

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

Product Name: Android SET TOP BOX

Trade Mark: Viya

Test Model: SC6BHA

FCC ID: 2AOVU-SEI830AT

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

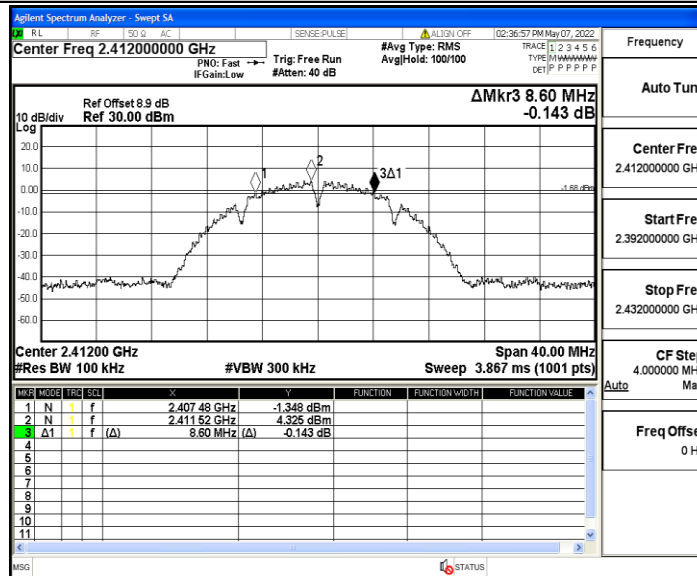
Appendix A: DTS Bandwidth

Test Result

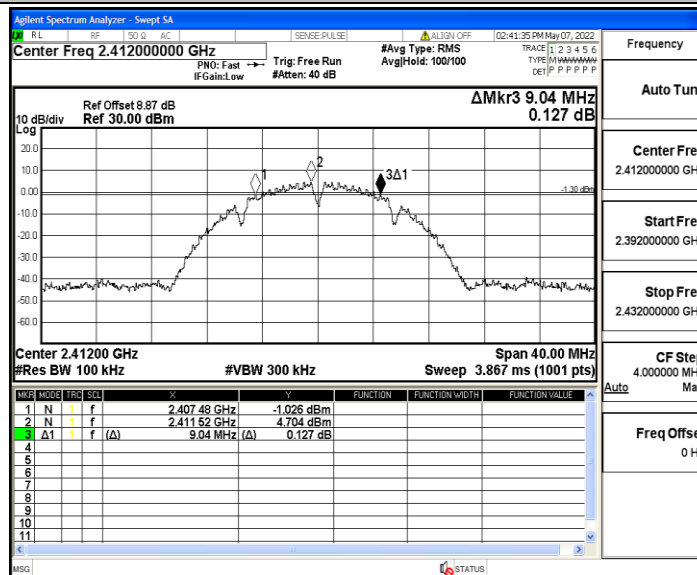
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.600	2407.480	2416.080	0.5	PASS
	Ant2	2412	9.040	2407.480	2416.520	0.5	PASS
	Ant1	2437	9.000	2432.520	2441.520	0.5	PASS
	Ant2	2437	9.040	2432.480	2441.520	0.5	PASS
	Ant1	2462	9.080	2457.480	2466.560	0.5	PASS
	Ant2	2462	9.040	2457.480	2466.520	0.5	PASS
11G	Ant1	2412	15.080	2404.480	2419.560	0.5	PASS
	Ant2	2412	15.040	2404.440	2419.480	0.5	PASS
	Ant1	2437	15.080	2429.440	2444.520	0.5	PASS
	Ant2	2437	12.600	2430.680	2443.280	0.5	PASS
	Ant1	2462	15.000	2454.560	2469.560	0.5	PASS
	Ant2	2462	15.080	2454.480	2469.560	0.5	PASS
11N20MIMO	Ant1	2412	15.080	2404.480	2419.560	0.5	PASS
	Ant2	2412	15.680	2404.480	2420.160	0.5	PASS
	Ant1	2437	15.040	2429.520	2444.560	0.5	PASS
	Ant2	2437	15.640	2428.880	2444.520	0.5	PASS
	Ant1	2462	15.040	2454.480	2469.520	0.5	PASS
	Ant2	2462	14.440	2454.480	2468.920	0.5	PASS
11N40MIMO	Ant1	2422	34.960	2404.560	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	33.760	2420.760	2454.520	0.5	PASS
	Ant1	2452	35.040	2434.480	2469.520	0.5	PASS
	Ant2	2452	35.040	2434.480	2469.520	0.5	PASS

