

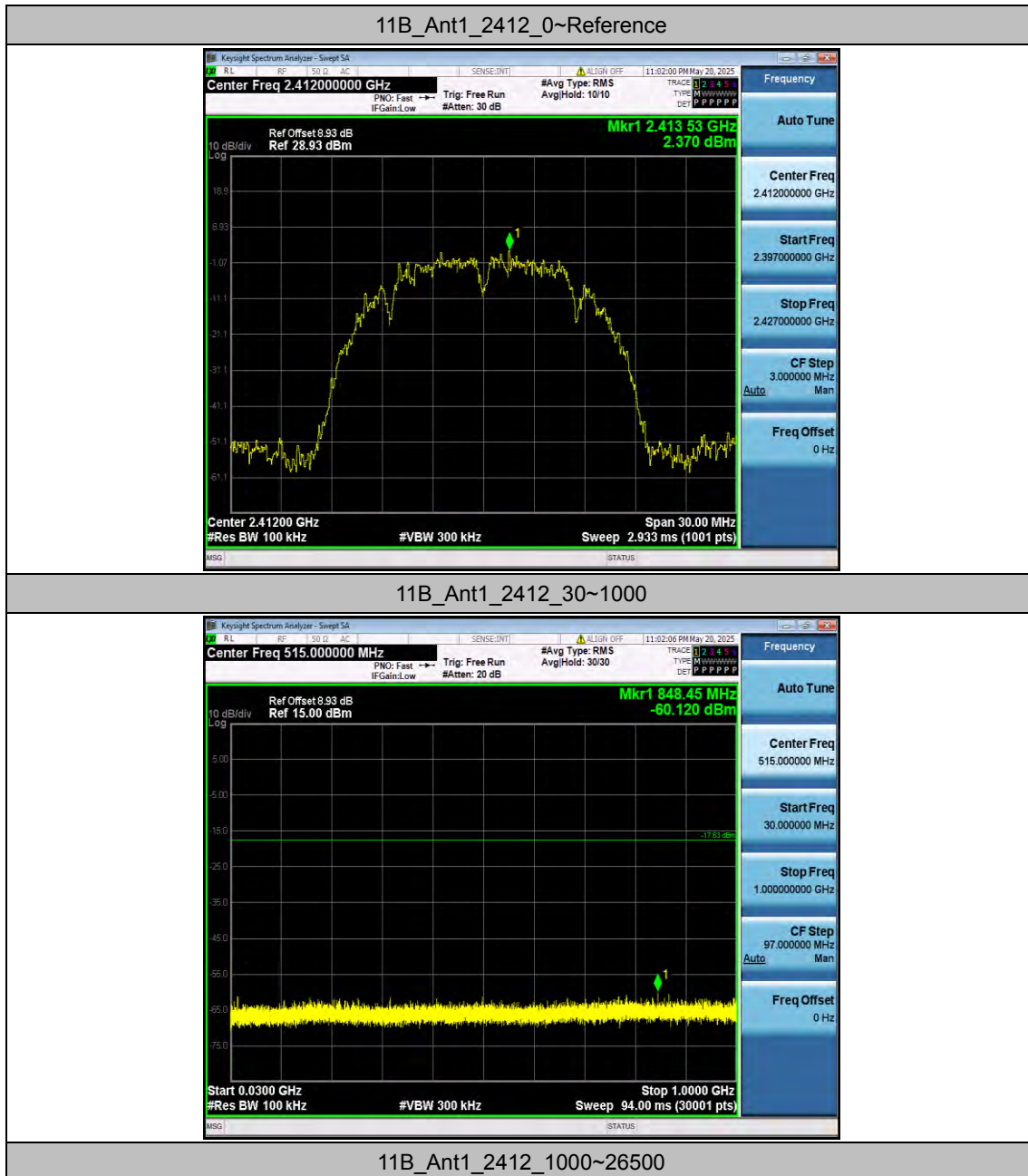
Appendix A.6: Conducted Spurious Emission

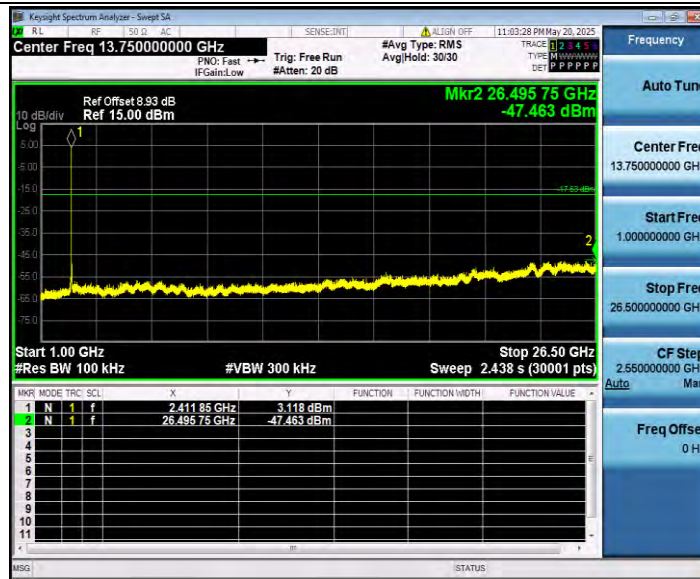
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.37	2.37	---	PASS
			30~1000	2.37	-60.12	≤ -17.63	PASS
			1000~26500	2.37	-47.46	≤ -17.63	PASS
		2437	Reference	2.48	2.48	---	PASS
			30~1000	2.48	-60.49	≤ -17.52	PASS
			1000~26500	2.48	-46.26	≤ -17.52	PASS
		2462	Reference	3.85	3.85	---	PASS
			30~1000	3.85	-60.17	≤ -16.15	PASS
			1000~26500	3.85	-47.76	≤ -16.15	PASS
11G	Ant1	2412	Reference	-1.10	-1.10	---	PASS
			30~1000	-1.10	-60.67	≤ -21.1	PASS
			1000~26500	-1.10	-47.28	≤ -21.1	PASS
		2437	Reference	0.76	0.76	---	PASS
			30~1000	0.76	-60.5	≤ -19.24	PASS
			1000~26500	0.76	-44.72	≤ -19.24	PASS
		2462	Reference	2.43	2.43	---	PASS
			30~1000	2.43	-60.34	≤ -17.57	PASS
			1000~26500	2.43	-47.62	≤ -17.57	PASS
11N20SISO	Ant1	2412	Reference	-2.74	-2.74	---	PASS
			30~1000	-2.74	-60.53	≤ -22.74	PASS
			1000~26500	-2.74	-47.68	≤ -22.74	PASS
		2437	Reference	-0.43	-0.43	---	PASS
			30~1000	-0.43	-60.15	≤ -20.43	PASS
			1000~26500	-0.43	-46.56	≤ -20.43	PASS
		2462	Reference	-1.21	-1.21	---	PASS
			30~1000	-1.21	-60.22	≤ -21.21	PASS
			1000~26500	-1.21	-47.65	≤ -21.21	PASS
11N40SISO	Ant1	2422	Reference	-4.18	-4.18	---	PASS
			30~1000	-4.18	-60.4	≤ -24.18	PASS
			1000~26500	-4.18	-46.79	≤ -24.18	PASS
		2437	Reference	-5.01	-5.01	---	PASS
			30~1000	-5.01	-60.54	≤ -25.01	PASS
			1000~26500	-5.01	-47.62	≤ -25.01	PASS
		2452	Reference	-1.20	-1.20	---	PASS
			30~1000	-1.20	-60.16	≤ -21.2	PASS
			1000~26500	-1.20	-47.68	≤ -21.2	PASS

11AX20SISO	Ant1	2412	Reference	-1.98	-1.98	---	PASS
			30~1000	-1.98	-60.71	≤ -21.98	PASS
			1000~26500	-1.98	-47.05	≤ -21.98	PASS
		2437	Reference	-1.32	-1.32	---	PASS
			30~1000	-1.32	-60.09	≤ -21.32	PASS
			1000~26500	-1.32	-47.82	≤ -21.32	PASS
		2462	Reference	-1.31	-1.31	---	PASS
			30~1000	-1.31	-60.33	≤ -21.31	PASS
			1000~26500	-1.31	-47.57	≤ -21.31	PASS
11AX40SISO	Ant1	2422	Reference	-4.63	-4.63	---	PASS
			30~1000	-4.63	-60.27	≤ -24.63	PASS
			1000~26500	-4.63	-47.33	≤ -24.63	PASS
		2437	Reference	-3.42	-3.42	---	PASS
			30~1000	-3.42	-60.12	≤ -23.42	PASS
			1000~26500	-3.42	-47.8	≤ -23.42	PASS
		2452	Reference	-2.24	-2.24	---	PASS
			30~1000	-2.24	-60.52	≤ -22.24	PASS
			1000~26500	-2.24	-47.34	≤ -22.24	PASS

Test Graphs

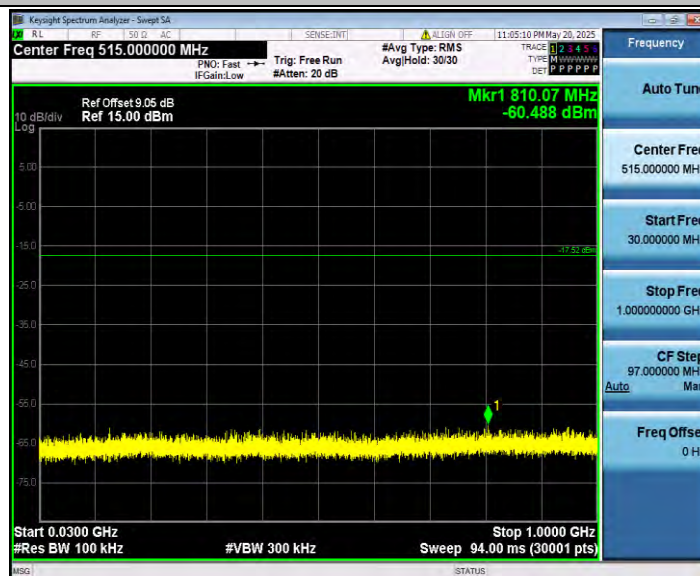




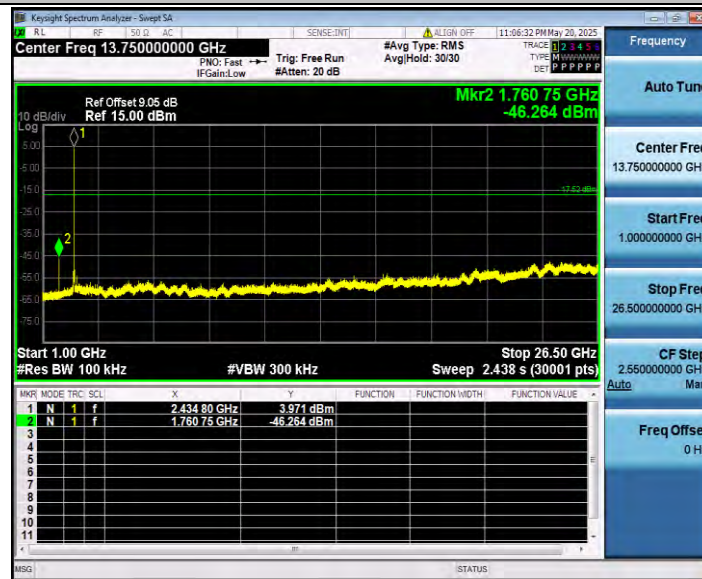
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



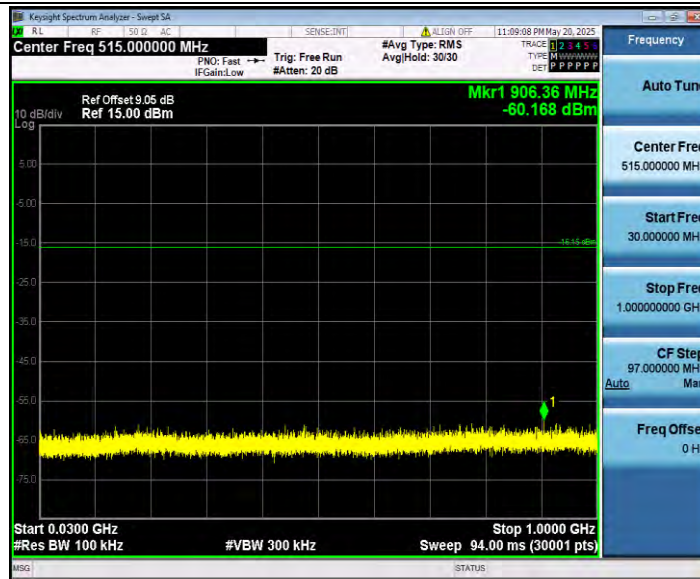
11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



