

Case No. : <u>GTS20231024007-1-8</u>
Ambient Condition: <u>23</u> °C, <u>48</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.11.10</u> Test Engineer: <u>Evan ouyang</u>

Appendix B.1: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.720	2407.240	2416.960	0.5	PASS
		2437	9.920	2432.040	2441.960	0.5	PASS
		2462	9.880	2457.040	2466.920	0.5	PASS
11G	Ant1	2412	15.680	2404.240	2419.920	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.320	2453.840	2470.160	0.5	PASS
11N20SISO	Ant1	2412	13.800	2405.720	2419.520	0.5	PASS
		2437	17.600	2428.200	2445.800	0.5	PASS
		2462	17.600	2453.200	2470.800	0.5	PASS
11AX20SISO	Ant1	2412	16.400	2403.200	2419.600	0.5	PASS
		2437	18.960	2427.520	2446.480	0.5	PASS
		2462	18.960	2452.520	2471.480	0.5	PASS

Test Graphs



11B_Ant1_2412



11B_Ant1_2437



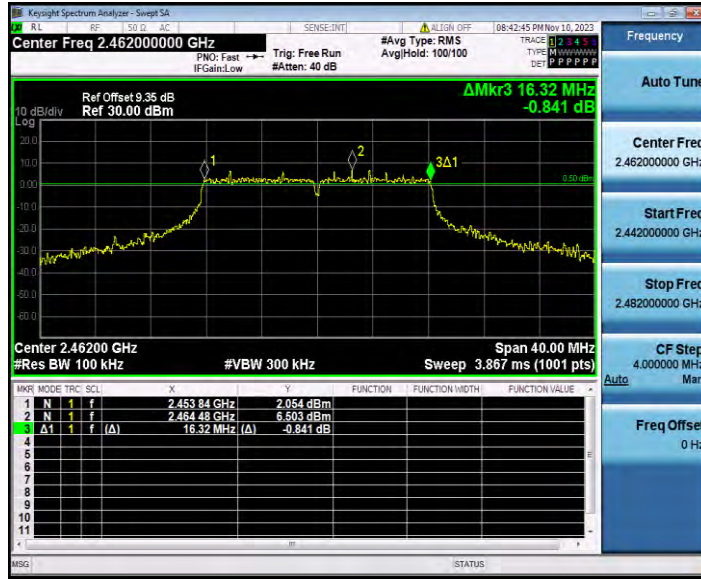
11B_Ant1_2462



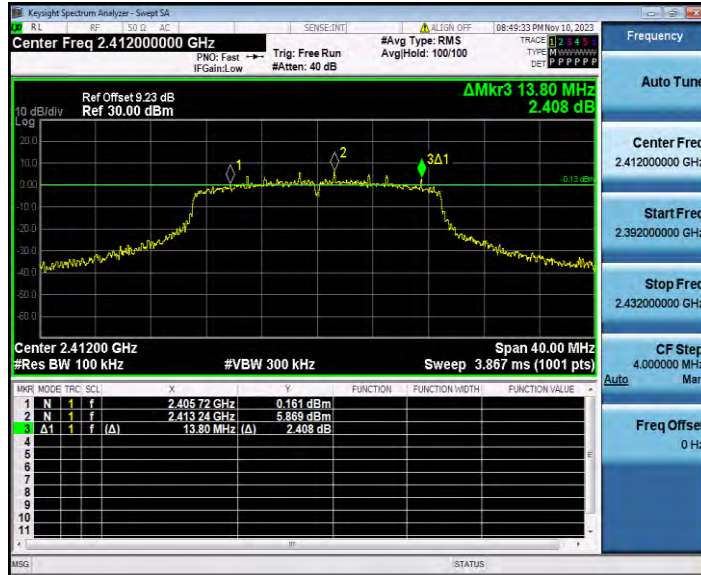
11G_Ant1_2412



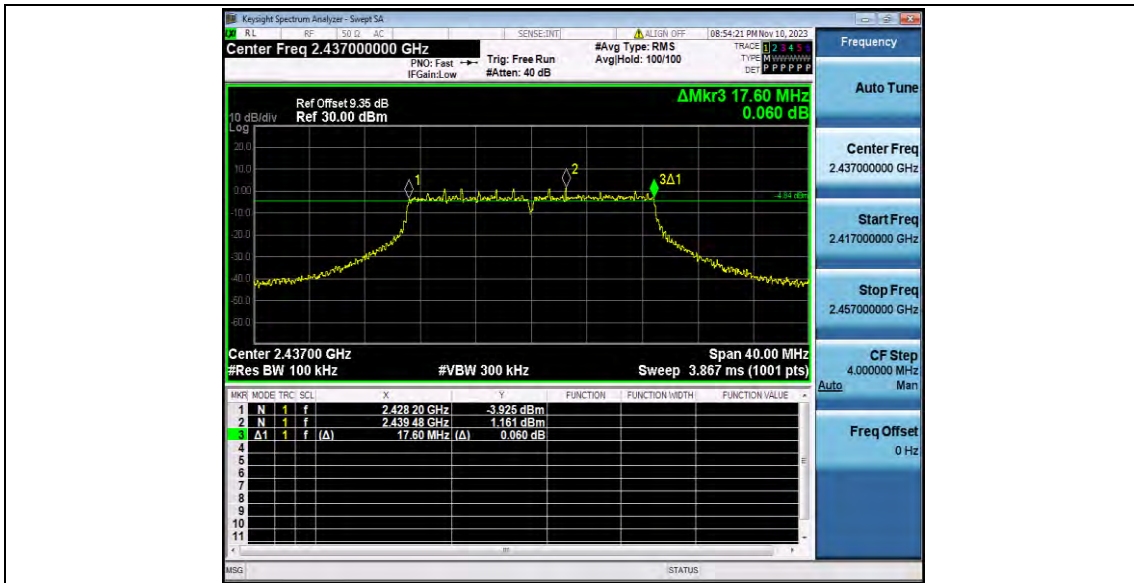
11G_Ant1_2437



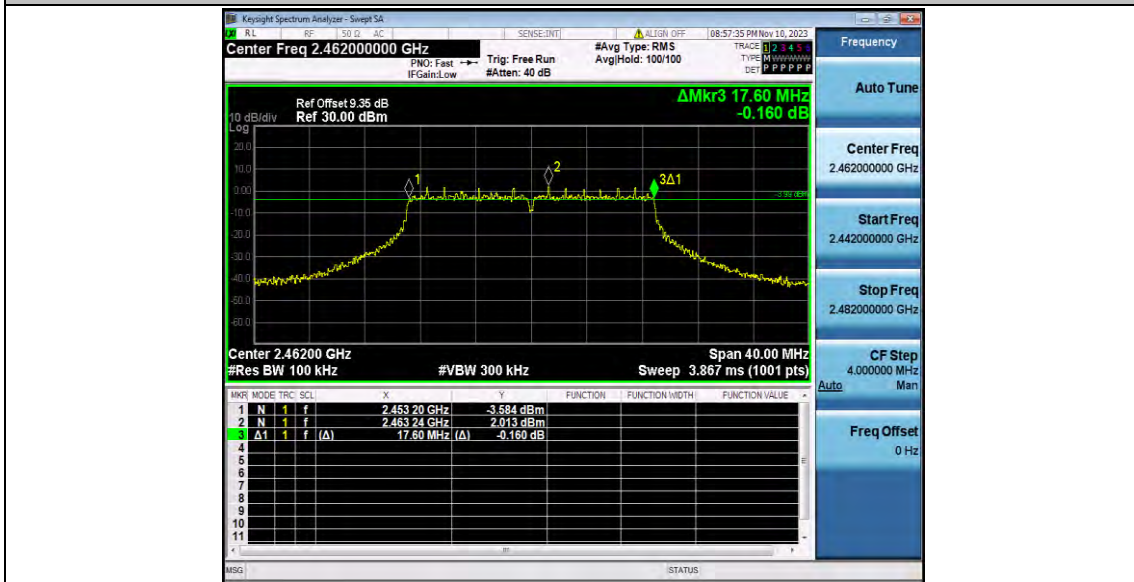
11G_Ant1_2462



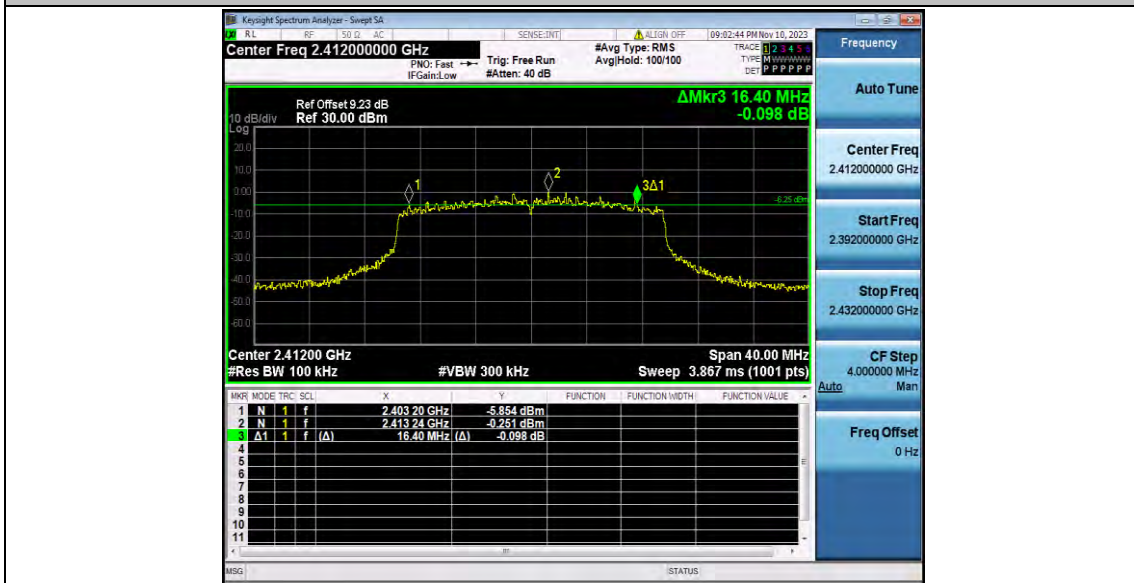
11N20SISO_Ant1_2412



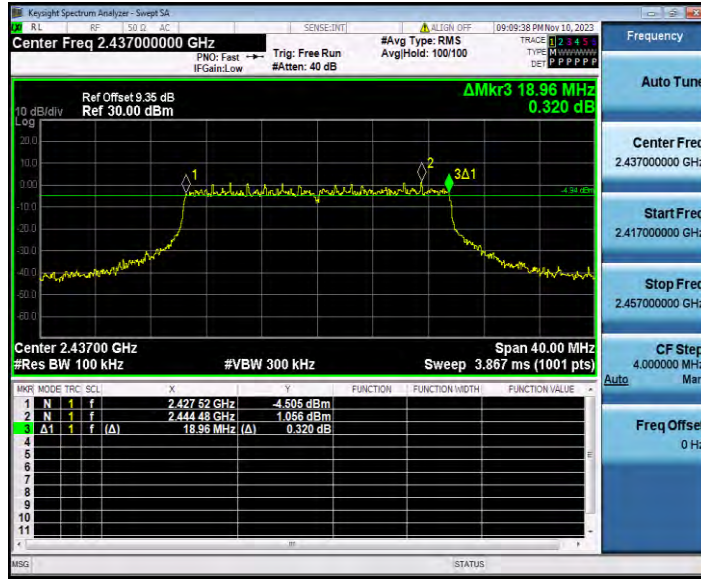
11N20SISO_Ant1_2437



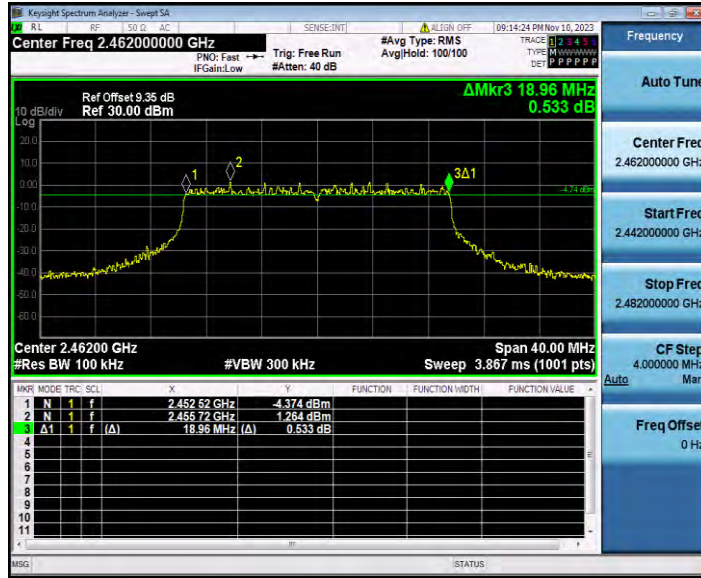
11N20SISO_Ant1_2462



11AX20SISO_Ant1_2412



11AX20SISO_Ant1_2437



11AX20SISO_Ant1_2462

Appendix B.2: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.826	2404.637	2419.463	---	---
		2437	14.876	2429.650	2444.526	---	---
		2462	14.912	2454.570	2469.482	---	---
11G	Ant1	2412	16.814	2403.551	2420.365	---	---
		2437	17.377	2428.254	2445.631	---	---
		2462	17.369	2453.197	2470.566	---	---
11N20SISO	Ant1	2412	17.898	2403.071	2420.969	---	---
		2437	18.384	2427.825	2446.209	---	---
		2462	18.406	2452.755	2471.161	---	---
11AX20SISO	Ant1	2412	18.842	2402.595	2421.437	---	---
		2437	19.173	2427.443	2446.616	---	---
		2462	19.153	2452.432	2471.585	---	---

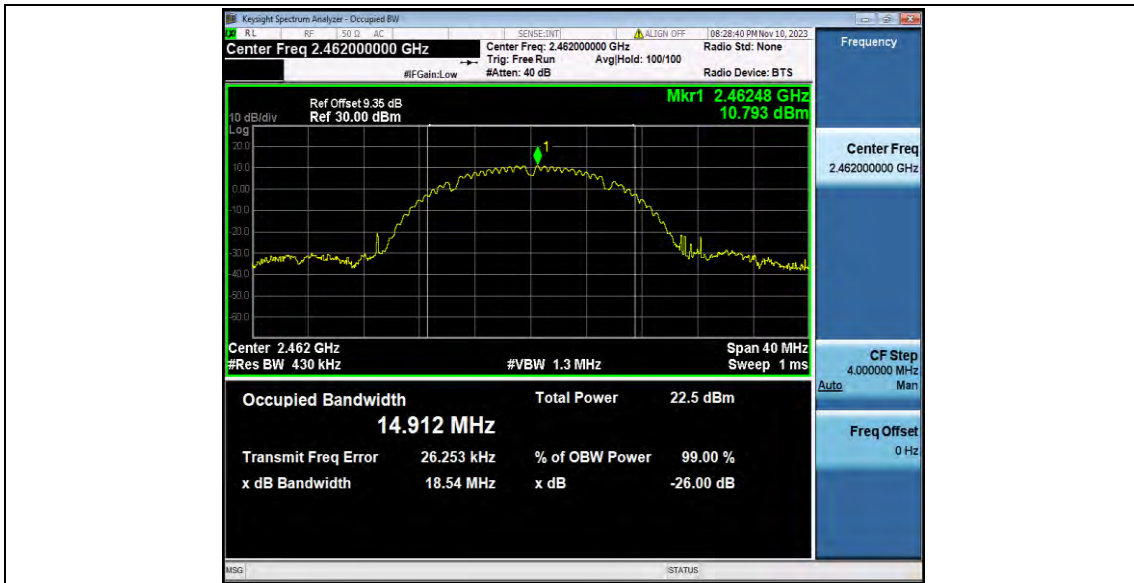
Test Graphs



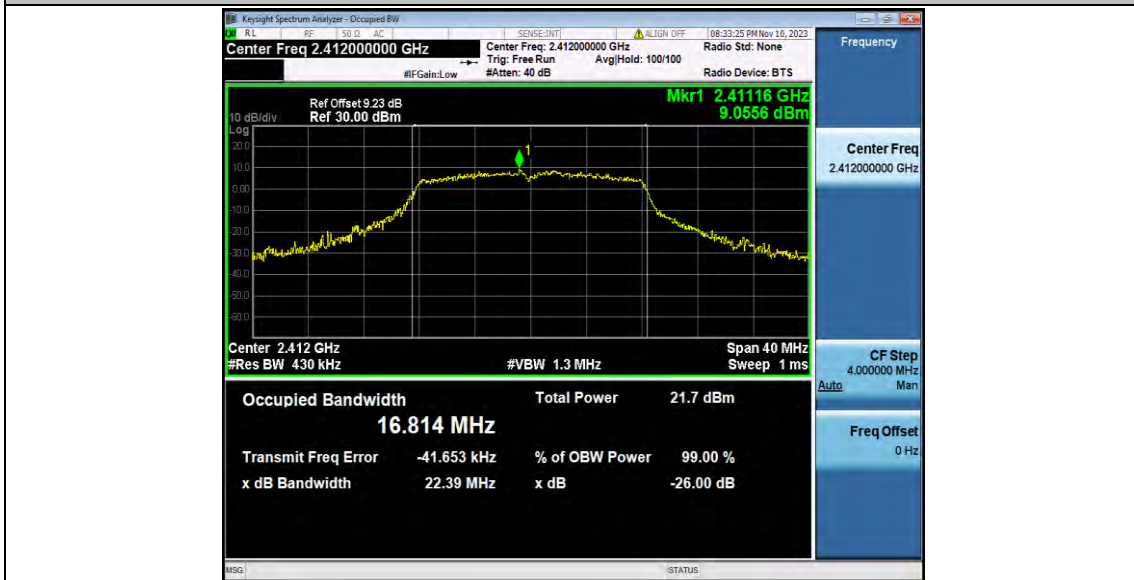
11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



