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

General Description of EUT	
Product Name:	**Outdoor LED scrolling sign**
Test Model:	**WYJ202203**
Sample ID:	**202204-0158_01-02**
Environmental Conditions	
Temperature:	**25℃**
Relative Humidity:	**55%**
Test Voltage:	**AC 120V**
Test Engineer:	**Huangjianping**
Note: For a more detailed features description, please refer to the report TBR-C-202204-0158-3	

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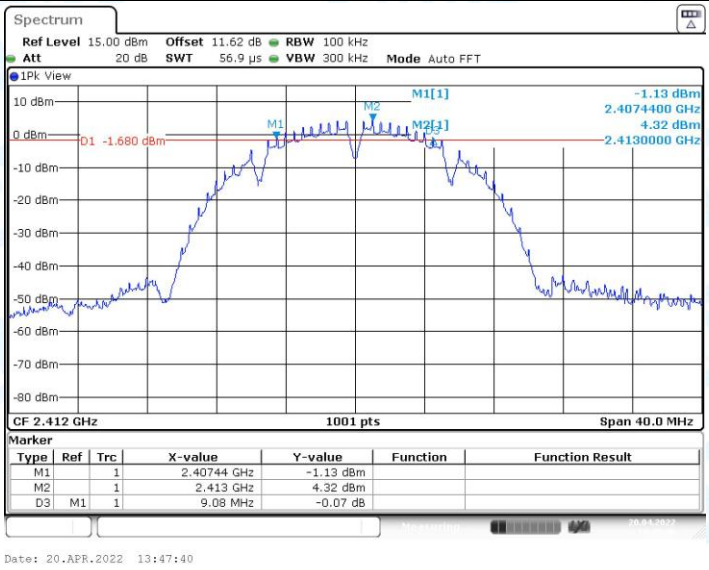
1. DTS Bandwidth

1.1.Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.08	2407.44	2416.52	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	16.36	2428.80	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



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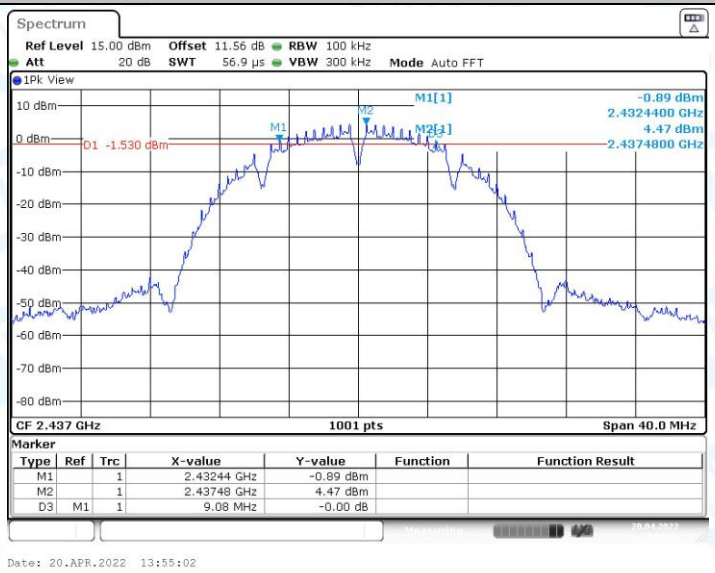

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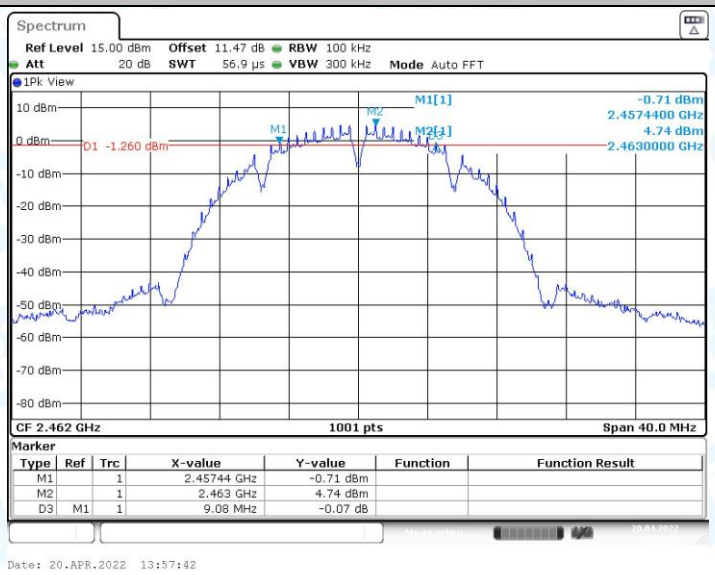
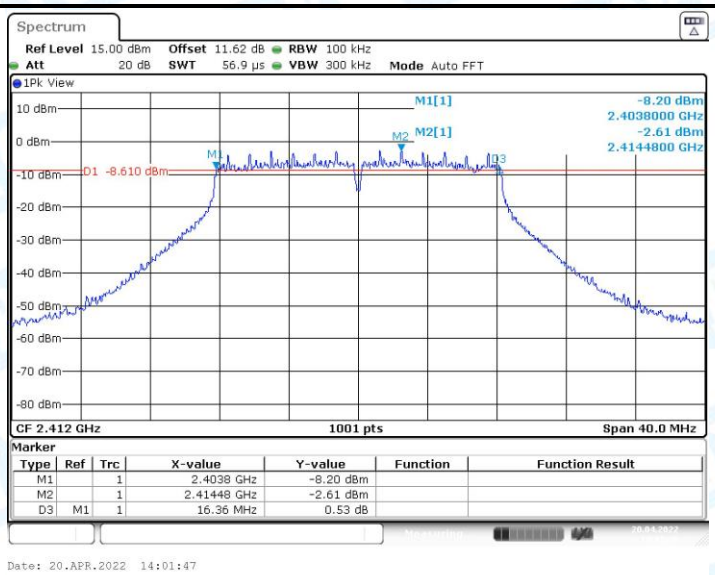
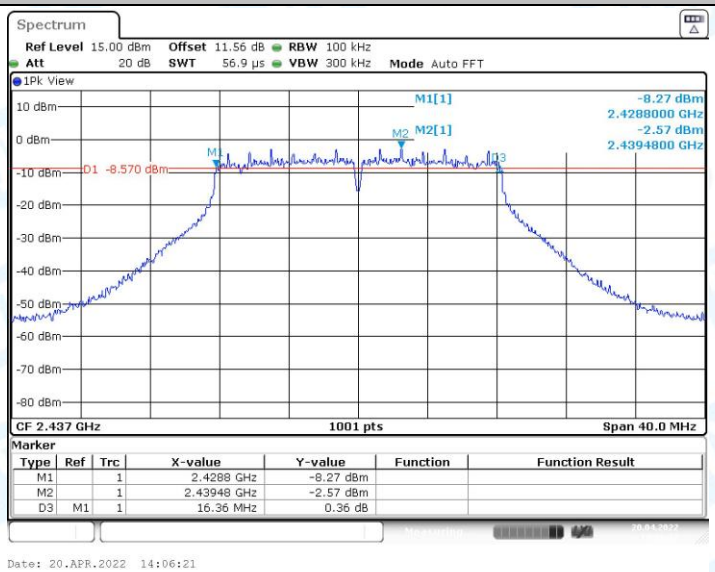


11G_Ant1_2412



11G_Ant1_2437



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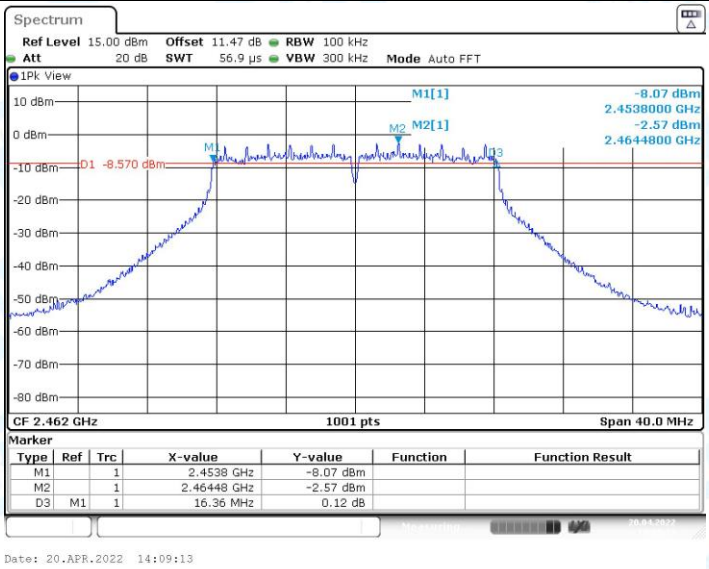

