

Case No. : <u>GTS20240102003-1-3</u>
Ambient Condition: <u>23</u> °C, <u>48</u> %RH,
Test Date: <u>2024.1.5</u> Test Engineer: <u>Evan ouyang</u>

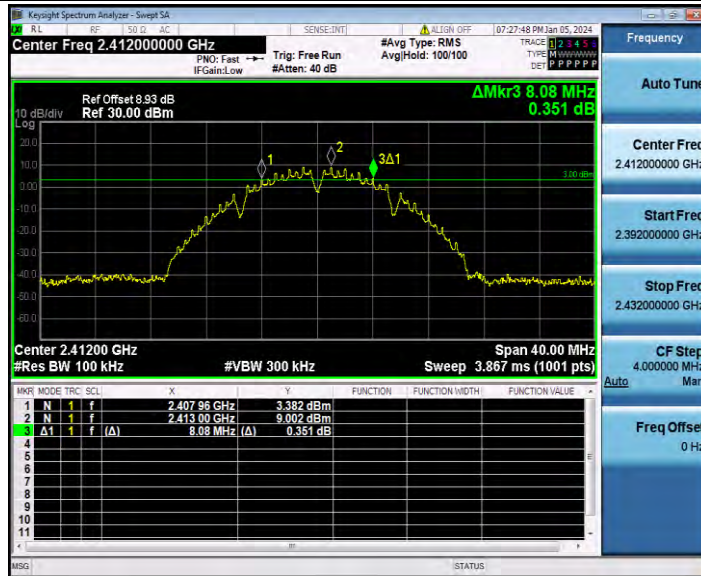
Appendix C.1: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.080	2407.960	2416.040	0.5	PASS
		2437	8.080	2432.960	2441.040	0.5	PASS
		2462	7.120	2458.440	2465.560	0.5	PASS
11G	Ant1	2412	15.080	2404.480	2419.560	0.5	PASS
		2437	14.200	2429.440	2443.640	0.5	PASS
		2462	13.760	2455.120	2468.880	0.5	PASS
11N20SISO	Ant1	2412	12.200	2405.720	2417.920	0.5	PASS
		2437	14.440	2430.120	2444.560	0.5	PASS
		2462	15.000	2454.520	2469.520	0.5	PASS
11N40SISO	Ant1	2422	32.560	2406.960	2439.520	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



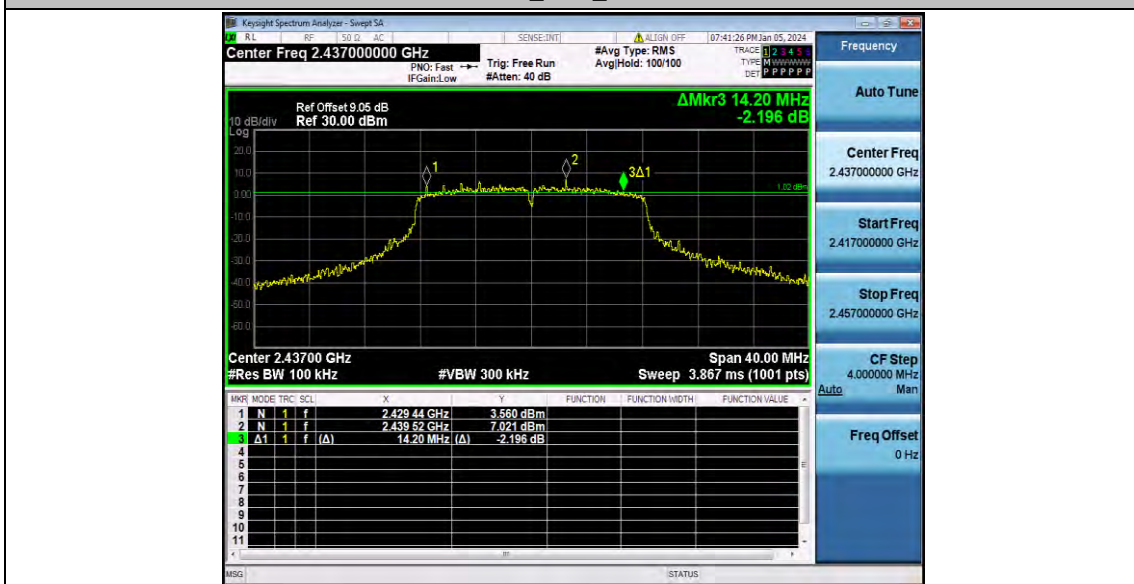
11B_Ant1_2462



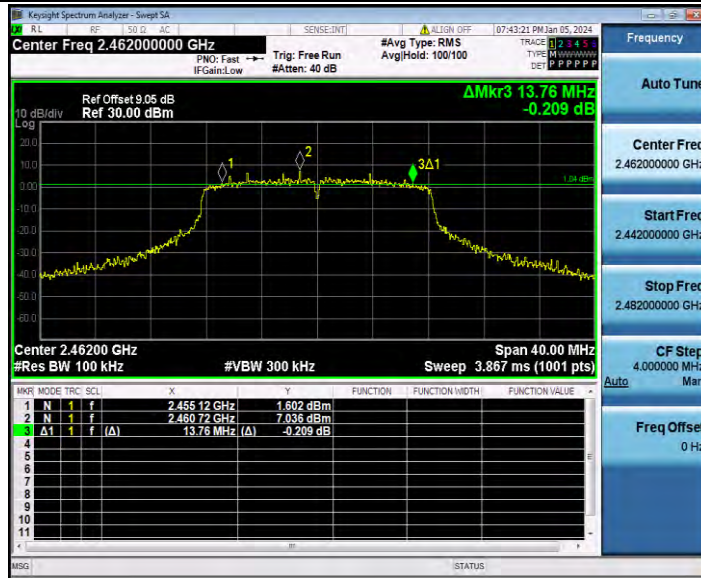
11G_Ant1_2412



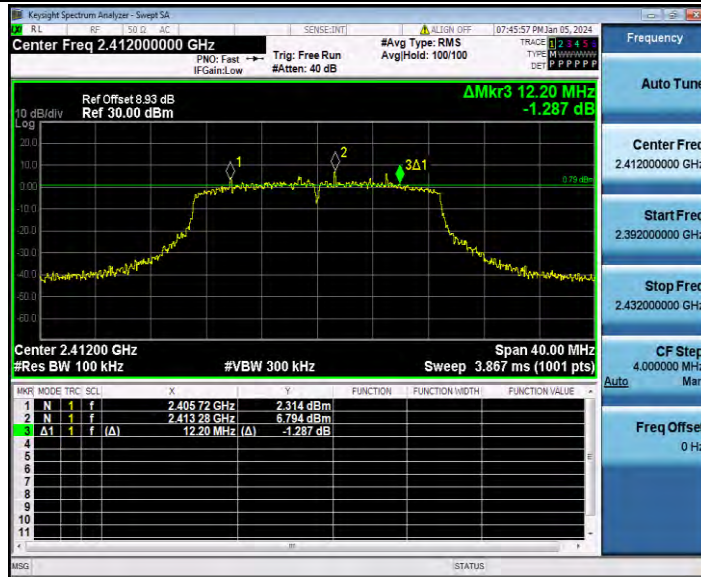
11G_Ant1_2437



11G_Ant1_2462



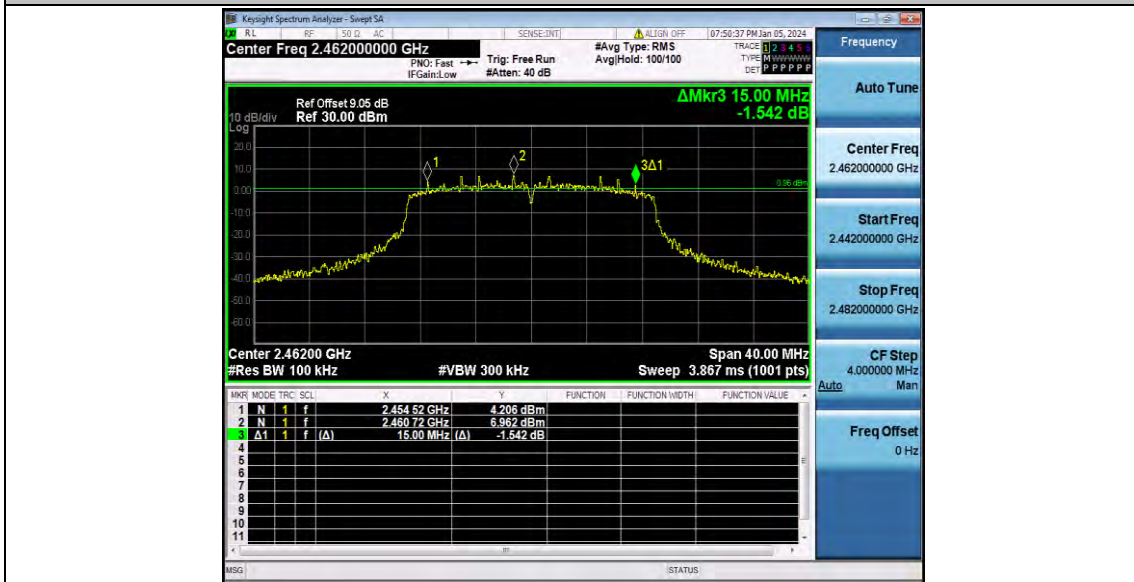
11N20SISO_Ant1_2412



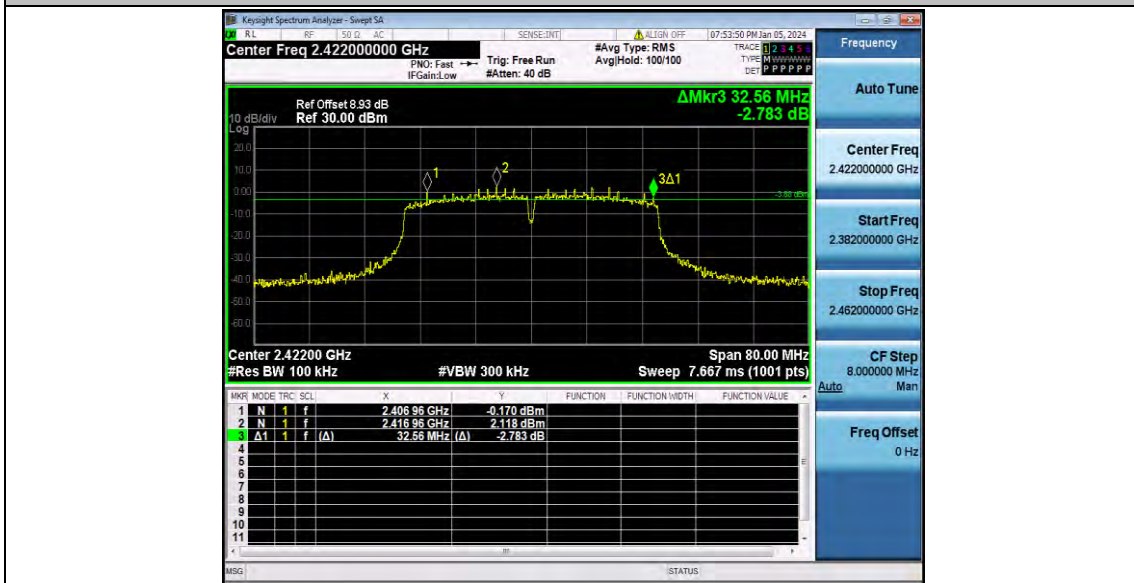
11N20SISO_Ant1_2437



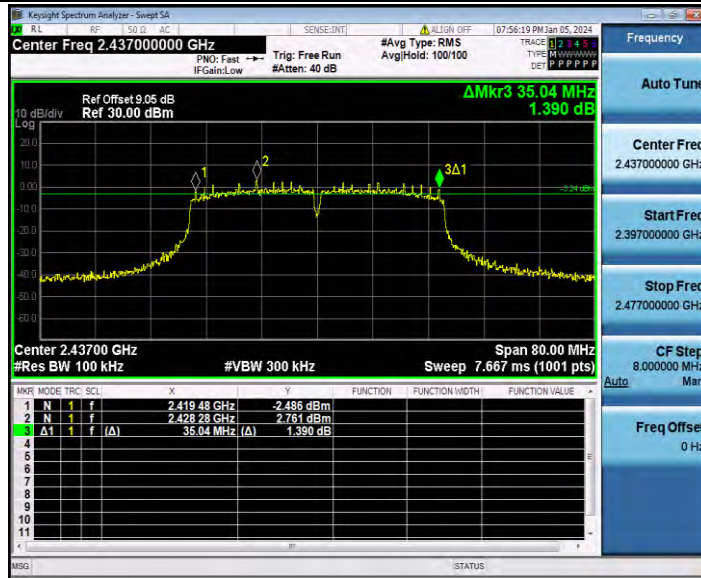
11N20SISO_Ant1_2462



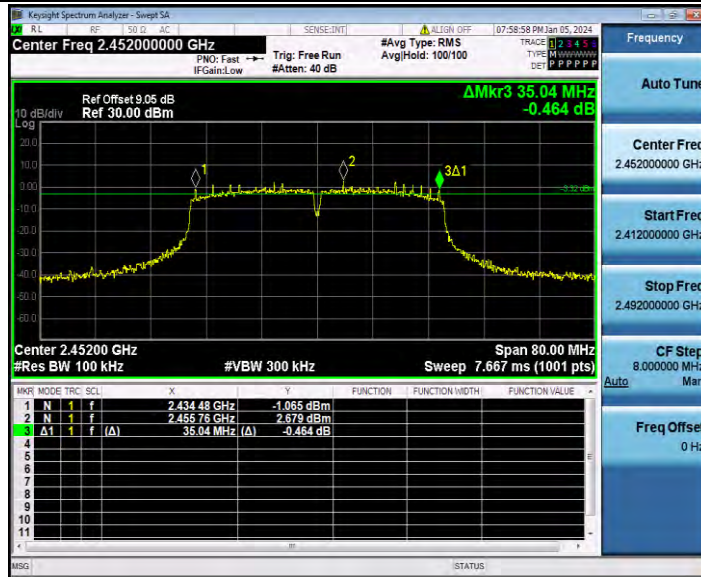
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

