

Case No. : <u>CTA24053000103</u>	
Ambient Condition: <u>23</u> °C, <u>48</u> %RH,	
Test Date: <u>2024.6.5</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	Ant0	2412	10.080	2406.960	2417.040	0.5	PASS
		2437	10.120	2431.920	2442.040	0.5	PASS
		2462	10.040	2456.960	2467.000	0.5	PASS
11G	Ant0	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	Ant0	2412	17.720	2403.160	2420.880	0.5	PASS
		2437	17.760	2428.120	2445.880	0.5	PASS
		2462	17.720	2453.120	2470.840	0.5	PASS
11N40SISO	Ant0	2422	36.480	2403.760	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_Ant0_2412



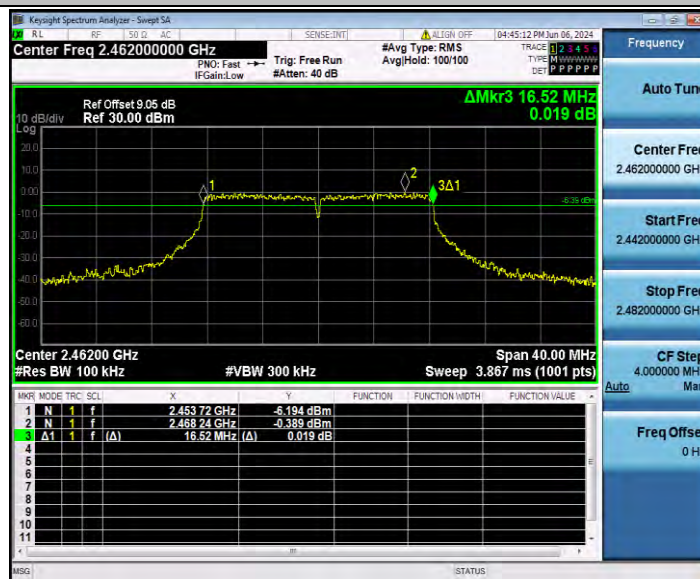
11B_Ant0_2437



11B_Ant0_2462



11G_Ant0_2462



11N20SISO_Ant0_2412



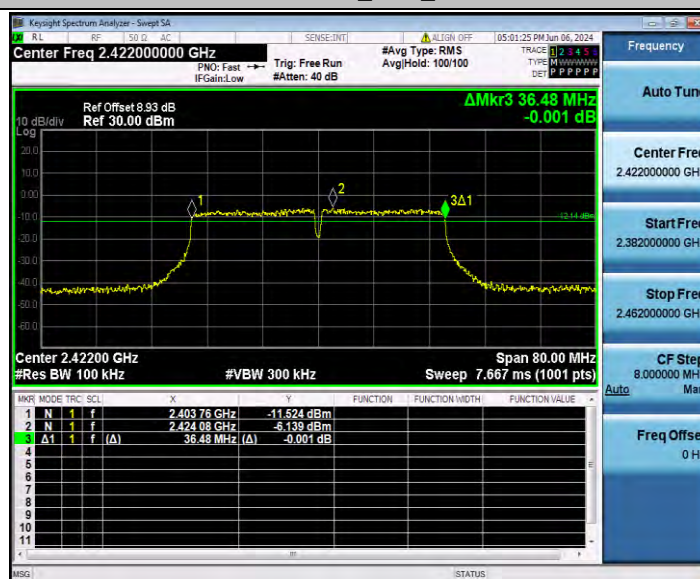
11N20SISO_Ant0_2437



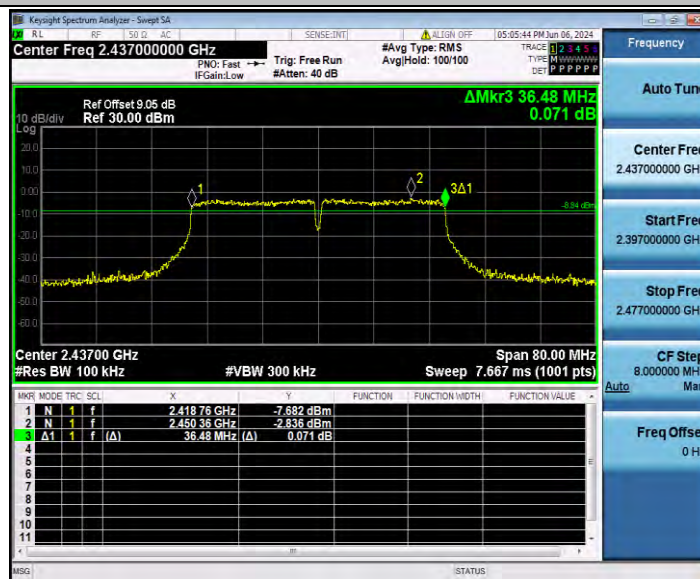
11N20SISO_Ant0_2462



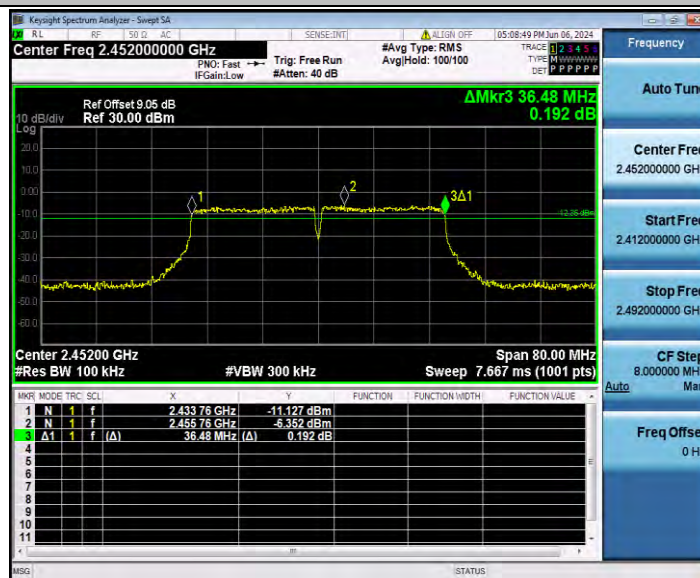
11N40SISO_Ant0_2422



11N40SISO_Ant0_2437



11N40SISO_Ant0_2452



Appendix C.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
11B	Ant0	2412	15.187	2404.4573	2419.6443
		2437	15.201	2429.3982	2444.5992
		2462	15.145	2454.4296	2469.5746
11G	Ant0	2412	17.005	2403.5055	2420.5105
		2437	17.121	2428.3462	2445.4672
		2462	17.010	2453.4506	2470.4606
11N20SISO	Ant0	2412	18.004	2403.0173	2421.0213
		2437	18.080	2427.9302	2446.0102
		2462	17.962	2453.0137	2470.9757
11N40SISO	Ant0	2422	36.800	2403.7318	2440.5318
		2437	36.722	2418.6520	2455.3740
		2452	36.763	2433.6633	2470.4263