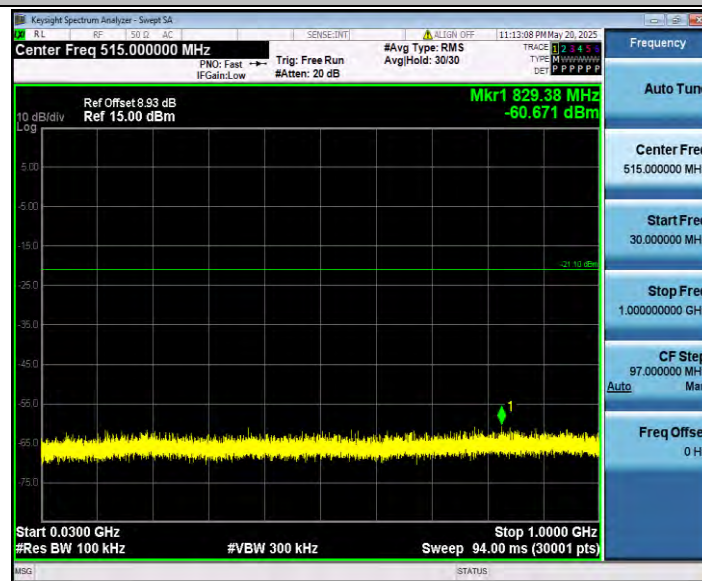
11B_Ant1_2462_1000~26500



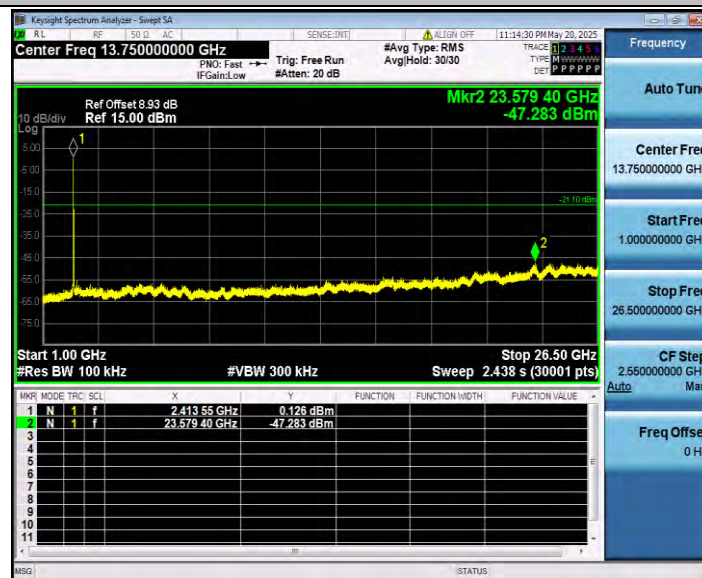
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



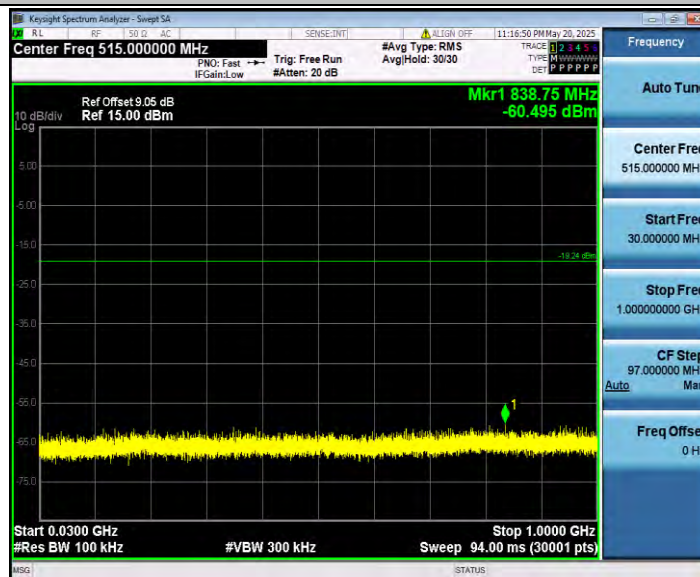
11G_Ant1_2412_1000~26500



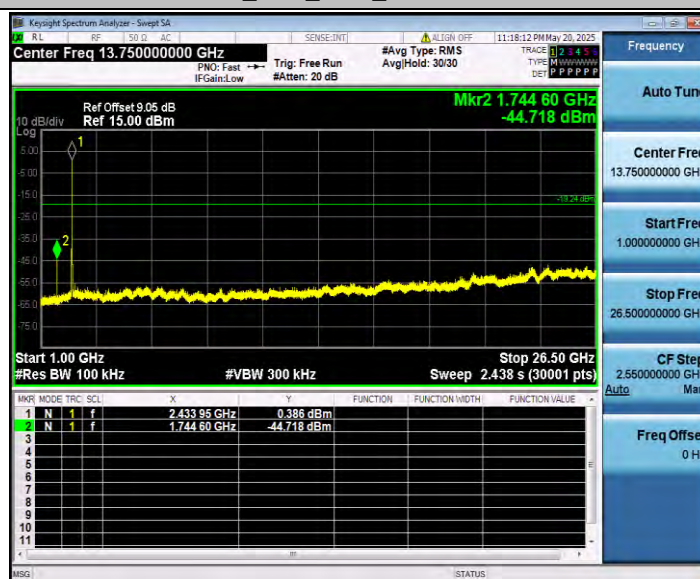
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



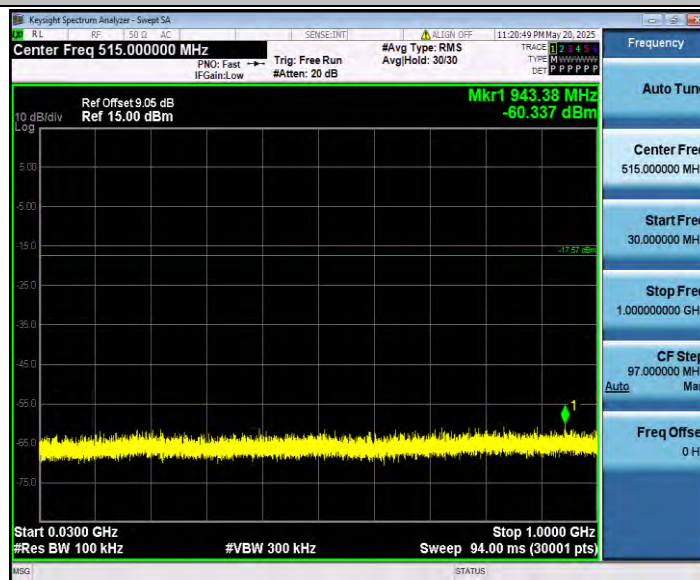
11G_Ant1_2437_1000~26500



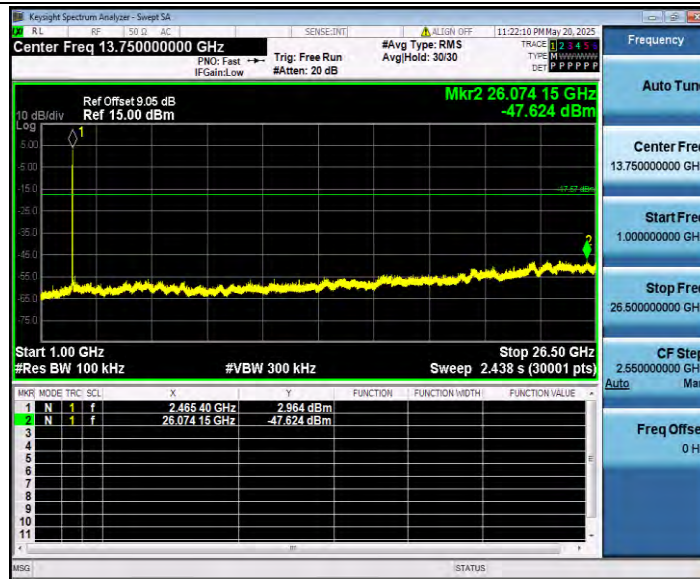
11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



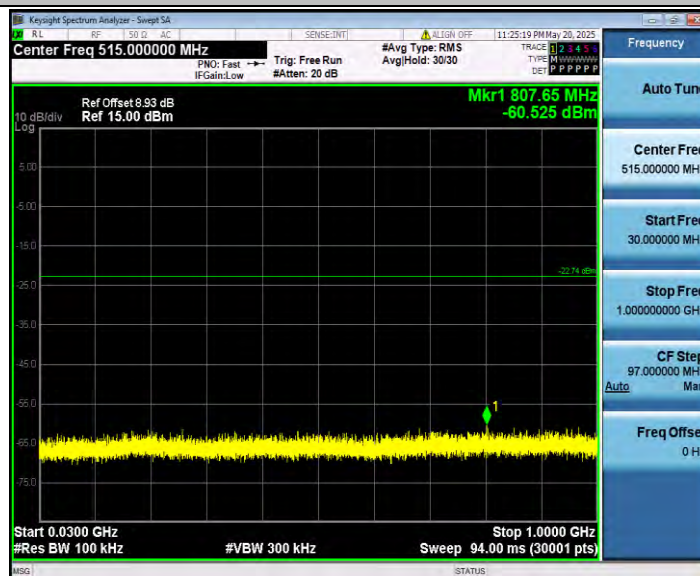
11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