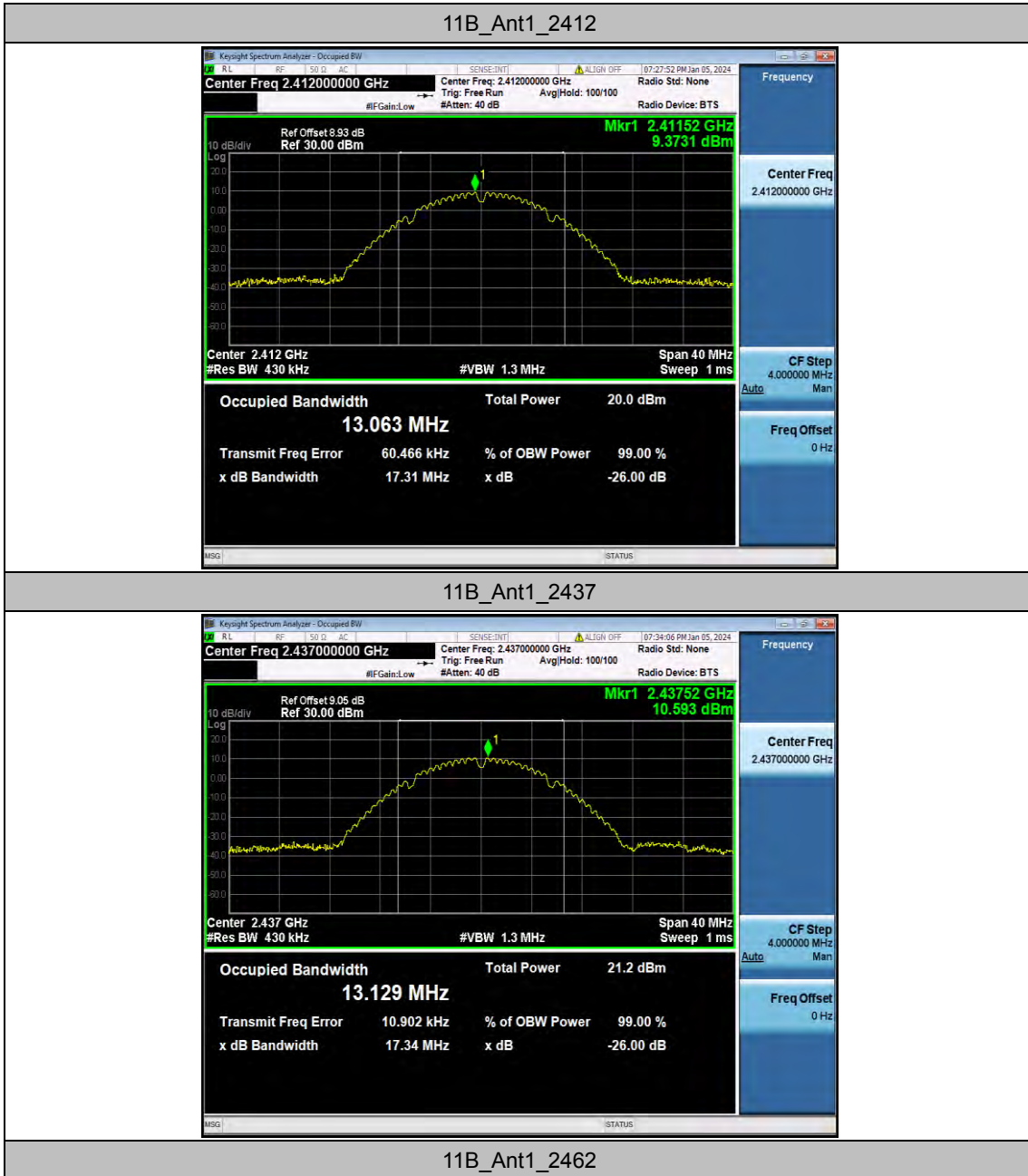


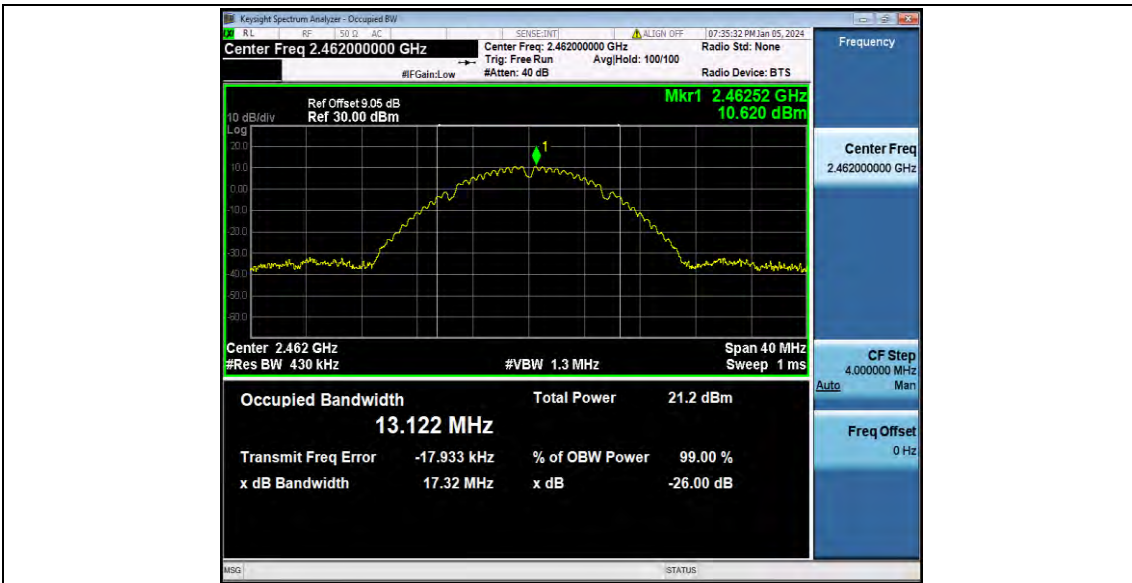
Appendix C.2: Occupied Channel Bandwidth

Test Result

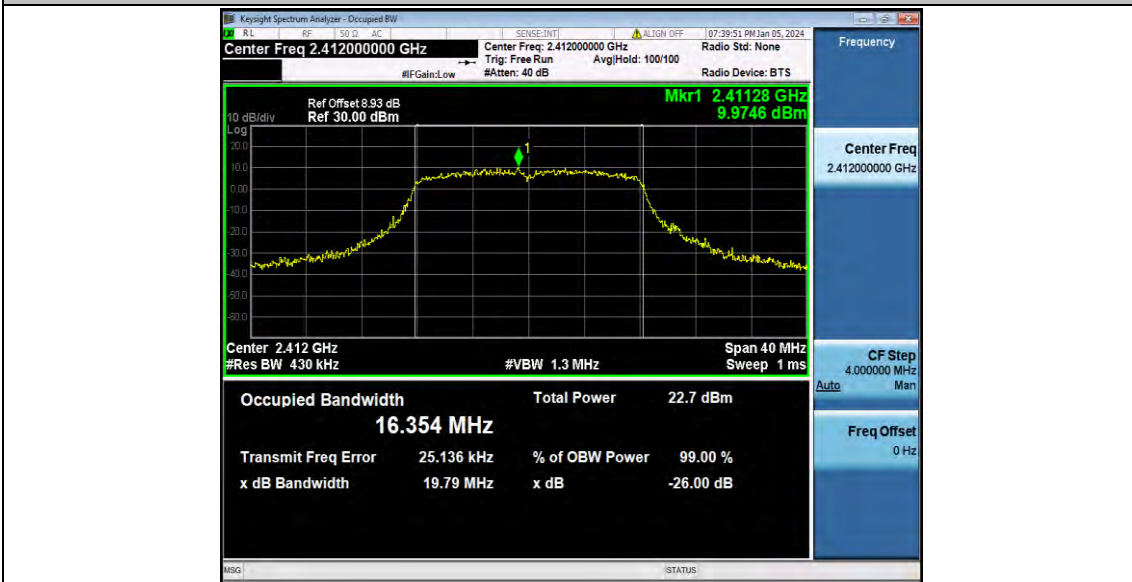
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.063	2405.5290	2418.5920	---	---
		2437	13.129	2430.4464	2443.5754	---	---
		2462	13.122	2455.4211	2468.5431	---	---
11G	Ant1	2412	16.354	2403.8481	2420.2021	---	---
		2437	16.402	2428.7966	2445.1986	---	---
		2462	16.394	2453.7968	2470.1908	---	---
11N20SISO	Ant1	2412	17.510	2403.2700	2420.7800	---	---
		2437	17.526	2428.2376	2445.7636	---	---
		2462	17.491	2453.2398	2470.7308	---	---
11N40SISO	Ant1	2422	35.955	2404.1340	2440.0890	---	---
		2437	35.874	2419.1264	2455.0004	---	---
		2452	35.859	2434.1053	2469.9643	---	---

Test Graphs





11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



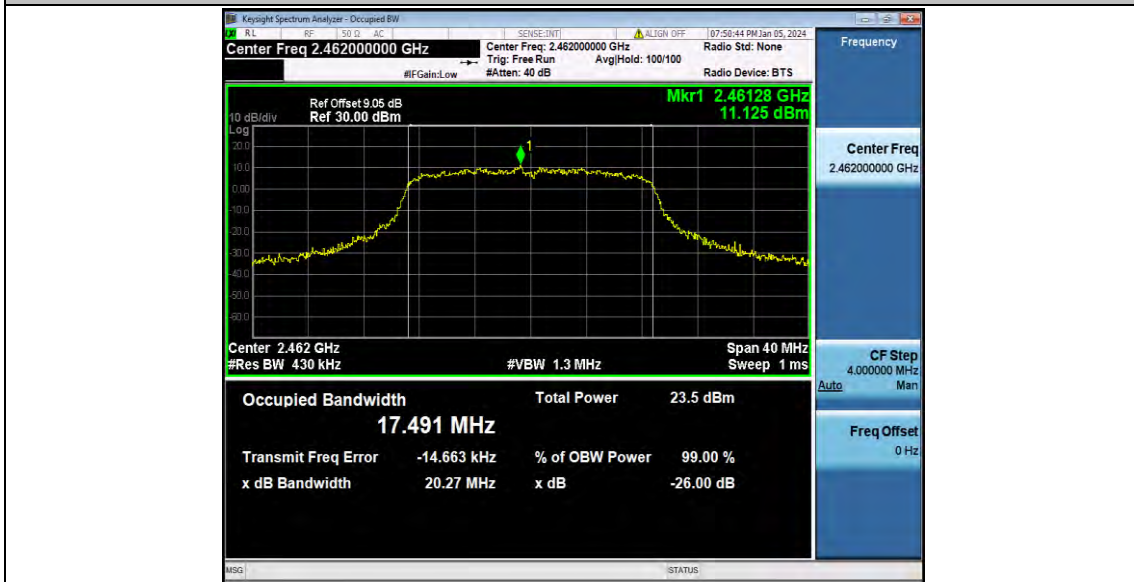
11N20SISO_Ant1_2412



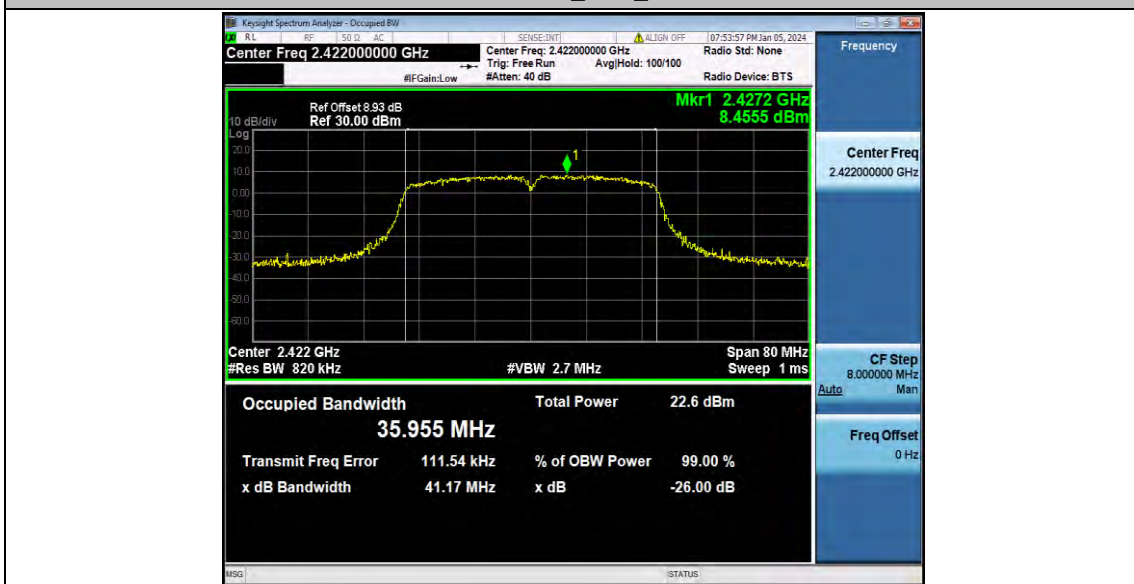
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C.3: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Peak Power[dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	20.08	≤30.00	PASS
		2437	21.25	≤30.00	PASS
		2462	21.28	≤30.00	PASS
11G	Ant1	2412	23.62	≤30.00	PASS
		2437	24.51	≤30.00	PASS
		2462	24.60	≤30.00	PASS
11N20SISO	Ant1	2412	23.62	≤30.00	PASS
		2437	24.41	≤30.00	PASS
		2462	24.39	≤30.00	PASS
11N40SISO	Ant1	2422	22.85	≤30.00	PASS
		2437	23.44	≤30.00	PASS
		2452	23.30	≤30.00	PASS

Appendix C.4: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-8.49	≤8.00	PASS
		2437	-8.07	≤8.00	PASS
		2462	-7.08	≤8.00	PASS
11G	Ant1	2412	-11.47	≤8.00	PASS
		2437	-10.23	≤8.00	PASS
		2462	-9.84	≤8.00	PASS
11N20SISO	Ant1	2412	-11.24	≤8.00	PASS
		2437	-9.58	≤8.00	PASS
		2462	-9.37	≤8.00	PASS
11N40SISO	Ant1	2422	-14.02	≤8.00	PASS
		2437	-14.15	≤8.00	PASS
		2452	-11.81	≤8.00	PASS