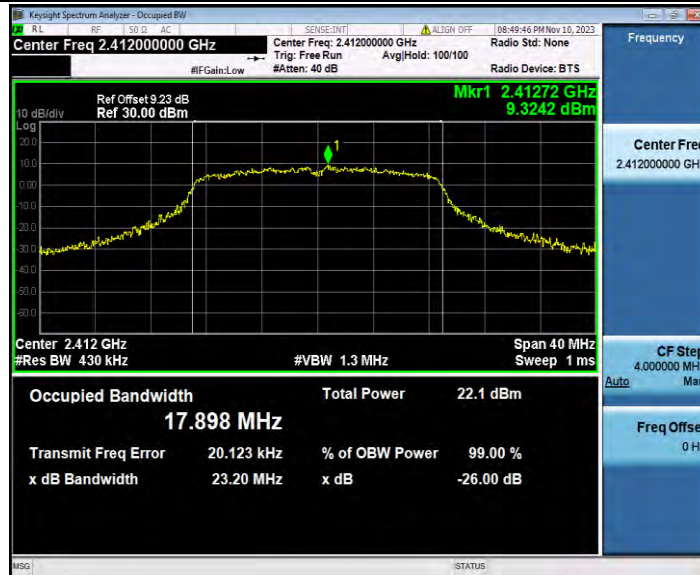
11G_Ant1_2412



11G_Ant1_2437



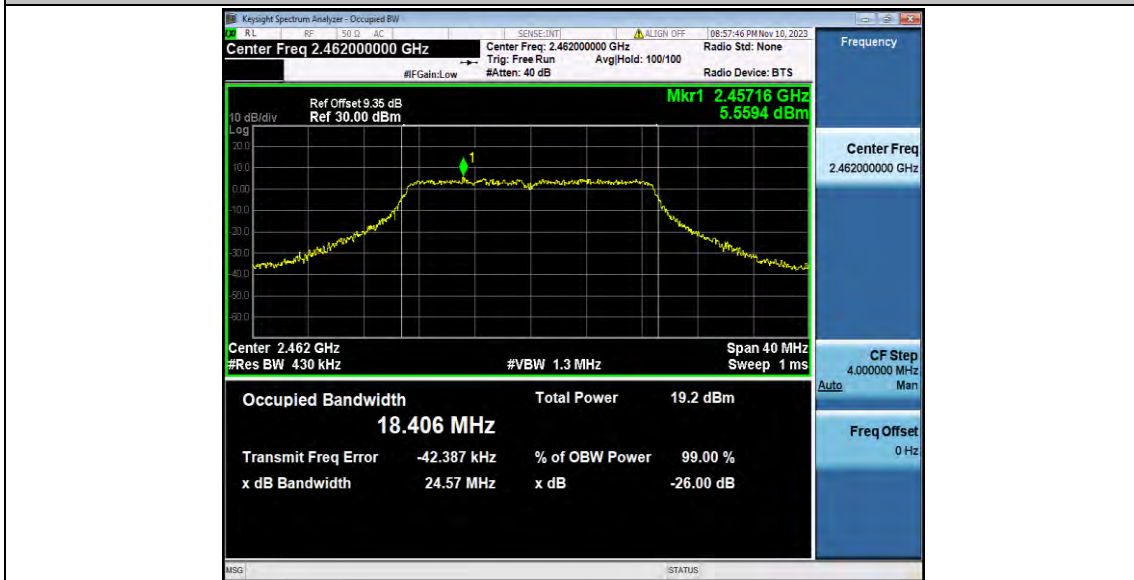
11G_Ant1_2462



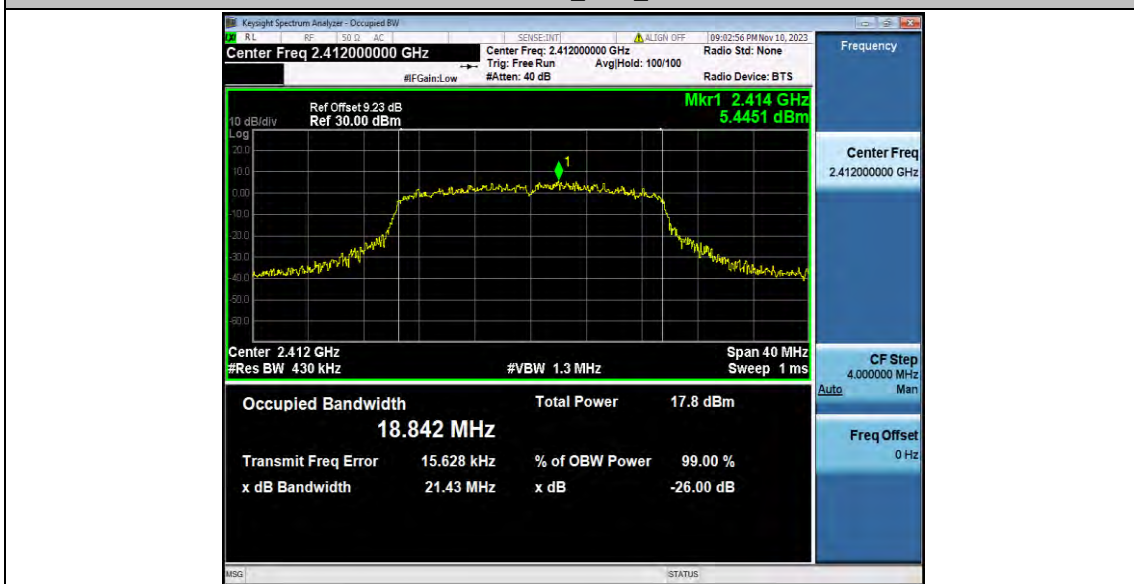
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



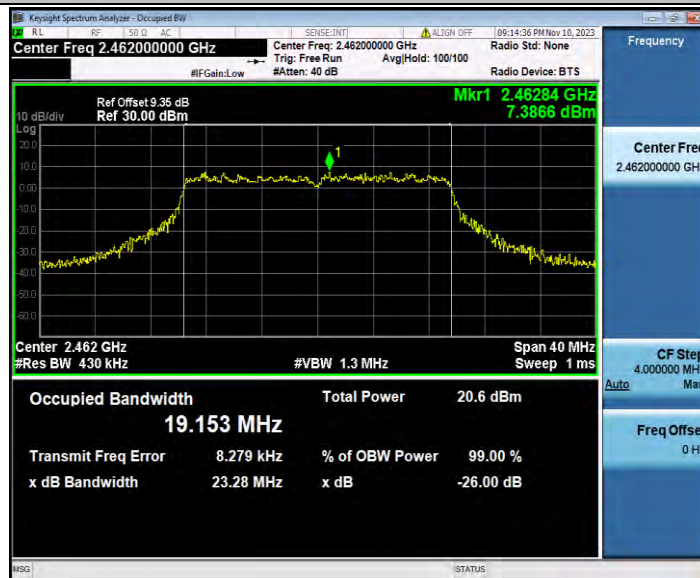
11N20SISO_Ant1_2462



11AX20SISO_Ant1_2412



11AX20SISO_Ant1_2437



11AX20SISO_Ant1_2462

Appendix B.3: Maximum conducted output power

Test Result Peak

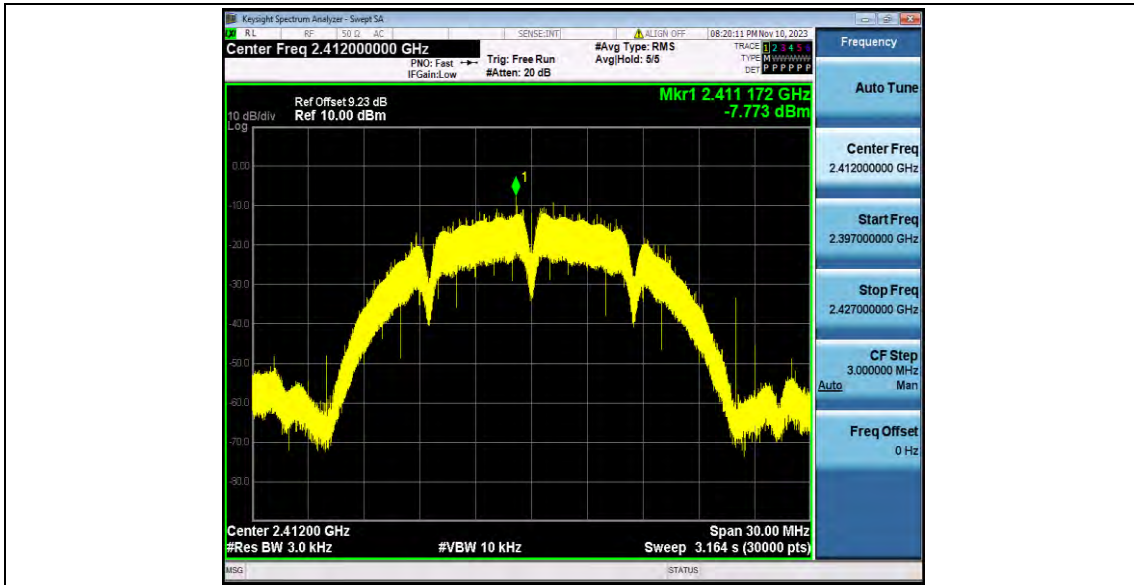
Test Mode	Antenna	Frequency[MHz]	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	19.88	≤30.00	PASS
		2437	21.98	≤30.00	PASS
		2462	22.51	≤30.00	PASS
11G	Ant1	2412	22.86	≤30.00	PASS
		2437	24.70	≤30.00	PASS
		2462	25.26	≤30.00	PASS
11N20SISO	Ant1	2412	23.56	≤30.00	PASS
		2437	20.30	≤30.00	PASS
		2462	20.55	≤30.00	PASS
11AX20SISO	Ant1	2412	19.16	≤30.00	PASS
		2437	21.62	≤30.00	PASS
		2462	21.88	≤30.00	PASS

Appendix B.4: Maximum power spectral density

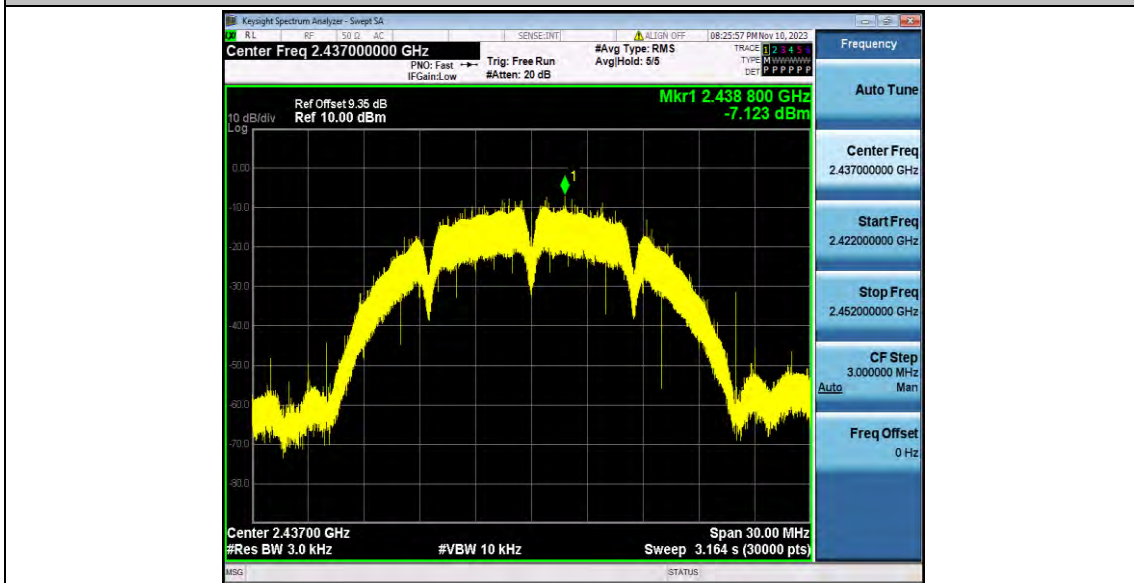
Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-7.77	≤8.00	PASS
		2437	-7.12	≤8.00	PASS
		2462	-6.45	≤8.00	PASS
11G	Ant1	2412	-12.06	≤8.00	PASS
		2437	-9.37	≤8.00	PASS
		2462	-9.2	≤8.00	PASS
11N20SISO	Ant1	2412	-10.64	≤8.00	PASS
		2437	-14.54	≤8.00	PASS
		2462	-13.84	≤8.00	PASS
11AX20SISO	Ant1	2412	-15.07	≤8.00	PASS
		2437	-14.45	≤8.00	PASS
		2462	-13.77	≤8.00	PASS

