

Case No. : GTS20231120007-1-4
Ambient Condition: 23 °C, 48 %RH,
Test Date: 2024.1.11
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	10.120	2406.920	2417.040	0.5	PASS
		2437	10.040	2431.960	2442.000	0.5	PASS
		2462	10.120	2456.920	2467.040	0.5	PASS
11G	Ant1	2412	16.560	2403.720	2420.280	0.5	PASS
		2437	16.560	2428.720	2445.280	0.5	PASS
		2462	16.520	2453.720	2470.240	0.5	PASS
11N20SISO	Ant1	2412	17.760	2403.080	2420.840	0.5	PASS
		2437	17.760	2428.120	2445.880	0.5	PASS
		2462	17.760	2453.120	2470.880	0.5	PASS
11N40SISO	Ant1	2422	36.560	2403.680	2440.240	0.5	PASS
		2437	36.480	2418.760	2455.240	0.5	PASS
		2452	36.480	2433.760	2470.240	0.5	PASS

Test Graphs

11B_Ant1_2412



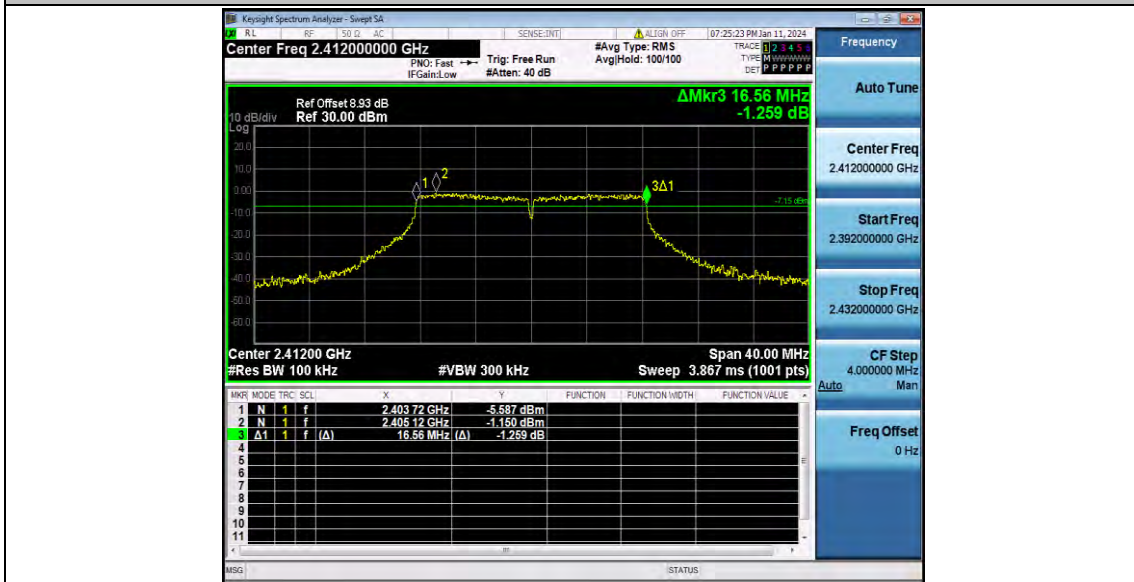
11B_Ant1_2437



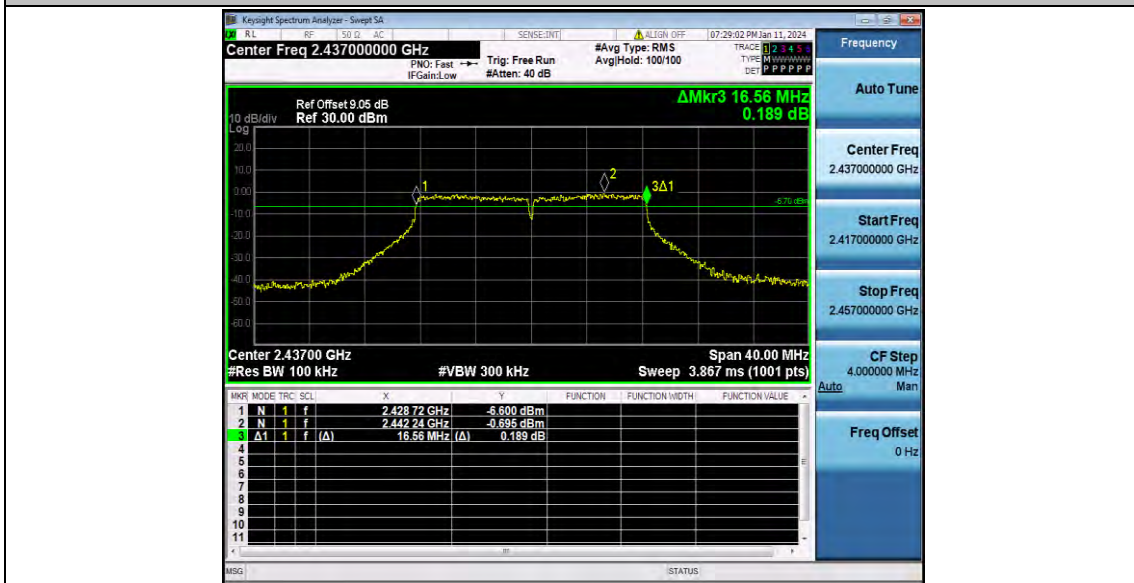
11B_Ant1_2462



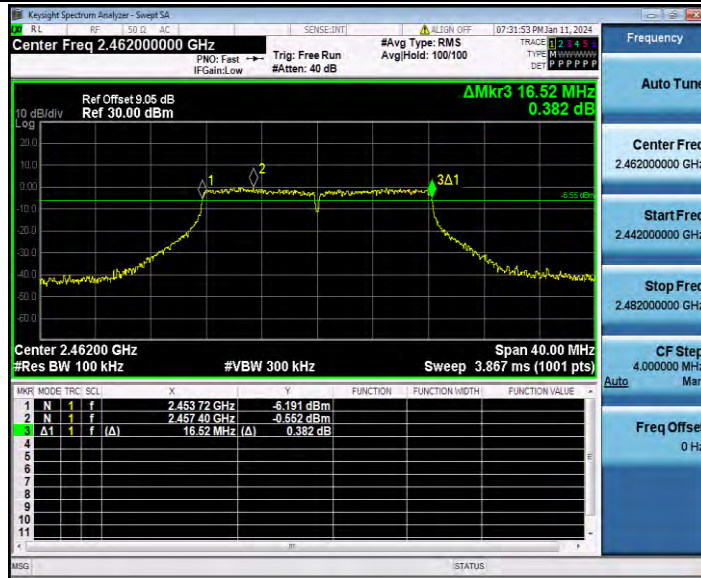
11G_Ant1_2412



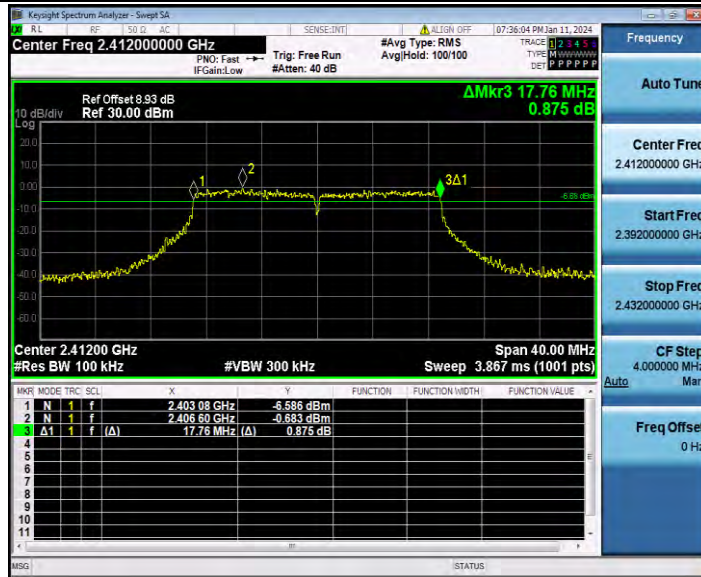
11G_Ant1_2437



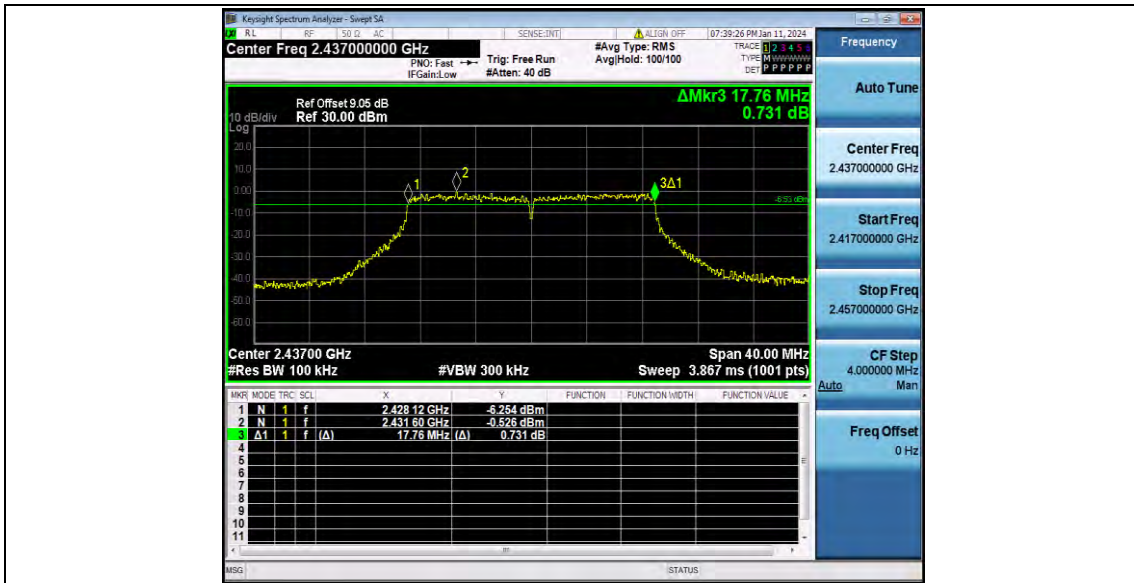
11G_Ant1_2462



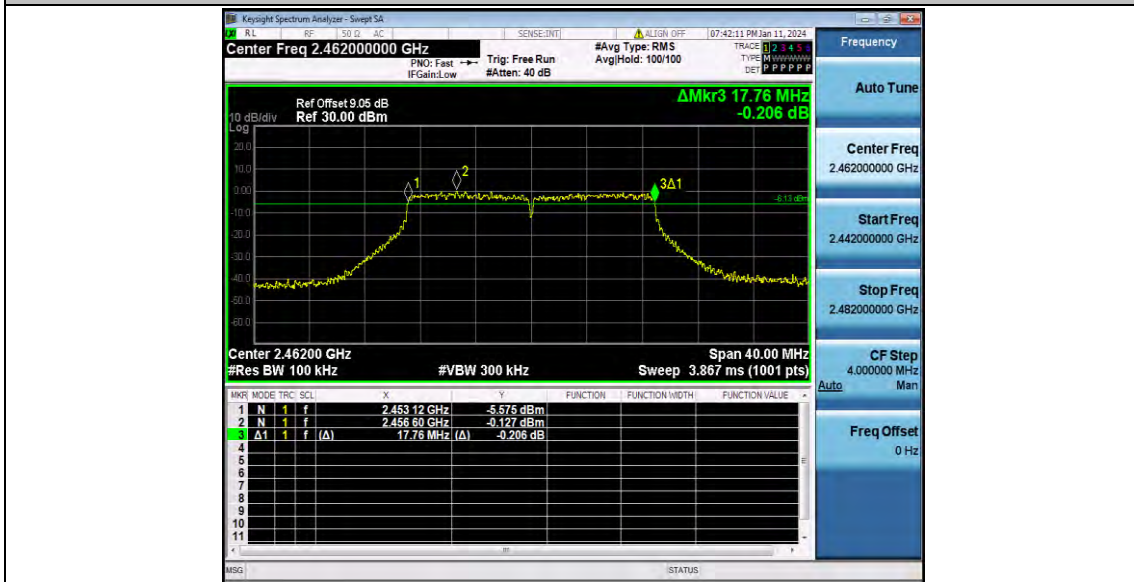
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



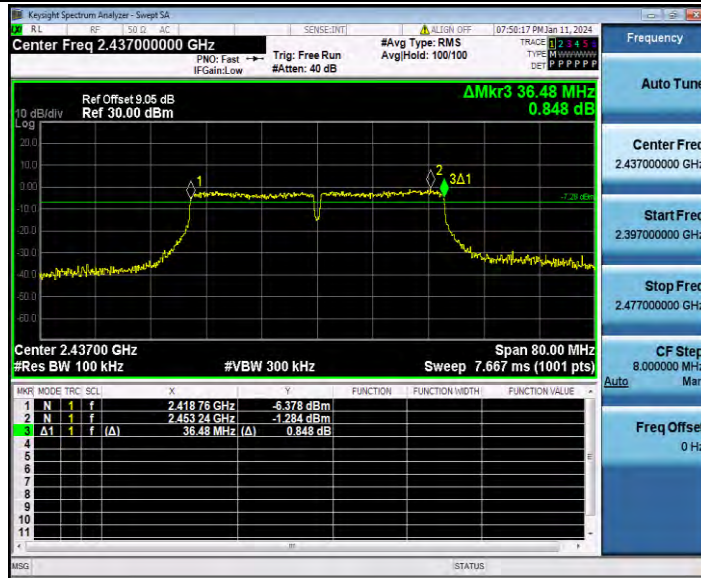
11N20SISO_Ant1_2462



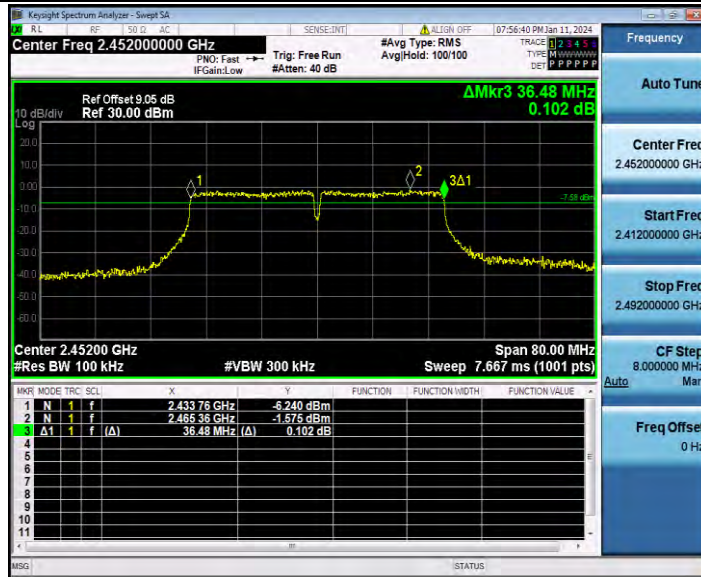
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

