

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

Product Name: 4K HDMI Dongle

Trade Mark: N/A

Test Model: SN8BKCB

FCC ID: 2AOVU-SN8BKCX

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

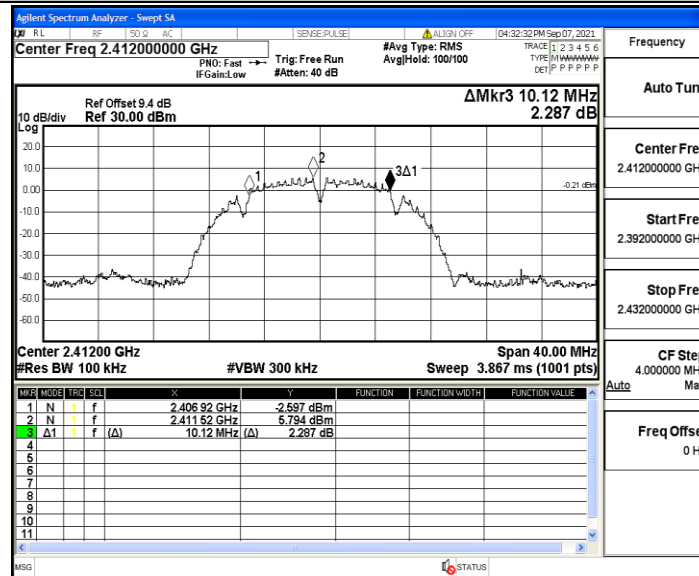
Appendix A: DTS Bandwidth

Test Result

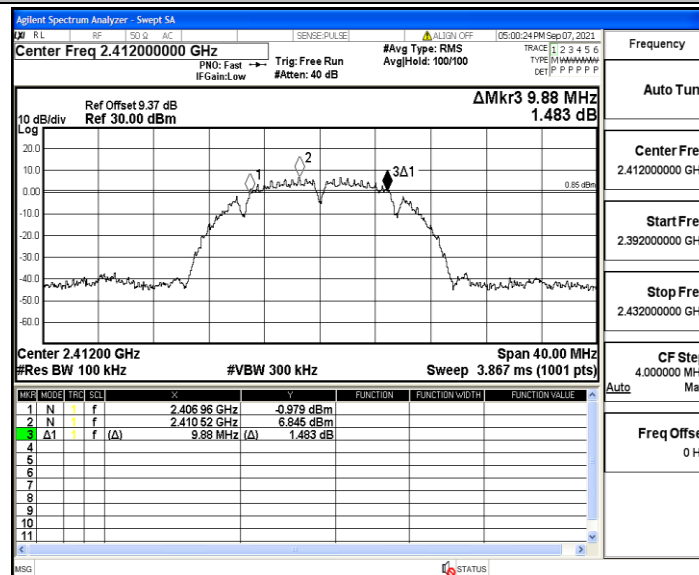
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.120	2406.920	2417.040	0.5	PASS
	Ant2	2412	9.880	2406.960	2416.840	0.5	PASS
	Ant1	2437	10.160	2431.920	2442.080	0.5	PASS
	Ant2	2437	10.160	2431.920	2442.080	0.5	PASS
	Ant1	2462	10.160	2456.920	2467.080	0.5	PASS
	Ant2	2462	10.080	2456.960	2467.040	0.5	PASS
11G	Ant1	2412	16.440	2403.800	2420.240	0.5	PASS
	Ant2	2412	16.480	2403.800	2420.280	0.5	PASS
	Ant1	2437	16.440	2428.800	2445.240	0.5	PASS
	Ant2	2437	16.600	2428.680	2445.280	0.5	PASS
	Ant1	2462	16.440	2453.800	2470.240	0.5	PASS
	Ant2	2462	16.480	2453.760	2470.240	0.5	PASS
11N20MIMO	Ant1	2412	17.680	2403.160	2420.840	0.5	PASS
	Ant2	2412	17.800	2403.120	2420.920	0.5	PASS
	Ant1	2437	17.680	2428.160	2445.840	0.5	PASS
	Ant2	2437	17.680	2428.160	2445.840	0.5	PASS
	Ant1	2462	17.640	2453.200	2470.840	0.5	PASS
	Ant2	2462	17.600	2453.200	2470.800	0.5	PASS
11N40MIMO	Ant1	2422	35.840	2403.840	2439.680	0.5	PASS
	Ant2	2422	35.840	2403.760	2439.600	0.5	PASS
	Ant1	2437	36.480	2418.760	2455.240	0.5	PASS
	Ant2	2437	35.520	2419.080	2454.600	0.5	PASS
	Ant1	2452	35.280	2434.400	2469.680	0.5	PASS
	Ant2	2452	35.840	2434.160	2470.000	0.5	PASS

