

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2AW97-X18

Company : SHENZHEN XINWU TECHNOLOGY LIMITED

EUT : Video Walkie-Talkie

Model Number : X18

Report No. : CTA25123000101

Reviewed By : Eric Wang

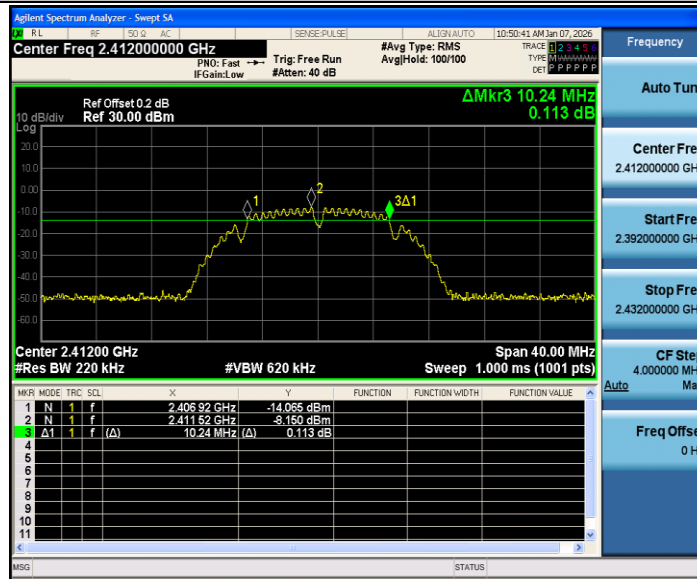
Appendix A: DTS Bandwidth

Test Result

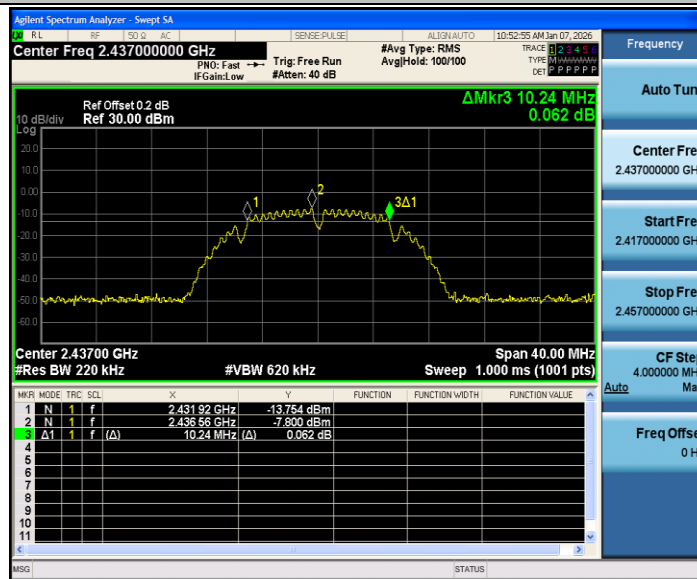
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.240	2406.920	2417.160	0.5	PASS
		2437	10.240	2431.920	2442.160	0.5	PASS
		2462	10.200	2456.920	2467.120	0.5	PASS
11G	Ant1	2412	15.920	2404.080	2420.000	0.5	PASS
		2437	15.920	2429.080	2445.000	0.5	PASS
		2462	15.960	2454.040	2470.000	0.5	PASS
11N20SISO	Ant1	2412	16.240	2404.200	2420.440	0.5	PASS
		2437	16.800	2428.680	2445.480	0.5	PASS
		2462	16.240	2454.200	2470.440	0.5	PASS
11N40SISO	Ant1	2422	35.280	2404.560	2439.840	0.5	PASS
		2437	36.000	2419.000	2455.000	0.5	PASS
		2452	34.880	2434.400	2469.280	0.5	PASS
11AX20SISO	Ant1	2412	18.520	2402.800	2421.320	0.5	PASS
		2437	18.800	2427.680	2446.480	0.5	PASS
		2462	18.440	2452.680	2471.120	0.5	PASS
11AX40SISO	Ant1	2422	36.480	2404.240	2440.720	0.5	PASS
		2437	36.480	2419.160	2455.640	0.5	PASS
		2452	37.120	2433.840	2470.960	0.5	PASS

Test Graphs

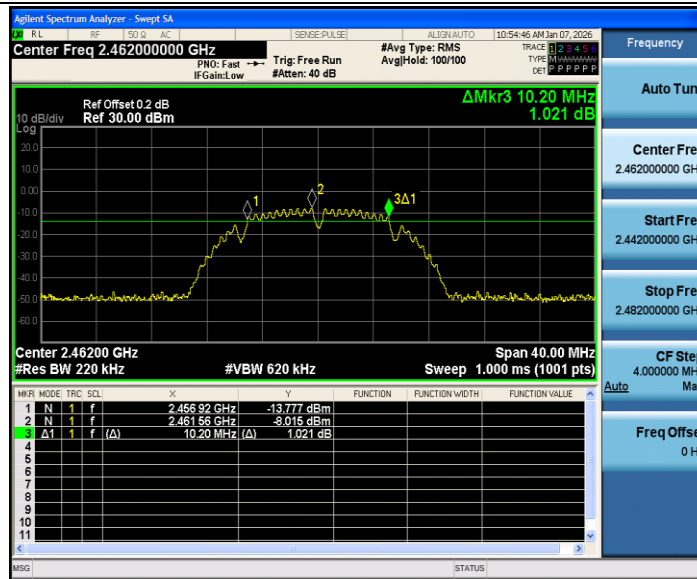
11B_Ant1_2412



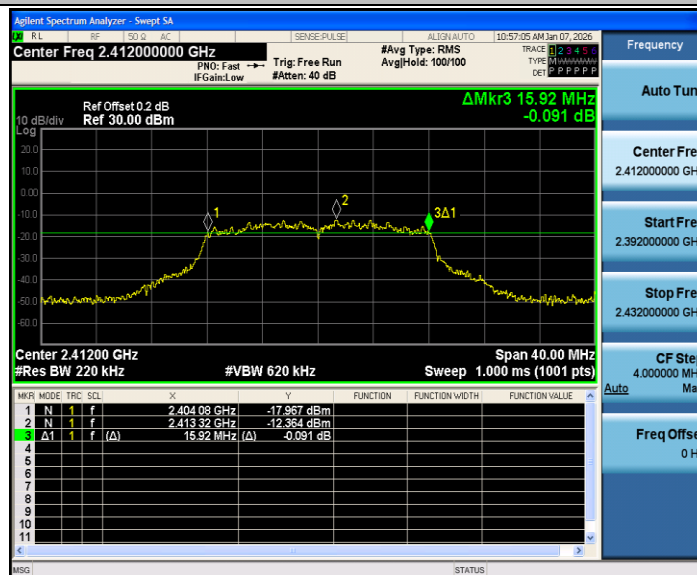
11B_Ant1_2437



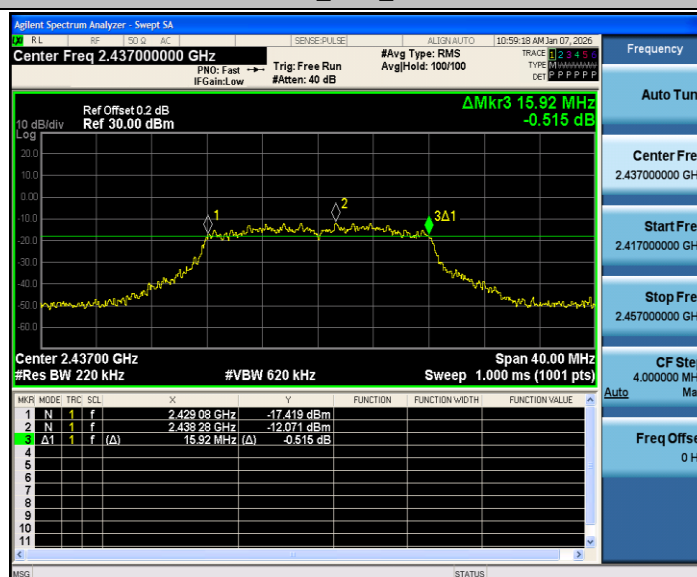
11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



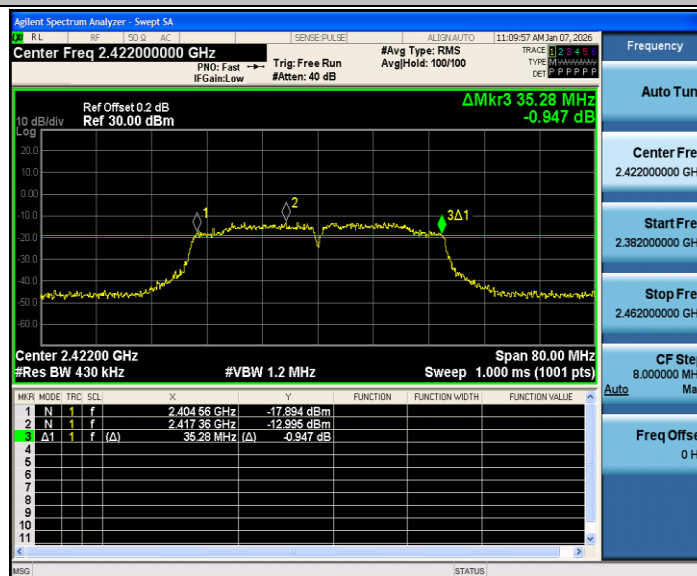
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



