

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BUEM-HOWBODY-S580

Company : HOWBODY TECH LIMITED

EUT : BODY ANALYZER

Model Number : HOWBODY-S580

Report No. : CTA25122302701

Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

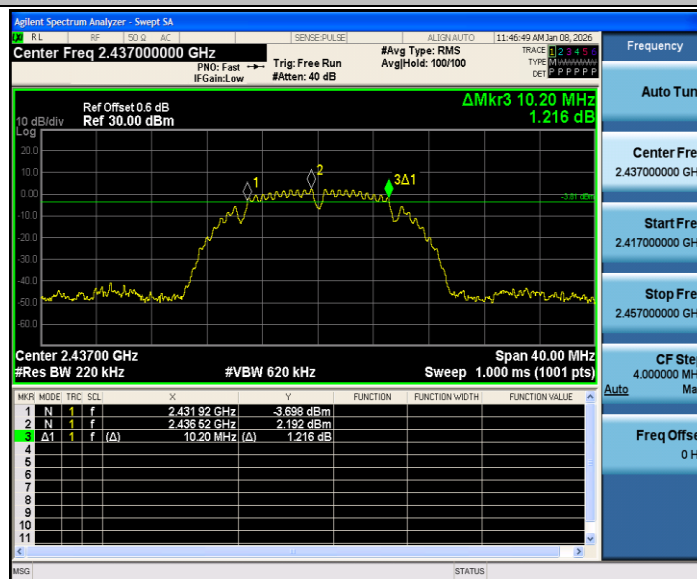
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.240	2406.920	2417.160	0.5	PASS
		2437	10.200	2431.920	2442.120	0.5	PASS
		2462	10.240	2456.920	2467.160	0.5	PASS
11G	Ant1	2412	16.000	2404.000	2420.000	0.5	PASS
		2437	15.600	2429.320	2444.920	0.5	PASS
		2462	15.520	2454.320	2469.840	0.5	PASS
11N20SISO	Ant1	2412	16.400	2404.080	2420.480	0.5	PASS
		2437	16.440	2428.640	2445.080	0.5	PASS
		2462	16.880	2453.520	2470.400	0.5	PASS
11N40SISO	Ant1	2422	36.080	2404.080	2440.160	0.5	PASS
		2437	35.680	2419.400	2455.080	0.5	PASS
		2452	35.920	2434.000	2469.920	0.5	PASS
11AX20SISO	Ant1	2412	18.720	2402.640	2421.360	0.5	PASS
		2437	18.280	2427.920	2446.200	0.5	PASS
		2462	18.080	2452.920	2471.000	0.5	PASS
11AX40SISO	Ant1	2422	35.920	2404.320	2440.240	0.5	PASS
		2437	36.960	2418.680	2455.640	0.5	PASS
		2452	37.680	2433.200	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



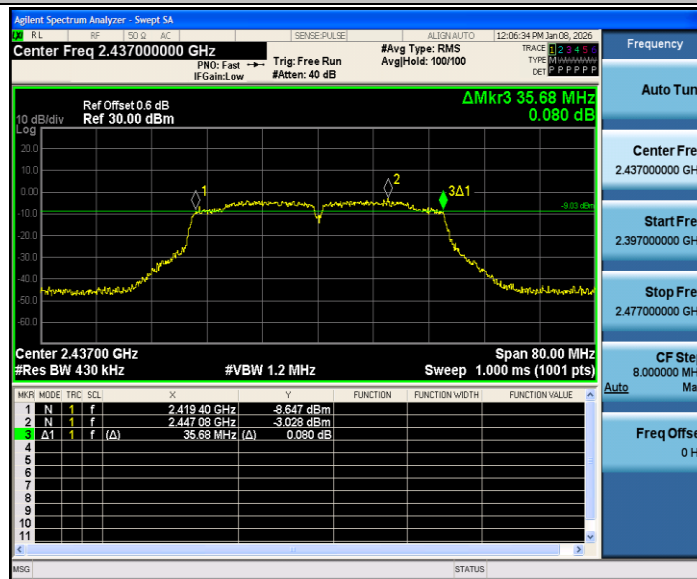
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



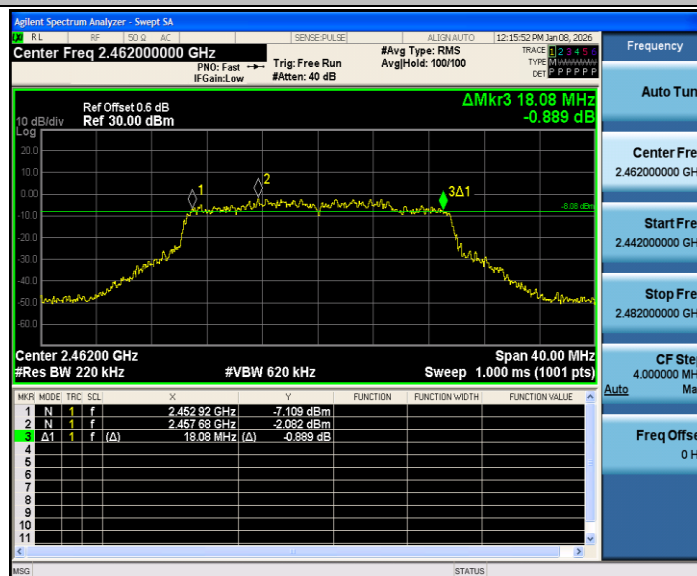
11AX20SISO_Ant1_2412



11AX20SISO_Ant1_2437



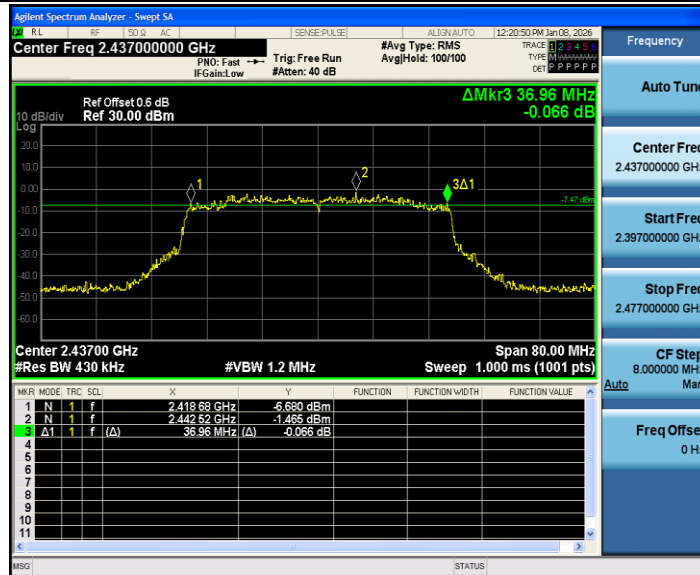
11AX20SISO_Ant1_2462



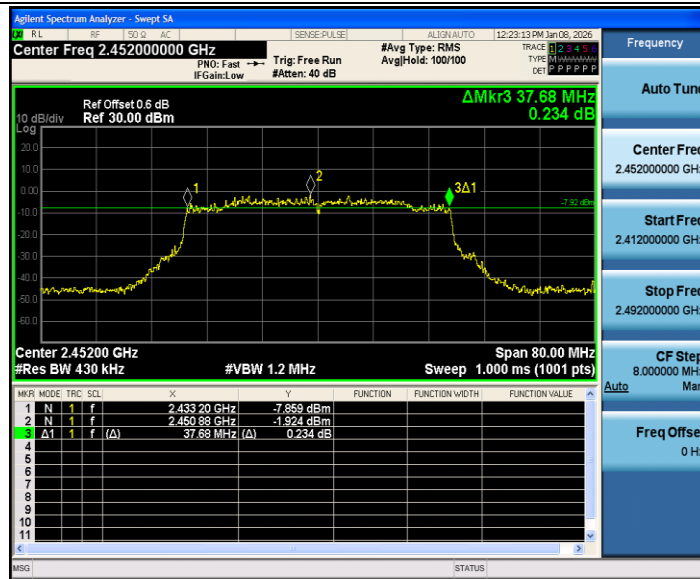
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



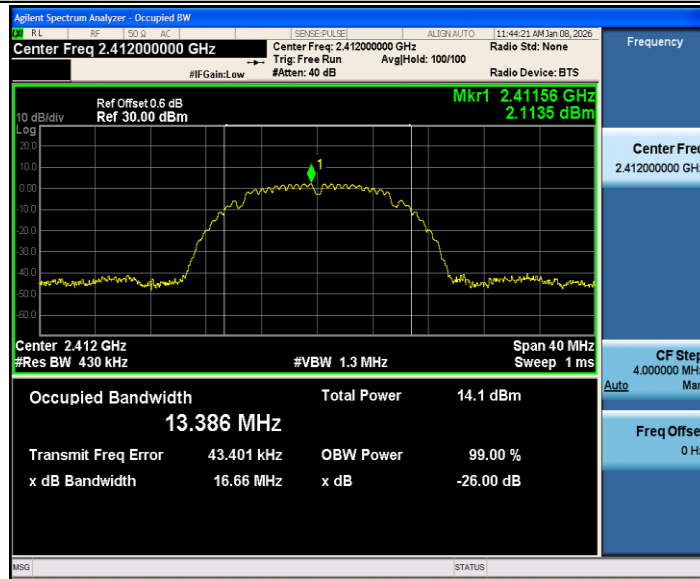
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.386	2405.3504	2418.7364	---	---
		2437	13.387	2430.3377	2443.7247	---	---
		2462	13.413	2455.3076	2468.7206	---	---
11G	Ant1	2412	16.809	2403.6872	2420.4962	---	---
		2437	16.856	2428.6405	2445.4965	---	---
		2462	16.862	2453.5547	2470.4167	---	---
11N20SISO	Ant1	2412	17.941	2403.0497	2420.9907	---	---
		2437	17.864	2428.0798	2445.9438	---	---
		2462	17.842	2453.1053	2470.9473	---	---
11N40SISO	Ant1	2422	36.012	2404.0823	2440.0943	---	---
		2437	36.026	2419.0645	2455.0905	---	---
		2452	36.119	2434.0380	2470.1570	---	---
11AX20SISO	Ant1	2412	18.903	2402.5813	2421.4843	---	---
		2437	18.989	2427.5533	2446.5423	---	---
		2462	18.952	2452.5368	2471.4888	---	---
11AX40SISO	Ant1	2422	37.507	2403.3496	2440.8566	---	---
		2437	37.465	2418.3730	2455.8380	---	---
		2452	37.607	2433.2748	2470.8818	---	---