Test Graphs

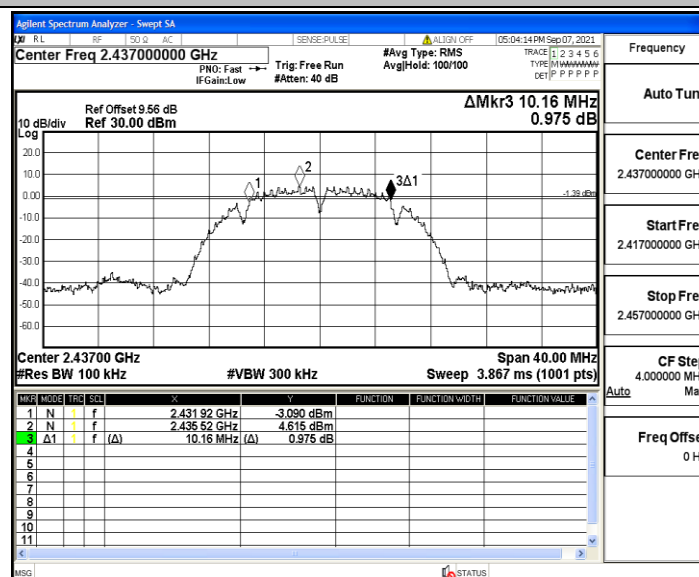
11B_Ant1_2412



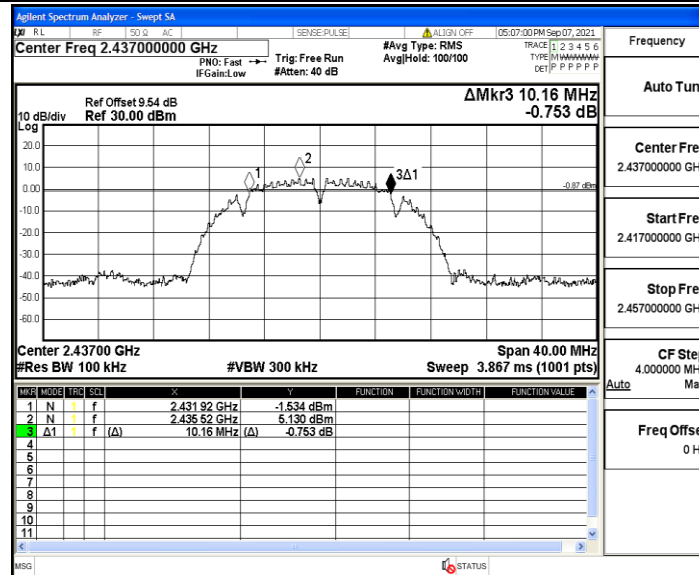
11B_Ant2_2412



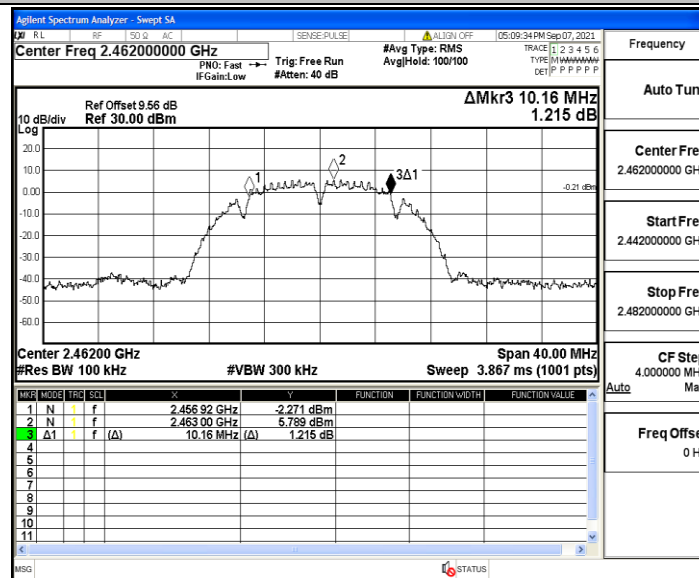
11B_Ant1_2437



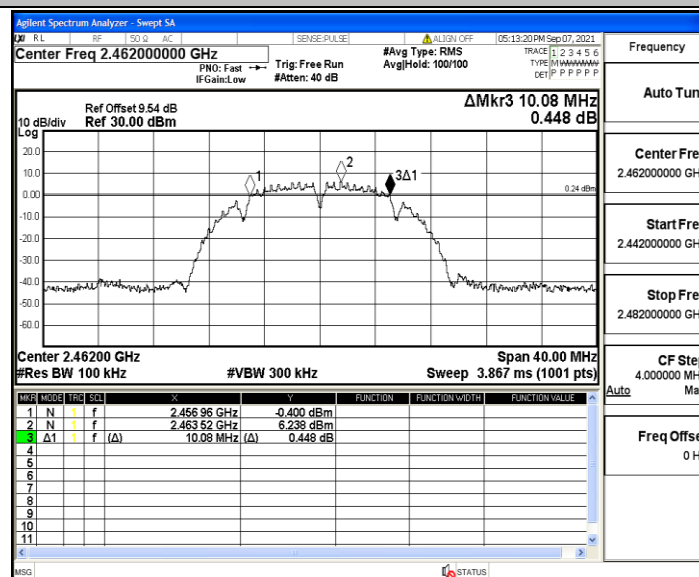
11B_Ant2_2437



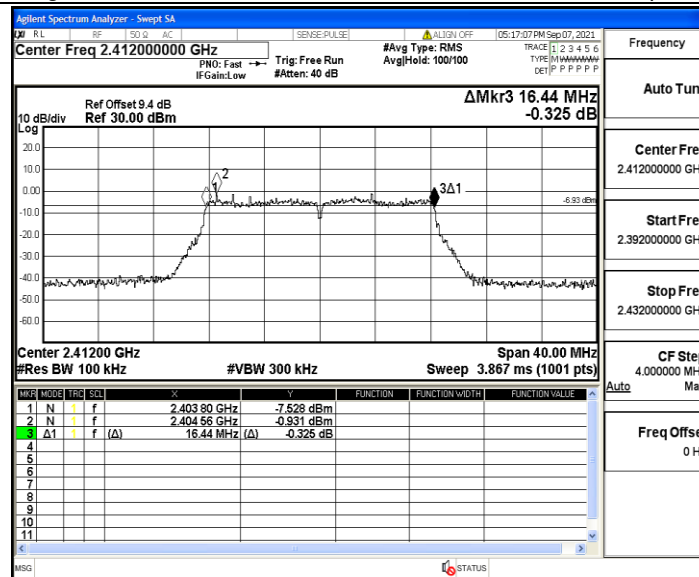
11B_Ant1_2462



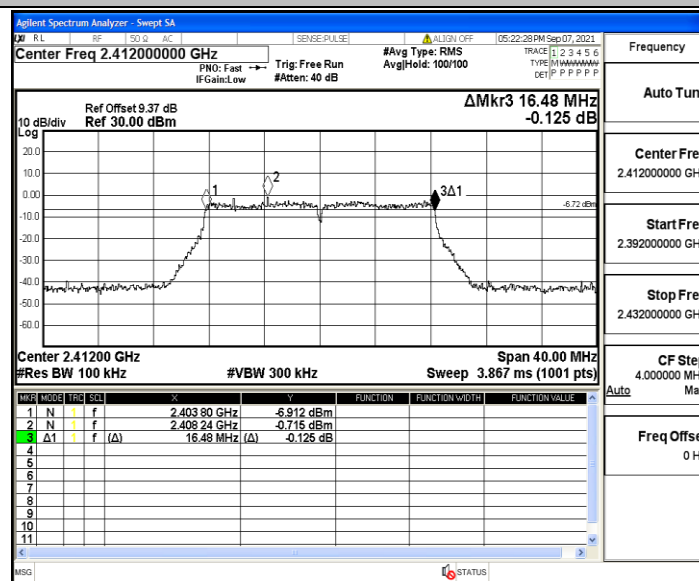
11B_Ant2_2462



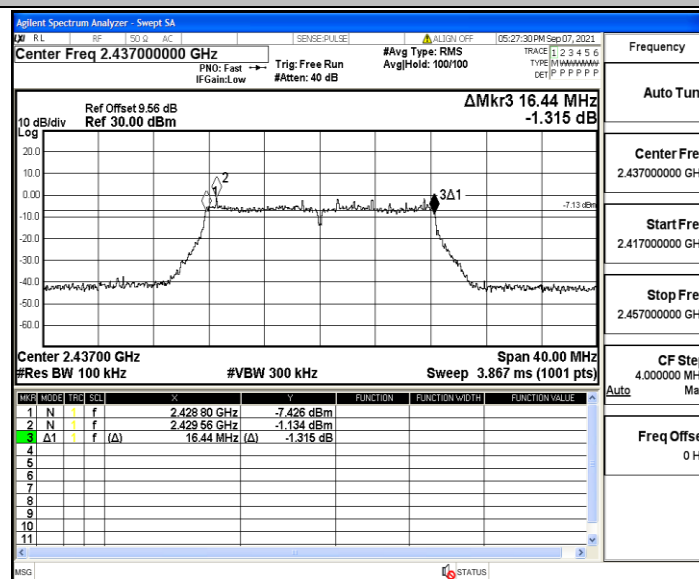
11G_Ant1_2412



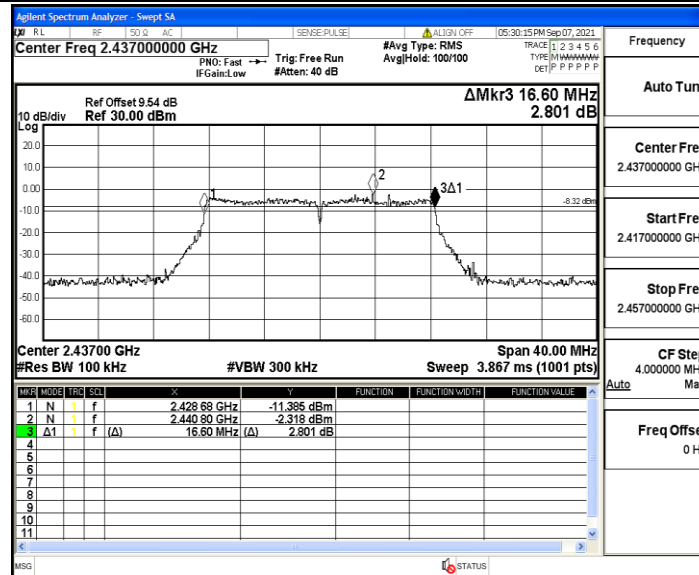
11G_Ant2_2412



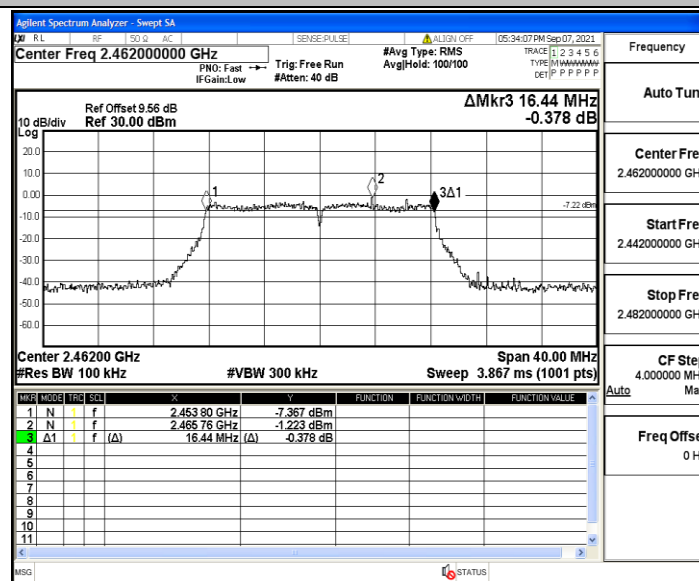
11G_Ant1_2437



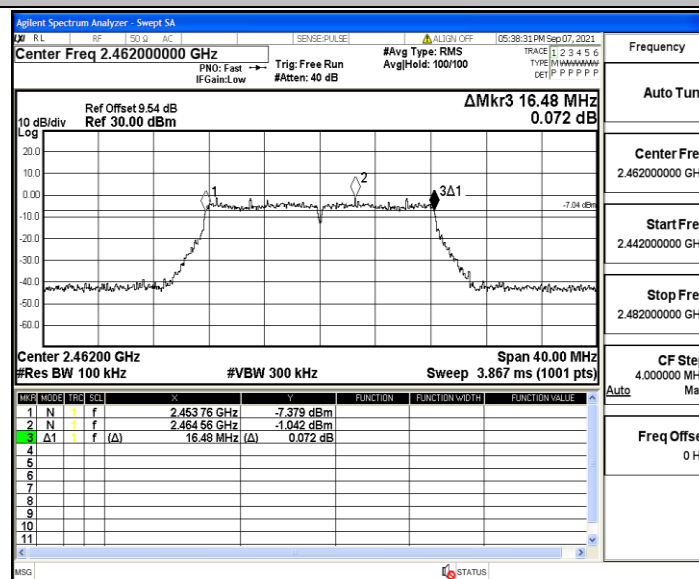
11G_Ant2_2437



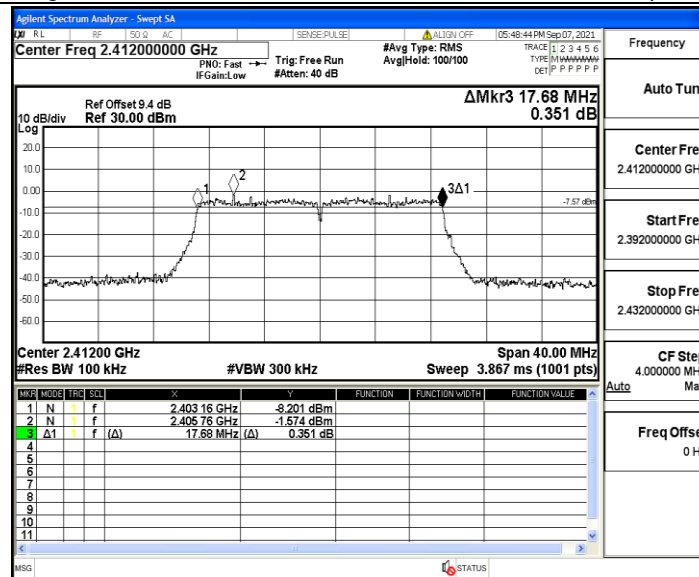
11G_Ant1_2462



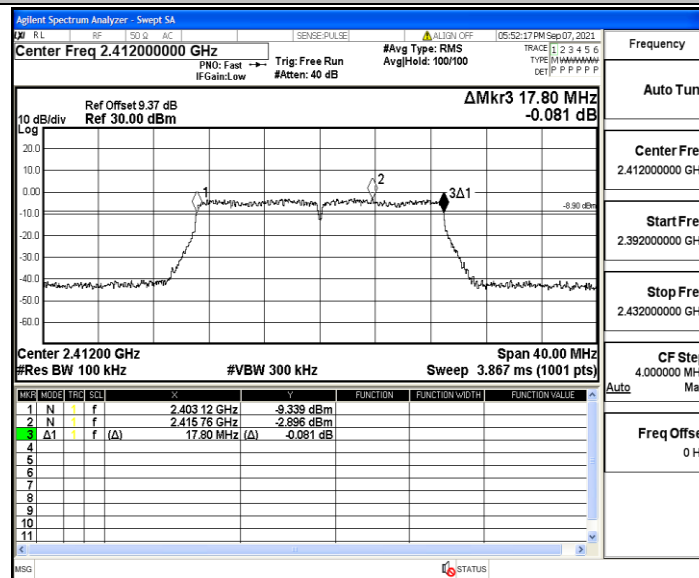
