

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BXL6-MORTALX5S

Company : Shenzhen Xinghe Video Communication Co., Ltd

EUT : TV BOX

Model Number : MORTAL X5S

Report No. : CTA26070601202

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	10.240	2431.920	2442.160	0.5	PASS
		2462	10.200	2456.920	2467.120	0.5	PASS
11G	Ant1	2412	15.360	2404.440	2419.800	0.5	PASS
		2437	15.800	2429.200	2445.000	0.5	PASS
		2462	15.680	2454.280	2469.960	0.5	PASS
11N20SISO	Ant1	2412	16.720	2403.640	2420.360	0.5	PASS
		2437	16.720	2428.680	2445.400	0.5	PASS
		2462	17.200	2453.400	2470.600	0.5	PASS
11N40SISO	Ant1	2422	35.360	2404.480	2439.840	0.5	PASS
		2437	35.840	2419.160	2455.000	0.5	PASS
		2452	34.880	2434.960	2469.840	0.5	PASS
11AX20SISO	Ant1	2412	18.600	2402.800	2421.400	0.5	PASS
		2437	18.320	2428.040	2446.360	0.5	PASS
		2462	18.440	2452.920	2471.360	0.5	PASS
11AX40SISO	Ant1	2422	36.160	2404.080	2440.240	0.5	PASS
		2437	36.560	2419.240	2455.800	0.5	PASS
		2452	36.560	2434.320	2470.880	0.5	PASS

Test Graphs

11B_Ant1_2412



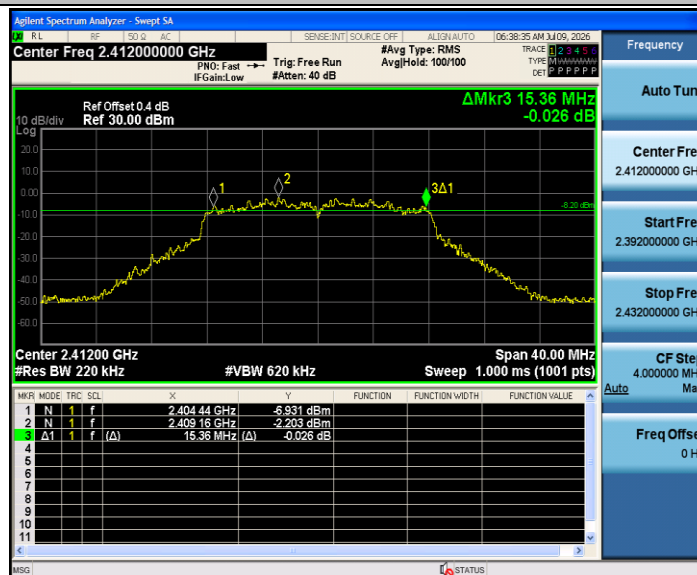
11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



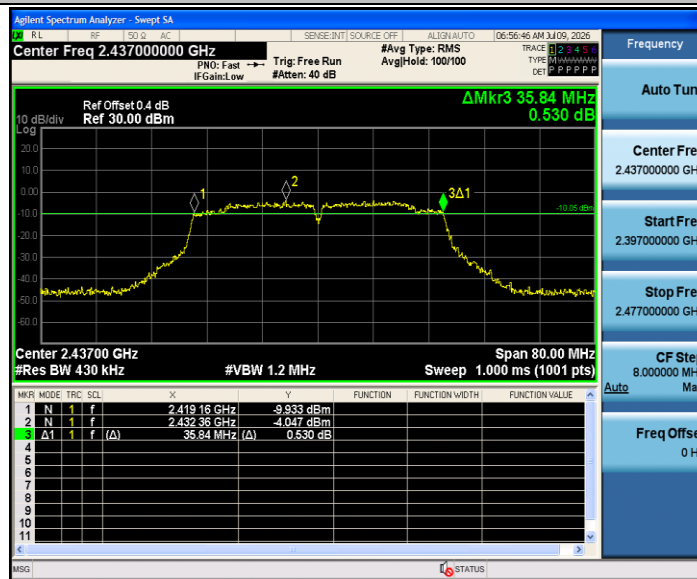
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



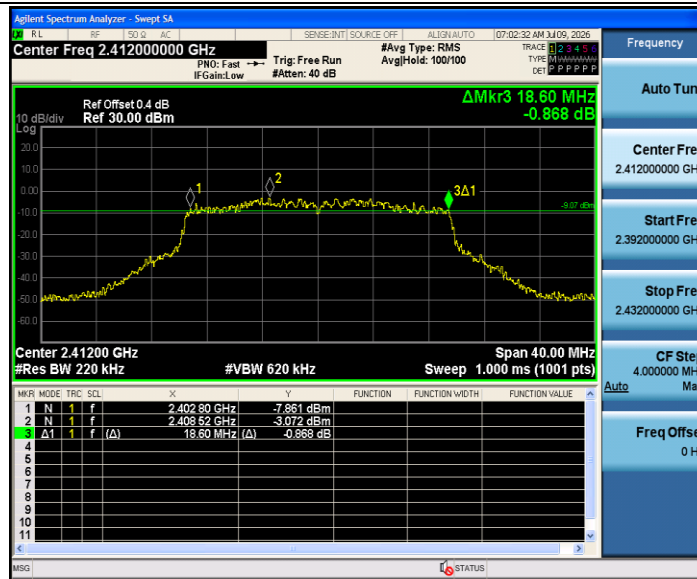
11N40SISO_Ant1_2437



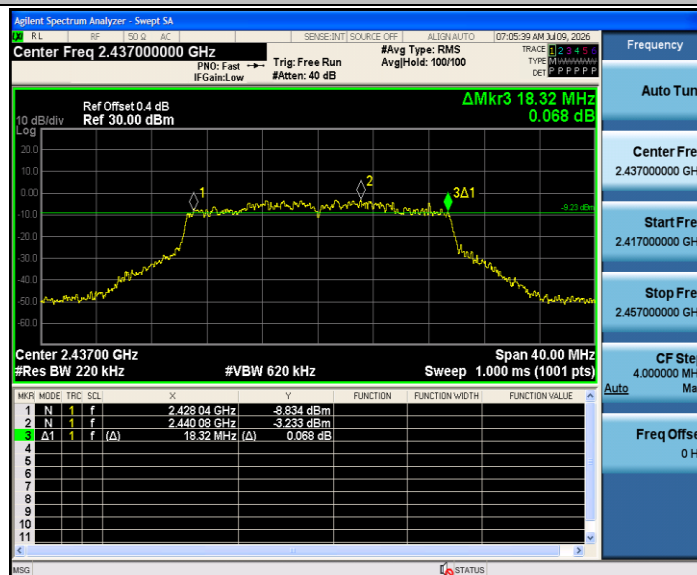
11N40SISO_Ant1_2452



11AX20SISO_Ant1_2412



11AX20SISO_Ant1_2437



11AX20SISO_Ant1_2462



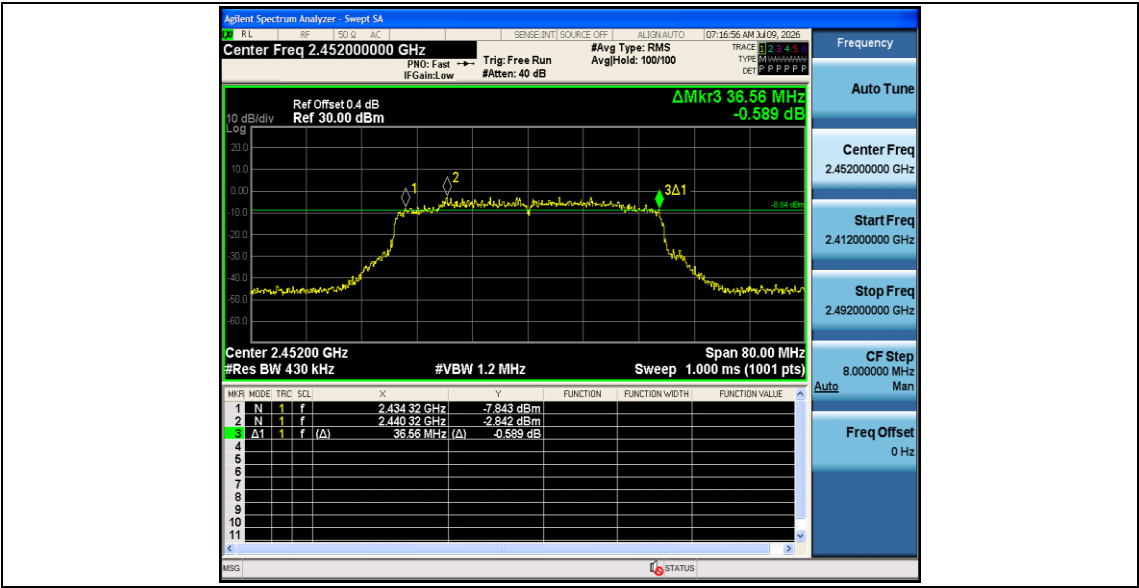
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



