

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BAQY-HE1000WIFI

Company : HIFIMAN KUNSHAN TECHNOLOGY GROUP CO., LTD.

EUT : WiFi Planar Magnetic Headphones

Model Number : HE1000 WiFi

Report No. : CTA25111402703

Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

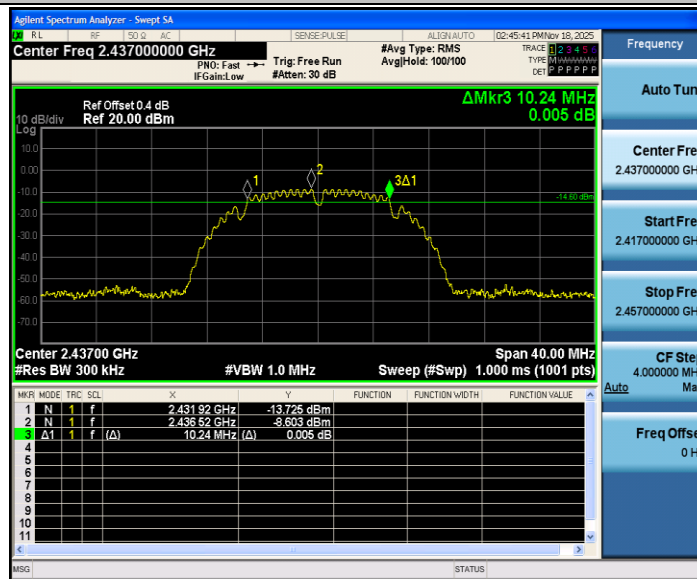
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.240	2406.920	2417.160	0.5	PASS
		2437	10.240	2431.920	2442.160	0.5	PASS
		2462	10.240	2456.920	2467.160	0.5	PASS
11G	Ant1	2412	16.200	2403.960	2420.160	0.5	PASS
		2437	15.720	2429.240	2444.960	0.5	PASS
		2462	15.960	2454.000	2469.960	0.5	PASS
11N20SISO	Ant1	2412	17.360	2403.400	2420.760	0.5	PASS
		2437	17.280	2428.440	2445.720	0.5	PASS
		2462	17.360	2453.320	2470.680	0.5	PASS
11N40SISO	Ant1	2422	35.600	2404.320	2439.920	0.5	PASS
		2437	35.600	2419.320	2454.920	0.5	PASS
		2452	35.840	2434.160	2470.000	0.5	PASS

Test Graphs

11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437





11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



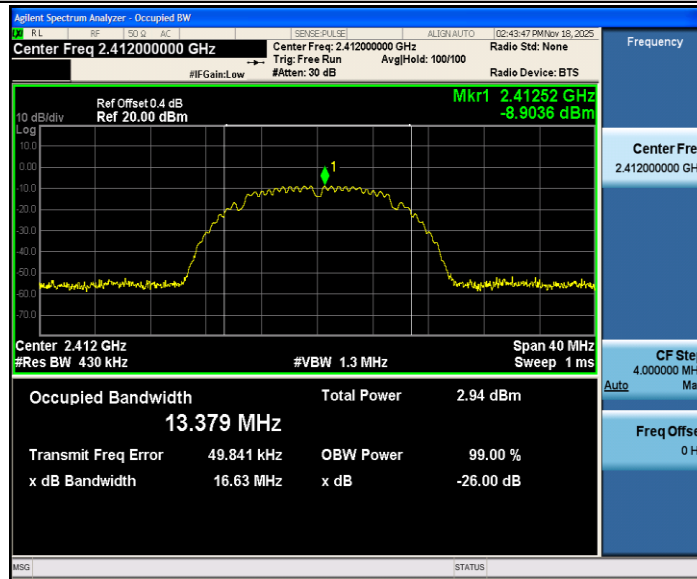
Appendix B: Occupied Channel Bandwidth

Test Result

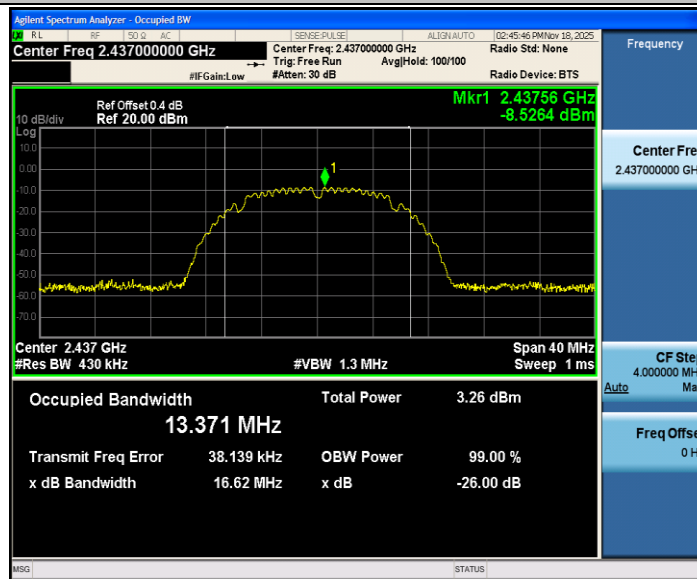
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.379	2405.3603	2418.7393	---	---
		2437	13.371	2430.3526	2443.7236	---	---
		2462	13.368	2455.3361	2468.7041	---	---
11G	Ant1	2412	16.818	2403.6719	2420.4899	---	---
		2437	16.751	2428.6890	2445.4400	---	---
		2462	16.728	2453.6748	2470.4028	---	---
11N20SISO	Ant1	2412	17.766	2403.1595	2420.9255	---	---
		2437	17.782	2428.1177	2445.8997	---	---
		2462	17.820	2453.1225	2470.9425	---	---
11N40SISO	Ant1	2422	36.066	2404.0748	2440.1408	---	---
		2437	36.036	2419.0681	2455.1041	---	---
		2452	35.993	2434.0764	2470.0694	---	---

