

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

General Description of EUT	
Product Name:	StiX
Test Model:	5700
Sample ID:	20211022-08_1-01
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	45%
Test Voltage:	AC 120V
Test Engineer:	HUANGJIANPING
Note: For a more detailed features description, please refer to the report TB-FCC184368	

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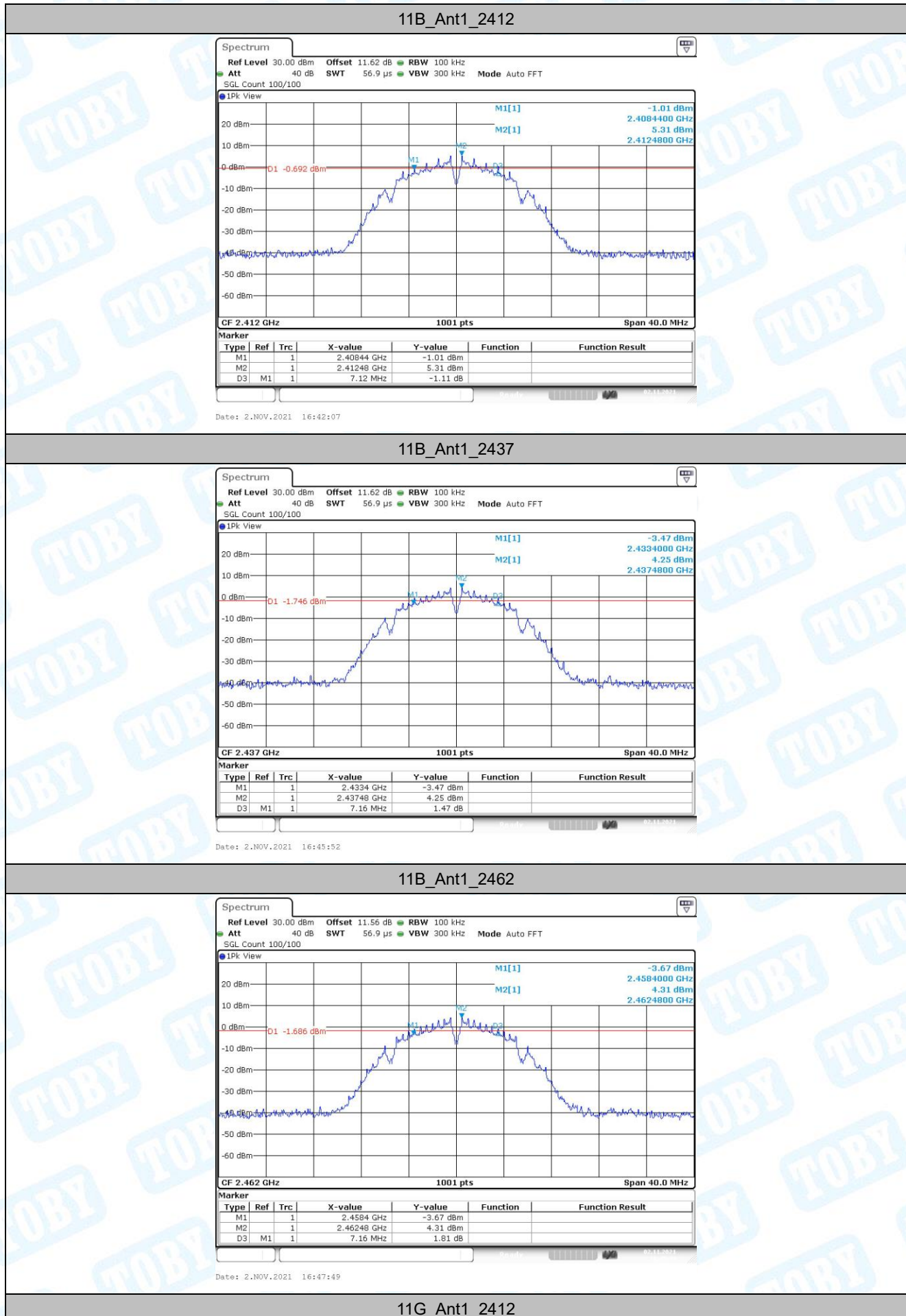
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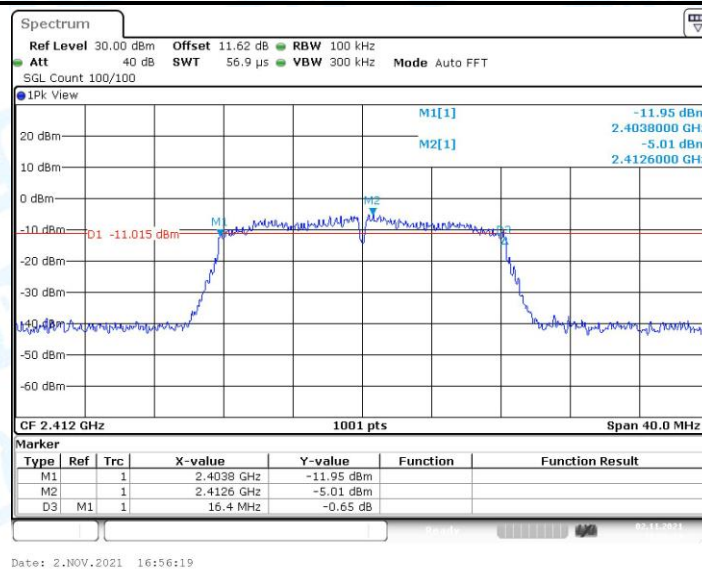
1. DTS Bandwidth

1.1. Test Result

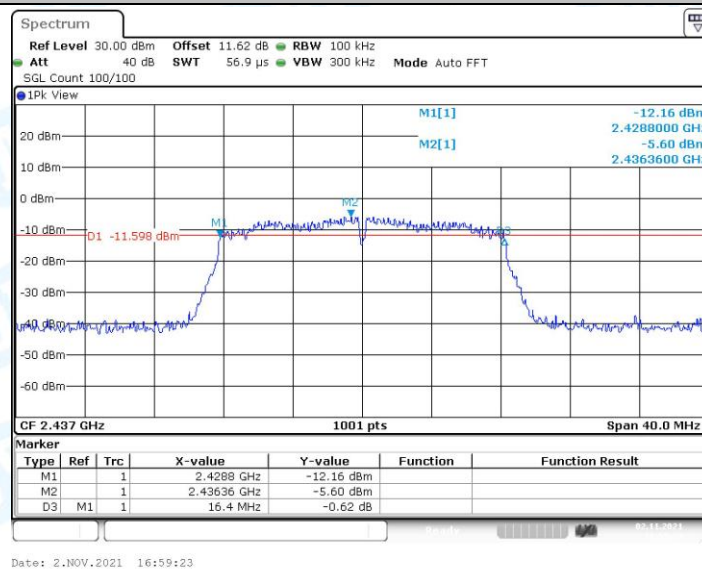
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	7.120	2408.440	2415.560	0.5	PASS
		2437	7.160	2433.400	2440.560	0.5	PASS
		2462	7.160	2458.400	2465.560	0.5	PASS
11G	Ant1	2412	16.400	2403.800	2420.200	0.5	PASS
		2437	16.400	2428.800	2445.200	0.5	PASS
		2462	13.960	2455.640	2469.600	0.5	PASS
11N20SISO	Ant1	2412	17.000	2403.480	2420.480	0.5	PASS
		2437	16.800	2428.800	2445.600	0.5	PASS
		2462	15.440	2454.400	2469.840	0.5	PASS

1.2. Test Graphs

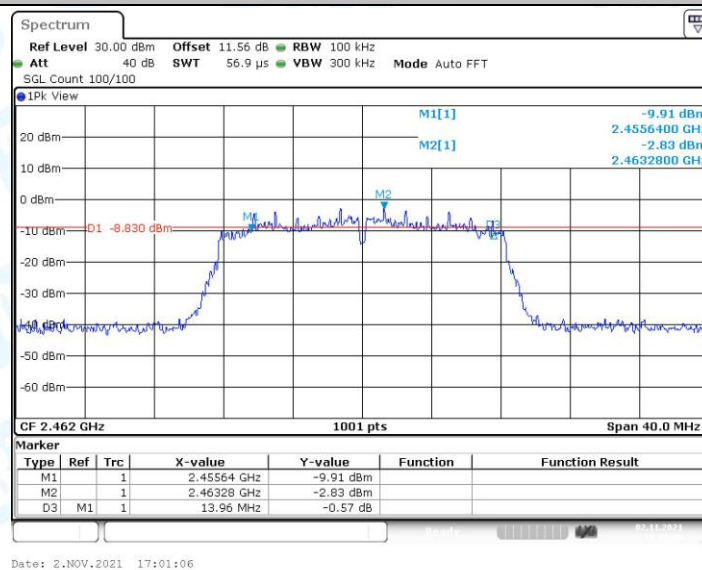




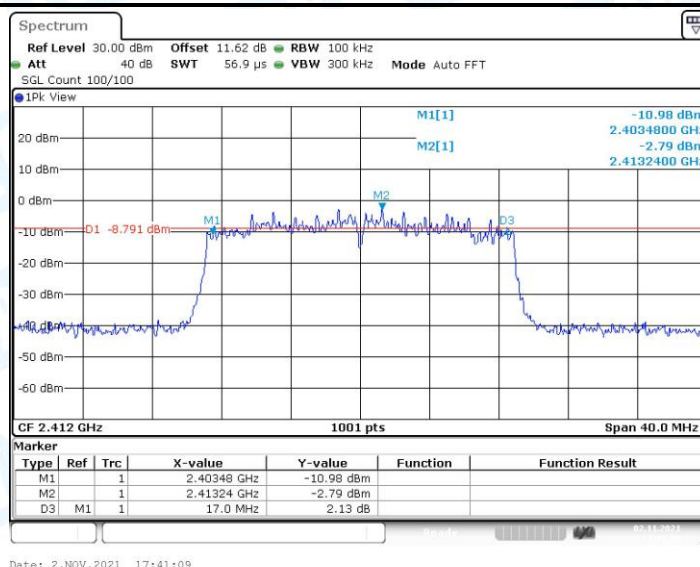
11G_Ant1_2437



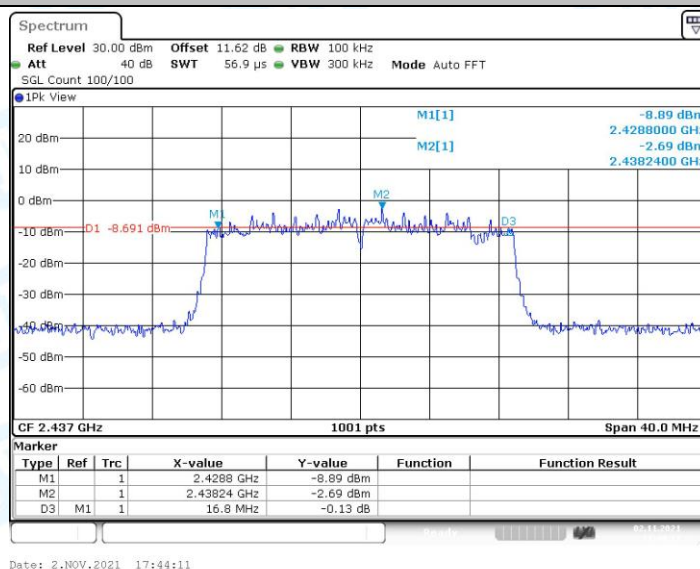
11G_Ant1_2462



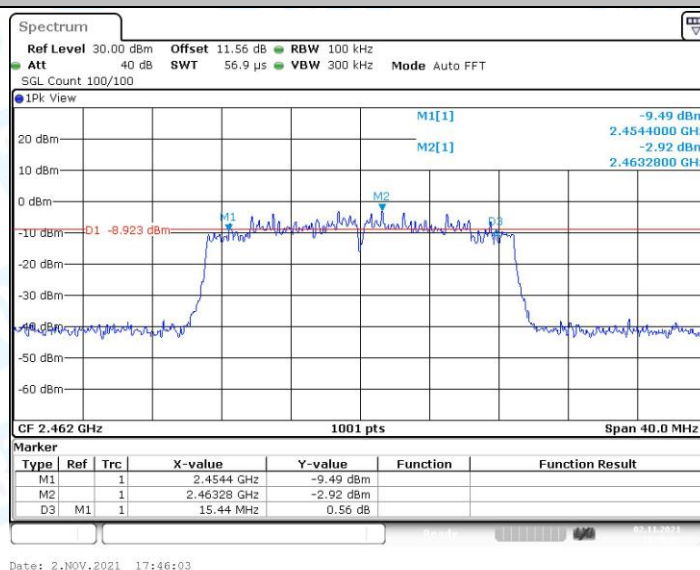
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