Test Graphs



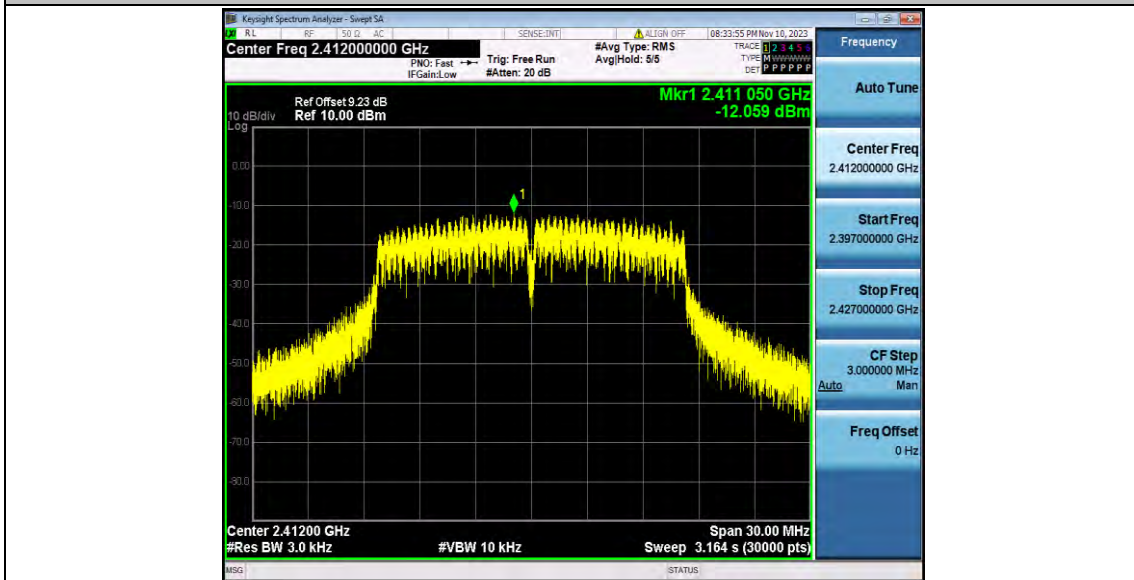
11B_Ant1_2412



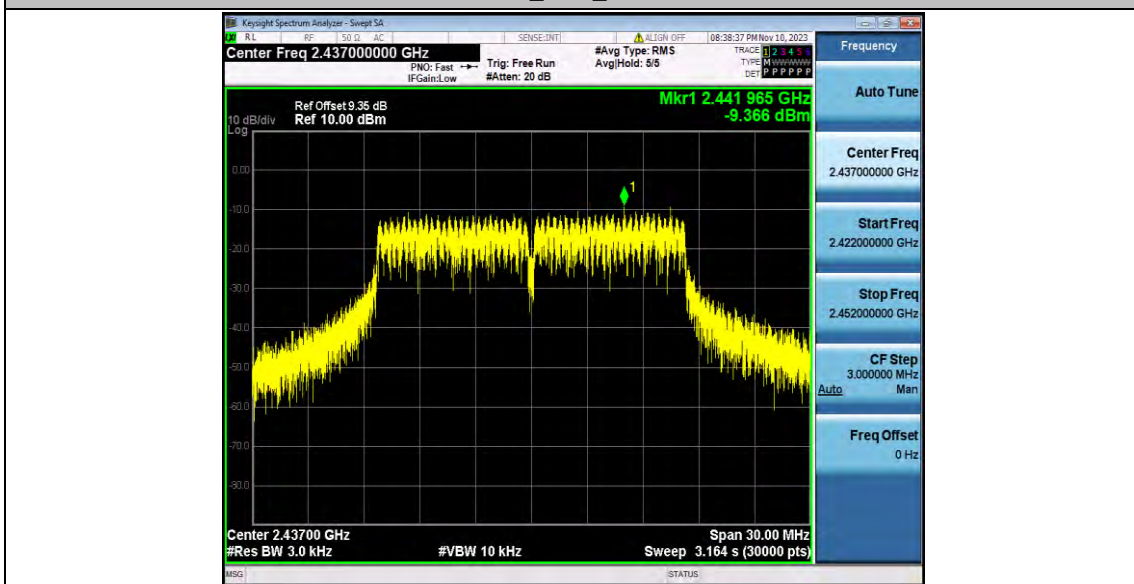
11B_Ant1_2437



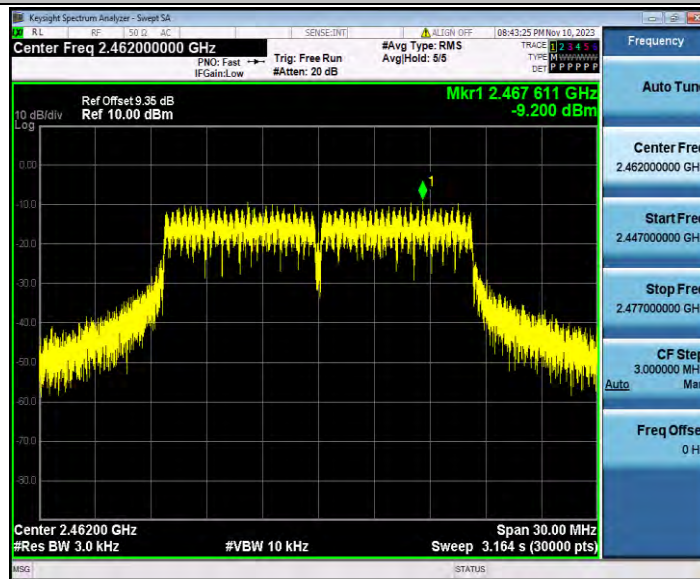
11B_Ant1_2462



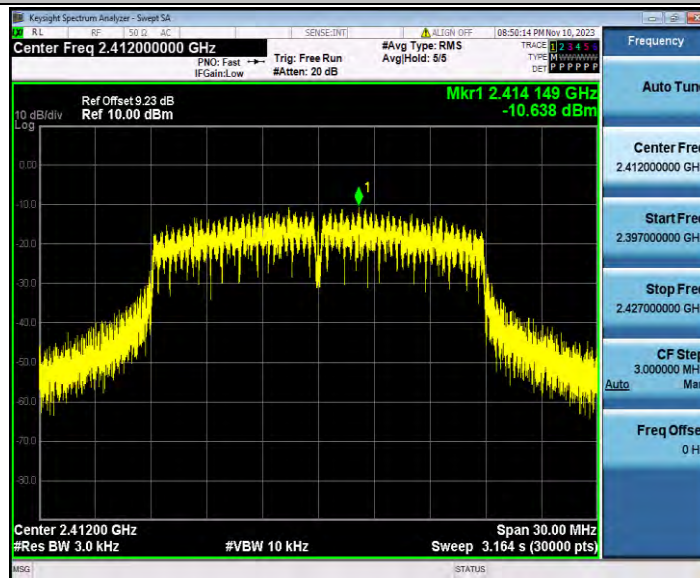
11G_Ant1_2412



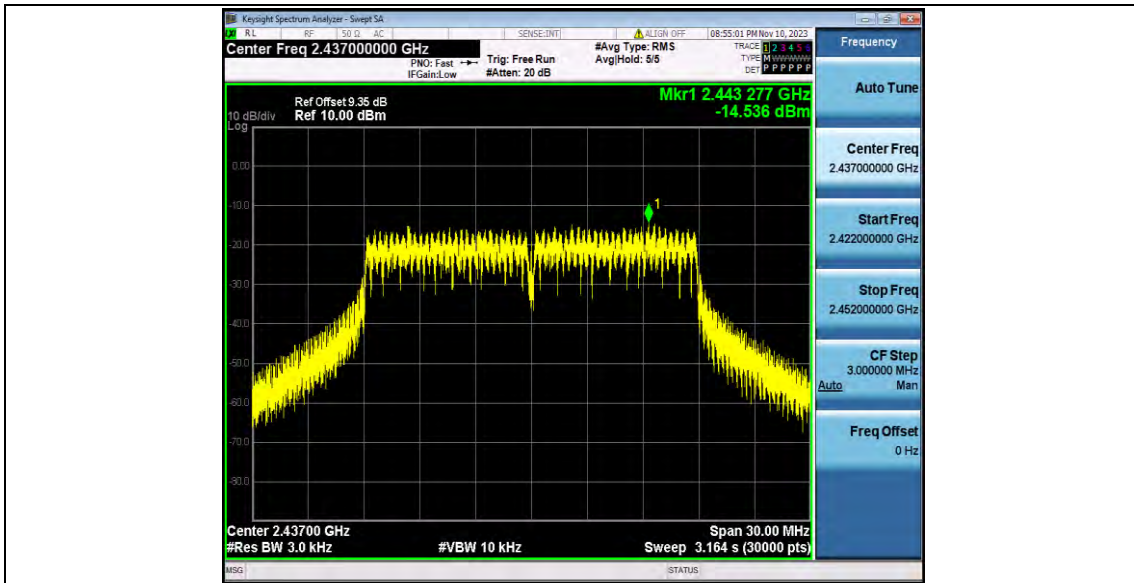
11G_Ant1_2437



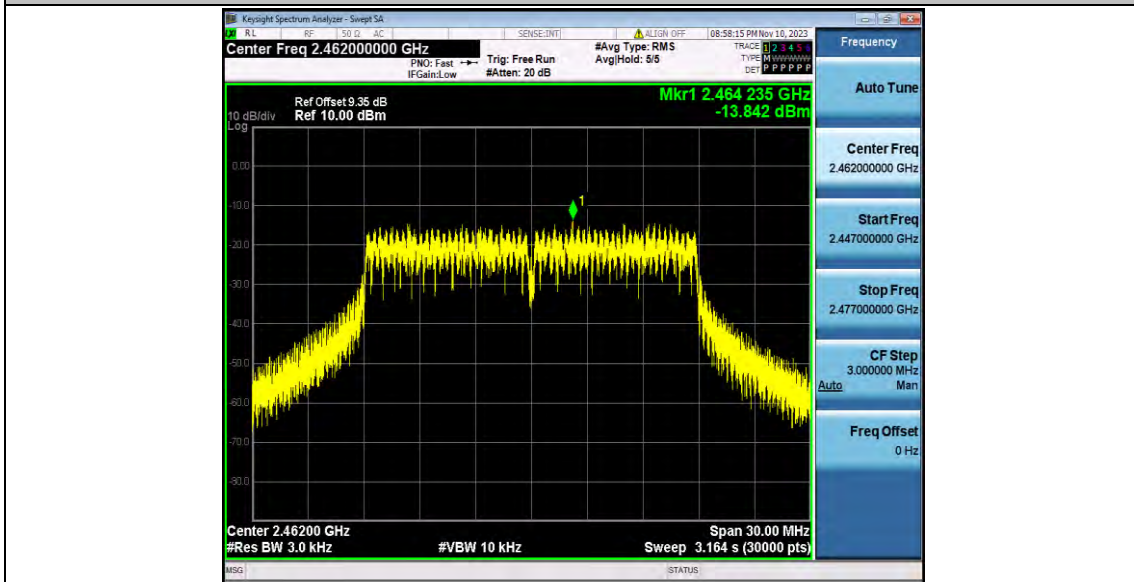
11G_Ant1_2462



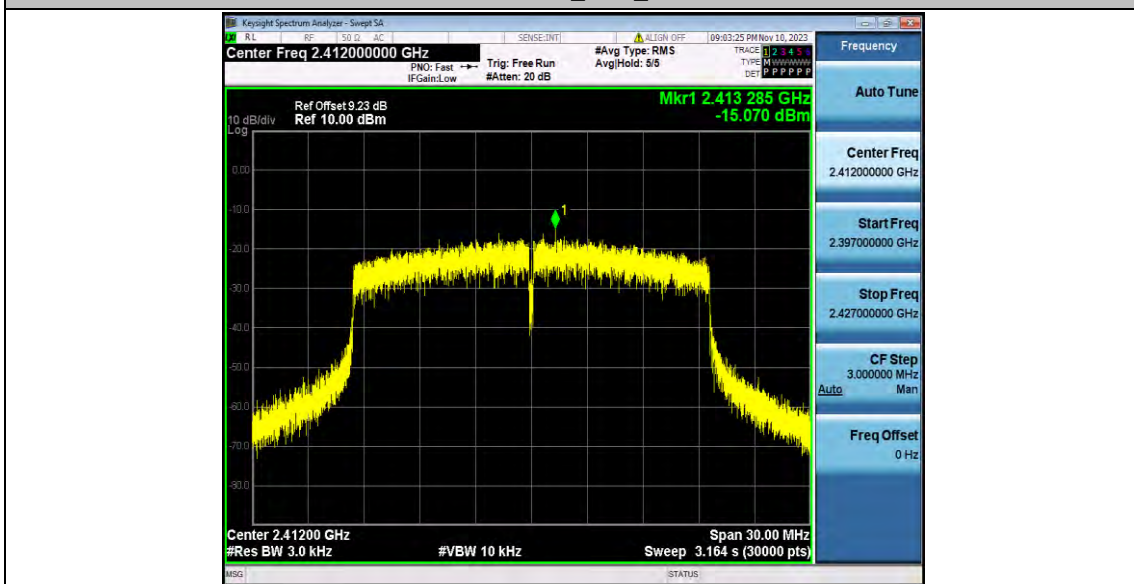
11N20SISO_Ant1_2412



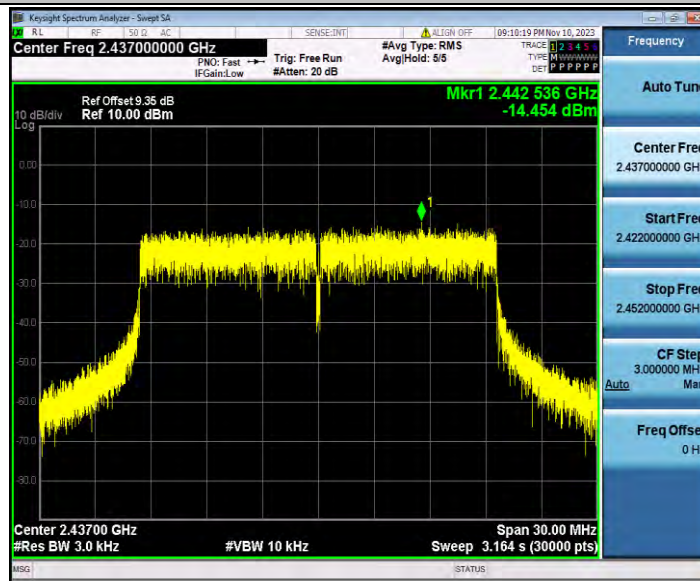
11N20SISO_Ant1_2437



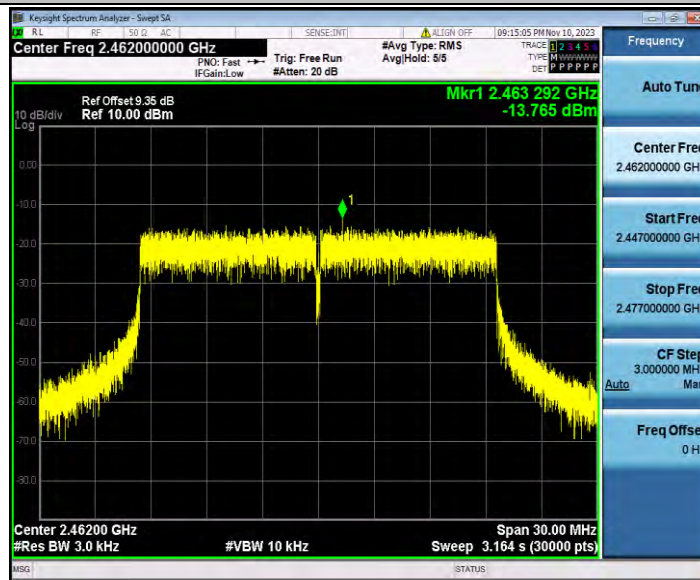
11N20SISO_Ant1_2462



11AX20SISO_Ant1_2412



11AX20SISO_Ant1_2437



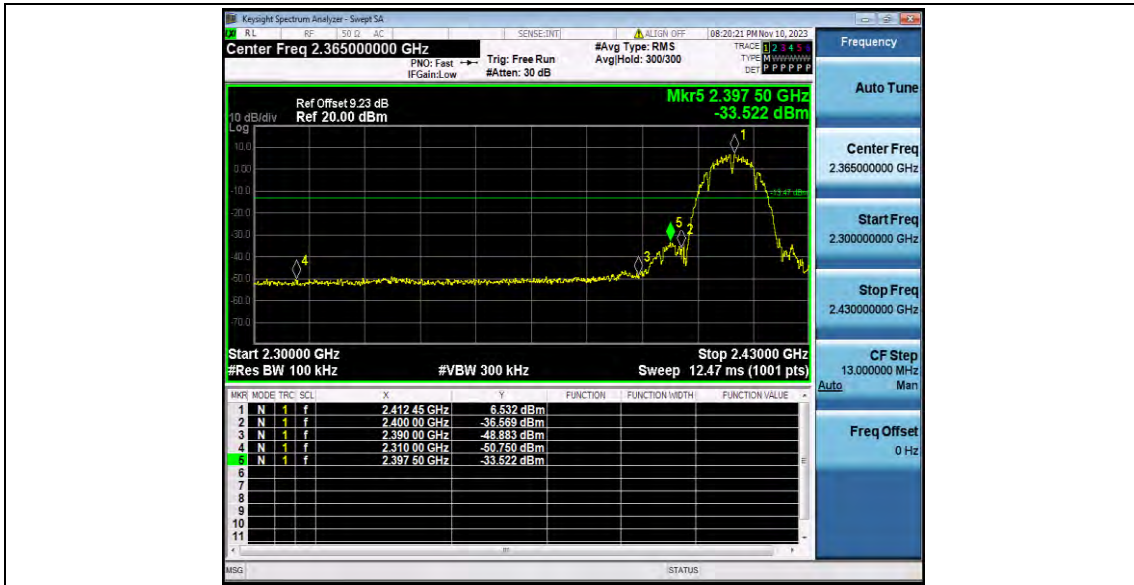
11AX20SISO_Ant1_2462

Appendix B.5: Band edge measurements

Test Result

Test Mode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	6.53	-33.52	≤-13.47	PASS
		High	2462	9.33	-43.55	≤-10.67	PASS
11G	Ant1	Low	2412	5.49	-25.31	≤-14.51	PASS
		High	2462	7.12	-32.99	≤-12.88	PASS
11N20SISO	Ant1	Low	2412	0.27	-32.87	≤-19.74	PASS
		High	2462	2.05	-44.69	≤-17.95	PASS
11AX20SISO	Ant1	Low	2412	0.27	-32.6	≤-19.73	PASS
		High	2462	1.60	-42.43	≤-18.4	PASS

