

Case No. : CTA24052402903**Ambient Condition:** 24 °C, 49 %RH,**Test Date:** 2024.2.21**Test Engineer:** Evan ouyang

Appendix C.1: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.080	2406.960	2417.040	0.5	PASS
		2437	9.800	2432.240	2442.040	0.5	PASS
		2462	9.840	2456.960	2466.800	0.5	PASS
11G	Ant1	2412	16.080	2404.080	2420.160	0.5	PASS
		2437	16.240	2428.880	2445.120	0.5	PASS
		2462	15.120	2454.440	2469.560	0.5	PASS
11N20SISO	Ant1	2412	16.880	2403.880	2420.760	0.5	PASS
		2437	17.280	2428.480	2445.760	0.5	PASS
		2462	17.040	2453.440	2470.480	0.5	PASS
11N40SISO	Ant1	2422	34.800	2404.400	2439.200	0.5	PASS
		2437	33.760	2419.480	2453.240	0.5	PASS
		2452	34.160	2435.360	2469.520	0.5	PASS

Test Graphs

11B_Ant1_2412



11B_Ant1_2437



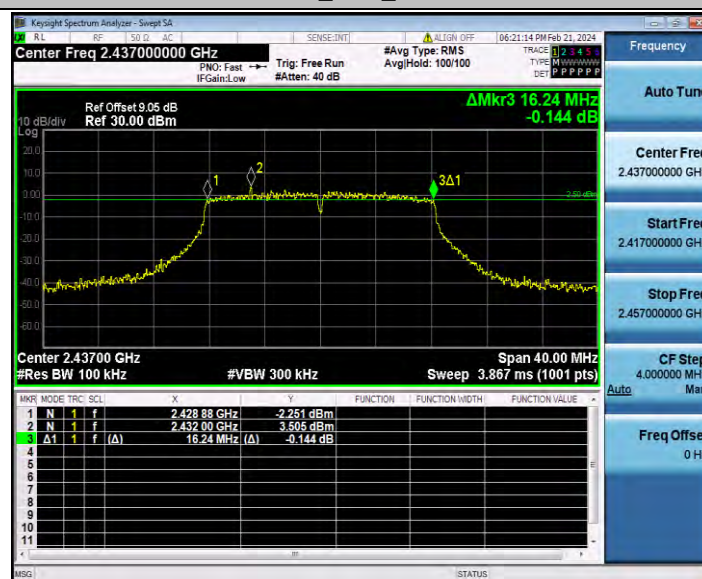
11B_Ant1_2462



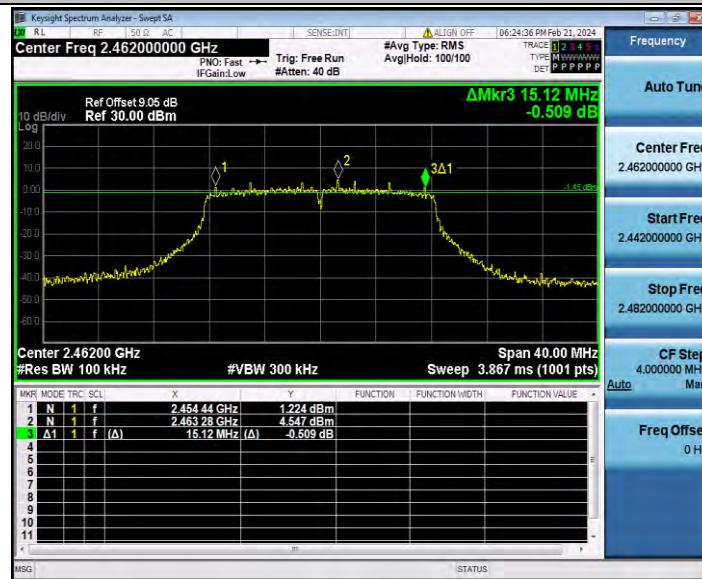
11G_Ant1_2412



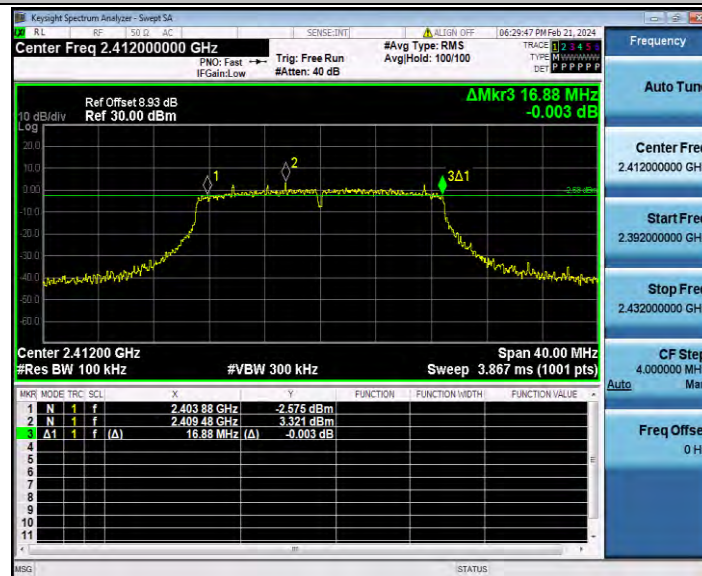
11G_Ant1_2437



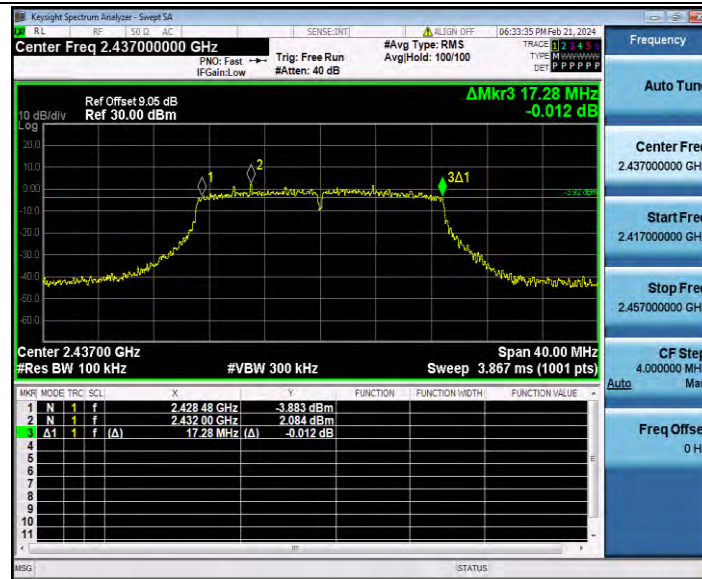
11G_Ant1_2462



11N20SISO_Ant1_2412



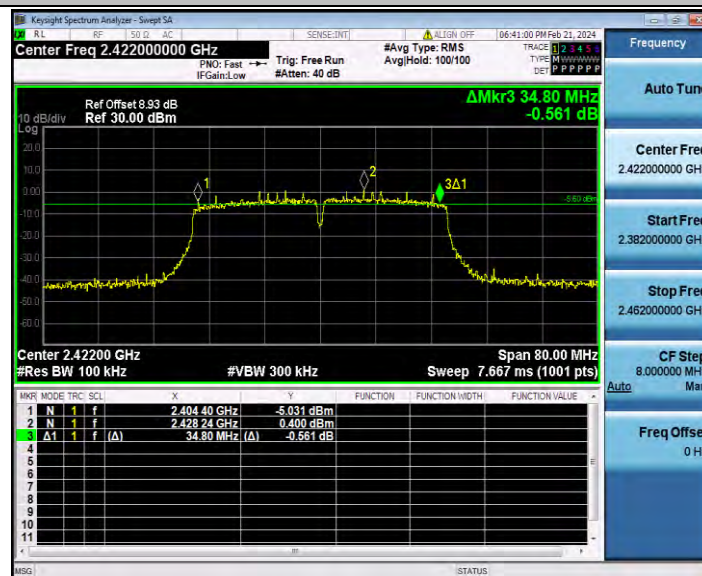
11N20SISO_Ant1_2437



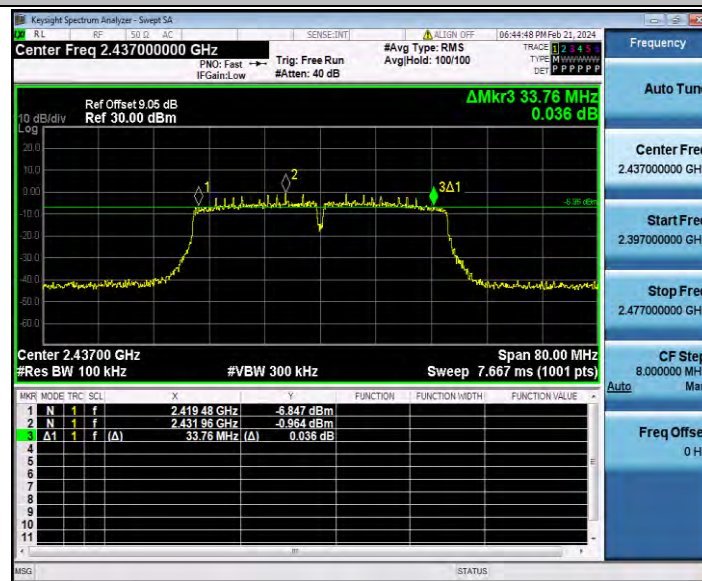
11N20SISO_Ant1_2462



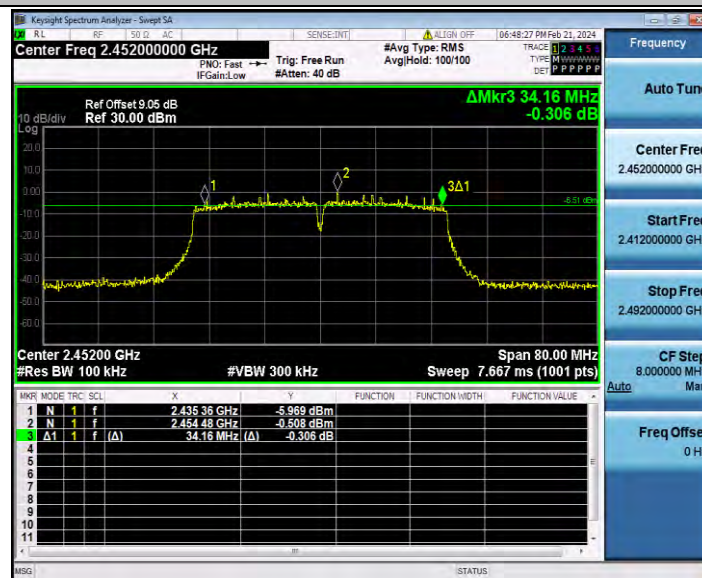
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



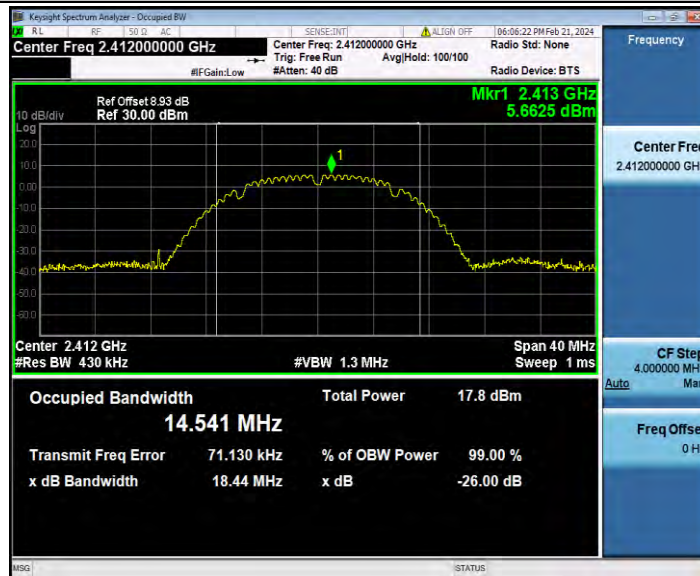
Appendix C.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.541	2404.8006	2419.3416	---	---
		2437	14.618	2429.6748	2444.2928	---	---
		2462	14.579	2454.6736	2469.2526	---	---
11G	Ant1	2412	16.732	2403.6929	2420.4249	---	---
		2437	16.737	2428.6593	2445.3963	---	---
		2462	16.756	2453.6505	2470.4065	---	---
11N20SISO	Ant1	2412	17.901	2403.1150	2421.0160	---	---
		2437	17.933	2428.0496	2445.9826	---	---
		2462	17.867	2453.0629	2470.9299	---	---
11N40SISO	Ant1	2422	36.095	2404.0455	2440.1405	---	---
		2437	36.327	2418.8290	2455.1560	---	---
		2452	36.293	2433.7807	2470.0737	---	---