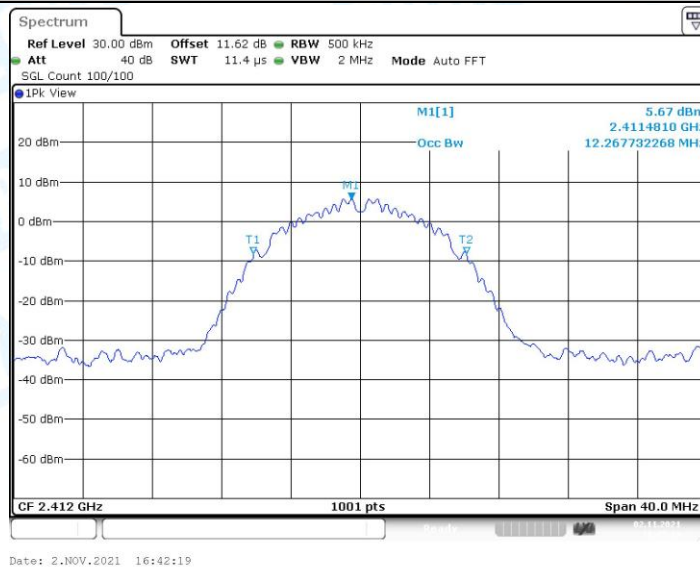
2. Occupied Channel Bandwidth

2.1. Test Result

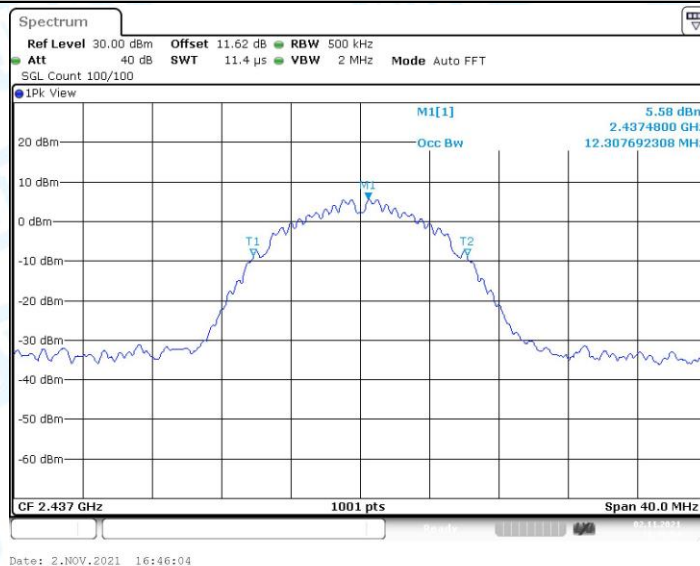
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.268	2405.846	2418.114	---	PASS
		2437	12.308	2430.846	2443.154	---	PASS
		2462	12.308	2455.846	2468.154	---	PASS
11G	Ant1	2412	16.464	2403.728	2420.192	---	PASS
		2437	16.863	2428.608	2445.472	---	PASS
		2462	16.663	2453.648	2470.312	---	PASS
11N20SISO	Ant1	2412	17.622	2403.209	2420.831	---	PASS
		2437	17.702	2428.089	2445.791	---	PASS
		2462	17.662	2453.169	2470.831	---	PASS

2.2. Test Graphs

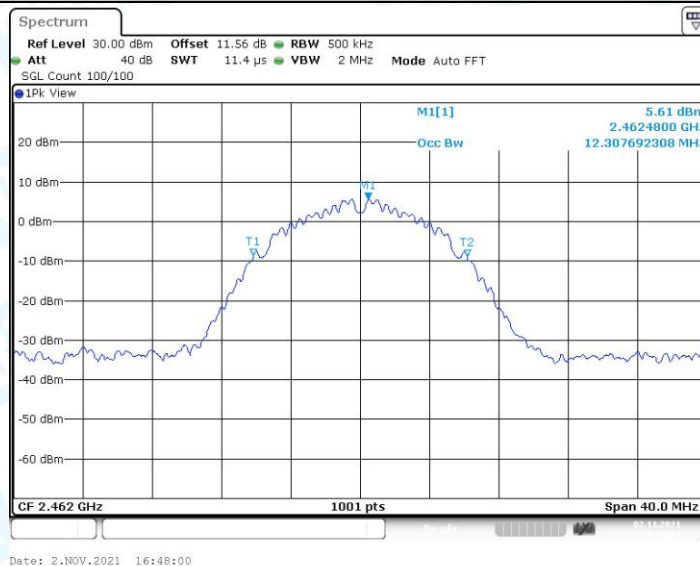
11B_Ant1_2412



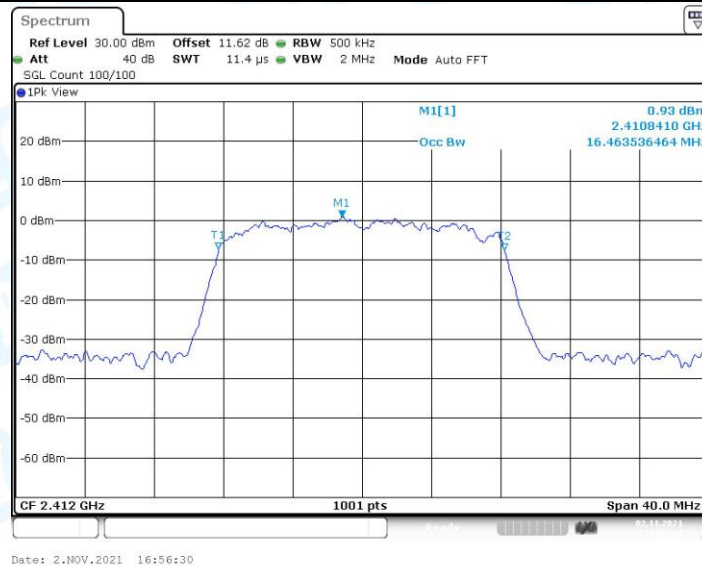
11B_Ant1_2437



11B_Ant1_2462



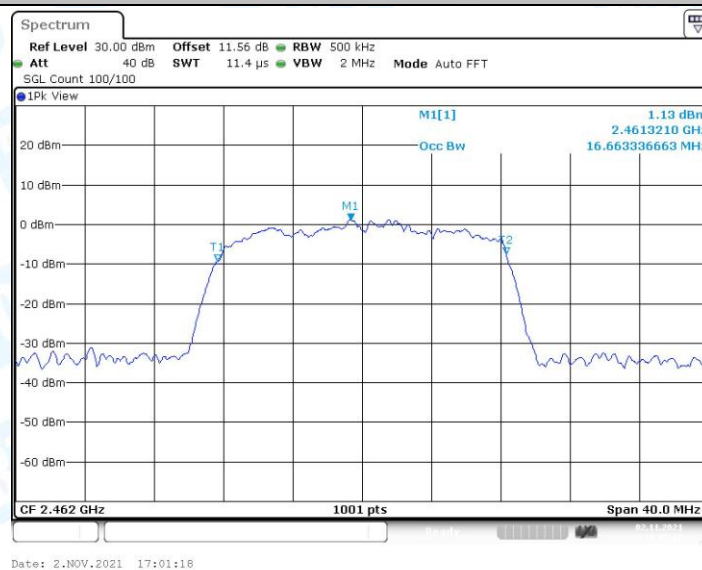
11G_Ant1_2412



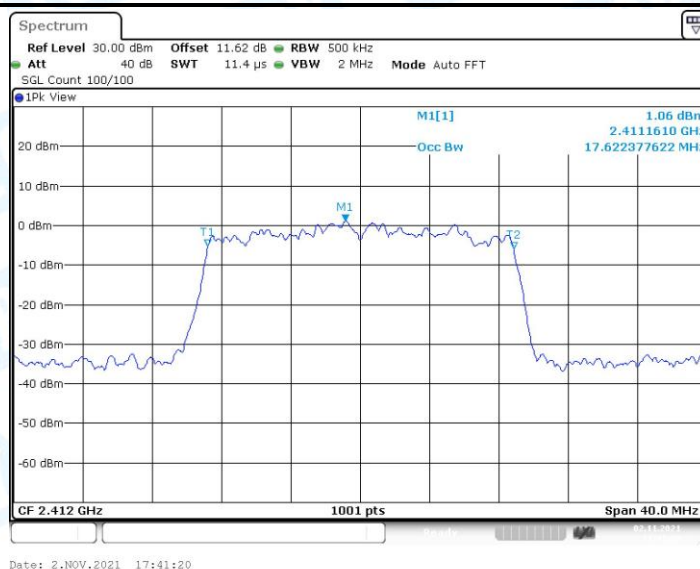
11G_Ant1_2437



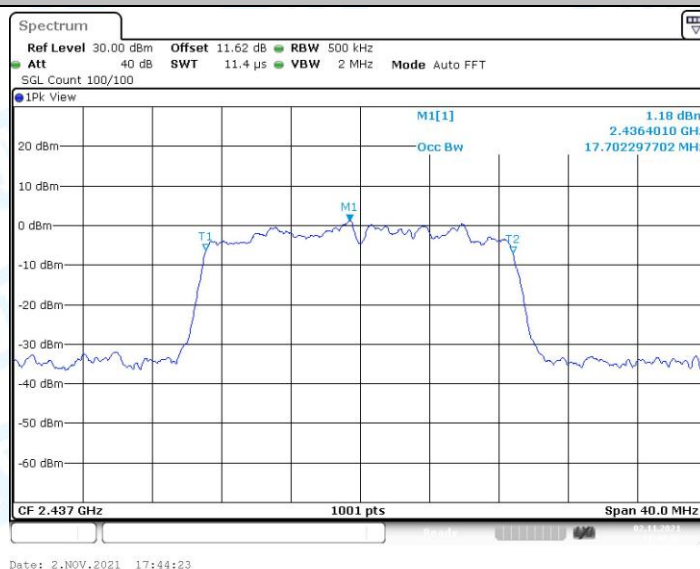
11G_Ant1_2462



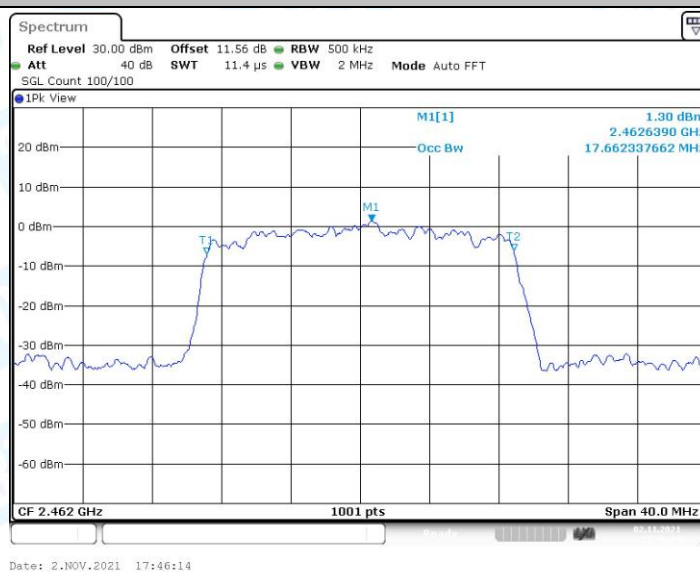
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



