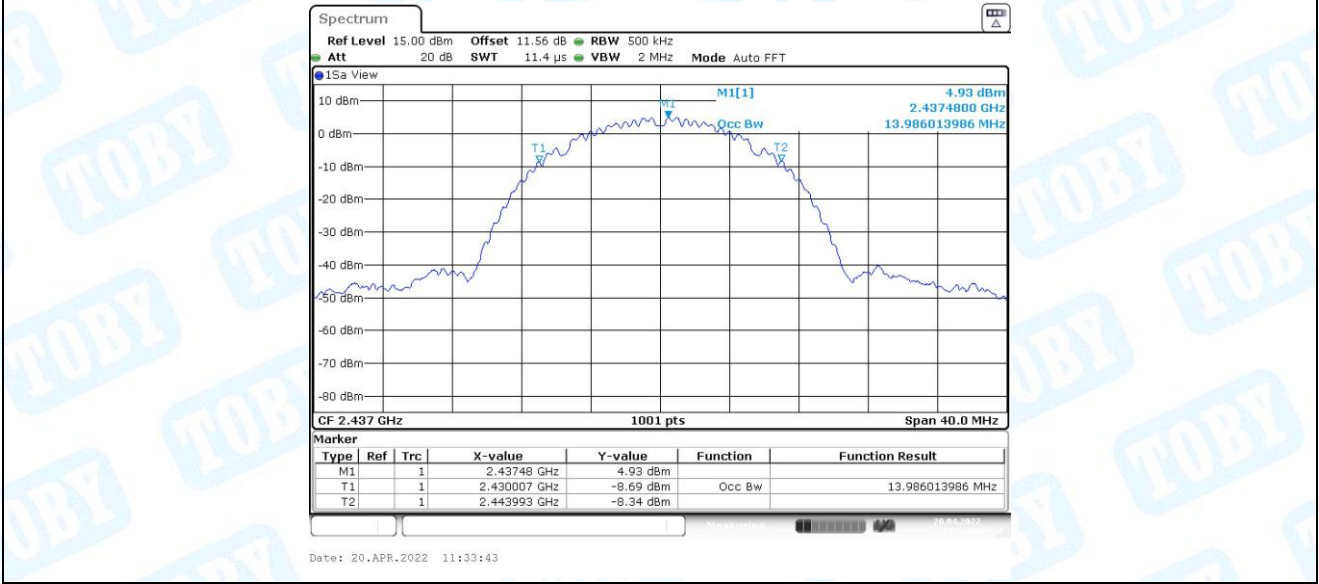
2.1. Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.986	2405.007	2418.993	---	---
		2437	13.986	2430.007	2443.993	---	---
		2462	13.986	2455.007	2468.993	---	---
11G	Ant1	2412	17.582	2403.209	2420.791	---	---
		2437	17.502	2428.289	2445.791	---	---
		2462	17.383	2453.369	2470.751	---	---
11N20SISO	Ant1	2412	18.342	2402.849	2421.191	---	---
		2437	18.182	2427.809	2445.991	---	---
		2462	18.182	2452.969	2471.151	---	---

