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

General Description of EUT	
Product Name:	LED Electronic clock
Test Model:	W0088
Sample ID:	20211229-09-2#
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	Adapter(GA-0901000) Input: AC100-240V 50/60Hz 0.6A Output: 9V1000mA
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TB-FCC186293	

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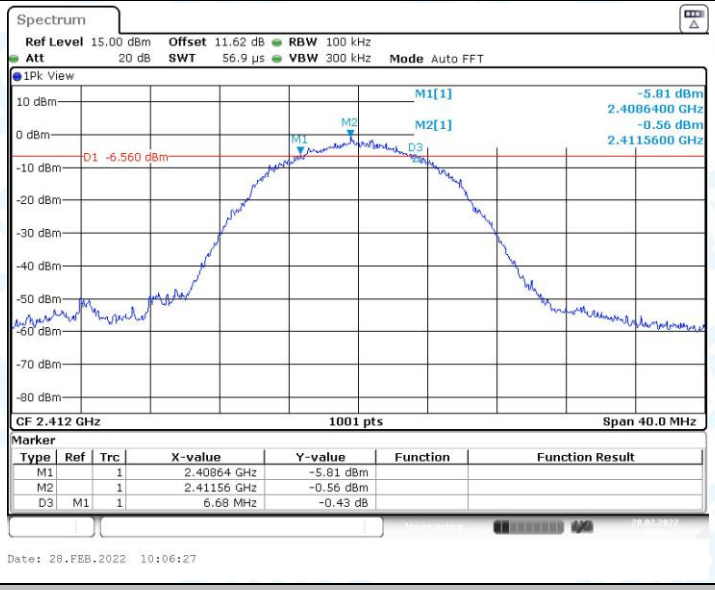
1. DTS Bandwidth

1.1.Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	6.68	2408.64	2415.32	0.5	PASS
		2437	8.04	2432.80	2440.84	0.5	PASS
		2462	7.56	2458.12	2465.68	0.5	PASS
11G	Ant1	2412	16.40	2403.76	2420.16	0.5	PASS
		2437	16.44	2428.76	2445.20	0.5	PASS
		2462	16.40	2453.76	2470.16	0.5	PASS
11N20SISO	Ant1	2412	16.48	2403.72	2420.20	0.5	PASS
		2437	16.44	2428.76	2445.20	0.5	PASS
		2462	16.44	2453.76	2470.20	0.5	PASS
11N40SISO	Ant1	2422	36.40	2403.76	2440.16	0.5	PASS
		2437	36.48	2418.76	2455.24	0.5	PASS
		2452	36.48	2433.76	2470.24	0.5	PASS

1.2.Test Graphs



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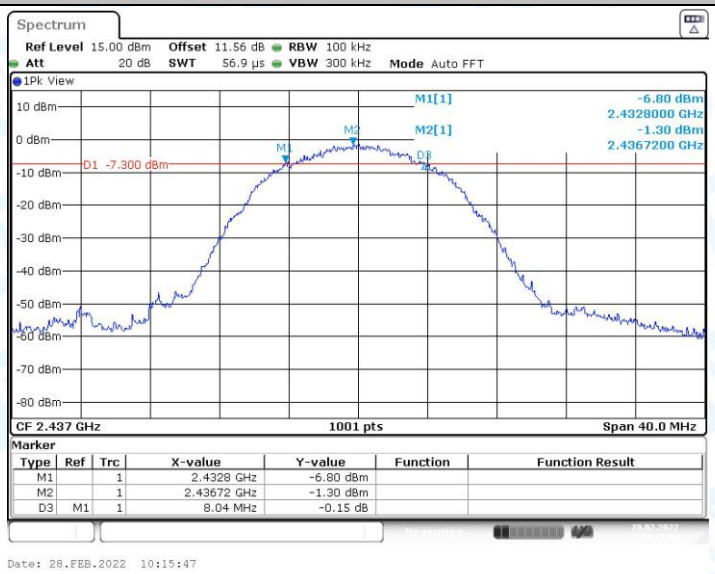

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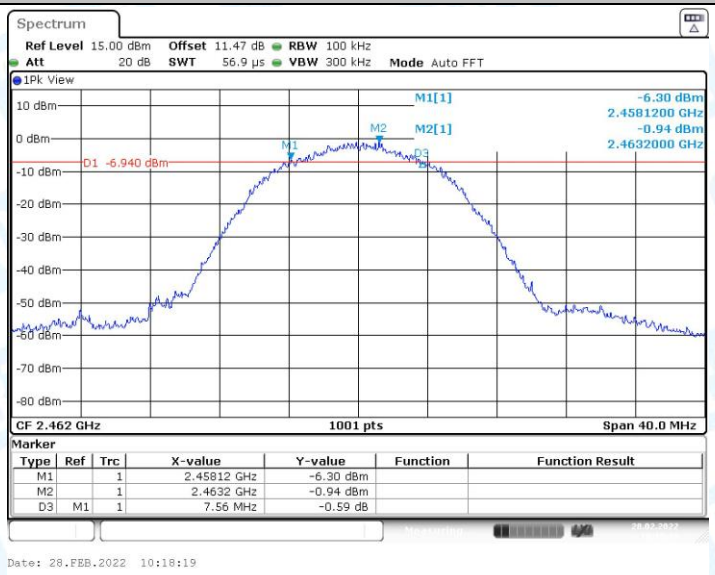

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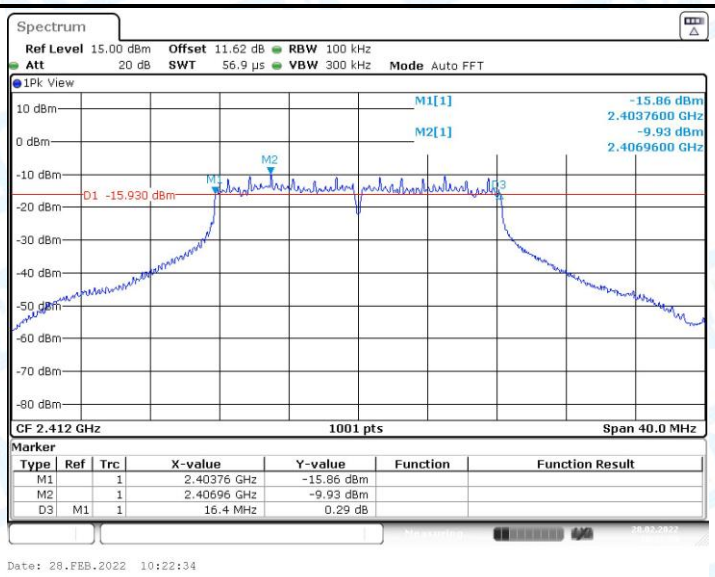

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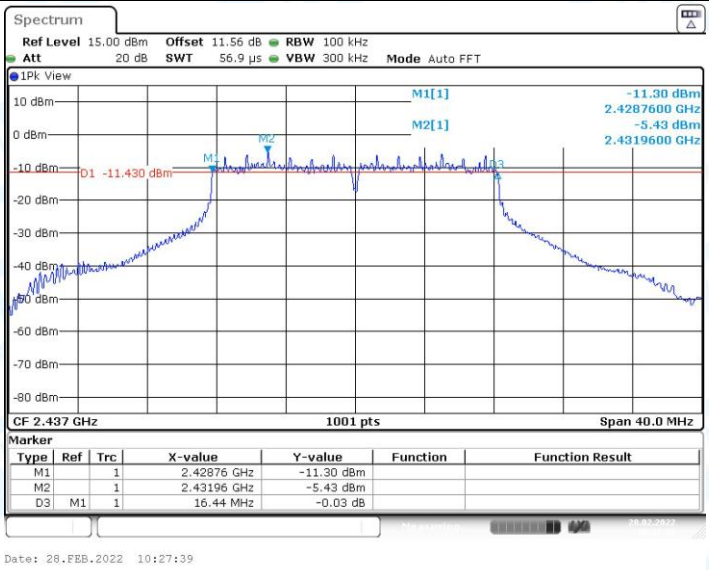