3. Maximum conducted output power

3.1. Test Result

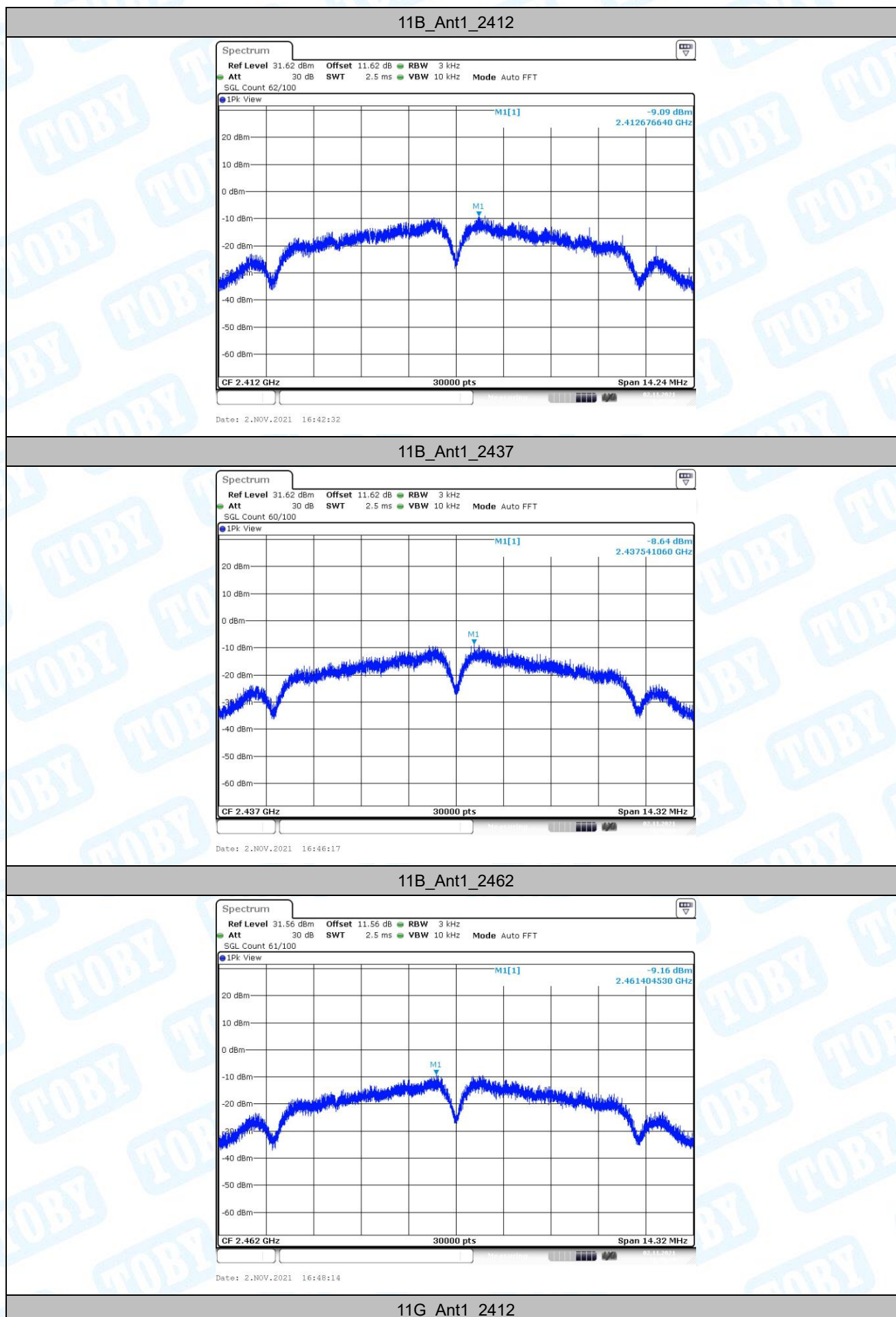
TestMode	Antenna	Channel	Power [dBm]	Limit [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	15.74	≤30	15.74	≤36	PASS
		2437	15.60	≤30	15.60	≤36	PASS
		2462	15.63	≤30	15.63	≤36	PASS
11G	Ant1	2412	15.06	≤30	15.06	≤36	PASS
		2437	14.99	≤30	14.99	≤36	PASS
		2462	15.00	≤30	15.00	≤36	PASS
11N20SISO	Ant1	2412	14.83	≤30	14.83	≤36	PASS
		2437	14.60	≤30	14.60	≤36	PASS
		2462	14.68	≤30	14.68	≤36	PASS

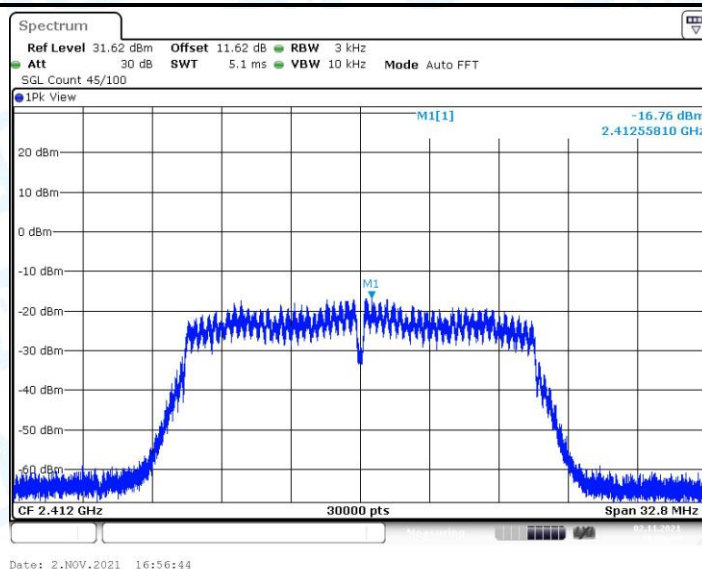
4. Maximum power spectral density

4.1. Test Result

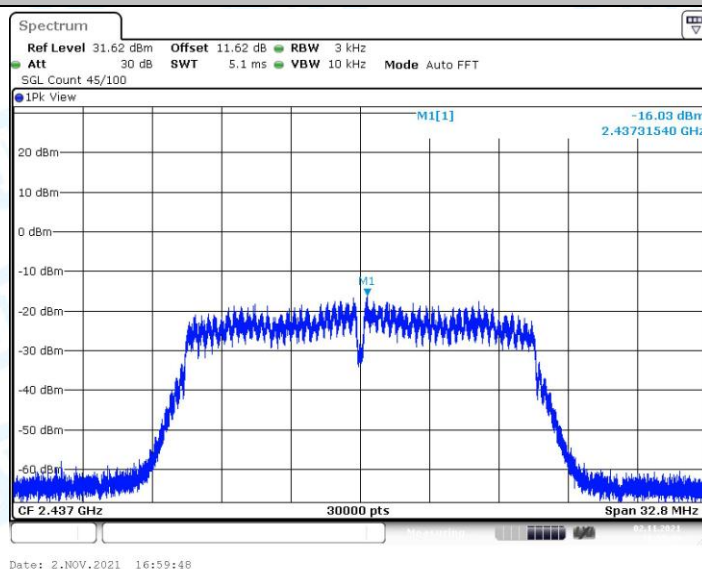
TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-9.09	≤8	PASS
		2437	-8.64	≤8	PASS
		2462	-9.16	≤8	PASS
11G	Ant1	2412	-16.76	≤8	PASS
		2437	-16.03	≤8	PASS
		2462	-16.42	≤8	PASS
11N20SISO	Ant1	2412	-17.86	≤8	PASS
		2437	-17.47	≤8	PASS
		2462	-17.04	≤8	PASS

4.2. Test Graphs

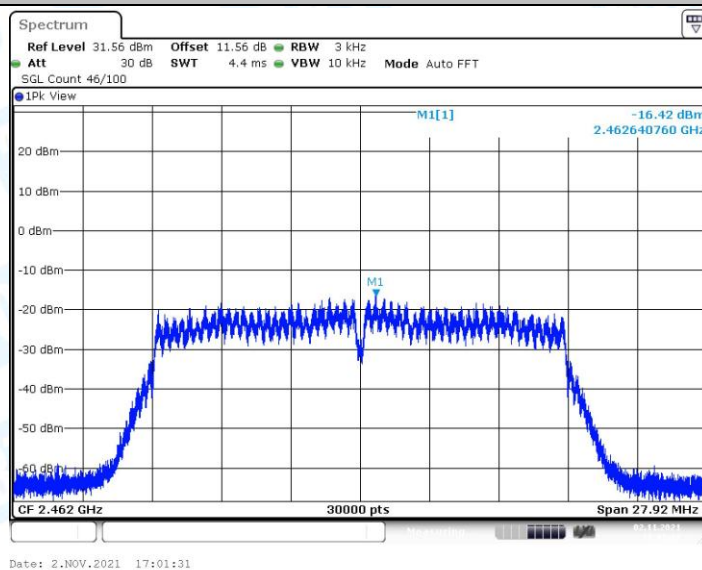




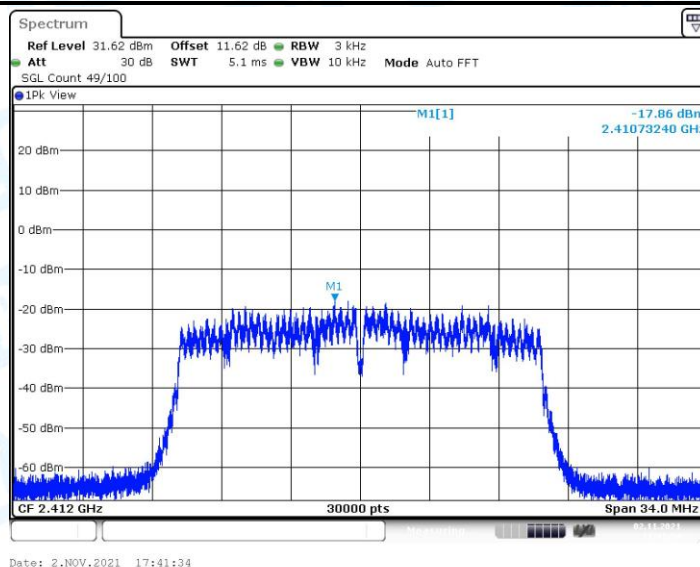
11G_Ant1_2437



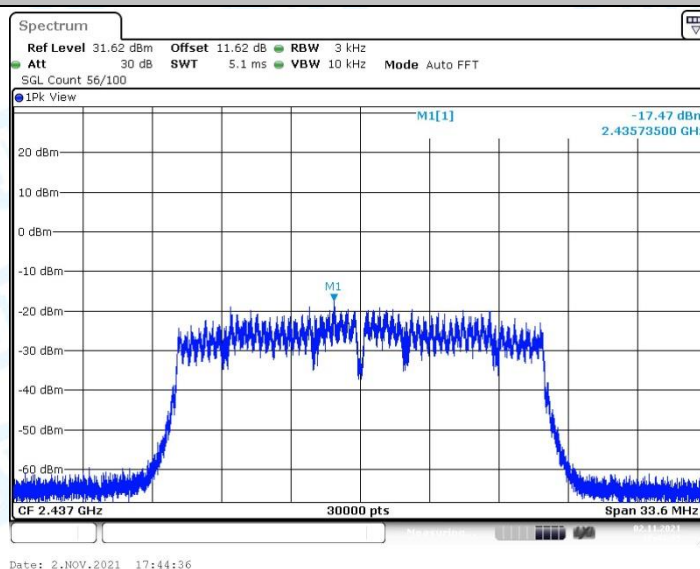
11G_Ant1_2462



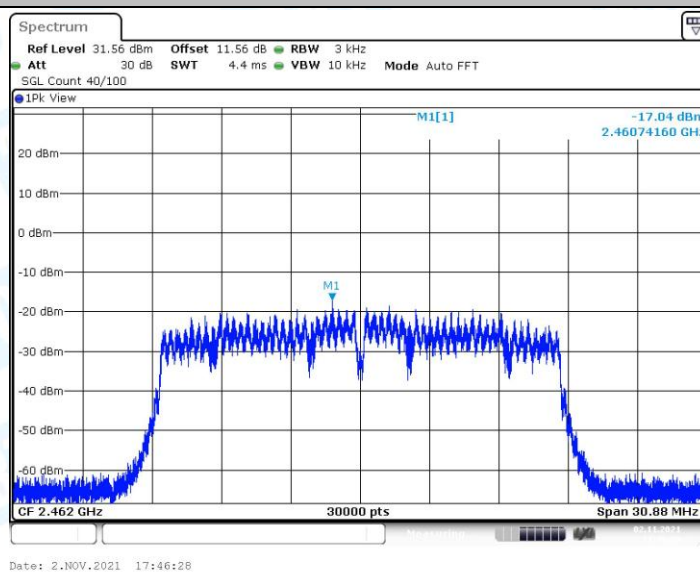
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

