

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

General Description of EUT	
Product Name:	IPTV Receiver
Test Model:	Amigo 7X V2
Sample ID:	20210821-21-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	52%
Test Voltage:	DC12V
Test Engineer:	Hejingchang
Note: For a more detailed features description, please refer to the report TB-FCC183405	

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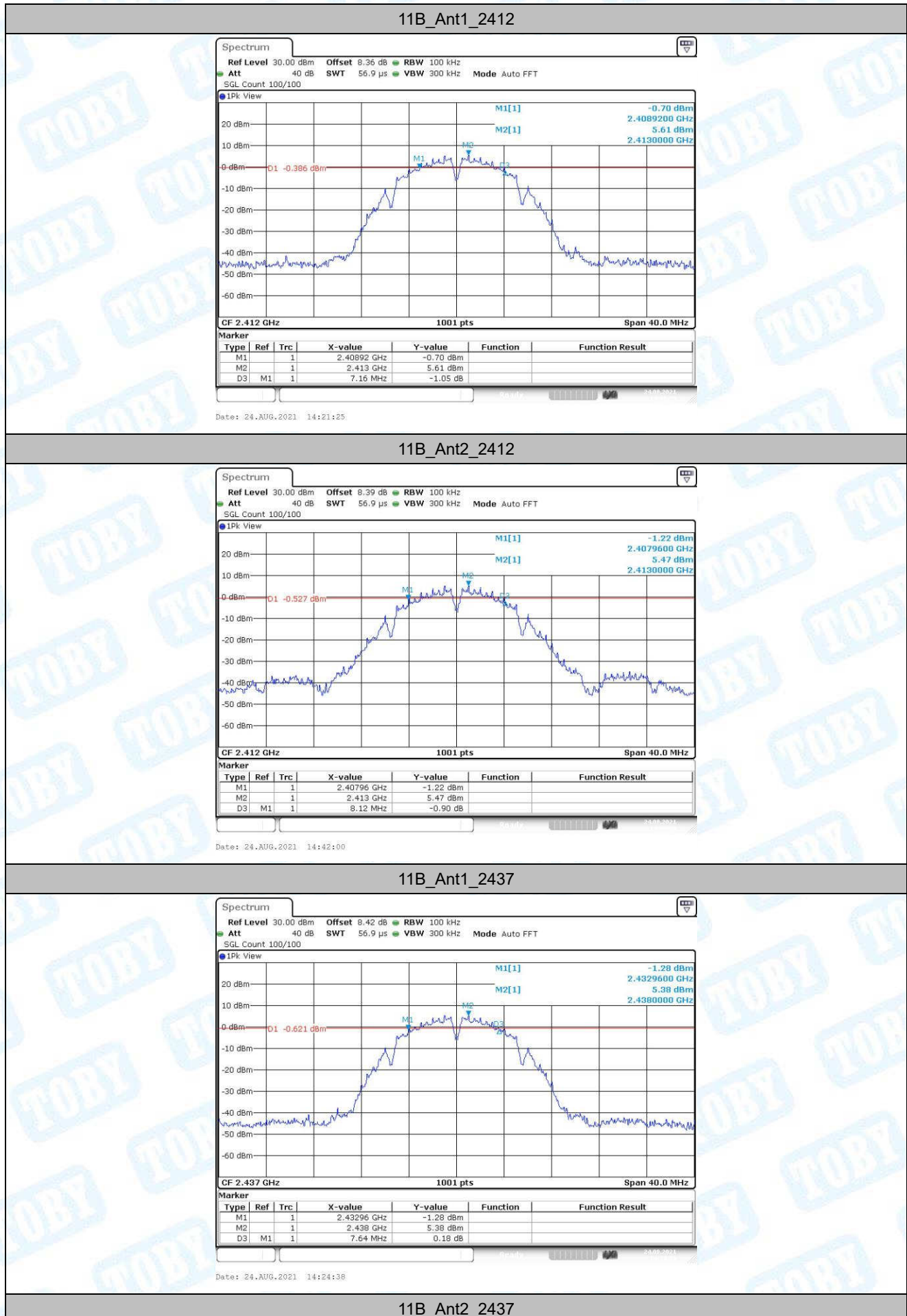
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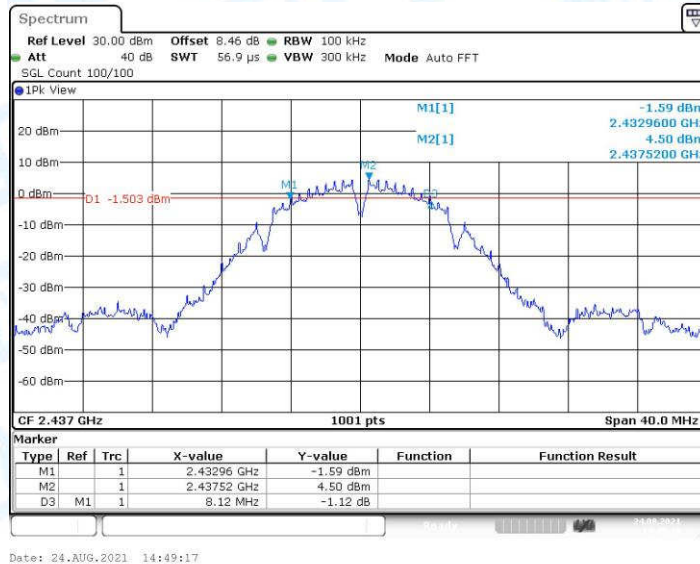
1. DTS Bandwidth

1.1. Test Result

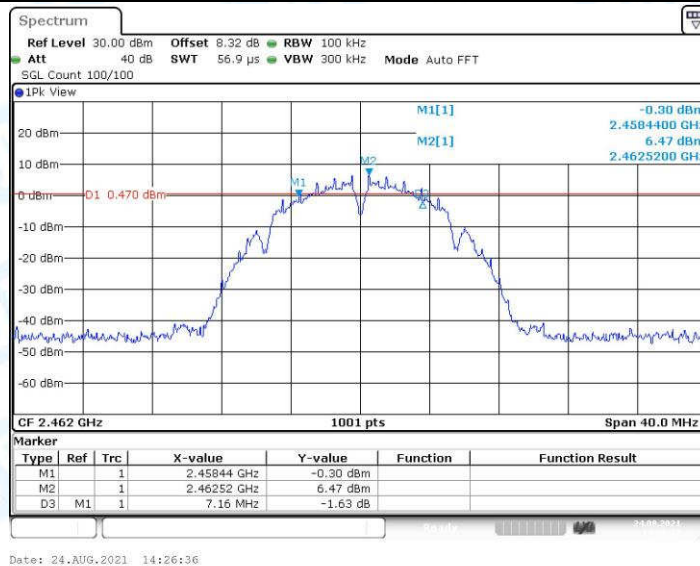
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	7.160	2408.920	2416.080	0.5	PASS
	Ant2	2412	8.120	2407.960	2416.080	0.5	PASS
	Ant1	2437	7.640	2432.960	2440.600	0.5	PASS
	Ant2	2437	8.120	2432.960	2441.080	0.5	PASS
	Ant1	2462	7.160	2458.440	2465.600	0.5	PASS
	Ant2	2462	7.160	2458.440	2465.600	0.5	PASS
11G	Ant1	2412	16.160	2404.080	2420.240	0.5	PASS
	Ant2	2412	16.400	2403.800	2420.200	0.5	PASS
	Ant1	2437	16.440	2428.800	2445.240	0.5	PASS
	Ant2	2437	16.440	2428.800	2445.240	0.5	PASS
	Ant1	2462	16.000	2454.200	2470.200	0.5	PASS
	Ant2	2462	17.720	2453.200	2470.920	0.5	PASS
11N20MIMO	Ant1	2412	17.000	2403.840	2420.840	0.5	PASS
	Ant2	2412	17.720	2403.160	2420.880	0.5	PASS
	Ant1	2437	17.640	2428.200	2445.840	0.5	PASS
	Ant2	2437	17.680	2428.160	2445.840	0.5	PASS
	Ant1	2462	17.640	2453.200	2470.840	0.5	PASS
	Ant2	2462	17.760	2453.160	2470.920	0.5	PASS

