

RF Test Data for WLAN(2.4G) (Conducted Measurement)

Product Name: Set Top Box

Trade Mark: N/A

Test Model: Claro STB SEI800CCOA-M

FCC ID: 2AOVU-SN6BHXX

Environmental Conditions

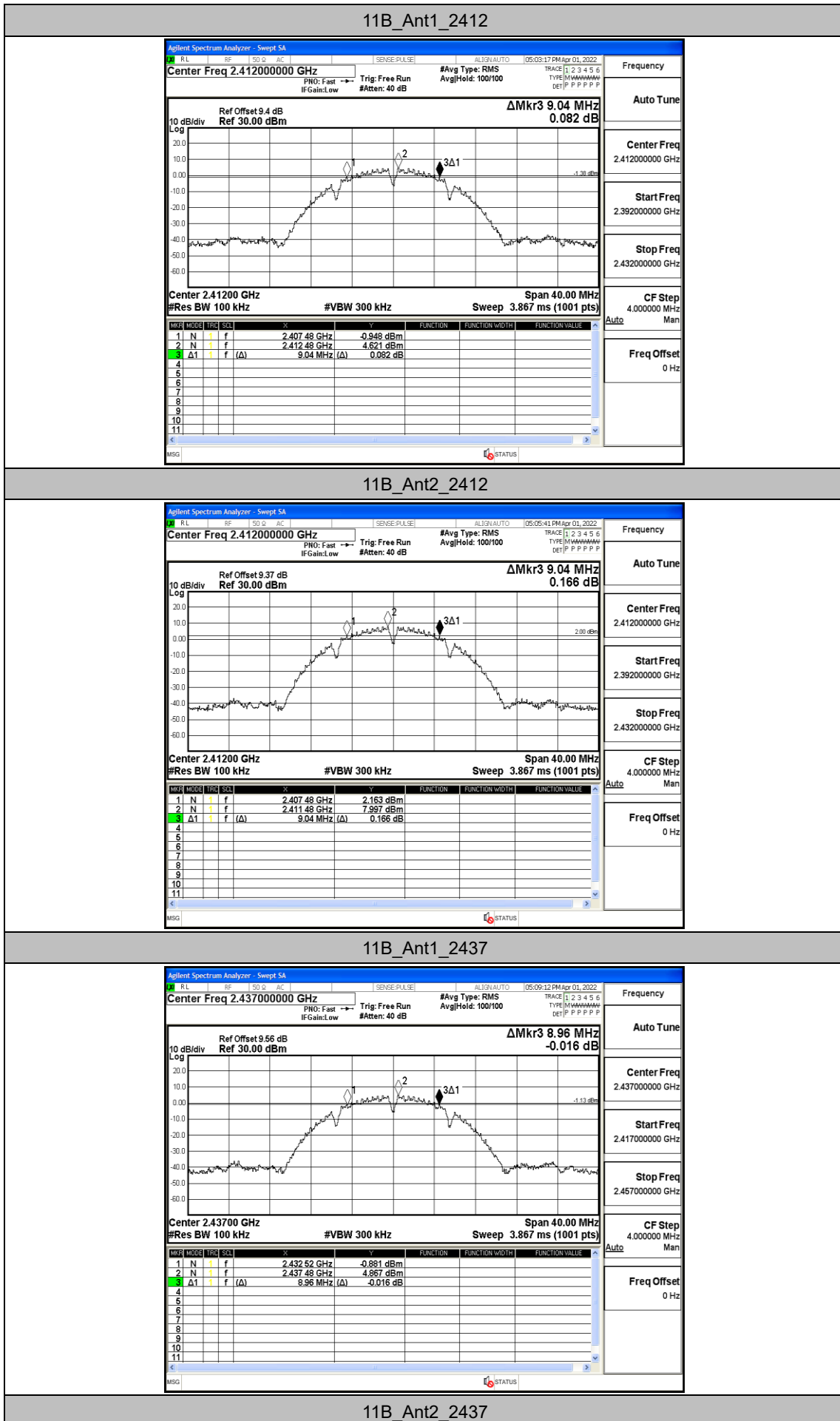
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

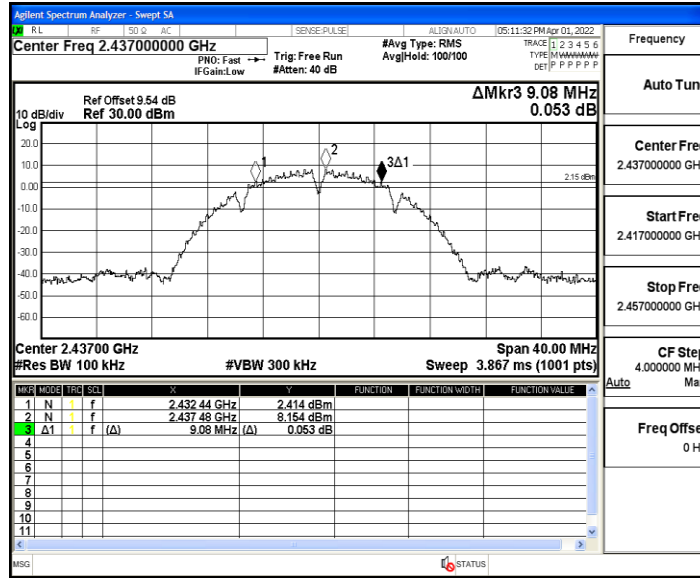
Appendix A: DTS Bandwidth

Test Result

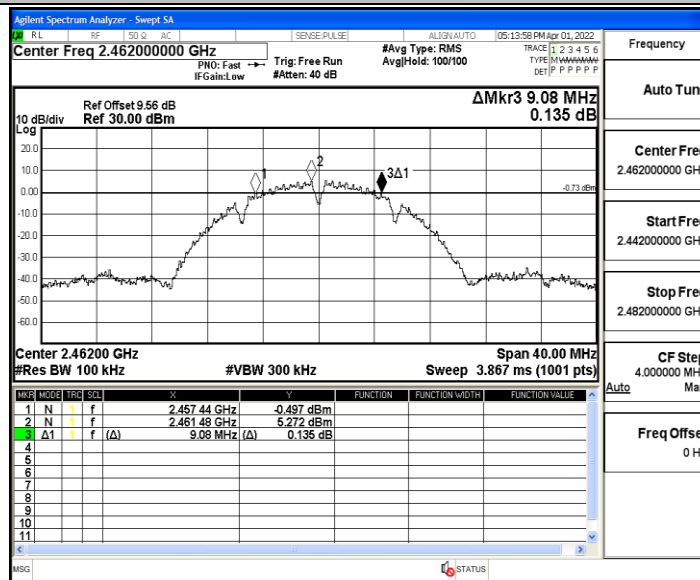
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.040	2407.480	2416.520	0.5	PASS
	Ant2	2412	9.040	2407.480	2416.520	0.5	PASS
	Ant1	2437	8.960	2432.520	2441.480	0.5	PASS
	Ant2	2437	9.080	2432.440	2441.520	0.5	PASS
	Ant1	2462	9.080	2457.440	2466.520	0.5	PASS
	Ant2	2462	9.040	2457.480	2466.520	0.5	PASS
11G	Ant1	2412	14.200	2405.360	2419.560	0.5	PASS
	Ant2	2412	15.080	2404.440	2419.520	0.5	PASS
	Ant1	2437	15.840	2428.840	2444.680	0.5	PASS
	Ant2	2437	12.840	2430.680	2443.520	0.5	PASS
	Ant1	2462	13.520	2455.360	2468.880	0.5	PASS
	Ant2	2462	13.400	2455.480	2468.880	0.5	PASS
11N20MIMO	Ant1	2412	14.680	2404.440	2419.120	0.5	PASS
	Ant2	2412	15.080	2404.440	2419.520	0.5	PASS
	Ant1	2437	15.320	2429.240	2444.560	0.5	PASS
	Ant2	2437	17.040	2428.600	2445.640	0.5	PASS
	Ant1	2462	15.720	2453.840	2469.560	0.5	PASS
	Ant2	2462	14.920	2454.520	2469.440	0.5	PASS
11N40MIMO	Ant1	2422	35.040	2404.480	2439.520	0.5	PASS
	Ant2	2422	35.040	2404.480	2439.520	0.5	PASS
	Ant1	2437	35.040	2419.480	2454.520	0.5	PASS
	Ant2	2437	33.840	2420.680	2454.520	0.5	PASS
	Ant1	2452	35.120	2434.400	2469.520	0.5	PASS
	Ant2	2452	35.040	2434.480	2469.520	0.5	PASS