Test Graphs



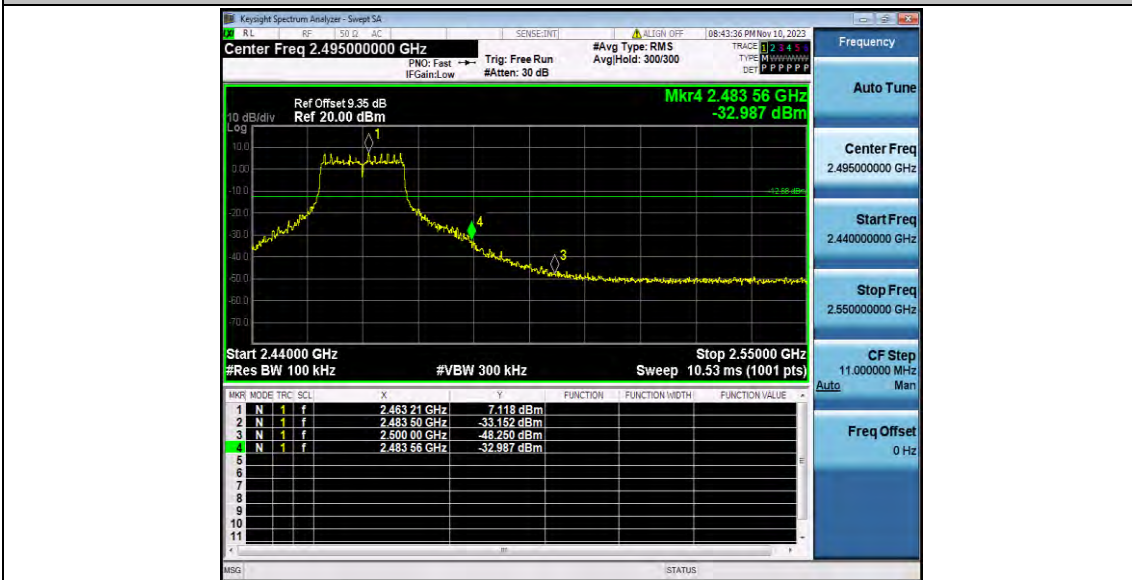
11B_Ant1_Low_2412



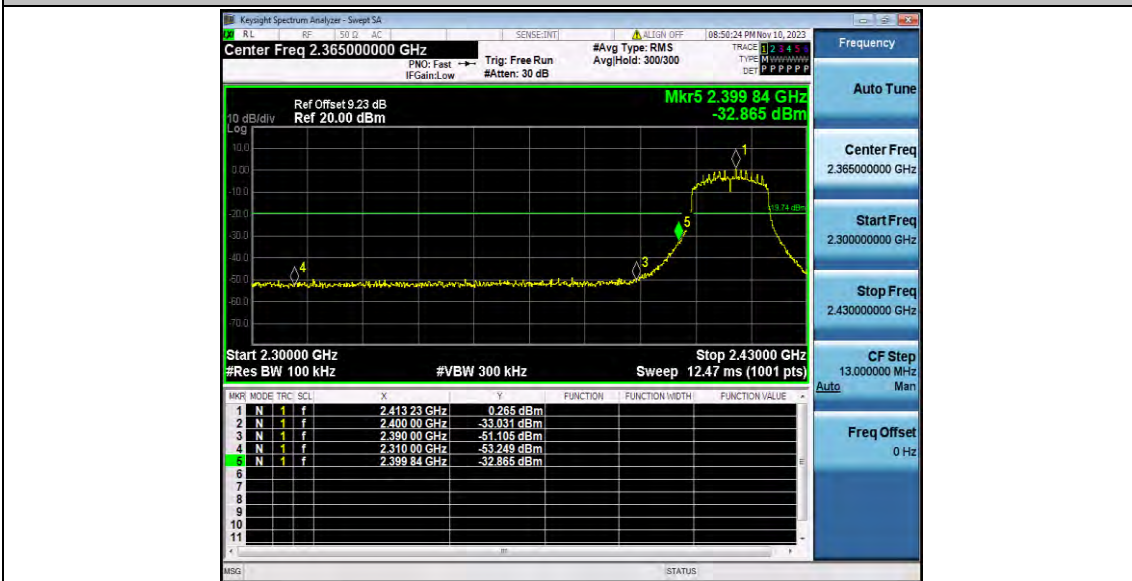
11B_Ant1_High_2462



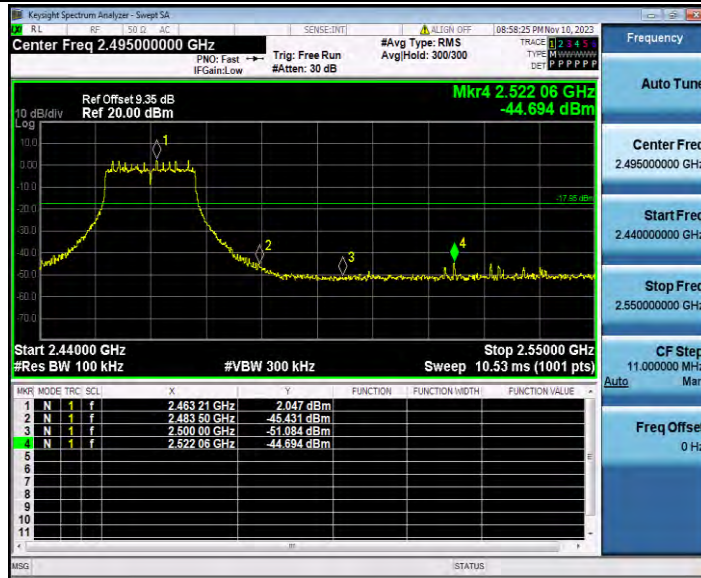
11G_Ant1_Low_2412



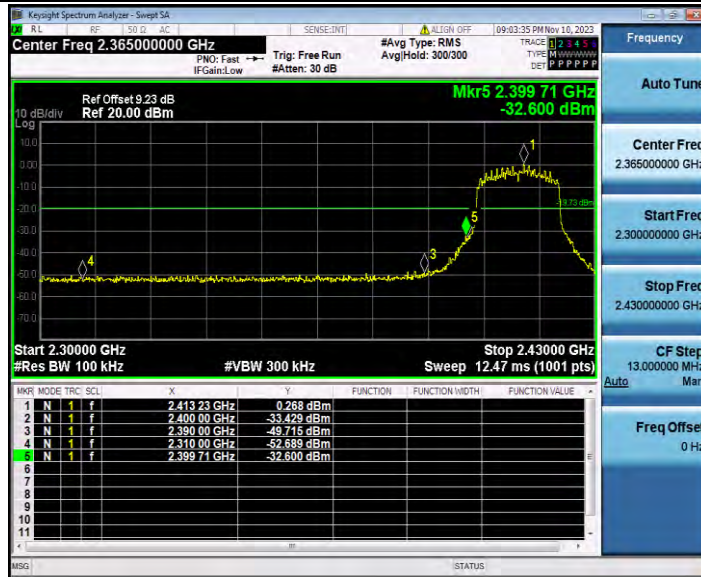
11G_Ant1_High_2462



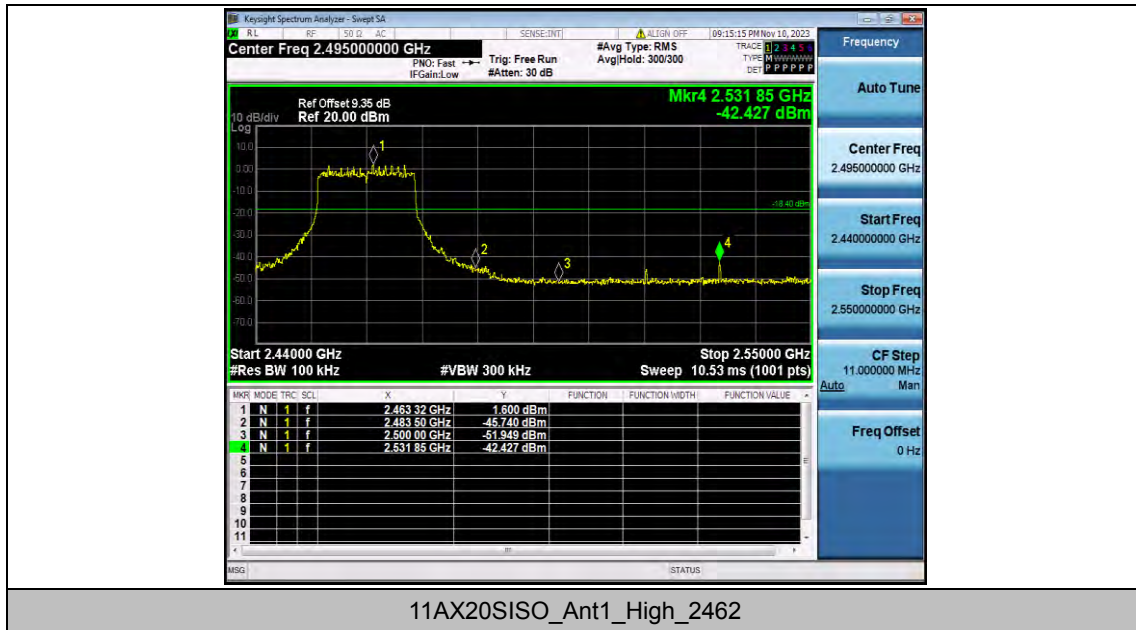
11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11AX20SISO_Ant1_Low_2412



11AX20SISO_Ant1_High_2462

Appendix B.6: Conducted Spurious Emission

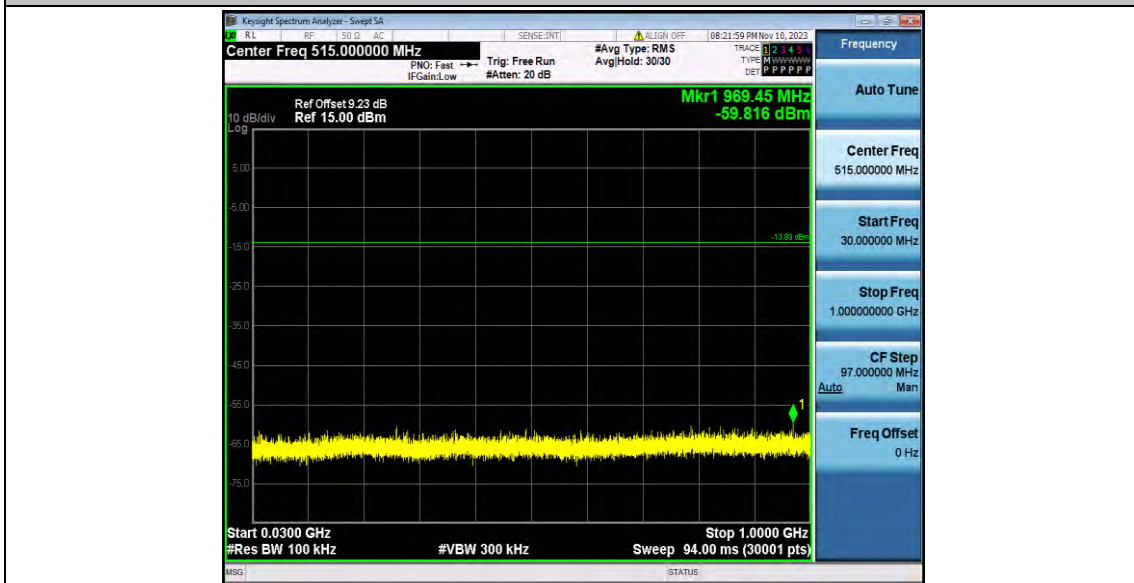
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	6.11	6.11	---	PASS
			30~1000	6.11	-59.82	≤-13.89	PASS
			1000~26500	6.11	-42.3	≤-13.89	PASS
		2437	Reference	7.94	7.94	---	PASS
			30~1000	7.94	-59.72	≤-12.06	PASS
			1000~26500	7.94	-40.86	≤-12.06	PASS
		2462	Reference	9.28	9.28	---	PASS
			30~1000	9.28	-59.62	≤-10.72	PASS
			1000~26500	9.28	-40.91	≤-10.72	PASS
11G	Ant1	2412	Reference	4.56	4.56	---	PASS
			30~1000	4.56	-60.47	≤-15.44	PASS
			1000~26500	4.56	-47	≤-15.44	PASS
		2437	Reference	4.33	4.33	---	PASS
			30~1000	4.33	-60.25	≤-15.67	PASS
			1000~26500	4.33	-43.22	≤-15.67	PASS
		2462	Reference	3.51	3.51	---	PASS
			30~1000	3.51	-60.32	≤-16.49	PASS
			1000~26500	3.51	-43.82	≤-16.49	PASS
11N20SISO	Ant1	2412	Reference	-3.40	-3.40	---	PASS
			30~1000	-3.40	-59.81	≤-23.4	PASS
			1000~26500	-3.40	-46.53	≤-23.4	PASS
		2437	Reference	0.21	0.21	---	PASS
			30~1000	0.21	-60.11	≤-19.79	PASS
			1000~26500	0.21	-42.87	≤-19.79	PASS
		2462	Reference	0.58	0.58	---	PASS
			30~1000	0.58	-59.92	≤-19.42	PASS
			1000~26500	0.58	-43.01	≤-19.42	PASS
11AX20SISO	Ant1	2412	Reference	-4.01	-4.01	---	PASS
			30~1000	-4.01	-59.63	≤-24.01	PASS
			1000~26500	-4.01	-39.49	≤-24.01	PASS
		2437	Reference	0.44	0.44	---	PASS
			30~1000	0.44	-60.48	≤-19.56	PASS
			1000~26500	0.44	-42.39	≤-19.56	PASS
		2462	Reference	-0.98	-0.98	---	PASS
			30~1000	-0.98	-59.24	≤-20.98	PASS
			1000~26500	-0.98	-43.21	≤-20.98	PASS