11G_Ant2_2462



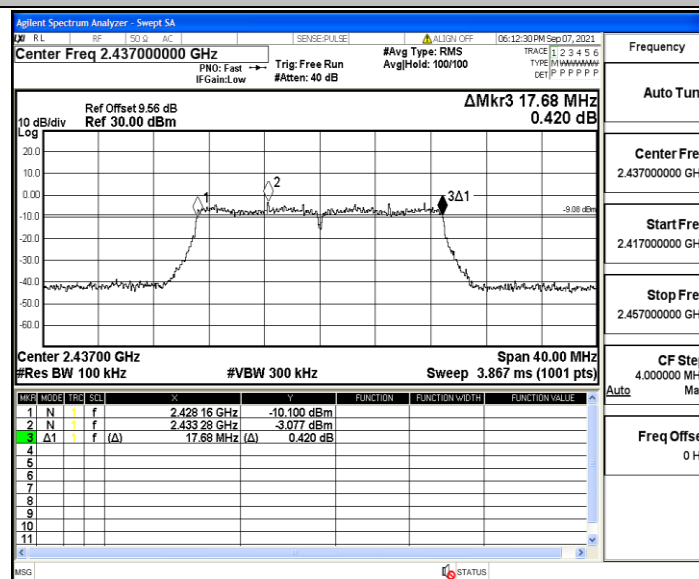
11N20MIMO_Ant1_2412



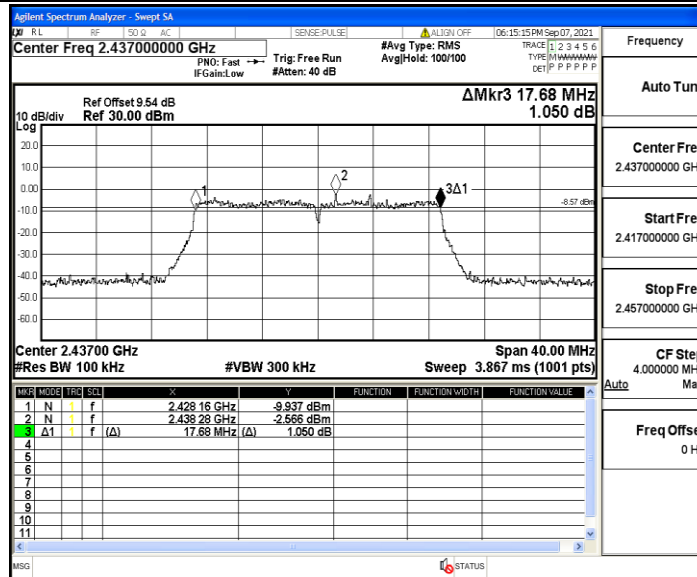
11N20MIMO_Ant2_2412



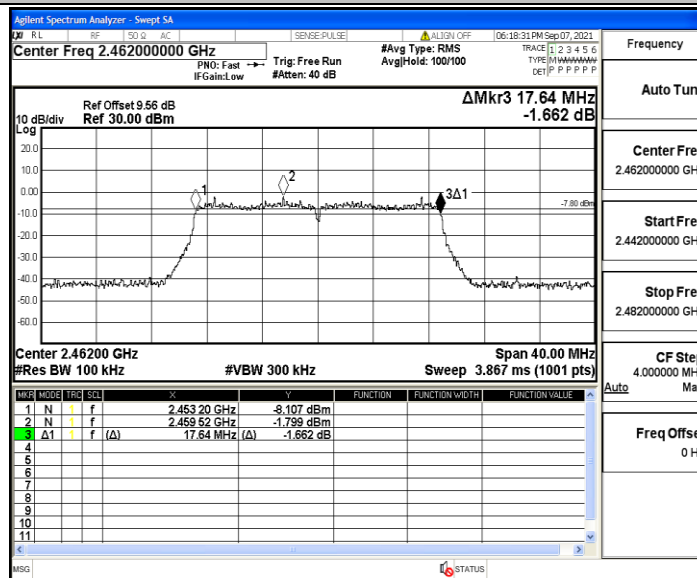
11N20MIMO_Ant1_2437



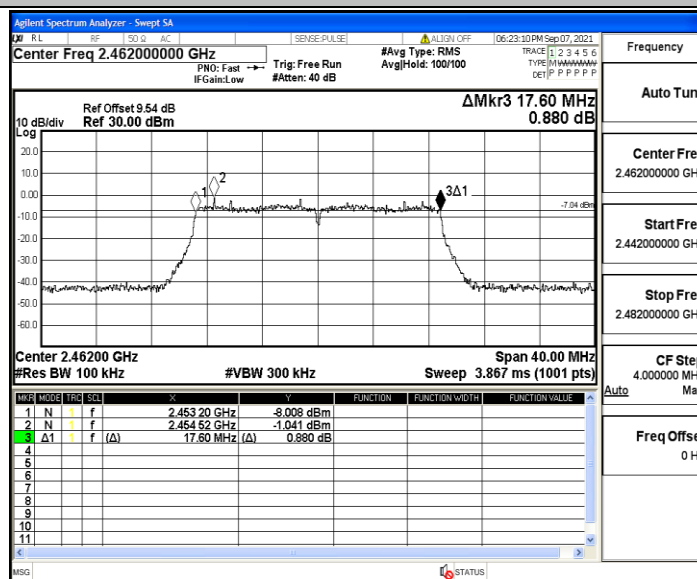
11N20MIMO_Ant2_2437



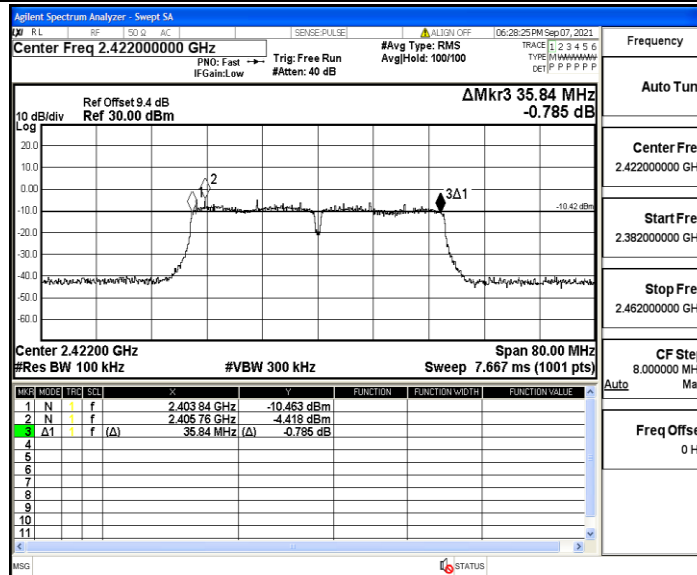
11N20MIMO_Ant1_2462



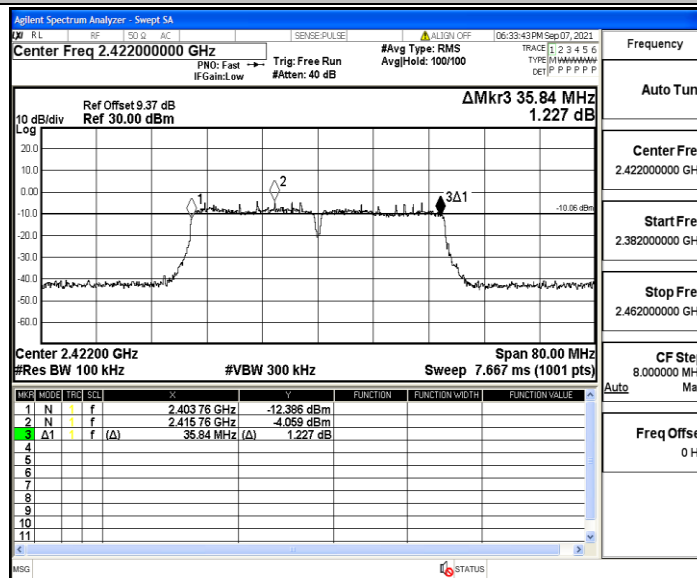
11N20MIMO_Ant2_2462



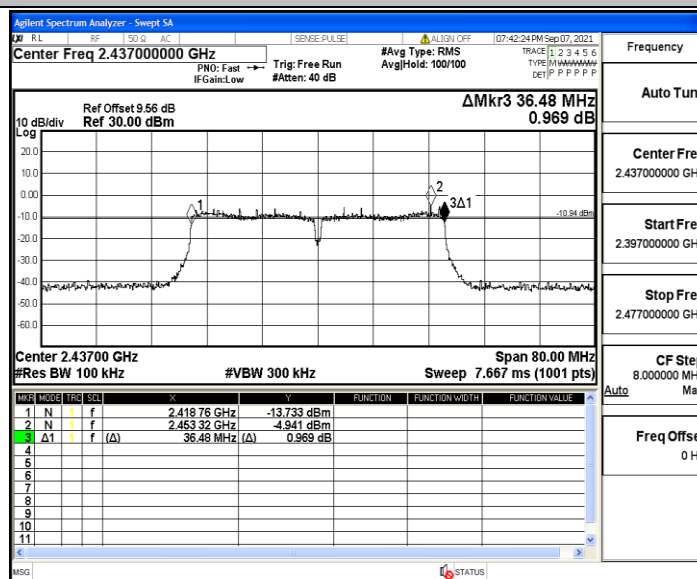
11N40MIMO_Ant1_2422



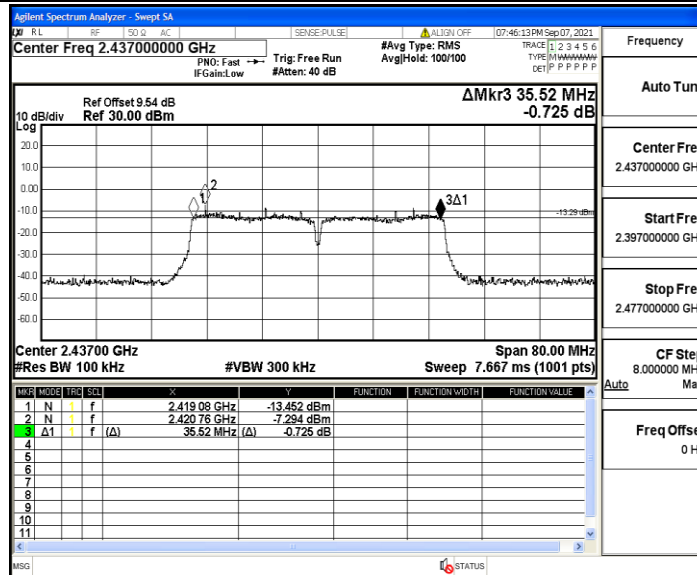
11N40MIMO_Ant2_2422



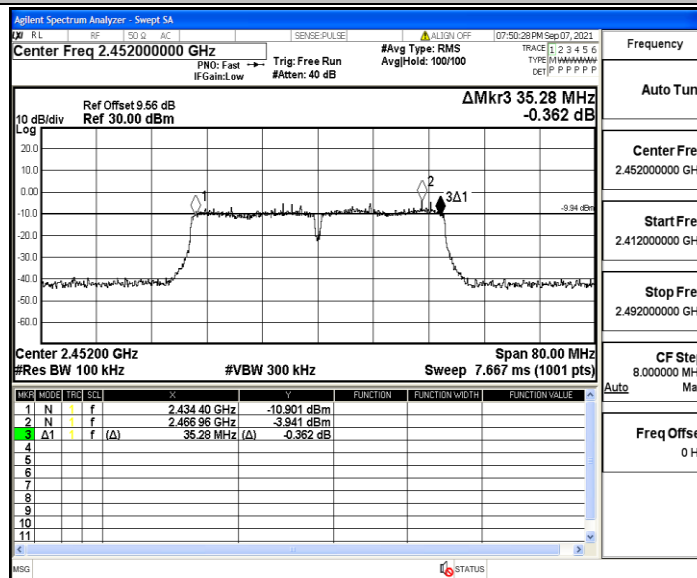
11N40MIMO_Ant1_2437



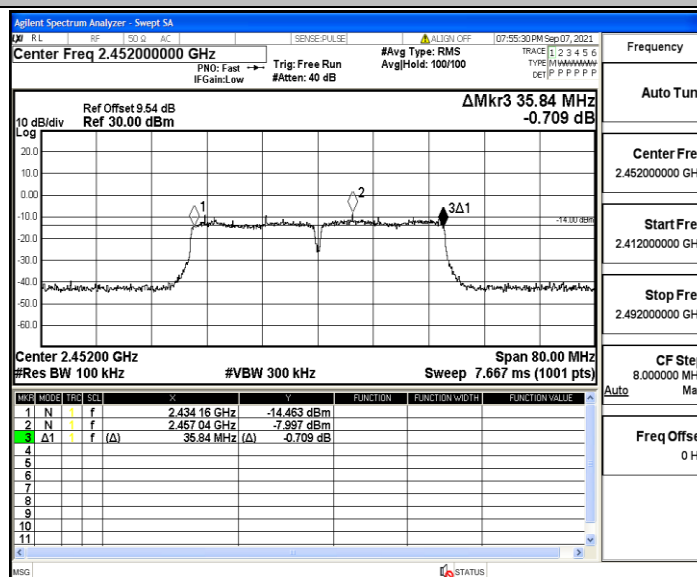
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452