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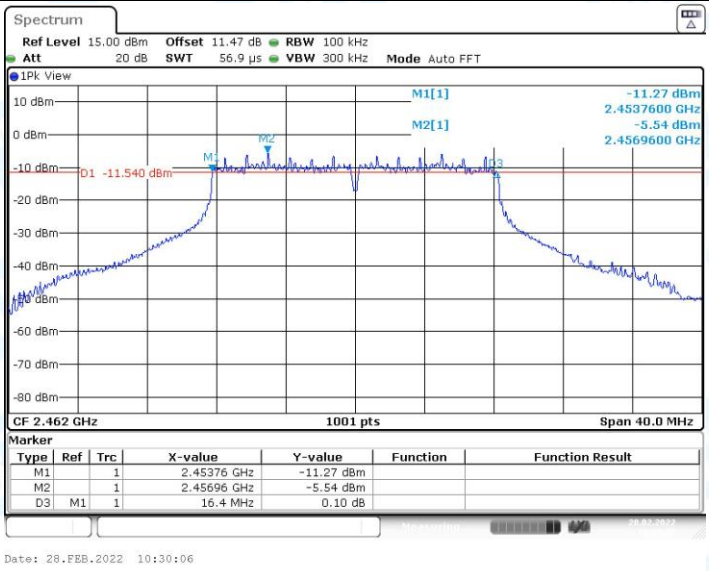

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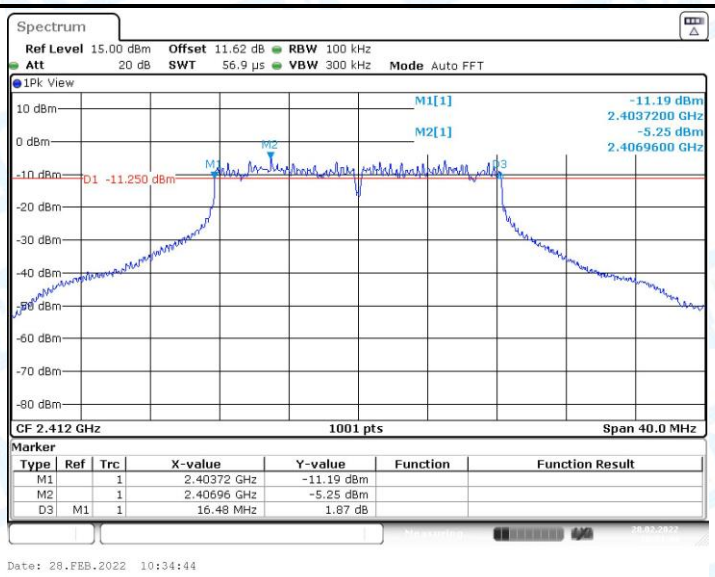

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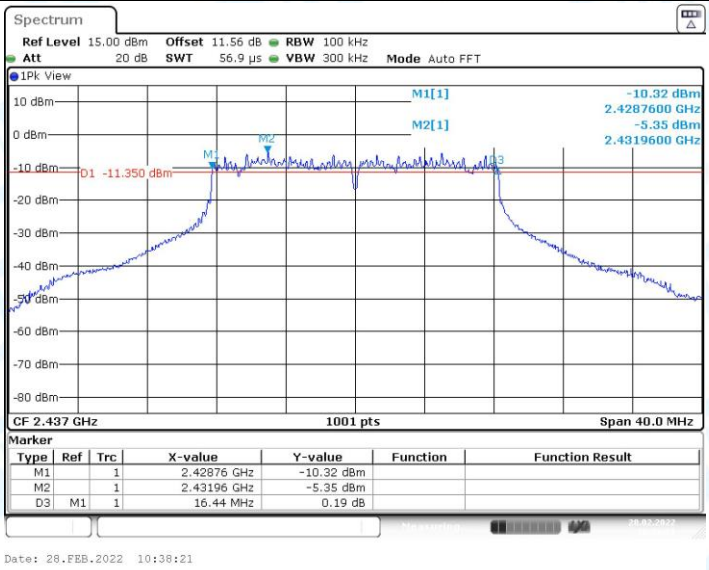

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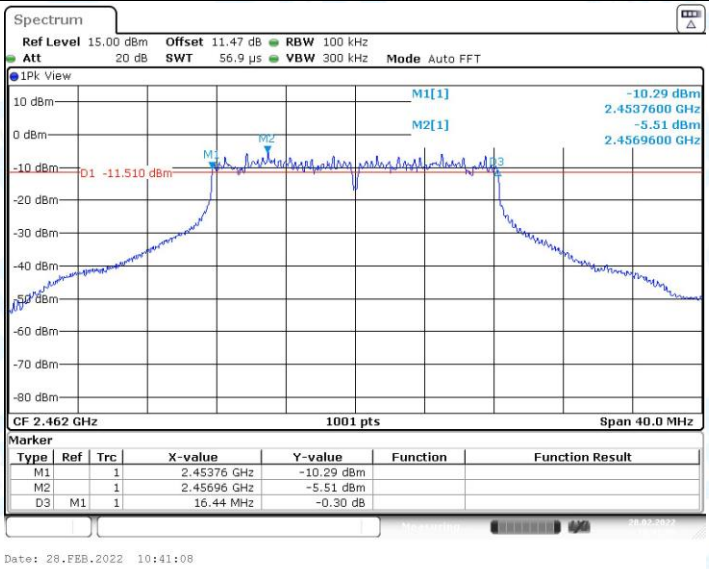

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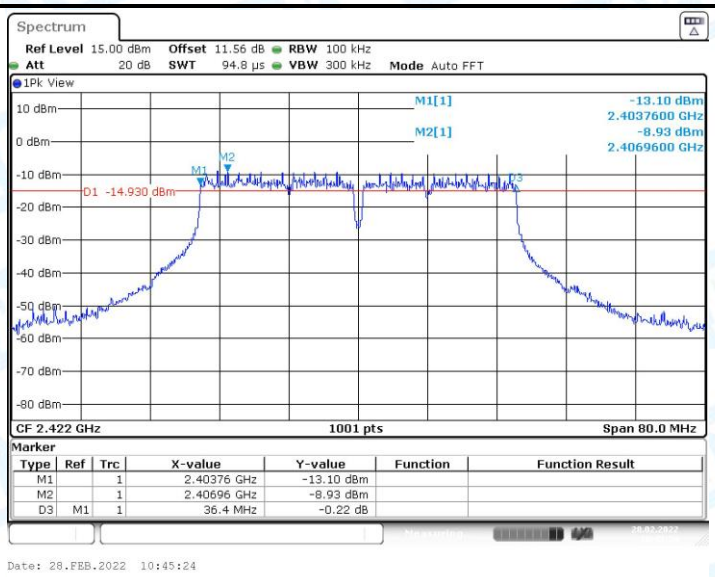
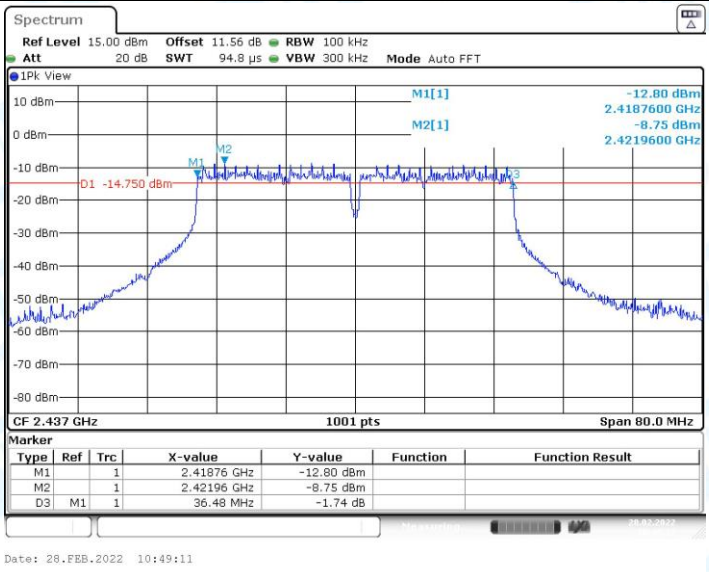


11N40SISO_Ant1_2422



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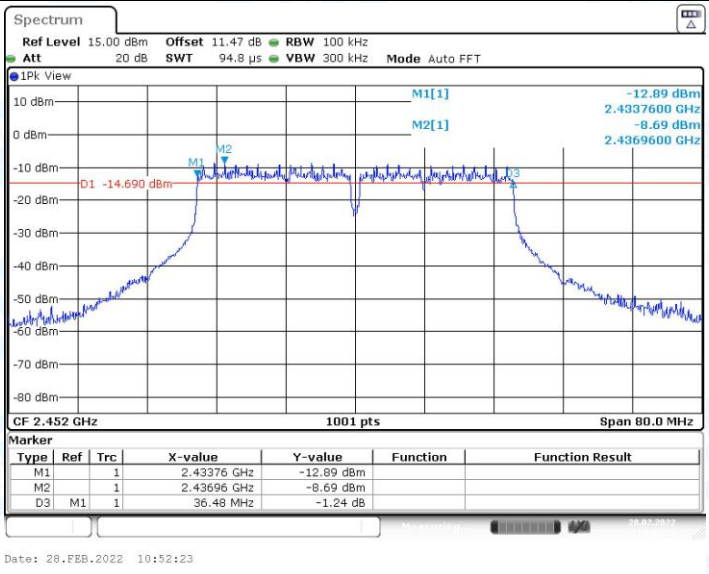