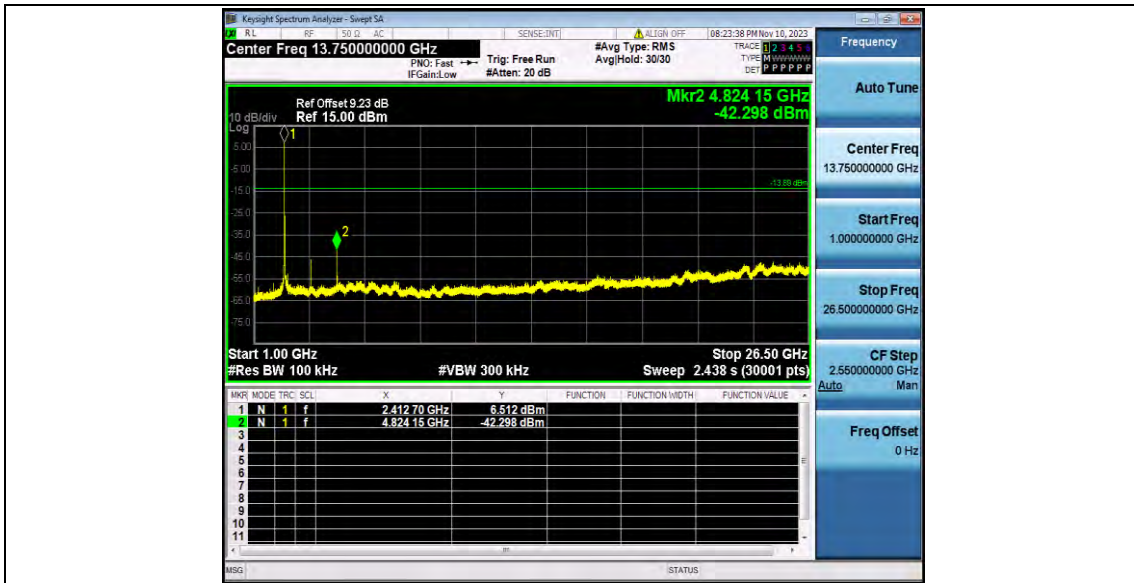
Test Graphs



11B_Ant1_2412_0~Reference



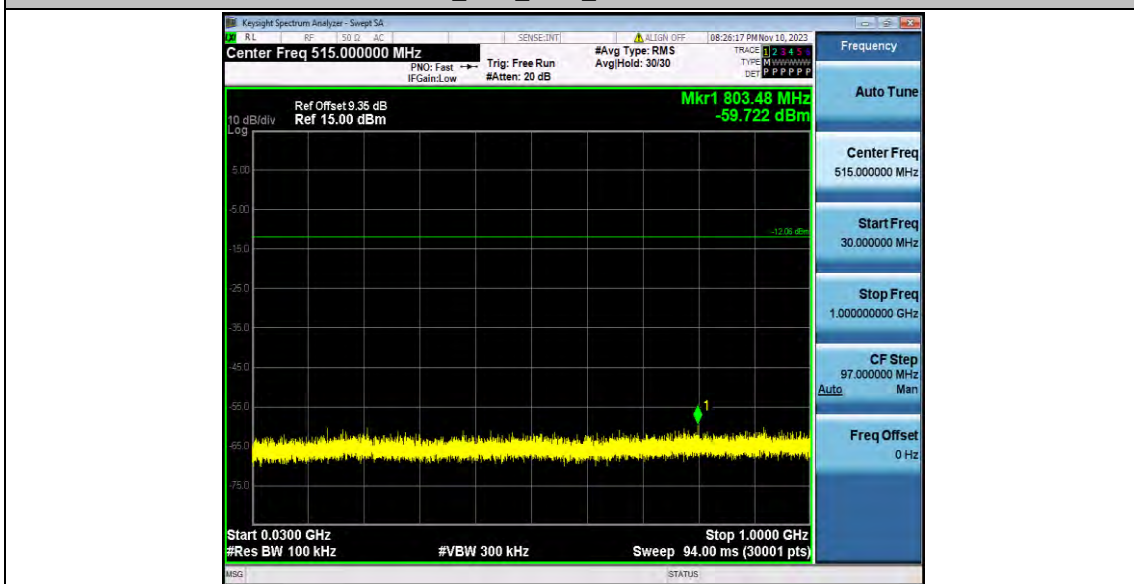
11B_Ant1_2412_30~1000



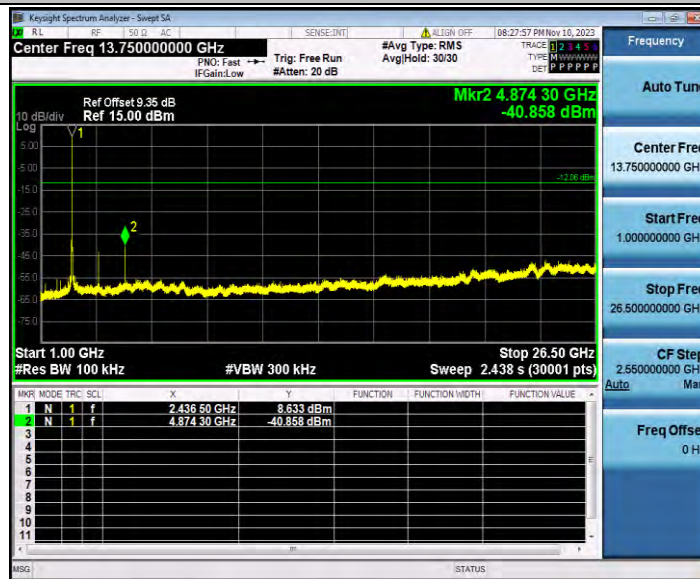
11B_Ant1_2412_1000~26500



11B_Ant1_2437_0~Reference



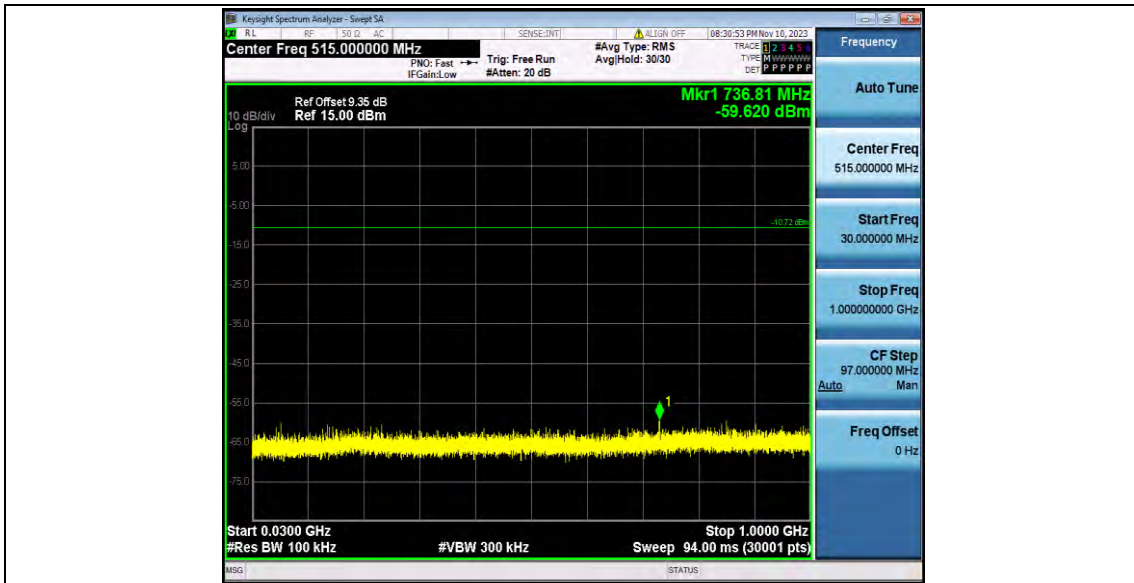
11B_Ant1_2437_30~1000



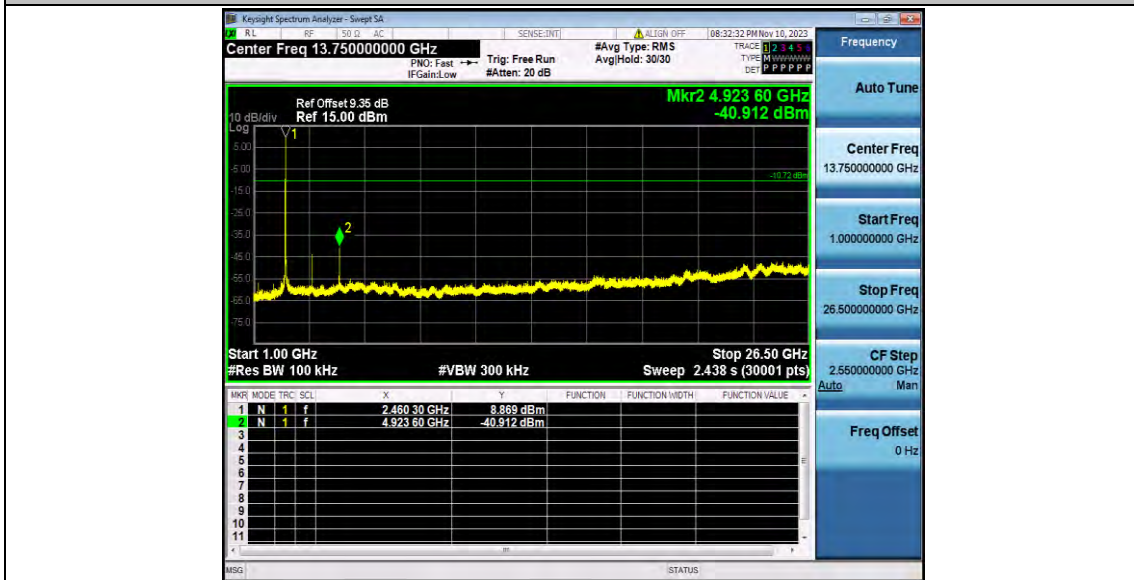
11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