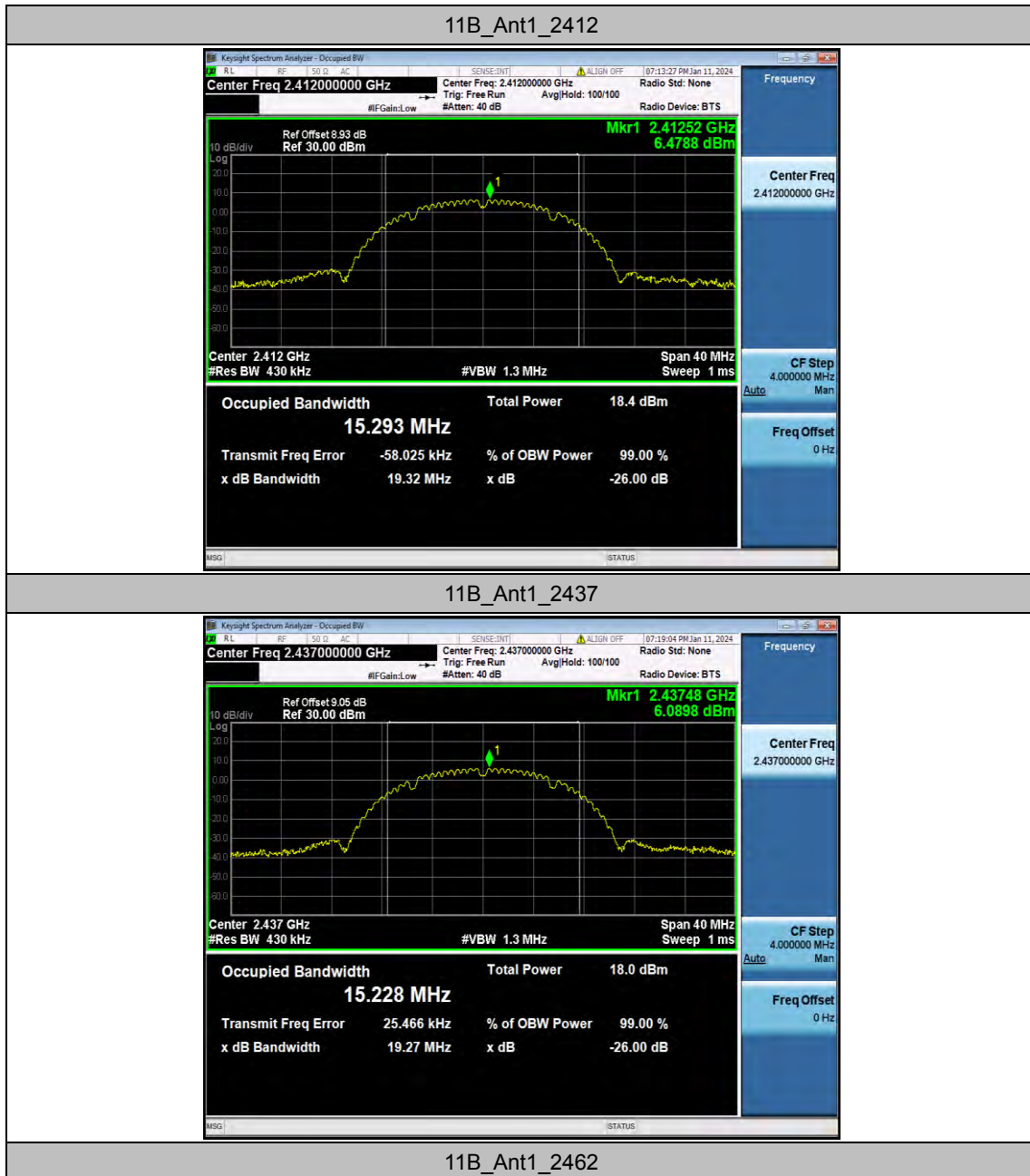


Appendix C.2: Occupied Channel Bandwidth

Test Result

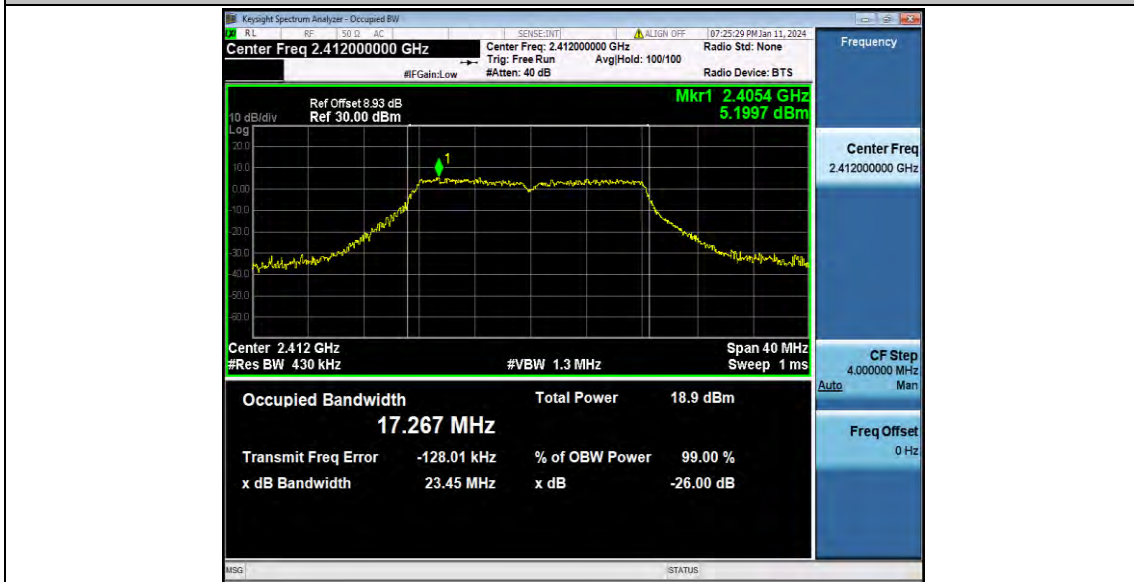
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	15.293	2404.2955	2419.5885	---	---
		2437	15.228	2429.4115	2444.6395	---	---
		2462	15.212	2454.3644	2469.5764	---	---
11G	Ant1	2412	17.267	2403.2385	2420.5055	---	---
		2437	17.348	2428.2304	2445.5784	---	---
		2462	17.176	2453.3455	2470.5215	---	---
11N20SISO	Ant1	2412	18.283	2402.8226	2421.1056	---	---
		2437	18.346	2427.8399	2446.1859	---	---
		2462	18.257	2452.8191	2471.0761	---	---
11N40SISO	Ant1	2422	37.221	2403.4426	2440.6636	---	---
		2437	37.063	2418.5352	2455.5982	---	---
		2452	36.948	2433.6244	2470.5724	---	---

Test Graphs

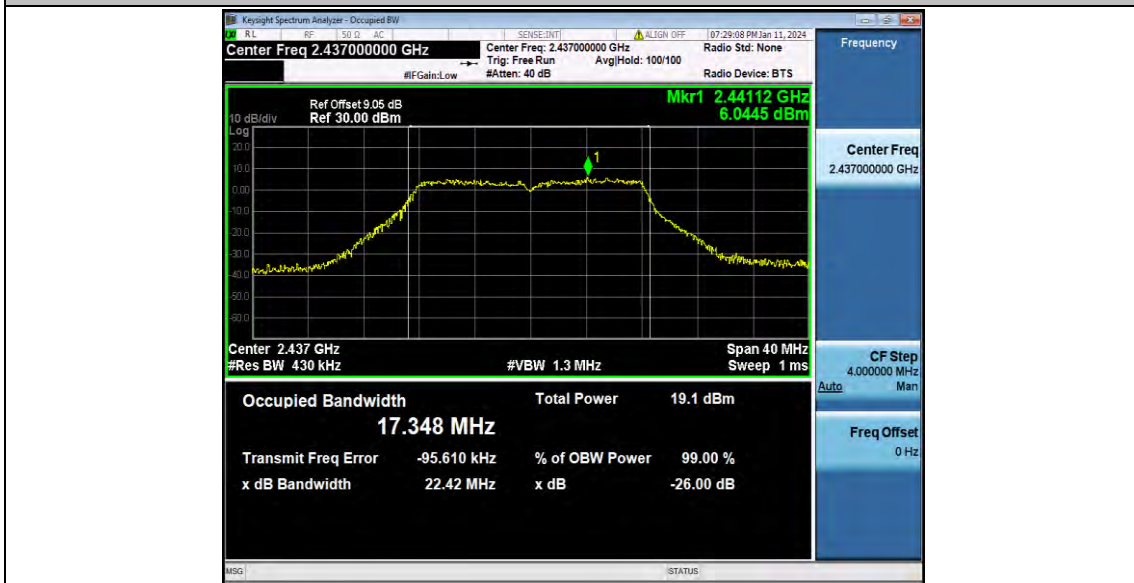




11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



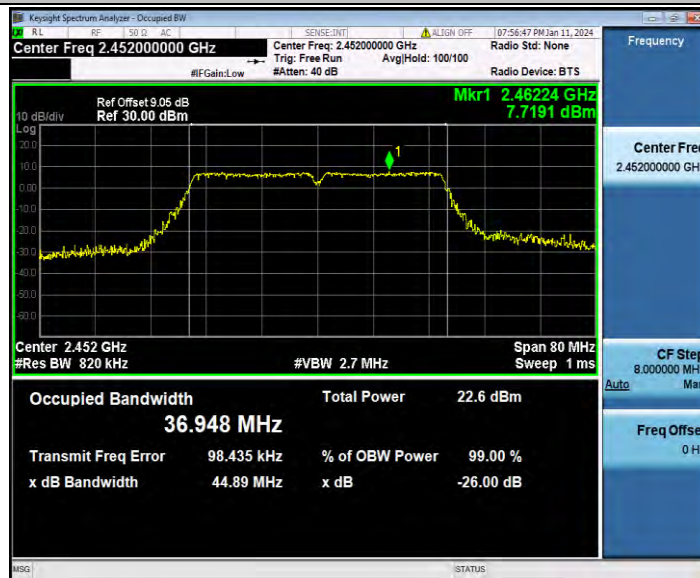
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C.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	18.46	0	0	18.46	≤30.00	PASS
		2437	18.14	0	0	18.14	≤30.00	PASS
		2462	18.52	0	0	18.52	≤30.00	PASS
11G	Ant1	2412	19.89	0	0	19.89	≤30.00	PASS
		2437	20.21	0	0	20.21	≤30.00	PASS
		2462	20.59	0	0	20.59	≤30.00	PASS
11N20 SISO	Ant1	2412	20.32	0	0	20.32	≤30.00	PASS
		2437	20.53	0	0	20.53	≤30.00	PASS
		2462	20.91	0	0	20.91	≤30.00	PASS
11N40 SISO	Ant1	2422	22.48	0	0	22.48	≤30.00	PASS
		2437	22.71	0	0	22.71	≤30.00	PASS
		2452	22.85	0	0	22.85	≤30.00	PASS

Note:

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

Appendix C.4: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-15.03	≤8.00	PASS
		2437	-15.21	≤8.00	PASS
		2462	-14.77	≤8.00	PASS
11G	Ant1	2412	-15.27	≤8.00	PASS
		2437	-14.85	≤8.00	PASS
		2462	-14.72	≤8.00	PASS
11N20SISO	Ant1	2412	-14.03	≤8.00	PASS
		2437	-14.53	≤8.00	PASS
		2462	-14.48	≤8.00	PASS
11N40SISO	Ant1	2422	-14.32	≤8.00	PASS
		2437	-14.20	≤8.00	PASS
		2452	-14.05	≤8.00	PASS

Note:

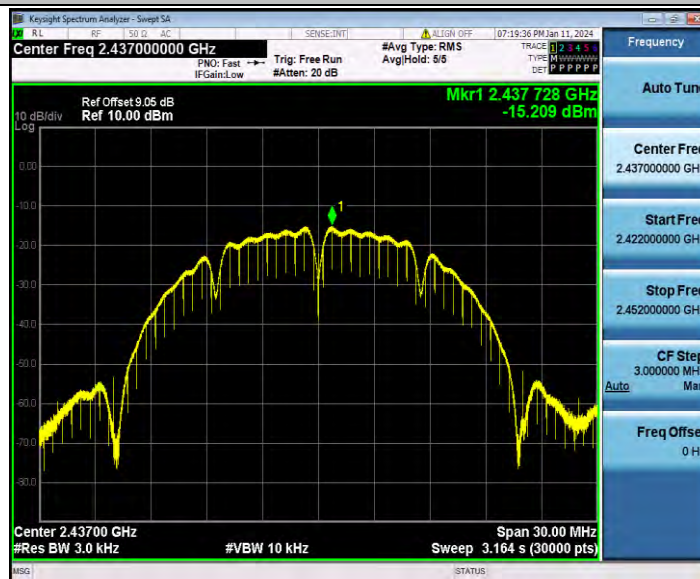
1. The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