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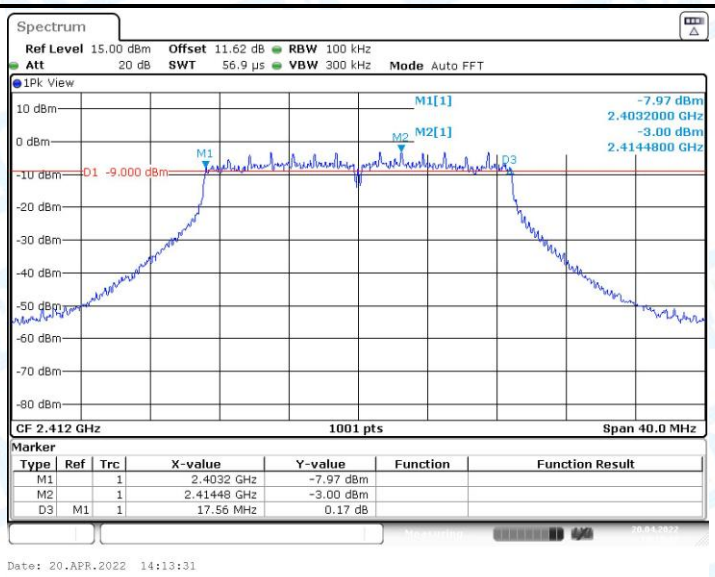

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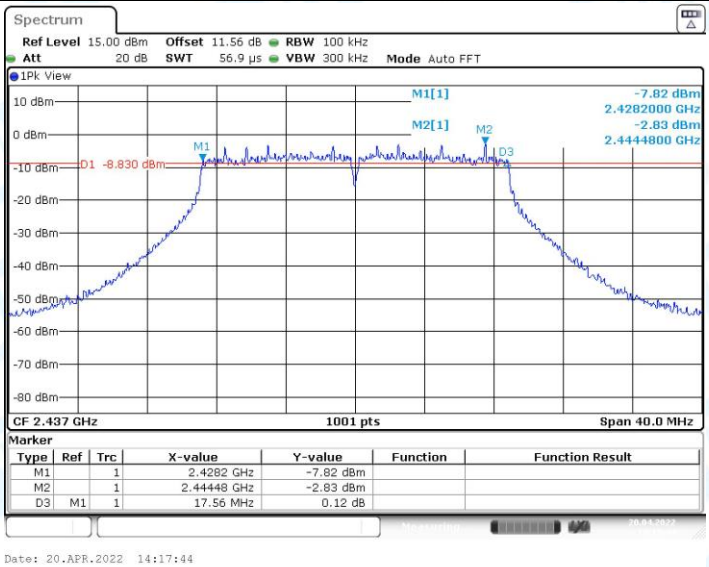

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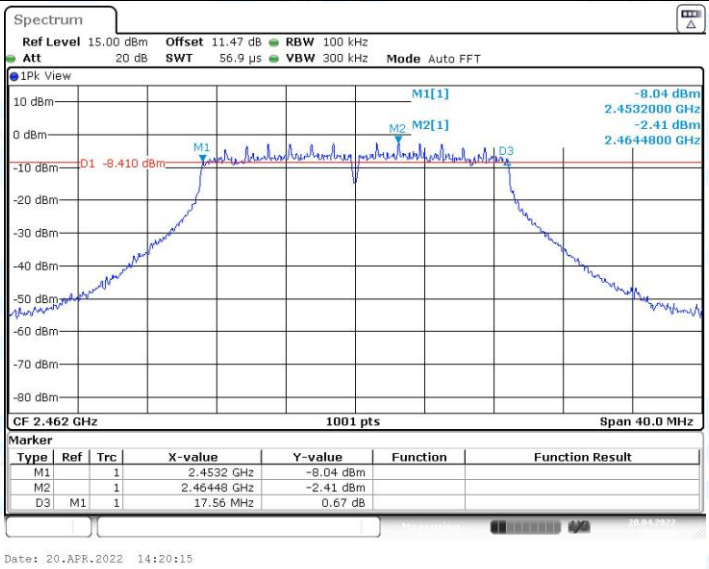


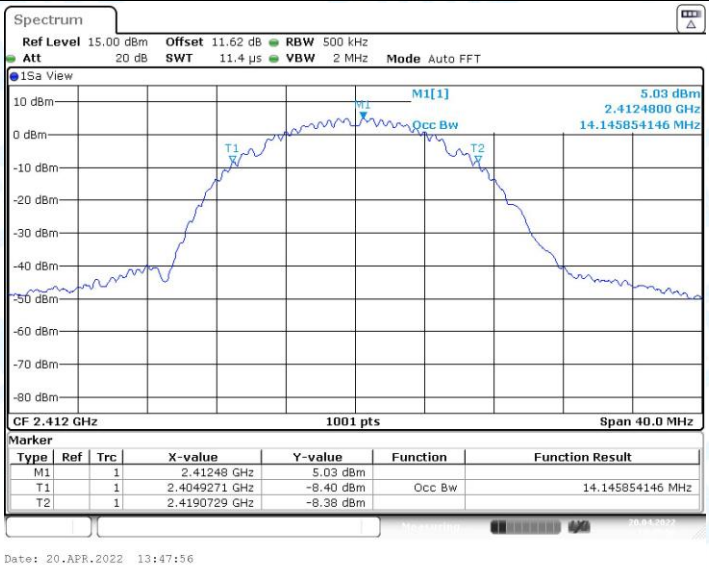
2. Occupied Channel Bandwidth

2.1.Test Result

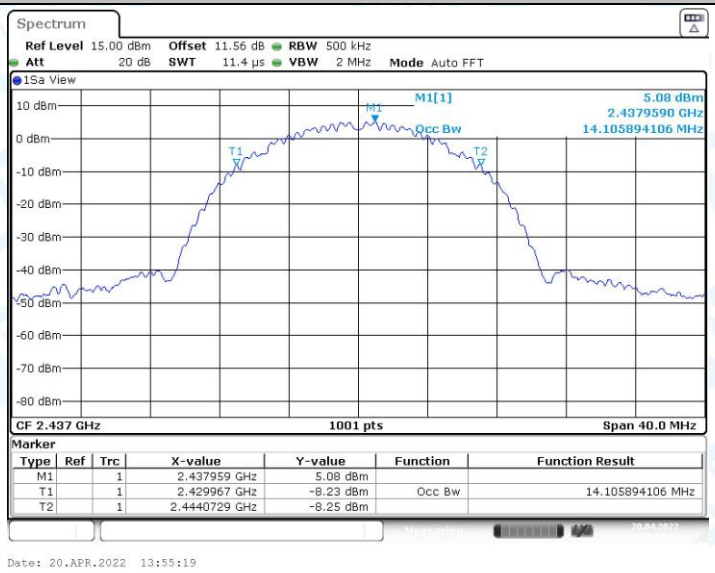
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.146	2404.927	2419.073	---	---
		2437	14.106	2429.967	2444.073	---	---
		2462	14.106	2454.927	2469.033	---	---
11G	Ant1	2412	17.383	2403.289	2420.671	---	---
		2437	17.343	2428.289	2445.631	---	---
		2462	17.303	2453.249	2470.551	---	---
11N20SISO	Ant1	2412	18.581	2402.769	2421.351	---	---
		2437	18.781	2427.689	2446.471	---	---
		2462	18.621	2452.849	2471.471	---	---