Test Graphs

11B_Ant0_2412



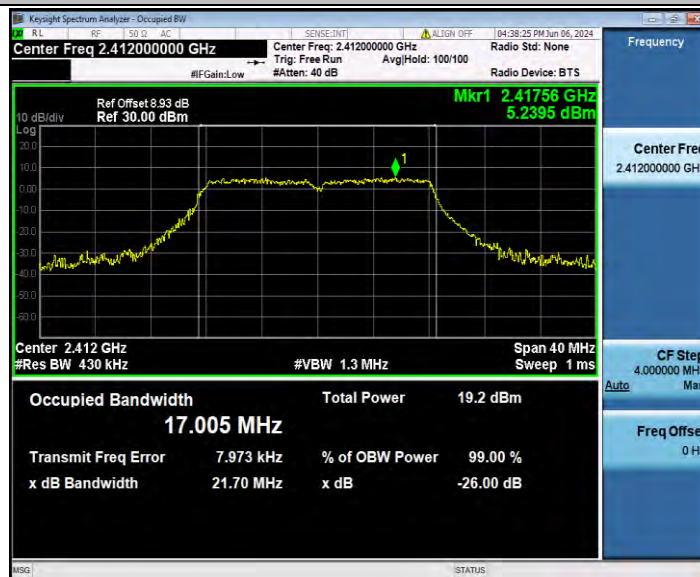
11B_Ant0_2437



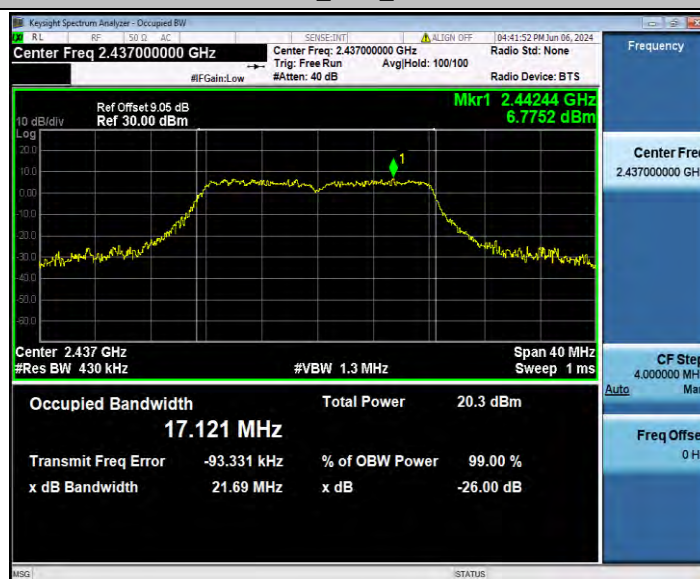
11B_Ant0_2462



11G_Ant0_2412



11G_Ant0_2437



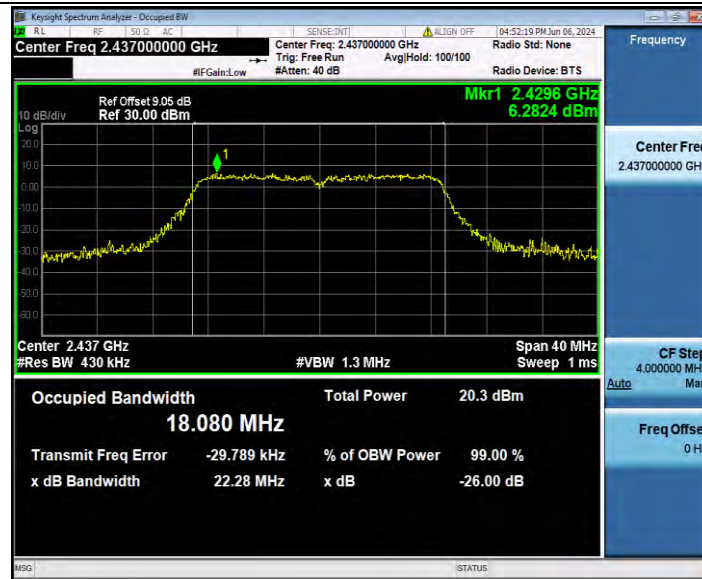
11G_Ant0_2462



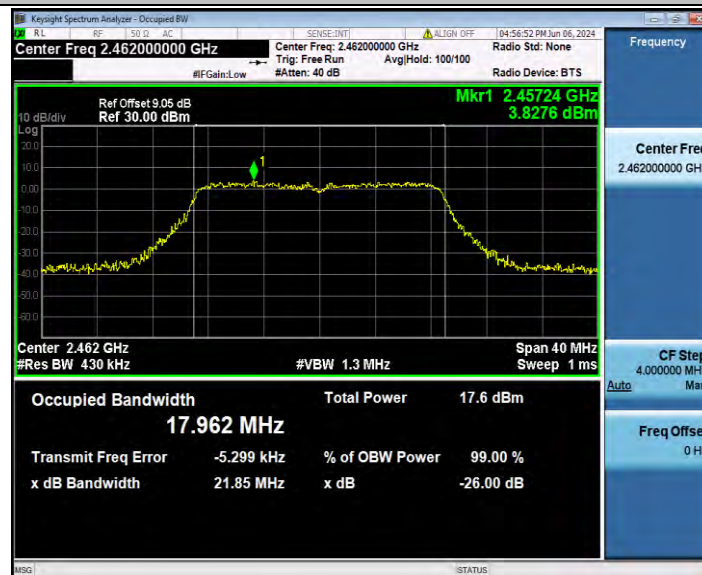
11N20SISO_Ant0_2412



11N20SISO_Ant0_2437



11N20SISO_Ant0_2462



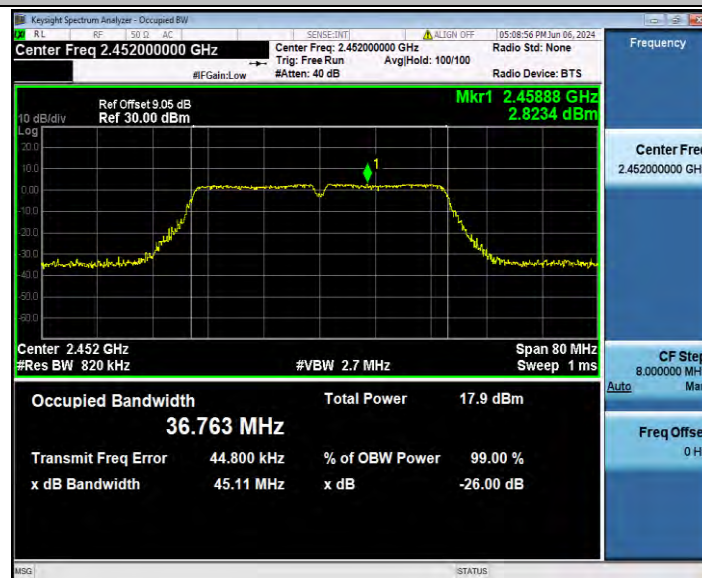
11N40SISO_Ant0_2422



11N40SISO_Ant0_2437



11N40SISO_Ant0_2452



Appendix C.3: Maximum conducted output power

Test Result -CHP

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant0	2412	15.79	≤30.00	PASS
		2437	15.73	≤30.00	PASS
		2462	16.21	≤30.00	PASS
11G	Ant0	2412	20.36	≤30.00	PASS
		2437	21.36	≤30.00	PASS
		2462	20.72	≤30.00	PASS
11N20SISO	Ant0	2412	18.92	≤30.00	PASS
		2437	21.64	≤30.00	PASS
		2462	18.79	≤30.00	PASS
11N40SISO	Ant0	2422	18.21	≤30.00	PASS
		2437	21.32	≤30.00	PASS
		2452	18.29	≤30.00	PASS

Appendix C.4: Maximum power spectral density

Test Result

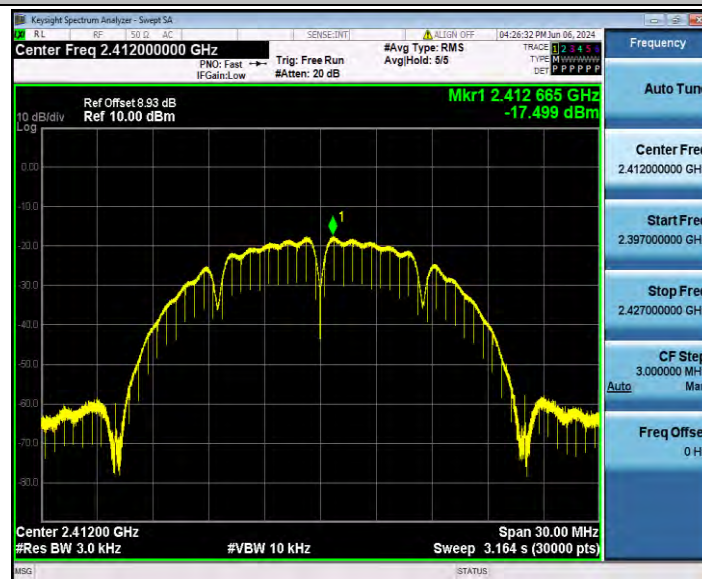
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant0	2412	-17.50	≤8.00	PASS
		2437	-17.67	≤8.00	PASS
		2462	-17.12	≤8.00	PASS
11G	Ant0	2412	-14.72	≤8.00	PASS
		2437	-14.09	≤8.00	PASS
		2462	-14.86	≤8.00	PASS
11N20SISO	Ant0	2412	-15.44	≤8.00	PASS
		2437	-13.37	≤8.00	PASS
		2462	-16.78	≤8.00	PASS
11N40SISO	Ant0	2422	-18.21	≤8.00	PASS
		2437	-14.72	≤8.00	PASS
		2452	-18.31	≤8.00	PASS

Note:

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

Test Graphs

11B_Ant0_2412



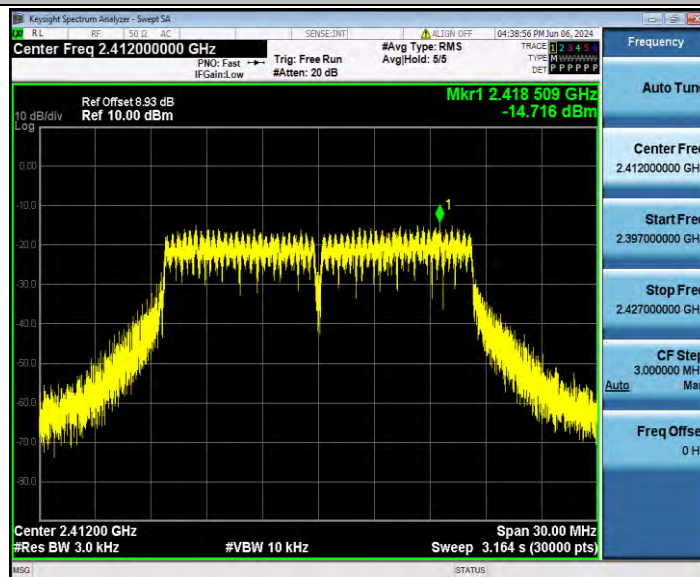
11B_Ant0_2437



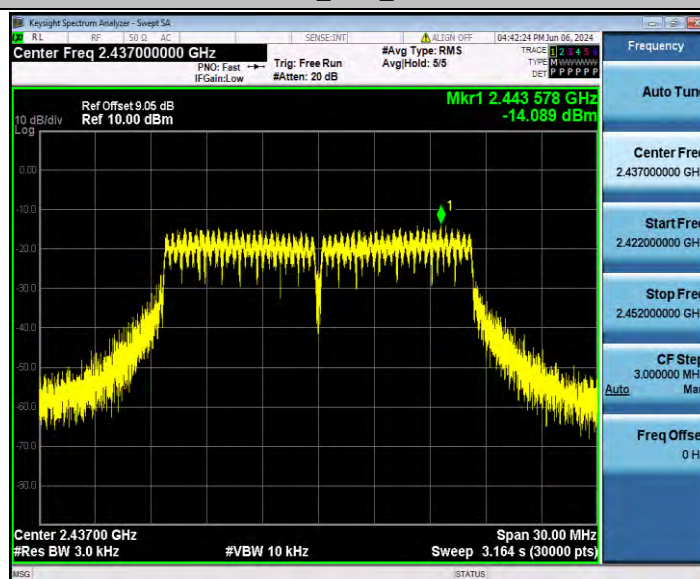
11B_Ant0_2462



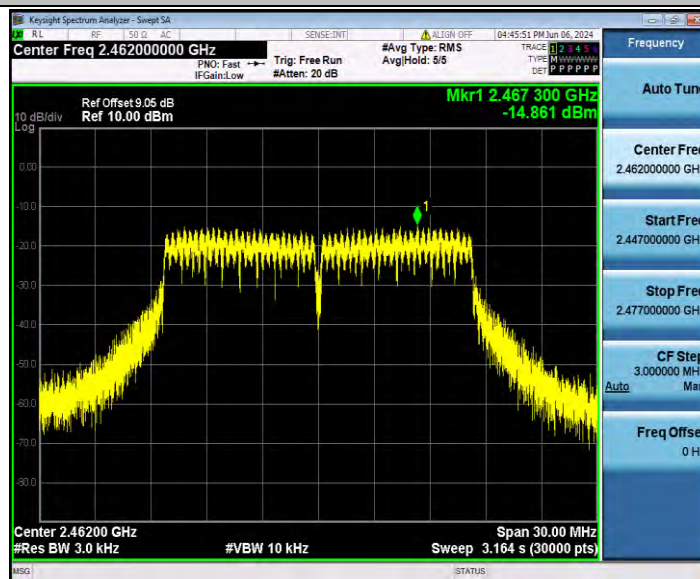
11G_Ant0_2412



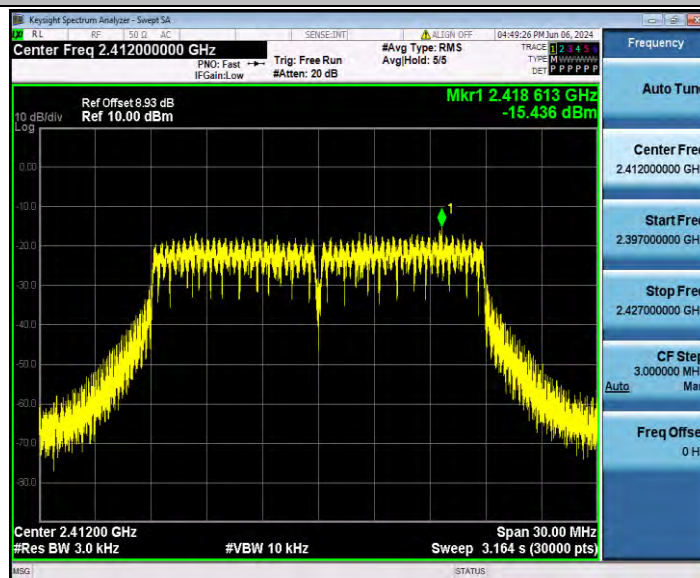
11G_Ant0_2437



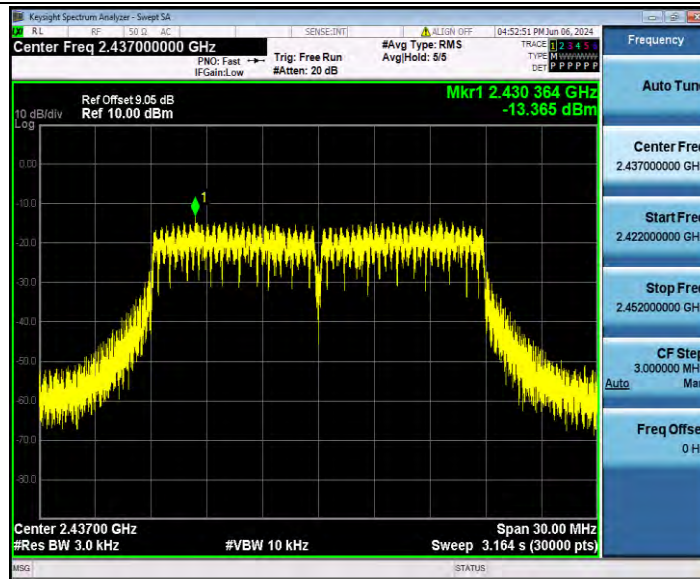
11G_Ant0_2462



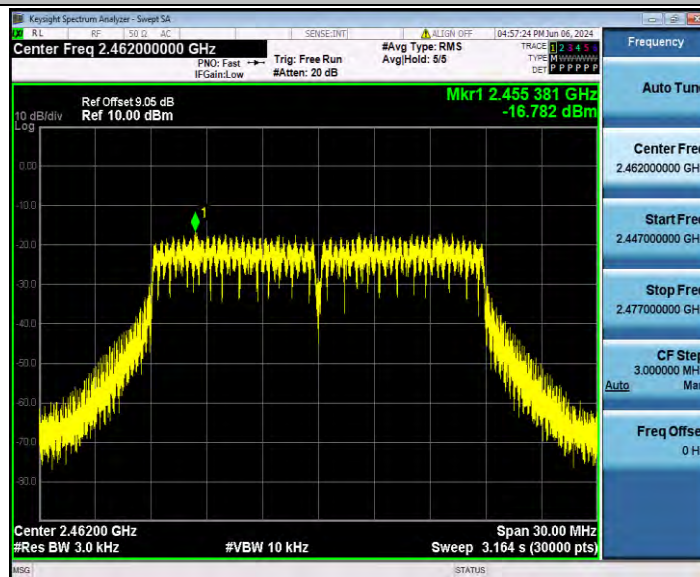
11N20SISO_Ant0_2412



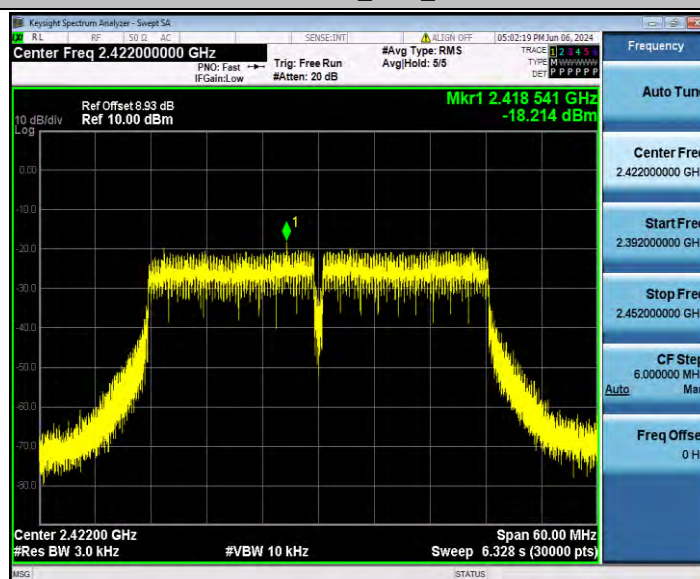
11N20SISO_Ant0_2437



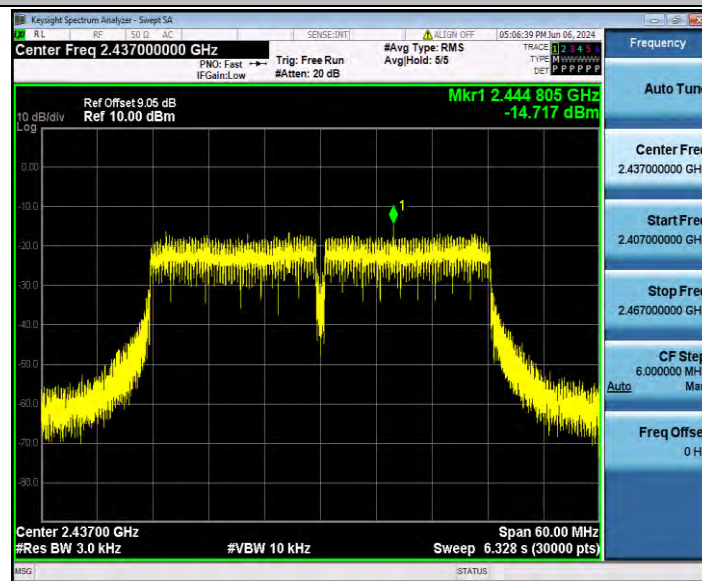
11N20SISO_Ant0_2462



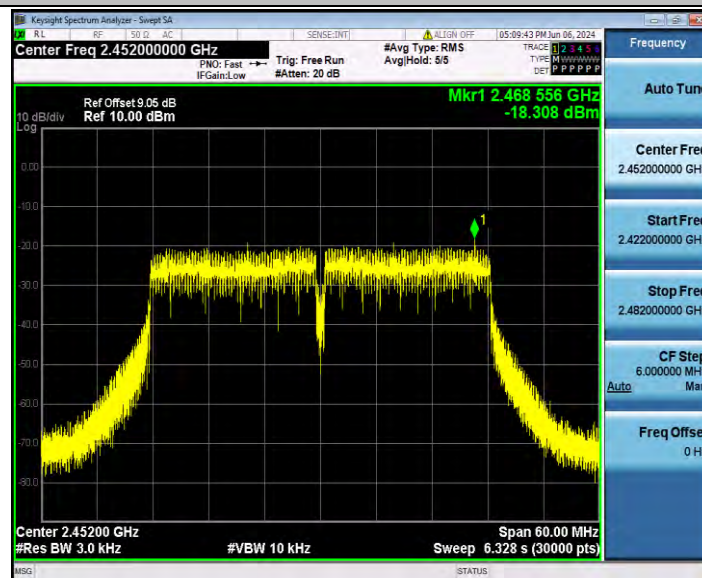
11N40SISO_Ant0_2422



11N40SISO_Ant0_2437



11N40SISO_Ant0_2452



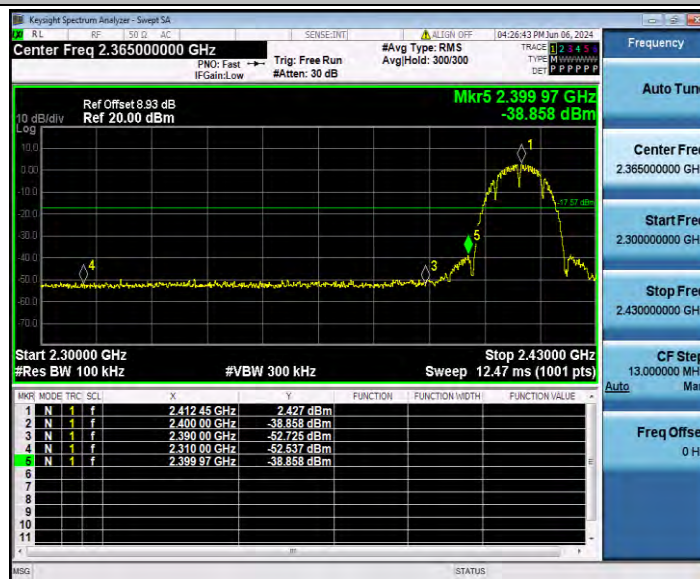
Appendix C.5: Band edge measurements

Test Result

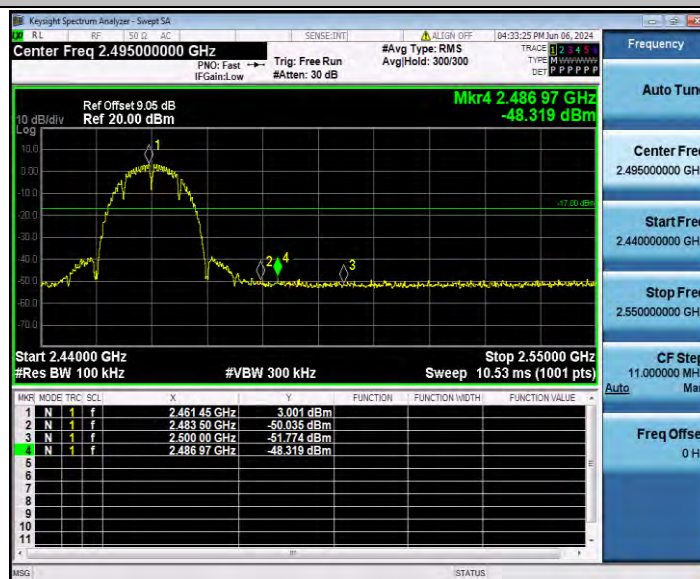
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant0	Low	2412	2.43	-38.86	≤ -17.57	PASS
		High	2462	3.00	-48.32	≤ -17	PASS
11G	Ant0	Low	2412	-0.74	-34.2	≤ -20.74	PASS
		High	2462	-0.34	-44.63	≤ -20.34	PASS
11N20SISO	Ant0	Low	2412	-2.61	-37.91	≤ -22.61	PASS
		High	2462	-2.42	-47.87	≤ -22.42	PASS
11N40SISO	Ant0	Low	2422	-5.84	-38.6	≤ -25.84	PASS
		High	2452	-5.81	-44.6	≤ -25.81	PASS