1.2. Test Graphs

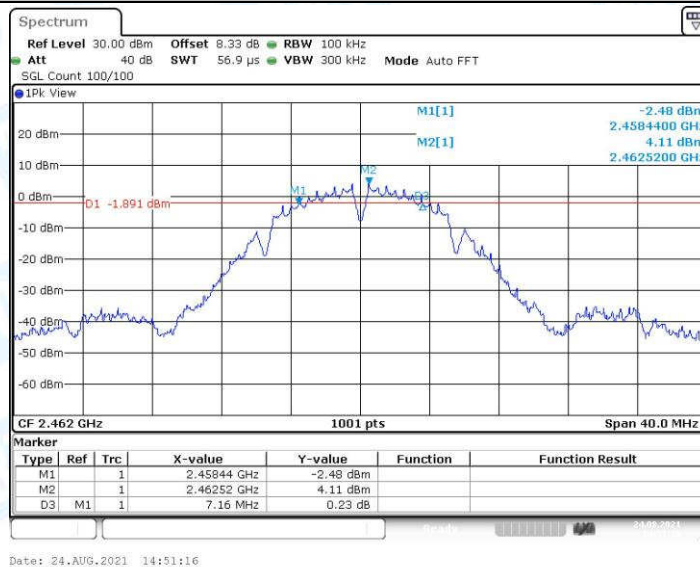




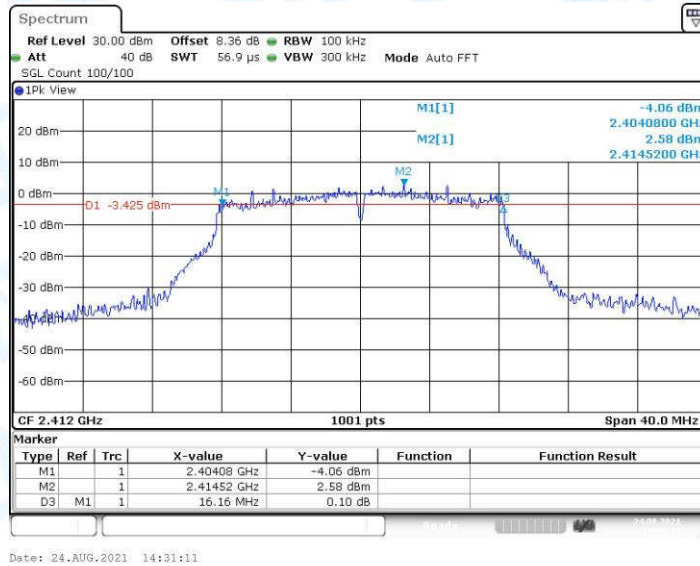
11B_Ant1_2462



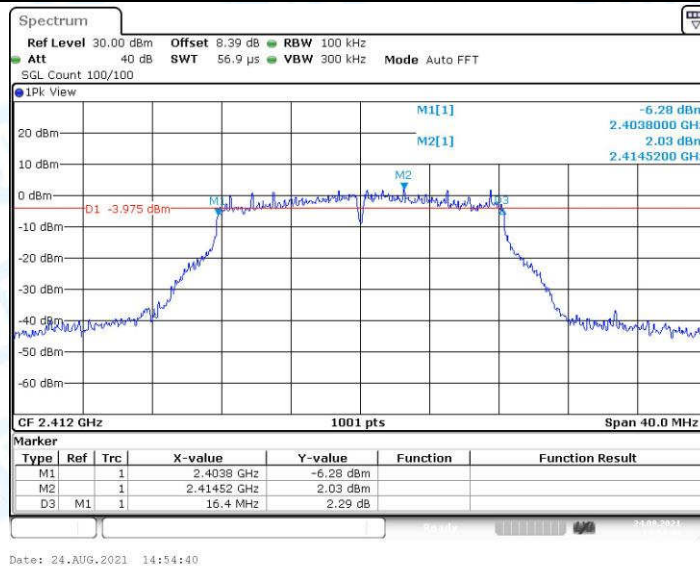
11B_Ant2_2462



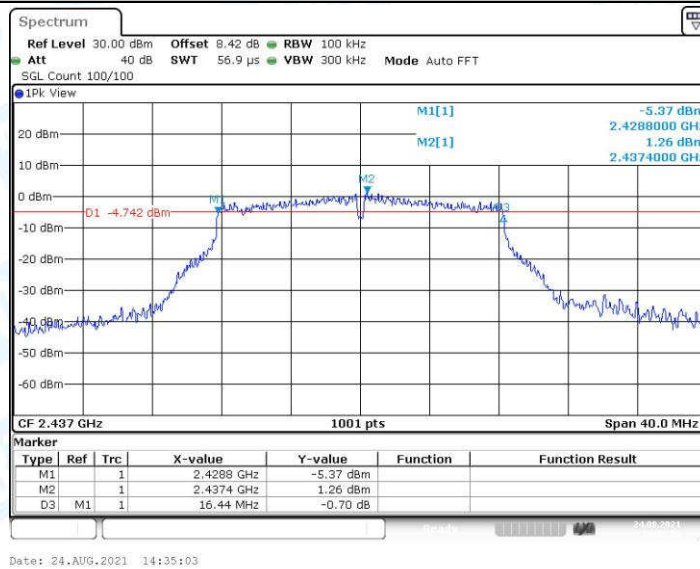
11G_Ant1_2412



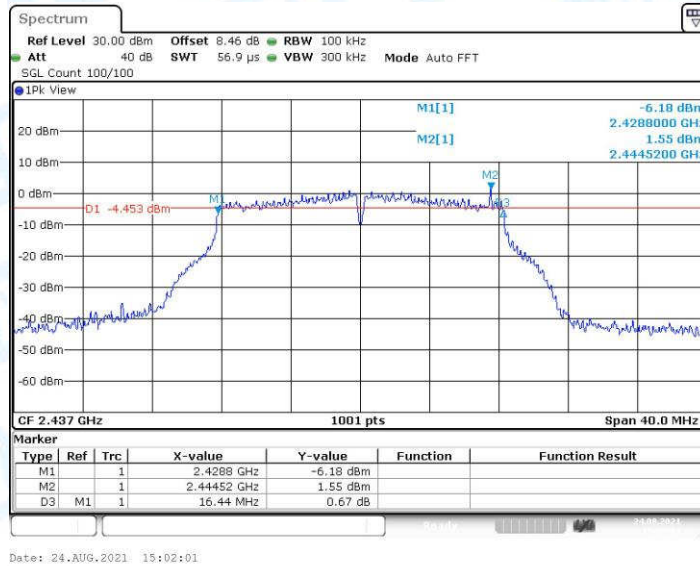
11G_Ant2_2412



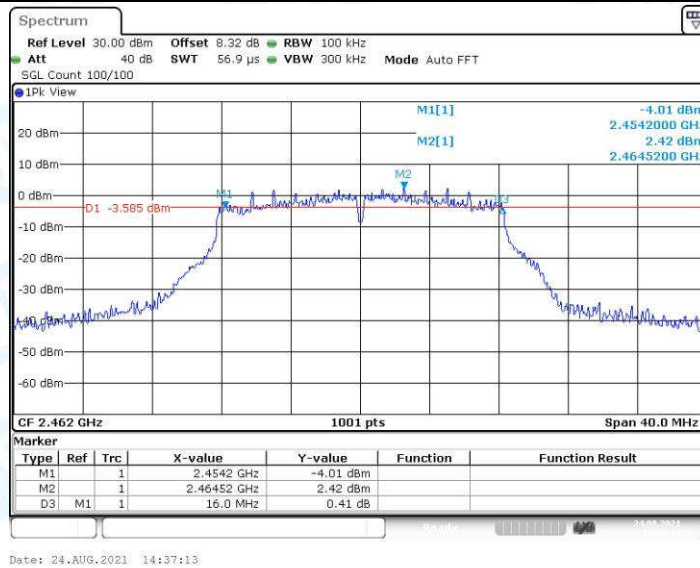
11G_Ant1_2437



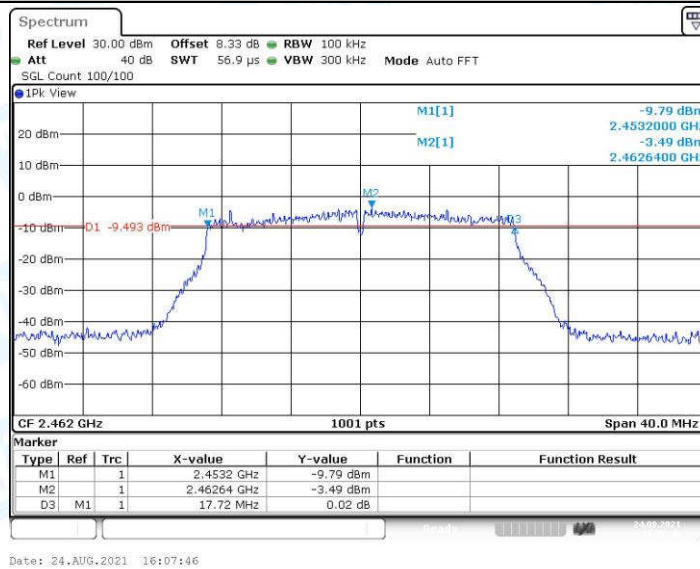
11G_Ant2_2437



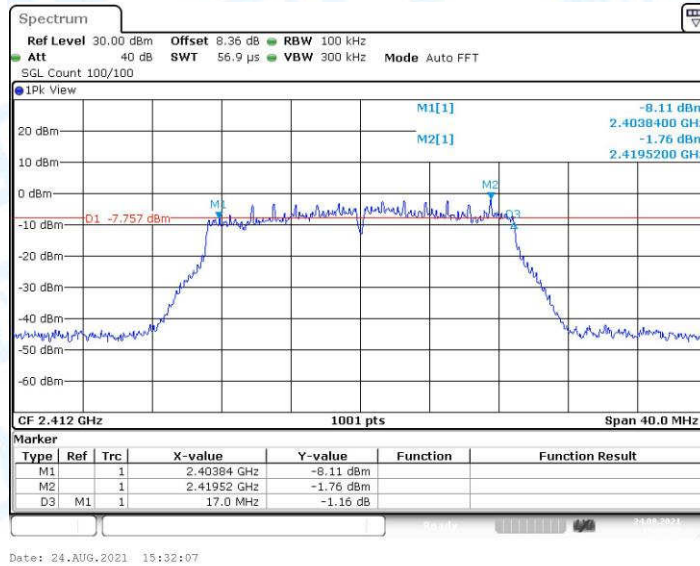
11G_Ant1_2462



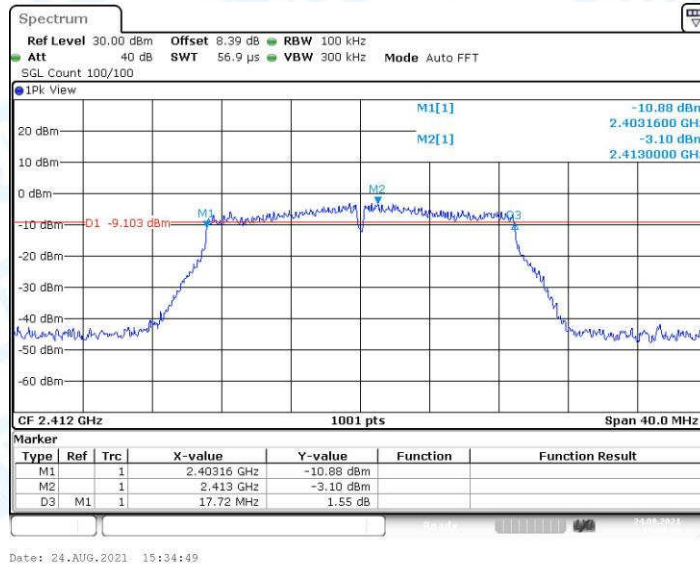
11G_Ant2_2462



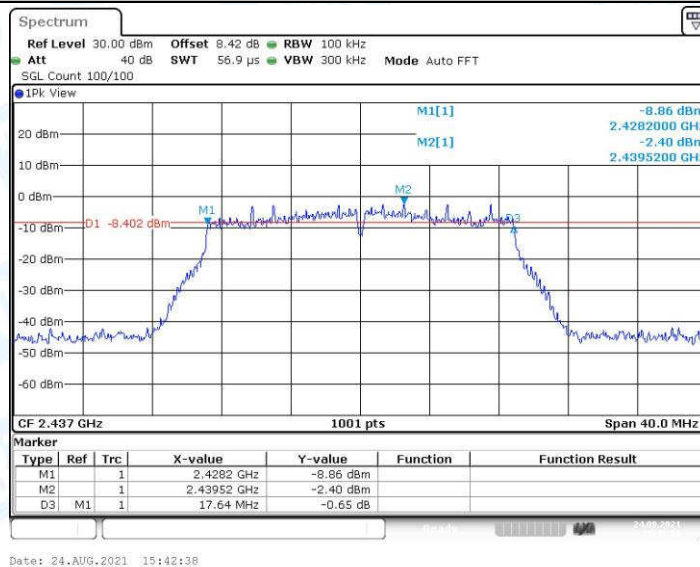
11N20MIMO_Ant1_2412



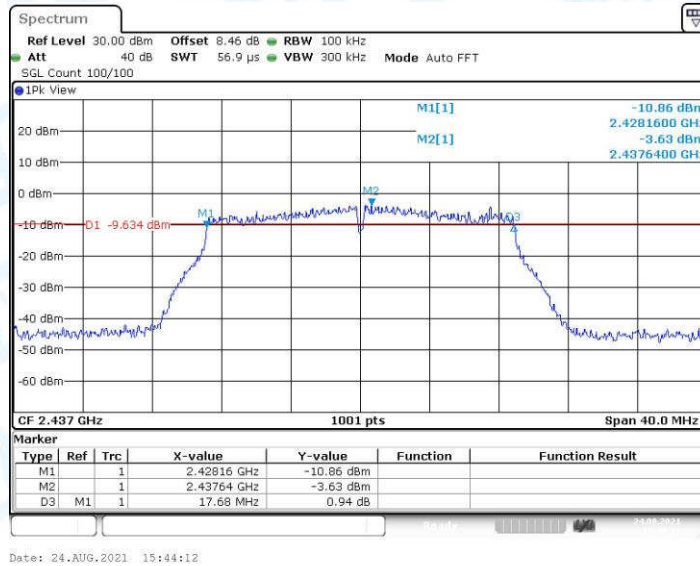
11N20MIMO_Ant2_2412



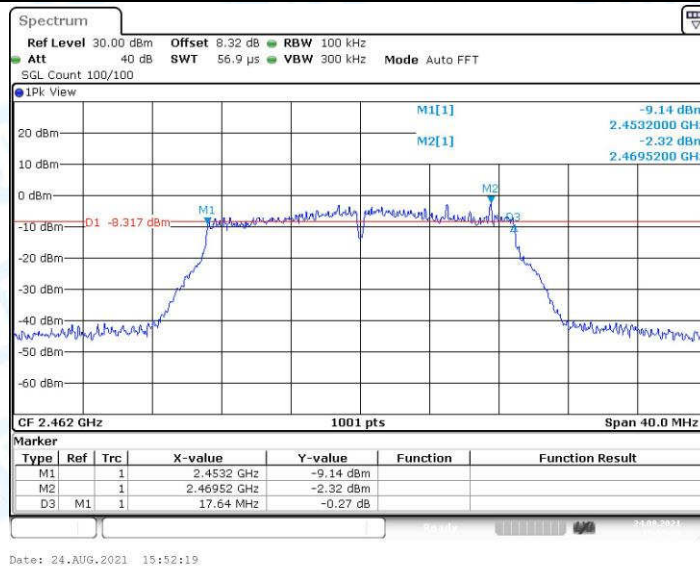
11N20MIMO_Ant1_2437



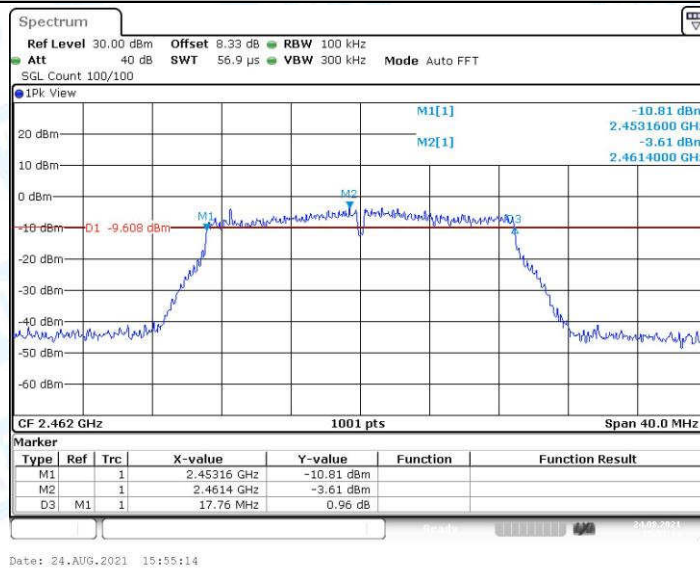
11N20MIMO_Ant2_2437



11N20MIMO_Ant1_2462



11N20MIMO_Ant2_2462

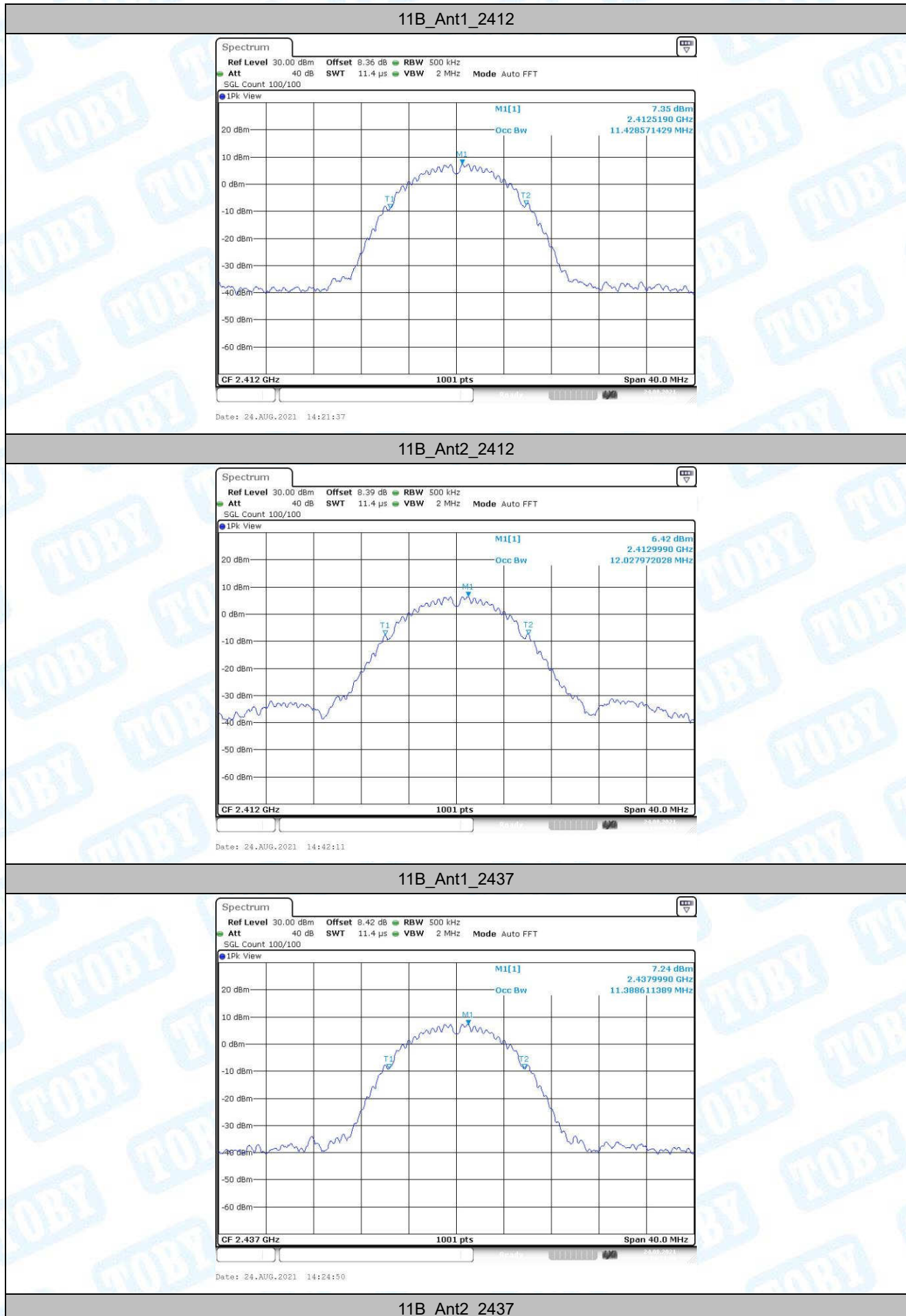


2. Occupied Channel Bandwidth

2.1. Test Result

