

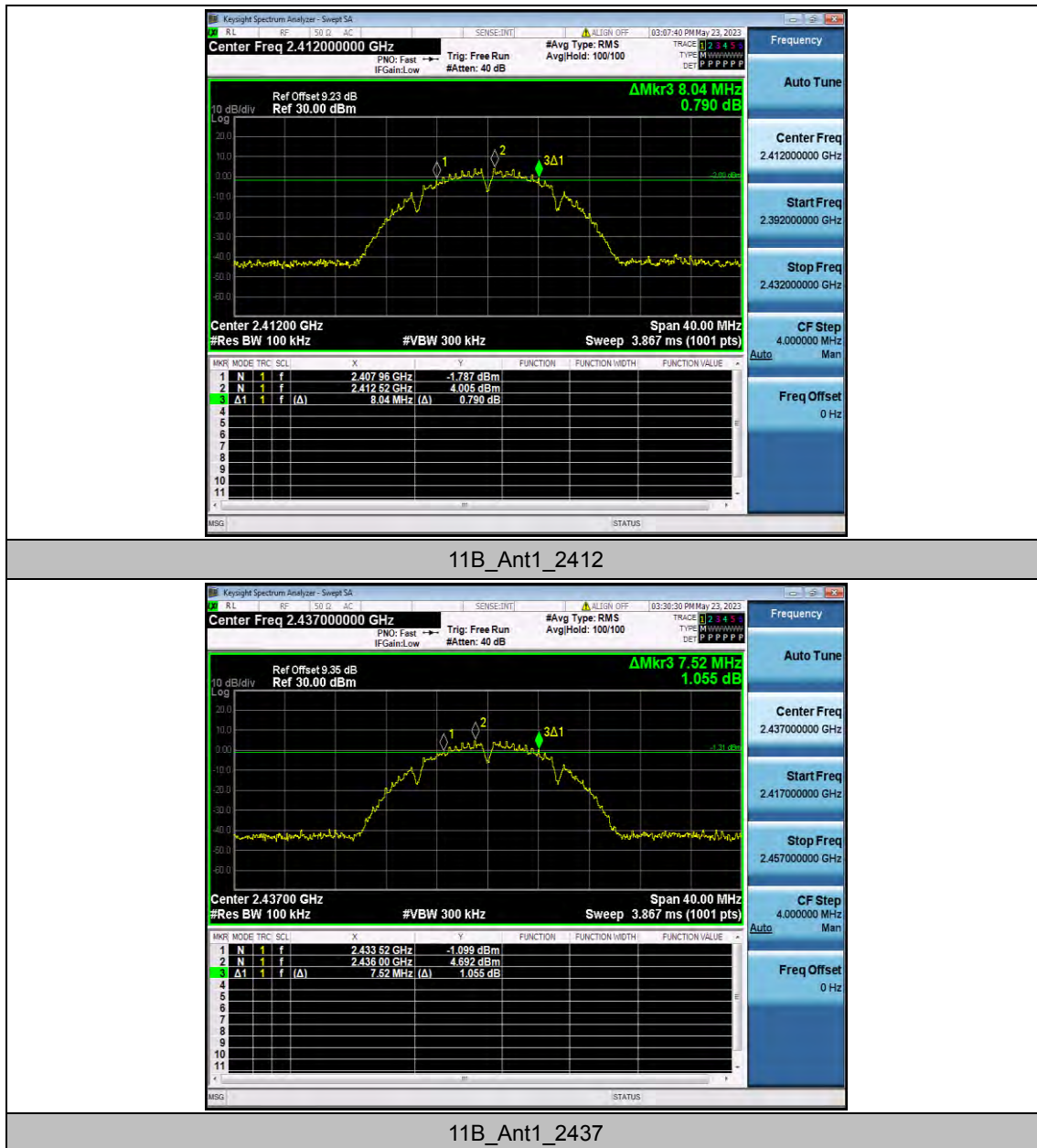
Case No. : <u>GTS20230417015-1-3</u>	
Ambient Condition: <u>25</u> °C, <u>50</u> %RH, Atmos100.1Kpa,	
Test Date: <u>2023.5.22</u>	Test Engineer: <u>Jenny zeng</u>

Appendix B.1: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.040	2407.960	2416.000	0.5	PASS
		2437	7.520	2433.520	2441.040	0.5	PASS
		2462	8.040	2458.000	2466.040	0.5	PASS
11G	Ant1	2412	15.880	2404.240	2420.120	0.5	PASS
		2437	13.840	2430.680	2444.520	0.5	PASS
		2462	15.040	2454.480	2469.520	0.5	PASS
11N20SISO	Ant1	2412	15.040	2405.360	2420.400	0.5	PASS
		2437	15.080	2429.440	2444.520	0.5	PASS
		2462	15.040	2454.520	2469.560	0.5	PASS
11N40SISO	Ant1	2422	35.040	2404.480	2439.520	0.5	PASS
		2437	33.840	2420.680	2454.520	0.5	PASS
		2452	35.280	2434.480	2469.760	0.5	PASS

Test Graphs





11B_Ant1_2462



11G_Ant1_2412



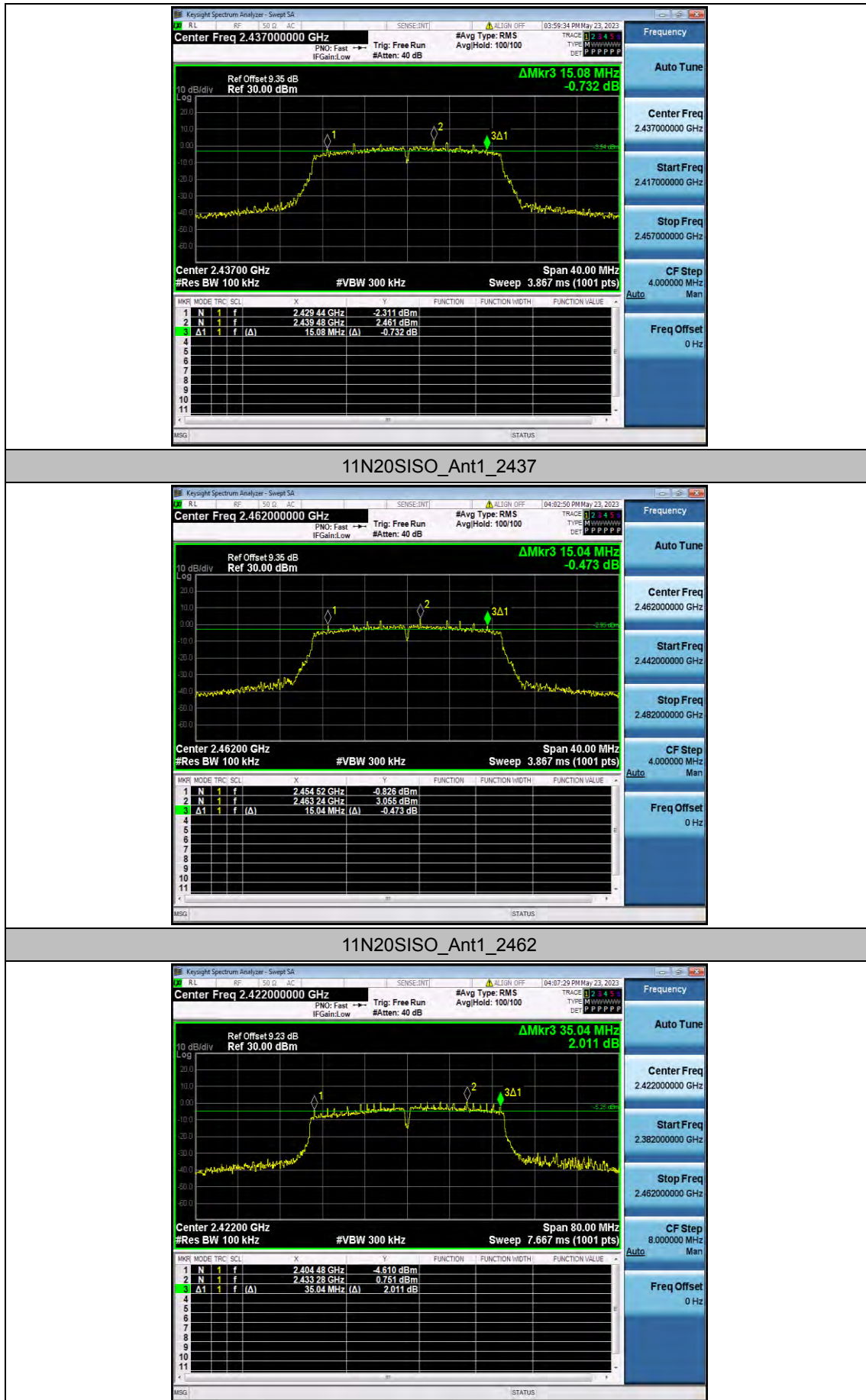
11G_Ant1_2437



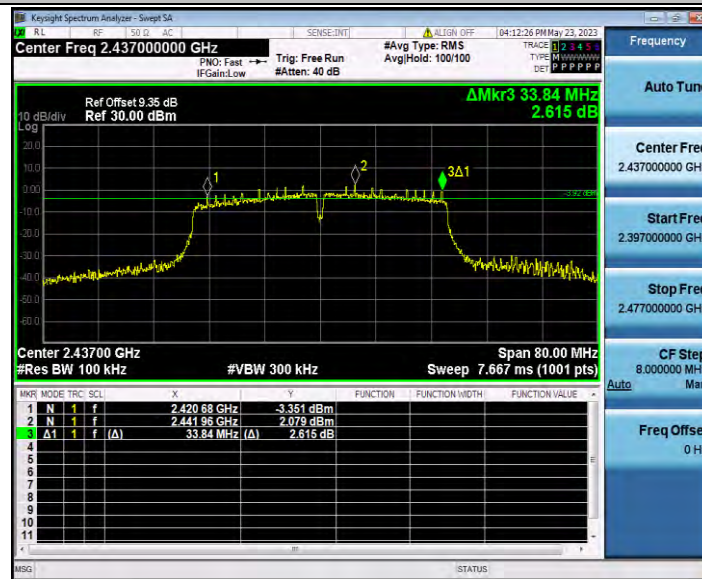
11G_Ant1_2462



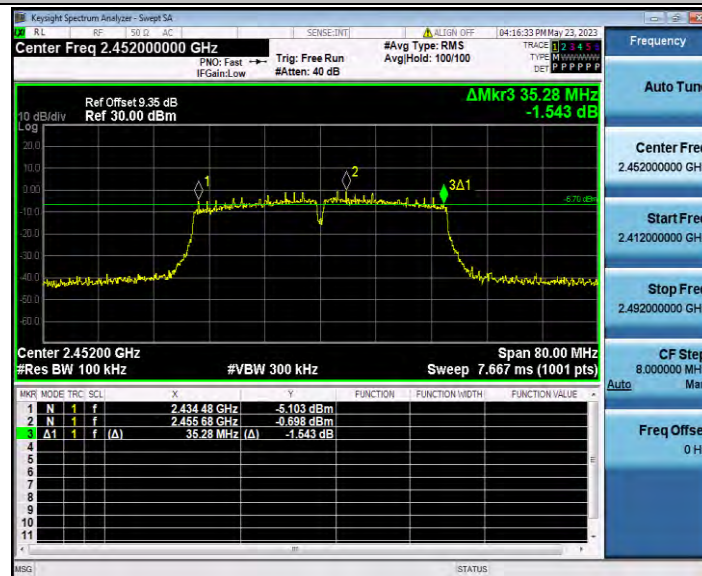
11N20SISO_Ant1_2412



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

Appendix B.2: Occupied Channel Bandwidth

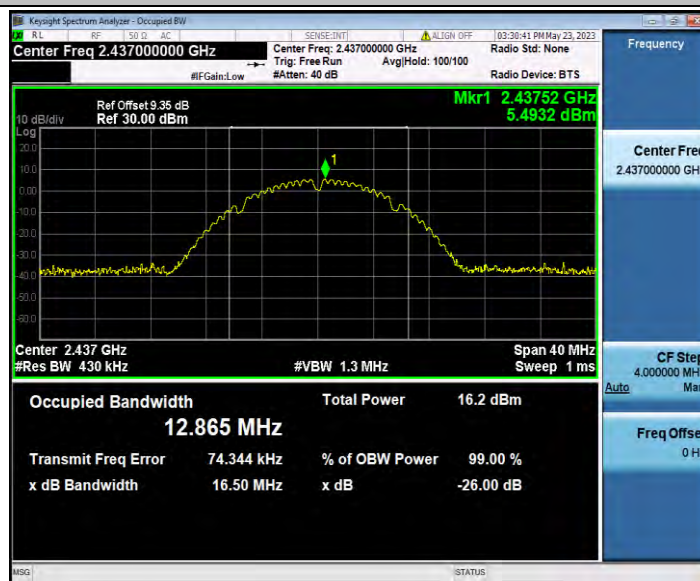
Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.948	2405.616	2418.564	---	---
		2437	12.865	2430.642	2443.507	---	---
		2462	12.849	2455.615	2468.464	---	---
11G	Ant1	2412	16.899	2403.577	2420.476	---	---
		2437	16.837	2428.636	2445.473	---	---
		2462	16.745	2453.635	2470.380	---	---
11N20SISO	Ant1	2412	17.886	2403.076	2420.962	---	---
		2437	17.804	2428.123	2445.927	---	---
		2462	17.739	2453.123	2470.862	---	---
11N40SISO	Ant1	2422	36.160	2404.150	2440.310	---	---
		2437	36.109	2419.160	2455.269	---	---
		2452	36.027	2434.108	2470.135	---	---