Test Graphs

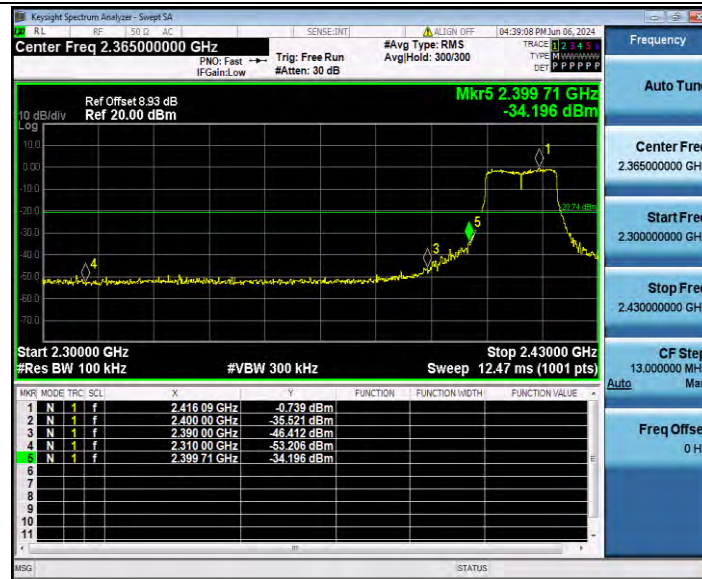
11B_Ant0_Low_2412



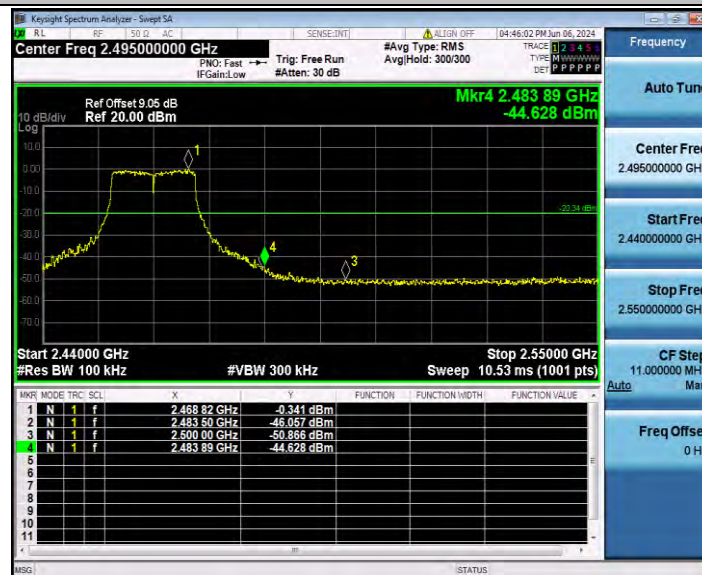
11B_Ant0_High_2462



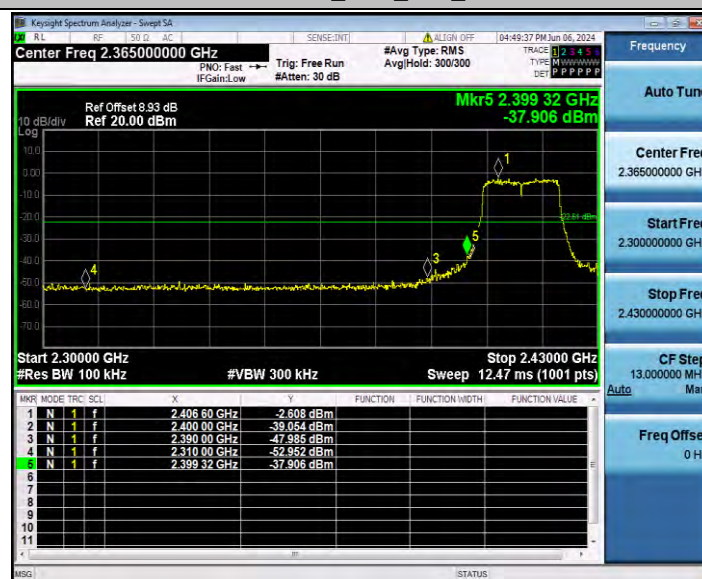
11G_Ant0_Low_2412



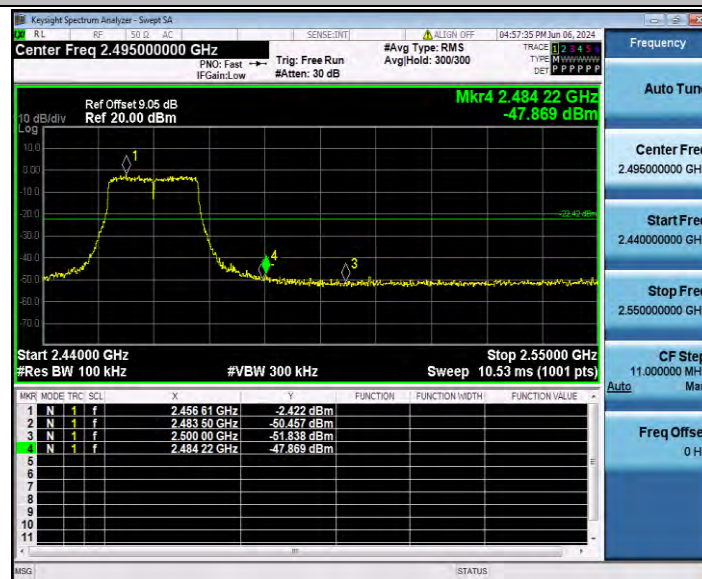
11G_Ant0_High_2462



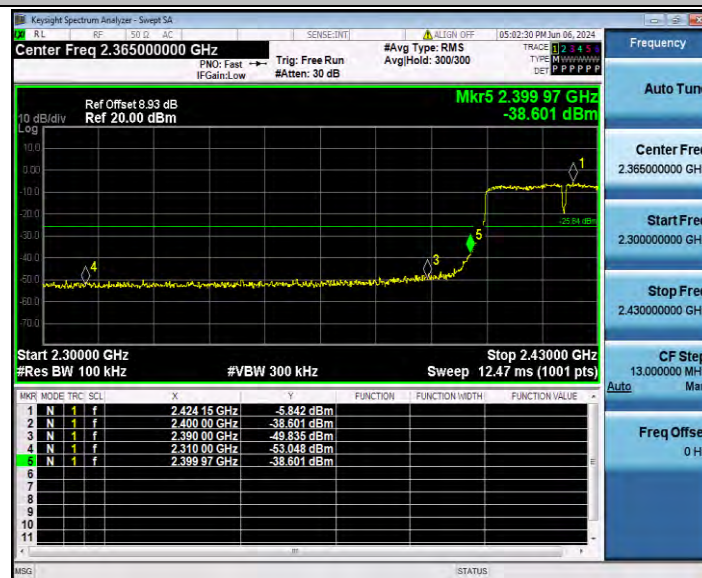
11N20SISO_Ant0_Low_2412



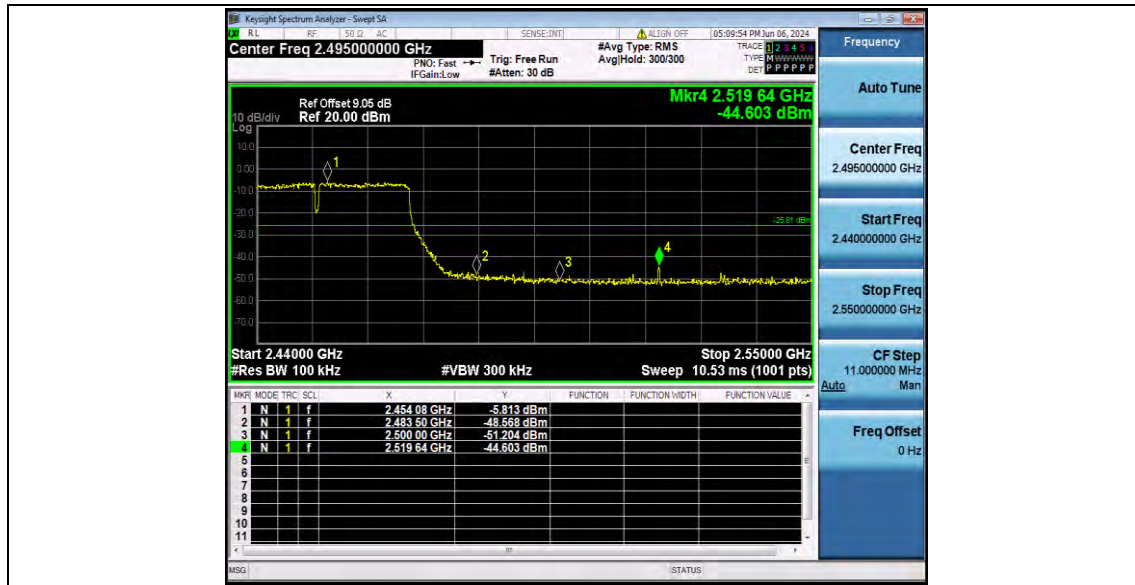
11N20SISO_Ant0_High_2462



11N40SISO_Ant0_Low_2422



11N40SISO_Ant0_High_2452

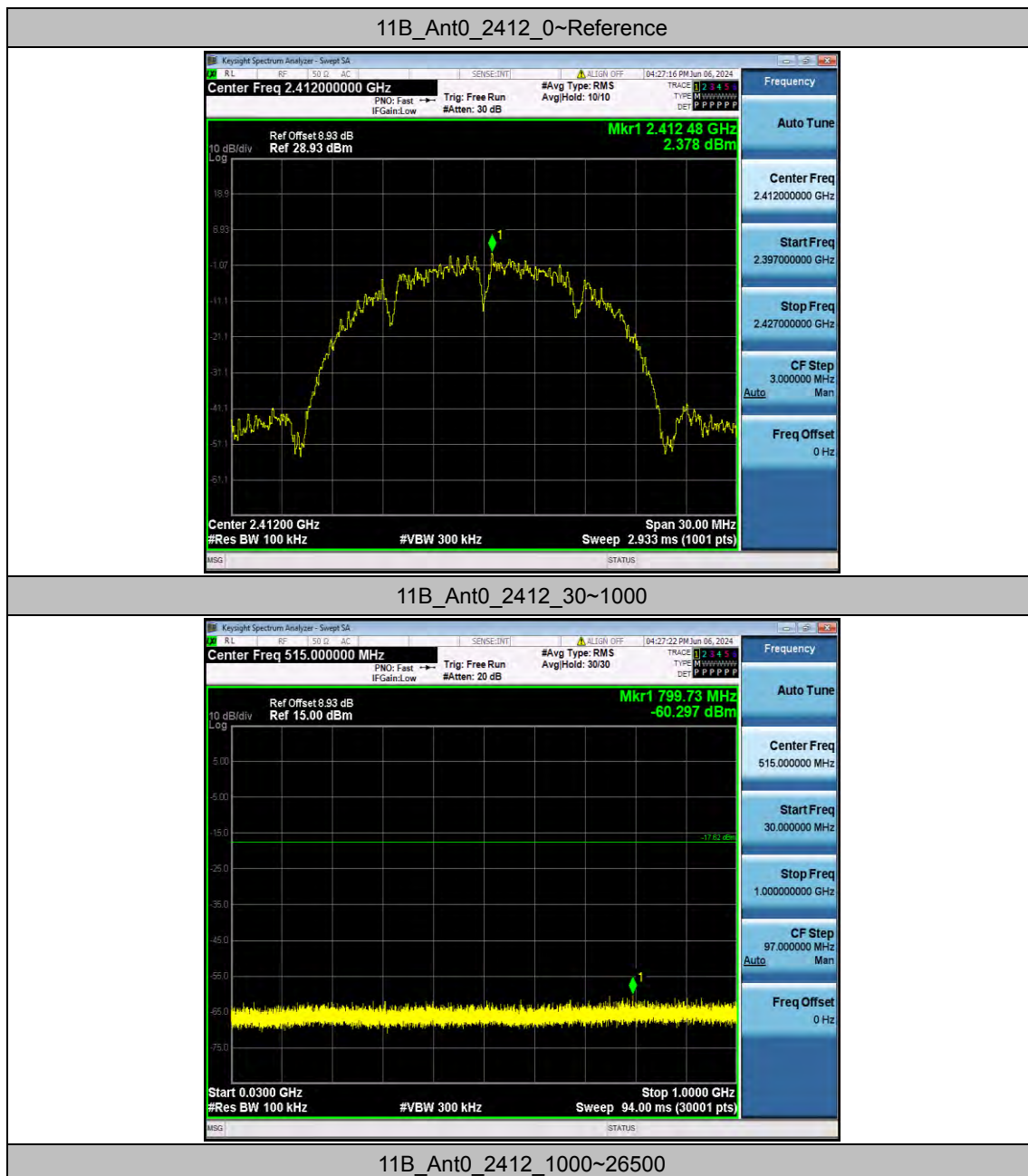


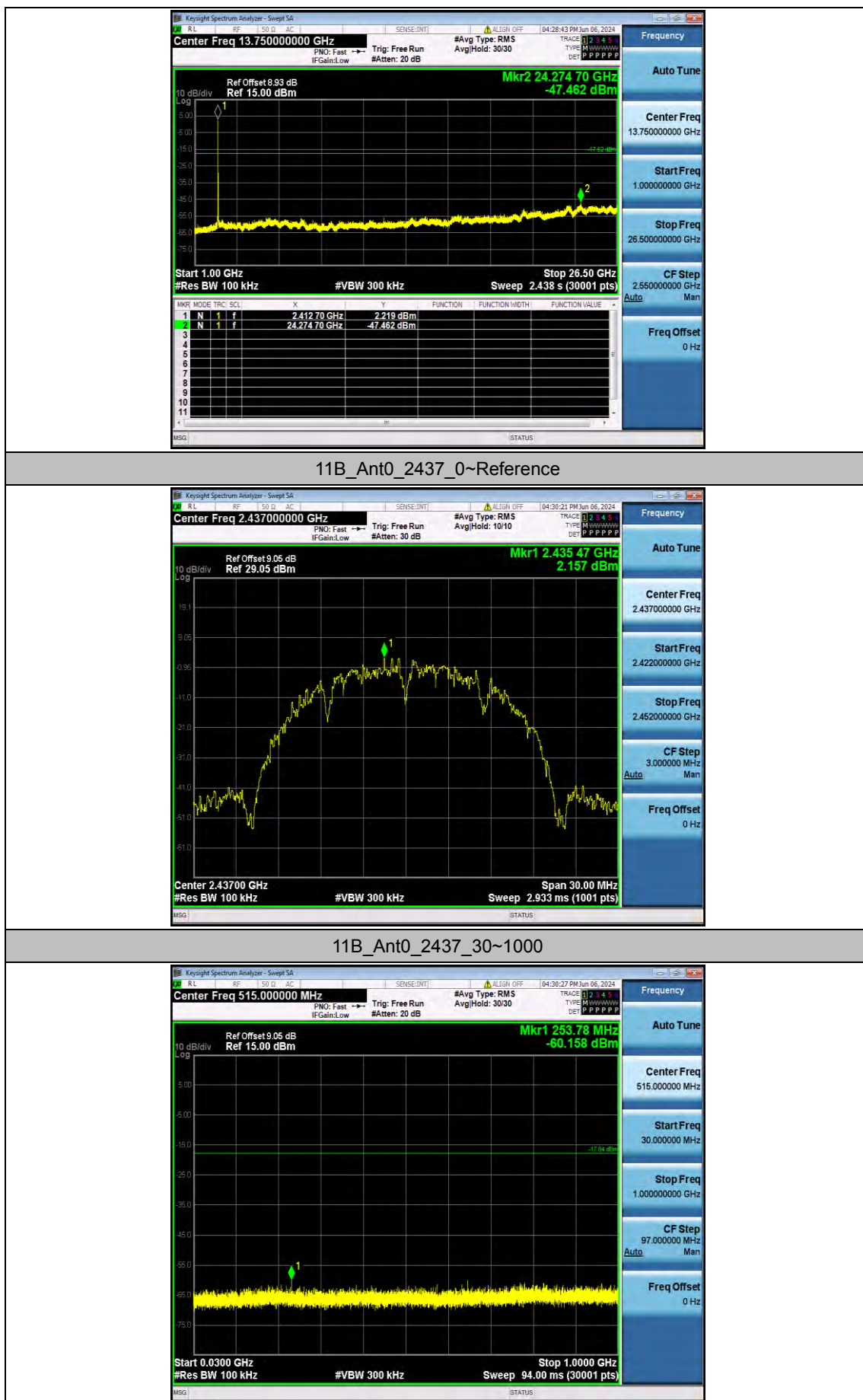
Appendix C.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant0	2412	Reference	2.38	2.38	---	PASS
			30~1000	2.38	-60.3	≤ -17.62	PASS
			1000~26500	2.38	-47.46	≤ -17.62	PASS
		2437	Reference	2.16	2.16	---	PASS
			30~1000	2.16	-60.16	≤ -17.84	PASS
			1000~26500	2.16	-47.79	≤ -17.84	PASS
		2462	Reference	2.68	2.68	---	PASS
			30~1000	2.68	-60.62	≤ -17.32	PASS
			1000~26500	2.68	-48.17	≤ -17.32	PASS
11G	Ant0	2412	Reference	-1.05	-1.05	---	PASS
			30~1000	-1.05	-60.7	≤ -21.05	PASS
			1000~26500	-1.05	-47.57	≤ -21.05	PASS
		2437	Reference	-0.17	-0.17	---	PASS
			30~1000	-0.17	-60.52	≤ -20.17	PASS
			1000~26500	-0.17	-46.9	≤ -20.17	PASS
		2462	Reference	-0.95	-0.95	---	PASS
			30~1000	-0.95	-60.1	≤ -20.95	PASS
			1000~26500	-0.95	-47.22	≤ -20.95	PASS
11N20SISO	Ant0	2412	Reference	-3.38	-3.38	---	PASS
			30~1000	-3.38	-60.62	≤ -23.38	PASS
			1000~26500	-3.38	-48	≤ -23.38	PASS
		2437	Reference	-0.83	-0.83	---	PASS
			30~1000	-0.83	-60.8	≤ -20.83	PASS
			1000~26500	-0.83	-47.43	≤ -20.83	PASS
		2462	Reference	-3.19	-3.19	---	PASS
			30~1000	-3.19	-59.91	≤ -23.19	PASS
			1000~26500	-3.19	-47.89	≤ -23.19	PASS
11N40SISO	Ant0	2422	Reference	-6.45	-6.45	---	PASS
			30~1000	-6.45	-60.54	≤ -26.45	PASS
			1000~26500	-6.45	-47.94	≤ -26.45	PASS
		2437	Reference	-3.53	-3.53	---	PASS
			30~1000	-3.53	-59.57	≤ -23.53	PASS
			1000~26500	-3.53	-47.37	≤ -23.53	PASS
		2452	Reference	-6.47	-6.47	---	PASS
			30~1000	-6.47	-59.41	≤ -26.47	PASS
			1000~26500	-6.47	-46.7	≤ -26.47	PASS