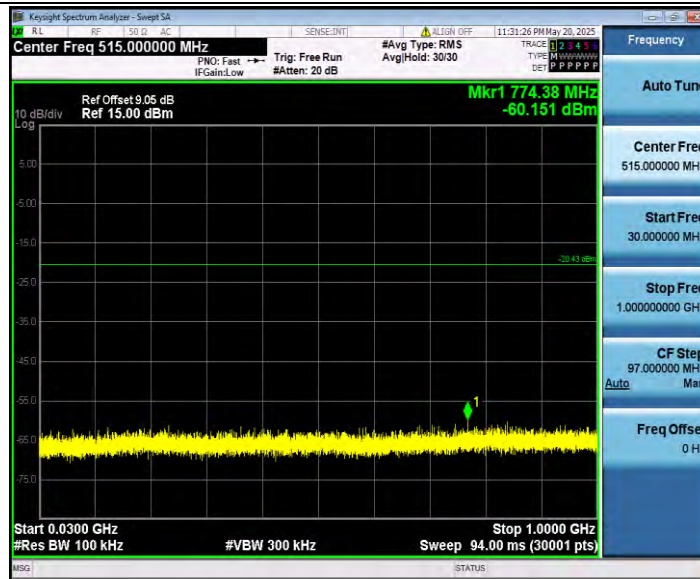
11N20SISO_Ant1_2412_1000~26500



11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000

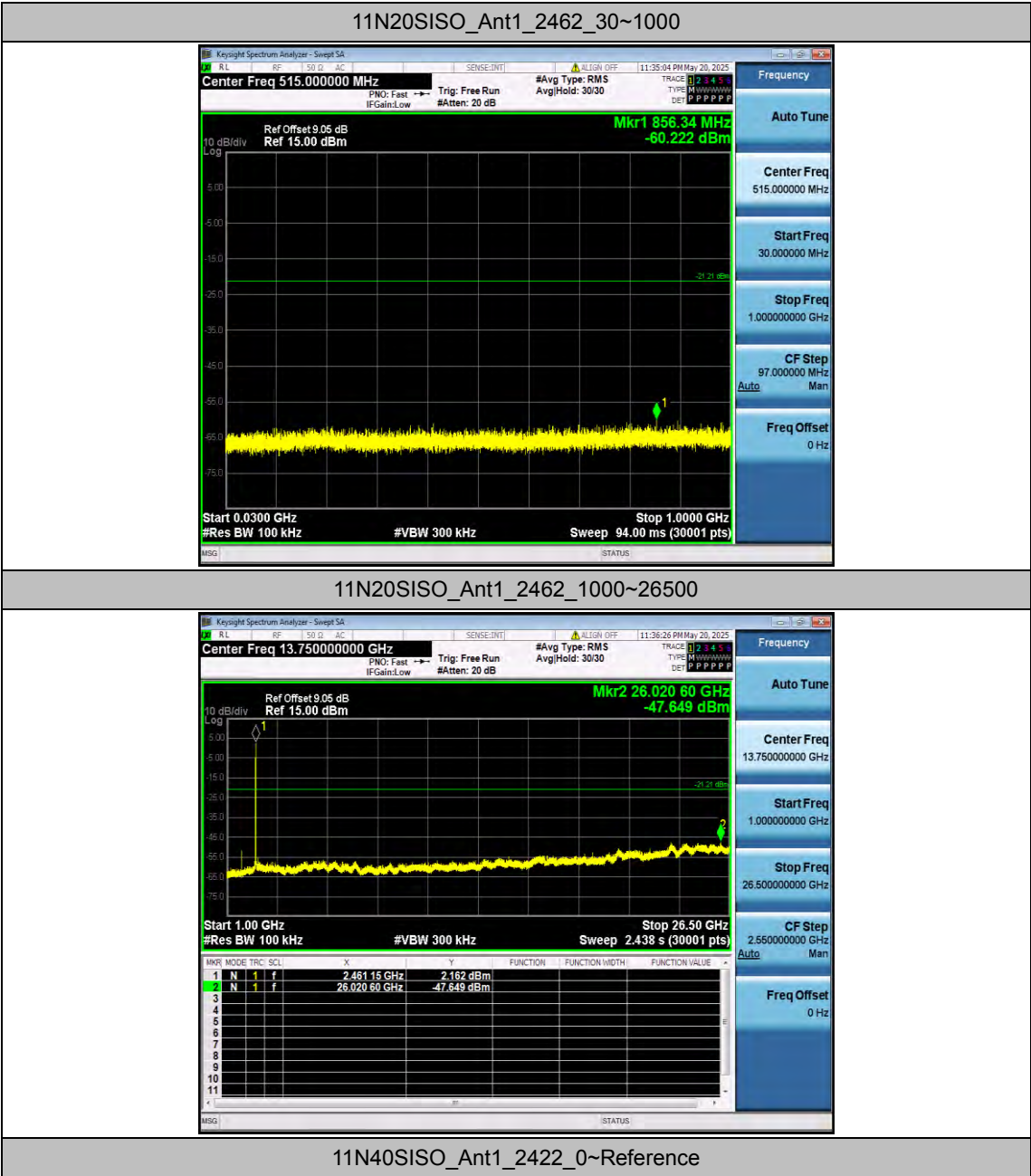


11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference



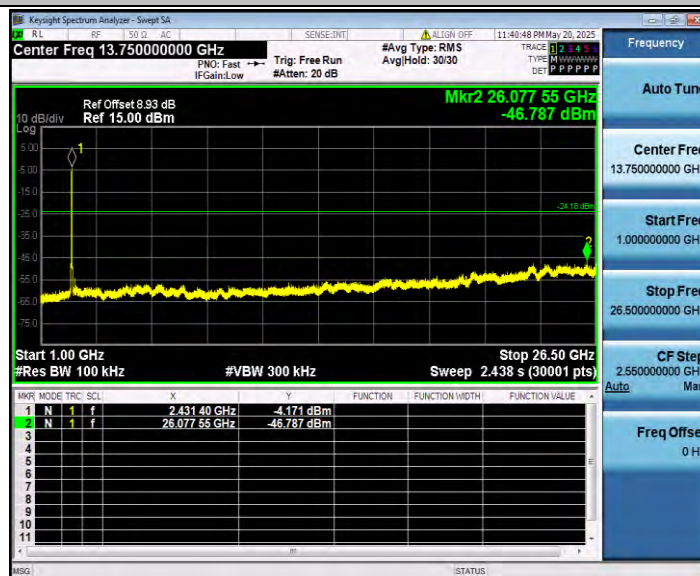




11N40SISO_Ant1_2422_30~1000



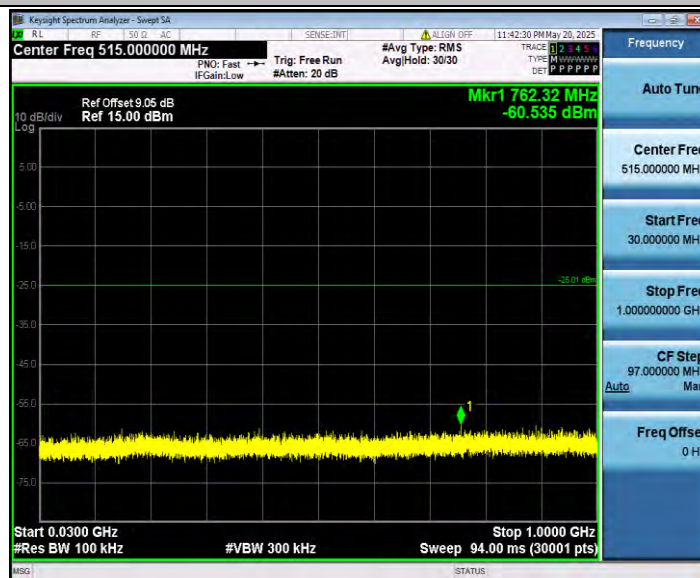
11N40SISO_Ant1_2422_1000~26500



11N40SISO_Ant1_2437_0~Reference



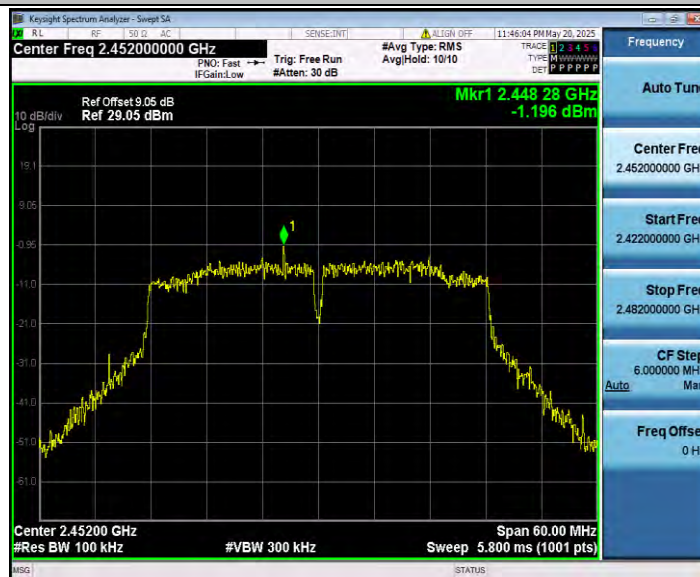
11N40SISO_Ant1_2437_30~1000



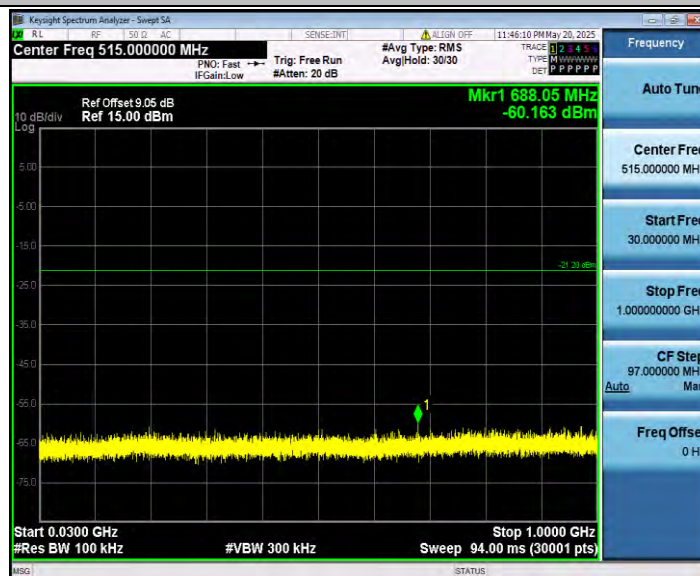
11N40SISO_Ant1_2437_1000~26500

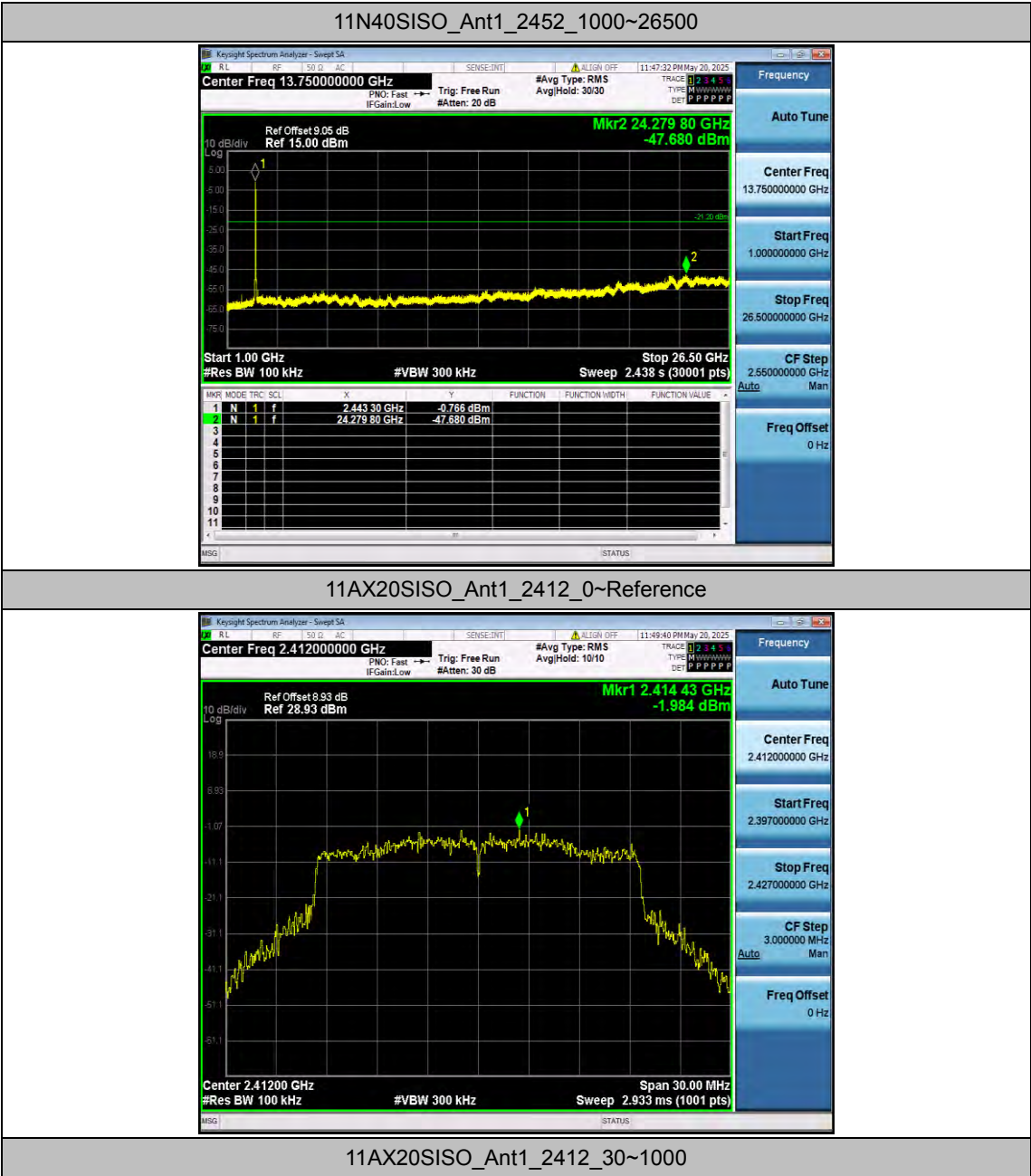


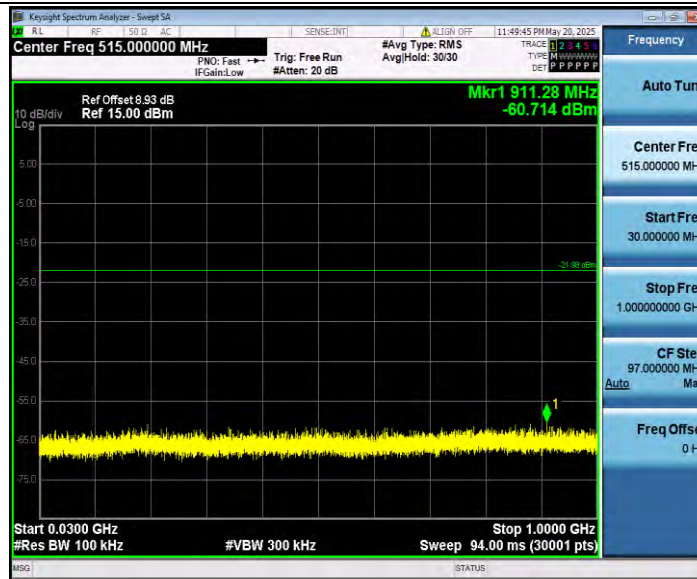
11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000