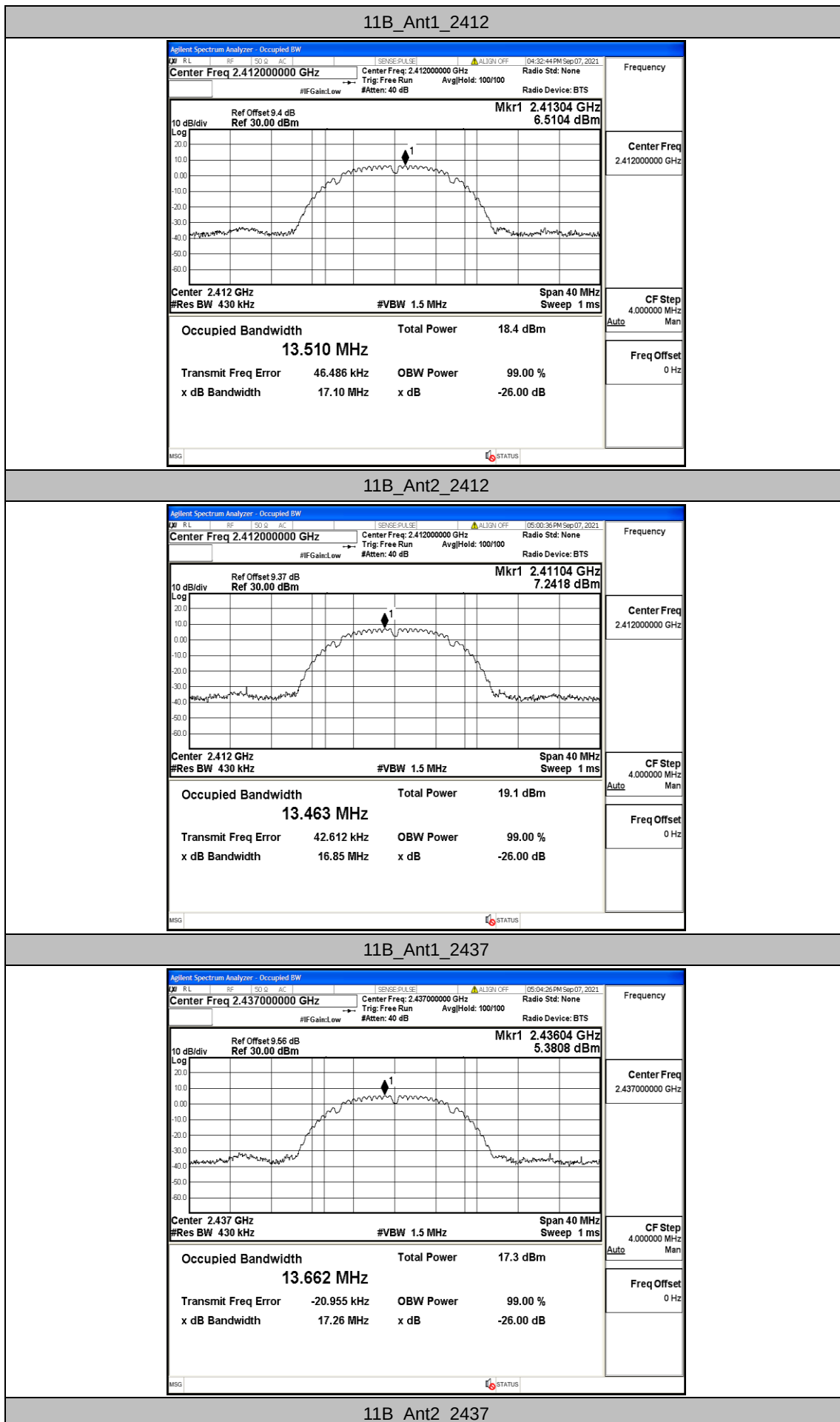


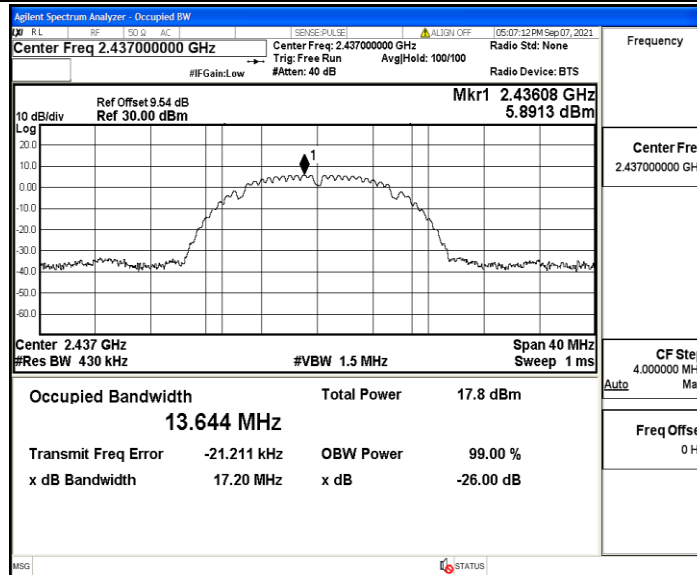
Appendix B: Occupied Channel Bandwidth

Test Result

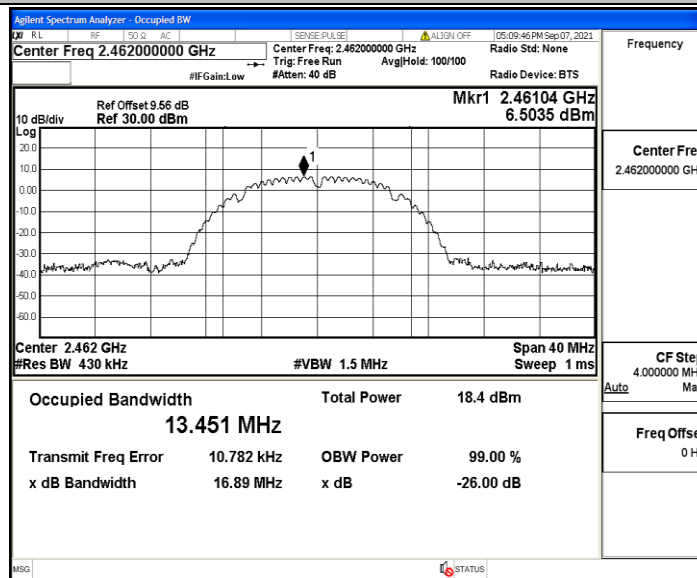
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.510	2405.291	2418.801	---	PASS
	Ant2	2412	13.463	2405.311	2418.774	---	PASS
	Ant1	2437	13.662	2430.148	2443.810	---	PASS
	Ant2	2437	13.644	2430.157	2443.801	---	PASS
	Ant1	2462	13.451	2455.285	2468.736	---	PASS
	Ant2	2462	13.422	2455.304	2468.726	---	PASS
11G	Ant1	2412	16.910	2403.611	2420.521	---	PASS
	Ant2	2412	17.016	2403.541	2420.557	---	PASS
	Ant1	2437	17.041	2428.486	2445.527	---	PASS
	Ant2	2437	17.024	2428.498	2445.522	---	PASS
	Ant1	2462	16.921	2453.577	2470.498	---	PASS
	Ant2	2462	16.878	2453.564	2470.442	---	PASS
11N20MIMO	Ant1	2412	17.818	2403.131	2420.949	---	PASS
	Ant2	2412	17.837	2403.147	2420.984	---	PASS
	Ant1	2437	17.861	2428.094	2445.955	---	PASS
	Ant2	2437	17.907	2428.071	2445.978	---	PASS
	Ant1	2462	17.767	2453.163	2470.930	---	PASS
	Ant2	2462	17.827	2453.114	2470.941	---	PASS
11N40MIMO	Ant1	2422	36.182	2403.915	2440.097	---	PASS
	Ant2	2422	36.272	2403.853	2440.125	---	PASS
	Ant1	2437	36.495	2418.866	2455.361	---	PASS
	Ant2	2437	36.574	2418.765	2455.339	---	PASS
	Ant1	2452	36.390	2433.920	2470.310	---	PASS
	Ant2	2452	36.408	2433.887	2470.295	---	PASS