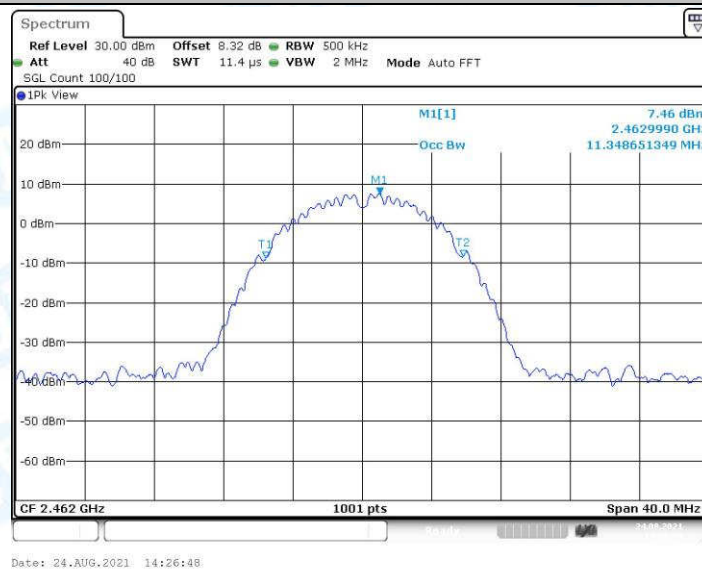
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	11.429	2406.446	2417.874	---	PASS
	Ant2	2412	12.028	2406.046	2418.074	---	PASS
	Ant1	2437	11.389	2431.326	2442.714	---	PASS
	Ant2	2437	12.068	2431.006	2443.074	---	PASS
	Ant1	2462	11.349	2456.446	2467.794	---	PASS
	Ant2	2462	12.068	2456.046	2468.114	---	PASS
11G	Ant1	2412	16.983	2403.608	2420.591	---	PASS
	Ant2	2412	16.823	2403.728	2420.551	---	PASS
	Ant1	2437	17.183	2428.449	2445.631	---	PASS
	Ant2	2437	17.063	2428.489	2445.551	---	PASS
	Ant1	2462	16.903	2453.728	2470.631	---	PASS
	Ant2	2462	18.182	2452.889	2471.071	---	PASS
11N20MIMO	Ant1	2412	18.222	2403.129	2421.351	---	PASS
	Ant2	2412	18.302	2402.929	2421.231	---	PASS
	Ant1	2437	18.462	2427.929	2446.391	---	PASS
	Ant2	2437	17.942	2428.049	2445.991	---	PASS
	Ant1	2462	17.902	2453.089	2470.991	---	PASS
	Ant2	2462	18.022	2453.009	2471.031	---	PASS

