Appendix B

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: AC EV Charger

Test Model: PCAC-J4-US11.5/240

Environmental Conditions

Temperature:	23.1° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Paddi Chen
Supervised by:	Nick Peng

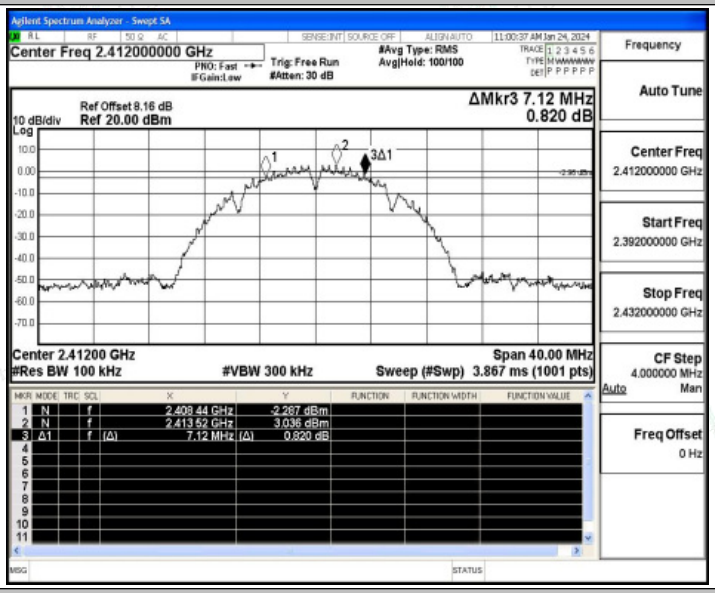
B.1 DTS Bandwidth

Test Result

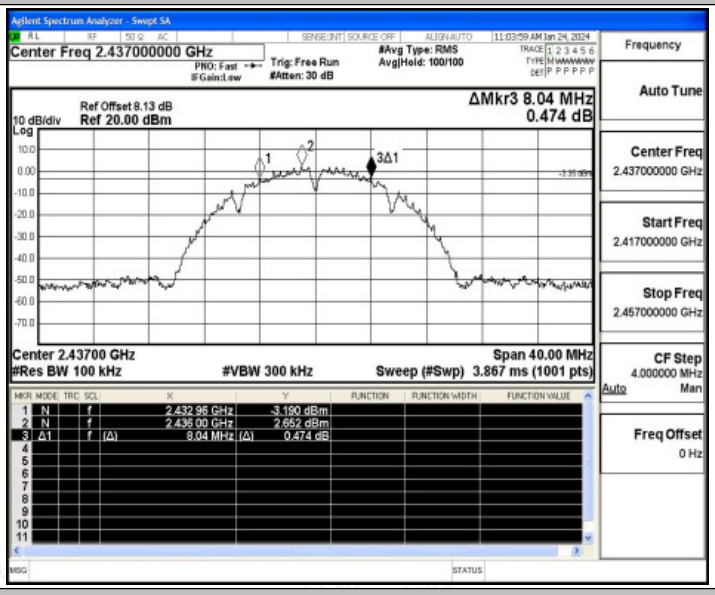
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	7.120	2408.440	2415.560	0.5	PASS
		2437	8.040	2432.960	2441.000	0.5	PASS
		2462	7.560	2458.000	2465.560	0.5	PASS
11G	Ant1	2412	14.800	2404.440	2419.240	0.5	PASS
		2437	15.080	2429.440	2444.520	0.5	PASS
		2462	14.680	2454.880	2469.560	0.5	PASS
11N20SISO	Ant1	2412	12.920	2405.680	2418.600	0.5	PASS
		2437	11.480	2431.760	2443.240	0.5	PASS
		2462	16.040	2453.480	2469.520	0.5	PASS
11N40SISO	Ant1	2422	35.120	2404.480	2439.600	0.5	PASS
		2437	35.040	2419.480	2454.520	0.5	PASS
		2452	35.040	2434.480	2469.520	0.5	PASS

