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

General Description of EUT	
Product Name:	MINI LED PROJECTOR
Test Model:	RD-850
Sample ID:	202202-0152-1-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	50%
Test Voltage:	AC 120V
Test Engineer:	Huangjianping
Note: For a more detailed features description, please refer to the report TBR-C-202202-0152-1.	

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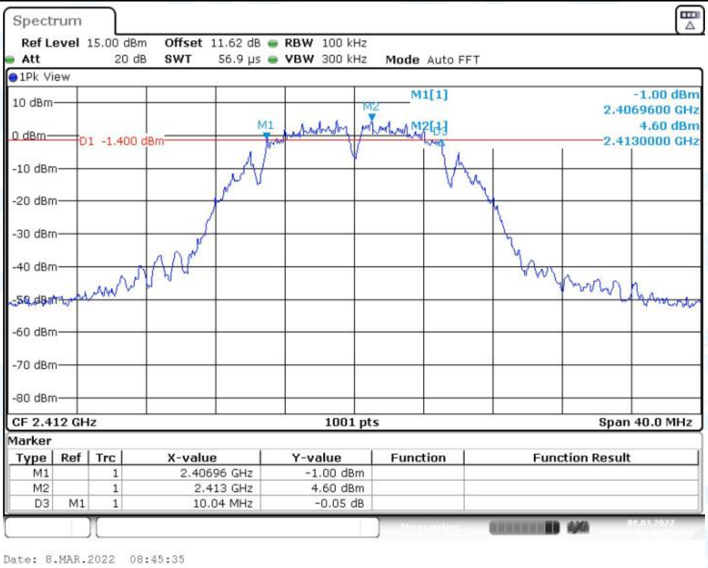
1. DTS Bandwidth

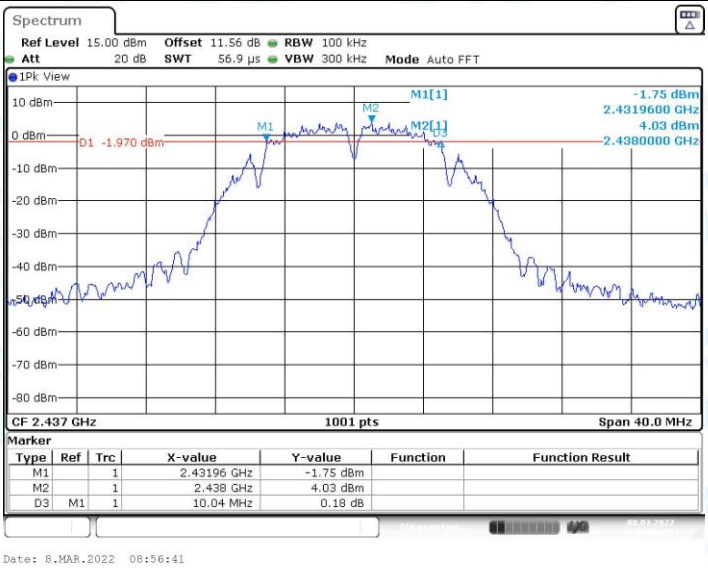
1.1.Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.04	2406.96	2417.00	0.5	PASS
		2437	10.04	2431.96	2442.00	0.5	PASS
		2462	10.04	2456.96	2467.00	0.5	PASS
11G	Ant1	2412	15.48	2404.08	2419.56	0.5	PASS
		2437	16.32	2428.84	2445.16	0.5	PASS
		2462	15.72	2454.20	2469.92	0.5	PASS
11N20SISO	Ant1	2412	17.04	2403.48	2420.52	0.5	PASS
		2437	15.80	2429.12	2444.92	0.5	PASS
		2462	15.92	2453.88	2469.80	0.5	PASS
11N40SISO	Ant1	2422	35.20	2404.40	2439.60	0.5	PASS
		2437	35.36	2419.24	2454.60	0.5	PASS
		2452	35.36	2434.24	2469.60	0.5	PASS