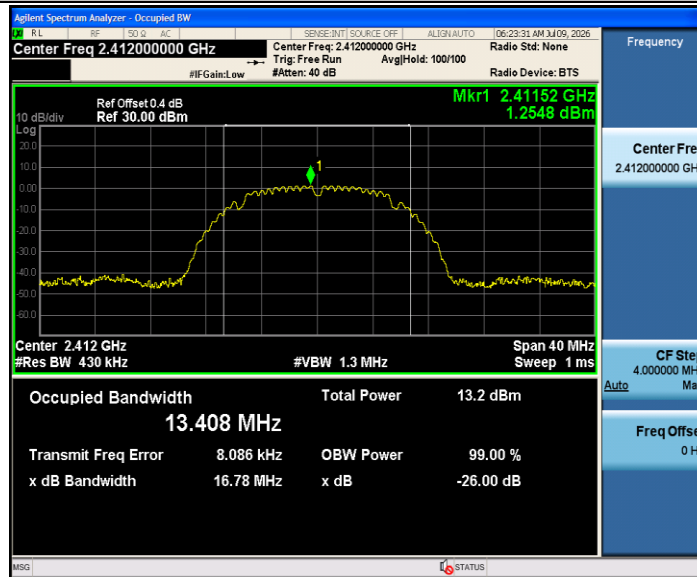
Appendix B: Occupied Channel Bandwidth

Test Result

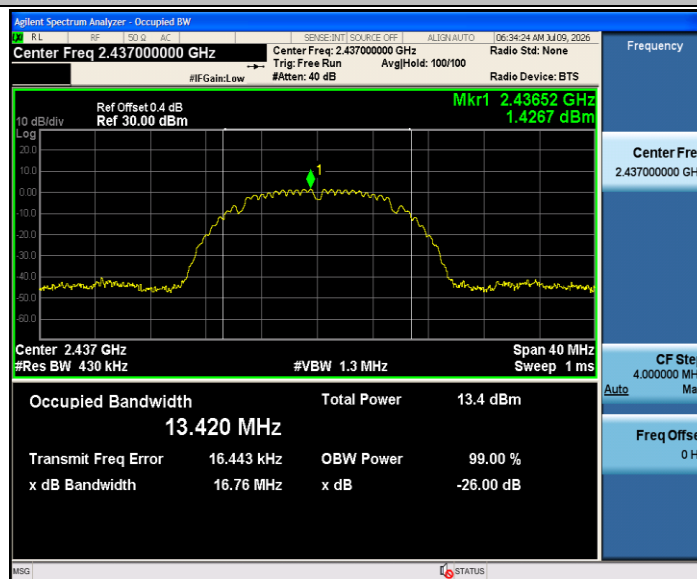
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.408	2405.3041	2418.7121	---	---
		2437	13.420	2430.3064	2443.7264	---	---
		2462	13.409	2455.3226	2468.7316	---	---
11G	Ant1	2412	16.830	2403.6095	2420.4395	---	---
		2437	16.800	2428.6186	2445.4186	---	---
		2462	16.842	2453.5962	2470.4382	---	---
11N20SISO	Ant1	2412	17.923	2403.0452	2420.9682	---	---
		2437	17.955	2428.0391	2445.9941	---	---
		2462	17.928	2453.0670	2470.9950	---	---
11N40SISO	Ant1	2422	36.002	2404.1465	2440.1485	---	---
		2437	36.056	2419.1216	2455.1776	---	---
		2452	36.110	2434.0889	2470.1989	---	---
11AX20SISO	Ant1	2412	18.902	2402.5685	2421.4705	---	---
		2437	18.912	2427.6082	2446.5202	---	---
		2462	18.920	2452.5684	2471.4884	---	---
11AX40SISO	Ant1	2422	37.625	2403.3194	2440.9444	---	---
		2437	37.536	2418.3830	2455.9190	---	---
		2452	37.684	2433.2491	2470.9331	---	---

