

## 10. CONDUCTED BAND EDGES AND SPURIOUS EMISSIONS

### 10.1. LIMITS

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

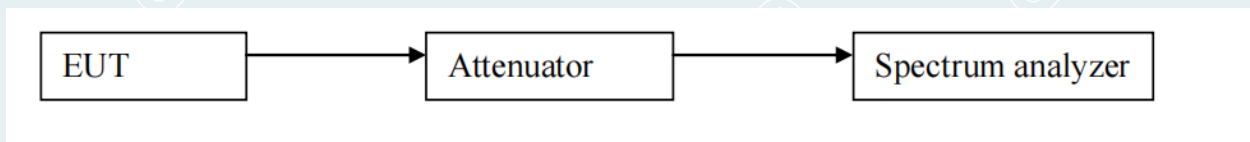
### 10.2. TEST PROCEDURES

Test procedures follow KDB 558074 D01 DTS Measurement Guidance.

Remove the antenna from the EUT and then connect a low attenuation cable from the antenna port to the spectrum.

- 1) Remove the antenna from the EUT and then connect a low attenuation cable from the antenna port to the spectrum.
- 2) Set the spectrum analyzer: RBW =100KHz; VBW =300KHz, Frequency range = 30MHz to 26.5GHz; Sweep = auto; Detector Function = Peak; Trace = Max hold.
- 3) Measure and record the results in the test report.
- 4) The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

### 10.3. TEST SETUP



----- The following blanks -----

**10.4. TEST RESULTS**

Pre-scan all modes and recorded the worst case results in this report (CDD).

Band edge

Environment: 22.5°C/54%RH/101.0kPa

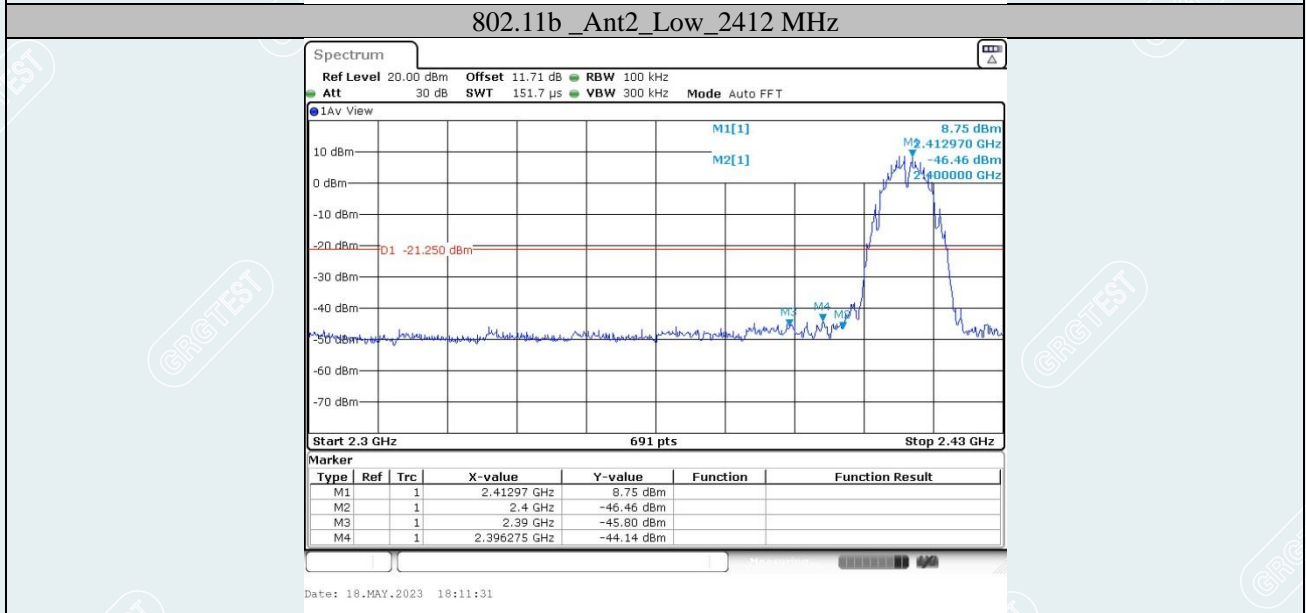
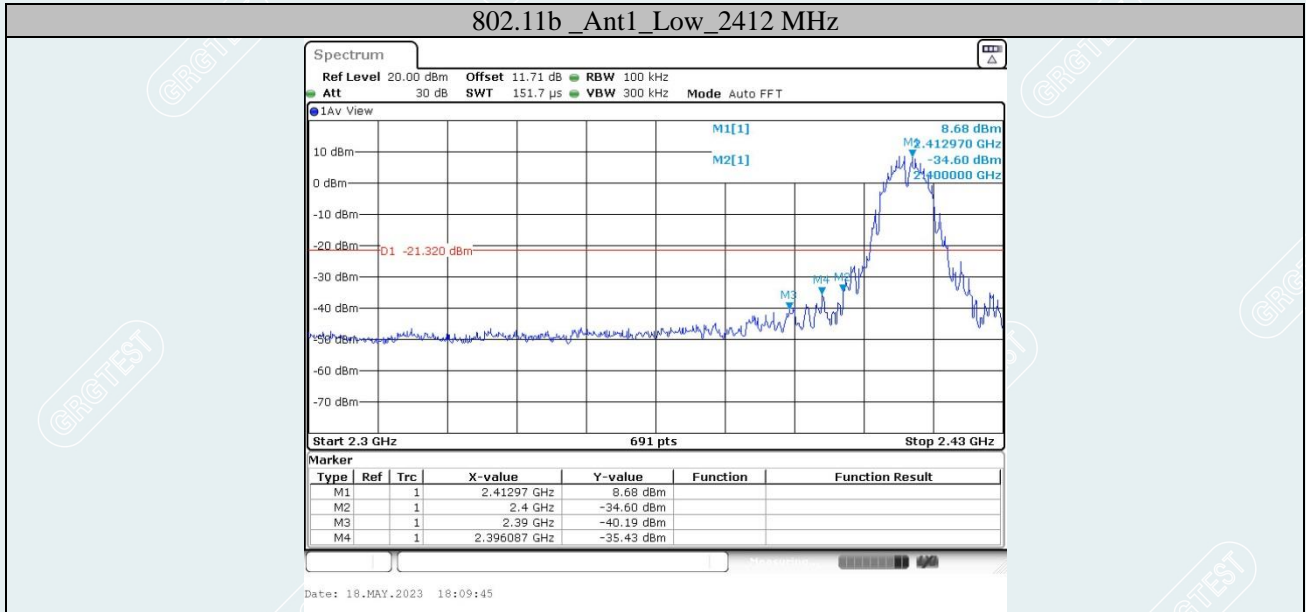
Tested By:Huang Tianmei

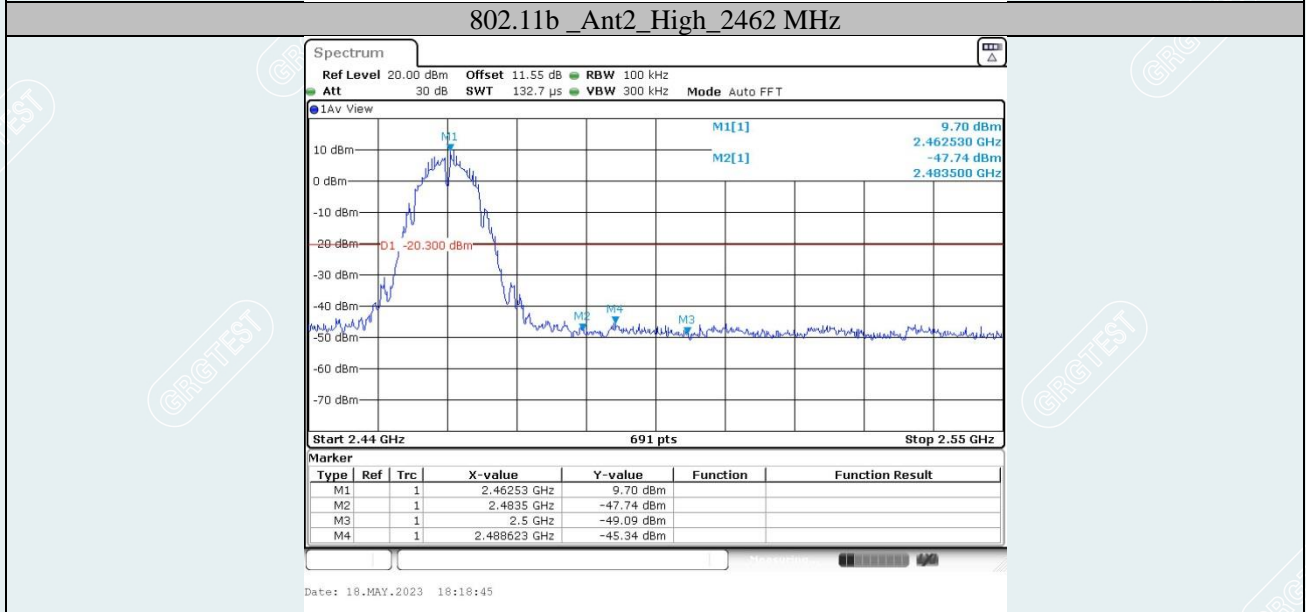
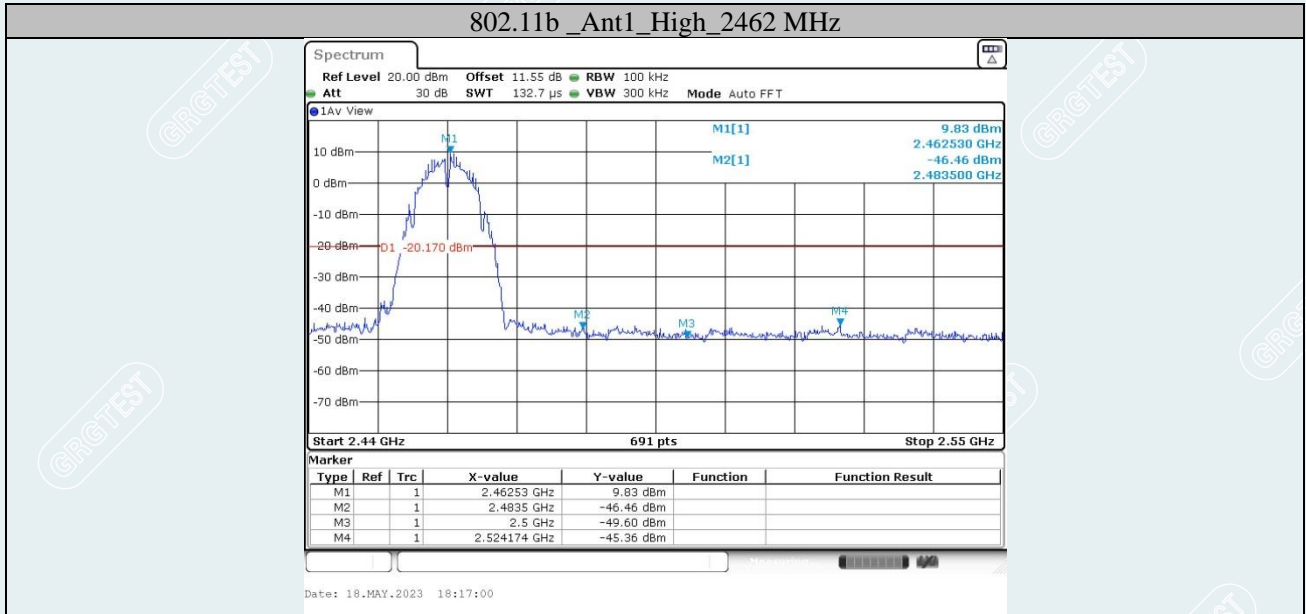
CDD

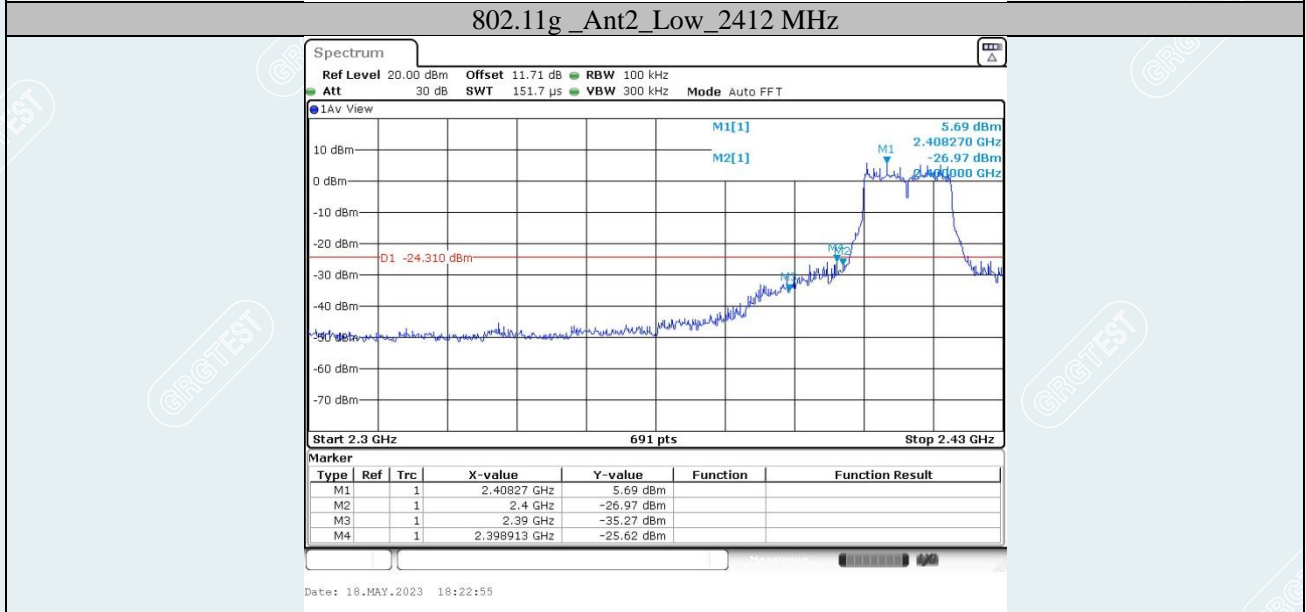
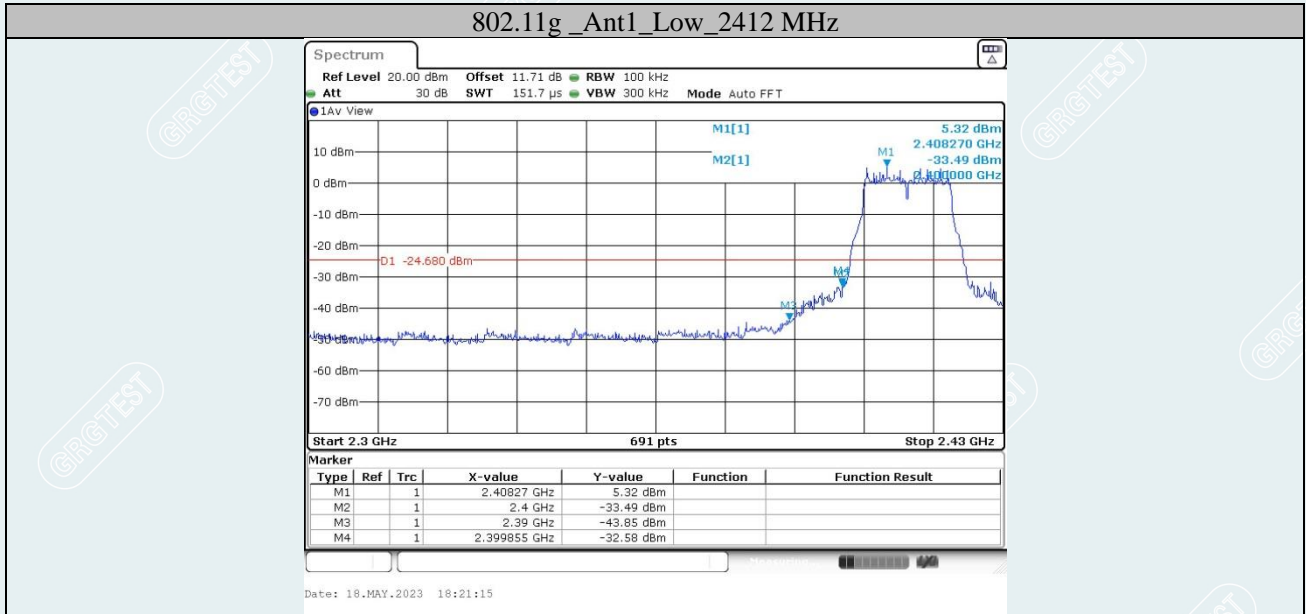
Voltage:AC120V/60Hz