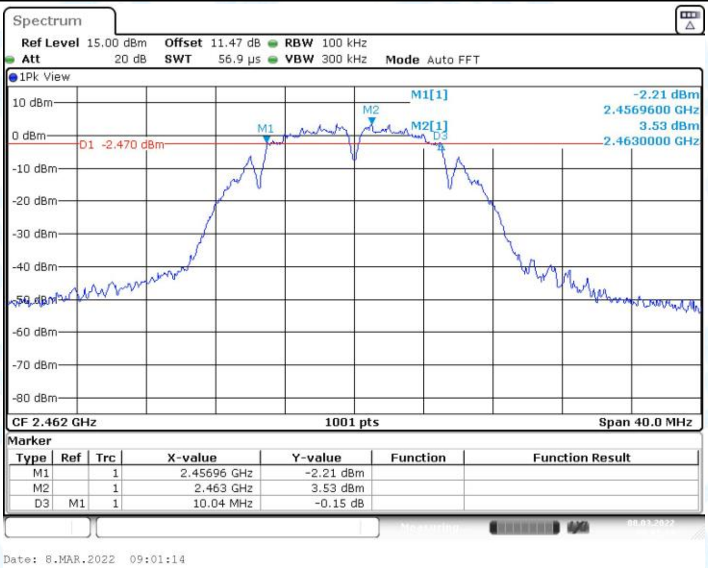
1.2.Test Graphs



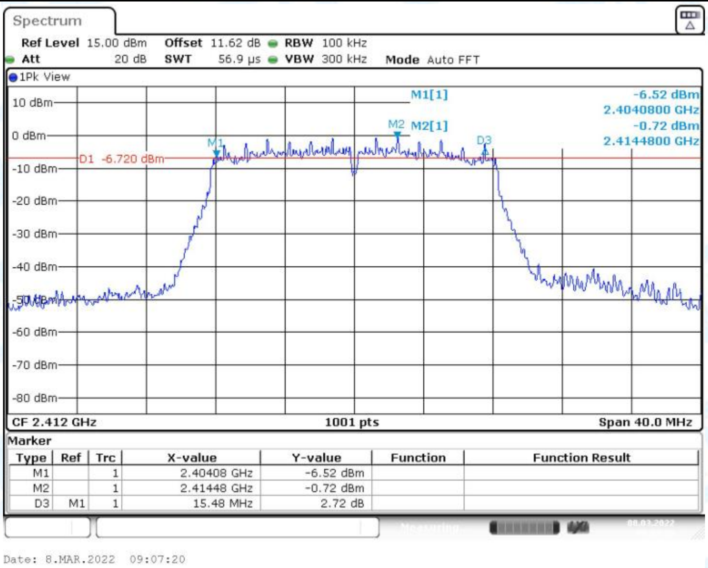
11B_Ant1_2412



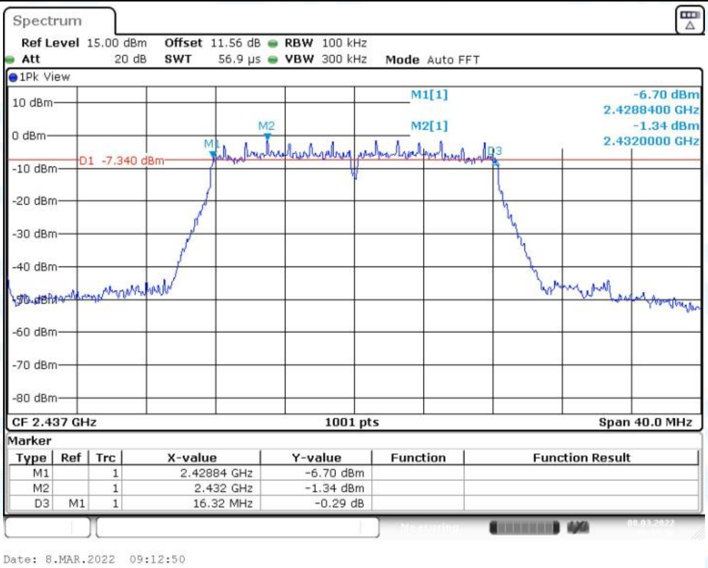
11B_Ant1_2437



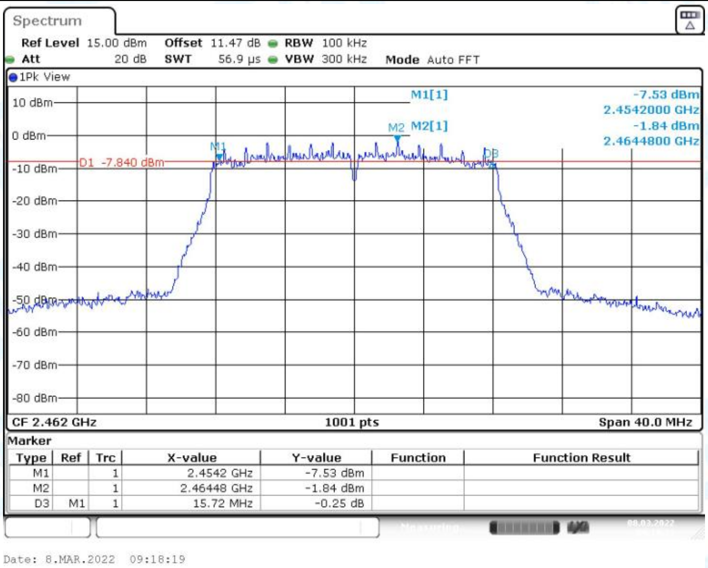
11B_Ant1_2462



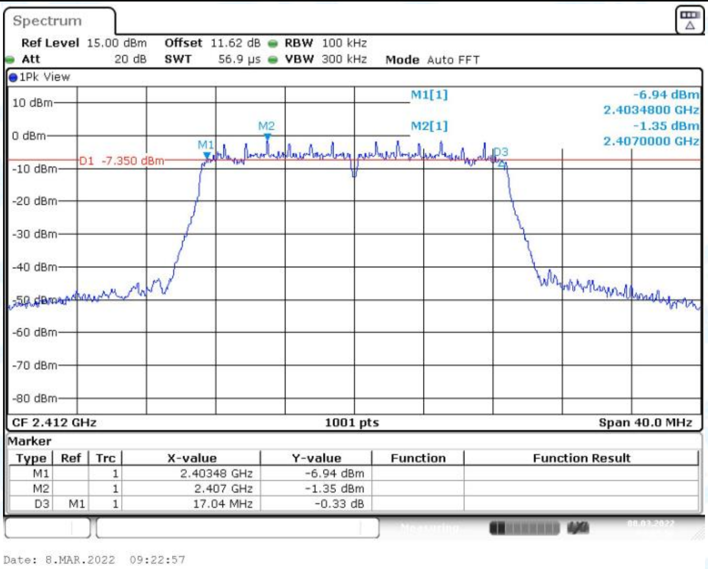
11G_Ant1_2412



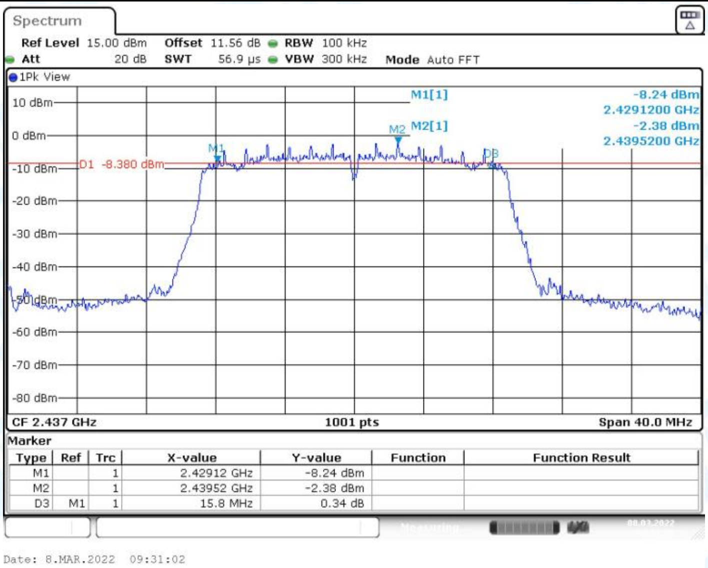
11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



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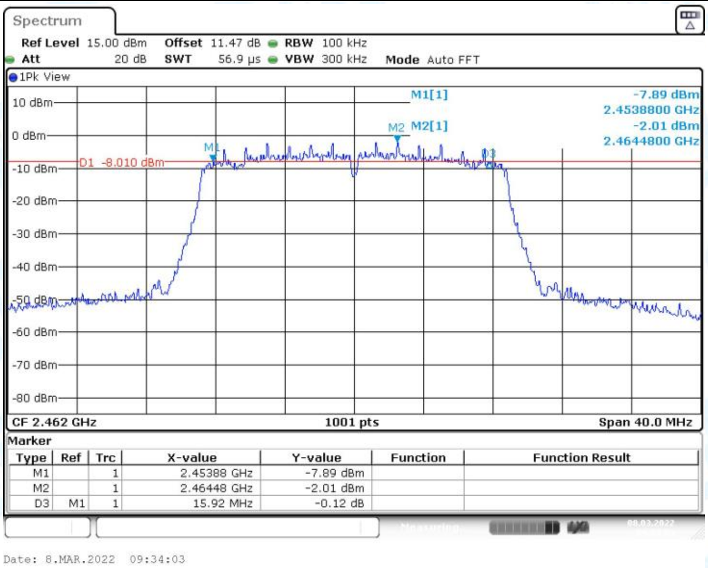

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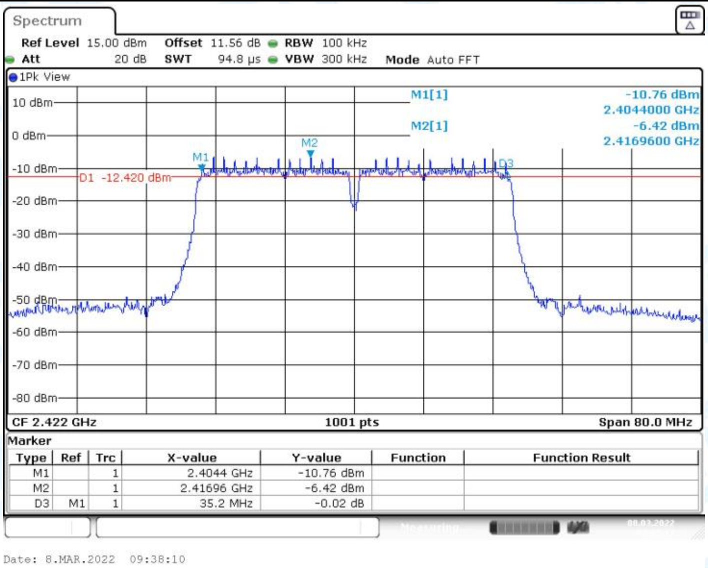
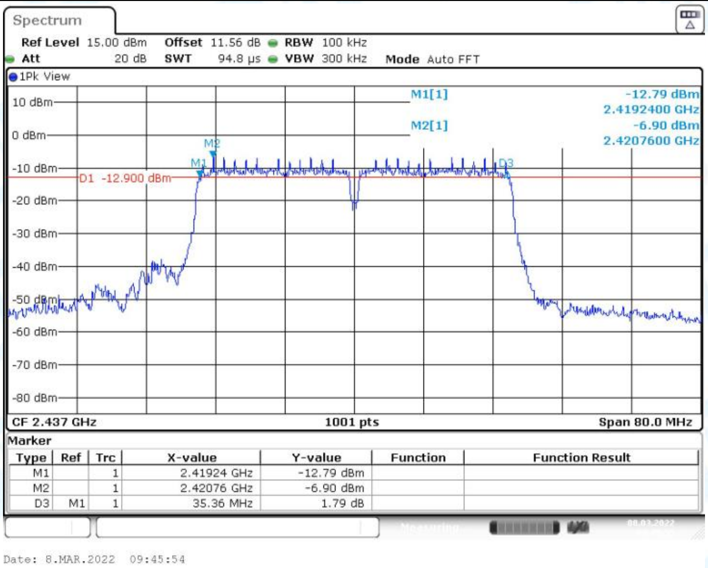
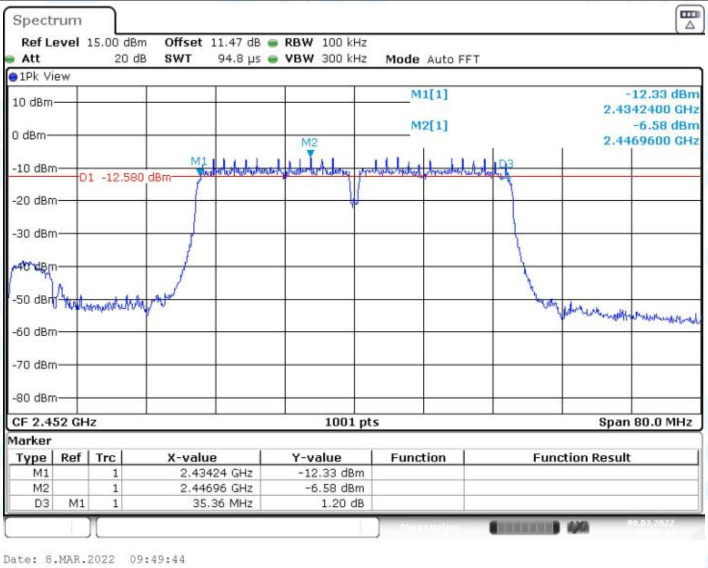