2.2.Test Graphs

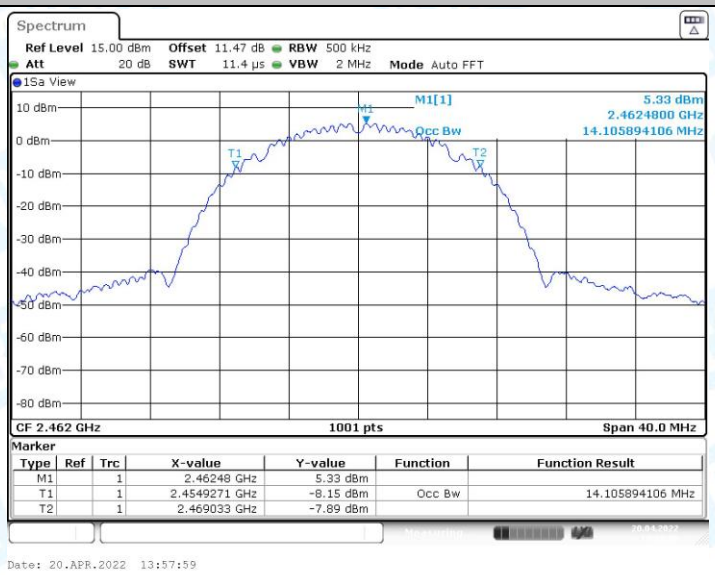
11B_Ant1_2412



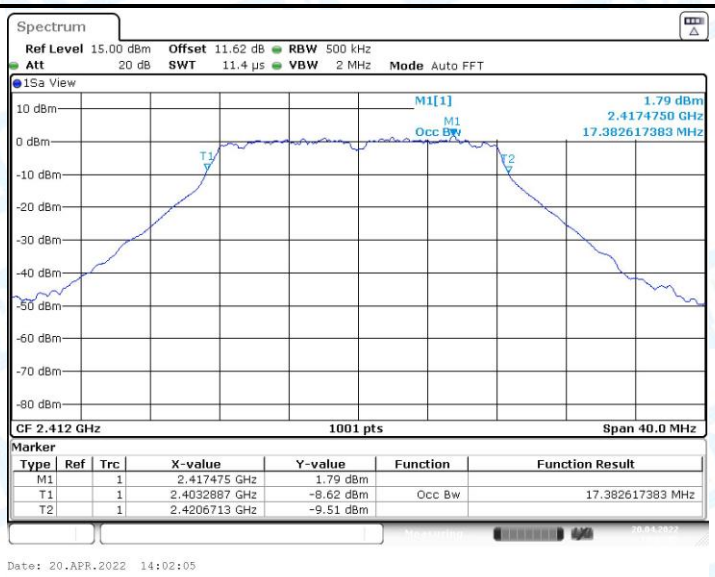
11B_Ant1_2437



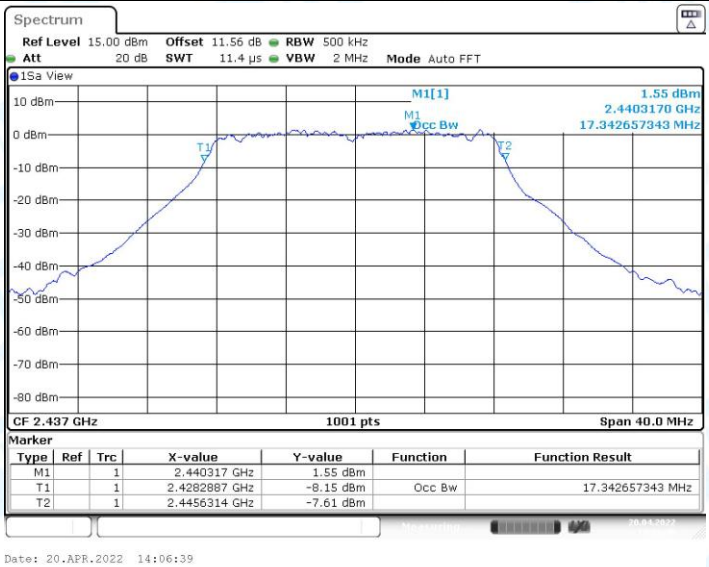
11B_Ant1_2462



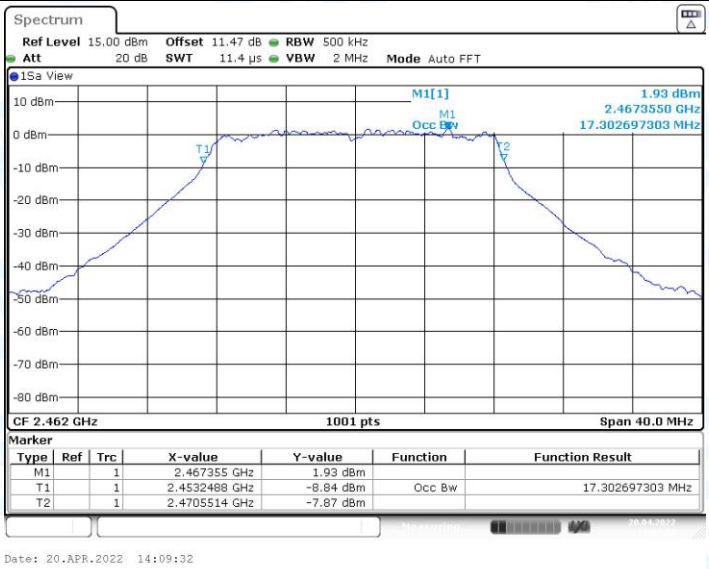
11G_Ant1_2412



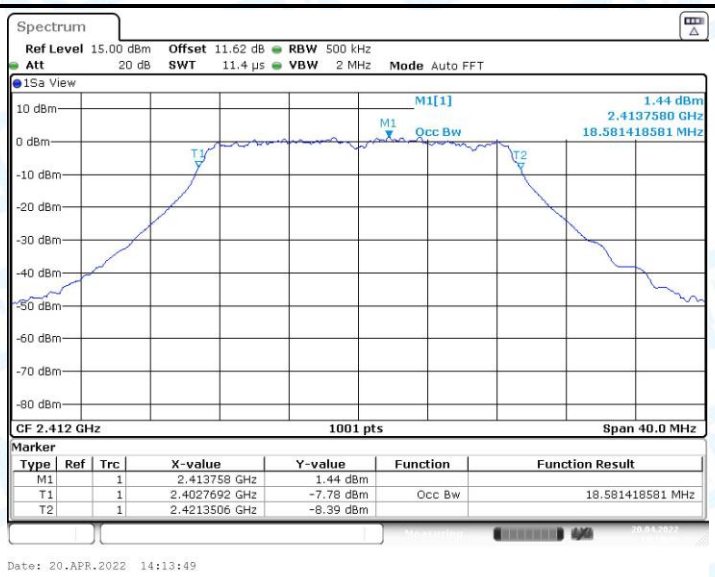
11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



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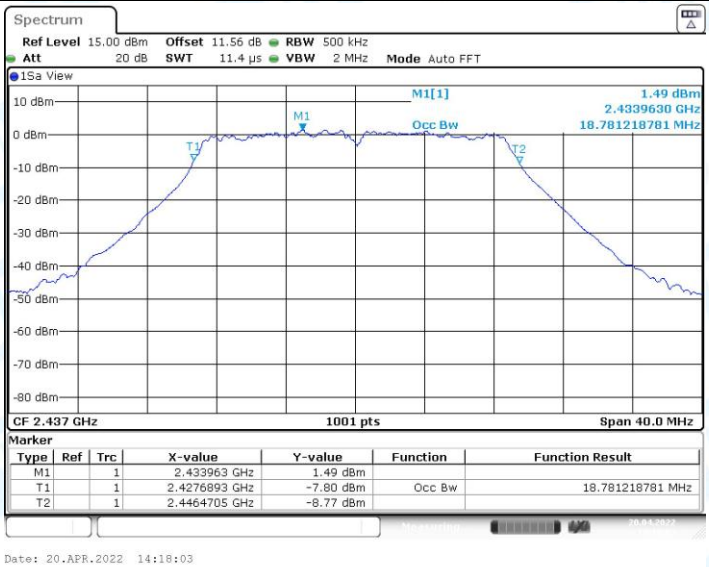


