

Appendix C: Maximum power spectral density

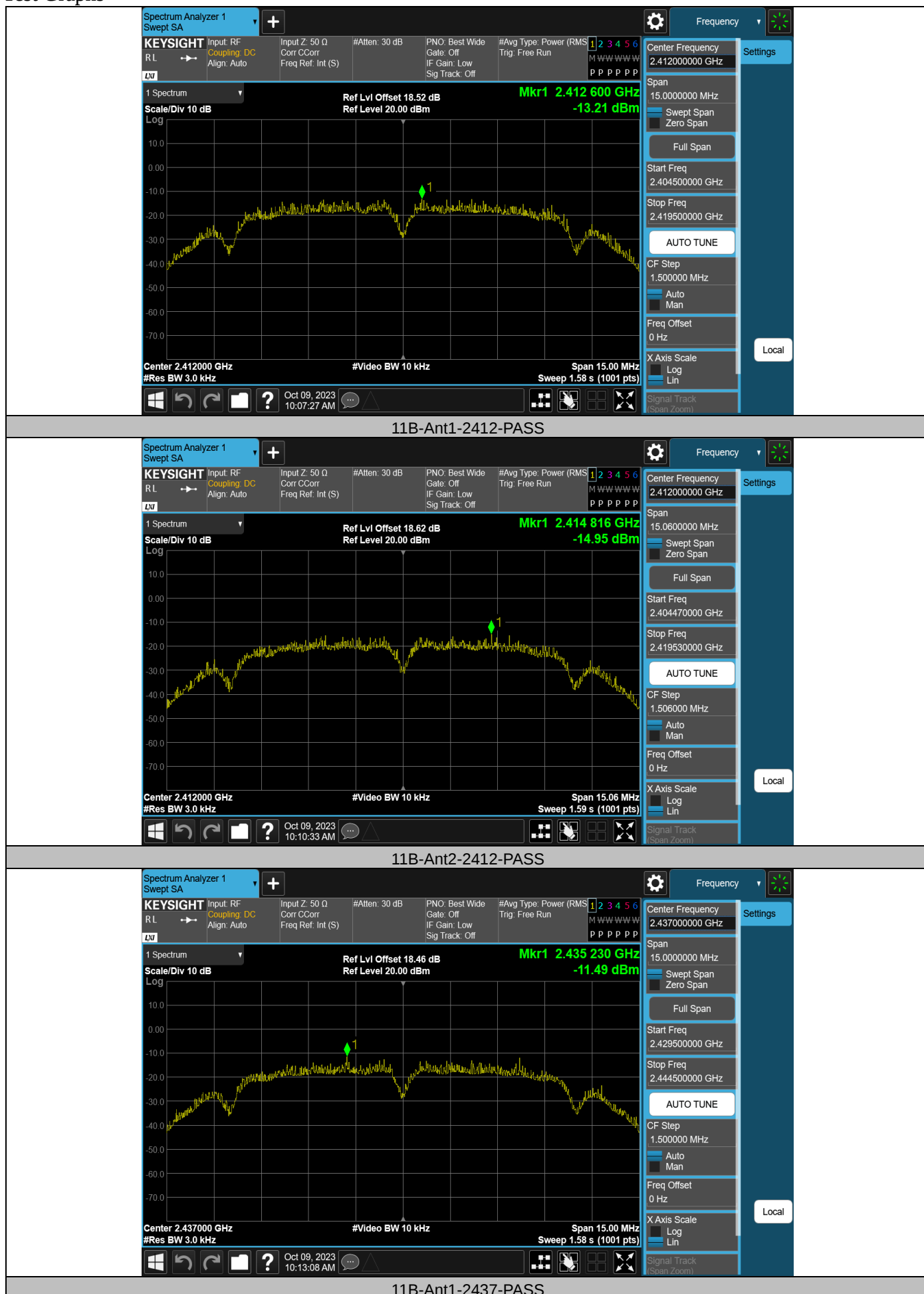
Test Result

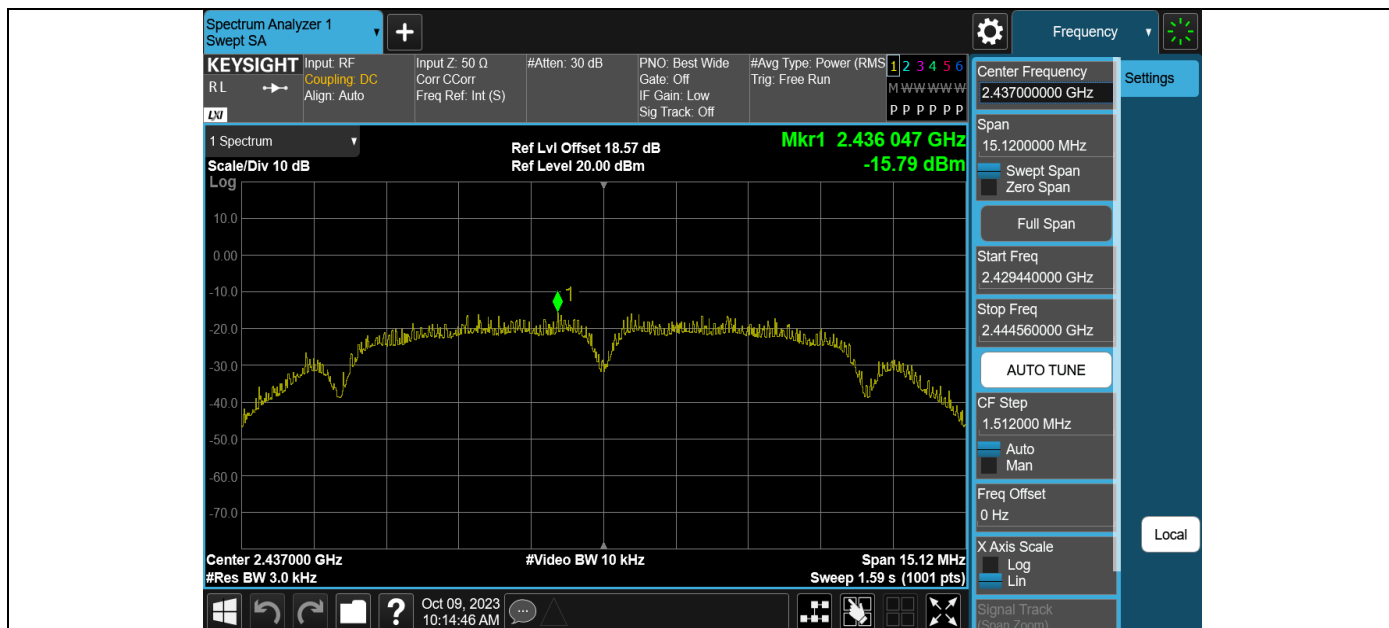
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-13.21	≤8.00	PASS
11B	Ant2	2412	-14.95	≤8.00	PASS
11B	Ant1	2437	-11.49	≤8.00	PASS
11B	Ant2	2437	-15.79	≤8.00	PASS
11B	Ant1	2462	-10.82	≤8.00	PASS
11B	Ant2	2462	-15.25	≤8.00	PASS
11G	Ant1	2412	-12.48	≤8.00	PASS
11G	Ant2	2412	-14.54	≤8.00	PASS
11G	Ant1	2437	-11.61	≤8.00	PASS
11G	Ant2	2437	-15.47	≤8.00	PASS
11G	Ant1	2462	-11.93	≤8.00	PASS
11G	Ant2	2462	-14.87	≤8.00	PASS
11N20MIMO	Ant1	2412	-11.97	≤8.00	PASS
11N20MIMO	Ant2	2412	-14.34	≤8.00	PASS
11N20MIMO	total	2412	-9.98	≤6.81	PASS
11N20MIMO	Ant1	2437	-11.89	≤8.00	PASS
11N20MIMO	Ant2	2437	-15.55	≤8.00	PASS
11N20MIMO	total	2437	-10.34	≤6.81	PASS
11N20MIMO	Ant1	2462	-12.71	≤8.00	PASS
11N20MIMO	Ant2	2462	-12.95	≤8.00	PASS
11N20MIMO	total	2462	-9.82	≤6.81	PASS
11N40MIMO	Ant1	2422	-12.49	≤8.00	PASS
11N40MIMO	Ant2	2422	-13.78	≤8.00	PASS
11N40MIMO	total	2422	-10.08	≤6.81	PASS
11N40MIMO	Ant1	2437	-12.12	≤8.00	PASS
11N40MIMO	Ant2	2437	-16.20	≤8.00	PASS
11N40MIMO	total	2437	-10.69	≤6.81	PASS
11N40MIMO	Ant1	2452	-12.91	≤8.00	PASS
11N40MIMO	Ant2	2452	-14.58	≤8.00	PASS
11N40MIMO	total	2452	-10.65	≤6.81	PASS

Note: For MIMO mode: Directional gain= $10 \times \log[(10^{3.88/20} + 10^{4.47/20})^2/2] = 7.19\text{dBi}$.

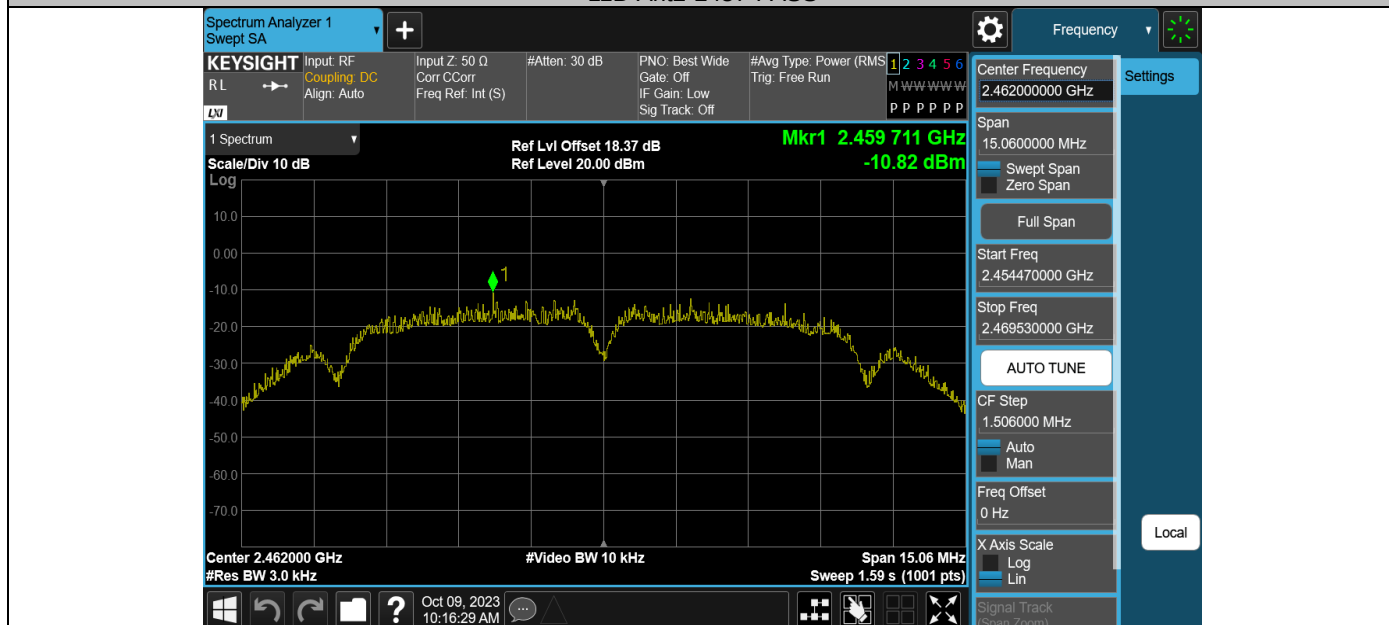
Limit = $8 - 7.19 + 6 = 6.81\text{dBm}$

Test Graphs

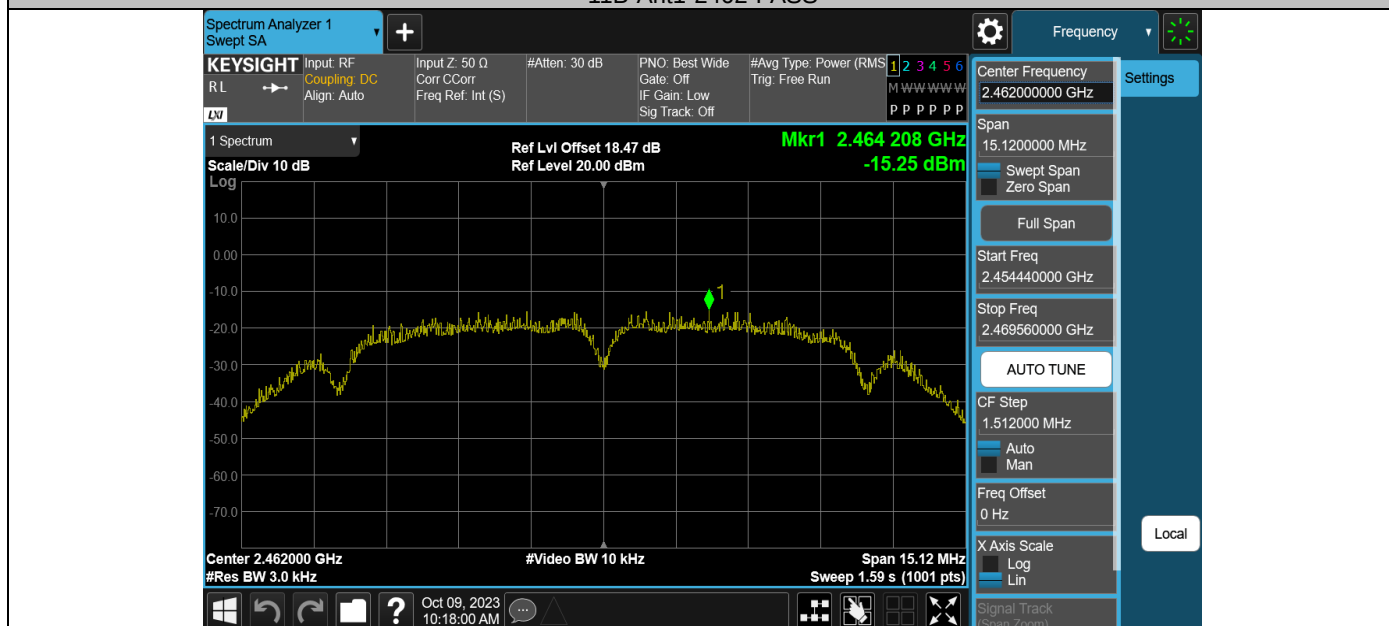




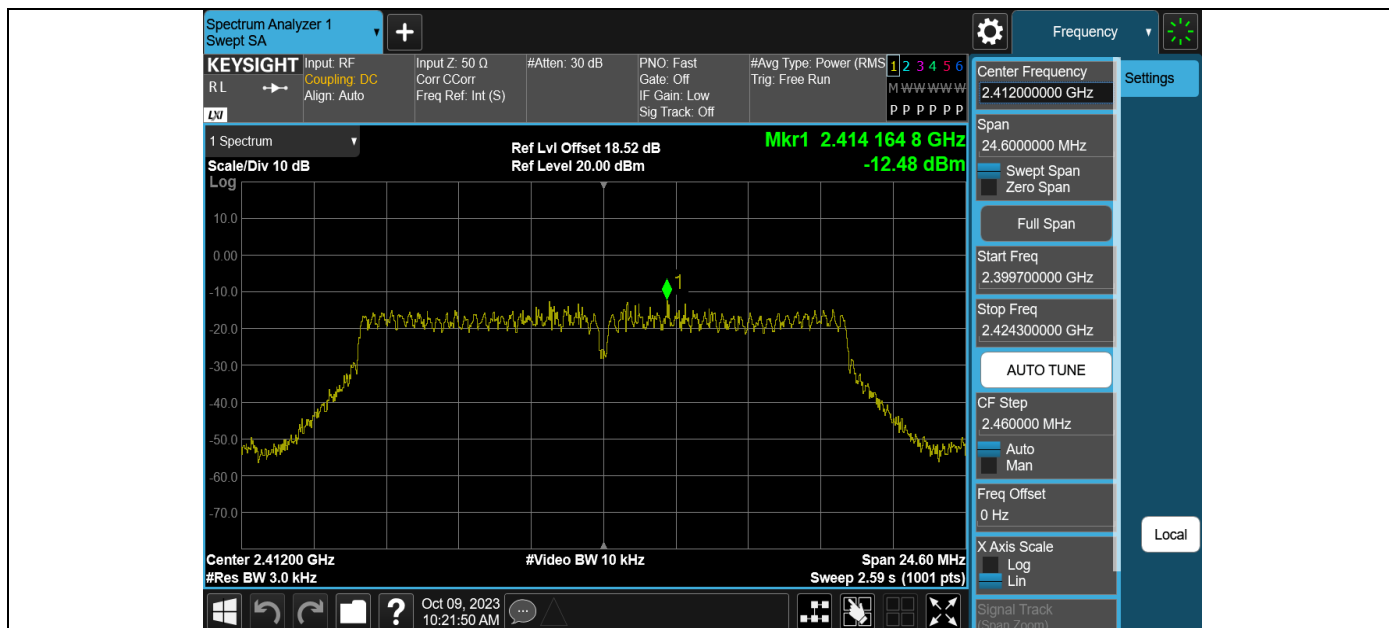
11B-Ant2-2437-PASS



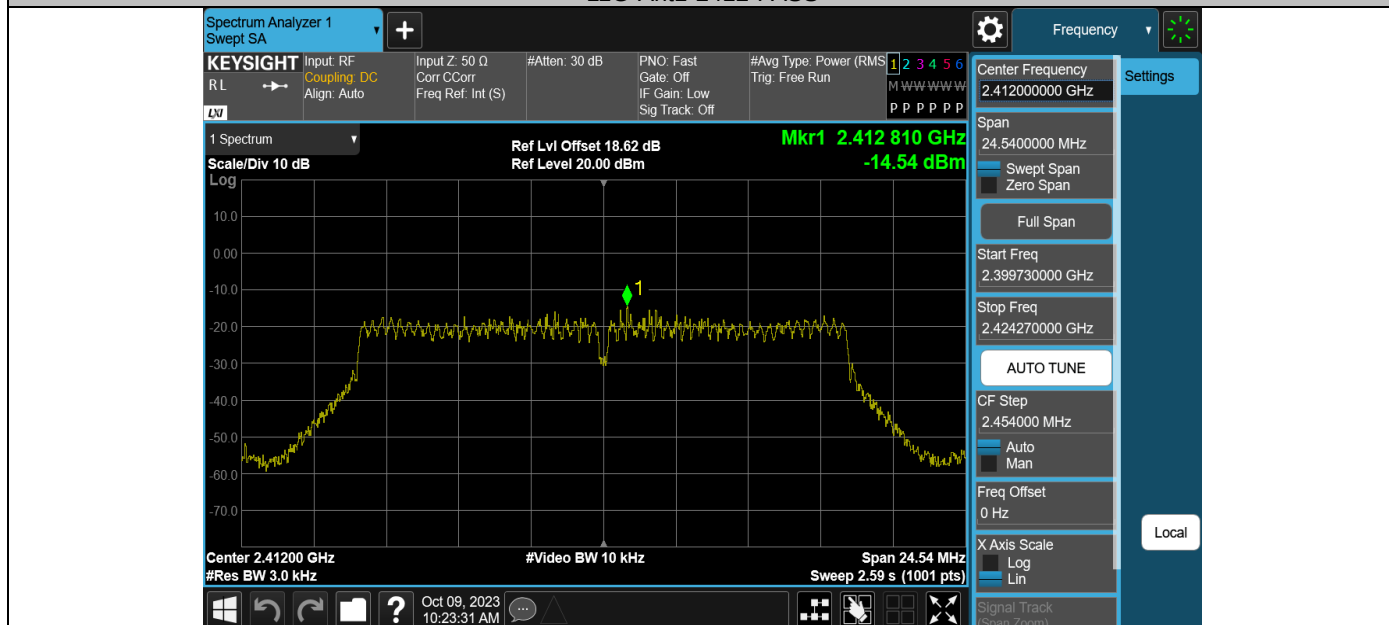
11B-Ant1-2462-PASS



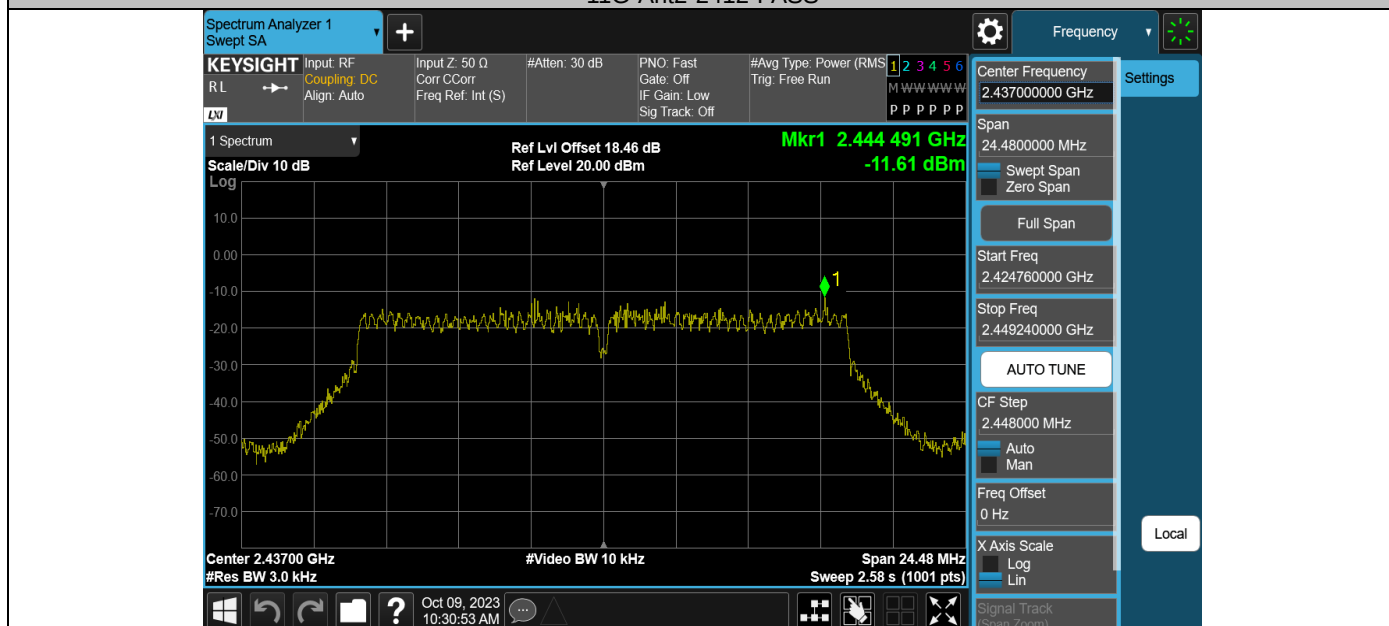
11B-Ant2-2462-PASS



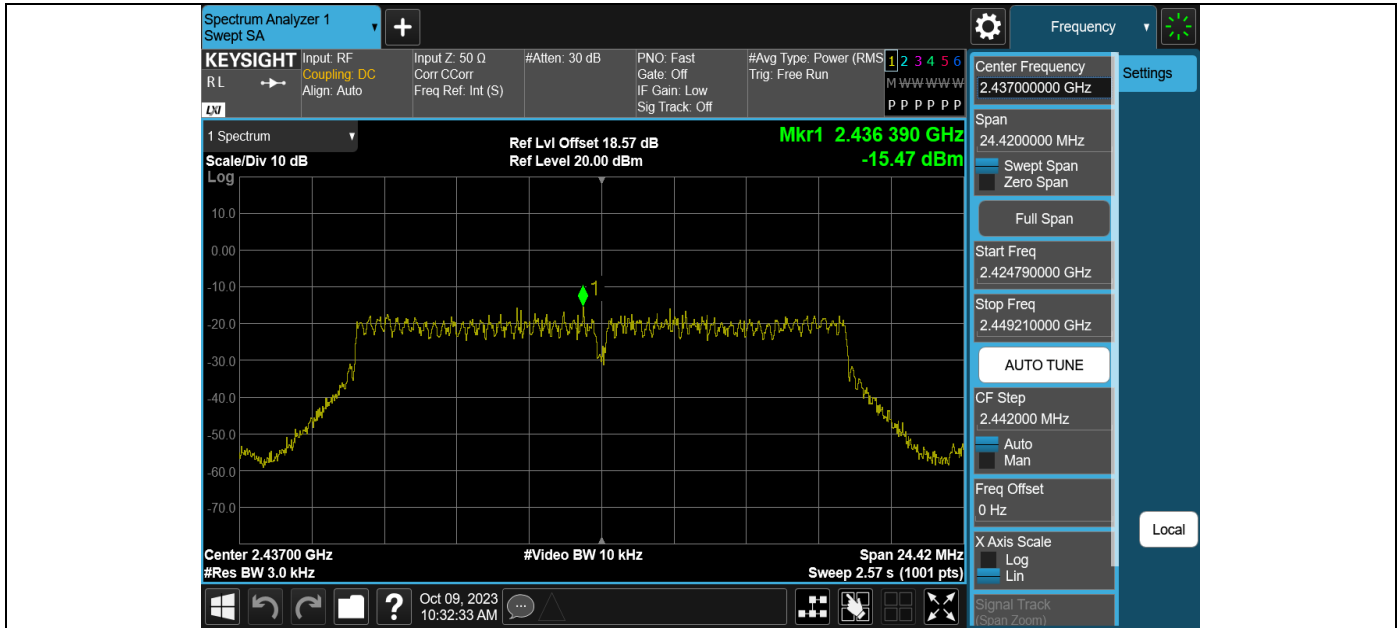
11G-Ant1-2412-PASS



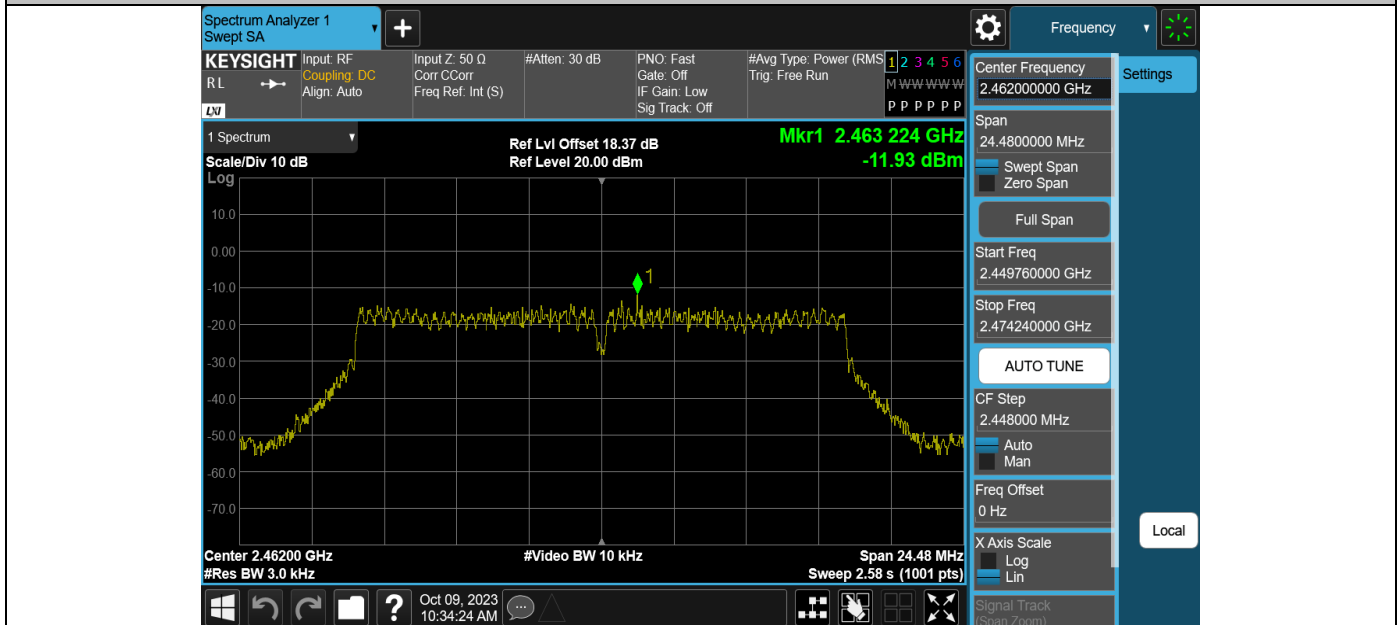
11G-Ant2-2412-PASS



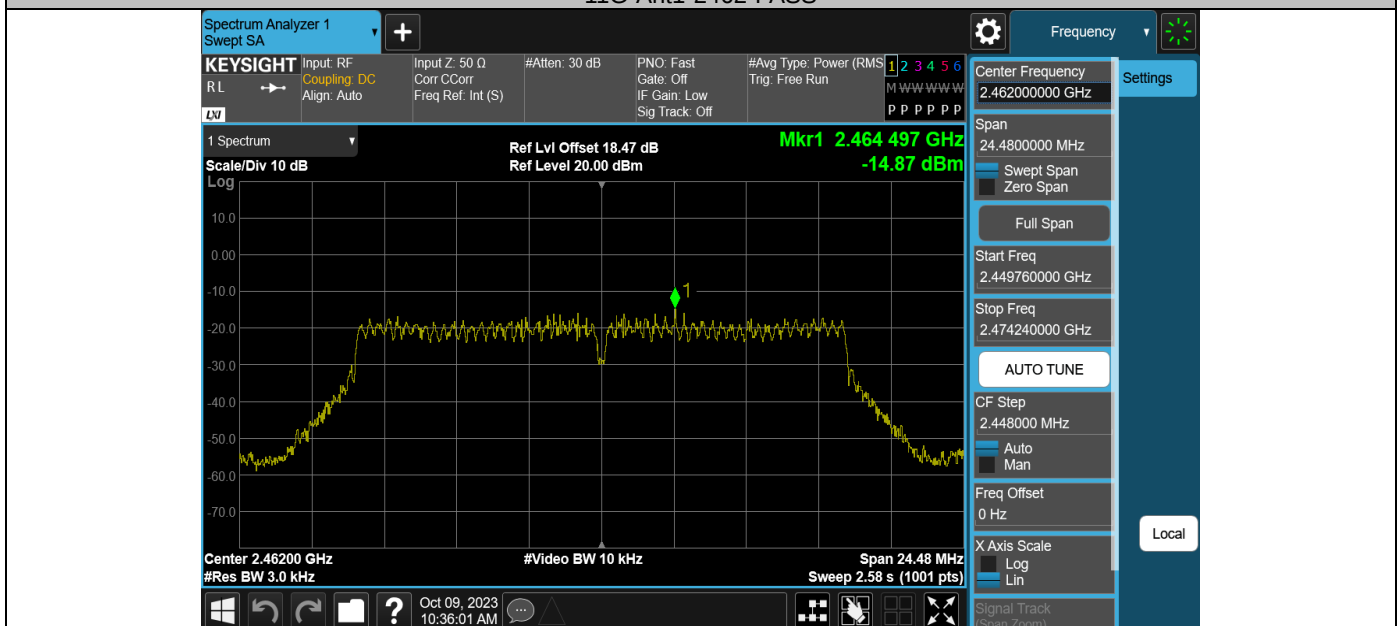
11G-Ant1-2437-PASS



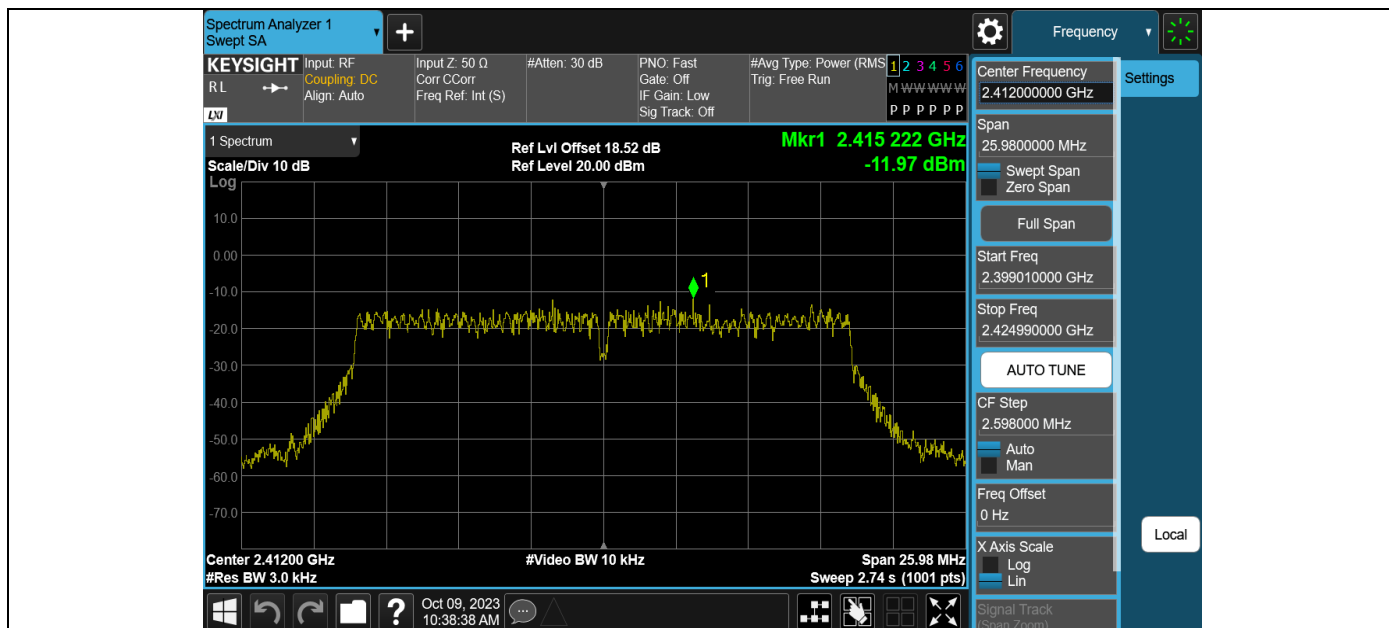
11G-Ant2-2437-PASS



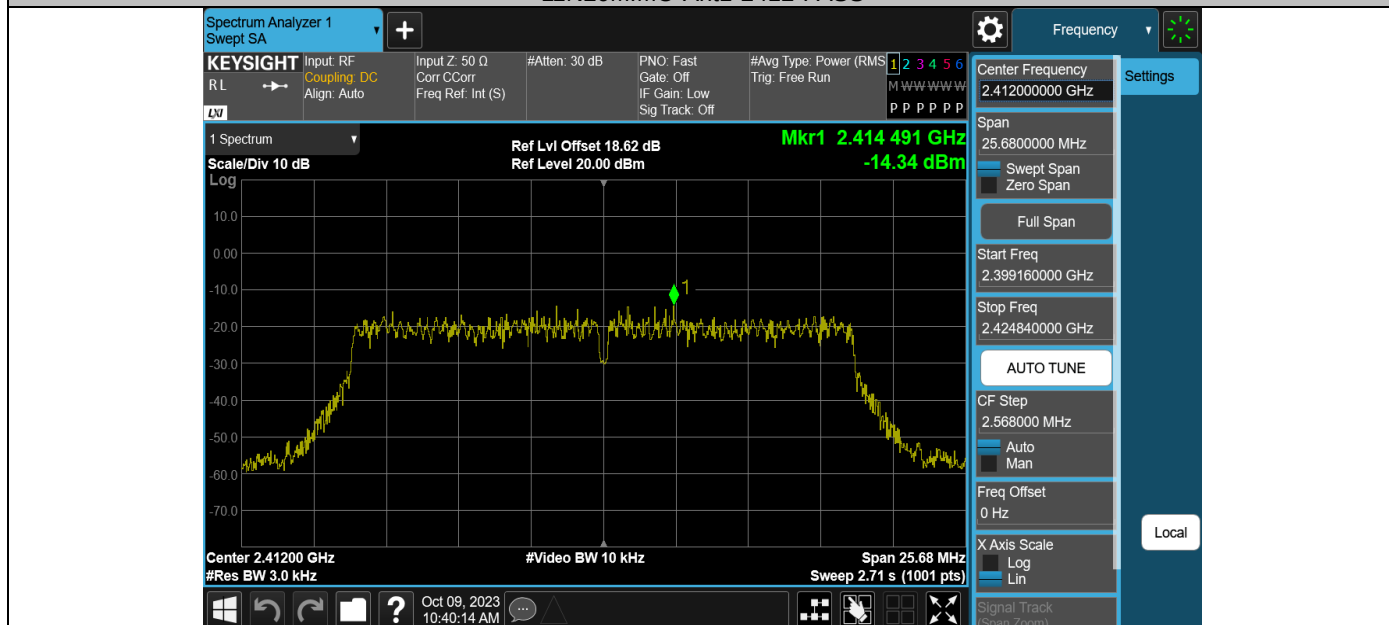
11G-Ant1-2462-PASS



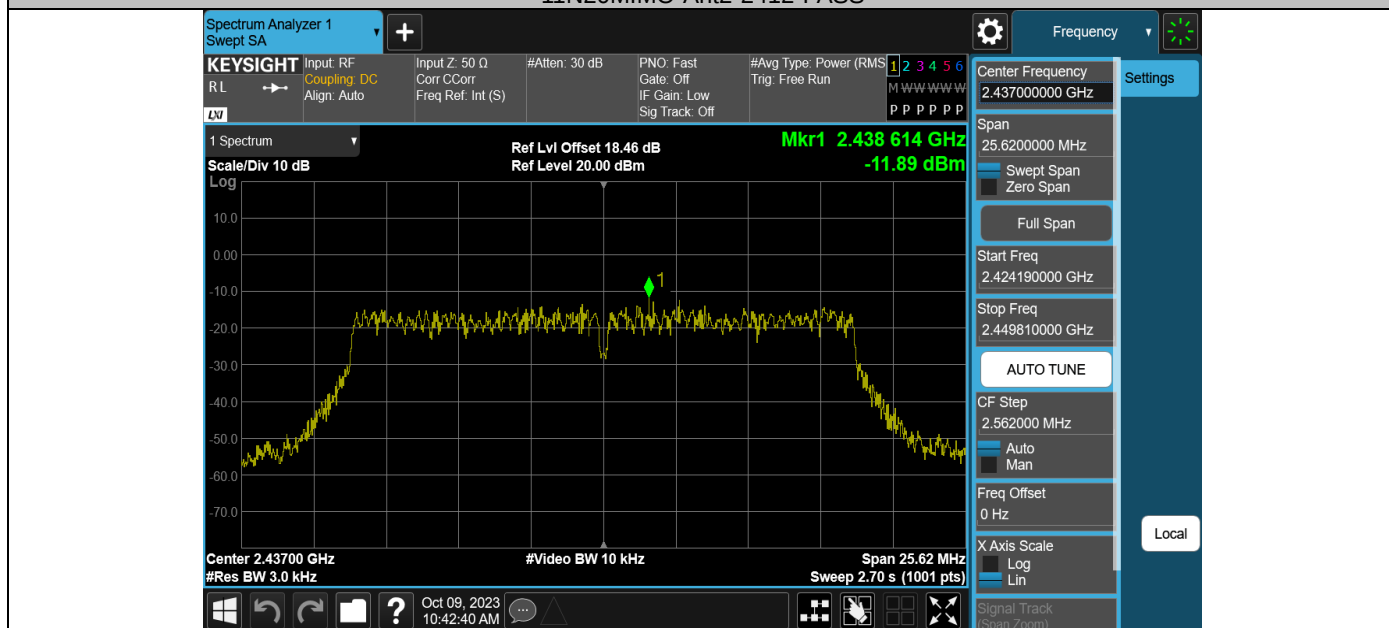
11G-Ant2-2462-PASS



11N20MIMO-Ant1-2412-PASS



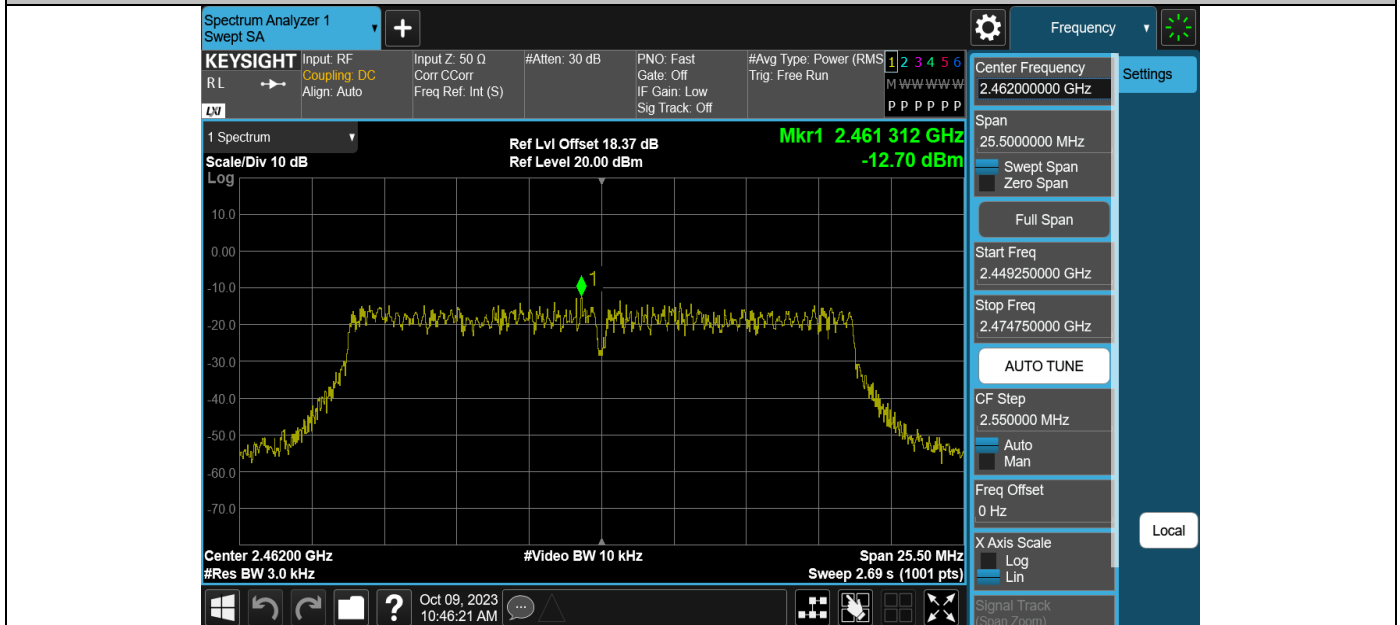
11N20MIMO-Ant2-2412-PASS



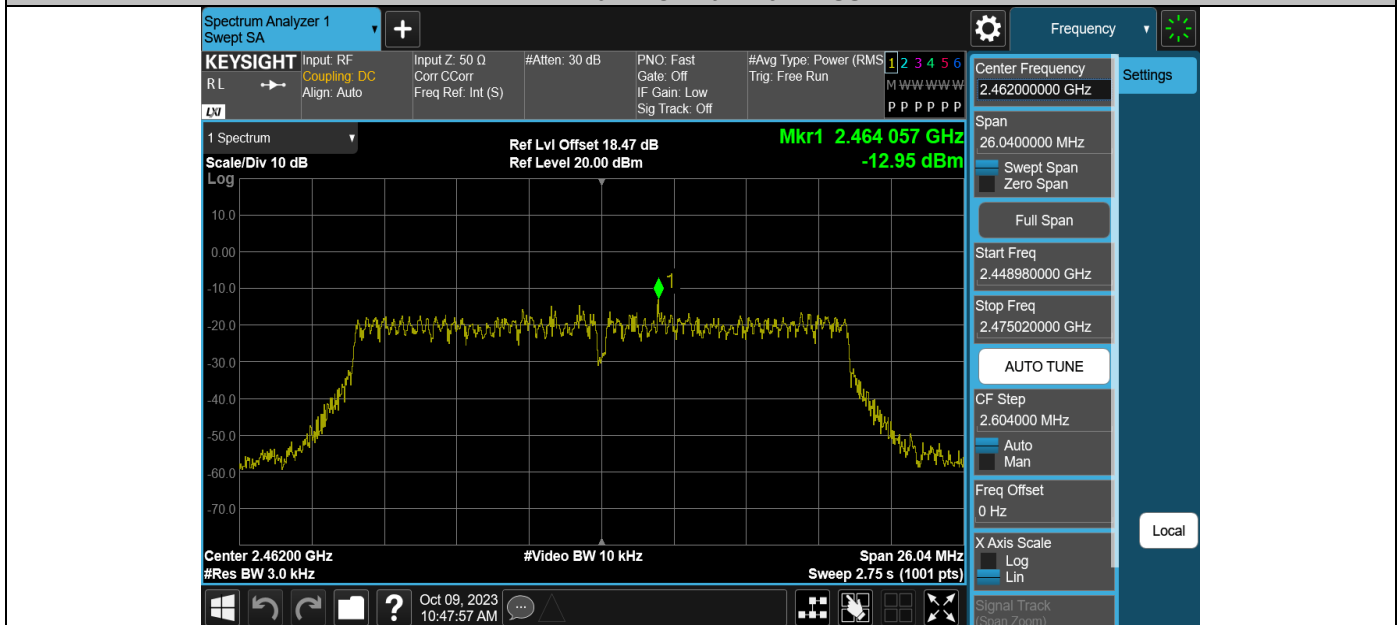
11N20MIMO-Ant1-2437-PASS



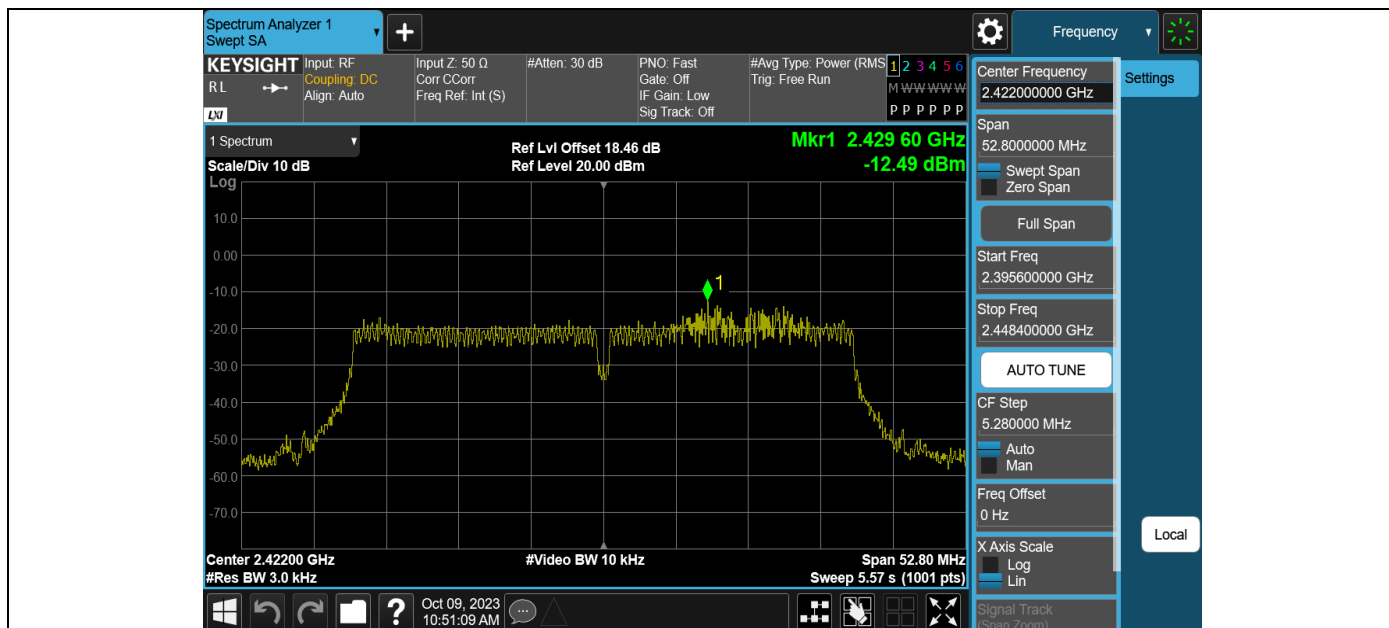
11N20MIMO-Ant2-2437-PASS



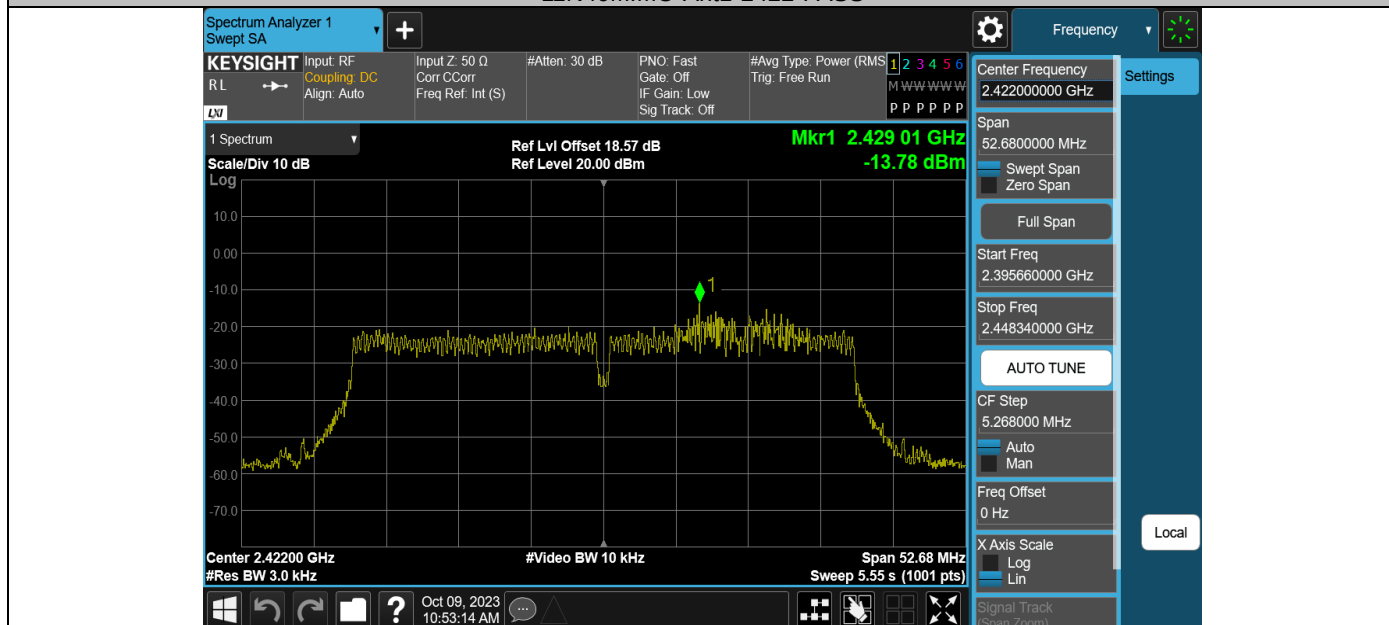
11N20MIMO-Ant1-2462-PASS



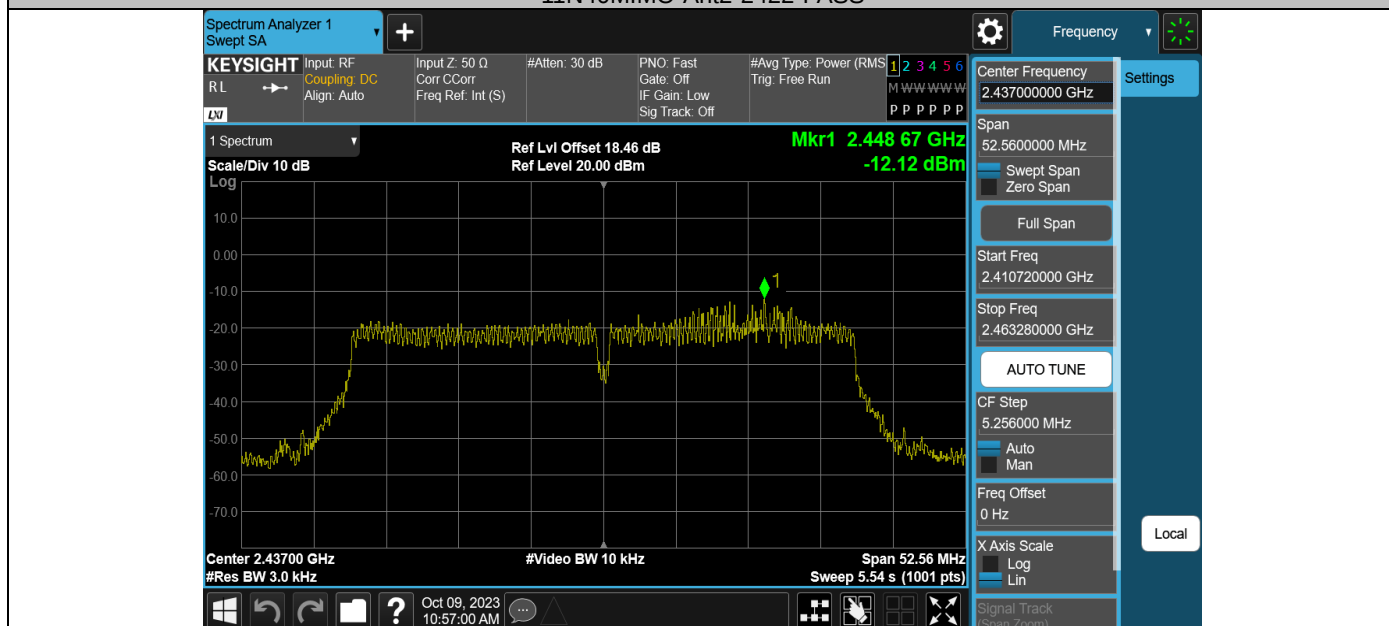
11N20MIMO-Ant2-2462-PASS



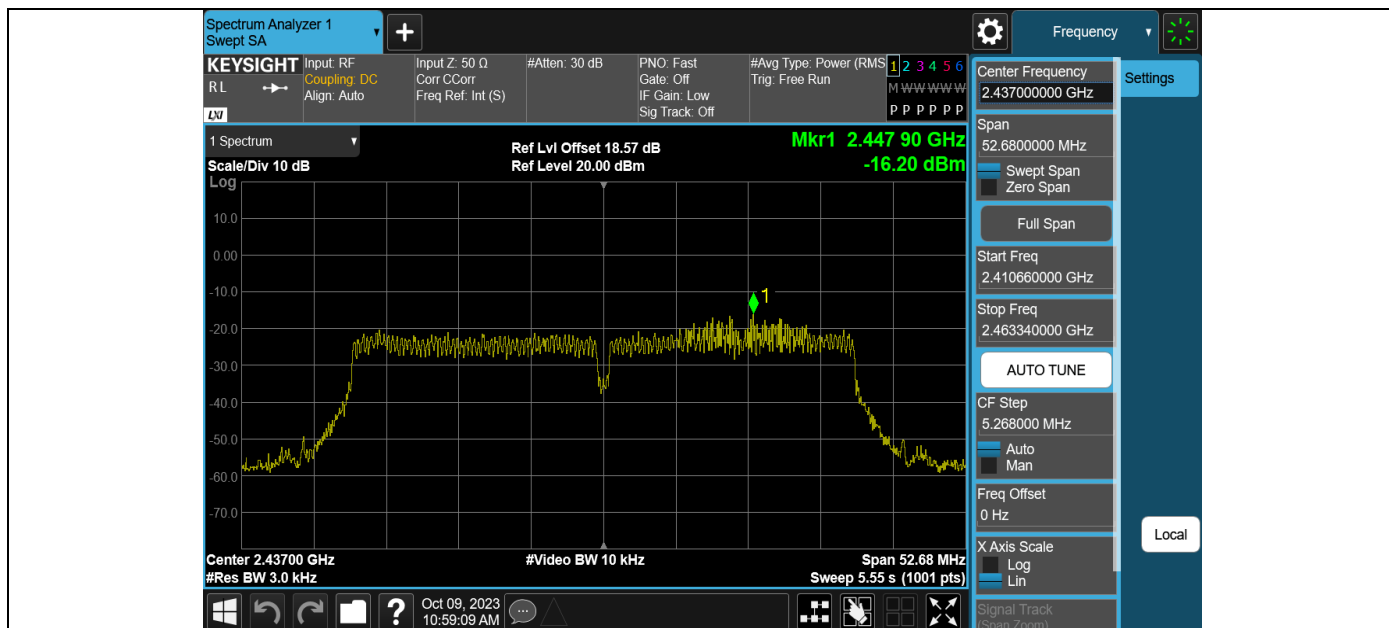
11N40MIMO-Ant1-2422-PASS



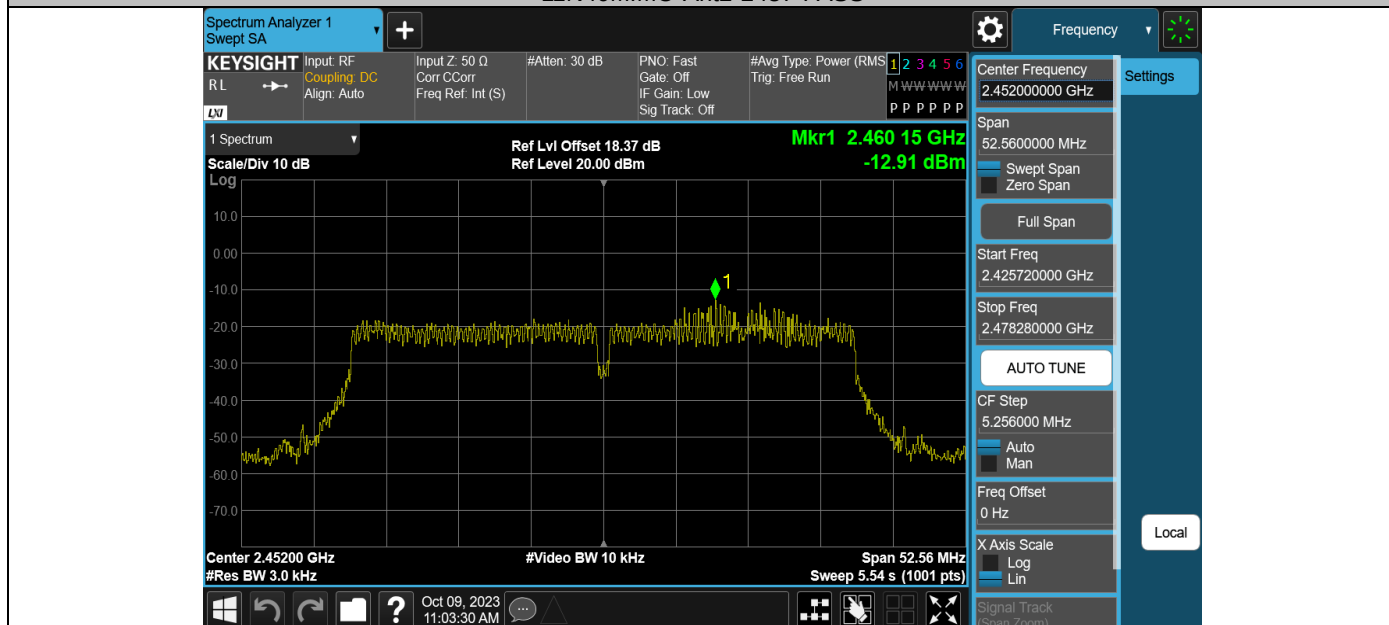
11N40MIMO-Ant2-2422-PASS



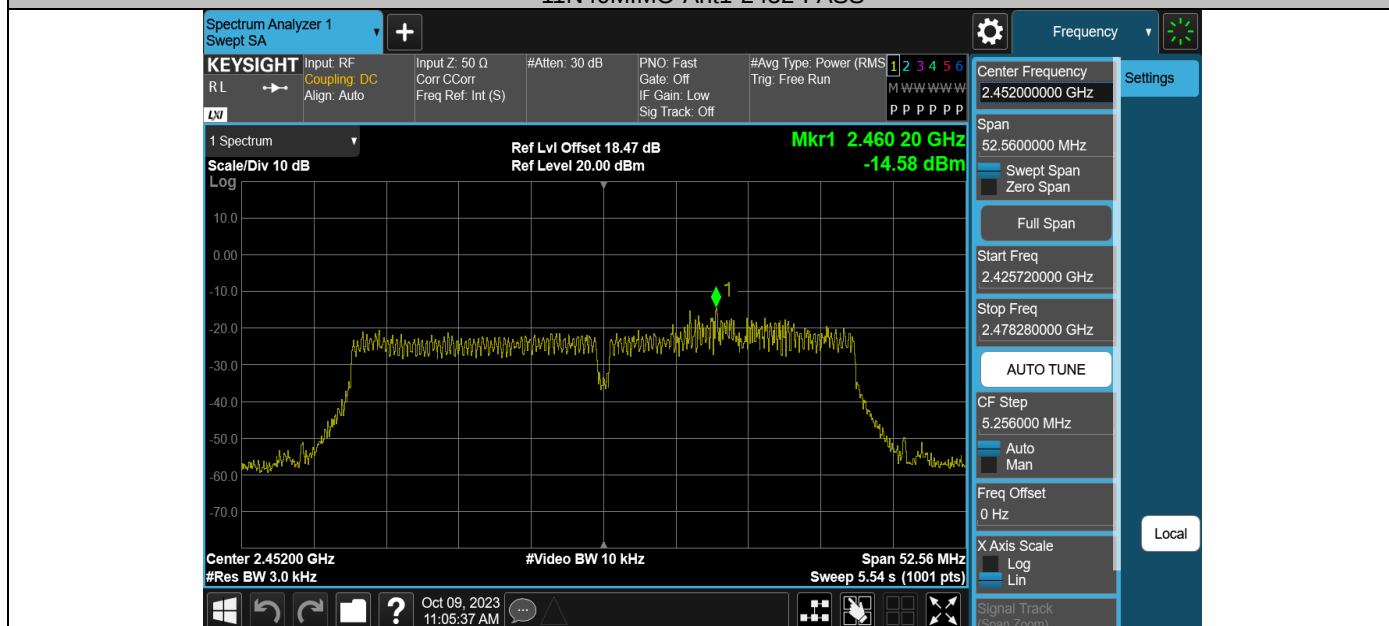
11N40MIMO-Ant1-2437-PASS



11N40MIMO-Ant2-2437-PASS



11N40MIMO-Ant1-2452-PASS



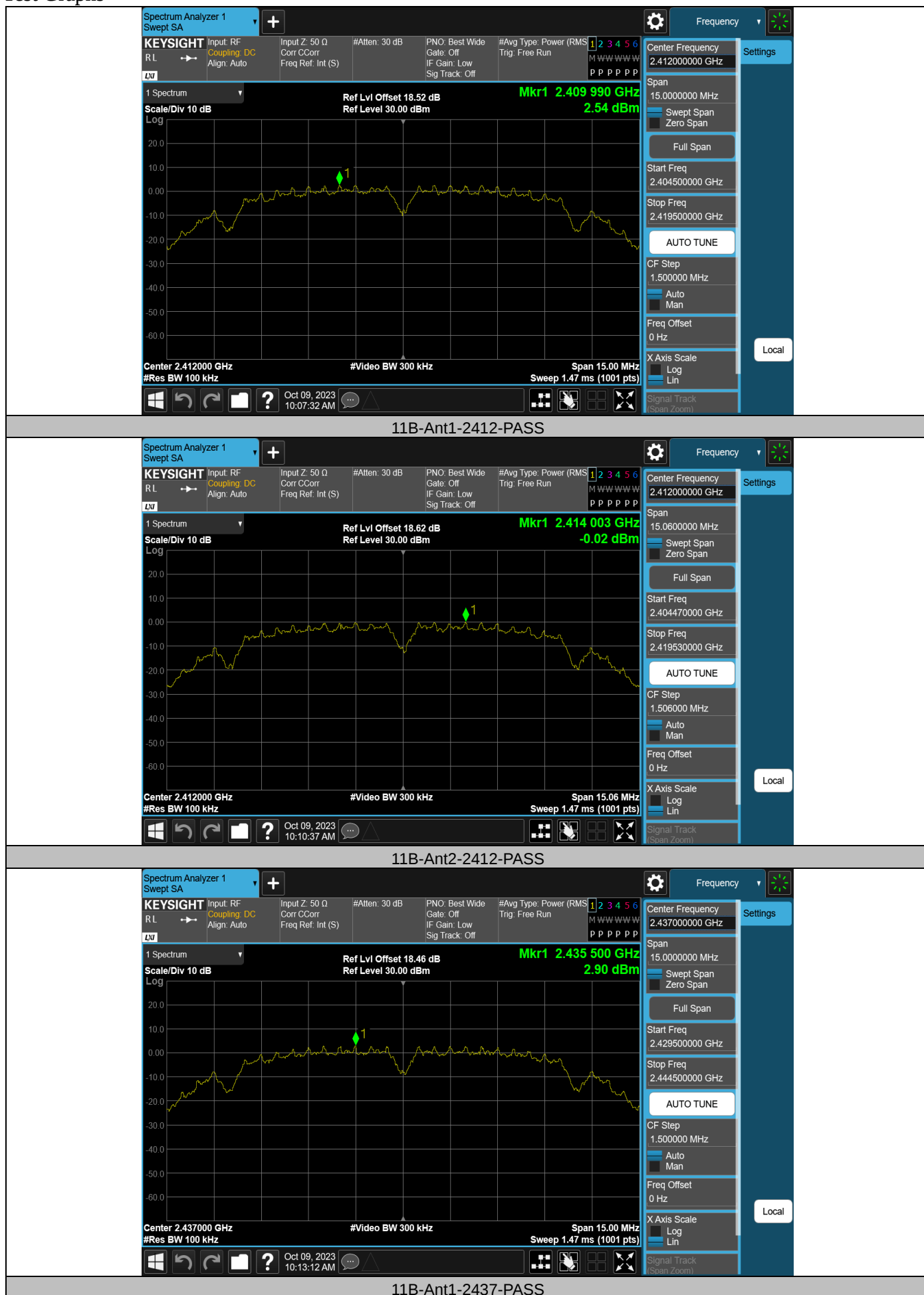
11N40MIMO-Ant2-2452-PASS

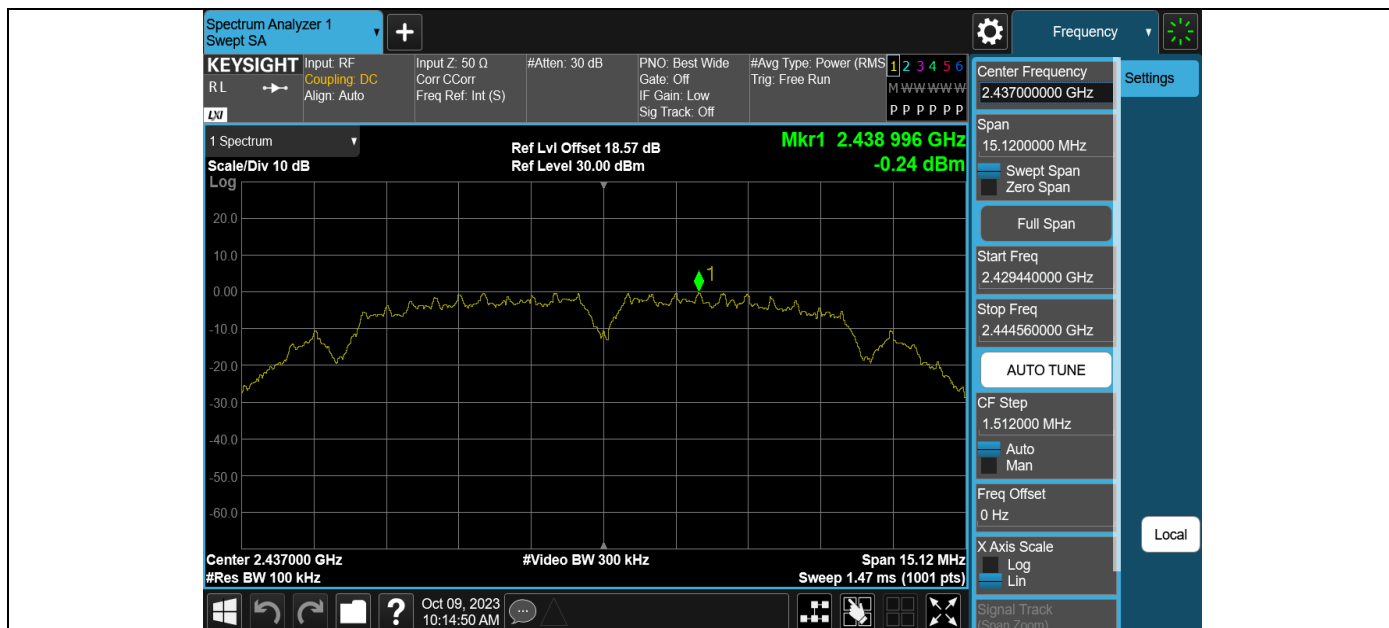
Appendix D: Reference level measurement

Test Result

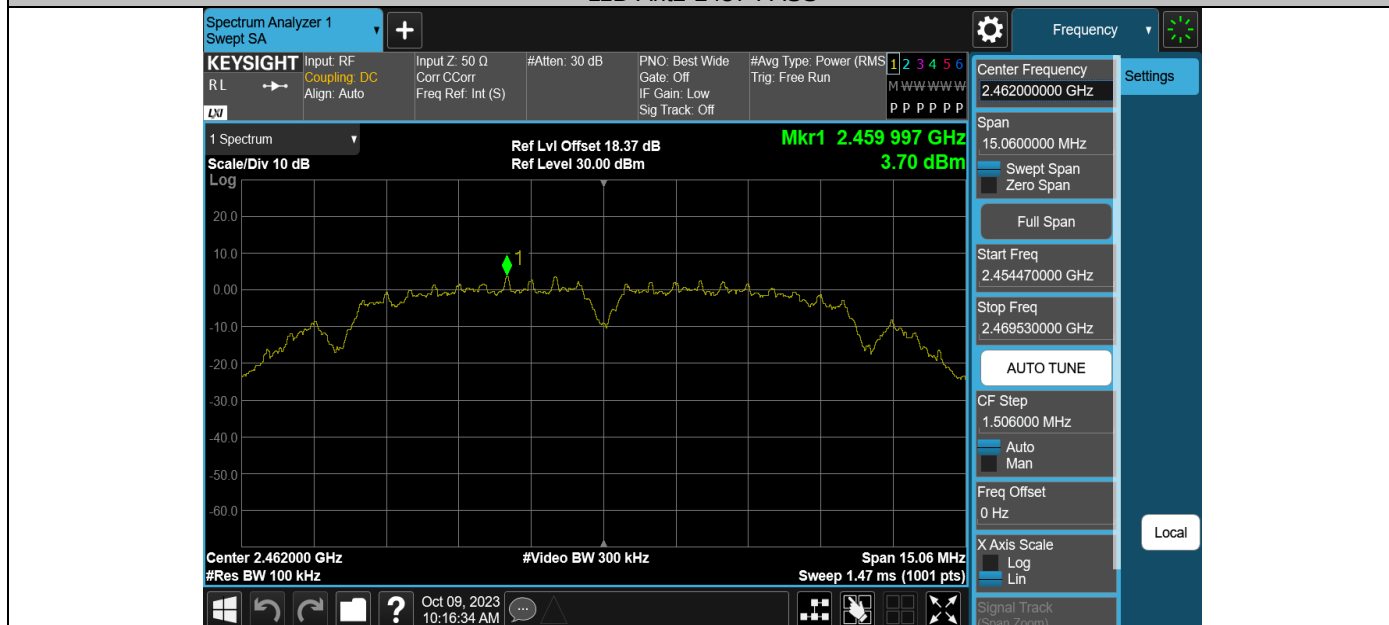
TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
11B	Ant1	2412	2409.99	2.54
11B	Ant2	2412	2414.00	-0.02
11B	Ant1	2437	2435.50	2.90
11B	Ant2	2437	2439.00	-0.24
11B	Ant1	2462	2460.00	3.70
11B	Ant2	2462	2462.50	0.45
11G	Ant1	2412	2419.53	1.33
11G	Ant2	2412	2413.25	-0.92
11G	Ant1	2437	2435.46	2.05
11G	Ant2	2437	2444.50	-0.42
11G	Ant1	2462	2454.53	1.71
11G	Ant2	2462	2469.49	0.01
11N20MIMO	Ant1	2412	2405.76	1.35
11N20MIMO	Ant2	2412	2419.50	-0.61
11N20MIMO	Ant1	2437	2435.51	2.13
11N20MIMO	Ant2	2437	2444.50	-0.91
11N20MIMO	Ant1	2462	2454.50	1.92
11N20MIMO	Ant2	2462	2469.50	-0.28
11N40MIMO	Ant1	2422	2429.55	1.24
11N40MIMO	Ant2	2422	2434.49	-0.59
11N40MIMO	Ant1	2437	2444.99	1.69
11N40MIMO	Ant2	2437	2446.11	-2.54
11N40MIMO	Ant1	2452	2465.03	-0.62
11N40MIMO	Ant2	2452	2461.51	-0.86

Test Graphs

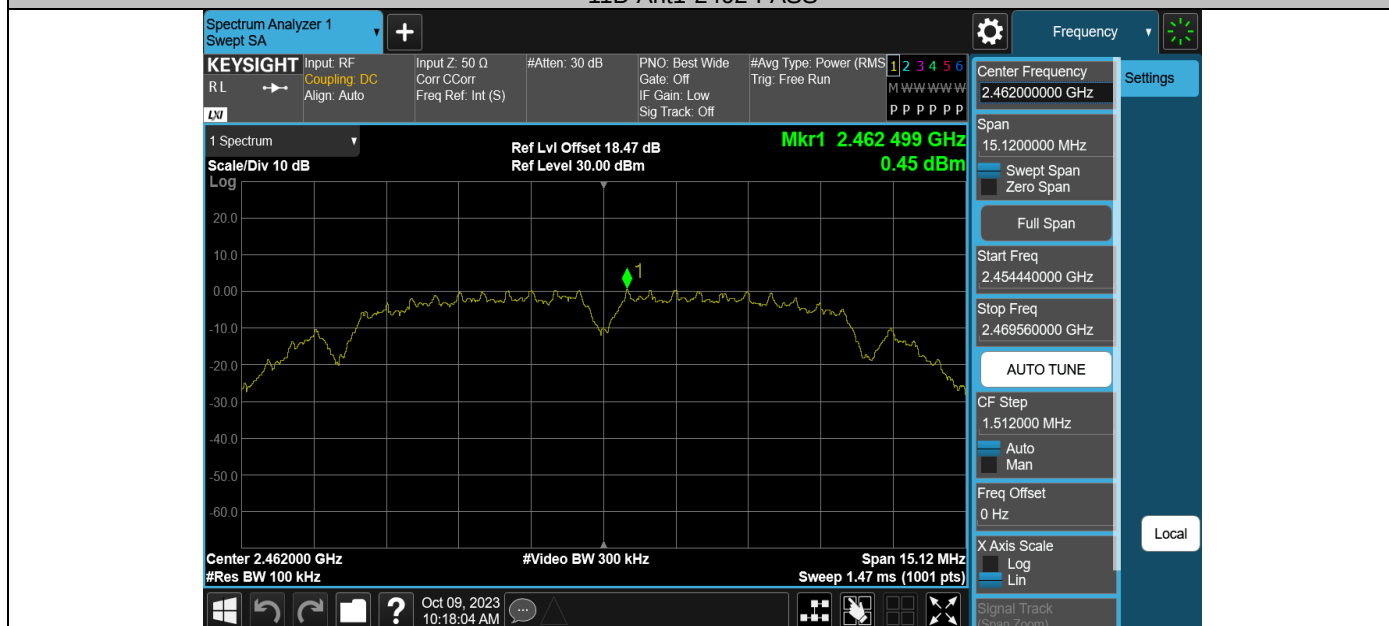




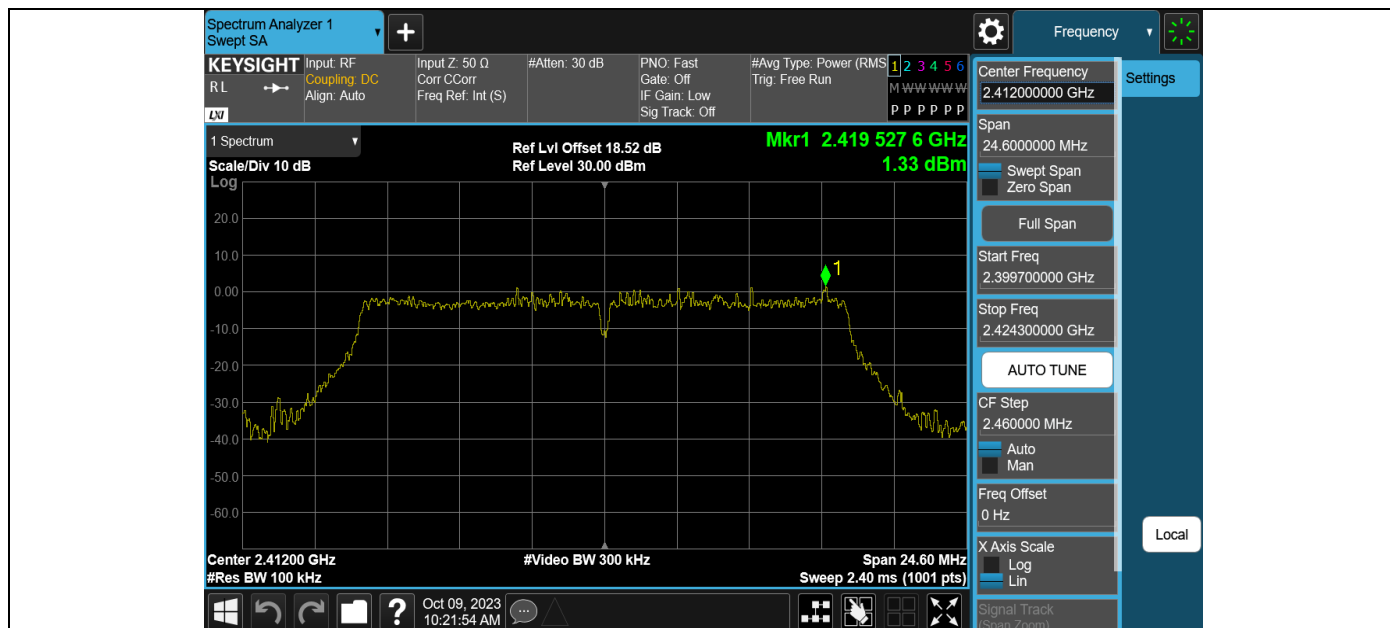
11B-Ant2-2437-PASS



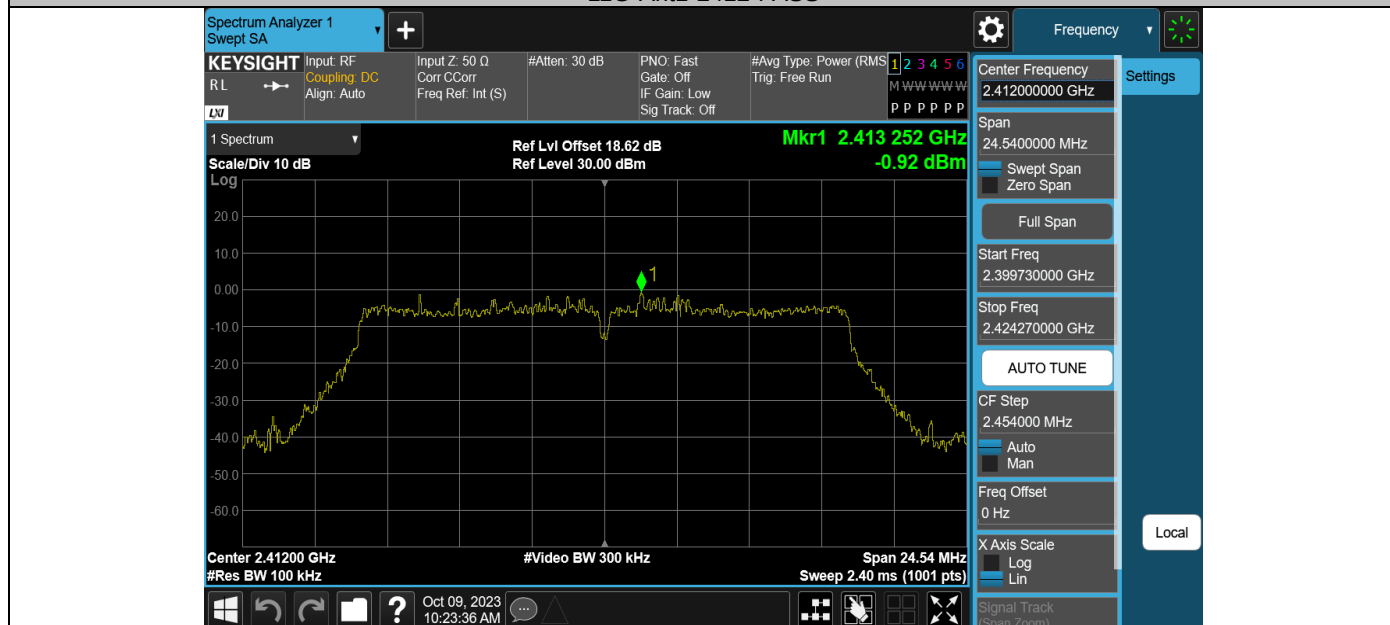
11B-Ant1-2462-PASS



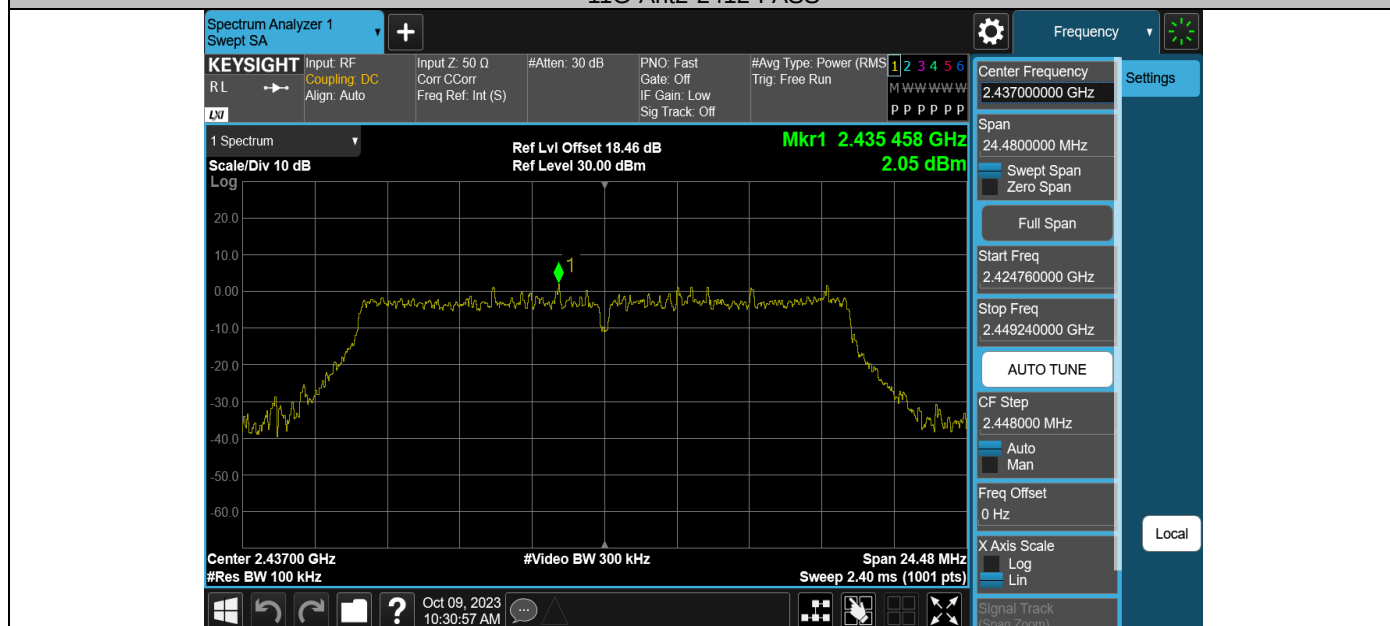
11B-Ant2-2462-PASS



11G-Ant1-2412-PASS

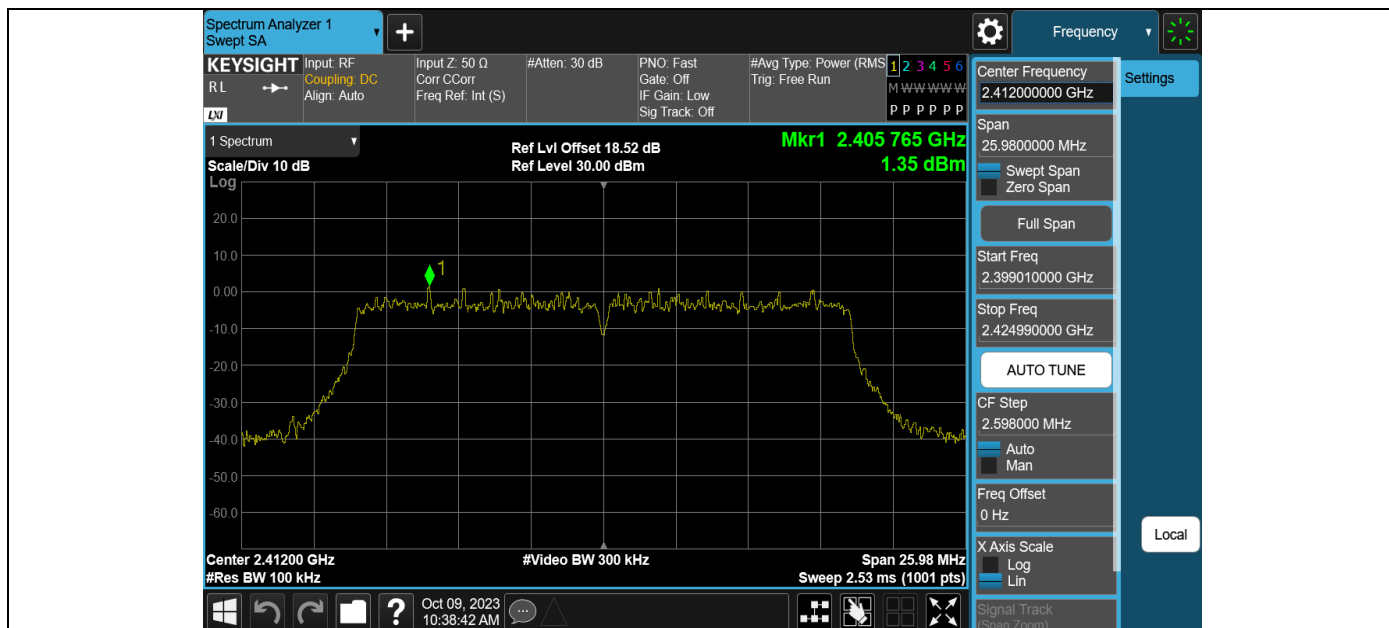


11G-Ant2-2412-PASS

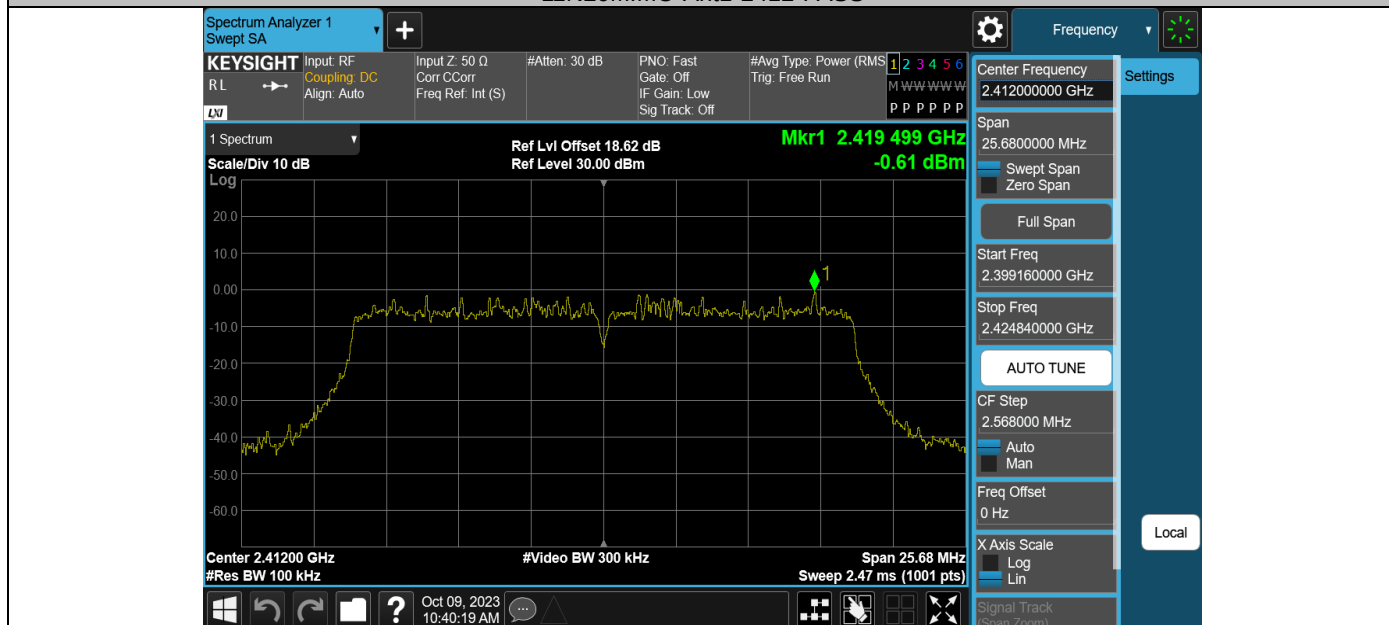


11G-Ant1-2437-PASS

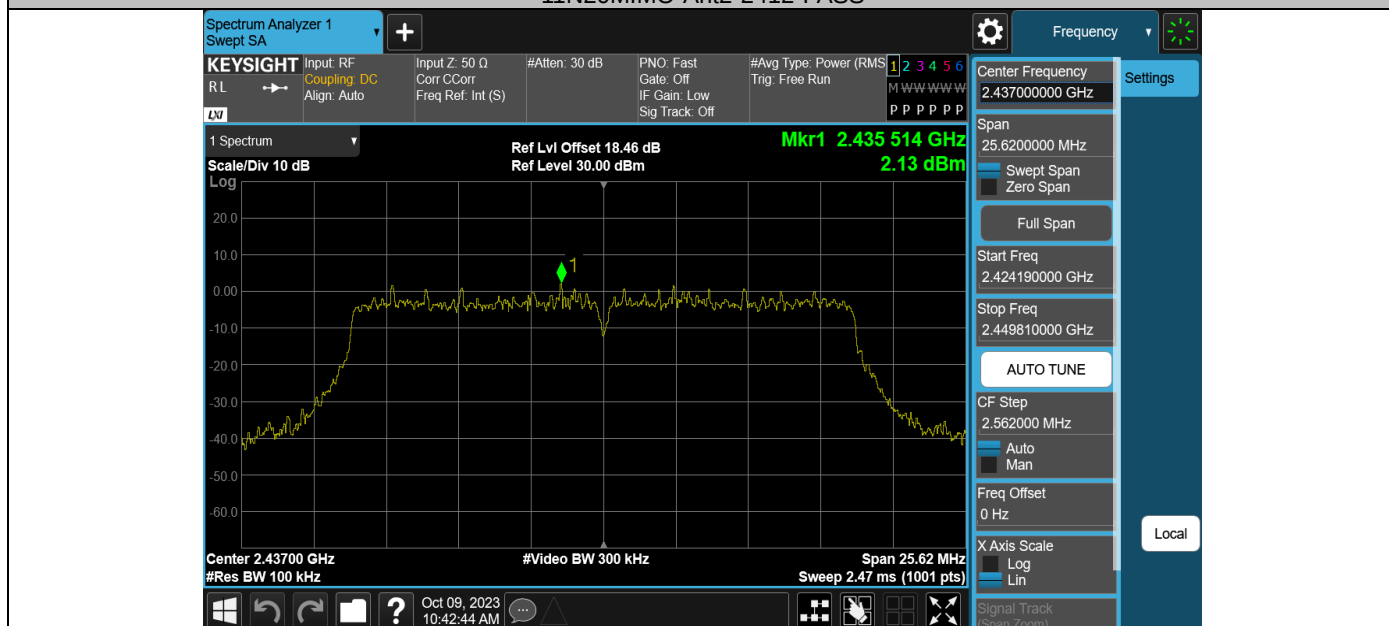




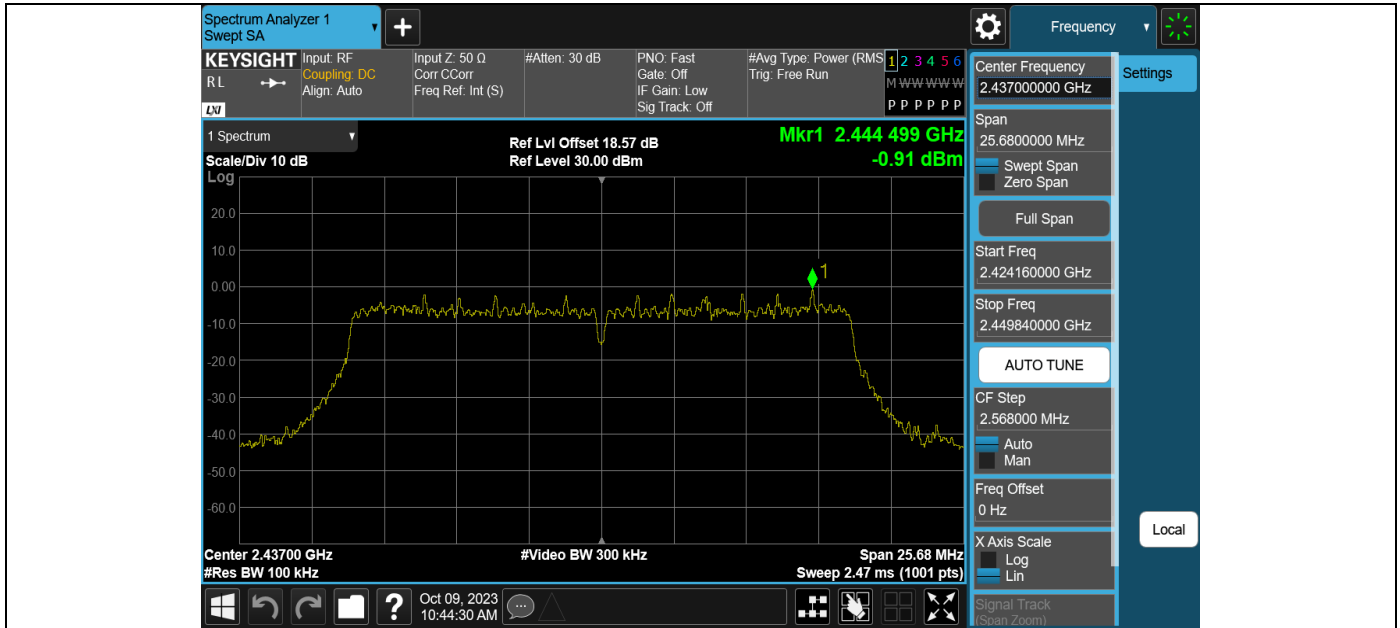
11N20MIMO-Ant1-2412-PASS



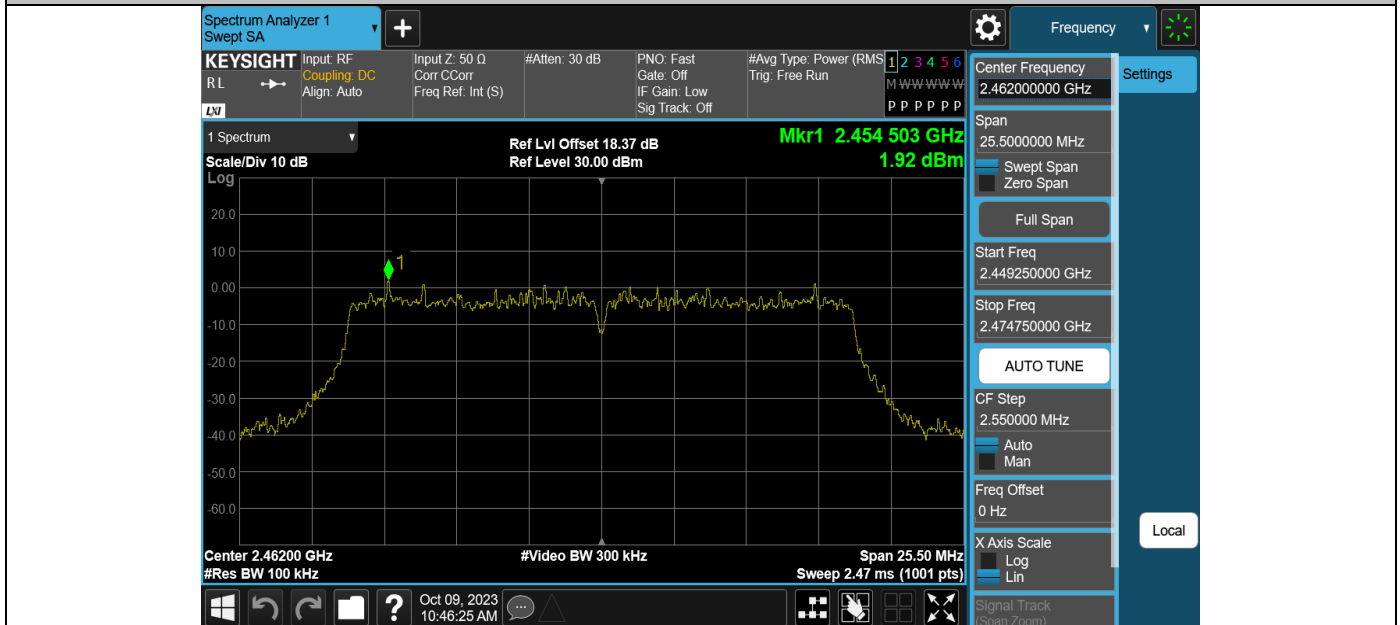
11N20MIMO-Ant2-2412-PASS



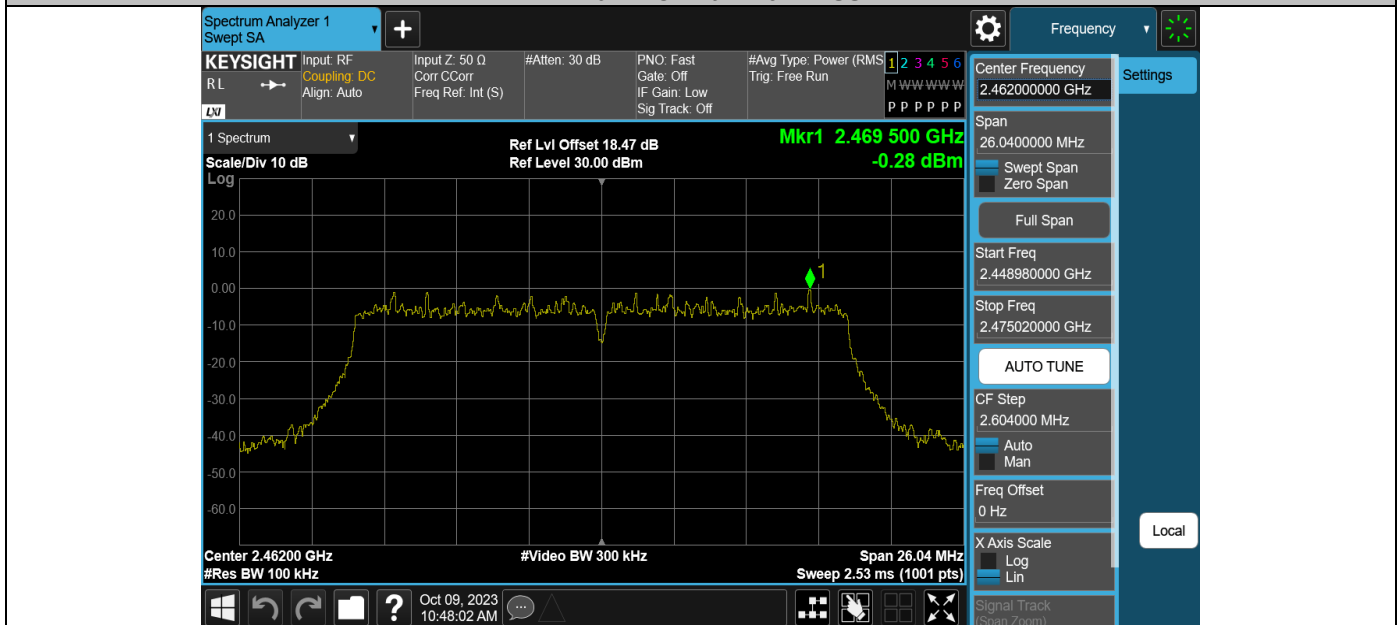
11N20MIMO-Ant1-2437-PASS



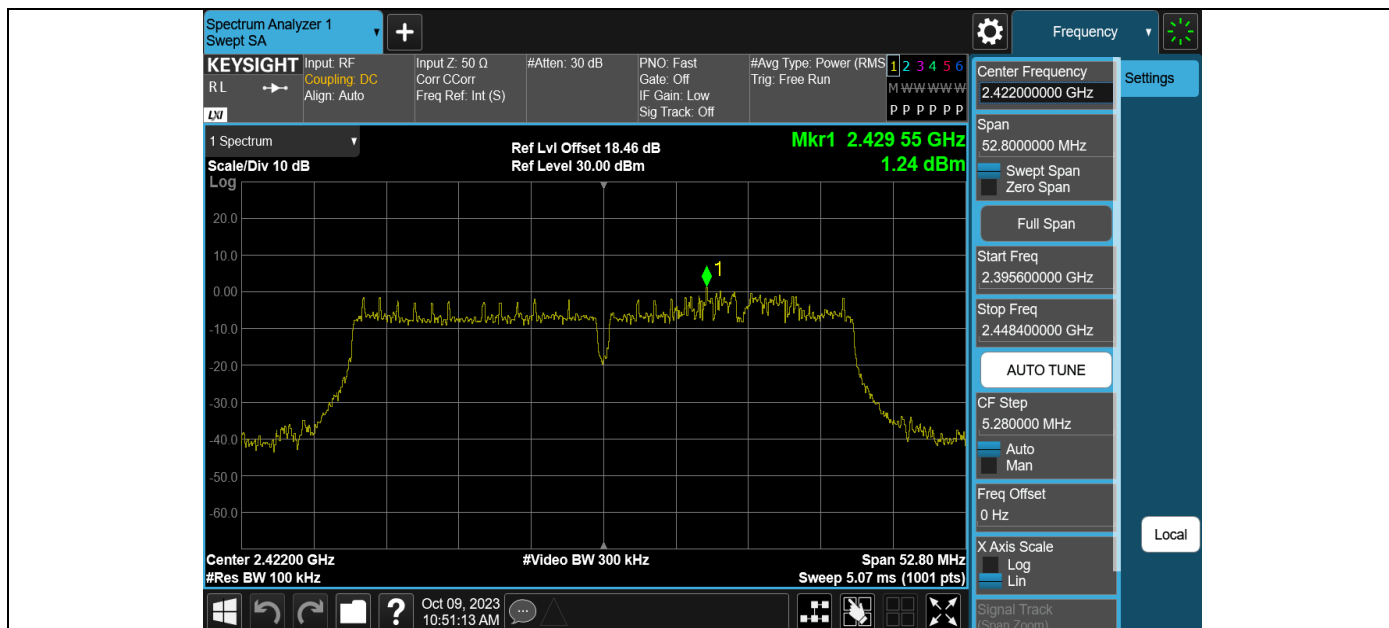
11N20MIMO-Ant2-2437-PASS



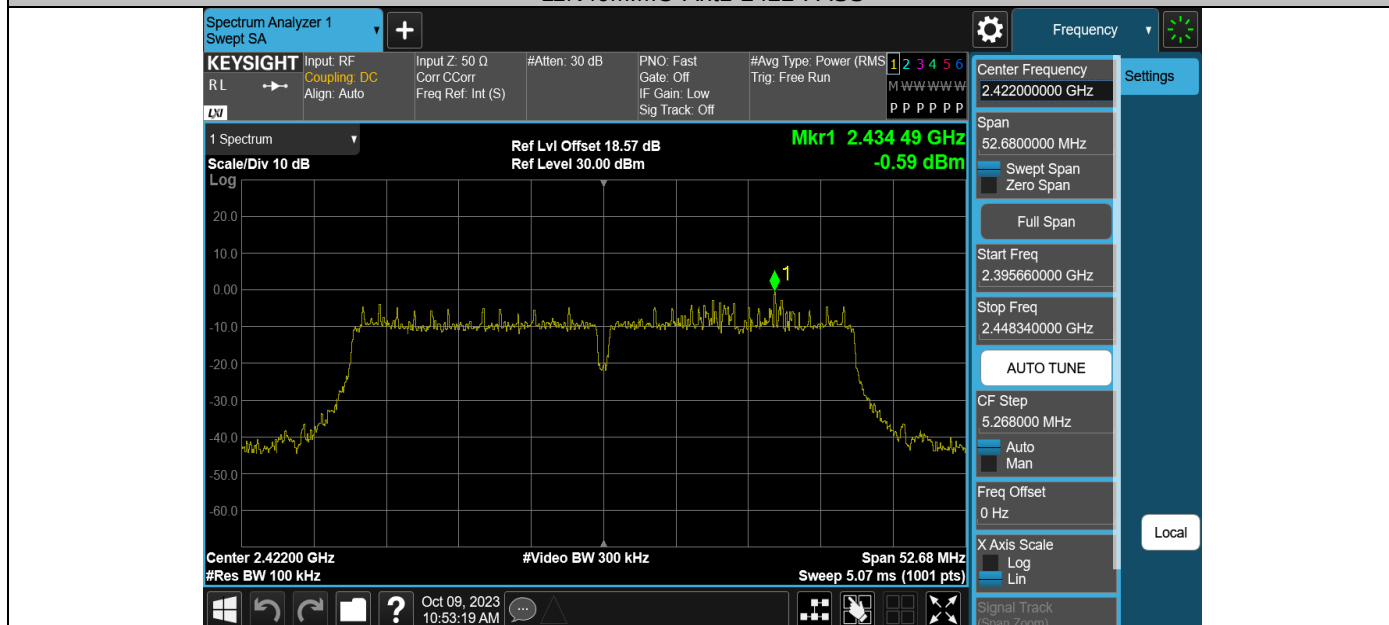
11N20MIMO-Ant1-2462-PASS



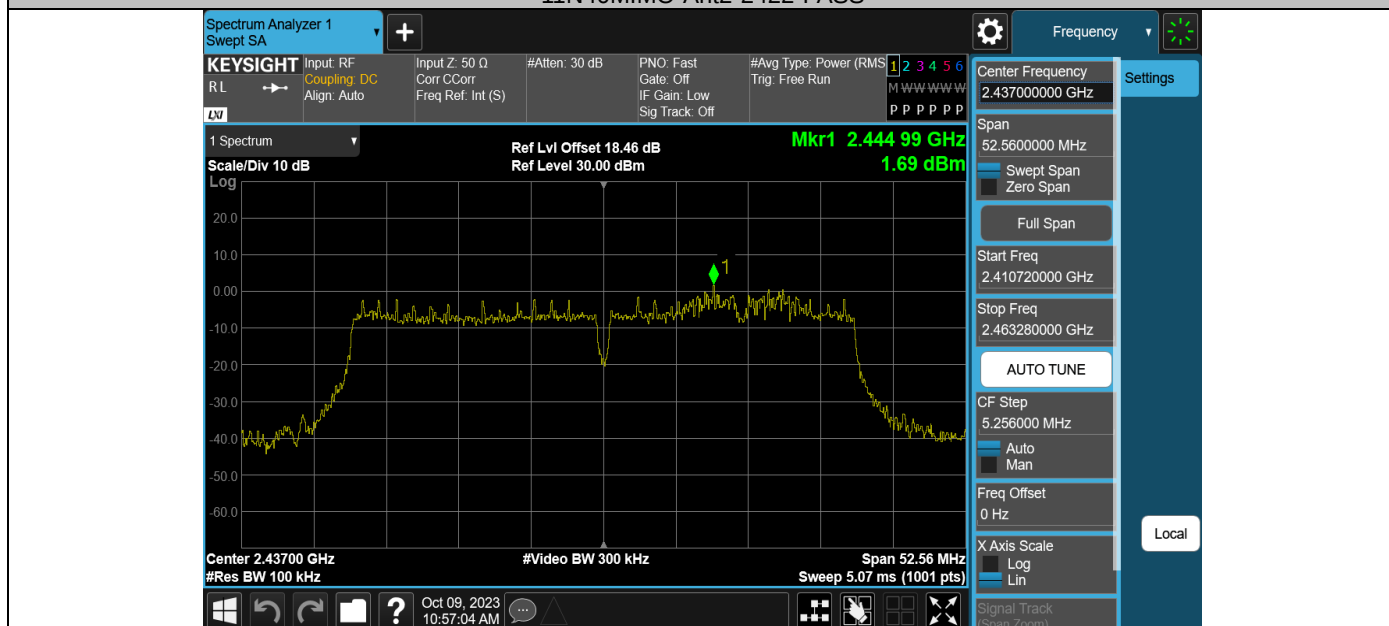
11N20MIMO-Ant2-2462-PASS



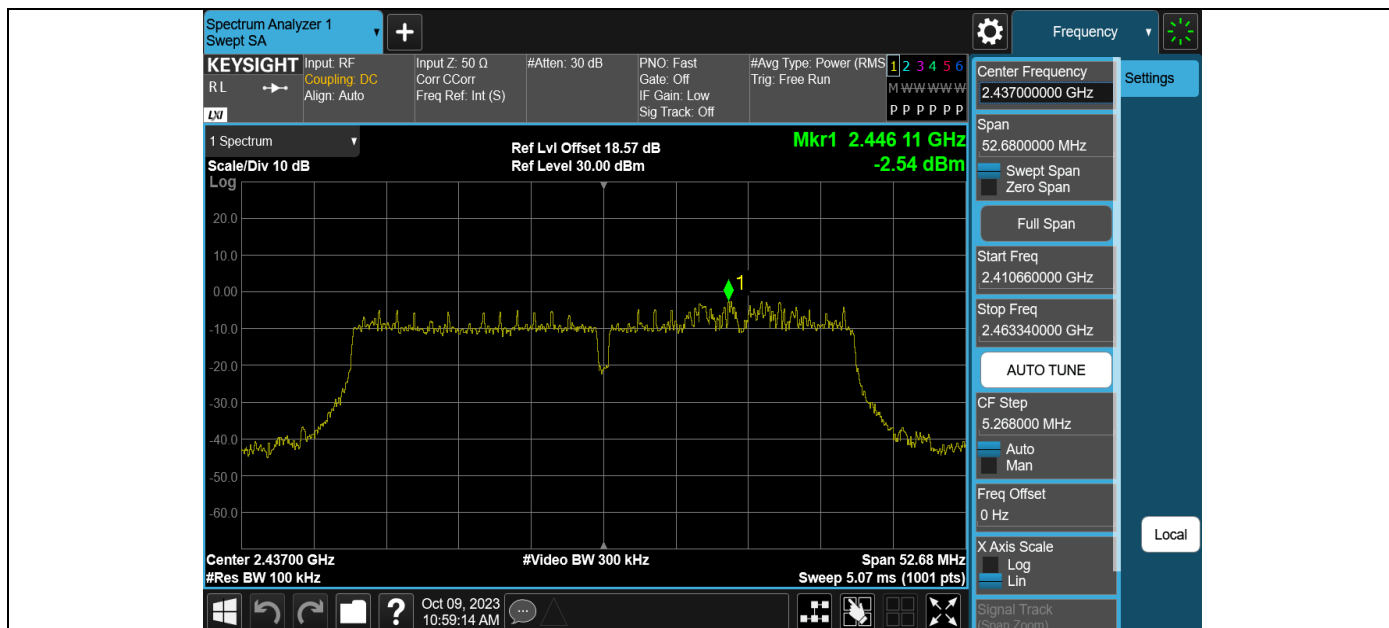
11N40MIMO-Ant1-2422-PASS



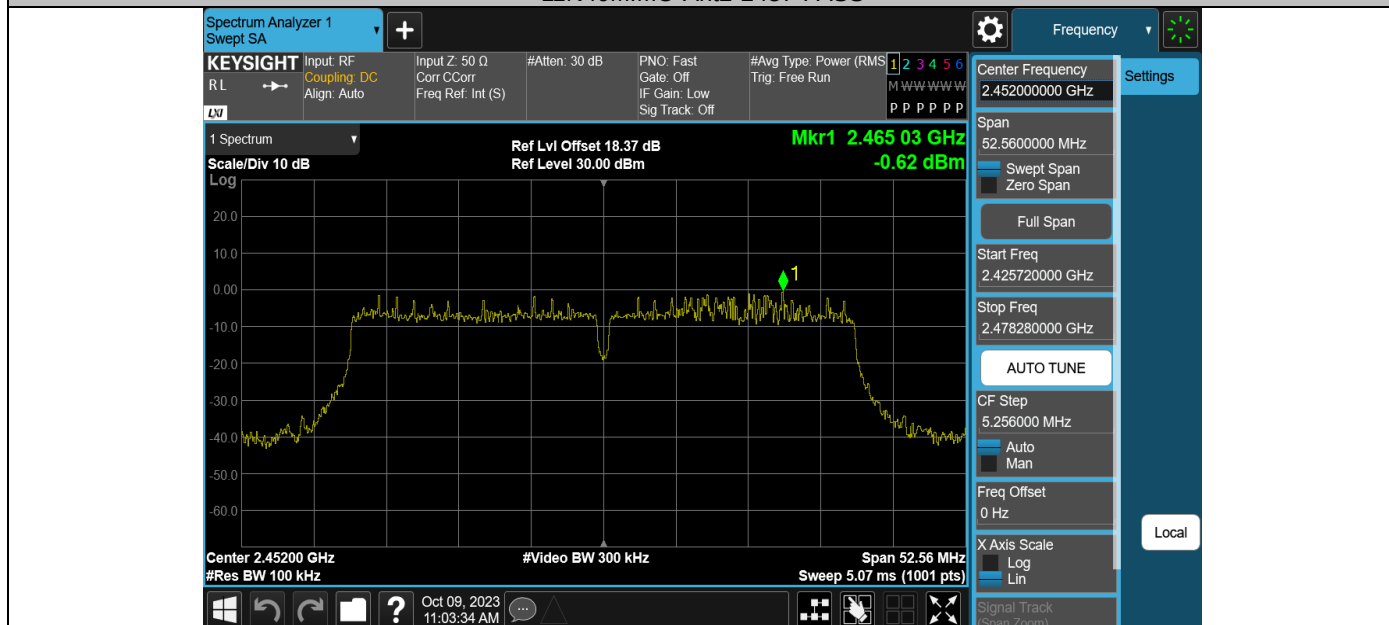
11N40MIMO-Ant2-2422-PASS



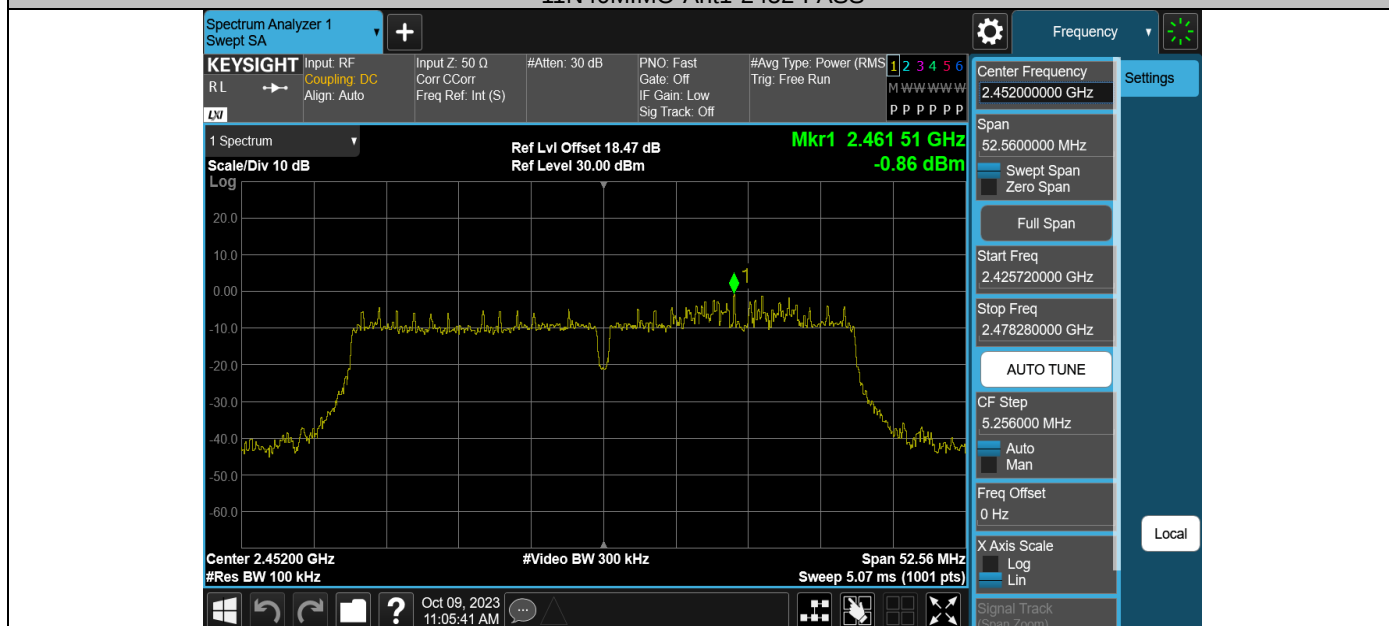
11N40MIMO-Ant1-2437-PASS



11N40MIMO-Ant2-2437-PASS



11N40MIMO-Ant1-2452-PASS



11N40MIMO-Ant2-2452-PASS

Appendix E: Band edge measurements

Test Result

Test Mode	Antenna	Ch Name	Frequency [MHz]	Ref Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	2.54	-40.16	≤ -17.46	PASS
11B	Ant2	Low	2412	-0.02	-40.62	≤ -20.02	PASS
11B	Ant1	High	2462	3.70	-40.78	≤ -16.3	PASS
11B	Ant2	High	2462	0.45	-39.24	≤ -19.55	PASS
11G	Ant1	Low	2412	1.33	-32.7	≤ -18.67	PASS
11G	Ant2	Low	2412	-0.92	-38.44	≤ -20.92	PASS
11G	Ant1	High	2462	1.71	-39.56	≤ -18.29	PASS
11G	Ant2	High	2462	0.01	-40.86	≤ -19.99	PASS
11N20MIMO	Ant1	Low	2412	1.35	-36.7	≤ -18.65	PASS
11N20MIMO	Ant2	Low	2412	-0.61	-39.69	≤ -20.61	PASS
11N20MIMO	Ant1	High	2462	1.92	-39.61	≤ -18.08	PASS
11N20MIMO	Ant2	High	2462	-0.28	-39.88	≤ -20.28	PASS
11N40MIMO	Ant1	Low	2422	1.24	-36.62	≤ -18.76	PASS
11N40MIMO	Ant2	Low	2422	-0.59	-39.43	≤ -20.59	PASS
11N40MIMO	Ant1	High	2452	-0.62	-38.32	≤ -20.62	PASS
11N40MIMO	Ant2	High	2452	-0.86	-40.71	≤ -20.86	PASS

Test Graphs