Test Graphs

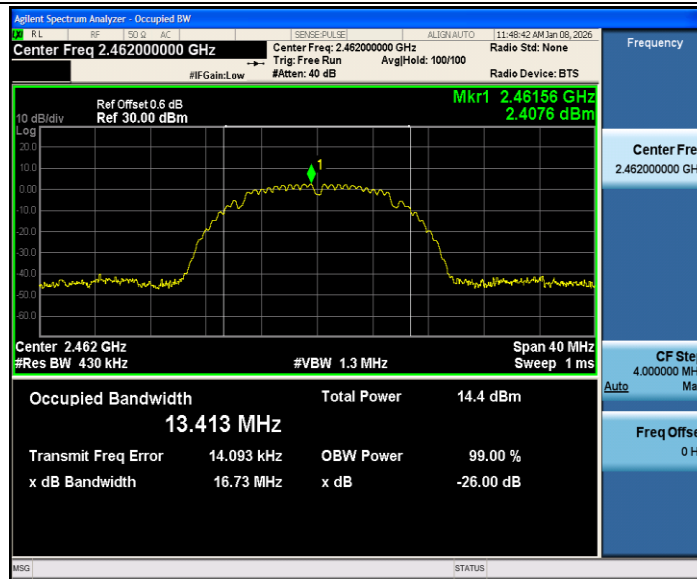
11B_Ant1_2412



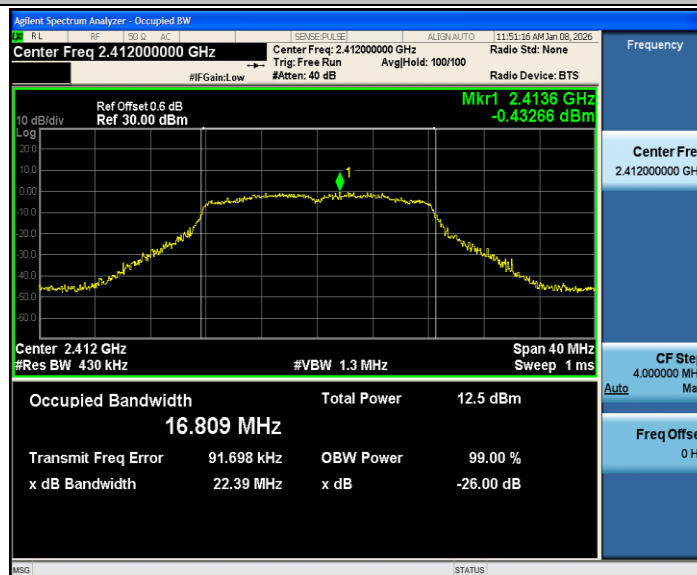
11B_Ant1_2437



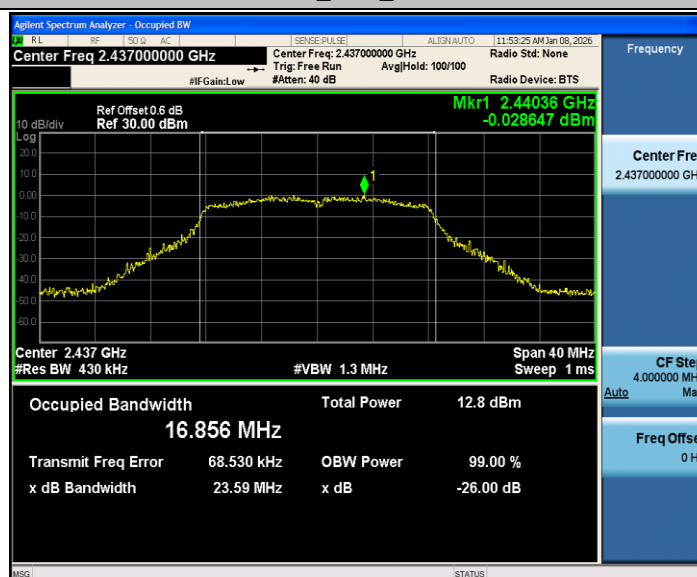
11B_Ant1_2462



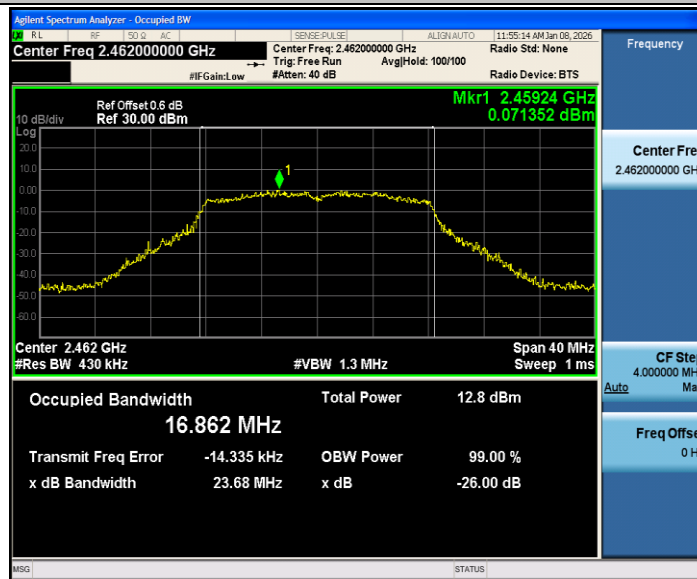
11G_Ant1_2412



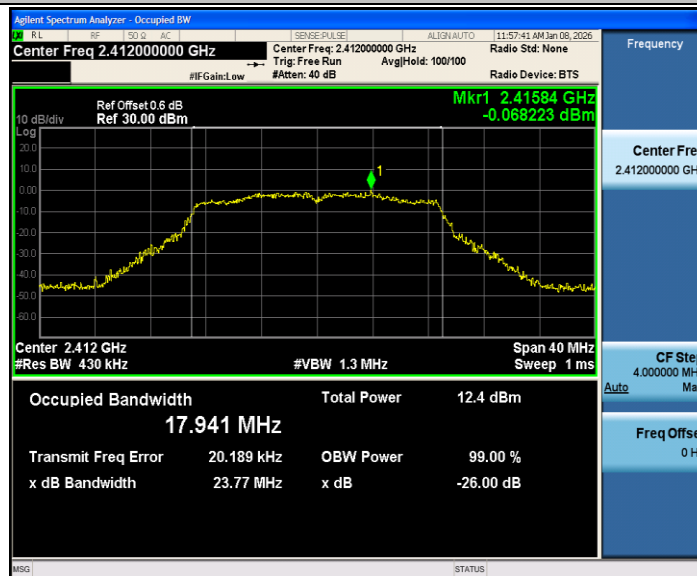
11G_Ant1_2437



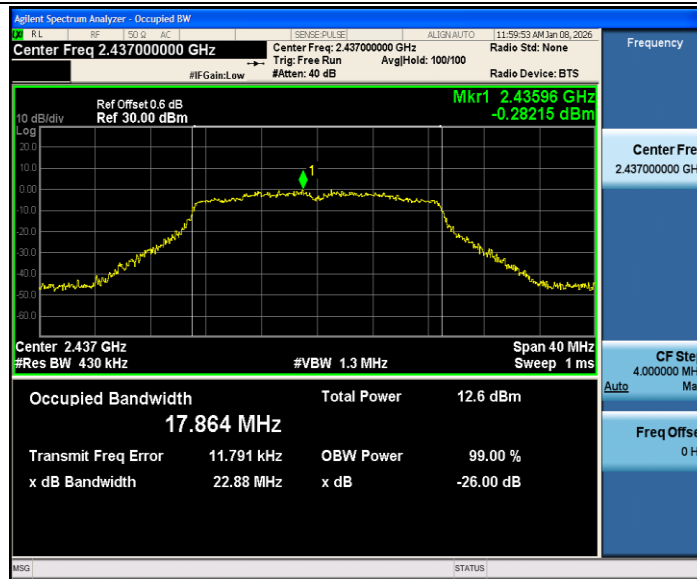
11G_Ant1_2462



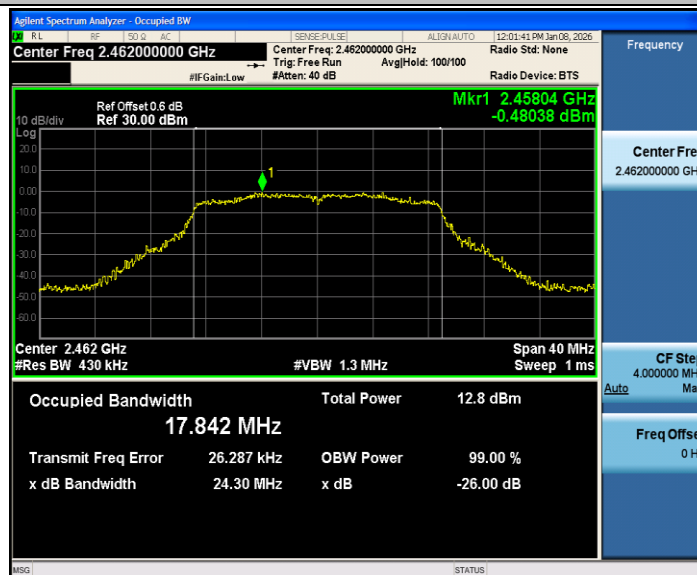
11N20SISO_Ant1_2412



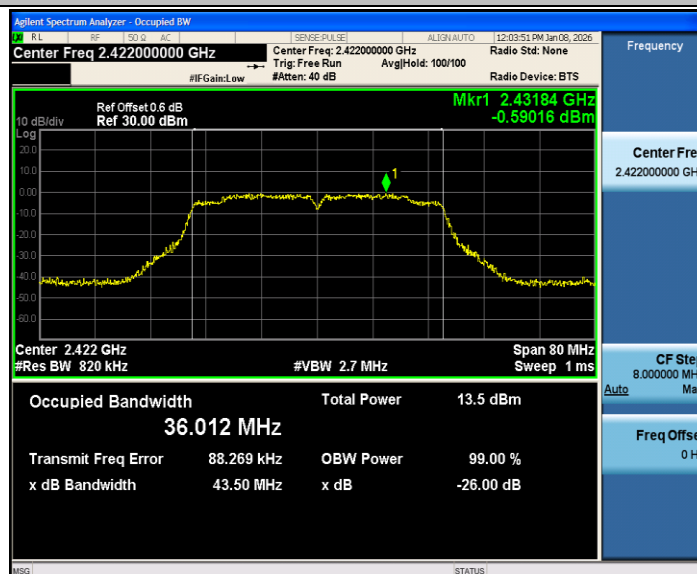
11N20SISO_Ant1_2437



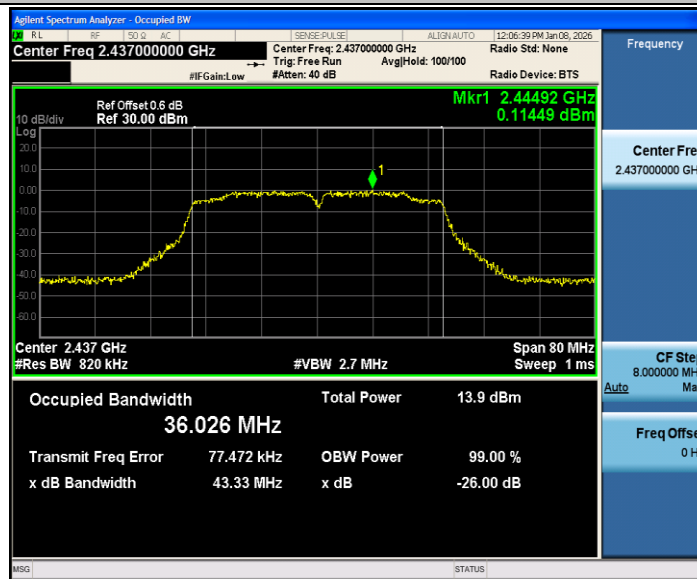
11N20SISO_Ant1_2462



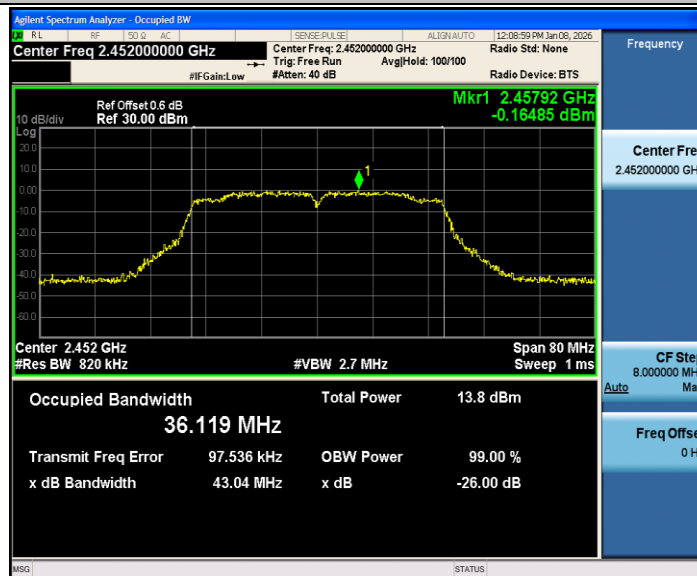
11N40SISO_Ant1_2422



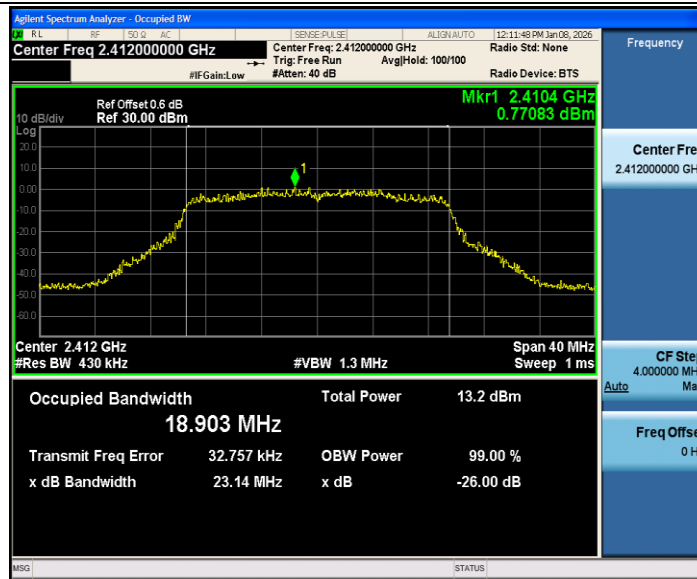
11N40SISO_Ant1_2437



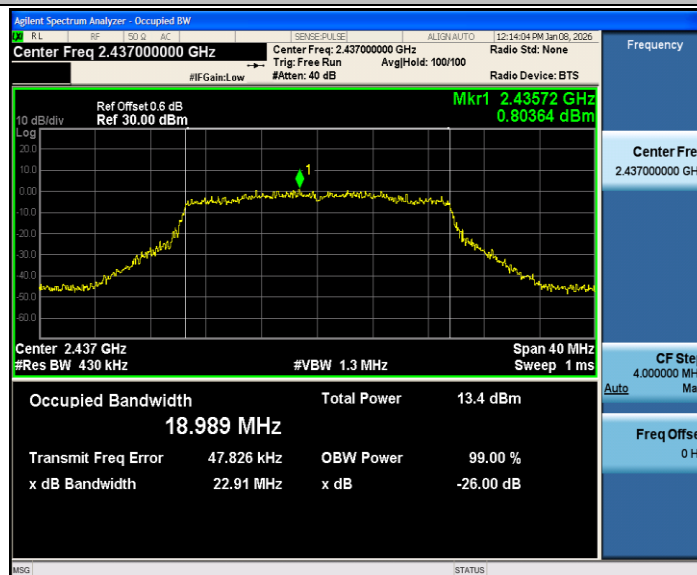
11N40SISO_Ant1_2452