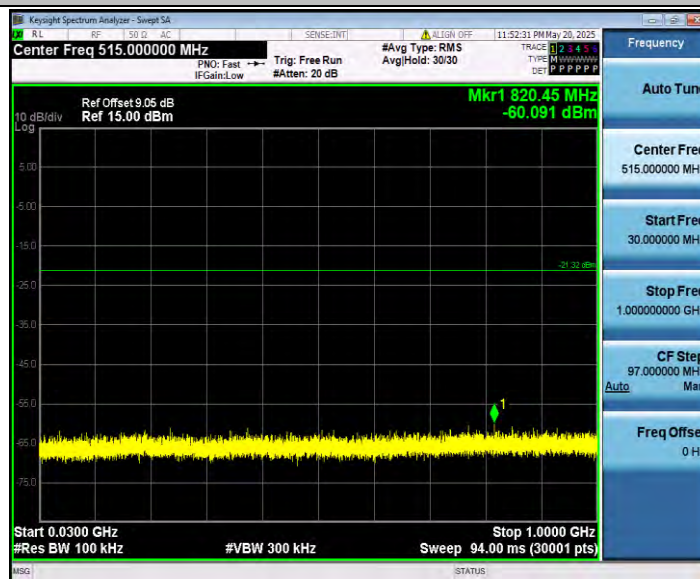
11AX20SISO_Ant1_2412_1000~26500



11AX20SISO_Ant1_2437_0~Reference



11AX20SISO_Ant1_2437_30~1000



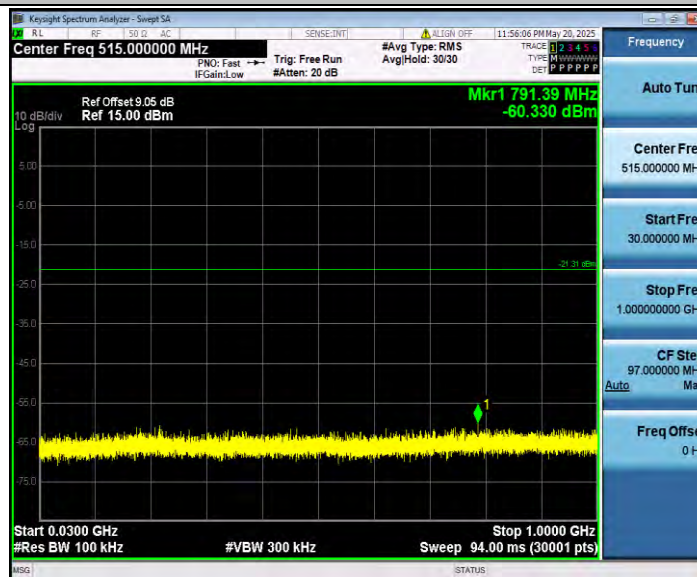
11AX20SISO_Ant1_2437_1000~26500



11AX20SISO_Ant1_2462_0~Reference



11AX20SISO_Ant1_2462_30~1000



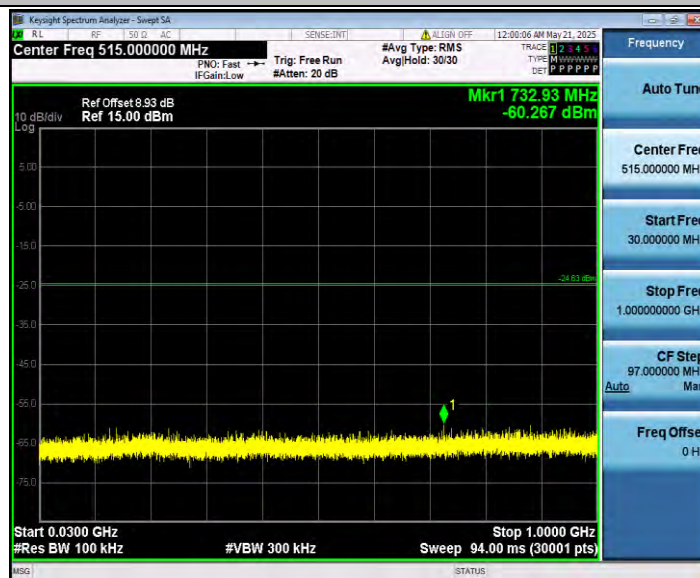
11AX20SISO_Ant1_2462_1000~26500



11AX40SISO_Ant1_2422_0~Reference



11AX40SISO_Ant1_2422_30~1000



11AX40SISO_Ant1_2422_1000~26500

The screenshot displays a Keysight Spectrum Analyzer interface. The main plot shows a signal spectrum with a peak at 2.44792 GHz, labeled 'Mkr1 2.447 92 GHz -3.421 dBm'. The center frequency is set to 2.43700000 GHz. The plot shows a signal with a bandwidth of 60.00 MHz and a resolution bandwidth of 100 kHz. The signal level is approximately -3.421 dBm. The plot also shows a reference level of 29.05 dBm and a reference offset of 9.05 dB. The plot is labeled 'Center Freq 2.43700000 GHz' and 'Span 60.00 MHz'. The plot is also labeled 'Ref Offset 9.05 dB' and 'Ref 29.05 dBm'. The plot is also labeled '10 dB/div' and 'Log'. The plot is also labeled 'Center 2.43700 GHz' and '#Res BW 100 kHz'. The plot is also labeled '#VBW 300 kHz' and 'Sweep 60.00 MHz (1001 pts)'. The plot is also labeled 'MSG' and 'STATUS'.

Key parameters visible on the screen include:

- Center Freq:** 2.43700000 GHz
- Span:** 60.00 MHz
- Ref Offset:** 9.05 dB
- Ref:** 29.05 dBm
- Mkr1:** 2.447 92 GHz, -3.421 dBm
- Trig:** Free Run
- #Avg Type:** RMS
- Avg Hold:** 10/10
- Trig:** Free Run
- #Atten:** 30 dB
- CF Step:** 6.00000 MHz
- Freq Offset:** 0 Hz

The screenshot displays the Keysight Spectrum Analyzer interface. The main plot shows a spectrum with a noise floor around -65 dBm and a marker at 801.09 MHz with a value of -60.121 dBm. The plot is set to a center frequency of 515.000000 MHz. The right-hand panel shows various settings including Frequency, Auto Tune, Center Freq, Start Freq, Stop Freq, CF Step, and Freq Offset.

Top Bar: Keysight Spectrum Analyzer - Sreel SA

Center Freq: 515.000000 MHz

Trig: Free Run

#Avg Type: RMS

Avg/Hold: 30/30

Trace: 1 2 3 4 5

Type: M

DET: P P P P P

Ref Offset: 9.05 dB

Ref: 15.00 dBm

Mkr1: 801.09 MHz

Mkr1 Value: -60.121 dBm

Start: 0.0300 GHz

#Res BW: 100 kHz

#VBW: 300 kHz

Stop: 1.0000 GHz

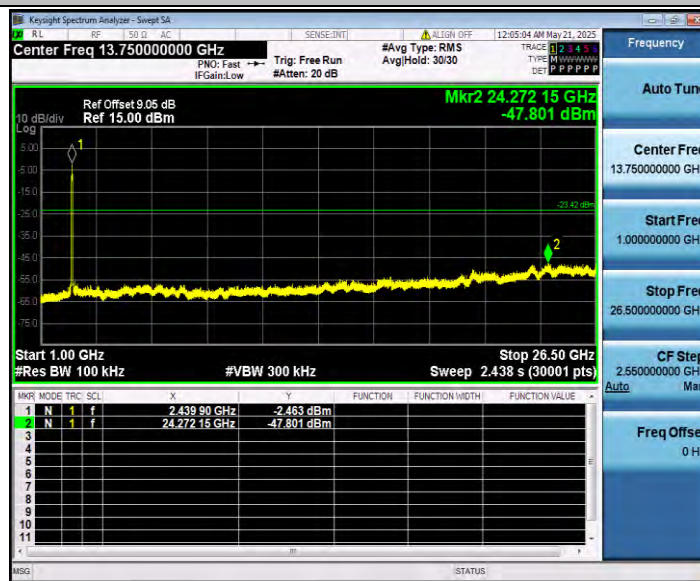
Sweep: 94.00 ms (30001 pts)

Frequency Panel:

- Auto Tune
- Center Freq: 515.000000 MHz
- Start Freq: 30.000000 MHz
- Stop Freq: 1.000000000 GHz
- CF Step: 97.000000 MHz
- Auto Man
- Freq Offset: 0 Hz

Status Bar: MSG STATUS

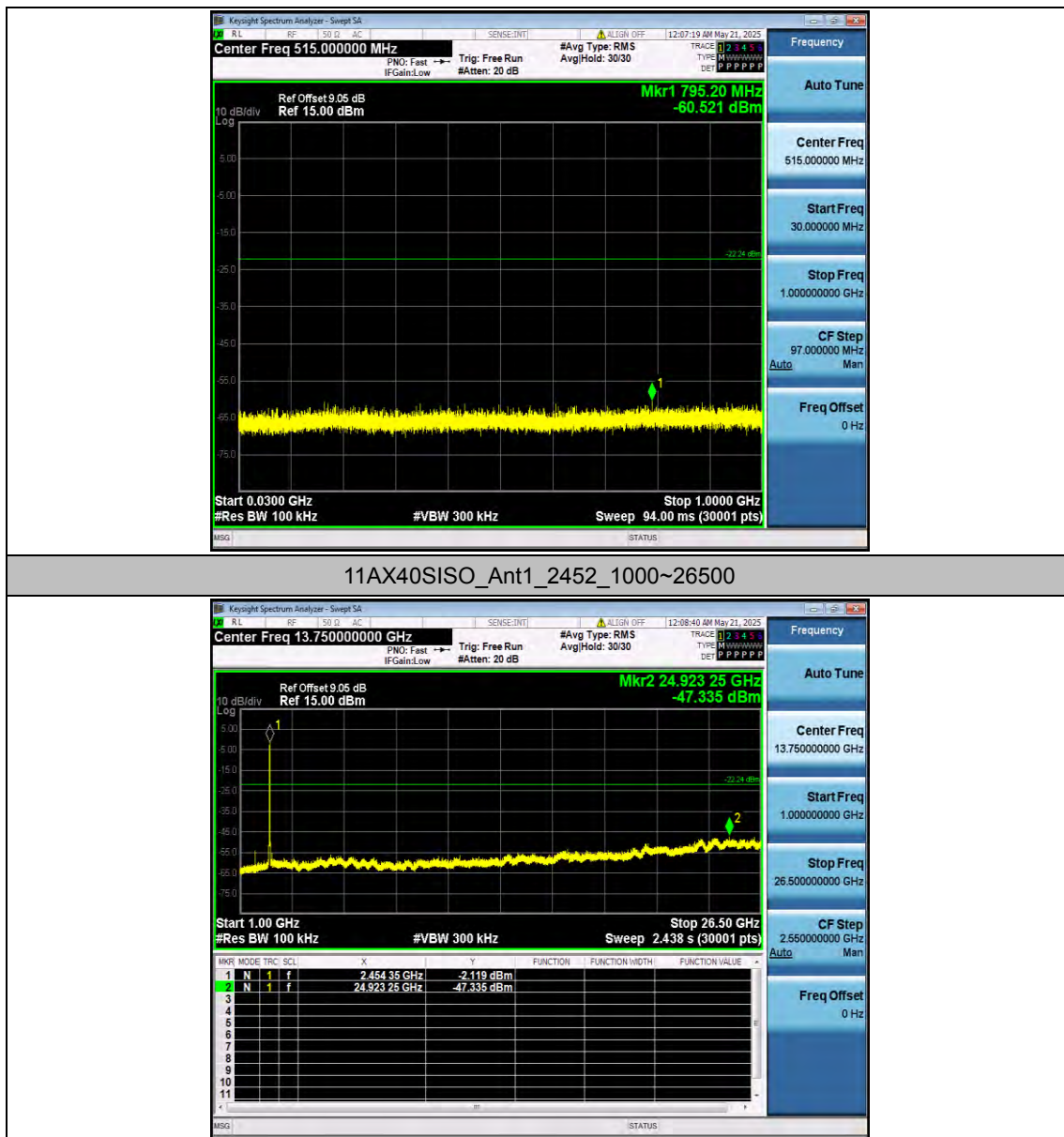
11AX40SISO_Ant1_2437_1000~26500



11AX40SISO_Ant1_2452_0~Reference



11AX40SISO_Ant1_2452_30~1000



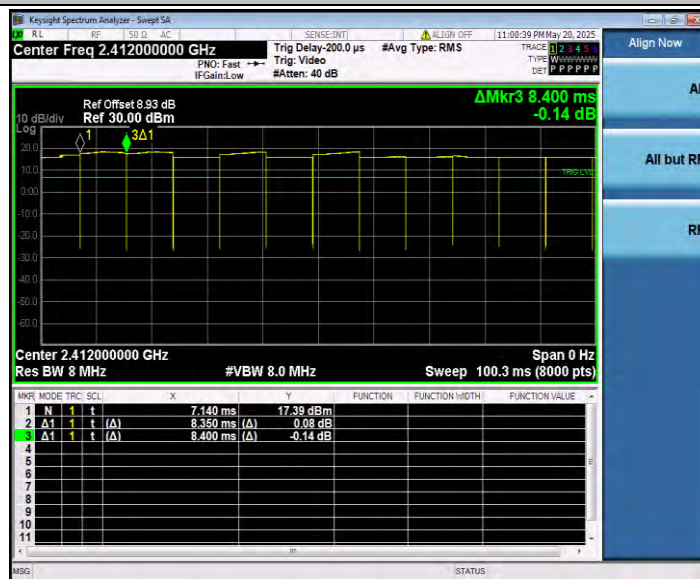
Appendix A.7: Duty Cycle

Test Result

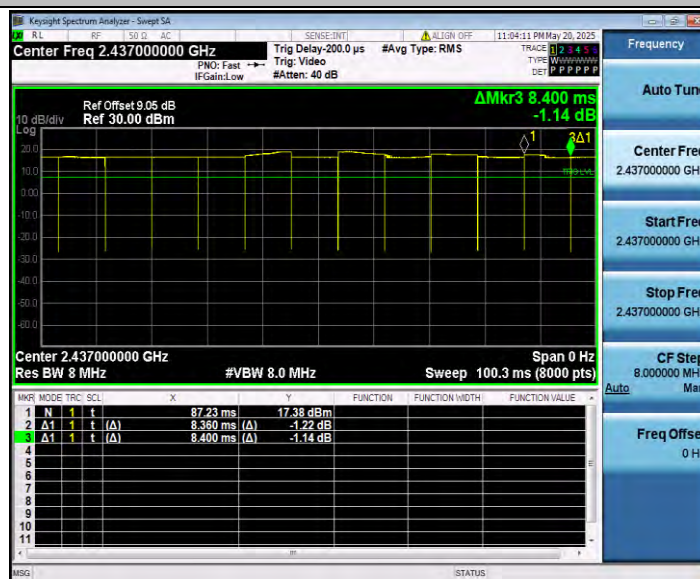
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11B	Ant1	2412	8.35	8.40	99.40	0.03	0.12
		2437	8.36	8.40	99.52	0.02	0.12
		2462	8.34	8.39	99.40	0.03	0.12
11G	Ant1	2412	2.08	2.13	97.65	0.10	0.48
		2437	2.08	2.13	97.65	0.10	0.48
		2462	2.08	2.13	97.65	0.10	0.48
11N20SISO	Ant1	2412	3.97	4.02	98.76	0.05	0.25
		2437	3.98	4.03	98.76	0.05	0.25
		2462	3.97	4.02	98.76	0.05	0.25
11N40SISO	Ant1	2422	3.97	4.02	98.76	0.05	0.25
		2437	3.96	4.02	98.51	0.07	0.25
		2452	3.96	4.01	98.75	0.05	0.25
11AX20SISO	Ant1	2412	3.98	4.03	98.76	0.05	0.25
		2437	3.98	4.03	98.76	0.05	0.25
		2462	3.97	4.02	98.76	0.05	0.25
11AX40SISO	Ant1	2422	3.98	4.03	98.76	0.05	0.25
		2437	3.97	4.02	98.76	0.05	0.25
		2452	3.97	4.02	98.76	0.05	0.25