11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



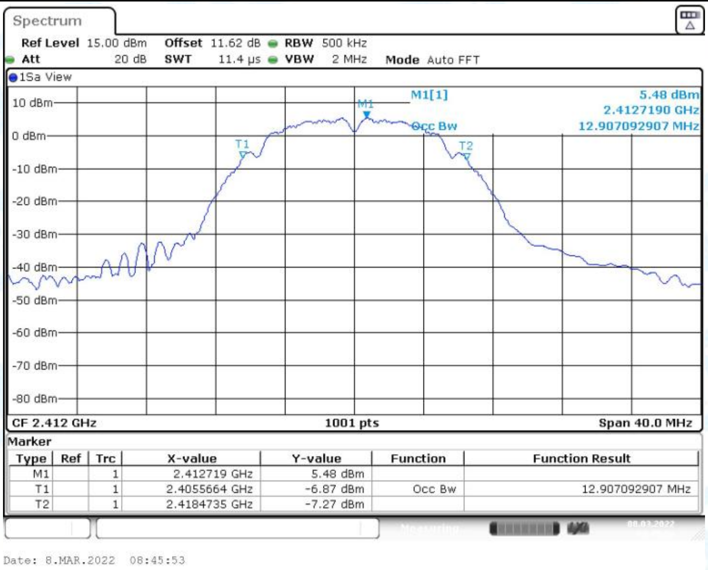
11N40SISO_Ant1_2452

2. Occupied Channel Bandwidth

2.1.Test Result

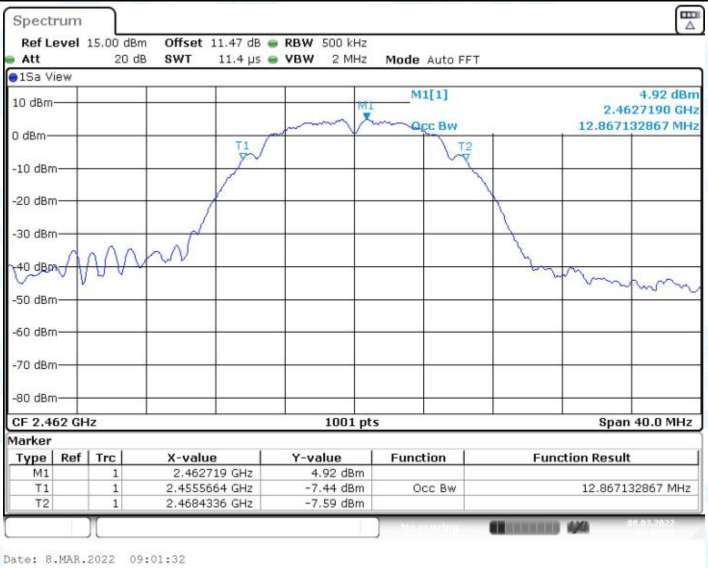
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.907	2405.566	2418.474	---	---
		2437	12.907	2430.526	2443.434	---	---
		2462	12.867	2455.566	2468.434	---	---
11G	Ant1	2412	16.623	2403.688	2420.312	---	---
		2437	16.783	2428.688	2445.472	---	---
		2462	16.623	2453.688	2470.312	---	---
11N20SISO	Ant1	2412	17.782	2403.049	2420.831	---	---
		2437	17.542	2428.209	2445.751	---	---
		2462	17.502	2453.249	2470.751	---	---
11N40SISO	Ant1	2422	35.964	2404.018	2439.982	---	---
		2437	36.044	2418.938	2454.982	---	---
		2452	35.964	2433.938	2469.902	---	---