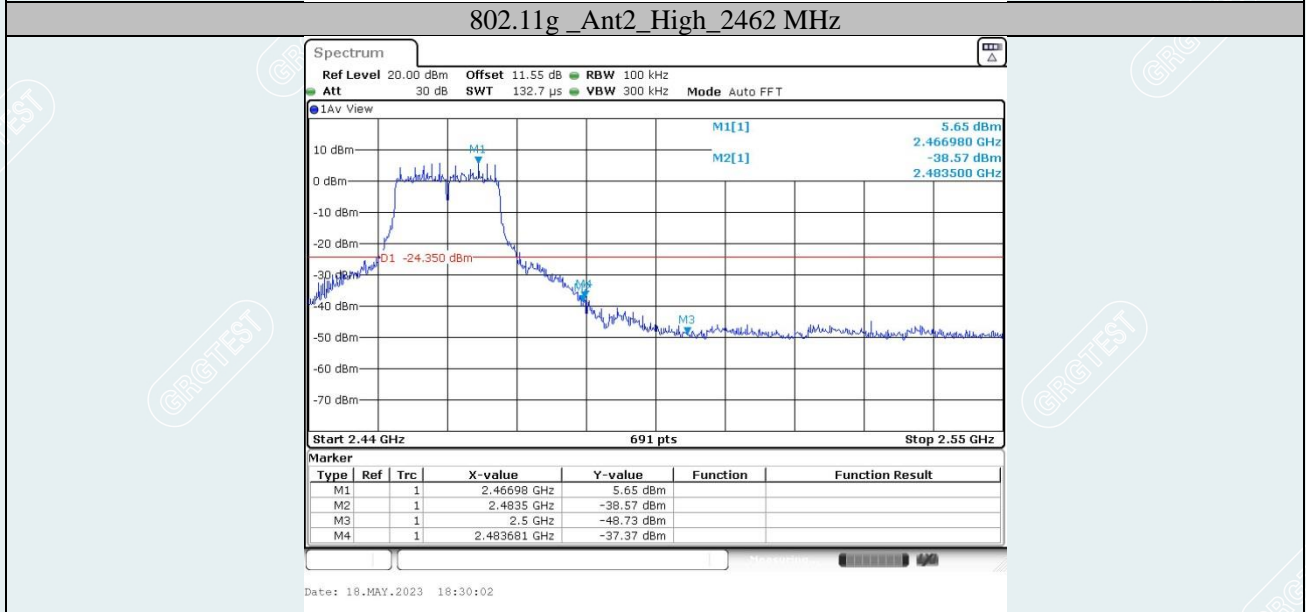
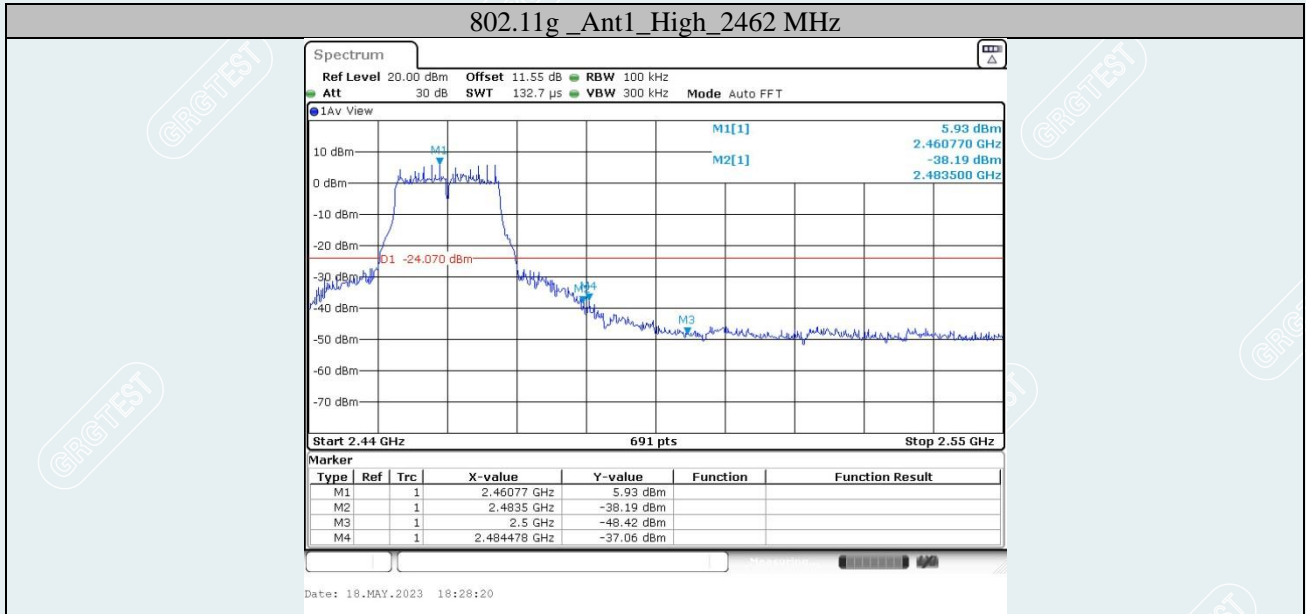
Date: 2023-05-18

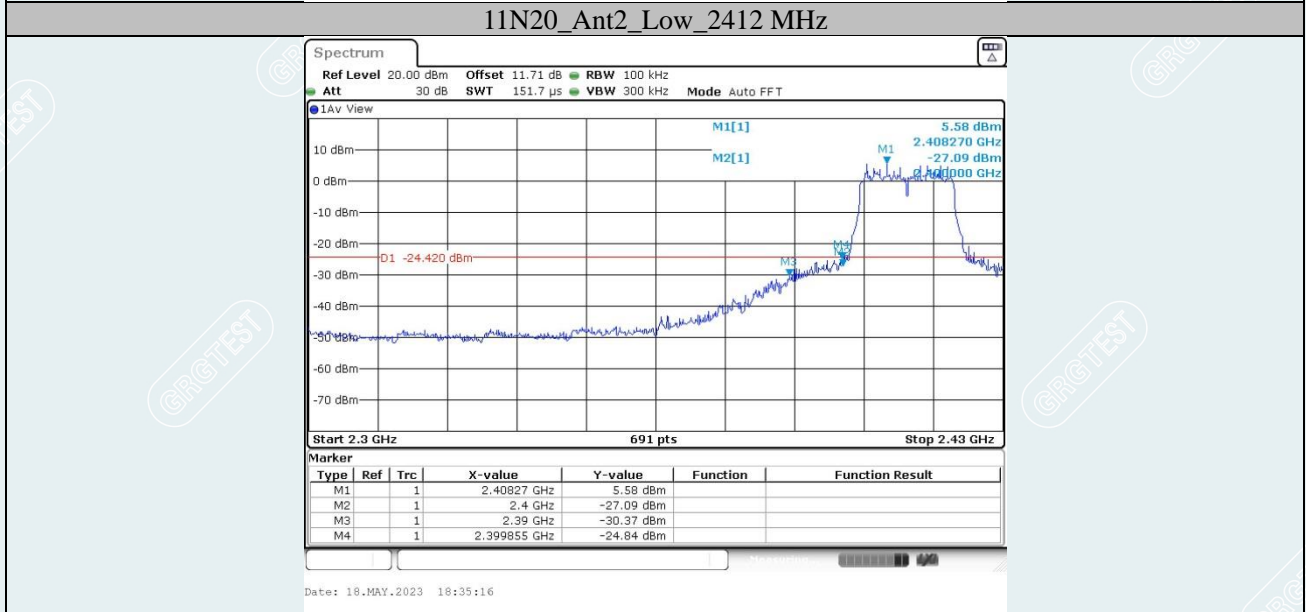
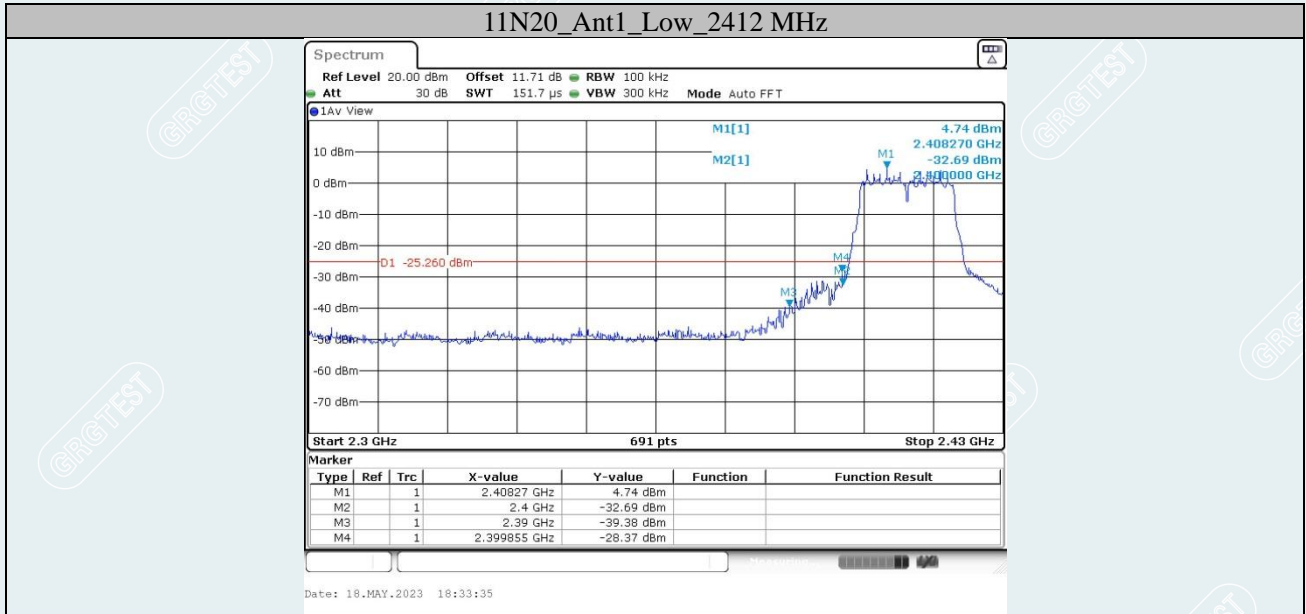
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
802.11b	Ant1	Low	2412	8.68	-35.43	≤-21.32	PASS
	Ant2	Low	2412	8.75	-44.14	≤-21.25	PASS
	Ant1	High	2462	9.83	-45.36	≤-20.17	PASS
	Ant2	High	2462	9.70	-45.34	≤-20.3	PASS
802.11g	Ant1	Low	2412	5.32	-32.58	≤-24.68	PASS
	Ant2	Low	2412	5.69	-25.62	≤-24.31	PASS
	Ant1	High	2462	5.93	-37.06	≤-24.07	PASS
	Ant2	High	2462	5.65	-37.37	≤-24.35	PASS
11N20	Ant1	Low	2412	4.74	-28.37	≤-25.26	PASS
	Ant2	Low	2412	5.58	-24.84	≤-24.42	PASS
	Ant1	High	2462	5.39	-35.51	≤-24.61	PASS
	Ant2	High	2462	5.11	-32.69	≤-24.89	PASS
11N40	Ant1	Low	2422	0.54	-34.6	≤-29.46	PASS
	Ant2	Low	2422	0.91	-34.67	≤-29.09	PASS
	Ant1	High	2452	2.84	-32.17	≤-27.16	PASS
	Ant2	High	2452	2.88	-31.82	≤-27.12	PASS
VHT20	Ant1	Low	2412	4.81	-31.59	≤-25.19	PASS
	Ant2	Low	2412	5.34	-26.07	≤-24.66	PASS
	Ant1	High	2462	5.33	-33.72	≤-24.67	PASS
	Ant2	High	2462	5.22	-33.88	≤-24.78	PASS
VHT40	Ant1	Low	2422	-1.09	-41.04	≤-31.09	PASS
	Ant2	Low	2422	-1.27	-36.62	≤-31.27	PASS
	Ant1	High	2452	0.85	-42.29	≤-29.15	PASS
	Ant2	High	2452	0.85	-37.58	≤-29.15	PASS
11AX20	Ant1	Low	2412	2.15	-37.28	≤-27.85	PASS
	Ant2	Low	2412	2.56	-28.53	≤-27.44	PASS
	Ant1	High	2462	2.40	-43.77	≤-27.6	PASS
	Ant2	High	2462	2.27	-42.04	≤-27.73	PASS
11AX40	Ant1	Low	2422	-1.11	-41.06	≤-31.11	PASS
	Ant2	Low	2422	-1.20	-37.18	≤-31.2	PASS
	Ant1	High	2452	0.72	-43.72	≤-29.28	PASS
	Ant2	High	2452	0.92	-36.86	≤-29.08	PASS