Test Graphs

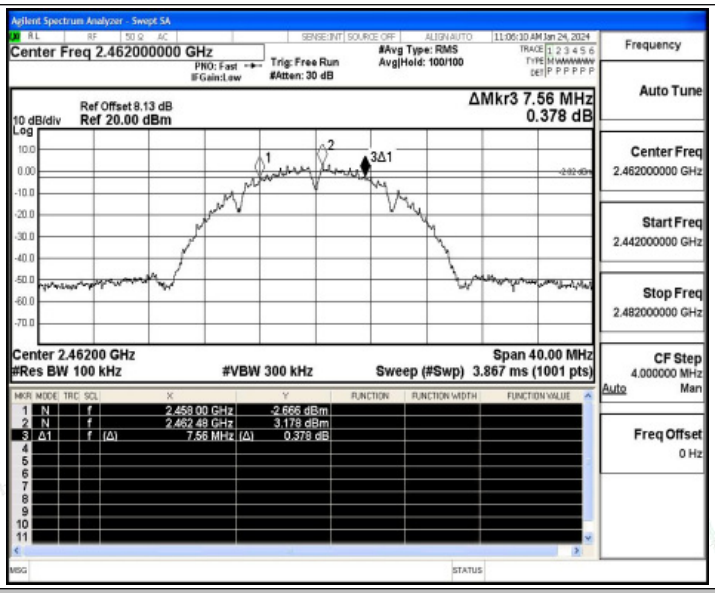
11B_Ant1_2412



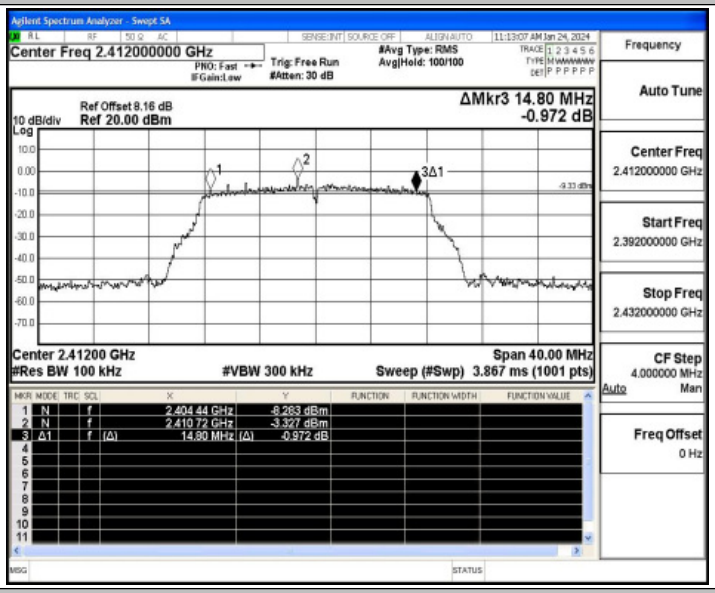
11B_Ant1_2437



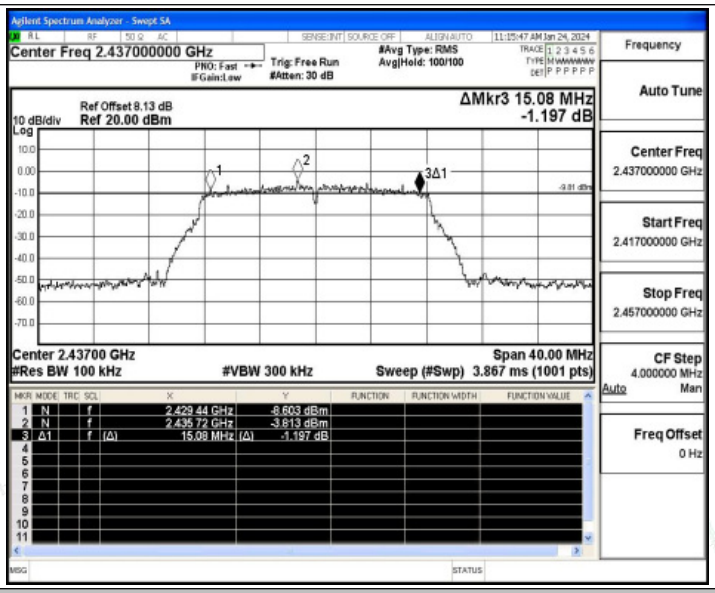
11B_Ant1_2462



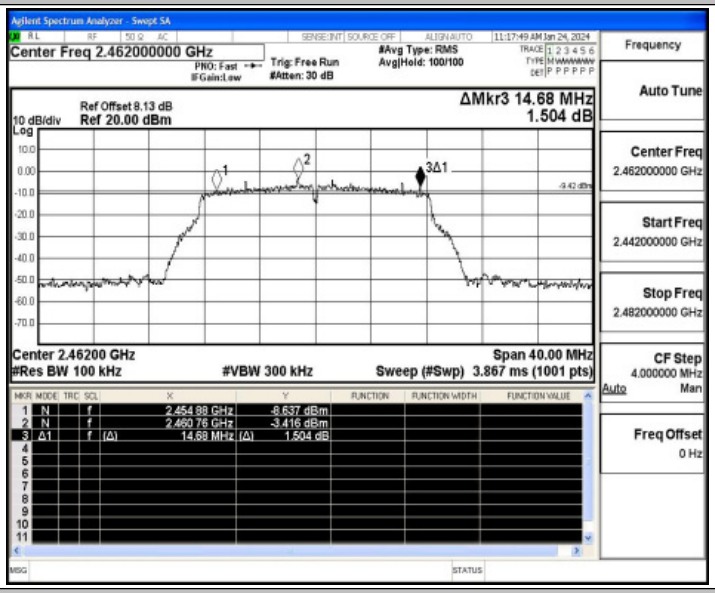
11G_Ant1_2412



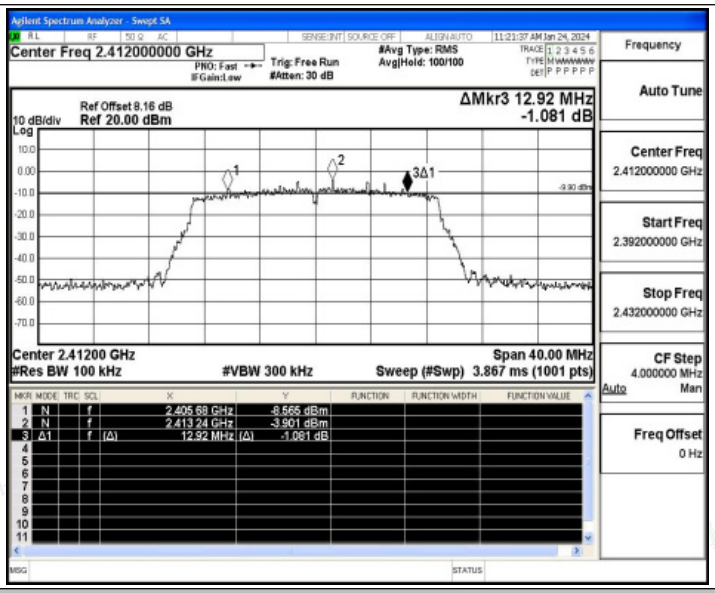
11G_Ant1_2437



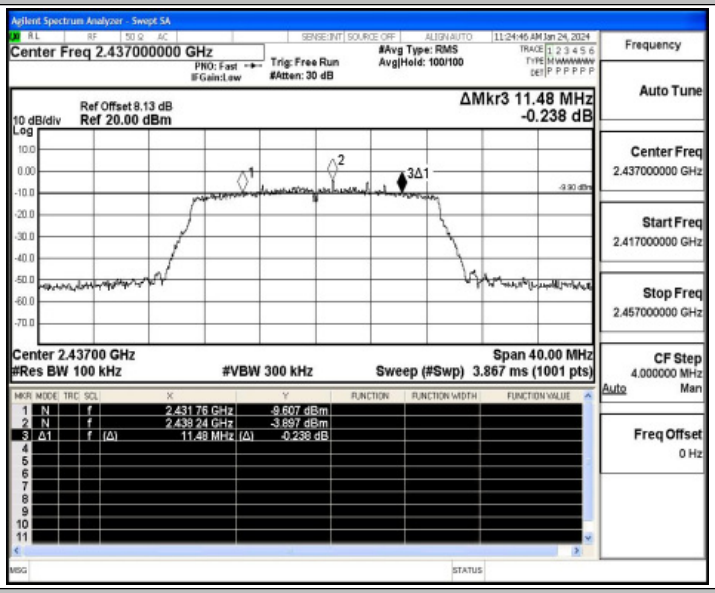
11G_Ant1_2462



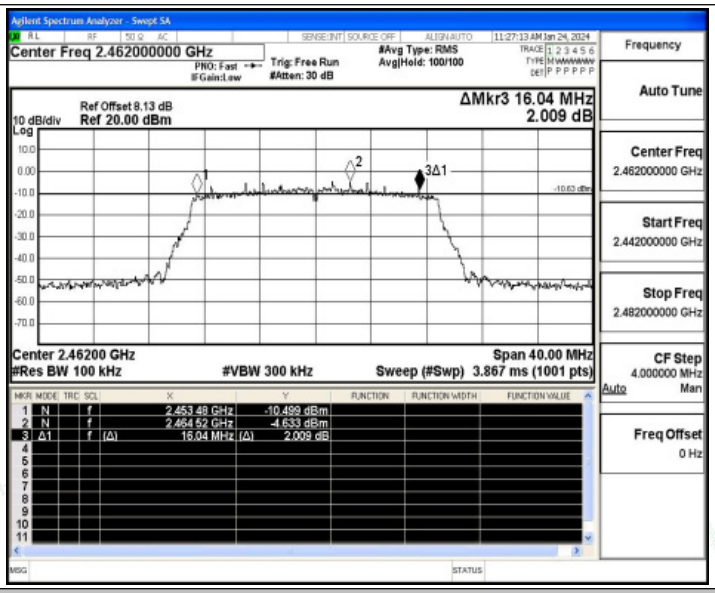
11N20SISO_Ant1_2412



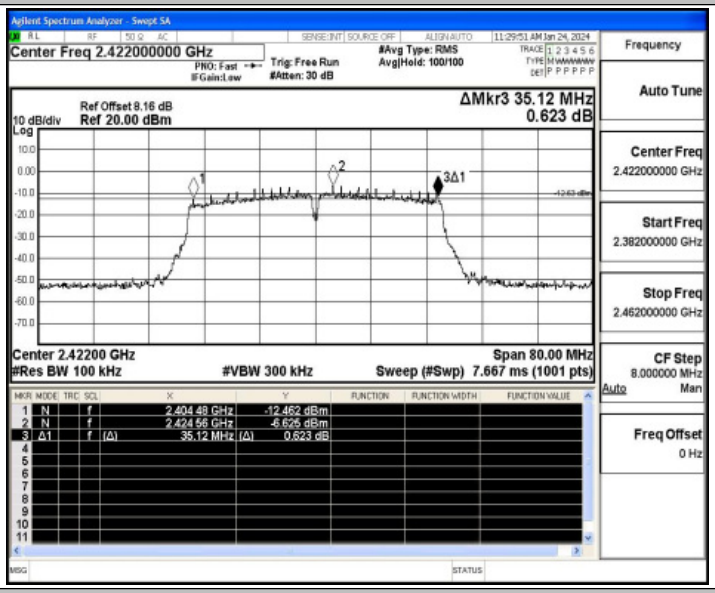
11N20SISO_Ant1_2437



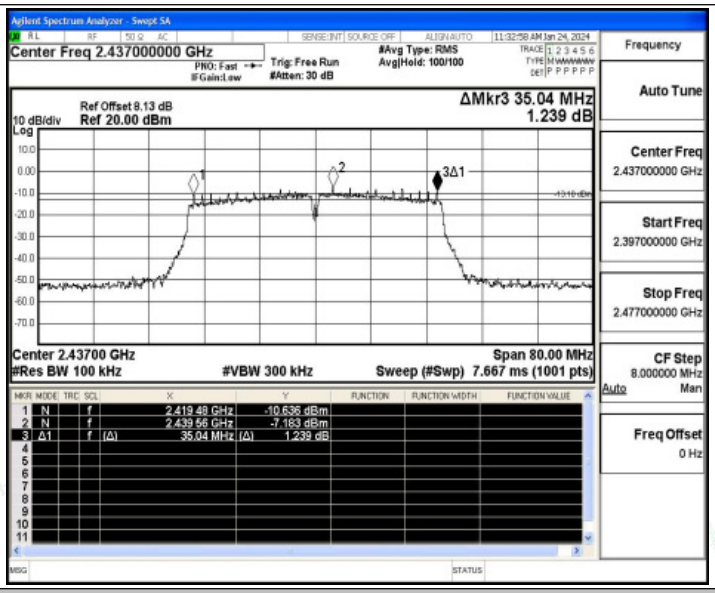
11N20SISO_Ant1_2462



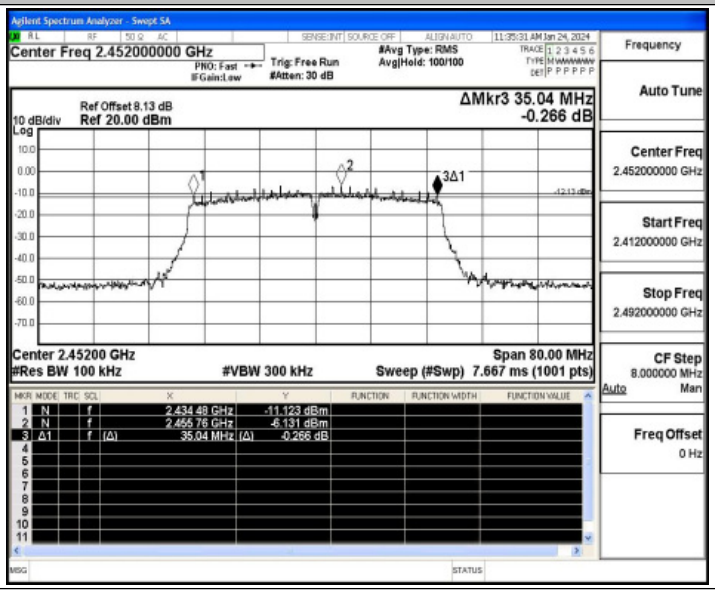
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



B.2 Maximum conducted output power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	14.32	≤30.00	PASS
		2437	15.16	≤30.00	PASS
		2462	14.57	≤30.00	PASS
