

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

Product Name: Falcon, HOMATICS Device

Trade Mark: CAAVO,HOMATICS

Test Model: CFWT-01 (with Tuner)

FCC ID: 2AOVU-CFWT01

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

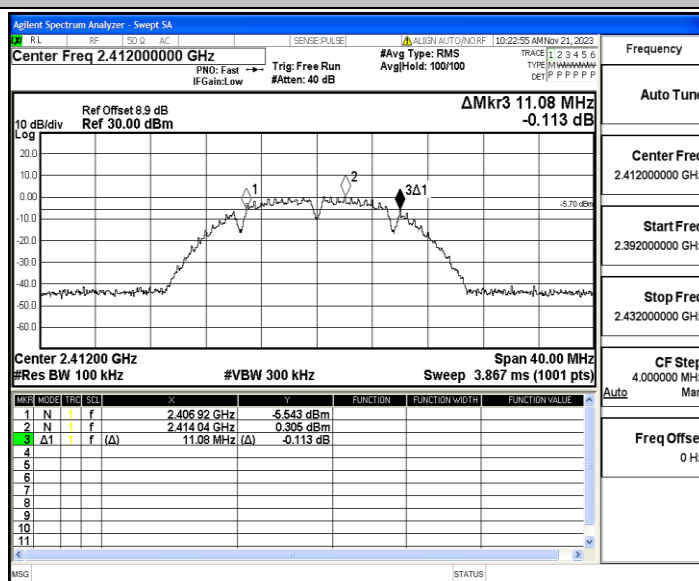
Appendix A: DTS Bandwidth

Test Result

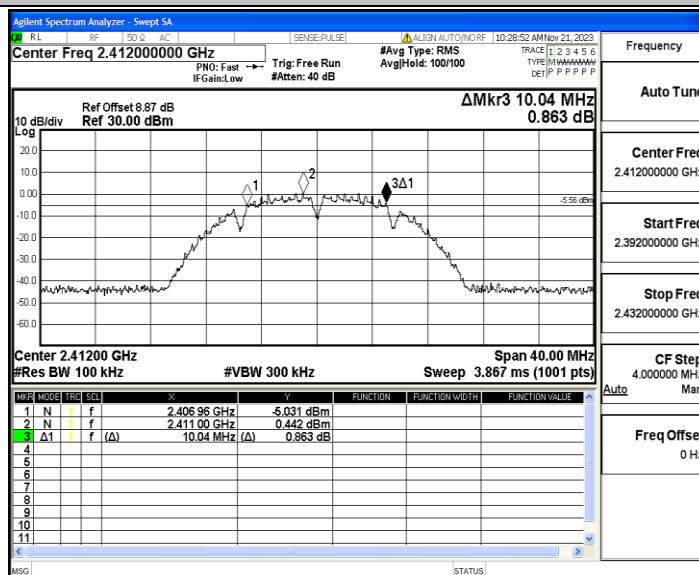
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	11.080	2406.920	2418.000	0.5	PASS
	Ant2	2412	10.040	2406.960	2417.000	0.5	PASS
	Ant1	2437	10.080	2431.960	2442.040	0.5	PASS
	Ant2	2437	10.040	2432.000	2442.040	0.5	PASS
	Ant1	2462	10.080	2456.960	2467.040	0.5	PASS
	Ant2	2462	10.080	2456.960	2467.040	0.5	PASS
11G	Ant1	2412	15.680	2404.120	2419.800	0.5	PASS
	Ant2	2412	16.320	2403.840	2420.160	0.5	PASS
	Ant1	2437	15.320	2429.240	2444.560	0.5	PASS
	Ant2	2437	16.320	2428.840	2445.160	0.5	PASS
	Ant1	2462	16.280	2453.880	2470.160	0.5	PASS
	Ant2	2462	16.280	2453.840	2470.120	0.5	PASS
11N20MIMO	Ant1	2412	16.920	2403.480	2420.400	0.5	PASS
	Ant2	2412	16.800	2403.600	2420.400	0.5	PASS
	Ant1	2437	16.560	2428.600	2445.160	0.5	PASS
	Ant2	2437	15.560	2429.200	2444.760	0.5	PASS
	Ant1	2462	15.120	2454.440	2469.560	0.5	PASS
	Ant2	2462	16.040	2454.120	2470.160	0.5	PASS
11N40MIMO	Ant1	2422	35.120	2404.400	2439.520	0.5	PASS
	Ant2	2422	34.080	2405.520	2439.600	0.5	PASS
	Ant1	2437	35.120	2419.480	2454.600	0.5	PASS
	Ant2	2437	35.040	2419.480	2454.520	0.5	PASS
	Ant1	2452	34.400	2435.120	2469.520	0.5	PASS
	Ant2	2452	35.040	2434.480	2469.520	0.5	PASS