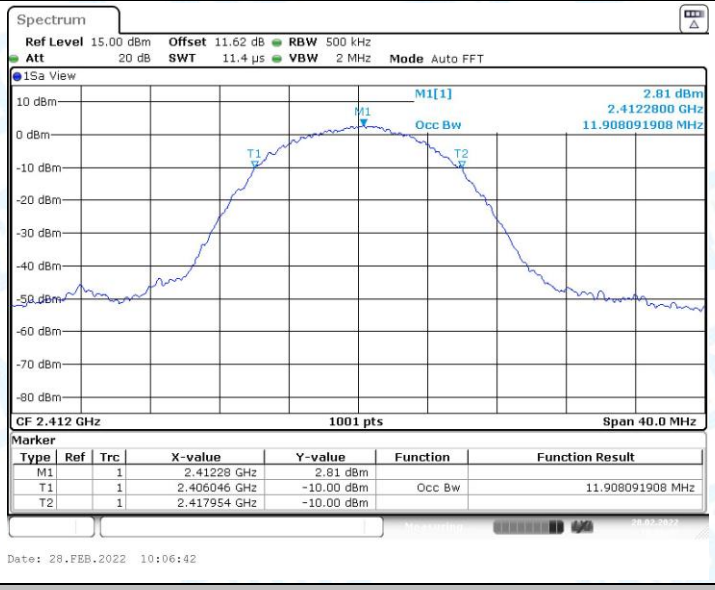
11N40SISO_Ant1_2452

2. Occupied Channel Bandwidth

2.1.Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	11.908	2406.046	2417.954	---	---
		2437	11.908	2431.006	2442.914	---	---
		2462	12.068	2455.926	2467.994	---	---
11G	Ant1	2412	18.062	2403.249	2421.311	---	---
		2437	18.661	2427.569	2446.231	---	---
		2462	18.422	2452.370	2470.791	---	---
11N20SISO	Ant1	2412	17.662	2403.289	2420.951	---	---
		2437	17.822	2428.329	2446.151	---	---
		2462	17.942	2453.209	2471.151	---	---
11N40SISO	Ant1	2422	37.083	2403.459	2440.541	---	---
		2437	37.163	2418.219	2455.382	---	---
		2452	37.083	2433.459	2470.541	---	---

2.2.Test Graphs



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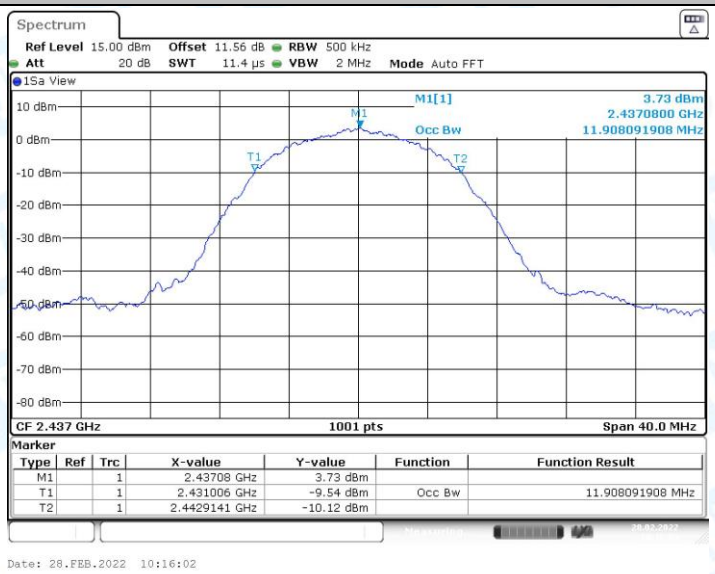

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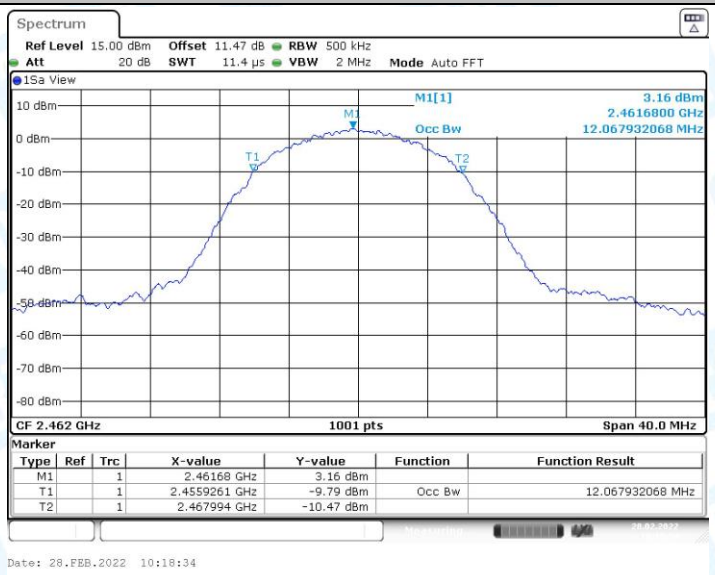

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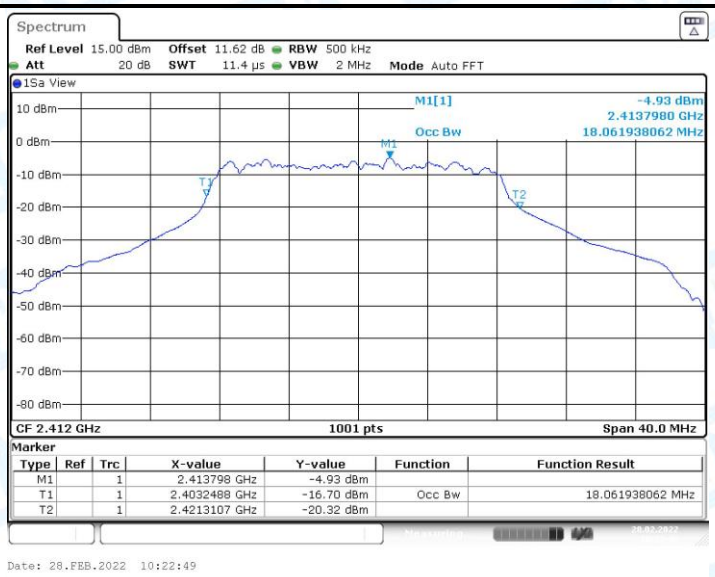

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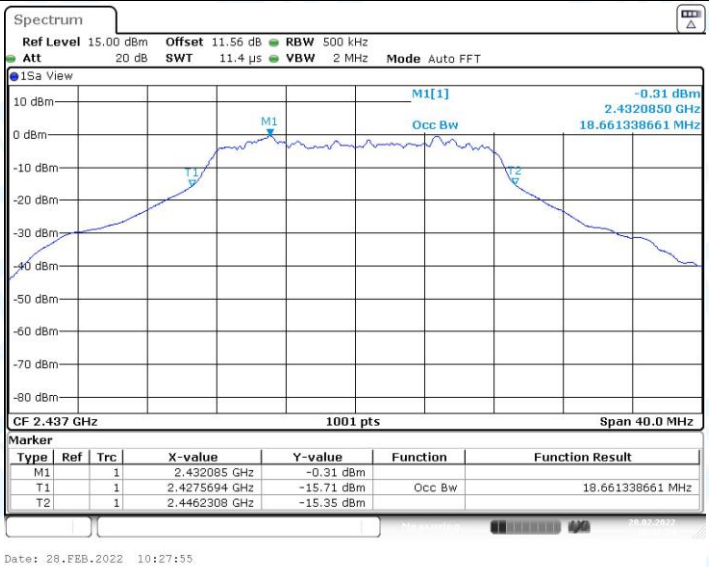

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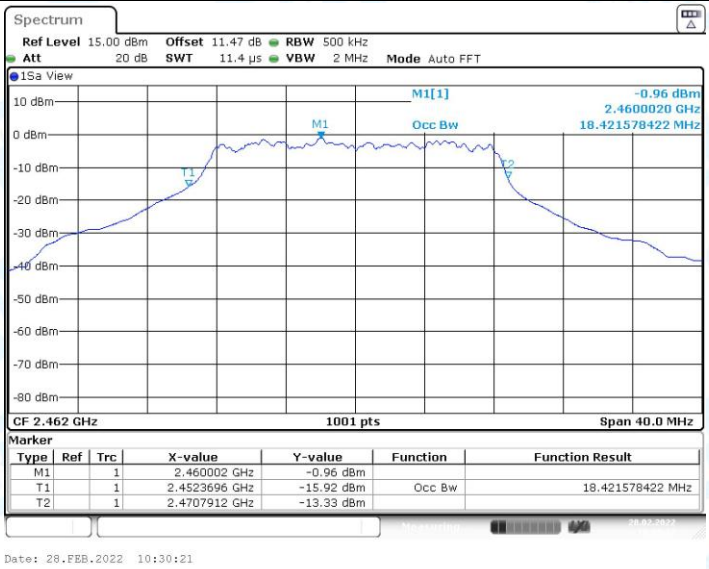

