

Case No. : <u>GTS20231206007-1-17</u>	
Ambient Condition: <u>24</u> °C, <u>48</u> %RH,	
Test Date: <u>2024.1.9</u>	Test Engineer: <u>Evan ouyang</u>

Appendix C.1: DTS Bandwidth

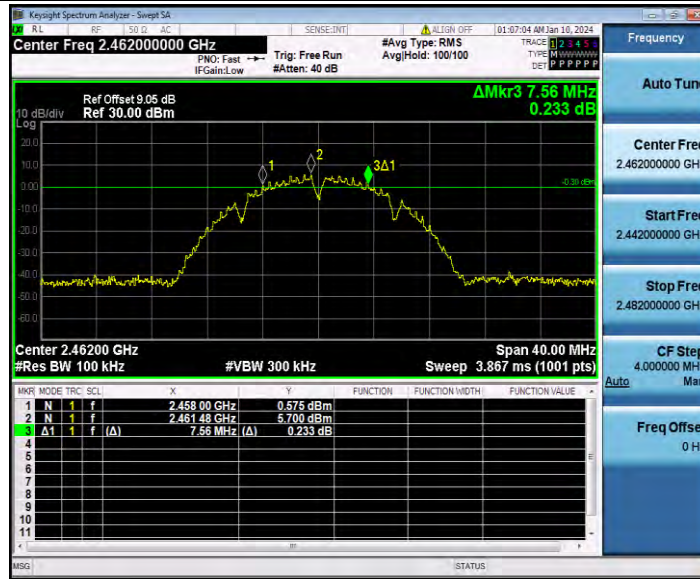
Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.000	2408.000	2416.000	0.5	PASS
		2437	8.560	2432.960	2441.520	0.5	PASS
		2462	7.560	2458.000	2465.560	0.5	PASS
11G	Ant1	2412	15.320	2404.480	2419.800	0.5	PASS
		2437	15.320	2429.440	2444.760	0.5	PASS
		2462	14.920	2454.560	2469.480	0.5	PASS
11N20SISO	Ant1	2412	17.120	2403.640	2420.760	0.5	PASS
		2437	15.120	2429.440	2444.560	0.5	PASS
		2462	15.120	2454.440	2469.560	0.5	PASS
11N40SISO	Ant1	2422	35.120	2404.480	2439.600	0.5	PASS
		2437	35.120	2419.480	2454.600	0.5	PASS
		2452	35.120	2434.480	2469.600	0.5	PASS

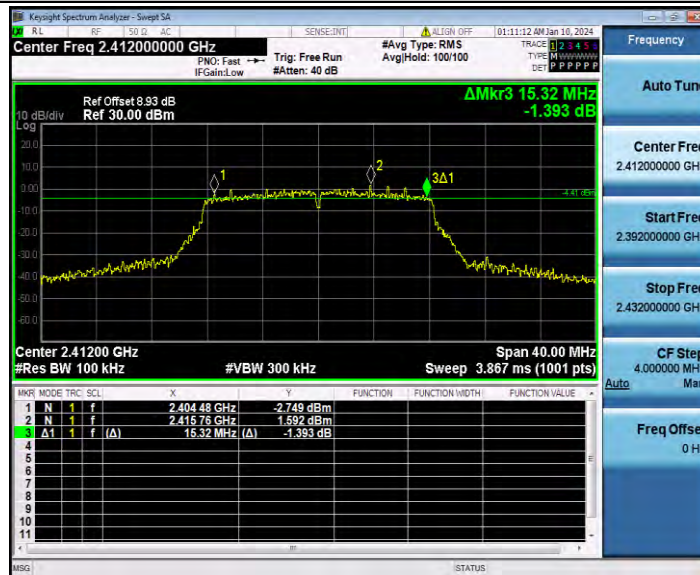
Test Graphs



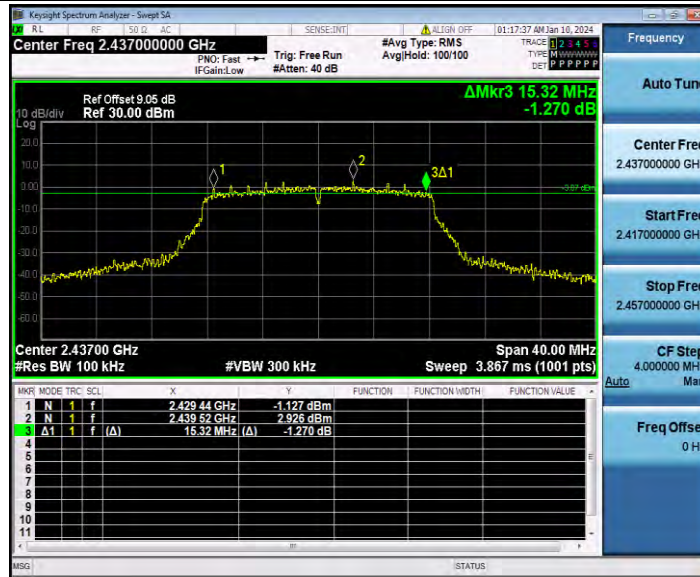
11B_Ant1_2462



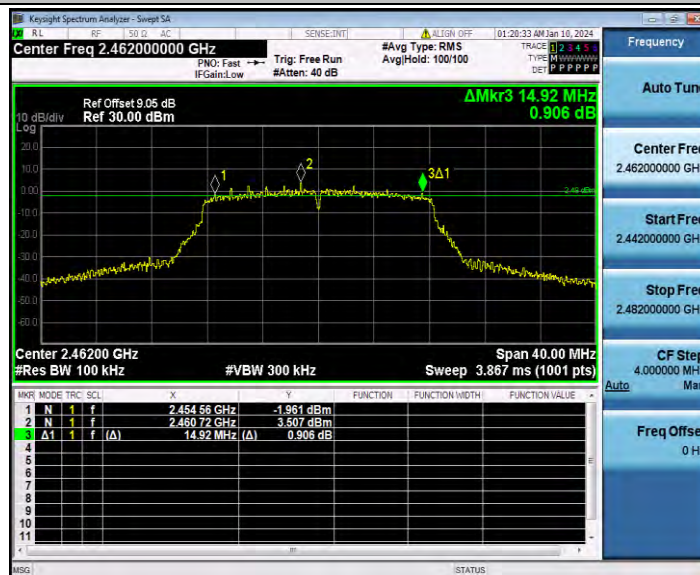
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412

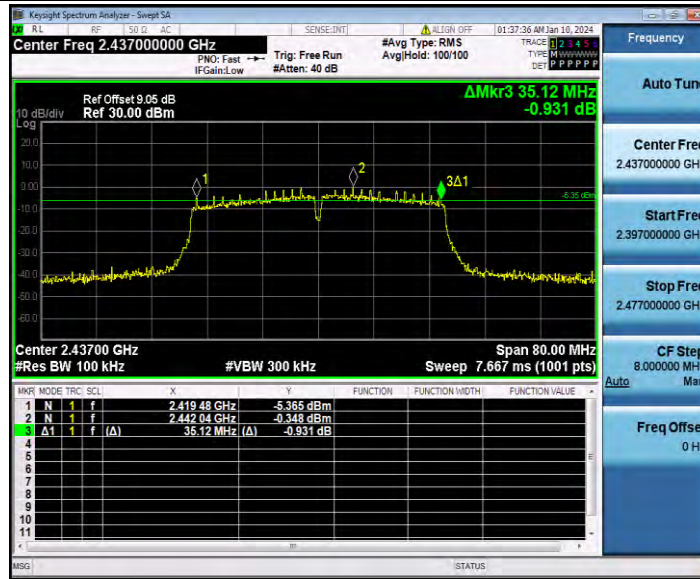


11N20SISO_Ant1_2437

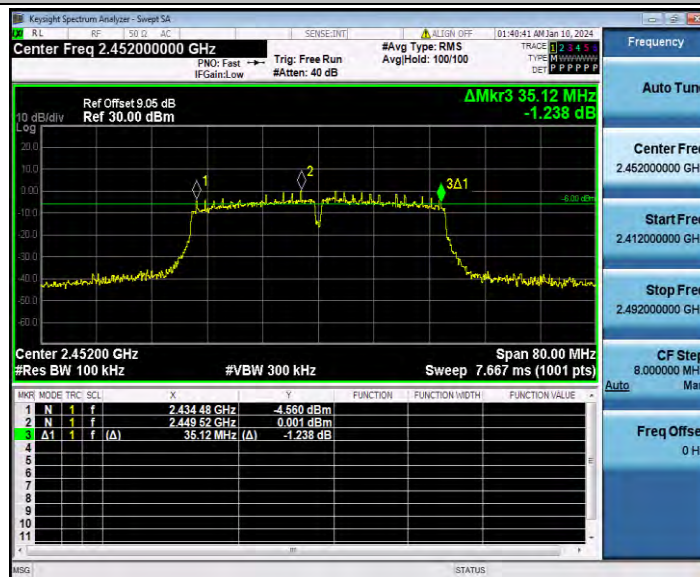




11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

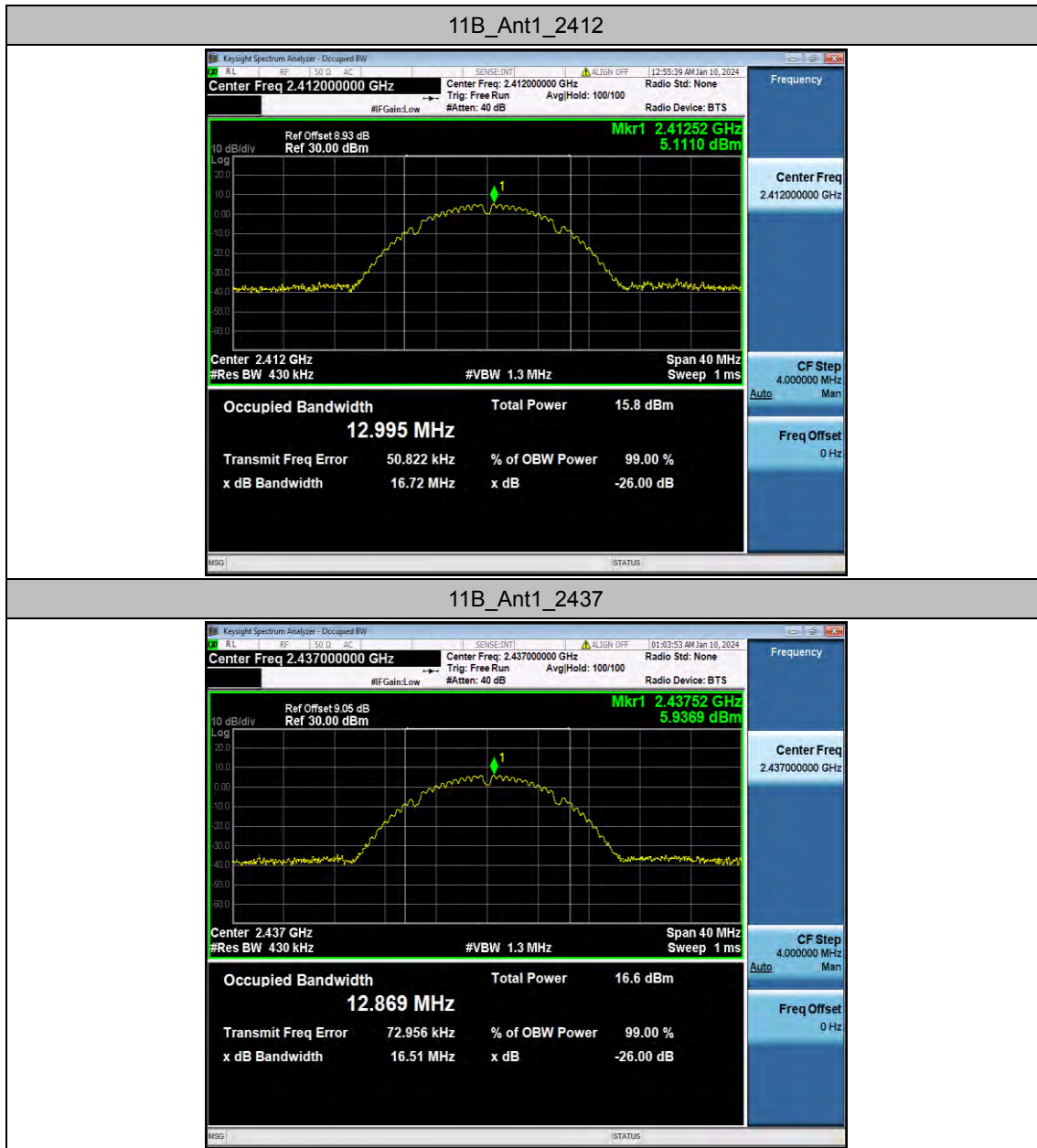


Appendix C.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.995	2405.5533	2418.5483	---	---
		2437	12.869	2430.6385	2443.5075	---	---
		2462	12.871	2455.6074	2468.4784	---	---
11G	Ant1	2412	16.873	2403.6149	2420.4879	---	---
		2437	16.768	2428.6852	2445.4532	---	---
		2462	16.827	2453.6171	2470.4441	---	---
11N20SISO	Ant1	2412	17.938	2403.0767	2421.0147	---	---
		2437	17.800	2428.1548	2445.9548	---	---
		2462	17.828	2453.0877	2470.9157	---	---
11N40SISO	Ant1	2422	36.187	2404.0876	2440.2746	---	---
		2437	36.126	2419.0913	2455.2173	---	---
		2452	36.133	2434.0119	2470.1449	---	---