Test Graphs

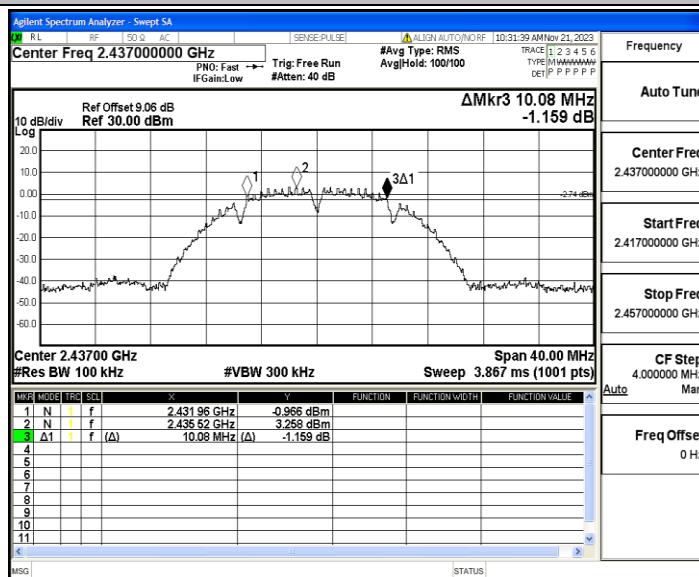
11B_Ant1_2412



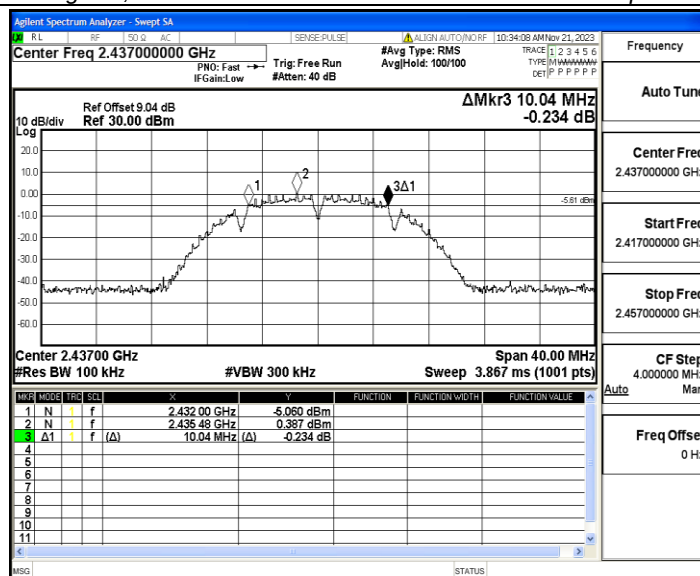
11B_Ant2_2412



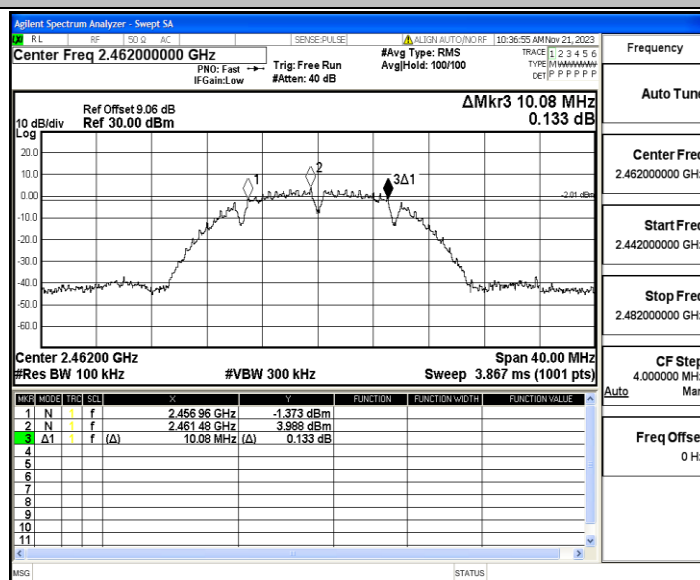
11B_Ant1_2437



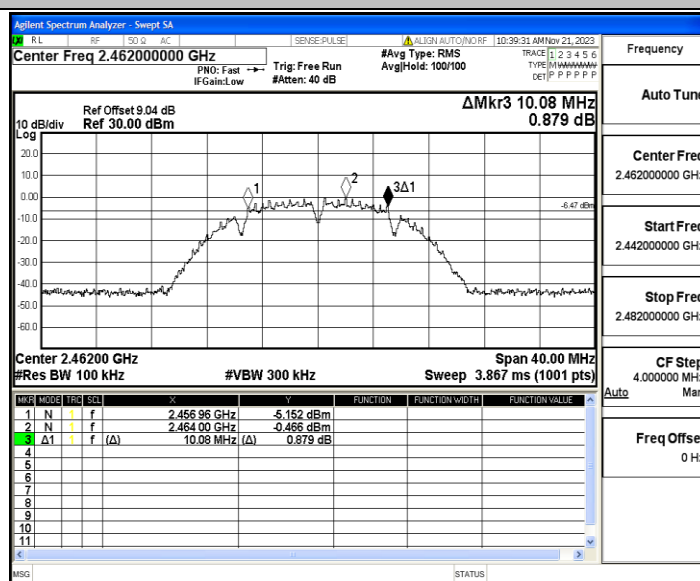
11B_Ant2_2437



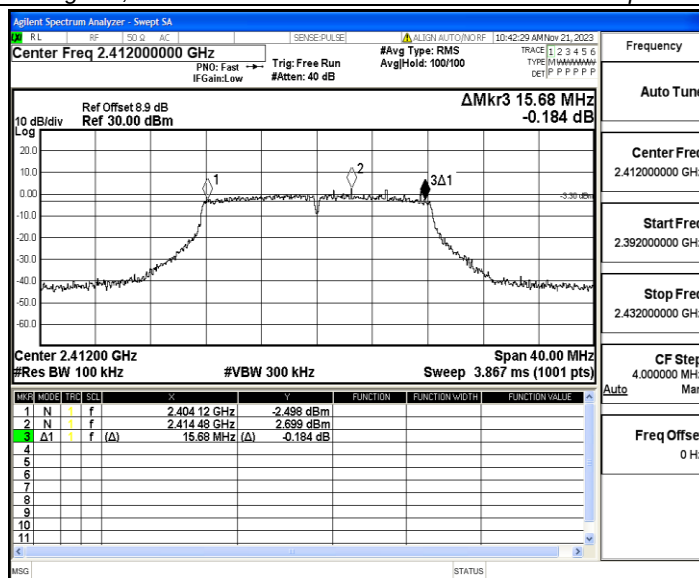
11B_Ant1_2462



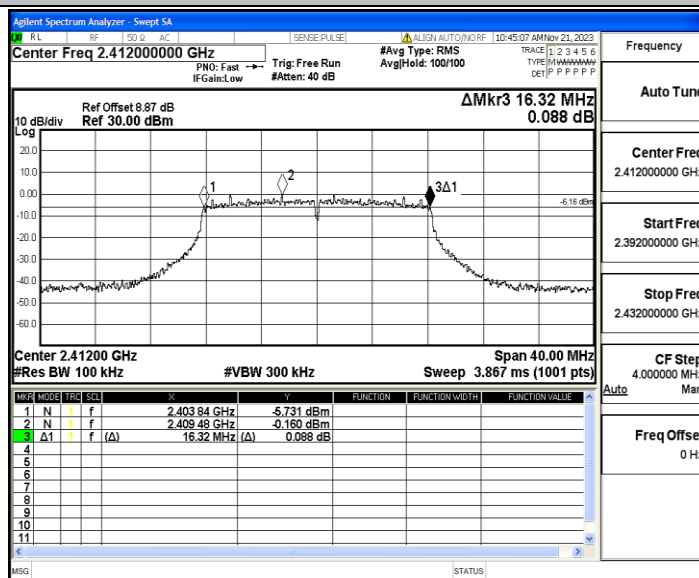
11B_Ant2_2462



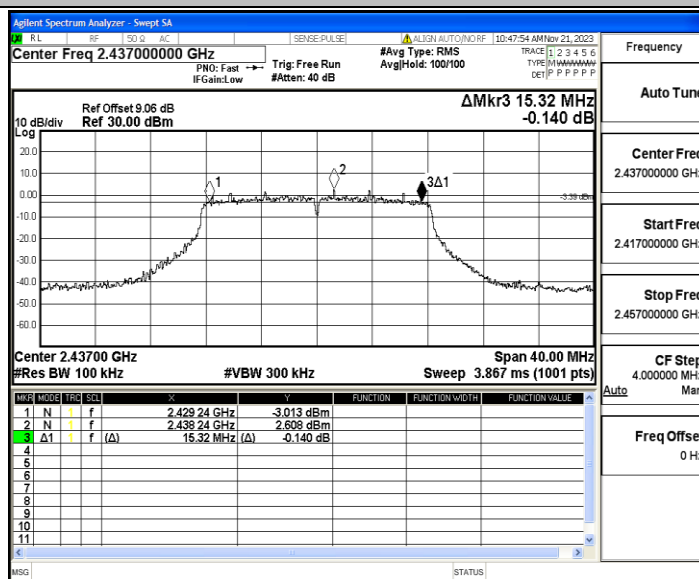
11G_Ant1_2412



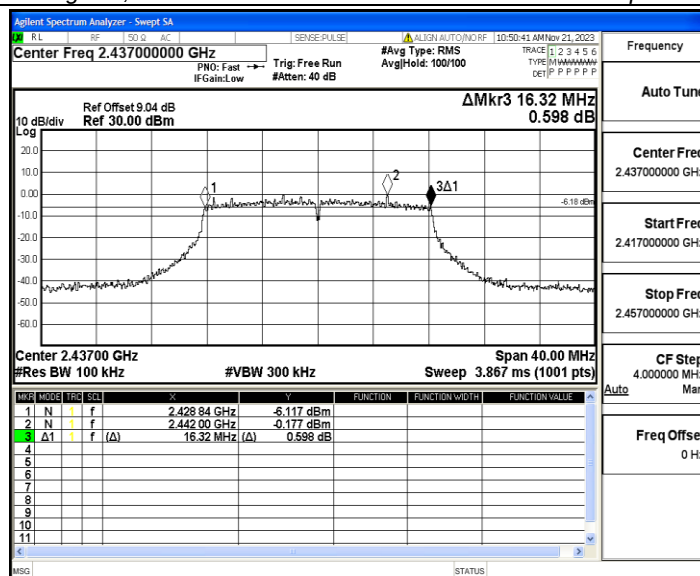
11G_Ant2_2412



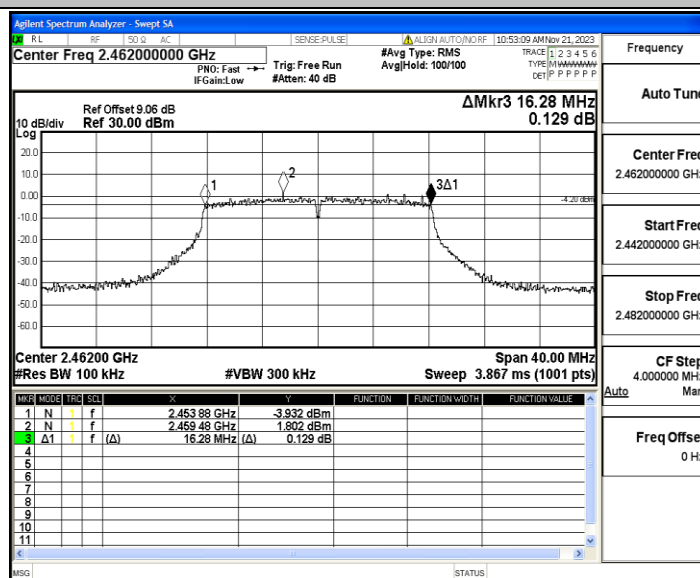
11G_Ant1_2437



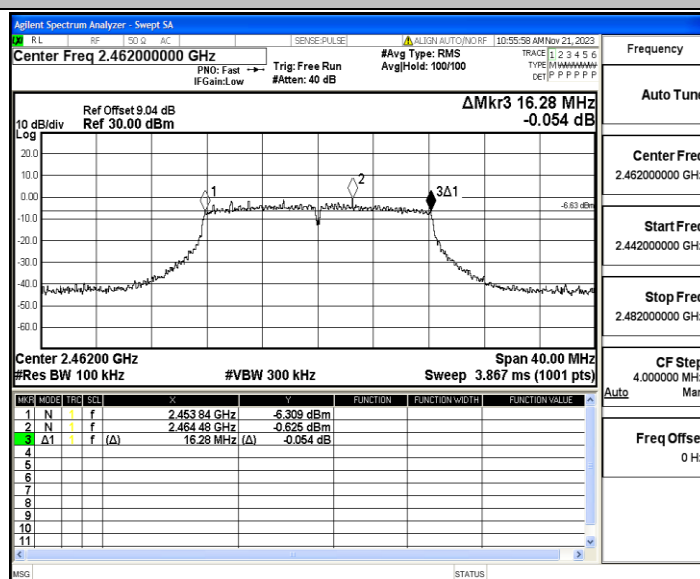
11G_Ant2_2437



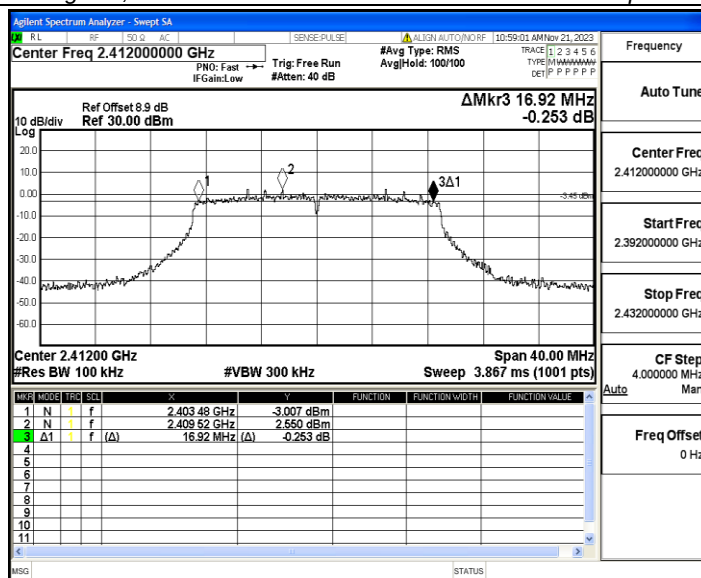
11G_Ant1_2462



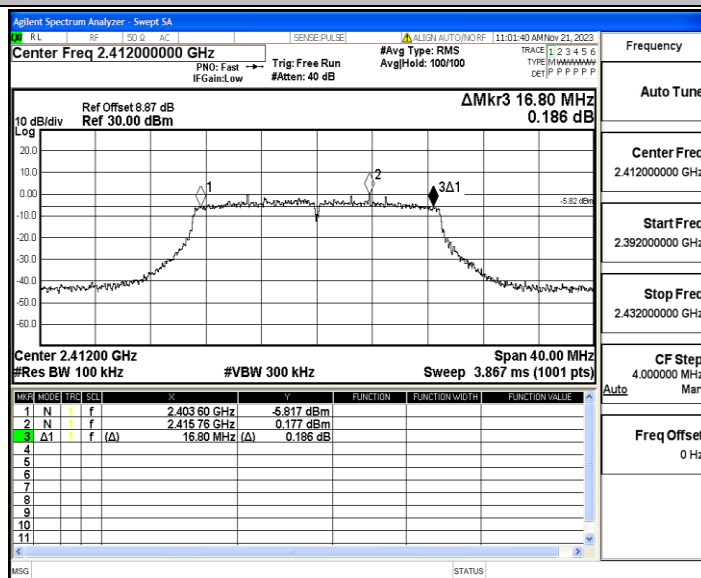
11G_Ant2_2462



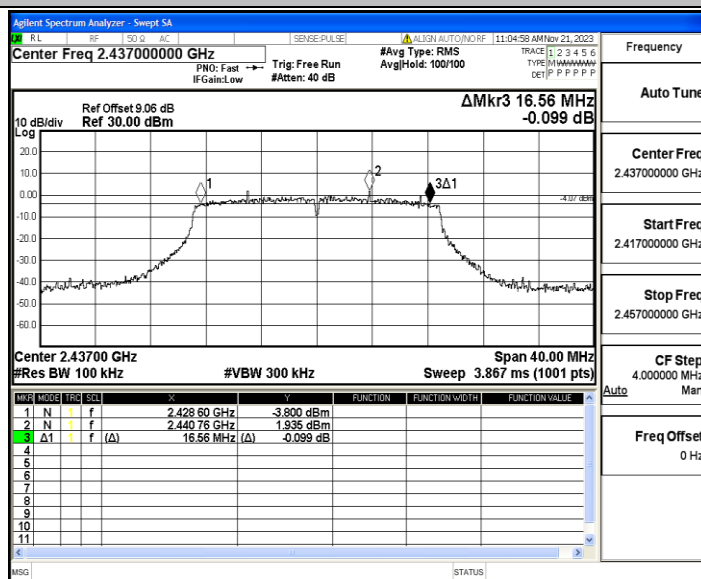
11N20MIMO_Ant1_2412



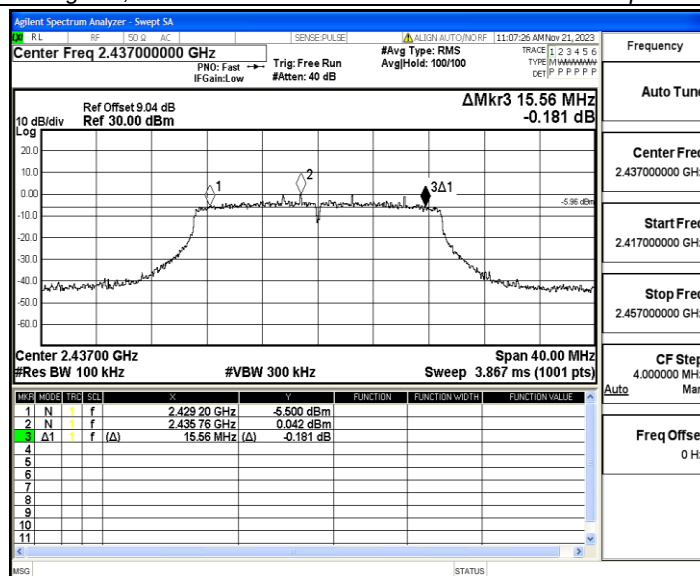
11N20MIMO_Ant2_2412



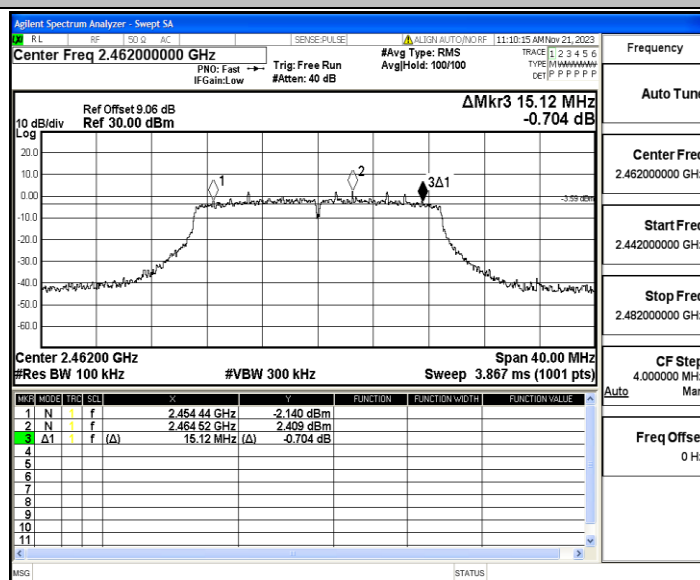
11N20MIMO_Ant1_2437



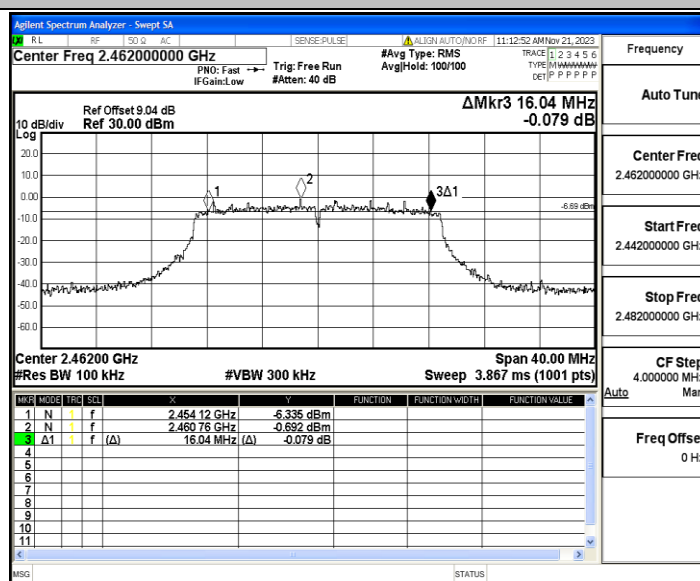
11N20MIMO_Ant2_2437



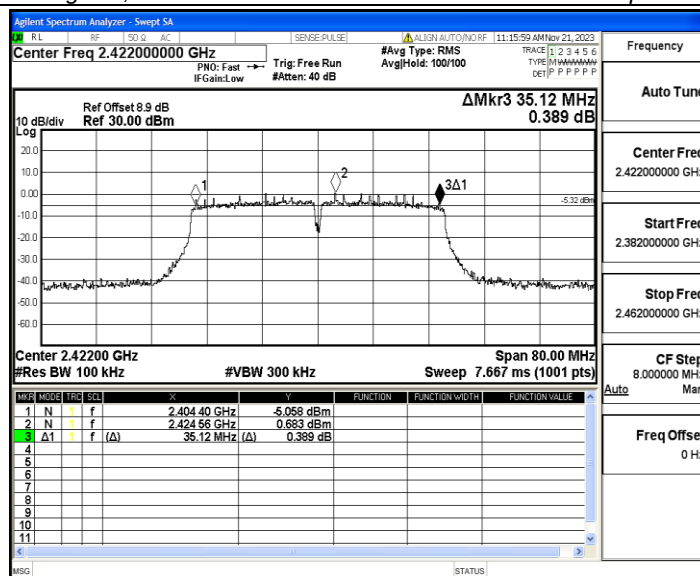
11N20MIMO_Ant1_2462



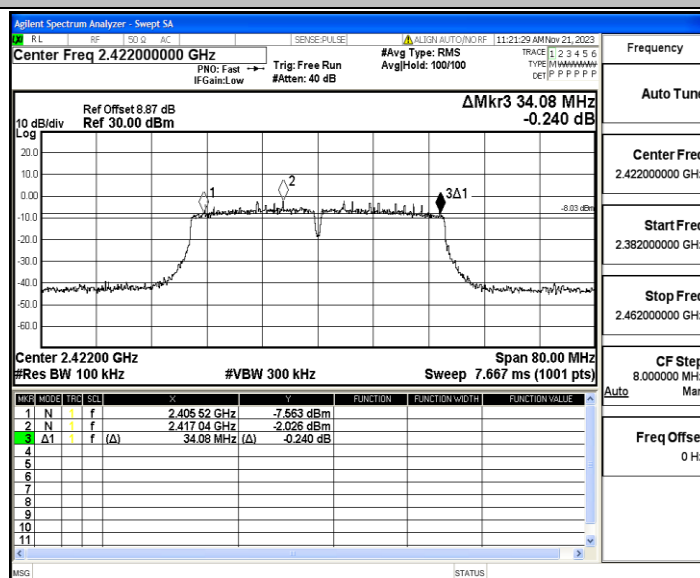
11N20MIMO_Ant2_2462



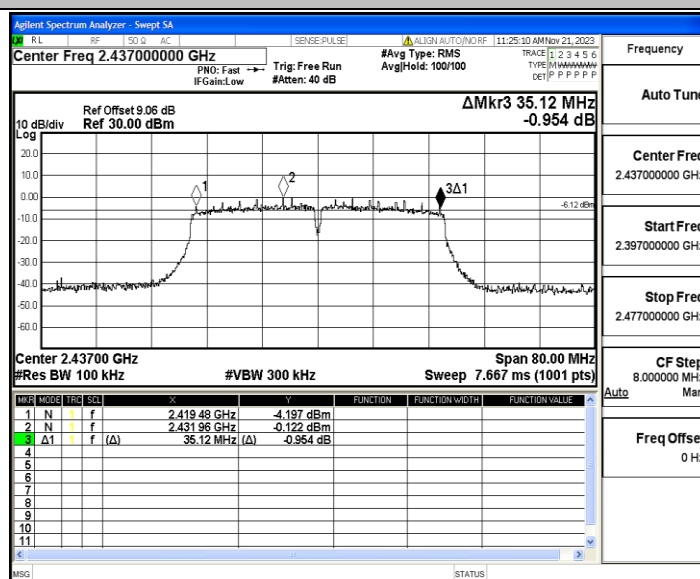
11N40MIMO_Ant1_2422



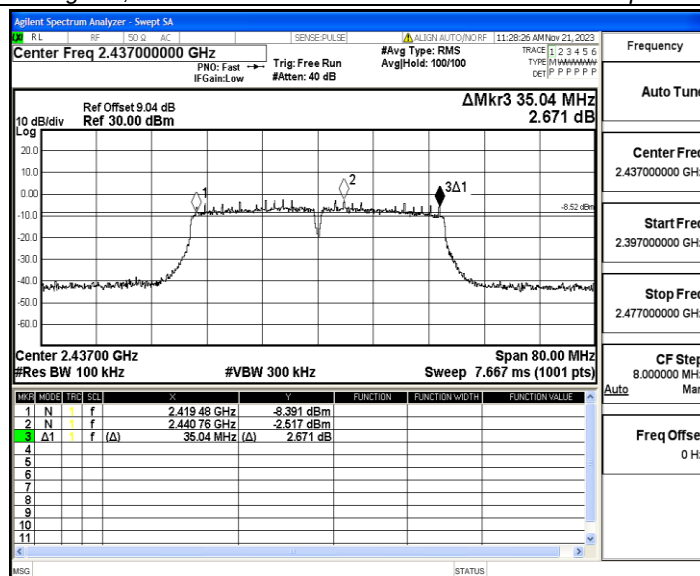
11N40MIMO_Ant2_2422



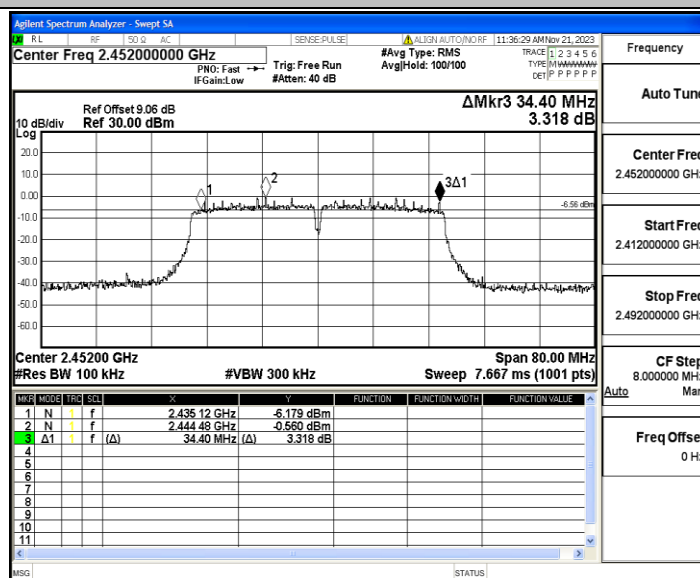
11N40MIMO_Ant1_2437



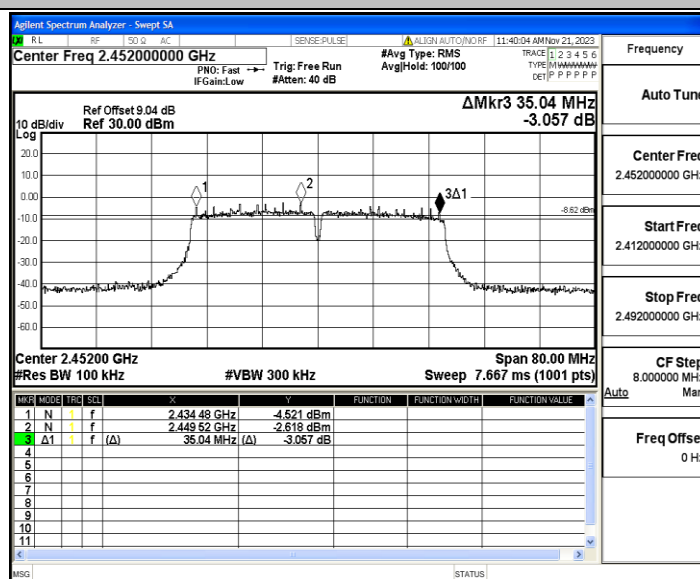
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