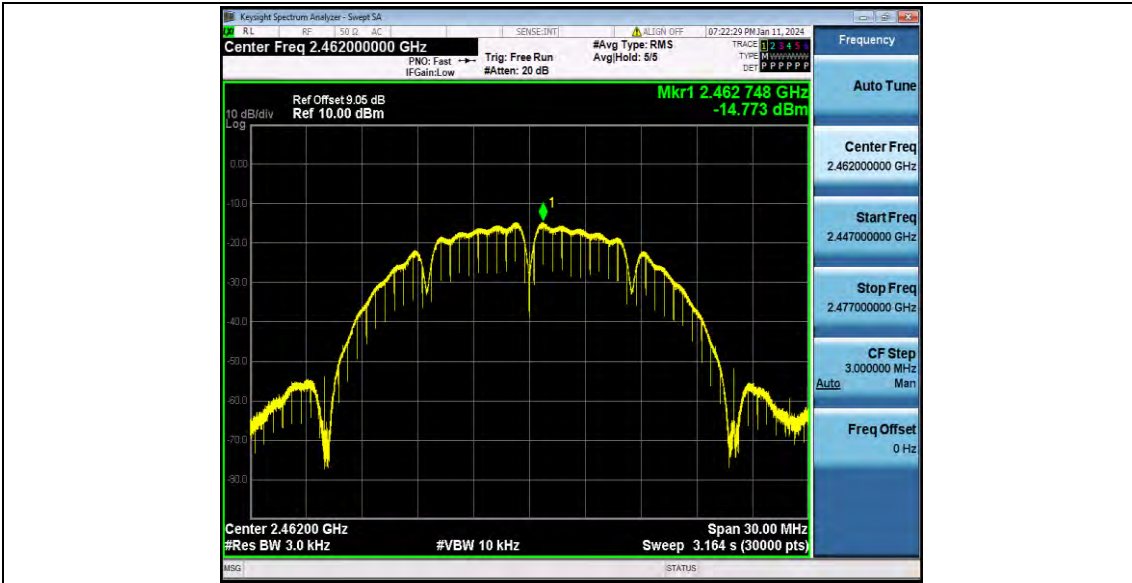
11B_Ant1_2412



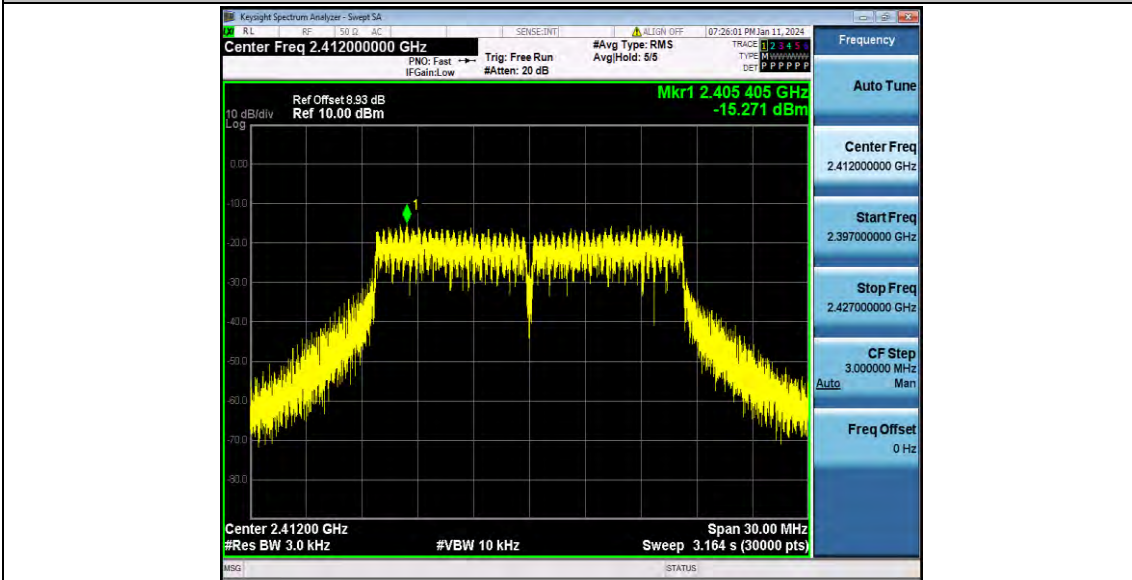
11B_Ant1_2437



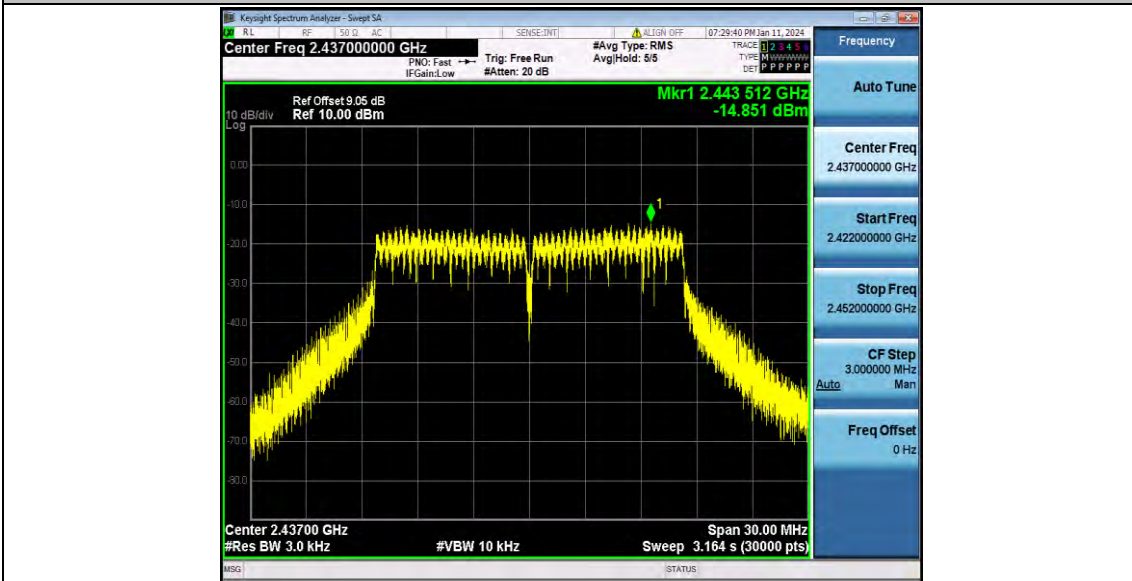
11B_Ant1_2462



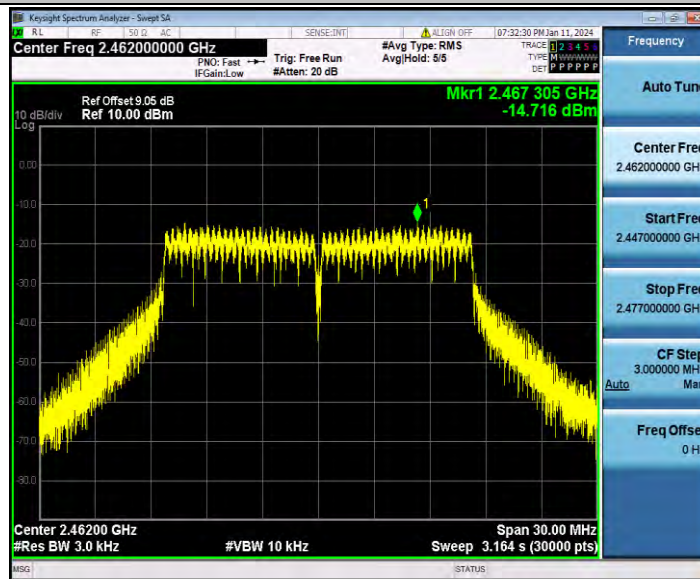
11G_Ant1_2412



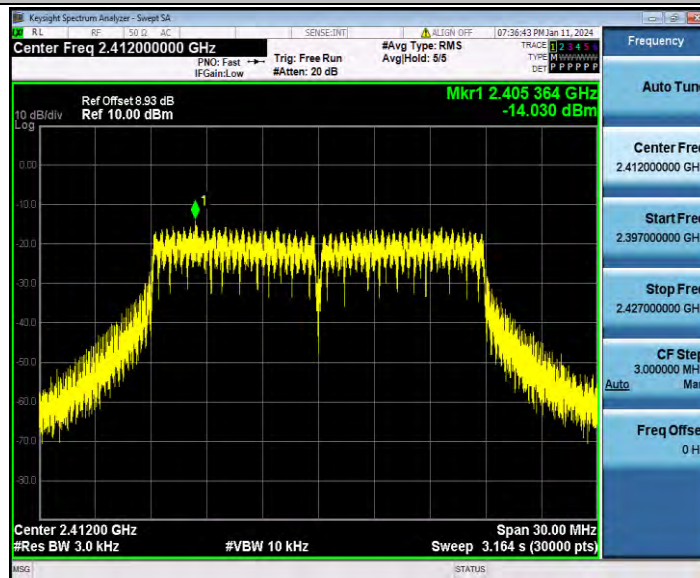
11G_Ant1_2437



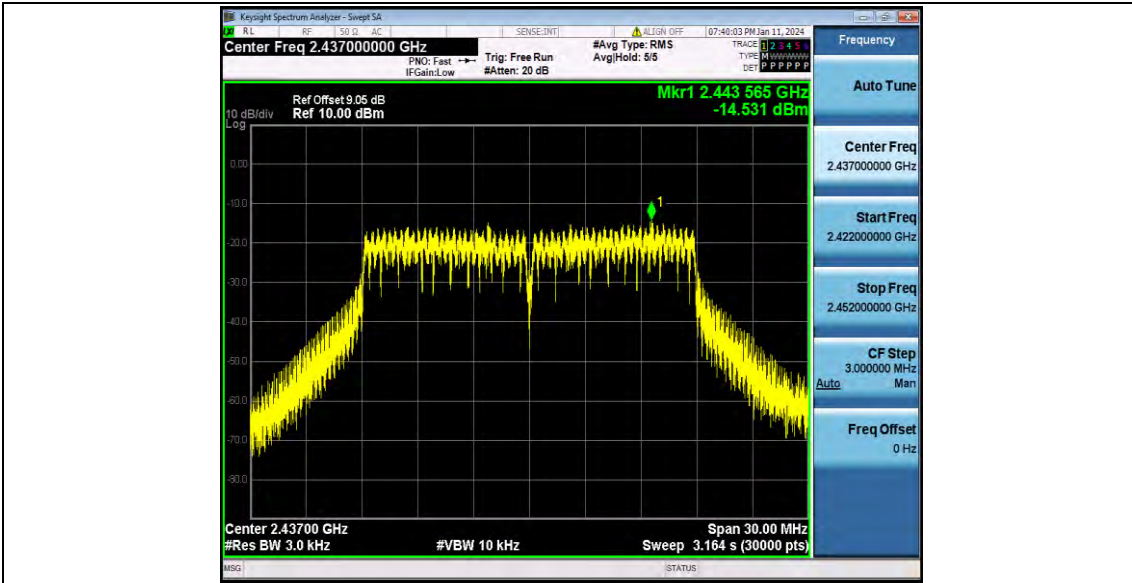
11G_Ant1_2462



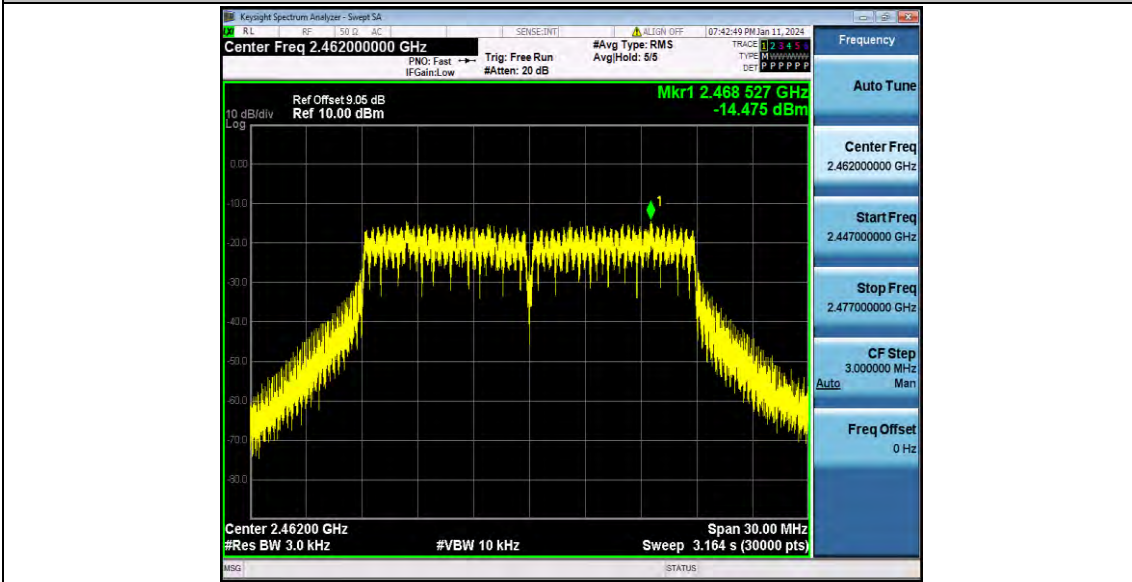
11N20SISO_Ant1_2412



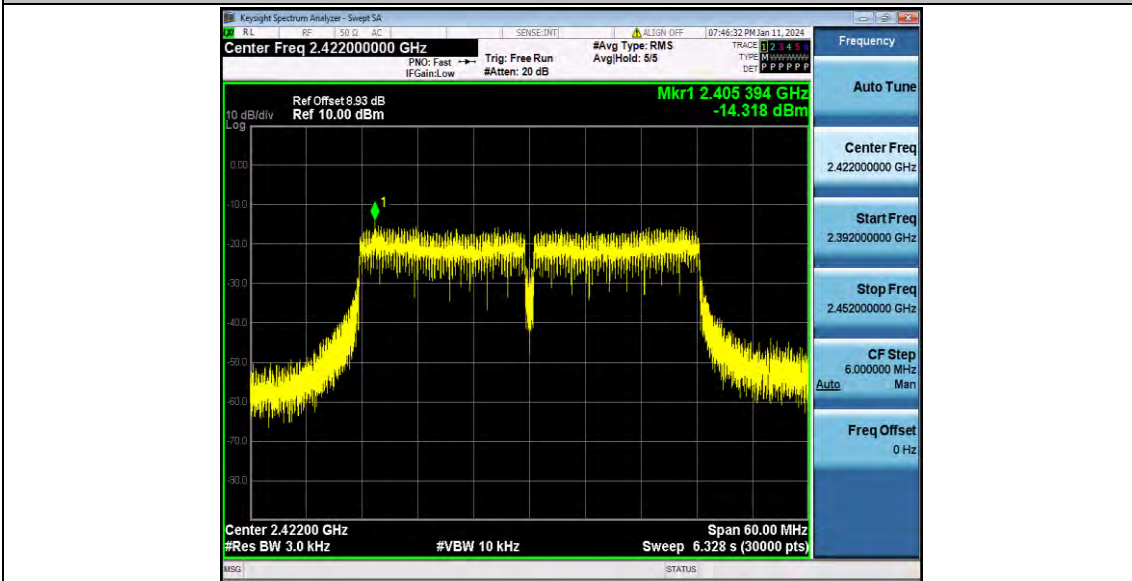
11N20SISO_Ant1_2437



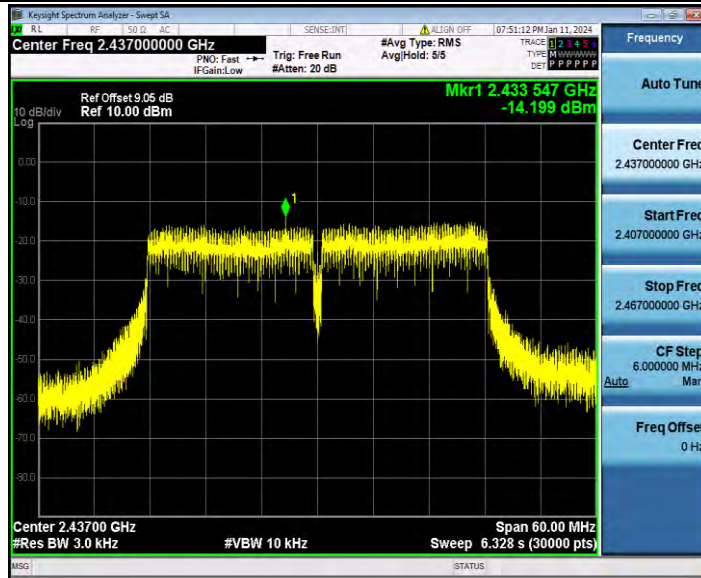
11N20SISO_Ant1_2462



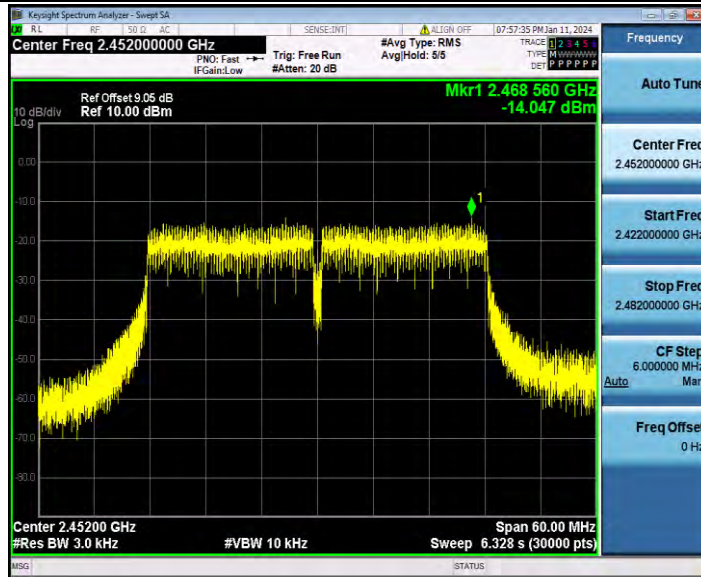
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



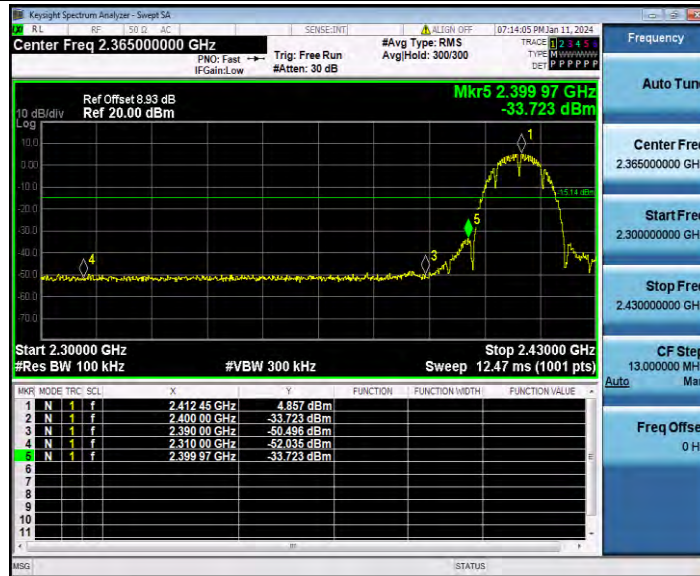
Appendix C.5: Band edge measurements

Test Result

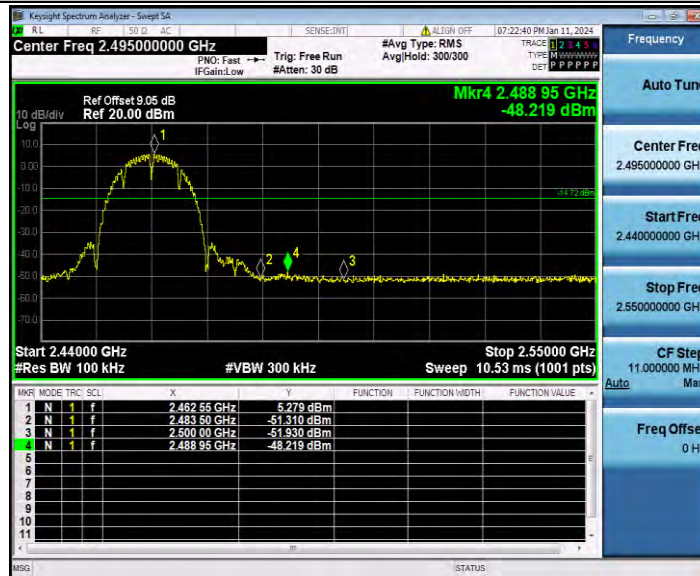
TestMode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	4.86	-33.72	≤ -15.14	PASS
		High	2462	5.28	-48.22	≤ -14.72	PASS
11G	Ant1	Low	2412	-0.64	-31.48	≤ -20.64	PASS
		High	2462	-0.45	-45.08	≤ -20.45	PASS
11N20 SISO	Ant1	Low	2412	-1.04	-31.19	≤ -21.04	PASS
		High	2462	-0.26	-44.57	≤ -20.26	PASS
11N40 SISO	Ant1	Low	2422	-2.05	-29.56	≤ -22.05	PASS
		High	2452	-1.44	-31.76	≤ -21.44	PASS