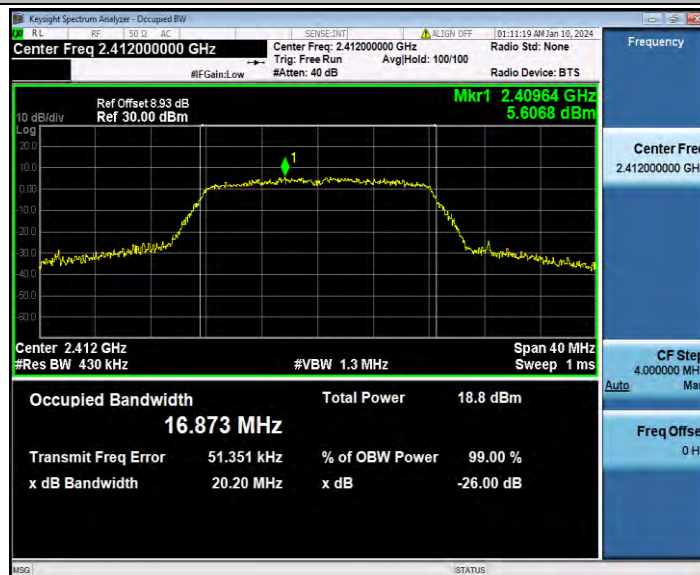
Test Graphs

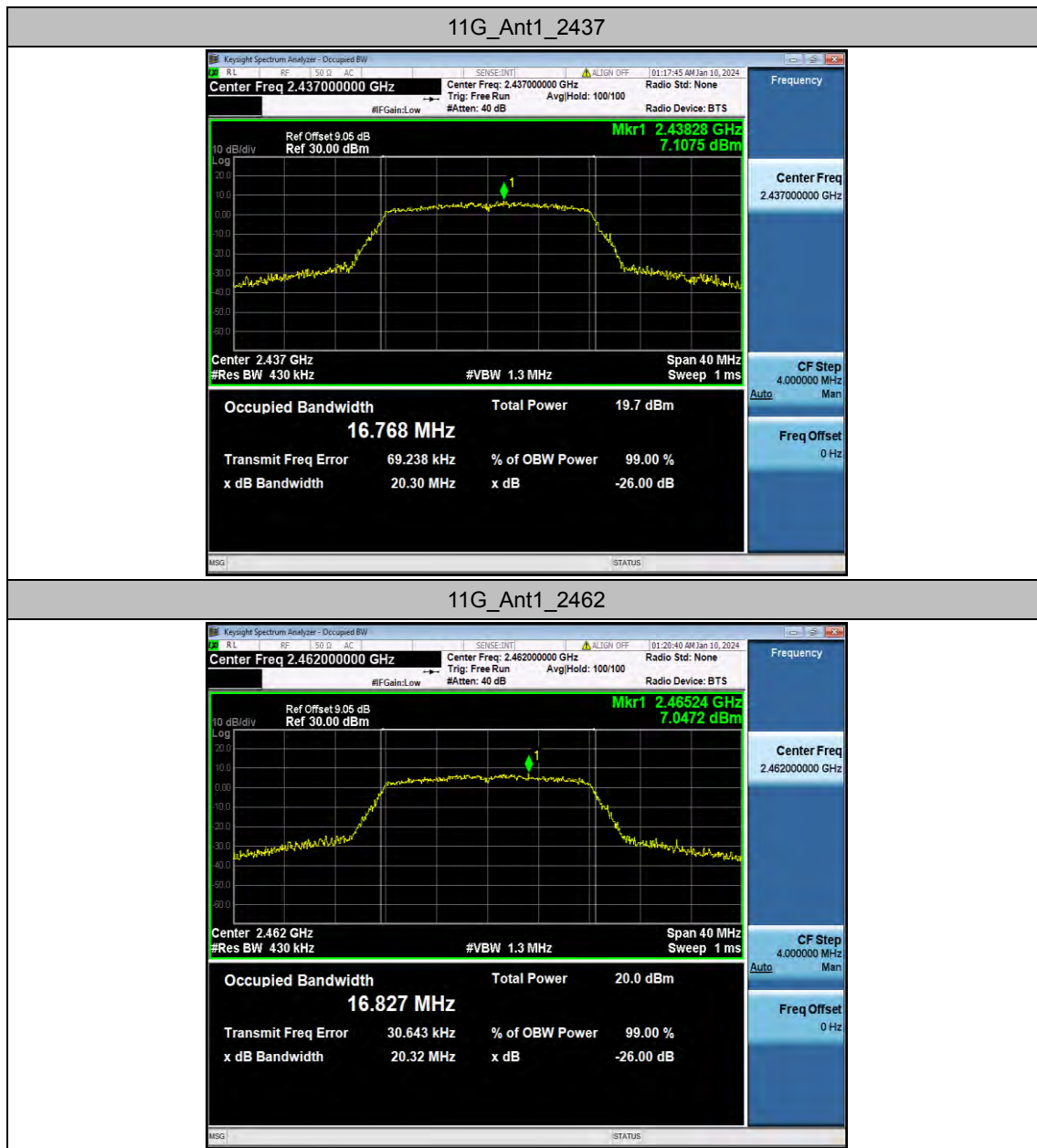


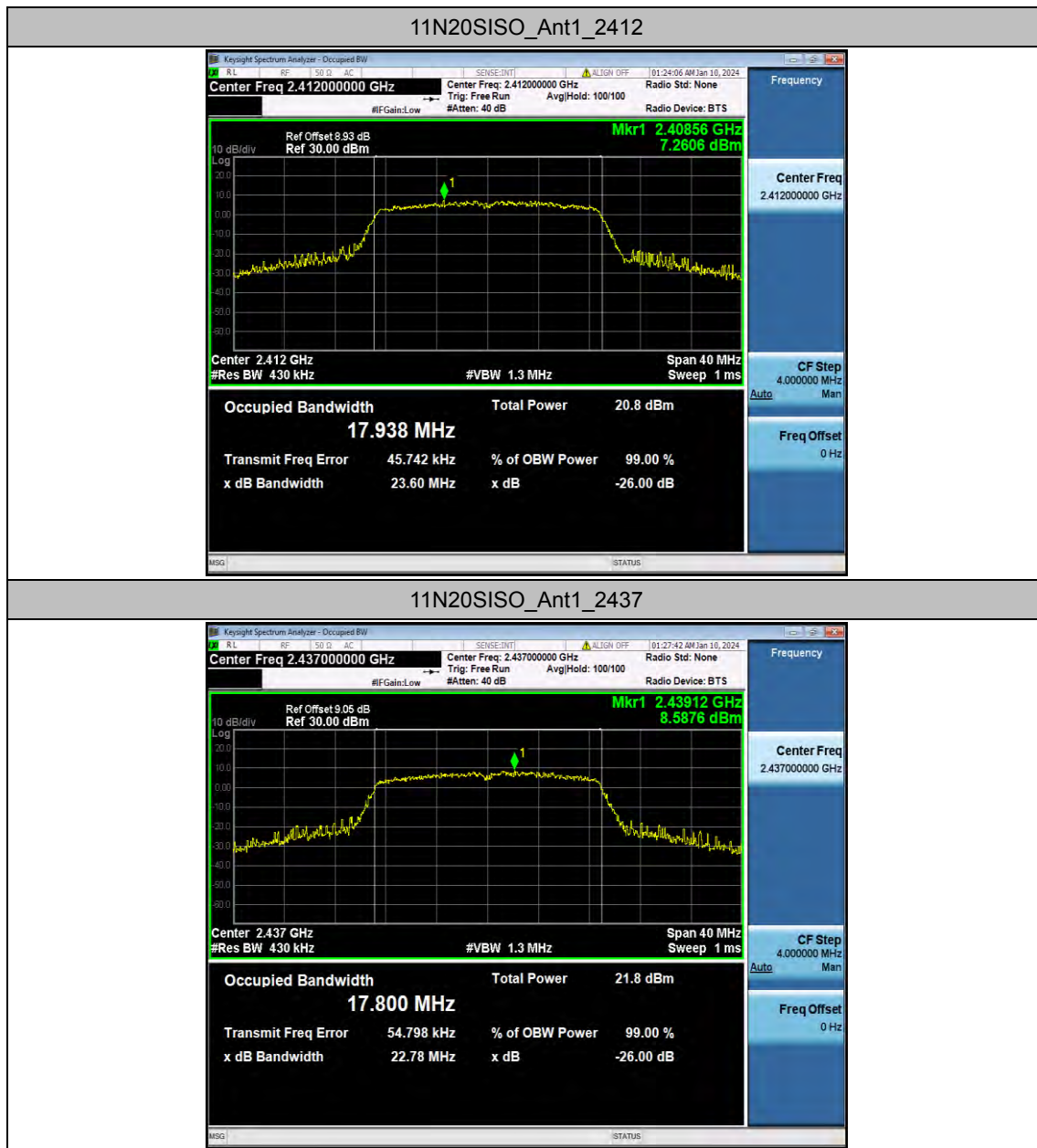
11B_Ant1_2462

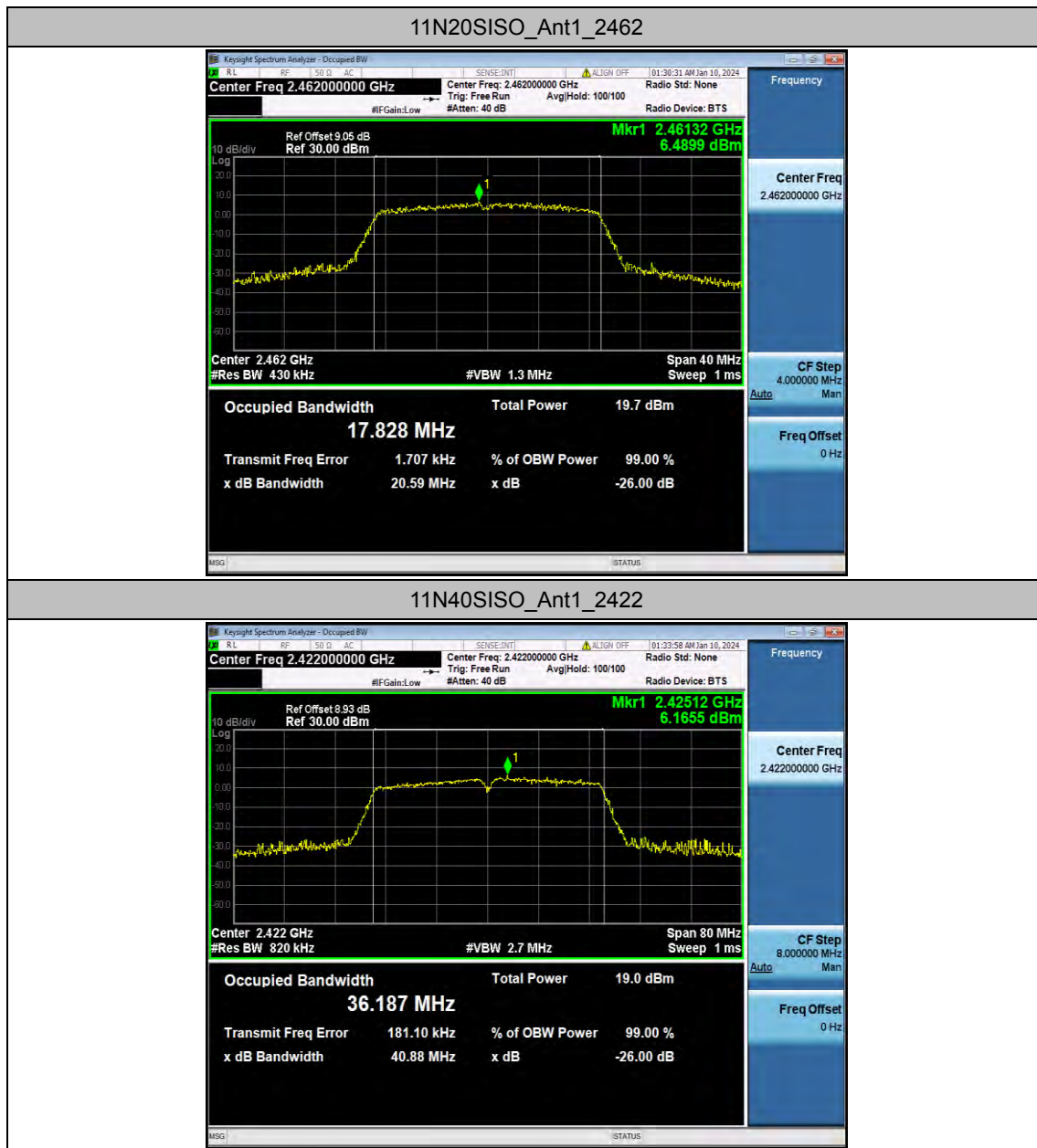


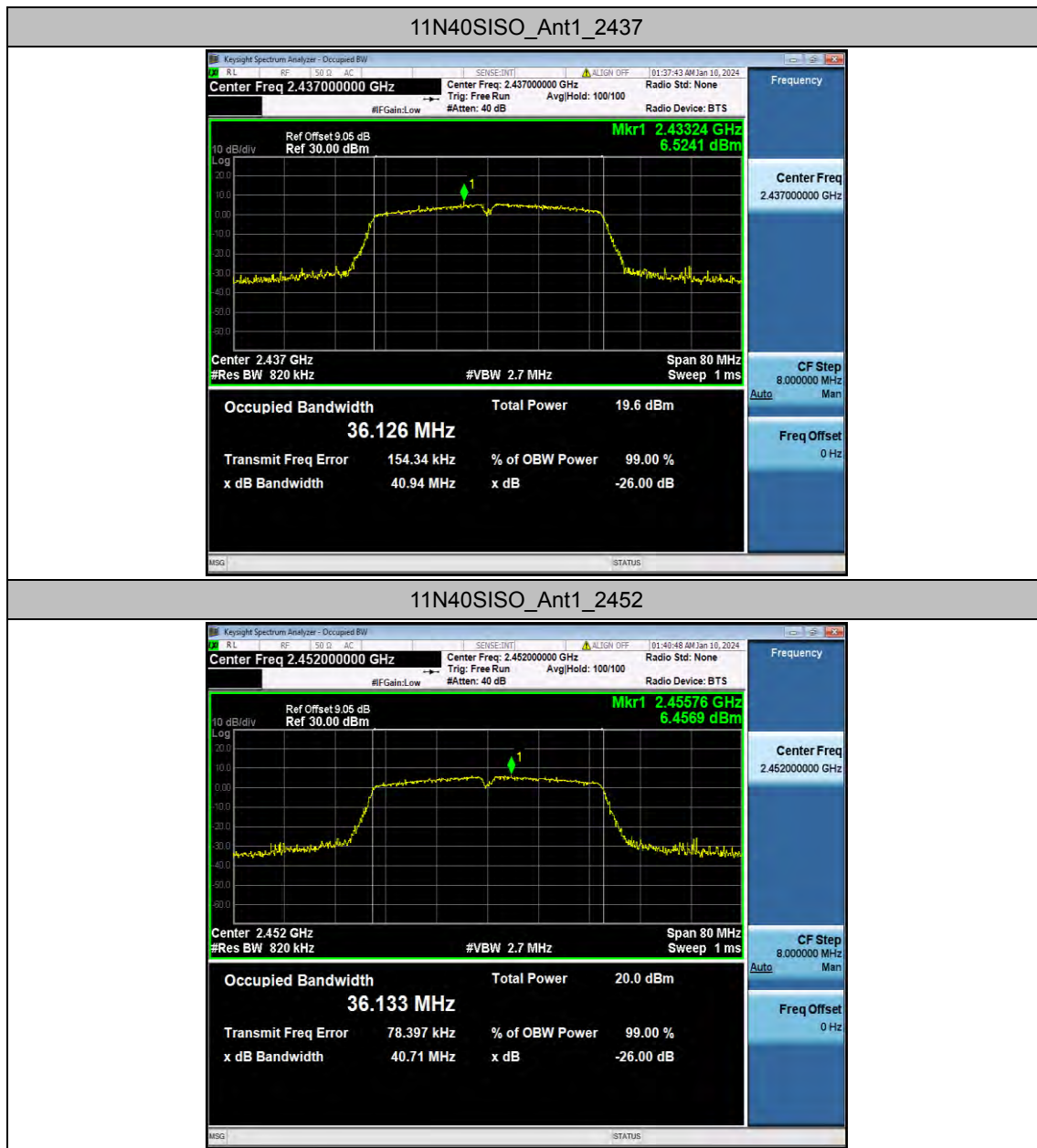
11G_Ant1_2412











Appendix C.3: Maximum conducted output power

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	15.85	≤30.00	PASS
		2437	16.87	≤30.00	PASS
		2462	17.23	≤30.00	PASS
11G	Ant1	2412	19.97	≤30.00	PASS
		2437	20.86	≤30.00	PASS
		2462	21.18	≤30.00	PASS
11N20SISO	Ant1	2412	21.98	≤30.00	PASS
		2437	23.00	≤30.00	PASS
		2462	20.76	≤30.00	PASS
11N40SISO	Ant1	2422	19.36	≤30.00	PASS
		2437	19.93	≤30.00	PASS
		2452	20.27	≤30.00	PASS

Note:

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

Appendix C.4: Maximum power spectral density

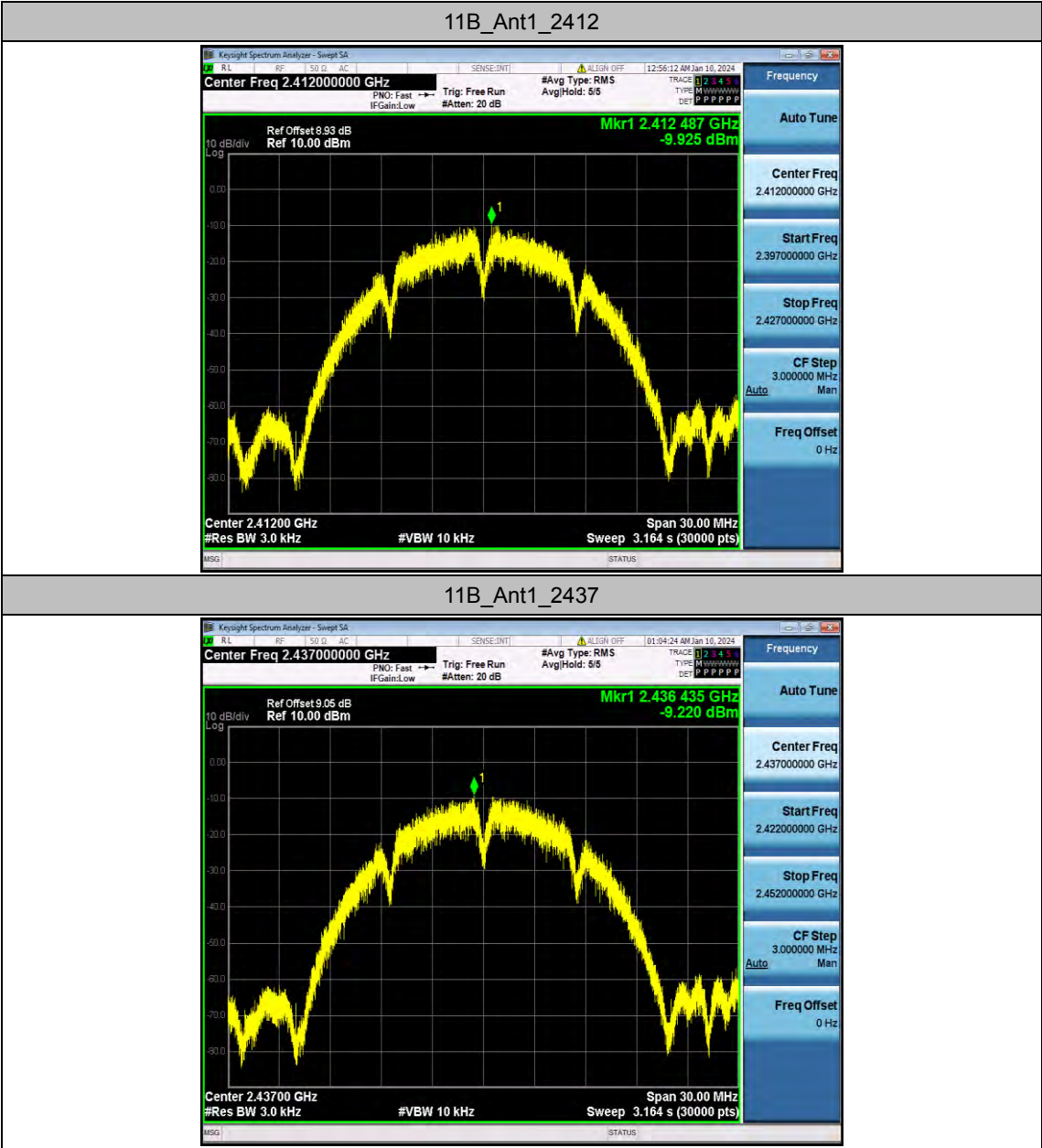
Test Result

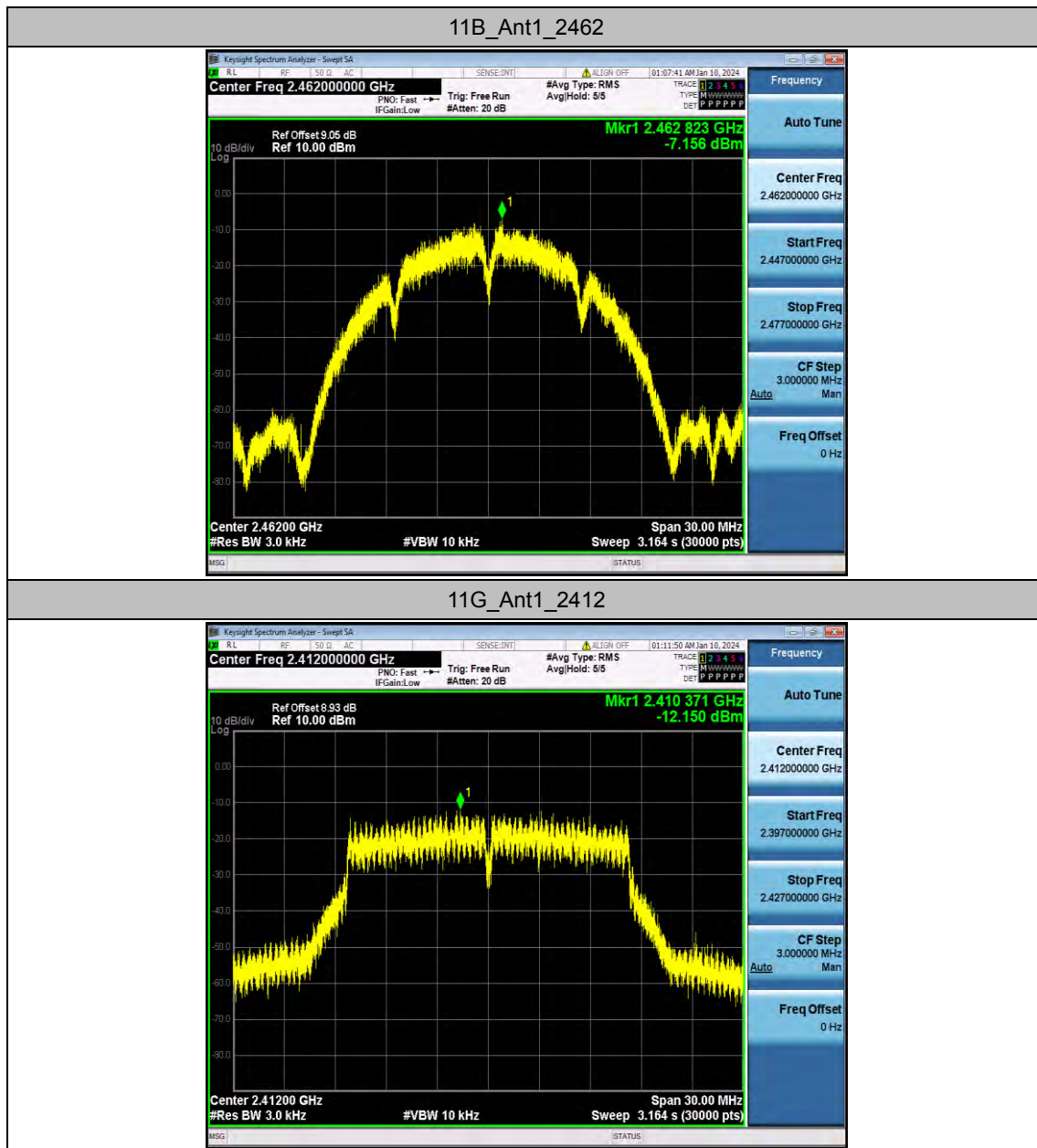
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-9.93	≤8.00	PASS
		2437	-9.22	≤8.00	PASS
		2462	-7.16	≤8.00	PASS
11G	Ant1	2412	-12.15	≤8.00	PASS
		2437	-10.84	≤8.00	PASS
		2462	-10.82	≤8.00	PASS
11N20SISO	Ant1	2412	-9.86	≤8.00	PASS
		2437	-8.93	≤8.00	PASS
		2462	-11.50	≤8.00	PASS
11N40SISO	Ant1	2422	-15.83	≤8.00	PASS
		2437	-14.97	≤8.00	PASS
		2452	-14.41	≤8.00	PASS

Note:

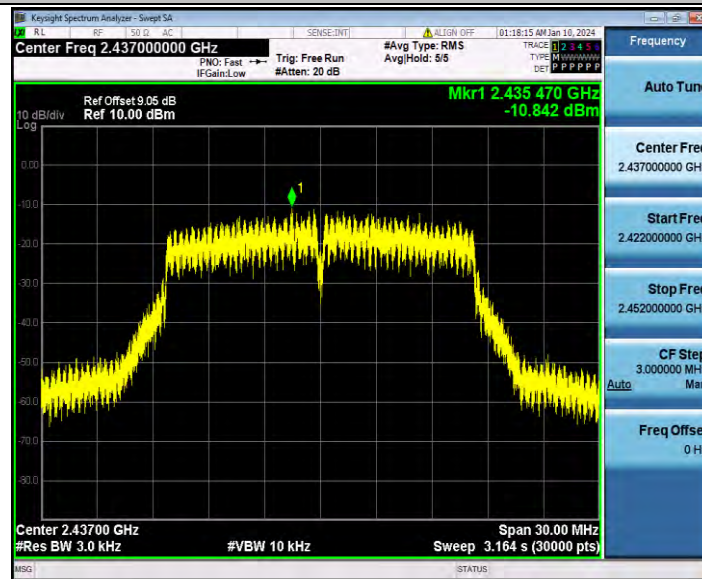
1. The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

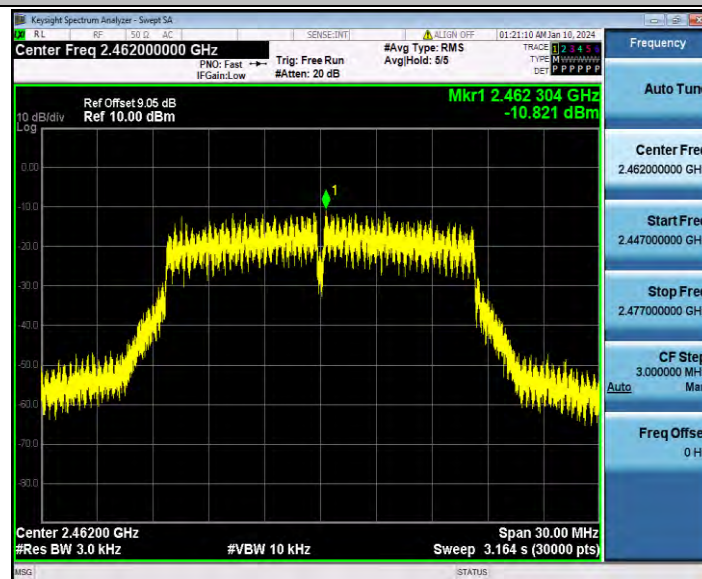


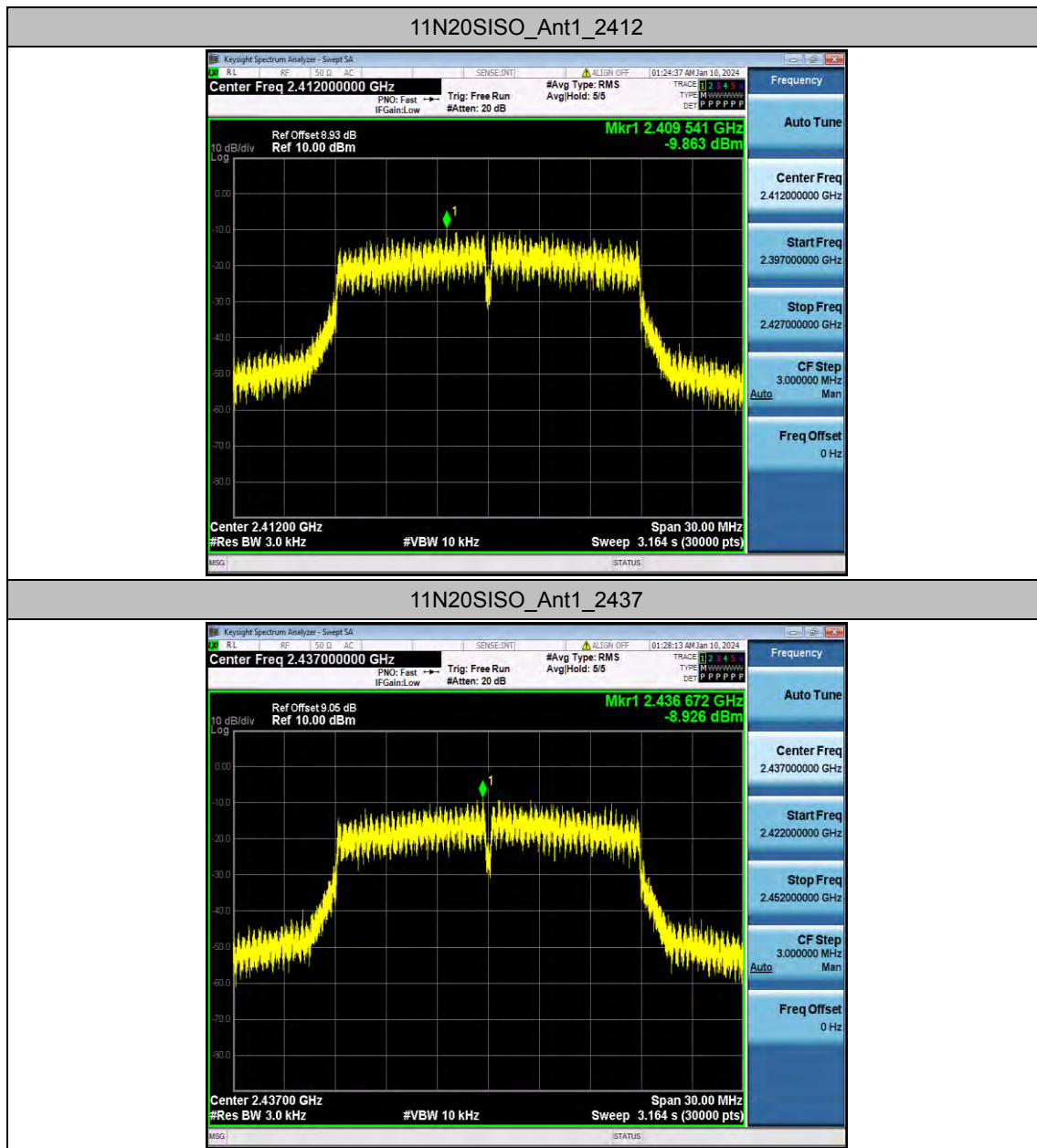


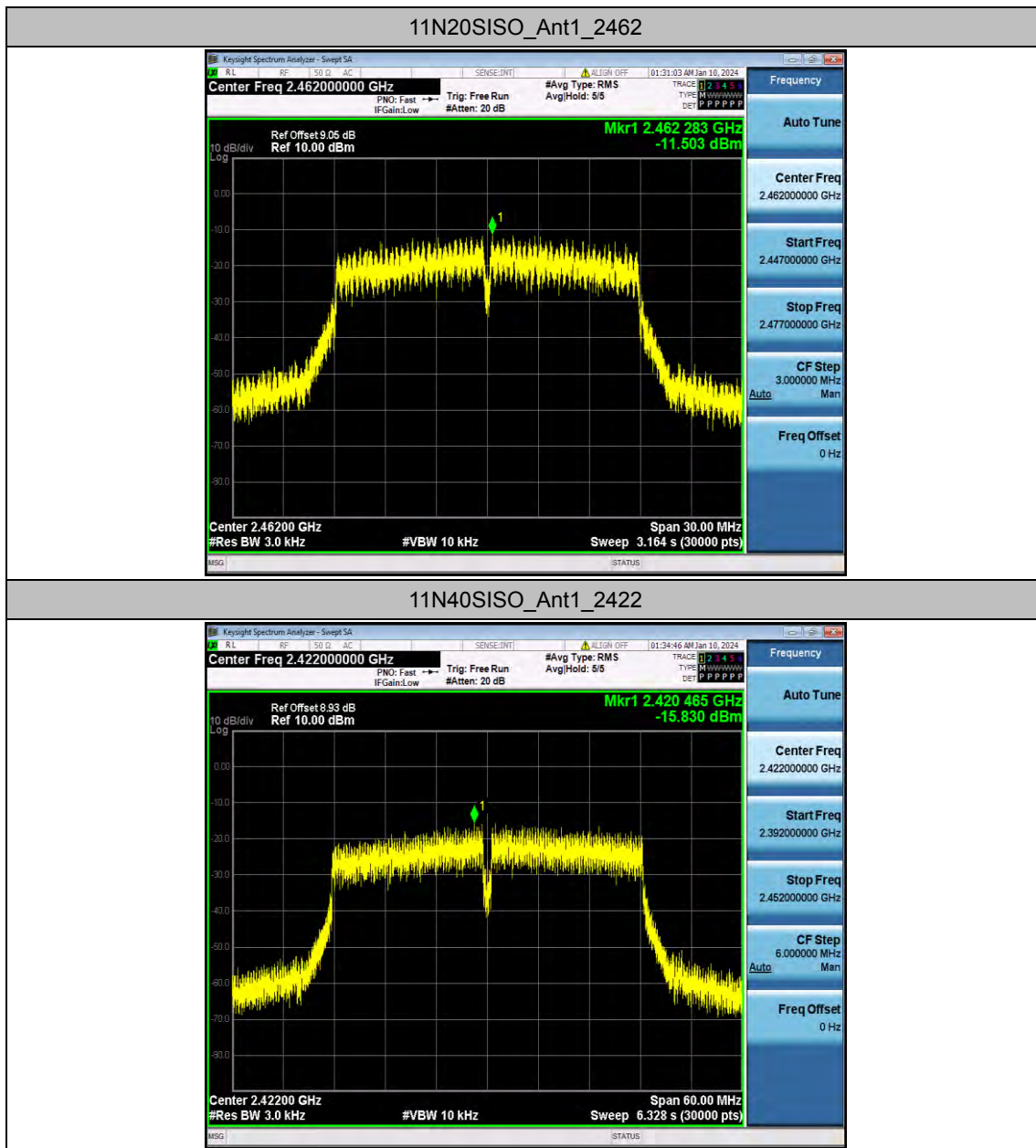
11G_Ant1_2437



11G_Ant1_2462









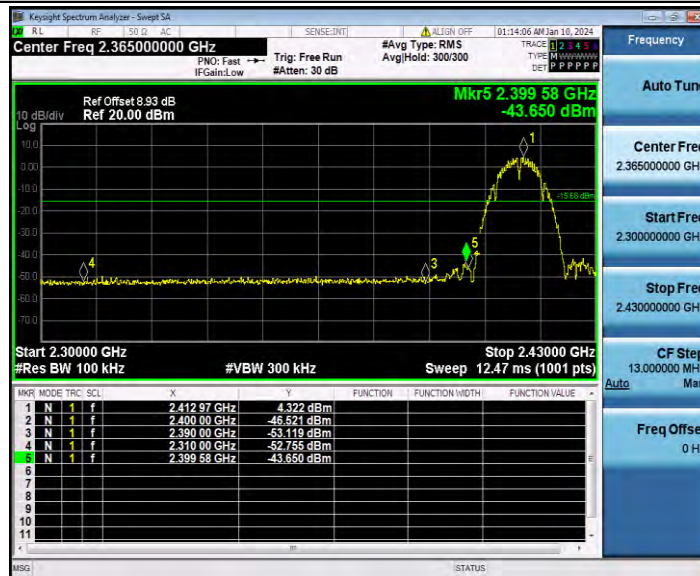
Appendix C.5: Band edge measurements

Test Result

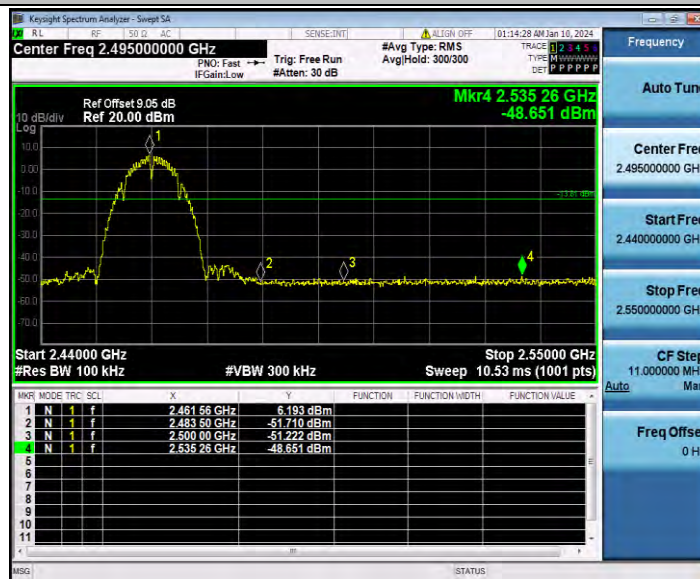
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.32	-43.65	≤-15.68	PASS
		High	2462	6.19	-48.65	≤-13.81	PASS
11G	Ant1	Low	2412	2.11	-31.49	≤-17.89	PASS
		High	2462	3.71	-46.8	≤-16.29	PASS
11N20SISO	Ant1	Low	2412	4.95	-26.93	≤-15.05	PASS
		High	2462	3.95	-44.87	≤-16.05	PASS
11N40SISO	Ant1	Low	2422	-0.87	-36.52	≤-20.87	PASS
		High	2452	0.02	-39.73	≤-19.98	PASS