2.2. Test Graphs



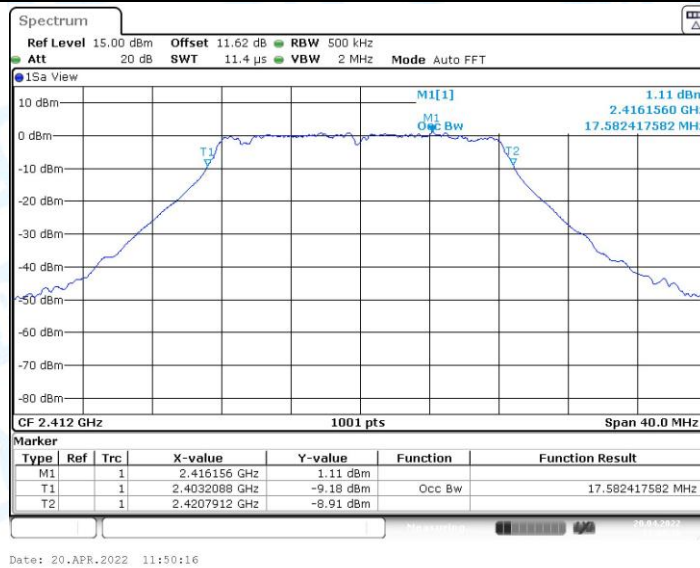
11B_Ant1_2412



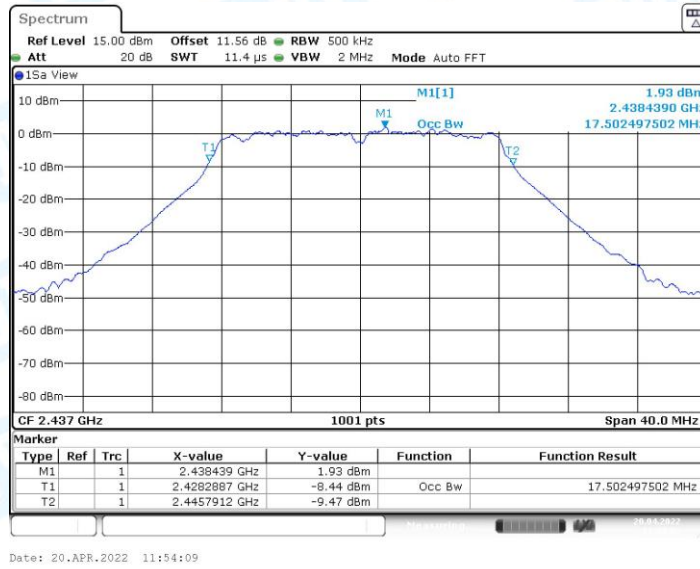
11B_Ant1_2437



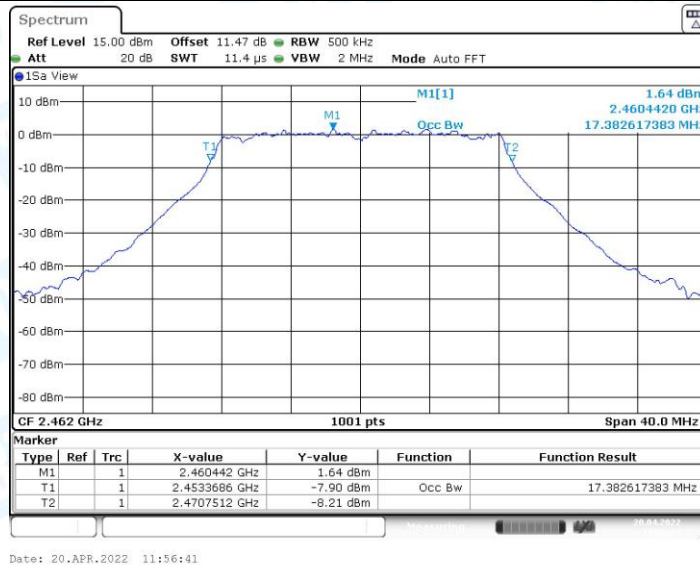
11B_Ant1_2462



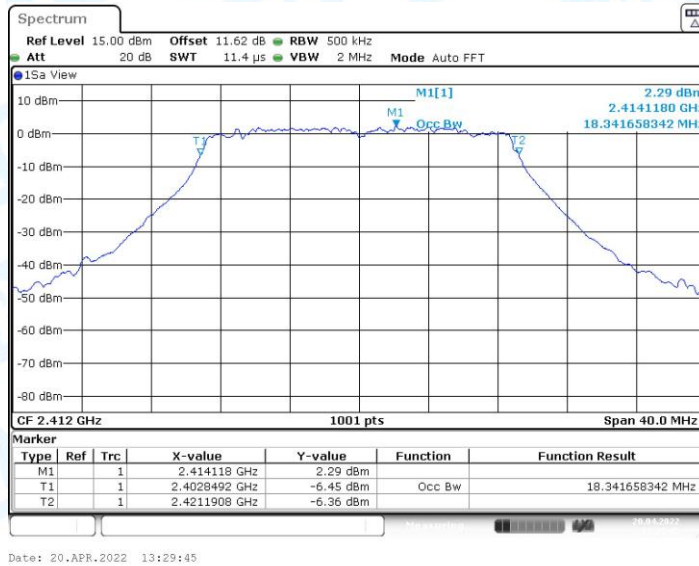
11G_Ant1_2412



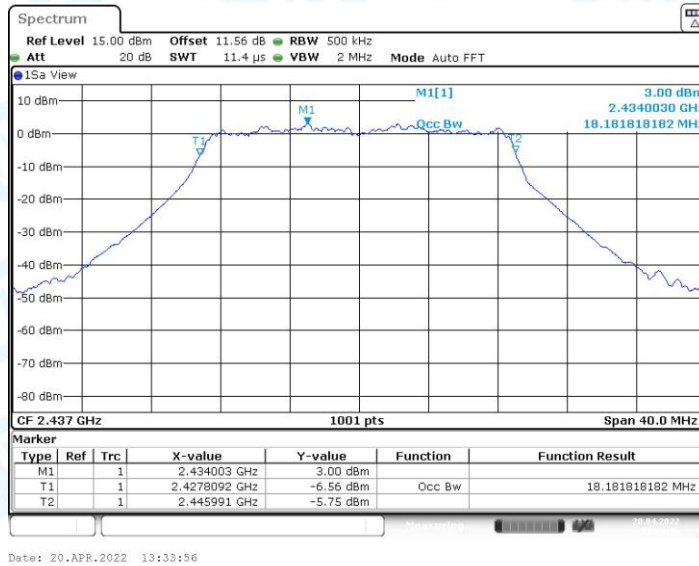
11G_Ant1_2437



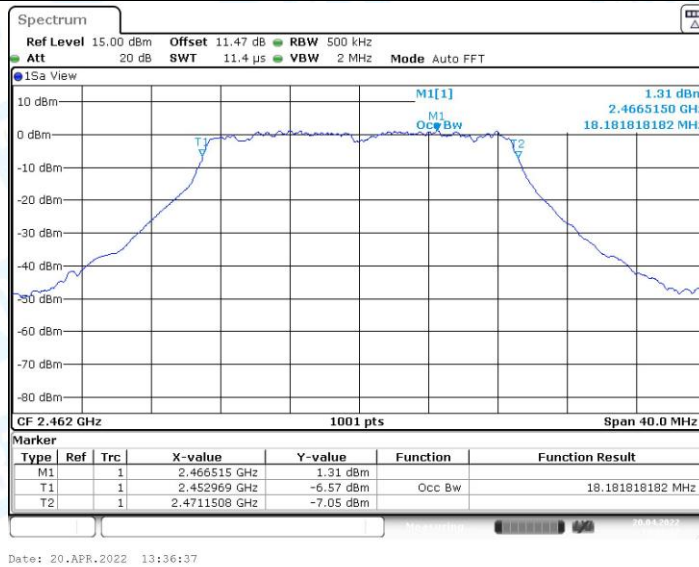
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

3. Maximum conducted output power

3.1. Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	16.30	≤30.00	PASS
		2437	16.09	≤30.00	PASS
		2462	16.14	≤30.00	PASS
11G	Ant1	2412	16.48	≤30.00	PASS
		2437	16.63	≤30.00	PASS
		2462	16.77	≤30.00	PASS
11N20SISO	Ant1	2412	17.66	≤30.00	PASS
		2437	17.86	≤30.00	PASS
		2462	16.79	≤30.00	PASS

4. Maximum power spectral density

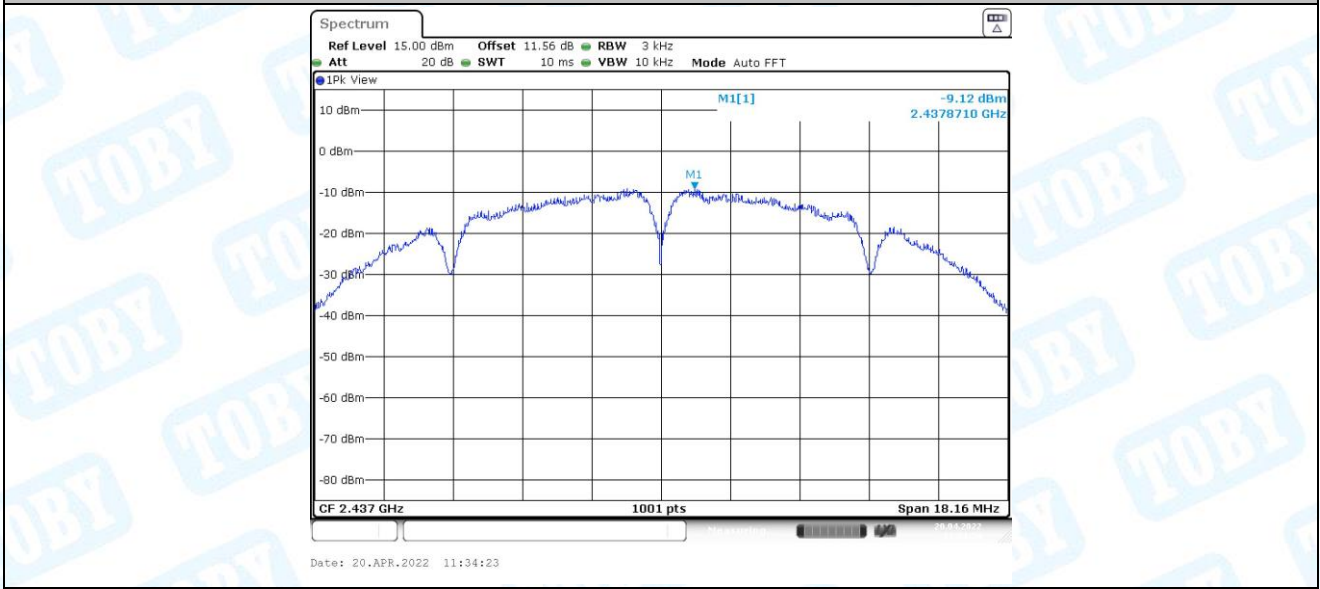
4.1. Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-8.41	≤8.00	PASS
		2437	-9.12	≤8.00	PASS
		2462	-7.6	≤8.00	PASS
11G	Ant1	2412	-16.53	≤8.00	PASS
		2437	-16.97	≤8.00	PASS
		2462	-16.64	≤8.00	PASS
11N20SISO	Ant1	2412	-16.35	≤8.00	PASS
		2437	-15.45	≤8.00	PASS
		2462	-16.78	≤8.00	PASS