Test Graphs

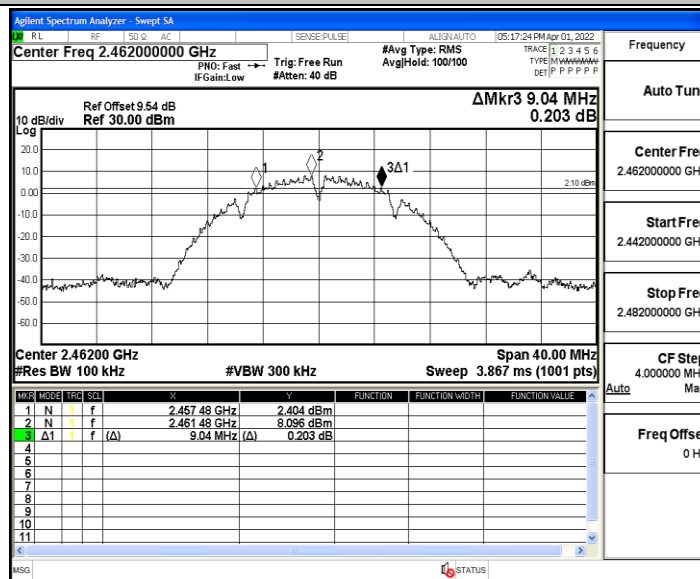




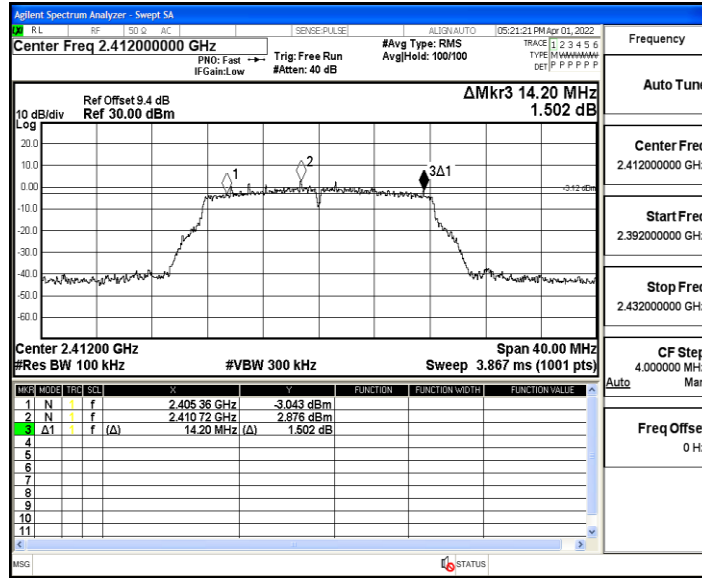
11B_Ant1_2462



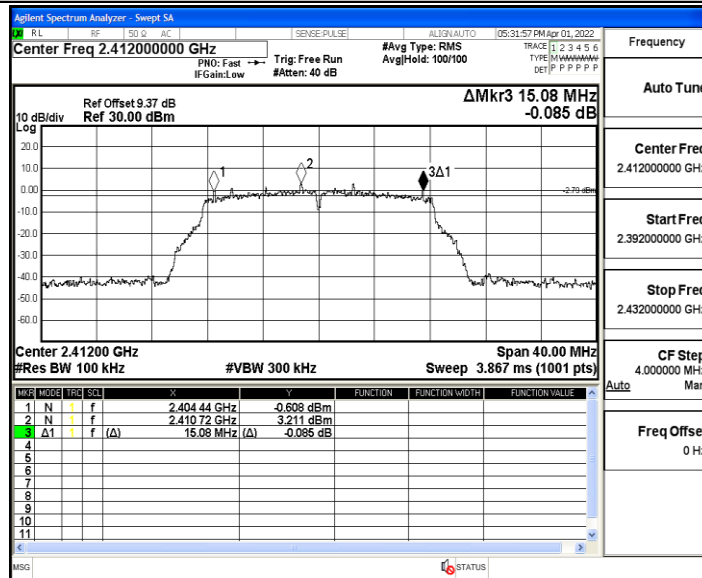
11B_Ant2_2462



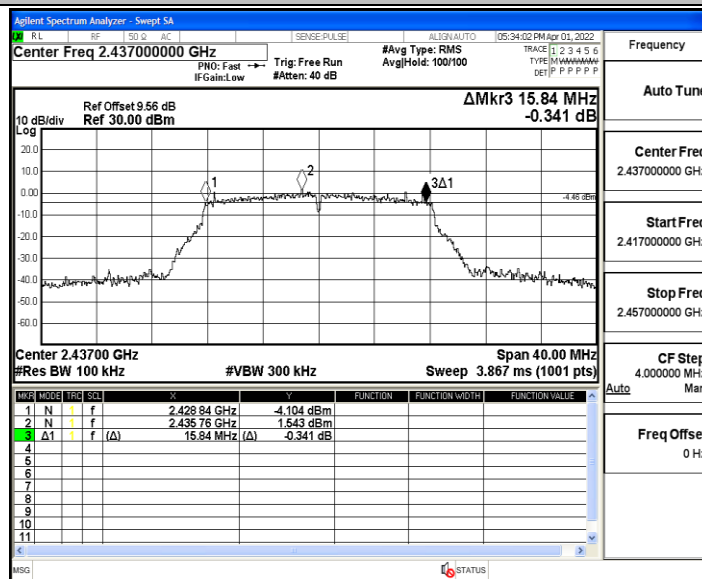
11G_Ant1_2412



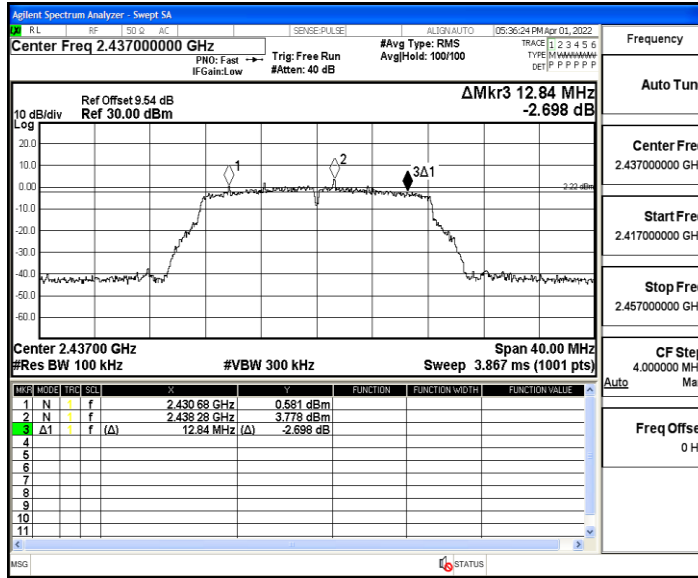
11G_Ant2_2412



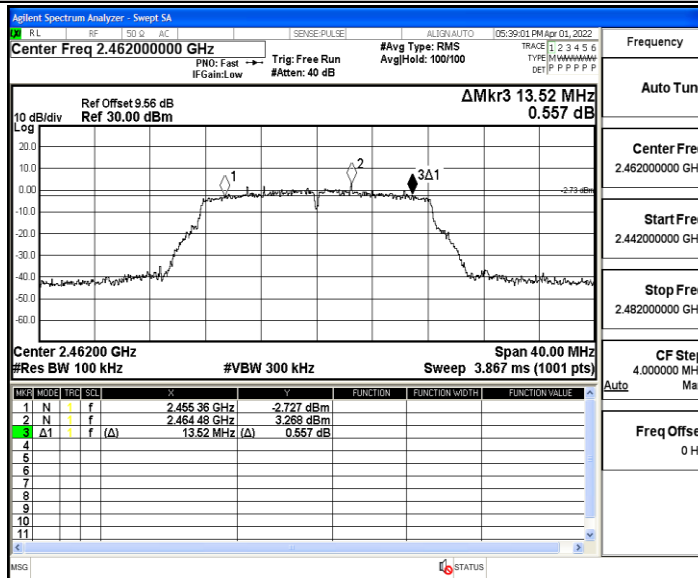
11G_Ant1_2437



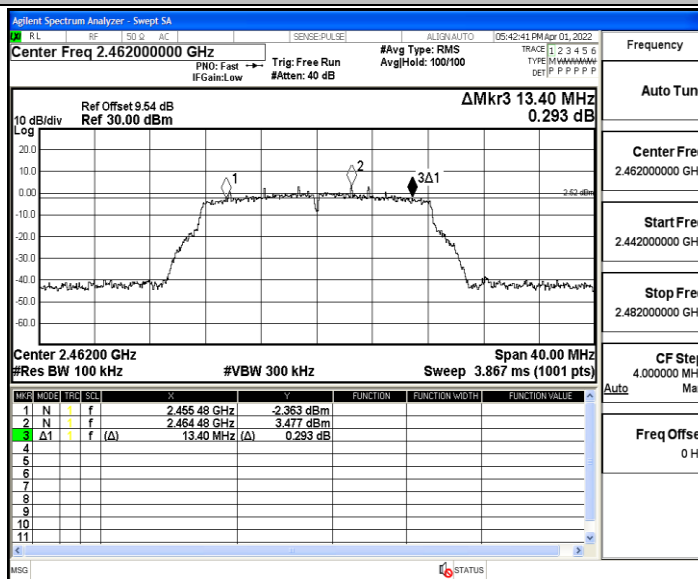
11G_Ant2_2437



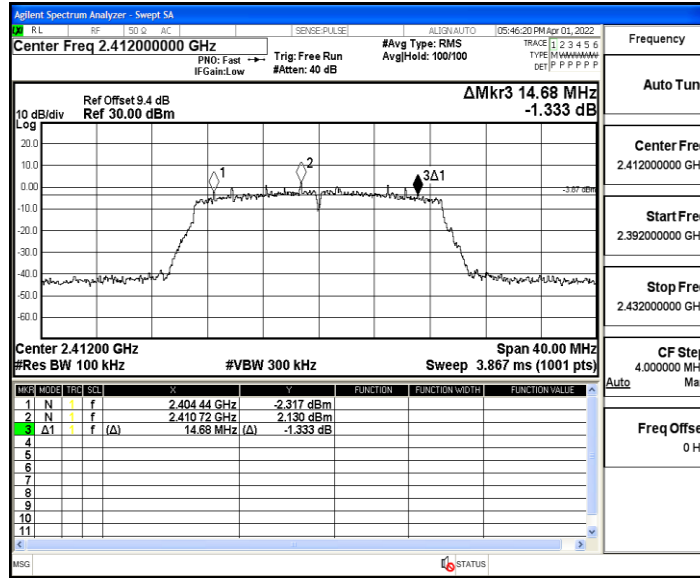
11G_Ant1_2462



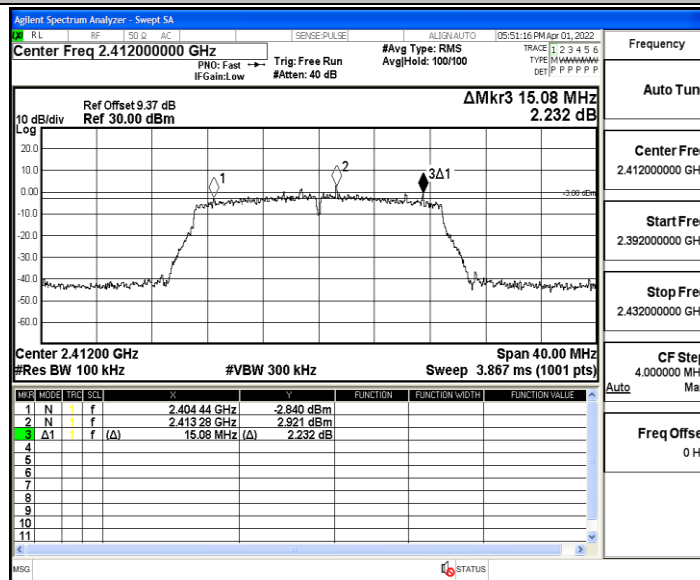
11G_Ant2_2462



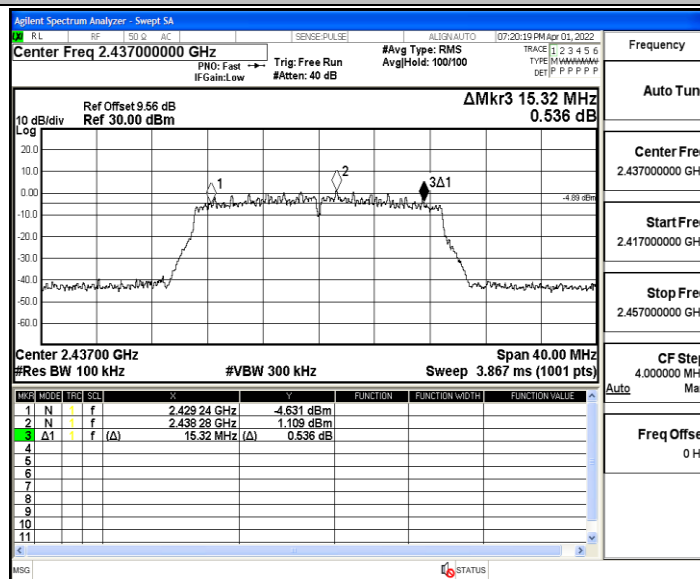
11N20MIMO_Ant1_2412



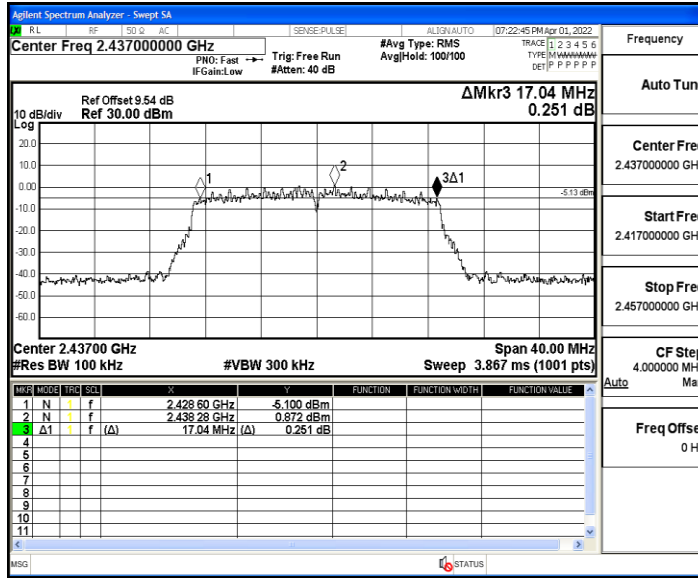
11N20MIMO_Ant2_2412



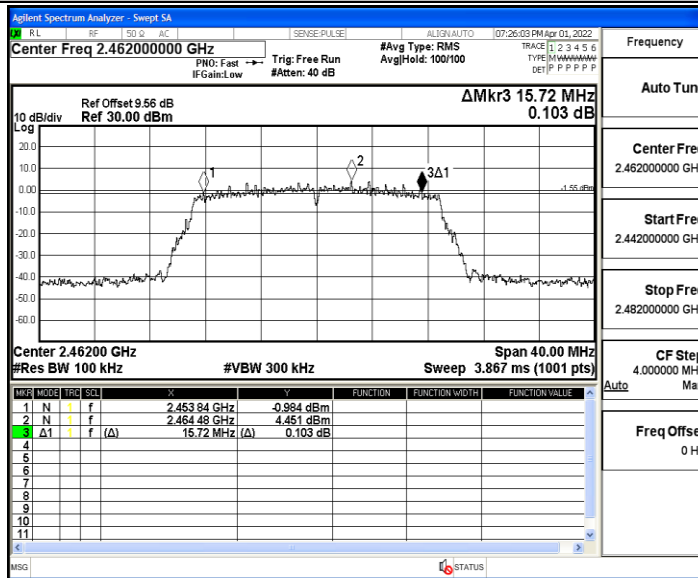
11N20MIMO_Ant1_2437



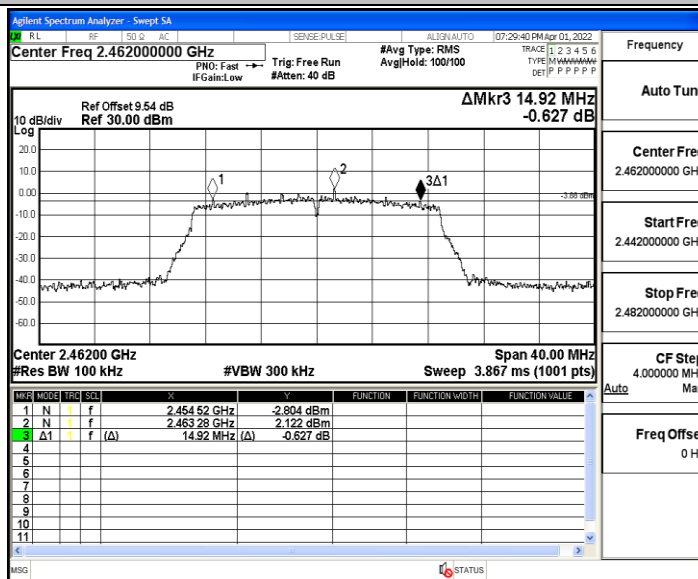
11N20MIMO_Ant2_2437



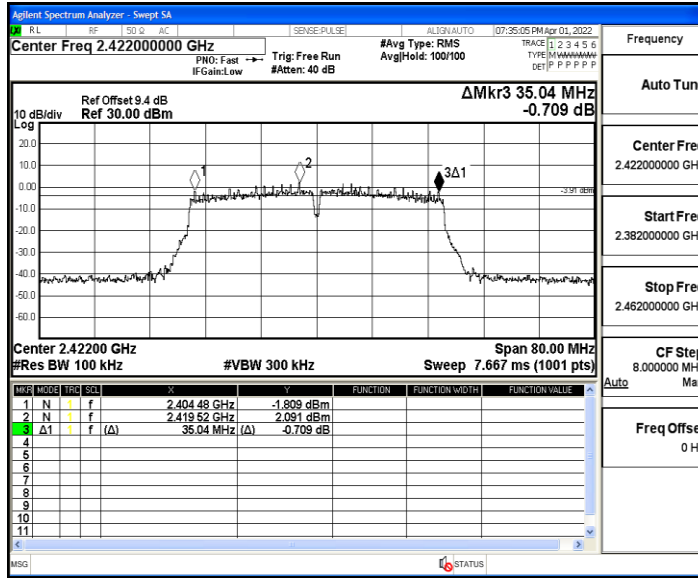
11N20MIMO_Ant1_2462



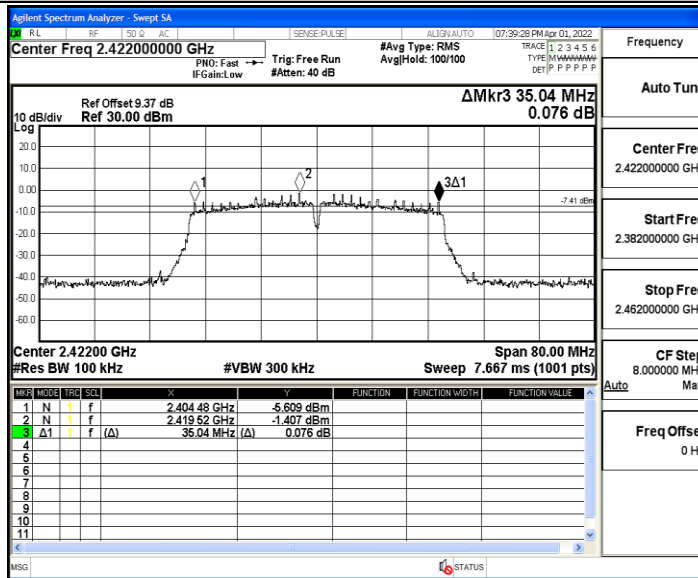
11N20MIMO_Ant2_2462



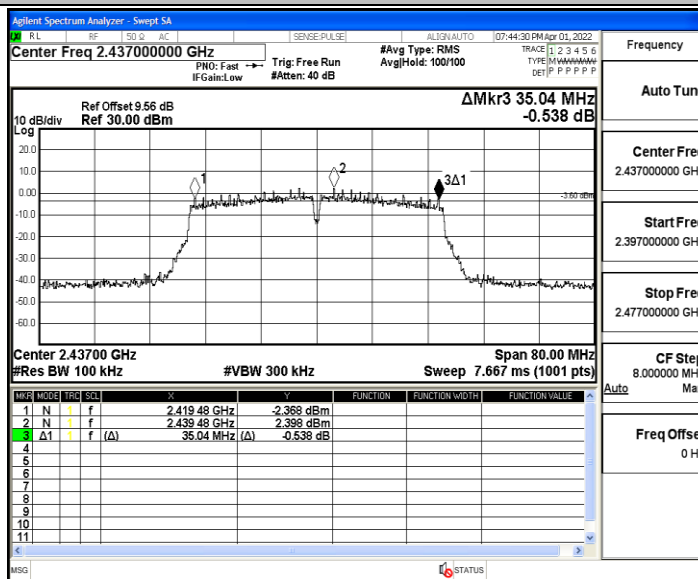
11N40MIMO_Ant1_2422



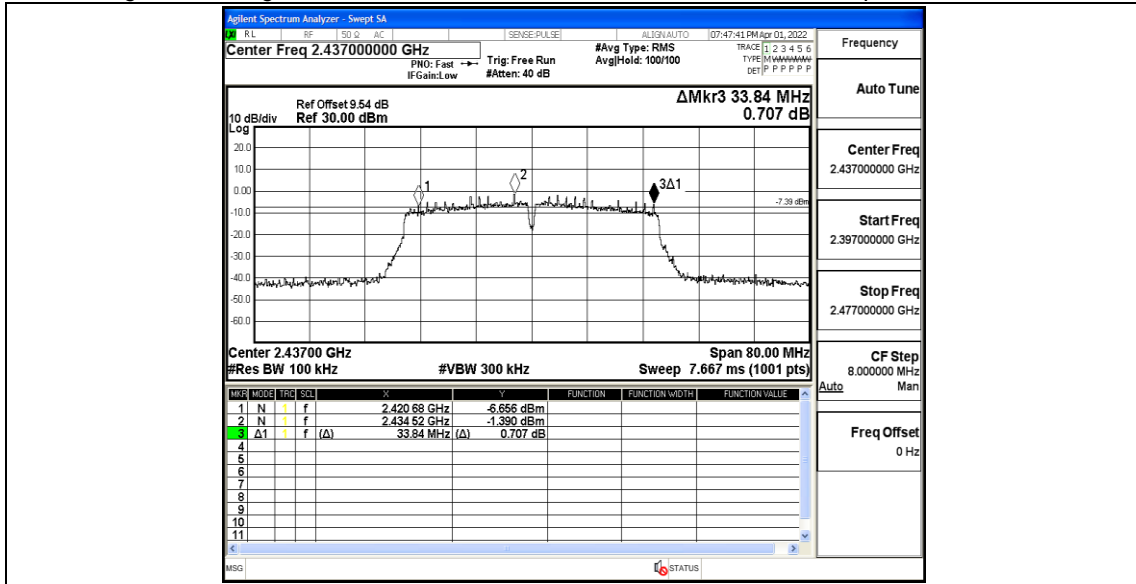
11N40MIMO_Ant2_2422



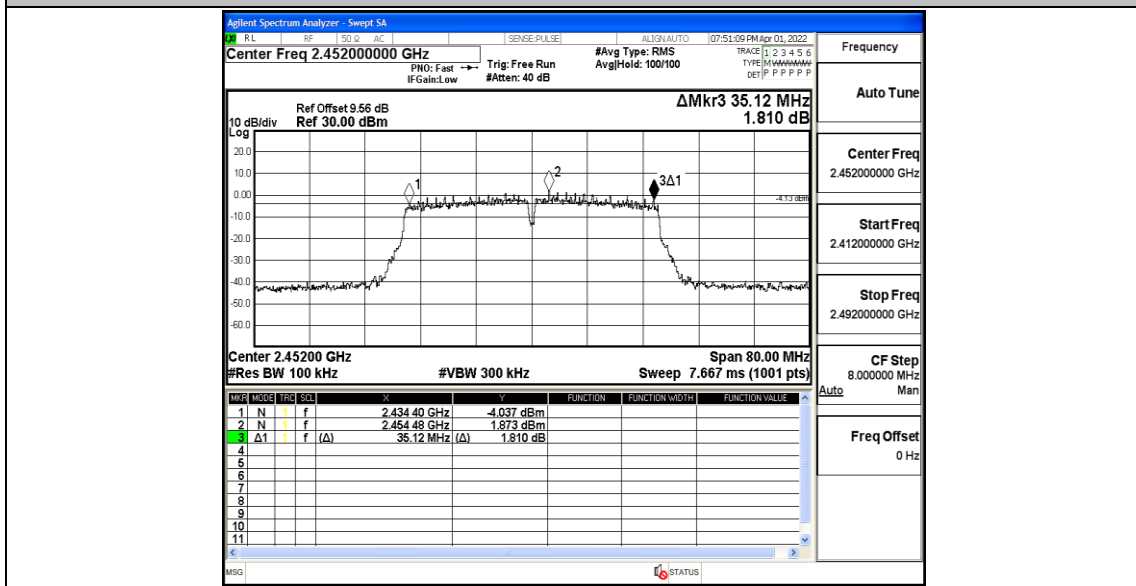
11N40MIMO_Ant1_2437



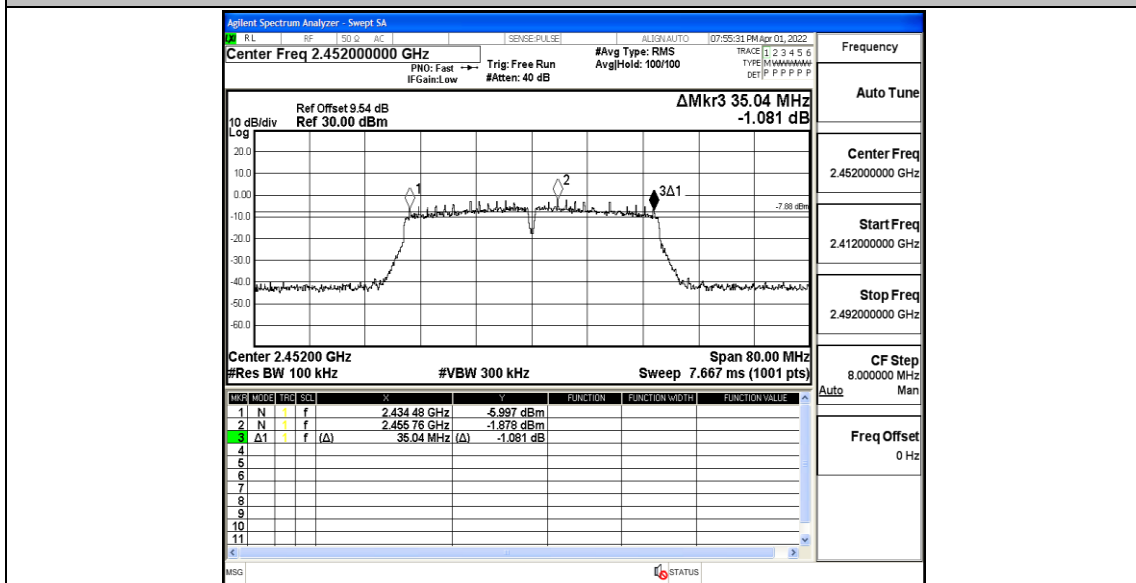
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452