Test Graphs



11B_Ant1_2412



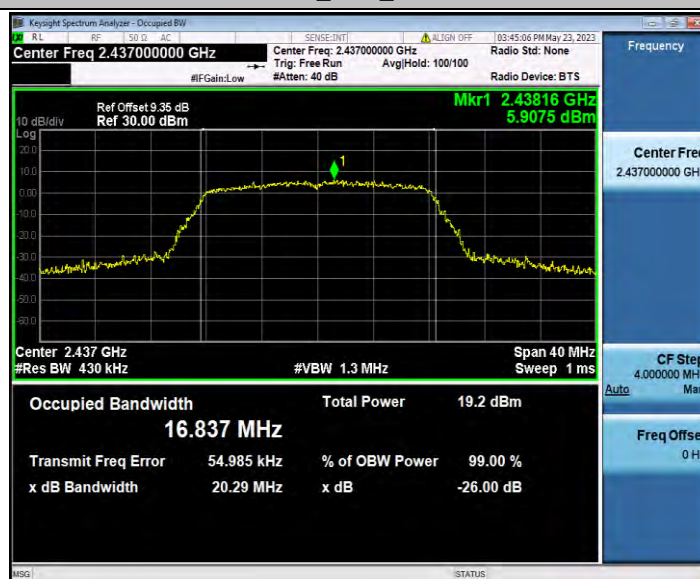
11B_Ant1_2437



11B_Ant1_2462



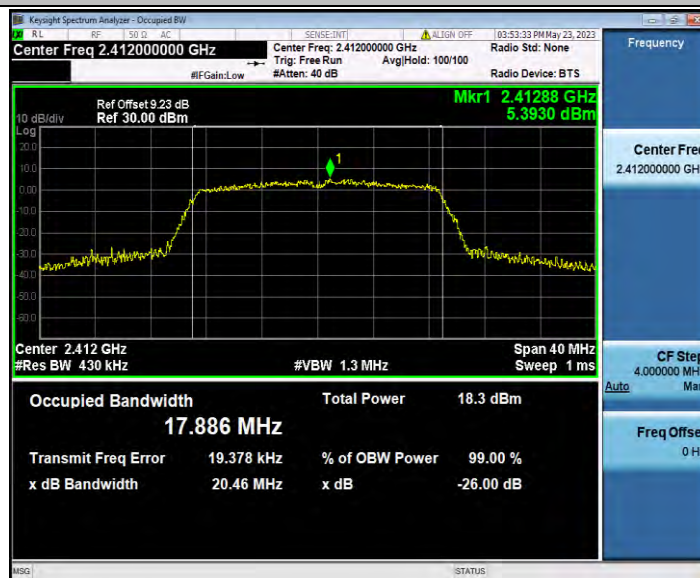
11G_Ant1_2412



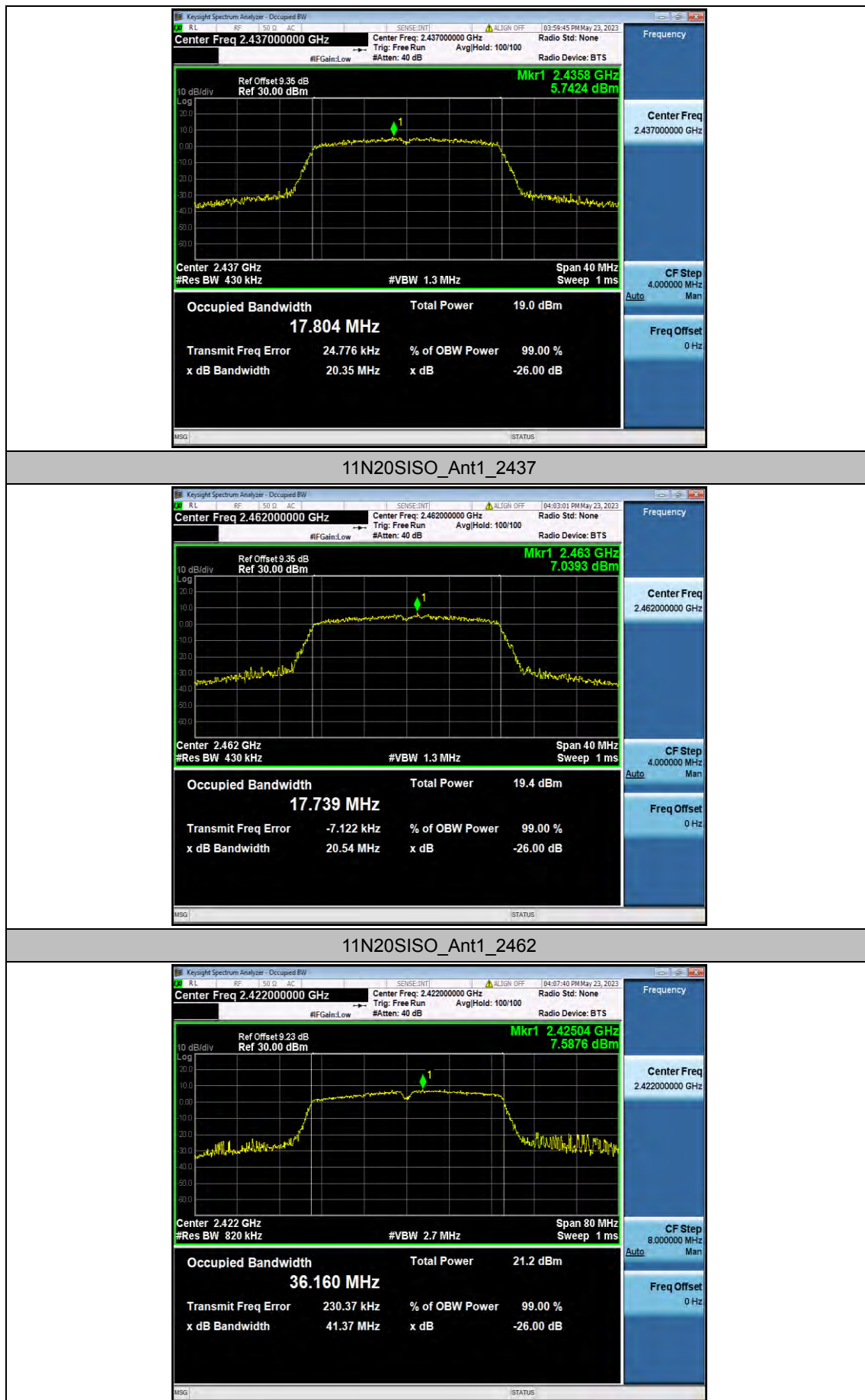
11G_Ant1_2437



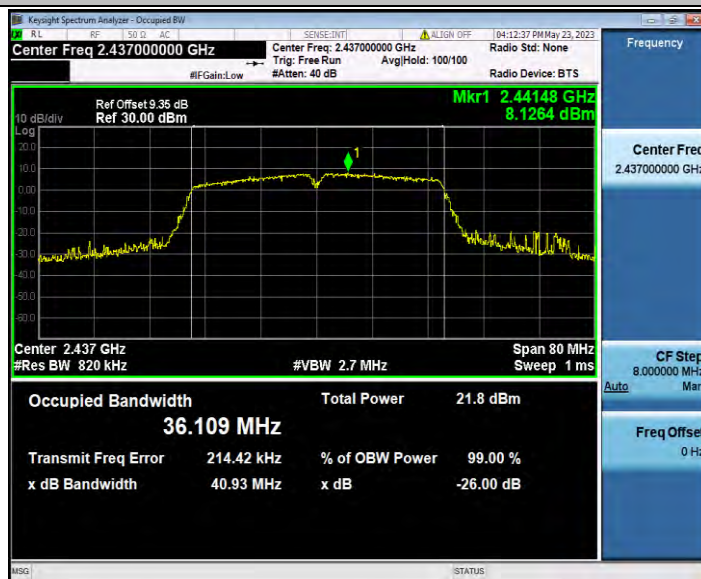
11G_Ant1_2462



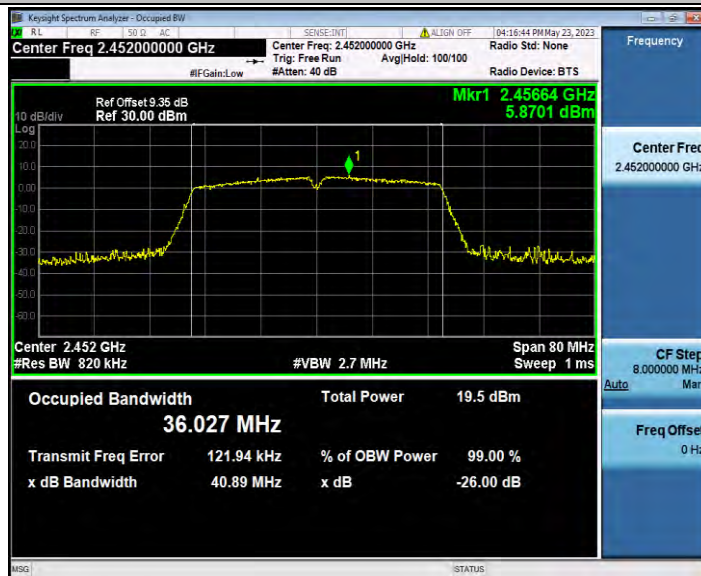
11N20SISO_Ant1_2412



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

Appendix B.3: Maximum conducted output power

Test Result Peak

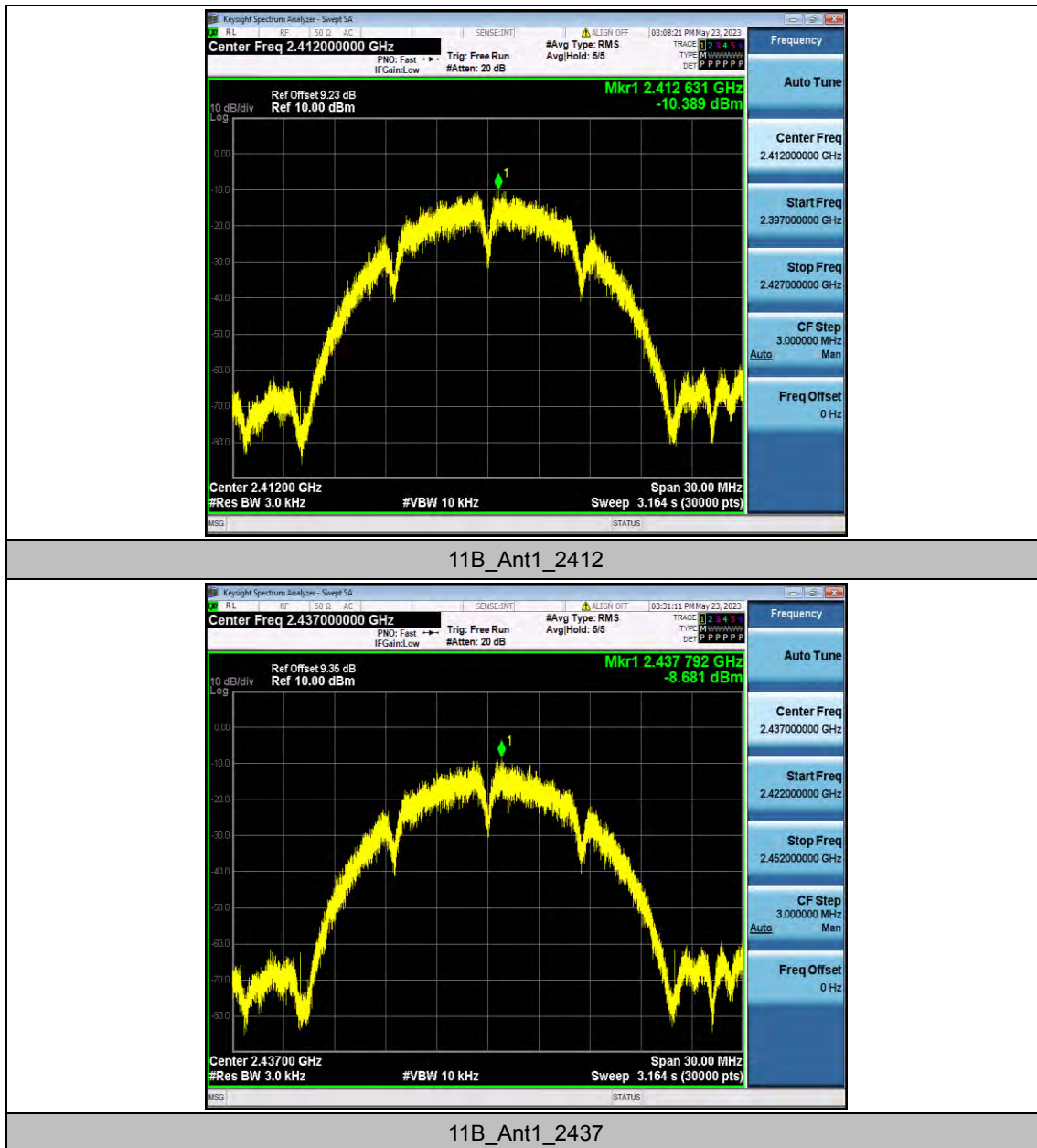
TestMode	Antenna	Frequency[MHz]	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	17.61	≤30.00	PASS
		2437	17.21	≤30.00	PASS
		2462	17.57	≤30.00	PASS
11G	Ant1	2412	19.31	≤30.00	PASS
		2437	20.41	≤30.00	PASS
		2462	20.61	≤30.00	PASS
11N20SISO	Ant1	2412	19.35	≤30.00	PASS
		2437	20.30	≤30.00	PASS
		2462	20.57	≤30.00	PASS
11N40SISO	Ant1	2422	21.56	≤30.00	PASS
		2437	22.22	≤30.00	PASS
		2452	19.85	≤30.00	PASS