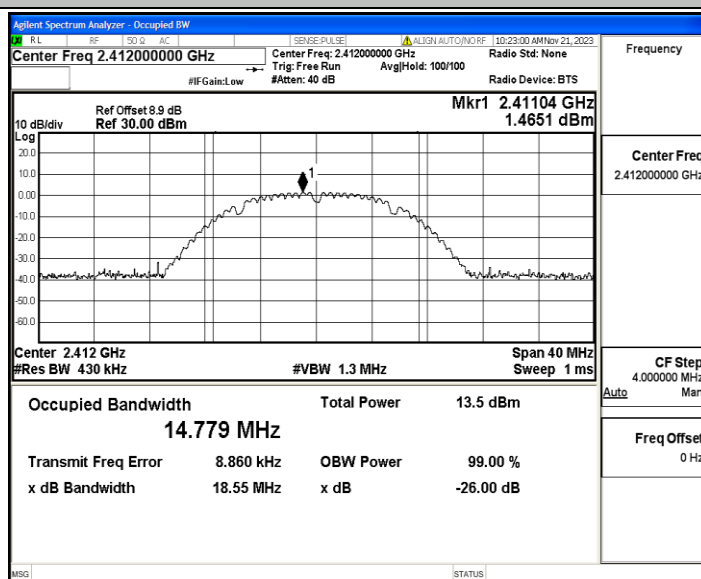
Appendix B: Occupied Channel Bandwidth

Test Result

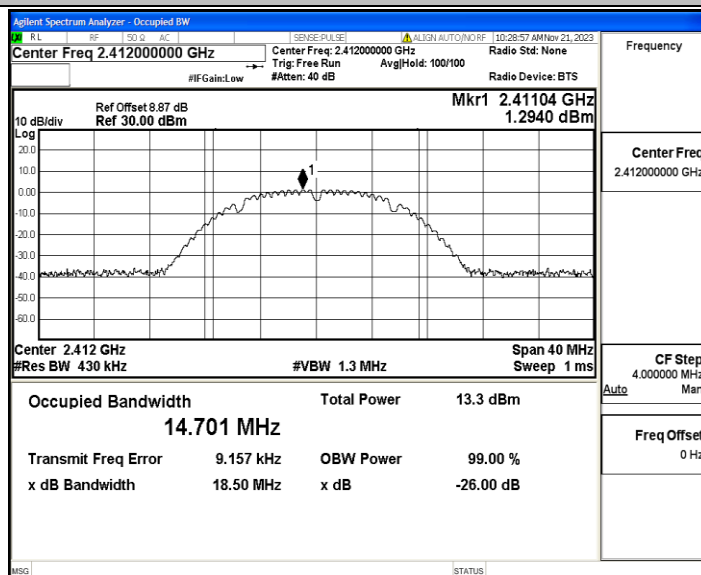
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.779	2404.6194	2419.3984	---	---
	Ant2	2412	14.701	2404.6587	2419.3597	---	---
	Ant1	2437	14.722	2429.6441	2444.3661	---	---
	Ant2	2437	14.705	2429.6380	2444.3430	---	---
	Ant1	2462	14.751	2454.6691	2469.4201	---	---
	Ant2	2462	14.762	2454.6285	2469.3905	---	---
11G	Ant1	2412	16.824	2403.6089	2420.4329	---	---
	Ant2	2412	16.641	2403.7313	2420.3723	---	---
	Ant1	2437	16.729	2428.6602	2445.3892	---	---
	Ant2	2437	16.658	2428.6942	2445.3522	---	---
	Ant1	2462	16.701	2453.6837	2470.3847	---	---
	Ant2	2462	16.665	2453.7050	2470.3700	---	---
11N20MIMO	Ant1	2412	17.922	2403.1010	2421.0230	---	---
	Ant2	2412	17.953	2403.0873	2421.0403	---	---
	Ant1	2437	17.848	2428.0854	2445.9334	---	---
	Ant2	2437	17.913	2428.0530	2445.9660	---	---
	Ant1	2462	17.849	2453.1027	2470.9517	---	---
	Ant2	2462	17.831	2453.1015	2470.9325	---	---
11N40MIMO	Ant1	2422	36.286	2403.9575	2440.2435	---	---
	Ant2	2422	36.205	2403.9901	2440.1951	---	---
	Ant1	2437	36.200	2418.9578	2455.1578	---	---
	Ant2	2437	36.232	2418.8649	2455.0969	---	---
	Ant1	2452	36.194	2433.9573	2470.1513	---	---
	Ant2	2452	36.297	2433.9118	2470.2088	---	---