Test Graphs

11B_Ant1_Low_2412



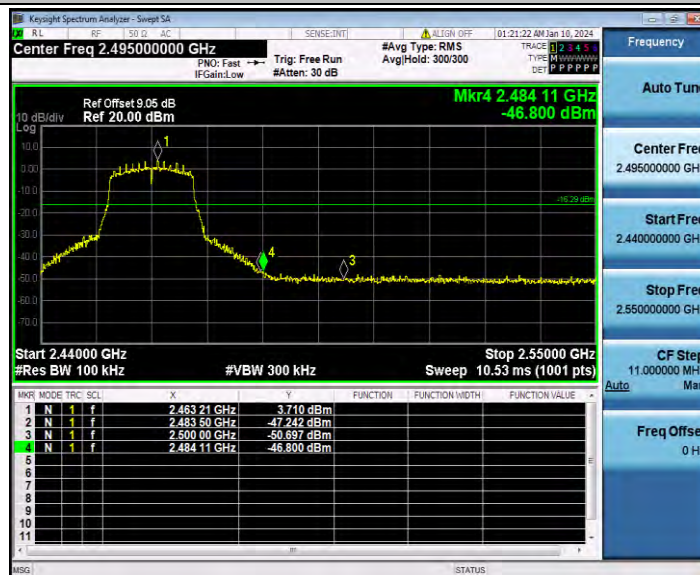
11B_Ant1_High_2462



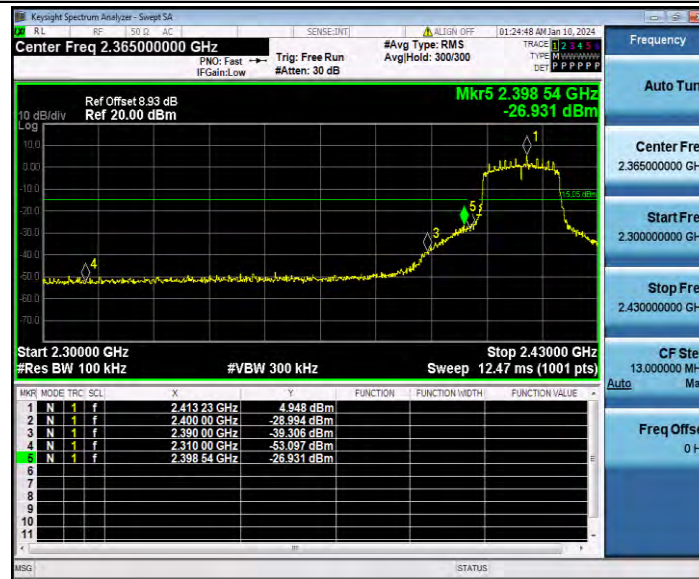
11G_Ant1_Low_2412



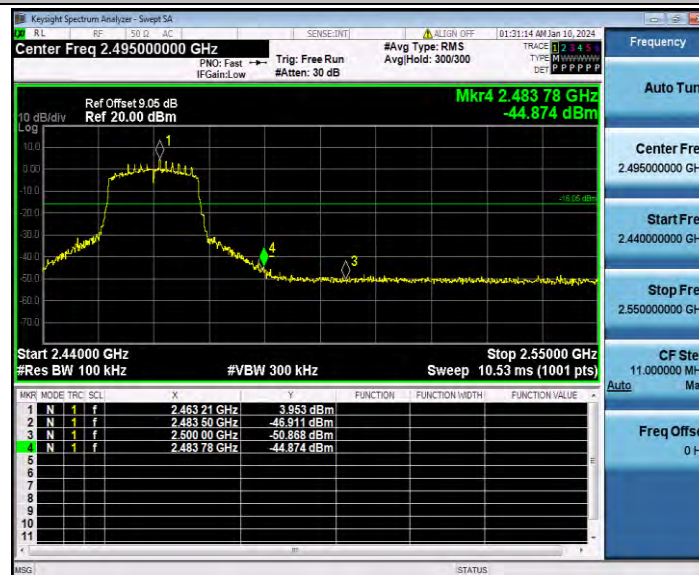
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



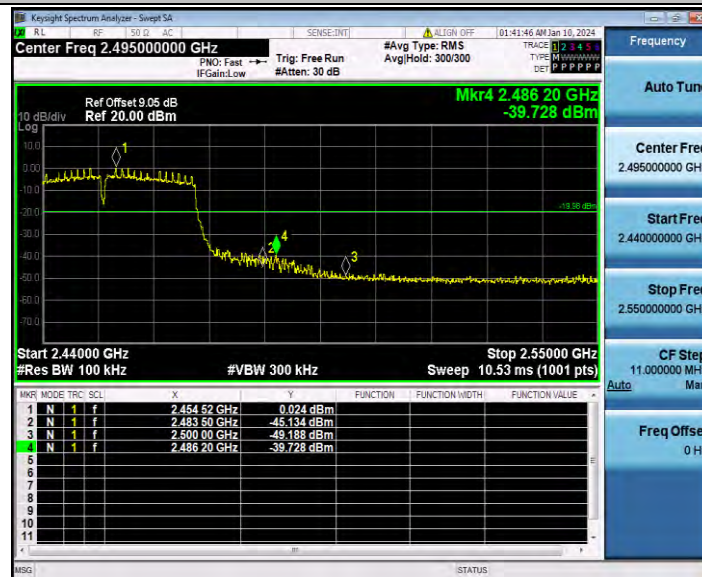
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

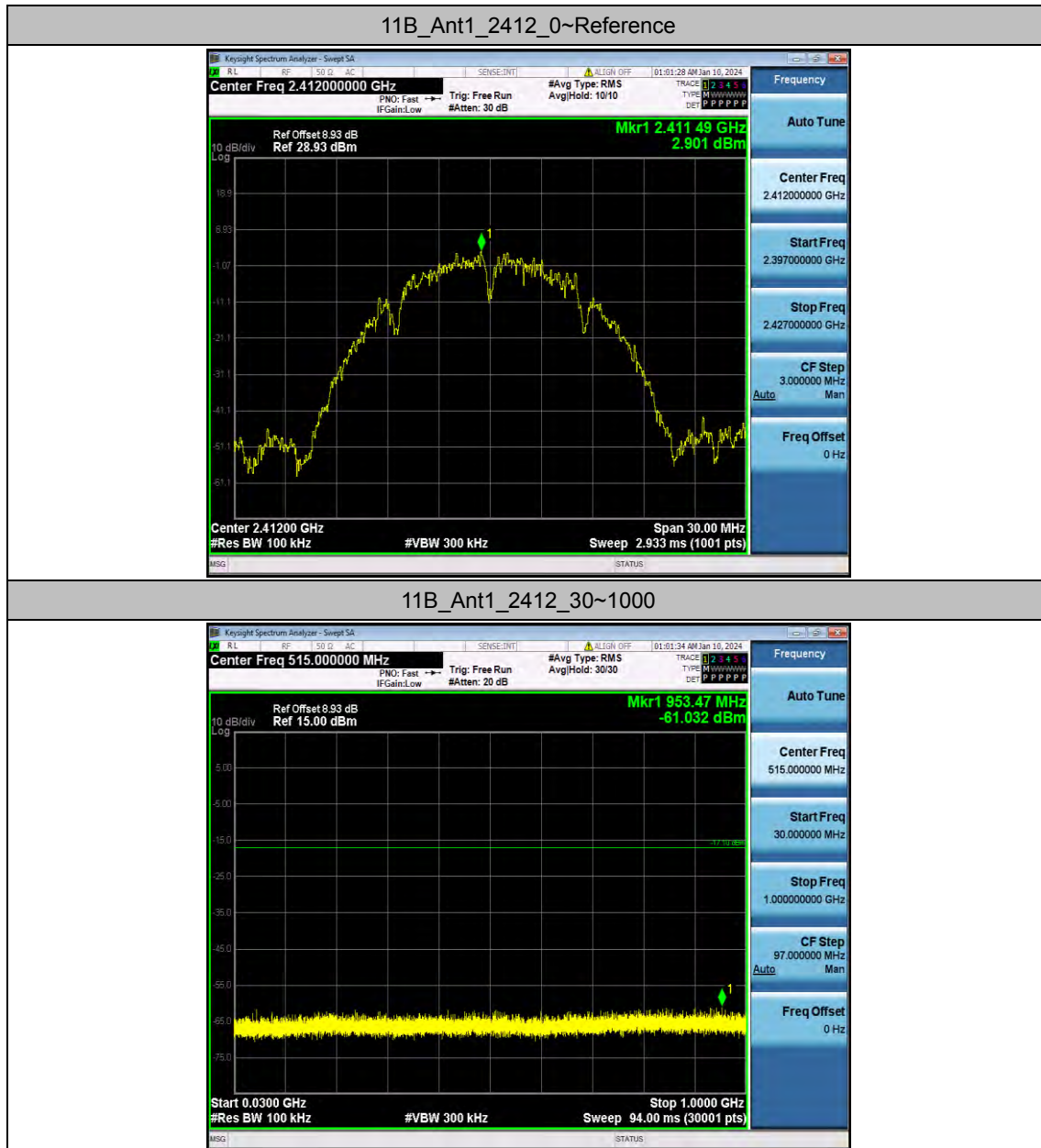


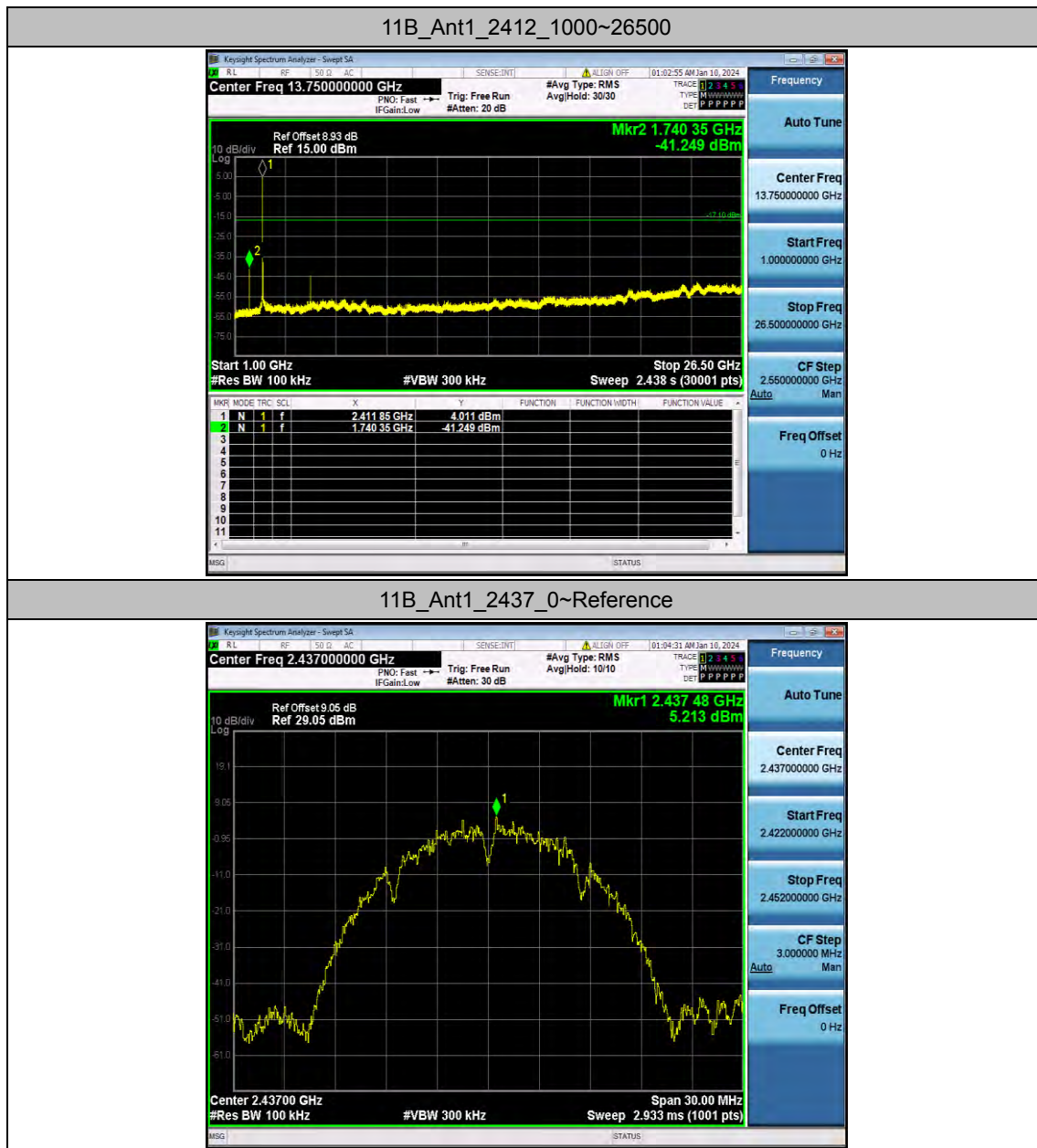
Appendix C.6: Conducted Spurious Emission

Test Result

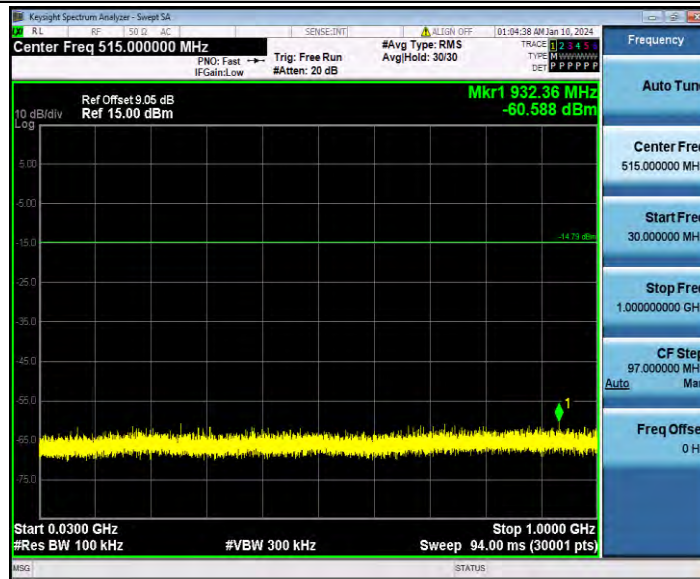
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.90	2.90	---	PASS
			30~1000	2.90	-61.03	≤ -17.1	PASS
			1000~26500	2.90	-41.25	≤ -17.1	PASS
		2437	Reference	5.21	5.21	---	PASS
			30~1000	5.21	-60.59	≤ -14.79	PASS
			1000~26500	5.21	-45.05	≤ -14.79	PASS
		2462	Reference	5.39	5.39	---	PASS
			30~1000	5.39	-60.49	≤ -14.61	PASS
			1000~26500	5.39	-34.64	≤ -14.61	PASS
11G	Ant1	2412	Reference	-1.21	-1.21	---	PASS
			30~1000	-1.21	-60.66	≤ -21.21	PASS
			1000~26500	-1.21	-43.31	≤ -21.21	PASS
		2437	Reference	-0.10	-0.10	---	PASS
			30~1000	-0.10	-59.47	≤ -20.1	PASS
			1000~26500	-0.10	-47.88	≤ -20.1	PASS
		2462	Reference	0.08	0.08	---	PASS
			30~1000	0.08	-60.53	≤ -19.92	PASS
			1000~26500	0.08	-47.87	≤ -19.92	PASS
11N20SISO	Ant1	2412	Reference	2.38	2.38	---	PASS
			30~1000	2.38	-60.93	≤ -17.62	PASS
			1000~26500	2.38	-47.66	≤ -17.62	PASS
		2437	Reference	3.87	3.87	---	PASS
			30~1000	3.87	-60.52	≤ -16.13	PASS
			1000~26500	3.87	-47.89	≤ -16.13	PASS
		2462	Reference	2.24	2.24	---	PASS
			30~1000	2.24	-60.33	≤ -17.76	PASS
			1000~26500	2.24	-40.66	≤ -17.76	PASS
11N40SISO	Ant1	2422	Reference	-1.01	-1.01	---	PASS
			30~1000	-1.01	-60.11	≤ -21.01	PASS
			1000~26500	-1.01	-42.94	≤ -21.01	PASS
		2437	Reference	-0.33	-0.33	---	PASS
			30~1000	-0.33	-61.03	≤ -20.33	PASS
			1000~26500	-0.33	-44.99	≤ -20.33	PASS
		2452	Reference	-0.55	-0.55	---	PASS
			30~1000	-0.55	-60.86	≤ -20.55	PASS
			1000~26500	-0.55	-47.33	≤ -20.55	PASS