Test Graphs

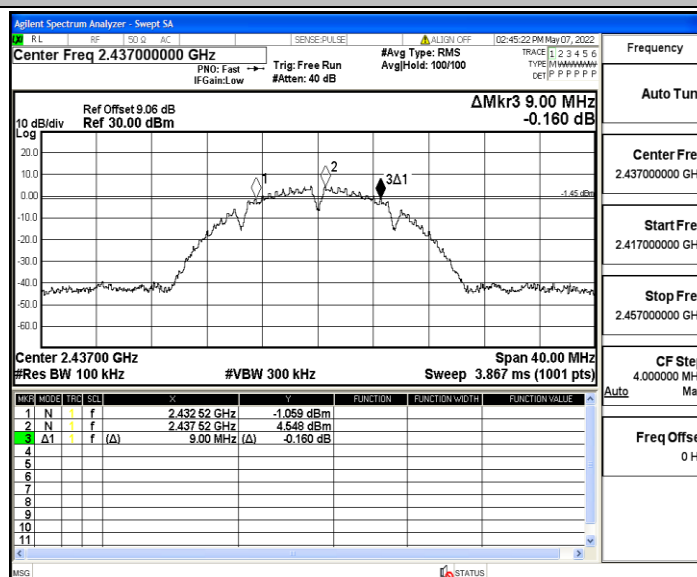
11B_Ant1_2412



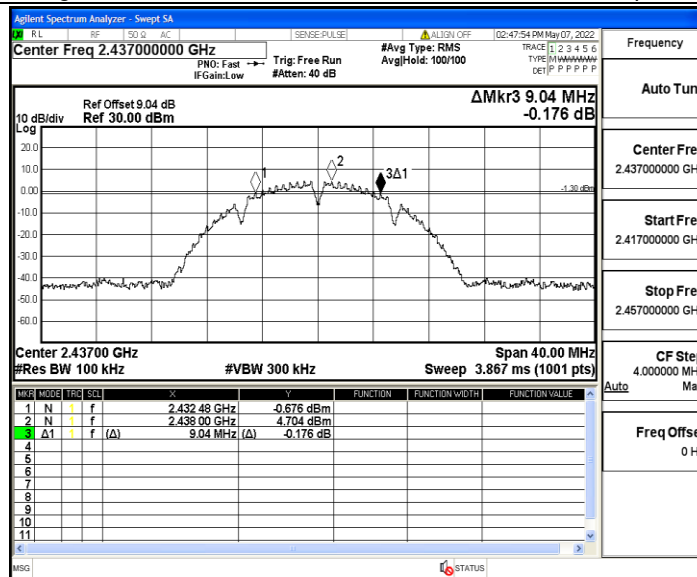
11B_Ant2_2412



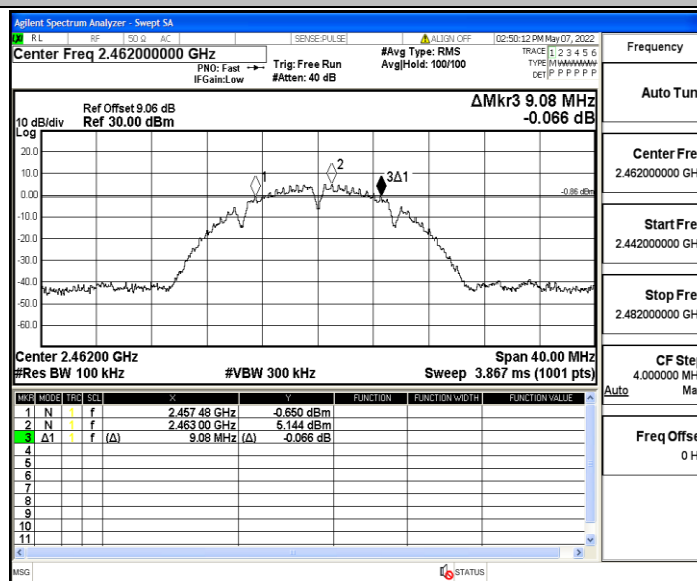
11B_Ant1_2437



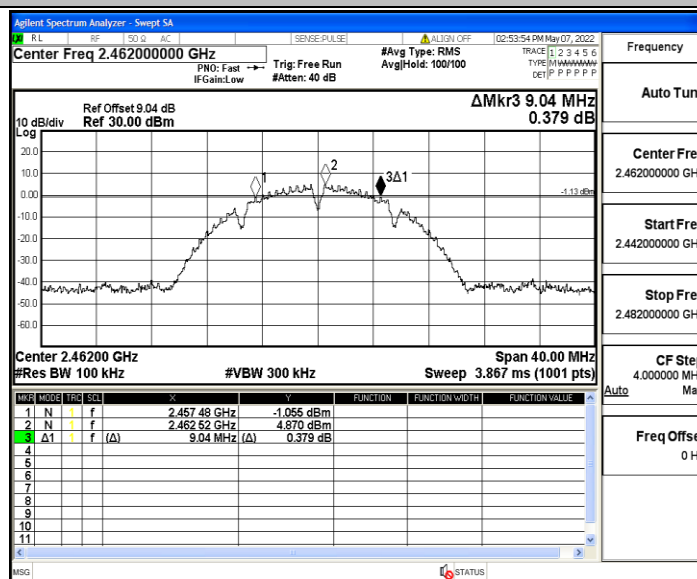
11B_Ant2_2437



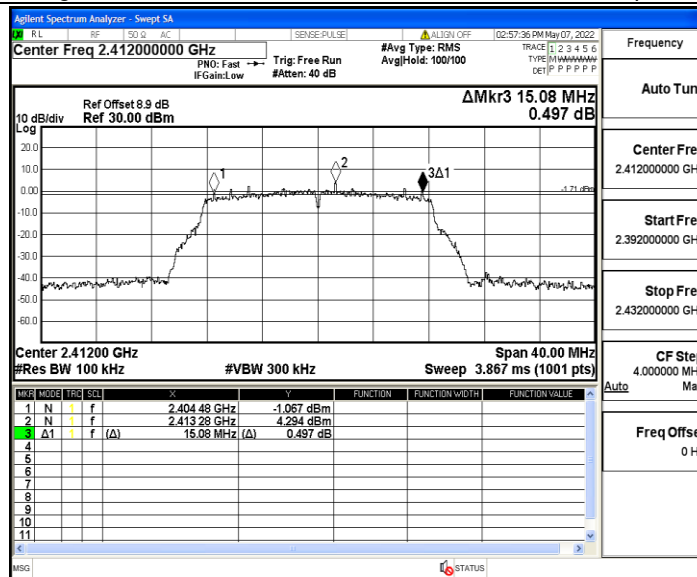
11B_Ant1_2462



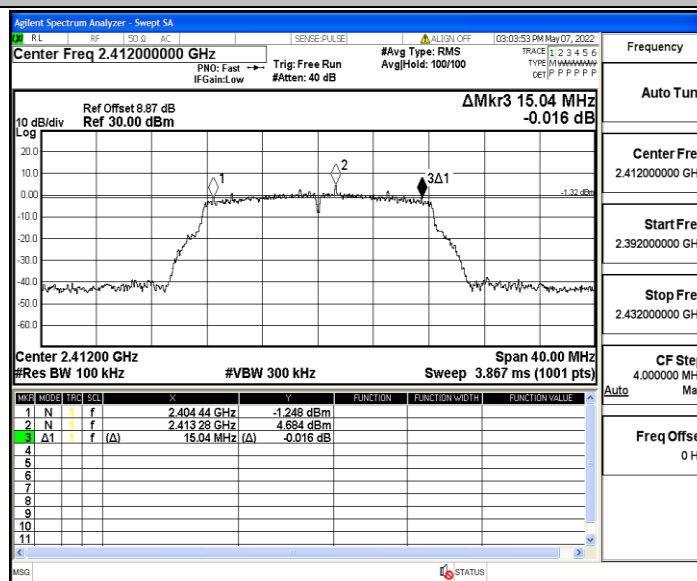
11B_Ant2_2462



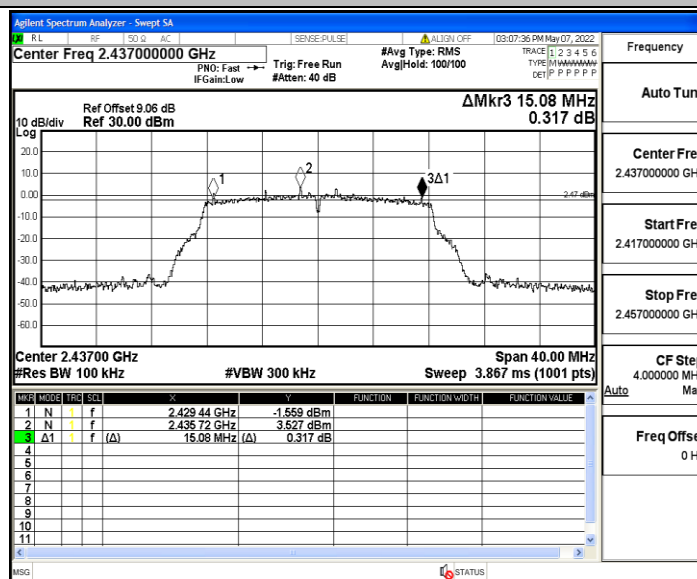
11G_Ant1_2412



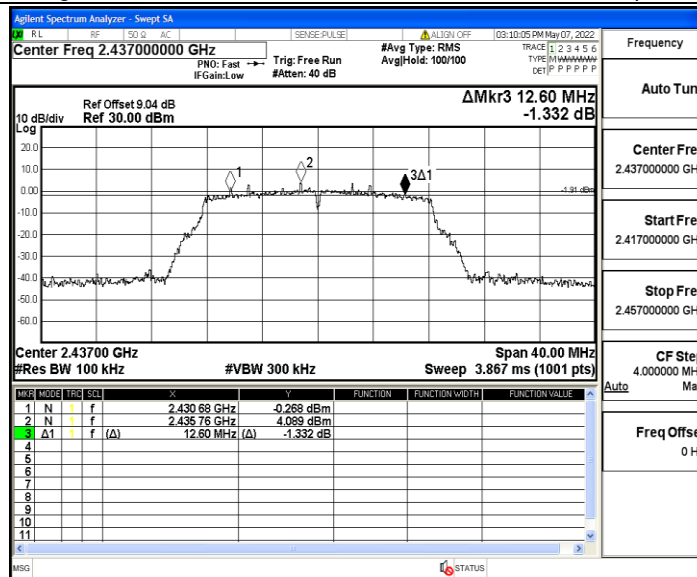
11G_Ant2_2412



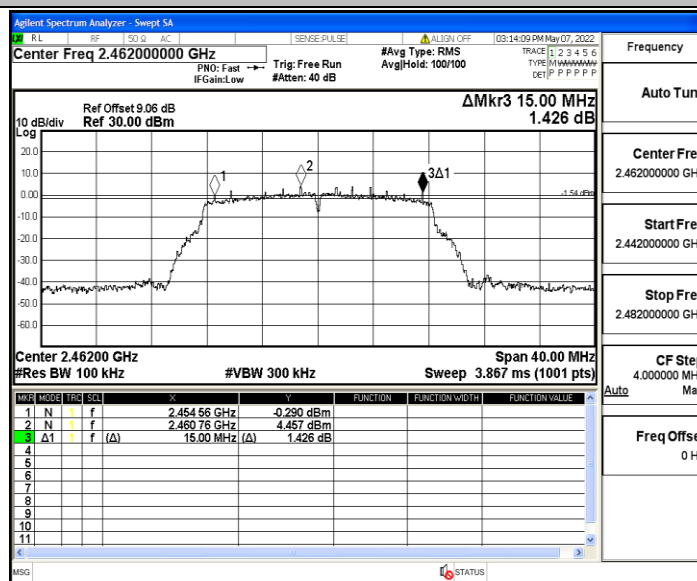
11G_Ant1_2437



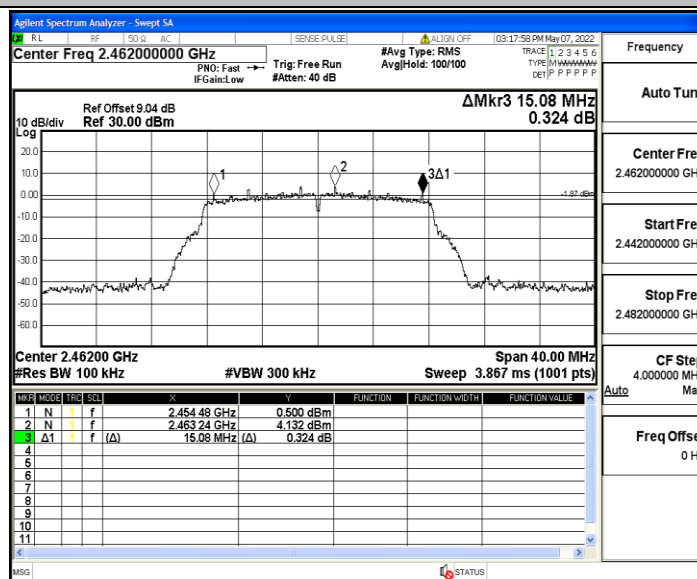
11G_Ant2_2437



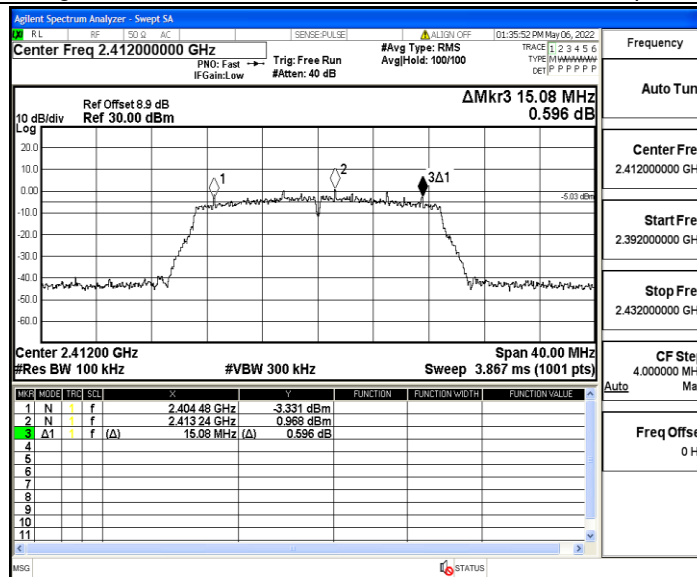
11G_Ant1_2462



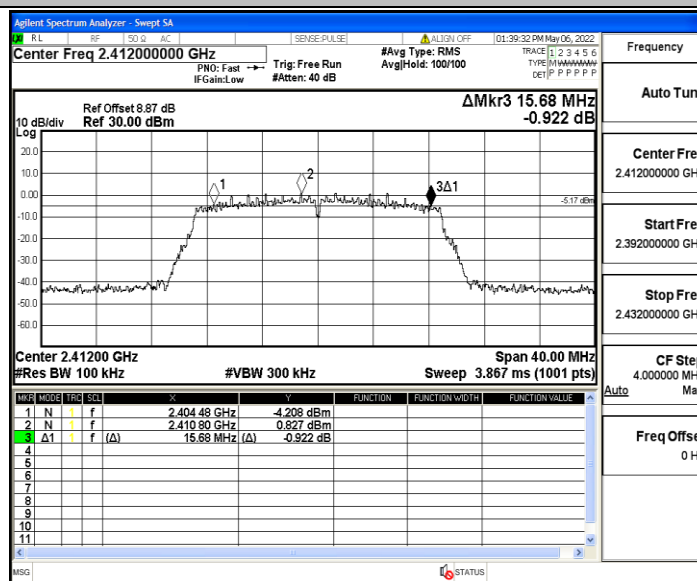
11G_Ant2_2462



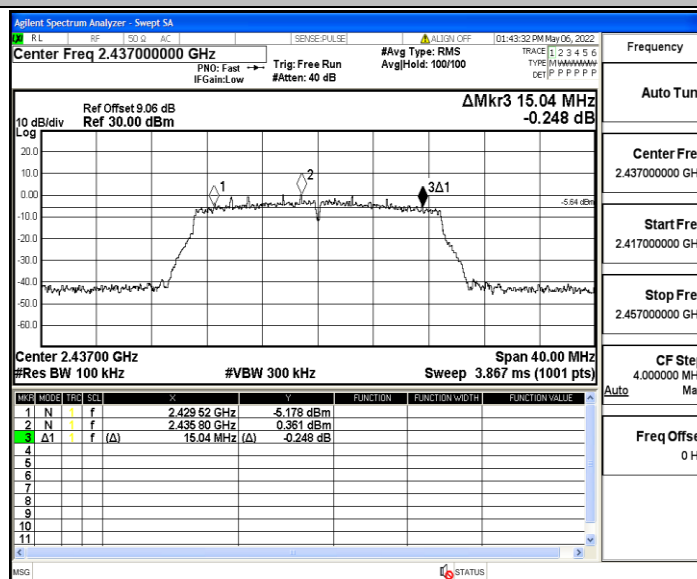
11N20MIMO_Ant1_2412



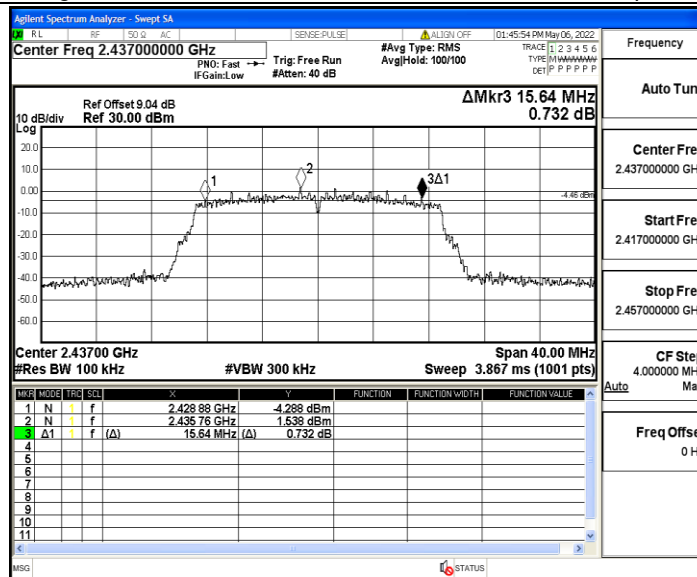
11N20MIMO_Ant2_2412



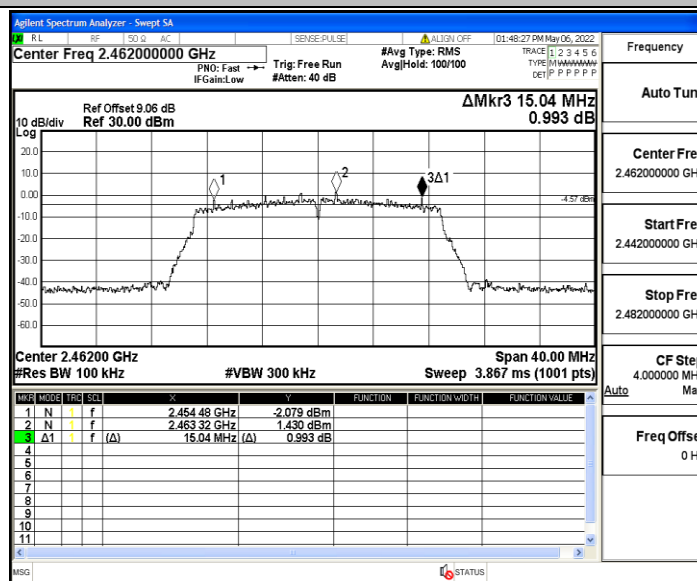
11N20MIMO_Ant1_2437



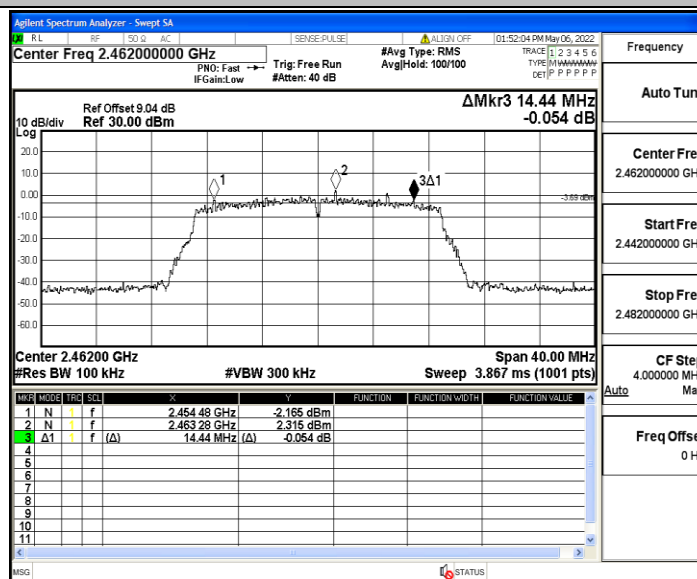
11N20MIMO_Ant2_2437



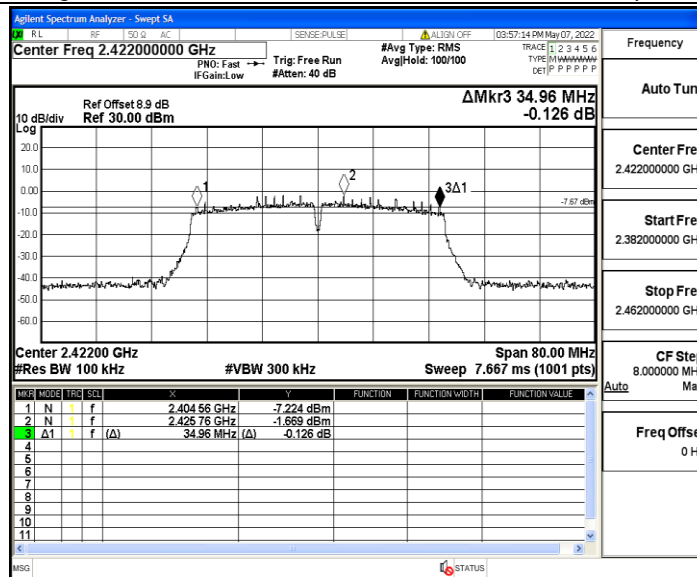
11N20MIMO_Ant1_2462



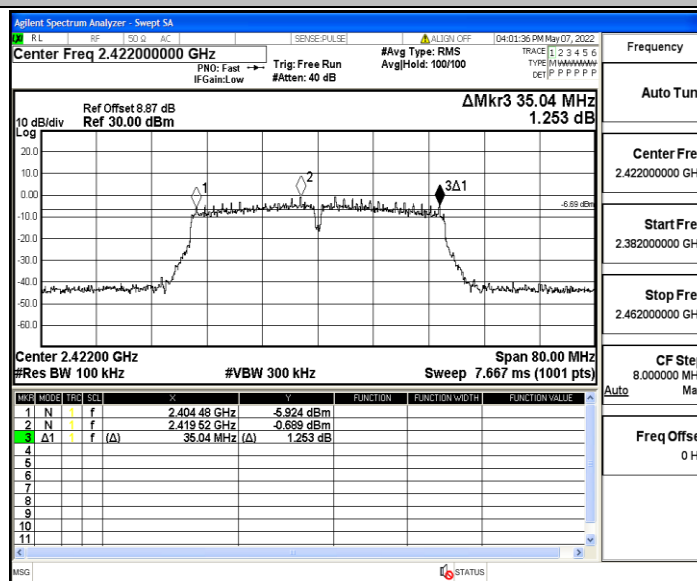
11N20MIMO_Ant2_2462



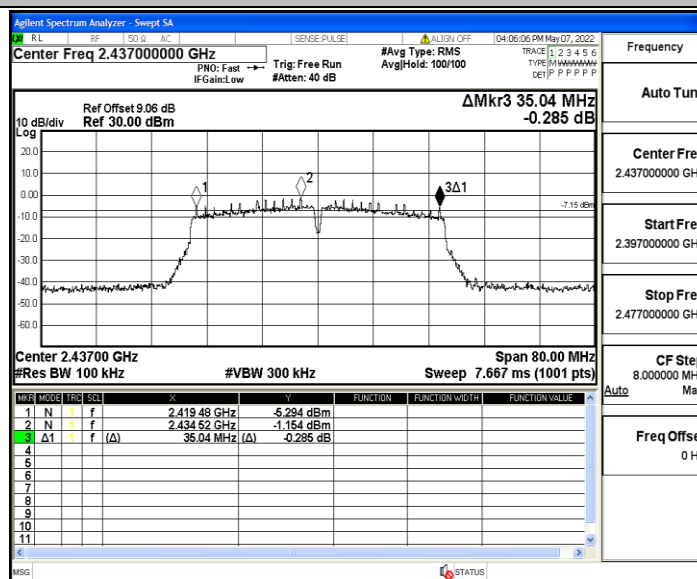
11N40MIMO_Ant1_2422



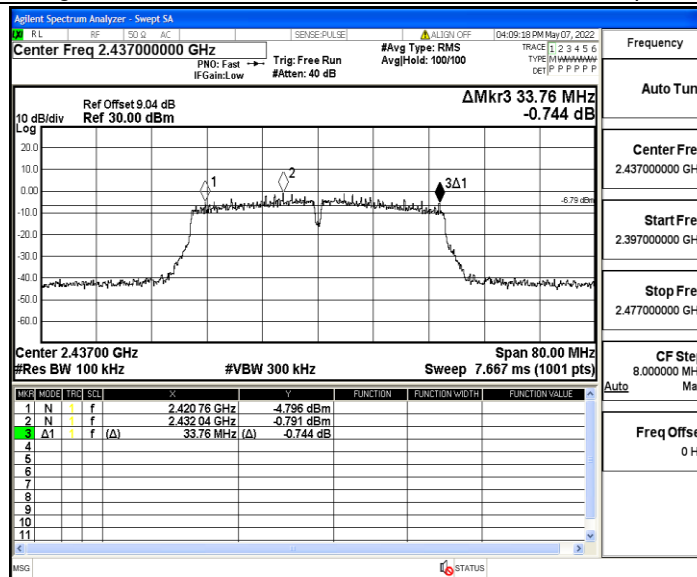
11N40MIMO_Ant2_2422



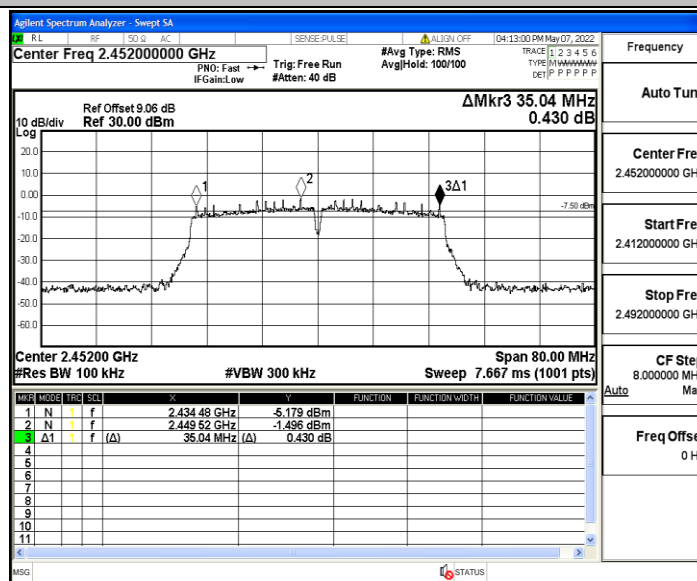
11N40MIMO_Ant1_2437



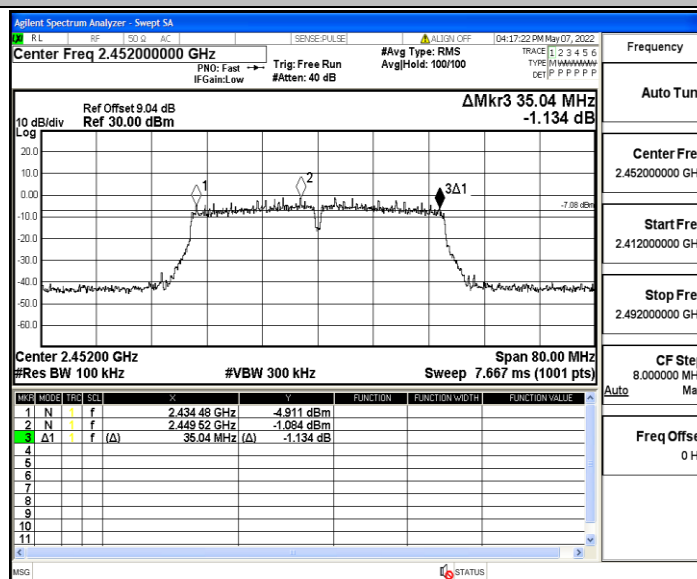
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452