2.2.Test Graphs

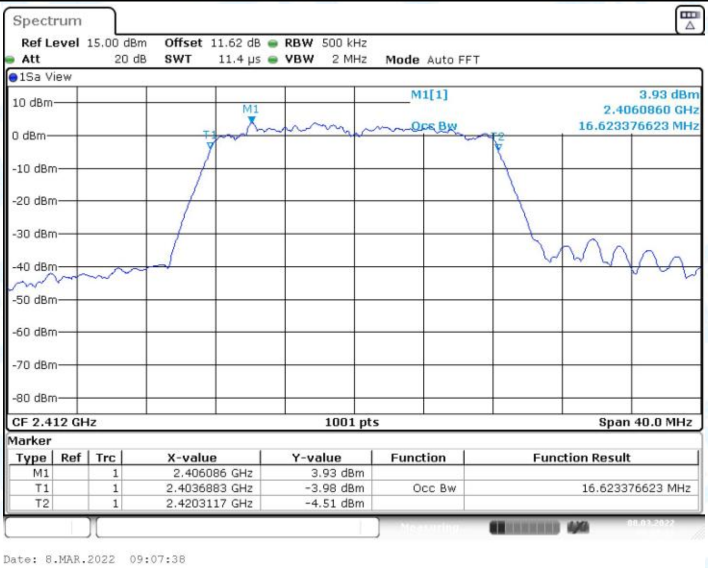


11B_Ant1_2412

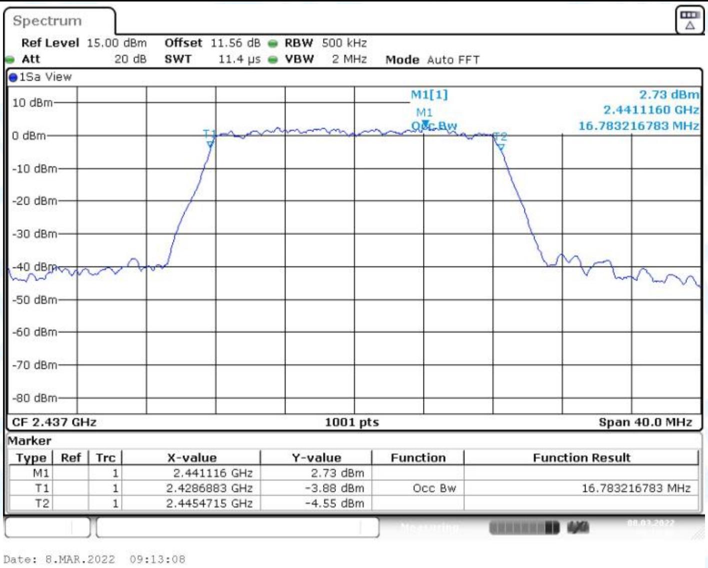
11B_Ant1_2437



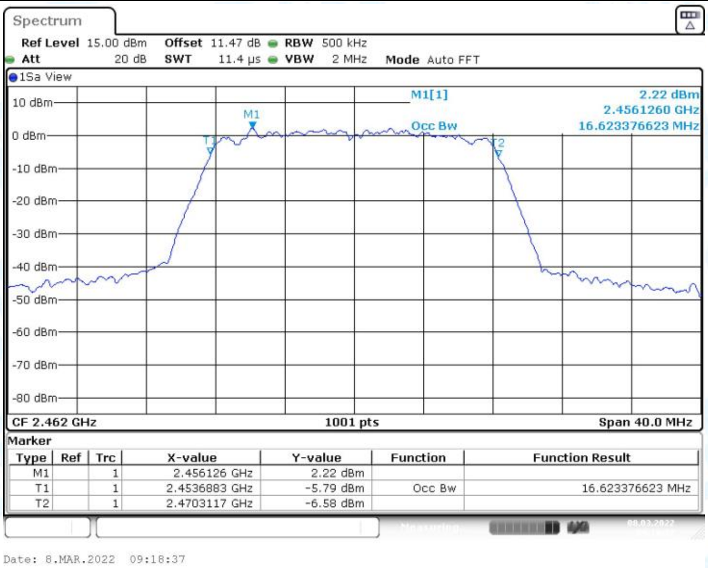
11B_Ant1_2462



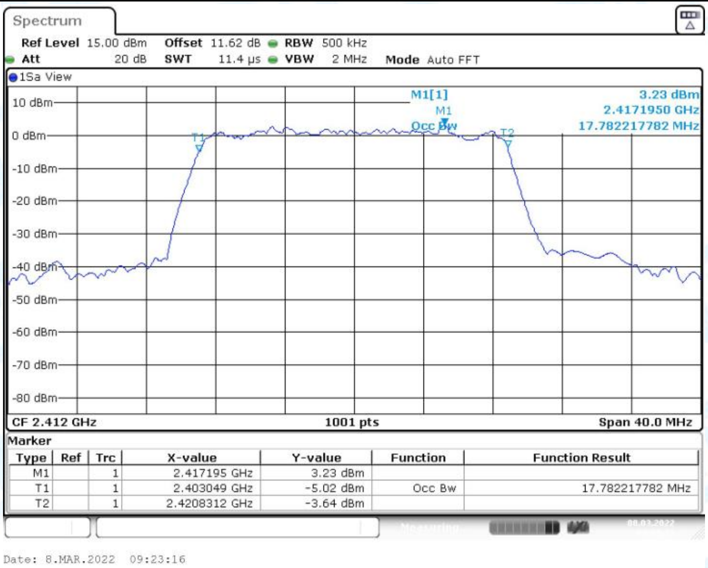
11G_Ant1_2412



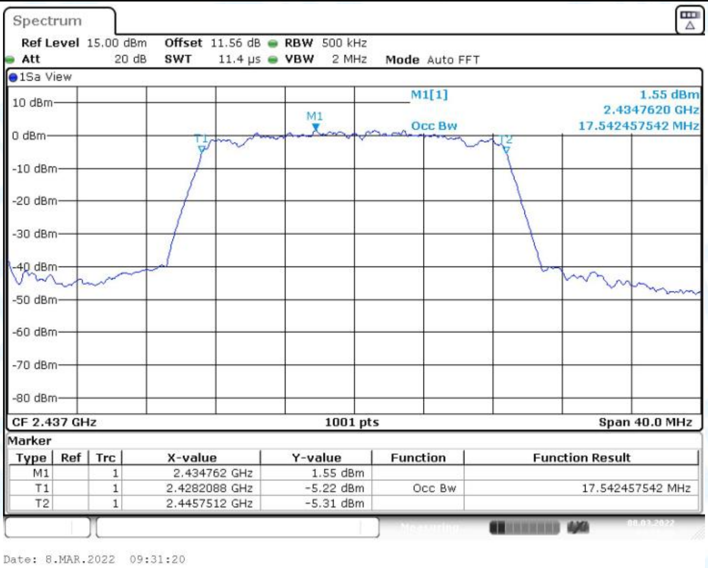
11G_Ant1_2437



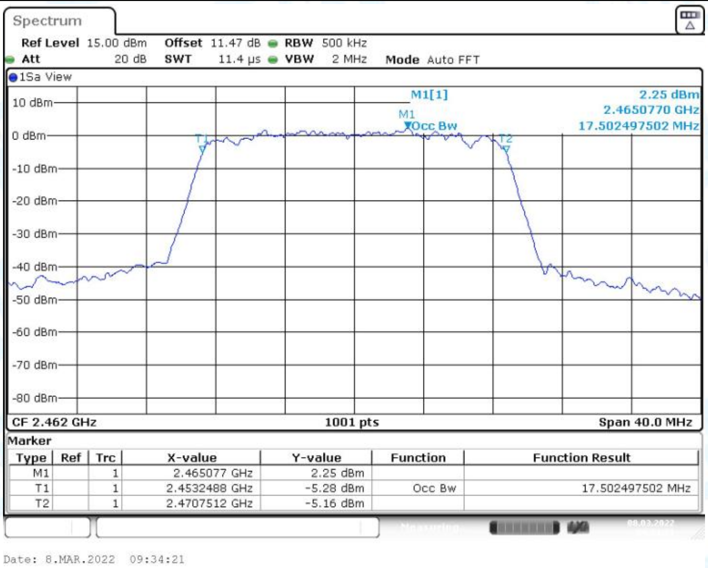
11G_Ant1_2462



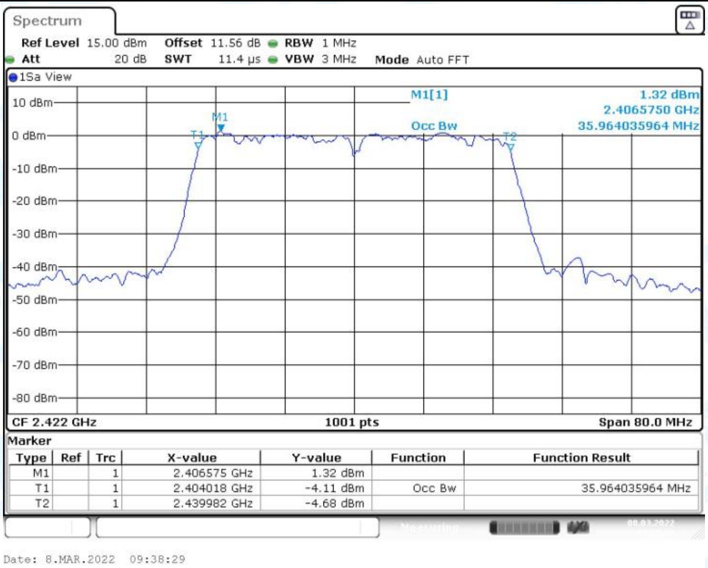
11N20SISO_Ant1_2412



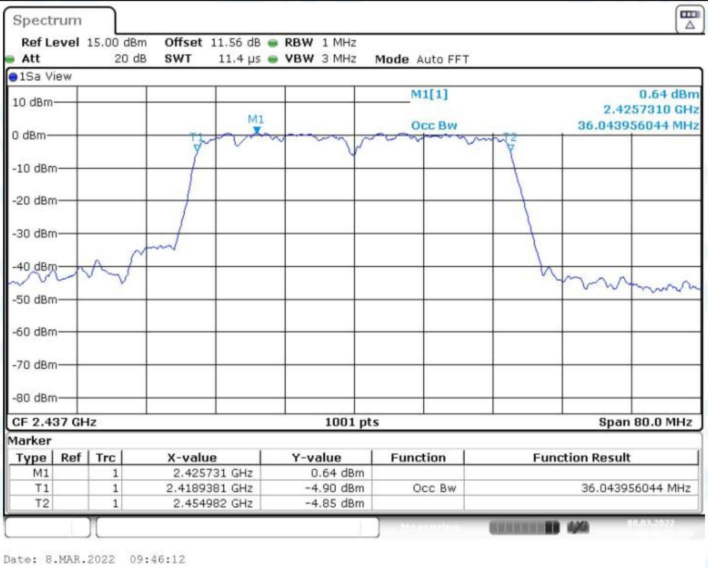
11N20SISO_Ant1_2437



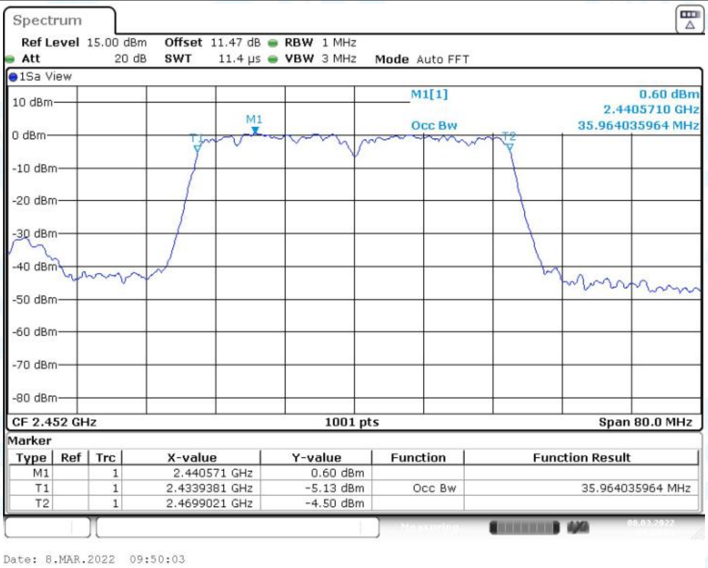
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

3. Maximum conducted output power

3.1.Test Result

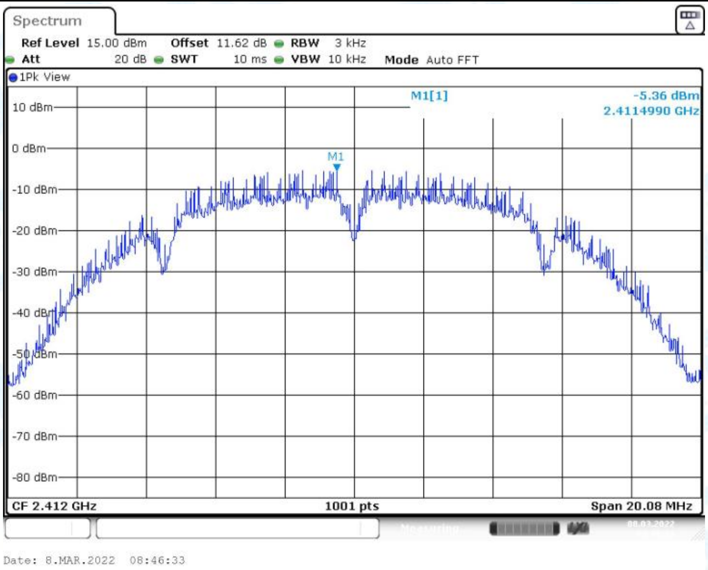
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	16.75	≤30.00	PASS
		2437	16.01	≤30.00	PASS
		2462	16.21	≤30.00	PASS
11G	Ant1	2412	17.78	≤30.00	PASS
		2437	17.69	≤30.00	PASS
		2462	17.04	≤30.00	PASS
11N20SISO	Ant1	2412	17.61	≤30.00	PASS
		2437	16.49	≤30.00	PASS
		2462	16.75	≤30.00	PASS
11N40SISO	Ant1	2422	15.78	≤30.00	PASS
		2437	15.93	≤30.00	PASS
		2452	15.54	≤30.00	PASS