Test Graphs

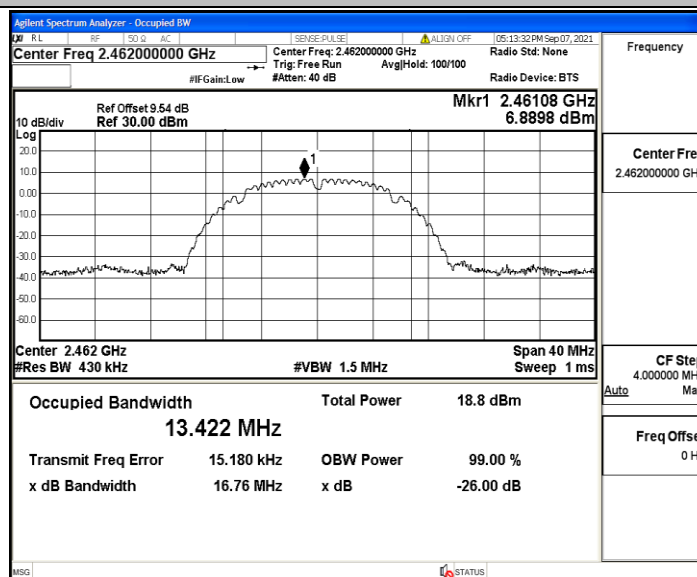




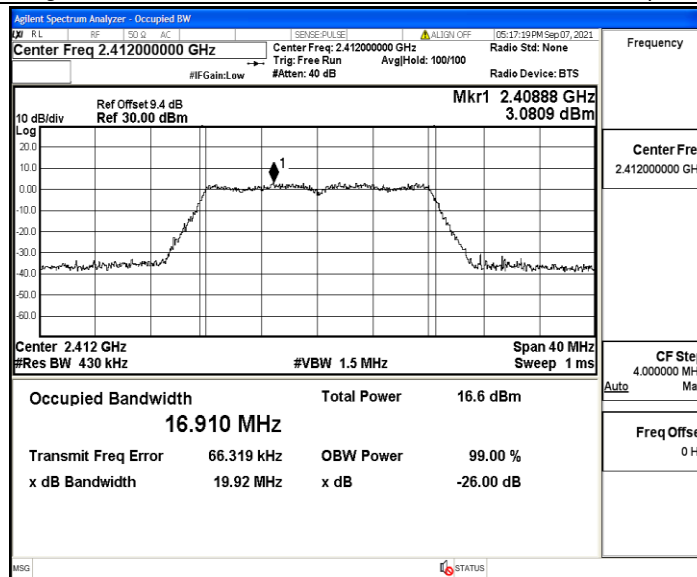
11B_Ant1_2462



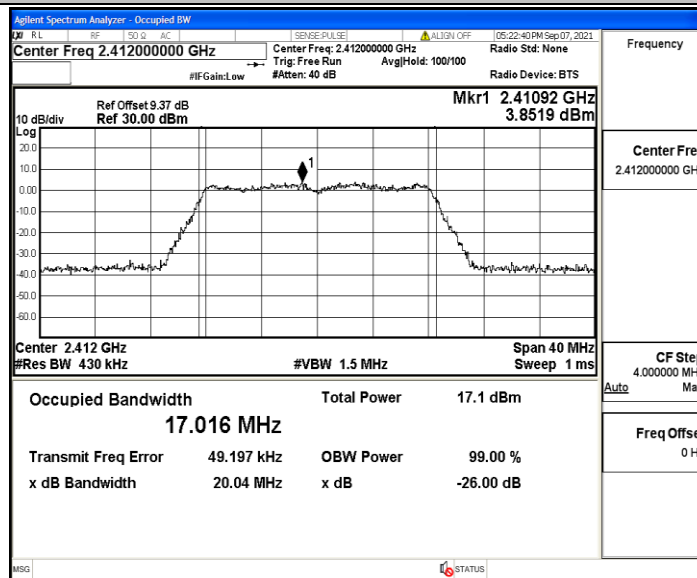
11B_Ant2_2462



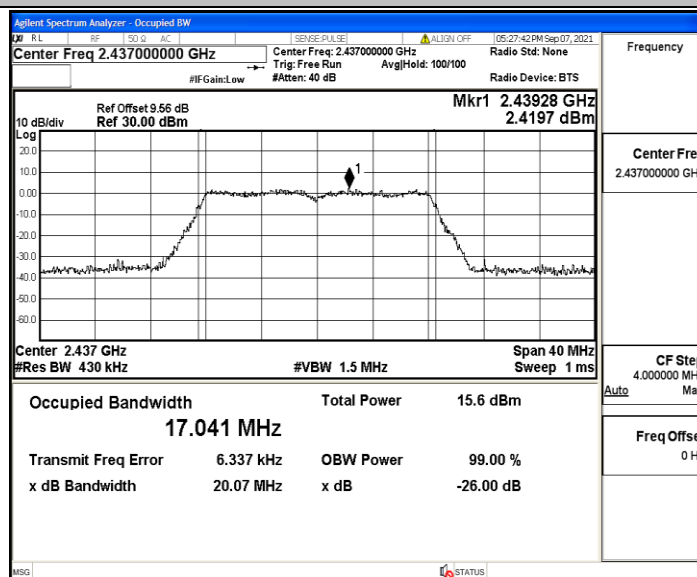
11G_Ant1_2412



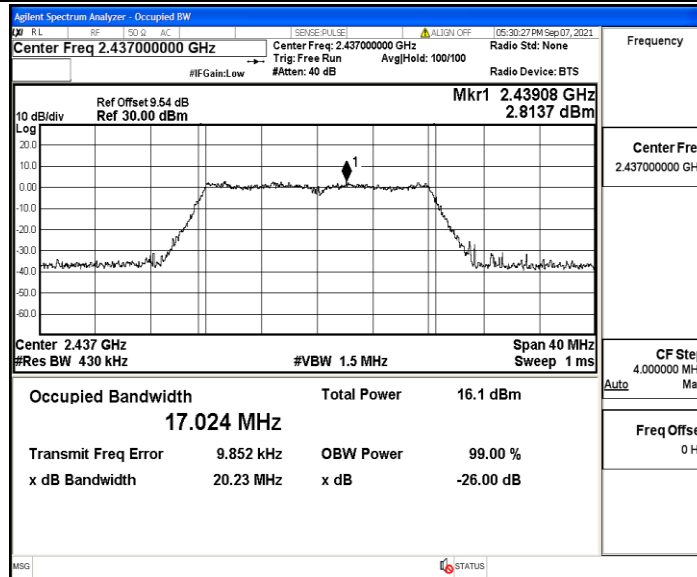
11G_Ant2_2412



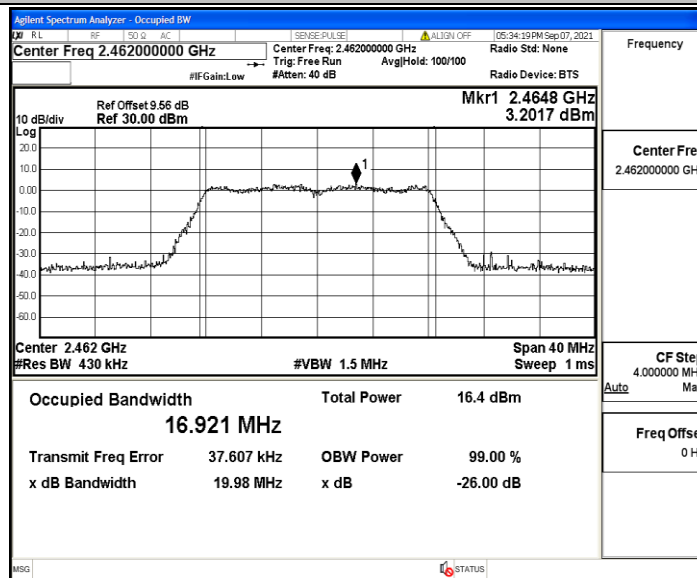
11G_Ant1_2437



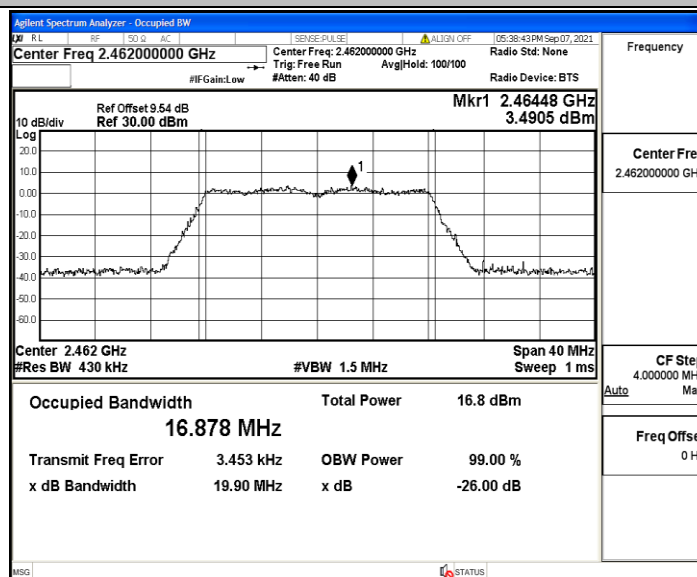
11G_Ant2_2437



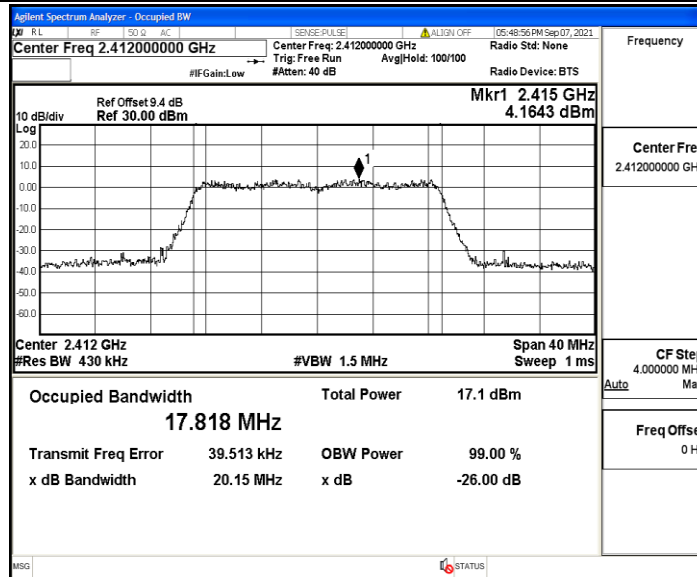
11G_Ant1_2462



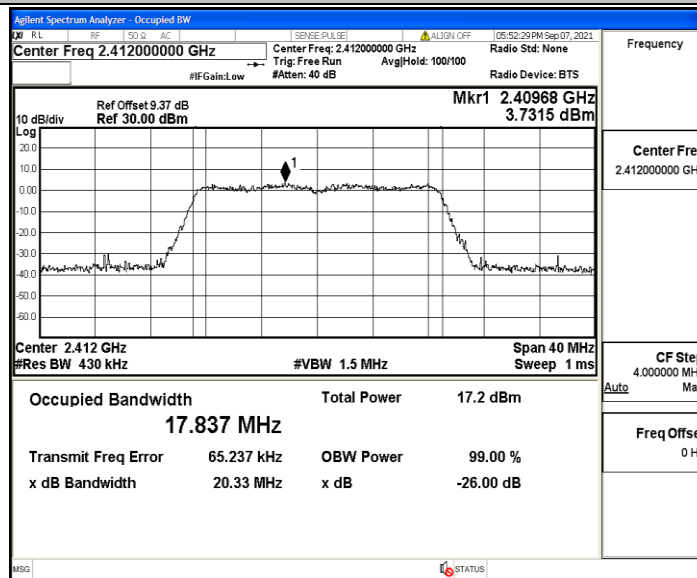
11G_Ant2_2462



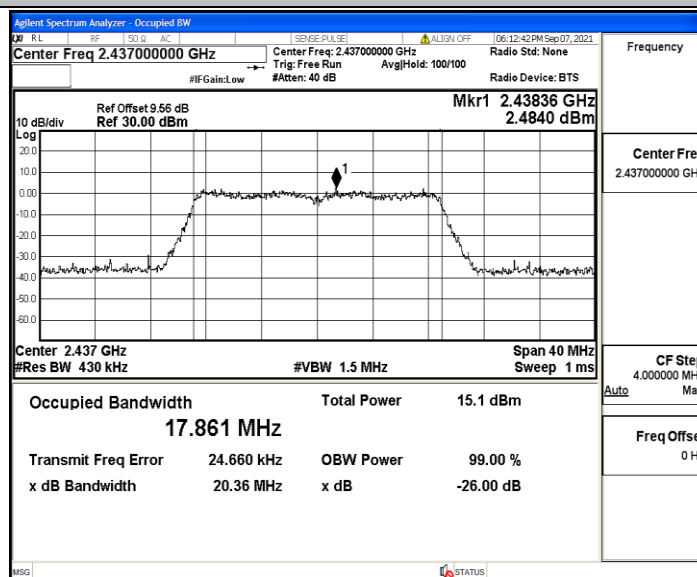
11N20MIMO_Ant1_2412



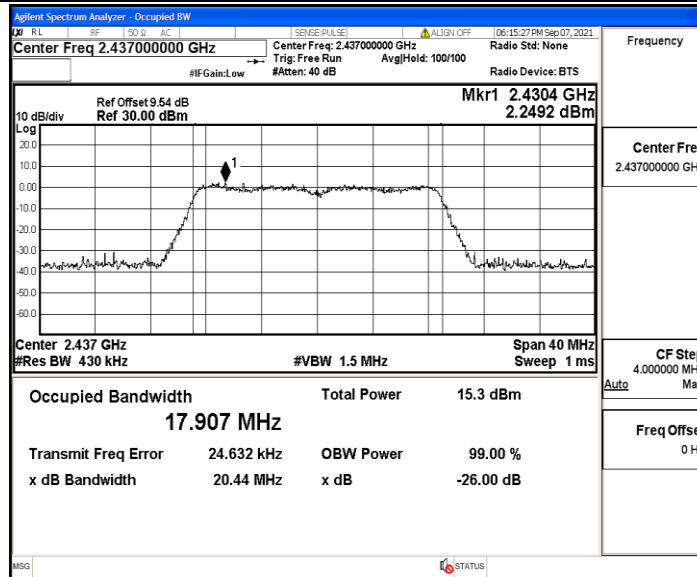
11N20MIMO_Ant2_2412



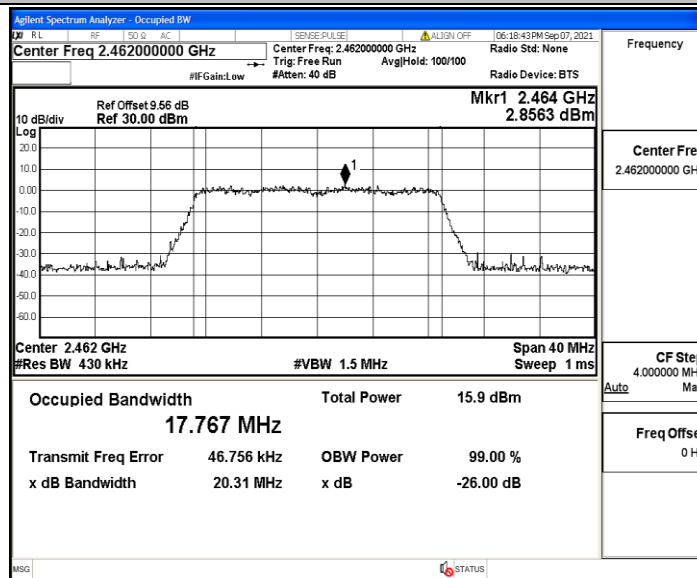
11N20MIMO_Ant1_2437



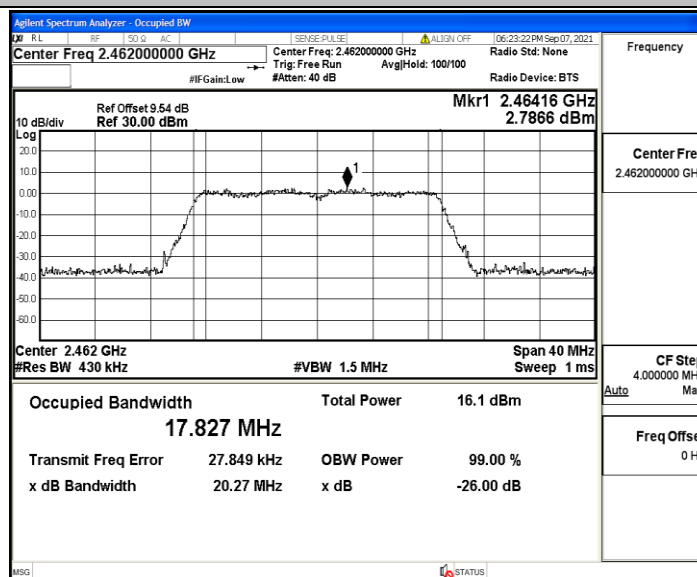
11N20MIMO_Ant2_2437



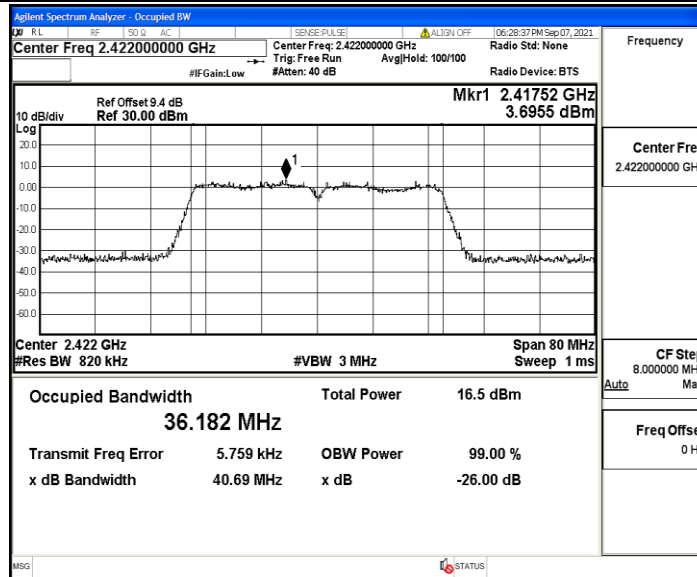
11N20MIMO_Ant1_2462



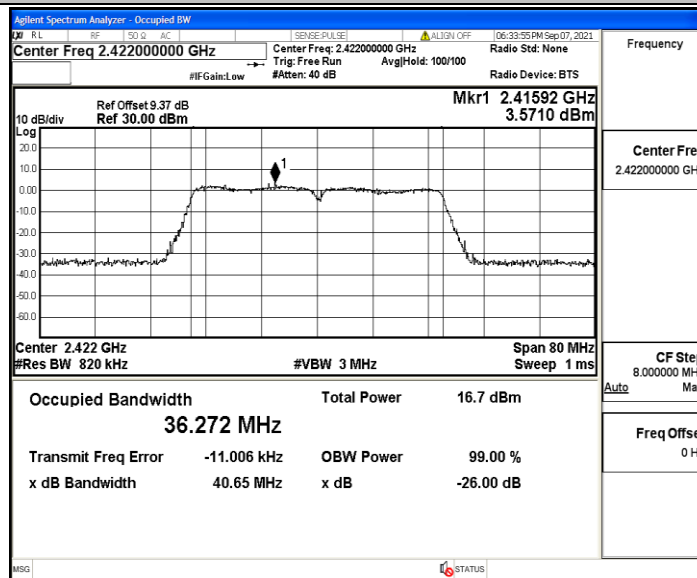
11N20MIMO_Ant2_2462



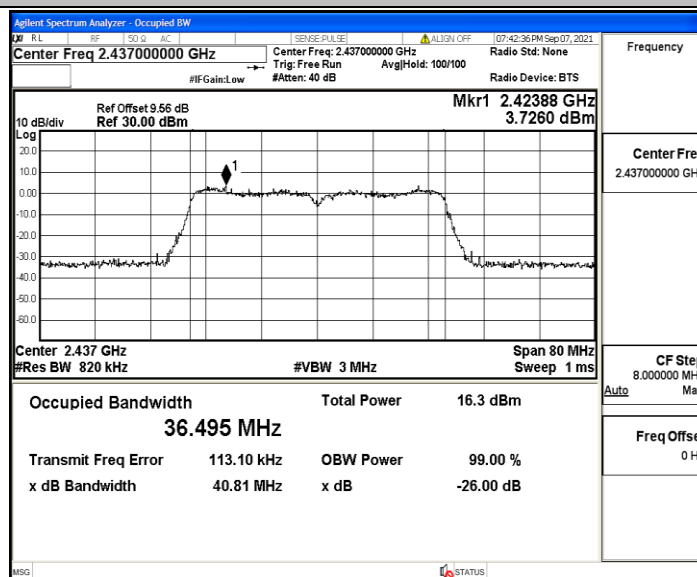
11N40MIMO_Ant1_2422



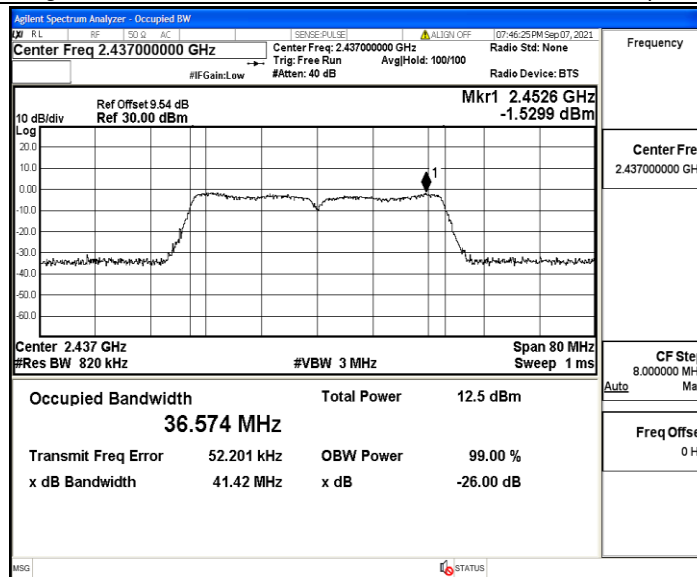
11N40MIMO_Ant2_2422



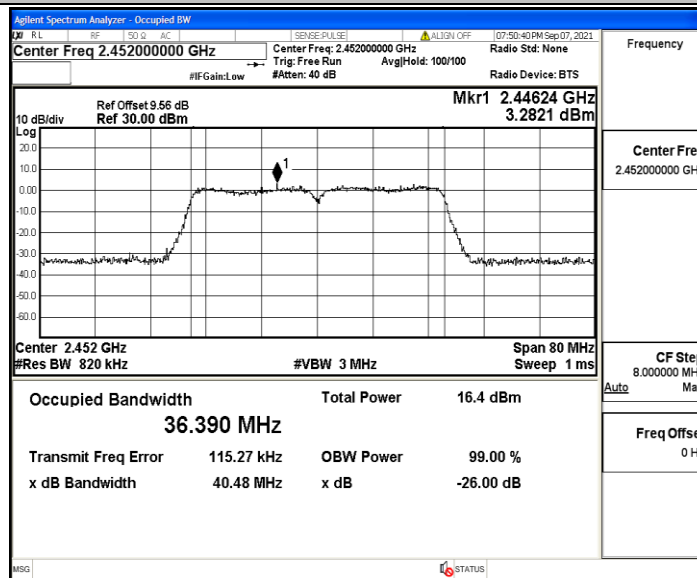
11N40MIMO_Ant1_2437



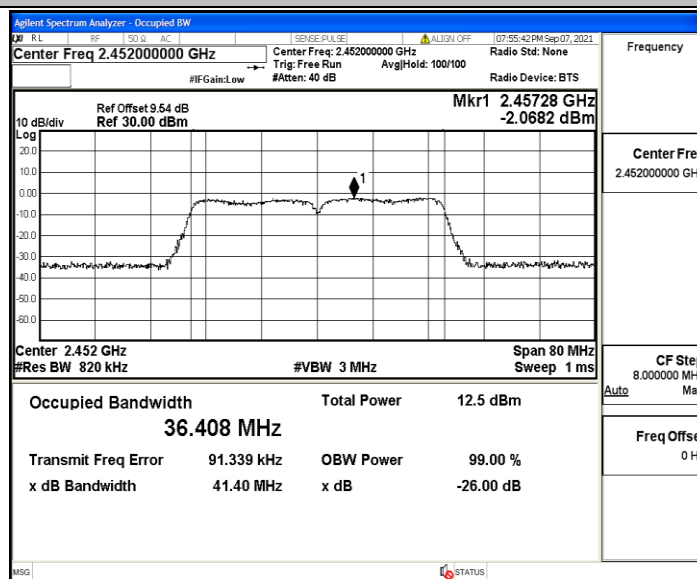
11N40MIMO_Ant2_2437



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	15.56	≤30	PASS
	Ant2	2412	16.13	≤30	PASS
	Ant1	2437	14.39	≤30	PASS
	Ant2	2437	14.90	≤30	PASS
	Ant1	2462	15.40	≤30	PASS
	Ant2	2462	15.80	≤30	PASS
11G	Ant1	2412	10.58	≤30	PASS
	Ant2	2412	11.06	≤30	PASS
	Ant1	2437	9.50	≤30	PASS
	Ant2	2437	9.99	≤30	PASS
	Ant1	2462	10.34	≤30	PASS