Test Graphs

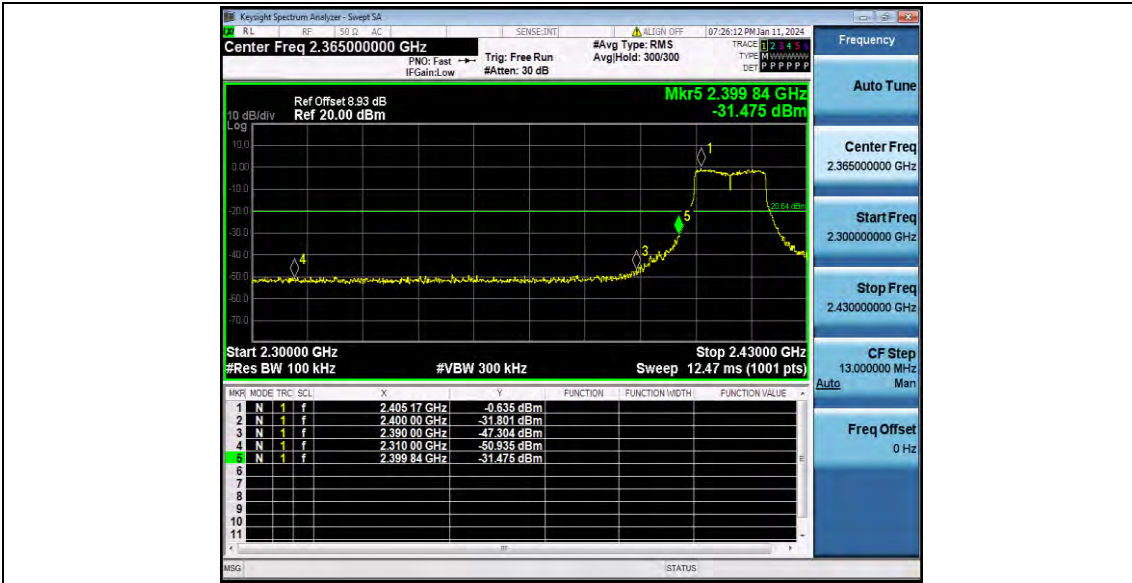
11B_Ant1_Low_2412



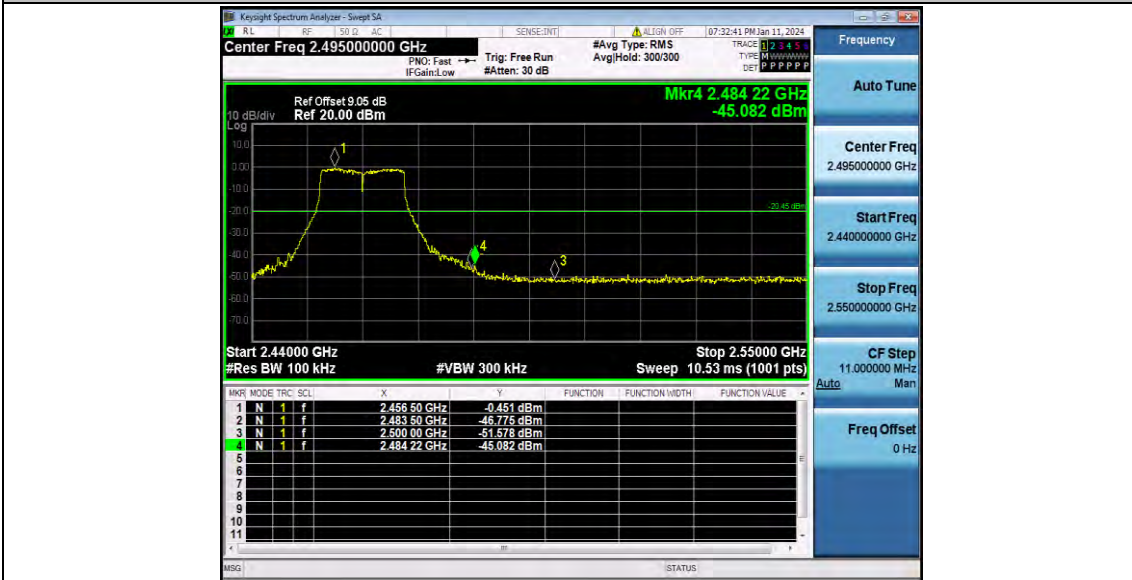
11B_Ant1_High_2462



11G_Ant1_Low_2412



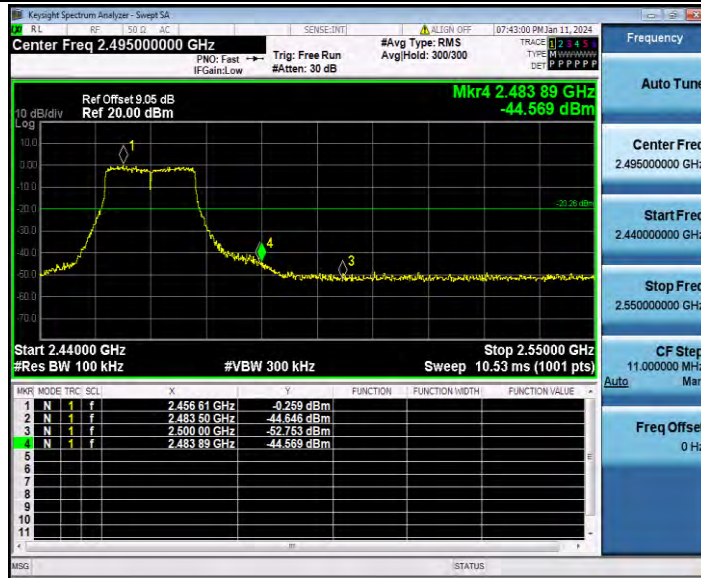
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

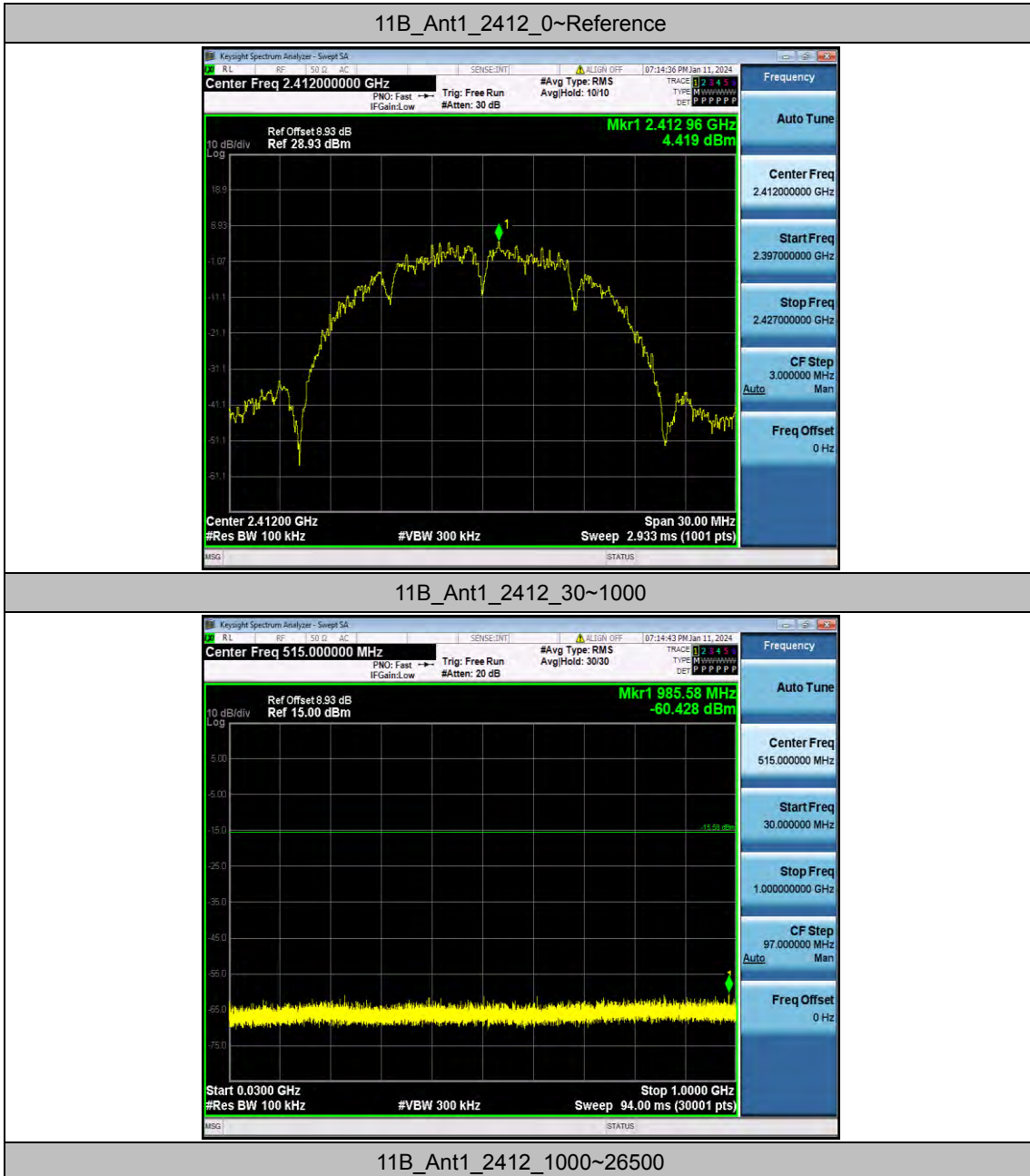


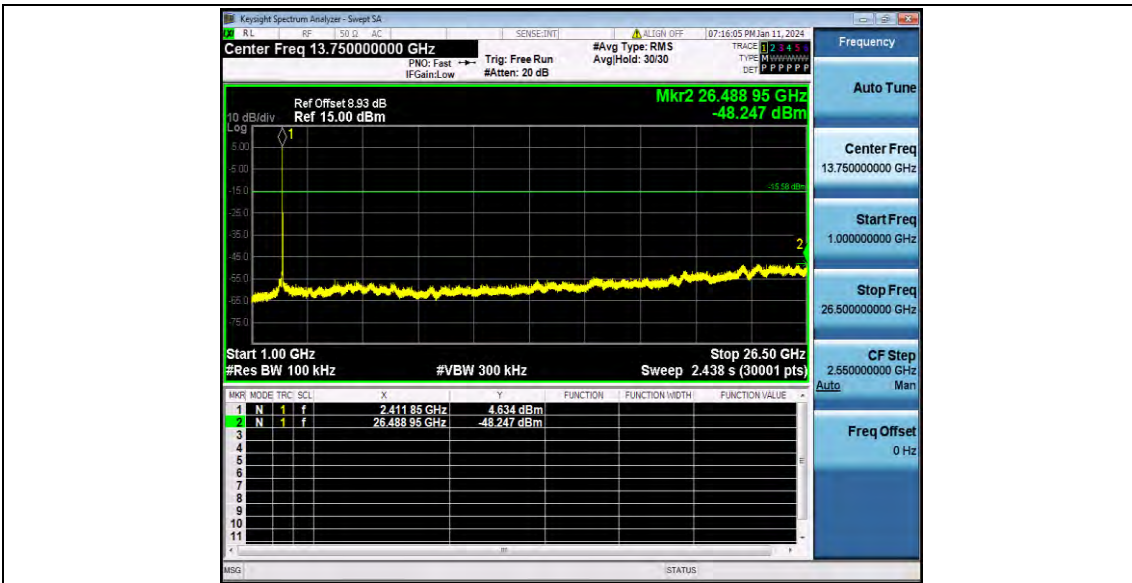
Appendix C.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.42	4.42	---	PASS
			30~1000	4.42	-60.43	≤-15.58	PASS
			1000~26500	4.42	-48.25	≤-15.58	PASS
		2437	Reference	4.59	4.59	---	PASS
			30~1000	4.59	-59.95	≤-15.41	PASS
			1000~26500	4.59	-47.95	≤-15.41	PASS
		2462	Reference	4.89	4.89	---	PASS
			30~1000	4.89	-60.42	≤-15.11	PASS
			1000~26500	4.89	-47.12	≤-15.11	PASS
11G	Ant1	2412	Reference	-1.31	-1.31	---	PASS
			30~1000	-1.31	-60.8	≤-21.31	PASS
			1000~26500	-1.31	-48.15	≤-21.31	PASS
		2437	Reference	-1.50	-1.50	---	PASS
			30~1000	-1.50	-60.82	≤-21.5	PASS
			1000~26500	-1.50	-47.36	≤-21.5	PASS
		2462	Reference	-1.02	-1.02	---	PASS
			30~1000	-1.02	-60.25	≤-21.02	PASS
			1000~26500	-1.02	-47.86	≤-21.02	PASS
11N20SISO	Ant1	2412	Reference	-0.94	-0.94	---	PASS
			30~1000	-0.94	-60.23	≤-20.94	PASS
			1000~26500	-0.94	-47.58	≤-20.94	PASS
		2437	Reference	-1.86	-1.86	---	PASS
			30~1000	-1.86	-61.13	≤-21.86	PASS
			1000~26500	-1.86	-47.09	≤-21.86	PASS
		2462	Reference	-1.30	-1.30	---	PASS
			30~1000	-1.30	-60.15	≤-21.3	PASS
			1000~26500	-1.30	-47.42	≤-21.3	PASS
11N40SISO	Ant1	2422	Reference	-2.76	-2.76	---	PASS
			30~1000	-2.76	-60.25	≤-22.76	PASS
			1000~26500	-2.76	-48.22	≤-22.76	PASS
		2437	Reference	-2.04	-2.04	---	PASS
			30~1000	-2.04	-60.53	≤-22.04	PASS
			1000~26500	-2.04	-47.36	≤-22.04	PASS
		2452	Reference	-1.89	-1.89	---	PASS
			30~1000	-1.89	-51.25	≤-21.89	PASS
			1000~26500	-1.89	-47.89	≤-21.89	PASS

Test Graphs

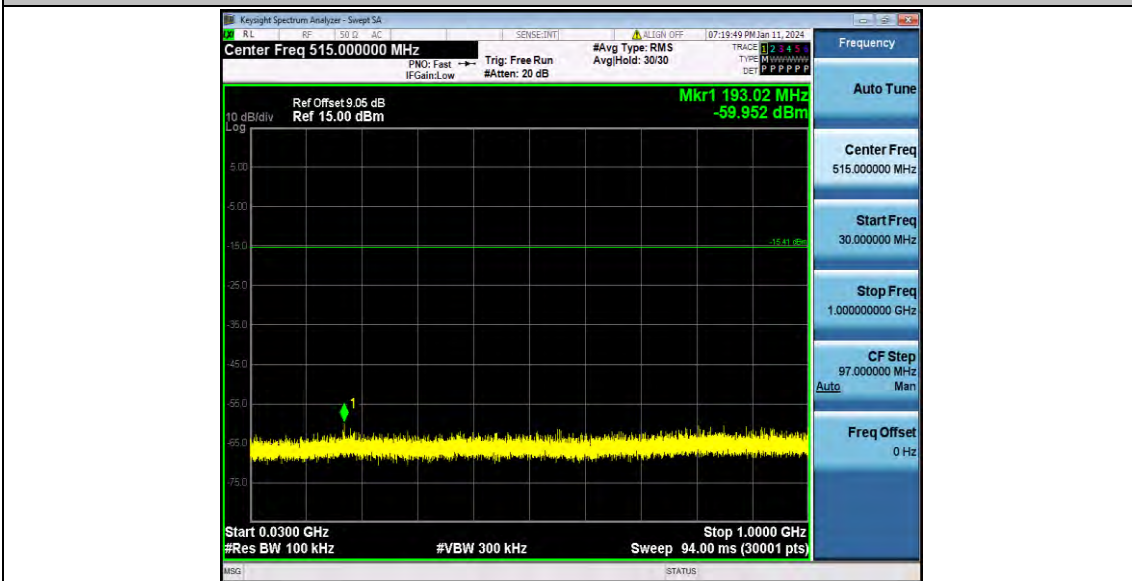




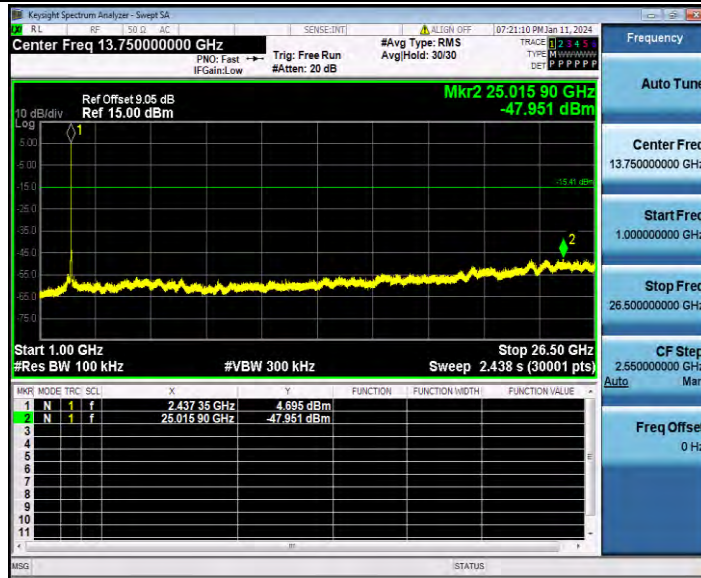
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