11G	Ant1	2412	13.63	≤30.00	PASS
		2437	13.70	≤30.00	PASS
		2462	13.70	≤30.00	PASS
11N20SISO	Ant1	2412	12.59	≤30.00	PASS
		2437	12.52	≤30.00	PASS
		2462	12.64	≤30.00	PASS
11N40SISO	Ant1	2422	12.81	≤30.00	PASS
		2437	12.95	≤30.00	PASS
		2452	13.12	≤30.00	PASS

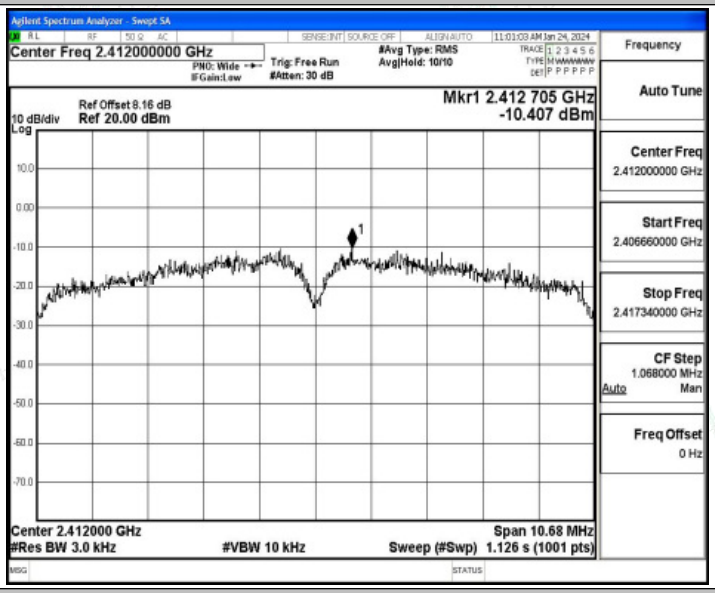
B.3 Maximum power spectral density

Test Result

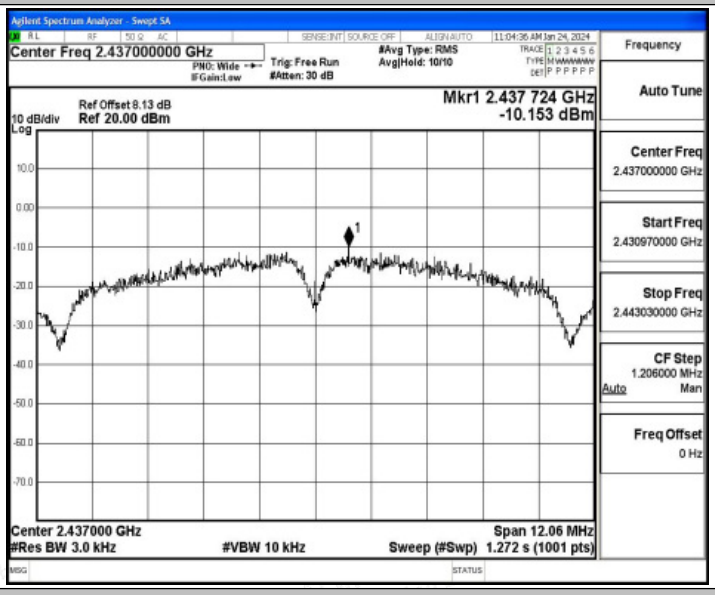
TestMode	Antenna	Freq(MHz)	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-10.41	≤8.00	PASS
		2437	-10.15	≤8.00	PASS
		2462	-10.76	≤8.00	PASS
11G	Ant1	2412	-16.65	≤8.00	PASS
		2437	-17.61	≤8.00	PASS
		2462	-16.65	≤8.00	PASS
11N20SISO	Ant1	2412	-18.18	≤8.00	PASS
		2437	-16.79	≤8.00	PASS
		2462	-16.79	≤8.00	PASS
11N40SISO	Ant1	2422	-20.48	≤8.00	PASS
		2437	-18.14	≤8.00	PASS
		2452	-17.73	≤8.00	PASS