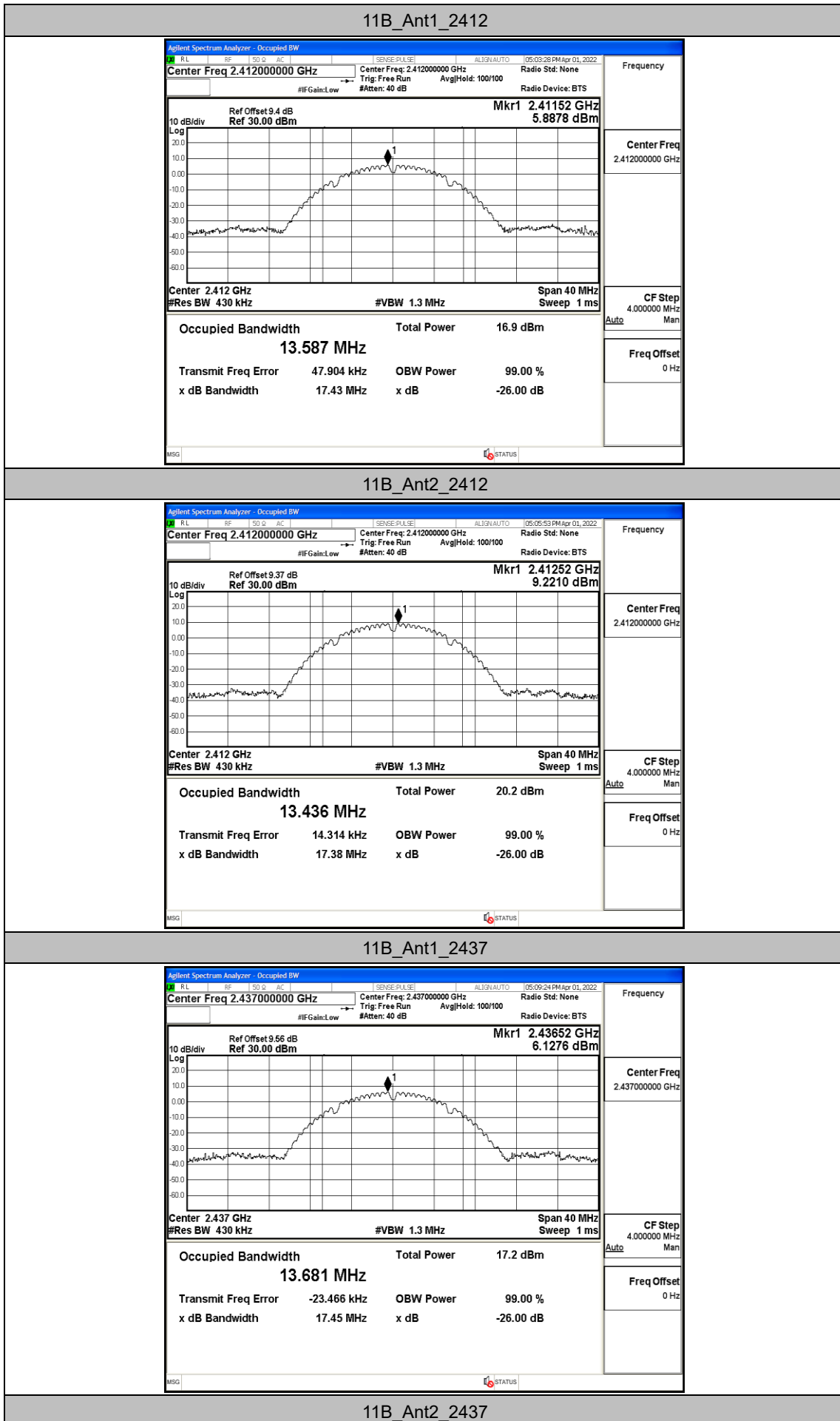


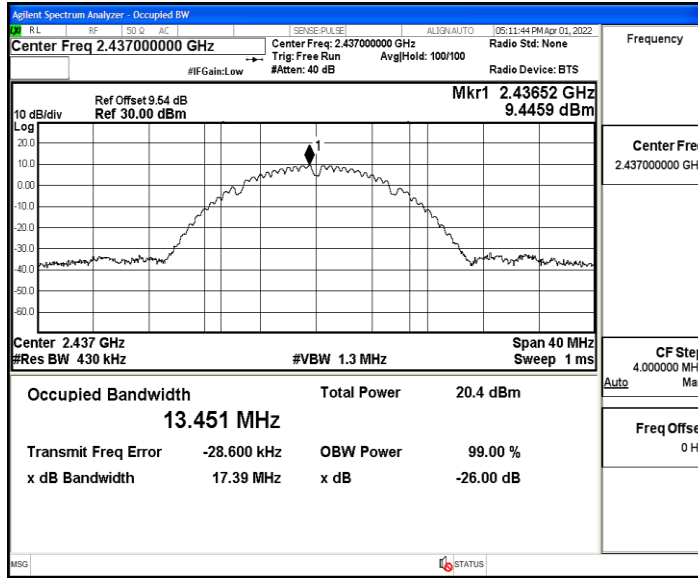
Appendix B: Occupied Channel Bandwidth

Test Result

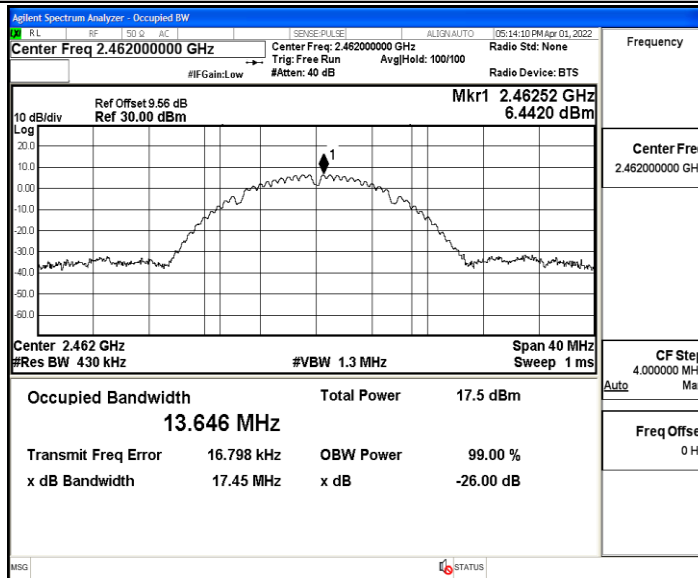
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.587	2405.254	2418.841	---	PASS
	Ant2	2412	13.436	2405.296	2418.732	---	PASS
	Ant1	2437	13.681	2430.136	2443.817	---	PASS
	Ant2	2437	13.451	2430.246	2443.697	---	PASS
	Ant1	2462	13.646	2455.194	2468.840	---	PASS
	Ant2	2462	13.433	2455.333	2468.766	---	PASS
11G	Ant1	2412	16.776	2403.578	2420.354	---	PASS
	Ant2	2412	16.695	2403.663	2420.358	---	PASS
	Ant1	2437	16.857	2428.512	2445.369	---	PASS
	Ant2	2437	16.792	2428.578	2445.370	---	PASS
	Ant1	2462	16.815	2453.602	2470.417	---	PASS
	Ant2	2462	16.819	2453.596	2470.415	---	PASS
11N20MIMO	Ant1	2412	17.794	2403.150	2420.944	---	PASS
	Ant2	2412	17.773	2403.151	2420.924	---	PASS
	Ant1	2437	17.689	2428.189	2445.878	---	PASS
	Ant2	2437	17.696	2428.176	2445.872	---	PASS
	Ant1	2462	17.655	2453.200	2470.855	---	PASS
	Ant2	2462	17.779	2453.114	2470.893	---	PASS
11N40MIMO	Ant1	2422	36.242	2403.958	2440.200	---	PASS
	Ant2	2422	36.010	2404.044	2440.054	---	PASS
	Ant1	2437	36.101	2418.963	2455.064	---	PASS
	Ant2	2437	36.027	2419.025	2455.052	---	PASS
	Ant1	2452	36.227	2434.015	2470.242	---	PASS
	Ant2	2452	36.082	2434.030	2470.112	---	PASS