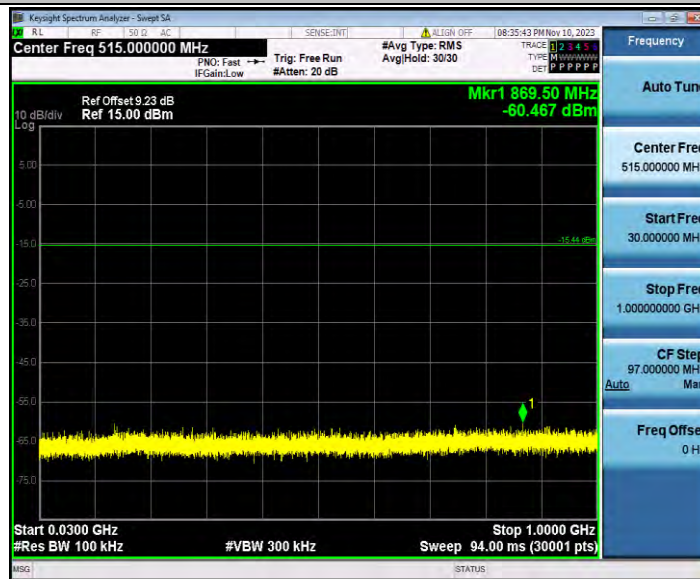
11B_Ant1_2462_30~1000



11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



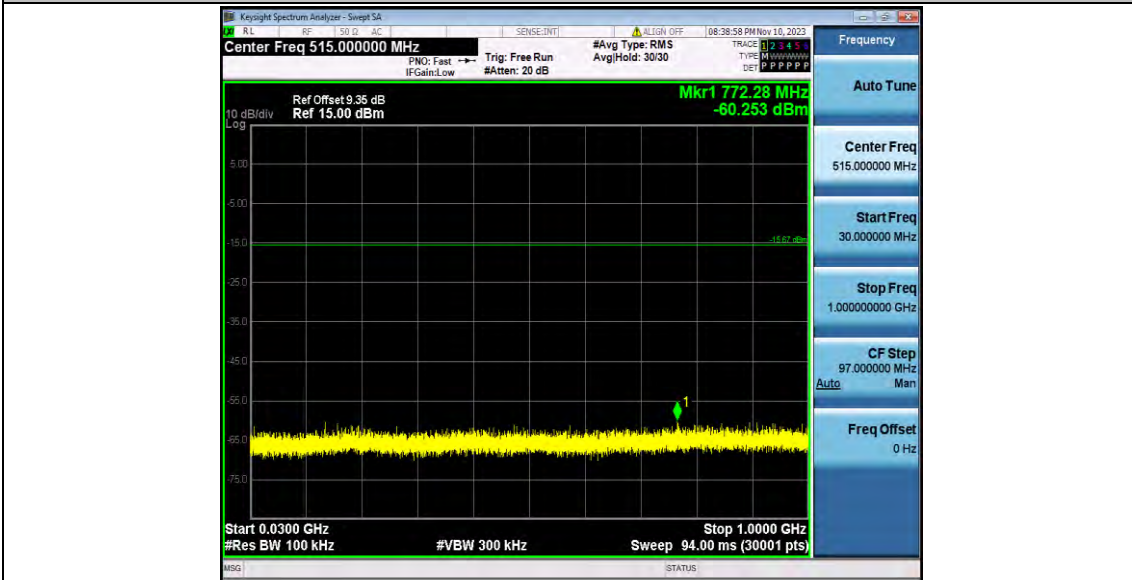
11G_Ant1_2412_30~1000



11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



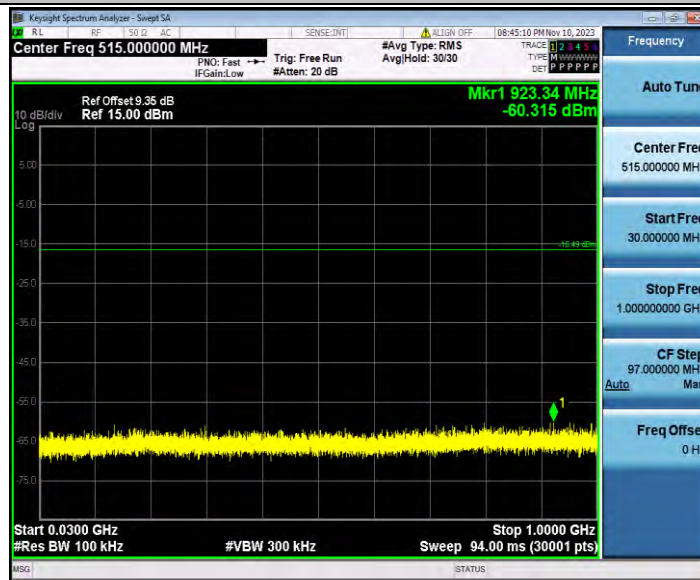
11G_Ant1_2437_30~1000



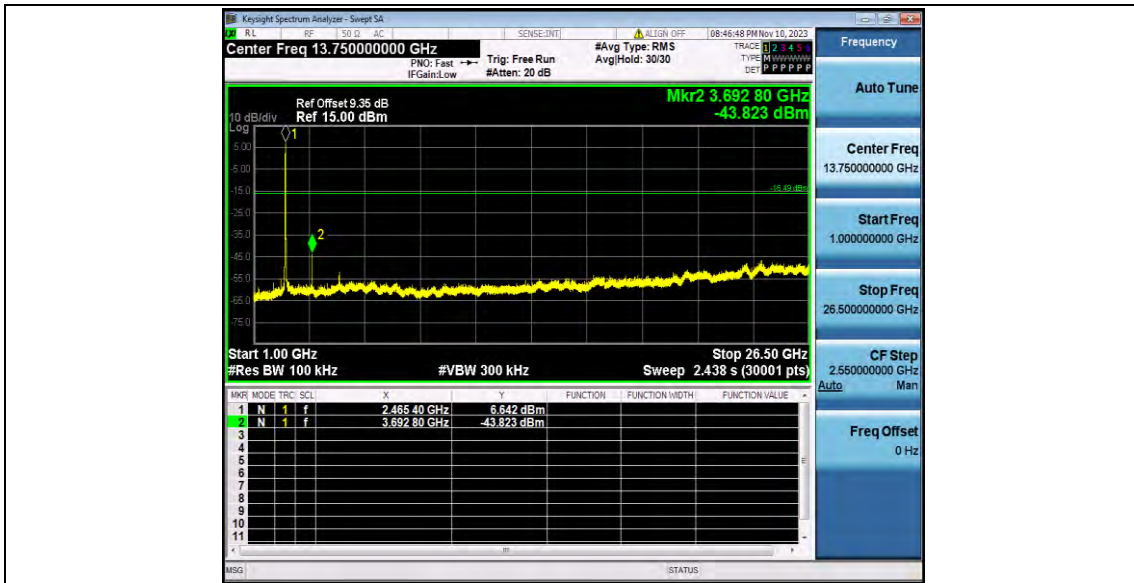
11G_Ant1_2437_1000~26500



11G_Ant1_2462_0~Reference



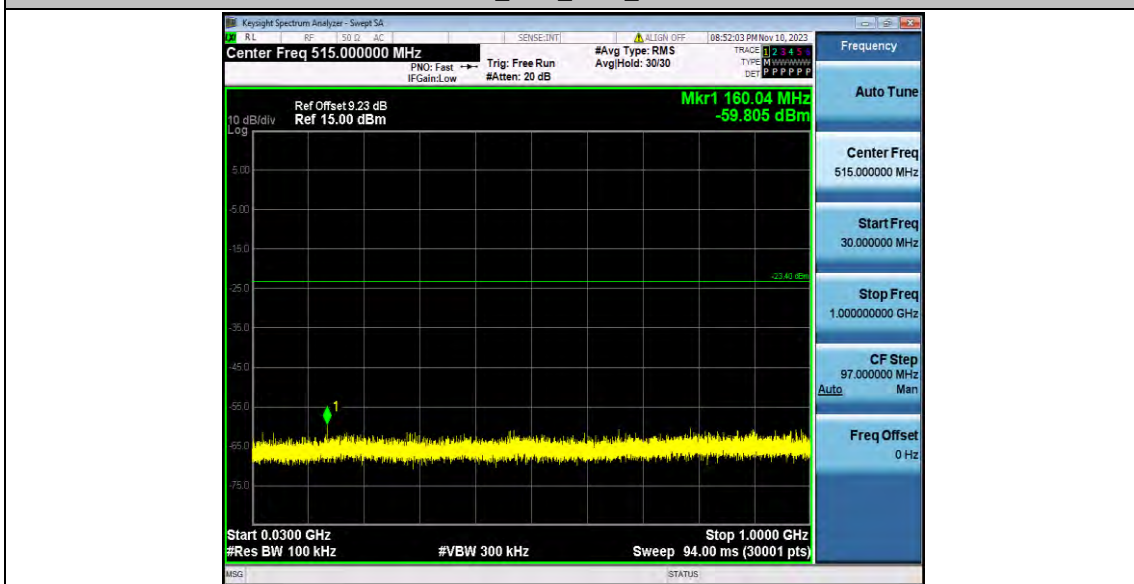
11G_Ant1_2462_30~1000



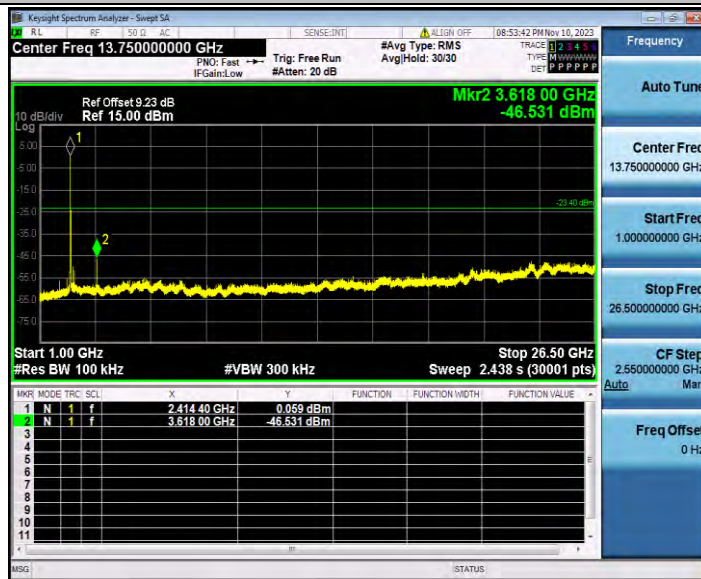
11G_Ant1_2462_1000~26500



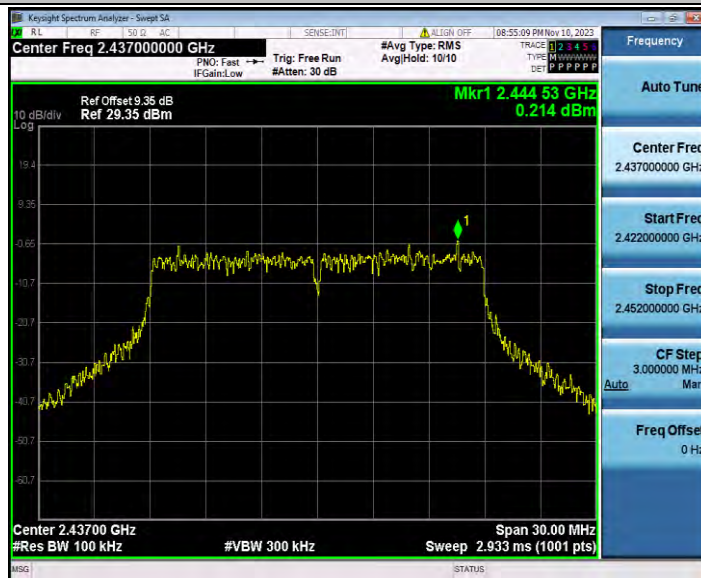
11N20SIS0_Ant1_2412_0~Reference



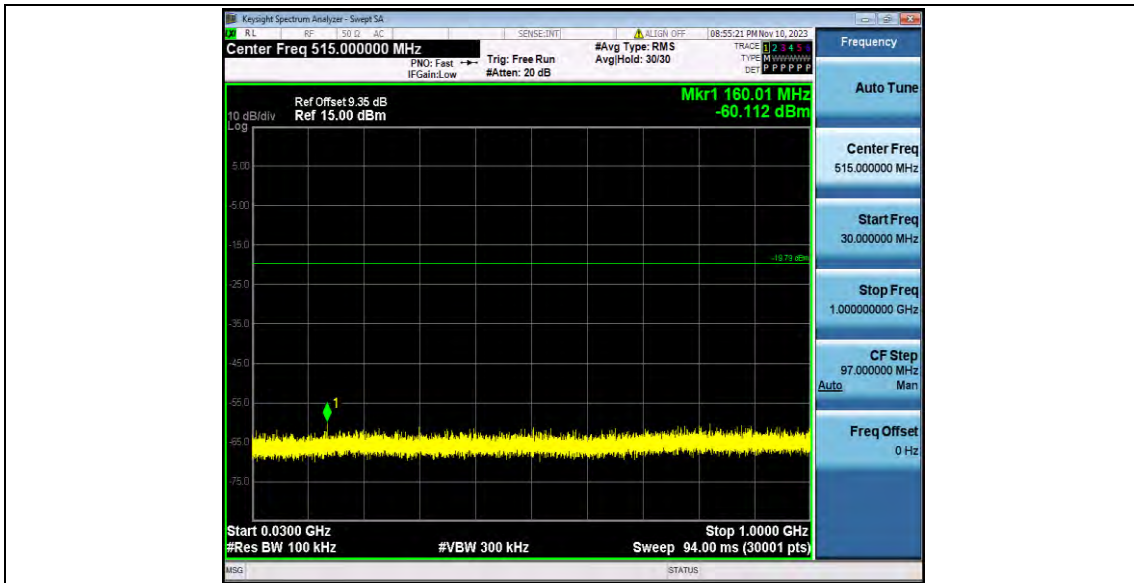
11N20SISO_Ant1_2412_30~1000



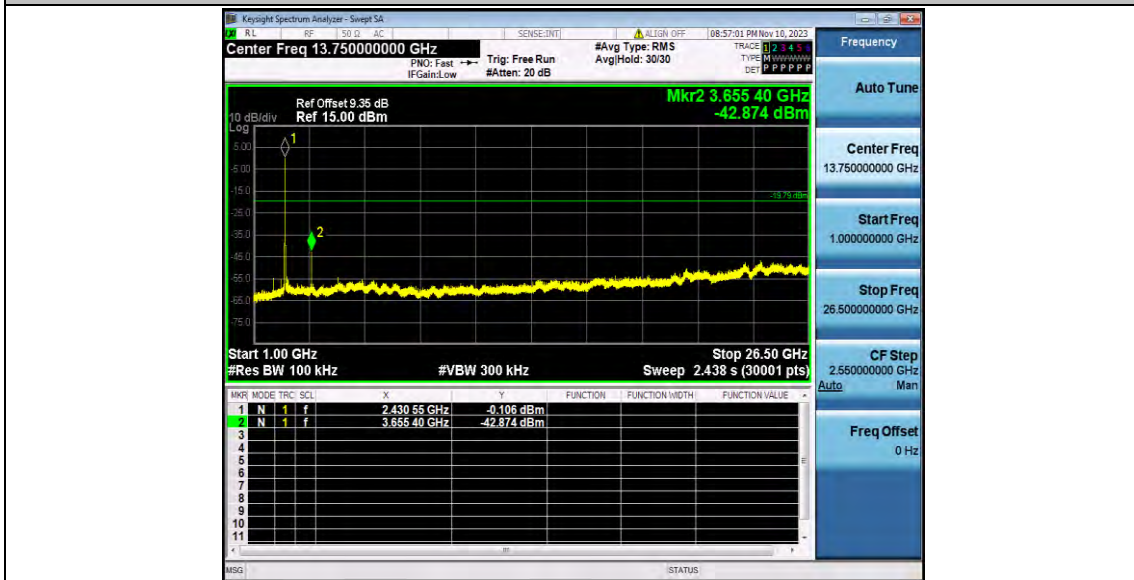
11N20SISO_Ant1_2412_1000~26500



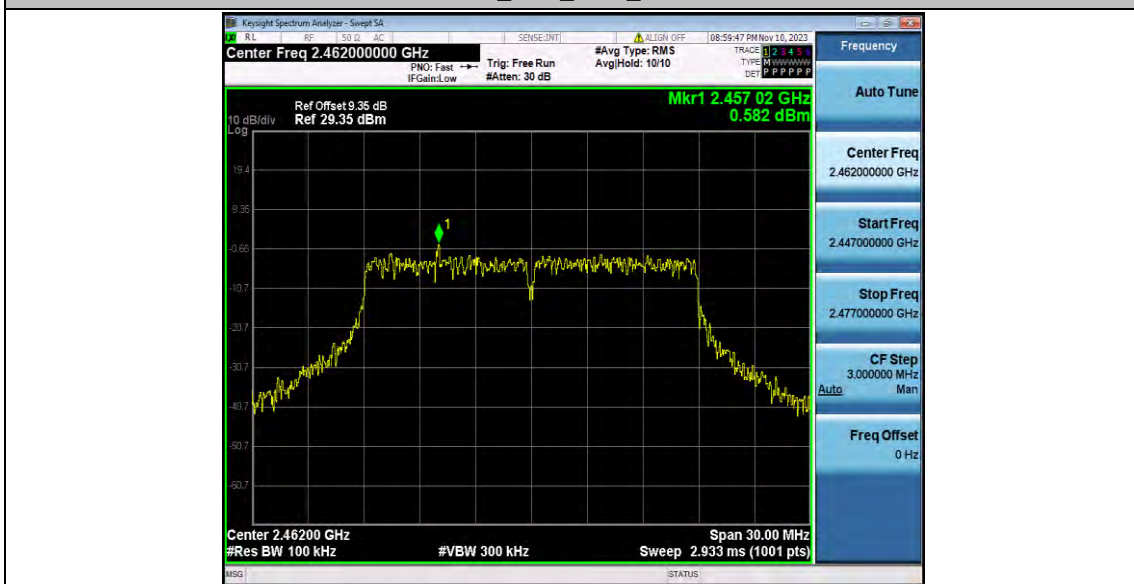
11N20SISO_Ant1_2437_0~Reference



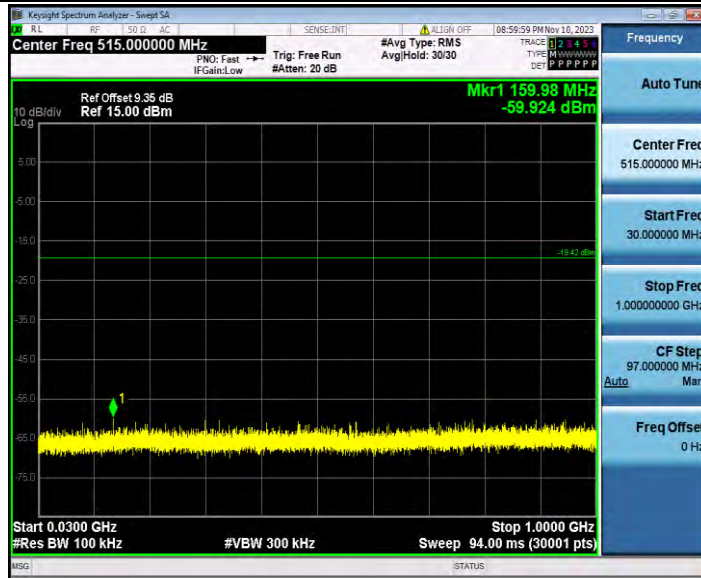
11N20SISO_Ant1_2437_30~1000



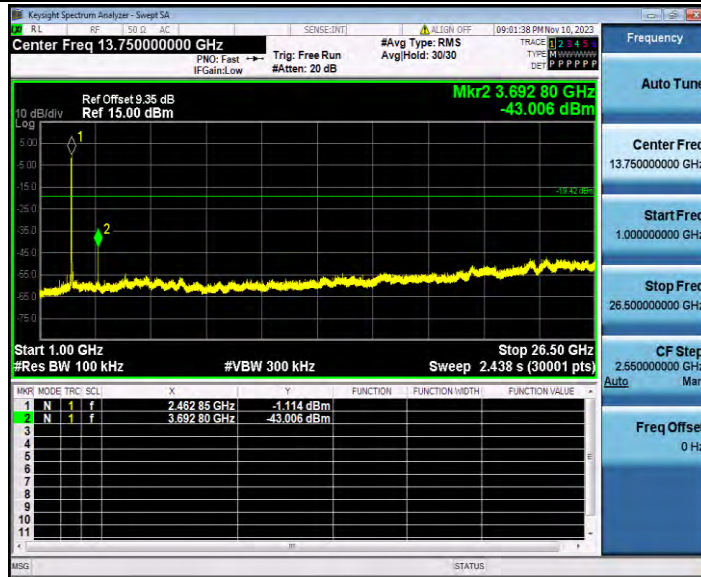
11N20SISO_Ant1_2437_1000~26500



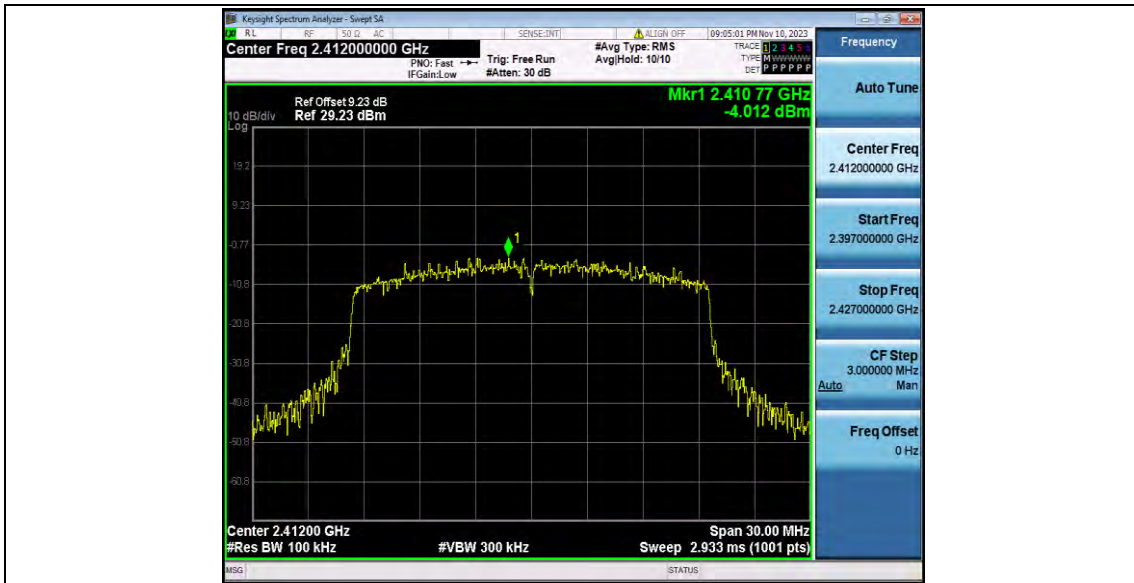
11N20SISO_Ant1_2462_0~Reference



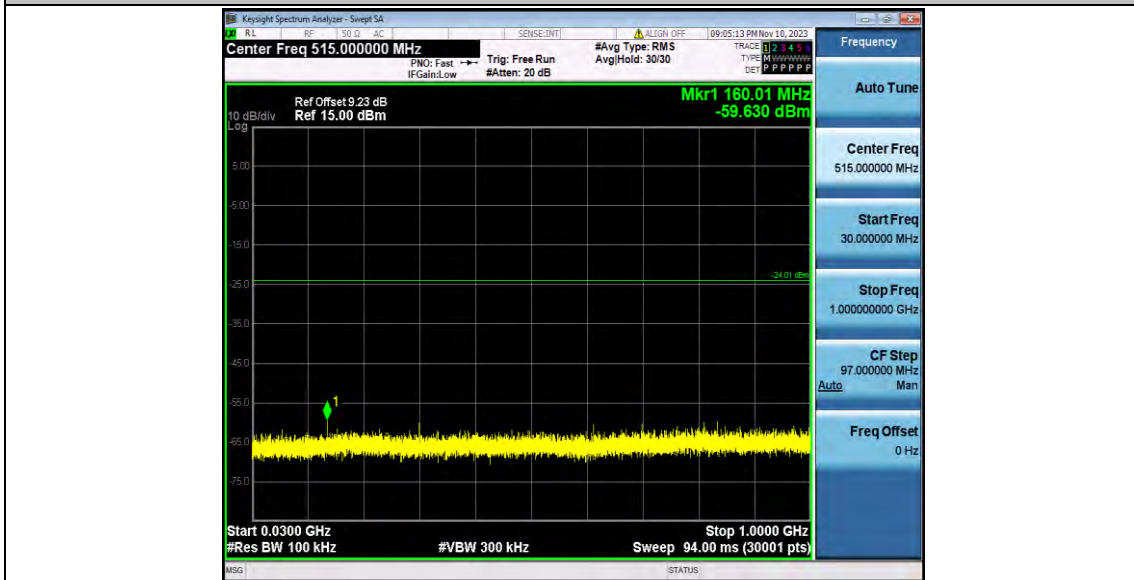
11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