11N20SISO_Ant1_2462

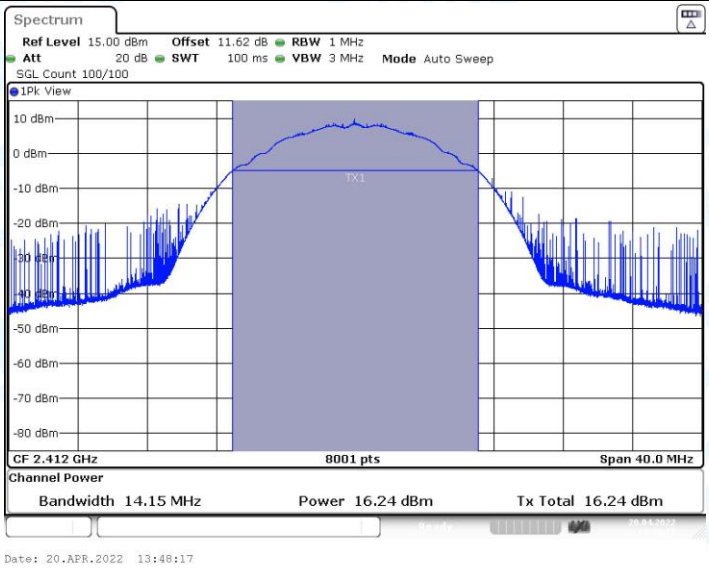
3. Maximum conducted output power

3.1.Test Result

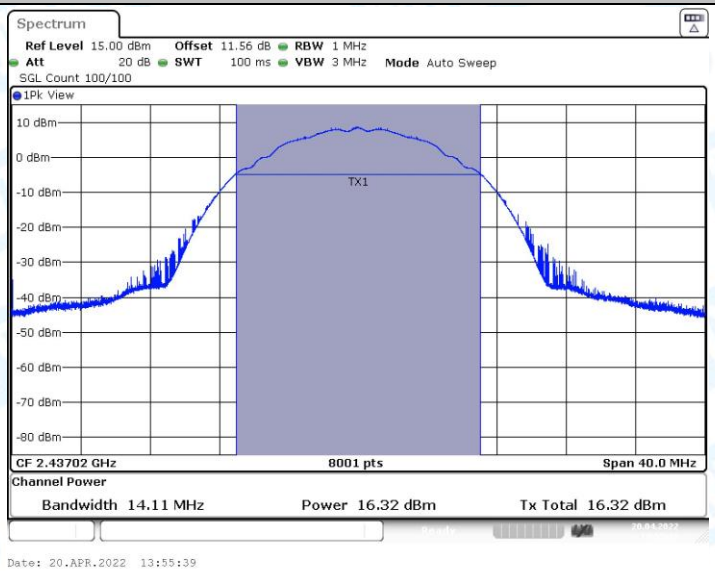
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	16.24	≤30.00	PASS
		2437	16.32	≤30.00	PASS
		2462	16.46	≤30.00	PASS
11G	Ant1	2412	16.56	≤30.00	PASS
		2437	16.75	≤30.00	PASS
		2462	16.97	≤30.00	PASS
11N20SISO	Ant1	2412	16.69	≤30.00	PASS
		2437	16.84	≤30.00	PASS
		2462	16.99	≤30.00	PASS

3.2.Test Graphs

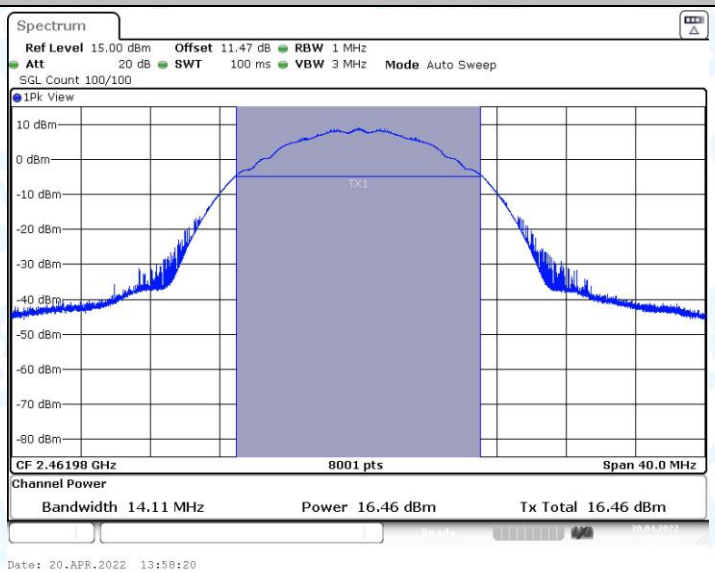
11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



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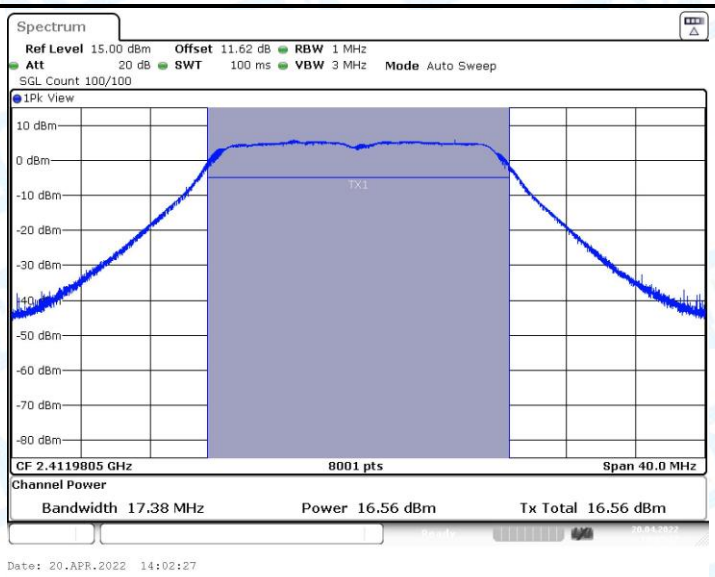
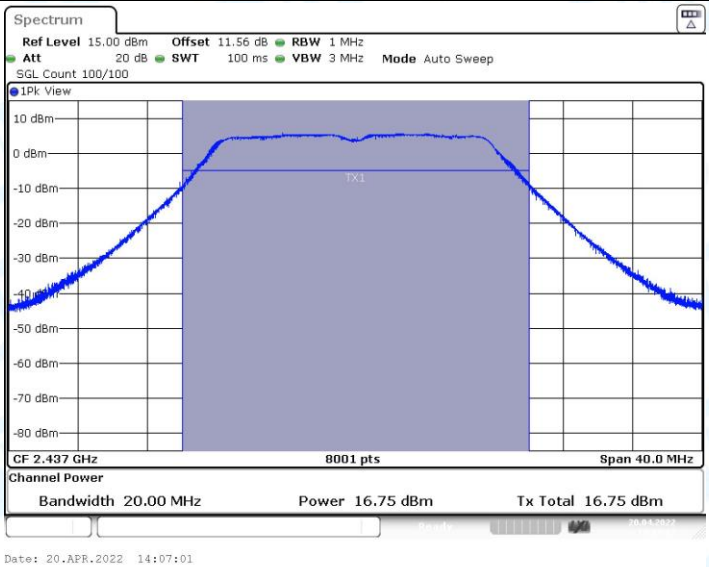
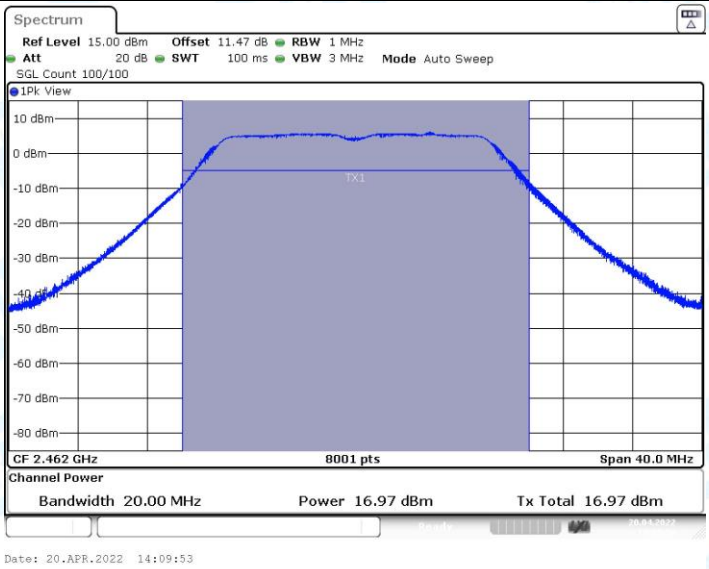