Test Graphs

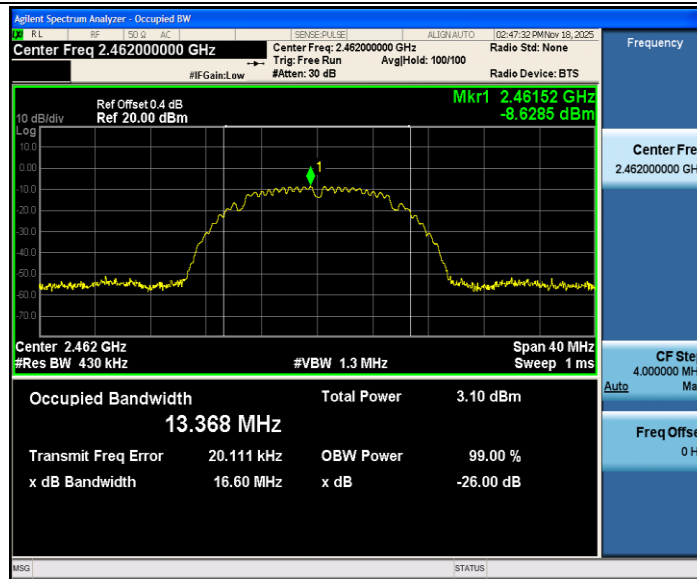
11B_Ant1_2412



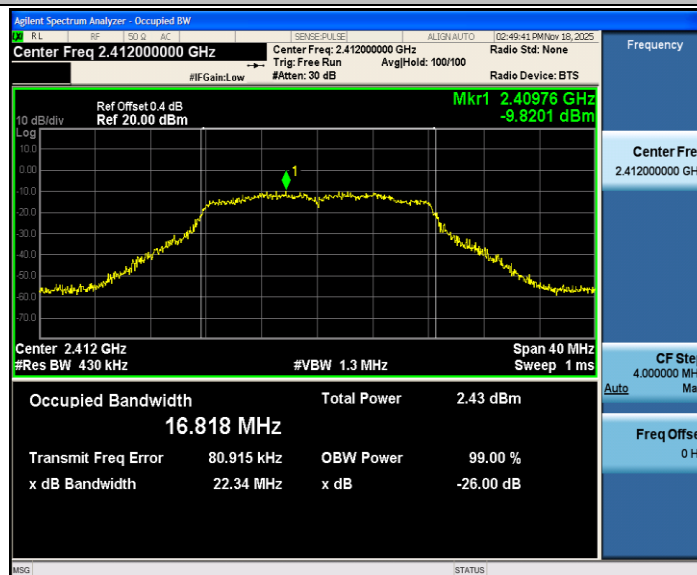
11B_Ant1_2437



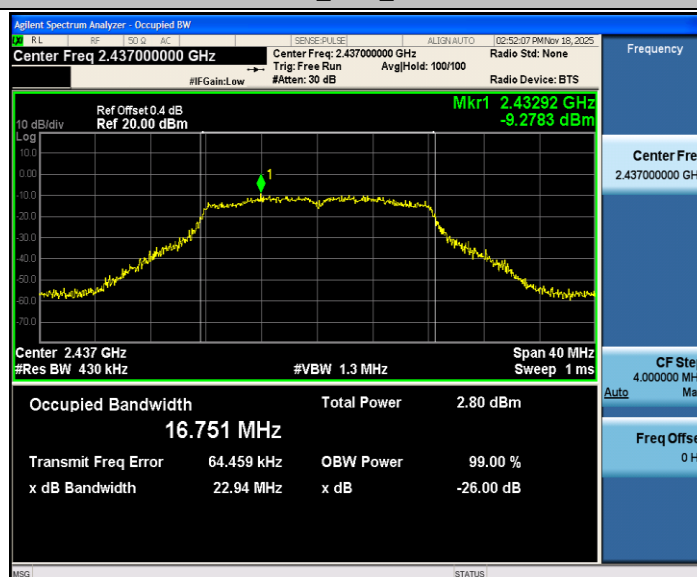
11B_Ant1_2462



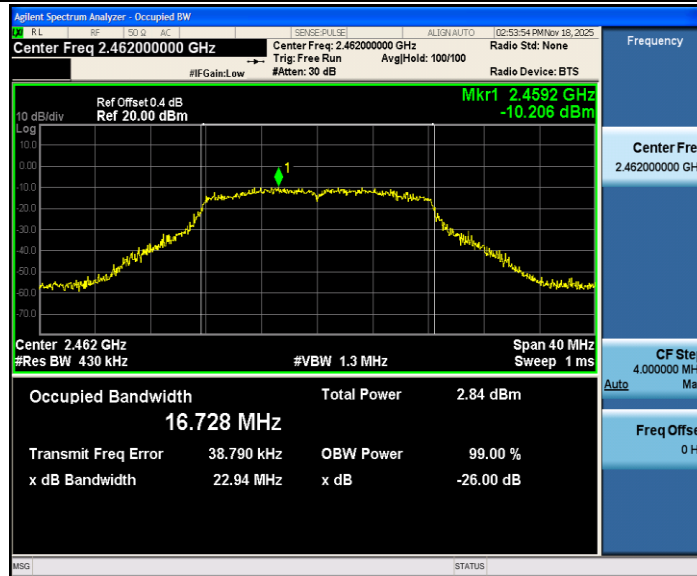
11G_Ant1_2412



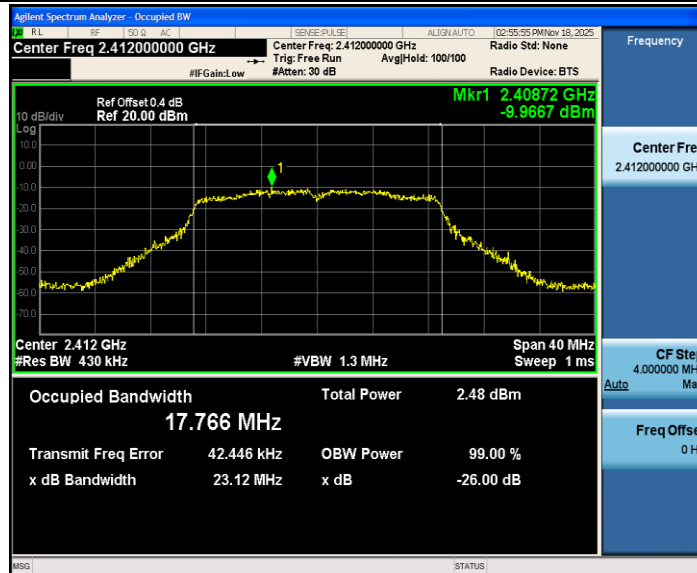
11G_Ant1_2437



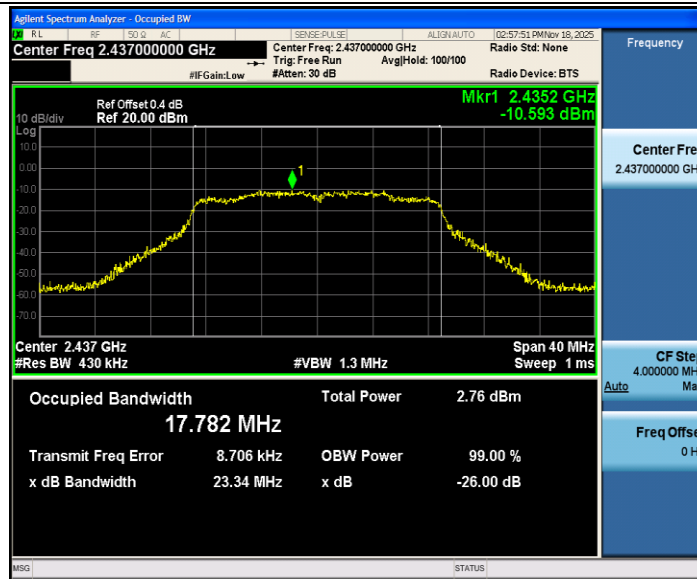
11G_Ant1_2462



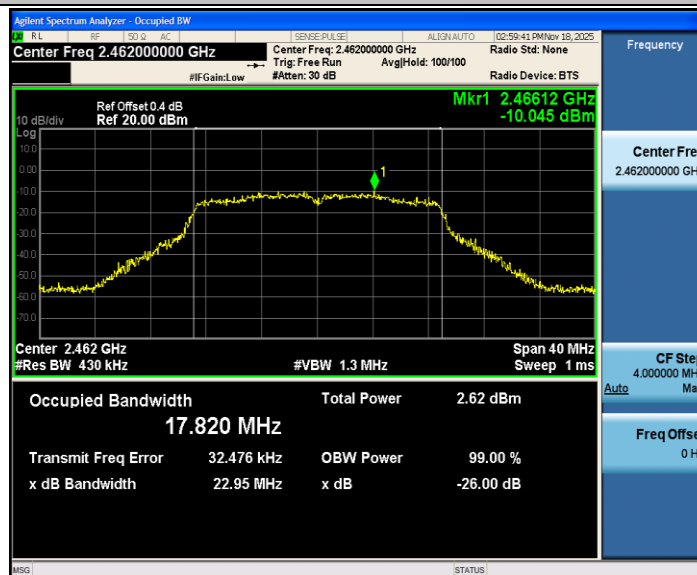
11N20SISO_Ant1_2412



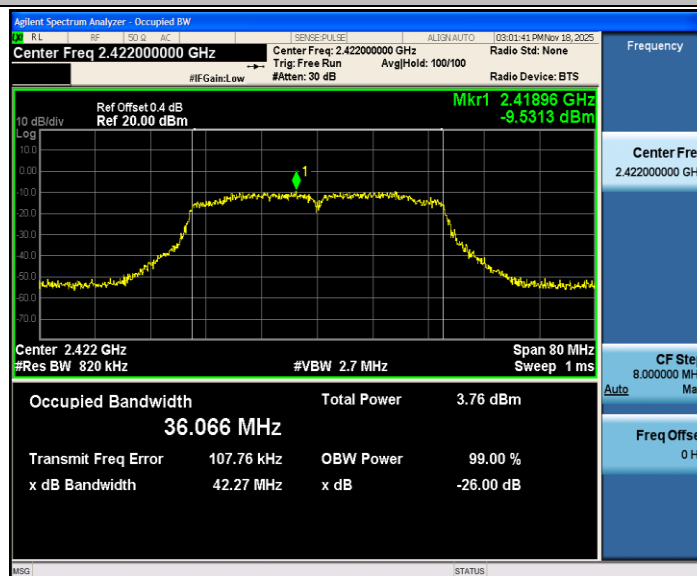
11N20SISO_Ant1_2437



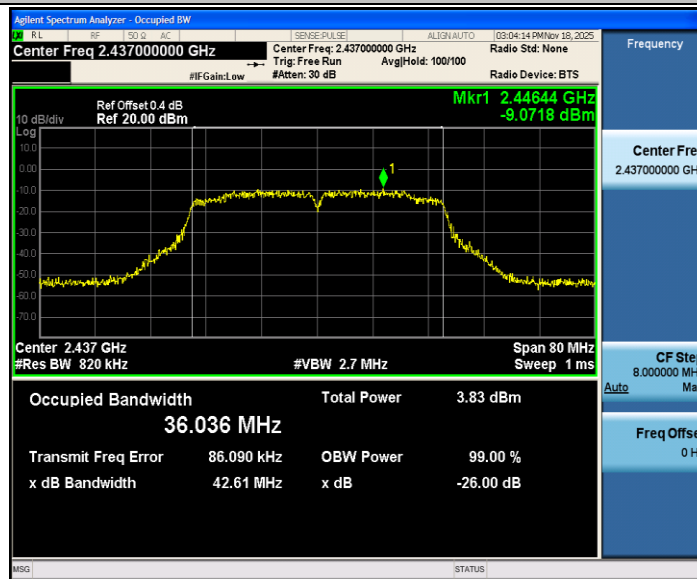
11N20SISO_Ant1_2462



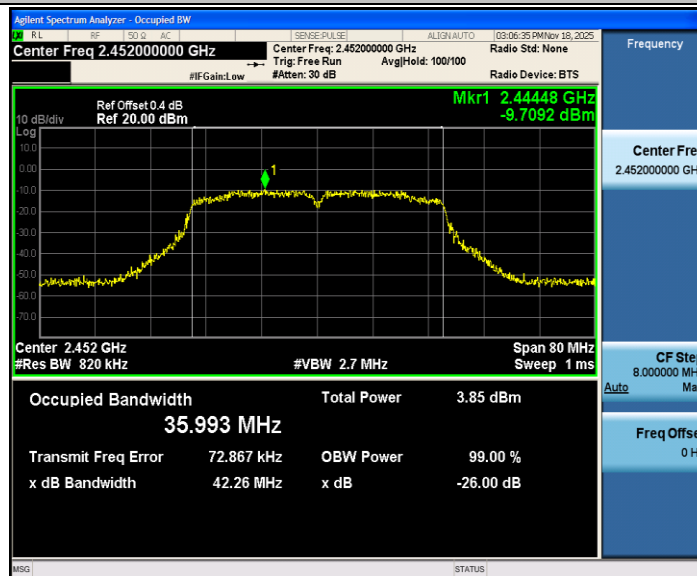
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	2.71	≤30.00	PASS
		2437	3.12	≤30.00	PASS
		2462	3.07	≤30.00	PASS
11G	Ant1	2412	3.23	≤30.00	PASS
		2437	3.42	≤30.00	PASS
		2462	3.35	≤30.00	PASS
11N20SISO	Ant1	2412	3.08	≤30.00	PASS
		2437	3.40	≤30.00	PASS
		2462	3.29	≤30.00	PASS
11N40SISO	Ant1	2422	3.86	≤30.00	PASS
		2437	4.10	≤30.00	PASS
		2452	4.07	≤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	-23.31	≤8.00	PASS
		2437	-23.15	≤8.00	PASS
		2462	-23.16	≤8.00	PASS
11G	Ant1	2412	-27.66	≤8.00	PASS
		2437	-27.88	≤8.00	PASS
		2462	-27.07	≤8.00	PASS
11N20SISO	Ant1	2412	-27.12	≤8.00	PASS
		2437	-27.46	≤8.00	PASS
		2462	-26.85	≤8.00	PASS
11N40SISO	Ant1	2422	-29.89	≤8.00	PASS
		2437	-28.88	≤8.00	PASS
		2452	-29.27	≤8.00	PASS

