

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2AZ2R-MPS

Company : Shenzhen USEER Robotics Co.,Ltd.

EUT : Robotic Vacuum Cleaner

Model Number : M330 Plus

Report No. : CTA25111800902

Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

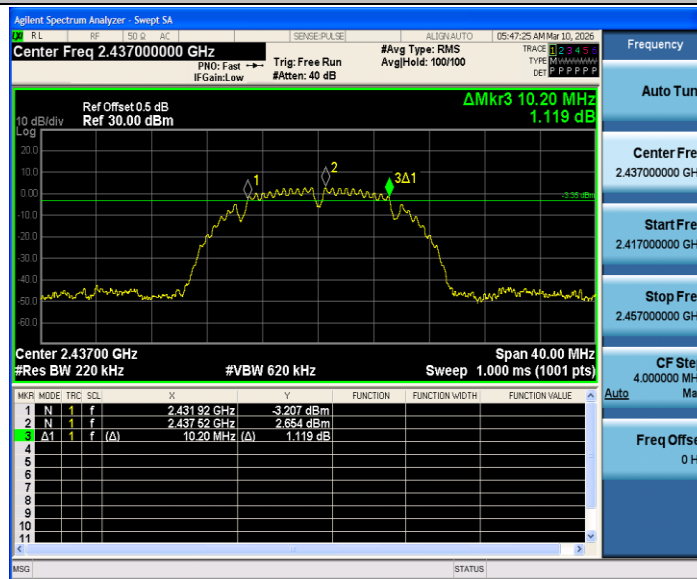
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.200	2406.920	2417.120	0.5	PASS
		2437	10.200	2431.920	2442.120	0.5	PASS
		2462	10.200	2456.920	2467.120	0.5	PASS
11G	Ant1	2412	15.920	2404.080	2420.000	0.5	PASS
		2437	15.360	2429.440	2444.800	0.5	PASS
		2462	15.520	2454.120	2469.640	0.5	PASS
11N20SISO	Ant1	2412	16.360	2404.080	2420.440	0.5	PASS
		2437	16.040	2429.040	2445.080	0.5	PASS
		2462	16.760	2453.720	2470.480	0.5	PASS

Test Graphs

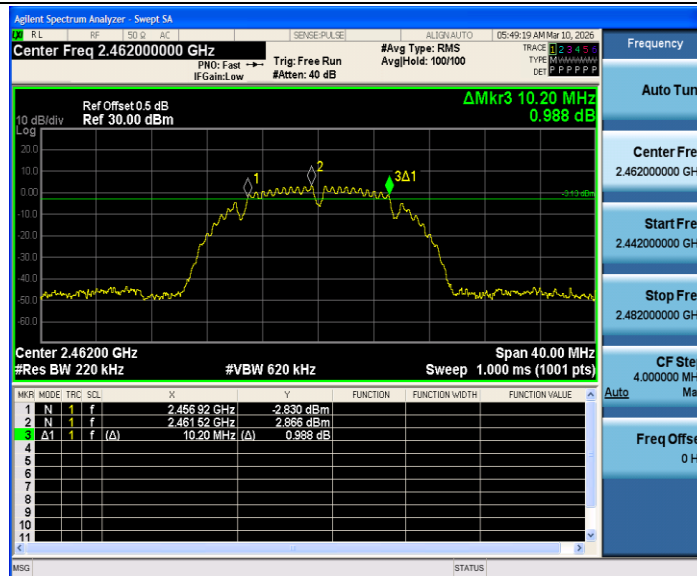
11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



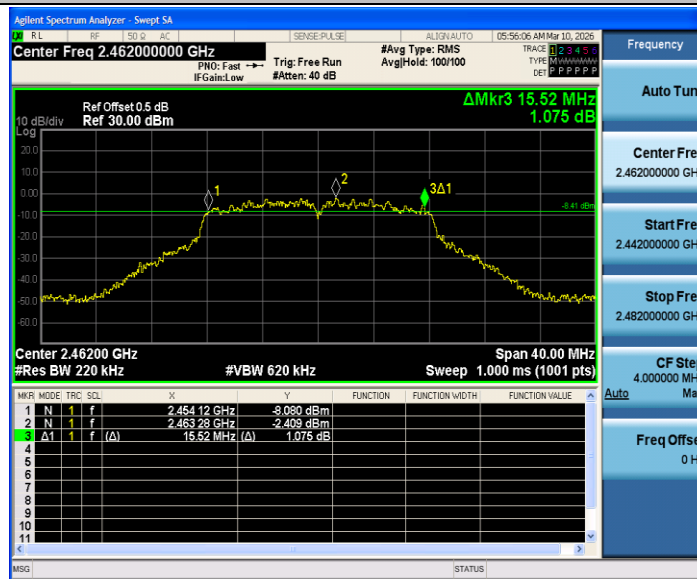
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