4.2. Test Graphs



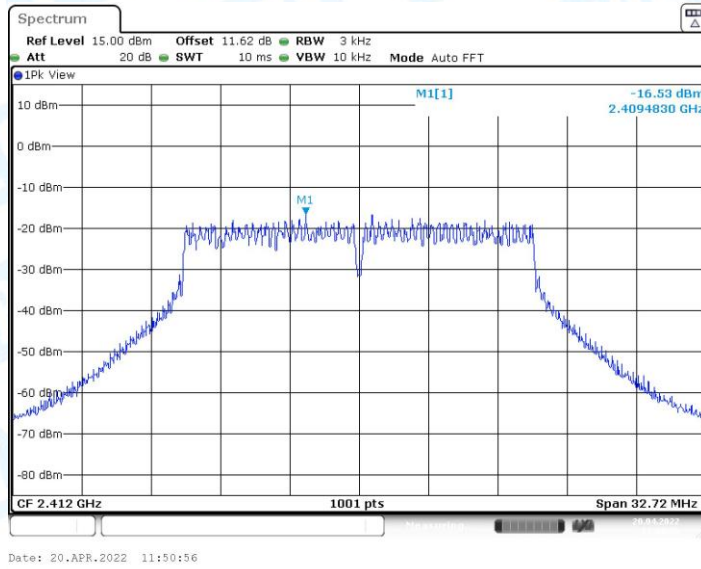
11B_Ant1_2412



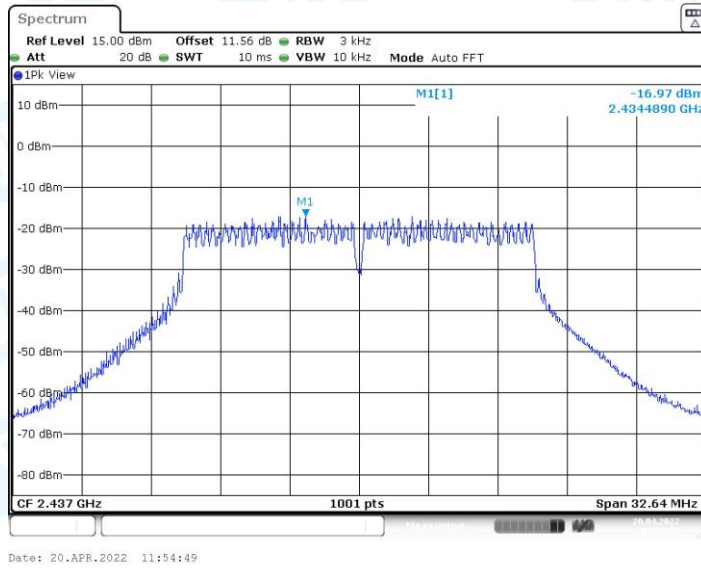
11B_Ant1_2437



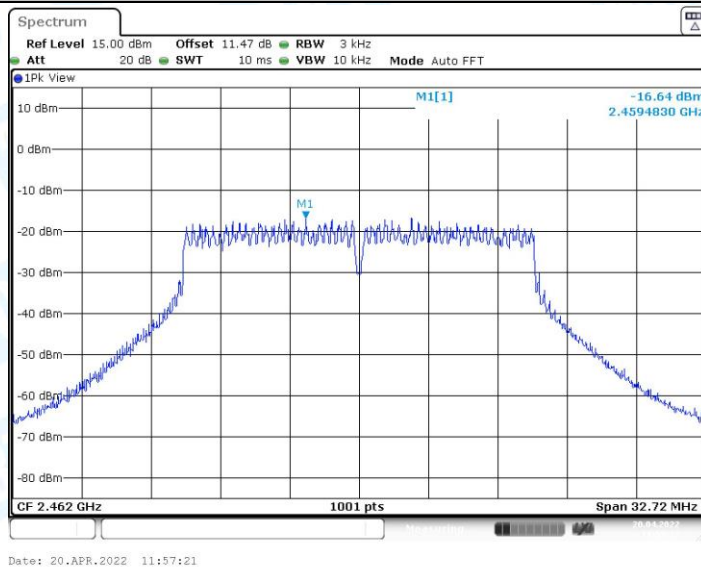
11B_Ant1_2462



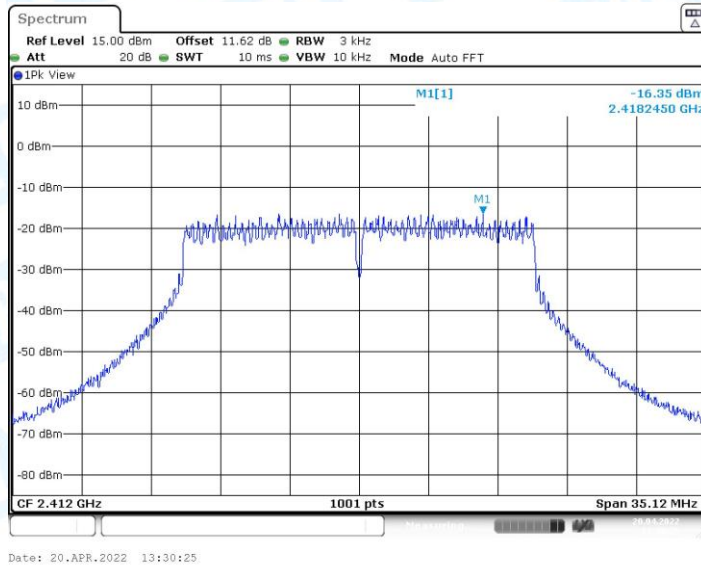
11G_Ant1_2412



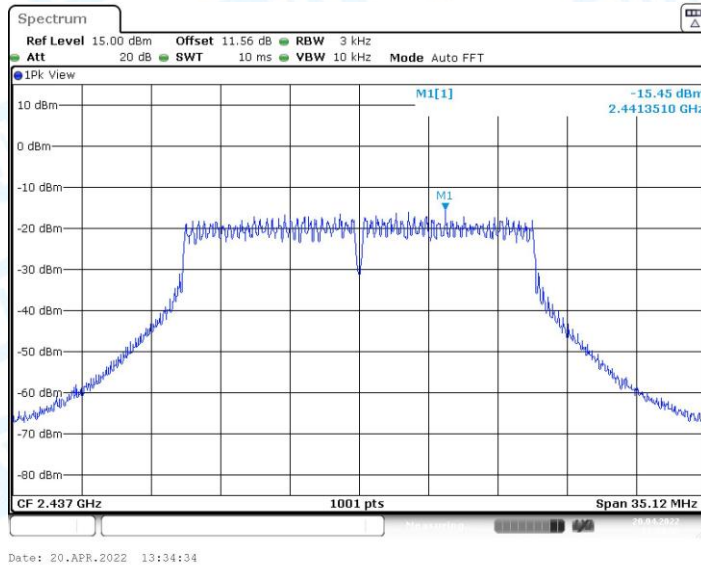
11G_Ant1_2437



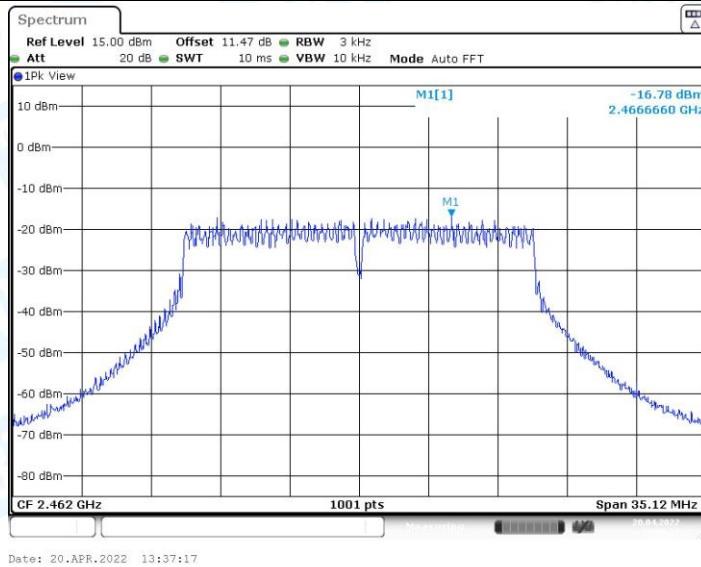
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