	Ant2	2462	10.71	≤30	PASS
11N20MIMO	Ant1	2412	9.68	≤30	PASS
	Ant2	2412	9.25	≤30	PASS
	total	2412	12.5	≤30	PASS
	Ant1	2437	8.68	≤30	PASS
	Ant2	2437	9.14	≤30	PASS
	total	2437	11.9	≤30	PASS
	Ant1	2462	9.50	≤30	PASS
	Ant2	2462	9.92	≤30	PASS
	total	2462	12.7	≤30	PASS
11N40MIMO	Ant1	2422	8.32	≤30	PASS
	Ant2	2422	7.89	≤30	PASS
	total	2422	11.1	≤30	PASS
	Ant1	2437	8.13	≤30	PASS
	Ant2	2437	7.70	≤30	PASS
	total	2437	10.9	≤30	PASS
	Ant1	2452	8.24	≤30	PASS
	Ant2	2452	7.70	≤30	PASS
	total	2452	11.0	≤30	PASS

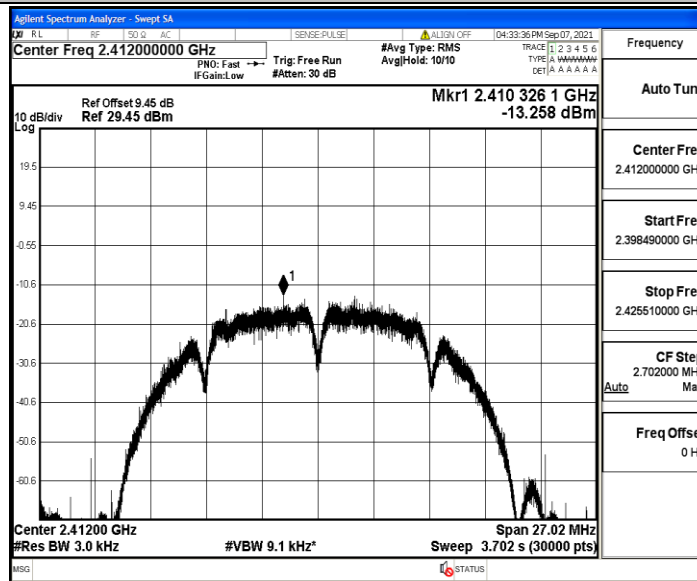
Appendix D: Maximum power spectral density

Test Result

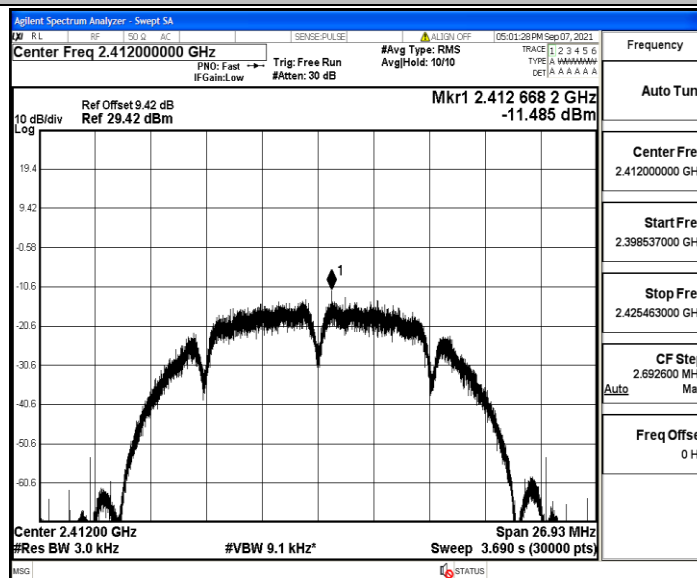
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-13.26	≤8	PASS
	Ant2	2412	-11.49	≤8	PASS
	Ant1	2437	-14.73	≤8	PASS
	Ant2	2437	-14.48	≤8	PASS
	Ant1	2462	-14	≤8	PASS
	Ant2	2462	-11.62	≤8	PASS
11G	Ant1	2412	-21.71	≤8	PASS
	Ant2	2412	-20.43	≤8	PASS
	Ant1	2437	-22.76	≤8	PASS
	Ant2	2437	-21.96	≤8	PASS
	Ant1	2462	-21.53	≤8	PASS
	Ant2	2462	-20.51	≤8	PASS
11N20MIMO	Ant1	2412	-22.49	≤8	PASS
	Ant2	2412	-23.21	≤8	PASS
	total	2412	-19.82	≤8	PASS
	Ant1	2437	-23.22	≤8	PASS
	Ant2	2437	-23.16	≤8	PASS
	total	2437	-20.18	≤8	PASS
	Ant1	2462	-22.1	≤8	PASS
	Ant2	2462	-22.16	≤8	PASS
	total	2462	-19.12	≤8	PASS
11N40MIMO	Ant1	2422	-26.34	≤8	PASS
	Ant2	2422	-27.34	≤8	PASS
	total	2422	-23.80	≤8	PASS
	Ant1	2437	-27.1	≤8	PASS
	Ant2	2437	-26.86	≤8	PASS
	total	2437	-23.97	≤8	PASS
	Ant1	2452	-26.97	≤8	PASS
	Ant2	2452	-28.01	≤8	PASS
	total	2452	-24.45	≤8	PASS