Appendix B.4: Maximum power spectral density

Test Result

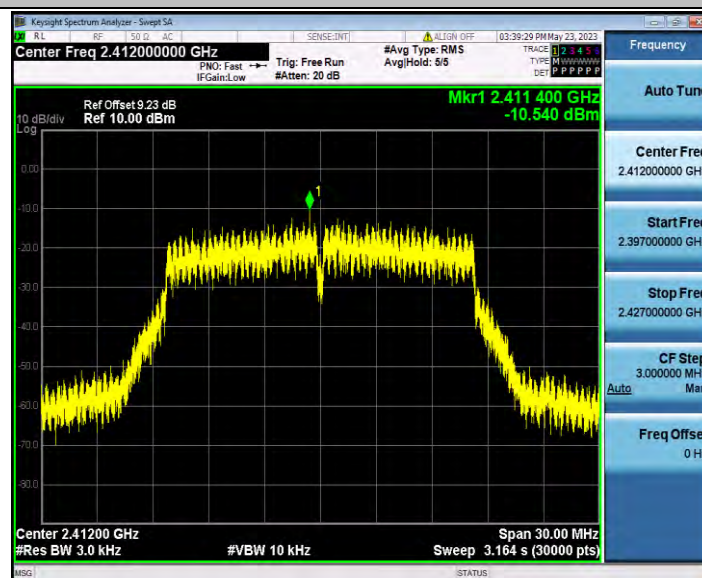
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-10.39	≤8.00	PASS
		2437	-8.68	≤8.00	PASS
		2462	-9.32	≤8.00	PASS
11G	Ant1	2412	-10.54	≤8.00	PASS
		2437	-11.26	≤8.00	PASS
		2462	-10.49	≤8.00	PASS
11N20SISO	Ant1	2412	-13.35	≤8.00	PASS
		2437	-10.82	≤8.00	PASS
		2462	-10.9	≤8.00	PASS
11N40SISO	Ant1	2422	-13.61	≤8.00	PASS
		2437	-11.27	≤8.00	PASS
		2452	-14.17	≤8.00	PASS

Test Graphs

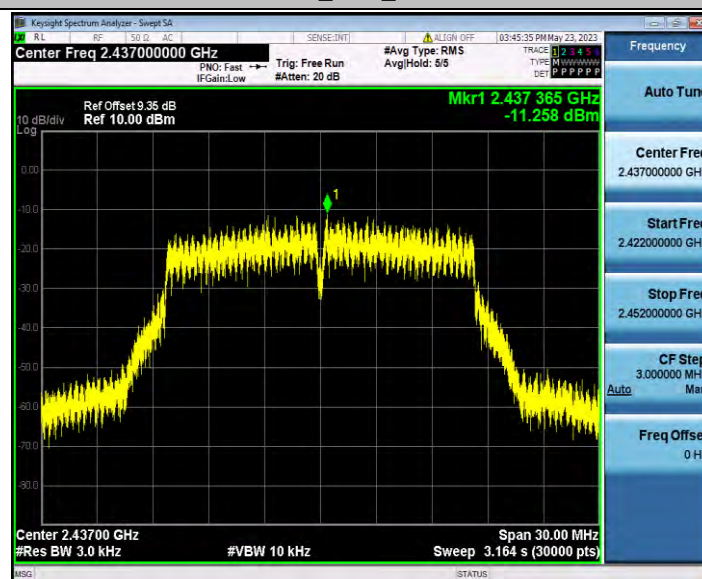




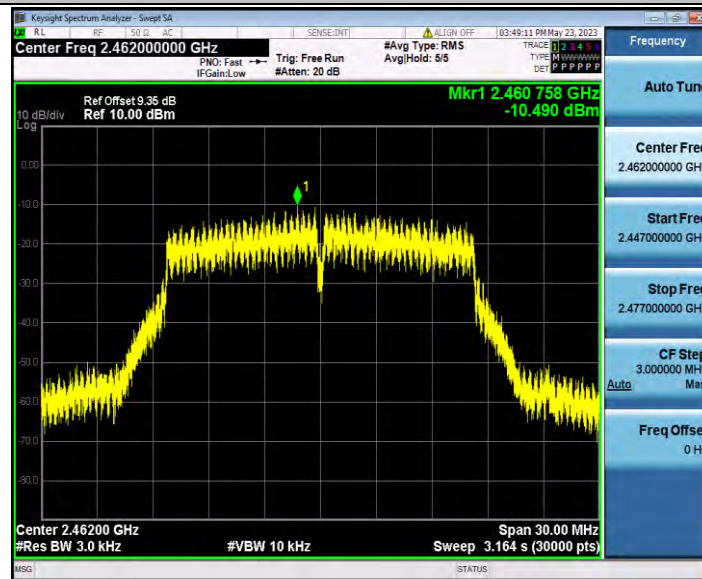
11B_Ant1_2462



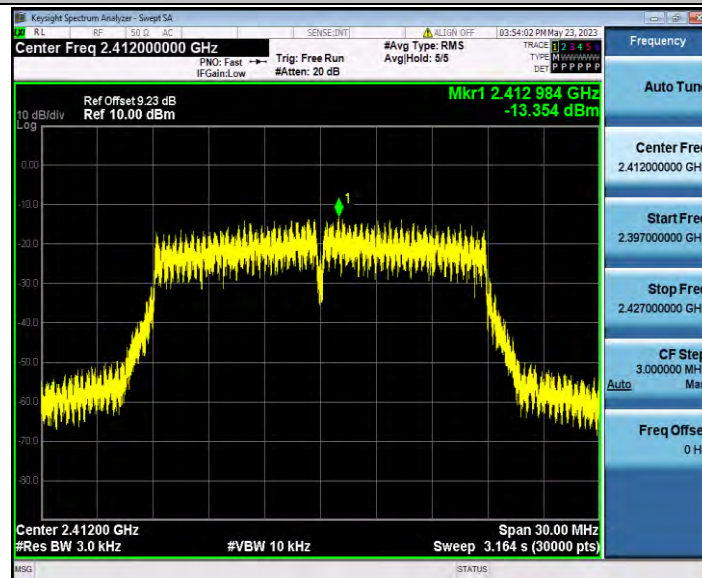
11G_Ant1_2412



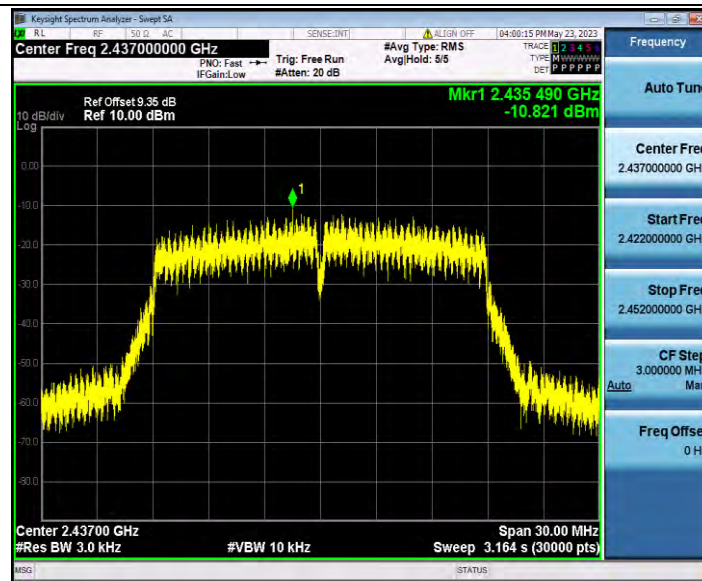
11G_Ant1_2437



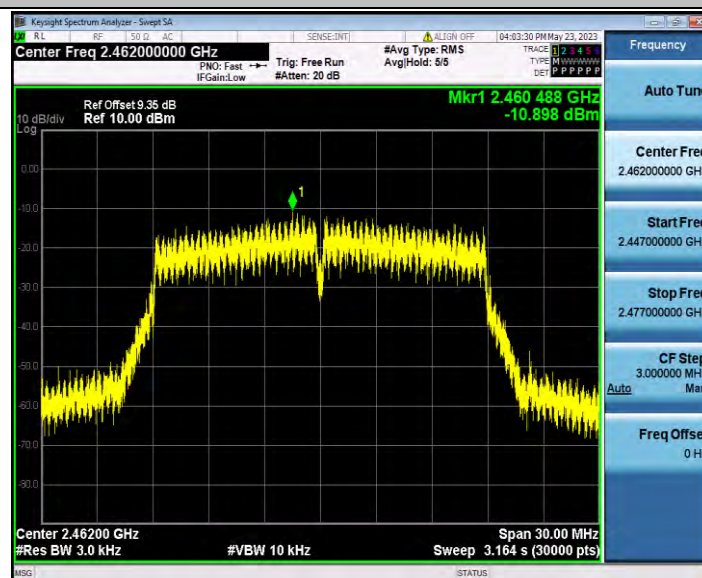
11G_Ant1_2462



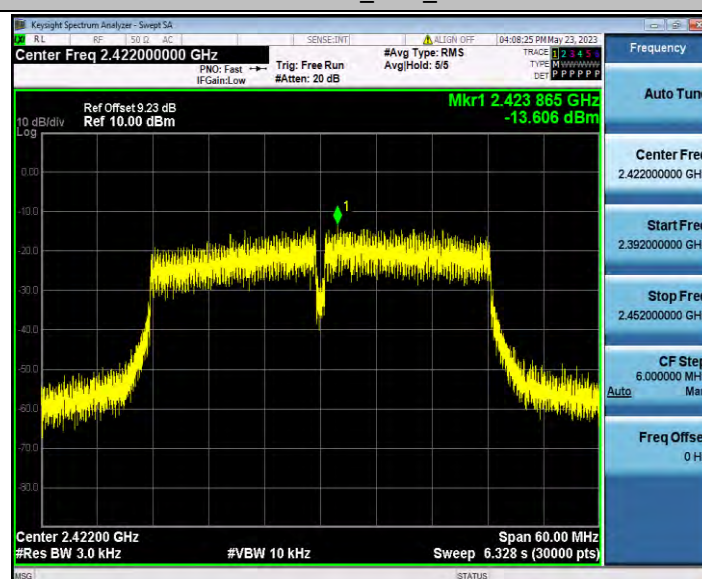
11N20SISO_Ant1_2412



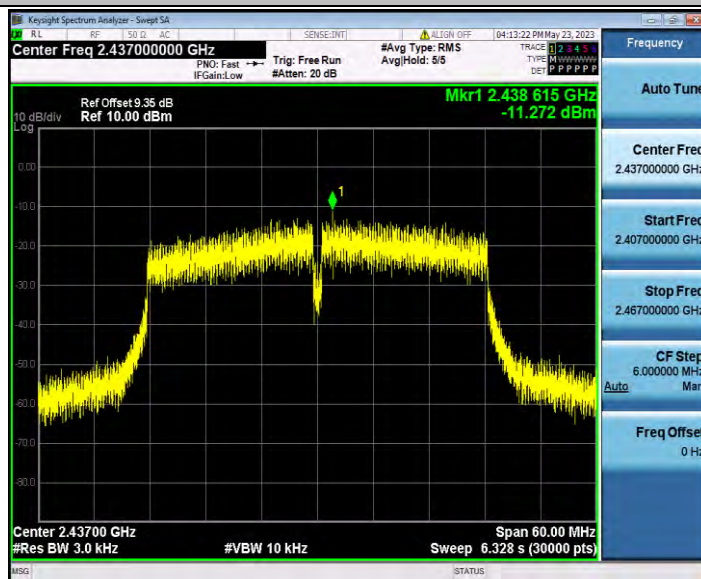
11N20SISO_Ant1_2437



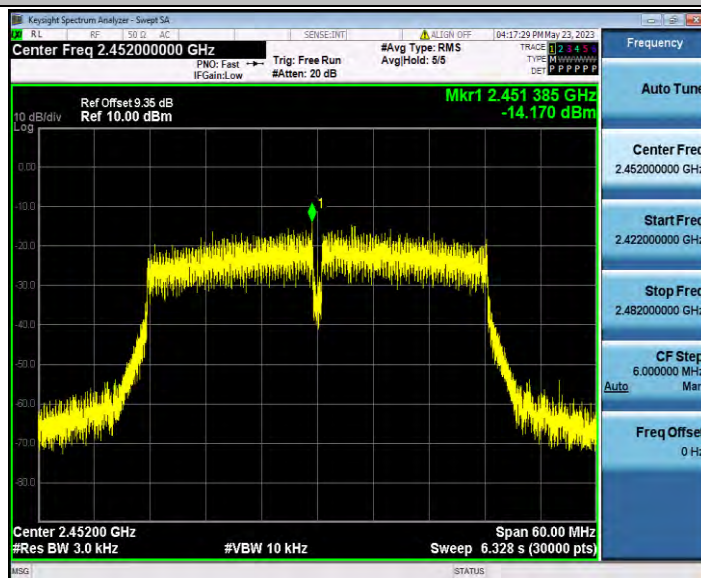
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



