

Case No. : <u>CTA24061301902</u>
Ambient Condition: <u>22 °C, 51 %RH,</u>
Test Date: <u>2024.6.4</u> Test Engineer: <u>Lushan Kong</u>

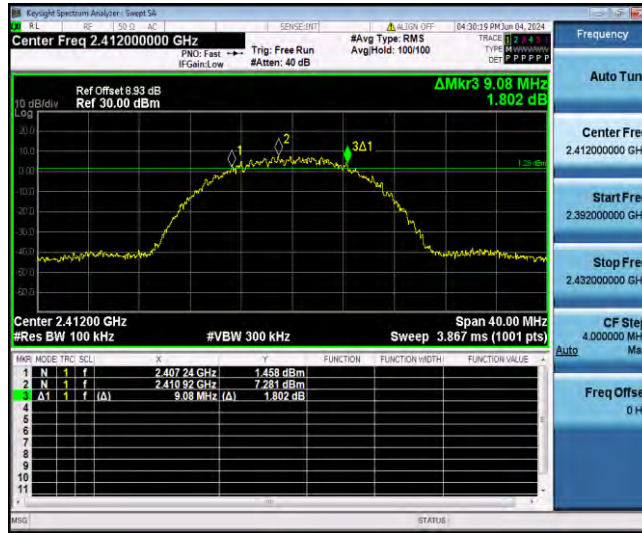
Appendix A.1: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.080	2407.240	2416.320	0.5	PASS
		2437	9.280	2432.240	2441.520	0.5	PASS
		2462	9.720	2457.240	2466.960	0.5	PASS
11G	Ant1	2412	16.440	2403.760	2420.200	0.5	PASS
		2437	16.480	2428.760	2445.240	0.5	PASS
		2462	16.400	2453.800	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.680	2403.120	2420.800	0.5	PASS
		2437	17.720	2428.160	2445.880	0.5	PASS
		2462	17.680	2453.160	2470.840	0.5	PASS