Test Graphs

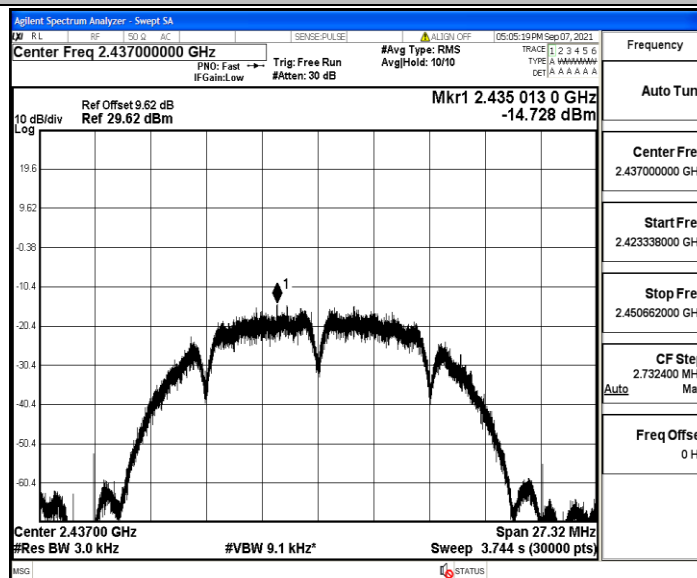
11B_Ant1_2412



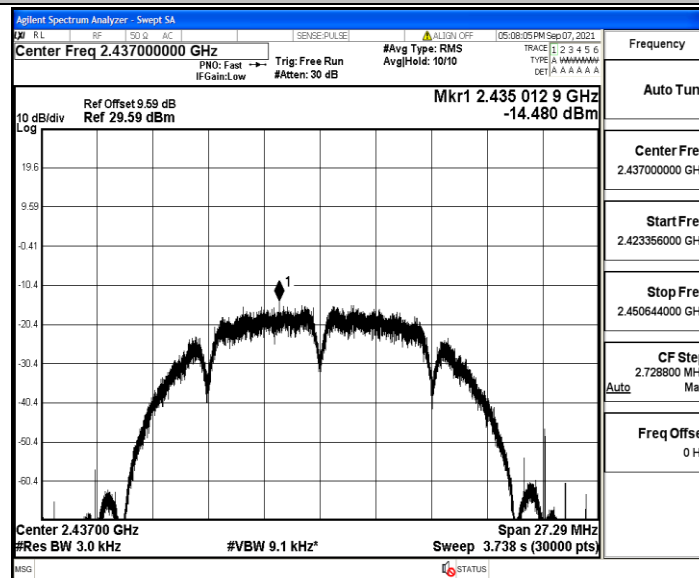
11B_Ant2_2412



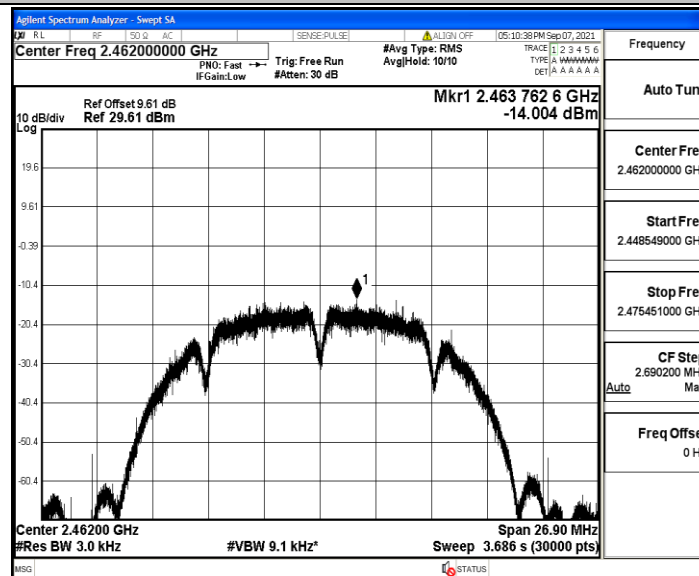
11B_Ant1_2437



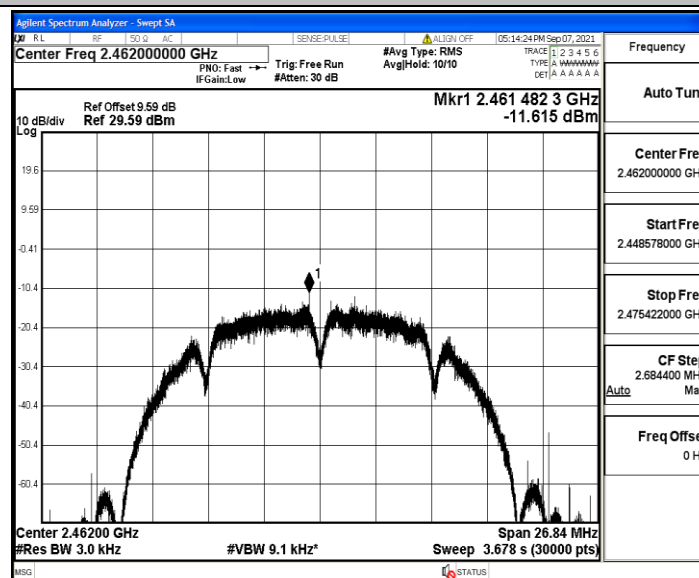
11B_Ant2_2437



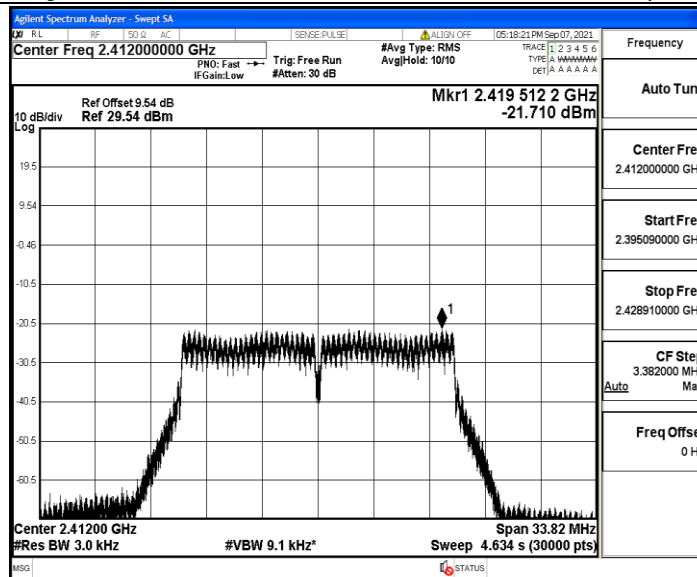
11B_Ant1_2462



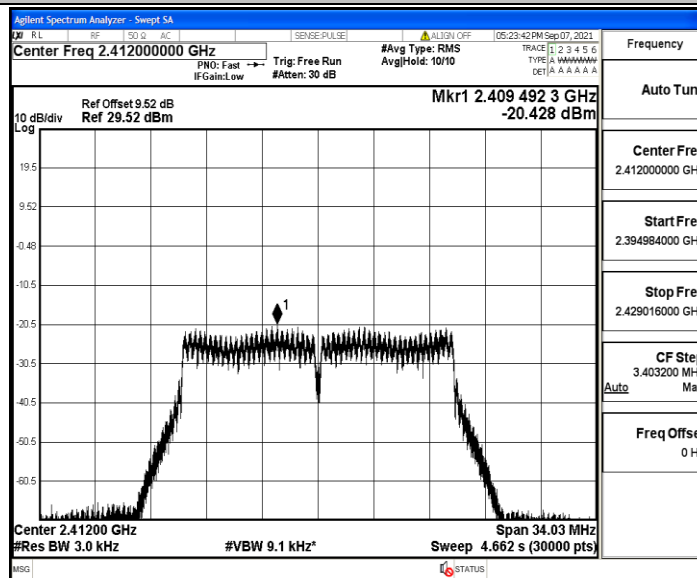
11B_Ant2_2462



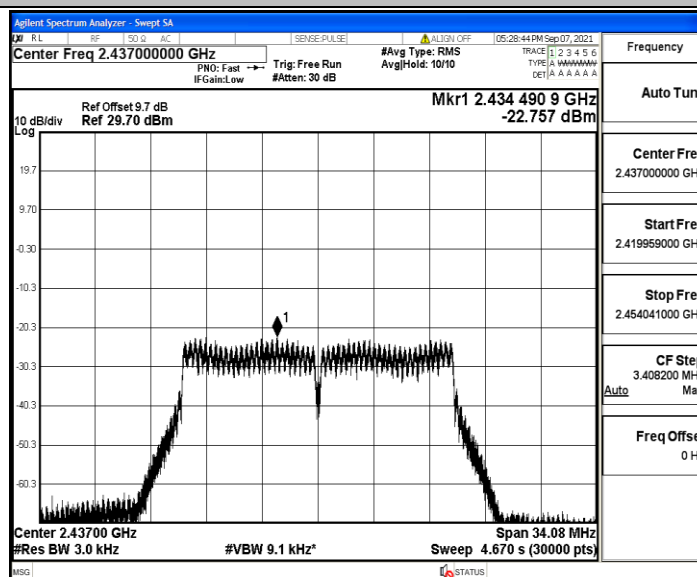
11G_Ant1_2412



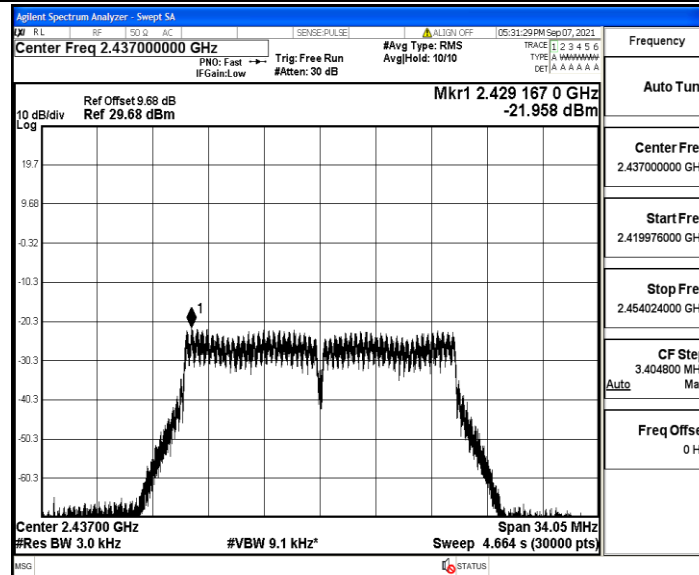
11G_Ant2_2412



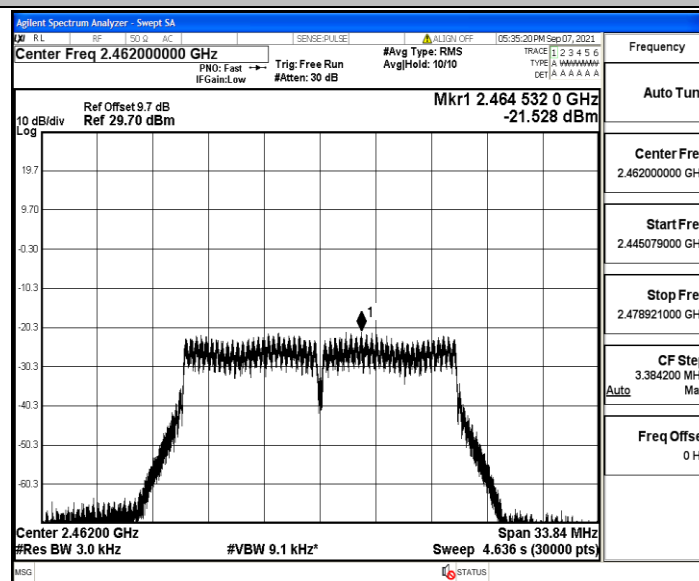
11G_Ant1_2437



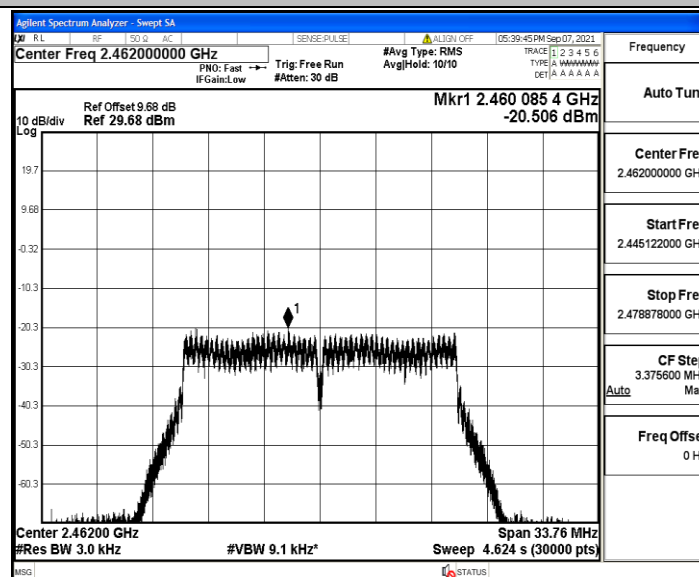
11G_Ant2_2437



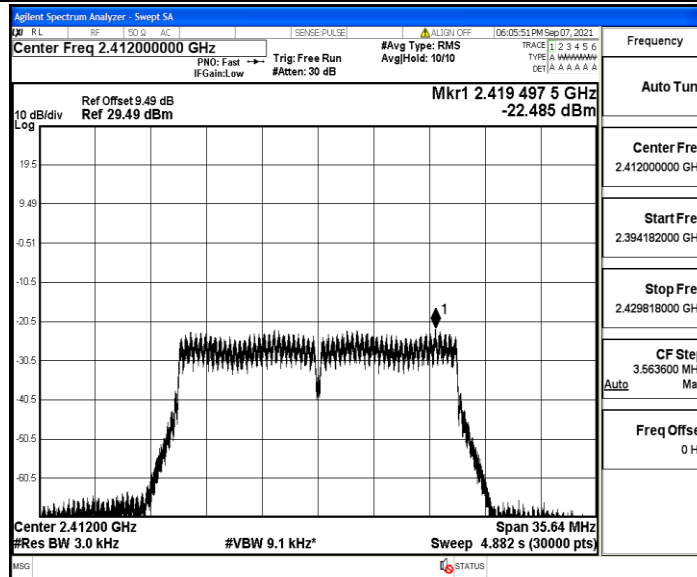
11G_Ant1_2462



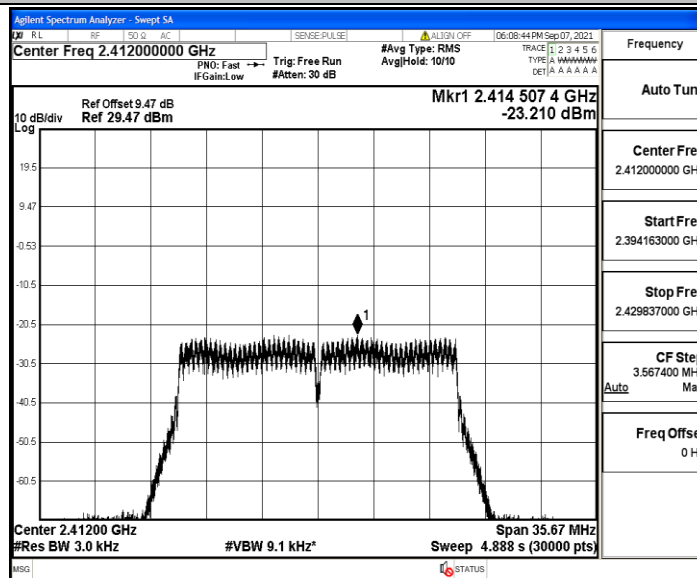