Test Graphs

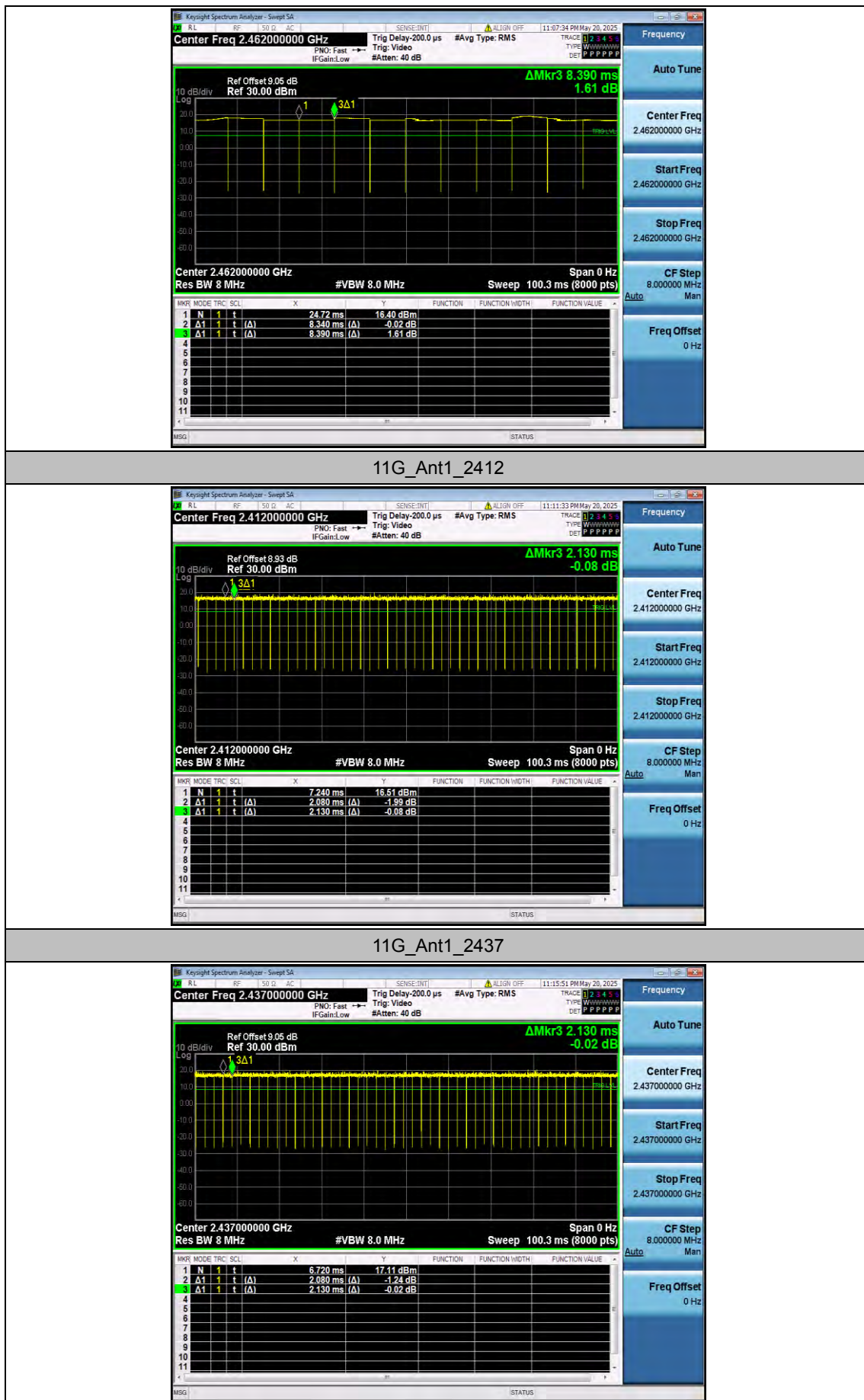
11B_Ant1_2412

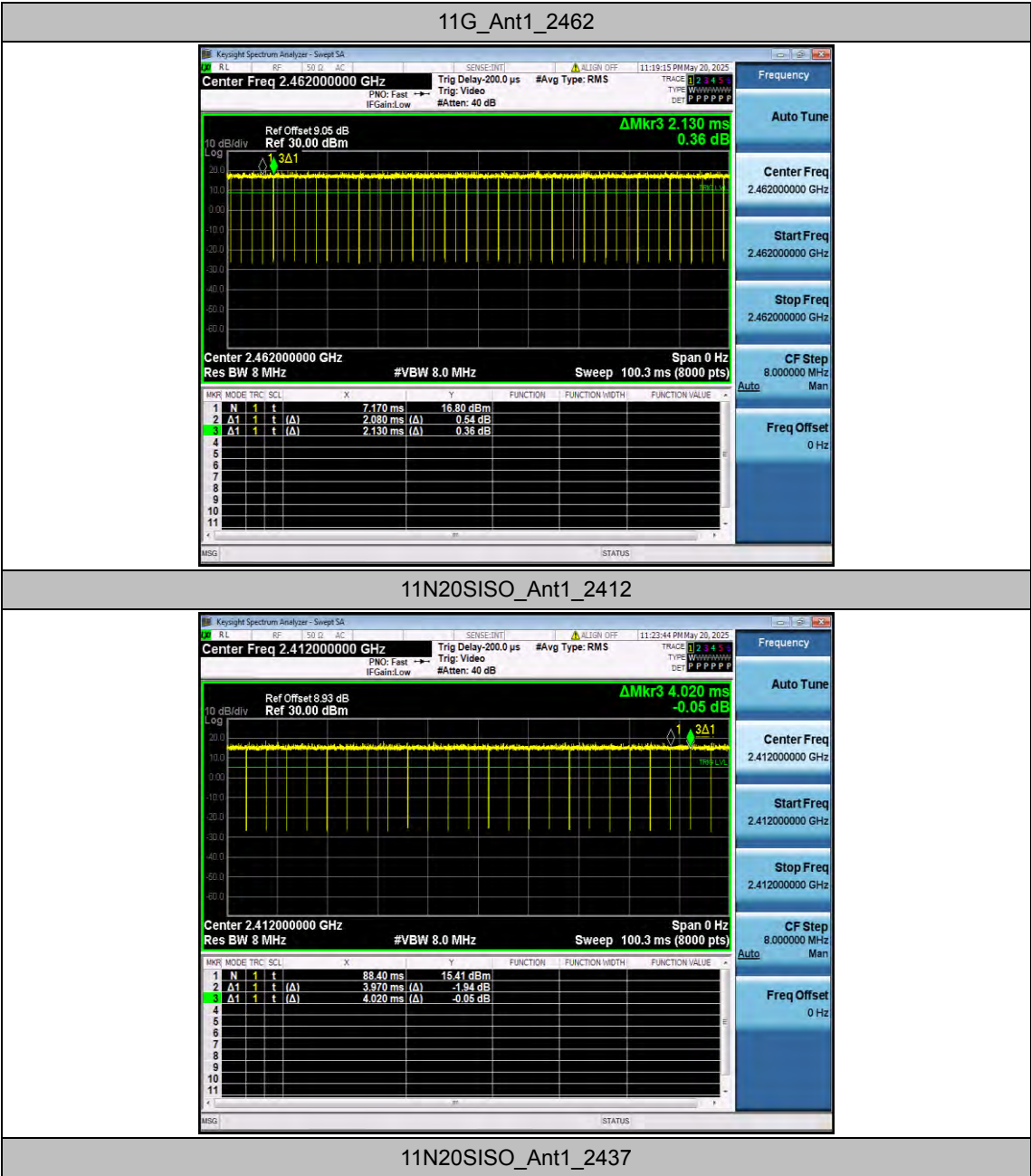


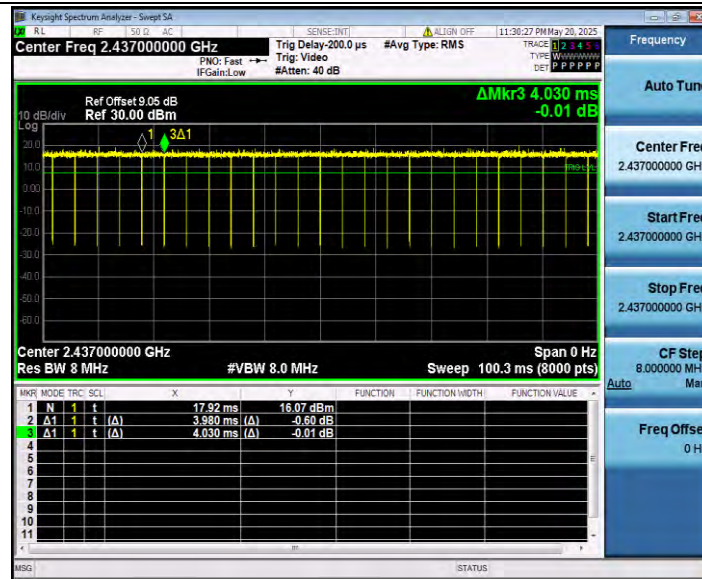
11B_Ant1_2437



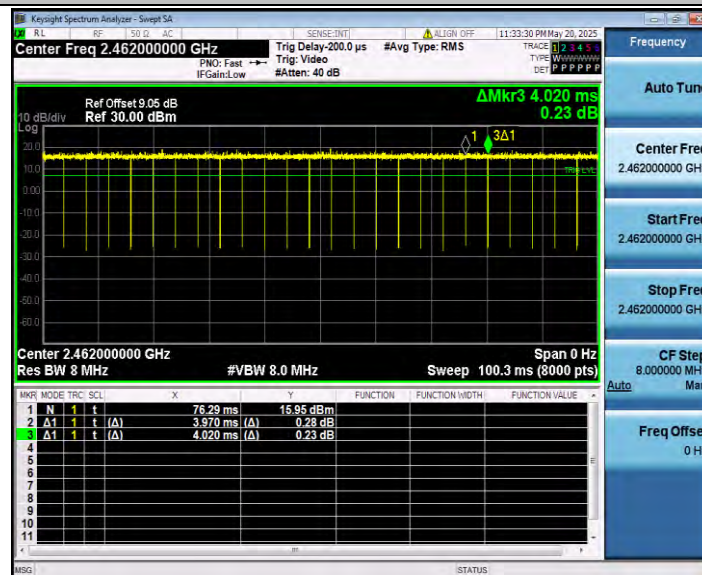
11B_Ant1_2462



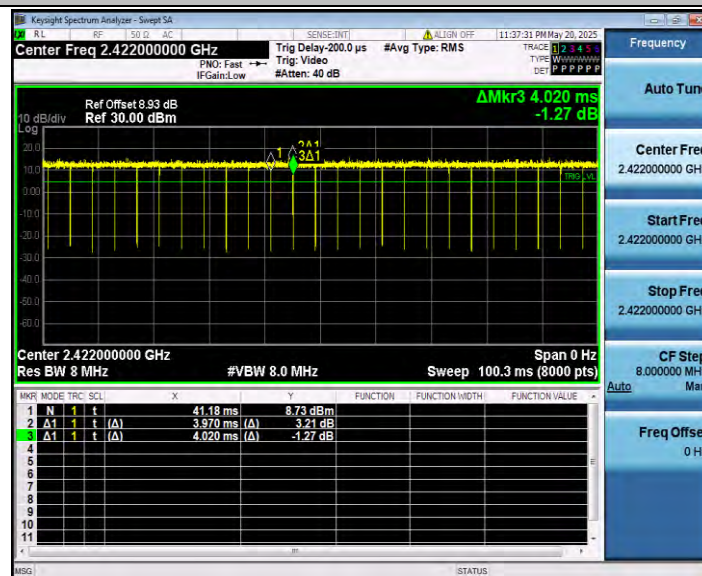




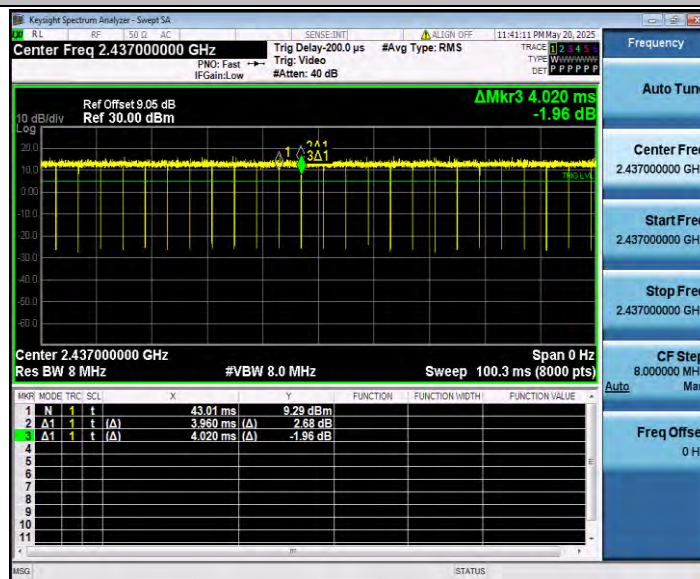
11N20SISO_Ant1_2462



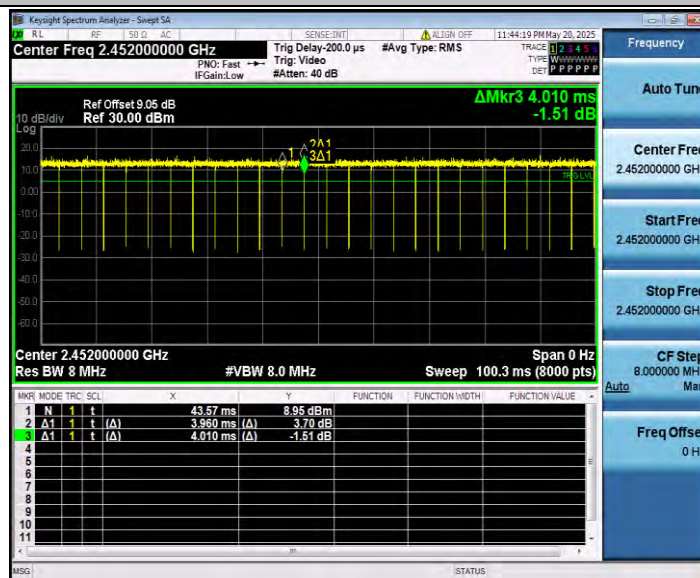
11N40SISO_Ant1_2422