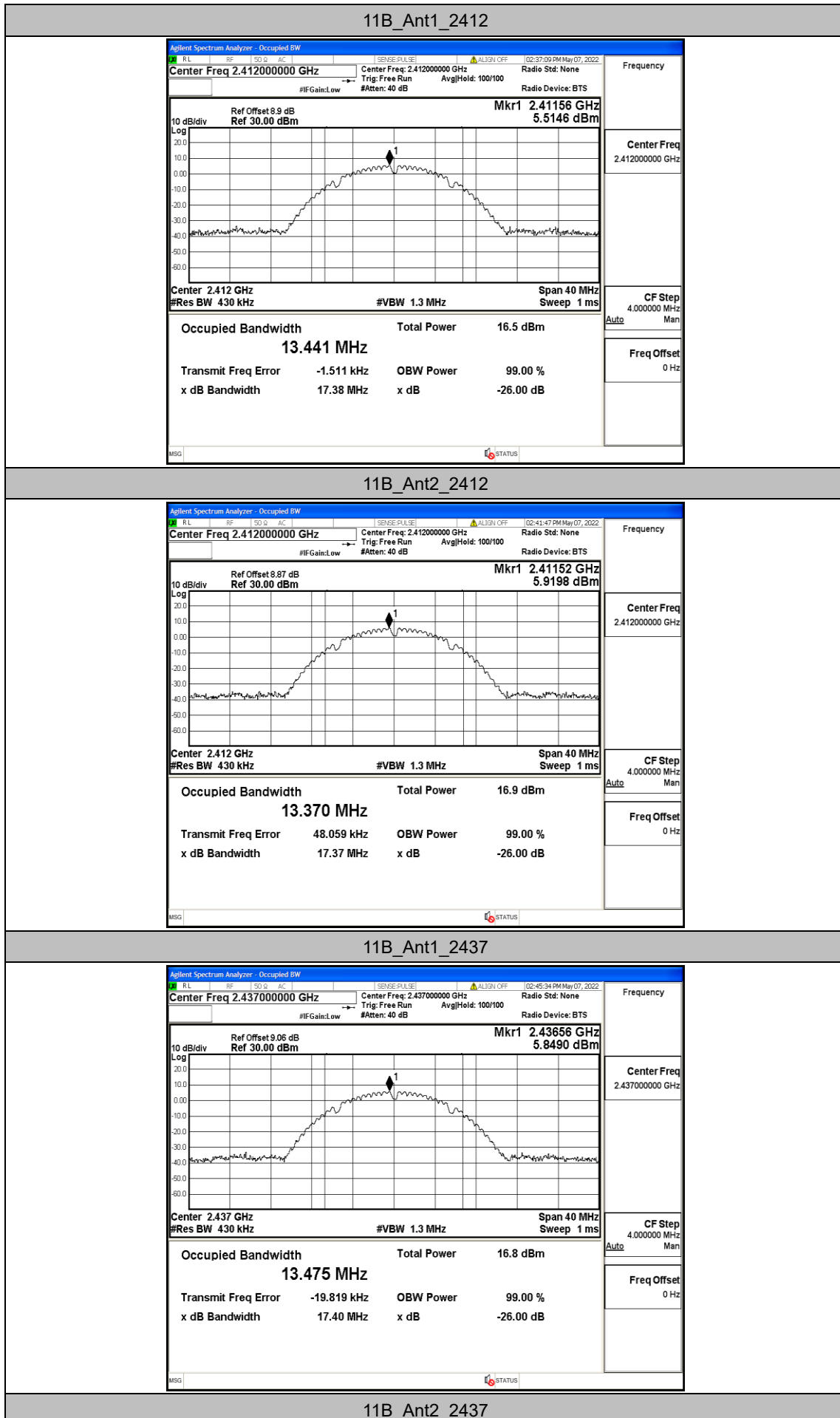


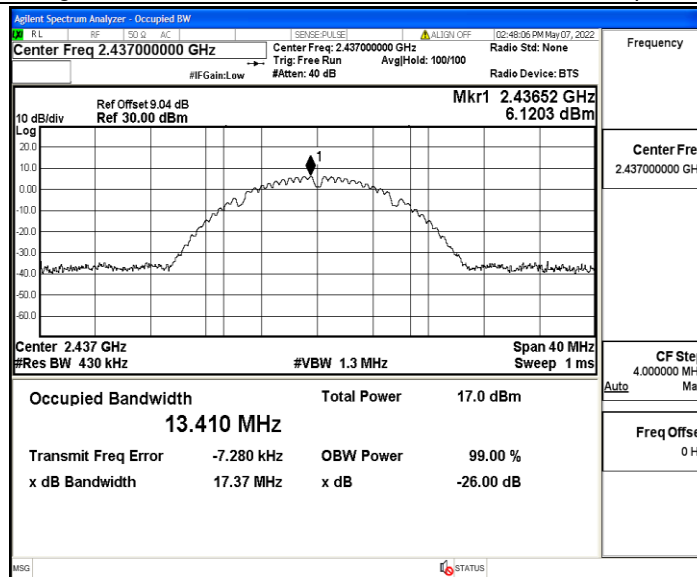
Appendix B: Occupied Channel Bandwidth

Test Result

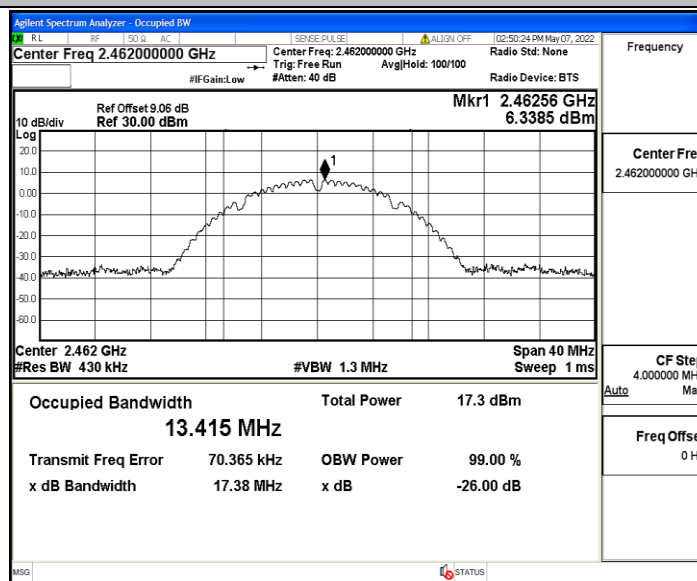
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.441	2405.278	2418.719	---	PASS
	Ant2	2412	13.370	2405.363	2418.733	---	PASS
	Ant1	2437	13.475	2430.243	2443.718	---	PASS
	Ant2	2437	13.410	2430.288	2443.698	---	PASS
	Ant1	2462	13.415	2455.363	2468.778	---	PASS
	Ant2	2462	13.377	2455.382	2468.759	---	PASS
11G	Ant1	2412	16.839	2403.573	2420.412	---	PASS
	Ant2	2412	16.761	2403.608	2420.369	---	PASS
	Ant1	2437	16.839	2428.534	2445.373	---	PASS
	Ant2	2437	16.834	2428.591	2445.425	---	PASS
	Ant1	2462	16.753	2453.666	2470.419	---	PASS
	Ant2	2462	16.884	2453.579	2470.463	---	PASS
11N20MIMO	Ant1	2412	17.791	2403.140	2420.931	---	PASS
	Ant2	2412	17.615	2403.250	2420.865	---	PASS
	Ant1	2437	17.827	2428.120	2445.947	---	PASS
	Ant2	2437	17.596	2428.230	2445.826	---	PASS
	Ant1	2462	17.753	2453.193	2470.946	---	PASS
	Ant2	2462	17.578	2453.286	2470.864	---	PASS
11N40MIMO	Ant1	2422	36.033	2404.016	2440.049	---	PASS
	Ant2	2422	36.106	2403.981	2440.087	---	PASS
	Ant1	2437	35.992	2419.057	2455.049	---	PASS
	Ant2	2437	36.063	2418.964	2455.027	---	PASS
	Ant1	2452	36.128	2434.019	2470.147	---	PASS
	Ant2	2452	36.286	2433.979	2470.265	---	PASS

