

Appendix A: Test Results of 2.4GHz Wi-Fi

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Appendix A.1: Test Results of 6dB Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.160	2407.960	2416.120	0.5	PASS
	Ant2	2412	8.200	2407.920	2416.120	0.5	PASS
	Ant1	2437	8.160	2432.920	2441.080	0.5	PASS
	Ant2	2437	8.160	2432.920	2441.080	0.5	PASS
	Ant1	2462	8.160	2457.920	2466.080	0.5	PASS
	Ant2	2462	8.160	2457.920	2466.080	0.5	PASS
11G	Ant1	2412	16.200	2403.920	2420.120	0.5	PASS
	Ant2	2412	16.240	2403.880	2420.120	0.5	PASS
	Ant1	2437	16.200	2428.840	2445.040	0.5	PASS
	Ant2	2437	16.320	2428.800	2445.120	0.5	PASS
	Ant1	2462	16.240	2453.880	2470.120	0.5	PASS
	Ant2	2462	16.160	2453.960	2470.120	0.5	PASS
11N20MIMO	Ant1	2412	17.440	2403.320	2420.760	0.5	PASS
	Ant2	2412	17.560	2403.240	2420.800	0.5	PASS
	Ant1	2437	17.400	2428.280	2445.680	0.5	PASS
	Ant2	2437	17.520	2428.160	2445.680	0.5	PASS
	Ant1	2462	17.520	2453.240	2470.760	0.5	PASS
	Ant2	2462	17.360	2453.320	2470.680	0.5	PASS
11N40MIMO	Ant1	2422	35.280	2404.480	2439.760	0.5	PASS
	Ant2	2422	32.000	2405.520	2437.520	0.5	PASS
	Ant1	2437	35.760	2419.160	2454.920	0.5	PASS
	Ant2	2437	34.800	2419.240	2454.040	0.5	PASS
	Ant1	2452	35.280	2434.240	2469.520	0.5	PASS
	Ant2	2452	35.440	2434.320	2469.760	0.5	PASS
11AX20MIMO	Ant1	2412	18.760	2402.520	2421.280	0.5	PASS
	Ant2	2412	18.760	2402.560	2421.320	0.5	PASS
	Ant1	2437	18.840	2427.560	2446.400	0.5	PASS
	Ant2	2437	18.680	2427.560	2446.240	0.5	PASS
	Ant1	2462	17.760	2453.080	2470.840	0.5	PASS
	Ant2	2462	18.560	2452.760	2471.320	0.5	PASS
11AX40MIMO	Ant1	2422	36.560	2403.840	2440.400	0.5	PASS
	Ant2	2422	36.720	2403.920	2440.640	0.5	PASS
	Ant1	2437	36.880	2418.600	2455.480	0.5	PASS
	Ant2	2437	37.040	2418.200	2455.240	0.5	PASS
	Ant1	2452	37.200	2433.520	2470.720	0.5	PASS
	Ant2	2452	36.960	2433.440	2470.400	0.5	PASS

Test Graphs

11B Ant1 2412



11B Ant2 2412



11B Ant1 2437



11B_Ant2_2437



11B_Ant1_2462



11B_Ant2_2462







11N20MIMO Ant1 2412



11N20MIMO Ant2 2412



11N20MIMO Ant1 2437



11N20MIMO_Ant2_2437



11N20MIMO_Ant1_2462



11N20MIMO_Ant2_2462





11N40MIMO Ant2 2437



11N40MIMO Ant1 2452



11N40MIMO Ant2 2452





11AX20MIMO_Ant2_2462



11AX40MIMO_Ant1_2422



11AX40MIMO_Ant2_2422



11AX40MIMO_Ant1_2437



11AX40MIMO_Ant2_2437



11AX40MIMO_Ant1_2452



11AX40MIMO_Ant2_2452



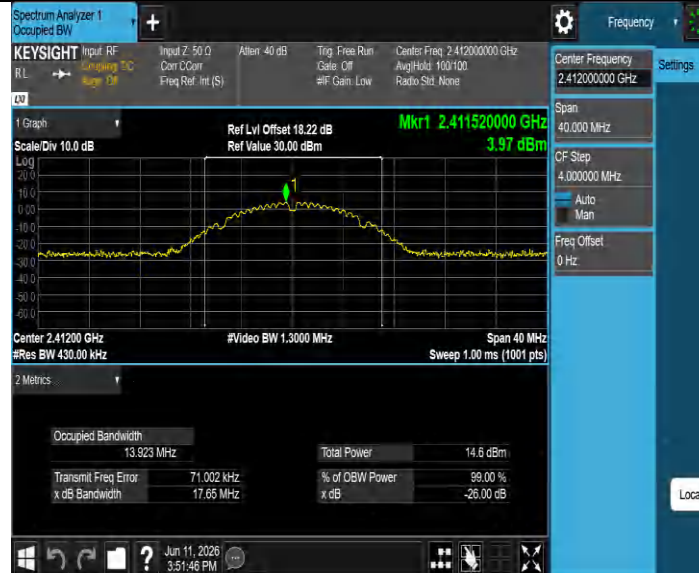
Appendix A.2: Test Results of 99% Bandwidth

Test Result

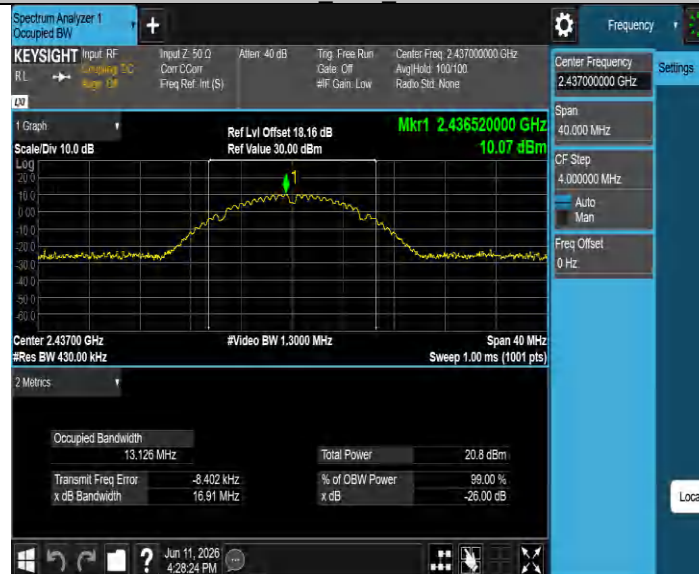
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.923	2405.1095	2419.0325	---	PASS
		2437	13.126	2430.4286	2443.5546	---	PASS
		2462	13.120	2455.3958	2468.5158	---	PASS
11G	Ant1	2412	17.600	2403.2389	2420.8389	---	PASS
		2437	17.589	2428.2421	2445.8311	---	PASS
		2462	17.793	2452.9975	2470.7905	---	PASS
11N20MIMO	Ant1	2412	18.721	2402.7673	2421.4883	---	PASS
		2437	18.730	2427.5938	2446.3238	---	PASS
		2462	18.846	2452.4953	2471.3413	---	PASS
11N40MIMO	Ant1	2422	36.319	2403.7605	2440.0795	---	PASS
		2437	36.372	2418.8484	2455.2204	---	PASS
		2452	36.309	2433.7985	2470.1075	---	PASS
11AX20MIMO	Ant1	2412	19.322	2402.3290	2421.6510	---	PASS
		2437	18.996	2427.4925	2446.4885	---	PASS
		2462	18.989	2452.5068	2471.4958	---	PASS
11AX40MIMO	Ant1	2422	37.853	2403.0564	2440.9094	---	PASS
		2437	37.724	2418.1365	2455.8605	---	PASS
		2452	37.737	2433.1479	2470.8849	---	PASS

Test Graphs

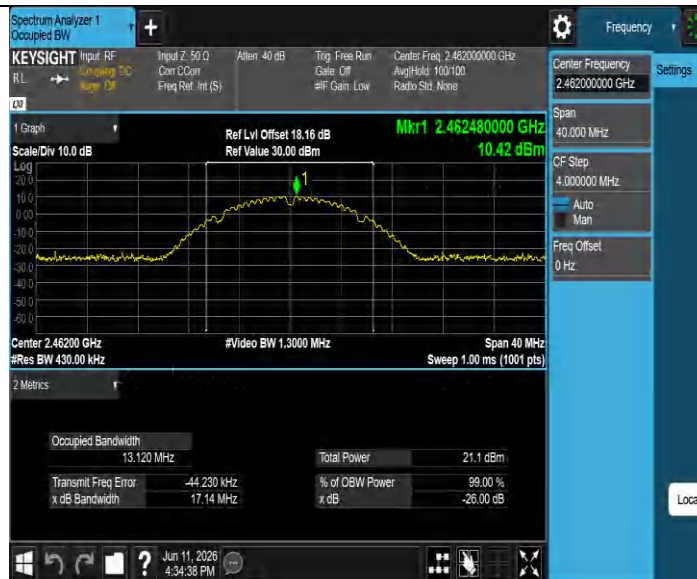
11B Ant1 2412



11B Ant1 2437



11B Ant1 2462



11G_Ant1_2412



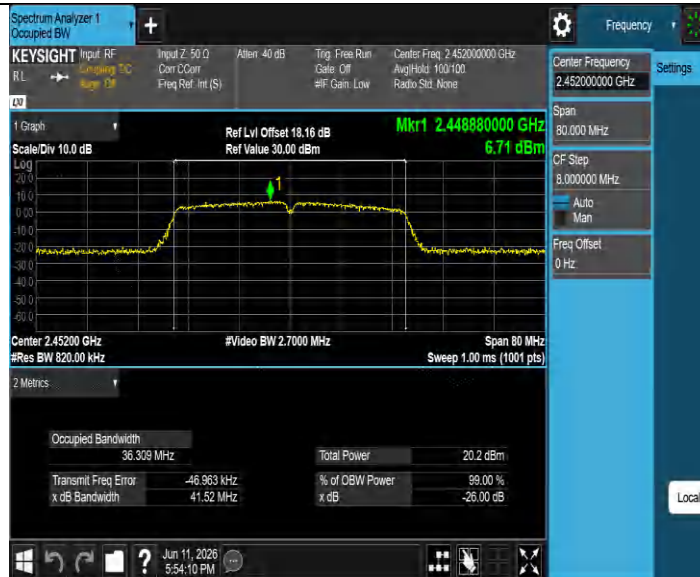
11G_Ant1_2437



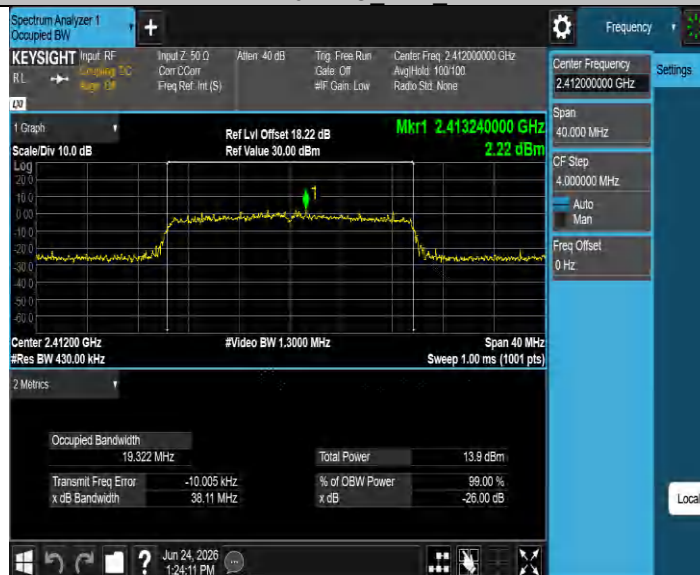
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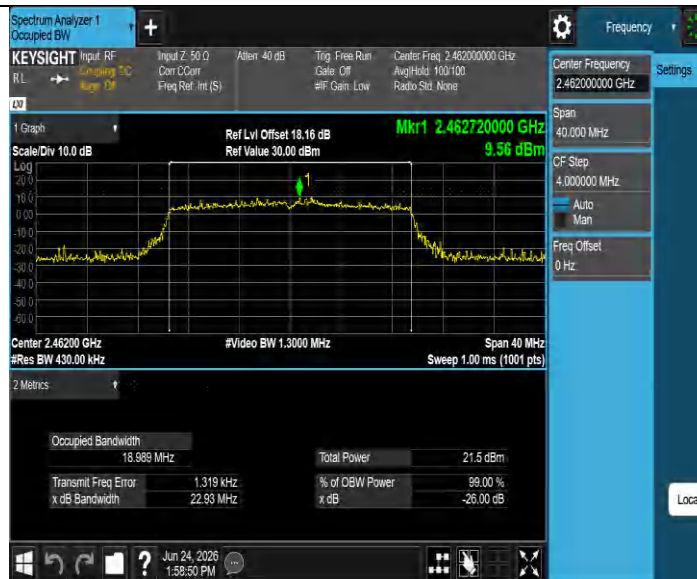
11AX20MIMO_Ant1_2412



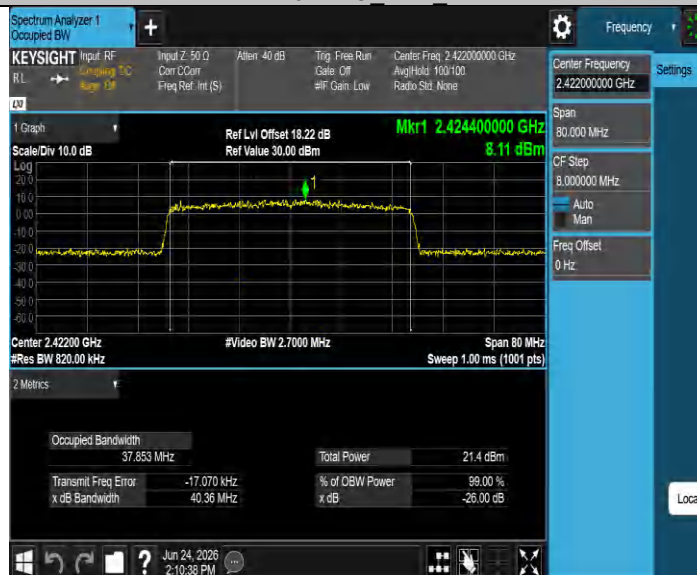
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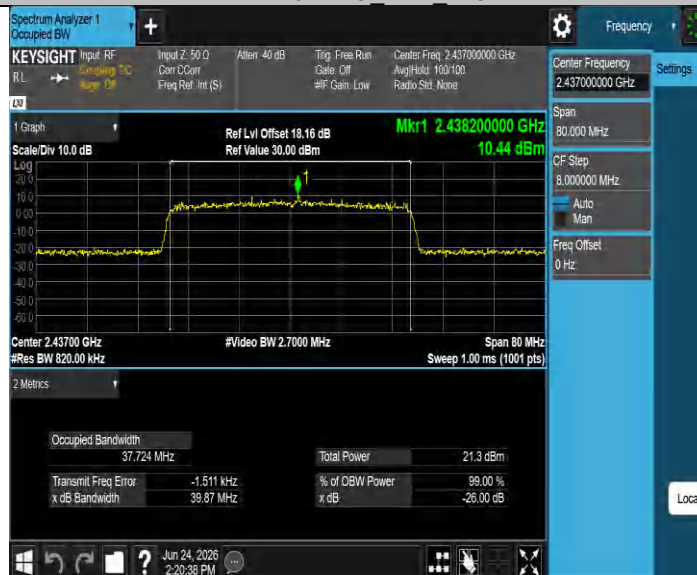
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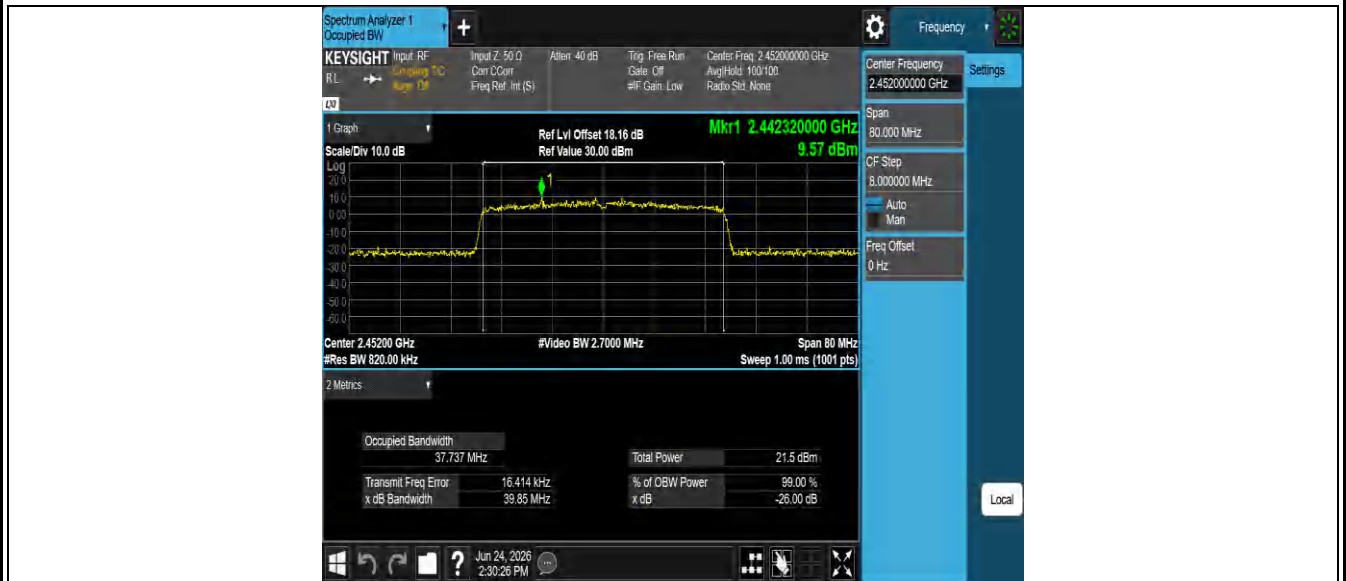
11AX40MIMO_Ant1_2422



11AX40MIMO_Ant1_2437



11AX40MIMO_Ant1_2452



Appendix A.3: Test Results of Conducted Power Spectral Density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-2.36	≤8.00	PASS
	Ant2	2412	-3.34	≤8.00	PASS
	Ant1	2437	-3.32	≤8.00	PASS
	Ant2	2437	-3.27	≤8.00	PASS
	Ant1	2462	-3.38	≤8.00	PASS
	Ant2	2462	-3.63	≤8.00	PASS
11G	Ant1	2412	-8.57	≤8.00	PASS
	Ant2	2412	-8.05	≤8.00	PASS
	Ant1	2437	-8.94	≤8.00	PASS
	Ant2	2437	-8.76	≤8.00	PASS
	Ant1	2462	-8.14	≤8.00	PASS
	Ant2	2462	-8.13	≤8.00	PASS
11N20MIMO	Ant1	2412	-10.06	≤8.00	PASS
	Ant2	2412	-8.68	≤8.00	PASS
	total	2412	-6.31	≤8.00	PASS
	Ant1	2437	-10.50	≤8.00	PASS
	Ant2	2437	-9.87	≤8.00	PASS
	total	2437	-7.16	≤8.00	PASS
	Ant1	2462	-9.41	≤8.00	PASS
	Ant2	2462	-9.41	≤8.00	PASS
11N40MIMO	Ant1	2422	-12.67	≤8.00	PASS
	Ant2	2422	-12.43	≤8.00	PASS
	total	2422	-9.54	≤8.00	PASS
	Ant1	2437	-13.60	≤8.00	PASS
	Ant2	2437	-13.62	≤8.00	PASS
	total	2437	-10.60	≤8.00	PASS
	Ant1	2452	-13.76	≤8.00	PASS
	Ant2	2452	-13.51	≤8.00	PASS
11AX20MIMO	Ant1	2412	-9.78	≤8.00	PASS
	Ant2	2412	-10.89	≤8.00	PASS
	total	2412	-7.29	≤8.00	PASS
	Ant1	2437	-10.96	≤8.00	PASS
	Ant2	2437	-11.17	≤8.00	PASS
	total	2437	-8.05	≤8.00	PASS
	Ant1	2462	-10.17	≤8.00	PASS
	Ant2	2462	-10.44	≤8.00	PASS
11AX40MIMO	Ant1	2422	-13.31	≤8.00	PASS
	Ant2	2422	-13.42	≤8.00	PASS
	total	2422	-10.35	≤8.00	PASS
	Ant1	2437	-13.33	≤8.00	PASS
	Ant2	2437	-14.76	≤8.00	PASS
	total	2437	-10.98	≤8.00	PASS
	Ant1	2452	-13.74	≤8.00	PASS
	Ant2	2452	-13.99	≤8.00	PASS
	total	2452	-10.85	≤8.00	PASS

Test Graphs

11B Ant1 2412





11B_Ant2_2437



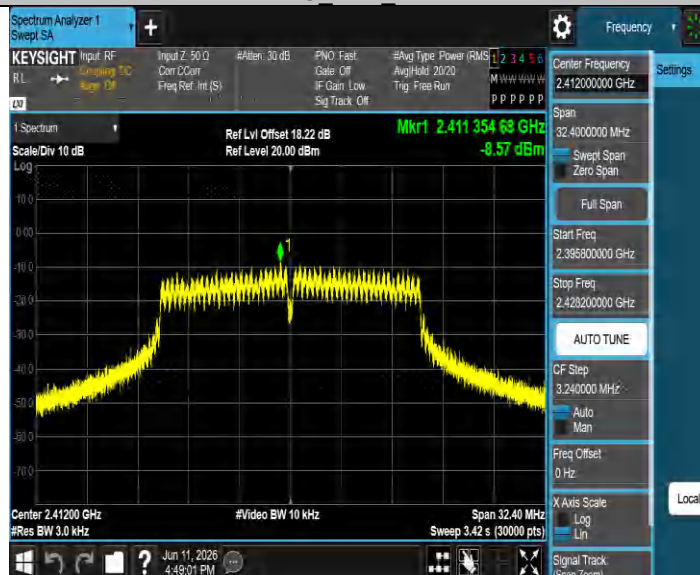
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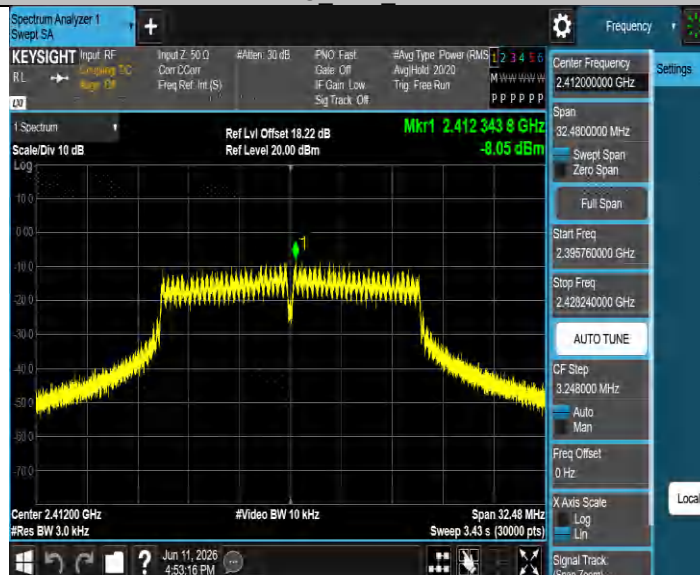
11B_Ant2_2462



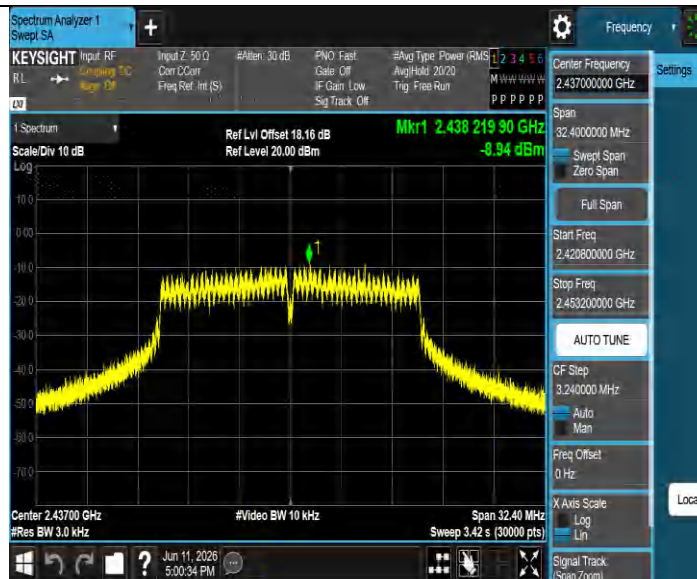
11G_Ant1_2412

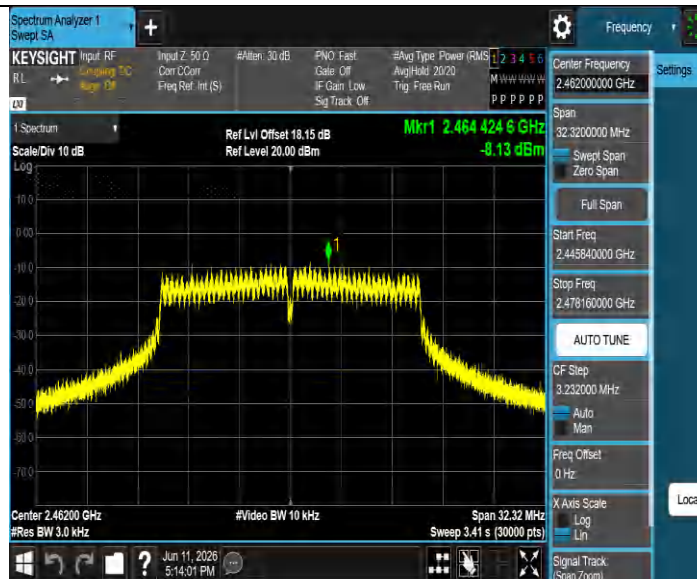


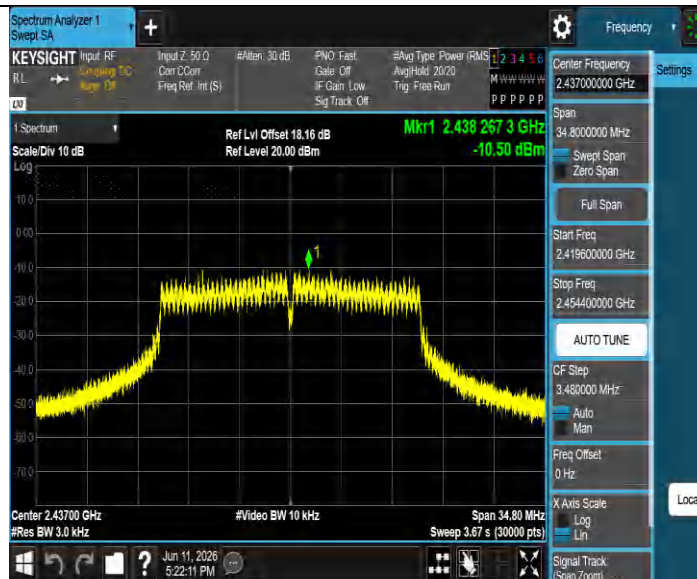
11G_Ant2_2412



11G_Ant1_2437







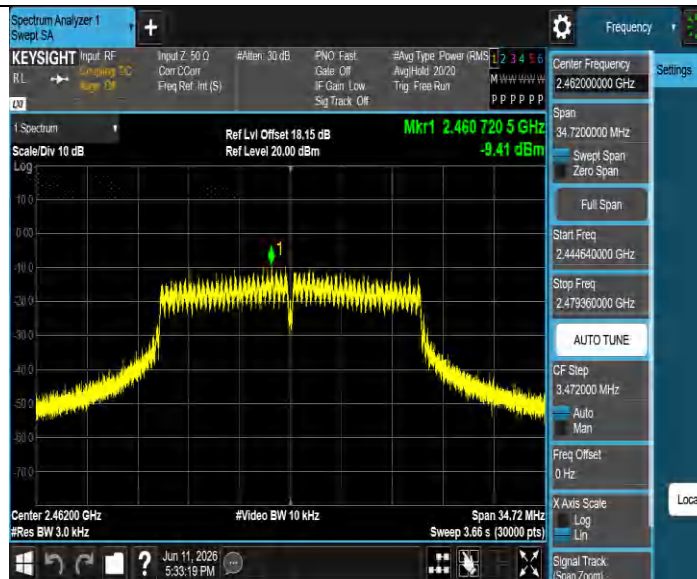
11N20MIMO_Ant2_2437



11N20MIMO_Ant1_2462



11N20MIMO_Ant2_2462



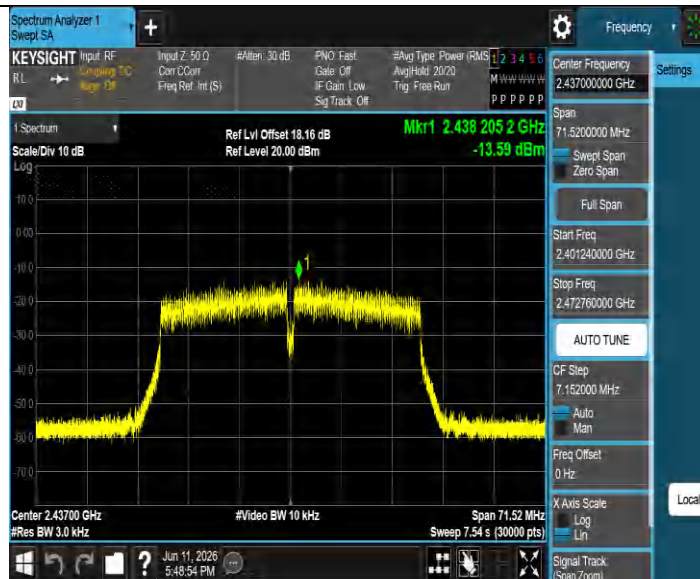
11N40MIMO_Ant1_2422



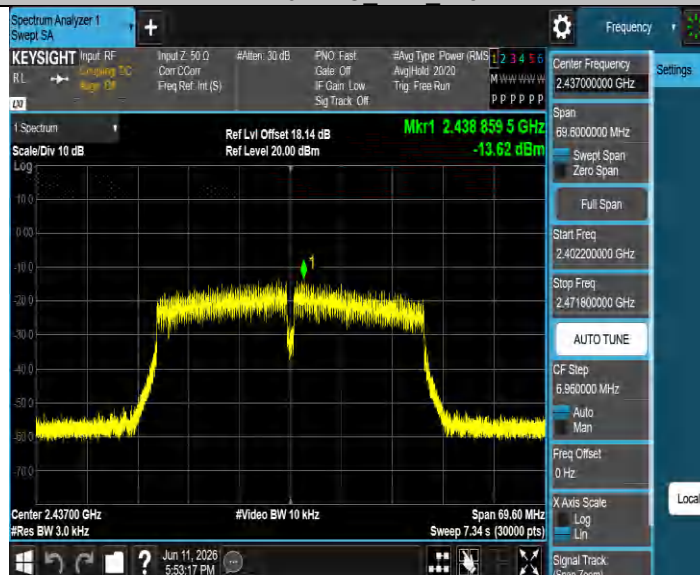
11N40MIMO_Ant2_2422



11N40MIMO_Ant1_2437



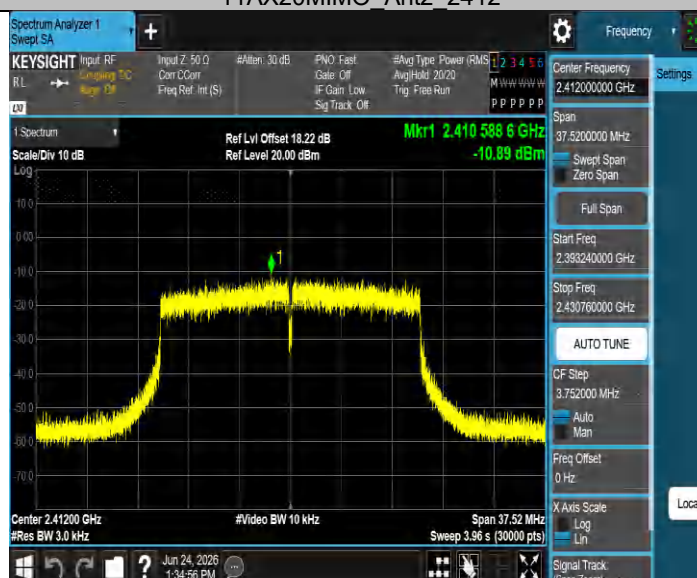
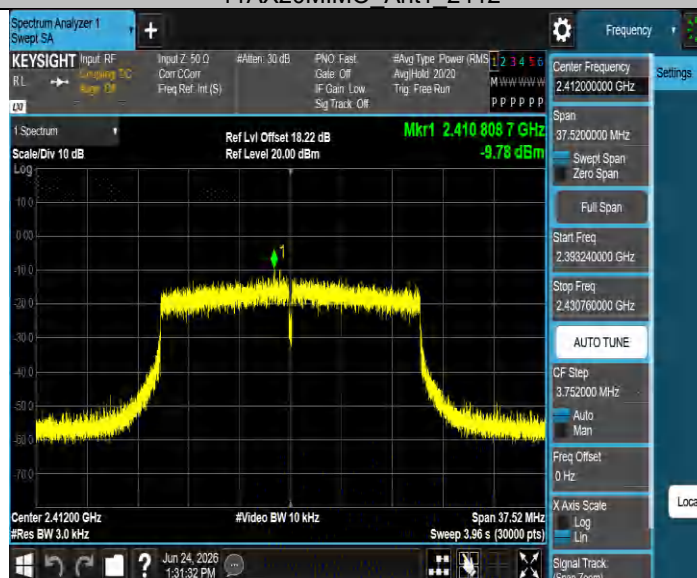
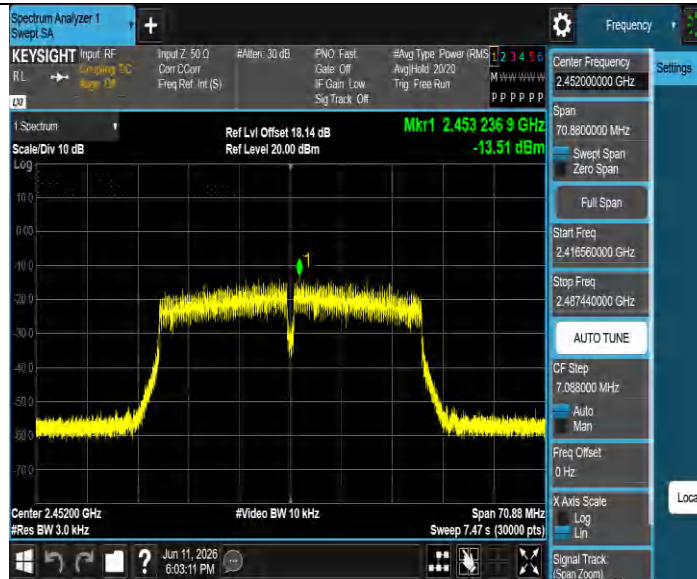
11N40MIMO_Ant2_2437

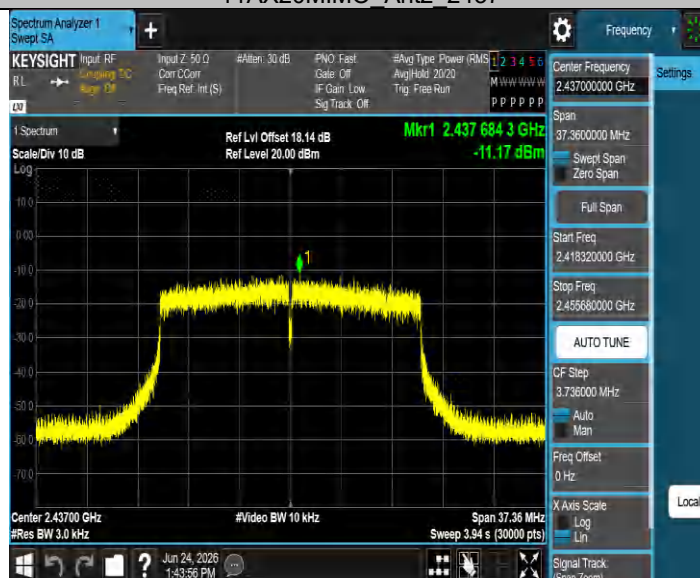
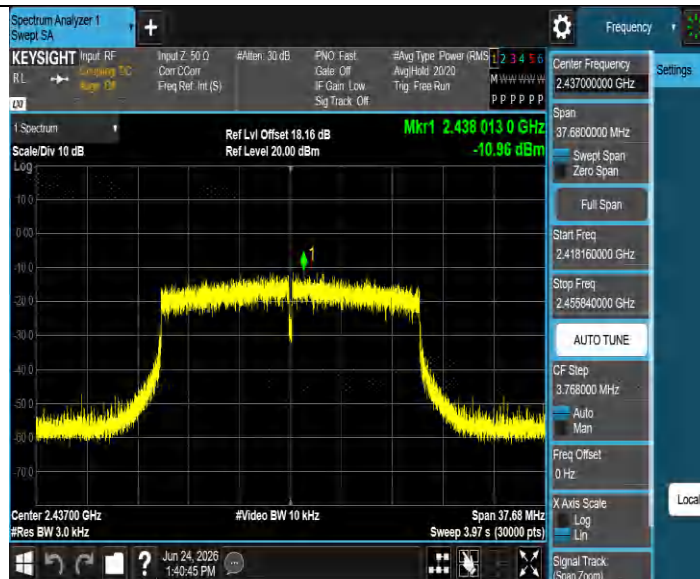


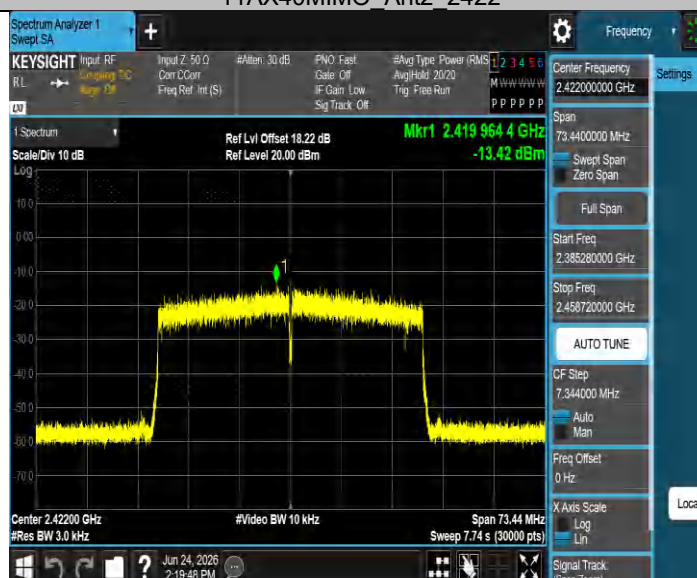
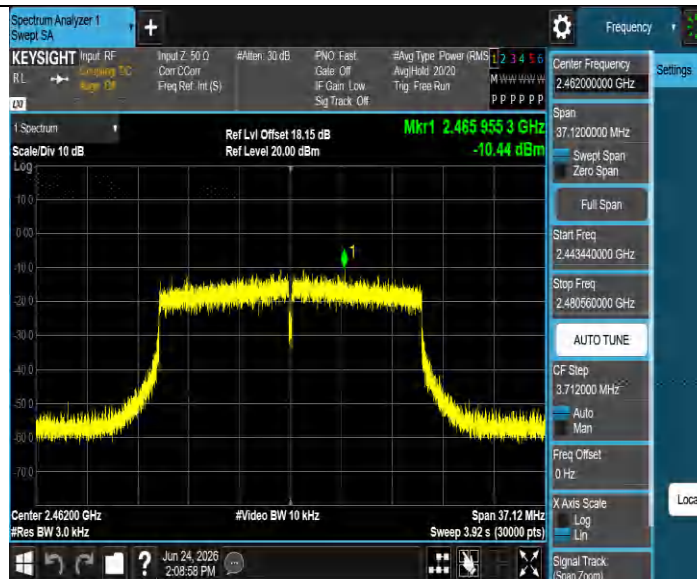
11N40MIMO_Ant1_2452



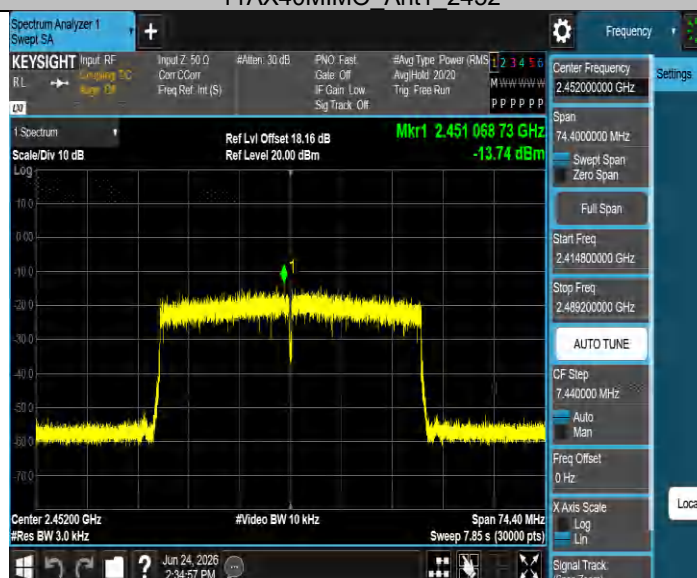
11N40MIMO_Ant2_2452

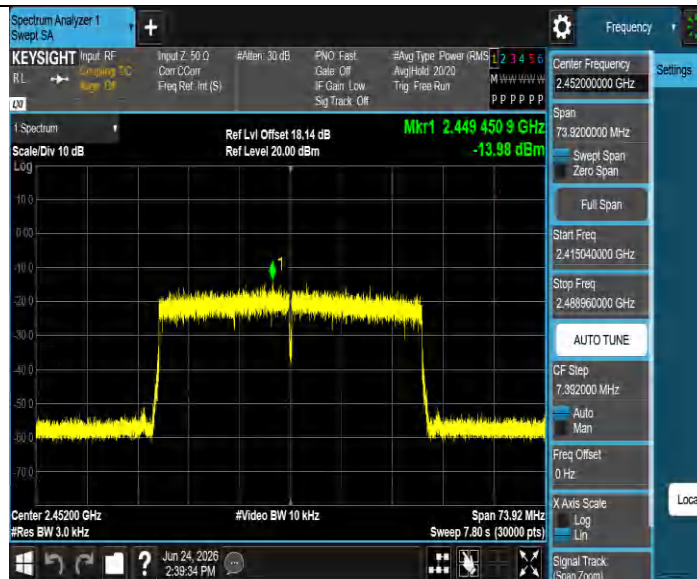






11AX40MIMO_Ant1_2437





Appendix A.4: Test Results of Band Edge Measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	9.50	-35.84	≤-10.5	PASS
		High	2462	9.20	-37.87	≤-10.8	PASS
11G	Ant1	Low	2412	4.51	-25.99	≤-15.49	PASS
		High	2462	5.14	-36.55	≤-14.86	PASS
11N20MIMO	Ant1	Low	2412	3.26	-26.8	≤-16.74	PASS
		High	2462	3.94	-37.7	≤-16.06	PASS
11N40MIMO	Ant1	Low	2422	0.55	-35.56	≤-19.45	PASS
		High	2452	0.50	-37.52	≤-19.5	PASS
11AX20MIMO	Ant1	Low	2412	3.14	-26.85	≤-16.86	PASS
		High	2462	4.16	-37.85	≤-15.84	PASS
11AX40MIMO	Ant1	Low	2422	0.07	-37.32	≤-19.93	PASS
		High	2452	0.34	-37.94	≤-19.66	PASS

Test Graphs

11B Ant1 Low 2412



11B Ant1 High 2462



11G Ant1 Low 2412









Appendix A.5: Test Results of Conducted Spurious Emissions

Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	8.04	8.04	---	PASS
			30~1000	8.04	-51.52	≤-11.96	PASS
			1000~26500	8.04	-38.68	≤-11.96	PASS
		2437	Reference	9.69	9.69	---	PASS
			30~1000	9.69	-51.19	≤-10.31	PASS
			1000~26500	9.69	-38.92	≤-10.31	PASS
		2462	Reference	9.75	9.75	---	PASS
			30~1000	9.75	-51.47	≤-10.25	PASS
			1000~26500	9.75	-38.57	≤-10.25	PASS
11G	Ant1	2412	Reference	1.49	1.49	---	PASS
			30~1000	1.49	-51.92	≤-18.51	PASS
			1000~26500	1.49	-50.61	≤-18.51	PASS
		2437	Reference	1.69	1.69	---	PASS
			30~1000	1.69	-51.84	≤-18.31	PASS
			1000~26500	1.69	-50.06	≤-18.31	PASS
		2462	Reference	1.96	1.96	---	PASS
			30~1000	1.96	-52.11	≤-18.04	PASS
			1000~26500	1.96	-51.23	≤-18.04	PASS
11N20MIMO	Ant1	2412	Reference	0.42	0.42	---	PASS
			30~1000	0.42	-52.07	≤-19.58	PASS
			1000~26500	0.42	-52.06	≤-19.58	PASS
		2437	Reference	1.62	1.62	---	PASS
			30~1000	1.62	-51.65	≤-18.38	PASS
			1000~26500	1.62	-53.35	≤-18.38	PASS
		2462	Reference	0.60	0.60	---	PASS
			30~1000	0.60	-52.29	≤-19.4	PASS
			1000~26500	0.60	-52.41	≤-19.4	PASS
11N40MIMO	Ant1	2422	Reference	-1.14	-1.14	---	PASS
			30~1000	-1.14	-51.08	≤-21.14	PASS
			1000~26500	-1.14	-54.17	≤-21.14	PASS
		2437	Reference	-2.89	-2.89	---	PASS
			30~1000	-2.89	-52.06	≤-22.89	PASS
			1000~26500	-2.89	-54	≤-22.89	PASS
		2452	Reference	-1.33	-1.33	---	PASS
			30~1000	-1.33	-51.55	≤-21.33	PASS
			1000~26500	-1.33	-54.25	≤-21.33	PASS
11AX20MIMO	Ant1	2412	Reference	2.08	2.08	---	PASS
			30~1000	2.08	-50.38	≤-17.92	PASS
			1000~26500	2.08	-48.07	≤-17.92	PASS
		2437	Reference	2.74	2.74	---	PASS
			30~1000	2.74	-51.33	≤-17.26	PASS
			1000~26500	2.74	-53.53	≤-17.26	PASS
		2462	Reference	3.47	3.47	---	PASS
			30~1000	3.47	-51.71	≤-16.53	PASS
			1000~26500	3.47	-50.89	≤-16.53	PASS
11AX40MIMO	Ant1	2422	Reference	-0.01	-0.01	---	PASS
			30~1000	-0.01	-52.2	≤-20.01	PASS
			1000~26500	-0.01	-53.41	≤-20.01	PASS
		2437	Reference	0.43	0.43	---	PASS
			30~1000	0.43	-51.9	≤-19.57	PASS
			1000~26500	0.43	-52.87	≤-19.57	PASS
		2452	Reference	0.13	0.13	---	PASS
			30~1000	0.13	-52.1	≤-19.87	PASS
			1000~26500	0.13	-52.98	≤-19.87	PASS

Test Graphs

11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



11B_Ant1_2412_1000~26500



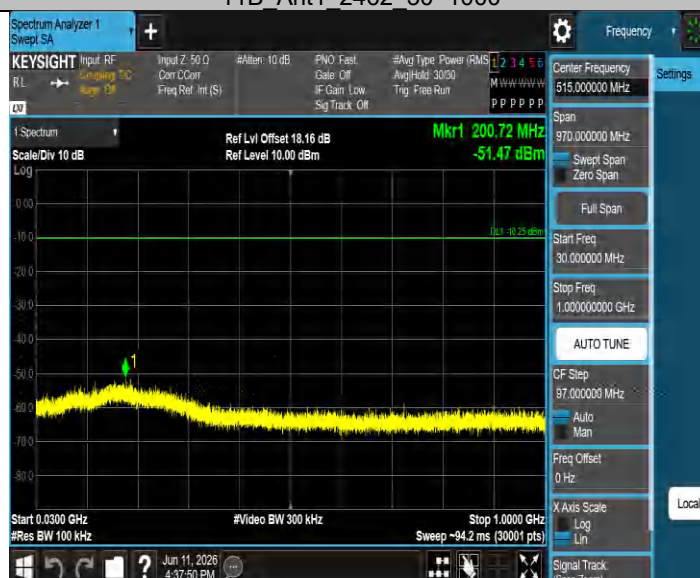
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



11B_Ant1_2437_1000~26500





11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



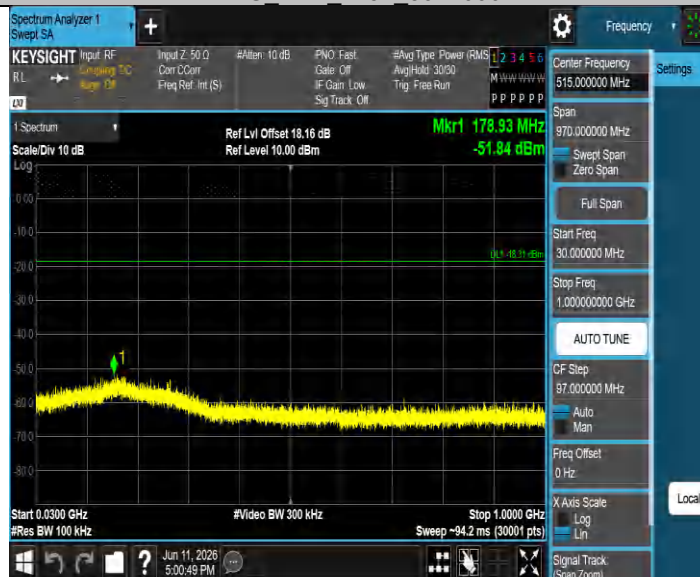
11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



11G_Ant1_2437_1000~26500