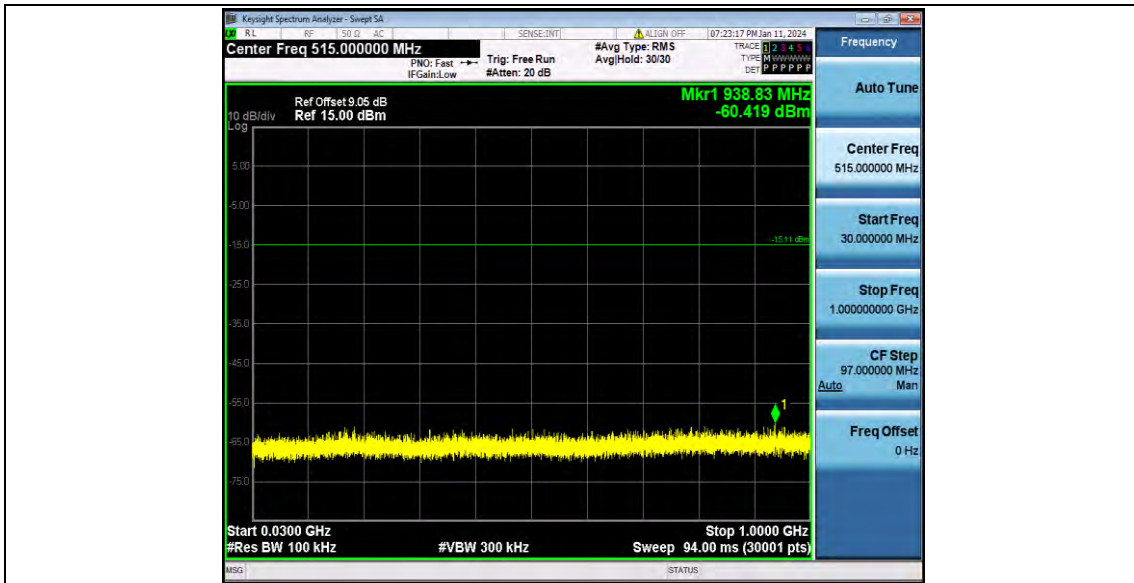
11B_Ant1_2437_1000~26500



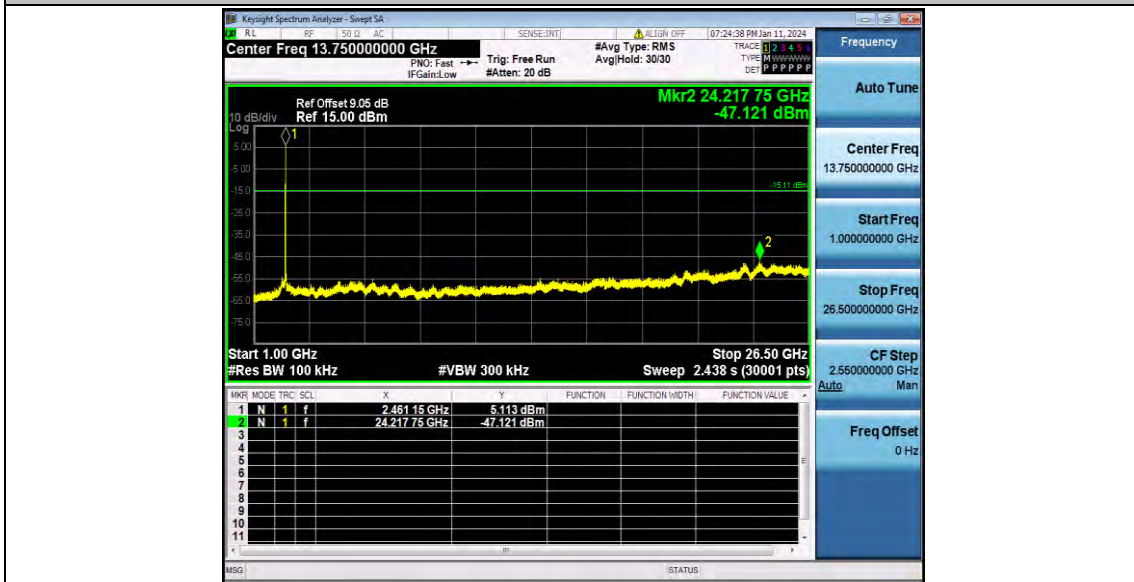
11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