Test Graphs

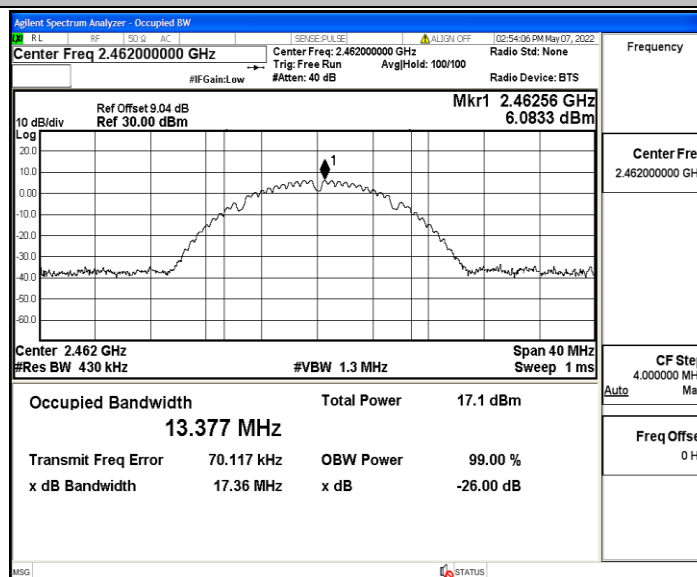




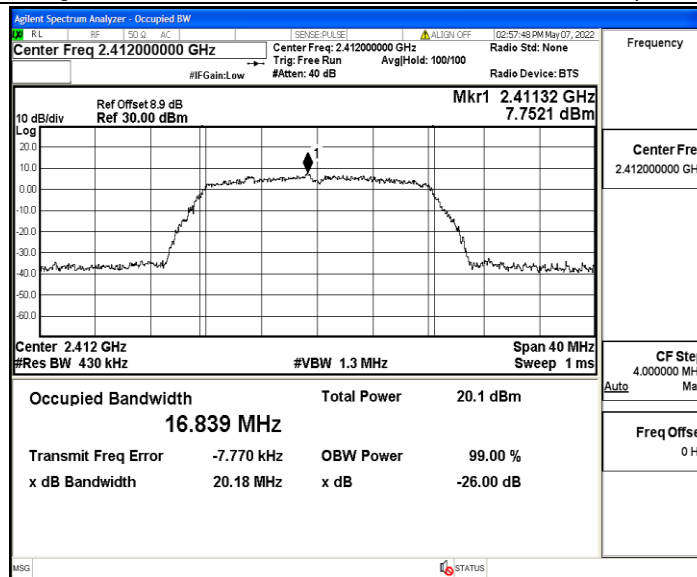
11B_Ant1_2462



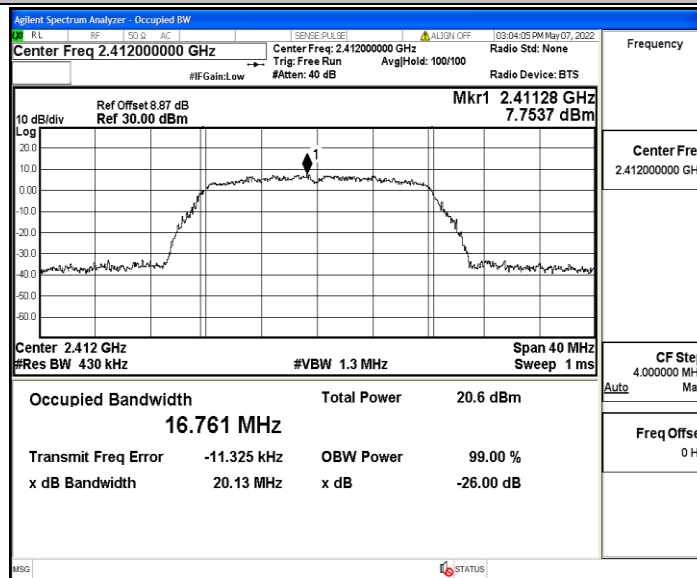
11B_Ant2_2462



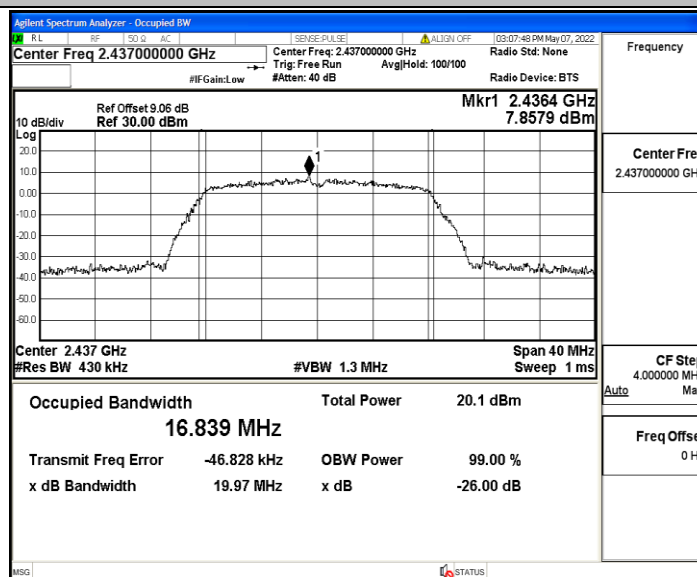
11G_Ant1_2412



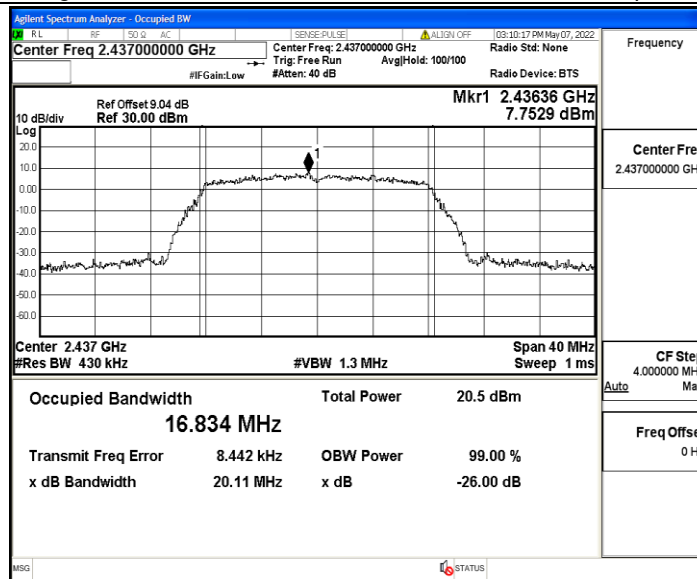
11G_Ant2_2412



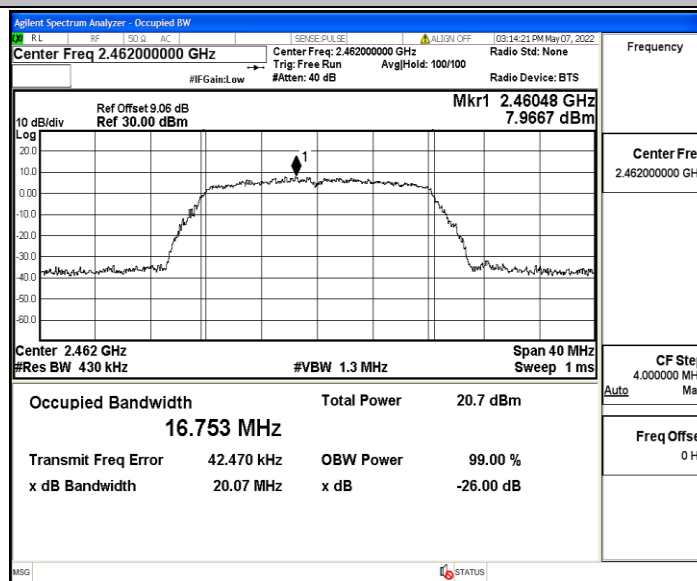
11G_Ant1_2437



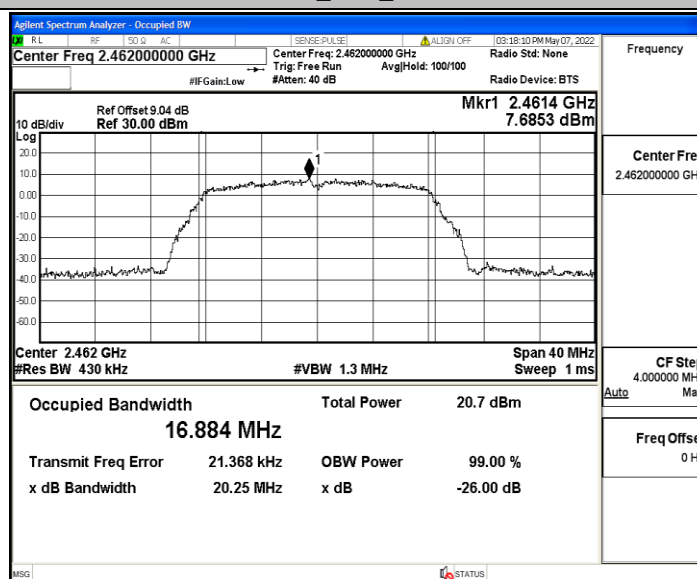
11G_Ant2_2437



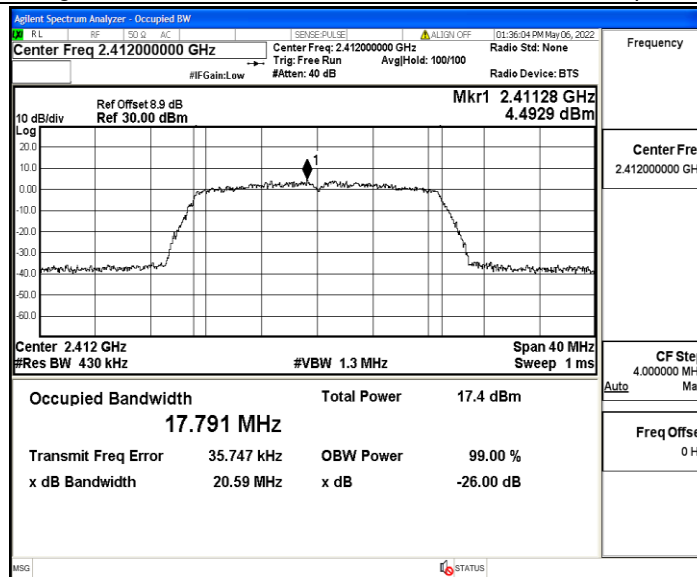
11G_Ant1_2462



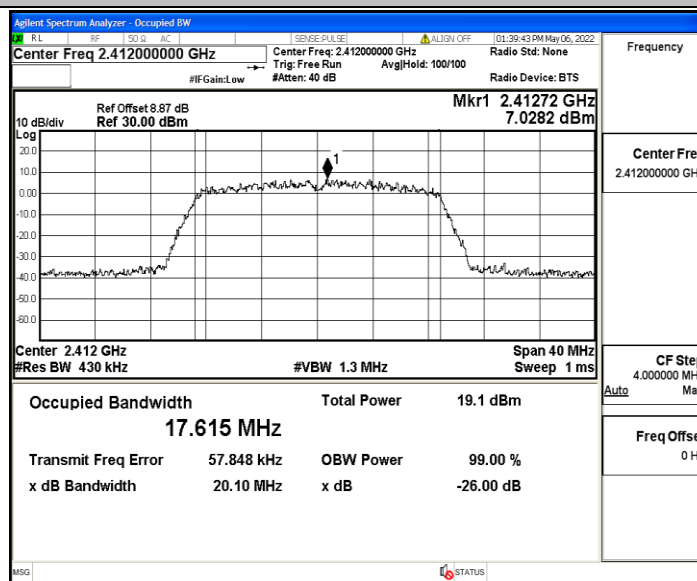
11G_Ant2_2462



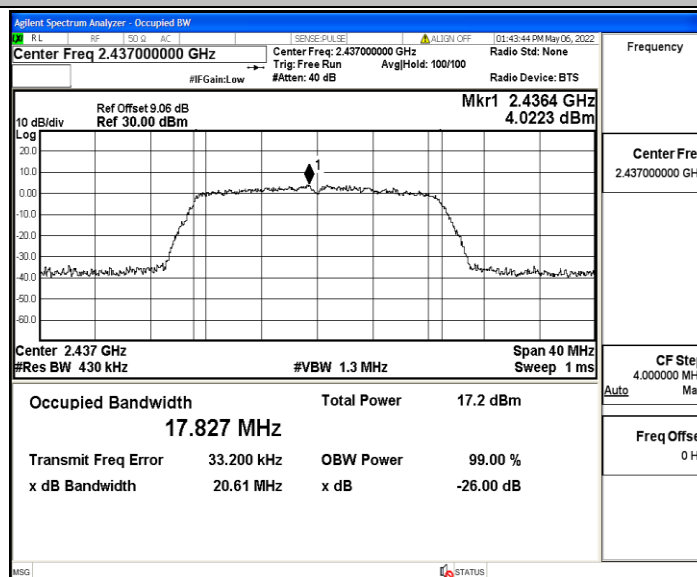
11N20MIMO_Ant1_2412



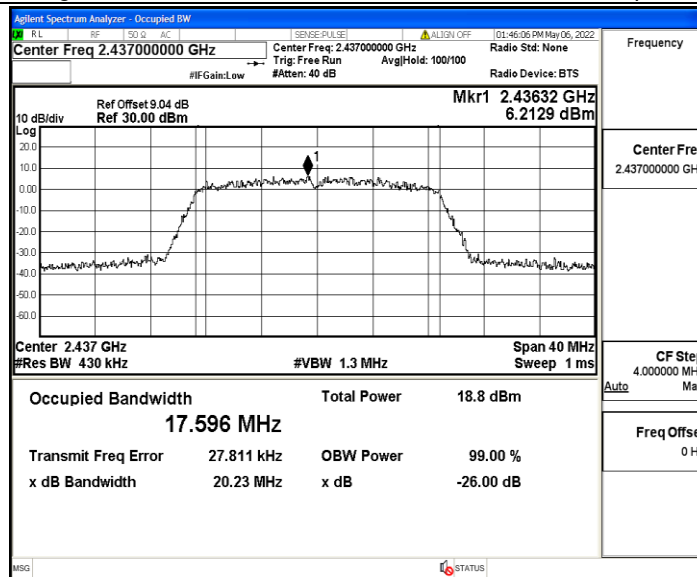
11N20MIMO_Ant2_2412



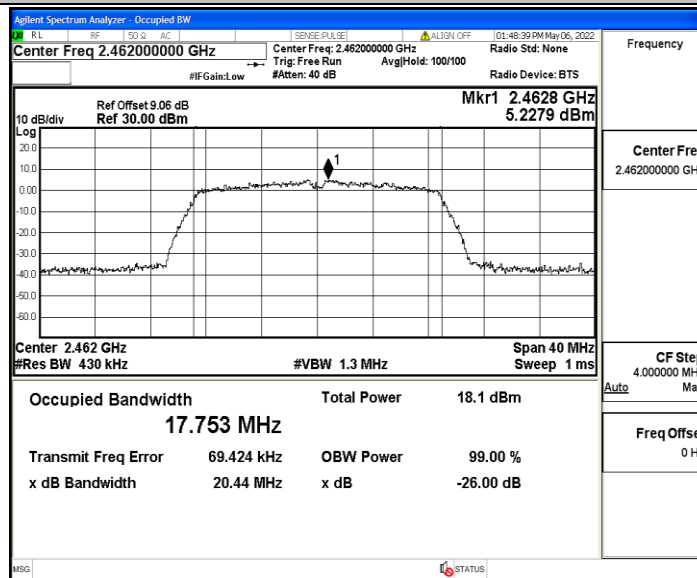
11N20MIMO_Ant1_2437



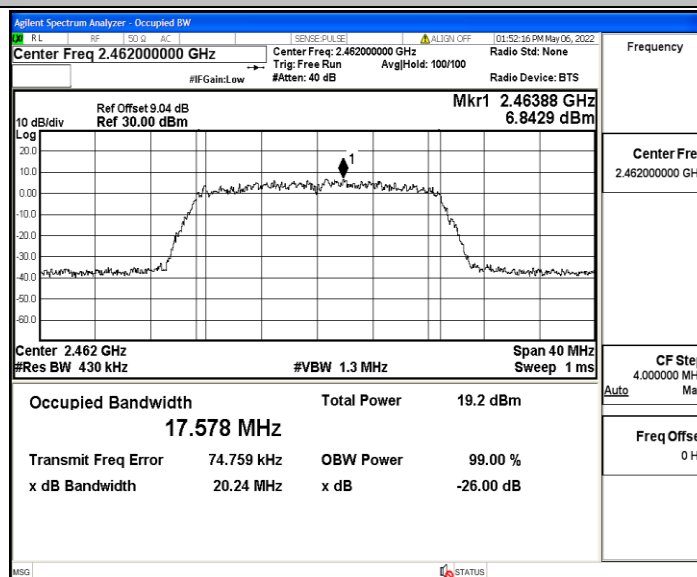
11N20MIMO_Ant2_2437



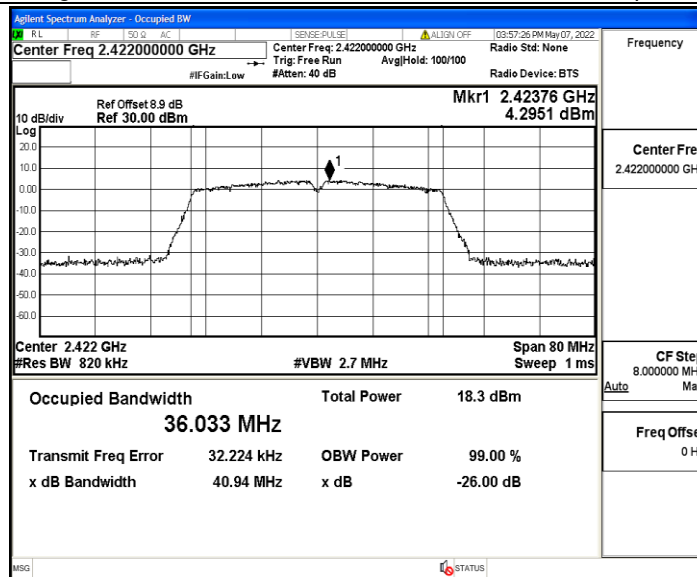
11N20MIMO_Ant1_2462



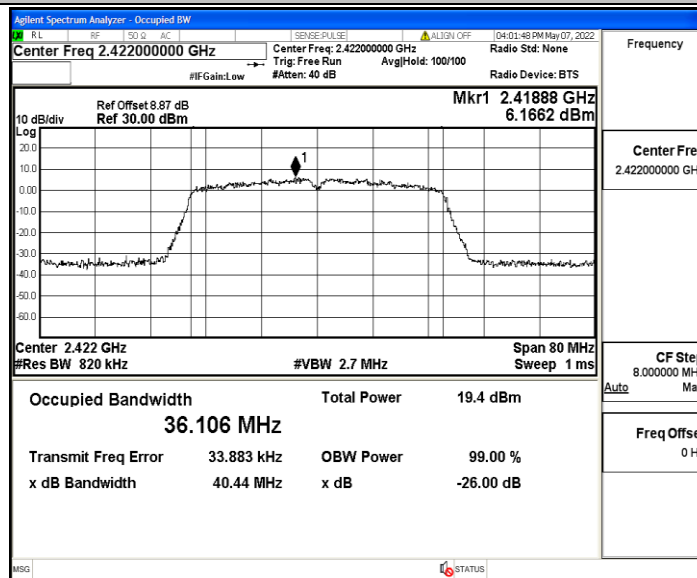
11N20MIMO_Ant2_2462



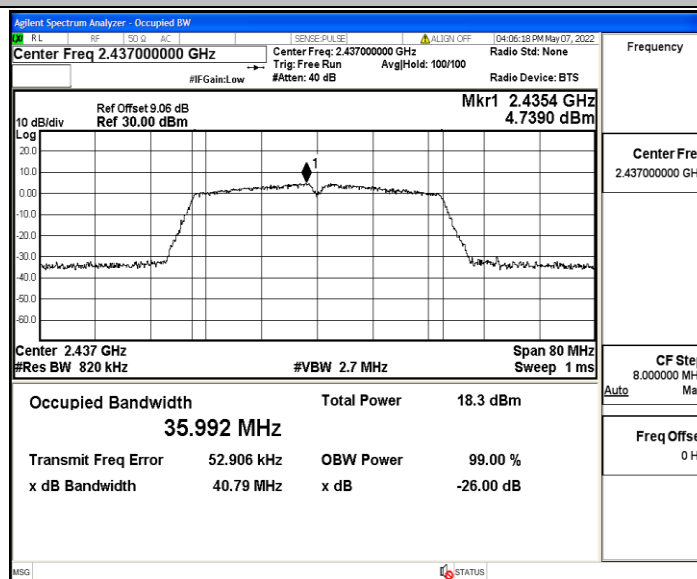
11N40MIMO_Ant1_2422



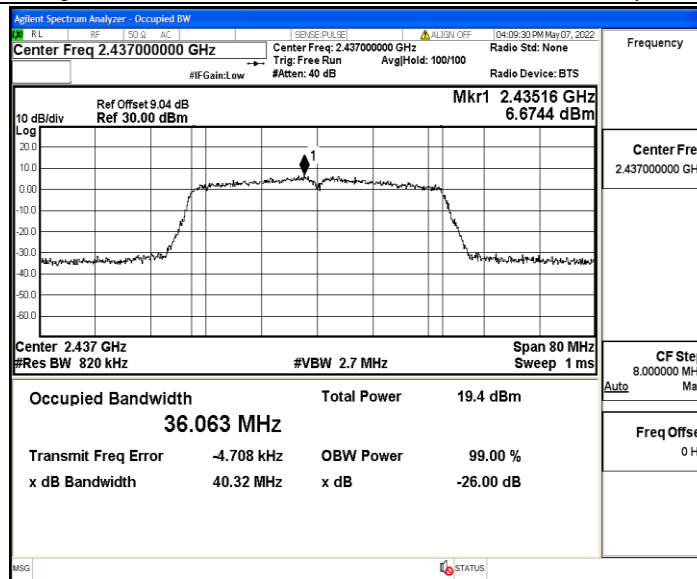
11N40MIMO_Ant2_2422



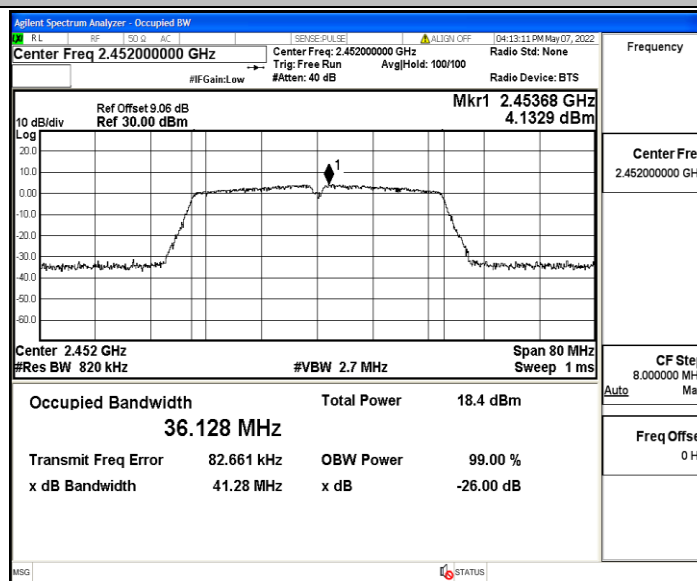
11N40MIMO_Ant1_2437



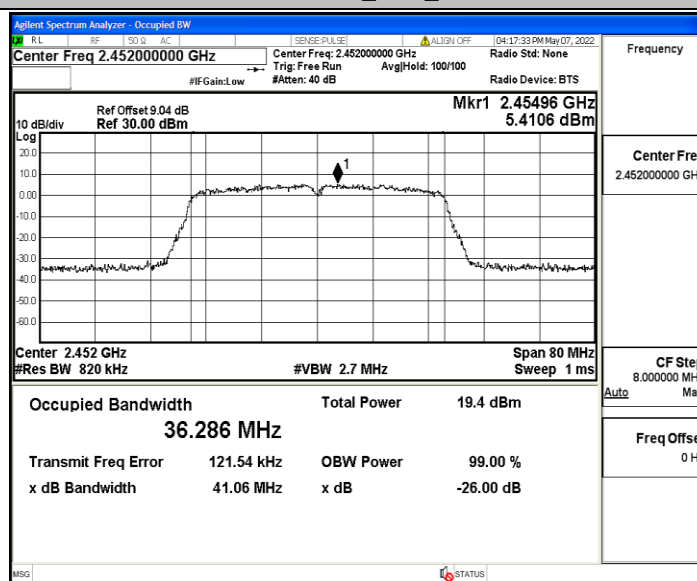
11N40MIMO_Ant2_2437



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	13.52	≤30	PASS
	Ant2	2412	14.10	≤30	PASS
	Ant1	2437	13.90	≤30	PASS
	Ant2	2437	14.04	≤30	PASS
	Ant1	2462	14.35	≤30	PASS
	Ant2	2462	14.08	≤30	PASS
11G	Ant1	2412	14.10	≤30	PASS
	Ant2	2412	14.59	≤30	PASS
	Ant1	2437	14.10	≤30	PASS
	Ant2	2437	14.55	≤30	PASS
	Ant1	2462	14.73	≤30	PASS
	Ant2	2462	14.74	≤30	PASS
11N20MIMO	Ant1	2412	11.32	≤30	PASS
	Ant2	2412	12.16	≤30	PASS