Test Graphs

11B_Ant1_2412



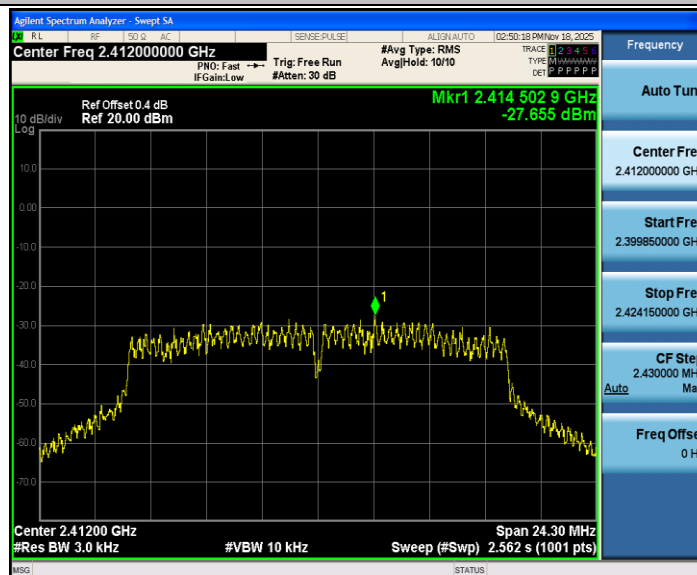
11B_Ant1_2437



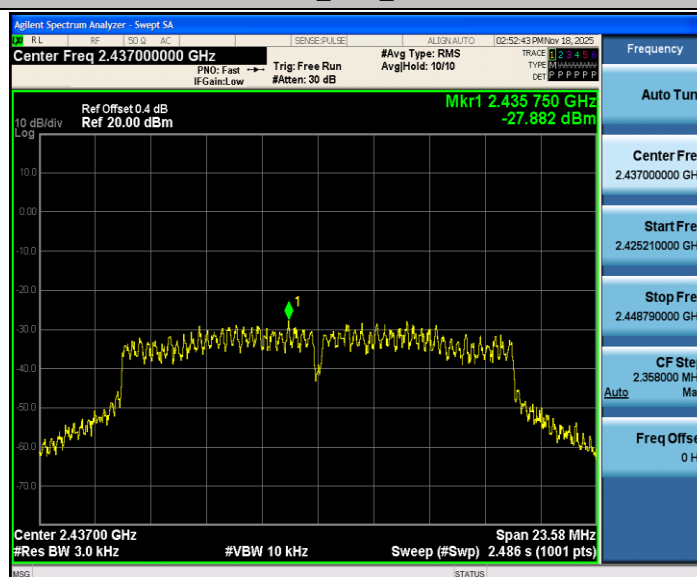
11B_Ant1_2462



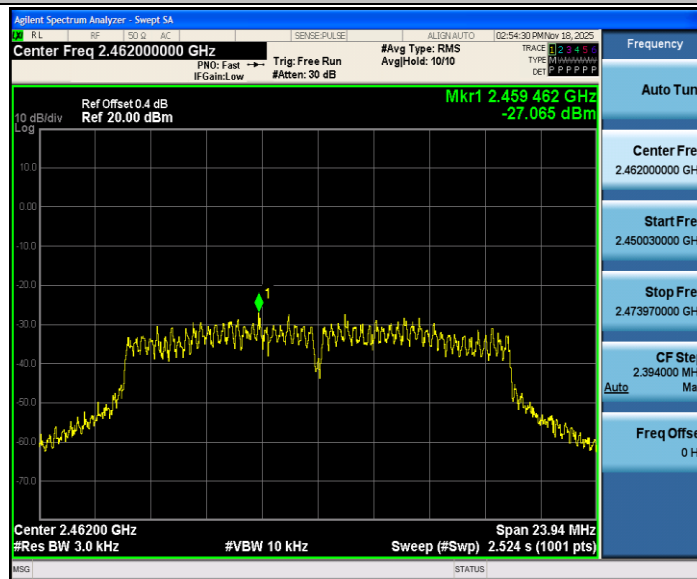
11G_Ant1_2412



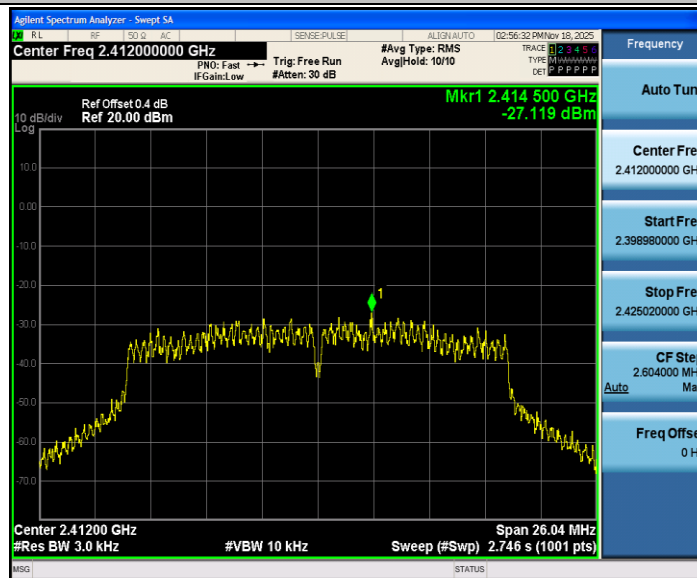
11G_Ant1_2437



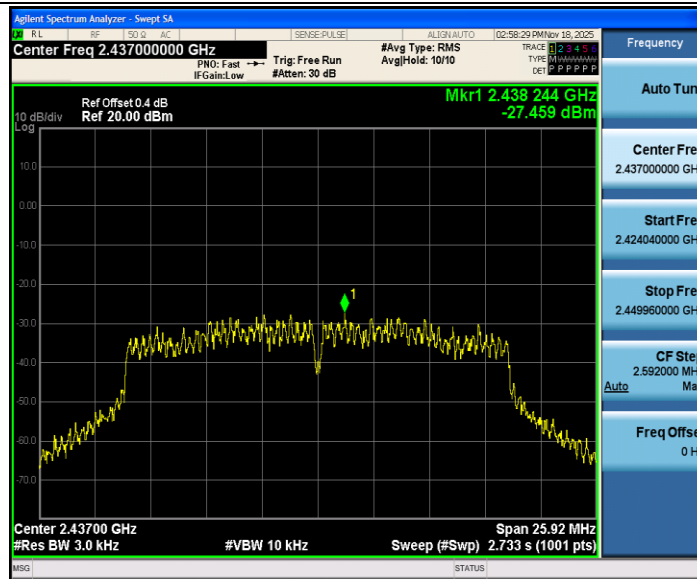
11G_Ant1_2462



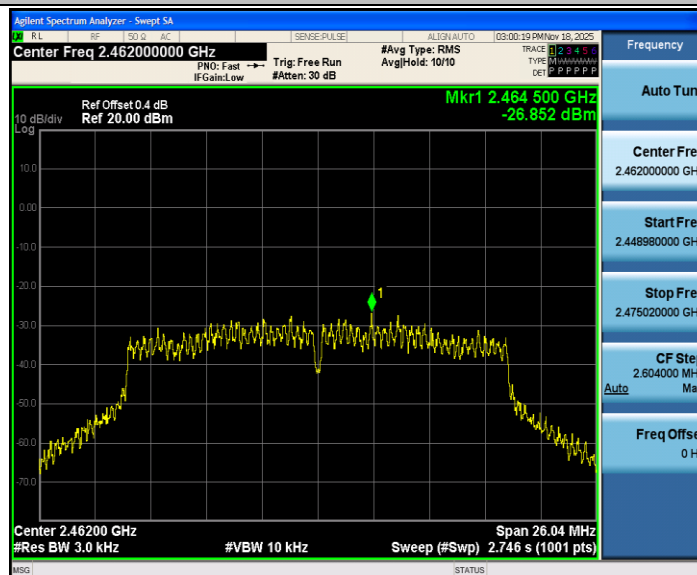
11N20SISO_Ant1_2412



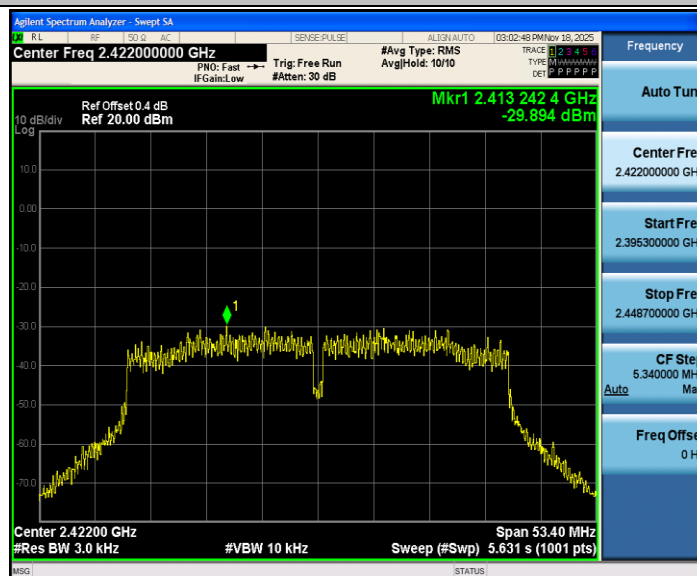
11N20SISO_Ant1_2437



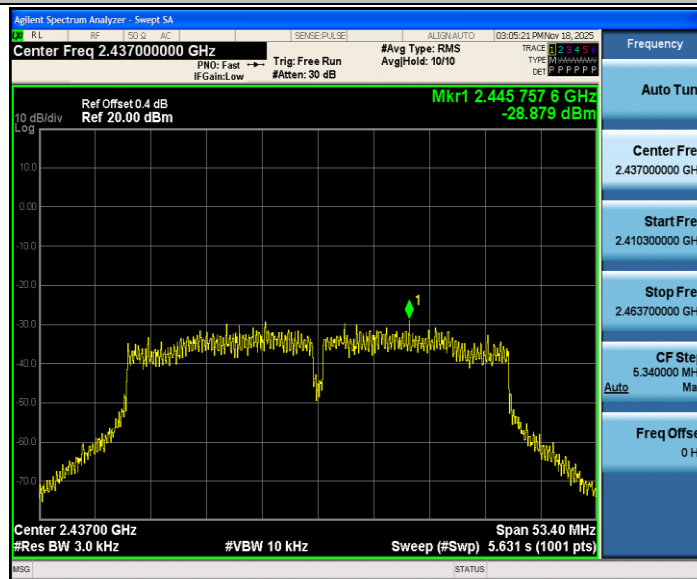
11N20SISO_Ant1_2462



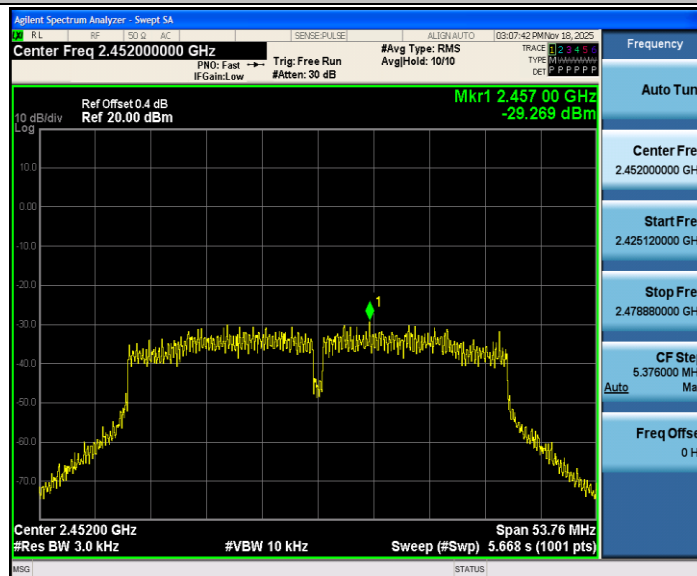
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



