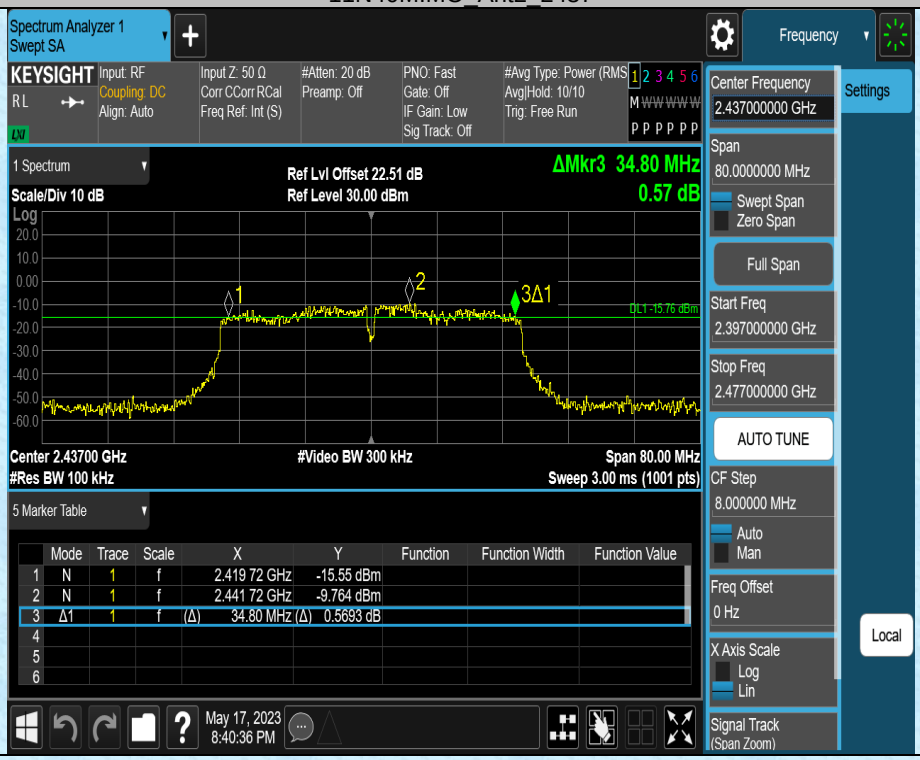
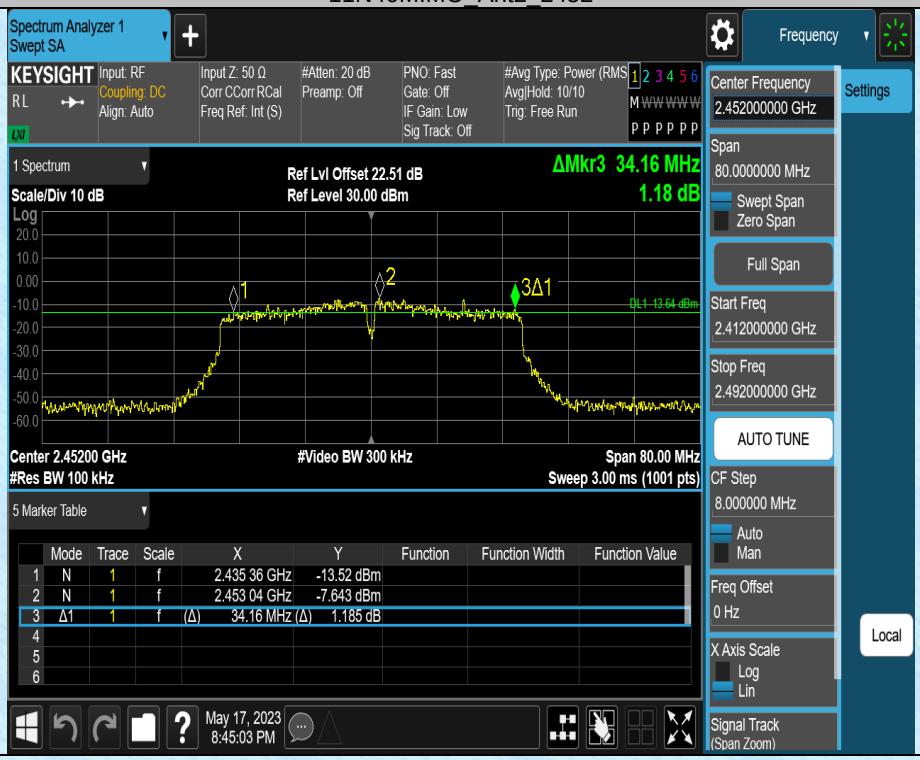
11N40MIMO_Ant1_2437

11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452

11N40MIMO_Ant2_2452



11AX20MIMO_Ant1_2412

11AX20MIMO_Ant2_2412

11AX20MIMO_Ant1_2437

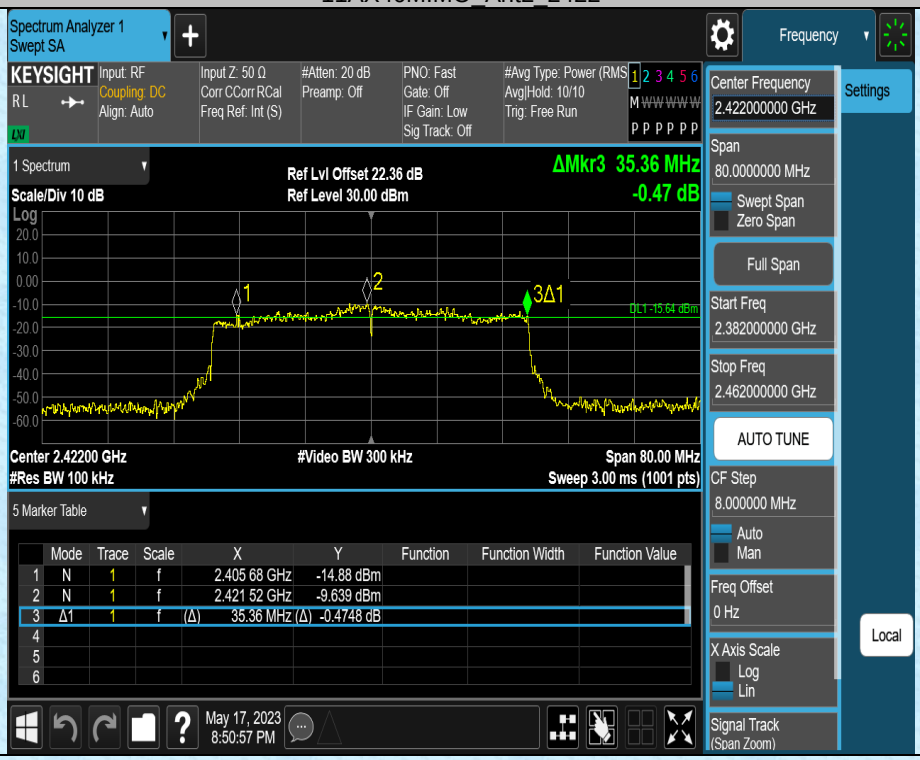
11AX20MIMO_Ant2_2437

11AX20MIMO_Ant1_2462

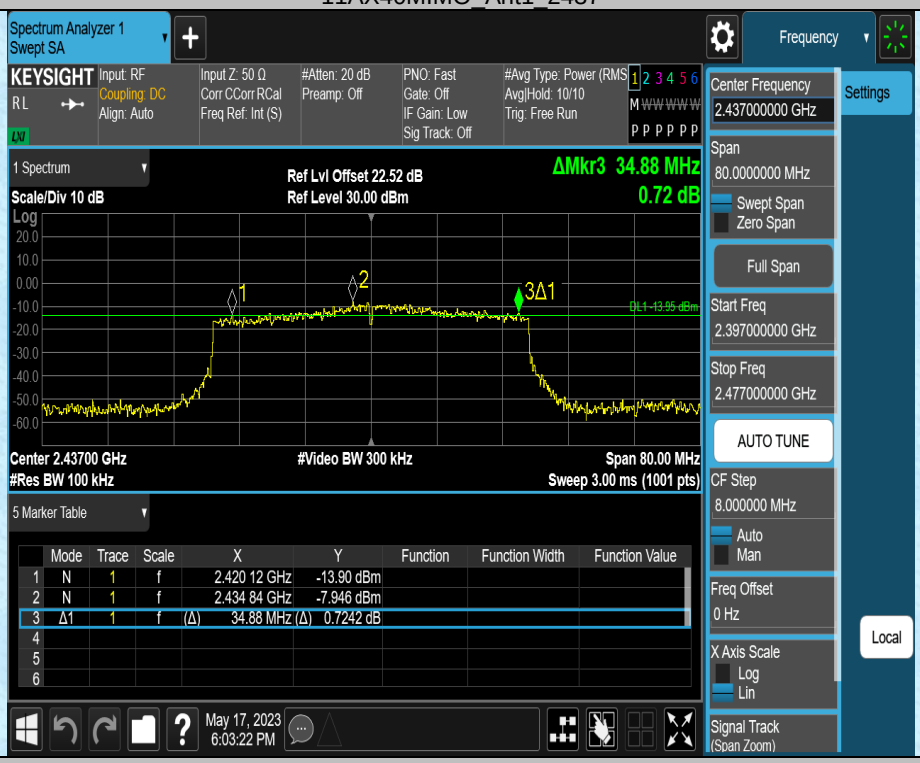
11AX20MIMO_Ant2_2462

11AX40MIMO_Ant1_2422

11AX40MIMO_Ant2_2422



11AX40MIMO_Ant1_2437



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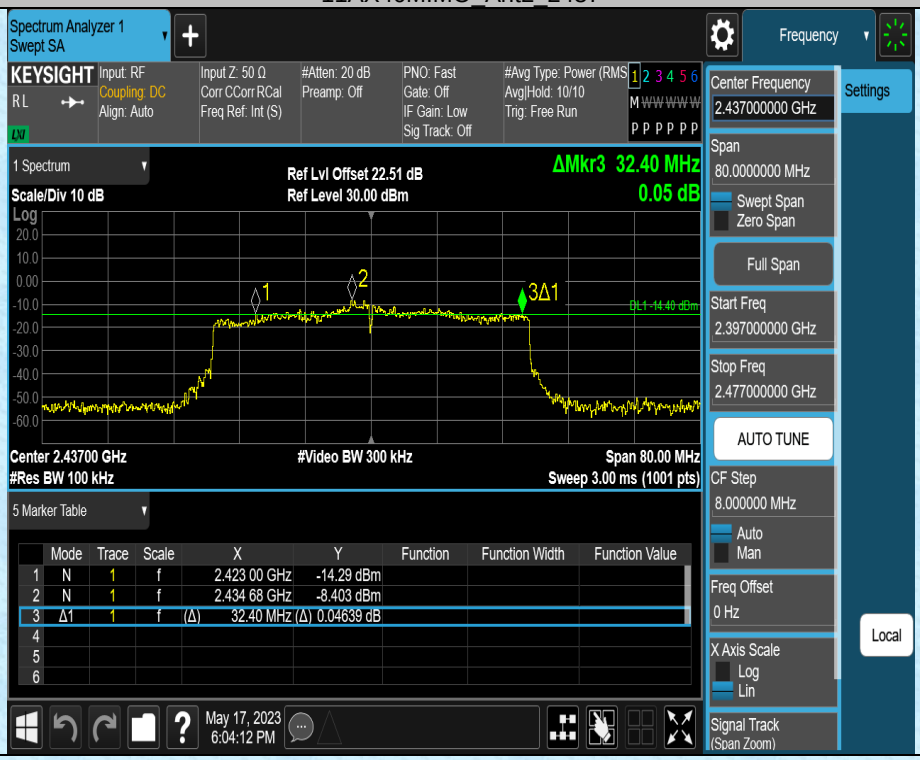
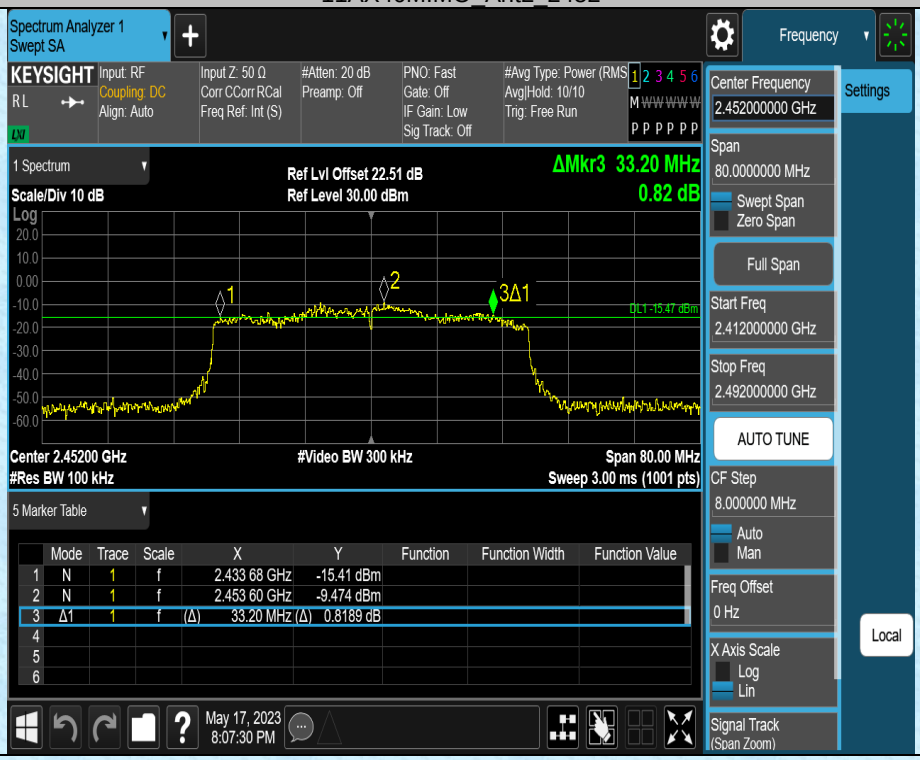