	total	2412	14.77	≤30	PASS
	Ant1	2437	11.33	≤30	PASS
	Ant2	2437	11.90	≤30	PASS
	total	2437	14.63	≤30	PASS
	Ant1	2462	12.05	≤30	PASS
	Ant2	2462	12.24	≤30	PASS
	total	2462	15.16	≤30	PASS
11N40MIMO	Ant1	2422	11.47	≤30	PASS
	Ant2	2422	12.05	≤30	PASS
	total	2422	14.78	≤30	PASS
	Ant1	2437	11.47	≤30	PASS
	Ant2	2437	12.00	≤30	PASS
	total	2437	14.75	≤30	PASS
	Ant1	2452	11.60	≤30	PASS
	Ant2	2452	12.01	≤30	PASS
	total	2452	14.82	≤30	PASS

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

Appendix D: Maximum power spectral density

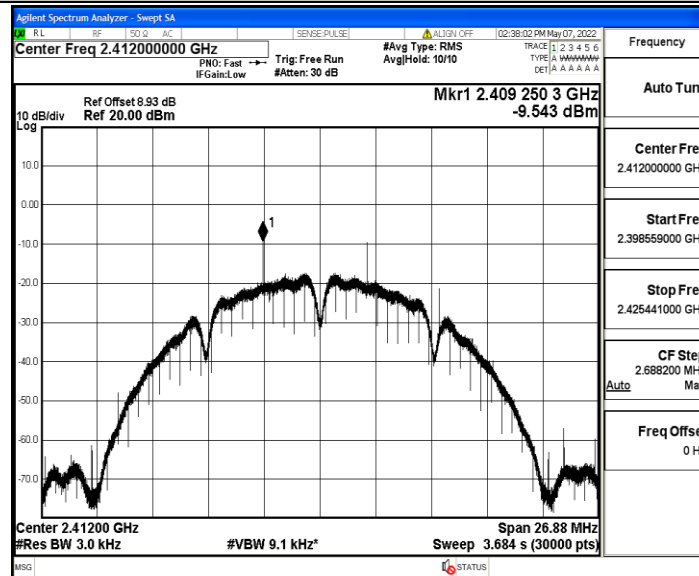
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-9.54	≤8.00	PASS
	Ant2	2412	-10.84	≤8.00	PASS
	Ant1	2437	-4.02	≤8.00	PASS
	Ant2	2437	-9.06	≤8.00	PASS
	Ant1	2462	-7.13	≤8.00	PASS
	Ant2	2462	-9.51	≤8.00	PASS
11G	Ant1	2412	-16.81	≤8.00	PASS
	Ant2	2412	-16.52	≤8.00	PASS
	Ant1	2437	-16.69	≤8.00	PASS
	Ant2	2437	-16.21	≤8.00	PASS
	Ant1	2462	-16.18	≤8.00	PASS
	Ant2	2462	-15.88	≤8.00	PASS
11N20MIMO	Ant1	2412	-20.35	≤8.00	PASS
	Ant2	2412	-17.89	≤8.00	PASS
	total	2412	-15.94	≤8.00	PASS
	Ant1	2437	-19.95	≤8.00	PASS
	Ant2	2437	-19.65	≤8.00	PASS
	total	2437	-16.79	≤8.00	PASS
	Ant1	2462	-19.32	≤8.00	PASS
	Ant2	2462	-18.6	≤8.00	PASS
	total	2462	-15.93	≤8.00	PASS
11N40MIMO	Ant1	2422	-22.57	≤8.00	PASS
	Ant2	2422	-22.03	≤8.00	PASS
	total	2422	-19.28	≤8.00	PASS
	Ant1	2437	-22.25	≤8.00	PASS
	Ant2	2437	-22	≤8.00	PASS
	total	2437	-19.11	≤8.00	PASS
	Ant1	2452	-21.82	≤8.00	PASS
	Ant2	2452	-22.08	≤8.00	PASS
	total	2452	-18.94	≤8.00	PASS

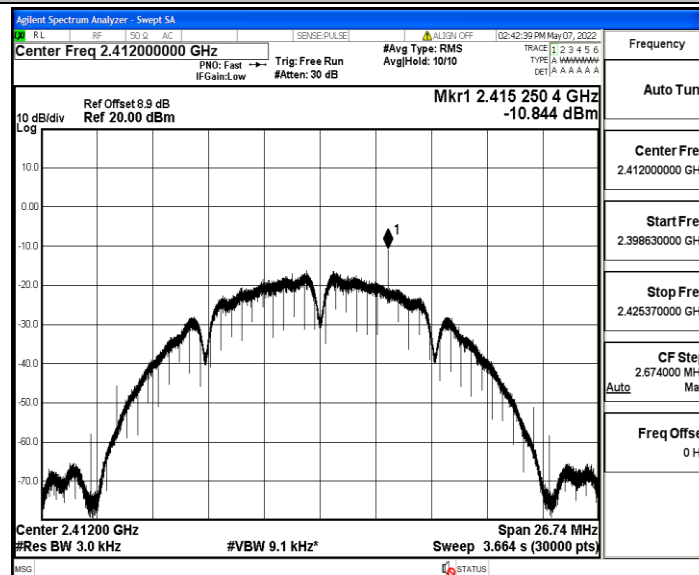
Note: The Duty Cycle Factor is compensated in the test result.