Test Graphs

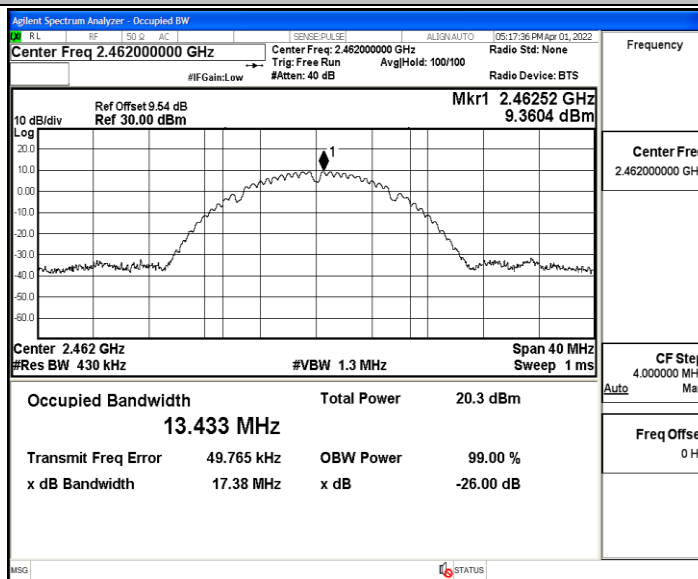




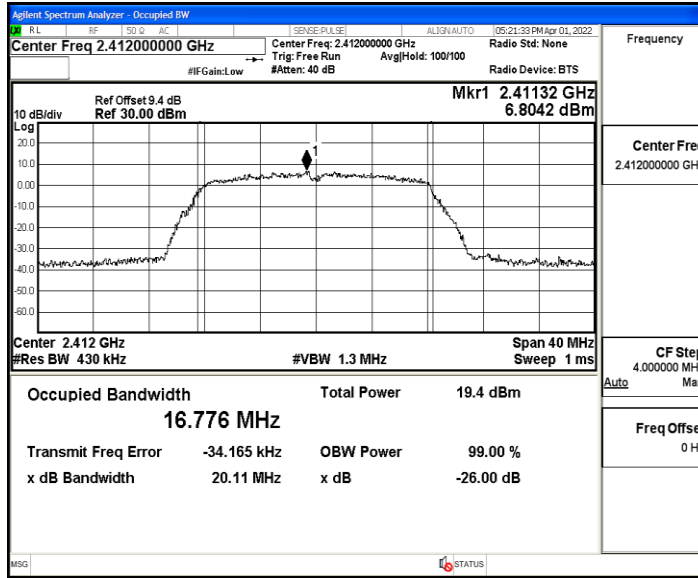
11B_Ant1_2462



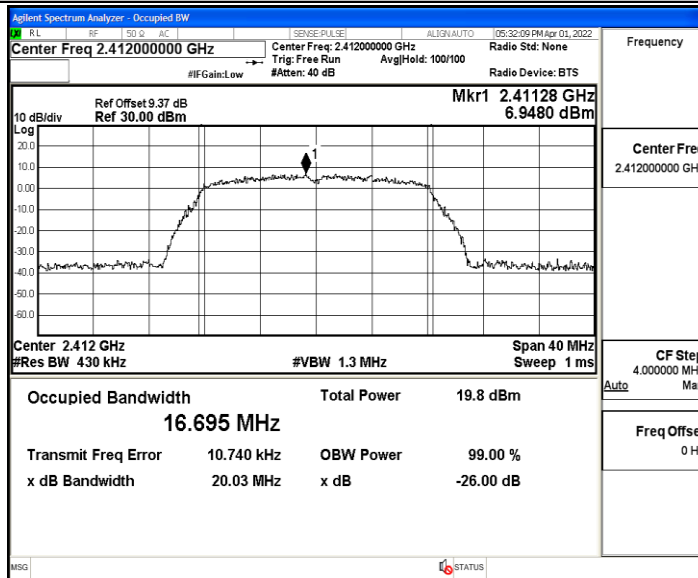
11B_Ant2_2462



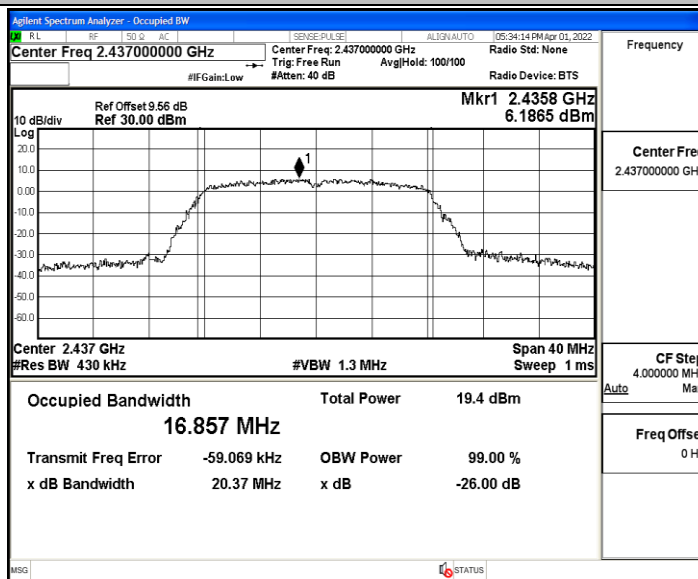
11G_Ant1_2412



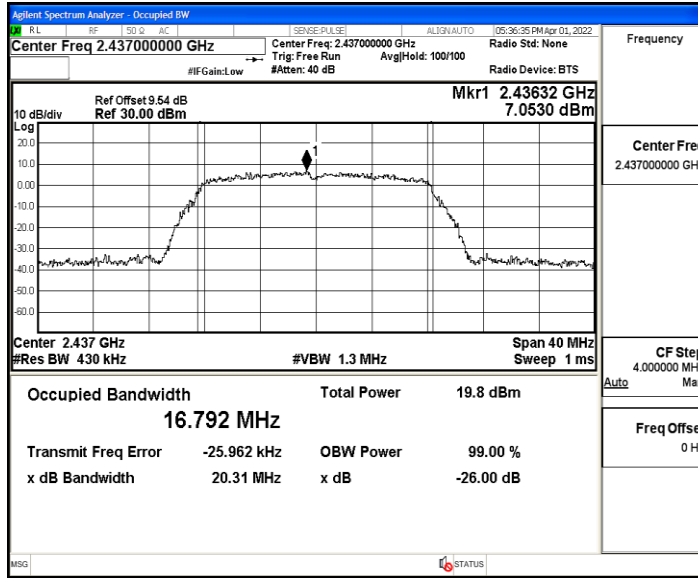
11G_Ant2_2412



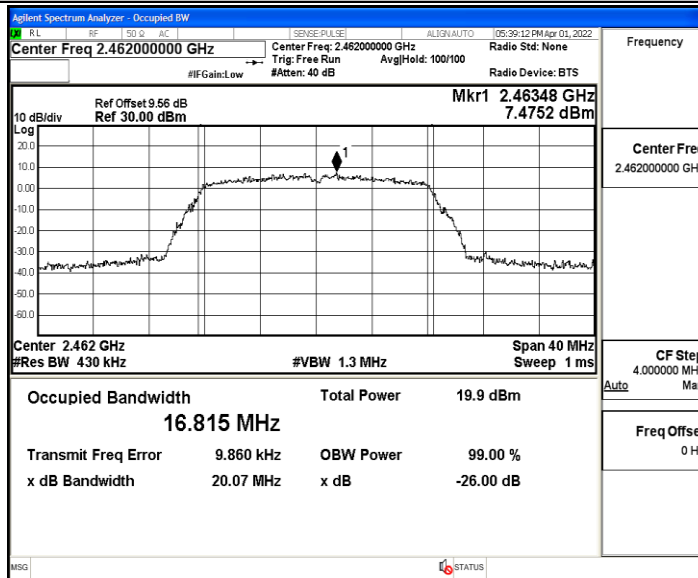
11G_Ant1_2437



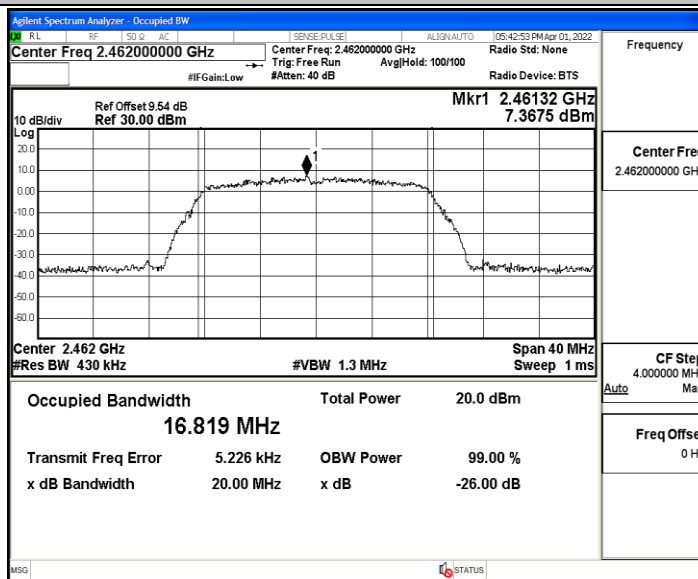
11G_Ant2_2437



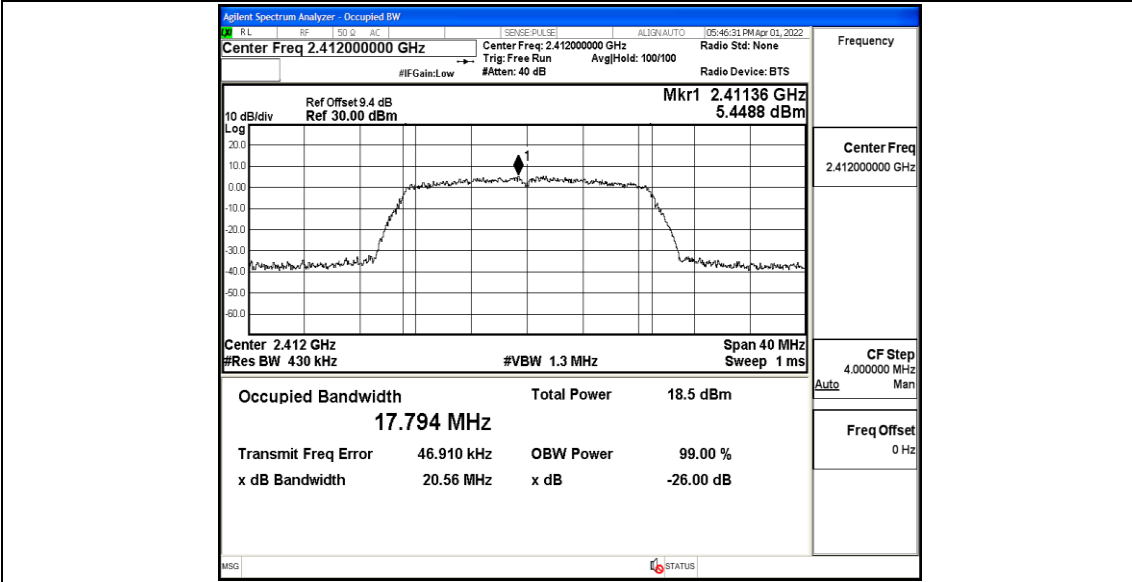
11G_Ant1_2462



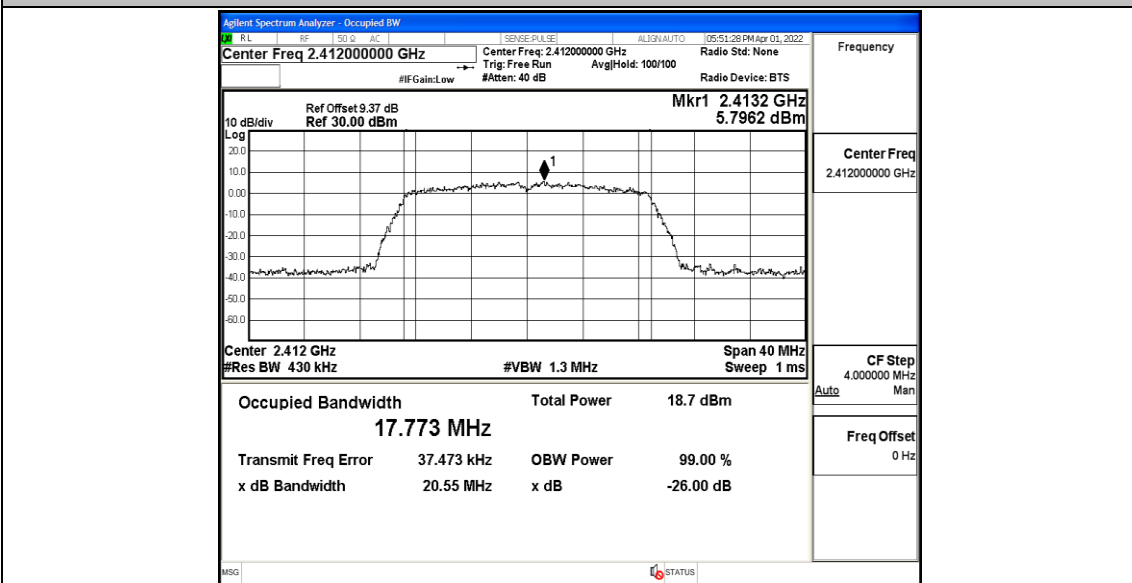
11G_Ant2_2462



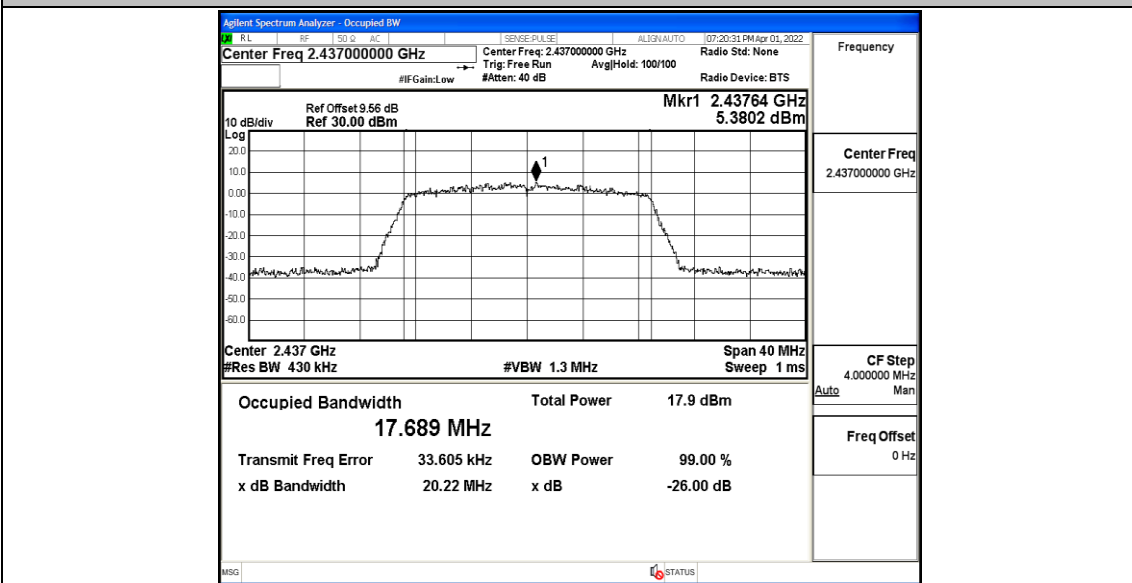
11N20MIMO_Ant1_2412



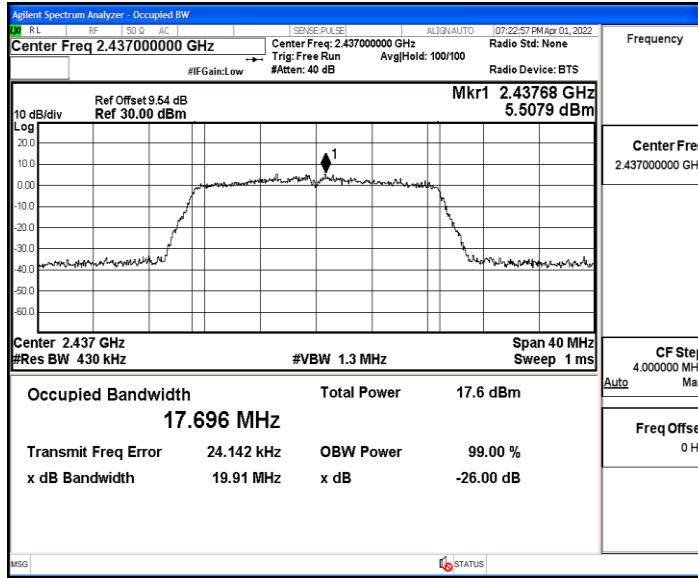
11N20MIMO_Ant2_2412



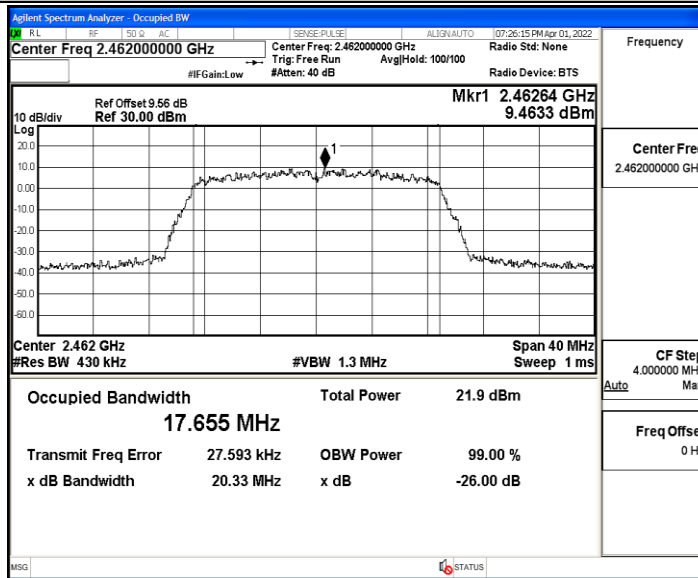
11N20MIMO_Ant1_2437



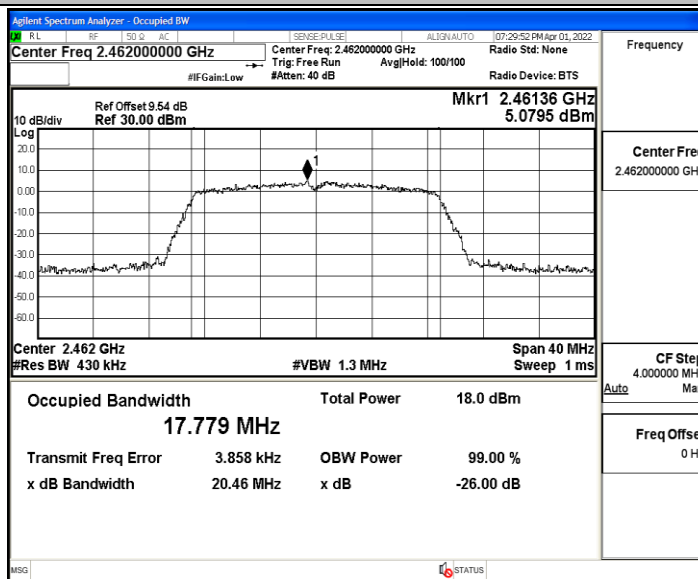
11N20MIMO_Ant2_2437



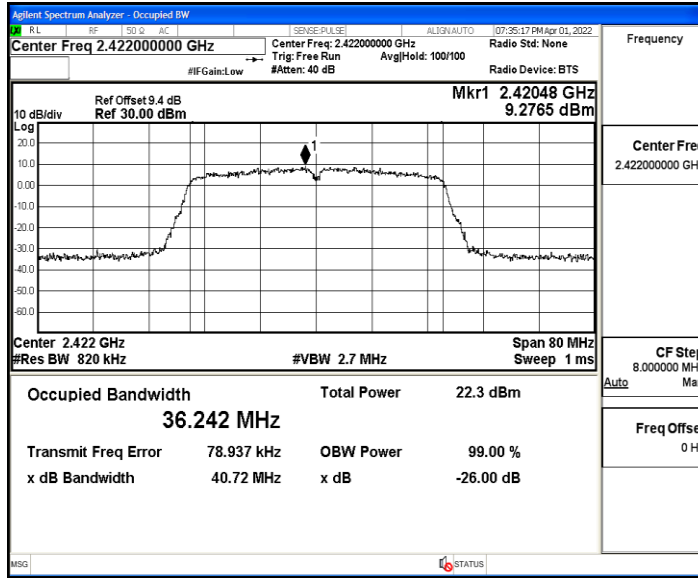
11N20MIMO_Ant1_2462



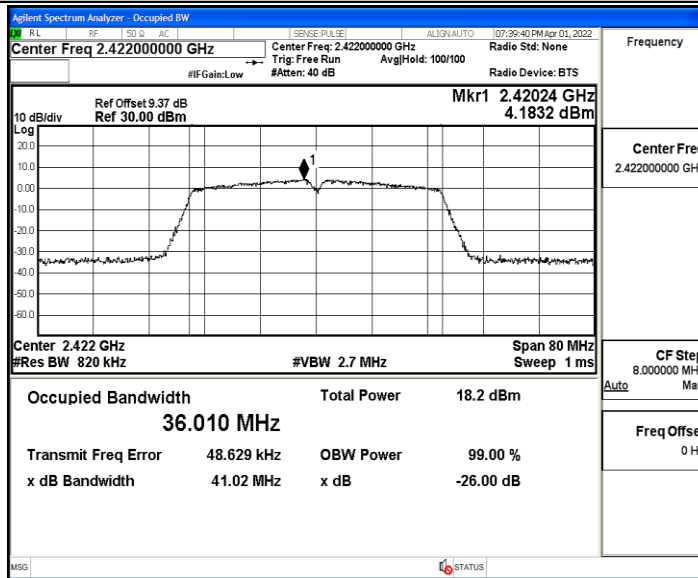
11N20MIMO_Ant2_2462



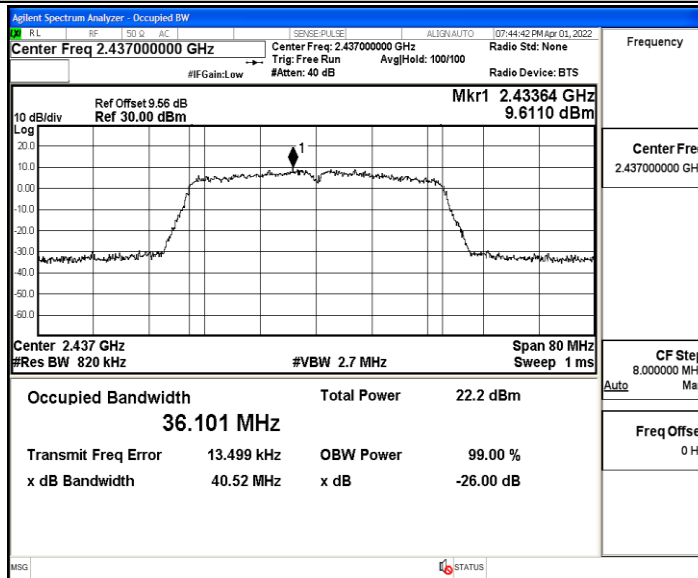
11N40MIMO_Ant1_2422



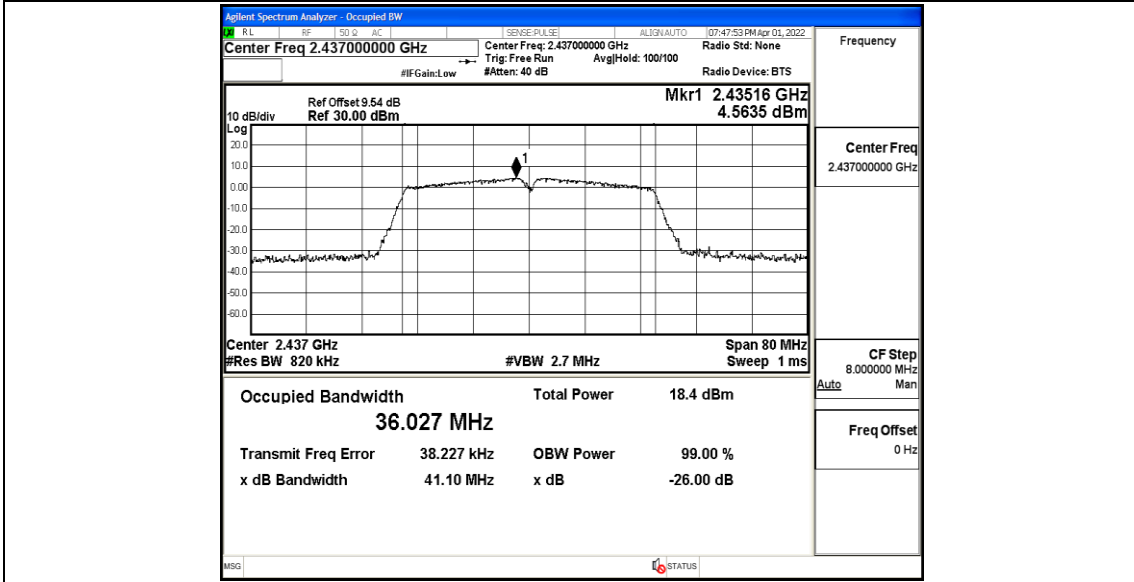
11N40MIMO_Ant2_2422



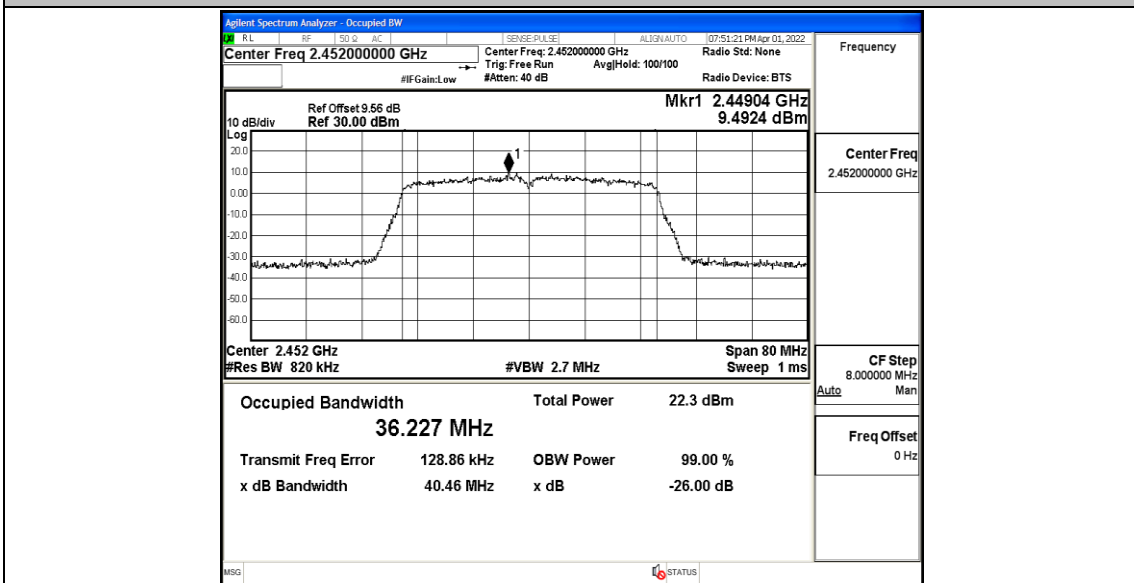
11N40MIMO_Ant1_2437



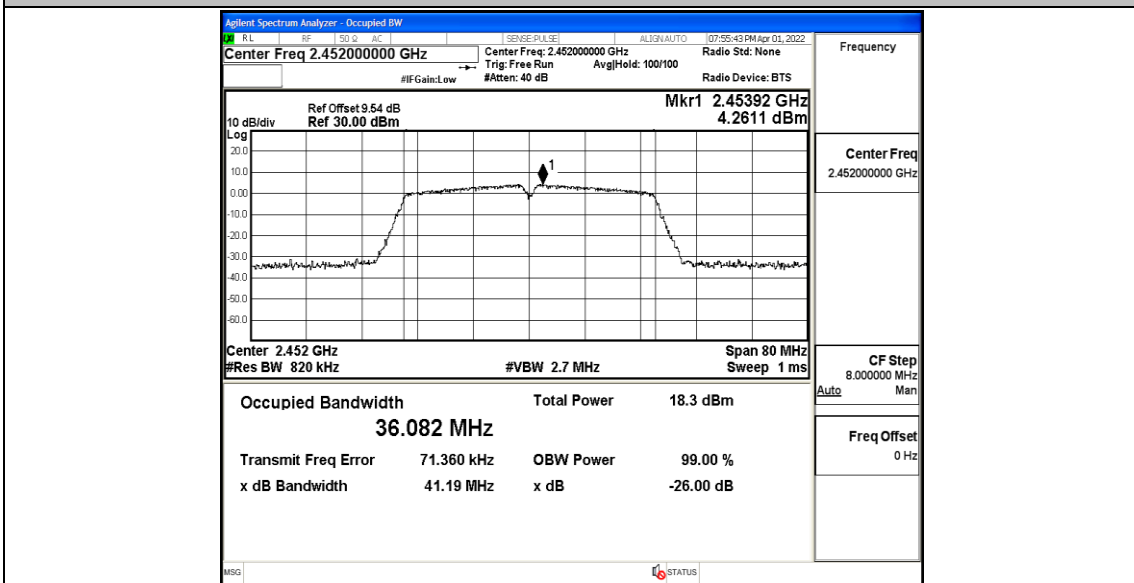
11N40MIMO_Ant2_2437



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	14.23	≤30	PASS
	Ant2	2412	17.28	≤30	PASS
	Ant1	2437	14.20	≤30	PASS
	Ant2	2437	17.36	≤30	PASS
	Ant1	2462	14.51	≤30	PASS
	Ant2	2462	17.43	≤30	PASS
11G	Ant1	2412	13.41	≤30	PASS
	Ant2	2412	13.83	≤30	PASS
	Ant1	2437	13.42	≤30	PASS
	Ant2	2437	13.83	≤30	PASS
	Ant1	2462	13.87	≤30	PASS
	Ant2	2462	14.03	≤30	PASS
11N20MIMO	Ant1	2412	12.46	≤30	PASS