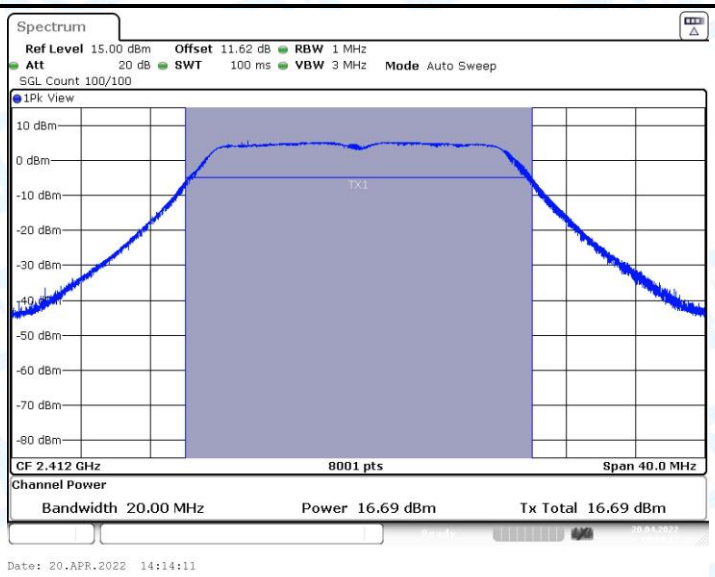
11G_Ant1_2437



11G_Ant1_2462

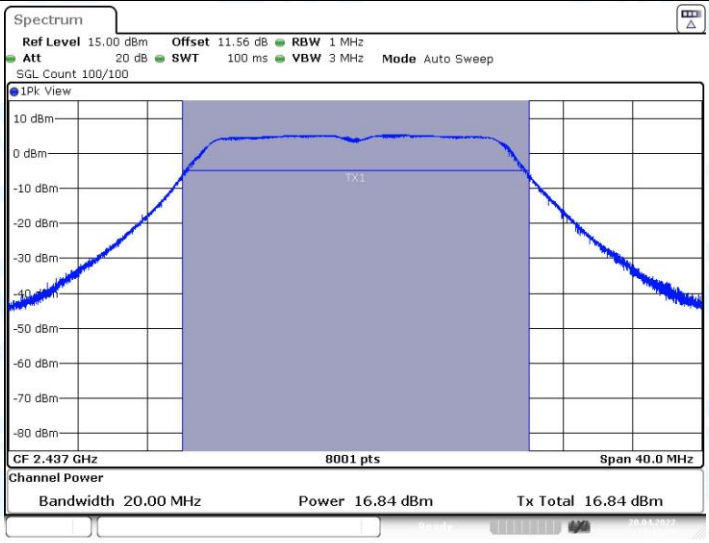


11N20SISO_Ant1_2412



Date: 20.APR.2022 14:14:11

11N20SISO_Ant1_2437



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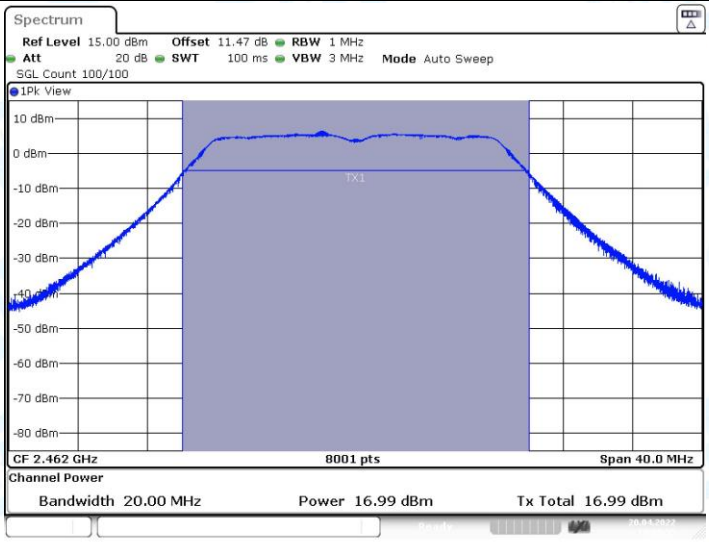
11N20SISO_Ant1_2462



Date: 20.APR.2022 14:20:55

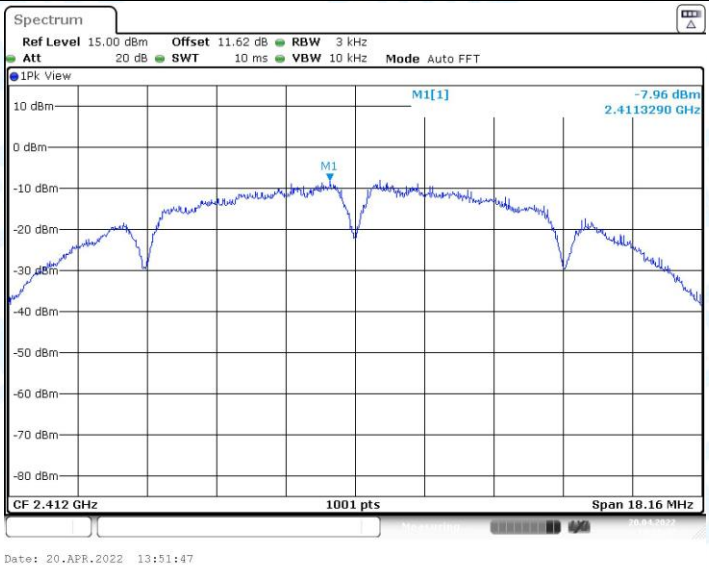
4. Maximum power spectral density

4.1.Test Result

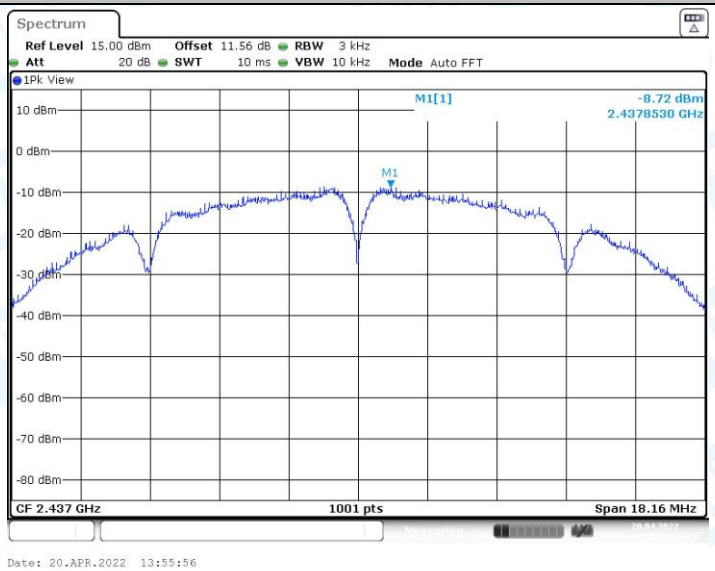
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-7.96	≤8.00	PASS
		2437	-8.72	≤8.00	PASS
		2462	-7.22	≤8.00	PASS
11G	Ant1	2412	-16.47	≤8.00	PASS
		2437	-16.72	≤8.00	PASS
		2462	-16.42	≤8.00	PASS
11N20SISO	Ant1	2412	-16.83	≤8.00	PASS
		2437	-16.72	≤8.00	PASS
		2462	-16.02	≤8.00	PASS