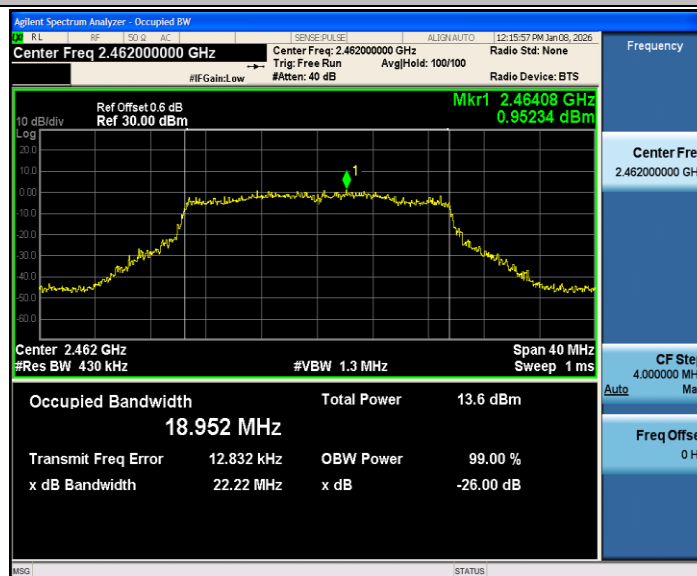
11AX20SISO_Ant1_2412



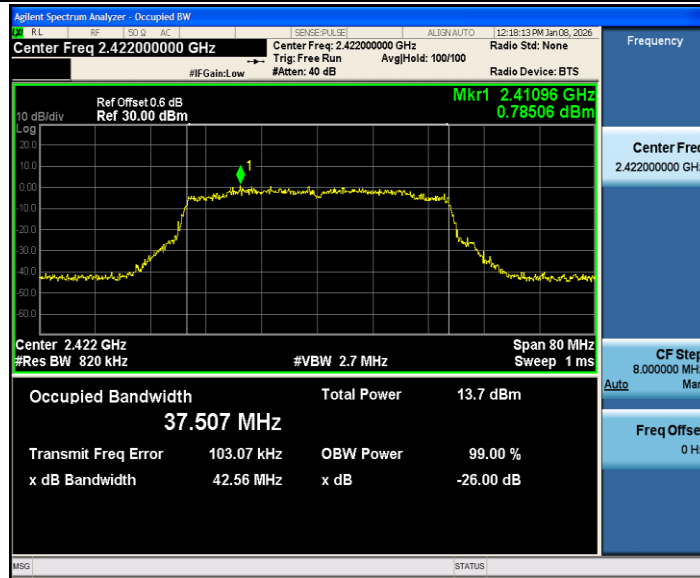
11AX20SISO_Ant1_2437



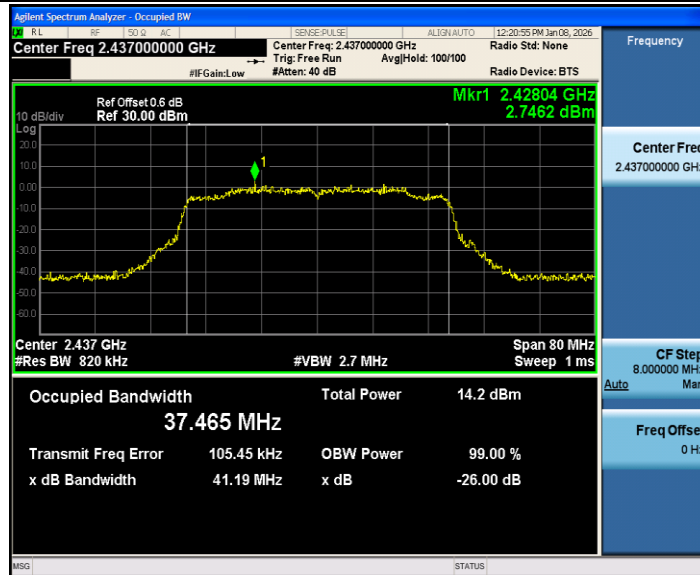
11AX20SISO_Ant1_2462



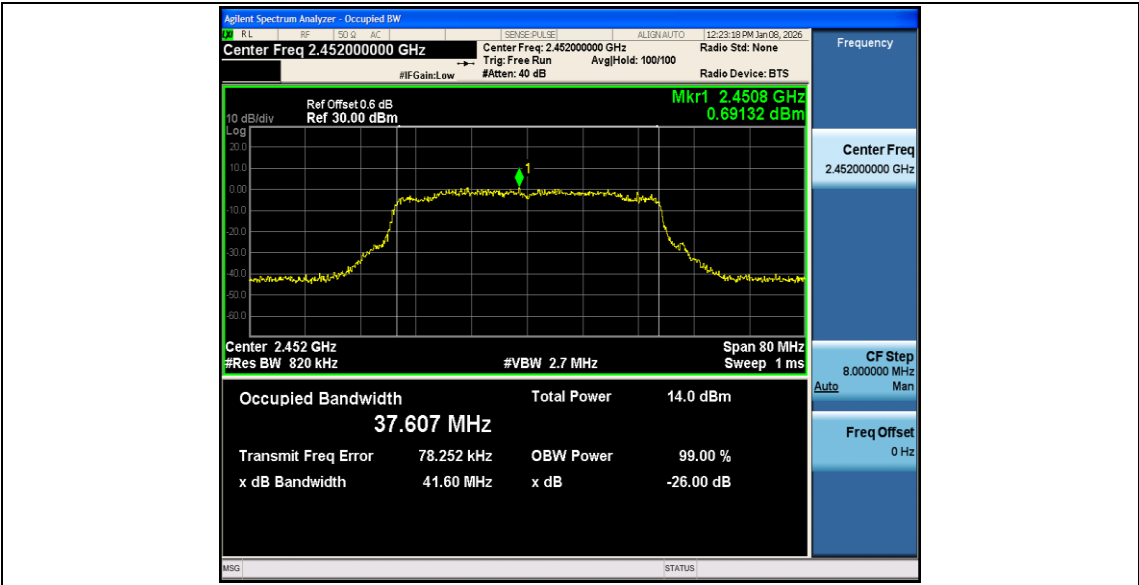
11AX40SISO_Ant1_2422



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	13.76	≤30.00	PASS
		2437	13.94	≤30.00	PASS
		2462	14.05	≤30.00	PASS
11G	Ant1	2412	13.50	≤30.00	PASS
		2437	13.61	≤30.00	PASS
		2462	13.73	≤30.00	PASS
11N20SISO	Ant1	2412	13.28	≤30.00	PASS
		2437	13.38	≤30.00	PASS
		2462	13.66	≤30.00	PASS
11N40SISO	Ant1	2422	13.56	≤30.00	PASS
		2437	13.98	≤30.00	PASS
		2452	13.98	≤30.00	PASS
11AX20SISO	Ant1	2412	13.77	≤30.00	PASS
		2437	13.89	≤30.00	PASS
		2462	14.01	≤30.00	PASS