Test Graphs

11B_Ant1_2412



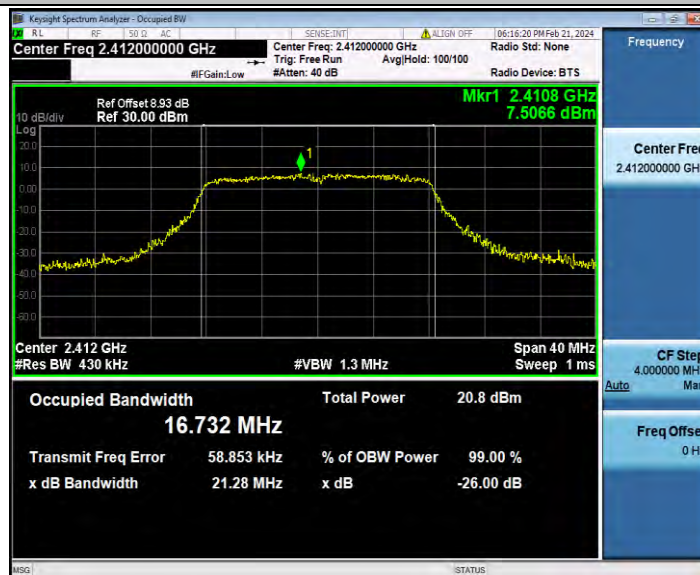
11B_Ant1_2437



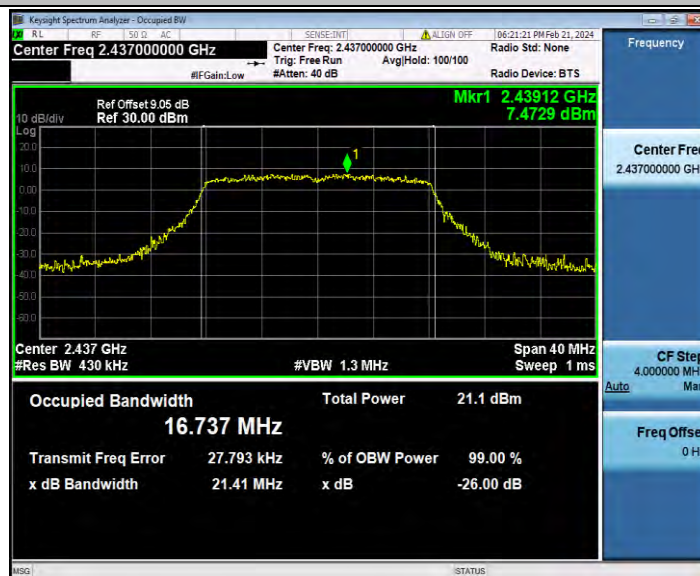
11B_Ant1_2462



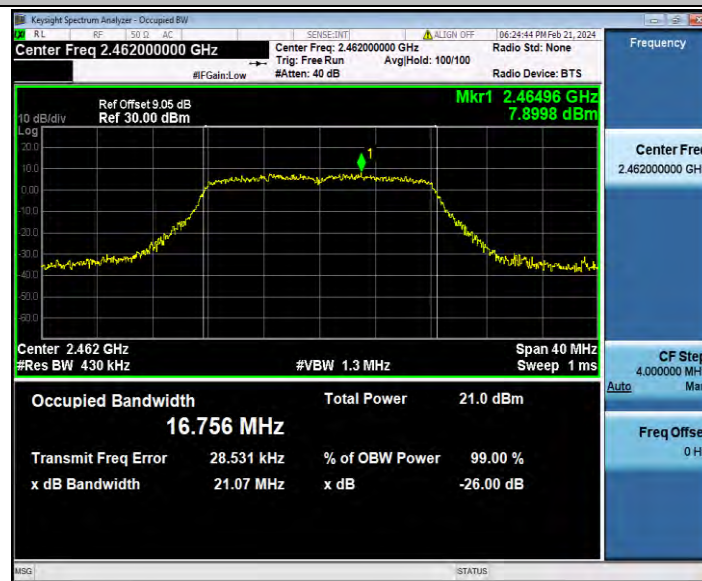
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



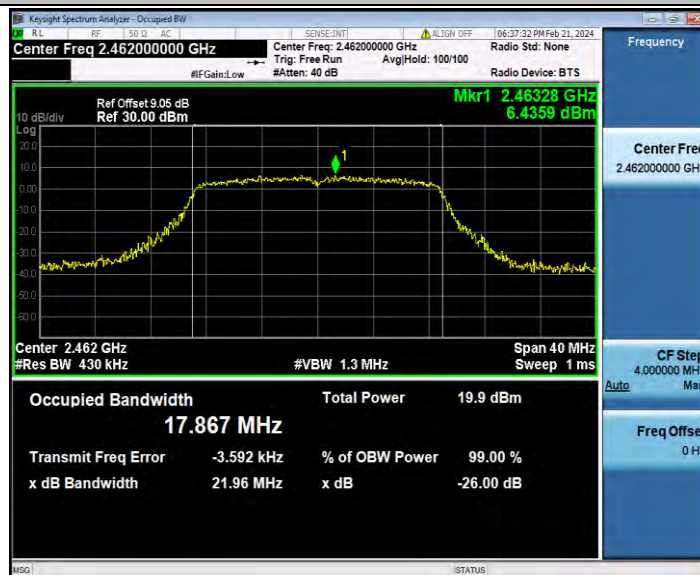
11N20SISO_Ant1_2412



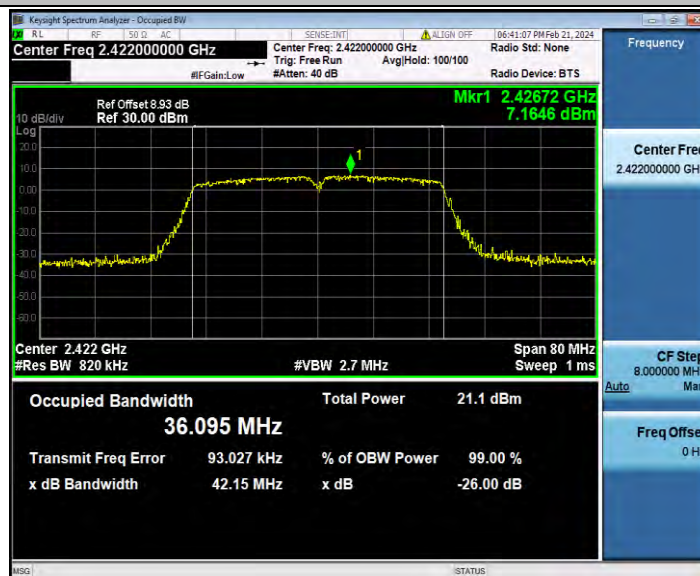
11N20SISO_Ant1_2437



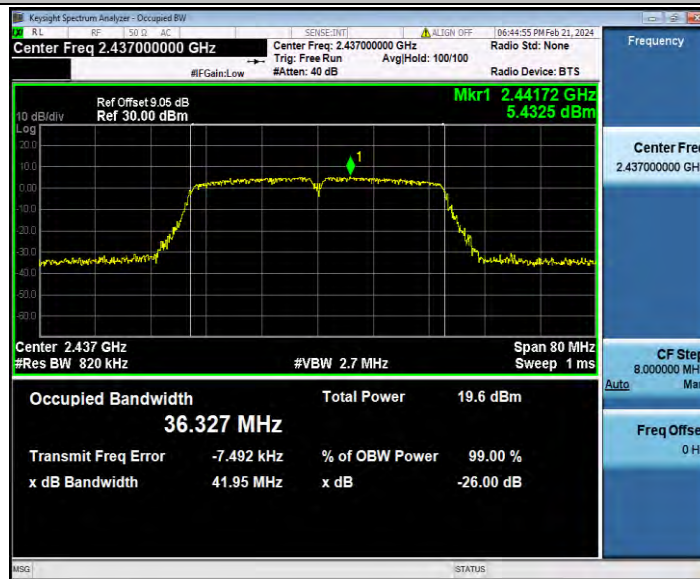
11N20SISO_Ant1_2462



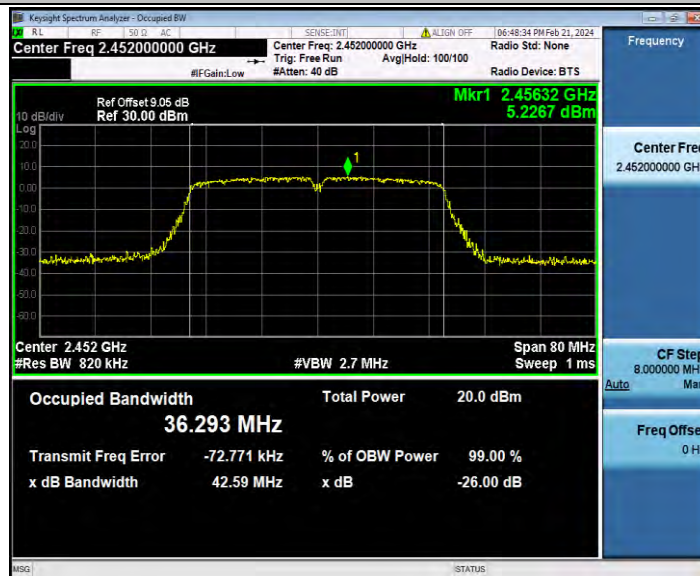
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C.3: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Average power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	17.79	0	0	17.79	≤30.00	PASS
		2437	18.24	0	0	18.24	≤30.00	PASS
		2462	18.14	0	0	18.14	≤30.00	PASS
11G	Ant1	2412	22.19	0	0	22.19	≤30.00	PASS
		2437	22.38	0	0	22.38	≤30.00	PASS
		2462	22.30	0	0	22.30	≤30.00	PASS
11N20SI SO	Ant1	2412	21.83	0	0	21.83	≤30.00	PASS
		2437	21.11	0	0	21.11	≤30.00	PASS
		2462	21.13	0	0	21.13	≤30.00	PASS
11N40SI SO	Ant1	2422	21.44	0	0	21.44	≤30.00	PASS
		2437	19.86	0	0	19.86	≤30.00	PASS
		2452	20.12	0	0	20.12	≤30.00	PASS

Note:

1.The Duty Cycle Factor and RBW Factor is compensated in the data.

Appendix C.4: Maximum power spectral density

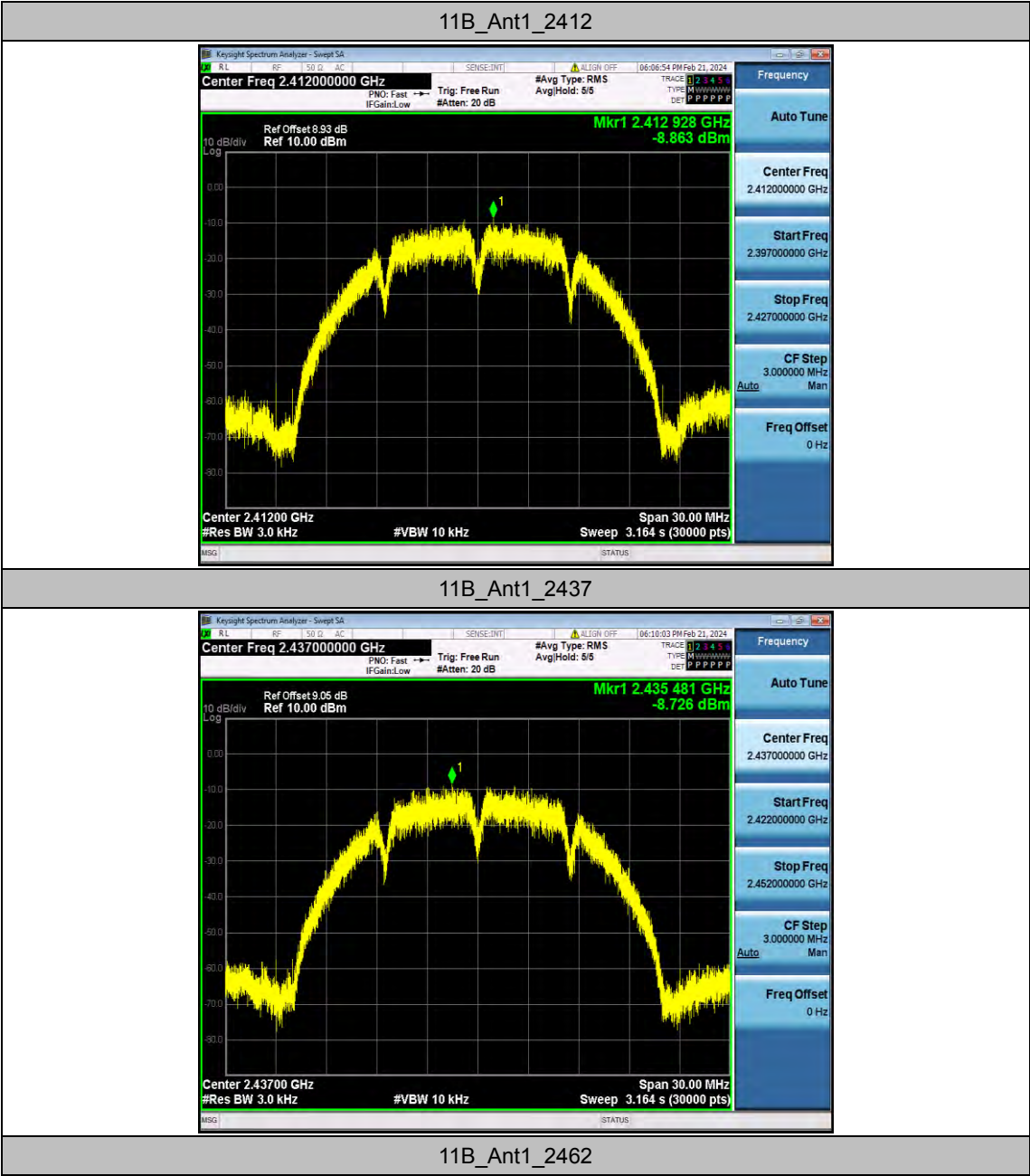
Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-8.86	≤8.00	PASS
		2437	-8.73	≤8.00	PASS
		2462	-8.32	≤8.00	PASS
11G	Ant1	2412	-10.32	≤8.00	PASS
		2437	-10.48	≤8.00	PASS
		2462	-10.63	≤8.00	PASS
11N20SISO	Ant1	2412	-10.02	≤8.00	PASS
		2437	-11.64	≤8.00	PASS
		2462	-11.66	≤8.00	PASS
11N40SISO	Ant1	2422	-13.49	≤8.00	PASS
		2437	-14.64	≤8.00	PASS
		2452	-14.05	≤8.00	PASS