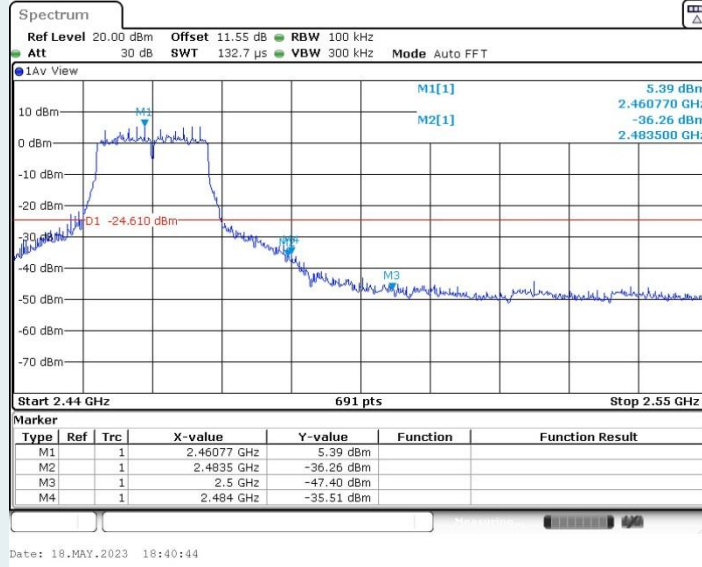






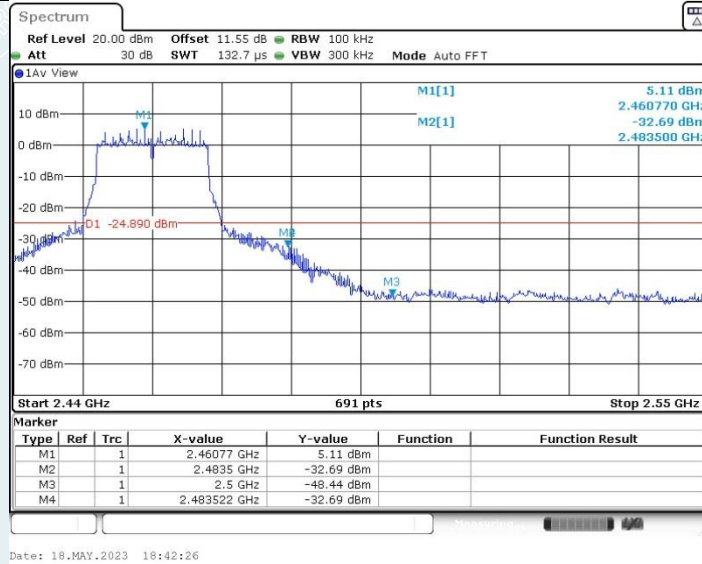


### 11N20\_Ant1\_High\_2462 MHz

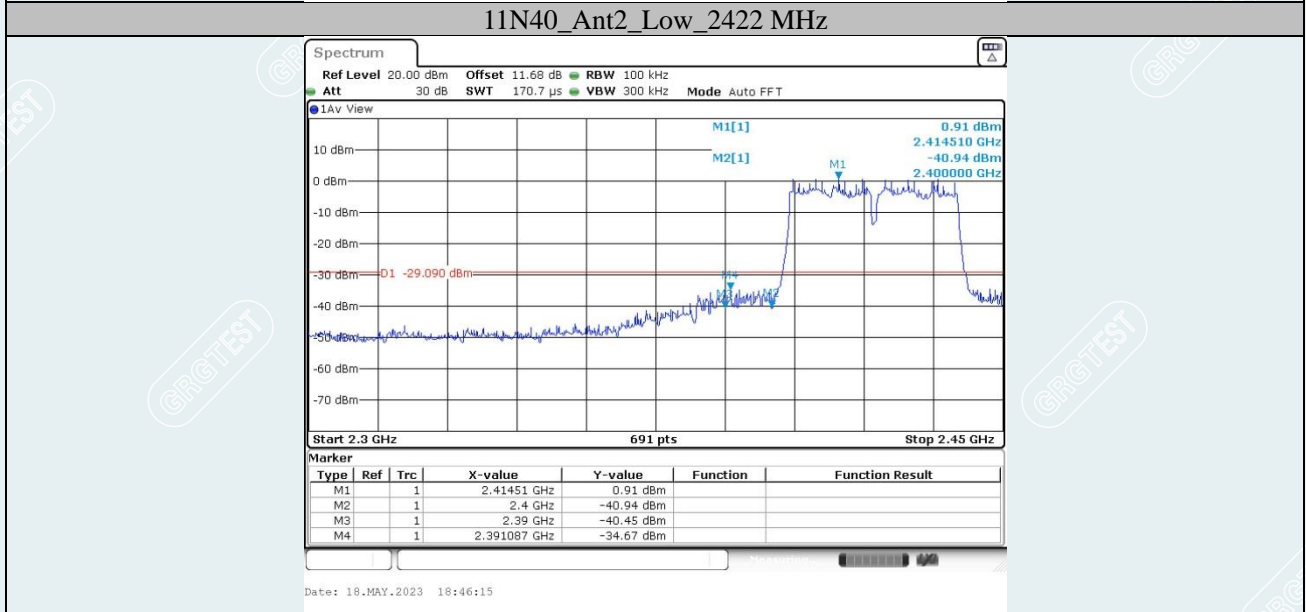
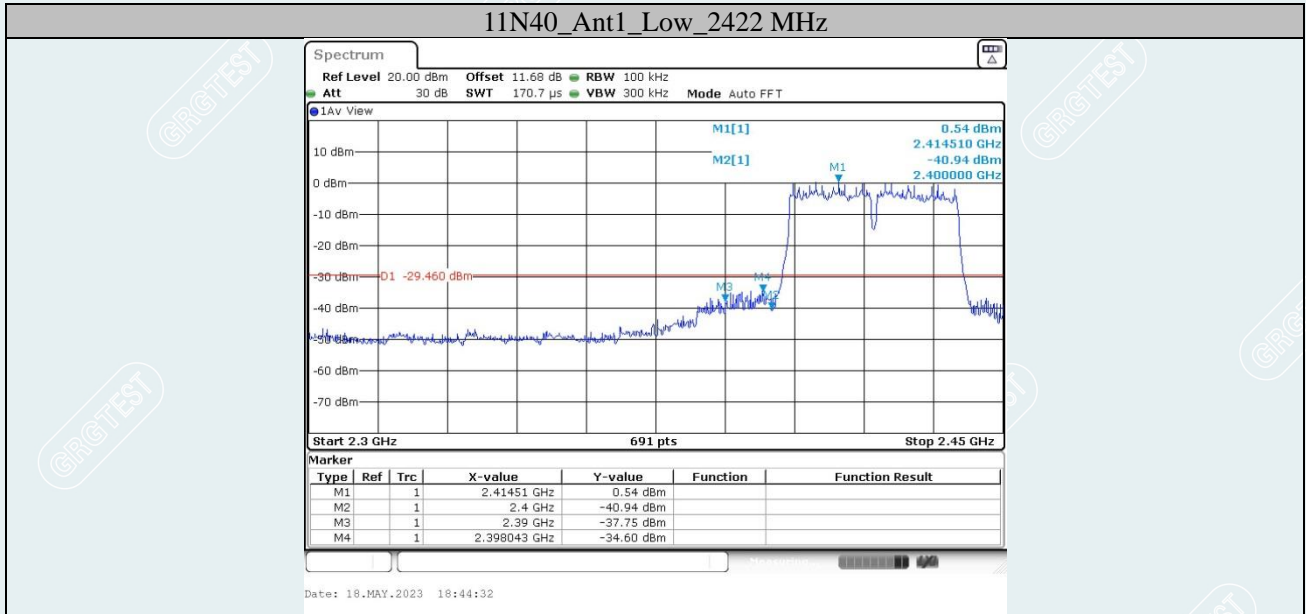


Date: 18.MAY.2023 18:40:44

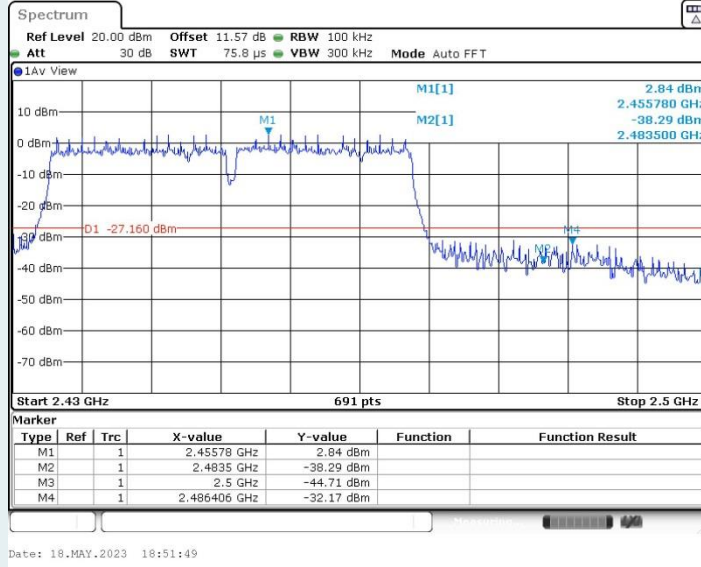
### 11N20\_Ant2\_High\_2462 MHz



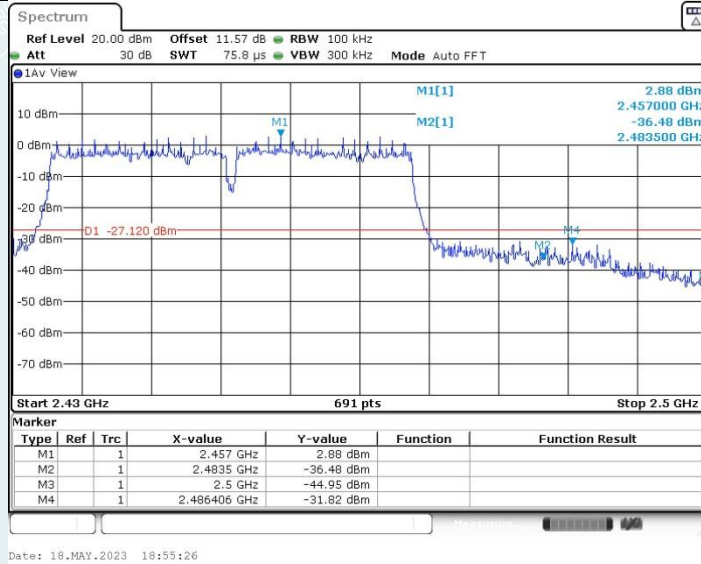
Date: 18.MAY.2023 18:42:26

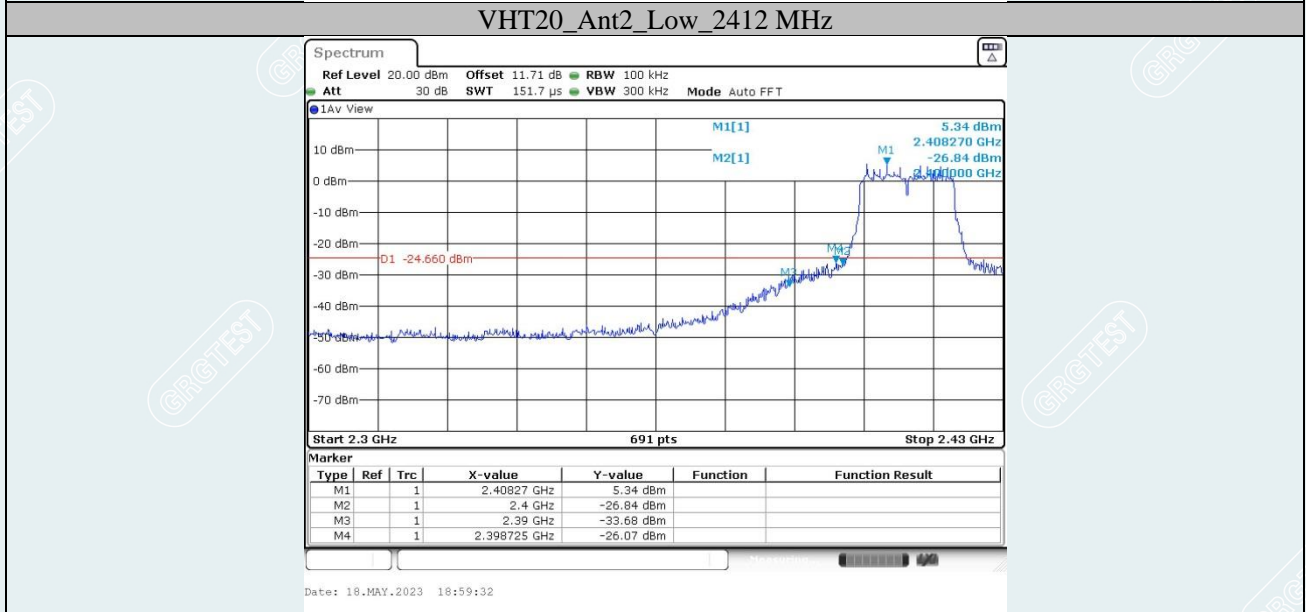
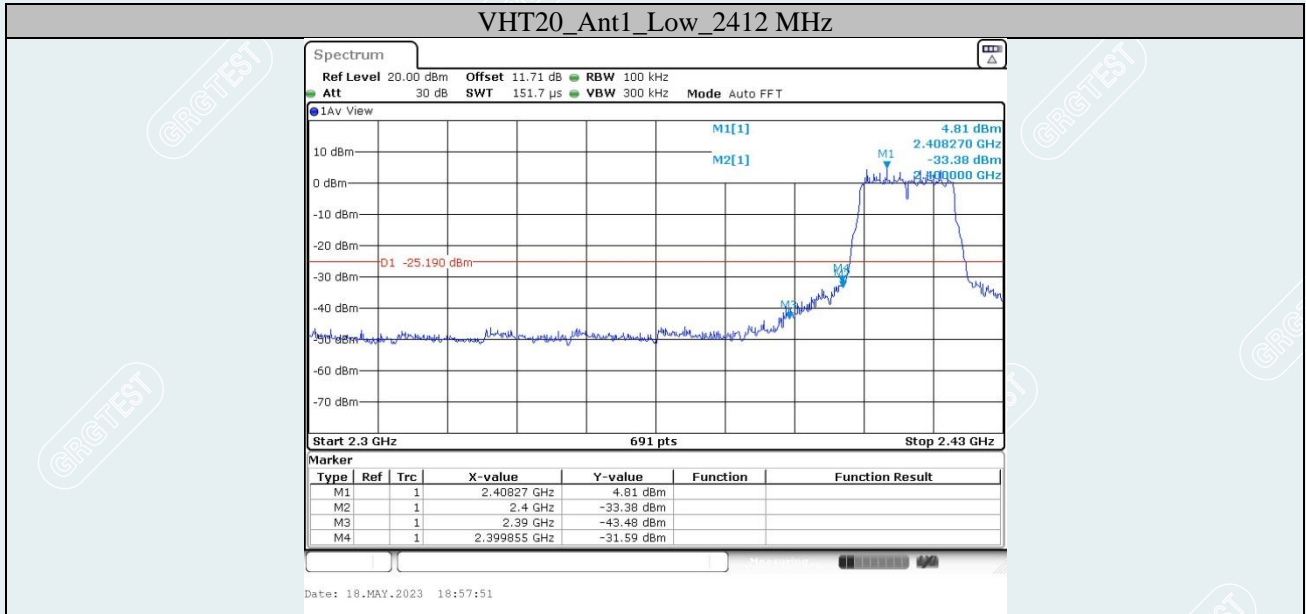