4. Maximum power spectral density

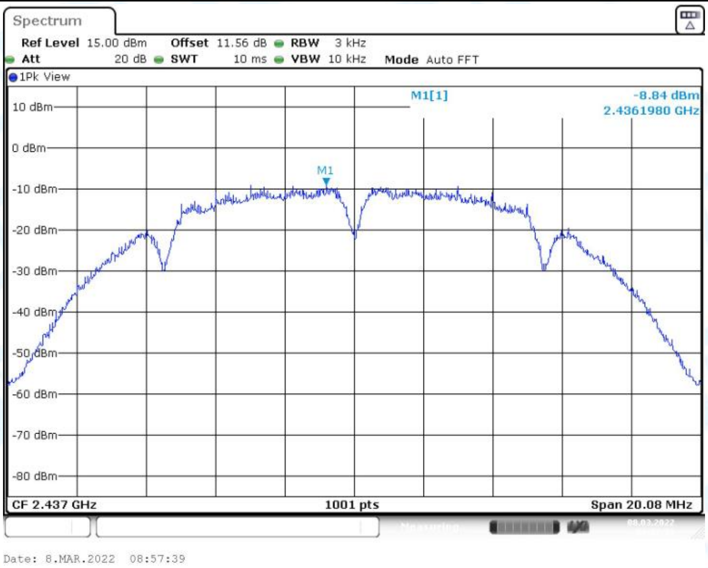
4.1.Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-5.36	≤8.00	PASS
		2437	-8.84	≤8.00	PASS
		2462	-7.94	≤8.00	PASS
11G	Ant1	2412	-15.31	≤8.00	PASS
		2437	-16.35	≤8.00	PASS
		2462	-16.09	≤8.00	PASS
11N20SISO	Ant1	2412	-14.81	≤8.00	PASS
		2437	-15.03	≤8.00	PASS
		2462	-14.51	≤8.00	PASS
11N40SISO	Ant1	2422	-21.3	≤8.00	PASS
		2437	-20.09	≤8.00	PASS
		2452	-20.65	≤8.00	PASS