11AX40SISO	Ant1	2422	13.83	≤30.00	PASS
		2437	14.03	≤30.00	PASS
		2452	14.15	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

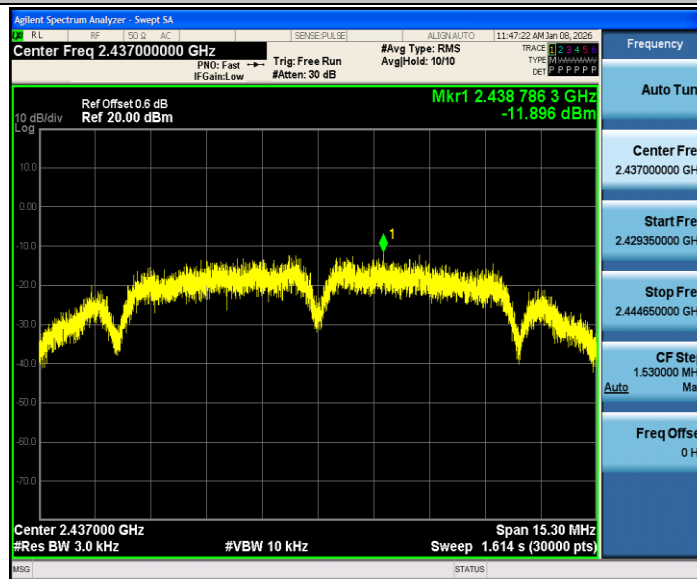
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.42	≤8.00	PASS
		2437	-11.90	≤8.00	PASS
		2462	-11.22	≤8.00	PASS
11G	Ant1	2412	-18.61	≤8.00	PASS
		2437	-17.31	≤8.00	PASS
		2462	-18.85	≤8.00	PASS
11N20SISO	Ant1	2412	-18.57	≤8.00	PASS
		2437	-17.48	≤8.00	PASS
		2462	-17.81	≤8.00	PASS
11N40SISO	Ant1	2422	-21.22	≤8.00	PASS
		2437	-20.52	≤8.00	PASS
		2452	-20.49	≤8.00	PASS
11AX20SISO	Ant1	2412	-19.48	≤8.00	PASS
		2437	-19.01	≤8.00	PASS
		2462	-19.04	≤8.00	PASS
11AX40SISO	Ant1	2422	-22.34	≤8.00	PASS
		2437	-22.03	≤8.00	PASS
		2452	-21.45	≤8.00	PASS