### 11N40\_Ant1\_High\_2452 MHz

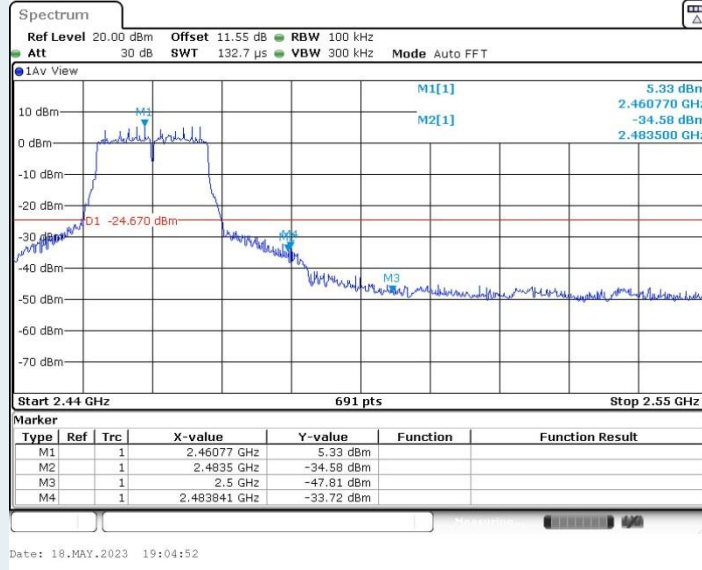


### 11N40\_Ant2\_High\_2452 MHz

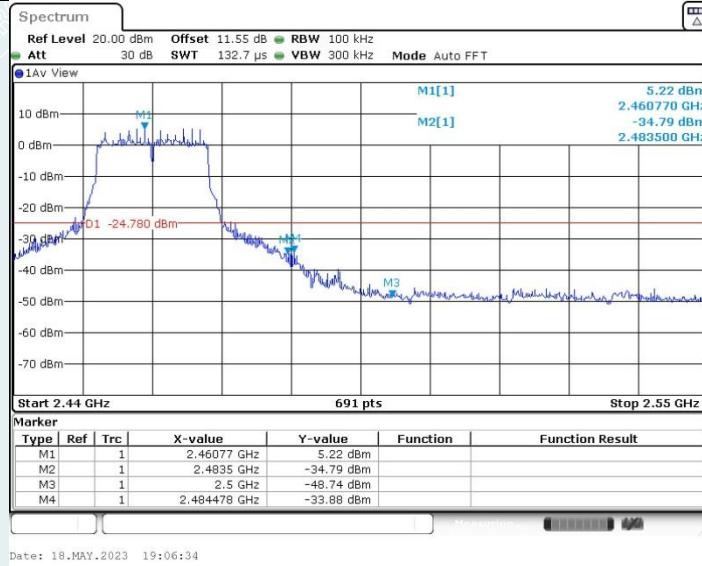


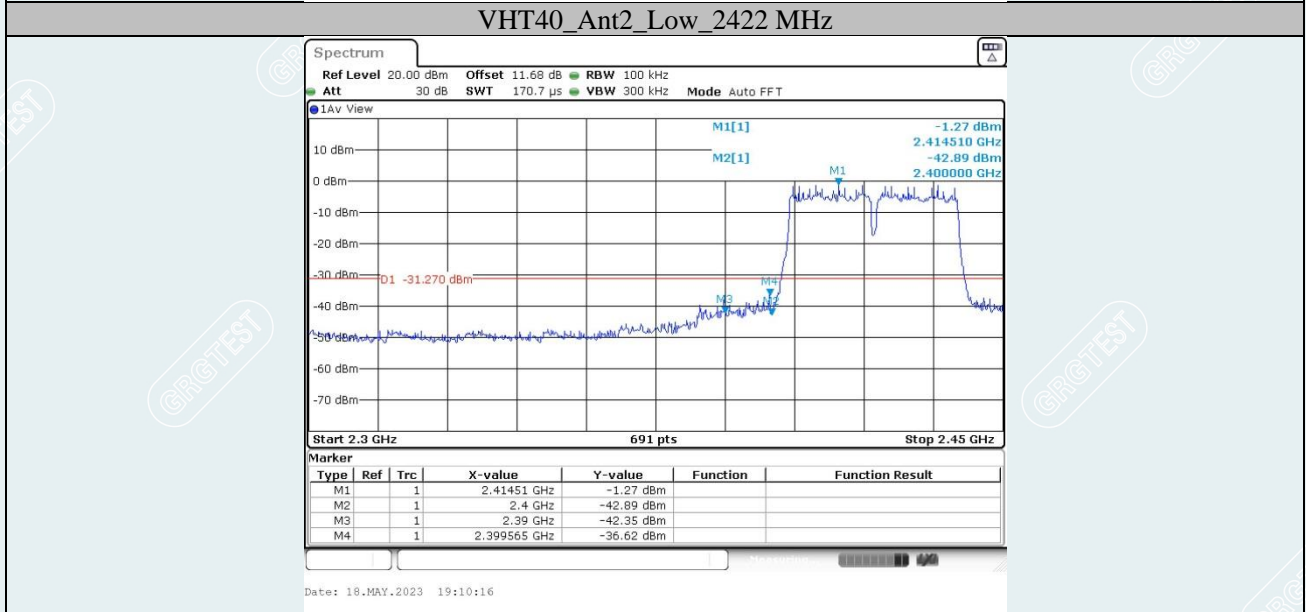
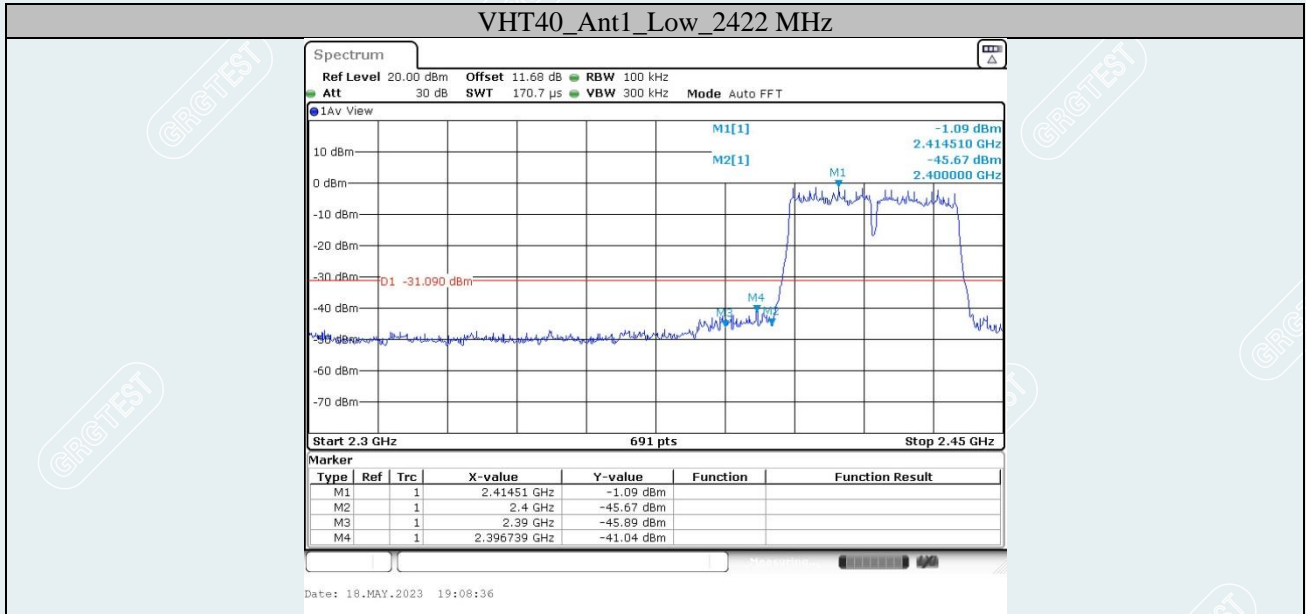


### VHT20\_Ant1\_High\_2462 MHz

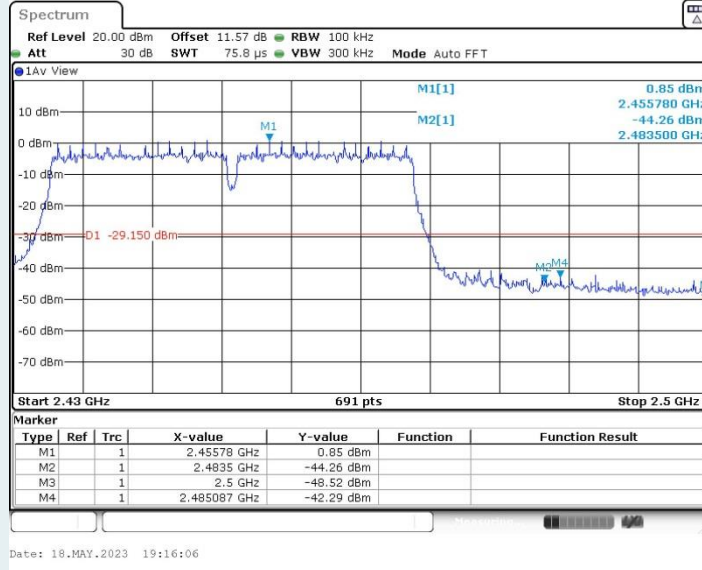


### VHT20\_Ant2\_High\_2462 MHz

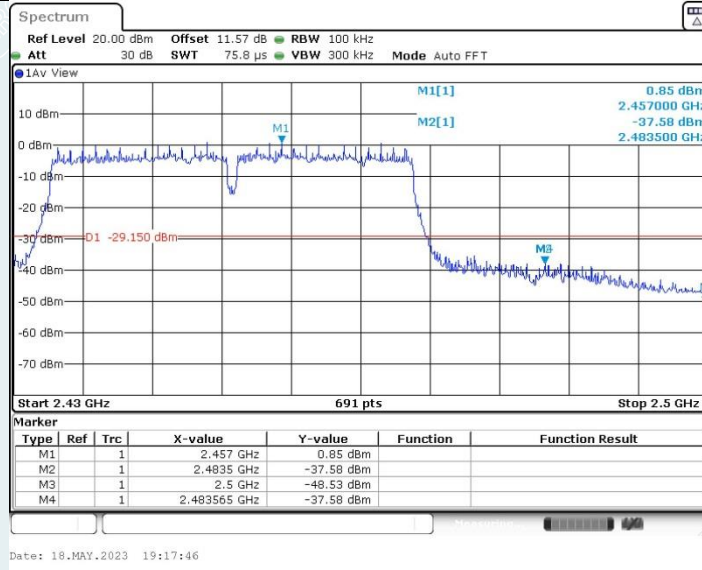


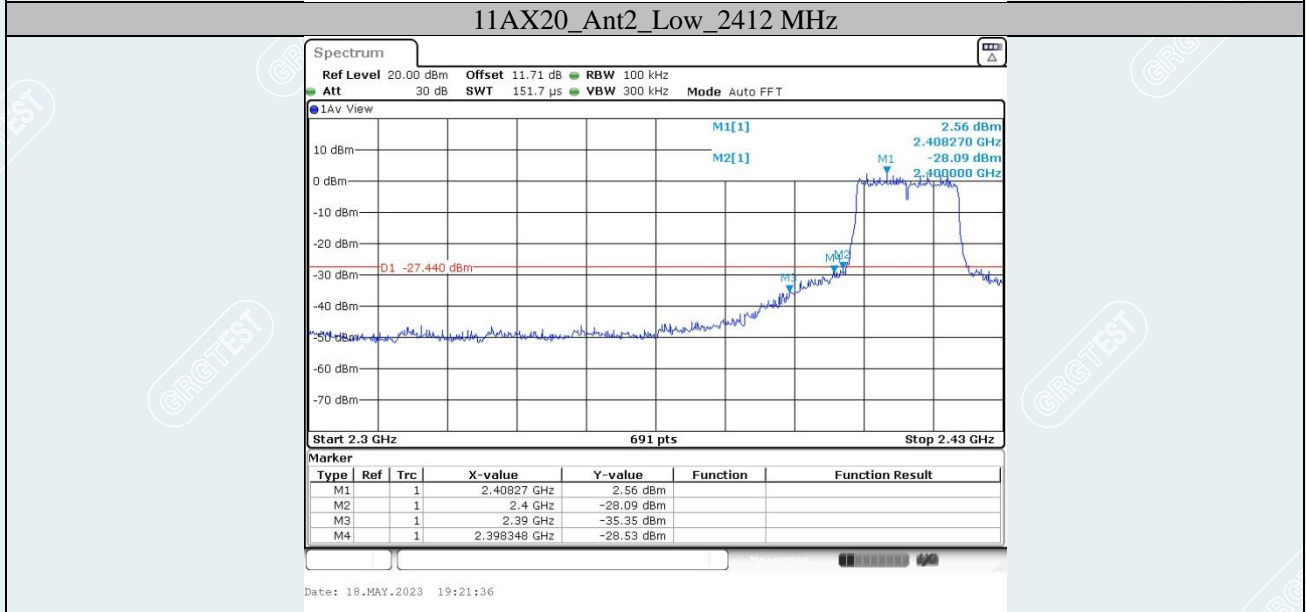
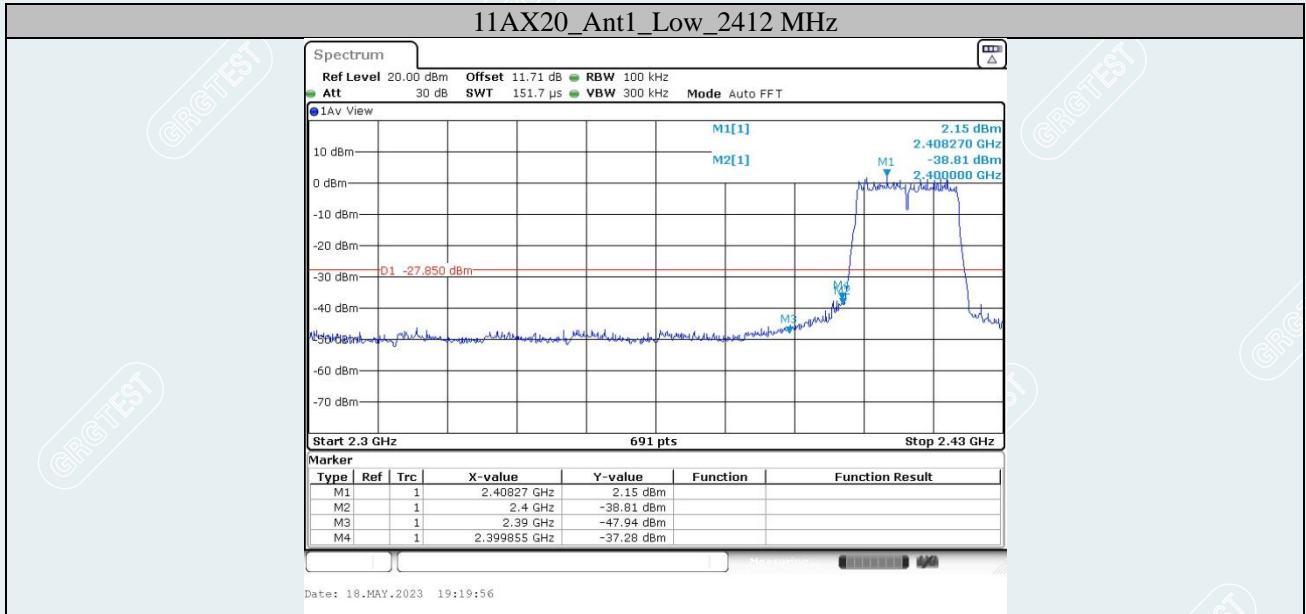