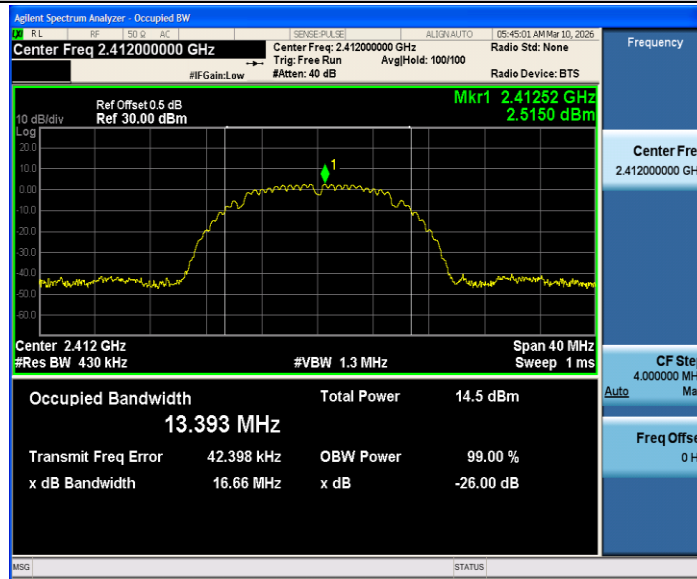
Appendix B: Occupied Channel Bandwidth

Test Result

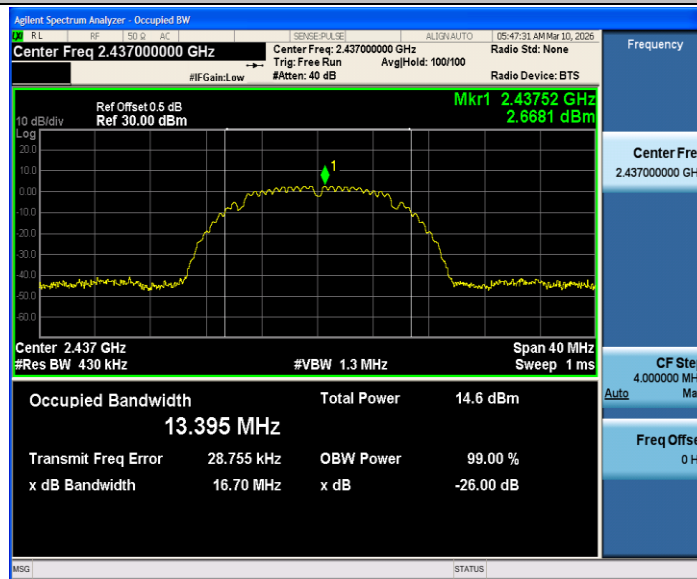
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.393	2405.3459	2418.7389	---	---
		2437	13.395	2430.3313	2443.7263	---	---
		2462	13.410	2455.3067	2468.7167	---	---
11G	Ant1	2412	16.831	2403.6413	2420.4723	---	---
		2437	16.888	2428.6099	2445.4979	---	---
		2462	16.888	2453.5792	2470.4672	---	---
11N20SISO	Ant1	2412	17.898	2403.0655	2420.9635	---	---
		2437	17.867	2428.0919	2445.9589	---	---
		2462	17.839	2453.0832	2470.9222	---	---