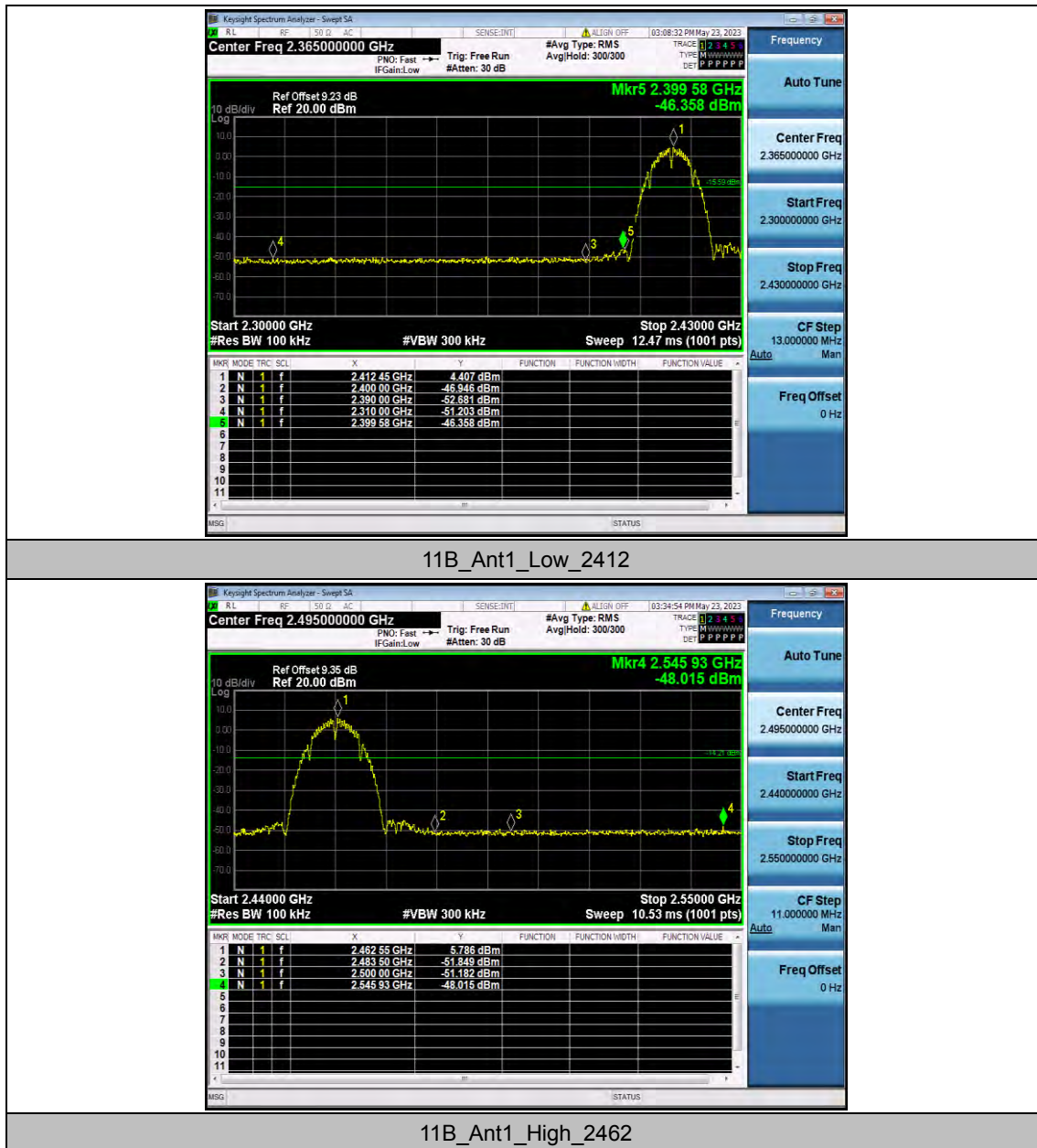
11N40SISO_Ant1_2452

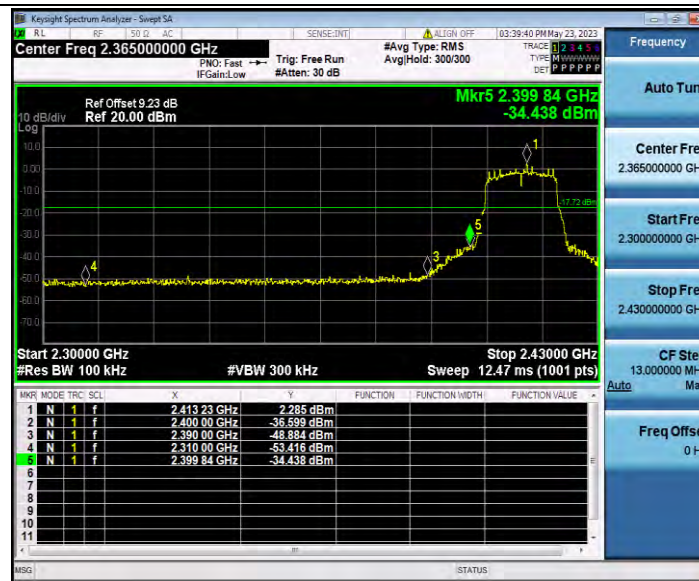
Appendix B.5: Band edge measurements

Test Result

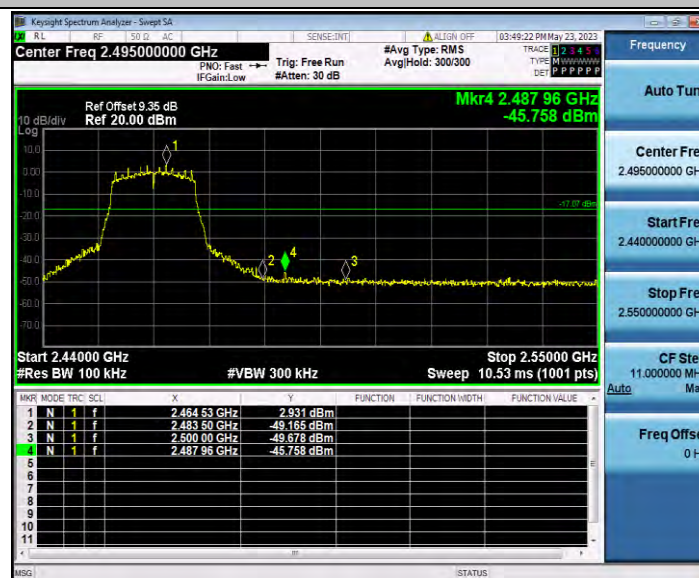
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.41	-46.36	≤ -15.59	PASS
		High	2462	5.79	-48.02	≤ -14.21	PASS
11G	Ant1	Low	2412	2.29	-34.44	≤ -17.72	PASS
		High	2462	2.93	-45.76	≤ -17.07	PASS
11N20SISO	Ant1	Low	2412	2.00	-34.29	≤ -18	PASS
		High	2462	3.35	-46.61	≤ -16.65	PASS
11N40SISO	Ant1	Low	2422	1.32	-33.58	≤ -18.68	PASS
		High	2452	-0.42	-40.7	≤ -20.42	PASS