### VHT40\_Ant1\_High\_2452 MHz

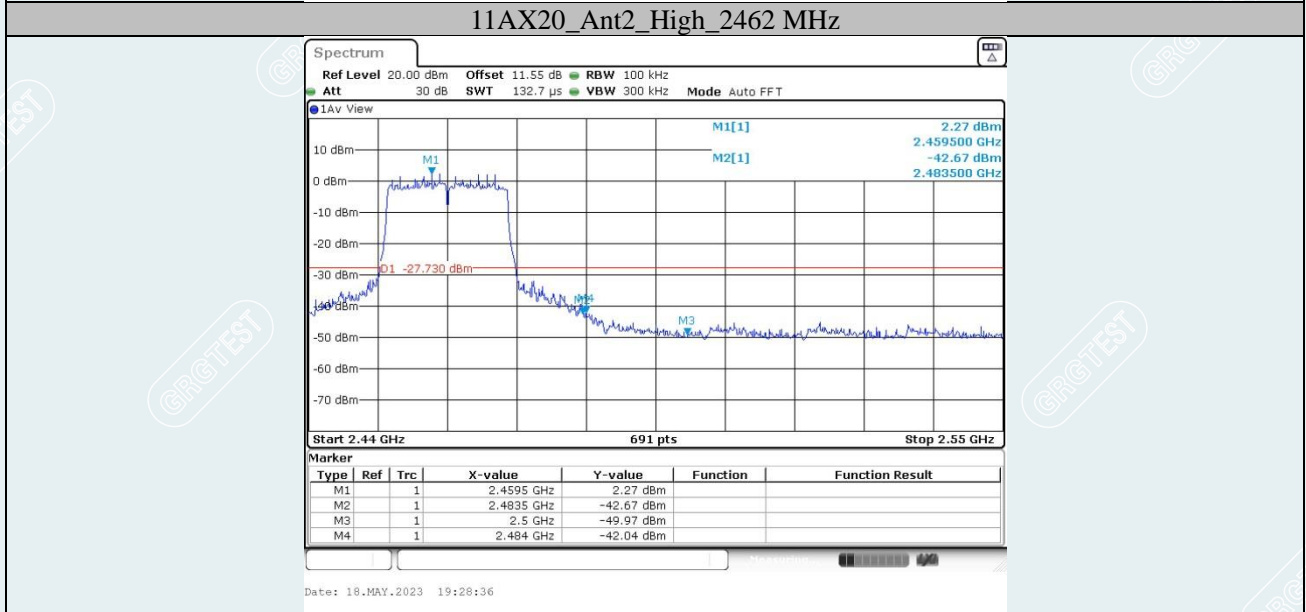
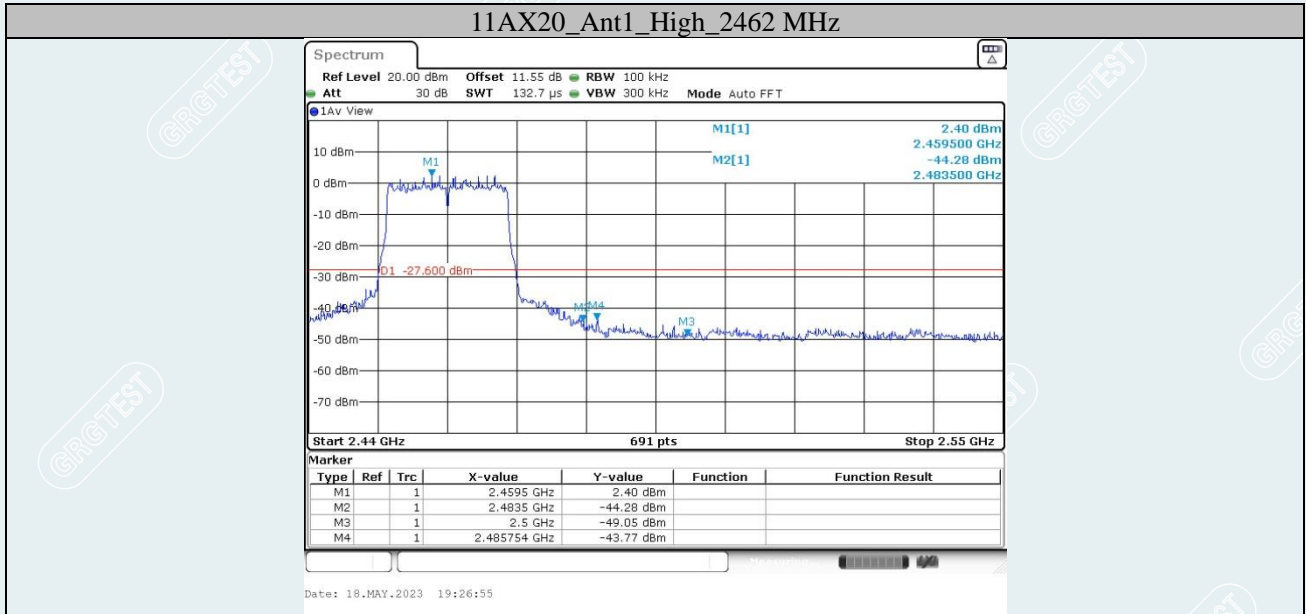


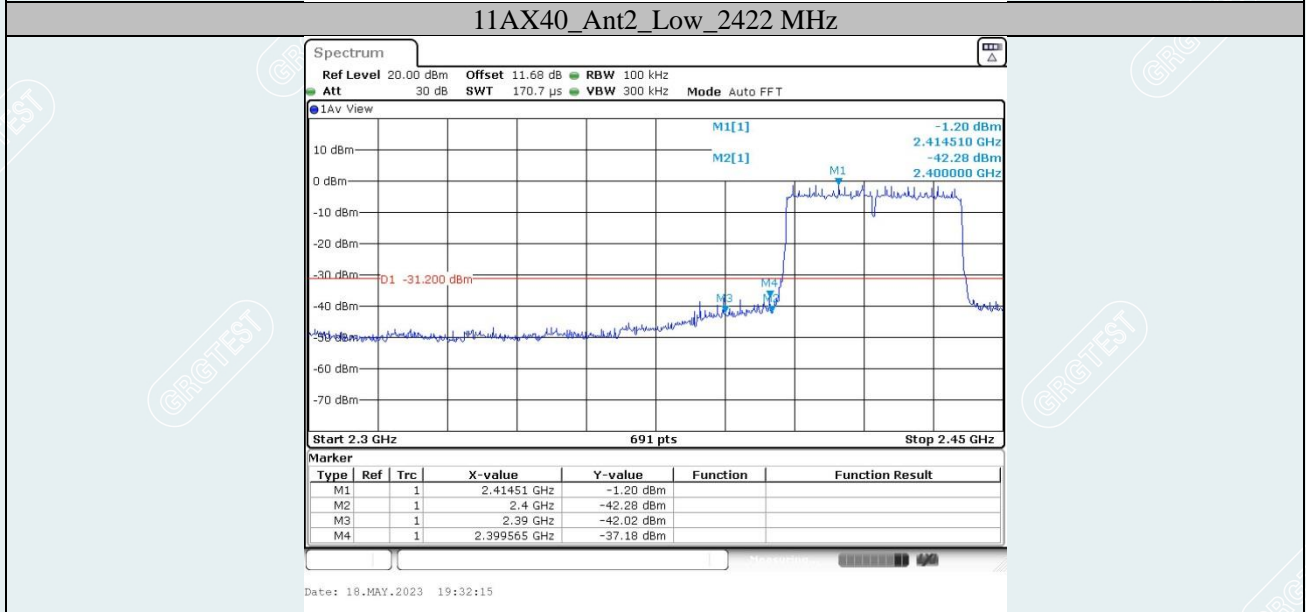
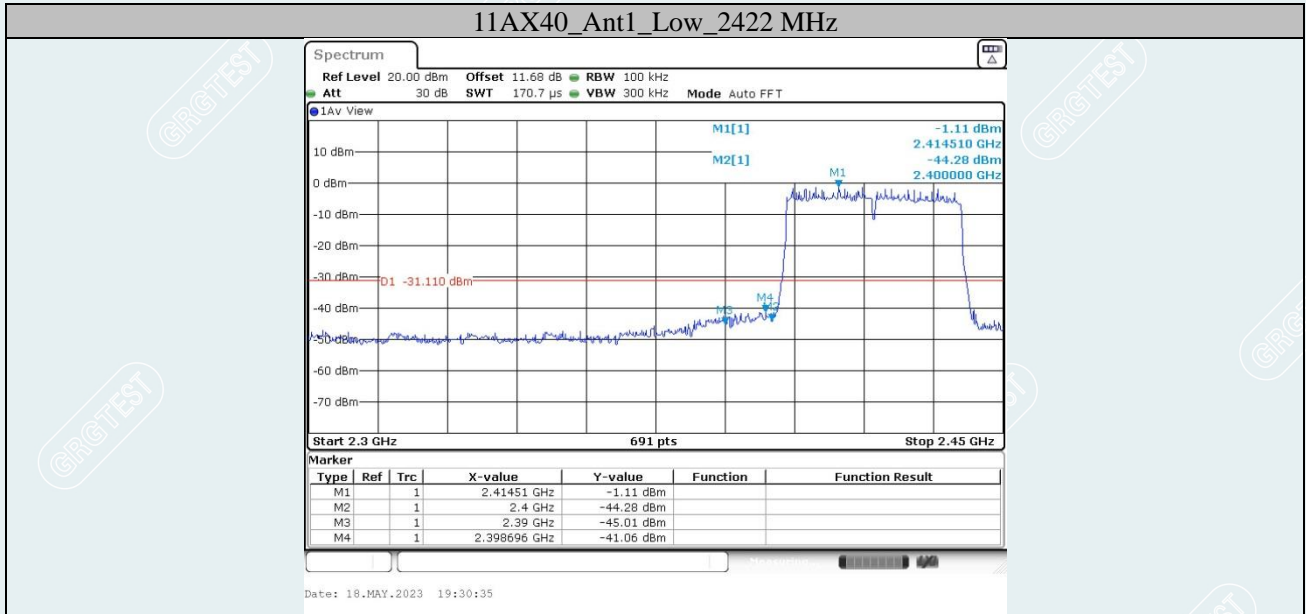
### VHT40\_Ant2\_High\_2452 MHz



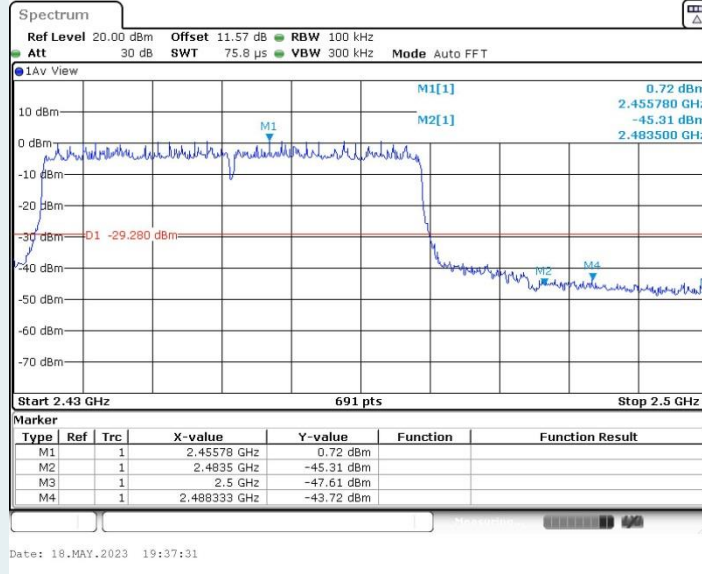




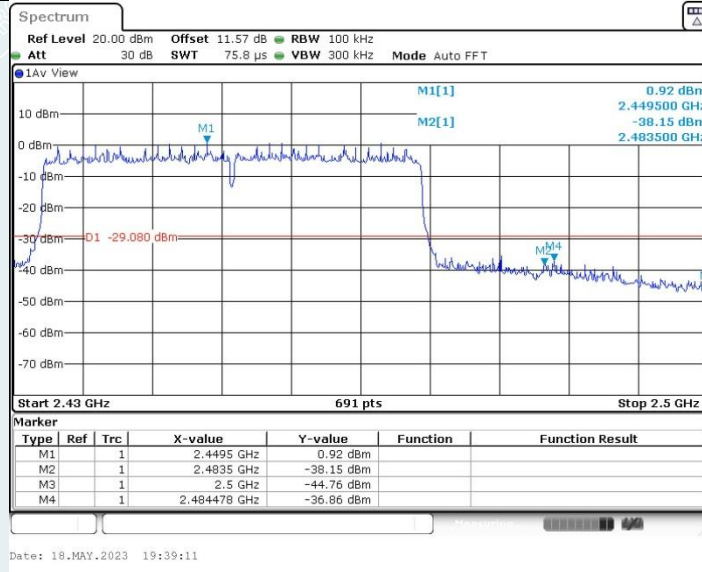




802.11ax HE40 MIMO\_Ant1\_High\_2452 MHz



802.11ax HE40 MIMO\_Ant2\_High\_2452 MHz



Conducted Spurious Emission:

Pre-scan all modes and recorded the worst case results in this report (CDD).