Test Graphs

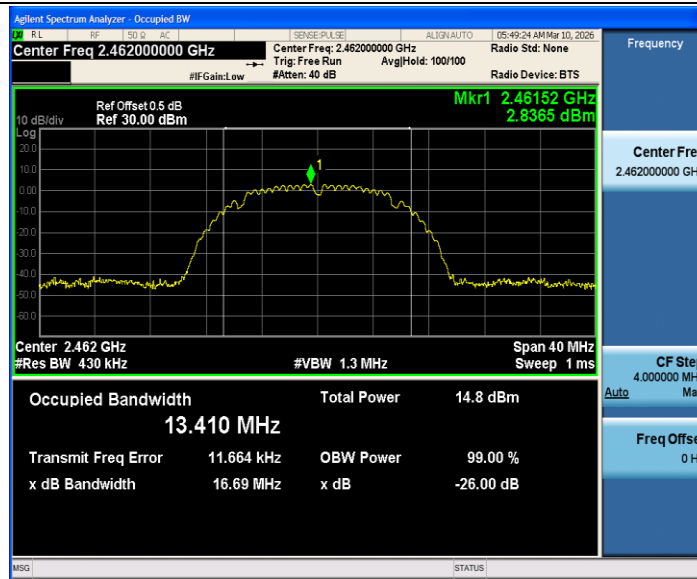
11B_Ant1_2412



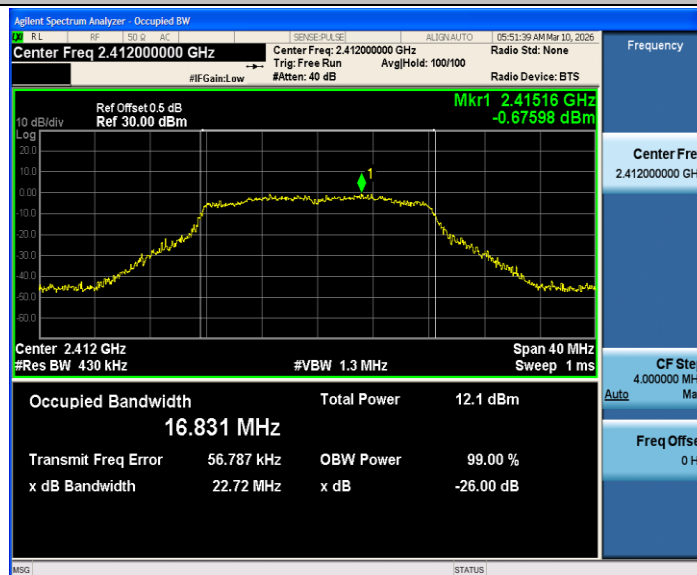
11B_Ant1_2437



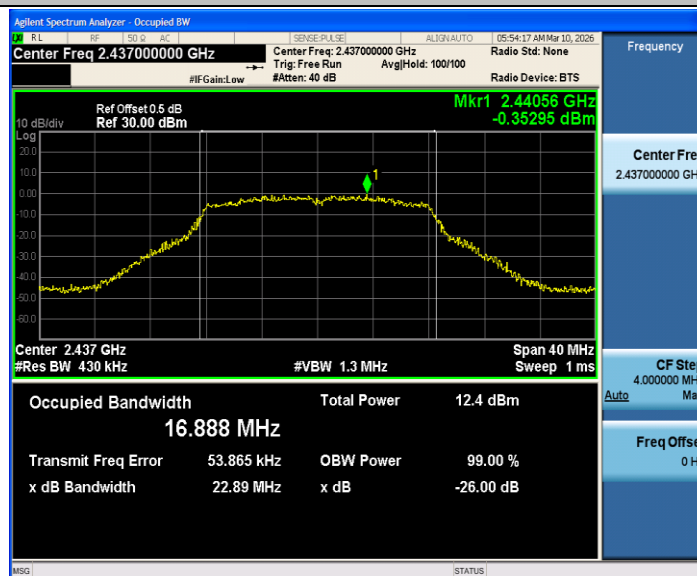
11B_Ant1_2462



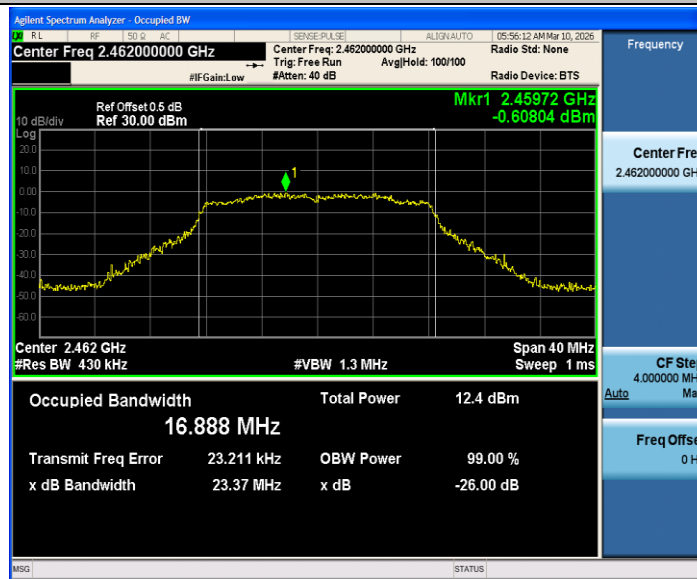
11G_Ant1_2412



11G_Ant1_2437



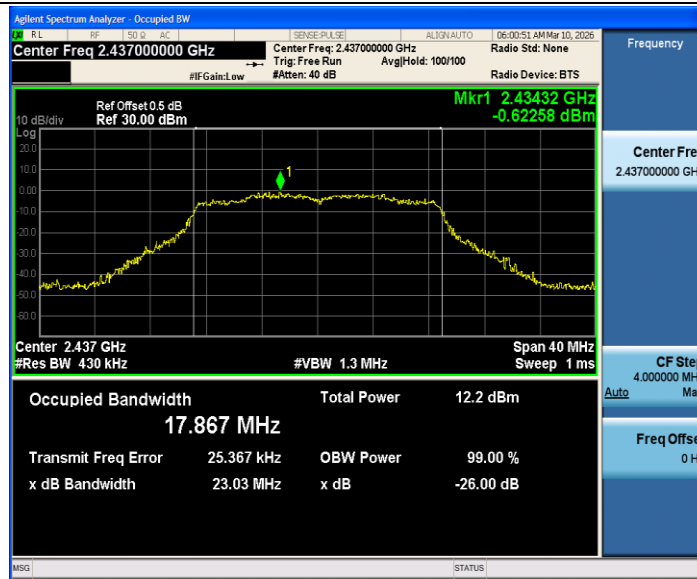
11G_Ant1_2462



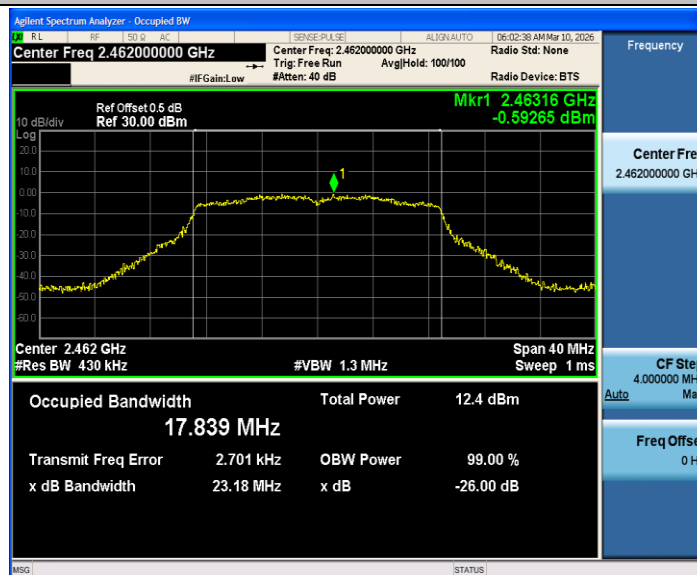
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	14.09	≤30.00	PASS
		2437	14.39	≤30.00	PASS
		2462	14.49	≤30.00	PASS
11G	Ant1	2412	12.91	≤30.00	PASS
		2437	13.15	≤30.00	PASS
		2462	13.38	≤30.00	PASS
11N20SISO	Ant1	2412	12.73	≤30.00	PASS
		2437	13.03	≤30.00	PASS
		2462	13.26	≤30.00	PASS