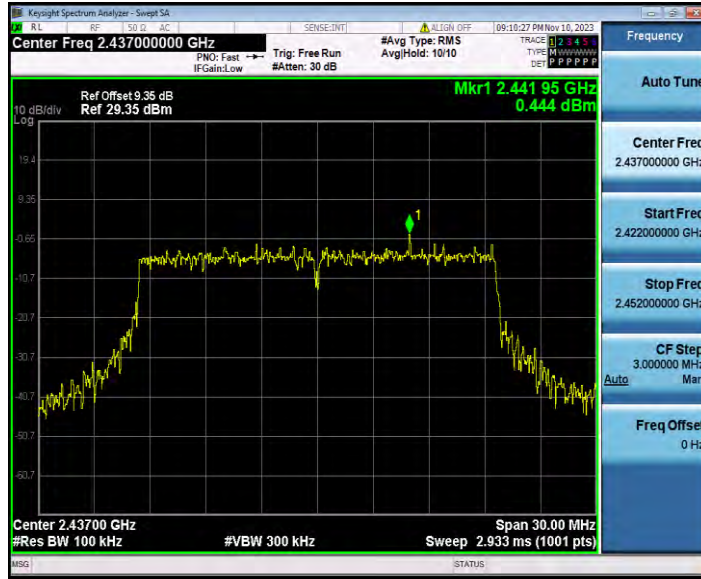
11AX20SISO_Ant1_2412_0-Reference



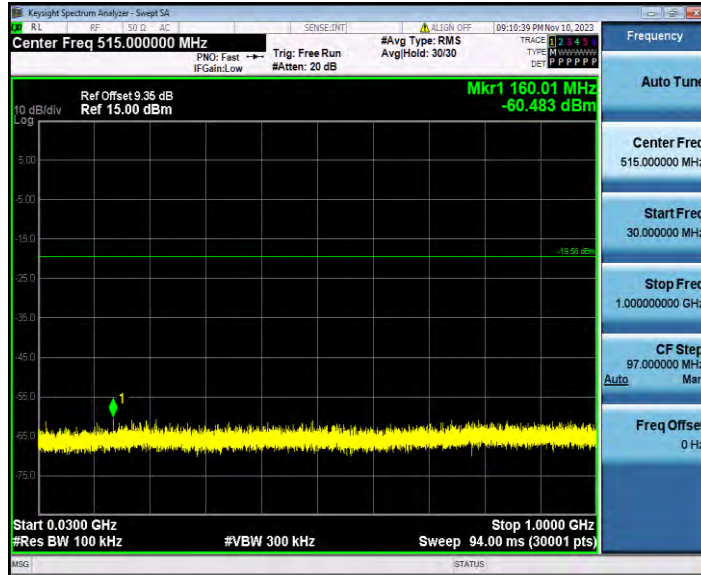
11AX20SISO_Ant1_2412_30~1000



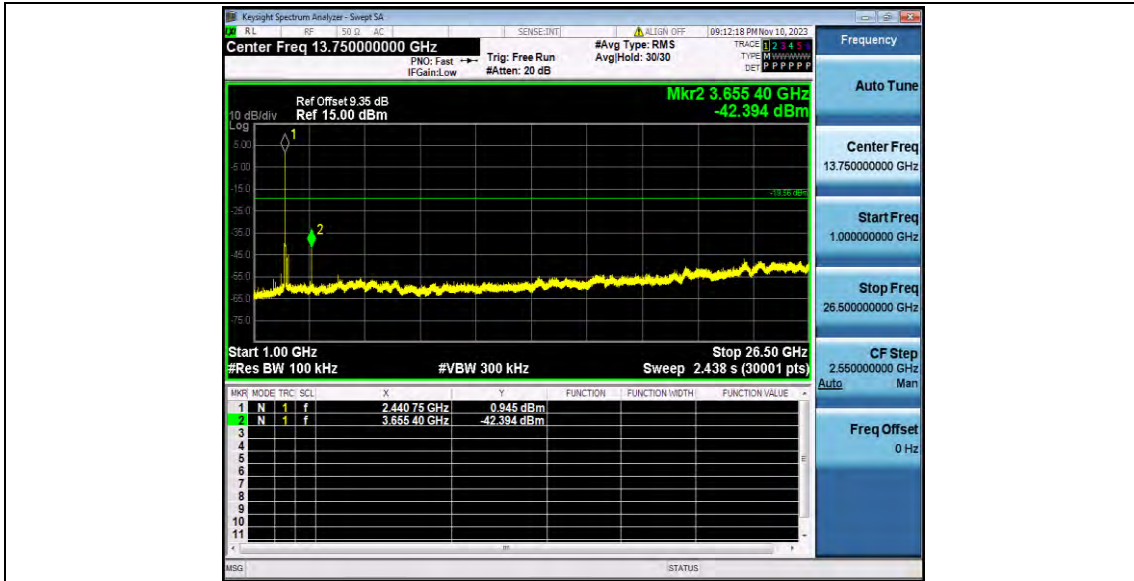
11AX20SISO_Ant1_2412_1000~26500



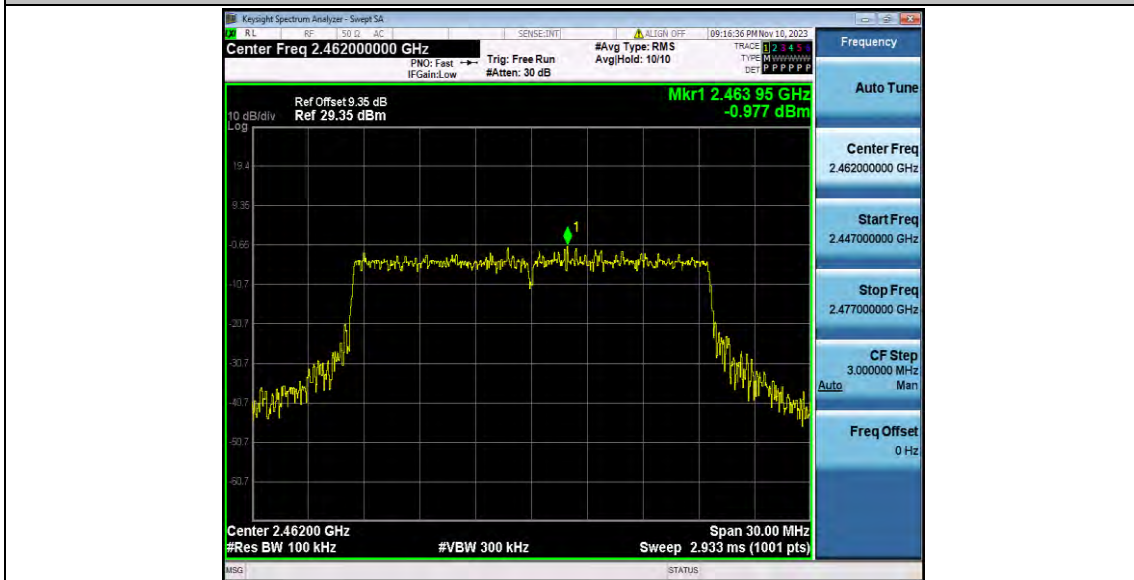
11AX20SISO_Ant1_2437_0~Reference



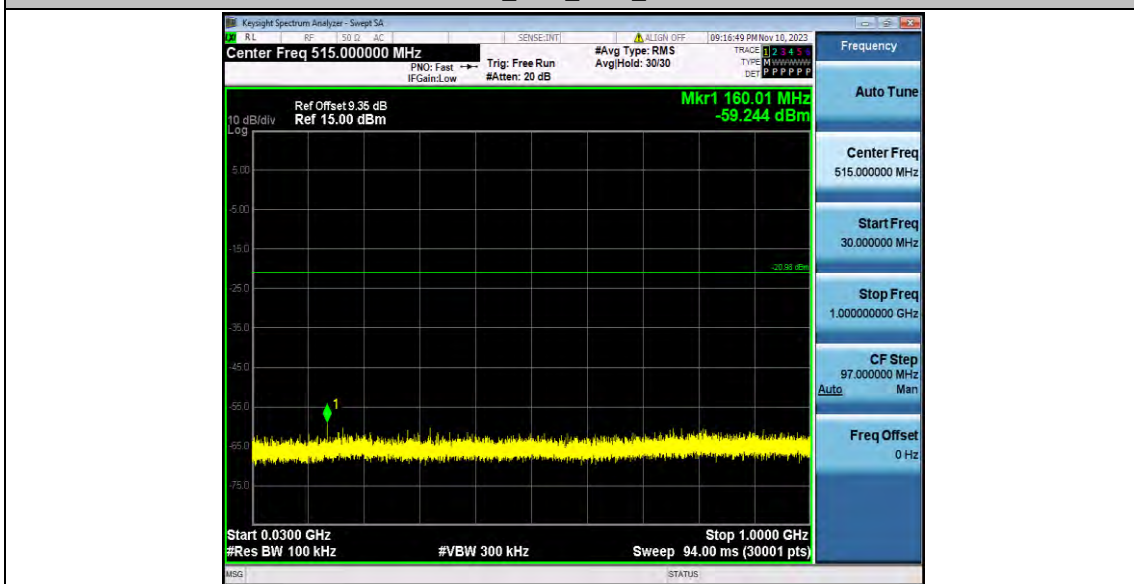
11AX20SISO_Ant1_2437_30~1000



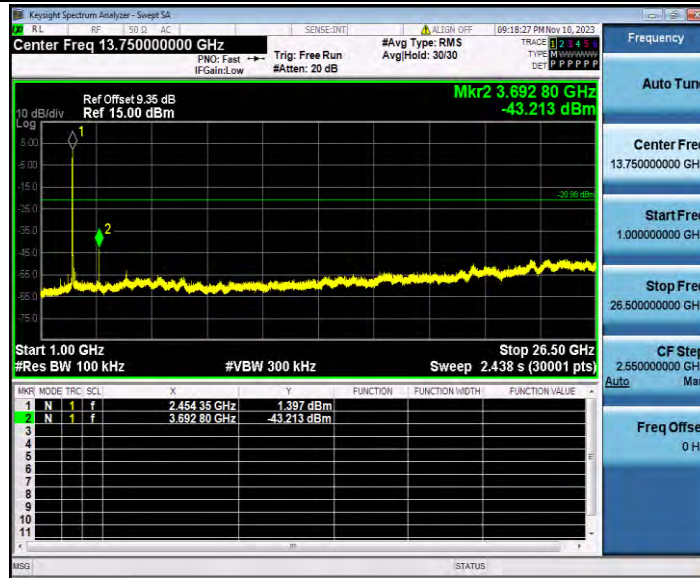
11AX20SISO_Ant1_2437_1000~26500



11AX20SISO_Ant1_2462_0~Reference



11AX20SISO_Ant1_2462_30~1000



11AX20SISO_Ant1_2462_1000~26500

Appendix B.7: Emissions in Restricted Bands

Test Result

Test Mode	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	-48.93	≤-41.20	46.27	≤54	PASS
				AV	2386.450	-44.39	≤-41.20	50.81	≤54	PASS
				AV	2390.000	-45.4	≤-41.20	49.80	≤54	PASS
				Peak	2310.000	-44.55	≤-21.20	50.65	≤74	PASS
				Peak	2386.840	-37.87	≤-21.20	57.33	≤74	PASS
				Peak	2390.000	-43.4	≤-21.20	51.80	≤74	PASS
		High	2462	AV	2483.500	-45.12	≤-41.20	50.08	≤54	PASS
				AV	2483.670	-45.13	≤-41.20	50.07	≤54	PASS
				AV	2500.000	-47.26	≤-41.20	47.94	≤54	PASS
				Peak	2483.500	-42.16	≤-21.20	53.04	≤74	PASS
				Peak	2484.660	-38.67	≤-21.20	56.53	≤74	PASS
				Peak	2500.000	-46.52	≤-21.20	48.68	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.22	≤-41.20	45.98	≤54	PASS
				AV	2389.960	-47.34	≤-41.20	47.86	≤54	PASS
				AV	2390.000	-47.34	≤-41.20	47.86	≤54	PASS
				Peak	2310.000	-48.18	≤-21.20	47.02	≤74	PASS
				Peak	2325.090	-40.29	≤-21.20	54.91	≤74	PASS
				Peak	2390.000	-42.38	≤-21.20	52.82	≤74	PASS
		High	2462	AV	2483.500	-44.86	≤-41.20	50.34	≤54	PASS
				AV	2483.560	-44.97	≤-41.20	50.23	≤54	PASS
				AV	2500.000	-48.29	≤-41.20	46.91	≤54	PASS
				Peak	2483.500	-40.81	≤-21.20	54.39	≤74	PASS
				Peak	2484.550	-38.52	≤-21.20	56.68	≤74	PASS
				Peak	2500.000	-45.32	≤-21.20	49.88	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-49.21	≤-41.20	45.99	≤54	PASS
				AV	2389.960	-46.96	≤-41.20	48.24	≤54	PASS
				AV	2390.000	-46.96	≤-41.20	48.24	≤54	PASS
				Peak	2310.000	-45.83	≤-21.20	49.37	≤74	PASS
				Peak	2389.310	-39.38	≤-21.20	55.82	≤74	PASS
				Peak	2390.000	-40.73	≤-21.20	54.47	≤74	PASS
		High	2462	AV	2483.500	-44.09	≤-41.20	51.11	≤54	PASS
				AV	2483.560	-44.14	≤-41.20	51.06	≤54	PASS
				AV	2500.000	-48.25	≤-41.20	46.95	≤54	PASS
				Peak	2483.500	-41.05	≤-21.20	54.15	≤74	PASS
				Peak	2484.000	-32	≤-21.20	63.20	≤74	PASS
				Peak	2484.000	-32	≤-21.20	63.20	≤74	PASS

				Peak	2500.000	-47.1	≤ -21.20	48.10	≤ 74	PASS
11AX20SI SO	Ant1	Low	2412	AV	2310.000	-49.23	≤ -41.20	45.97	≤ 54	PASS
				AV	2389.960	-47.11	≤ -41.20	48.09	≤ 54	PASS
				AV	2390.000	-47.11	≤ -41.20	48.09	≤ 54	PASS
				Peak	2310.000	-49.42	≤ -21.20	45.78	≤ 74	PASS
				Peak	2360.450	-39.41	≤ -21.20	55.79	≤ 74	PASS
				Peak	2390.000	-43.34	≤ -21.20	51.86	≤ 74	PASS
		High	2462	AV	2483.500	-42.69	≤ -41.20	52.51	≤ 54	PASS
				AV	2483.560	-42.76	≤ -41.20	52.44	≤ 54	PASS
				AV	2500.000	-48.22	≤ -41.20	46.98	≤ 54	PASS
				Peak	2483.500	-39.33	≤ -21.20	55.87	≤ 74	PASS
				Peak	2485.540	-33.71	≤ -21.20	61.49	≤ 74	PASS
				Peak	2500.000	-45.2	≤ -21.20	50.00	≤ 74	PASS

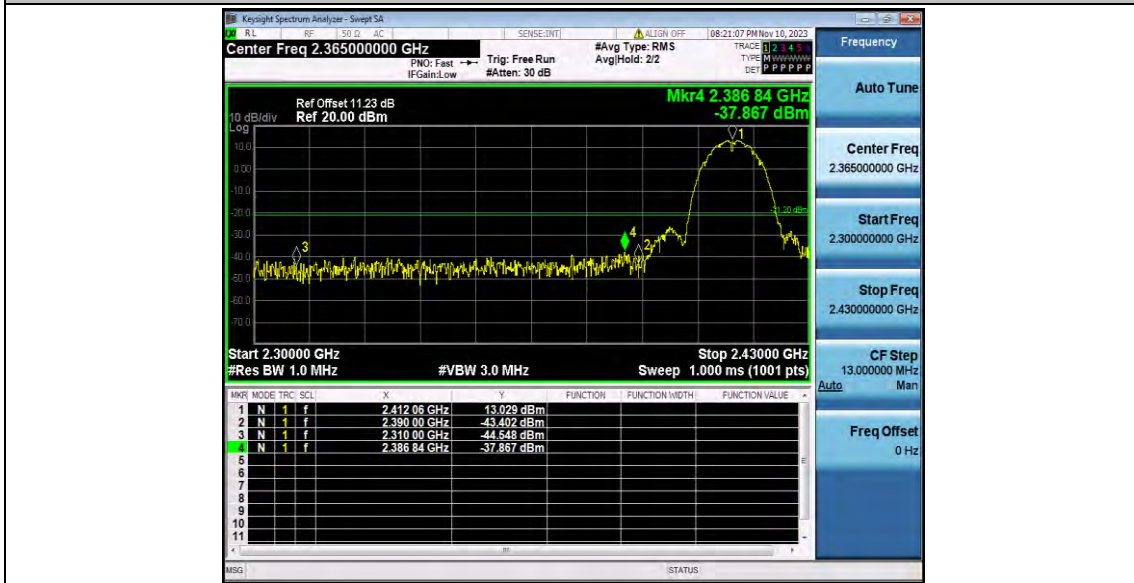
Note:

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.