Test Graphs

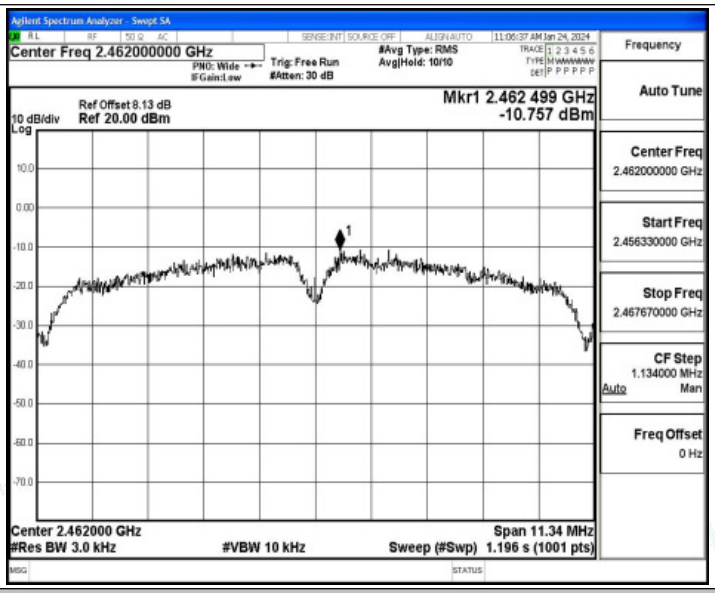
11B_Ant1_2412



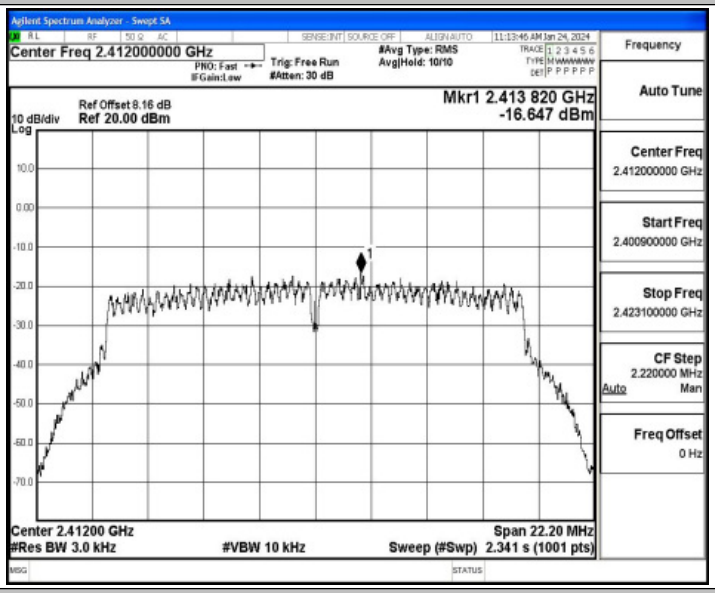
11B_Ant1_2437



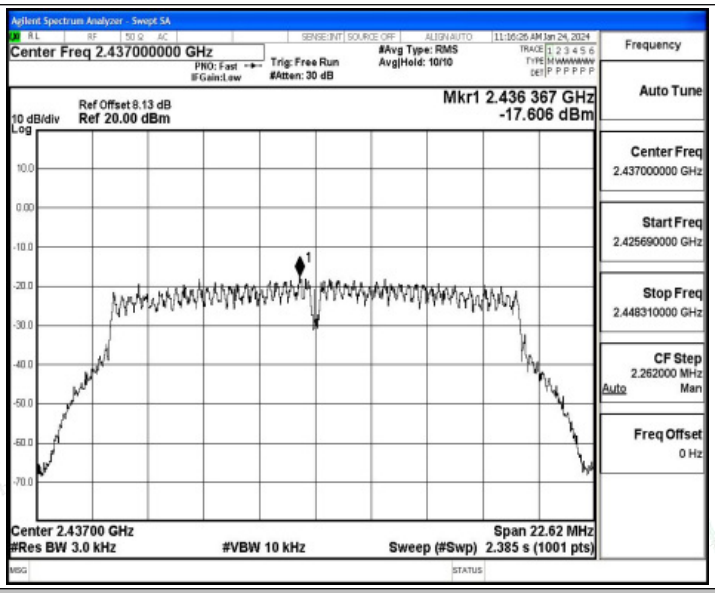
11B_Ant1_2462



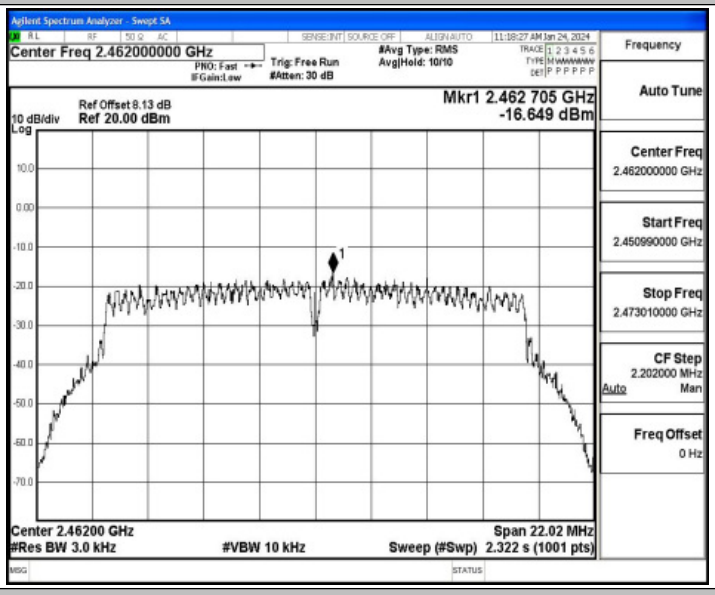
11G_Ant1_2412



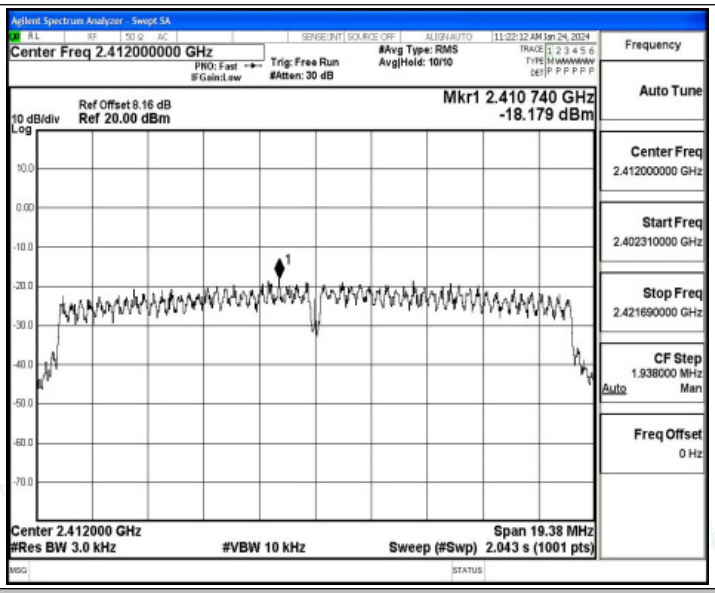
11G_Ant1_2437



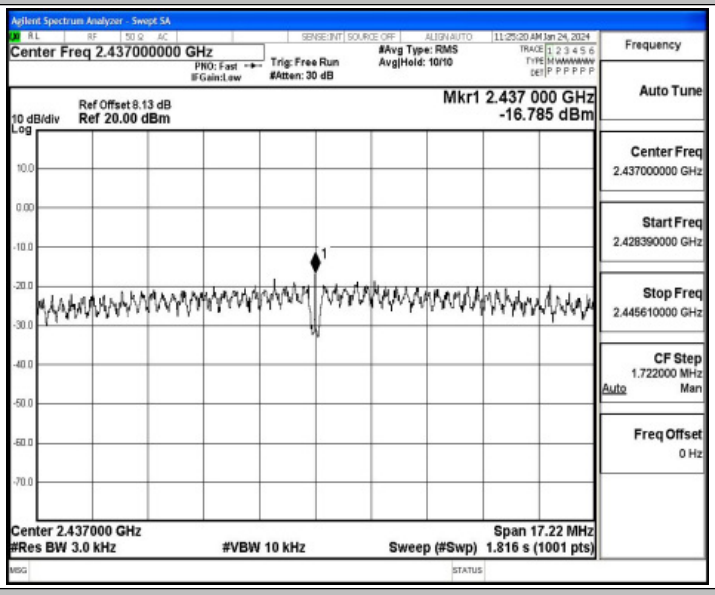
11G_Ant1_2462



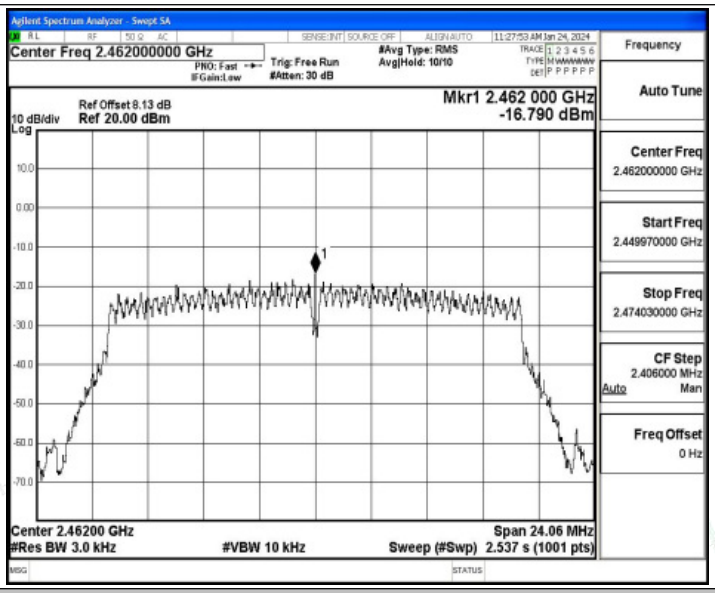
11N20SISO_Ant1_2412



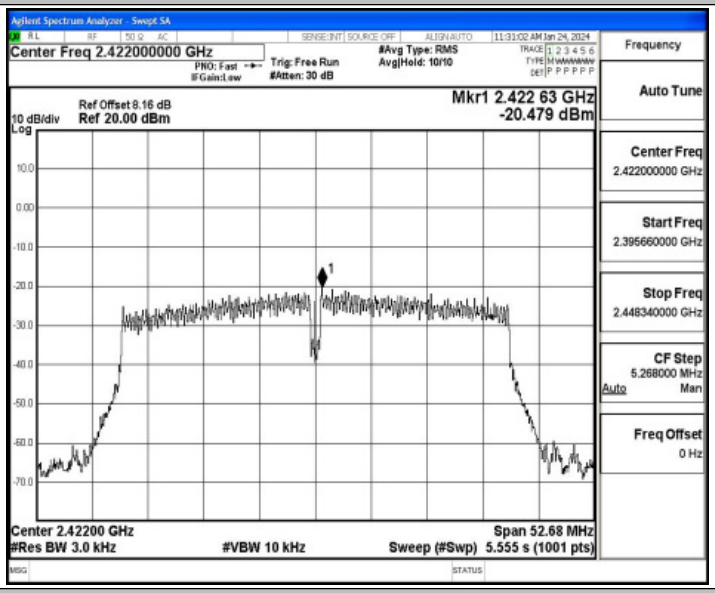
11N20SISO_Ant1_2437



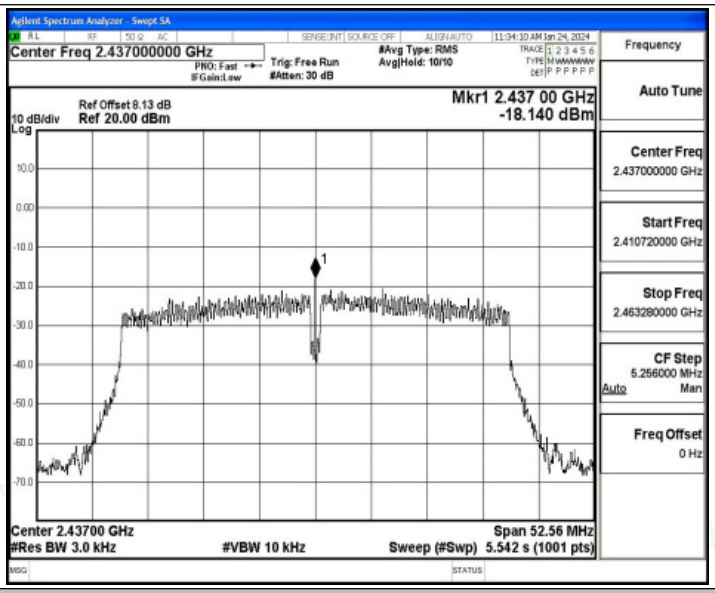
11N20SISO_Ant1_2462



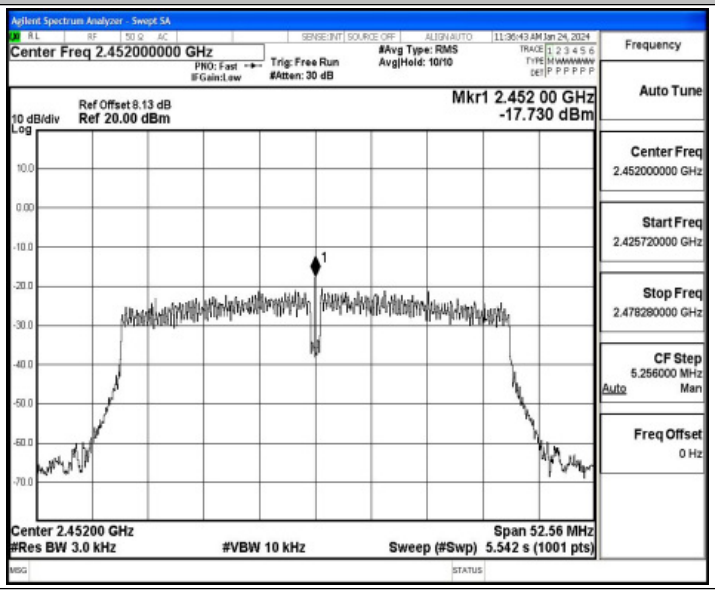
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



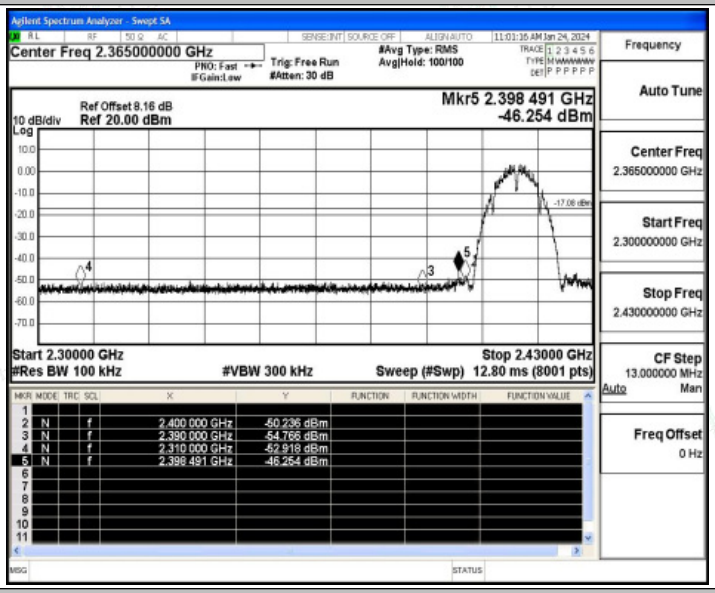
B.4 Band edge measurements

Test Result

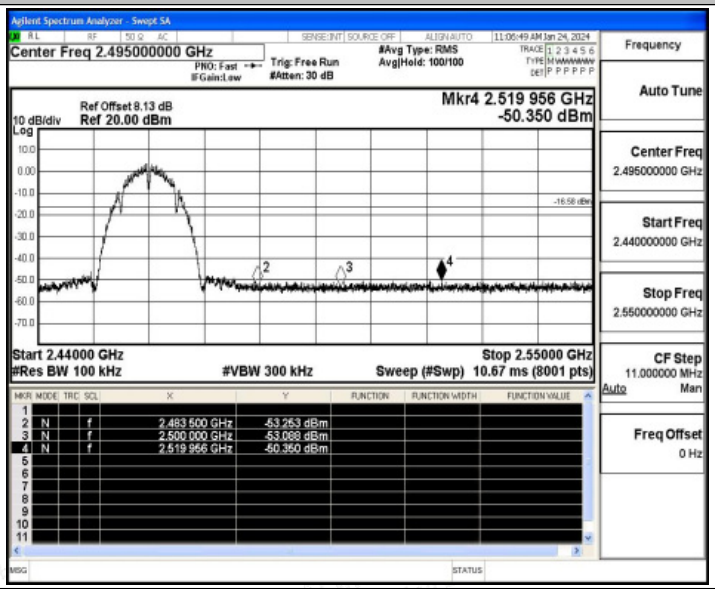
TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.92	-46.25	≤-17.08	PASS
		High	2462	3.42	-50.35	≤-16.58	PASS
11G	Ant1	Low	2412	-2.95	-47.49	≤-22.95	PASS
		High	2462	-3.51	-48.95	≤-23.51	PASS
11N20SISO	Ant1	Low	2412	-4.23	-49.23	≤-24.23	PASS
		High	2462	-4.37	-49.12	≤-24.37	PASS
11N40SISO	Ant1	Low	2422	-6.68	-47.44	≤-26.68	PASS
		High	2452	-6.45	-49.35	≤-26.45	PASS