Note:

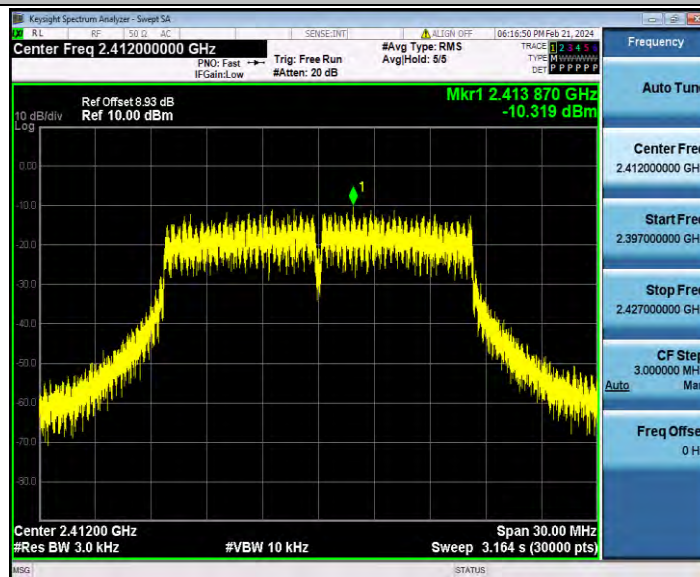
1. The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

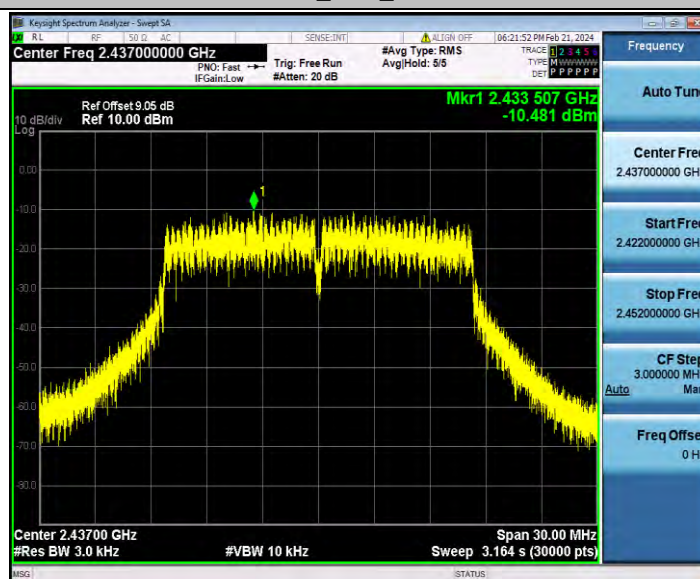




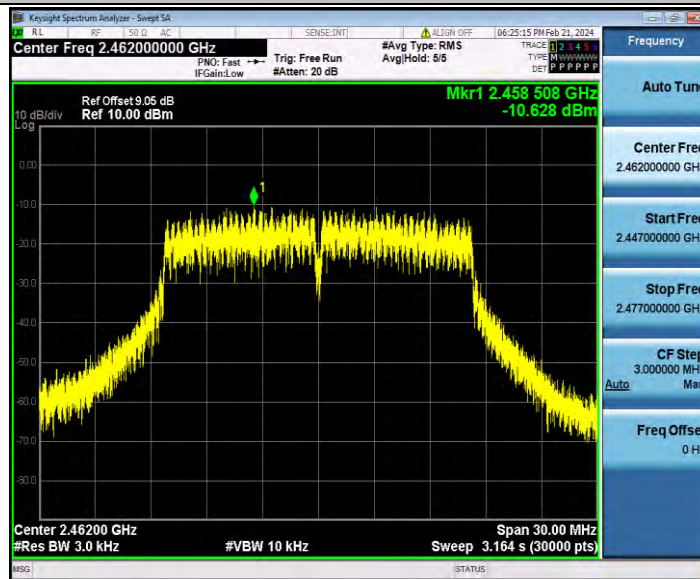
11G_Ant1_2412



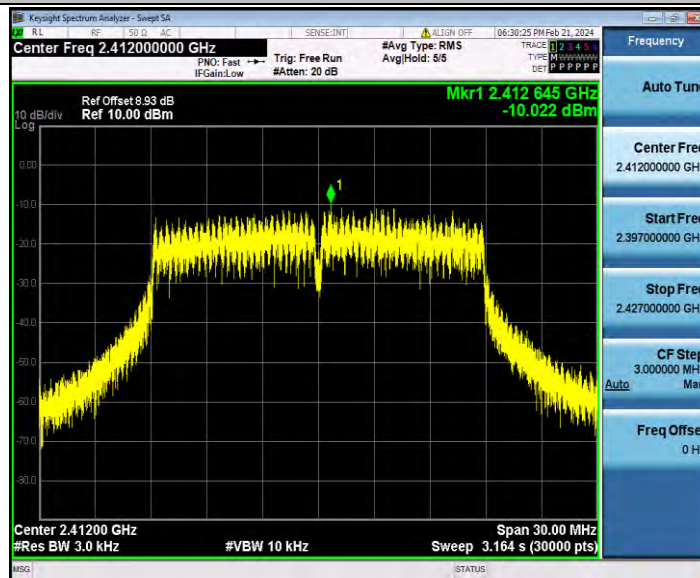
11G_Ant1_2437



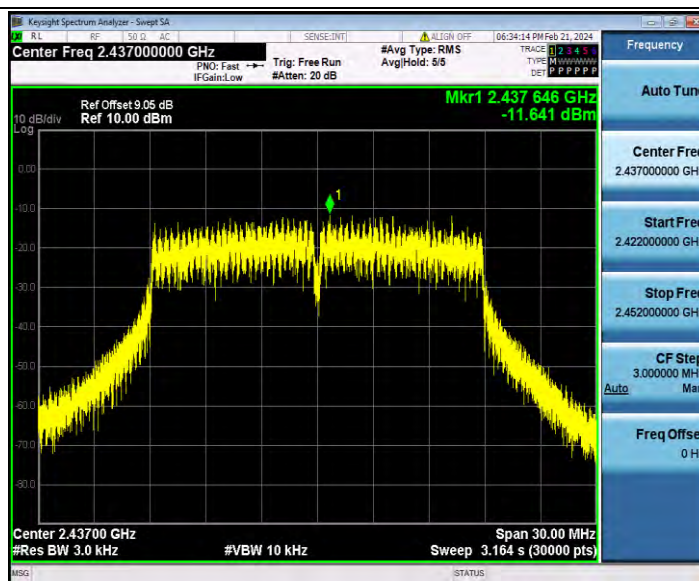
11G_Ant1_2462



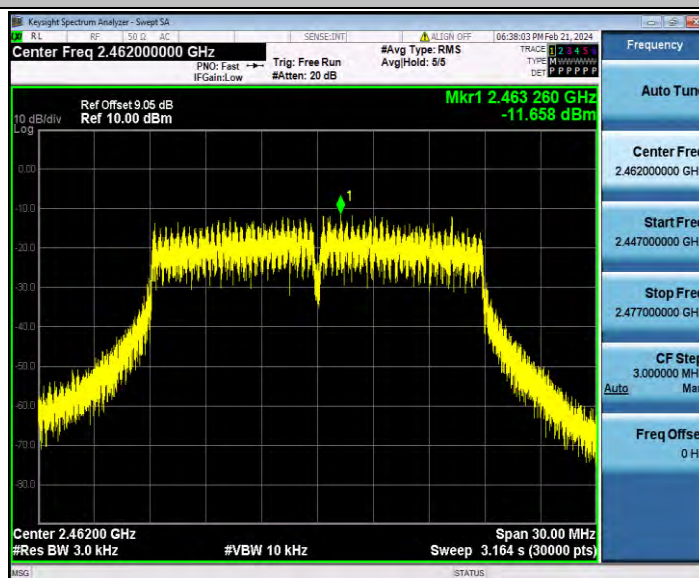
11N20SISO_Ant1_2412



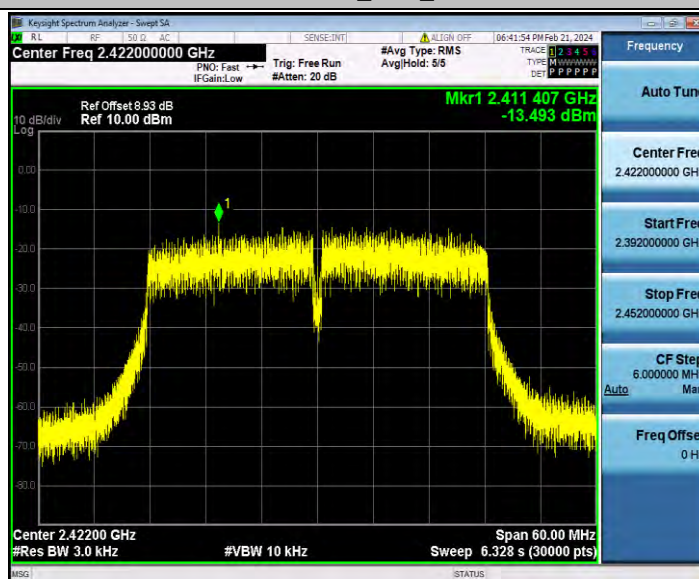
11N20SISO_Ant1_2437



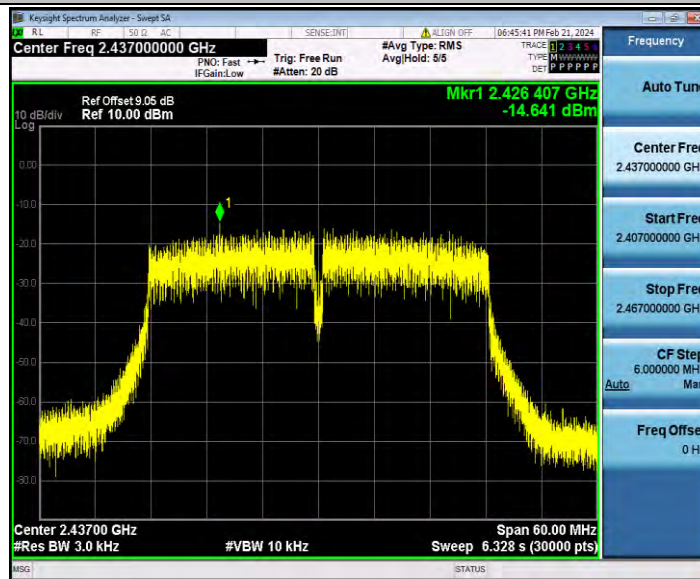
11N20SISO_Ant1_2462



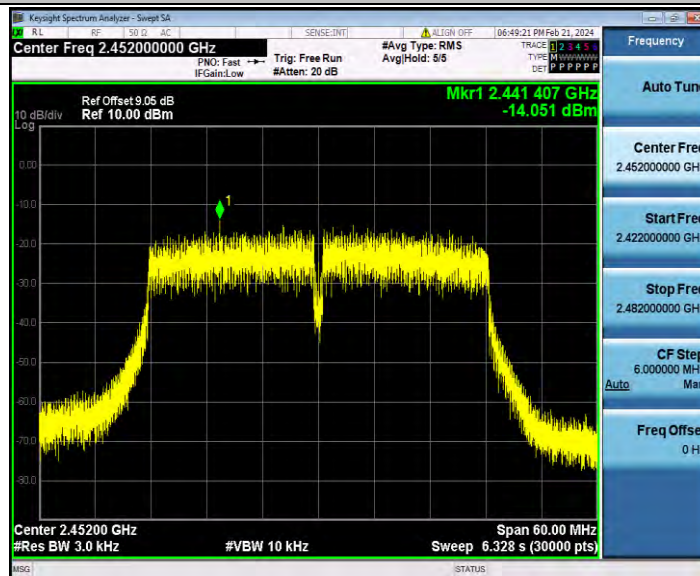
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

