

Case No. : <u>CTA24061300303</u>	
Ambient Condition: <u>23</u> °C, <u>49</u> %RH,	
Test Date: <u>2024.6.15</u>	Test Engineer: <u>Evan ouyang</u>

Appendix C.1: DTS Bandwidth

Test Result

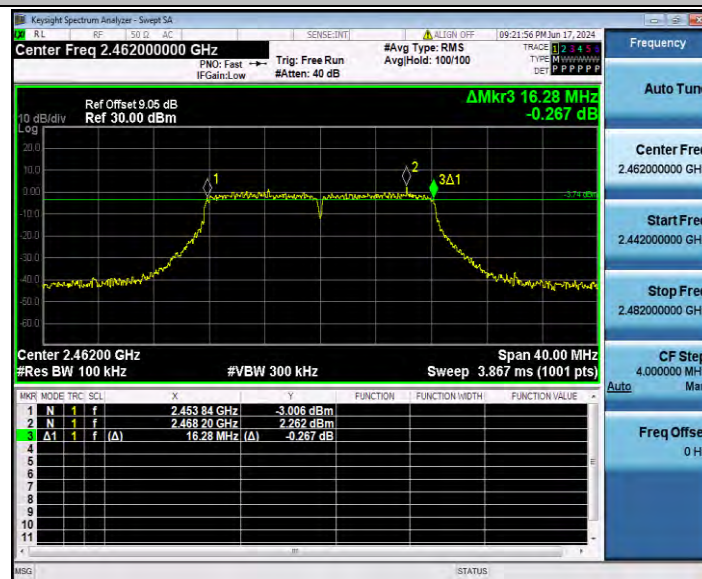
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.880	2406.880	2417.760	0.5	PASS
		2437	9.920	2431.960	2441.880	0.5	PASS
		2462	10.320	2457.000	2467.320	0.5	PASS
11G	Ant1	2412	16.360	2403.840	2420.200	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.280	2453.840	2470.120	0.5	PASS
11N20SISO	Ant1	2412	16.880	2403.640	2420.520	0.5	PASS
		2437	17.040	2428.440	2445.480	0.5	PASS
		2462	16.920	2453.560	2470.480	0.5	PASS
11N40SISO	Ant1	2422	32.880	2406.640	2439.520	0.5	PASS
		2437	34.960	2419.480	2454.440	0.5	PASS
		2452	35.120	2434.480	2469.600	0.5	PASS

Test Graphs

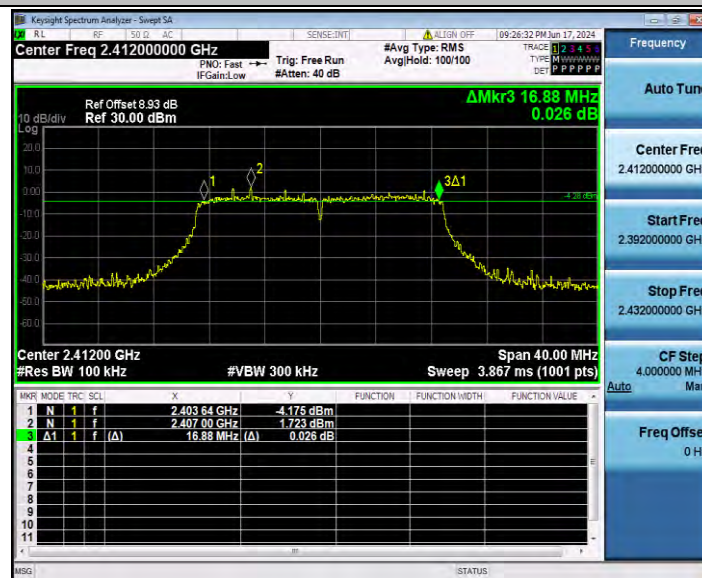




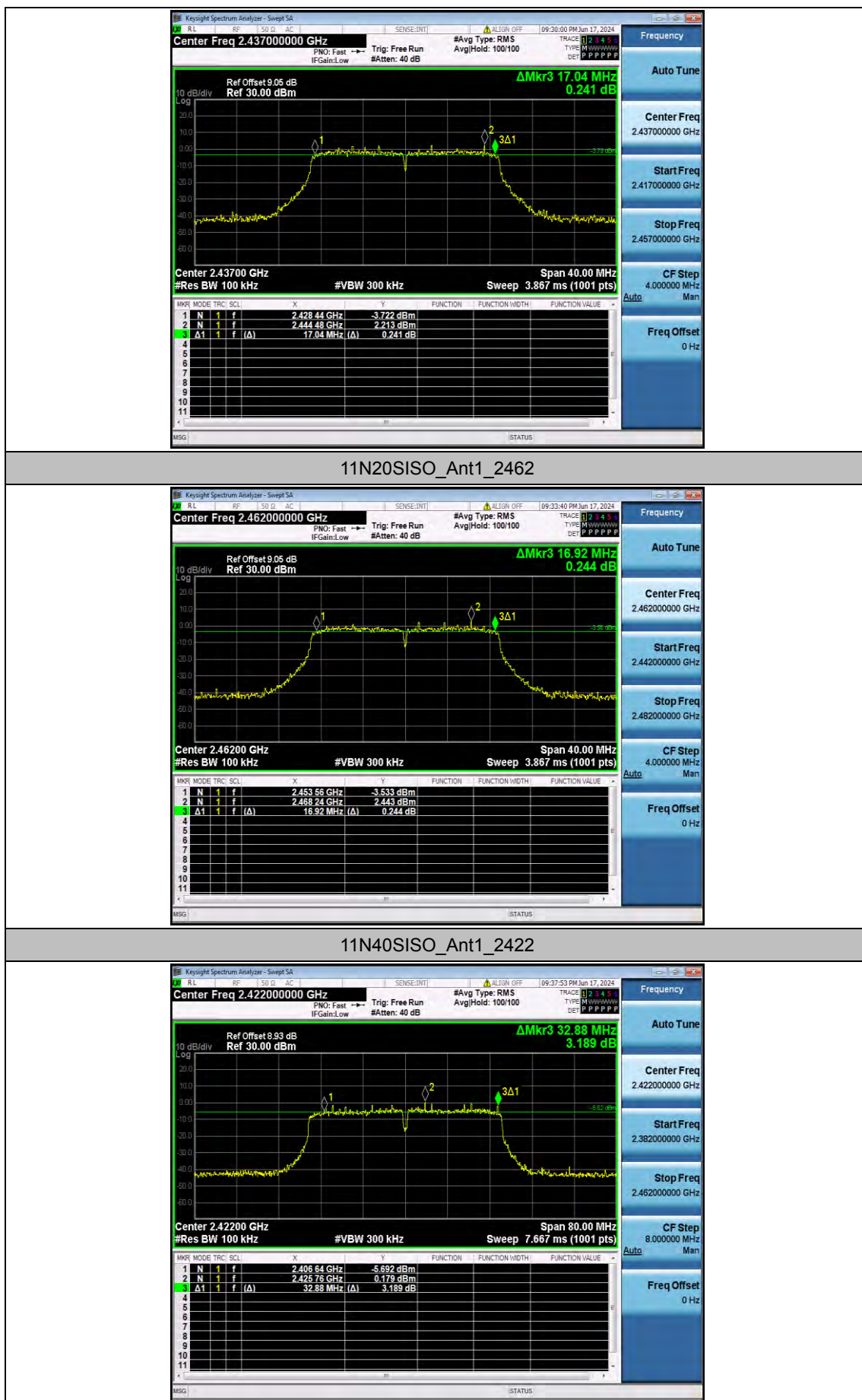
11G_Ant1_2462



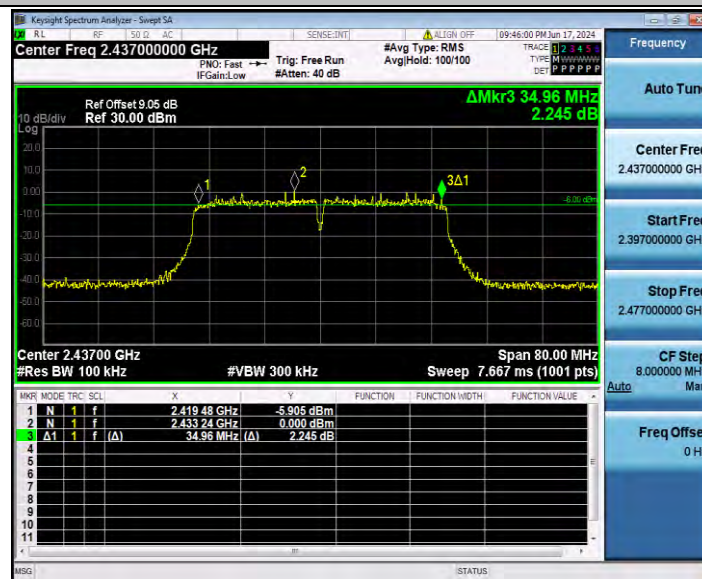
11N20SISO_Ant1_2412



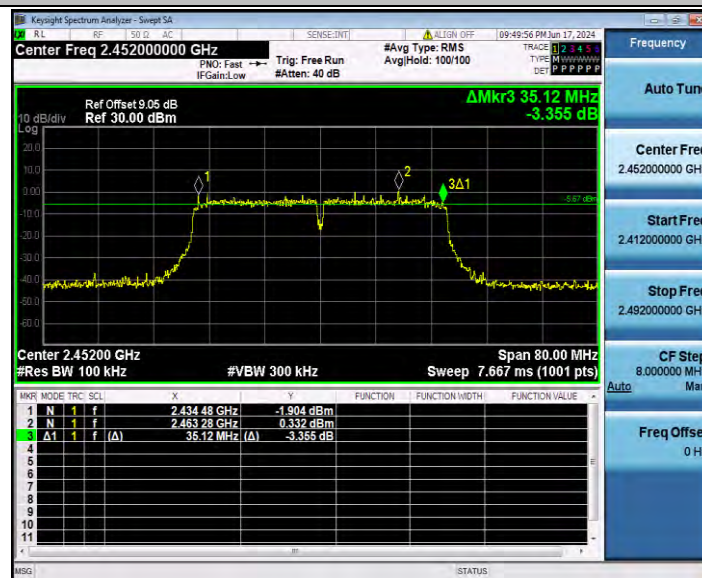
11N20SISO_Ant1_2437



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	14.790	2404.6978	2419.4878
		2437	14.731	2429.5946	2444.3256
		2462	14.662	2454.6666	2469.3286
11G	Ant1	2412	16.858	2403.6014	2420.4594
		2437	16.916	2428.5558	2445.4718
		2462	16.915	2453.5751	2470.4901
11N20SISO	Ant1	2412	17.832	2403.1296	2420.9616
		2437	17.790	2428.1353	2445.9253
		2462	17.827	2453.0784	2470.9054
11N40SISO	Ant1	2422	36.100	2404.0166	2440.1166
		2437	36.143	2418.9426	2455.0856
		2452	36.106	2433.9855	2470.0915