Test Graphs

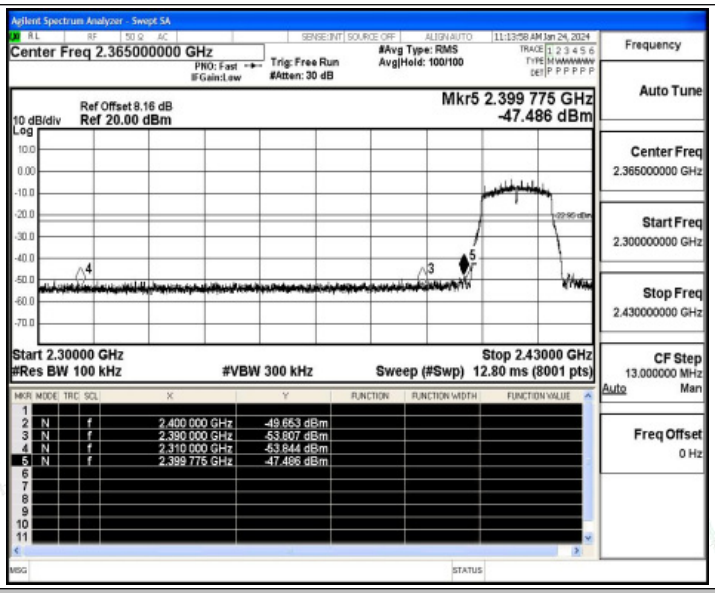
11B_Ant1_Low_2412



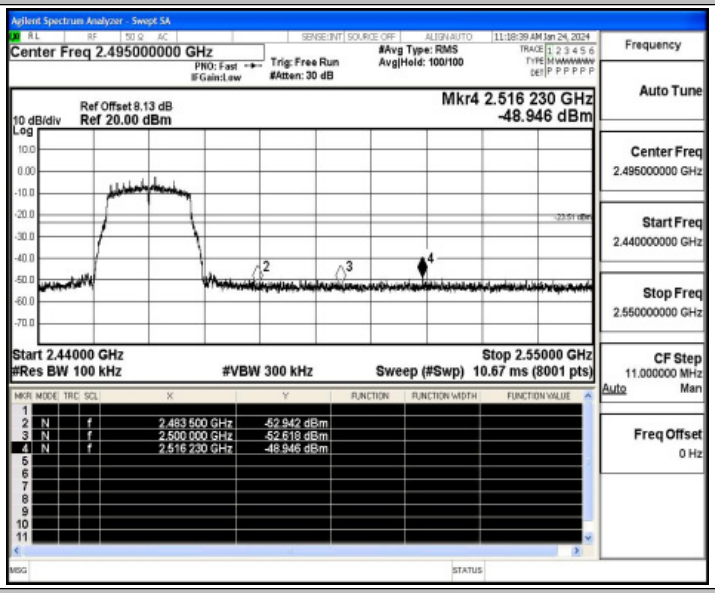
11B_Ant1_High_2462



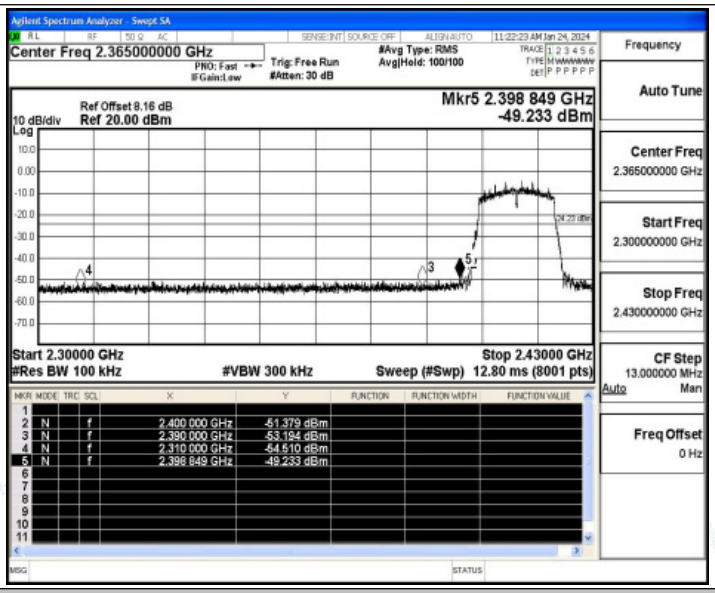
11G_Ant1_Low_2412



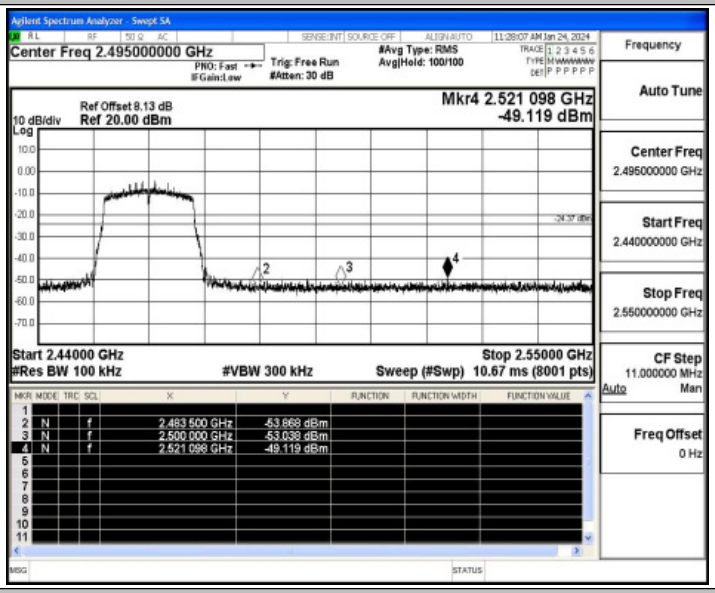
11G_Ant1_High_2462



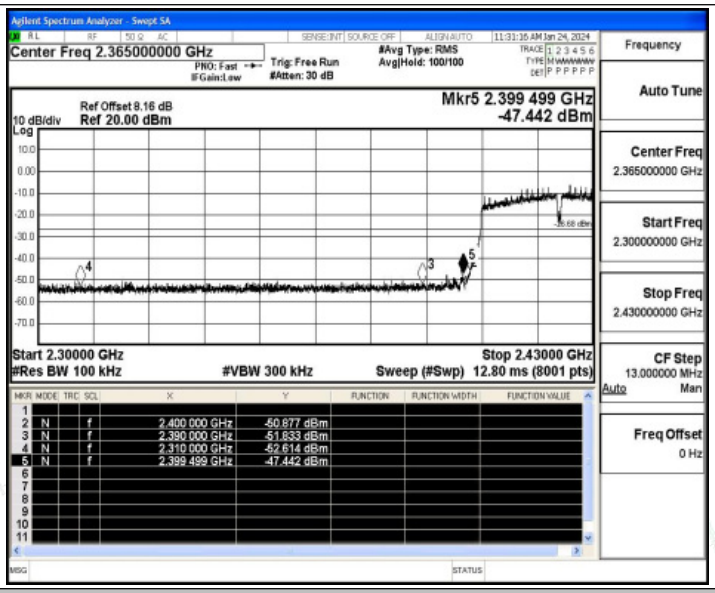
11N20SISO_Ant1_Low_2412



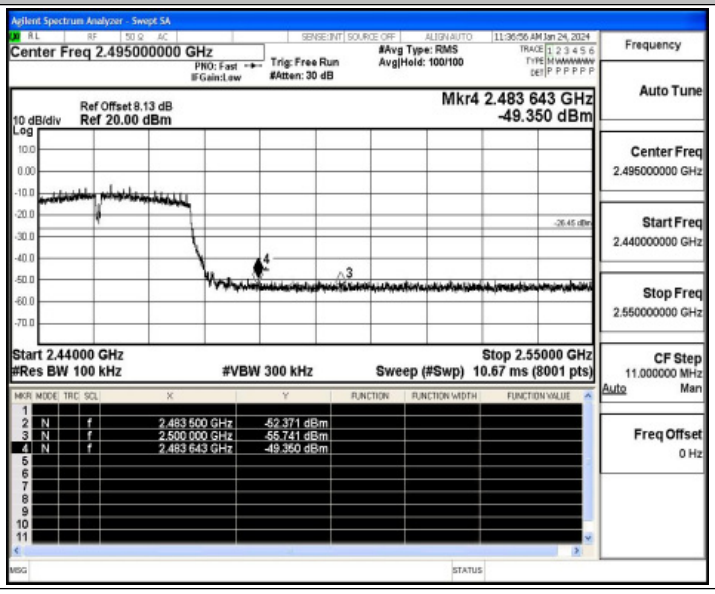
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



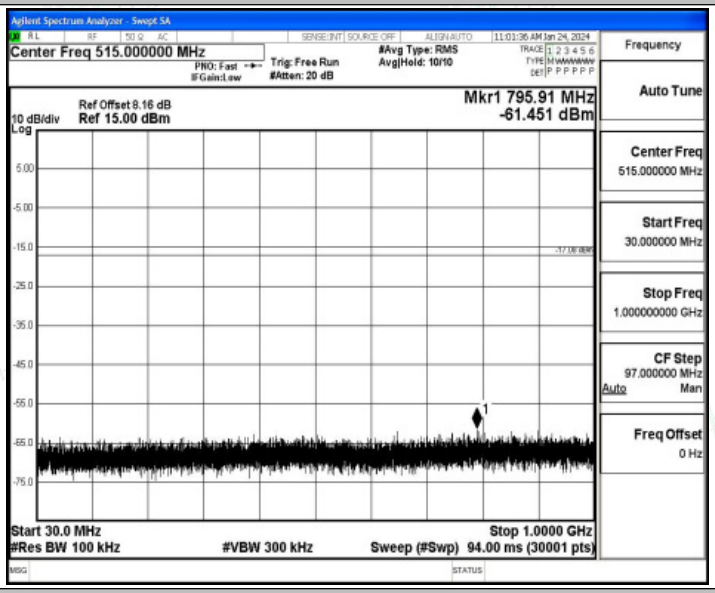
B.5 Conducted Spurious Emission

Test Result

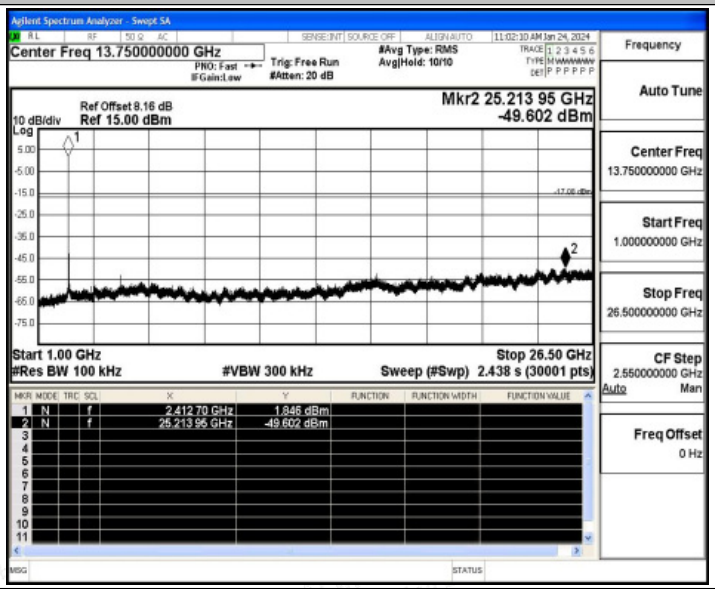
TestMode	Antenna	Freq(MHz)	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	30~1000	2.92	-61.45	≤-17.08	PASS
			1000~26500	2.92	-49.6	≤-17.08	PASS
		2437	30~1000	2.77	-61.63	≤-17.23	PASS
			1000~26500	2.77	-49.38	≤-17.23	PASS
		2462	30~1000	3.42	-61.3	≤-16.58	PASS
			1000~26500	3.42	-49	≤-16.58	PASS
11G	Ant1	2412	30~1000	-2.95	-61.29	≤-22.95	PASS
			1000~26500	-2.95	-49.06	≤-22.95	PASS
		2437	30~1000	-3.47	-61.63	≤-23.47	PASS
			1000~26500	-3.47	-49.1	≤-23.47	PASS
		2462	30~1000	-3.51	-61.54	≤-23.51	PASS
			1000~26500	-3.51	-48.24	≤-23.51	PASS
11N20SISO	Ant1	2412	30~1000	-4.23	-61.35	≤-24.23	PASS
			1000~26500	-4.23	-48.16	≤-24.23	PASS
		2437	30~1000	-4.55	-61.67	≤-24.55	PASS
			1000~26500	-4.55	-49.56	≤-24.55	PASS
		2462	30~1000	-4.37	-61.09	≤-24.37	PASS
			1000~26500	-4.37	-48.92	≤-24.37	PASS
11N40SISO	Ant1	2422	30~1000	-6.68	-61.25	≤-26.68	PASS
			1000~26500	-6.68	-47.71	≤-26.68	PASS
		2437	30~1000	-6.65	-60.86	≤-26.65	PASS
			1000~26500	-6.65	-49.15	≤-26.65	PASS
		2452	30~1000	-6.45	-61.82	≤-26.45	PASS
			1000~26500	-6.45	-49.15	≤-26.45	PASS