Test Graphs

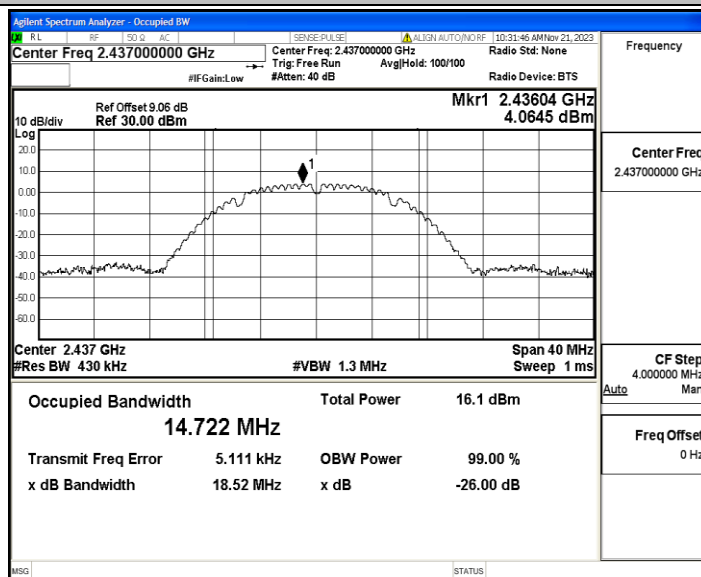
11B_Ant1_2412



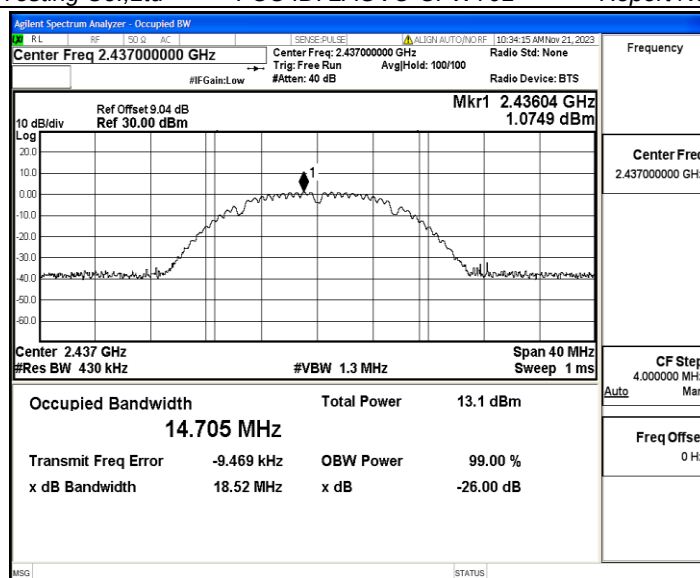
11B_Ant2_2412



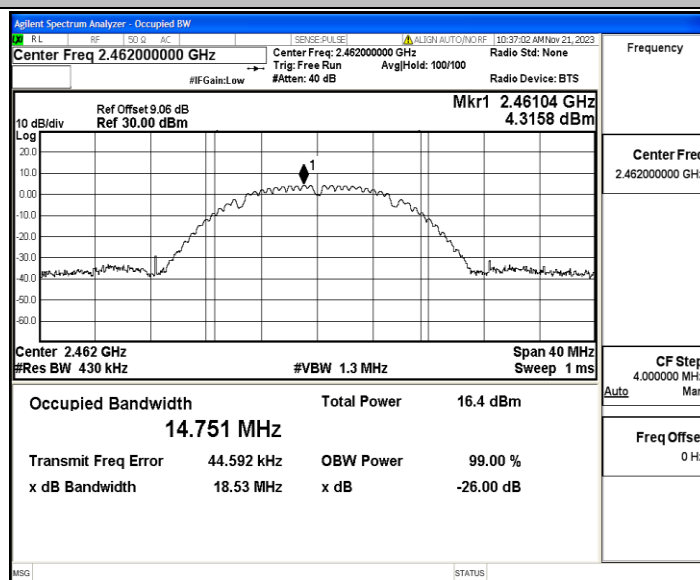
11B_Ant1_2437



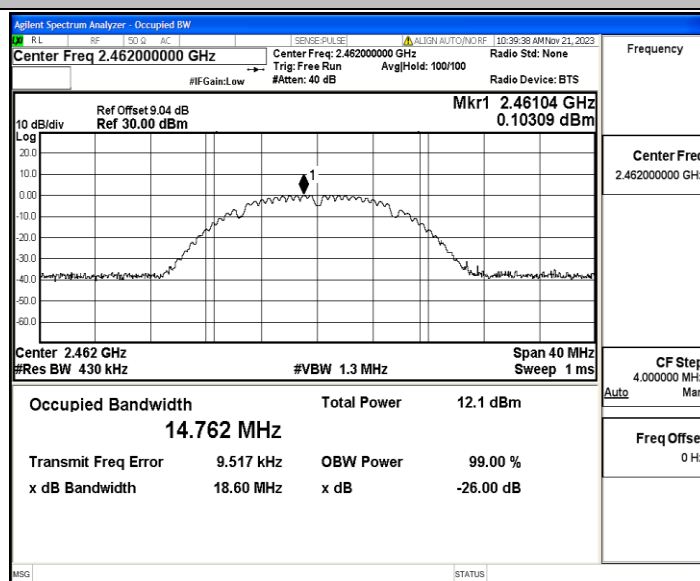
11B_Ant2_2437



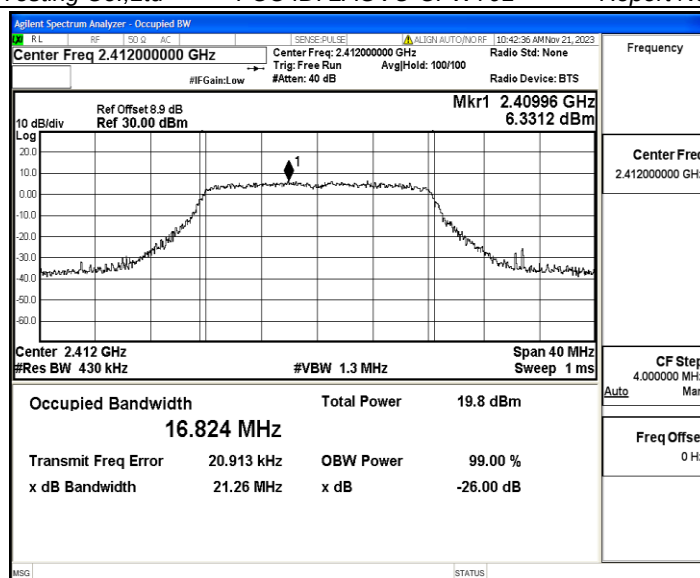
11B_Ant1_2462



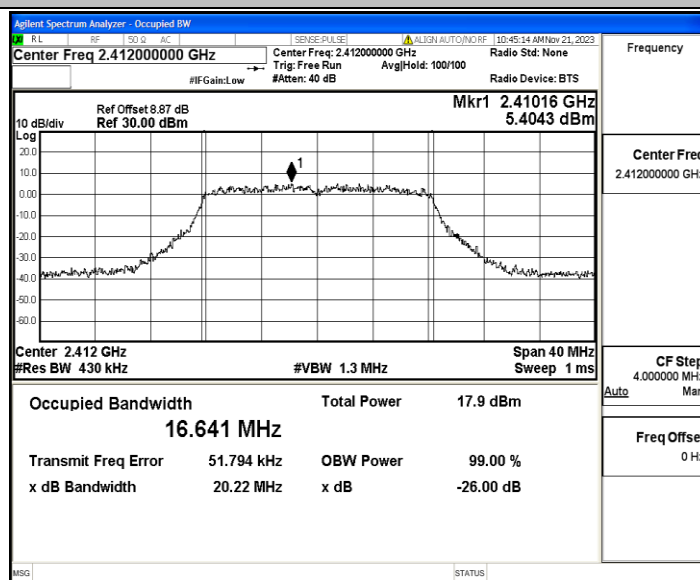
11B_Ant2_2462



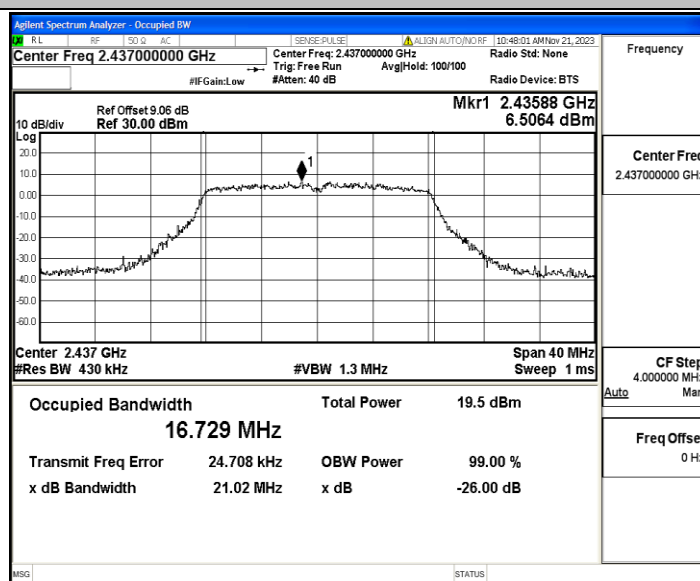
11G_Ant1_2412



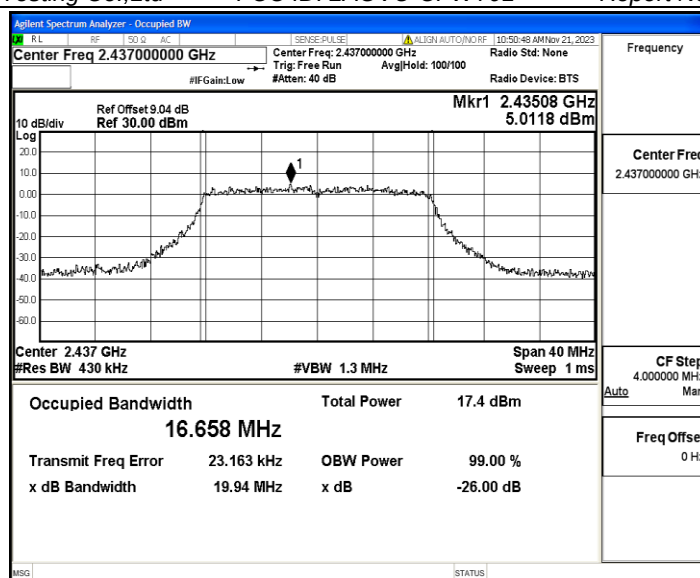
11G_Ant2_2412



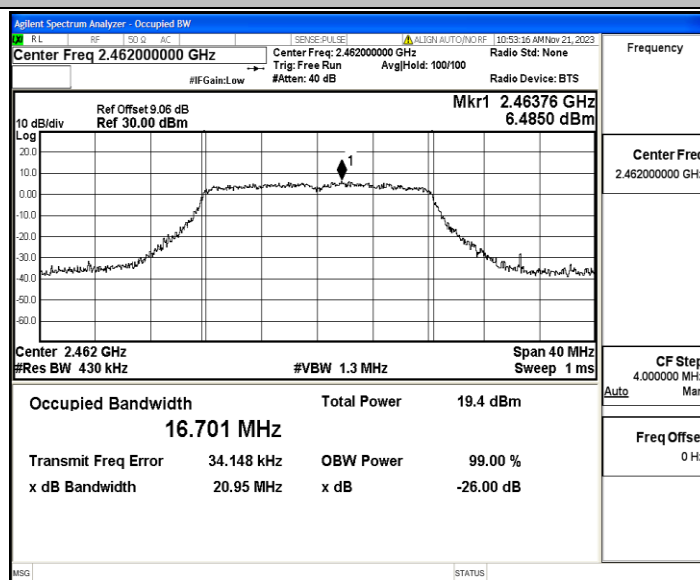
11G_Ant1_2437



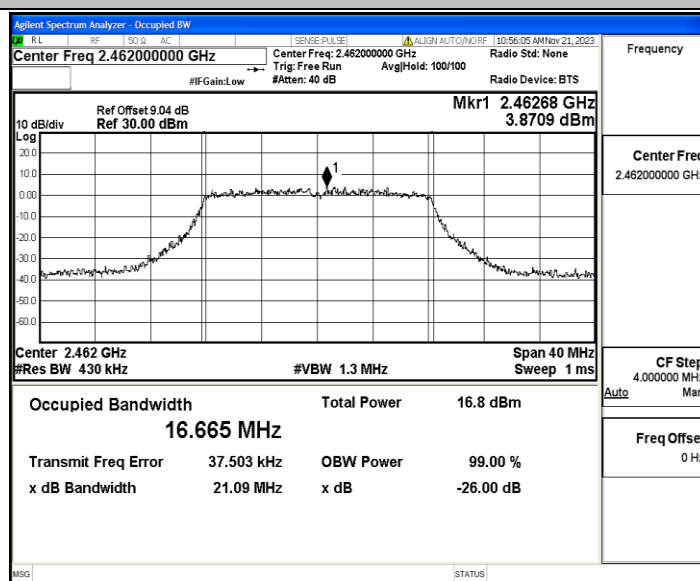
11G_Ant2_2437



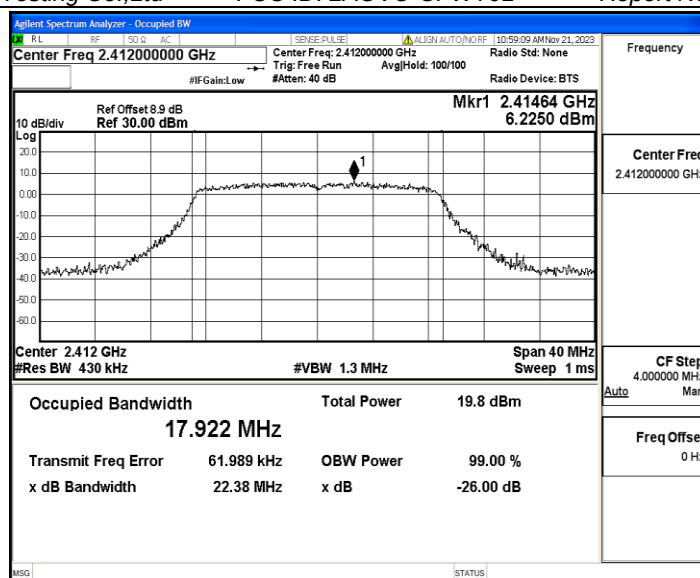
11G_Ant1_2462



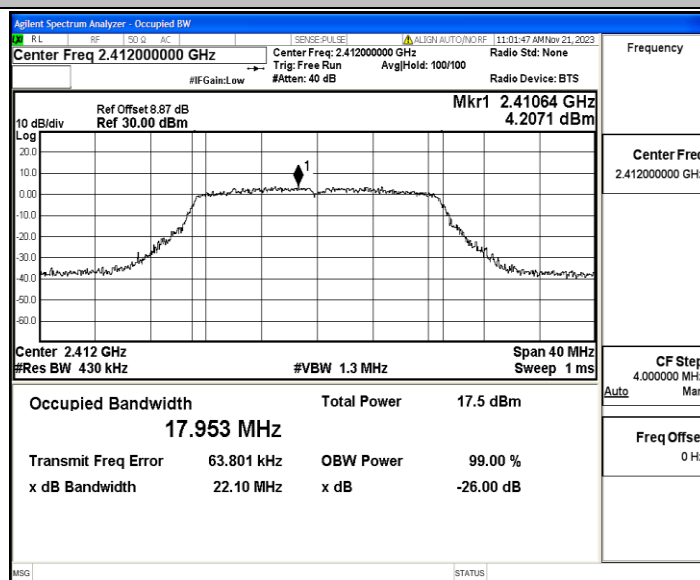
11G_Ant2_2462



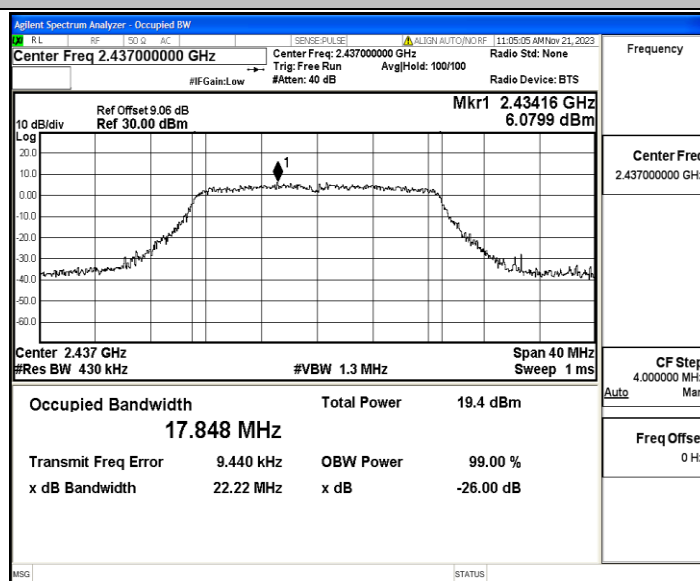
11N20MIMO_Ant1_2412



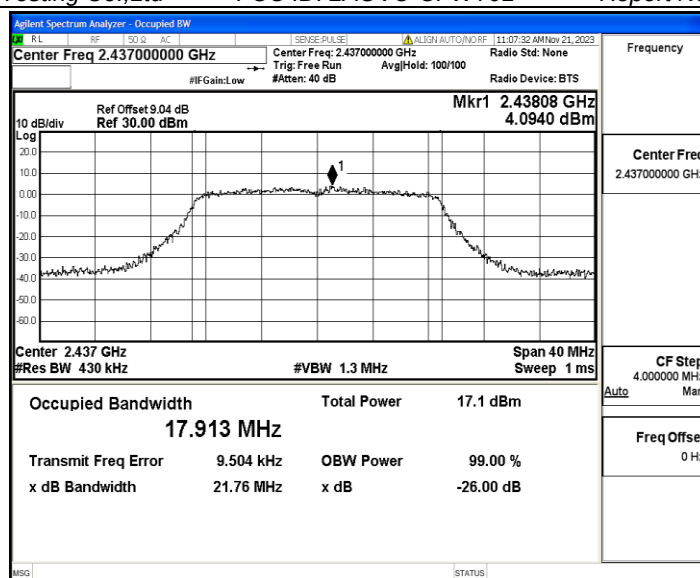
11N20MIMO_Ant2_2412



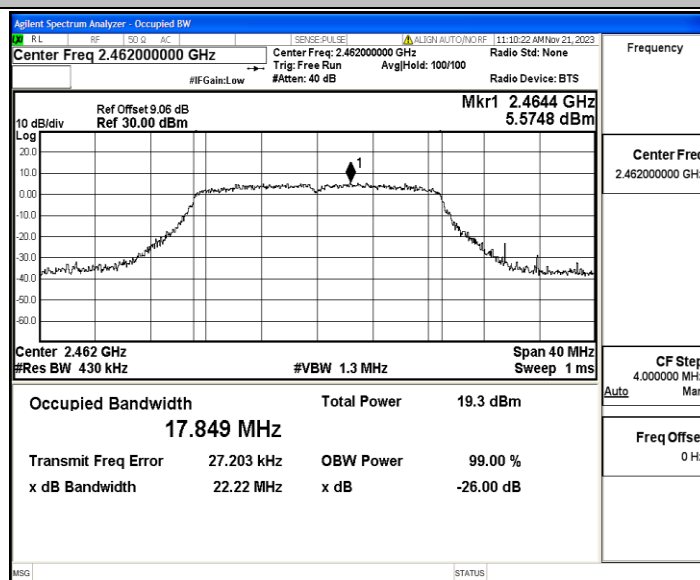
11N20MIMO_Ant1_2437



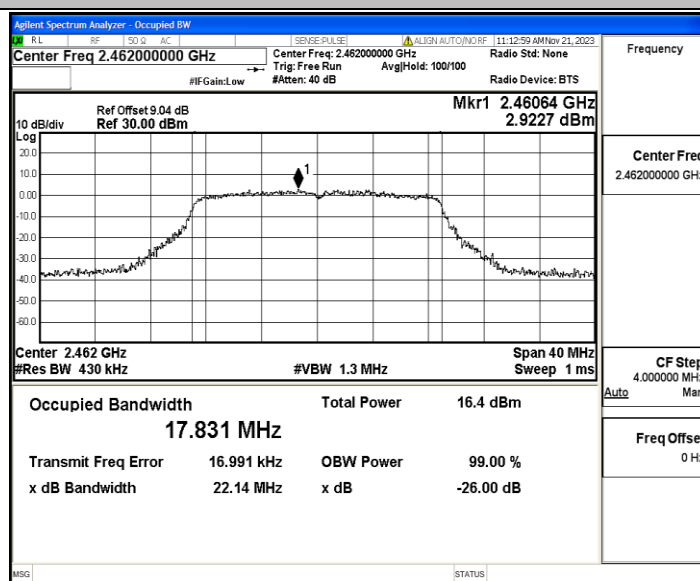
11N20MIMO_Ant2_2437



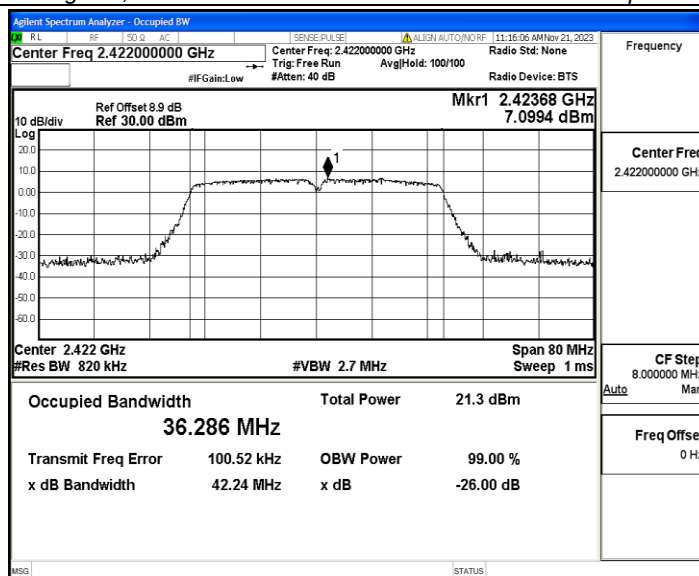
11N20MIMO_Ant1_2462



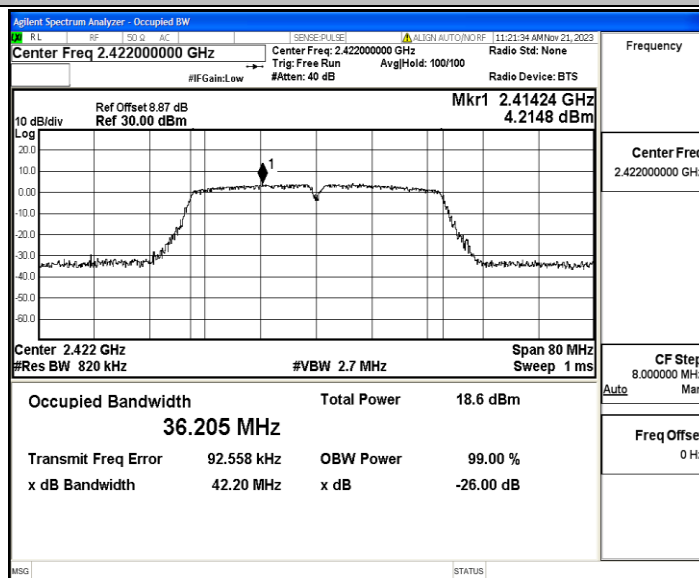
11N20MIMO_Ant2_2462



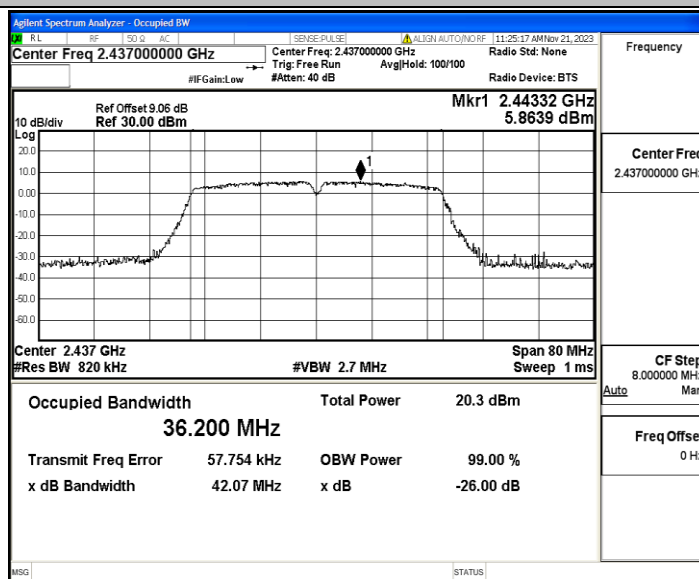
11N40MIMO_Ant1_2422



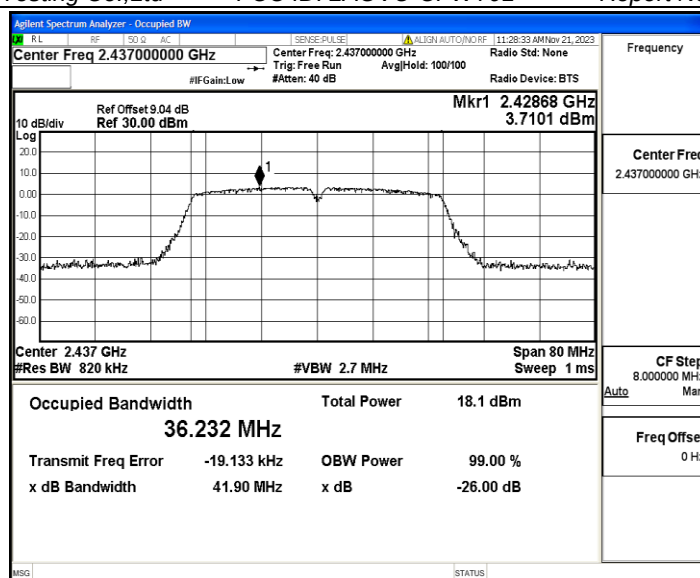
11N40MIMO_Ant2_2422



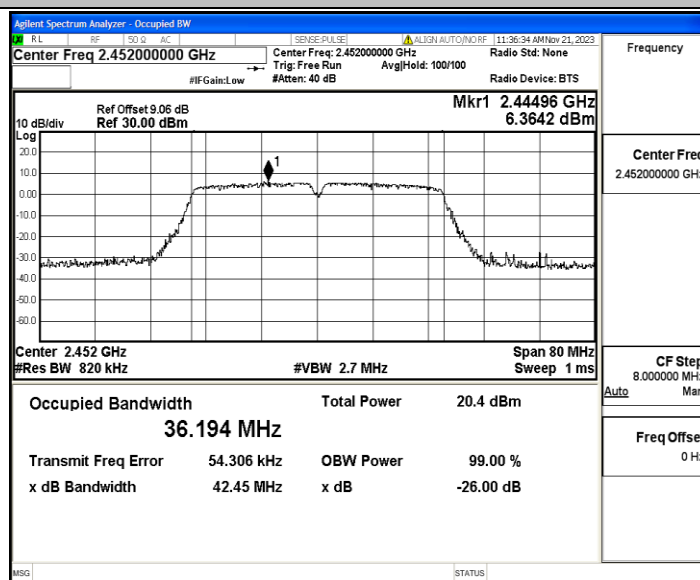
11N40MIMO_Ant1_2437



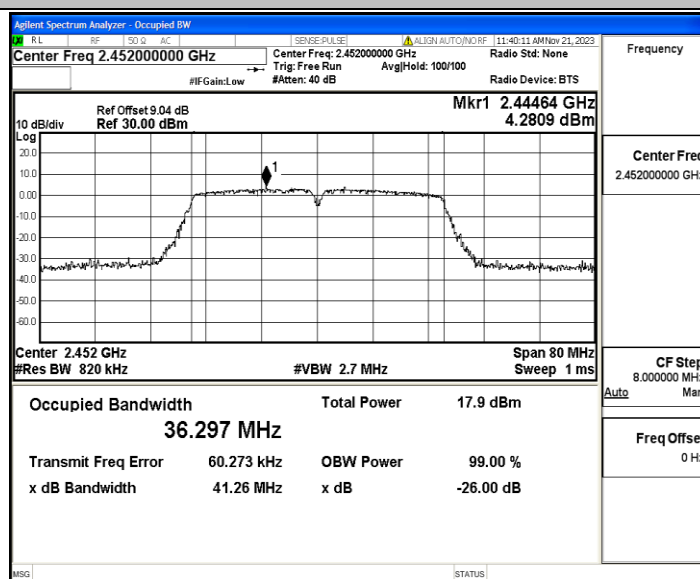
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