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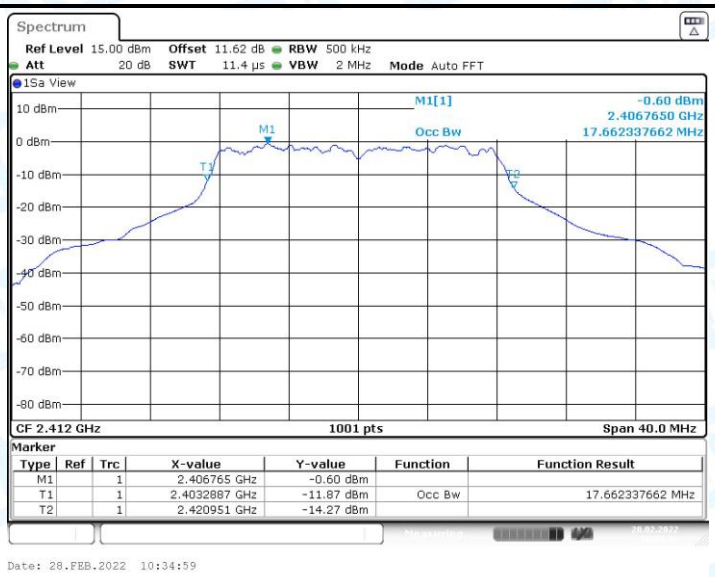
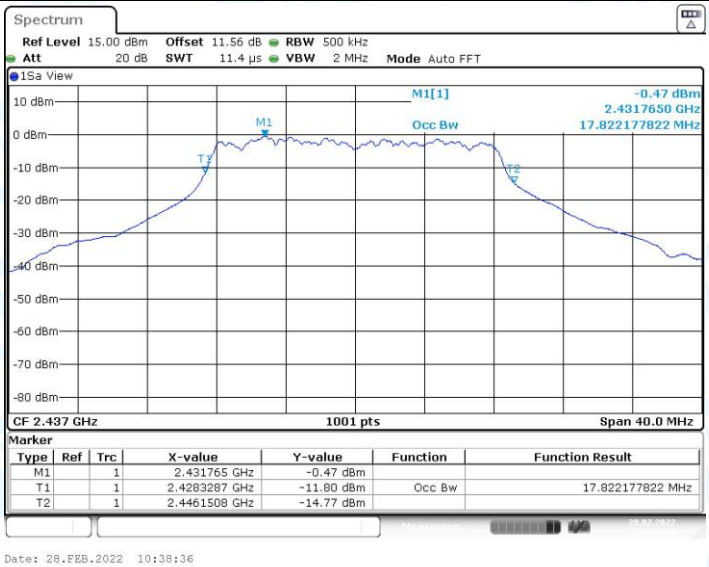


11N20SISO_Ant1_2412



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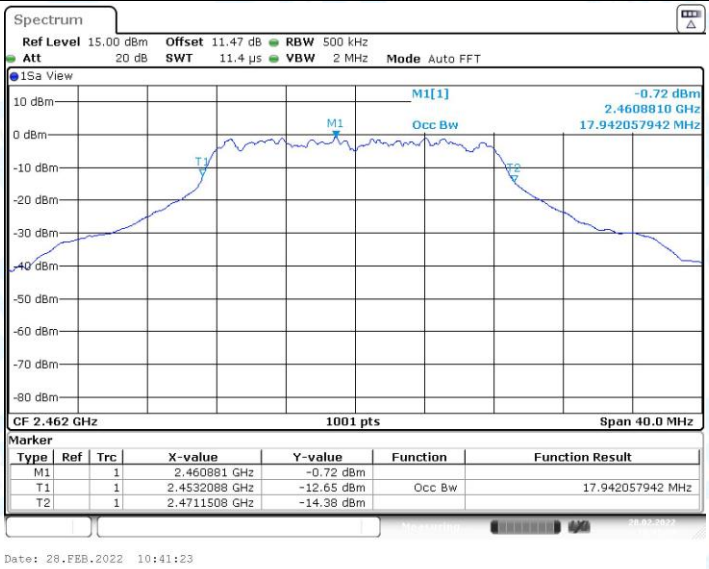

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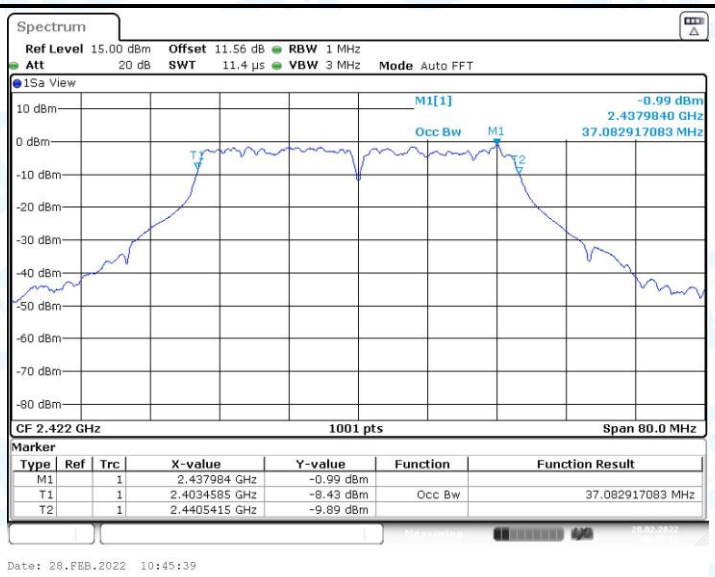
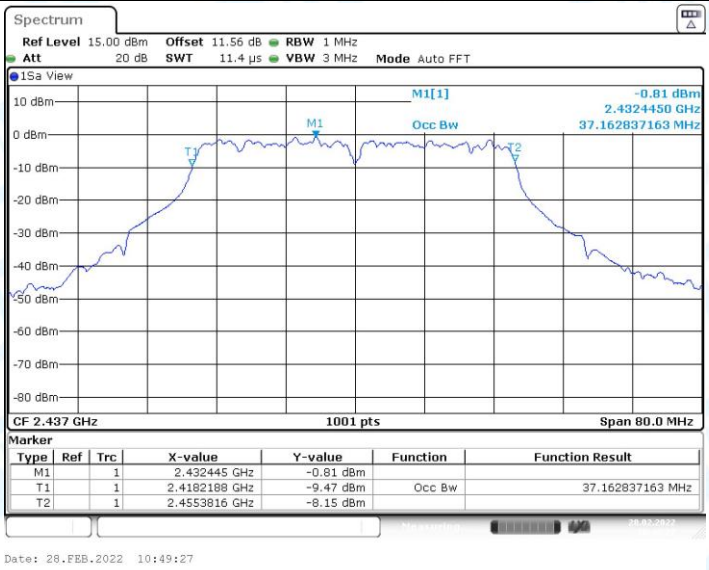


11N40SISO_Ant1_2422



11N40SISO_Ant1_2437

11N40SISO_Ant1_2452

3. Maximum conducted output power

3.1.Test Result

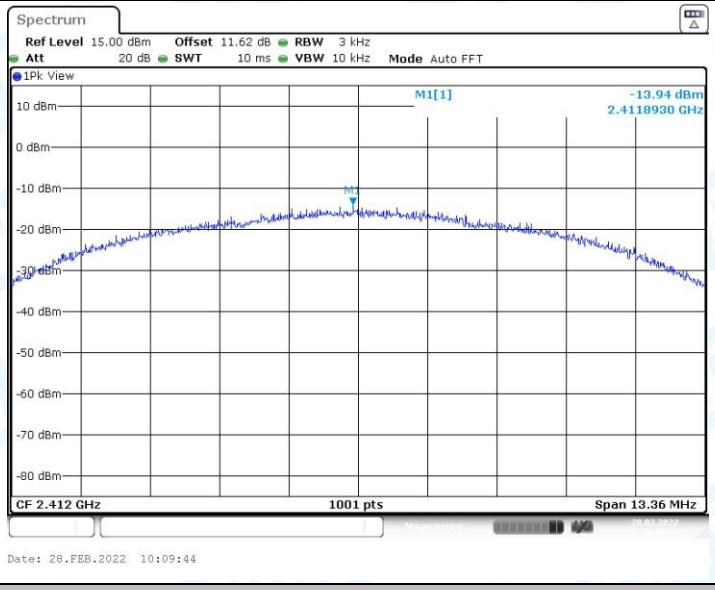
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	13.28	≤30.00	PASS
		2437	13.38	≤30.00	PASS
		2462	13.15	≤30.00	PASS
11G	Ant1	2412	13.39	≤30.00	PASS
		2437	13.41	≤30.00	PASS
		2462	13.23	≤30.00	PASS
11N20SISO	Ant1	2412	14.08	≤30.00	PASS
		2437	14.05	≤30.00	PASS
		2462	13.84	≤30.00	PASS
11N40SISO	Ant1	2422	13.48	≤30.00	PASS
		2437	13.81	≤30.00	PASS
		2452	13.87	≤30.00	PASS