Test Graphs

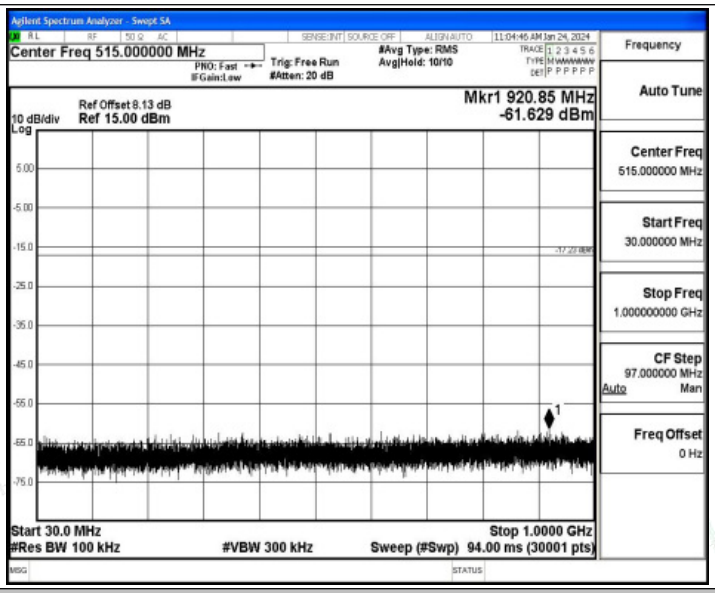
11B_Ant1_2412_30~1000



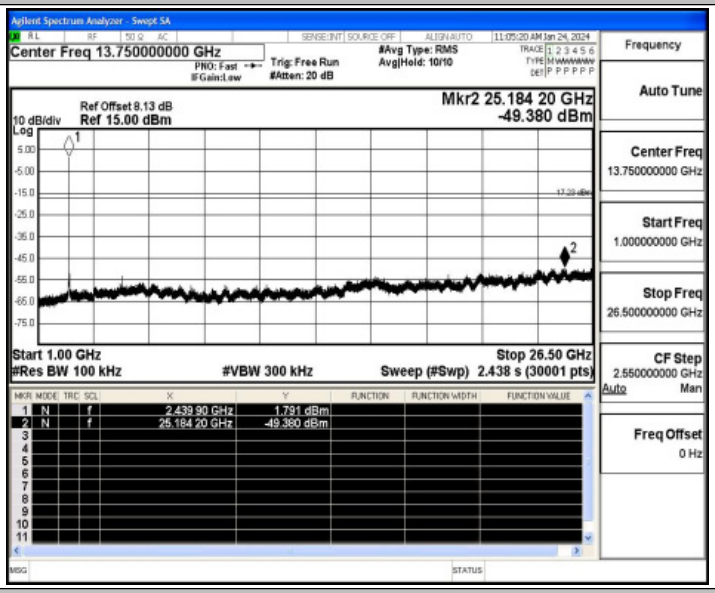
11B_Ant1_2412_1000~26500



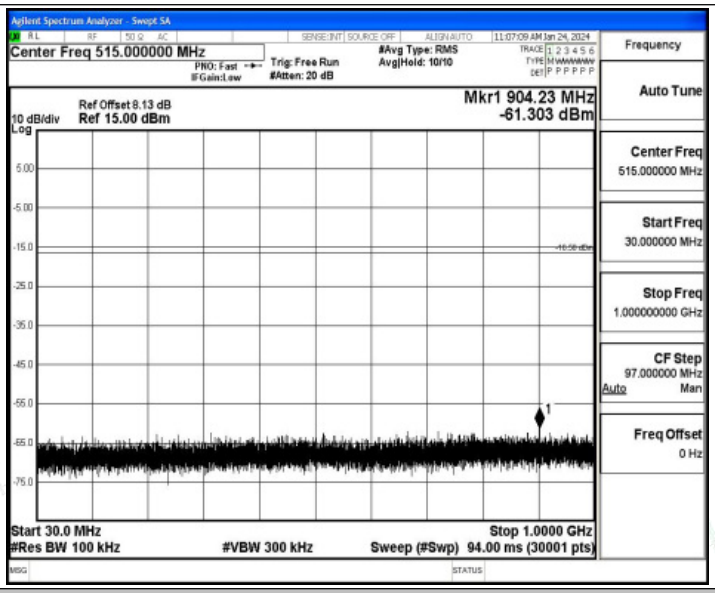
11B_Ant1_2437_30~1000



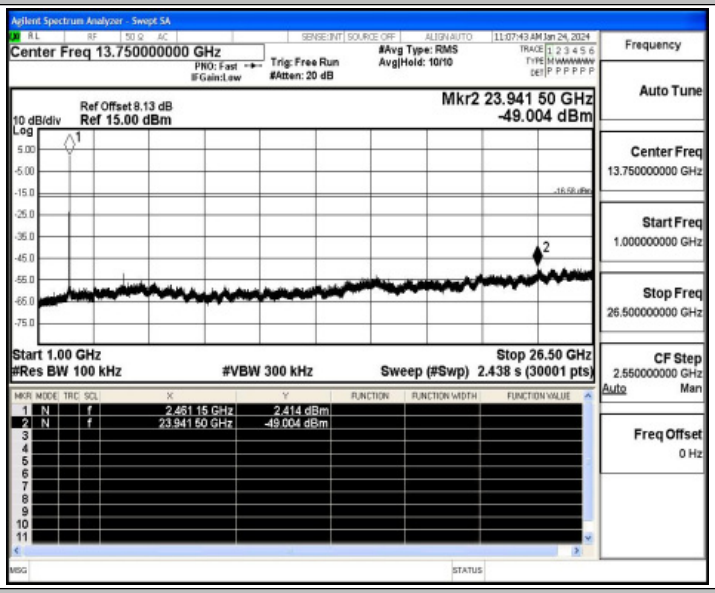
11B_Ant1_2437_1000~26500



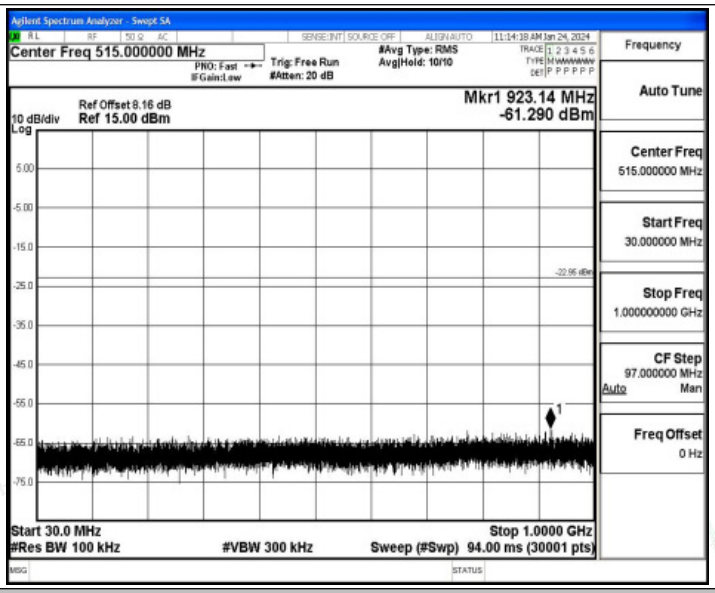
11B_Ant1_2462_30~1000



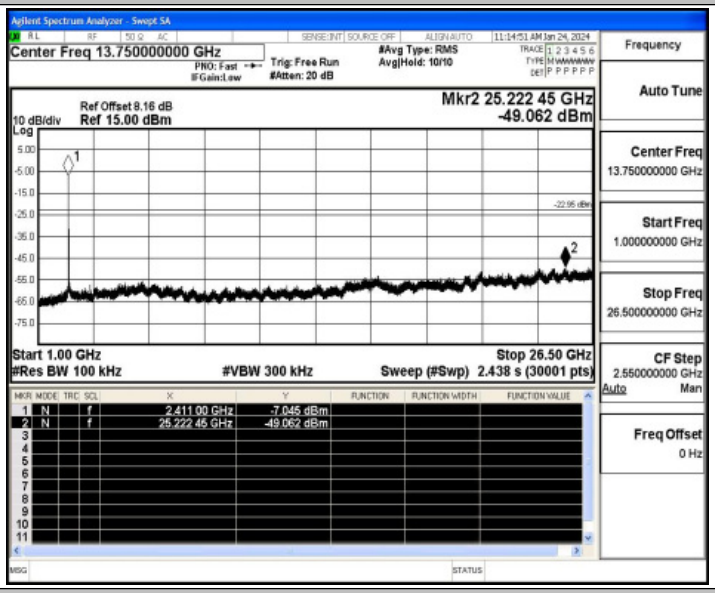
11B_Ant1_2462_1000~26500



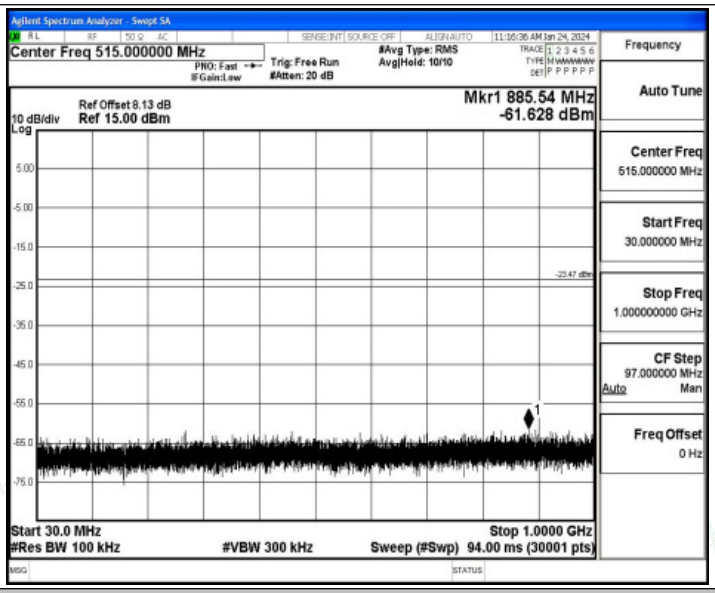
11G_Ant1_2412_30~1000



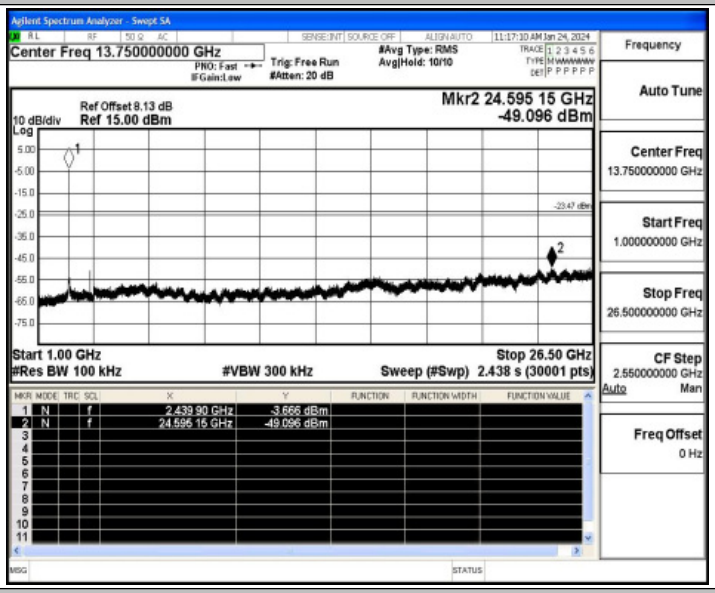
11G_Ant1_2412_1000~26500



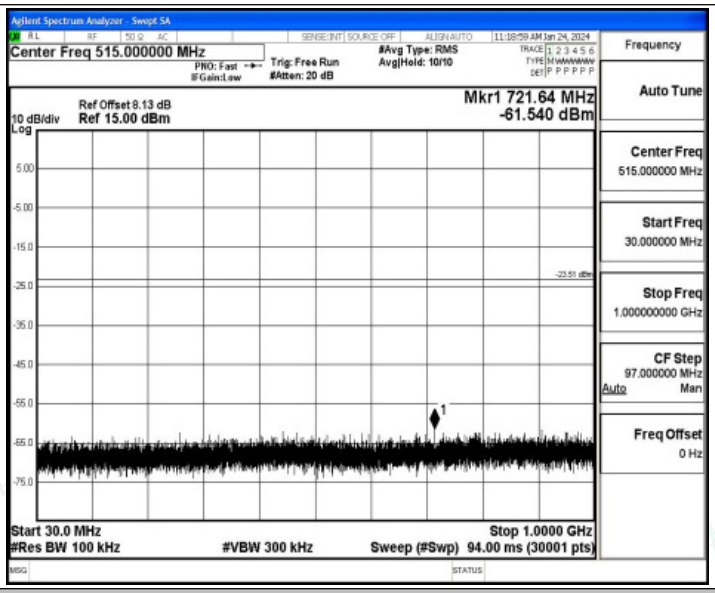
11G_Ant1_2437_30~1000



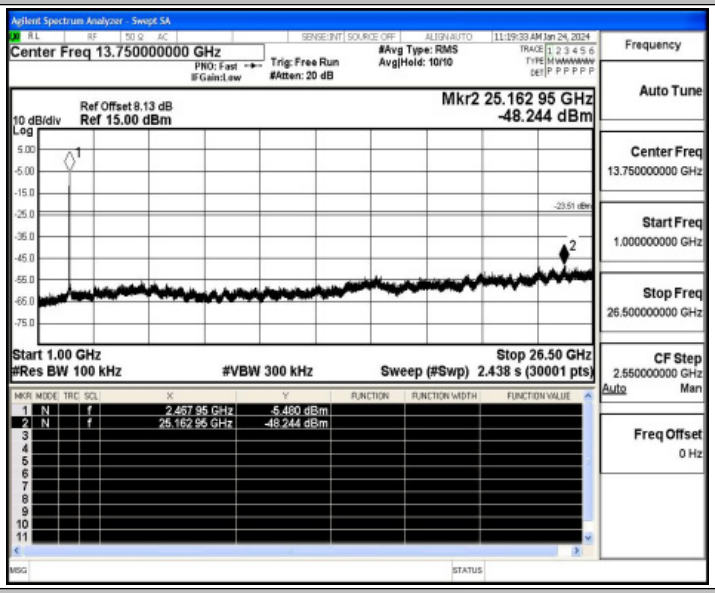