2.2. Test Graphs

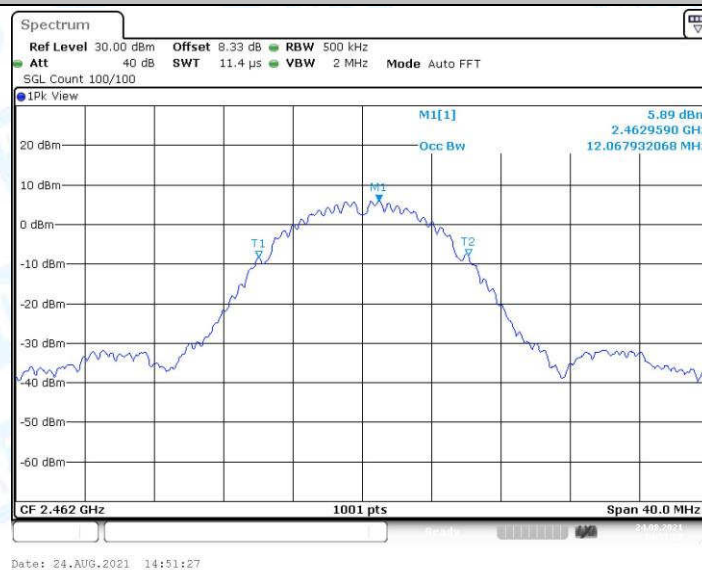




11B_Ant1_2462



11B_Ant2_2462



11G_Ant1_2412



11G_Ant2_2412



11G_Ant1_2437



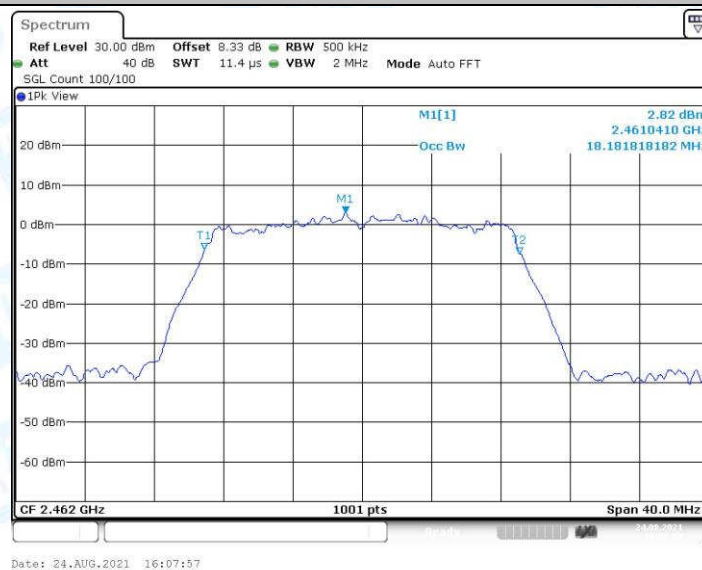
11G_Ant2_2437



11G_Ant1_2462



11G_Ant2_2462



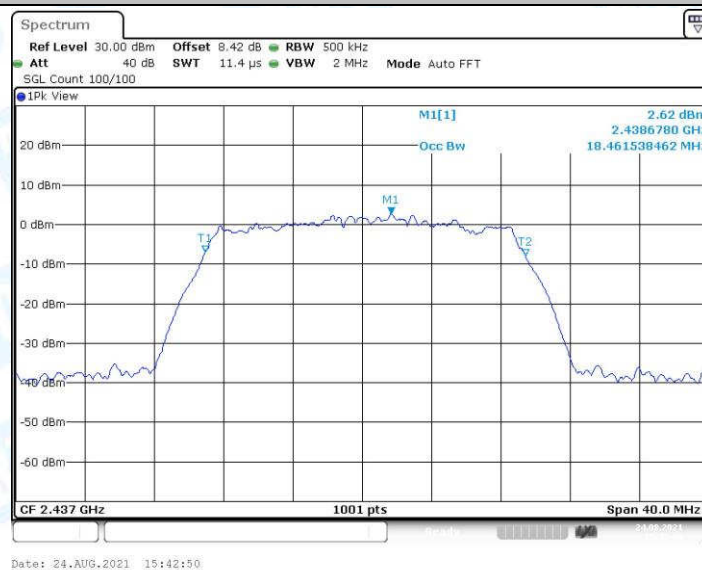
11N20MIMO_Ant1_2412



11N20MIMO_Ant2_2412



11N20MIMO_Ant1_2437



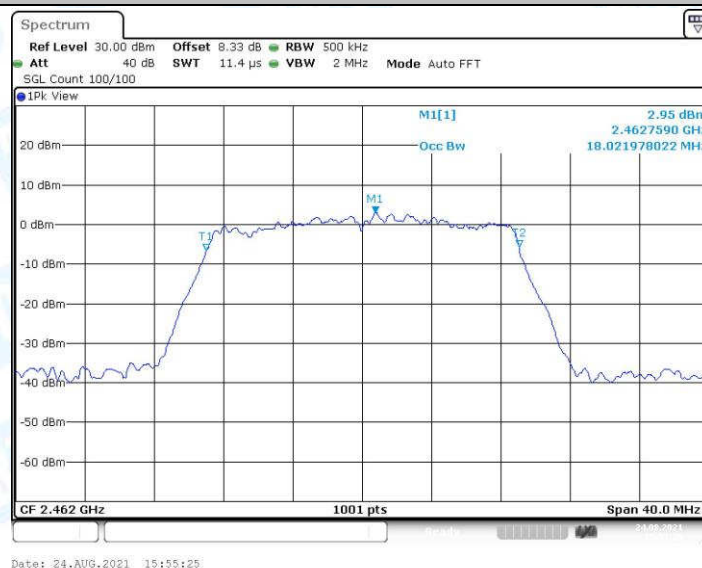
11N20MIMO_Ant2_2437



11N20MIMO_Ant1_2462



11N20MIMO_Ant2_2462



3. Maximum conducted output power

3.1. Test Result

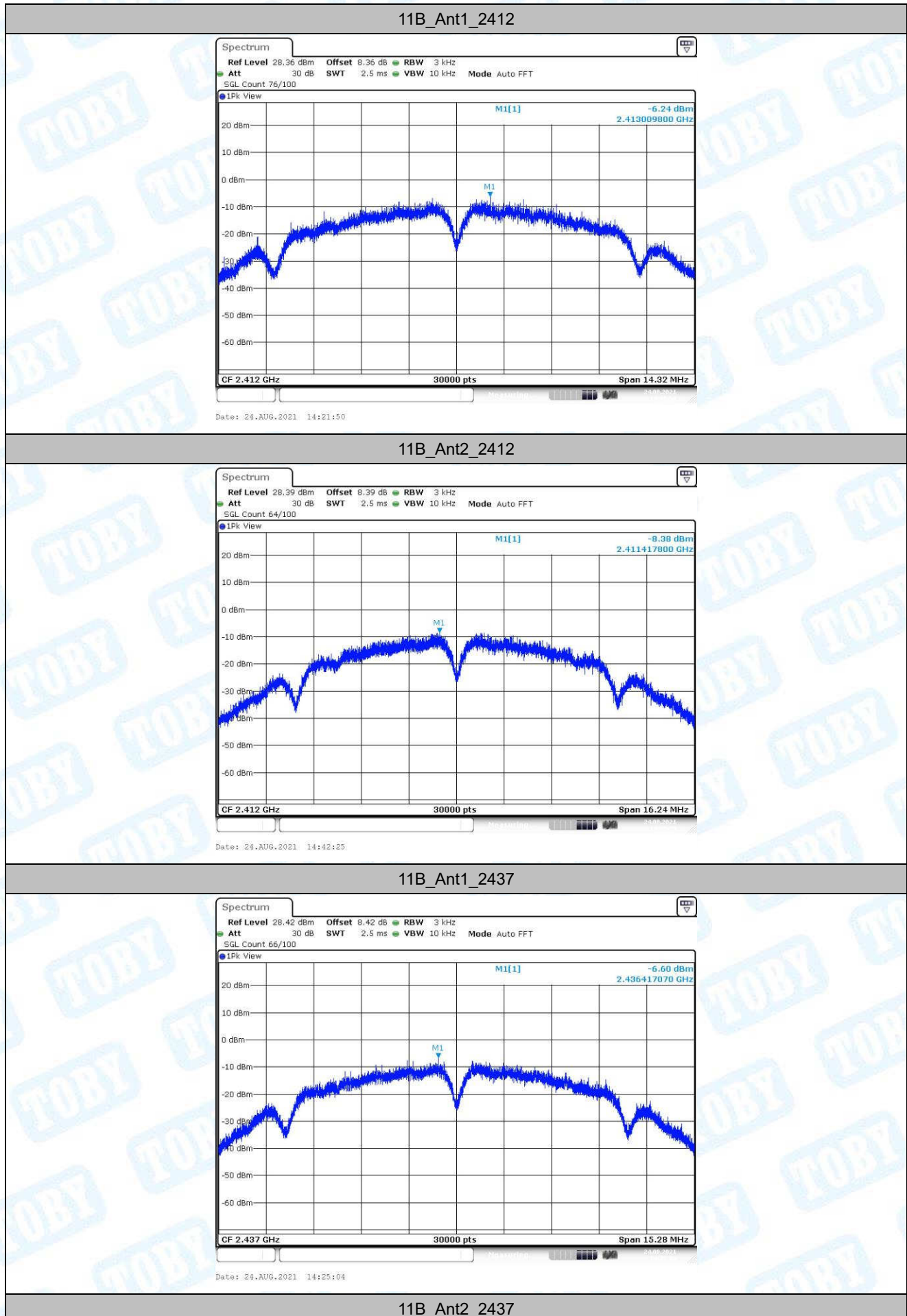
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	17.72	≤30	PASS
	Ant2	2412	16.87	≤30	PASS
	Ant1	2437	17.65	≤30	PASS
	Ant2	2437	16.55	≤30	PASS
	Ant1	2462	17.78	≤30	PASS
	Ant2	2462	16.30	≤30	PASS
11G	Ant1	2412	16.97	≤30	PASS
	Ant2	2412	17.66	≤30	PASS
	Ant1	2437	16.89	≤30	PASS
	Ant2	2437	17.24	≤30	PASS
	Ant1	2462	16.89	≤30	PASS
	Ant2	2462	16.93	≤30	PASS
11N20MIMO	Ant1	2412	16.82	≤30	PASS
	Ant2	2412	17.52	≤30	PASS
	total	2412	20.2	≤29.18	PASS
	Ant1	2437	16.84	≤30	PASS
	Ant2	2437	17.22	≤30	PASS
	total	2437	20.0	≤29.18	PASS
	Ant1	2462	16.89	≤30	PASS
	Ant2	2462	16.99	≤30	PASS
	total	2462	20.0	≤29.18	PASS

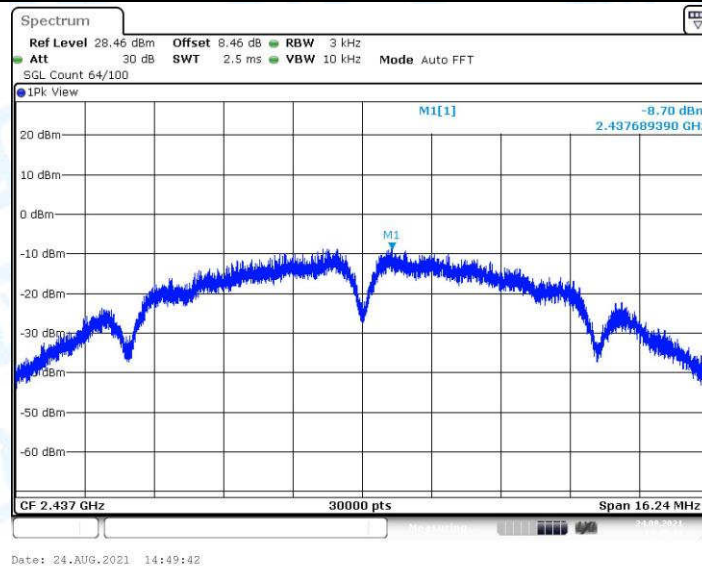
4. Maximum power spectral density

4.1. Test Result

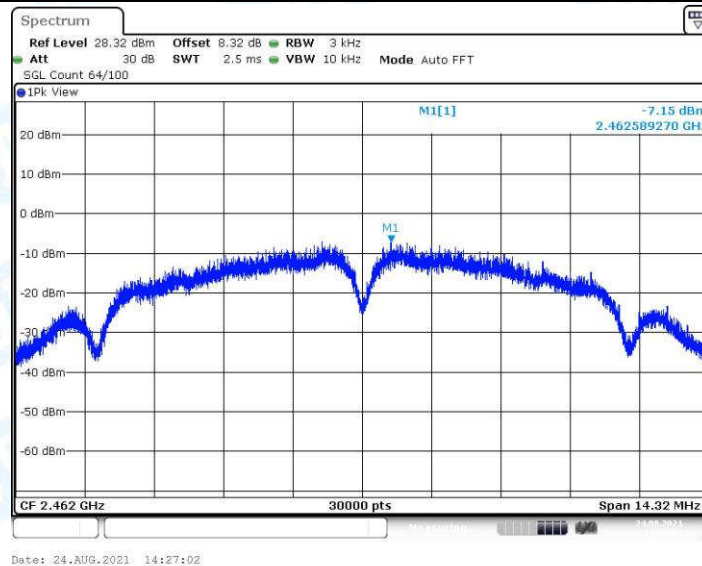
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-6.24	≤8	PASS
	Ant2	2412	-8.38	≤8	PASS
	Ant1	2437	-6.6	≤8	PASS
	Ant2	2437	-8.7	≤8	PASS
	Ant1	2462	-7.15	≤8	PASS
	Ant2	2462	-8.51	≤8	PASS
11G	Ant1	2412	-8.9	≤8	PASS
	Ant2	2412	-9.03	≤8	PASS
	Ant1	2437	-10.32	≤8	PASS
	Ant2	2437	-10.8	≤8	PASS
	Ant1	2462	-9.74	≤8	PASS
	Ant2	2462	-11.41	≤8	PASS
11N20MIMO	Ant1	2412	-14.64	≤8	PASS
	Ant2	2412	-14.05	≤8	PASS
	total	2412	-11.32	≤7.18	PASS
	Ant1	2437	-14.53	≤8	PASS
	Ant2	2437	-14.03	≤8	PASS
	total	2437	-11.26	≤7.18	PASS
	Ant1	2462	-14.18	≤8	PASS
	Ant2	2462	-14.57	≤8	PASS
	total	2462	-11.36	≤7.18	PASS