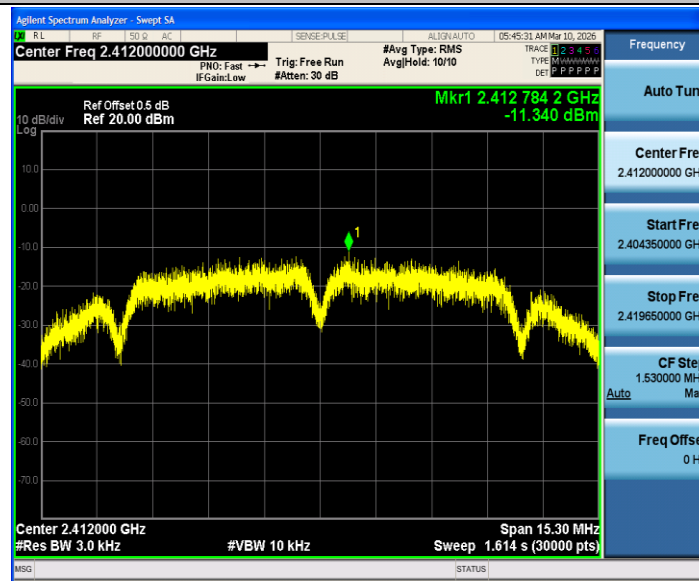
Appendix D: Maximum power spectral density

Test Result

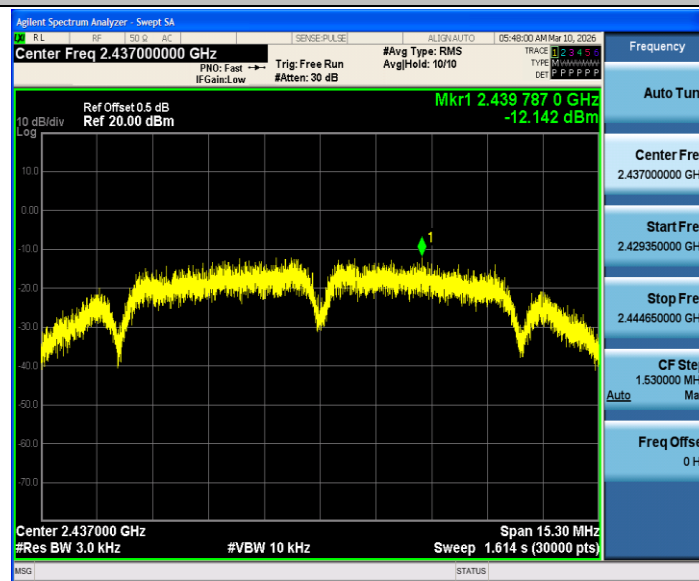
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.34	≤8.00	PASS
		2437	-12.14	≤8.00	PASS
		2462	-11.98	≤8.00	PASS
11G	Ant1	2412	-18.94	≤8.00	PASS
		2437	-18.07	≤8.00	PASS
		2462	-18.17	≤8.00	PASS
11N20SISO	Ant1	2412	-18.42	≤8.00	PASS
		2437	-18.35	≤8.00	PASS
		2462	-18.00	≤8.00	PASS

