

Appendix A: Test Results of 2.4GHz SDR

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Note: All testing were carried out on SISO mode and MIMO mode, but only the worst case was presented in this report.

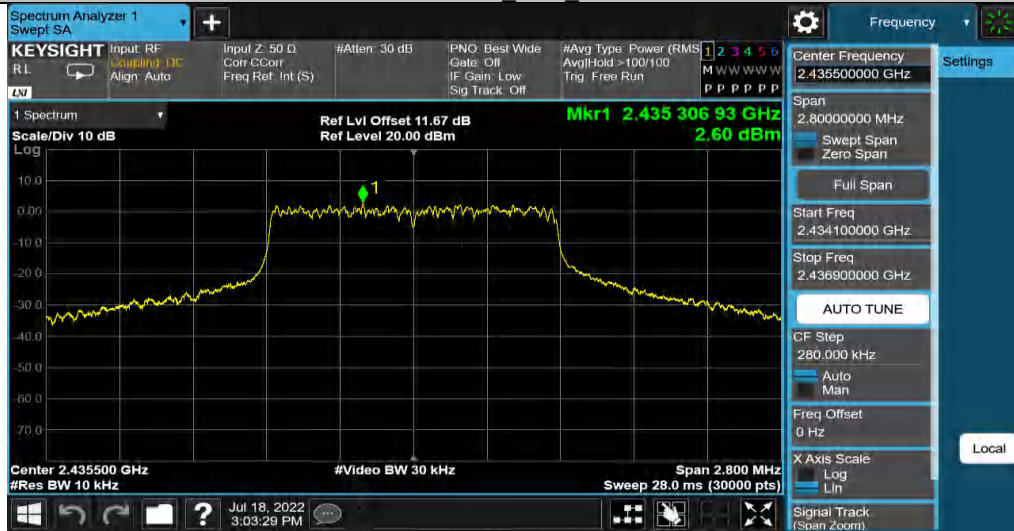
Appendix A.1: Test Results of Conducted Power Spectral Density

2.4GHz SDR, 1.4MHz BW

TestMode	Channel	Antenna	Result[dBm/10kHz]	Limit[dBm]	Verdict
1.4M-MIMO	2403.5	Ant1	2.31	≤8.00	PASS
		Ant2	1.82	≤8.00	PASS
		Total	5.08	≤8.00	PASS
	2435.5	Ant1	2.77	≤8.00	PASS
		Ant2	2.60	≤8.00	PASS
		Total	5.70	≤8.00	PASS
	2469.5	Ant1	3.57	≤8.00	PASS
		Ant2	3.34	≤8.00	PASS
		Total	6.47	≤8.00	PASS



1.4M-MIMO_Ant2_2435.5



1.4M-MIMO_Ant1_2469.5



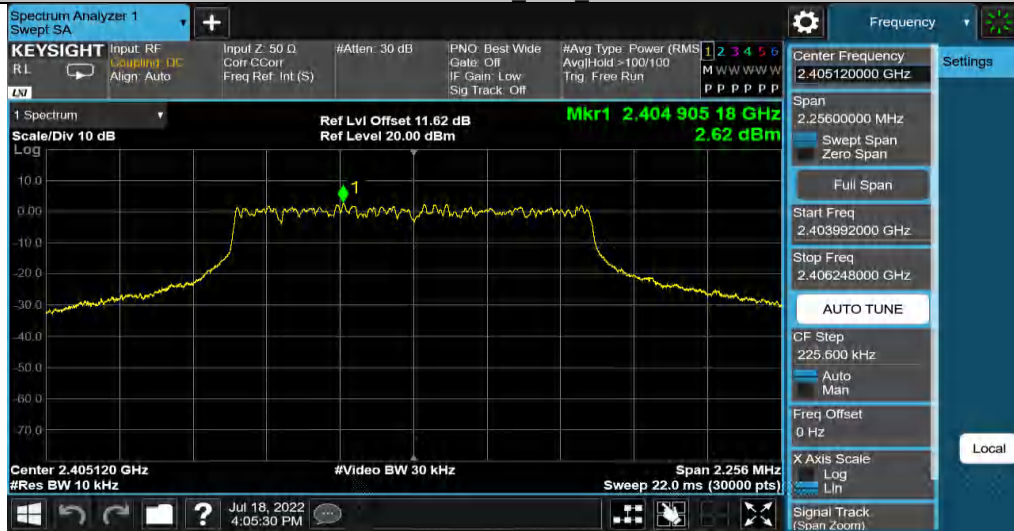
1.4M-MIMO_Ant2_2469.5



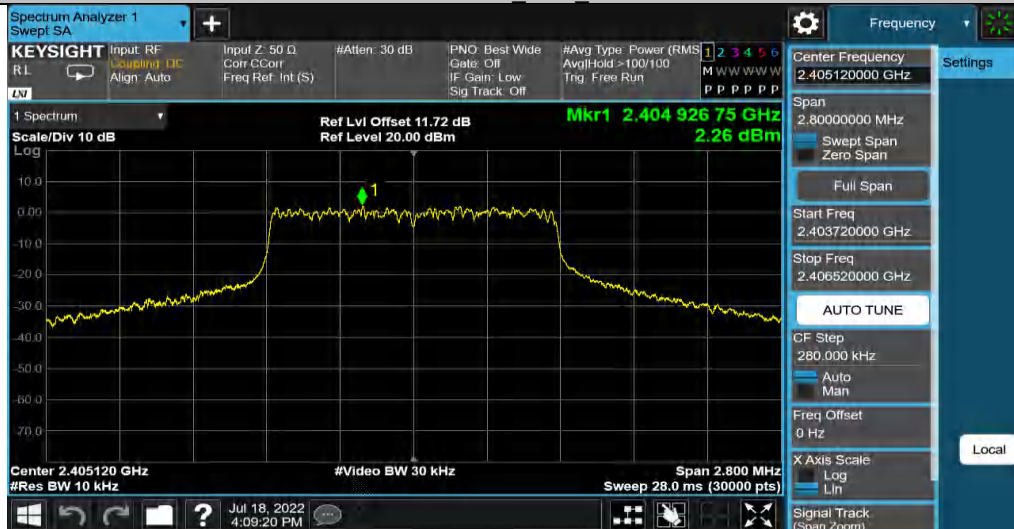
2.4GHz SDR, 1.4MHz BW CA mode

TestMode	Channel	Antenna	Result[dBm/10kHz]	Limit[dBm]	Verdict
1.4MCA-MIMO	2405.12	Ant1	2.62	≤8.00	PASS
		Ant2	2.26	≤8.00	PASS
		Total	5.45	≤8.00	PASS
	2437.12	Ant1	3.05	≤8.00	PASS
		Ant2	3.01	≤8.00	PASS
		Total	6.04	≤8.00	PASS
	2471.12	Ant1	3.44	≤8.00	PASS
		Ant2	3.52	≤8.00	PASS
		Total	6.49	≤8.00	PASS

1.4MCA-MIMO Ant1 2405.12



1.4MCA-MIMO Ant2 2405.12



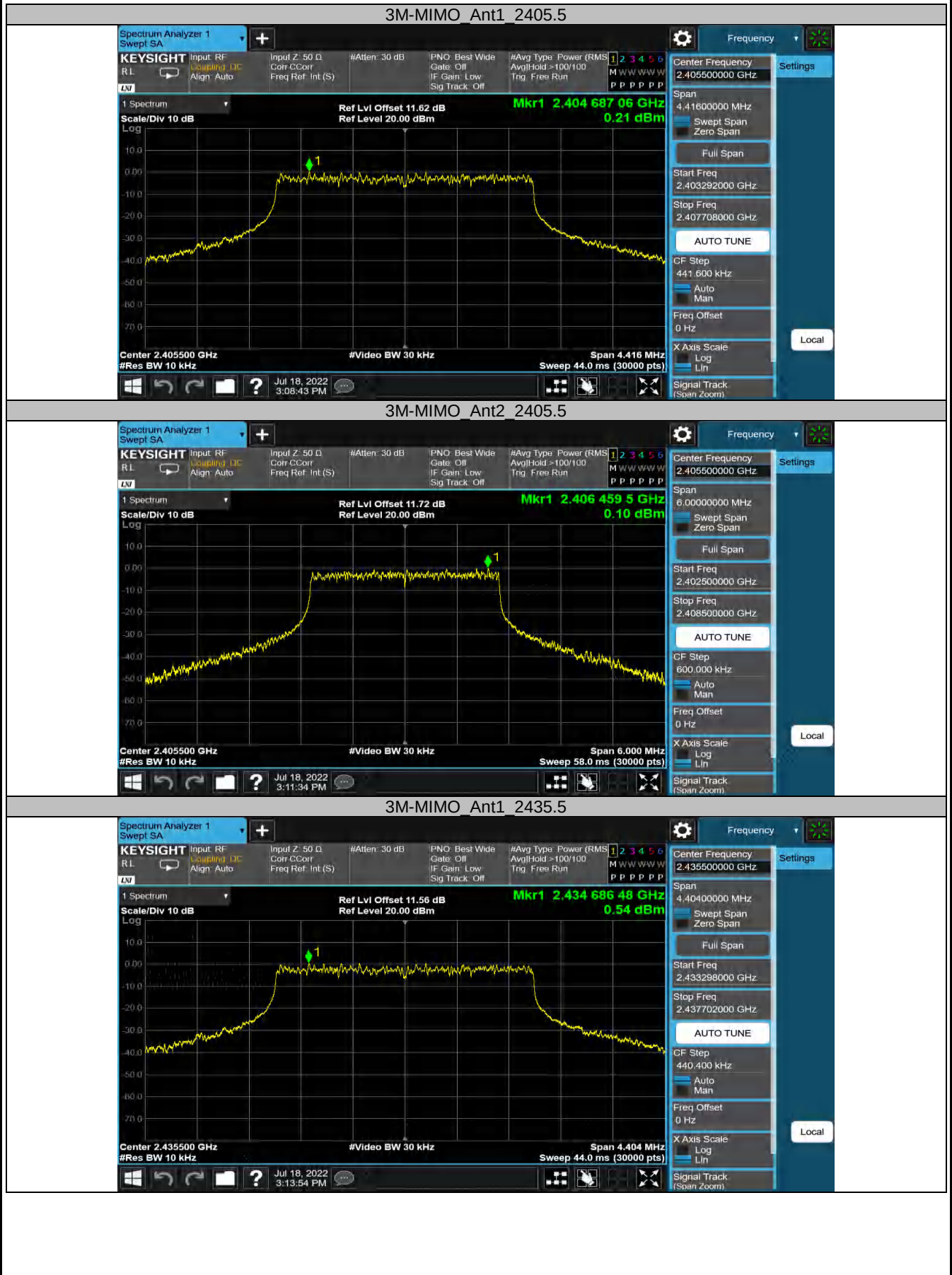
1.4MCA-MIMO Ant1 2437.12

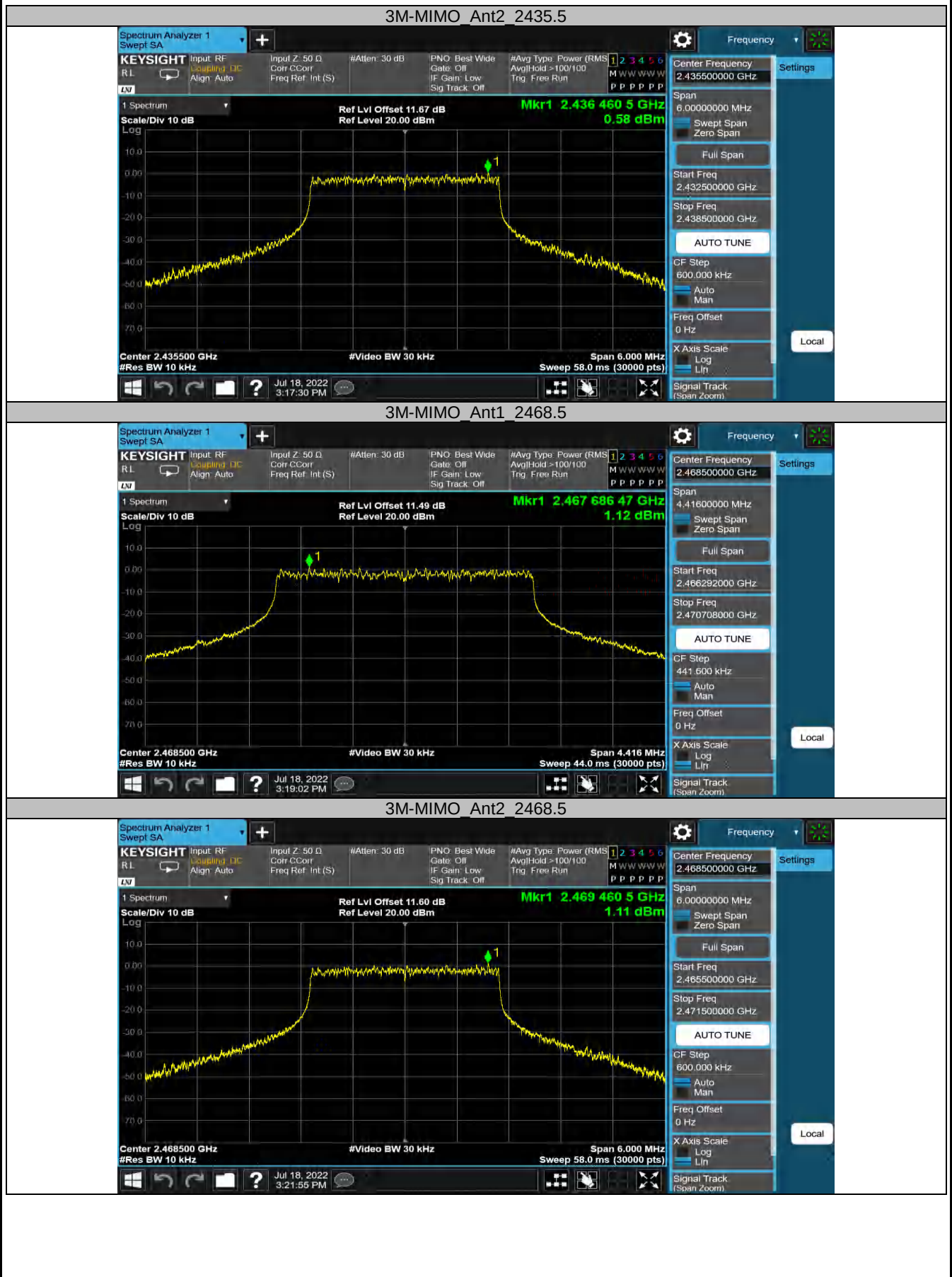




2.4GHz SDR, 3MHz BW

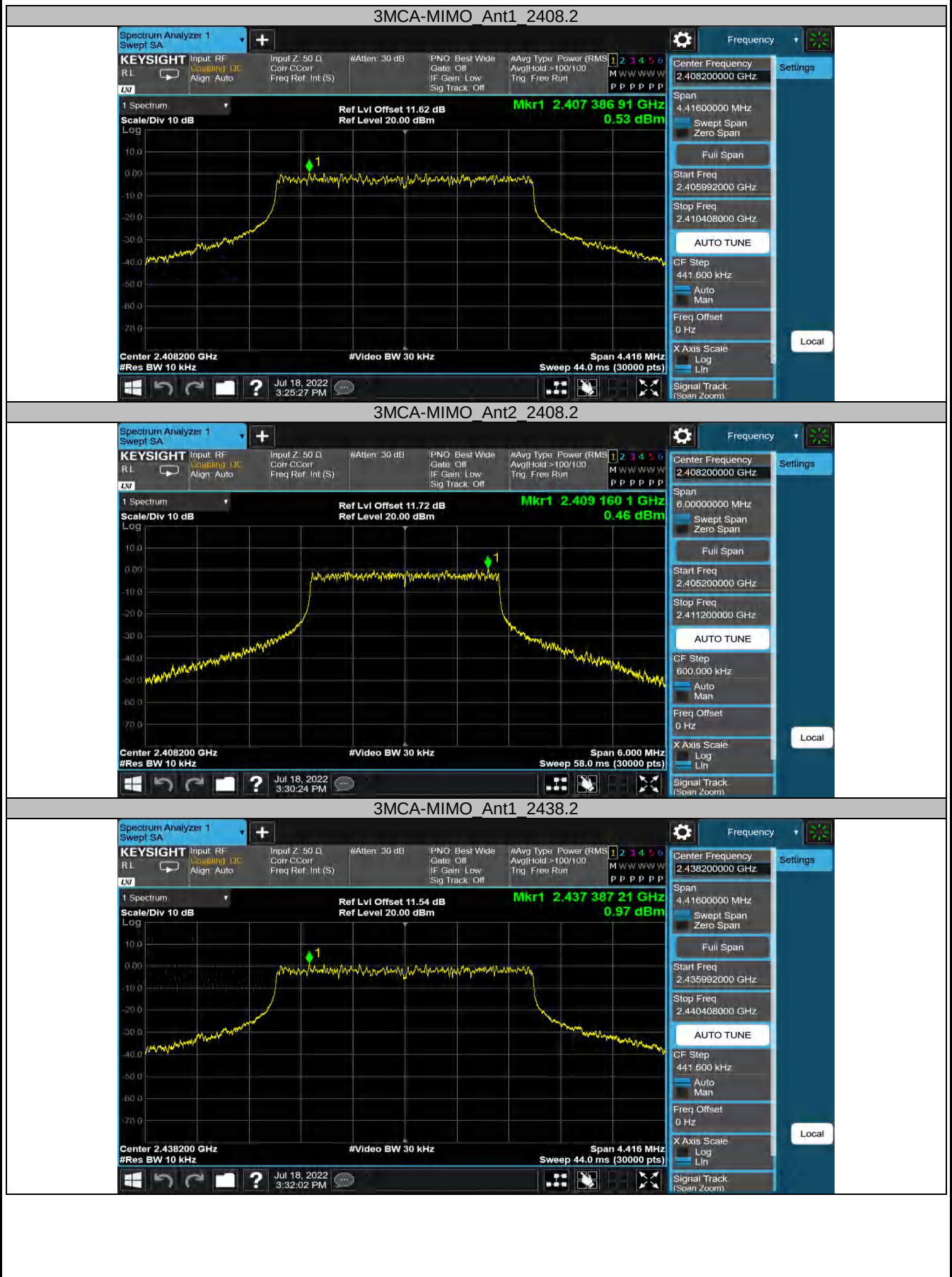
TestMode	Channel	Antenna	Result[dBm/10kHz]	Limit[dBm]	Verdict
3M-MIMO	2405.5	Ant1	0.21	≤8.00	PASS
		Ant2	0.10	≤8.00	PASS
		Total	3.17	≤8.00	PASS
	2435.5	Ant1	0.54	≤8.00	PASS
		Ant2	0.58	≤8.00	PASS
		Total	3.57	≤8.00	PASS
	2468.5	Ant1	1.12	≤8.00	PASS
		Ant2	1.11	≤8.00	PASS
		Total	4.13	≤8.00	PASS

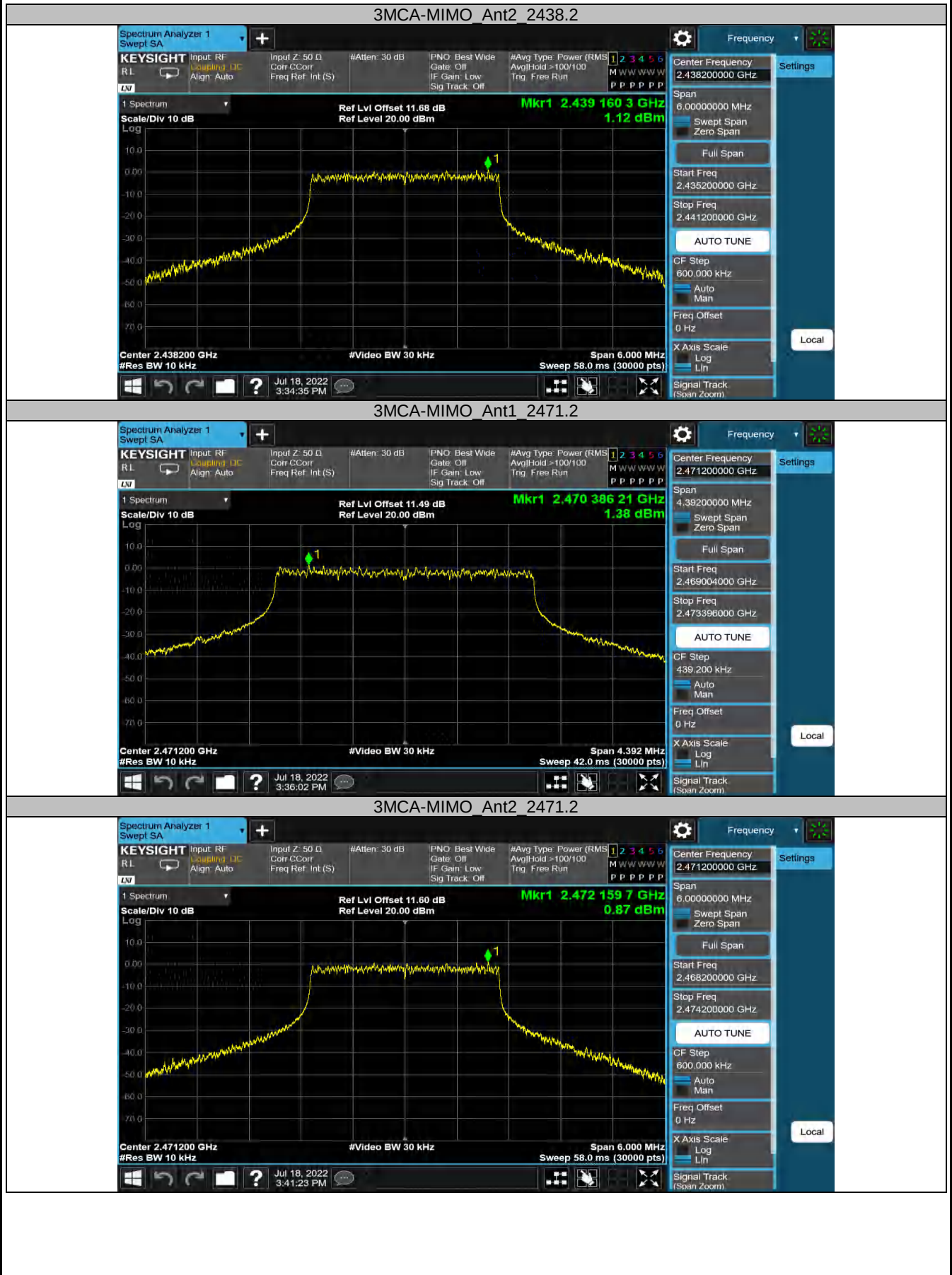




2.4GHz SDR, 3MHz BW CA mode

TestMode	Channel	Antenna	Result[dBm/10kHz]	Limit[dBm]	Verdict
3MCA-MIMO	2408.2	Ant1	0.53	≤8.00	PASS
		Ant2	0.46	≤8.00	PASS
		Total	3.51	≤8.00	PASS
	2438.2	Ant1	0.97	≤8.00	PASS
		Ant2	1.12	≤8.00	PASS
		Total	4.06	≤8.00	PASS
	2471.2	Ant1	1.38	≤8.00	PASS
		Ant2	0.87	≤8.00	PASS
		Total	4.14	≤8.00	PASS

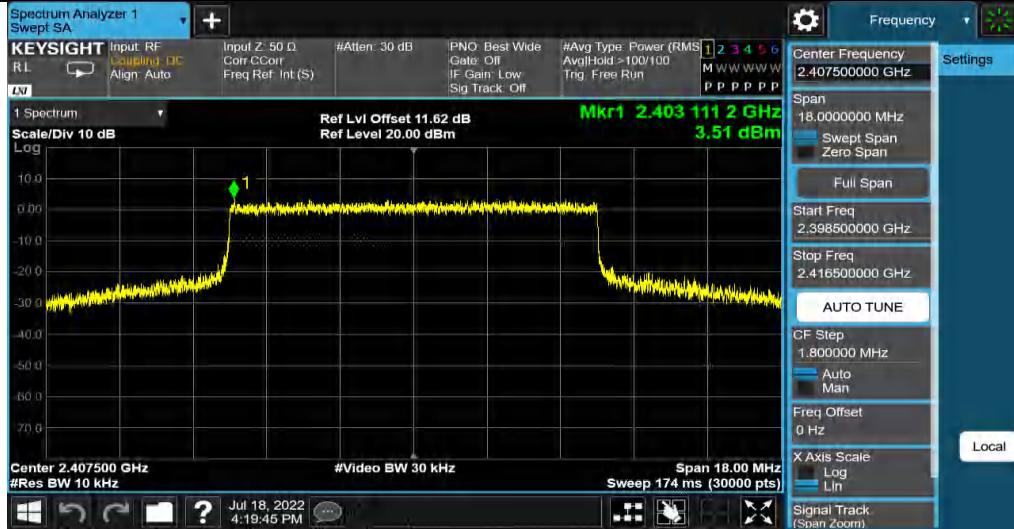




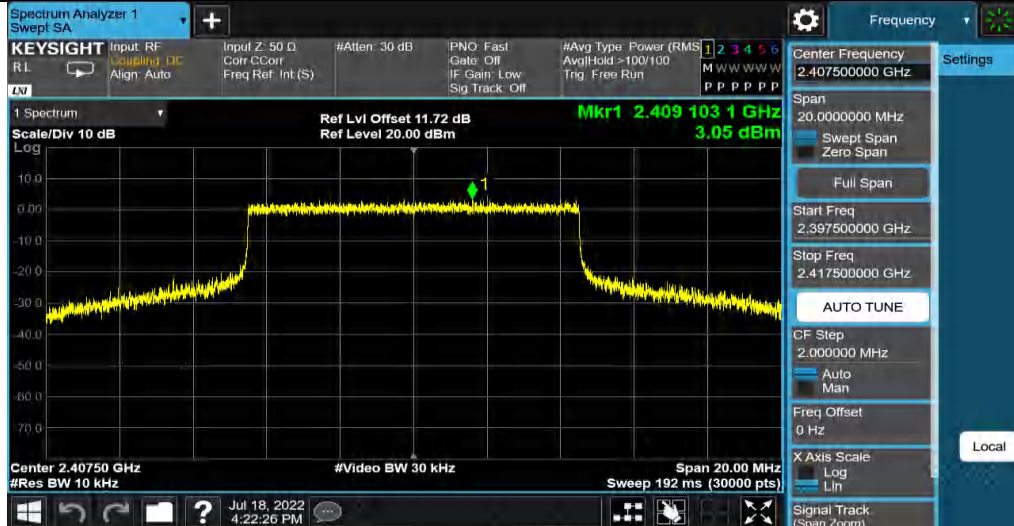
2.4GHz SDR, 10MHz BW

TestMode	Channel	Antenna	Result[dBm/10kHz]	Limit[dBm]	Verdict
10M-MIMO	2407.5	Ant1	3.51	≤8.00	PASS
		Ant2	3.05	≤8.00	PASS
		Total	6.30	≤8.00	PASS
	2437.5	Ant1	3.59	≤8.00	PASS
		Ant2	3.67	≤8.00	PASS
		Total	6.64	≤8.00	PASS
	2467.5	Ant1	3.51	≤8.00	PASS
		Ant2	2.97	≤8.00	PASS
		Total	6.26	≤8.00	PASS

10M-MIMO Ant1 2407.5

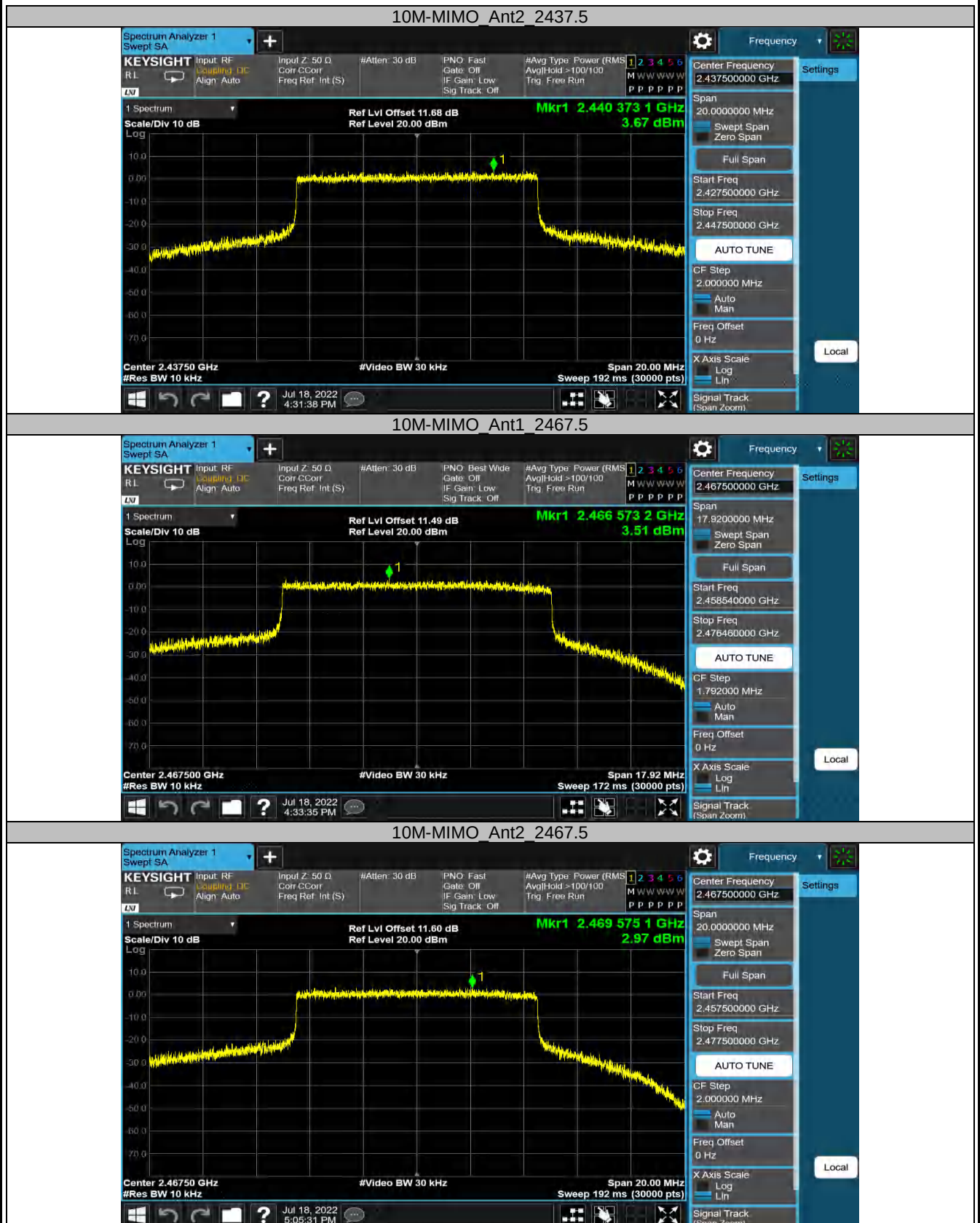


10M-MIMO Ant2 2407.5



10M-MIMO Ant1 2437.5

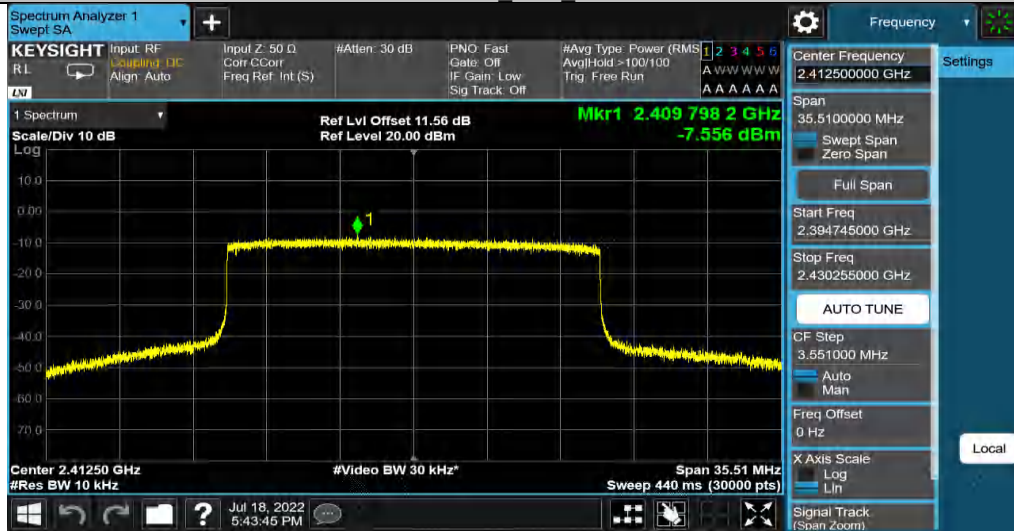




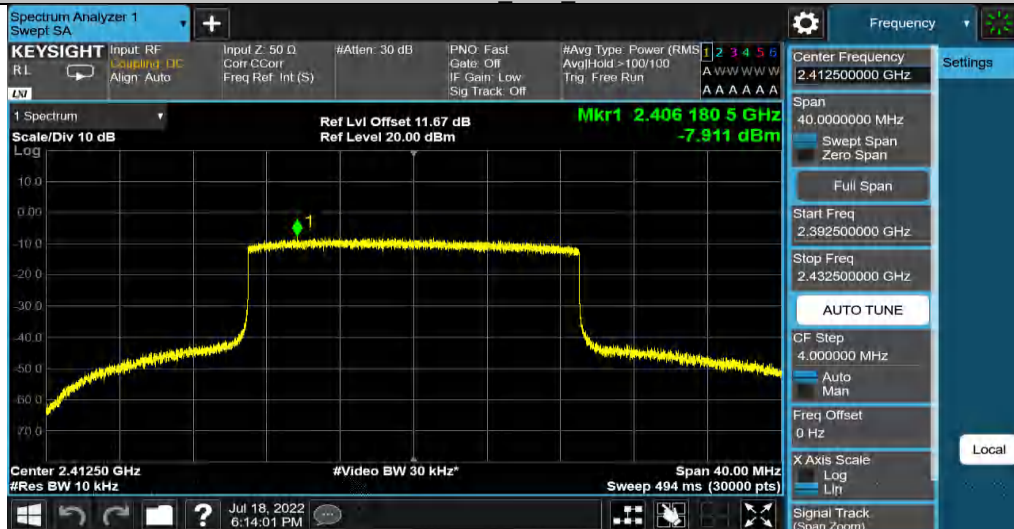
2.4GHz SDR, 20MHz BW

TestMode	Channel	Antenna	Result[dBm/10kHz]	Limit[dBm]	Verdict
20M-MIMO	2412.5	Ant1	-7.56	≤8.00	PASS
		Ant2	-7.91	≤8.00	PASS
		Total	-4.72	≤8.00	PASS
	2437.5	Ant1	-5.46	≤8.00	PASS
		Ant2	-5.40	≤8.00	PASS
		Total	-2.42	≤8.00	PASS
	2462.5	Ant1	-8.70	≤8.00	PASS
		Ant2	-9.61	≤8.00	PASS
		Total	-6.12	≤8.00	PASS

20M-MIMO Ant1 2412.5



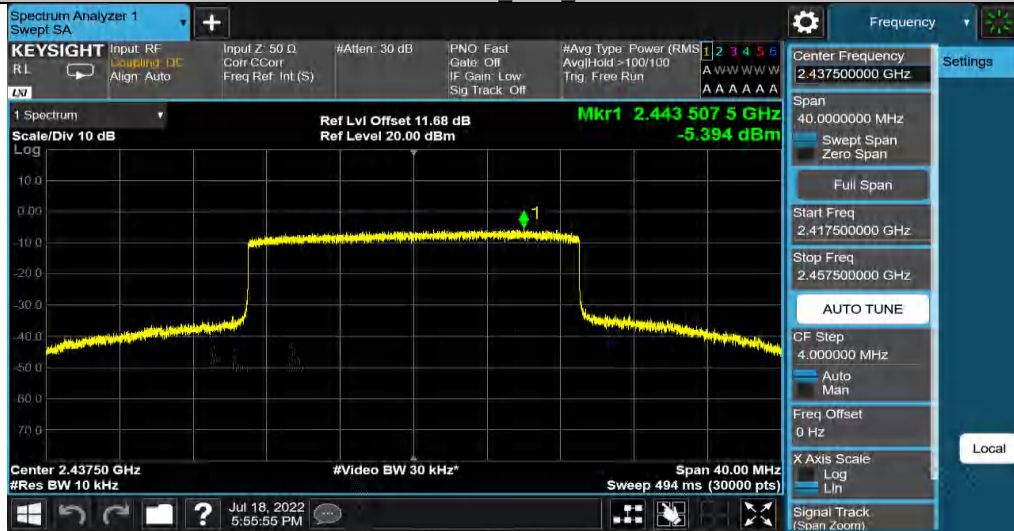
20M-MIMO Ant2 2412.5



20M-MIMO Ant1 2437.5



20M-MIMO Ant2 2437.5



20M-MIMO Ant1 2462.5



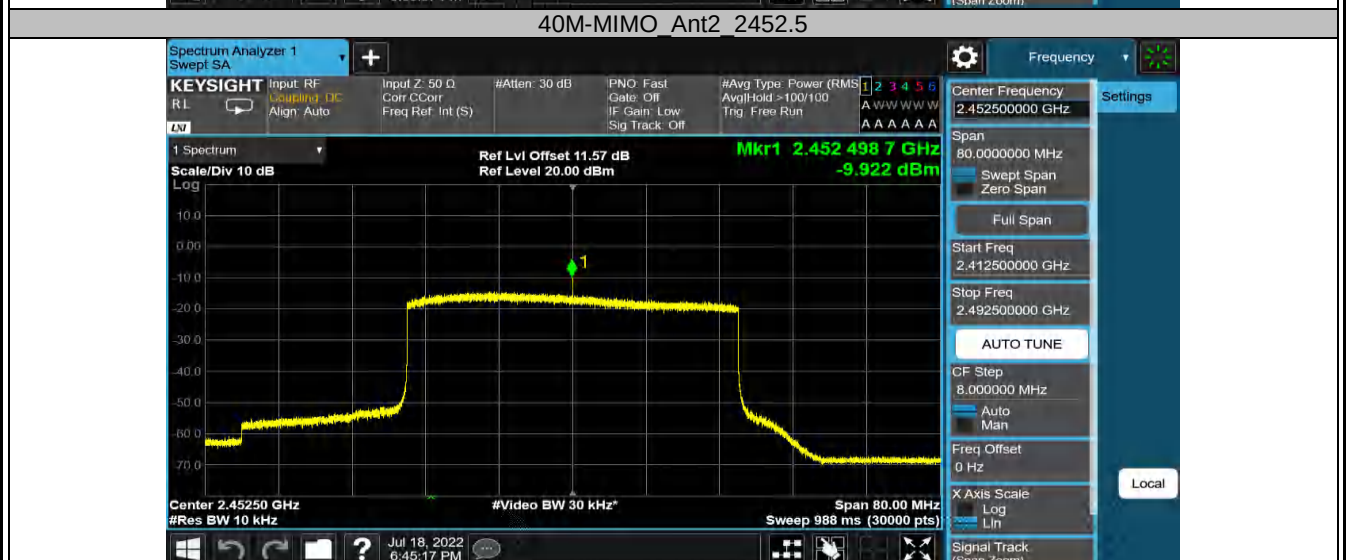
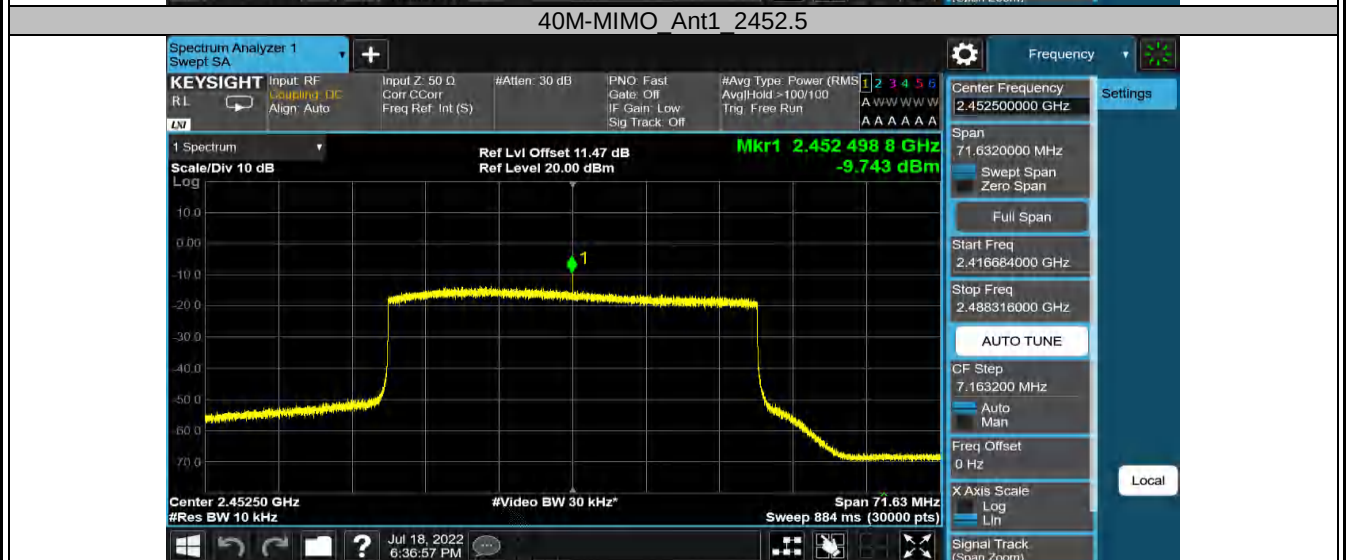
20M-MIMO Ant2 2462.5



2.4GHz SDR, 40MHz BW

TestMode	Channel	Antenna	Result[dBm/10kHz]	Limit[dBm]	Verdict
40M-MIMO	2422.5	Ant1	-11.11	≤8.00	PASS
		Ant2	-10.66	≤8.00	PASS
		Total	-7.87	≤8.00	PASS
	2437.5	Ant1	-8.93	≤8.00	PASS
		Ant2	-8.67	≤8.00	PASS
		Total	-5.79	≤8.00	PASS
	2452.5	Ant1	-9.74	≤8.00	PASS
		Ant2	-9.92	≤8.00	PASS
		Total	-6.82	≤8.00	PASS





Appendix A.2: Test Results of 6dB Bandwidth

2.4GHz SDR, 1.4MHz BW

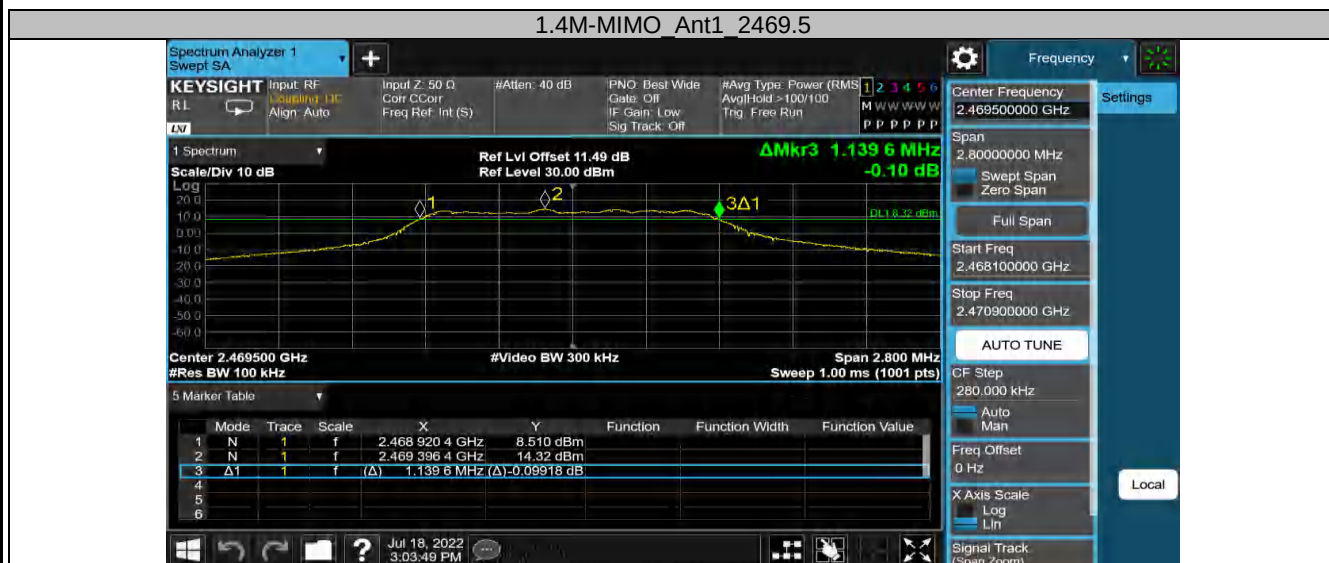
TestMode	Antenna	Channel	DTS BW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
1.4M-MIMO	Ant1	2403.5	1.126	2402.932	2404.057	0.5	PASS
		2435.5	1.140	2434.920	2436.060	0.5	PASS
		2469.5	1.140	2468.920	2470.060	0.5	PASS

1.4M-MIMO Ant1 2403.5



1.4M-MIMO Ant1 2435.5

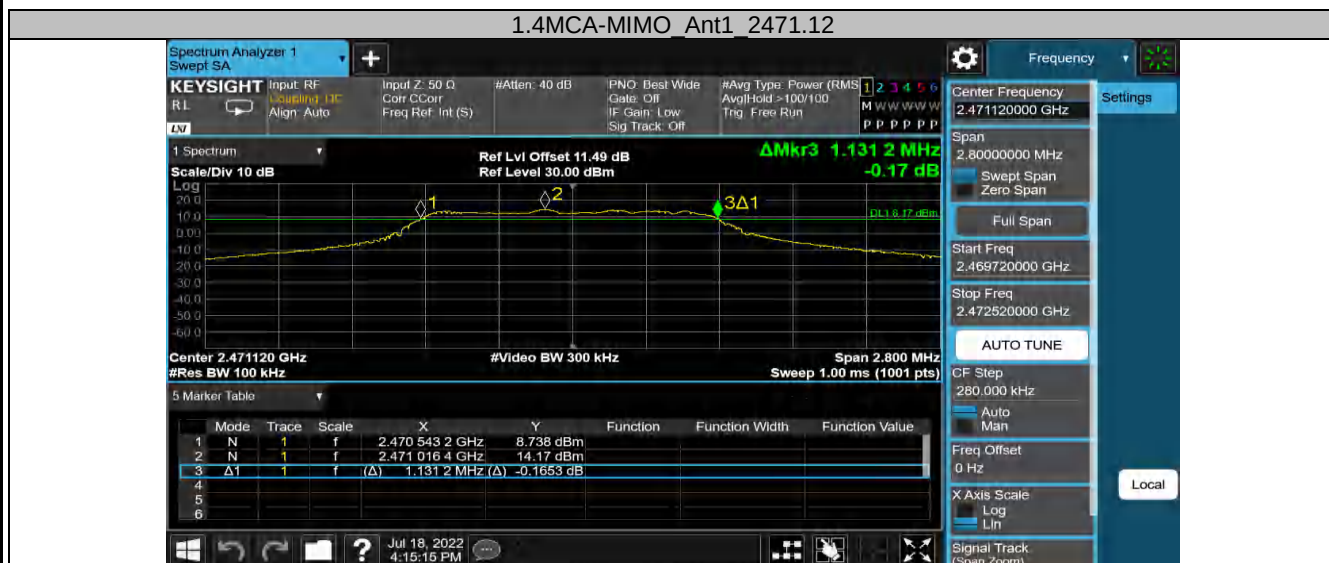




2.4GHz SDR, 1.4MHz BW CA mode

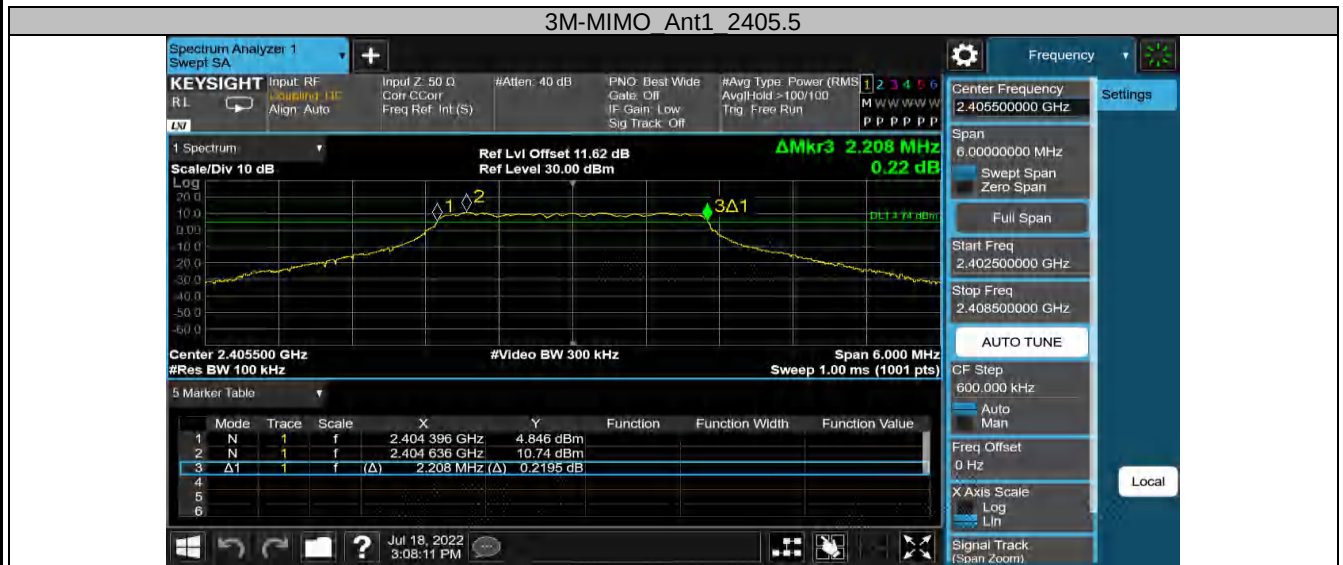
TestMode	Antenna	Channel	DTS BW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
1.4MCA-MIMO	Ant1	2405.12	1.128	2404.538	2405.666	0.5	PASS
		2437.12	1.131	2436.543	2437.674	0.5	PASS
		2471.12	1.131	2470.543	2471.674	0.5	PASS





2.4GHz SDR, 3MHz BW

TestMode	Antenna	Channel	DTS BW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
3M-MIMO	Ant1	2405.5	2.208	2404.396	2406.604	0.5	PASS
		2435.5	2.202	2434.402	2436.604	0.5	PASS
		2468.5	2.208	2467.396	2469.604	0.5	PASS

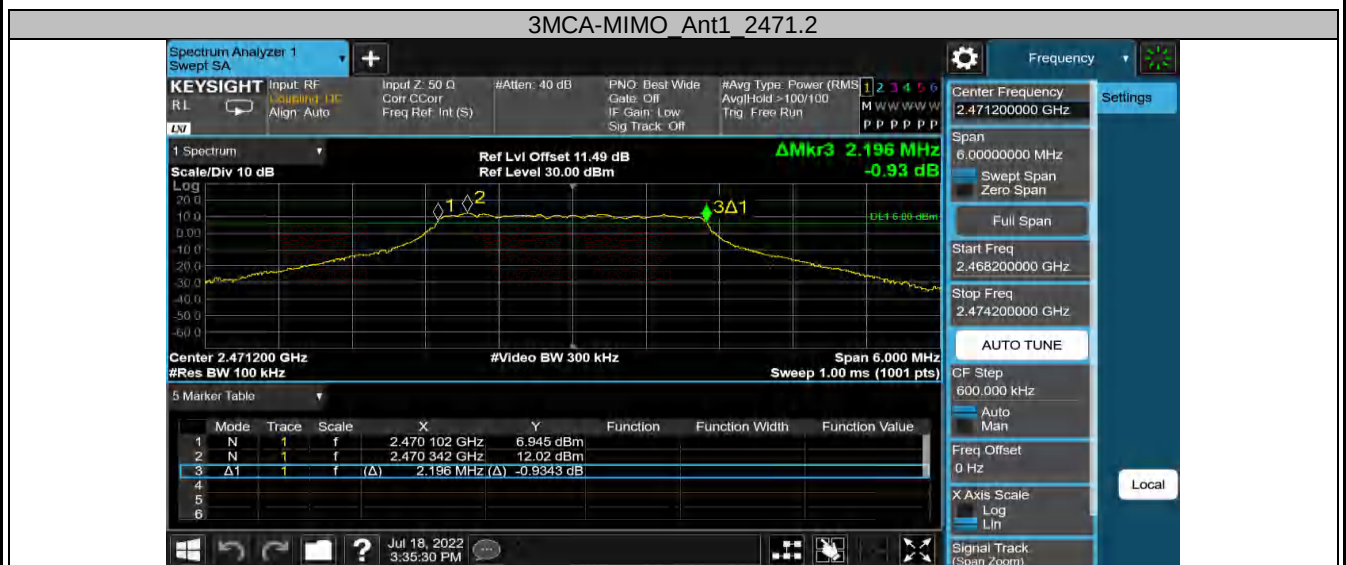




2.4GHz SDR, 3MHz BW CA mode

TestMode	Antenna	Channel	DTS BW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
3MCA-MIMO	Ant1	2408.2	2.208	2407.096	2409.304	0.5	PASS
		2438.2	2.208	2437.096	2439.304	0.5	PASS
		2471.2	2.196	2470.102	2472.298	0.5	PASS

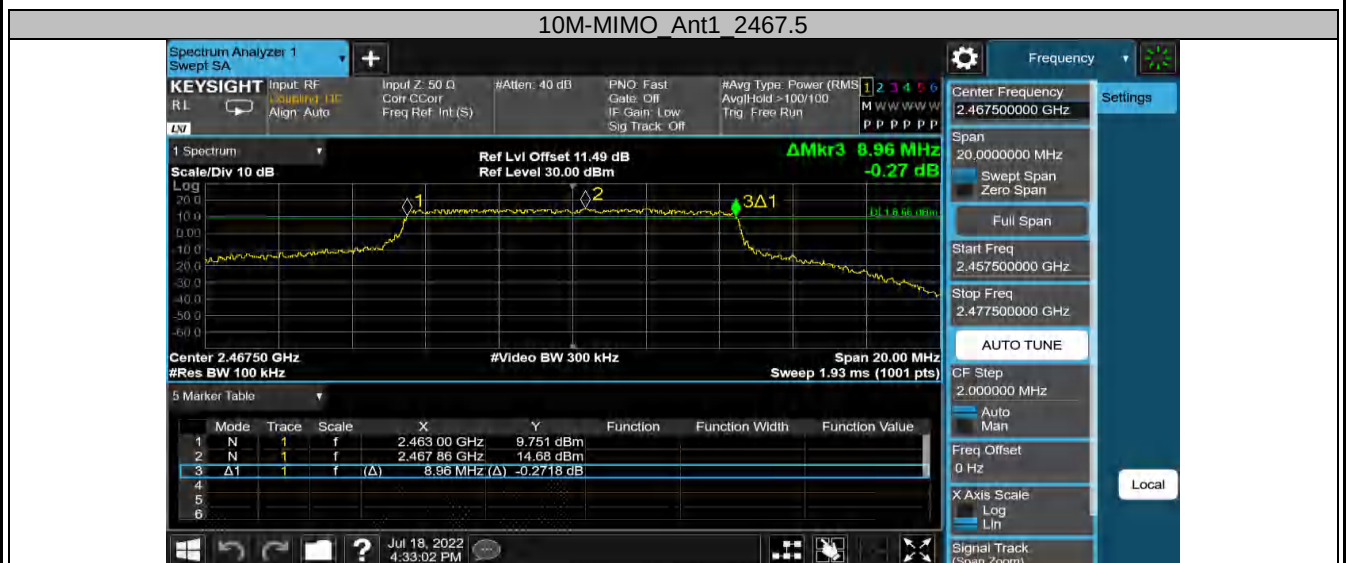
3MCA-MIMO Ant1 2408.2**3MCA-MIMO Ant1 2438.2**



2.4GHz SDR, 10MHz BW

TestMode	Antenna	Channel	DTS BW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
10M-MIMO	Ant1	2407.5	9.000	2403.000	2412.000	0.5	PASS
		2437.5	8.980	2433.020	2442.000	0.5	PASS
		2467.5	8.960	2463.000	2471.960	0.5	PASS

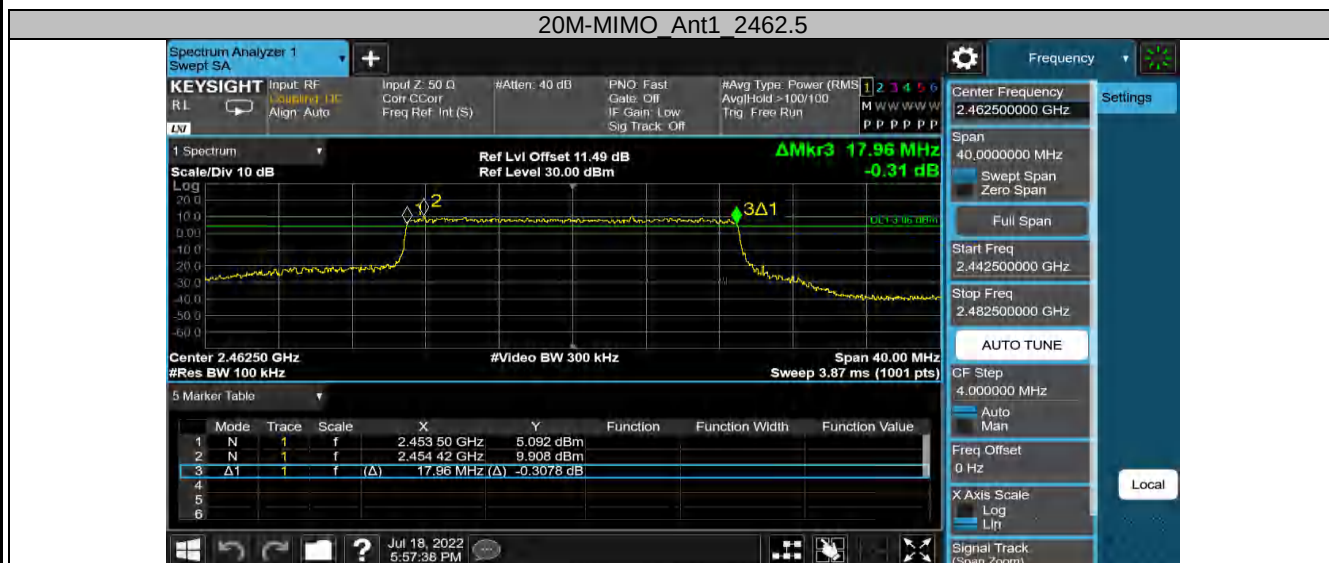
10M-MIMO Ant1 2407.5**10M-MIMO Ant1 2437.5**



2.4GHz SDR, 20MHz BW

TestMode	Antenna	Channel	DTS BW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
20M-MIMO	Ant1	2412.5	17.960	2403.500	2421.460	0.5	PASS
		2437.5	17.960	2428.540	2446.500	0.5	PASS
		2462.5	17.960	2453.500	2471.460	0.5	PASS

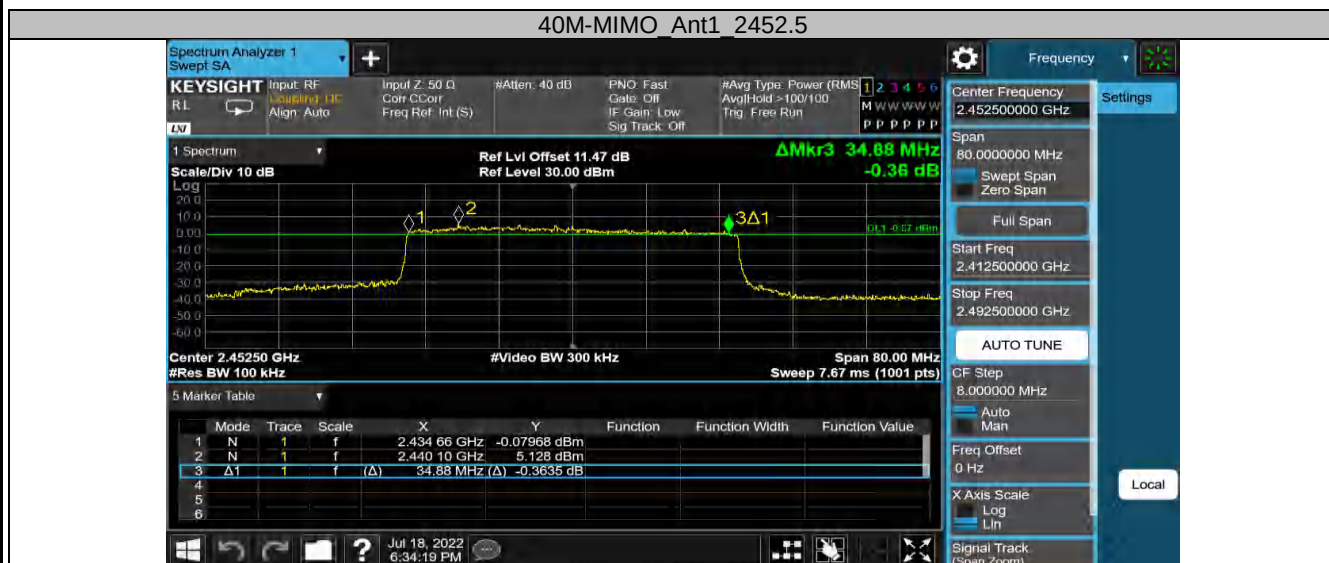
20M-MIMO Ant1 2412.5**20M-MIMO Ant1 2437.5**



2.4GHz SDR, 40MHz BW

TestMode	Antenna	Channel	DTS BW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
40M-MIMO	Ant1	2422.5	36.000	2404.500	2440.500	0.5	PASS
		2437.5	35.760	2419.580	2455.340	0.5	PASS
		2452.5	34.880	2434.660	2469.540	0.5	PASS

40M-MIMO Ant1 2422.5**40M-MIMO Ant1 2437.5**



Appendix A.3: Test Results of 99% Bandwidth

2.4GHz SDR, 1.4MHz BW

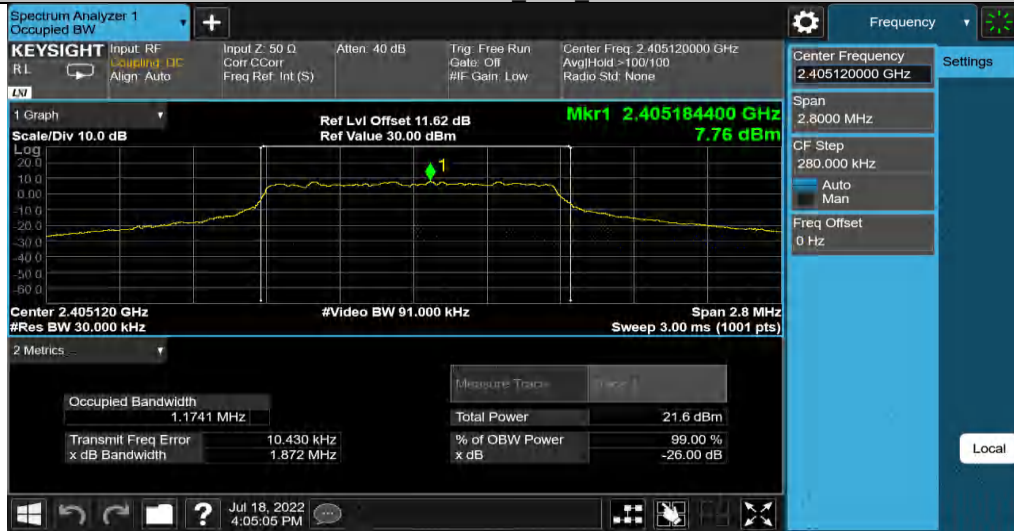
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
1.4M-MIMO	Ant1	2403.5	1.1753	2402.912	2404.088	---	PASS
		2435.5	1.1759	2434.912	2436.088	---	PASS
		2469.5	1.1682	2468.916	2470.084	---	PASS



2.4GHz SDR, 1.4MHz BW CA mode

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
1.4MCA-MIMO	Ant1	2405.12	1.1741	2404.545	2405.716	---	---
		2437.12	1.1799	2436.543	2437.721	---	---
		2471.12	1.1666	2470.541	2471.707	---	---

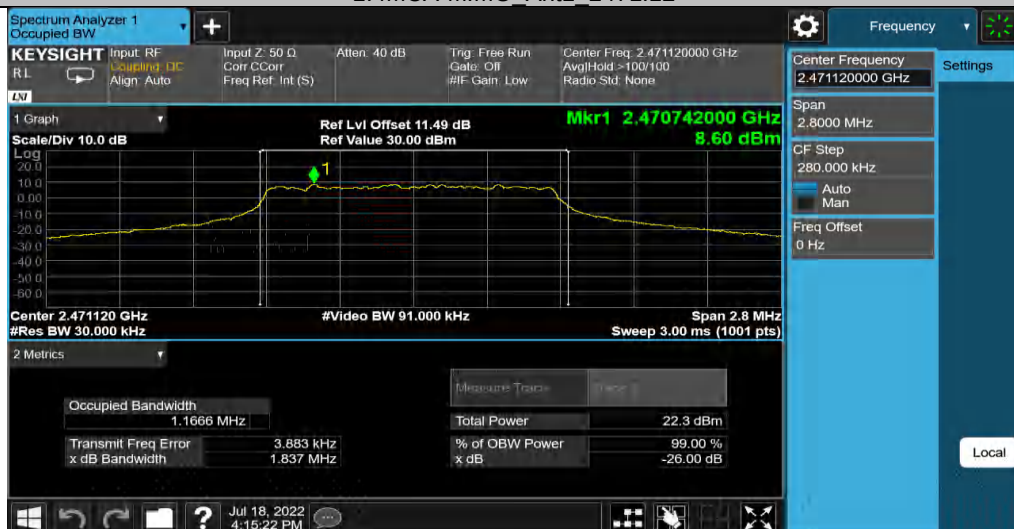
1.4MCA-MIMO Ant1 2405.12



1.4MCA-MIMO Ant1 2437.12

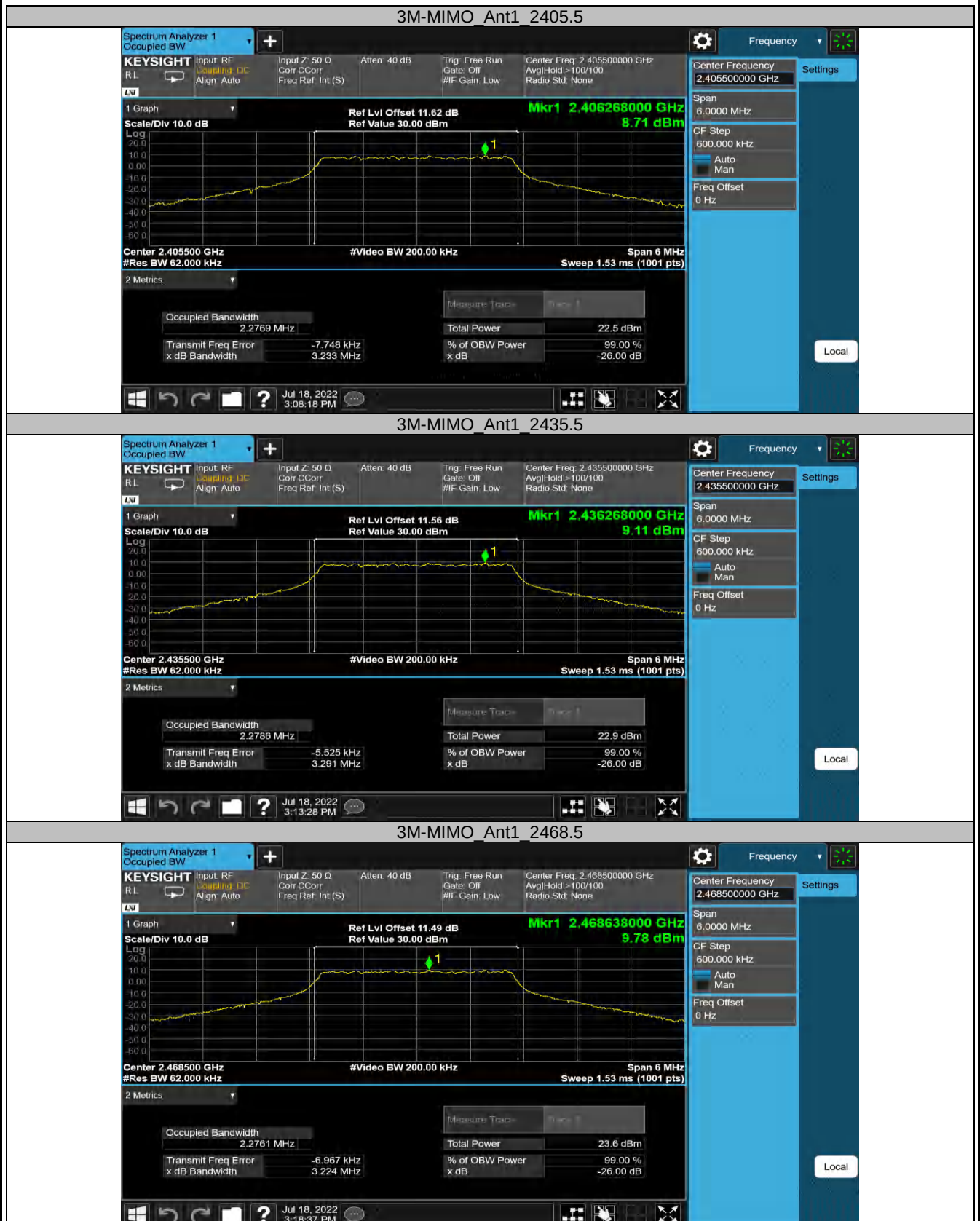


1.4MCA-MIMO Ant1 2471.12



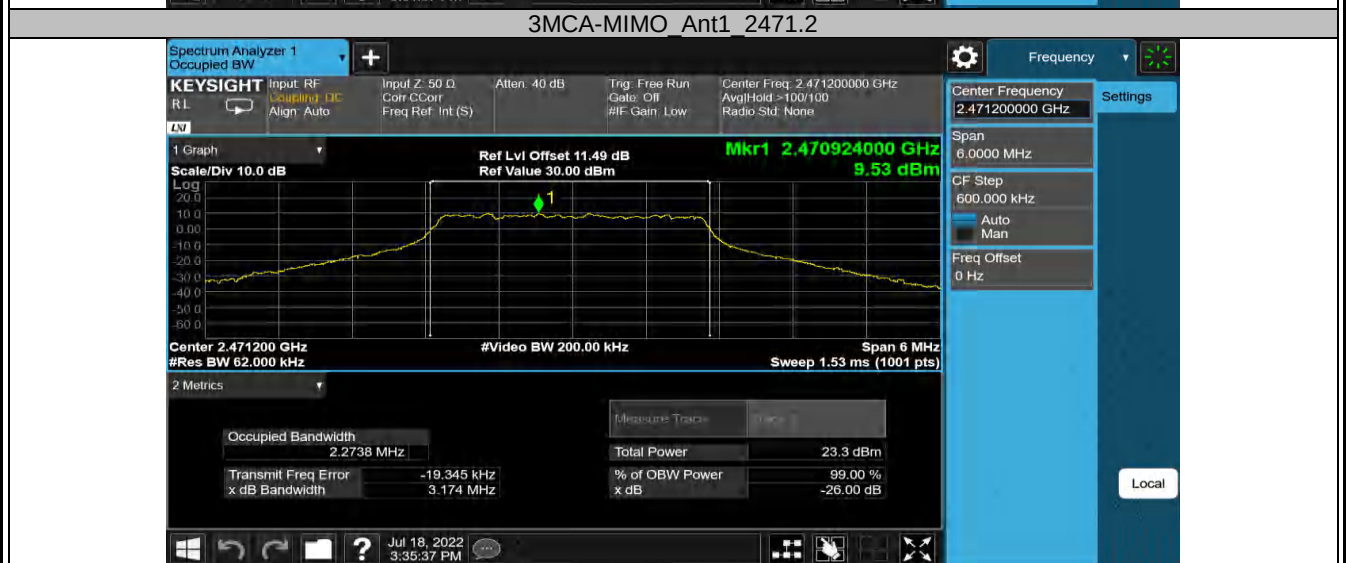
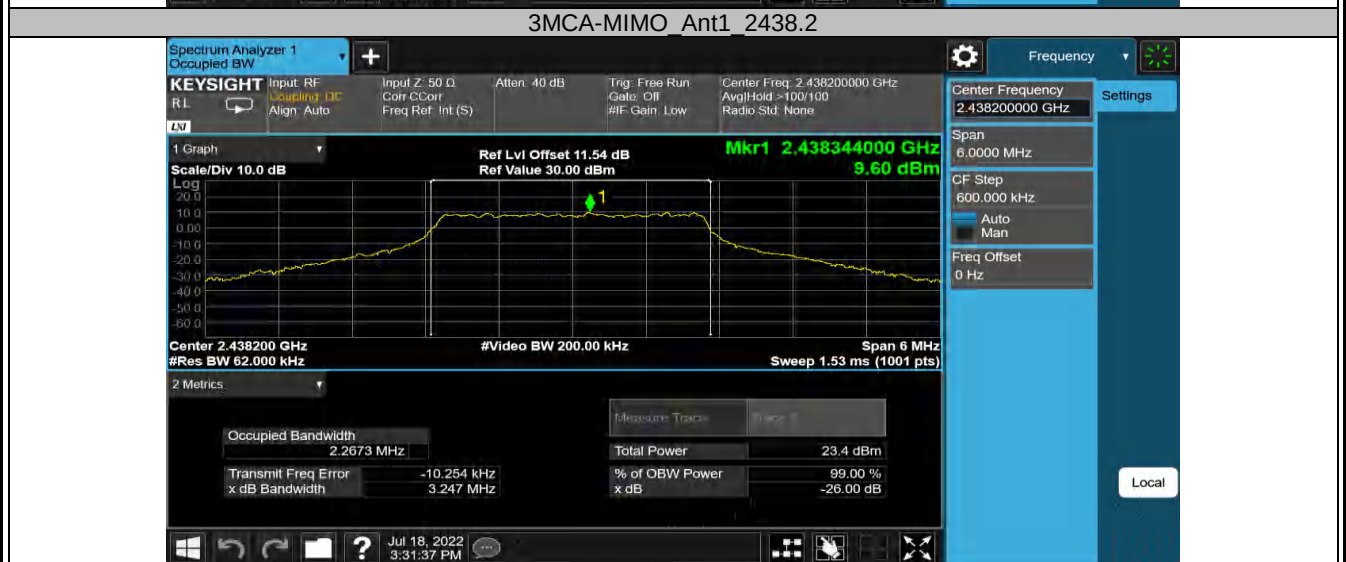
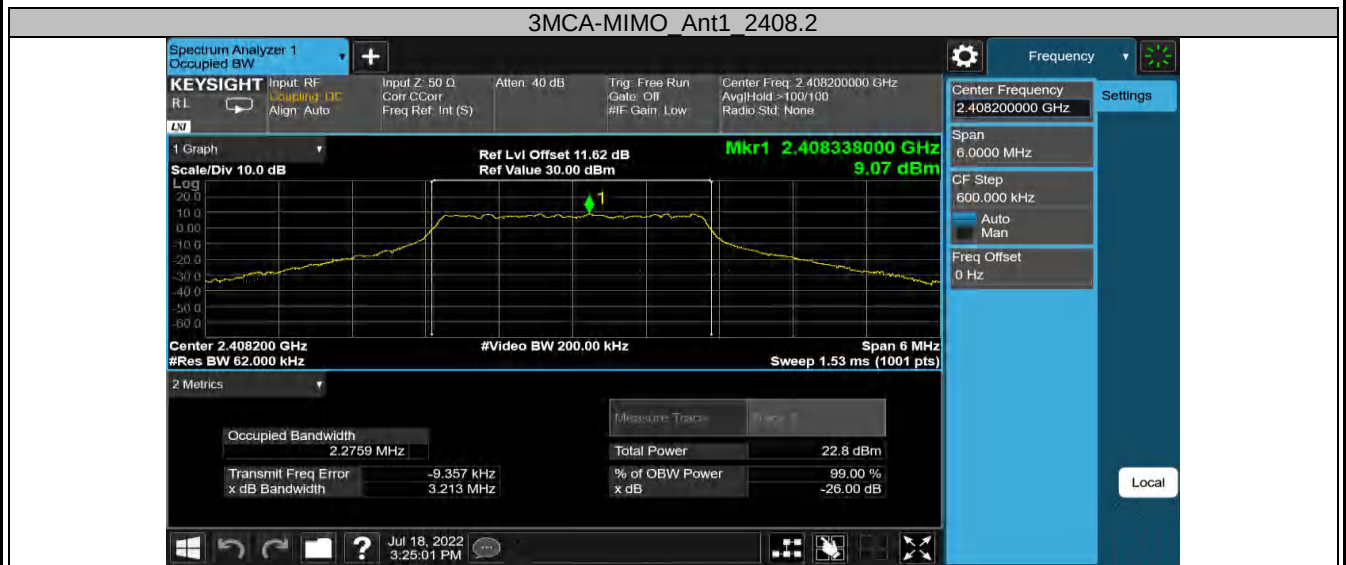
2.4GHz SDR, 3MHz BW

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
3M-MIMO	Ant1	2405.5	2.2769	2404.354	2406.628	---	---
		2435.5	2.2786	2434.354	2436.634	---	---
		2468.5	2.2761	2467.355	2469.631	---	---



2.4GHz SDR, 3MHz BW CA Mode

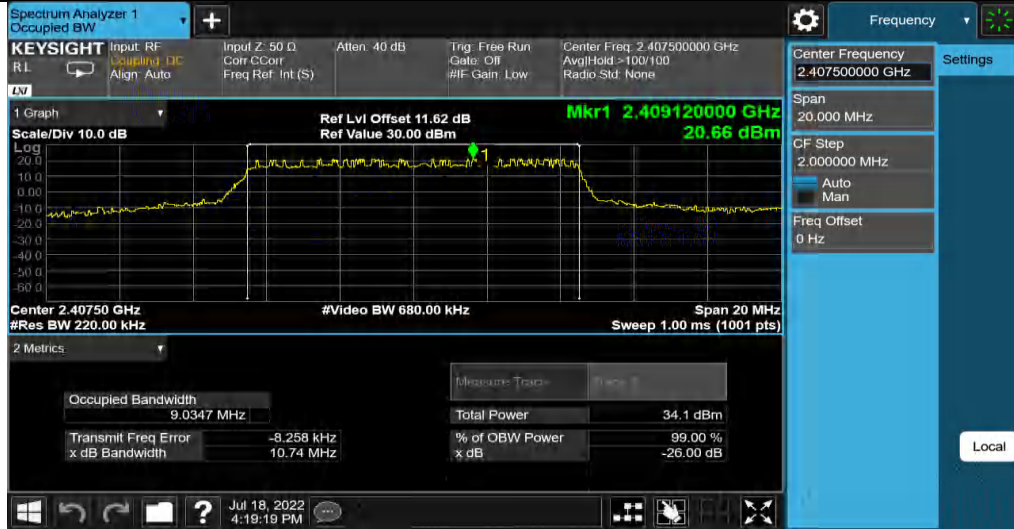
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
3MCA-MIMO	Ant1	2408.2	2.2759	2407.053	2409.327	---	---
		2438.2	2.2673	2437.056	2439.322	---	---
		2471.2	2.2738	2470.044	2472.317	---	---



2.4GHz SDR, 10MHz BW

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
10M-MIMO	Ant1	2407.5	9.0347	2402.970	2412.013	---	---
		2437.5	9.0582	2432.970	2442.041	---	---
		2467.5	9.0347	2462.934	2471.971	---	---

10M-MIMO Ant1 2407.5



10M-MIMO Ant1 2437.5



10M-MIMO Ant1 2467.5



2.4GHz SDR, 20MHz BW

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
20M-MIMO	Ant1	2412.5	17.753	2403.629	2421.384	---	---
		2437.5	17.858	2428.596	2446.511	---	---
		2462.5	17.865	2453.511	2471.435	---	---



2.4GHz SDR, 40MHz BW

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
40M-MIMO	Ant1	2422.5	35.913	2404.623	2440.390	---	---
		2437.5	35.921	2419.512	2455.496	---	---
		2452.5	35.797	2434.577	2470.393	---	---

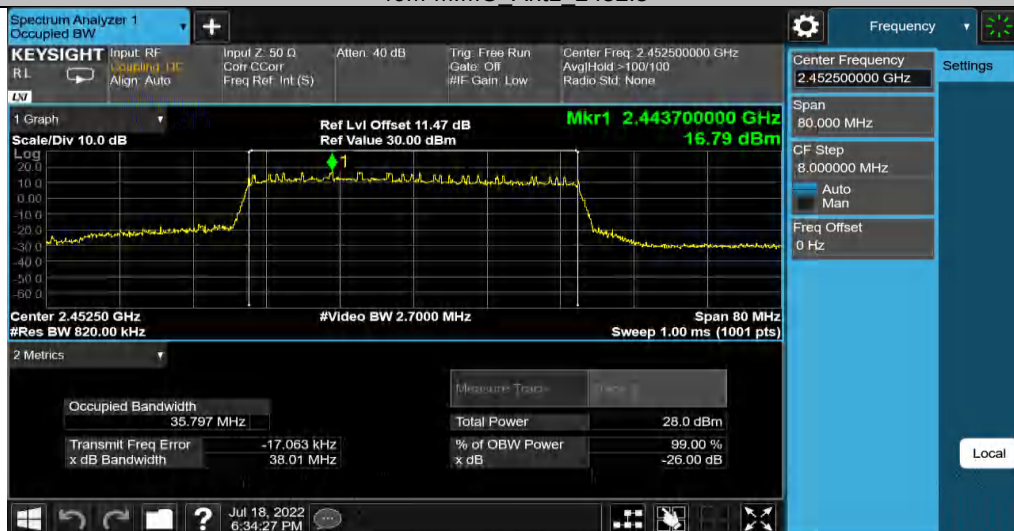
40M-MIMO Ant1 2422.5



40M-MIMO Ant1 2437.5



40M-MIMO Ant1 2452.5



Appendix A.4: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

2.4GHz SDR, 1.4MHz BW

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
1.4M-MIMO	Ant1	2403.5	Reference	13.08	13.08	---	PASS
			30~1000	13.08	-37.97	≤-16.92	PASS
			1000~26500	13.08	-29.31	≤-16.92	PASS
		2435.5	Reference	13.61	13.61	---	PASS
			30~1000	13.61	-38.2	≤-16.39	PASS
			1000~26500	13.61	-28.98	≤-16.39	PASS
		2469.5	Reference	14.34	14.34	---	PASS
			30~1000	14.34	-37.73	≤-15.66	PASS
			1000~26500	14.34	-28.98	≤-15.66	PASS

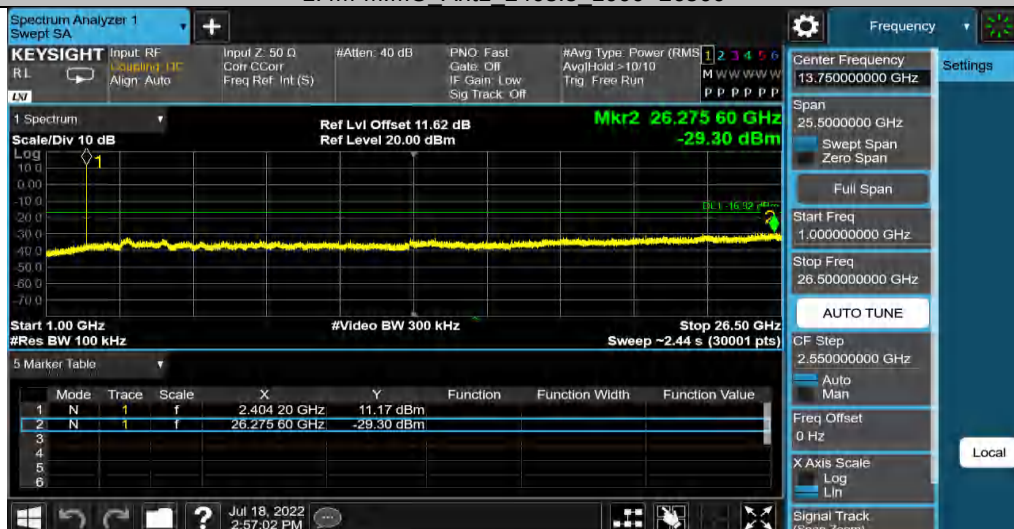
1.4M-MIMO_Ant1_2403.5_0-Reference



1.4M-MIMO_Ant1_2403.5_30~1000



1.4M-MIMO_Ant1_2403.5_1000~26500



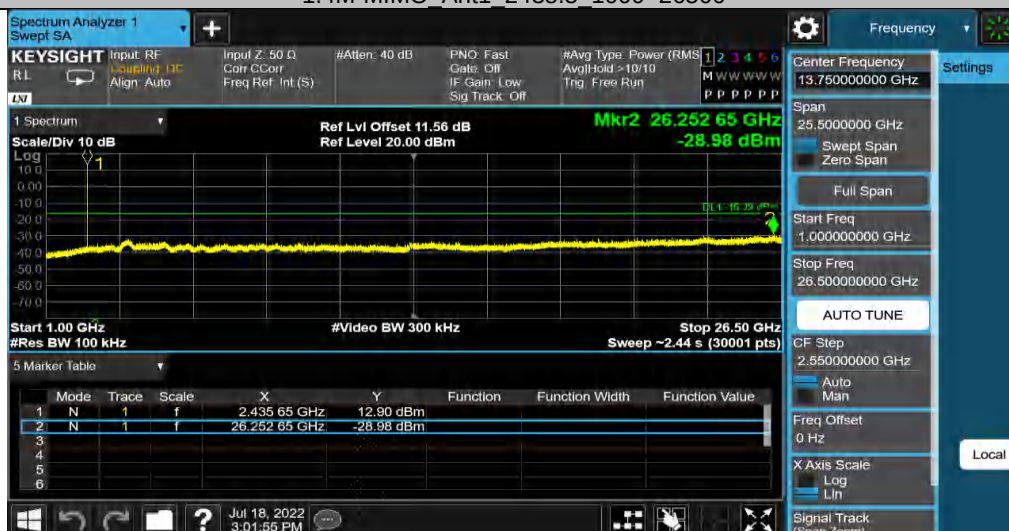
1.4M-MIMO_Ant1_2435.5 0-Reference



1.4M-MIMO_Ant1_2435.5 30-1000



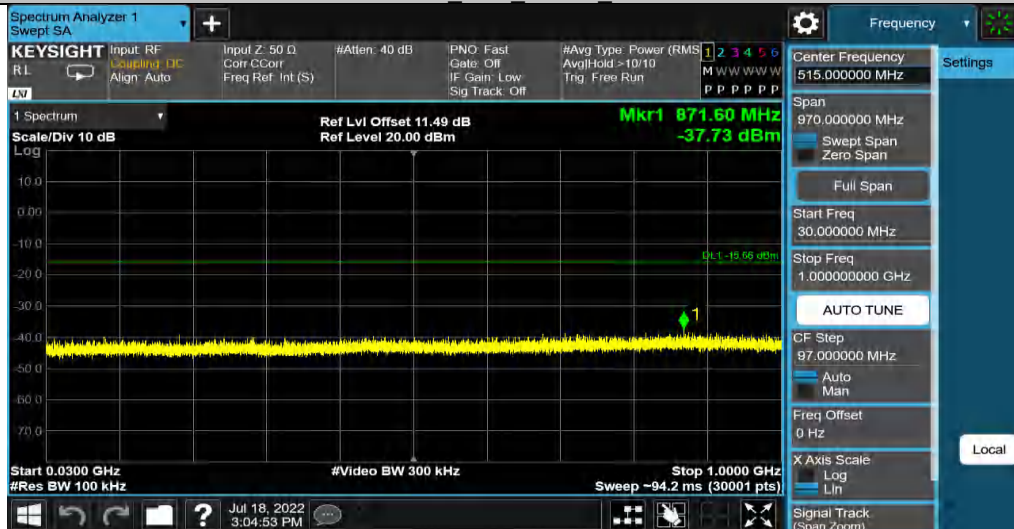
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1.4M-MIMO_Ant1_2469.5 0-Reference



1.4M-MIMO_Ant1_2469.5 30-1000



1.4M-MIMO_Ant1_2469.5 1000-26500



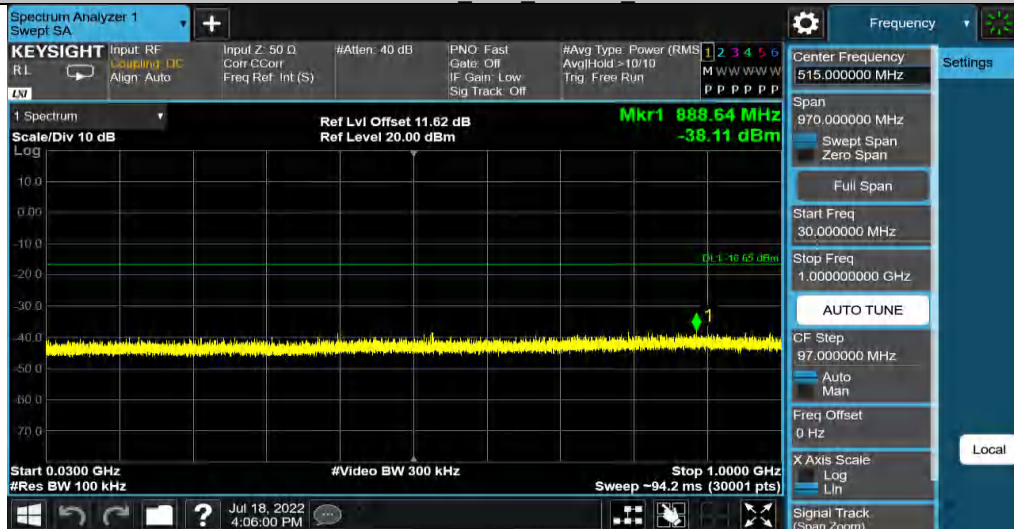
2.4GHz SDR, 1.4MHz BW CA mode

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
1.4MCA-MIMO	Ant1	2405.12	Reference	13.35	13.35	---	PASS
			30~1000	13.35	-38.11	≤-16.65	PASS
			1000~26500	13.35	-28.92	≤-16.65	PASS
		2437.12	Reference	13.89	13.89	---	PASS
			30~1000	13.89	-37.21	≤-16.11	PASS
			1000~26500	13.89	-27.83	≤-16.11	PASS
		2471.12	Reference	14.22	14.22	---	PASS
			30~1000	14.22	-38.17	≤-15.78	PASS
			1000~26500	14.22	-29.81	≤-15.78	PASS

1.4MCA-MIMO Ant1 2405.12 0~Reference



1.4MCA-MIMO Ant1 2405.12 30~1000



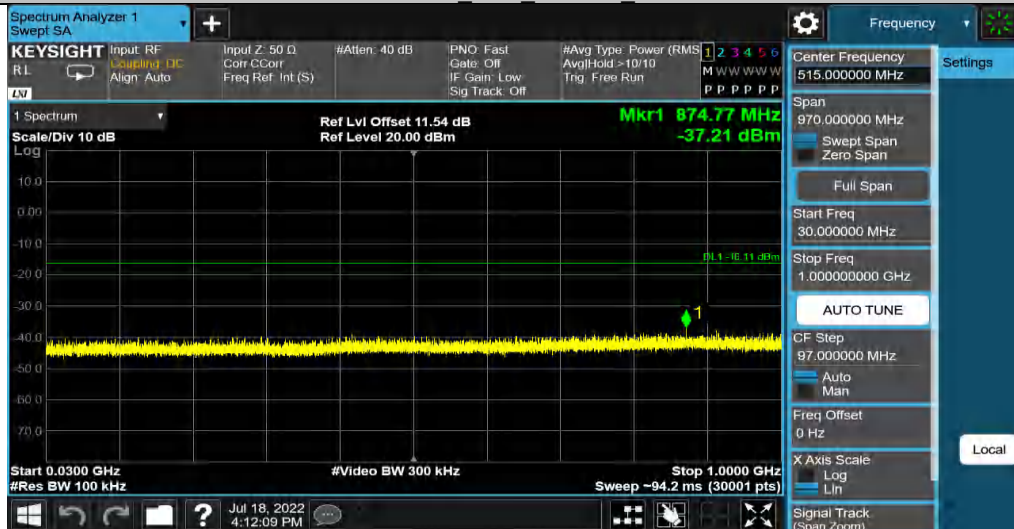
1.4MCA-MIMO Ant1 2405.12 1000~26500



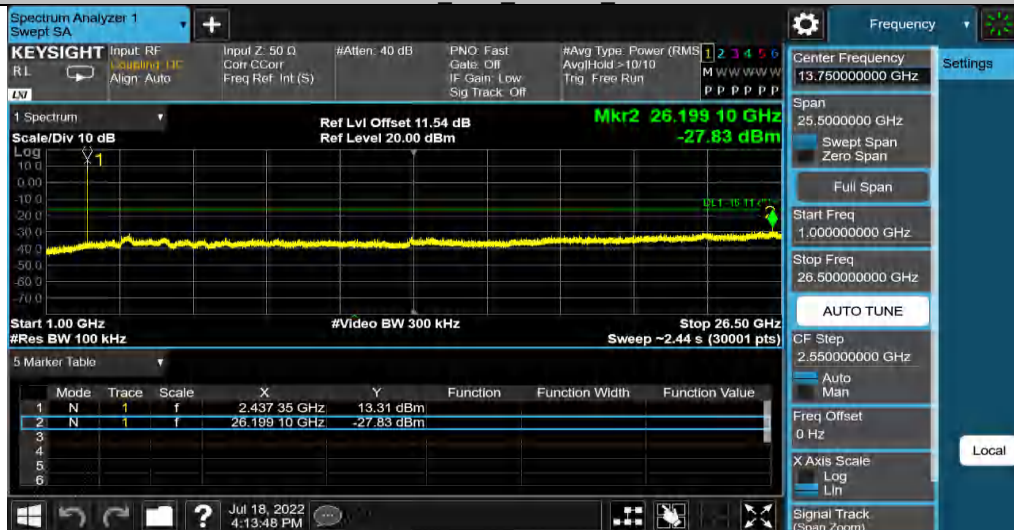
1.4MCA-MIMO Ant1 2437.12 0~Reference



1.4MCA-MIMO Ant1 2437.12 30~1000



1.4MCA-MIMO Ant1 2437.12 1000~26500



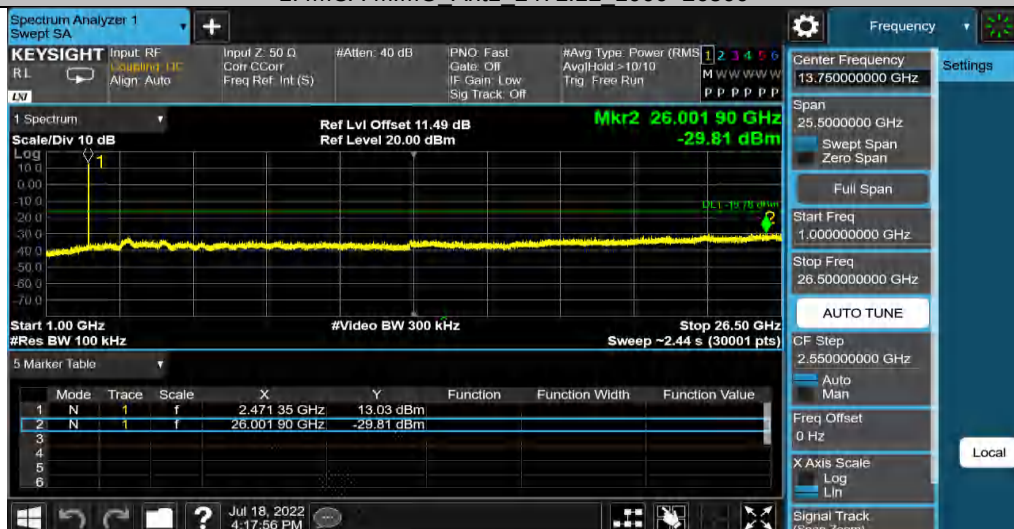
1.4MCA-MIMO Ant1 2471.12 0~Reference



1.4MCA-MIMO Ant1 2471.12 30~1000

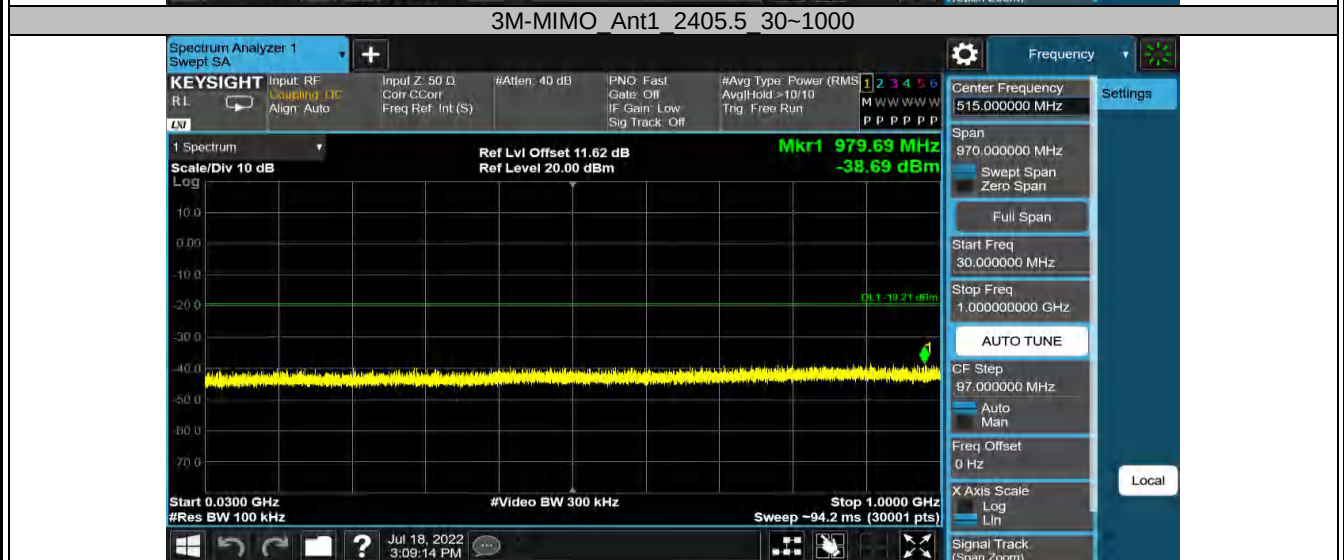
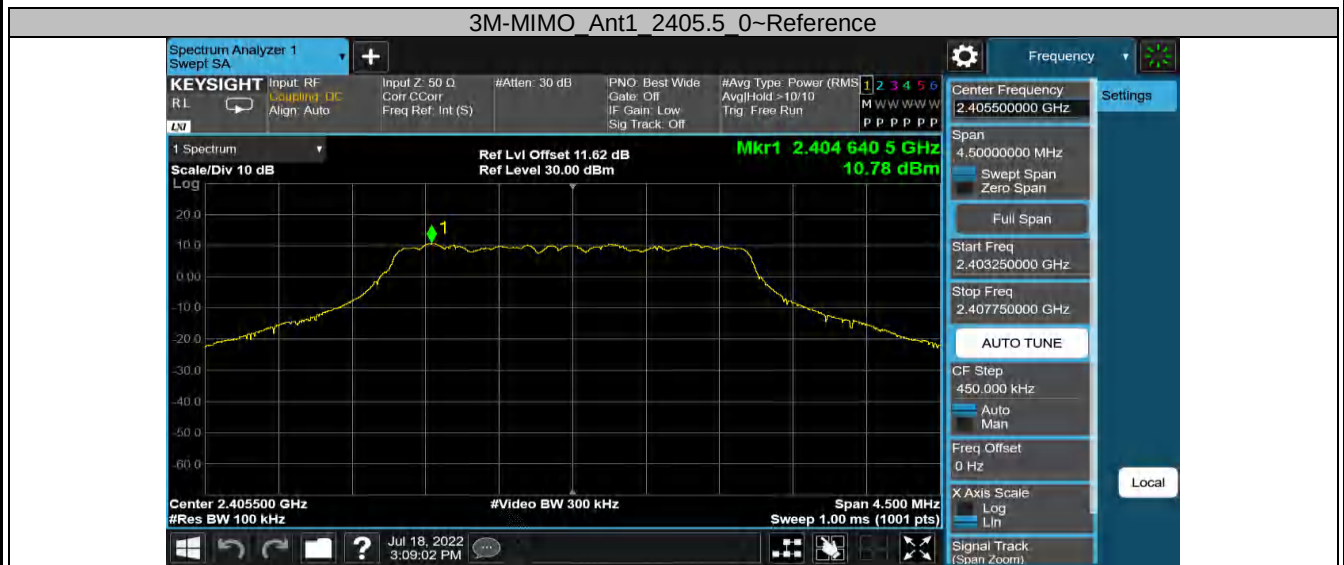


1.4MCA-MIMO Ant1 2471.12 1000~26500

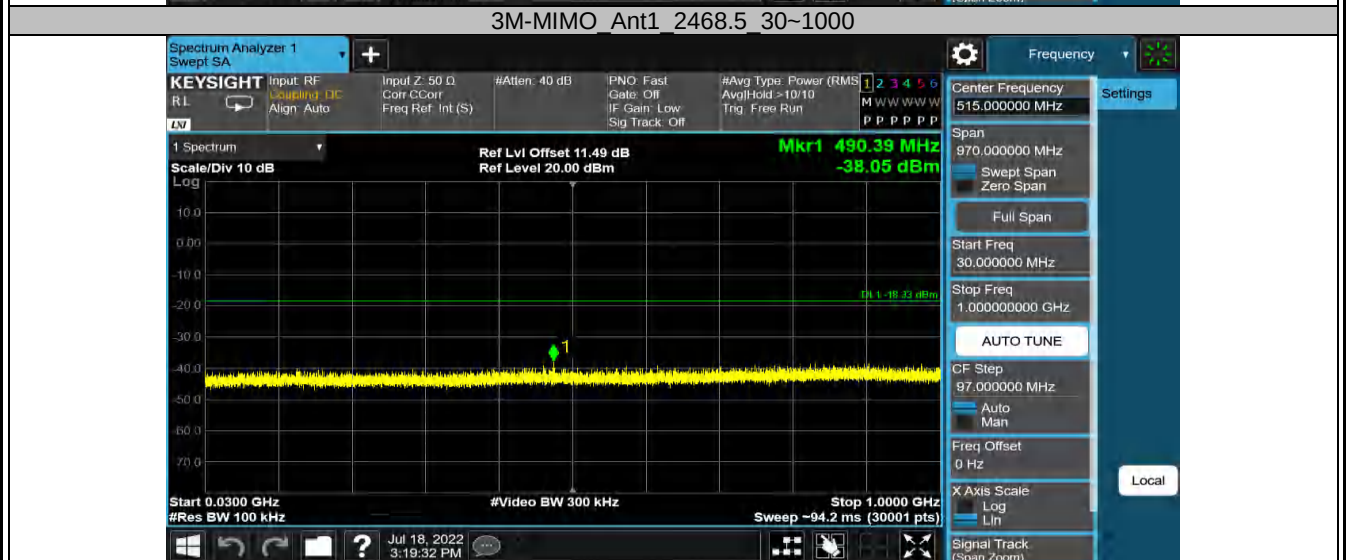
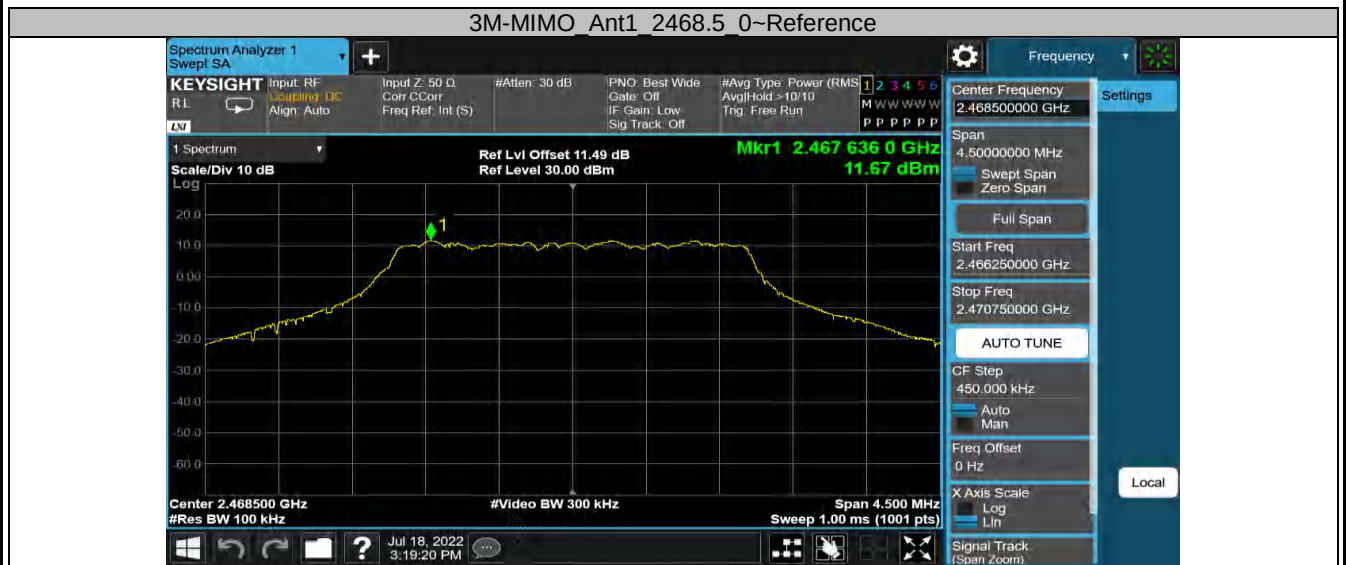


2.4GHz SDR, 3MHz BW

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
3M-MIMO	Ant1	2405.5	Reference	10.79	10.79	---	PASS
			30~1000	10.79	-38.69	≤-19.21	PASS
			1000~26500	10.79	-29.29	≤-19.21	PASS
		2435.5	Reference	11.14	11.14	---	PASS
			30~1000	11.14	-37.67	≤-18.86	PASS
			1000~26500	11.14	-29.78	≤-18.86	PASS
		2468.5	Reference	11.67	11.67	---	PASS
			30~1000	11.67	-38.05	≤-18.33	PASS
			1000~26500	11.67	-29.36	≤-18.33	PASS







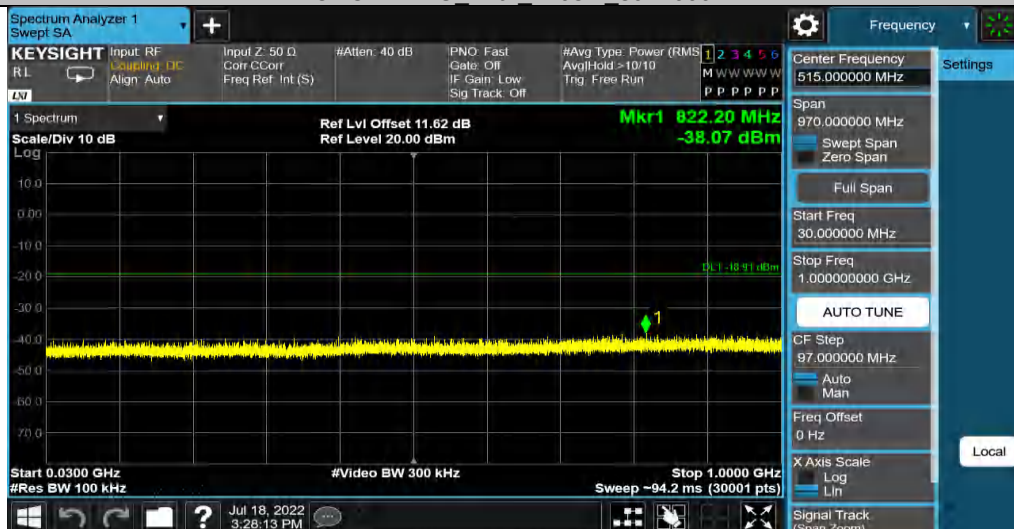
2.4GHz SDR, 3MHz BW CA mode

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
3MCA-MIMO	Ant1	2408.2	Reference	11.09	11.09	---	PASS
			30~1000	11.09	-38.07	≤-18.91	PASS
			1000~26500	11.09	-29.15	≤-18.91	PASS
		2438.2	Reference	11.58	11.58	---	PASS
			30~1000	11.58	-38.13	≤-18.42	PASS
			1000~26500	11.58	-29.5	≤-18.42	PASS
		2471.2	Reference	11.93	11.93	---	PASS
			30~1000	11.93	-37.79	≤-18.07	PASS
			1000~26500	11.93	-28.72	≤-18.07	PASS

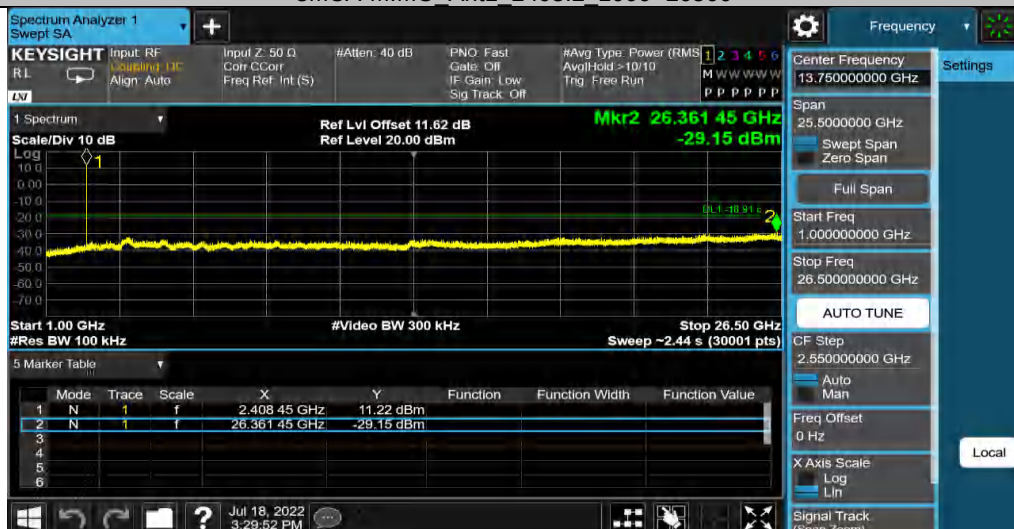
3MCA-MIMO Ant1 2408.2 0~Reference



3MCA-MIMO Ant1 2408.2 30~1000



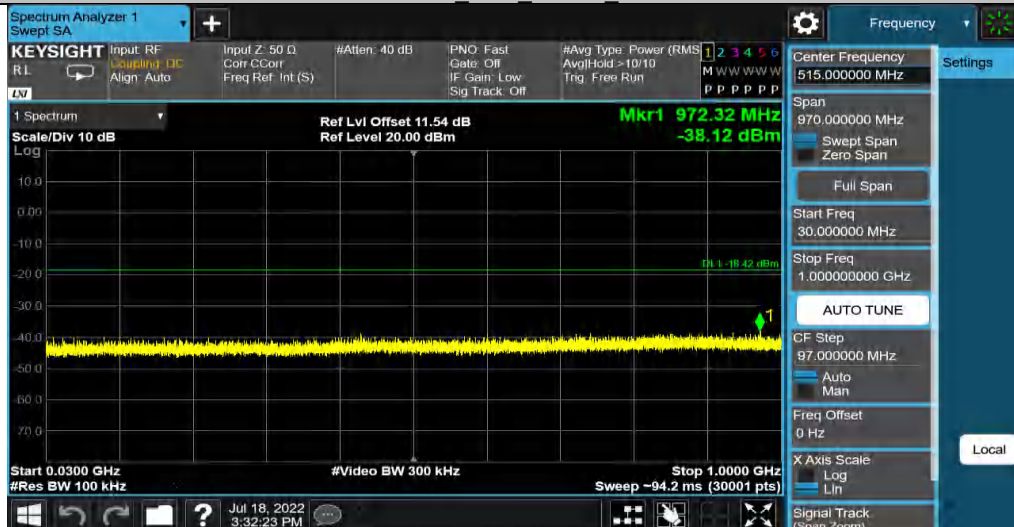
3MCA-MIMO Ant1 2408.2 1000~26500



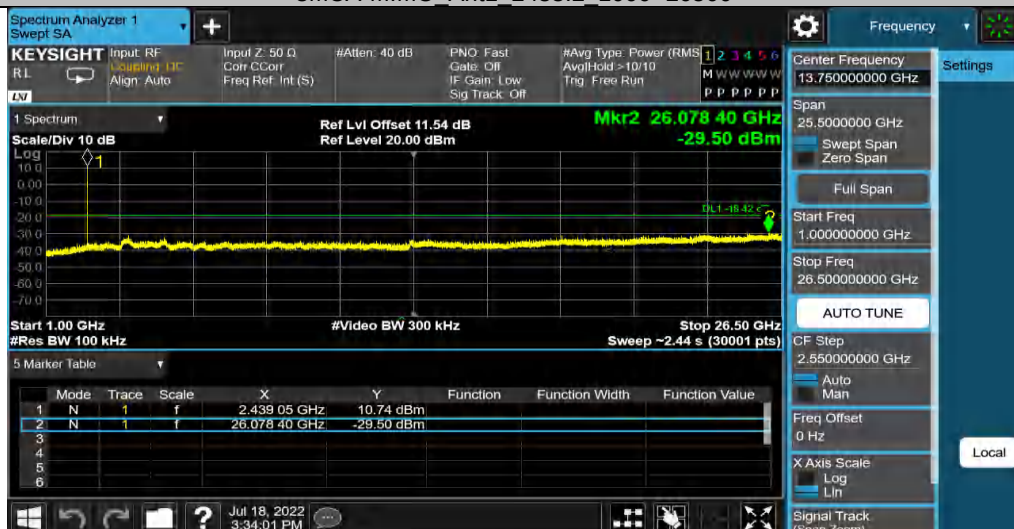
3MCA-MIMO Ant1 2438.2 0~Reference



3MCA-MIMO Ant1 2438.2 30~1000



3MCA-MIMO Ant1 2438.2 1000~26500



3MCA-MIMO Ant1 2471.2 0~Reference



3MCA-MIMO Ant1 2471.2 30~1000



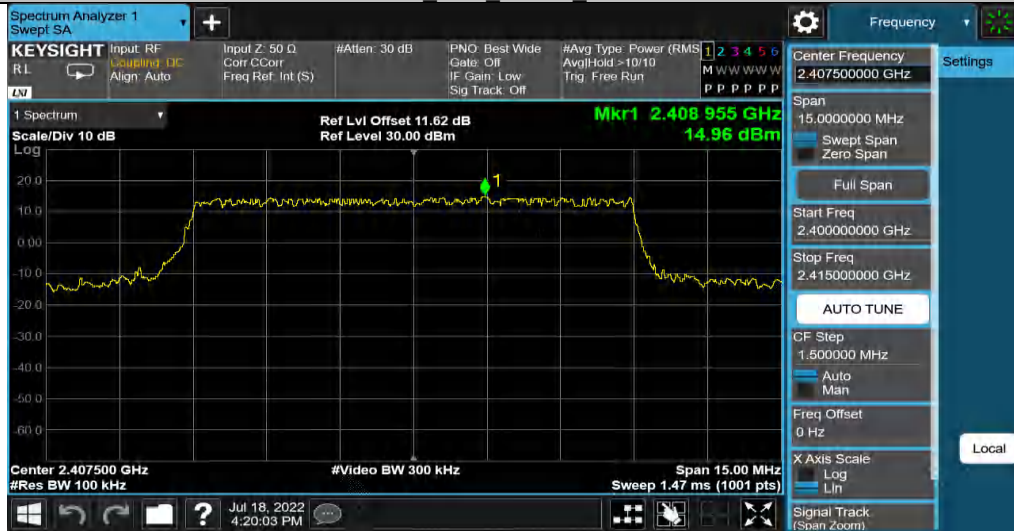
3MCA-MIMO Ant1 2471.2 1000~26500



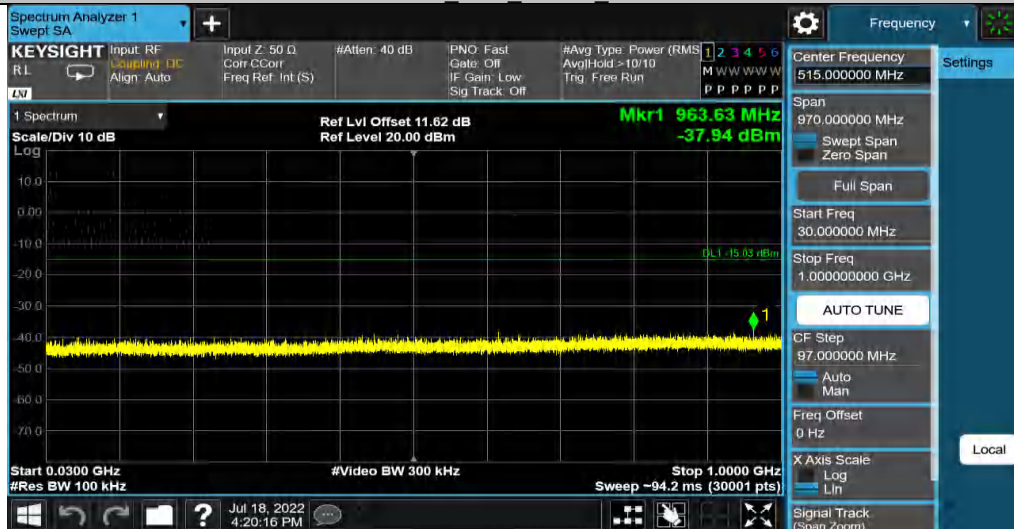
2.4GHz SDR, 10MHz BW

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
10M-MIMO	Ant1	2407.5	Reference	14.97	14.97	---	PASS
			30~1000	14.97	-37.94	≤-15.03	PASS
			1000~26500	14.97	-29.26	≤-15.03	PASS
		2437.5	Reference	16.04	16.04	---	PASS
			30~1000	16.04	-37.15	≤-13.96	PASS
			1000~26500	16.04	-28.62	≤-13.96	PASS
		2467.5	Reference	15.03	15.03	---	PASS
			30~1000	15.03	-38.43	≤-14.97	PASS
			1000~26500	15.03	-28.86	≤-14.97	PASS

10M-MIMO_Ant1_2407.5_0-Reference



10M-MIMO_Ant1_2407.5_30~1000



10M-MIMO_Ant1_2407.5_1000~26500



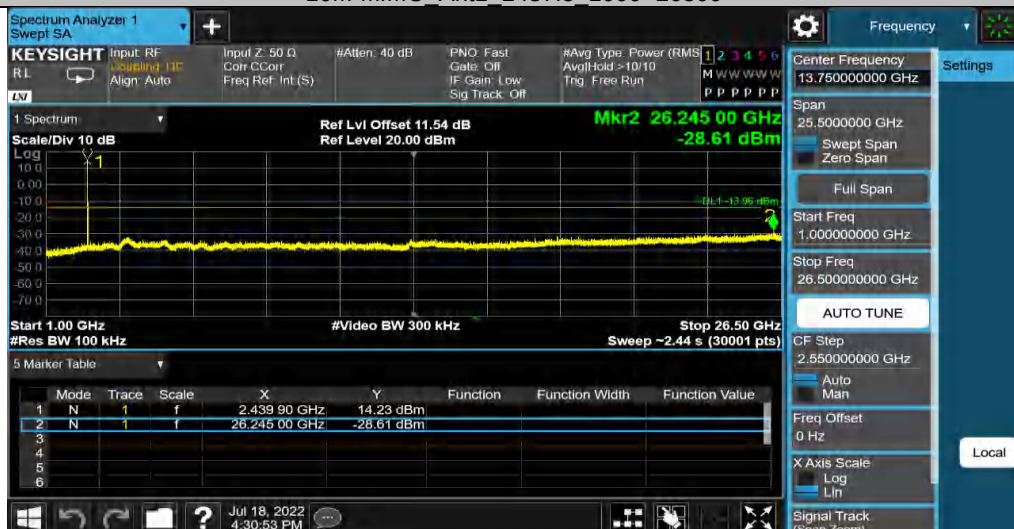
10M-MIMO_Ant1_2437.5_0-Reference



10M-MIMO_Ant1_2437.5_30-1000



10M-MIMO_Ant1_2437.5_1000-26500



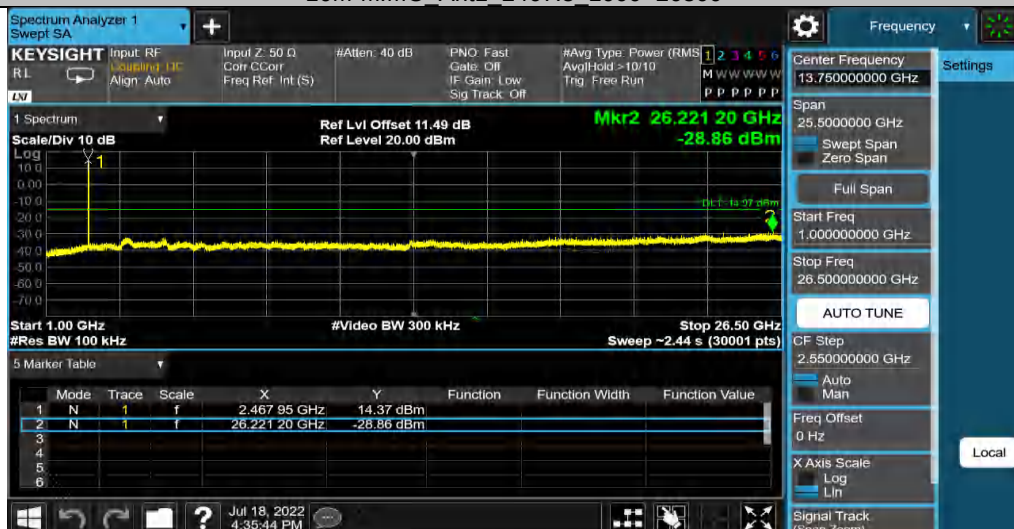
10M-MIMO_Ant1_2467.5_0-Reference



10M-MIMO_Ant1_2467.5_30-1000



10M-MIMO_Ant1_2467.5_1000-26500



2.4GHz SDR, 20MHz BW

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
20M-MIMO	Ant1	2412.5	Reference	10.33	10.33	---	PASS
			30~1000	10.33	-38.54	≤-19.67	PASS
			1000~26500	10.33	-29.7	≤-19.67	PASS
		2437.5	Reference	13.46	13.46	---	PASS
			30~1000	13.46	-38.23	≤-16.54	PASS
			1000~26500	13.46	-29.31	≤-16.54	PASS
		2462.5	Reference	9.92	9.92	---	PASS
			30~1000	9.92	-37.77	≤-20.08	PASS
			1000~26500	9.92	-28.77	≤-20.08	PASS

20M-MIMO_Ant1_2412.5_0-Reference



20M-MIMO_Ant1_2412.5_30-1000



20M-MIMO_Ant1_2412.5_1000-26500



20M-MIMO_Ant1_2437.5_0-Reference



20M-MIMO_Ant1_2437.5_30-1000



20M-MIMO_Ant1_2437.5_1000-26500