Test Graphs

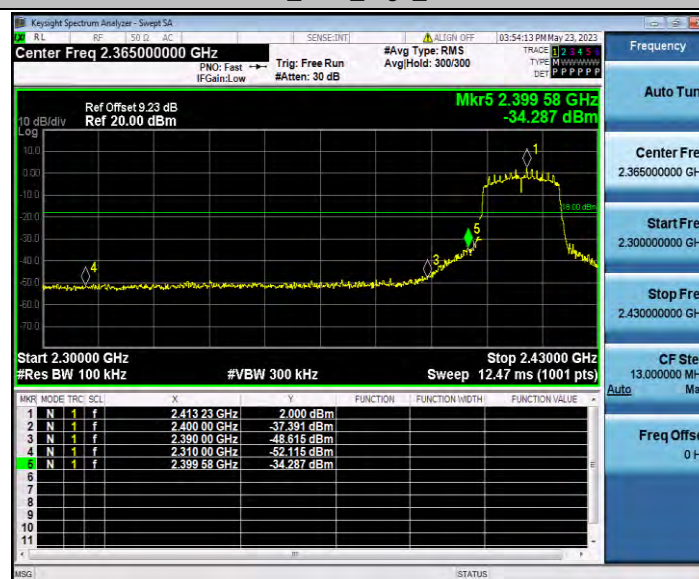




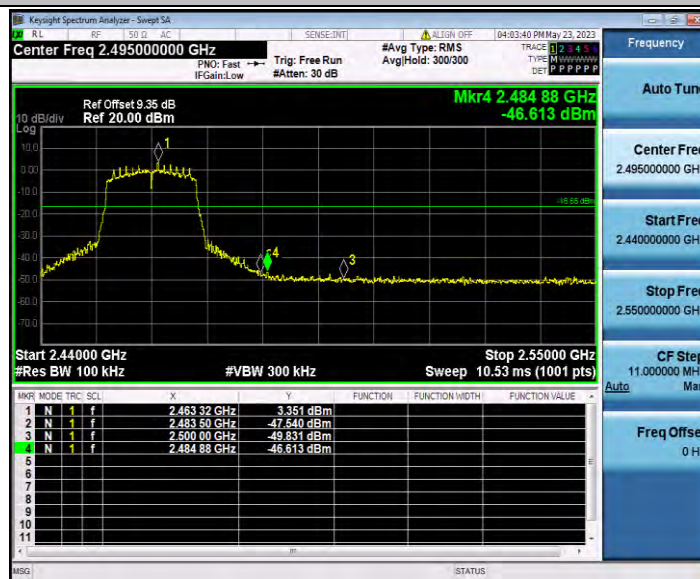
11G_Ant1_Low_2412



11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422

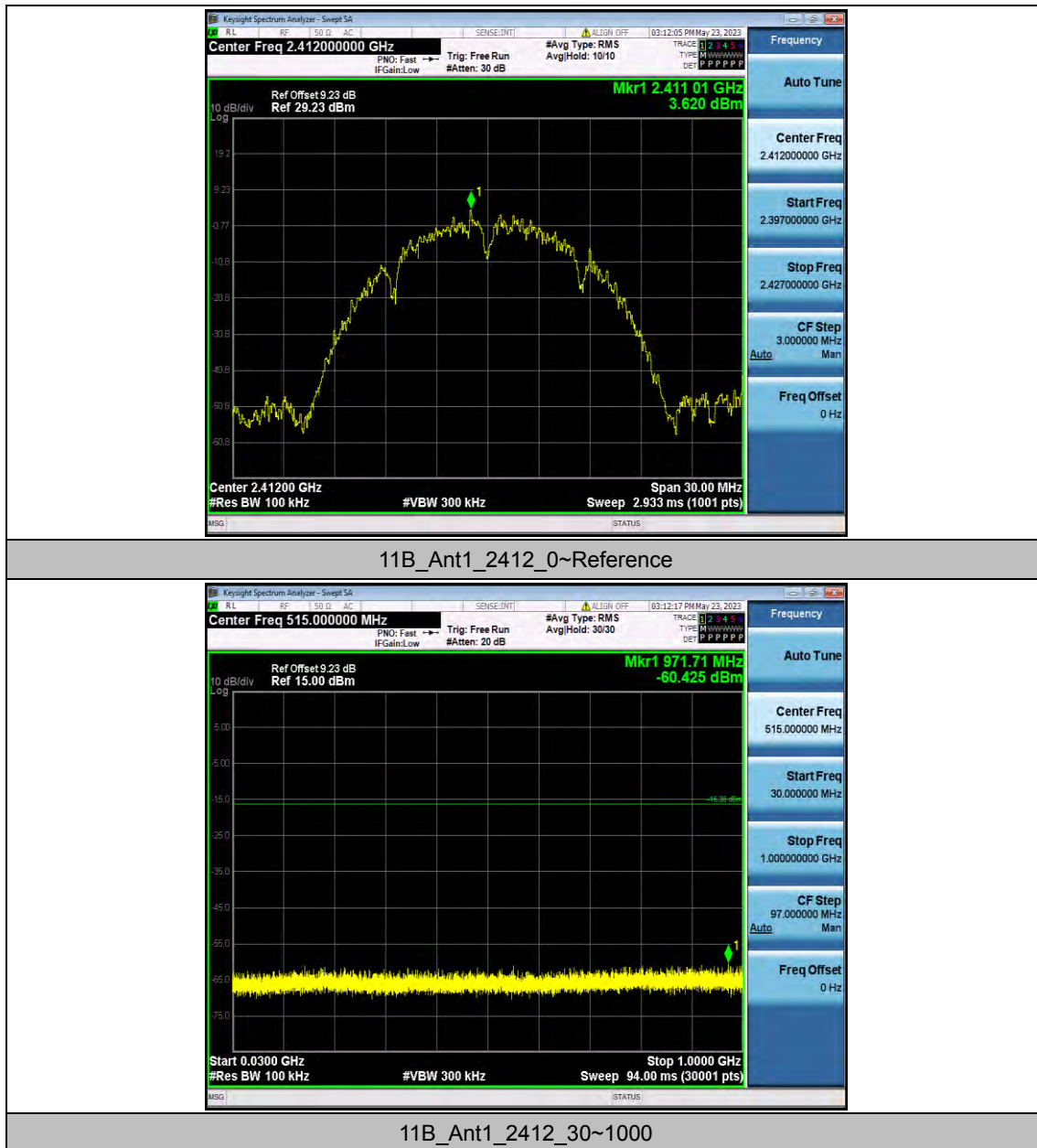


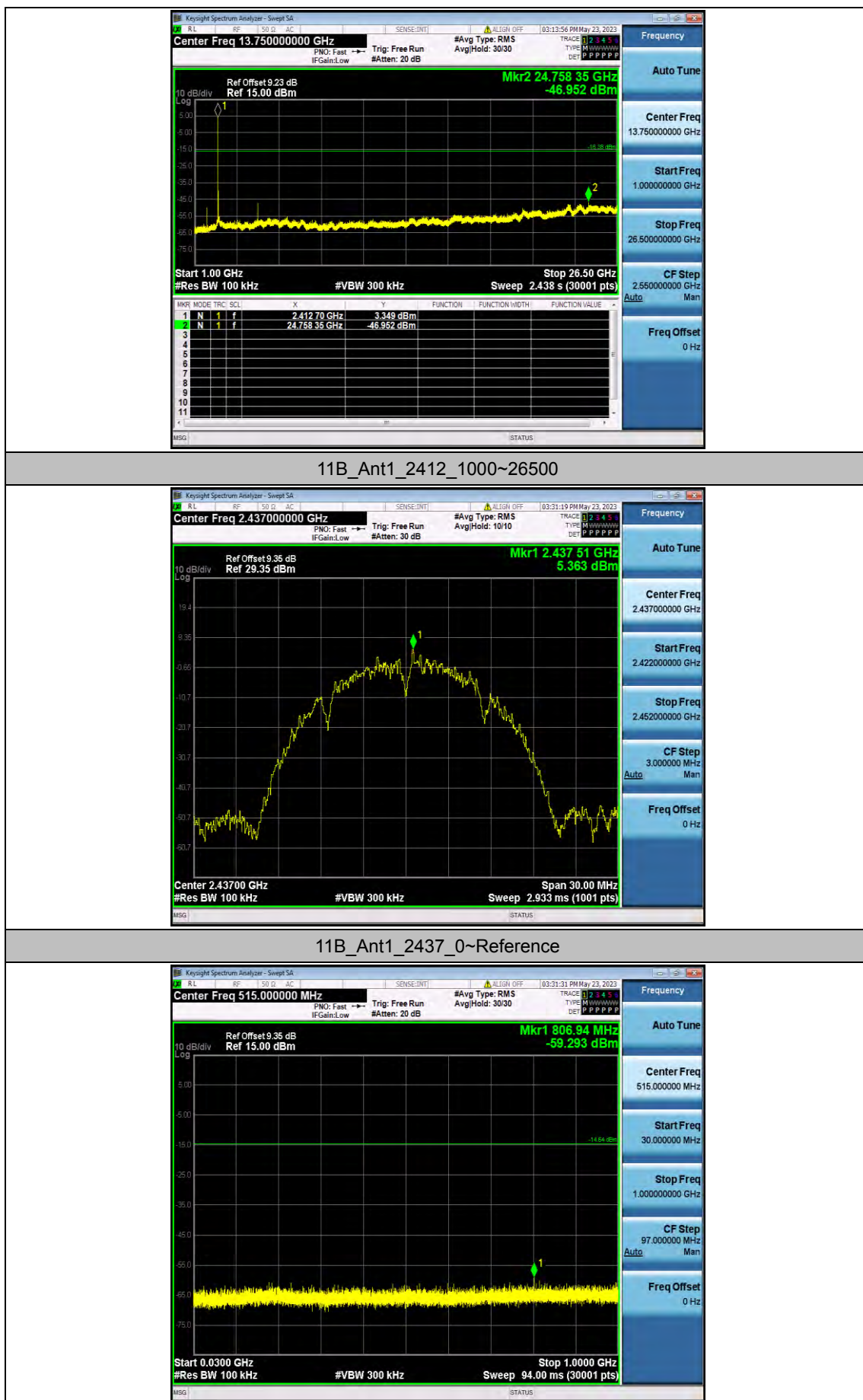
Appendix B.6: Conducted Spurious Emission

Test Result

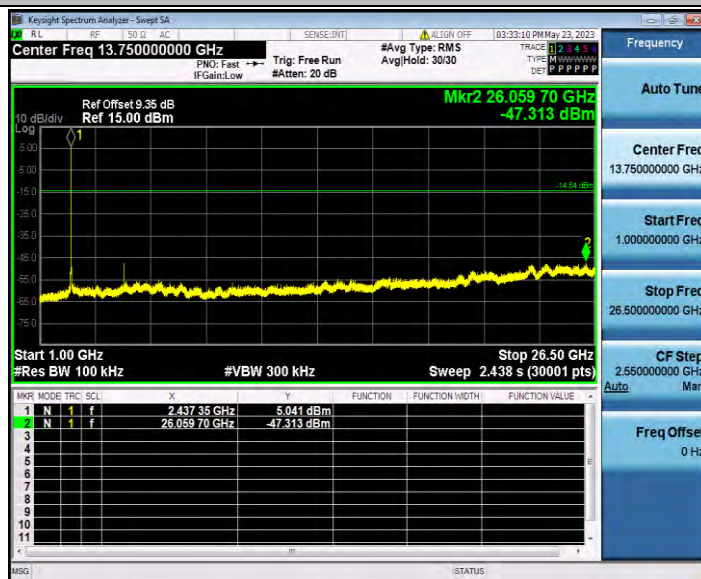
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	3.62	3.62	---	PASS
			30~1000	3.62	-60.43	≤ -16.38	PASS
			1000~26500	3.62	-46.95	≤ -16.38	PASS
		2437	Reference	5.36	5.36	---	PASS
			30~1000	5.36	-59.29	≤ -14.64	PASS
			1000~26500	5.36	-47.31	≤ -14.64	PASS
		2462	Reference	4.89	4.89	---	PASS
			30~1000	4.89	-60.44	≤ -15.11	PASS
			1000~26500	4.89	-46.23	≤ -15.11	PASS
11G	Ant1	2412	Reference	2.24	2.24	---	PASS
			30~1000	2.24	-55.14	≤ -17.76	PASS
			1000~26500	2.24	-47.54	≤ -17.76	PASS
		2437	Reference	0.37	0.37	---	PASS
			30~1000	0.37	-60.55	≤ -19.63	PASS
			1000~26500	0.37	-47.53	≤ -19.63	PASS
		2462	Reference	2.02	2.02	---	PASS
			30~1000	2.02	-59.51	≤ -17.98	PASS
			1000~26500	2.02	-47.27	≤ -17.98	PASS
11N20SISO	Ant1	2412	Reference	-2.62	-2.62	---	PASS
			30~1000	-2.62	-60.28	≤ -22.62	PASS
			1000~26500	-2.62	-47.36	≤ -22.62	PASS
		2437	Reference	-0.12	-0.12	---	PASS
			30~1000	-0.12	-60.69	≤ -20.12	PASS
			1000~26500	-0.12	-47.3	≤ -20.12	PASS
		2462	Reference	1.01	1.01	---	PASS
			30~1000	1.01	-60.17	≤ -18.99	PASS
			1000~26500	1.01	-47.65	≤ -18.99	PASS
11N40SISO	Ant1	2422	Reference	-1.44	-1.44	---	PASS
			30~1000	-1.44	-60.58	≤ -21.44	PASS
			1000~26500	-1.44	-46.6	≤ -21.44	PASS
		2437	Reference	0.86	0.86	---	PASS
			30~1000	0.86	-59.84	≤ -19.14	PASS
			1000~26500	0.86	-47.75	≤ -19.14	PASS
		2452	Reference	-1.06	-1.06	---	PASS
			30~1000	-1.06	-60.45	≤ -21.06	PASS
			1000~26500	-1.06	-47.47	≤ -21.06	PASS

Test Graphs





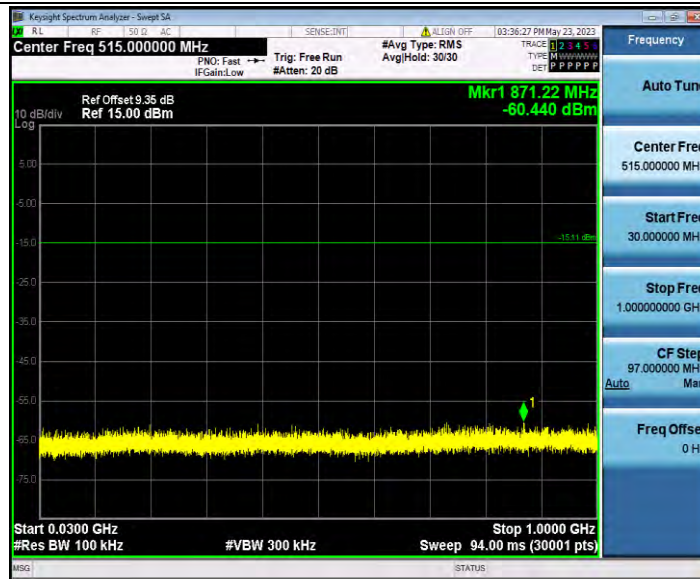
11B_Ant1_2437_30~1000



11B_Ant1_2437_1000~26500



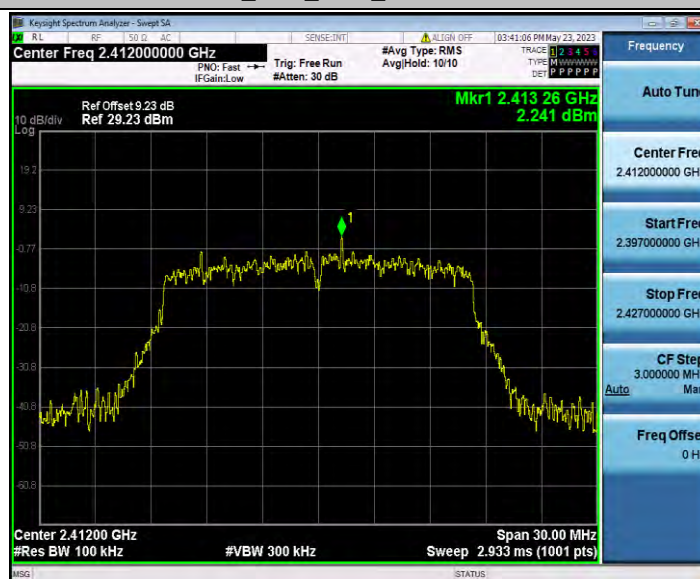
11B_Ant1_2462_0~Reference



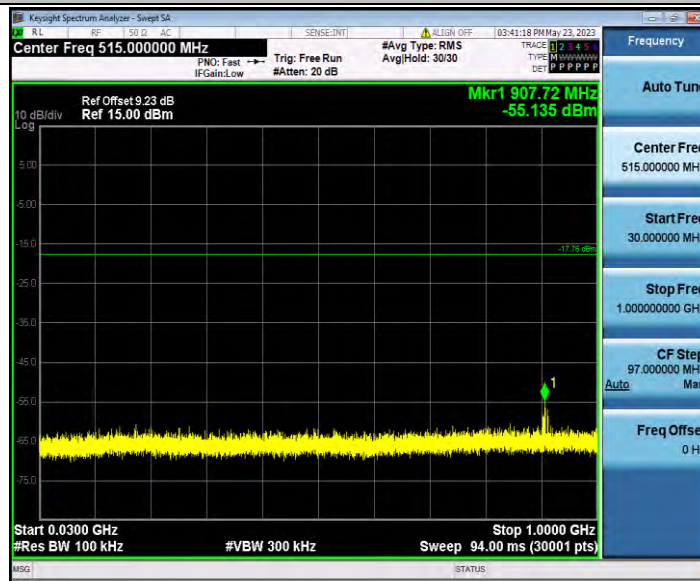
11B_Ant1_2462_30~1000



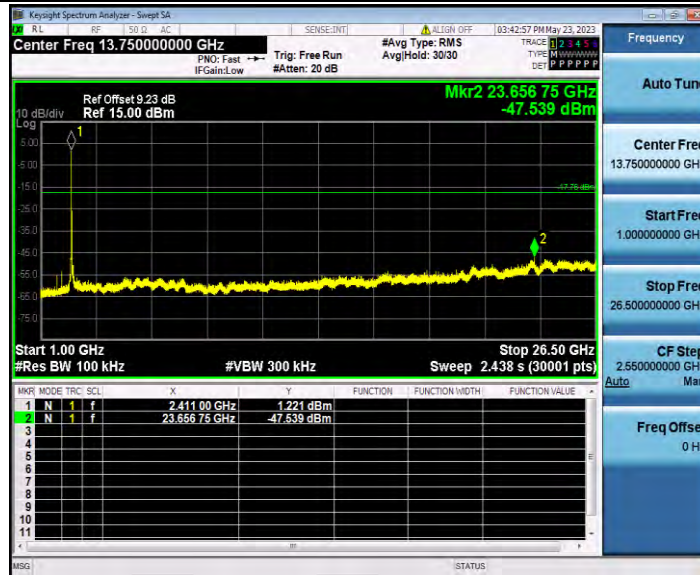
11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