4.2.Test Graphs

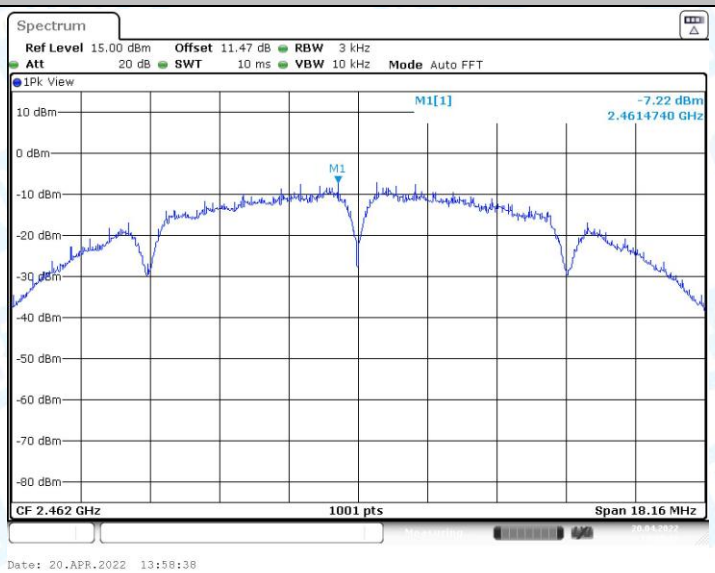
11B_Ant1_2412



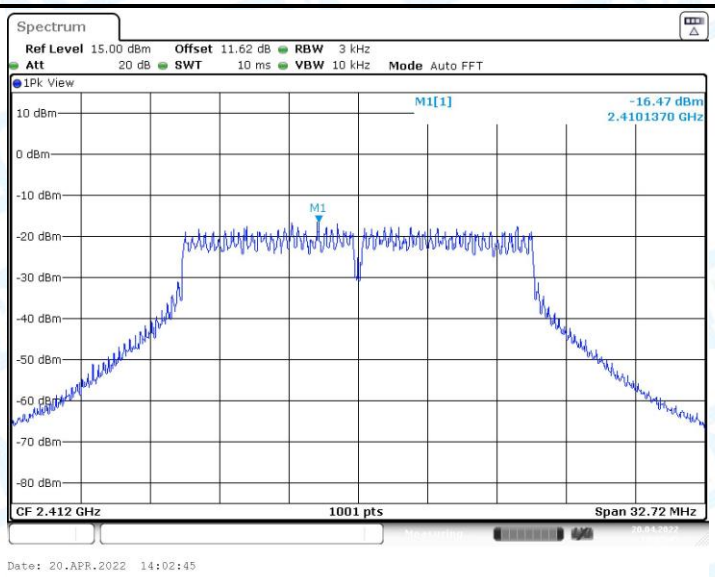
11B_Ant1_2437



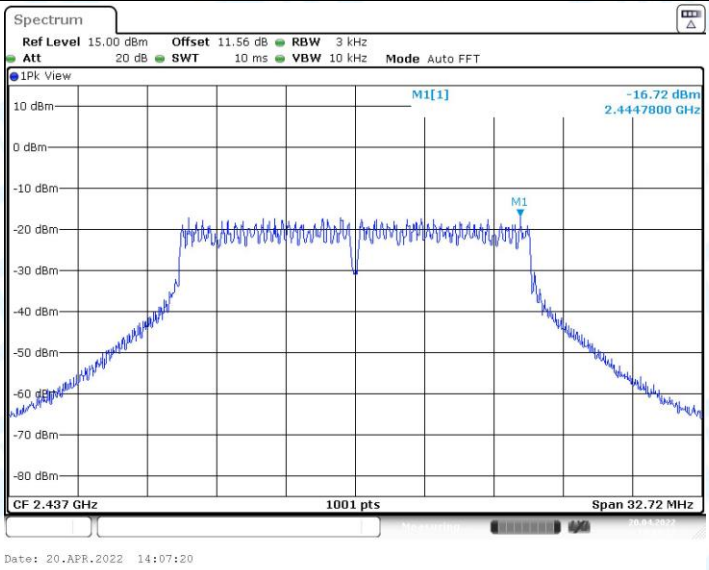
11B_Ant1_2462



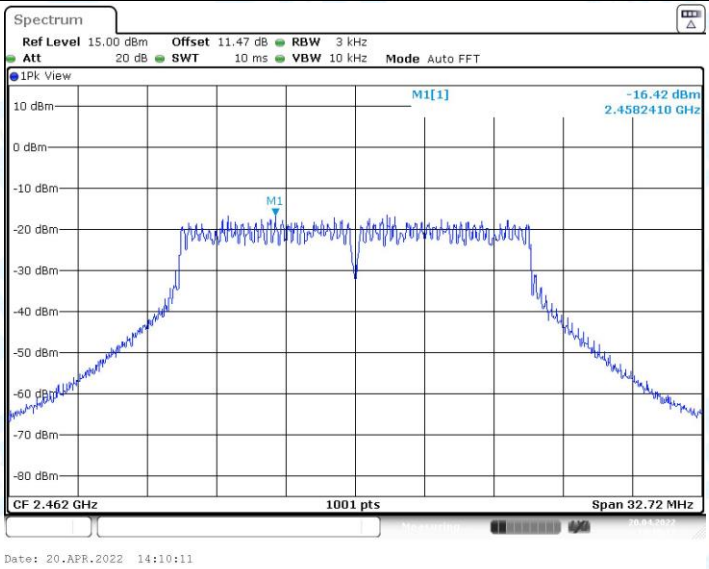
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



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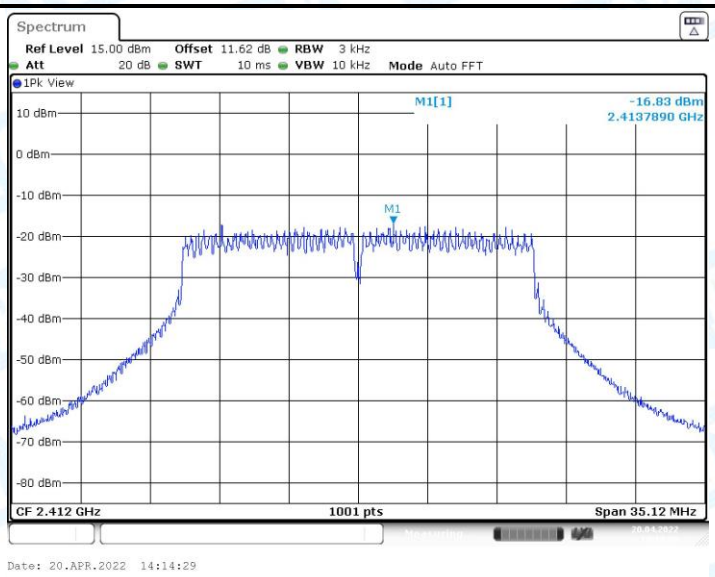