11G_Ant1_2437_1000~26500



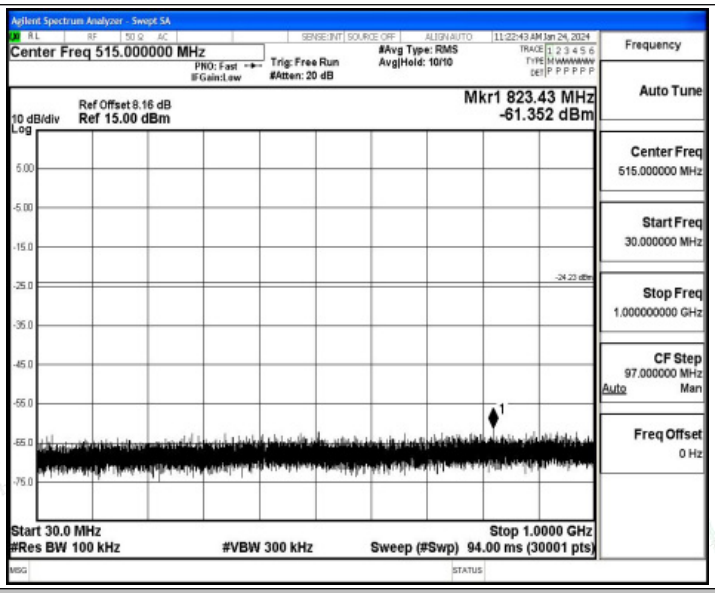
11G_Ant1_2462_30~1000



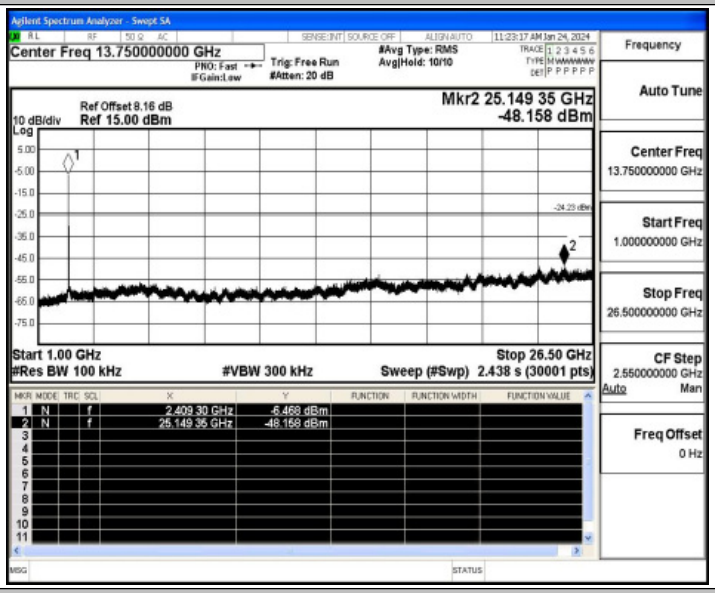
11G_Ant1_2462_1000~26500



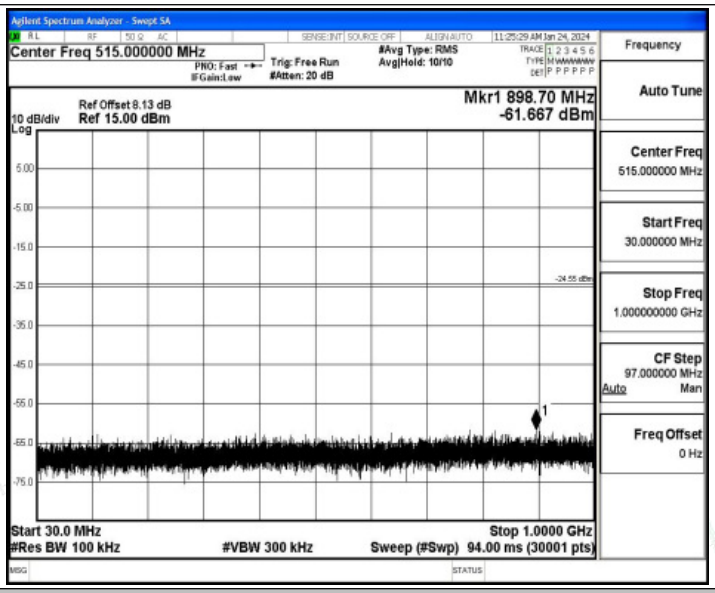
11N20SISO_Ant1_2412_30~1000



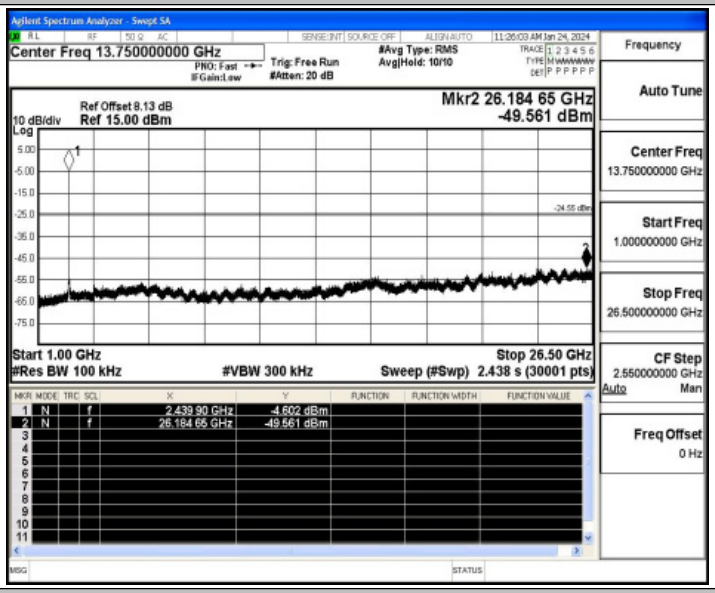
11N20SISO_Ant1_2412_1000~26500



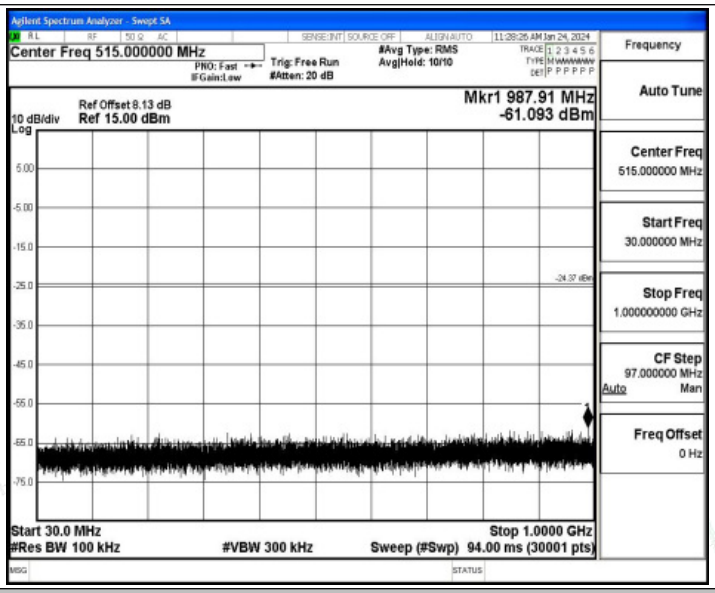
11N20SISO_Ant1_2437_30~1000



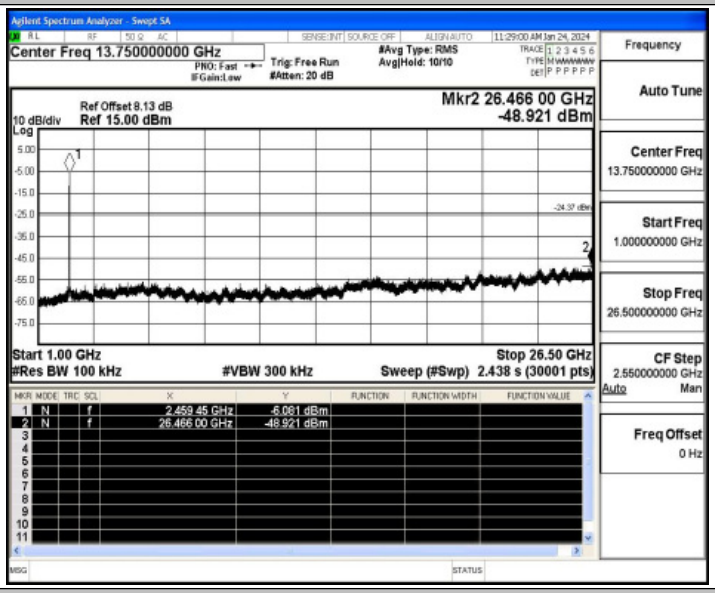
11N20SISO_Ant1_2437_1000~26500



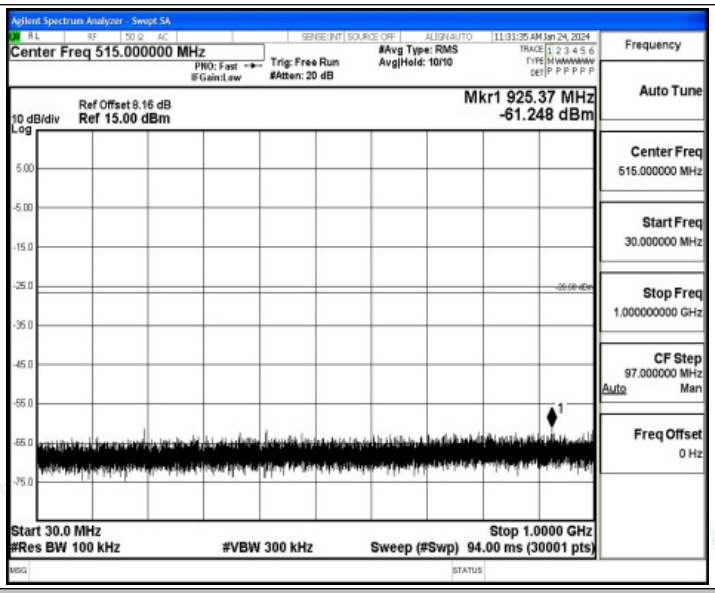
11N20SISO_Ant1_2462_30~1000



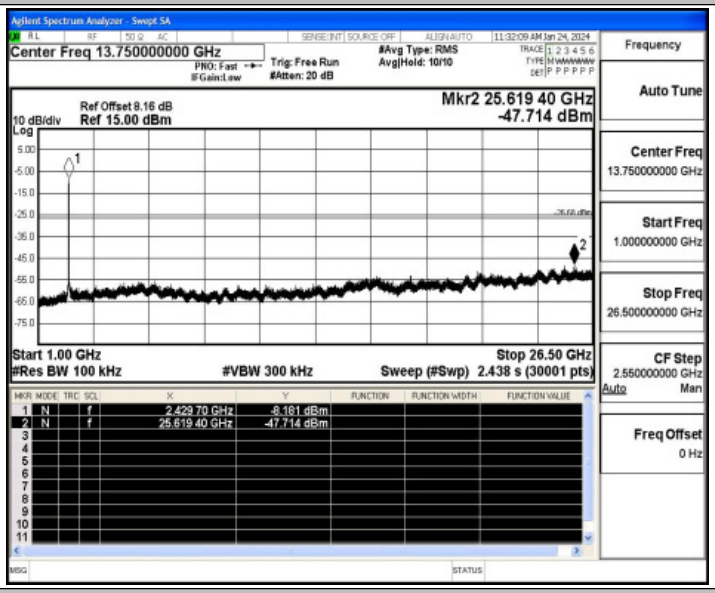
11N20SISO_Ant1_2462_1000~26500



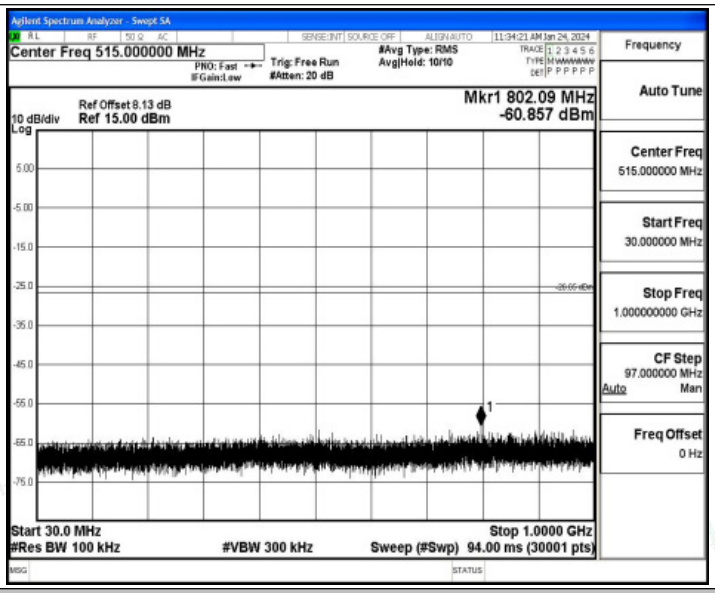
11N40SISO_Ant1_2422_30~1000