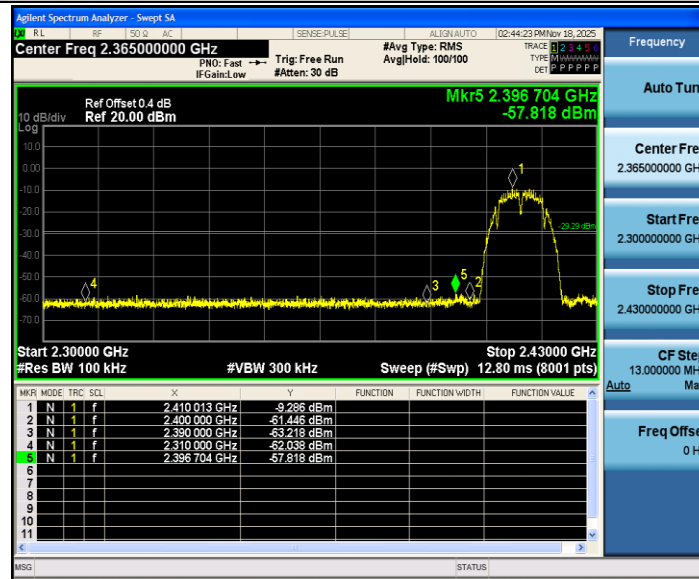
Appendix E: Band edge measurements

Test Result

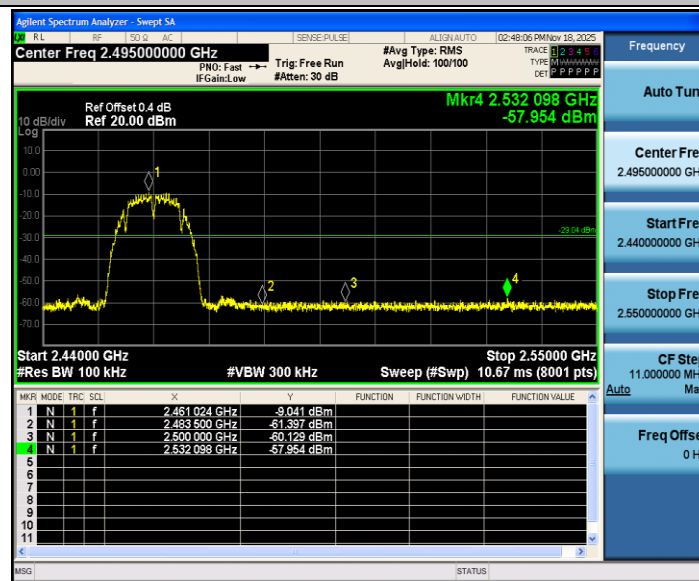
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-9.29	-57.82	≤-29.29	PASS
		High	2462	-9.04	-57.95	≤-29.04	PASS
11G	Ant1	Low	2412	-12.54	-45.49	≤-32.54	PASS
		High	2462	-12.29	-57.74	≤-32.29	PASS
11N20SISO	Ant1	Low	2412	-12.87	-44.99	≤-32.87	PASS
		High	2462	-12.35	-57.06	≤-32.35	PASS
11N40SISO	Ant1	Low	2422	-15.31	-42.83	≤-35.31	PASS
		High	2452	-15.26	-58.24	≤-35.26	PASS