Test Graphs





11B_Ant1_2437_30~1000



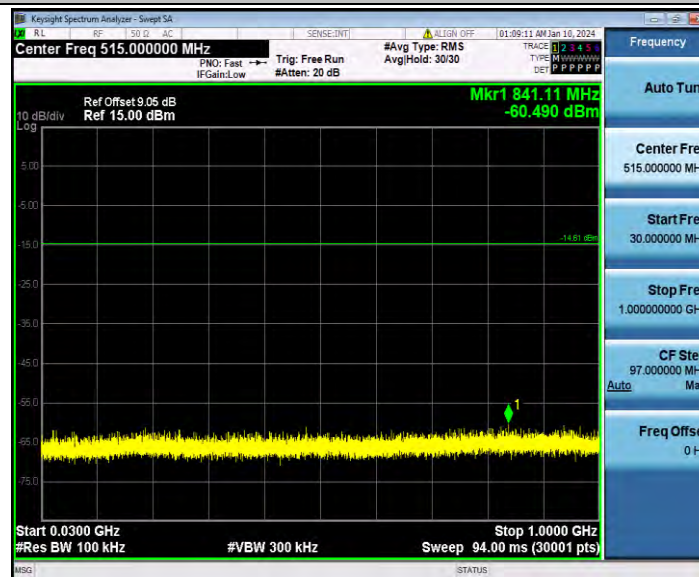
11B_Ant1_2437_1000~26500

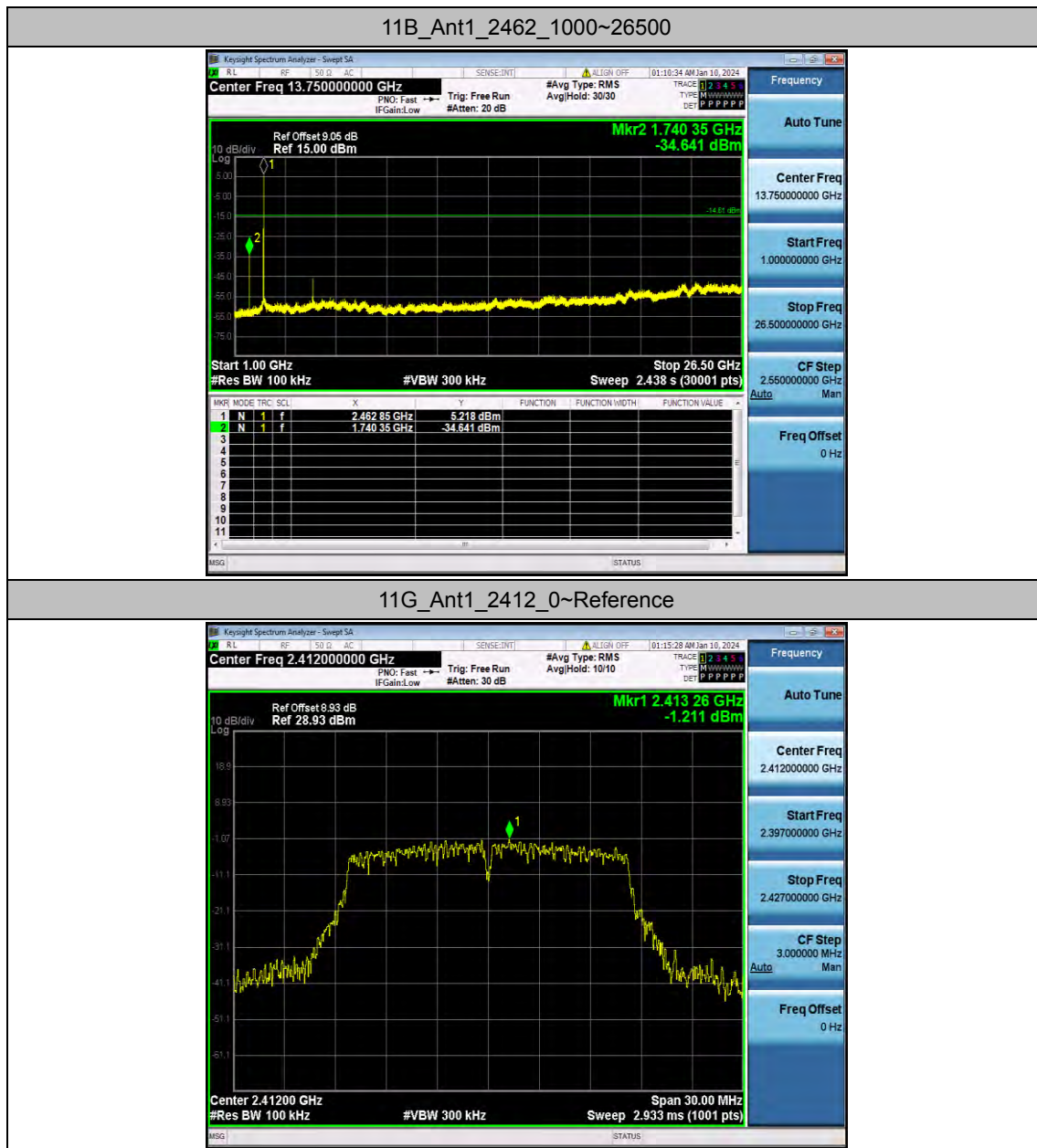


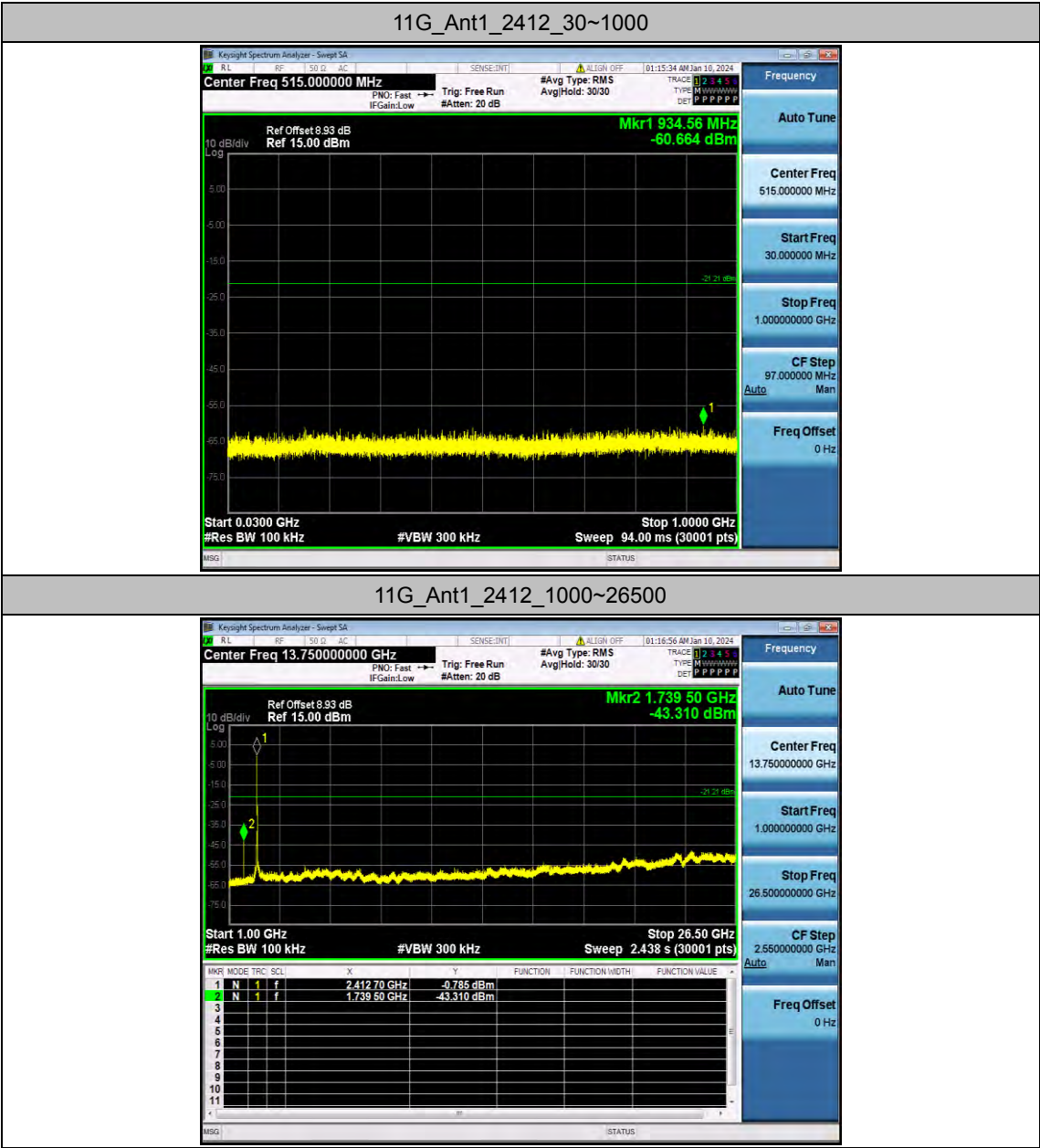
11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