Test Graphs

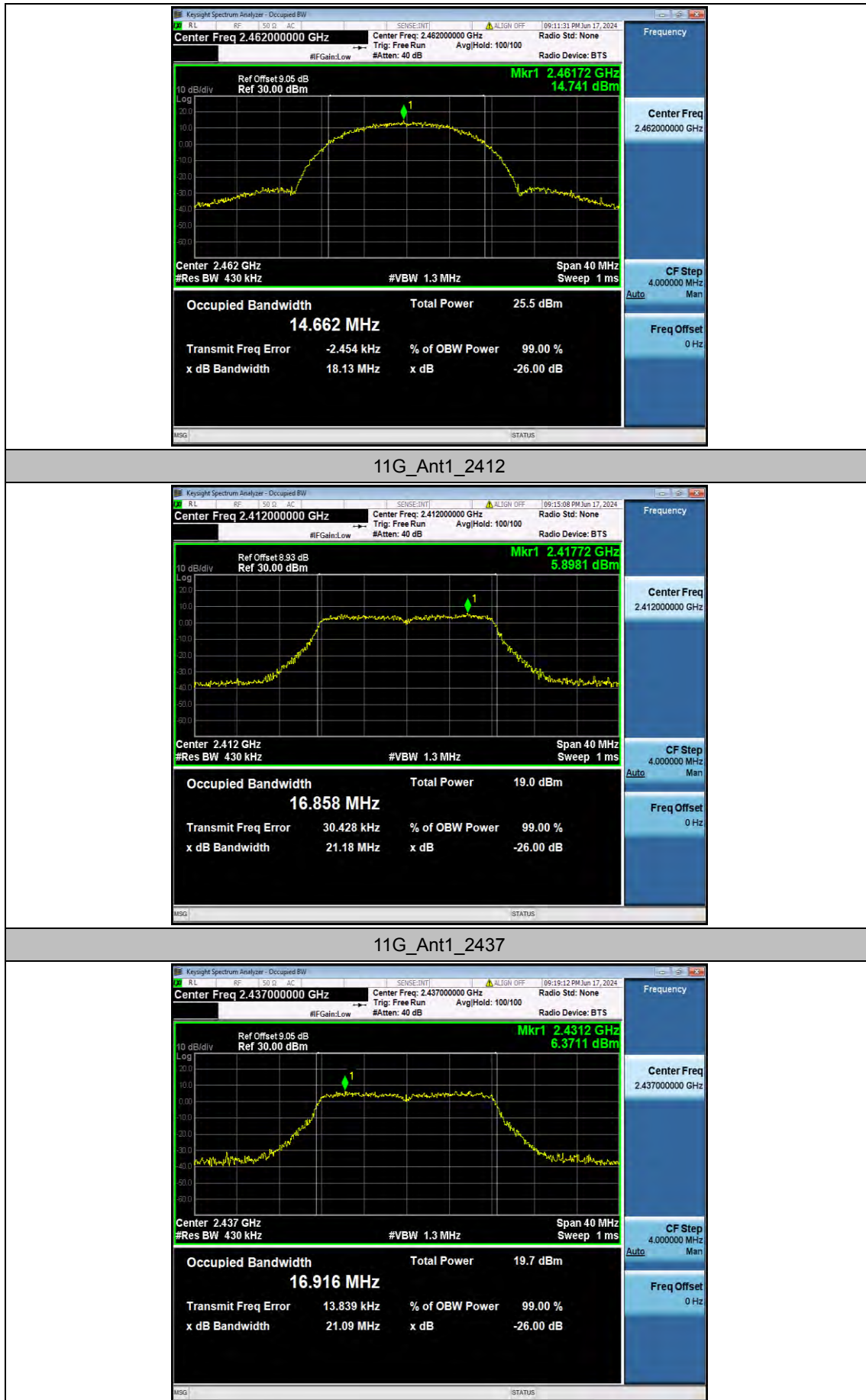
11B_Ant1_2412



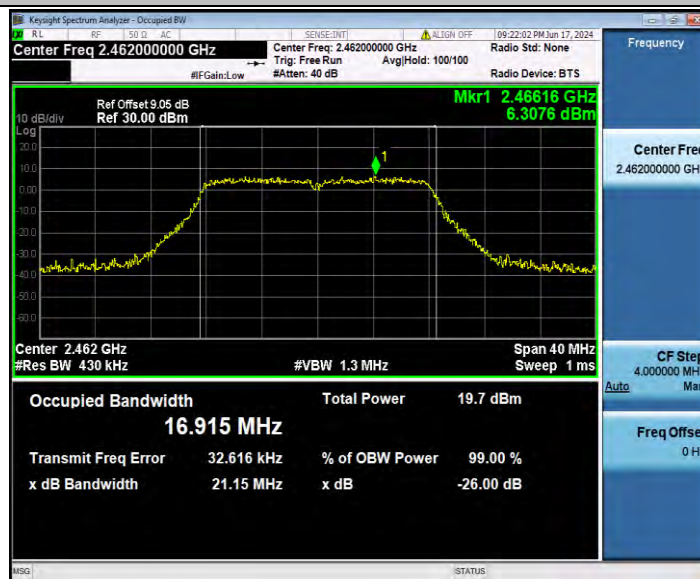
11B_Ant1_2437



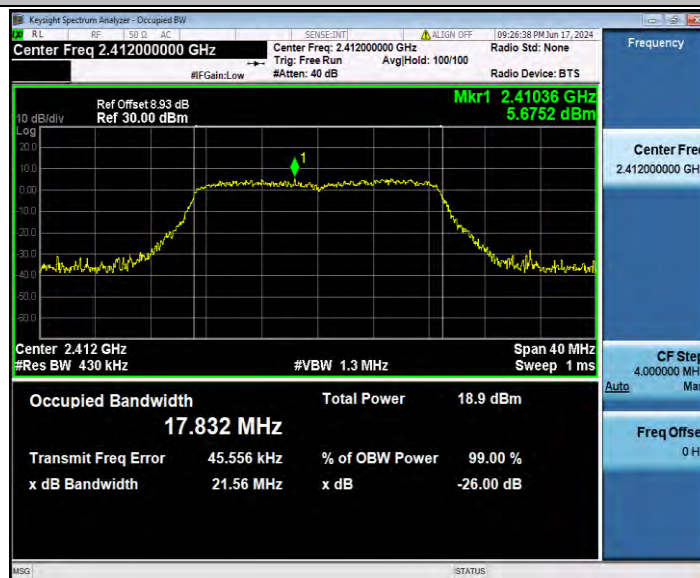
11B_Ant1_2462



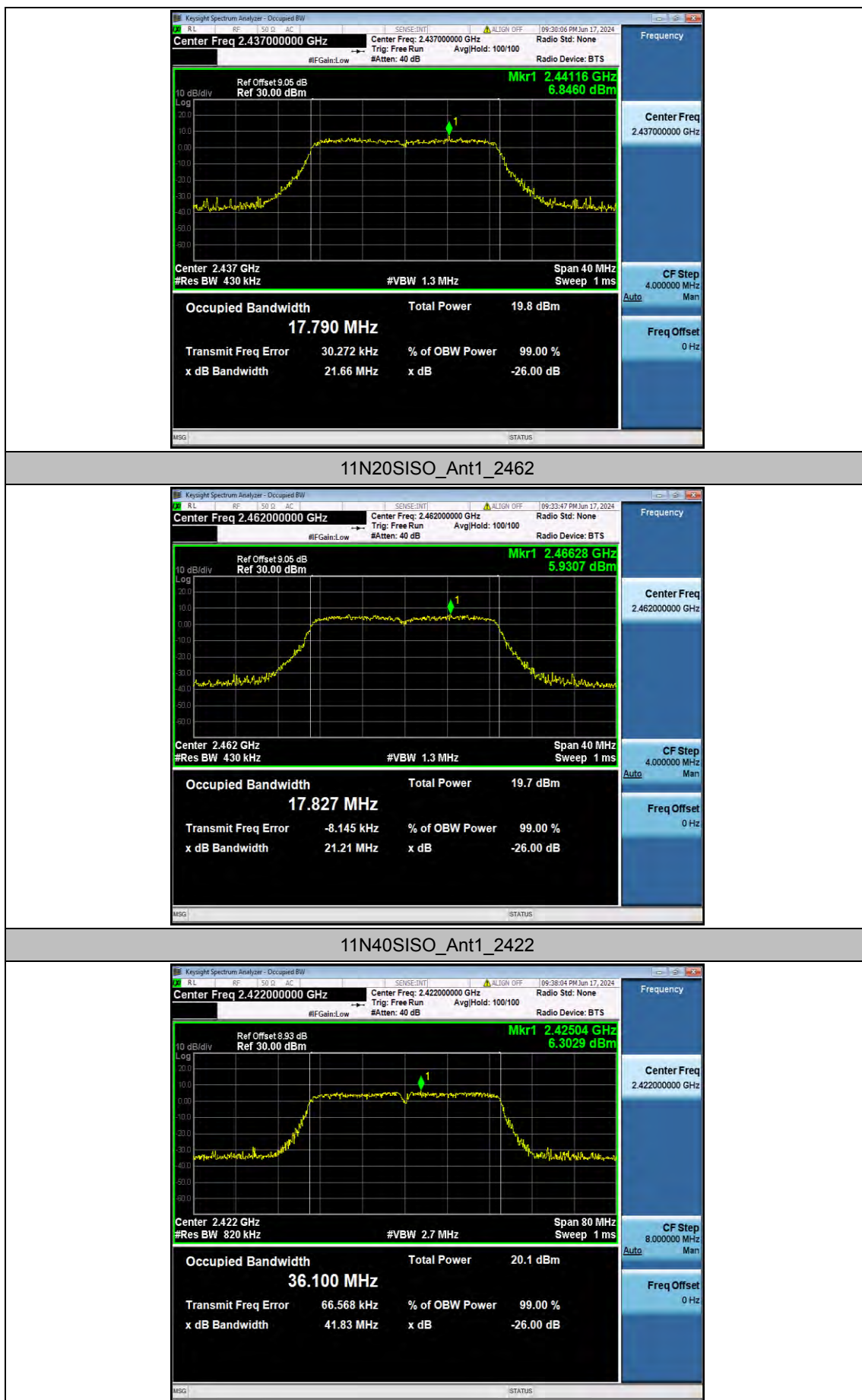
11G_Ant1_2462



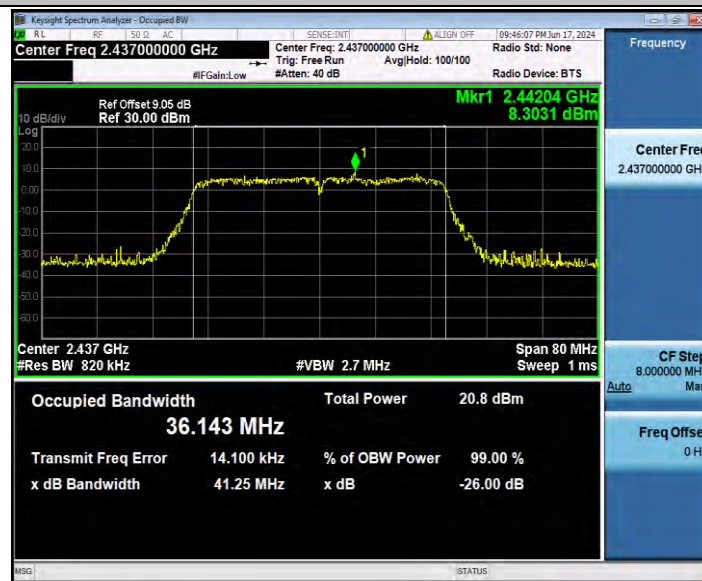
11N20SISO_Ant1_2412



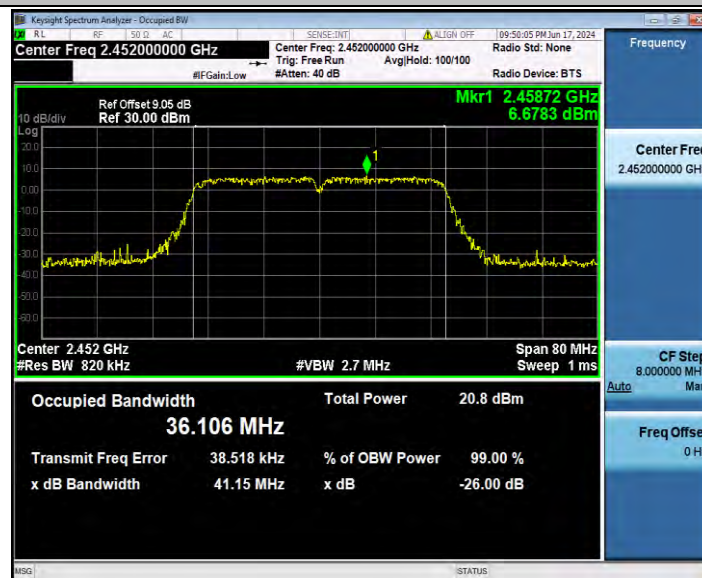
11N20SISO_Ant1_2437



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	24.30	≤30.00	PASS
		2437	25.01	≤30.00	PASS
		2462	25.10	≤30.00	PASS
11G	Ant1	2412	20.03	≤30.00	PASS
		2437	20.81	≤30.00	PASS
		2462	21.02	≤30.00	PASS
11N20SISO	Ant1	2412	20.16	≤30.00	PASS
		2437	20.78	≤30.00	PASS
		2462	20.84	≤30.00	PASS
11N40SISO	Ant1	2422	20.40	≤30.00	PASS
		2437	20.92	≤30.00	PASS
		2452	20.90	≤30.00	PASS

Appendix C.4: Maximum power spectral density

Test Result

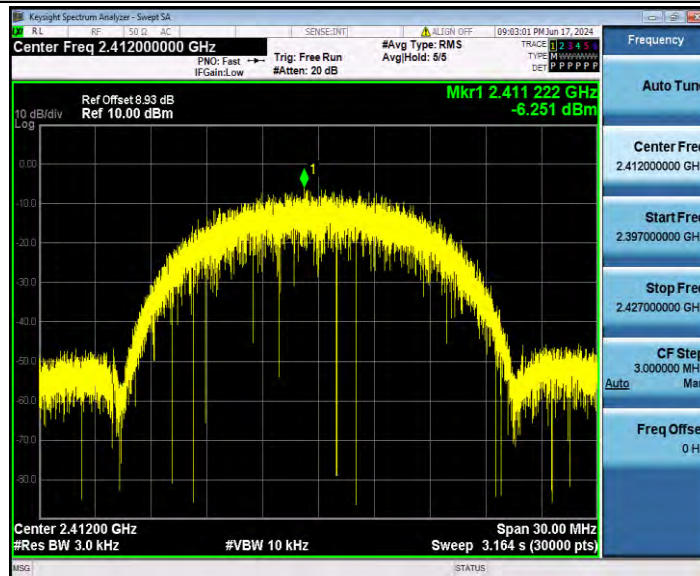
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-6.25	≤8.00	PASS
		2437	-3.83	≤8.00	PASS
		2462	-4.85	≤8.00	PASS
11G	Ant1	2412	-12.76	≤8.00	PASS
		2437	-11.93	≤8.00	PASS
		2462	-11.90	≤8.00	PASS
11N20SISO	Ant1	2412	-12.72	≤8.00	PASS
		2437	-11.91	≤8.00	PASS
		2462	-11.08	≤8.00	PASS
11N40SISO	Ant1	2422	-14.18	≤8.00	PASS
		2437	-15.17	≤8.00	PASS
		2452	-14.53	≤8.00	PASS

Note:

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

Test Graphs

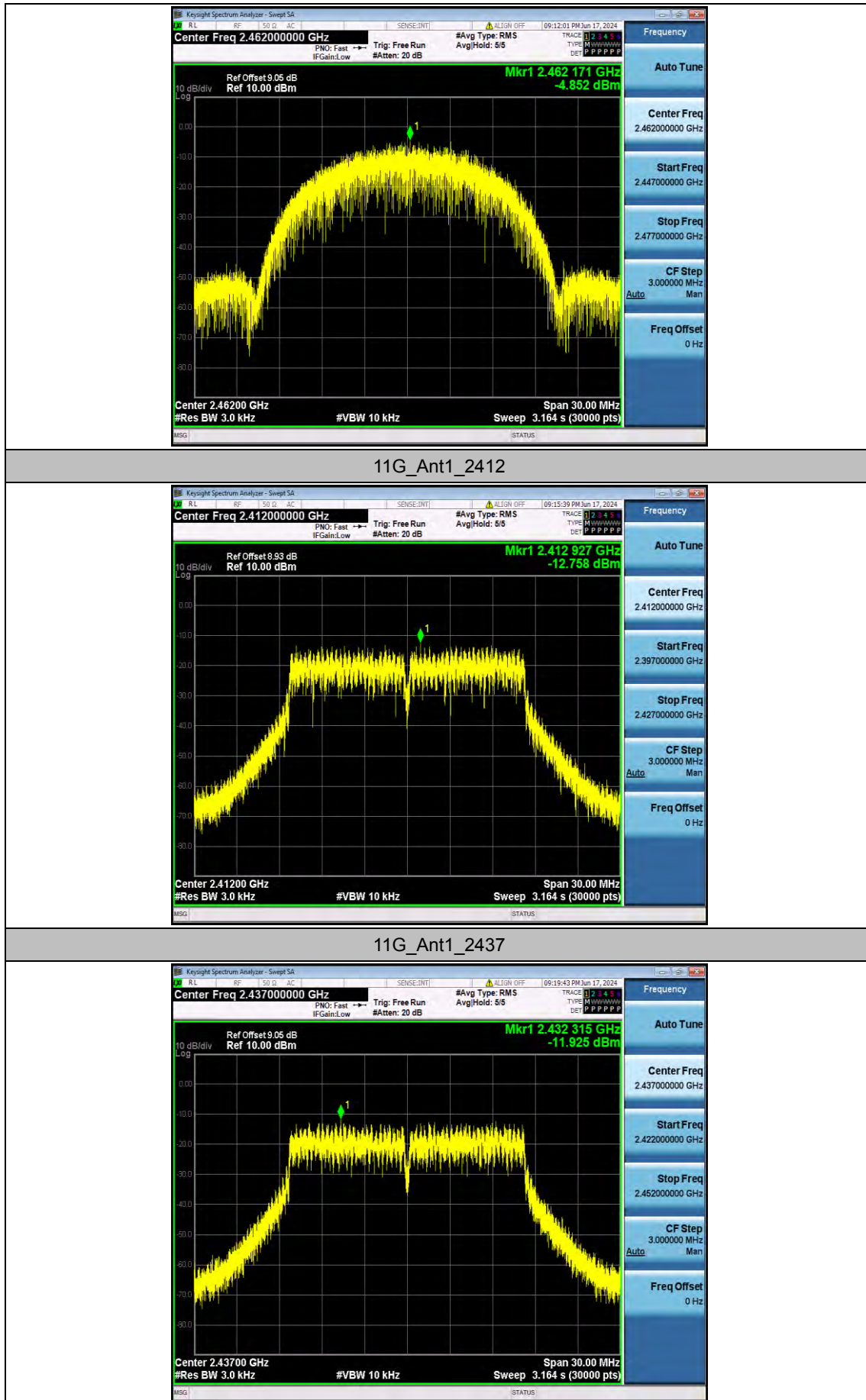
11B_Ant1_2412



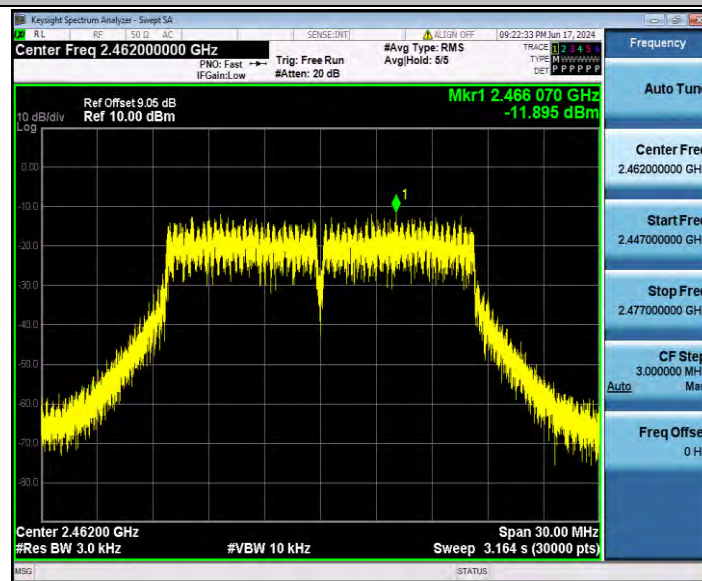
11B_Ant1_2437



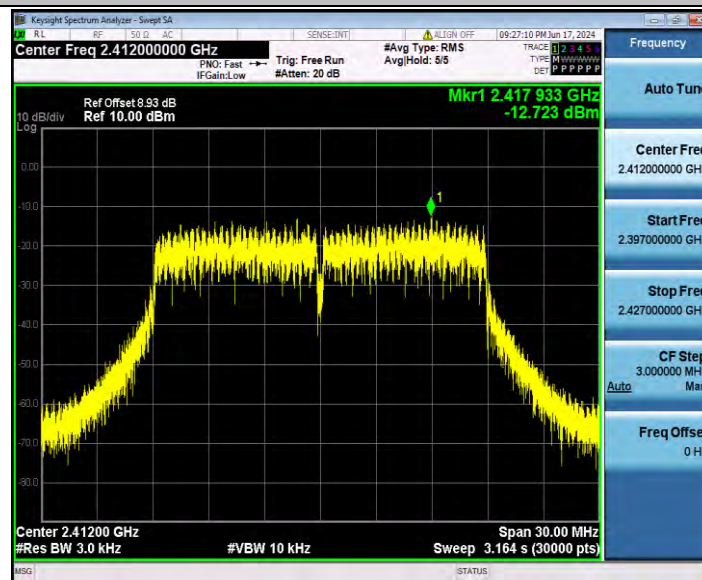
11B_Ant1_2462



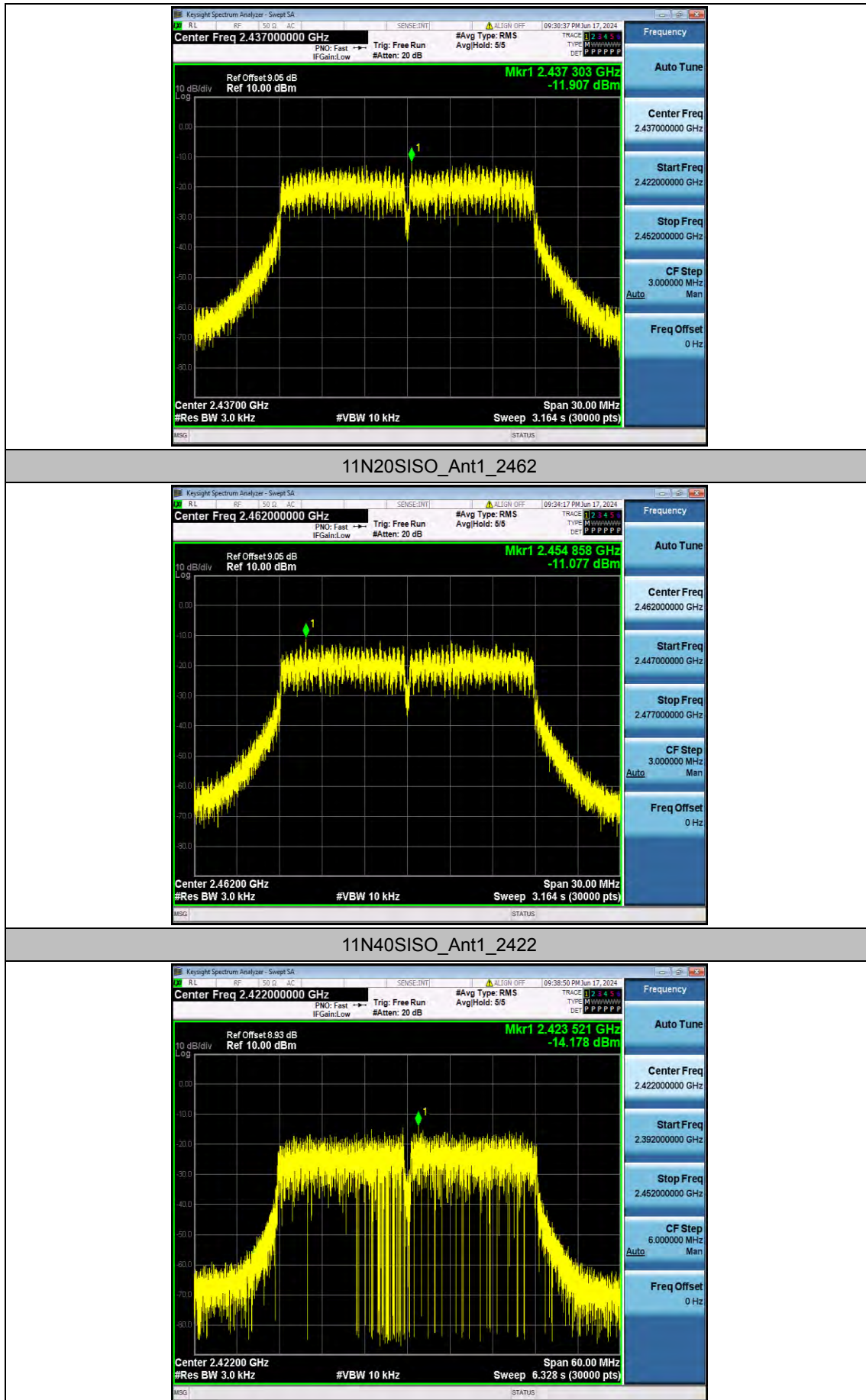
11G_Ant1_2462



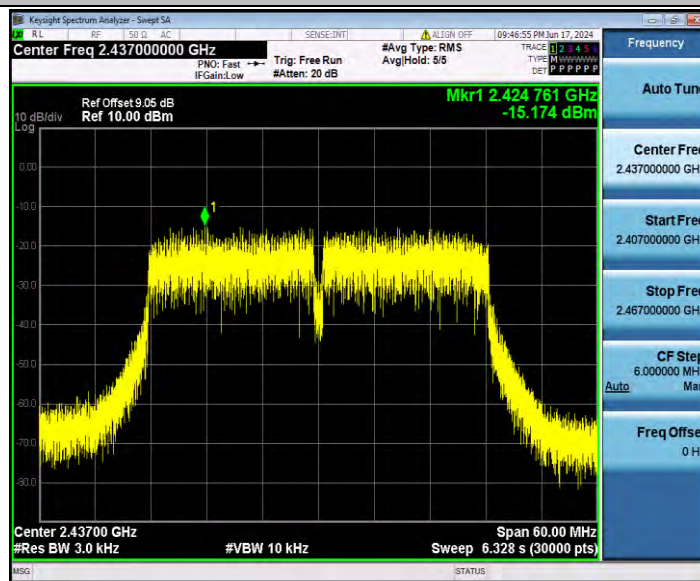
11N20SISO_Ant1_2412



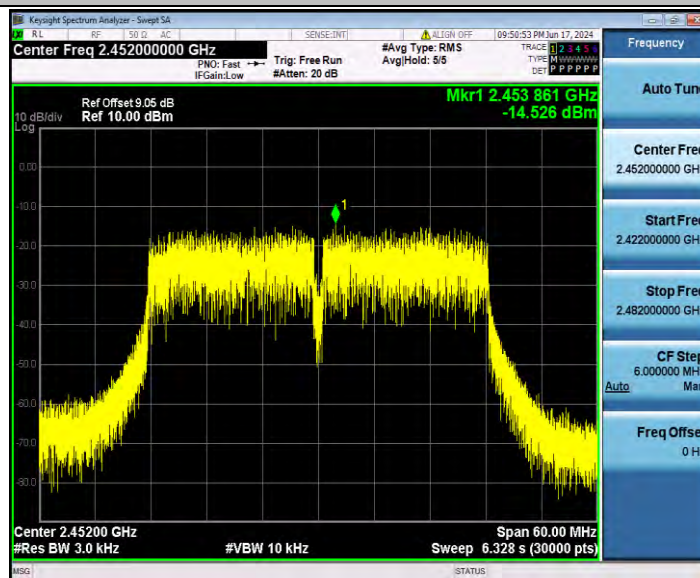
11N20SISO_Ant1_2437



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



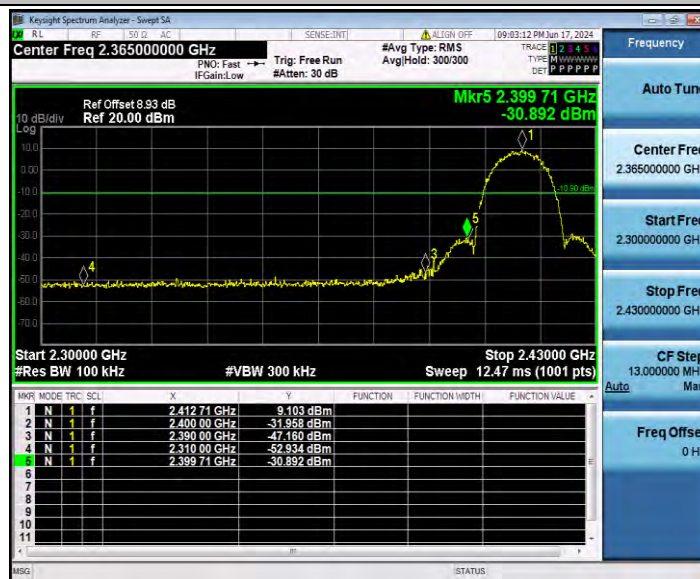
Appendix C.5: Band edge measurements

Test Result

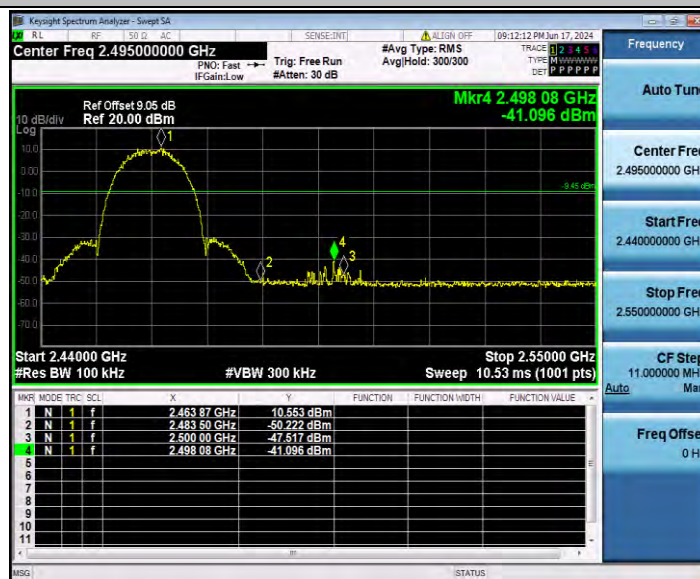
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	9.10	-30.89	≤ -10.9	PASS
		High	2462	10.55	-41.1	≤ -9.45	PASS
11G	Ant1	Low	2412	2.11	-37.41	≤ -17.89	PASS
		High	2462	2.64	-47.13	≤ -17.36	PASS
11N20SISO	Ant1	Low	2412	1.76	-34.67	≤ -18.24	PASS
		High	2462	3.00	-42.9	≤ -17	PASS
11N40SISO	Ant1	Low	2422	-0.09	-37.34	≤ -20.09	PASS
		High	2452	0.55	-42.65	≤ -19.45	PASS