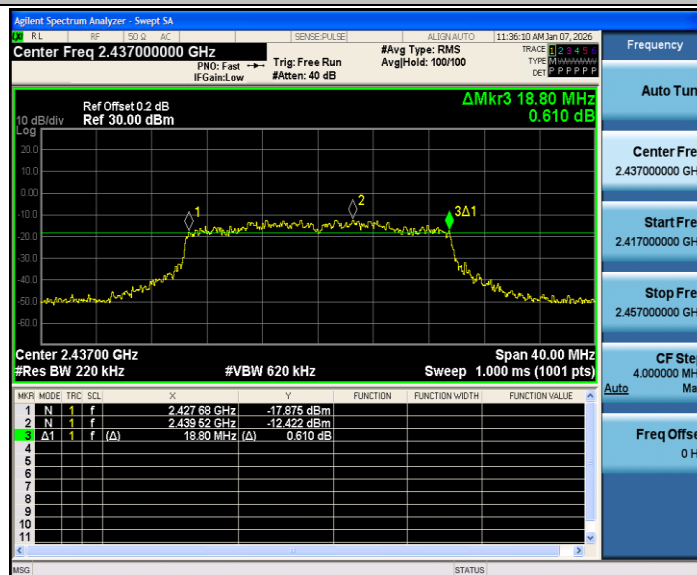
11N40SISO_Ant1_2452



11AX20SISO_Ant1_2412



11AX20SISO_Ant1_2437



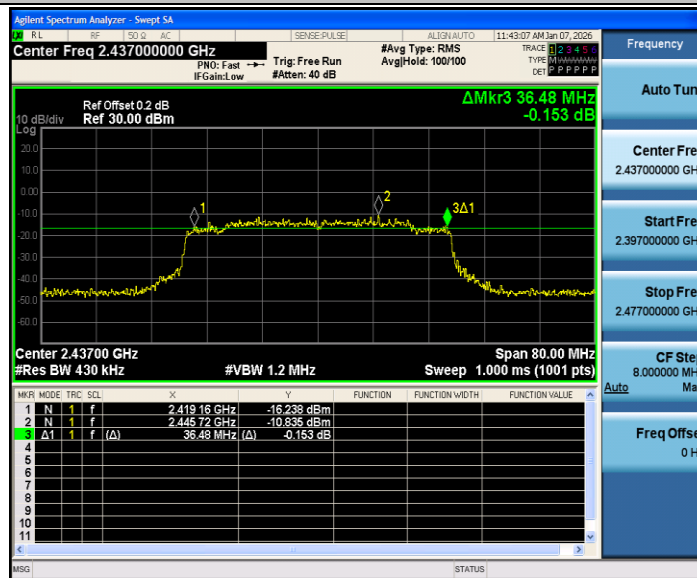
11AX20SISO_Ant1_2462



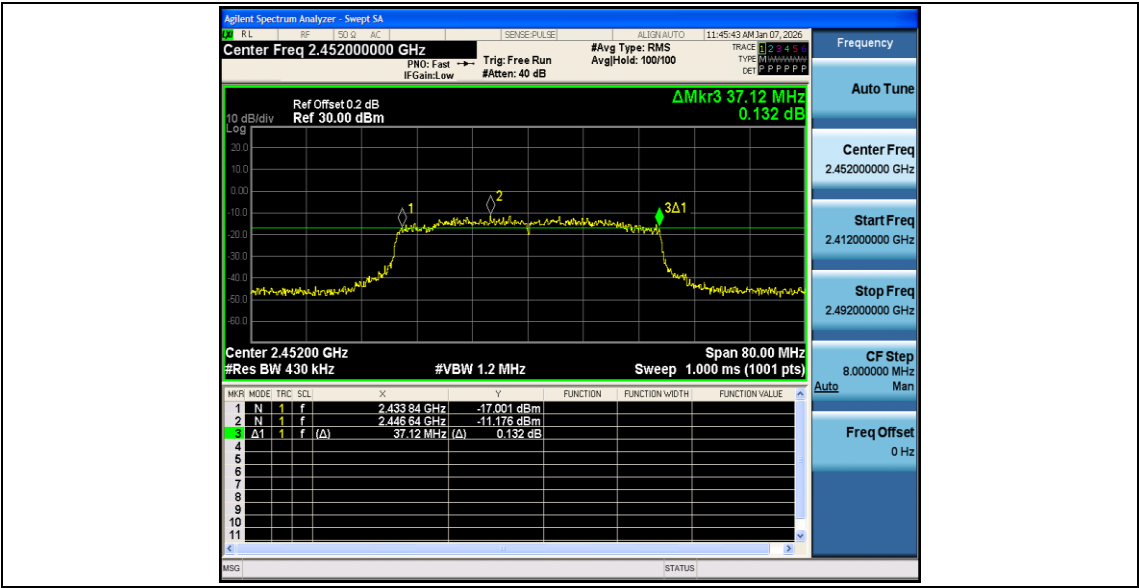
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



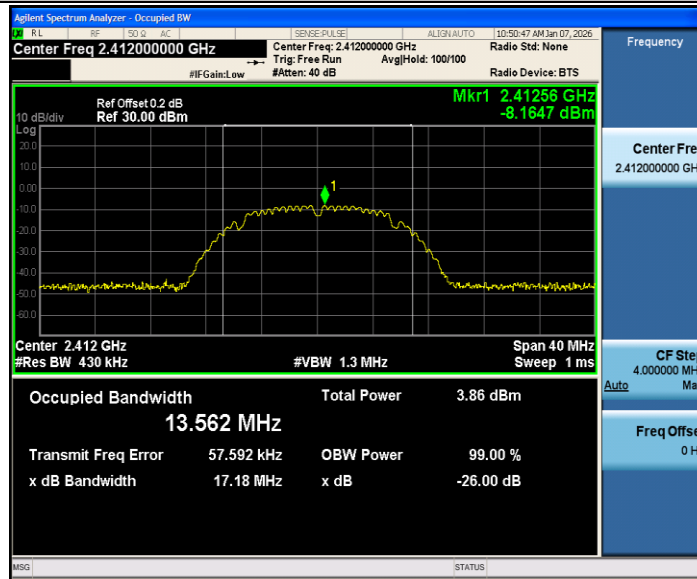
Appendix B: Occupied Channel Bandwidth

Test Result

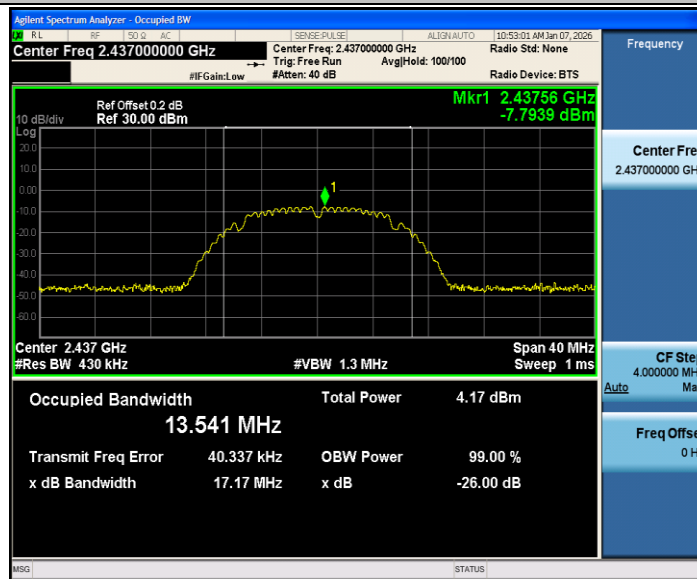
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.562	2405.2766	2418.8386	---	---
		2437	13.541	2430.2698	2443.8108	---	---
		2462	13.572	2455.2381	2468.8101	---	---
11G	Ant1	2412	16.927	2403.5849	2420.5119	---	---
		2437	16.845	2428.6387	2445.4837	---	---
		2462	16.923	2453.5595	2470.4825	---	---
11N20SISO	Ant1	2412	17.962	2403.0651	2421.0271	---	---
		2437	17.920	2428.0700	2445.9900	---	---
		2462	17.977	2453.0101	2470.9871	---	---
11N40SISO	Ant1	2422	36.082	2404.0727	2440.1547	---	---
		2437	36.072	2419.0676	2455.1396	---	---
		2452	36.116	2434.0036	2470.1196	---	---
11AX20SISO	Ant1	2412	18.985	2402.5645	2421.5495	---	---
		2437	18.895	2427.6031	2446.4981	---	---
		2462	19.009	2452.5256	2471.5346	---	---
11AX40SISO	Ant1	2422	37.682	2403.2677	2440.9497	---	---
		2437	37.734	2418.2364	2455.9704	---	---
		2452	37.709	2433.2745	2470.9835	---	---