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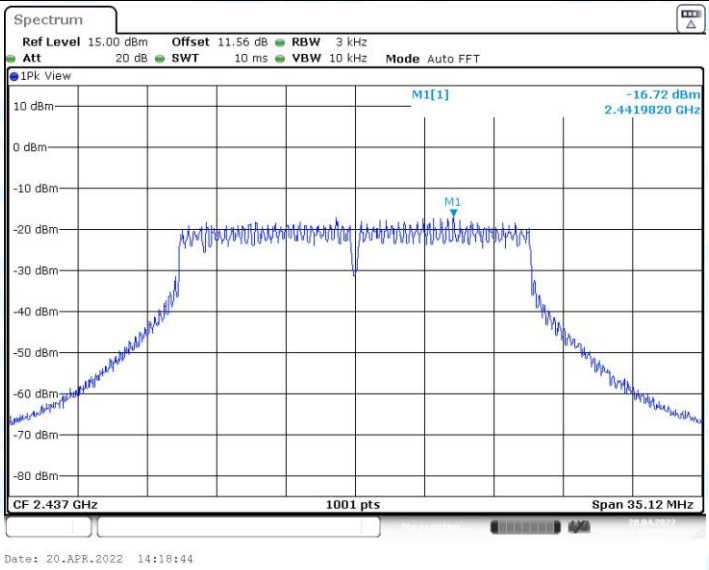
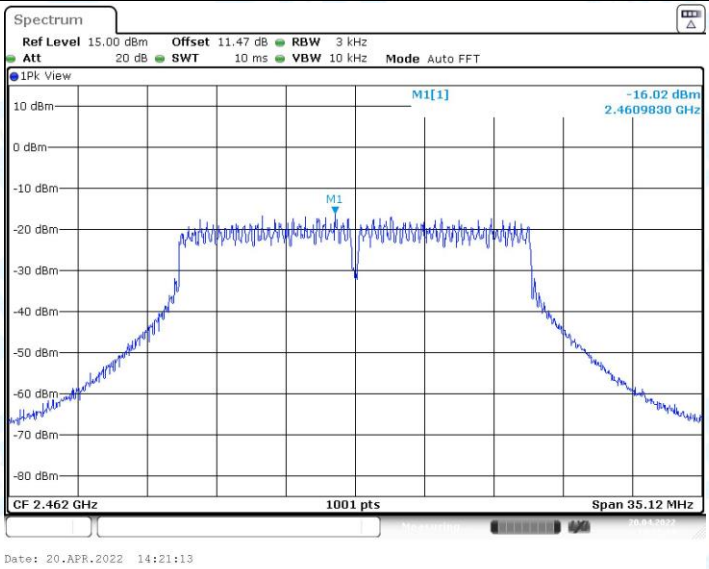


11N20SISO_Ant1_2462



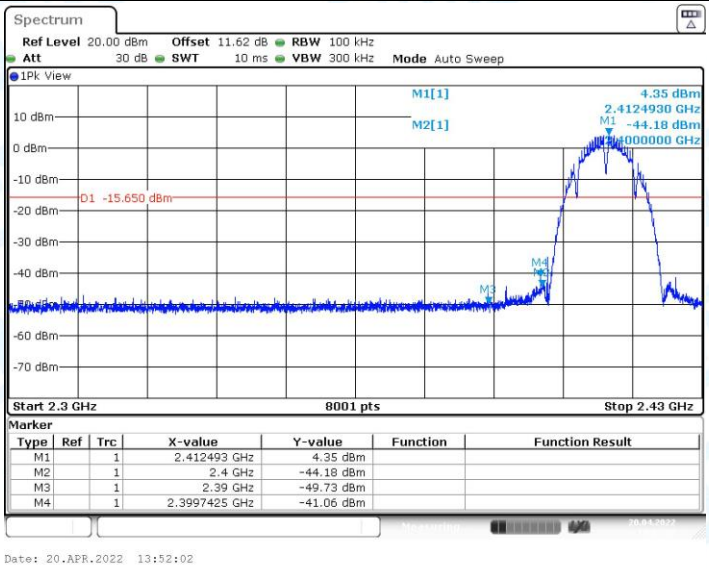
5. Band edge measurements

5.1.Test Result

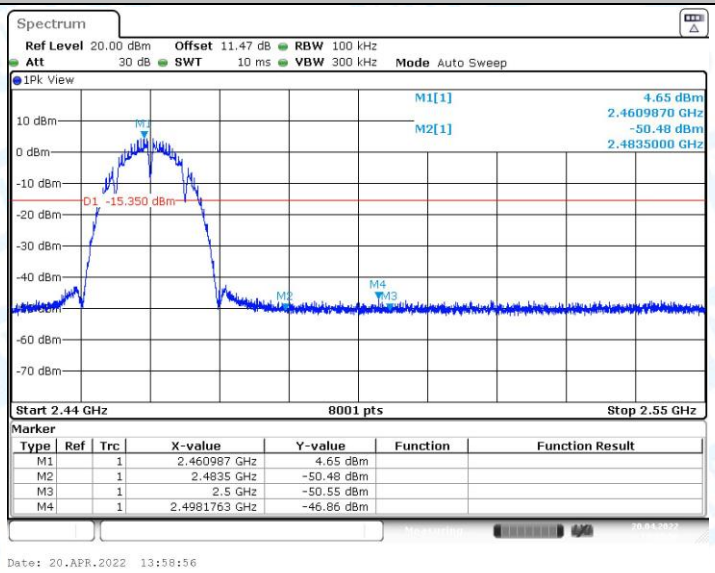
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.35	-41.06	≤-15.65	PASS
		High	2462	4.65	-46.86	≤-15.35	PASS
11G	Ant1	Low	2412	-2.78	-36.97	≤-22.78	PASS
		High	2462	-2.86	-46.93	≤-22.86	PASS
11N20SISO	Ant1	Low	2412	-2.69	-35.05	≤-22.69	PASS
		High	2462	-2.44	-46.49	≤-22.44	PASS