Test Graphs

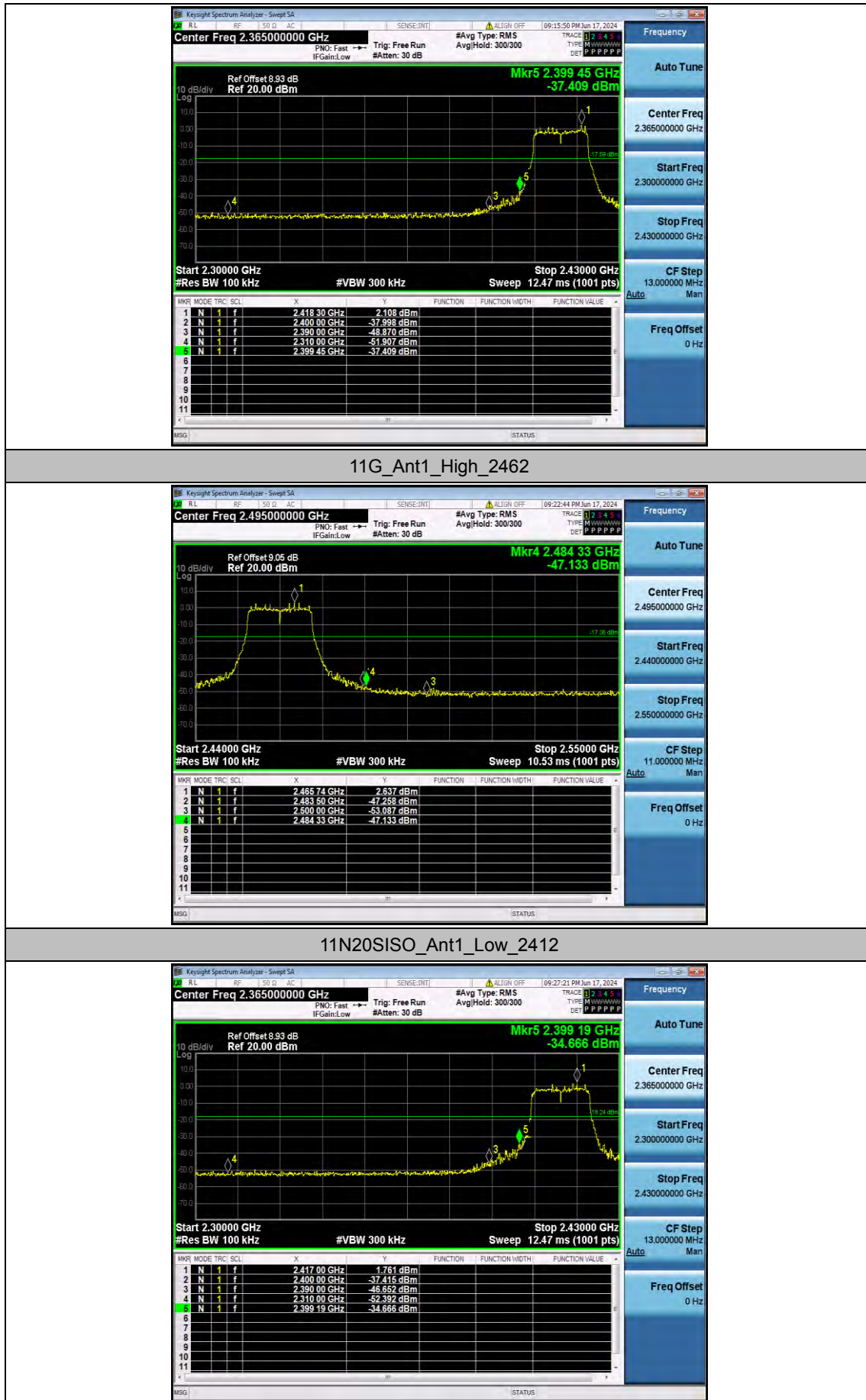
11B_Ant1_Low_2412



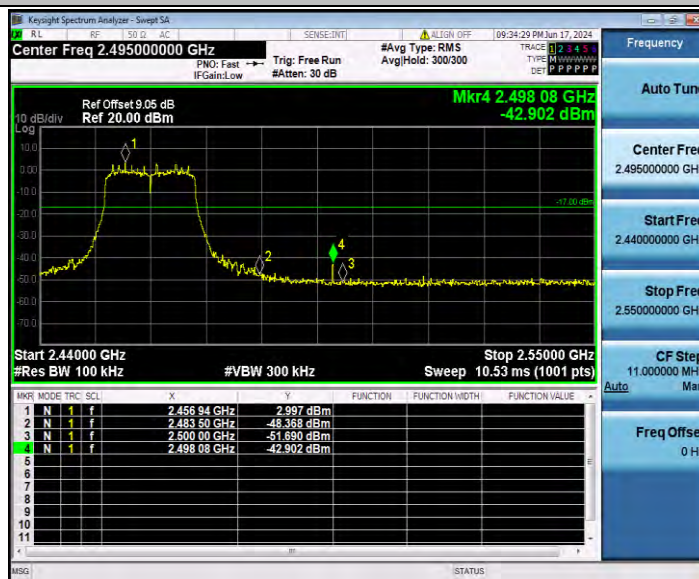
11B_Ant1_High_2462



11G_Ant1_Low_2412



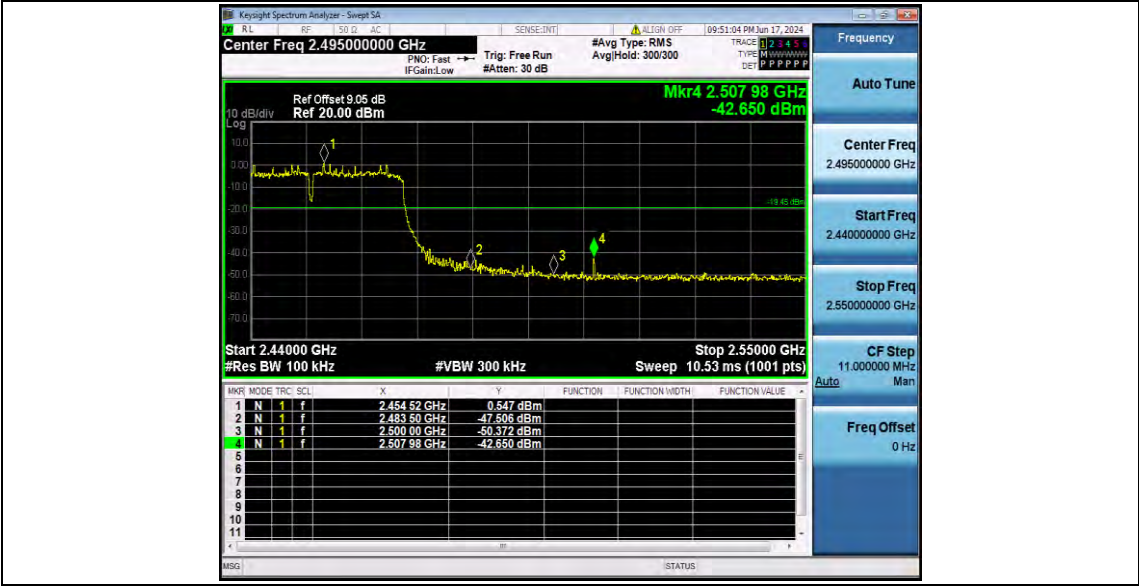
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