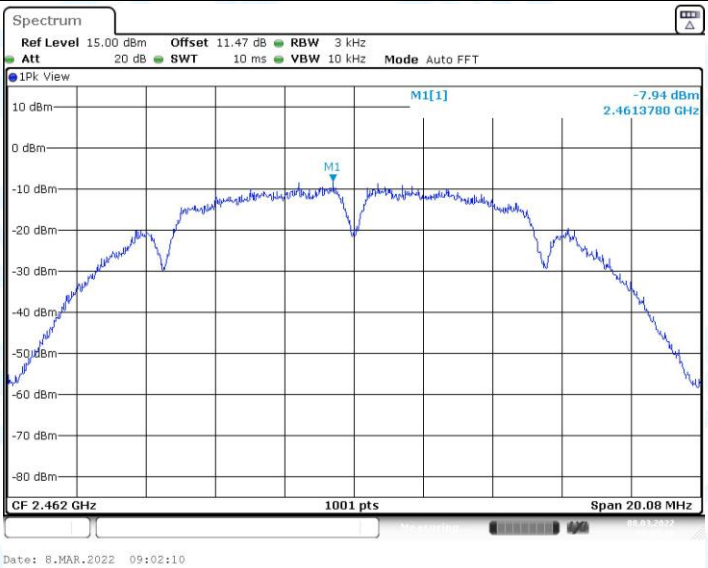
4.2.Test Graphs



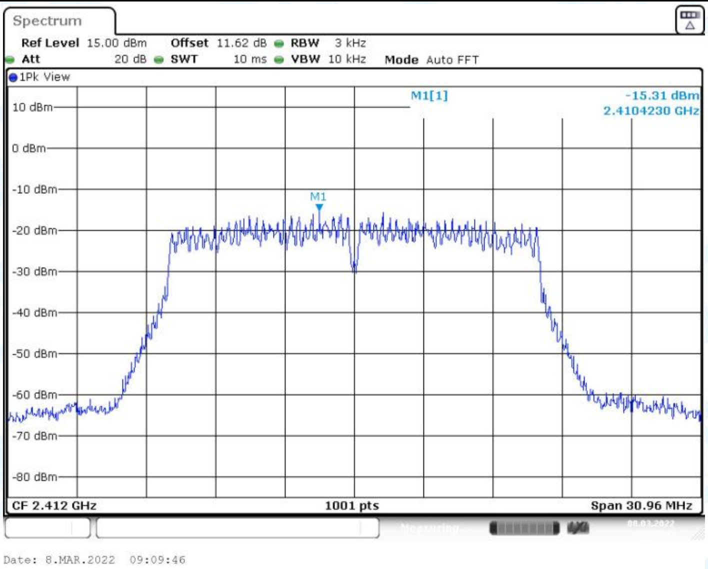
11B_Ant1_2412



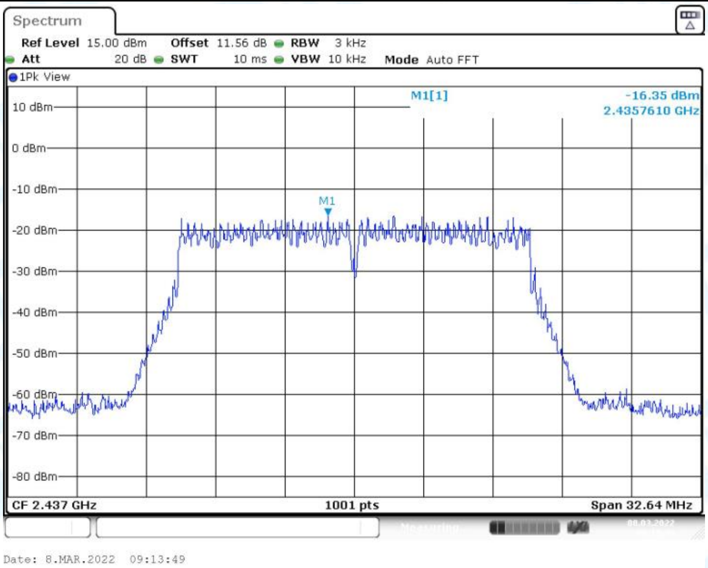
11B_Ant1_2437



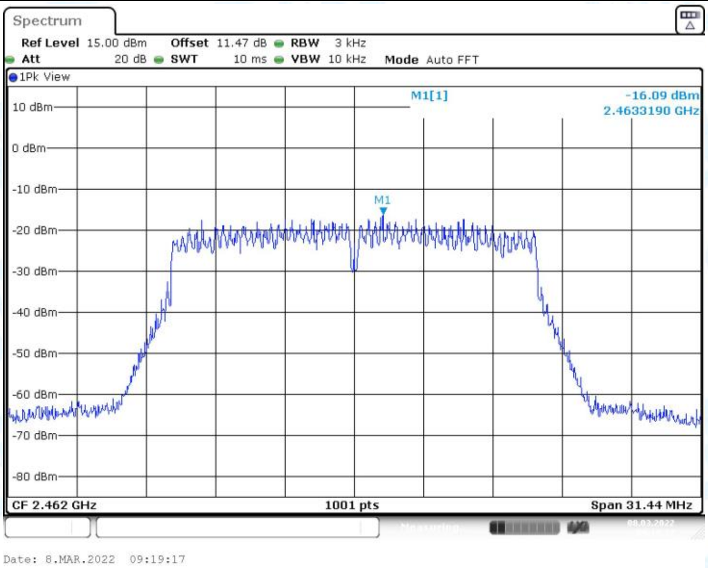
11B_Ant1_2462



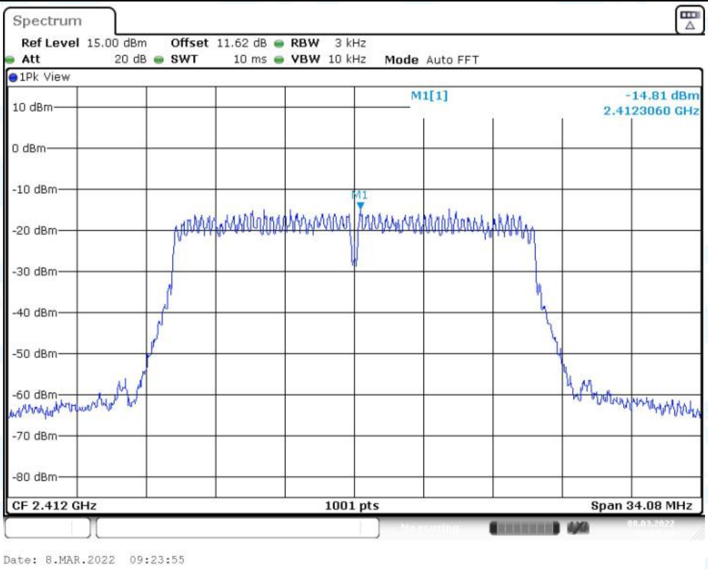
11G_Ant1_2412



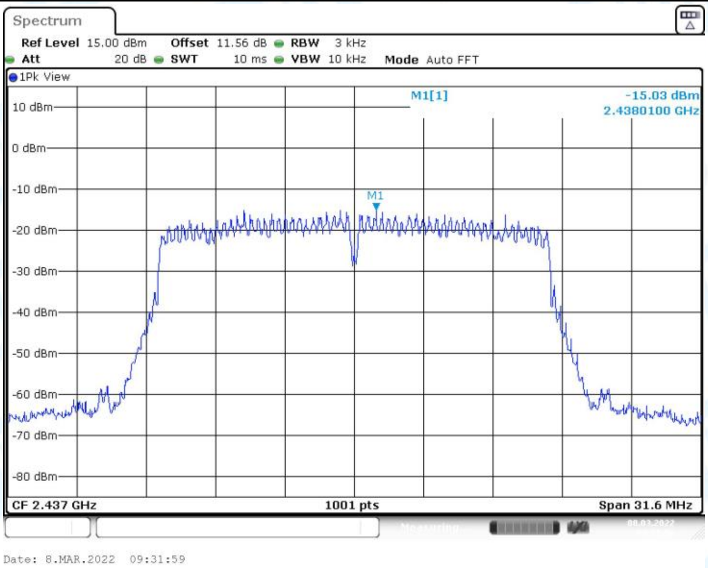
11G_Ant1_2437



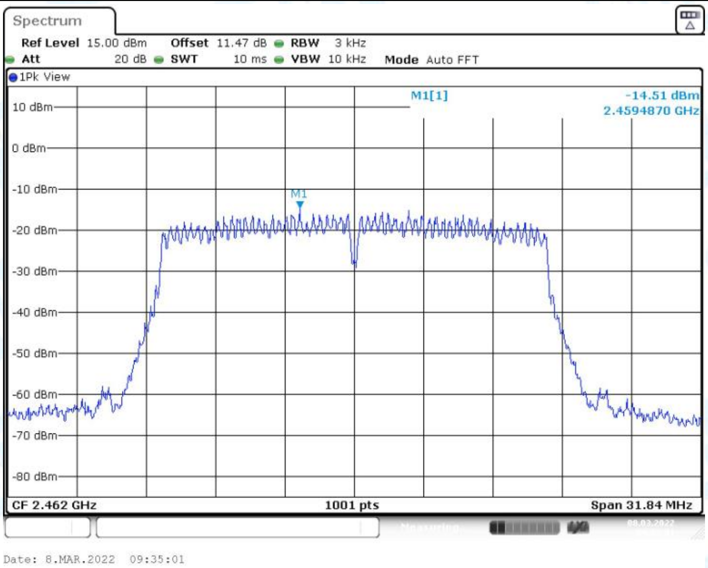
11G_Ant1_2462



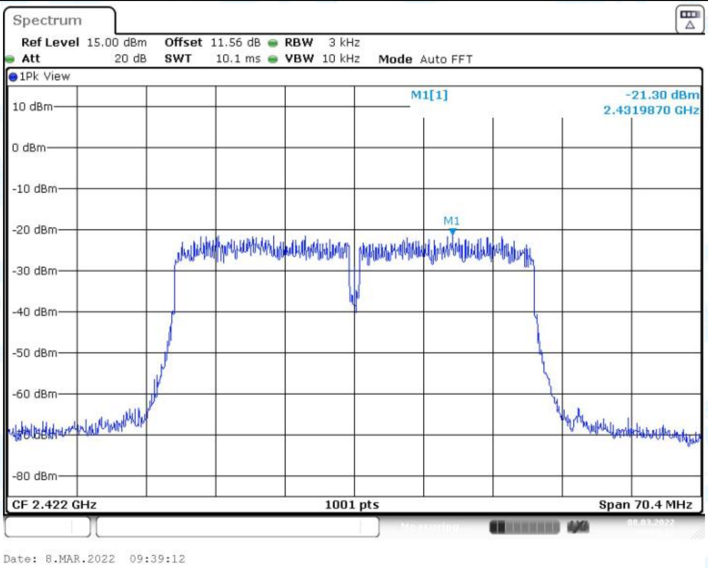
11N20SISO_Ant1_2412



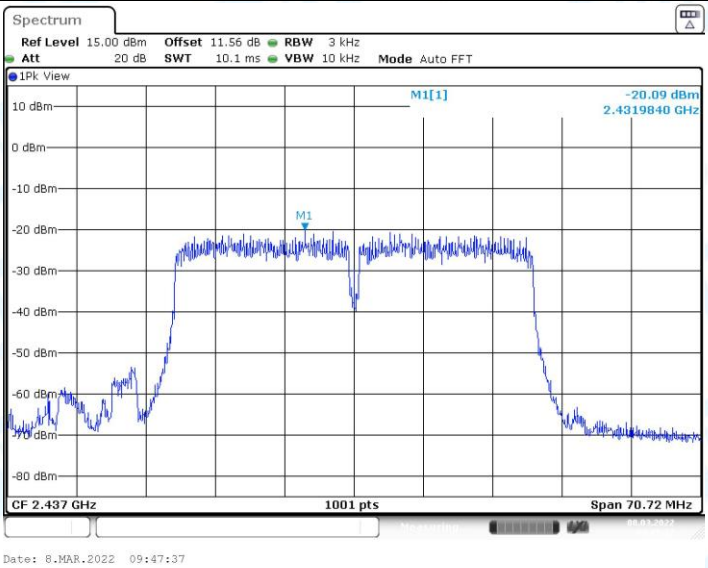
11N20SISO_Ant1_2437



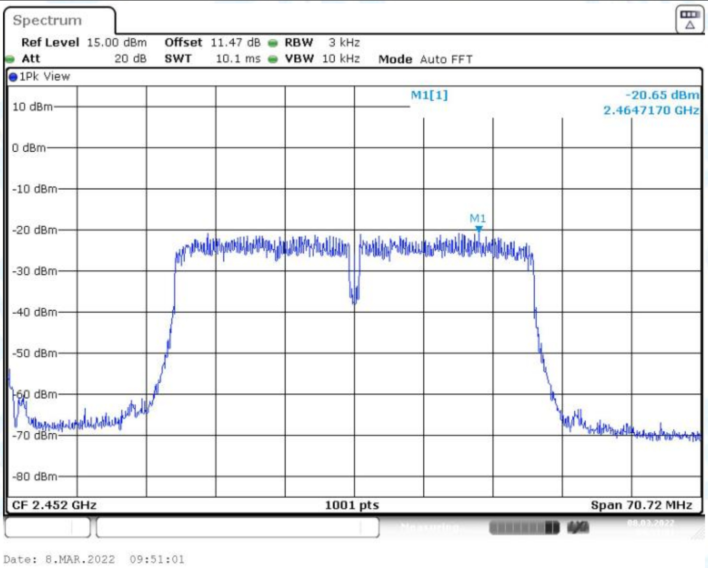
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