Test Graphs

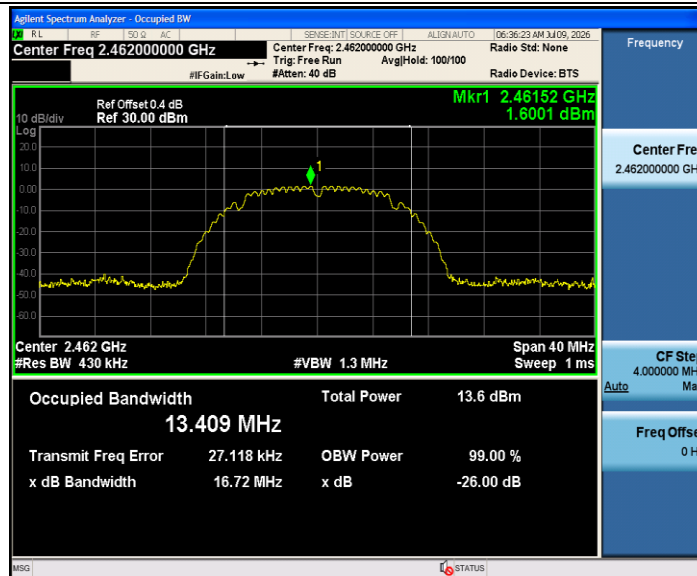
11B_Ant1_2412



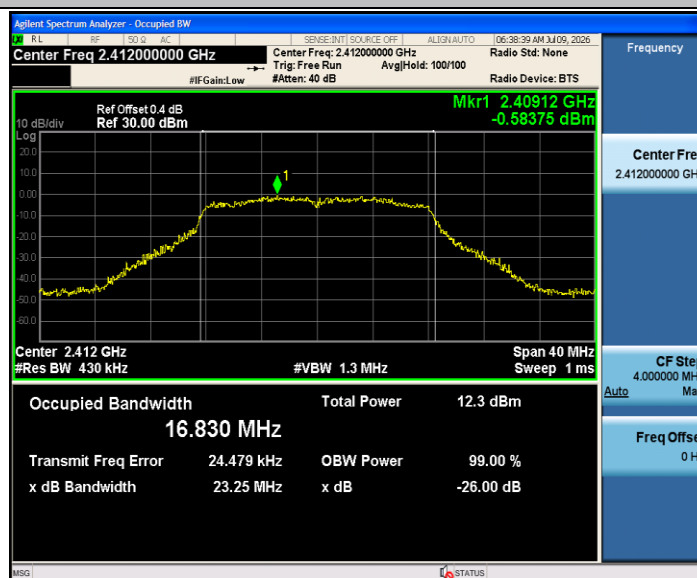
11B_Ant1_2437



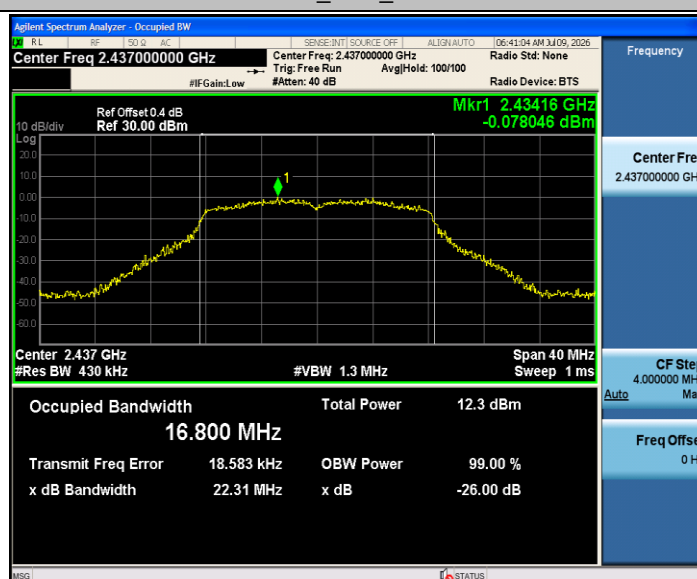
11B_Ant1_2462



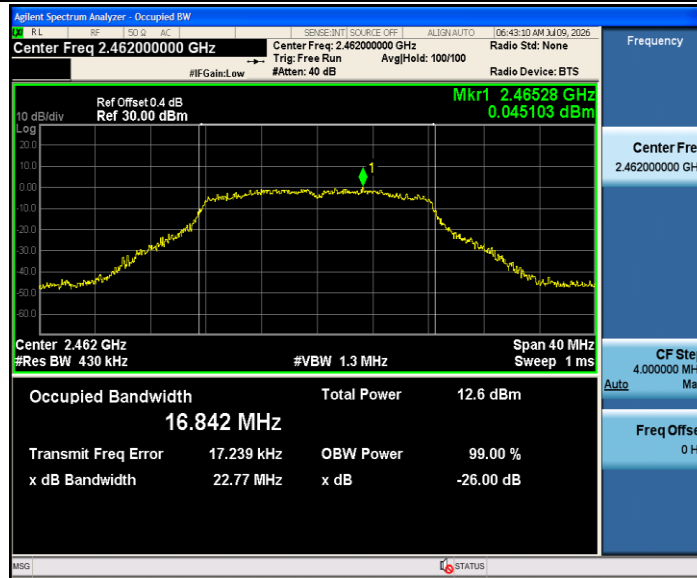
11G_Ant1_2412



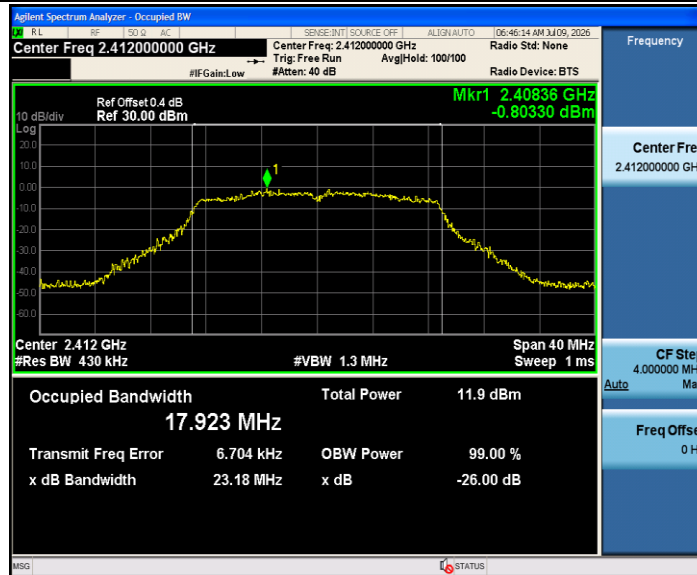
11G_Ant1_2437



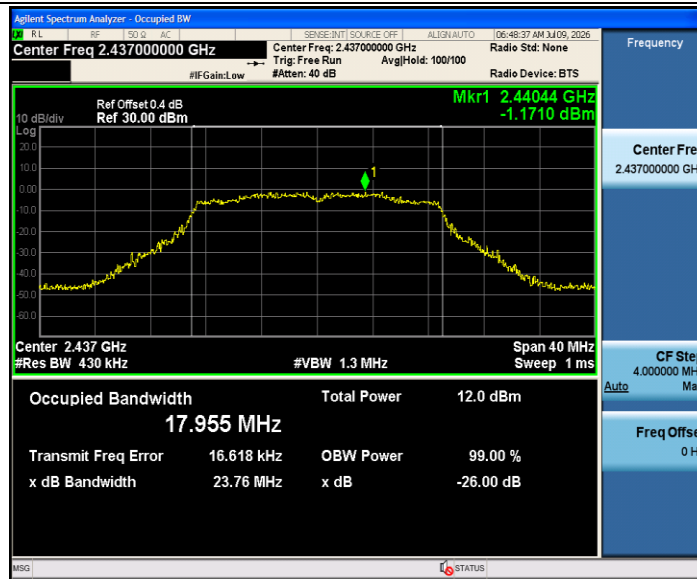
11G_Ant1_2462



11N20SISO_Ant1_2412



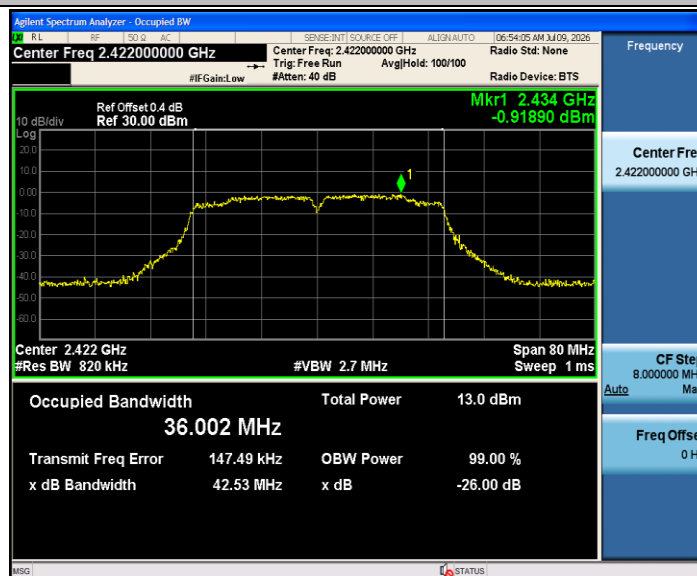
11N20SISO_Ant1_2437



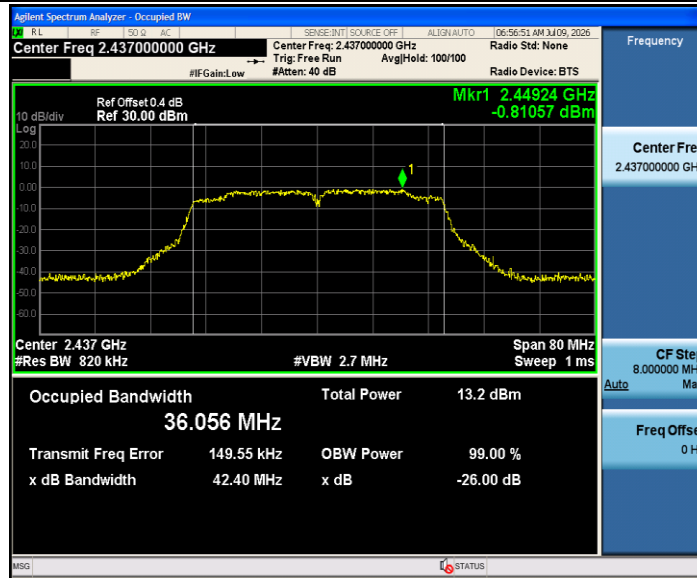
11N20SISO_Ant1_2462



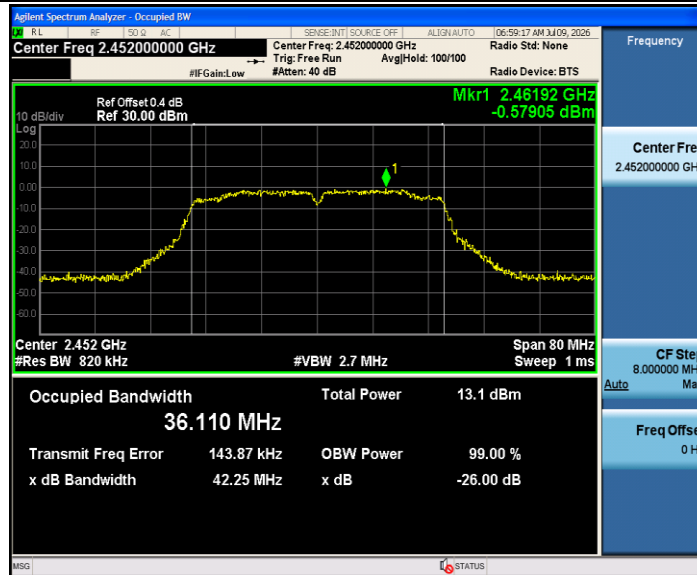
11N40SISO_Ant1_2422



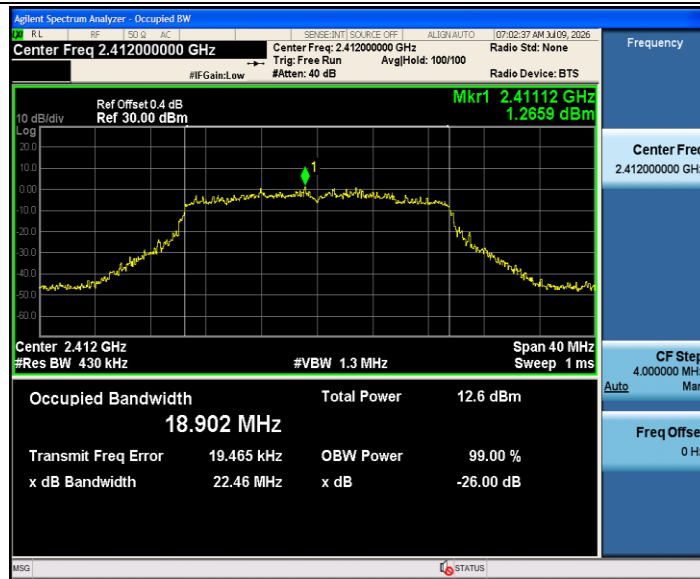
11N40SISO_Ant1_2437



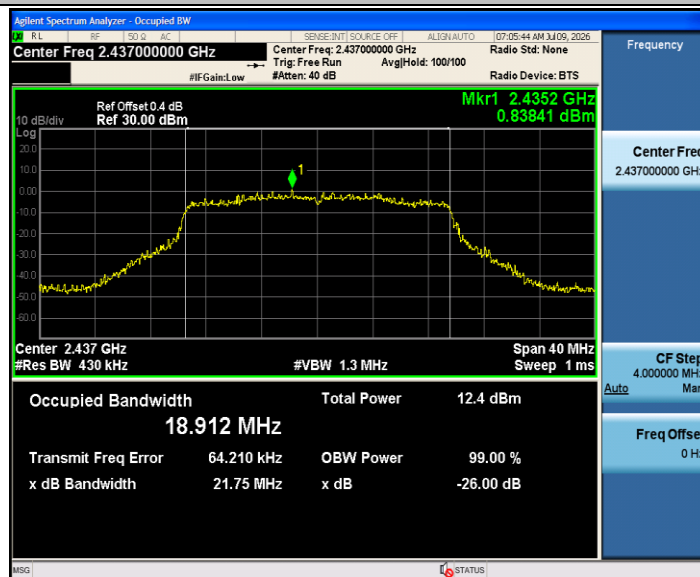
11N40SISO_Ant1_2452



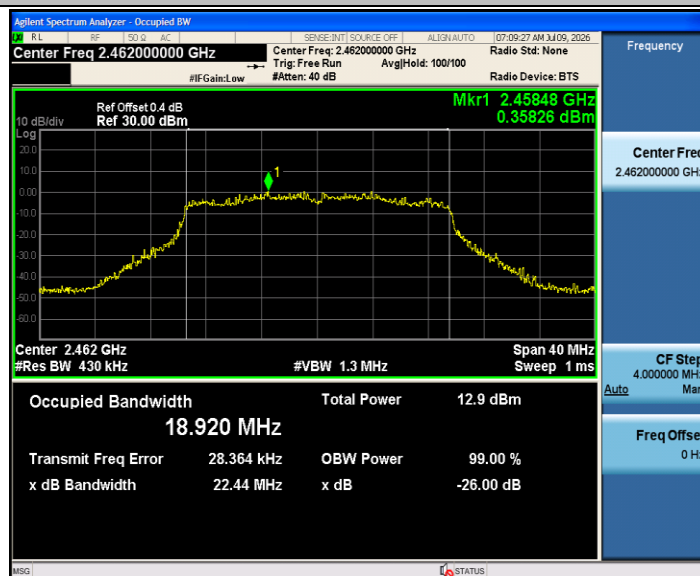
11AX20SISO_Ant1_2412



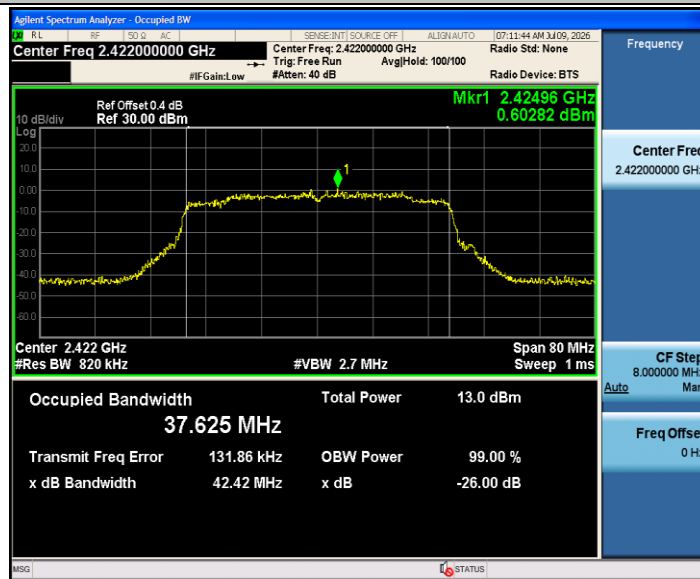
11AX20ISO_Ant1_2437



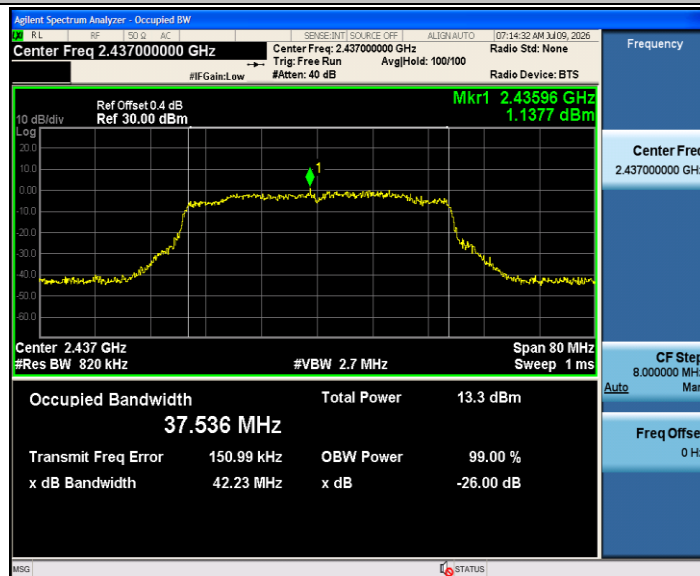
11AX20ISO_Ant1_2462



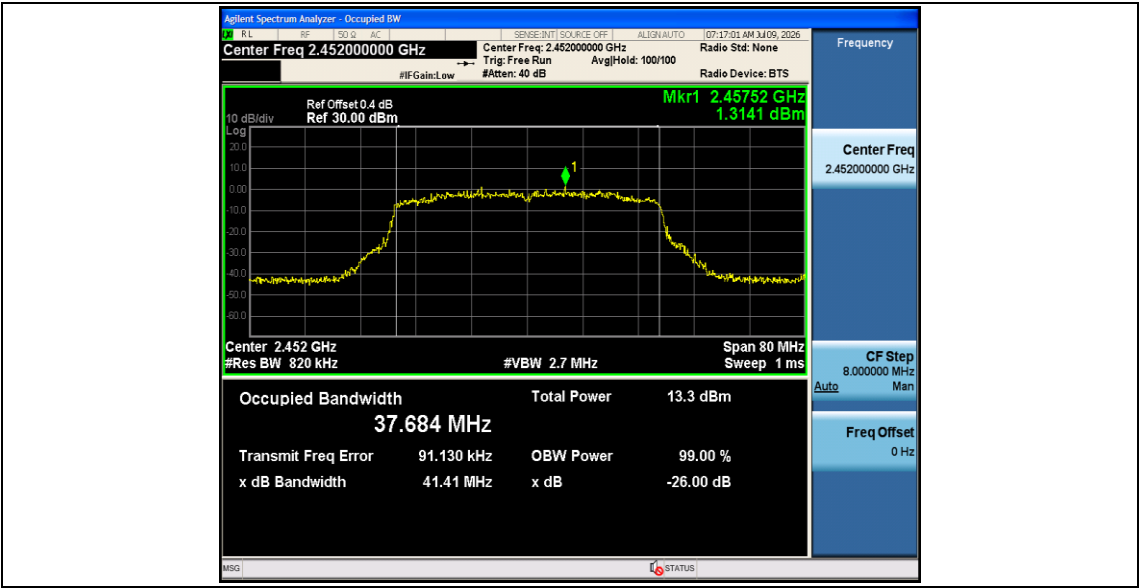
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	13.53	≤30.00	PASS
		2437	13.07	≤30.00	PASS
		2462	13.22	≤30.00	PASS