Test Graphs

11B_Ant1_2412



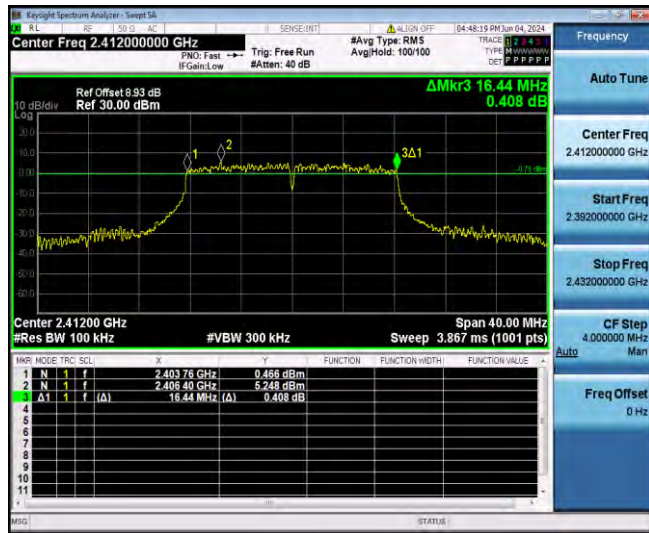
11B_Ant1_2437



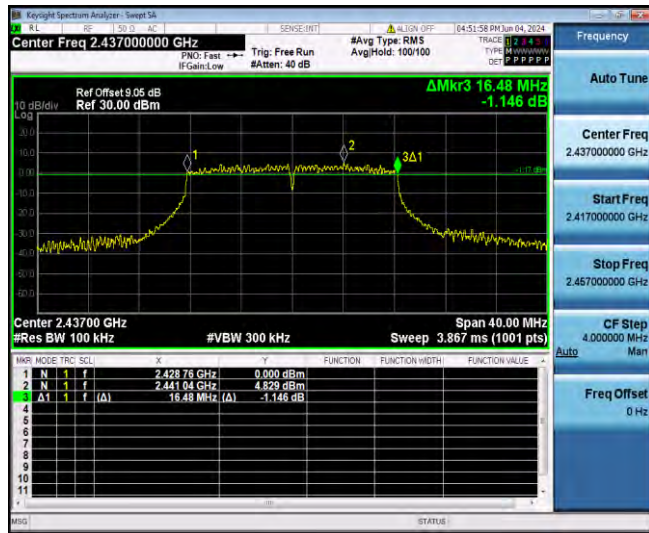
11B_Ant1_2462



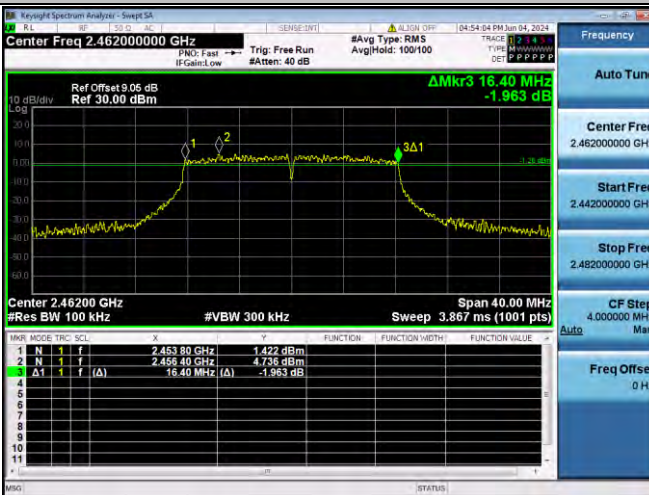
11G_Ant1_2412



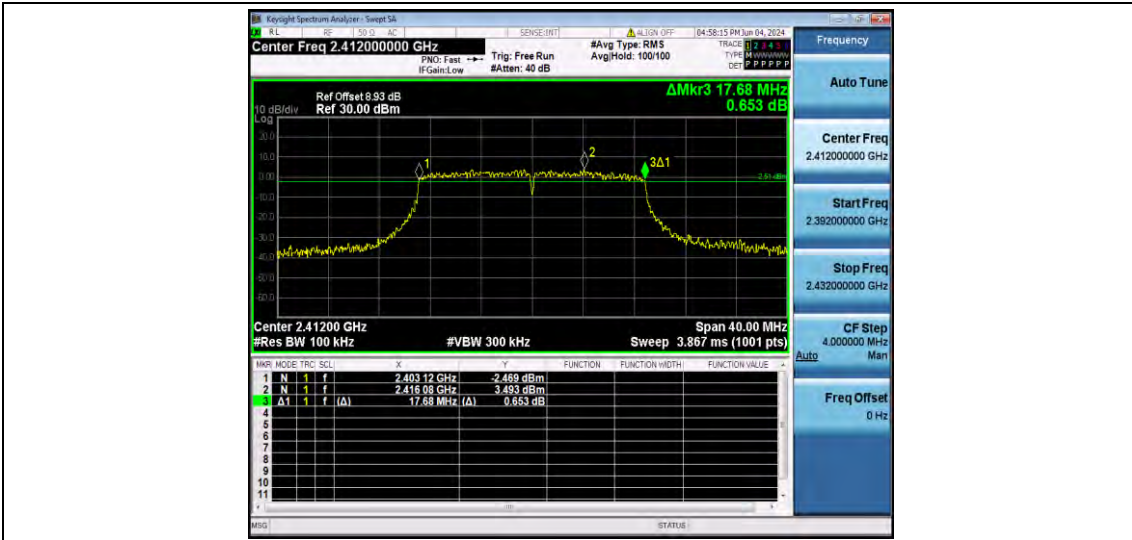
11G_Ant1_2437



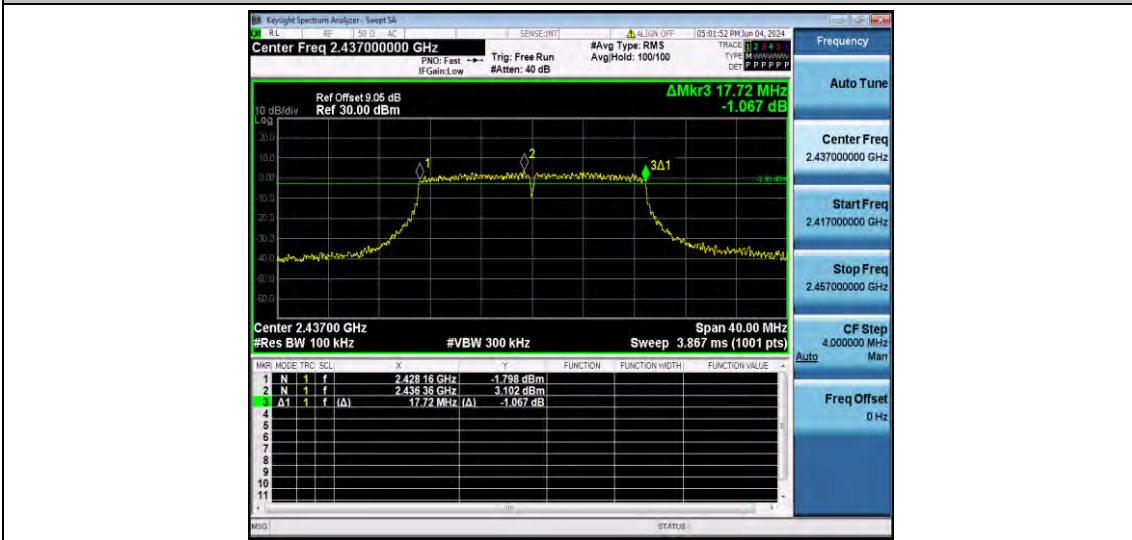
11G_Ant1_2462



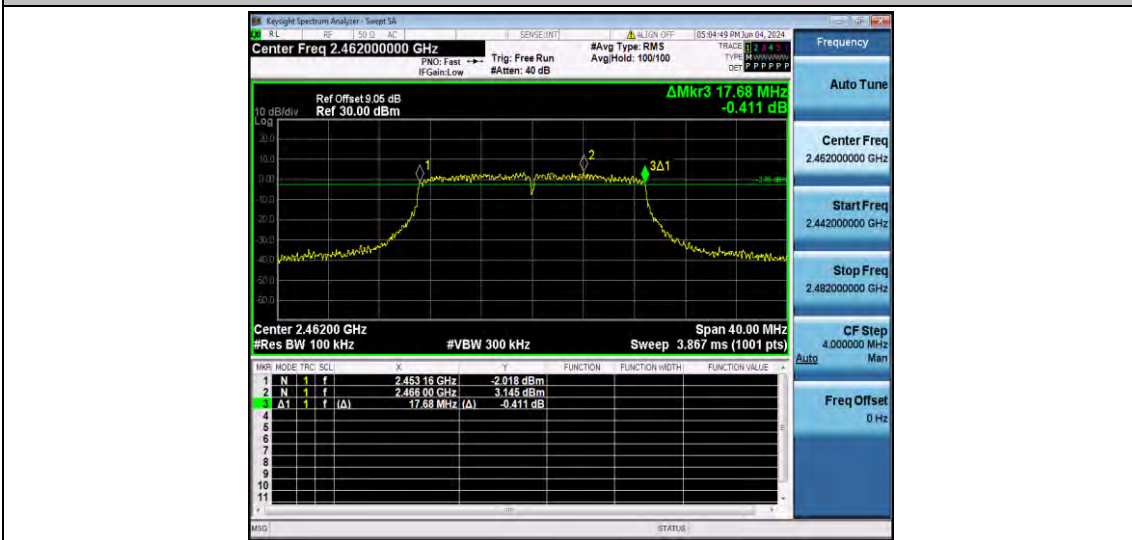
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



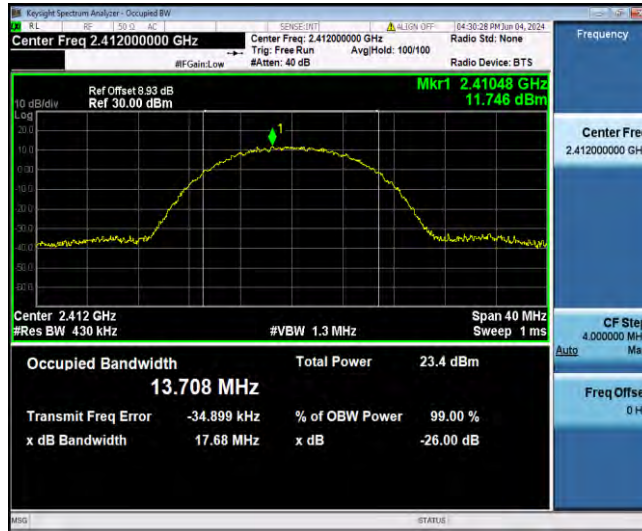
Appendix A.2: Occupied Channel Bandwidth

Test Result

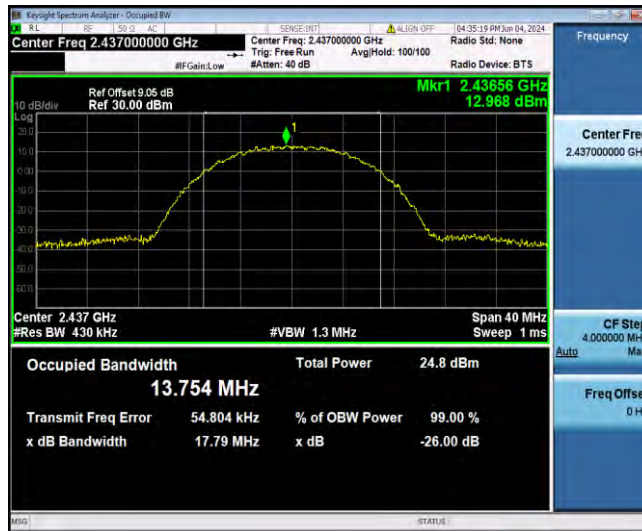
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
11B	Ant1	2412	13.708	2405.1111	2418.8191
		2437	13.754	2430.1778	2443.9318
		2462	13.717	2455.1574	2468.8744
11G	Ant1	2412	16.711	2403.6063	2420.3173
		2437	16.700	2428.6451	2445.3451
		2462	16.682	2453.6431	2470.3251
11N20SISO	Ant1	2412	17.729	2403.1064	2420.8354
		2437	17.771	2428.1123	2445.8833
		2462	17.675	2453.1599	2470.8349