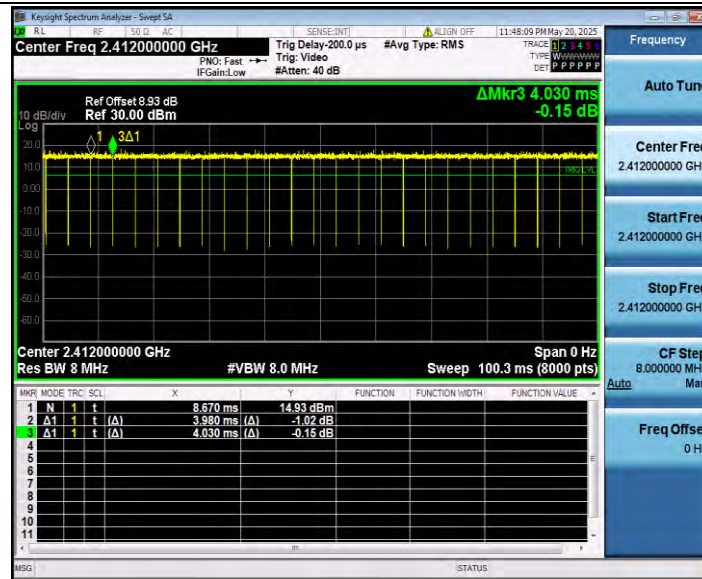
11N40SISO_Ant1_2437



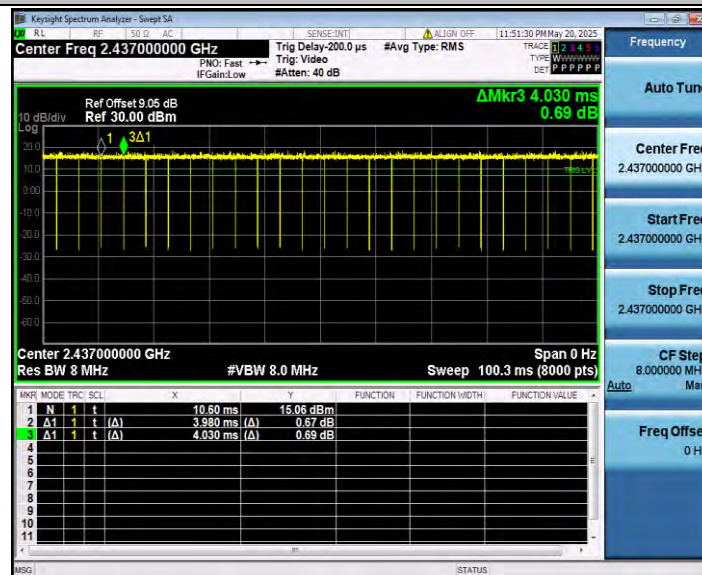
11N40SISO_Ant1_2452



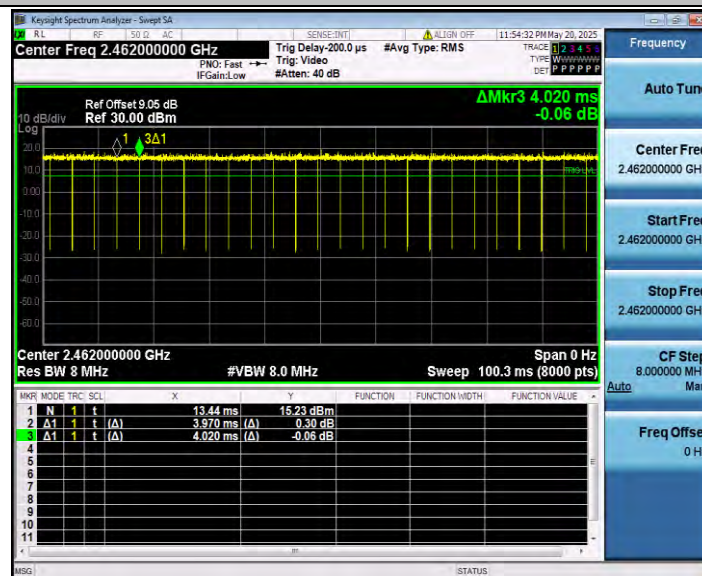
11AX20SISO_Ant1_2412



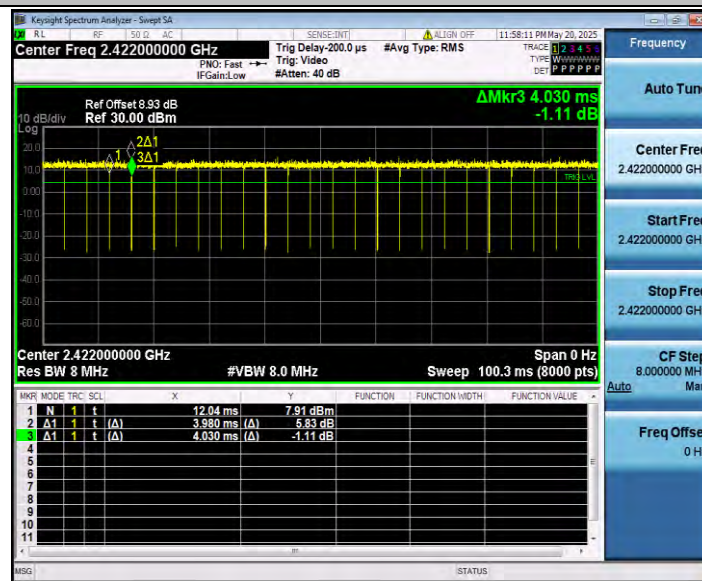
11AX20SISO_Ant1_2437



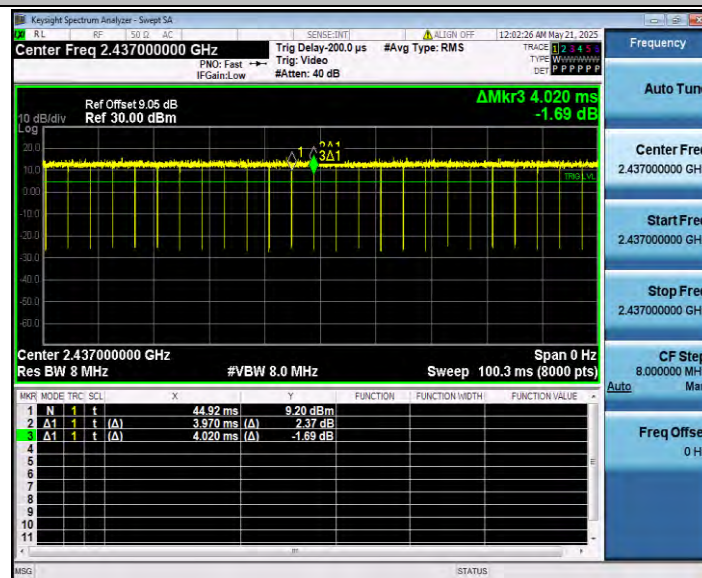
11AX20SISO_Ant1_2462



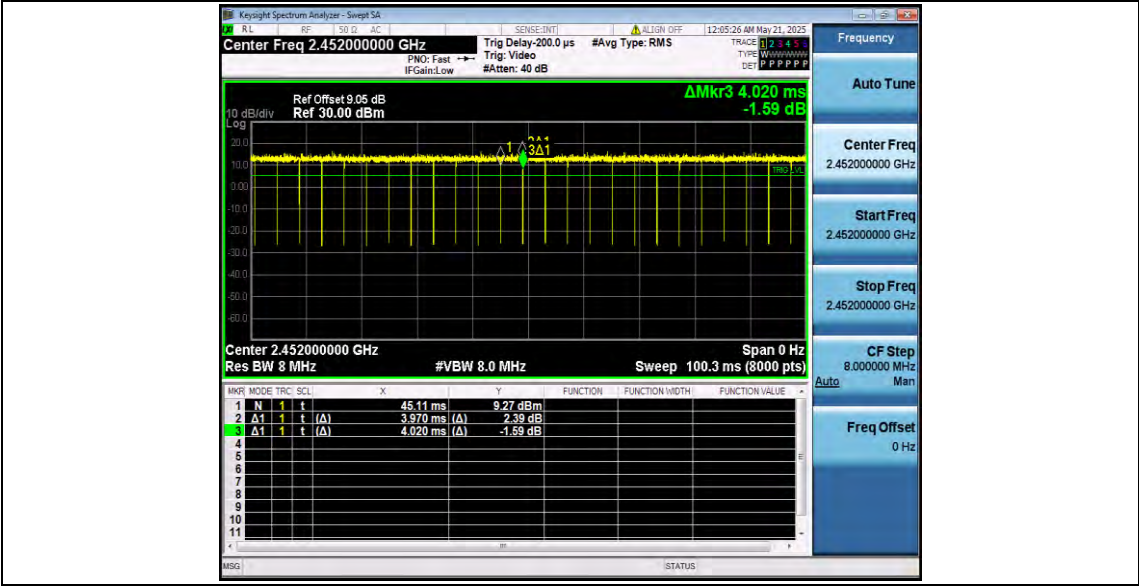
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



