

Case No. : <u>CTA24050902503</u>	
Ambient Condition: <u>23</u> °C, <u>49</u> %RH,	
Test Date: <u>2024.3.19</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	10.080	2431.960	2442.040	0.5	PASS
		2462	10.080	2456.960	2467.040	0.5	PASS
11G	Ant0	2412	16.520	2403.760	2420.280	0.5	PASS
		2437	16.520	2428.760	2445.280	0.5	PASS
		2462	16.560	2453.720	2470.280	0.5	PASS
11N20SISO	Ant0	2412	17.800	2403.080	2420.880	0.5	PASS
		2437	17.760	2428.120	2445.880	0.5	PASS
		2462	17.760	2453.120	2470.880	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



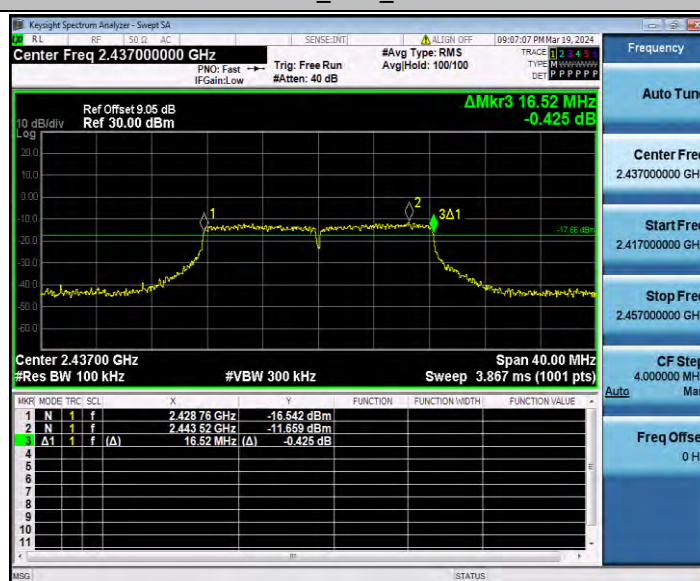
11B_Ant0_2462



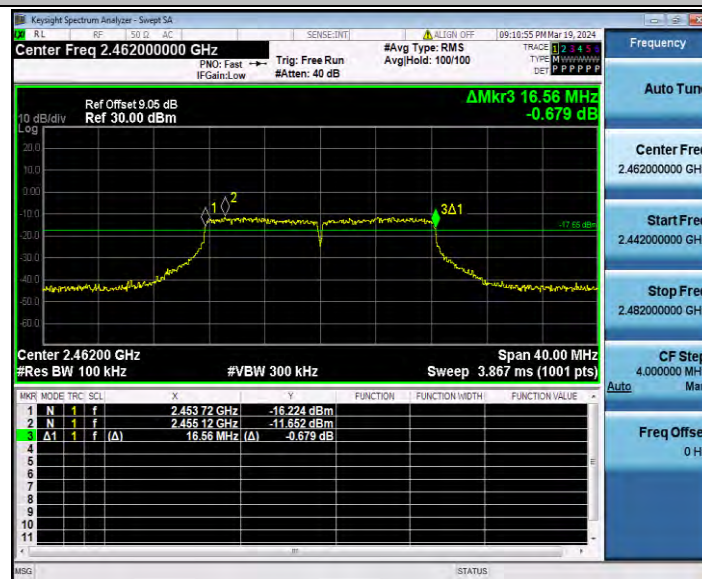
11G_Ant0_2412



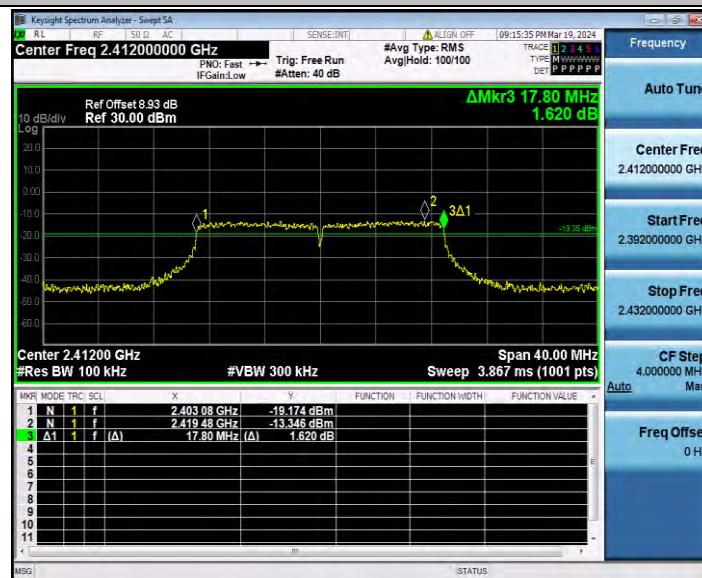
11G_Ant0_2437



11G_Ant0_2462



11N20SISO_Ant0_2412



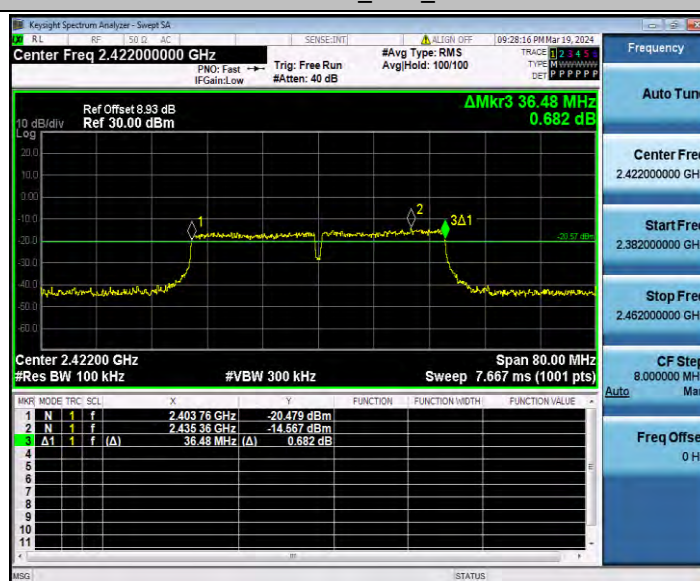
11N20SISO_Ant0_2437



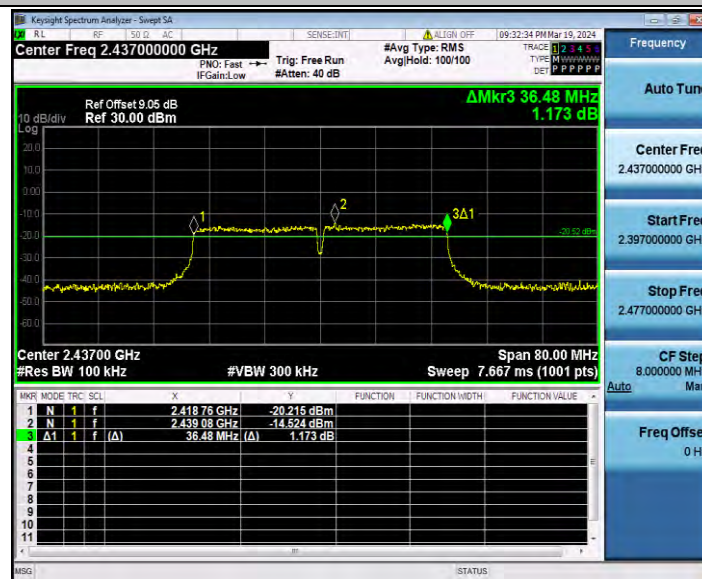
11N20SISO_Ant0_2462



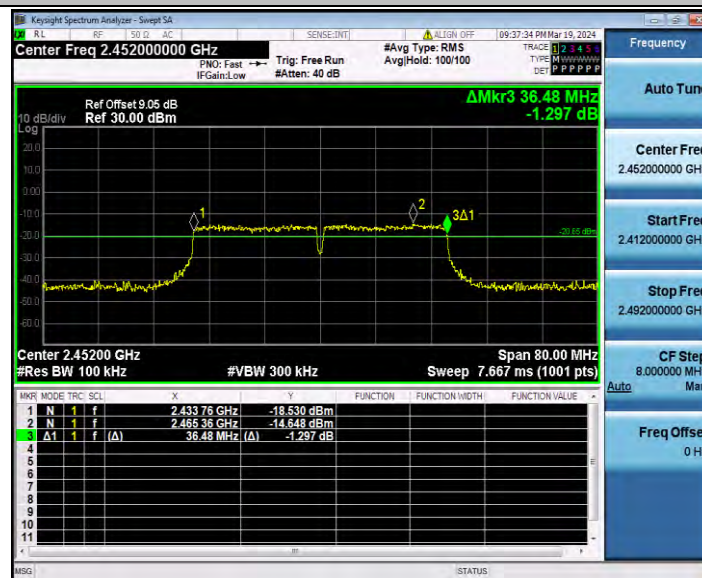
11N40SISO_Ant0_2422



11N40SISO_Ant0_2437



11N40SISO_Ant0_2452



Appendix C.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
11B	Ant0	2412	15.294	2404.3675	2419.6615
		2437	15.378	2429.3641	2444.7421
		2462	15.330	2454.3135	2469.6435
11G	Ant0	2412	17.316	2403.2749	2420.5909
		2437	17.279	2428.3606	2445.6396
		2462	17.440	2453.1263	2470.5663
11N20SISO	Ant0	2412	18.456	2402.8039	2421.2599
		2437	18.313	2427.8729	2446.1859
		2462	18.329	2452.8076	2471.1366
11N40SISO	Ant0	2422	37.391	2403.4561	2440.8471
		2437	37.110	2418.5733	2455.6833
		2452	37.188	2433.4123	2470.6003