	Ant2	2412	12.60	≤30	PASS
	total	2412	15.54	≤30	PASS
	Ant1	2437	14.70	≤30	PASS
	Ant2	2437	11.13	≤30	PASS
	total	2437	16.28	≤30	PASS
	Ant1	2462	15.05	≤30	PASS
	Ant2	2462	11.89	≤30	PASS
	total	2462	16.76	≤30	PASS
11N40MIMO	Ant1	2422	14.81	≤30	PASS
	Ant2	2422	11.32	≤30	PASS
	total	2422	16.42	≤30	PASS
	Ant1	2437	15.02	≤30	PASS
	Ant2	2437	11.41	≤30	PASS
	total	2437	16.59	≤30	PASS
	Ant1	2452	12.92	≤30	PASS
	Ant2	2452	9.52	≤30	PASS
	total	2452	14.55	≤30	PASS

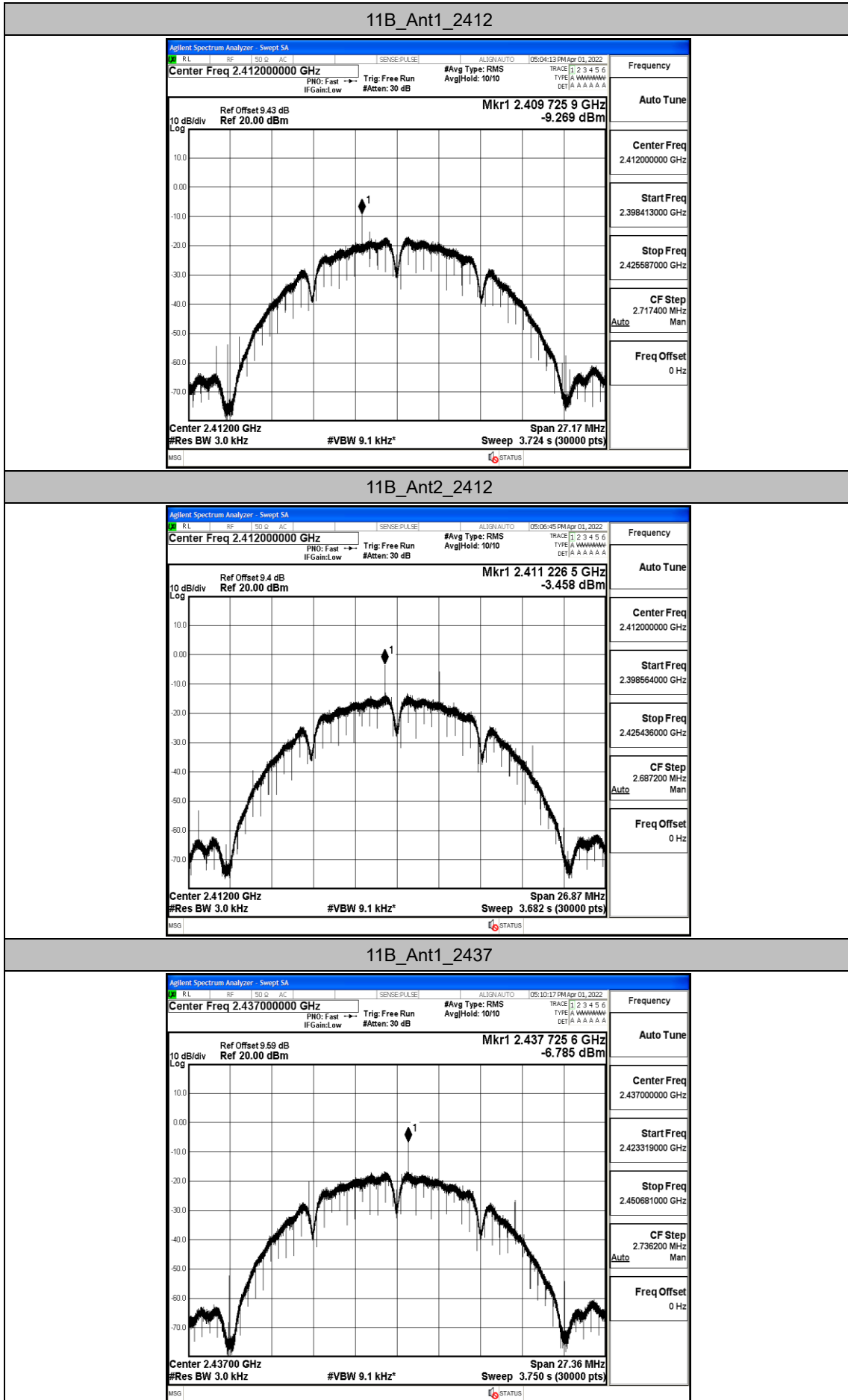
Note: The Duty Cycle Factor is compensated in the test result.

Appendix D: Maximum power spectral density

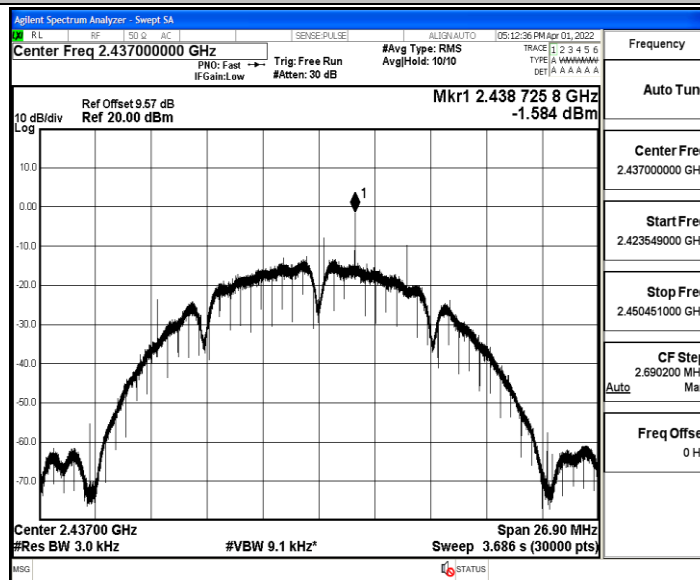
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-9.27	≤8.00	PASS
	Ant2	2412	-3.46	≤8.00	PASS
	Ant1	2437	-6.79	≤8.00	PASS
	Ant2	2437	-1.58	≤8.00	PASS
	Ant1	2462	-16.3	≤8.00	PASS
	Ant2	2462	-5.61	≤8.00	PASS
11G	Ant1	2412	-16.75	≤8.00	PASS
	Ant2	2412	-17.17	≤8.00	PASS
	Ant1	2437	-17.35	≤8.00	PASS
	Ant2	2437	-17.25	≤8.00	PASS
	Ant1	2462	-16.73	≤8.00	PASS
	Ant2	2462	-16.18	≤8.00	PASS
11N20MIMO	Ant1	2412	-18.61	≤8.00	PASS
	Ant2	2412	-18.67	≤8.00	PASS
	total	2412	-15.63	≤8.00	PASS
	Ant1	2437	-13.29	≤8.00	PASS
	Ant2	2437	-17.65	≤8.00	PASS
	total	2437	-11.93	≤8.00	PASS
	Ant1	2462	-15.88	≤8.00	PASS
	Ant2	2462	-19.48	≤8.00	PASS
	total	2462	-14.31	≤8.00	PASS
11N40MIMO	Ant1	2422	-18.55	≤8.00	PASS
	Ant2	2422	-22.53	≤8.00	PASS
	total	2422	-17.09	≤8.00	PASS
	Ant1	2437	-18.89	≤8.00	PASS
	Ant2	2437	-22.1	≤8.00	PASS
	total	2437	-17.19	≤8.00	PASS
	Ant1	2452	-21.46	≤8.00	PASS
	Ant2	2452	-24.6	≤8.00	PASS
	total	2452	-19.74	≤8.00	PASS