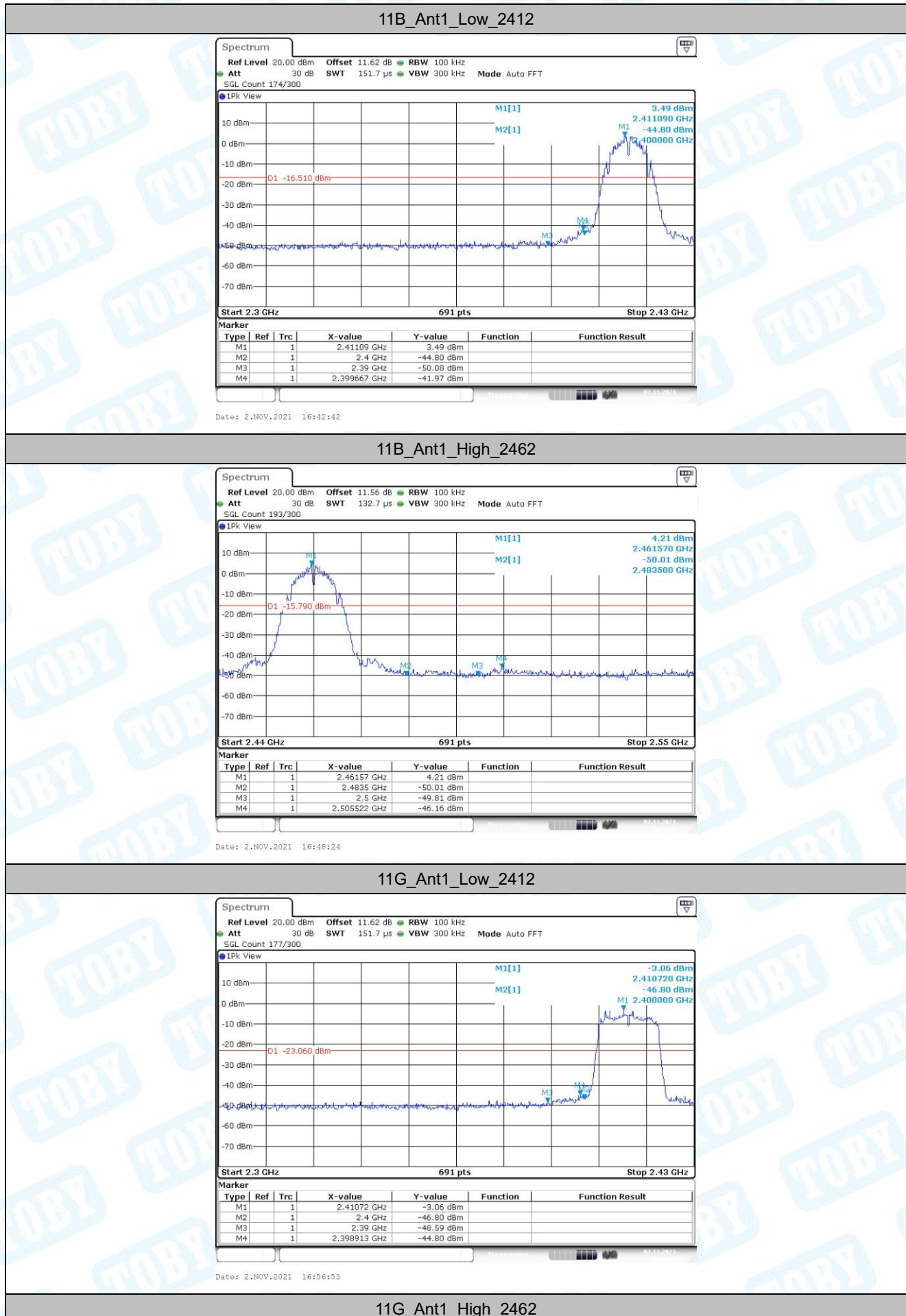


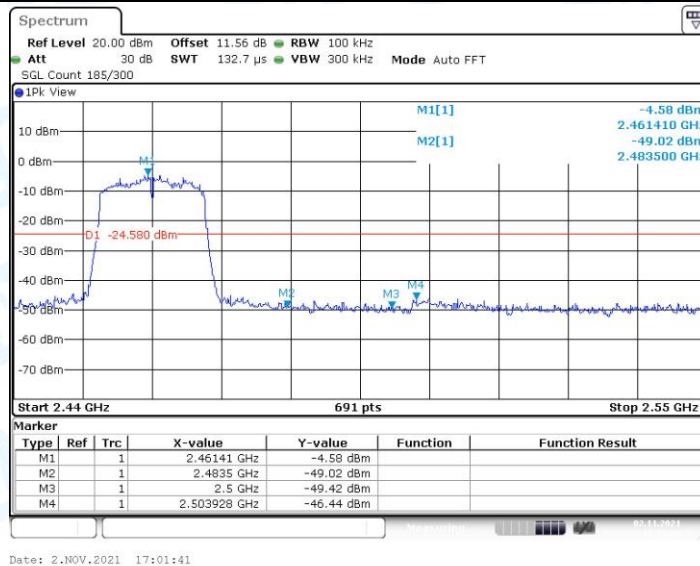
5. Band edge measurements

5.1. Test Result

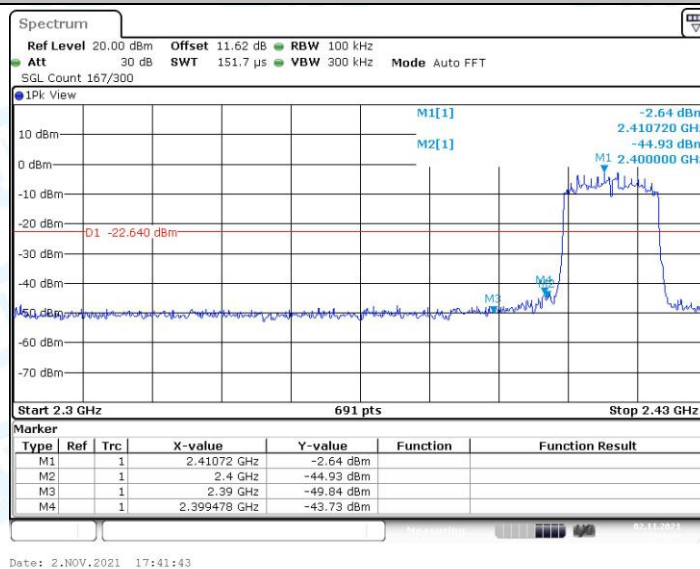
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	3.49	-41.97	≤-16.51	PASS
		High	2462	4.21	-46.16	≤-15.79	PASS
11G	Ant1	Low	2412	-3.06	-44.8	≤-23.06	PASS
		High	2462	-4.58	-46.44	≤-24.58	PASS
11N20SISO	Ant1	Low	2412	-2.64	-43.73	≤-22.64	PASS
		High	2462	-2.50	-45.94	≤-22.5	PASS

5.2. Test Graphs

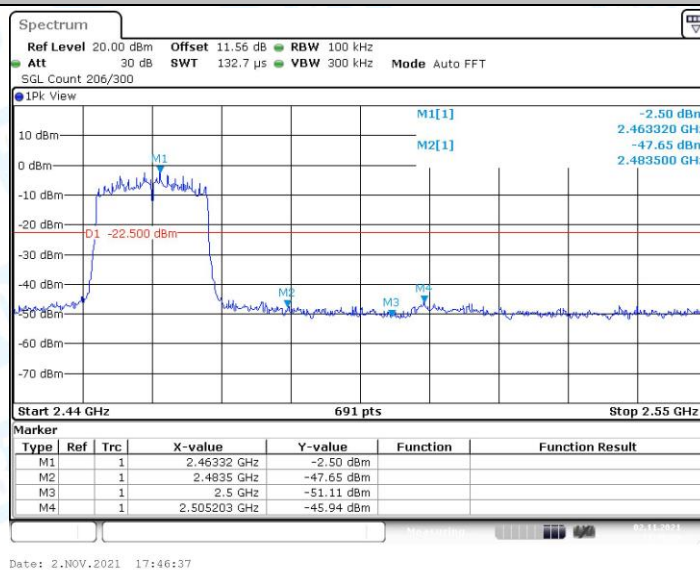




11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462

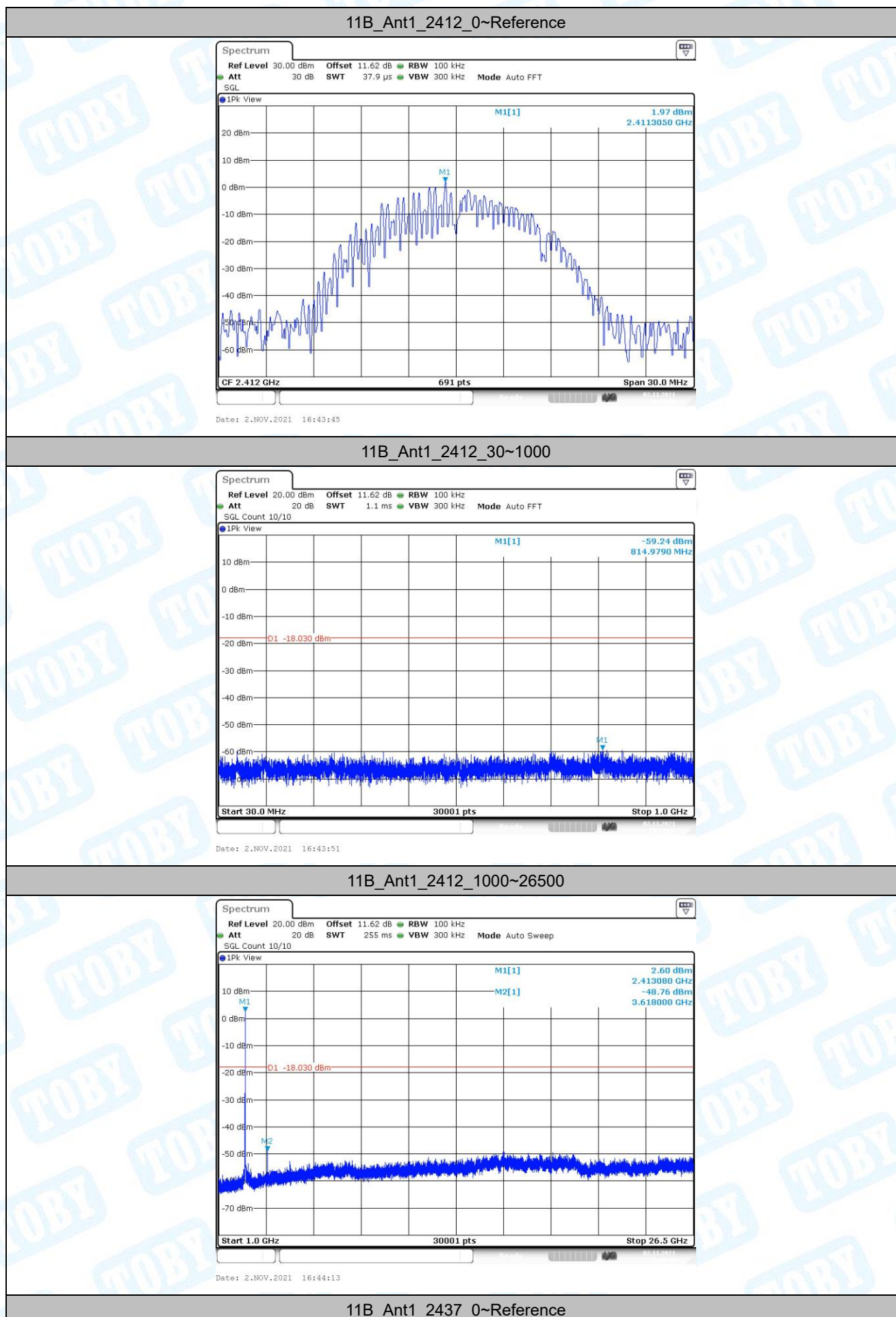


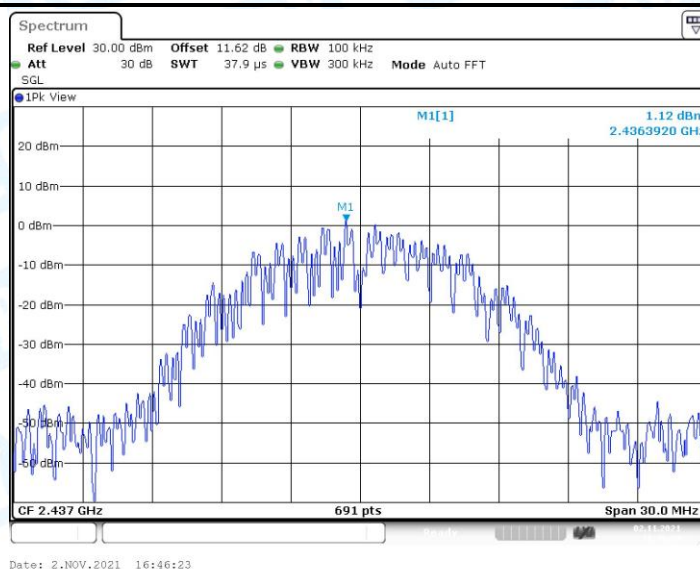
6. Conducted Spurious Emission

6.1. Test Result

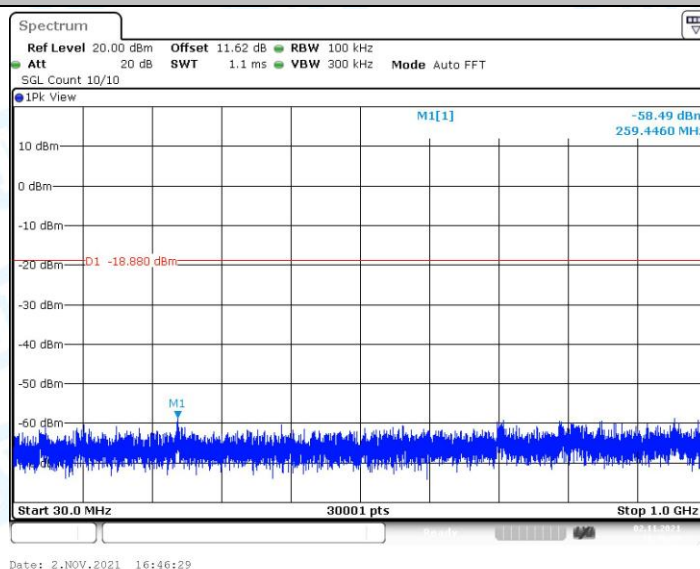
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	1.97	1.97	---	PASS
			30~1000	1.97	-59.24	≤-18.03	PASS
			1000~26500	1.97	-48.76	≤-18.03	PASS
		2437	Reference	1.12	1.12	---	PASS
			30~1000	1.12	-58.49	≤-18.88	PASS
			1000~26500	1.12	-48.97	≤-18.88	PASS
		2462	Reference	1.51	1.51	---	PASS
			30~1000	1.51	-59.15	≤-18.49	PASS
			1000~26500	1.51	-48.26	≤-18.49	PASS
11G	Ant1	2412	Reference	-6.99	-6.99	---	PASS
			30~1000	-6.99	-58.5	≤-26.99	PASS
			1000~26500	-6.99	-49.14	≤-26.99	PASS
		2437	Reference	-7.40	-7.40	---	PASS
			30~1000	-7.40	-58.45	≤-27.4	PASS
			1000~26500	-7.40	-49.16	≤-27.4	PASS
		2462	Reference	-6.23	-6.23	---	PASS
			30~1000	-6.23	-57.79	≤-26.23	PASS
			1000~26500	-6.23	-49.17	≤-26.23	PASS
11N20SISO	Ant1	2412	Reference	-6.41	-6.41	---	PASS
			30~1000	-6.41	-58.15	≤-26.41	PASS
			1000~26500	-6.41	-48.3	≤-26.41	PASS
		2437	Reference	-7.12	-7.12	---	PASS
			30~1000	-7.12	-57.38	≤-27.12	PASS
			1000~26500	-7.12	-49.37	≤-27.12	PASS
		2462	Reference	-7.03	-7.03	---	PASS
			30~1000	-7.03	-58.45	≤-27.03	PASS
			1000~26500	-7.03	-48.38	≤-27.03	PASS