Test Graphs

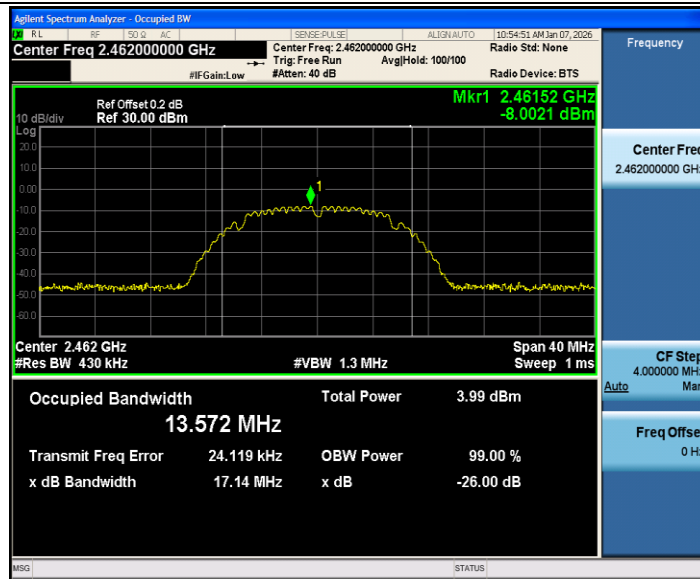
11B_Ant1_2412



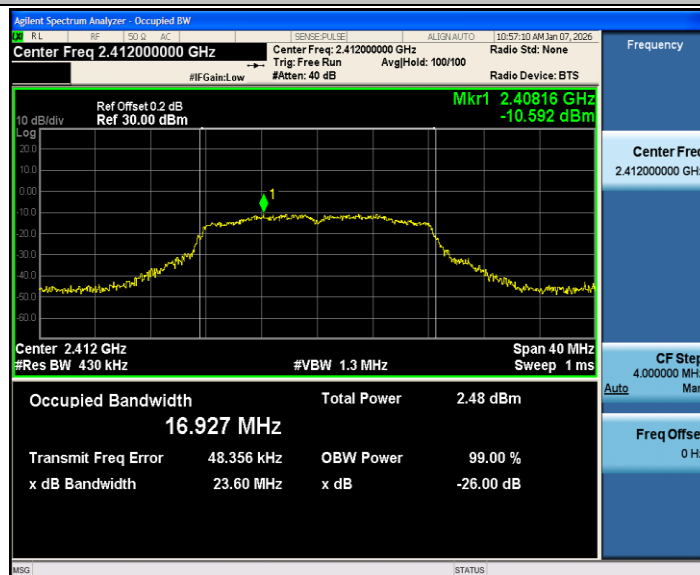
11B_Ant1_2437



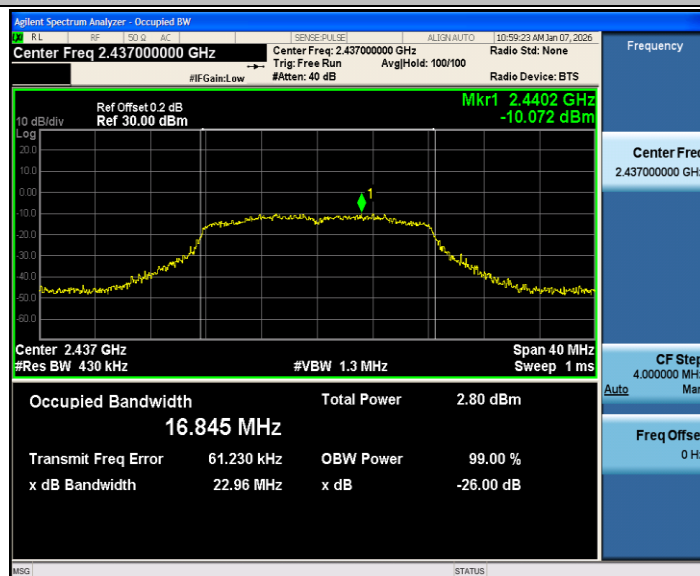
11B_Ant1_2462



11G_Ant1_2412



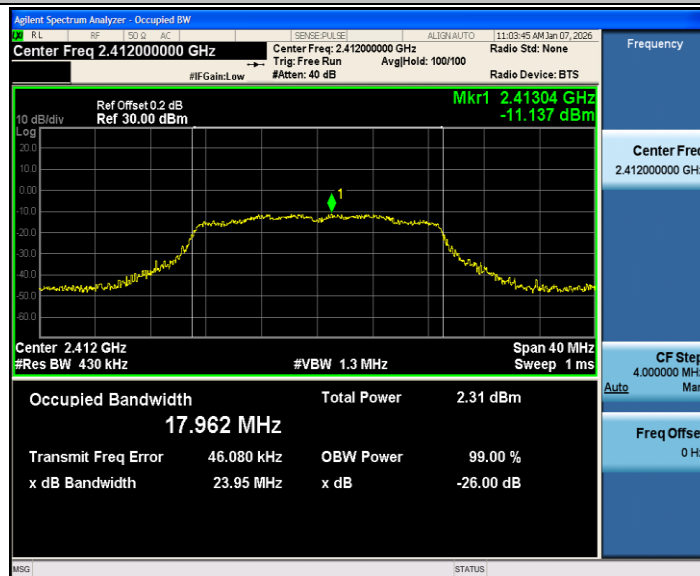
11G_Ant1_2437



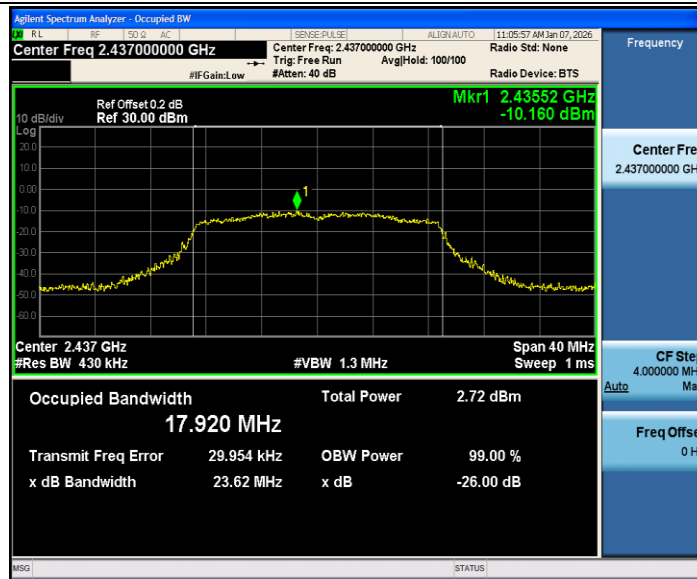
11G_Ant1_2462



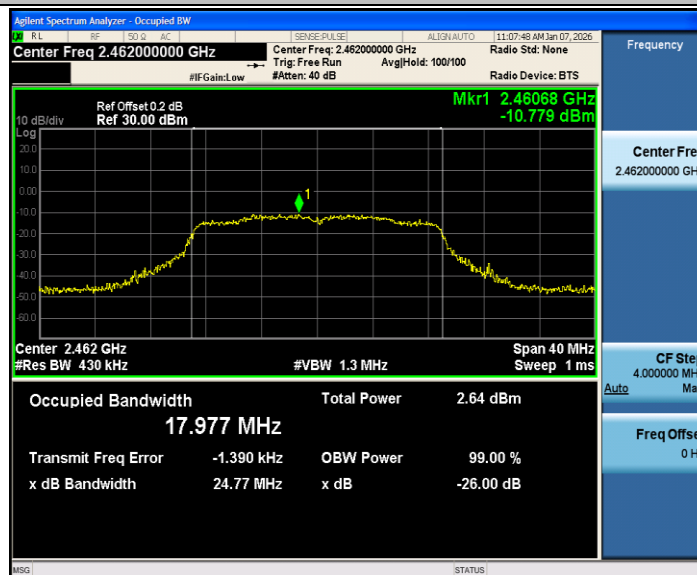
11N20SISO_Ant1_2412



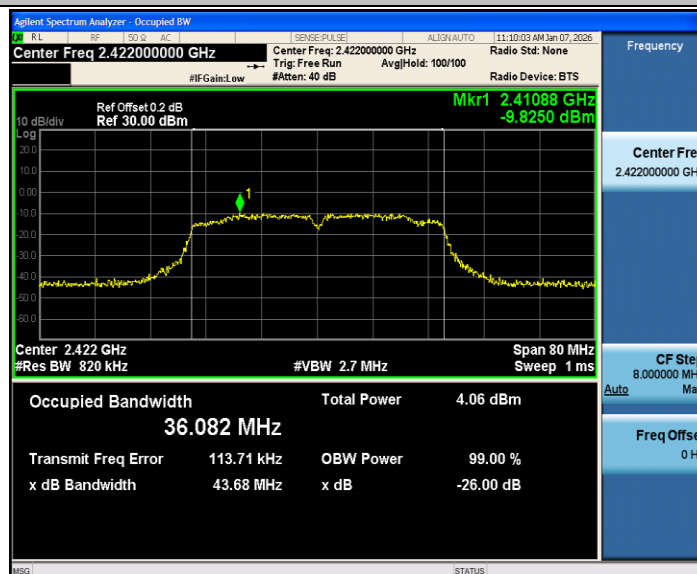
11N20SISO_Ant1_2437



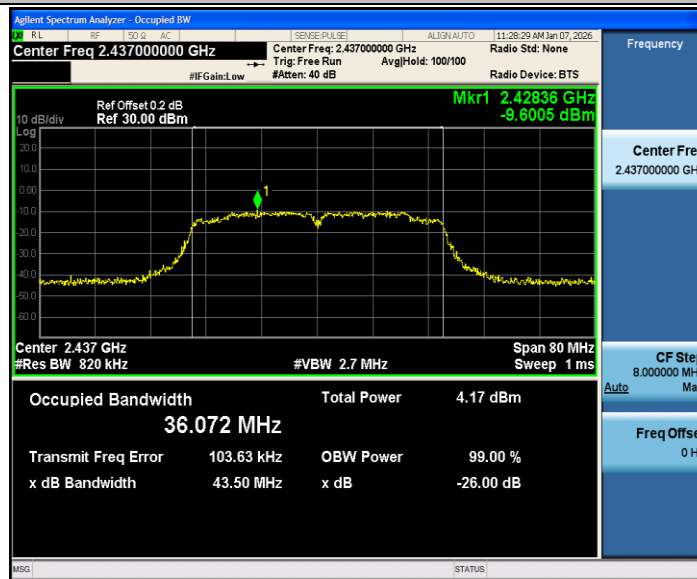
11N20SISO_Ant1_2462



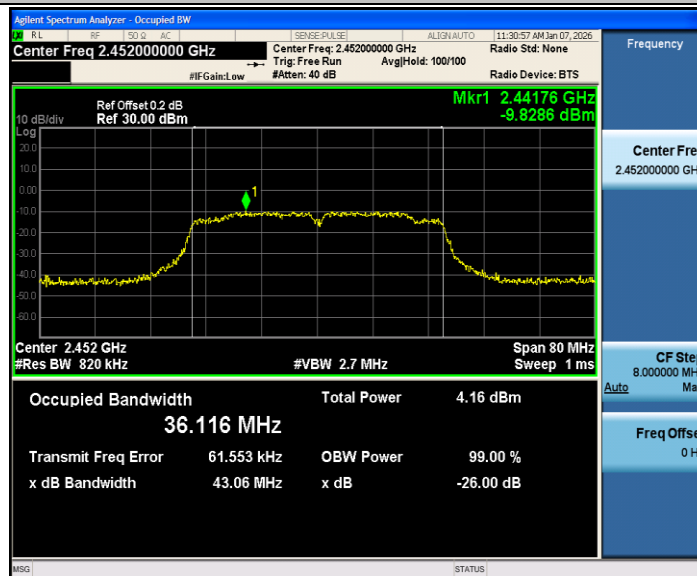
11N40SISO_Ant1_2422



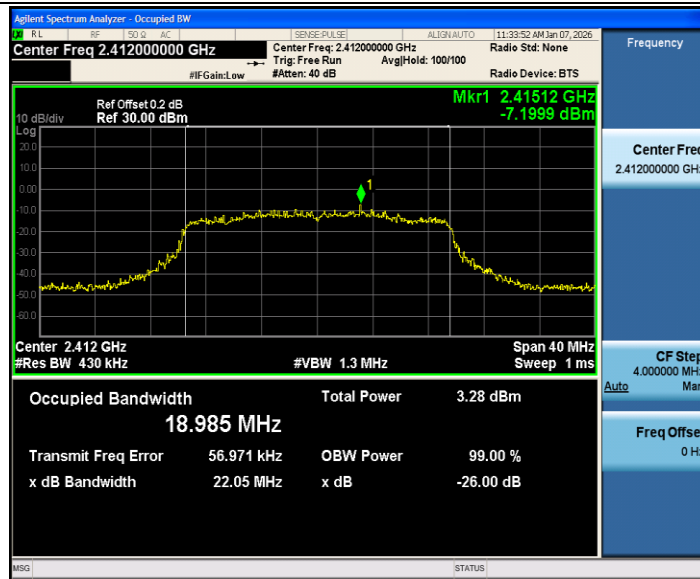
11N40SISO_Ant1_2437



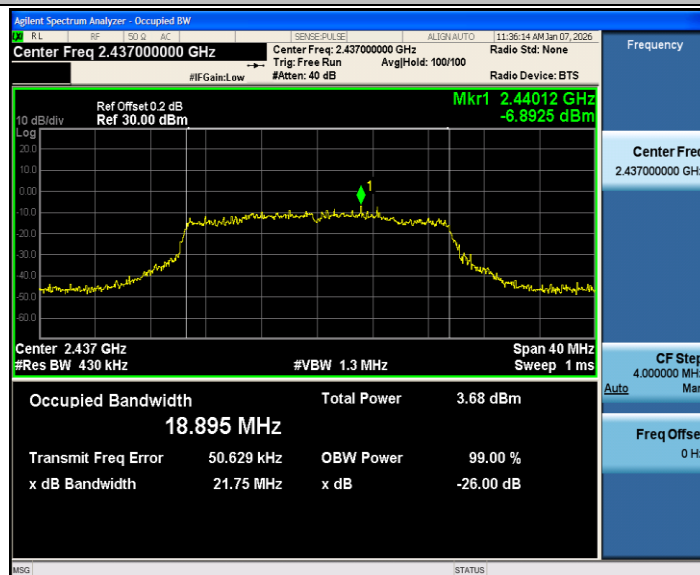
11N40SISO_Ant1_2452



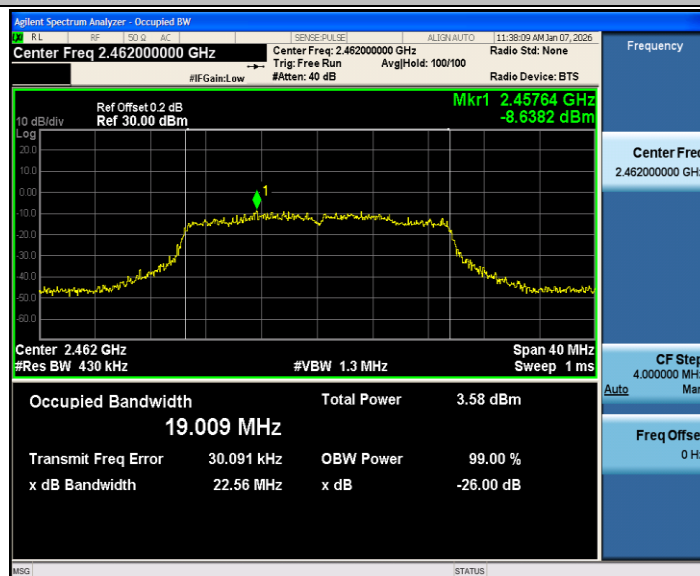
11AX20SISO_Ant1_2412



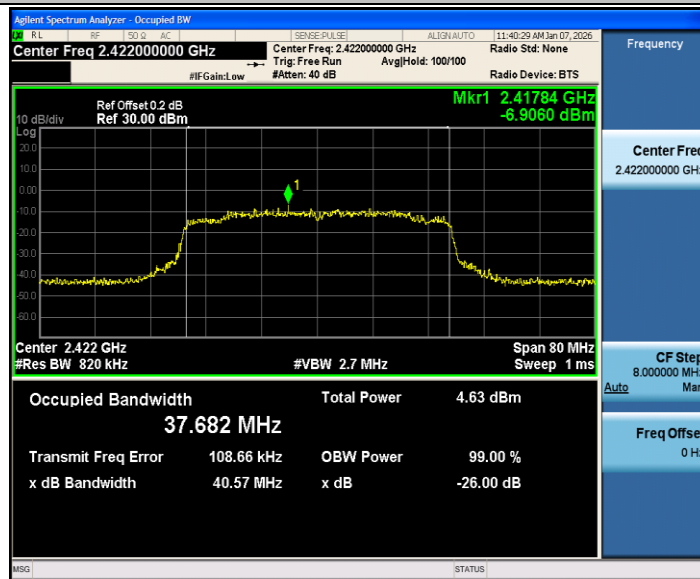
11AX20SISO_Ant1_2437



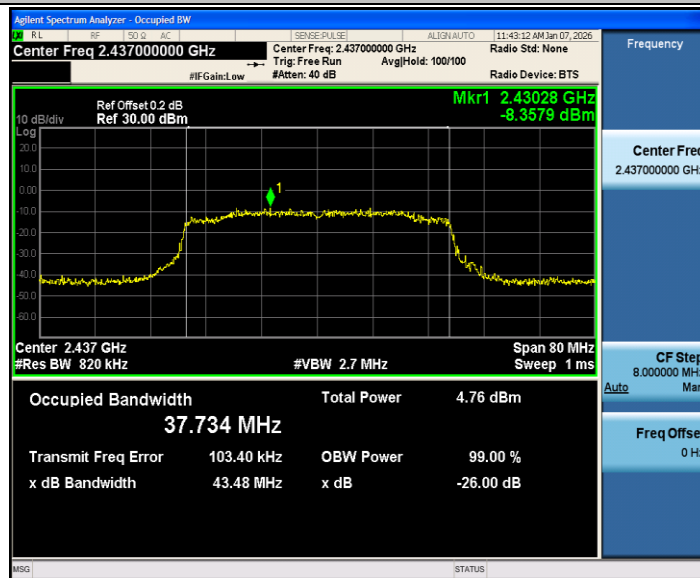
11AX20SISO_Ant1_2462



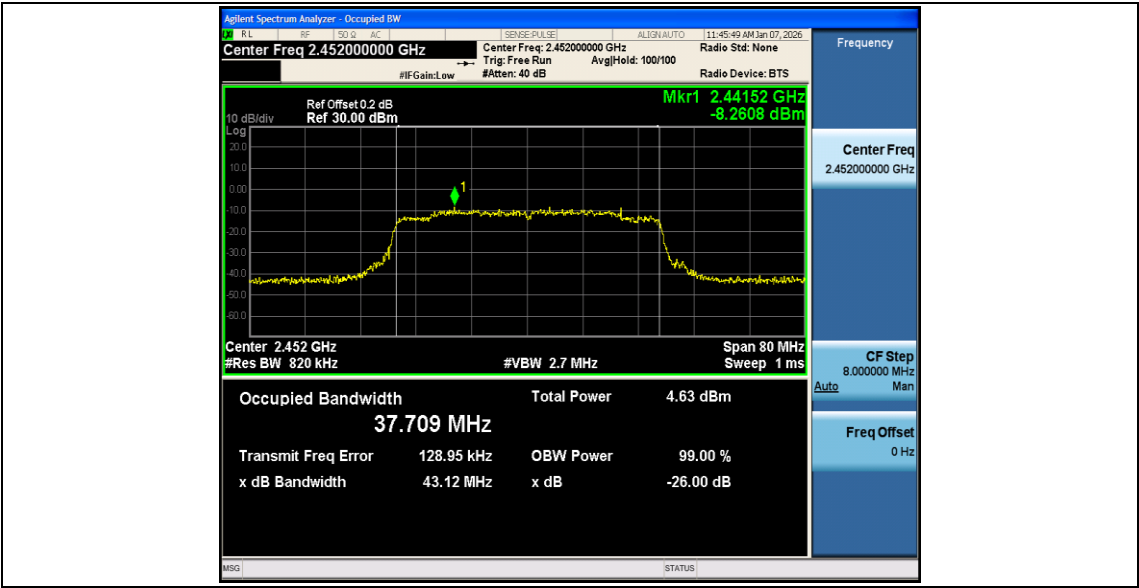
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	3.54	≤30.00	PASS
		2437	3.85	≤30.00	PASS