Test Graphs

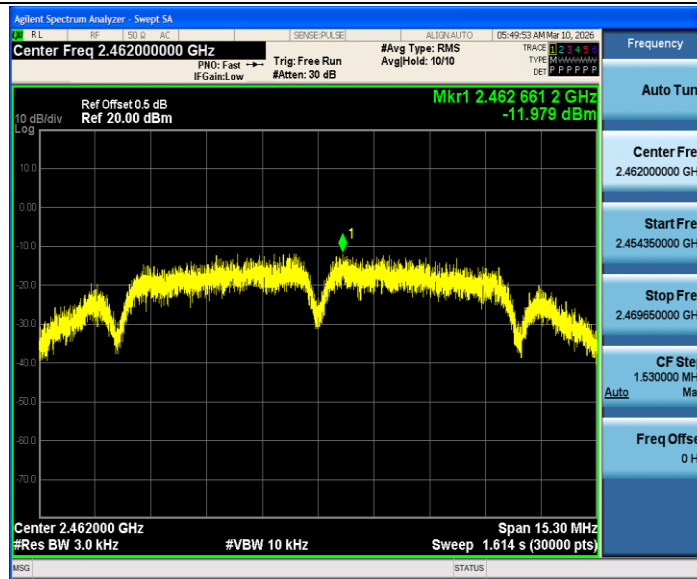
11B_Ant1_2412



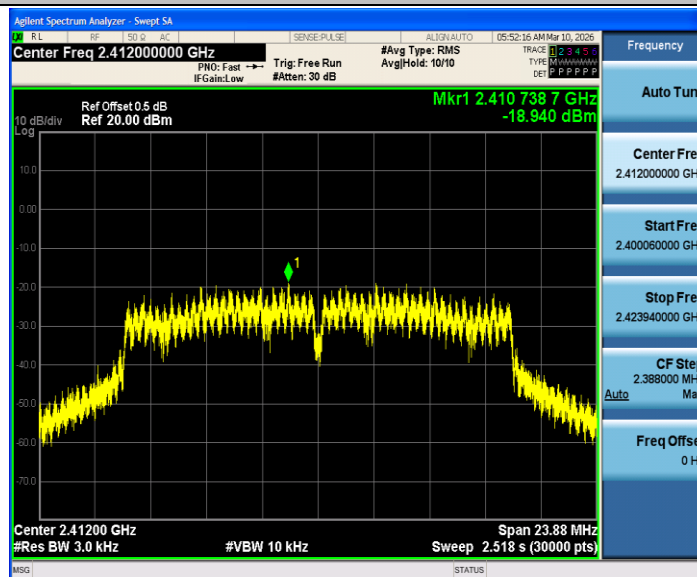
11B_Ant1_2437



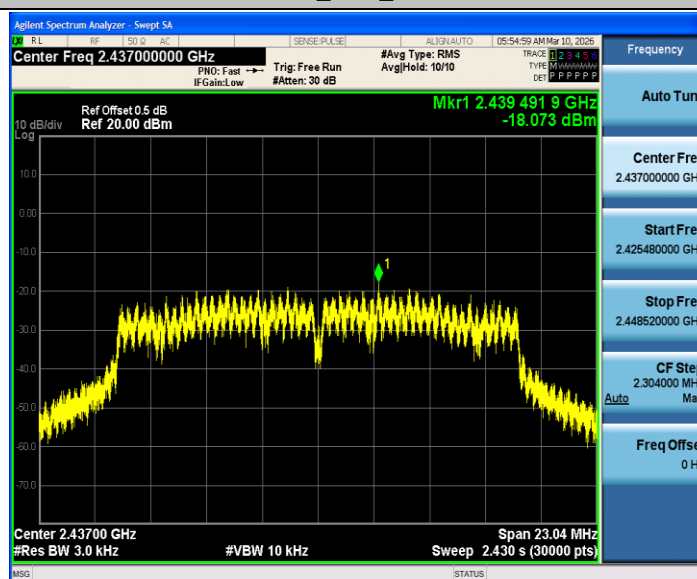
11B_Ant1_2462



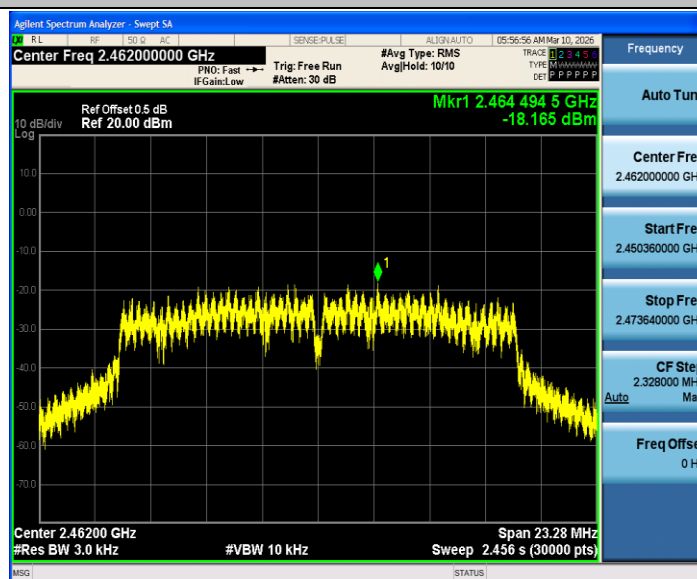
11G_Ant1_2412



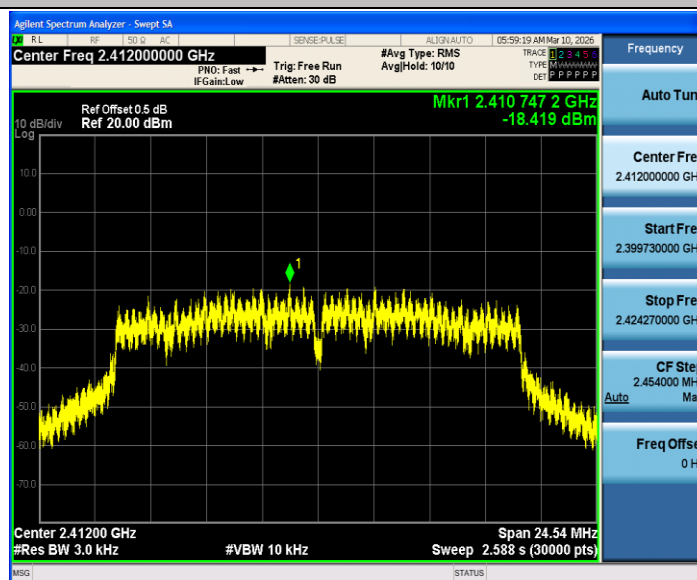
11G_Ant1_2437



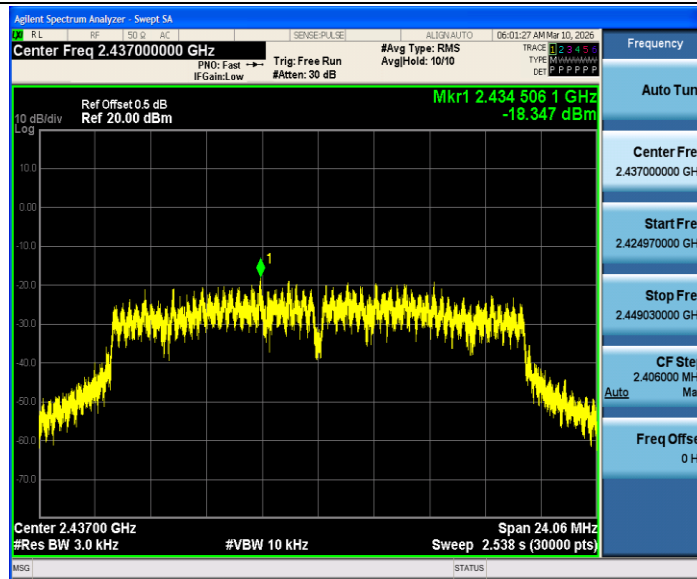
11G_Ant1_2462



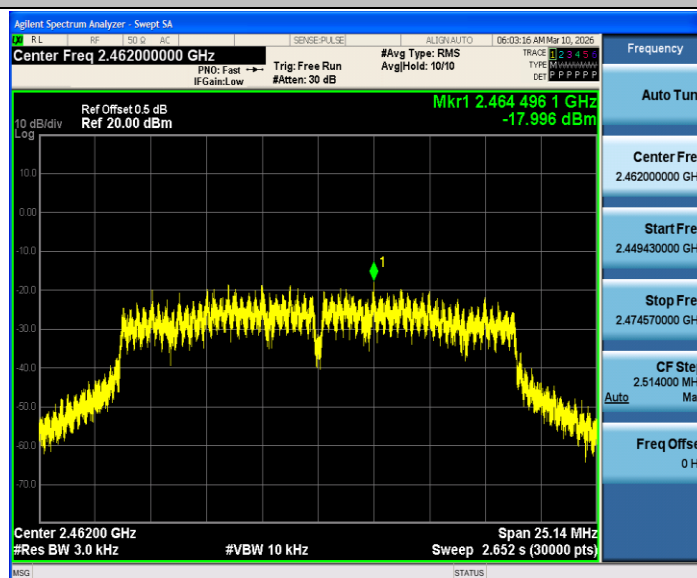
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