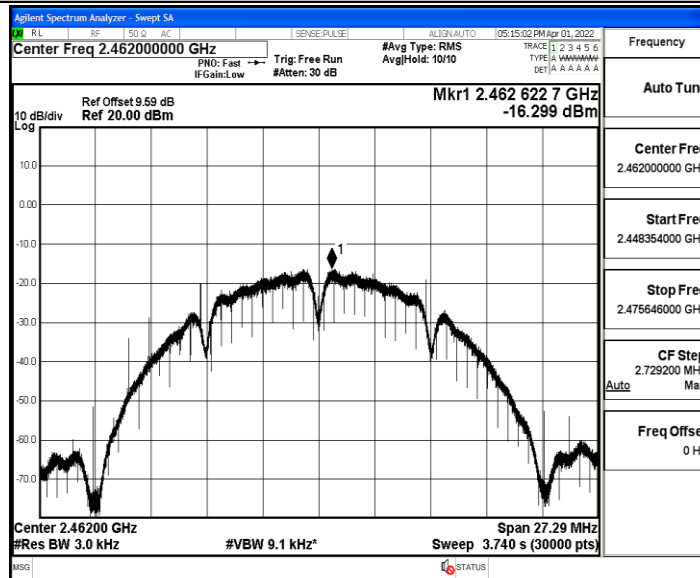
Test Graphs



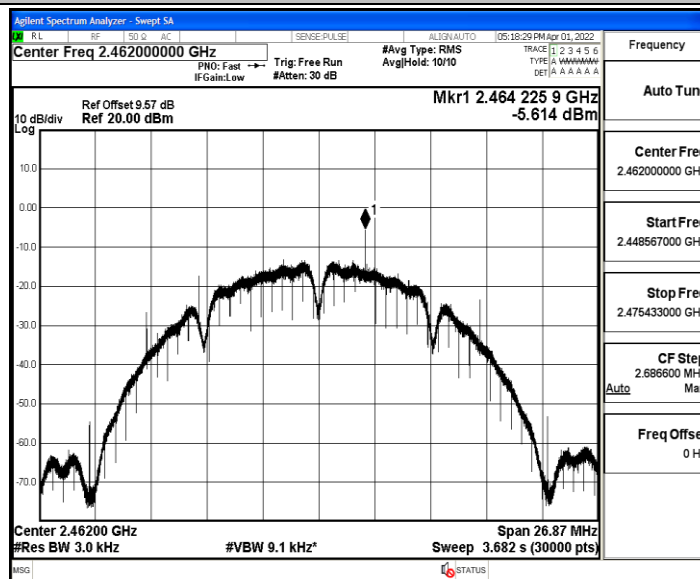
11B_Ant2_2437



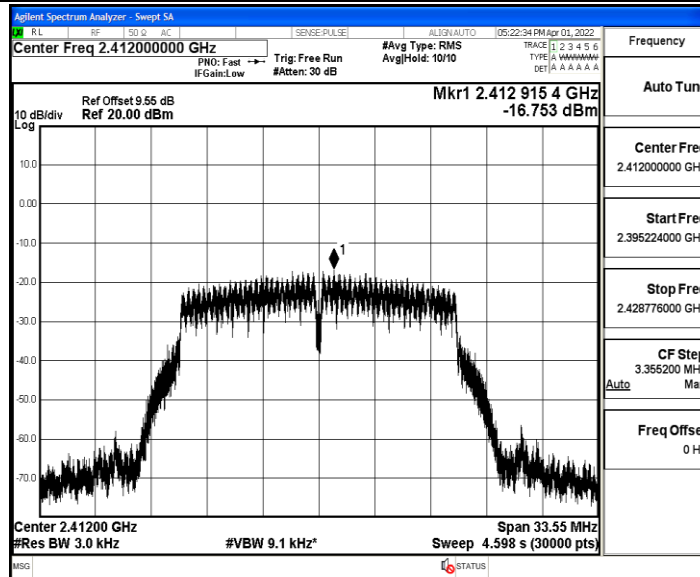
11B_Ant1_2462



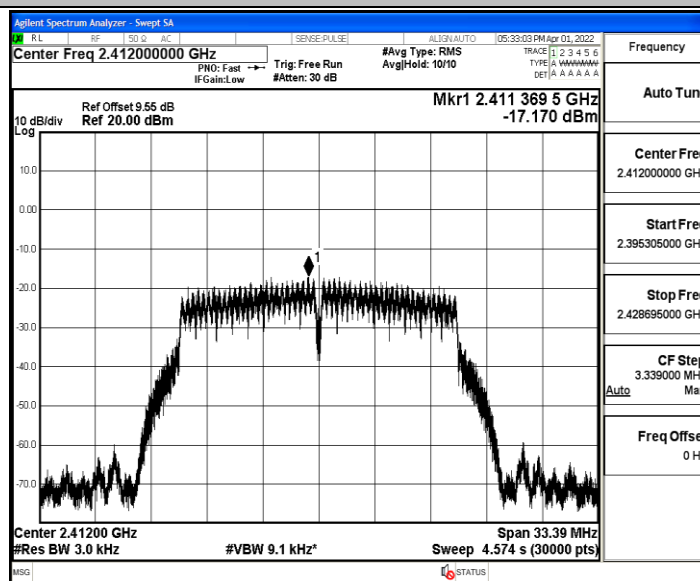
11B_Ant2_2462



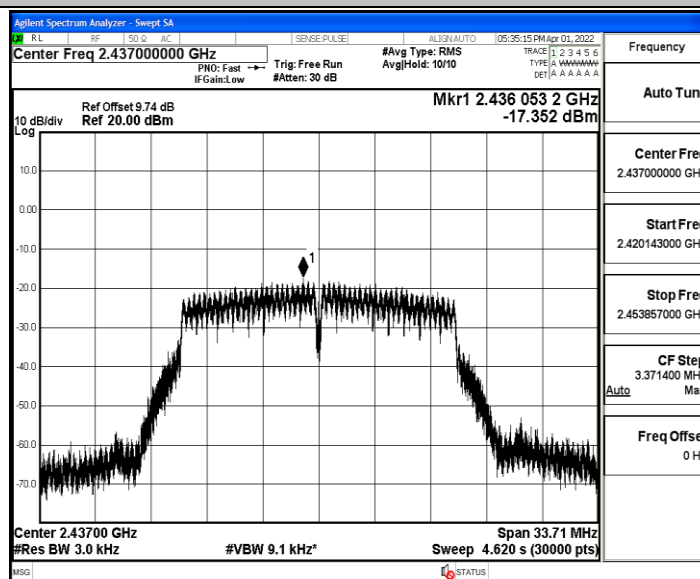
11G_Ant1_2412



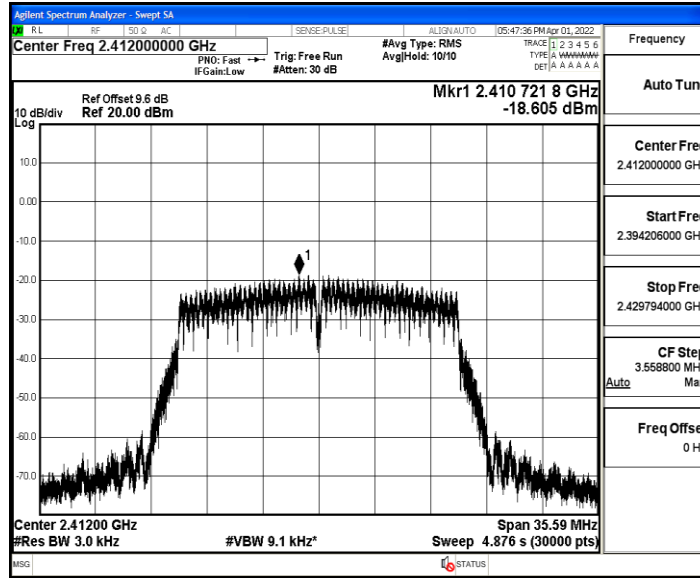
11G_Ant2_2412



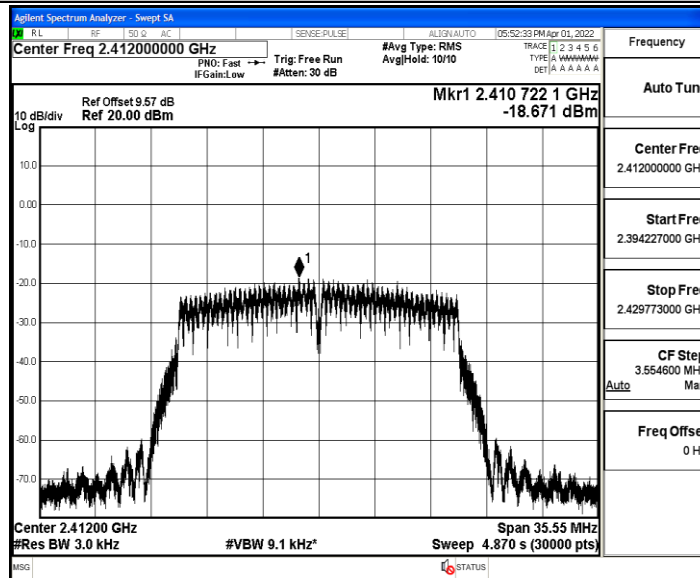
11G_Ant1_2437



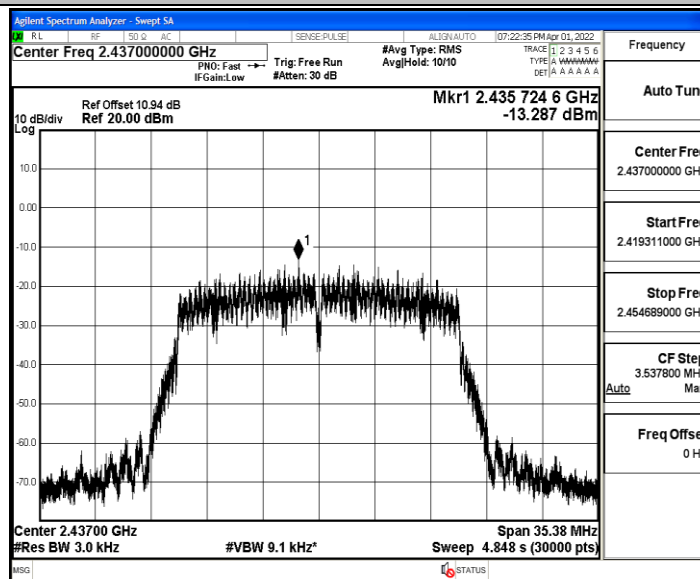
11G_Ant2_2437



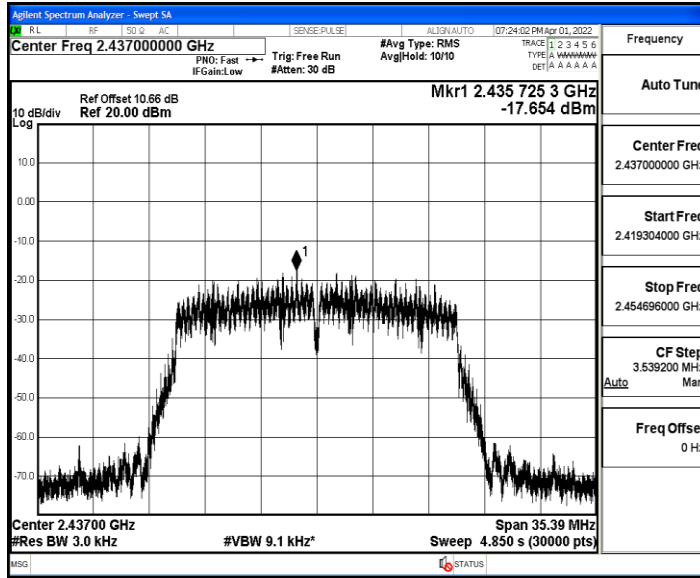
11N20MIMO_Ant2_2412



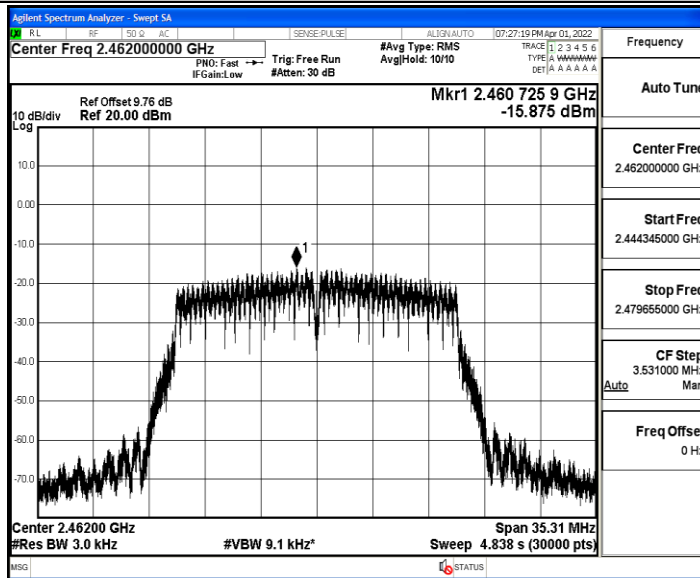
11N20MIMO_Ant1_2437



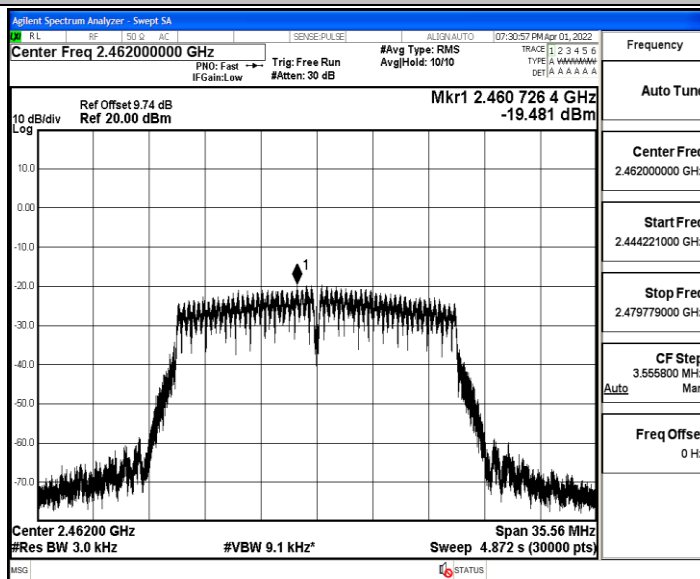
11N20MIMO_Ant2_2437



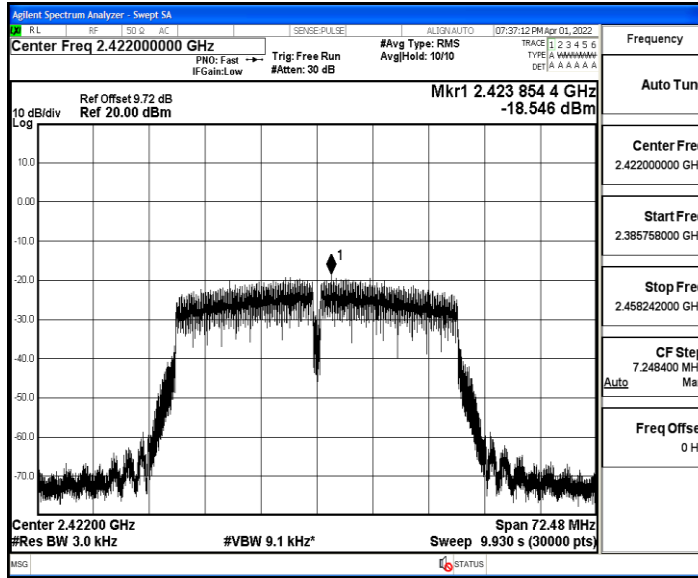
11N20MIMO_Ant1_2462



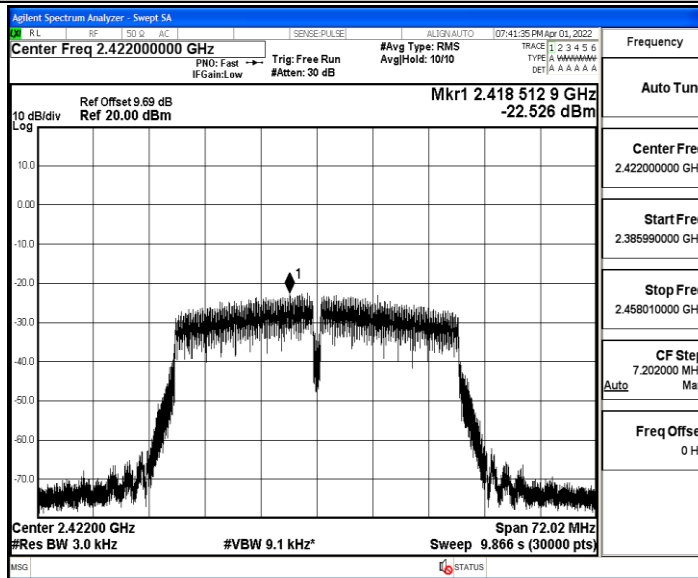
11N20MIMO_Ant2_2462



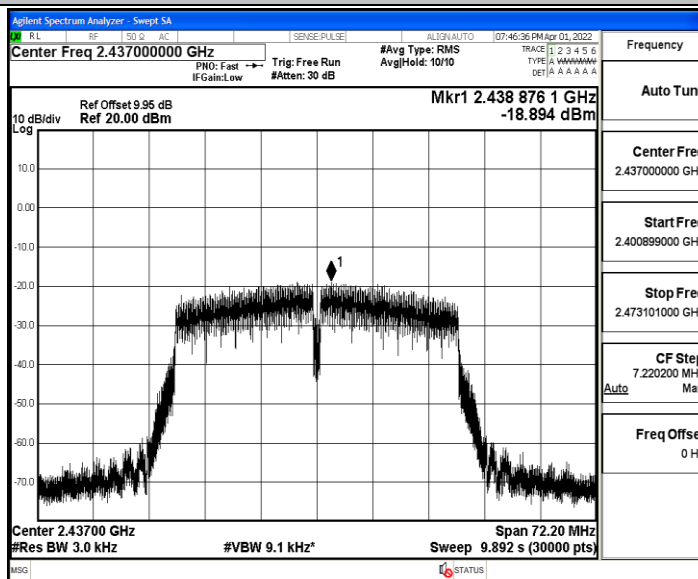
11N40MIMO_Ant1_2422



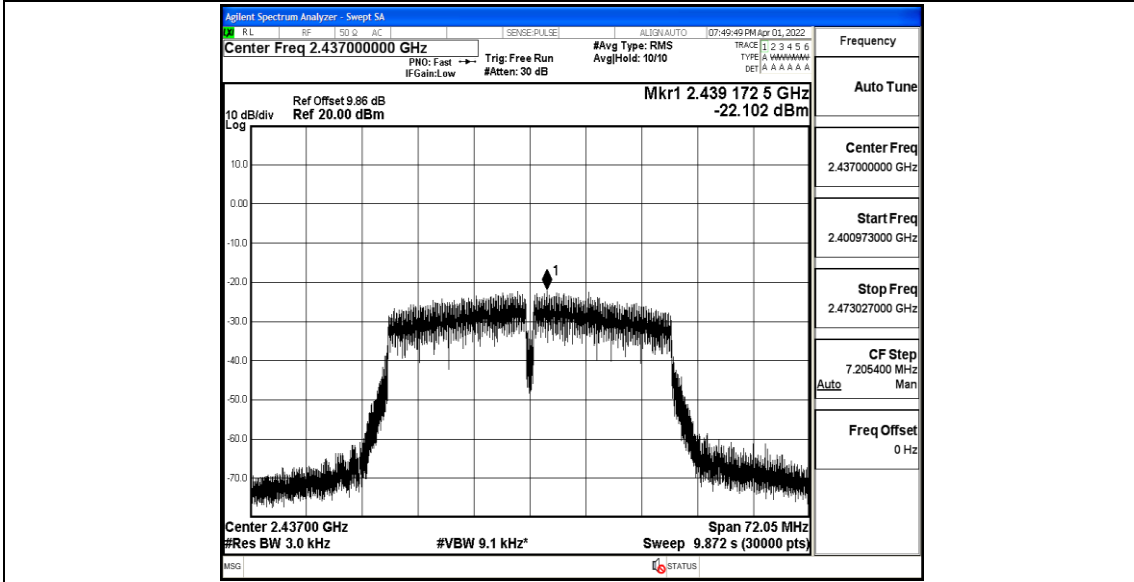
11N40MIMO_Ant2_2422



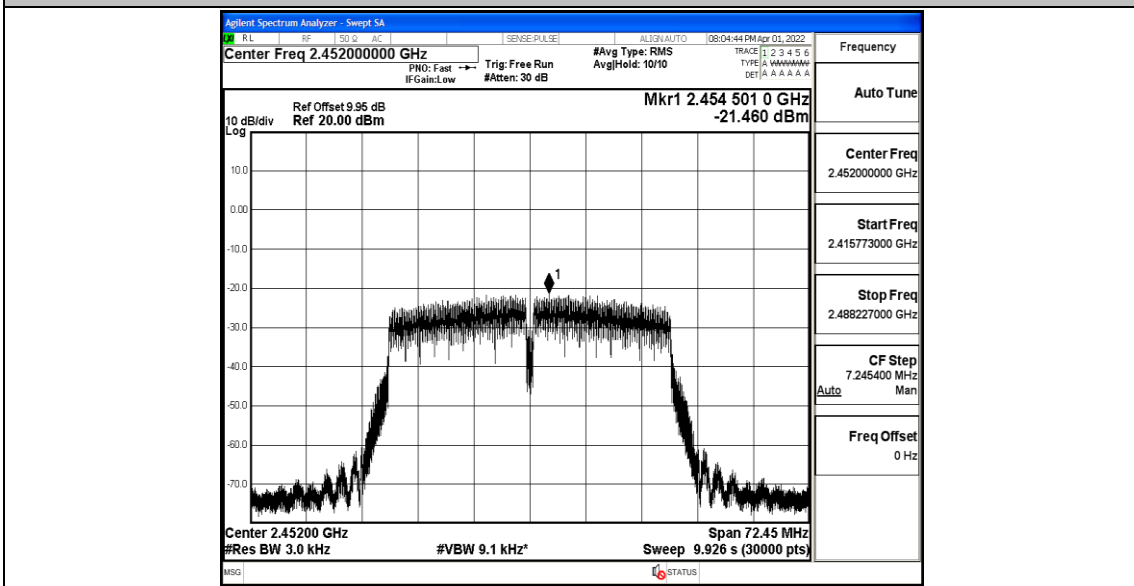
11N40MIMO_Ant1_2437



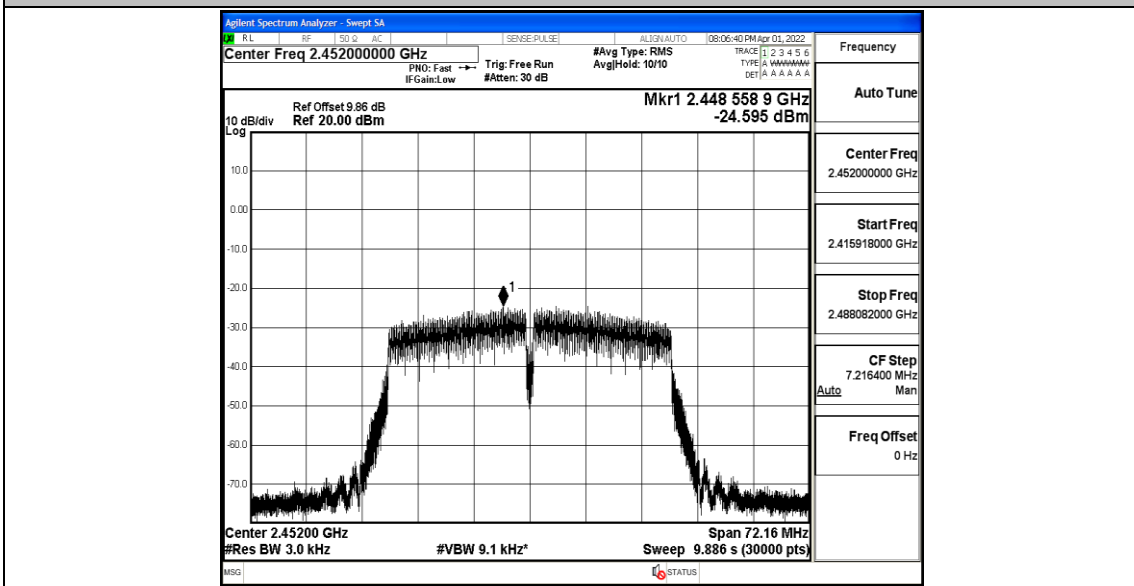
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452