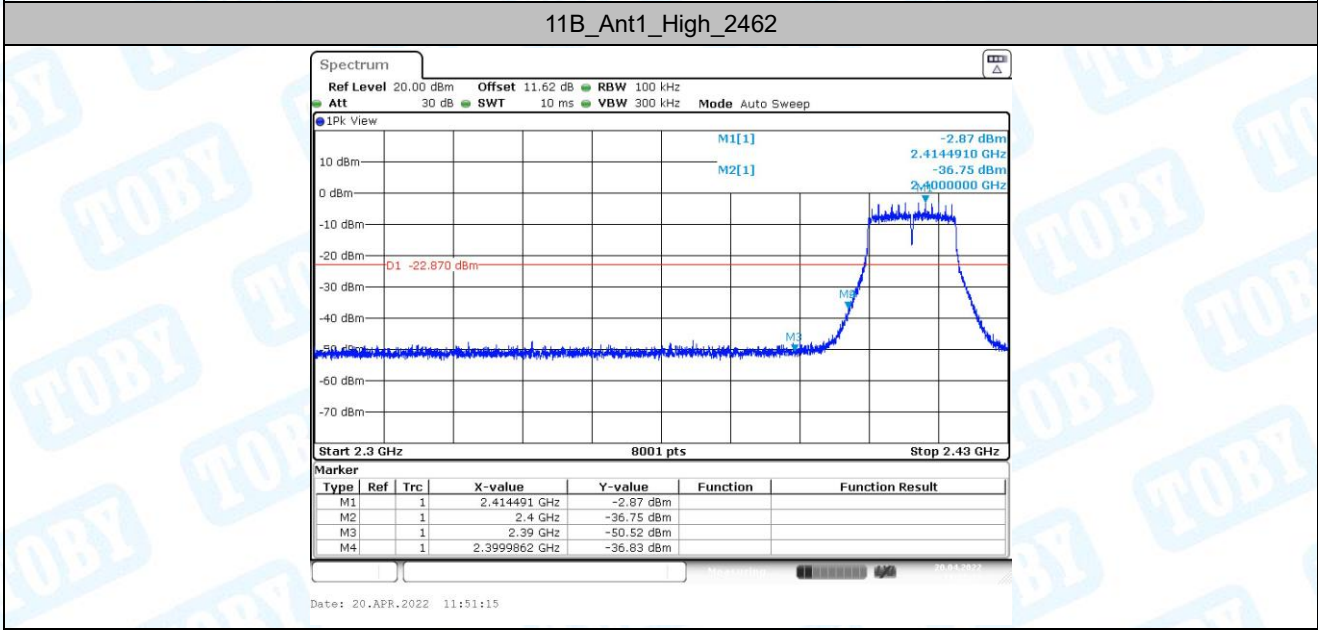
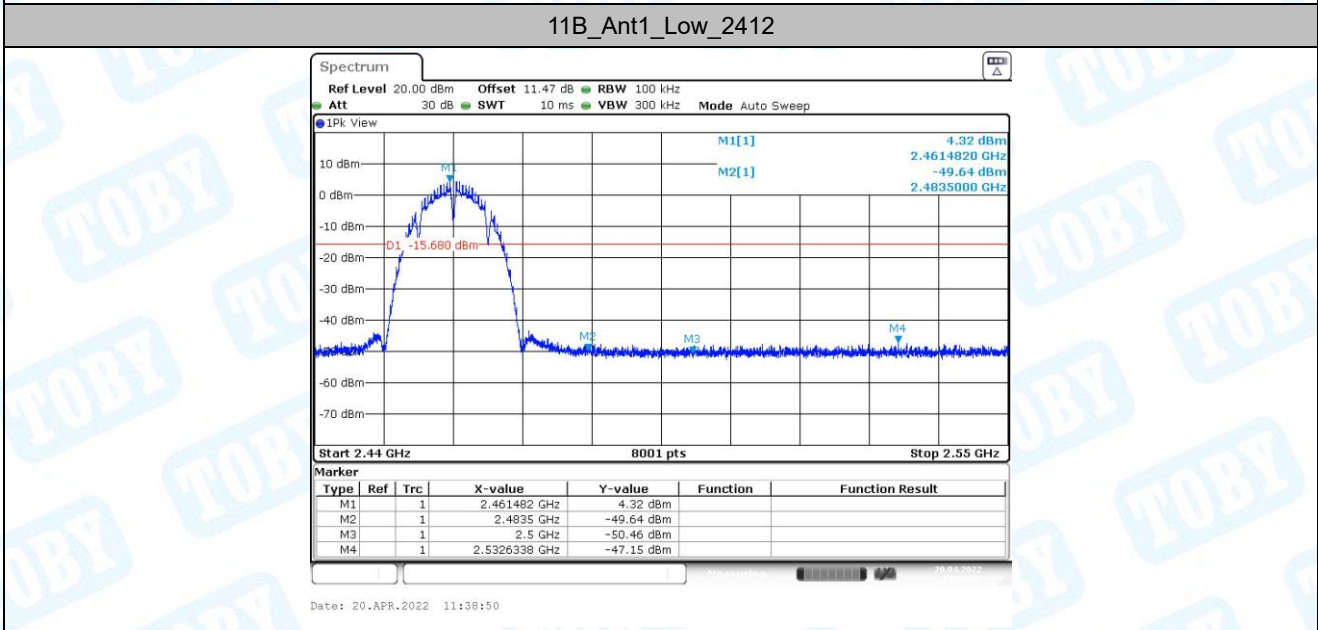
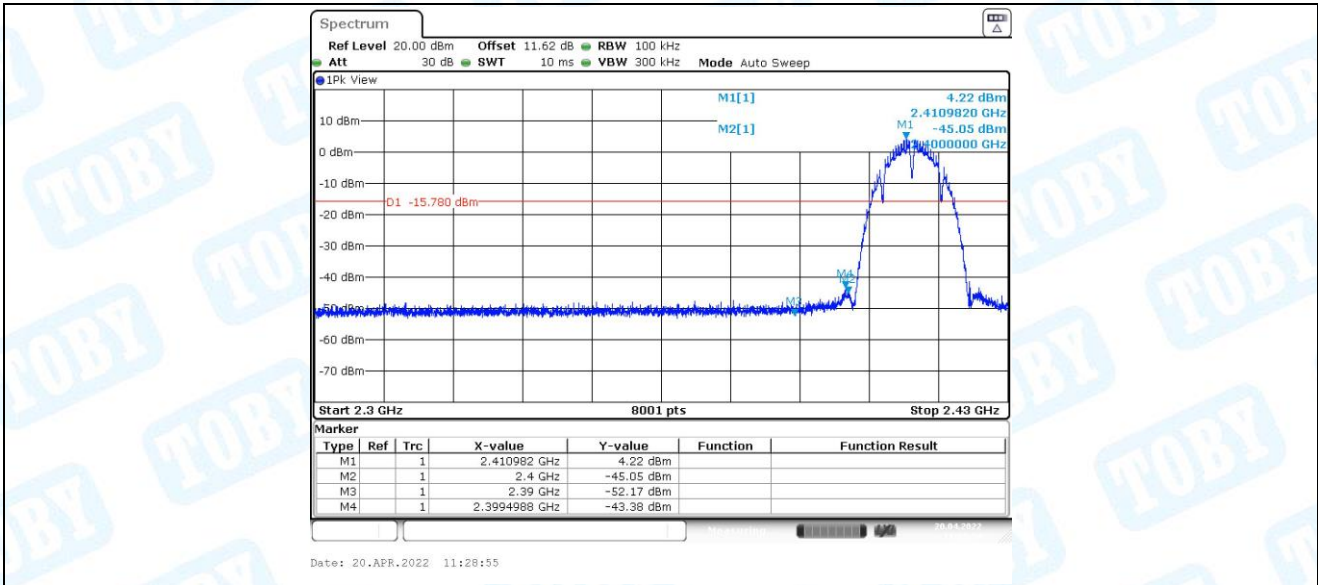
11N20SISO_Ant1_2462