11G	Ant1	2412	13.13	≤30.00	PASS
		2437	13.32	≤30.00	PASS
		2462	13.38	≤30.00	PASS
11N20SISO	Ant1	2412	12.73	≤30.00	PASS
		2437	12.87	≤30.00	PASS
		2462	13.22	≤30.00	PASS
11N40SISO	Ant1	2422	13.20	≤30.00	PASS
		2437	13.39	≤30.00	PASS
		2452	13.23	≤30.00	PASS
11AX20SISO	Ant1	2412	12.88	≤30.00	PASS
		2437	13.13	≤30.00	PASS
		2462	13.29	≤30.00	PASS
11AX40SISO	Ant1	2422	13.04	≤30.00	PASS
		2437	13.24	≤30.00	PASS
		2452	13.31	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

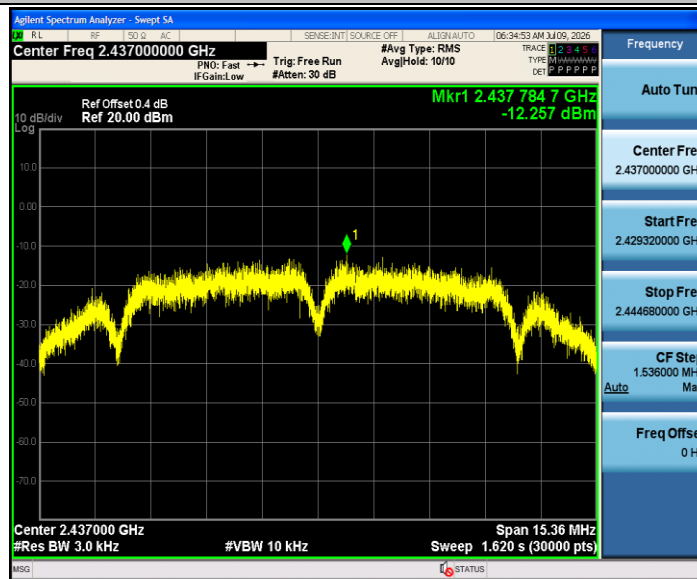
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-12.20	≤8.00	PASS
		2437	-12.26	≤8.00	PASS
		2462	-12.86	≤8.00	PASS
11G	Ant1	2412	-18.09	≤8.00	PASS
		2437	-17.86	≤8.00	PASS
		2462	-18.63	≤8.00	PASS
11N20SISO	Ant1	2412	-19.14	≤8.00	PASS
		2437	-18.83	≤8.00	PASS
		2462	-18.90	≤8.00	PASS
11N40SISO	Ant1	2422	-22.03	≤8.00	PASS
		2437	-20.96	≤8.00	PASS
		2452	-21.79	≤8.00	PASS
11AX20SISO	Ant1	2412	-20.09	≤8.00	PASS
		2437	-20.14	≤8.00	PASS
		2462	-19.10	≤8.00	PASS
11AX40SISO	Ant1	2422	-22.86	≤8.00	PASS
		2437	-22.57	≤8.00	PASS
		2452	-23.26	≤8.00	PASS