Appendix C: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	13.76	≤30.00	PASS
	Ant2	2412	10.44	≤30.00	PASS
	Ant1	2437	13.27	≤30.00	PASS
	Ant2	2437	10.12	≤30.00	PASS
	Ant1	2462	13.44	≤30.00	PASS
	Ant2	2462	9.21	≤30.00	PASS
11G	Ant1	2412	13.97	≤30.00	PASS
	Ant2	2412	11.73	≤30.00	PASS
	Ant1	2437	13.70	≤30.00	PASS
	Ant2	2437	11.44	≤30.00	PASS
	Ant1	2462	13.54	≤30.00	PASS
	Ant2	2462	10.56	≤30.00	PASS
11N20MIMO	Ant1	2412	13.92	≤30.00	PASS
	Ant2	2412	11.64	≤30.00	PASS
	total	2412	15.94	≤30.00	PASS
	Ant1	2437	13.53	≤30.00	PASS
	Ant2	2437	11.26	≤30.00	PASS
	total	2437	15.55	≤30.00	PASS
	Ant1	2462	13.39	≤30.00	PASS
	Ant2	2462	10.39	≤30.00	PASS
	total	2462	15.15	≤30.00	PASS
11N40MIMO	Ant1	2422	14.77	≤30.00	PASS
	Ant2	2422	11.81	≤30.00	PASS
	total	2422	16.55	≤30.00	PASS
	Ant1	2437	13.85	≤30.00	PASS
	Ant2	2437	11.53	≤30.00	PASS
	total	2437	15.85	≤30.00	PASS
	Ant1	2452	15.98	≤30.00	PASS
	Ant2	2452	9.90	≤30.00	PASS
	total	2452	16.94	≤30.00	PASS

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

Appendix D: Maximum power spectral density

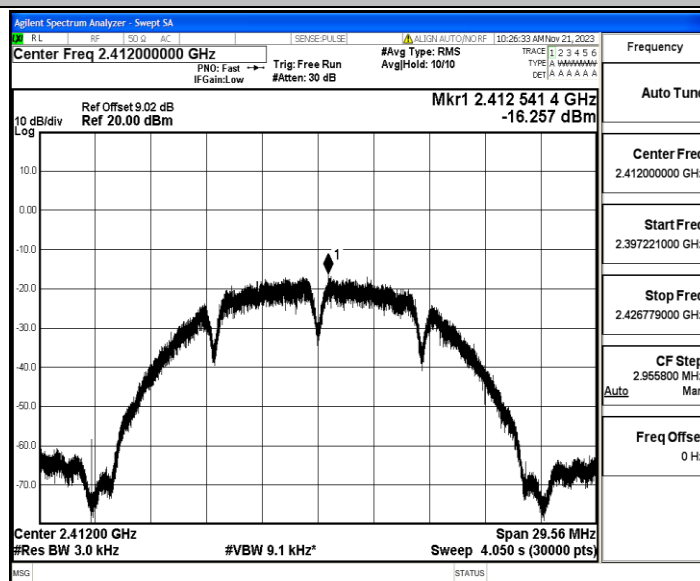
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-16.26	≤8.00	PASS
	Ant2	2412	-19.84	≤8.00	PASS
	Ant1	2437	-17.29	≤8.00	PASS
	Ant2	2437	-19.7	≤8.00	PASS
	Ant1	2462	-17.06	≤8.00	PASS
	Ant2	2462	-21.06	≤8.00	PASS
11G	Ant1	2412	-15.86	≤8.00	PASS
	Ant2	2412	-17.87	≤8.00	PASS
	Ant1	2437	-16.35	≤8.00	PASS
	Ant2	2437	-19.23	≤8.00	PASS
	Ant1	2462	-15.06	≤8.00	PASS
	Ant2	2462	-18.48	≤8.00	PASS
11N20MIMO	Ant1	2412	-15.69	≤8.00	PASS
	Ant2	2412	-18.65	≤8.00	PASS
	total	2412	-13.91	≤8.00	PASS
	Ant1	2437	-16.05	≤8.00	PASS
	Ant2	2437	-18.98	≤8.00	PASS
	total	2437	-14.26	≤8.00	PASS
	Ant1	2462	-16.67	≤8.00	PASS
	Ant2	2462	-18.82	≤8.00	PASS
	total	2462	-14.60	≤8.00	PASS
11N40MIMO	Ant1	2422	-17.5	≤8.00	PASS
	Ant2	2422	-20.63	≤8.00	PASS
	total	2422	-15.78	≤8.00	PASS
	Ant1	2437	-18.18	≤8.00	PASS
	Ant2	2437	-21.19	≤8.00	PASS
	total	2437	-16.42	≤8.00	PASS
	Ant1	2452	-16.69	≤8.00	PASS
	Ant2	2452	-22.96	≤8.00	PASS
	total	2452	-15.77	≤8.00	PASS

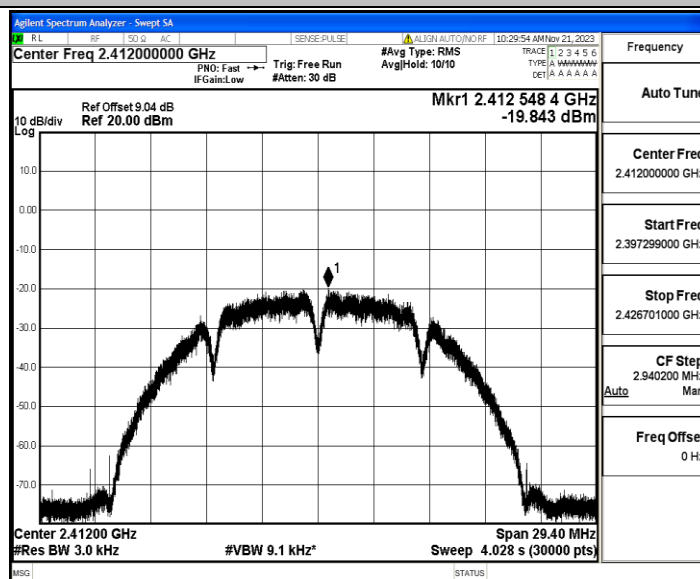
Note: The Duty Cycle Factor is compensated in the test result.