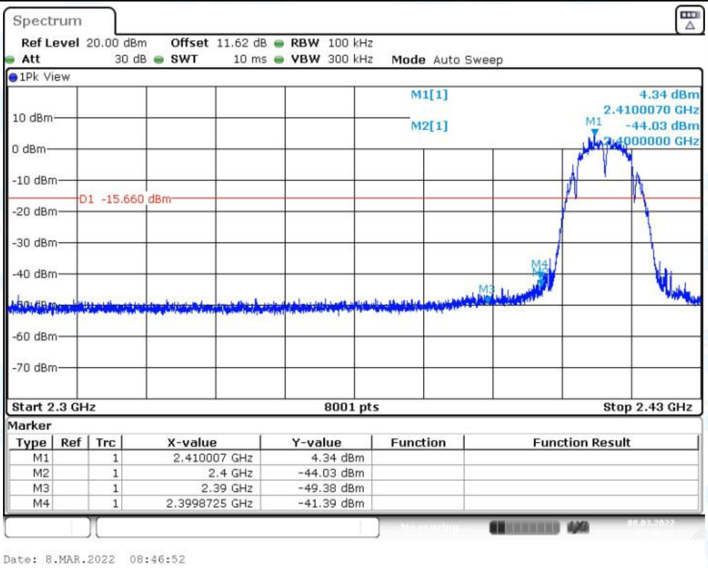
11N40SISO_Ant1_2452

5. Band edge measurements

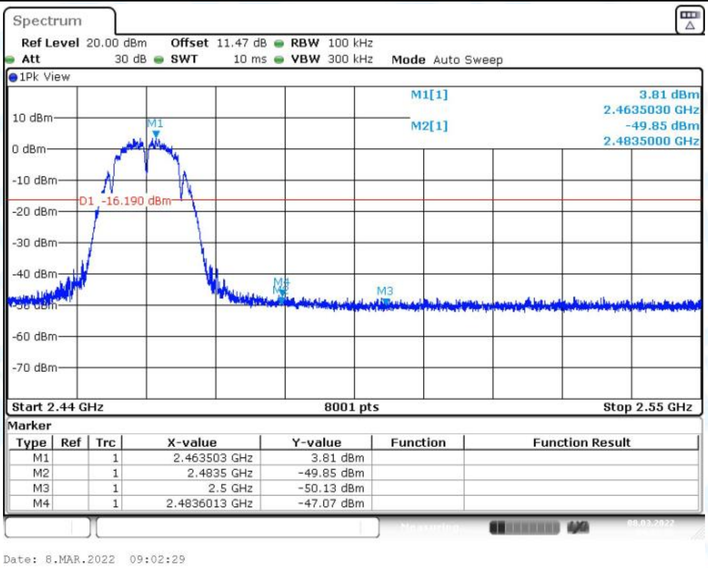
5.1.Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.34	-41.39	≤-15.66	PASS
		High	2462	3.81	-47.07	≤-16.19	PASS
11G	Ant1	Low	2412	-1.34	-45.7	≤-21.34	PASS
		High	2462	-2.23	-47.25	≤-22.23	PASS
11N20SISO	Ant1	Low	2412	-1.71	-44.73	≤-21.71	PASS
		High	2462	-2.32	-47.08	≤-22.32	PASS
11N40SISO	Ant1	Low	2422	-6.64	-46.07	≤-26.64	PASS
		High	2452	-6.89	-46.34	≤-26.89	PASS