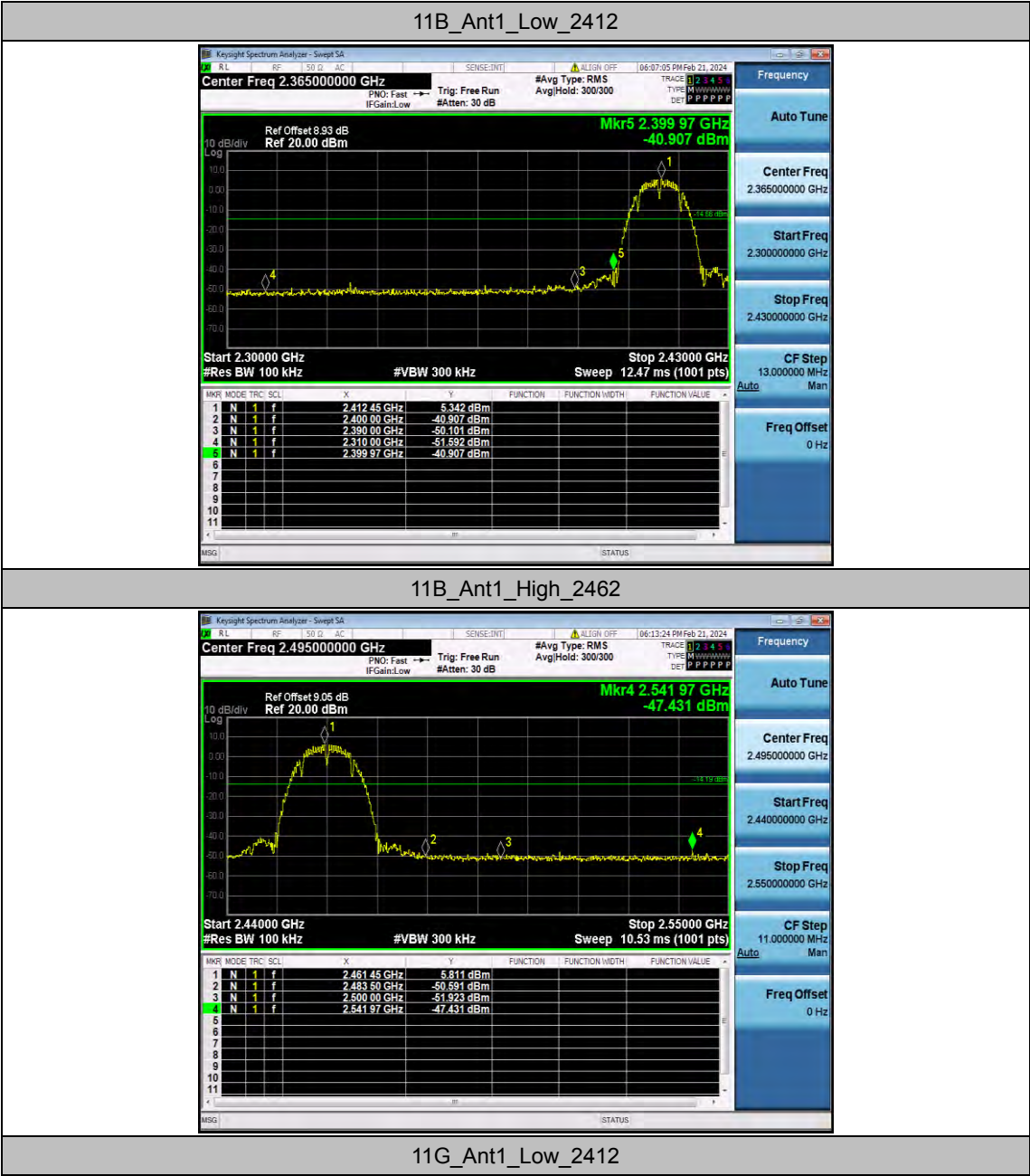


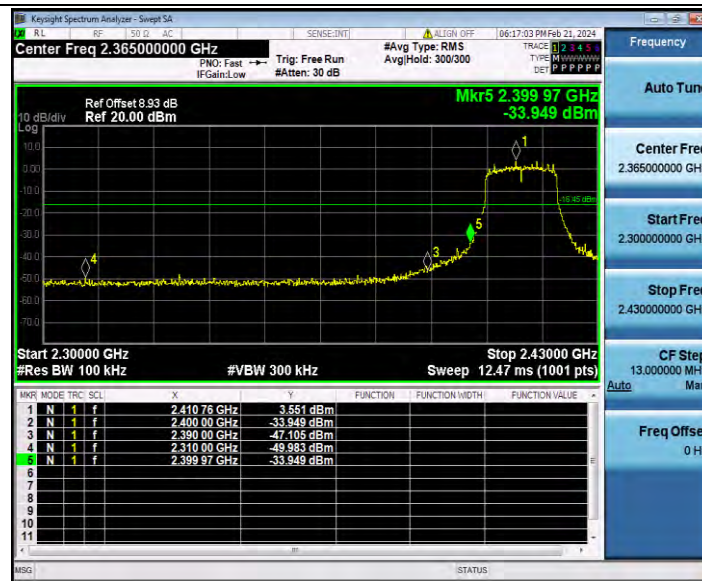
Appendix C.5: Band edge measurements

Test Result

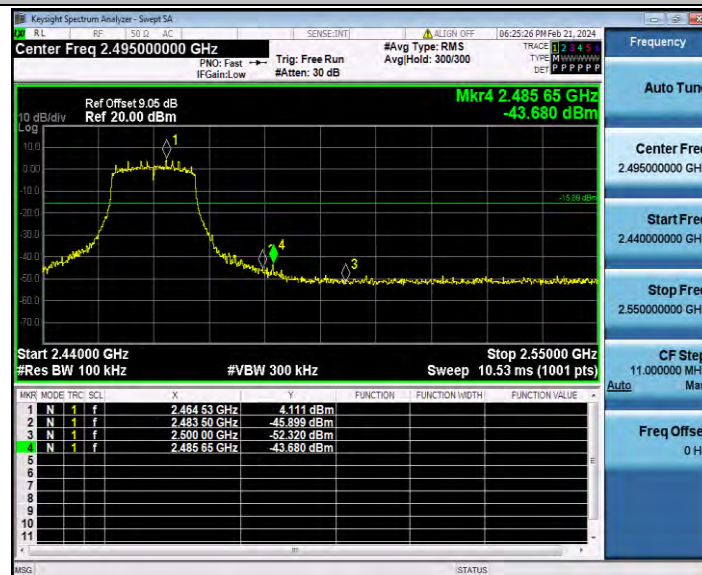
TestMode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	5.34	-40.91	≤ -14.66	PASS
		High	2462	5.81	-47.43	≤ -14.19	PASS
11G	Ant1	Low	2412	3.55	-33.95	≤ -16.45	PASS
		High	2462	4.11	-43.68	≤ -15.89	PASS
11N20SIS O	Ant1	Low	2412	4.35	-31.42	≤ -15.65	PASS
		High	2462	3.61	-47.55	≤ -16.39	PASS
11N40SIS O	Ant1	Low	2422	0.48	-37.64	≤ -19.52	PASS
		High	2452	-0.65	-43.68	≤ -20.65	PASS

Test Graphs

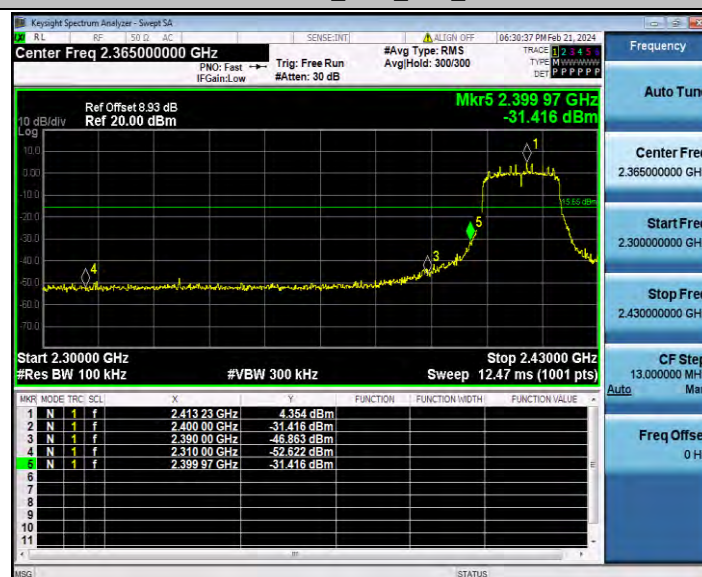




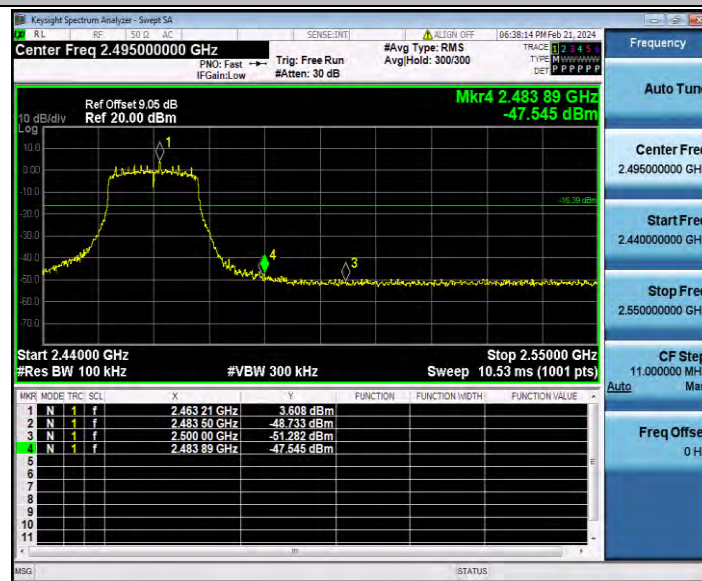
11G_Ant1_High_2462



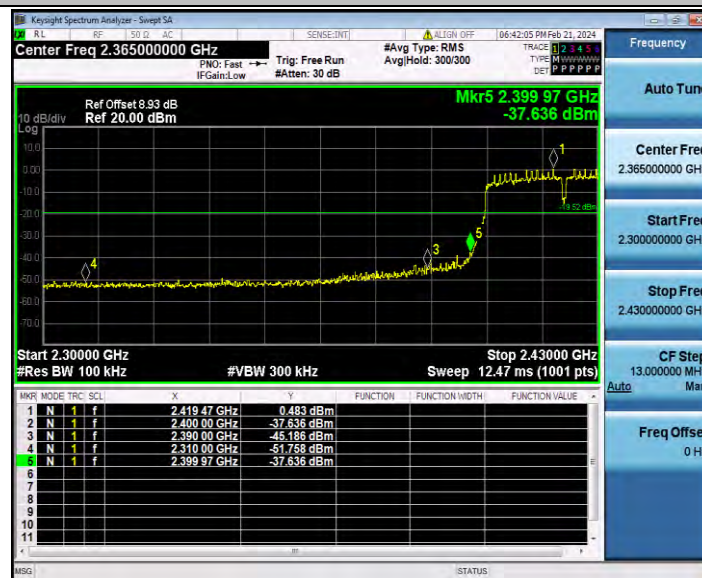
11N20SISO_Ant1_Low_2412



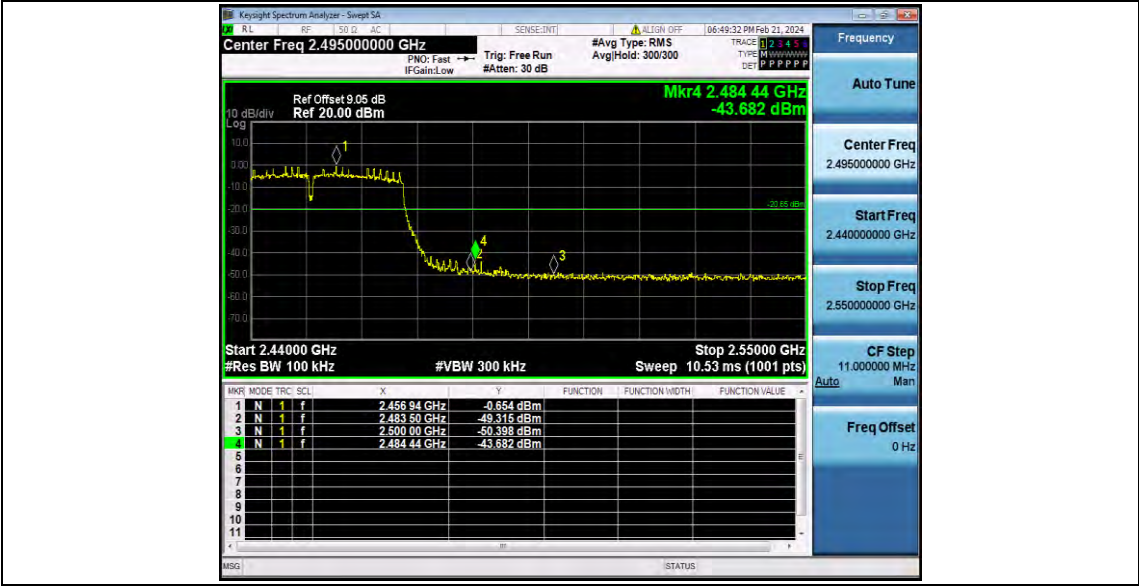
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