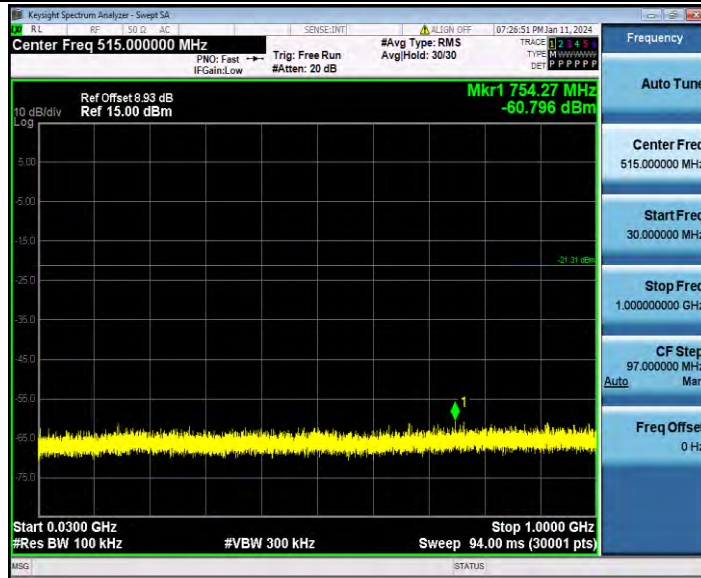
11B_Ant1_2462_1000~26500



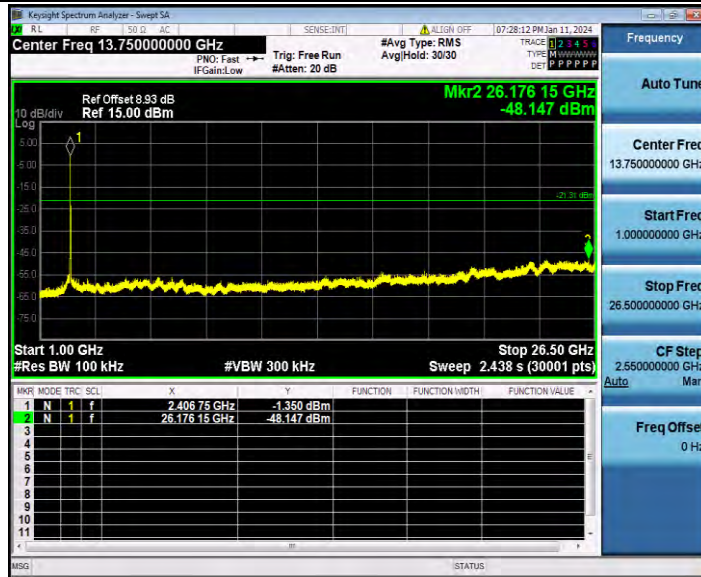
11G_Ant1_2412_0~Reference



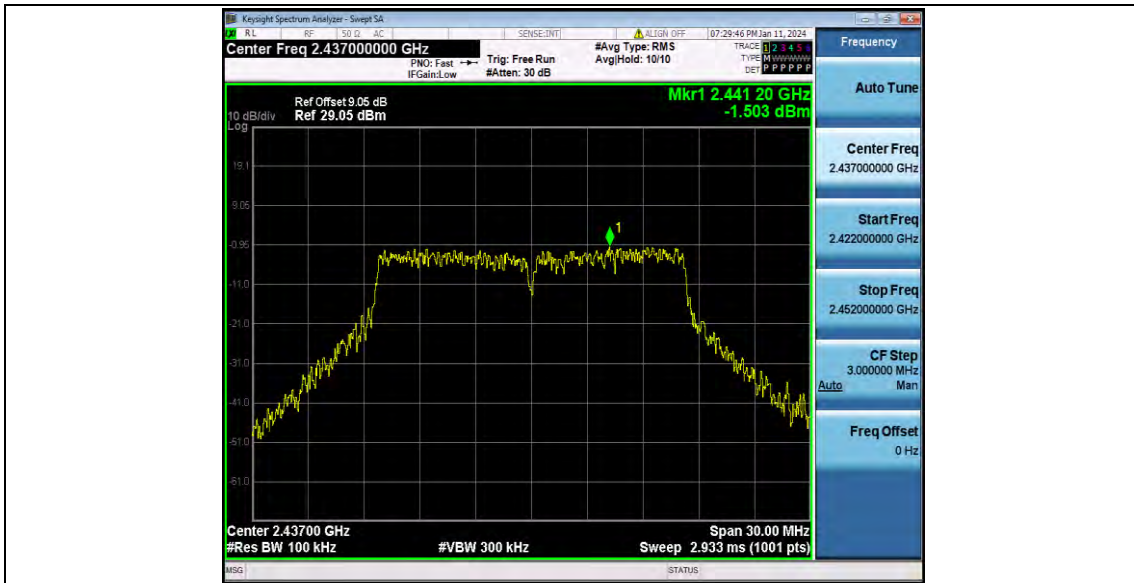
11G_Ant1_2412_30~1000



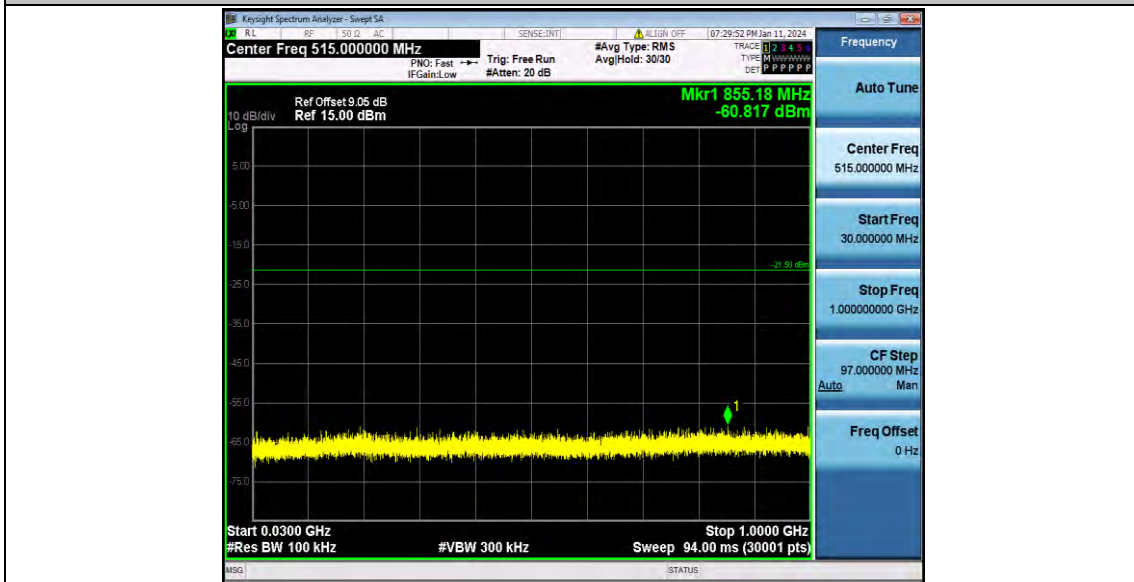
11G_Ant1_2412_1000~26500



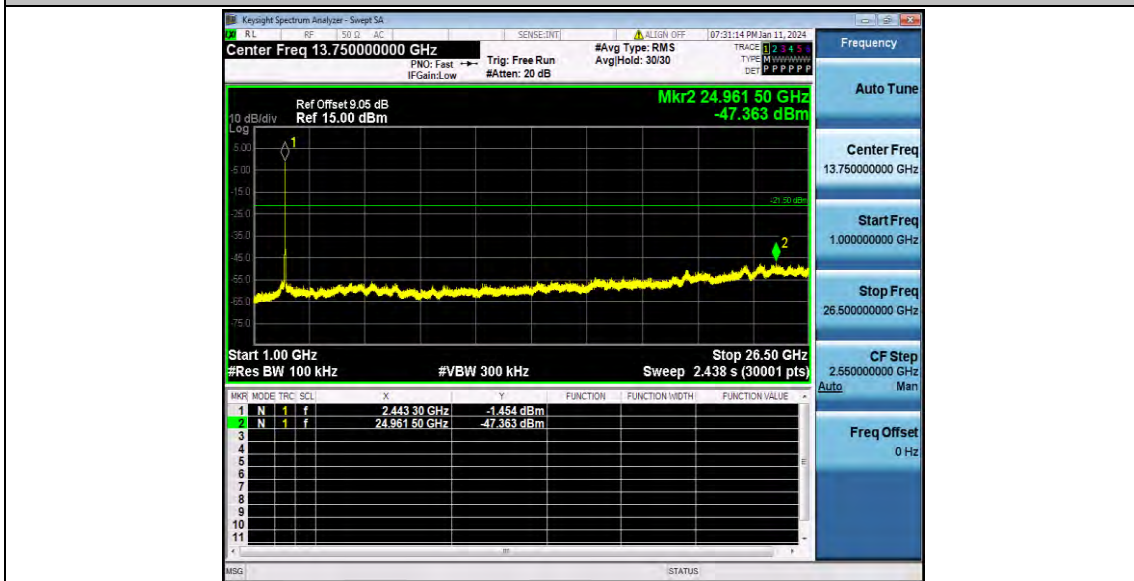
11G_Ant1_2437_0~Reference



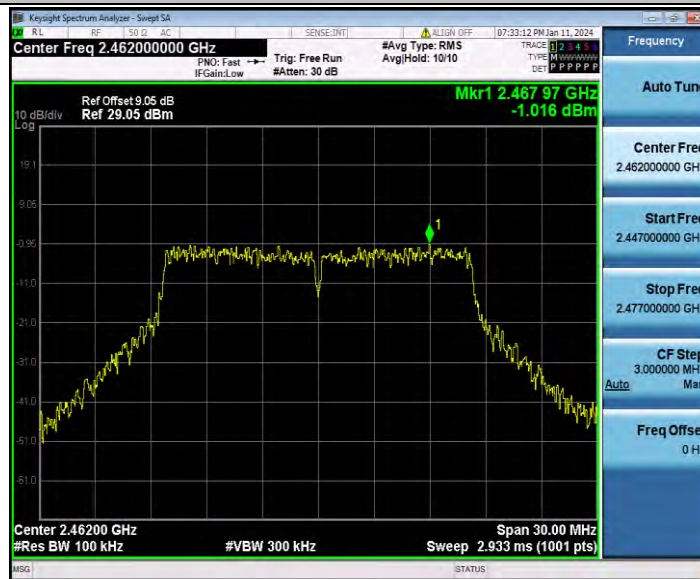
11G_Ant1_2437_30~1000



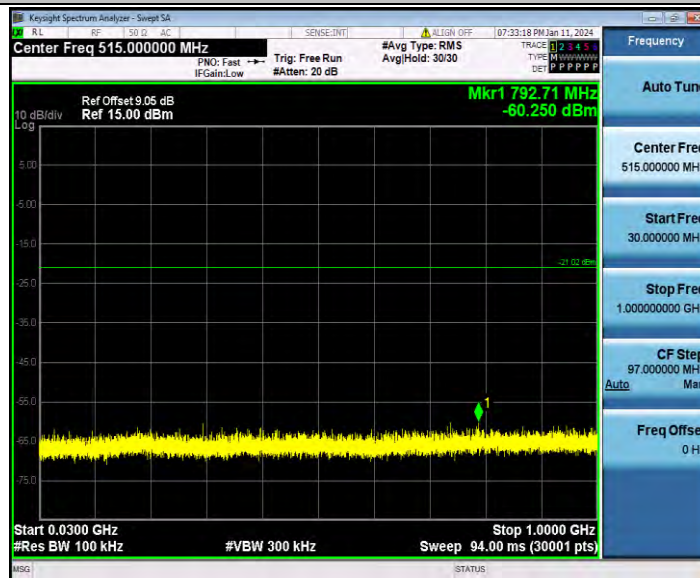
11G_Ant1_2437_1000~26500



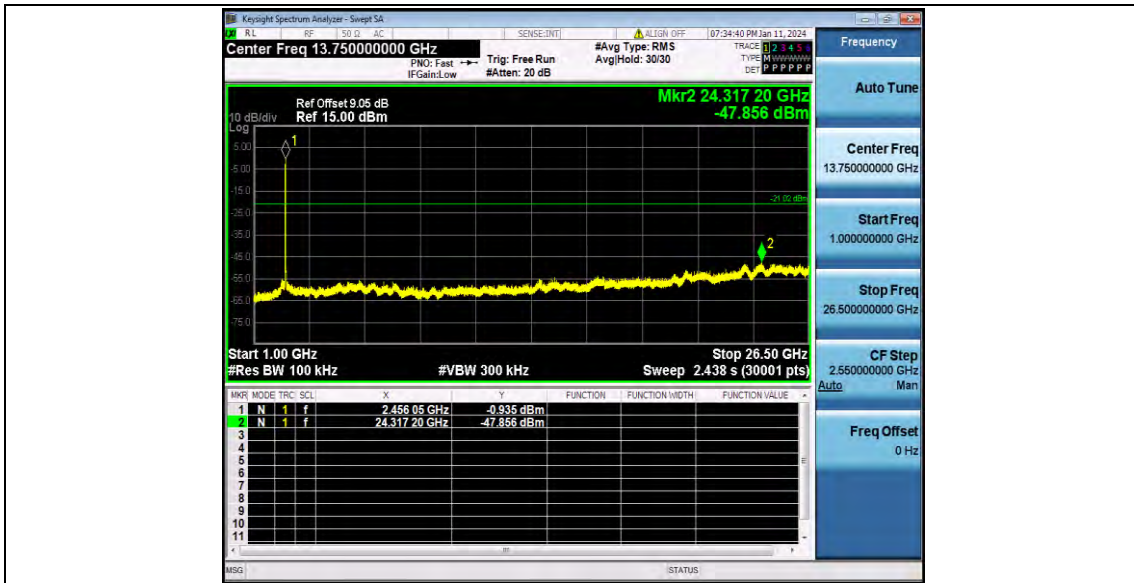
11G_Ant1_2462_0~Reference



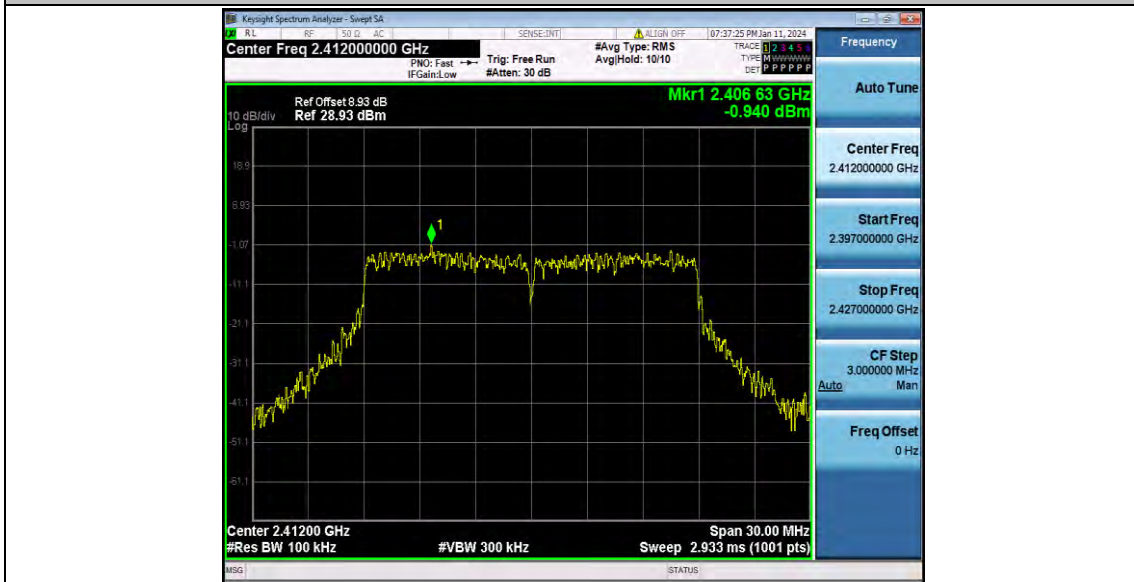
11G_Ant1_2462_30~1000



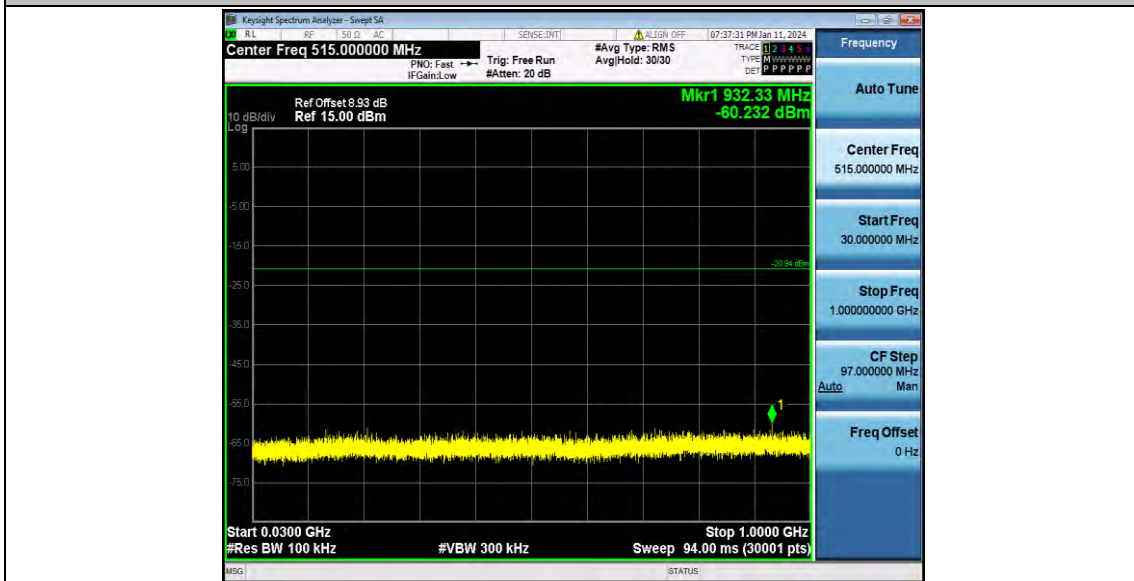
11G_Ant1_2462_1000~26500



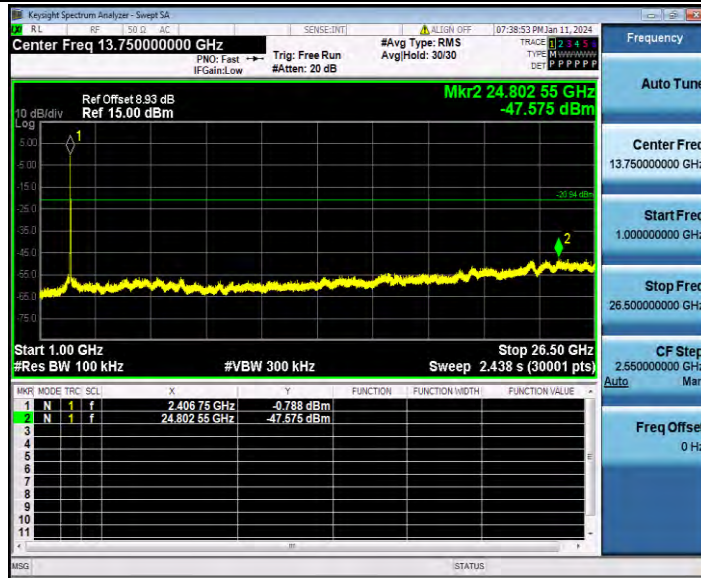
11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



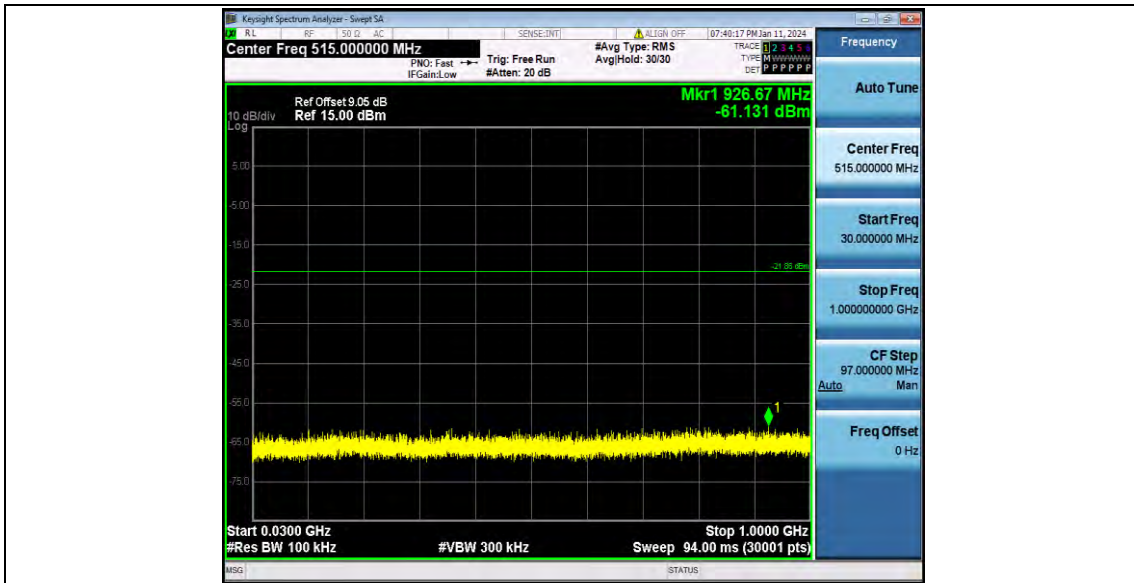
11N20SISO_Ant1_2412_1000~26500



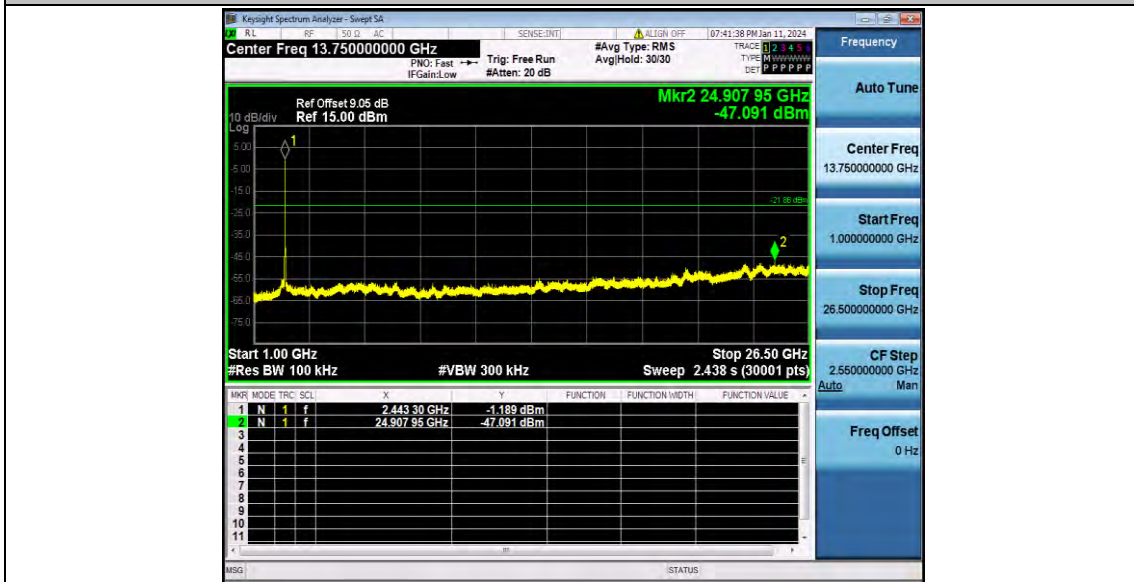
11N20SISO_Ant1_2437_0~Reference



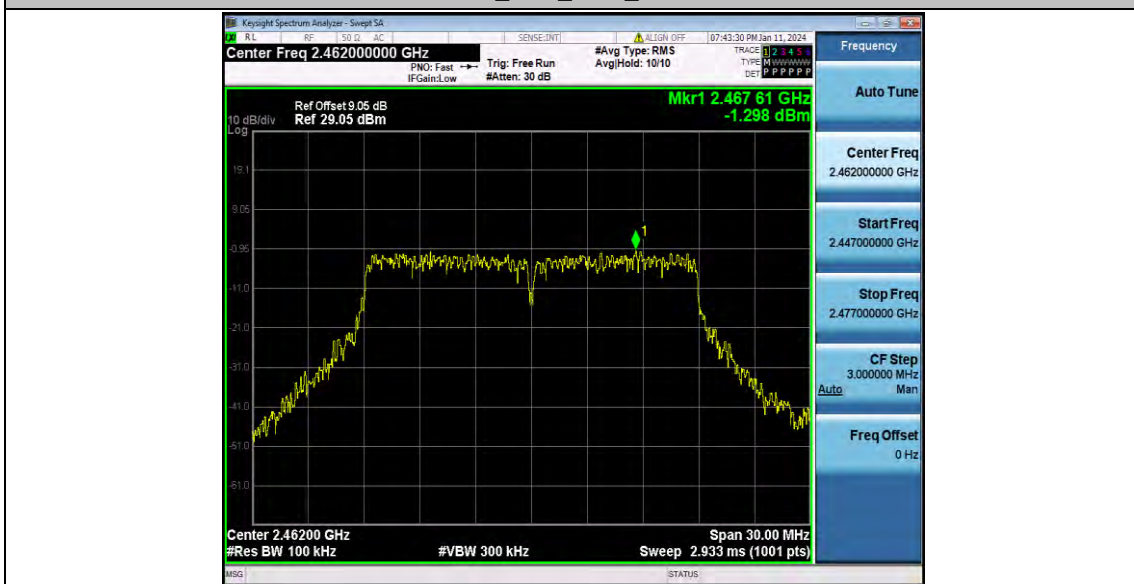
11N20SISO_Ant1_2437_30~1000



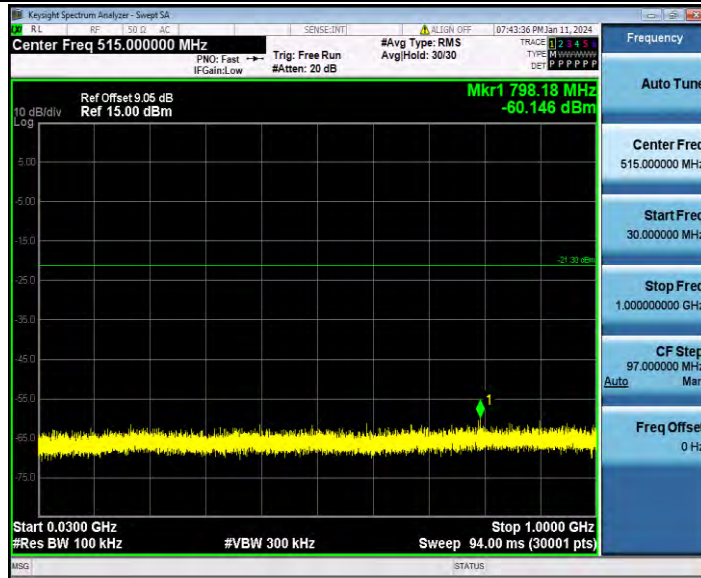
11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