Test Graphs

11B_Ant1_2412



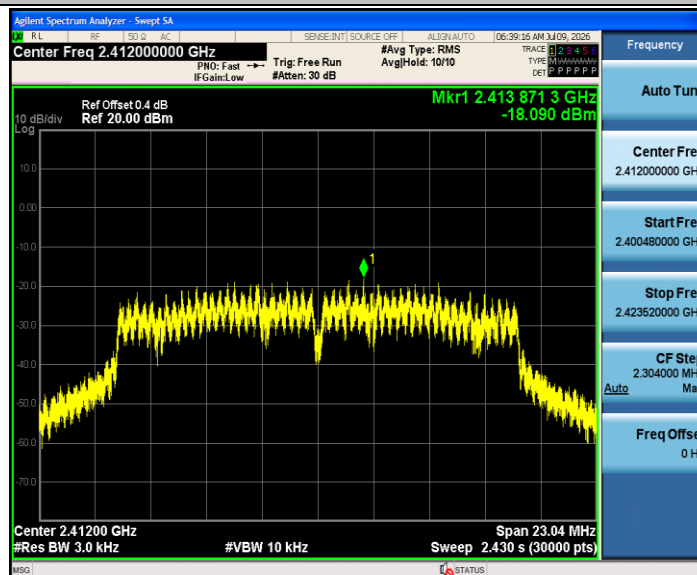
11B_Ant1_2437



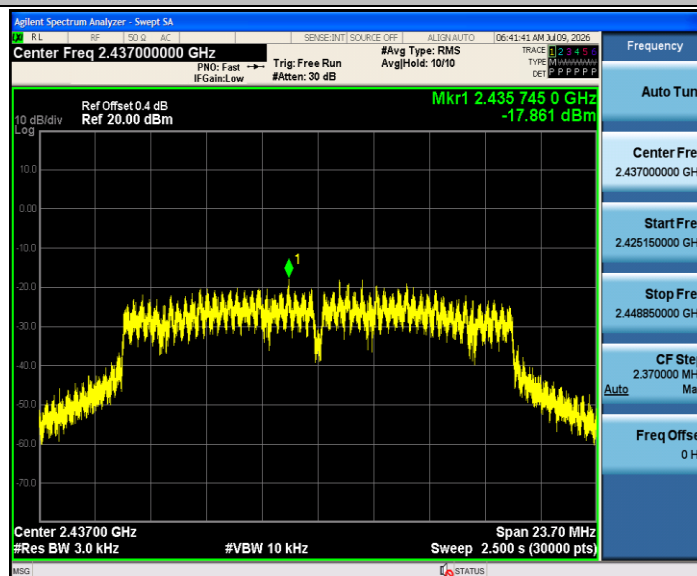
11B_Ant1_2462



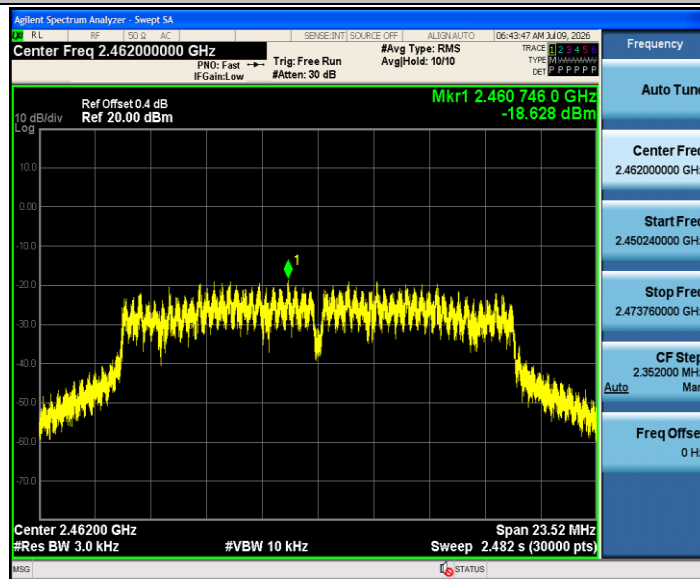
11G_Ant1_2412



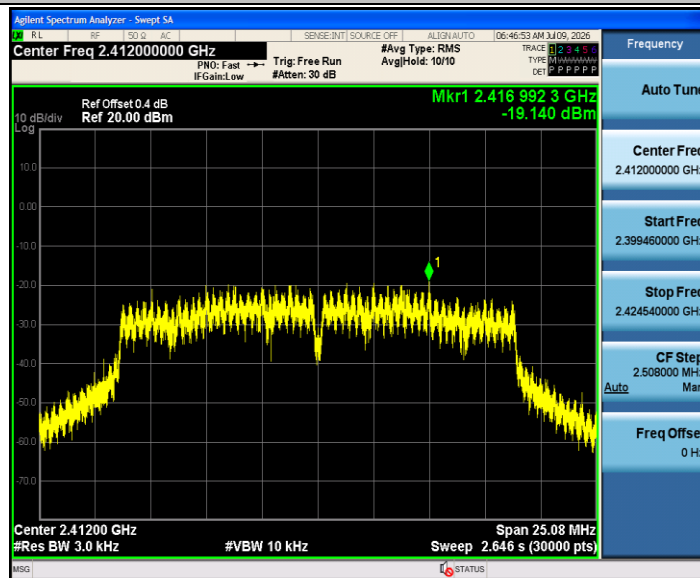
11G_Ant1_2437



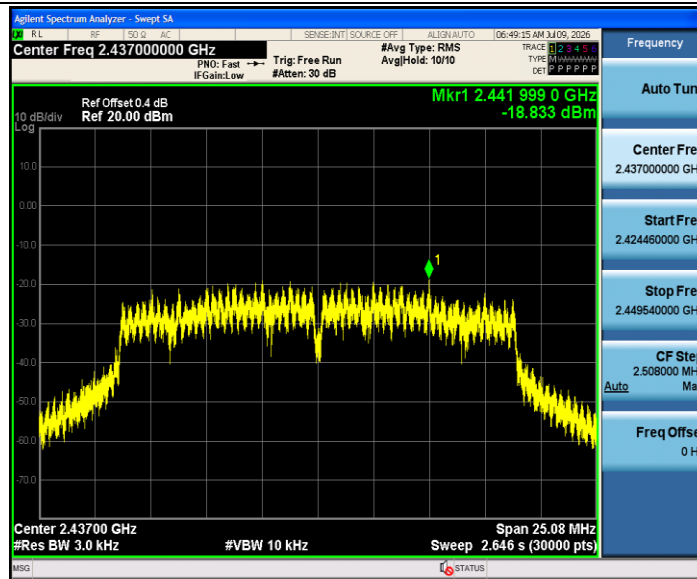
11G_Ant1_2462



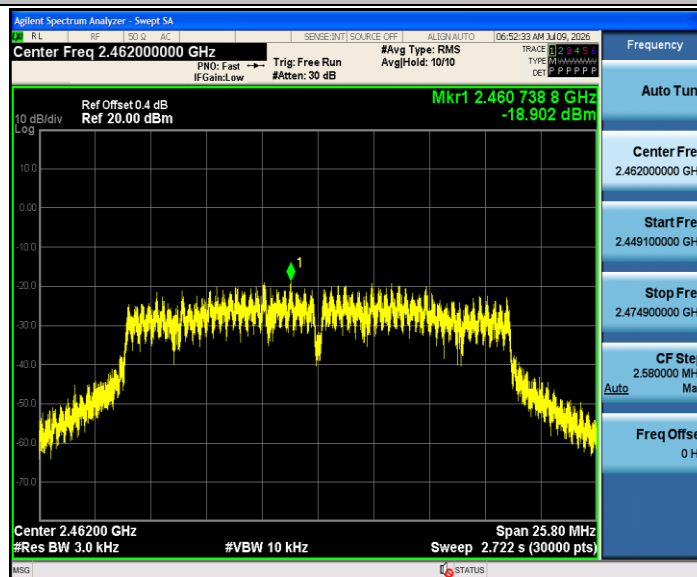
11N20SISO_Ant1_2412



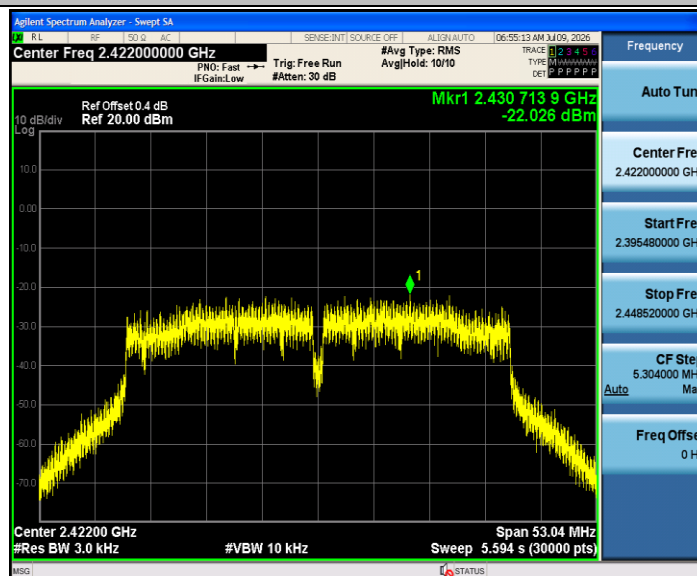
11N20SISO_Ant1_2437



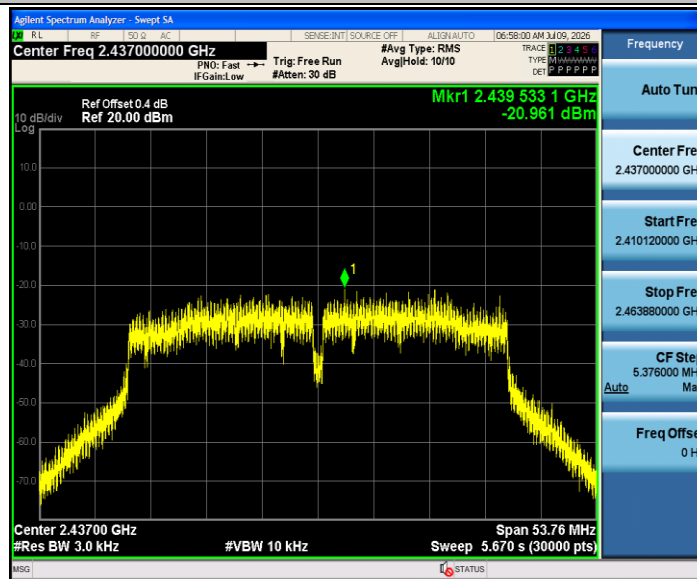
11N20SISO_Ant1_2462



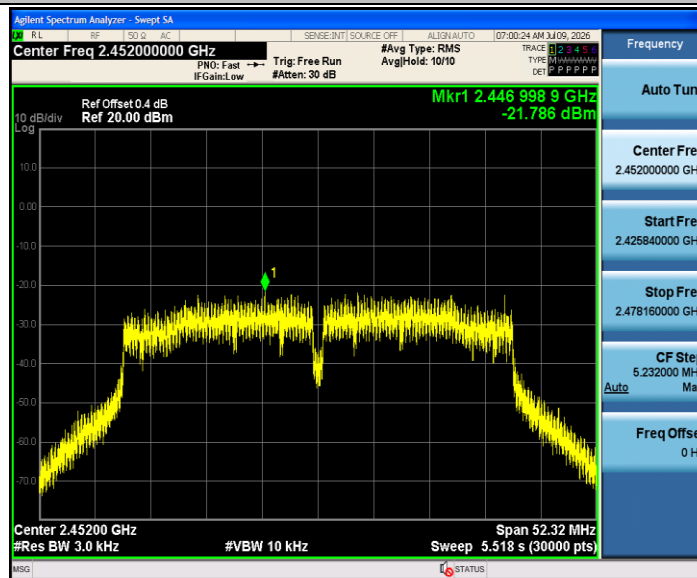
11N40SISO_Ant1_2422



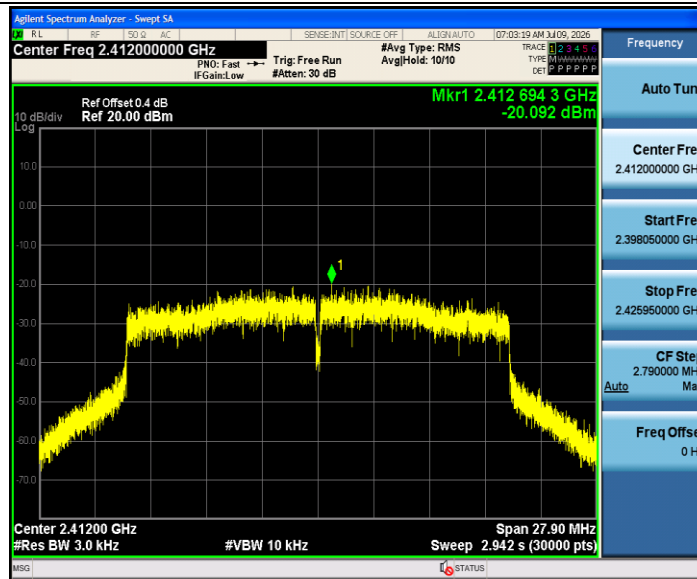
11N40SISO_Ant1_2437



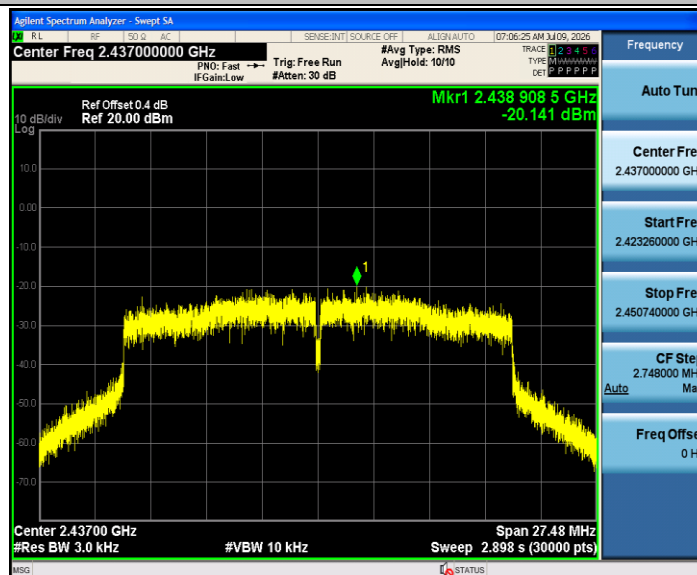
11N40SISO_Ant1_2452



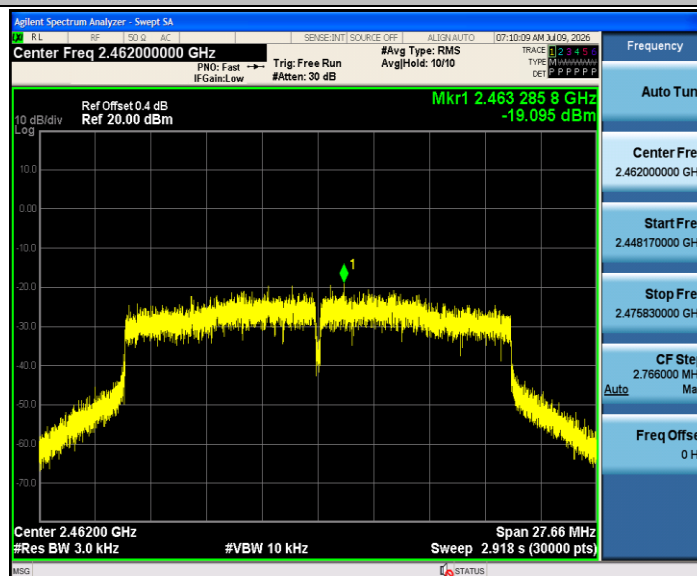
11AX20SISO_Ant1_2412



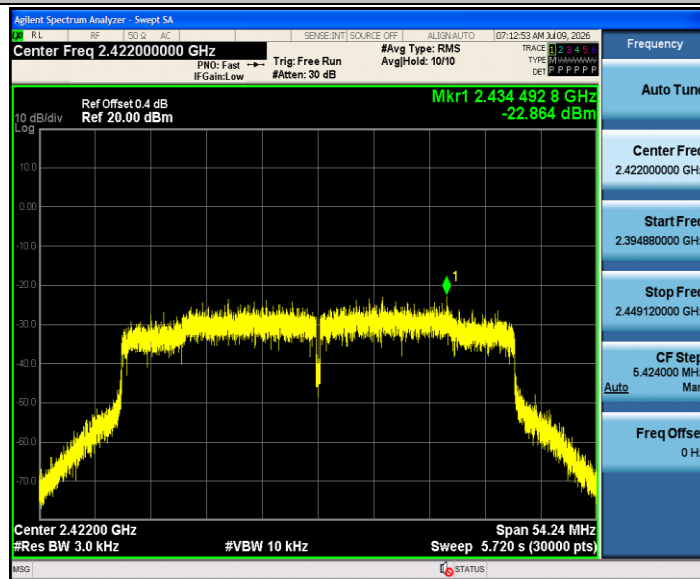
11AX20SISO_Ant1_2437



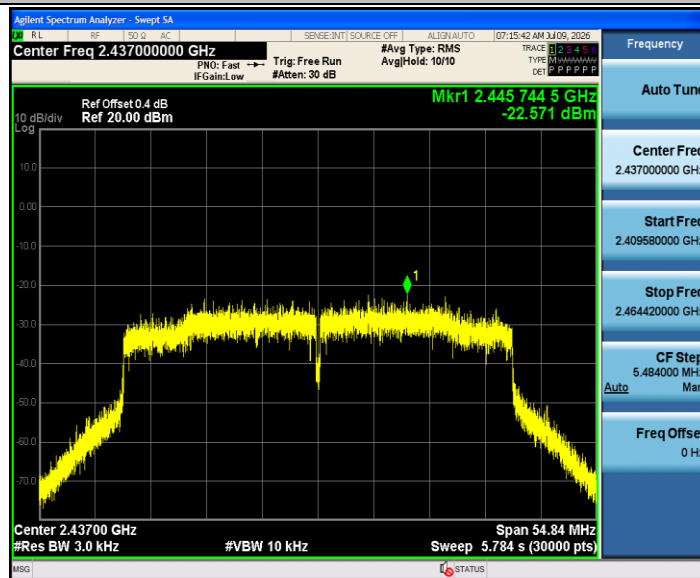
11AX20SISO_Ant1_2462



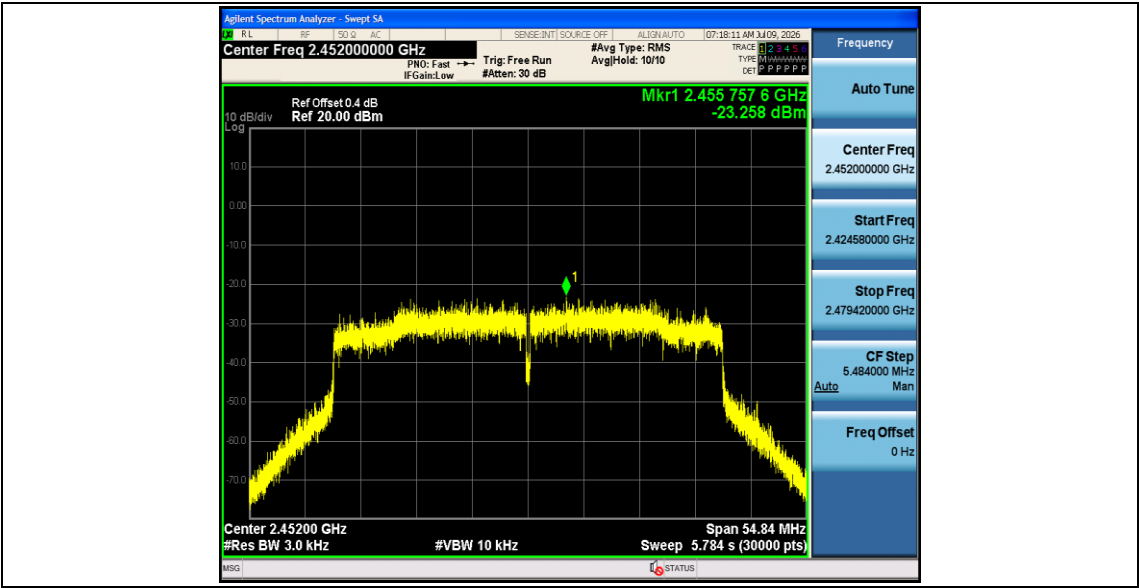
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



Appendix E: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-0.66	-0.66	---	PASS