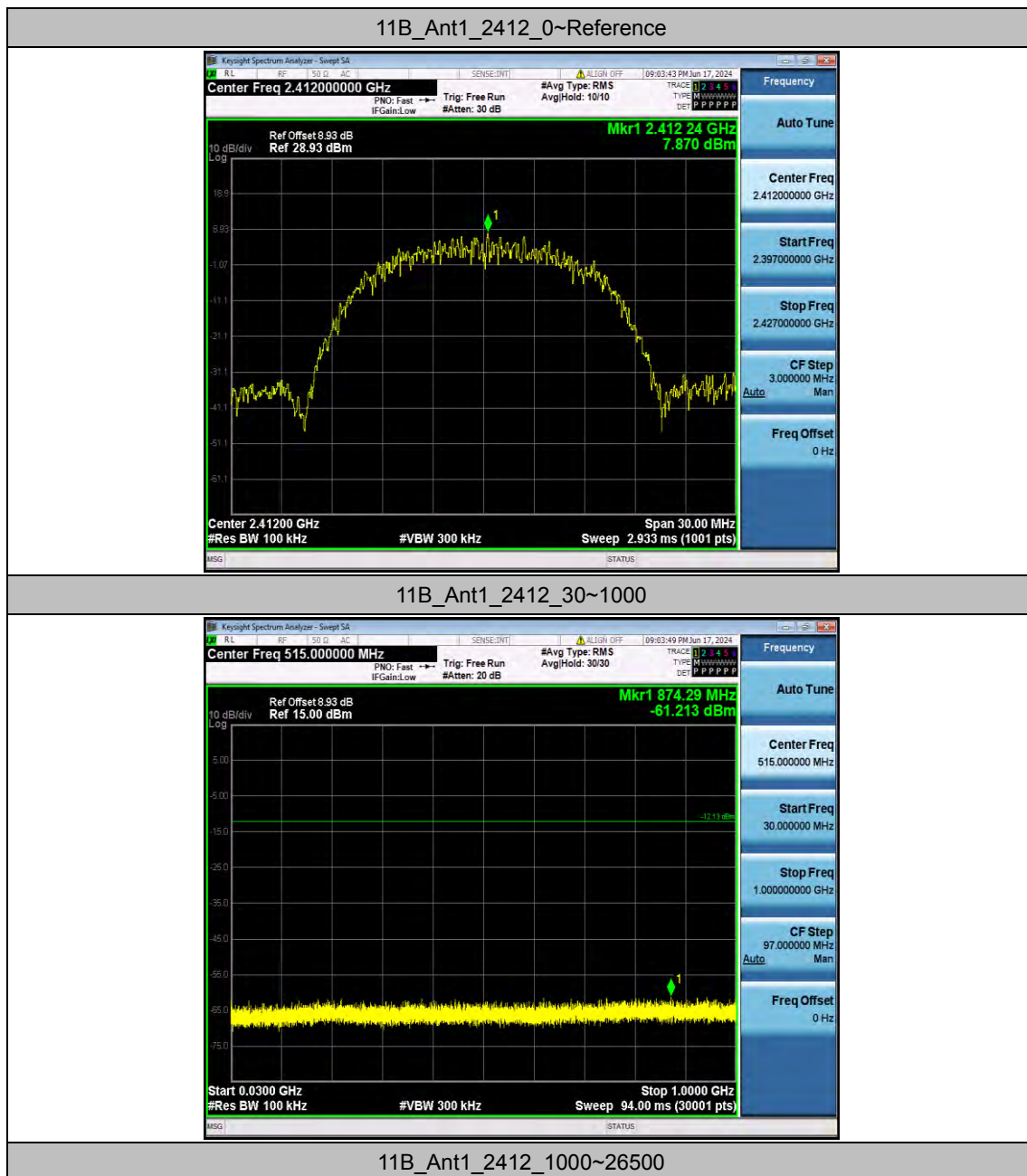


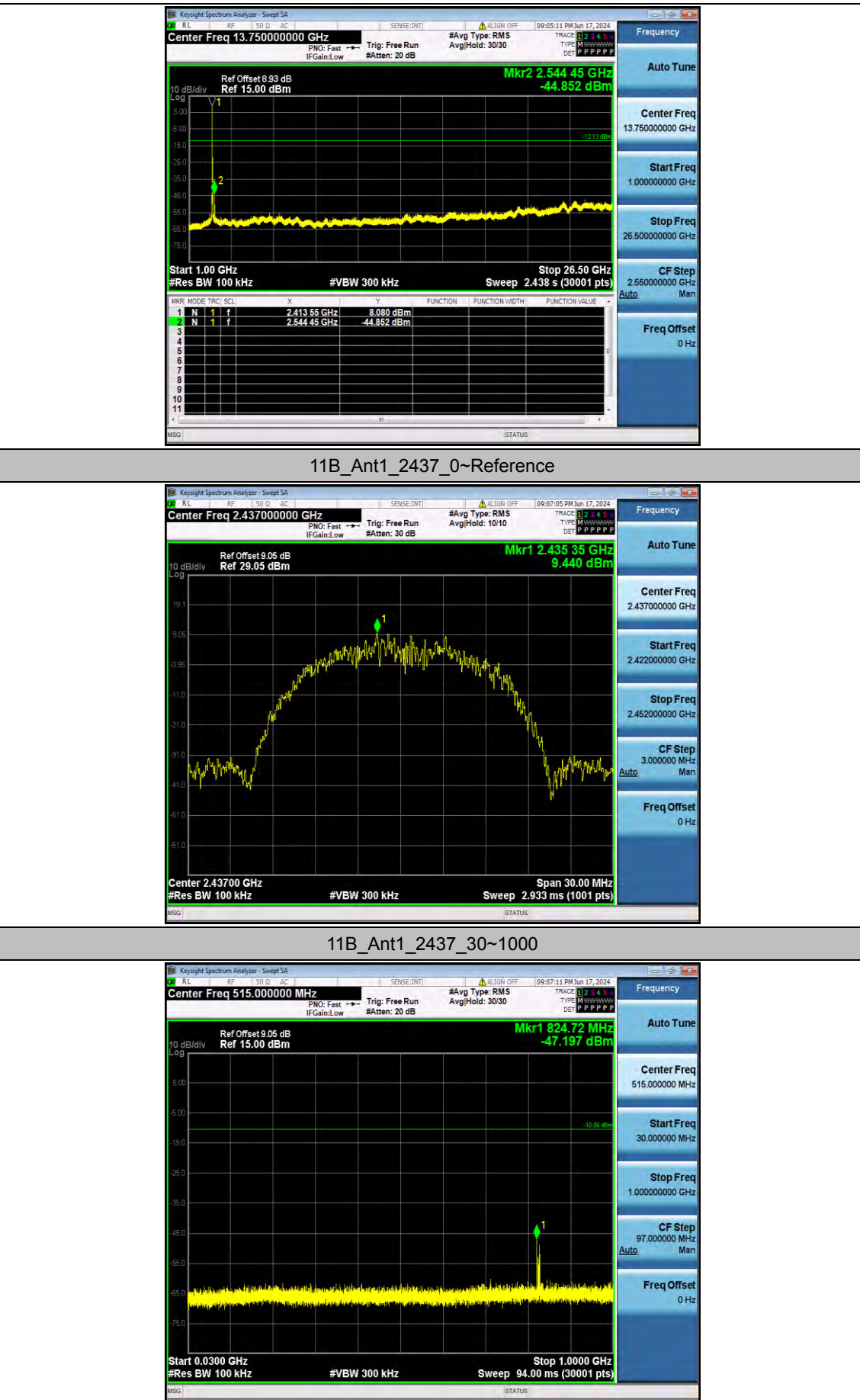
Appendix C.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	7.87	7.87	---	PASS
			30~1000	7.87	-61.21	≤ -12.13	PASS
			1000~26500	7.87	-44.85	≤ -12.13	PASS
		2437	Reference	9.44	9.44	---	PASS
			30~1000	9.44	-47.2	≤ -10.56	PASS
			1000~26500	9.44	-47.81	≤ -10.56	PASS
		2462	Reference	8.51	8.51	---	PASS
			30~1000	8.51	-47.16	≤ -11.49	PASS
			1000~26500	8.51	-47.76	≤ -11.49	PASS
11G	Ant1	2412	Reference	-0.05	-0.05	---	PASS
			30~1000	-0.05	-60.24	≤ -20.05	PASS
			1000~26500	-0.05	-47.23	≤ -20.05	PASS
		2437	Reference	2.08	2.08	---	PASS
			30~1000	2.08	-60.61	≤ -17.92	PASS
			1000~26500	2.08	-47.98	≤ -17.92	PASS
		2462	Reference	1.12	1.12	---	PASS
			30~1000	1.12	-60.62	≤ -18.88	PASS
			1000~26500	1.12	-44.26	≤ -18.88	PASS
11N20SISO	Ant1	2412	Reference	-1.63	-1.63	---	PASS
			30~1000	-1.63	-60.63	≤ -21.63	PASS
			1000~26500	-1.63	-48.32	≤ -21.63	PASS
		2437	Reference	0.48	0.48	---	PASS
			30~1000	0.48	-60.81	≤ -19.52	PASS
			1000~26500	0.48	-46.94	≤ -19.52	PASS
		2462	Reference	-0.29	-0.29	---	PASS
			30~1000	-0.29	-60.72	≤ -20.29	PASS
			1000~26500	-0.29	-47.85	≤ -20.29	PASS
11N40SISO	Ant1	2422	Reference	-2.56	-2.56	---	PASS
			30~1000	-2.56	-59.04	≤ -22.56	PASS
			1000~26500	-2.56	-47.63	≤ -22.56	PASS
		2437	Reference	-1.10	-1.10	---	PASS
			30~1000	-1.10	-56.88	≤ -21.1	PASS
			1000~26500	-1.10	-47.63	≤ -21.1	PASS
		2452	Reference	-3.44	-3.44	---	PASS
			30~1000	-3.44	-59.99	≤ -23.44	PASS
			1000~26500	-3.44	-47.81	≤ -23.44	PASS

Test Graphs





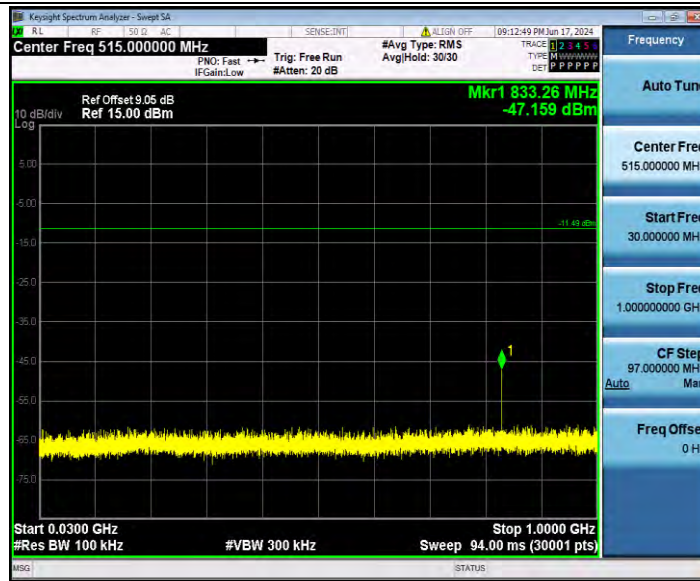
11B_Ant1_2437_1000~26500



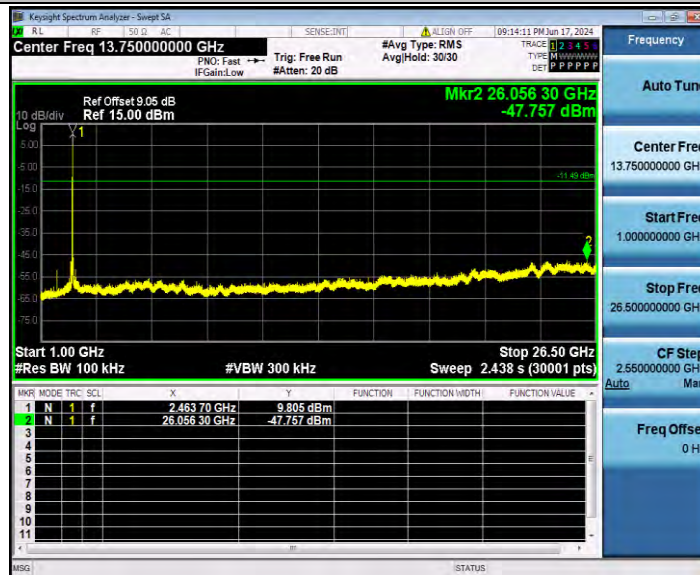
11B_Ant1_2462_0~Reference



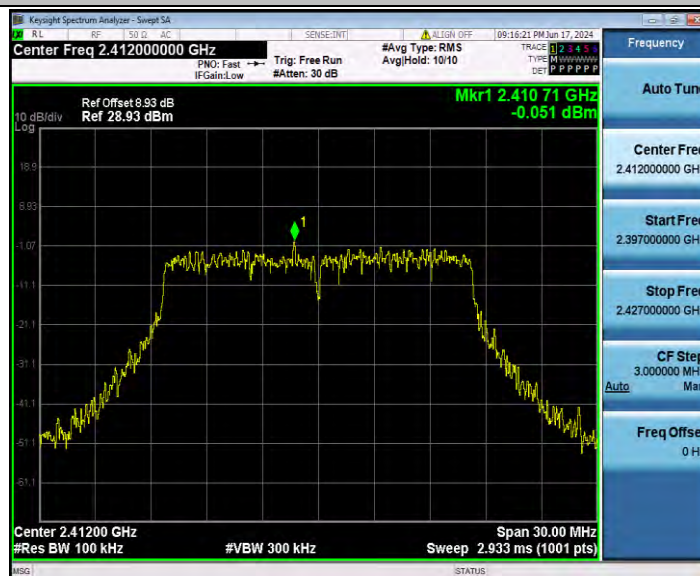
11B_Ant1_2462_30~1000



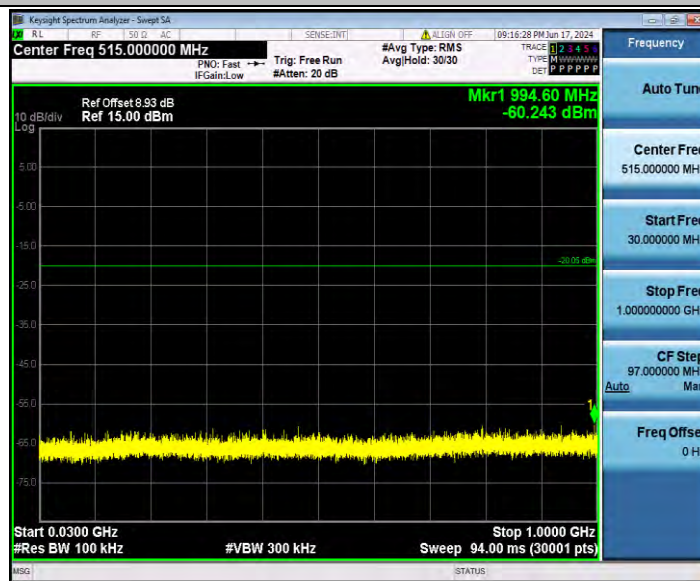
11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