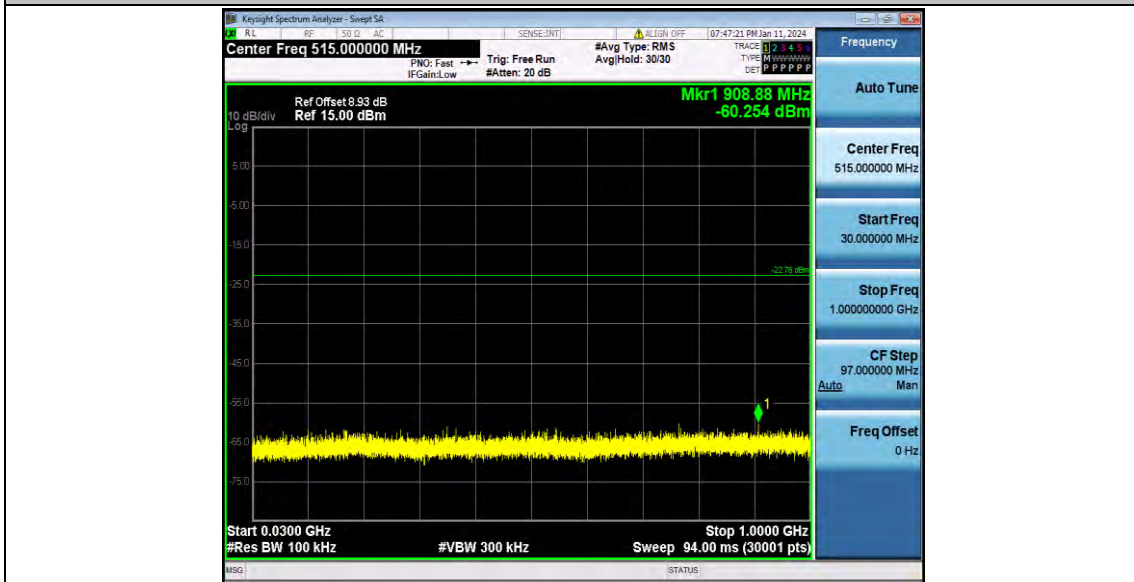
11N20SISO_Ant1_2462_1000~26500



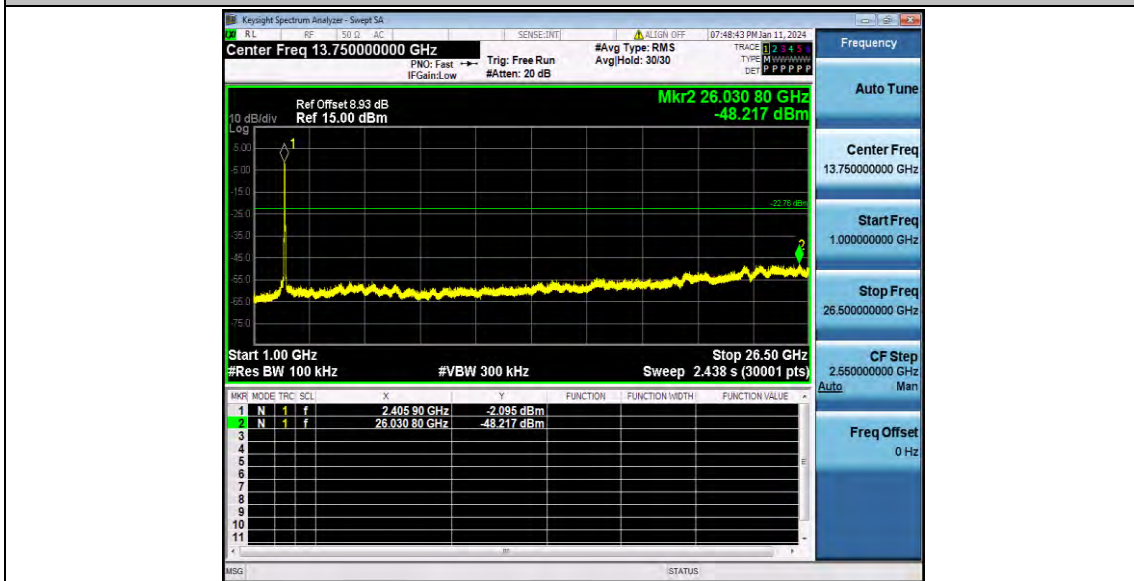
11N40SISO_Ant1_2422_0~Reference



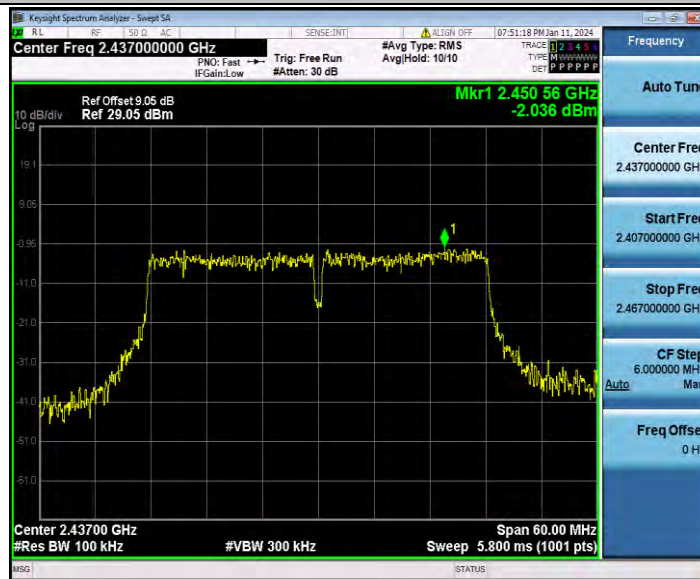
11N40SISO_Ant1_2422_30~1000



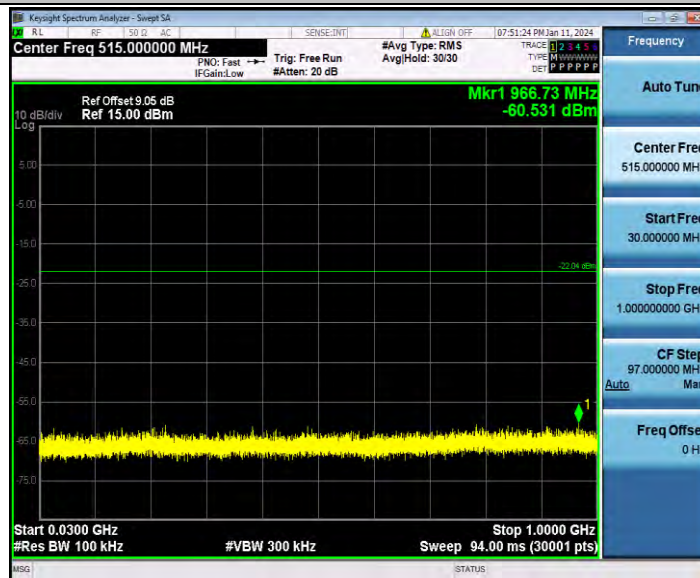
11N40SISO_Ant1_2422_1000~26500



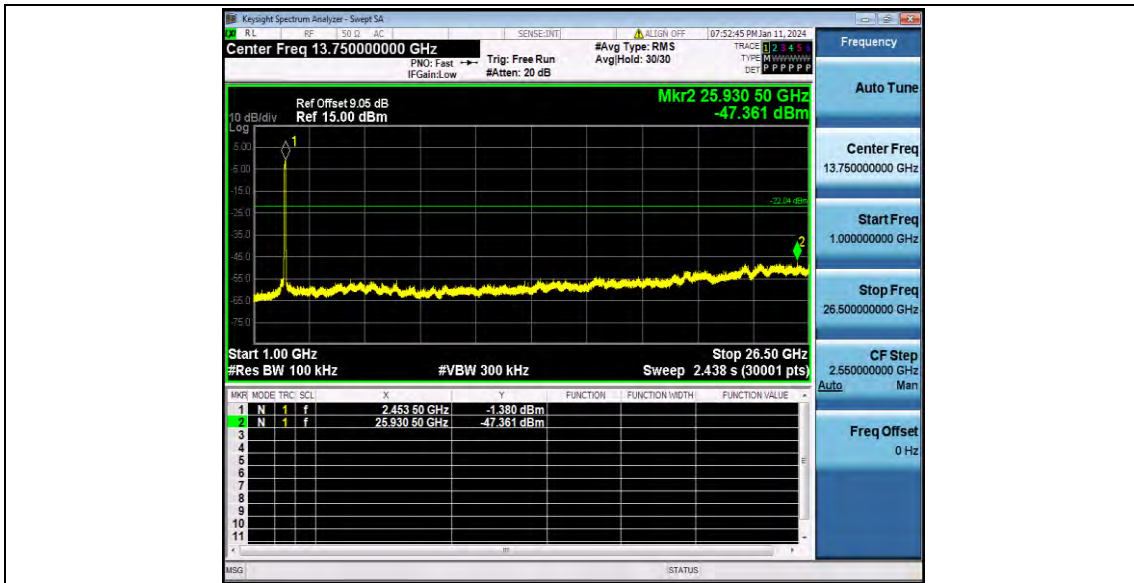
11N40SISO_Ant1_2437_0~Reference



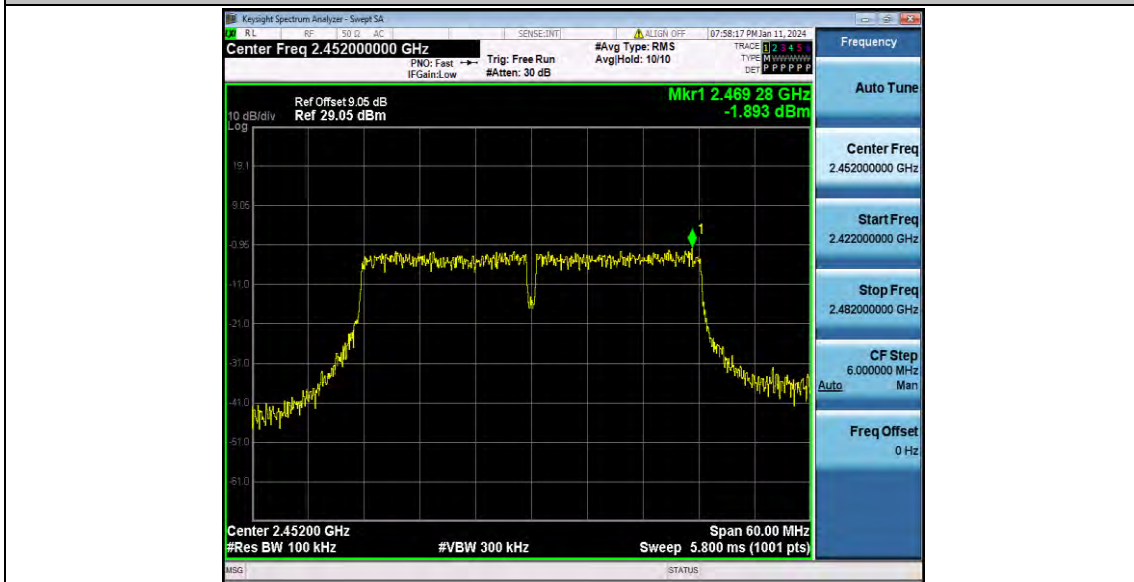
11N40SISO_Ant1_2437_30~1000



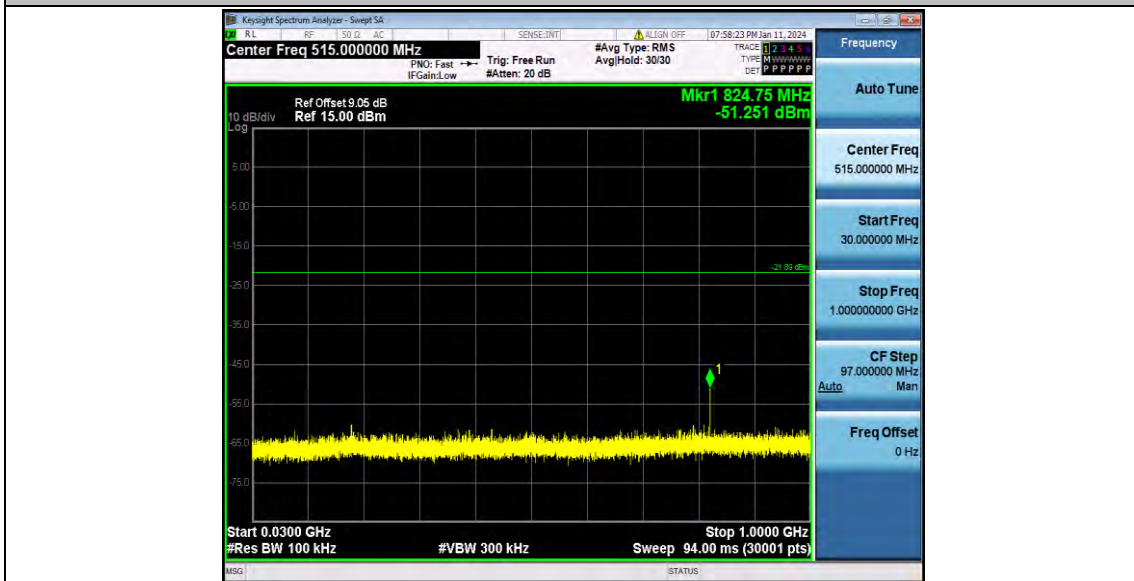
11N40SISO_Ant1_2437_1000~26500

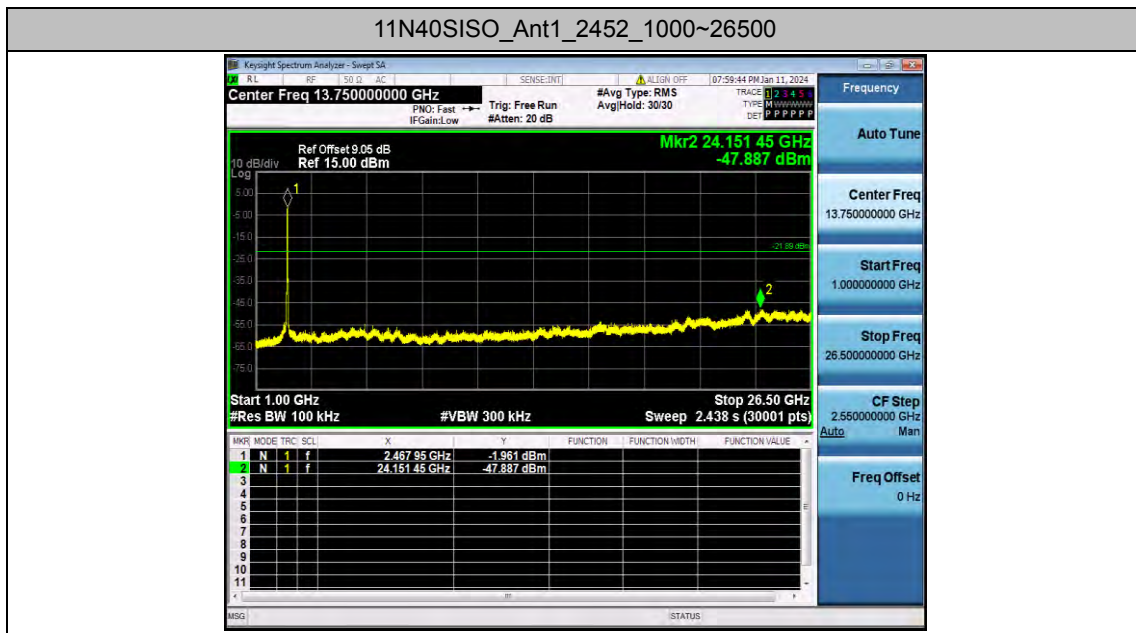


11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000





Appendix C.7: Emissions in Restricted Bands

Test Result

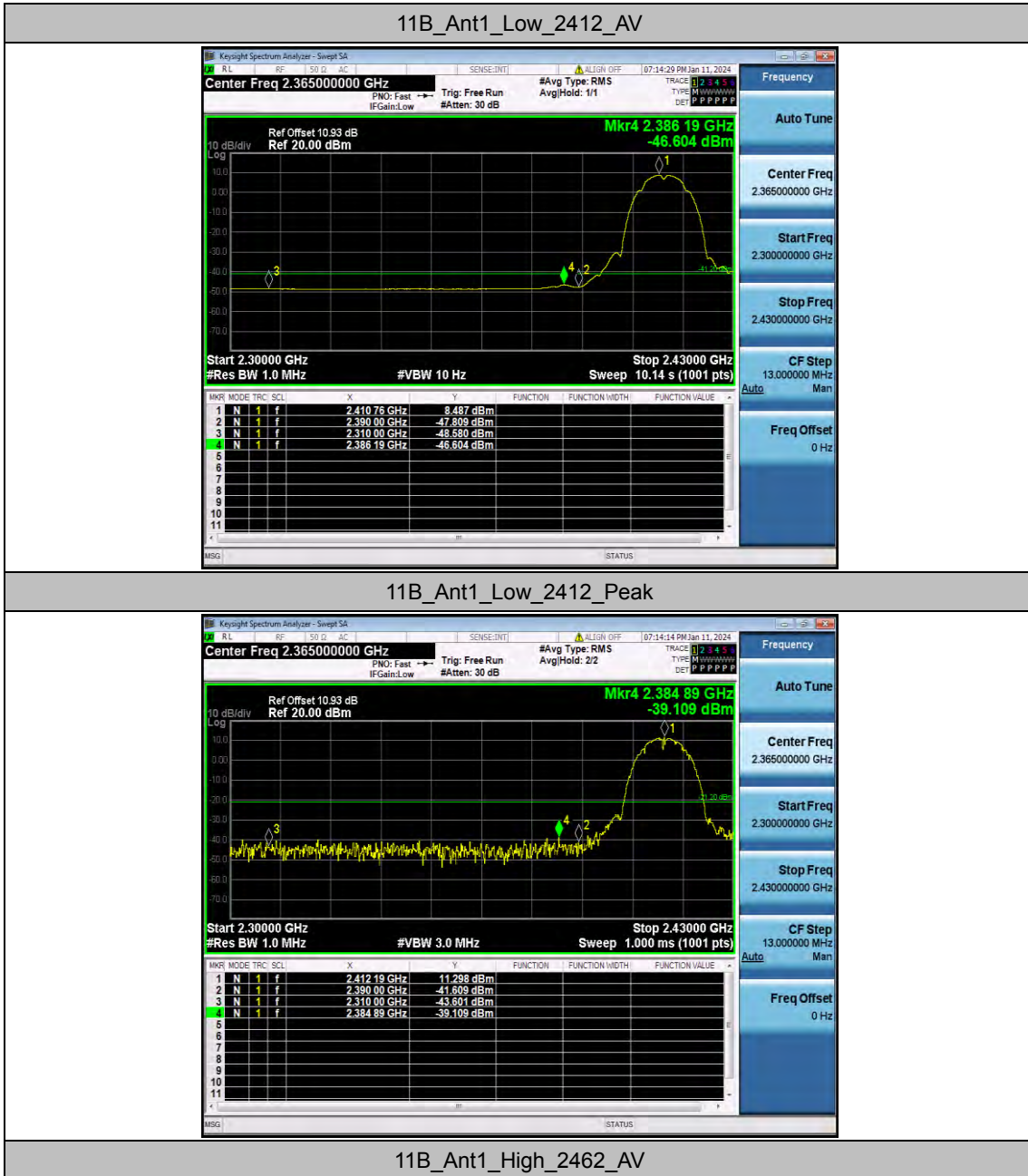
TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-48.58	≤-41.20	46.62	≤54	PASS
				AV	2386.190	-46.6	≤-41.20	48.60	≤54	PASS
				AV	2390.000	-47.81	≤-41.20	47.39	≤54	PASS
				Peak	2310.000	-43.6	≤-21.20	51.60	≤74	PASS
				Peak	2384.890	-39.11	≤-21.20	56.09	≤74	PASS
				Peak	2390.000	-41.61	≤-21.20	53.59	≤74	PASS
		High	2462	AV	2483.500	-47.8	≤-41.20	47.40	≤54	PASS
				AV	2487.850	-46.76	≤-41.20	48.44	≤54	PASS
				AV	2500.000	-48.45	≤-41.20	46.75	≤54	PASS
				Peak	2483.500	-45.1	≤-21.20	50.10	≤74	PASS
				Peak	2489.280	-39.44	≤-21.20	55.76	≤74	PASS
				Peak	2500.000	-45.24	≤-21.20	49.96	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-48.69	≤-41.20	46.51	≤54	PASS
				AV	2389.960	-44.97	≤-41.20	50.23	≤54	PASS
				AV	2390.000	-44.97	≤-41.20	50.23	≤54	PASS
				Peak	2310.000	-46.37	≤-21.20	48.83	≤74	PASS
				Peak	2385.020	-39.38	≤-21.20	55.82	≤74	PASS
				Peak	2390.000	-42.33	≤-21.20	52.87	≤74	PASS
		High	2462	AV	2483.500	-43.21	≤-41.20	51.99	≤54	PASS
				AV	2483.560	-43.36	≤-41.20	51.84	≤54	PASS
				AV	2500.000	-48.43	≤-41.20	46.77	≤54	PASS
				Peak	2483.500	-40.37	≤-21.20	54.83	≤74	PASS
				Peak	2484.220	-38.68	≤-21.20	56.52	≤74	PASS
				Peak	2500.000	-49.53	≤-21.20	45.67	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-48.67	≤-41.20	46.53	≤54	PASS
				AV	2389.960	-44.22	≤-41.20	50.98	≤54	PASS
				AV	2390.000	-44.22	≤-41.20	50.98	≤54	PASS
				Peak	2310.000	-48.58	≤-21.20	46.62	≤74	PASS
				Peak	2389.180	-37.66	≤-21.20	57.54	≤74	PASS
				Peak	2390.000	-40.7	≤-21.20	54.50	≤74	PASS
		High	2462	AV	2483.500	-41.95	≤-41.20	53.25	≤54	PASS
				AV	2483.560	-42.03	≤-41.20	53.17	≤54	PASS
				AV	2500.000	-48.42	≤-41.20	46.78	≤54	PASS
				Peak	2483.500	-38.1	≤-21.20	57.10	≤74	PASS
				Peak	2484.660	-33.03	≤-21.20	62.17	≤74	PASS
				Peak	2484.660	-33.03	≤-21.20	62.17	≤74	PASS