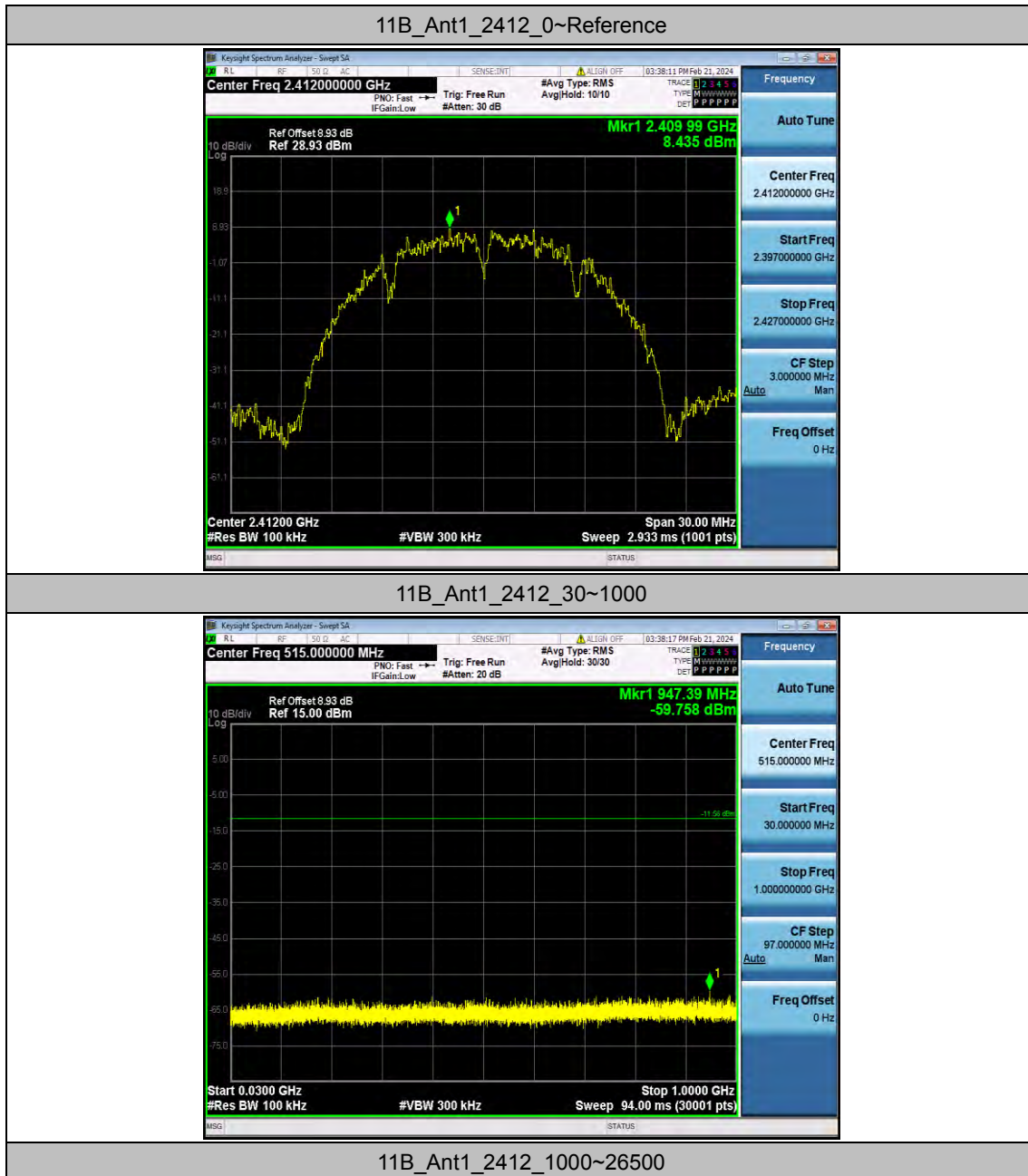


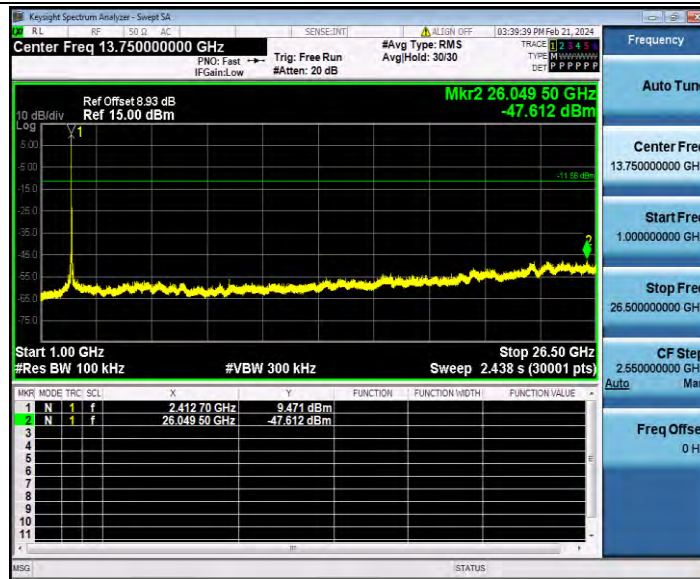
Appendix C.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	8.44	8.44	---	PASS
			30~1000	8.44	-59.76	≤ -11.56	PASS
			1000~26500	8.44	-47.61	≤ -11.56	PASS
		2437	Reference	4.36	4.36	---	PASS
			30~1000	4.36	-60.39	≤ -15.64	PASS
			1000~26500	4.36	-47.78	≤ -15.64	PASS
		2462	Reference	3.90	3.90	---	PASS
			30~1000	3.90	-59.92	≤ -16.1	PASS
			1000~26500	3.90	-47.66	≤ -16.1	PASS
11G	Ant1	2412	Reference	0.41	0.41	---	PASS
			30~1000	0.41	-61.07	≤ -19.59	PASS
			1000~26500	0.41	-47.49	≤ -19.59	PASS
		2437	Reference	0.52	0.52	---	PASS
			30~1000	0.52	-60.15	≤ -19.48	PASS
			1000~26500	0.52	-48.16	≤ -19.48	PASS
		2462	Reference	0.67	0.67	---	PASS
			30~1000	0.67	-60.44	≤ -19.33	PASS
			1000~26500	0.67	-47.55	≤ -19.33	PASS
11N20SISO	Ant1	2412	Reference	0.59	0.59	---	PASS
			30~1000	0.59	-60.7	≤ -19.41	PASS
			1000~26500	0.59	-46.62	≤ -19.41	PASS
		2437	Reference	-0.87	-0.87	---	PASS
			30~1000	-0.87	-60.62	≤ -20.87	PASS
			1000~26500	-0.87	-47.74	≤ -20.87	PASS
		2462	Reference	1.32	1.32	---	PASS
			30~1000	1.32	-60.76	≤ -18.68	PASS
			1000~26500	1.32	-47.1	≤ -18.68	PASS
11N40SISO	Ant1	2422	Reference	-0.74	-0.74	---	PASS
			30~1000	-0.74	-61.18	≤ -20.74	PASS
			1000~26500	-0.74	-47.72	≤ -20.74	PASS
		2437	Reference	-4.00	-4.00	---	PASS
			30~1000	-4.00	-60.24	≤ -24	PASS
			1000~26500	-4.00	-47.55	≤ -24	PASS
		2452	Reference	-1.44	-1.44	---	PASS
			30~1000	-1.44	-60.92	≤ -21.44	PASS
			1000~26500	-1.44	-47.64	≤ -21.44	PASS

Test Graphs

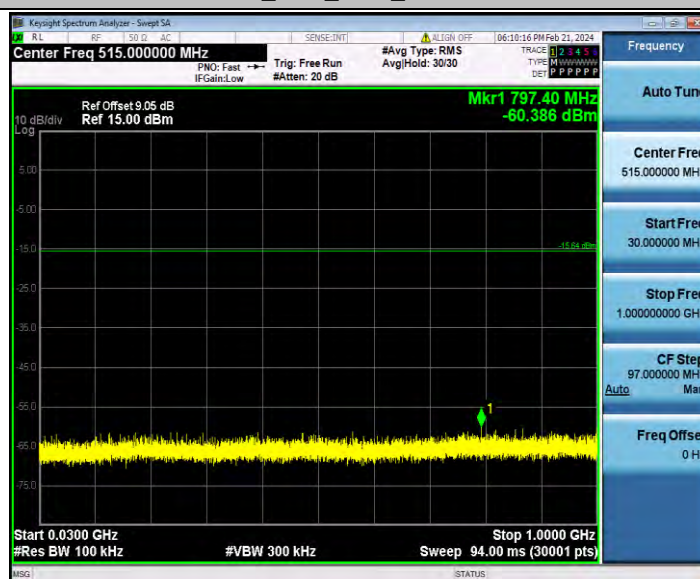




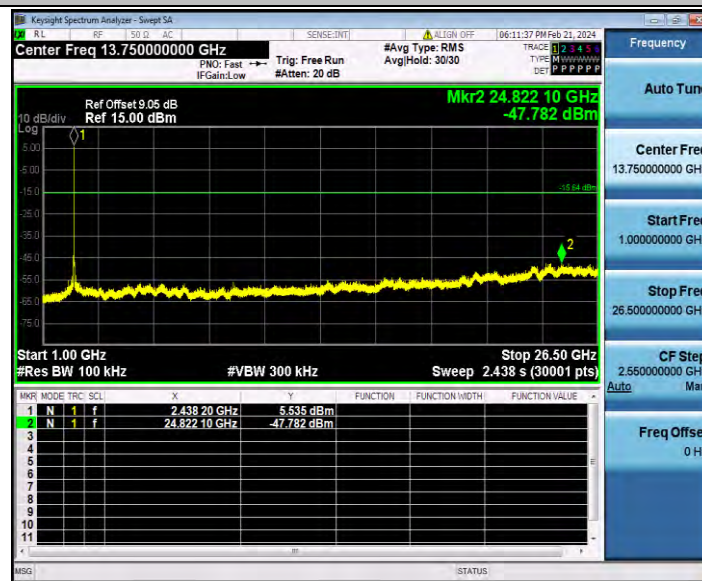
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



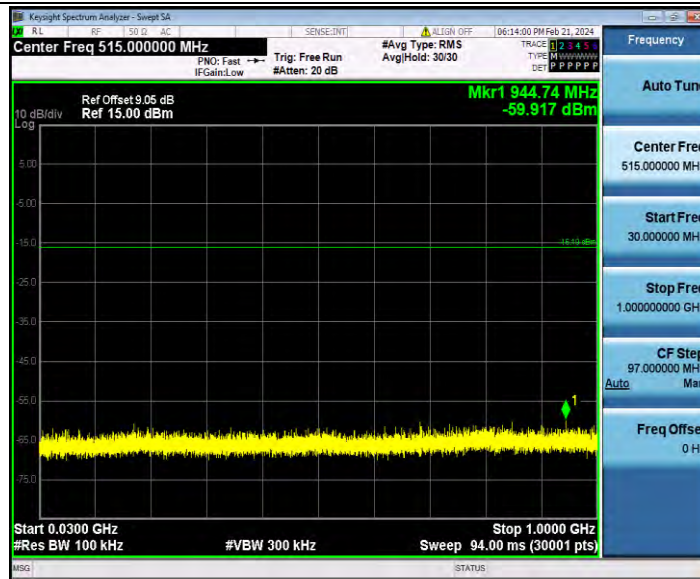
11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000

