

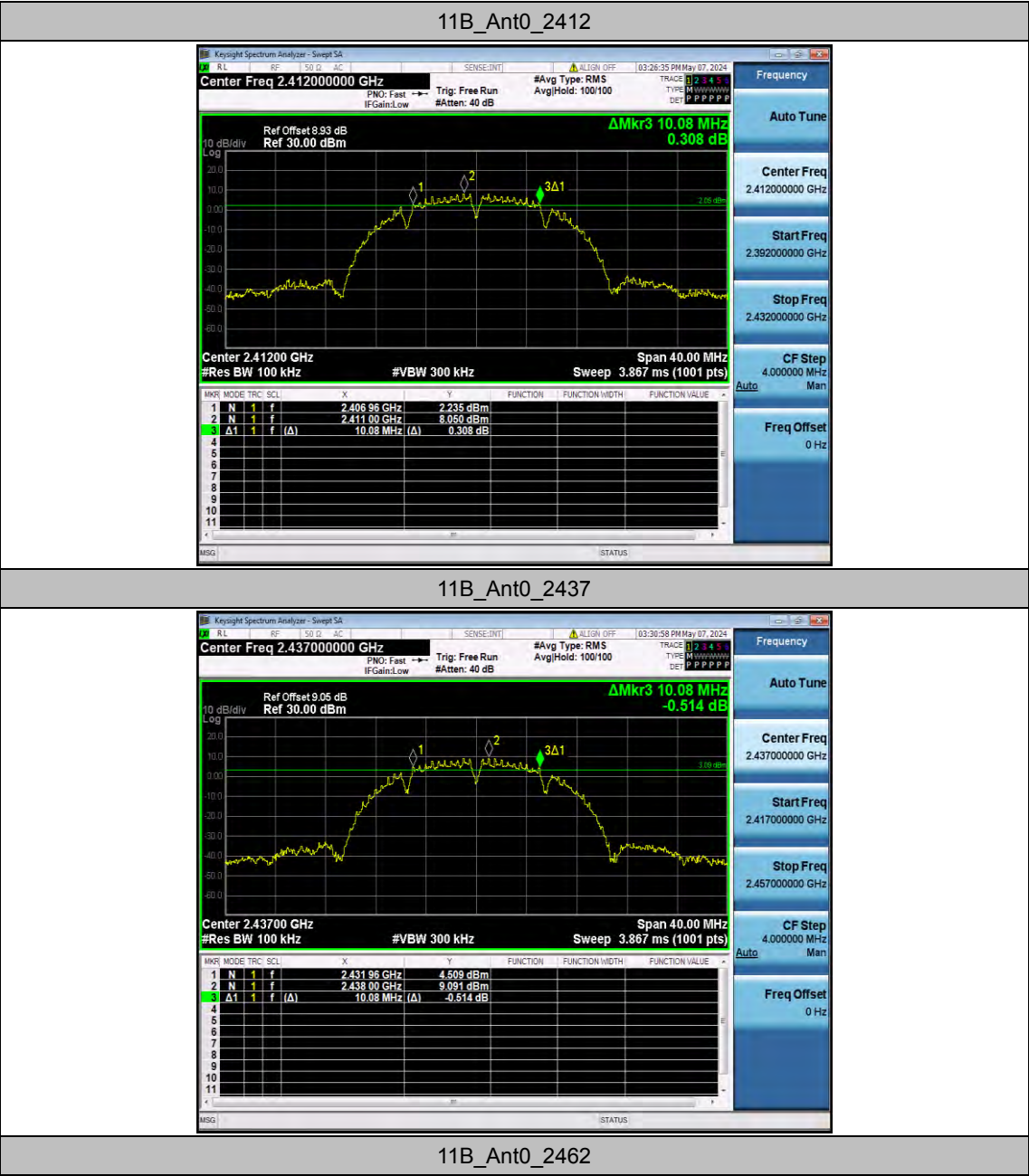
Case No. : <u>CTA24051100203</u>	
Ambient Condition: <u>22</u> °C, <u>53</u> %RH,	
Test Date: <u>2024.4.8</u>	Test Engineer: <u>Evan ouyang</u>

Appendix C.1: DTS Bandwidth

Test Result

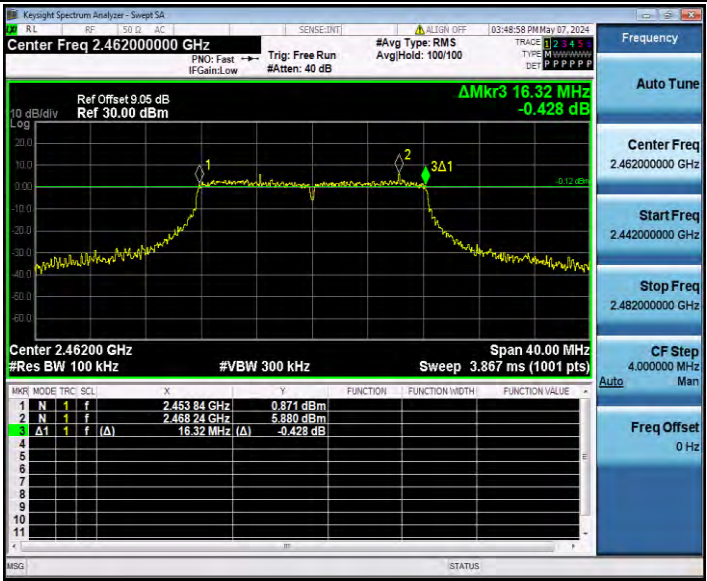
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant0	2412	10.080	2406.960	2417.040	0.5	PASS
		2437	10.080	2431.960	2442.040	0.5	PASS
		2462	10.040	2456.960	2467.000	0.5	PASS
11G	Ant0	2412	16.320	2403.840	2420.160	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.320	2453.840	2470.160	0.5	PASS
11N20SISO	Ant0	2412	16.360	2404.000	2420.360	0.5	PASS
		2437	17.560	2428.200	2445.760	0.5	PASS
		2462	17.280	2453.240	2470.520	0.5	PASS
11N40SISO	Ant0	2422	35.440	2404.080	2439.520	0.5	PASS
		2437	35.520	2419.080	2454.600	0.5	PASS
		2452	35.440	2434.080	2469.520	0.5	PASS