Test Graphs

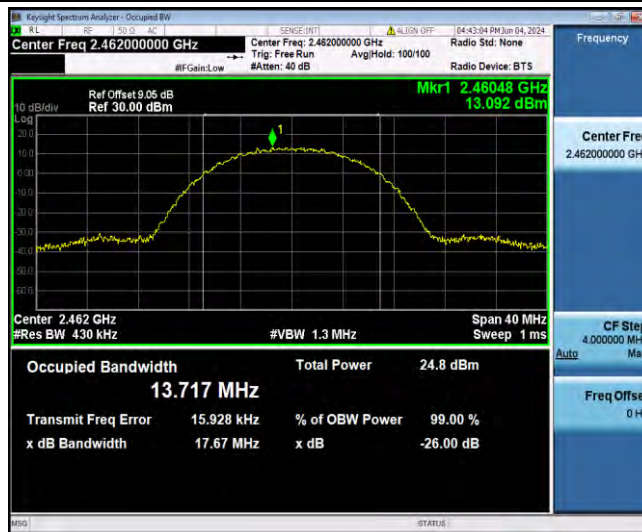
11B_Ant1_2412



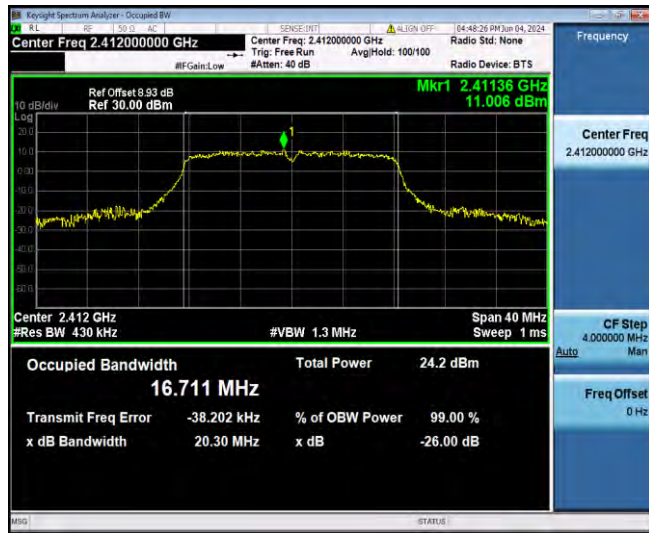
11B_Ant1_2437



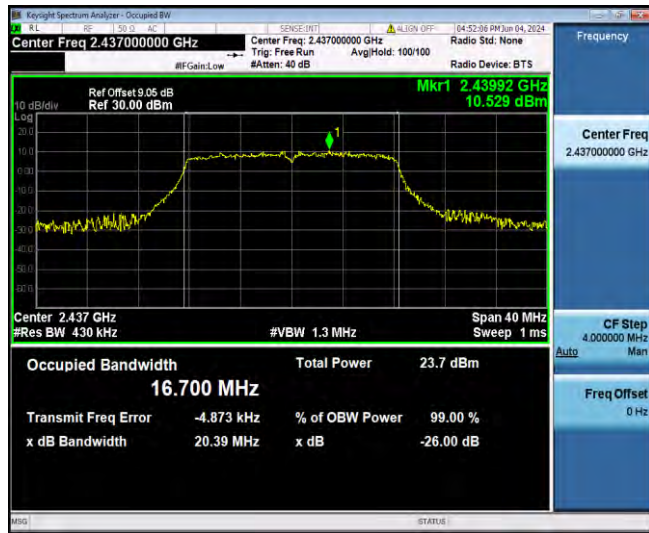
11B_Ant1_2462



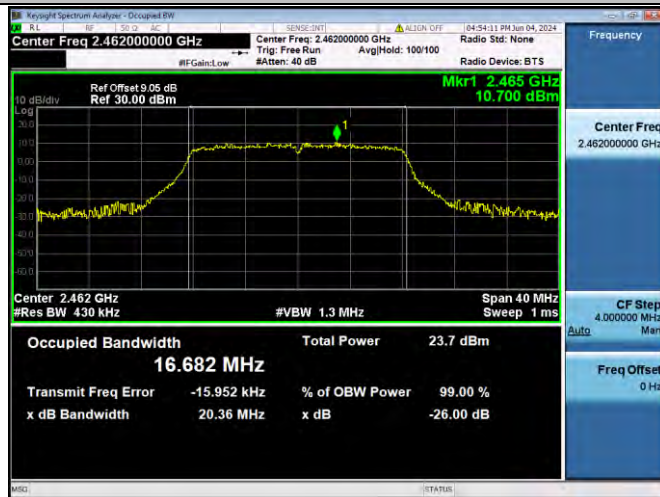
11G_Ant1_2412



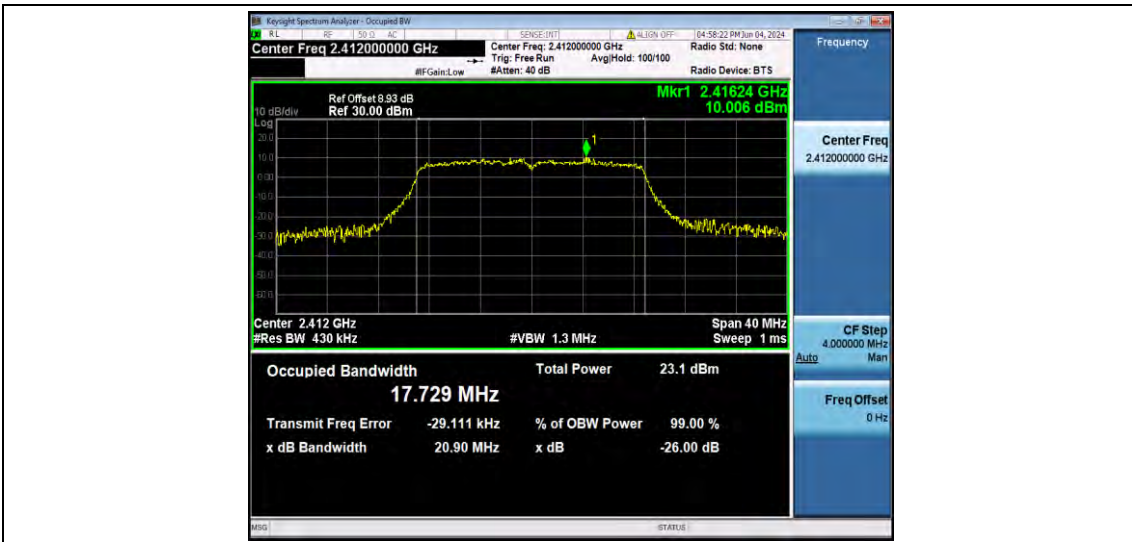
11G_Ant1_2437



11G_Ant1_2462



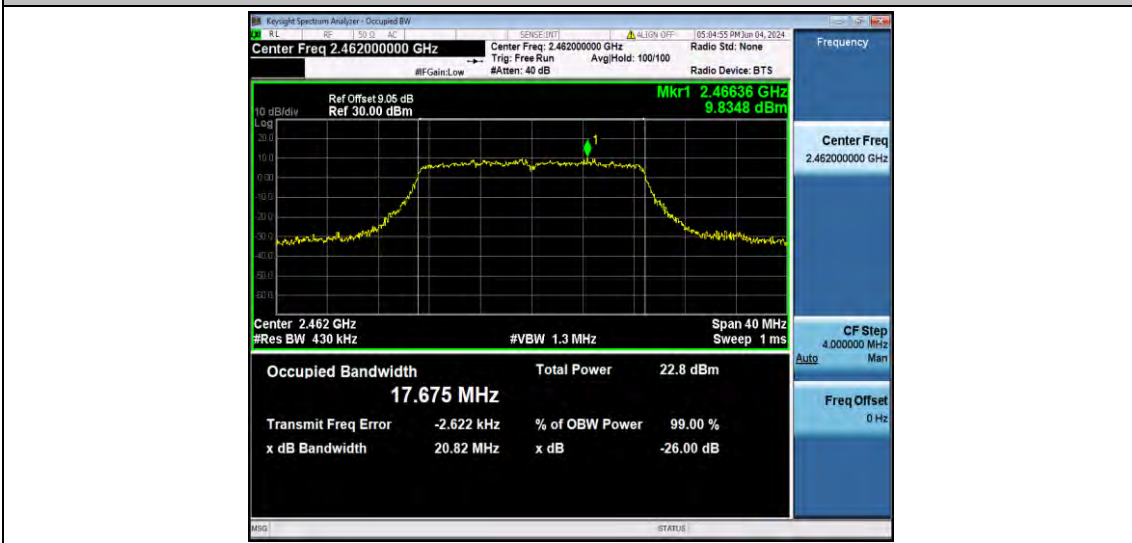
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



Appendix A.3: Maximum conducted output power

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	23.01	≤30.00	PASS
		2437	24.44	≤30.00	PASS
		2462	24.51	≤30.00	PASS
11G	Ant1	2412	25.38	≤30.00	PASS
		2437	24.88	≤30.00	PASS
		2462	24.99	≤30.00	PASS
11N20SISO	Ant1	2412	24.02	≤30.00	PASS
		2437	23.49	≤30.00	PASS
		2462	23.68	≤30.00	PASS

Note:

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

Appendix A.4: Maximum power spectral density

Test Result

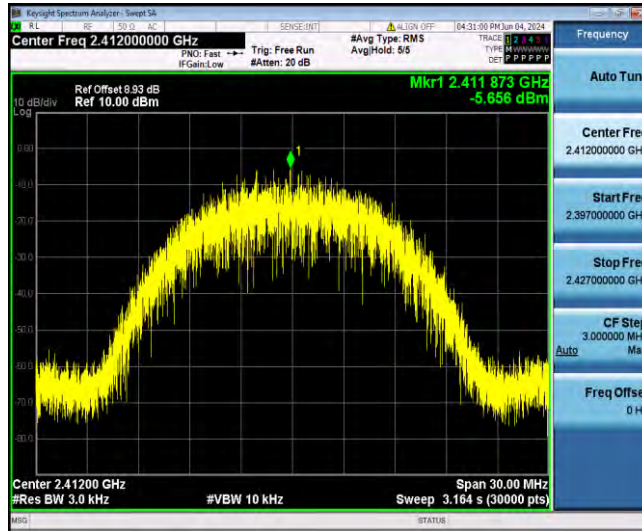
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-5.66	≤8.00	PASS
		2437	-4.27	≤8.00	PASS
		2462	-4.18	≤8.00	PASS
11G	Ant1	2412	-8.35	≤8.00	PASS
		2437	-8.90	≤8.00	PASS
		2462	-8.64	≤8.00	PASS
11N20SISO	Ant1	2412	-9.99	≤8.00	PASS
		2437	-10.43	≤8.00	PASS
		2462	-9.91	≤8.00	PASS

Note:

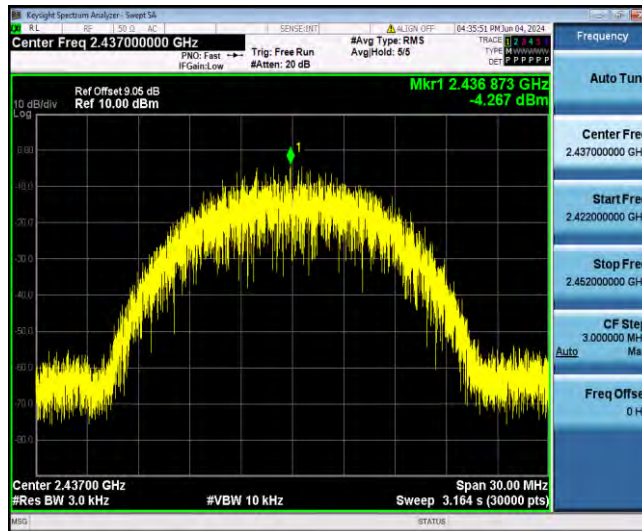
1. The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