Test Graphs

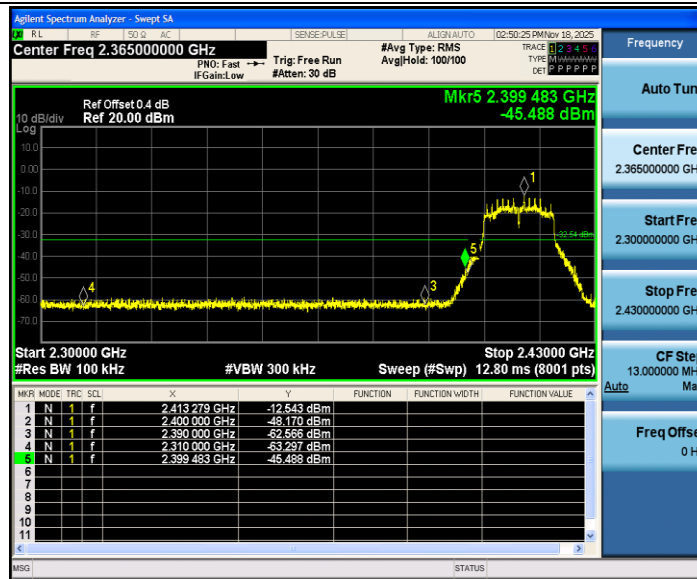
11B_Ant1_Low_2412



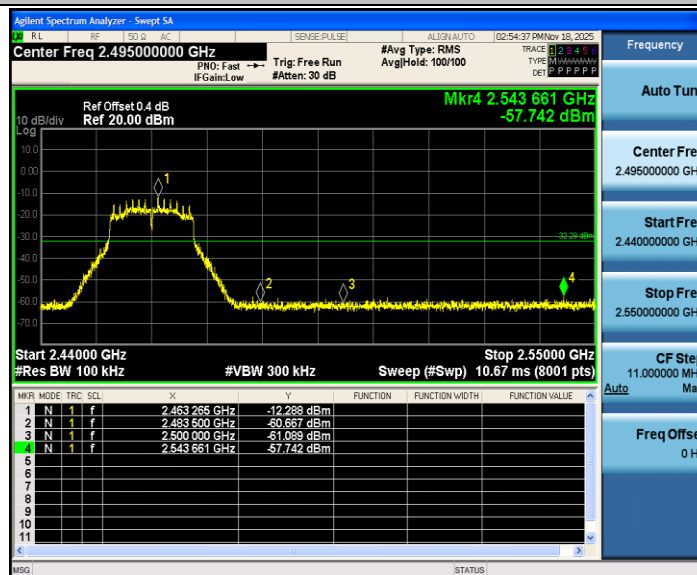
11B_Ant1_High_2462



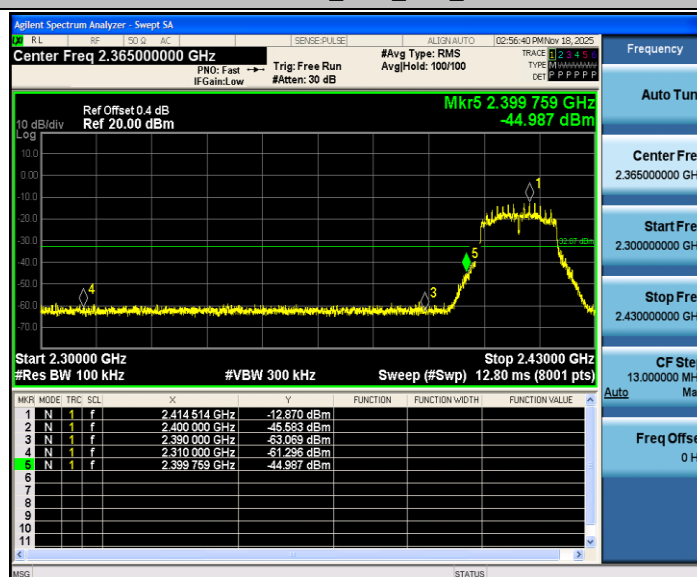
11G_Ant1_Low_2412



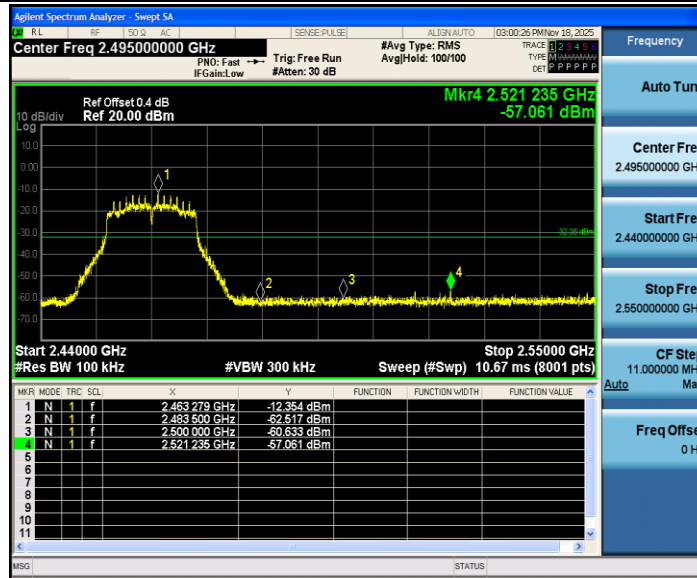
11G_Ant1_High_2462



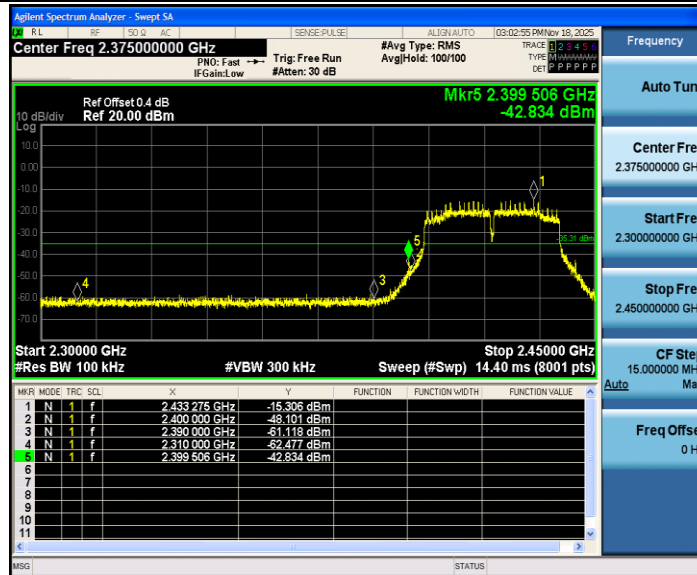
11N20SISO_Ant1_Low_2412



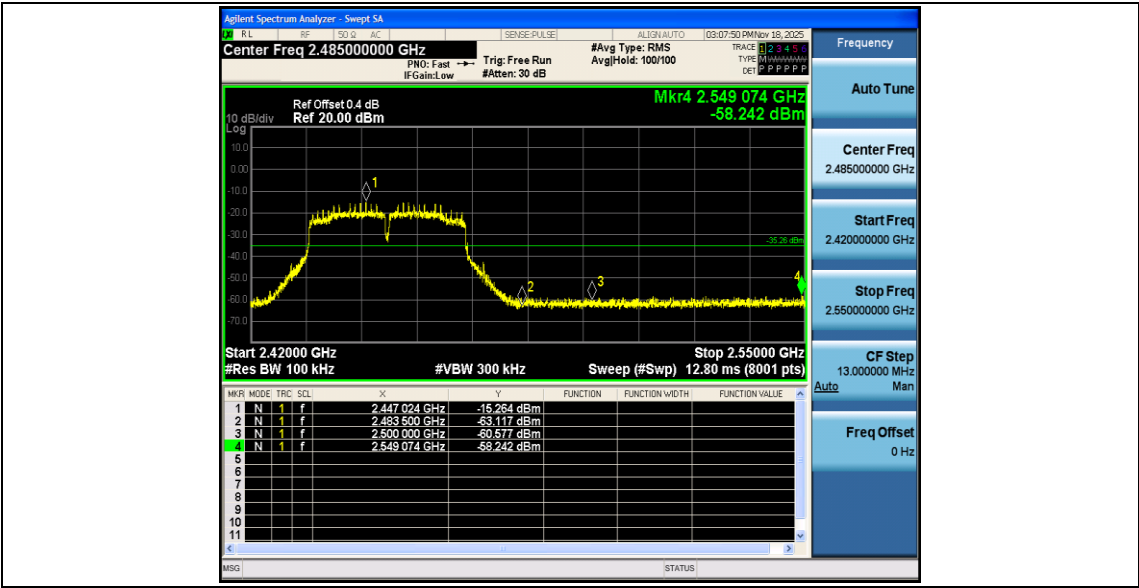
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

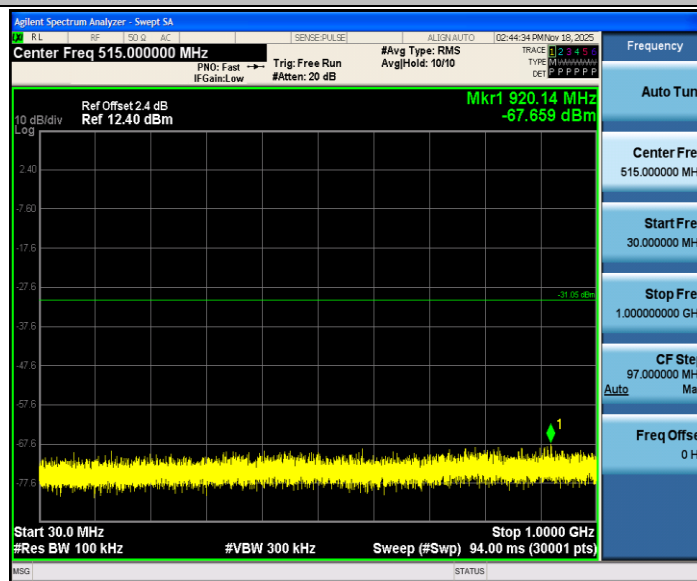
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-11.05	-11.05	---	PASS
			30~1000	-11.05	-67.66	≤-31.05	PASS
			1000~26500	-11.05	-54.94	≤-31.05	PASS
		2437	Reference	-9.26	-9.26	---	PASS
			30~1000	-9.26	-67.34	≤-29.26	PASS
			1000~26500	-9.26	-55.25	≤-29.26	PASS
		2462	Reference	-9.93	-9.93	---	PASS
			30~1000	-9.93	-67.85	≤-29.93	PASS
			1000~26500	-9.93	-55.27	≤-29.93	PASS
11G	Ant1	2412	Reference	-13.01	-13.01	---	PASS
			30~1000	-13.01	-67.78	≤-33.01	PASS
			1000~26500	-13.01	-55.78	≤-33.01	PASS
		2437	Reference	-13.10	-13.10	---	PASS
			30~1000	-13.10	-68.41	≤-33.1	PASS
			1000~26500	-13.10	-55.53	≤-33.1	PASS
		2462	Reference	-13.92	-13.92	---	PASS
			30~1000	-13.92	-67.94	≤-33.92	PASS
			1000~26500	-13.92	-54.9	≤-33.92	PASS
11N20SISO	Ant1	2412	Reference	-12.90	-12.90	---	PASS
			30~1000	-12.90	-67.84	≤-32.9	PASS
			1000~26500	-12.90	-55.59	≤-32.9	PASS
		2437	Reference	-12.95	-12.95	---	PASS
			30~1000	-12.95	-68.29	≤-32.95	PASS
			1000~26500	-12.95	-55.06	≤-32.95	PASS
		2462	Reference	-12.77	-12.77	---	PASS
			30~1000	-12.77	-67.7	≤-32.77	PASS
			1000~26500	-12.77	-54.84	≤-32.77	PASS
11N40SISO	Ant1	2422	Reference	-15.50	-15.50	---	PASS
			30~1000	-15.50	-68.14	≤-35.5	PASS
			1000~26500	-15.50	-55.44	≤-35.5	PASS
		2437	Reference	-15.34	-15.34	---	PASS
			30~1000	-15.34	-67.84	≤-35.34	PASS
			1000~26500	-15.34	-55.49	≤-35.34	PASS
		2452	Reference	-15.89	-15.89	---	PASS
			30~1000	-15.89	-67.53	≤-35.89	PASS
			1000~26500	-15.89	-55.22	≤-35.89	PASS