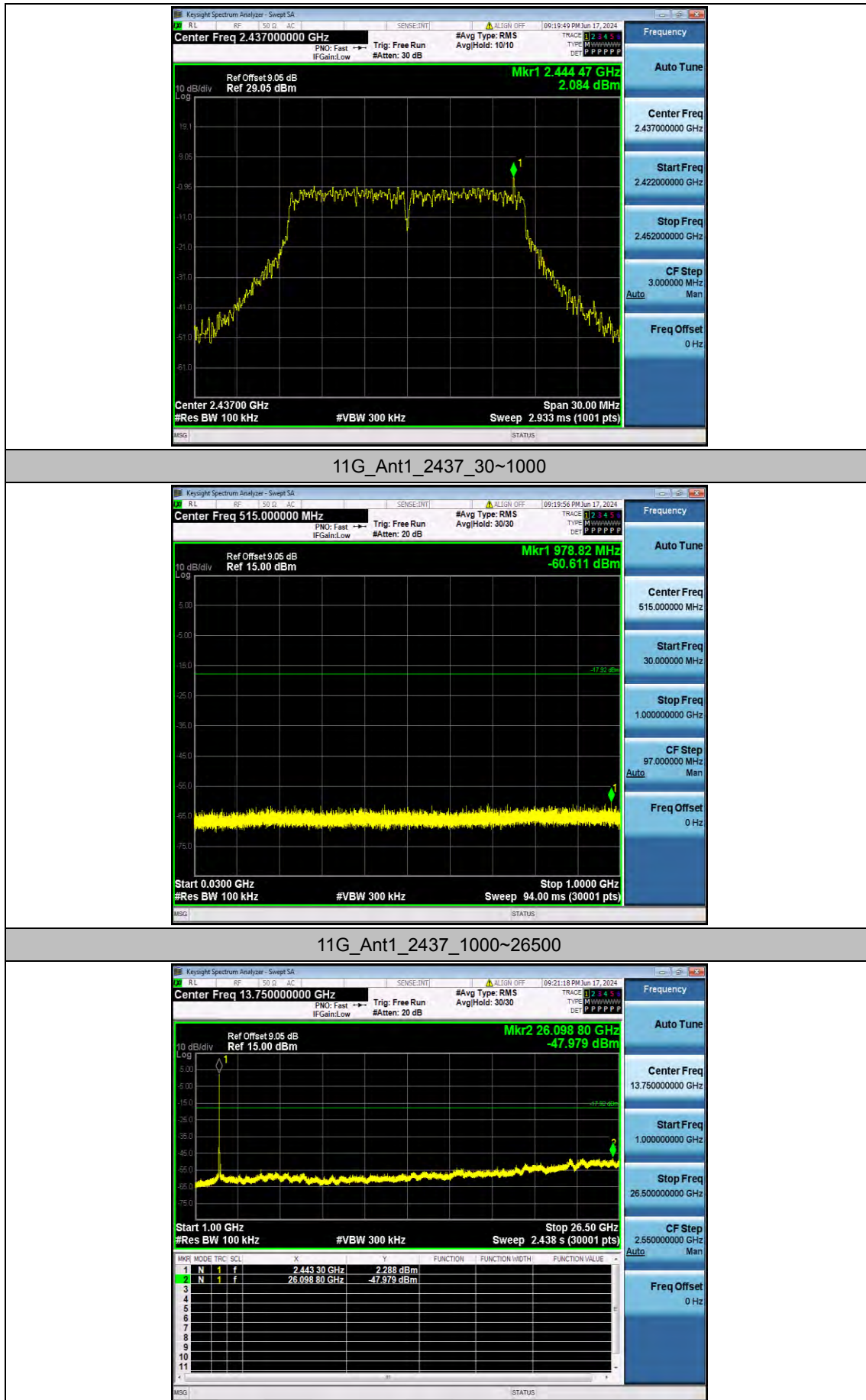
11G_Ant1_2412_30~1000



11G_Ant1_2412_1000~26500



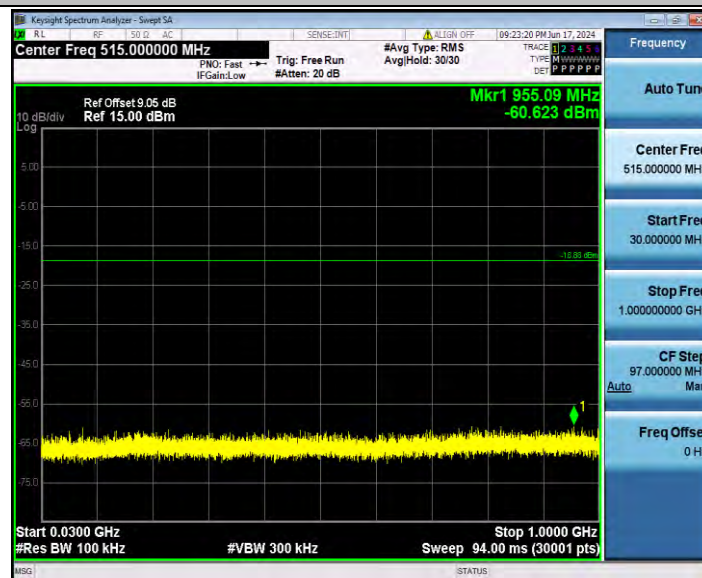
11G_Ant1_2437_0~Reference



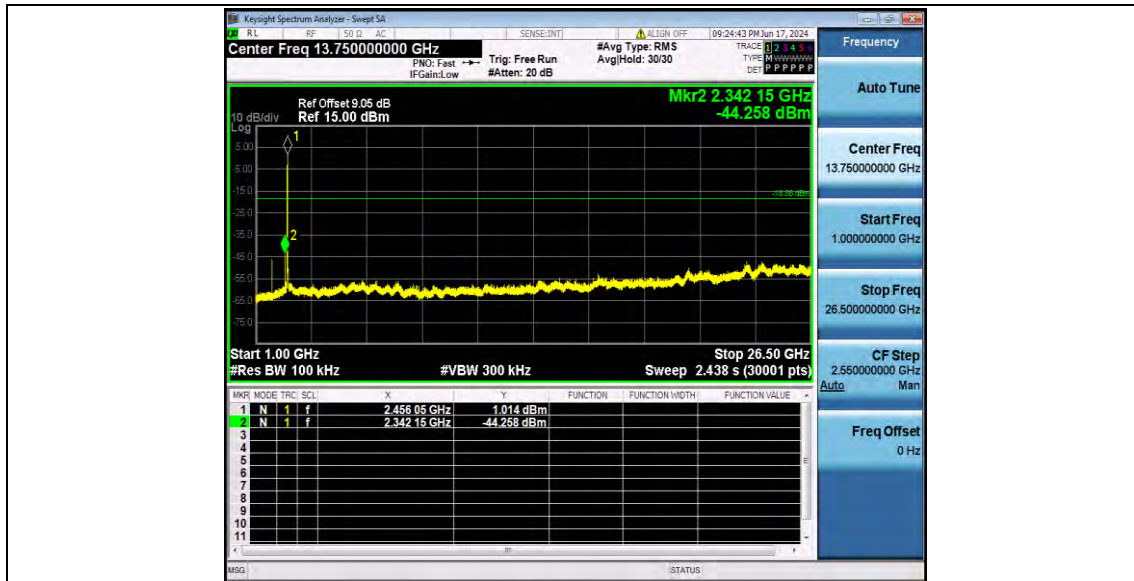
11G_Ant1_2462_0~Reference



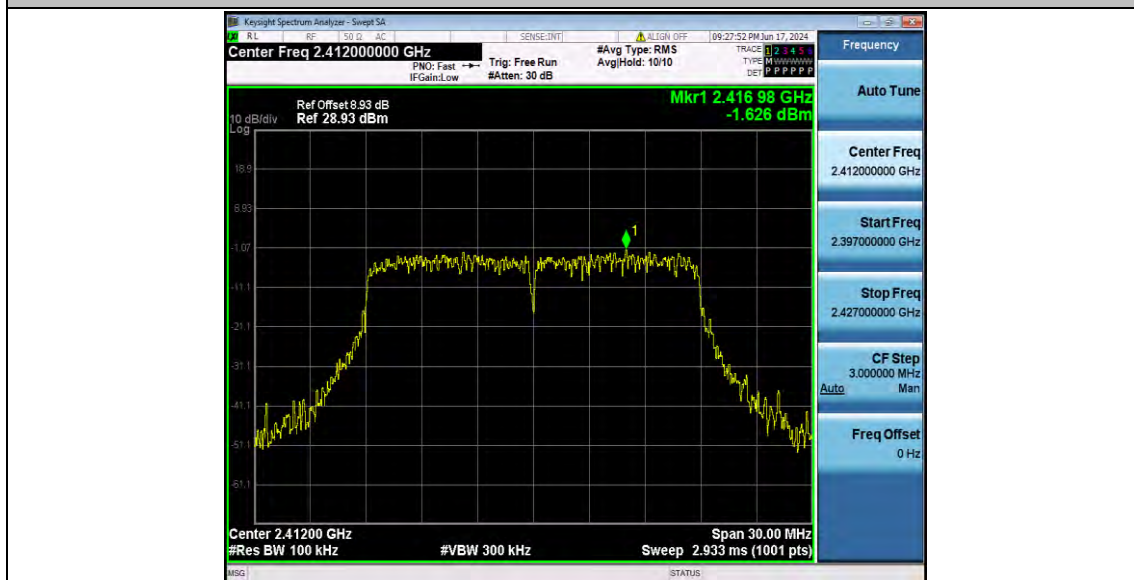
11G_Ant1_2462_30~1000



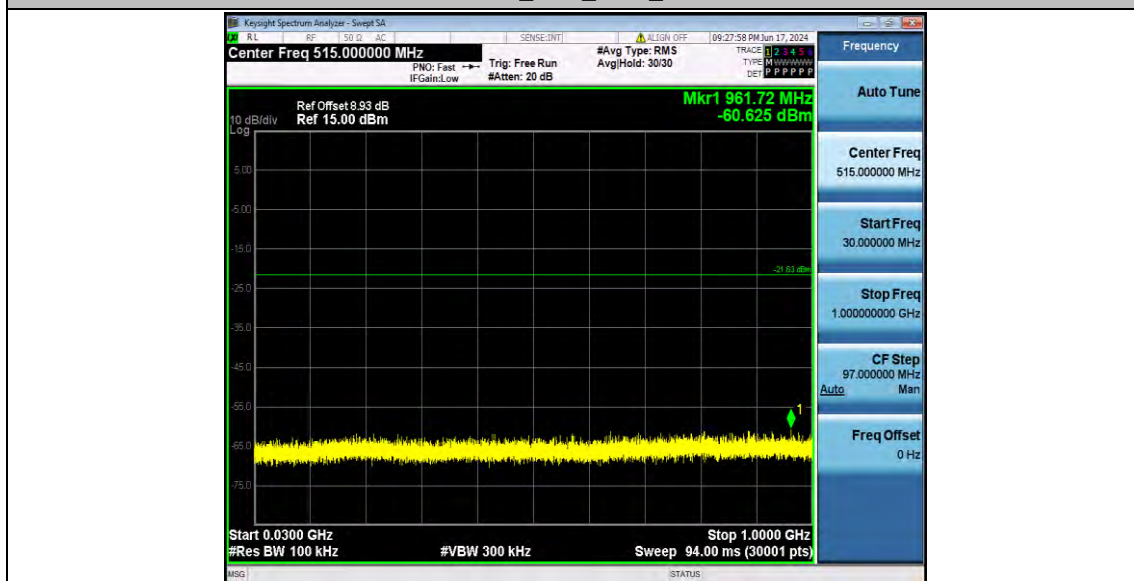
11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



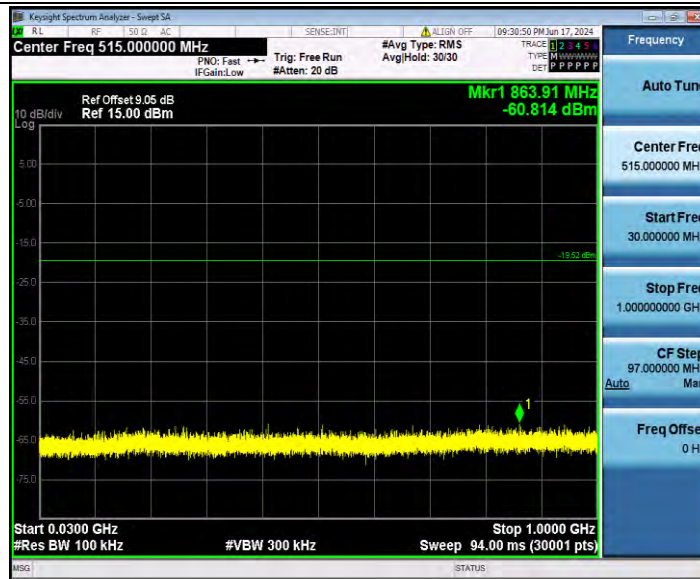
11N20SISO_Ant1_2412_1000~26500



11N20SISO_Ant1_2437_0~Reference



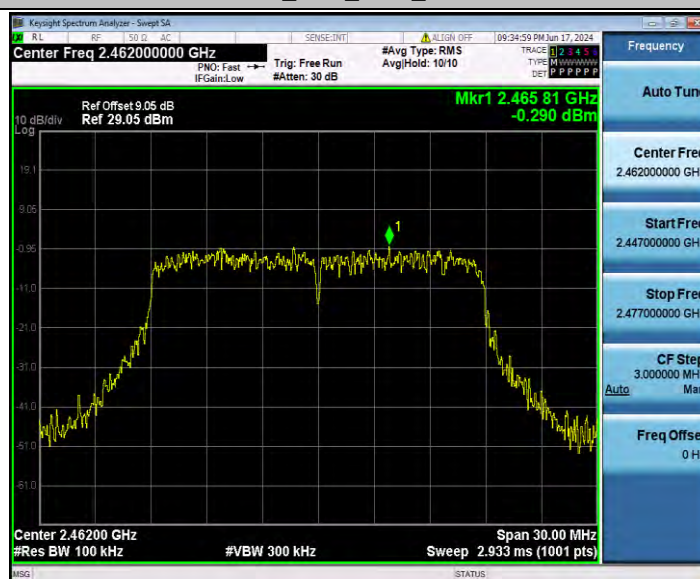
11N20SISO_Ant1_2437_30~1000



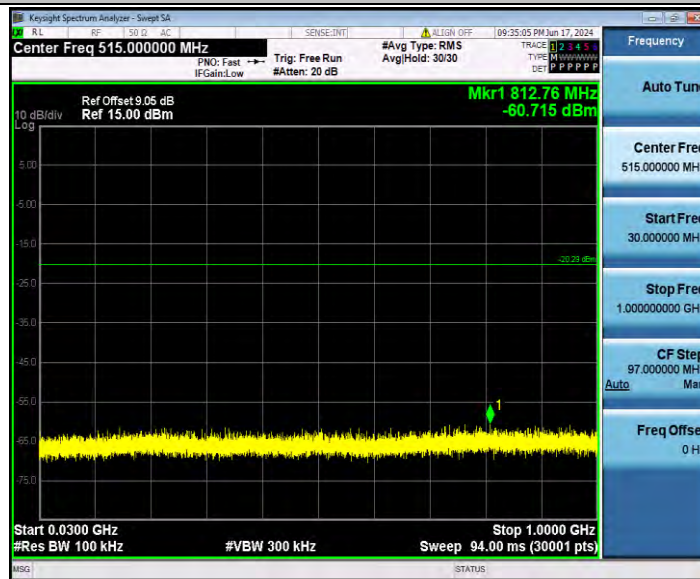
11N20SISO_Ant1_2437_1000~26500



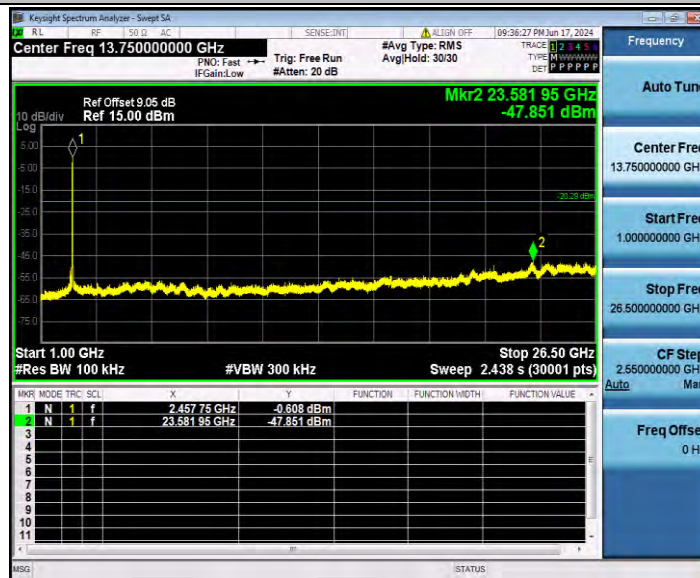
11N20SISO_Ant1_2462_0~Reference



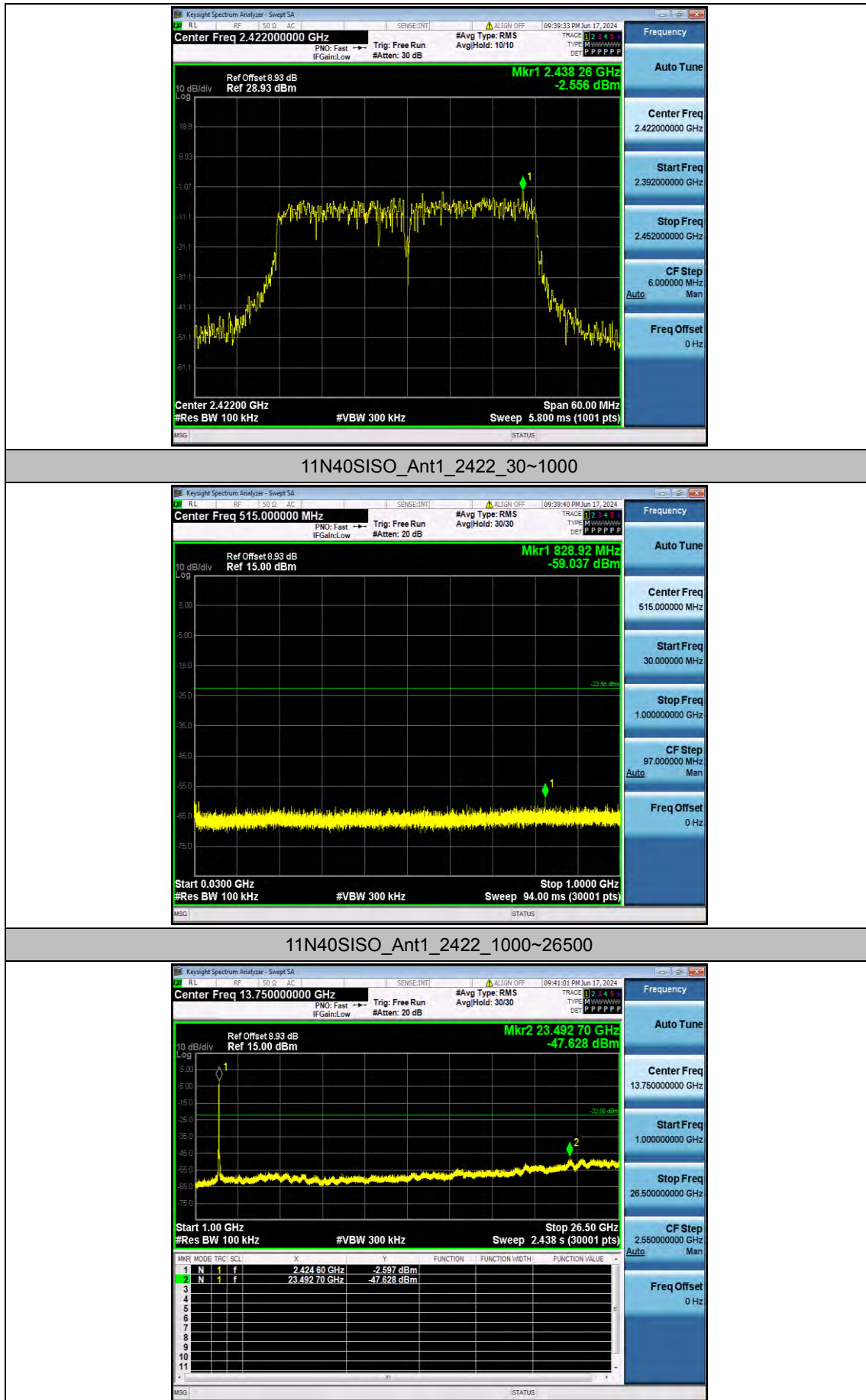
11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