Test Graphs

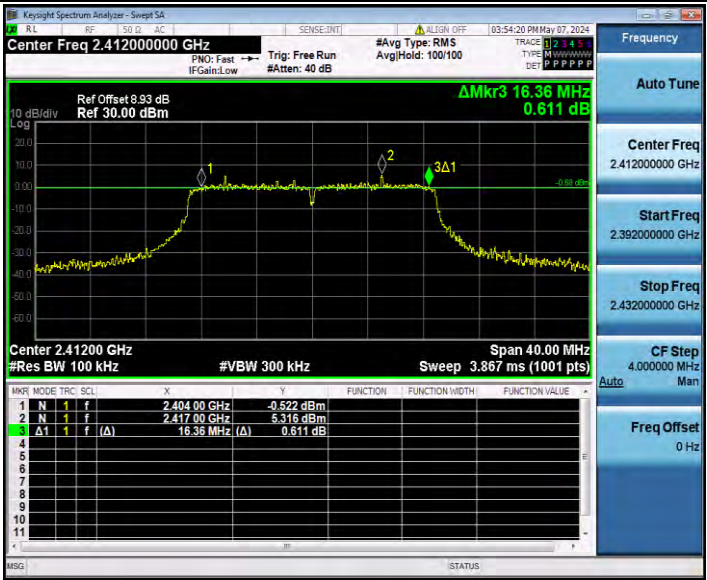




11G_Ant0_2462



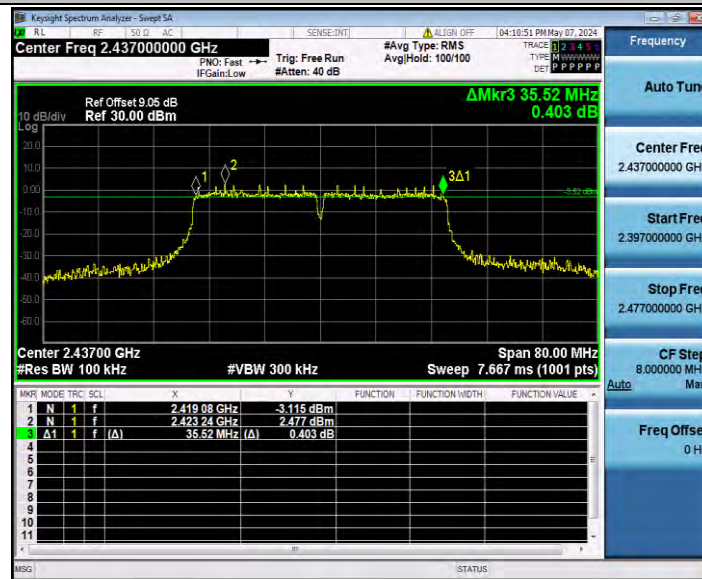
11N20SISO_Ant0_2412



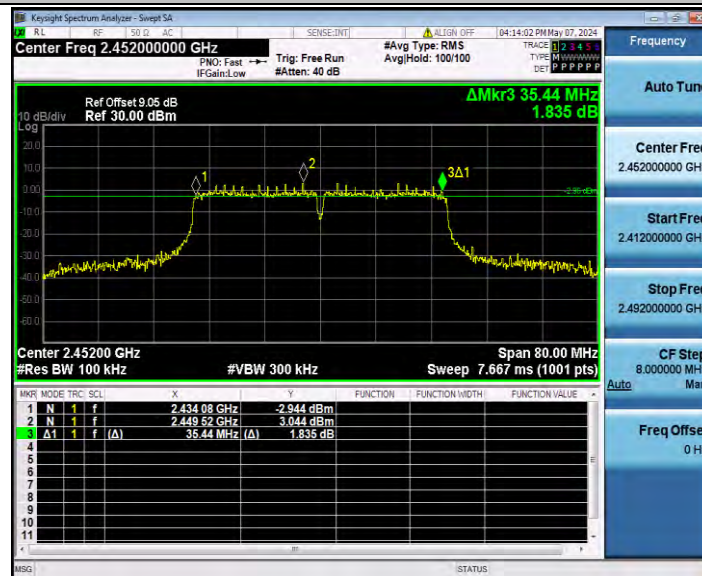
11N20SISO_Ant0_2437



11N40SISO_Ant0_2437



11N40SISO_Ant0_2452

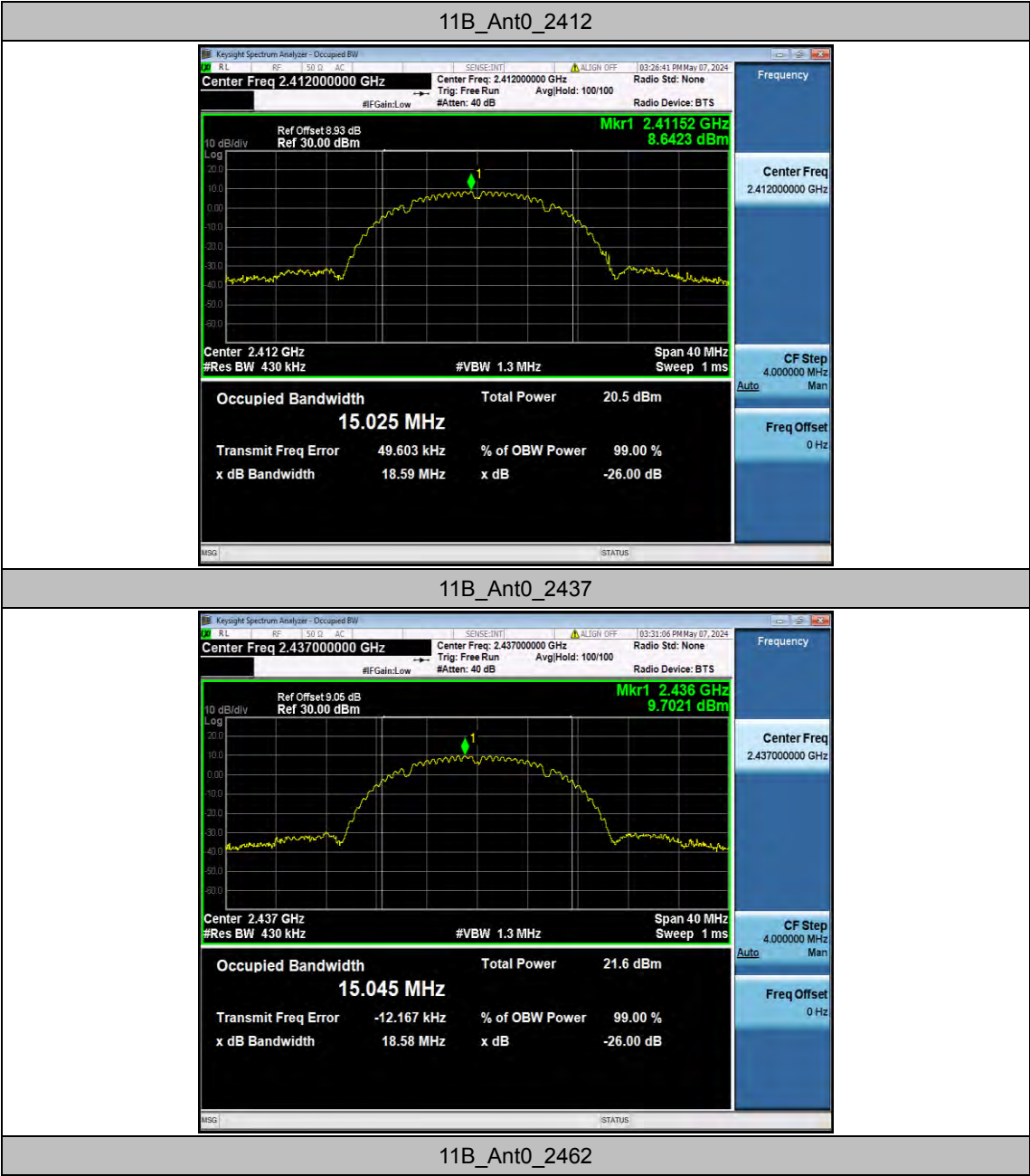


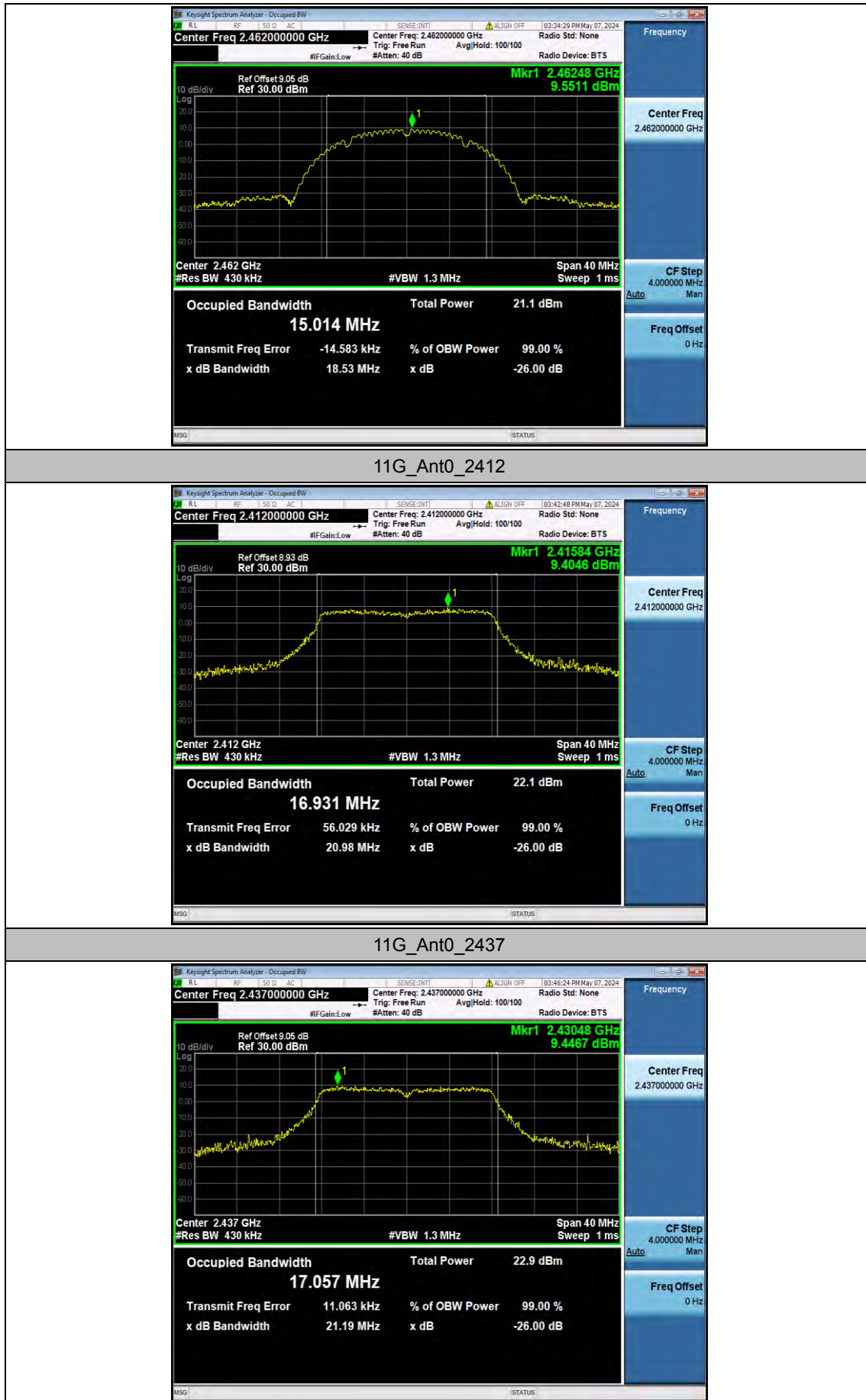
Appendix C.2: Occupied Channel Bandwidth

Test Result

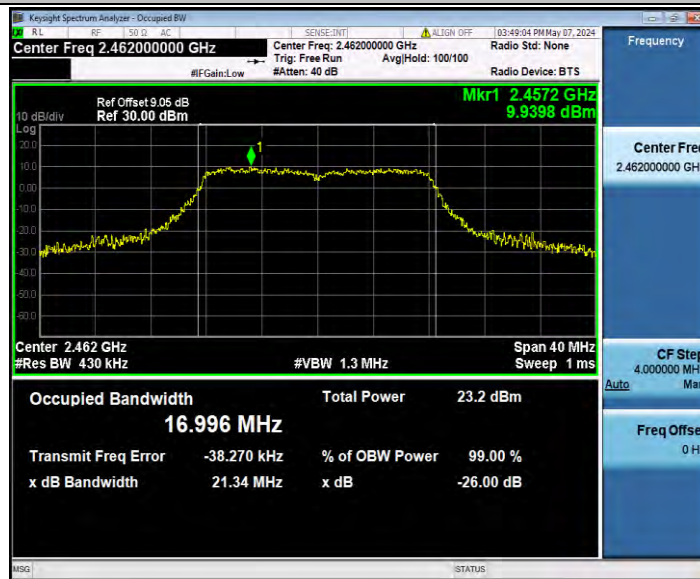
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant0	2412	15.025	2404.5371	2419.5621	---	---
		2437	15.045	2429.4653	2444.5103	---	---
		2462	15.014	2454.4784	2469.4924	---	---
11G	Ant0	2412	16.931	2403.5905	2420.5215	---	---
		2437	17.057	2428.4826	2445.5396	---	---
		2462	16.996	2453.4637	2470.4597	---	---
11N20SISO	Ant0	2412	17.948	2403.0641	2421.0121	---	---
		2437	17.910	2428.0108	2445.9208	---	---
		2462	18.004	2452.9869	2470.9909	---	---
11N40SISO	Ant0	2422	36.339	2403.9181	2440.2571	---	---
		2437	36.410	2418.7713	2455.1813	---	---
		2452	36.463	2433.7041	2470.1671	---	---

Test Graphs

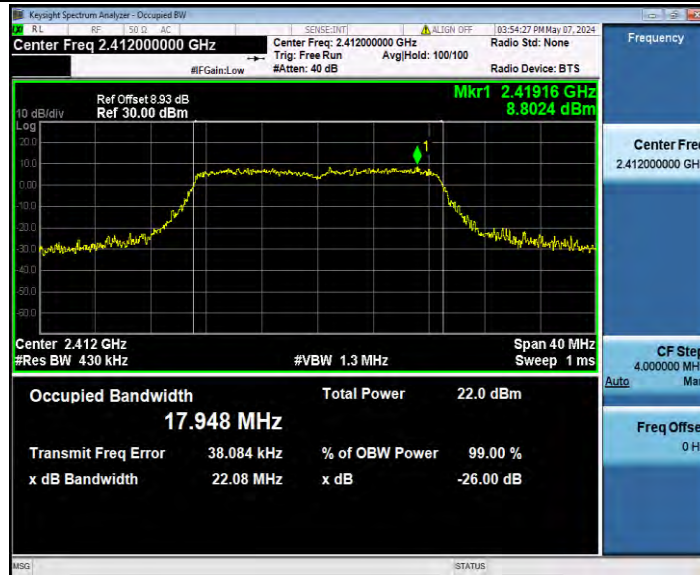




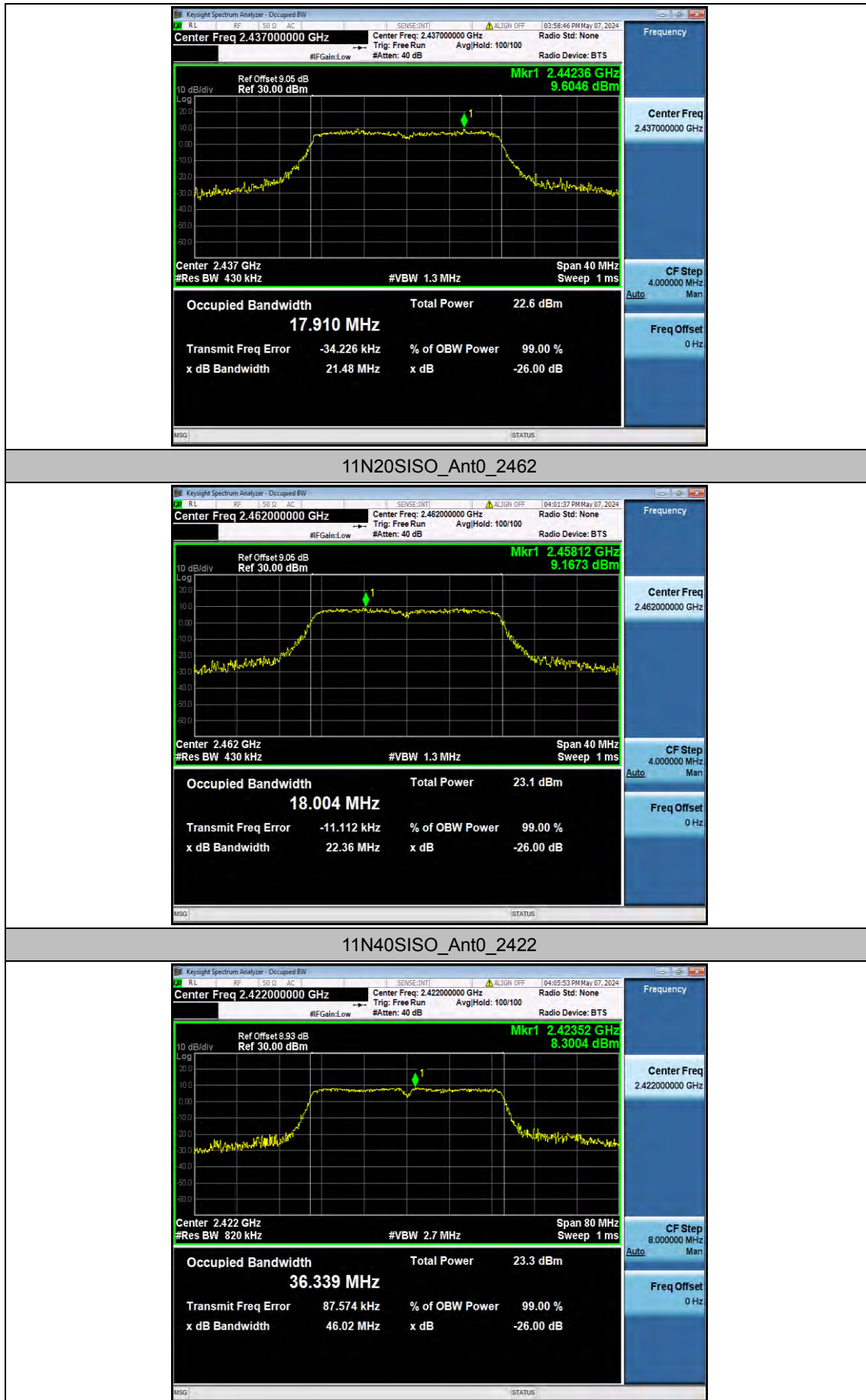
11G_Ant0_2462



11N20SISO_Ant0_2412



11N20SISO_Ant0_2437





Appendix C.3: Maximum conducted output power

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant0	2412	20.87	≤29.90	PASS
		2437	22.02	≤29.90	PASS
		2462	21.26	≤29.90	PASS
11G	Ant0	2412	23.23	≤29.90	PASS
		2437	23.93	≤29.90	PASS
		2462	24.40	≤29.90	PASS
11N20SISO	Ant0	2412	23.25	≤29.90	PASS
		2437	23.67	≤29.90	PASS
		2462	24.32	≤29.90	PASS
11N40SISO	Ant0	2422	23.76	≤29.90	PASS
		2437	23.68	≤29.90	PASS
		2452	24.28	≤29.90	PASS

Note:

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

Appendix C.4: Maximum power spectral density

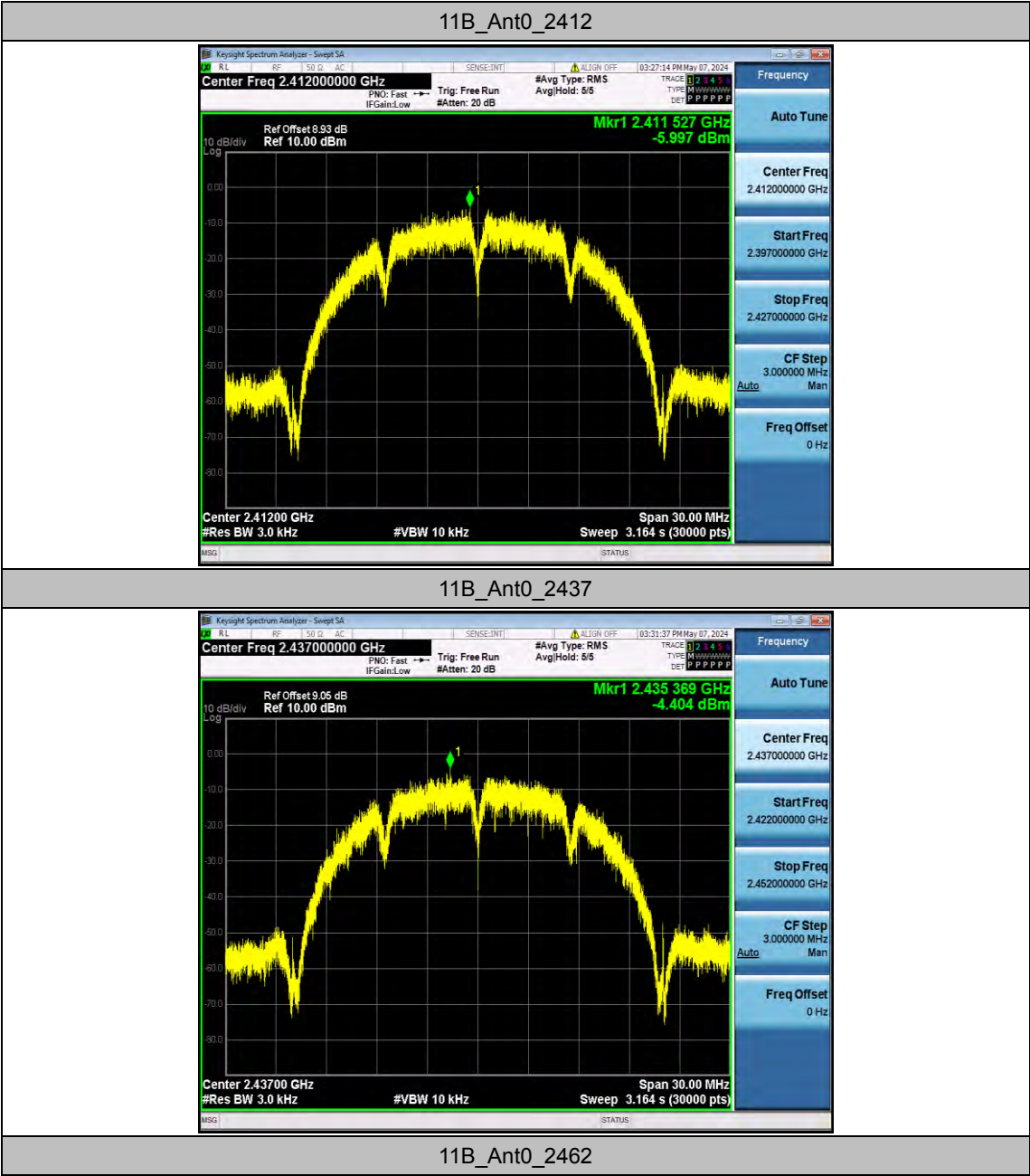
Test Result

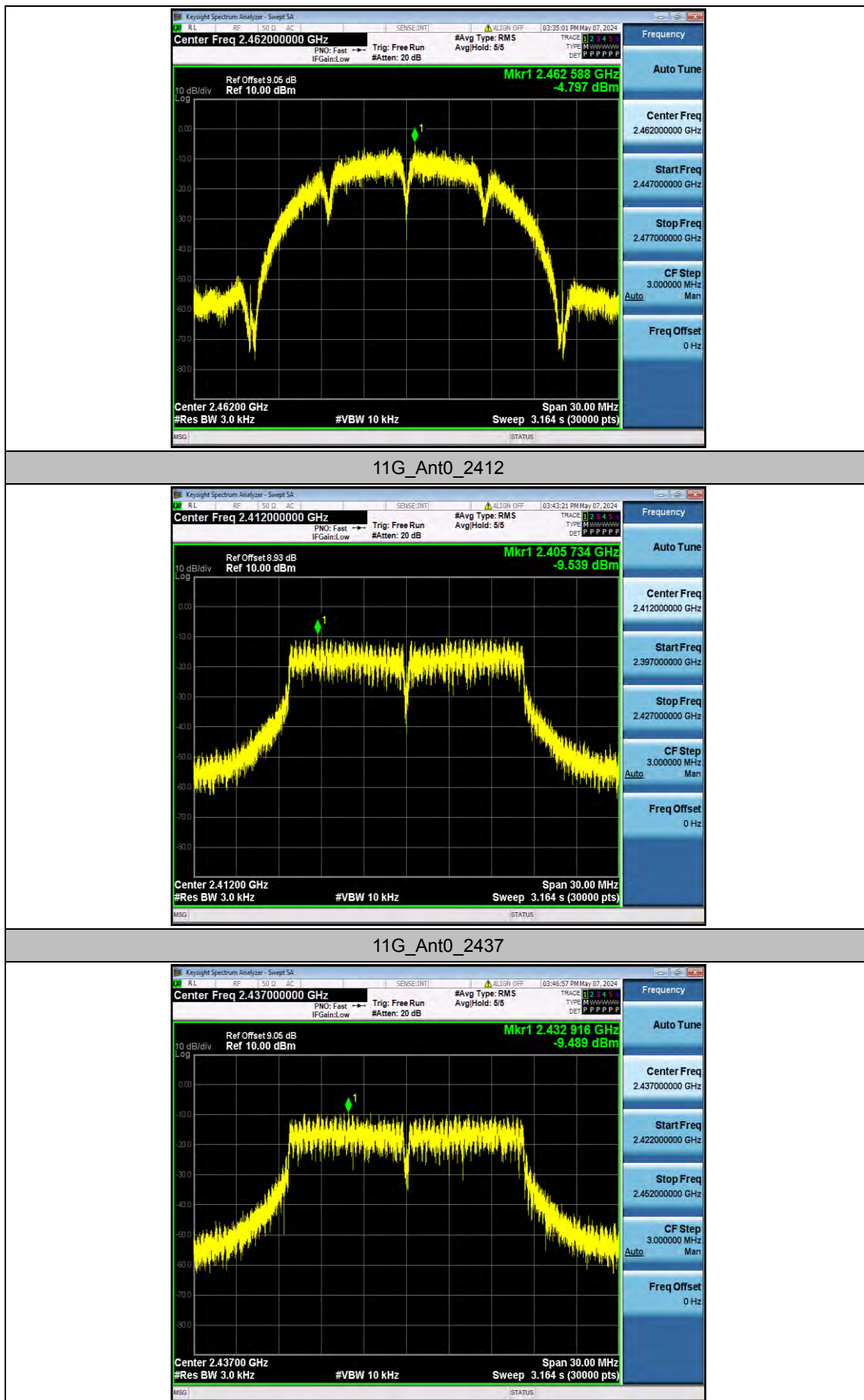
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant0	2412	-6.00	≤7.90	PASS
		2437	-4.40	≤7.90	PASS
		2462	-4.80	≤7.90	PASS
11G	Ant0	2412	-9.54	≤7.90	PASS
		2437	-9.49	≤7.90	PASS
		2462	-8.76	≤7.90	PASS
11N20SISO	Ant0	2412	-7.98	≤7.90	PASS
		2437	-8.45	≤7.90	PASS
		2462	-8.08	≤7.90	PASS
11N40SISO	Ant0	2422	-11.48	≤7.90	PASS
		2437	-12.28	≤7.90	PASS
		2452	-11.29	≤7.90	PASS

Note:

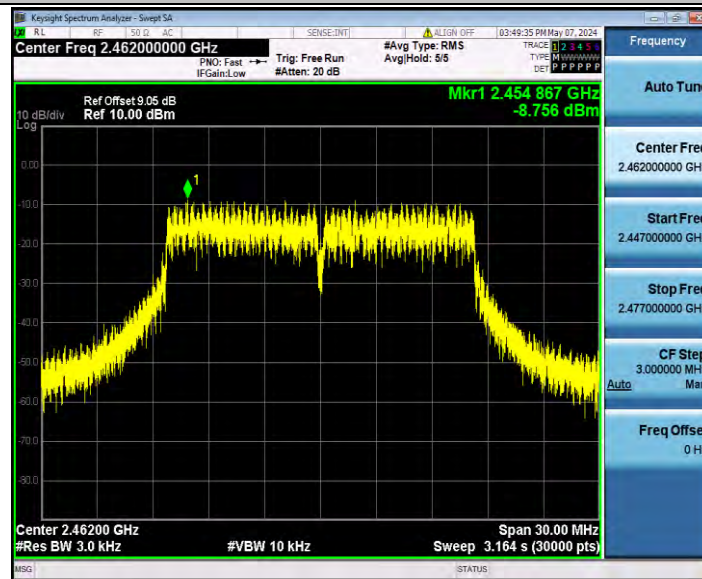
1. The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