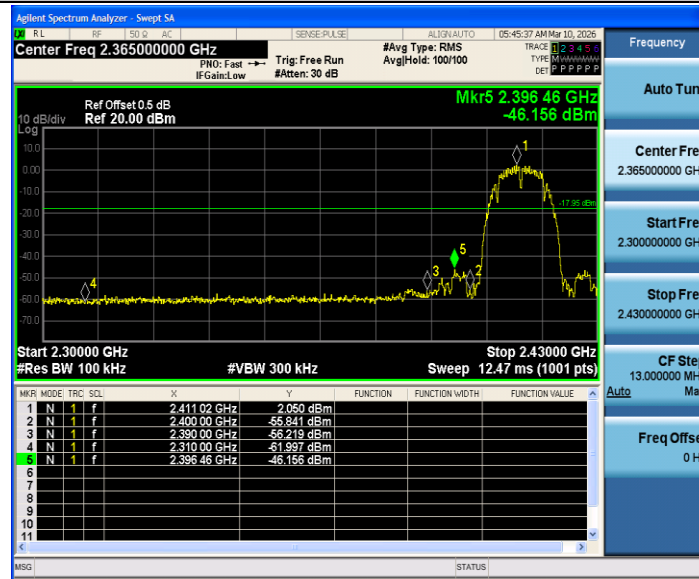
Appendix E: Band edge measurements

Test Result

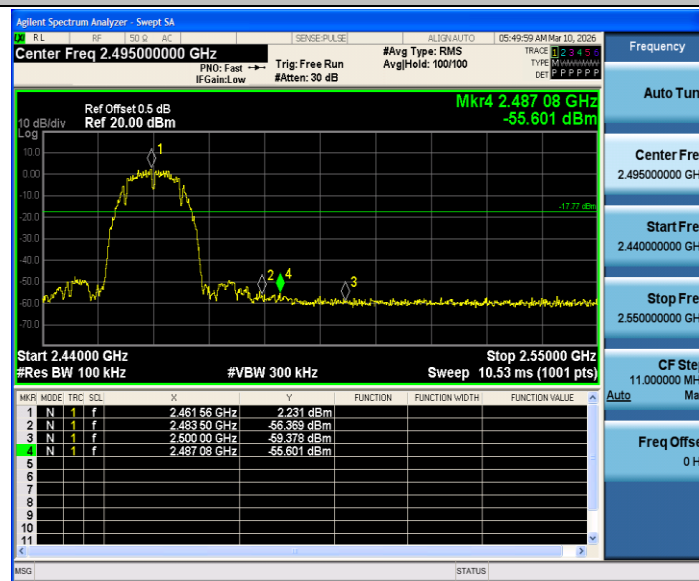
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.05	-46.16	≤-17.95	PASS
		High	2462	2.23	-55.6	≤-17.77	PASS
11G	Ant1	Low	2412	-3.50	-35.32	≤-23.5	PASS
		High	2462	-3.10	-56.64	≤-23.1	PASS
11N20SISO	Ant1	Low	2412	-3.65	-35.19	≤-23.65	PASS
		High	2462	-3.12	-57.41	≤-23.12	PASS