		2462	3.66	≤30.00	PASS
11G	Ant1	2412	3.37	≤30.00	PASS
		2437	3.73	≤30.00	PASS
		2462	3.65	≤30.00	PASS
11N20SISO	Ant1	2412	3.12	≤30.00	PASS
		2437	3.65	≤30.00	PASS
		2462	3.38	≤30.00	PASS
11N40SISO	Ant1	2422	4.20	≤30.00	PASS
		2437	4.41	≤30.00	PASS
		2452	4.31	≤30.00	PASS
11AX20SISO	Ant1	2412	3.70	≤30.00	PASS
		2437	4.10	≤30.00	PASS
		2462	3.95	≤30.00	PASS
11AX40SISO	Ant1	2422	4.60	≤30.00	PASS
		2437	4.67	≤30.00	PASS
		2452	4.77	≤30.00	PASS

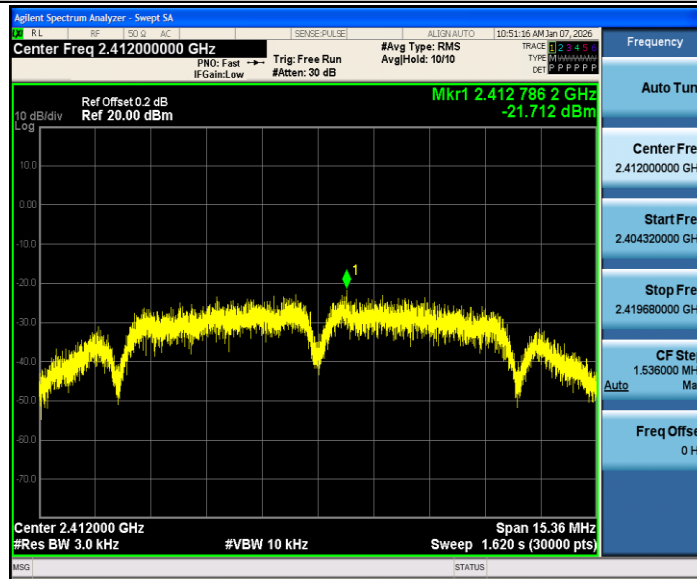
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-21.71	≤8.00	PASS
		2437	-21.40	≤8.00	PASS
		2462	-22.57	≤8.00	PASS
11G	Ant1	2412	-28.38	≤8.00	PASS
		2437	-27.74	≤8.00	PASS
		2462	-27.52	≤8.00	PASS
11N20SISO	Ant1	2412	-27.14	≤8.00	PASS
		2437	-28.05	≤8.00	PASS
		2462	-27.81	≤8.00	PASS
11N40SISO	Ant1	2422	-29.45	≤8.00	PASS
		2437	-30.05	≤8.00	PASS
		2452	-29.93	≤8.00	PASS
11AX20SISO	Ant1	2412	-29.53	≤8.00	PASS
		2437	-29.41	≤8.00	PASS
		2462	-29.58	≤8.00	PASS
11AX40SISO	Ant1	2422	-31.26	≤8.00	PASS
		2437	-31.45	≤8.00	PASS
		2452	-31.09	≤8.00	PASS