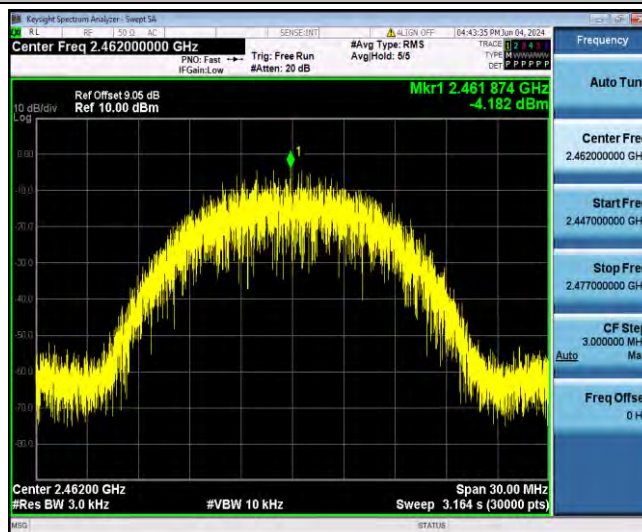
11B_Ant1_2412



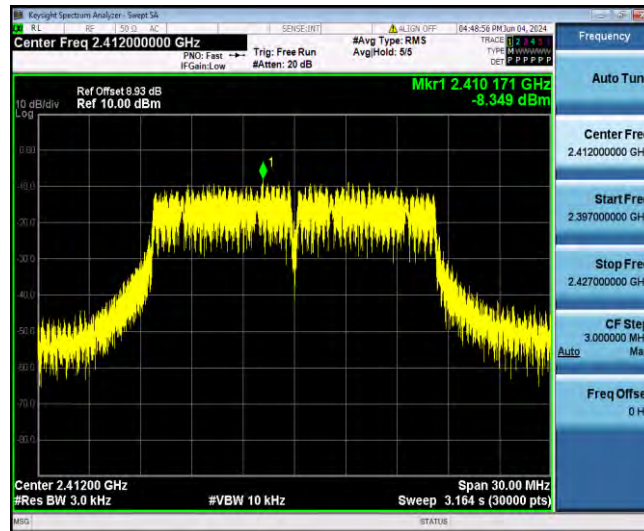
11B_Ant1_2437



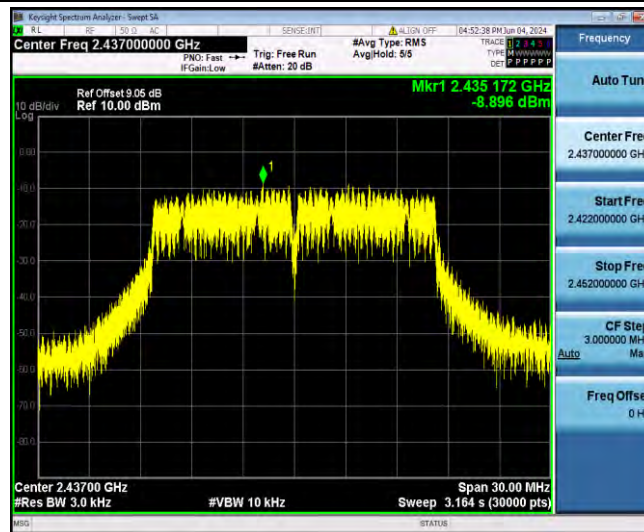
11B_Ant1_2462



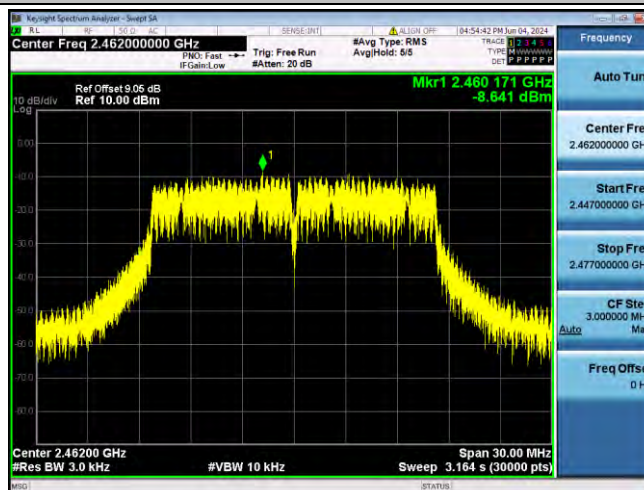
11G_Ant1_2412



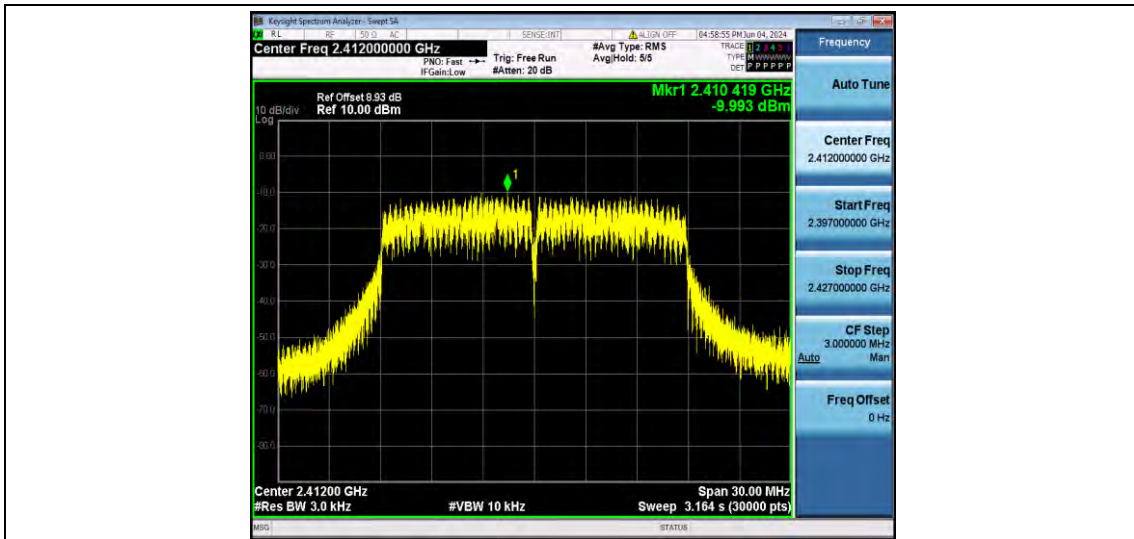
11G_Ant1_2437



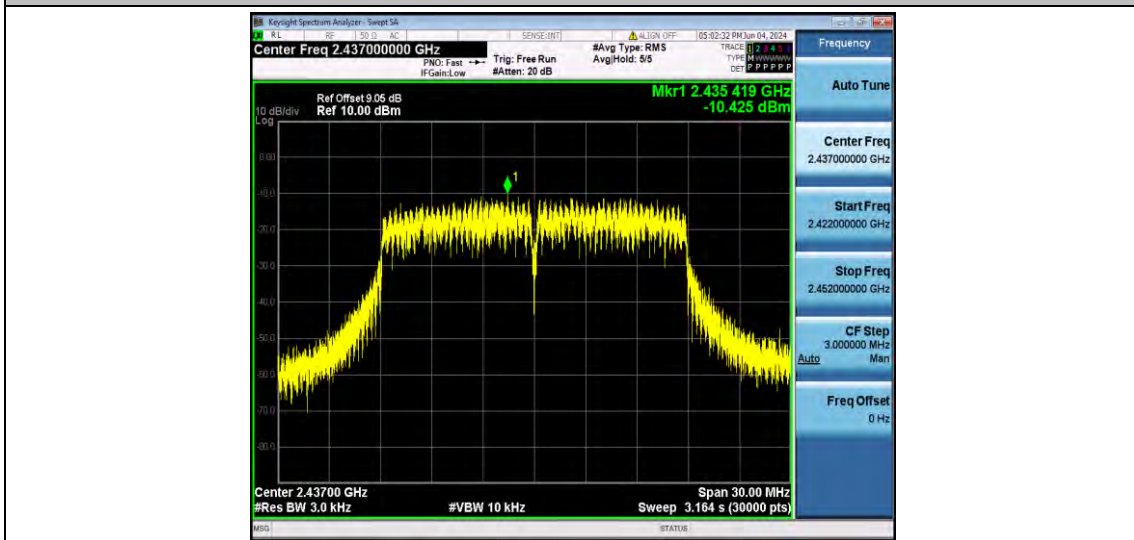
11G_Ant1_2462



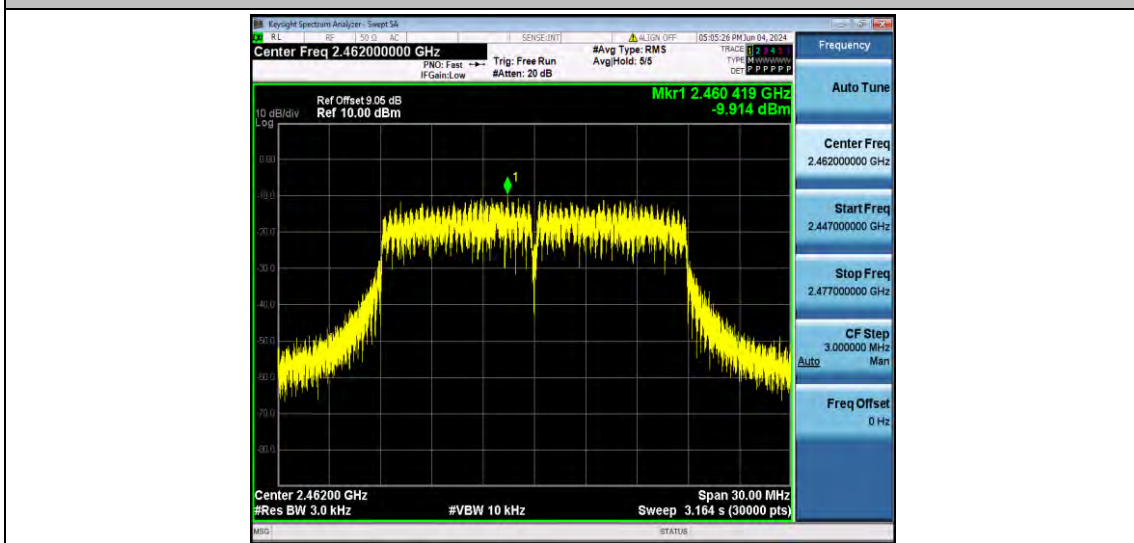
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