Test Graphs

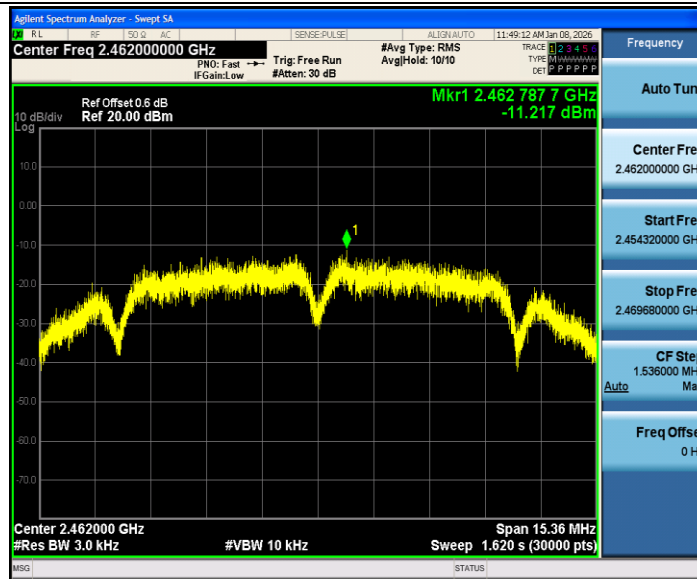
11B_Ant1_2412



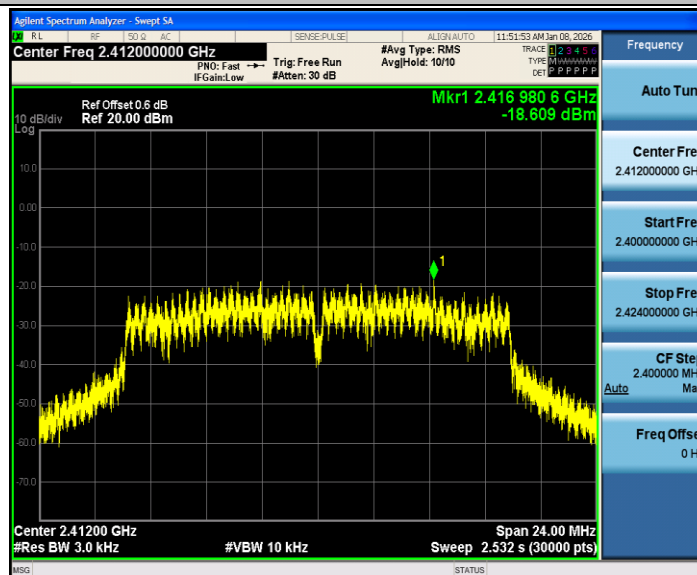
11B_Ant1_2437



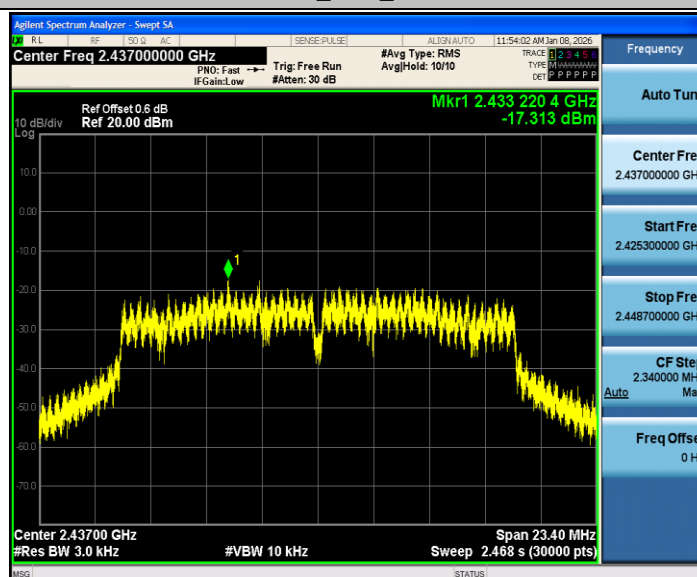
11B_Ant1_2462



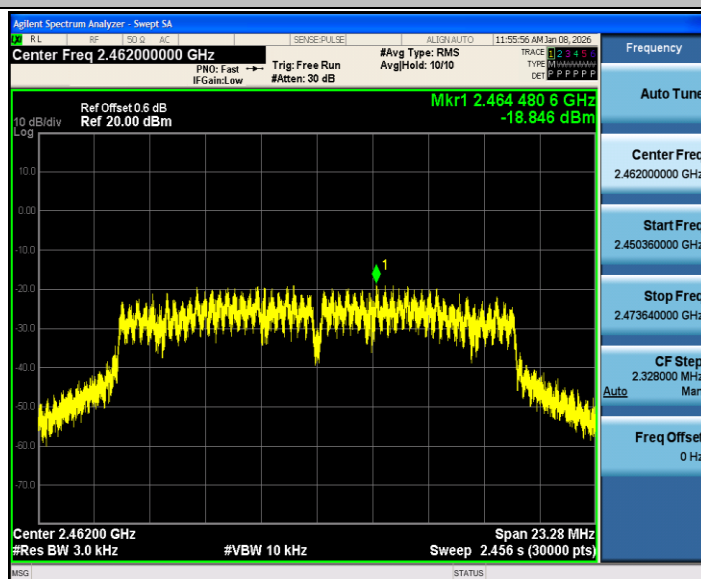
11G_Ant1_2412



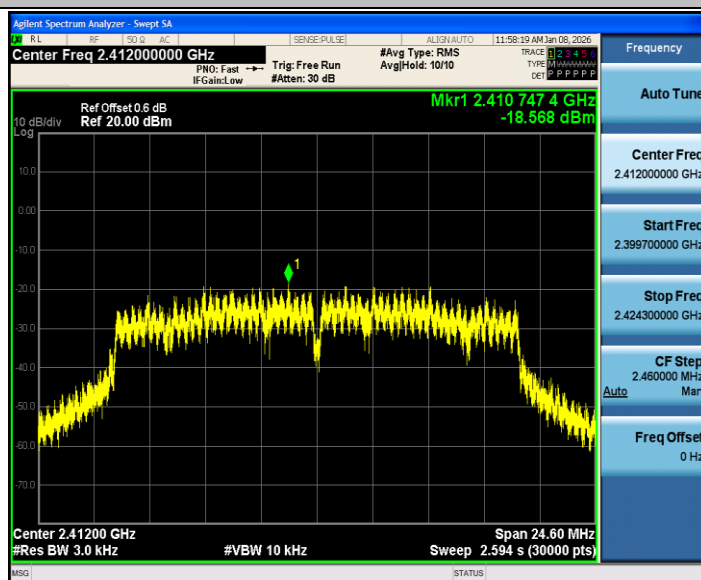
11G_Ant1_2437



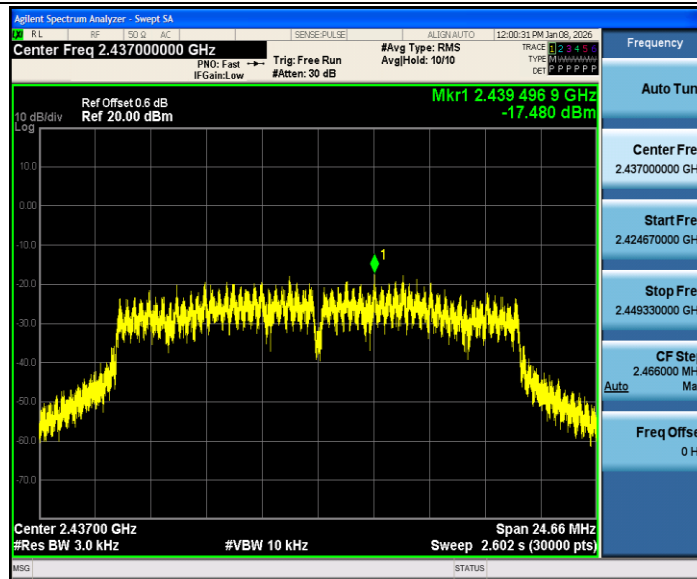
11G_Ant1_2462



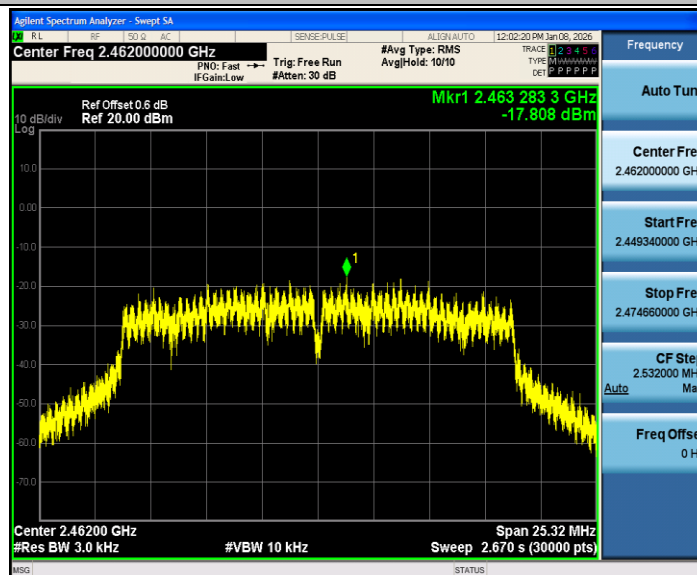
11N20SISO_Ant1_2412



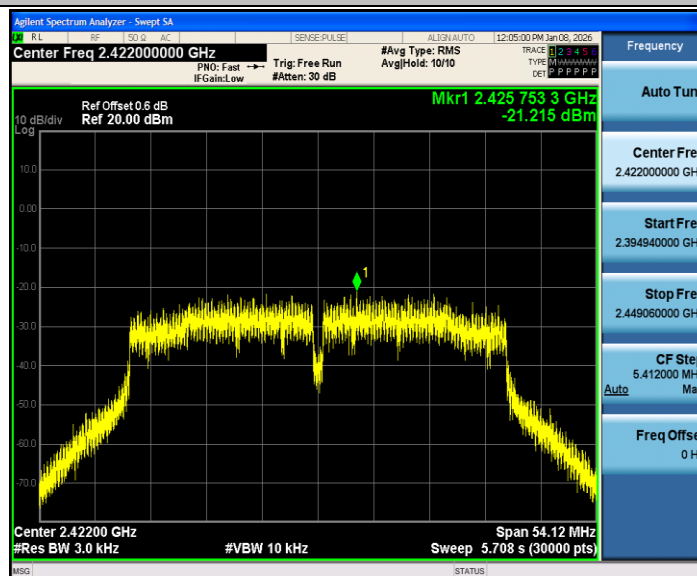
11N20SISO_Ant1_2437



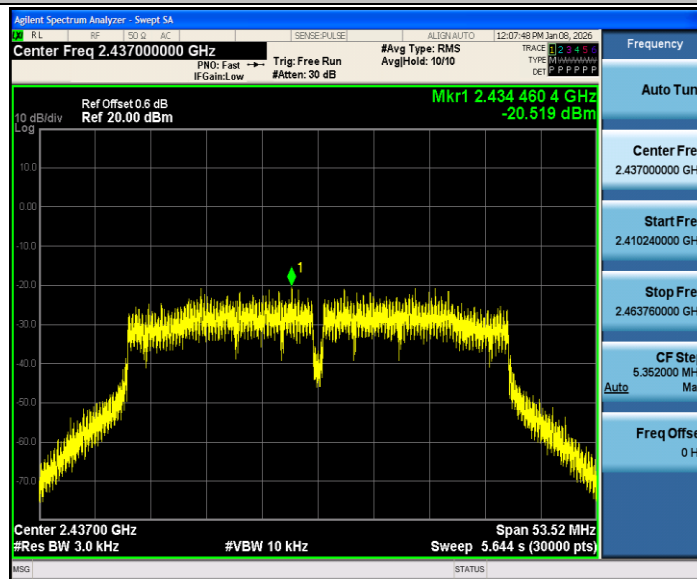