Test Graphs





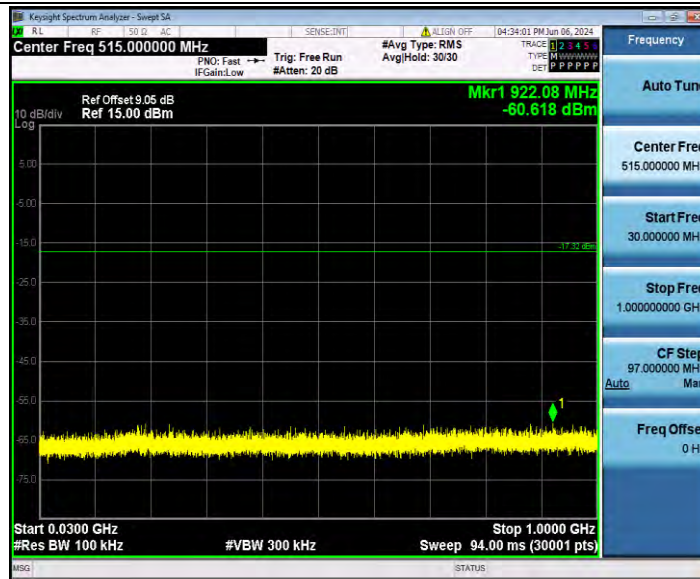
11B_Ant0_2437_1000~26500



11B_Ant0_2462_0~Reference



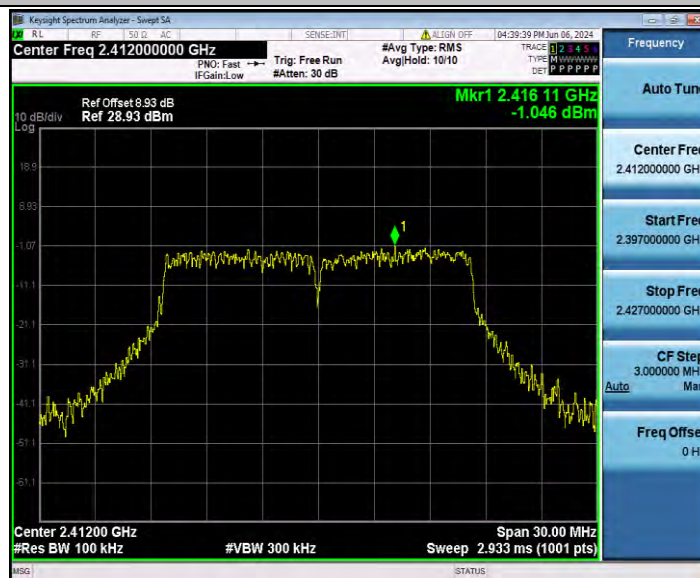
11B_Ant0_2462_30~1000



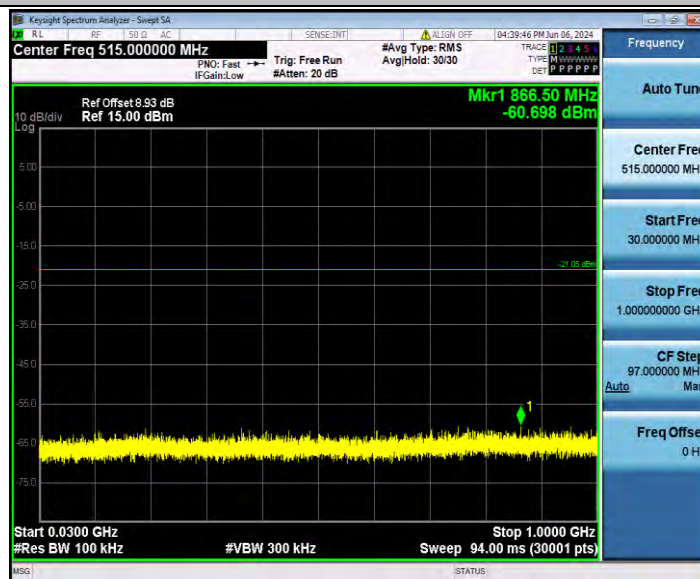
11B_Ant0_2462_1000~26500



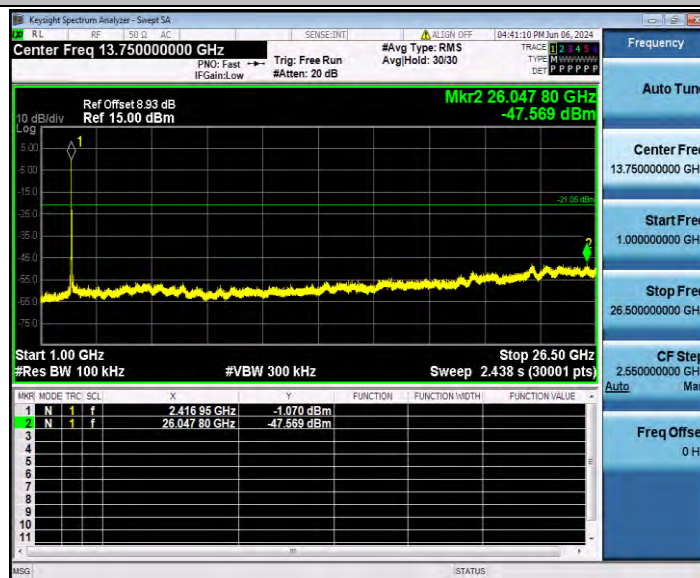
11G_Ant0_2412_0~Reference



11G_Ant0_2412_30~1000



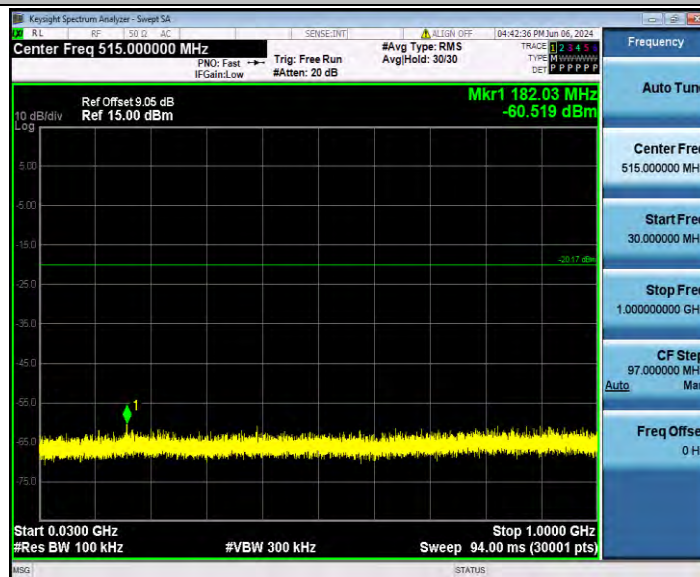
11G_Ant0_2412_1000~26500



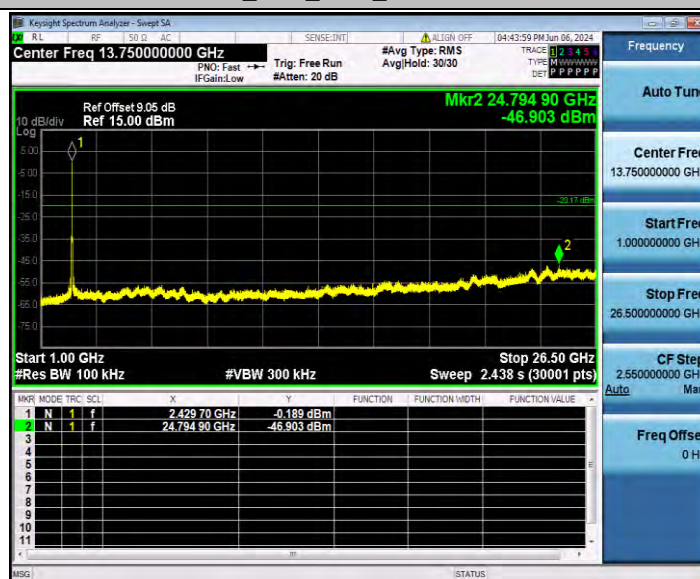
11G_Ant0_2437_0~Reference



11G_Ant0_2437_30~1000



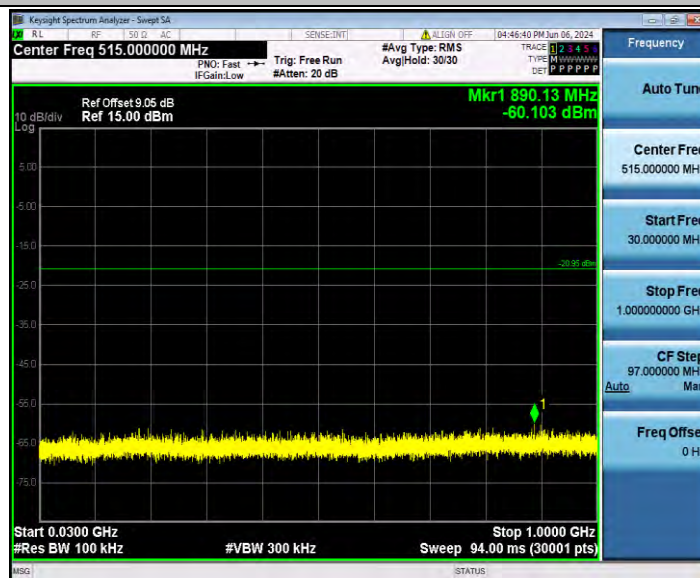
11G_Ant0_2437_1000~26500



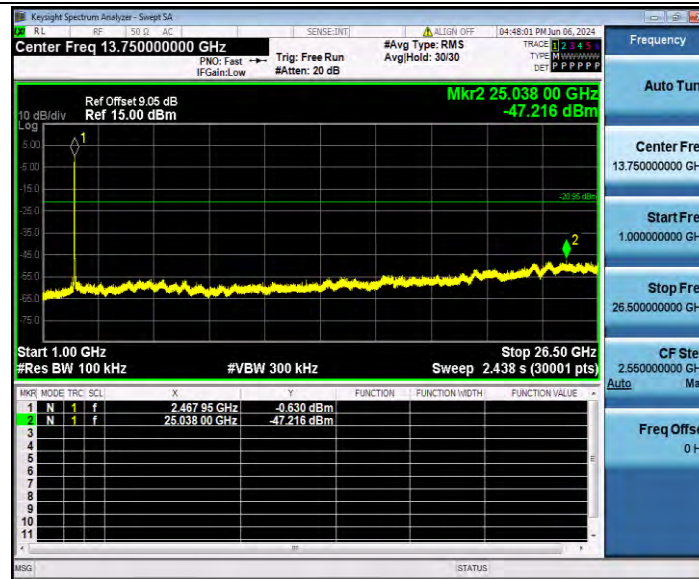
11G_Ant0_2462_0~Reference



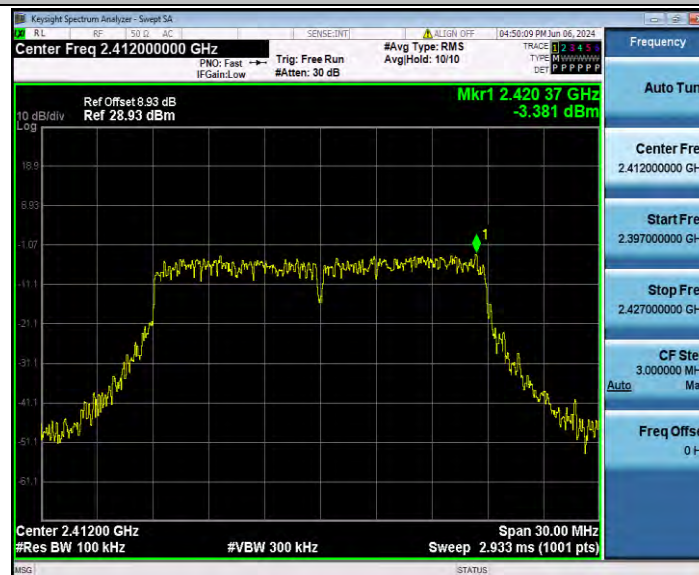
11G_Ant0_2462_30~1000



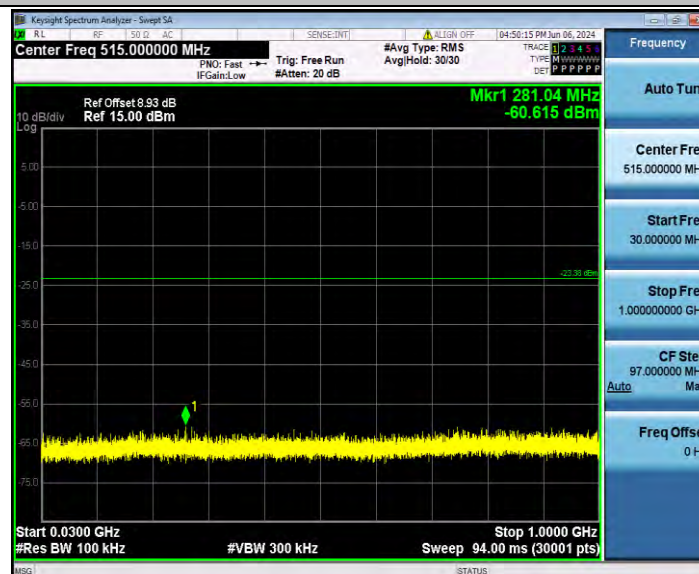
11G_Ant0_2462_1000~26500



11N20SISO_Ant0_2412_0~Reference



11N20SISO_Ant0_2412_30~1000



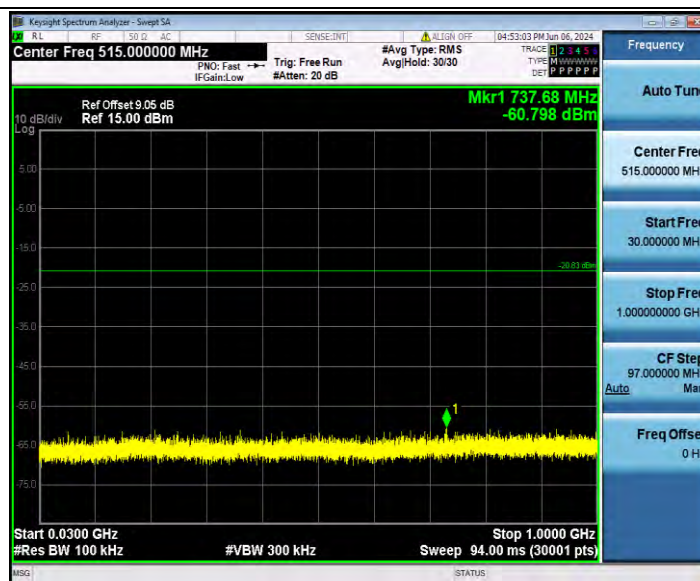
11N20SISO_Ant0_2412_1000~26500



11N20SISO_Ant0_2437_0~Reference



11N20SISO_Ant0_2437_30~1000



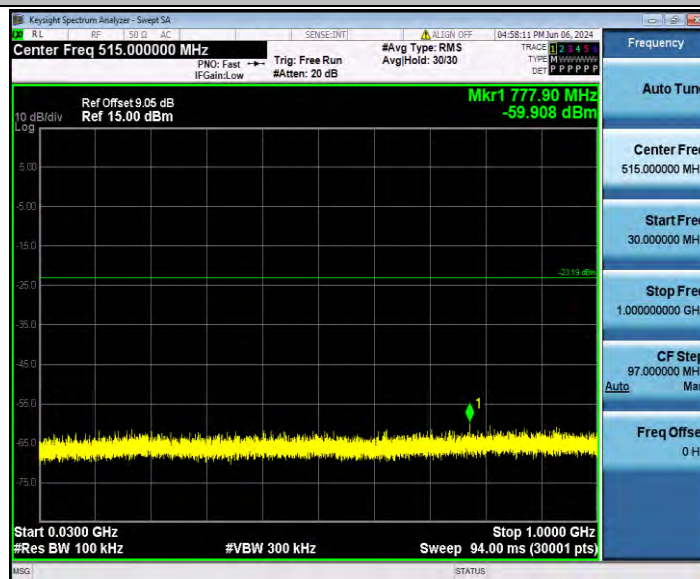
11N20SISO_Ant0_2437_1000~26500



11N20SISO_Ant0_2462_0~Reference