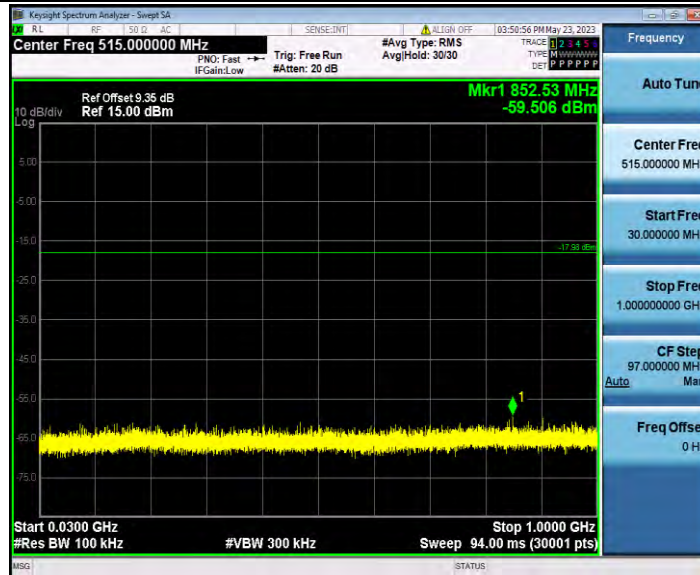
11G_Ant1_2437_30~1000



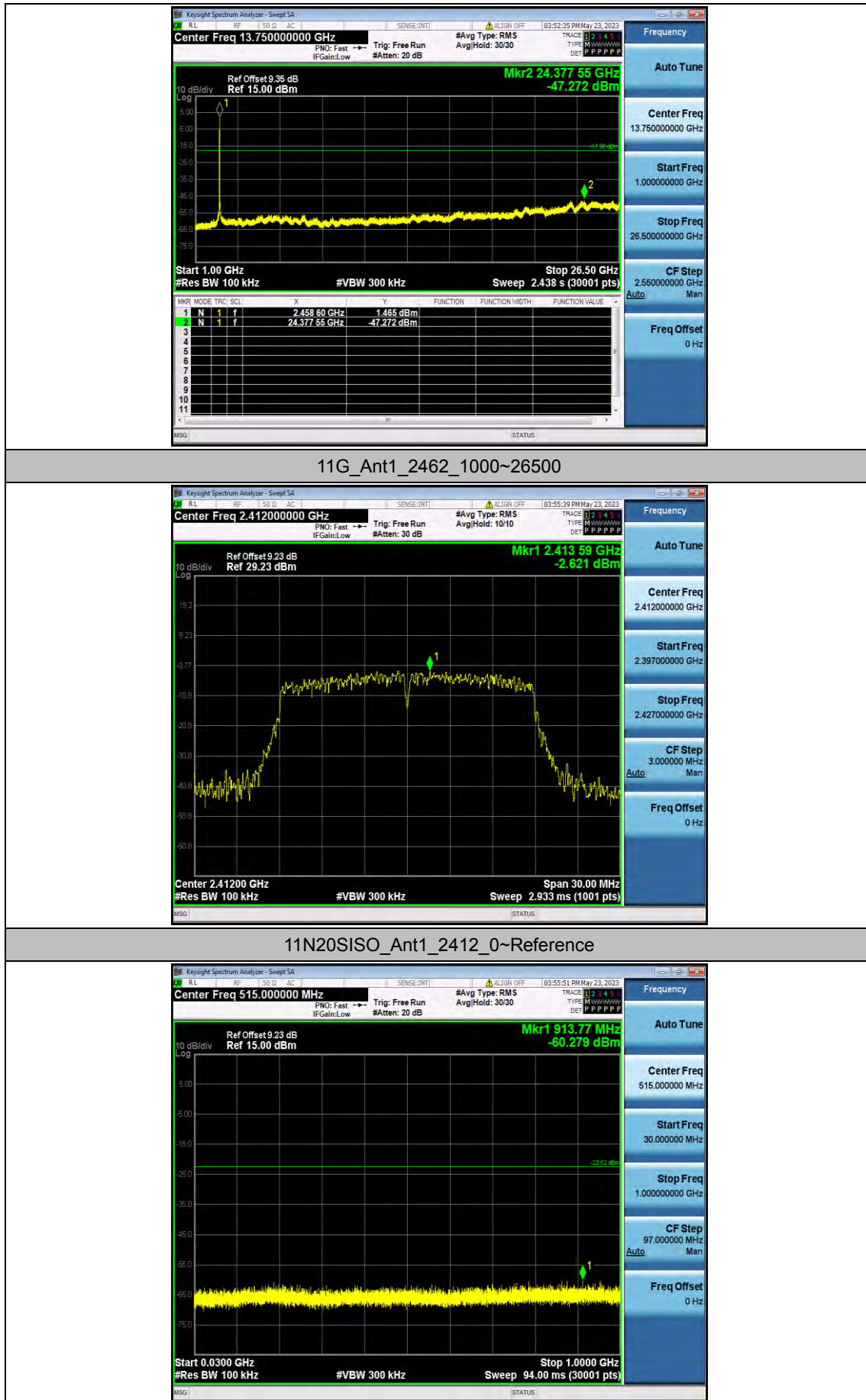
11G_Ant1_2437_1000~26500



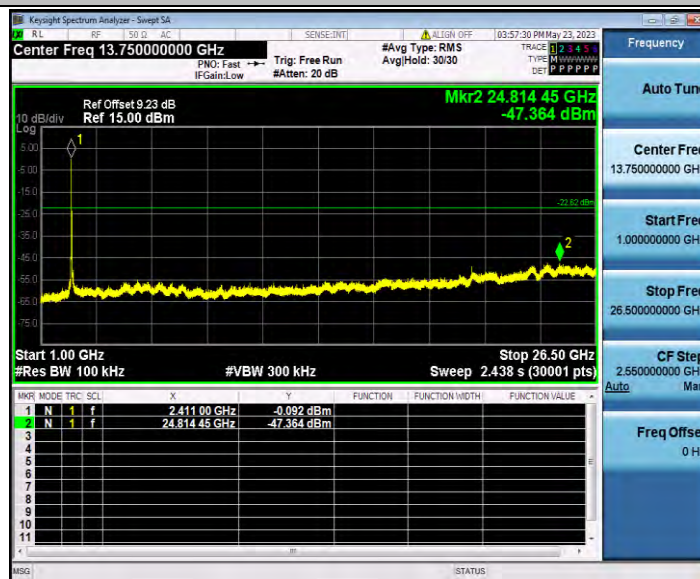
11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



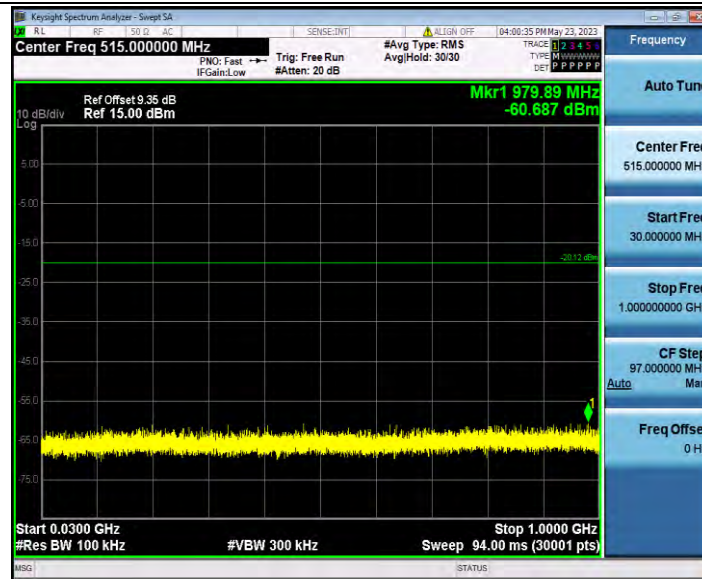
11N20SISO_Ant1_2412_30~1000



11N20SISO_Ant1_2412_1000~26500



11N20SISO_Ant1_2437_0~Reference



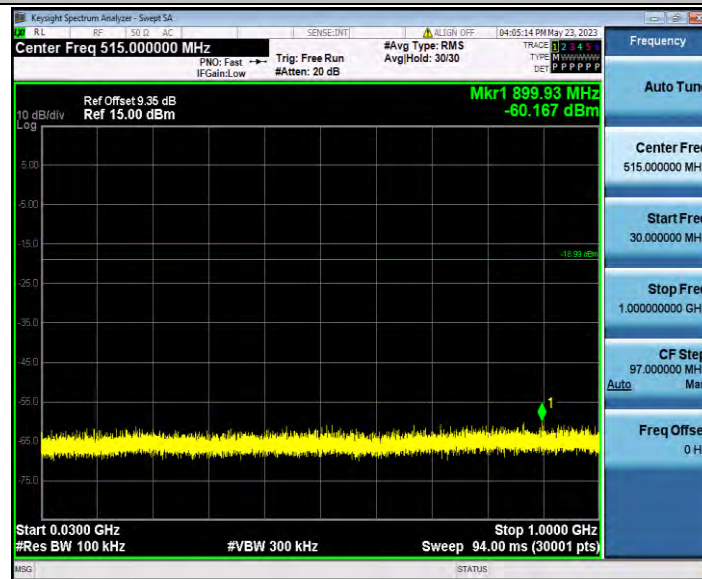
11N20SISO_Ant1_2437_30~1000



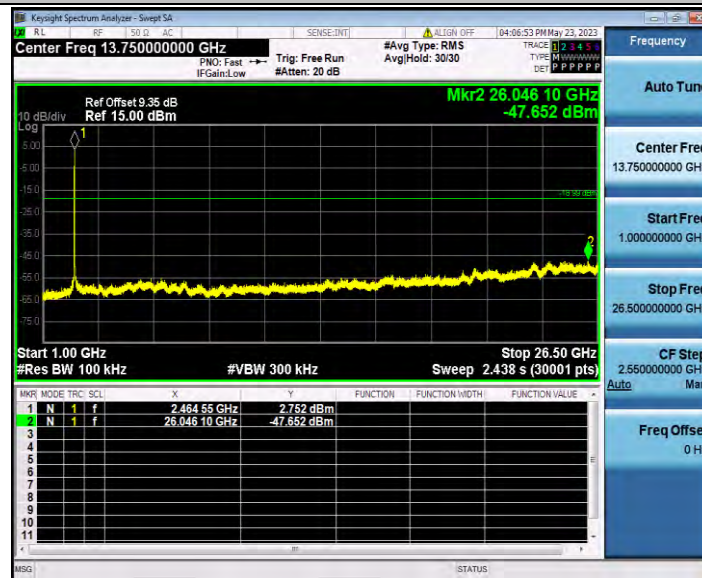
11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference



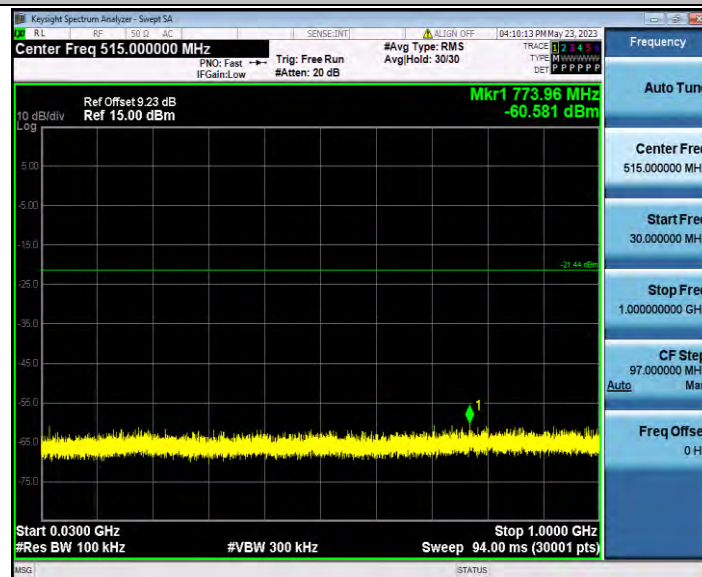
11N20SISO_Ant1_2462_30~1000



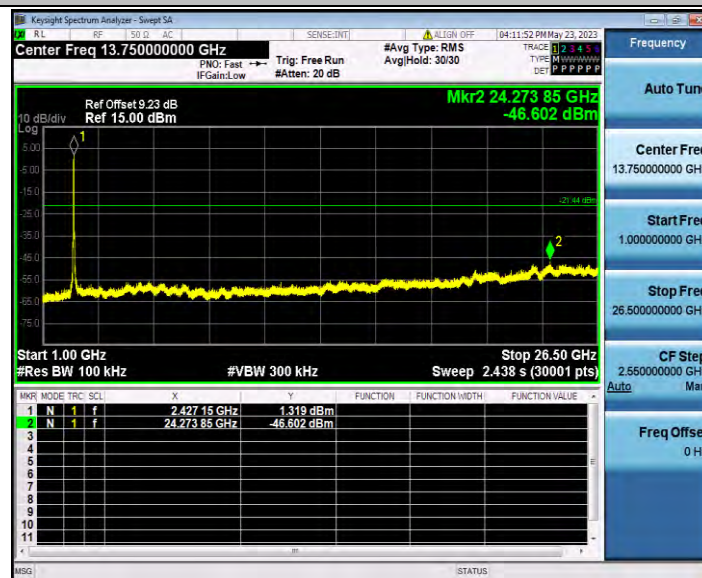
11N20SISO_Ant1_2462_1000~26500



11N40SISO_Ant1_2422_0~Reference



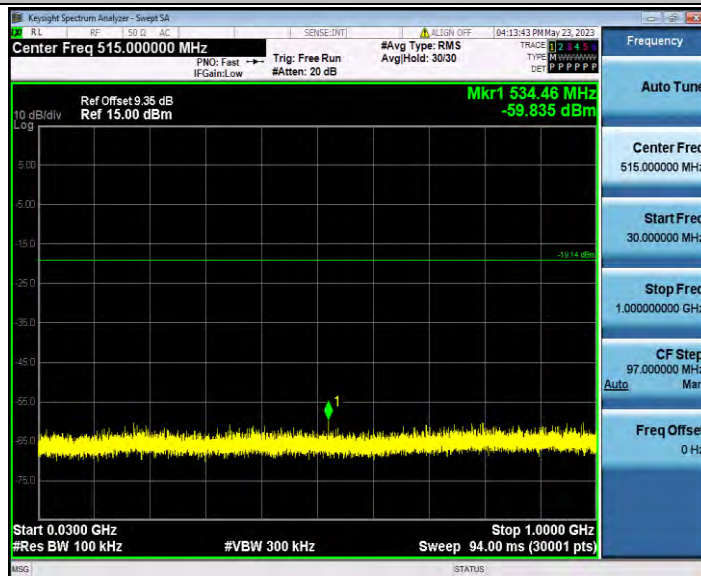
11N40SISO_Ant1_2422_30~1000



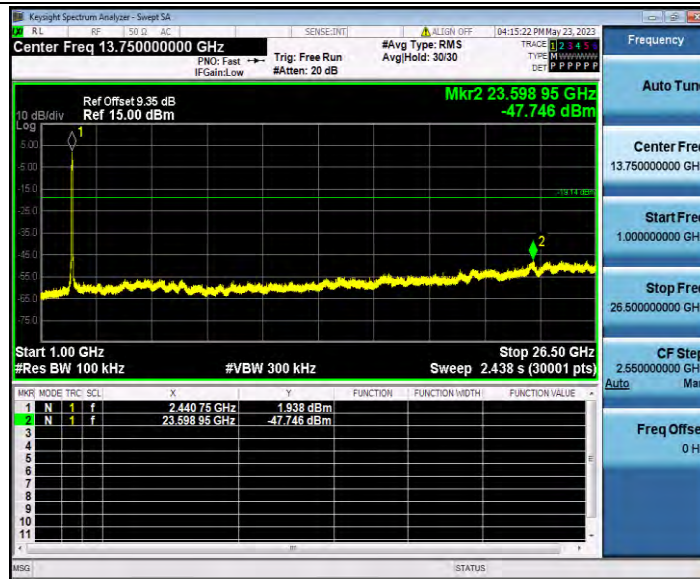
11N40SISO_Ant1_2422_1000~26500



11N40SISO_Ant1_2437_0~Reference



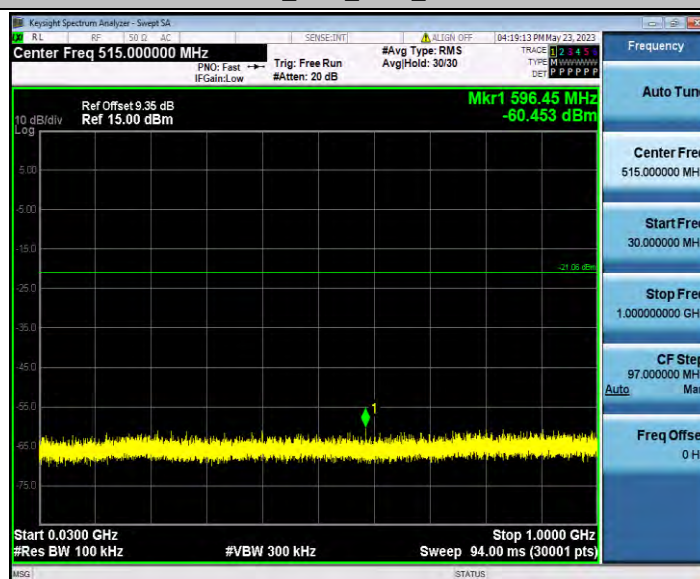
11N40SISO_Ant1_2437_30~1000

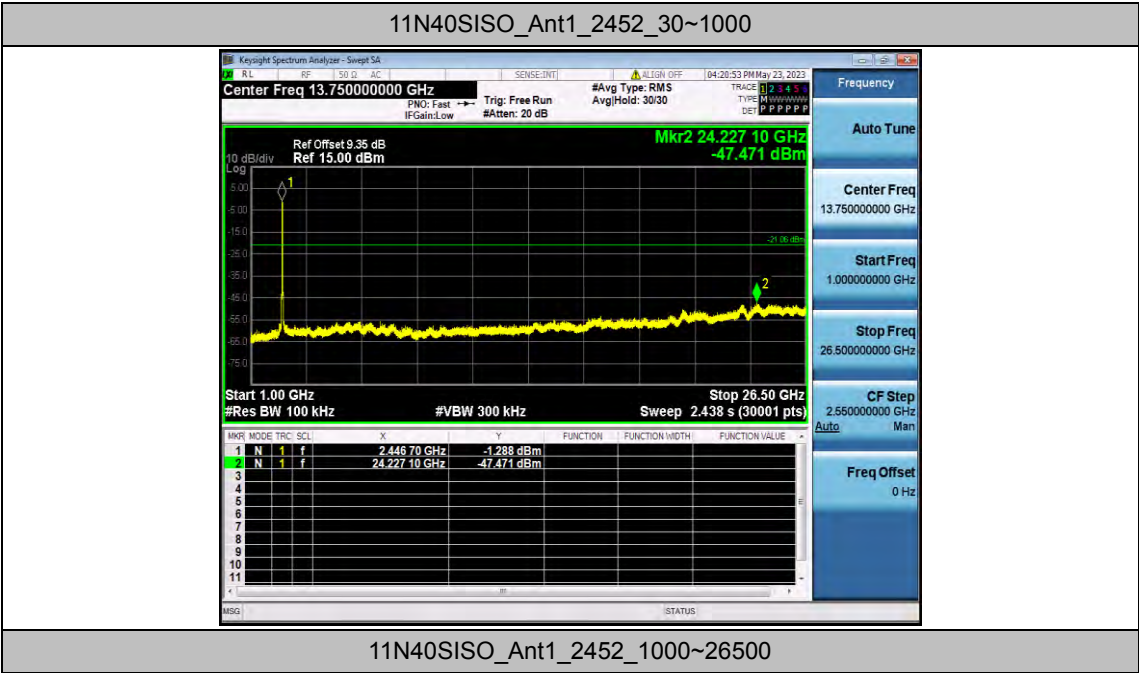


11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference





Appendix B.7: Emissions in Restricted Bands

Test Result

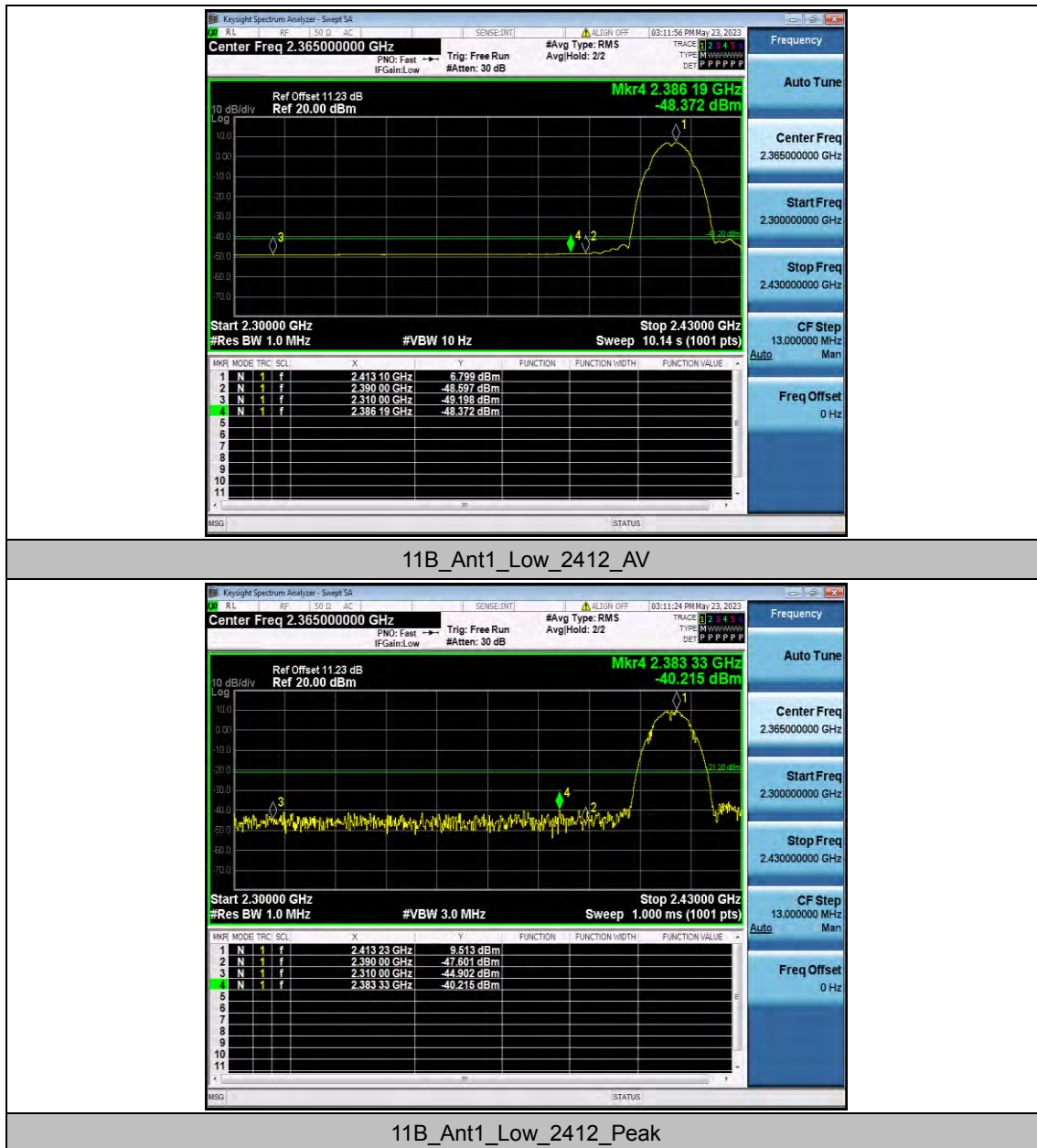
TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-49.2	≤-41.20	46.00	≤54	PASS
				AV	2386.190	-48.37	≤-41.20	46.83	≤54	PASS
				AV	2390.000	-48.6	≤-41.20	46.60	≤54	PASS
				Peak	2310.000	-44.9	≤-21.20	50.30	≤74	PASS
				Peak	2383.330	-40.21	≤-21.20	54.99	≤74	PASS
				Peak	2390.000	-47.6	≤-21.20	47.60	≤74	PASS
		High	2462	AV	2483.500	-48.34	≤-41.20	46.86	≤54	PASS
				AV	2487.960	-47.97	≤-41.20	47.23	≤54	PASS
				AV	2500.000	-48.18	≤-41.20	47.02	≤54	PASS
				Peak	2483.500	-44.99	≤-21.20	50.21	≤74	PASS
				Peak	2489.720	-39.56	≤-21.20	55.64	≤74	PASS
				Peak	2500.000	-43.76	≤-21.20	51.44	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.01	≤-41.20	46.19	≤54	PASS
				AV	2389.960	-45.77	≤-41.20	49.43	≤54	PASS
				AV	2390.000	-45.77	≤-41.20	49.43	≤54	PASS
				Peak	2310.000	-39.85	≤-21.20	55.35	≤74	PASS
				Peak	2383.460	-39.57	≤-21.20	55.63	≤74	PASS
				Peak	2390.000	-39.75	≤-21.20	55.45	≤74	PASS
		High	2462	AV	2483.500	-44.99	≤-41.20	50.21	≤54	PASS
				AV	2483.560	-45.08	≤-41.20	50.12	≤54	PASS
				AV	2500.000	-46.86	≤-41.20	48.34	≤54	PASS
				Peak	2483.500	-40.15	≤-21.20	55.05	≤74	PASS
				Peak	2488.950	-37.77	≤-21.20	57.43	≤74	PASS
				Peak	2500.000	-42.82	≤-21.20	52.38	≤74	PASS
11N20SISO	Ant1	Low	2412	AV	2310.000	-48.98	≤-41.20	46.22	≤54	PASS
				AV	2389.960	-44.77	≤-41.20	50.43	≤54	PASS
				AV	2390.000	-44.77	≤-41.20	50.43	≤54	PASS
				Peak	2310.000	-51.26	≤-21.20	43.94	≤74	PASS
				Peak	2340.430	-38.74	≤-21.20	56.46	≤74	PASS
				Peak	2390.000	-44.92	≤-21.20	50.28	≤74	PASS
		High	2462	AV	2483.500	-44.42	≤-41.20	50.78	≤54	PASS
				AV	2483.560	-44.53	≤-41.20	50.67	≤54	PASS
				AV	2500.000	-46.87	≤-41.20	48.33	≤54	PASS
				Peak	2483.500	-38	≤-21.20	57.20	≤74	PASS
				Peak	2491.040	-37.94	≤-21.20	57.26	≤74	PASS
				Peak	2500.000	-41.82	≤-21.20	53.38	≤74	PASS