Test Graphs

11B_Ant1_2412



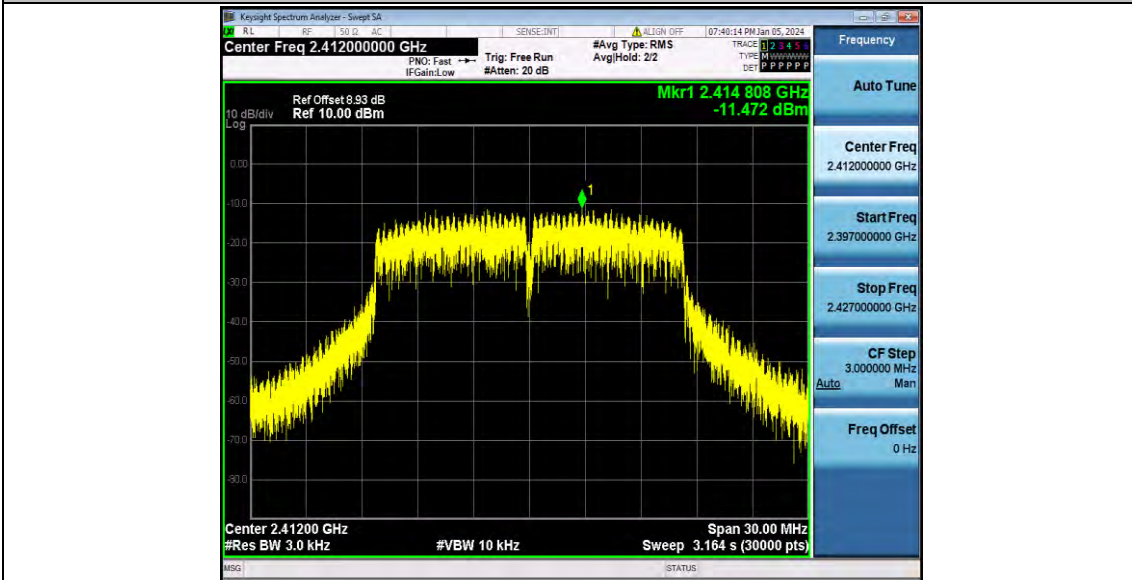
11B_Ant1_2437



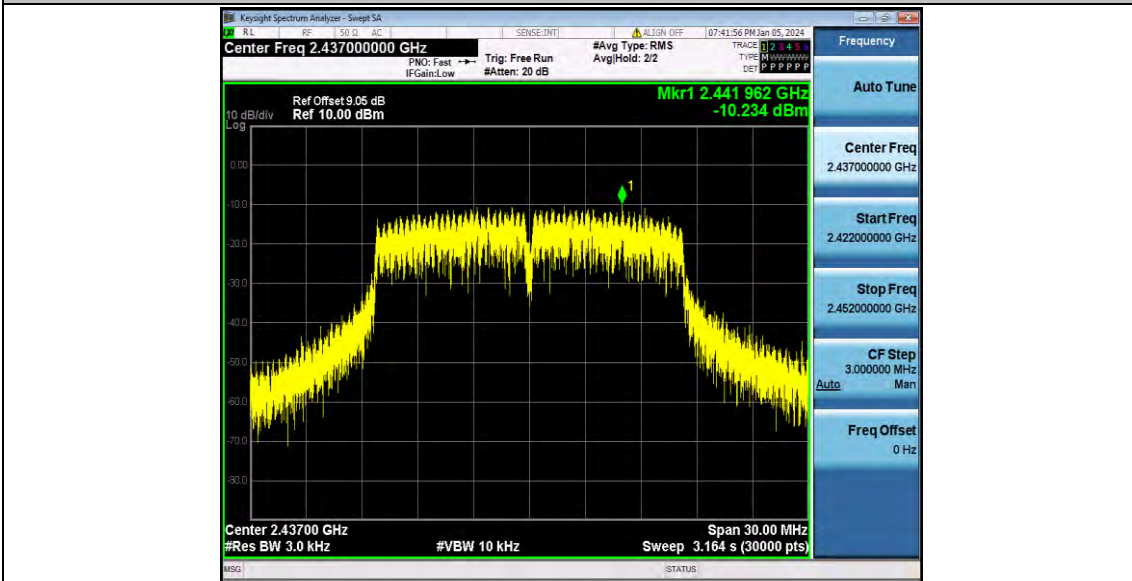
11B_Ant1_2462



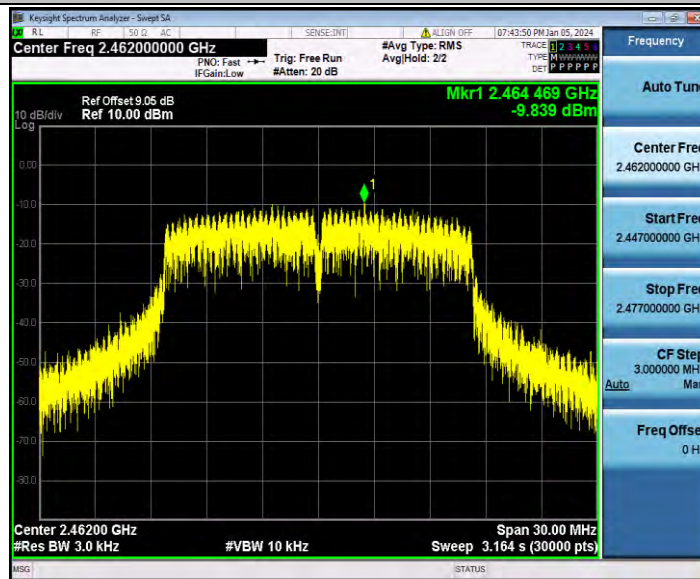
11G_Ant1_2412



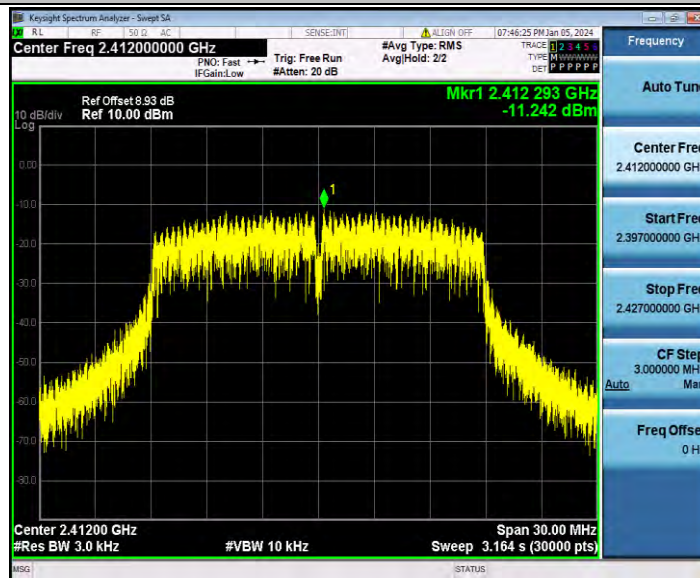
11G_Ant1_2437



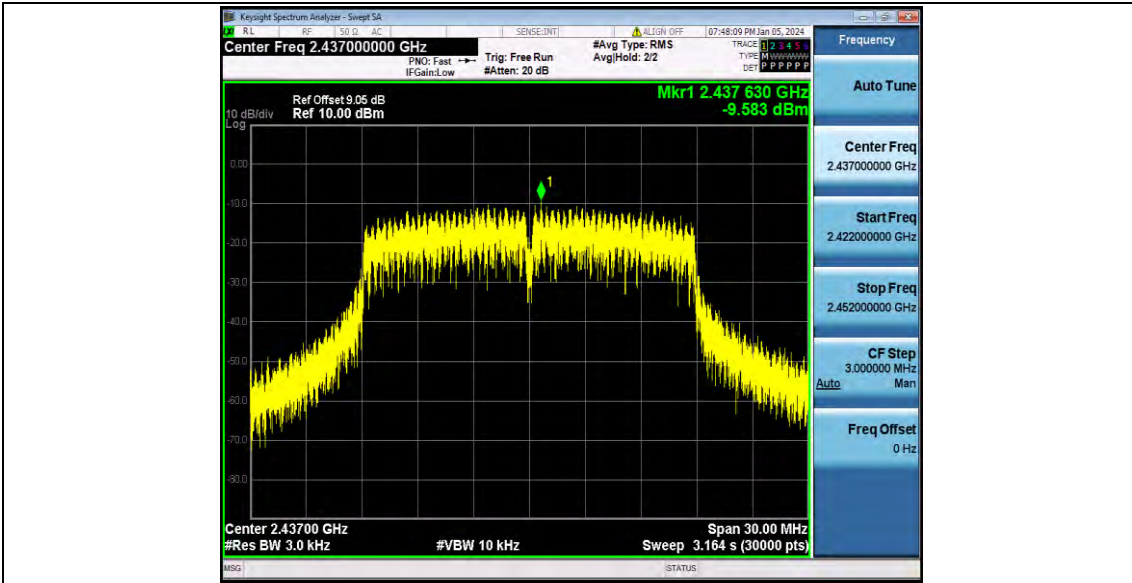
11G_Ant1_2462



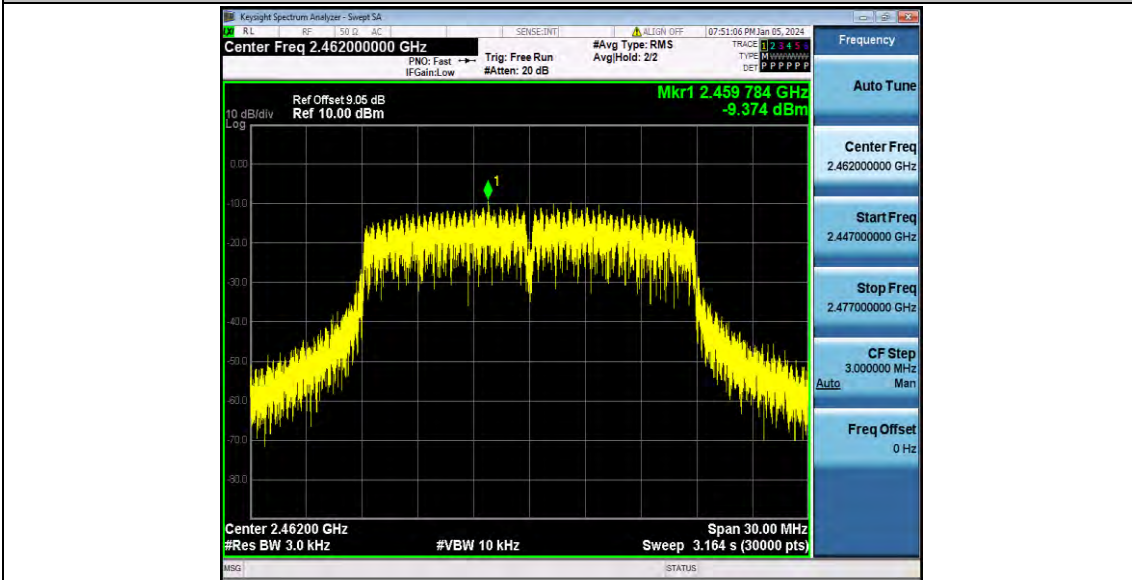
11N20SISO_Ant1_2412



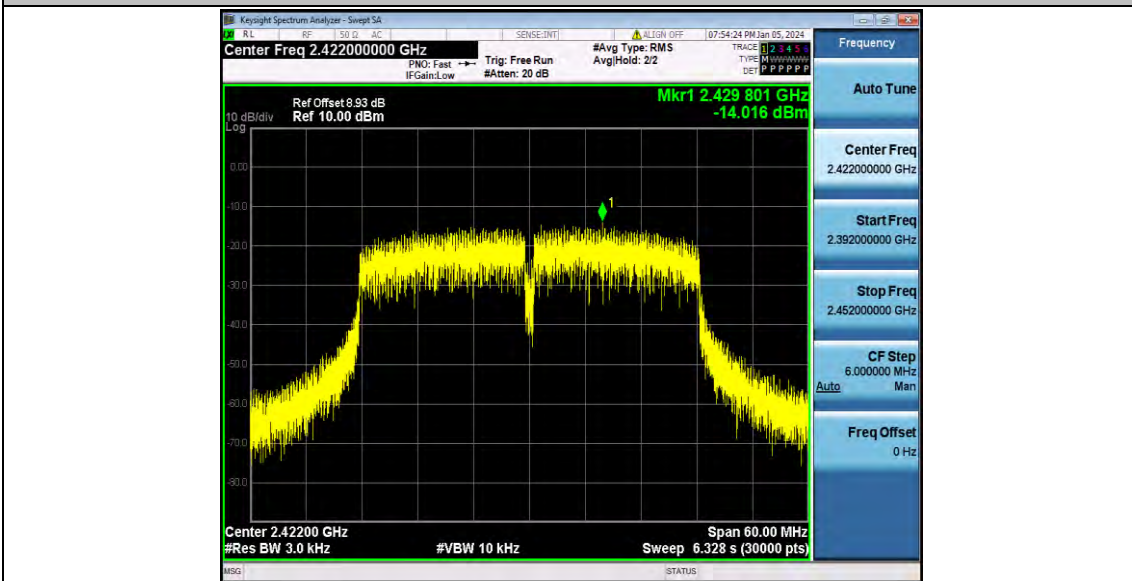
11N20SISO_Ant1_2437



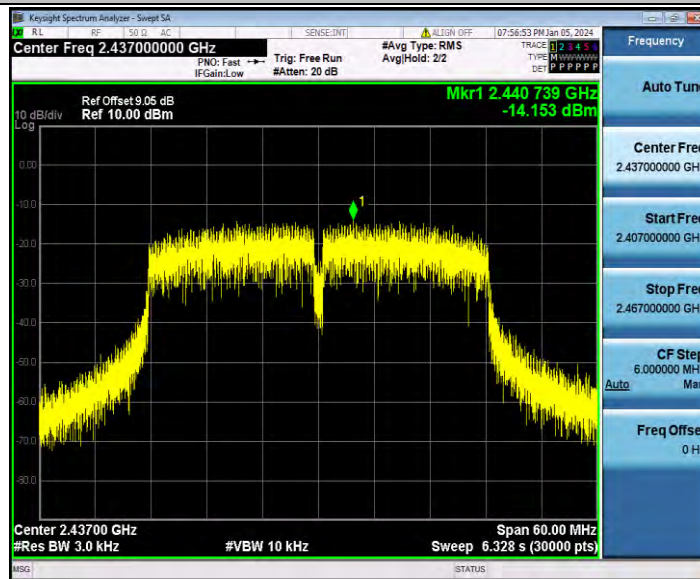
11N20SISO_Ant1_2462



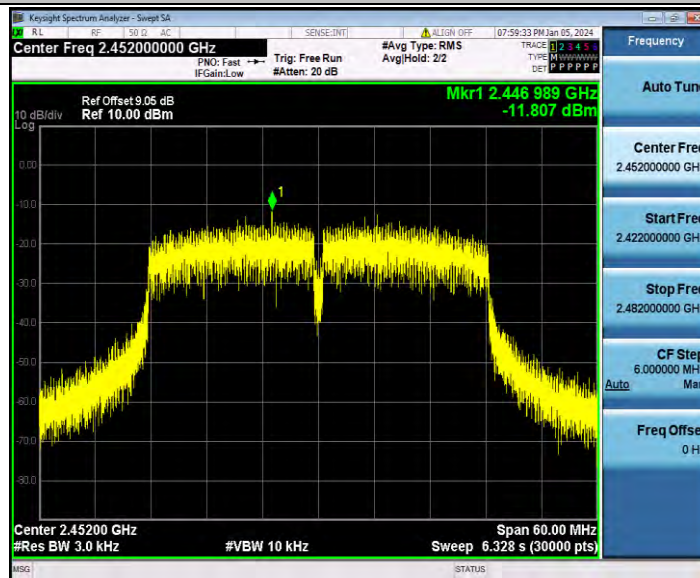
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



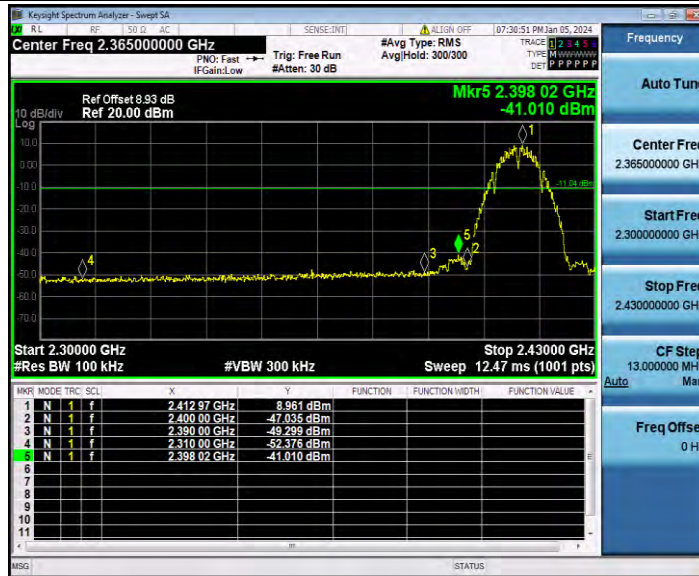
Appendix C.5: Band edge measurements

Test Result

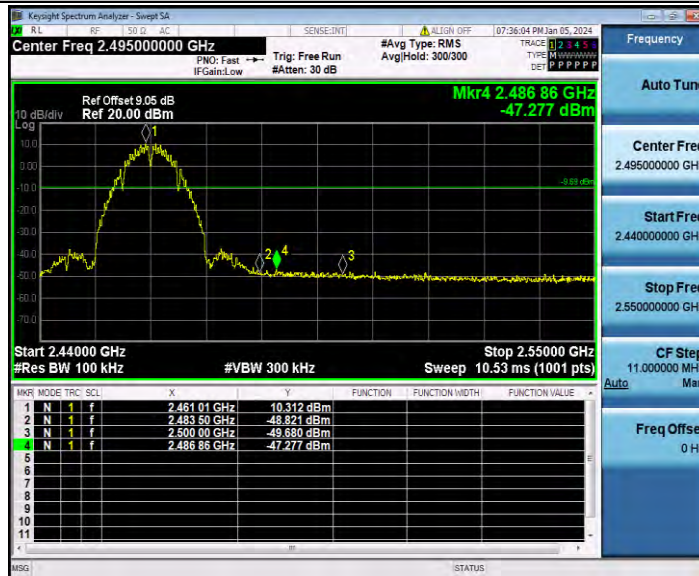
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	8.96	-41.01	≤-11.04	PASS
		High	2462	10.31	-47.28	≤-9.69	PASS
11G	Ant1	Low	2412	6.11	-31.36	≤-13.89	PASS
		High	2462	7.08	-44.1	≤-12.92	PASS
11N20SISO	Ant1	Low	2412	6.16	-32.47	≤-13.84	PASS
		High	2462	7.57	-43.13	≤-12.43	PASS
11N40SISO	Ant1	Low	2422	2.45	-31.45	≤-17.55	PASS
		High	2452	2.92	-38.29	≤-17.09	PASS