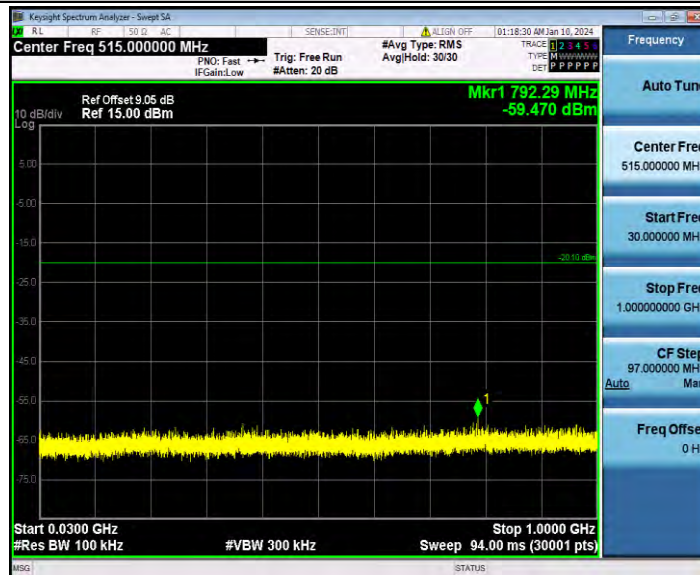




11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000

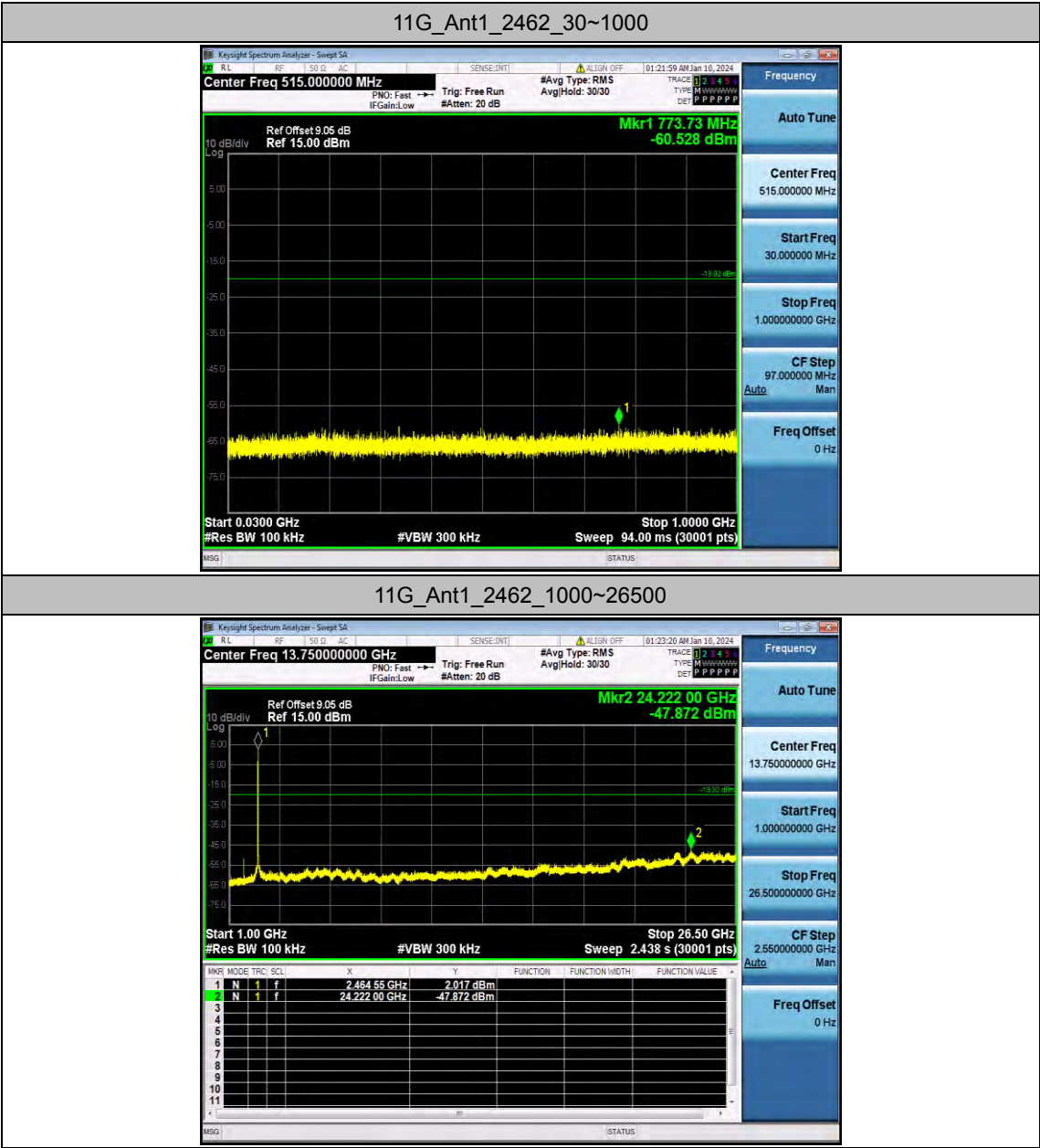


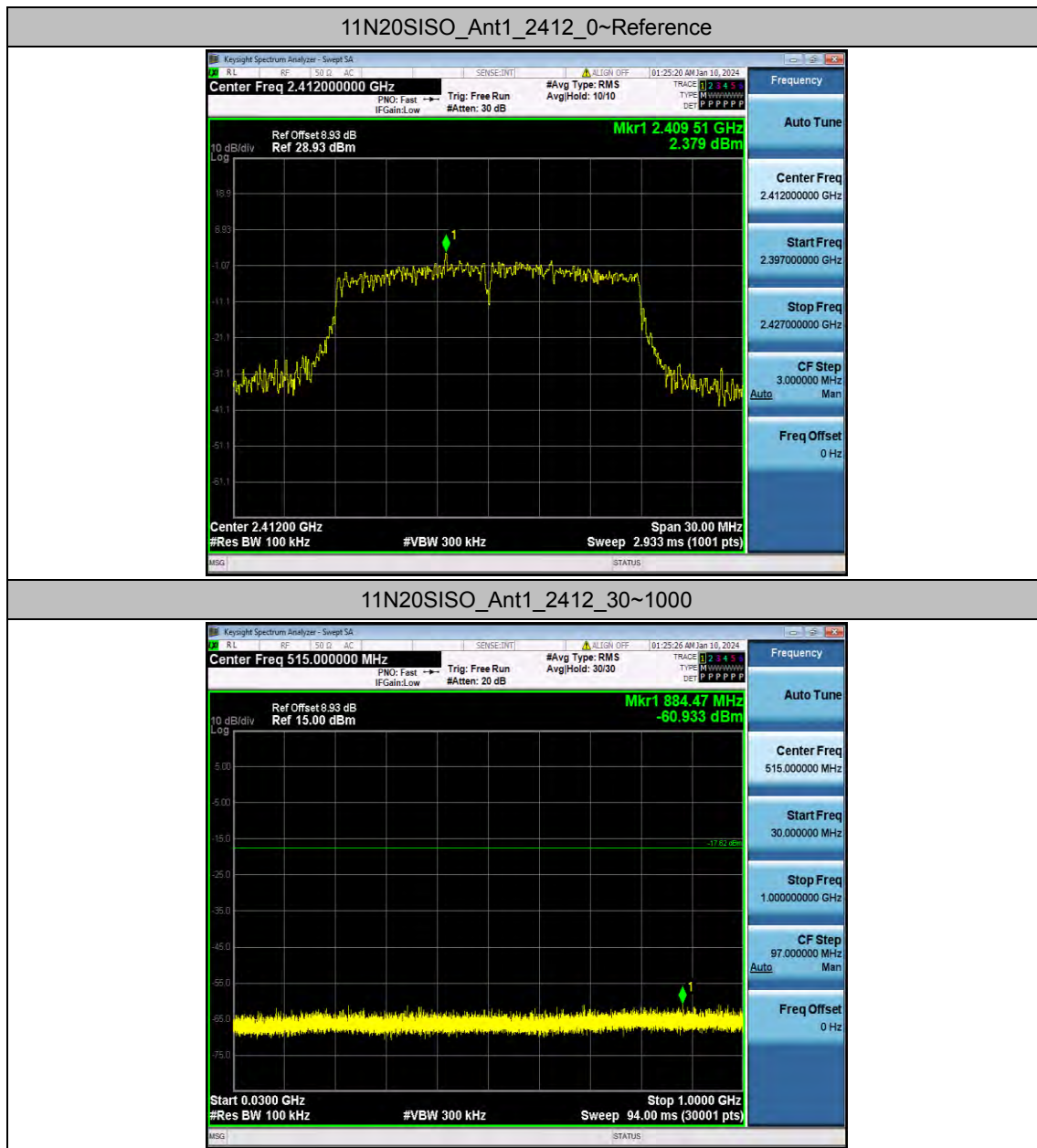
11G_Ant1_2437_1000~26500

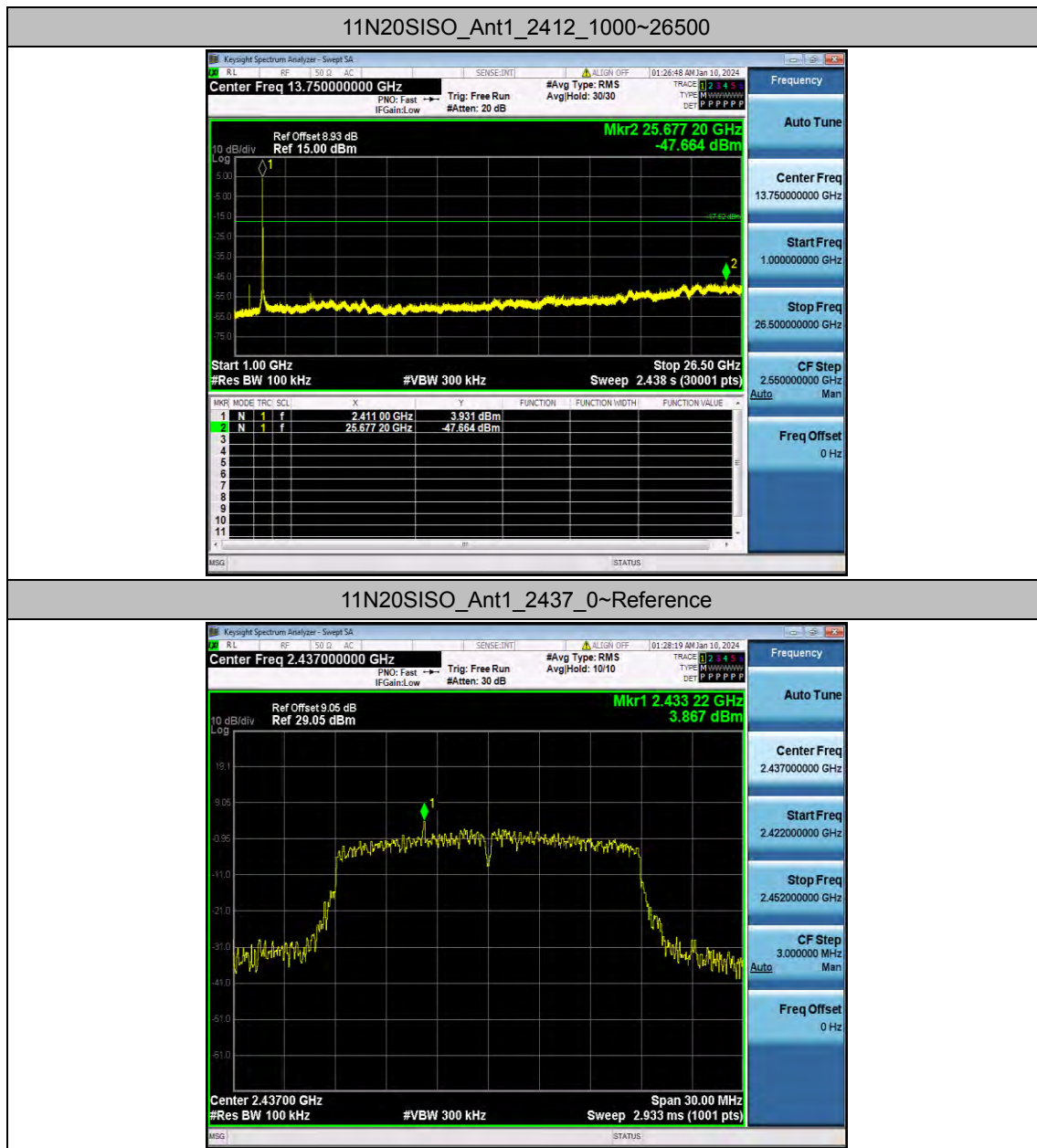


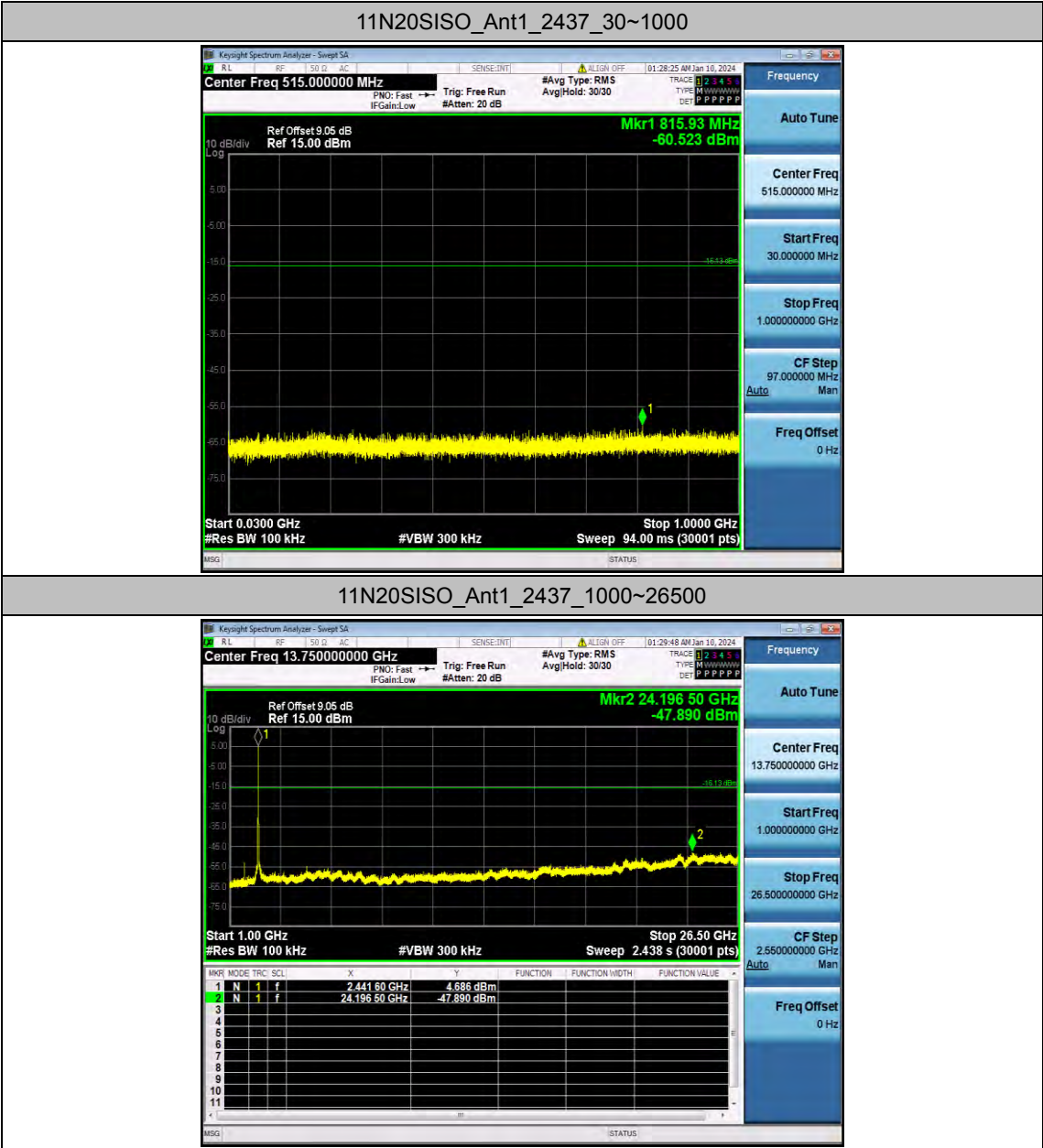
11G_Ant1_2462_0~Reference

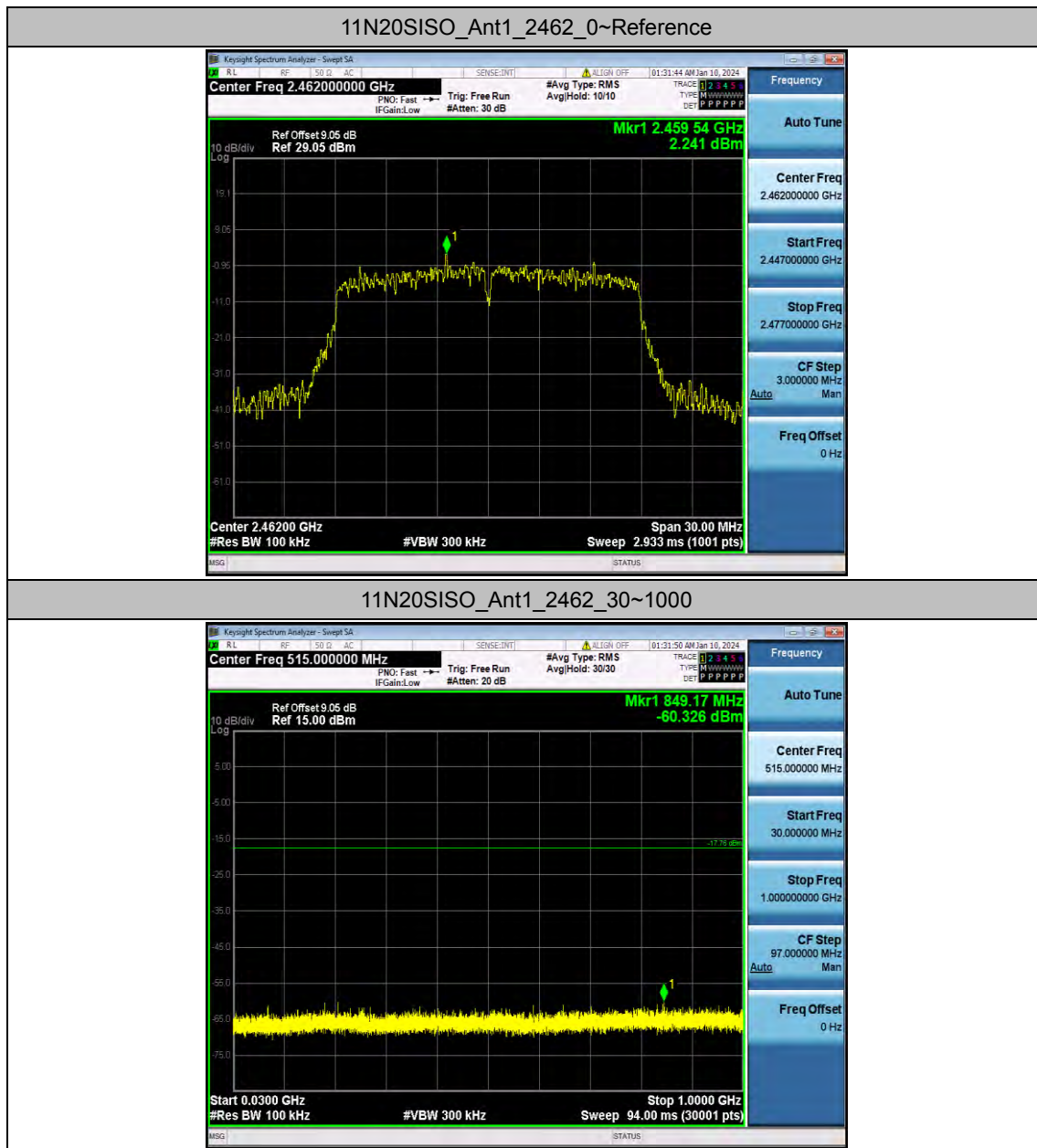




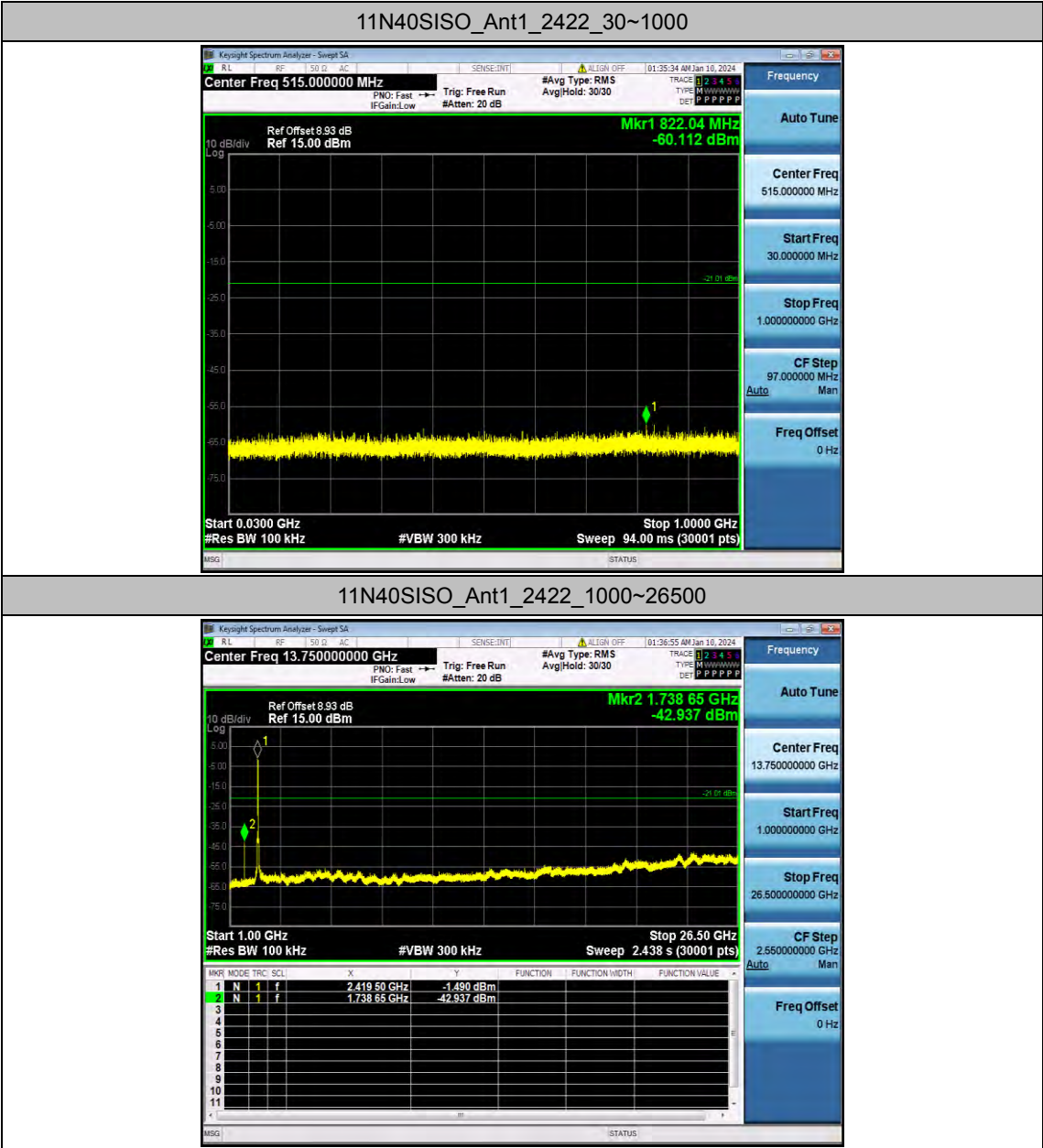


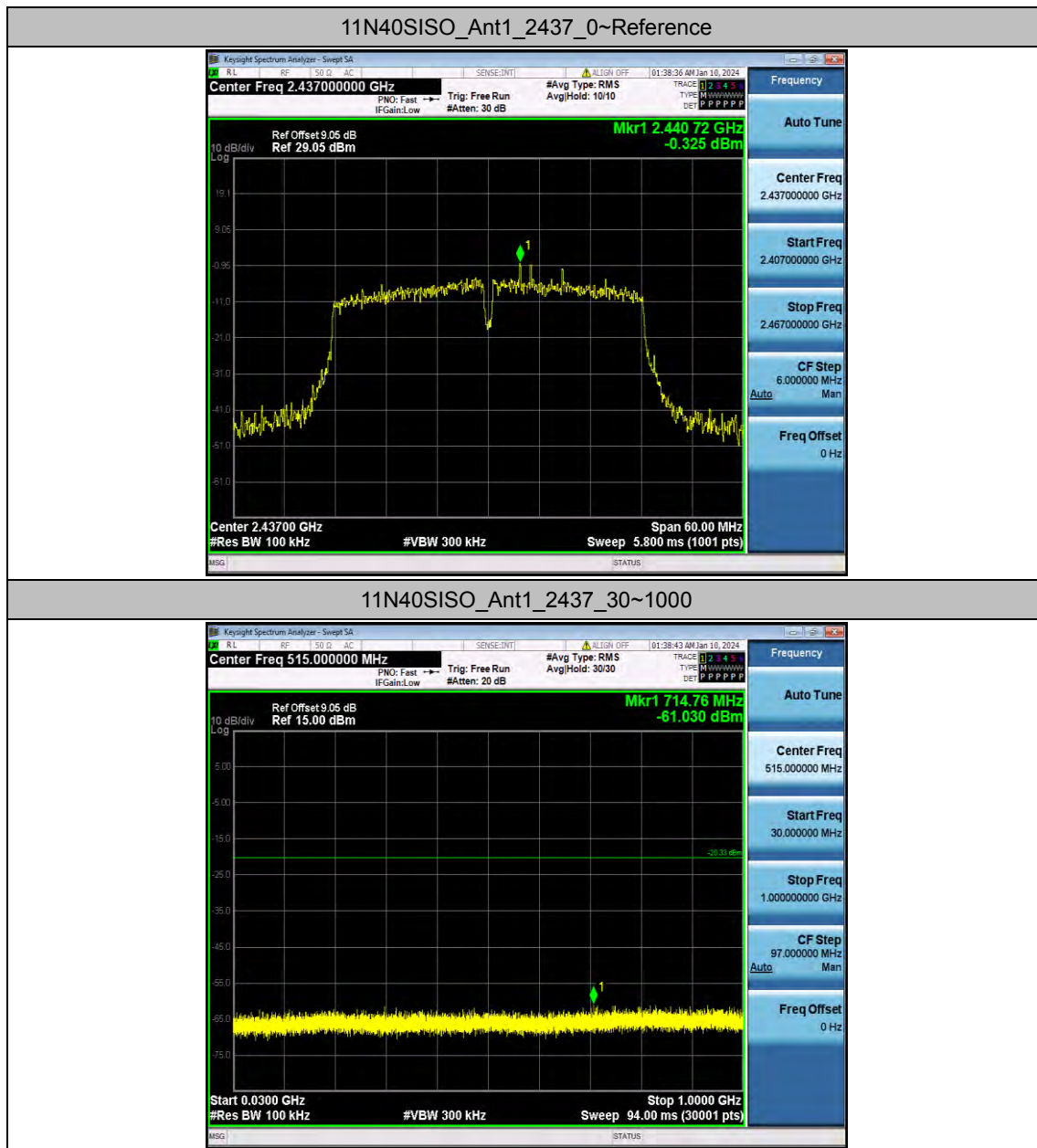




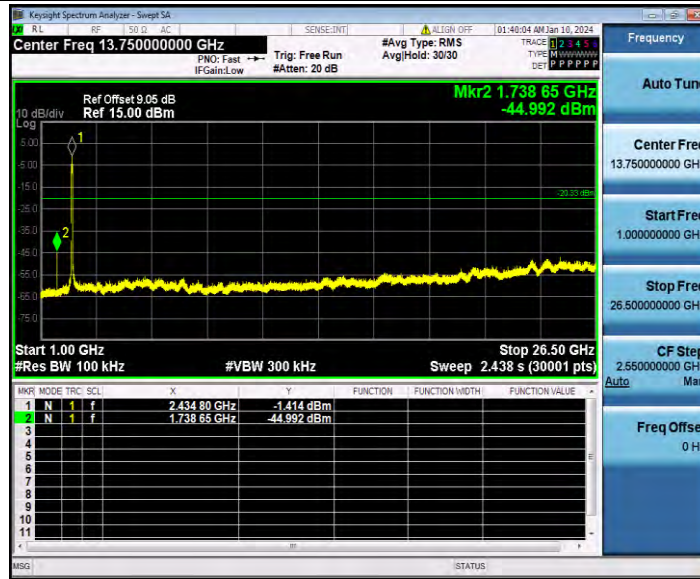






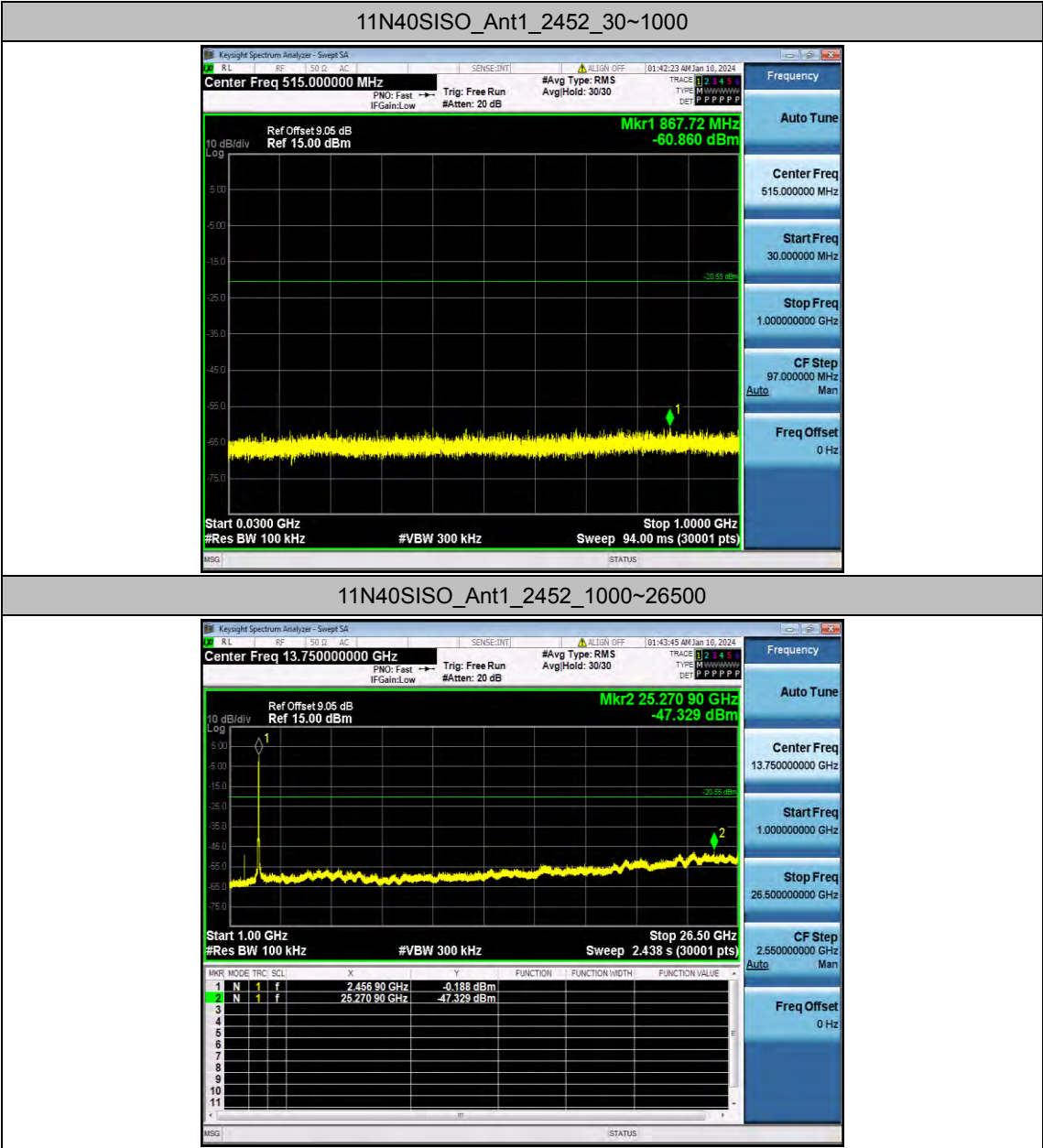


11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference





Appendix C.7: Emissions in Restricted Bands

Test Result

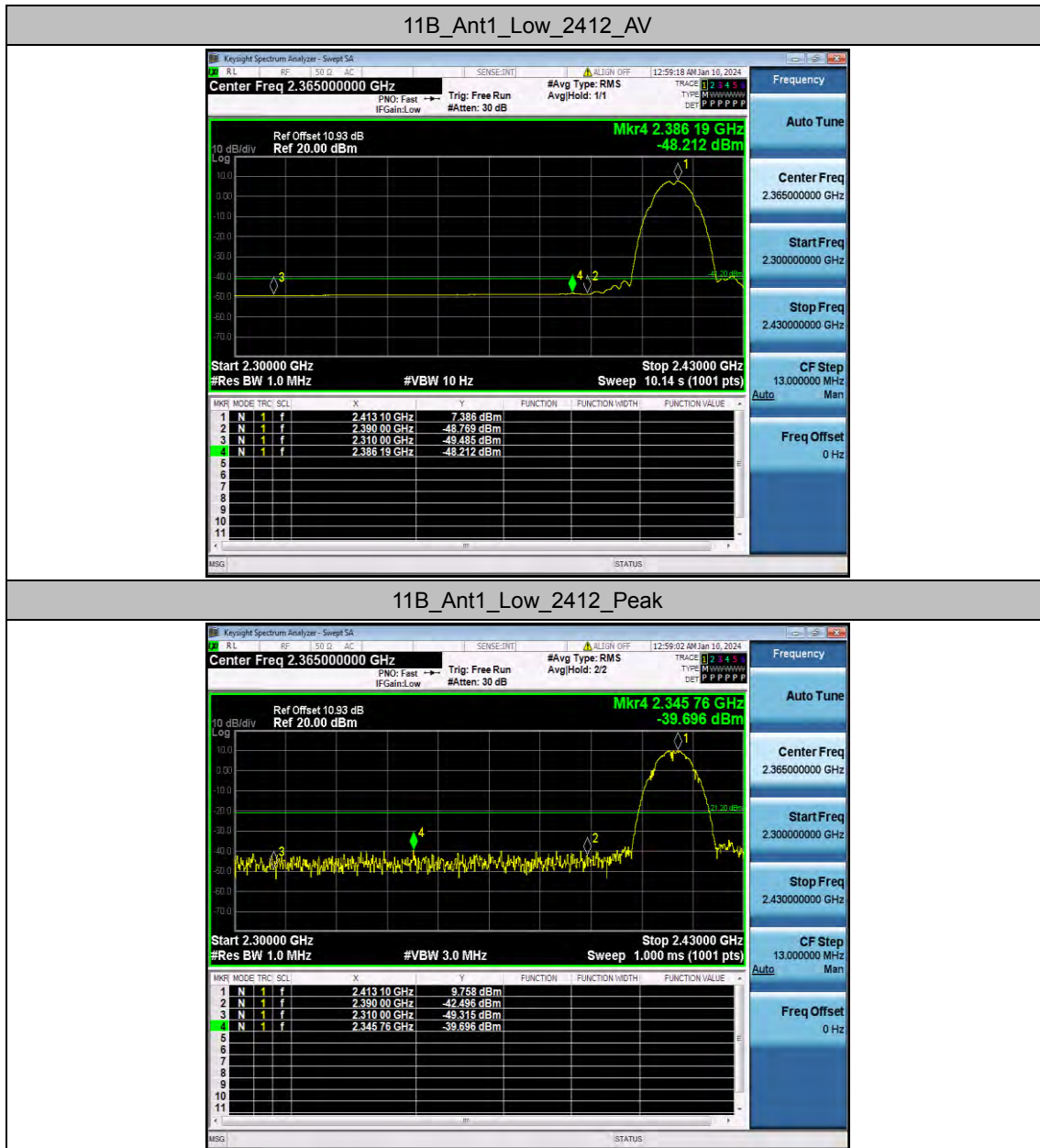
TestMode	Antenna	ChName	Frequenc y[MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-49.49	≤-41.20	45.71	≤54	PASS
				AV	2386.190	-48.21	≤-41.20	46.99	≤54	PASS
				AV	2390.000	-48.77	≤-41.20	46.43	≤54	PASS
				Peak	2310.000	-49.32	≤-21.20	45.88	≤74	PASS
				Peak	2345.760	-39.7	≤-21.20	55.50	≤74	PASS
				Peak	2390.000	-42.5	≤-21.20	52.70	≤74	PASS
		High	2462	AV	2483.500	-48.33	≤-41.20	46.87	≤54	PASS
				AV	2486.420	-48.16	≤-41.20	47.04	≤54	PASS
				AV	2500.000	-48.26	≤-41.20	46.94	≤54	PASS
				Peak	2483.500	-42.74	≤-21.20	52.46	≤74	PASS