Test Graphs

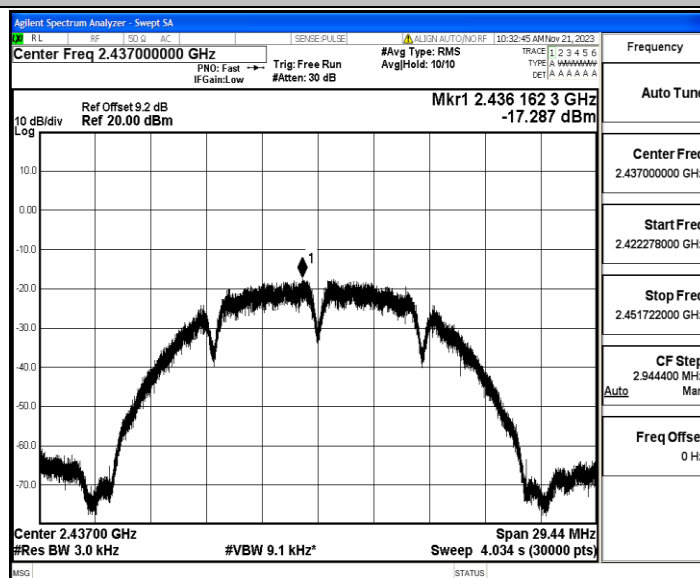
11B_Ant1_2412



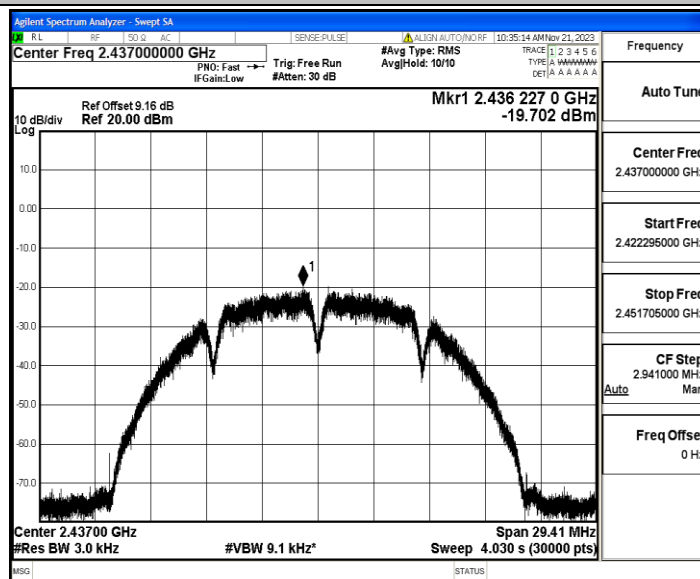
11B_Ant2_2412



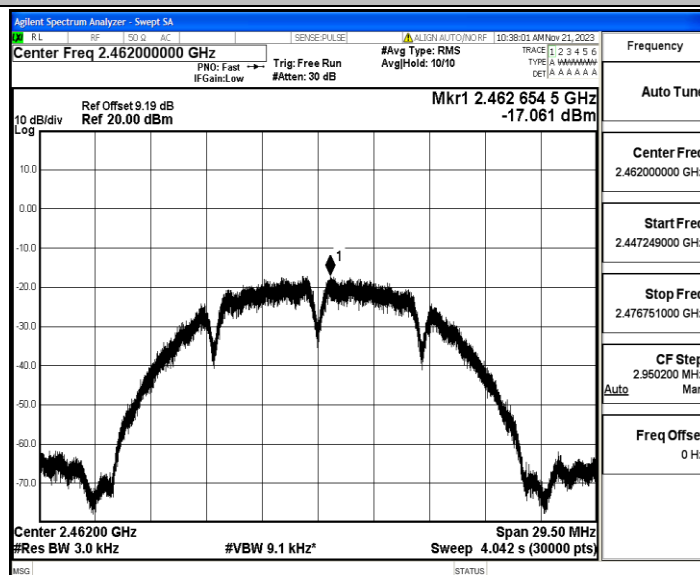
11B_Ant1_2437



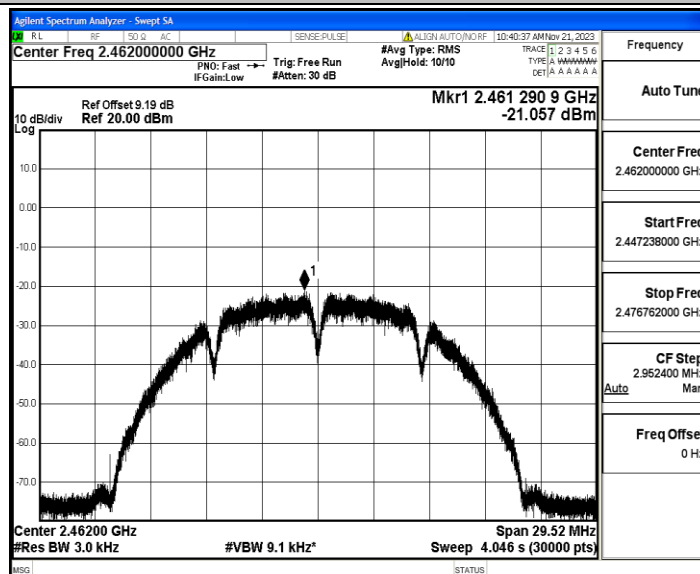
11B_Ant2_2437



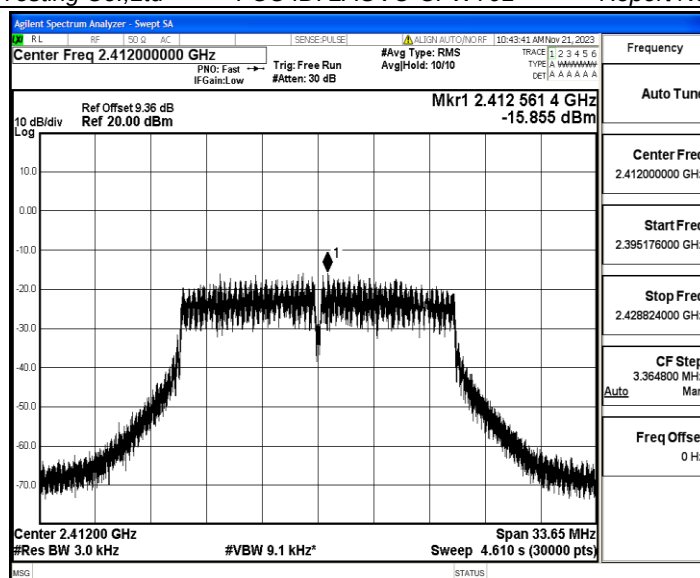
11B_Ant1_2462



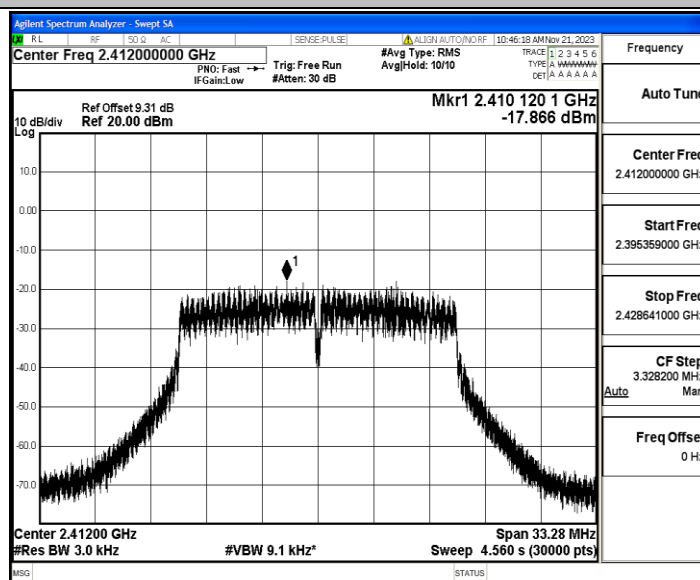
11B_Ant2_2462



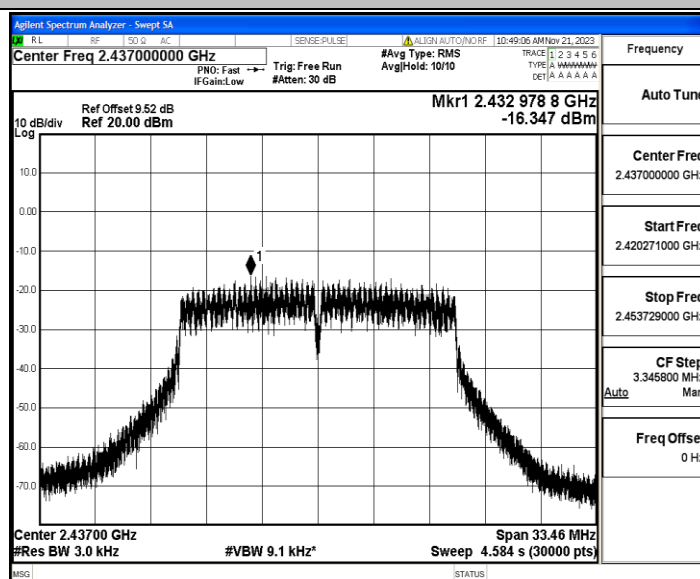
11G_Ant1_2412



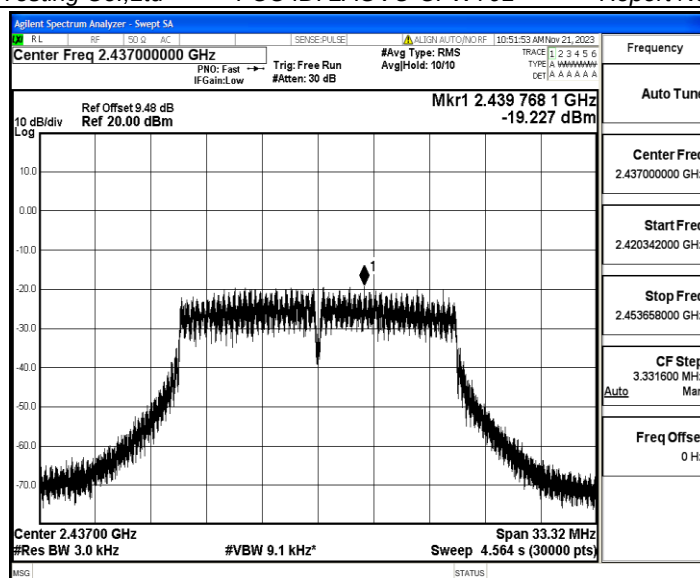
11G_Ant2_2412



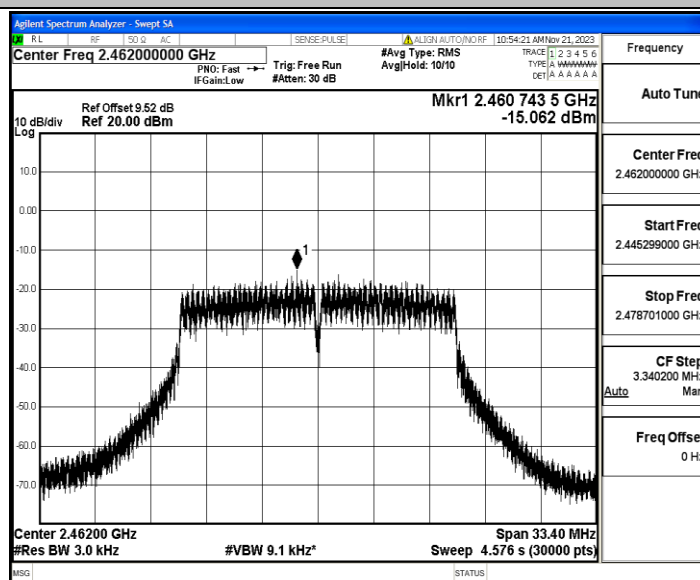
11G_Ant1_2437



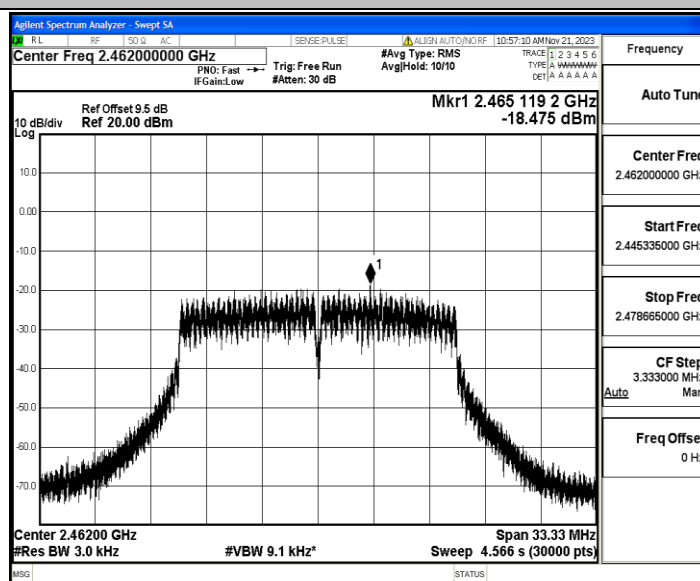
11G_Ant2_2437



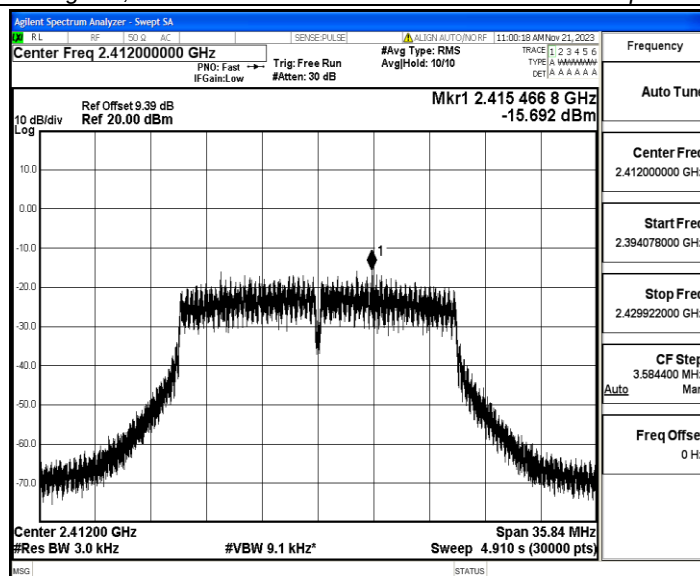
11G_Ant1_2462



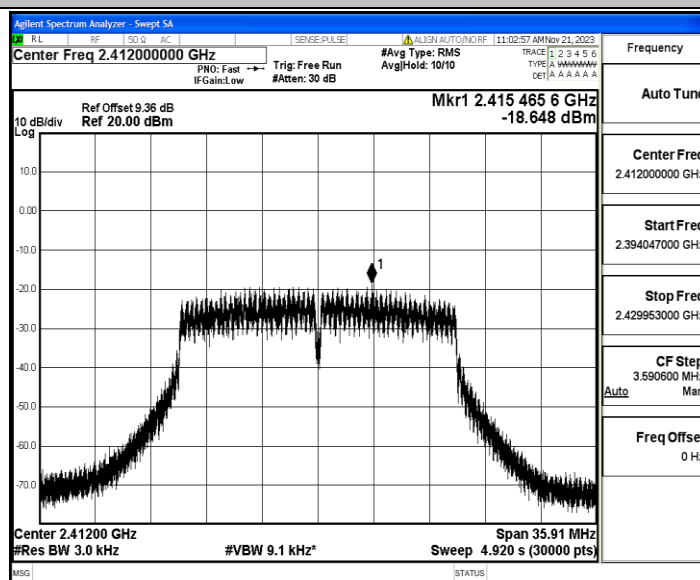
11G_Ant2_2462



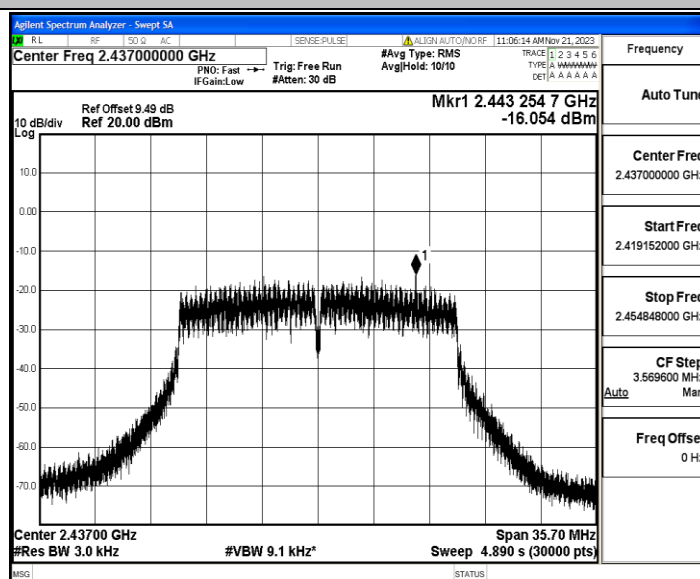
11N20MIMO_Ant1_2412



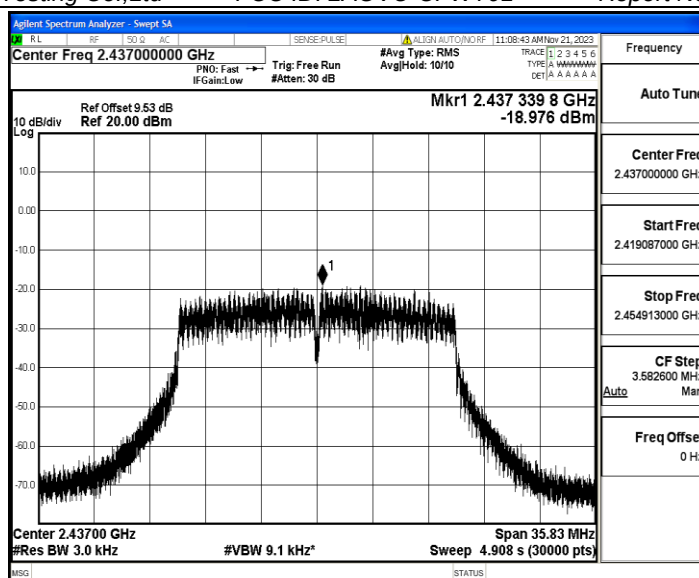
11N20MIMO_Ant2_2412



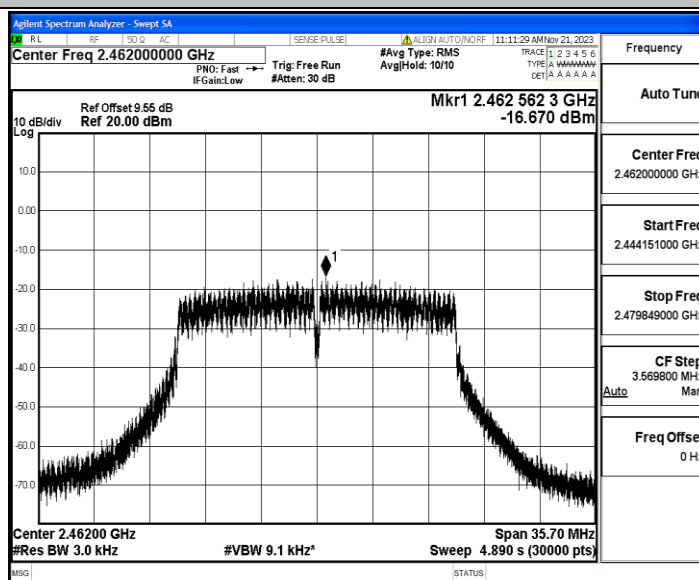
11N20MIMO_Ant1_2437



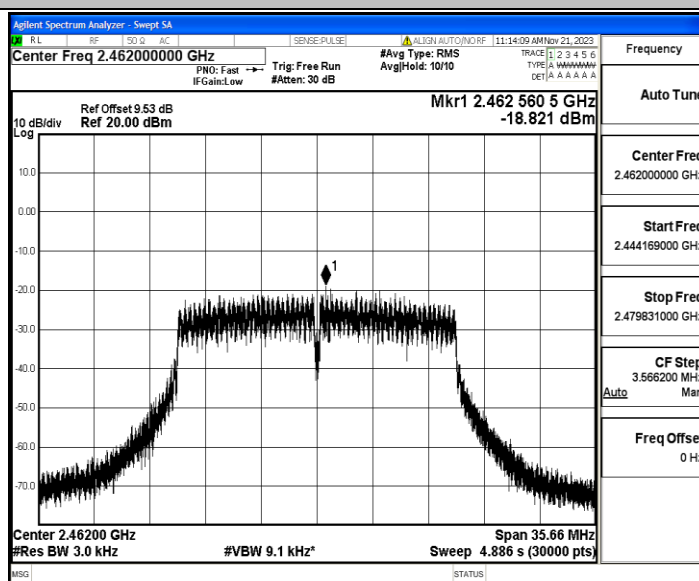
11N20MIMO_Ant2_2437



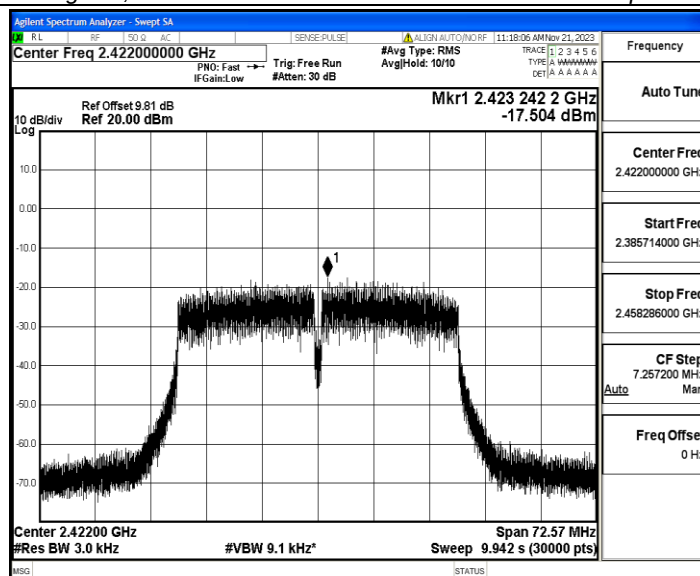
11N20MIMO_Ant1_2462



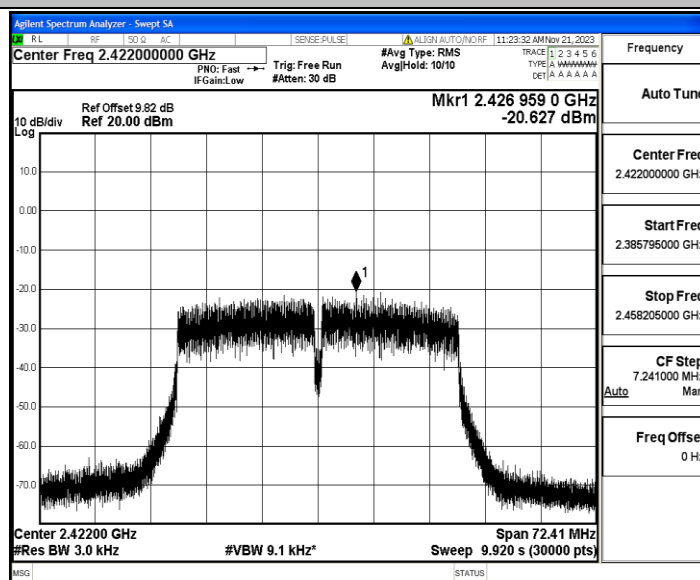
11N20MIMO_Ant2_2462