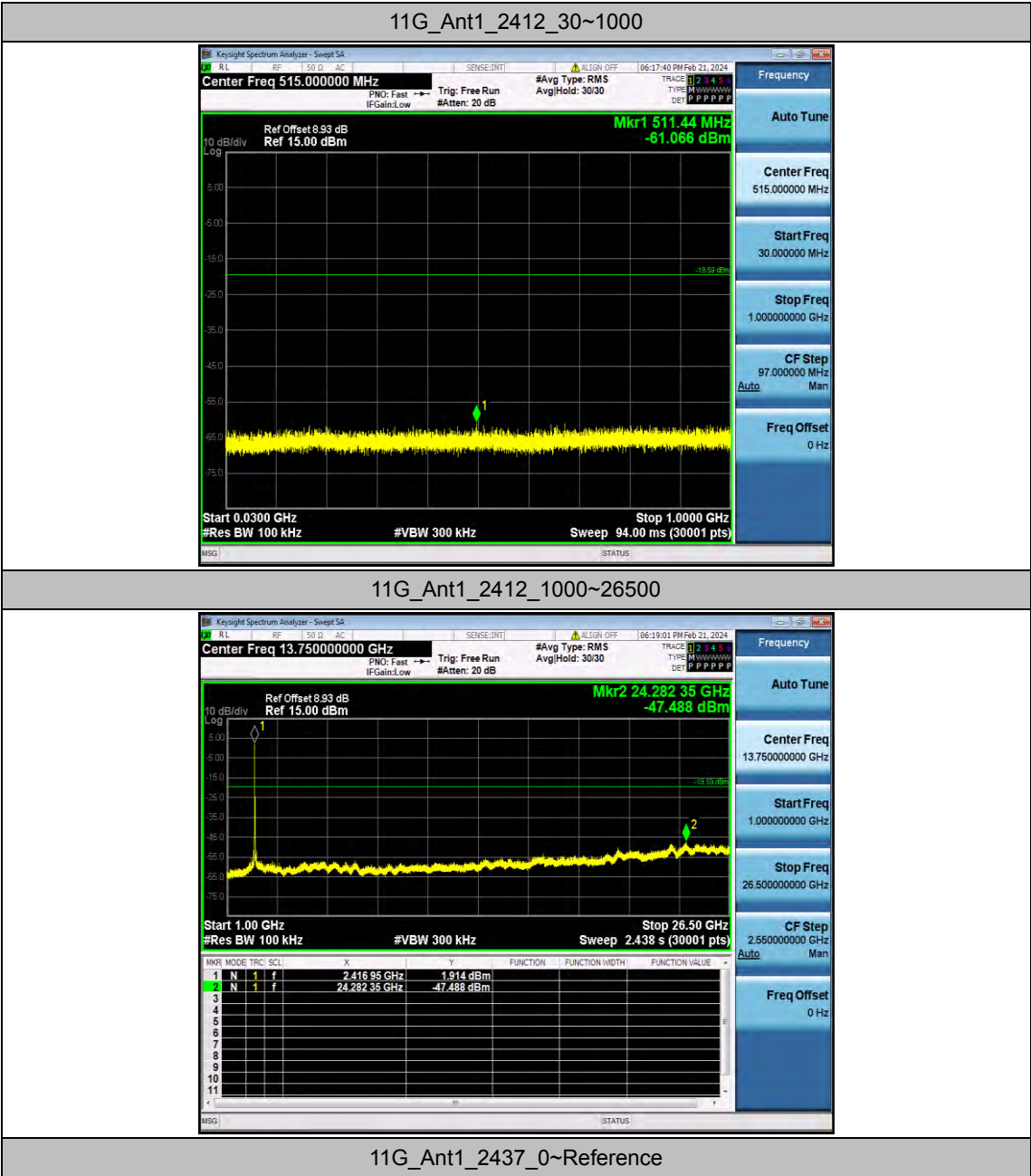


11B_Ant1_2462_1000~26500



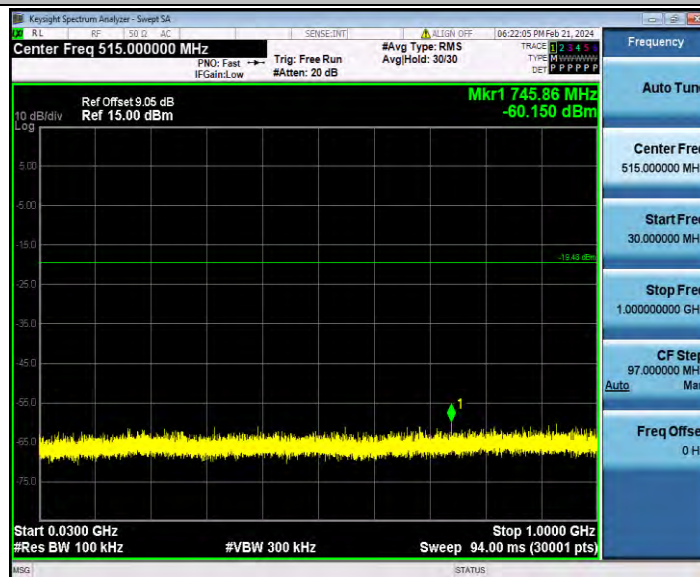
11G_Ant1_2412_0~Reference



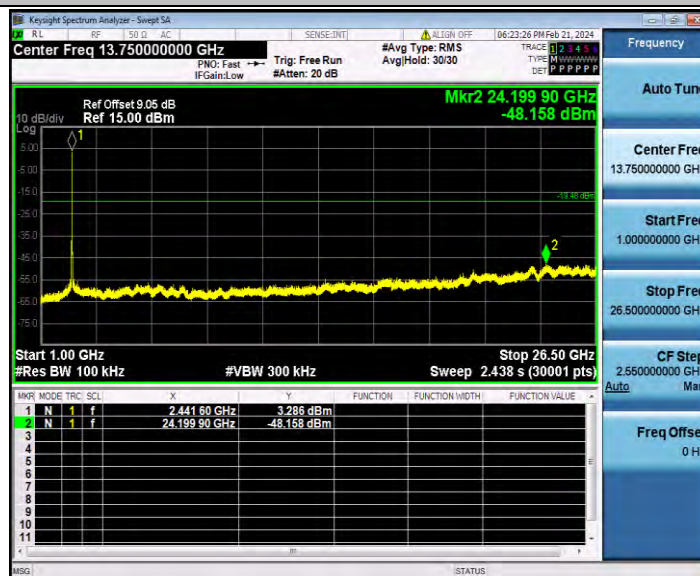




11G_Ant1_2437_30~1000



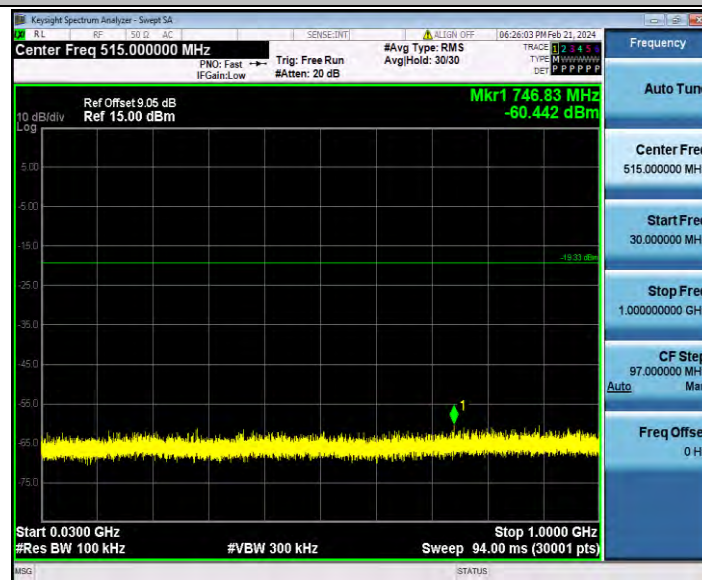
11G_Ant1_2437_1000~26500



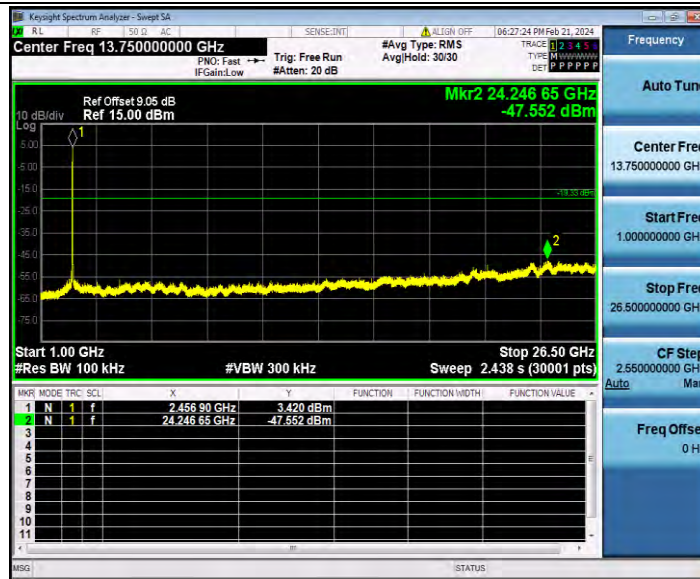
11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



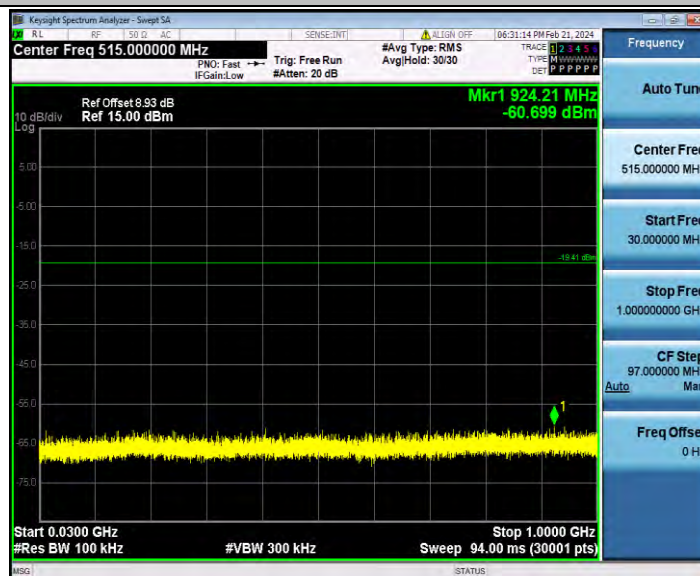
11G_Ant1_2462_1000~26500



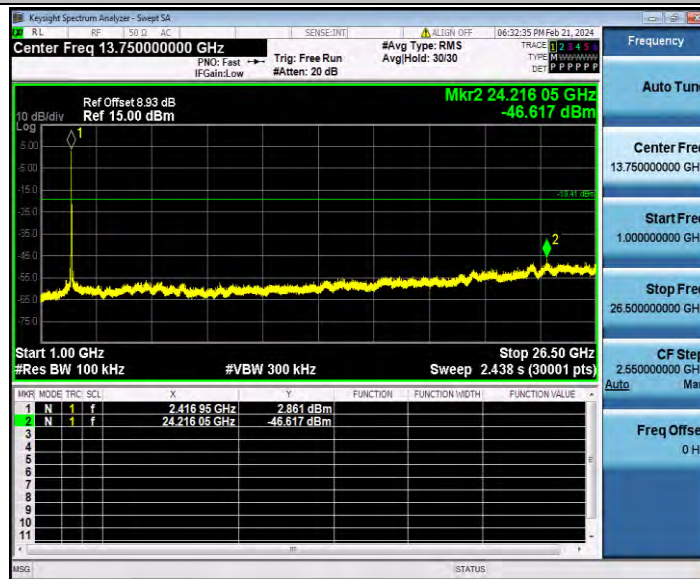
11N20SISO_Ant1_2412_0~Reference



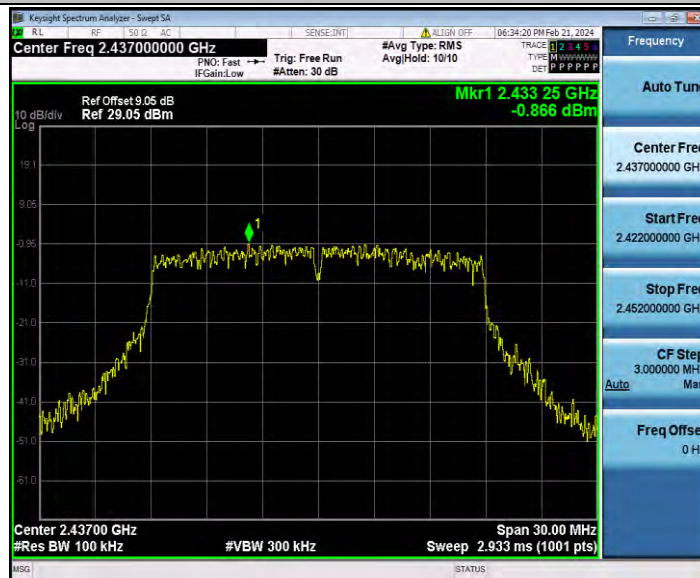
11N20SISO_Ant1_2412_30~1000



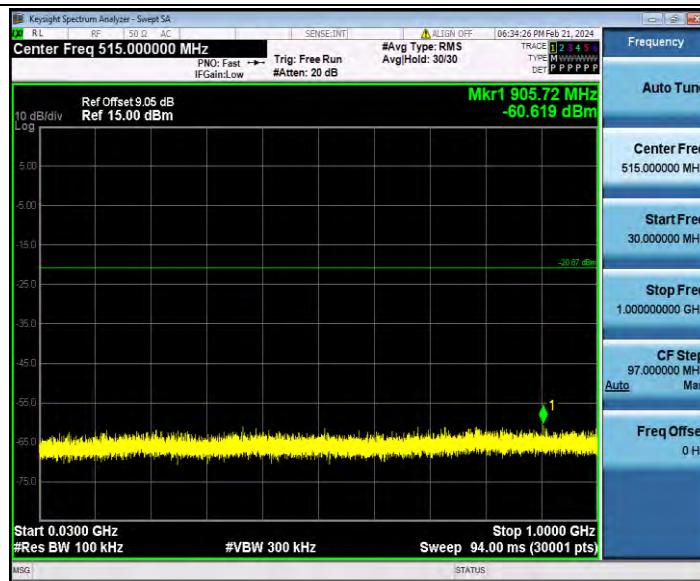
11N20SISO_Ant1_2412_1000~26500



11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



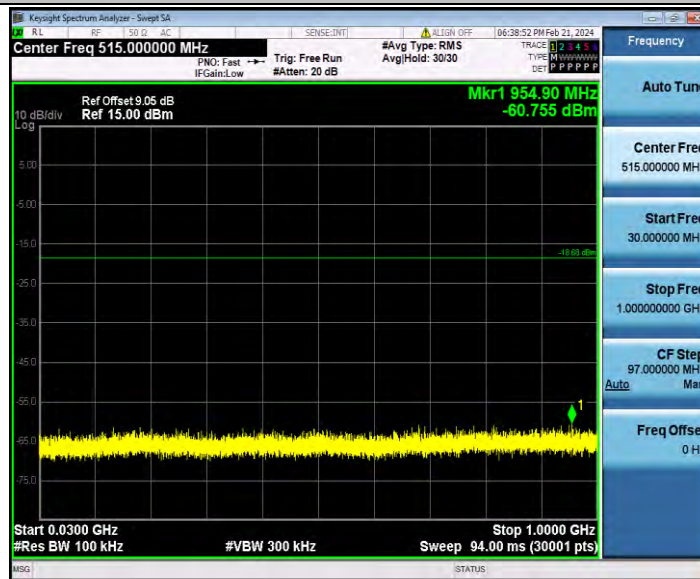
11N20SISO_Ant1_2437_1000~26500



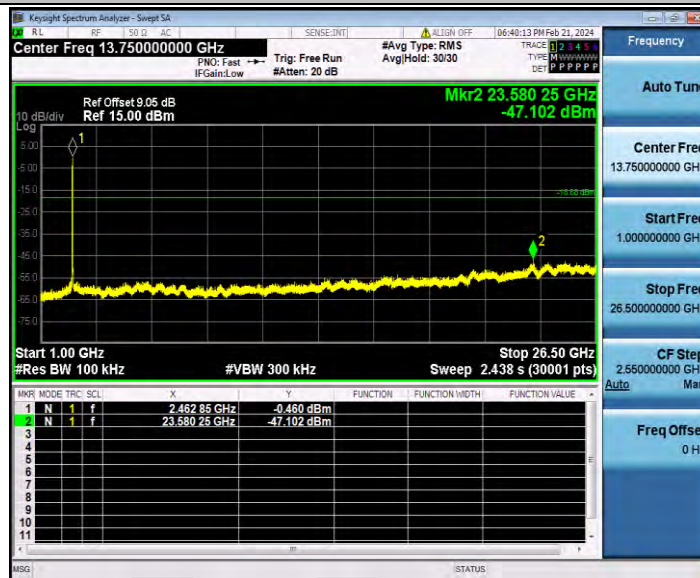
11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