6.2. Test Graphs

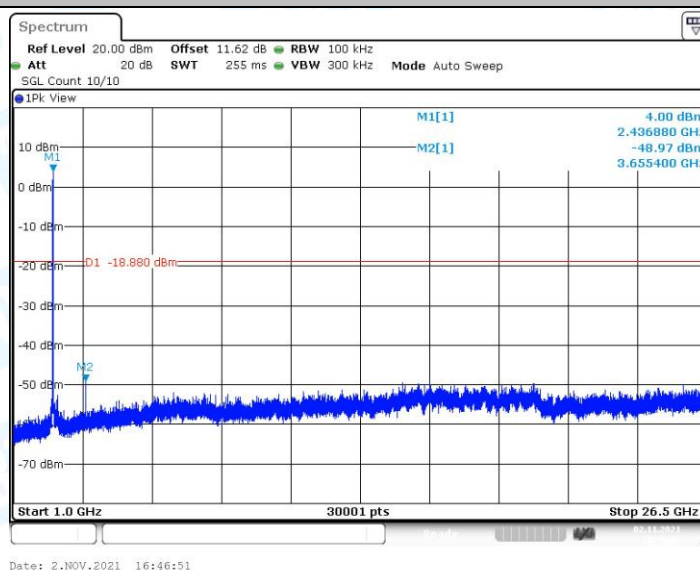




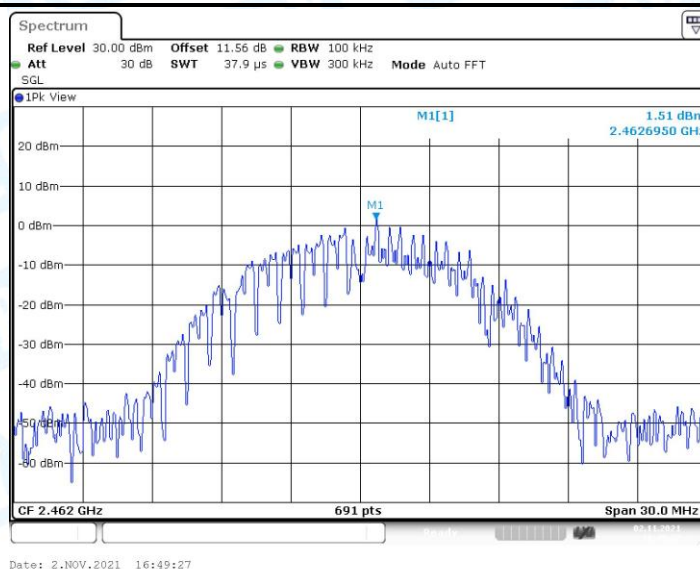
11B_Ant1_2437_30~1000



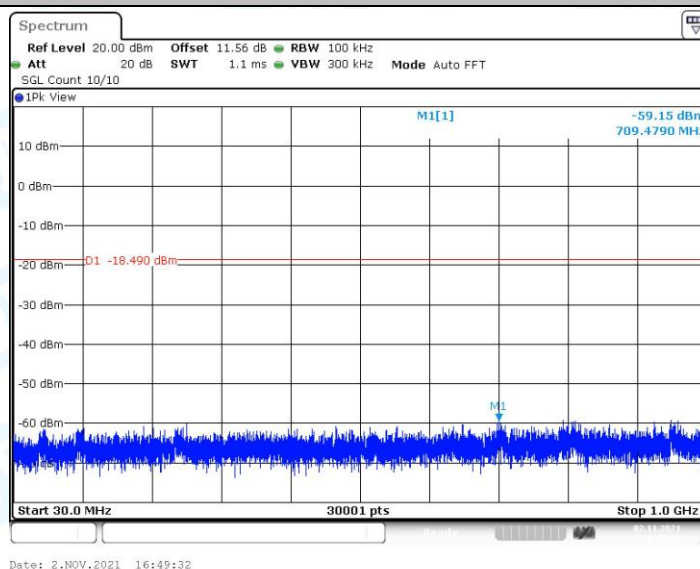
11B_Ant1_2437_1000~26500



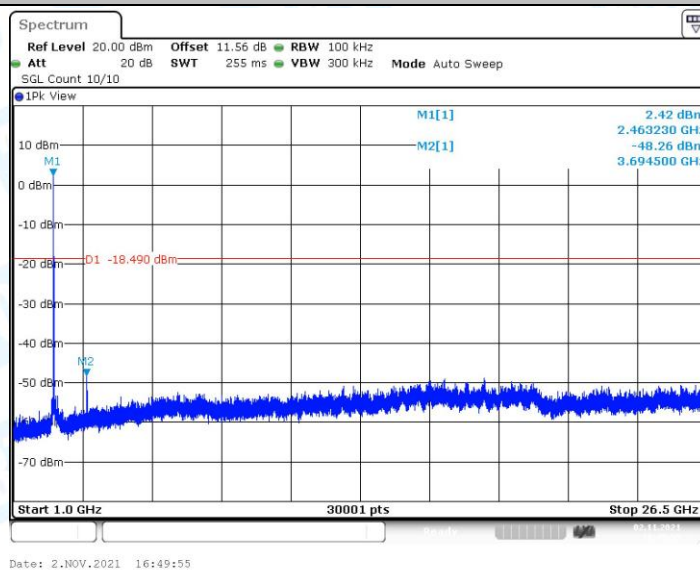
11B_Ant1_2462_0~Reference



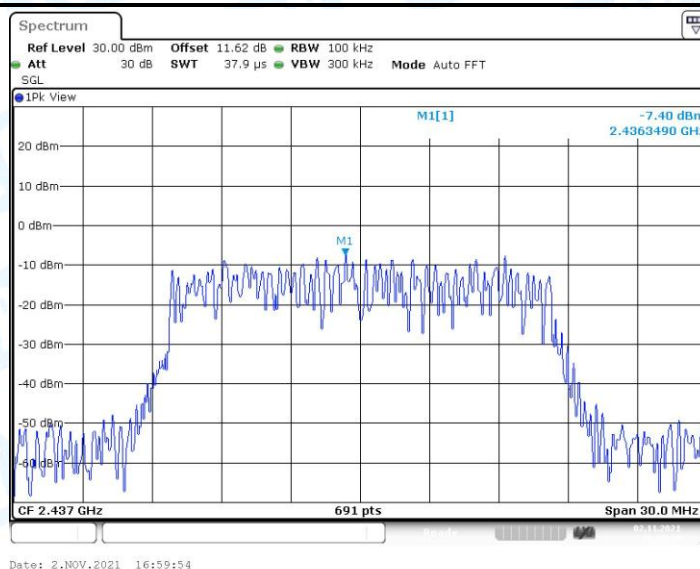
11B_Ant1_2462_30~1000



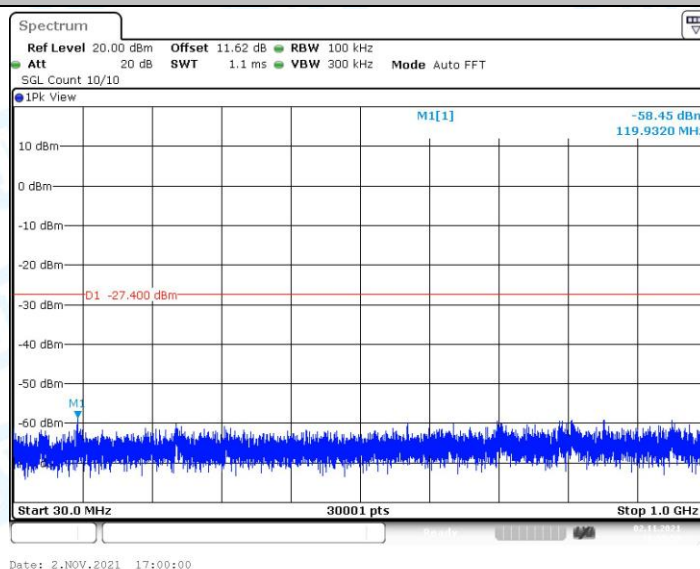
11B_Ant1_2462_1000~26500



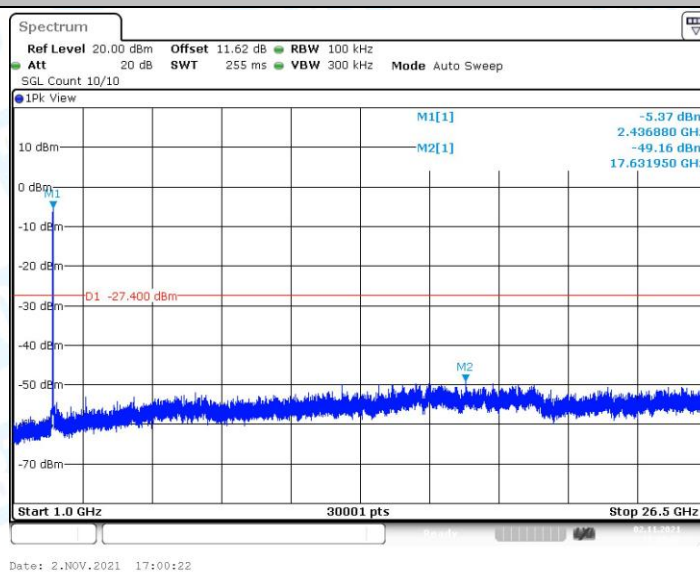
11G_Ant1_2412_0~Reference



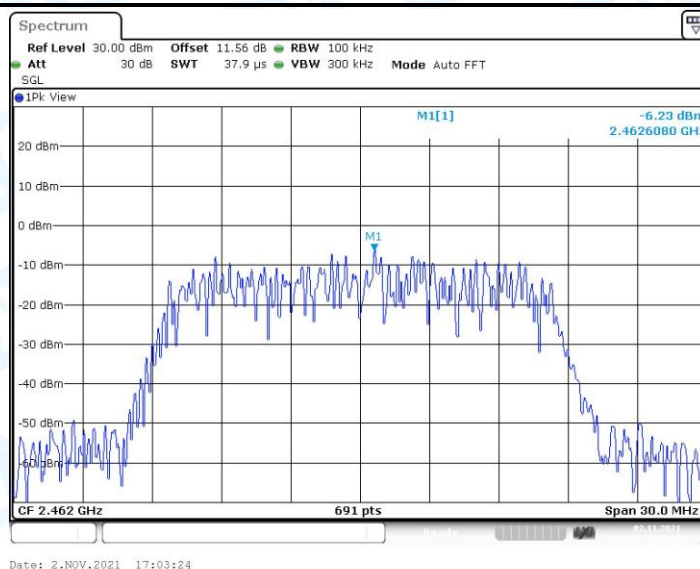
11G_Ant1_2437_30~1000



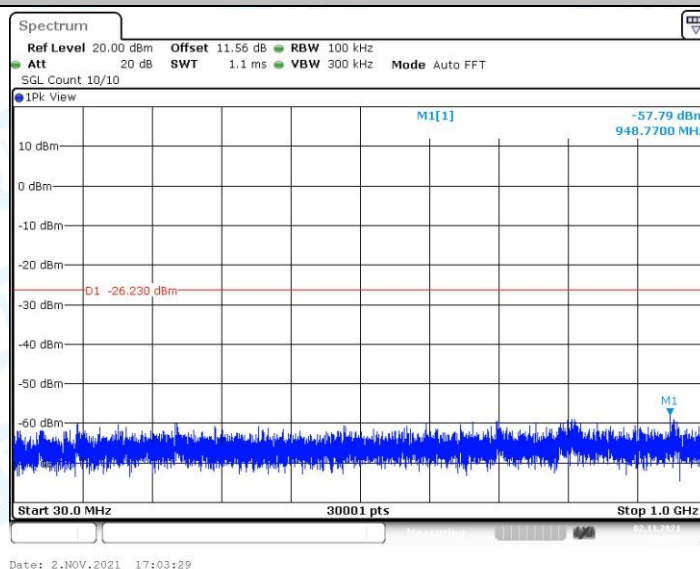
11G_Ant1_2437_1000~26500



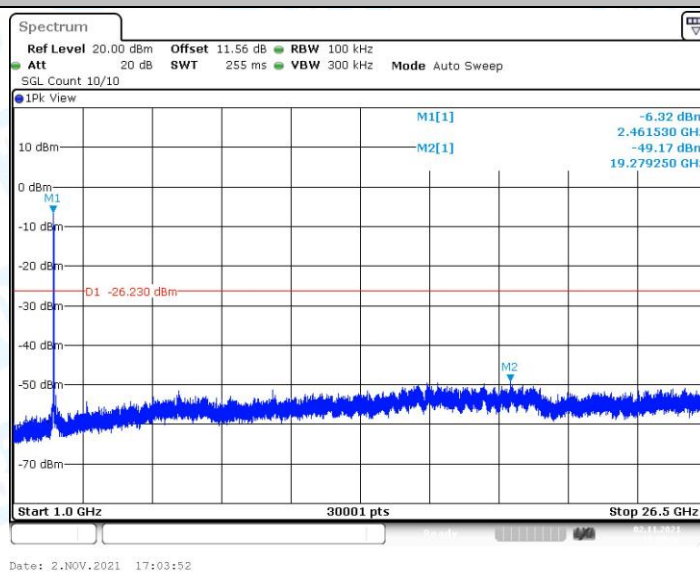