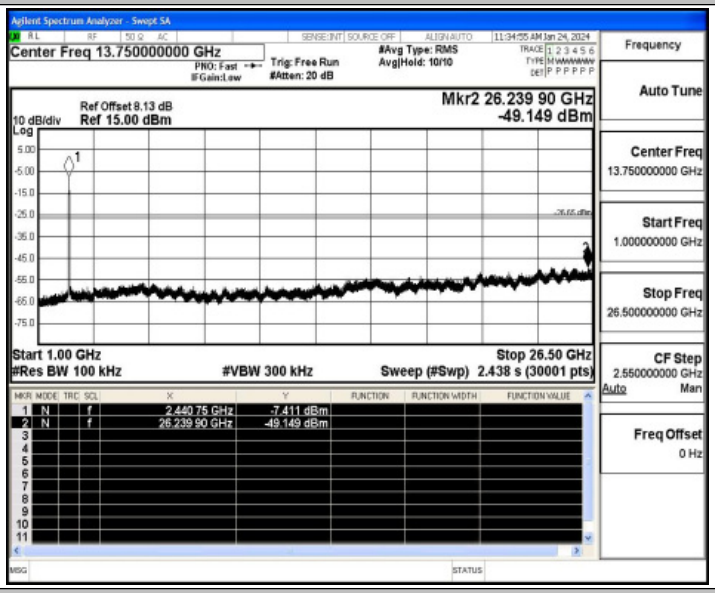
11N40SISO_Ant1_2422_1000~26500



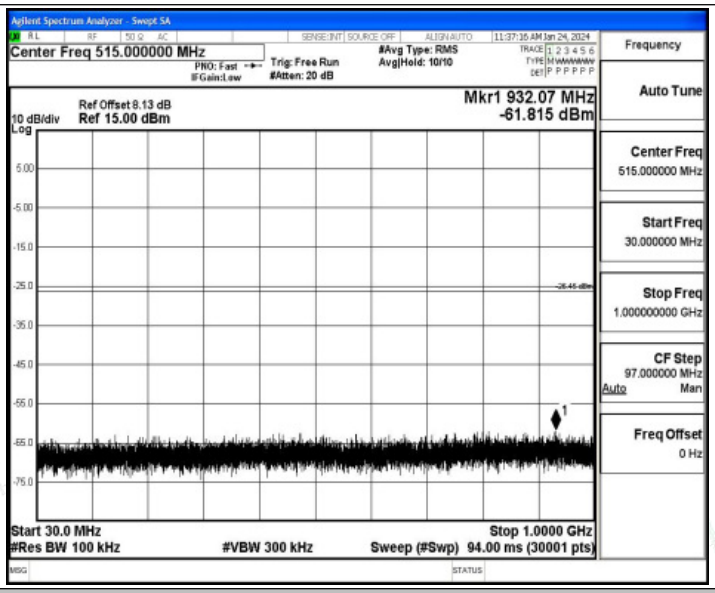
11N40SISO_Ant1_2437_30~1000



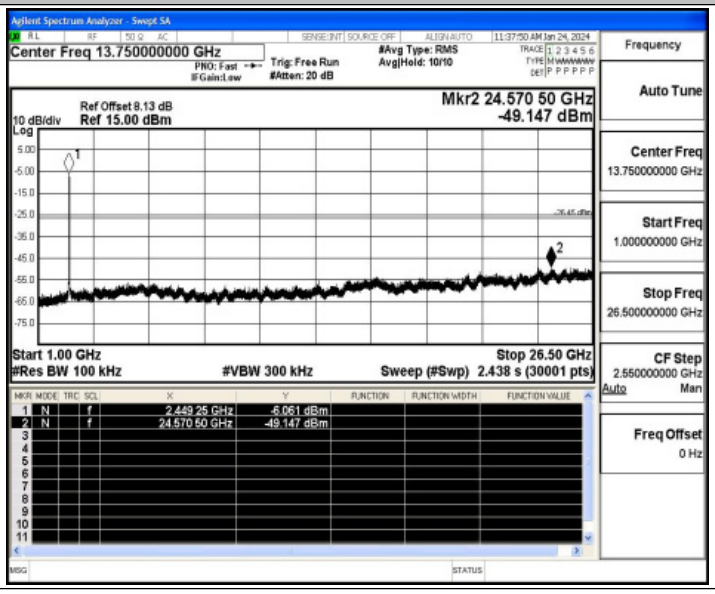
11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_30~1000



11N40SISO_Ant1_2452_1000~26500



Reference level measurement

Test Result

TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
11B	Ant1	2412	2411.49	2.92
		2437	2436.48	2.77
		2462	2462.51	3.42
11G	Ant1	2412	2413.24	-2.95
		2437	2438.24	-3.47
		2462	2464.51	-3.51
11N20SISO	Ant1	2412	2414.50	-4.23
		2437	2435.73	-4.55
		2462	2460.72	-4.37
11N40SISO	Ant1	2422	2419.52	-6.68
		2437	2441.99	-6.65
		2452	2456.99	-6.45