Test Result

Environment: 22.5°C/54%RH/101.0kPa

Tested By:Huang Tianmei

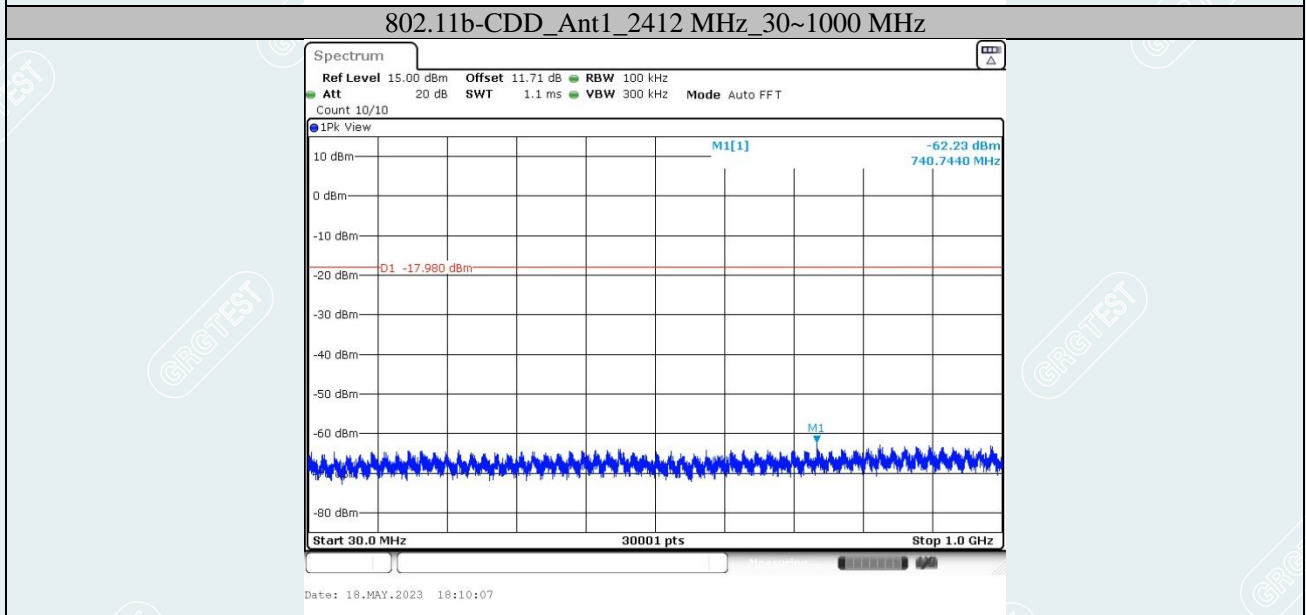
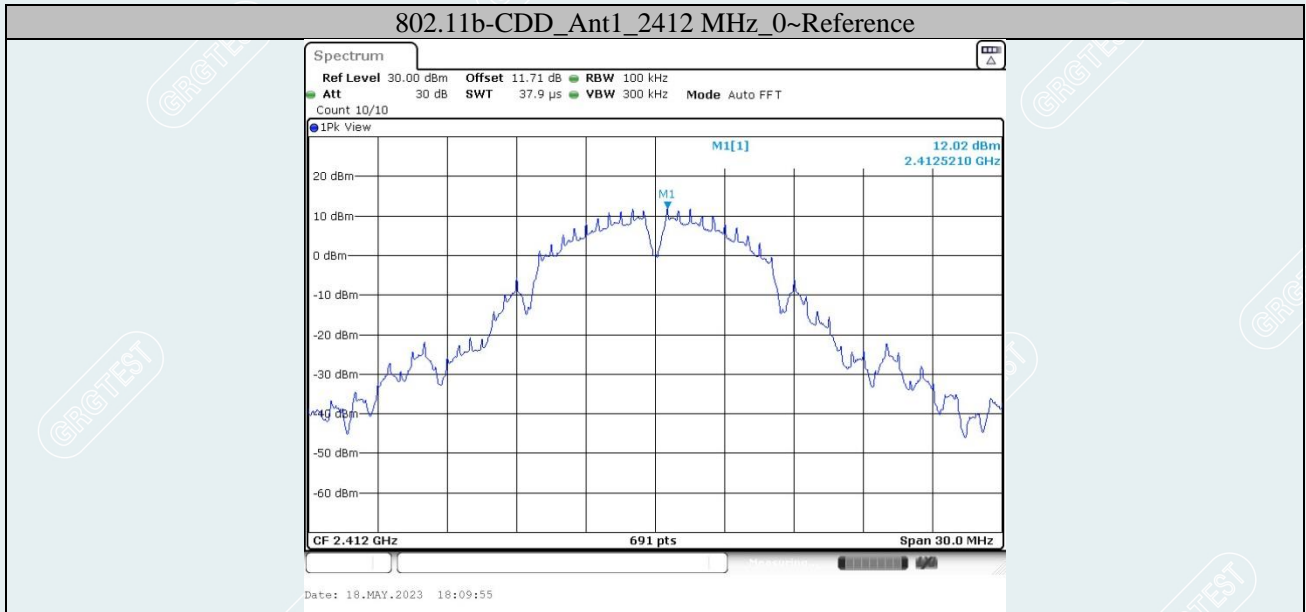
Voltage:AC120V/60Hz

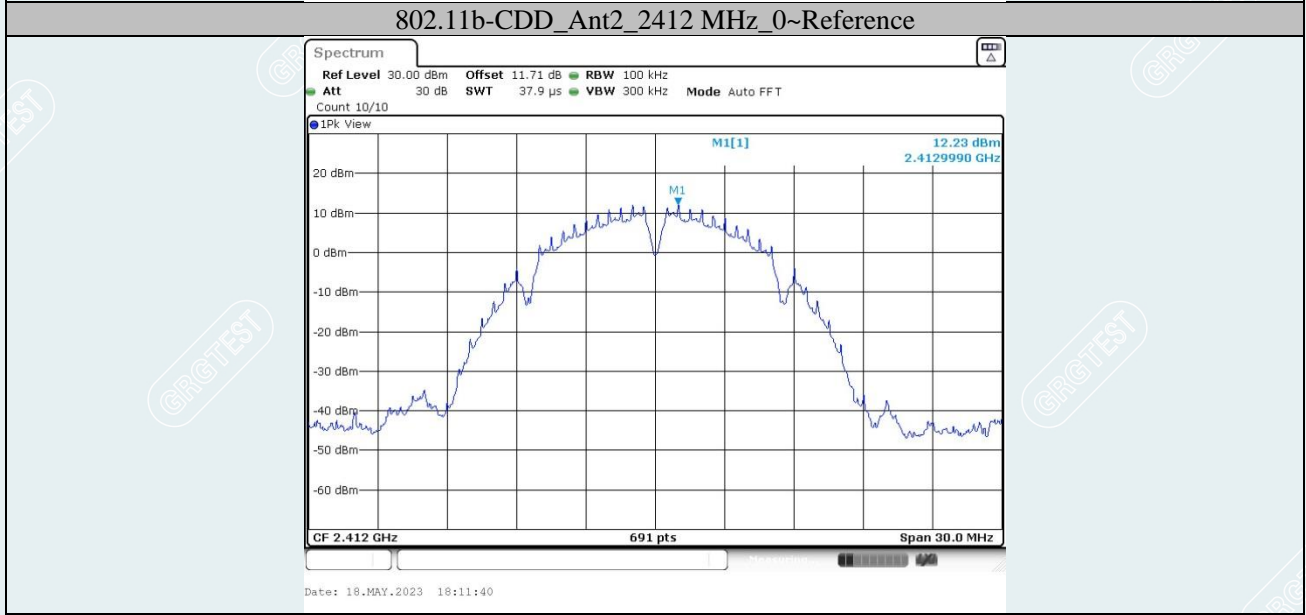
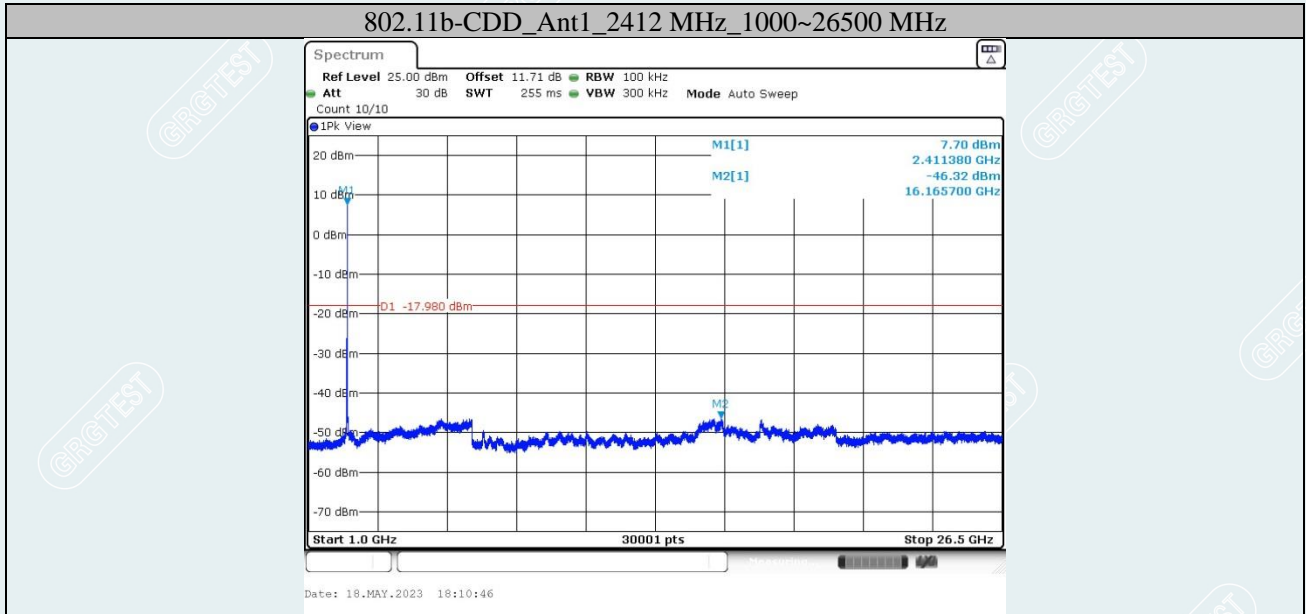
Date: 2023-05-18

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
802.11b-CDD	Ant1	2412	Reference	12.02	12.02	---	PASS
			30~1000	12.02	-62.23	≤-17.98	PASS
			1000~26500	12.02	-46.32	≤-17.98	PASS
	Ant2	2412	Reference	12.23	12.23	---	PASS
			30~1000	12.23	-62.8	≤-17.77	PASS
			1000~26500	12.23	-46.46	≤-17.77	PASS
	Ant1	2437	Reference	11.65	11.65	---	PASS
			30~1000	11.65	-62.83	≤-18.35	PASS
			1000~26500	11.65	-46.44	≤-18.35	PASS
	Ant2	2437	Reference	12.15	12.15	---	PASS
			30~1000	12.15	-62.73	≤-17.85	PASS
			1000~26500	12.15	-46.53	≤-17.85	PASS
	Ant1	2462	Reference	11.62	11.62	---	PASS
			30~1000	11.62	-62.44	≤-18.38	PASS
			1000~26500	11.62	-46.79	≤-18.38	PASS
	Ant2	2462	Reference	11.66	11.66	---	PASS
			30~1000	11.66	-62.18	≤-18.34	PASS
			1000~26500	11.66	-46.54	≤-18.34	PASS
802.11g-CDD	Ant1	2412	Reference	7.56	7.56	---	PASS
			30~1000	7.56	-62.74	≤-22.44	PASS
			1000~26500	7.56	-46.32	≤-22.44	PASS
	Ant2	2412	Reference	8.03	8.03	---	PASS
			30~1000	8.03	-62.65	≤-21.97	PASS
			1000~26500	8.03	-46.21	≤-21.97	PASS
	Ant1	2437	Reference	7.81	7.81	---	PASS
			30~1000	7.81	-63.03	≤-22.19	PASS
			1000~26500	7.81	-46.49	≤-22.19	PASS
	Ant2	2437	Reference	8.26	8.26	---	PASS
			30~1000	8.26	-62.4	≤-21.74	PASS
			1000~26500	8.26	-46.57	≤-21.74	PASS
	Ant1	2462	Reference	7.84	7.84	---	PASS
			30~1000	7.84	-62.87	≤-22.16	PASS
			1000~26500	7.84	-46.31	≤-22.16	PASS
	Ant2	2462	Reference	7.94	7.94	---	PASS
			30~1000	7.94	-62.33	≤-22.06	PASS
			1000~26500	7.94	-46.4	≤-22.06	PASS