4. Maximum power spectral density

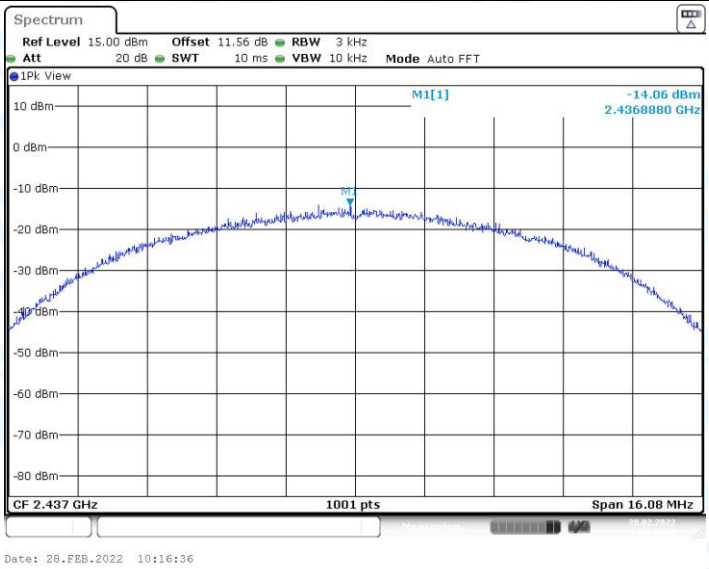
4.1.Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-13.94	≤8.00	PASS
		2437	-14.06	≤8.00	PASS
		2462	-14.28	≤8.00	PASS
11G	Ant1	2412	-18.95	≤8.00	PASS
		2437	-18.73	≤8.00	PASS
		2462	-18.62	≤8.00	PASS
11N20SISO	Ant1	2412	-18.04	≤8.00	PASS
		2437	-18.18	≤8.00	PASS
		2462	-18.8	≤8.00	PASS
11N40SISO	Ant1	2422	-22.35	≤8.00	PASS
		2437	-21.44	≤8.00	PASS
		2452	-22.35	≤8.00	PASS

4.2.Test Graphs



11B_Ant1_2412



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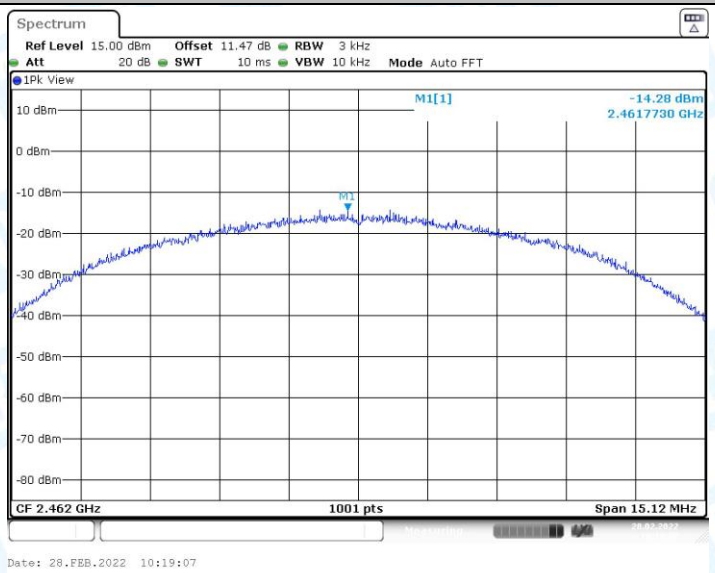
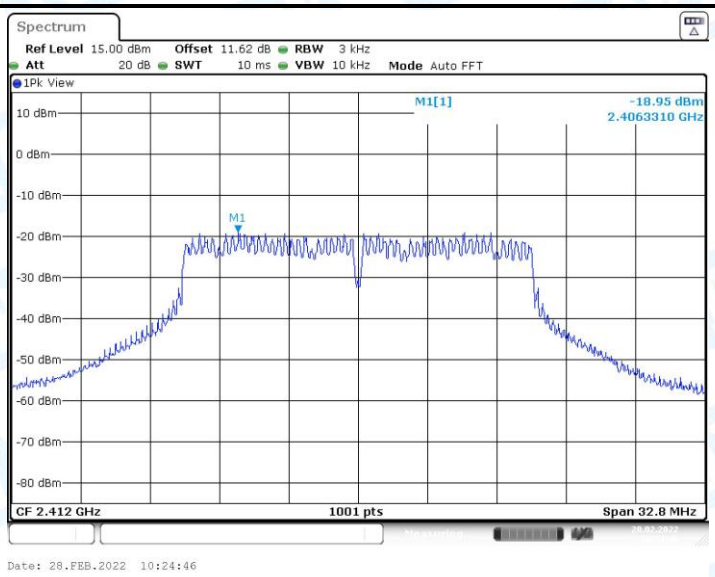


11B_Ant1_2462



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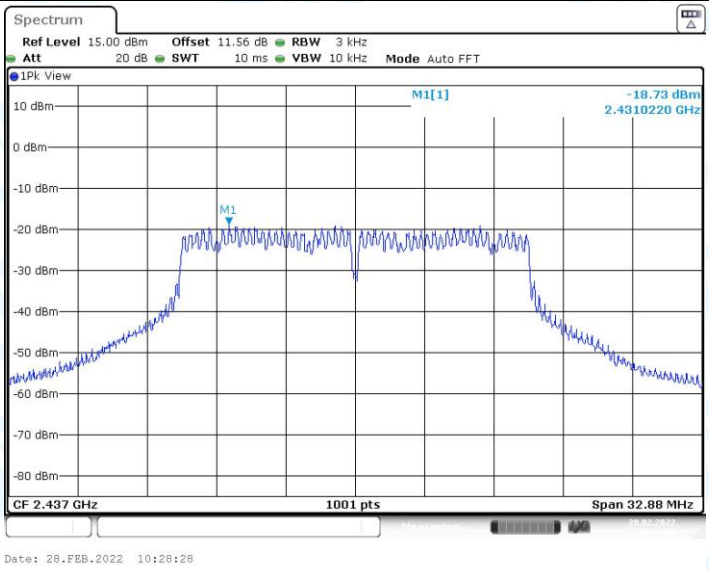

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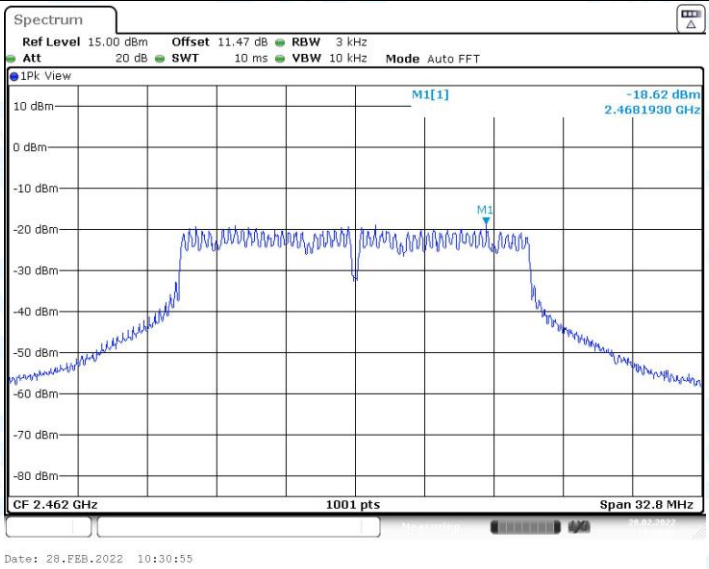