11N20SISO_Ant1_2462



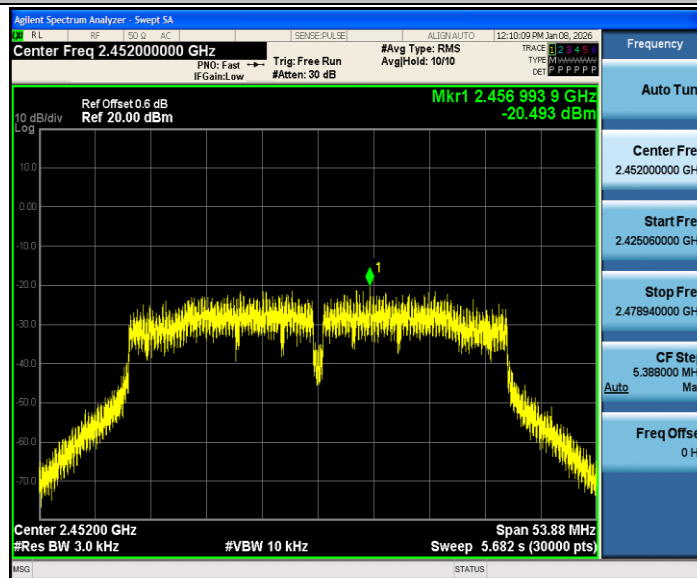
11N40SISO_Ant1_2422



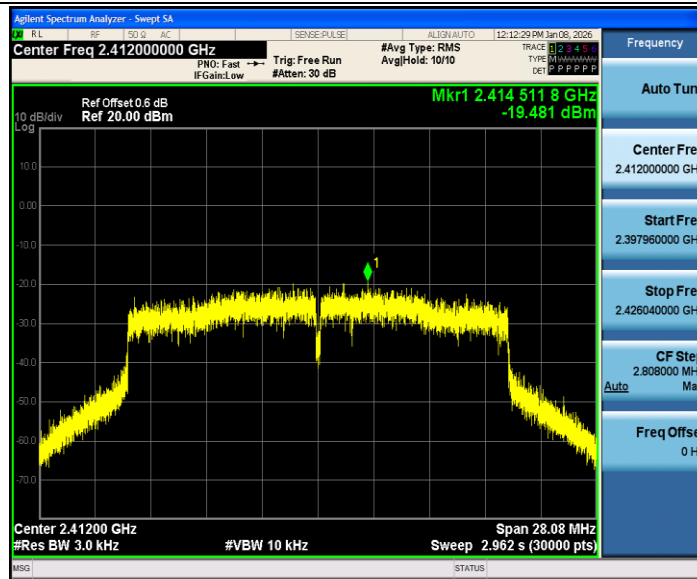
11N40SISO_Ant1_2437



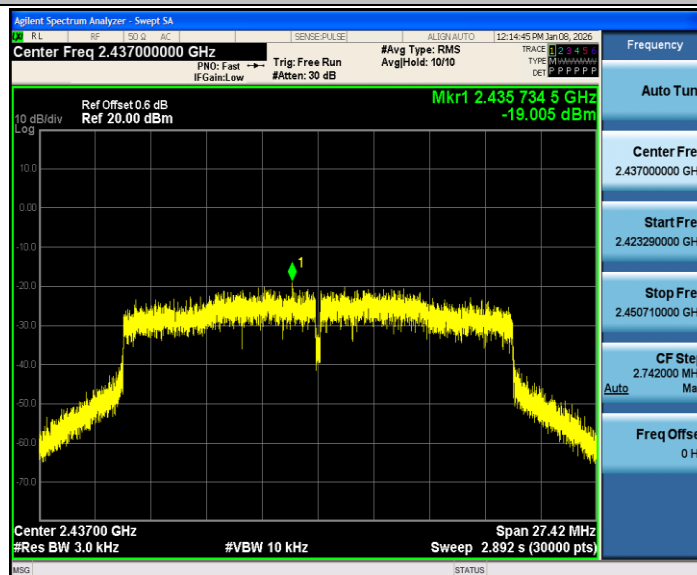
11N40SISO_Ant1_2452



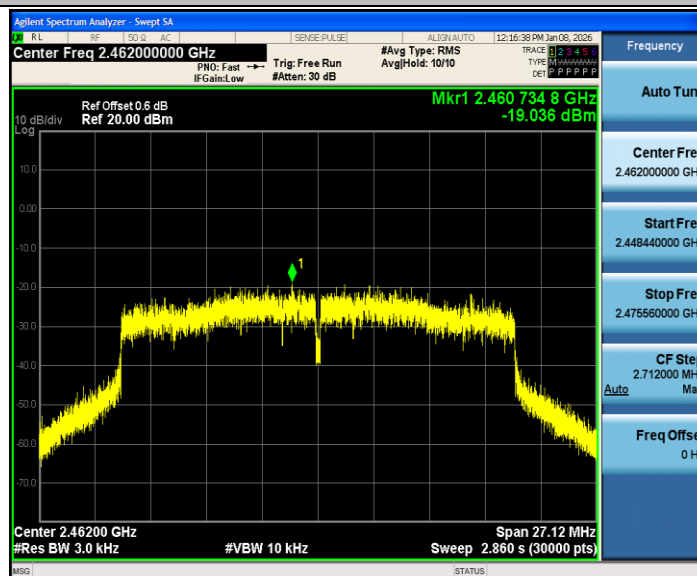
11AX20SISO_Ant1_2412



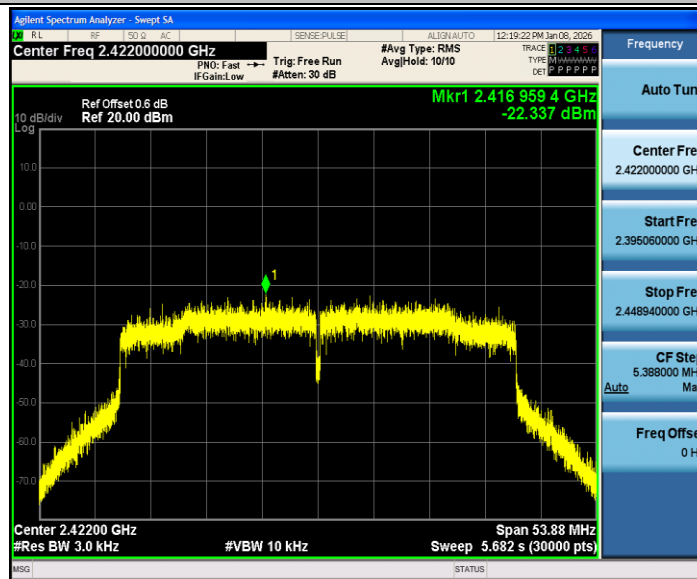
11AX20SISO_Ant1_2437



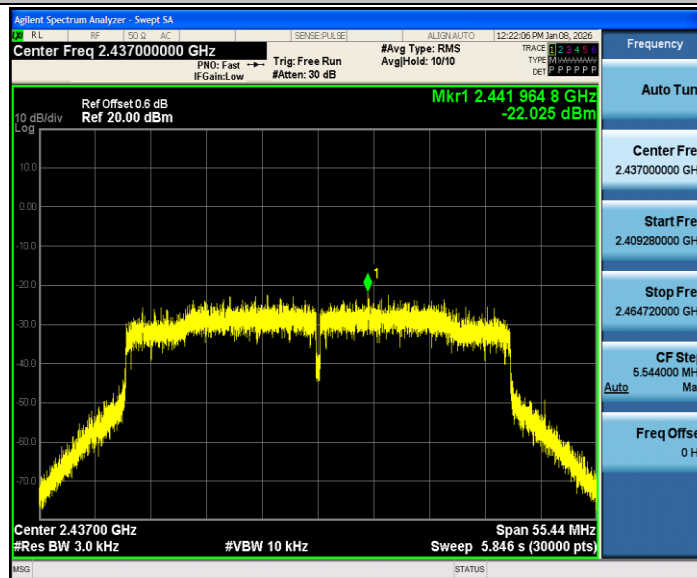
11AX20SISO_Ant1_2462



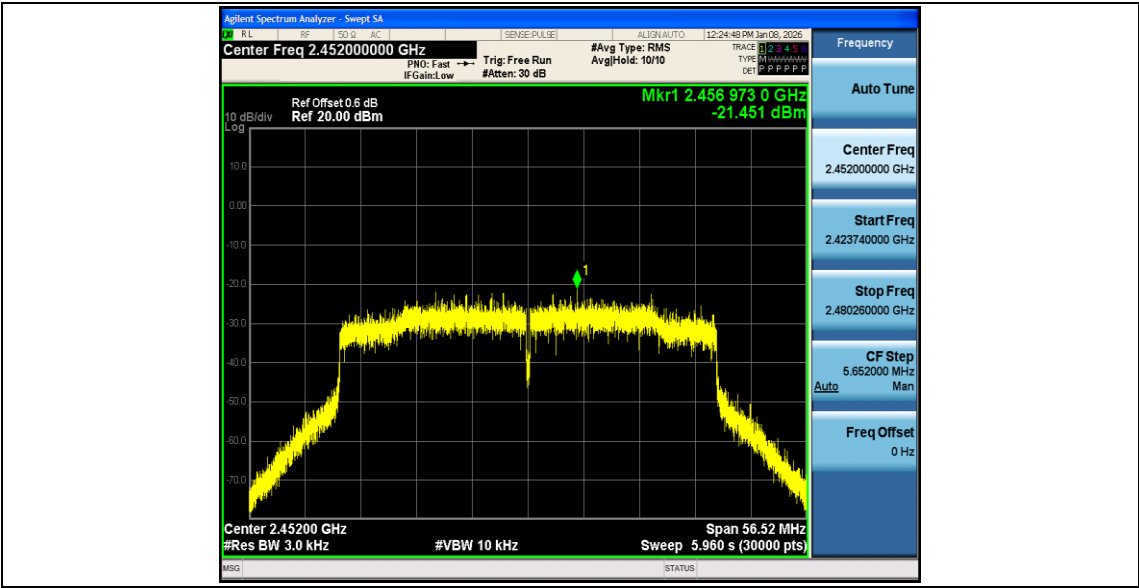
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