			30~1000	-0.66	-68.35	≤-20.66	PASS
			1000~26500	-0.66	-46.22	≤-20.66	PASS
		2437	Reference	0.67	0.67	---	PASS
			30~1000	0.67	-69.12	≤-19.33	PASS
			1000~26500	0.67	-46.36	≤-19.33	PASS
		2462	Reference	1.37	1.37	---	PASS
			30~1000	1.37	-67.84	≤-18.63	PASS
			1000~26500	1.37	-46.67	≤-18.63	PASS
11G	Ant1	2412	Reference	-3.98	-3.98	---	PASS
			30~1000	-3.98	-68.52	≤-23.98	PASS
			1000~26500	-3.98	-46.86	≤-23.98	PASS
		2437	Reference	-3.89	-3.89	---	PASS
			30~1000	-3.89	-69.1	≤-23.89	PASS
			1000~26500	-3.89	-46.03	≤-23.89	PASS
		2462	Reference	-3.84	-3.84	---	PASS
			30~1000	-3.84	-68.8	≤-23.84	PASS
			1000~26500	-3.84	-46.68	≤-23.84	PASS
11N20SISO	Ant1	2412	Reference	-4.71	-4.71	---	PASS
			30~1000	-4.71	-68.04	≤-24.71	PASS
			1000~26500	-4.71	-46.3	≤-24.71	PASS
		2437	Reference	-3.89	-3.89	---	PASS
			30~1000	-3.89	-69.33	≤-23.89	PASS
			1000~26500	-3.89	-46.05	≤-23.89	PASS
		2462	Reference	-4.09	-4.09	---	PASS
			30~1000	-4.09	-69.72	≤-24.09	PASS
			1000~26500	-4.09	-46.73	≤-24.09	PASS
11N40SISO	Ant1	2422	Reference	-6.75	-6.75	---	PASS