4.2. Test Graphs

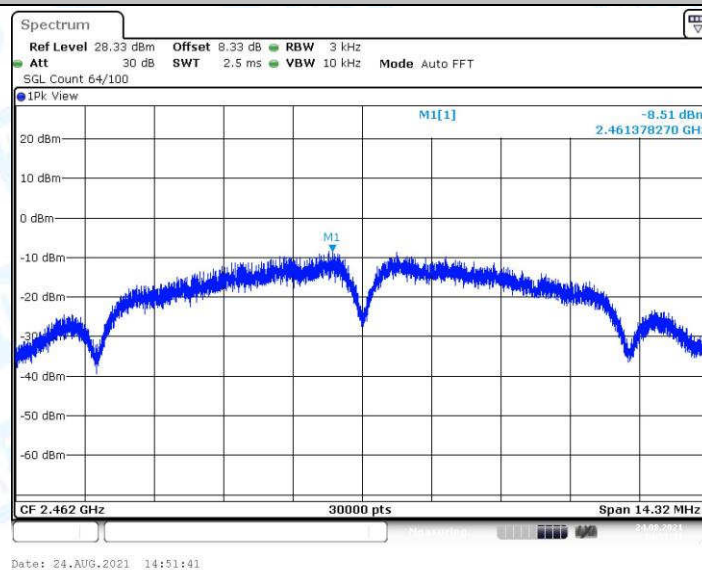




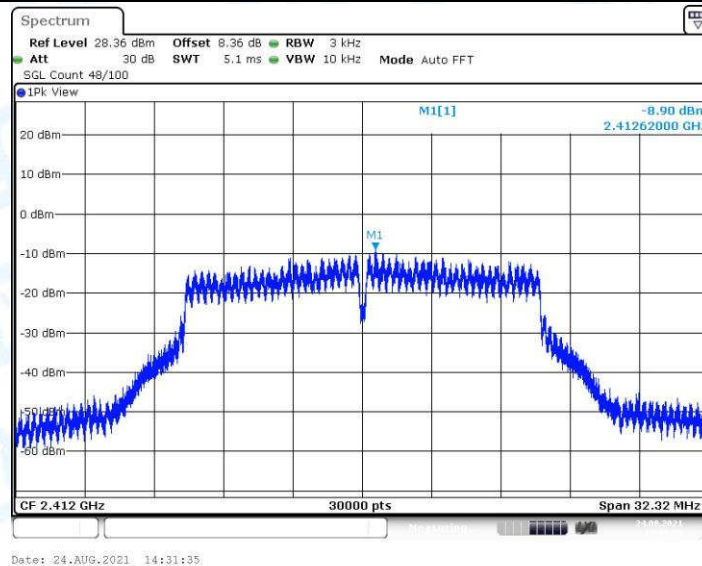
11B_Ant1_2462



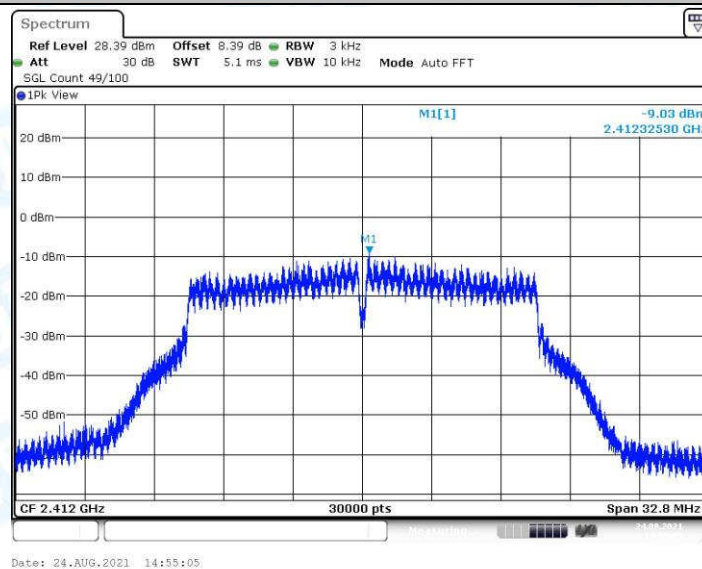
11B_Ant2_2462



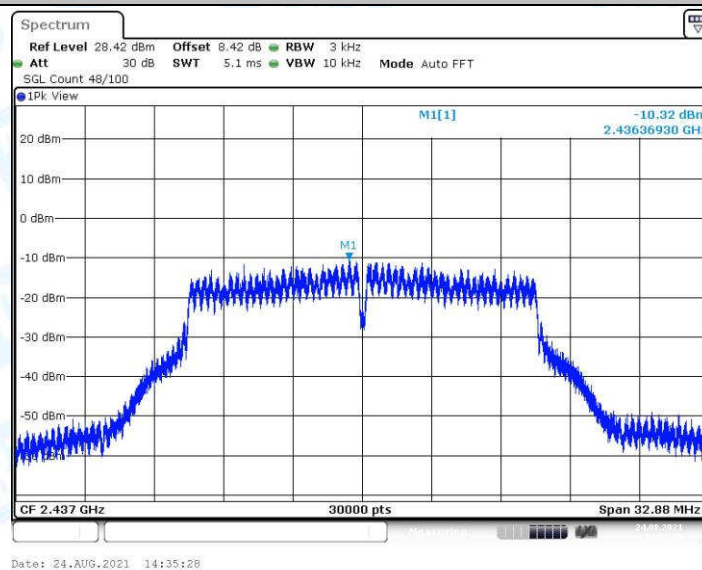
11G_Ant1_2412



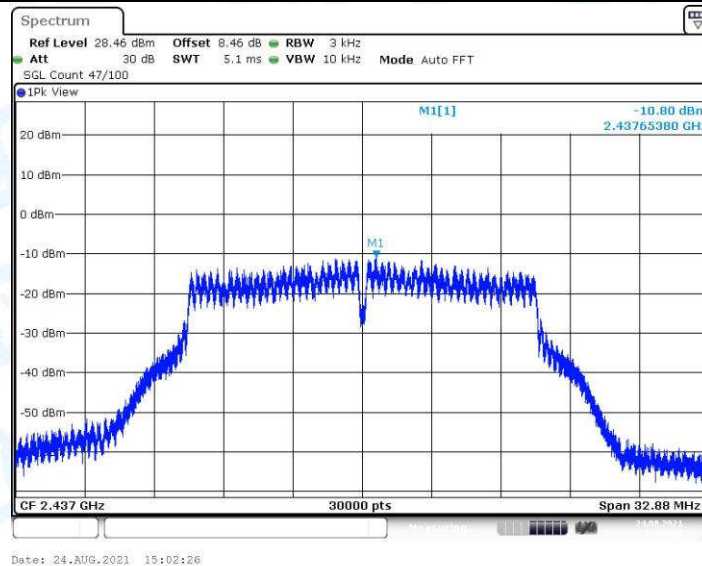
11G_Ant2_2412



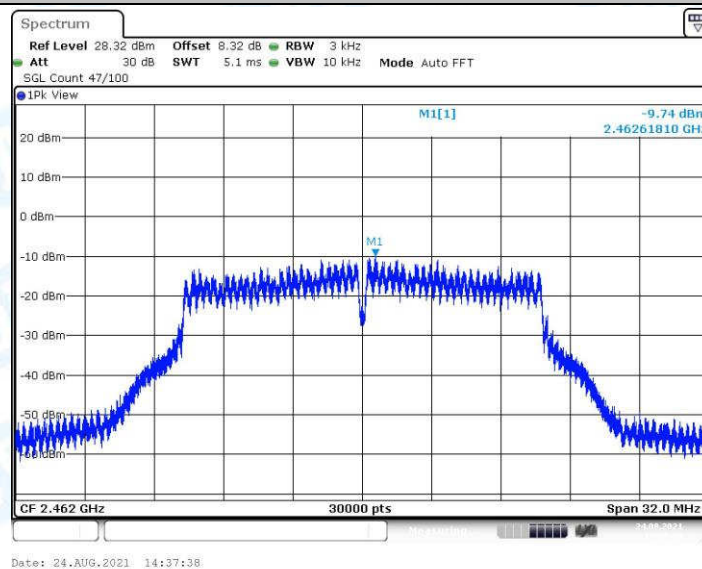
11G_Ant1_2437



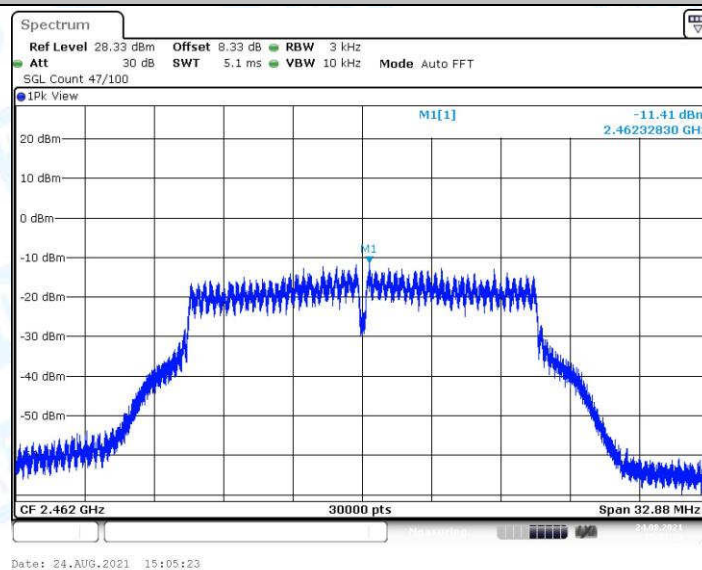
11G_Ant2_2437



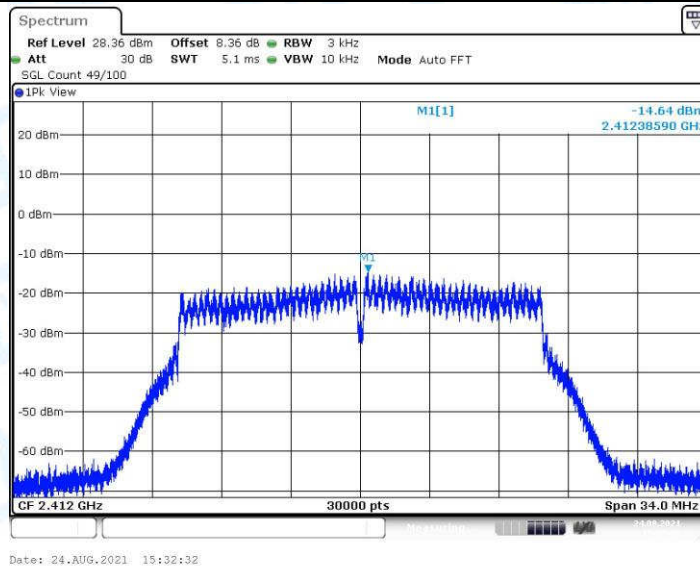
11G_Ant1_2462



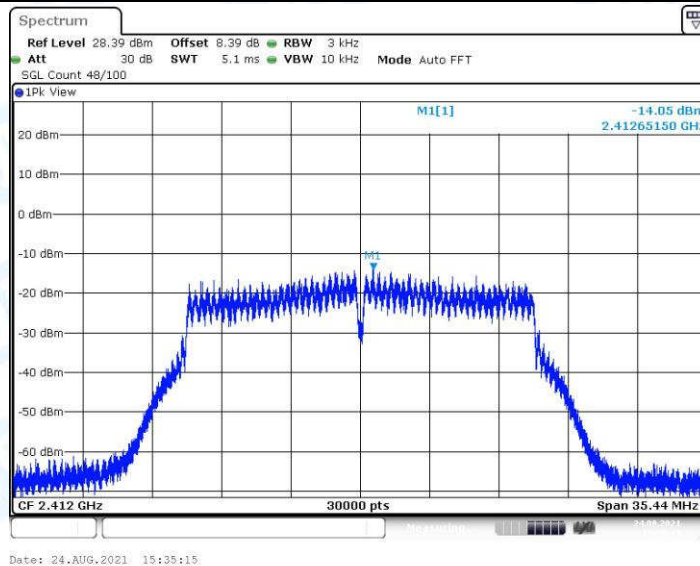
11G_Ant2_2462



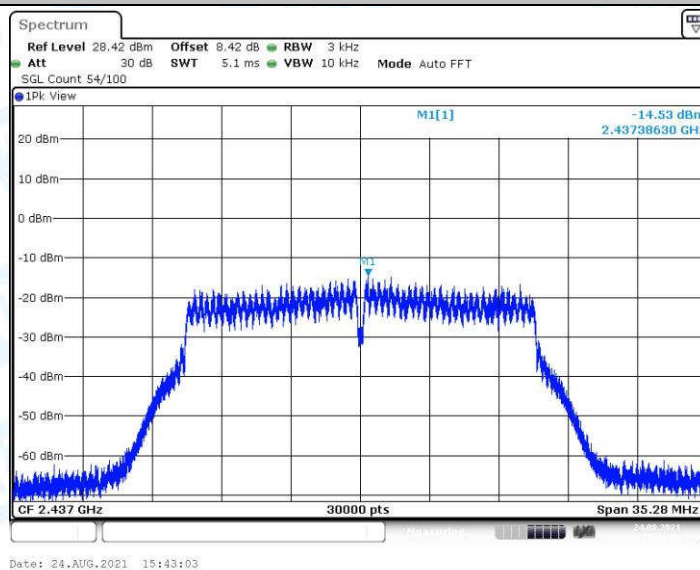
11N20MIMO_Ant1_2412



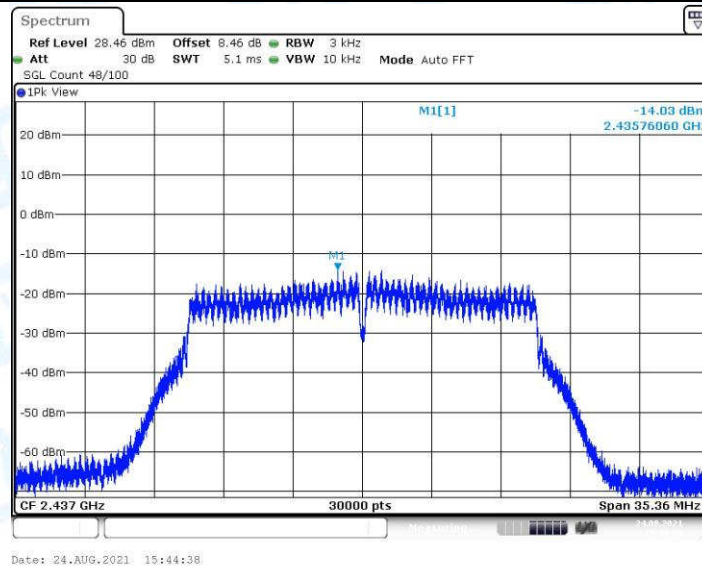
11N20MIMO_Ant2_2412



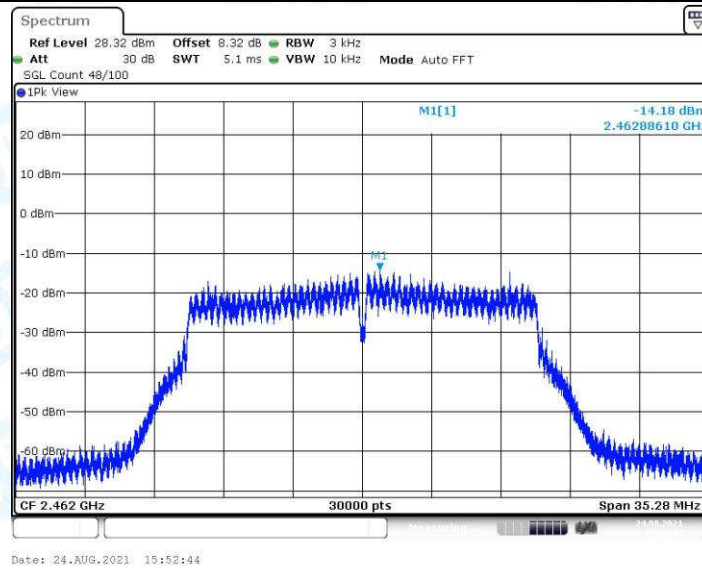
11N20MIMO_Ant1_2437



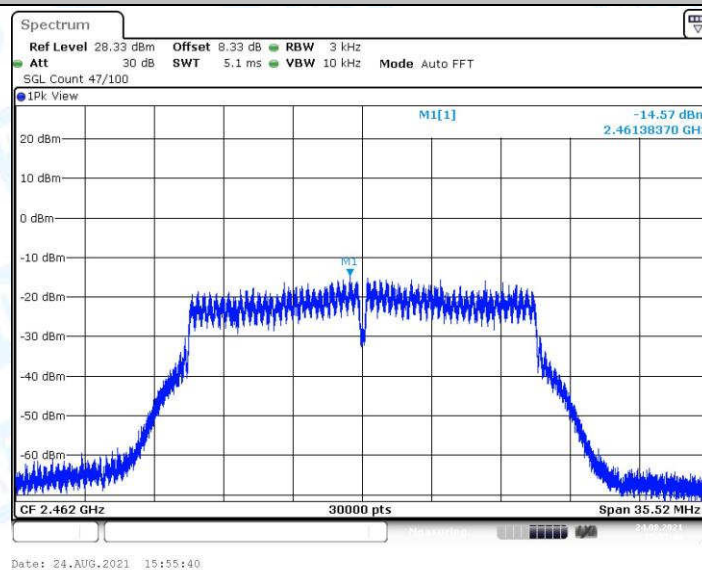
11N20MIMO_Ant2_2437