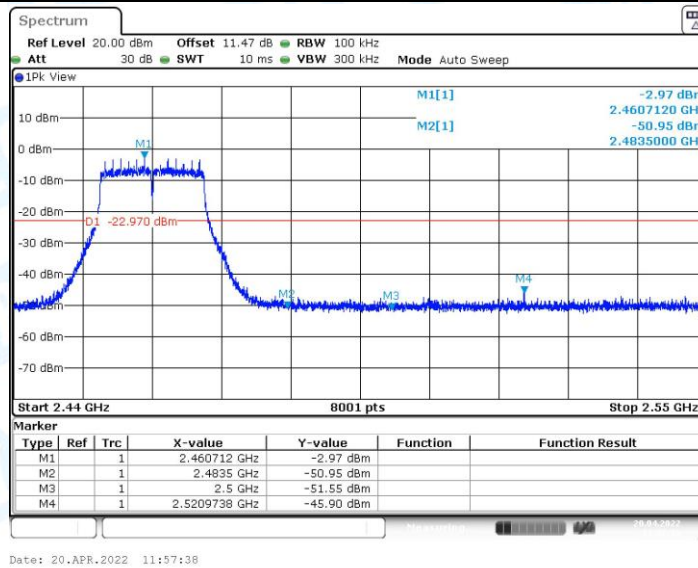
5. Band edge measurements

5.1. Test Result

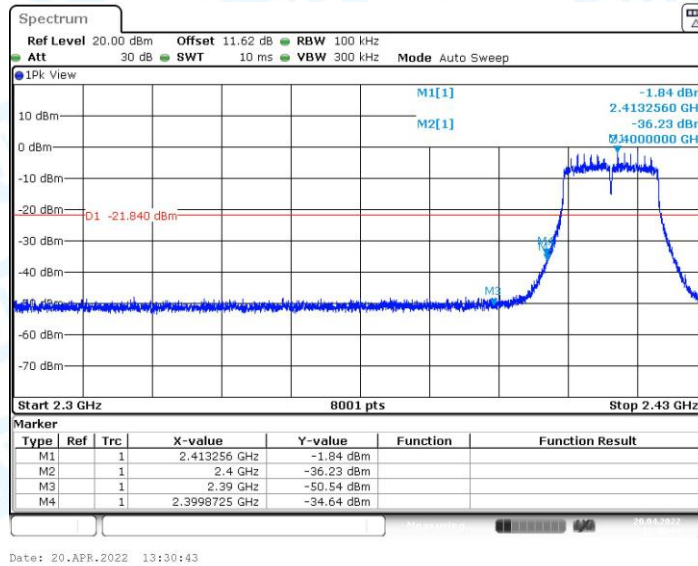
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.22	-43.38	≤-15.78	PASS
		High	2462	4.32	-47.15	≤-15.68	PASS
11G	Ant1	Low	2412	-2.87	-36.83	≤-22.87	PASS
		High	2462	-2.97	-45.9	≤-22.97	PASS
11N20SISO	Ant1	Low	2412	-1.84	-34.64	≤-21.84	PASS
		High	2462	-2.55	-46.76	≤-22.55	PASS