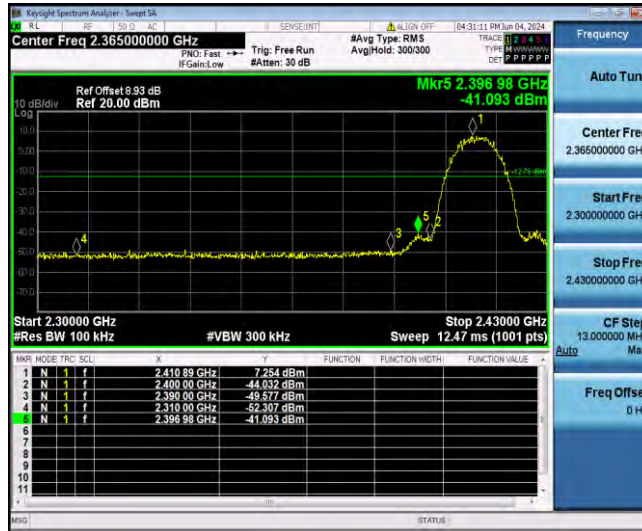
Appendix A.5: Band edge measurements

Test Result

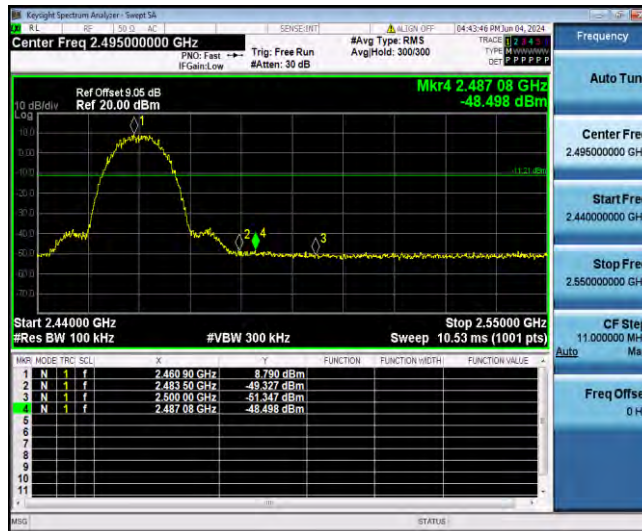
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	7.25	-41.09	≤ -12.75	PASS
		High	2462	8.79	-48.5	≤ -11.21	PASS
11G	Ant1	Low	2412	5.33	-26.72	≤ -14.67	PASS
		High	2462	4.76	-38.66	≤ -15.24	PASS
11N20SISO	Ant1	Low	2412	3.89	-31.35	≤ -16.11	PASS
		High	2462	3.63	-40.11	≤ -16.37	PASS

Test Graphs

11B_Ant1_Low_2412



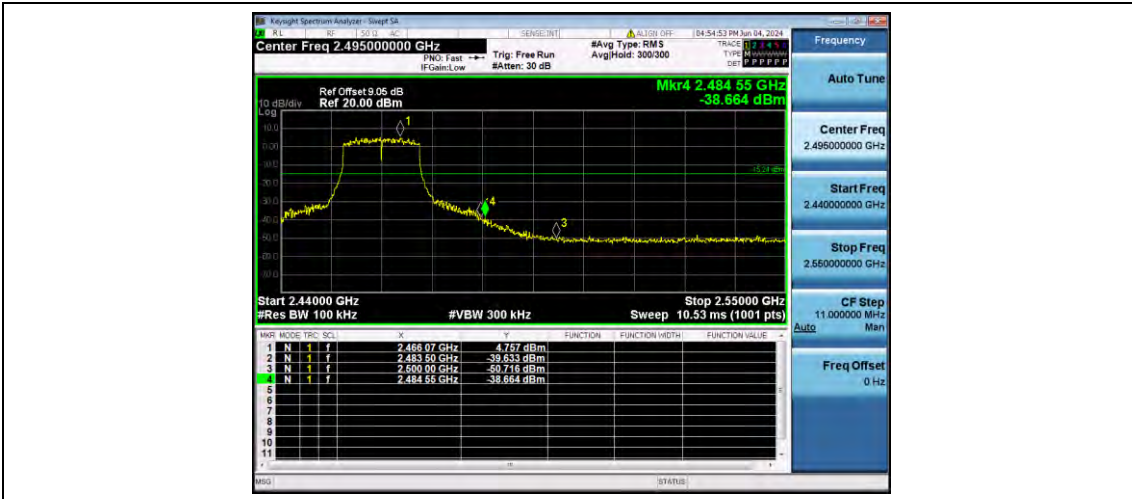
11B_Ant1_High_2462



11G_Ant1_Low_2412



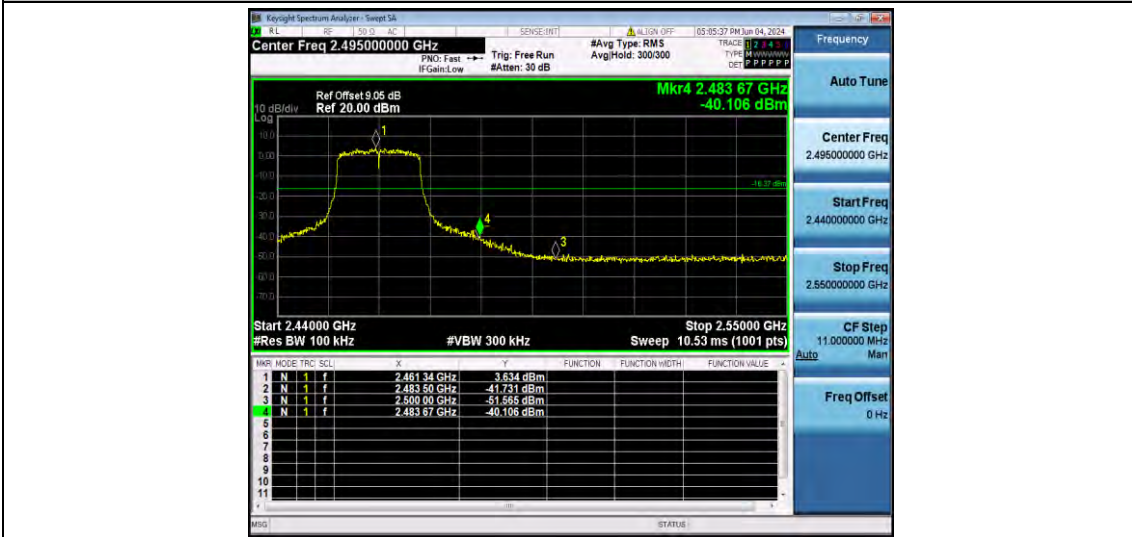
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