11N20MIMO_Ant1_2462



11N20MIMO_Ant2_2462

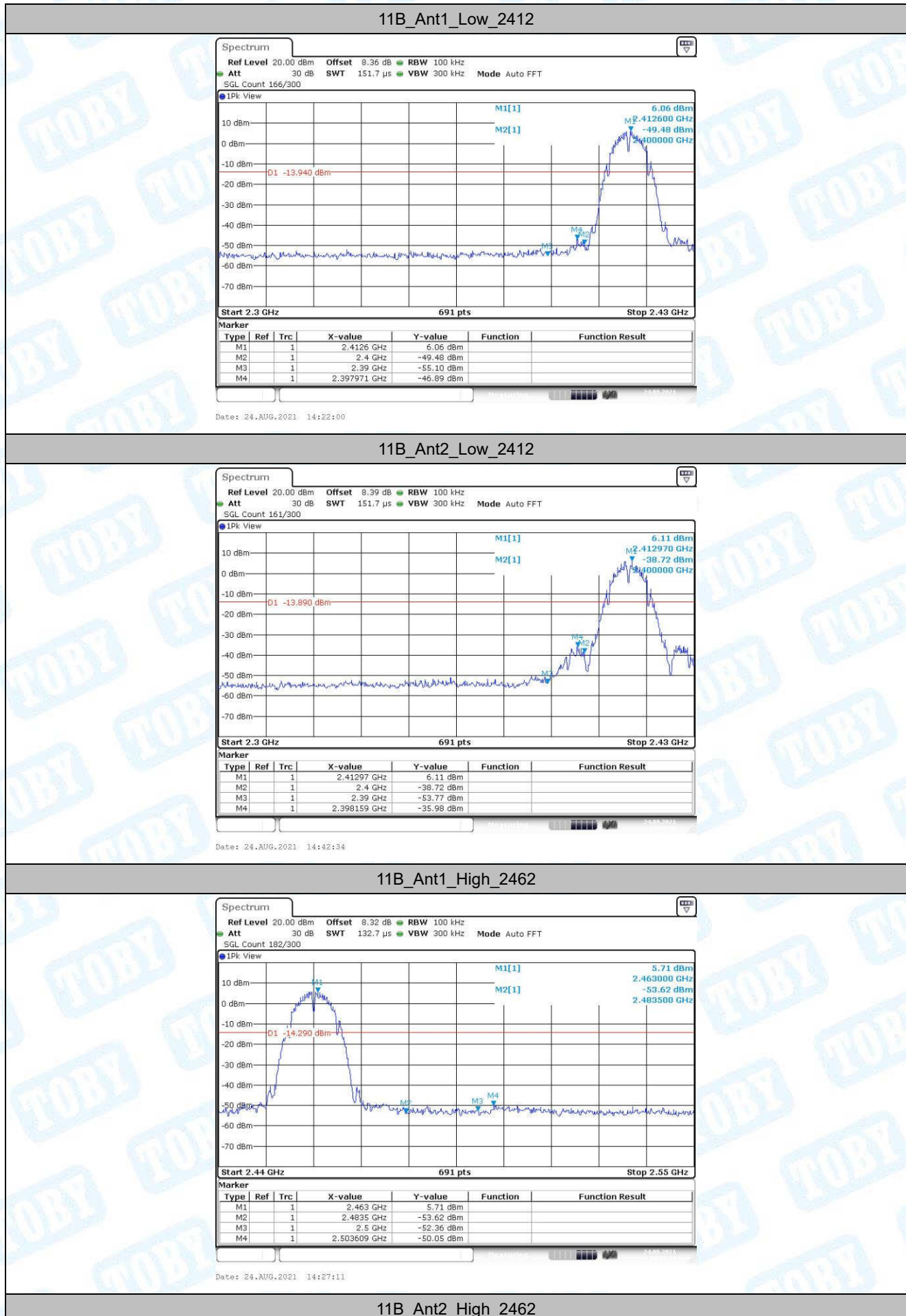


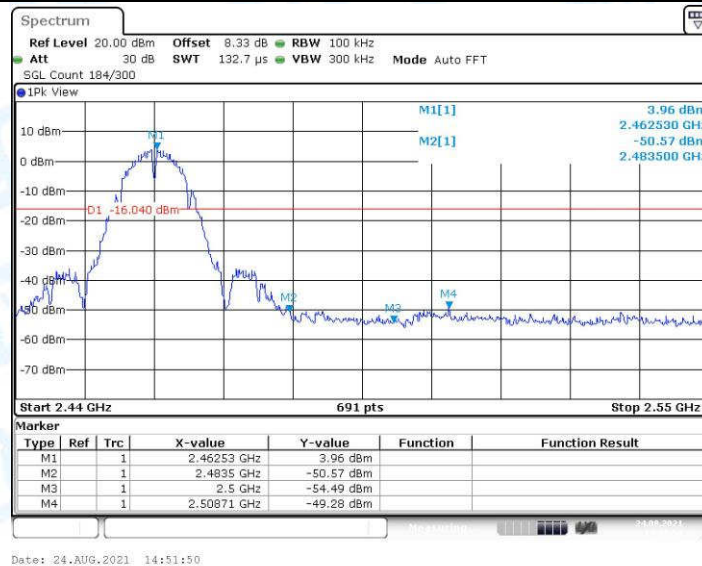
5. Band edge measurements

5.1. Test Result

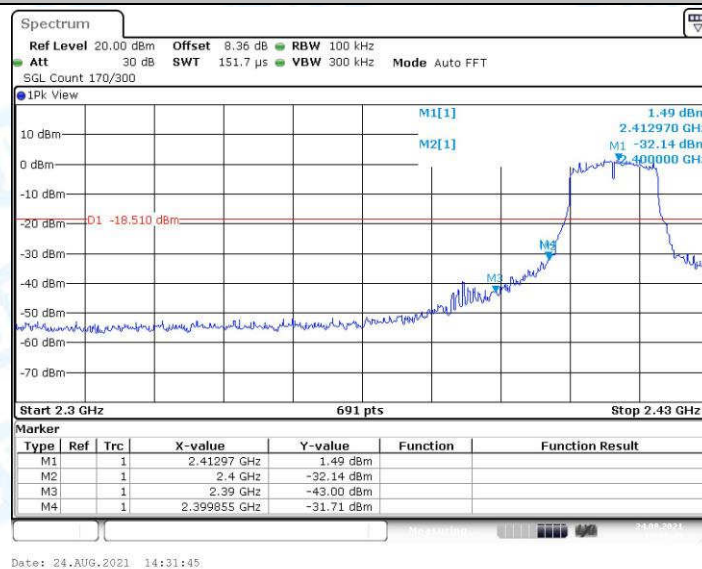
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	6.06	-46.89	≤ -13.94	PASS
	Ant2	Low	2412	6.11	-35.98	≤ -13.89	PASS
	Ant1	High	2462	5.71	-50.05	≤ -14.29	PASS
	Ant2	High	2462	3.96	-49.28	≤ -16.04	PASS
11G	Ant1	Low	2412	1.49	-31.71	≤ -18.51	PASS
	Ant2	Low	2412	2.00	-36.99	≤ -18	PASS
	Ant1	High	2462	1.47	-39.9	≤ -18.53	PASS
	Ant2	High	2462	0.79	-48.58	≤ -19.21	PASS
11N20MIMO	Ant1	Low	2412	-2.84	-46.08	≤ -22.84	PASS
	Ant2	Low	2412	-2.30	-45.54	≤ -22.3	PASS
	Ant1	High	2462	-3.83	-48.38	≤ -23.83	PASS
	Ant2	High	2462	-3.40	-49.49	≤ -23.4	PASS