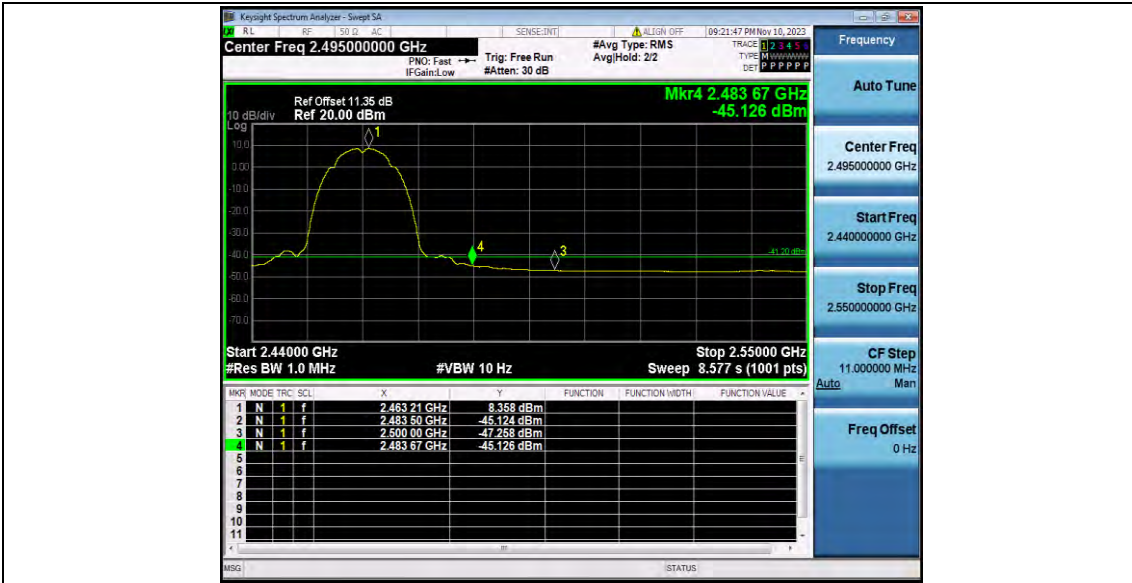
Test Graphs



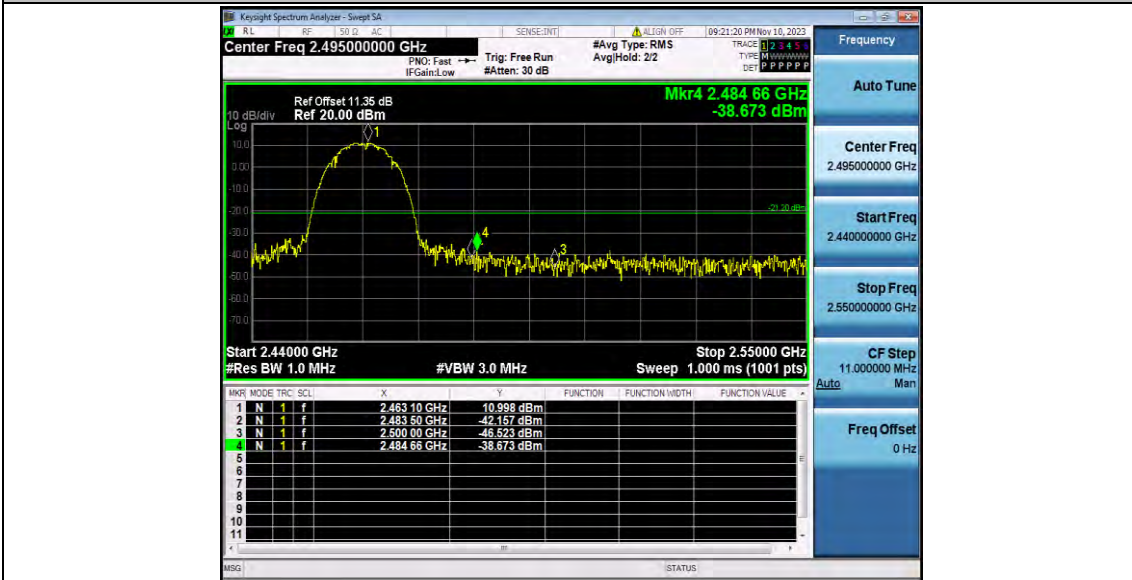
11B_Ant1_Low_2412_AV



11B_Ant1_Low_2412_Peak



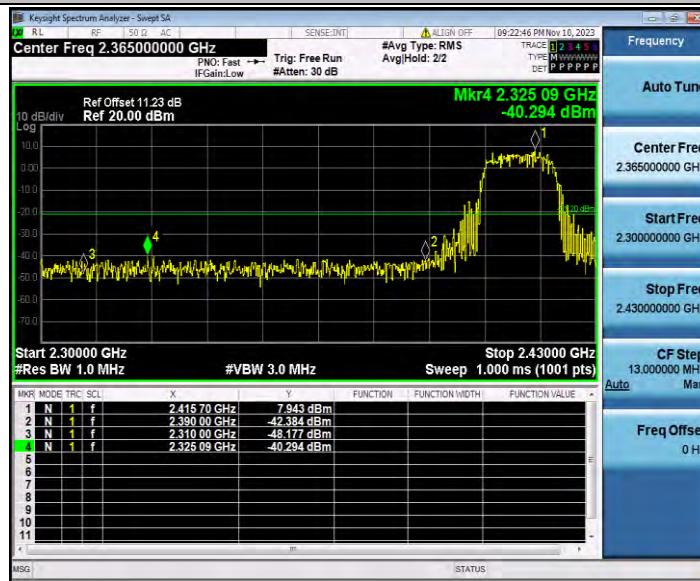
11B_Ant1_High_2462_AV



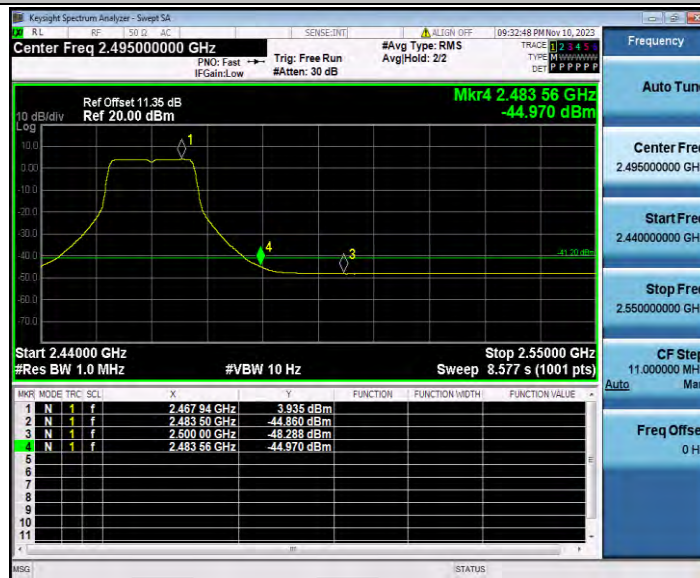
11B_Ant1_High_2462_Peak



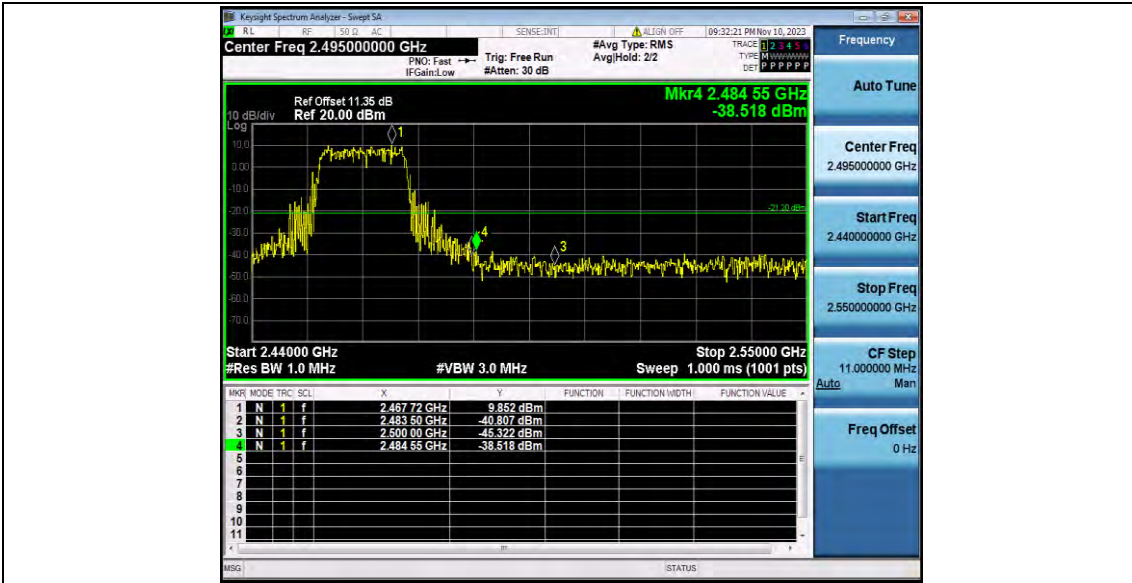
11G_Ant1_Low_2412_AV



11G_Ant1_Low_2412_Peak



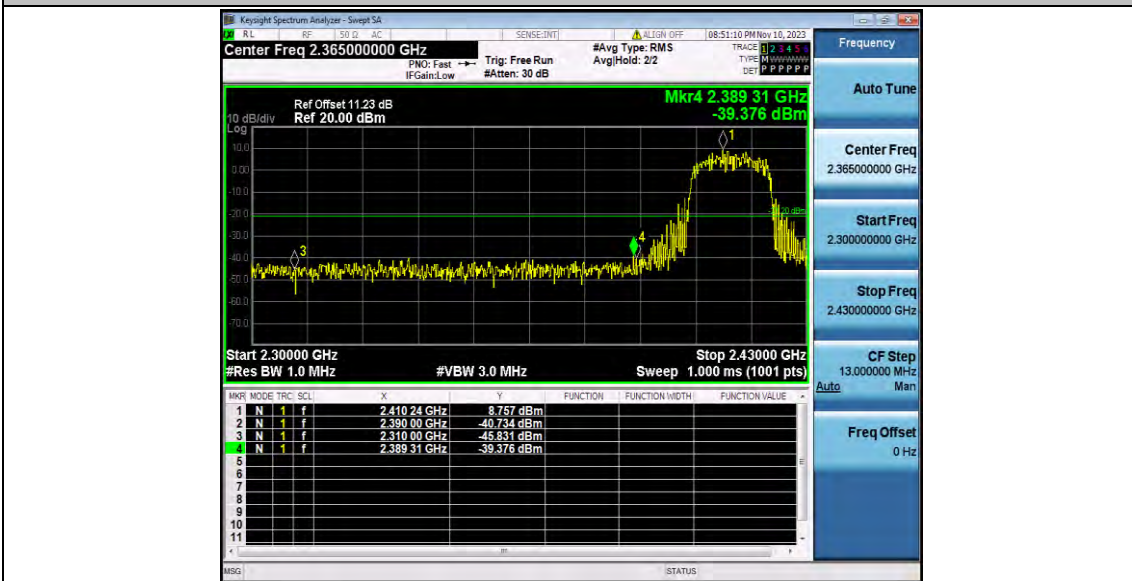
11G_Ant1_High_2462_AV



11G_Ant1_High_2462_Peak



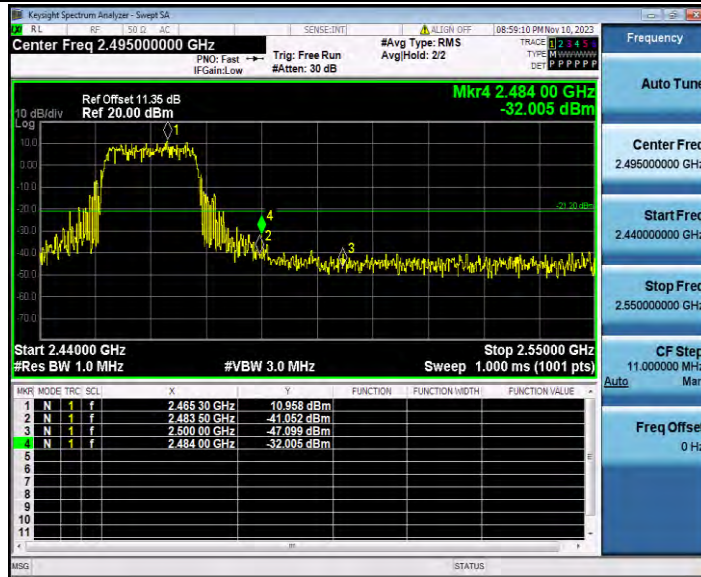
11N20SISO_Ant1_Low_2412_AV



11N20SISO_Ant1_Low_2412_Peak



11N20SISO_Ant1_High_2462_AV



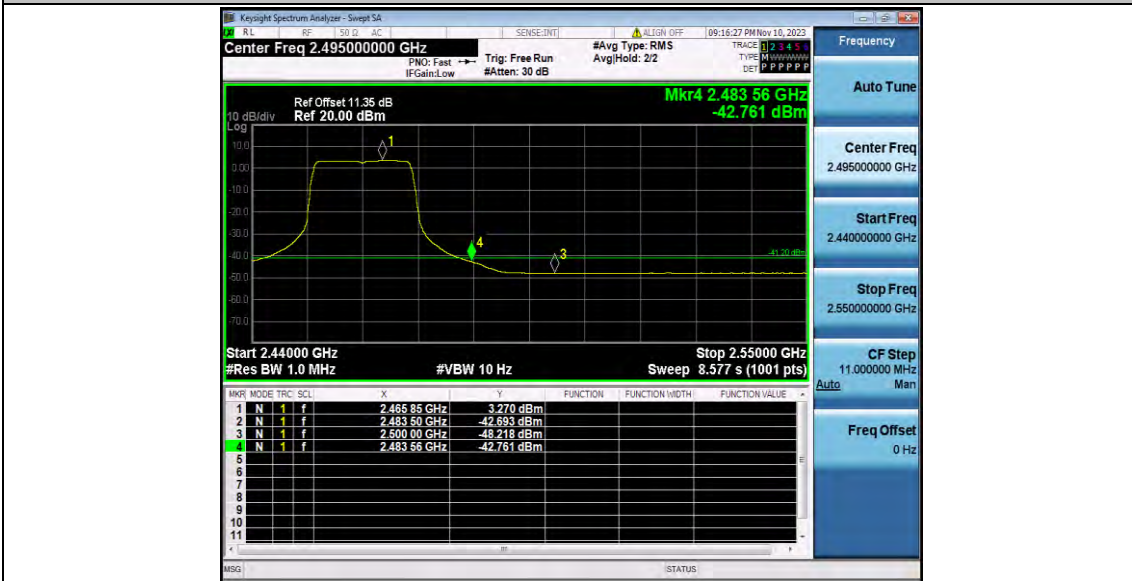
11N20SISO_Ant1_High_2462_Peak



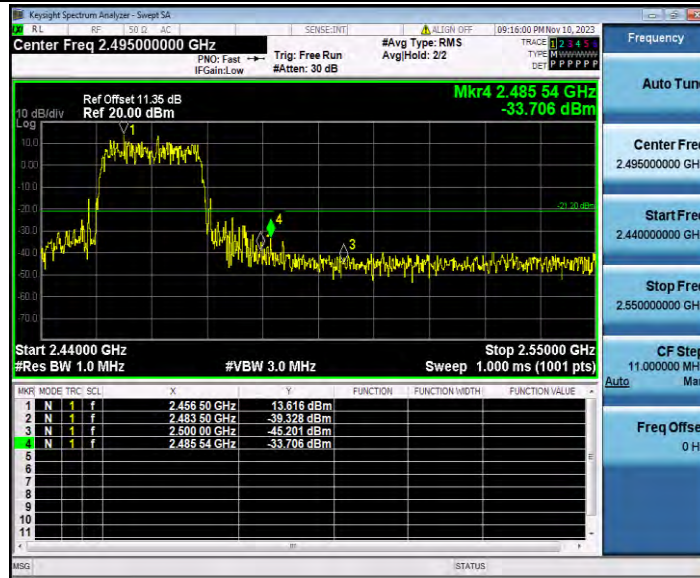
11AX20SISO_Ant1_Low_2412_AV



11AX20SISO_Ant1_Low_2412_Peak



11AX20SISO_Ant1_High_2462_AV



11AX20SISO_Ant1_High_2462_Peak