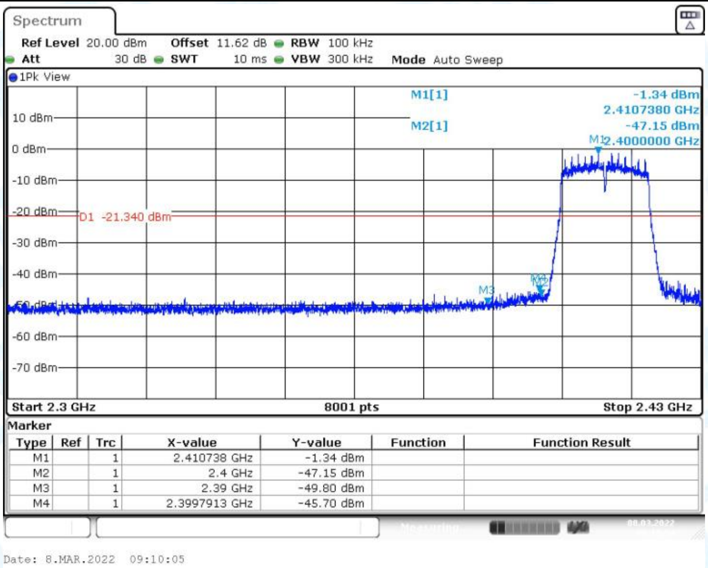
5.2.Test Graphs



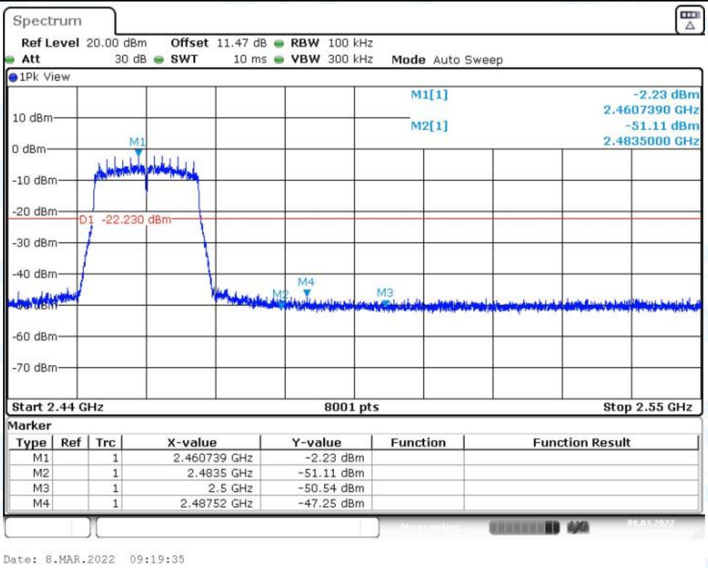
11B_Ant1_Low_2412



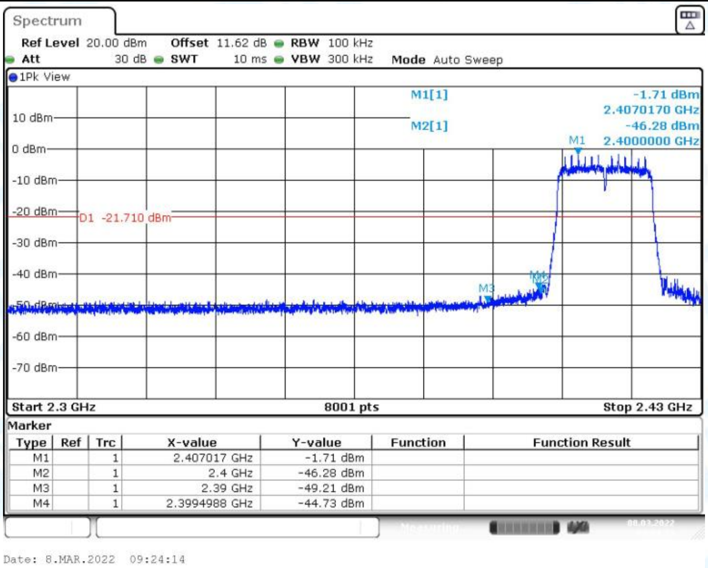
11B_Ant1_High_2462



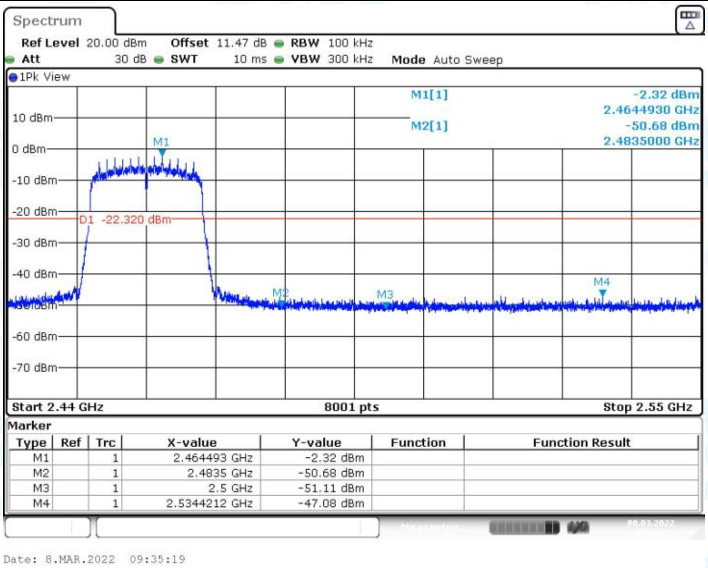
11G_Ant1_Low_2412



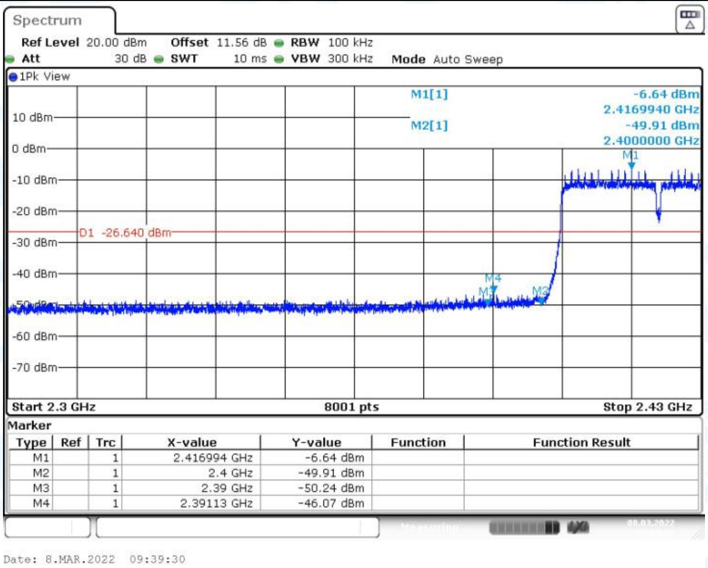
11G_Ant1_High_2462



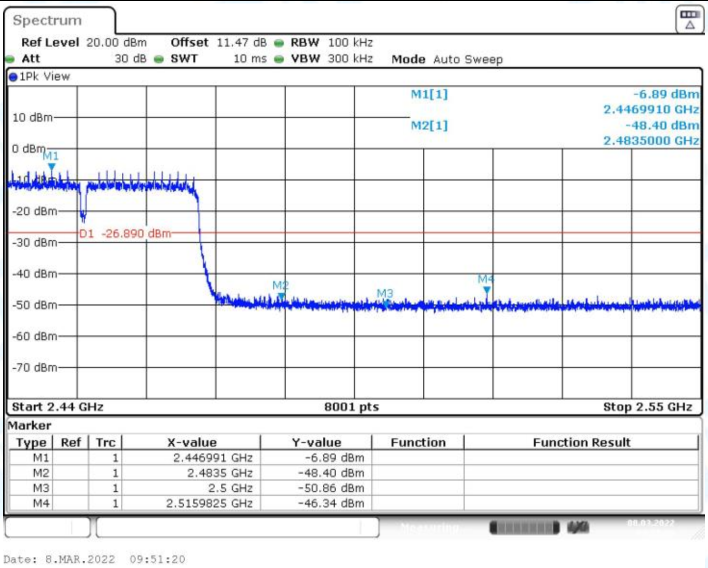
11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



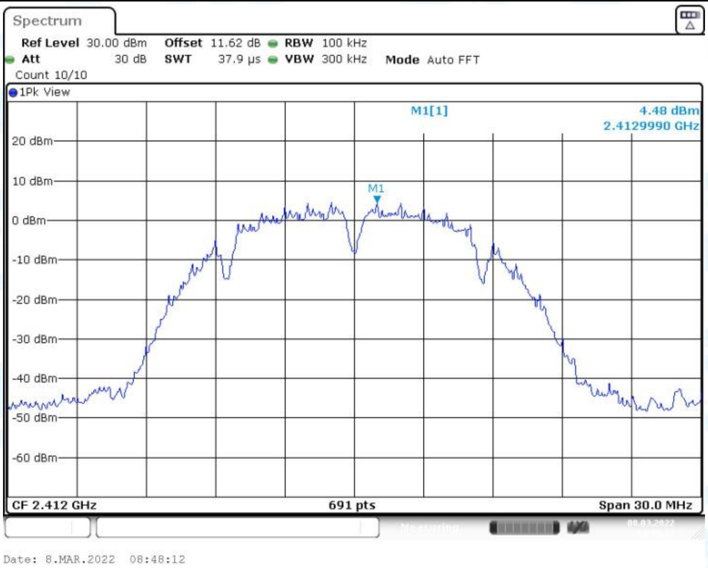
11N40SISO_Ant1_High_2452

6. Conducted Spurious Emission

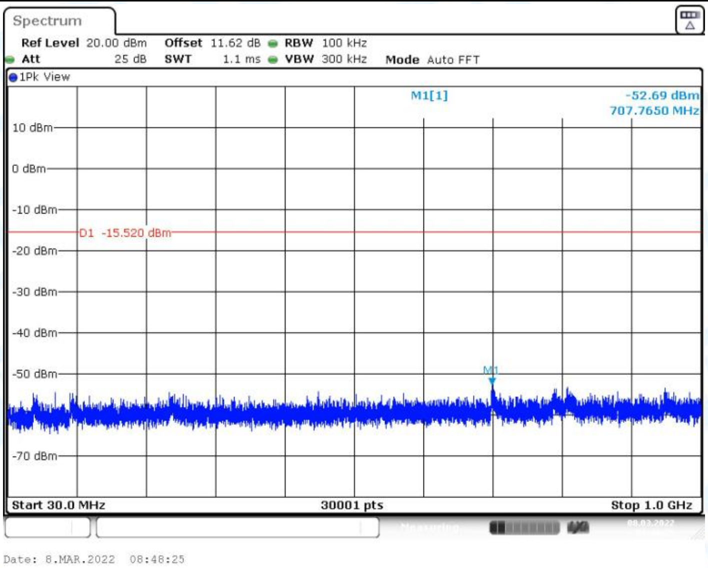
6.1.Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.48	4.48	---	PASS
			30~1000	4.48	-52.69	≤-15.52	PASS
			1000~26500	4.48	-34.37	≤-15.52	PASS
		2437	Reference	3.21	3.21	---	PASS
			30~1000	3.21	-52.94	≤-16.79	PASS
			1000~26500	3.21	-38.11	≤-16.79	PASS
		2462	Reference	3.62	3.62	---	PASS
			30~1000	3.62	-53.72	≤-16.38	PASS
			1000~26500	3.62	-37.58	≤-16.38	PASS
11G	Ant1	2412	Reference	-1.26	-1.26	---	PASS
			30~1000	-1.26	-52.93	≤-21.26	PASS
			1000~26500	-1.26	-44.7	≤-21.26	PASS
		2437	Reference	-1.42	-1.42	---	PASS
			30~1000	-1.42	-50.88	≤-21.42	PASS
			1000~26500	-1.42	-46.66	≤-21.42	PASS
		2462	Reference	-2.03	-2.03	---	PASS
			30~1000	-2.03	-53.34	≤-22.03	PASS
			1000~26500	-2.03	-47.36	≤-22.03	PASS
11N20SISO	Ant1	2412	Reference	-1.48	-1.48	---	PASS
			30~1000	-1.48	-52.75	≤-21.48	PASS
			1000~26500	-1.48	-46.98	≤-21.48	PASS
		2437	Reference	-2.24	-2.24	---	PASS
			30~1000	-2.24	-53.27	≤-22.24	PASS
			1000~26500	-2.24	-47.01	≤-22.24	PASS
		2462	Reference	-2.38	-2.38	---	PASS
			30~1000	-2.38	-52.95	≤-22.38	PASS
			1000~26500	-2.38	-46.89	≤-22.38	PASS
11N40SISO	Ant1	2422	Reference	-6.33	-6.33	---	PASS
			30~1000	-6.33	-53.37	≤-26.33	PASS
			1000~26500	-6.33	-47.09	≤-26.33	PASS
		2437	Reference	-6.45	-6.45	---	PASS
			30~1000	-6.45	-51.96	≤-26.45	PASS
			1000~26500	-6.45	-46.57	≤-26.45	PASS
		2452	Reference	-6.75	-6.75	---	PASS
			30~1000	-6.75	-53.3	≤-26.75	PASS
			1000~26500	-6.75	-47.46	≤-26.75	PASS

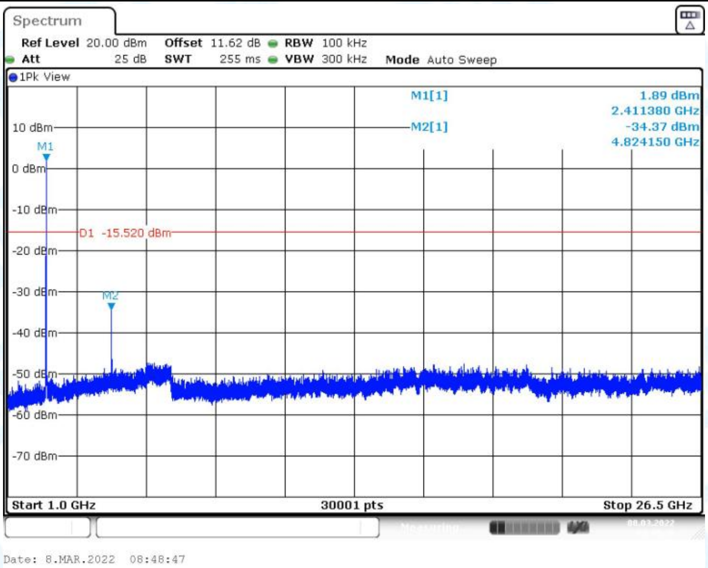
6.2.Test Graphs



11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



11B_Ant1_2412_1000~26500