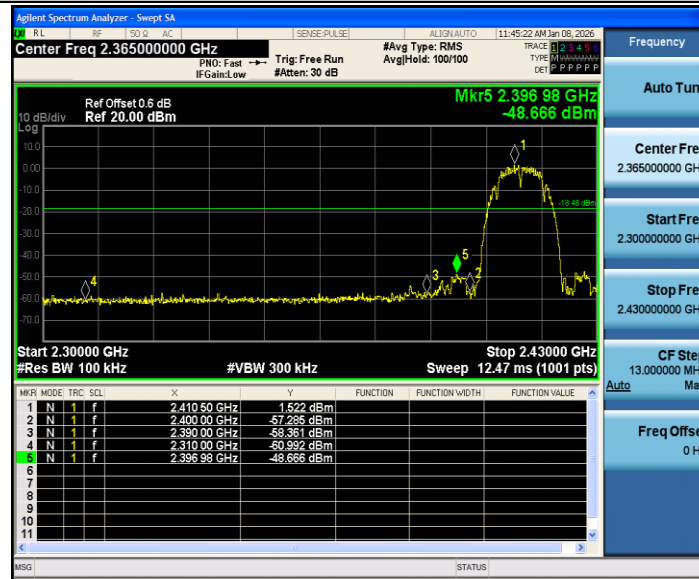
Appendix E: Band edge measurements

Test Result

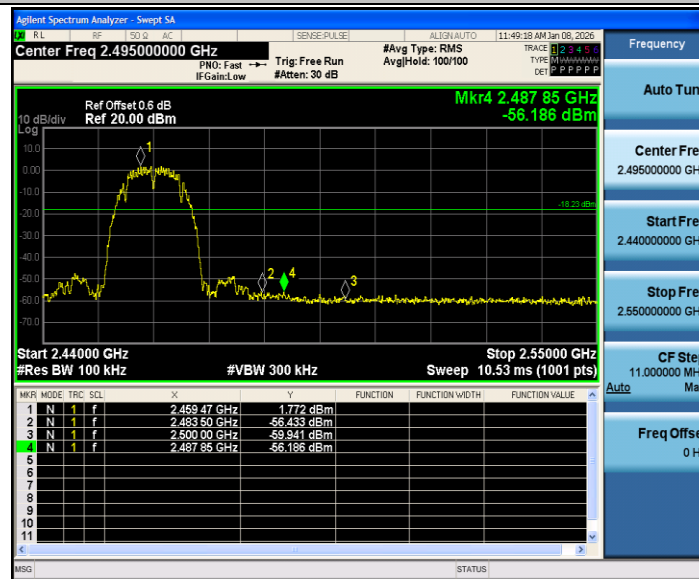
TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.52	-48.67	≤-18.48	PASS
		High	2462	1.77	-56.19	≤-18.23	PASS
11G	Ant1	Low	2412	-2.96	-33.34	≤-22.96	PASS
		High	2462	-2.71	-57.89	≤-22.71	PASS
11N20SISO	Ant1	Low	2412	-3.35	-35.03	≤-23.35	PASS
		High	2462	-2.76	-57.95	≤-22.76	PASS
11N40SISO	Ant1	Low	2422	-6.26	-33.99	≤-26.26	PASS
		High	2452	-6.05	-57.64	≤-26.05	PASS
11AX20SISO	Ant1	Low	2412	-3.75	-35.89	≤-23.75	PASS
		High	2462	-3.52	-57.49	≤-23.52	PASS
11AX40SISO	Ant1	Low	2422	-6.66	-36.15	≤-26.66	PASS
		High	2452	-6.58	-57.48	≤-26.58	PASS