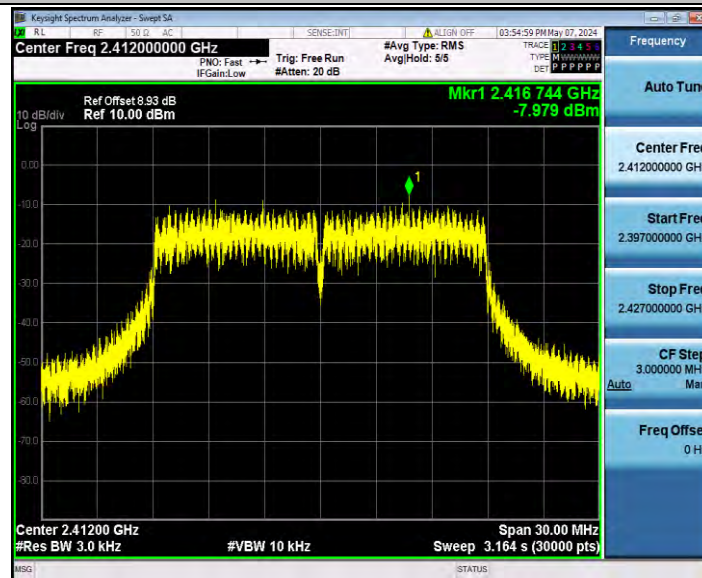




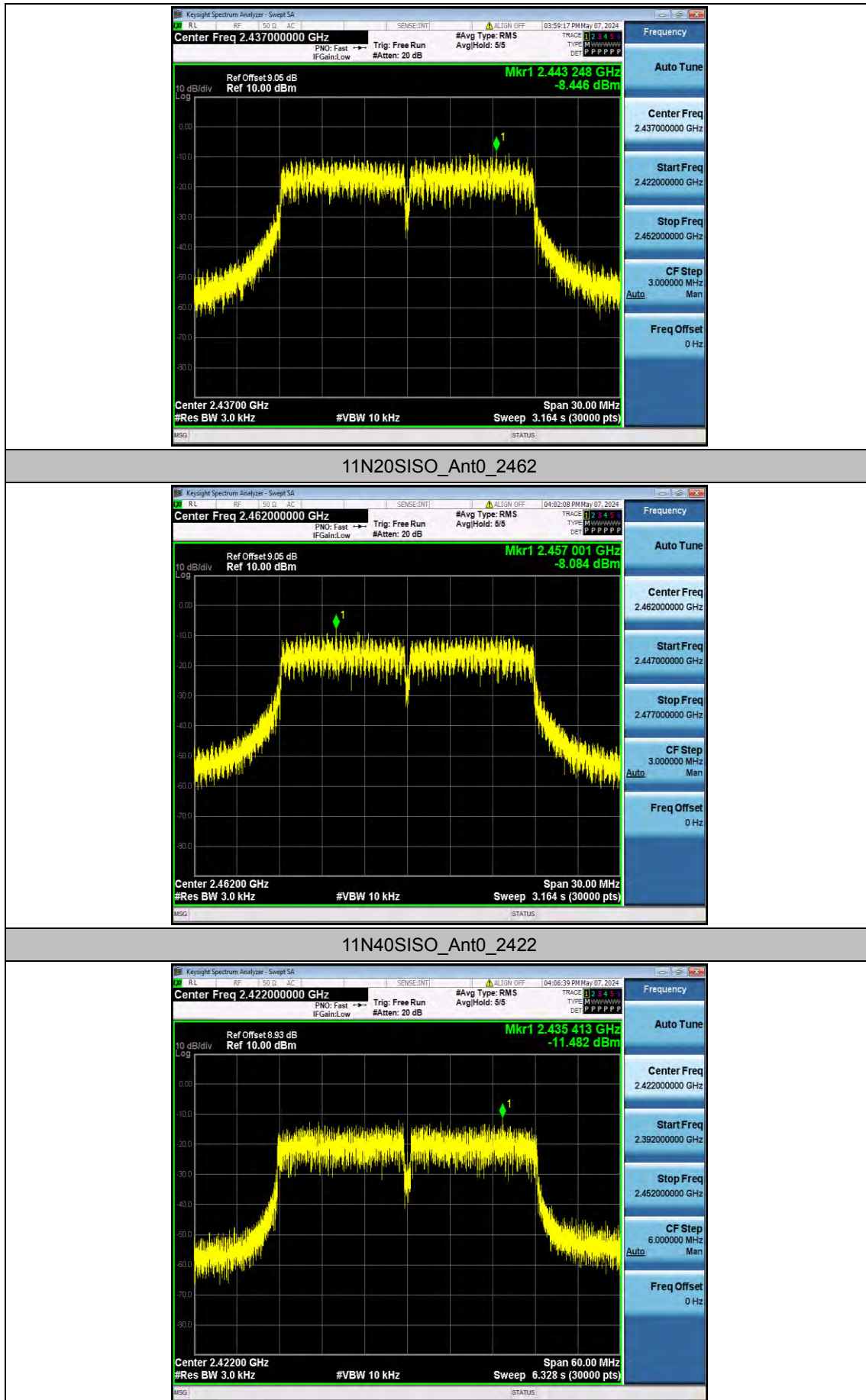
11G_Ant0_2462

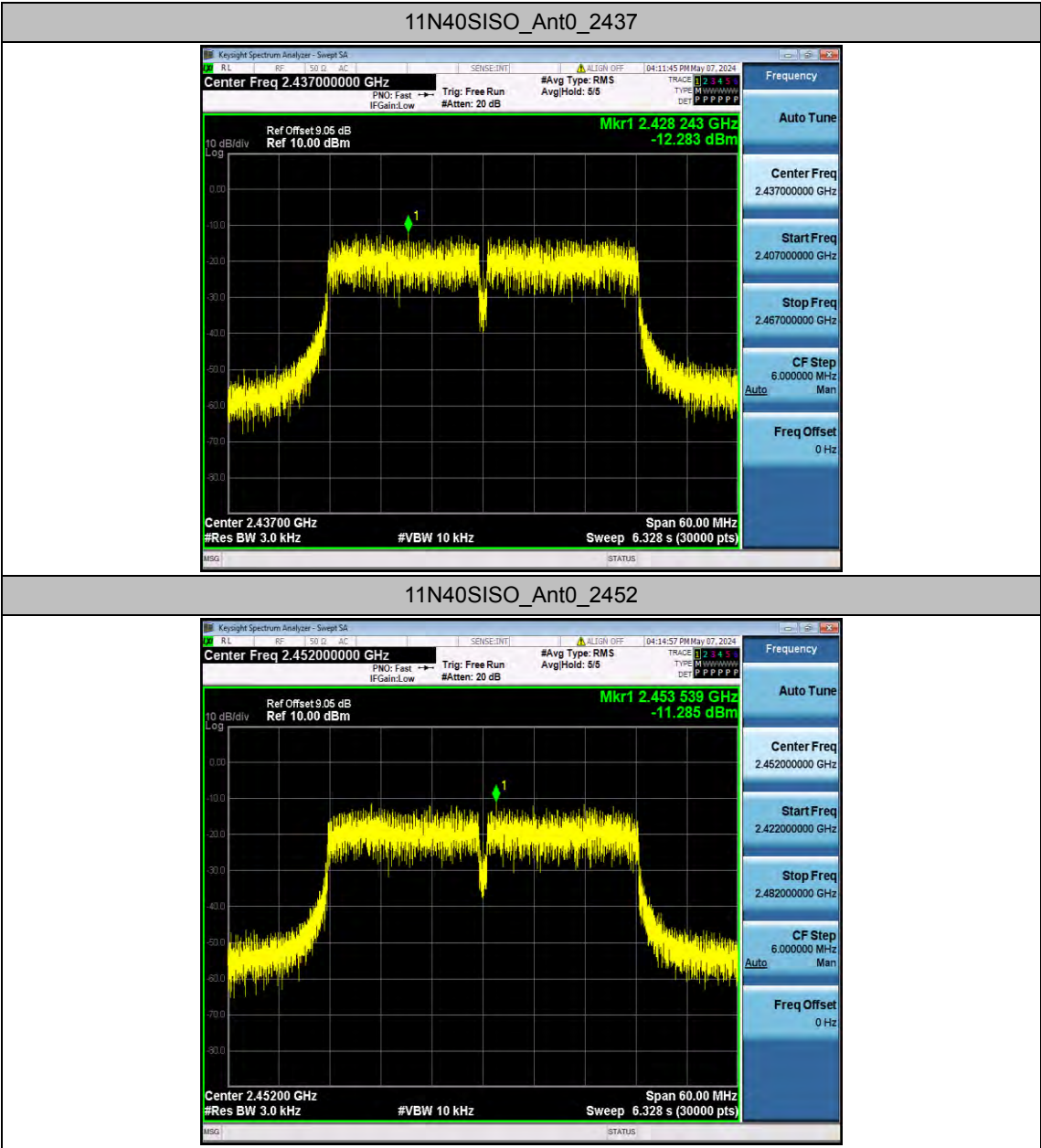


11N20SISO_Ant0_2412



11N20SISO_Ant0_2437



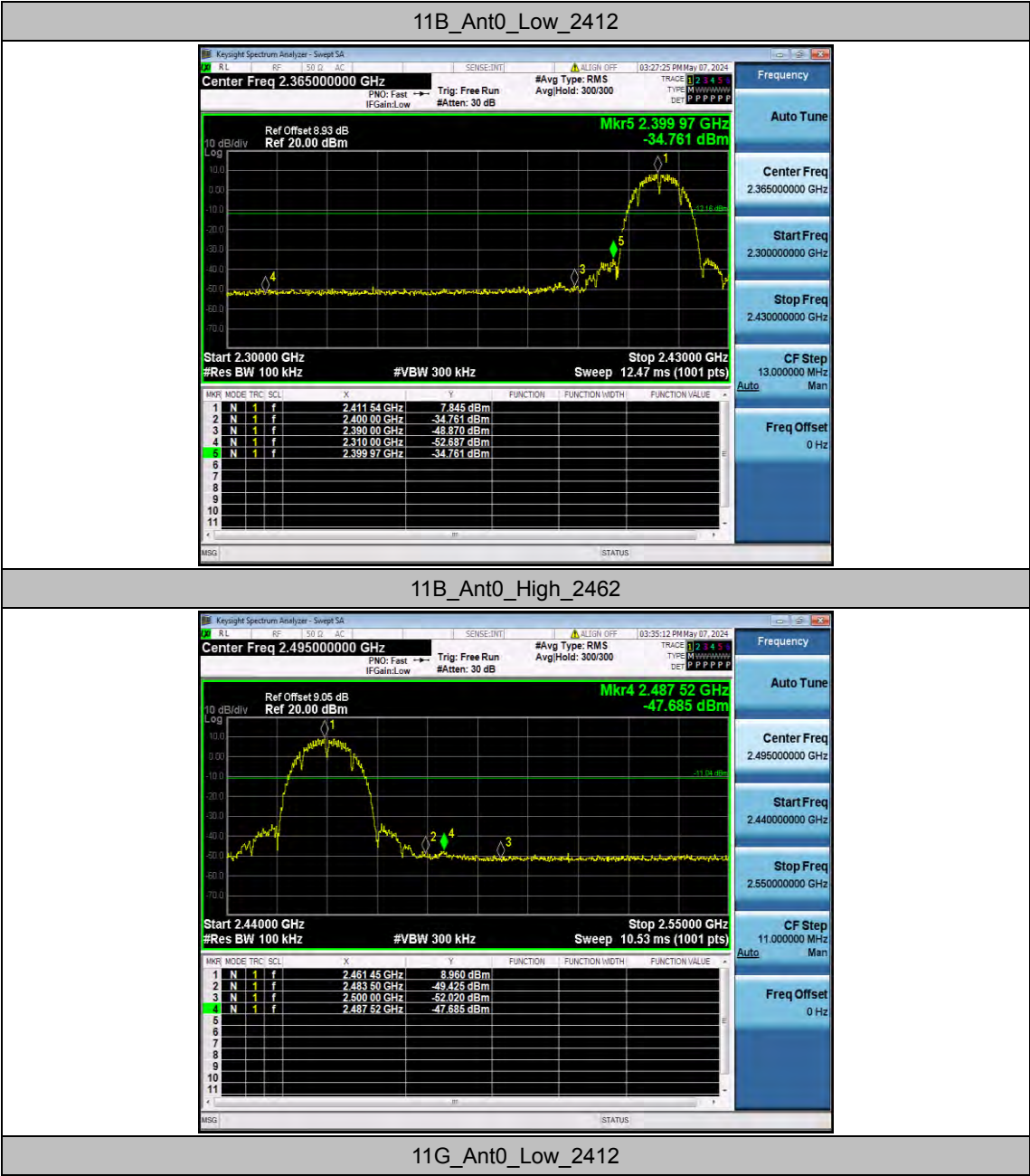


Appendix C.5: Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant0	Low	2412	7.85	-34.76	≤ -12.16	PASS
		High	2462	8.96	-47.69	≤ -11.04	PASS
11G	Ant0	Low	2412	5.08	-29.48	≤ -14.92	PASS
		High	2462	6.35	-39.86	≤ -13.65	PASS
11N20SISO	Ant0	Low	2412	5.01	-29.35	≤ -14.99	PASS
		High	2462	6.17	-34.79	≤ -13.83	PASS
11N40SISO	Ant0	Low	2422	2.50	-29.43	≤ -17.5	PASS
		High	2452	3.11	-31.06	≤ -16.89	PASS