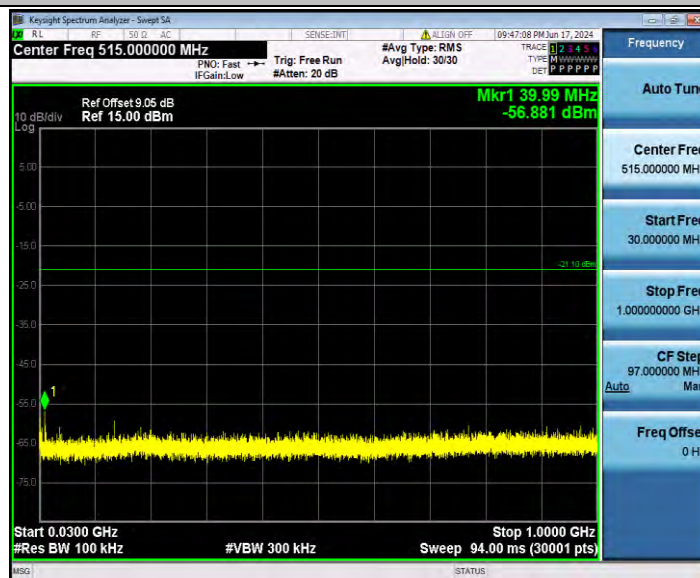
11N40SISO_Ant1_2422_0~Reference



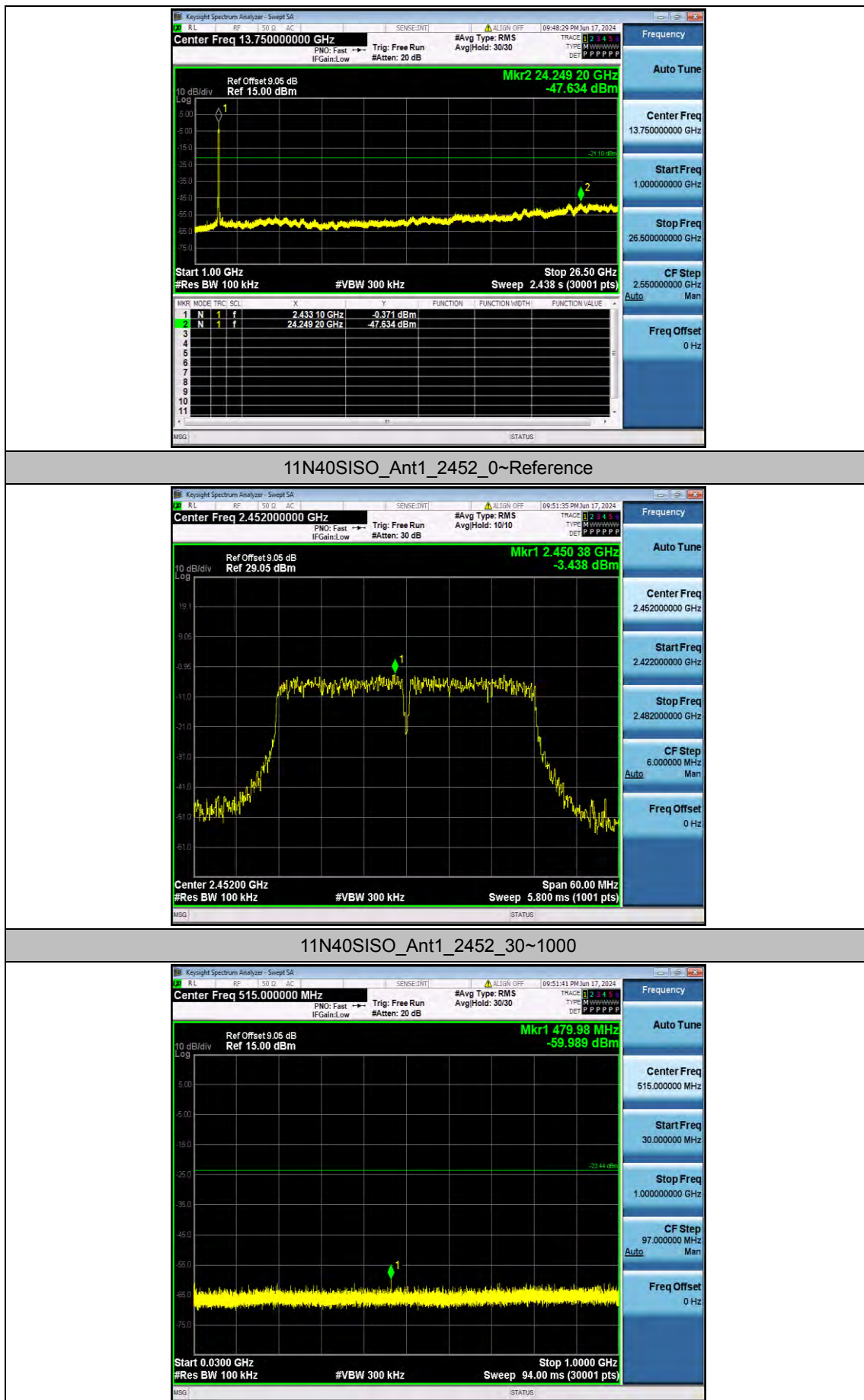
11N40SISO_Ant1_2437_0~Reference



11N40SISO_Ant1_2437_30~1000



11N40SISO_Ant1_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	Ant1	Low	2412	AV	2310.000	-49.24	≤-41.20	45.96	≤54	PASS
				AV	2386.840	-46.47	≤-41.20	48.73	≤54	PASS
				AV	2390.000	-46.51	≤-41.20	48.69	≤54	PASS
				Peak	2310.000	-45.88	≤-21.20	49.32	≤74	PASS
				Peak	2326.130	-39.16	≤-21.20	56.04	≤74	PASS
				Peak	2390.000	-45.92	≤-21.20	49.28	≤74	PASS
		High	2462	AV	2483.500	-47.42	≤-41.20	47.78	≤54	PASS
				AV	2483.670	-47.39	≤-41.20	47.81	≤54	PASS
				AV	2500.000	-48.17	≤-41.20	47.03	≤54	PASS
				Peak	2483.500	-45.63	≤-21.20	49.57	≤74	PASS
				Peak	2488.620	-37.54	≤-21.20	57.66	≤74	PASS
				Peak	2500.000	-45.07	≤-21.20	50.13	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.29	≤-41.20	45.91	≤54	PASS
				AV	2389.960	-46.1	≤-41.20	49.10	≤54	PASS
				AV	2390.000	-46.1	≤-41.20	49.10	≤54	PASS
				Peak	2310.000	-50.43	≤-21.20	44.77	≤74	PASS
				Peak	2373.840	-38.46	≤-21.20	56.74	≤74	PASS
				Peak	2390.000	-42.86	≤-21.20	52.34	≤74	PASS
		High	2462	AV	2483.500	-45.79	≤-41.20	49.41	≤54	PASS
				AV	2483.560	-45.87	≤-41.20	49.33	≤54	PASS
				AV	2500.000	-48.35	≤-41.20	46.85	≤54	PASS
				Peak	2483.500	-40.26	≤-21.20	54.94	≤74	PASS
				Peak	2489.390	-38.96	≤-21.20	56.24	≤74	PASS
				Peak	2500.000	-46.68	≤-21.20	48.52	≤74	PASS
11N20SISO	Ant1	Low	2412	AV	2310.000	-49.25	≤-41.20	45.95	≤54	PASS
				AV	2389.960	-45.62	≤-41.20	49.58	≤54	PASS
				AV	2390.000	-45.62	≤-41.20	49.58	≤54	PASS
				Peak	2310.000	-42.83	≤-21.20	52.37	≤74	PASS
				Peak	2389.440	-39.01	≤-21.20	56.19	≤74	PASS
				Peak	2390.000	-41.01	≤-21.20	54.19	≤74	PASS
		High	2462	AV	2483.500	-45.82	≤-41.20	49.38	≤54	PASS
				AV	2483.560	-45.86	≤-41.20	49.34	≤54	PASS
				AV	2500.000	-48.4	≤-41.20	46.80	≤54	PASS
				Peak	2483.500	-43.28	≤-21.20	51.92	≤74	PASS

				Peak	2484.330	-38.18	≤ -21.20	57.02	≤ 74	PASS
				Peak	2500.000	-43.69	≤ -21.20	51.51	≤ 74	PASS
11N40SISO	Ant1	Low	2422	AV	2310.000	-49.4	≤ -41.20	45.80	≤ 54	PASS
				AV	2389.180	-44.19	≤ -41.20	51.01	≤ 54	PASS
				AV	2390.000	-44.36	≤ -41.20	50.84	≤ 54	PASS
				Peak	2310.000	-49.5	≤ -21.20	45.70	≤ 74	PASS
				Peak	2378.390	-33.66	≤ -21.20	61.54	≤ 74	PASS
				Peak	2390.000	-47.32	≤ -21.20	47.88	≤ 74	PASS
		High	2452	AV	2483.500	-46.25	≤ -41.20	48.95	≤ 54	PASS
				AV	2484.660	-46.16	≤ -41.20	49.04	≤ 54	PASS
				AV	2500.000	-47.68	≤ -41.20	47.52	≤ 54	PASS
				Peak	2483.500	-42.92	≤ -21.20	52.28	≤ 74	PASS
				Peak	2489.280	-36.88	≤ -21.20	58.32	≤ 74	PASS
				Peak	2500.000	-44.95	≤ -21.20	50.25	≤ 74	PASS

Note:

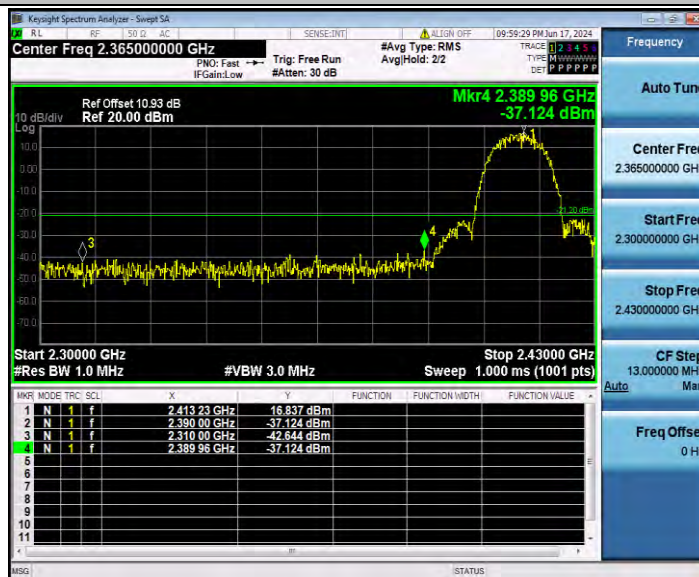
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