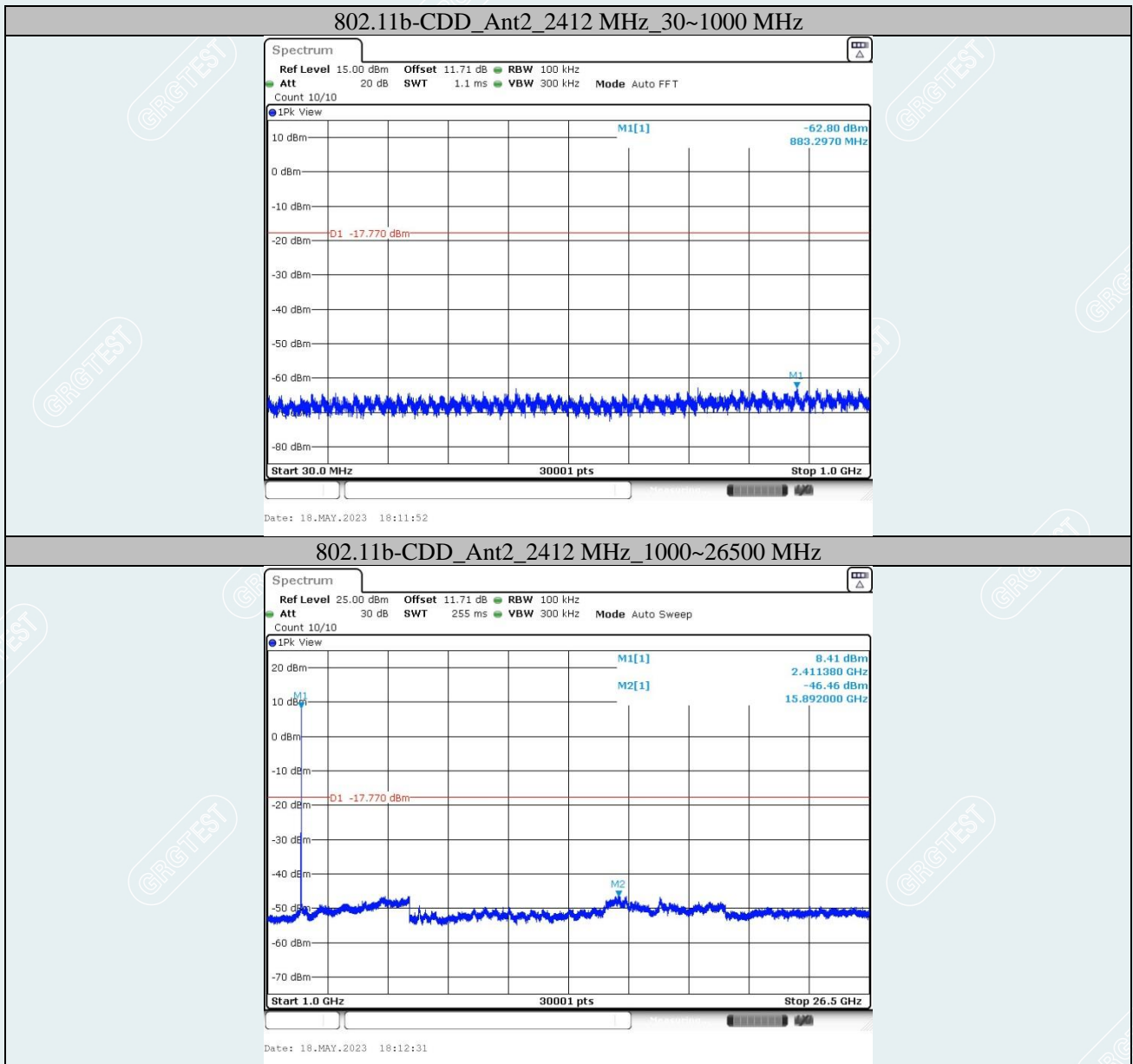
802.11n HT20 MIMO	Ant1	2412	Reference	6.95	6.95	---	PASS
			30~1000	6.95	-58.17	≤-23.05	PASS
			1000~26500	6.95	-46.38	≤-23.05	PASS
	Ant2	2412	Reference	7.86	7.86	---	PASS
			30~1000	7.86	-62.23	≤-22.14	PASS
			1000~26500	7.86	-46.38	≤-22.14	PASS
	Ant1	2437	Reference	7.17	7.17	---	PASS
			30~1000	7.17	-61.99	≤-22.83	PASS
			1000~26500	7.17	-46.38	≤-22.83	PASS
	Ant2	2437	Reference	7.49	7.49	---	PASS
			30~1000	7.49	-62.36	≤-22.51	PASS
			1000~26500	7.49	-46.32	≤-22.51	PASS
Ant1	2462	Reference	7.30	7.30	---	PASS	
		30~1000	7.30	-63.43	≤-22.7	PASS	
		1000~26500	7.30	-46.32	≤-22.7	PASS	
Ant2	2462	Reference	7.44	7.44	---	PASS	
		30~1000	7.44	-62.93	≤-22.56	PASS	
		1000~26500	7.44	-46.42	≤-22.56	PASS	
802.11n HT40 MIMO	Ant1	2422	Reference	3.42	3.42	---	PASS
			30~1000	3.42	-62.76	≤-26.58	PASS
			1000~26500	3.42	-46.4	≤-26.58	PASS
	Ant2	2422	Reference	4.04	4.04	---	PASS
			30~1000	4.04	-62.95	≤-25.96	PASS
			1000~26500	4.04	-46.54	≤-25.96	PASS
	Ant1	2437	Reference	3.47	3.47	---	PASS
			30~1000	3.47	-63.22	≤-26.53	PASS
			1000~26500	3.47	-46.36	≤-26.53	PASS
	Ant2	2437	Reference	3.62	3.62	---	PASS
			30~1000	3.62	-62.97	≤-26.38	PASS
			1000~26500	3.62	-46.53	≤-26.38	PASS
Ant1	2452	Reference	3.84	3.84	---	PASS	
		30~1000	3.84	-62.97	≤-26.16	PASS	
		1000~26500	3.84	-46.3	≤-26.16	PASS	
Ant2	2452	Reference	3.83	3.83	---	PASS	
		30~1000	3.83	-61.34	≤-26.17	PASS	
		1000~26500	3.83	-46.52	≤-26.17	PASS	
VHT20 MIMO	Ant1	2412	Reference	7.04	7.04	---	PASS
			30~1000	7.04	-62.51	≤-22.96	PASS
			1000~26500	7.04	-45.89	≤-22.96	PASS
	Ant2	2412	Reference	7.86	7.86	---	PASS
			30~1000	7.86	-62.86	≤-22.14	PASS
			1000~26500	7.86	-46.26	≤-22.14	PASS
	Ant1	2437	Reference	7.22	7.22	---	PASS
			30~1000	7.22	-62.72	≤-22.78	PASS
			1000~26500	7.22	-46.53	≤-22.78	PASS
	Ant2	2437	Reference	7.80	7.80	---	PASS
			30~1000	7.80	-63	≤-22.2	PASS
			1000~26500	7.80	-46.25	≤-22.2	PASS
Ant1	2462	Reference	7.26	7.26	---	PASS	
		30~1000	7.26	-63.22	≤-22.74	PASS	
		1000~26500	7.26	-46.55	≤-22.74	PASS	
Ant2	2462	Reference	7.52	7.52	---	PASS	
		30~1000	7.52	-63.2	≤-22.48	PASS	
		1000~26500	7.52	-46.28	≤-22.48	PASS	

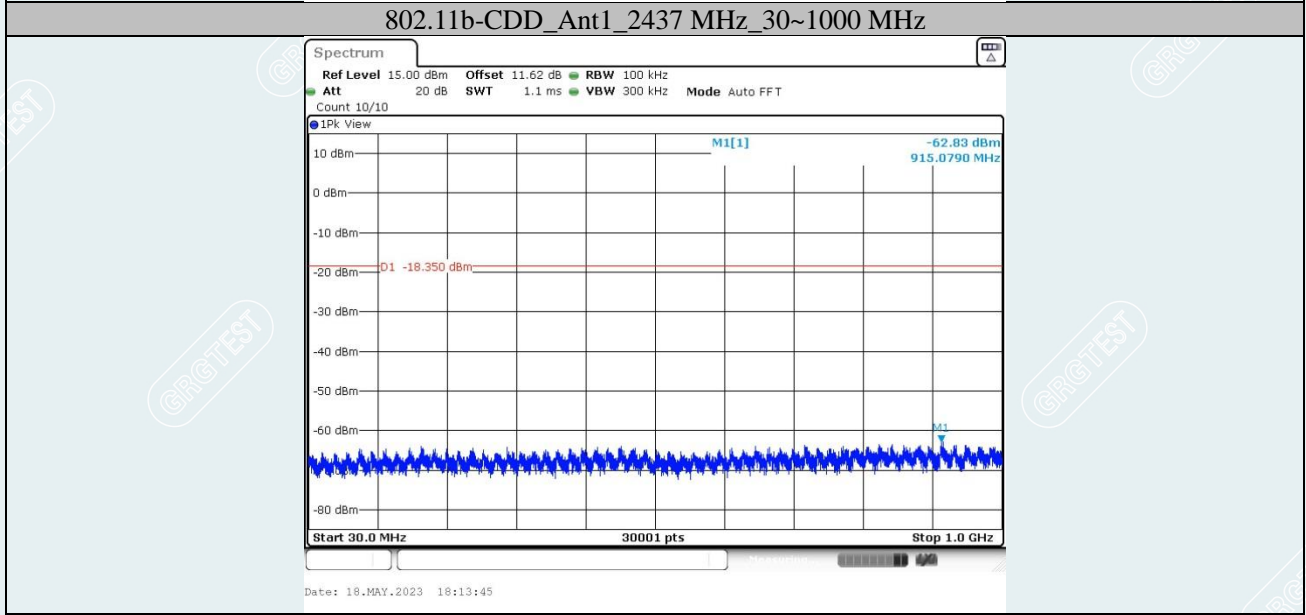
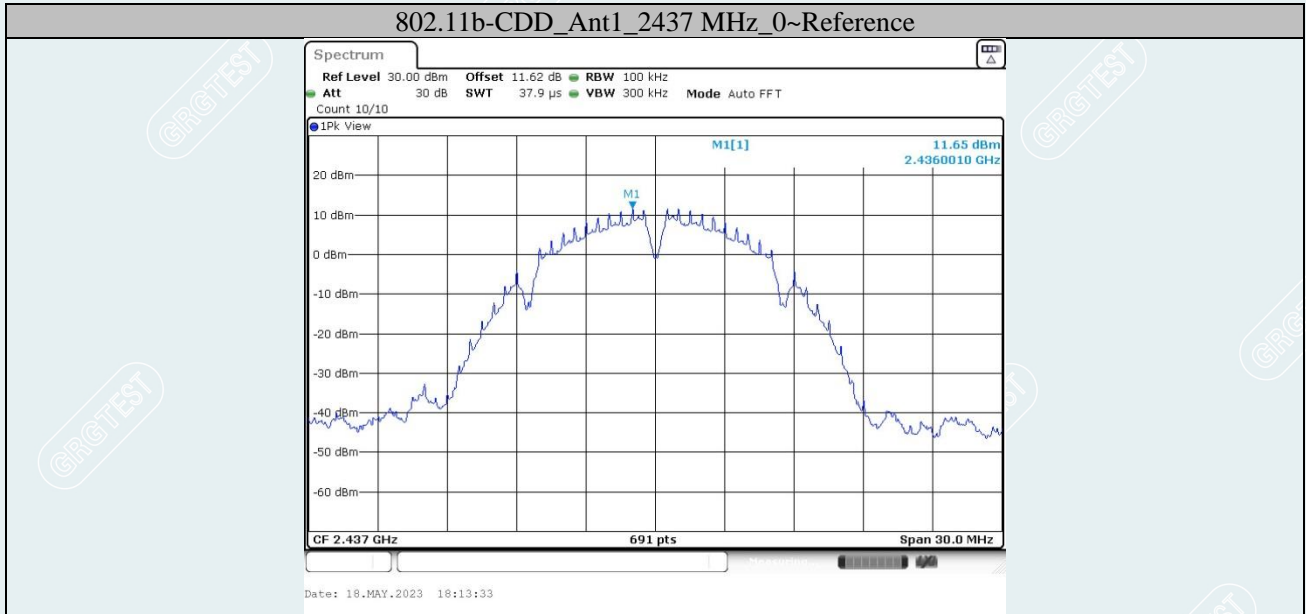
VHT40 MIMO	Ant1	2422	Reference	1.72	1.72	---	PASS
			30~1000	1.72	-62.06	≤-28.28	PASS
			1000~26500	1.72	-46.22	≤-28.28	PASS
	Ant2	2422	Reference	2.37	2.37	---	PASS
			30~1000	2.37	-62.43	≤-27.63	PASS
			1000~26500	2.37	-46.51	≤-27.63	PASS
	Ant1	2437	Reference	1.60	1.60	---	PASS
			30~1000	1.60	-63.22	≤-28.4	PASS
			1000~26500	1.60	-45.97	≤-28.4	PASS
	Ant2	2437	Reference	1.53	1.53	---	PASS
			30~1000	1.53	-63.12	≤-28.47	PASS
			1000~26500	1.53	-46.6	≤-28.47	PASS
Ant1	2452	Reference	1.79	1.79	---	PASS	
		30~1000	1.79	-62.9	≤-28.21	PASS	
		1000~26500	1.79	-46.28	≤-28.21	PASS	
Ant2	2452	Reference	1.84	1.84	---	PASS	
		30~1000	1.84	-62.84	≤-28.16	PASS	
		1000~26500	1.84	-46.07	≤-28.16	PASS	
802.11ax HE20 MIMO	Ant1	2412	Reference	4.36	4.36	---	PASS
			30~1000	4.36	-62.76	≤-25.64	PASS
			1000~26500	4.36	-46.41	≤-25.64	PASS
	Ant2	2412	Reference	4.75	4.75	---	PASS
			30~1000	4.75	-62.91	≤-25.25	PASS
			1000~26500	4.75	-46.27	≤-25.25	PASS
	Ant1	2437	Reference	4.43	4.43	---	PASS
			30~1000	4.43	-63.05	≤-25.57	PASS
			1000~26500	4.43	-46.37	≤-25.57	PASS
	Ant2	2437	Reference	4.84	4.84	---	PASS
			30~1000	4.84	-62.21	≤-25.16	PASS
			1000~26500	4.84	-46.25	≤-25.16	PASS
Ant1	2462	Reference	4.36	4.36	---	PASS	
		30~1000	4.36	-62.46	≤-25.64	PASS	
		1000~26500	4.36	-46.07	≤-25.64	PASS	
Ant2	2462	Reference	4.40	4.40	---	PASS	
		30~1000	4.40	-62.44	≤-25.6	PASS	
		1000~26500	4.40	-46.41	≤-25.6	PASS	
802.11ax HE40 MIMO	Ant1	2422	Reference	1.84	1.84	---	PASS
			30~1000	1.84	-62.11	≤-28.16	PASS
			1000~26500	1.84	-46.13	≤-28.16	PASS
	Ant2	2422	Reference	2.15	2.15	---	PASS
			30~1000	2.15	-62.77	≤-27.85	PASS
			1000~26500	2.15	-46.44	≤-27.85	PASS
	Ant1	2437	Reference	1.66	1.66	---	PASS
			30~1000	1.66	-62.69	≤-28.34	PASS
			1000~26500	1.66	-46.54	≤-28.34	PASS
	Ant2	2437	Reference	1.80	1.80	---	PASS
			30~1000	1.80	-62.61	≤-28.2	PASS
			1000~26500	1.80	-46.52	≤-28.2	PASS
Ant1	2452	Reference	1.66	1.66	---	PASS	
		30~1000	1.66	-63.12	≤-28.34	PASS	
		1000~26500	1.66	-46.43	≤-28.34	PASS	
Ant2	2452	Reference	1.63	1.63	---	PASS	
		30~1000	1.63	-62.53	≤-28.37	PASS	
		1000~26500	1.63	-46.04	≤-28.37	PASS	