Appendix A.6: Conducted Spurious Emission

Test Result

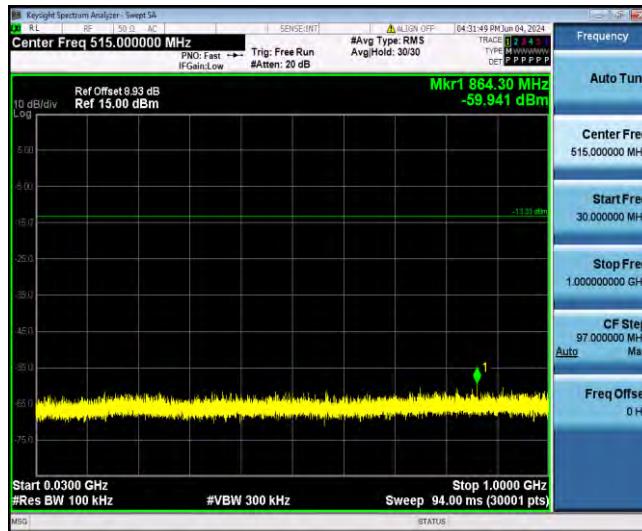
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	6.67	6.67	---	PASS
			30~1000	6.67	-59.94	≤ -13.33	PASS
			1000~26500	6.67	-47.4	≤ -13.33	PASS
		2437	Reference	8.44	8.44	---	PASS
			30~1000	8.44	-60.38	≤ -11.56	PASS
			1000~26500	8.44	-47.77	≤ -11.56	PASS
		2462	Reference	8.51	8.51	---	PASS
			30~1000	8.51	-60.32	≤ -11.49	PASS
			1000~26500	8.51	-47.85	≤ -11.49	PASS
11G	Ant1	2412	Reference	4.66	4.66	---	PASS
			30~1000	4.66	-56.35	≤ -15.34	PASS
			1000~26500	4.66	-45.98	≤ -15.34	PASS
		2437	Reference	4.29	4.29	---	PASS
			30~1000	4.29	-60.68	≤ -15.71	PASS
			1000~26500	4.29	-48.37	≤ -15.71	PASS
		2462	Reference	4.59	4.59	---	PASS
			30~1000	4.59	-47.23	≤ -15.41	PASS
			1000~26500	4.59	-47.5	≤ -15.41	PASS
11N20SISO	Ant1	2412	Reference	3.88	3.88	---	PASS
			30~1000	3.88	-59.91	≤ -16.12	PASS
			1000~26500	3.88	-47.08	≤ -16.12	PASS
		2437	Reference	2.55	2.55	---	PASS
			30~1000	2.55	-60.7	≤ -17.45	PASS
			1000~26500	2.55	-48.31	≤ -17.45	PASS
		2462	Reference	3.02	3.02	---	PASS
			30~1000	3.02	-59.44	≤ -16.98	PASS
			1000~26500	3.02	-47.59	≤ -16.98	PASS

Test Graphs

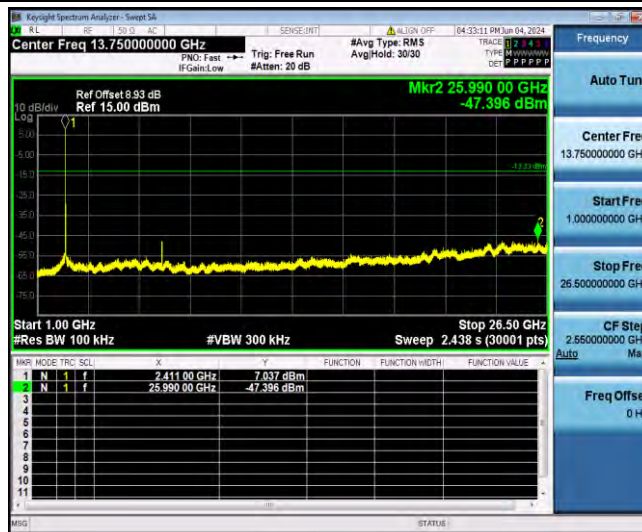
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



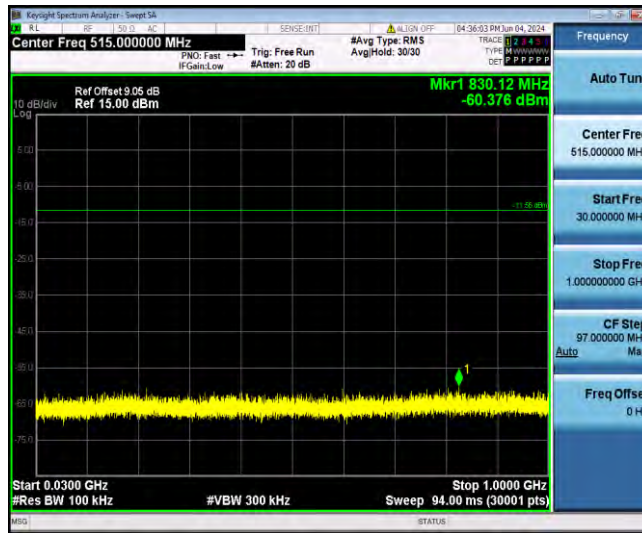
11B_Ant1_2412_1000~26500



11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



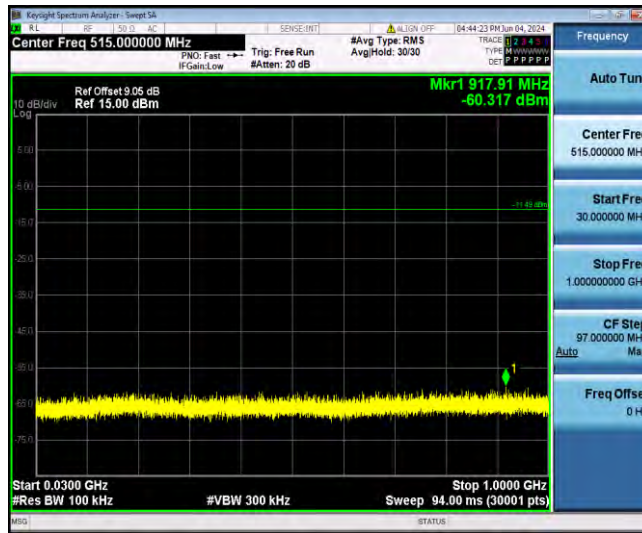
11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



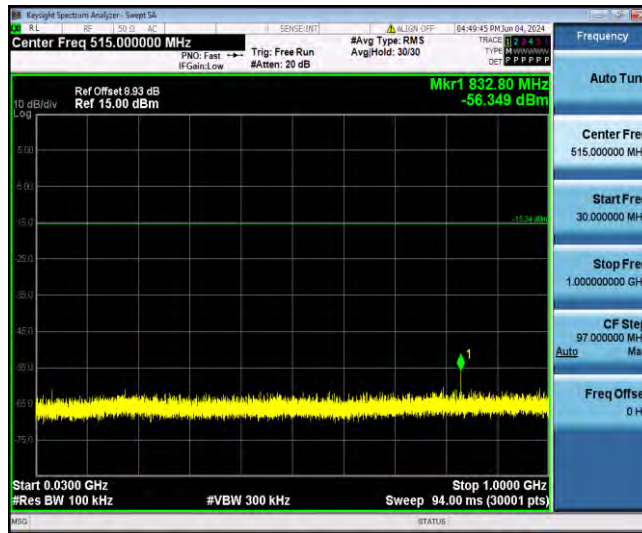
11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



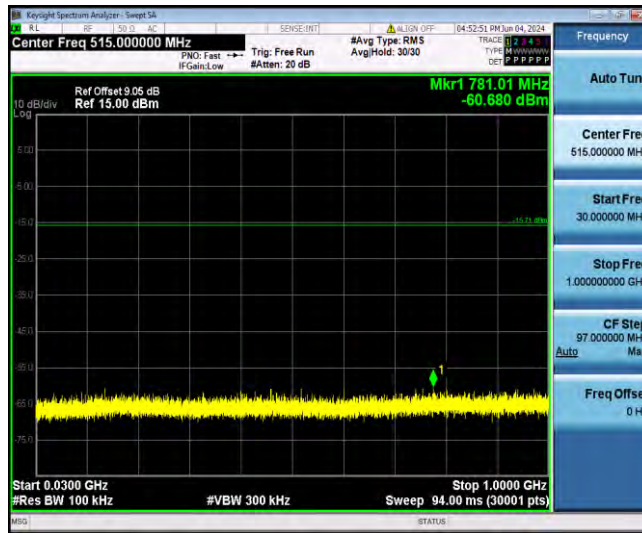
11G_Ant1_2412_1000~26500



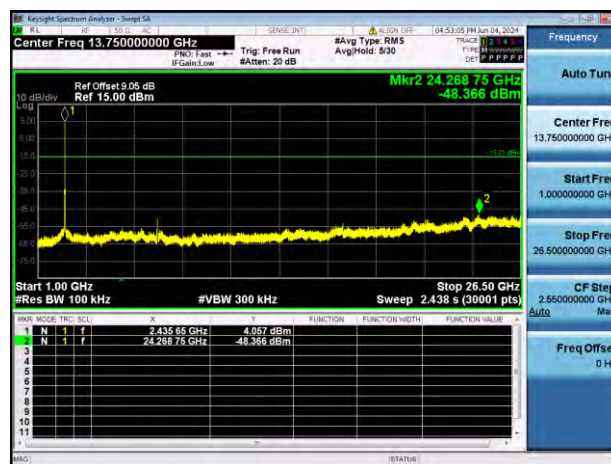
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