5.2. Test Graphs

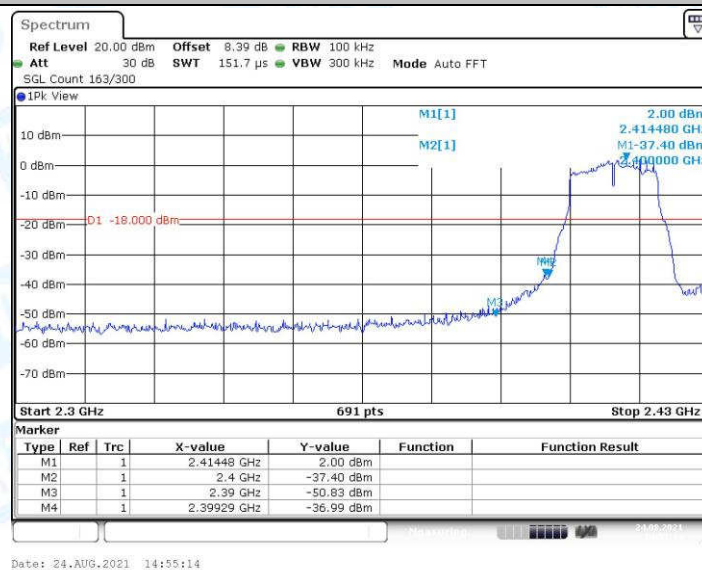




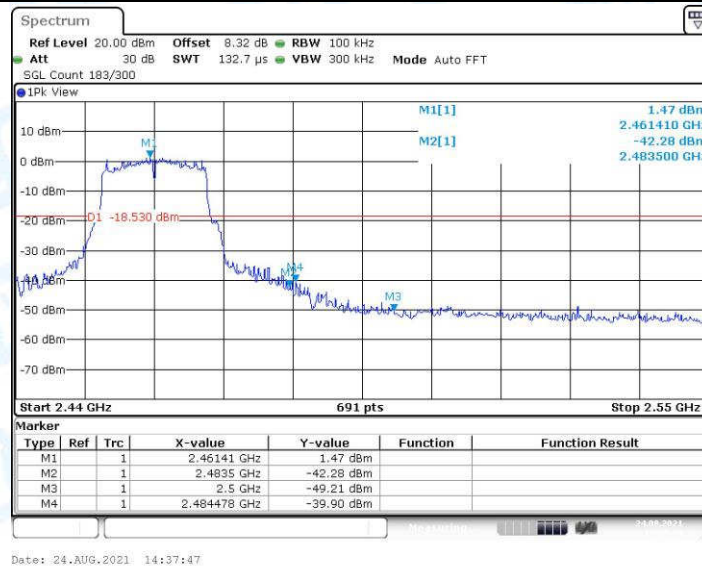
11G_Ant1_Low_2412



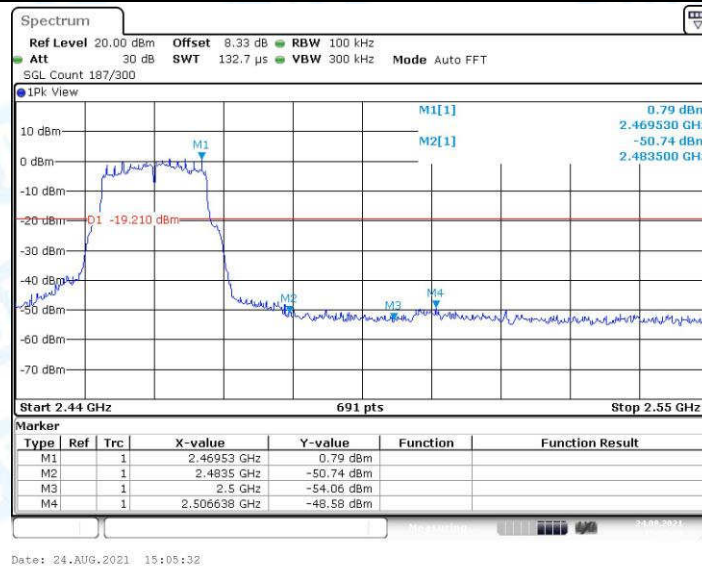
11G_Ant2_Low_2412



11G_Ant1_High_2462



11G_Ant2_High_2462



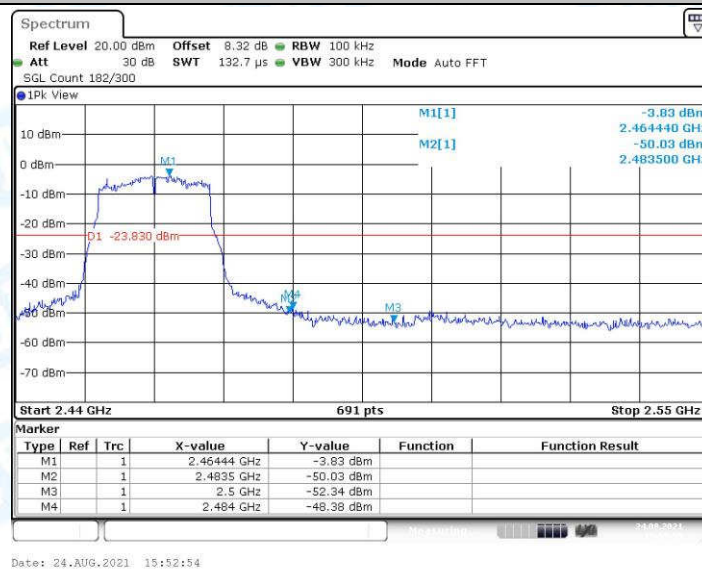
11N20MIMO_Ant1_Low_2412



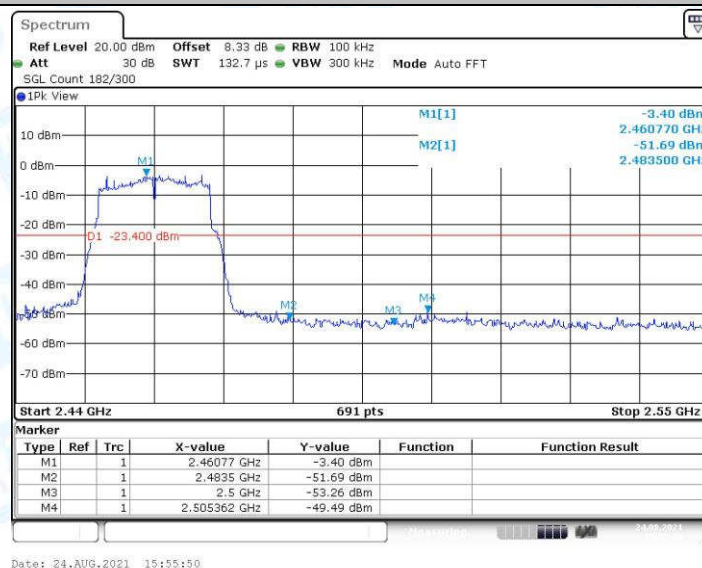
11N20MIMO_Ant2_Low_2412



11N20MIMO_Ant1_High_2462



11N20MIMO_Ant2_High_2462



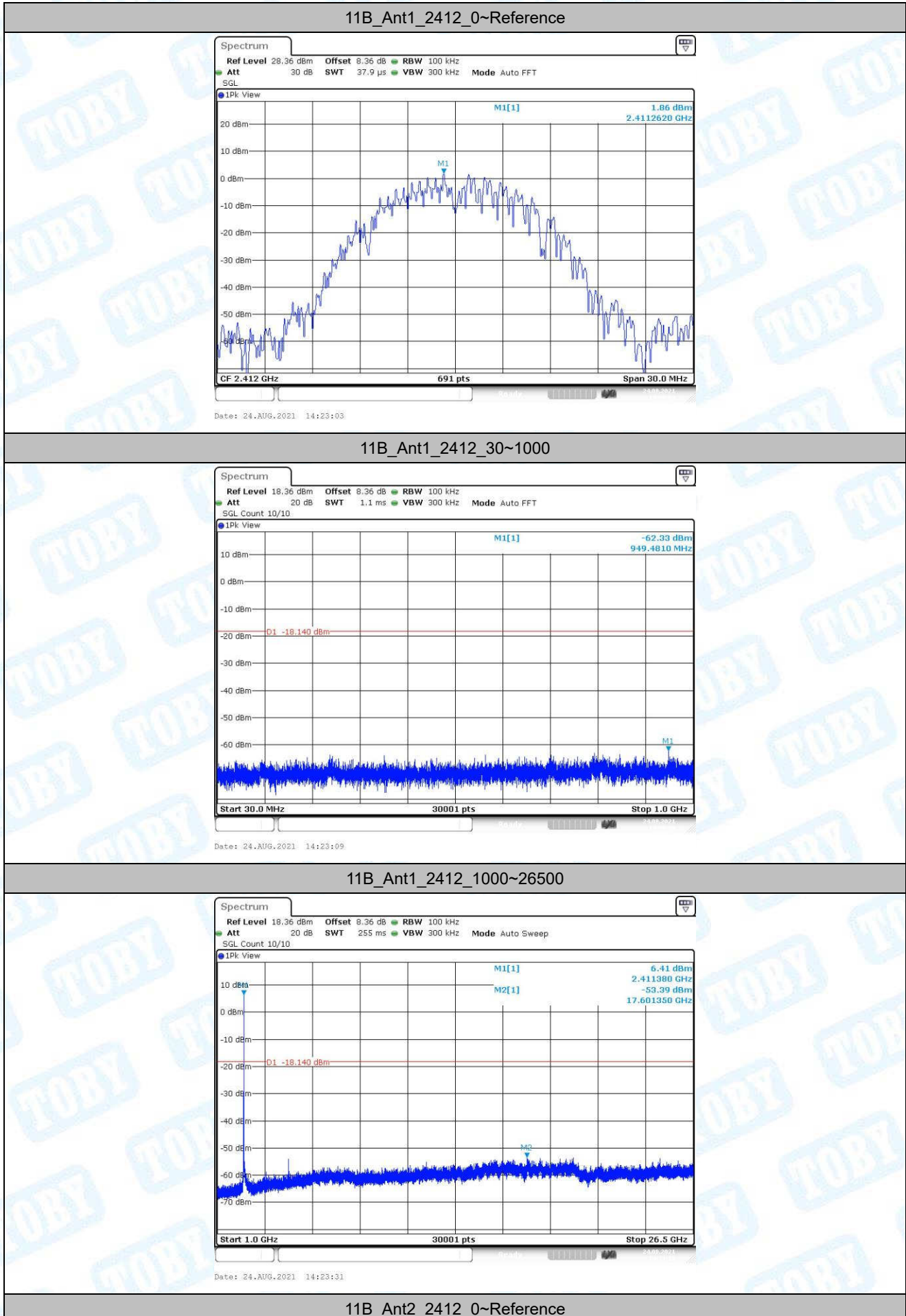
6. Conducted Spurious Emission

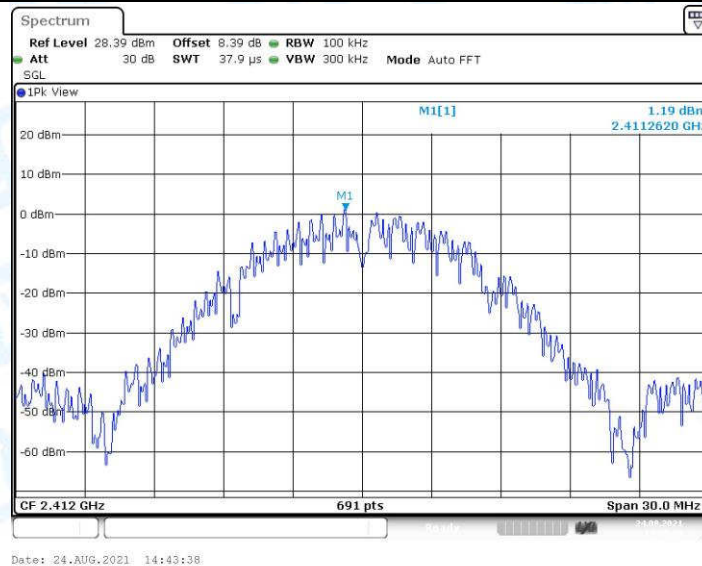
6.1. Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	1.86	1.86	---	PASS
			30~1000	1.86	-62.33	≤-18.14	PASS
			1000~26500	1.86	-53.39	≤-18.14	PASS
	Ant2	2412	Reference	1.19	1.19	---	PASS
			30~1000	1.19	-63.17	≤-18.81	PASS
			1000~26500	1.19	-50.99	≤-18.81	PASS
	Ant1	2437	Reference	3.24	3.24	---	PASS
			30~1000	3.24	-61.98	≤-16.76	PASS
			1000~26500	3.24	-53.63	≤-16.76	PASS
	Ant2	2437	Reference	3.27	3.27	---	PASS
			30~1000	3.27	-62.15	≤-16.73	PASS
			1000~26500	3.27	-47.76	≤-16.73	PASS
	Ant1	2462	Reference	3.57	3.57	---	PASS
			30~1000	3.57	-63.36	≤-16.43	PASS
			1000~26500	3.57	-53.78	≤-16.43	PASS
	Ant2	2462	Reference	1.98	1.98	---	PASS
			30~1000	1.98	-63.11	≤-18.02	PASS
			1000~26500	1.98	-52.83	≤-18.02	PASS
11G	Ant1	2412	Reference	-0.93	-0.93	---	PASS
			30~1000	-0.93	-63.08	≤-20.93	PASS
			1000~26500	-0.93	-53.76	≤-20.93	PASS
	Ant2	2412	Reference	-1.21	-1.21	---	PASS
			30~1000	-1.21	-63.03	≤-21.21	PASS
			1000~26500	-1.21	-53.57	≤-21.21	PASS
	Ant1	2437	Reference	-0.61	-0.61	---	PASS
			30~1000	-0.61	-63.14	≤-20.61	PASS
			1000~26500	-0.61	-53.7	≤-20.61	PASS
	Ant2	2437	Reference	-2.53	-2.53	---	PASS
			30~1000	-2.53	-61.9	≤-22.53	PASS
			1000~26500	-2.53	-52.23	≤-22.53	PASS
	Ant1	2462	Reference	-0.66	-0.66	---	PASS
			30~1000	-0.66	-61.86	≤-20.66	PASS
			1000~26500	-0.66	-53.28	≤-20.66	PASS
	Ant2	2462	Reference	-1.82	-1.82	---	PASS
			30~1000	-1.82	-62.17	≤-21.82	PASS
			1000~26500	-1.82	-53.7	≤-21.82	PASS
11N20MIMO	Ant1	2412	Reference	-5.19	-5.19	---	PASS
			30~1000	-5.19	-63.09	≤-25.19	PASS
			1000~26500	-5.19	-53.13	≤-25.19	PASS
	Ant2	2412	Reference	-4.21	-4.21	---	PASS
			30~1000	-4.21	-61.78	≤-24.21	PASS

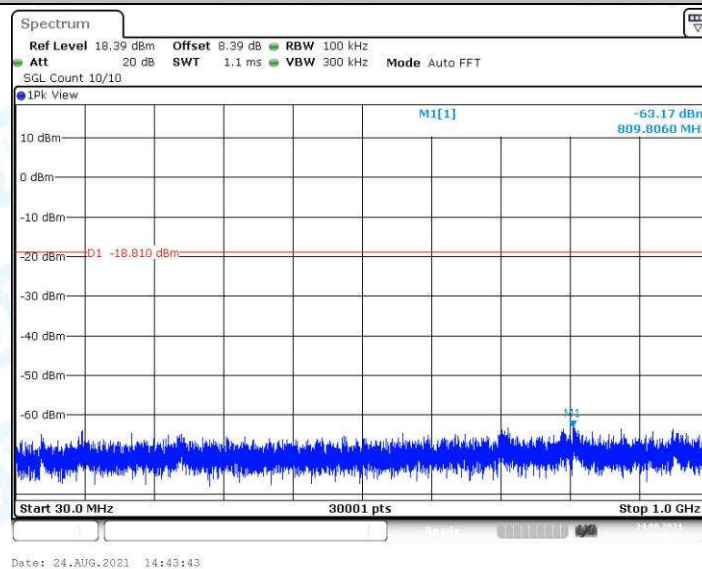
			1000~26500	-4.21	-52.88	≤ -24.21	PASS
	Ant1	2437	Reference	-5.24	-5.24	---	PASS
			30~1000	-5.24	-62.81	≤ -25.24	PASS
			1000~26500	-5.24	-53	≤ -25.24	PASS
	Ant2	2437	Reference	-5.48	-5.48	---	PASS
			30~1000	-5.48	-63.15	≤ -25.48	PASS
			1000~26500	-5.48	-53.12	≤ -25.48	PASS
	Ant1	2462	Reference	-4.99	-4.99	---	PASS
			30~1000	-4.99	-62.5	≤ -24.99	PASS
			1000~26500	-4.99	-53.19	≤ -24.99	PASS
	Ant2	2462	Reference	-5.73	-5.73	---	PASS
			30~1000	-5.73	-62.44	≤ -25.73	PASS
			1000~26500	-5.73	-53.61	≤ -25.73	PASS