Appendix A.8: Emissions in Restricted Bands

Test Result

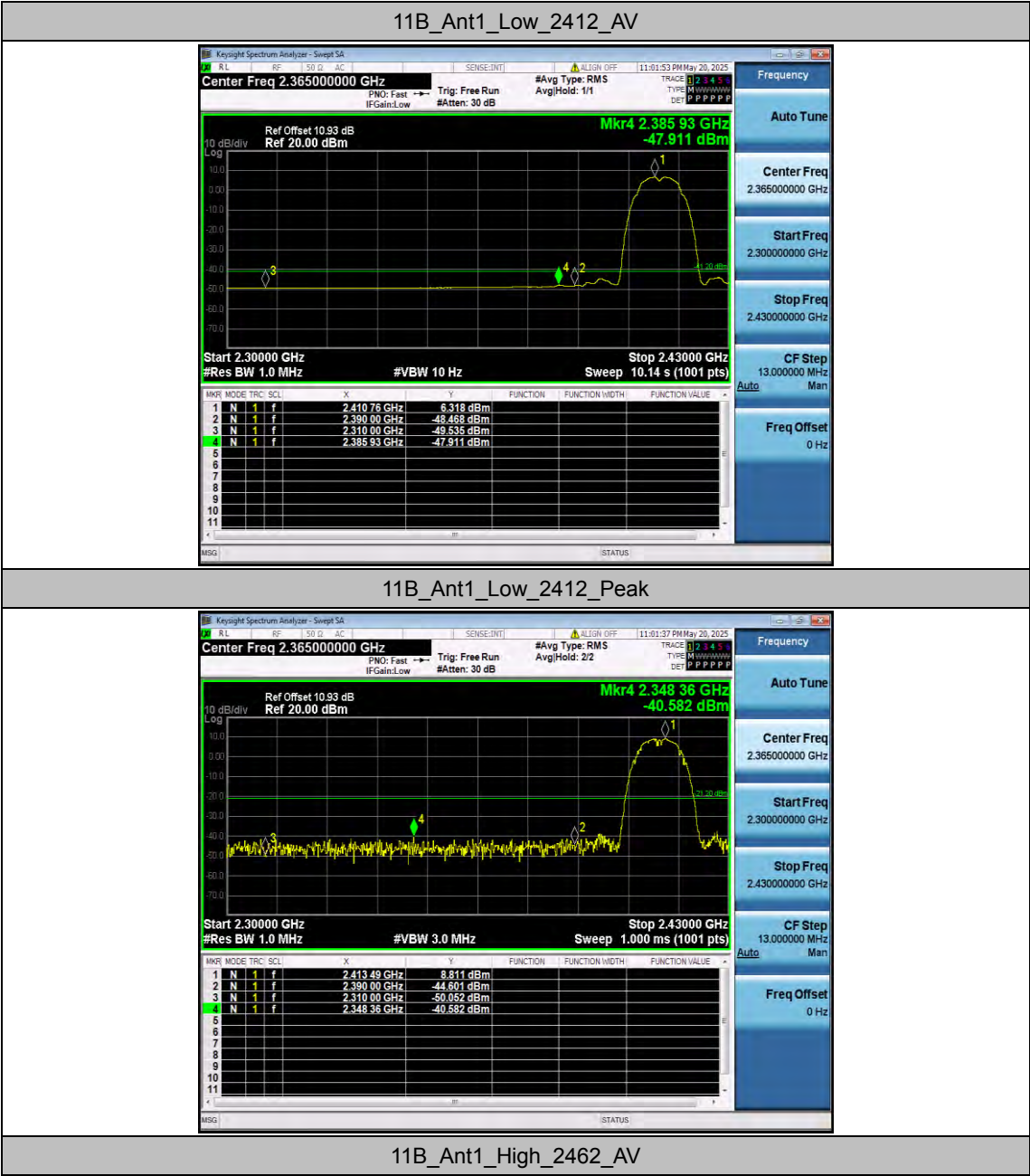
TestMode	Antenna	ChName	Frequenc y[MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-49.54	≤-41.20	45.66	≤54	PASS
				AV	2385.930	-47.91	≤-41.20	47.29	≤54	PASS
				AV	2390.000	-48.47	≤-41.20	46.73	≤54	PASS
				Peak	2310.000	-50.05	≤-21.20	45.15	≤74	PASS
				Peak	2348.360	-40.58	≤-21.20	54.62	≤74	PASS
				Peak	2390.000	-44.6	≤-21.20	50.60	≤74	PASS
		High	2462	AV	2483.500	-48.21	≤-41.20	46.99	≤54	PASS
				AV	2488.510	-47.97	≤-41.20	47.23	≤54	PASS
				AV	2500.000	-48.67	≤-41.20	46.53	≤54	PASS
				Peak	2483.500	-43.98	≤-21.20	51.22	≤74	PASS
				Peak	2497.310	-40.56	≤-21.20	54.64	≤74	PASS
				Peak	2500.000	-45.94	≤-21.20	49.26	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.47	≤-41.20	45.73	≤54	PASS
				AV	2389.960	-48.48	≤-41.20	46.72	≤54	PASS
				AV	2390.000	-48.48	≤-41.20	46.72	≤54	PASS
				Peak	2310.000	-46.47	≤-21.20	48.73	≤74	PASS
				Peak	2388.660	-39.26	≤-21.20	55.94	≤74	PASS
				Peak	2390.000	-44.66	≤-21.20	50.54	≤74	PASS
		High	2462	AV	2483.500	-48.3	≤-41.20	46.90	≤54	PASS
				AV	2483.560	-48.31	≤-41.20	46.89	≤54	PASS
				AV	2500.000	-48.67	≤-41.20	46.53	≤54	PASS
				Peak	2483.500	-41.7	≤-21.20	53.50	≤74	PASS
				Peak	2483.780	-39.71	≤-21.20	55.49	≤74	PASS
				Peak	2500.000	-43.38	≤-21.20	51.82	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-49.48	≤-41.20	45.72	≤54	PASS
				AV	2389.570	-48.57	≤-41.20	46.63	≤54	PASS
				AV	2390.000	-48.59	≤-41.20	46.61	≤54	PASS
				Peak	2310.000	-45.4	≤-21.20	49.80	≤74	PASS
				Peak	2340.950	-40.03	≤-21.20	55.17	≤74	PASS
				Peak	2390.000	-43.95	≤-21.20	51.25	≤74	PASS
		High	2462	AV	2483.500	-48.23	≤-41.20	46.97	≤54	PASS
				AV	2483.560	-48.24	≤-41.20	46.96	≤54	PASS
				AV	2500.000	-48.62	≤-41.20	46.58	≤54	PASS
				Peak	2483.500	-45.86	≤-21.20	49.34	≤74	PASS
				Peak	2496.980	-40.77	≤-21.20	54.43	≤74	PASS
				Peak	2500.000	-49.68	≤-21.20	45.52	≤74	PASS

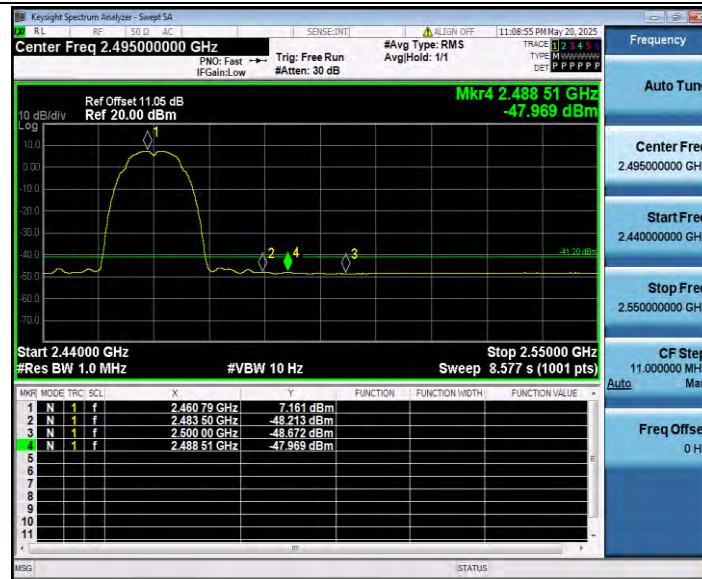
11N40SISO	Ant1	Low	2422	AV	2310.000	-49.46	≤ -41.20	45.74	≤ 54	PASS
				AV	2389.960	-45.01	≤ -41.20	50.19	≤ 54	PASS
				AV	2390.000	-45.01	≤ -41.20	50.19	≤ 54	PASS
				Peak	2310.000	-50.5	≤ -21.20	44.70	≤ 74	PASS
				Peak	2381.900	-38.46	≤ -21.20	56.74	≤ 74	PASS
				Peak	2390.000	-39.75	≤ -21.20	55.45	≤ 74	PASS
		High	2452	AV	2483.500	-45.42	≤ -41.20	49.78	≤ 54	PASS
				AV	2483.560	-45.43	≤ -41.20	49.77	≤ 54	PASS
				AV	2500.000	-48.11	≤ -41.20	47.09	≤ 54	PASS
				Peak	2483.500	-42.43	≤ -21.20	52.77	≤ 74	PASS
				Peak	2483.890	-39.2	≤ -21.20	56.00	≤ 74	PASS
				Peak	2500.000	-47.06	≤ -21.20	48.14	≤ 74	PASS
11AX20SISO	Ant1	Low	2412	AV	2310.000	-49.5	≤ -41.20	45.70	≤ 54	PASS
				AV	2389.570	-48.58	≤ -41.20	46.62	≤ 54	PASS
				AV	2390.000	-48.62	≤ -41.20	46.58	≤ 54	PASS
				Peak	2310.000	-46.21	≤ -21.20	48.99	≤ 74	PASS
				Peak	2315.080	-40.07	≤ -21.20	55.13	≤ 74	PASS
				Peak	2390.000	-50.13	≤ -21.20	45.07	≤ 74	PASS
		High	2462	AV	2483.500	-48.37	≤ -41.20	46.83	≤ 54	PASS
				AV	2483.780	-48.37	≤ -41.20	46.83	≤ 54	PASS
				AV	2500.000	-48.62	≤ -41.20	46.58	≤ 54	PASS
				Peak	2483.500	-46.99	≤ -21.20	48.21	≤ 74	PASS
				Peak	2483.780	-38.7	≤ -21.20	56.50	≤ 74	PASS
				Peak	2500.000	-45.59	≤ -21.20	49.61	≤ 74	PASS
11AX40SISO	Ant1	Low	2422	AV	2310.000	-49.45	≤ -41.20	45.75	≤ 54	PASS
				AV	2389.960	-45.72	≤ -41.20	49.48	≤ 54	PASS
				AV	2390.000	-45.72	≤ -41.20	49.48	≤ 54	PASS
				Peak	2310.000	-49.02	≤ -21.20	46.18	≤ 74	PASS
				Peak	2386.190	-37.85	≤ -21.20	57.35	≤ 74	PASS
				Peak	2390.000	-39.57	≤ -21.20	55.63	≤ 74	PASS
		High	2452	AV	2483.500	-45.73	≤ -41.20	49.47	≤ 54	PASS
				AV	2483.560	-45.77	≤ -41.20	49.43	≤ 54	PASS
				AV	2500.000	-48.11	≤ -41.20	47.09	≤ 54	PASS
				Peak	2483.500	-47.4	≤ -21.20	47.80	≤ 74	PASS
				Peak	2490.490	-39.36	≤ -21.20	55.84	≤ 74	PASS
				Peak	2500.000	-42.56	≤ -21.20	52.64	≤ 74	PASS

Note:

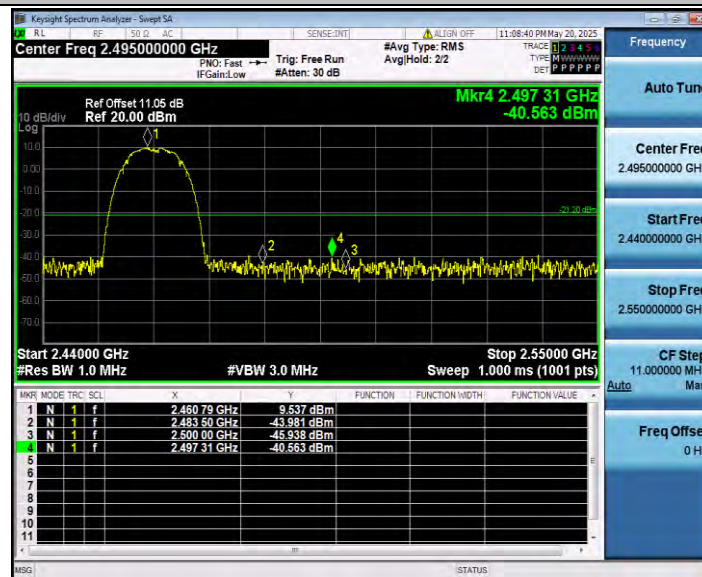
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