5.2.Test Graphs

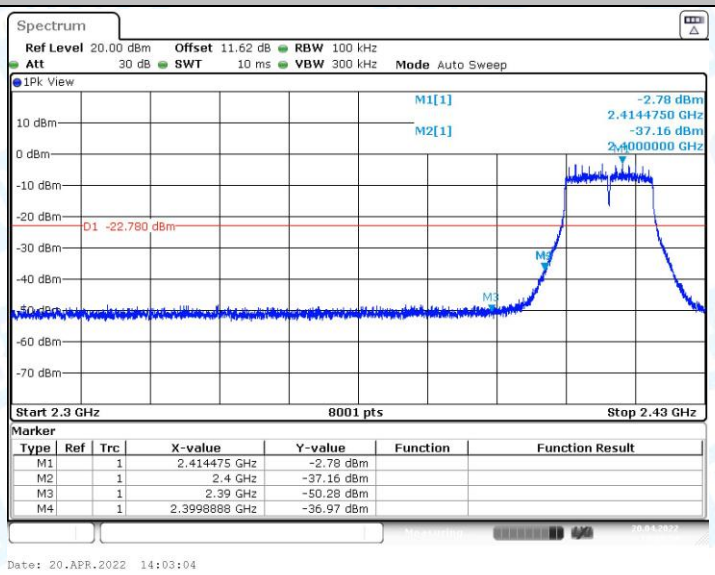
11B_Ant1_Low_2412



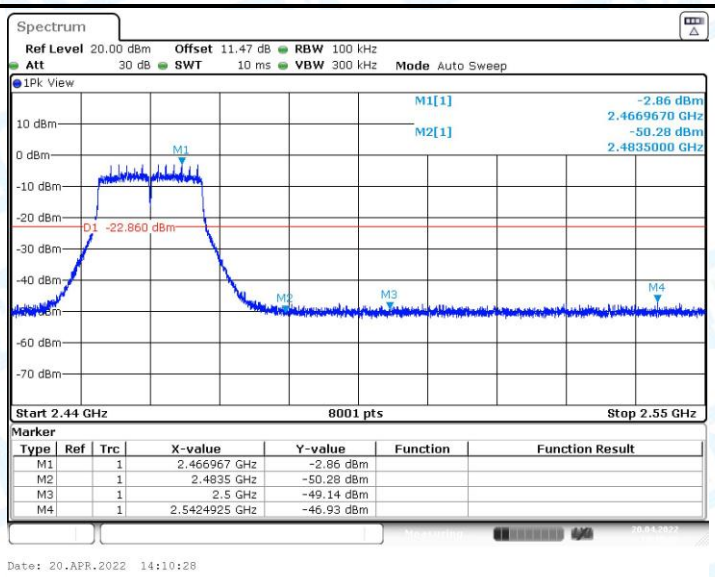
11B_Ant1_High_2462



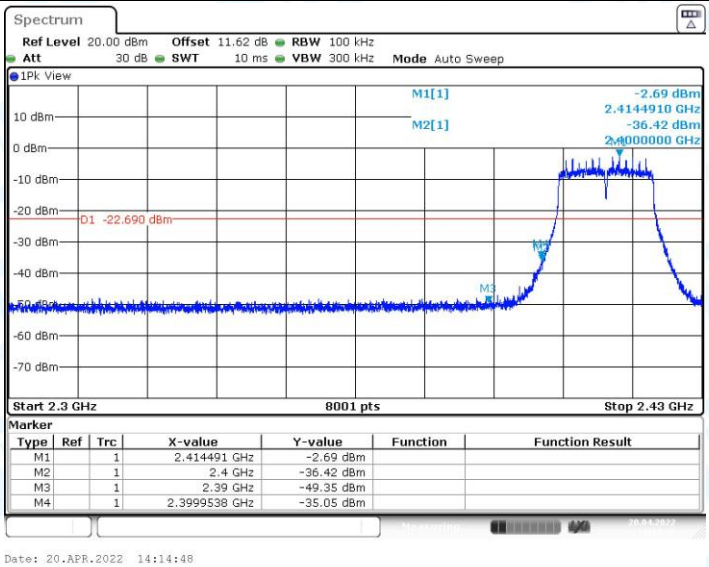
11G_Ant1_Low_2412



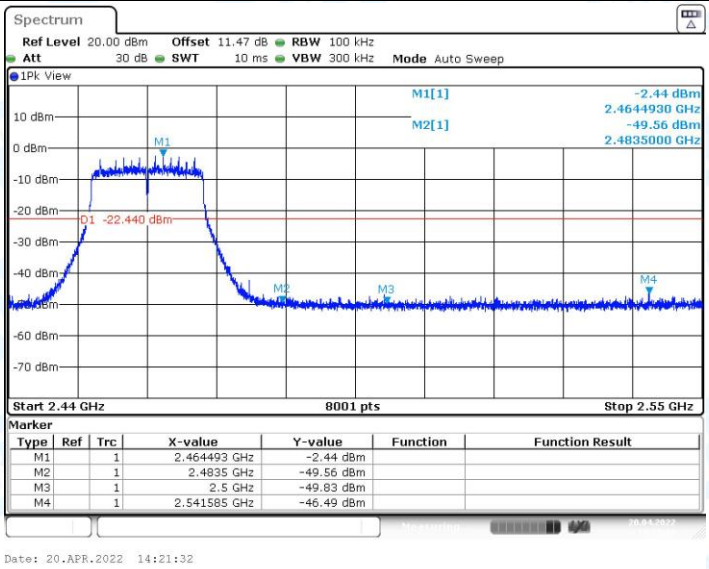
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



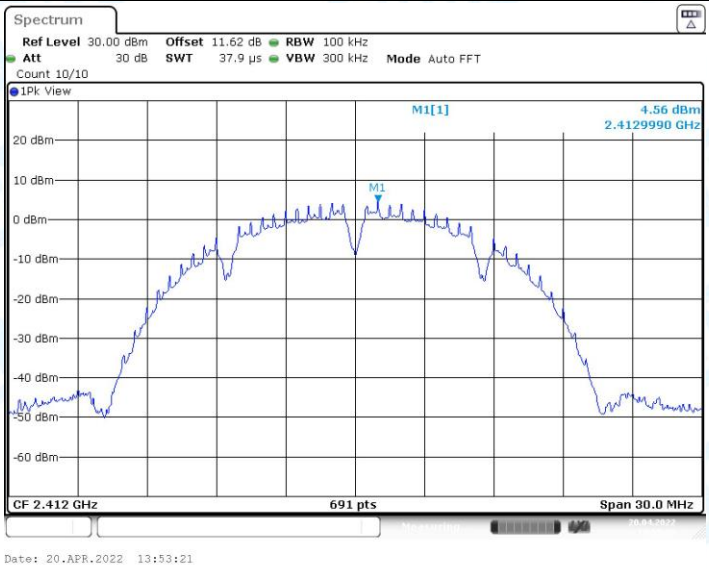
6. Conducted Spurious Emission

6.1.Test Result

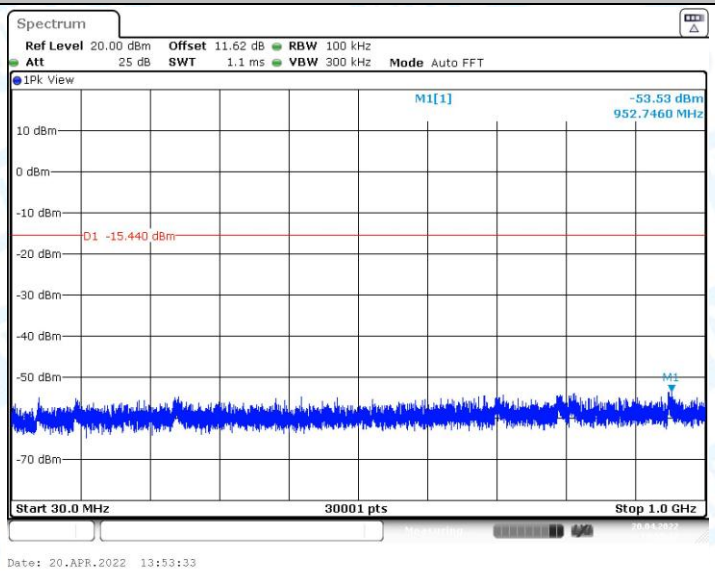
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.56	4.56	---	PASS
			30~1000	4.56	-53.53	≤-15.44	PASS
			1000~26500	4.56	-46.89	≤-15.44	PASS
		2437	Reference	4.69	4.69	---	PASS
			30~1000	4.69	-52.31	≤-15.31	PASS
			1000~26500	4.69	-47.25	≤-15.31	PASS
		2462	Reference	4.50	4.50	---	PASS
			30~1000	4.50	-53.26	≤-15.5	PASS
			1000~26500	4.50	-47.55	≤-15.5	PASS
11G	Ant1	2412	Reference	-2.56	-2.56	---	PASS
			30~1000	-2.56	-53.34	≤-22.56	PASS
			1000~26500	-2.56	-47.09	≤-22.56	PASS
		2437	Reference	-2.38	-2.38	---	PASS
			30~1000	-2.38	-52.22	≤-22.38	PASS
			1000~26500	-2.38	-47.21	≤-22.38	PASS
		2462	Reference	-2.67	-2.67	---	PASS
			30~1000	-2.67	-53.27	≤-22.67	PASS
			1000~26500	-2.67	-46.82	≤-22.67	PASS
11N20SISO	Ant1	2412	Reference	-2.52	-2.52	---	PASS
			30~1000	-2.52	-51.96	≤-22.52	PASS
			1000~26500	-2.52	-46.82	≤-22.52	PASS
		2437	Reference	-2.76	-2.76	---	PASS
			30~1000	-2.76	-52.97	≤-22.76	PASS
			1000~26500	-2.76	-46.99	≤-22.76	PASS
		2462	Reference	-2.78	-2.78	---	PASS
			30~1000	-2.78	-53.34	≤-22.78	PASS
			1000~26500	-2.78	-46.78	≤-22.78	PASS

6.2.Test Graphs

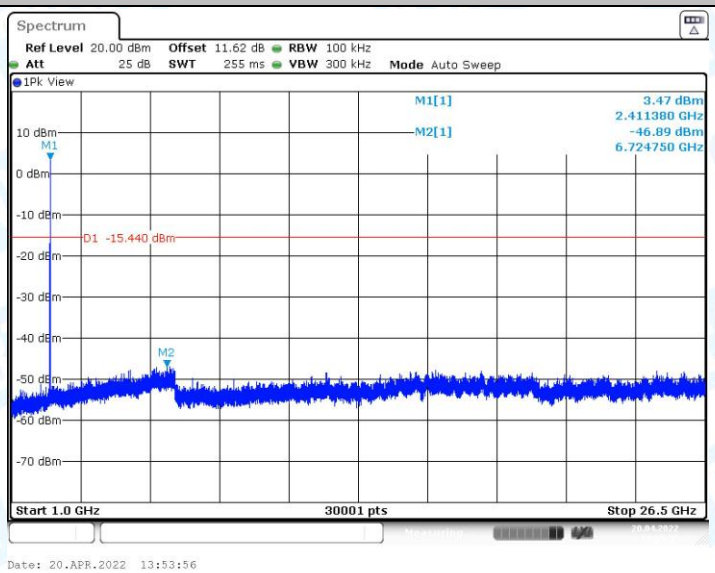
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



11B_Ant1_2412_1000~26500



11B_Ant1_2437_0~Reference