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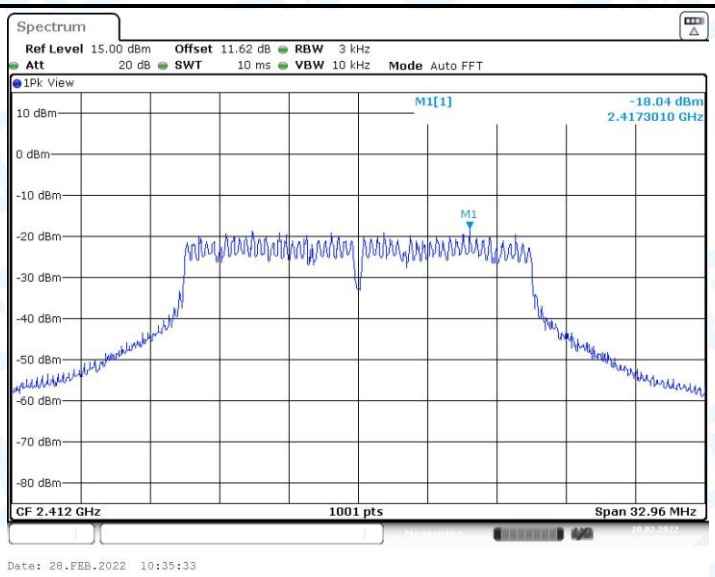

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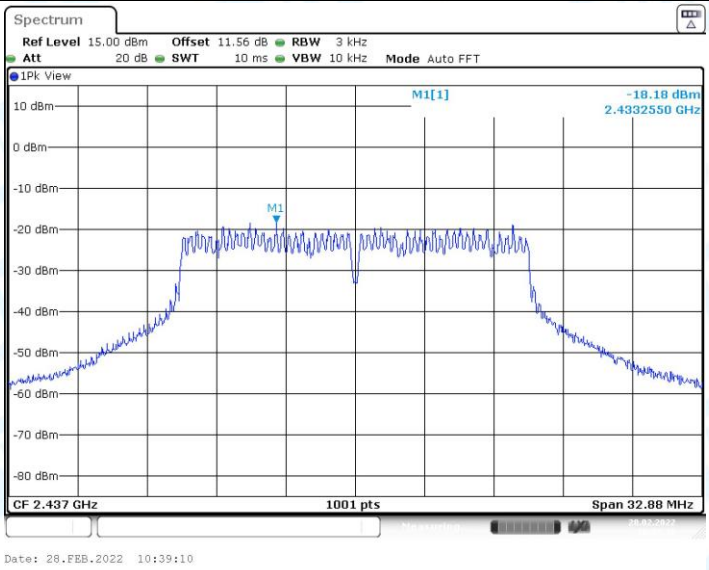

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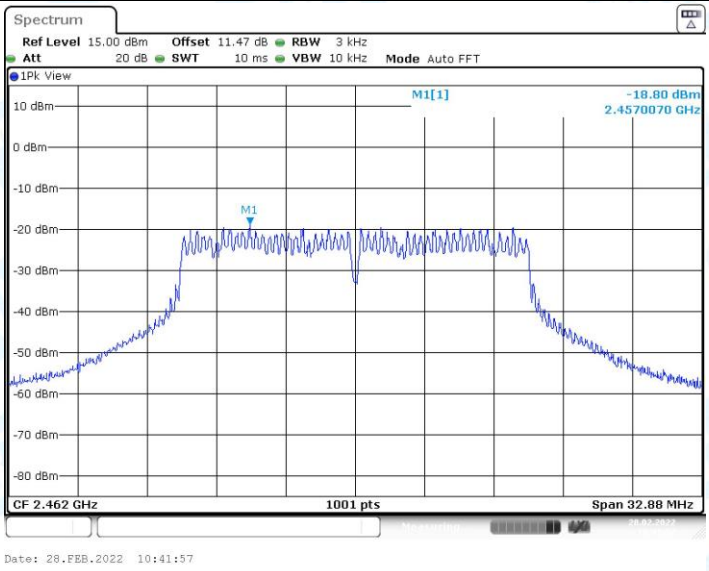

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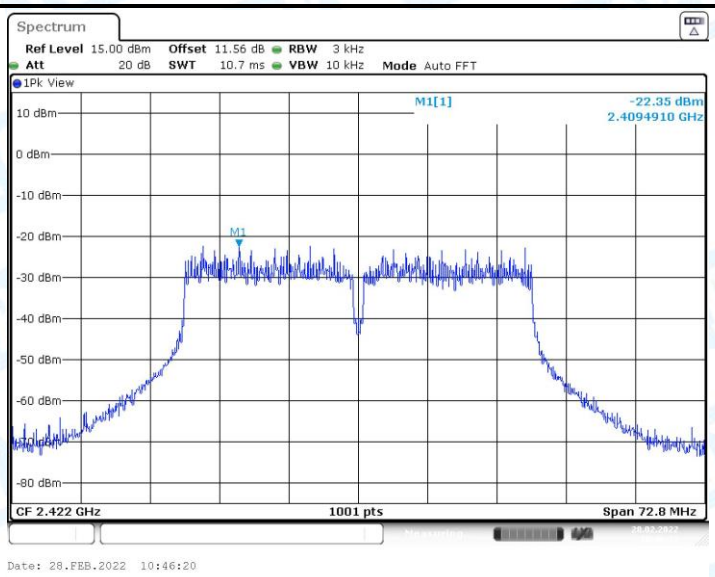

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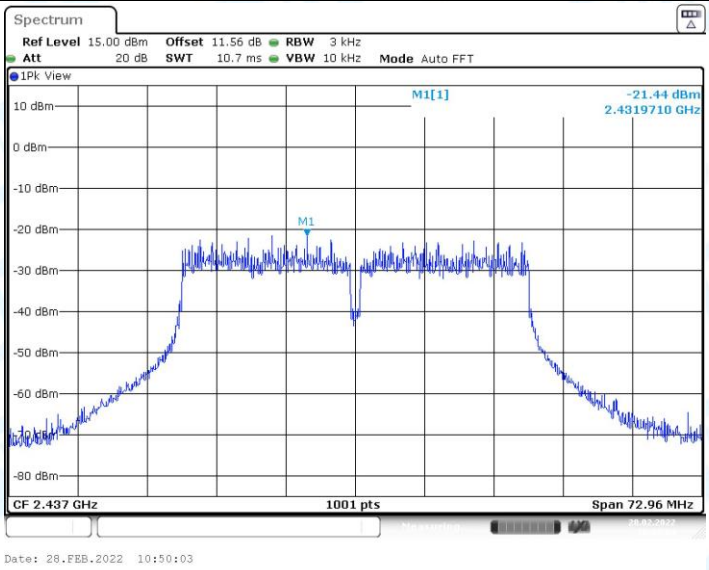

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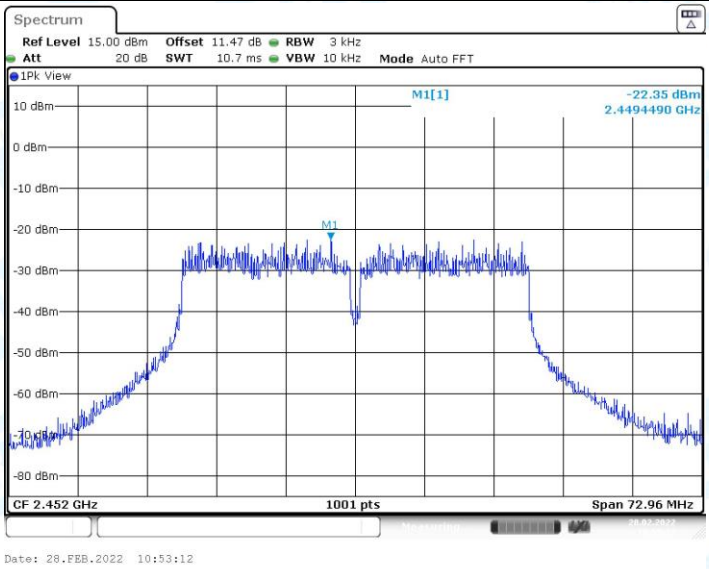