Test Graphs

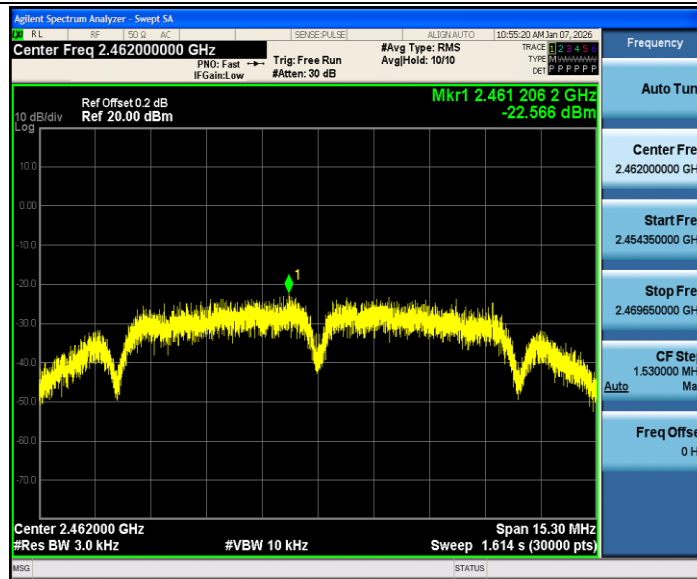
11B_Ant1_2412



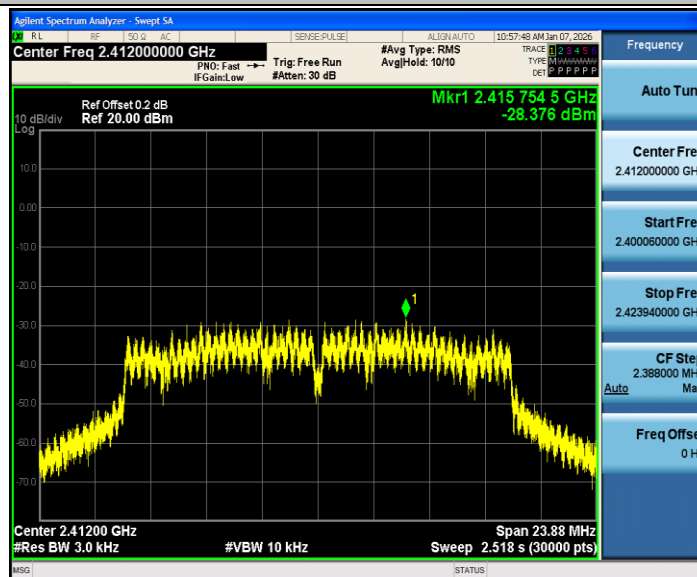
11B_Ant1_2437



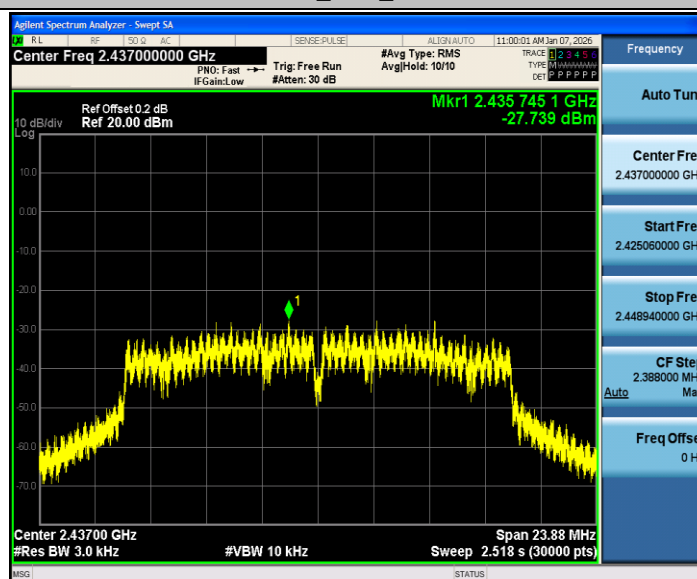
11B_Ant1_2462



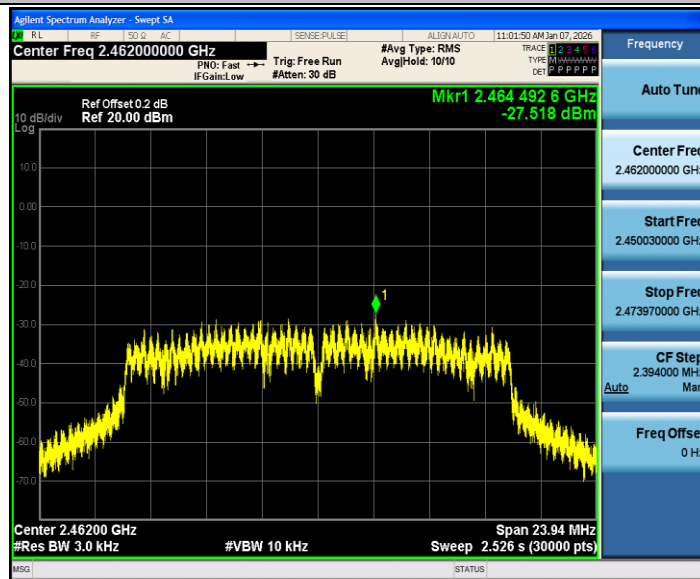
11G_Ant1_2412



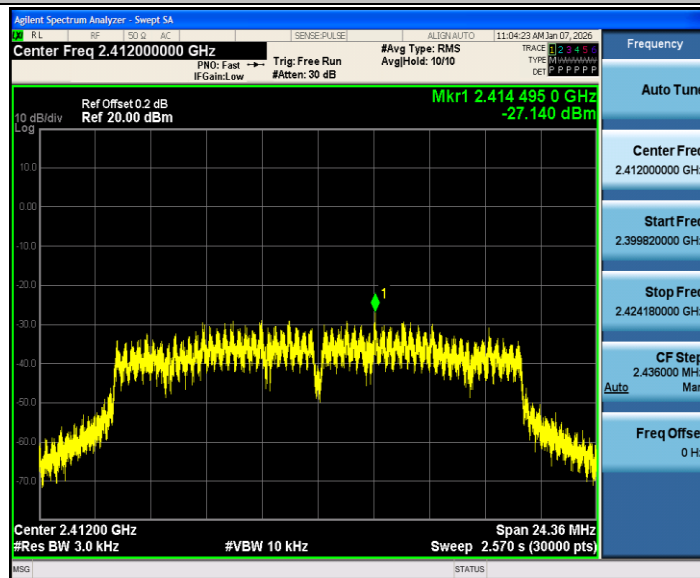
11G_Ant1_2437



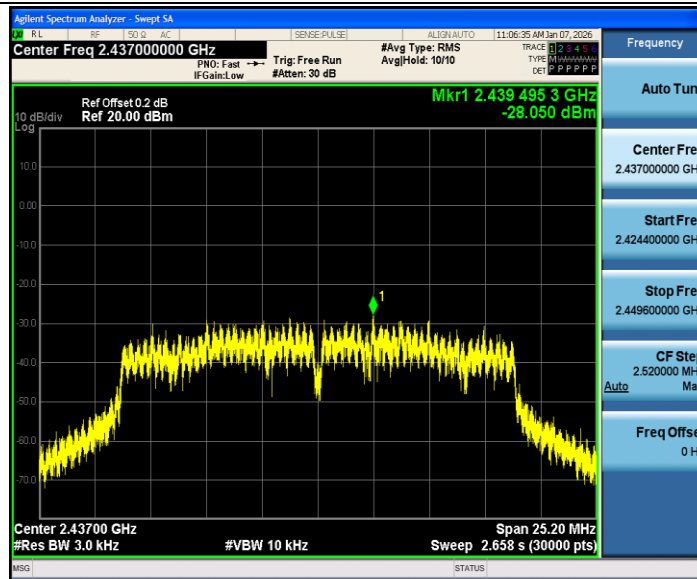
11G_Ant1_2462



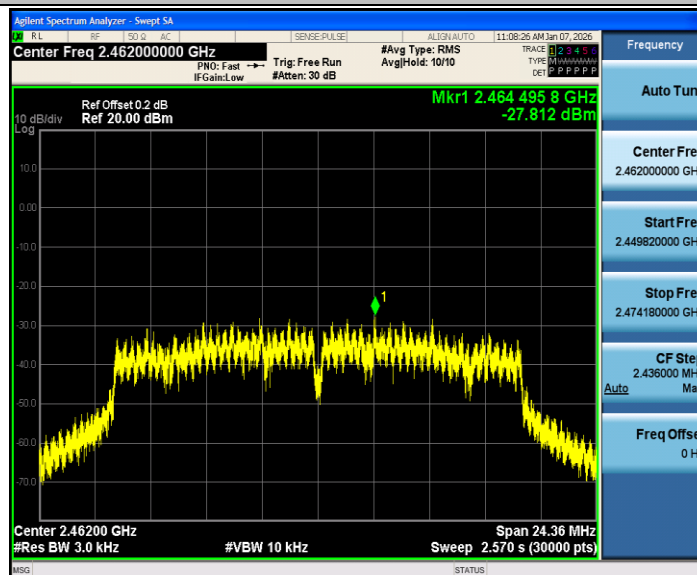
11N20SISO_Ant1_2412



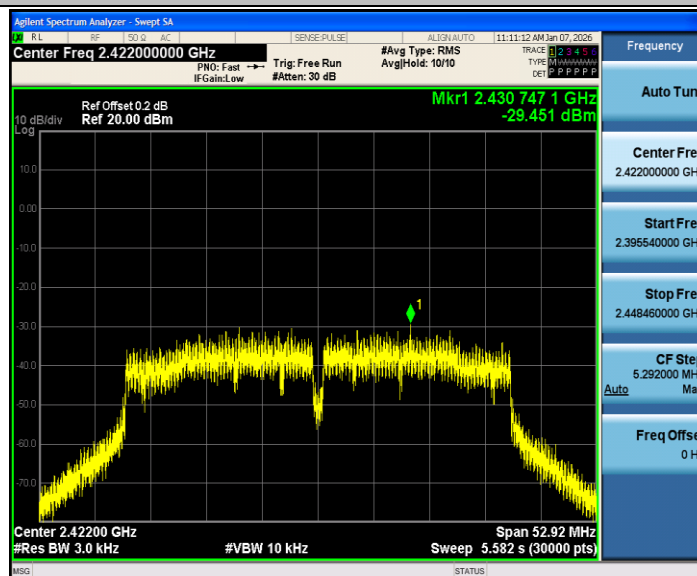
11N20SISO_Ant1_2437



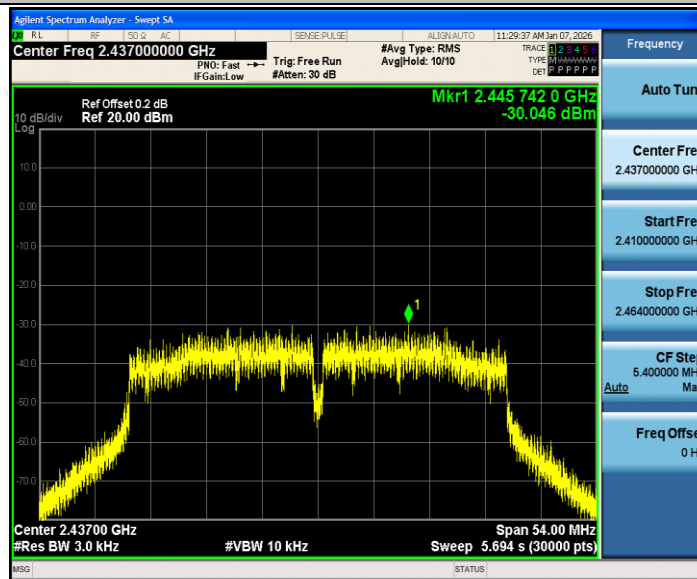
11N20SISO_Ant1_2462



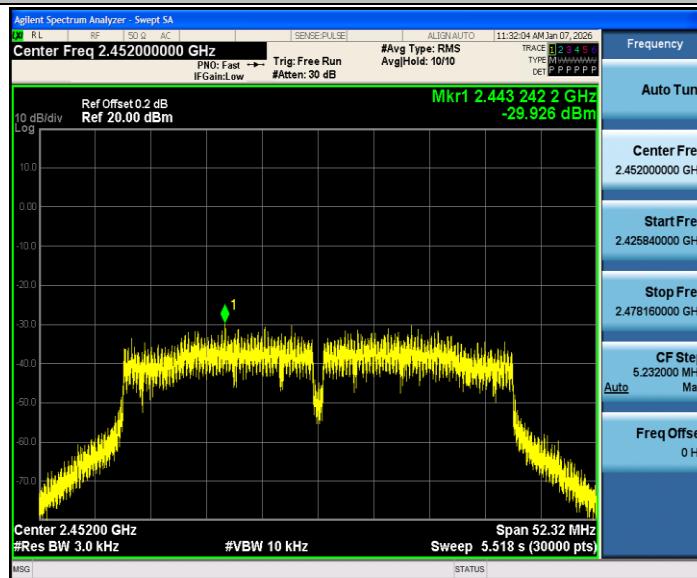