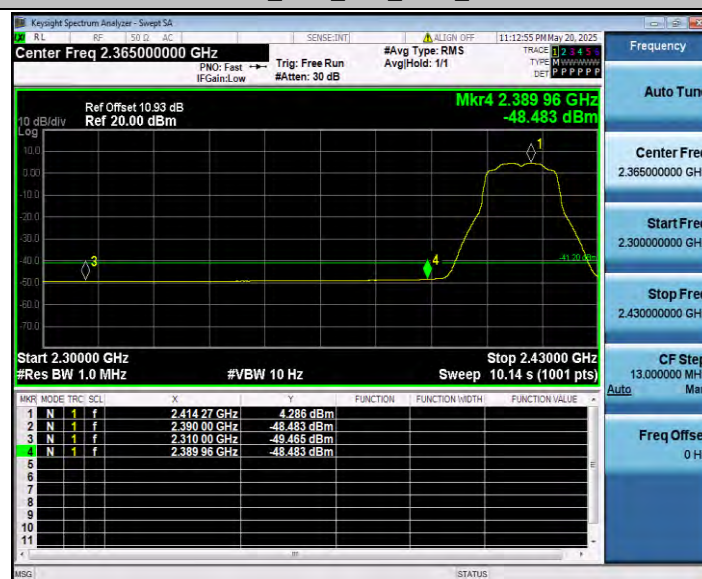




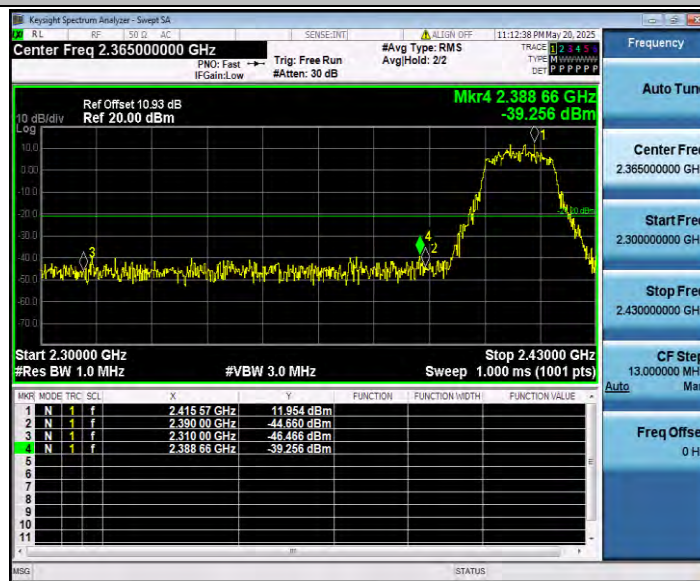
11B_Ant1_High_2462_Peak



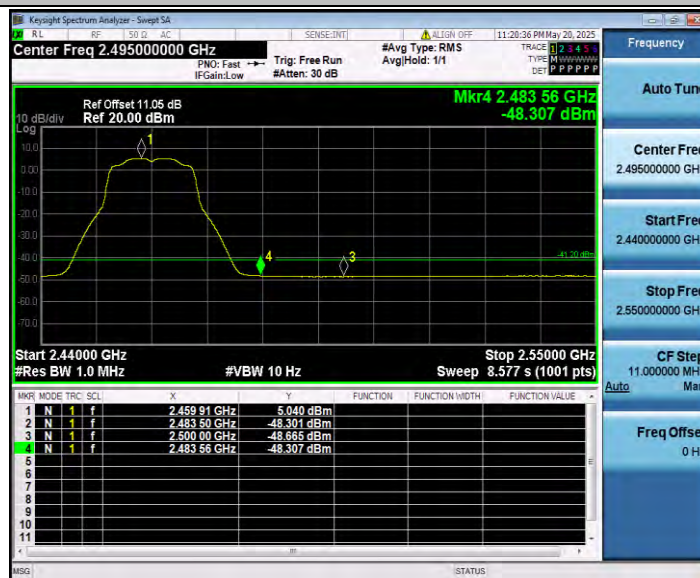
11G_Ant1_Low_2412_AV



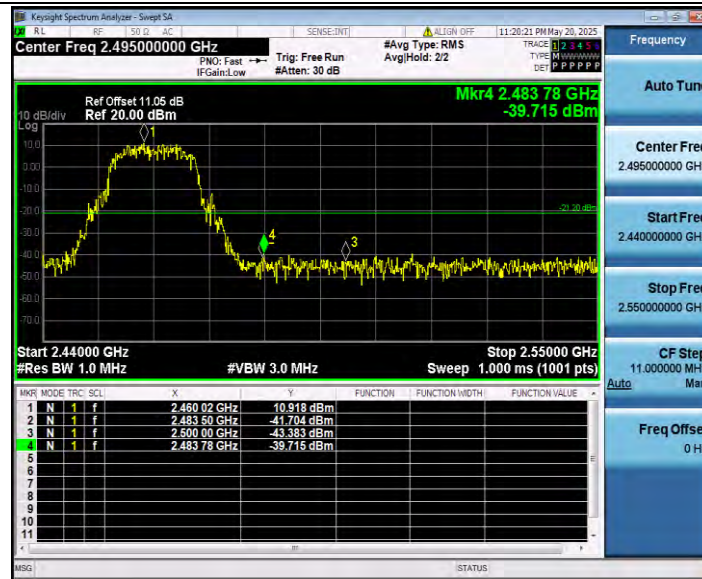
11G_Ant1_Low_2412_Peak



11G_Ant1_High_2462_AV



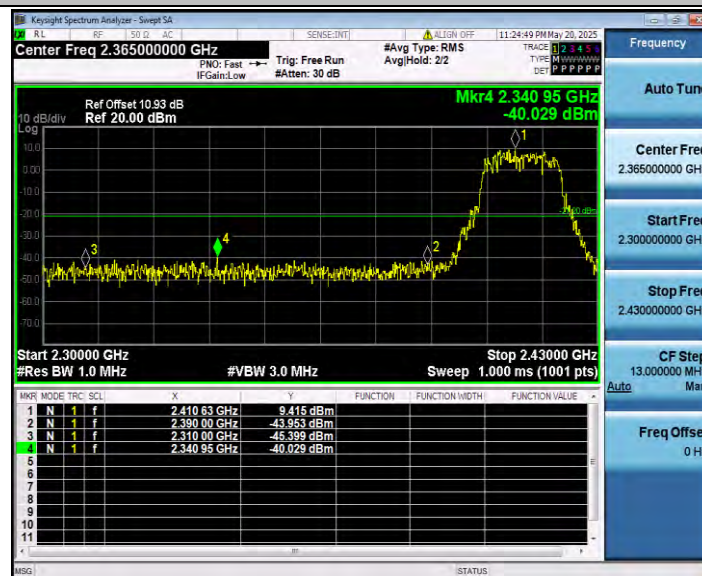
11G_Ant1_High_2462_Peak

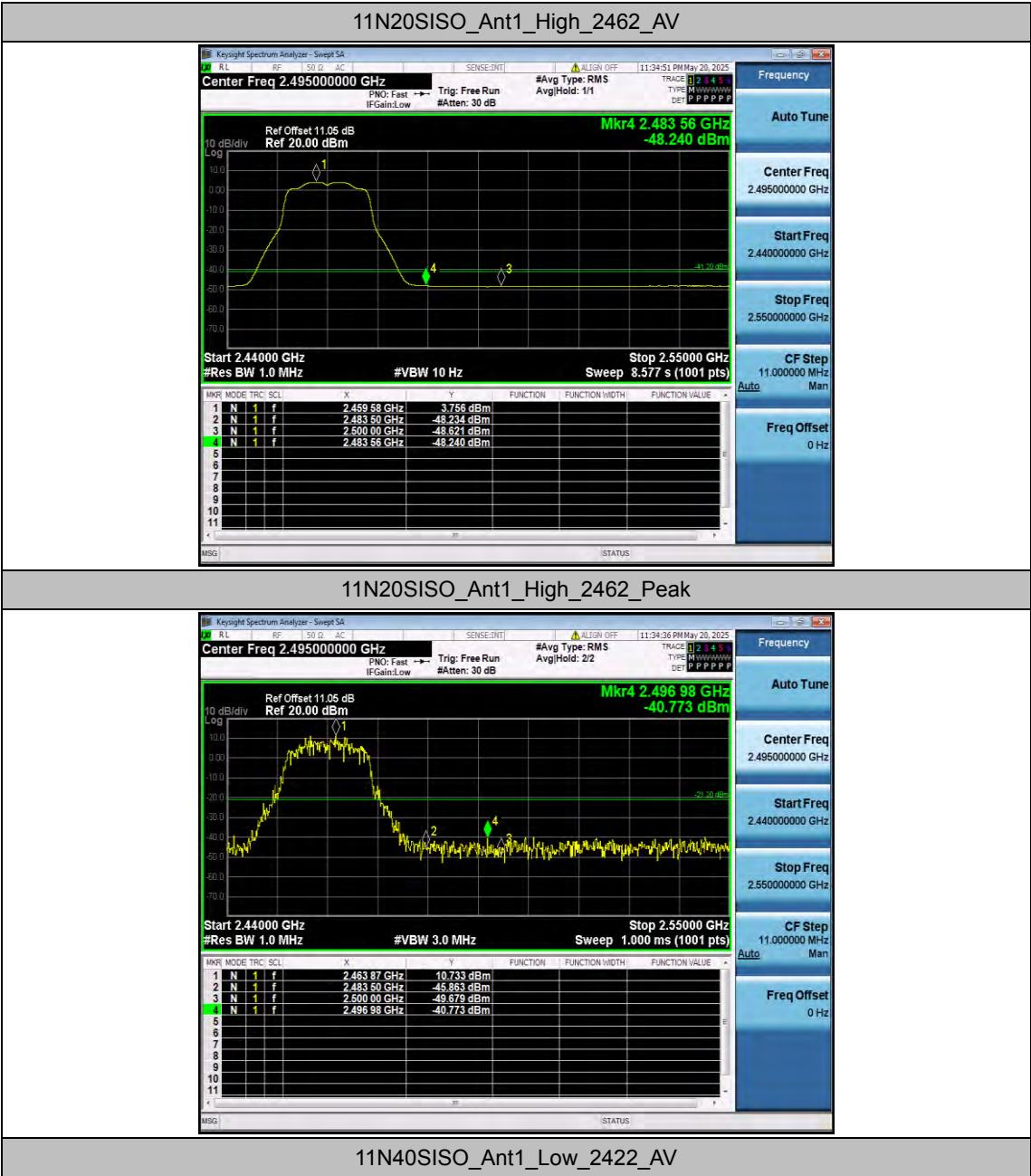


11N20SISO_Ant1_Low_2412_AV



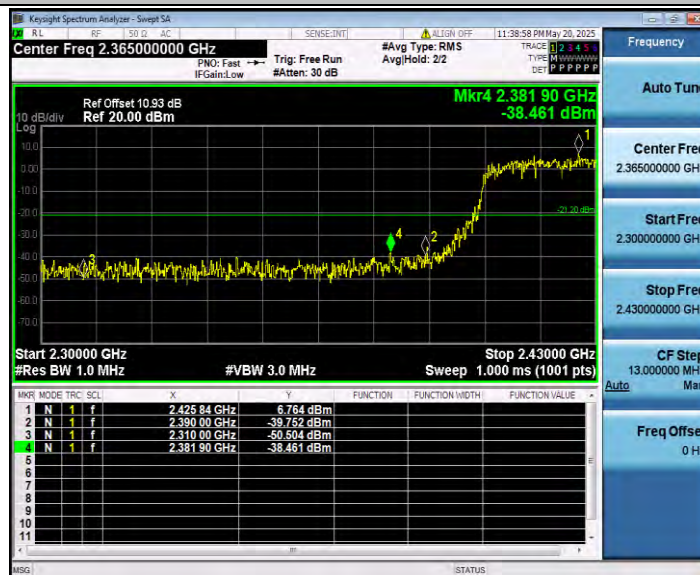
11N20SISO_Ant1_Low_2412_Peak







11N40SISO_Ant1_Low_2422_Peak



11N40SISO_Ant1_High_2452_AV



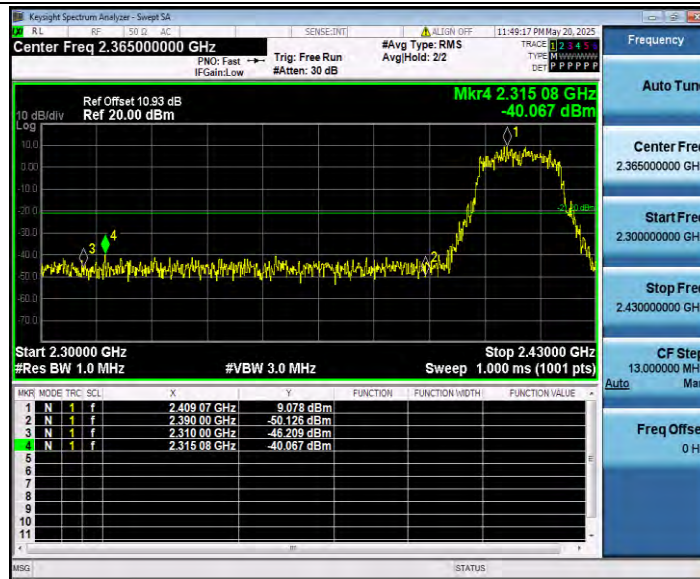
11N40SISO_Ant1_High_2452_Peak



11AX20SISO_Ant1_Low_2412_AV



11AX20SISO_Ant1_Low_2412_Peak



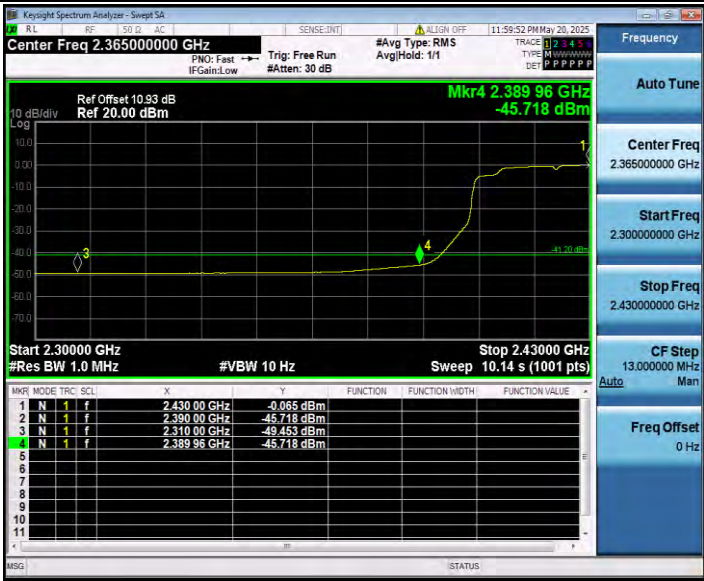
11AX20SISO_Ant1_High_2462_AV



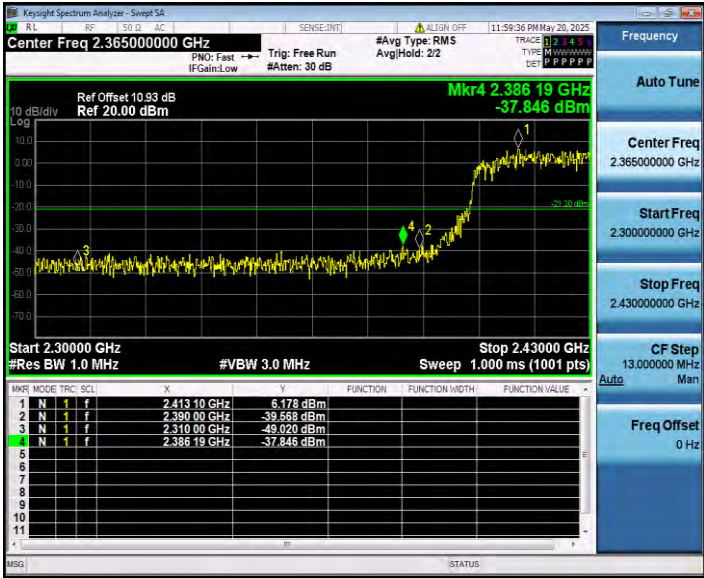
11AX20SISO_Ant1_High_2462_Peak



11AX40SISO_Ant1_Low_2422_AV



11AX40SISO_Ant1_Low_2422_Peak



11AX40SISO_Ant1_High_2452_AV