Test Graphs

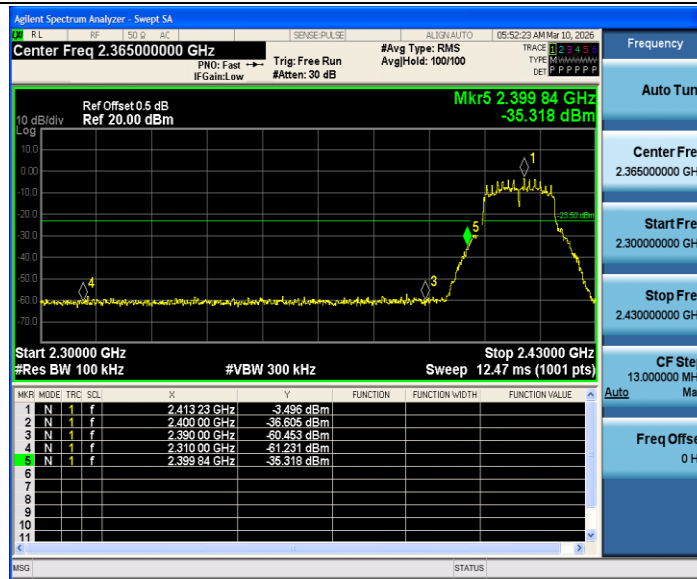
11B_Ant1_Low_2412



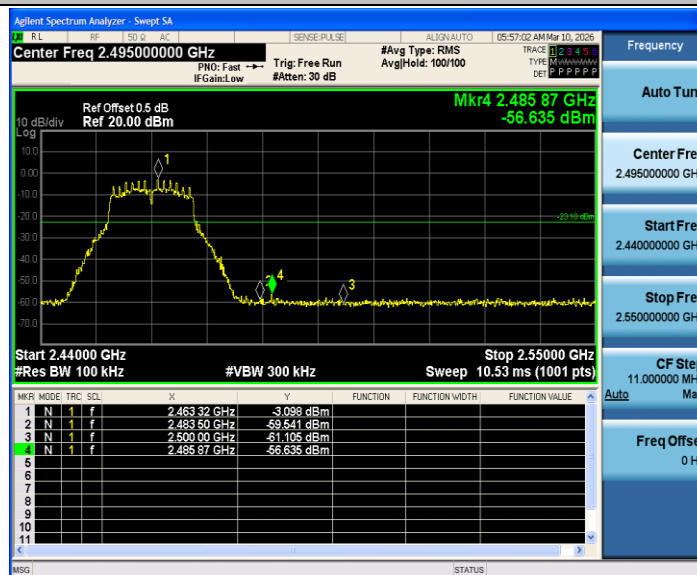
11B_Ant1_High_2462



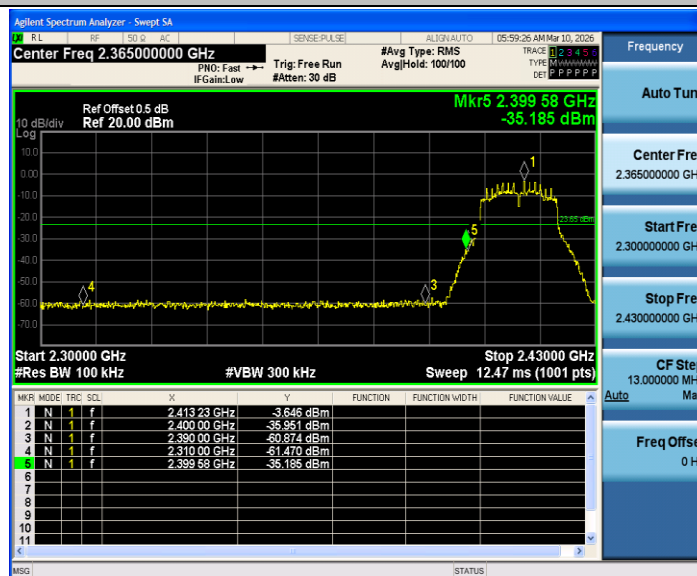
11G_Ant1_Low_2412



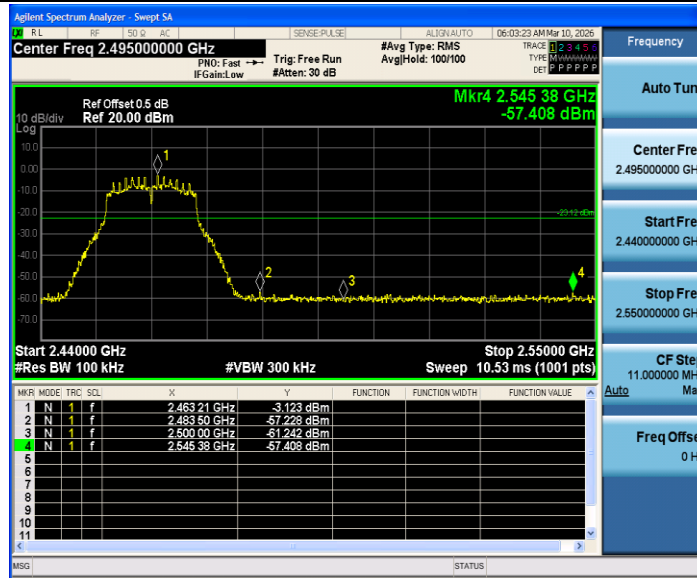
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