Test Graphs

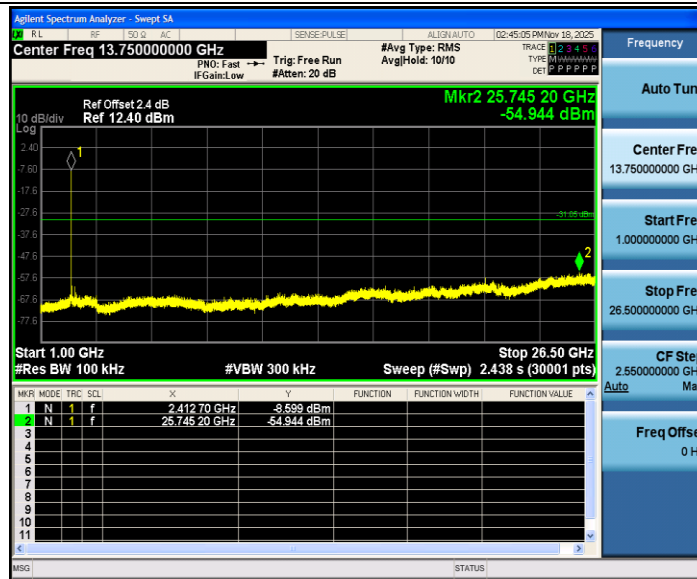
11B_Ant1_2412_0~Reference



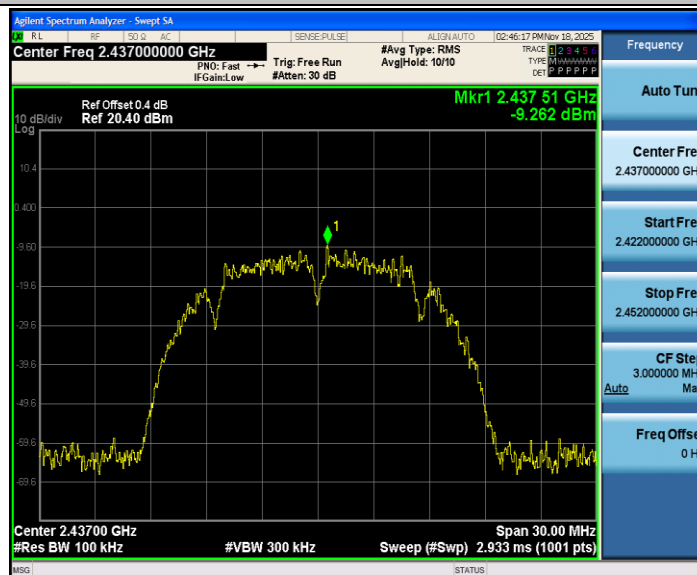
11B_Ant1_2412_30~1000



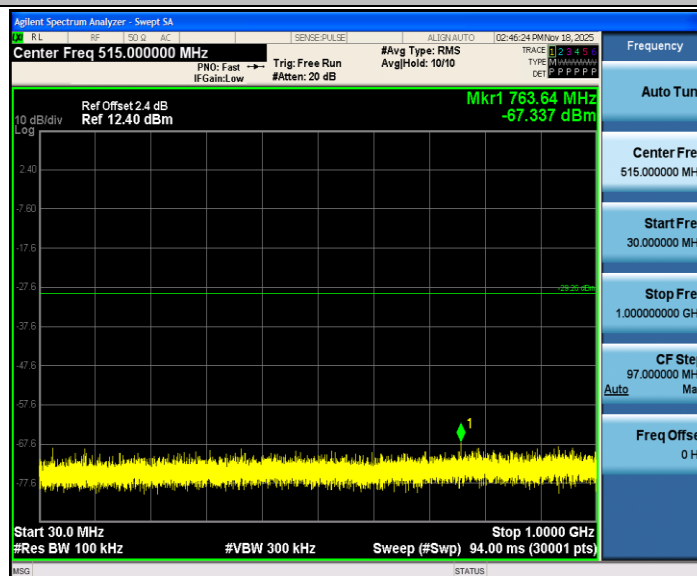
11B_Ant1_2412_1000~26500



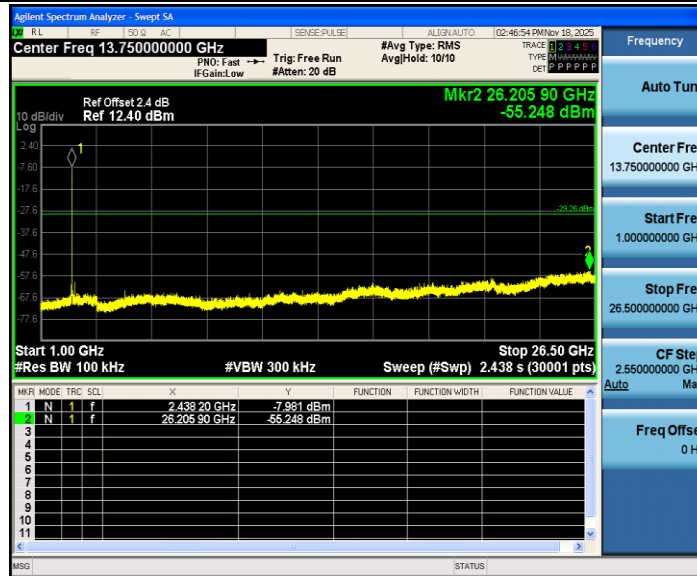
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