Test Graphs

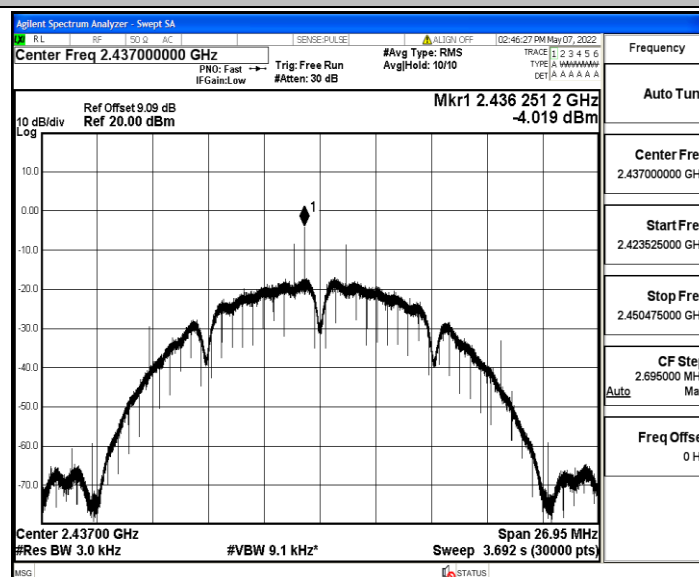
11B_Ant1_2412



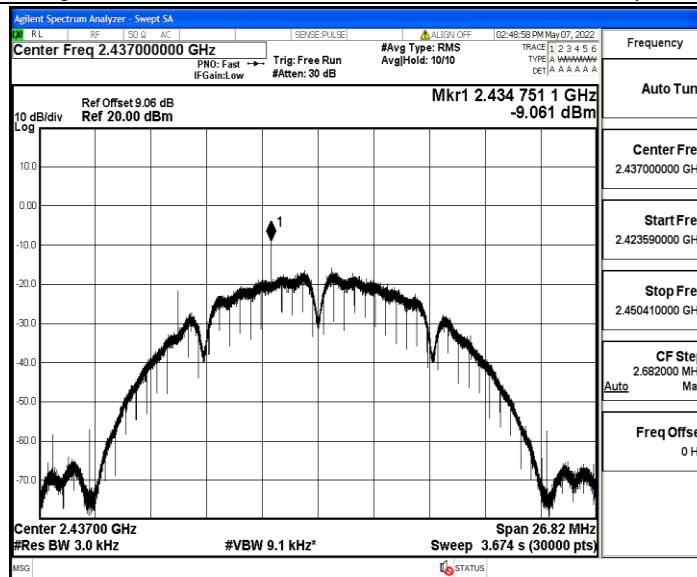
11B_Ant2_2412



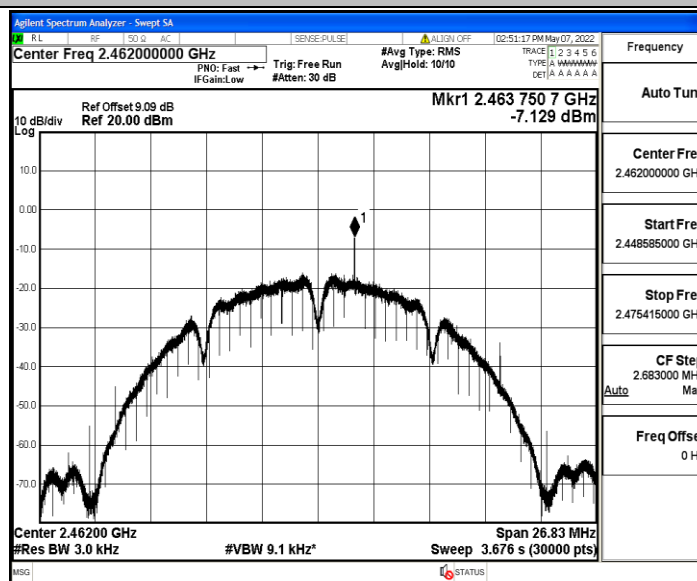
11B_Ant1_2437



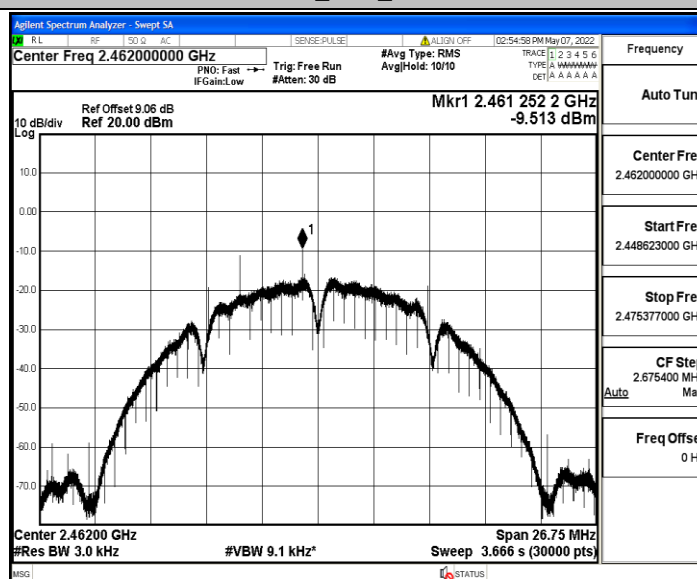
11B_Ant2_2437



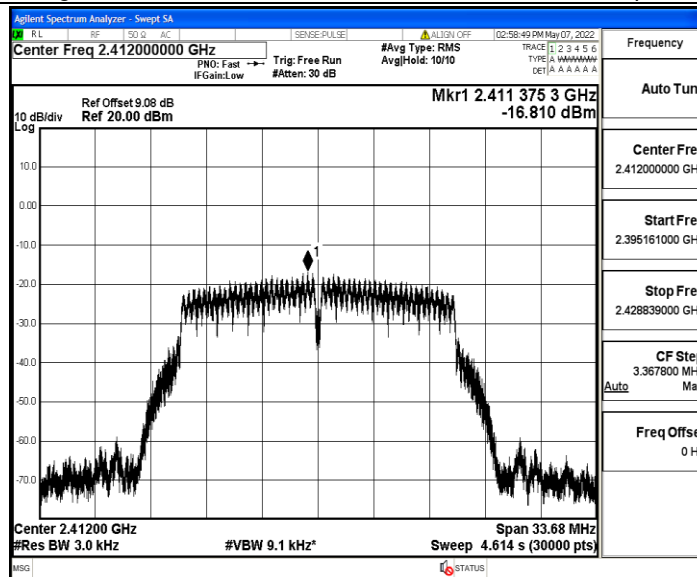
11B_Ant1_2462



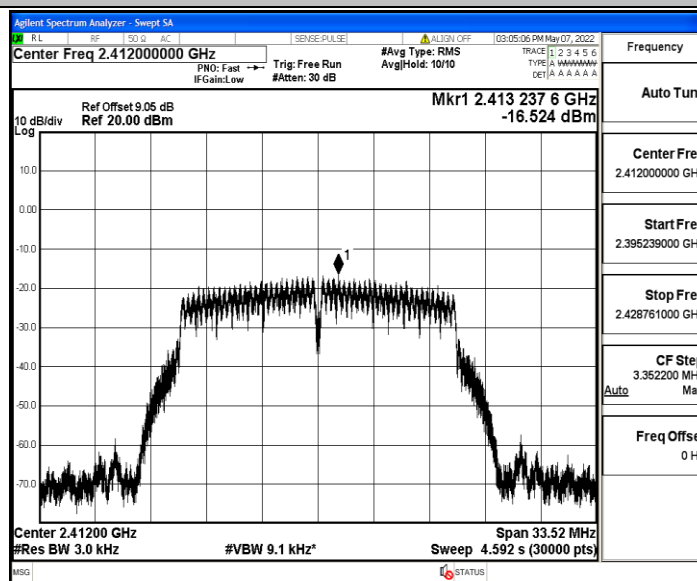
11B_Ant2_2462



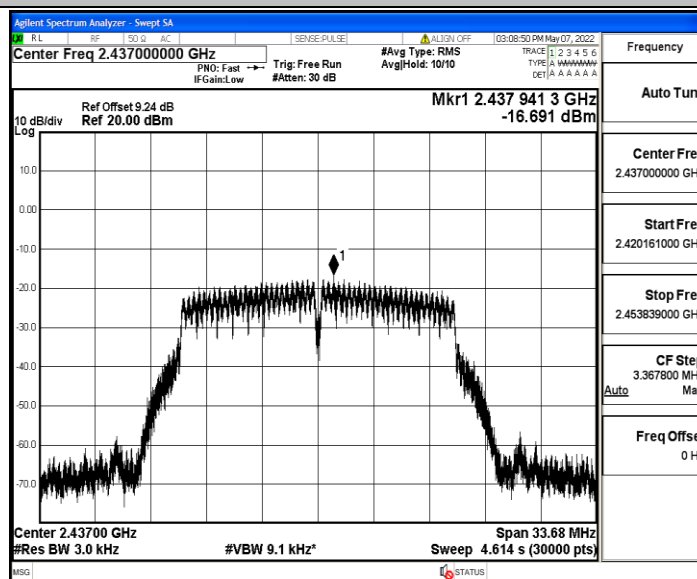
11G_Ant1_2412



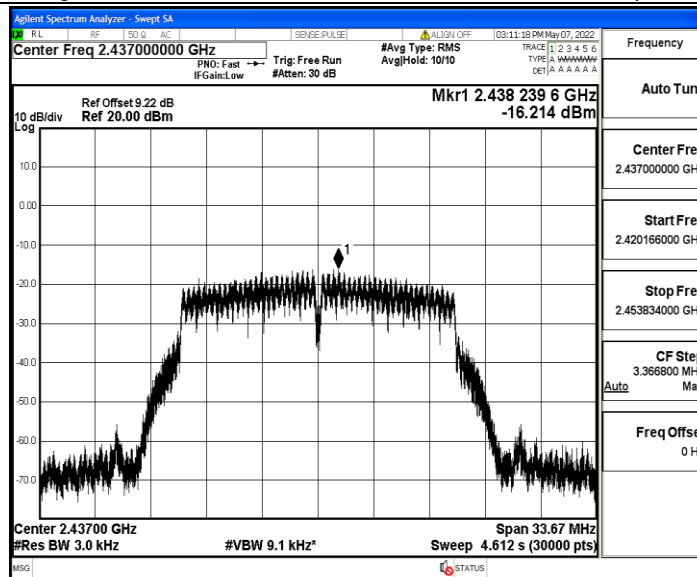
11G_Ant2_2412



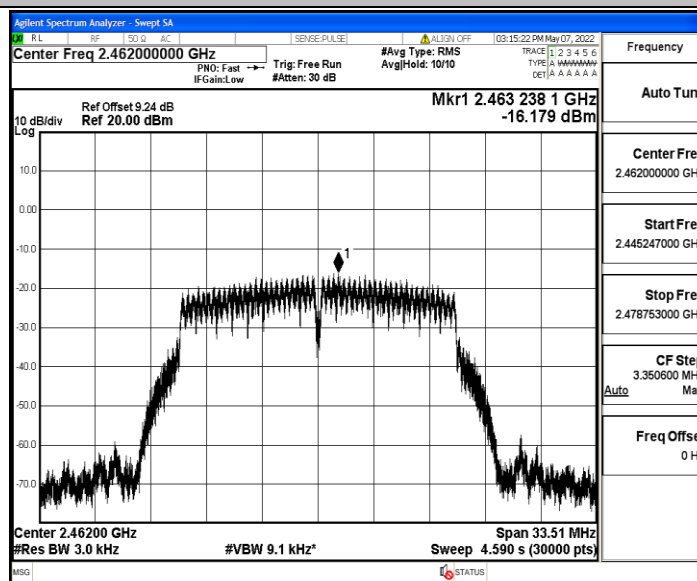
11G_Ant1_2437



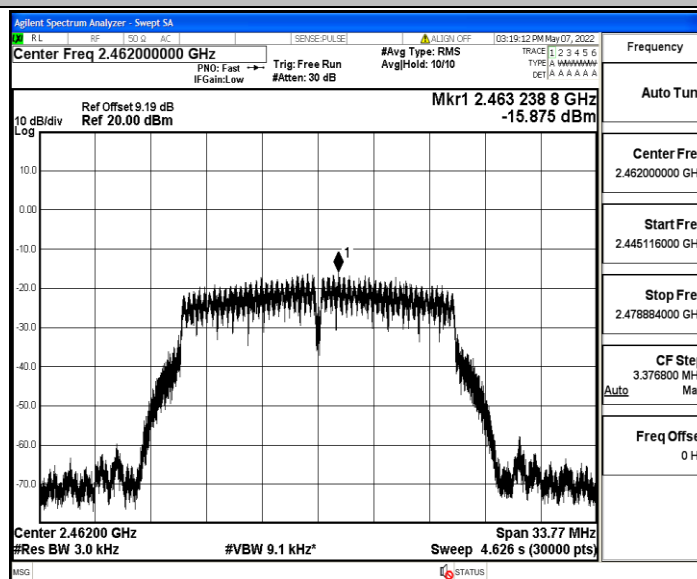
11G_Ant2_2437



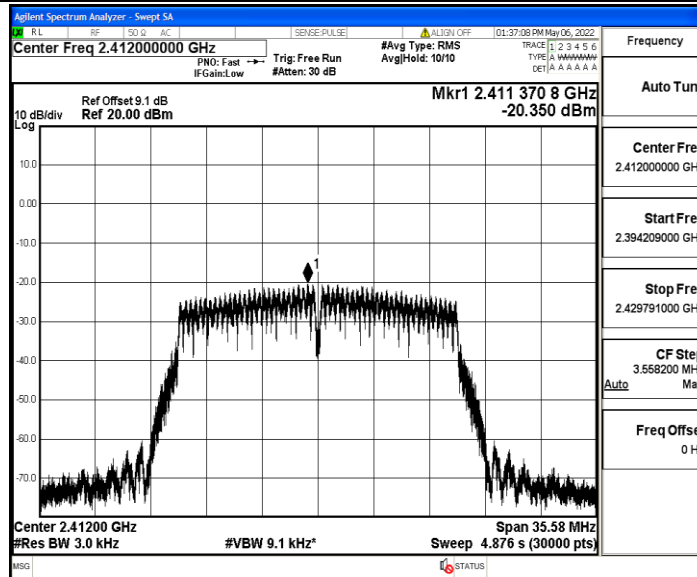
11G_Ant1_2462



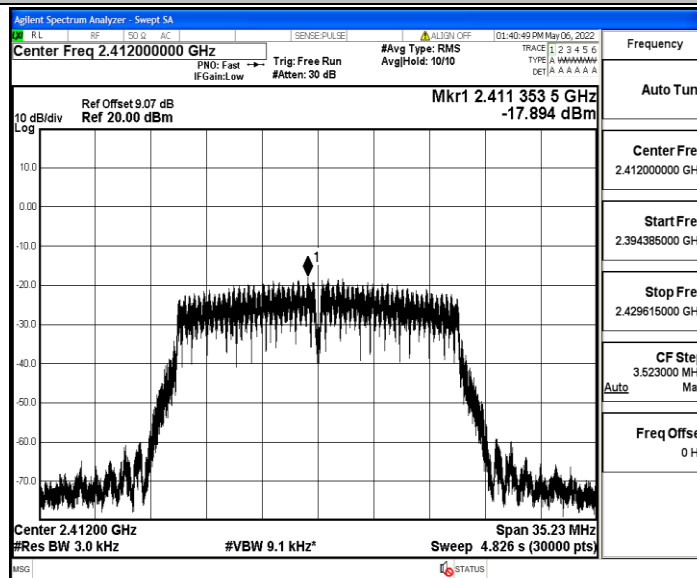
11G_Ant2_2462



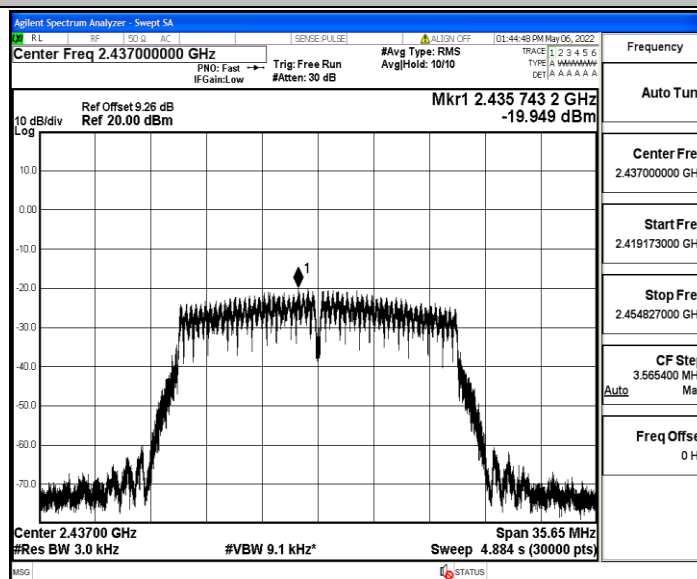
11N20MIMO_Ant1_2412



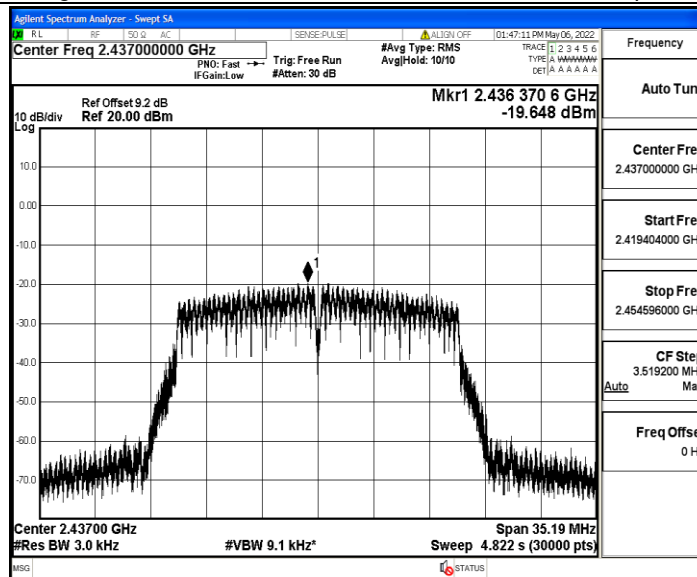
11N20MIMO_Ant2_2412



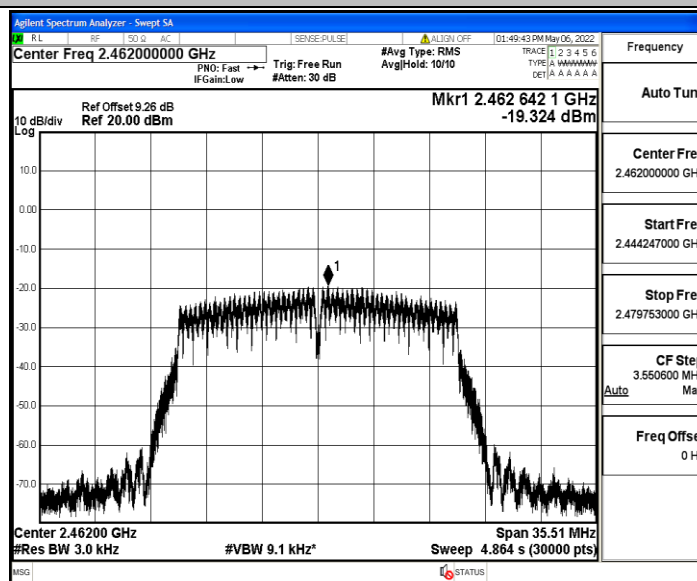
11N20MIMO_Ant1_2437



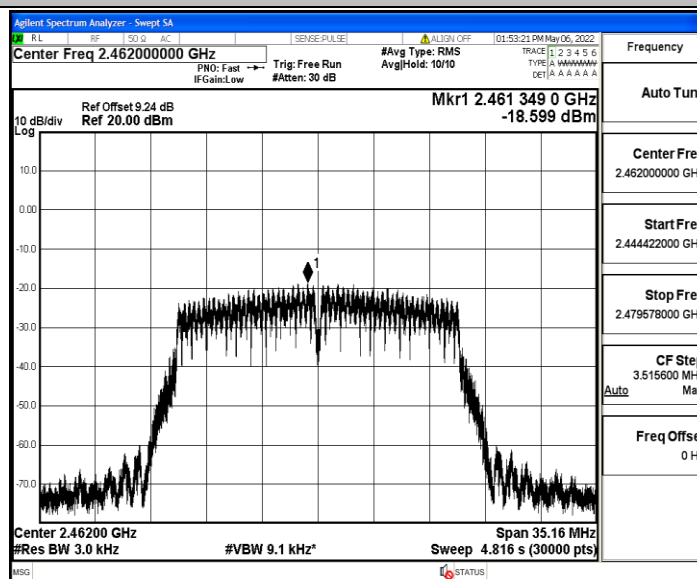
11N20MIMO_Ant2_2437



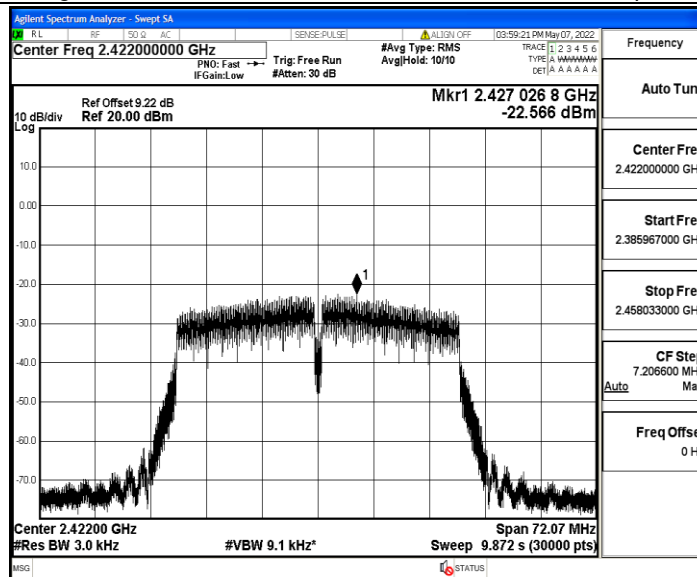
11N20MIMO_Ant1_2462



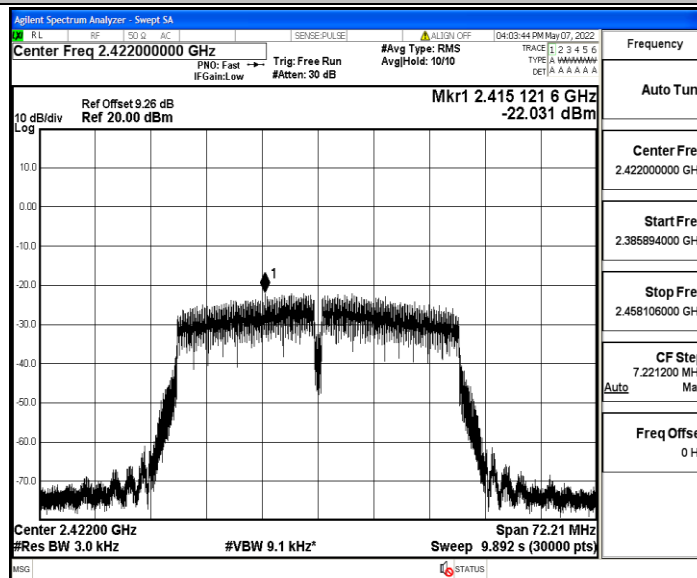
11N20MIMO_Ant2_2462