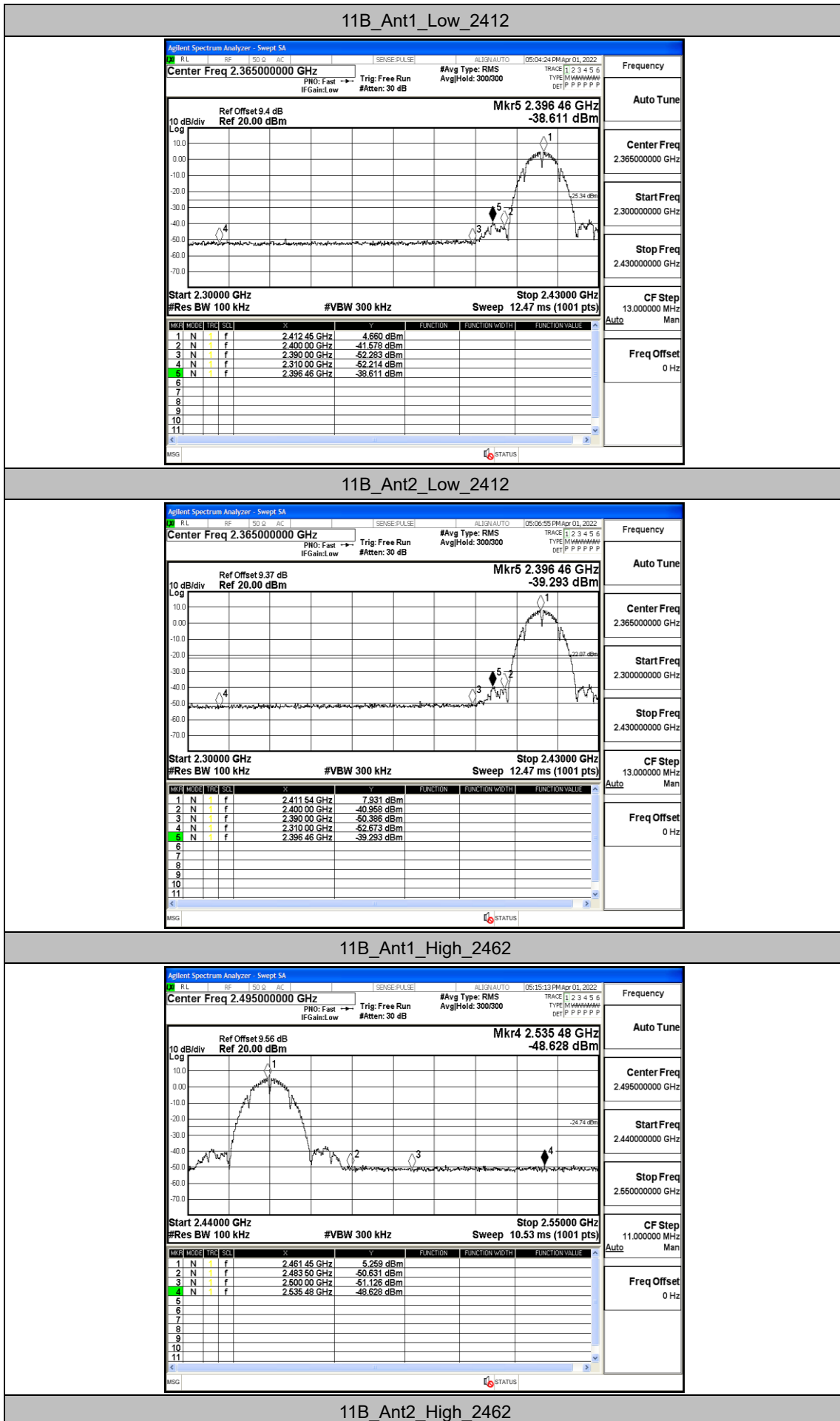


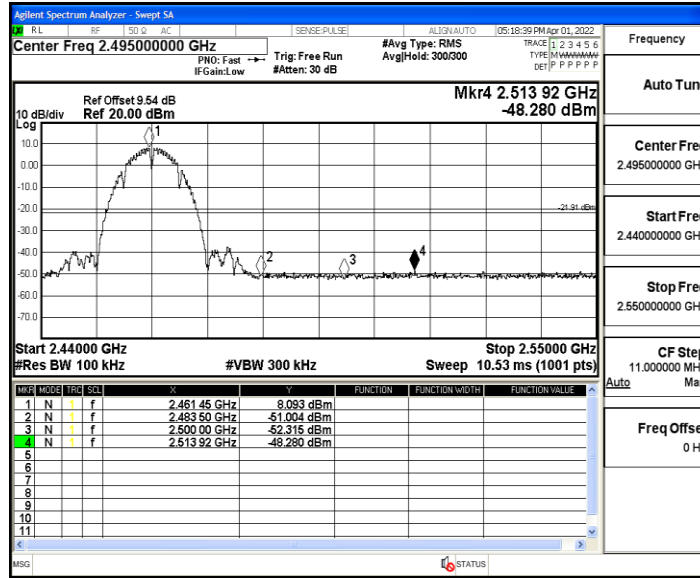
Appendix E: Band edge measurements

Test Result

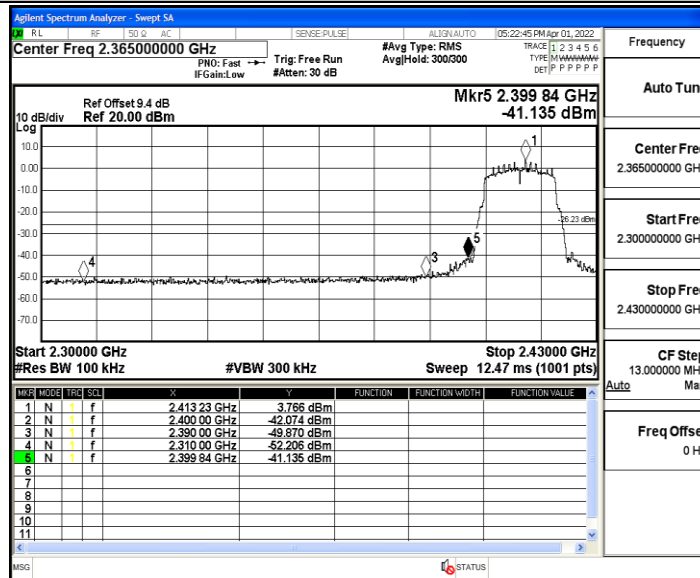
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.66	-38.61	≤-25.34	PASS
	Ant2	Low	2412	7.93	-39.29	≤-22.07	PASS
	Ant1	High	2462	5.26	-48.63	≤-24.74	PASS
	Ant2	High	2462	8.09	-48.28	≤-21.91	PASS
11G	Ant1	Low	2412	3.77	-41.14	≤-26.23	PASS
	Ant2	Low	2412	3.81	-41.67	≤-26.19	PASS
	Ant1	High	2462	3.65	-46.21	≤-26.36	PASS
	Ant2	High	2462	4.10	-47.18	≤-25.9	PASS
11N20MIMO	Ant1	Low	2412	2.81	-41.02	≤-27.19	PASS
	Ant2	Low	2412	2.34	-42.23	≤-27.66	PASS
	Ant1	High	2462	4.66	-46.84	≤-25.35	PASS
	Ant2	High	2462	2.17	-48.65	≤-27.83	PASS
11N40MIMO	Ant1	Low	2422	2.16	-38.61	≤-27.84	PASS
	Ant2	Low	2422	-1.34	-39.36	≤-31.34	PASS
	Ant1	High	2452	1.90	-45.86	≤-28.1	PASS
	Ant2	High	2452	-1.35	-46.9	≤-31.35	PASS