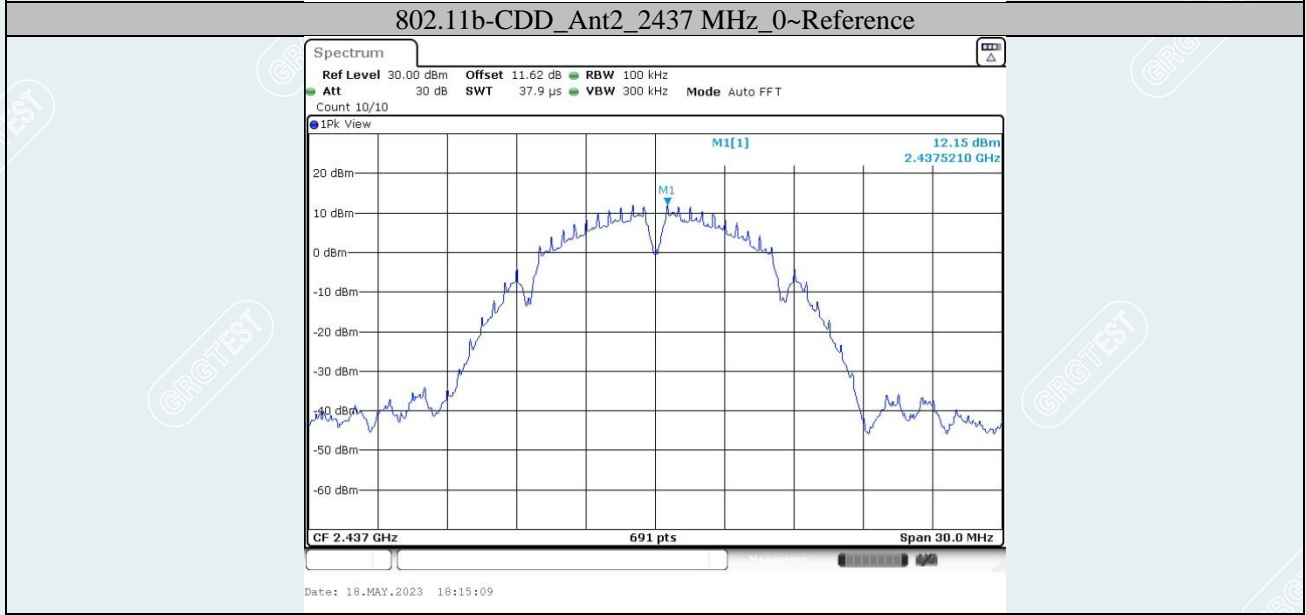
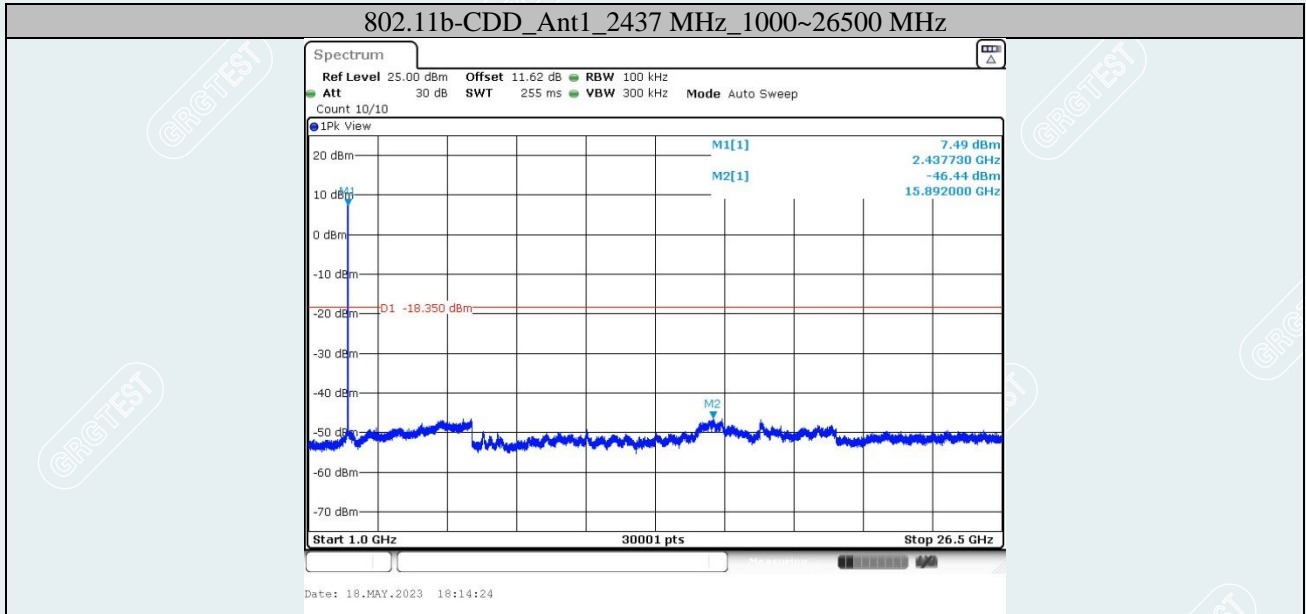


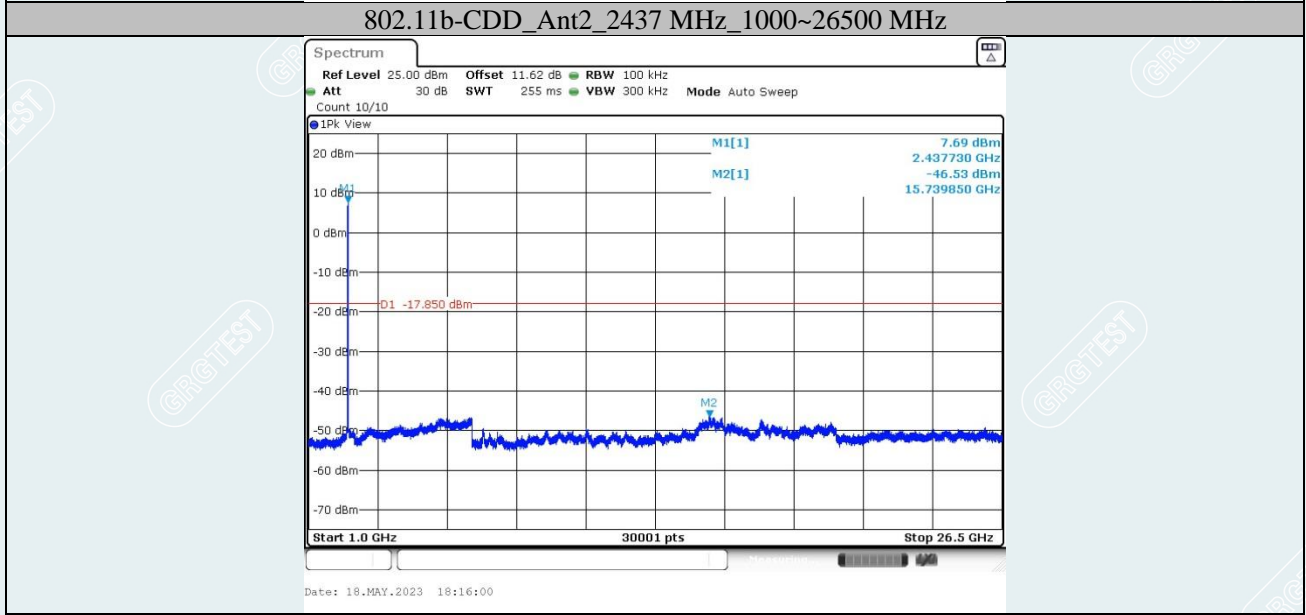
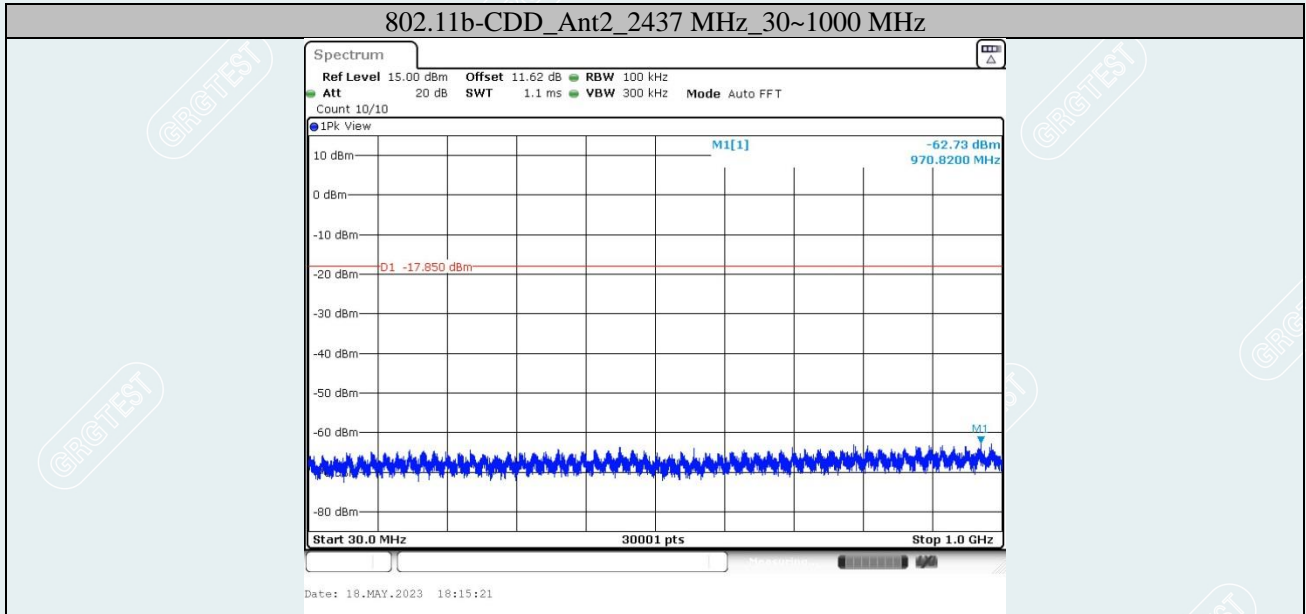


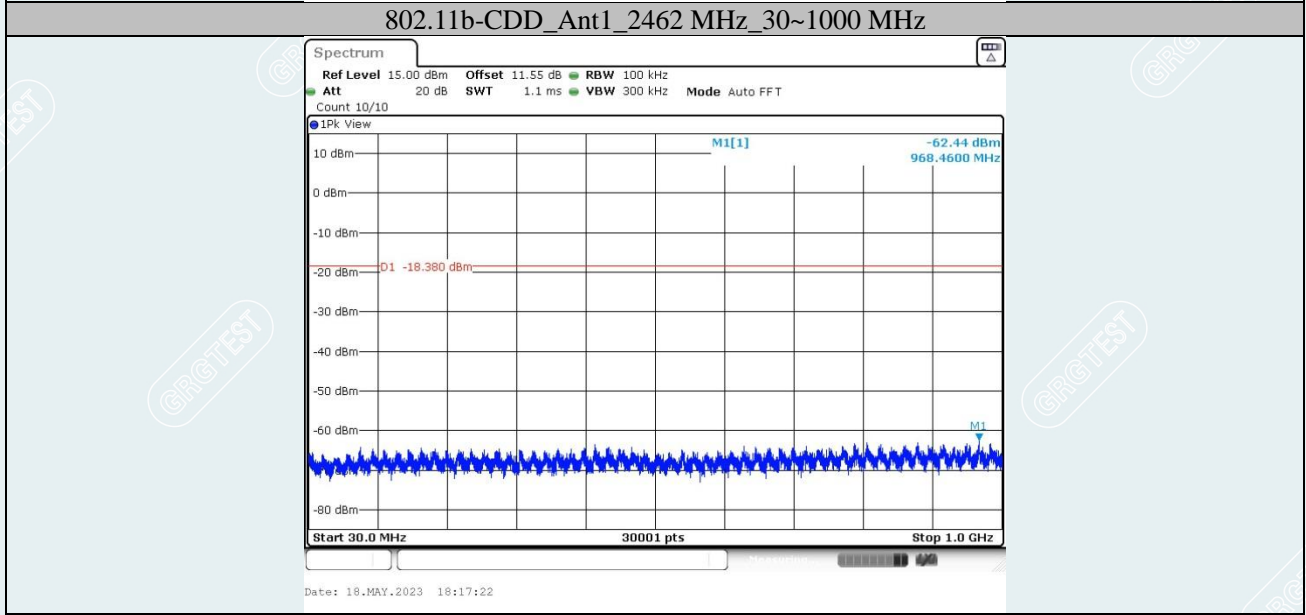
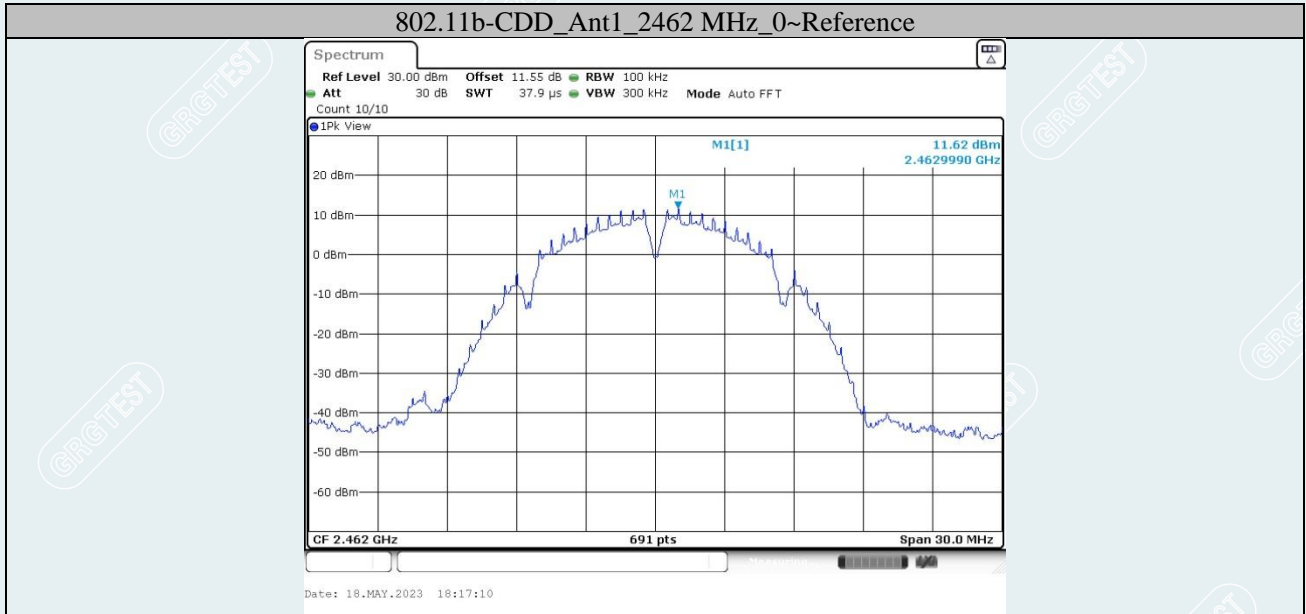




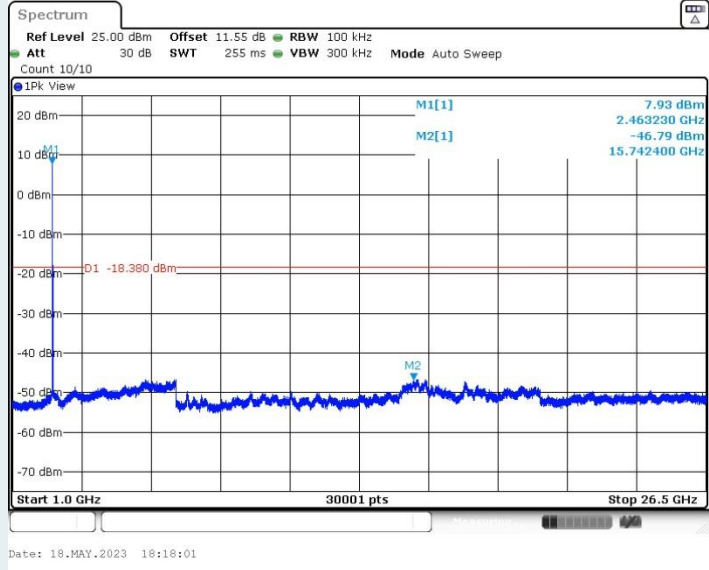








### 802.11b-CDD\_Ant1\_2462 MHz\_1000~26500 MHz



### 802.11b-CDD\_Ant2\_2462 MHz\_0~Reference