Test Graphs

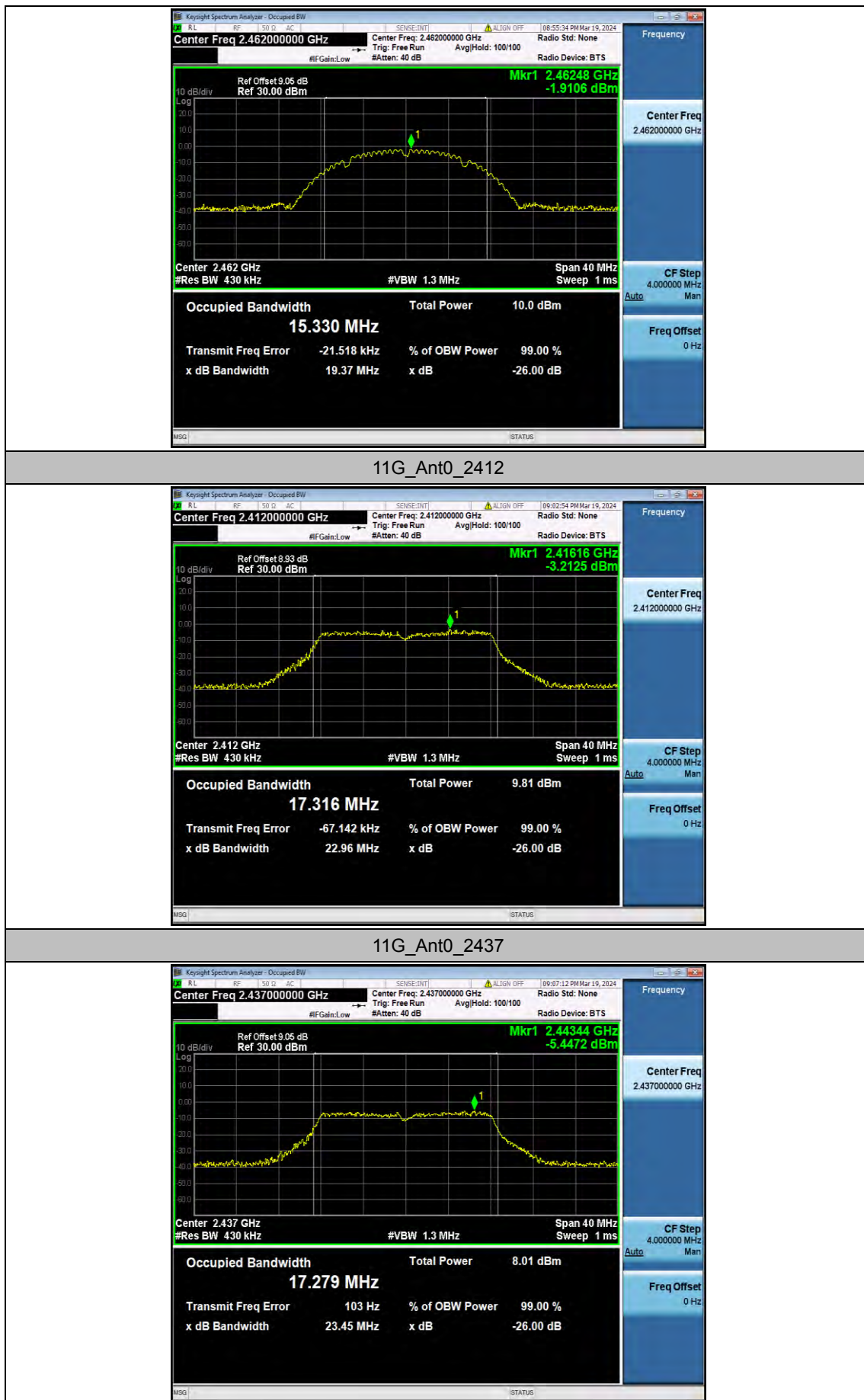
11B_Ant0_2412



11B_Ant0_2437



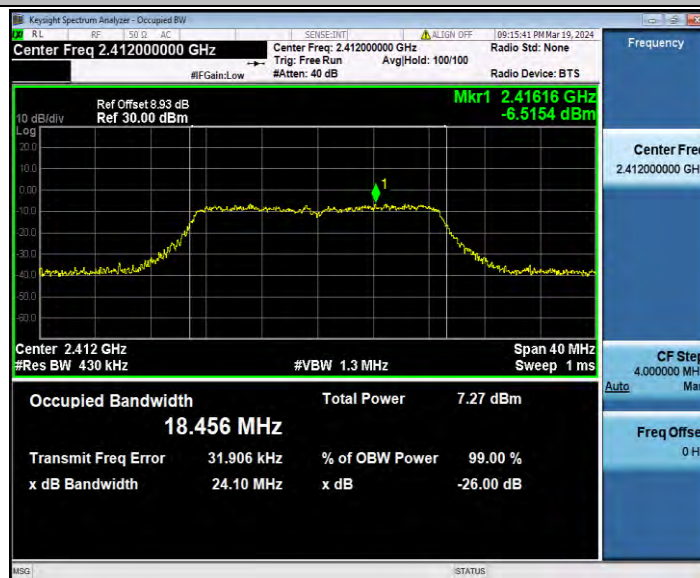
11B_Ant0_2462



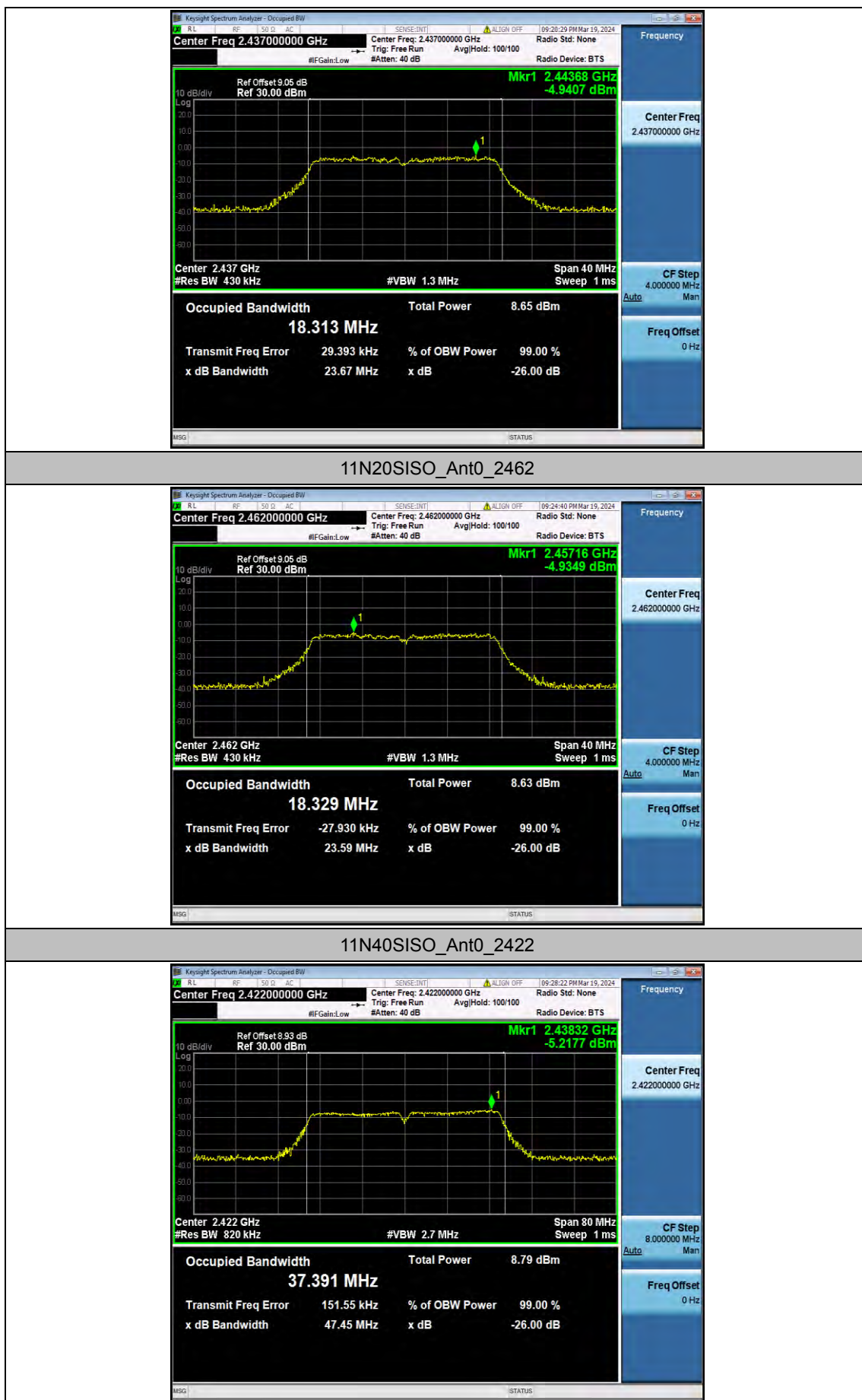
11G_Ant0_2462



11N20SISO_Ant0_2412



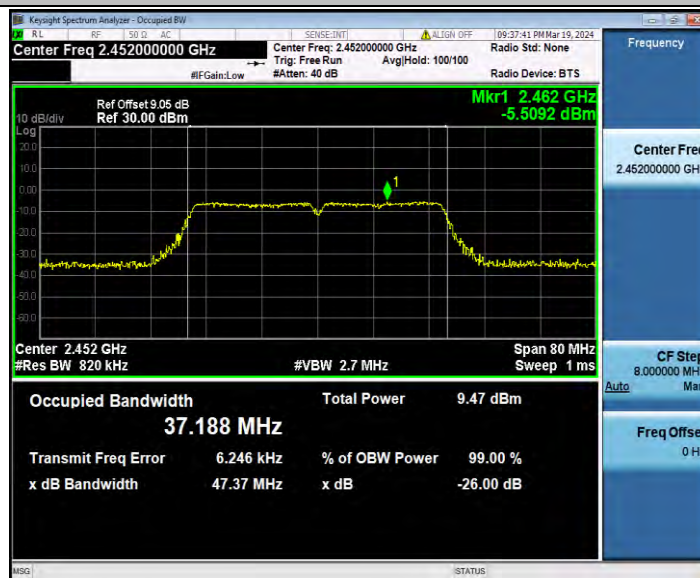
11N20SISO_Ant0_2437



11N40SISO_Ant0_2437



11N40SISO_Ant0_2452



Appendix C.3: Maximum conducted output power

Test Result -CHP

Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant0	2412	8.40	≤30.00	PASS
		2437	8.74	≤30.00	PASS
		2462	8.75	≤30.00	PASS
11G	Ant0	2412	7.08	≤30.00	PASS
		2437	8.10	≤30.00	PASS
		2462	8.60	≤30.00	PASS
11N20SISO	Ant0	2412	8.62	≤30.00	PASS
		2437	8.98	≤30.00	PASS
		2462	8.65	≤30.00	PASS
11N40SISO	Ant0	2422	8.11	≤30.00	PASS
		2437	8.40	≤30.00	PASS
		2452	8.83	≤30.00	PASS

Note:

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

Appendix C.4: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant0	2412	-25.06	≤8.00	PASS
		2437	-23.65	≤8.00	PASS
		2462	-23.23	≤8.00	PASS
11G	Ant0	2412	-24.55	≤8.00	PASS
		2437	-26.04	≤8.00	PASS
		2462	-25.46	≤8.00	PASS
11N20SISO	Ant0	2412	-26.22	≤8.00	PASS
		2437	-25.00	≤8.00	PASS
		2462	-25.52	≤8.00	PASS
11N40SISO	Ant0	2422	-25.95	≤8.00	PASS
		2437	-27.65	≤8.00	PASS
		2452	-27.89	≤8.00	PASS

Note:

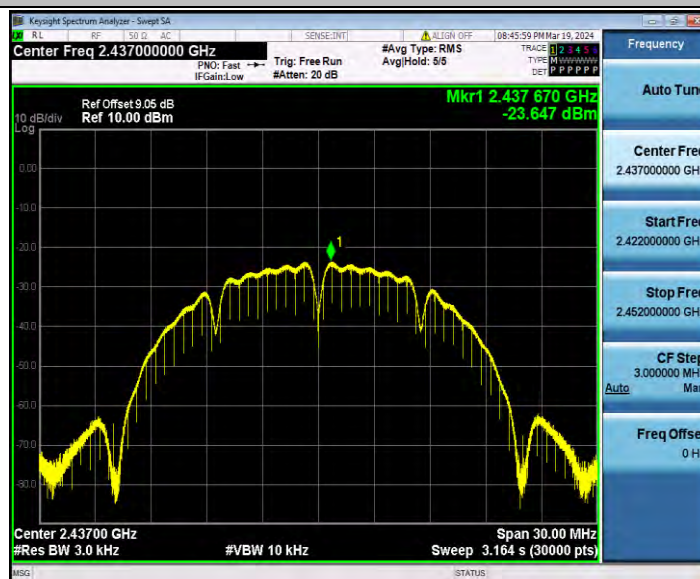
1. The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

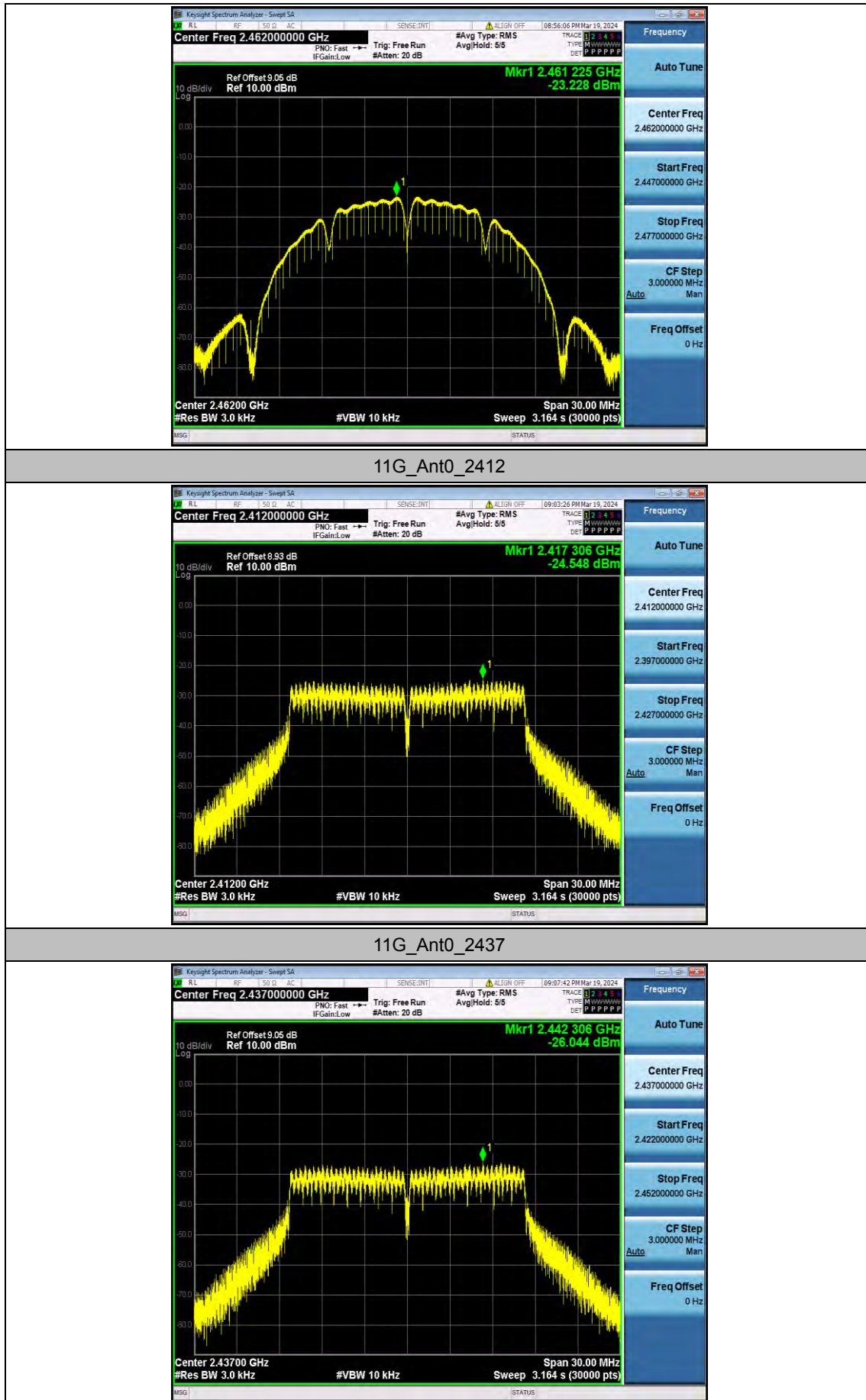
11B_Ant0_2412



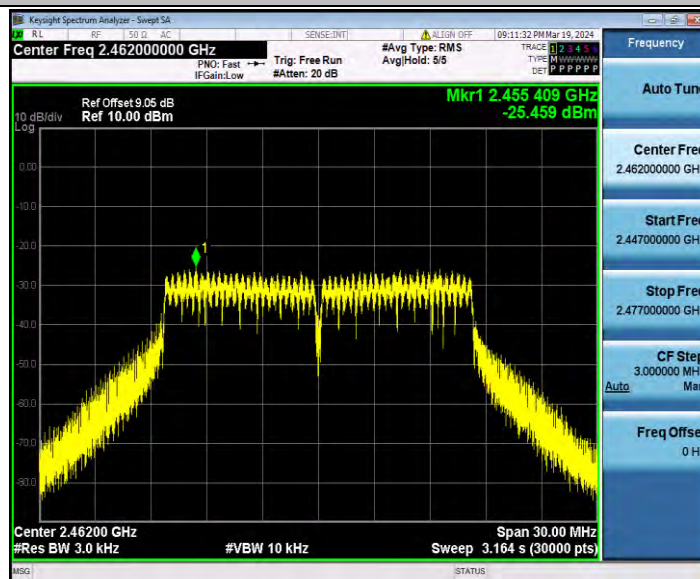
11B_Ant0_2437



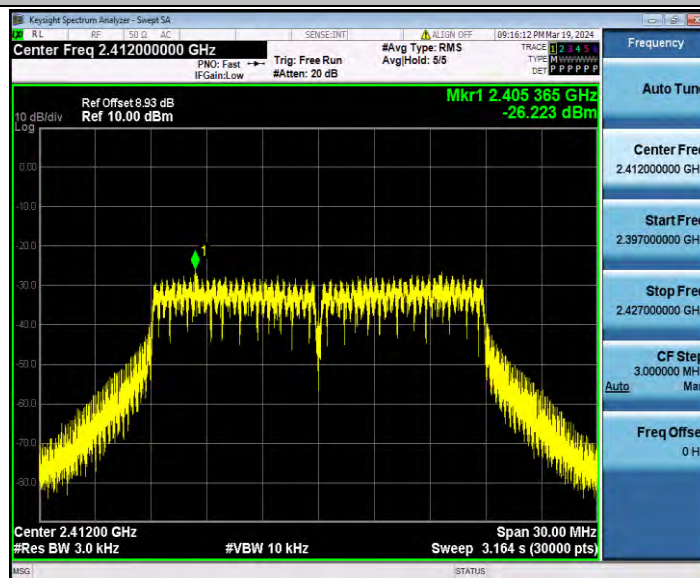
11B_Ant0_2462



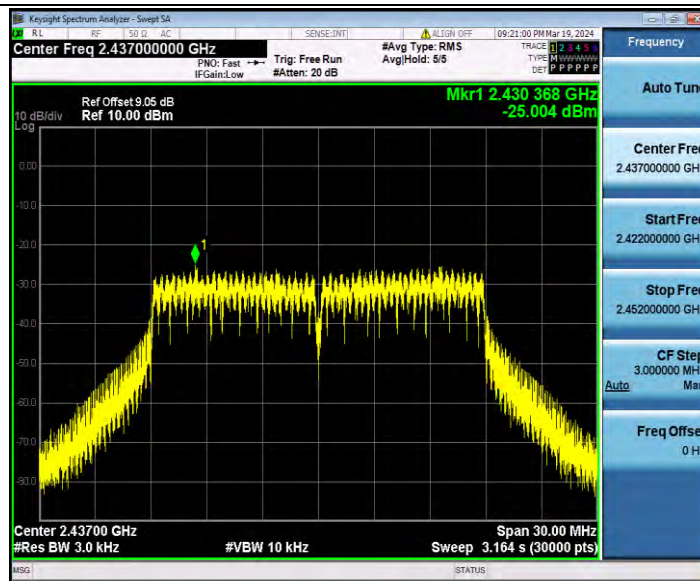
11G_Ant0_2462



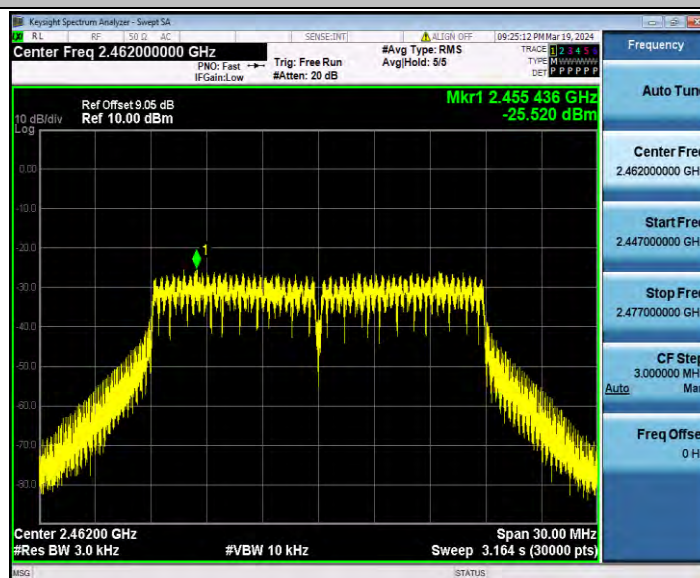
11N20SISO_Ant0_2412



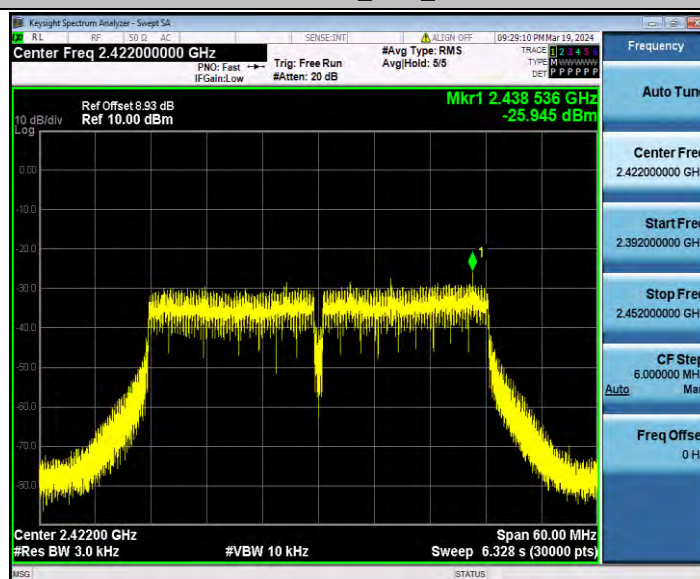
11N20SISO_Ant0_2437



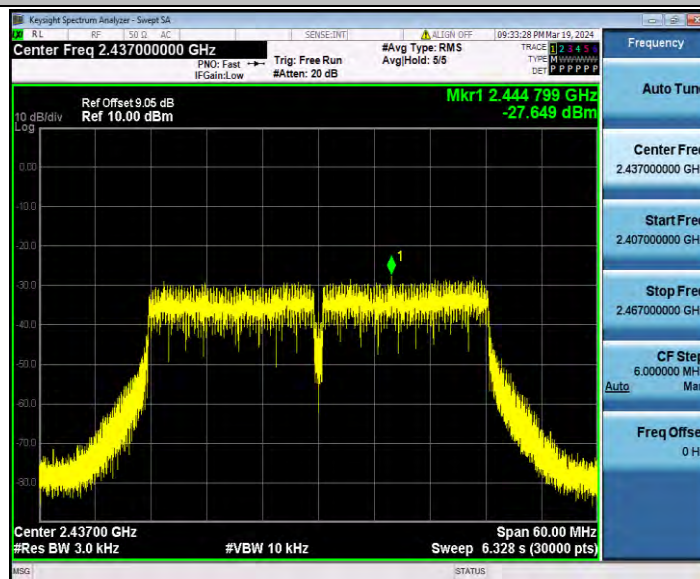
11N20SISO_Ant0_2462



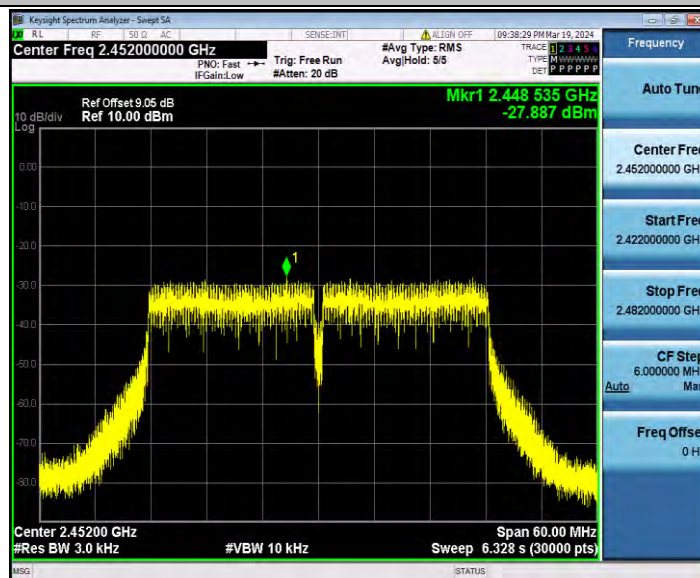
11N40SISO_Ant0_2422



11N40SISO_Ant0_2437



11N40SISO_Ant0_2452



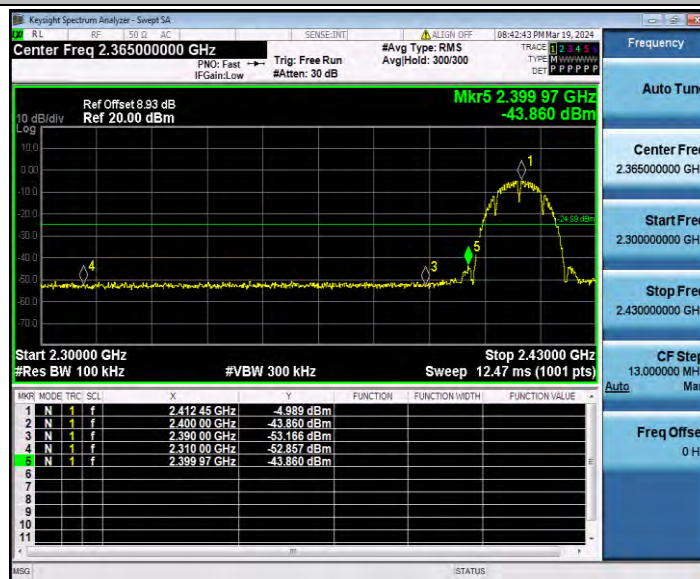
Appendix C.5: Band edge measurements

Test Result

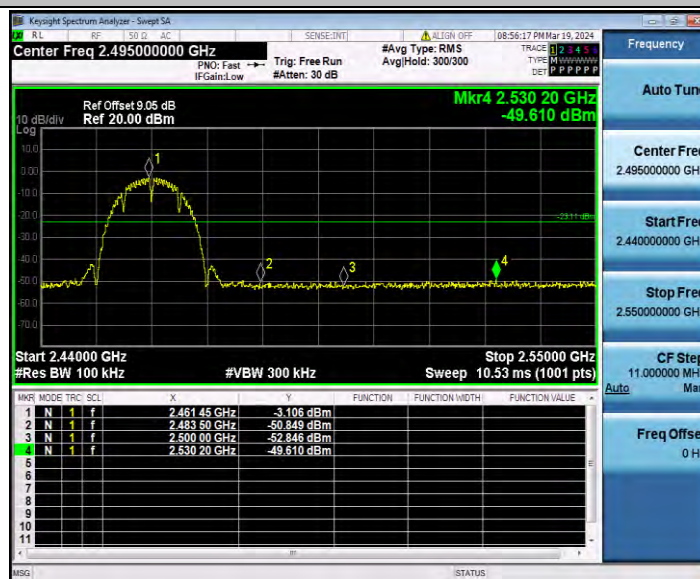
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant0	Low	2412	-4.99	-43.86	≤ -24.99	PASS
		High	2462	-3.11	-49.61	≤ -23.11	PASS
11G	Ant0	Low	2412	-10.21	-42	≤ -30.21	PASS
		High	2462	-11.40	-49.16	≤ -31.4	PASS
11N20SISO	Ant0	Low	2412	-12.93	-43.28	≤ -32.93	PASS
		High	2462	-11.08	-49.46	≤ -31.08	PASS
11N40SISO	Ant0	Low	2422	-15.73	-44.94	≤ -35.73	PASS
		High	2452	-14.59	-49.03	≤ -34.59	PASS

Test Graphs

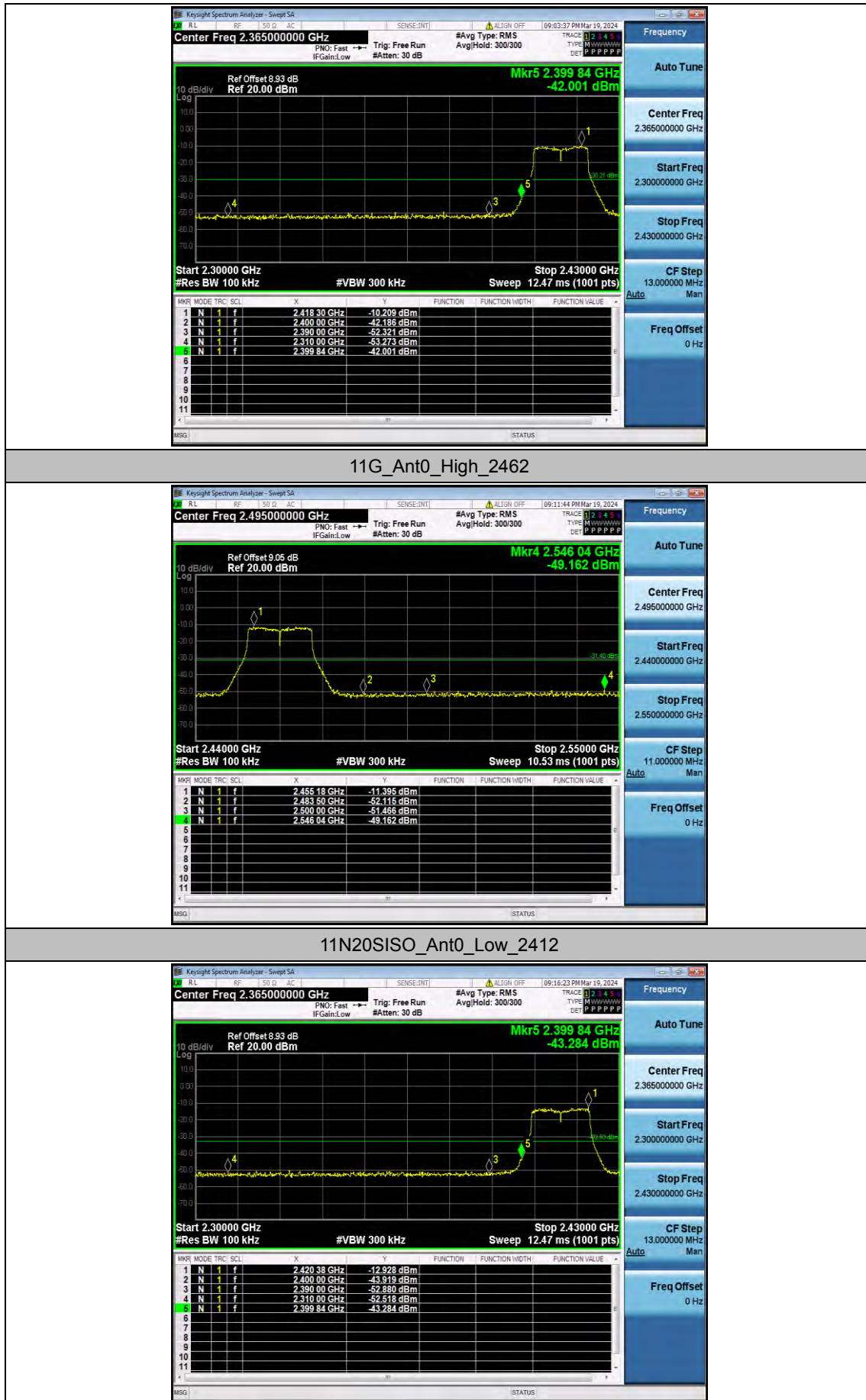
11B_Ant0_Low_2412



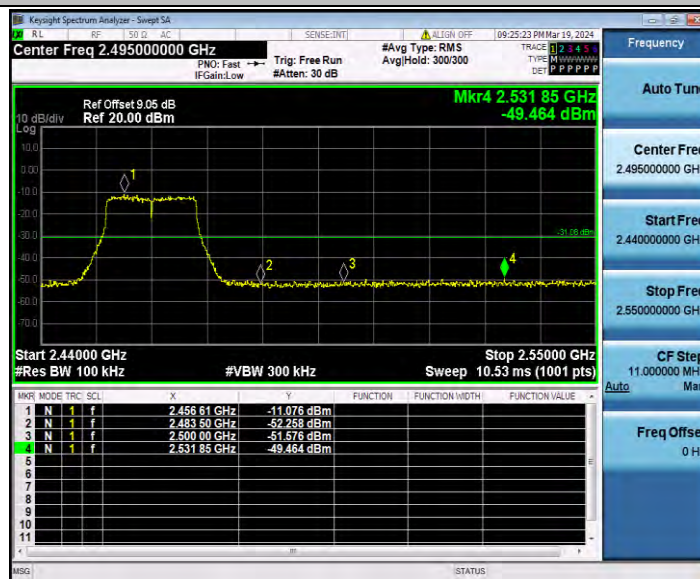
11B_Ant0_High_2462



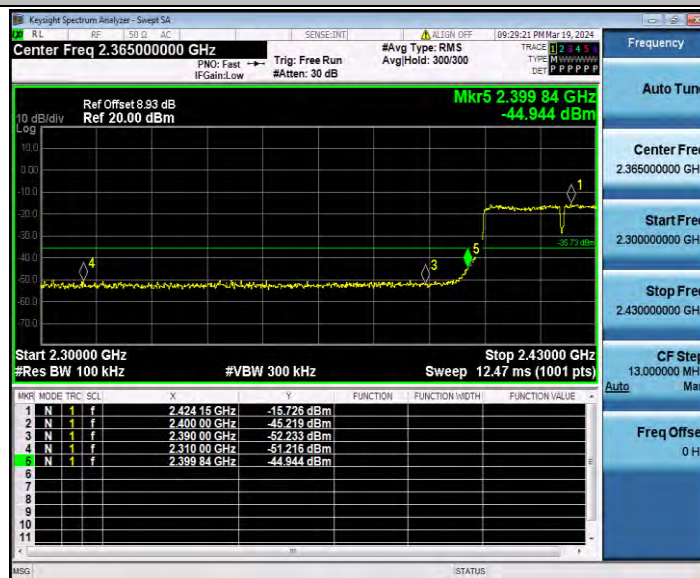
11G_Ant0_Low_2412



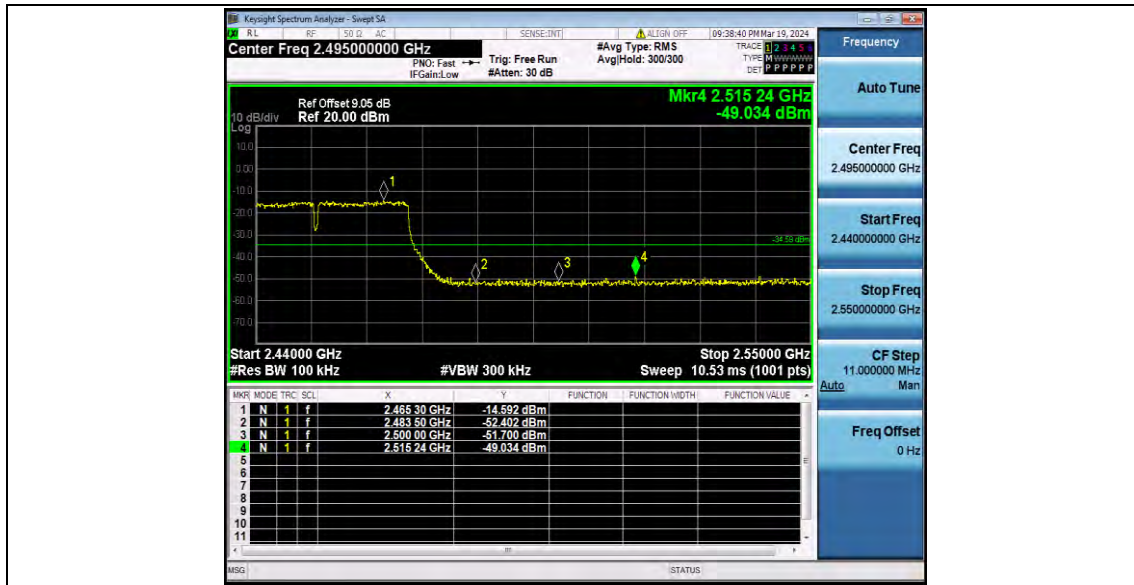
11N20SISO_Ant0_High_2462



11N40SISO_Ant0_Low_2422



11N40SISO_Ant0_High_2452

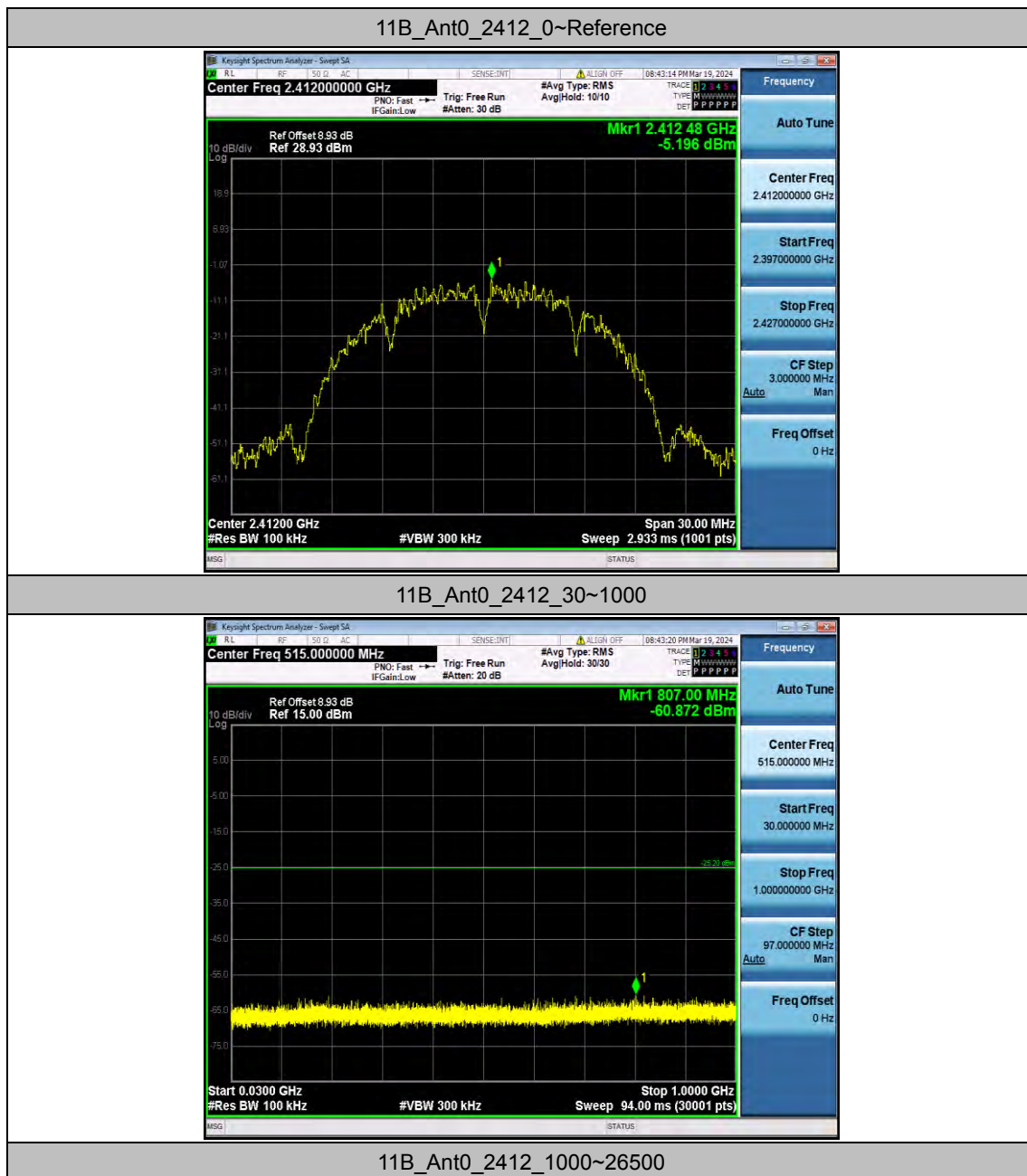


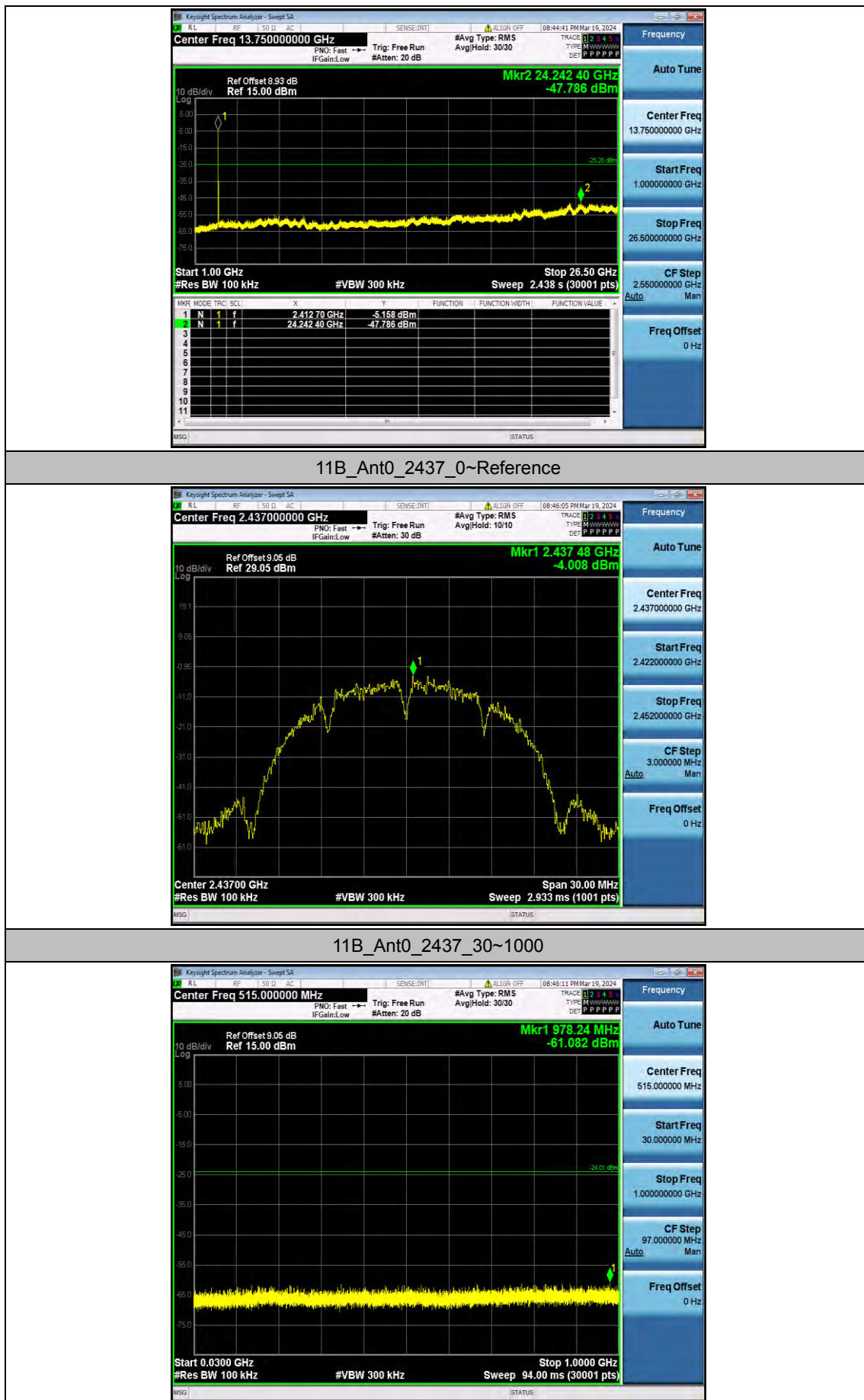
Appendix C.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant0	2412	Reference	-5.20	-5.20	---	PASS
			30~1000	-5.20	-60.87	≤ -25.2	PASS
			1000~26500	-5.20	-47.79	≤ -25.2	PASS
		2437	Reference	-4.01	-4.01	---	PASS
			30~1000	-4.01	-61.08	≤ -24.01	PASS
			1000~26500	-4.01	-47.39	≤ -24.01	PASS
		2462	Reference	-3.57	-3.57	---	PASS
			30~1000	-3.57	-60.35	≤ -23.57	PASS
			1000~26500	-3.57	-47.88	≤ -23.57	PASS
11G	Ant0	2412	Reference	-11.10	-11.10	---	PASS
			30~1000	-11.10	-61	≤ -31.1	PASS
			1000~26500	-11.10	-48.5	≤ -31.1	PASS
		2437	Reference	-12.82	-12.82	---	PASS
			30~1000	-12.82	-60.48	≤ -32.82	PASS
			1000~26500	-12.82	-48.09	≤ -32.82	PASS
		2462	Reference	-11.65	-11.65	---	PASS
			30~1000	-11.65	-60.92	≤ -31.65	PASS
			1000~26500	-11.65	-47.77	≤ -31.65	PASS
11N20SISO	Ant0	2412	Reference	-13.22	-13.22	---	PASS
			30~1000	-13.22	-61.22	≤ -33.22	PASS
			1000~26500	-13.22	-46.21	≤ -33.22	PASS
		2437	Reference	-12.22	-12.22	---	PASS
			30~1000	-12.22	-60.48	≤ -32.22	PASS
			1000~26500	-12.22	-47.74	≤ -32.22	PASS
		2462	Reference	-12.36	-12.36	---	PASS
			30~1000	-12.36	-60.61	≤ -32.36	PASS
			1000~26500	-12.36	-48.42	≤ -32.36	PASS
11N40SISO	Ant0	2422	Reference	-15.62	-15.62	---	PASS
			30~1000	-15.62	-60.47	≤ -35.62	PASS
			1000~26500	-15.62	-47.87	≤ -35.62	PASS
		2437	Reference	-15.31	-15.31	---	PASS
			30~1000	-15.31	-60.7	≤ -35.31	PASS
			1000~26500	-15.31	-46.74	≤ -35.31	PASS
		2452	Reference	-14.98	-14.98	---	PASS
			30~1000	-14.98	-60.62	≤ -34.98	PASS
			1000~26500	-14.98	-48.13	≤ -34.98	PASS

Test Graphs





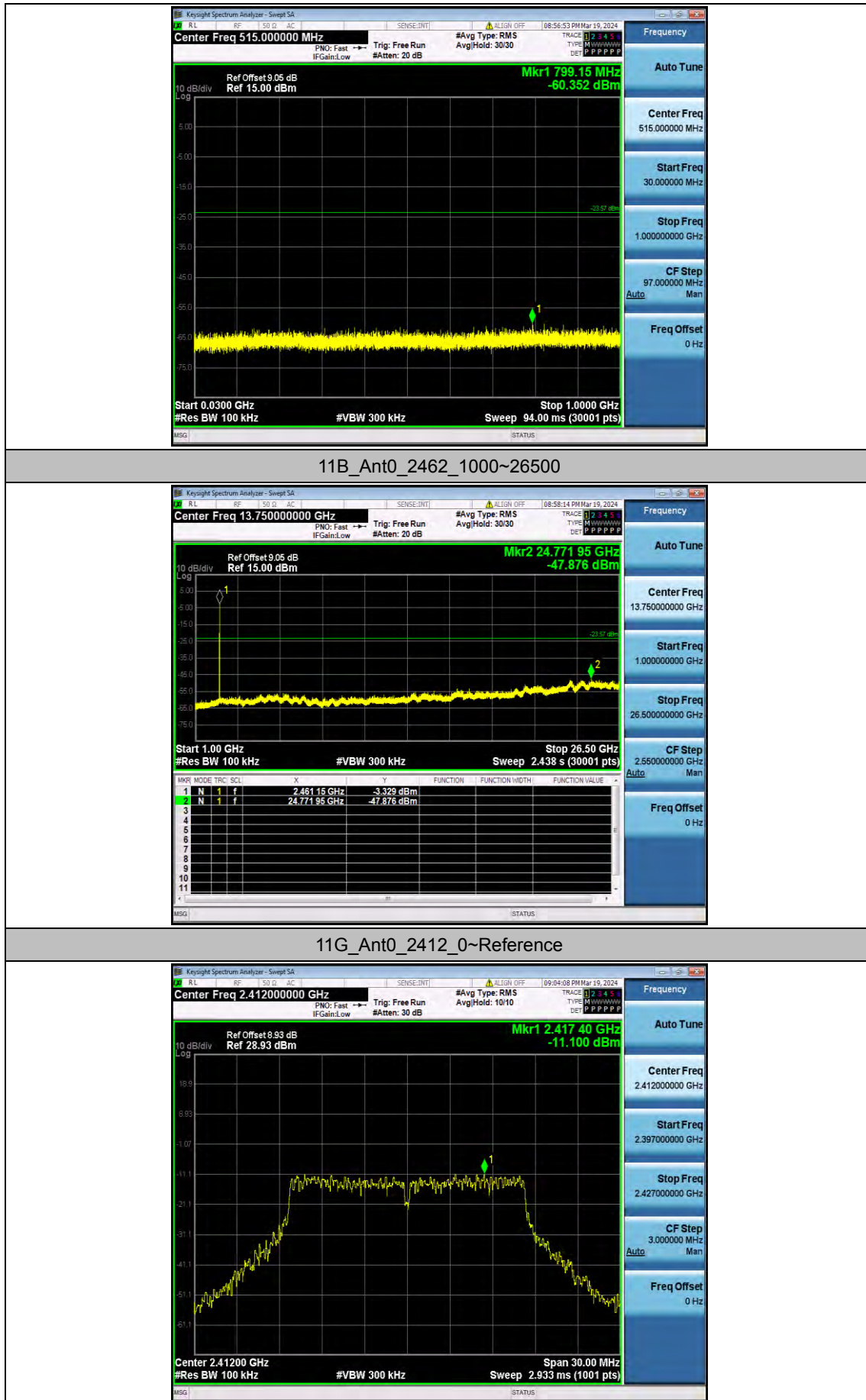
11B_Ant0_2437_1000~26500



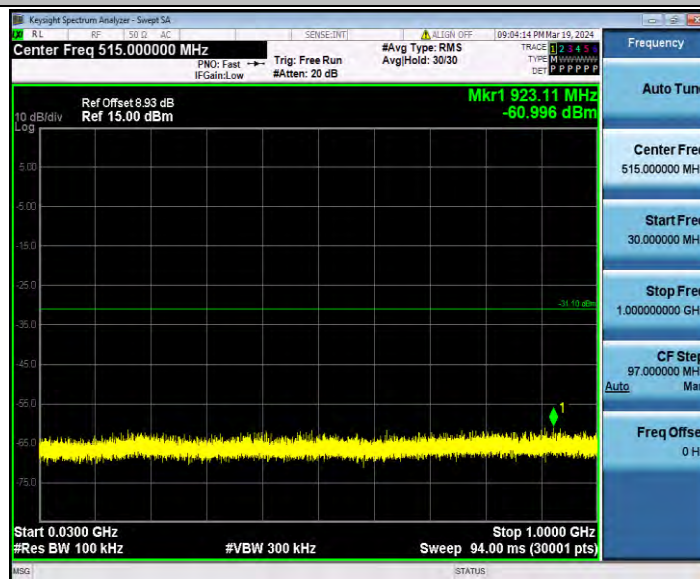
11B_Ant0_2462_0~Reference



11B_Ant0_2462_30~1000



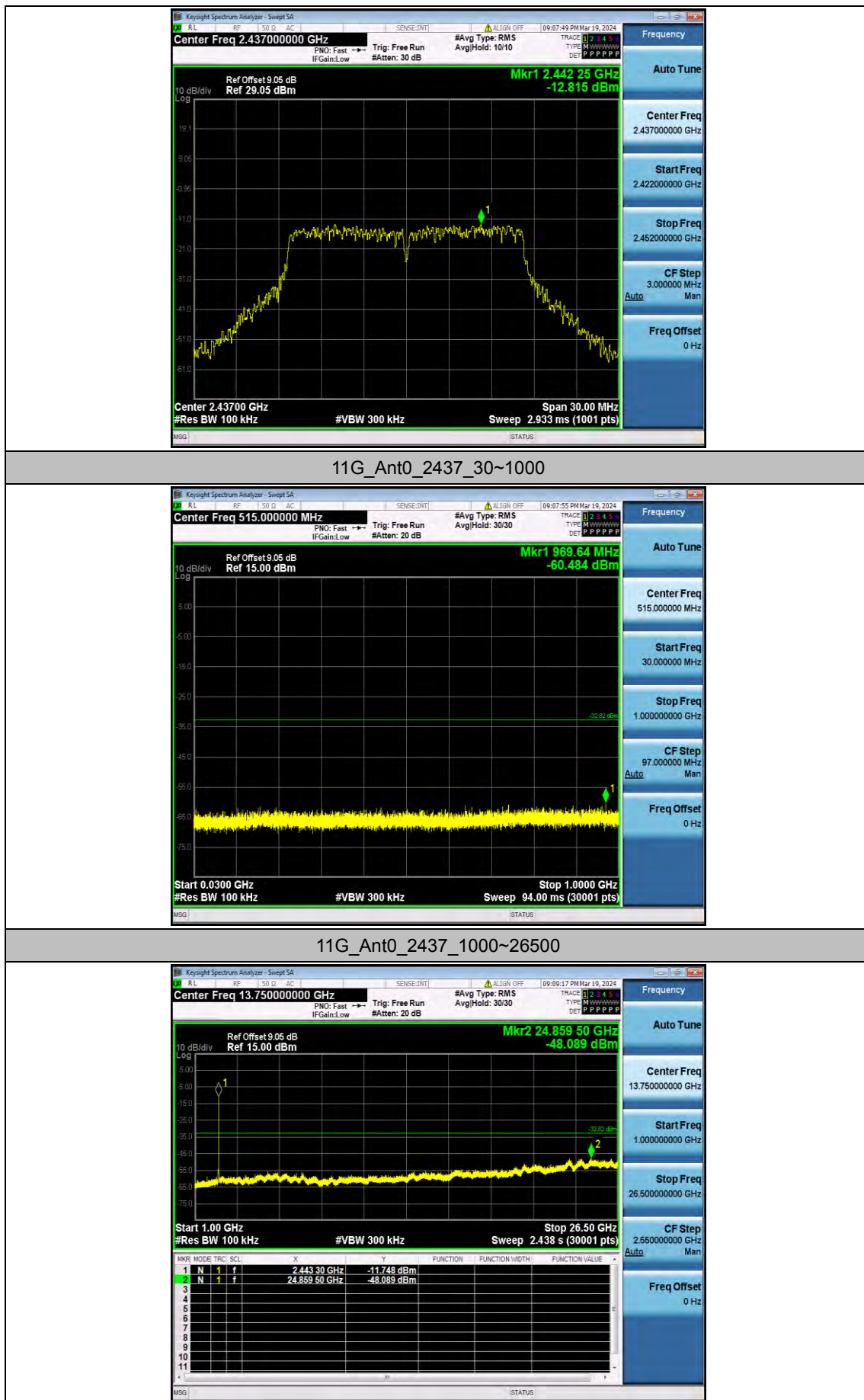
11G_Ant0_2412_30~1000



11G_Ant0_2412_1000~26500



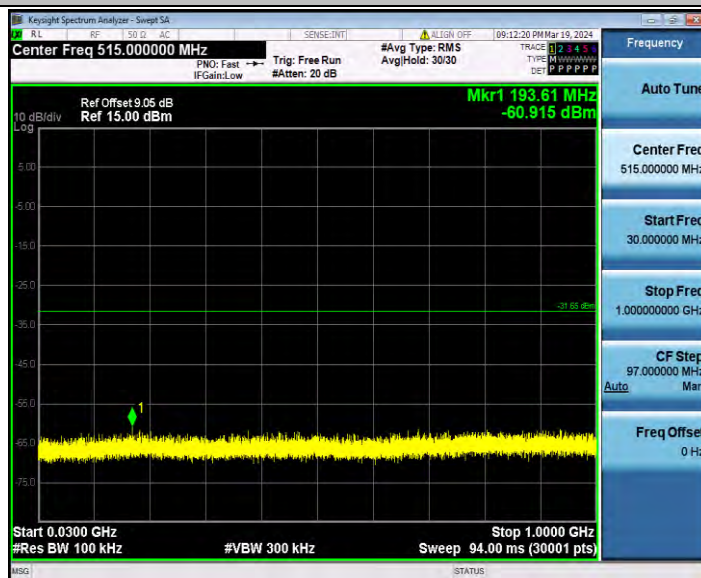
11G_Ant0_2437_0~Reference



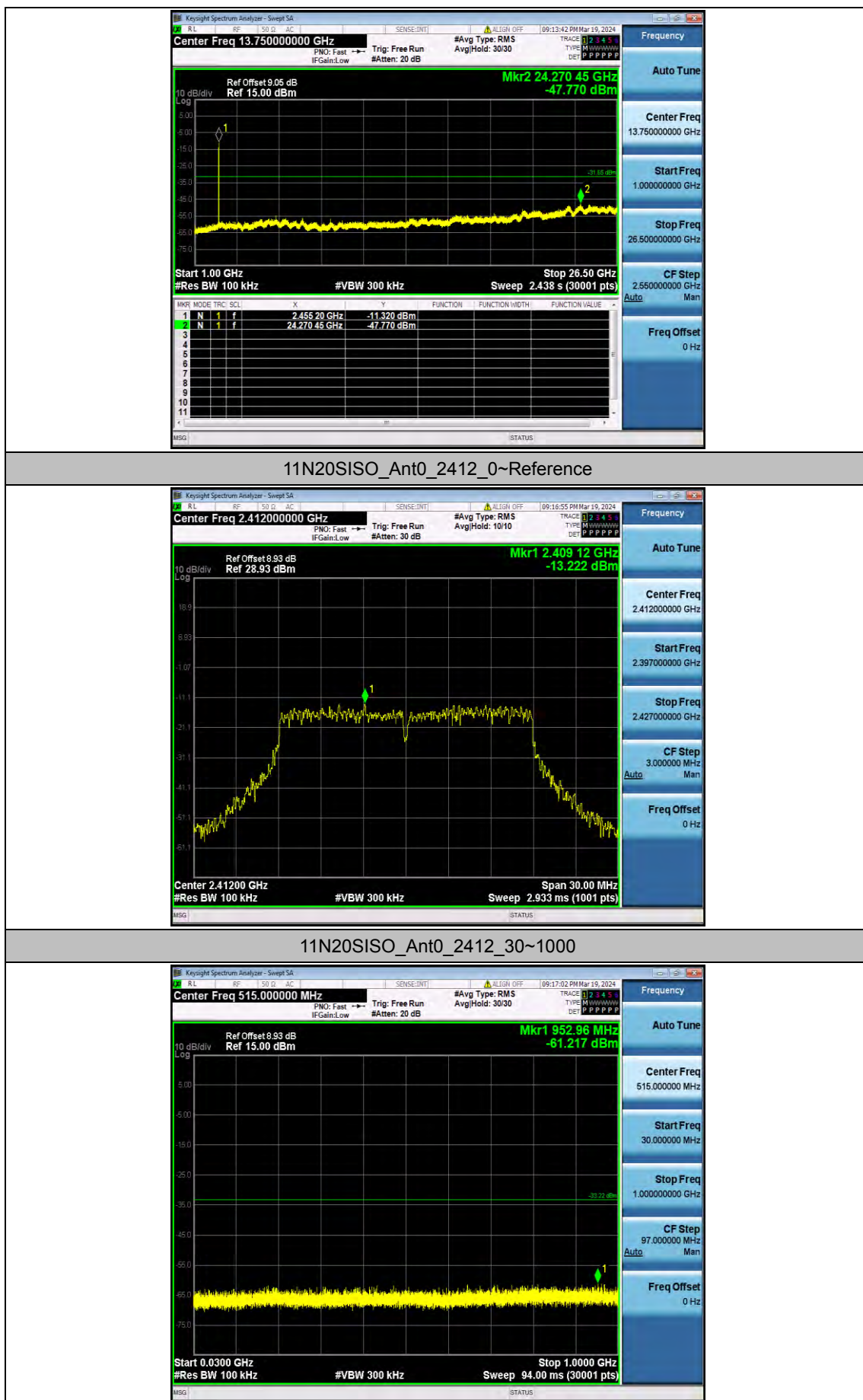
11G_Ant0_2462_0~Reference



11G_Ant0_2462_30~1000



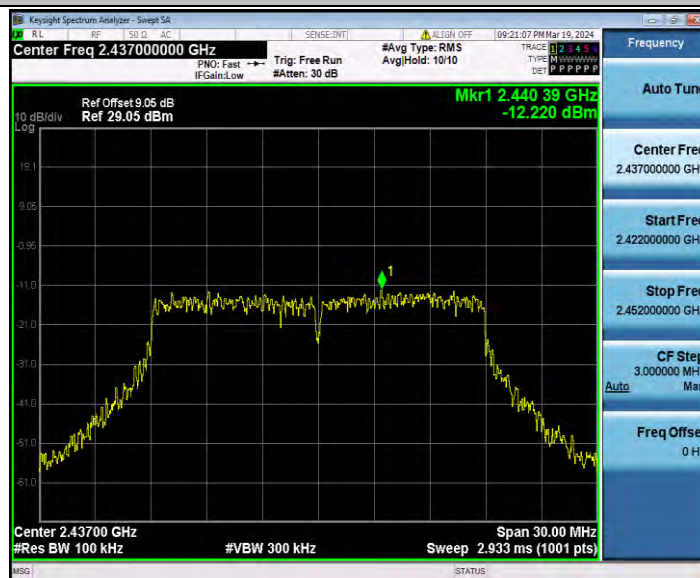
11G_Ant0_2462_1000~26500



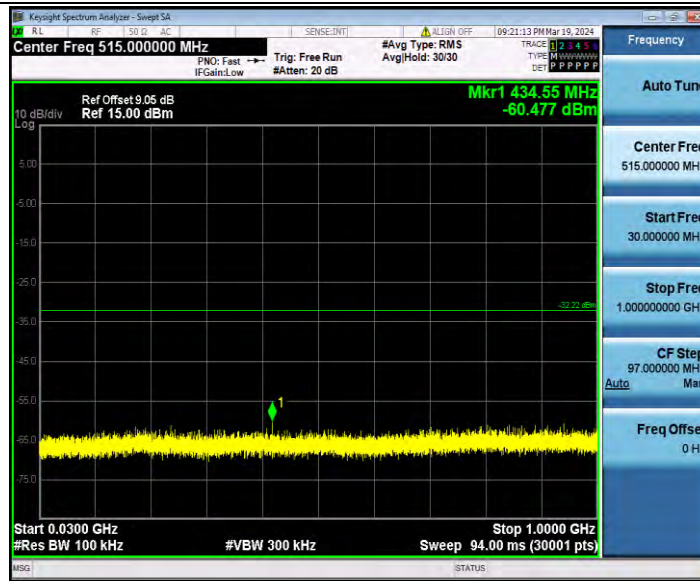
11N20SISO_Ant0_2412_1000~26500



11N20SISO_Ant0_2437_0~Reference



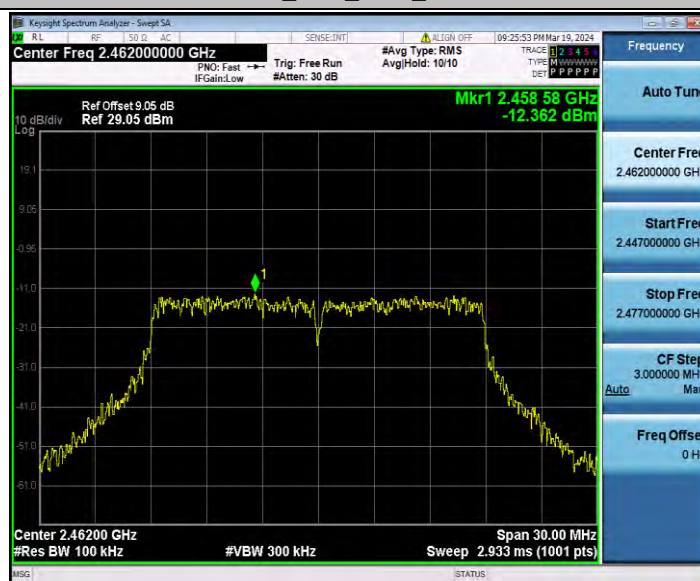
11N20SISO_Ant0_2437_30~1000



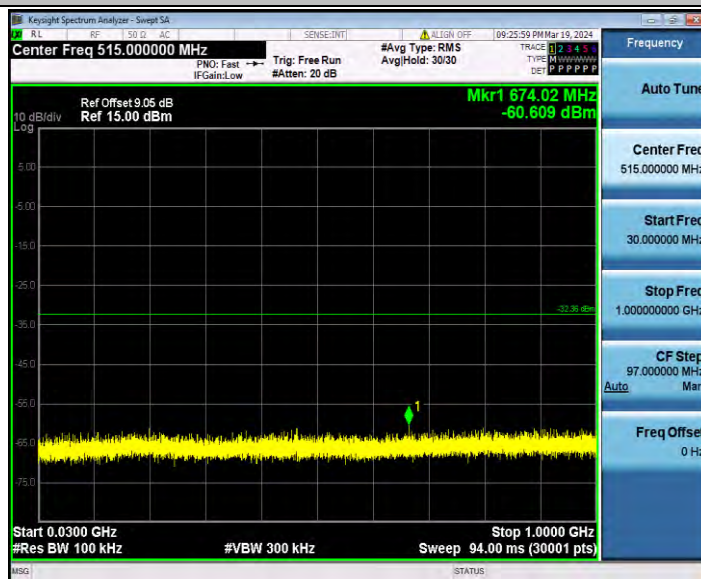
11N20SISO_Ant0_2437_1000~26500



11N20SISO_Ant0_2462_0~Reference



11N20SISO_Ant0_2462_30~1000



11N20SISO_Ant0_2462_1000~26500



11N40SISO_Ant0_2422_0~Reference



11N40SISO_Ant0_2422_30~1000



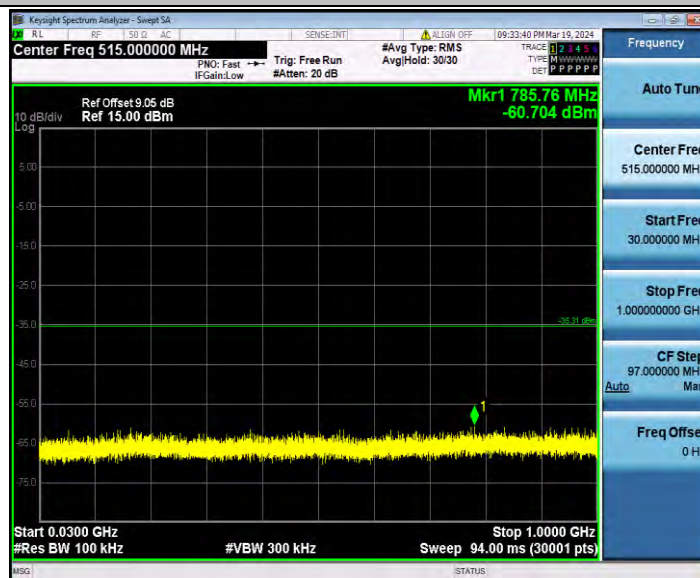
11N40SISO_Ant0_2422_1000~26500



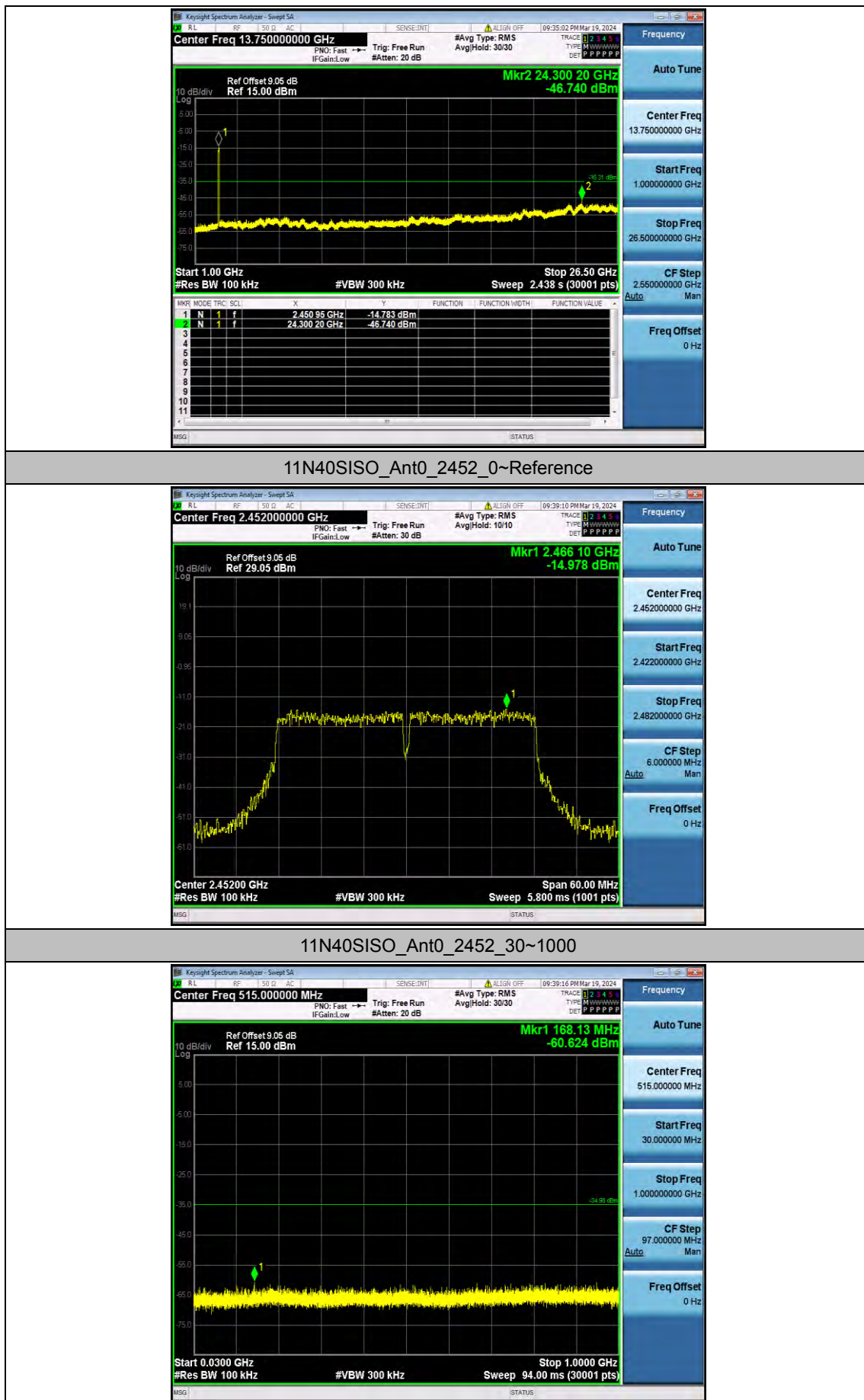
11N40SISO_Ant0_2437_0~Reference

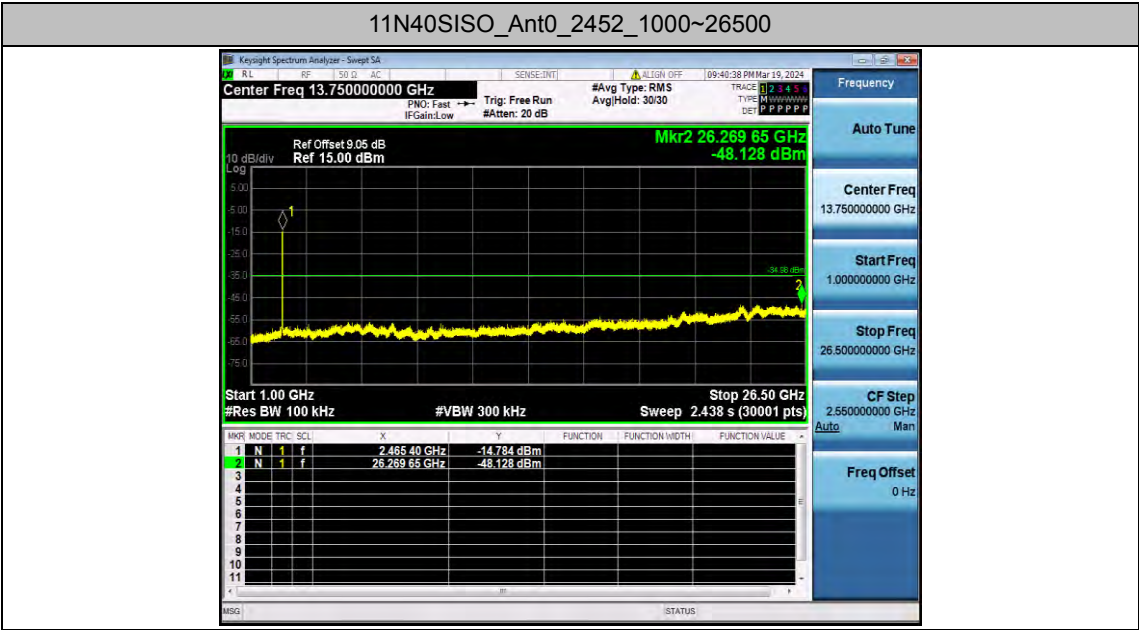


11N40SISO_Ant0_2437_30~1000



11N40SISO_Ant0_2437_1000~26500





Appendix C.7: Emissions in Restricted Bands

Test Result

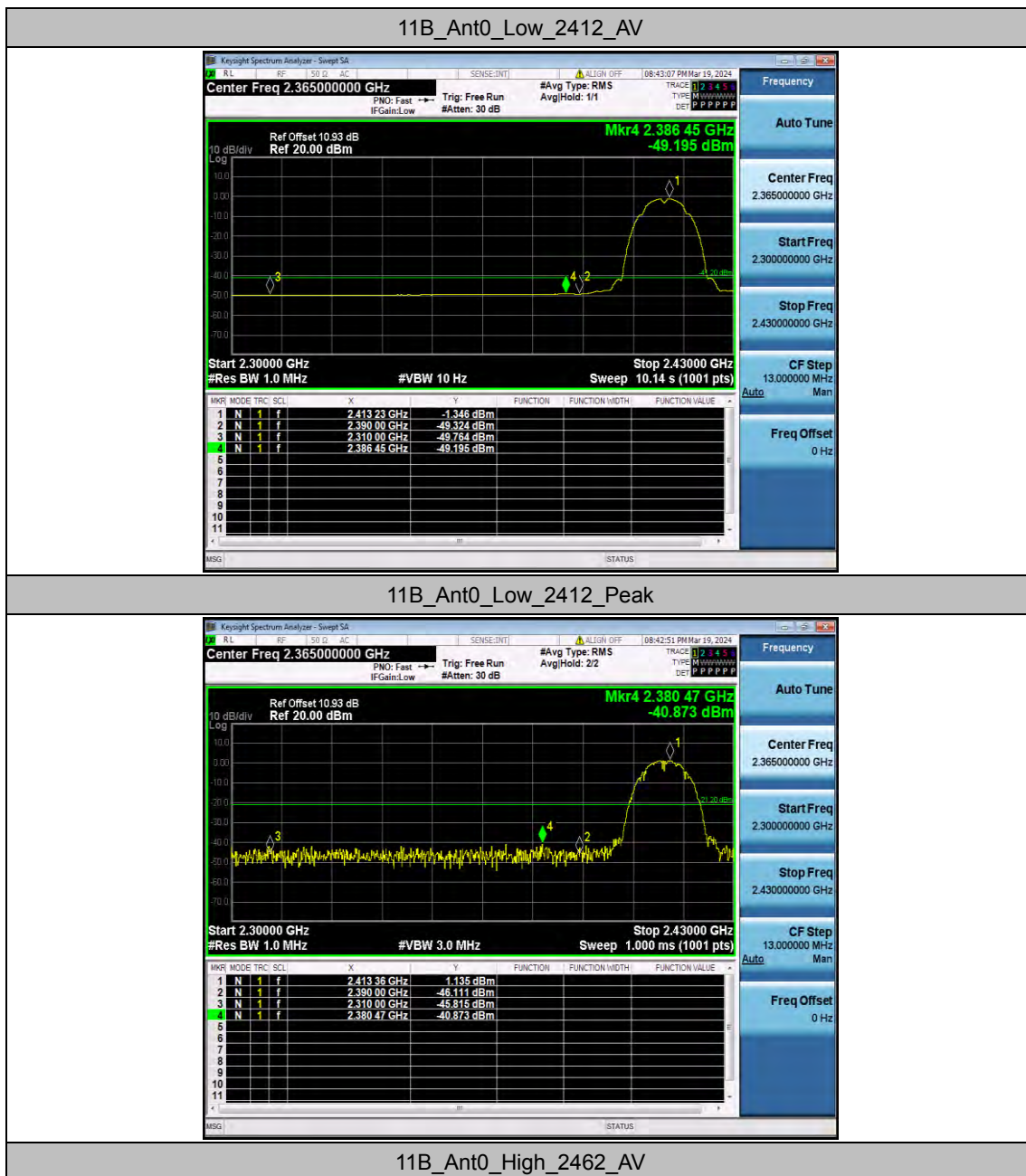
TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant0	Low	2412	AV	2310.000	-49.76	≤-41.20	45.44	≤54	PASS
				AV	2386.450	-49.2	≤-41.20	46.00	≤54	PASS
				AV	2390.000	-49.32	≤-41.20	45.88	≤54	PASS
				Peak	2310.000	-45.82	≤-21.20	49.38	≤74	PASS
				Peak	2380.470	-40.87	≤-21.20	54.33	≤74	PASS
				Peak	2390.000	-46.11	≤-21.20	49.09	≤74	PASS
		High	2462	AV	2483.500	-49.21	≤-41.20	45.99	≤54	PASS
				AV	2497.200	-49.02	≤-41.20	46.18	≤54	PASS
				AV	2500.000	-49.03	≤-41.20	46.17	≤54	PASS
				Peak	2483.500	-46.25	≤-21.20	48.95	≤74	PASS
				Peak	2494.010	-41.15	≤-21.20	54.05	≤74	PASS
				Peak	2500.000	-43.78	≤-21.20	51.42	≤74	PASS
11G	Ant0	Low	2412	AV	2310.000	-49.66	≤-41.20	45.54	≤54	PASS
				AV	2389.960	-49.07	≤-41.20	46.13	≤54	PASS
				AV	2390.000	-49.07	≤-41.20	46.13	≤54	PASS
				Peak	2310.000	-44.99	≤-21.20	50.21	≤74	PASS
				Peak	2357.070	-39.83	≤-21.20	55.37	≤74	PASS
				Peak	2390.000	-46.09	≤-21.20	49.11	≤74	PASS
		High	2462	AV	2483.500	-49.14	≤-41.20	46.06	≤54	PASS
				AV	2499.950	-49.01	≤-41.20	46.19	≤54	PASS
				AV	2500.000	-49.01	≤-41.20	46.19	≤54	PASS
				Peak	2483.500	-45.31	≤-21.20	49.89	≤74	PASS
				Peak	2487.410	-40.86	≤-21.20	54.34	≤74	PASS
				Peak	2500.000	-46.43	≤-21.20	48.77	≤74	PASS
11N20SISO	Ant0	Low	2412	AV	2310.000	-49.79	≤-41.20	45.41	≤54	PASS
				AV	2389.960	-49.17	≤-41.20	46.03	≤54	PASS
				AV	2390.000	-49.17	≤-41.20	46.03	≤54	PASS
				Peak	2310.000	-48.61	≤-21.20	46.59	≤74	PASS
				Peak	2330.030	-39.66	≤-21.20	55.54	≤74	PASS
				Peak	2390.000	-44.47	≤-21.20	50.73	≤74	PASS
		High	2462	AV	2483.500	-49.13	≤-41.20	46.07	≤54	PASS
				AV	2498.960	-49.01	≤-41.20	46.19	≤54	PASS
				AV	2500.000	-49.06	≤-41.20	46.14	≤54	PASS
				Peak	2483.500	-51.34	≤-21.20	43.86	≤74	PASS
				Peak	2489.060	-40.44	≤-21.20	54.76	≤74	PASS

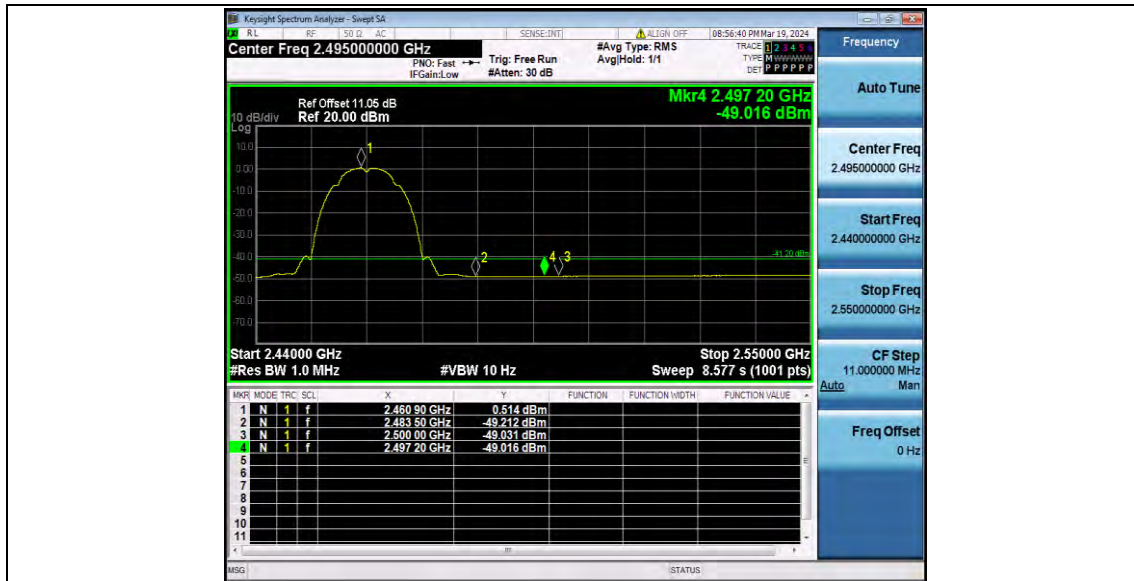
				Peak	2500.000	-46.25	≤ -21.20	48.95	≤ 74	PASS
11N40SIS O	Ant0	Low	2422	AV	2310.000	-49.78	≤ -41.20	45.42	≤ 54	PASS
				AV	2389.700	-48.85	≤ -41.20	46.35	≤ 54	PASS
				AV	2390.000	-48.86	≤ -41.20	46.34	≤ 54	PASS
				Peak	2310.000	-47.1	≤ -21.20	48.10	≤ 74	PASS
				Peak	2317.680	-40.97	≤ -21.20	54.23	≤ 74	PASS
				Peak	2390.000	-44.49	≤ -21.20	50.71	≤ 74	PASS
		High	2452	AV	2483.500	-49	≤ -41.20	46.20	≤ 54	PASS
				AV	2499.180	-48.97	≤ -41.20	46.23	≤ 54	PASS
				AV	2500.000	-49.01	≤ -41.20	46.19	≤ 54	PASS
				Peak	2483.500	-47.22	≤ -21.20	47.98	≤ 74	PASS
				Peak	2489.060	-42.08	≤ -21.20	53.12	≤ 74	PASS
				Peak	2500.000	-45.67	≤ -21.20	49.53	≤ 74	PASS

Note:

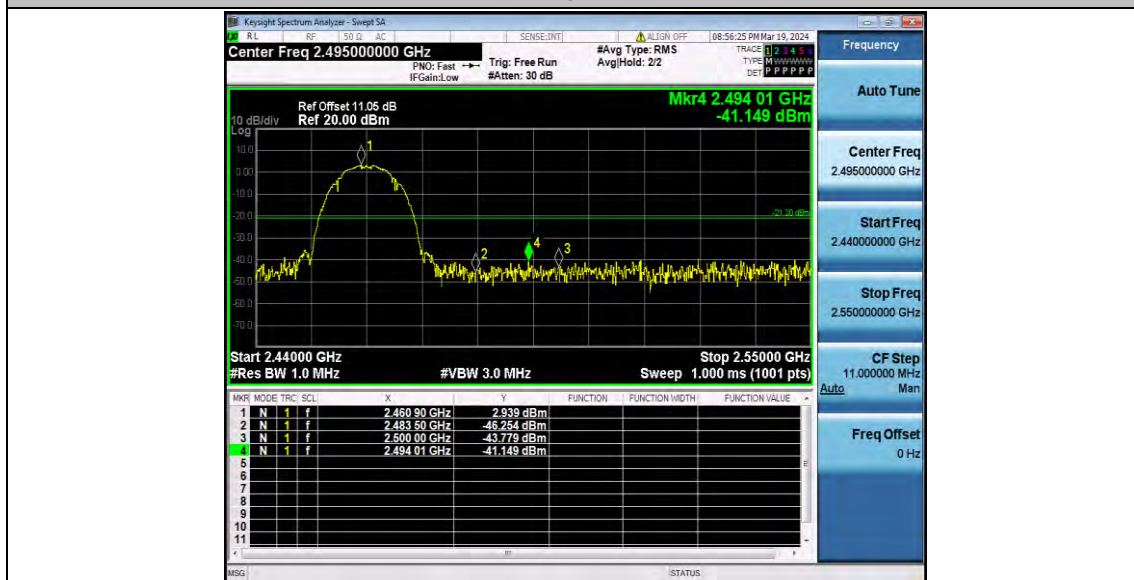
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