Test Graphs

11B_Ant1_Low_2412



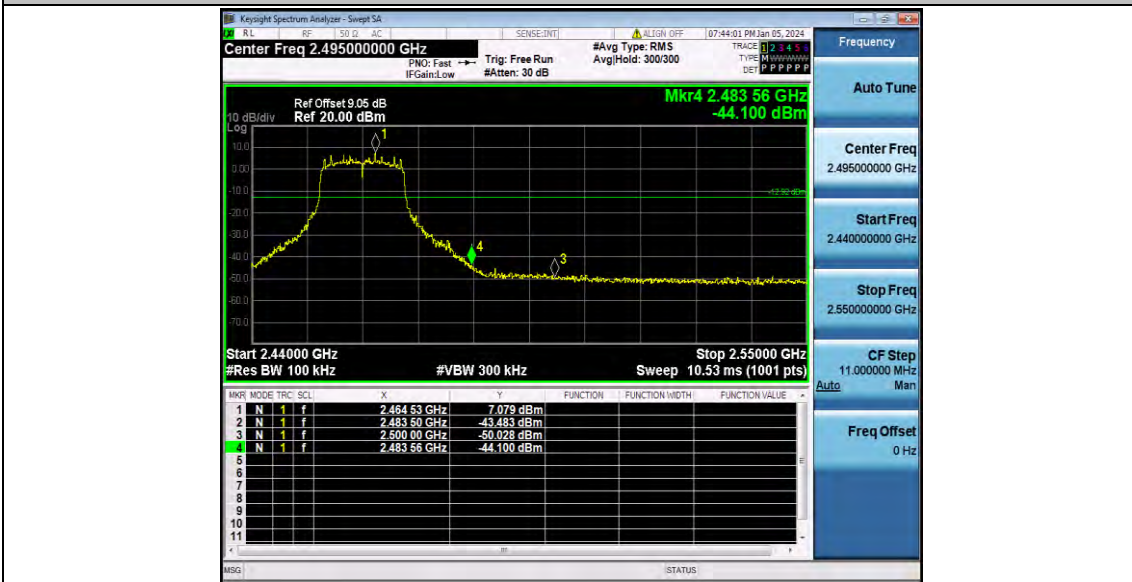
11B_Ant1_High_2462



11G_Ant1_Low_2412



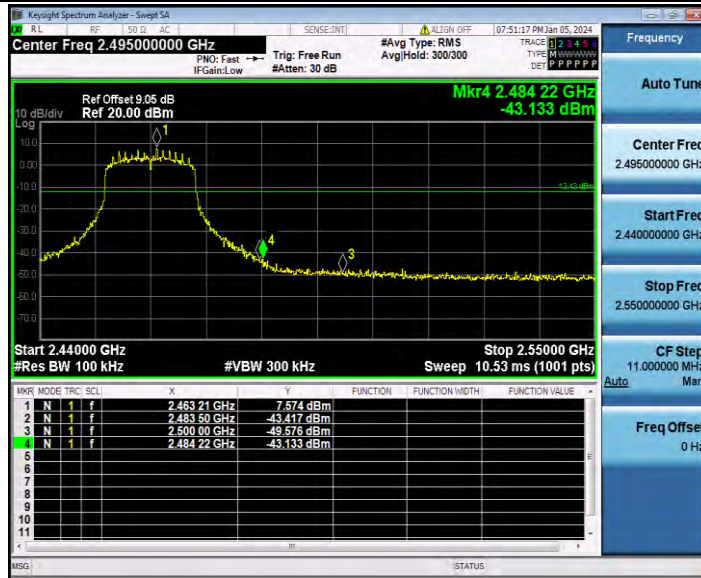
11G_Ant1_High_2462



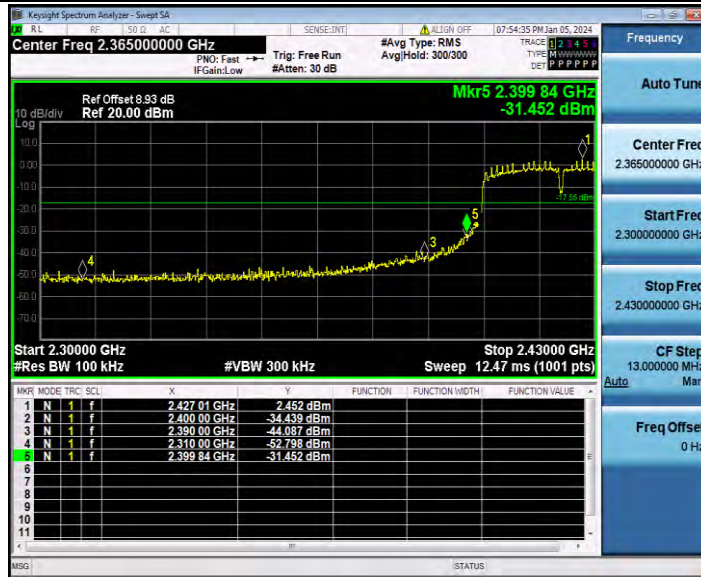
11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

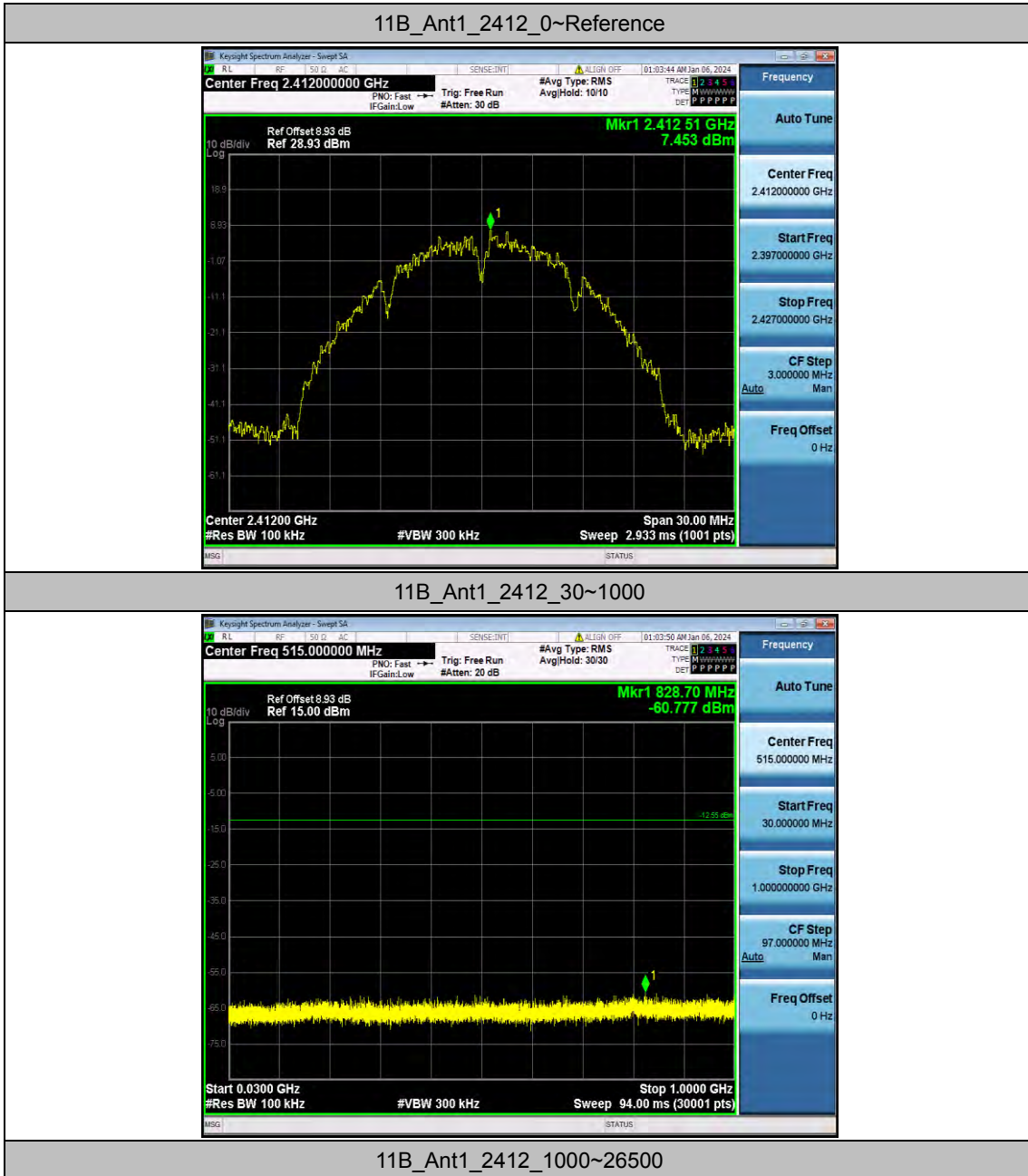


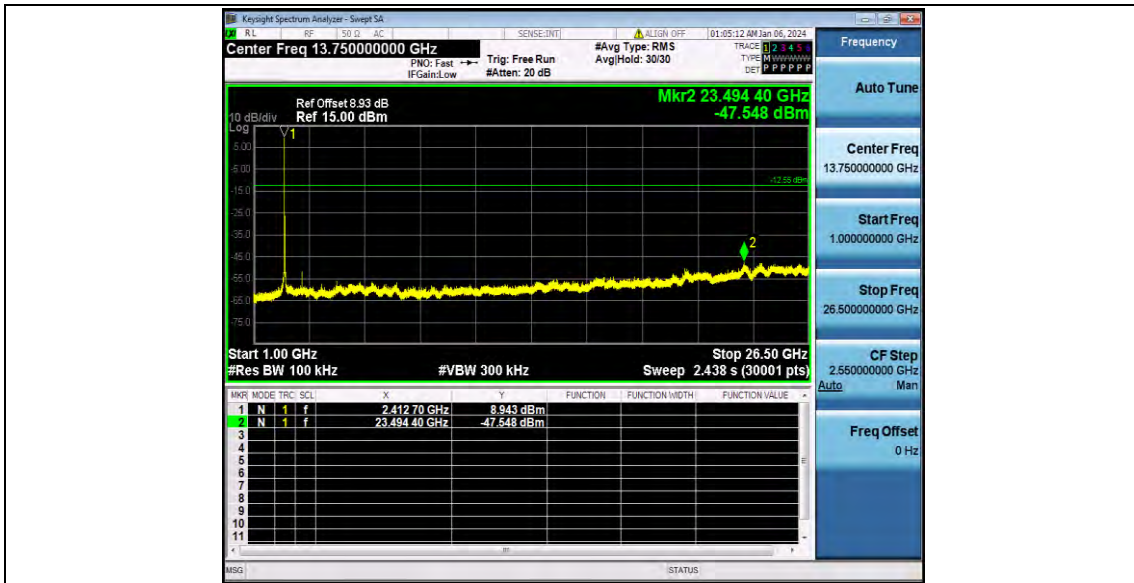
Appendix C.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	7.45	7.45	---	PASS
			30~1000	7.45	-60.78	≤ -12.55	PASS
			1000~26500	7.45	-47.55	≤ -12.55	PASS
		2437	Reference	8.78	8.78	---	PASS
			30~1000	8.78	-60.1	≤ -11.22	PASS
			1000~26500	8.78	-47.1	≤ -11.22	PASS
		2462	Reference	9.06	9.06	---	PASS
			30~1000	9.06	-60.31	≤ -10.94	PASS
			1000~26500	9.06	-47.55	≤ -10.94	PASS
11G	Ant1	2412	Reference	4.32	4.32	---	PASS
			30~1000	4.32	-60.32	≤ -15.68	PASS
			1000~26500	4.32	-47.7	≤ -15.68	PASS
		2437	Reference	5.56	5.56	---	PASS
			30~1000	5.56	-60.49	≤ -14.44	PASS
			1000~26500	5.56	-47.62	≤ -14.44	PASS
		2462	Reference	3.56	3.56	---	PASS
			30~1000	3.56	-60.48	≤ -16.44	PASS
			1000~26500	3.56	-48.18	≤ -16.44	PASS
11N20SISO	Ant1	2412	Reference	5.39	5.39	---	PASS
			30~1000	5.39	-60.6	≤ -14.61	PASS
			1000~26500	5.39	-47.38	≤ -14.61	PASS
		2437	Reference	5.07	5.07	---	PASS
			30~1000	5.07	-57.4	≤ -14.93	PASS
			1000~26500	5.07	-47.35	≤ -14.93	PASS
		2462	Reference	6.99	6.99	---	PASS
			30~1000	6.99	-60.71	≤ -13.01	PASS
			1000~26500	6.99	-47.47	≤ -13.01	PASS
11N40SISO	Ant1	2422	Reference	1.41	1.41	---	PASS
			30~1000	1.41	-60.45	≤ -18.59	PASS
			1000~26500	1.41	-47.86	≤ -18.59	PASS
		2437	Reference	1.69	1.69	---	PASS
			30~1000	1.69	-59.65	≤ -18.31	PASS
			1000~26500	1.69	-47.35	≤ -18.31	PASS
		2452	Reference	1.79	1.79	---	PASS
			30~1000	1.79	-59.98	≤ -18.21	PASS
			1000~26500	1.79	-47.41	≤ -18.21	PASS

Test Graphs

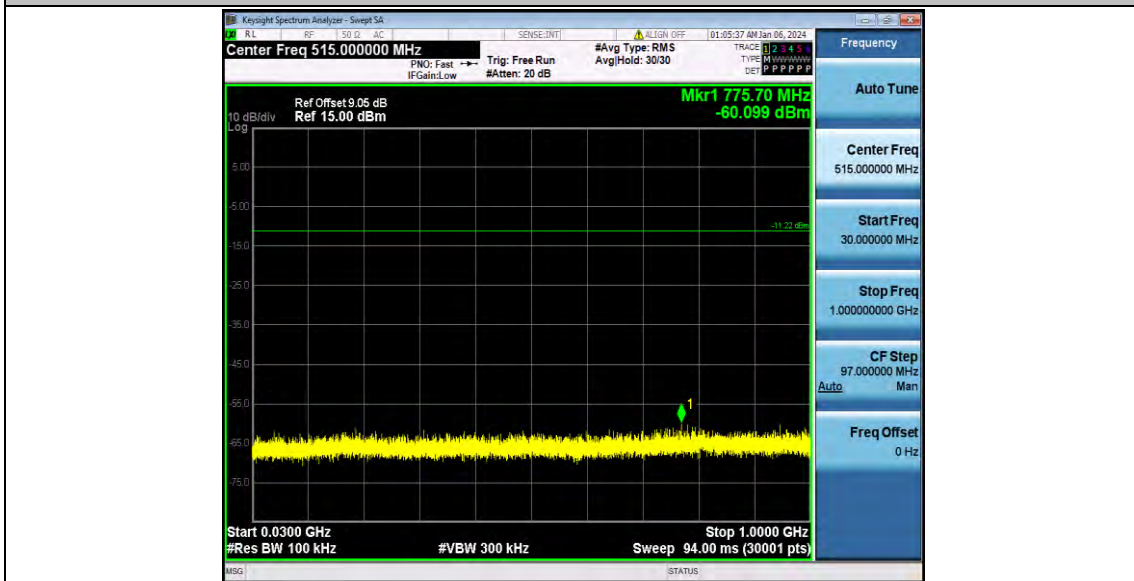




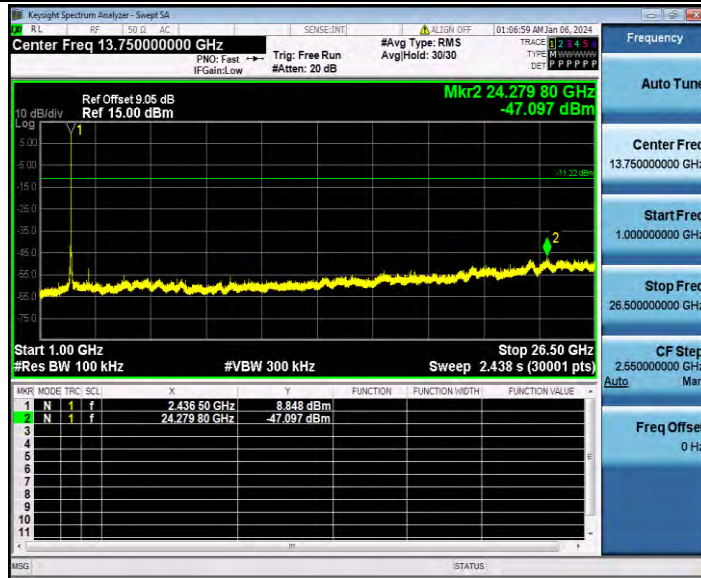
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



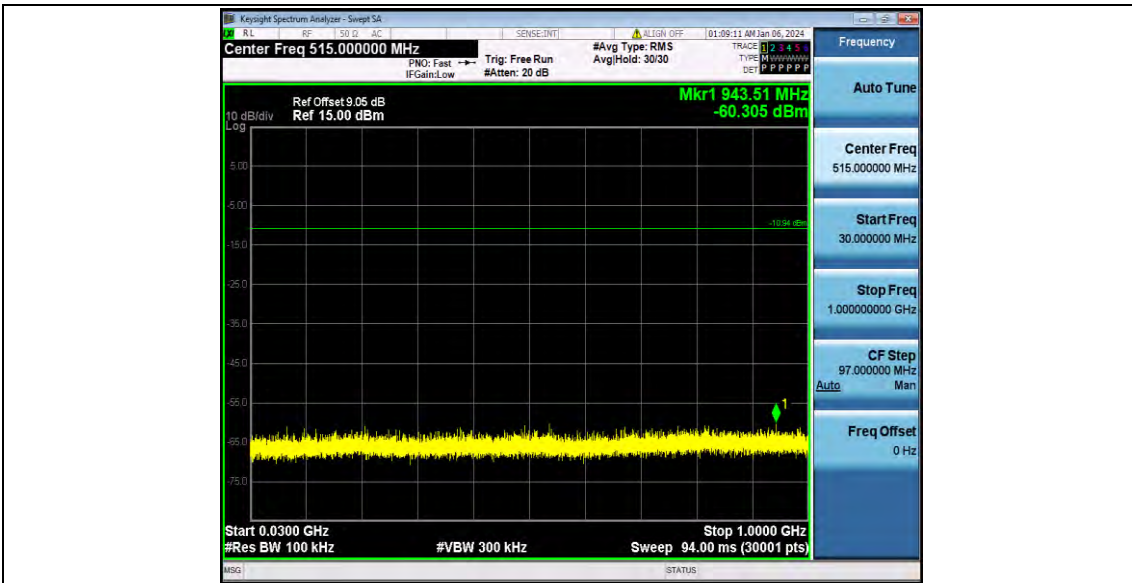
11B_Ant1_2437_1000~26500



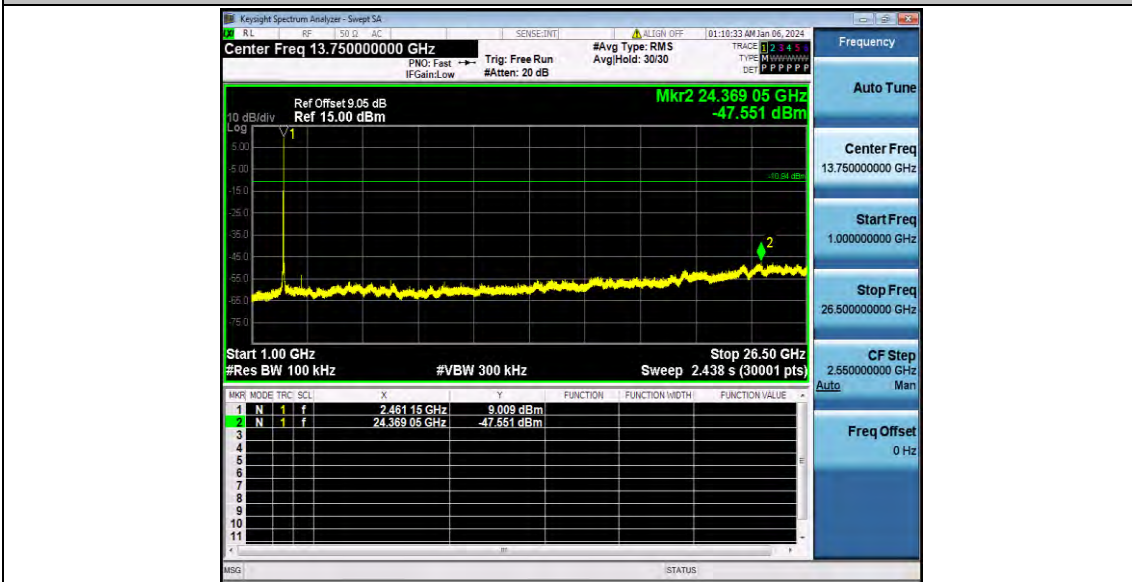
11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



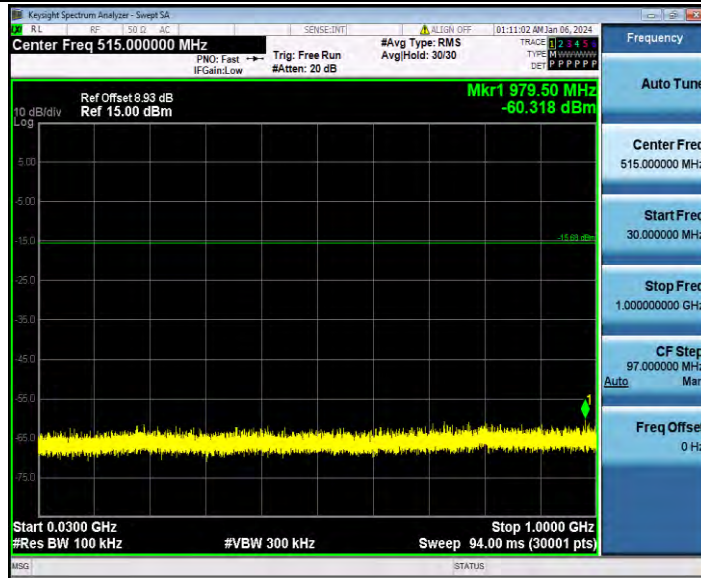
11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



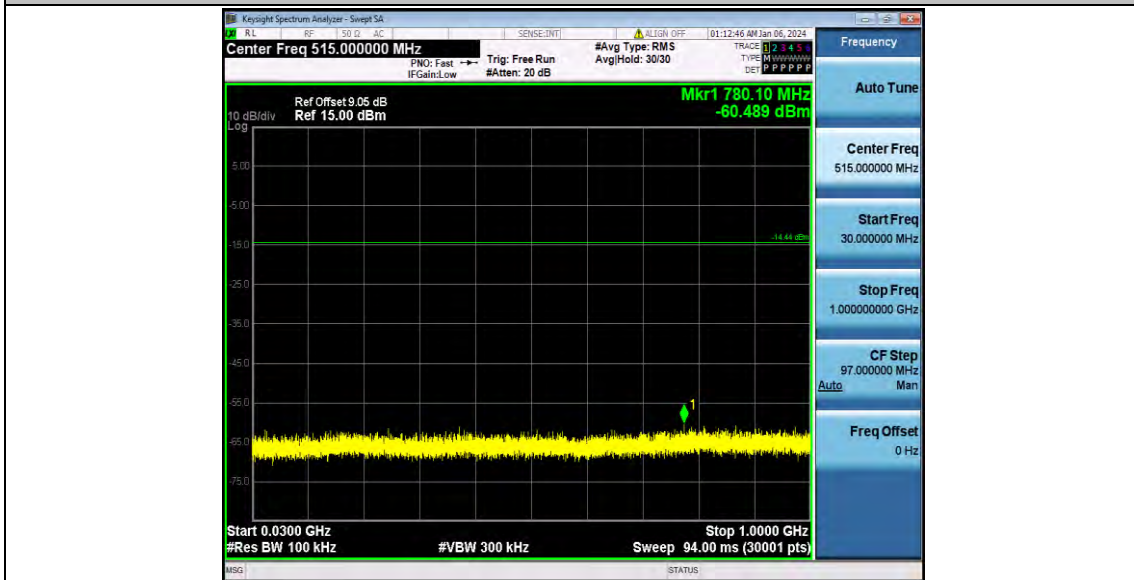
11G_Ant1_2412_1000~26500



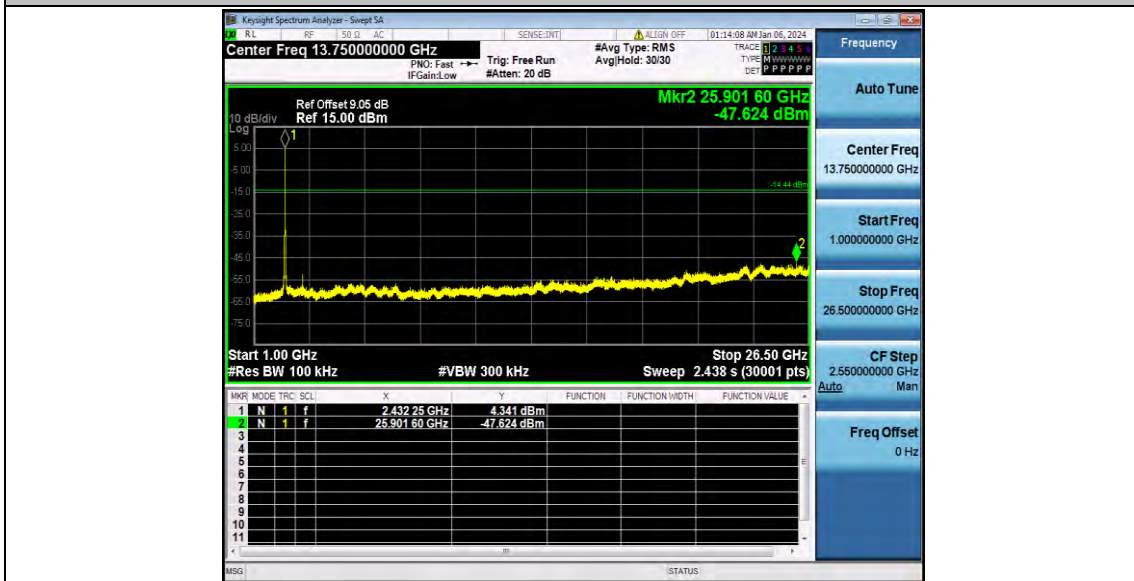
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



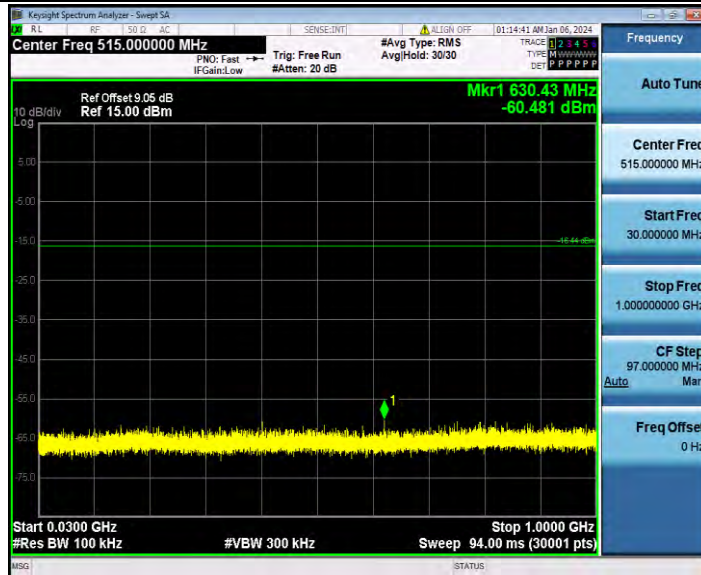
11G_Ant1_2437_1000~26500



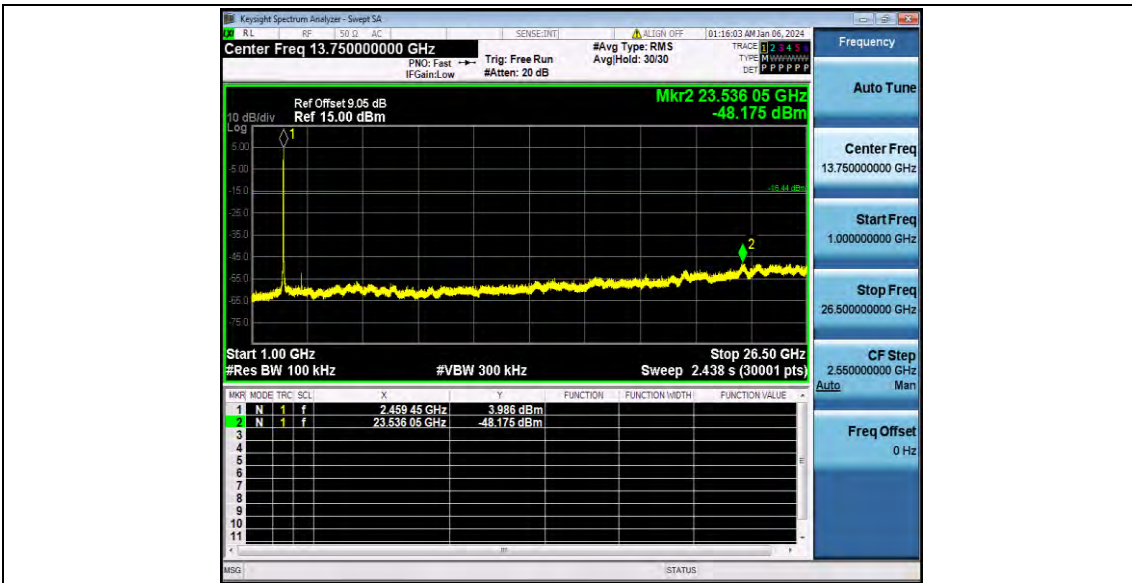
11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



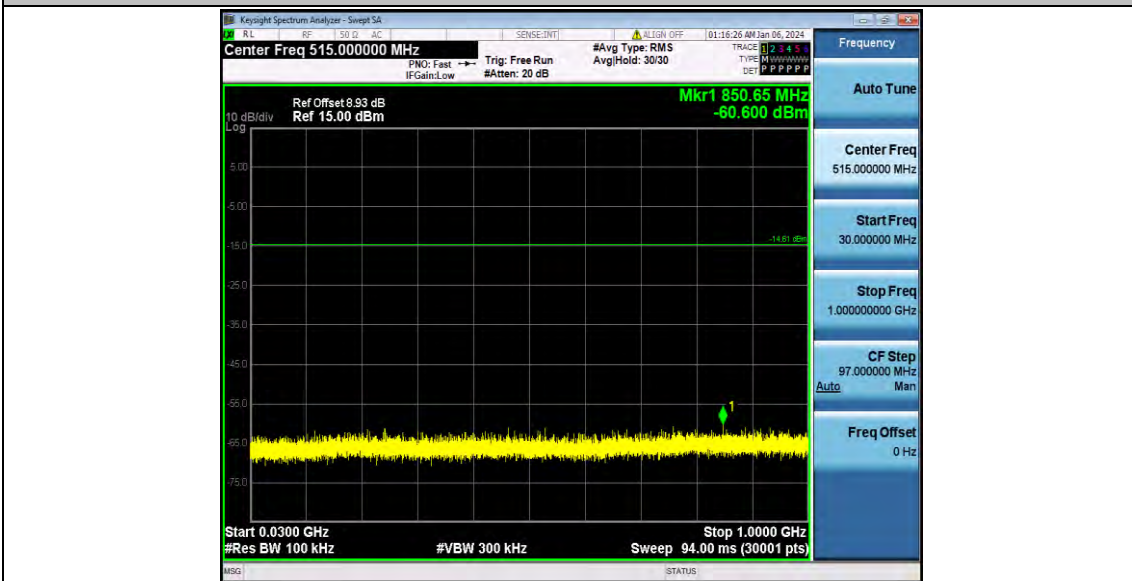
11G_Ant1_2462_1000~26500



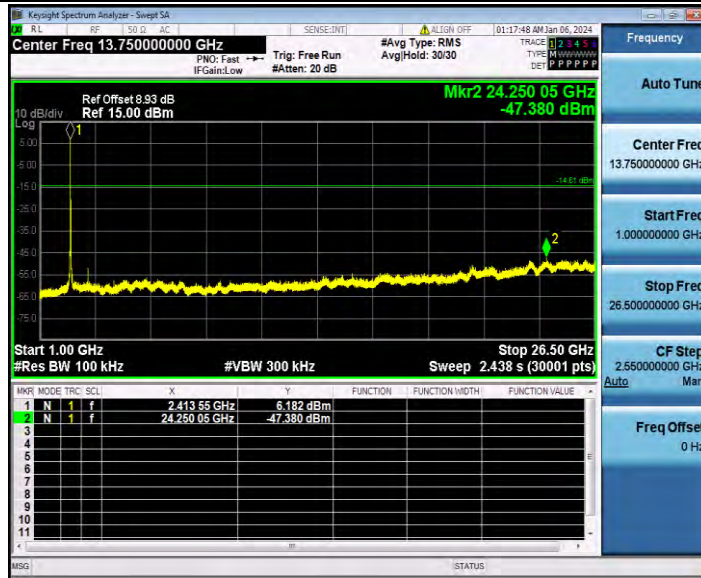
11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~100



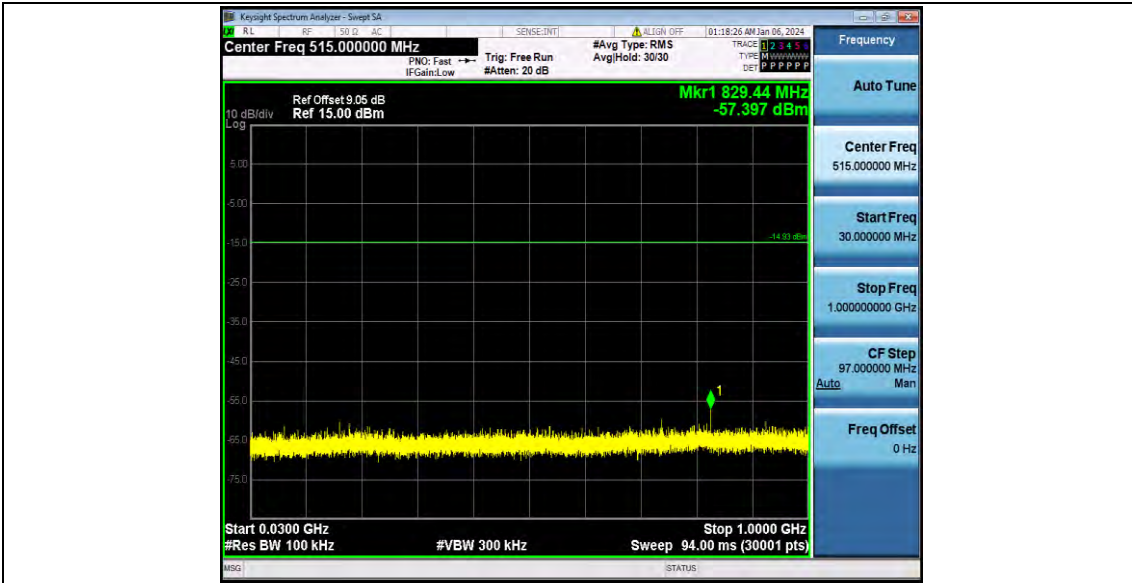
11N20SISO_Ant1_2412_1000~26500



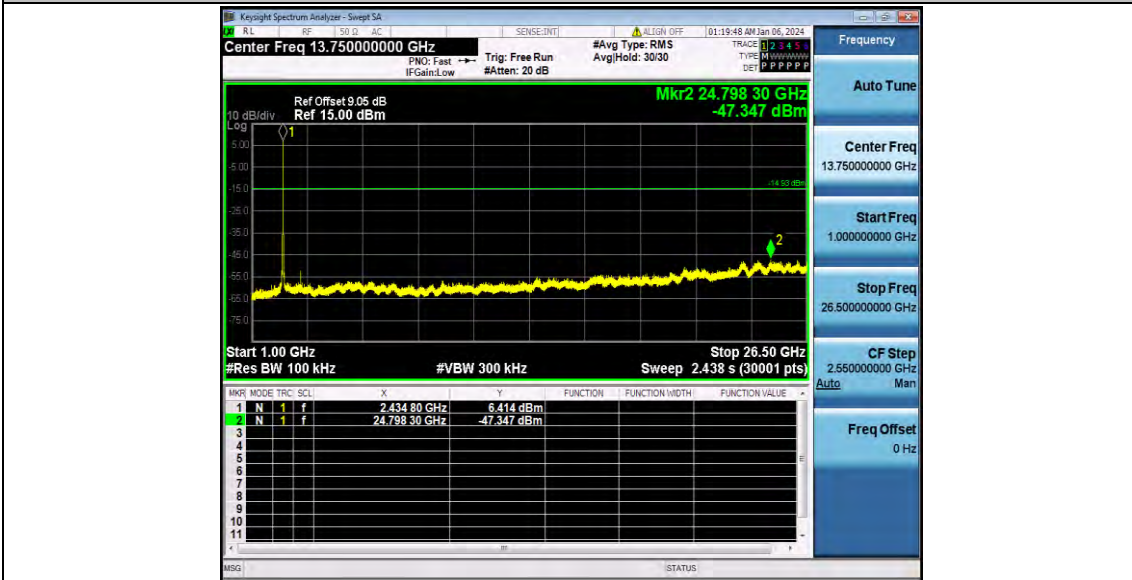
11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



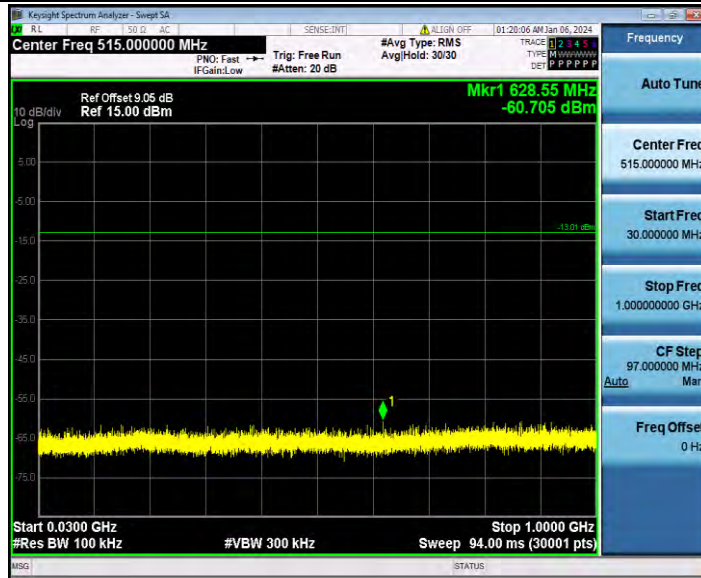
11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



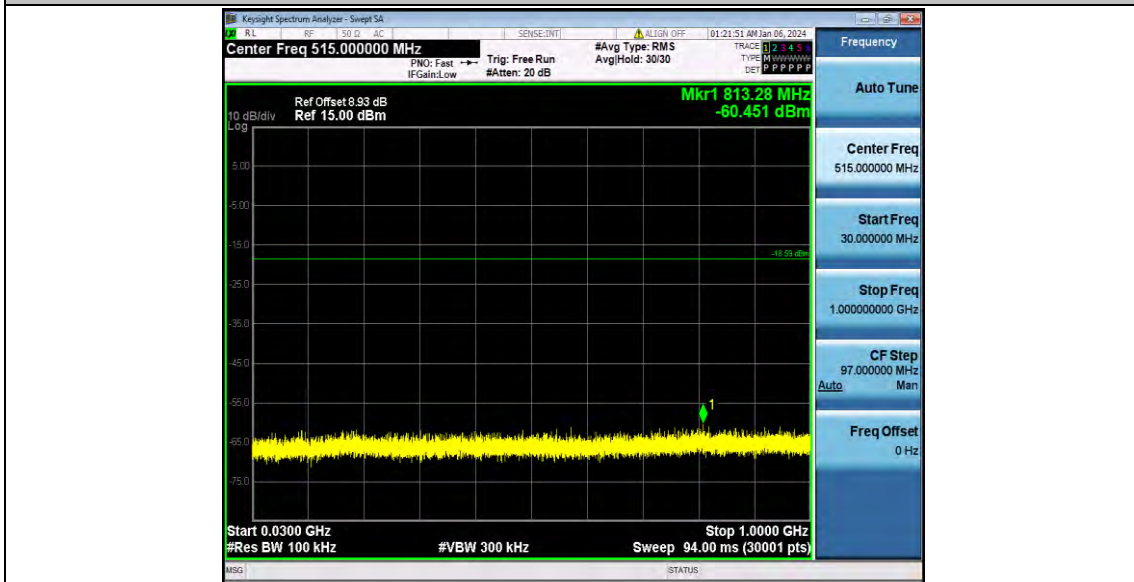
11N20SISO_Ant1_2462_1000~26500



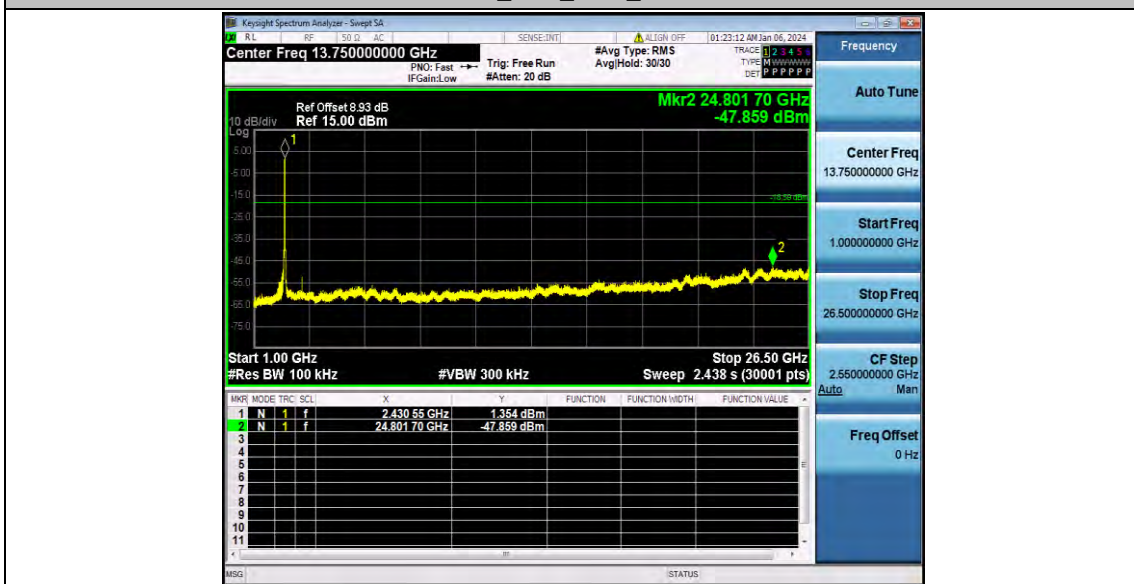
11N40SISO_Ant1_2422_0~Reference



11N40SISO_Ant1_2422_30~1000



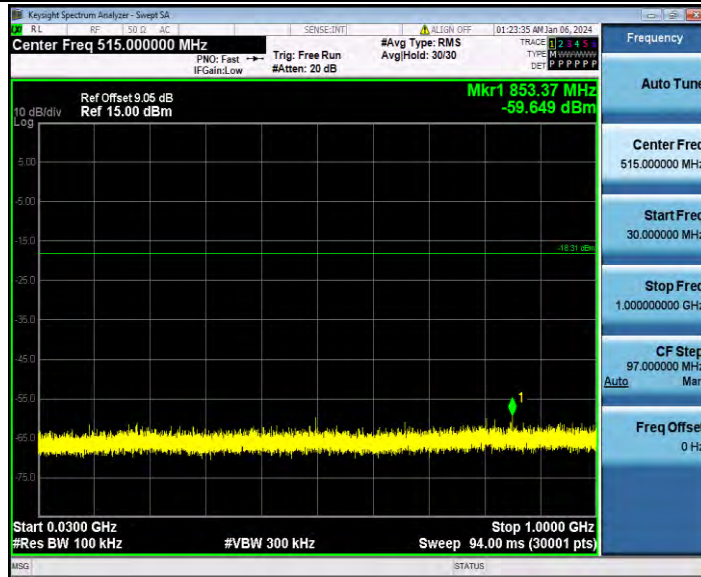
11N40SISO_Ant1_2422_1000~26500



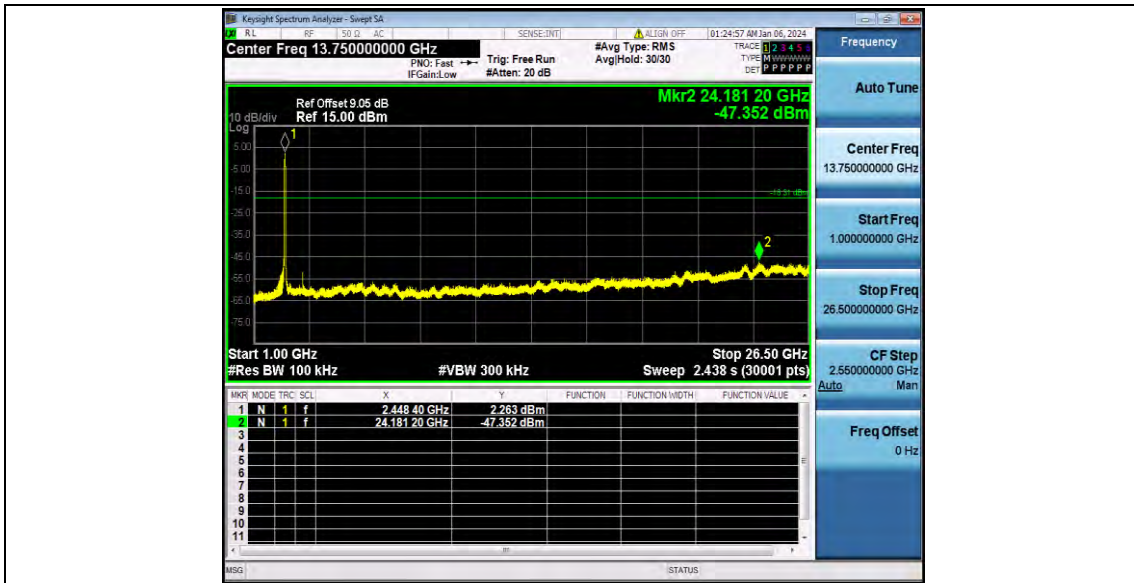
11N40SISO_Ant1_2437_0~Reference



11N40SISO_Ant1_2437_30~1000



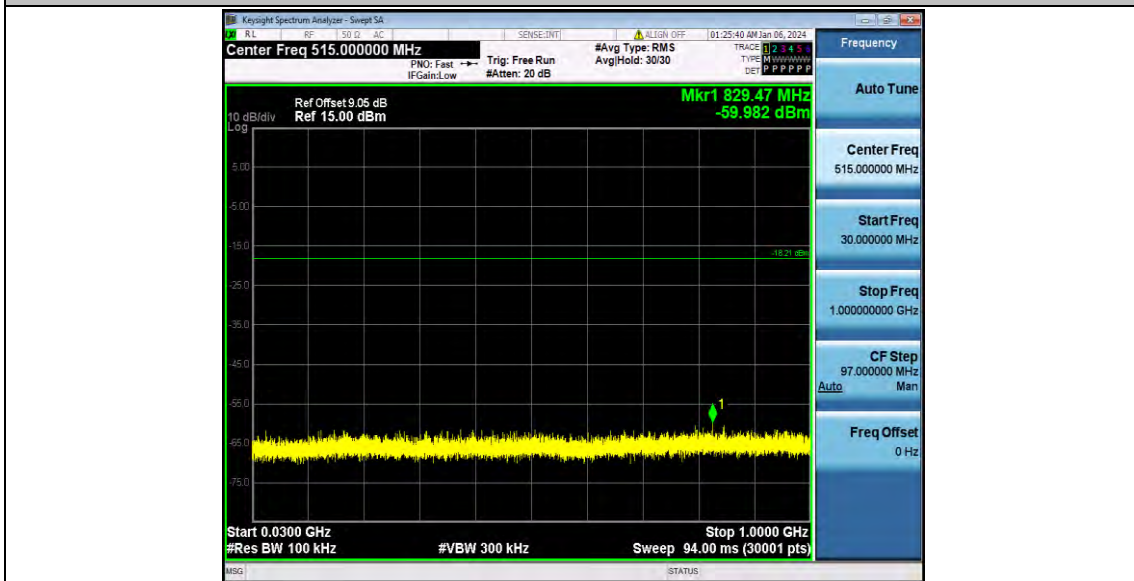
11N40SISO_Ant1_2437_1000~26500

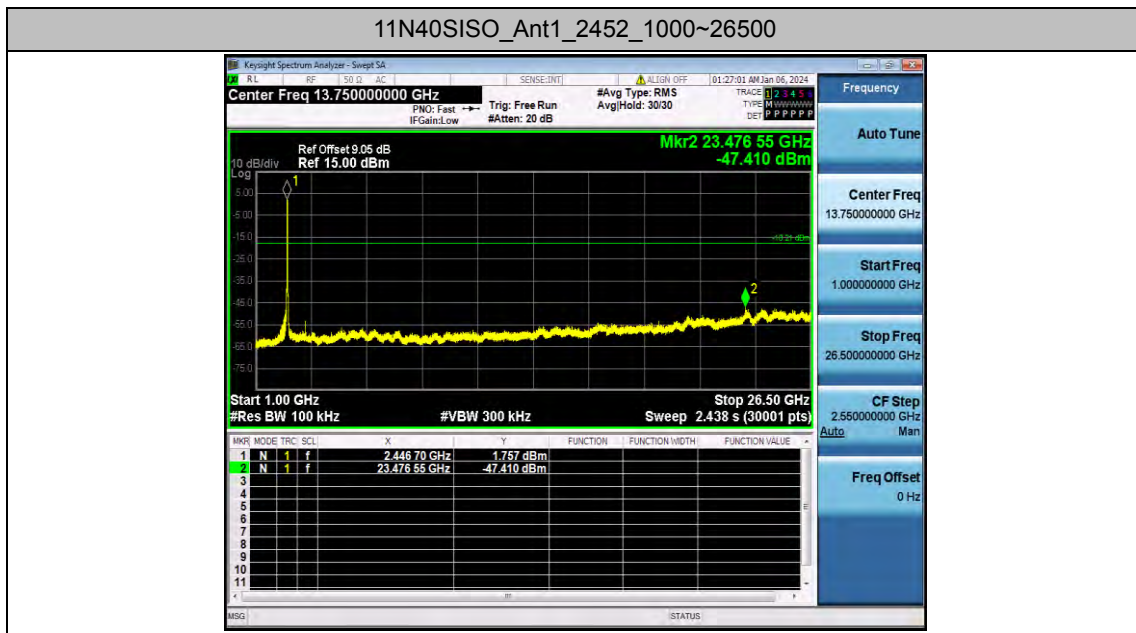


11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000





Appendix C.7: Emissions in Restricted Bands

Test Result

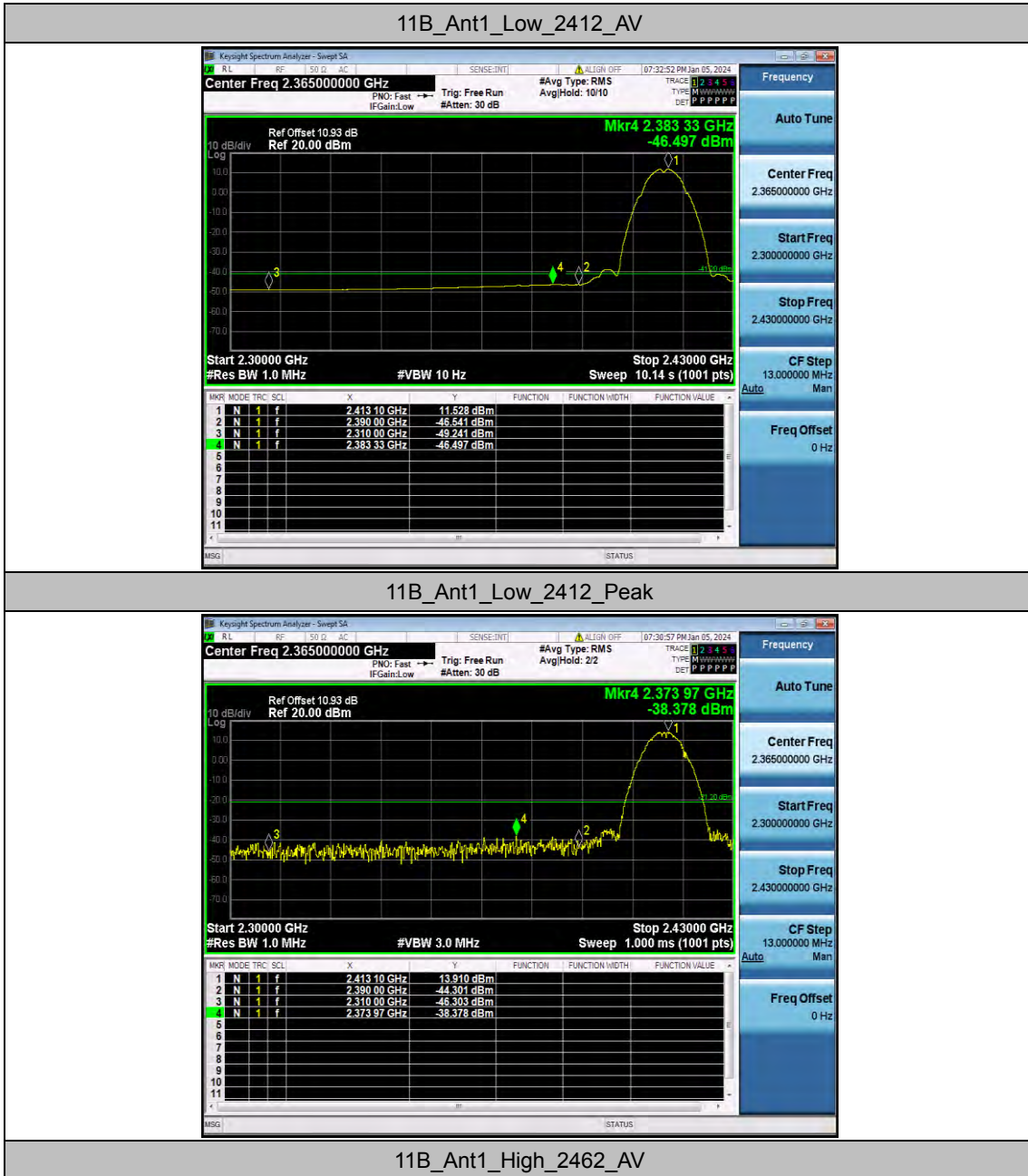
TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-49.24	≤-41.20	45.96	≤54	PASS
				AV	2383.330	-46.5	≤-41.20	48.70	≤54	PASS
				AV	2390.000	-46.54	≤-41.20	48.66	≤54	PASS
				Peak	2310.000	-46.3	≤-21.20	48.90	≤74	PASS
				Peak	2373.970	-38.38	≤-21.20	56.82	≤74	PASS
				Peak	2390.000	-44.3	≤-21.20	50.90	≤74	PASS
		High	2462	AV	2483.500	-45.74	≤-41.20	49.46	≤54	PASS
				AV	2487.520	-45.18	≤-41.20	50.02	≤54	PASS
				AV	2500.000	-46.42	≤-41.20	48.78	≤54	PASS
				Peak	2483.500	-44.11	≤-21.20	51.09	≤74	PASS
				Peak	2490.270	-37.49	≤-21.20	57.71	≤74	PASS
				Peak	2500.000	-42.9	≤-21.20	52.30	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.3	≤-41.20	45.90	≤54	PASS
				AV	2389.960	-43.05	≤-41.20	52.15	≤54	PASS
				AV	2390.000	-43.05	≤-41.20	52.15	≤54	PASS
				Peak	2310.000	-41.61	≤-21.20	53.59	≤74	PASS
				Peak	2389.830	-36.82	≤-21.20	58.38	≤74	PASS
				Peak	2390.000	-40.76	≤-21.20	54.44	≤74	PASS
		High	2462	AV	2483.500	-41.47	≤-41.20	53.73	≤54	PASS
				AV	2483.560	-41.69	≤-41.20	53.51	≤54	PASS
				AV	2500.000	-46.23	≤-41.20	48.97	≤54	PASS
				Peak	2483.500	-36.89	≤-21.20	58.31	≤74	PASS
				Peak	2483.560	-34.94	≤-21.20	60.26	≤74	PASS
				Peak	2500.000	-44.3	≤-21.20	50.90	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-49.34	≤-41.20	45.86	≤54	PASS
				AV	2389.960	-42.35	≤-41.20	52.85	≤54	PASS
				AV	2390.000	-42.35	≤-41.20	52.85	≤54	PASS
				Peak	2310.000	-46.8	≤-21.20	48.40	≤74	PASS
				Peak	2383.330	-36.99	≤-21.20	58.21	≤74	PASS
				Peak	2390.000	-44.6	≤-21.20	50.60	≤74	PASS
		High	2462	AV	2483.500	-46.58	≤-41.20	48.62	≤54	PASS
				AV	2483.560	-46.66	≤-41.20	48.54	≤54	PASS
				AV	2500.000	-48.53	≤-41.20	46.67	≤54	PASS
				Peak	2483.500	-42.06	≤-21.20	53.14	≤74	PASS
				Peak	2484.330	-38.11	≤-21.20	57.09	≤74	PASS
				Peak	2500.000	-44.27	≤-21.20	50.93	≤74	PASS

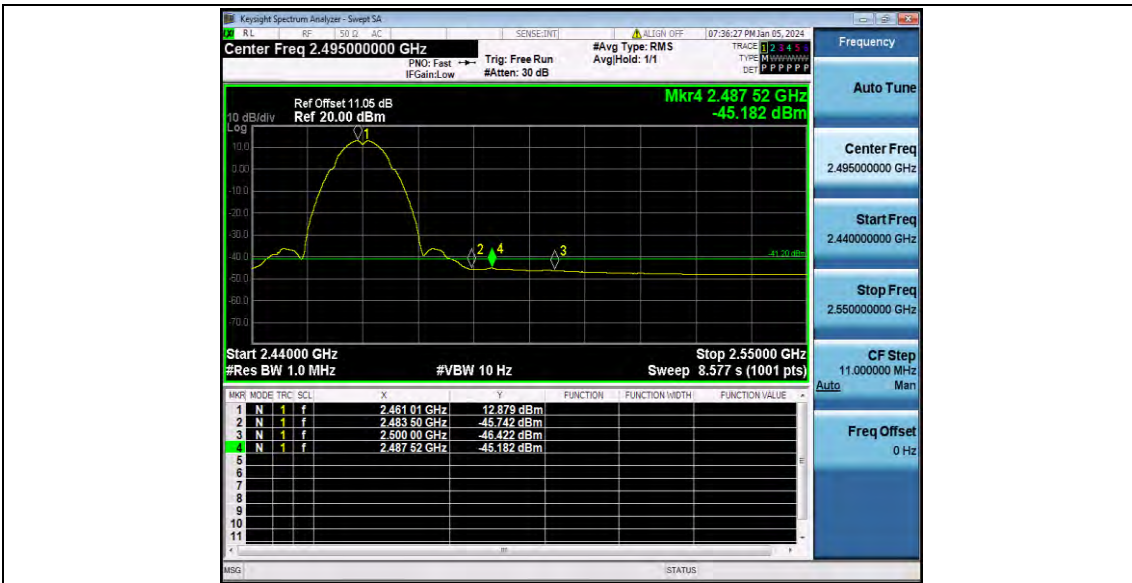
11N40SIS O	Ant1	Low	2422	AV	2310.000	-49.59	≤ -41.20	45.61	≤ 54	PASS
				AV	2389.960	-46.51	≤ -41.20	48.69	≤ 54	PASS
				AV	2390.000	-46.51	≤ -41.20	48.69	≤ 54	PASS
				Peak	2310.000	-48.49	≤ -21.20	46.71	≤ 74	PASS
				Peak	2353.040	-38.52	≤ -21.20	56.68	≤ 74	PASS
				Peak	2390.000	-45.49	≤ -21.20	49.71	≤ 74	PASS
	High	2452	AV	2483.500	-45.12	≤ -41.20	50.08	≤ 54	PASS	
			AV	2483.670	-45.11	≤ -41.20	50.09	≤ 54	PASS	
			AV	2500.000	-48.34	≤ -41.20	46.86	≤ 54	PASS	
			Peak	2483.500	-42.02	≤ -21.20	53.18	≤ 74	PASS	
			Peak	2483.890	-38.29	≤ -21.20	56.91	≤ 74	PASS	
			Peak	2500.000	-44.99	≤ -21.20	50.21	≤ 74	PASS	

Note:

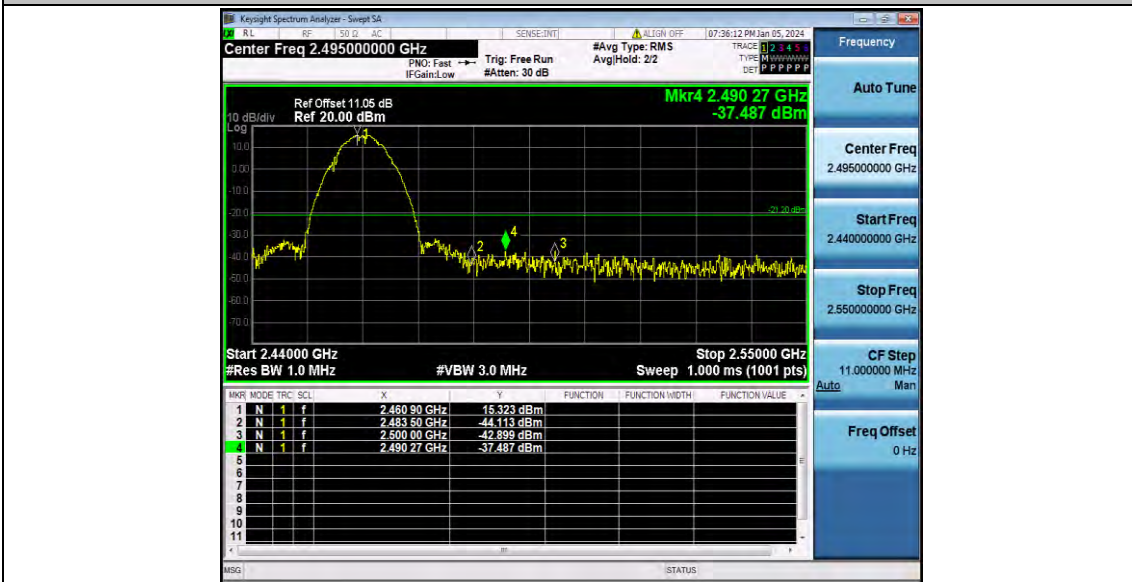
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs





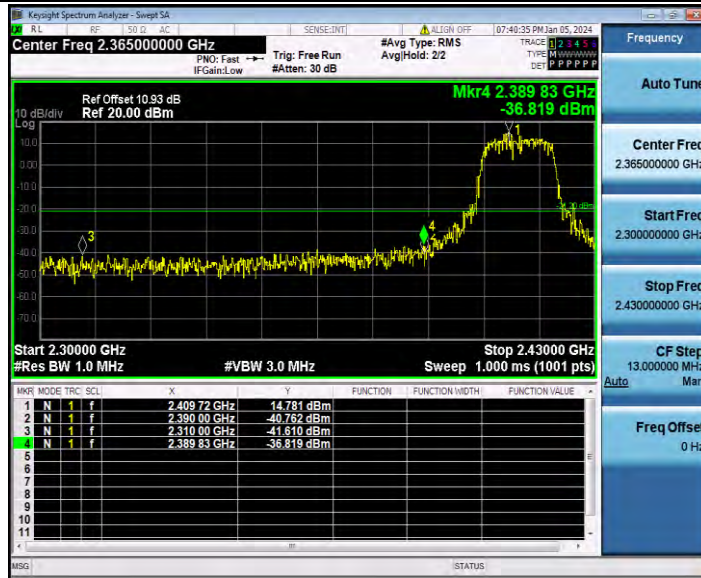
11B_Ant1_High_2462_Peak



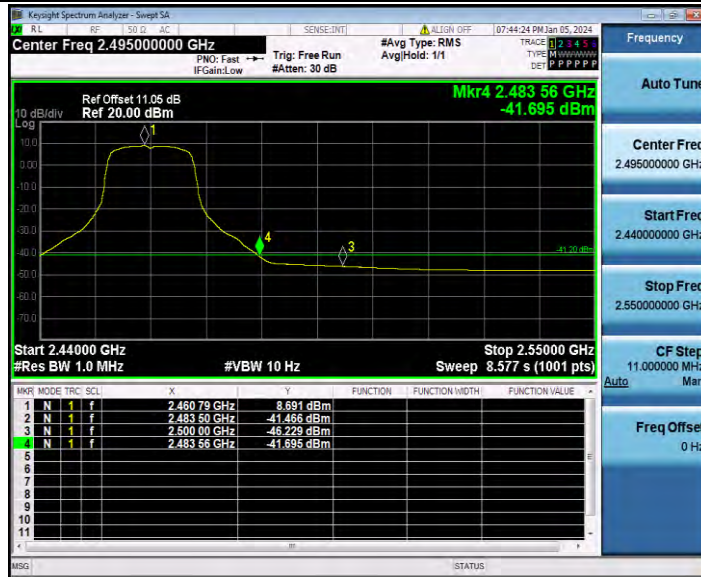
11G_Ant1_Low_2412_AV



11G_Ant1_Low_2412_Peak



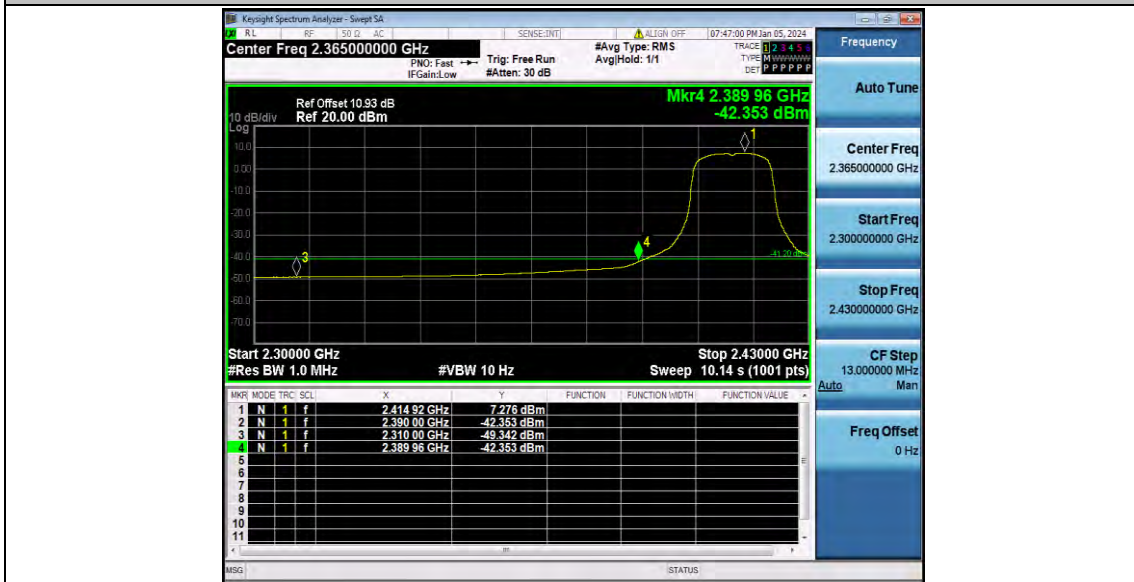
11G_Ant1_High_2462_AV



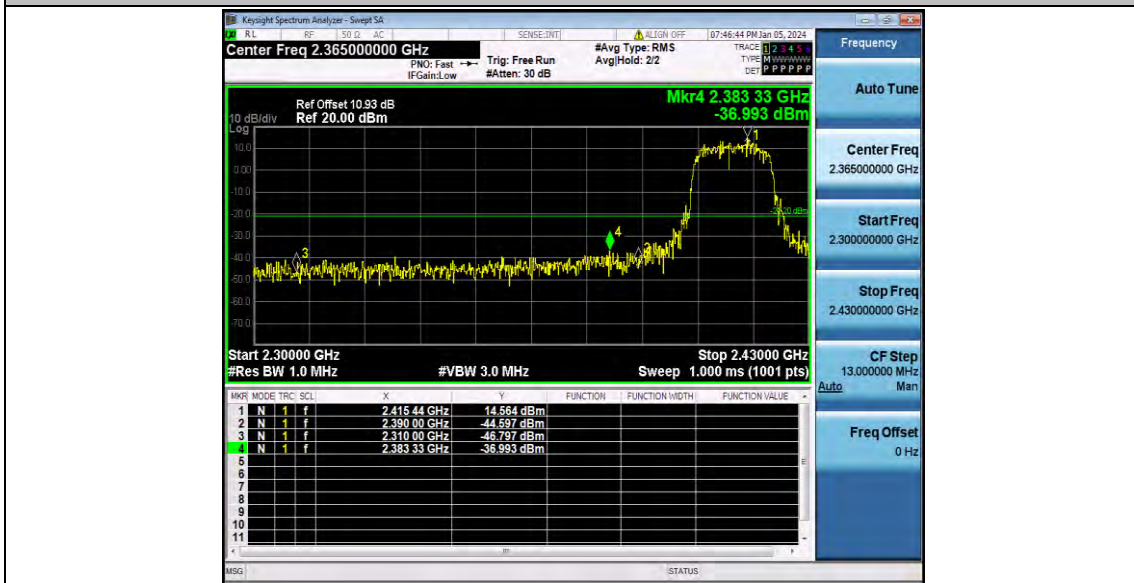
11G_Ant1_High_2462_Peak



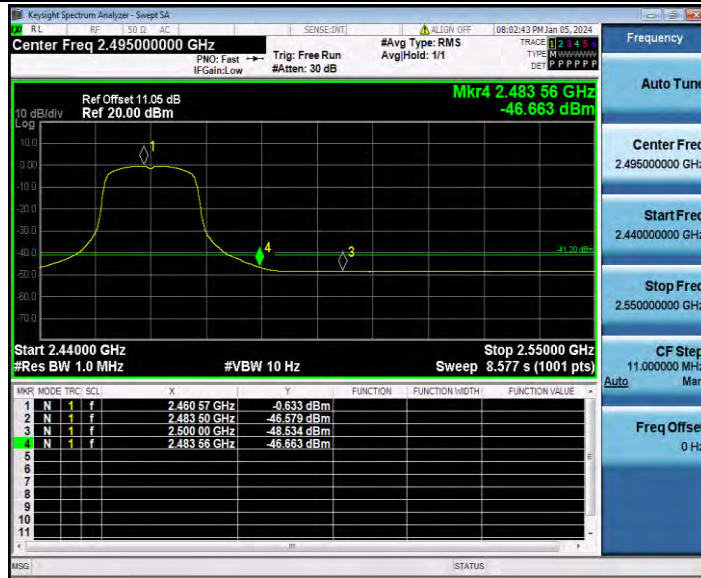
11N20SISO_Ant1_Low_2412_AV



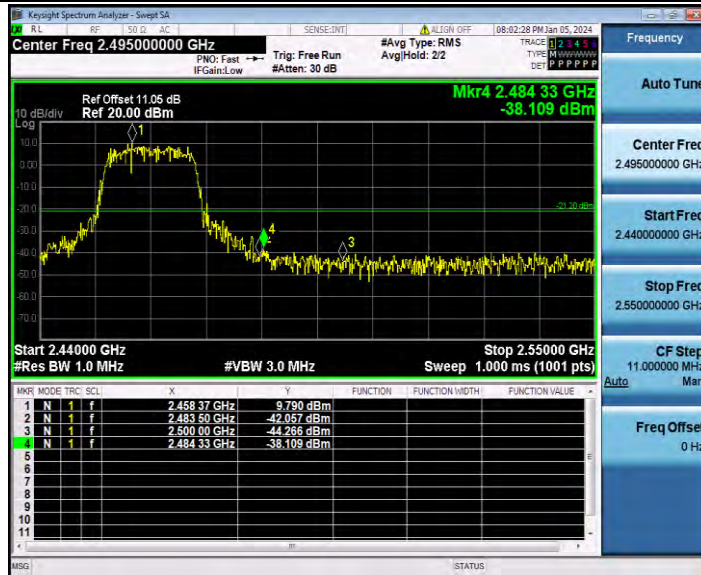
11N20SISO_Ant1_Low_2412_Peak



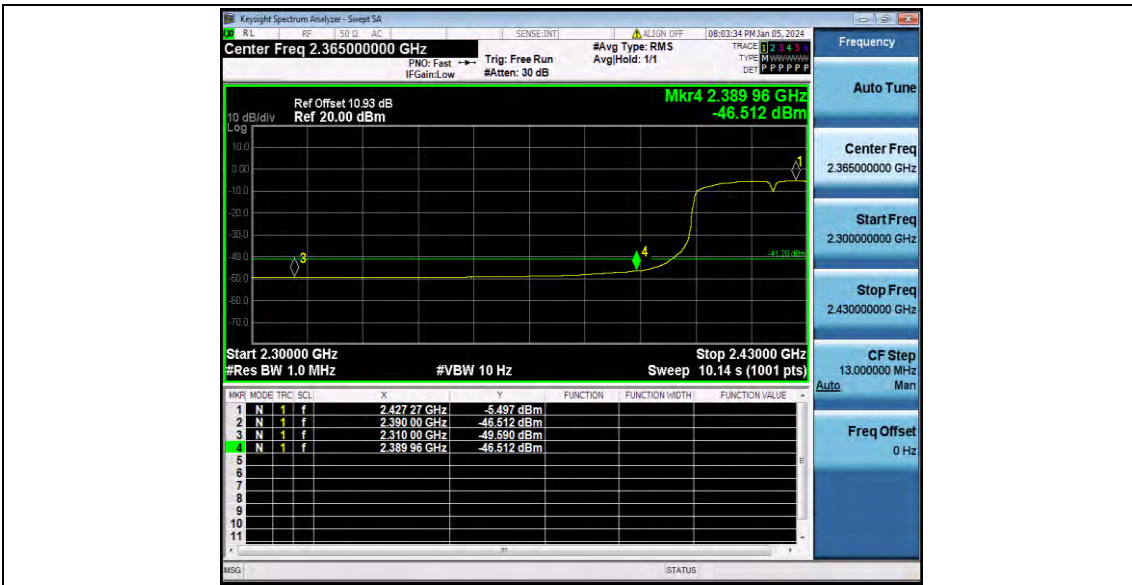
11N20SISO_Ant1_High_2462_AV



11N20SISO_Ant1_High_2462_Peak



11N40SISO_Ant1_Low_2422_AV



11N40SISO_Ant1_Low_2422_Peak



11N40SISO_Ant1_High_2452_AV