11G_Ant1_2462_0~Reference



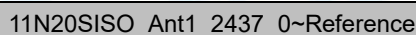
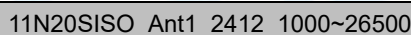
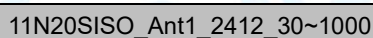
11G_Ant1_2462_30~1000

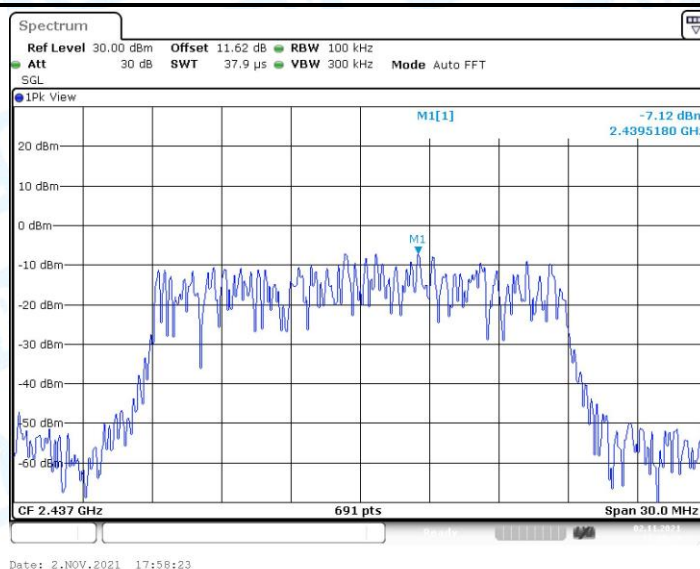


11G_Ant1_2462_1000~26500

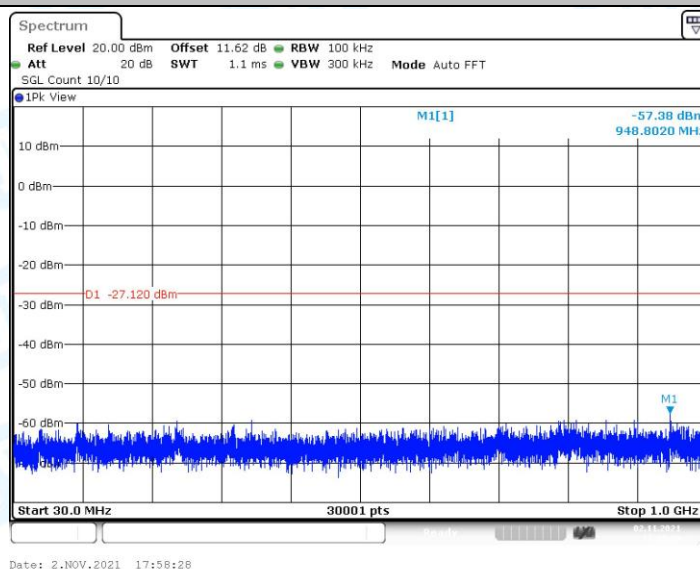


11N20SISO_Ant1_2412_0~Reference

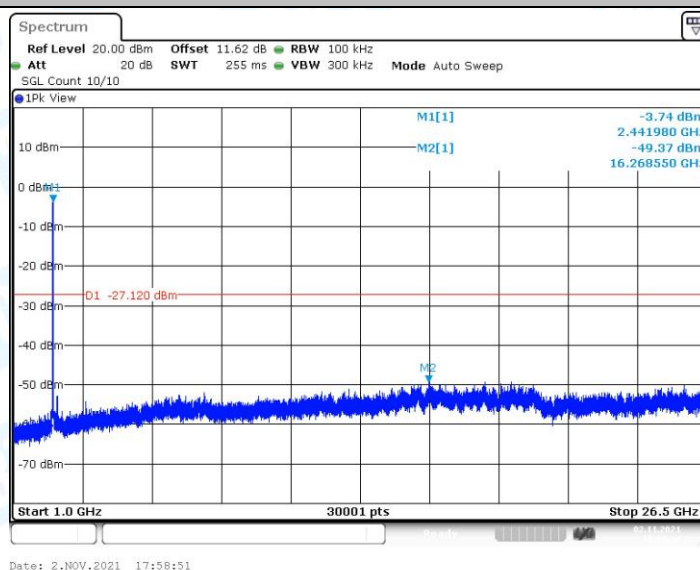




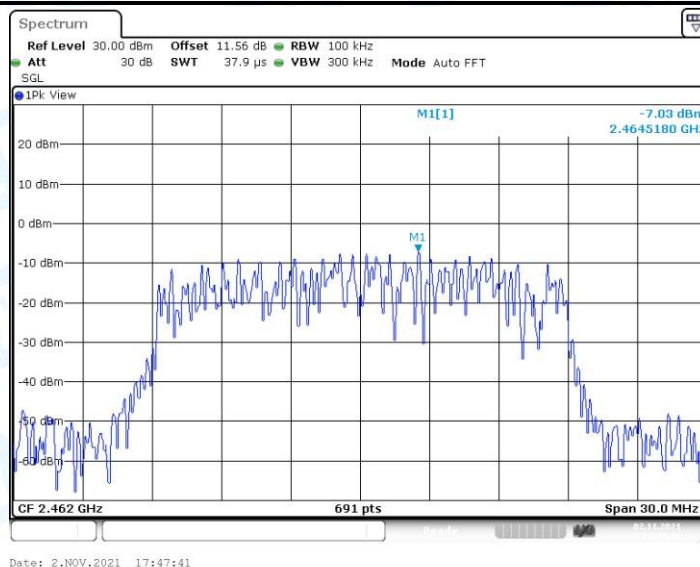
11N20SISO_Ant1_2437_30~1000



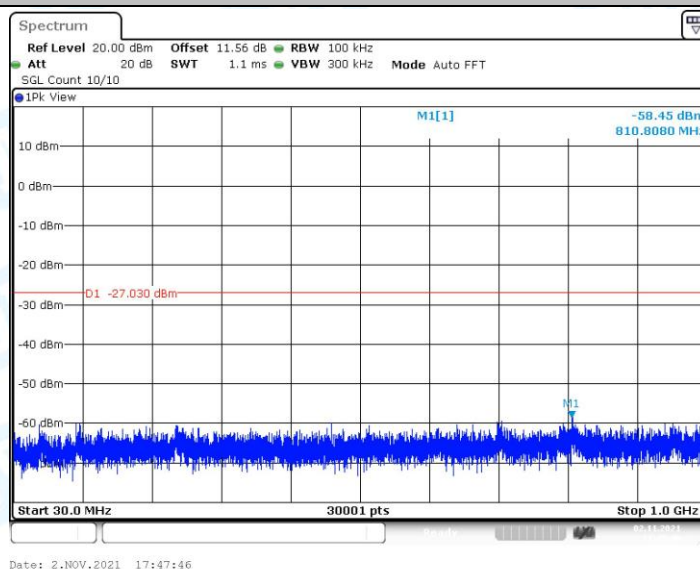
11N20SISO_Ant1_2437_1000~26500



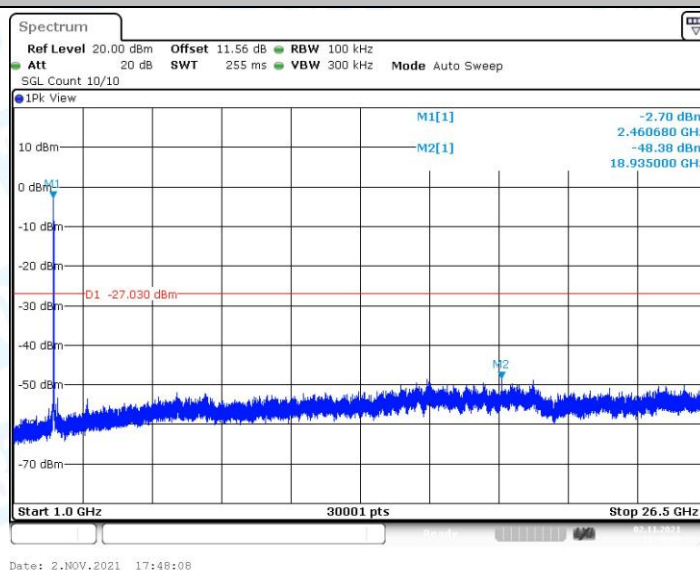
11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500