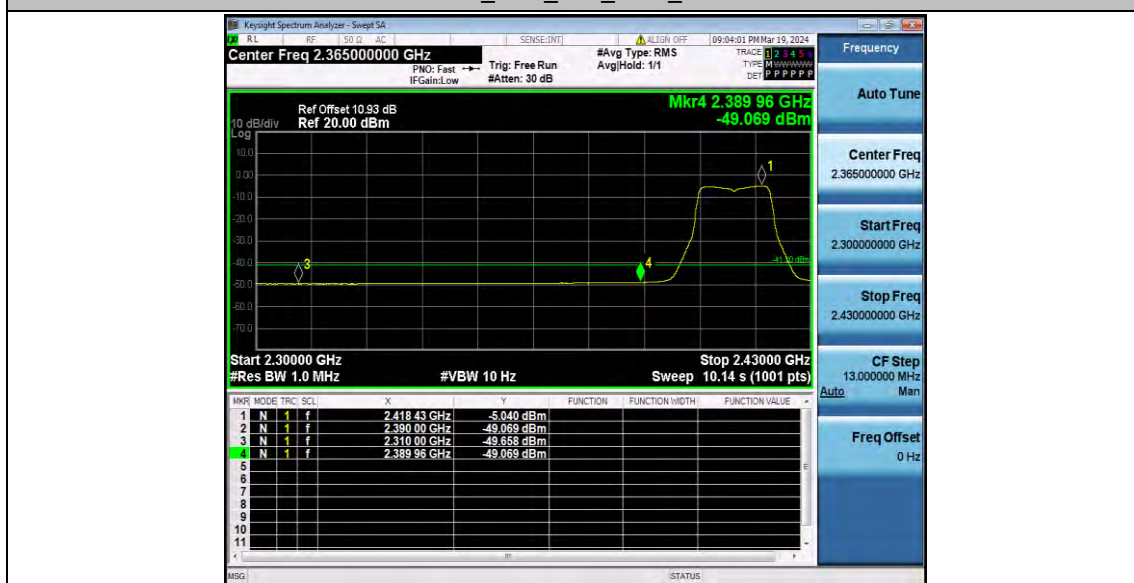




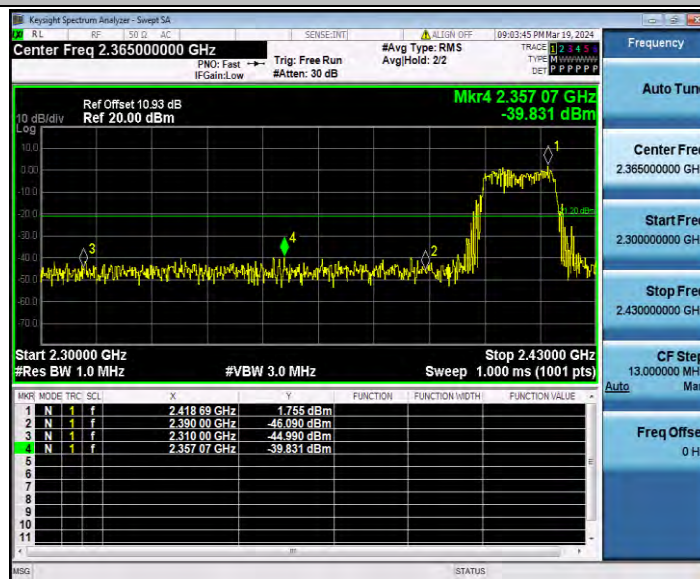
11B_Ant0_High_2462_Peak



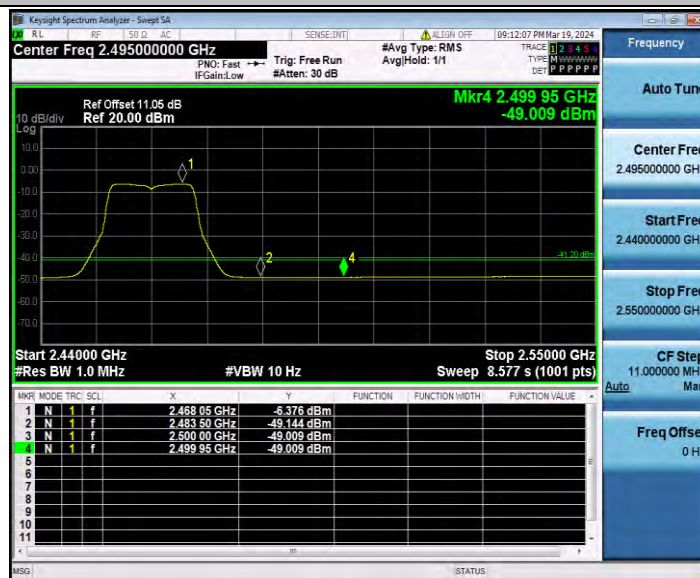
11G_Ant0_Low_2412_AV



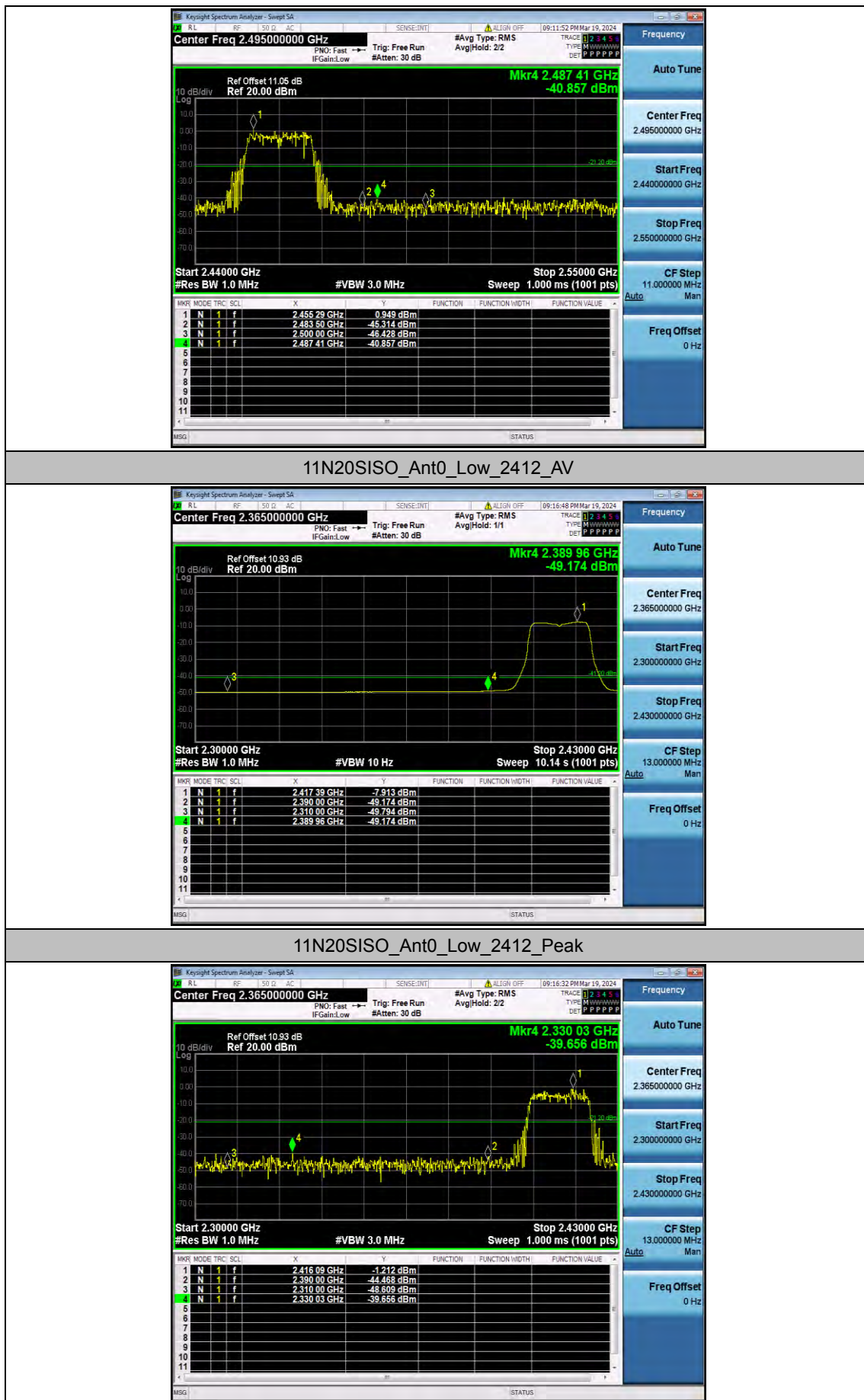
11G_Ant0_Low_2412_Peak



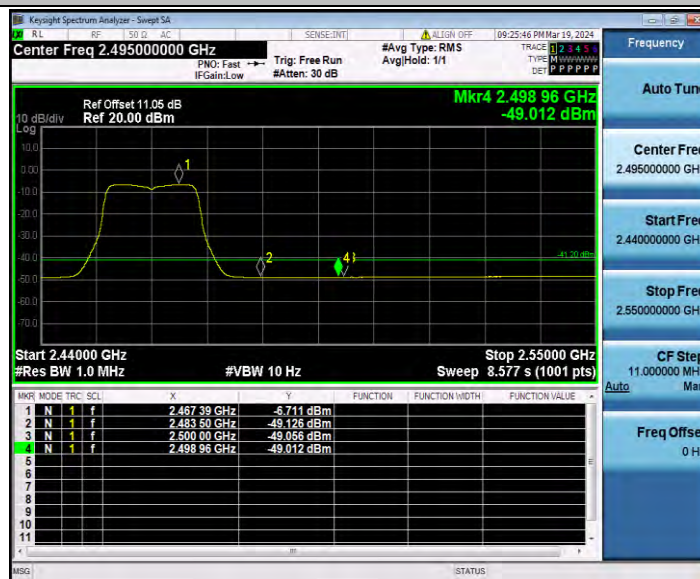
11G_Ant0_High_2462_AV



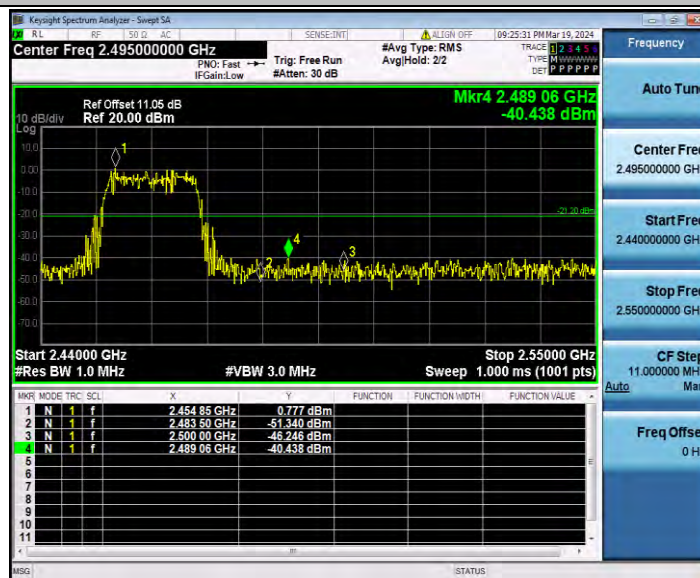
11G_Ant0_High_2462_Peak



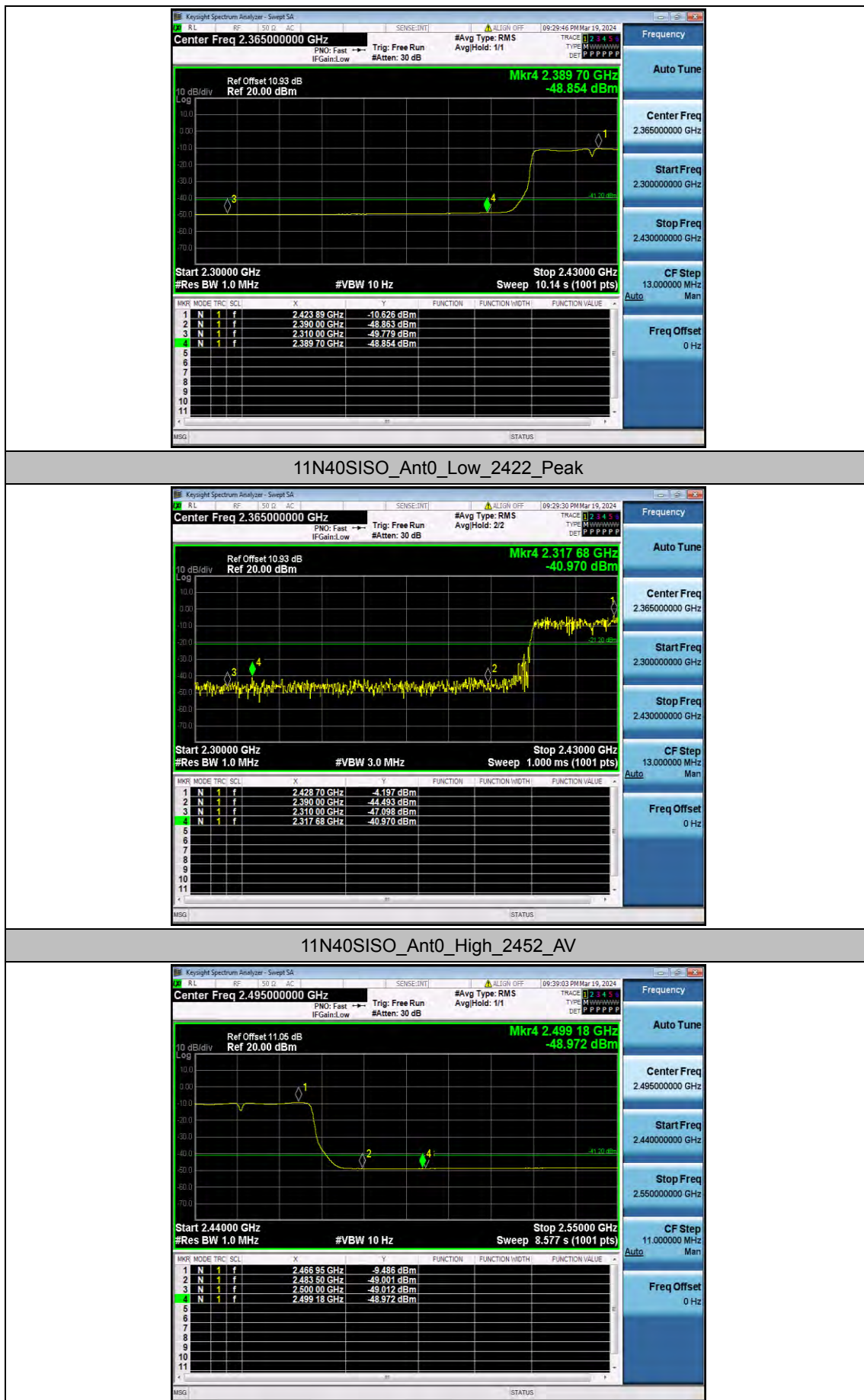
11N20SISO_Ant0_High_2462_AV



11N20SISO_Ant0_High_2462_Peak



11N40SISO_Ant0_Low_2422_AV



11N40SISO_Ant0_High_2452_Peak