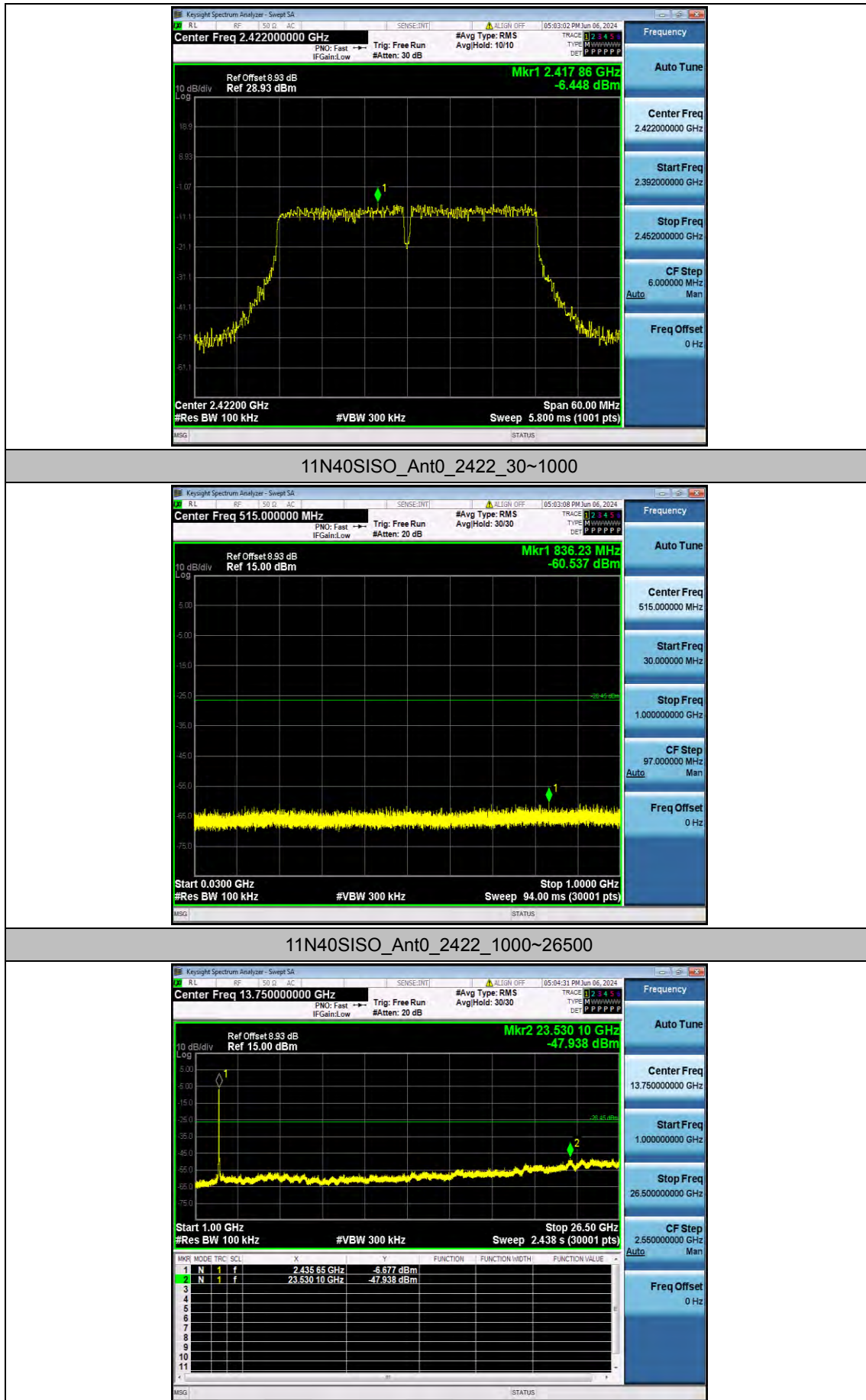
11N20SISO_Ant0_2462_30~1000



11N20SISO_Ant0_2462_1000~26500



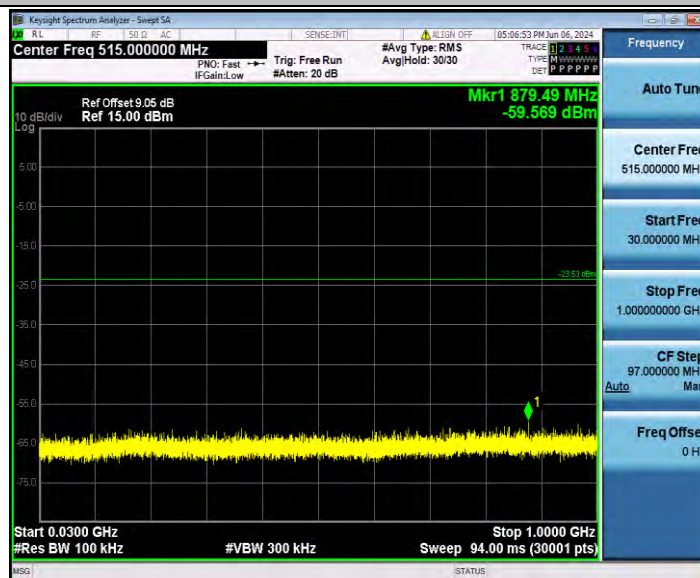
11N40SISO_Ant0_2422_0~Reference



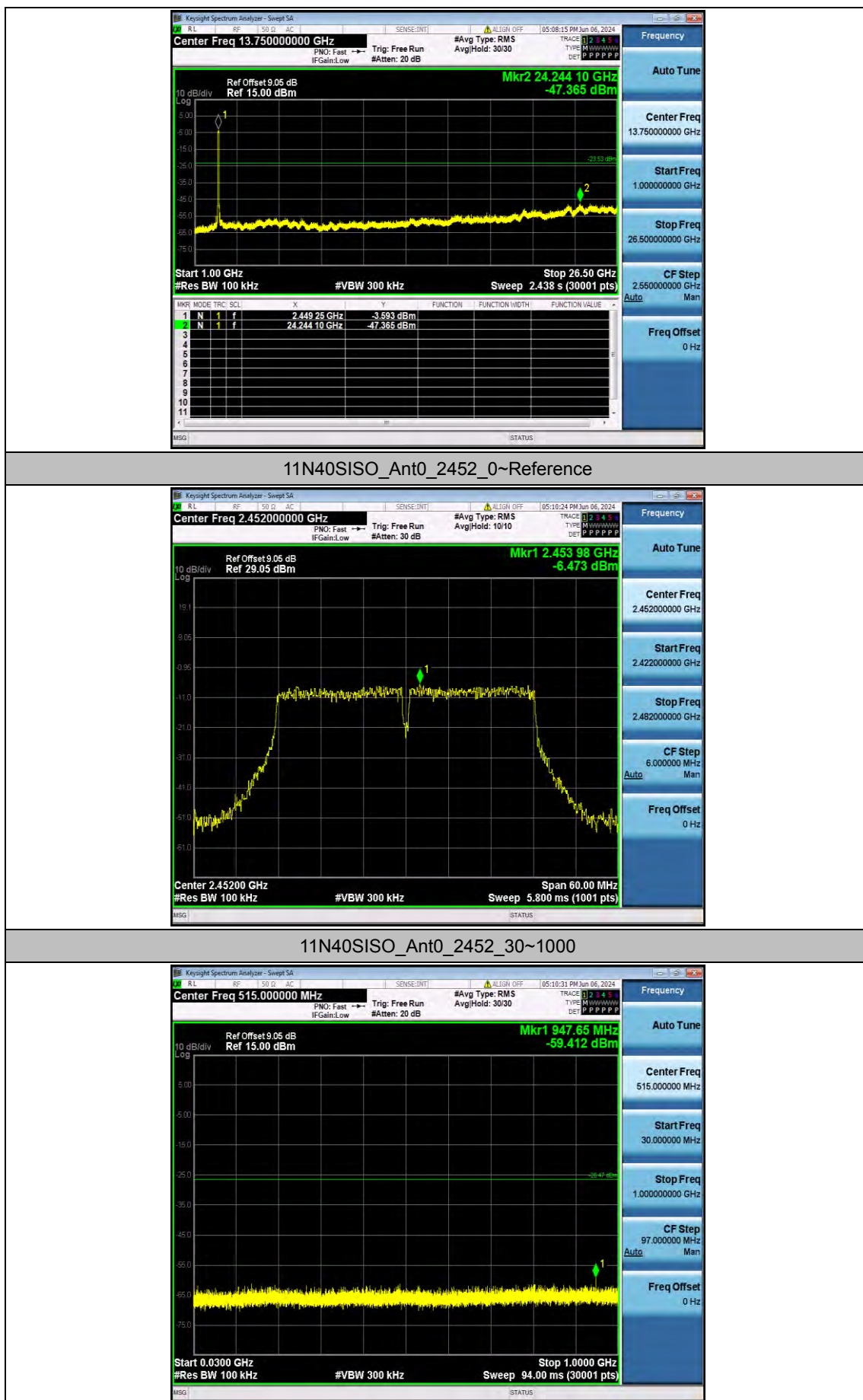
11N40SISO_Ant0_2437_0~Reference



11N40SISO_Ant0_2437_30~1000



11N40SISO_Ant0_2437_1000~26500





Appendix C.7: Emissions in Restricted Bands

Test Result

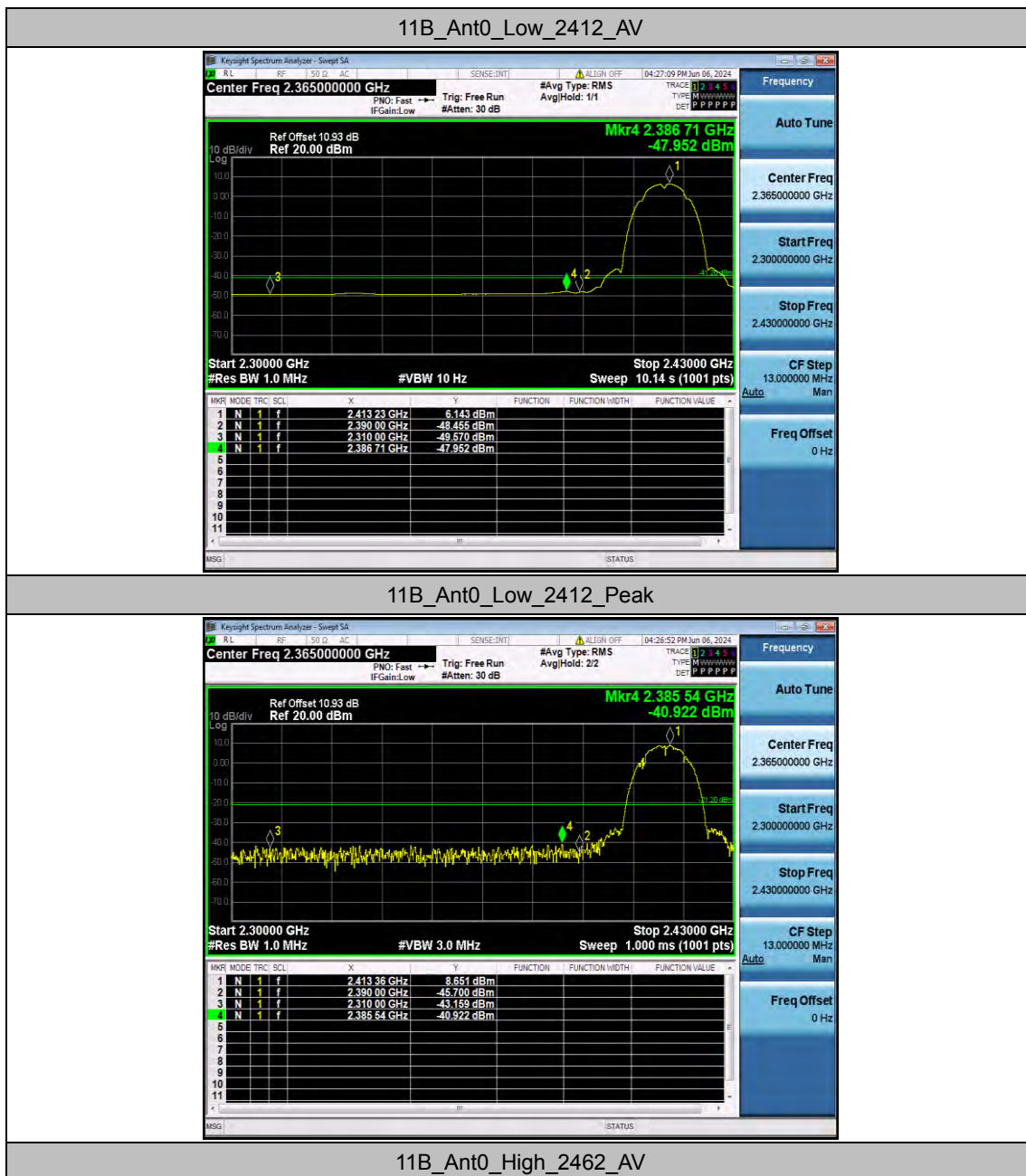
TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant0	Low	2412	AV	2310.000	-49.57	≤-41.20	45.63	≤54	PASS
				AV	2386.710	-47.95	≤-41.20	47.25	≤54	PASS
				AV	2390.000	-48.46	≤-41.20	46.74	≤54	PASS
				Peak	2310.000	-43.16	≤-21.20	52.04	≤74	PASS
				Peak	2385.540	-40.92	≤-21.20	54.28	≤74	PASS
				Peak	2390.000	-45.7	≤-21.20	49.50	≤74	PASS
		High	2462	AV	2483.500	-47.72	≤-41.20	47.48	≤54	PASS
				AV	2487.300	-47.44	≤-41.20	47.76	≤54	PASS
				AV	2500.000	-48.43	≤-41.20	46.77	≤54	PASS
				Peak	2483.500	-47.55	≤-21.20	47.65	≤74	PASS
				Peak	2487.740	-40.66	≤-21.20	54.54	≤74	PASS
				Peak	2500.000	-44.87	≤-21.20	50.33	≤74	PASS
11G	Ant0	Low	2412	AV	2310.000	-49.45	≤-41.20	45.75	≤54	PASS