			30~1000	-6.75	-68.91	≤-26.75	PASS
			1000~26500	-6.75	-46.35	≤-26.75	PASS
		2437	Reference	-6.68	-6.68	---	PASS
			30~1000	-6.68	-68.63	≤-26.68	PASS
			1000~26500	-6.68	-46.79	≤-26.68	PASS
		2452	Reference	-6.54	-6.54	---	PASS
			30~1000	-6.54	-69.32	≤-26.54	PASS
			1000~26500	-6.54	-47.37	≤-26.54	PASS

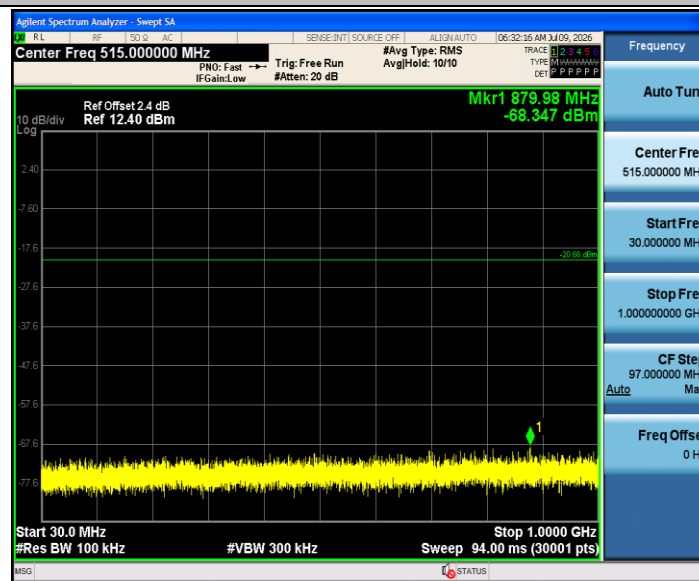
11AX20SISO	Ant1	2412	Reference	-5.79	-5.79	---	PASS
			30~1000	-5.79	-68.68	≤ -25.79	PASS
			1000~26500	-5.79	-46.56	≤ -25.79	PASS
		2437	Reference	-7.15	-7.15	---	PASS
			30~1000	-7.15	-68.32	≤ -27.15	PASS
			1000~26500	-7.15	-46.53	≤ -27.15	PASS
		2462	Reference	-6.79	-6.79	---	PASS
			30~1000	-6.79	-68.84	≤ -26.79	PASS
			1000~26500	-6.79	-46.57	≤ -26.79	PASS
11AX40SISO	Ant1	2422	Reference	-8.14	-8.14	---	PASS
			30~1000	-8.14	-68.62	≤ -28.14	PASS
			1000~26500	-8.14	-45.45	≤ -28.14	PASS
		2437	Reference	-7.10	-7.10	---	PASS
			30~1000	-7.10	-68.69	≤ -27.1	PASS
			1000~26500	-7.10	-46.82	≤ -27.1	PASS
		2452	Reference	-7.52	-7.52	---	PASS
			30~1000	-7.52	-68.78	≤ -27.52	PASS
			1000~26500	-7.52	-46.87	≤ -27.52	PASS

