

Case No. : <u>CTA24053000403</u>
Ambient Condition: <u>24 °C, 49 %RH,</u>
Test Date: <u>2024.5.28</u> Test Engineer: <u>Evan ouyang</u>

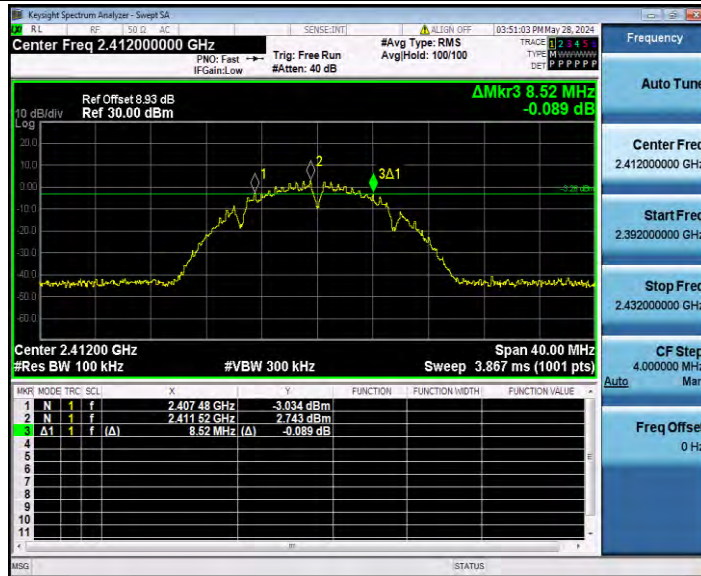
Appendix C.1: DTS Bandwidth

Test Result

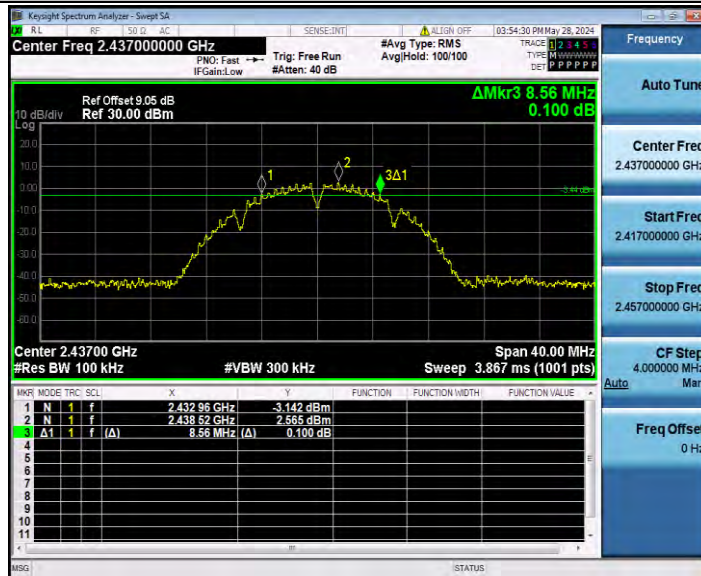
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.520	2407.480	2416.000	0.5	PASS
		2437	8.560	2432.960	2441.520	0.5	PASS
		2462	7.600	2457.960	2465.560	0.5	PASS
11G	Ant1	2412	15.480	2404.080	2419.560	0.5	PASS
		2437	15.720	2429.440	2445.160	0.5	PASS
		2462	15.640	2453.880	2469.520	0.5	PASS
11N20SISO	Ant1	2412	16.120	2403.440	2419.560	0.5	PASS
		2437	15.080	2429.480	2444.560	0.5	PASS
		2462	14.880	2454.640	2469.520	0.5	PASS
11N40SISO	Ant1	2422	35.680	2404.480	2440.160	0.5	PASS
		2437	35.040	2419.560	2454.600	0.5	PASS
		2452	26.160	2437.040	2463.200	0.5	PASS

Test Graphs

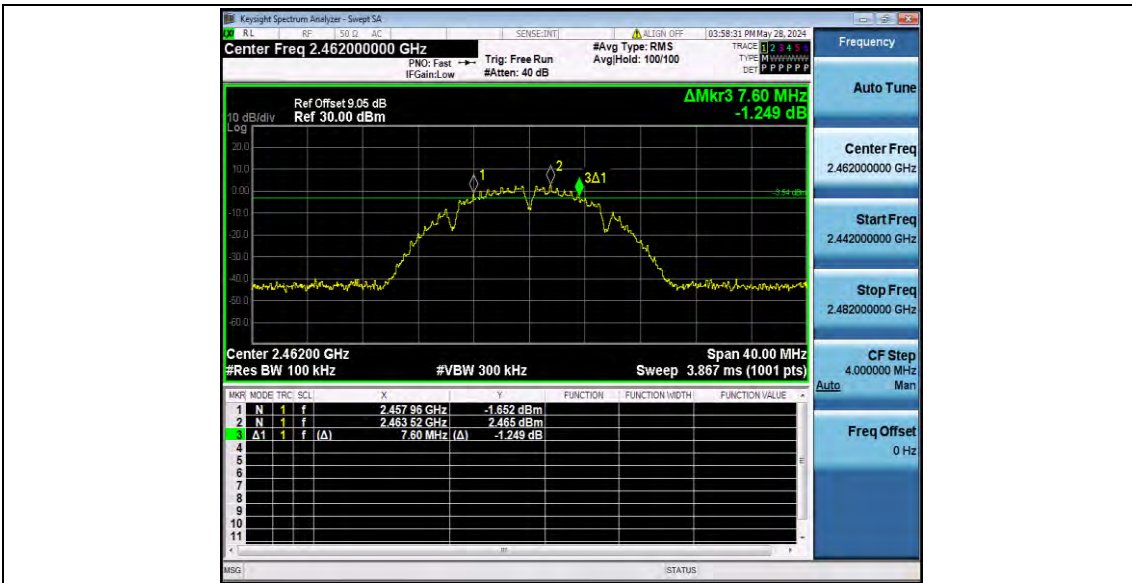
11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



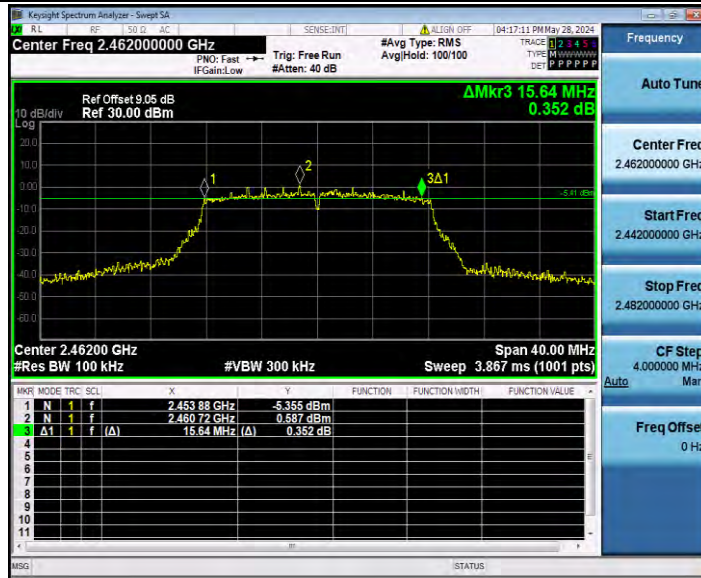
11G_Ant1_2412



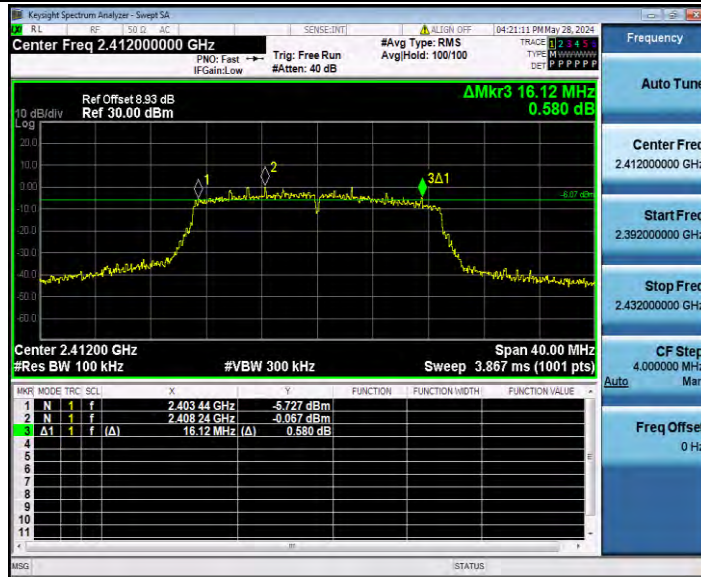
11G_Ant1_2437



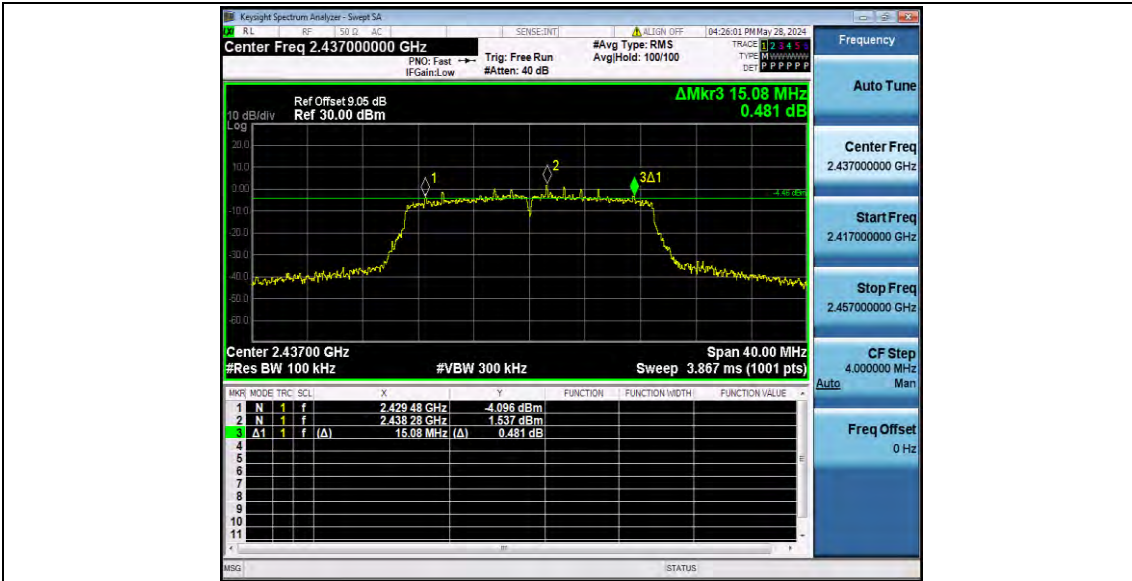
11G_Ant1_2462



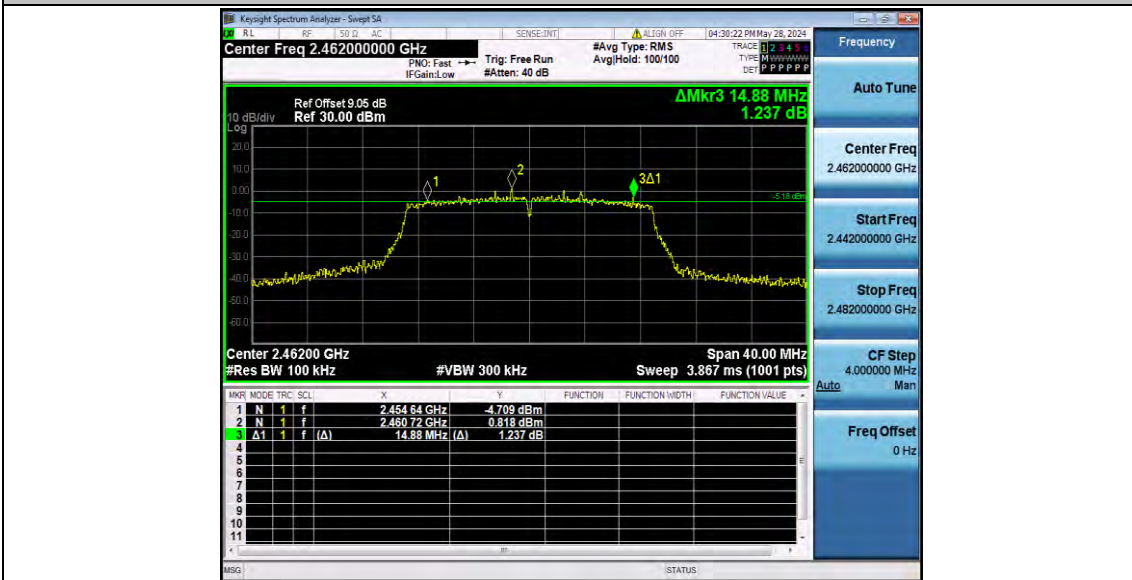
11N20SISO_Ant1_2412



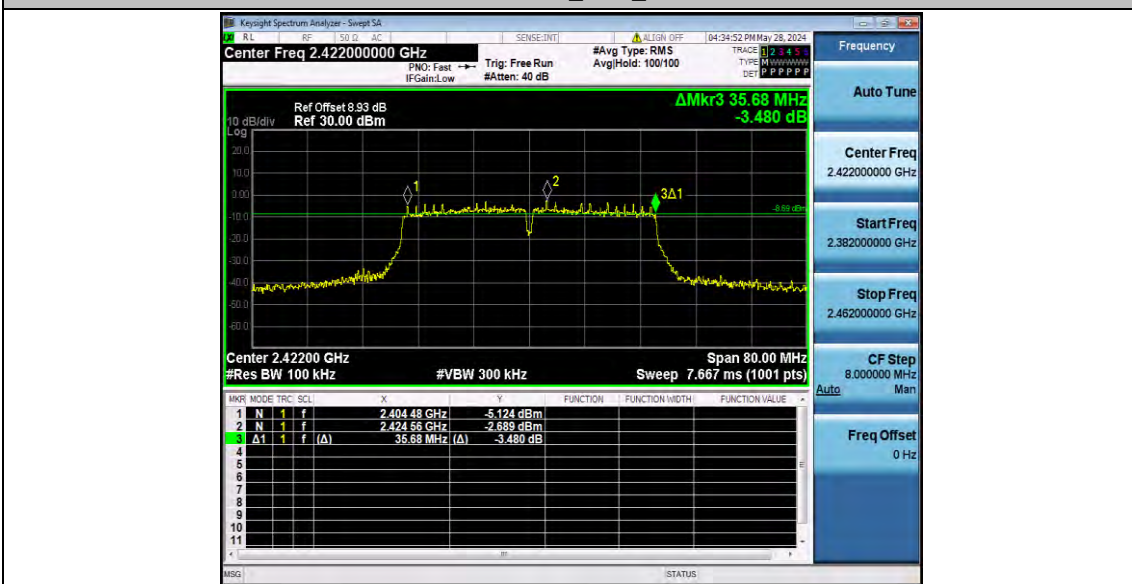
11N20SISO_Ant1_2437



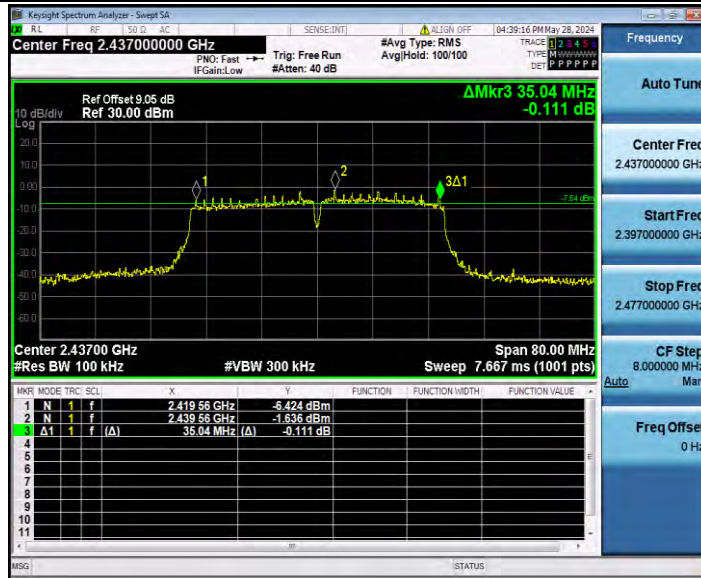
11N20SISO_Ant1_2462



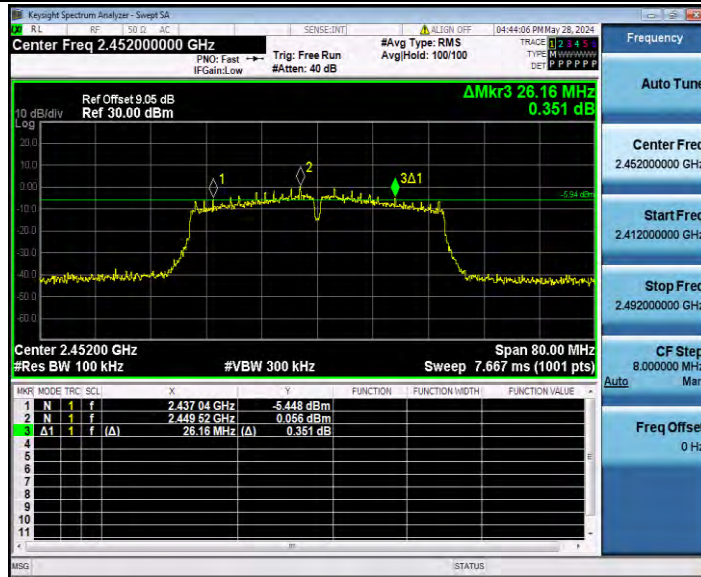
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

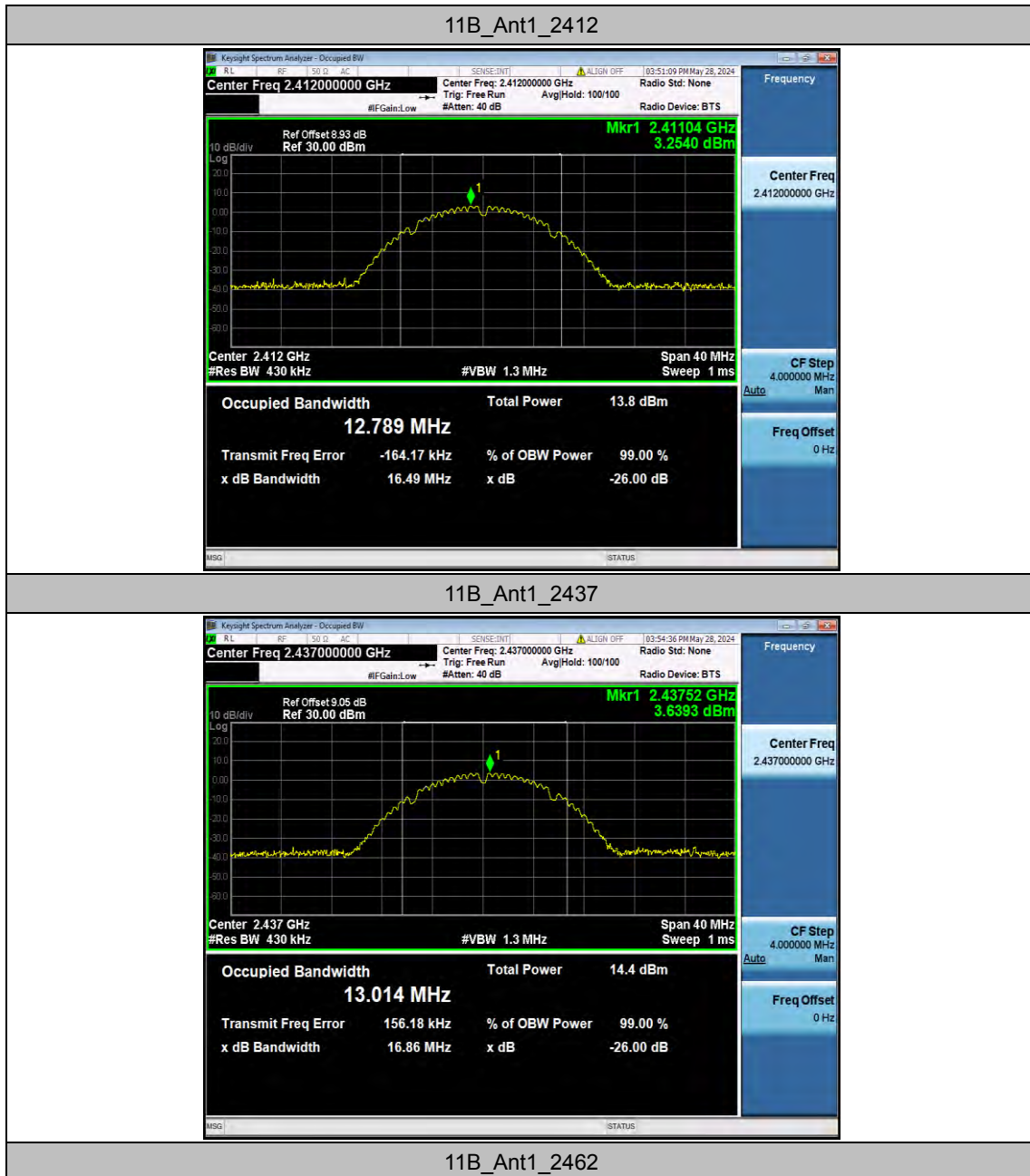


Appendix C.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
11B	Ant1	2412	12.789	2405.4413	2418.2303
		2437	13.014	2430.6492	2443.6632
		2462	12.943	2455.4109	2468.3539
11G	Ant1	2412	16.769	2403.4709	2420.2399
		2437	16.919	2428.5995	2445.5185
		2462	16.896	2453.5288	2470.4248
11N20SISO	Ant1	2412	17.786	2403.0229	2420.8089
		2437	17.887	2428.1421	2446.0291
		2462	17.848	2453.0823	2470.9303
11N40SISO	Ant1	2422	36.529	2403.8133	2440.3423
		2437	36.290	2418.8686	2455.1586
		2452	35.723	2434.1589	2469.8819

Test Graphs





11G_Ant1_2412



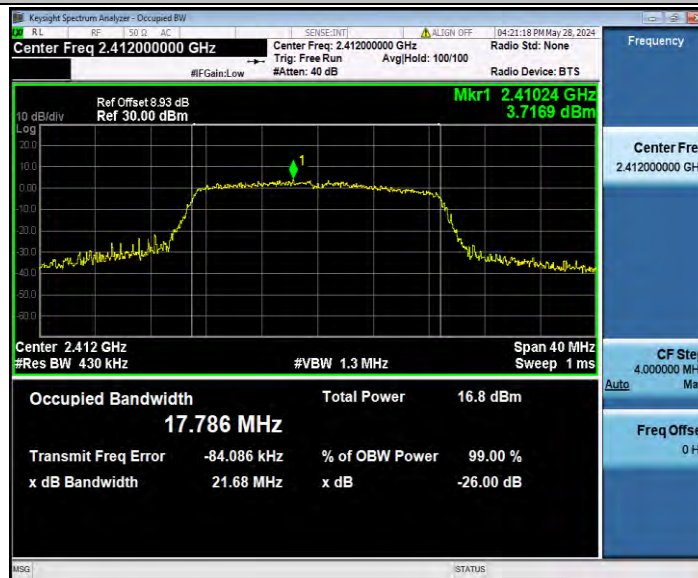
11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



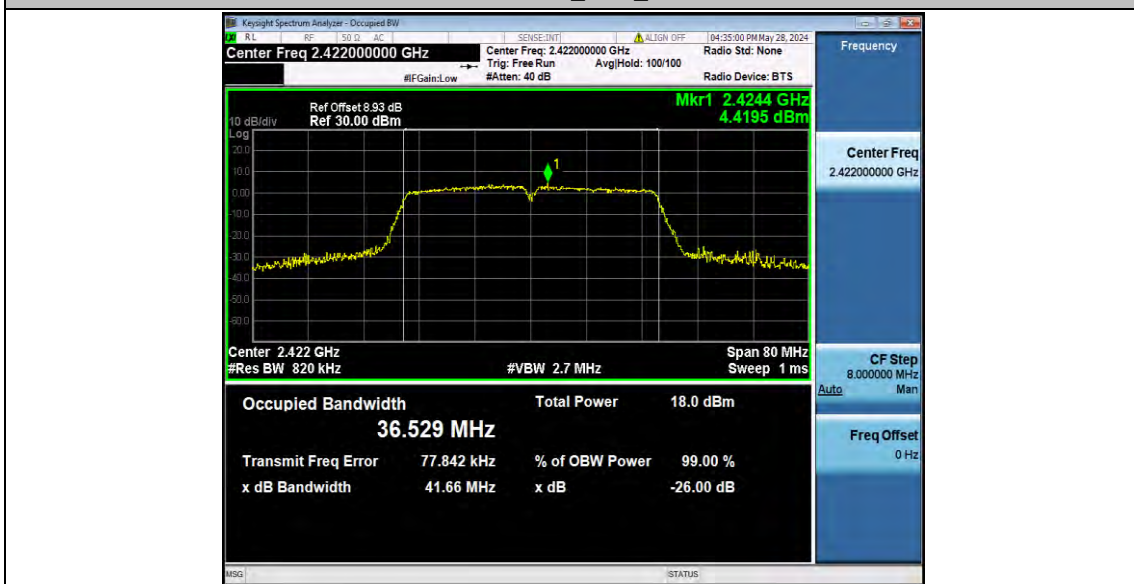
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



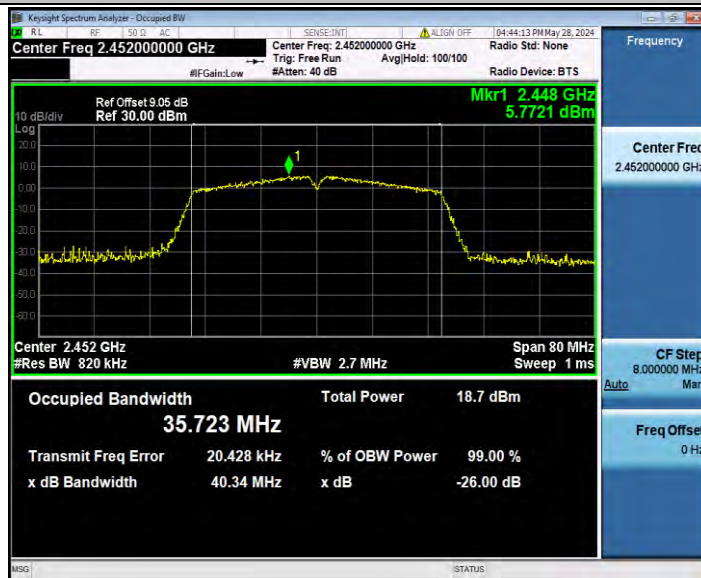
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C.3: Maximum conducted output power

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	13.89	≤30.00	PASS
		2437	14.40	≤30.00	PASS
		2462	14.58	≤30.00	PASS
11G	Ant1	2412	18.06	≤30.00	PASS
		2437	18.60	≤30.00	PASS
		2462	18.69	≤30.00	PASS
11N20SISO	Ant1	2412	18.02	≤30.00	PASS
		2437	18.55	≤30.00	PASS
		2462	18.58	≤30.00	PASS
11N40SISO	Ant1	2422	18.30	≤30.00	PASS
		2437	18.81	≤30.00	PASS
		2452	19.10	≤30.00	PASS

Note:

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

Appendix C.4: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.75	≤8.00	PASS
		2437	-11.00	≤8.00	PASS
		2462	-11.03	≤8.00	PASS
11G	Ant1	2412	-13.13	≤8.00	PASS
		2437	-12.77	≤8.00	PASS
		2462	-11.95	≤8.00	PASS
11N20SISO	Ant1	2412	-12.89	≤8.00	PASS
		2437	-13.75	≤8.00	PASS
		2462	-13.36	≤8.00	PASS
11N40SISO	Ant1	2422	-16.65	≤8.00	PASS
		2437	-14.98	≤8.00	PASS
		2452	-15.19	≤8.00	PASS

Note:

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

Test Graphs

11B_Ant1_2412



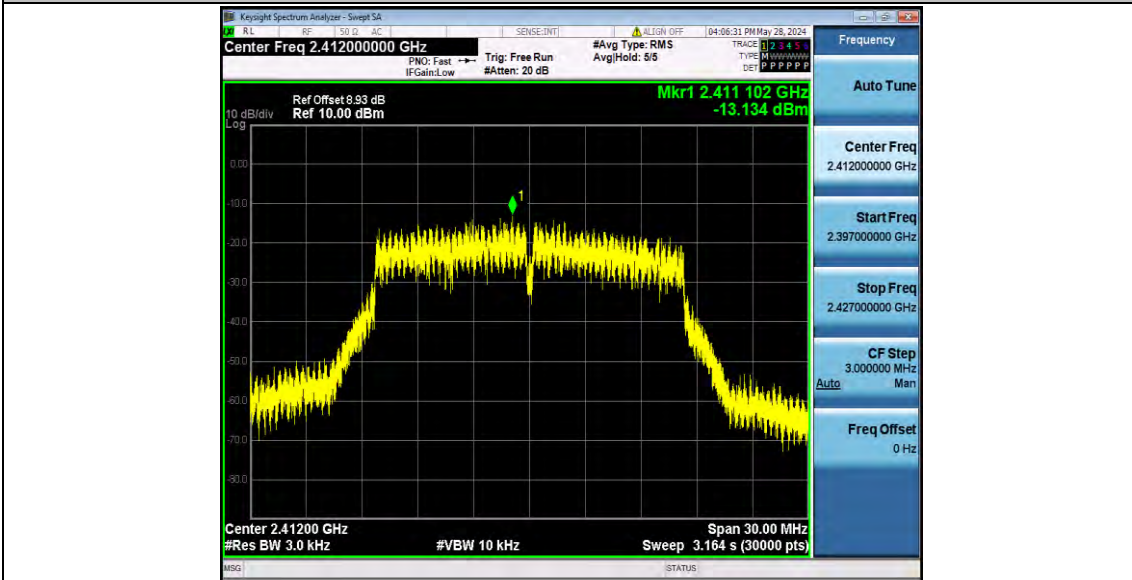
11B_Ant1_2437



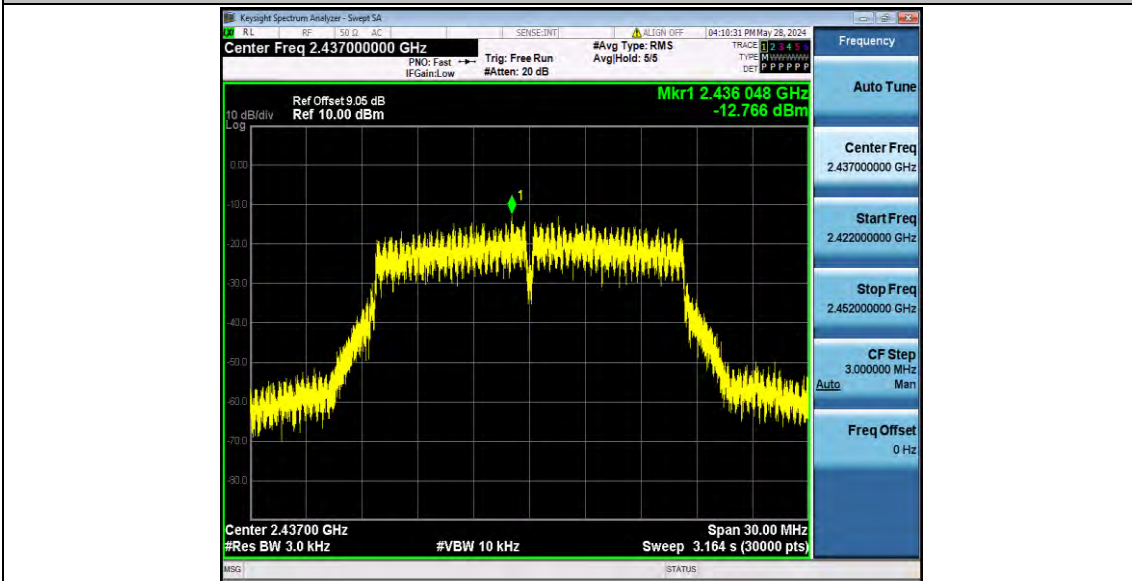
11B_Ant1_2462



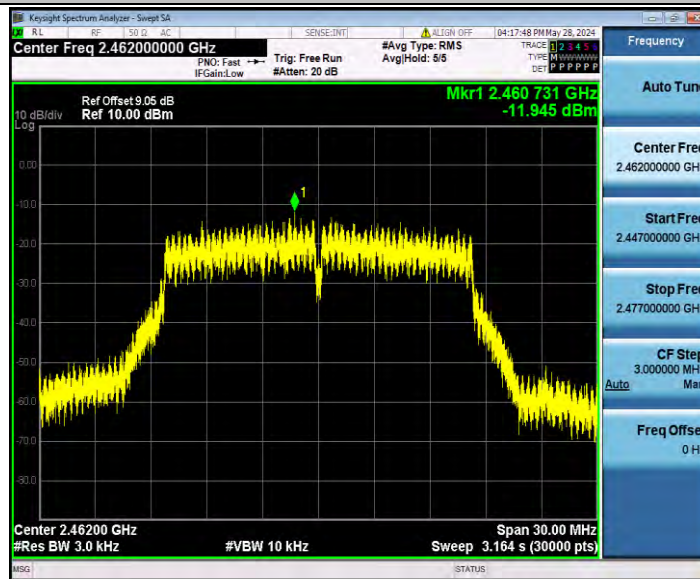
11G_Ant1_2412



11G_Ant1_2437



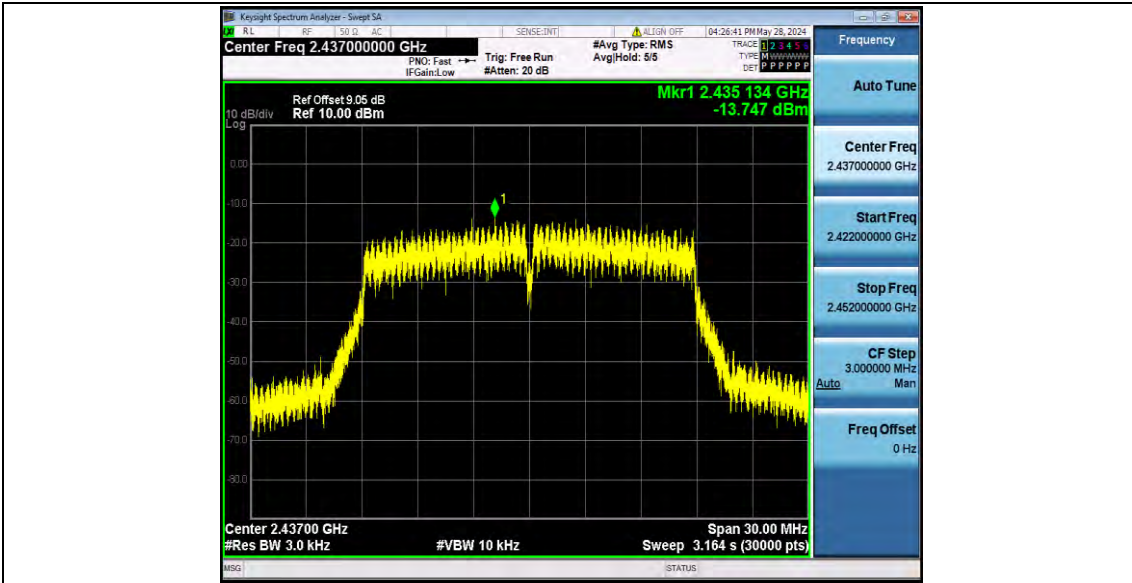
11G_Ant1_2462



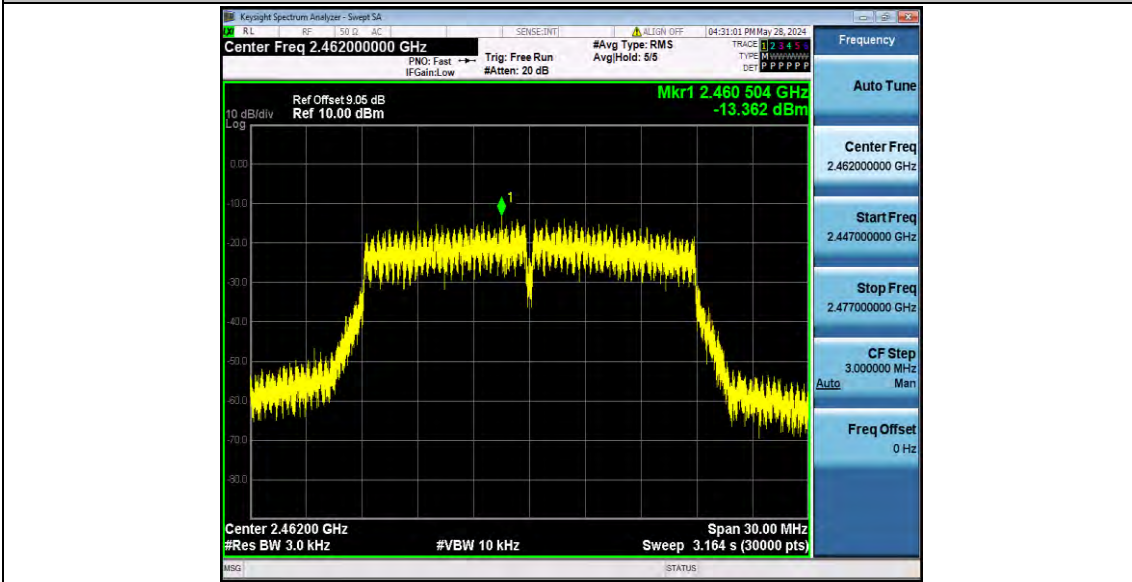
11N20SISO_Ant1_2412



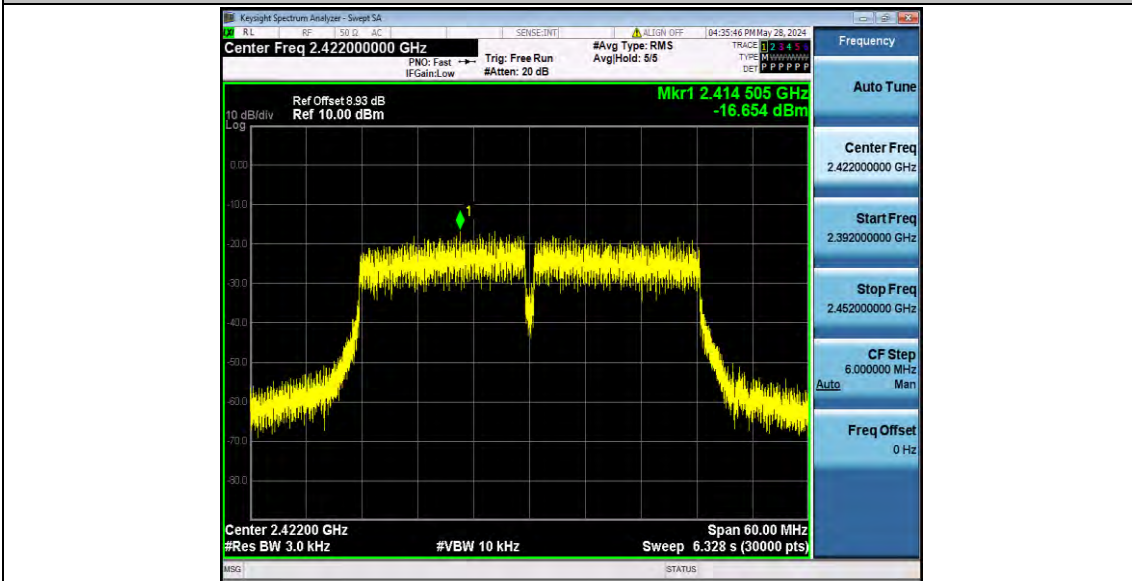
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



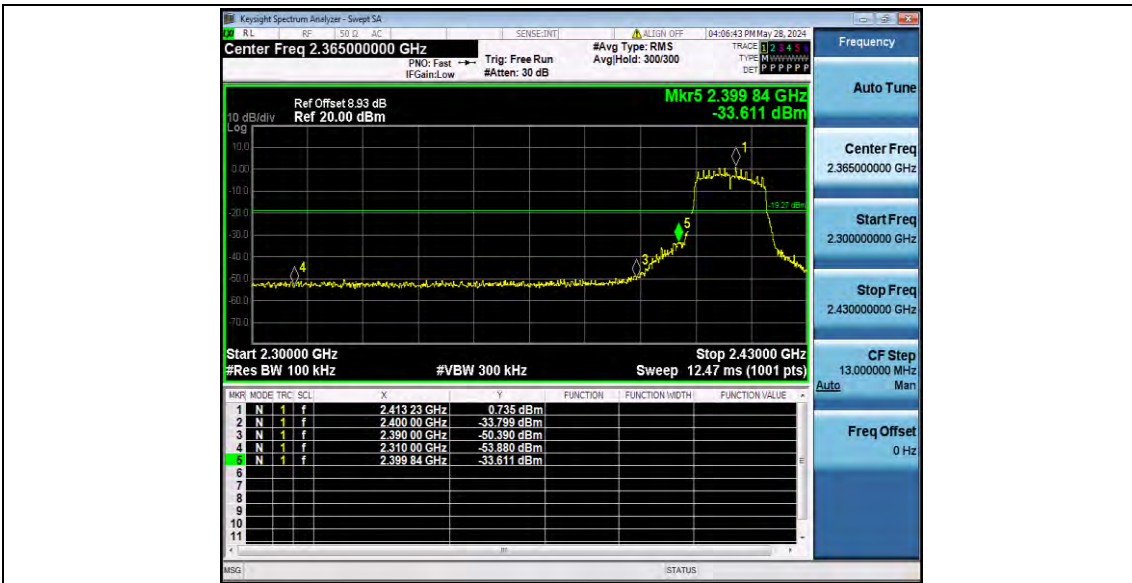
Appendix C.5: Band edge measurements

Test Result

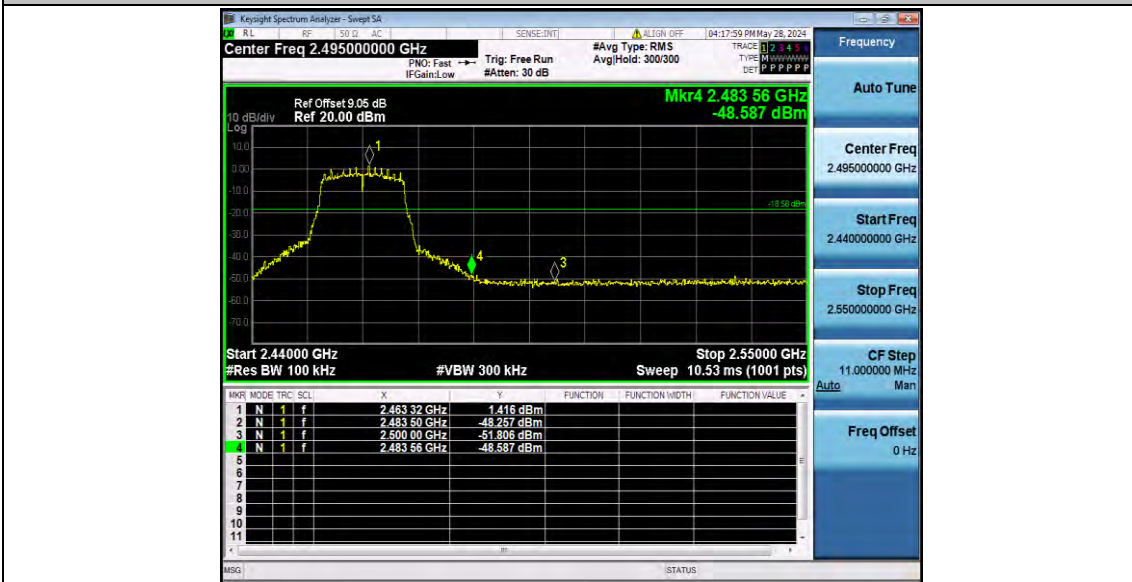
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.82	-47.5	≤ -17.19	PASS
		High	2462	3.41	-48.93	≤ -16.59	PASS
11G	Ant1	Low	2412	0.74	-33.61	≤ -19.27	PASS
		High	2462	1.42	-48.59	≤ -18.58	PASS
11N20SISO	Ant1	Low	2412	0.62	-33.17	≤ -19.38	PASS
		High	2462	1.39	-46.51	≤ -18.61	PASS
11N40SISO	Ant1	Low	2422	-2.22	-33.61	≤ -22.22	PASS
		High	2452	-0.23	-43.47	≤ -20.23	PASS

Test Graphs





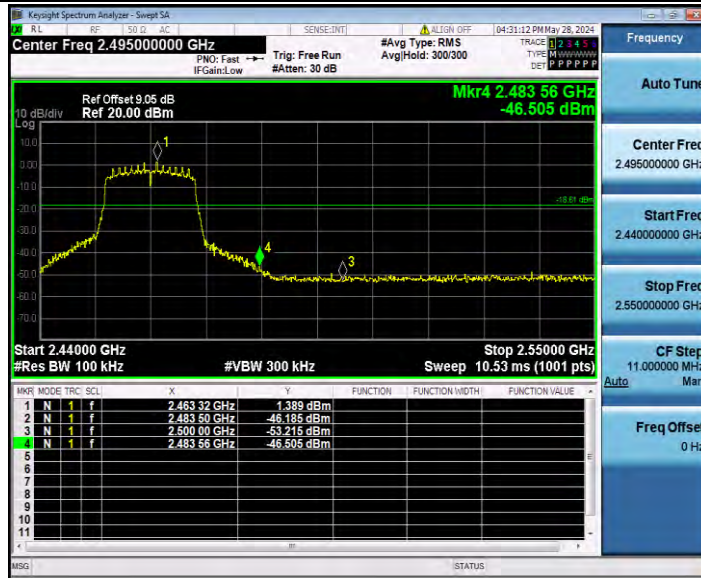
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



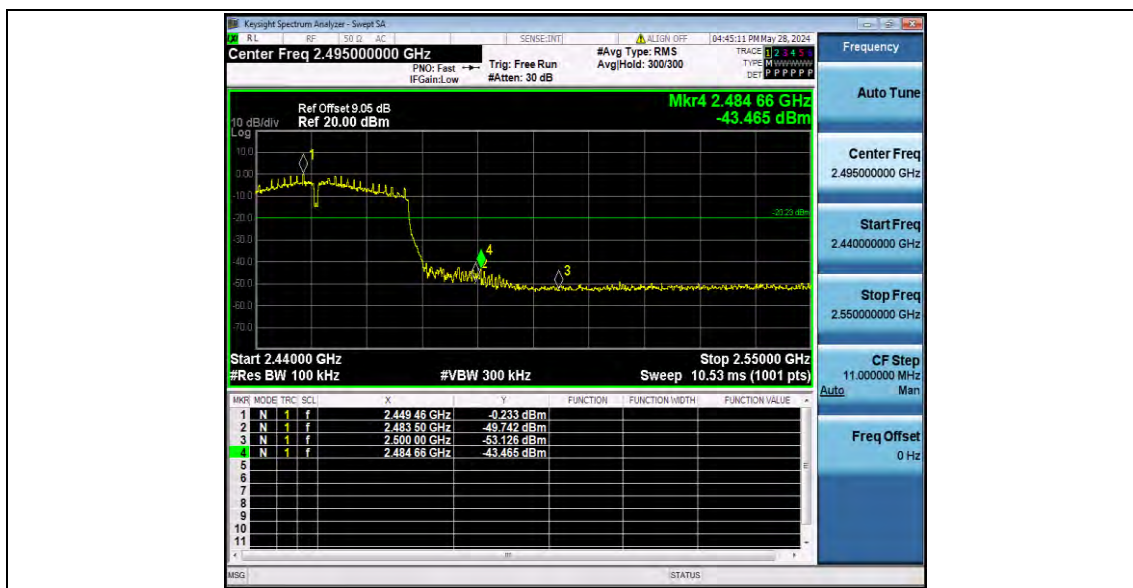
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

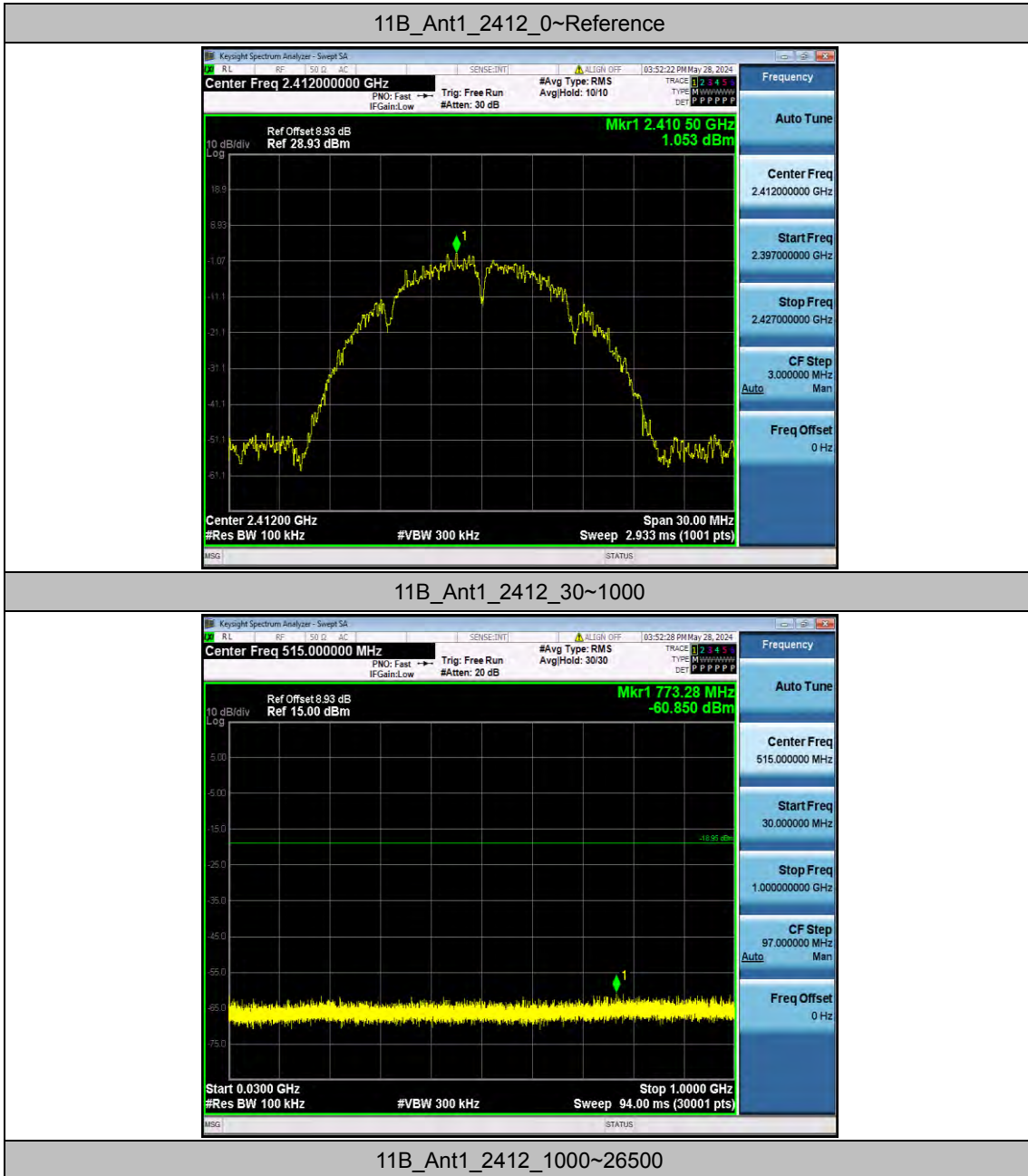


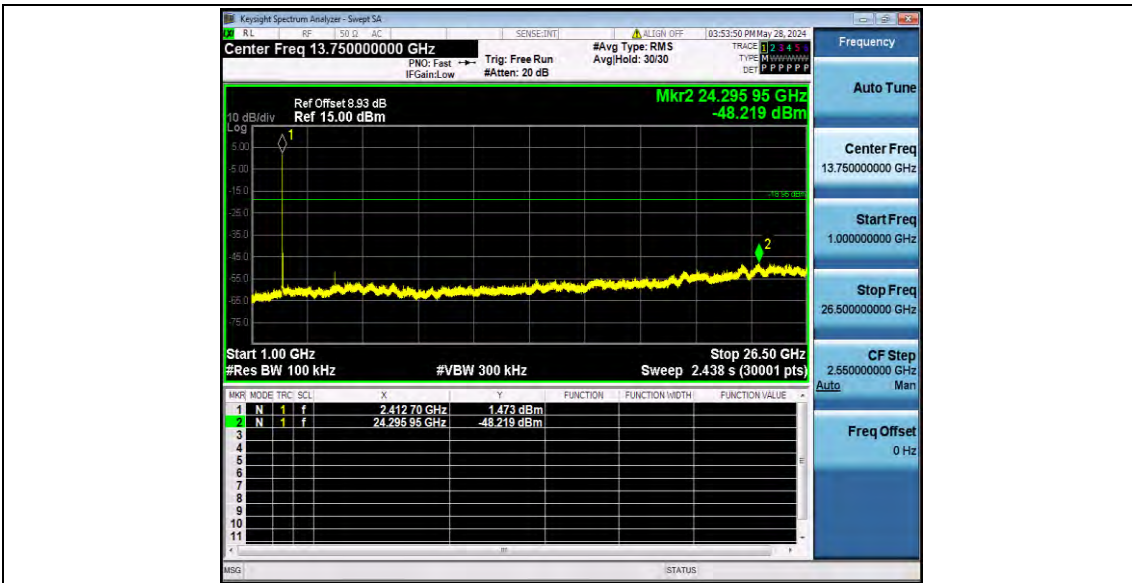
Appendix C.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	1.05	1.05	---	PASS
			30~1000	1.05	-60.85	≤-18.95	PASS
			1000~26500	1.05	-48.22	≤-18.95	PASS
		2437	Reference	1.06	1.06	---	PASS
			30~1000	1.06	-60.41	≤-18.94	PASS
			1000~26500	1.06	-47.84	≤-18.94	PASS
		2462	Reference	3.15	3.15	---	PASS
			30~1000	3.15	-60.63	≤-16.85	PASS
			1000~26500	3.15	-47.38	≤-16.85	PASS
11G	Ant1	2412	Reference	-2.06	-2.06	---	PASS
			30~1000	-2.06	-60.62	≤-22.06	PASS
			1000~26500	-2.06	-47.38	≤-22.06	PASS
		2437	Reference	-2.50	-2.50	---	PASS
			30~1000	-2.50	-46.9	≤-22.5	PASS
			1000~26500	-2.50	-48.01	≤-22.5	PASS
		2462	Reference	-0.42	-0.42	---	PASS
			30~1000	-0.42	-60.28	≤-20.42	PASS
			1000~26500	-0.42	-48.34	≤-20.42	PASS
11N20SISO	Ant1	2412	Reference	-2.00	-2.00	---	PASS
			30~1000	-2.00	-60.6	≤-22	PASS
			1000~26500	-2.00	-48.13	≤-22	PASS
		2437	Reference	-2.15	-2.15	---	PASS
			30~1000	-2.15	-60.79	≤-22.15	PASS
			1000~26500	-2.15	-47.86	≤-22.15	PASS
		2462	Reference	-0.55	-0.55	---	PASS
			30~1000	-0.55	-60.94	≤-20.55	PASS
			1000~26500	-0.55	-47.97	≤-20.55	PASS
11N40SISO	Ant1	2422	Reference	-4.45	-4.45	---	PASS
			30~1000	-4.45	-60.93	≤-24.45	PASS
			1000~26500	-4.45	-48.07	≤-24.45	PASS
		2437	Reference	-1.90	-1.90	---	PASS
			30~1000	-1.90	-60.09	≤-21.9	PASS
			1000~26500	-1.90	-47.51	≤-21.9	PASS
		2452	Reference	-3.63	-3.63	---	PASS
			30~1000	-3.63	-60.7	≤-23.63	PASS
			1000~26500	-3.63	-47.21	≤-23.63	PASS

Test Graphs

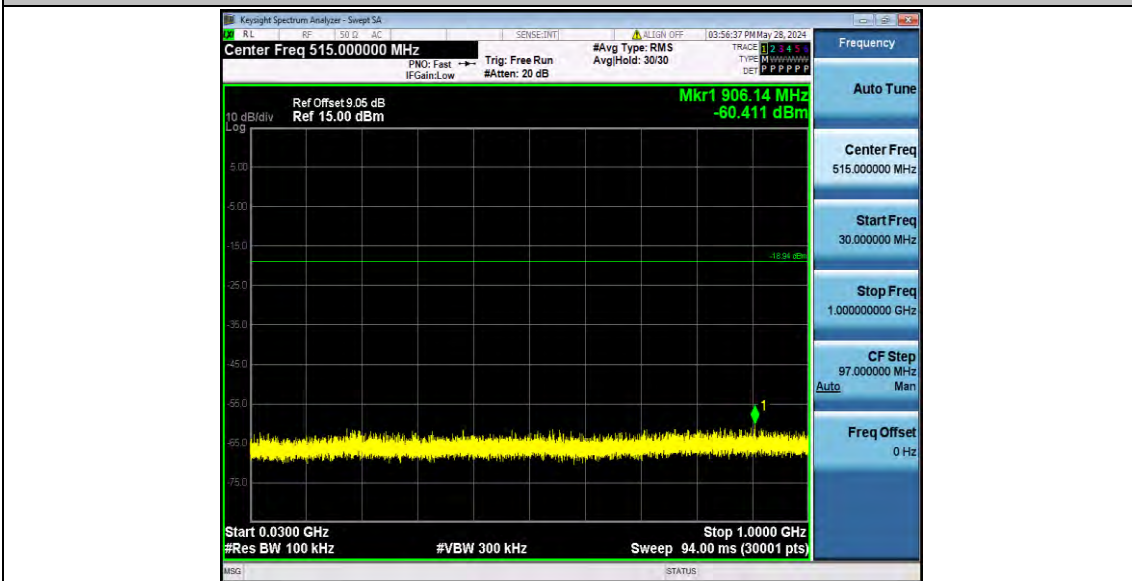




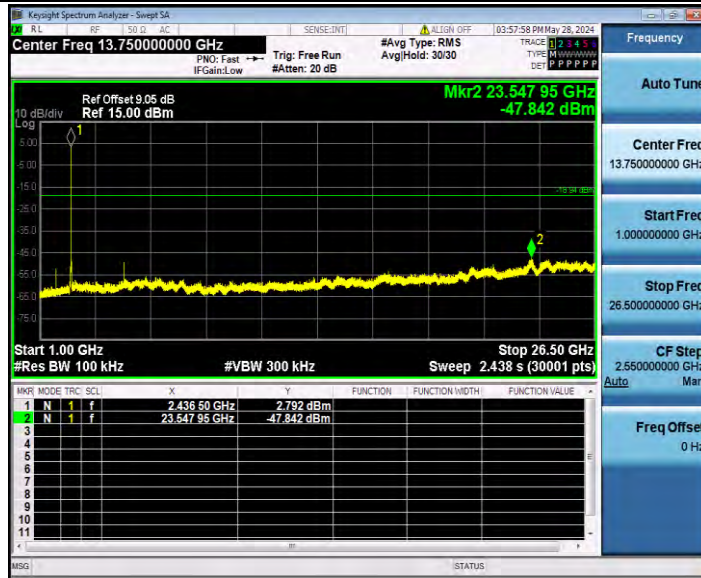
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



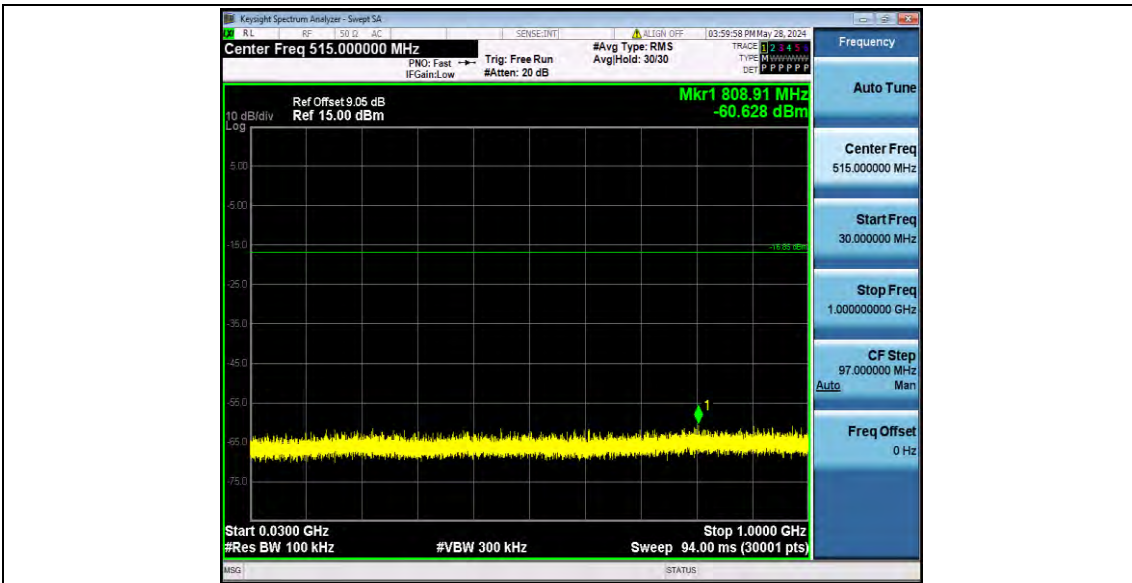
11B_Ant1_2437_1000~26500



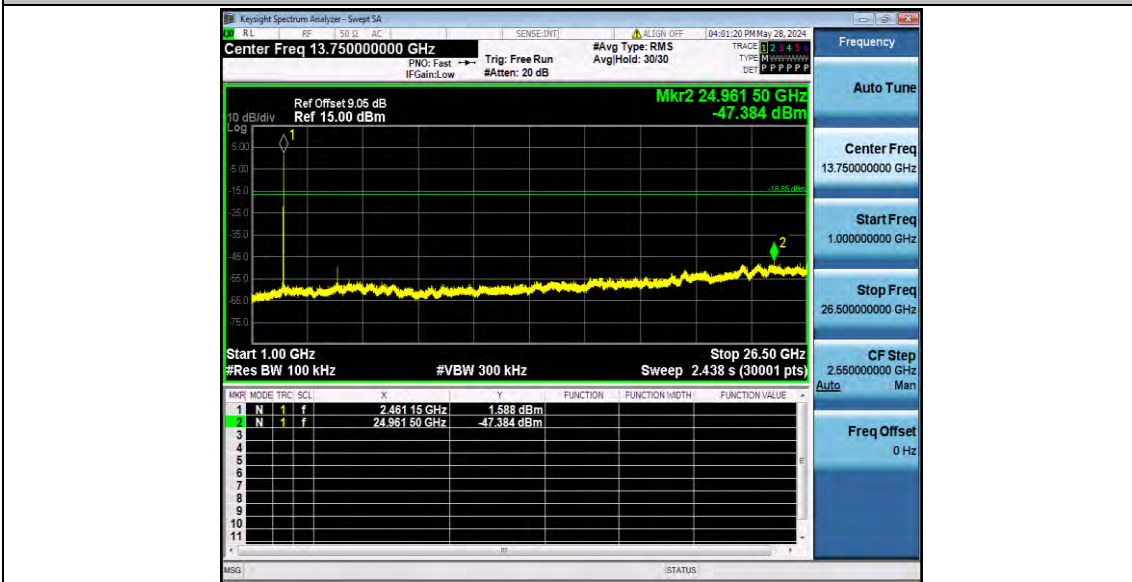
11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



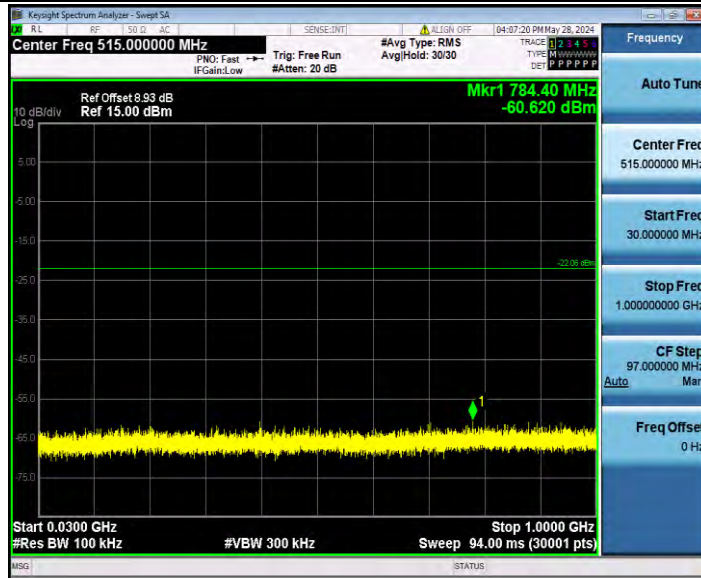
11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



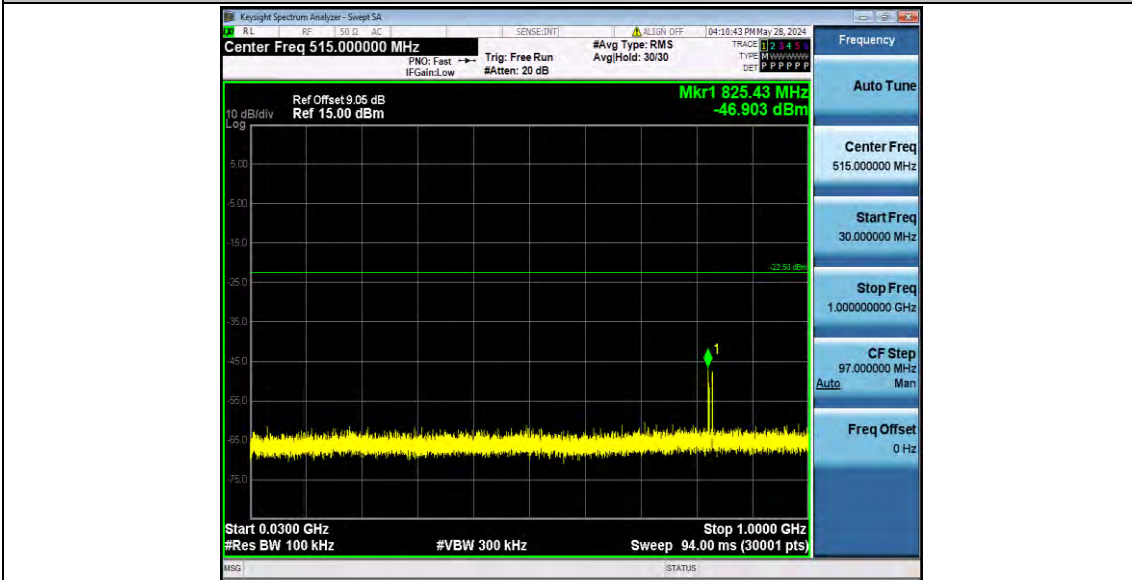
11G_Ant1_2412_1000~26500



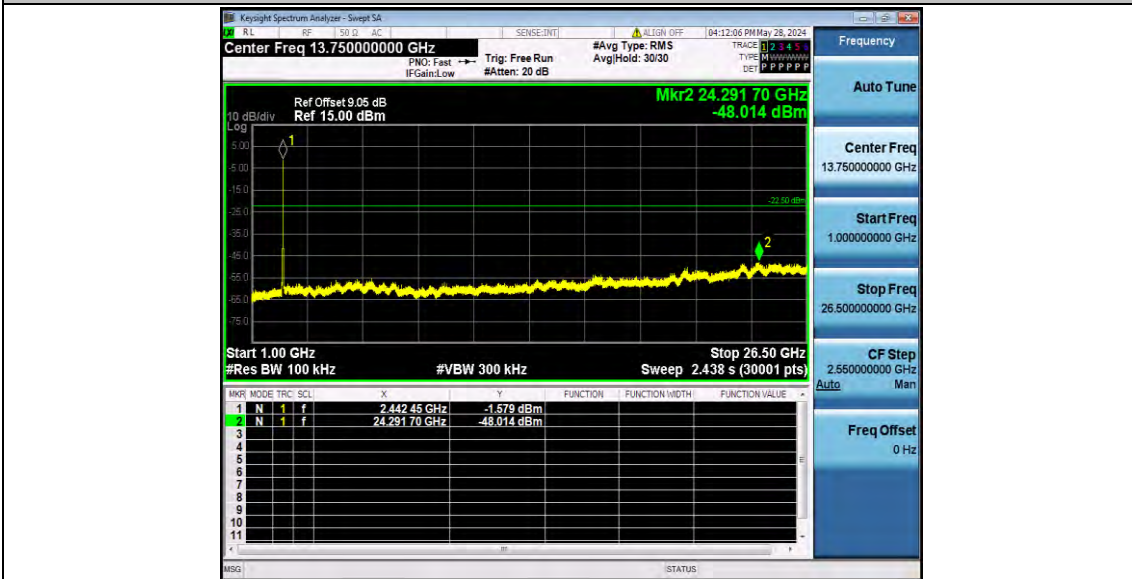
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



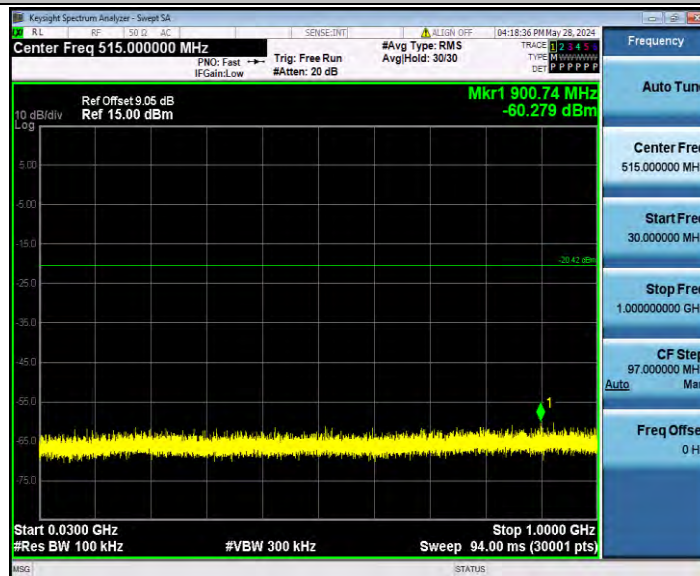
11G_Ant1_2437_1000~26500



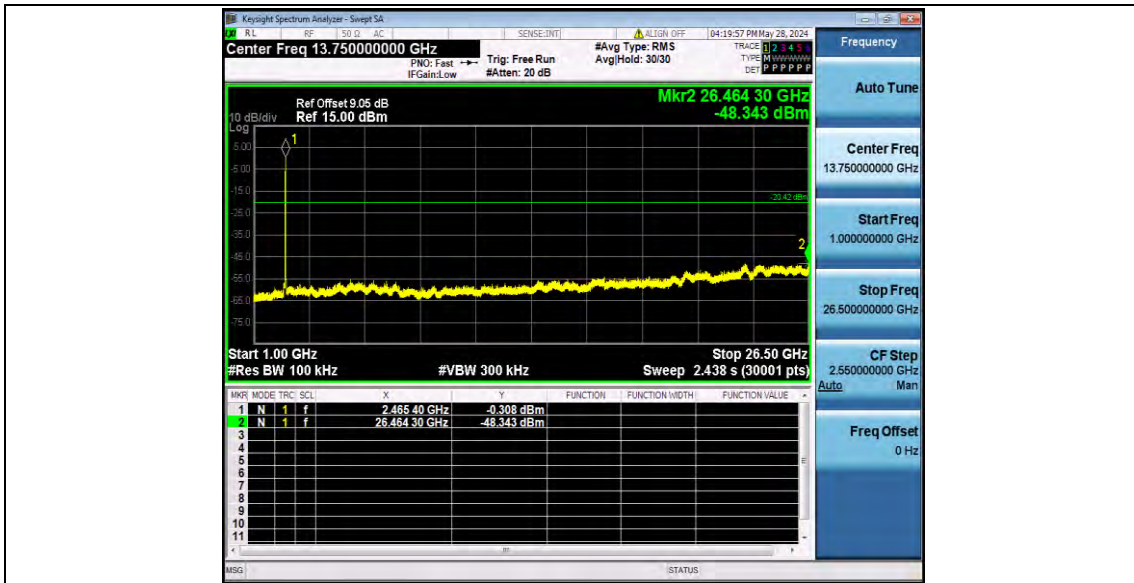
11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



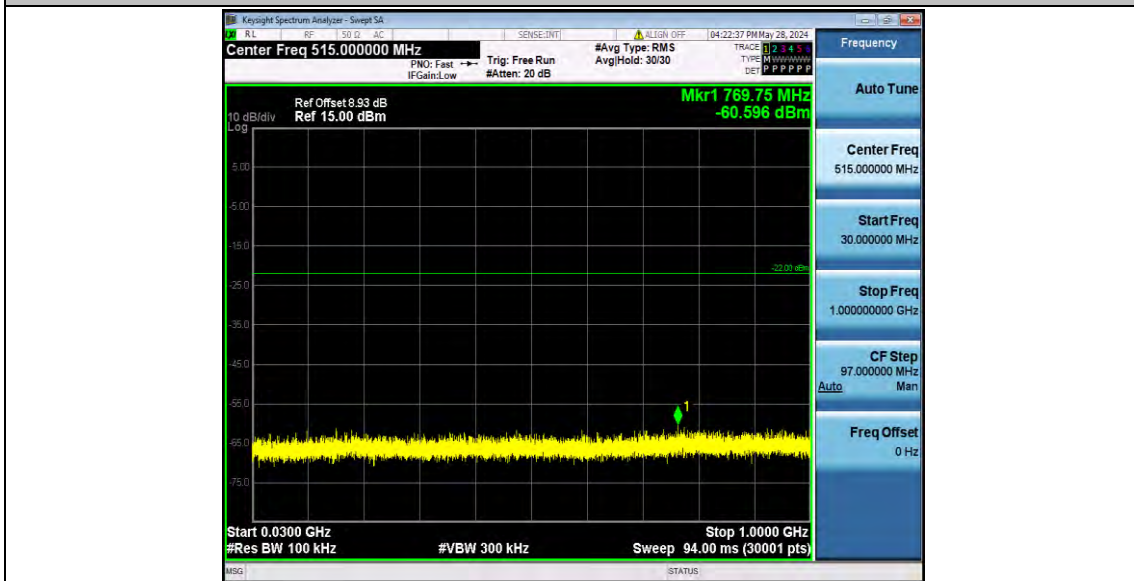
11G_Ant1_2462_1000~26500



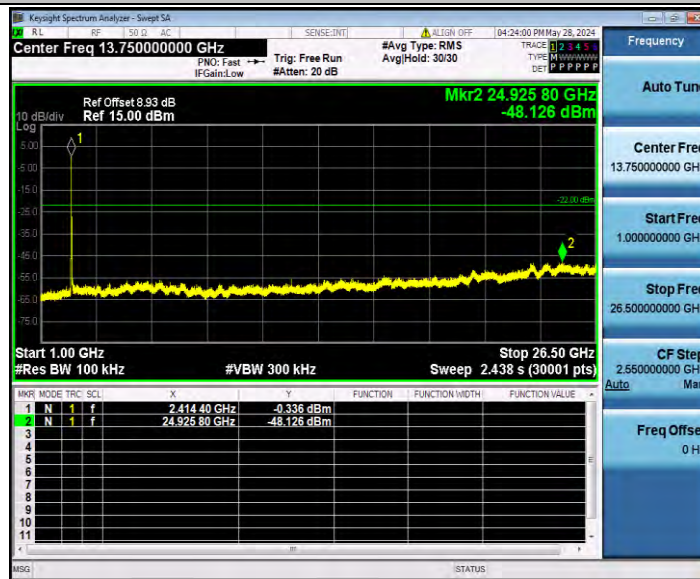
11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



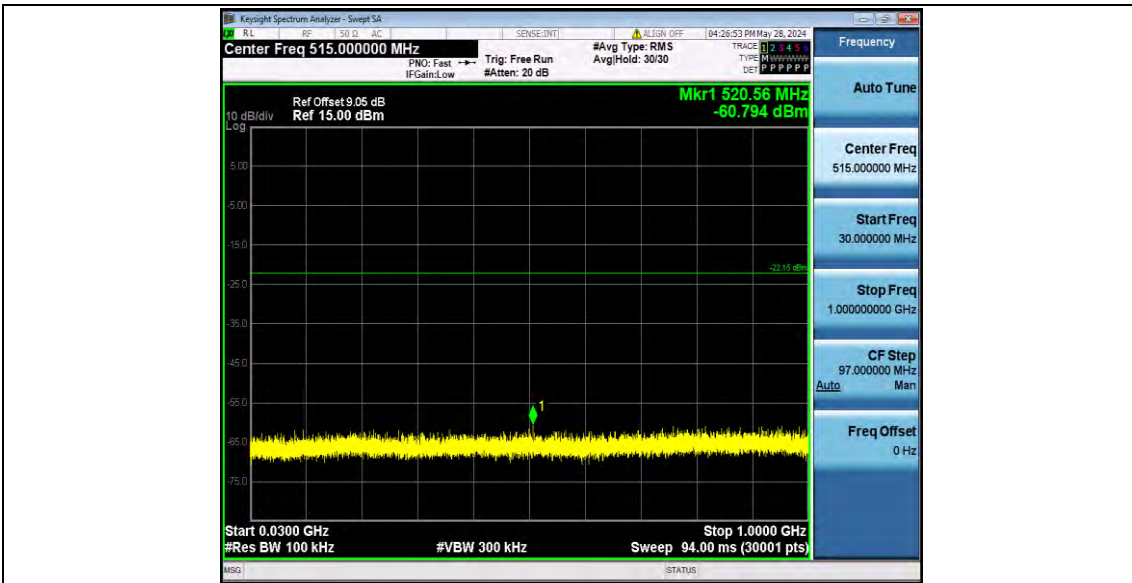
11N20SISO_Ant1_2412_1000~26500



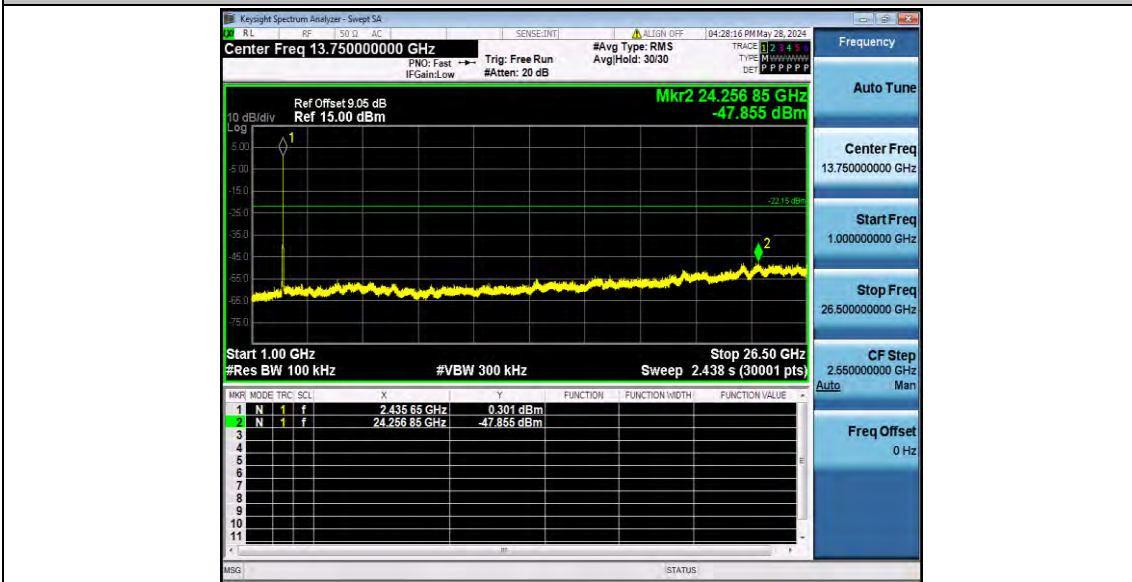
11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



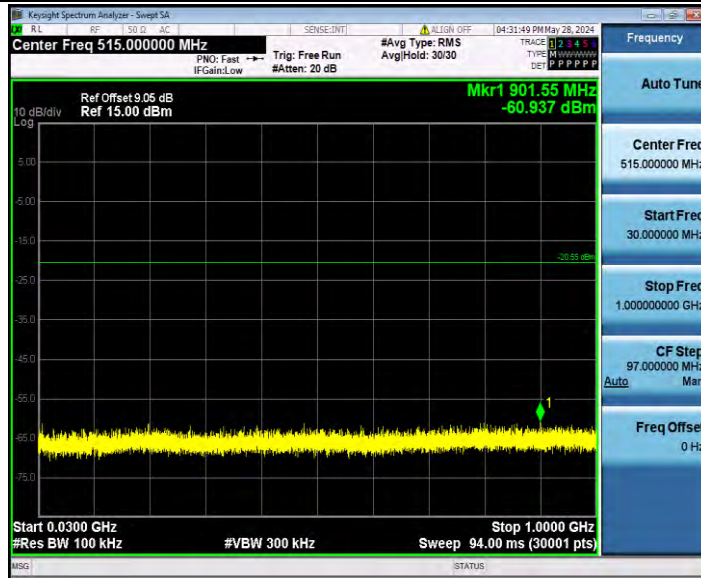
11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



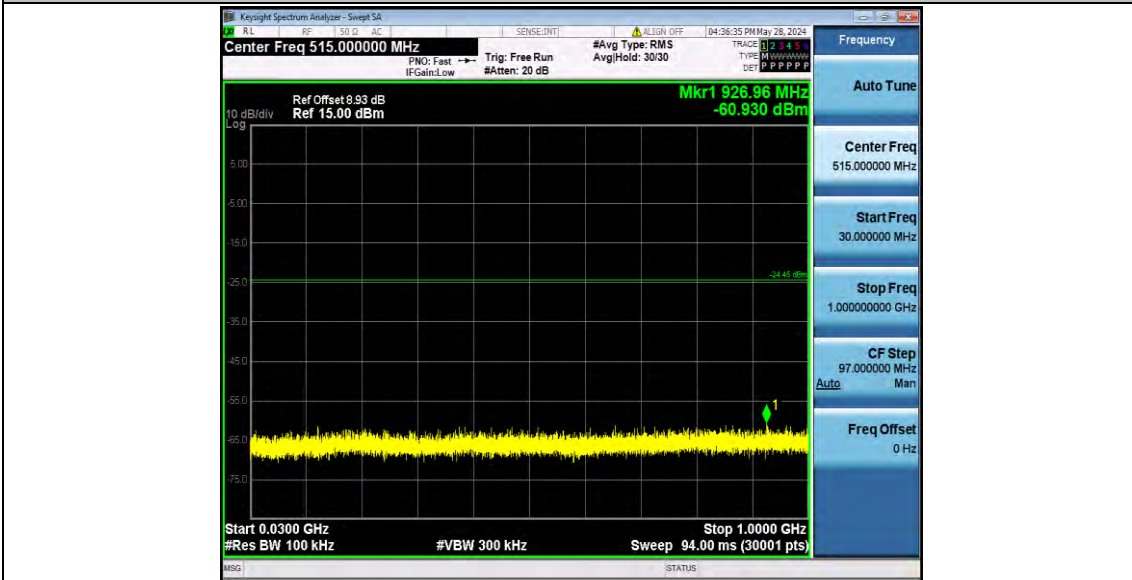
11N20SISO_Ant1_2462_1000~26500



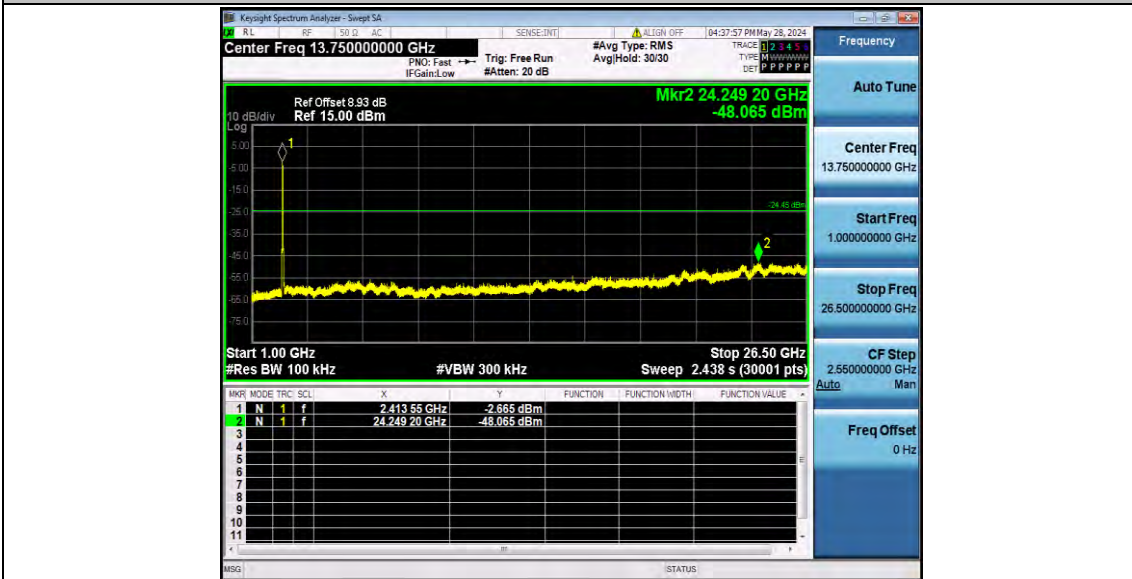
11N40SISO_Ant1_2422_0~Reference



11N40SISO_Ant1_2422_30~1000



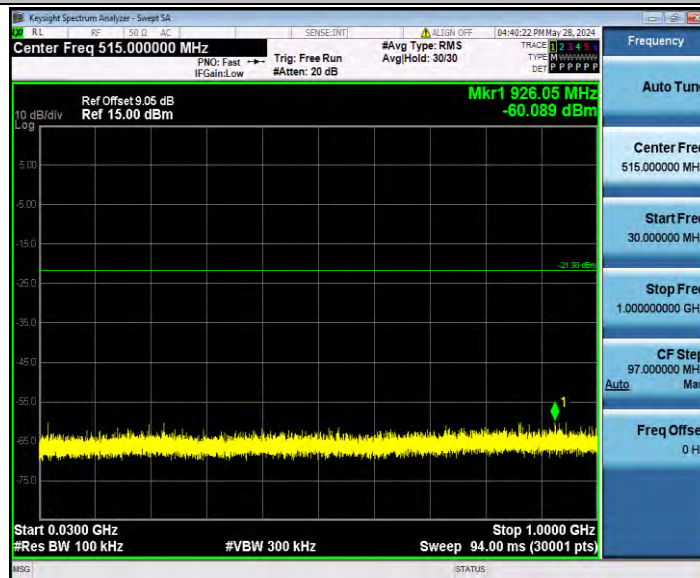
11N40SISO_Ant1_2422_1000~26500



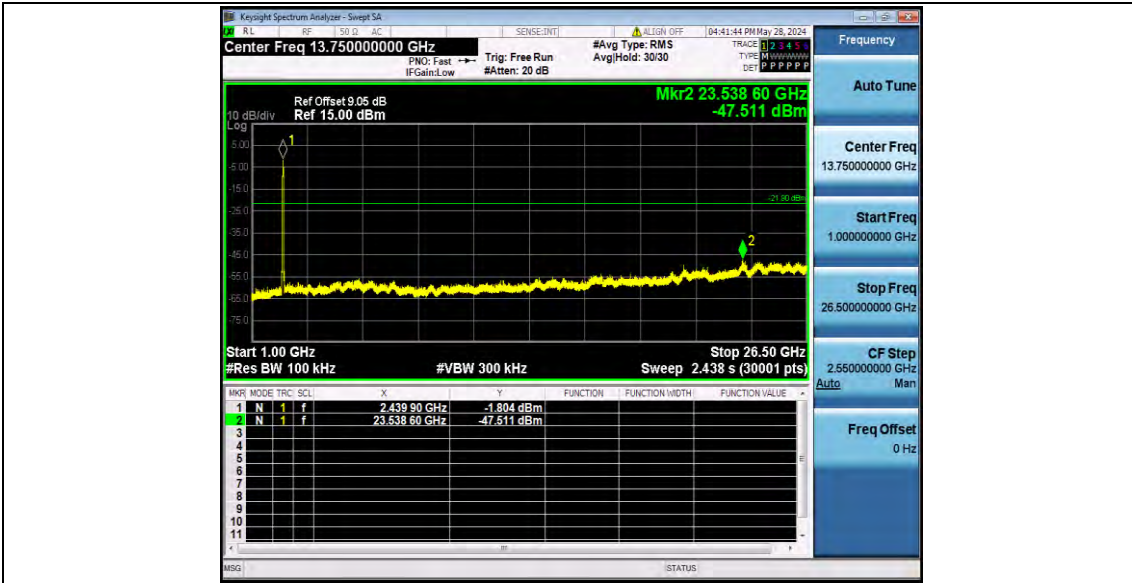
11N40SISO_Ant1_2437_0~Reference



11N40SISO_Ant1_2437_30~1000



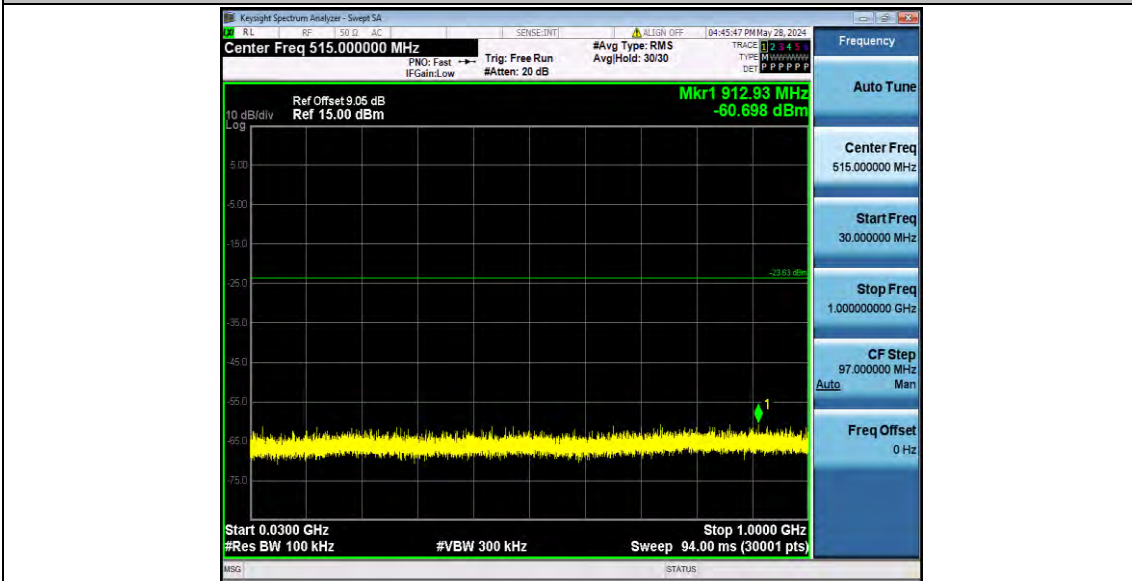
11N40SISO_Ant1_2437_1000~26500

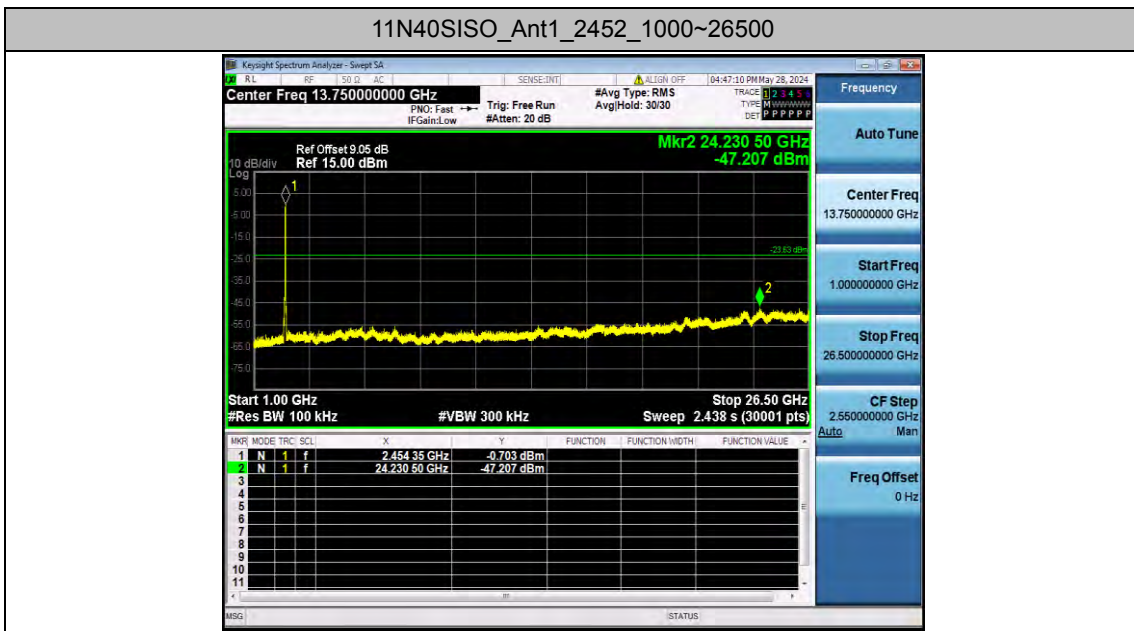


11N40SISO_Ant1_2452_0~Reference



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	-49.71	≤-41.20	45.49	≤54	PASS
				AV	2389.960	-48.96	≤-41.20	46.24	≤54	PASS
				AV	2390.000	-48.96	≤-41.20	46.24	≤54	PASS
				Peak	2310.000	-47.61	≤-21.20	47.59	≤74	PASS
				Peak	2361.620	-40.78	≤-21.20	54.42	≤74	PASS
				Peak	2390.000	-46.57	≤-21.20	48.63	≤74	PASS
		High	2462	AV	2483.500	-48.69	≤-41.20	46.51	≤54	PASS
				AV	2483.560	-48.72	≤-41.20	46.48	≤54	PASS
				AV	2500.000	-48.97	≤-41.20	46.23	≤54	PASS
				Peak	2483.500	-46.14	≤-21.20	49.06	≤74	PASS
				Peak	2499.840	-41.15	≤-21.20	54.05	≤74	PASS
				Peak	2500.000	-42.27	≤-21.20	52.93	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.62	≤-41.20	45.58	≤54	PASS
				AV	2389.960	-46.71	≤-41.20	48.49	≤54	PASS
				AV	2390.000	-46.71	≤-41.20	48.49	≤54	PASS
				Peak	2310.000	-44.97	≤-21.20	50.23	≤74	PASS
				Peak	2387.620	-39.37	≤-21.20	55.83	≤74	PASS
				Peak	2390.000	-44.83	≤-21.20	50.37	≤74	PASS
		High	2462	AV	2483.500	-46.19	≤-41.20	49.01	≤54	PASS
				AV	2483.560	-46.26	≤-41.20	48.94	≤54	PASS
				AV	2500.000	-48.92	≤-41.20	46.28	≤54	PASS
				Peak	2483.500	-41.65	≤-21.20	53.55	≤74	PASS
				Peak	2484.110	-39.82	≤-21.20	55.38	≤74	PASS
				Peak	2500.000	-43.13	≤-21.20	52.07	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-49.66	≤-41.20	45.54	≤54	PASS
				AV	2389.960	-45.65	≤-41.20	49.55	≤54	PASS
				AV	2390.000	-45.65	≤-41.20	49.55	≤54	PASS
				Peak	2310.000	-44.97	≤-21.20	50.23	≤74	PASS
				Peak	2387.620	-39.37	≤-21.20	55.83	≤74	PASS
				Peak	2390.000	-44.83	≤-21.20	50.37	≤74	PASS
		High	2462	AV	2483.500	-45.16	≤-41.20	50.04	≤54	PASS
				AV	2483.560	-45.27	≤-41.20	49.93	≤54	PASS
				AV	2500.000	-48.95	≤-41.20	46.25	≤54	PASS
				Peak	2483.500	-44.66	≤-21.20	50.54	≤74	PASS
				Peak	2486.420	-40.05	≤-21.20	55.15	≤74	PASS
				Peak	2486.420	-40.05	≤-21.20	55.15	≤74	PASS

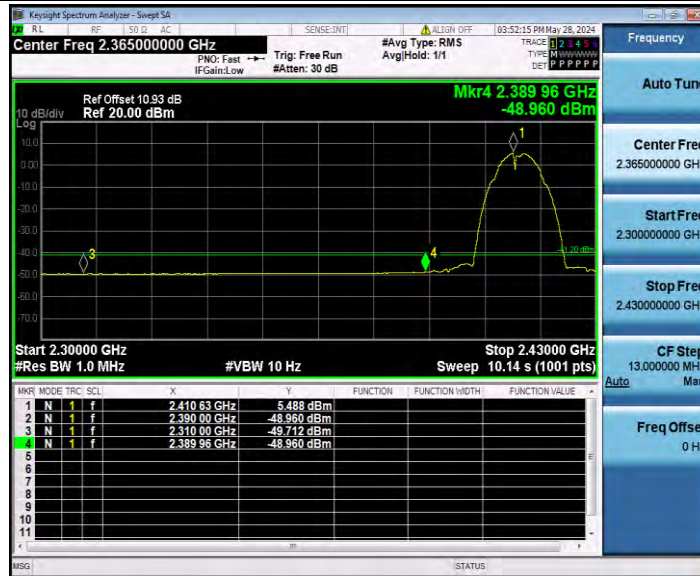
				Peak	2500.000	-45.7	≤ -21.20	49.50	≤ 74	PASS
11N40SIS O	Ant1	Low	2422	AV	2310.000	-49.63	≤ -41.20	45.57	≤ 54	PASS
				AV	2389.960	-44.69	≤ -41.20	50.51	≤ 54	PASS
				AV	2390.000	-44.69	≤ -41.20	50.51	≤ 54	PASS
				Peak	2310.000	-50.39	≤ -21.20	44.81	≤ 74	PASS
				Peak	2388.270	-39.16	≤ -21.20	56.04	≤ 74	PASS
				Peak	2390.000	-41.28	≤ -21.20	53.92	≤ 74	PASS
		High	2452	AV	2483.500	-45.99	≤ -41.20	49.21	≤ 54	PASS
				AV	2484.000	-45.93	≤ -41.20	49.27	≤ 54	PASS
				AV	2500.000	-48.95	≤ -41.20	46.25	≤ 54	PASS
				Peak	2483.500	-47.38	≤ -21.20	47.82	≤ 74	PASS
				Peak	2484.000	-40.53	≤ -21.20	54.67	≤ 74	PASS
				Peak	2500.000	-41.76	≤ -21.20	53.44	≤ 74	PASS

Note:

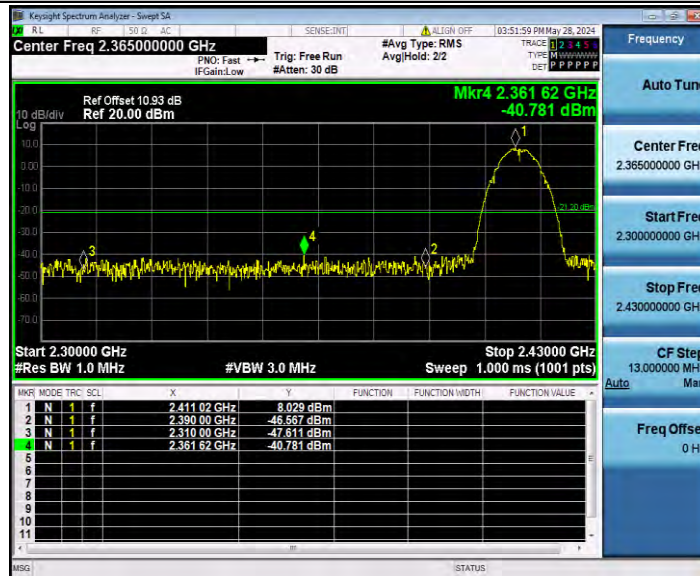
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

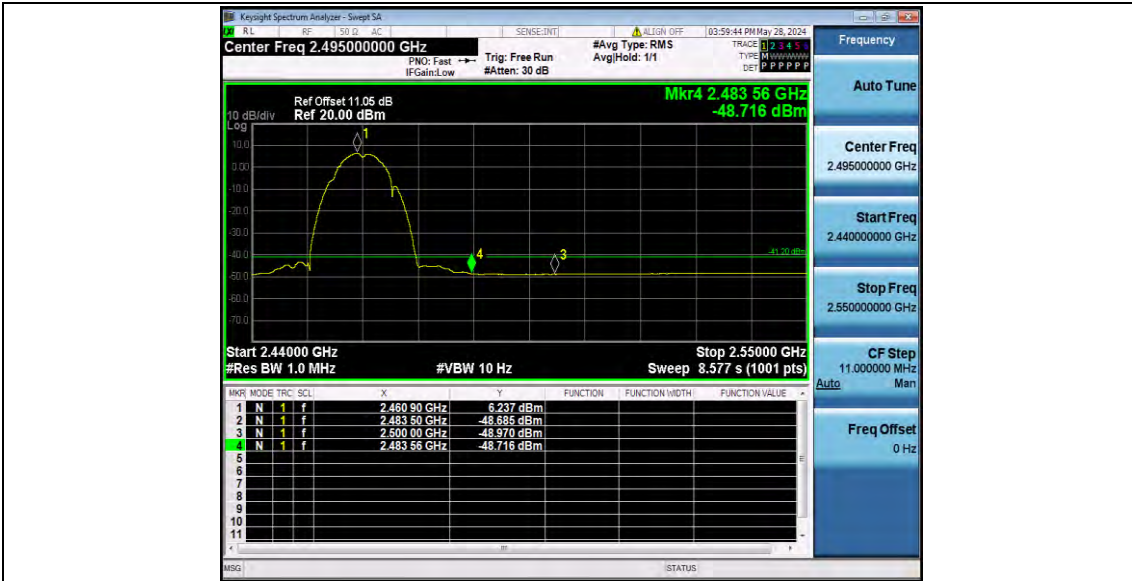
11B_Ant1_Low_2412_AV



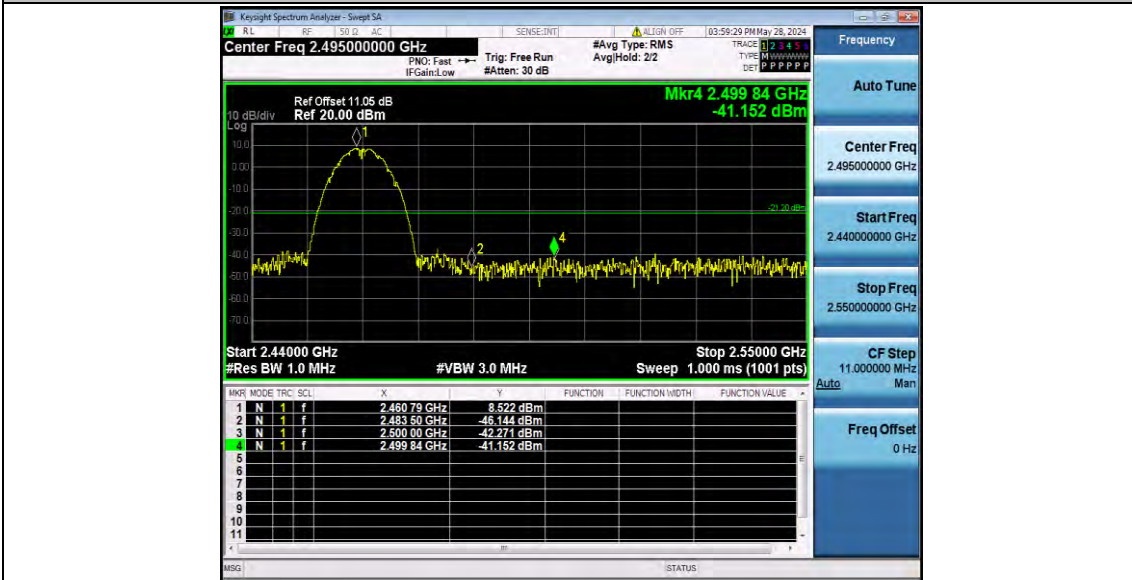
11B_Ant1_Low_2412_Peak



11B_Ant1_High_2462_AV



11B_Ant1_High_2462_Peak



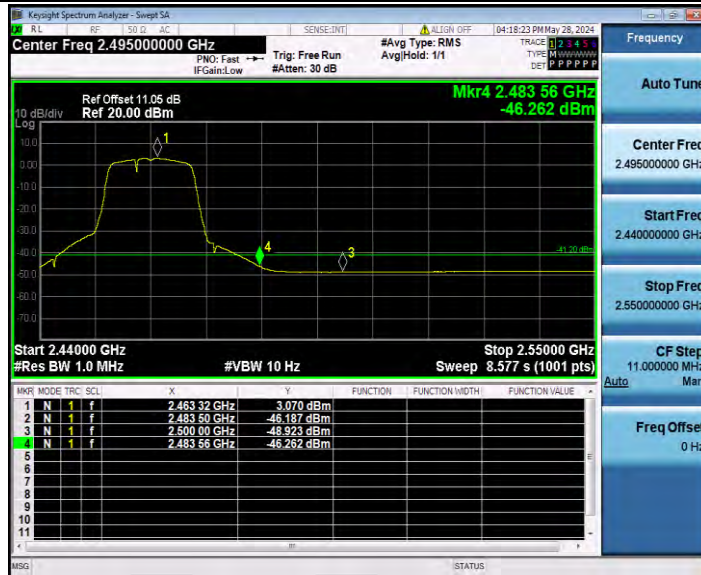
11G_Ant1_Low_2412_AV



11G_Ant1_Low_2412_Peak



11G_Ant1_High_2462_AV



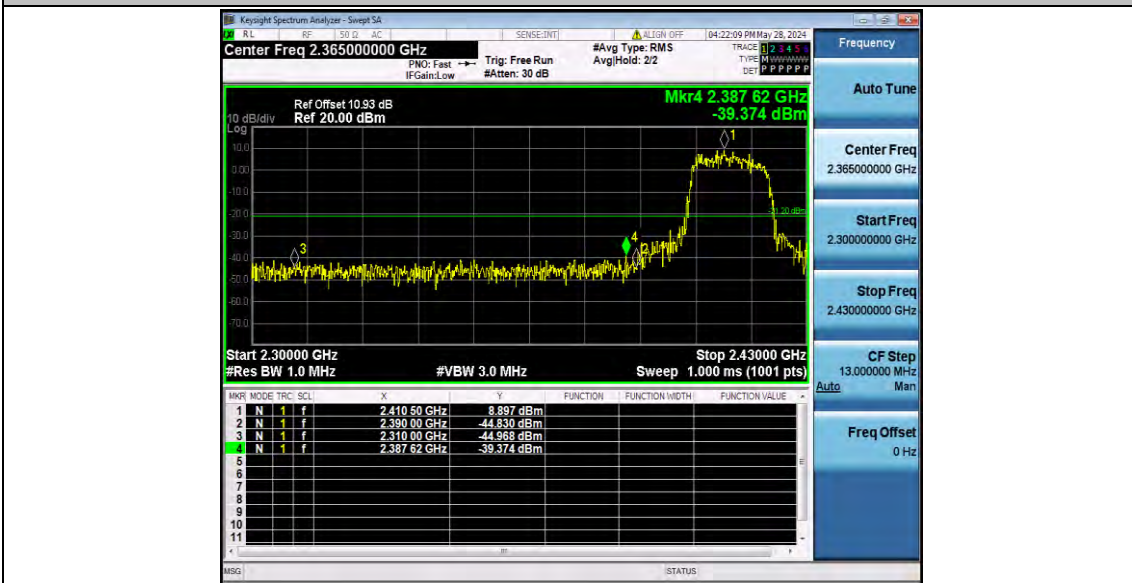
11G_Ant1_High_2462_Peak



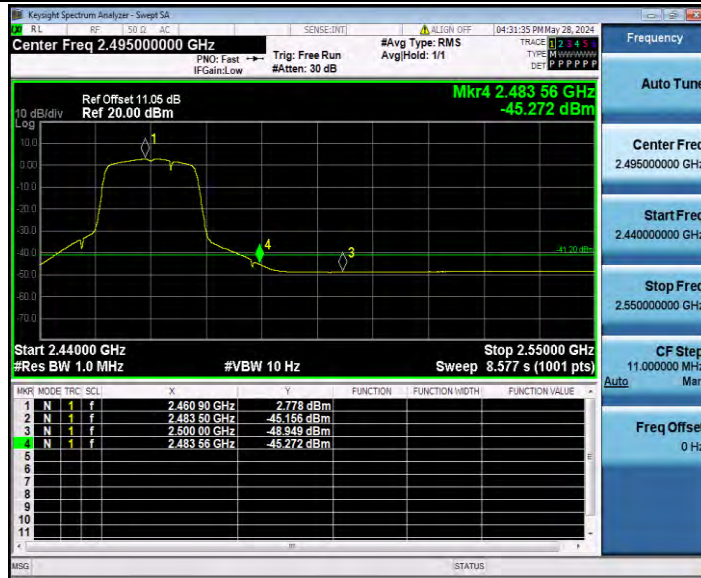
11N20SISO_Ant1_Low_2412_AV



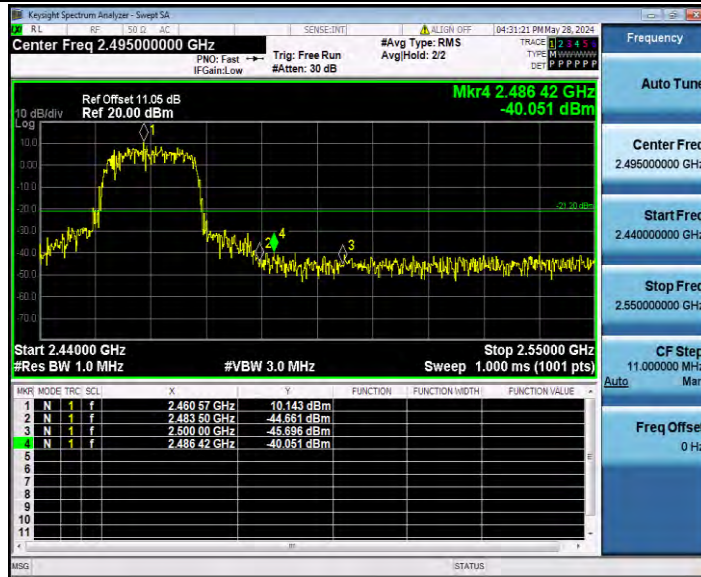
11N20SISO_Ant1_Low_2412_Peak



11N20SISO_Ant1_High_2462_AV



11N20SISO_Ant1_High_2462_Peak



11N40SISO_Ant1_Low_2422_AV



11N40SISO_Ant1_Low_2422_Peak



11N40SISO_Ant1_High_2452_AV



11N40SISO_Ant1_High_2452_Peak