				AV	2389.960	-44.35	≤-41.20	50.85	≤54	PASS
				AV	2390.000	-44.35	≤-41.20	50.85	≤54	PASS
				Peak	2310.000	-53.18	≤-21.20	42.02	≤74	PASS
				Peak	2389.830	-35.53	≤-21.20	59.67	≤74	PASS
				Peak	2390.000	-40.96	≤-21.20	54.24	≤74	PASS
		High	2462	AV	2483.500	-42.31	≤-41.20	52.89	≤54	PASS
				AV	2483.560	-42.41	≤-41.20	52.79	≤54	PASS
				AV	2500.000	-48.24	≤-41.20	46.96	≤54	PASS
				Peak	2483.500	-38.35	≤-21.20	56.85	≤74	PASS
				Peak	2486.310	-36.77	≤-21.20	58.43	≤74	PASS
				Peak	2500.000	-45.29	≤-21.20	49.91	≤74	PASS
11N20SISO	Ant0	Low	2412	AV	2310.000	-49.49	≤-41.20	45.71	≤54	PASS
				AV	2389.960	-46.41	≤-41.20	48.79	≤54	PASS
				AV	2390.000	-46.41	≤-41.20	48.79	≤54	PASS
				Peak	2310.000	-48.8	≤-21.20	46.40	≤74	PASS
				Peak	2389.960	-36.37	≤-21.20	58.83	≤74	PASS
				Peak	2390.000	-36.37	≤-21.20	58.83	≤74	PASS
		High	2462	AV	2483.500	-46.49	≤-41.20	48.71	≤54	PASS
				AV	2483.560	-46.54	≤-41.20	48.66	≤54	PASS
				AV	2500.000	-48.37	≤-41.20	46.83	≤54	PASS
				Peak	2483.500	-45.35	≤-21.20	49.85	≤74	PASS
				Peak	2494.120	-39.22	≤-21.20	55.98	≤74	PASS