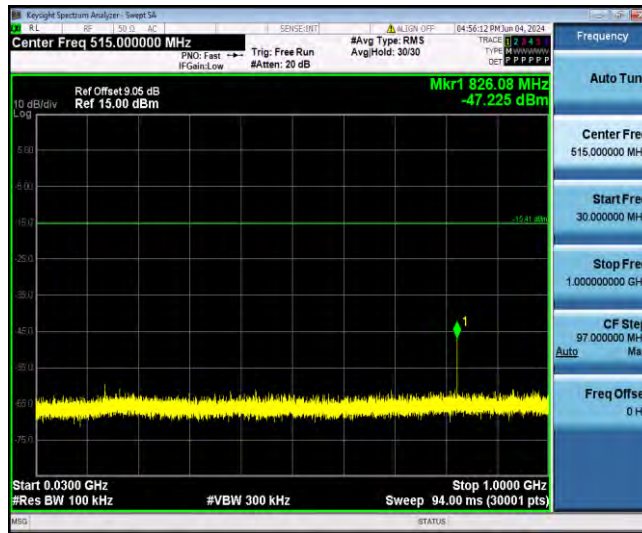
11G_Ant1_2437_1000~26500



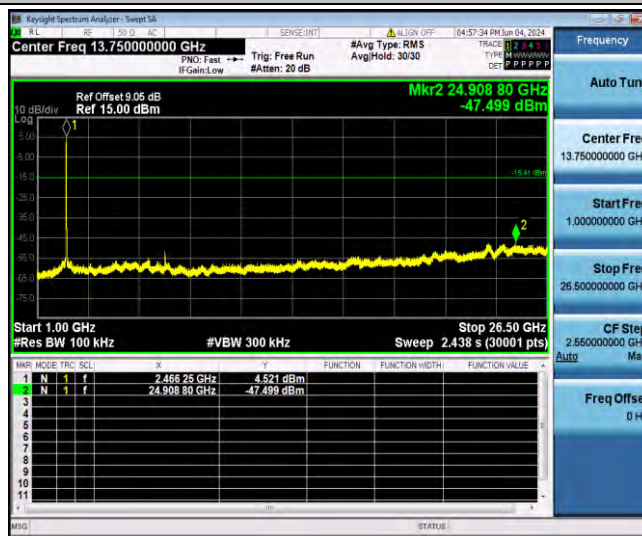
11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



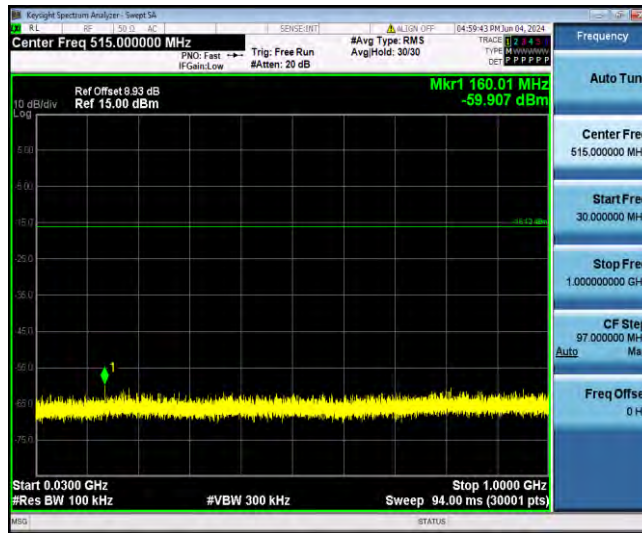
11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



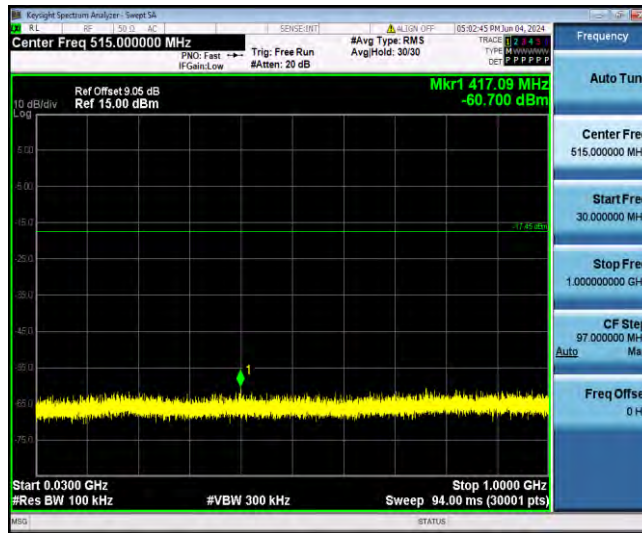
11N20SISO_Ant1_2412_1000~26500



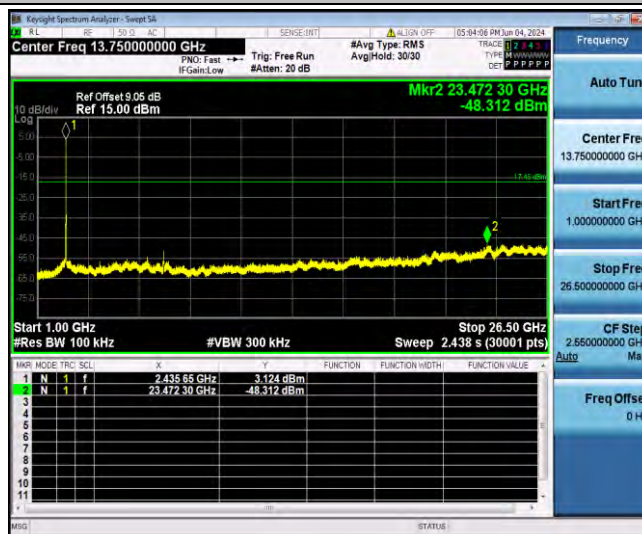
11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



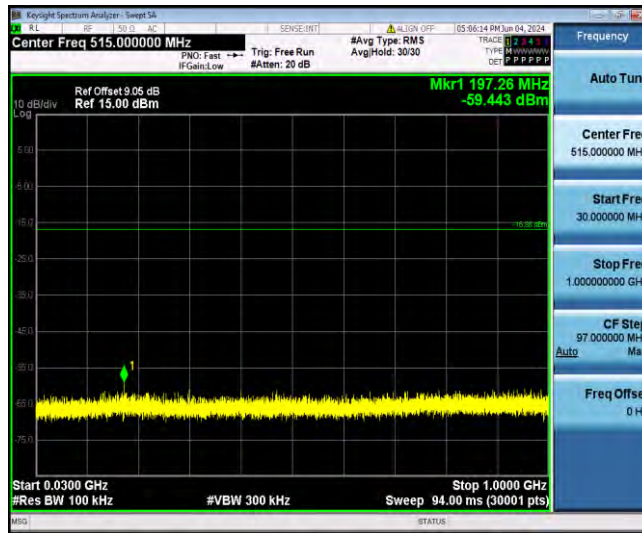
11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



Appendix A.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	-48.97	≤-41.20	46.23	≤54	PASS
				AV	2386.710	-47.27	≤-41.20	47.93	≤54	PASS
				AV	2390.000	-47.3	≤-41.20	47.90	≤54	PASS
				Peak	2310.000	-42.95	≤-21.20	52.25	≤74	PASS
				Peak	2389.570	-40.7	≤-21.20	54.50	≤74	PASS
				Peak	2390.000	-44.85	≤-21.20	50.35	≤74	PASS
		High	2462	AV	2483.500	-46.69	≤-41.20	48.51	≤54	PASS
				AV	2486.860	-46.53	≤-41.20	48.67	≤54	PASS
				AV	2500.000	-47.86	≤-41.20	47.34	≤54	PASS
				Peak	2483.500	-43.38	≤-21.20	51.82	≤74	PASS
				Peak	2487.740	-38.68	≤-21.20	56.52	≤74	PASS
				Peak	2500.000	-42.36	≤-21.20	52.84	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.47	≤-41.20	45.73	≤54	PASS
				AV	2389.960	-42.77	≤-41.20	52.43	≤54	PASS
				AV	2390.000	-42.77	≤-41.20	52.43	≤54	PASS
				Peak	2310.000	-45.75	≤-21.20	49.45	≤74	PASS
				Peak	2386.710	-34.84	≤-21.20	60.36	≤74	PASS
				Peak	2390.000	-44.2	≤-21.20	51.00	≤74	PASS
		High	2462	AV	2483.500	-43.6	≤-41.20	51.60	≤54	PASS
				AV	2483.560	-43.71	≤-41.20	51.49	≤54	PASS
				AV	2500.000	-48.75	≤-41.20	46.45	≤54	PASS
				Peak	2483.500	-37.86	≤-21.20	57.34	≤74	PASS
				Peak	2485.650	-34.56	≤-21.20	60.64	≤74	PASS
				Peak	2500.000	-46.64	≤-21.20	48.56	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-49.49	≤-41.20	45.71	≤54	PASS
				AV	2389.960	-45.82	≤-41.20	49.38	≤54	PASS
				AV	2390.000	-45.82	≤-41.20	49.38	≤54	PASS
				Peak	2310.000	-43.99	≤-21.20	51.21	≤74	PASS
				Peak	2387.490	-36.6	≤-21.20	58.60	≤74	PASS
				Peak	2390.000	-45.06	≤-21.20	50.14	≤74	PASS
		High	2462	AV	2483.500	-45.55	≤-41.20	49.65	≤54	PASS
				AV	2483.560	-45.61	≤-41.20	49.59	≤54	PASS
				AV	2500.000	-48.78	≤-41.20	46.42	≤54	PASS
				Peak	2483.500	-43.72	≤-21.20	51.48	≤74	PASS
				Peak	2486.090	-36.82	≤-21.20	58.38	≤74	PASS
				Peak	2486.090	-36.82	≤-21.20	58.38	≤74	PASS