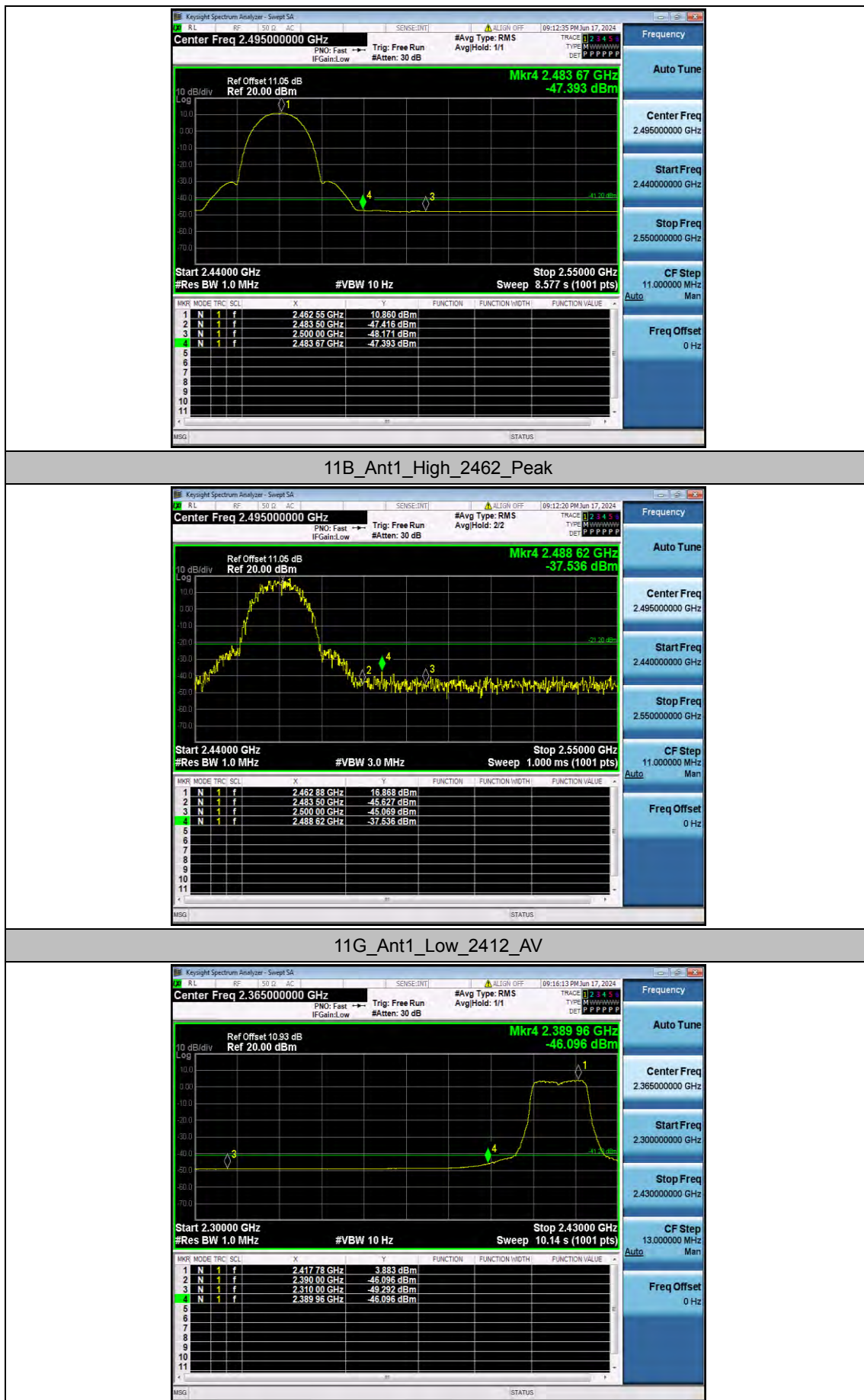
11B_Ant1_Low_2412_AV



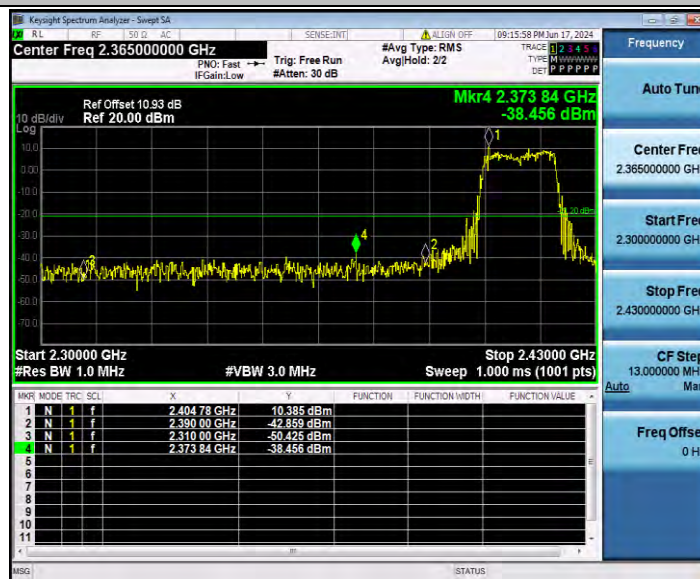
11B_Ant1_Low_2412_Peak



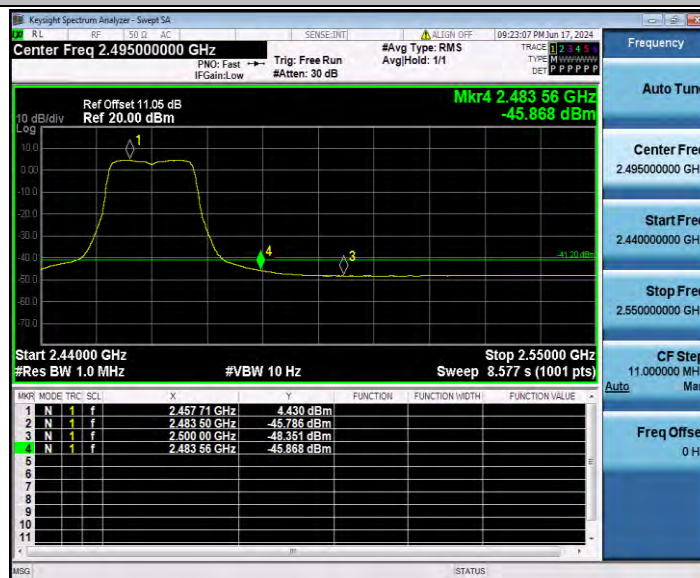
11B_Ant1_High_2462_AV



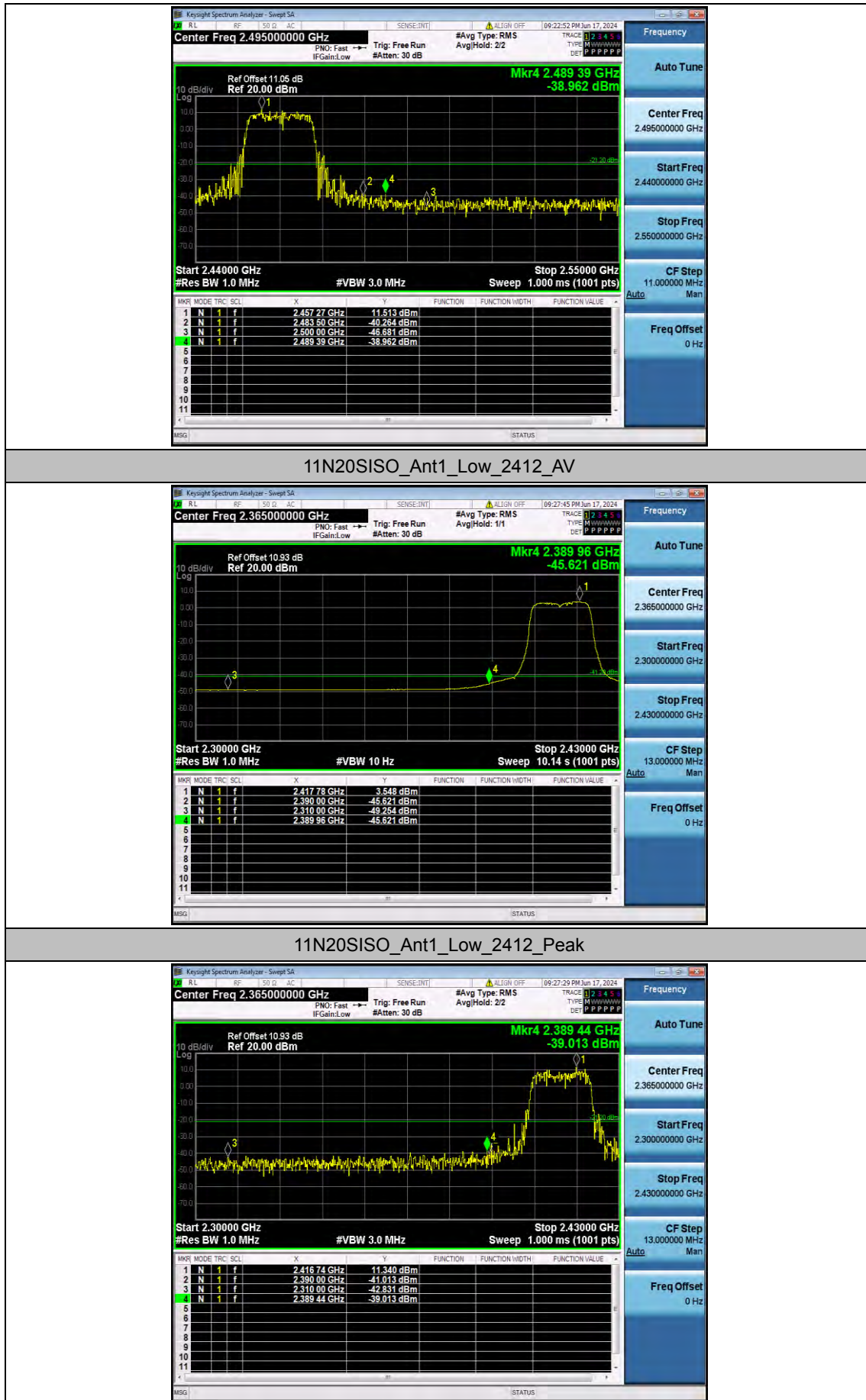
11G_Ant1_Low_2412_Peak



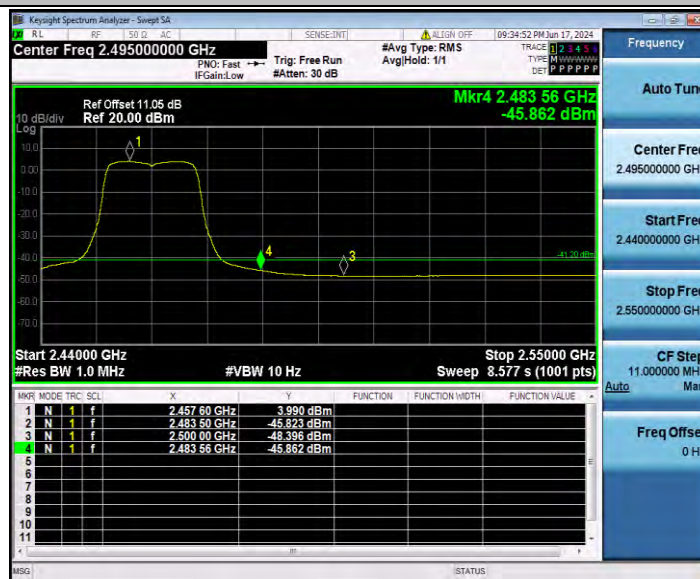
11G_Ant1_High_2462_AV



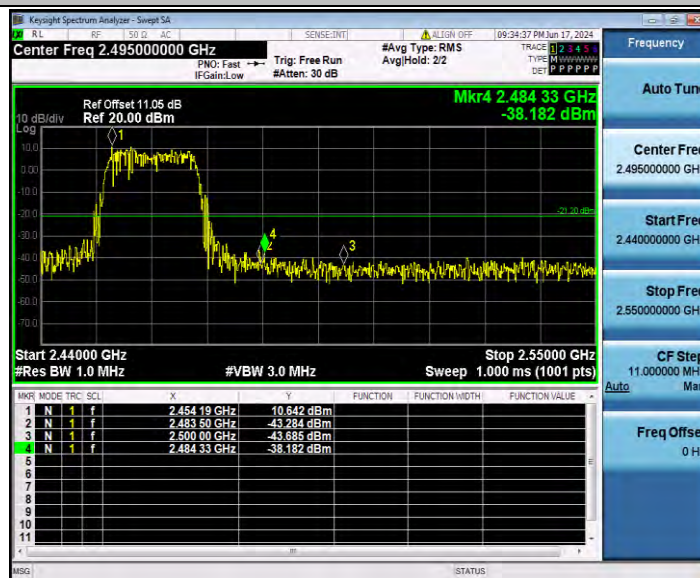
11G_Ant1_High_2462_Peak



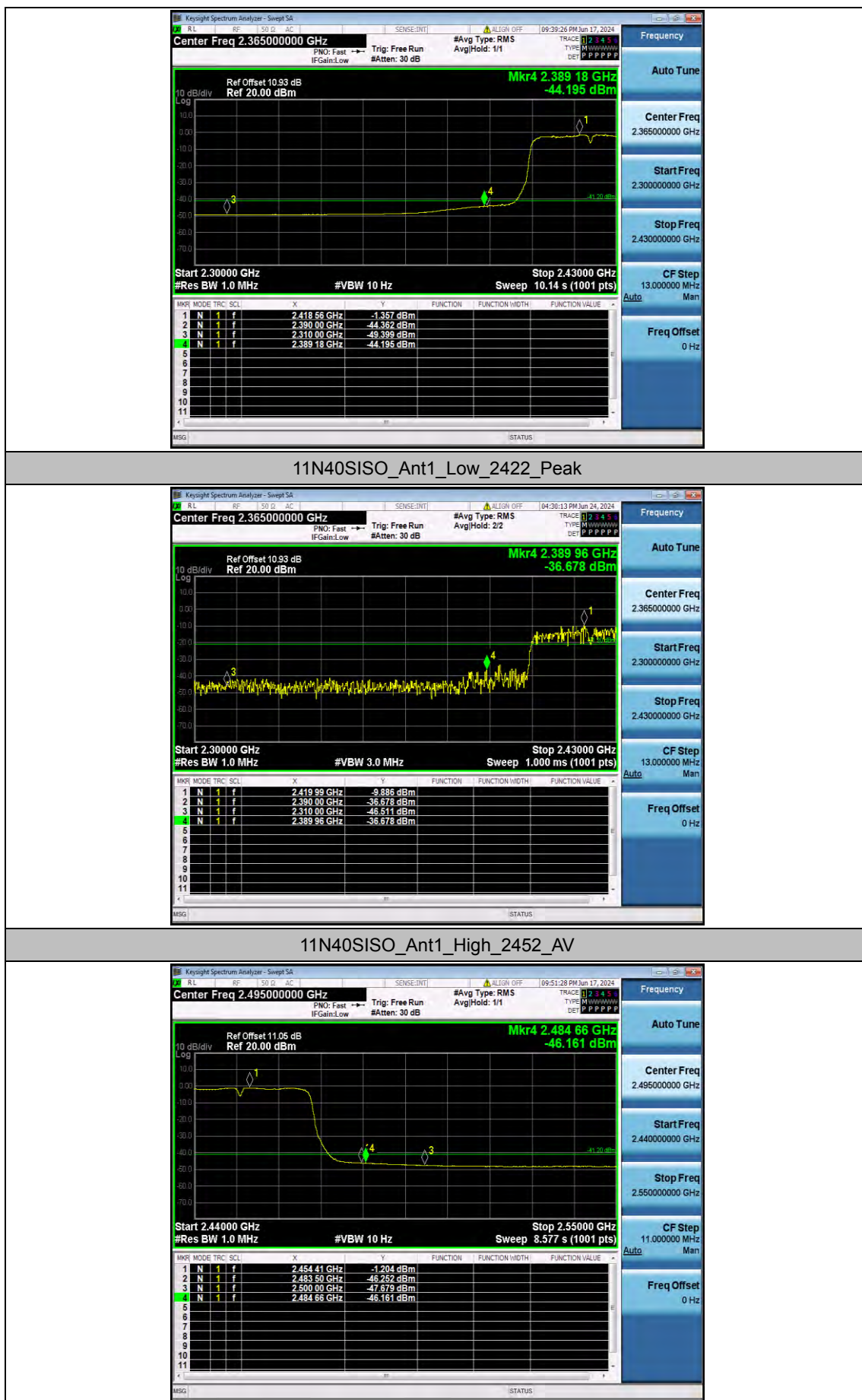
11N20SISO_Ant1_High_2462_AV



11N20SISO_Ant1_High_2462_Peak



11N40SISO_Ant1_Low_2422_AV



11N40SISO_Ant1_High_2452_Peak