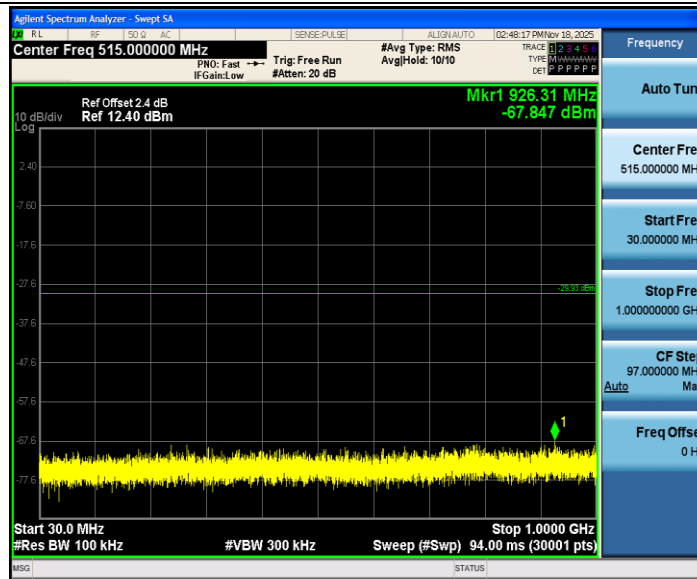
11B_Ant1_2437_1000~26500



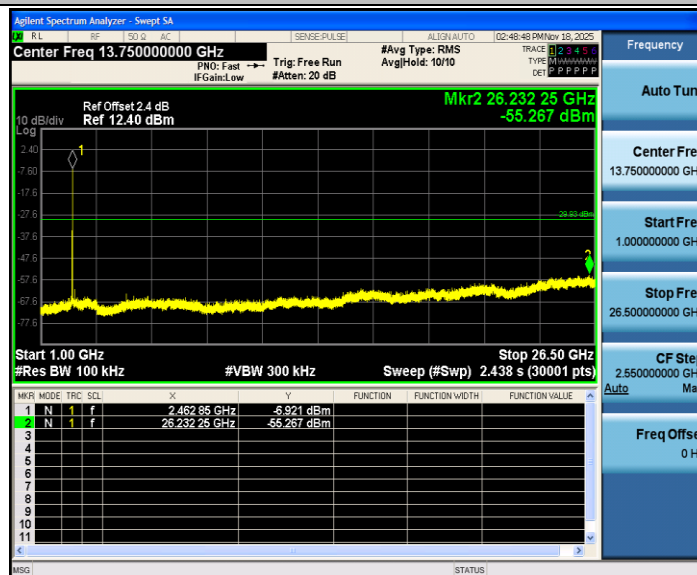
11B_Ant1_2462_0~Reference



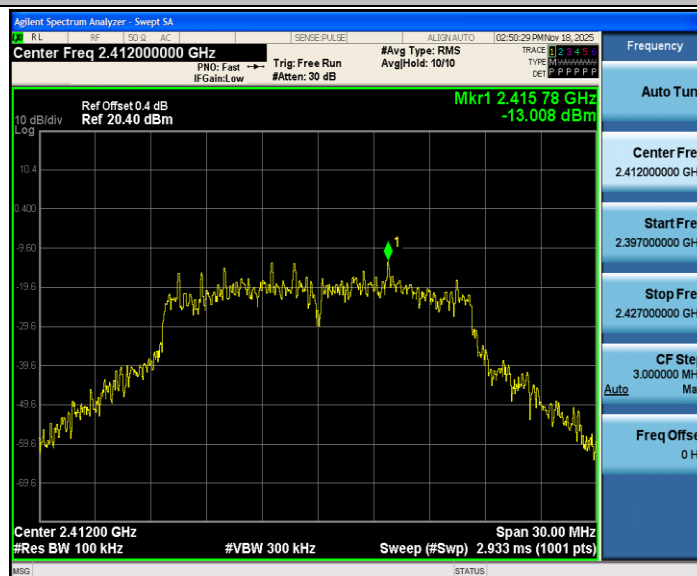
11B_Ant1_2462_30~1000



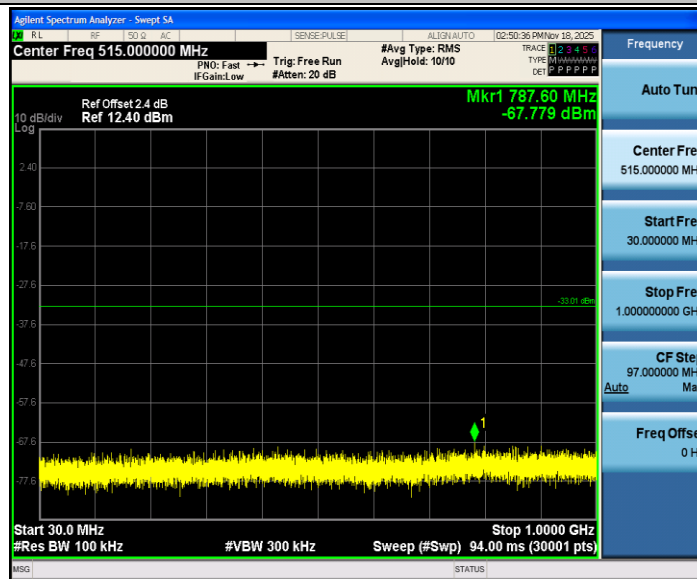
11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



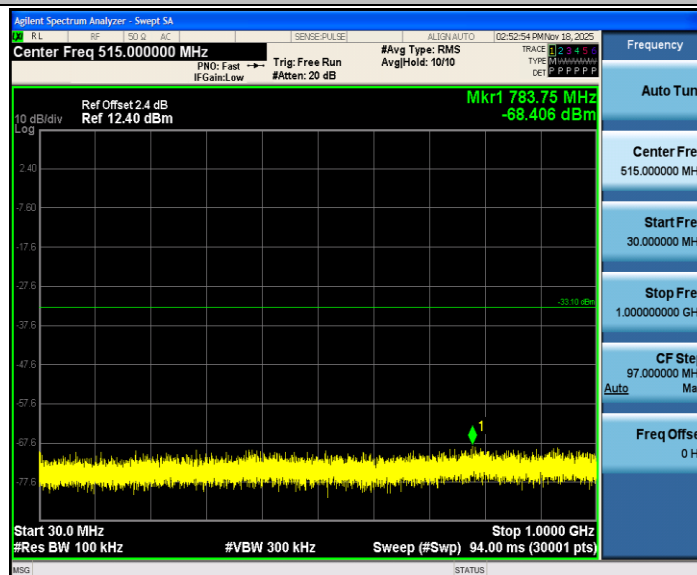
11G_Ant1_2412_1000~26500



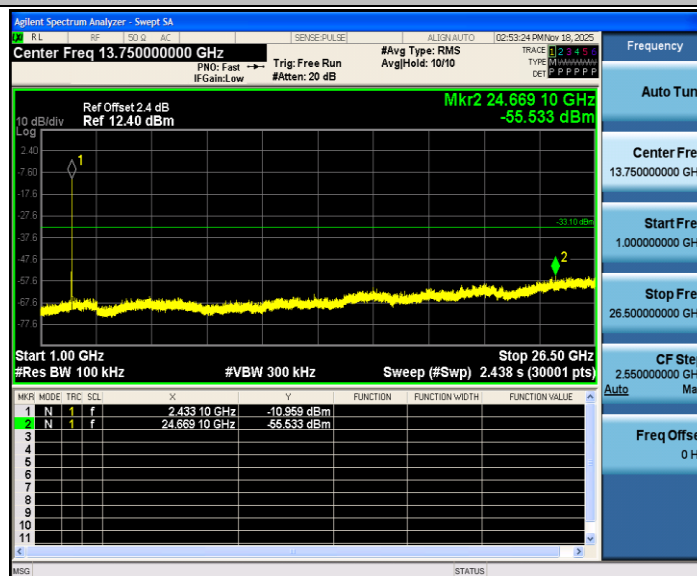
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



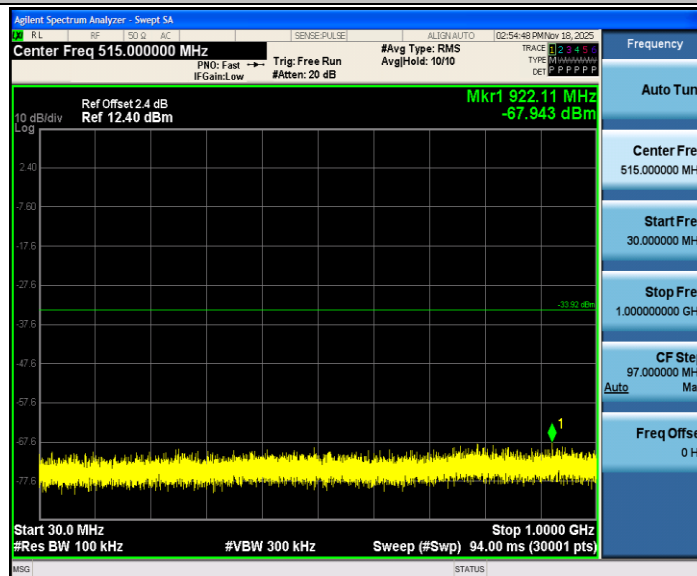
11G_Ant1_2437_1000~26500



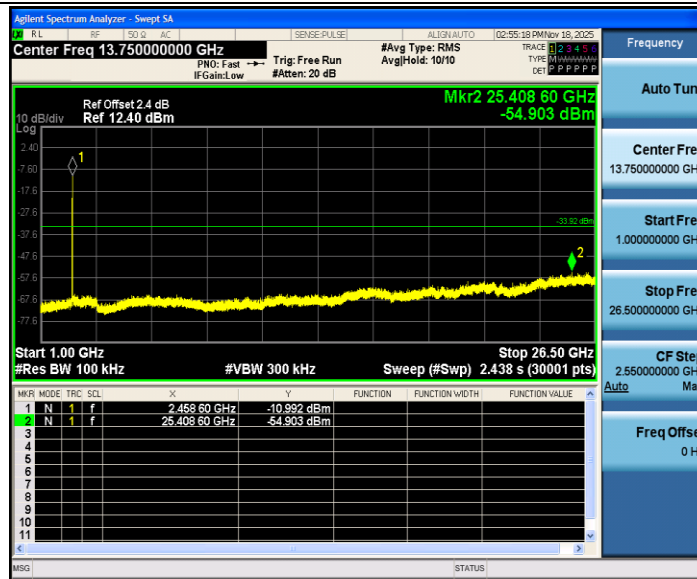
11G_Ant1_2462_0~Reference



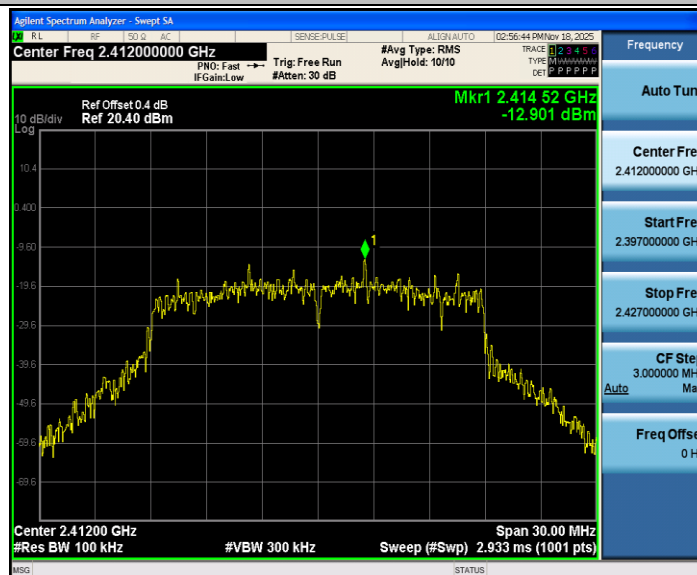
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