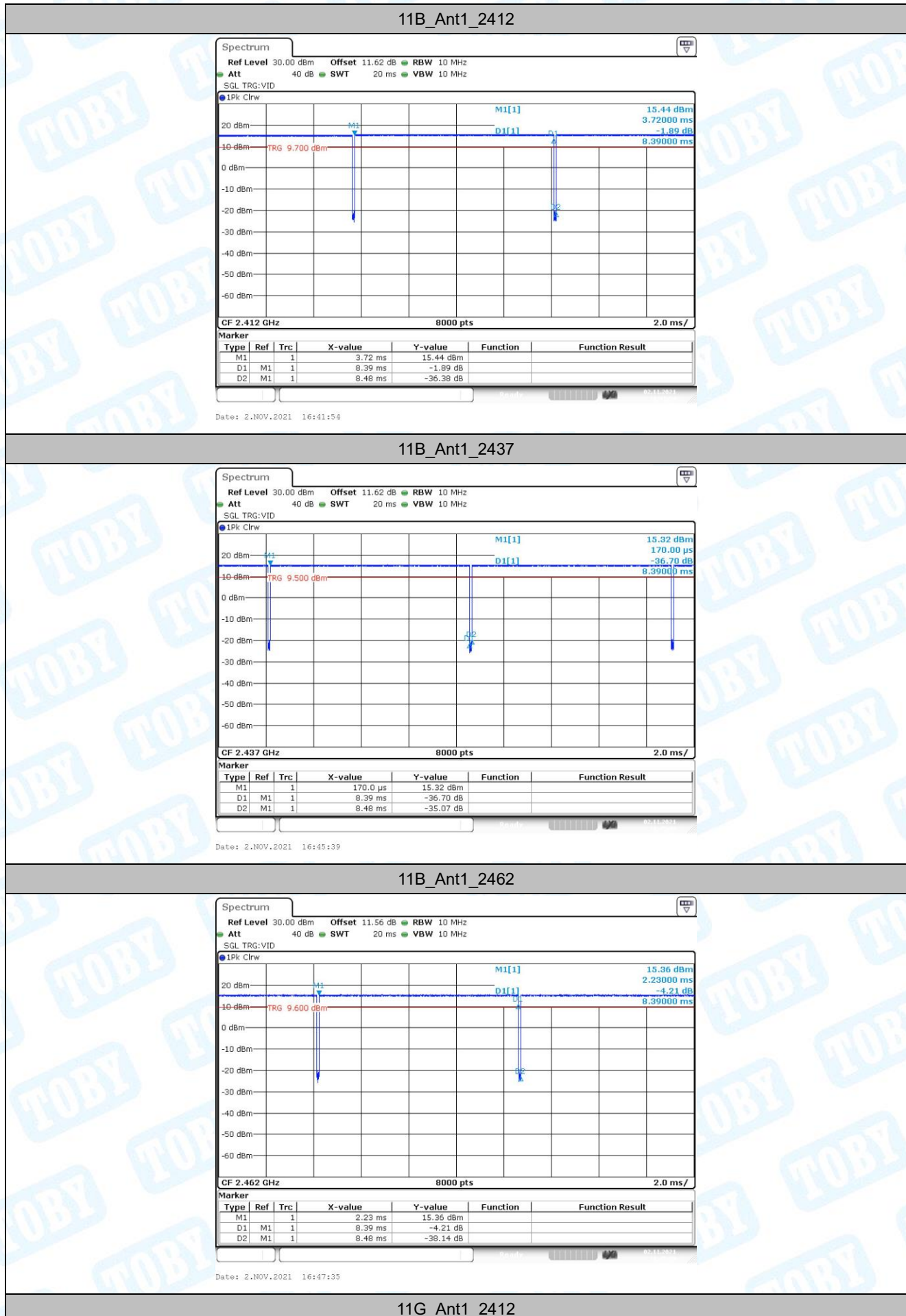


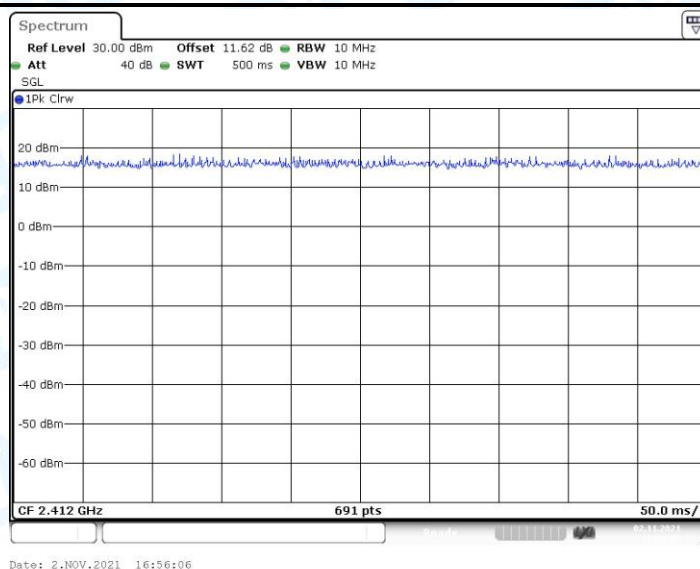
7. Duty Cycle

7.1. Test Result

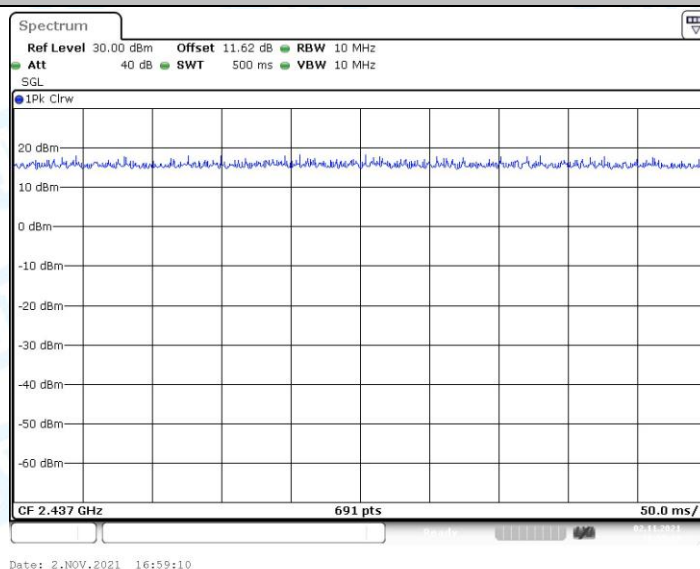
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T(KHz)	Limit	Verdict
11B	Ant1	2412	8.39	8.48	98.94	0.12	---	PASS
		2437	8.39	8.48	98.94	0.12	---	PASS
		2462	8.39	8.48	98.94	0.12	---	PASS
11G	Ant1	2412	0.00	0.00	100	0	---	PASS
		2437	0.00	0.00	100	0	---	PASS
		2462	0.00	0.00	100	0	---	PASS
11N20SISO	Ant1	2412	0.00	0.00	100	0	---	PASS
		2437	0.00	0.00	100	0	---	PASS
		2462	0.00	0.00	100	0	---	PASS

7.2. Test Graphs

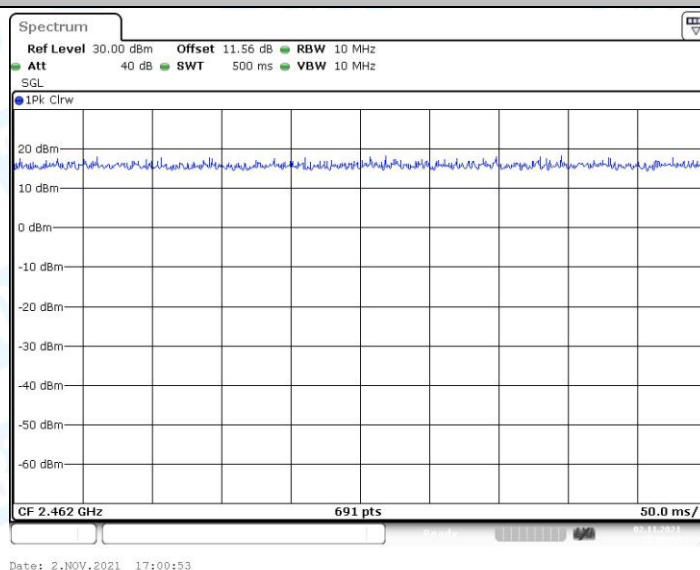




11G_Ant1_2437



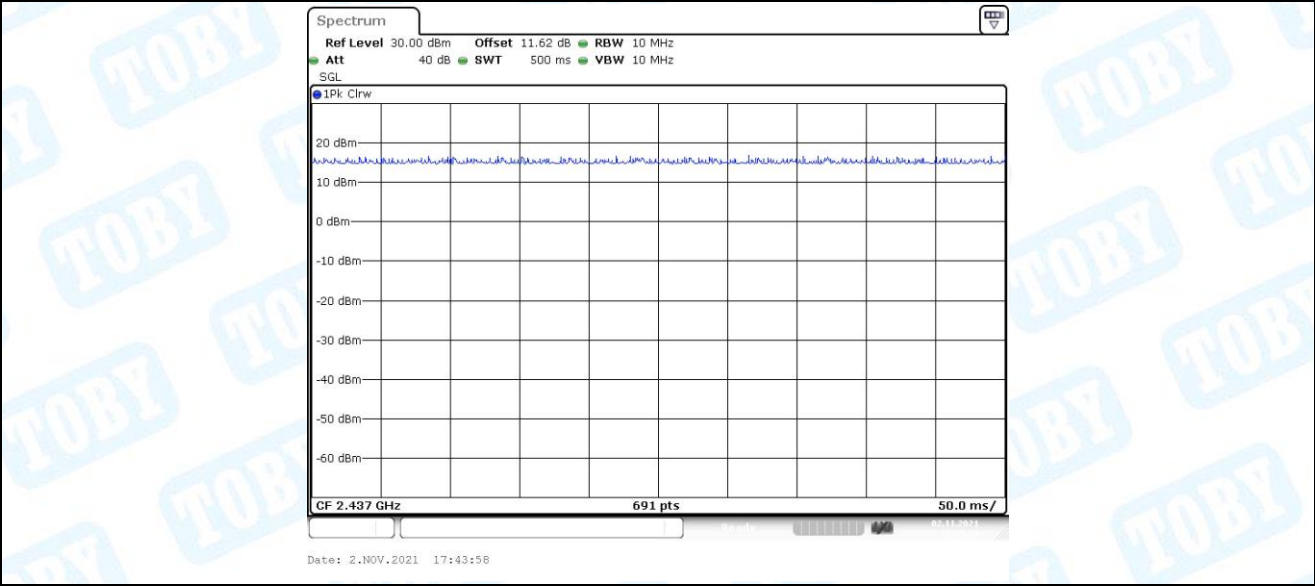
11G_Ant1_2462



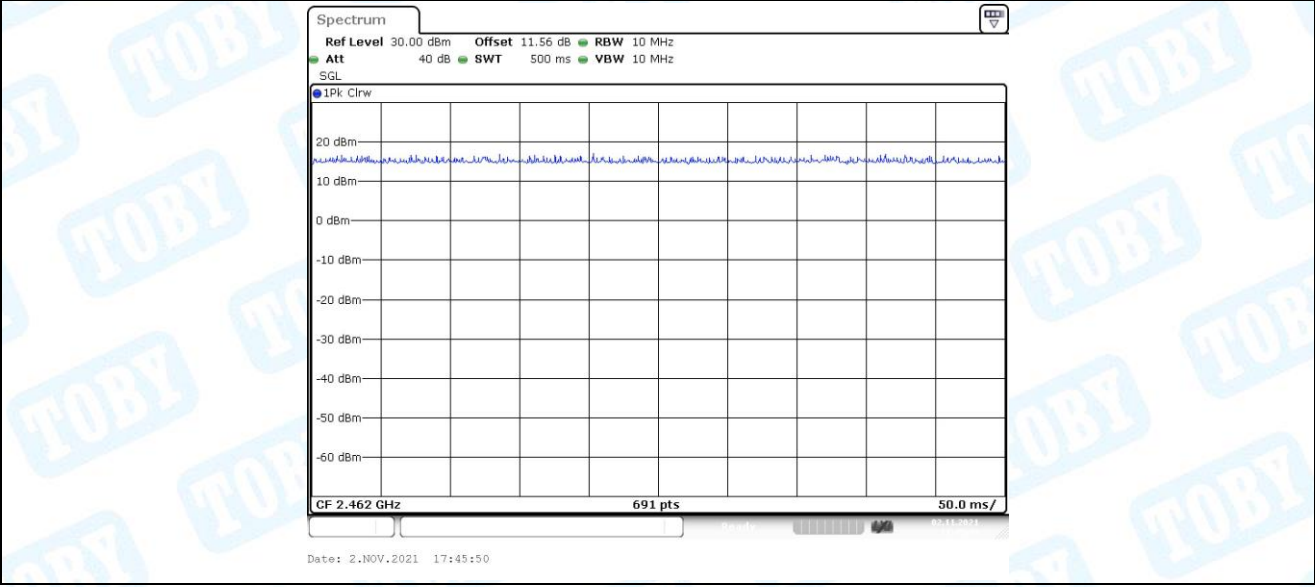
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_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	-49.76	≤-41.20	PASS
				AV	2340.319	-47.21	≤-41.20	PASS
				AV	2390.000	-48.18	≤-41.20	PASS
				Peak	2310.000	-38.17	≤-21.20	PASS
				Peak	2311.681	-38.08	≤-21.20	PASS
				Peak	2390.000	-41.5	≤-21.20	PASS
		High	2462	AV	2483.500	-47.29	≤-41.20	PASS
				AV	2484.159	-47.1	≤-41.20	PASS
				AV	2500.000	-48.15	≤-41.20	PASS
				Peak	2483.500	-39.87	≤-21.20	PASS
				Peak	2489.739	-37.93	≤-21.20	PASS
				Peak	2500.000	-40.48	≤-21.20	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.87	≤-41.20	PASS
				AV	2339.942	-47.46	≤-41.20	PASS
				AV	2390.000	-48.43	≤-41.20	PASS
				Peak	2310.000	-45.29	≤-21.20	PASS
				Peak	2350.116	-37.36	≤-21.20	PASS
				Peak	2390.000	-41.14	≤-21.20	PASS
		High	2462	AV	2483.500	-47.64	≤-41.20	PASS
				AV	2483.522	-47.64	≤-41.20	PASS
				AV	2500.000	-48.67	≤-41.20	PASS
				Peak	2483.500	-38.38	≤-21.20	PASS
				Peak	2483.522	-38.38	≤-21.20	PASS
				Peak	2500.000	-43.92	≤-21.20	PASS
11N20SISO	Ant1	Low	2412	AV	2310.000	-49.89	≤-41.20	PASS
				AV	2340.130	-47.52	≤-41.20	PASS
				AV	2390.000	-48.85	≤-41.20	PASS
				Peak	2310.000	-42.09	≤-21.20	PASS
				Peak	2339.942	-38.48	≤-21.20	PASS
				Peak	2390.000	-42.42	≤-21.20	PASS
		High	2462	AV	2483.500	-47.97	≤-41.20	PASS
				AV	2483.522	-47.97	≤-41.20	PASS
				AV	2500.000	-48.82	≤-41.20	PASS
				Peak	2483.500	-44.91	≤-21.20	PASS
				Peak	2492.449	-38.27	≤-21.20	PASS
				Peak	2500.000	-43.32	≤-21.20	PASS