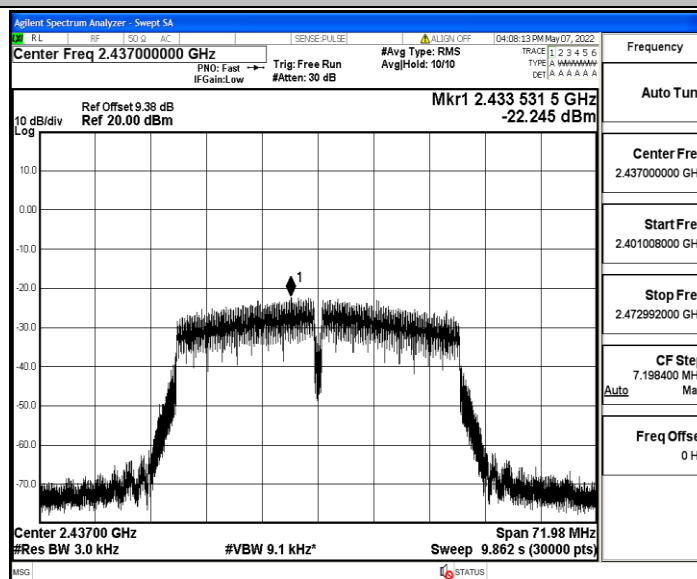
11N40MIMO_Ant1_2422



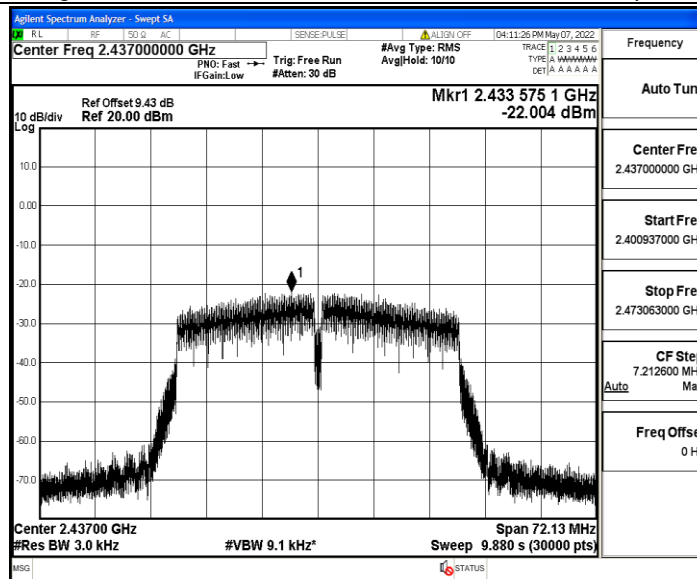
11N40MIMO_Ant2_2422



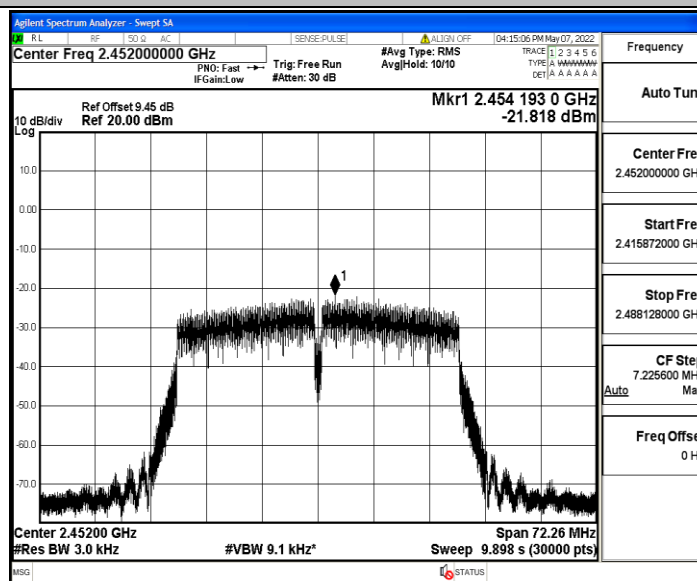
11N40MIMO_Ant1_2437



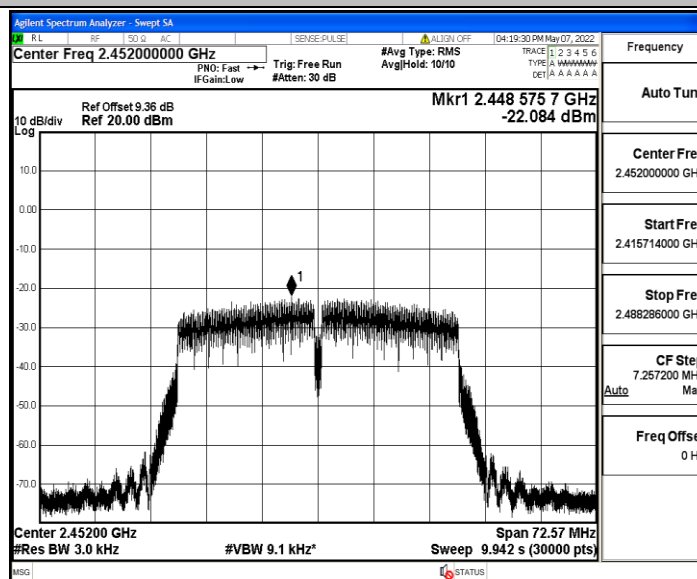
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



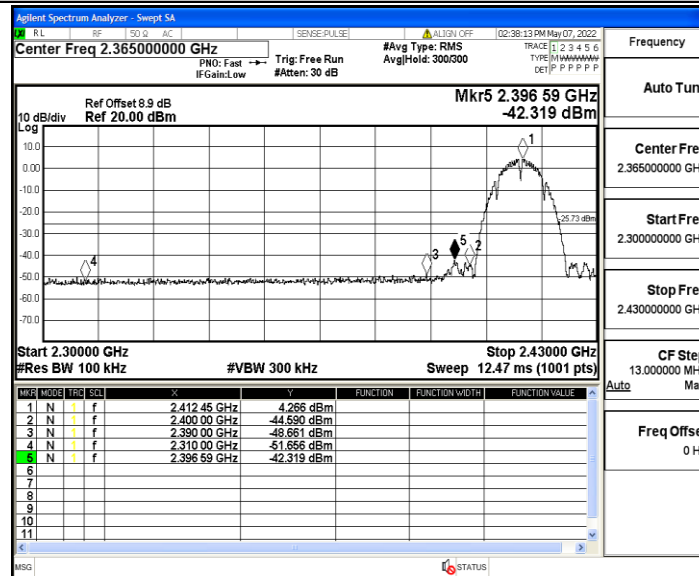
Appendix E: Band edge measurements

Test Result

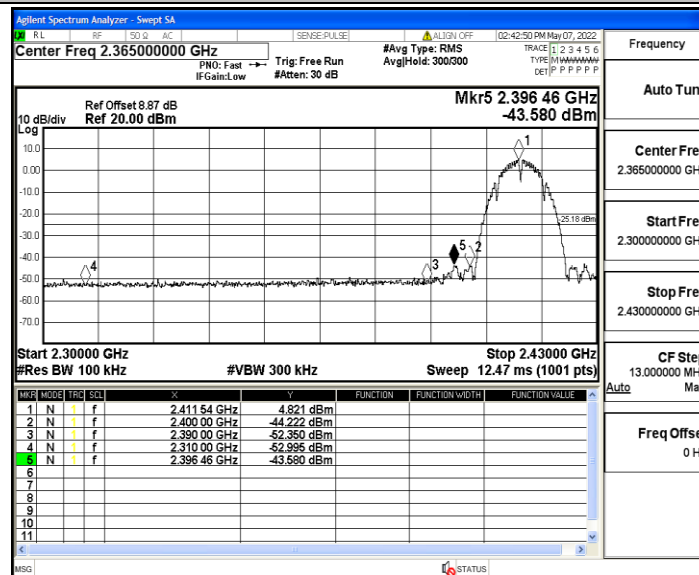
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.27	-42.32	≤-25.73	PASS
	Ant2	Low	2412	4.82	-43.58	≤-25.18	PASS
	Ant1	High	2462	5.16	-49.28	≤-24.84	PASS
	Ant2	High	2462	4.91	-48.95	≤-25.09	PASS
11G	Ant1	Low	2412	4.02	-40.85	≤-25.98	PASS
	Ant2	Low	2412	4.82	-40.73	≤-25.18	PASS
	Ant1	High	2462	4.92	-47.31	≤-25.08	PASS
	Ant2	High	2462	4.77	-46.28	≤-25.23	PASS
11N20MIMO	Ant1	Low	2412	1.53	-43.59	≤-28.48	PASS
	Ant2	Low	2412	2.19	-43.21	≤-27.81	PASS
	Ant1	High	2462	2.50	-48.69	≤-27.5	PASS
	Ant2	High	2462	1.47	-47.29	≤-28.54	PASS
11N40MIMO	Ant1	Low	2422	-1.40	-41.78	≤-31.4	PASS
	Ant2	Low	2422	-0.77	-38.8	≤-30.77	PASS
	Ant1	High	2452	-1.33	-48.86	≤-31.33	PASS
	Ant2	High	2452	-0.83	-47.26	≤-30.83	PASS