Test Graphs



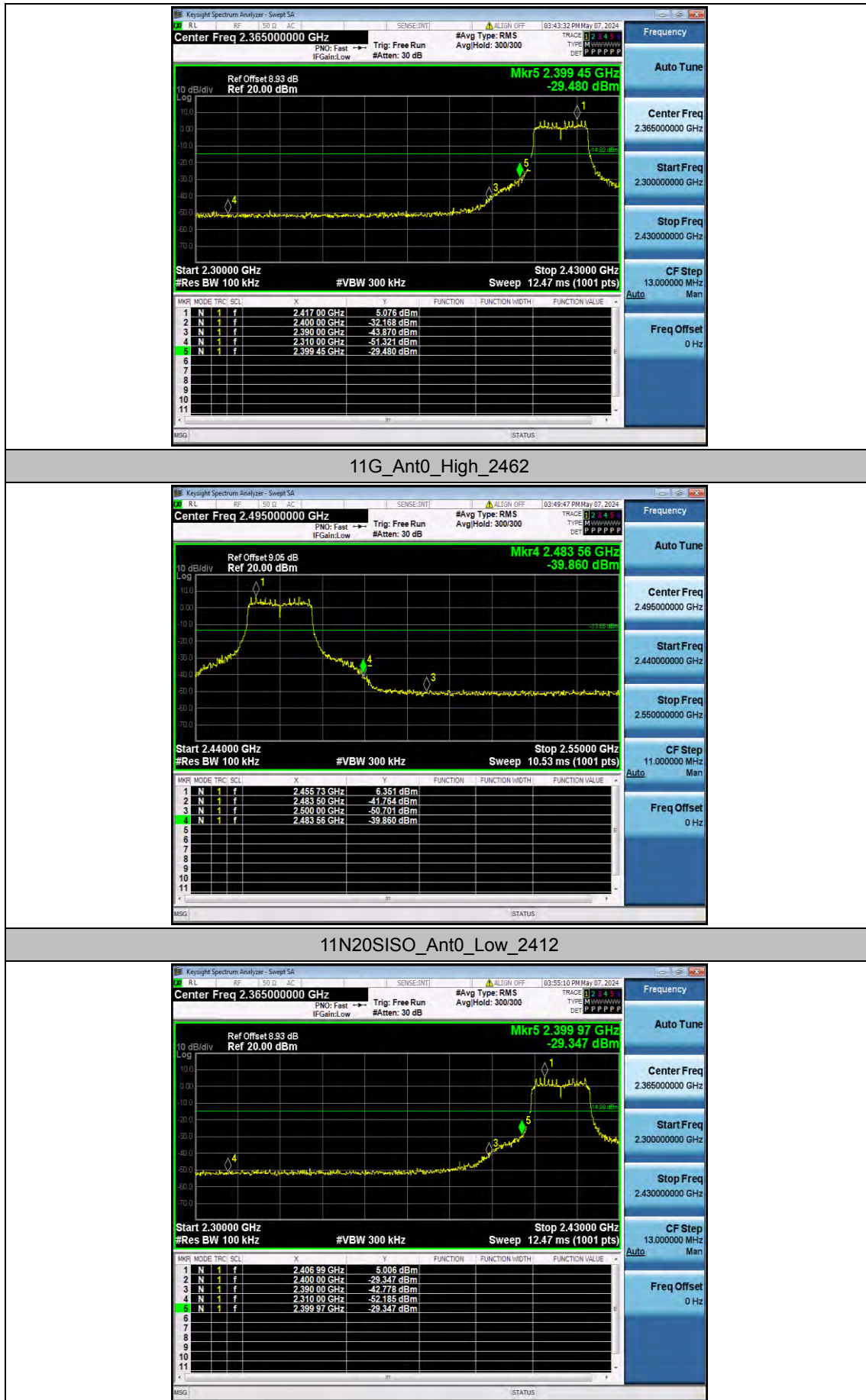
11B_Ant0_High_2462

Frequency

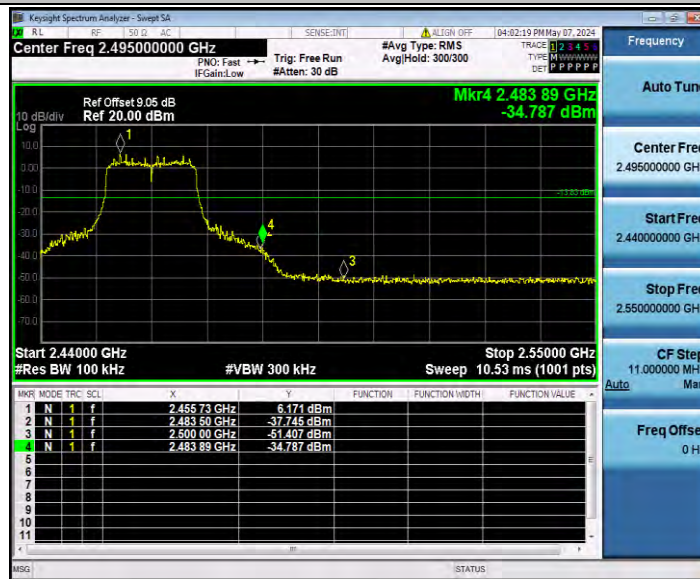
Auto Tune

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

11G_Ant0_Low_2412



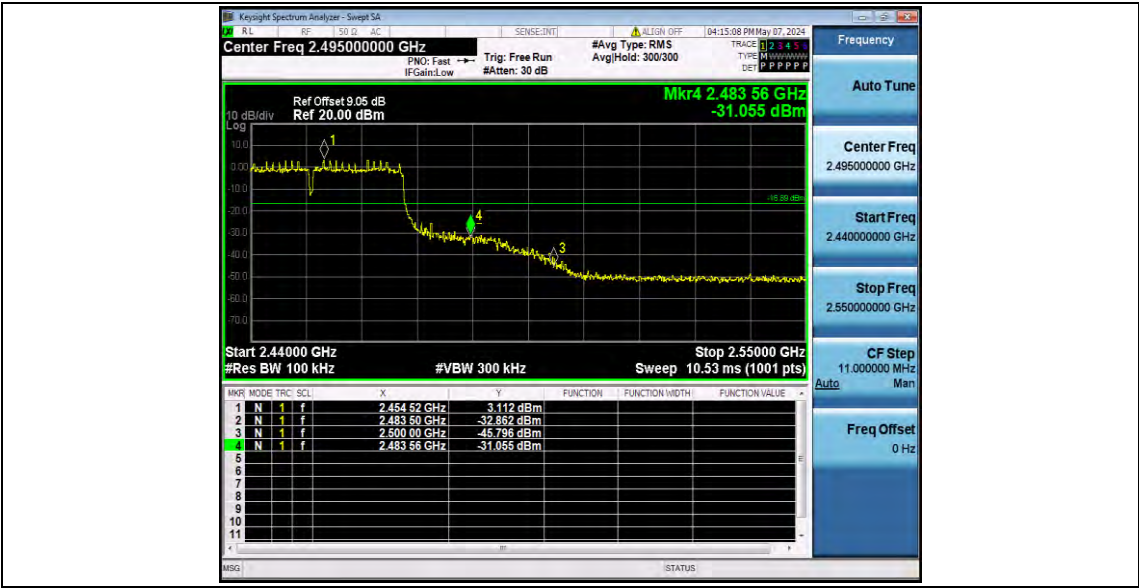
11N20SISO_Ant0_High_2462



11N40SISO_Ant0_Low_2422



11N40SISO_Ant0_High_2452

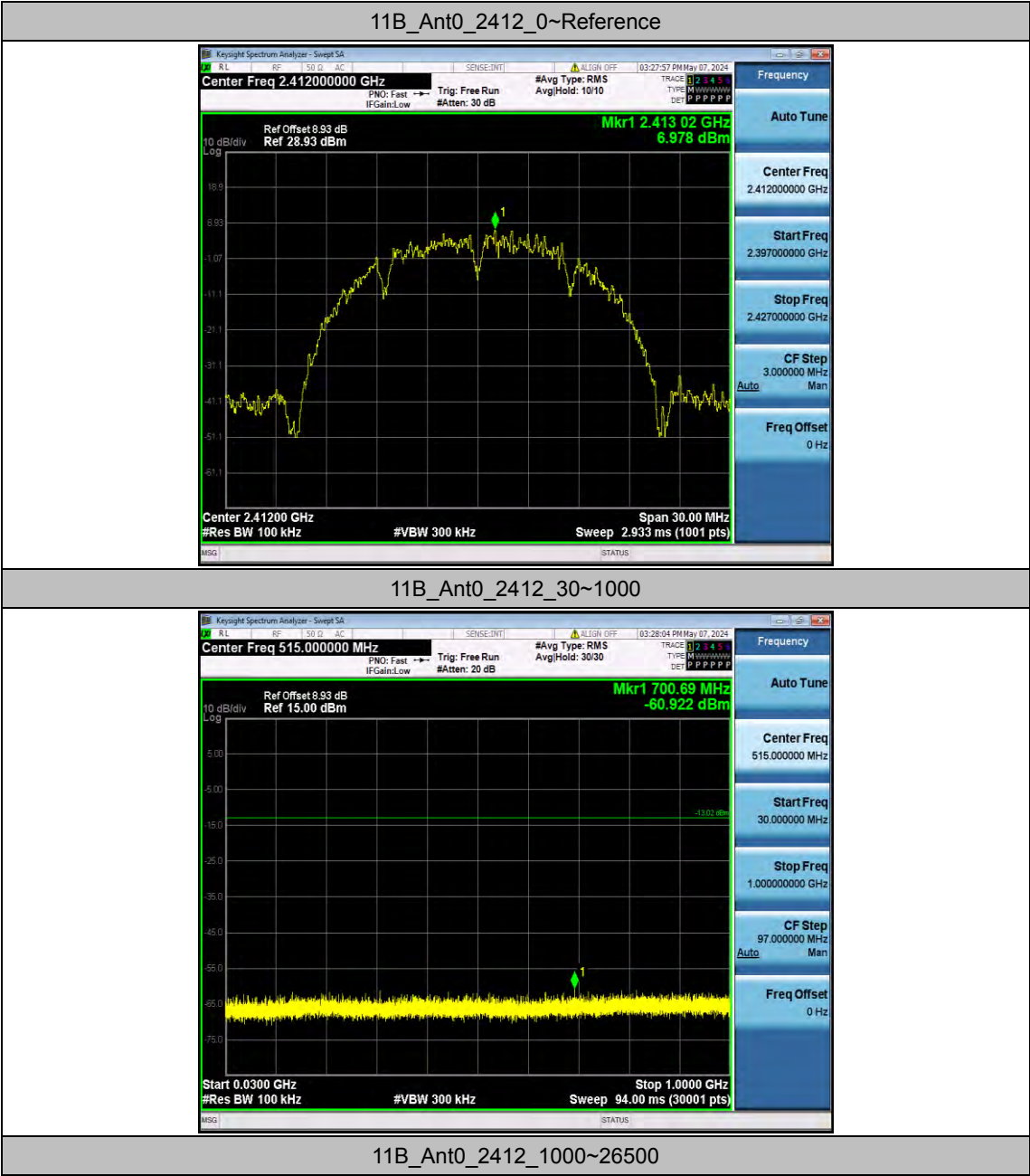


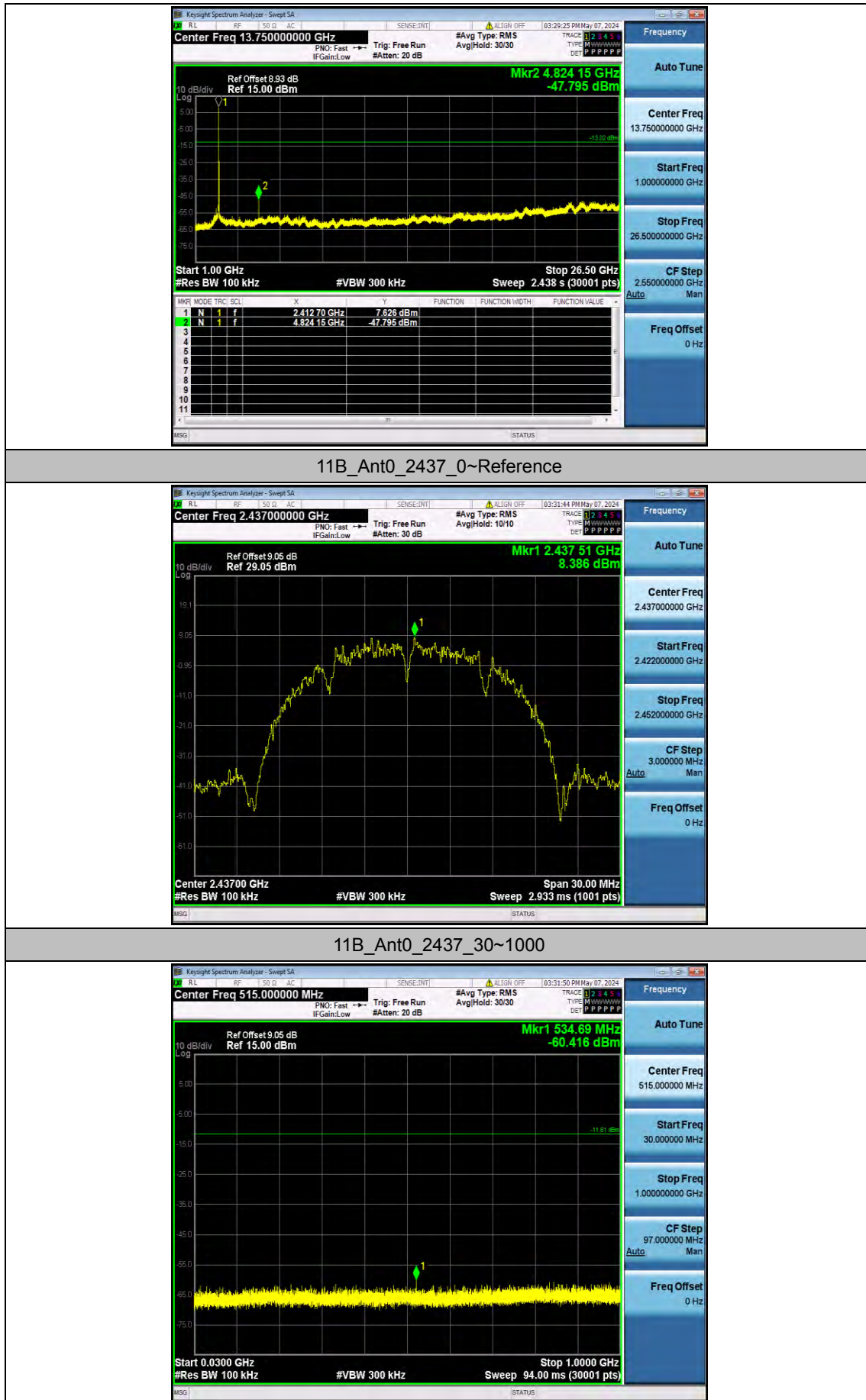
Appendix C.6: Conducted Spurious Emission

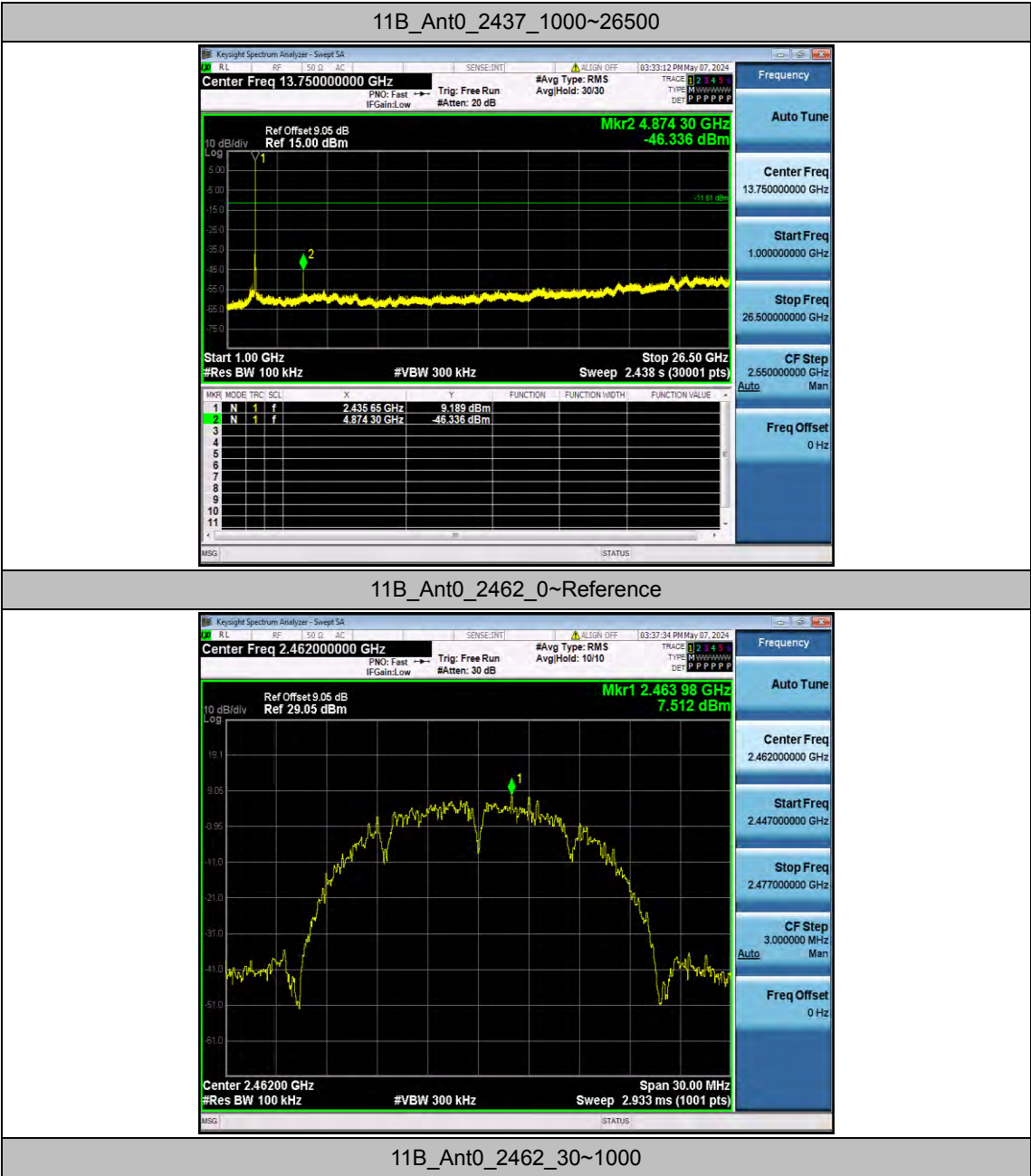
Test Result

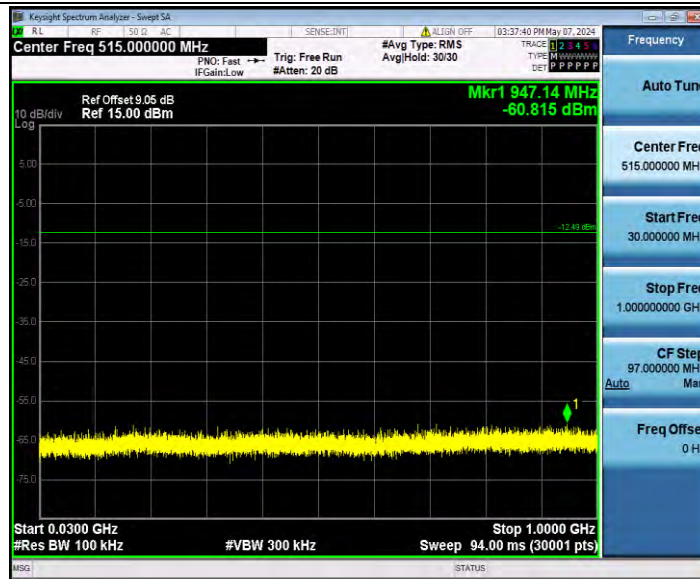
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant0	2412	Reference	6.98	6.98	---	PASS
			30~1000	6.98	-60.92	≤ -13.02	PASS
			1000~26500	6.98	-47.8	≤ -13.02	PASS
		2437	Reference	8.39	8.39	---	PASS
			30~1000	8.39	-60.42	≤ -11.61	PASS
			1000~26500	8.39	-46.34	≤ -11.61	PASS
		2462	Reference	7.51	7.51	---	PASS
			30~1000	7.51	-60.82	≤ -12.49	PASS
			1000~26500	7.51	-47.53	≤ -12.49	PASS
11G	Ant0	2412	Reference	4.14	4.14	---	PASS
			30~1000	4.14	-60.56	≤ -15.86	PASS
			1000~26500	4.14	-48.26	≤ -15.86	PASS
		2437	Reference	5.29	5.29	---	PASS
			30~1000	5.29	-60.85	≤ -14.71	PASS
			1000~26500	5.29	-47.88	≤ -14.71	PASS
		2462	Reference	5.88	5.88	---	PASS
			30~1000	5.88	-60.56	≤ -14.12	PASS
			1000~26500	5.88	-48.25	≤ -14.12	PASS
11N20SISO	Ant0	2412	Reference	3.50	3.50	---	PASS
			30~1000	3.50	-61.12	≤ -16.5	PASS
			1000~26500	3.50	-48.02	≤ -16.5	PASS
		2437	Reference	4.45	4.45	---	PASS
			30~1000	4.45	-59.84	≤ -15.55	PASS
			1000~26500	4.45	-47.22	≤ -15.55	PASS
		2462	Reference	-3.49	-3.49	---	PASS
			30~1000	-3.49	-46.49	≤ -23.49	PASS
			1000~26500	-3.49	-47.67	≤ -23.49	PASS
11N40SISO	Ant0	2422	Reference	0.57	0.57	---	PASS
			30~1000	0.57	-60.17	≤ -19.43	PASS
			1000~26500	0.57	-47.42	≤ -19.43	PASS
		2437	Reference	1.29	1.29	---	PASS
			30~1000	1.29	-60.63	≤ -18.71	PASS
			1000~26500	1.29	-48.09	≤ -18.71	PASS
		2452	Reference	1.66	1.66	---	PASS
			30~1000	1.66	-60.68	≤ -18.34	PASS
			1000~26500	1.66	-47.76	≤ -18.34	PASS