Test Graphs

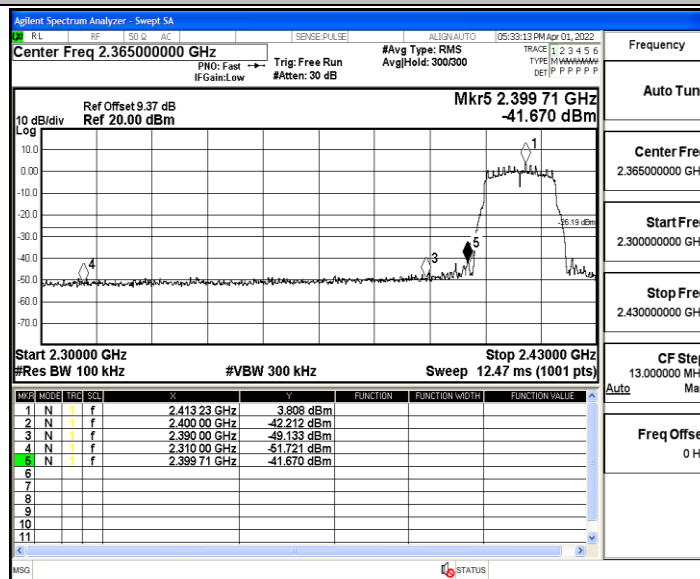




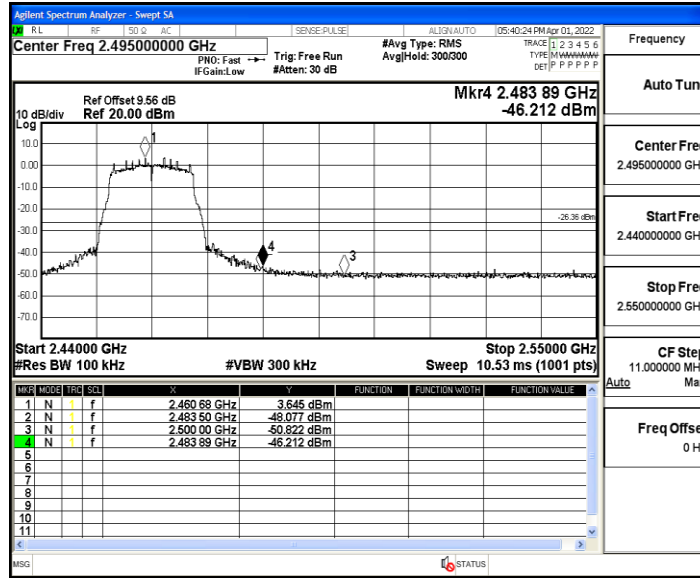
11G_Ant1_Low_2412



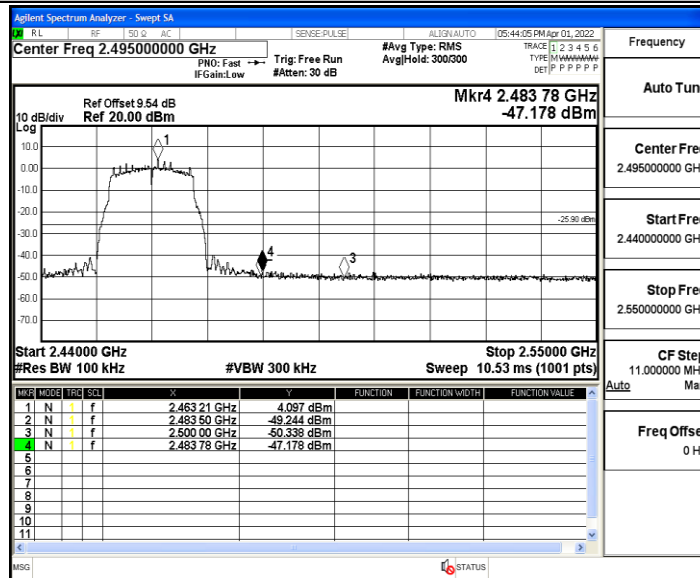
11G_Ant2_Low_2412



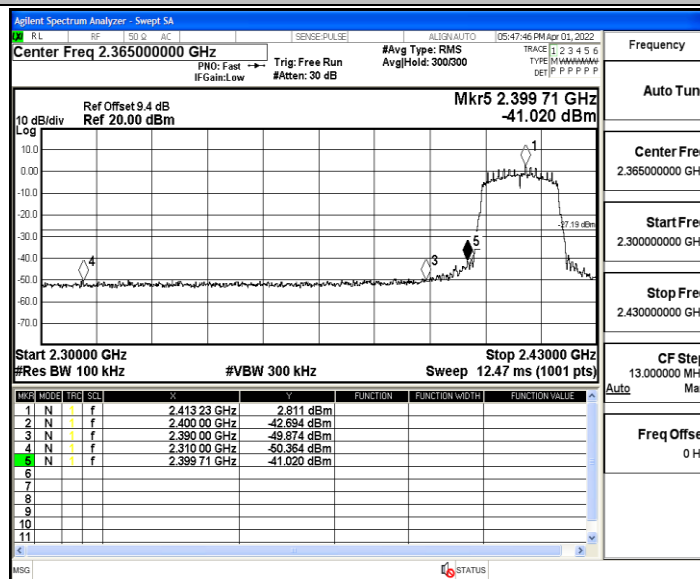
11G_Ant1_High_2462



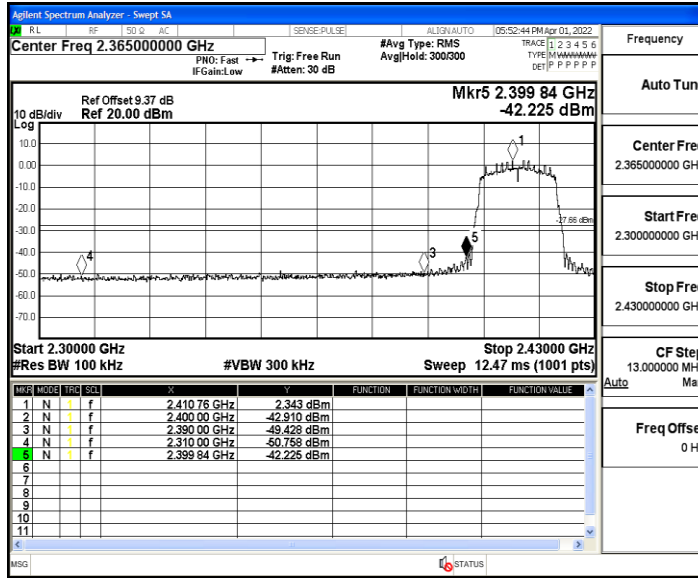
11G_Ant2_High_2462



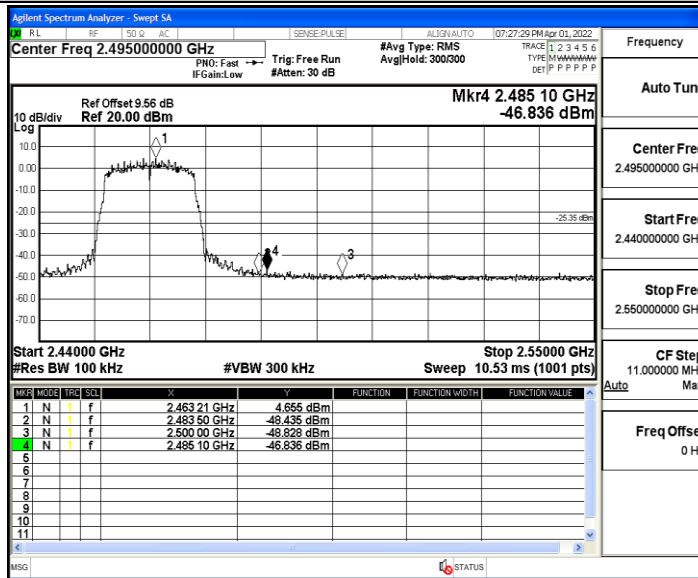
11N20MIMO_Ant1_Low_2412



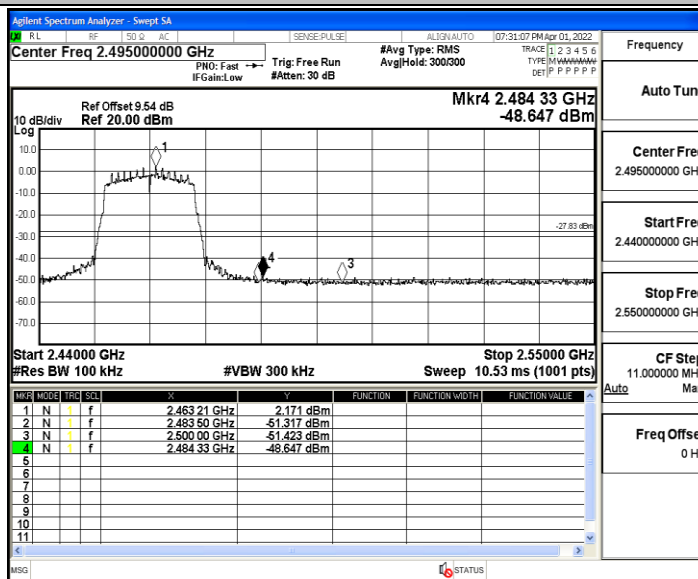
11N20MIMO_Ant2_Low_2412



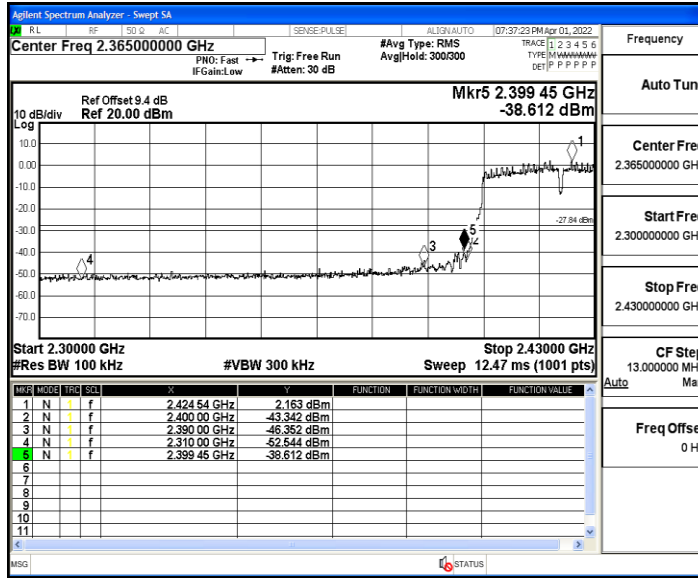
11N20MIMO_Ant1_High_2462



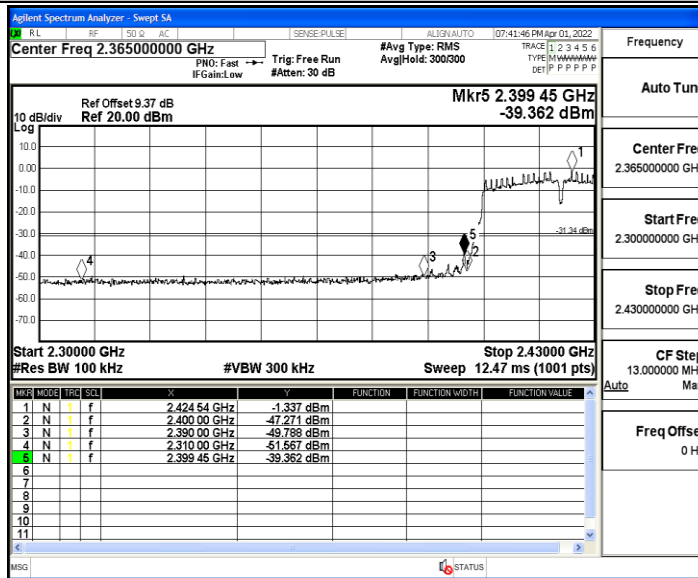
11N20MIMO_Ant2_High_2462



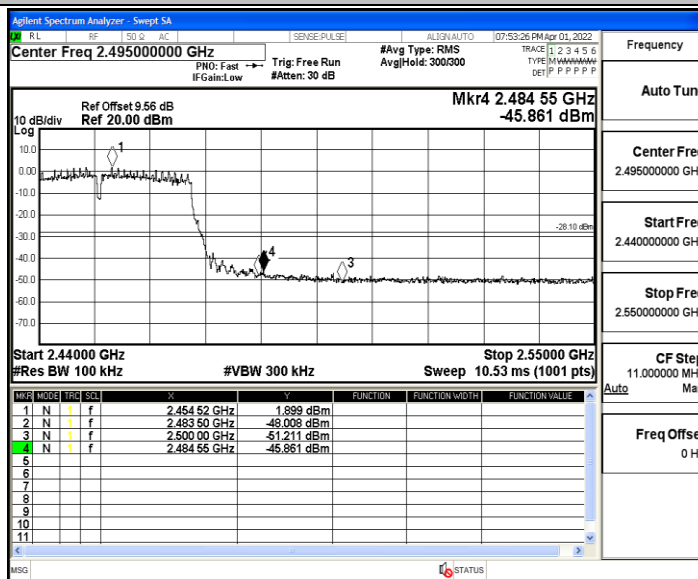
11N40MIMO_Ant1_Low_2422



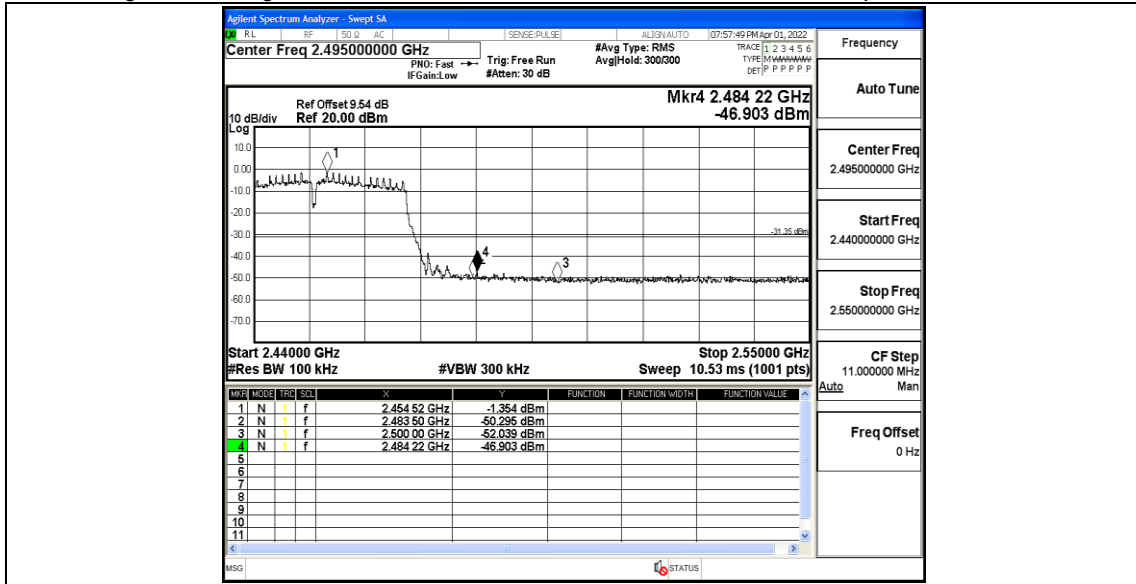
11N40MIMO_Ant2_Low_2422



11N40MIMO_Ant1_High_2452



11N40MIMO_Ant2_High_2452



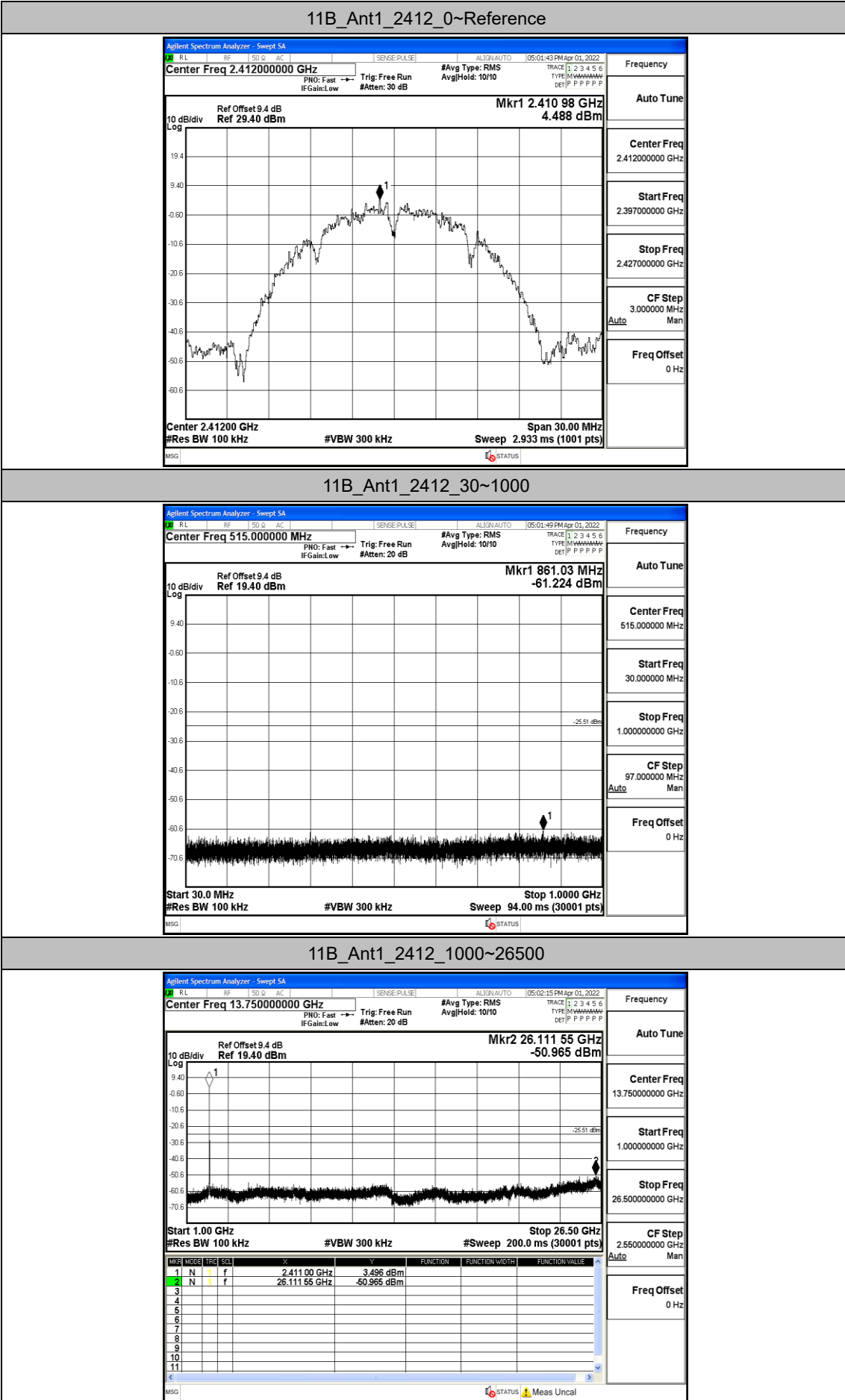
Appendix F: Conducted Spurious Emission

Test Result

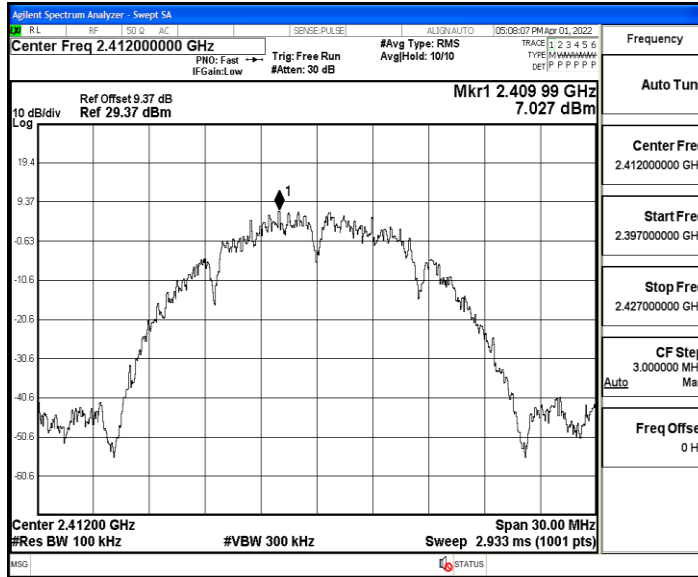
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict	
11B	Ant1	2412	Reference	4.49	4.49	---	PASS	
			30~1000	4.49	-61.22	≤-25.51	PASS	
			1000~26500	4.49	-50.97	≤-25.51	PASS	
	Ant2	2412	Reference	7.03	7.03	---	PASS	
			30~1000	7.03	-60.44	≤-22.97	PASS	
			1000~26500	7.03	-47.87	≤-22.97	PASS	
	Ant1	2437	Reference	4.43	4.43	---	PASS	
			30~1000	4.43	-60.19	≤-25.57	PASS	
			1000~26500	4.43	-50.41	≤-25.57	PASS	
	Ant2	2437	Reference	8.15	8.15	---	PASS	
			30~1000	8.15	-61.19	≤-21.85	PASS	
			1000~26500	8.15	-50.73	≤-21.85	PASS	
	Ant1	2462	Reference	5.07	5.07	---	PASS	
			30~1000	5.07	-60.61	≤-24.93	PASS	
			1000~26500	5.07	-51.01	≤-24.93	PASS	
	Ant2	2462	Reference	8.07	8.07	---	PASS	
			30~1000	8.07	-61.05	≤-21.93	PASS	
			1000~26500	8.07	-50.97	≤-21.93	PASS	
	11G	Ant1	2412	Reference	0.26	0.26	---	PASS
				30~1000	0.26	-60.76	≤-29.74	PASS
				1000~26500	0.26	-51.36	≤-29.74	PASS
		Ant2	2412	Reference	0.33	0.33	---	PASS
				30~1000	0.33	-60.33	≤-29.67	PASS
				1000~26500	0.33	-49.77	≤-29.67	PASS
Ant1		2437	Reference	1.13	1.13	---	PASS	
			30~1000	1.13	-59.3	≤-28.87	PASS	
			1000~26500	1.13	-51.28	≤-28.87	PASS	
Ant2		2437	Reference	0.35	0.35	---	PASS	
			30~1000	0.35	-60.82	≤-29.65	PASS	
			1000~26500	0.35	-50.85	≤-29.65	PASS	
Ant1		2462	Reference	2.72	2.72	---	PASS	
			30~1000	2.72	-61.6	≤-27.28	PASS	
			1000~26500	2.72	-50.83	≤-27.28	PASS	
Ant2		2462	Reference	1.93	1.93	---	PASS	
			30~1000	1.93	-61.02	≤-28.07	PASS	
			1000~26500	1.93	-50.34	≤-28.07	PASS	
11N20MIMO		Ant1	2412	Reference	-0.78	-0.78	---	PASS
				30~1000	-0.78	-61.4	≤-30.78	PASS
				1000~26500	-0.78	-50.95	≤-30.78	PASS
		Ant2	2412	Reference	-1.41	-1.41	---	PASS

			30~1000	-1.41	-61.19	≤ -31.41	PASS
			1000~26500	-1.41	-49.83	≤ -31.41	PASS
	Ant1	2437	Reference	5.06	5.06	---	PASS
			30~1000	5.06	-60.37	≤ -24.94	PASS
			1000~26500	5.06	-48.94	≤ -24.94	PASS
	Ant2	2437	Reference	9.11	9.11	---	PASS
			30~1000	9.11	-60.6	≤ -20.89	PASS
			1000~26500	9.11	-48.93	≤ -20.89	PASS
	Ant1	2462	Reference	5.17	5.17	---	PASS
			30~1000	5.17	-60.37	≤ -24.83	PASS
			1000~26500	5.17	-50.78	≤ -24.83	PASS
	Ant2	2462	Reference	-0.79	-0.79	---	PASS
30~1000			-0.79	-61.27	≤ -30.79	PASS	
1000~26500			-0.79	-51.85	≤ -30.79	PASS	
11N40MIMO	Ant1	2422	Reference	1.17	1.17	---	PASS
			30~1000	1.17	-59.23	≤ -28.83	PASS
			1000~26500	1.17	-51.3	≤ -28.83	PASS
	Ant2	2422	Reference	-3.30	-3.30	---	PASS
			30~1000	-3.30	-61.38	≤ -33.3	PASS
			1000~26500	-3.30	-50.3	≤ -33.3	PASS
	Ant1	2437	Reference	0.05	0.05	---	PASS
			30~1000	0.05	-59.83	≤ -29.95	PASS
			1000~26500	0.05	-51.85	≤ -29.95	PASS
	Ant2	2437	Reference	-2.99	-2.99	---	PASS
			30~1000	-2.99	-60.7	≤ -32.99	PASS
			1000~26500	-2.99	-51.54	≤ -32.99	PASS
	Ant1	2452	Reference	0.43	0.43	---	PASS
			30~1000	0.43	-59.61	≤ -29.57	PASS
			1000~26500	0.43	-51.48	≤ -29.57	PASS
	Ant2	2452	Reference	-3.73	-3.73	---	PASS
			30~1000	-3.73	-60.57	≤ -33.73	PASS
			1000~26500	-3.73	-50.37	≤ -33.73	PASS

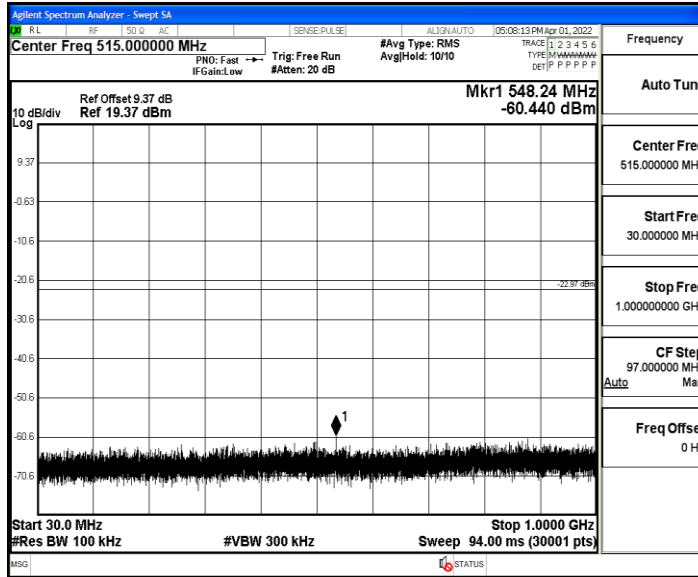
Test Graphs



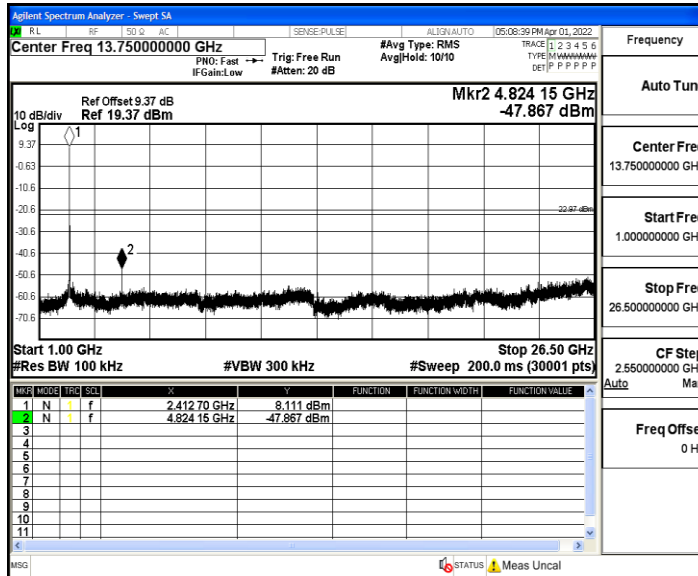
11B_Ant2_2412_0~Reference



11B_Ant2_2412_30~1000



11B_Ant2_2412_1000~26500



11B_Ant1_2437_0~Reference