11N40SISO_Ant1_2422



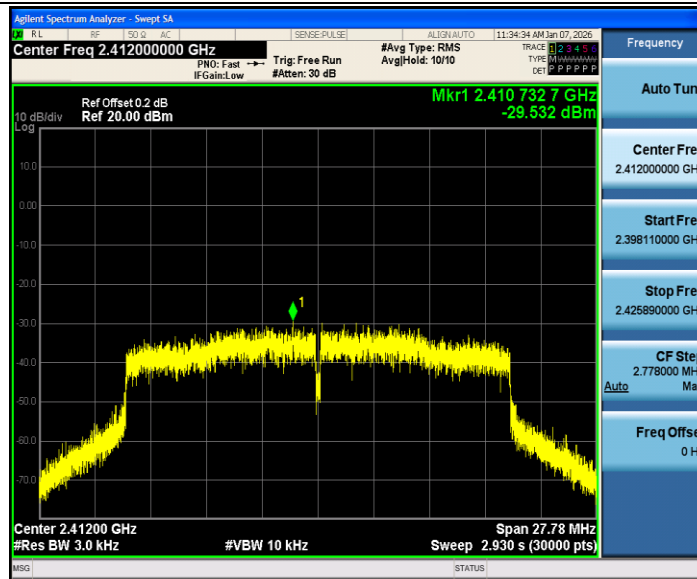
11N40SISO_Ant1_2437



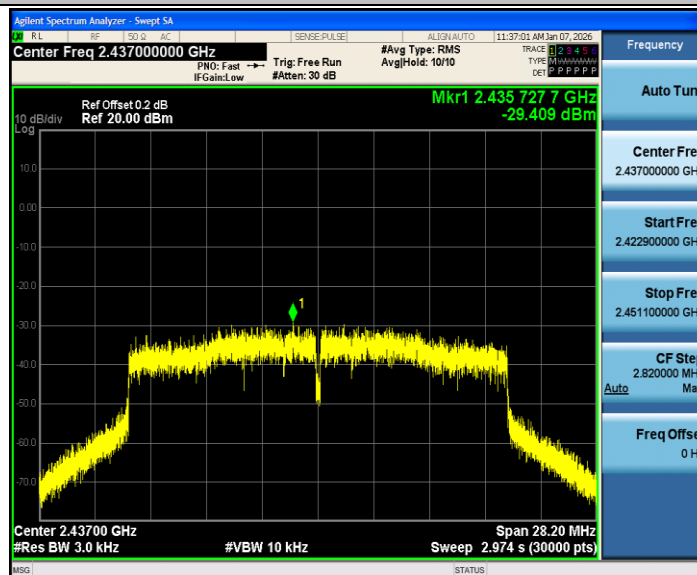
11N40SISO_Ant1_2452



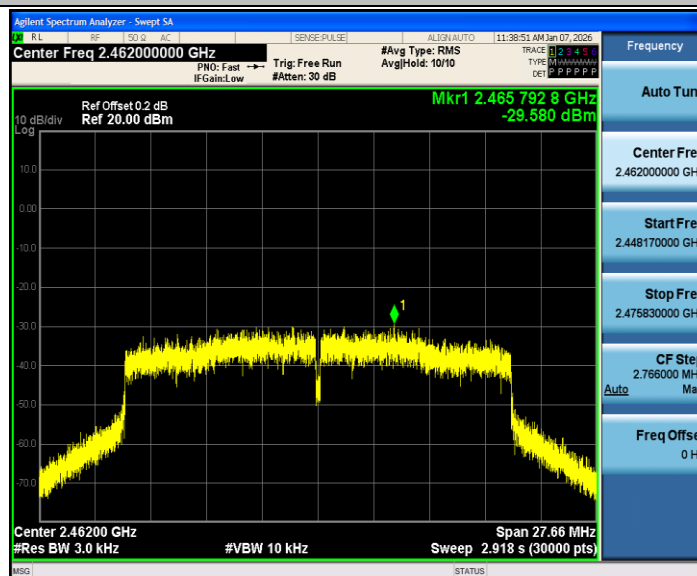
11AX20SISO_Ant1_2412



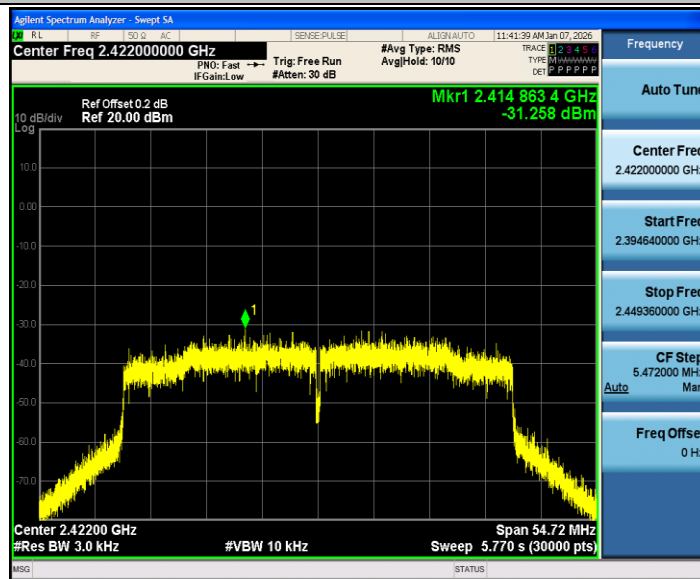
11AX20SISO_Ant1_2437



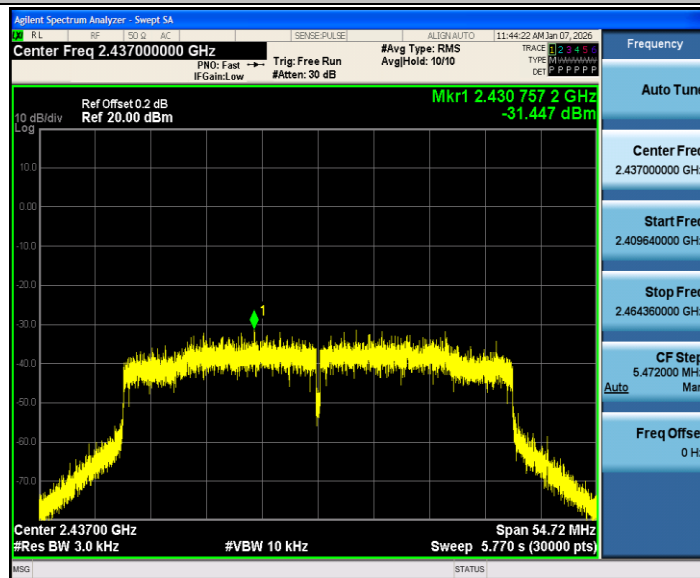
11AX20SISO_Ant1_2462



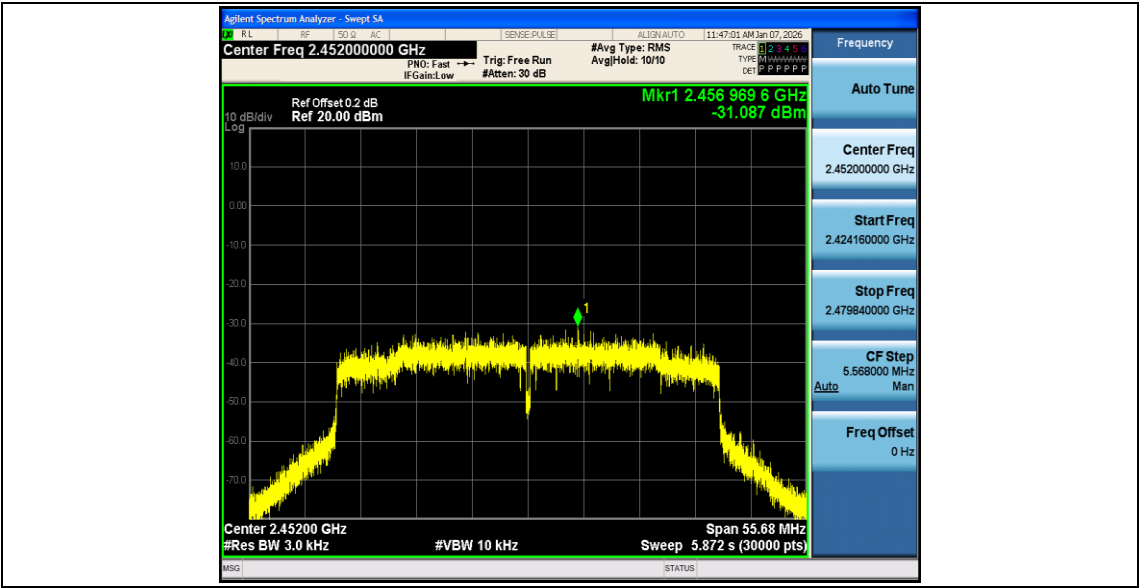
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



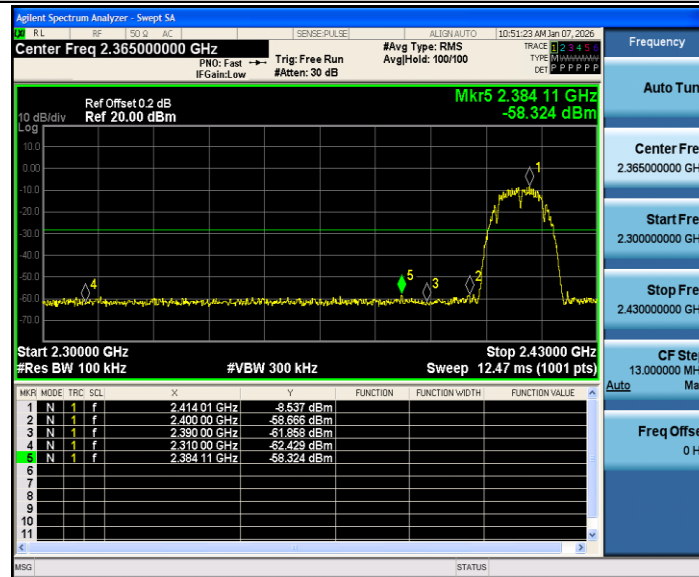
Appendix E: Band edge measurements

Test Result

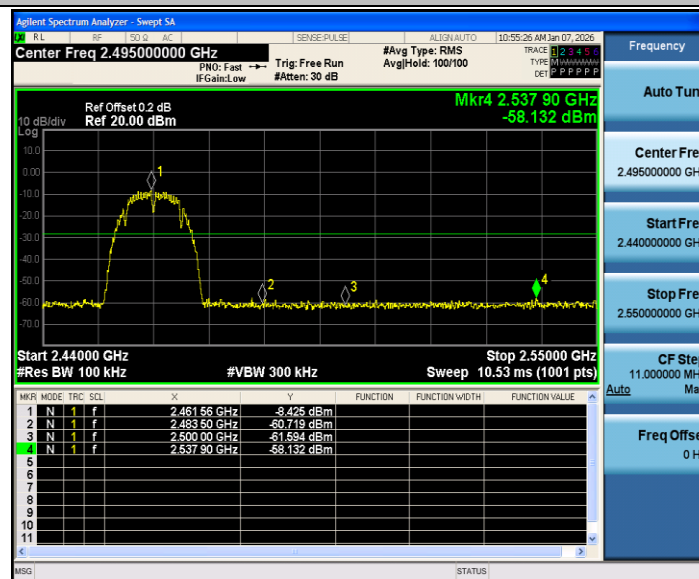
TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-8.54	-58.32	≤-28.54	PASS
		High	2462	-8.43	-58.13	≤-28.43	PASS
11G	Ant1	Low	2412	-13.04	-44.12	≤-33.04	PASS
		High	2462	-12.85	-57.64	≤-32.85	PASS
11N20SISO	Ant1	Low	2412	-13.07	-44.7	≤-33.07	PASS
		High	2462	-13.18	-57.69	≤-33.18	PASS
11N40SISO	Ant1	Low	2422	-15.83	-43.54	≤-35.83	PASS
		High	2452	-15.60	-57.85	≤-35.6	PASS
11AX20SISO	Ant1	Low	2412	-13.52	-43.38	≤-33.52	PASS
		High	2462	-13.30	-58.21	≤-33.3	PASS
11AX40SISO	Ant1	Low	2422	-16.03	-45.08	≤-36.03	PASS
		High	2452	-15.78	-58.66	≤-35.78	PASS