Test Graphs

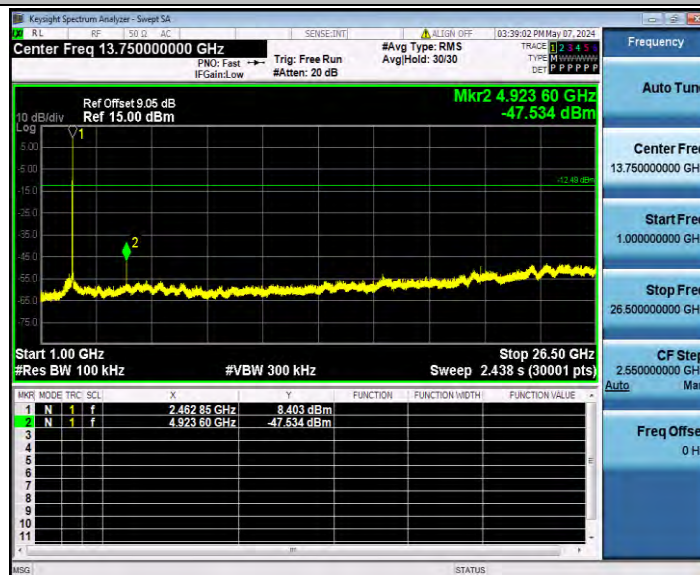








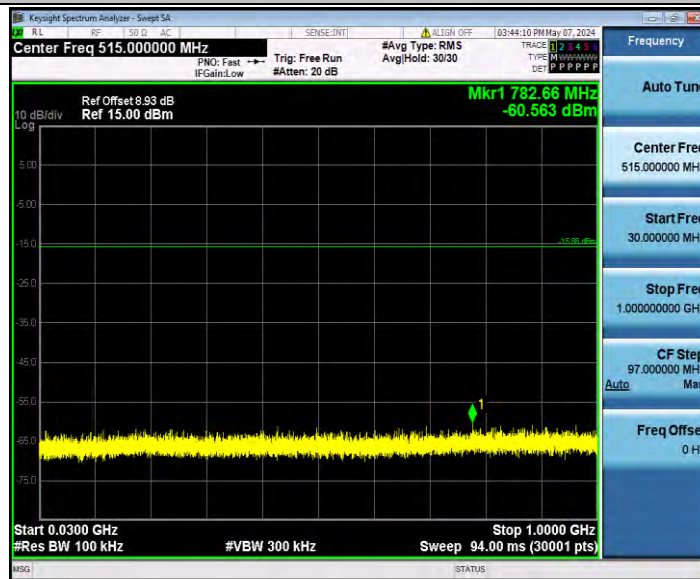
11B_Ant0_2462_1000~26500



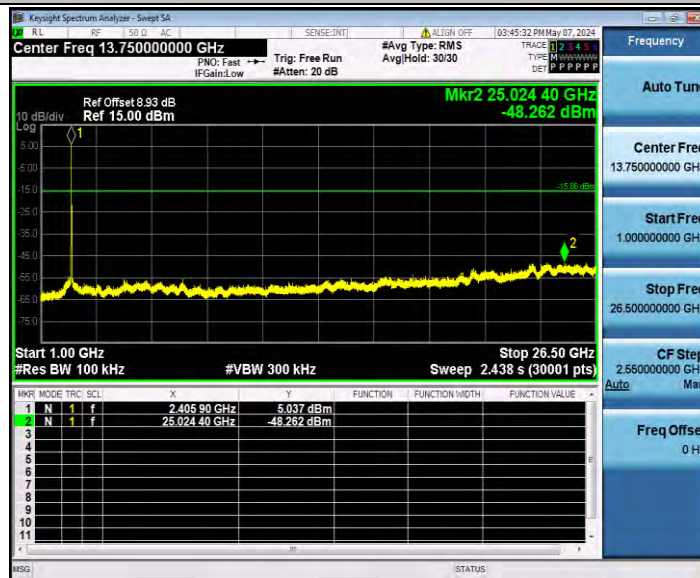
11G_Ant0_2412_0~Reference



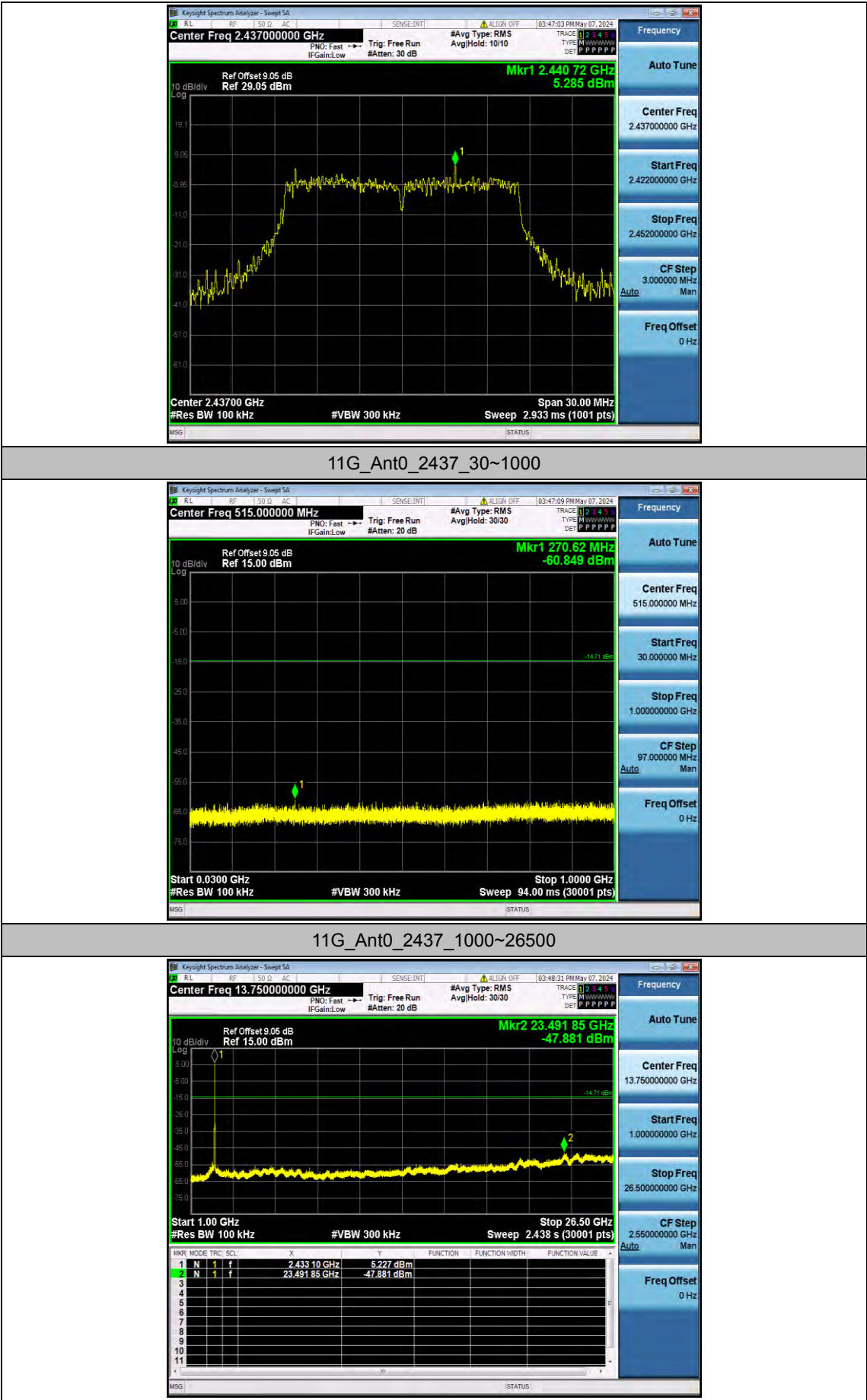
11G_Ant0_2412_30~1000



11G_Ant0_2412_1000~26500



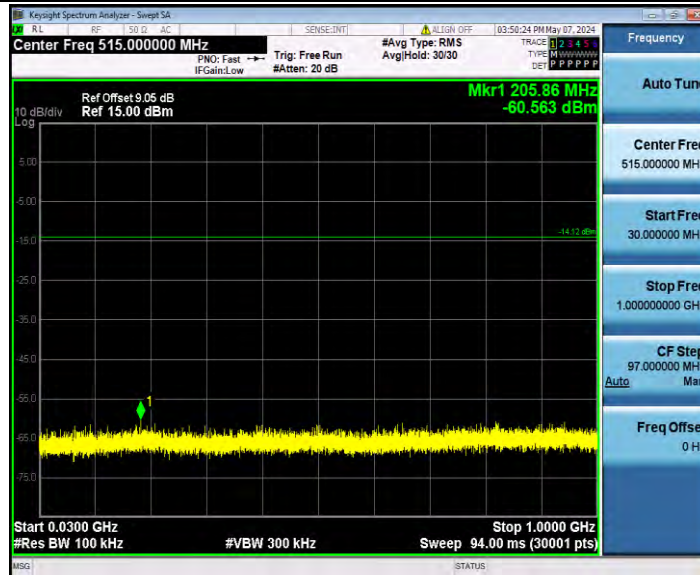
11G_Ant0_2437_0~Reference



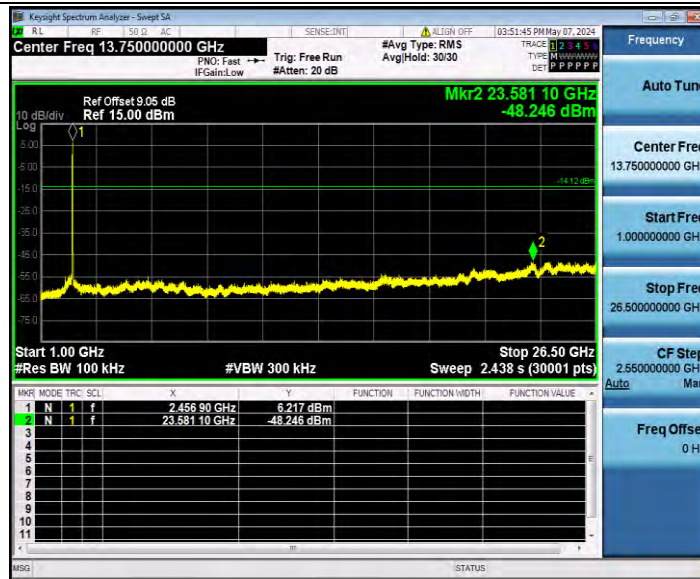
11G_Ant0_2462_0~Reference



11G_Ant0_2462_30~1000



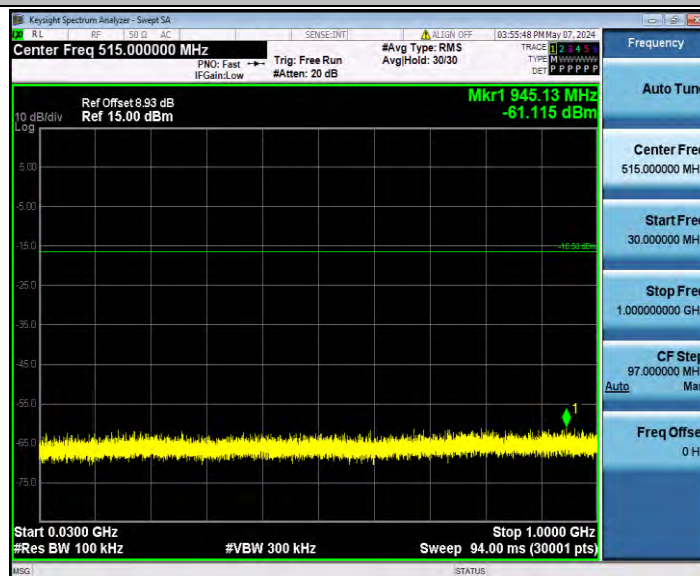
11G_Ant0_2462_1000~26500



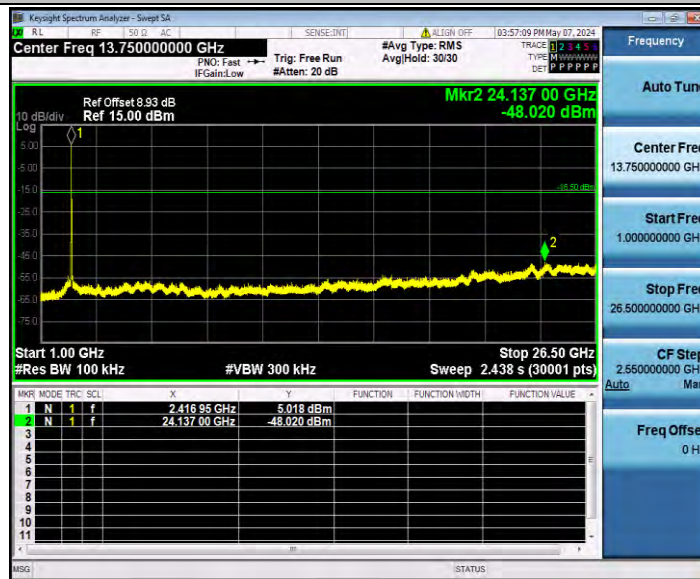
11N20SISO_Ant0_2412_0~Reference



11N20SISO_Ant0_2412_30~1000



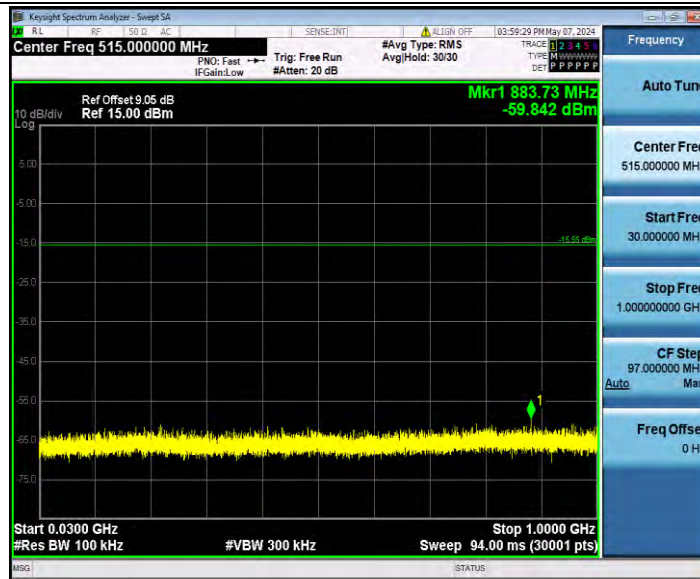
11N20SISO_Ant0_2412_1000~26500



11N20SISO_Ant0_2437_0~Reference



11N20SISO_Ant0_2437_30~1000

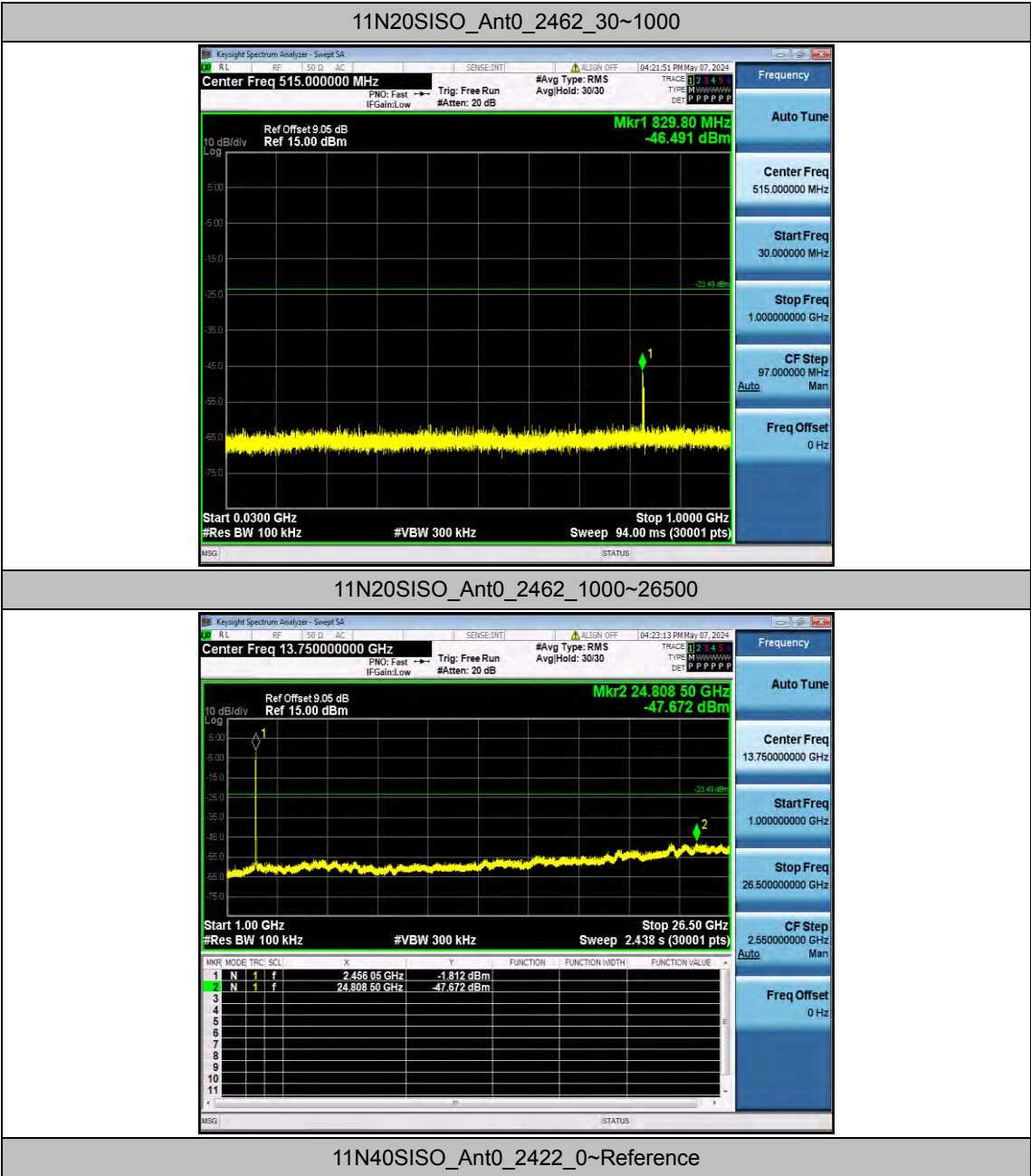


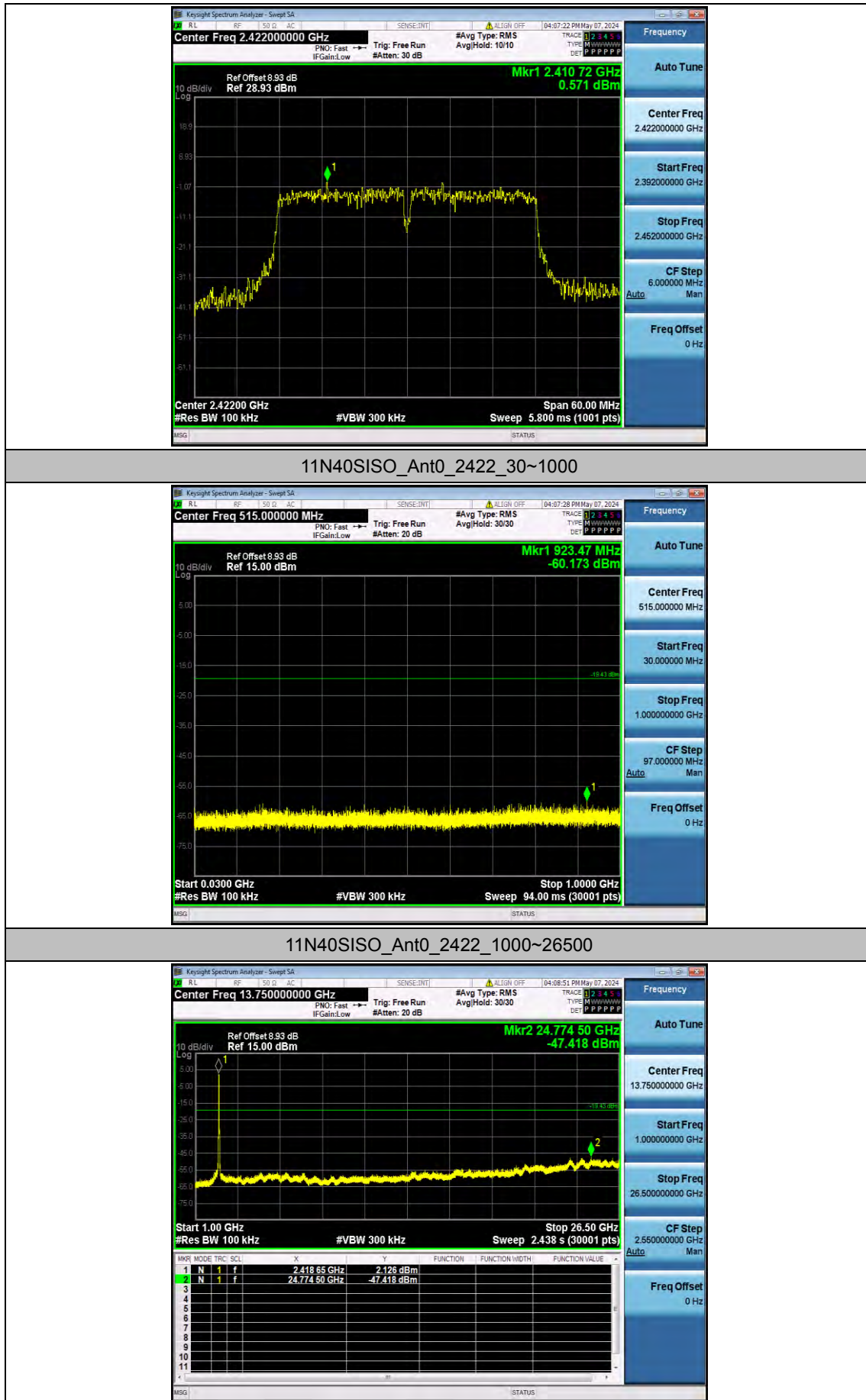
11N20SISO_Ant0_2437_1000~26500



11N20SISO_Ant0_2462_0~Reference



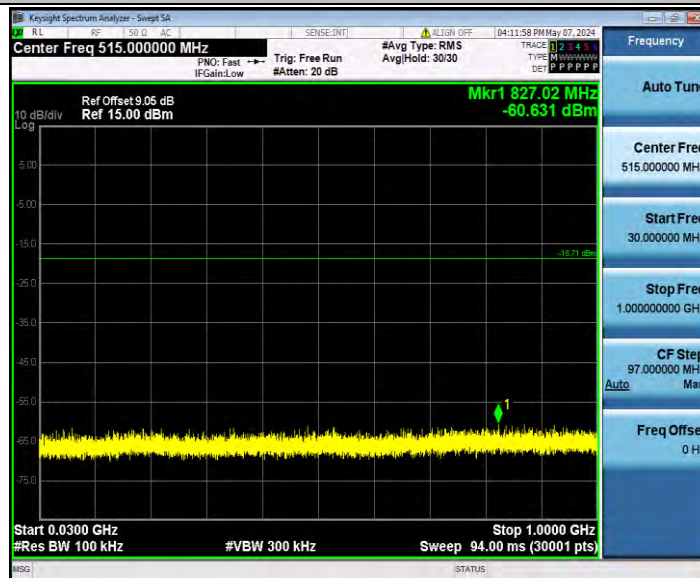




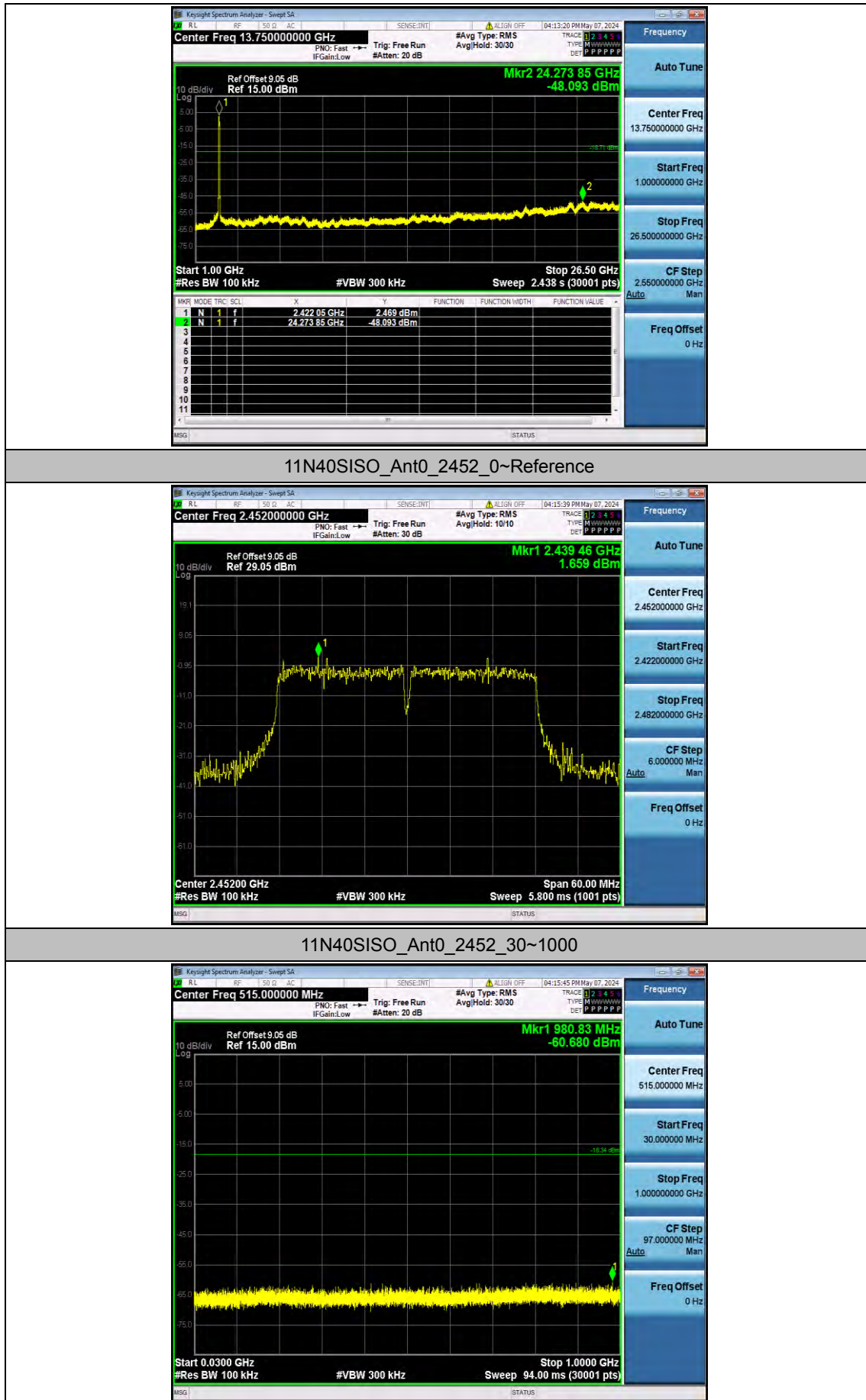
11N40SISO_Ant0_2437_0~Reference



11N40SISO_Ant0_2437_30~1000



11N40SISO_Ant0_2437_1000~26500





Appendix C.7: Emissions in Restricted Bands

Test Result

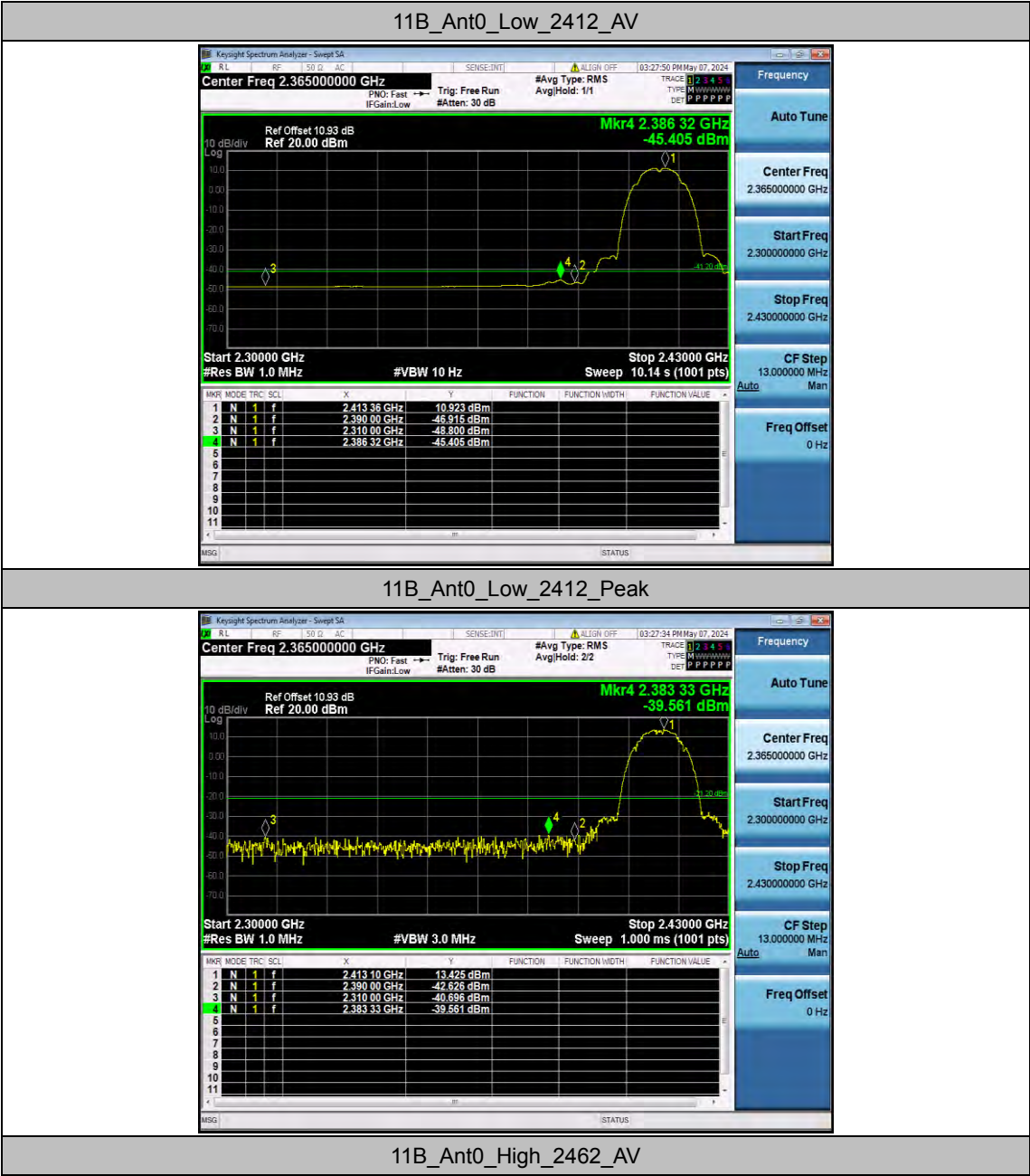
TestMode	Antenna	ChName	Frequenc y[MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant0	Low	2412	AV	2310.000	-48.8	≤-41.20	46.40	≤54	PASS
				AV	2386.320	-45.4	≤-41.20	49.80	≤54	PASS
				AV	2390.000	-46.92	≤-41.20	48.28	≤54	PASS
				Peak	2310.000	-40.7	≤-21.20	54.50	≤74	PASS