5.2. Test Graphs

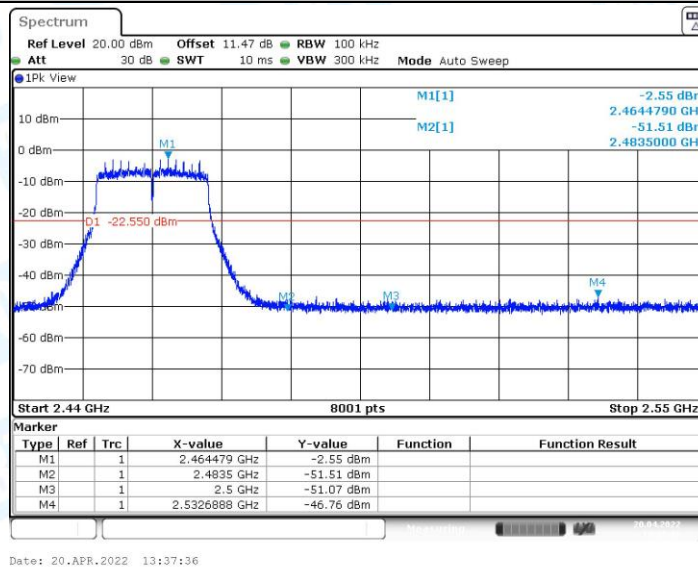




11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



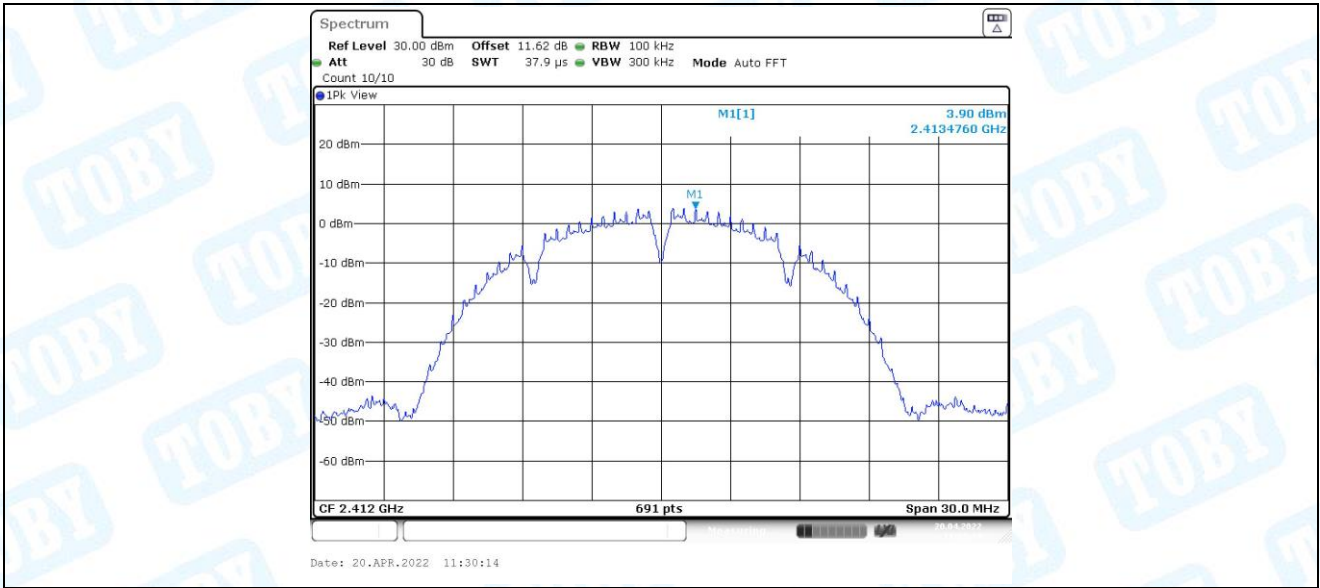
11N20SISO_Ant1_High_2462

6. Conducted Spurious Emission

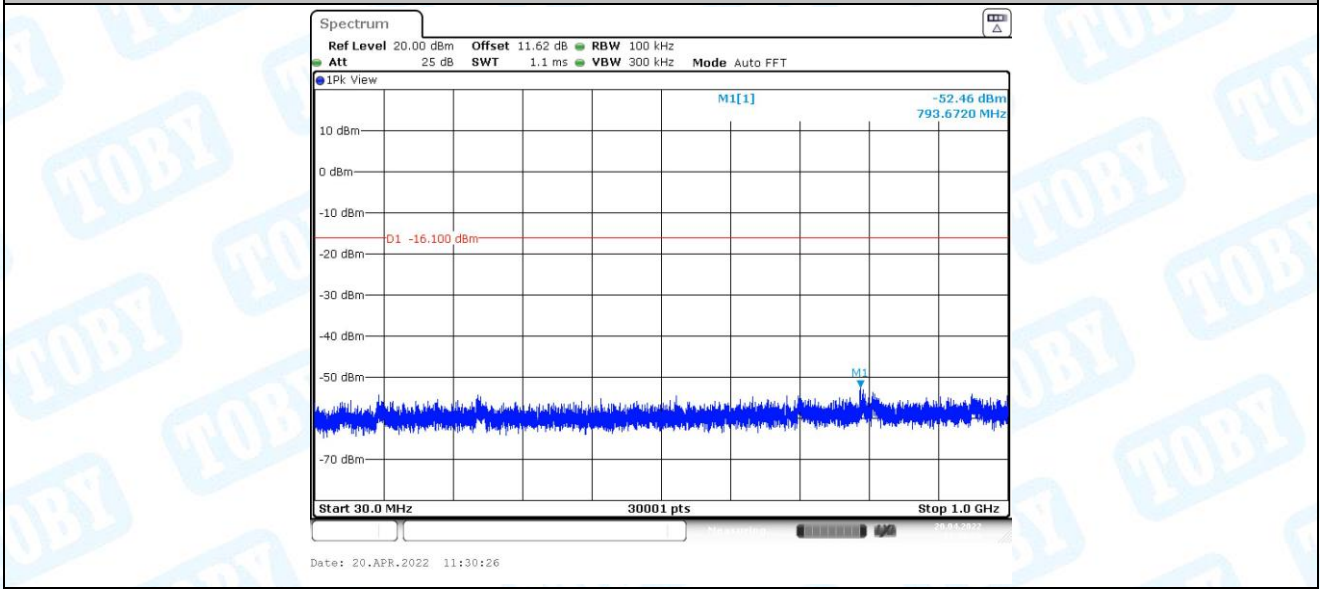
6.1. Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	3.90	3.90	---	PASS
			30~1000	3.90	-52.46	≤-16.1	PASS
			1000~26500	3.90	-46.68	≤-16.1	PASS
		2437	Reference	4.16	4.16	---	PASS
			30~1000	4.16	-53.66	≤-15.84	PASS
			1000~26500	4.16	-46.82	≤-15.84	PASS
		2462	Reference	4.99	4.99	---	PASS
			30~1000	4.99	-53.59	≤-15.01	PASS
			1000~26500	4.99	-47.15	≤-15.01	PASS
11G	Ant1	2412	Reference	-3.52	-3.52	---	PASS
			30~1000	-3.52	-52.73	≤-23.52	PASS
			1000~26500	-3.52	-47.07	≤-23.52	PASS
		2437	Reference	-2.52	-2.52	---	PASS
			30~1000	-2.52	-52.64	≤-22.52	PASS
			1000~26500	-2.52	-47.12	≤-22.52	PASS
		2462	Reference	-2.45	-2.45	---	PASS
			30~1000	-2.45	-53.41	≤-22.45	PASS
			1000~26500	-2.45	-47.12	≤-22.45	PASS
11N20SISO	Ant1	2412	Reference	-1.44	-1.44	---	PASS
			30~1000	-1.44	-52.95	≤-21.44	PASS
			1000~26500	-1.44	-47.45	≤-21.44	PASS
		2437	Reference	-1.32	-1.32	---	PASS
			30~1000	-1.32	-52.81	≤-21.32	PASS
			1000~26500	-1.32	-46.74	≤-21.32	PASS
		2462	Reference	-3.18	-3.18	---	PASS
			30~1000	-3.18	-53	≤-23.18	PASS
			1000~26500	-3.18	-46.15	≤-23.18	PASS