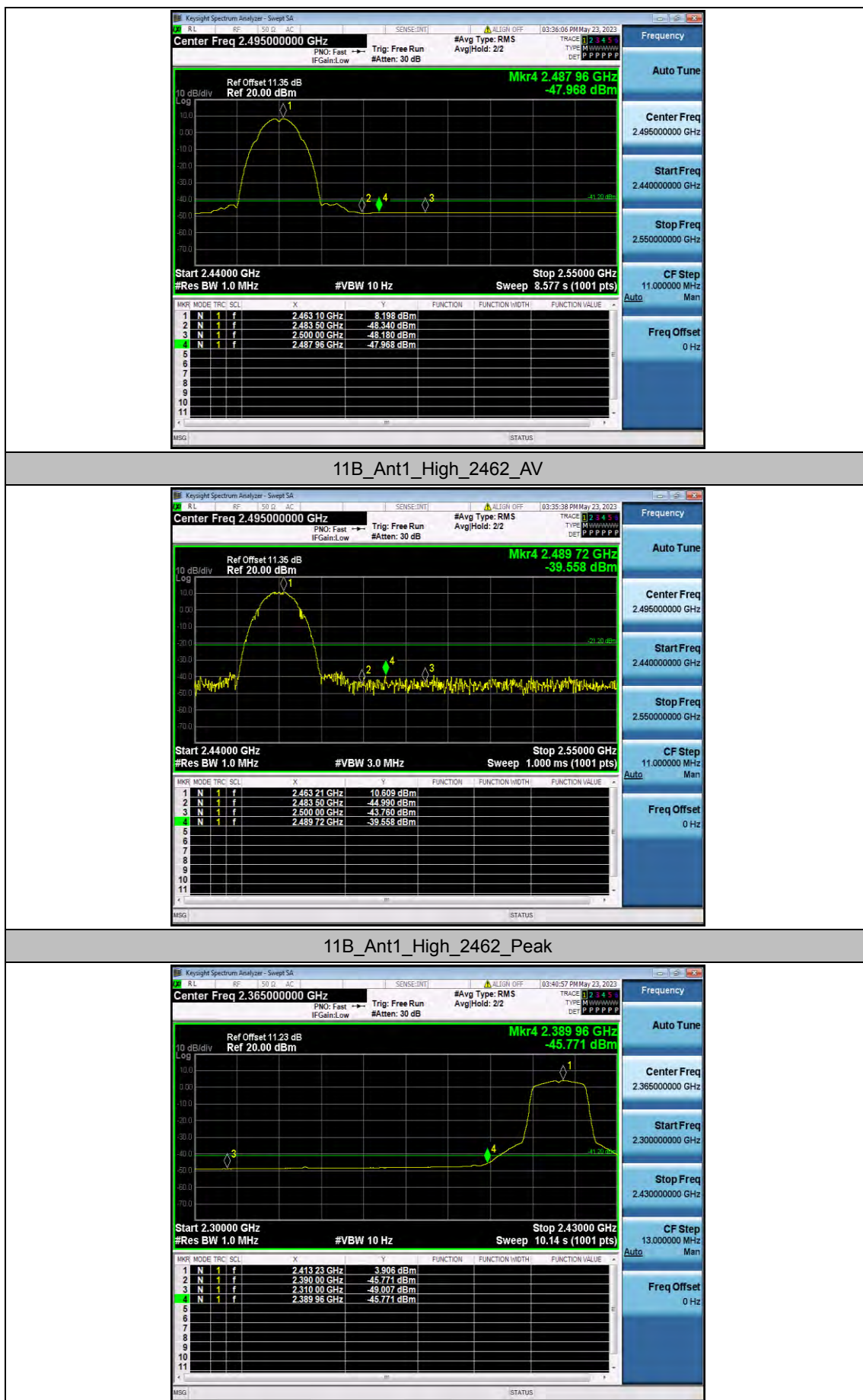
11N40SIS O	Ant1	Low	2422	AV	2310.000	-49.01	≤ -41.20	46.19	≤ 54	PASS
				AV	2389.960	-44.89	≤ -41.20	50.31	≤ 54	PASS
				AV	2390.000	-44.89	≤ -41.20	50.31	≤ 54	PASS
				Peak	2310.000	-47.04	≤ -21.20	48.16	≤ 74	PASS
				Peak	2351.740	-38.1	≤ -21.20	57.10	≤ 74	PASS
				Peak	2390.000	-40.19	≤ -21.20	55.01	≤ 74	PASS
		High	2452	AV	2483.500	-43.13	≤ -41.20	52.07	≤ 54	PASS
				AV	2484.000	-43.11	≤ -41.20	52.09	≤ 54	PASS
				AV	2500.000	-46.9	≤ -41.20	48.30	≤ 54	PASS
				Peak	2483.500	-39.14	≤ -21.20	56.06	≤ 74	PASS
				Peak	2487.850	-35.02	≤ -21.20	60.18	≤ 74	PASS
				Peak	2500.000	-41.88	≤ -21.20	53.32	≤ 74	PASS

Note:

1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle 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

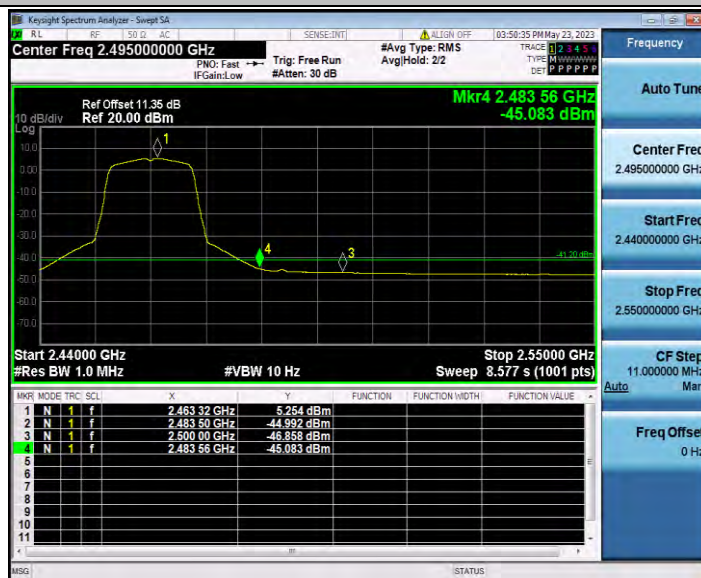




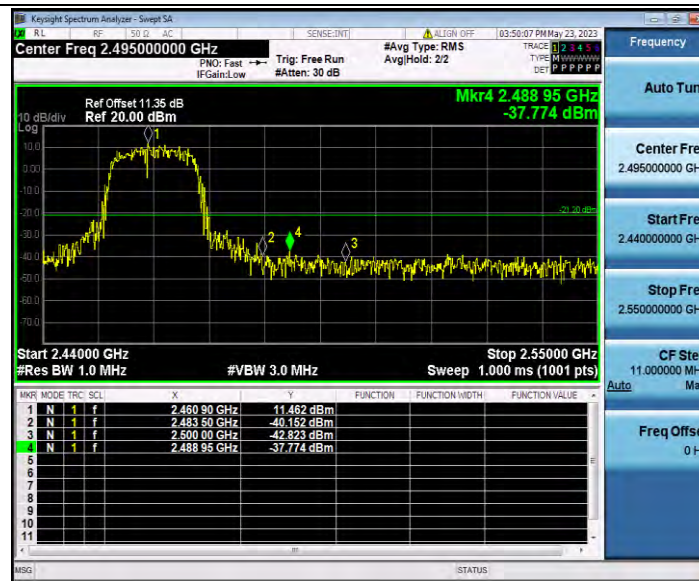
11G_Ant1_Low_2412_AV



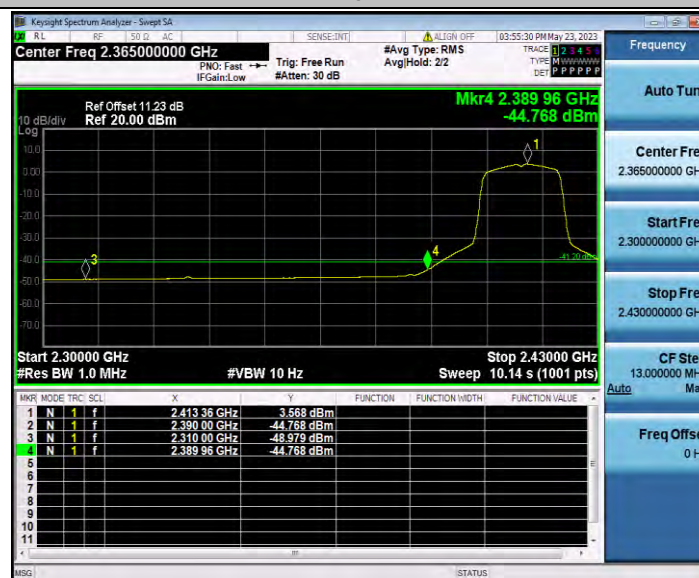
11G_Ant1_Low_2412_Peak



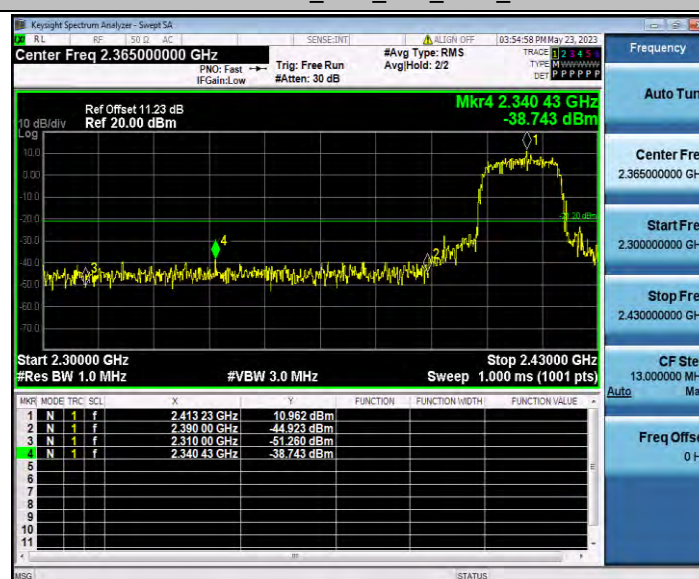
11G_Ant1_High_2462_AV



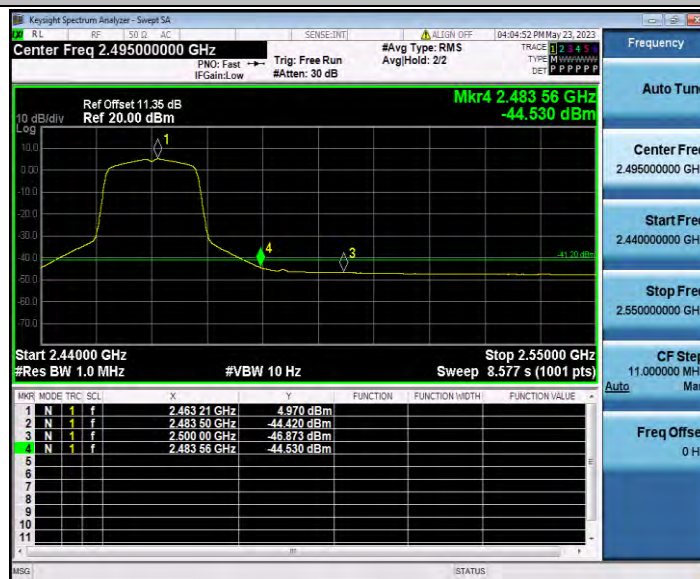
11G_Ant1_High_2462_Peak



11N20SISO_Ant1_Low_2412_AV



11N20SISO_Ant1_Low_2412_Peak



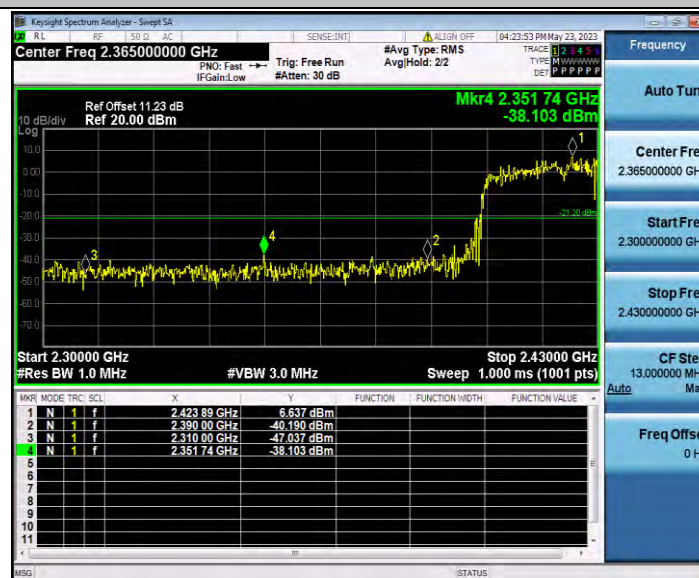
11N20SISO_Ant1_High_2462_AV



11N20SISO_Ant1_High_2462_Peak



11N40SISO_Ant1_Low_2422_AV



11N40SISO_Ant1_Low_2422_Peak