				Peak	2383.330	-39.56	≤-21.20	55.64	≤74	PASS
				Peak	2390.000	-42.63	≤-21.20	52.57	≤74	PASS
		High	2462	AV	2483.500	-46.69	≤-41.20	48.51	≤54	PASS
				AV	2487.630	-45.83	≤-41.20	49.37	≤54	PASS
				AV	2500.000	-48.25	≤-41.20	46.95	≤54	PASS
				Peak	2483.500	-41.93	≤-21.20	53.27	≤74	PASS
				Peak	2494.010	-40.75	≤-21.20	54.45	≤74	PASS
				Peak	2500.000	-44.58	≤-21.20	50.62	≤74	PASS
11G	Ant0	Low	2412	AV	2310.000	-49.44	≤-41.20	45.76	≤54	PASS
				AV	2389.960	-44.49	≤-41.20	50.71	≤54	PASS
				AV	2390.000	-44.49	≤-41.20	50.71	≤54	PASS
				Peak	2310.000	-48.52	≤-21.20	46.68	≤74	PASS
				Peak	2389.180	-38.08	≤-21.20	57.12	≤74	PASS
				Peak	2390.000	-39.11	≤-21.20	56.09	≤74	PASS
		High	2462	AV	2483.500	-43.29	≤-41.20	51.91	≤54	PASS
				AV	2483.560	-43.5	≤-41.20	51.70	≤54	PASS
				AV	2500.000	-48.75	≤-41.20	46.45	≤54	PASS
				Peak	2483.500	-42.44	≤-21.20	52.76	≤74	PASS
				Peak	2483.890	-37.33	≤-21.20	57.87	≤74	PASS
				Peak	2500.000	-45.56	≤-21.20	49.64	≤74	PASS
11N20SIS O	Ant0	Low	2412	AV	2310.000	-49.47	≤-41.20	45.73	≤54	PASS
				AV	2389.960	-43.93	≤-41.20	51.27	≤54	PASS
				AV	2390.000	-43.93	≤-41.20	51.27	≤54	PASS
				Peak	2310.000	-45.89	≤-21.20	49.31	≤74	PASS
				Peak	2389.700	-37.53	≤-21.20	57.67	≤74	PASS
				Peak	2390.000	-40.74	≤-21.20	54.46	≤74	PASS
		High	2462	AV	2483.500	-41.87	≤-41.20	53.33	≤54	PASS
				AV	2483.560	-41.91	≤-41.20	53.29	≤54	PASS
				AV	2500.000	-48.76	≤-41.20	46.44	≤54	PASS
				Peak	2483.500	-34.12	≤-21.20	61.08	≤74	PASS
				Peak	2483.560	-34.28	≤-21.20	60.92	≤74	PASS