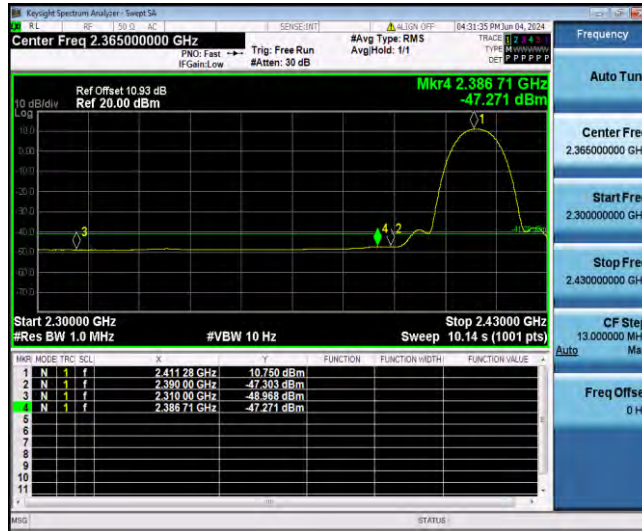
				Peak	2500.000	-42.8	≤-21.20	52.40	≤74	PASS
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Note:

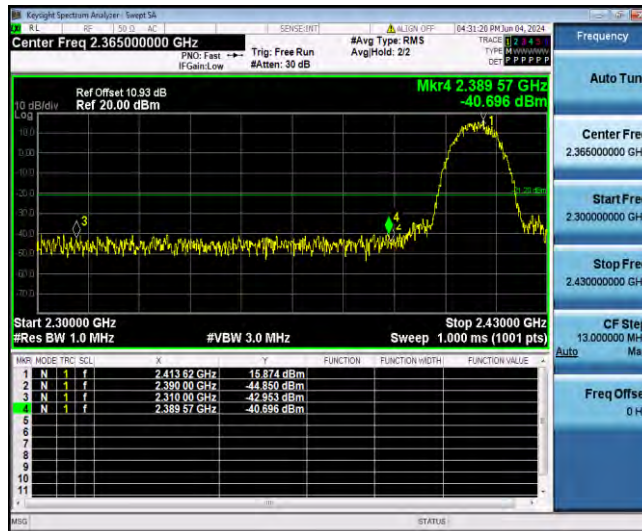
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

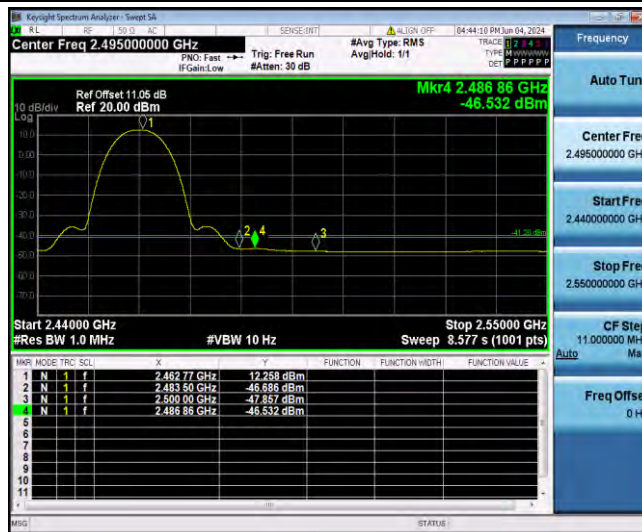
11B_Ant1_Low_2412_AV



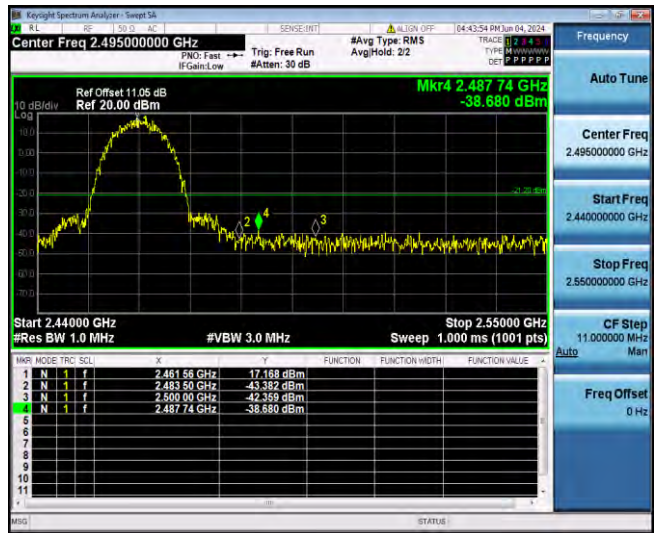
11B_Ant1_Low_2412_Peak



11B_Ant1_High_2462_AV



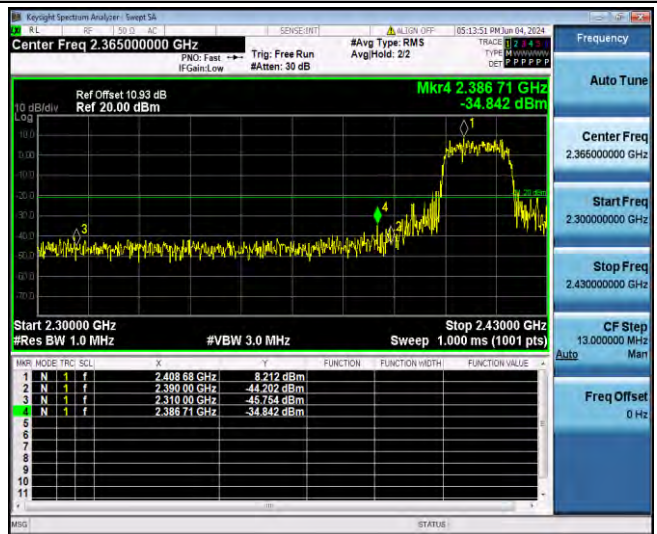
11B_Ant1_High_2462_Peak



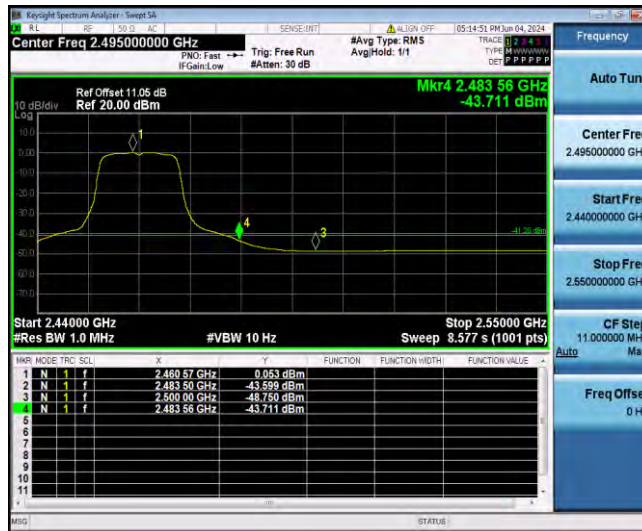
11G_Ant1_Low_2412_AV



11G_Ant1_Low_2412_Peak



11G_Ant1_High_2462_AV



11G_Ant1_High_2462_Peak



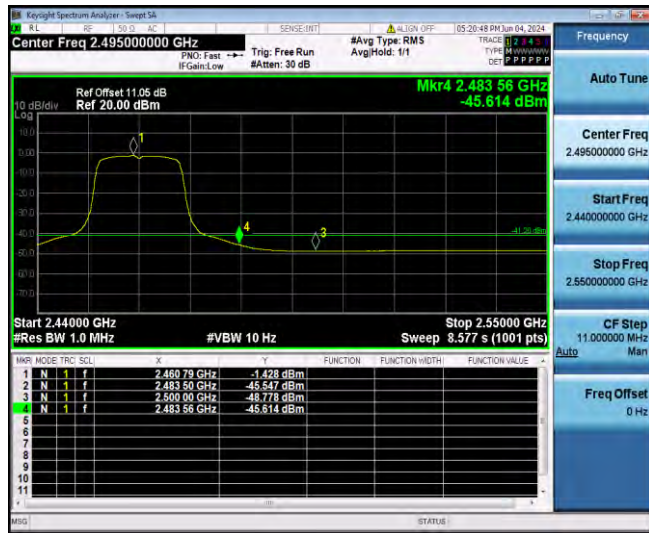
11N20SISO_Ant1_Low_2412_AV



11N20SISO_Ant1_Low_2412_Peak



11N20SISO_Ant1_High_2462_AV



11N20SISO_Ant1_High_2462_Peak