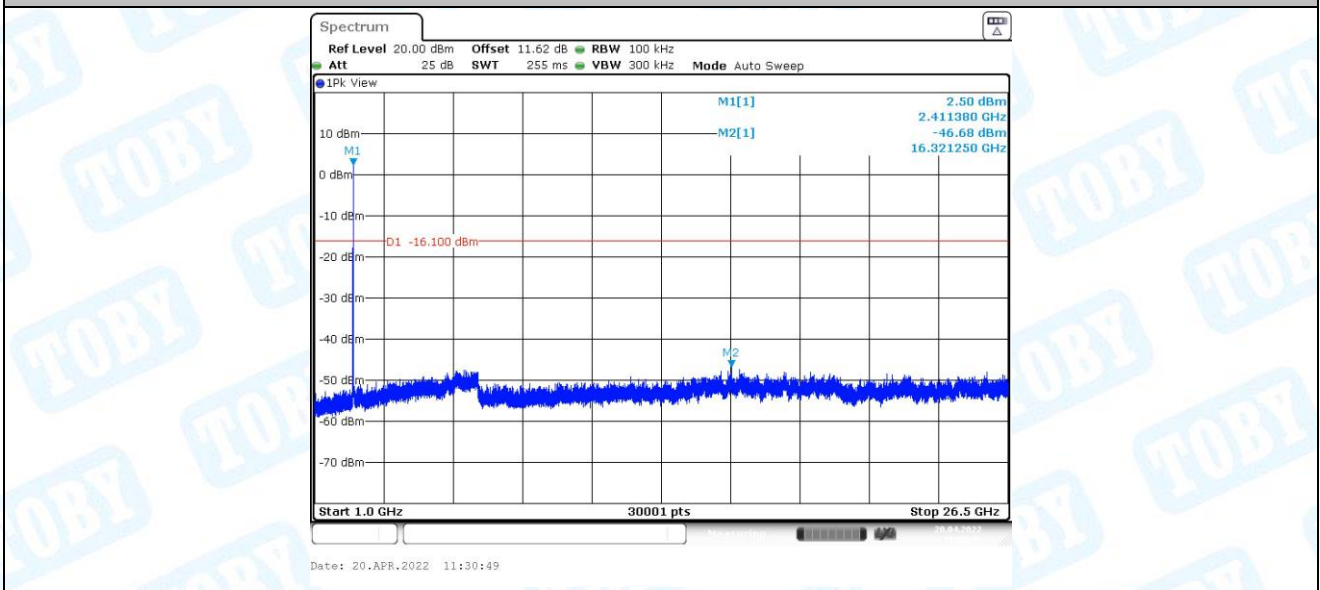
6.2. Test Graphs



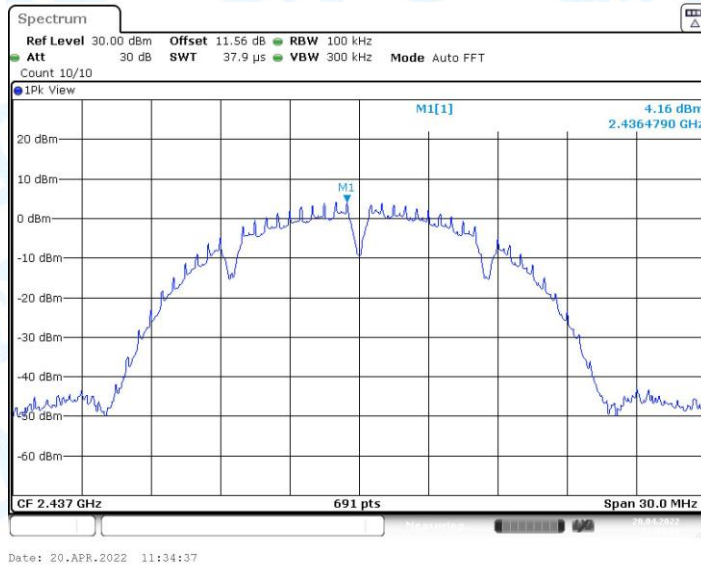
11B_Ant1_2412_0~Reference



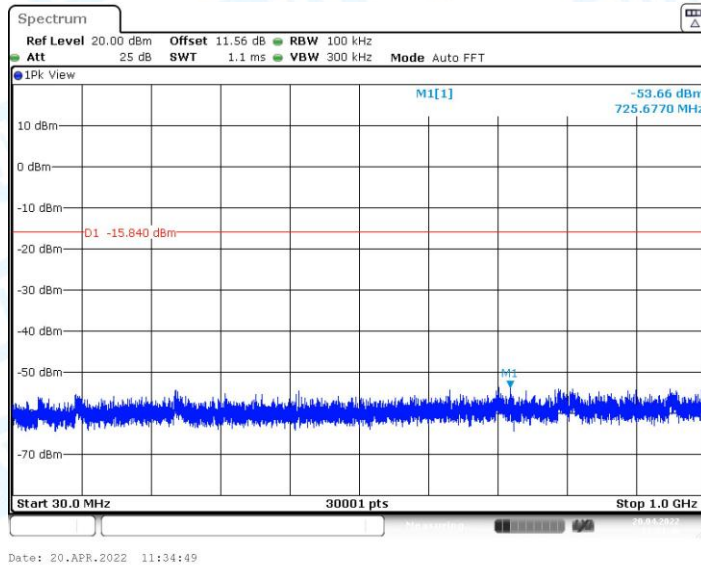
11B_Ant1_2412_30~1000



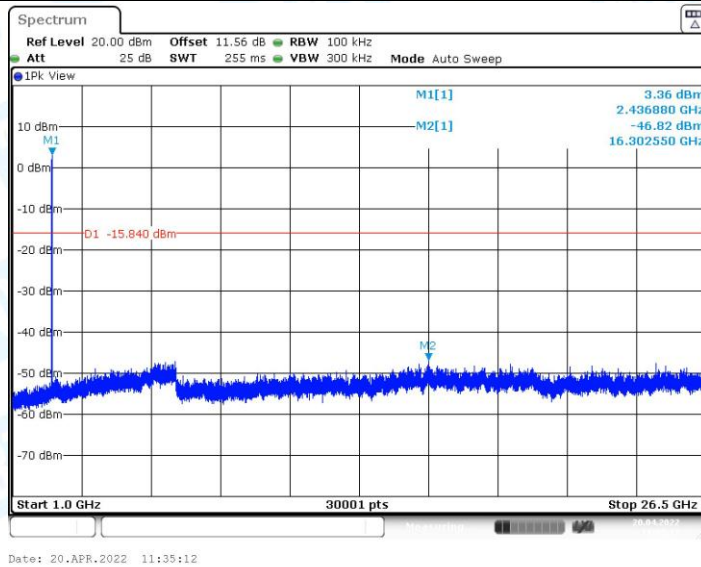
11B_Ant1_2412_1000~26500



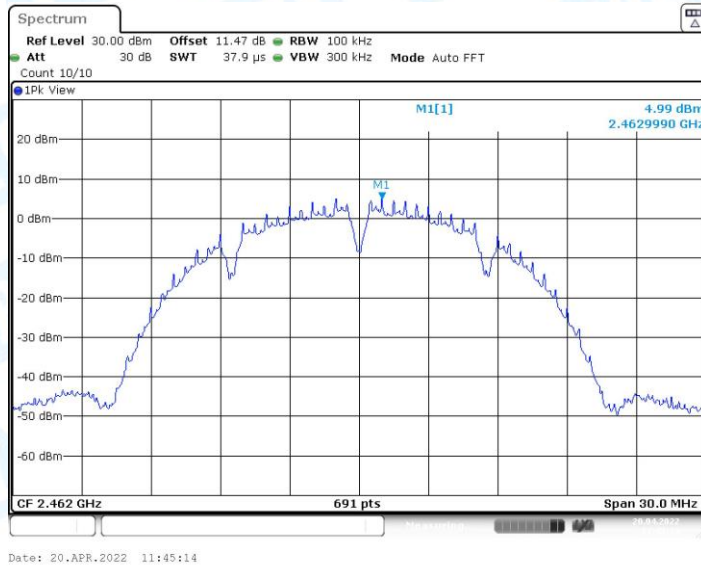
11B_Ant1_2437_0~Reference



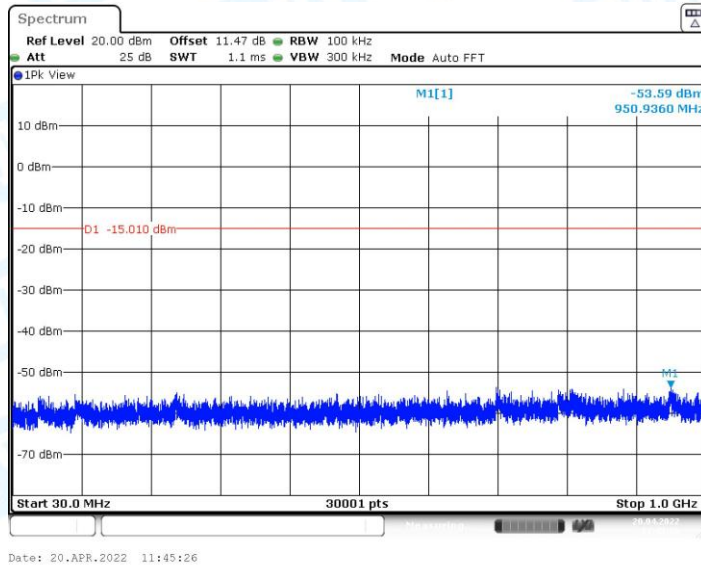
11B_Ant1_2437_30~1000



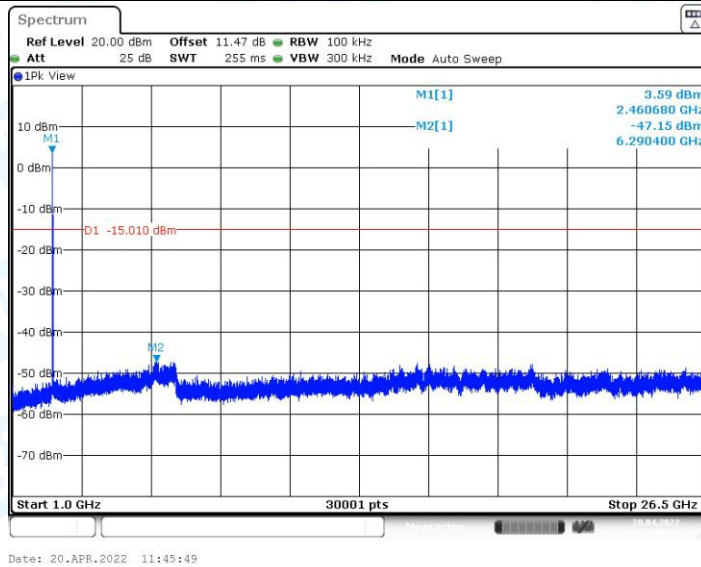
11B_Ant1_2437_1000~26500