Test Graphs

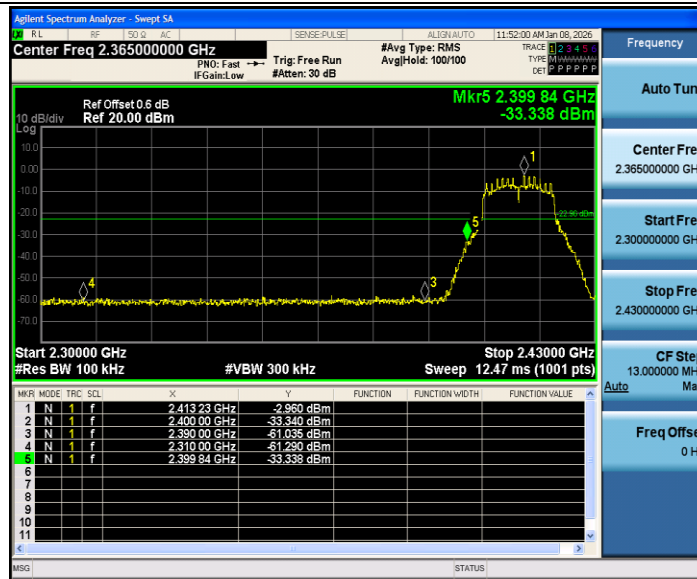
11B_Ant1_Low_2412



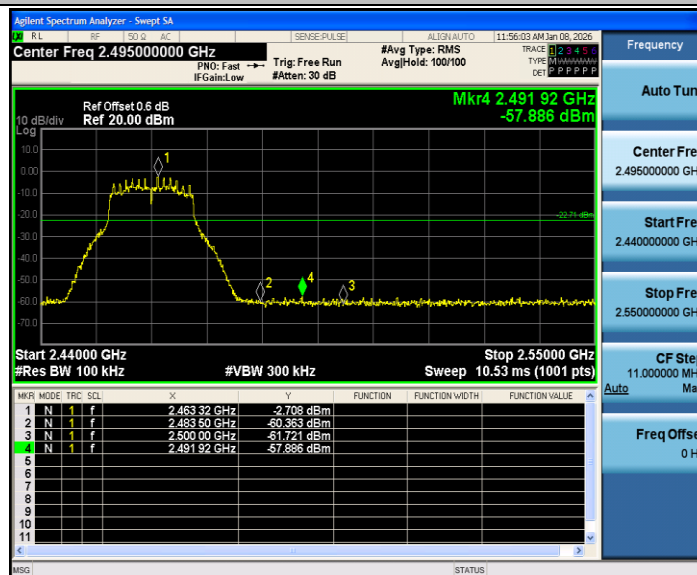
11B_Ant1_High_2462



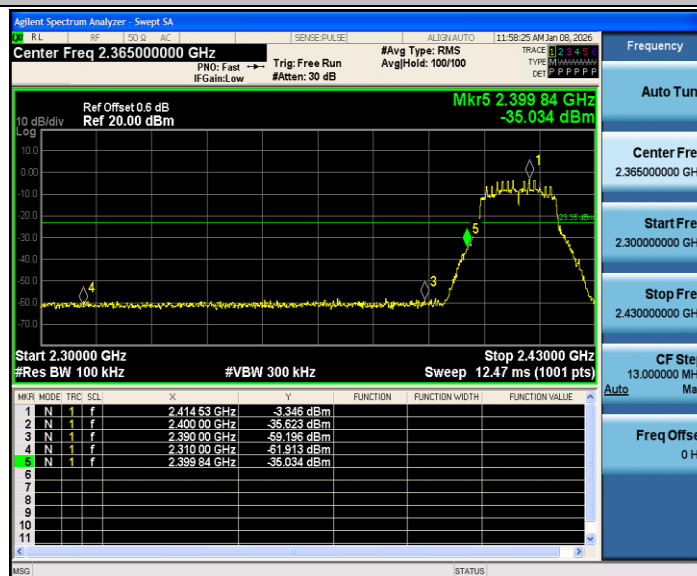
11G_Ant1_Low_2412



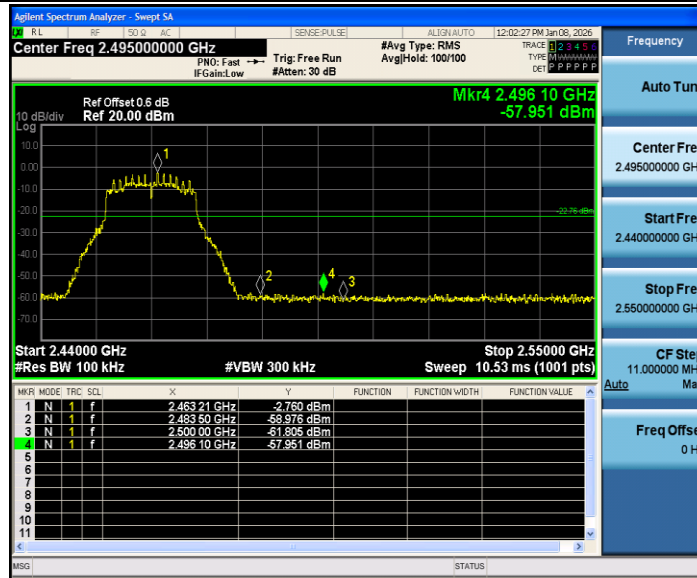
11G_Ant1_High_2462



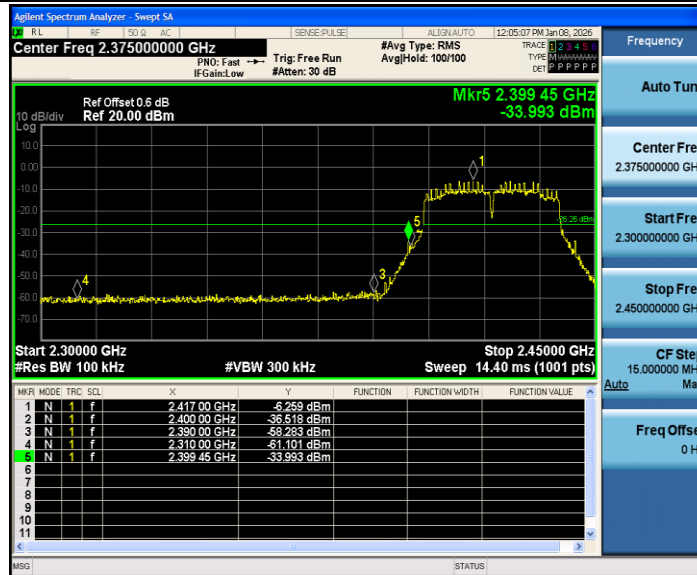
11N20SISO_Ant1_Low_2412



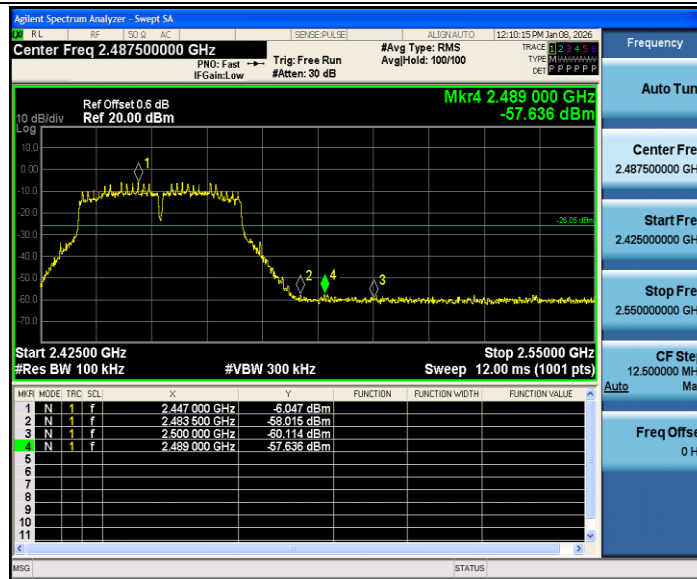
11N20SISO_Ant1_High_2462



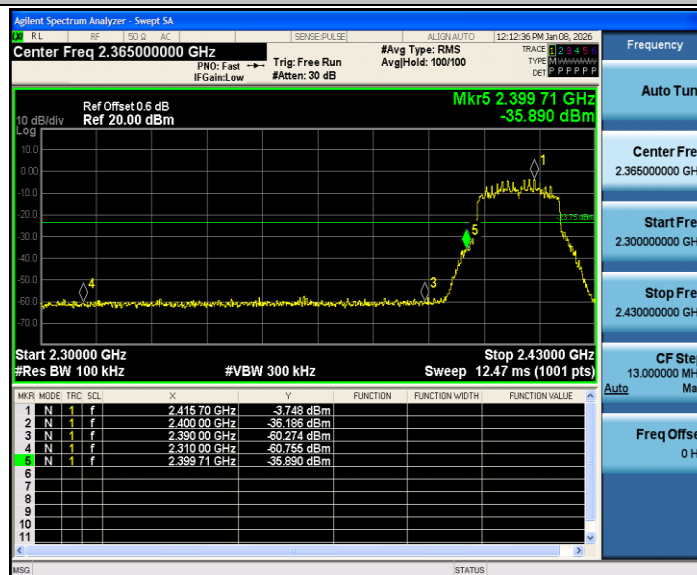
11N40SISO_Ant1_Low_2422



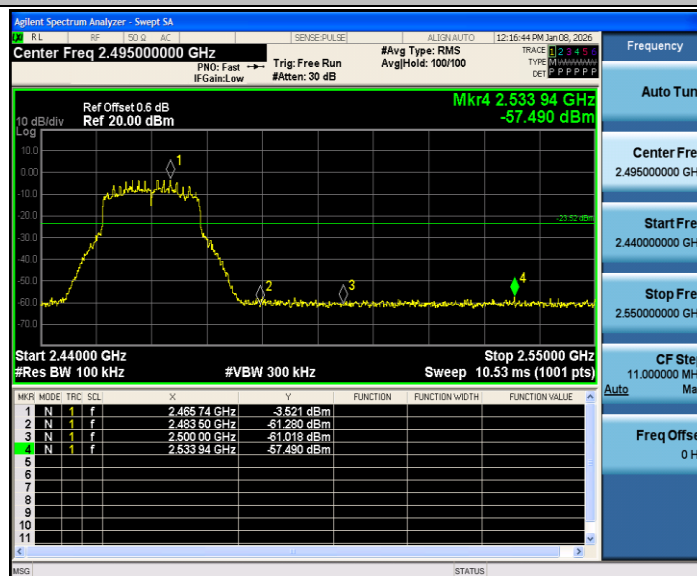
11N40SISO_Ant1_High_2452



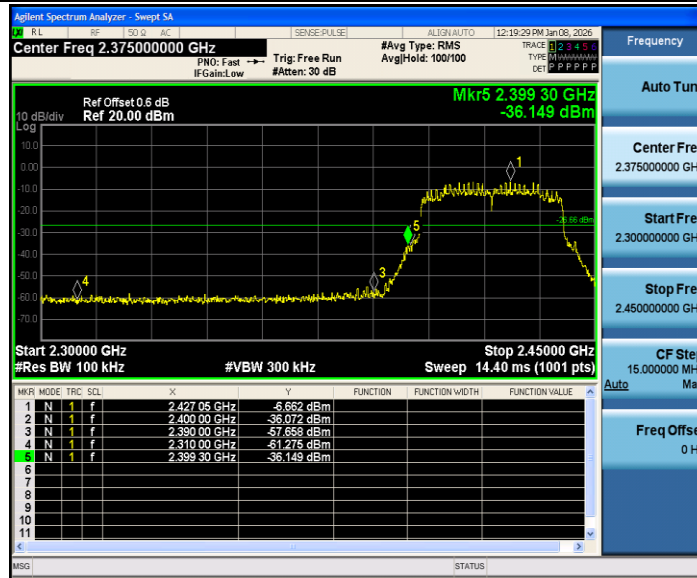
11AX20SISO_Ant1_Low_2412



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	0.80	0.80	---	PASS
			30~1000	0.80	-67.01	≤-19.2	PASS
			1000~26500	0.80	-54.97	≤-19.2	PASS
		2437	Reference	1.08	1.08	---	PASS
			30~1000	1.08	-66.98	≤-18.92	PASS
			1000~26500	1.08	-54.85	≤-18.92	PASS
		2462	Reference	0.21	0.21	---	PASS
			30~1000	0.21	-67.71	≤-19.79	PASS
			1000~26500	0.21	-55.3	≤-19.79	PASS
11G	Ant1	2412	Reference	-3.06	-3.06	---	PASS
			30~1000	-3.06	-68.1	≤-23.06	PASS
			1000~26500	-3.06	-55.09	≤-23.06	PASS
		2437	Reference	-3.10	-3.10	---	PASS
			30~1000	-3.10	-66.37	≤-23.1	PASS
			1000~26500	-3.10	-55.32	≤-23.1	PASS
		2462	Reference	-3.29	-3.29	---	PASS
			30~1000	-3.29	-68.26	≤-23.29	PASS
			1000~26500	-3.29	-54.77	≤-23.29	PASS
11N20SISO	Ant1	2412	Reference	-3.35	-3.35	---	PASS
			30~1000	-3.35	-67.56	≤-23.35	PASS
			1000~26500	-3.35	-55.16	≤-23.35	PASS
		2437	Reference	-2.83	-2.83	---	PASS
			30~1000	-2.83	-68.03	≤-22.83	PASS
			1000~26500	-2.83	-55.35	≤-22.83	PASS
		2462	Reference	-4.04	-4.04	---	PASS
			30~1000	-4.04	-67.98	≤-24.04	PASS
			1000~26500	-4.04	-55.54	≤-24.04	PASS
11N40SISO	Ant1	2422	Reference	-6.69	-6.69	---	PASS
			30~1000	-6.69	-68.53	≤-26.69	PASS
			1000~26500	-6.69	-54.29	≤-26.69	PASS
		2437	Reference	-6.37	-6.37	---	PASS
			30~1000	-6.37	-67.24	≤-26.37	PASS
			1000~26500	-6.37	-54.7	≤-26.37	PASS
		2452	Reference	-6.26	-6.26	---	PASS
			30~1000	-6.26	-67.85	≤-26.26	PASS
			1000~26500	-6.26	-55.35	≤-26.26	PASS
11AX20SISO	Ant1	2412	Reference	-4.89	-4.89	---	PASS