

Case No. : <u>GTS20241123004-3-01</u>	
Ambient Condition: <u>22</u> °C, <u>51</u> %RH,	
Test Date: <u>2025.1.17</u>	Test Engineer: <u>Evan ouyang</u>

Appendix A.1: DTS Bandwidth

Test Result

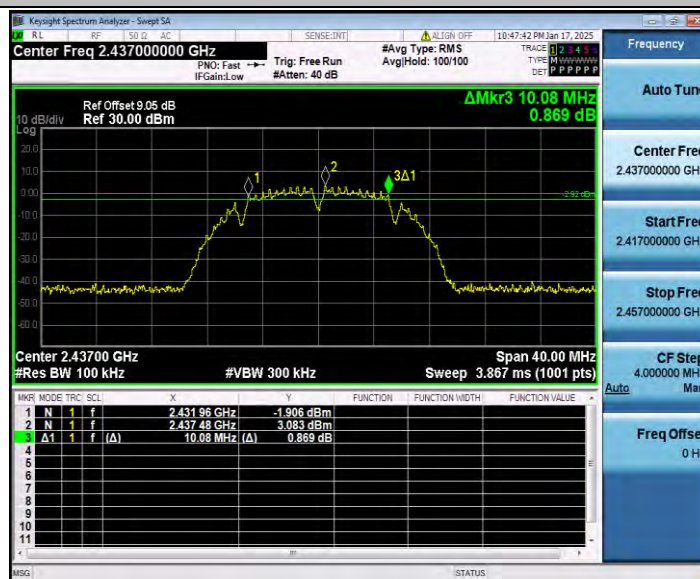
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.080	2406.960	2417.040	0.5	PASS
		2437	10.080	2431.960	2442.040	0.5	PASS
		2462	10.080	2456.960	2467.040	0.5	PASS
11G	Ant1	2412	15.360	2404.520	2419.880	0.5	PASS
		2437	13.760	2430.760	2444.520	0.5	PASS
		2462	12.520	2455.680	2468.200	0.5	PASS
11N20SISO	Ant1	2412	15.120	2404.440	2419.560	0.5	PASS
		2437	12.960	2431.600	2444.560	0.5	PASS
		2462	14.040	2455.480	2469.520	0.5	PASS
11N40SISO	Ant1	2422	35.680	2404.480	2440.160	0.5	PASS
		2437	33.760	2419.480	2453.240	0.5	PASS
		2452	28.800	2438.240	2467.040	0.5	PASS

Test Graphs

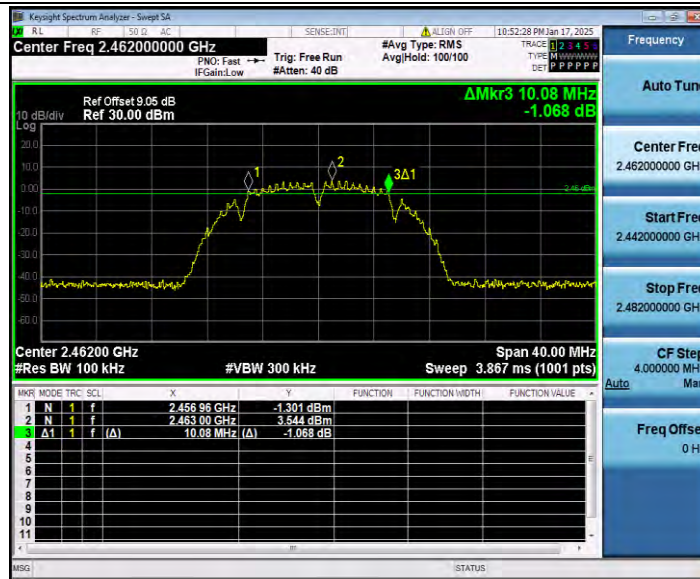
11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



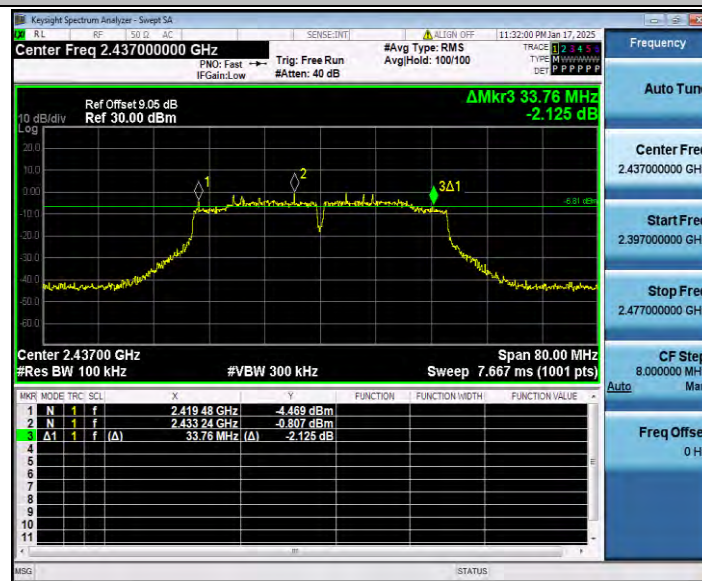
11N20SISO_Ant1_2462



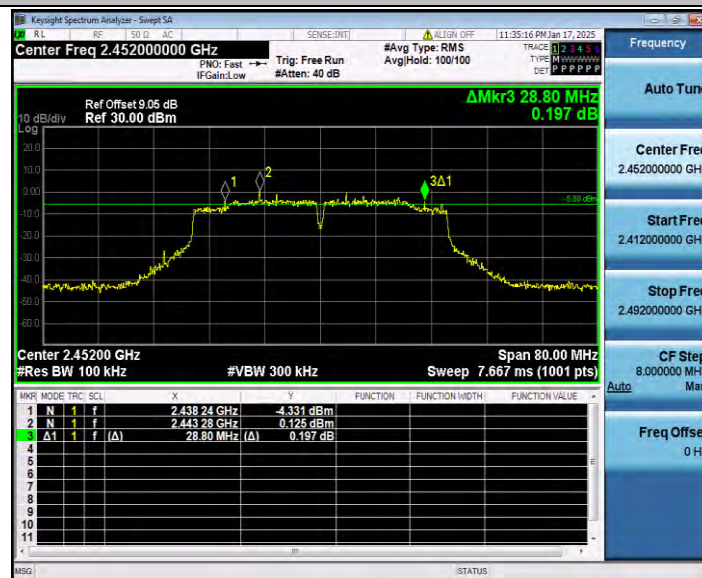
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



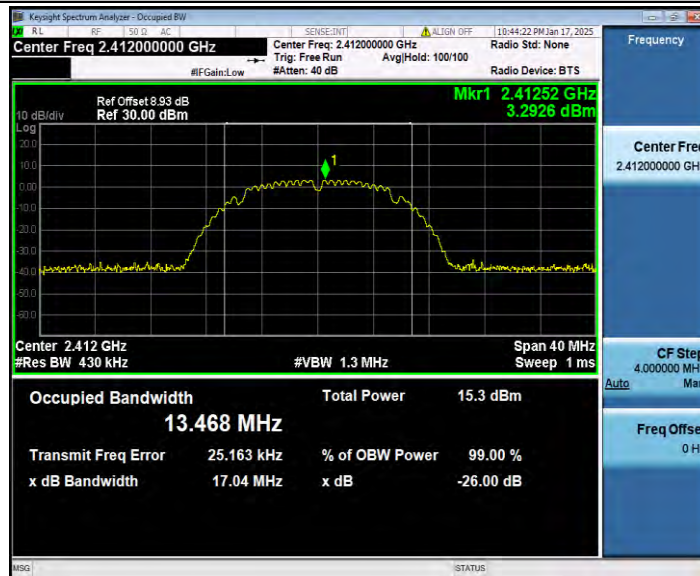
Appendix A.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.468	2405.2912	2418.7592	---	---
		2437	13.490	2430.3128	2443.8028	---	---
		2462	13.447	2455.2737	2468.7207	---	---
11G	Ant1	2412	16.921	2403.5929	2420.5139	---	---
		2437	16.953	2428.5852	2445.5382	---	---
		2462	16.790	2453.5955	2470.3855	---	---
11N20SISO	Ant1	2412	17.883	2403.1025	2420.9855	---	---
		2437	17.981	2428.0793	2446.0603	---	---
		2462	17.871	2453.0496	2470.9206	---	---
11N40SISO	Ant1	2422	36.074	2404.0514	2440.1254	---	---
		2437	36.060	2419.0125	2455.0725	---	---
		2452	36.005	2434.0438	2470.0488	---	---

Test Graphs

11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



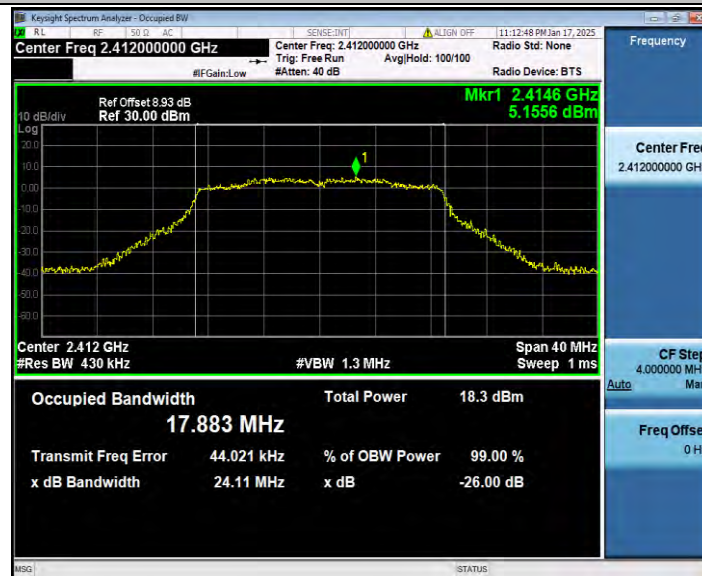
11G_Ant1_2437



11G_Ant1_2462



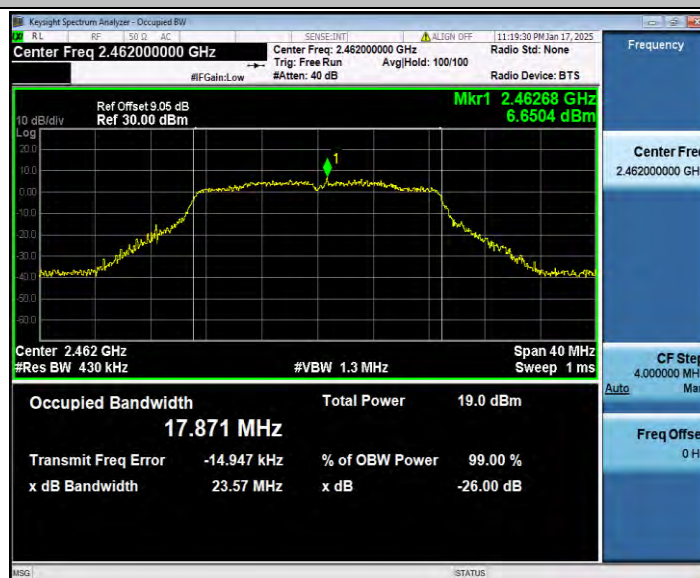
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix A.3: Maximum conducted output power

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	15.32	≤30.00	PASS
		2437	15.87	≤30.00	PASS
		2462	16.20	≤30.00	PASS
11G	Ant1	2412	19.27	≤30.00	PASS
		2437	19.77	≤30.00	PASS
		2462	20.19	≤30.00	PASS
11N20SISO	Ant1	2412	19.17	≤30.00	PASS
		2437	19.56	≤30.00	PASS
		2462	20.00	≤30.00	PASS
11N40SISO	Ant1	2422	19.62	≤30.00	PASS
		2437	20.09	≤30.00	PASS
		2452	20.23	≤30.00	PASS

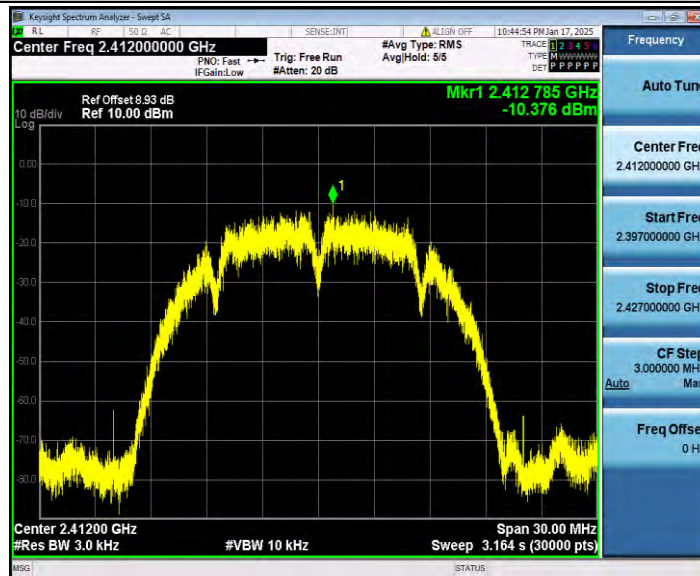
Appendix A.4: Maximum power spectral density

Test Result

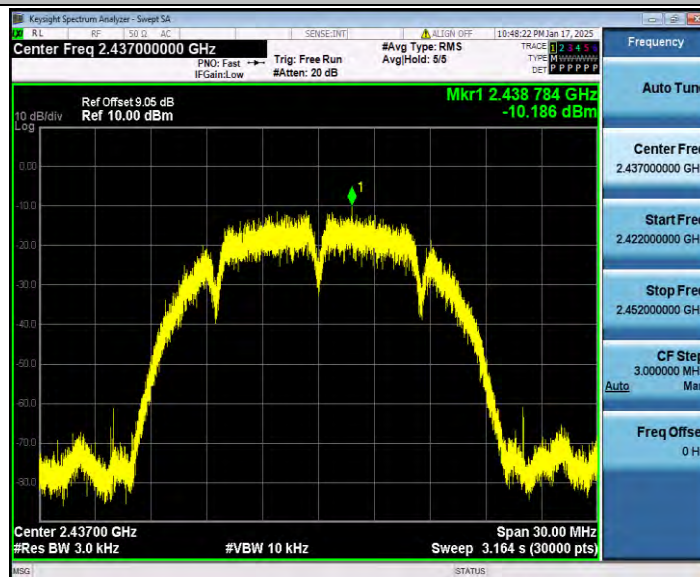
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-10.38	≤8.00	PASS
		2437	-10.19	≤8.00	PASS
		2462	-10.33	≤8.00	PASS
11G	Ant1	2412	-12.48	≤8.00	PASS
		2437	-11.02	≤8.00	PASS
		2462	-11.08	≤8.00	PASS
11N20SISO	Ant1	2412	-12.44	≤8.00	PASS
		2437	-12.03	≤8.00	PASS
		2462	-11.64	≤8.00	PASS
11N40SISO	Ant1	2422	-15.50	≤8.00	PASS
		2437	-15.41	≤8.00	PASS
		2452	-14.54	≤8.00	PASS

Test Graphs

11B_Ant1_2412



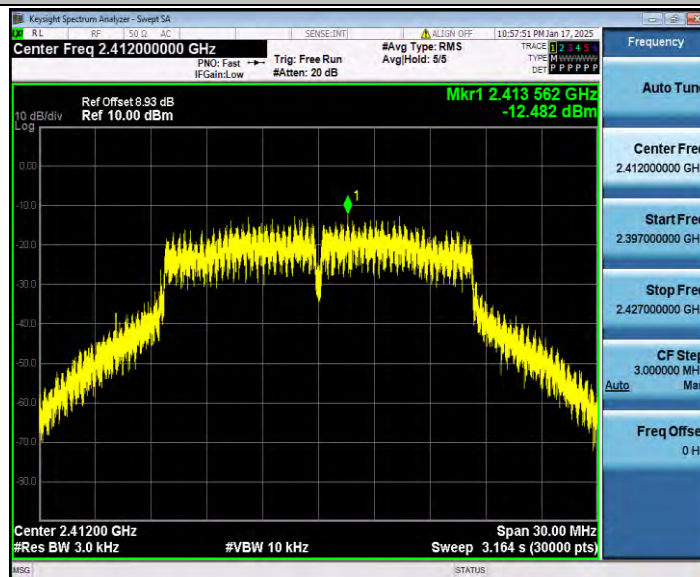
11B_Ant1_2437



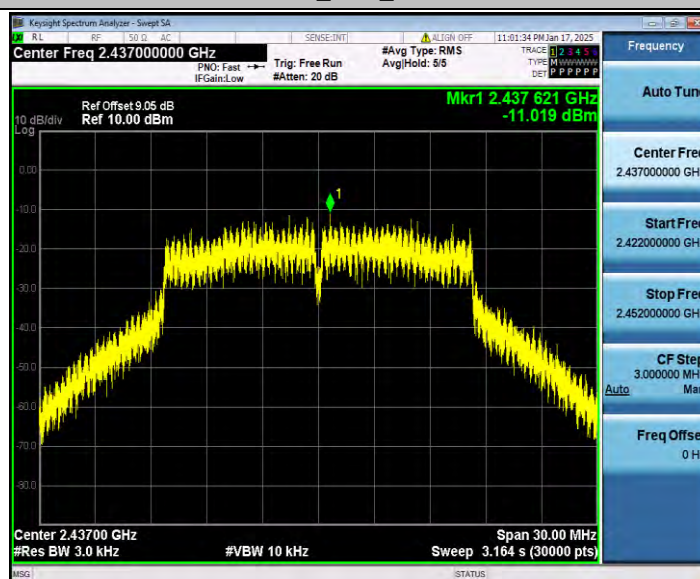
11B_Ant1_2462



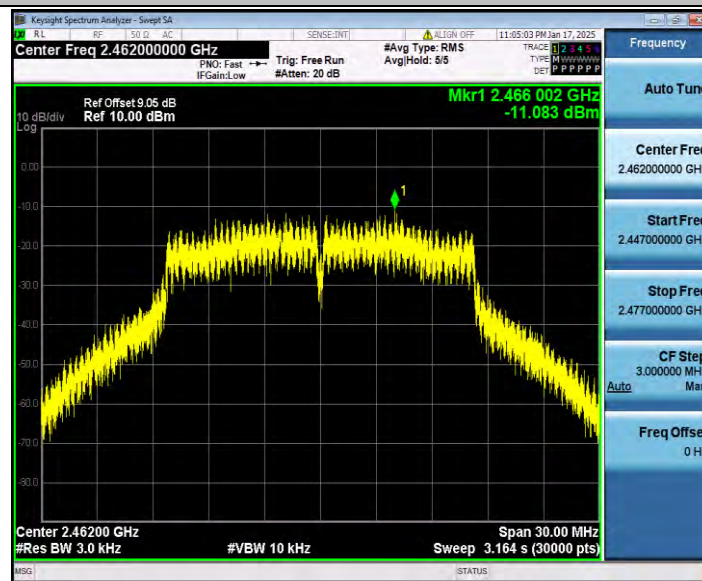
11G_Ant1_2412



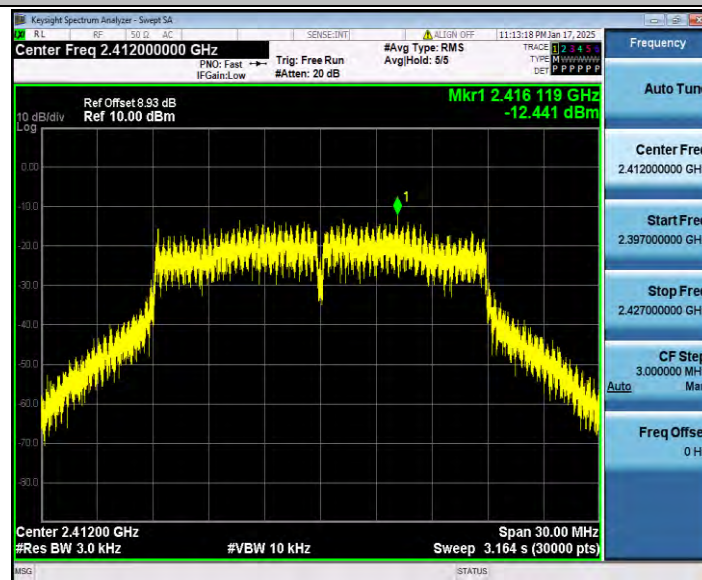
11G_Ant1_2437



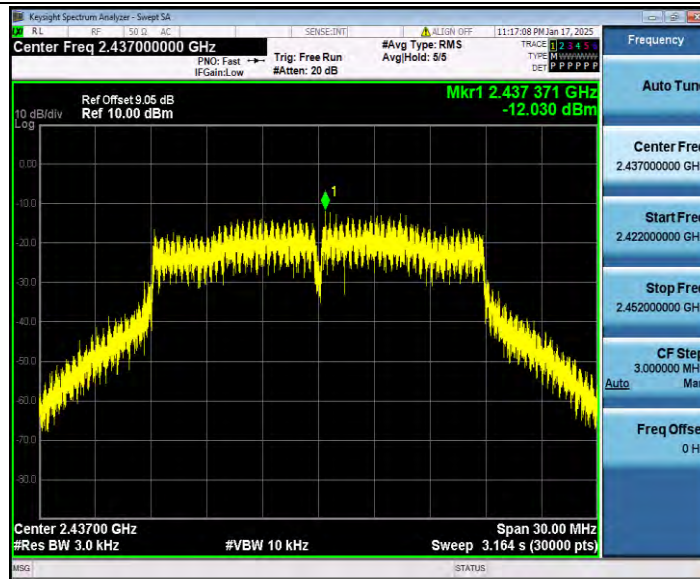
11G_Ant1_2462



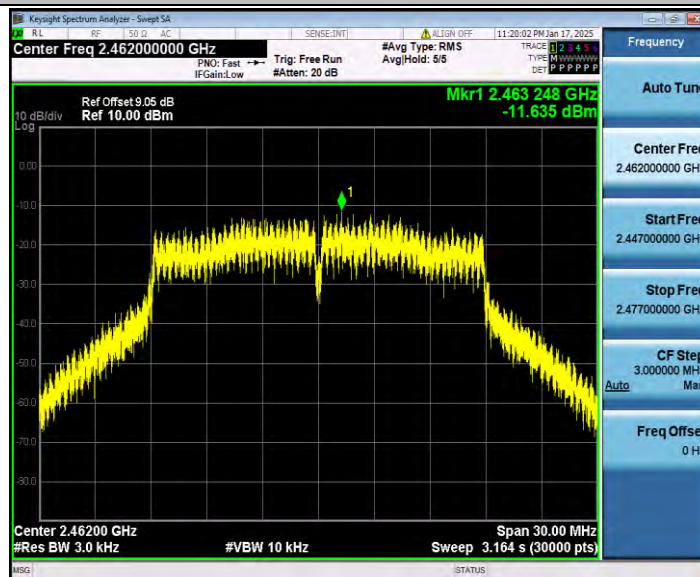
11N20SISO_Ant1_2412



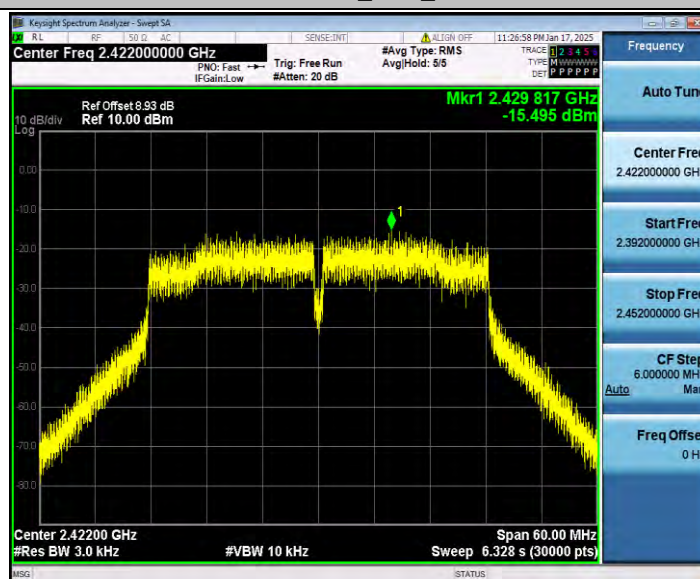
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



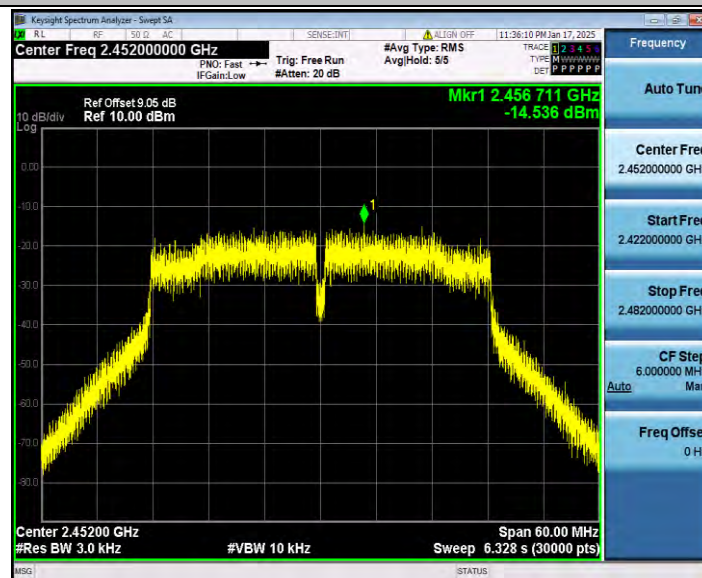
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

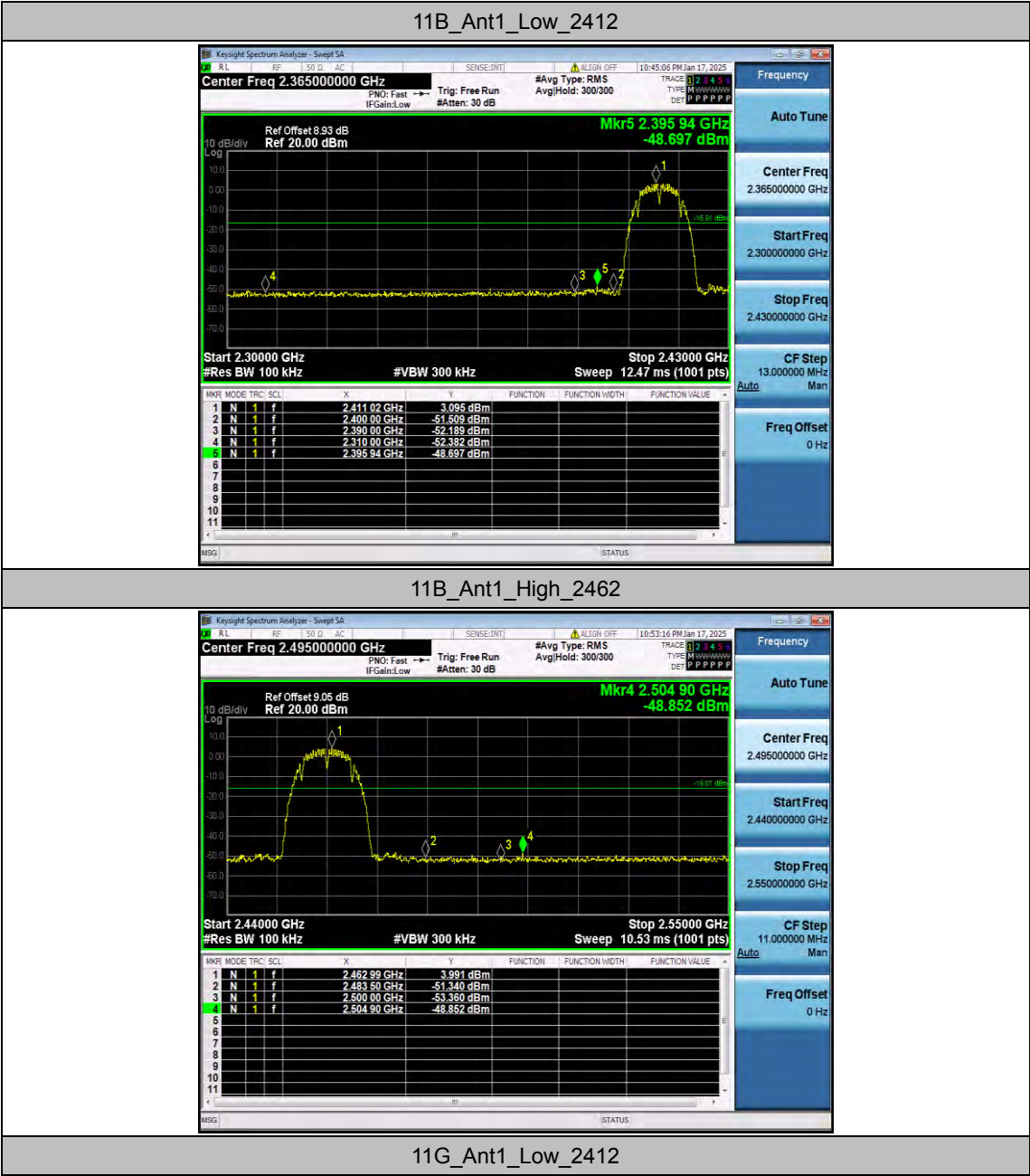


Appendix A.5: Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	3.10	-48.7	≤ -16.91	PASS
		High	2462	3.99	-48.85	≤ -16.01	PASS
11G	Ant1	Low	2412	2.69	-28.73	≤ -17.31	PASS
		High	2462	3.62	-48.12	≤ -16.38	PASS
11N20SISO	Ant1	Low	2412	2.32	-28.41	≤ -17.68	PASS
		High	2462	3.40	-48.7	≤ -16.61	PASS
11N40SISO	Ant1	Low	2422	-1.27	-31.27	≤ -21.27	PASS
		High	2452	-0.27	-48.65	≤ -20.27	PASS

Test Graphs



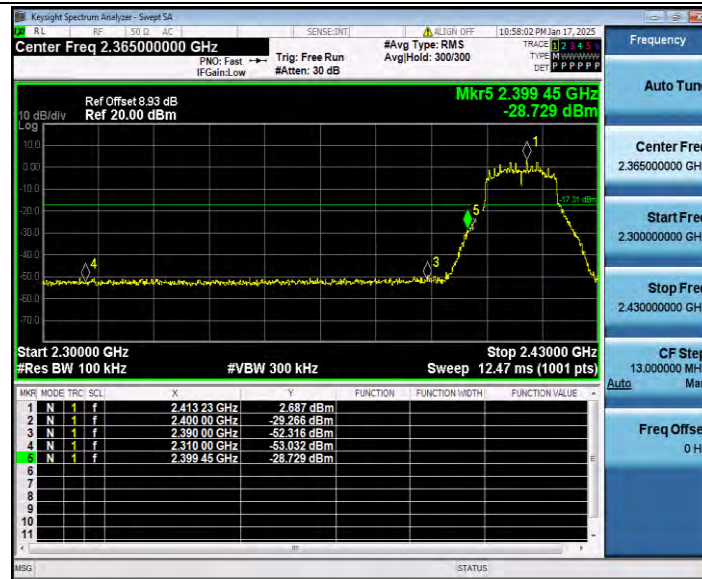
11B_Ant1_High_2462

Frequency

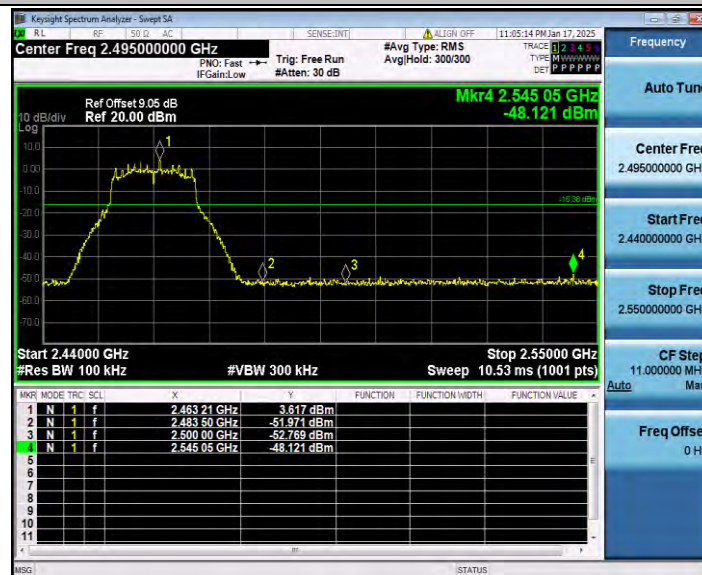
Auto Tune

Center Freq
2.495000000 GHzStart Freq
2.440000000 GHzStop Freq
2.550000000 GHzCF Step
11.000000 MHz
Auto ManFreq Offset
0 Hz

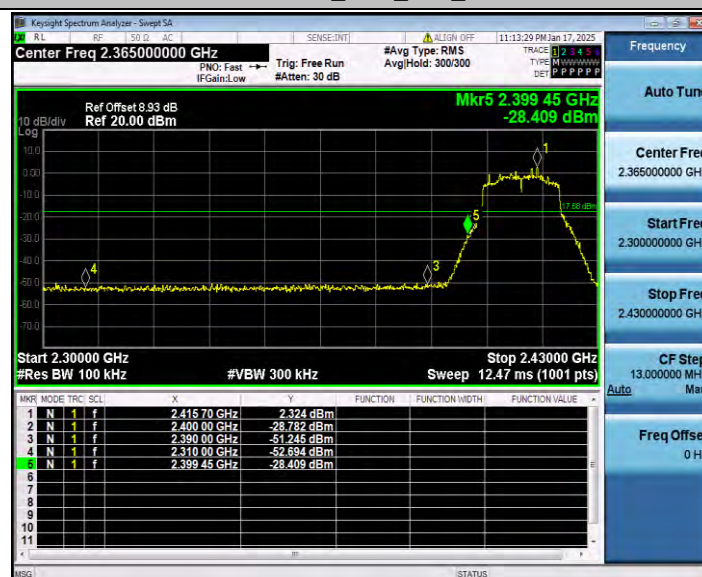
11G_Ant1_Low_2412



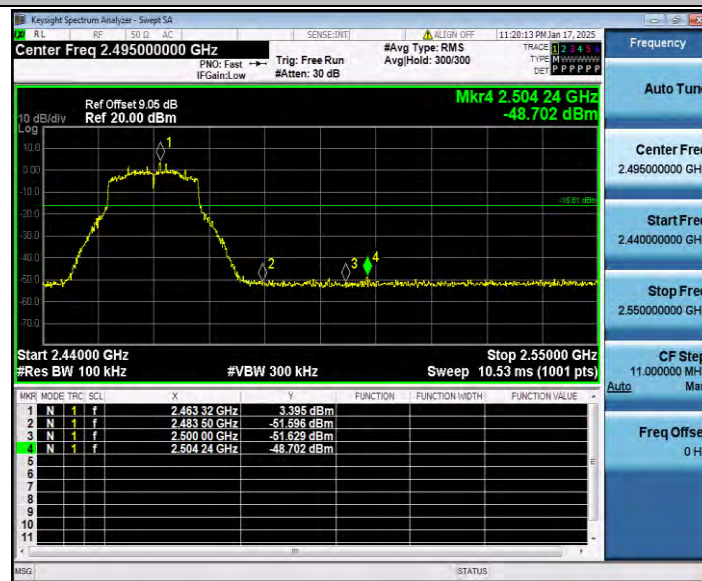
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



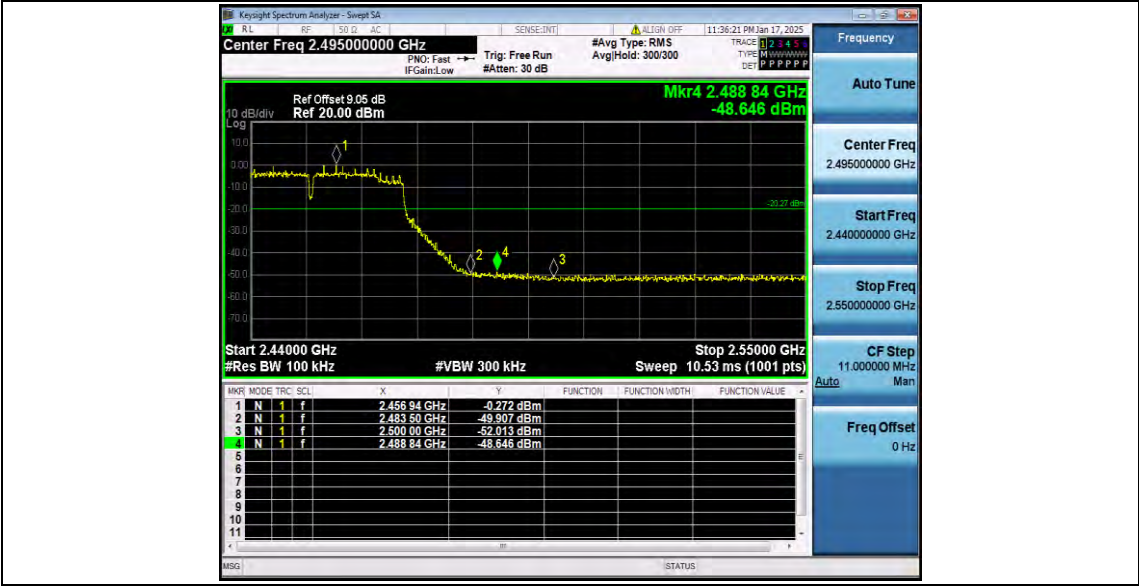
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

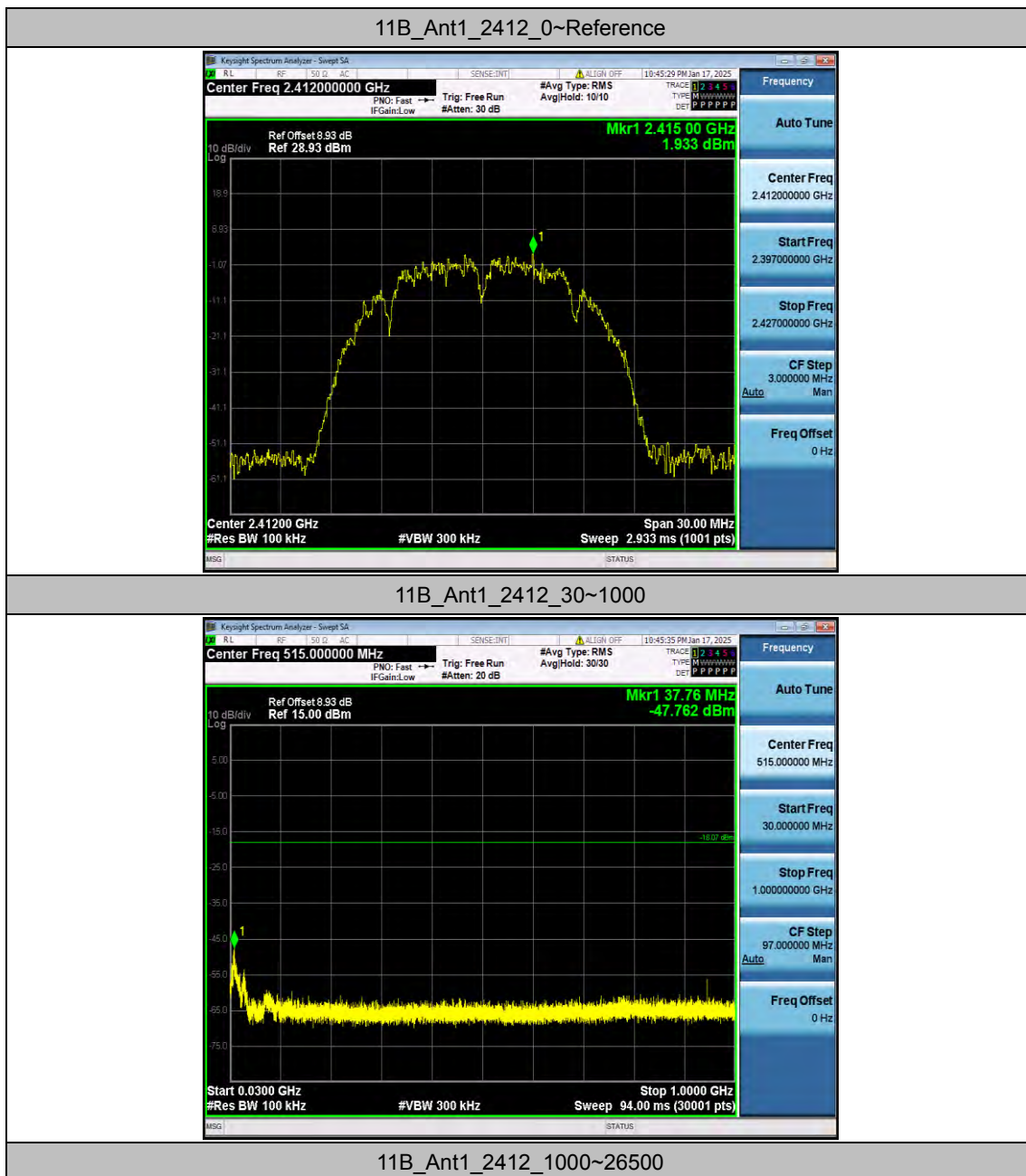


Appendix A.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	1.93	1.93	---	PASS
			30~1000	1.93	-47.76	≤ -18.07	PASS
			1000~26500	1.93	-47.62	≤ -18.07	PASS
		2437	Reference	2.67	2.67	---	PASS
			30~1000	2.67	-46.68	≤ -17.33	PASS
			1000~26500	2.67	-47.97	≤ -17.33	PASS
		2462	Reference	2.75	2.75	---	PASS
			30~1000	2.75	-53.51	≤ -17.25	PASS
			1000~26500	2.75	-47.87	≤ -17.25	PASS
11G	Ant1	2412	Reference	1.90	1.90	---	PASS
			30~1000	1.90	-52.03	≤ -18.1	PASS
			1000~26500	1.90	-47.76	≤ -18.1	PASS
		2437	Reference	-1.00	-1.00	---	PASS
			30~1000	-1.00	-52.57	≤ -21	PASS
			1000~26500	-1.00	-47.78	≤ -21	PASS
		2462	Reference	-0.16	-0.16	---	PASS
			30~1000	-0.16	-51	≤ -20.16	PASS
			1000~26500	-0.16	-47.74	≤ -20.16	PASS
11N20SISO	Ant1	2412	Reference	-0.77	-0.77	---	PASS
			30~1000	-0.77	-52.63	≤ -20.77	PASS
			1000~26500	-0.77	-48.03	≤ -20.77	PASS
		2437	Reference	2.11	2.11	---	PASS
			30~1000	2.11	-52.44	≤ -17.89	PASS
			1000~26500	2.11	-47.13	≤ -17.89	PASS
		2462	Reference	-1.72	-1.72	---	PASS
			30~1000	-1.72	-42.04	≤ -21.72	PASS
			1000~26500	-1.72	-47.75	≤ -21.72	PASS
11N40SISO	Ant1	2422	Reference	-2.49	-2.49	---	PASS
			30~1000	-2.49	-51.61	≤ -22.49	PASS
			1000~26500	-2.49	-48.17	≤ -22.49	PASS
		2437	Reference	-3.57	-3.57	---	PASS
			30~1000	-3.57	-51.77	≤ -23.57	PASS
			1000~26500	-3.57	-48.11	≤ -23.57	PASS
		2452	Reference	-1.09	-1.09	---	PASS
			30~1000	-1.09	-50.92	≤ -21.09	PASS
			1000~26500	-1.09	-47.61	≤ -21.09	PASS

Test Graphs

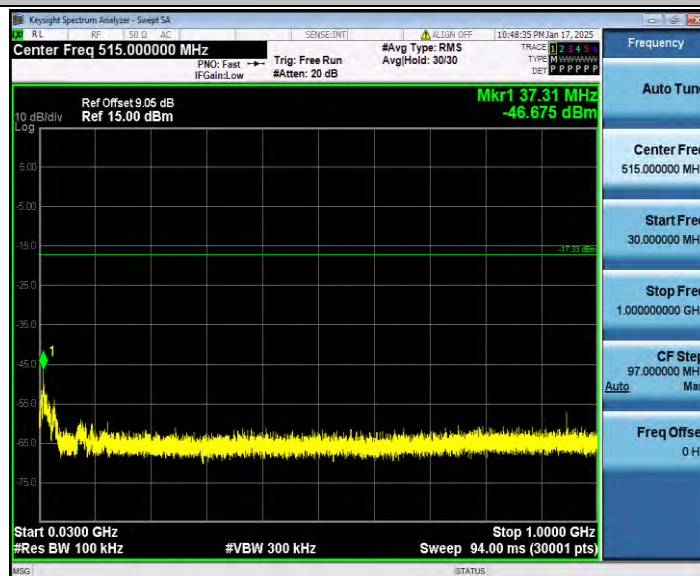




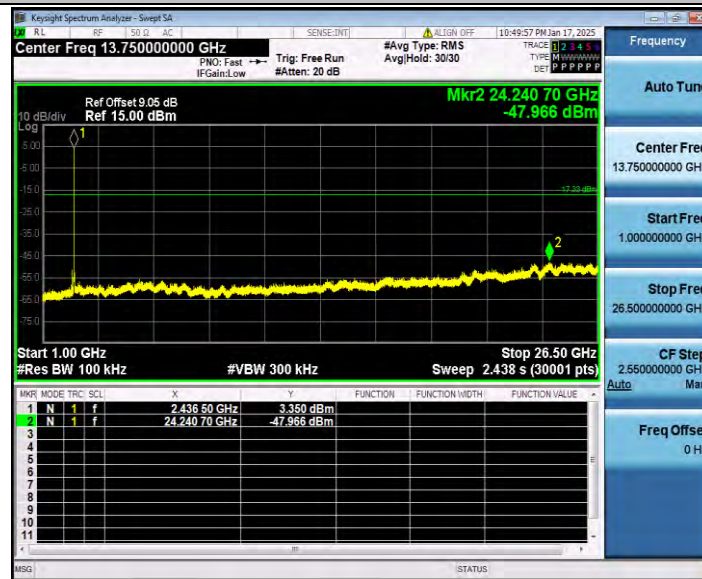
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



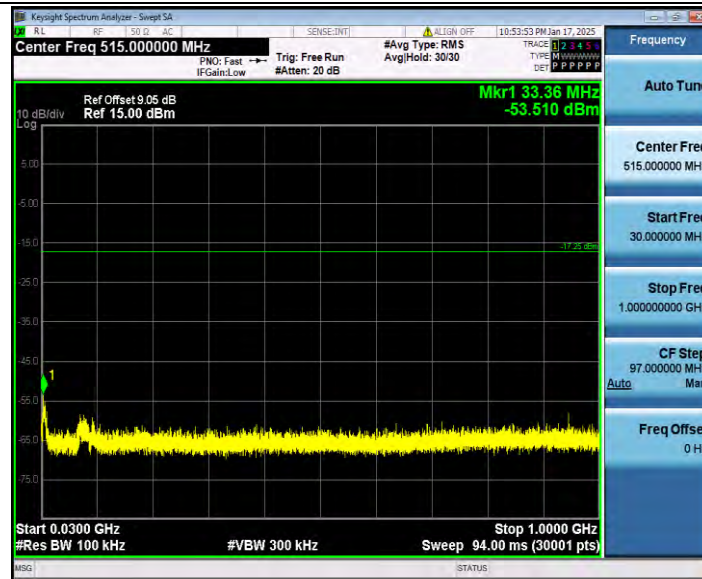
11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



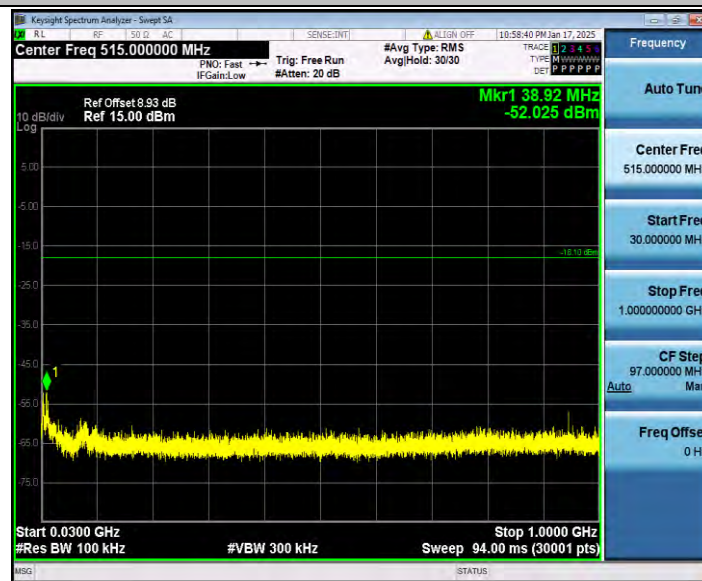
11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



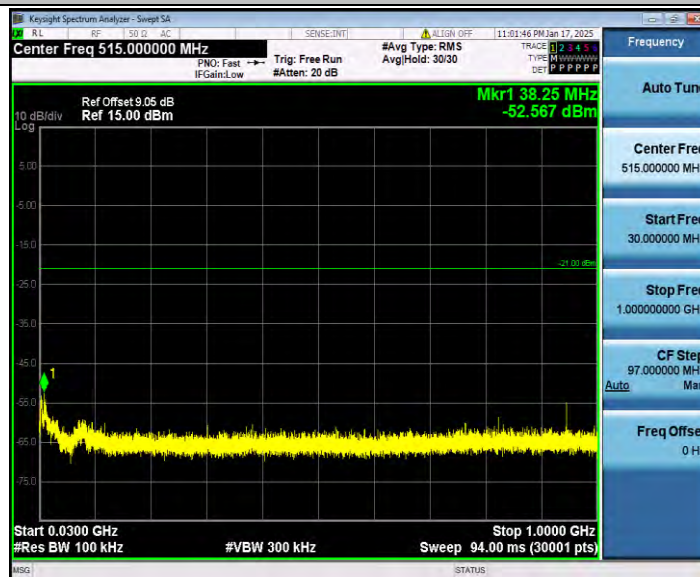
11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



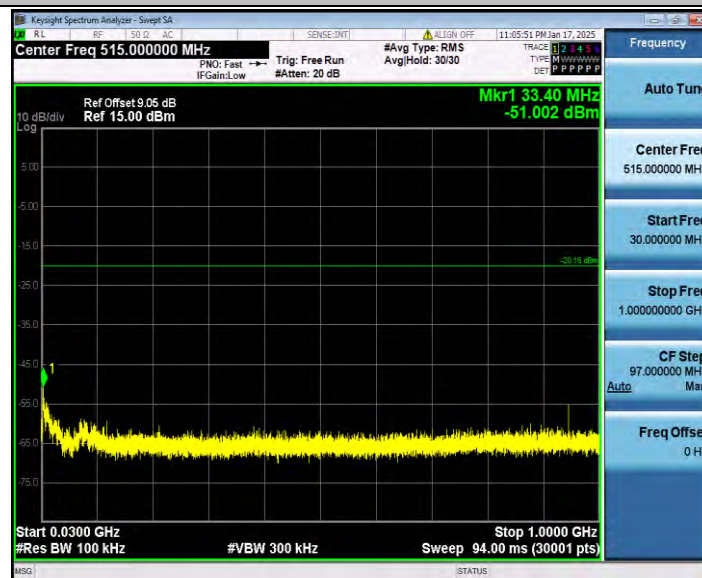
11G_Ant1_2437_1000~26500



11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



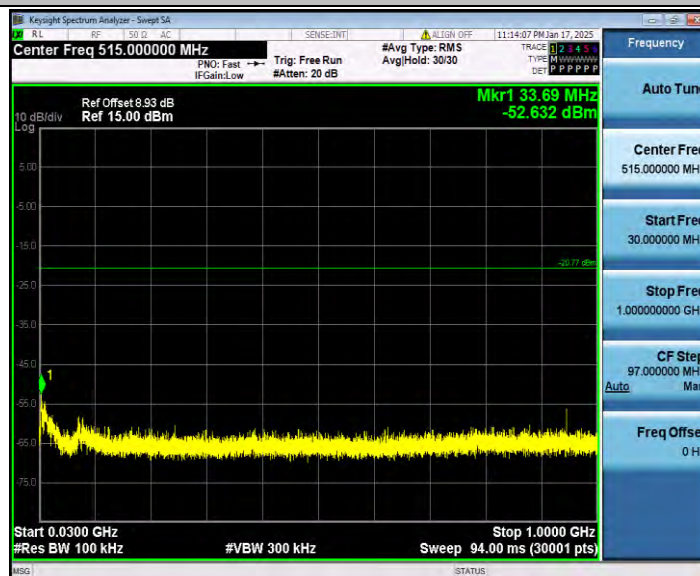
11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



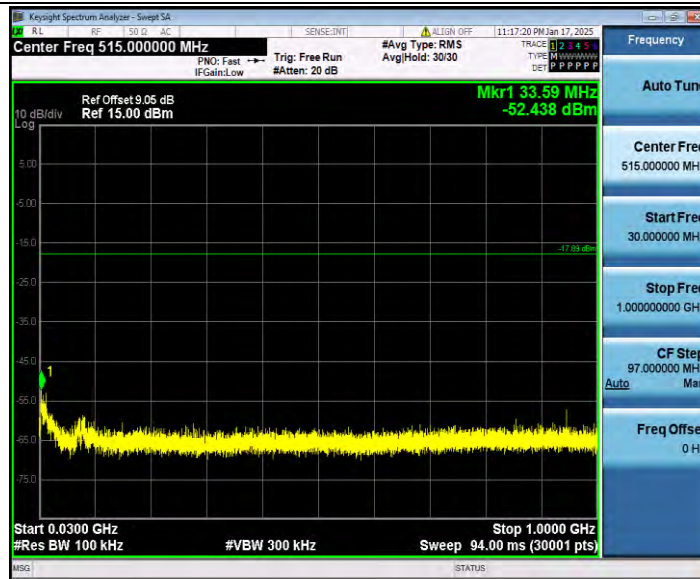
11N20SISO_Ant1_2412_1000~26500



11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



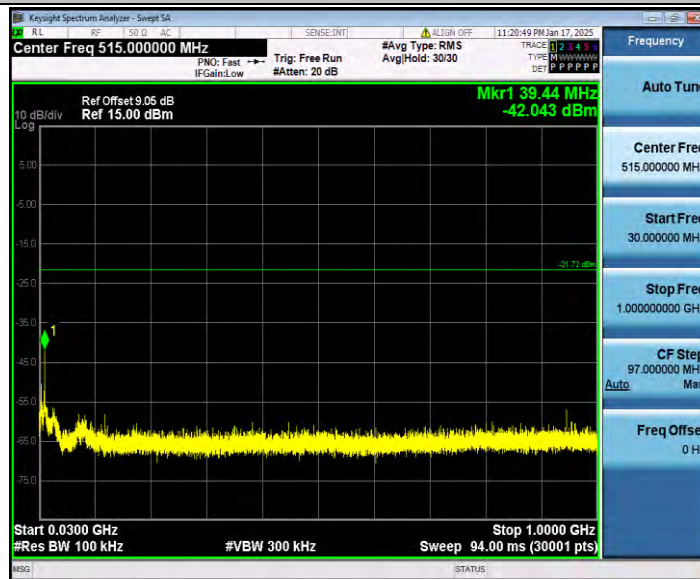
11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



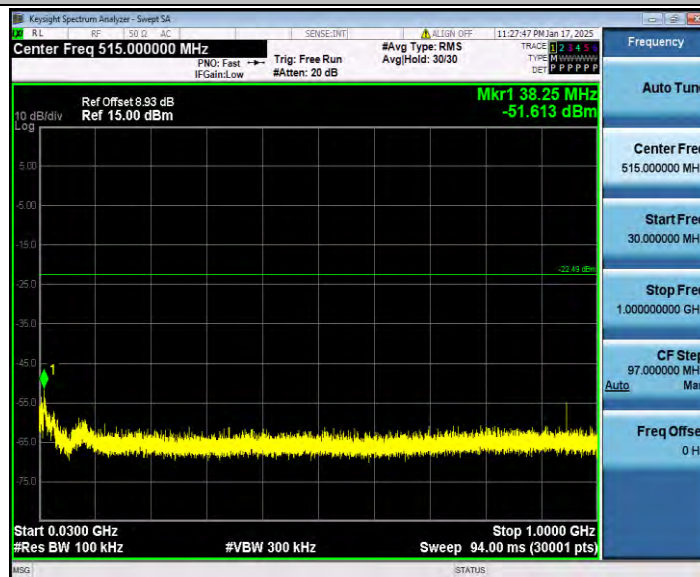
11N20SISO_Ant1_2462_1000~26500



11N40SISO_Ant1_2422_0~Reference



11N40SISO_Ant1_2422_30~1000



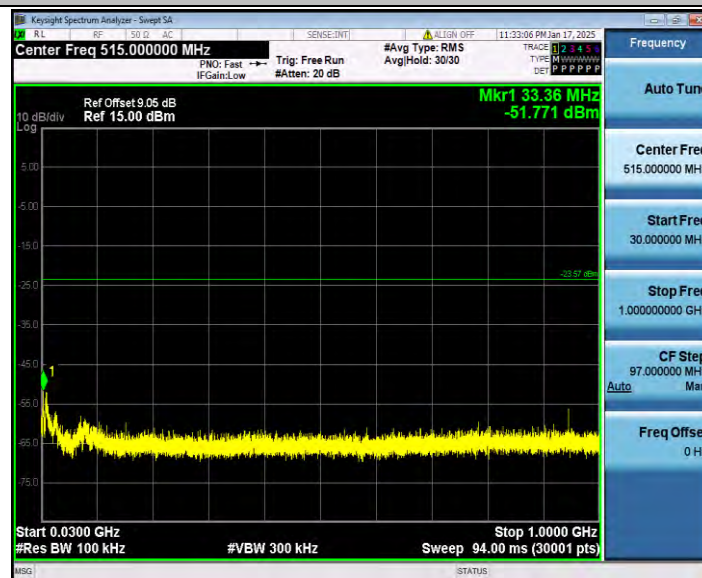
11N40SISO_Ant1_2422_1000~26500



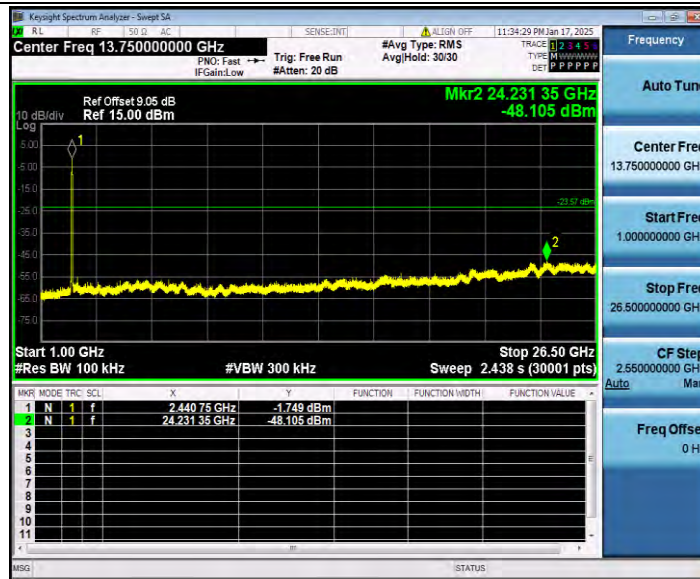
11N40SISO_Ant1_2437_0~Reference



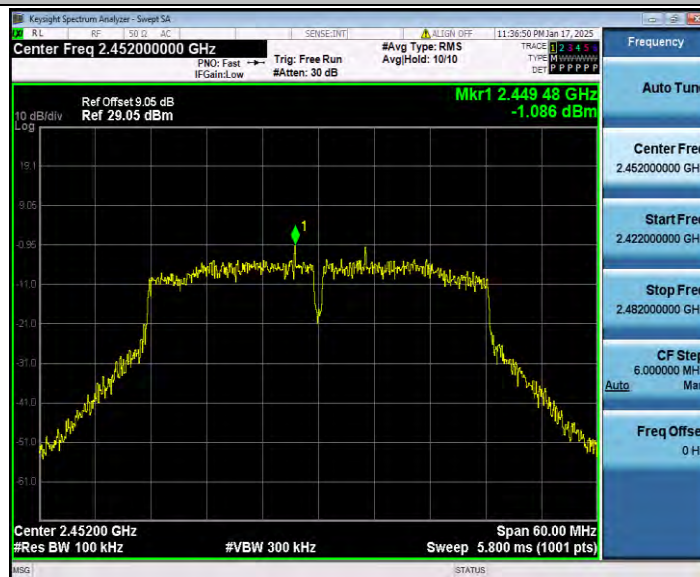
11N40SISO_Ant1_2437_30~1000



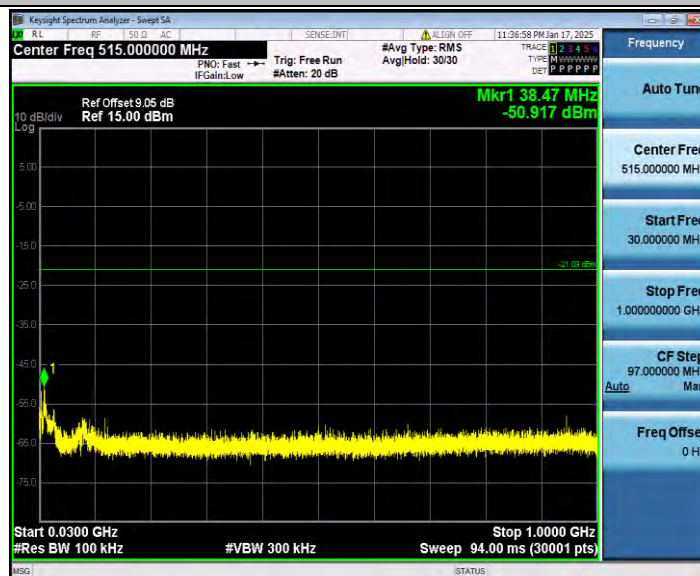
11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000





Appendix A.7: Emissions in Restricted Bands

Test Result

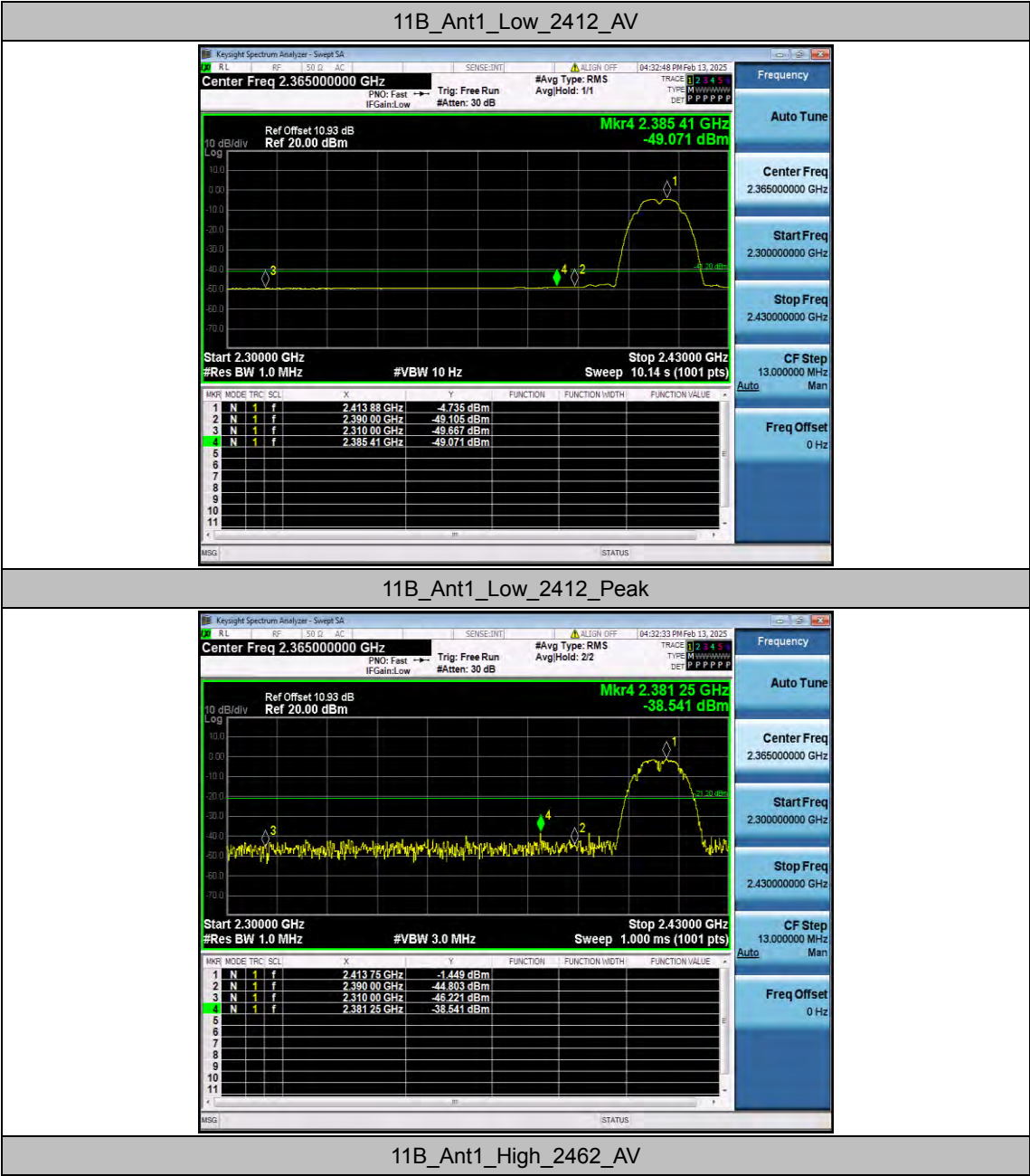
TestMode	Antenna	ChName	Frequenc y[MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-49.67	≤-41.20	45.53	≤54	PASS
				AV	2385.410	-49.07	≤-41.20	46.13	≤54	PASS
				AV	2390.000	-49.11	≤-41.20	46.09	≤54	PASS
				Peak	2310.000	-46.22	≤-21.20	48.98	≤74	PASS
				Peak	2381.250	-38.54	≤-21.20	56.66	≤74	PASS
				Peak	2390.000	-44.8	≤-21.20	50.40	≤74	PASS
		High	2462	AV	2483.500	-48.86	≤-41.20	46.34	≤54	PASS
				AV	2484.330	-48.61	≤-41.20	46.59	≤54	PASS
				AV	2500.000	-48.95	≤-41.20	46.25	≤54	PASS
				Peak	2483.500	-45.51	≤-21.20	49.69	≤74	PASS
				Peak	2485.430	-39.47	≤-21.20	55.73	≤74	PASS
				Peak	2500.000	-44.17	≤-21.20	51.03	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.7	≤-41.20	45.50	≤54	PASS
				AV	2389.960	-48.89	≤-41.20	46.31	≤54	PASS
				AV	2390.000	-48.89	≤-41.20	46.31	≤54	PASS
				Peak	2310.000	-48.83	≤-21.20	46.37	≤74	PASS
				Peak	2389.310	-41.39	≤-21.20	53.81	≤74	PASS
				Peak	2390.000	-47.21	≤-21.20	47.99	≤74	PASS
		High	2462	AV	2483.500	-48.83	≤-41.20	46.37	≤54	PASS
				AV	2483.560	-48.85	≤-41.20	46.35	≤54	PASS
				AV	2500.000	-48.96	≤-41.20	46.24	≤54	PASS
				Peak	2483.500	-42.87	≤-21.20	52.33	≤74	PASS
				Peak	2488.620	-40.8	≤-21.20	54.40	≤74	PASS
				Peak	2500.000	-47.17	≤-21.20	48.03	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-49.73	≤-41.20	45.47	≤54	PASS
				AV	2389.700	-48.76	≤-41.20	46.44	≤54	PASS
				AV	2390.000	-48.78	≤-41.20	46.42	≤54	PASS
				Peak	2310.000	-43.55	≤-21.20	51.65	≤74	PASS
				Peak	2329.250	-41.36	≤-21.20	53.84	≤74	PASS
				Peak	2390.000	-42.65	≤-21.20	52.55	≤74	PASS
		High	2462	AV	2483.500	-48.69	≤-41.20	46.51	≤54	PASS
				AV	2483.670	-48.7	≤-41.20	46.50	≤54	PASS
				AV	2500.000	-48.93	≤-41.20	46.27	≤54	PASS
				Peak	2483.500	-40.39	≤-21.20	54.81	≤74	PASS
				Peak	2493.680	-41.65	≤-21.20	53.55	≤74	PASS

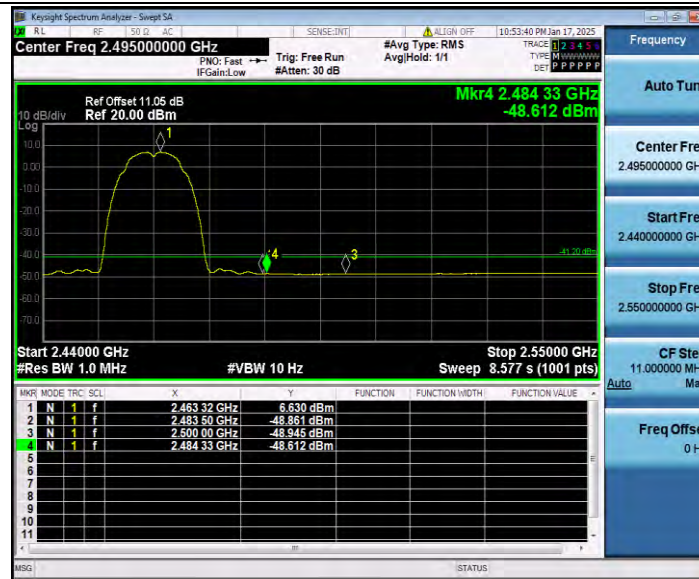
				Peak	2500.000	-44.02	≤ -21.20	51.18	≤ 74	PASS
11N40SIS O	Ant1	Low	2422	AV	2310.000	-49.71	≤ -41.20	45.49	≤ 54	PASS
				AV	2389.960	-47.38	≤ -41.20	47.82	≤ 54	PASS
				AV	2390.000	-47.38	≤ -41.20	47.82	≤ 54	PASS
				Peak	2310.000	-52.55	≤ -21.20	42.65	≤ 74	PASS
				Peak	2385.540	-39.2	≤ -21.20	56.00	≤ 74	PASS
				Peak	2390.000	-46.83	≤ -21.20	48.37	≤ 74	PASS
		High	2452	AV	2483.500	-46.16	≤ -41.20	49.04	≤ 54	PASS
				AV	2483.560	-46.2	≤ -41.20	49.00	≤ 54	PASS
				AV	2500.000	-48.58	≤ -41.20	46.62	≤ 54	PASS
				Peak	2483.500	-42.55	≤ -21.20	52.65	≤ 74	PASS
				Peak	2484.770	-39.33	≤ -21.20	55.87	≤ 74	PASS
				Peak	2500.000	-43.56	≤ -21.20	51.64	≤ 74	PASS

Note:

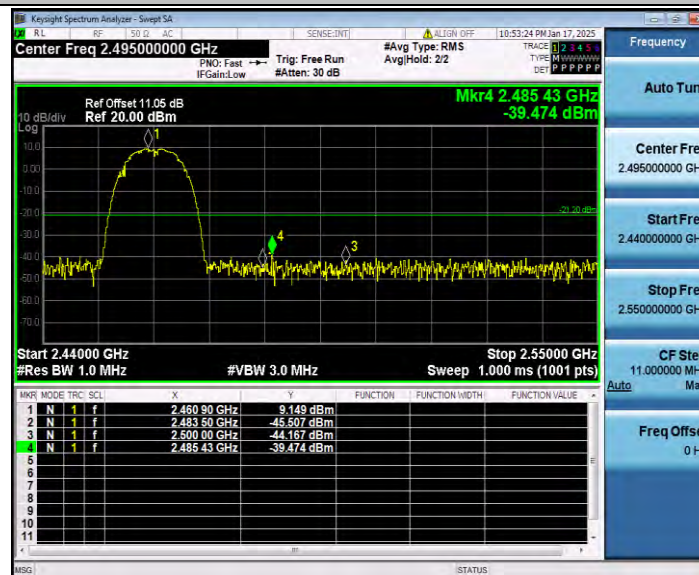
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs





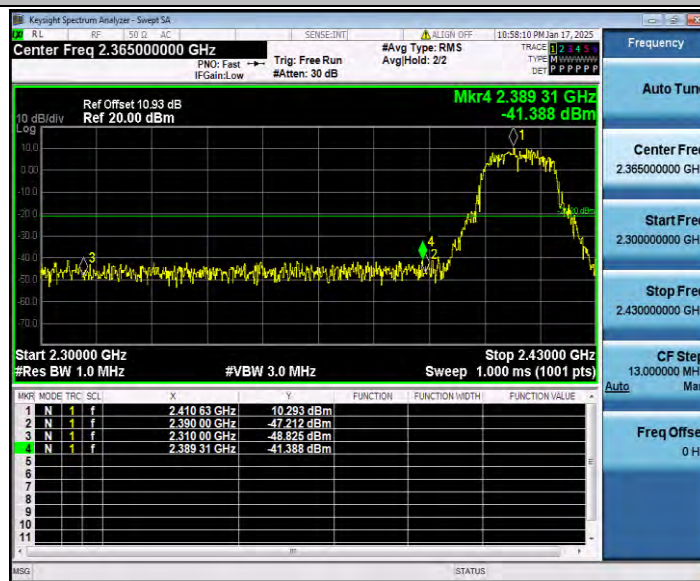
11B_Ant1_High_2462_Peak



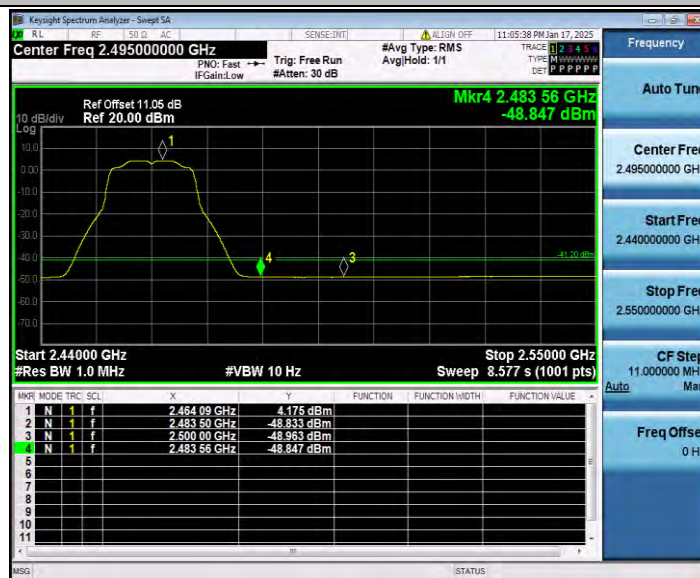
11G_Ant1_Low_2412_AV



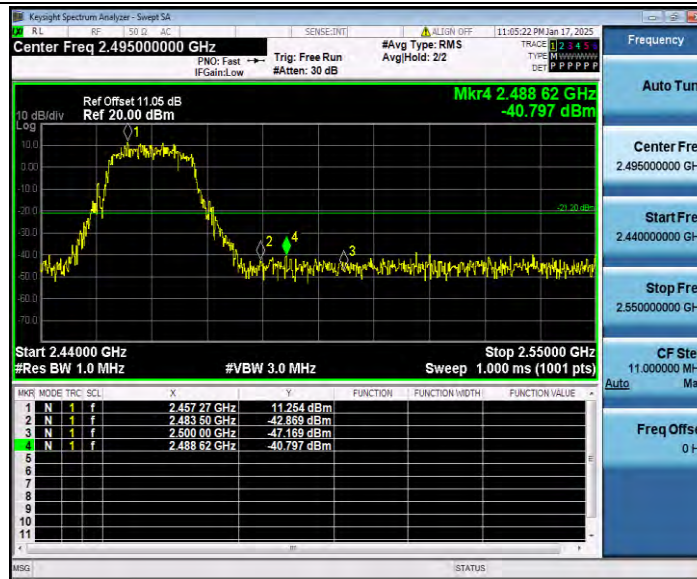
11G_Ant1_Low_2412_Peak



11G_Ant1_High_2462_AV



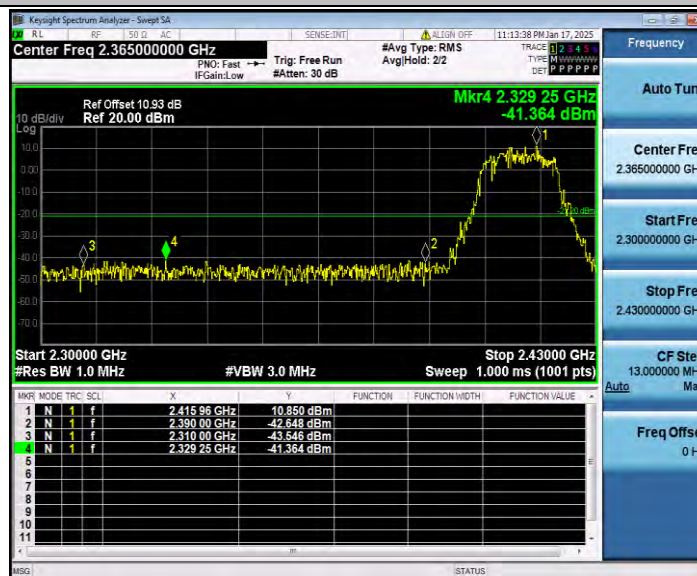
11G_Ant1_High_2462_Peak



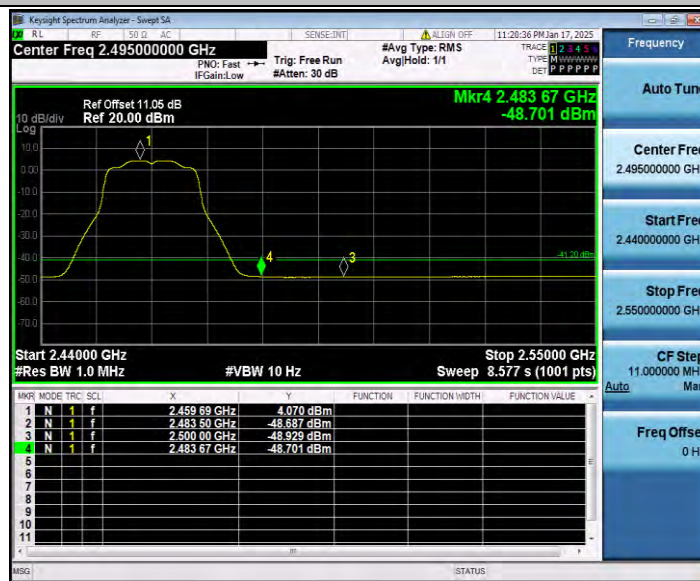
11N20SISO_Ant1_Low_2412_AV



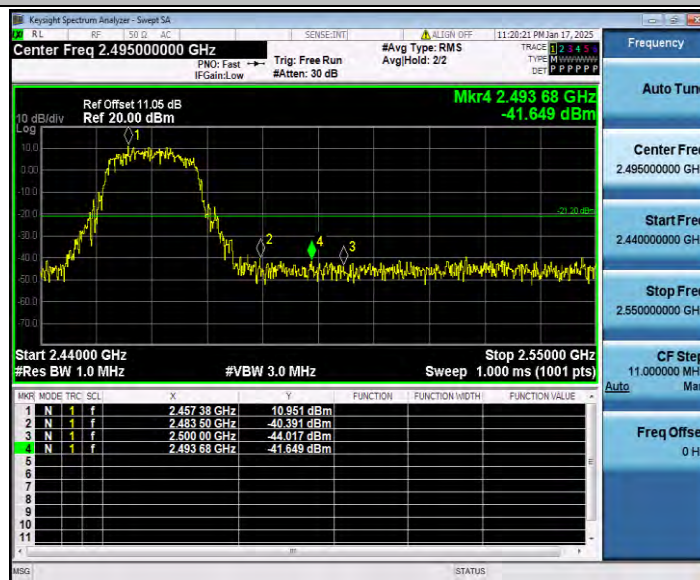
11N20SISO_Ant1_Low_2412_Peak



11N20SISO_Ant1_High_2462_AV



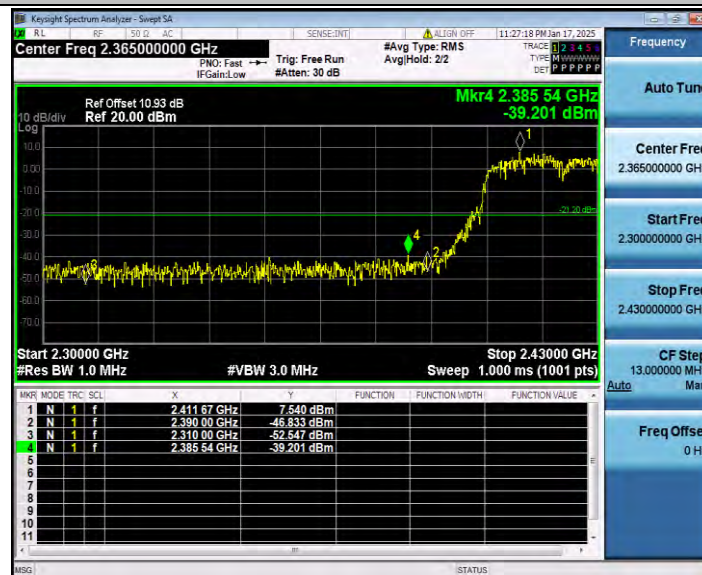
11N20SISO_Ant1_High_2462_Peak



11N40SISO_Ant1_Low_2422_AV



11N40SISO_Ant1_Low_2422_Peak



11N40SISO_Ant1_High_2452_AV