6.2.Test Graphs

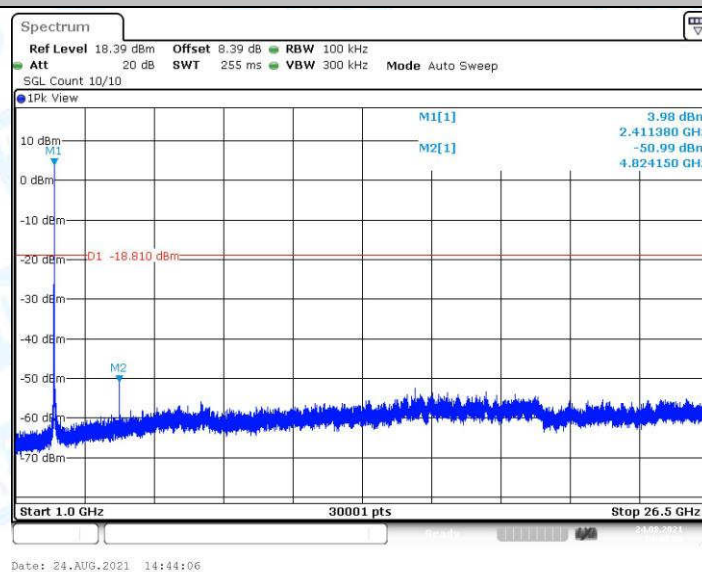




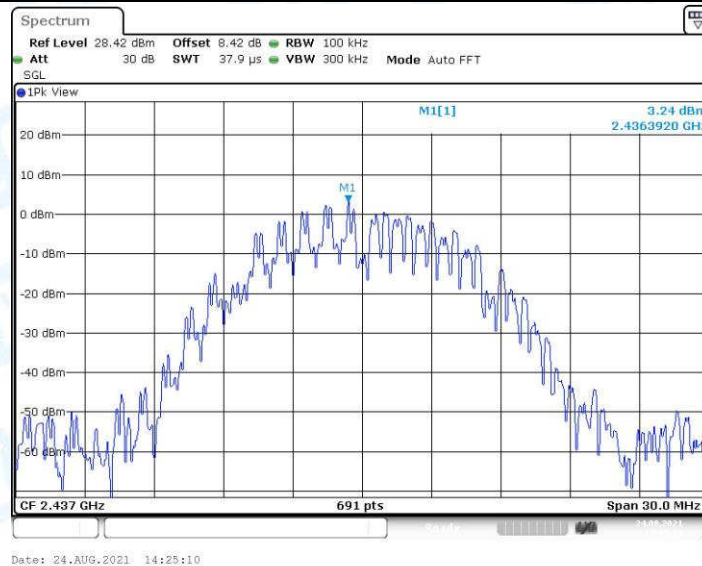
11B_Ant2_2412_30~1000



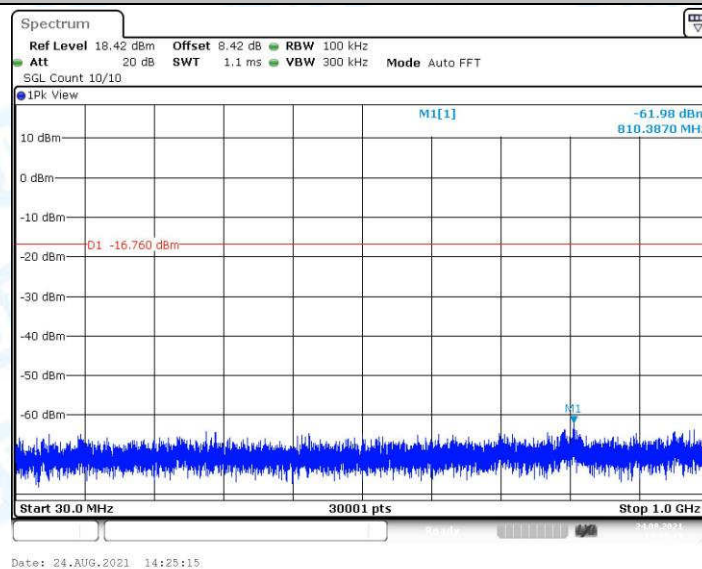
11B_Ant2_2412_1000~26500



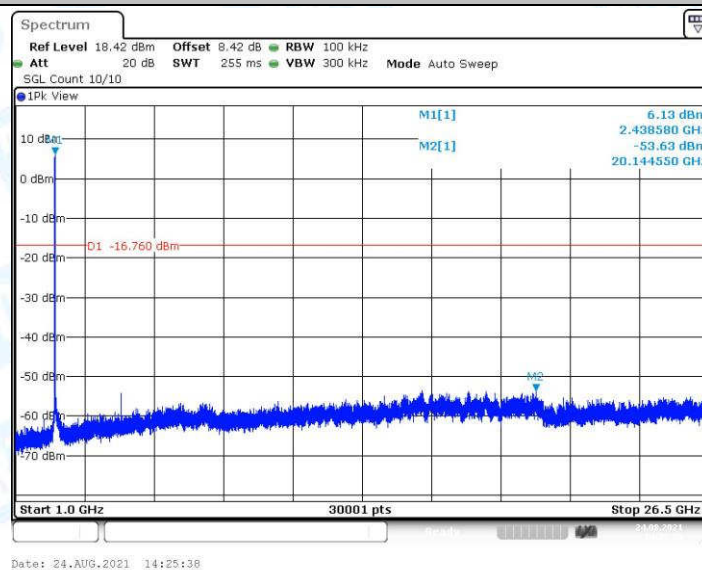
11B_Ant1_2437_0~Reference



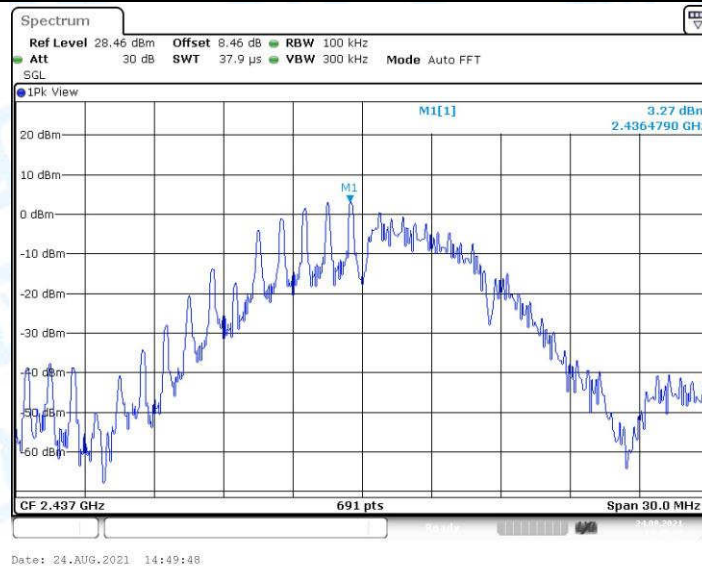
11B_Ant1_2437_30~1000



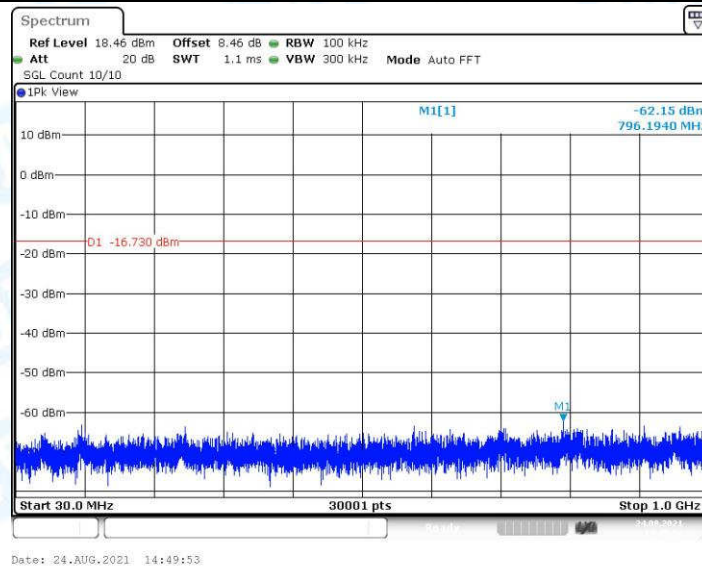
11B_Ant1_2437_1000~26500



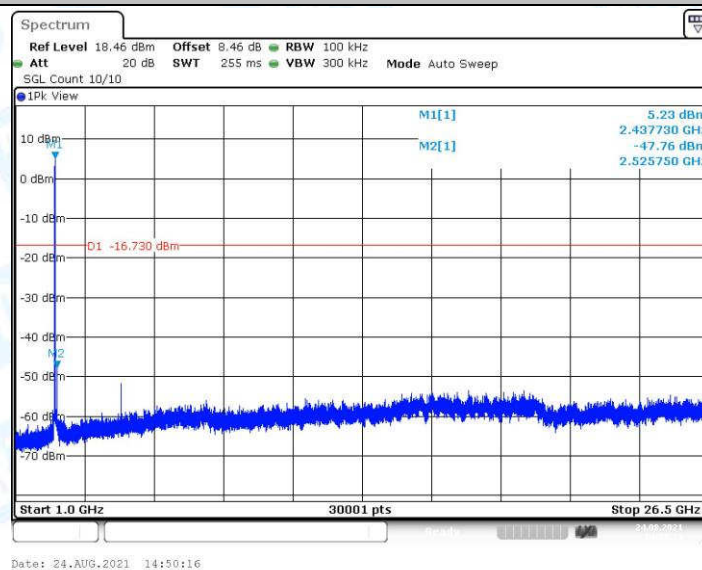
11B_Ant2_2437_0~Reference



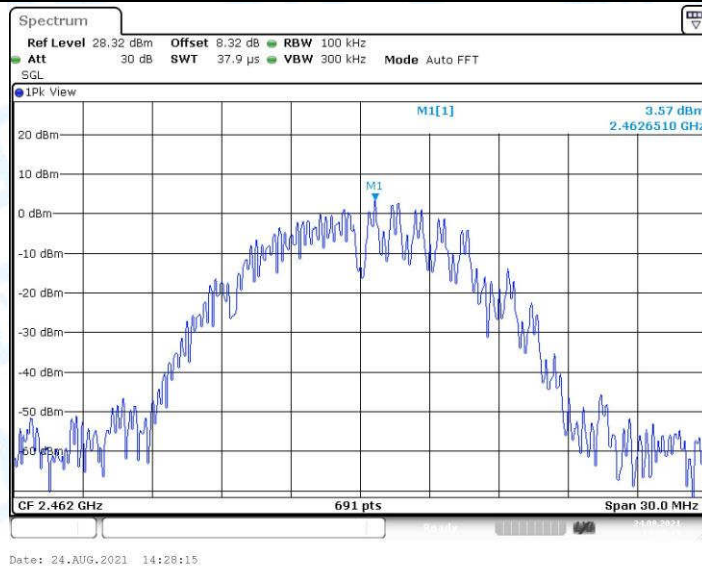
11B_Ant2_2437_30~1000



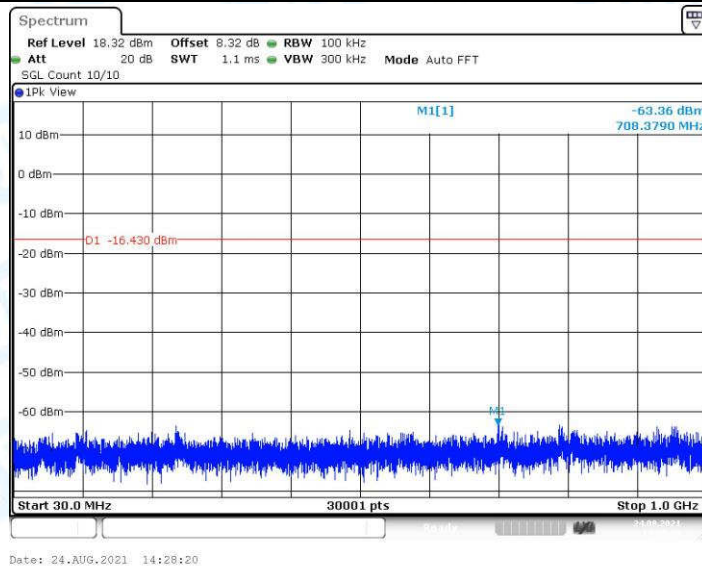
11B_Ant2_2437_1000~26500



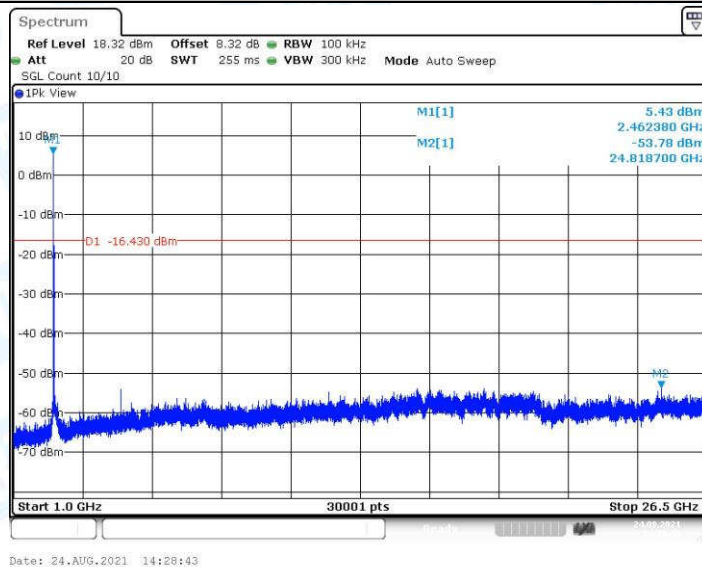
11B_Ant1_2462_0~Reference



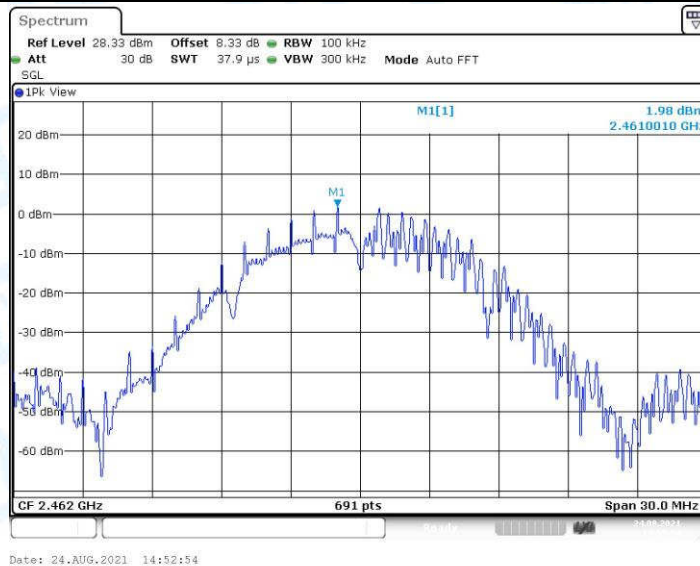
11B_Ant1_2462_30~1000



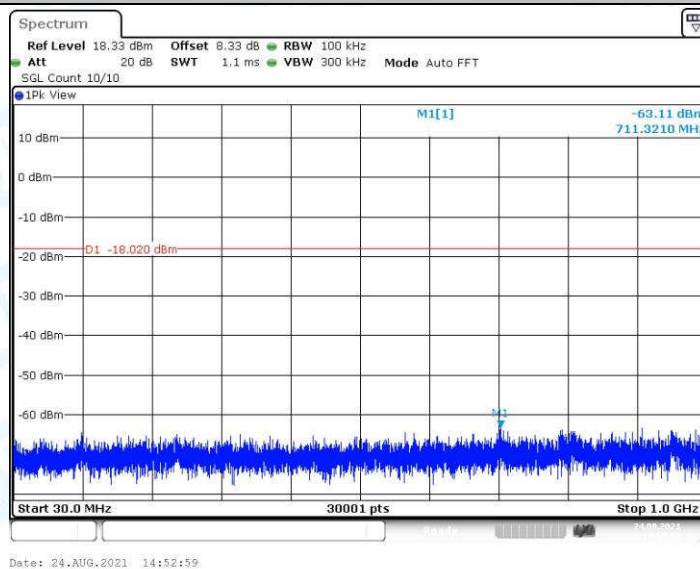
11B_Ant1_2462_1000~26500



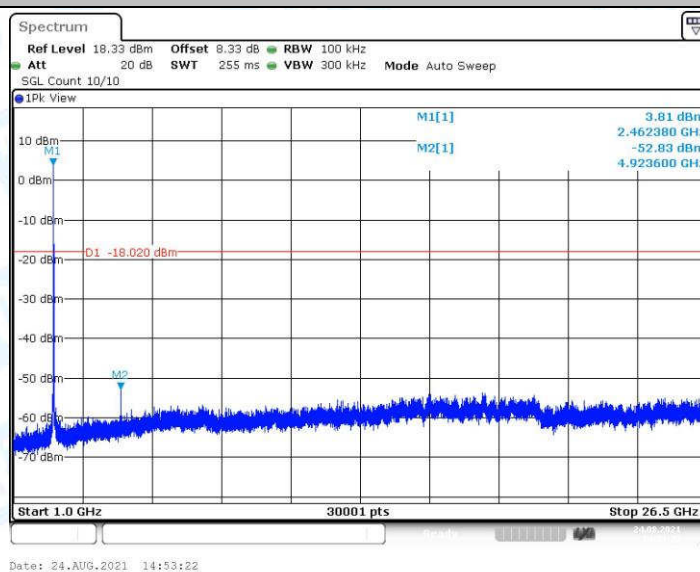
11B_Ant2_2462_0~Reference



11B_Ant2_2462_30~1000



11B_Ant2_2462_1000~26500



11G_Ant1_2412_0~Reference