11AX40MIMO_Ant1_2452

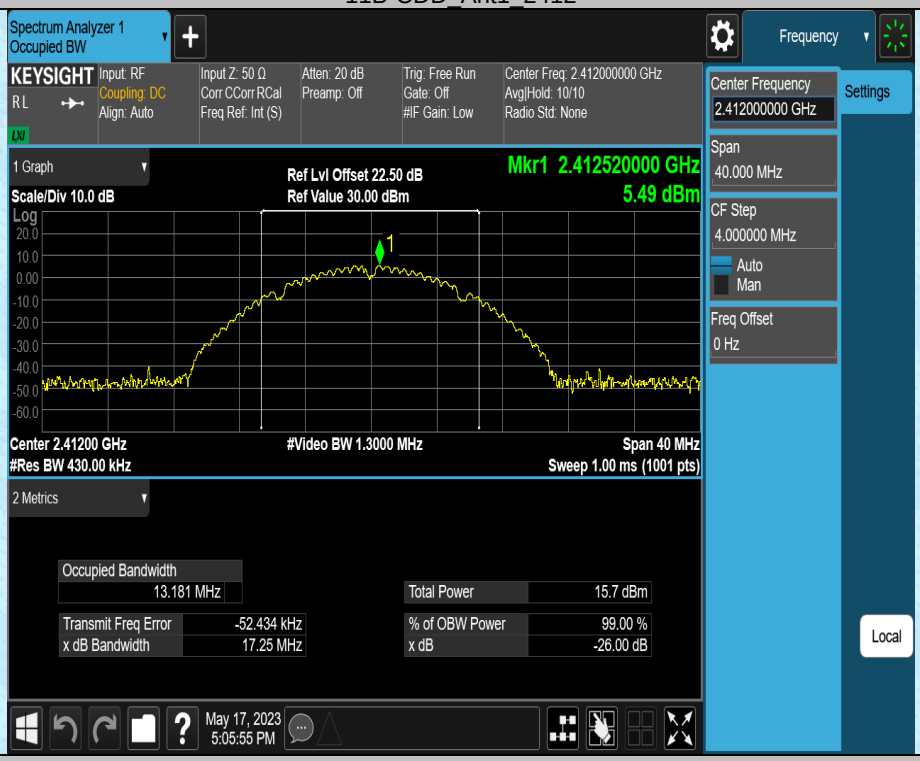
11AX40MIMO_Ant2_2452



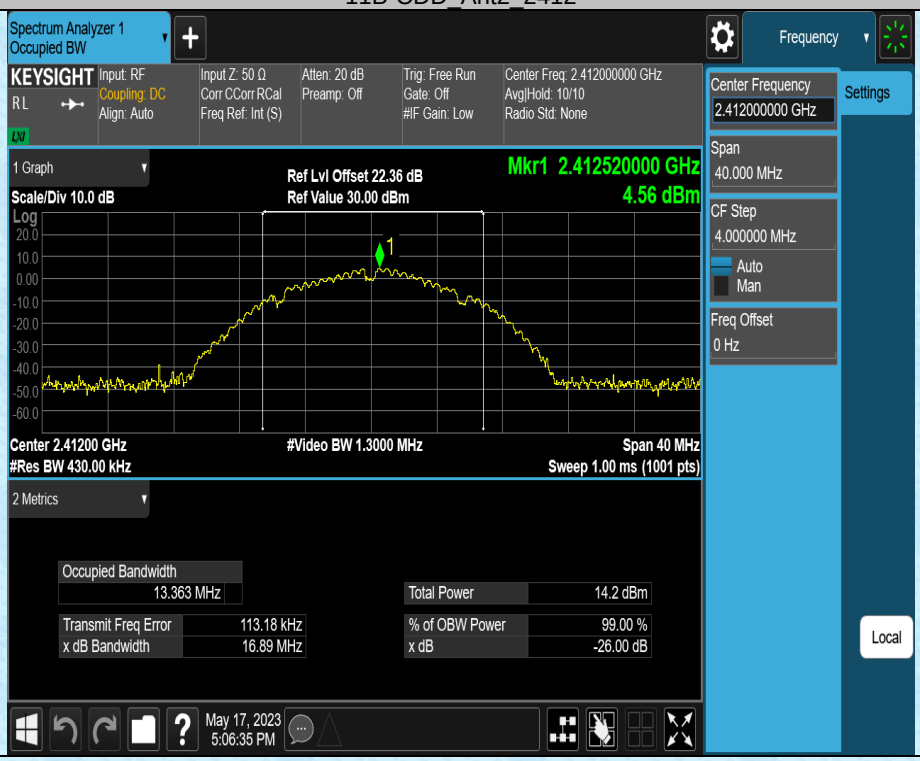
Occupied Channel Bandwidth

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B-CDD	Ant1	2412	13.181	2405.3571	2418.5381	---	---
	Ant2	2412	13.363	2405.4317	2418.7947	---	---
	Ant1	2437	13.217	2430.5159	2443.7329	---	---
	Ant2	2437	13.415	2430.4214	2443.8364	---	---
	Ant1	2462	13.344	2455.3671	2468.7111	---	---
	Ant2	2462	13.151	2455.4538	2468.6048	---	---
11G-CDD	Ant1	2412	16.334	2403.8101	2420.1441	---	---
	Ant2	2412	16.453	2403.8026	2420.2556	---	---
	Ant1	2437	16.359	2428.8512	2445.2102	---	---
	Ant2	2437	16.434	2428.7673	2445.2013	---	---
	Ant1	2462	16.343	2453.8399	2470.1829	---	---
	Ant2	2462	16.341	2453.8284	2470.1694	---	---
11N20MIMO	Ant1	2412	17.522	2403.2130	2420.7350	---	---
	Ant2	2412	17.607	2403.2220	2420.8290	---	---
	Ant1	2437	17.539	2428.2666	2445.8056	---	---
	Ant2	2437	17.620	2428.2617	2445.8817	---	---
	Ant1	2462	17.558	2453.2119	2470.7699	---	---
	Ant2	2462	17.515	2453.2575	2470.7725	---	---
11N40MIMO	Ant1	2422	36.104	2404.0003	2440.1043	---	---
	Ant2	2422	36.040	2404.1166	2440.1566	---	---
	Ant1	2437	35.792	2419.1629	2454.9549	---	---
	Ant2	2437	36.009	2419.0912	2455.1002	---	---
	Ant1	2452	35.884	2434.0960	2469.9800	---	---
	Ant2	2452	35.872	2434.1848	2470.0568	---	---
11AX20MIMO	Ant1	2412	18.806	2402.5321	2421.3381	---	---
	Ant2	2412	18.859	2402.5745	2421.4335	---	---
	Ant1	2437	18.885	2427.5344	2446.4194	---	---
	Ant2	2437	18.905	2427.5800	2446.4850	---	---
	Ant1	2462	18.755	2452.5989	2471.3539	---	---
	Ant2	2462	18.740	2452.6118	2471.3518	---	---
11AX40MIMO	Ant1	2422	37.730	2403.1548	2440.8848	---	---
	Ant2	2422	37.591	2403.2772	2440.8682	---	---
	Ant1	2437	37.531	2418.3156	2455.8466	---	---
	Ant2	2437	37.556	2418.3073	2455.8633	---	---
	Ant1	2452	37.579	2433.2867	2470.8657	---	---
	Ant2	2452	37.428	2433.2880	2470.7160	---	---

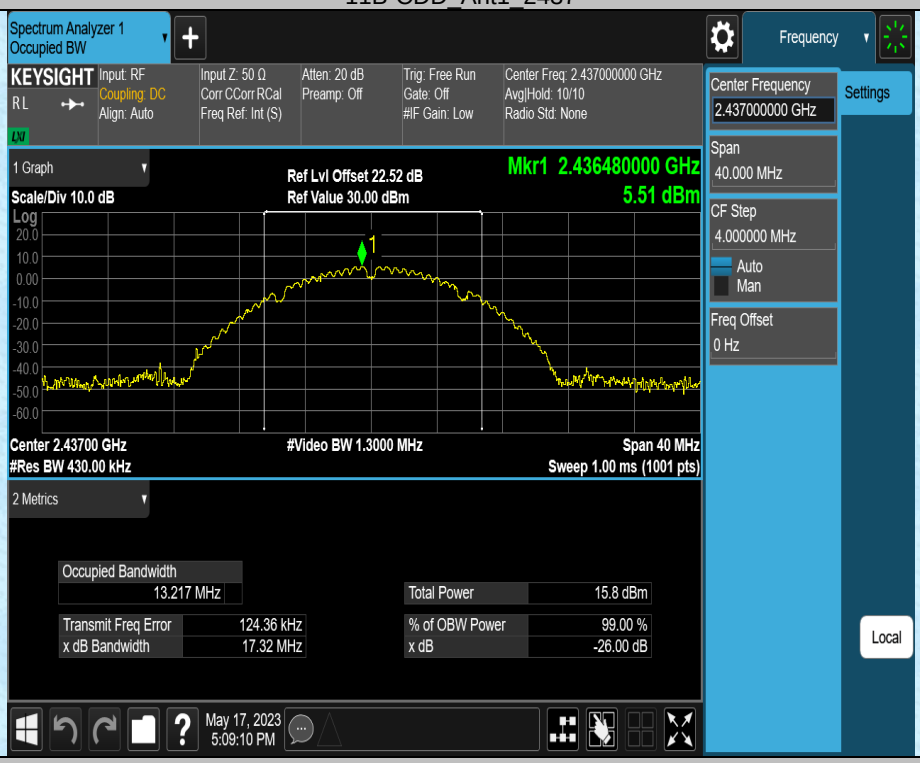
11B-CDD_Ant1_2412



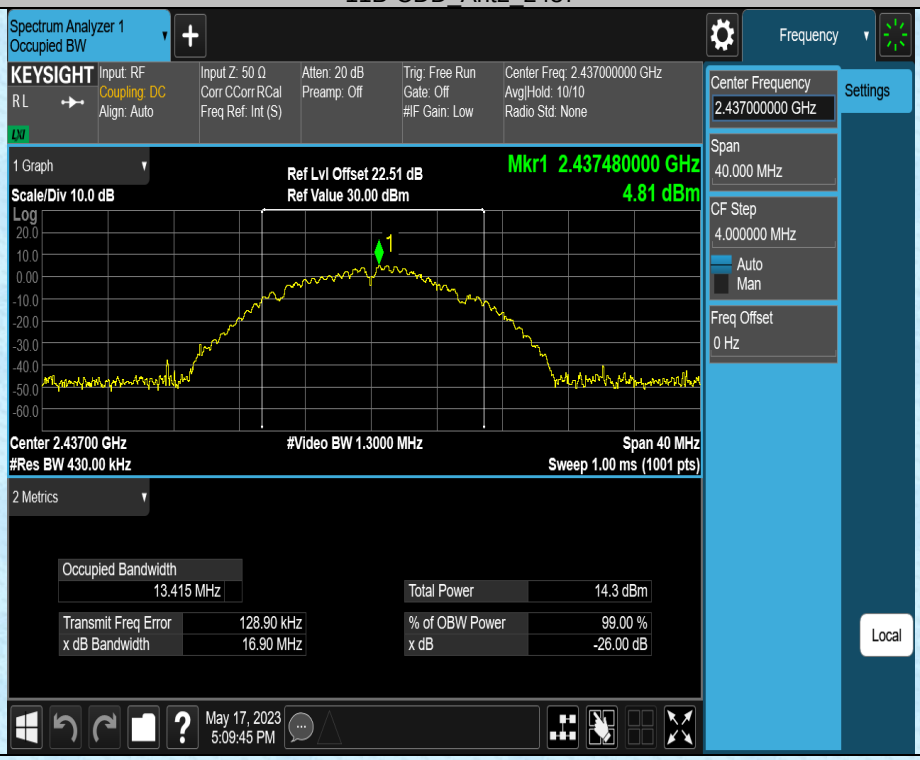
11B-CDD_Ant2_2412



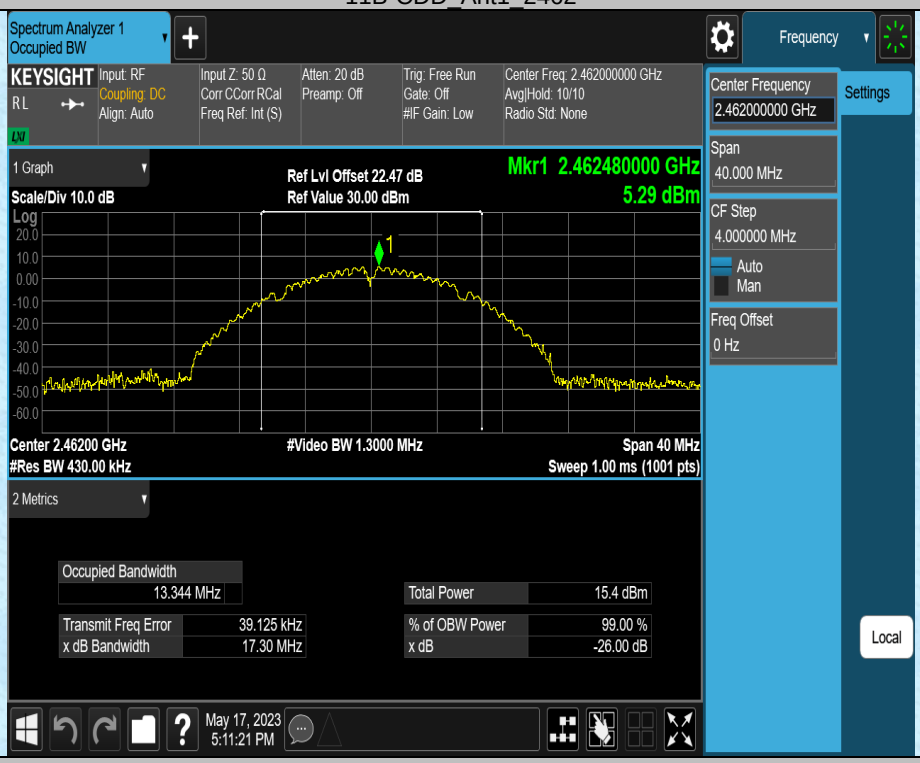
11B-CDD_Ant1_2437



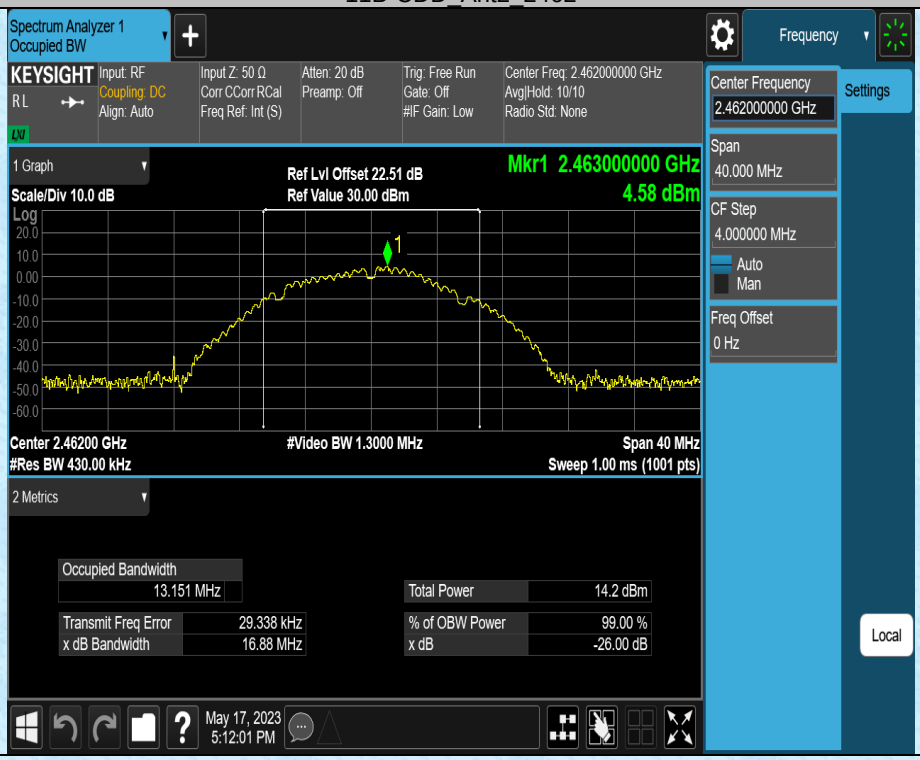
11B-CDD_Ant2_2437



11B-CDD_Ant1_2462



11B-CDD_Ant2_2462



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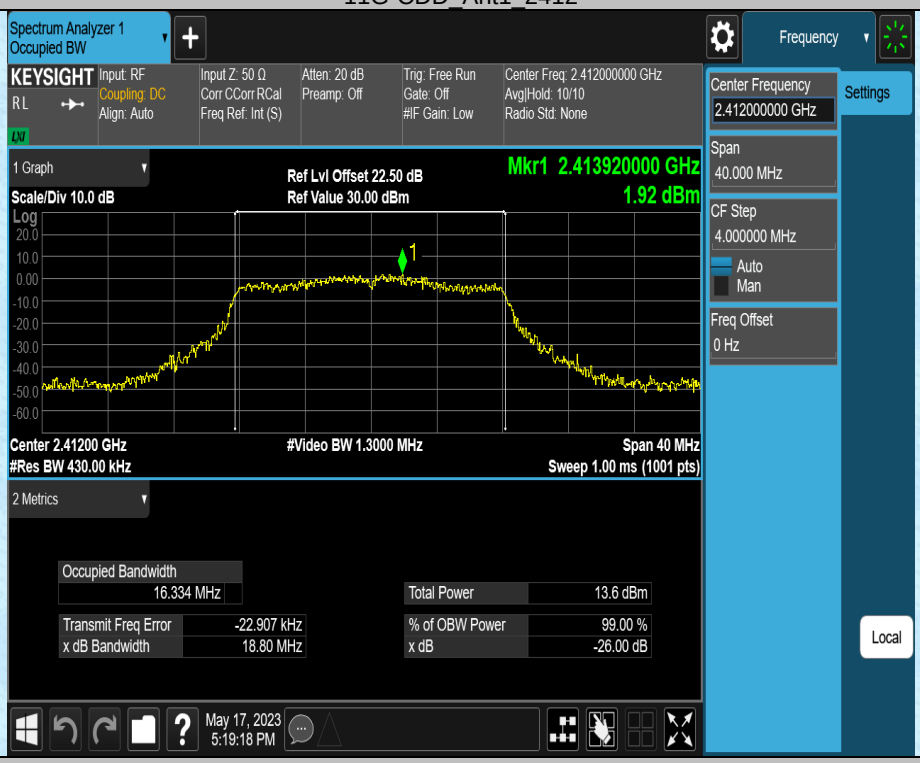

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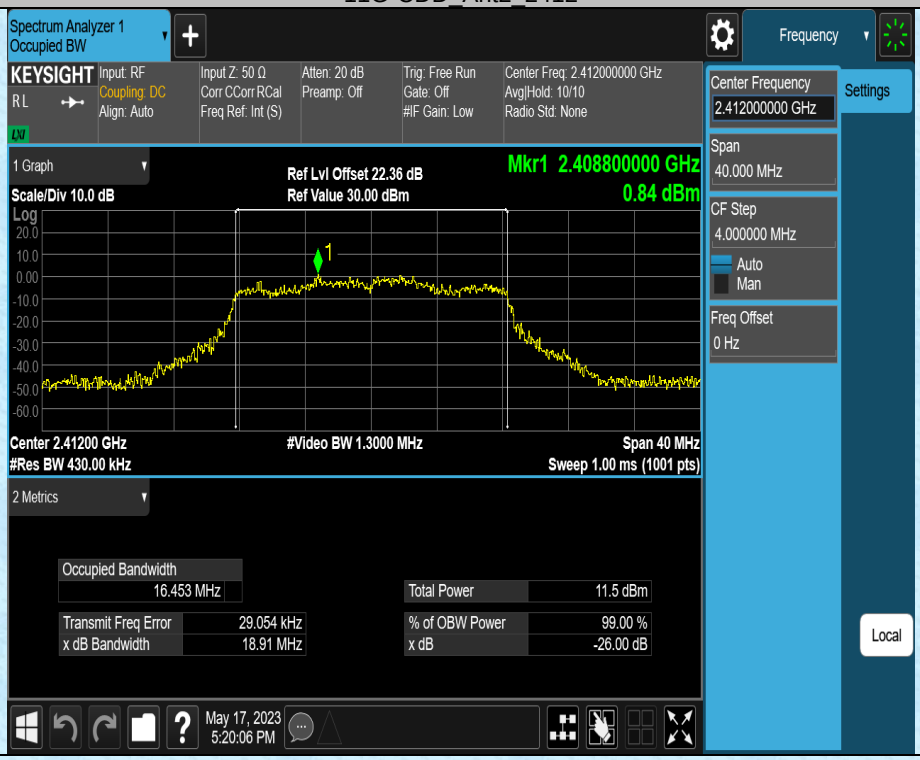

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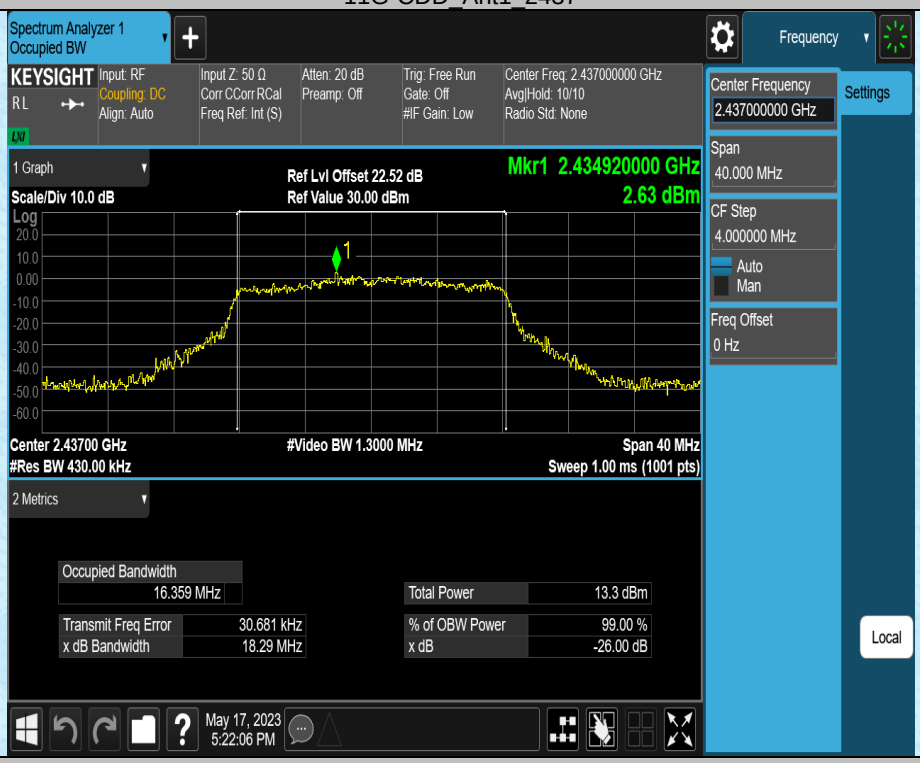

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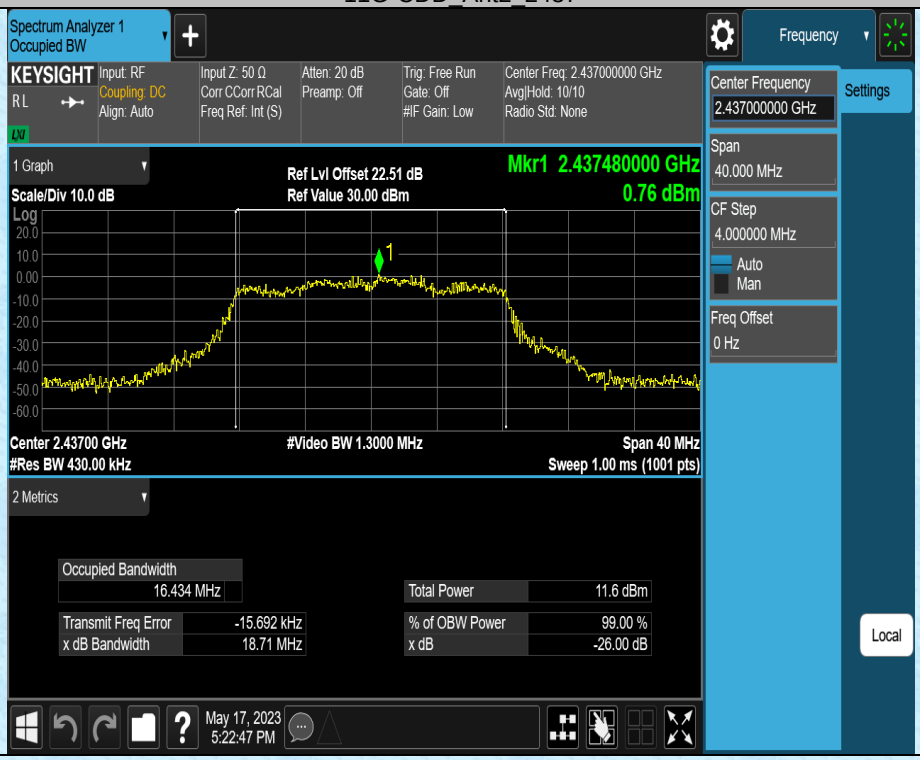

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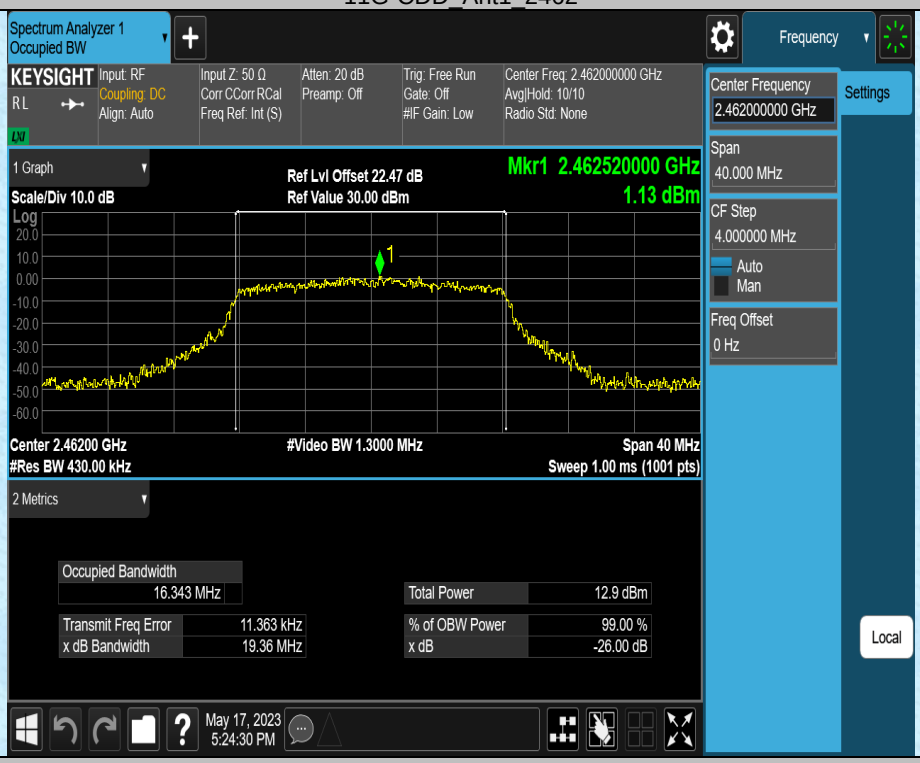

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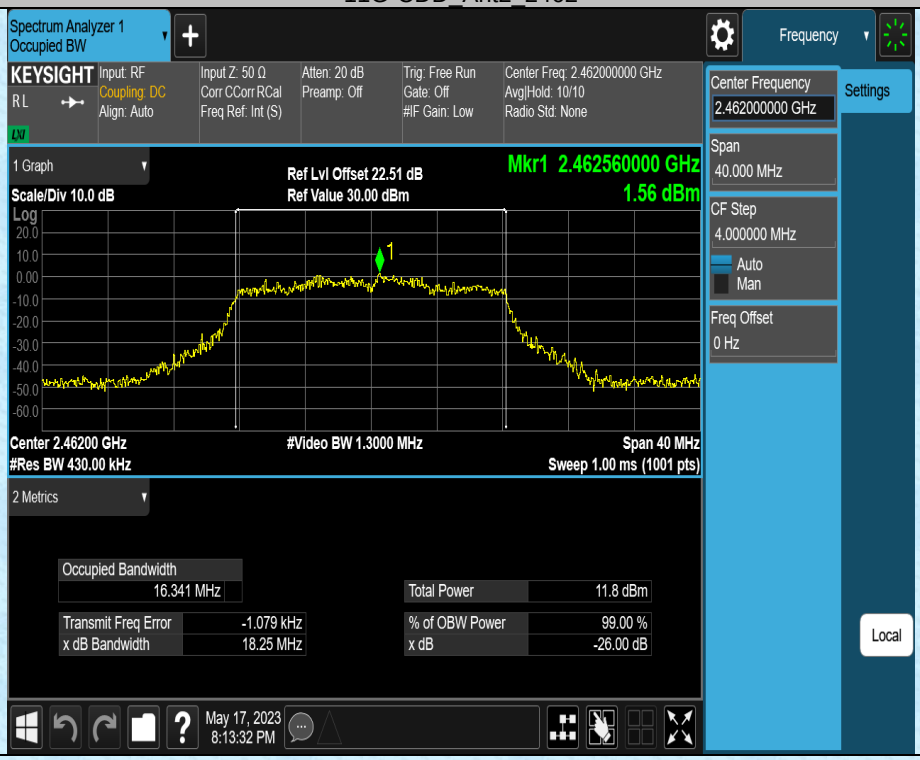
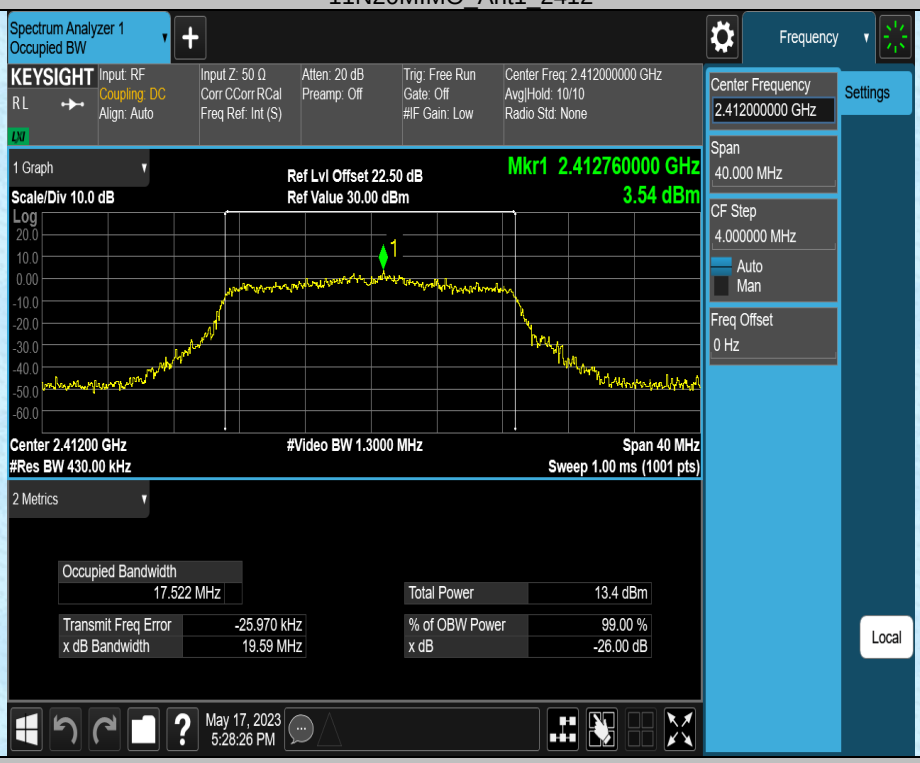


11N20MIMO_Ant1_2412



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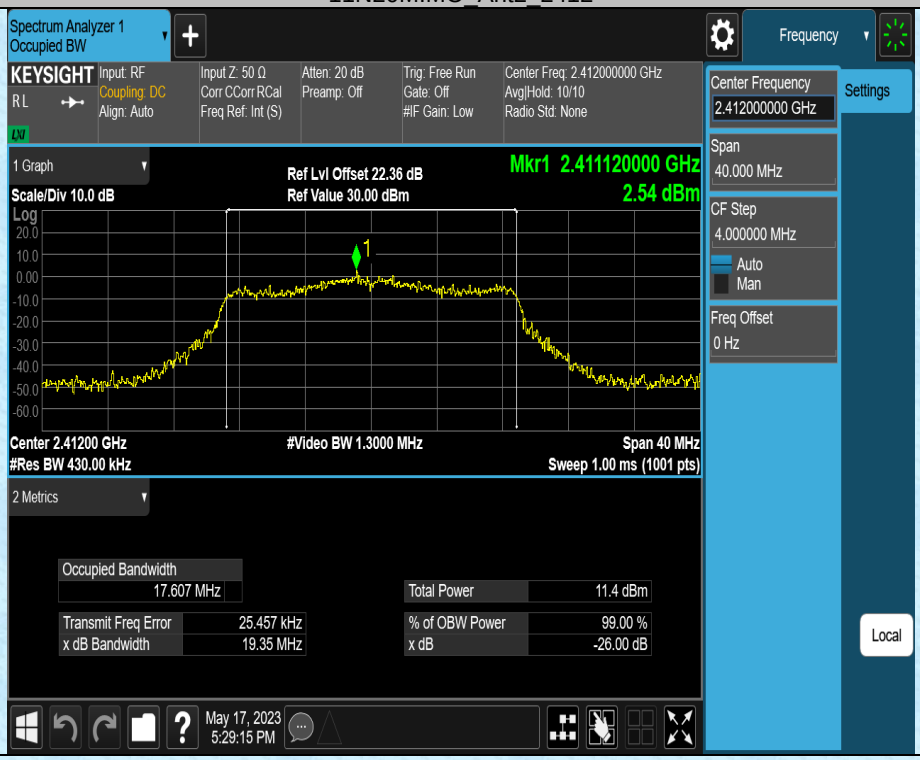

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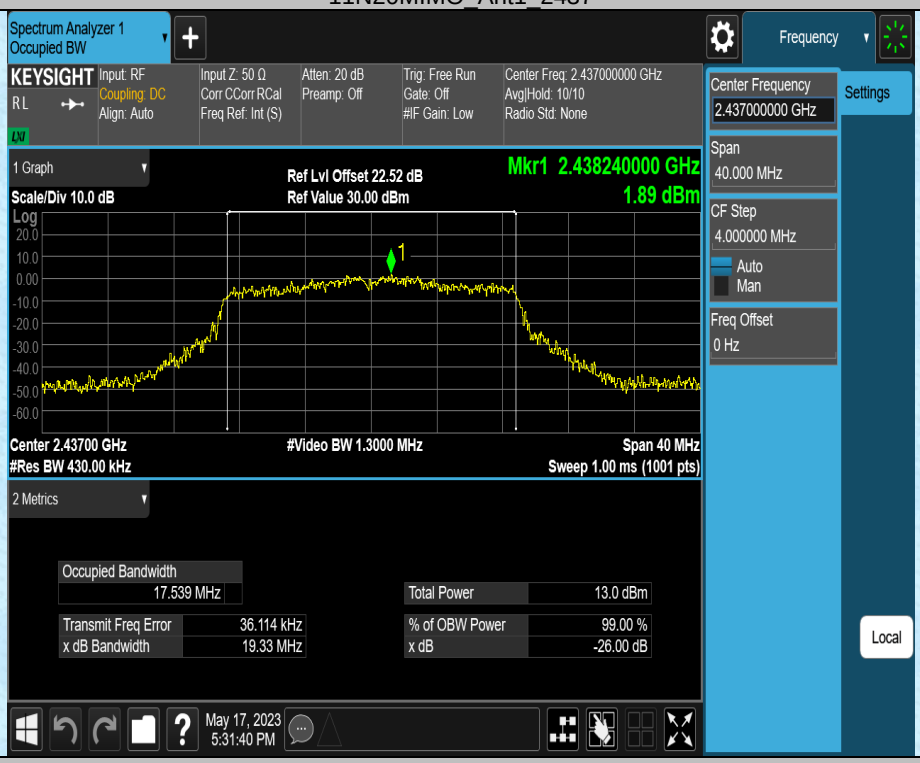

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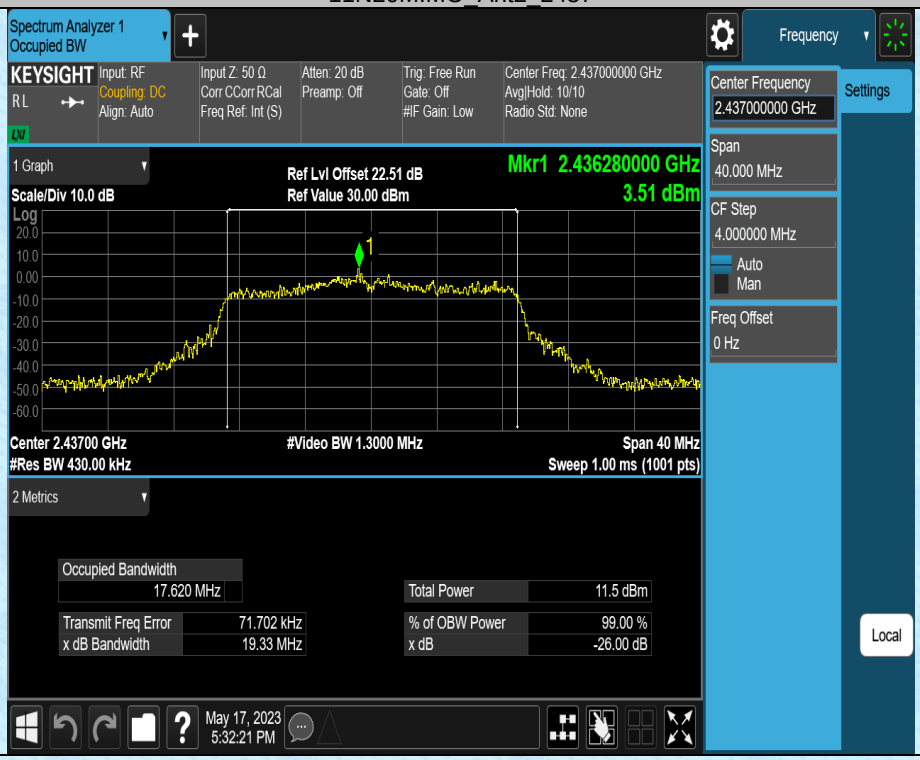

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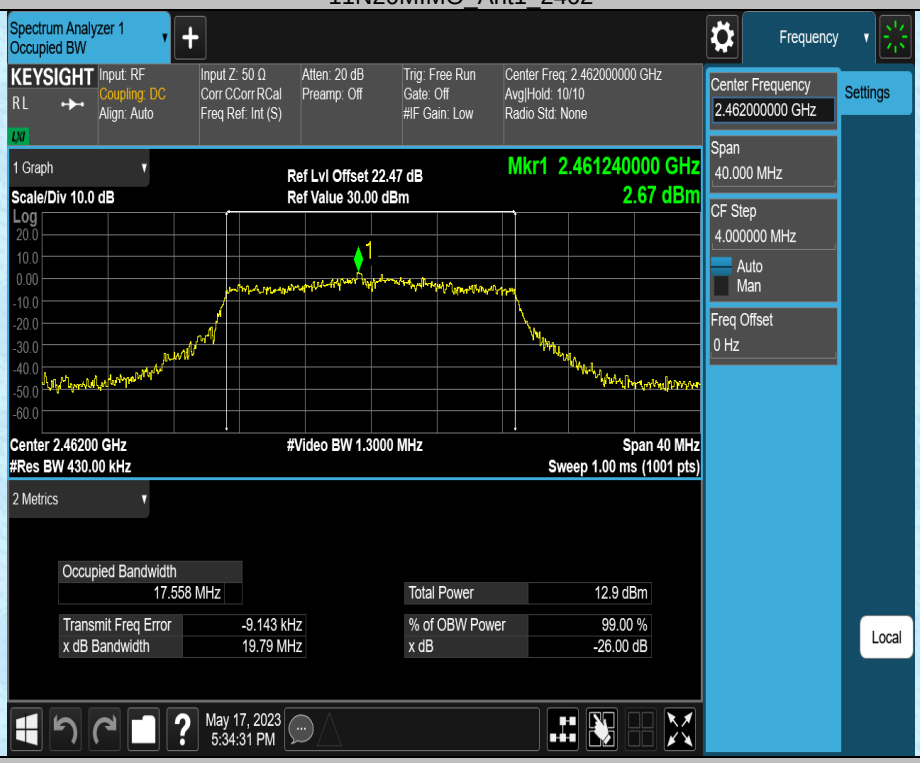

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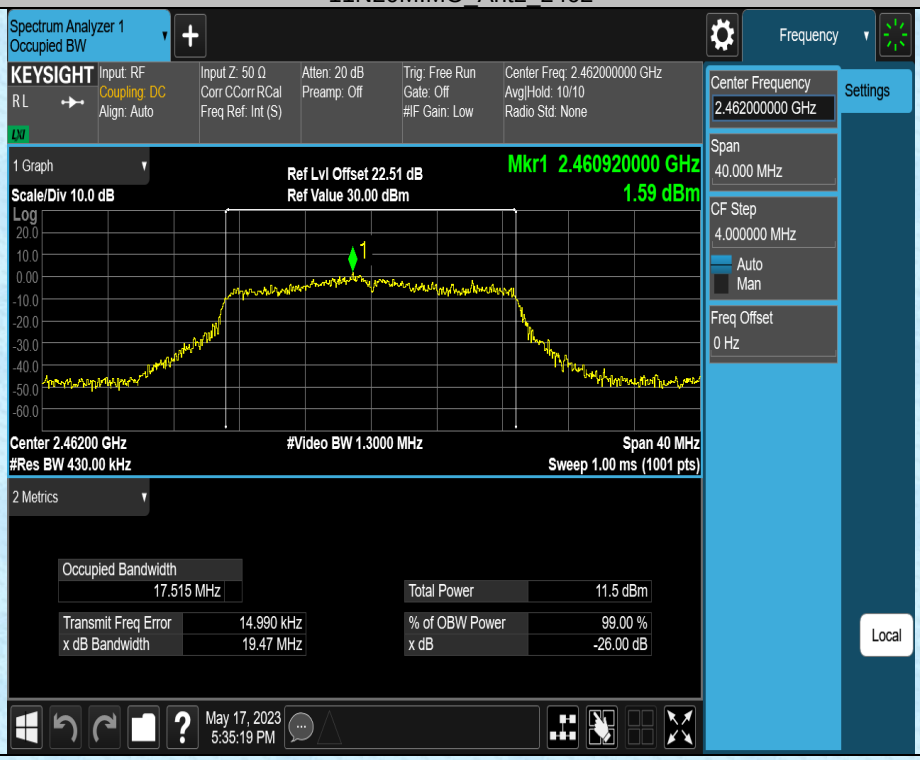
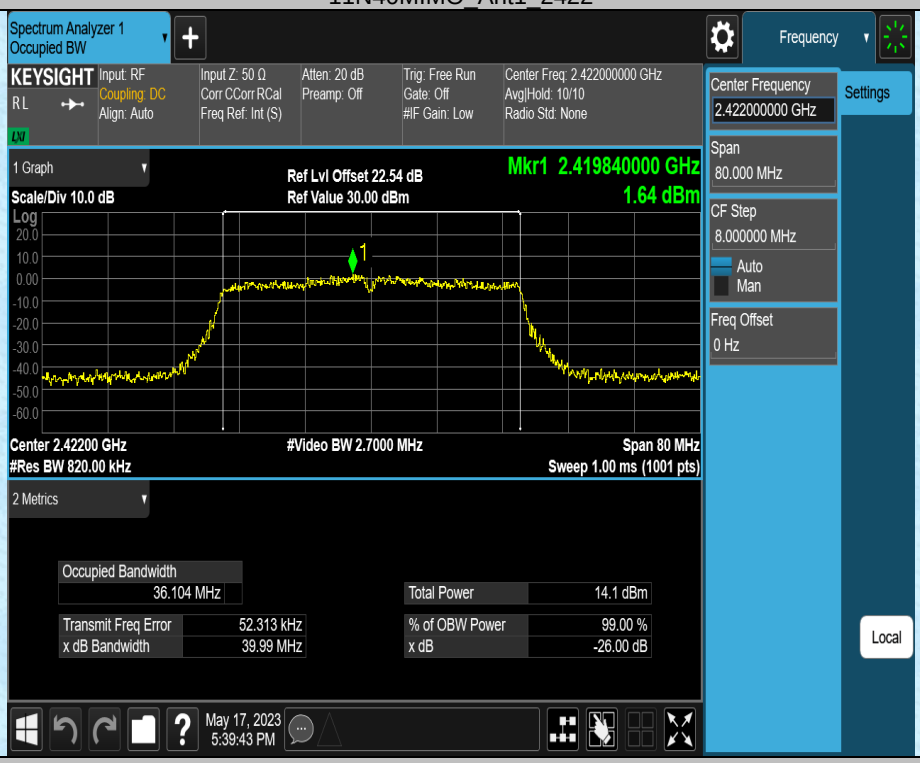


11N40MIMO_Ant1_2422



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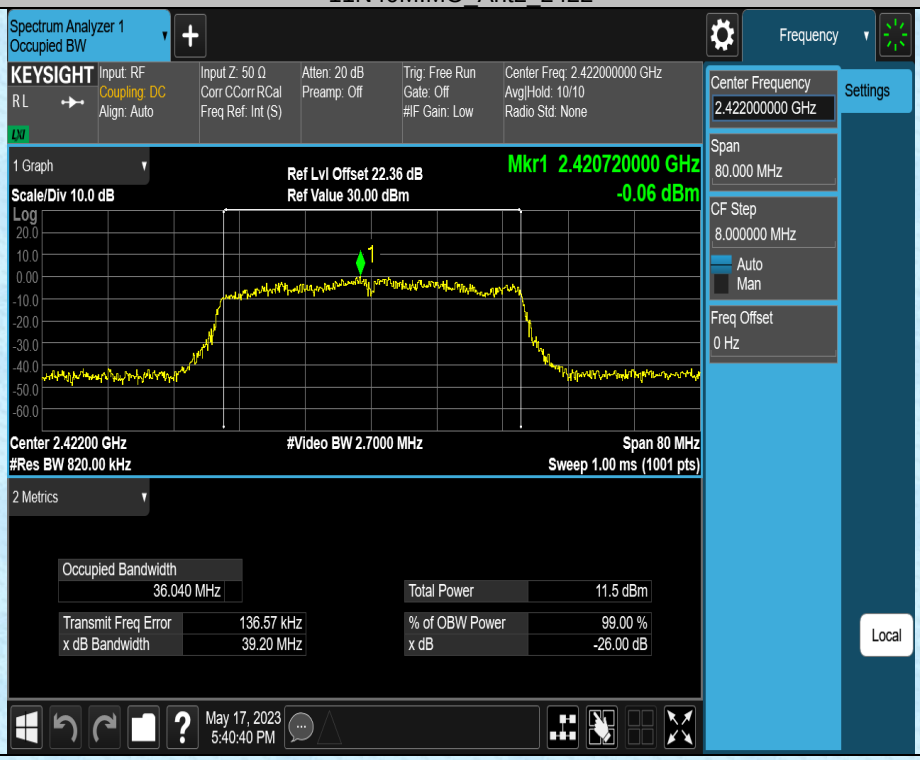

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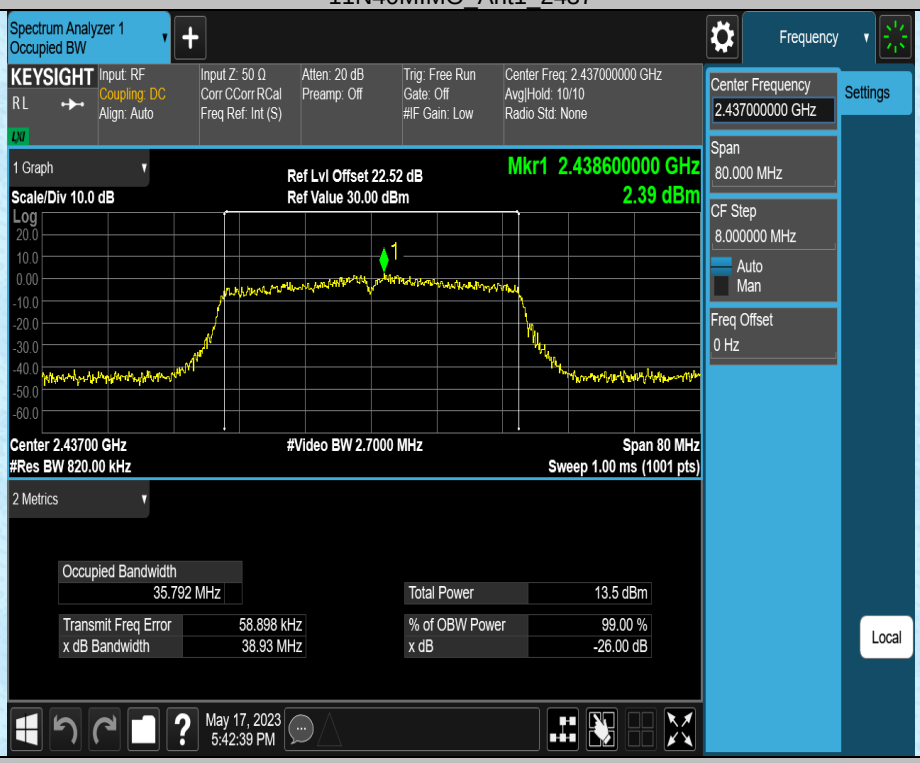
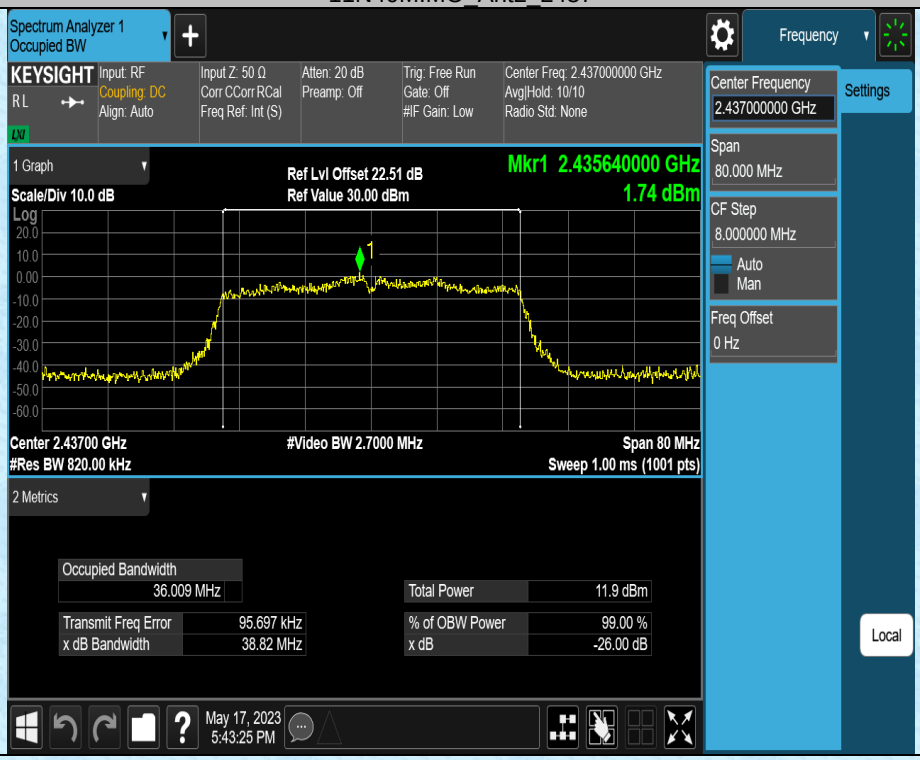
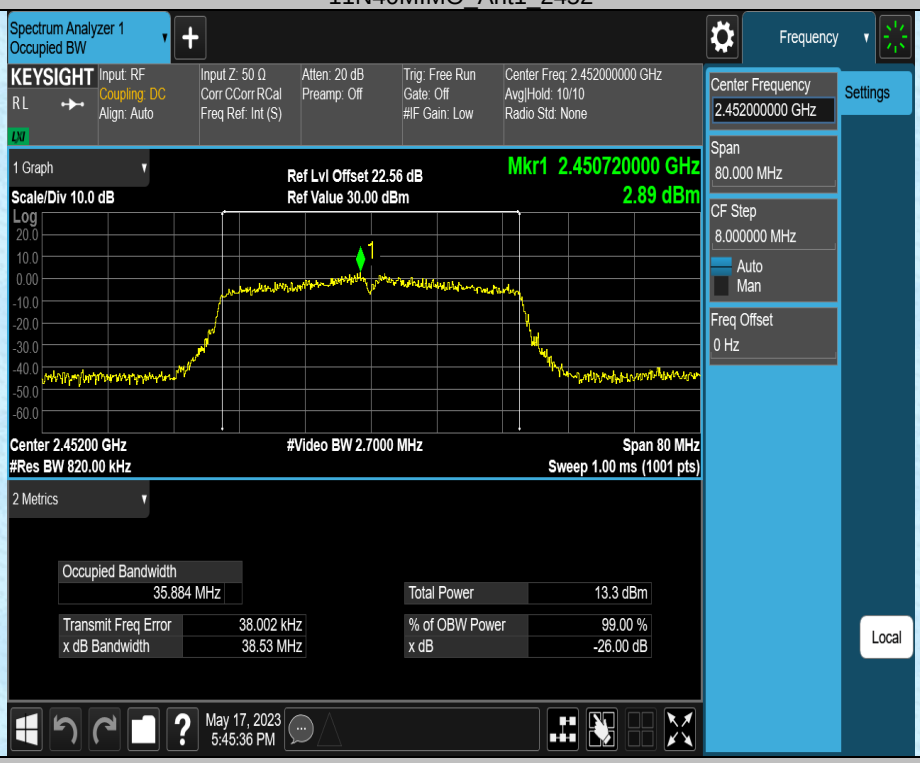


11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



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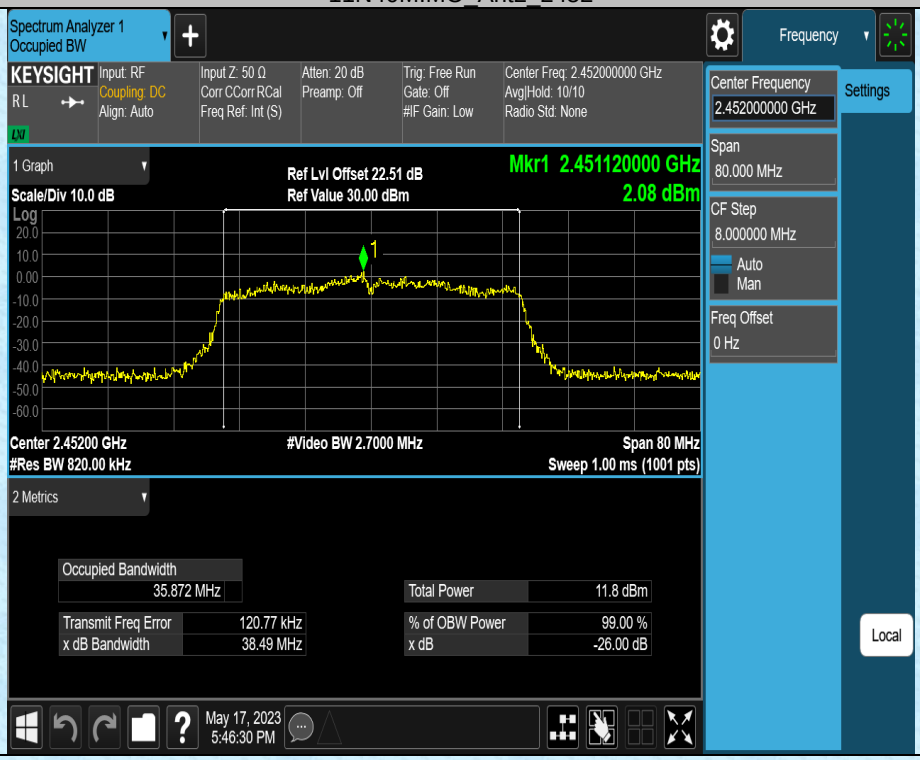
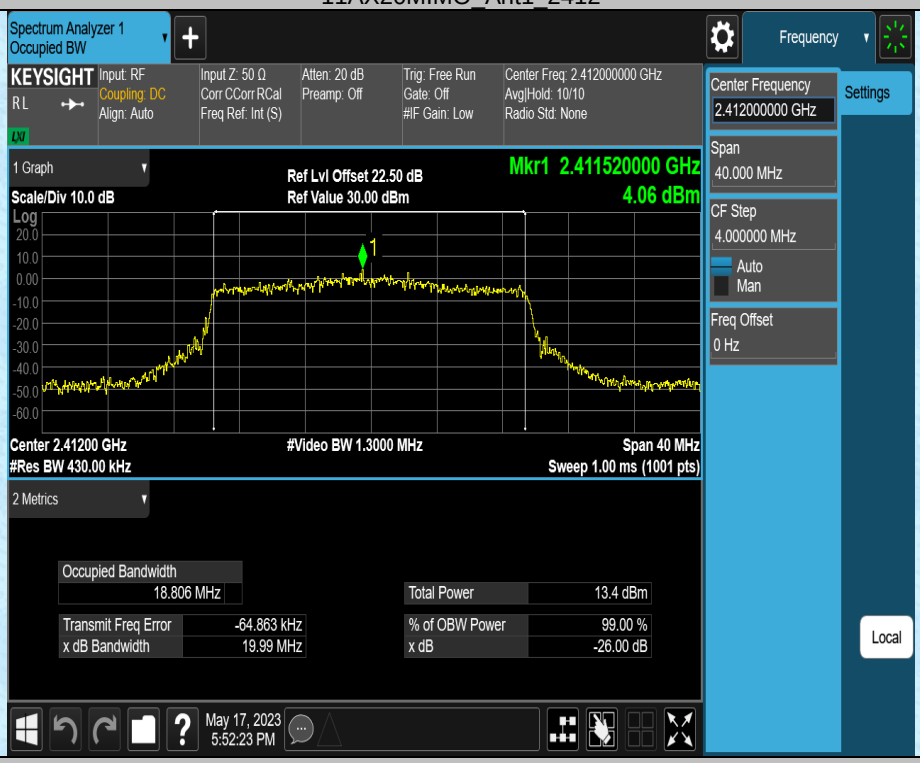
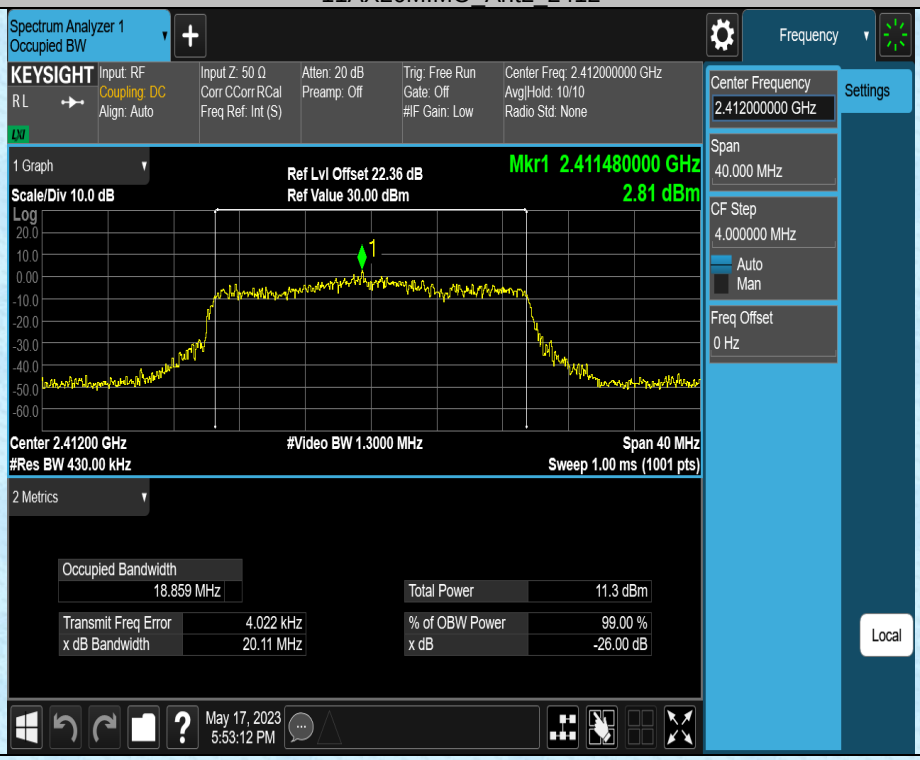


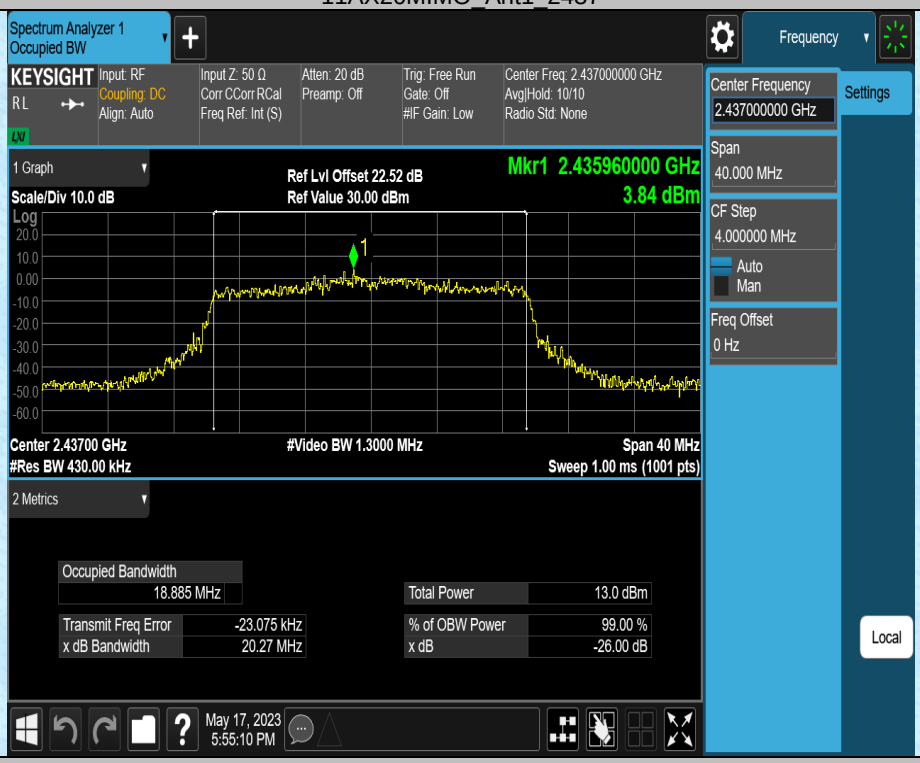
11AX20MIMO_Ant1_2412



11AX20MIMO_Ant2_2412



11AX20MIMO_Ant1_2437



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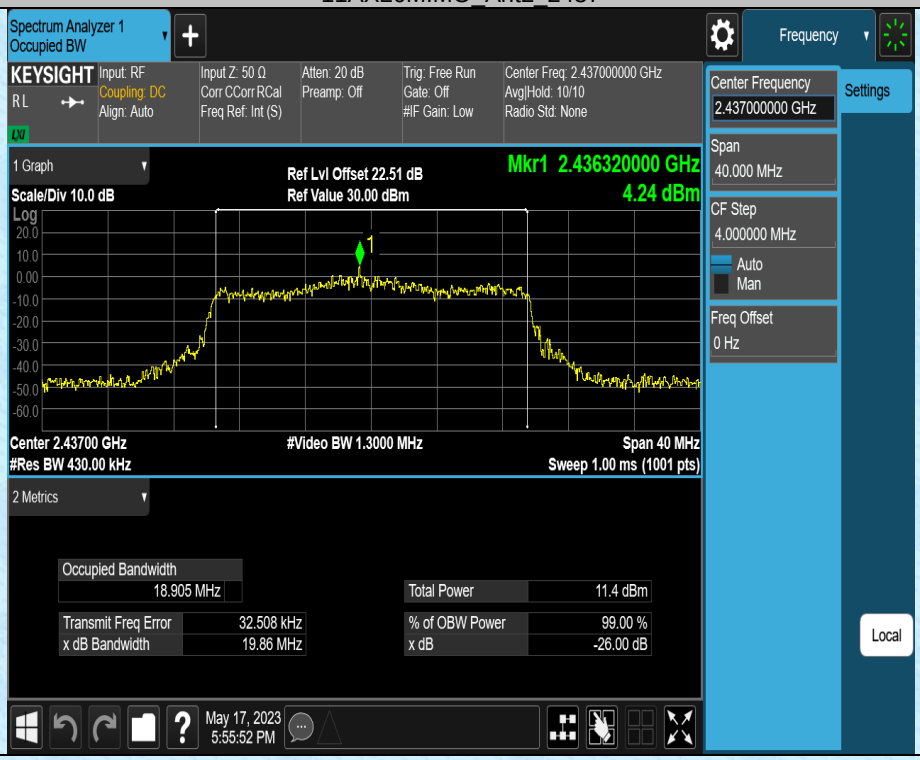
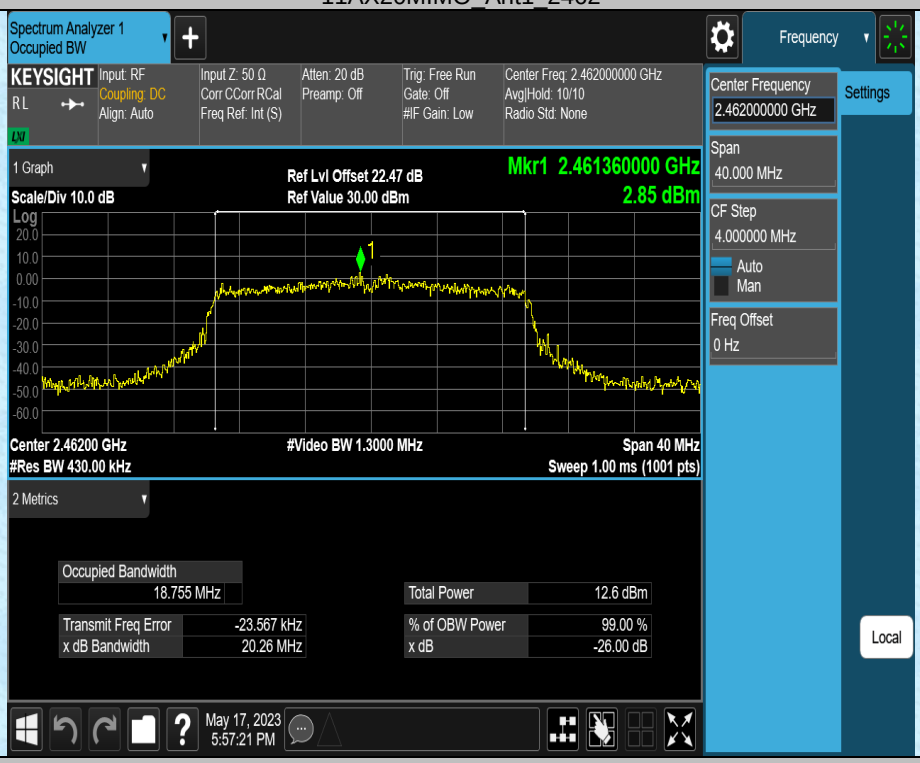


11AX20MIMO_Ant1_2462



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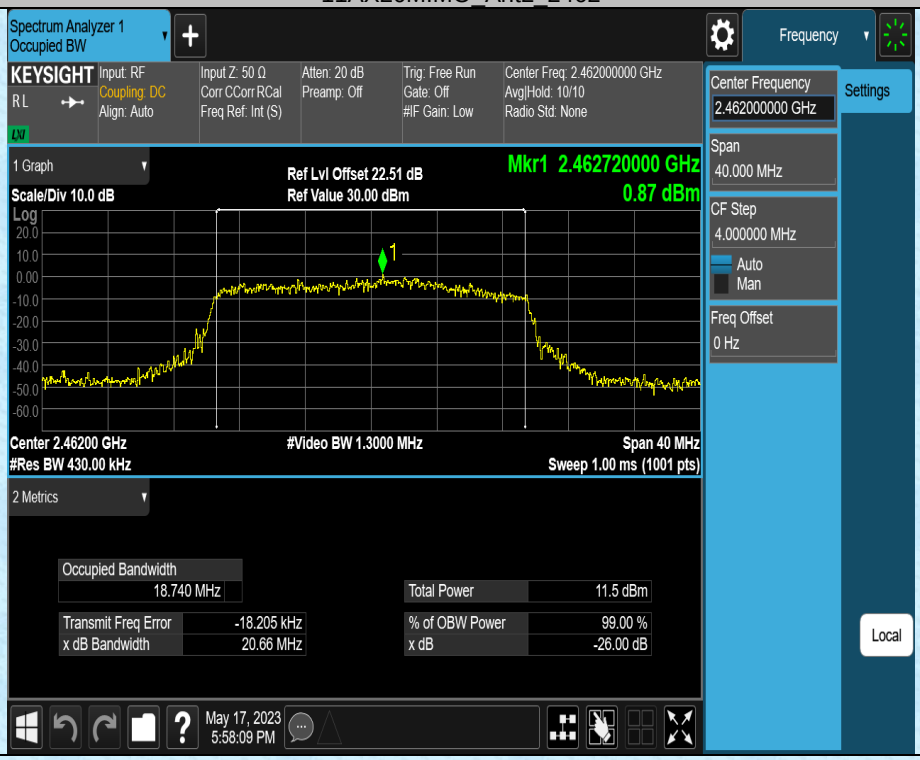
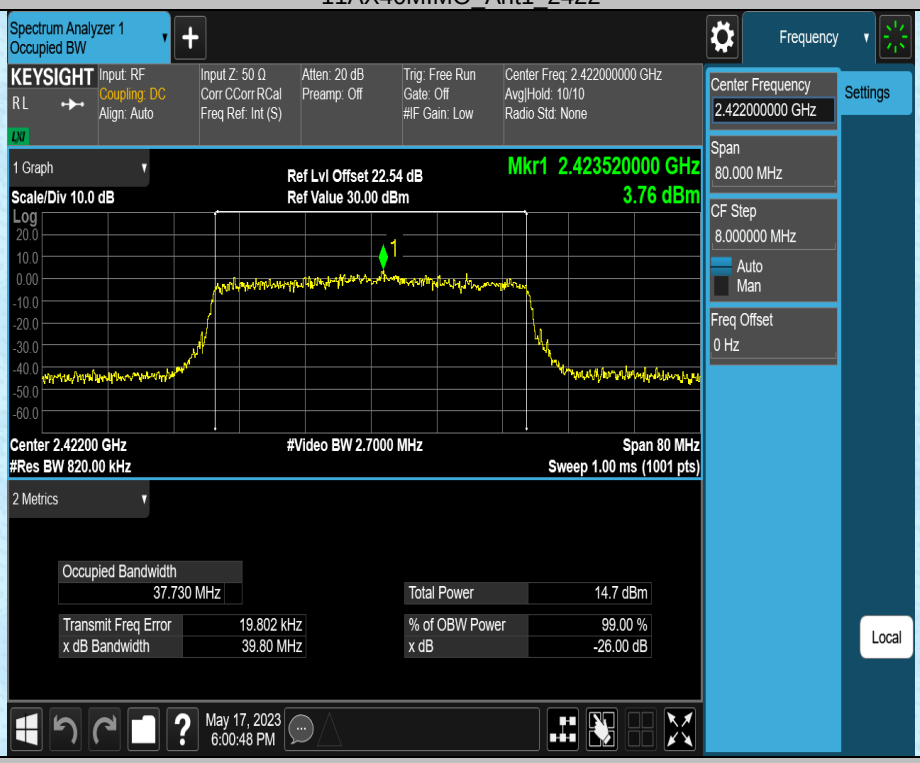


11AX40MIMO_Ant1_2422



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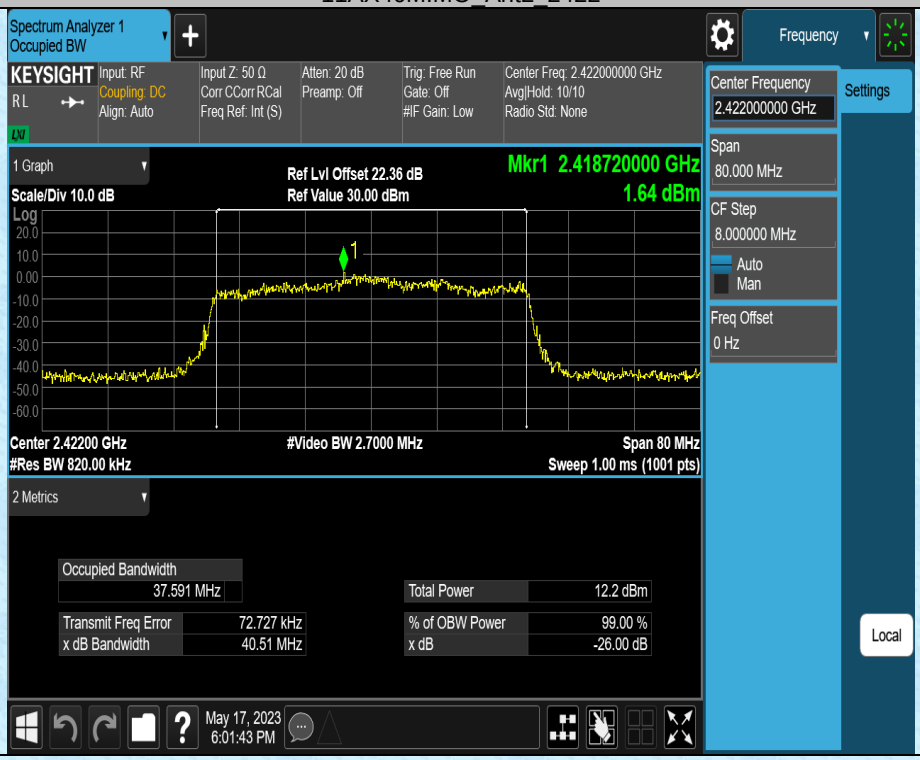

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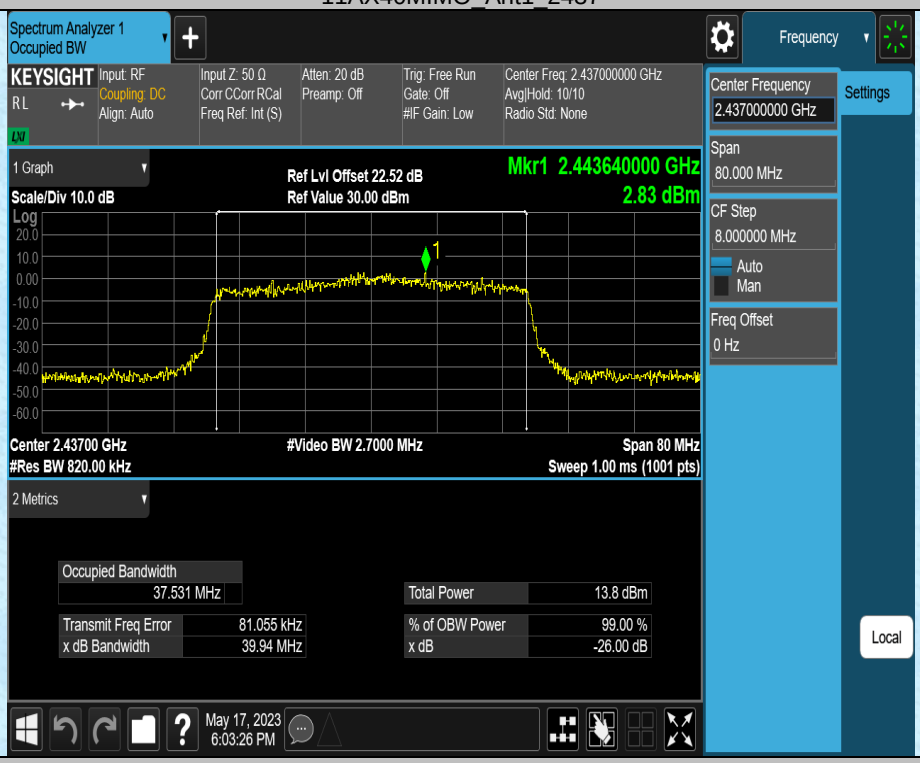
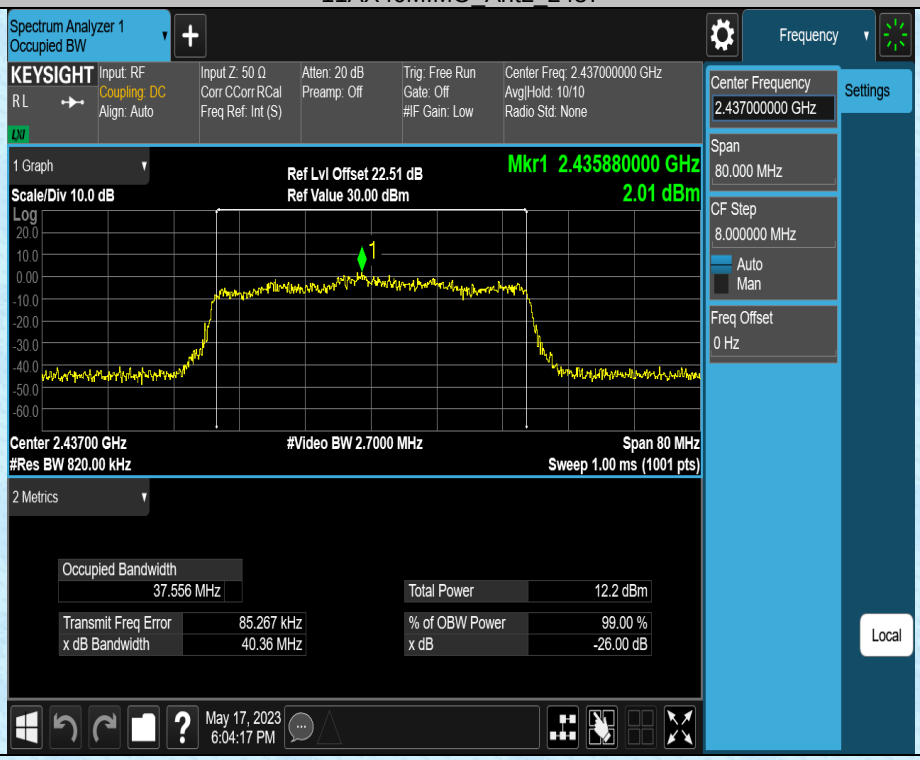
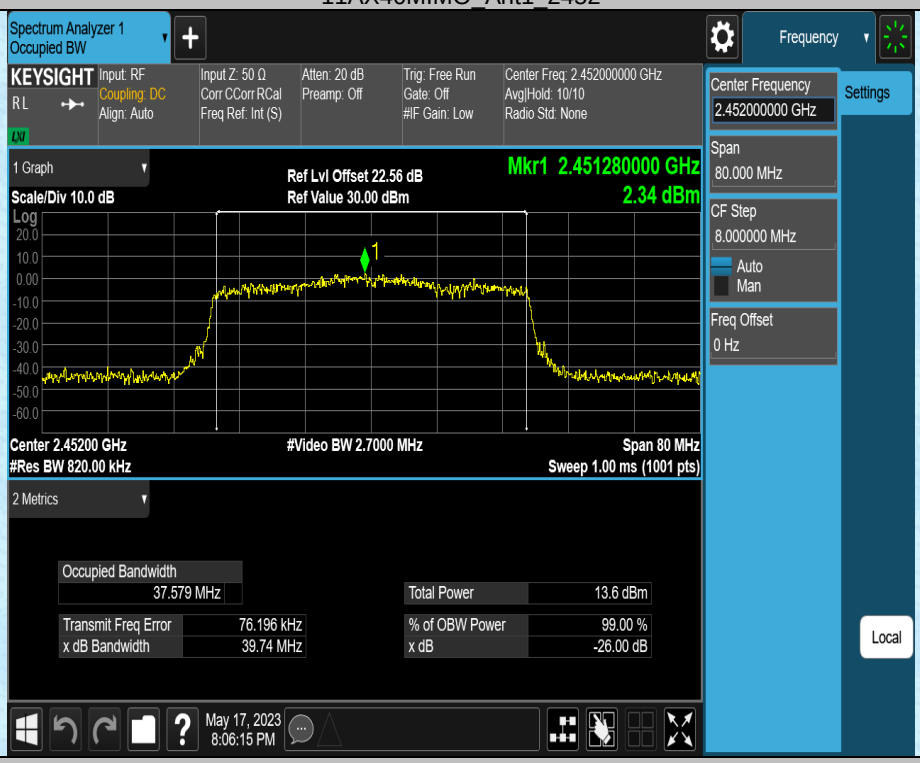


11AX40MIMO_Ant2_2437



11AX40MIMO_Ant1_2452



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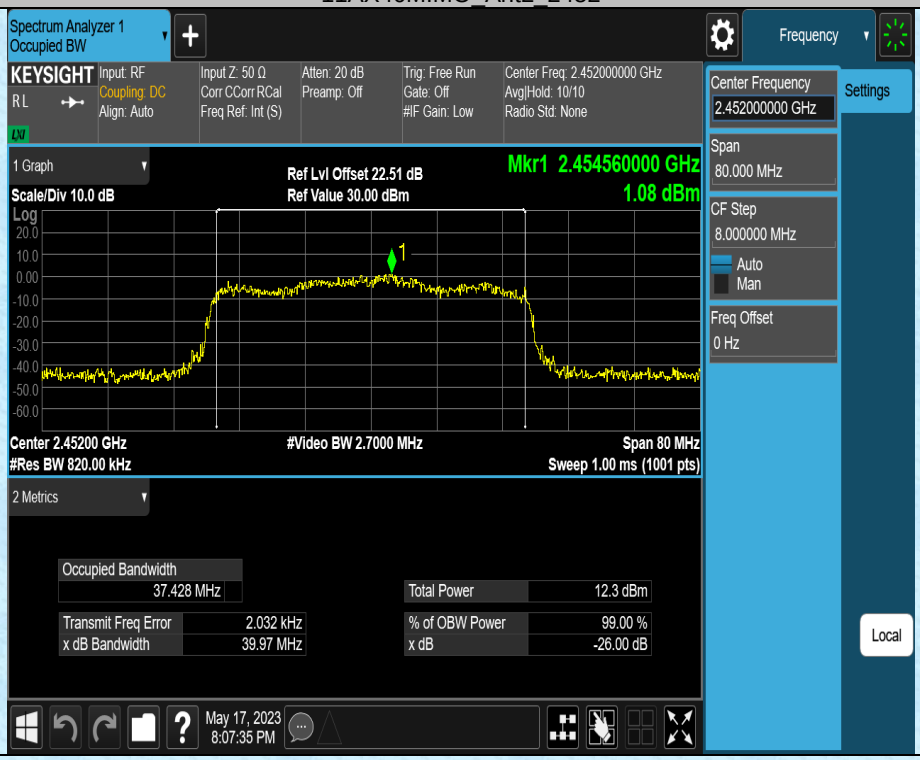
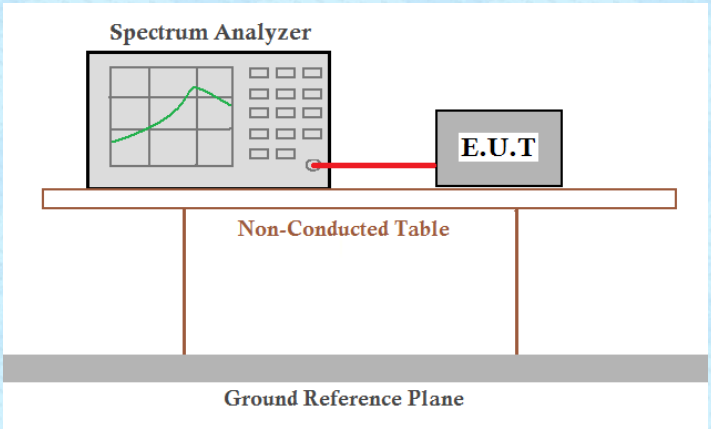


7.5 Power Spectral Density

Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	KDB558074 D01 15.247 Meas Guidance v05r02 FCC KDB 662911 D01 Multiple Transmitter Output v02r01
Limit:	8dBm/3kHz
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement Data:

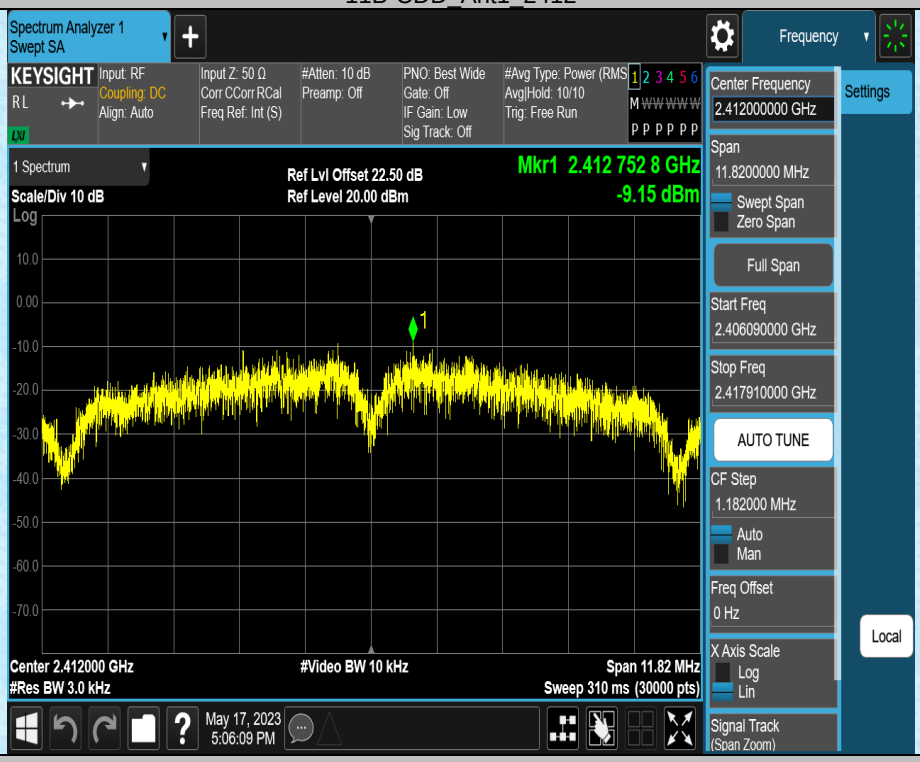
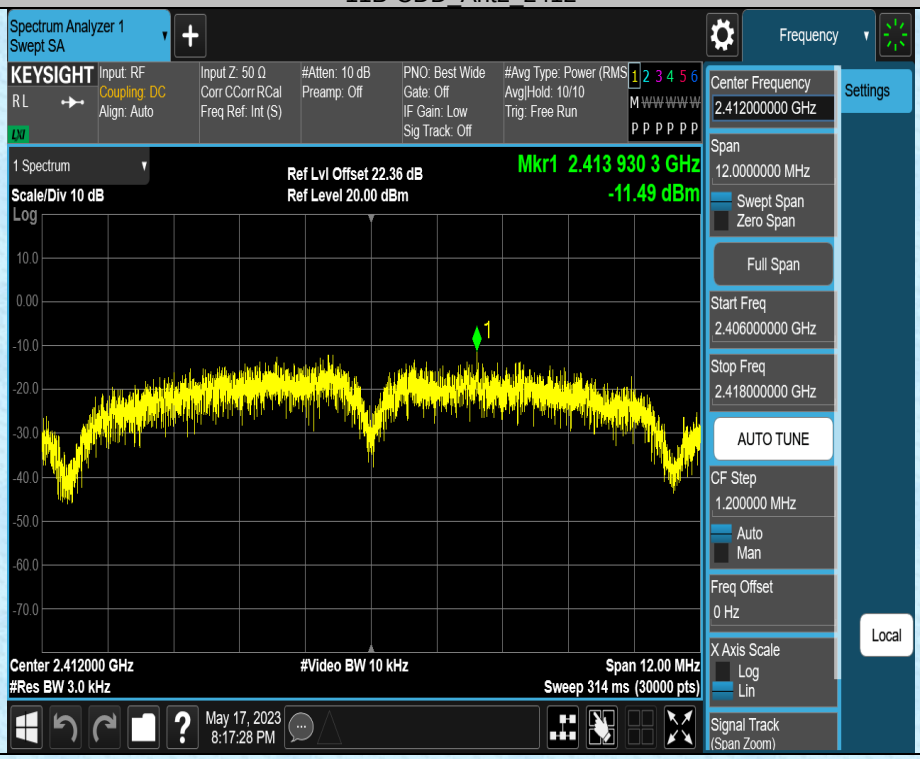
Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B-CDD	Ant1	2412	-9.15	≤7.34	PASS
	Ant2	2412	-11.49	≤7.34	PASS
	total	2412	-7.15	≤7.34	PASS
	Ant1	2437	-9.72	≤7.34	PASS
	Ant2	2437	-10.84	≤7.34	PASS
	total	2437	-7.23	≤7.34	PASS
	Ant1	2462	-9.72	≤7.34	PASS
	Ant2	2462	-11.4	≤7.34	PASS
	total	2462	-7.47	≤7.34	PASS
11G-CDD	Ant1	2412	-17.32	≤7.34	PASS
	Ant2	2412	-19.04	≤7.34	PASS
	total	2412	-15.09	≤7.34	PASS
	Ant1	2437	-17.88	≤7.34	PASS
	Ant2	2437	-19.63	≤7.34	PASS
	total	2437	-15.66	≤7.34	PASS
	Ant1	2462	-17.18	≤7.34	PASS
	Ant2	2462	-18.71	≤7.34	PASS
	total	2462	-14.87	≤7.34	PASS
11N20MIMO	Ant1	2412	-16.87	≤7.34	PASS
	Ant2	2412	-16.43	≤7.34	PASS
	total	2412	-13.63	≤7.34	PASS
	Ant1	2437	-17.06	≤7.34	PASS
	Ant2	2437	-16.86	≤7.34	PASS
	total	2437	-13.95	≤7.34	PASS
	Ant1	2462	-17.2	≤7.34	PASS
	Ant2	2462	-17.47	≤7.34	PASS
	total	2462	-14.32	≤7.34	PASS

11N40MIMO	Ant1	2422	-18.87	≤7.34	PASS
	Ant2	2422	-20.93	≤7.34	PASS
	total	2422	-16.77	≤7.34	PASS
	Ant1	2437	-19.78	≤7.34	PASS
	Ant2	2437	-20.4	≤7.34	PASS
	total	2437	-17.07	≤7.34	PASS
	Ant1	2452	-19.63	≤7.34	PASS
	Ant2	2452	-21.56	≤7.34	PASS
	total	2452	-17.48	≤7.34	PASS
11AX20MIMO	Ant1	2412	-17.48	≤7.34	PASS
	Ant2	2412	-19.29	≤7.34	PASS
	total	2412	-15.28	≤7.34	PASS
	Ant1	2437	-17.79	≤7.34	PASS
	Ant2	2437	-19.46	≤7.34	PASS
	total	2437	-15.53	≤7.34	PASS
	Ant1	2462	-18.48	≤7.34	PASS
	Ant2	2462	-18.78	≤7.34	PASS
	total	2462	-15.62	≤7.34	PASS
11AX40MIMO	Ant1	2422	-18.46	≤7.34	PASS
	Ant2	2422	-20.77	≤7.34	PASS
	total	2422	-16.45	≤7.34	PASS
	Ant1	2437	-18.59	≤7.34	PASS
	Ant2	2437	-20.08	≤7.34	PASS
	total	2437	-16.26	≤7.34	PASS
	Ant1	2452	-17.84	≤7.34	PASS
	Ant2	2452	-20.27	≤7.34	PASS
	total	2452	-15.88	≤7.34	PASS

Frequency[MHz]	ANT 1 Antenna Gain (dBi)	ANT 2 Antenna Gain (dBi)	Correlated chains directional gain (dBi)	Peak Power Limit (dBm)
2412-2462	4.39	2.75	6.66	7.34
Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, …, G_N dBi If transmit signals are correlated, then Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2$ /N_{ANT}] dBi [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]				
2412-2462: Directional gain = 10log[$(10^{4.39/20} + 10^{2.75/20})^2/N_{ANT}$] dBi=6.66				

Note: Beamforming conducted power less than no beamforming conducted power, so only no beamforming conducted power spectral density was recored.

11B-CDD_Ant1_2412



11B-CDD_Ant2_2412