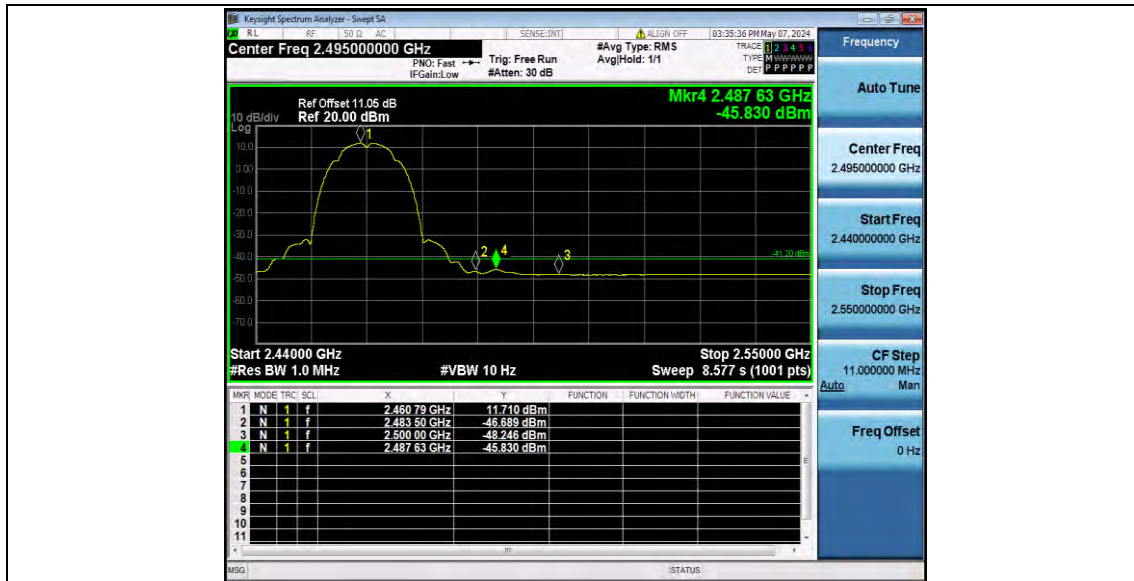
				Peak	2500.000	-47.83	≤ -21.20	47.37	≤ 74	PASS
11N40SIS O	Ant0	Low	2422	AV	2310.000	-49.53	≤ -41.20	45.67	≤ 54	PASS
				AV	2389.960	-42.35	≤ -41.20	52.85	≤ 54	PASS
				AV	2390.000	-42.35	≤ -41.20	52.85	≤ 54	PASS
				Peak	2310.000	-44.17	≤ -21.20	51.03	≤ 74	PASS
				Peak	2389.440	-36.34	≤ -21.20	58.86	≤ 74	PASS
				Peak	2390.000	-43.89	≤ -21.20	51.31	≤ 74	PASS
		High	2452	AV	2483.500	-41.61	≤ -41.20	53.59	≤ 54	PASS
				AV	2483.560	-41.58	≤ -41.20	53.62	≤ 54	PASS
				AV	2500.000	-47.75	≤ -41.20	47.45	≤ 54	PASS
				Peak	2483.500	-31.66	≤ -21.20	63.54	≤ 74	PASS
				Peak	2485.100	-27.63	≤ -21.20	67.57	≤ 74	PASS
				Peak	2500.000	-42.25	≤ -21.20	52.95	≤ 74	PASS

Note:

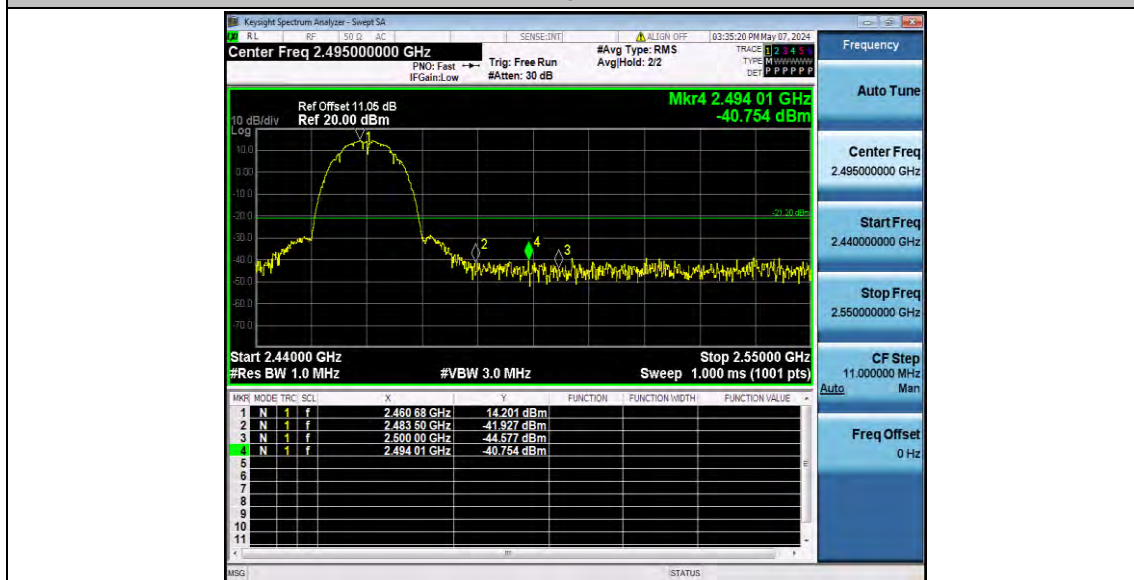
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

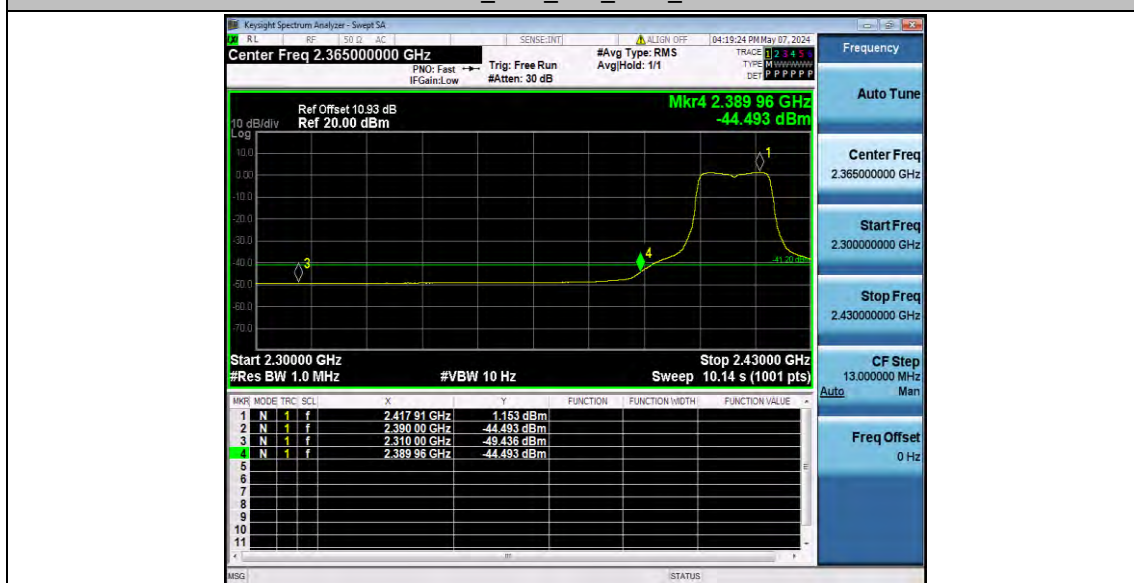


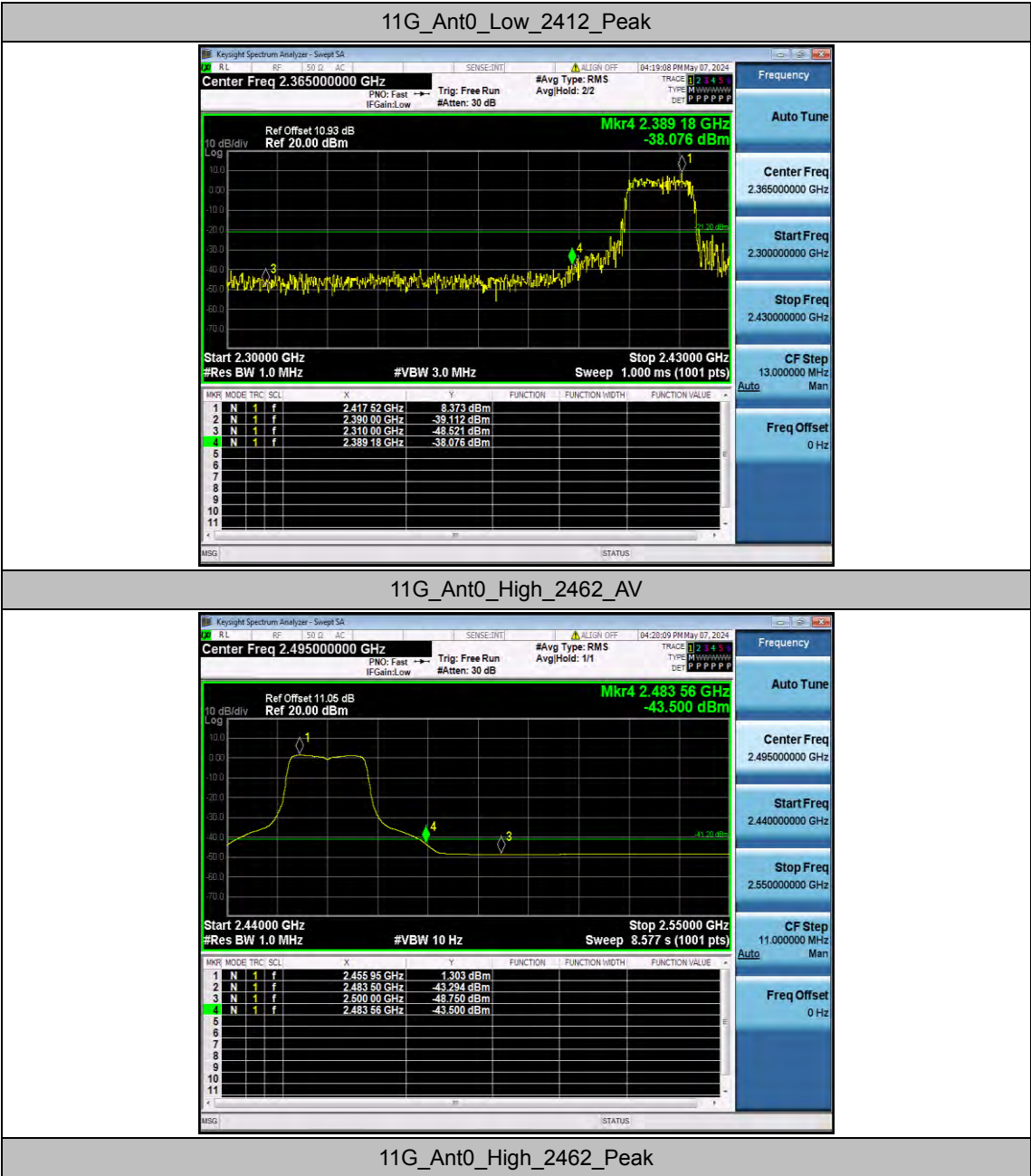


11B_Ant0_High_2462_Peak



11G_Ant0_Low_2412_AV







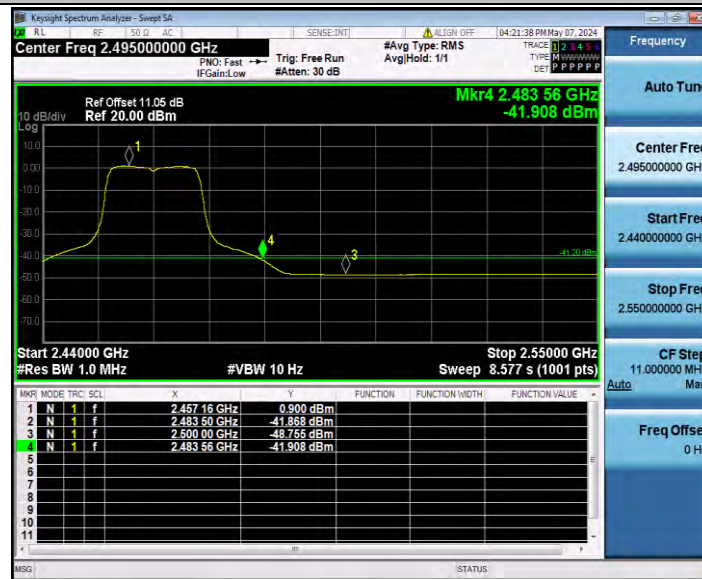
11N20SISO_Ant0_Low_2412_AV



11N20SISO_Ant0_Low_2412_Peak



11N20SISO_Ant0_High_2462_AV



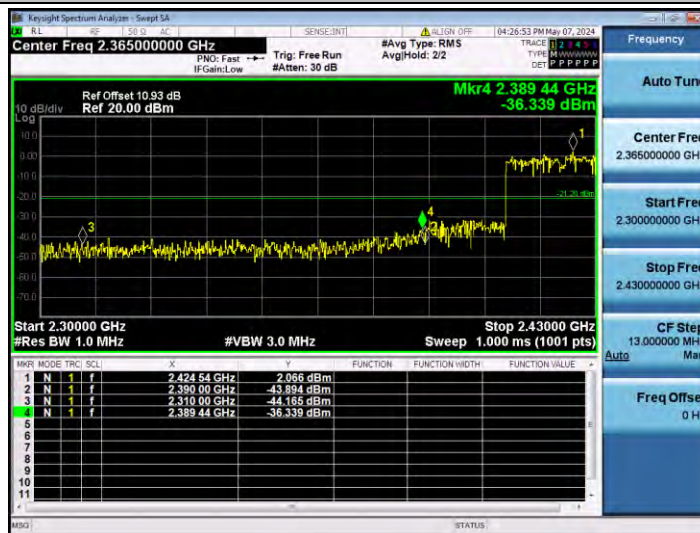
11N20SISO_Ant0_High_2462_Peak



11N40SISO_Ant0_Low_2422_AV



11N40SISO_Ant0_Low_2422_Peak



11N40SISO_Ant0_High_2452_AV



11N40SISO_Ant0_High_2452_Peak