Appendix F: Conducted Spurious Emission

Test Result

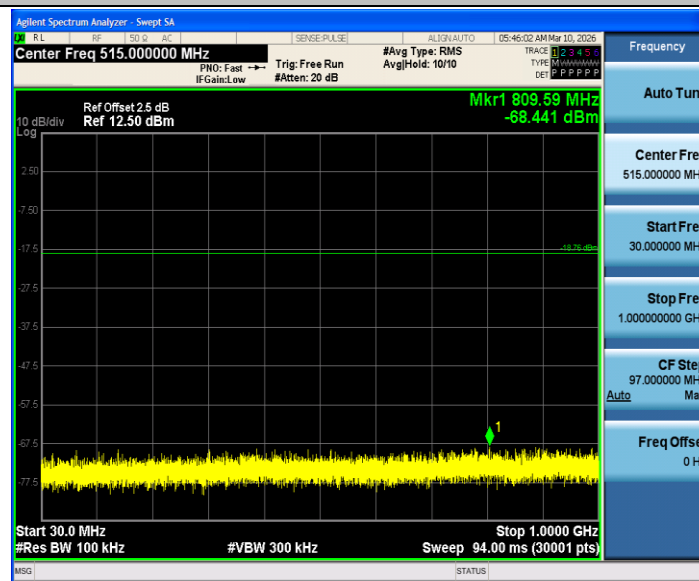
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	1.24	1.24	---	PASS
			30~1000	1.24	-68.44	≤-18.76	PASS
			1000~26500	1.24	-54.77	≤-18.76	PASS
		2437	Reference	1.88	1.88	---	PASS
			30~1000	1.88	-67.74	≤-18.12	PASS
			1000~26500	1.88	-55.27	≤-18.12	PASS
		2462	Reference	1.06	1.06	---	PASS
			30~1000	1.06	-67.57	≤-18.94	PASS
			1000~26500	1.06	-54.84	≤-18.94	PASS
11G	Ant1	2412	Reference	-3.79	-3.79	---	PASS
			30~1000	-3.79	-66.82	≤-23.79	PASS
			1000~26500	-3.79	-55.33	≤-23.79	PASS
		2437	Reference	-3.90	-3.90	---	PASS
			30~1000	-3.90	-67.69	≤-23.9	PASS
			1000~26500	-3.90	-55.11	≤-23.9	PASS
		2462	Reference	-3.11	-3.11	---	PASS
			30~1000	-3.11	-67.44	≤-23.11	PASS
			1000~26500	-3.11	-54.95	≤-23.11	PASS
11N20SISO	Ant1	2412	Reference	-4.78	-4.78	---	PASS
			30~1000	-4.78	-67.37	≤-24.78	PASS
			1000~26500	-4.78	-54.26	≤-24.78	PASS
		2437	Reference	-3.87	-3.87	---	PASS
			30~1000	-3.87	-66.78	≤-23.87	PASS
			1000~26500	-3.87	-54.33	≤-23.87	PASS
		2462	Reference	-3.72	-3.72	---	PASS
			30~1000	-3.72	-68.02	≤-23.72	PASS
			1000~26500	-3.72	-55.24	≤-23.72	PASS

Test Graphs

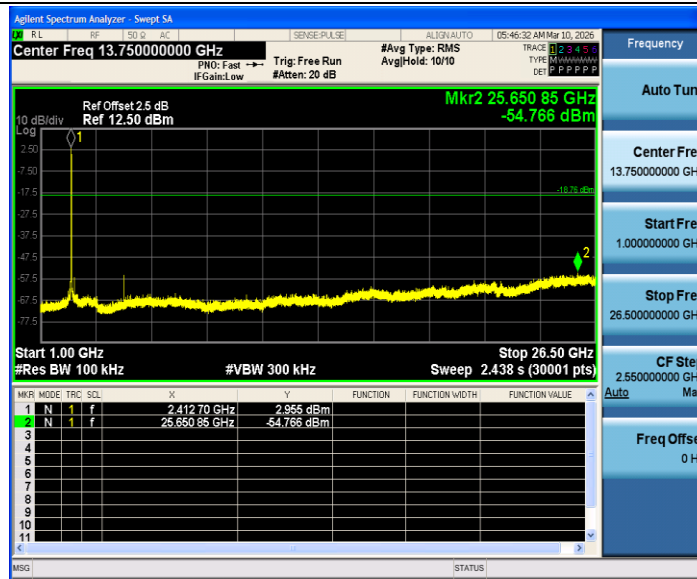
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



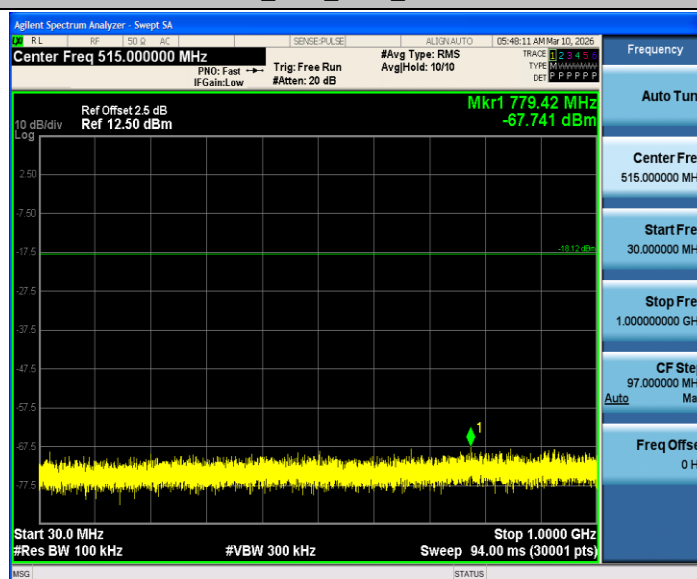
11B_Ant1_2412_1000~26500



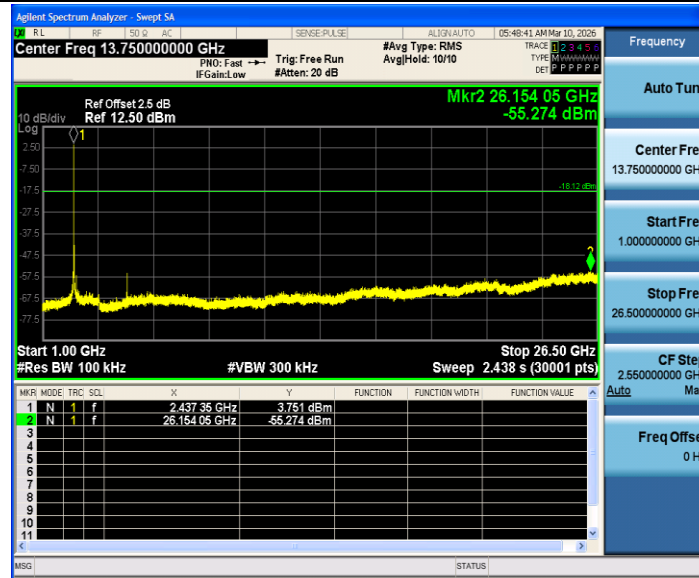
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000