Test Graphs

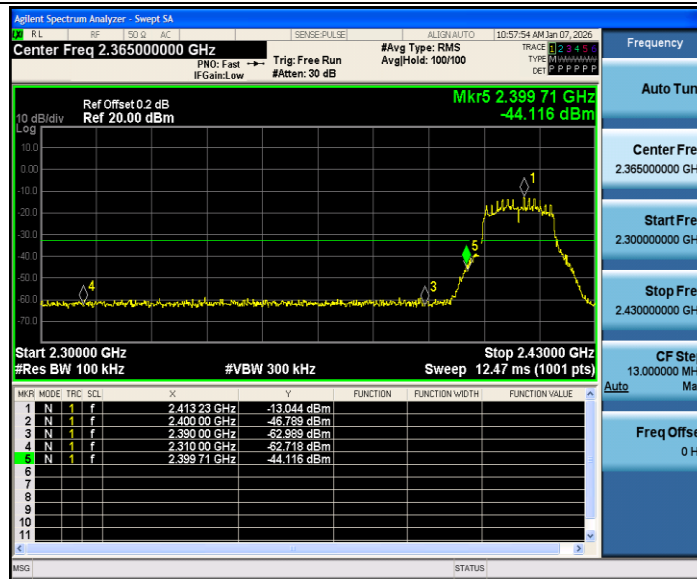
11B_Ant1_Low_2412



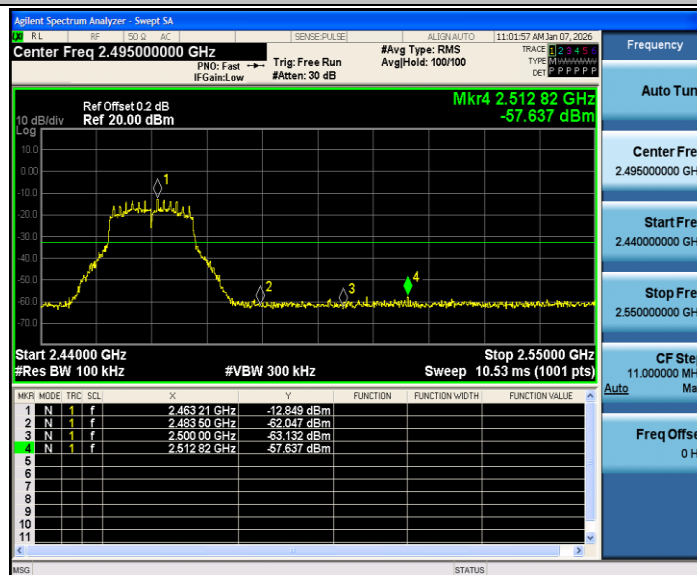
11B_Ant1_High_2462



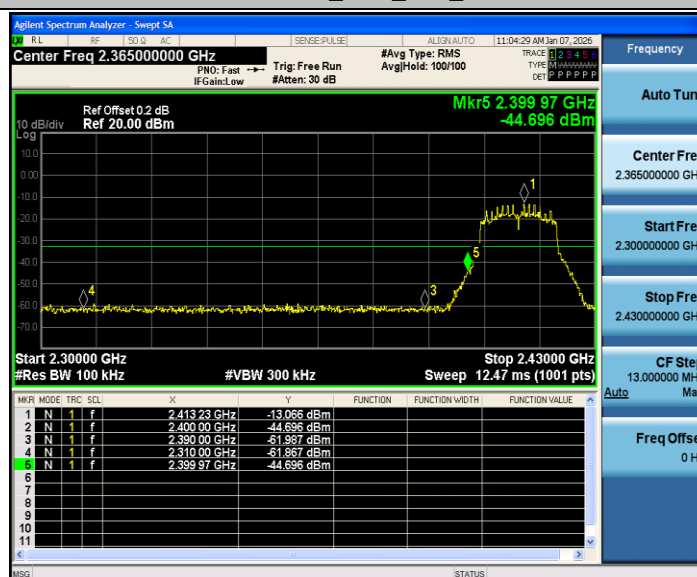
11G_Ant1_Low_2412



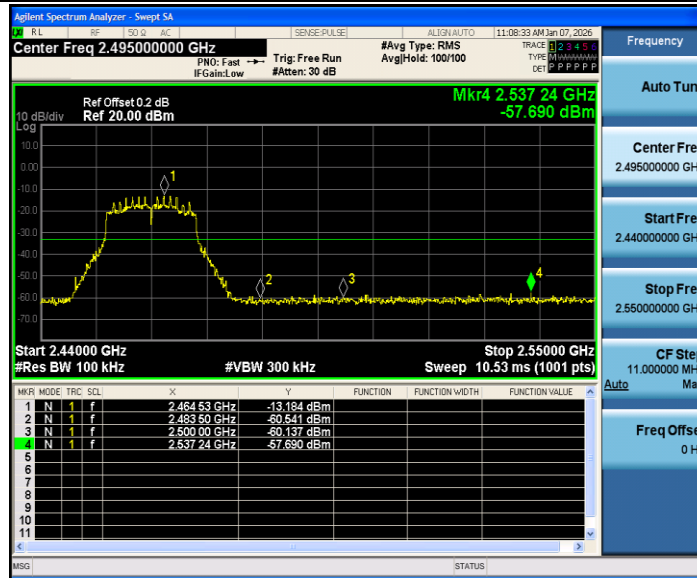
11G_Ant1_High_2462



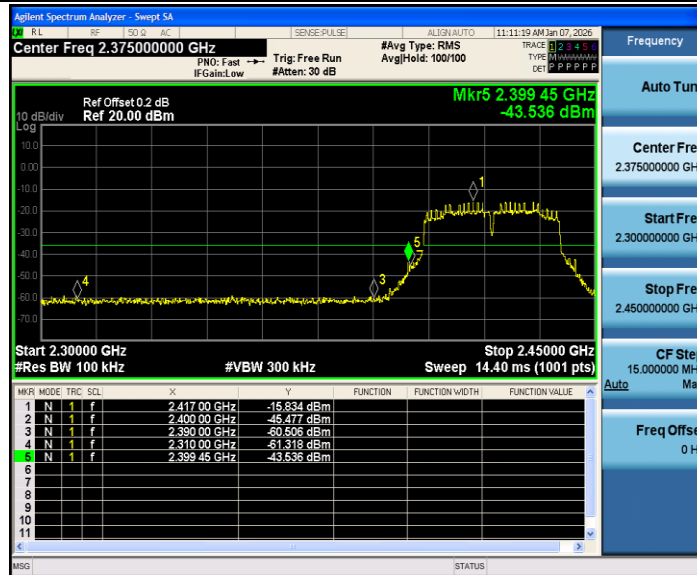
11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



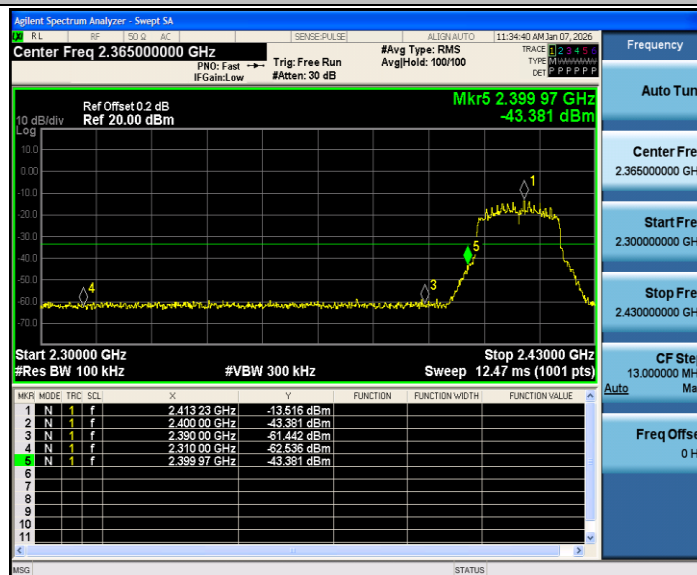
11N40SISO_Ant1_Low_2422



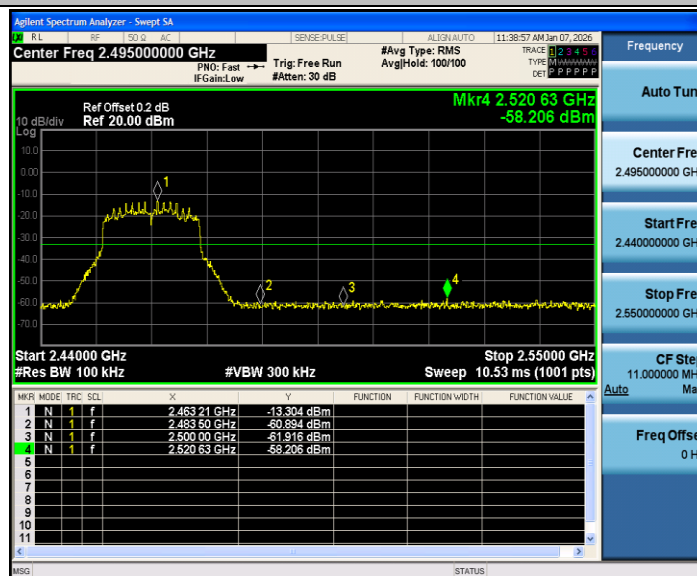
11N40SISO_Ant1_High_2452



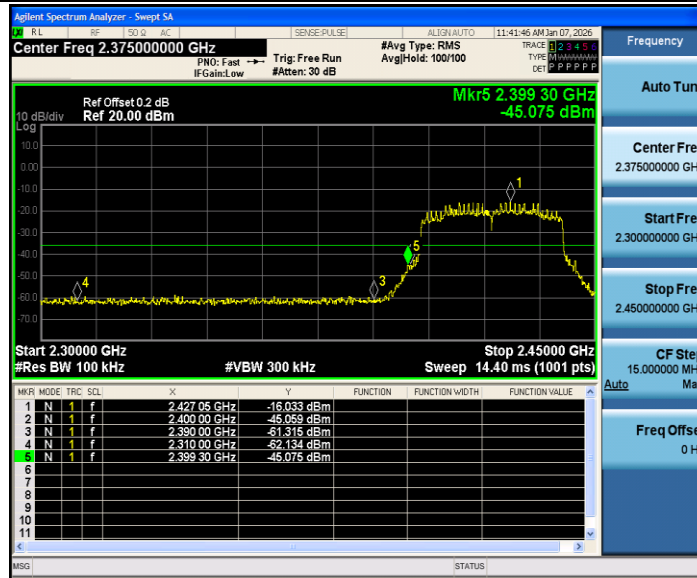
11AX20SISO_Ant1_Low_2412



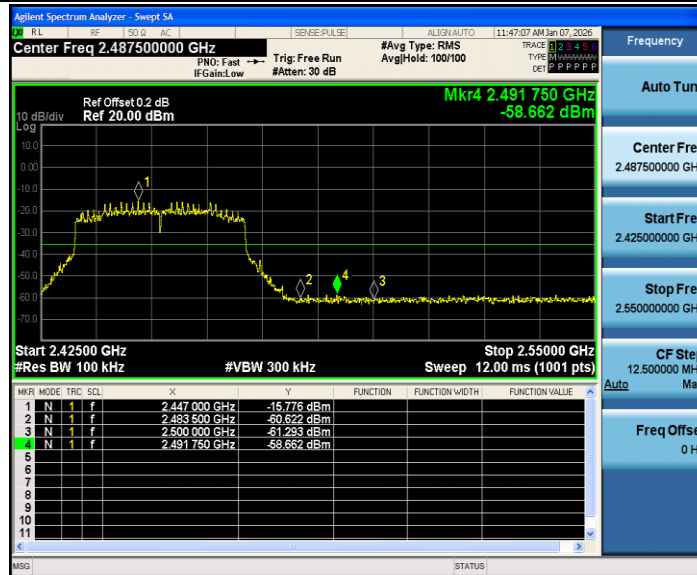
11AX20SISO_Ant1_High_2462



11AX40SISO_Ant1_Low_2422



11AX40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-8.96	-8.96	---	PASS
			30~1000	-8.96	-67.83	≤-28.96	PASS
			1000~26500	-8.96	-55.6	≤-28.96	PASS
		2437	Reference	-8.37	-8.37	---	PASS
			30~1000	-8.37	-67.86	≤-28.37	PASS
			1000~26500	-8.37	-55.72	≤-28.37	PASS
		2462	Reference	-9.16	-9.16	---	PASS
			30~1000	-9.16	-68.76	≤-29.16	PASS
			1000~26500	-9.16	-55.01	≤-29.16	PASS
11G	Ant1	2412	Reference	-13.47	-13.47	---	PASS
			30~1000	-13.47	-68.68	≤-33.47	PASS
			1000~26500	-13.47	-55.4	≤-33.47	PASS
		2437	Reference	-13.10	-13.10	---	PASS
			30~1000	-13.10	-68.52	≤-33.1	PASS
			1000~26500	-13.10	-55.27	≤-33.1	PASS
		2462	Reference	-13.10	-13.10	---	PASS
			30~1000	-13.10	-68.16	≤-33.1	PASS
			1000~26500	-13.10	-54.82	≤-33.1	PASS
11N20SISO	Ant1	2412	Reference	-13.97	-13.97	---	PASS
			30~1000	-13.97	-68.23	≤-33.97	PASS
			1000~26500	-13.97	-54.84	≤-33.97	PASS
		2437	Reference	-13.61	-13.61	---	PASS
			30~1000	-13.61	-67.6	≤-33.61	PASS
			1000~26500	-13.61	-55.52	≤-33.61	PASS
		2462	Reference	-13.54	-13.54	---	PASS
			30~1000	-13.54	-68.36	≤-33.54	PASS
			1000~26500	-13.54	-55.39	≤-33.54	PASS
11N40SISO	Ant1	2422	Reference	-15.80	-15.80	---	PASS
			30~1000	-15.80	-68.7	≤-35.8	PASS
			1000~26500	-15.80	-55.53	≤-35.8	PASS
		2437	Reference	-15.82	-15.82	---	PASS
			30~1000	-15.82	-68.65	≤-35.82	PASS
			1000~26500	-15.82	-55.39	≤-35.82	PASS
		2452	Reference	-16.56	-16.56	---	PASS
			30~1000	-16.56	-67.56	≤-36.56	PASS
			1000~26500	-16.56	-55.2	≤-36.56	PASS
11AX20SISO	Ant1	2412	Reference	-13.74	-13.74	---	PASS