Test Graphs

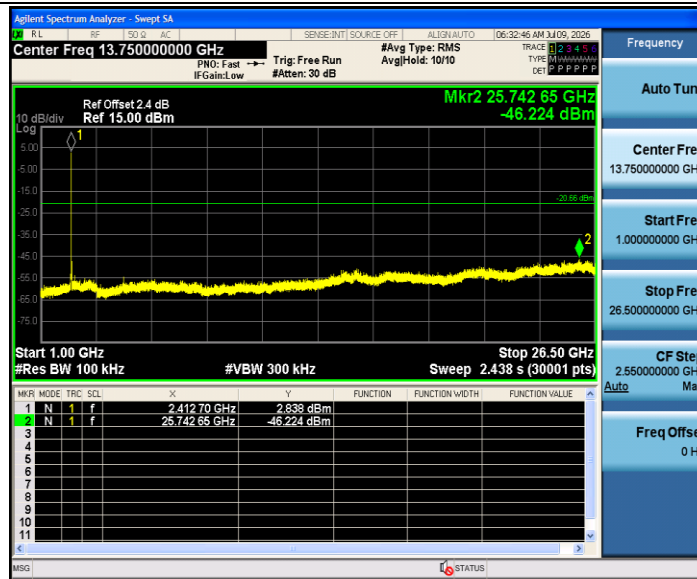
11B_Ant1_2412_0~Reference



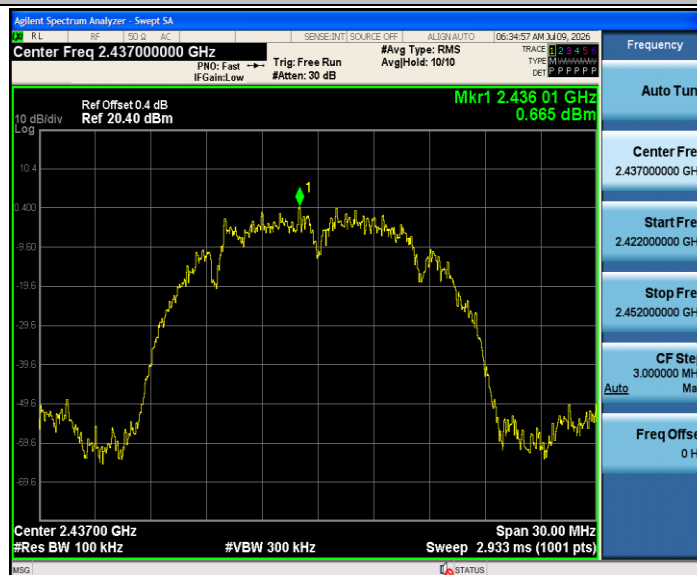
11B_Ant1_2412_30~1000



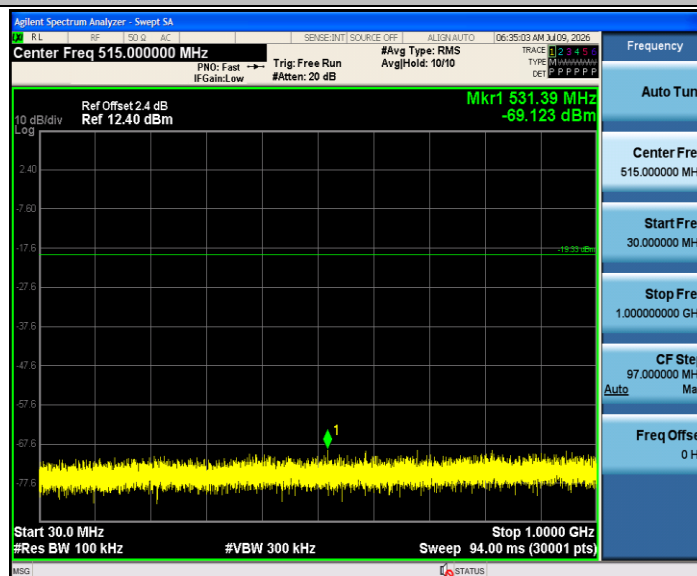
11B_Ant1_2412_1000~26500



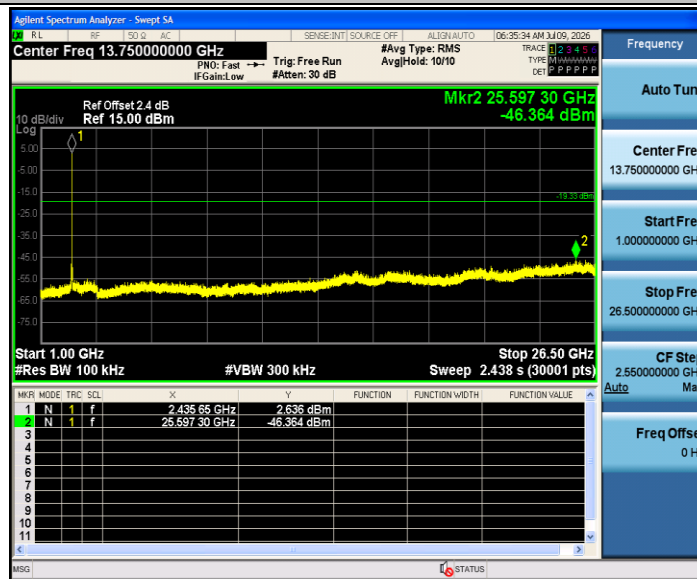
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



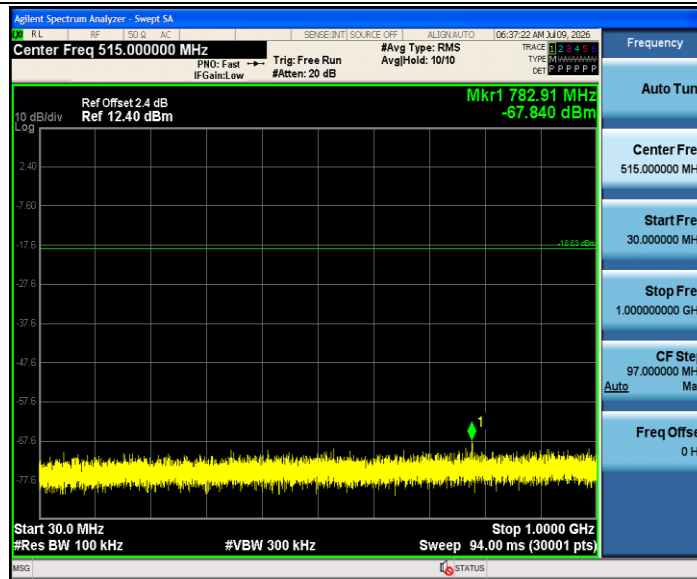
11B_Ant1_2437_1000~26500



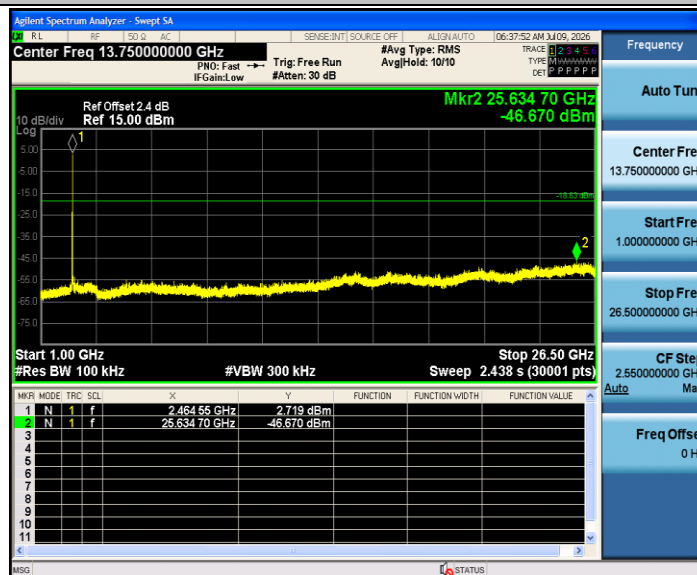
11B_Ant1_2462_0~Reference



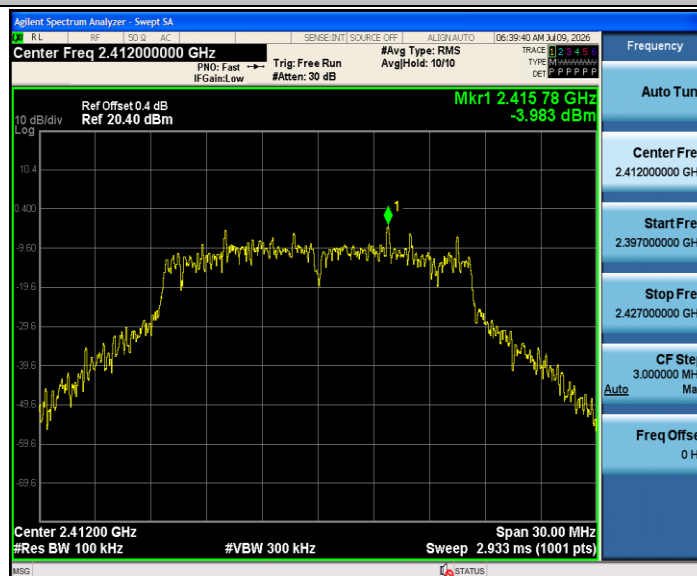
11B_Ant1_2462_30~1000



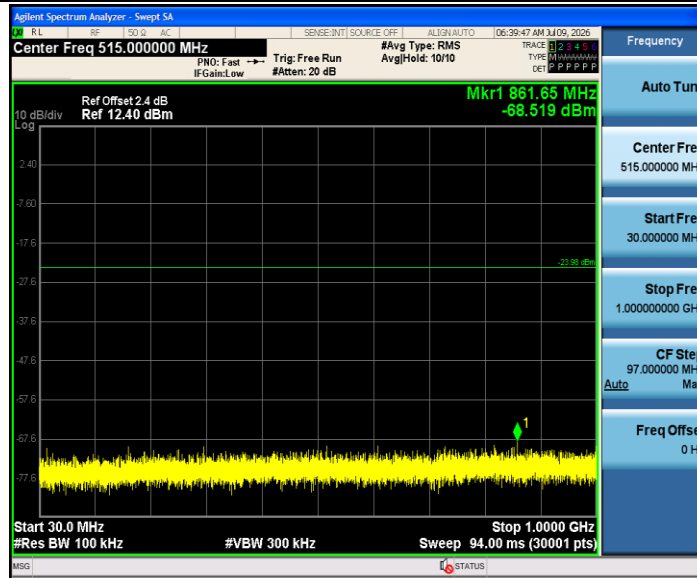
11B_Ant1_2462_1000~26500



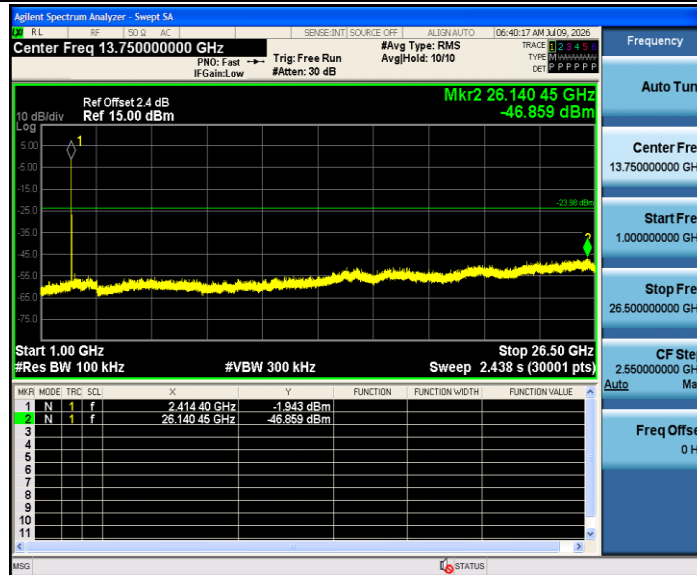
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference