

Appendix Test Data for WLAN(2.4G) (Conducted Measurement)**Product Name: NucBox****Trade Mark: GMKtec****Test Model: K1****FCC ID: 2AXUD-K1****Environmental Conditions**

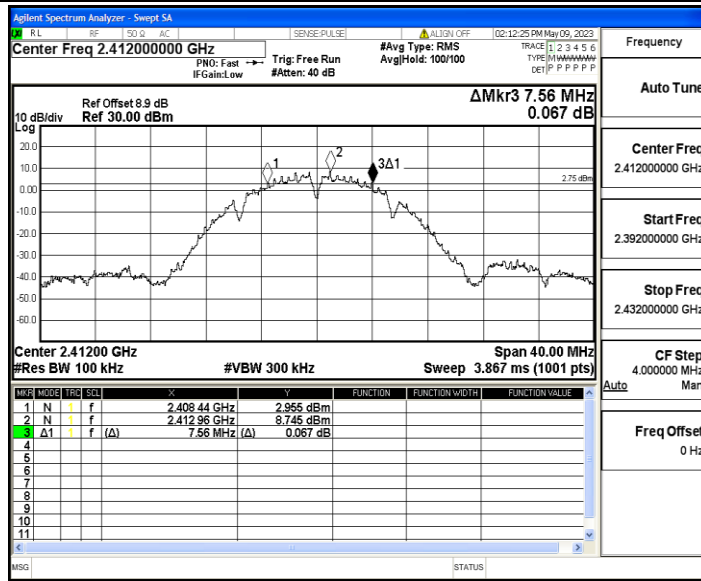
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth**Test Result**

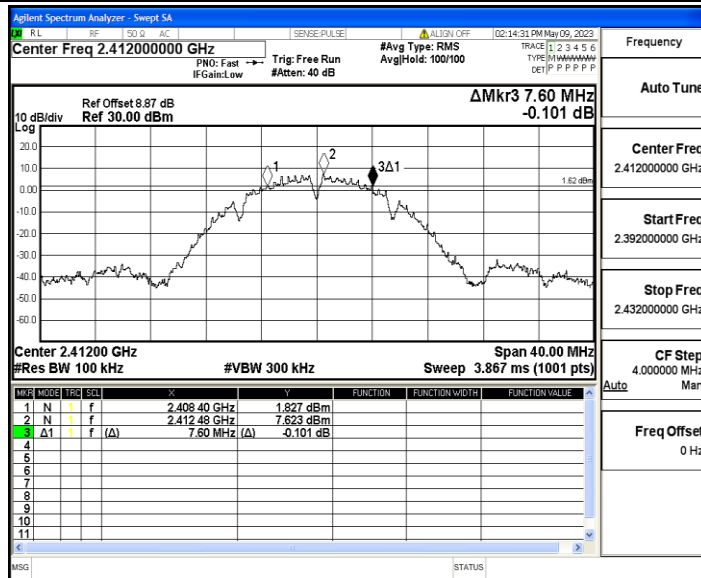
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	7.560	2408.440	2416.000	0.5	PASS
	Ant2	2412	7.600	2408.400	2416.000	0.5	PASS
	Ant1	2437	8.560	2432.440	2441.000	0.5	PASS
	Ant2	2437	7.040	2433.480	2440.520	0.5	PASS
	Ant1	2462	7.720	2457.920	2465.640	0.5	PASS
	Ant2	2462	8.040	2457.960	2466.000	0.5	PASS
11G	Ant1	2412	15.040	2404.440	2419.480	0.5	PASS
	Ant2	2412	16.040	2404.040	2420.080	0.5	PASS
	Ant1	2437	15.400	2429.040	2444.440	0.5	PASS
	Ant2	2437	15.120	2429.400	2444.520	0.5	PASS
	Ant1	2462	15.160	2454.680	2469.840	0.5	PASS
	Ant2	2462	15.680	2454.400	2470.080	0.5	PASS
11N20MIMO	Ant1	2412	15.320	2404.440	2419.760	0.5	PASS
	Ant2	2412	15.640	2403.840	2419.480	0.5	PASS
	Ant1	2437	14.440	2428.840	2443.280	0.5	PASS
	Ant2	2437	16.880	2428.200	2445.080	0.5	PASS
	Ant1	2462	16.080	2454.400	2470.480	0.5	PASS
	Ant2	2462	16.680	2454.040	2470.720	0.5	PASS
11N40MIMO	Ant1	2422	35.120	2404.400	2439.520	0.5	PASS
	Ant2	2422	33.840	2405.680	2439.520	0.5	PASS
	Ant1	2437	35.040	2419.480	2454.520	0.5	PASS
	Ant2	2437	31.280	2419.480	2450.760	0.5	PASS
	Ant1	2452	35.120	2434.400	2469.520	0.5	PASS
	Ant2	2452	35.120	2434.400	2469.520	0.5	PASS

Test Graphs

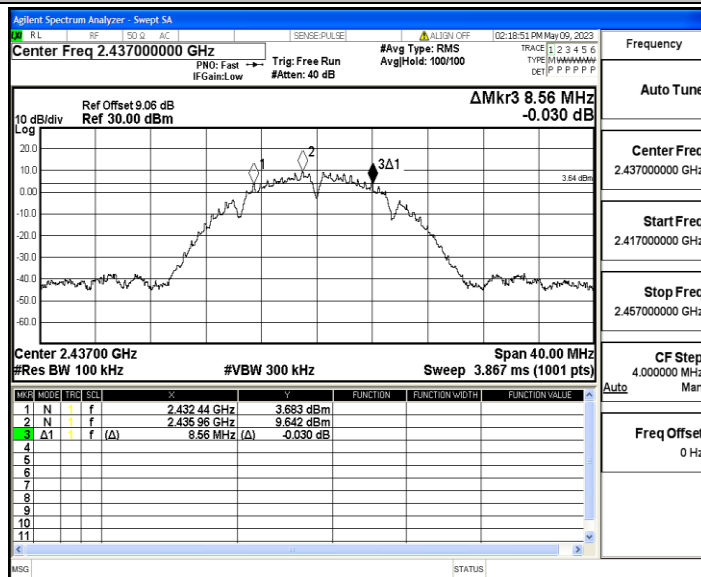
11B_Ant1_2412



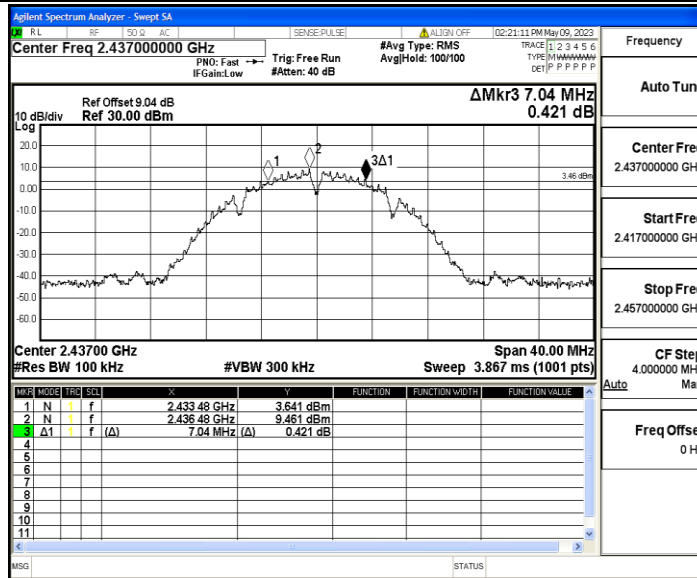
11B_Ant2_2412



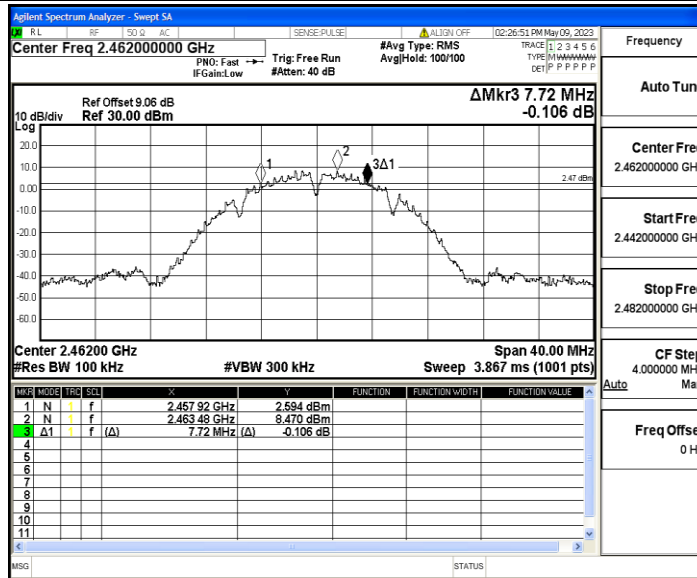
11B_Ant1_2437



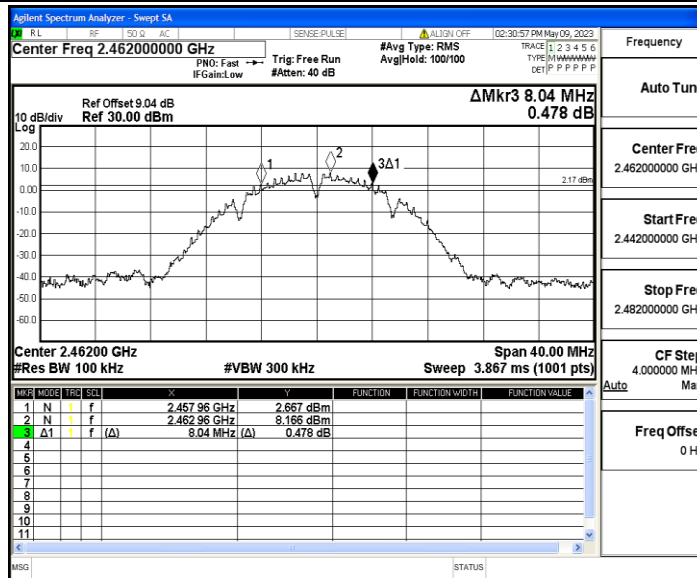
11B_Ant2_2437



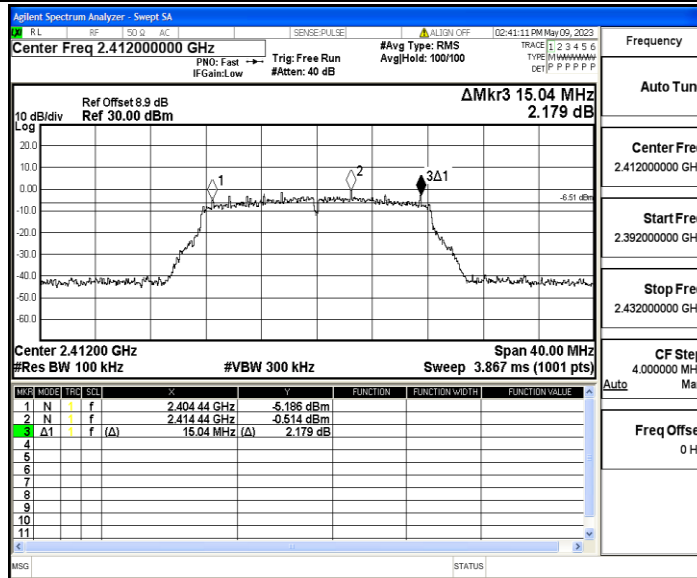
11B_Ant1_2462



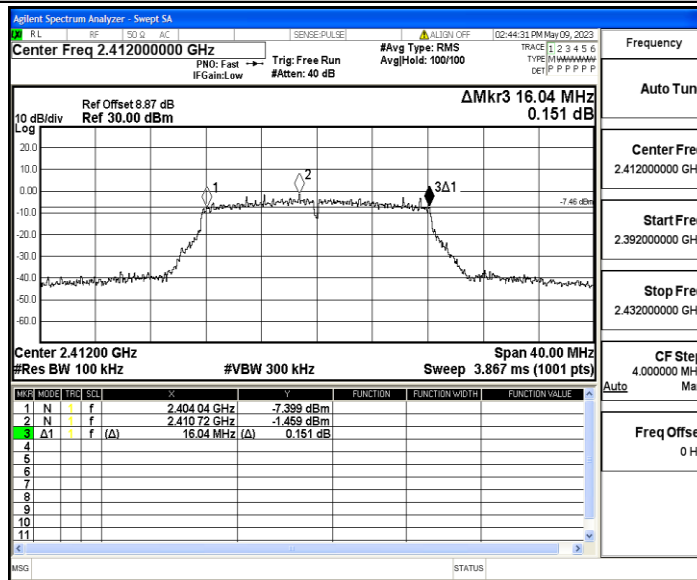
11B_Ant2_2462



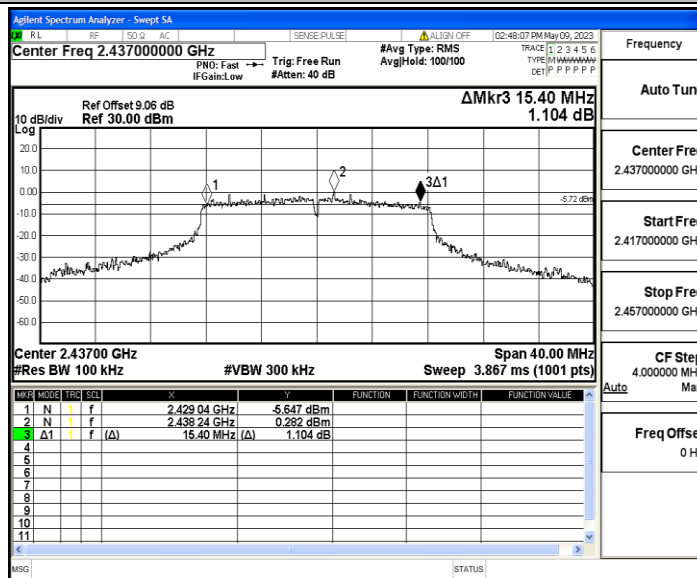
11G_Ant1_2412



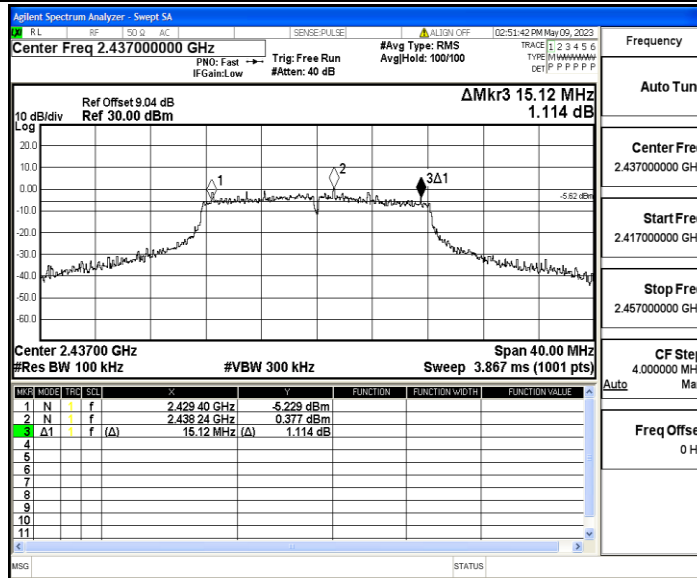
11G_Ant2_2412



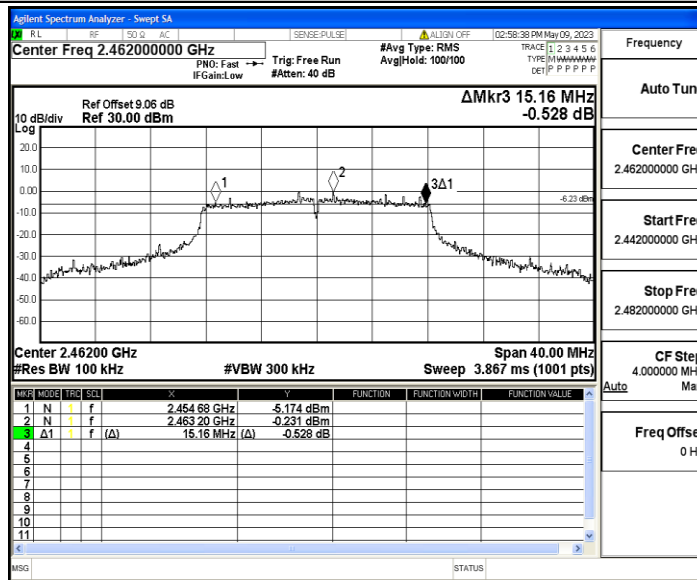
11G_Ant1_2437



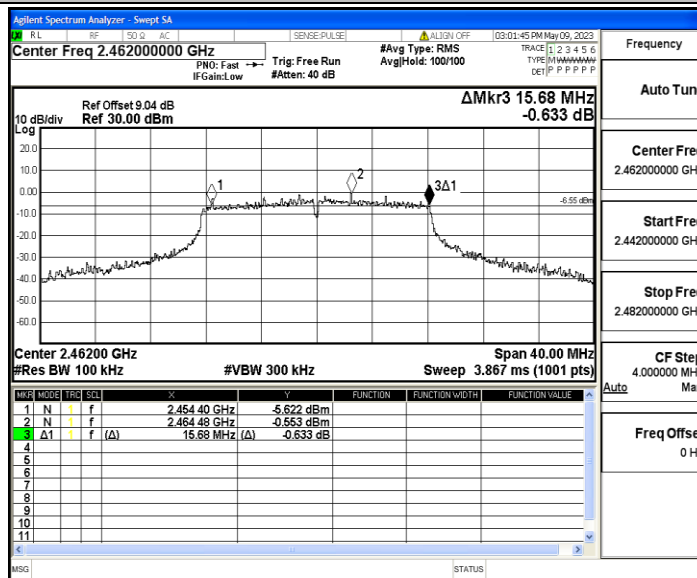
11G_Ant2_2437



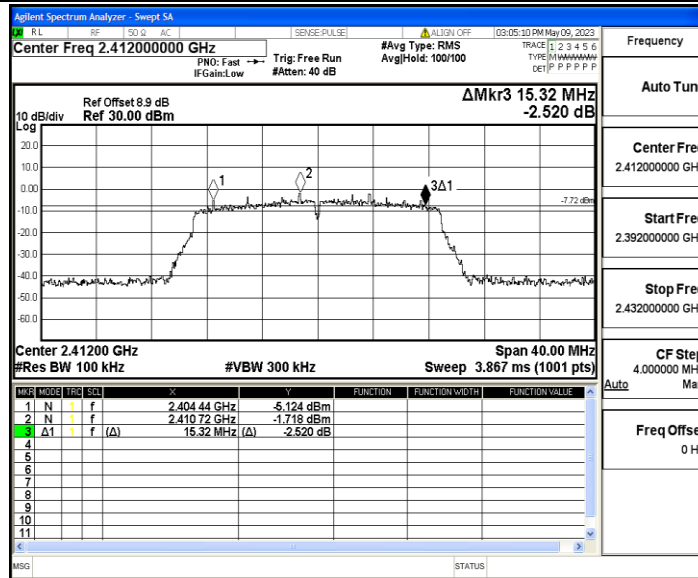
11G_Ant1_2462



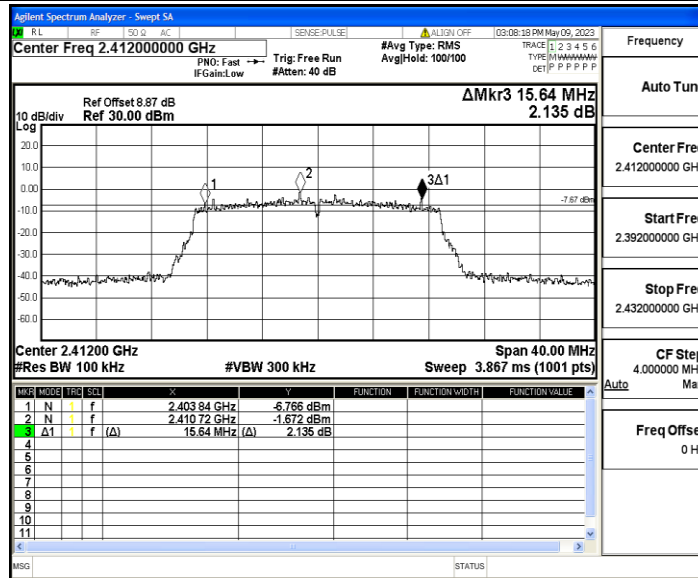
11G_Ant2_2462



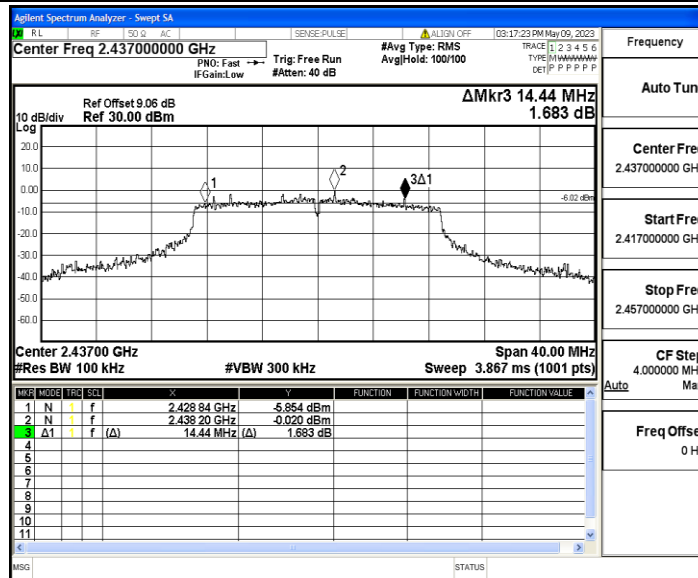
11N20MIMO_Ant1_2412



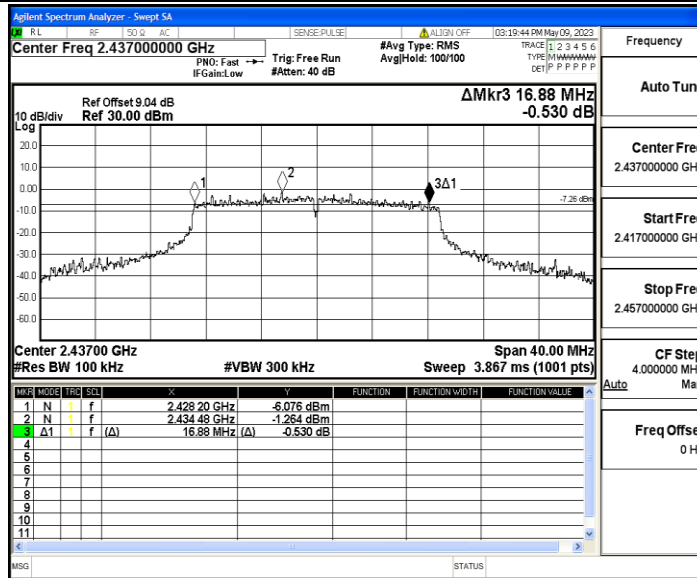
11N20MIMO_Ant2_2412



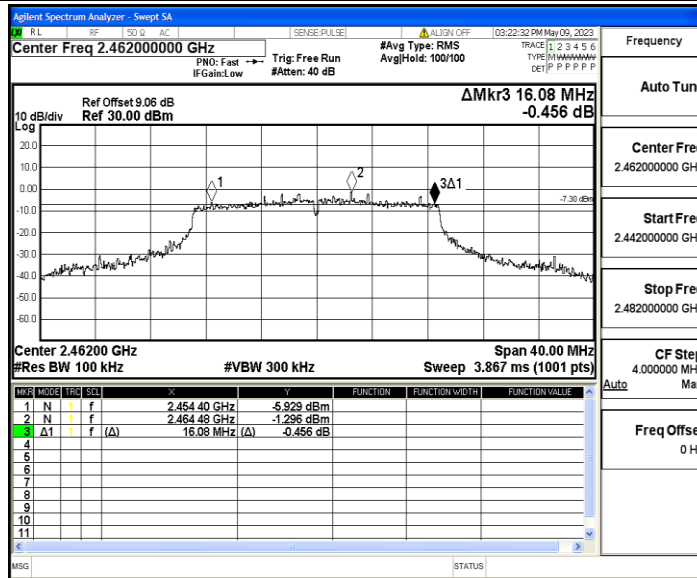
11N20MIMO_Ant1_2437



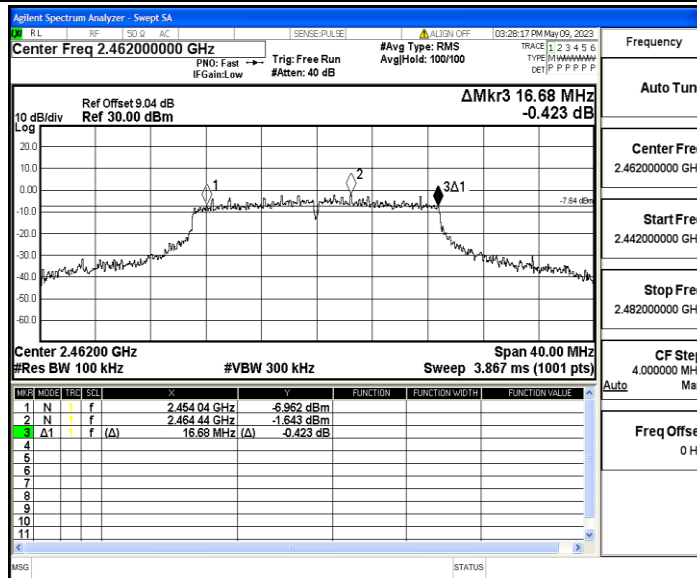
11N20MIMO_Ant2_2437



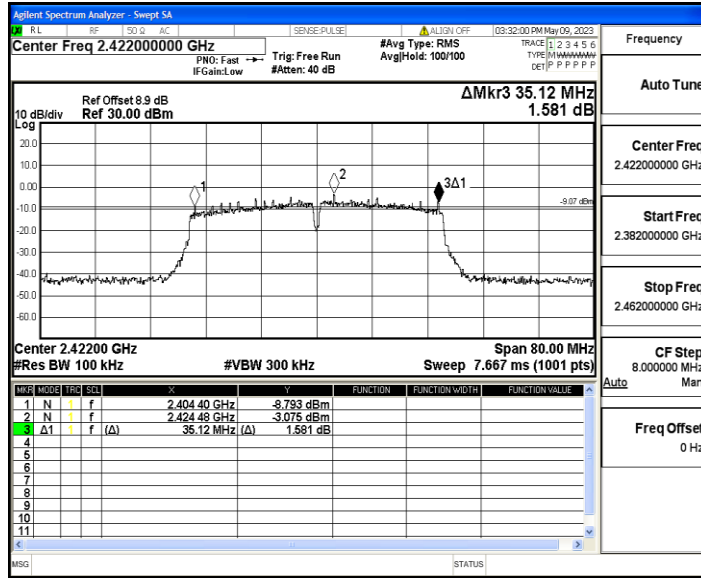
11N20MIMO_Ant1_2462



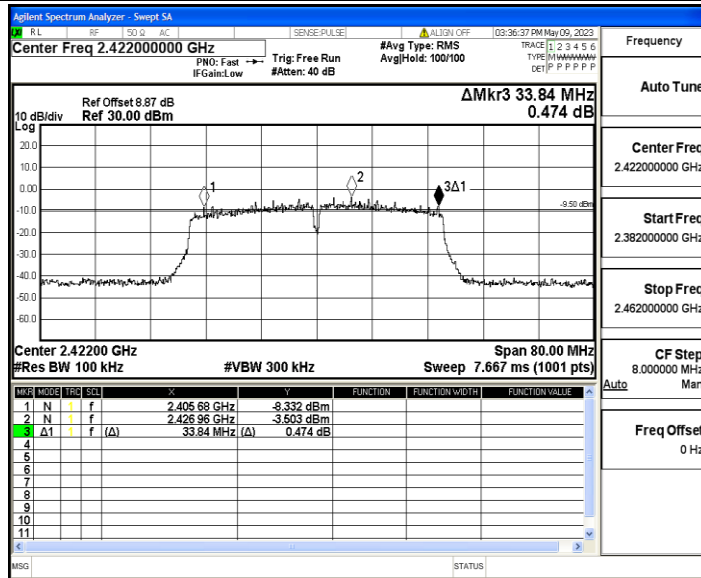
11N20MIMO_Ant2_2462



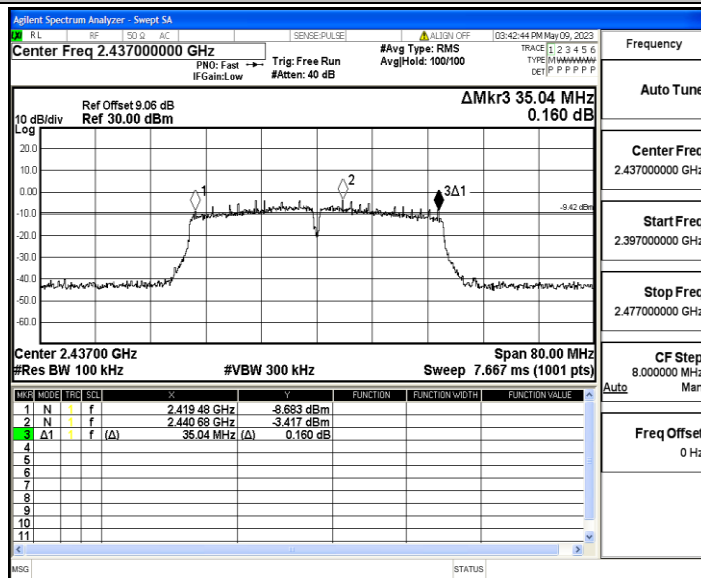
11N40MIMO_Ant1_2422



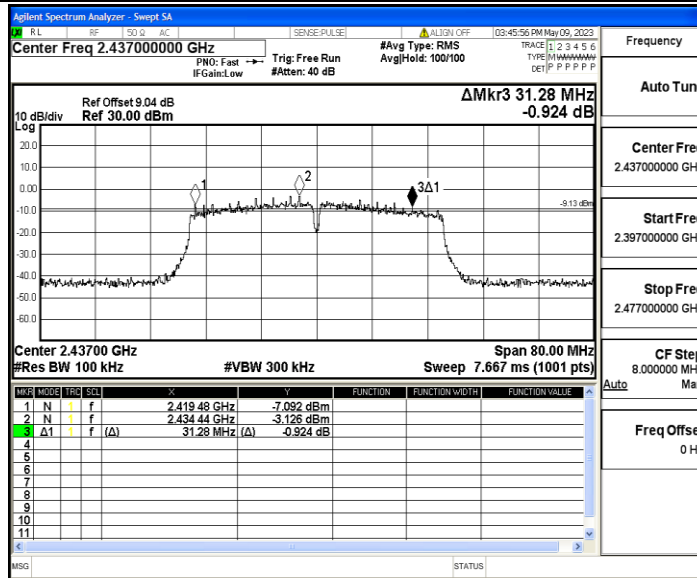
11N40MIMO_Ant2_2422



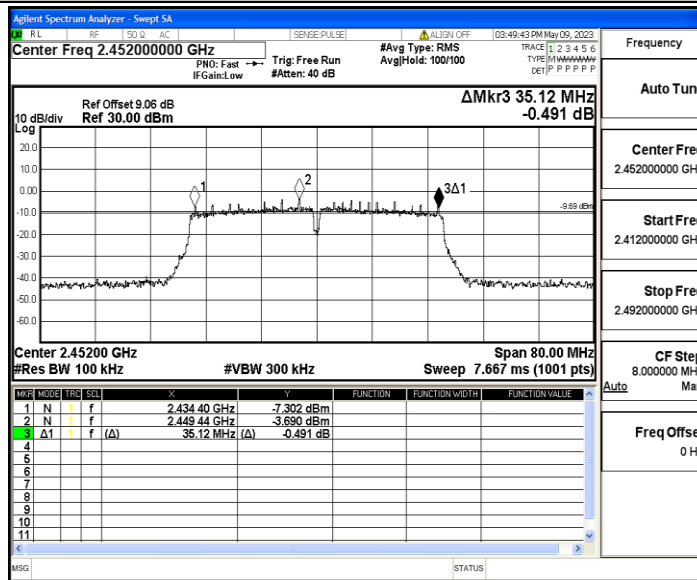
11N40MIMO_Ant1_2437



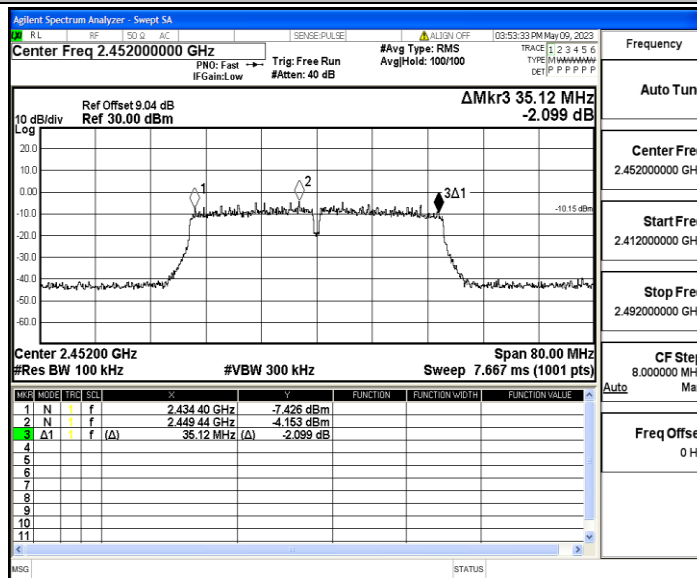
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452

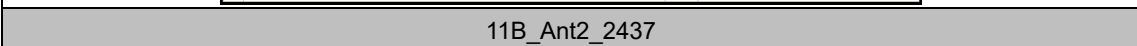
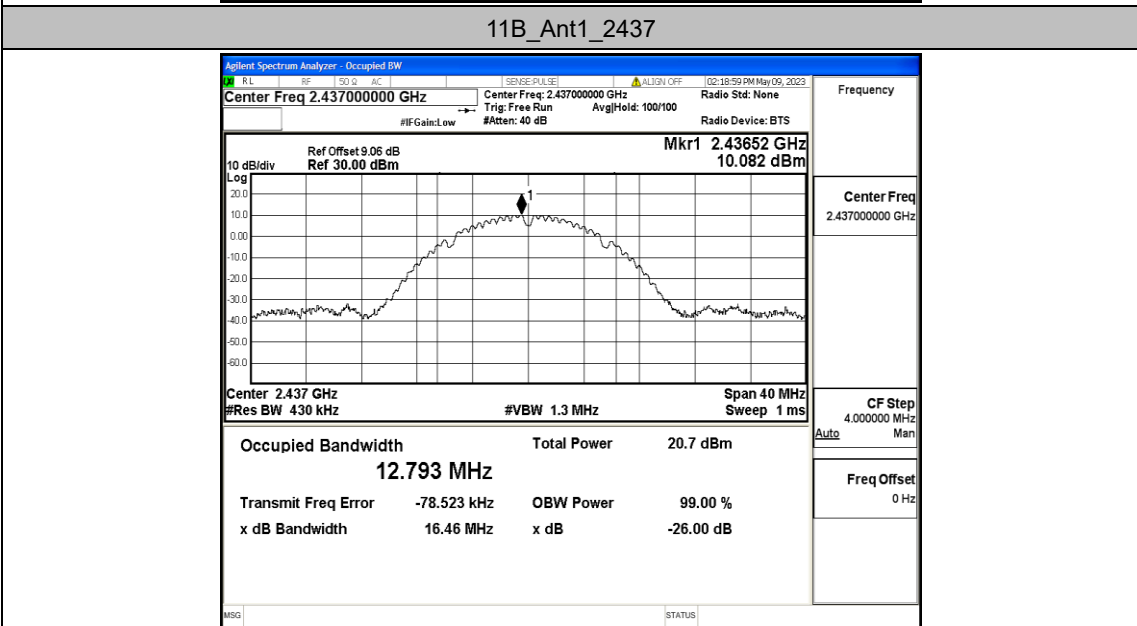
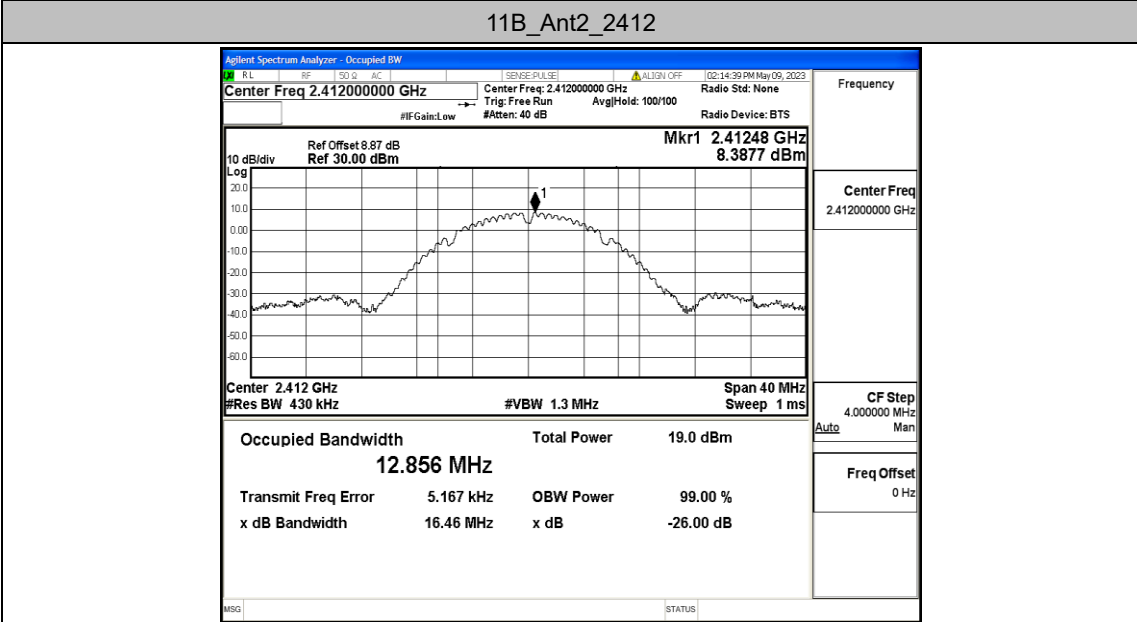
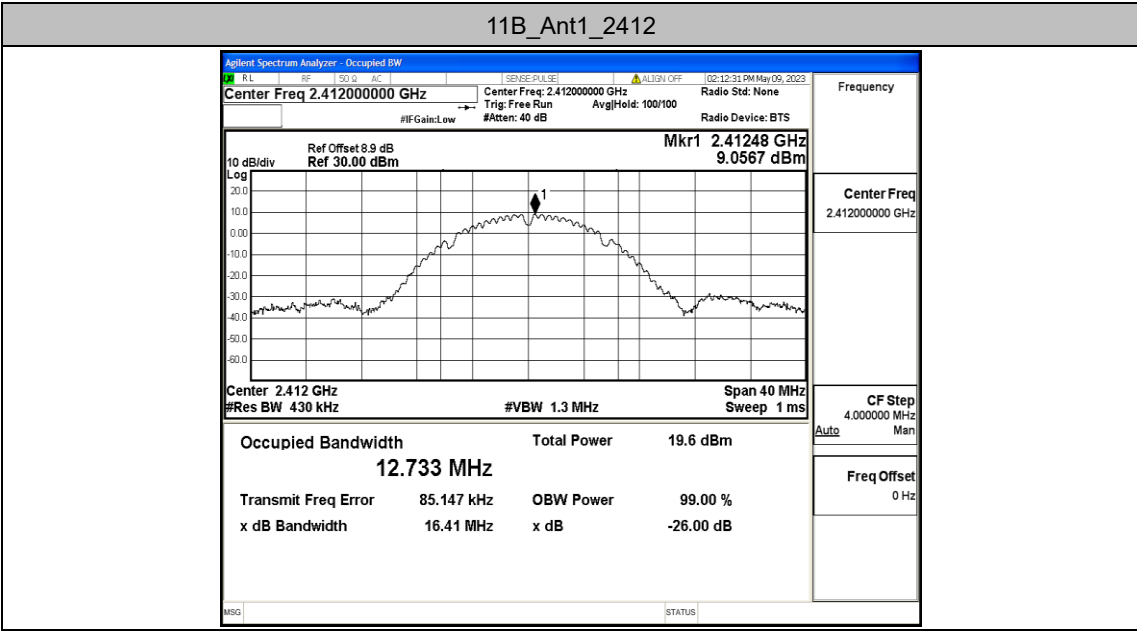


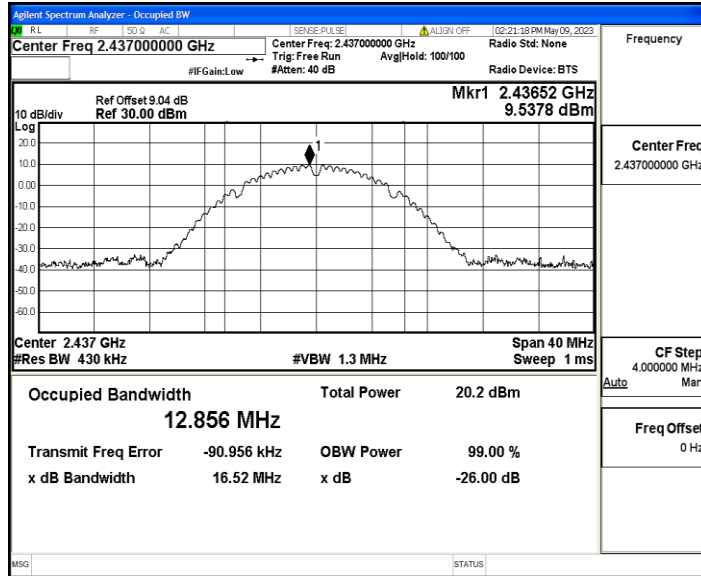
Appendix B: Occupied Channel Bandwidth

Test Result

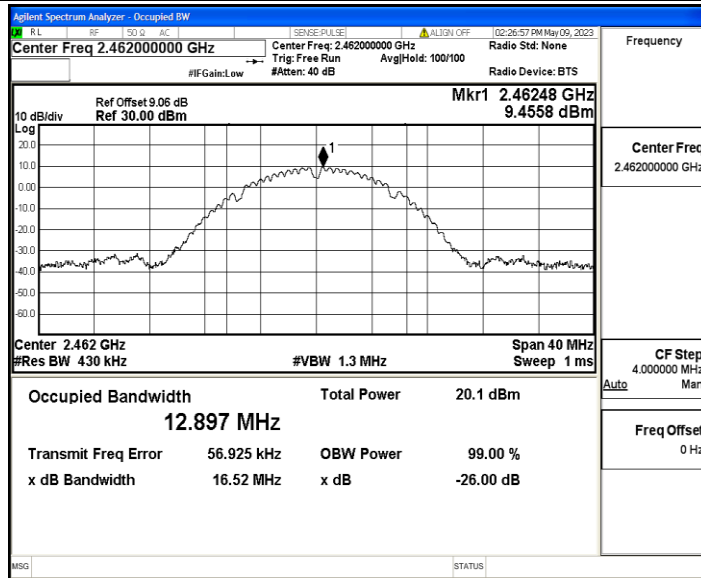
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.733	2405.7187	2418.4517	---	---
	Ant2	2412	12.856	2405.5772	2418.4332	---	---
	Ant1	2437	12.793	2430.5250	2443.3180	---	---
	Ant2	2437	12.856	2430.4810	2443.3370	---	---
	Ant1	2462	12.897	2455.6084	2468.5054	---	---
	Ant2	2462	13.027	2455.5442	2468.5712	---	---
11G	Ant1	2412	16.713	2403.7030	2420.4160	---	---
	Ant2	2412	16.602	2403.6837	2420.2857	---	---
	Ant1	2437	17.483	2428.1281	2445.6111	---	---
	Ant2	2437	17.214	2428.2892	2445.5032	---	---
	Ant1	2462	17.564	2453.2723	2470.8363	---	---
	Ant2	2462	17.353	2453.4626	2470.8156	---	---
11N20MIMO	Ant1	2412	17.761	2403.1619	2420.9229	---	---
	Ant2	2412	17.712	2403.1326	2420.8446	---	---
	Ant1	2437	18.518	2427.6279	2446.1459	---	---
	Ant2	2437	18.128	2427.8190	2445.9470	---	---
	Ant1	2462	18.648	2452.7252	2471.3732	---	---
	Ant2	2462	18.301	2452.8814	2471.1824	---	---
11N40MIMO	Ant1	2422	35.946	2404.1113	2440.0573	---	---
	Ant2	2422	36.035	2404.0237	2440.0587	---	---
	Ant1	2437	35.946	2419.0210	2454.9670	---	---
	Ant2	2437	35.914	2419.0073	2454.9213	---	---
	Ant1	2452	36.227	2433.8970	2470.1240	---	---
	Ant2	2452	36.430	2433.7383	2470.1683	---	---

Test Graphs

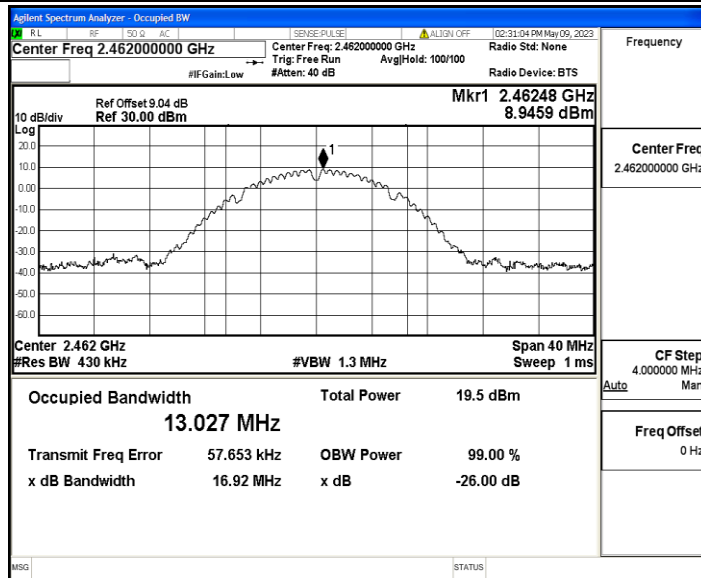




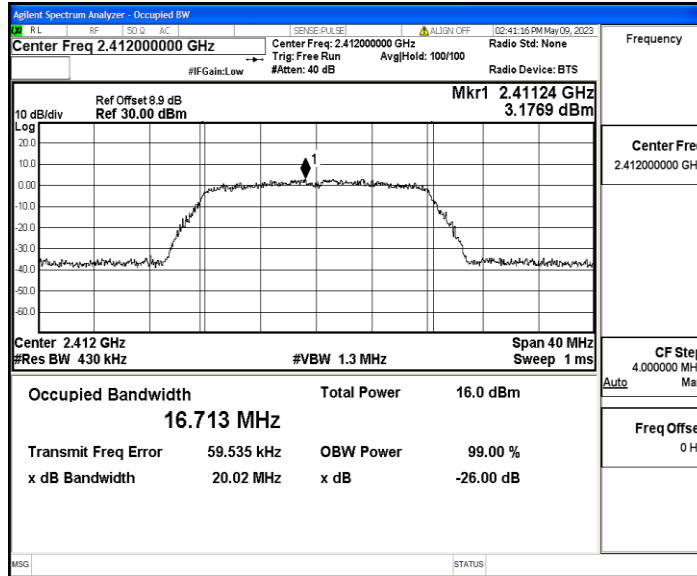
11B_Ant1_2462



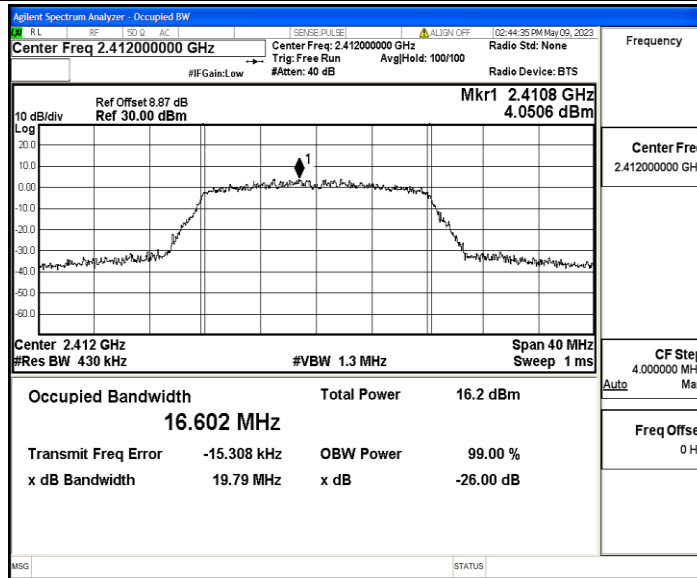
11B_Ant2_2462



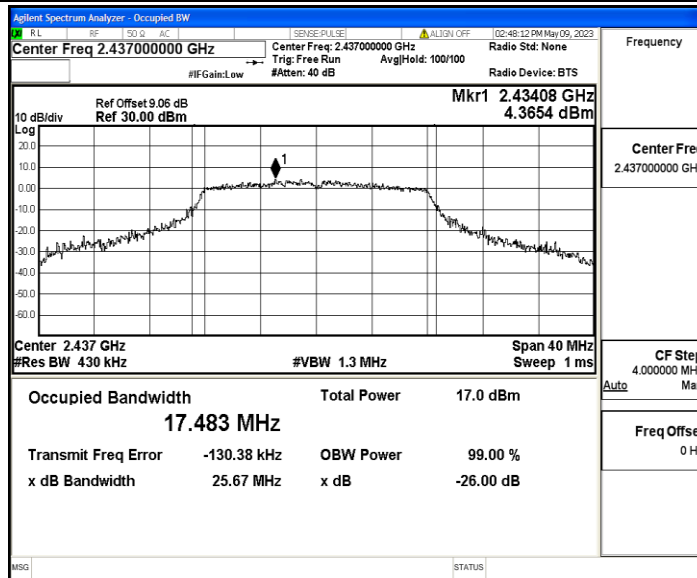
11G_Ant1_2412



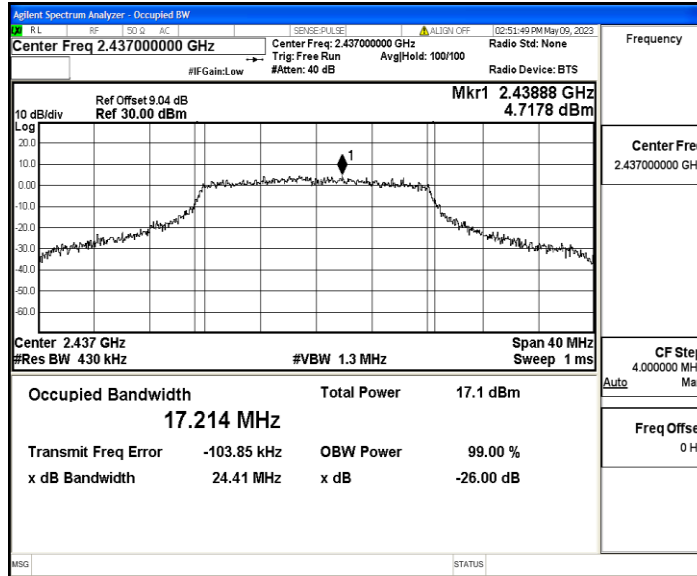
11G_Ant2_2412



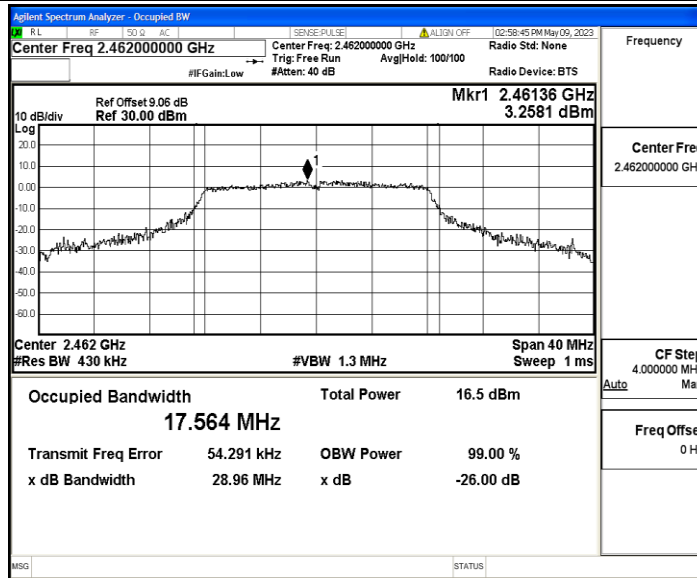
11G_Ant1_2437



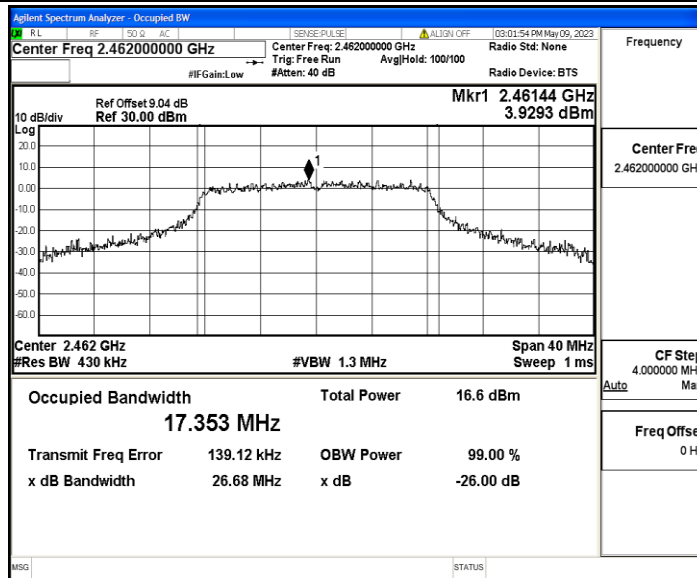
11G_Ant2_2437



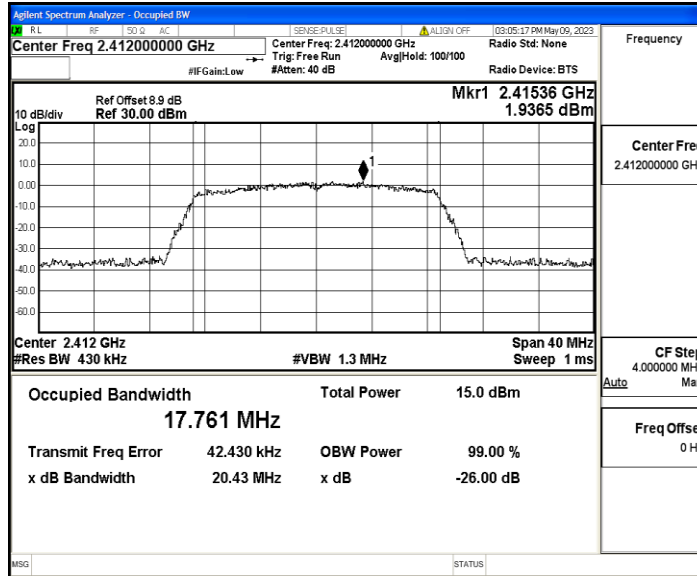
11G_Ant1_2462



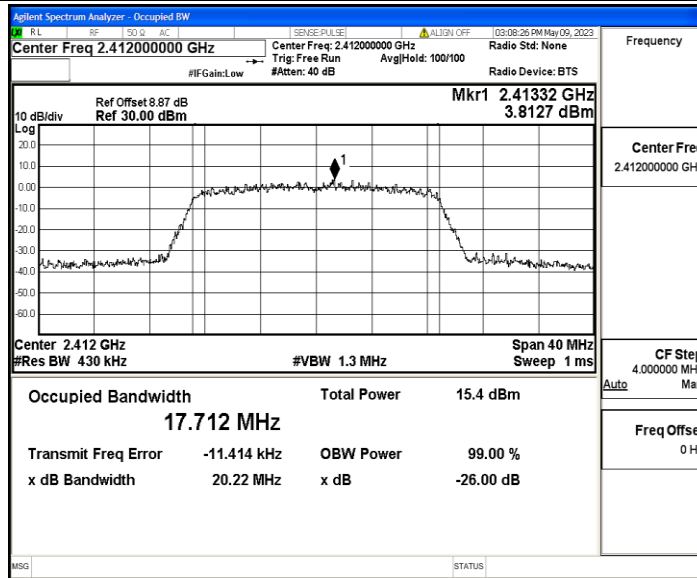
11G_Ant2_2462



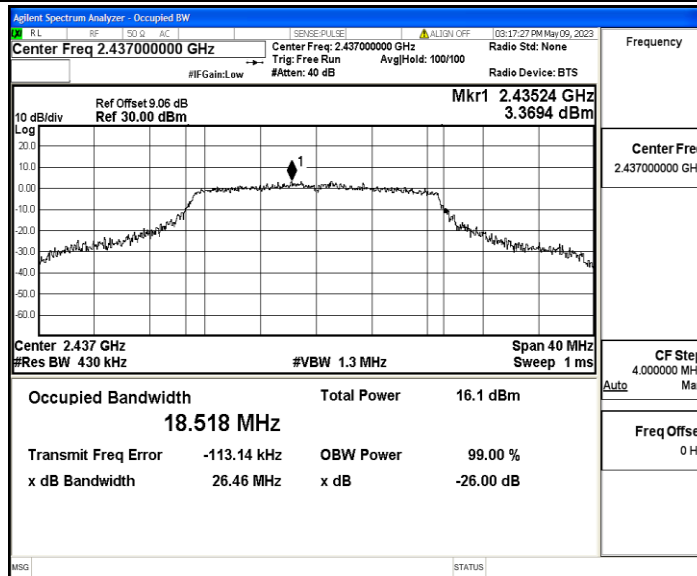
11N20MIMO_Ant1_2412



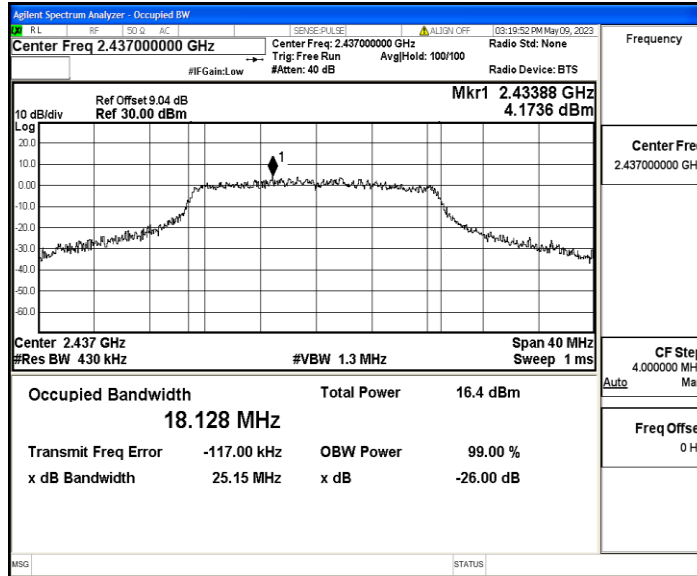
11N20MIMO_Ant2_2412



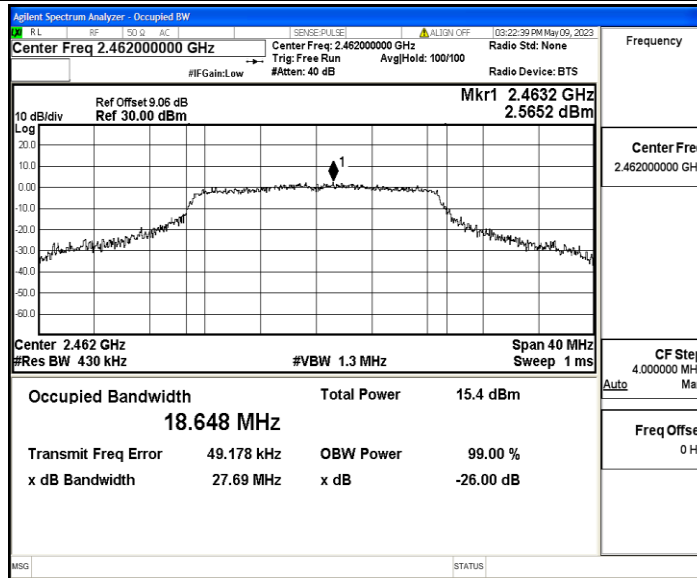
11N20MIMO_Ant1_2437



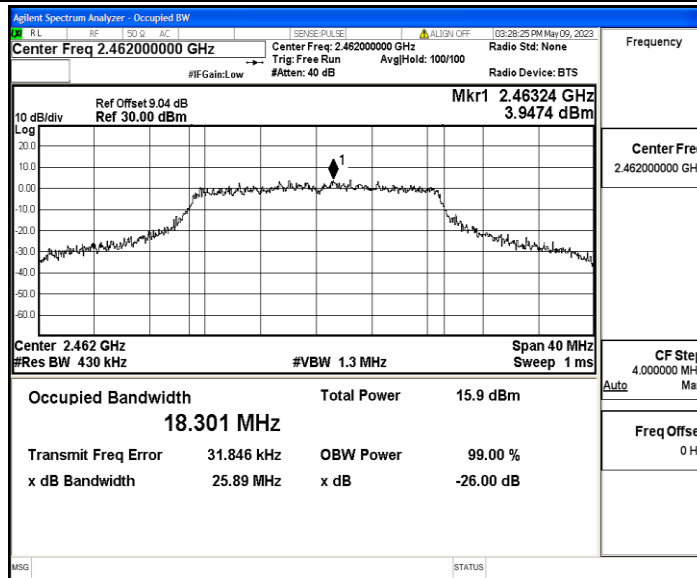
11N20MIMO_Ant2_2437



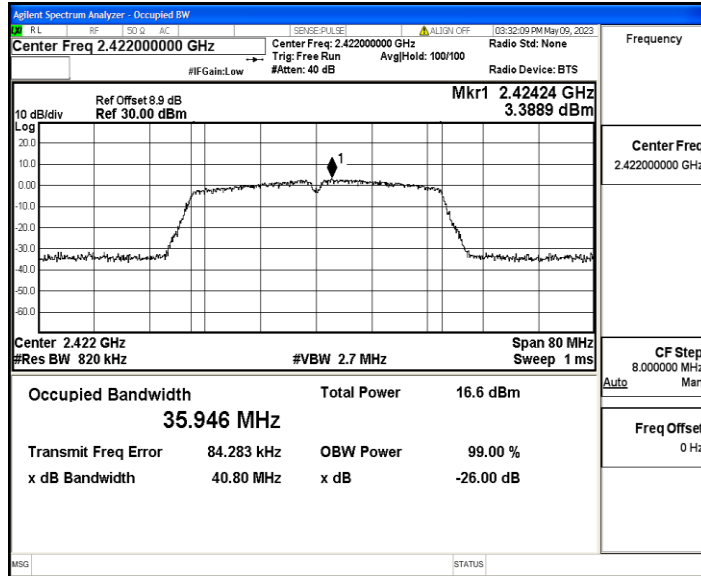
11N20MIMO_Ant1_2462



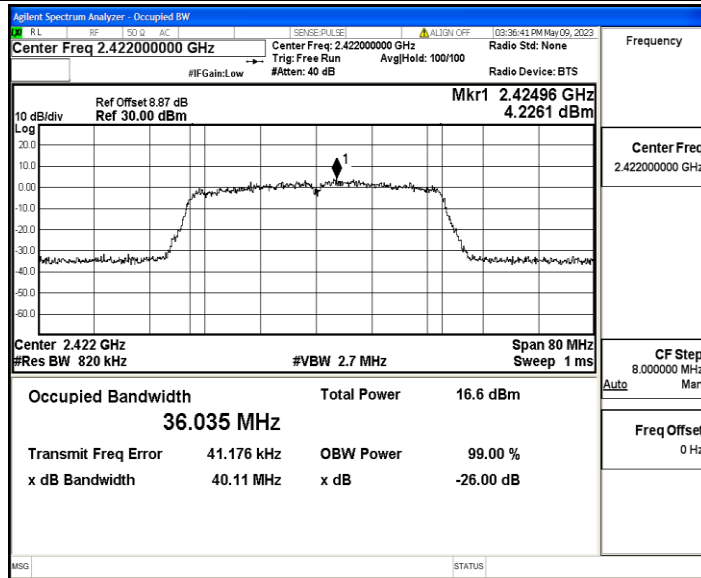
11N20MIMO_Ant2_2462



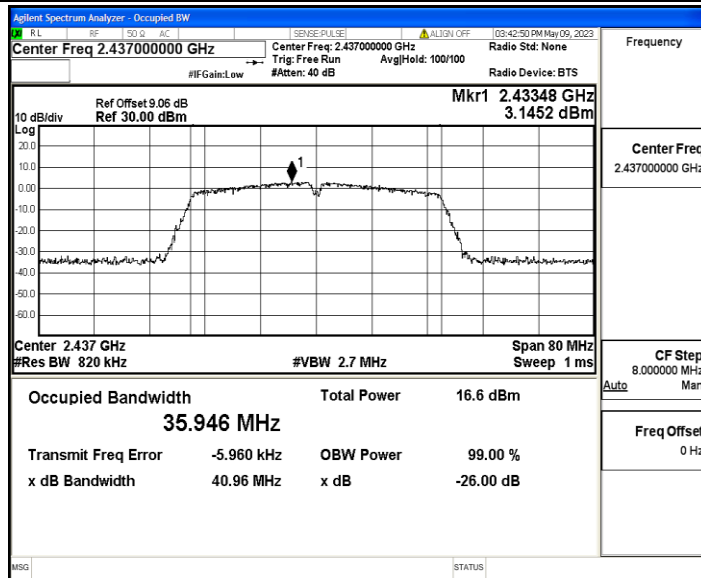
11N40MIMO_Ant1_2422



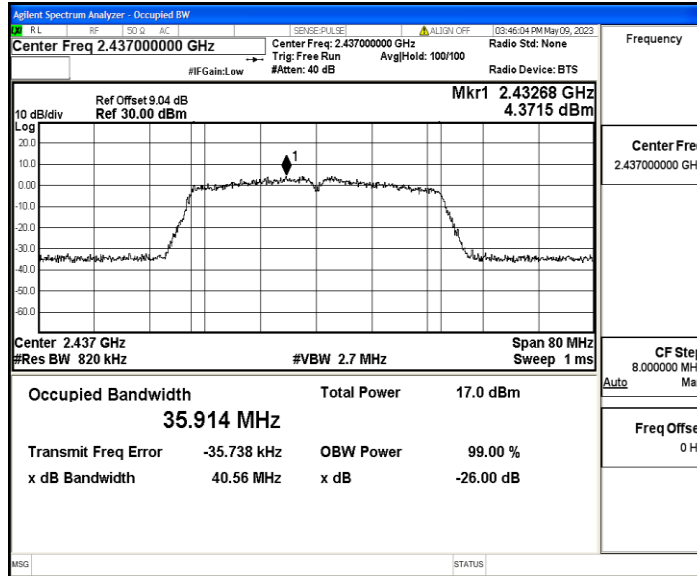
11N40MIMO_Ant2_2422



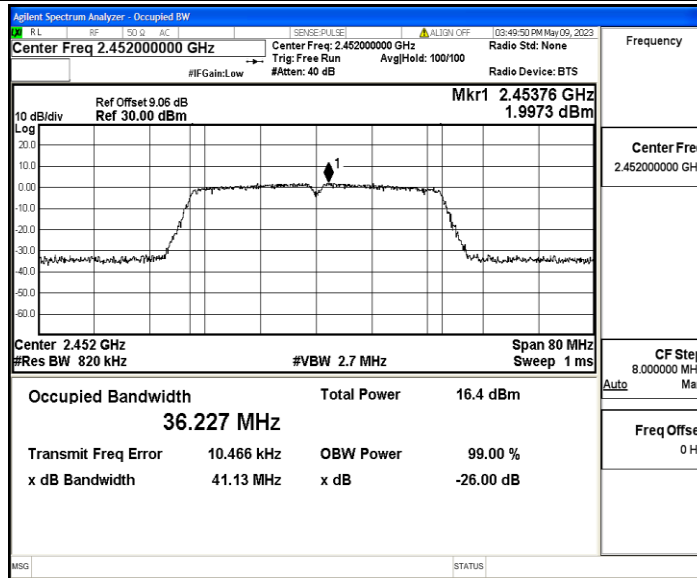
11N40MIMO_Ant1_2437



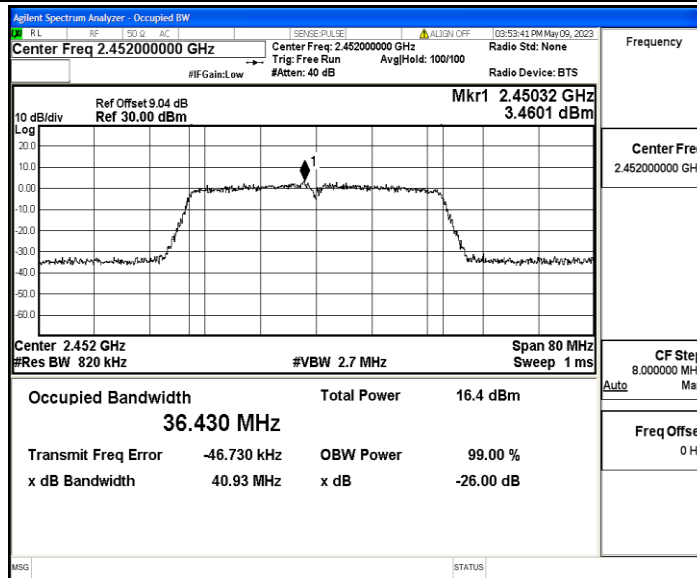
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



Appendix C: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	16.54	≤30.00	PASS
	Ant2	2412	16.14	≤30.00	PASS
	Ant1	2437	17.82	≤30.00	PASS
	Ant2	2437	17.16	≤30.00	PASS
	Ant1	2462	17.08	≤30.00	PASS
	Ant2	2462	16.53	≤30.00	PASS
11G	Ant1	2412	10.05	≤30.00	PASS
	Ant2	2412	9.94	≤30.00	PASS
	Ant1	2437	11.12	≤30.00	PASS
	Ant2	2437	10.99	≤30.00	PASS
	Ant1	2462	10.51	≤30.00	PASS
	Ant2	2462	10.31	≤30.00	PASS
11N20MIMO	Ant1	2412	8.90	≤30.00	PASS
	Ant2	2412	8.59	≤30.00	PASS
	total	2412	11.76	≤30.00	PASS
	Ant1	2437	9.85	≤30.00	PASS
	Ant2	2437	9.75	≤30.00	PASS
	total	2437	12.81	≤30.00	PASS
	Ant1	2462	9.64	≤30.00	PASS
	Ant2	2462	9.42	≤30.00	PASS
total	2462	12.54	≤30.00	PASS	
11N40MIMO	Ant1	2422	9.85	≤30.00	PASS
	Ant2	2422	9.36	≤30.00	PASS
	total	2422	12.62	≤30.00	PASS
	Ant1	2437	10.59	≤30.00	PASS
	Ant2	2437	9.94	≤30.00	PASS
	total	2437	13.29	≤30.00	PASS
	Ant1	2452	9.83	≤30.00	PASS
	Ant2	2452	9.78	≤30.00	PASS
	total	2452	12.82	≤30.00	PASS

Note: The Duty Cycle Factor is compensated in the test result.

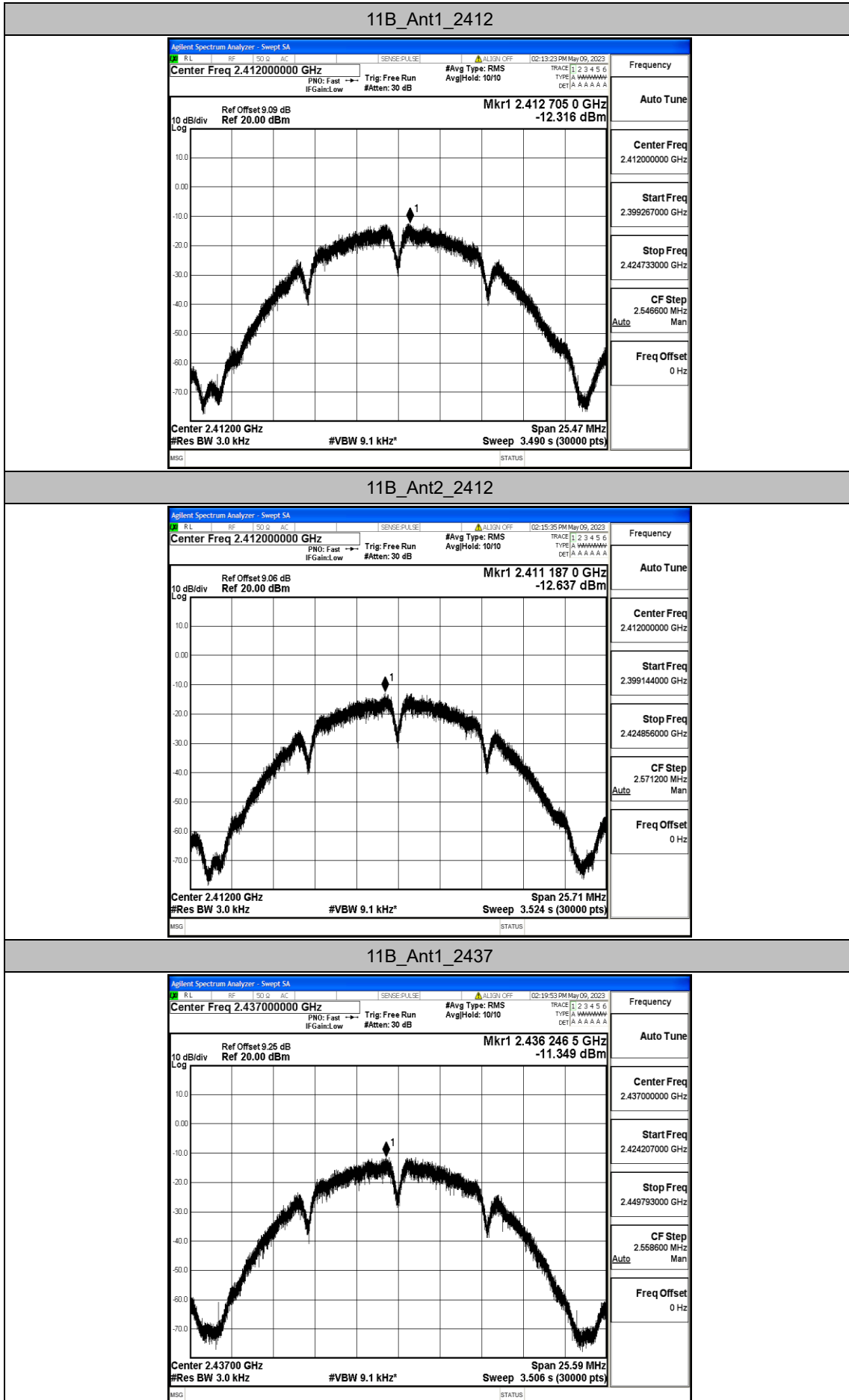
Appendix D: Maximum power spectral density

Test Result

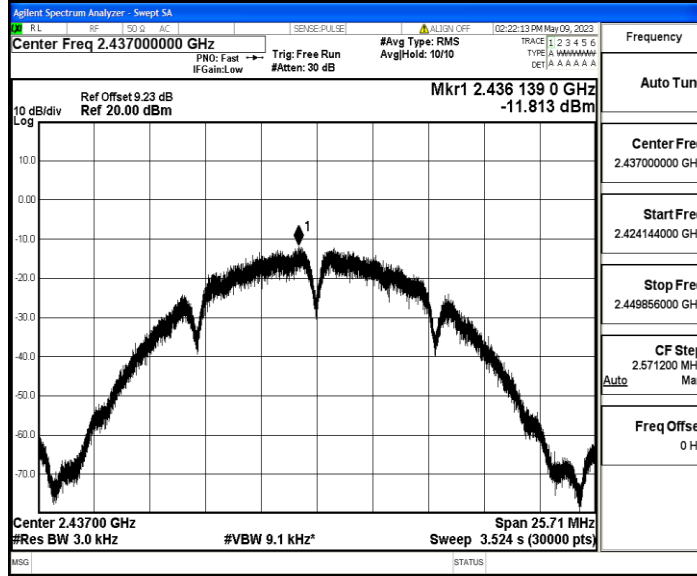
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-12.32	≤8.00	PASS
	Ant2	2412	-12.64	≤8.00	PASS
	Ant1	2437	-11.35	≤8.00	PASS
	Ant2	2437	-11.81	≤8.00	PASS
	Ant1	2462	-11.75	≤8.00	PASS
	Ant2	2462	-12.73	≤8.00	PASS
11G	Ant1	2412	-20.56	≤8.00	PASS
	Ant2	2412	-20.75	≤8.00	PASS
	Ant1	2437	-19.57	≤8.00	PASS
	Ant2	2437	-19.45	≤8.00	PASS
	Ant1	2462	-20.63	≤8.00	PASS
	Ant2	2462	-19.96	≤8.00	PASS
11N20MIMO	Ant1	2412	-21.46	≤8.00	PASS
	Ant2	2412	-22.11	≤8.00	PASS
	total	2412	-18.76	≤8.00	PASS
	Ant1	2437	-20.61	≤8.00	PASS
	Ant2	2437	-21.02	≤8.00	PASS
	total	2437	-17.80	≤8.00	PASS
	Ant1	2462	-21.57	≤8.00	PASS
	Ant2	2462	-21.38	≤8.00	PASS
	total	2462	-18.46	≤8.00	PASS
11N40MIMO	Ant1	2422	-24.06	≤8.00	PASS
	Ant2	2422	-23.84	≤8.00	PASS
	total	2422	-20.94	≤8.00	PASS
	Ant1	2437	-22.19	≤8.00	PASS
	Ant2	2437	-23.71	≤8.00	PASS
	total	2437	-19.87	≤8.00	PASS
	Ant1	2452	-24.01	≤8.00	PASS
	Ant2	2452	-24.04	≤8.00	PASS
	total	2452	-21.01	≤8.00	PASS

Note: The Duty Cycle Factor is compensated in the test result.

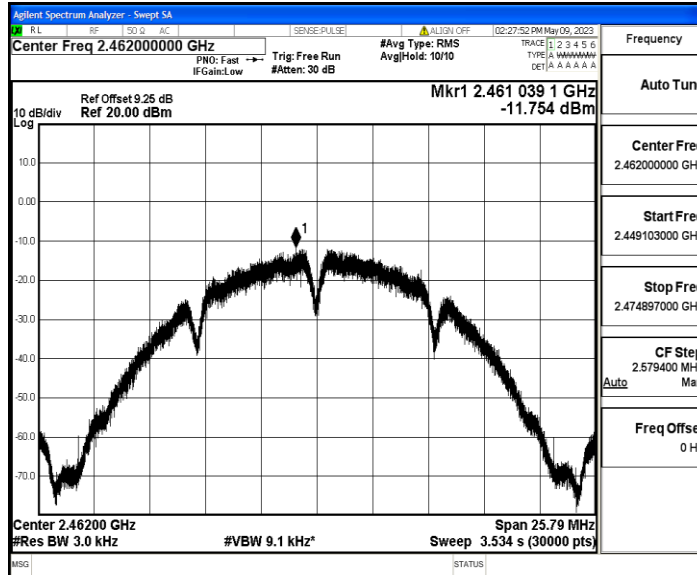
Test Graphs



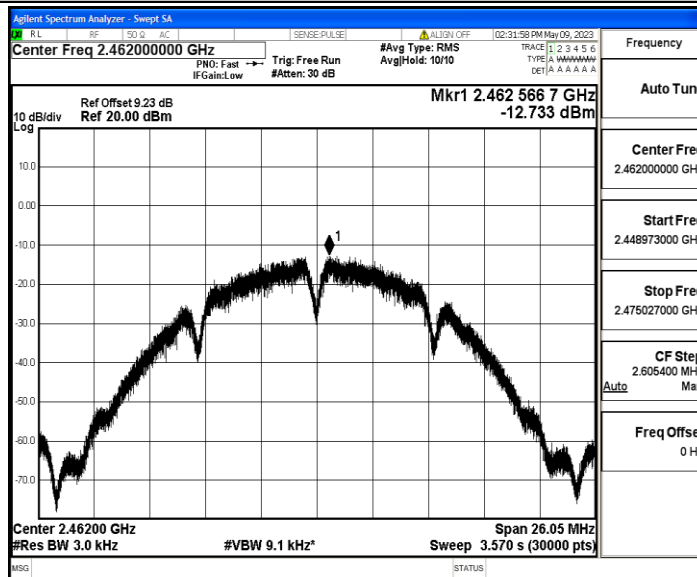
11B_Ant2_2437



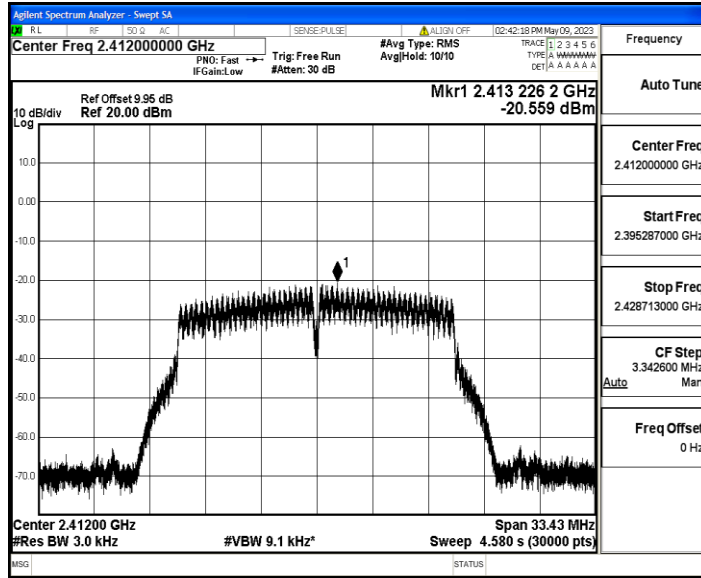
11B_Ant1_2462



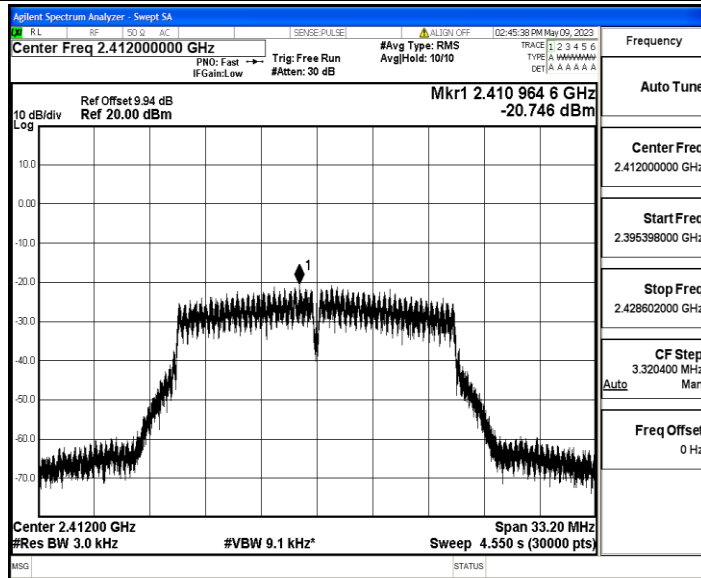
11B_Ant2_2462



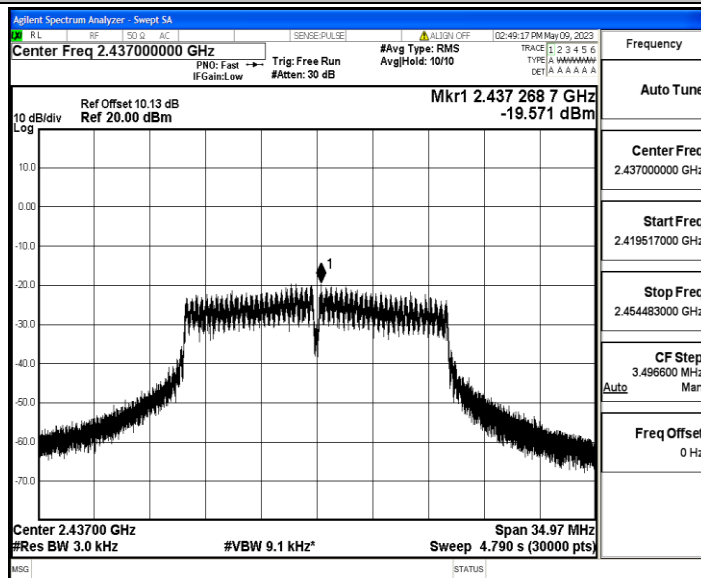
11G_Ant1_2412



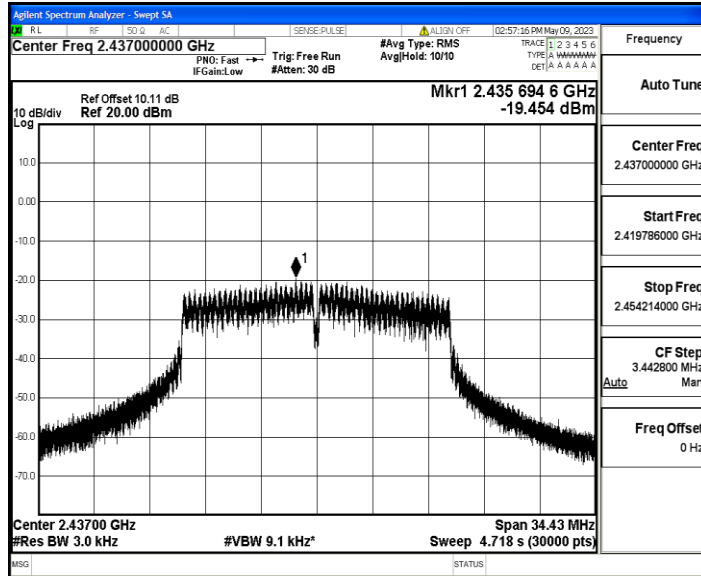
11G_Ant2_2412



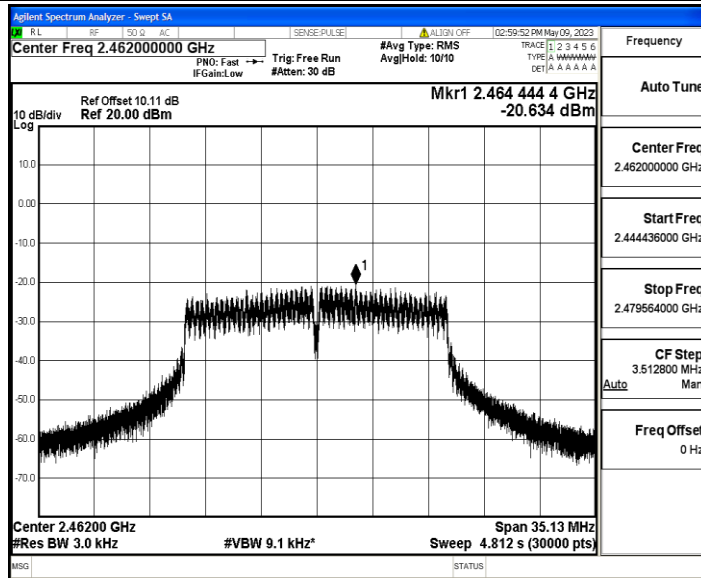
11G_Ant1_2437



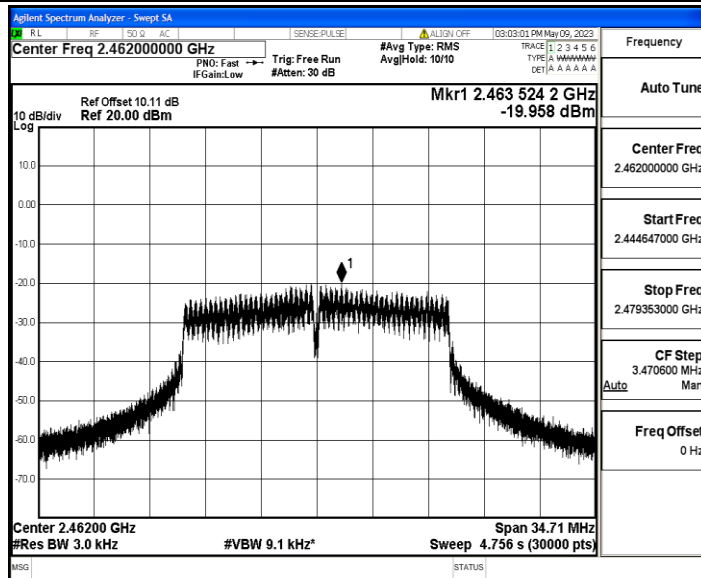
11G_Ant2_2437



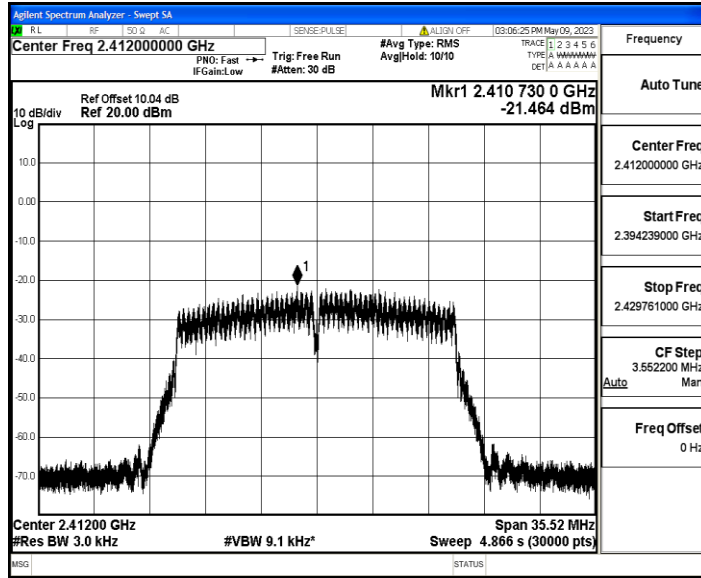
11G_Ant1_2462



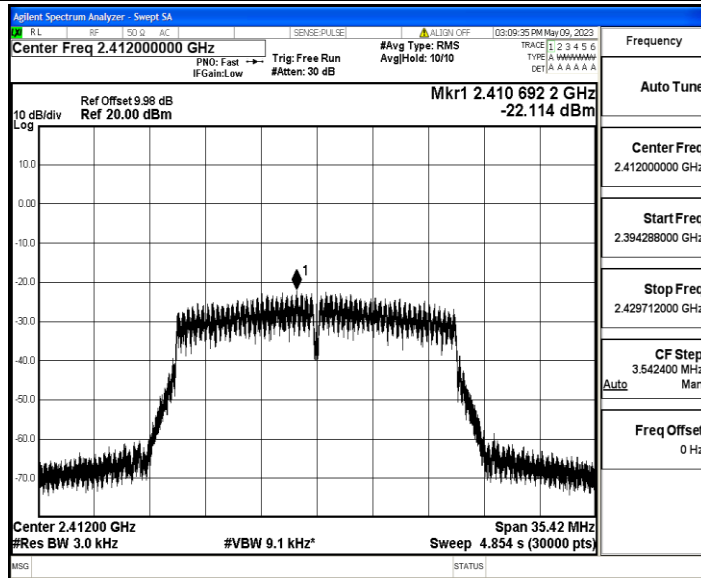
11G_Ant2_2462



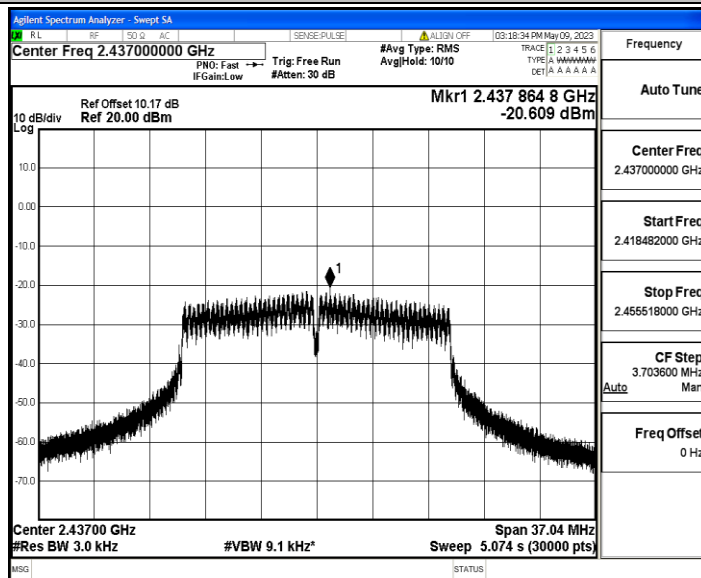
11N20MIMO_Ant1_2412



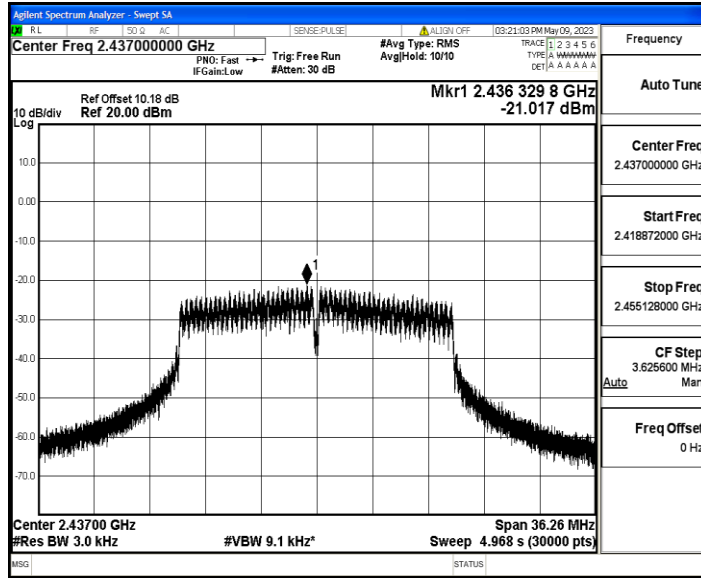
11N20MIMO_Ant2_2412



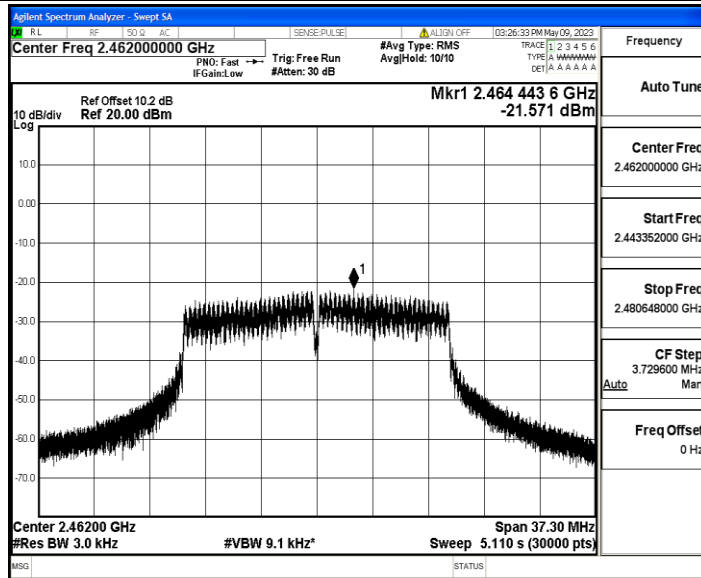
11N20MIMO_Ant1_2437



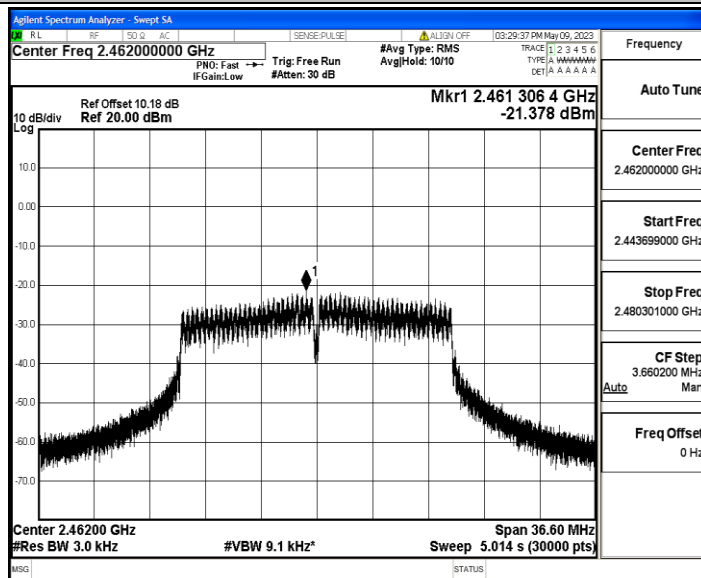
11N20MIMO_Ant2_2437



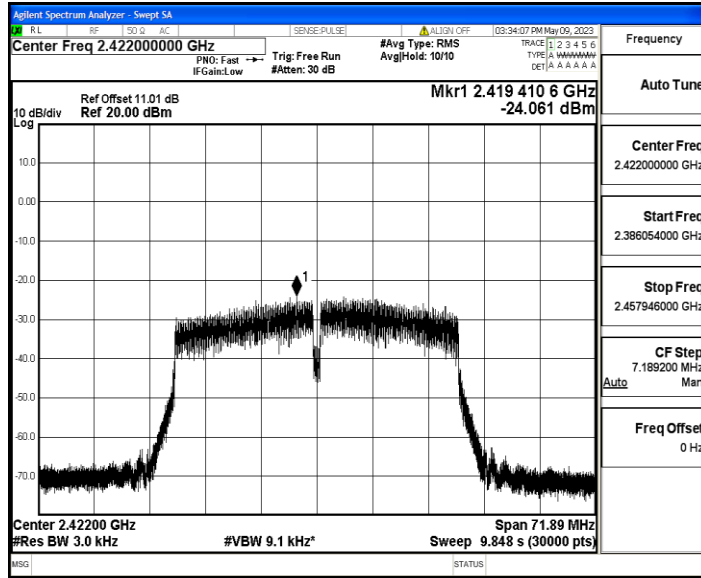
11N20MIMO_Ant1_2462



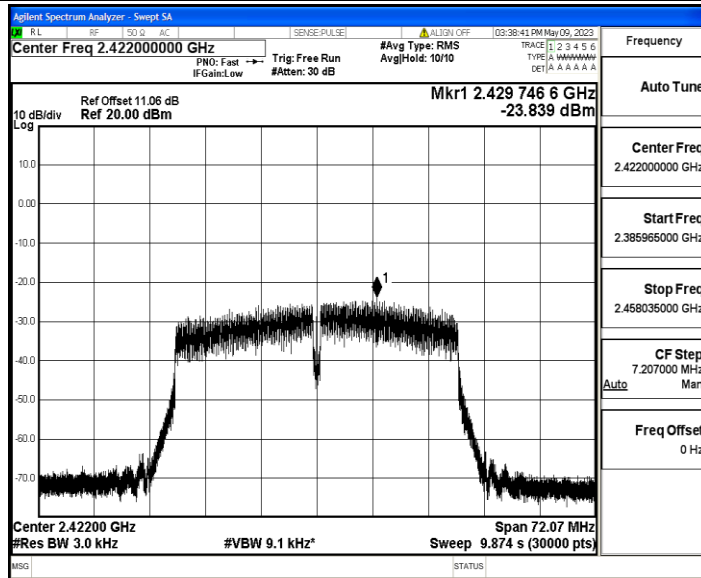
11N20MIMO_Ant2_2462



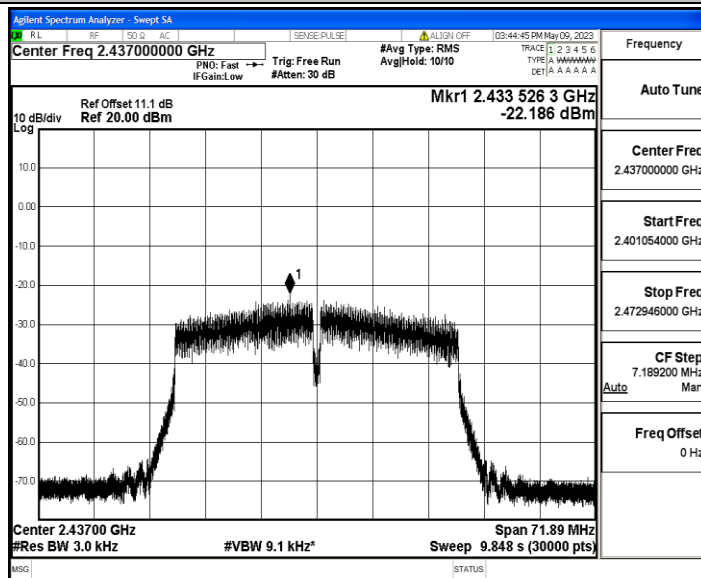
11N40MIMO_Ant1_2422



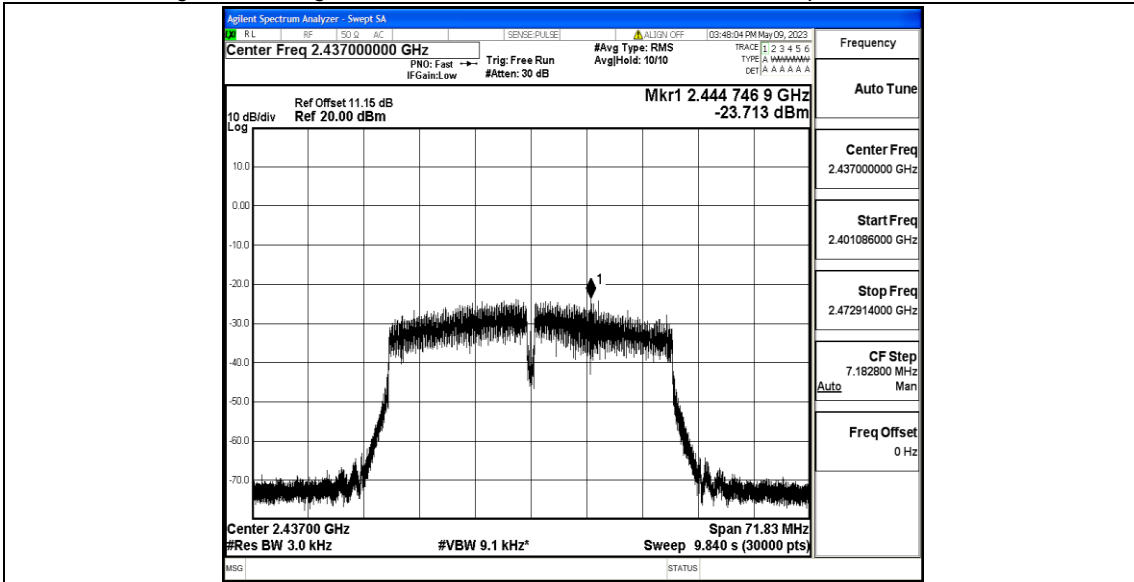
11N40MIMO_Ant2_2422



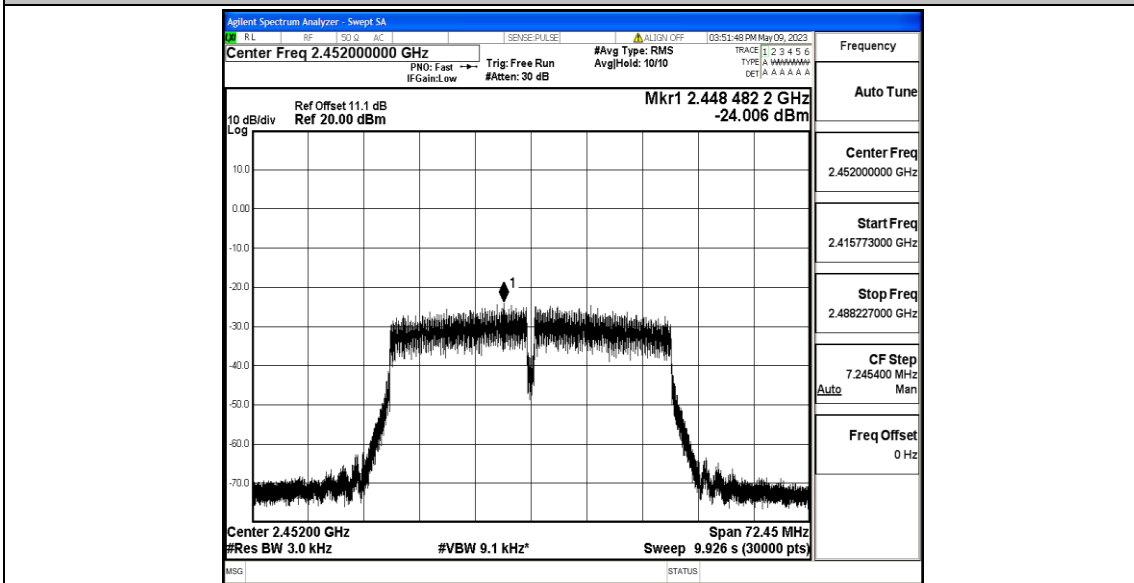
11N40MIMO_Ant1_2437



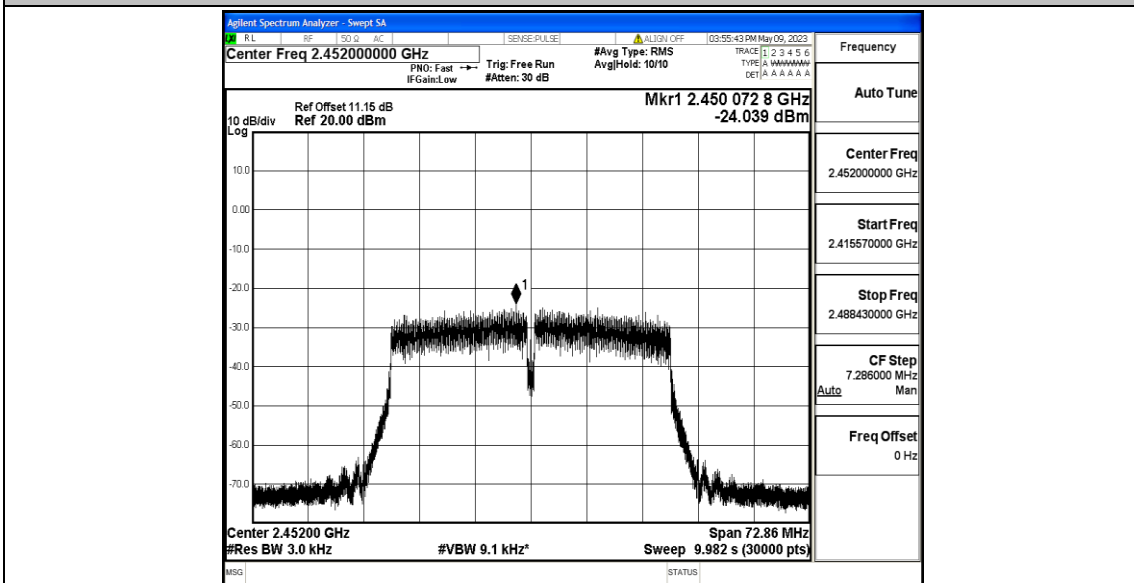
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



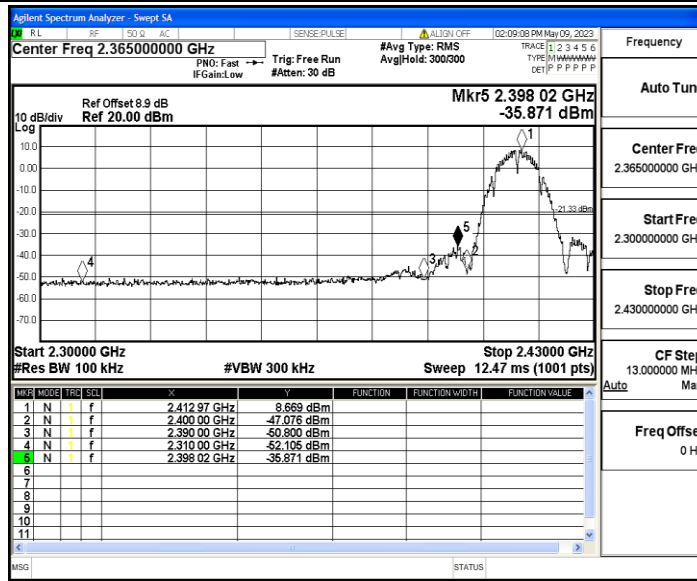
Appendix E: Band edge measurements

Test Result

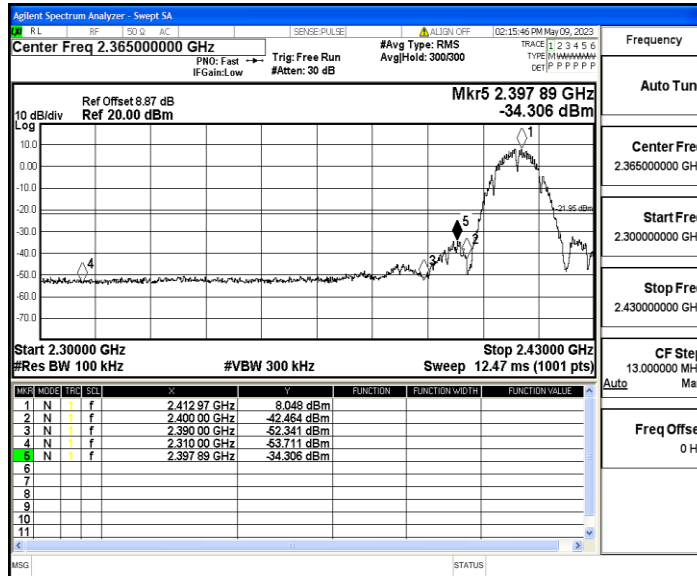
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	8.67	-35.87	≤-21.33	PASS
	Ant2	Low	2412	8.05	-34.31	≤-21.95	PASS
	Ant1	High	2462	9.29	-47.16	≤-20.72	PASS
	Ant2	High	2462	8.74	-48.14	≤-21.26	PASS
11G	Ant1	Low	2412	0.15	-42.75	≤-29.85	PASS
	Ant2	Low	2412	-0.79	-38.63	≤-30.79	PASS
	Ant1	High	2462	0.61	-48.02	≤-29.39	PASS
	Ant2	High	2462	-0.20	-48.34	≤-30.2	PASS
11N20MIMO	Ant1	Low	2412	-1.35	-43.41	≤-31.35	PASS
	Ant2	Low	2412	-1.17	-40.87	≤-31.17	PASS
	Ant1	High	2462	-1.27	-48.03	≤-31.27	PASS
	Ant2	High	2462	-0.73	-48.13	≤-30.73	PASS
11N40MIMO	Ant1	Low	2422	-3.11	-43.41	≤-33.11	PASS
	Ant2	Low	2422	-3.33	-40.79	≤-33.33	PASS
	Ant1	High	2452	-3.61	-48.24	≤-33.61	PASS
	Ant2	High	2452	-4.19	-46.59	≤-34.19	PASS

Test Graphs

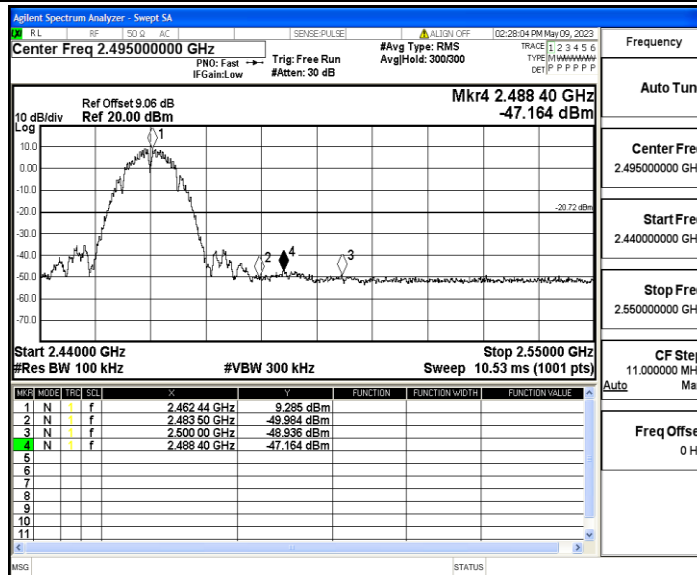
11B_Ant1_Low_2412



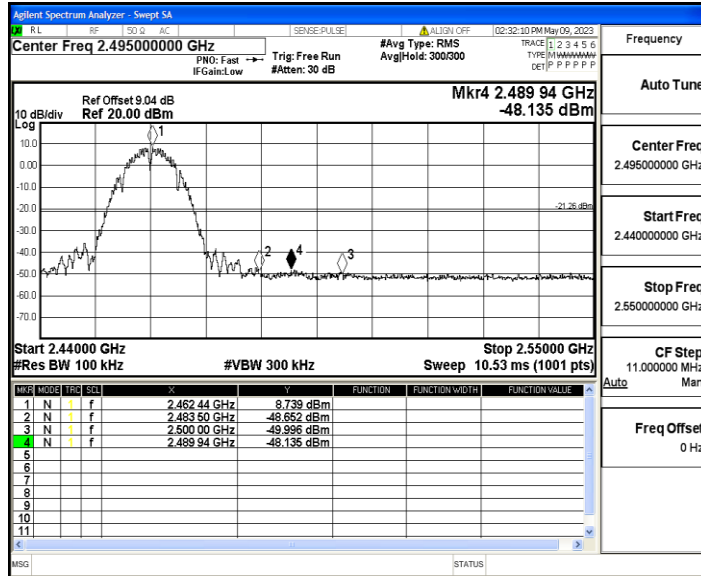
11B_Ant2_Low_2412



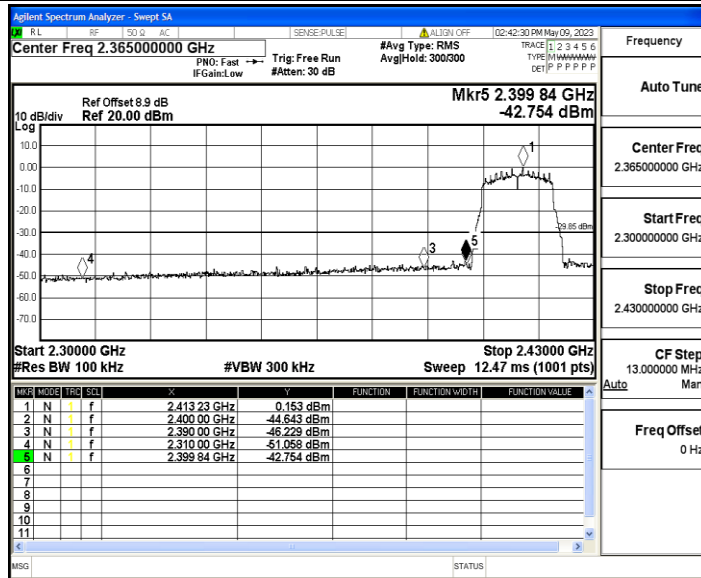
11B_Ant1_High_2462



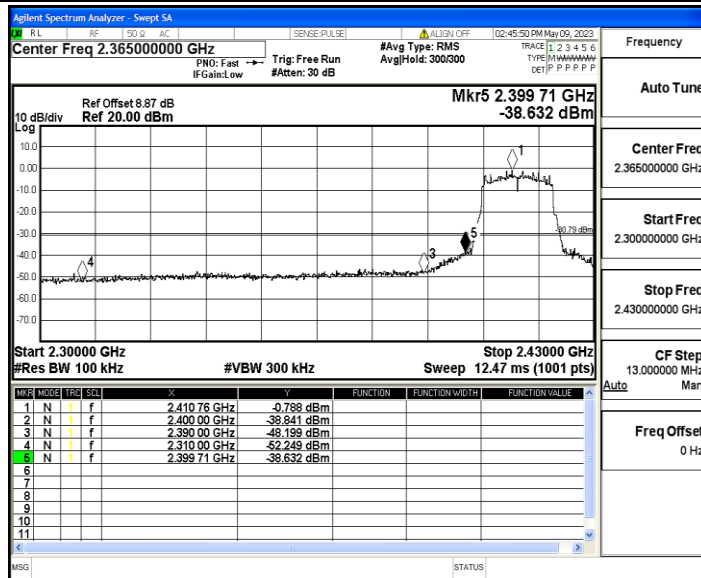
11B_Ant2_High_2462



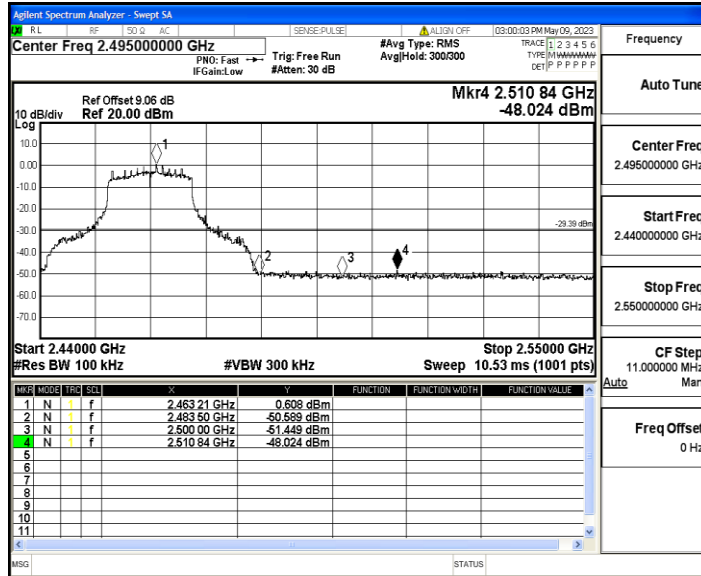
11G_Ant1_Low_2412



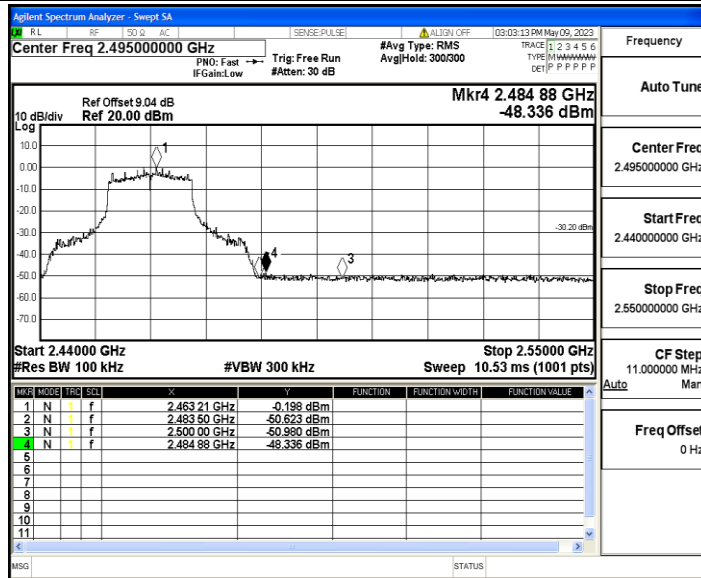
11G_Ant2_Low_2412



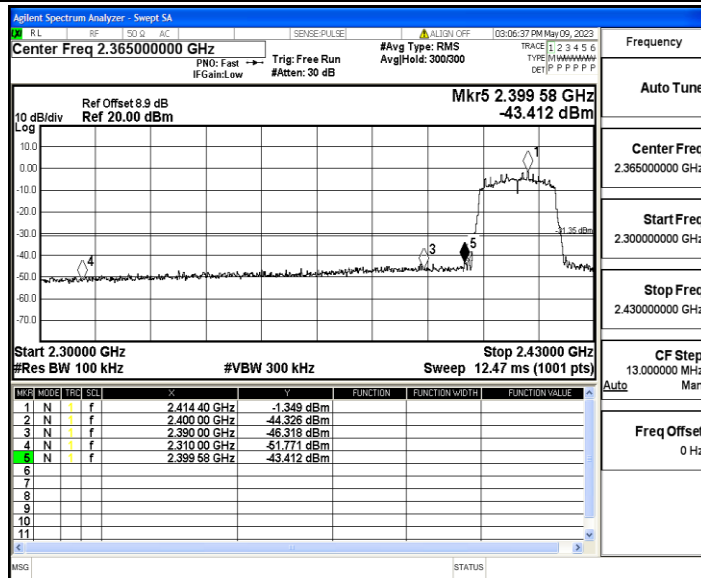
11G_Ant1_High_2462



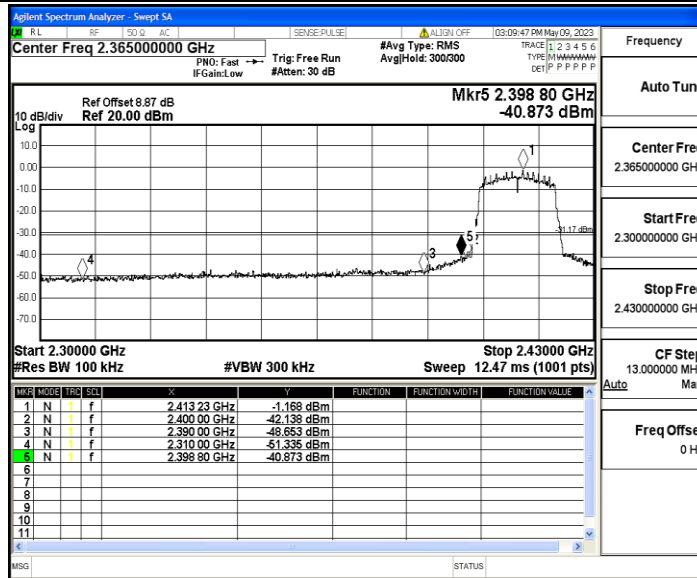
11G_Ant2_High_2462



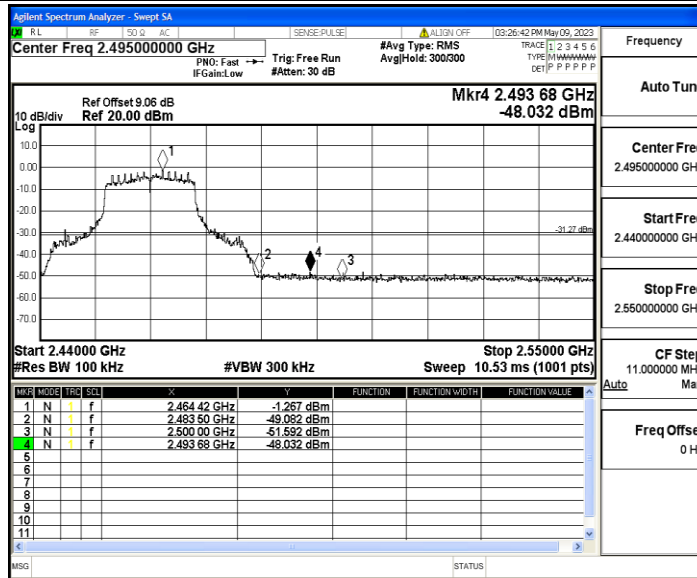
11N20MIMO_Ant1_Low_2412



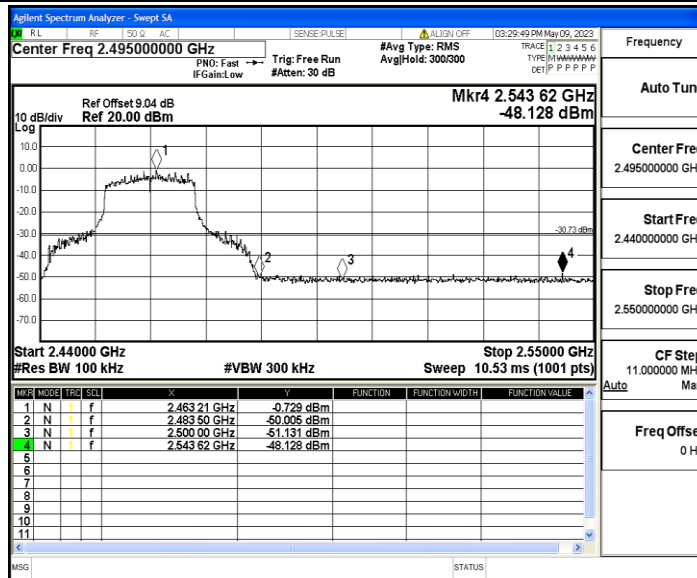
11N20MIMO_Ant2_Low_2412



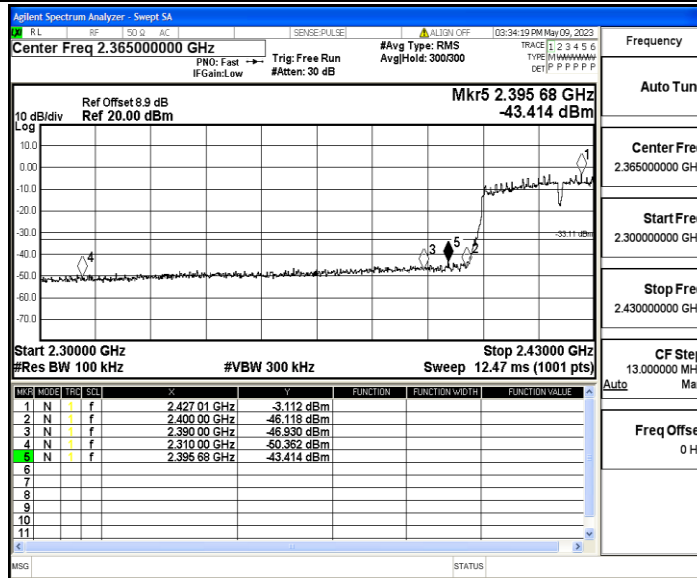
11N20MIMO_Ant1_High_2462



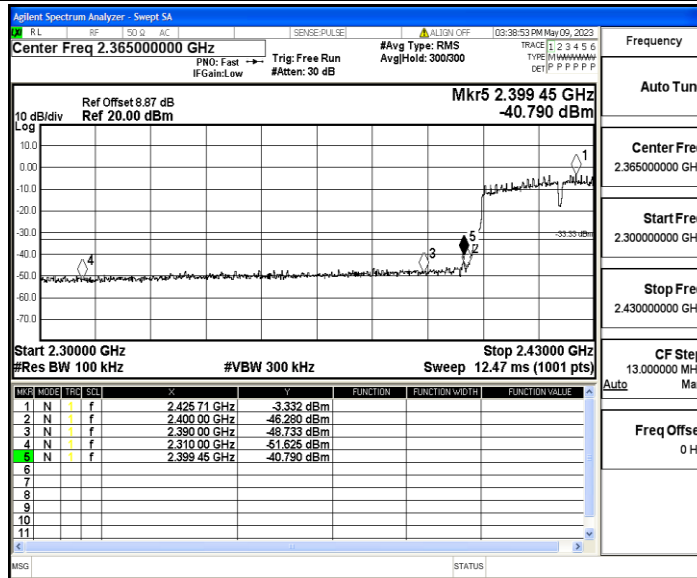
11N20MIMO_Ant2_High_2462



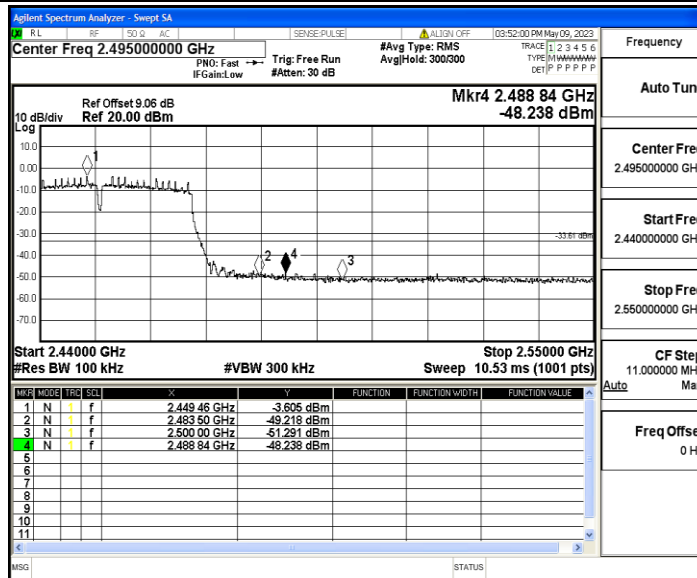
11N40MIMO_Ant1_Low_2422



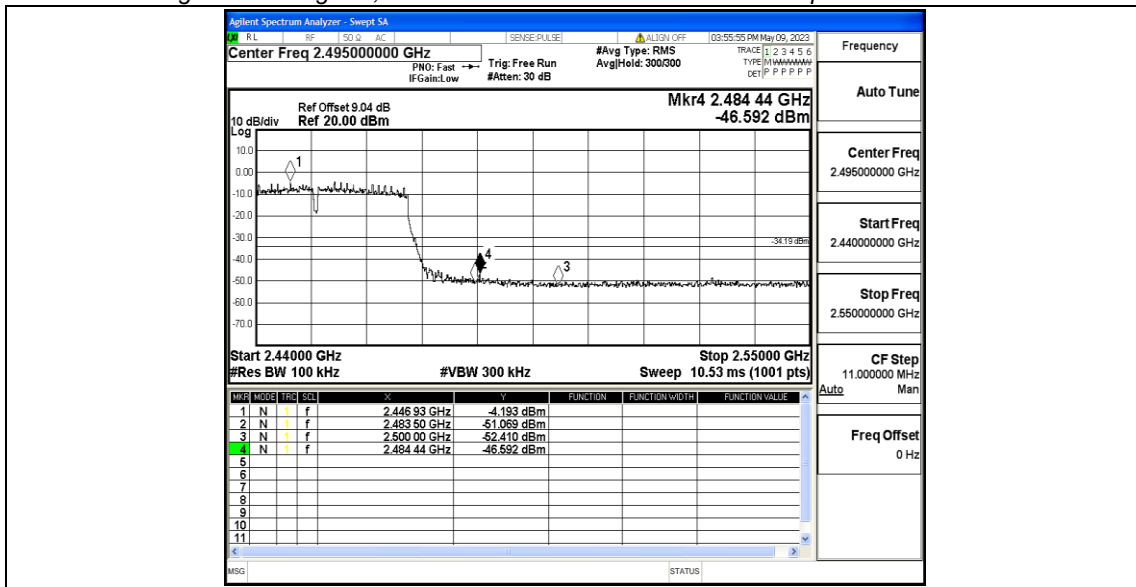
11N40MIMO_Ant2_Low_2422



11N40MIMO_Ant1_High_2452



11N40MIMO_Ant2_High_2452



Appendix F: Conducted Spurious Emission

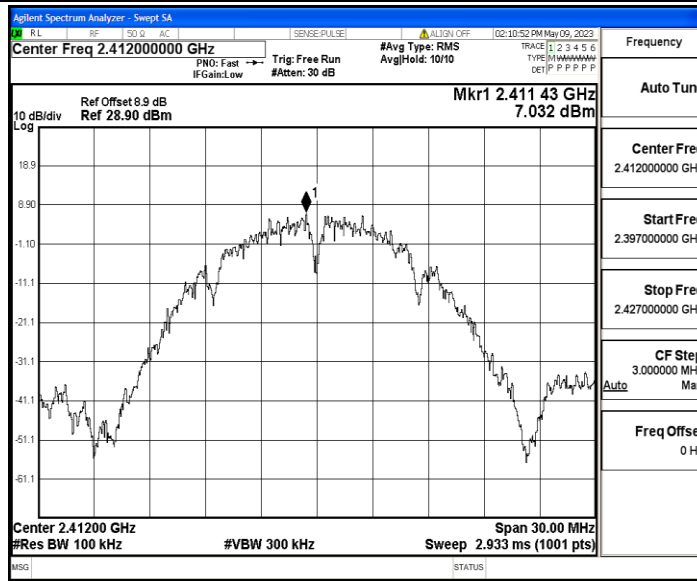
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict	
11B	Ant1	2412	Reference	7.03	7.03	---	PASS	
			30~1000	7.03	-61.72	≤-22.97	PASS	
			1000~26500	7.03	-48.46	≤-22.97	PASS	
	Ant2	2412	Reference	6.76	6.76	---	PASS	
			30~1000	6.76	-62.35	≤-23.24	PASS	
			1000~26500	6.76	-50.24	≤-23.24	PASS	
	Ant1	2437	Reference	9.07	9.07	---	PASS	
			30~1000	9.07	-62.3	≤-20.93	PASS	
			1000~26500	9.07	-47.25	≤-20.93	PASS	
	Ant2	2437	Reference	6.95	6.95	---	PASS	
			30~1000	6.95	-62.41	≤-23.05	PASS	
			1000~26500	6.95	-50.49	≤-23.05	PASS	
	Ant1	2462	Reference	8.26	8.26	---	PASS	
			30~1000	8.26	-62.91	≤-21.74	PASS	
			1000~26500	8.26	-45.83	≤-21.74	PASS	
	Ant2	2462	Reference	7.75	7.75	---	PASS	
			30~1000	7.75	-62.7	≤-22.25	PASS	
			1000~26500	7.75	-37.1	≤-22.25	PASS	
	11G	Ant1	2412	Reference	-1.07	-1.07	---	PASS
				30~1000	-1.07	-62.43	≤-31.07	PASS
				1000~26500	-1.07	-50.14	≤-31.07	PASS
		Ant2	2412	Reference	-3.24	-3.24	---	PASS
				30~1000	-3.24	-62.6	≤-33.24	PASS
				1000~26500	-3.24	-50.55	≤-33.24	PASS
Ant1		2437	Reference	-1.85	-1.85	---	PASS	
			30~1000	-1.85	-62.52	≤-31.85	PASS	
			1000~26500	-1.85	-50.11	≤-31.85	PASS	
Ant2		2437	Reference	-1.47	-1.47	---	PASS	
			30~1000	-1.47	-62.57	≤-31.47	PASS	
			1000~26500	-1.47	-50.22	≤-31.47	PASS	
Ant1		2462	Reference	-3.18	-3.18	---	PASS	
			30~1000	-3.18	-62.56	≤-33.18	PASS	
			1000~26500	-3.18	-49.35	≤-33.18	PASS	
Ant2		2462	Reference	-2.69	-2.69	---	PASS	
			30~1000	-2.69	-62.83	≤-32.69	PASS	
			1000~26500	-2.69	-50.05	≤-32.69	PASS	
11N20MIMO		Ant1	2412	Reference	-4.73	-4.73	---	PASS
				30~1000	-4.73	-62.18	≤-34.73	PASS
				1000~26500	-4.73	-50.06	≤-34.73	PASS
		Ant2	2412	Reference	-2.02	-2.02	---	PASS
				30~1000	-2.02	-62.96	≤-32.02	PASS

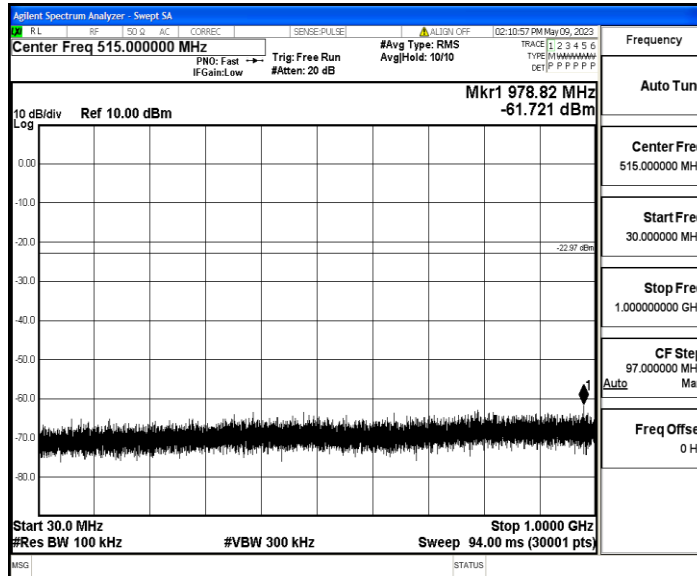
	Ant1	2437	1000~26500	-2.02	-49.72	≤ -32.02	PASS
			Reference	-2.68	-2.68	---	PASS
			30~1000	-2.68	-62.79	≤ -32.68	PASS
	Ant2	2437	1000~26500	-2.68	-50.18	≤ -32.68	PASS
			Reference	-1.31	-1.31	---	PASS
			30~1000	-1.31	-62.89	≤ -31.31	PASS
	Ant1	2462	1000~26500	-1.31	-49.68	≤ -31.31	PASS
			Reference	-2.06	-2.06	---	PASS
			30~1000	-2.06	-62.94	≤ -32.06	PASS
	Ant2	2462	1000~26500	-2.06	-48.7	≤ -32.06	PASS
			Reference	-1.40	-1.40	---	PASS
			30~1000	-1.40	-62.7	≤ -31.4	PASS
11N40MIMO	Ant1	2422	1000~26500	-1.40	-49.62	≤ -31.4	PASS
			Reference	-4.25	-4.25	---	PASS
			30~1000	-4.25	-62.81	≤ -34.25	PASS
	Ant2	2422	1000~26500	-4.25	-50.4	≤ -34.25	PASS
			Reference	-4.96	-4.96	---	PASS
			30~1000	-4.96	-62.89	≤ -34.96	PASS
	Ant1	2437	1000~26500	-4.96	-49.19	≤ -34.96	PASS
			Reference	-3.24	-3.24	---	PASS
			30~1000	-3.24	-62.12	≤ -33.24	PASS
	Ant2	2437	1000~26500	-3.24	-50.37	≤ -33.24	PASS
			Reference	-2.79	-2.79	---	PASS
			30~1000	-2.79	-62.86	≤ -32.79	PASS
Ant1	2452	1000~26500	-2.79	-49.61	≤ -32.79	PASS	
		Reference	-5.59	-5.59	---	PASS	
		30~1000	-5.59	-62.17	≤ -35.59	PASS	
Ant2	2452	1000~26500	-5.59	-49.76	≤ -35.59	PASS	
		Reference	-4.51	-4.51	---	PASS	
		30~1000	-4.51	-62.79	≤ -34.51	PASS	
			1000~26500	-4.51	-50.3	≤ -34.51	PASS

Test Graphs

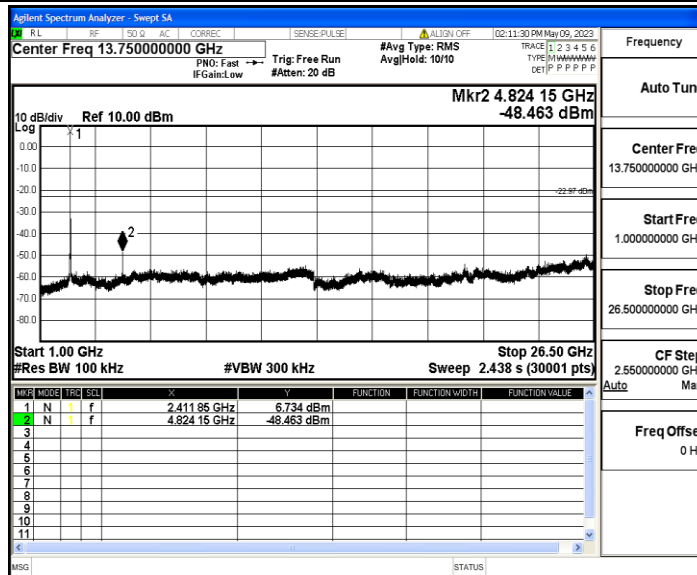
11B_Ant1_2412_0~Reference



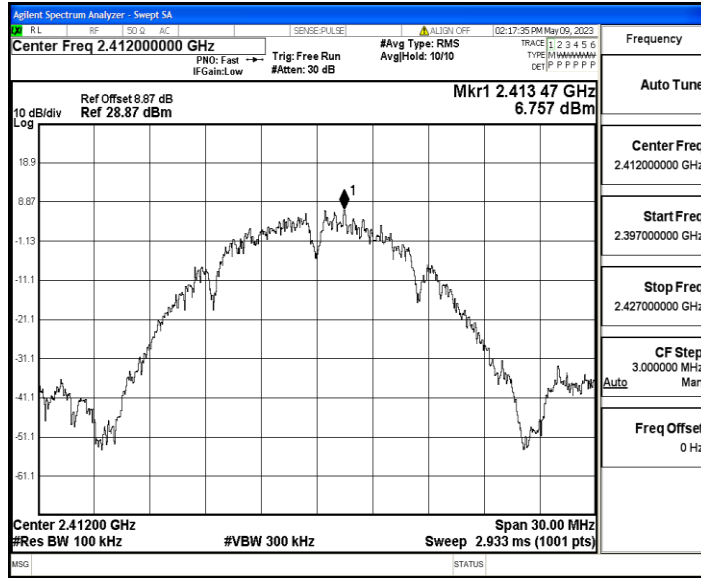
11B_Ant1_2412_30~1000



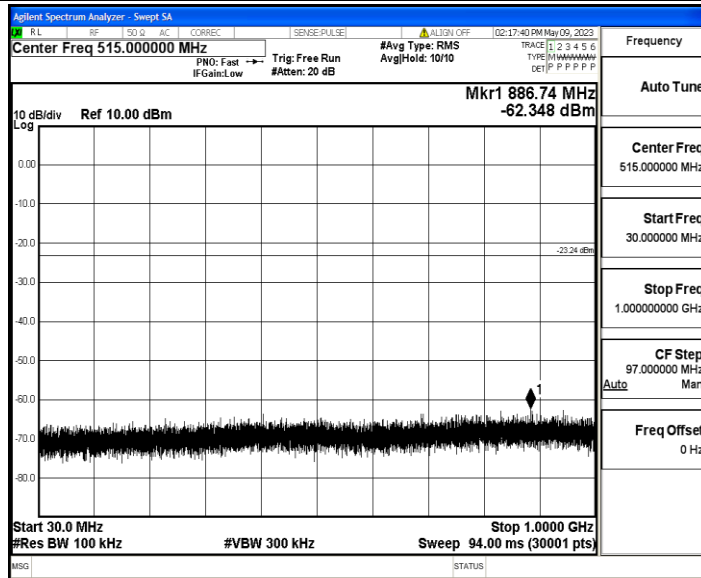
11B_Ant1_2412_1000~26500



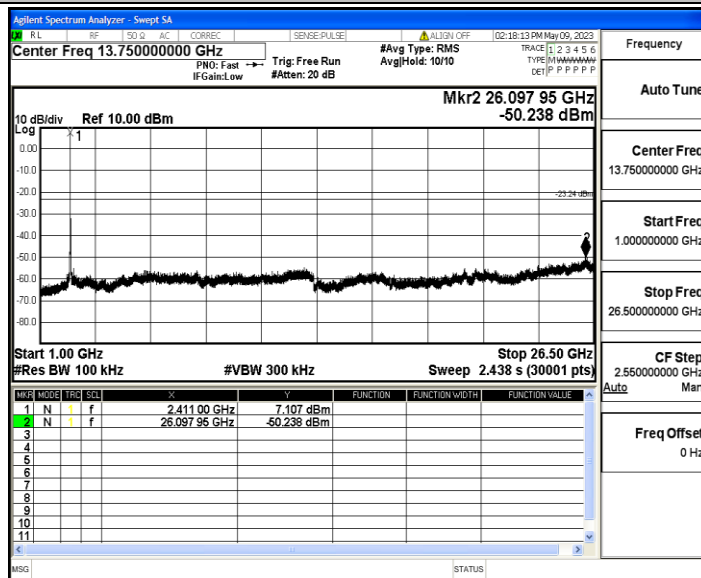
11B_Ant2_2412_0~Reference



11B_Ant2_2412_30~1000



11B_Ant2_2412_1000~26500



11B_Ant1_2437_0~Reference