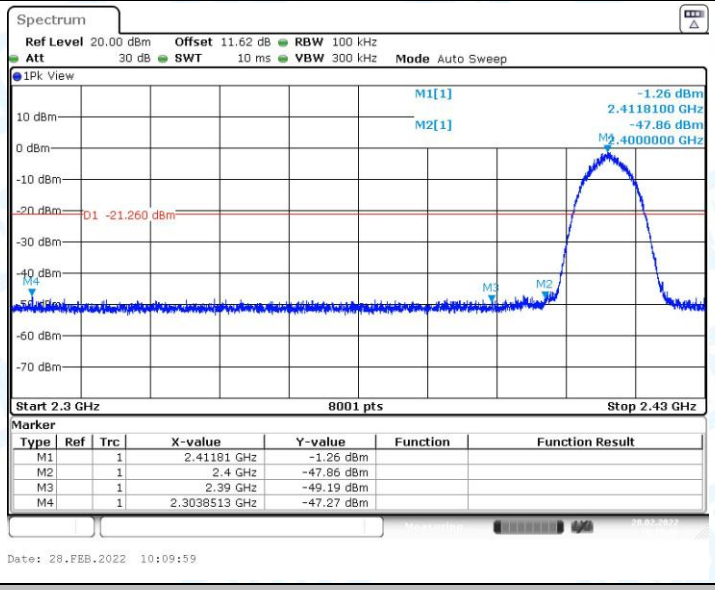
11N40SISO_Ant1_2452

5. Band edge measurements

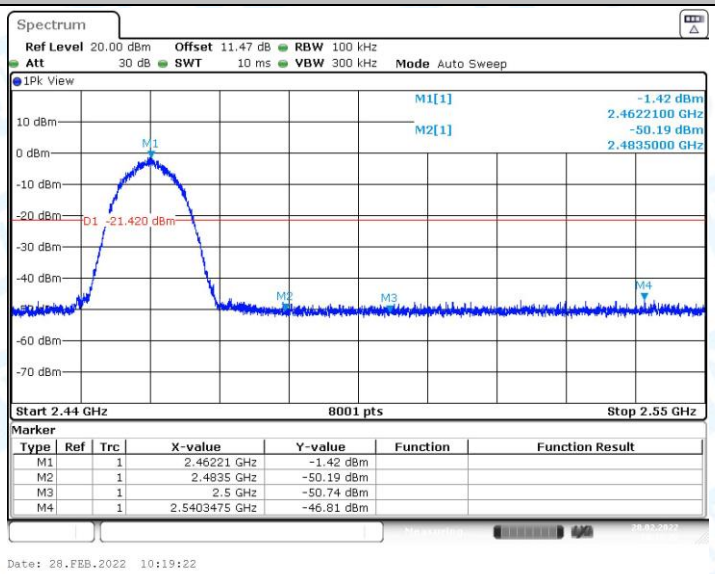
5.1.Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-1.26	-47.27	≤-21.26	PASS
		High	2462	-1.42	-46.81	≤-21.42	PASS
11G	Ant1	Low	2412	-5.70	-35.56	≤-25.7	PASS
		High	2462	-5.80	-46.11	≤-25.8	PASS
11N20SISO	Ant1	Low	2412	-5.48	-34.74	≤-25.48	PASS
		High	2462	-5.75	-46.69	≤-25.75	PASS
11N40SISO	Ant1	Low	2422	-9.11	-37.43	≤-29.11	PASS
		High	2452	-9.01	-45.48	≤-29.01	PASS

5.2.Test Graphs



11B_Ant1_Low_2412



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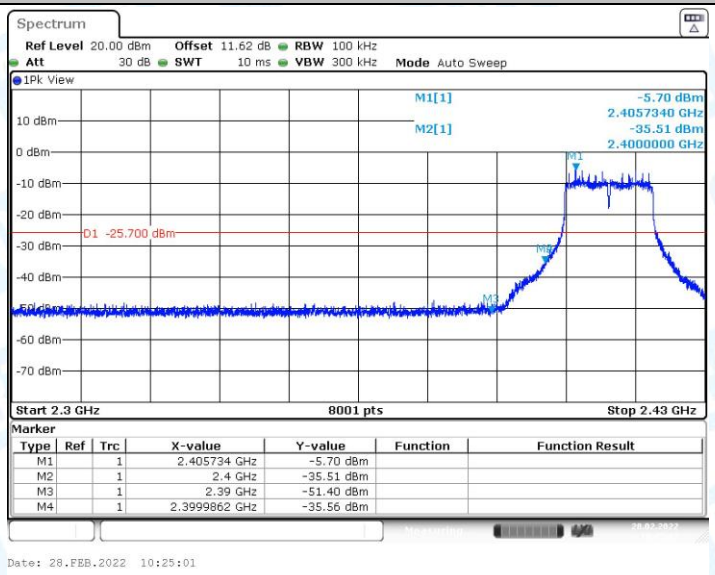

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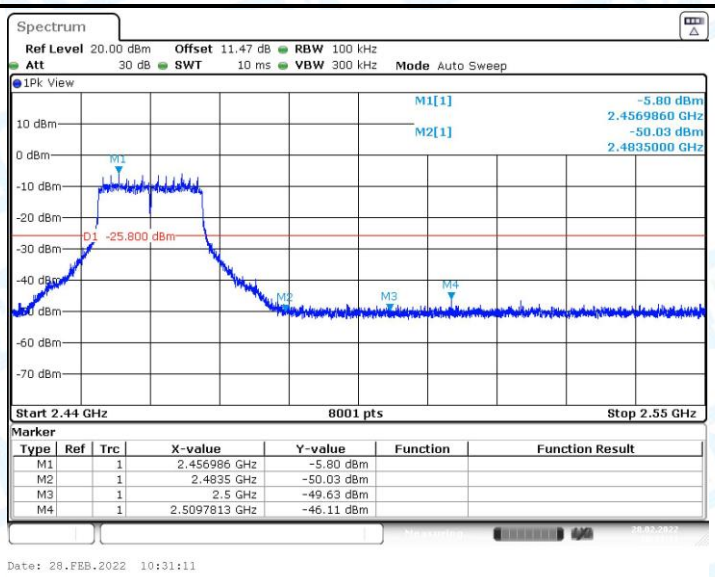

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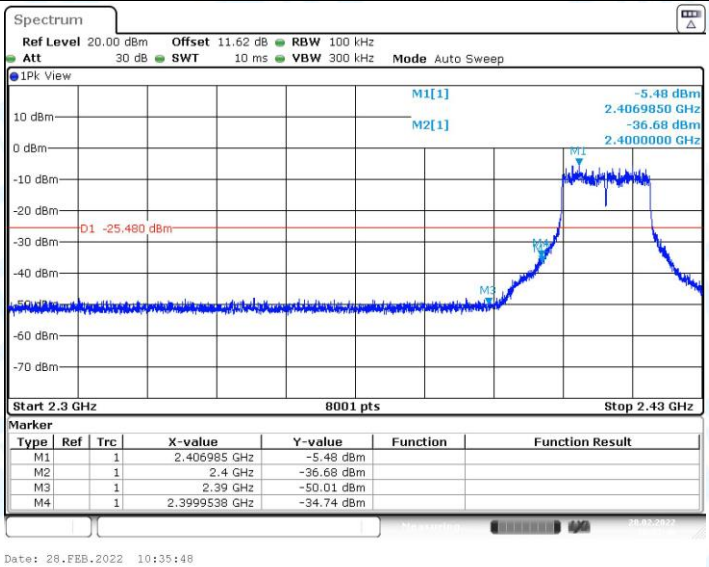
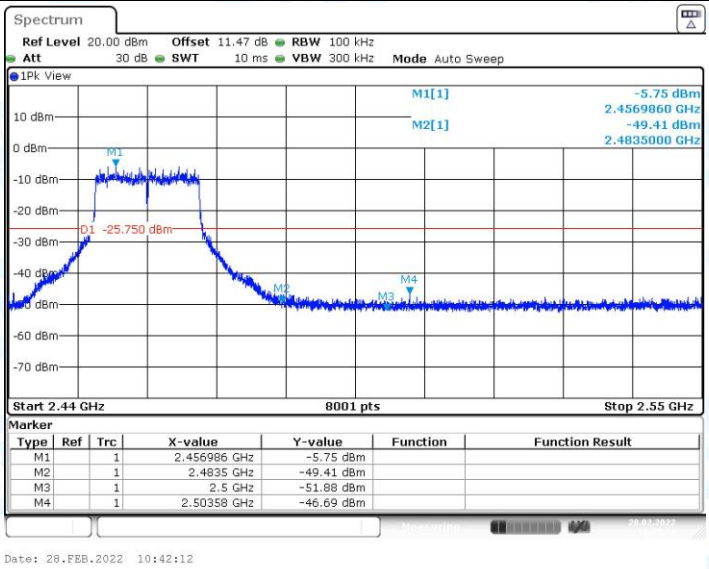
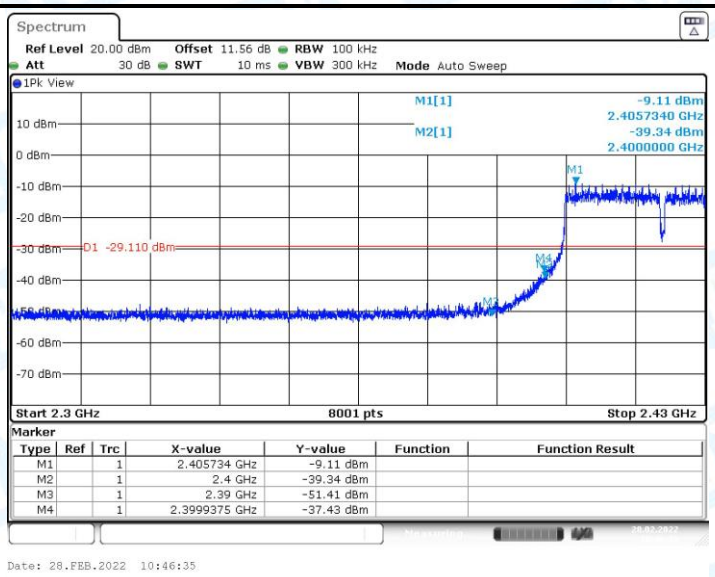