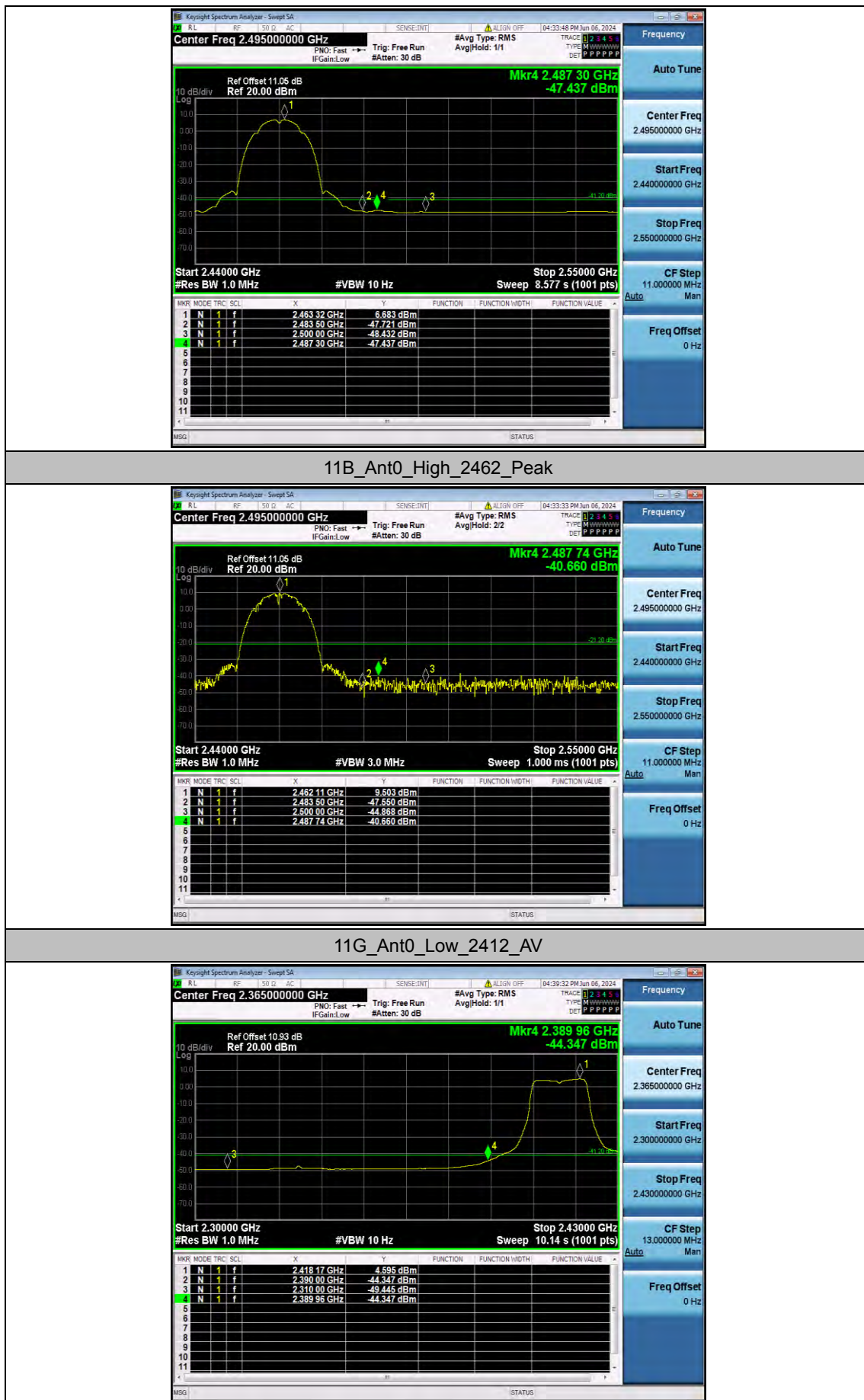
				Peak	2500.000	-46.08	≤ -21.20	49.12	≤ 74	PASS
11N40SIS O	Ant0	Low	2422	AV	2310.000	-49.49	≤ -41.20	45.71	≤ 54	PASS
				AV	2389.960	-46.65	≤ -41.20	48.55	≤ 54	PASS
				AV	2390.000	-46.65	≤ -41.20	48.55	≤ 54	PASS
				Peak	2310.000	-48.61	≤ -21.20	46.59	≤ 74	PASS
				Peak	2388.660	-38.34	≤ -21.20	56.86	≤ 74	PASS
				Peak	2390.000	-44.4	≤ -21.20	50.80	≤ 74	PASS
		High	2452	AV	2483.500	-46.12	≤ -41.20	49.08	≤ 54	PASS
				AV	2483.560	-46.14	≤ -41.20	49.06	≤ 54	PASS
				AV	2500.000	-47.72	≤ -41.20	47.48	≤ 54	PASS
				Peak	2483.500	-39.77	≤ -21.20	55.43	≤ 74	PASS
				Peak	2490.600	-39.04	≤ -21.20	56.16	≤ 74	PASS
				Peak	2500.000	-44.83	≤ -21.20	50.37	≤ 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

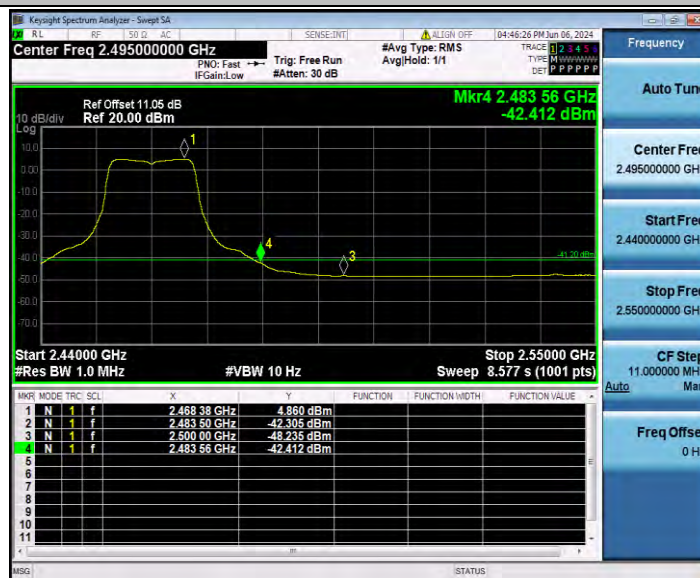




11G_Ant0_Low_2412_Peak



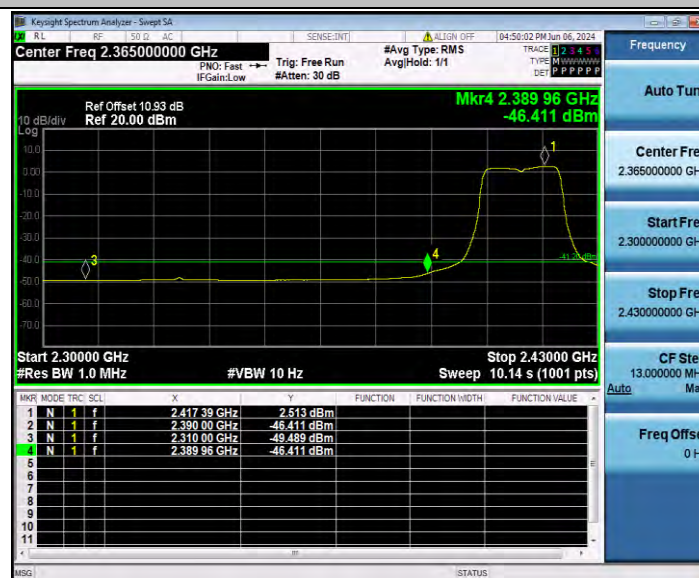
11G_Ant0_High_2462_AV



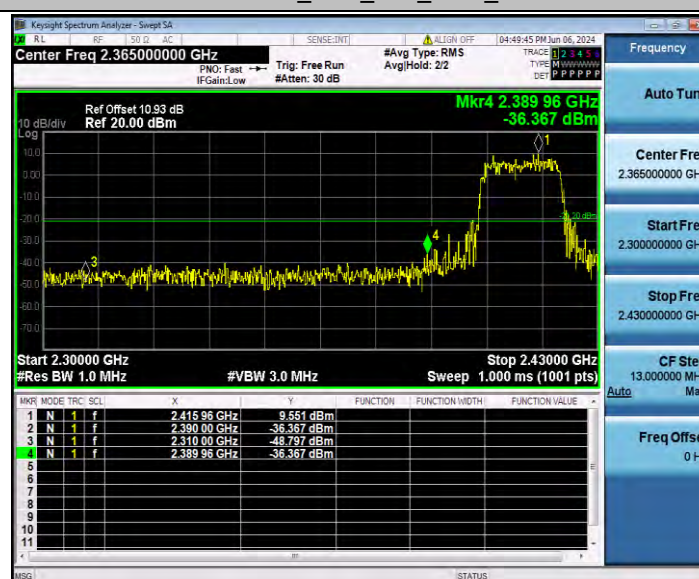
11G_Ant0_High_2462_Peak



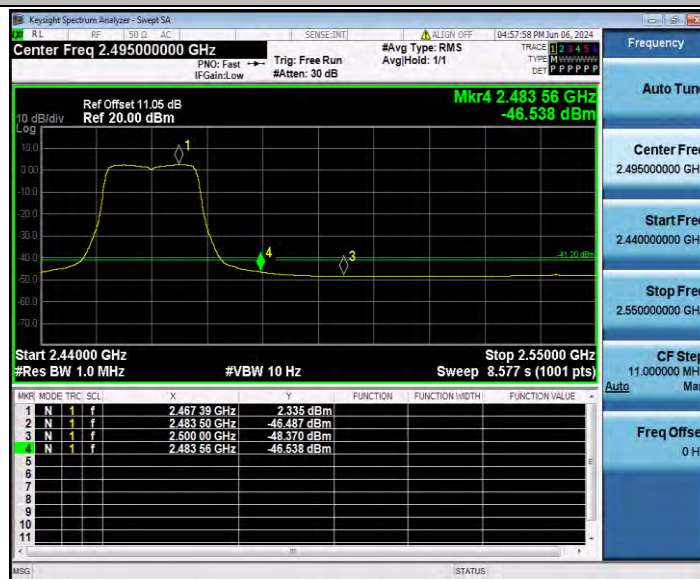
11N20SISO_Ant0_Low_2412_AV



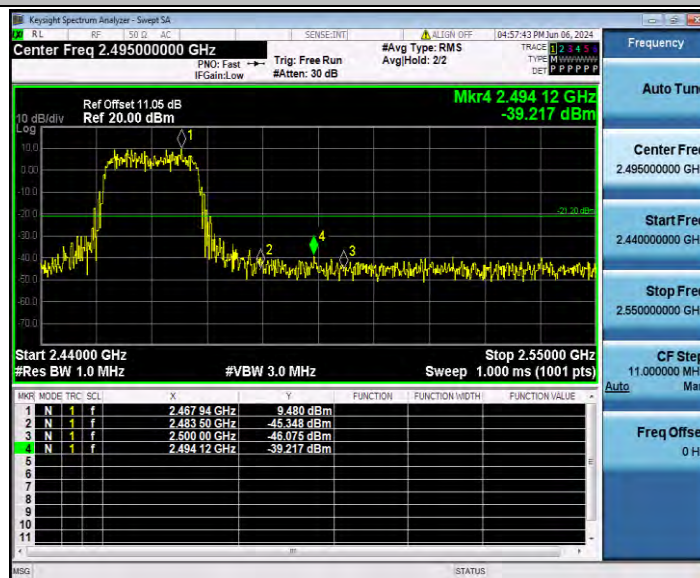
11N20SISO_Ant0_Low_2412_Peak



11N20SISO_Ant0_High_2462_AV



11N20SISO_Ant0_High_2462_Peak



11N40SISO_Ant0_Low_2422_AV