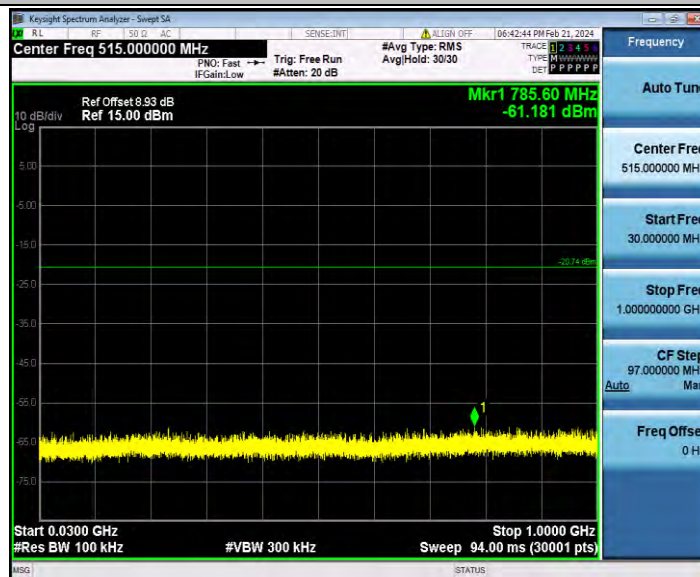
11N20SISO_Ant1_2462_1000~26500



11N40SISO_Ant1_2422_0~Reference



11N40SISO_Ant1_2422_30~1000



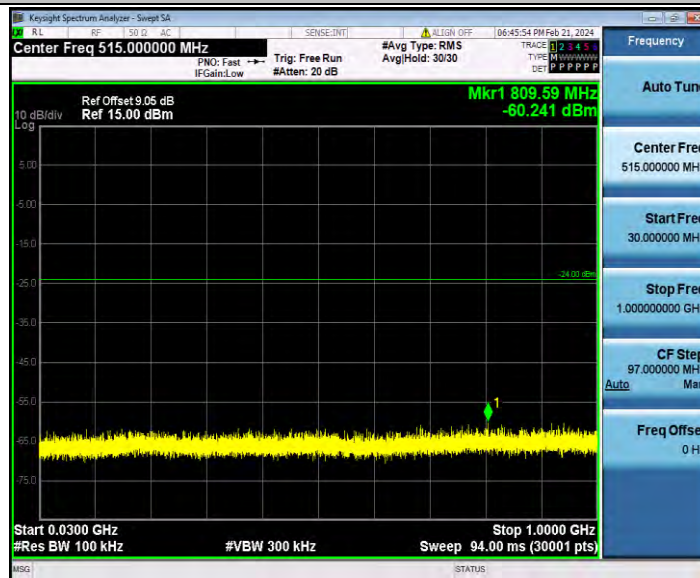
11N40SISO_Ant1_2422_1000~26500



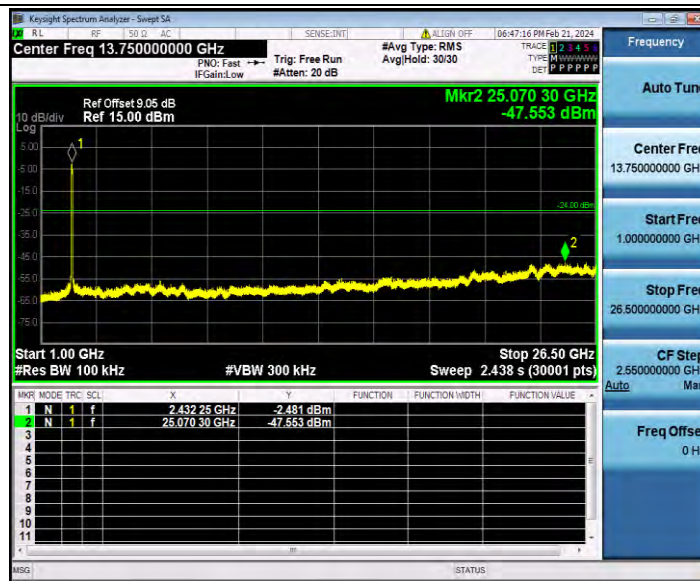
11N40SISO_Ant1_2437_0~Reference



11N40SISO_Ant1_2437_30~1000



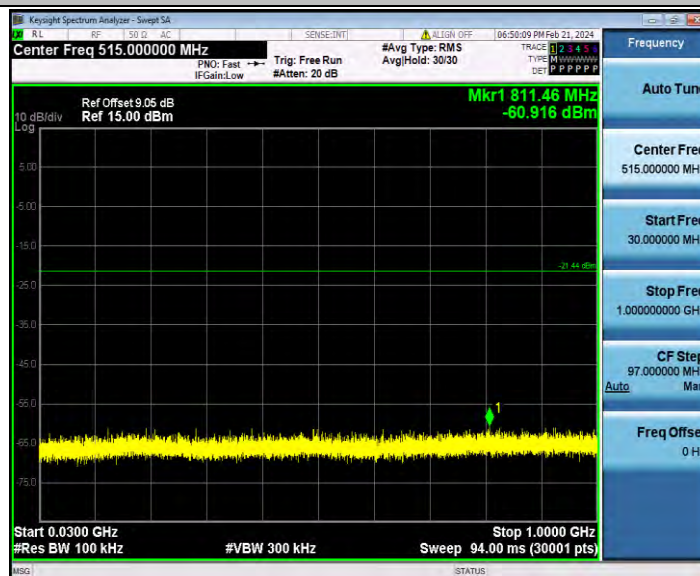
11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000





Appendix C.7: Emissions in Restricted Bands

Test Result

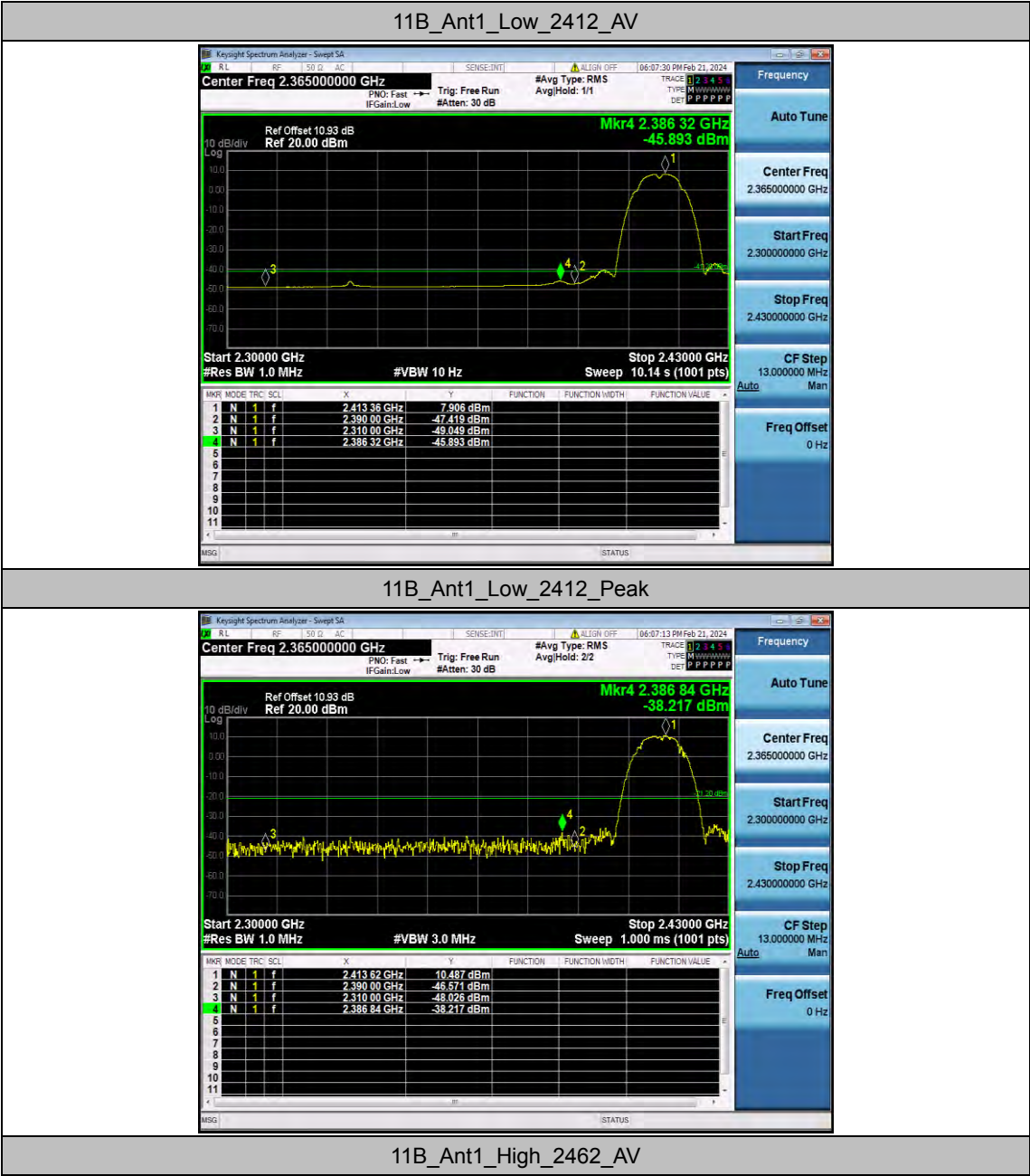
TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-49.05	≤-41.20	46.15	≤54	PASS
				AV	2386.320	-45.89	≤-41.20	49.31	≤54	PASS
				AV	2390.000	-47.42	≤-41.20	47.78	≤54	PASS
				Peak	2310.000	-48.03	≤-21.20	47.17	≤74	PASS
				Peak	2386.840	-38.22	≤-21.20	56.98	≤74	PASS
				Peak	2390.000	-46.57	≤-21.20	48.63	≤74	PASS
		High	2462	AV	2483.500	-47.37	≤-41.20	47.83	≤54	PASS
				AV	2487.960	-47.18	≤-41.20	48.02	≤54	PASS
				AV	2500.000	-47.96	≤-41.20	47.24	≤54	PASS
				Peak	2483.500	-40.94	≤-21.20	54.26	≤74	PASS
				Peak	2498.520	-39.34	≤-21.20	55.86	≤74	PASS
				Peak	2500.000	-41.35	≤-21.20	53.85	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.14	≤-41.20	46.06	≤54	PASS
				AV	2389.960	-43.87	≤-41.20	51.33	≤54	PASS
				AV	2390.000	-43.87	≤-41.20	51.33	≤54	PASS
				Peak	2310.000	-45.89	≤-21.20	49.31	≤74	PASS
				Peak	2388.790	-34.36	≤-21.20	60.84	≤74	PASS
				Peak	2390.000	-39.8	≤-21.20	55.40	≤74	PASS
		High	2462	AV	2483.500	-44.73	≤-41.20	50.47	≤54	PASS
				AV	2483.560	-44.82	≤-41.20	50.38	≤54	PASS
				AV	2500.000	-48.11	≤-41.20	47.09	≤54	PASS
				Peak	2483.500	-44.54	≤-21.20	50.66	≤74	PASS
				Peak	2499.070	-37.82	≤-21.20	57.38	≤74	PASS
				Peak	2500.000	-41.88	≤-21.20	53.32	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-49.46	≤-41.20	45.74	≤54	PASS
				AV	2389.960	-43.45	≤-41.20	51.75	≤54	PASS
				AV	2390.000	-43.45	≤-41.20	51.75	≤54	PASS
				Peak	2310.000	-47	≤-21.20	48.20	≤74	PASS
				Peak	2389.180	-36.49	≤-21.20	58.71	≤74	PASS
				Peak	2390.000	-38.99	≤-21.20	56.21	≤74	PASS
		High	2462	AV	2483.500	-46.18	≤-41.20	49.02	≤54	PASS
				AV	2483.560	-46.22	≤-41.20	48.98	≤54	PASS
				AV	2500.000	-48.37	≤-41.20	46.83	≤54	PASS
				Peak	2483.500	-41.52	≤-21.20	53.68	≤74	PASS
				Peak	2484.660	-38.25	≤-21.20	56.95	≤74	PASS