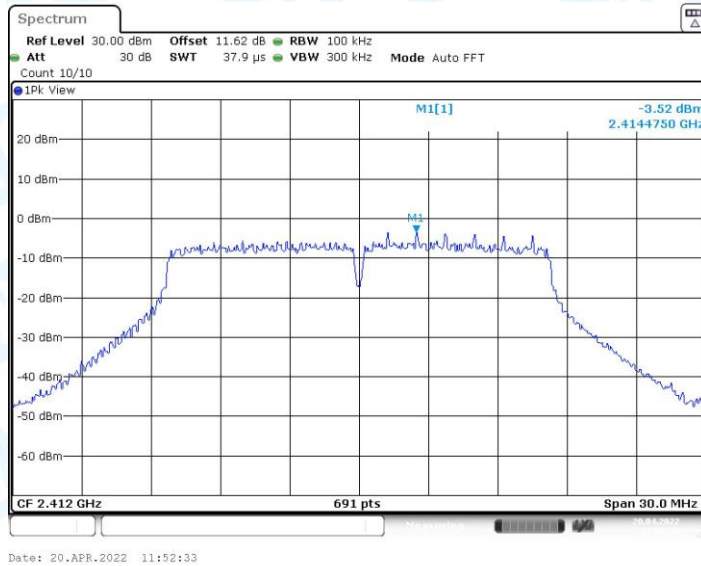
11B_Ant1_2462_0~Reference



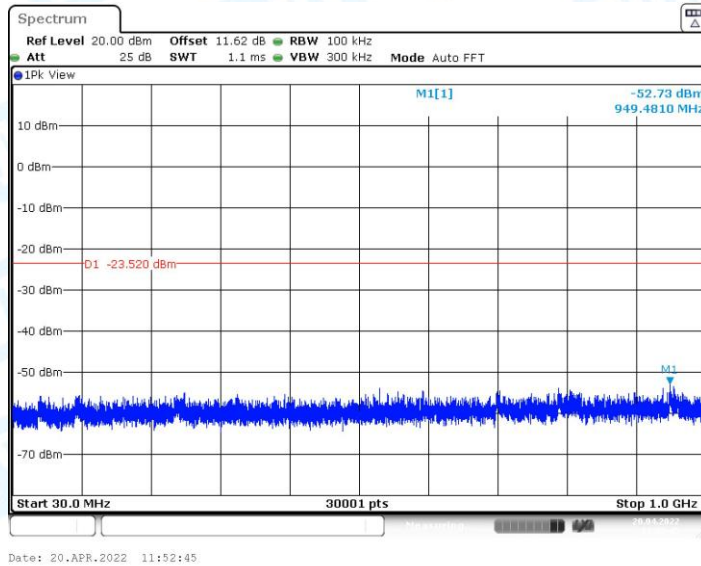
11B_Ant1_2462_30~1000



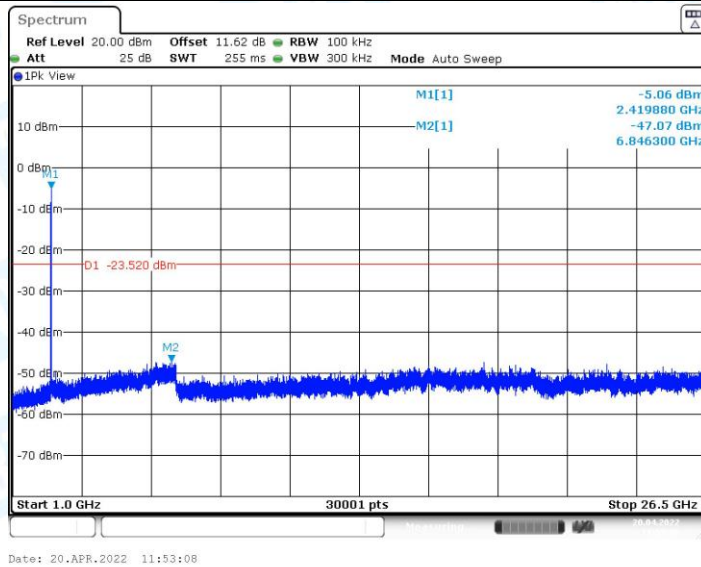
11B_Ant1_2462_1000~26500



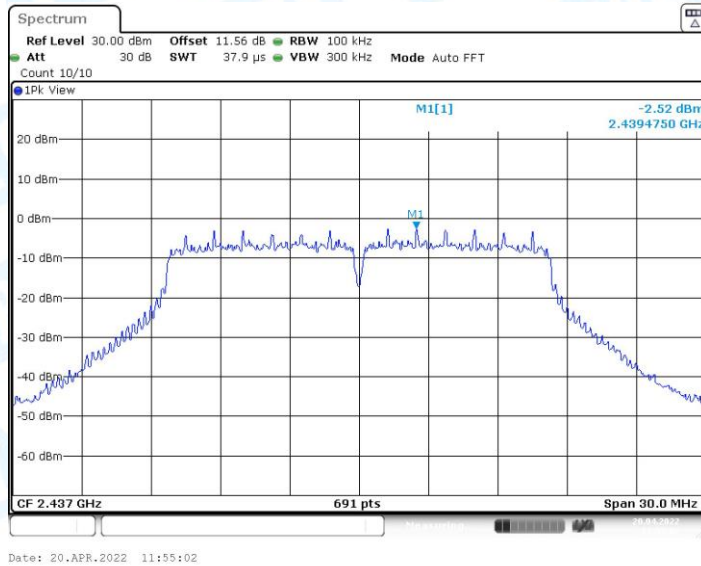
11G_Ant1_2412_0~Reference



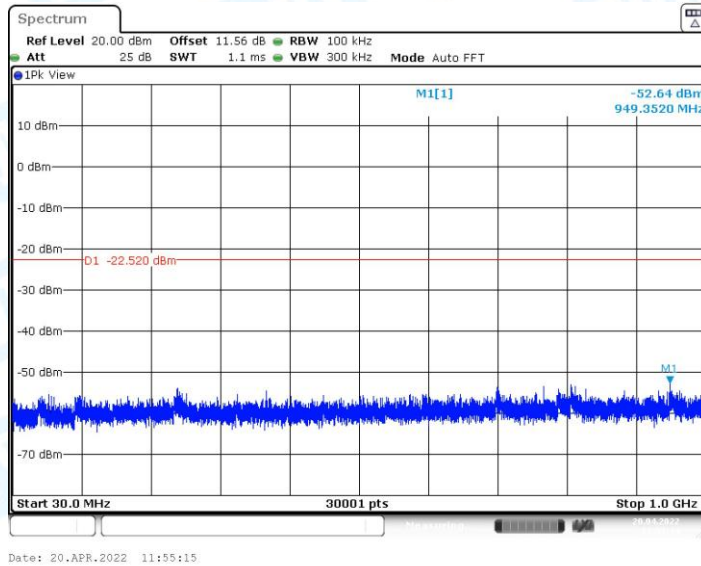
11G_Ant1_2412_30~1000



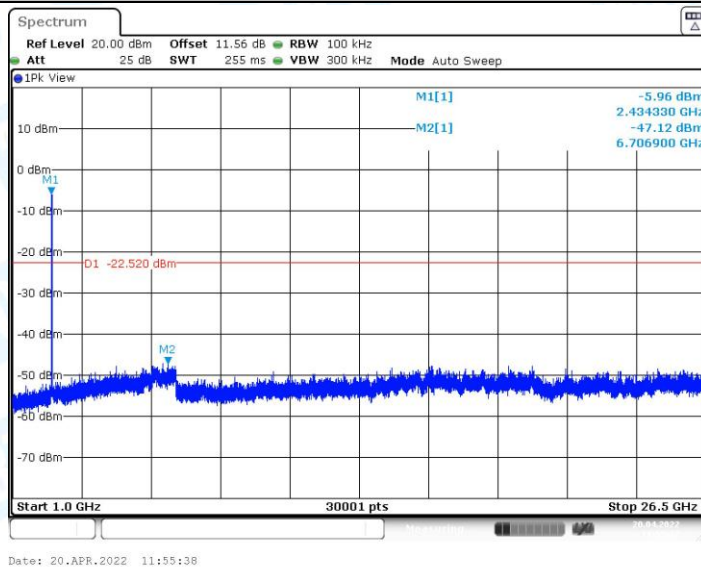
11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



11G_Ant1_2437_1000~26500