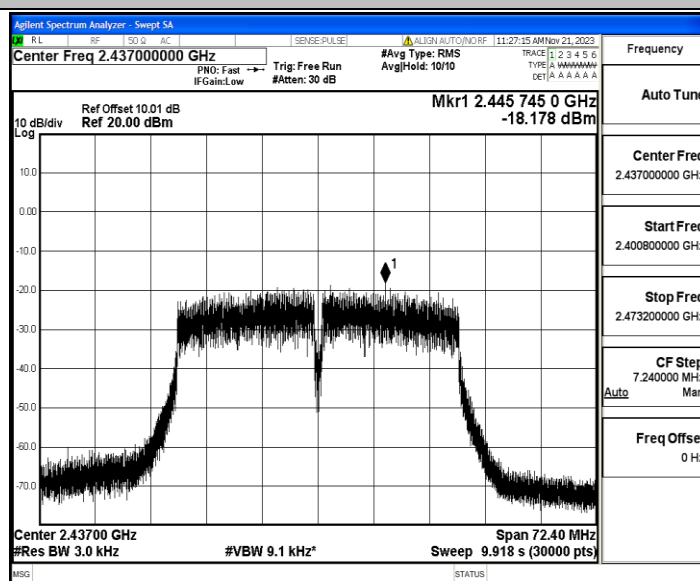
11N40MIMO_Ant1_2422



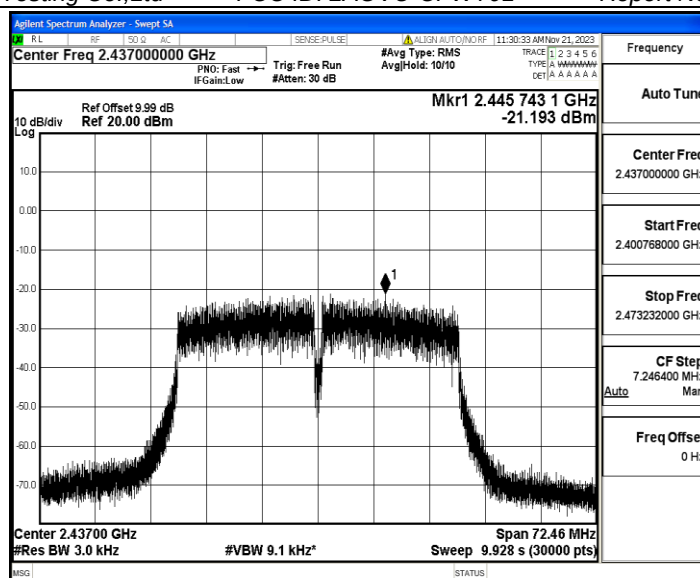
11N40MIMO_Ant2_2422



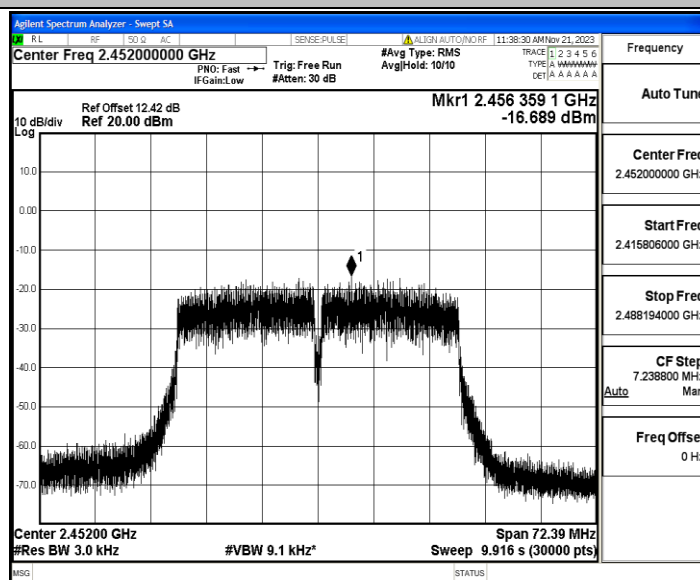
11N40MIMO_Ant1_2437



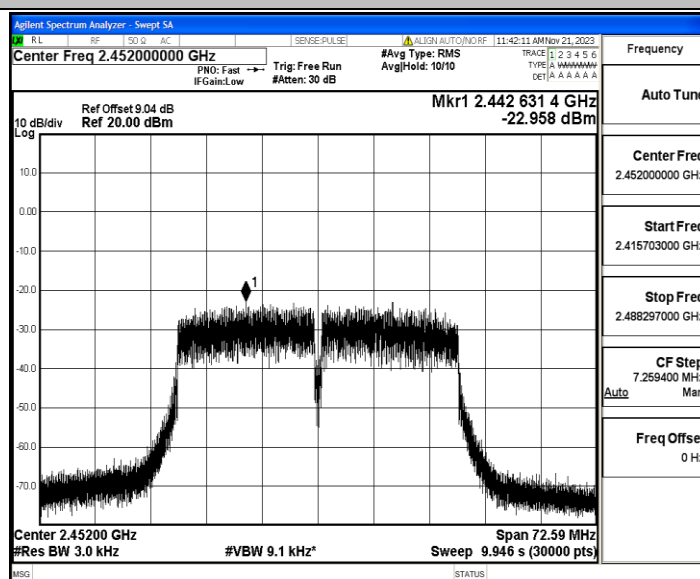
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



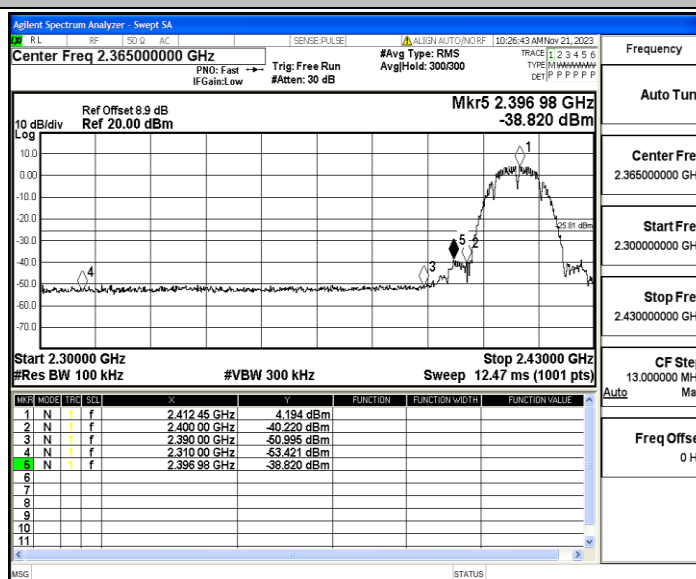
Appendix E: Band edge measurements

Test Result

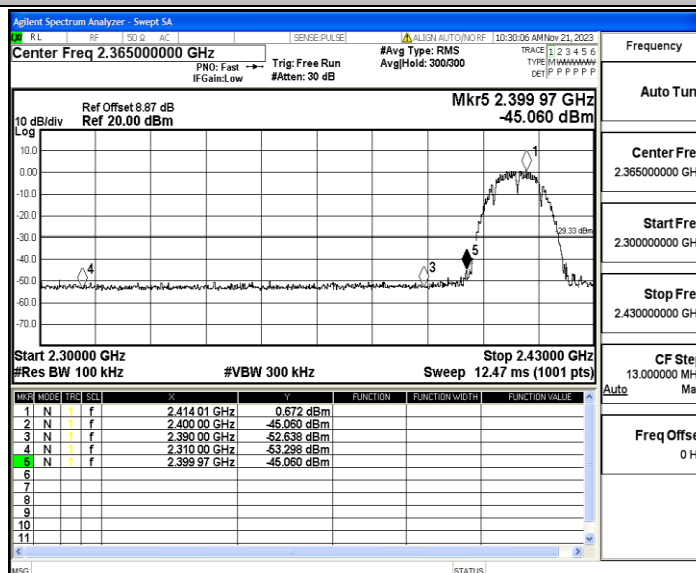
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.19	-38.82	≤-25.81	PASS
	Ant2	Low	2412	0.67	-45.06	≤-29.33	PASS
	Ant1	High	2462	3.88	-49.09	≤-26.13	PASS
	Ant2	High	2462	-0.05	-48.83	≤-30.05	PASS
11G	Ant1	Low	2412	2.79	-34.63	≤-27.21	PASS
	Ant2	Low	2412	0.21	-38.38	≤-29.79	PASS
	Ant1	High	2462	1.86	-48.09	≤-28.15	PASS
	Ant2	High	2462	-0.67	-47.32	≤-30.67	PASS
11N20MIMO	Ant1	Low	2412	2.82	-33.13	≤-27.18	PASS
	Ant2	Low	2412	0.37	-35.87	≤-29.63	PASS
	Ant1	High	2462	2.90	-45.43	≤-27.1	PASS
	Ant2	High	2462	-0.13	-48.97	≤-30.13	PASS
11N40MIMO	Ant1	Low	2422	0.85	-37.45	≤-29.15	PASS
	Ant2	Low	2422	-2.05	-40.47	≤-32.05	PASS
	Ant1	High	2452	0.19	-38.65	≤-29.81	PASS
	Ant2	High	2452	-2.59	-44.7	≤-32.59	PASS