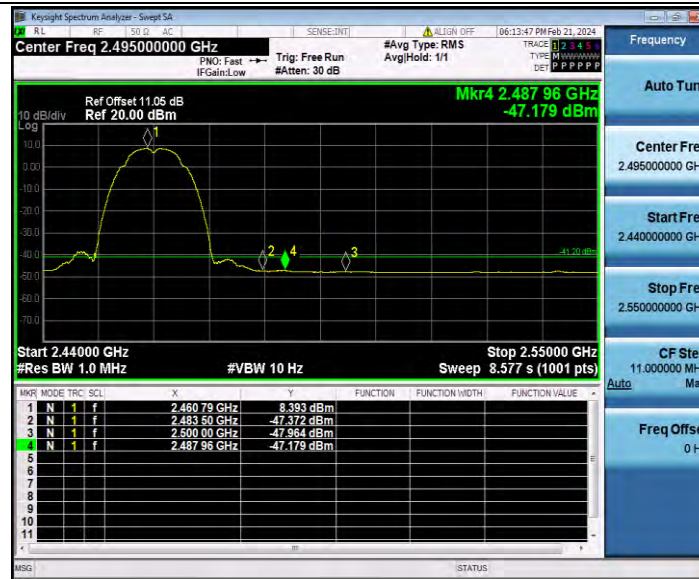
				Peak	2500.000	-42.82	≤ -21.20	52.38	≤ 74	PASS
11N40SIS O	Ant1	Low	2422	AV	2310.000	-49.47	≤ -41.20	45.73	≤ 54	PASS
				AV	2389.960	-43.87	≤ -41.20	51.33	≤ 54	PASS
				AV	2390.000	-43.87	≤ -41.20	51.33	≤ 54	PASS
				Peak	2310.000	-42.69	≤ -21.20	52.51	≤ 74	PASS
				Peak	2384.630	-35.5	≤ -21.20	59.70	≤ 74	PASS
				Peak	2390.000	-40.6	≤ -21.20	54.60	≤ 74	PASS
		High	2452	AV	2483.500	-46.15	≤ -41.20	49.05	≤ 54	PASS
				AV	2483.890	-46.14	≤ -41.20	49.06	≤ 54	PASS
				AV	2500.000	-47.95	≤ -41.20	47.25	≤ 54	PASS
				Peak	2483.500	-42.84	≤ -21.20	52.36	≤ 74	PASS
				Peak	2493.460	-37.39	≤ -21.20	57.81	≤ 74	PASS
				Peak	2500.000	-42.6	≤ -21.20	52.60	≤ 74	PASS

Note:

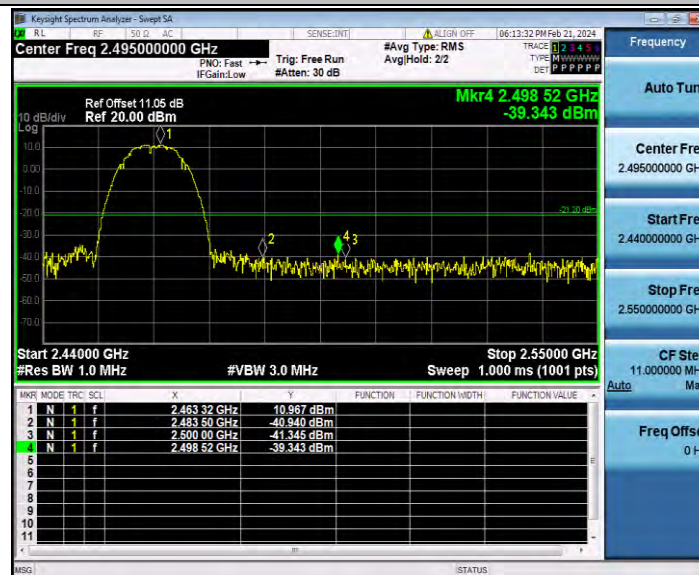
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs





11B_Ant1_High_2462_Peak



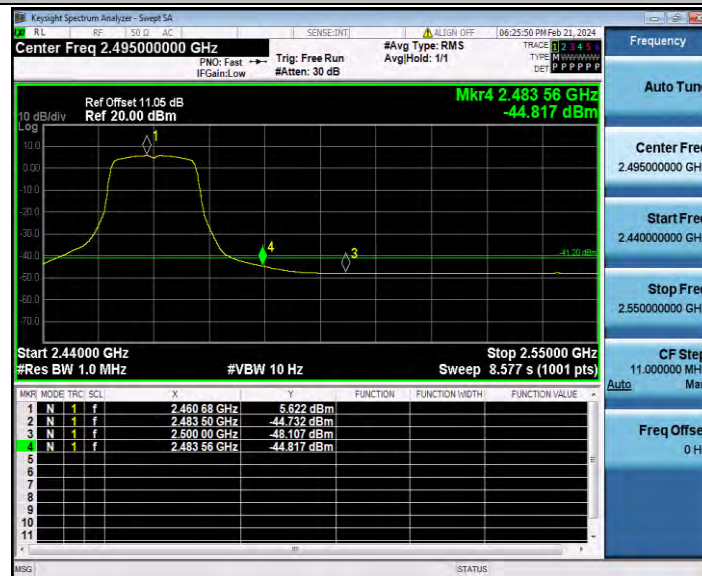
11G_Ant1_Low_2412_AV



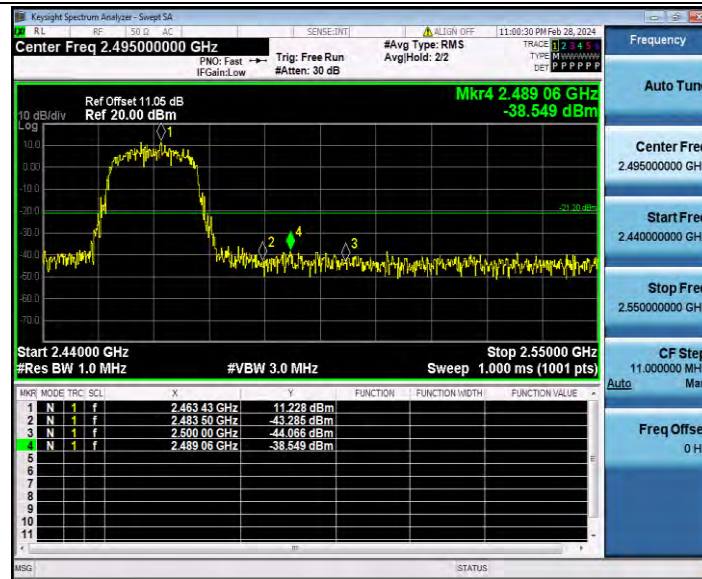
11G_Ant1_Low_2412_Peak



11G_Ant1_High_2462_AV



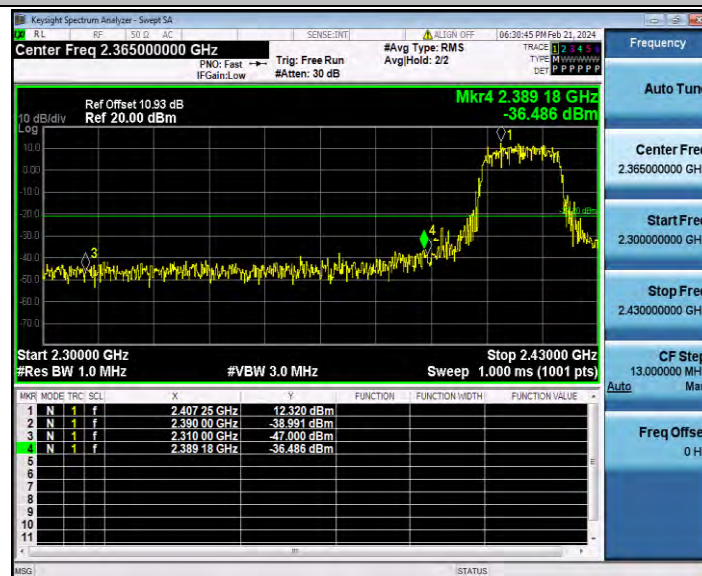
11G_Ant1_High_2462_Peak

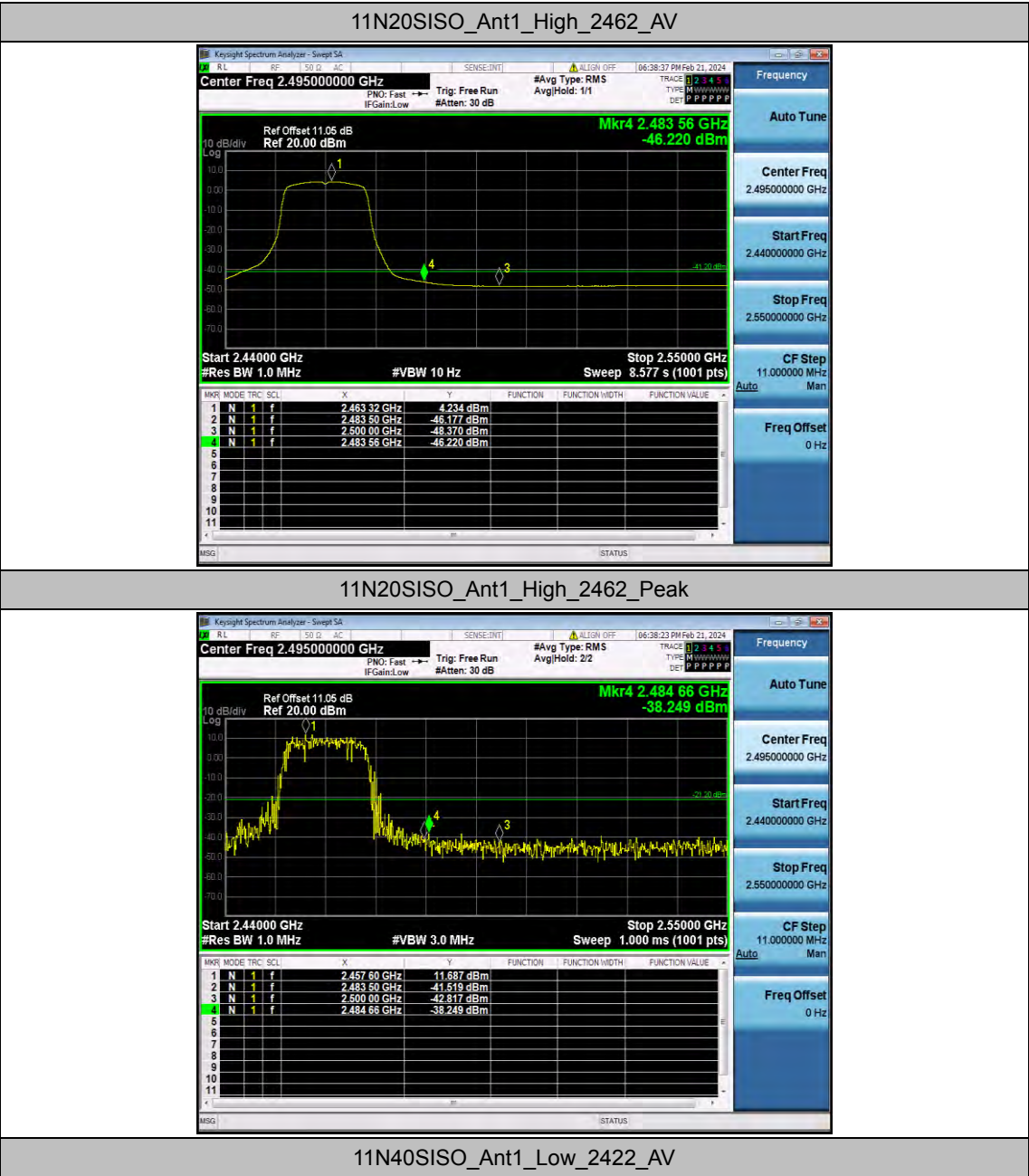


11N20SISO_Ant1_Low_2412_AV



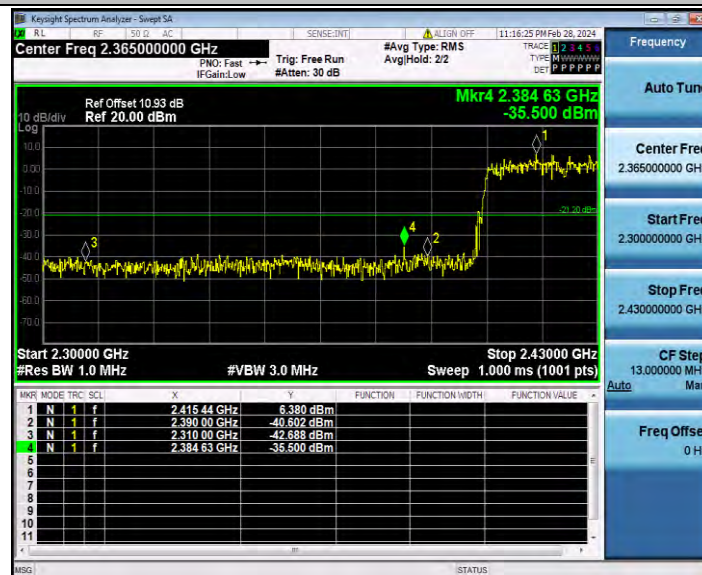
11N20SISO_Ant1_Low_2412_Peak







11N40SISO_Ant1_Low_2422_Peak



11N40SISO_Ant1_High_2452_AV