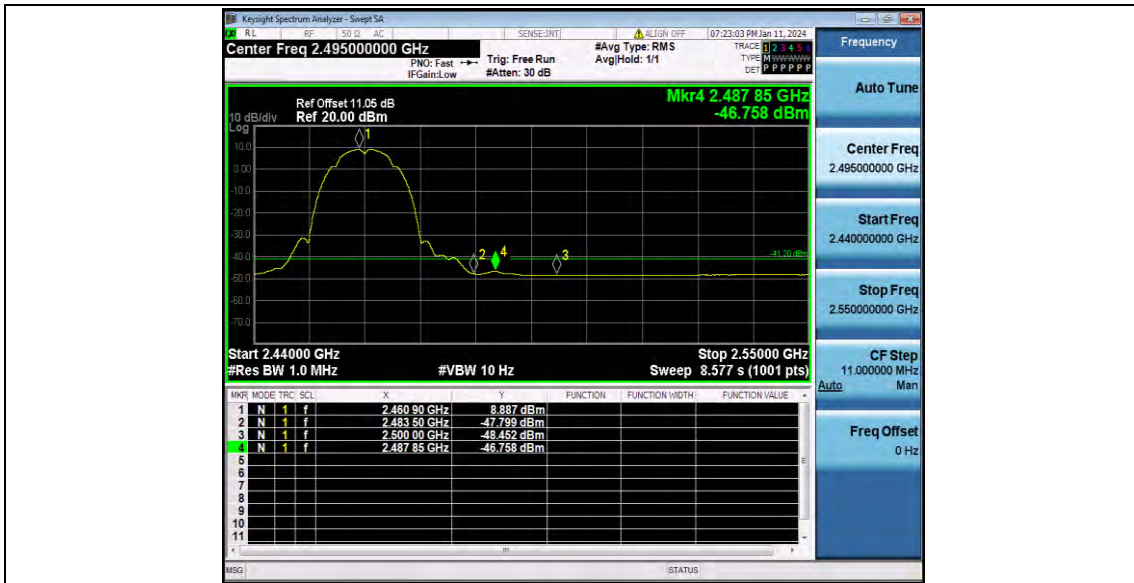
				Peak	2500.000	-42.46	≤ -21.20	52.74	≤ 74	PASS
11N40SIS O	Ant1	Low	2422	AV	2310.000	-49.36	≤ -41.20	45.84	≤ 54	PASS
				AV	2389.960	-48.52	≤ -41.20	46.68	≤ 54	PASS
				AV	2390.000	-48.52	≤ -41.20	46.68	≤ 54	PASS
				Peak	2310.000	-47.45	≤ -21.20	47.75	≤ 74	PASS
				Peak	2373.320	-38.81	≤ -21.20	56.39	≤ 74	PASS
				Peak	2390.000	-45.8	≤ -21.20	49.40	≤ 74	PASS
		High	2452	AV	2483.500	-45.64	≤ -41.20	49.56	≤ 54	PASS
				AV	2483.560	-45.65	≤ -41.20	49.55	≤ 54	PASS
				AV	2500.000	-48.4	≤ -41.20	46.80	≤ 54	PASS
				Peak	2483.500	-41.47	≤ -21.20	53.73	≤ 74	PASS
				Peak	2484.330	-37.52	≤ -21.20	57.68	≤ 74	PASS
				Peak	2500.000	-48.31	≤ -21.20	46.89	≤ 74	PASS

Note:

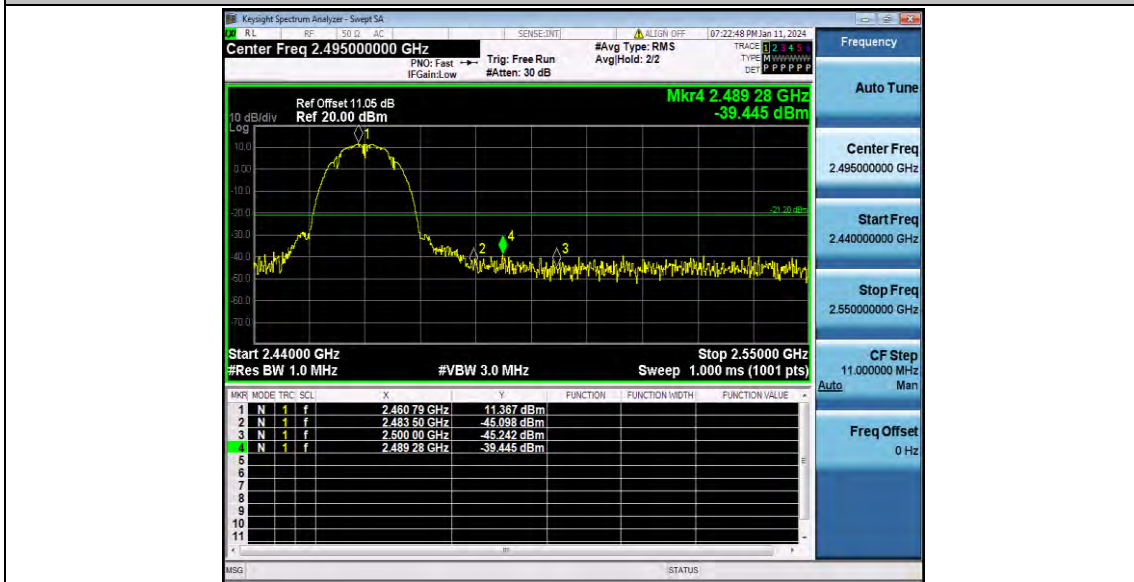
2. The Antenna Gain is compensated in the graph.
3. The Duty Cycle Factor and RBW Factor is compensated in the graph.
4. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs





11B_Ant1_High_2462_Peak



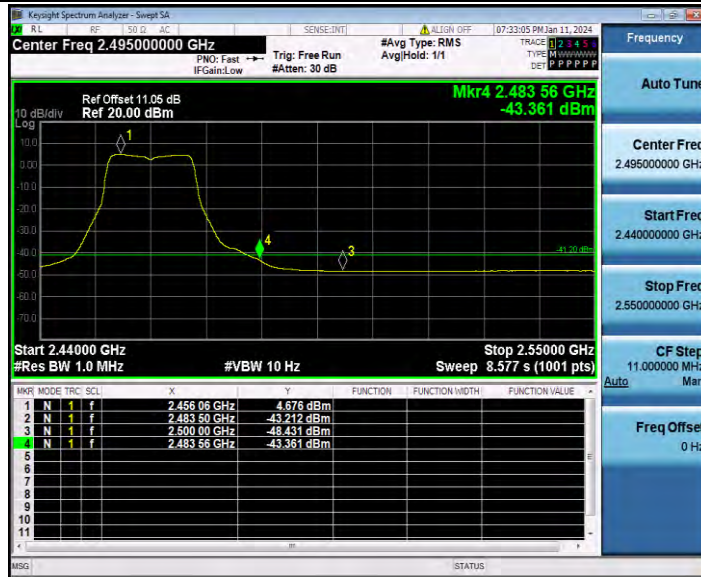
11G_Ant1_Low_2412_AV



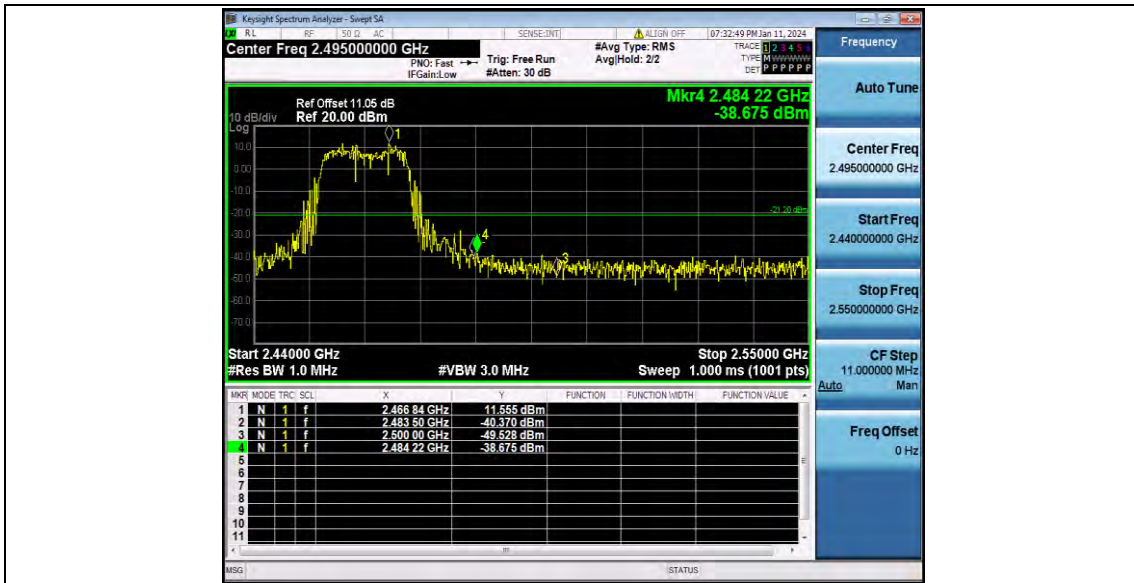
11G_Ant1_Low_2412_Peak



11G_Ant1_High_2462_AV



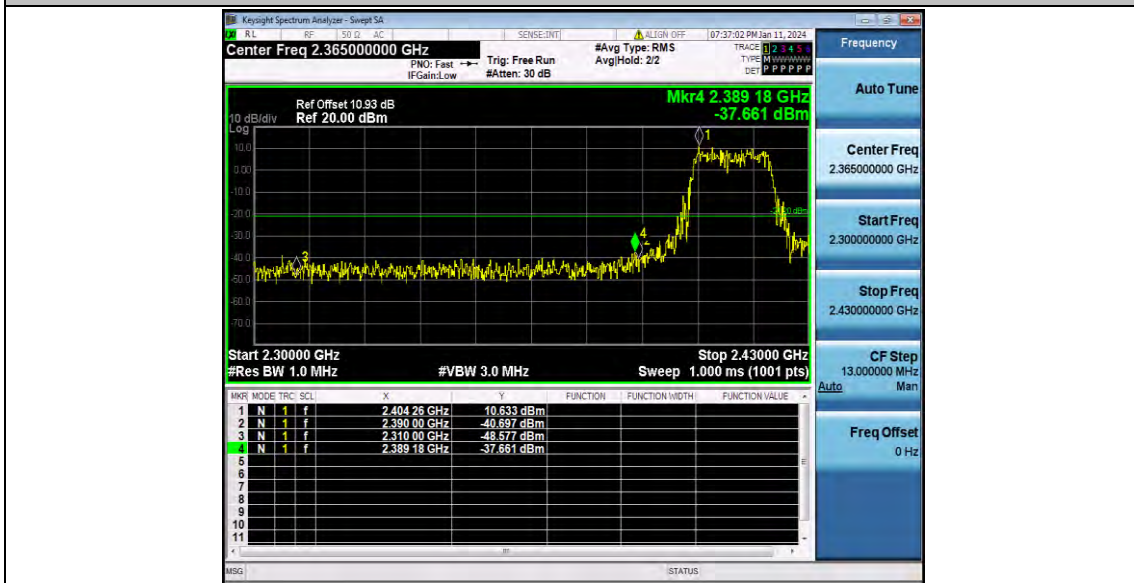
11G_Ant1_High_2462_Peak



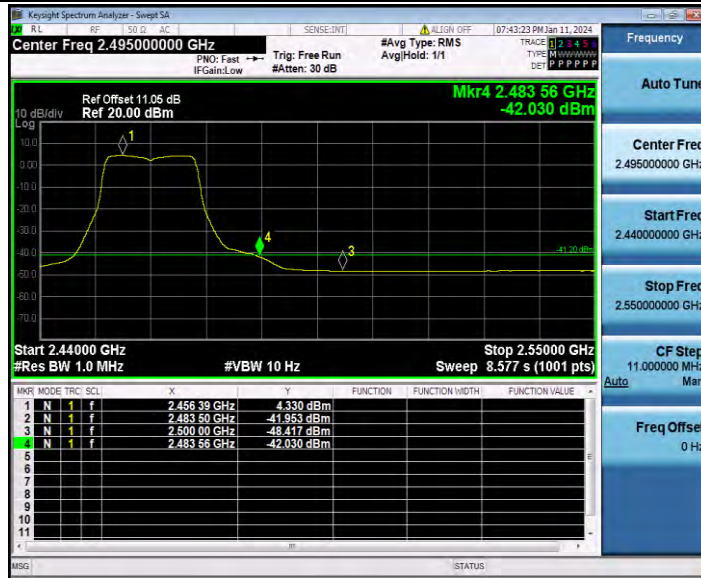
11N20SISO_Ant1_Low_2412_AV



11N20SISO_Ant1_Low_2412_Peak



11N20SISO_Ant1_High_2462_AV



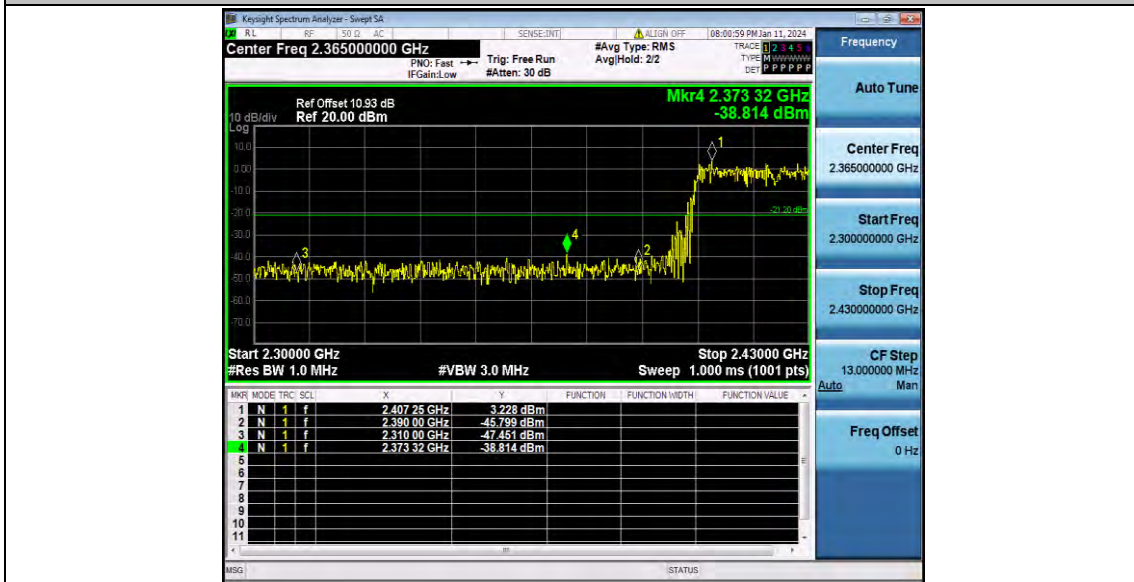
11N20SISO_Ant1_High_2462_Peak



11N40SISO_Ant1_Low_2422_AV



11N40SISO_Ant1_Low_2422_Peak



11N40SISO_Ant1_High_2452_AV