Test Graphs

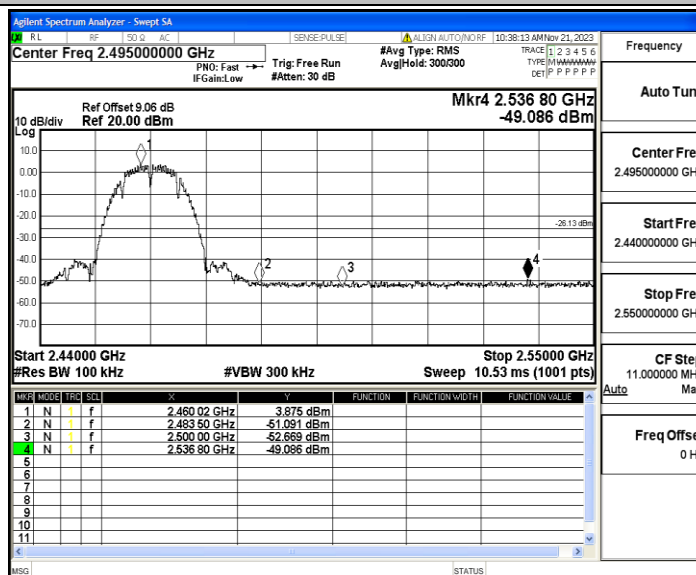
11B_Ant1_Low_2412



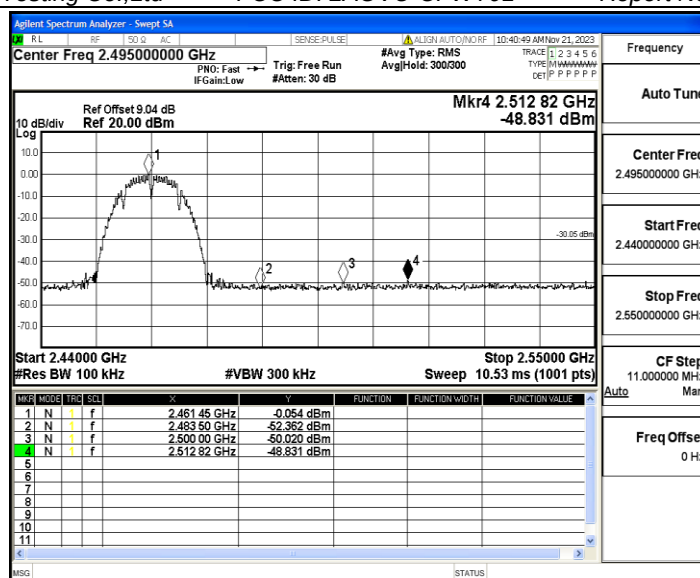
11B_Ant2_Low_2412



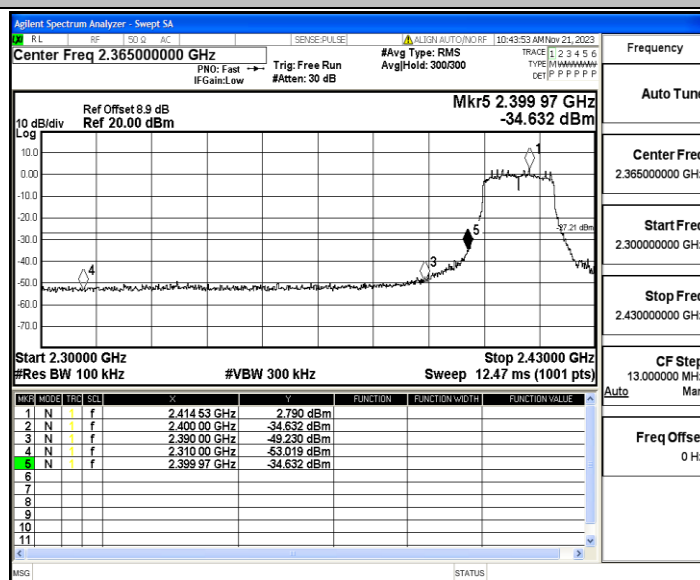
11B_Ant1_High_2462



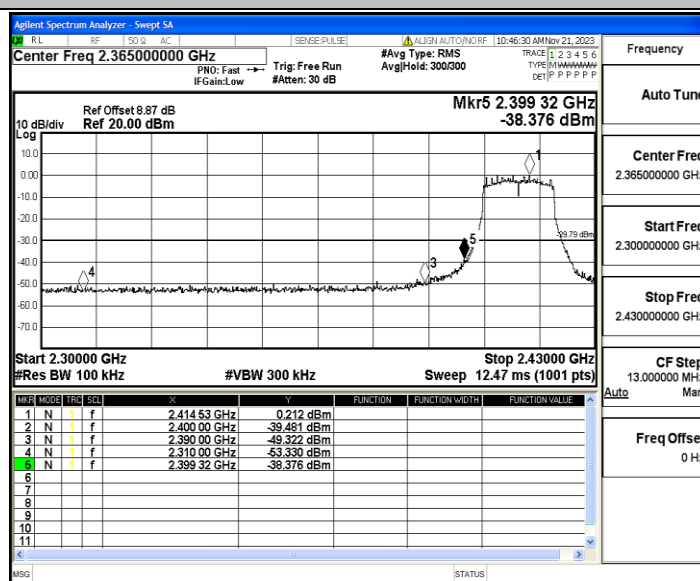
11B_Ant2_High_2462



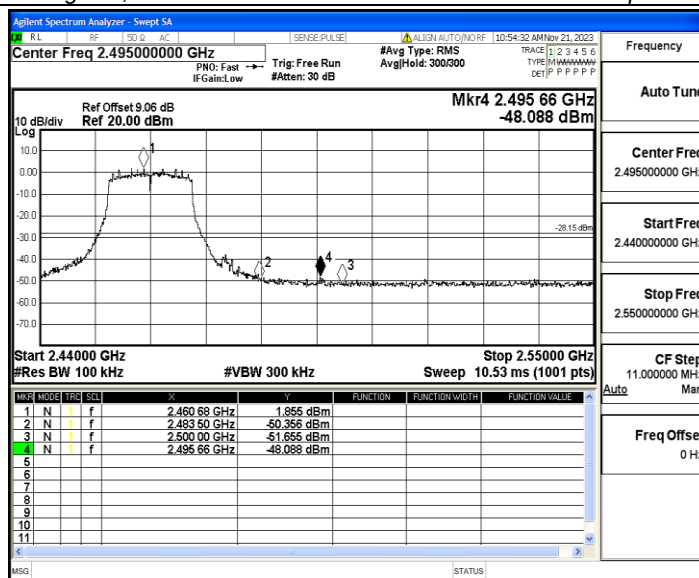
11G_Ant1_Low_2412



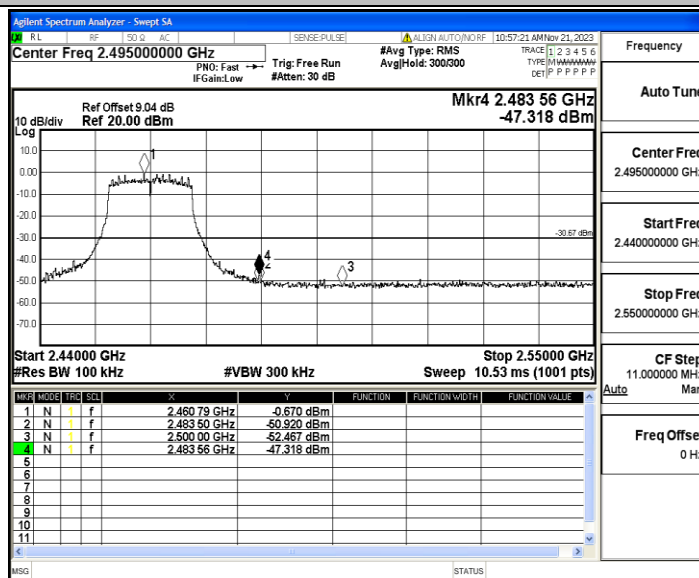
11G_Ant2_Low_2412



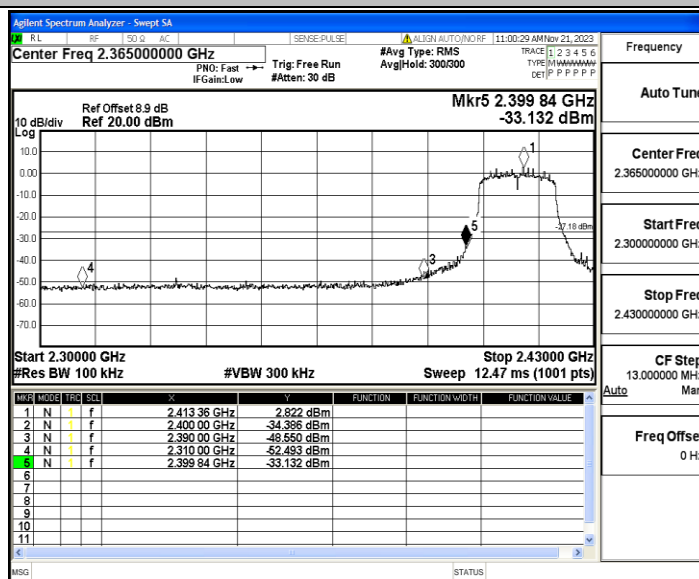
11G_Ant1_High_2462



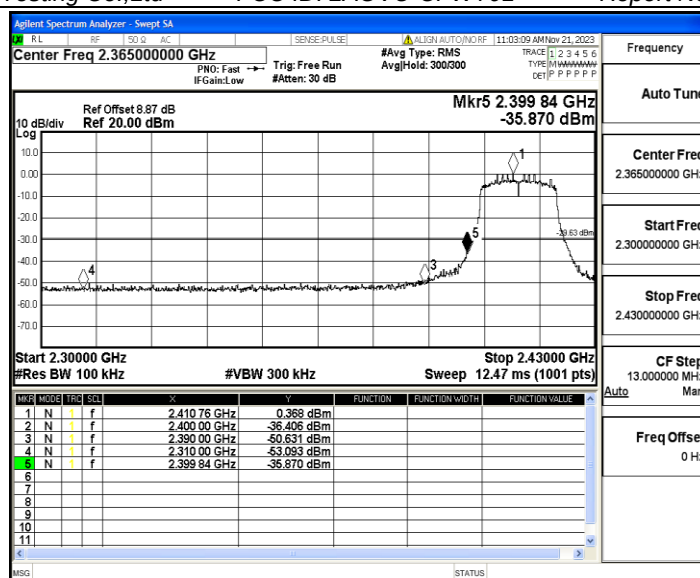
11G_Ant2_High_2462



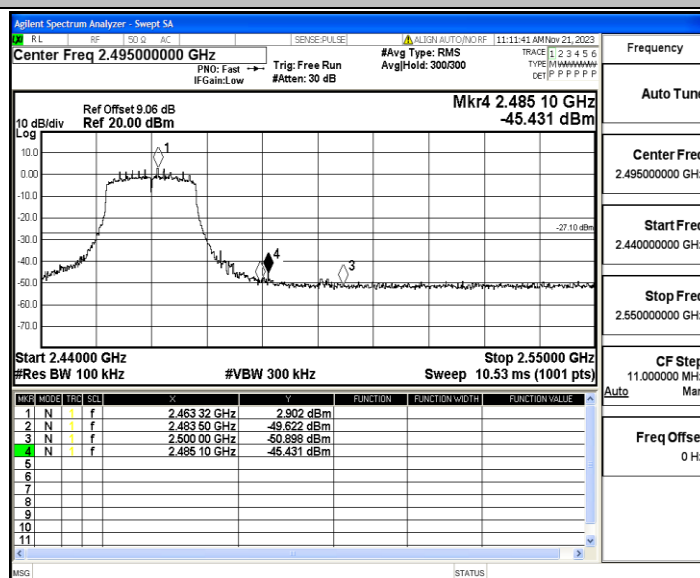
11N20MIMO_Ant1_Low_2412



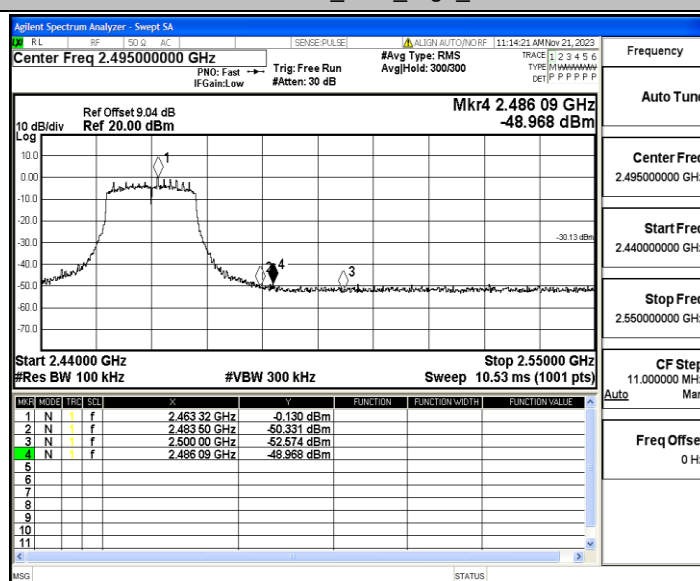
11N20MIMO_Ant2_Low_2412



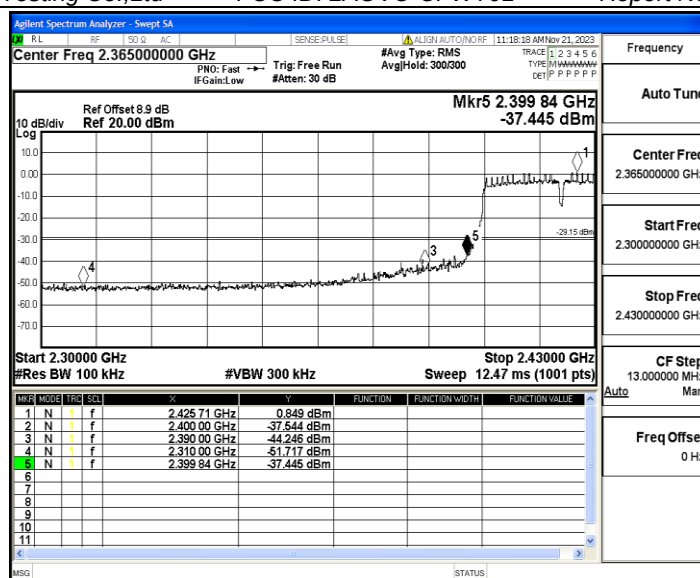
11N20MIMO_Ant1_High_2462



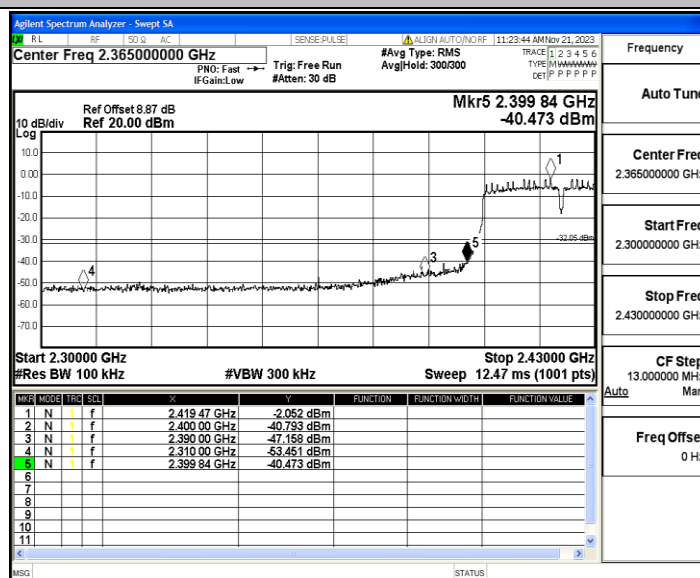
11N20MIMO_Ant2_High_2462



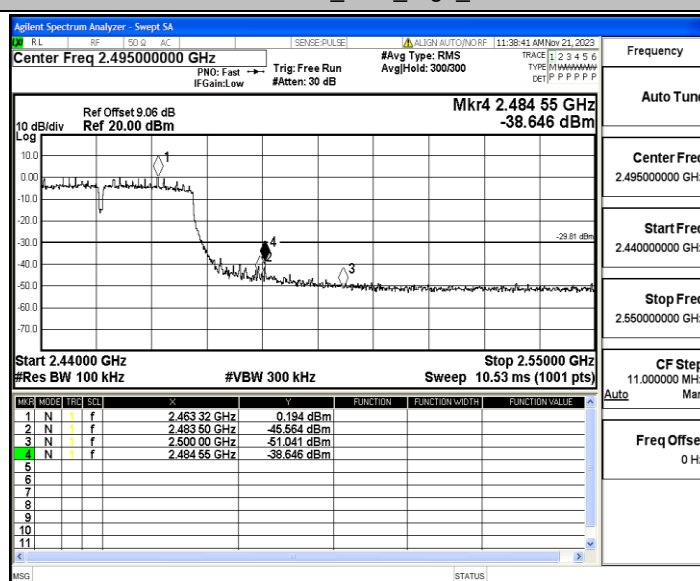
11N40MIMO_Ant1_Low_2422



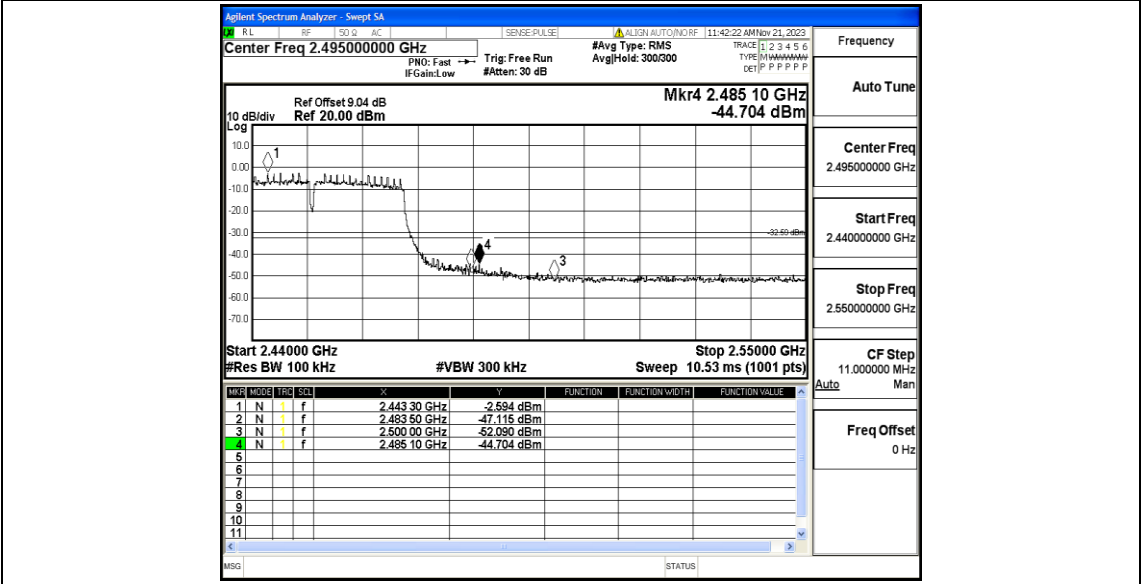
11N40MIMO_Ant2_Low_2422



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	3.58	3.58	---	PASS
			30~1000	3.58	-62.13	≤-26.42	PASS
			1000~26500	3.58	-50.61	≤-26.42	PASS
	Ant2	2412	Reference	0.51	0.51	---	PASS
			30~1000	0.51	-61.86	≤-29.49	PASS
			1000~26500	0.51	-50.13	≤-29.49	PASS
	Ant1	2437	Reference	2.85	2.85	---	PASS
			30~1000	2.85	-61.73	≤-27.15	PASS
			1000~26500	2.85	-50.2	≤-27.15	PASS
	Ant2	2437	Reference	0.22	0.22	---	PASS
			30~1000	0.22	-62.41	≤-29.78	PASS
			1000~26500	0.22	-50.63	≤-29.78	PASS
	Ant1	2462	Reference	3.44	3.44	---	PASS
			30~1000	3.44	-63.16	≤-26.56	PASS
			1000~26500	3.44	-50.33	≤-26.56	PASS
	Ant2	2462	Reference	-1.35	-1.35	---	PASS
			30~1000	-1.35	-62.9	≤-31.35	PASS
			1000~26500	-1.35	-50.05	≤-31.35	PASS
11G	Ant1	2412	Reference	0.46	0.46	---	PASS
			30~1000	0.46	-61.93	≤-29.54	PASS
			1000~26500	0.46	-49.27	≤-29.54	PASS
	Ant2	2412	Reference	0.19	0.19	---	PASS
			30~1000	0.19	-62.67	≤-29.81	PASS
			1000~26500	0.19	-49.08	≤-29.81	PASS
	Ant1	2437	Reference	0.92	0.92	---	PASS
			30~1000	0.92	-62.75	≤-29.08	PASS
			1000~26500	0.92	-49.74	≤-29.08	PASS
	Ant2	2437	Reference	-2.43	-2.43	---	PASS
			30~1000	-2.43	-62.37	≤-32.43	PASS
			1000~26500	-2.43	-50.16	≤-32.43	PASS
	Ant1	2462	Reference	1.38	1.38	---	PASS
			30~1000	1.38	-62.56	≤-28.62	PASS
			1000~26500	1.38	-50.84	≤-28.62	PASS
	Ant2	2462	Reference	-3.02	-3.02	---	PASS
			30~1000	-3.02	-62.31	≤-33.02	PASS
			1000~26500	-3.02	-50.59	≤-33.02	PASS
11N20MIMO	Ant1	2412	Reference	0.26	0.26	---	PASS
			30~1000	0.26	-62.74	≤-29.74	PASS
			1000~26500	0.26	-50.11	≤-29.74	PASS
	Ant2	2412	Reference	-2.72	-2.72	---	PASS
			30~1000	-2.72	-62.57	≤-32.72	PASS

	Ant1	2437	1000~26500	-2.72	-49.75	≤ -32.72	PASS
			Reference	0.08	0.08	---	PASS
			30~1000	0.08	-61.71	≤ -29.92	PASS
			1000~26500	0.08	-50.33	≤ -29.92	PASS
	Ant2	2437	Reference	-1.57	-1.57	---	PASS
			30~1000	-1.57	-62.85	≤ -31.57	PASS
			1000~26500	-1.57	-48.78	≤ -31.57	PASS
	Ant1	2462	Reference	-0.28	-0.28	---	PASS
			30~1000	-0.28	-63.27	≤ -30.28	PASS
			1000~26500	-0.28	-50.25	≤ -30.28	PASS
	Ant2	2462	Reference	-3.88	-3.88	---	PASS
			30~1000	-3.88	-61.95	≤ -33.88	PASS
			1000~26500	-3.88	-50.92	≤ -33.88	PASS
11N40MIMO	Ant1	2422	Reference	-0.69	-0.69	---	PASS
			30~1000	-0.69	-62.11	≤ -30.69	PASS
			1000~26500	-0.69	-50.9	≤ -30.69	PASS
	Ant2	2422	Reference	-3.88	-3.88	---	PASS
			30~1000	-3.88	-63.09	≤ -33.88	PASS
			1000~26500	-3.88	-50.34	≤ -33.88	PASS
	Ant1	2437	Reference	-0.10	-0.10	---	PASS
			30~1000	-0.10	-62.7	≤ -30.1	PASS
			1000~26500	-0.10	-50.28	≤ -30.1	PASS
	Ant2	2437	Reference	-3.33	-3.33	---	PASS
			30~1000	-3.33	-62.52	≤ -33.33	PASS
			1000~26500	-3.33	-49.95	≤ -33.33	PASS
	Ant1	2452	Reference	-2.30	-2.30	---	PASS
			30~1000	-2.30	-61.97	≤ -32.3	PASS
			1000~26500	-2.30	-50.3	≤ -32.3	PASS
	Ant2	2452	Reference	-4.31	-4.31	---	PASS
			30~1000	-4.31	-62.5	≤ -34.31	PASS
			1000~26500	-4.31	-50.32	≤ -34.31	PASS