				Peak	2488.180	-41.21	≤-21.20	53.99	≤74	PASS
				Peak	2500.000	-42.45	≤-21.20	52.75	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.27	≤-41.20	45.93	≤54	PASS
				AV	2389.960	-44.23	≤-41.20	50.97	≤54	PASS
				AV	2390.000	-44.23	≤-41.20	50.97	≤54	PASS
				Peak	2310.000	-46.99	≤-21.20	48.21	≤74	PASS
				Peak	2389.830	-37.68	≤-21.20	57.52	≤74	PASS
				Peak	2390.000	-41.83	≤-21.20	53.37	≤74	PASS
		High	2462	AV	2483.500	-44.13	≤-41.20	51.07	≤54	PASS
				AV	2483.560	-44.27	≤-41.20	50.93	≤54	PASS
				AV	2500.000	-47.32	≤-41.20	47.88	≤54	PASS
				Peak	2483.500	-39.33	≤-21.20	55.87	≤74	PASS
				Peak	2484.000	-37.35	≤-21.20	57.85	≤74	PASS
				Peak	2500.000	-44.52	≤-21.20	50.68	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-49.27	≤-41.20	45.93	≤54	PASS
				AV	2389.960	-46	≤-41.20	49.20	≤54	PASS
				AV	2390.000	-46	≤-41.20	49.20	≤54	PASS
				Peak	2310.000	-47.09	≤-21.20	48.11	≤74	PASS
				Peak	2389.960	-39.21	≤-21.20	55.99	≤74	PASS
				Peak	2390.000	-39.21	≤-21.20	55.99	≤74	PASS
		High	2462	AV	2483.500	-43.26	≤-41.20	51.94	≤54	PASS
				AV	2483.560	-43.37	≤-41.20	51.83	≤54	PASS
				AV	2500.000	-47.34	≤-41.20	47.86	≤54	PASS
				Peak	2483.500	-38.61	≤-21.20	56.59	≤74	PASS
				Peak	2484.220	-36.4	≤-21.20	58.80	≤74	PASS

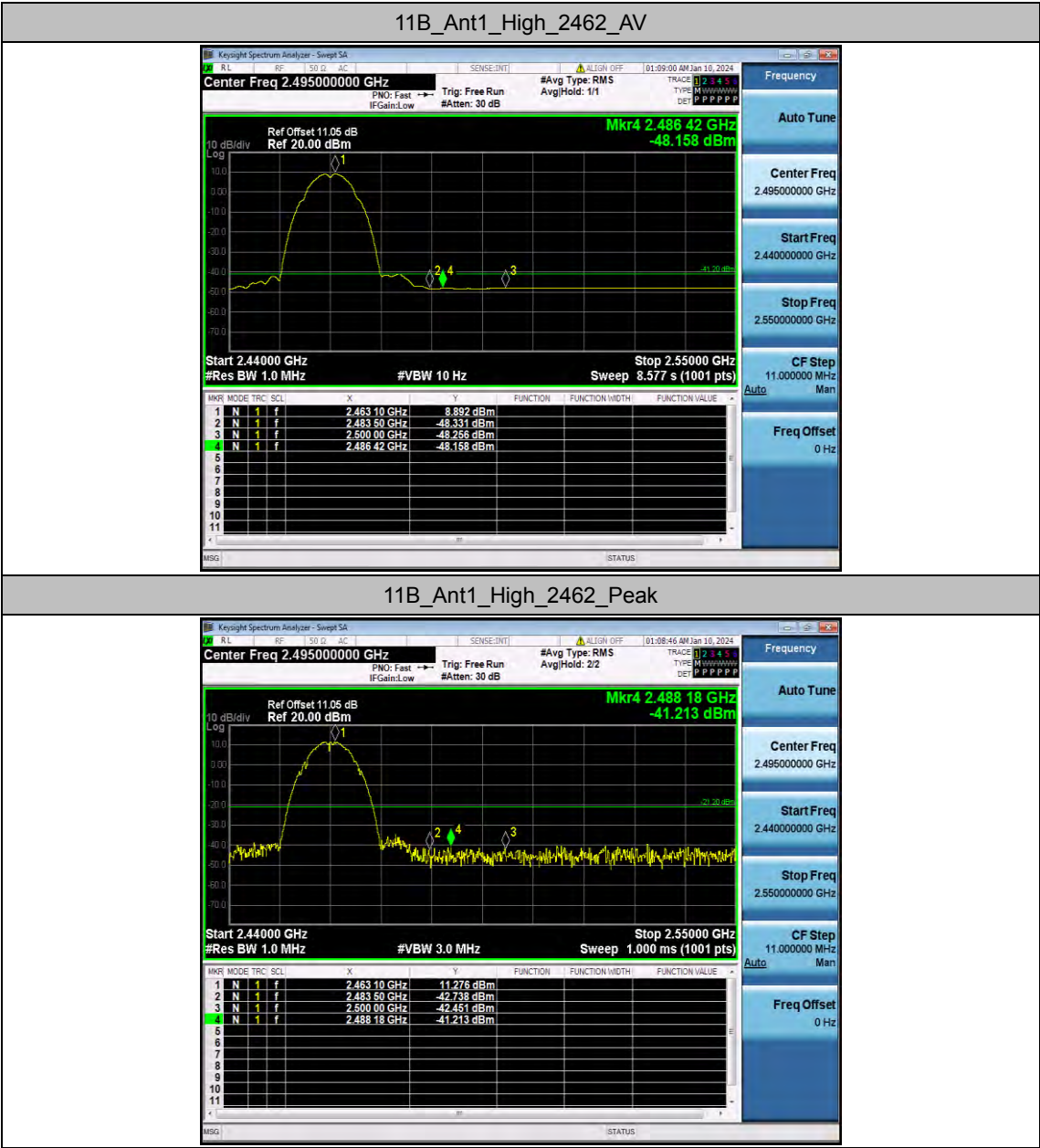
				Peak	2500.000	-47.03	≤ -21.20	48.17	≤ 74	PASS
11N40SIS O	Ant1	Low	2422	AV	2310.000	-49.26	≤ -41.20	45.94	≤ 54	PASS
				AV	2389.960	-42.5	≤ -41.20	52.70	≤ 54	PASS
				AV	2390.000	-42.5	≤ -41.20	52.70	≤ 54	PASS
				Peak	2310.000	-44.51	≤ -21.20	50.69	≤ 74	PASS
				Peak	2388.790	-36.99	≤ -21.20	58.21	≤ 74	PASS
				Peak	2390.000	-43.02	≤ -21.20	52.18	≤ 74	PASS
		High	2452	AV	2483.500	-41.44	≤ -41.20	53.76	≤ 54	PASS
				AV	2483.670	-41.49	≤ -41.20	53.71	≤ 54	PASS
				AV	2500.000	-46.58	≤ -41.20	48.62	≤ 54	PASS
				Peak	2483.500	-37.95	≤ -21.20	57.25	≤ 74	PASS
				Peak	2484.660	-34.05	≤ -21.20	61.15	≤ 74	PASS
				Peak	2500.000	-45.5	≤ -21.20	49.70	≤ 74	PASS

Note:

- The Antenna Gain is compensated in the graph.
- The Duty Cycle Factor and RBW Factor is compensated in the graph.
- 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

Frequency

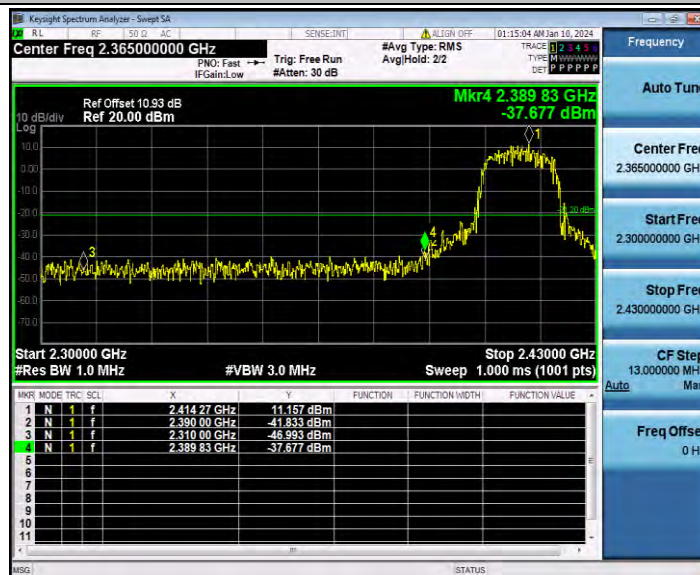
Auto Tune

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

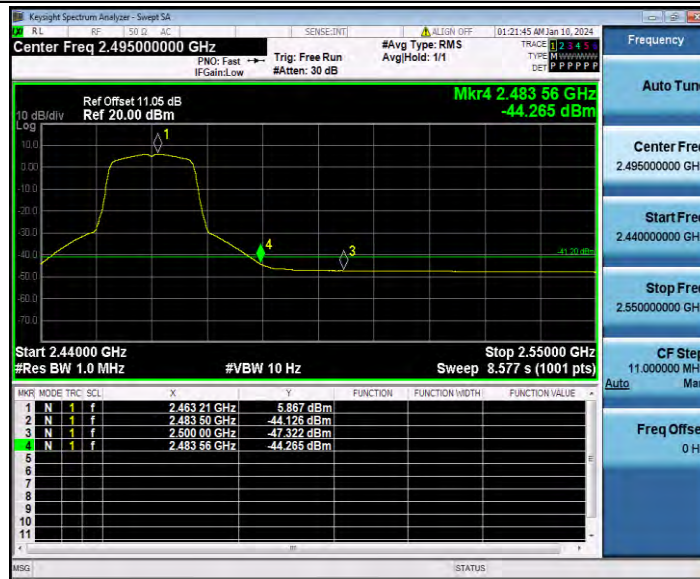
11G_Ant1_Low_2412_AV



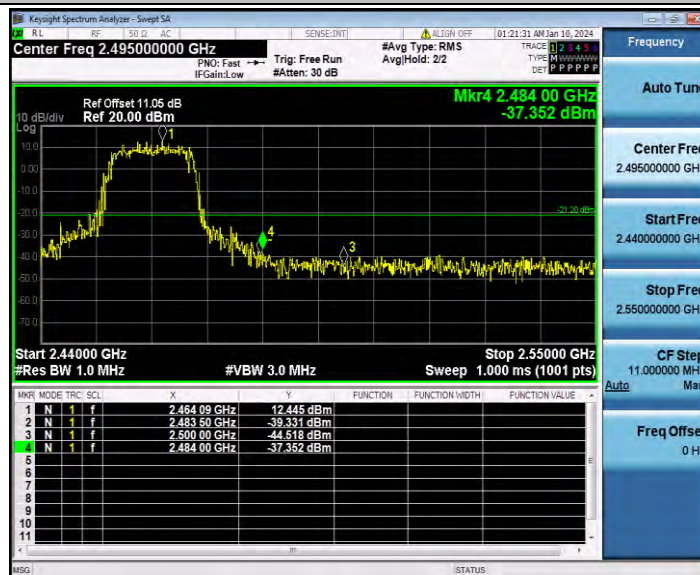
11G_Ant1_Low_2412_Peak

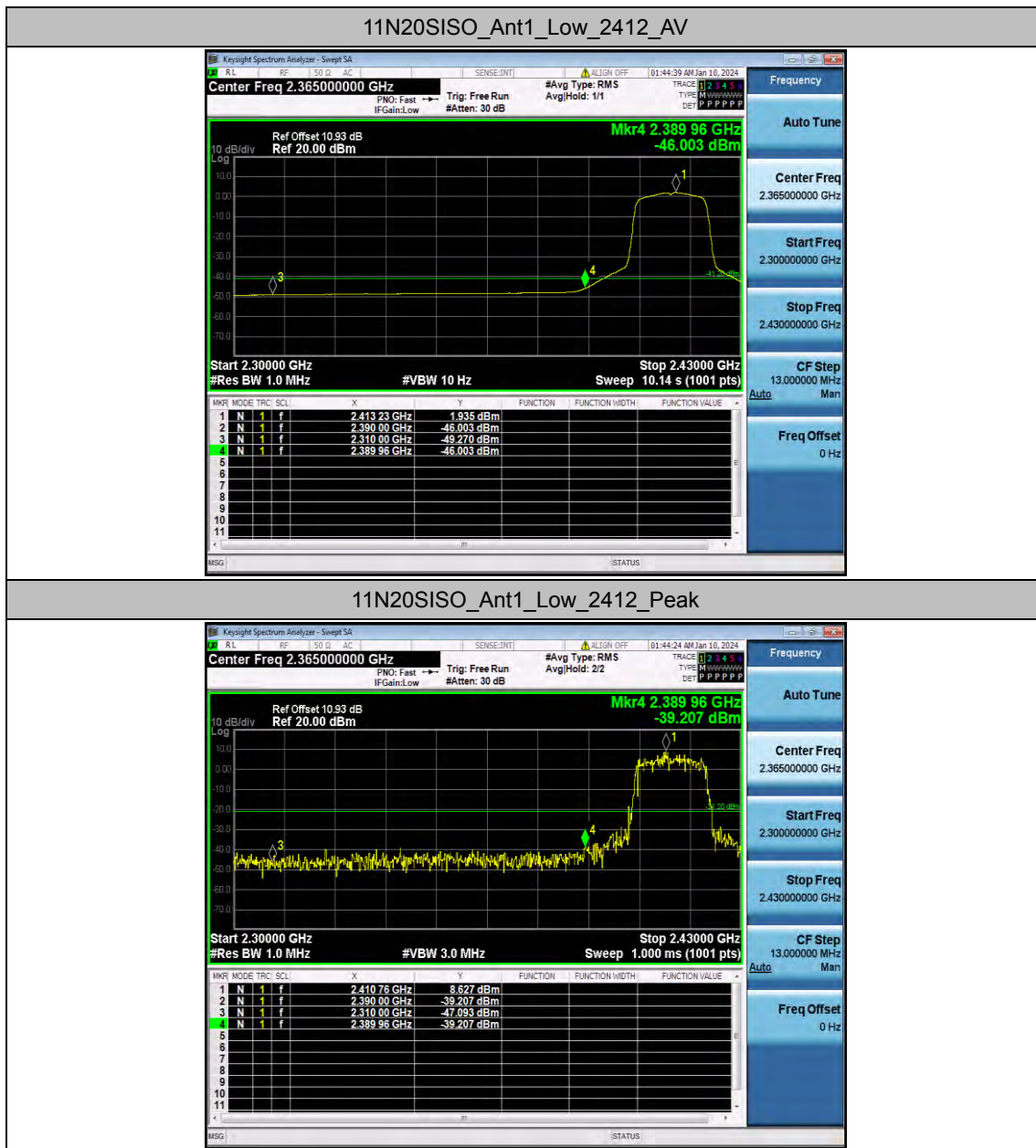


11G_Ant1_High_2462_AV

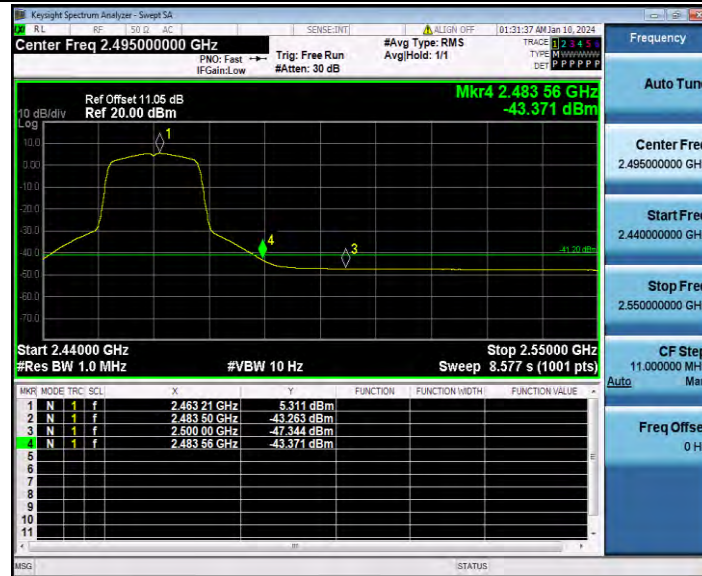


11G_Ant1_High_2462_Peak





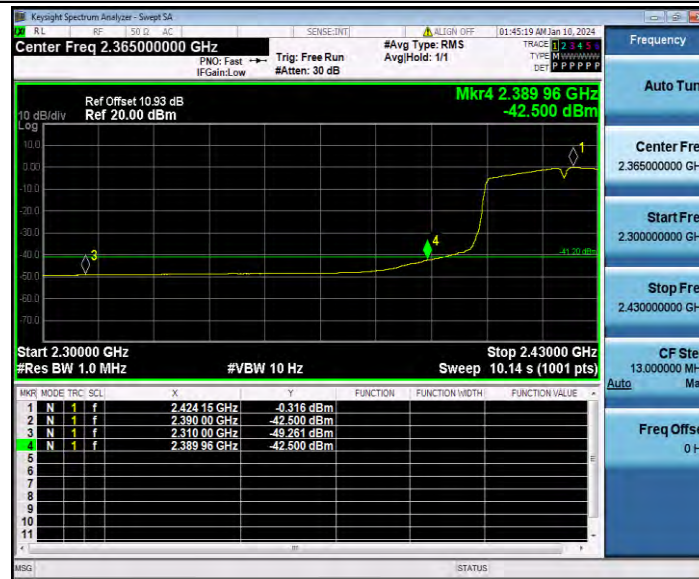
11N20SISO_Ant1_High_2462_AV



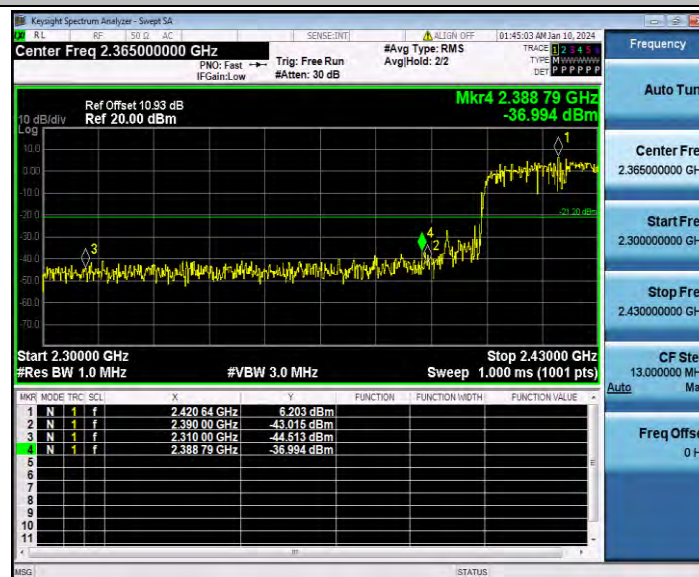
11N20SISO_Ant1_High_2462_Peak



11N40SISO_Ant1_Low_2422_AV



11N40SISO_Ant1_Low_2422_Peak



11N40SISO_Ant1_High_2452_AV



11N40SISO_Ant1_High_2452_Peak