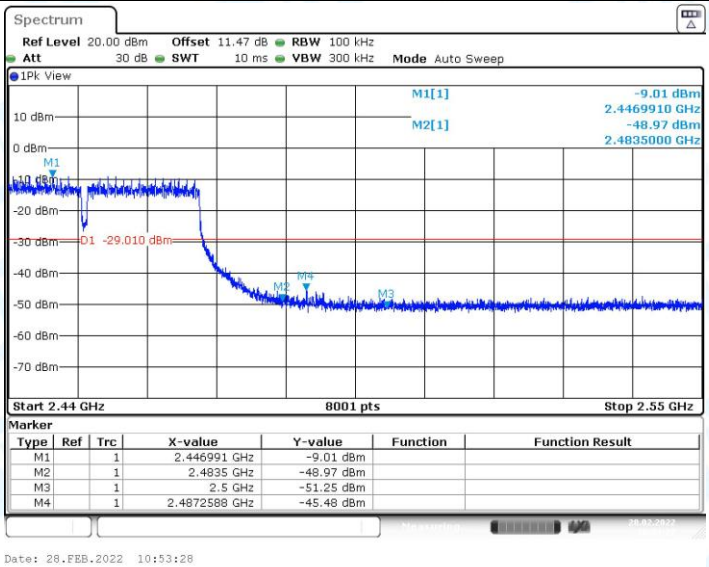
11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



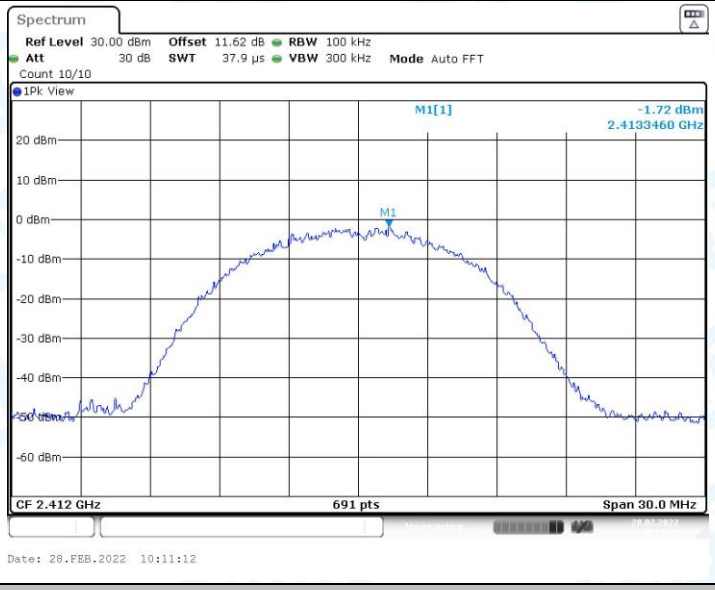
11N40SISO_Ant1_High_2452

6. Conducted Spurious Emission

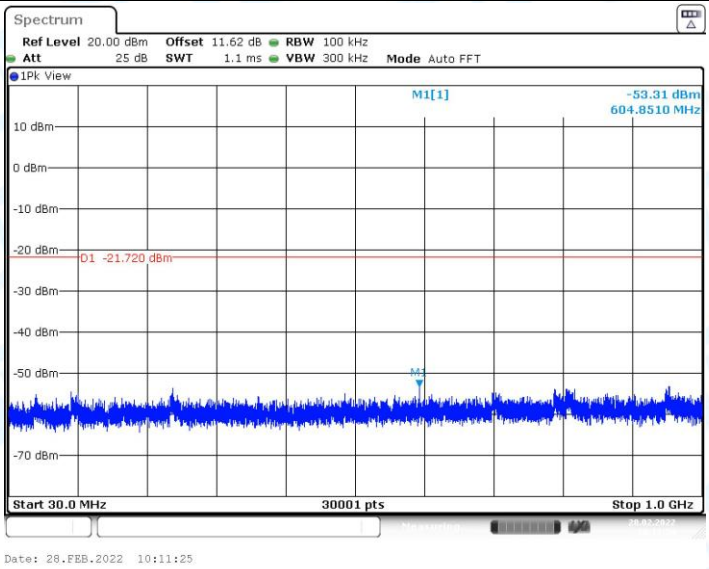
6.1.Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-1.72	-1.72	---	PASS
			30~1000	-1.72	-53.31	≤-21.72	PASS
			1000~26500	-1.72	-30.48	≤-21.72	PASS
		2437	Reference	-1.39	-1.39	---	PASS
			30~1000	-1.39	-53.38	≤-21.39	PASS
			1000~26500	-1.39	-29.79	≤-21.39	PASS
		2462	Reference	-2.03	-2.03	---	PASS
			30~1000	-2.03	-52.93	≤-22.03	PASS
			1000~26500	-2.03	-30.18	≤-22.03	PASS
11G	Ant1	2412	Reference	-5.48	-5.48	---	PASS
			30~1000	-5.48	-52.64	≤-25.48	PASS
			1000~26500	-5.48	-39.85	≤-25.48	PASS
		2437	Reference	-5.80	-5.80	---	PASS
			30~1000	-5.80	-53.14	≤-25.8	PASS
			1000~26500	-5.80	-44.16	≤-25.8	PASS
		2462	Reference	-5.64	-5.64	---	PASS
			30~1000	-5.64	-52.84	≤-25.64	PASS
			1000~26500	-5.64	-40.81	≤-25.64	PASS
11N20SISO	Ant1	2412	Reference	-5.30	-5.30	---	PASS
			30~1000	-5.30	-53.21	≤-25.3	PASS
			1000~26500	-5.30	-43.08	≤-25.3	PASS
		2437	Reference	-5.39	-5.39	---	PASS
			30~1000	-5.39	-53.32	≤-25.39	PASS
			1000~26500	-5.39	-41.9	≤-25.39	PASS
		2462	Reference	-5.56	-5.56	---	PASS
			30~1000	-5.56	-52.31	≤-25.56	PASS
			1000~26500	-5.56	-42.68	≤-25.56	PASS
11N40SISO	Ant1	2422	Reference	-9.05	-9.05	---	PASS
			30~1000	-9.05	-52.68	≤-29.05	PASS
			1000~26500	-9.05	-42.44	≤-29.05	PASS
		2437	Reference	-8.89	-8.89	---	PASS
			30~1000	-8.89	-52.44	≤-28.89	PASS
			1000~26500	-8.89	-42.17	≤-28.89	PASS
		2452	Reference	-8.75	-8.75	---	PASS
			30~1000	-8.75	-53.53	≤-28.75	PASS
			1000~26500	-8.75	-43.45	≤-28.75	PASS

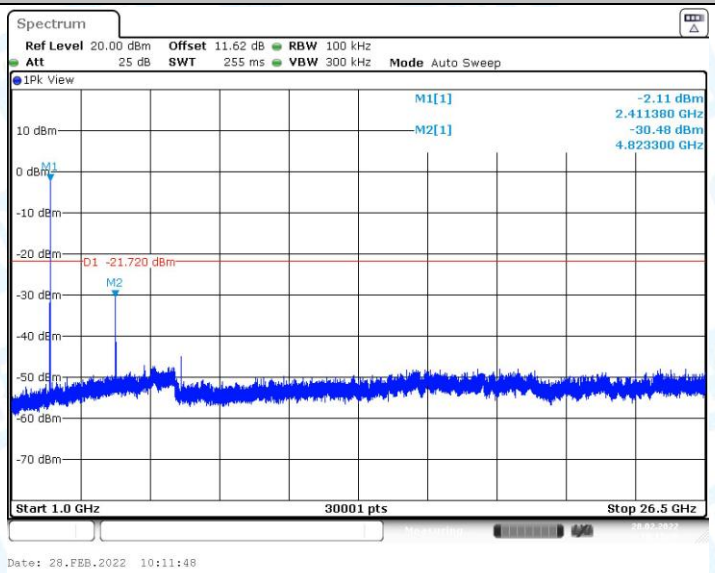
6.2.Test Graphs



11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



11B_Ant1_2412_1000~26500