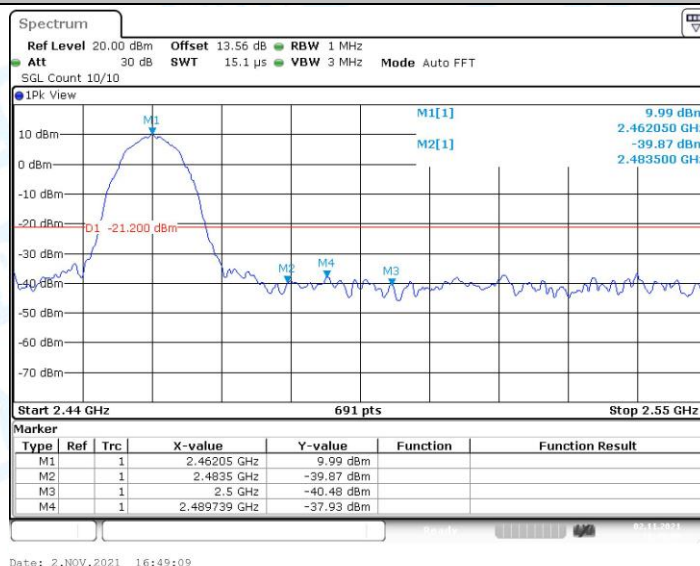
Note:

1. The Antenna Gain is compensated in the graph.
2. 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.

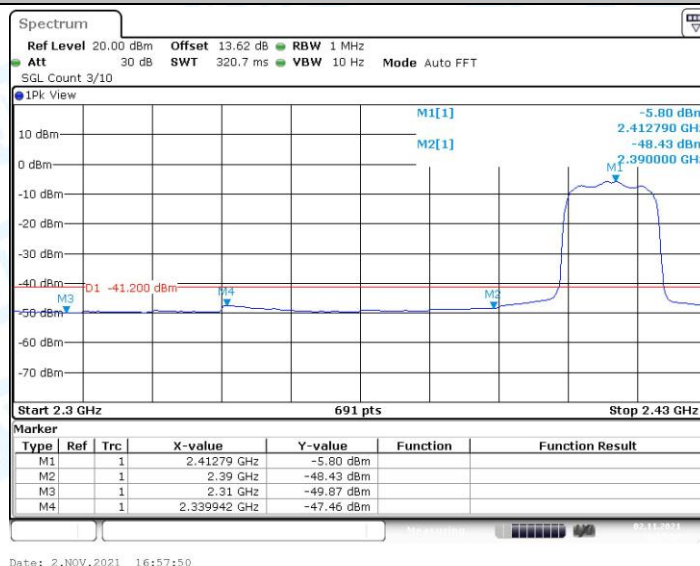
8.2. Test Graphs



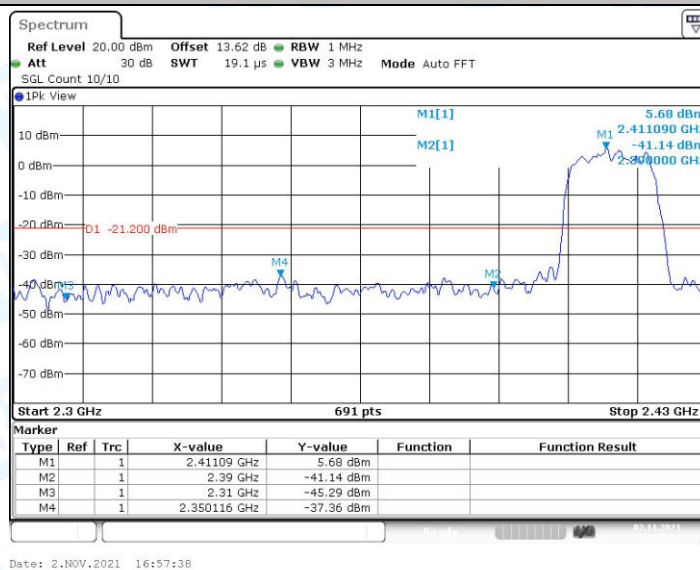
11B_Ant1_High_2462_Peak



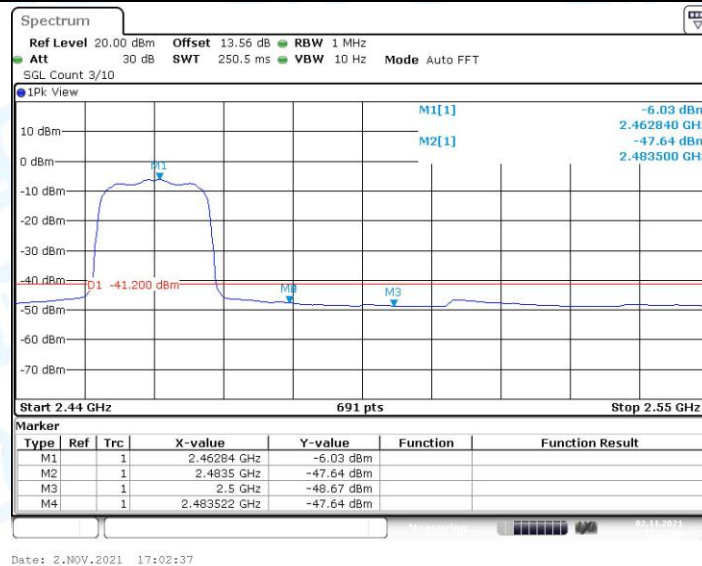
11G_Ant1_Low_2412_AV



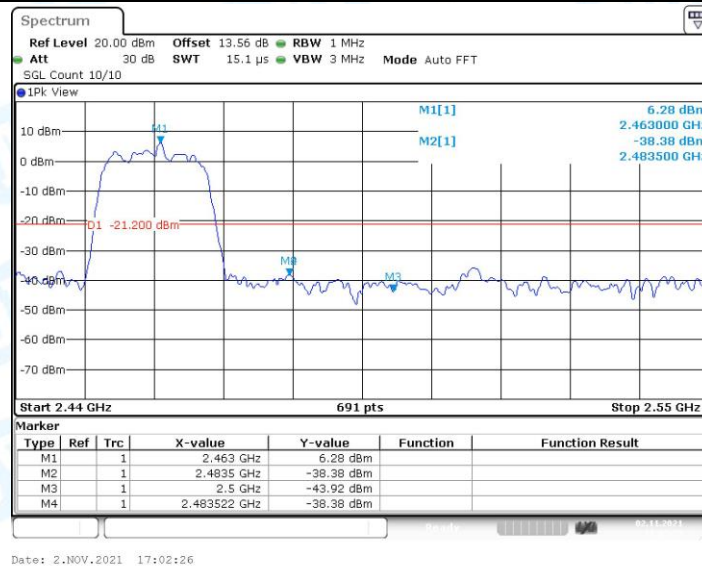
11G_Ant1_Low_2412_Peak



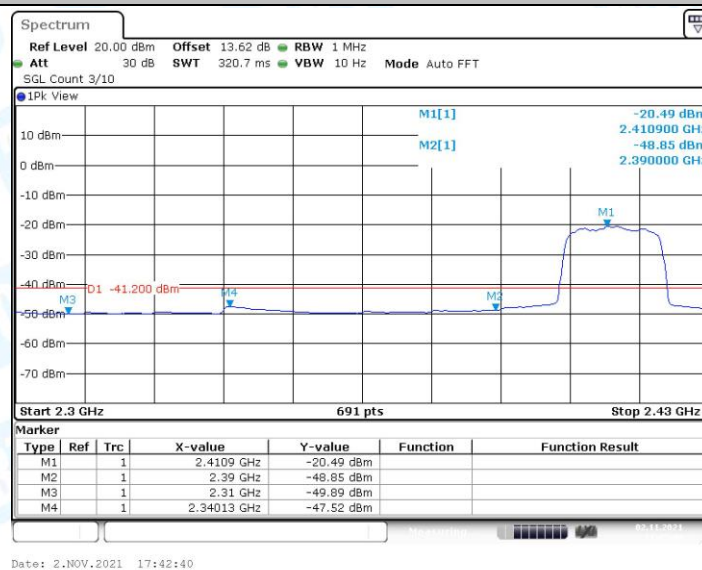
11G_Ant1_High_2462_AV



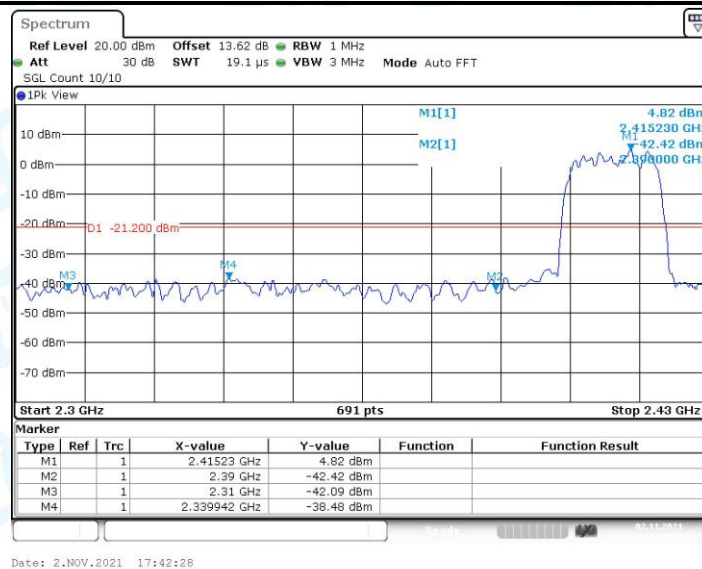
11G_Ant1_High_2462_Peak



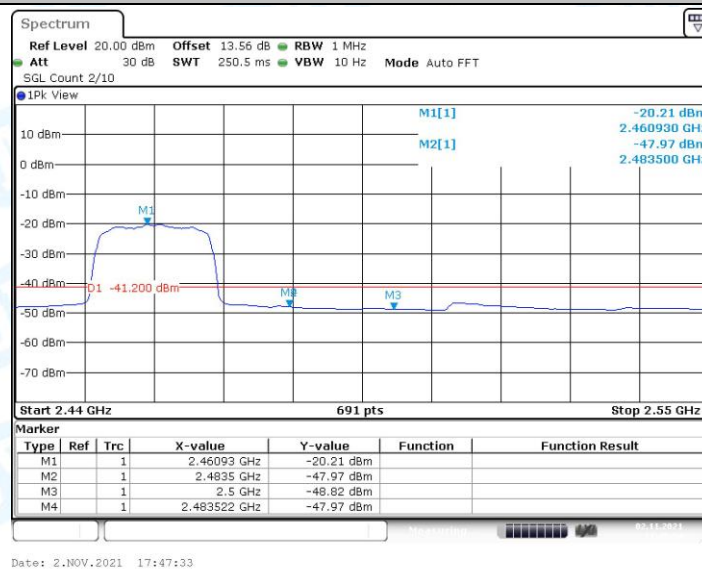
11N20SISO_Ant1_Low_2412_AV



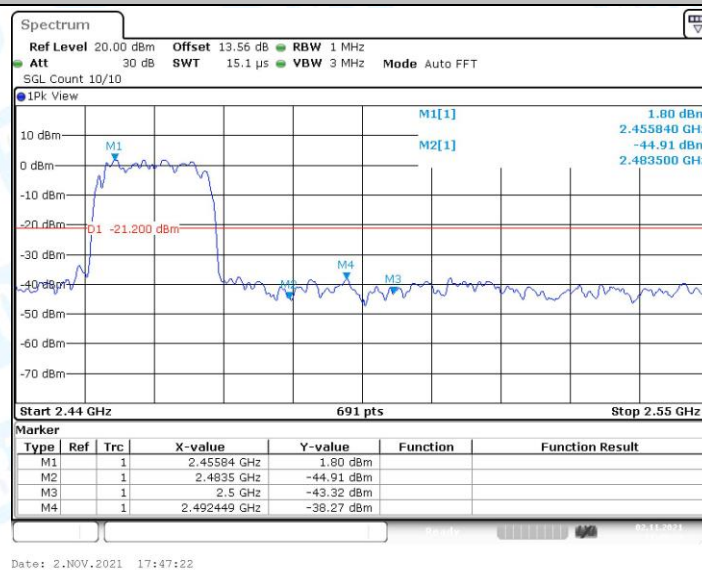
11N20SISO_Ant1_Low_2412_Peak



11N20SISO_Ant1_High_2462_AV



11N20SISO_Ant1_High_2462_Peak



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