Test Graphs

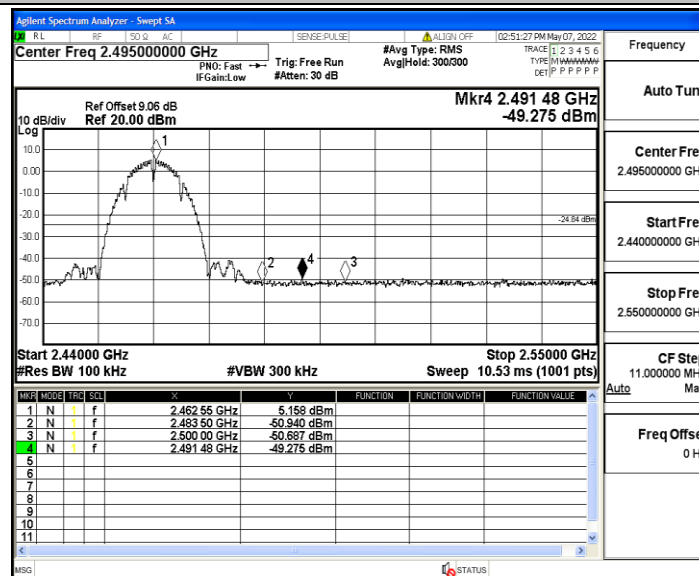
11B_Ant1_Low_2412



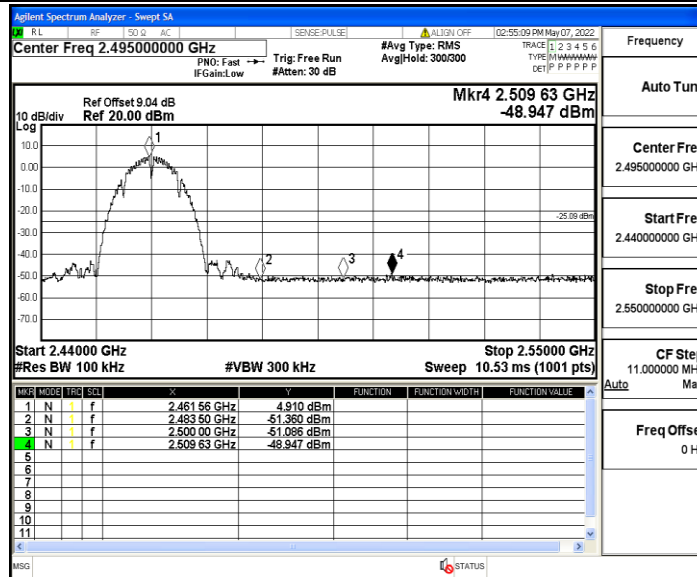
11B_Ant2_Low_2412



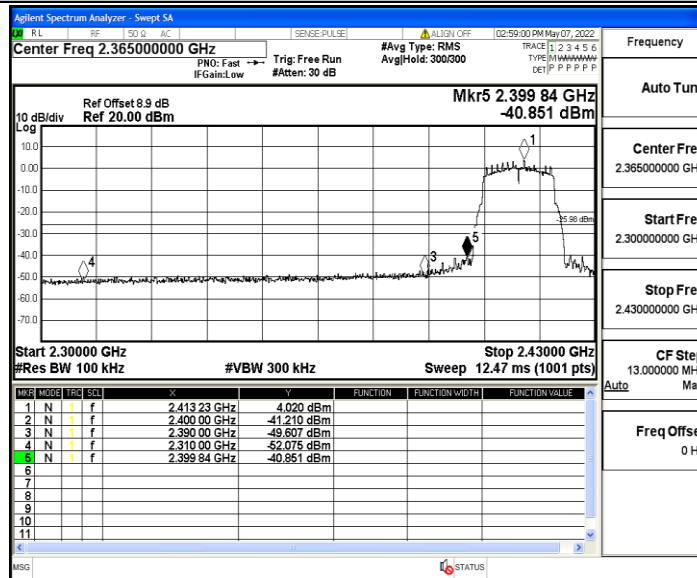
11B_Ant1_High_2462



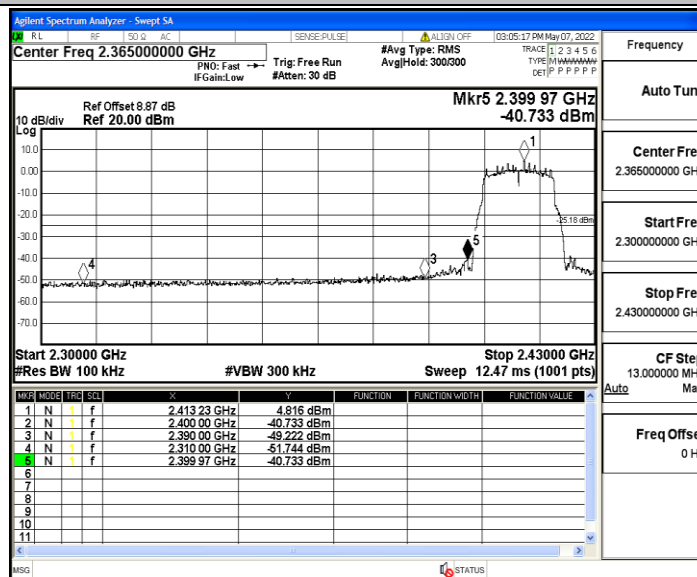
11B_Ant2_High_2462



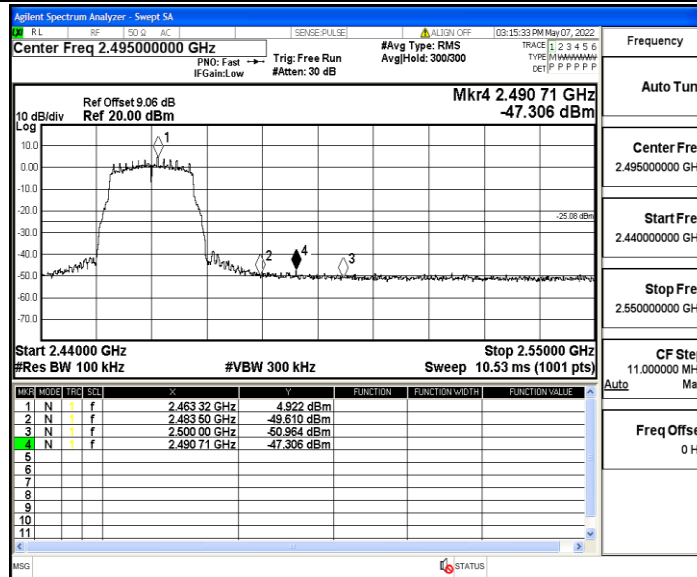
11G_Ant1_Low_2412



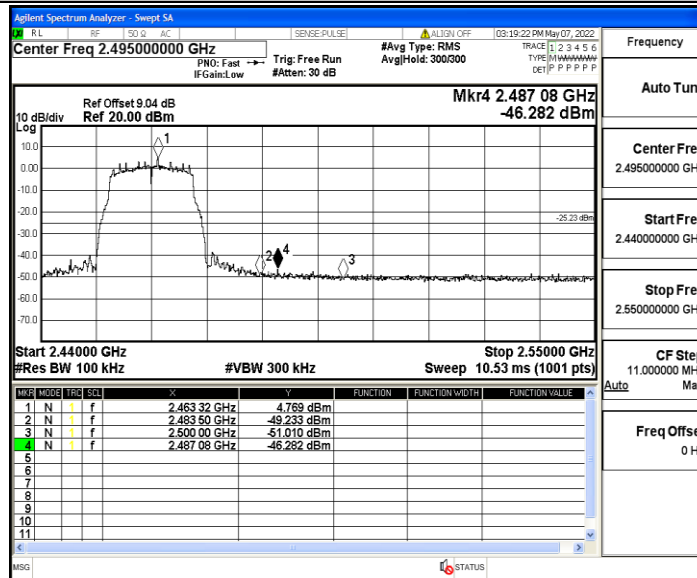
11G_Ant2_Low_2412



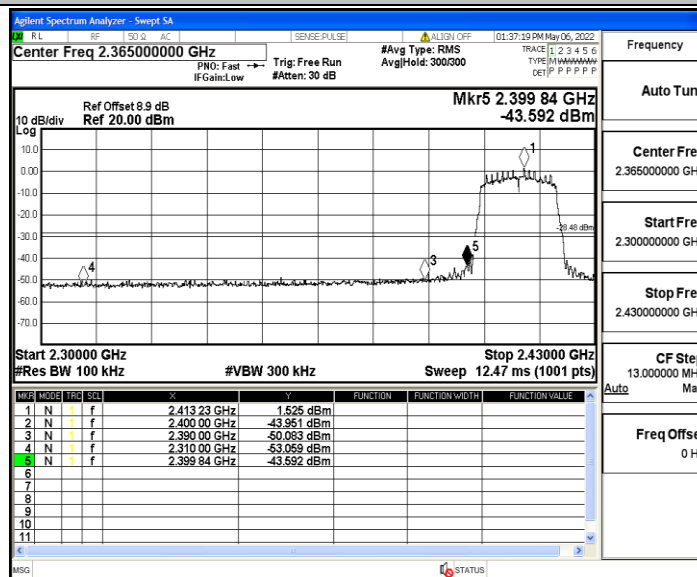
11G_Ant1_High_2462



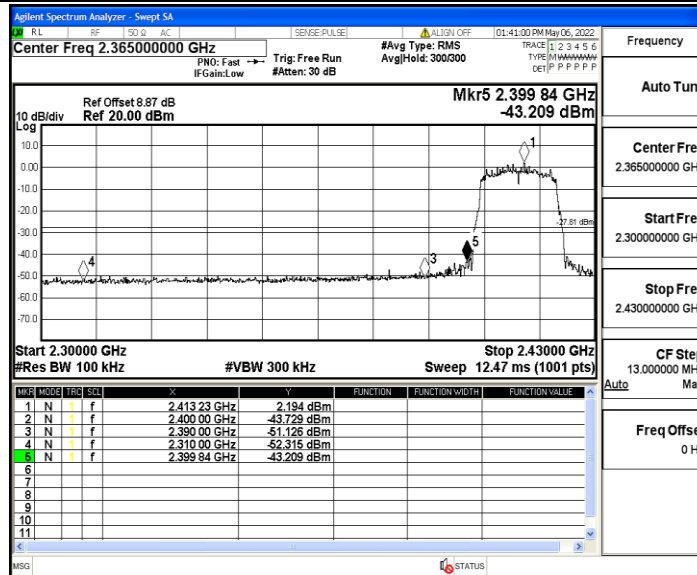
11G_Ant2_High_2462



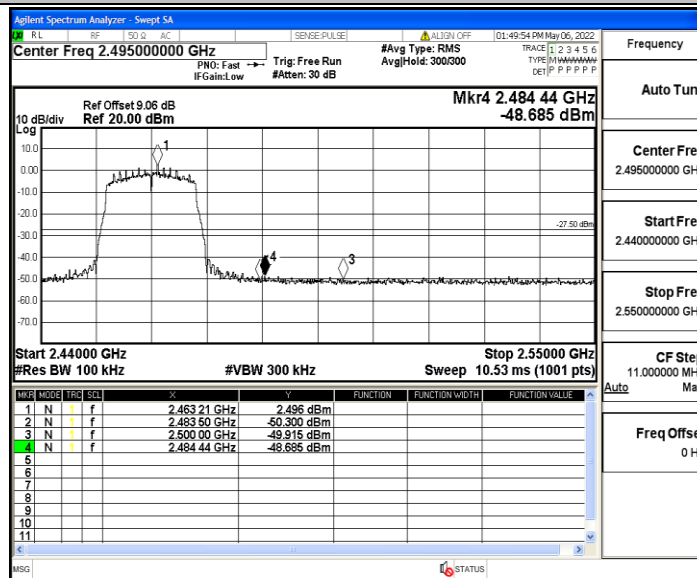
11N20MIMO_Ant1_Low_2412



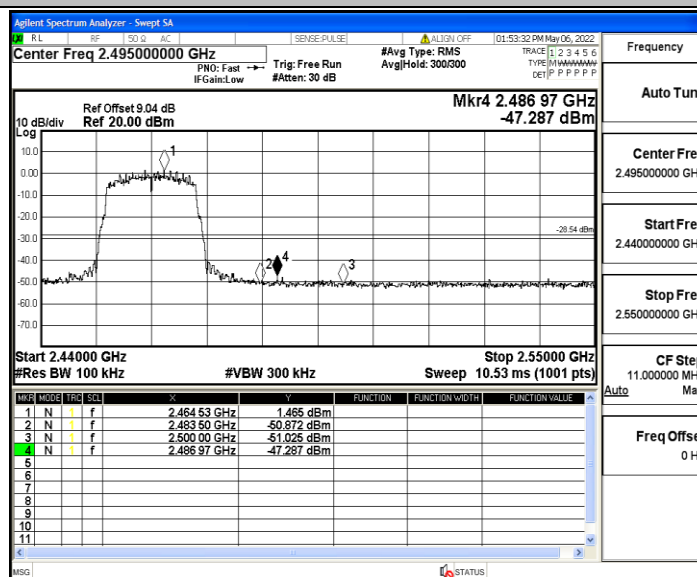
11N20MIMO_Ant2_Low_2412



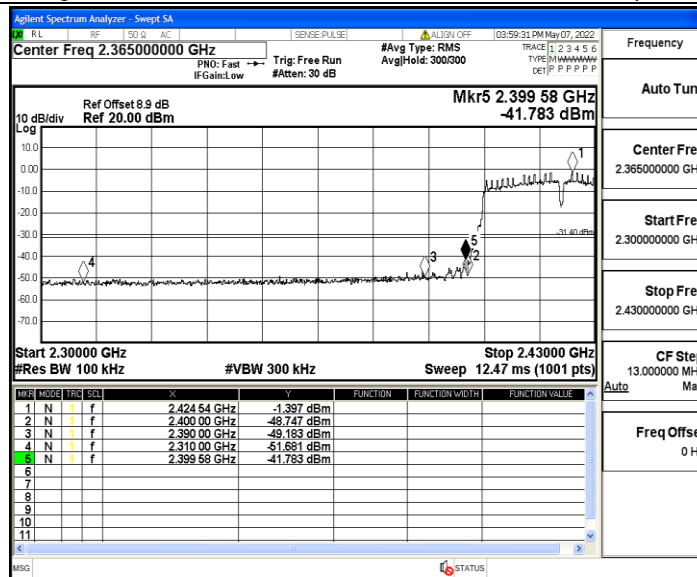
11N20MIMO_Ant1_High_2462



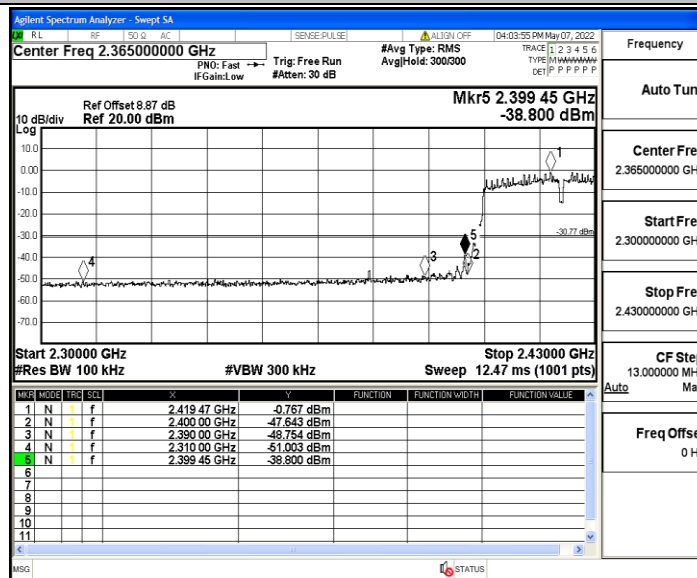
11N20MIMO_Ant2_High_2462



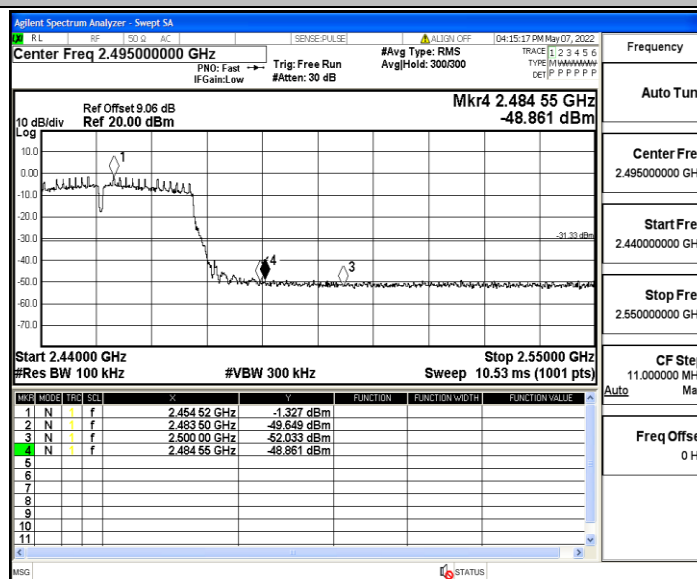
11N40MIMO_Ant1_Low_2422



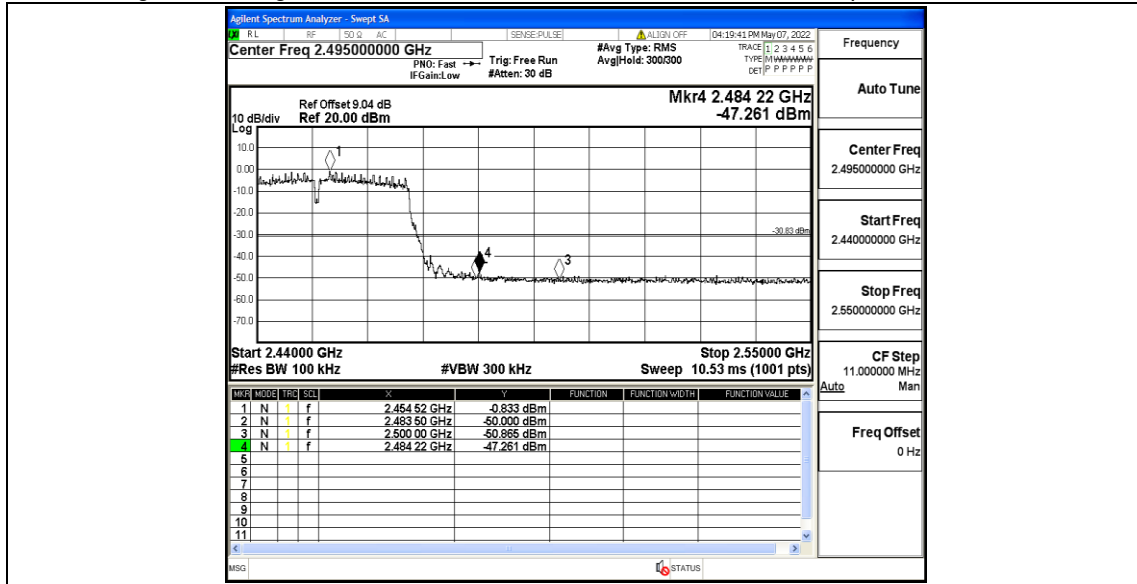
11N40MIMO_Ant2_Low_2422



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	3.35	3.35	---	PASS
			30~1000	3.35	-61.9	≤-26.65	PASS
			1000~26500	3.35	-51.82	≤-26.65	PASS
	Ant2	2412	Reference	4.36	4.36	---	PASS
			30~1000	4.36	-59.36	≤-25.64	PASS
			1000~26500	4.36	-51.97	≤-25.64	PASS
	Ant1	2437	Reference	3.82	3.82	---	PASS
			30~1000	3.82	-61.29	≤-26.18	PASS
			1000~26500	3.82	-51.02	≤-26.18	PASS
	Ant2	2437	Reference	4.61	4.61	---	PASS
			30~1000	4.61	-61.72	≤-25.39	PASS
			1000~26500	4.61	-49.15	≤-25.39	PASS
	Ant1	2462	Reference	4.95	4.95	---	PASS
			30~1000	4.95	-61.35	≤-25.05	PASS
			1000~26500	4.95	-50.66	≤-25.05	PASS
	Ant2	2462	Reference	4.38	4.38	---	PASS
			30~1000	4.38	-61.21	≤-25.62	PASS
			1000~26500	4.38	-51.64	≤-25.62	PASS
11G	Ant1	2412	Reference	0.88	0.88	---	PASS
			30~1000	0.88	-61.28	≤-29.12	PASS
			1000~26500	0.88	-50.91	≤-29.12	PASS
	Ant2	2412	Reference	2.30	2.30	---	PASS
			30~1000	2.30	-61.46	≤-27.7	PASS
			1000~26500	2.30	-50.69	≤-27.7	PASS
	Ant1	2437	Reference	4.03	4.03	---	PASS
			30~1000	4.03	-61.06	≤-25.97	PASS
			1000~26500	4.03	-52.13	≤-25.97	PASS
	Ant2	2437	Reference	3.80	3.80	---	PASS
			30~1000	3.80	-61.39	≤-26.2	PASS
			1000~26500	3.80	-51.57	≤-26.2	PASS
	Ant1	2462	Reference	0.91	0.91	---	PASS
			30~1000	0.91	-61.43	≤-29.09	PASS
			1000~26500	0.91	-51.68	≤-29.09	PASS
	Ant2	2462	Reference	1.16	1.16	---	PASS
			30~1000	1.16	-60.32	≤-28.84	PASS
			1000~26500	1.16	-51.54	≤-28.84	PASS
11N20MIMO	Ant1	2412	Reference	0.09	0.09	---	PASS
			30~1000	0.09	-61.23	≤-29.91	PASS
			1000~26500	0.09	-50.28	≤-29.91	PASS
	Ant2	2412	Reference	-0.32	-0.32	---	PASS

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
			30~1000	-0.32	-60.99	≤-30.32	PASS
			1000~26500	-0.32	-51.34	≤-30.32	PASS
	Ant1	2437	Reference	-1.77	-1.77	---	PASS
			30~1000	-1.77	-61.85	≤-31.77	PASS
			1000~26500	-1.77	-50.58	≤-31.77	PASS
	Ant2	2437	Reference	0.46	0.46	---	PASS
			30~1000	0.46	-61.85	≤-29.54	PASS
			1000~26500	0.46	-51.76	≤-29.54	PASS
	Ant1	2462	Reference	-0.53	-0.53	---	PASS
			30~1000	-0.53	-60.79	≤-30.53	PASS
			1000~26500	-0.53	-51.78	≤-30.53	PASS
	Ant2	2462	Reference	0.04	0.04	---	PASS
			30~1000	0.04	-61.38	≤-29.96	PASS
			1000~26500	0.04	-50.58	≤-29.96	PASS
11N40MIMO	Ant1	2422	Reference	-2.45	-2.45	---	PASS
			30~1000	-2.45	-61.42	≤-32.45	PASS
			1000~26500	-2.45	-51.82	≤-32.45	PASS
	Ant2	2422	Reference	-2.19	-2.19	---	PASS
			30~1000	-2.19	-60.97	≤-32.19	PASS
			1000~26500	-2.19	-51.57	≤-32.19	PASS
	Ant1	2437	Reference	-1.92	-1.92	---	PASS
			30~1000	-1.92	-61.76	≤-31.92	PASS
			1000~26500	-1.92	-51.38	≤-31.92	PASS
	Ant2	2437	Reference	-1.79	-1.79	---	PASS
			30~1000	-1.79	-61.63	≤-31.79	PASS
			1000~26500	-1.79	-51.63	≤-31.79	PASS
	Ant1	2452	Reference	-2.10	-2.10	---	PASS
			30~1000	-2.10	-61.01	≤-32.1	PASS
			1000~26500	-2.10	-51.11	≤-32.1	PASS
	Ant2	2452	Reference	-2.85	-2.85	---	PASS
			30~1000	-2.85	-61.2	≤-32.85	PASS
			1000~26500	-2.85	-51.29	≤-32.85	PASS

Test Graphs