11G_Ant2_2462



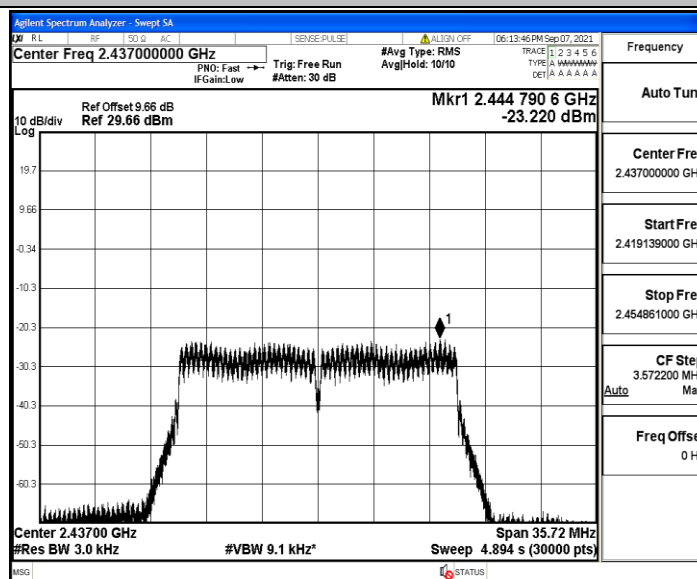
11N20MIMO_Ant1_2412



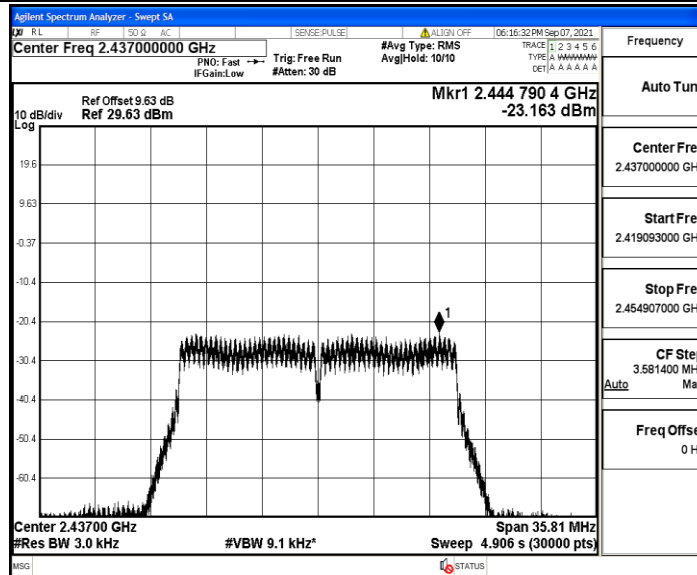
11N20MIMO_Ant2_2412



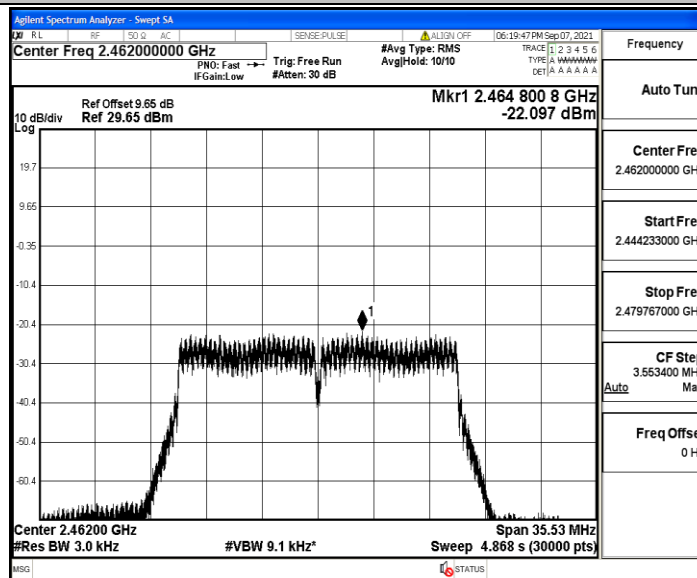
11N20MIMO_Ant1_2437



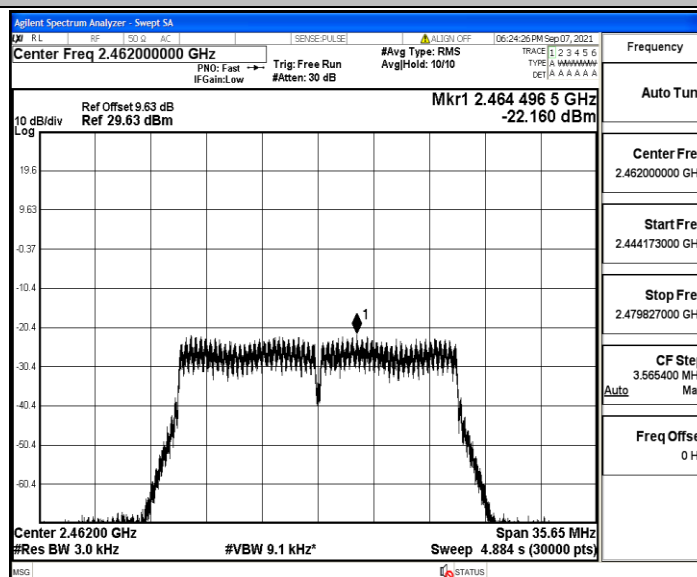
11N20MIMO_Ant2_2437



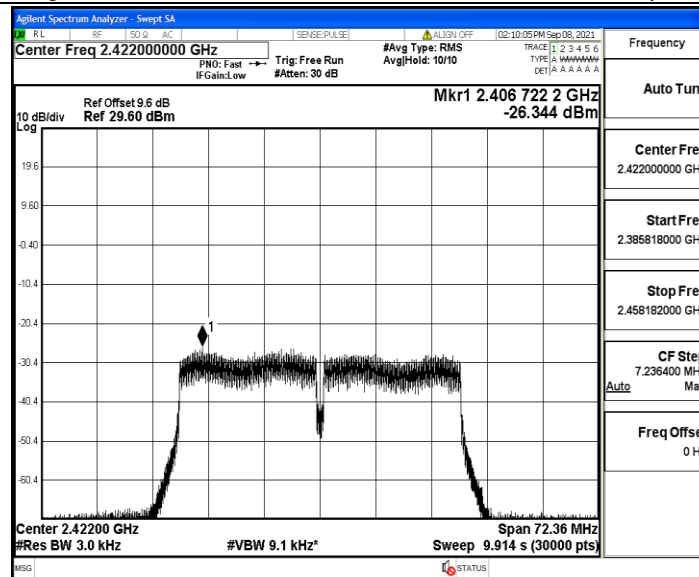
11N20MIMO_Ant1_2462



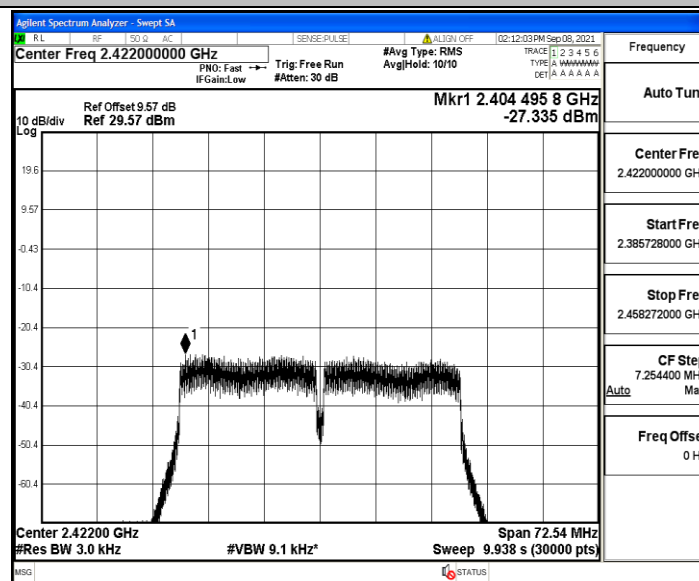
11N20MIMO_Ant2_2462



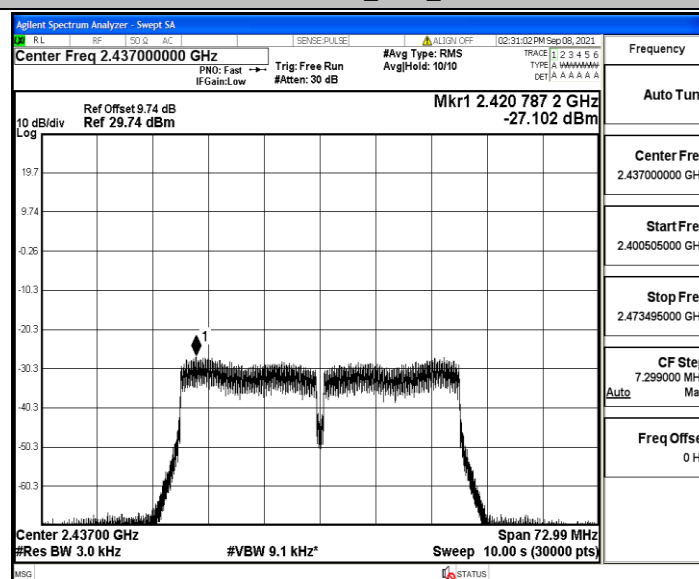
11N40MIMO_Ant1_2422



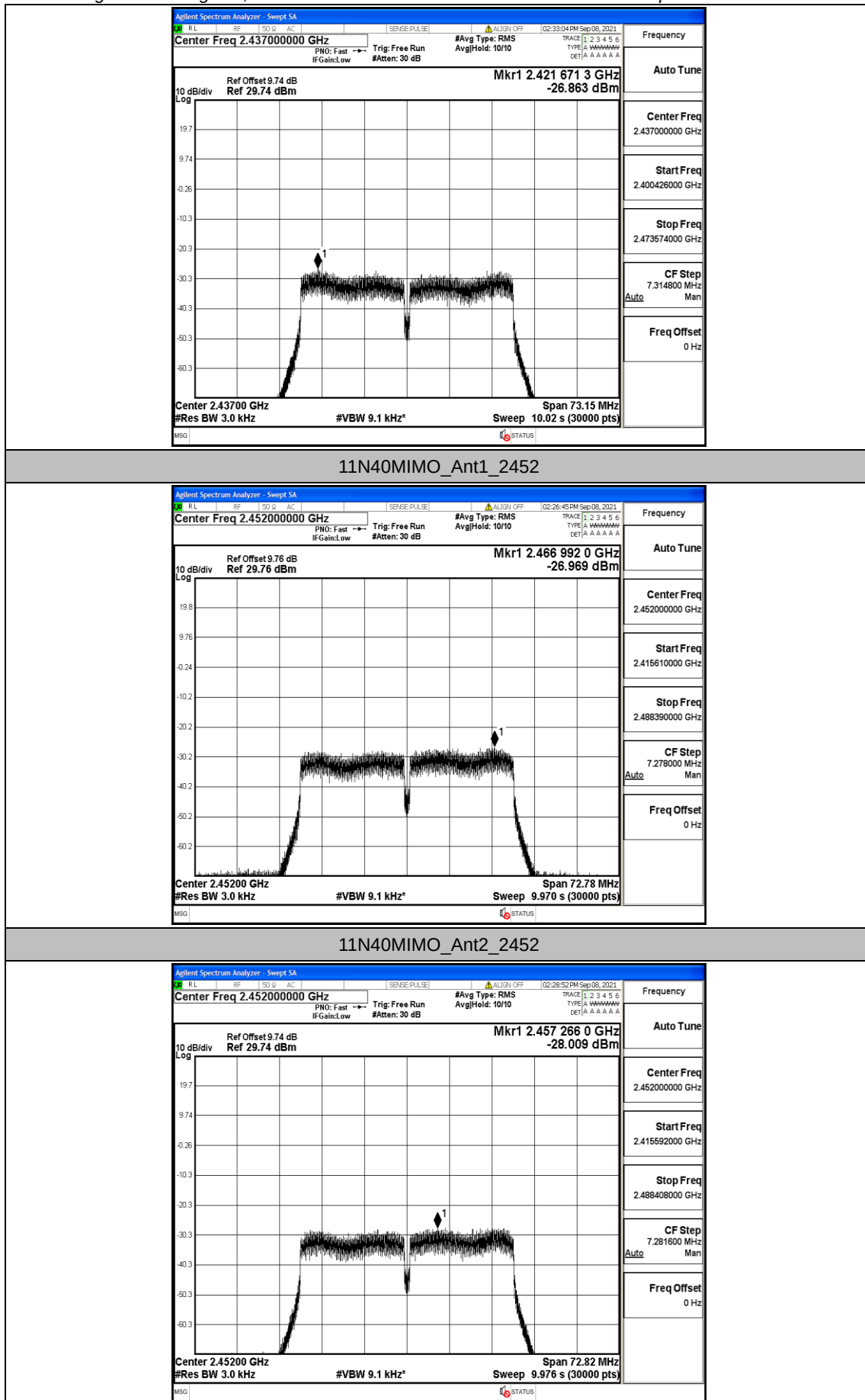
11N40MIMO_Ant2_2422



11N40MIMO_Ant1_2437



11N40MIMO_Ant2_2437



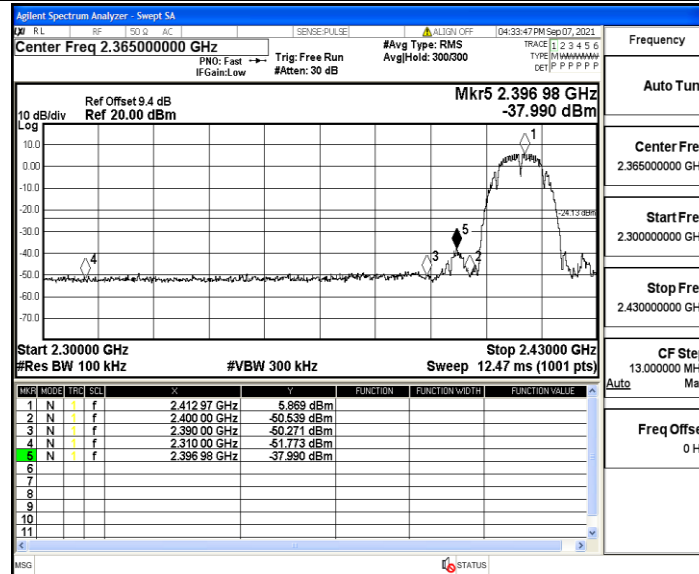
Appendix E: Band edge measurements

Test Result

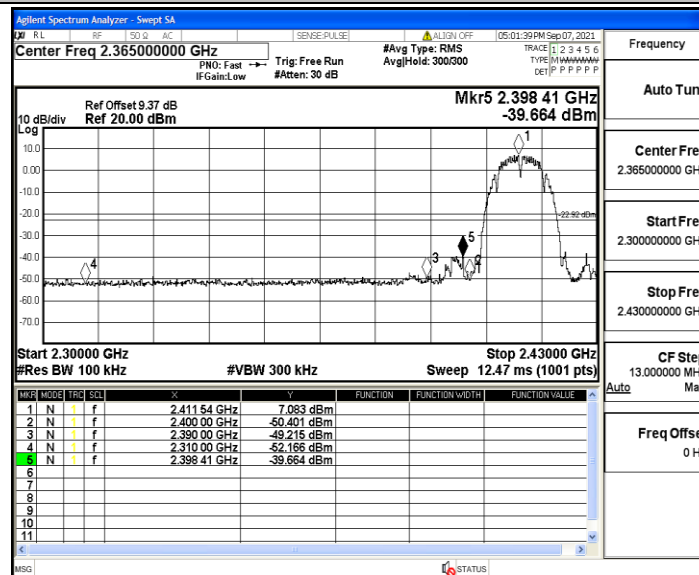
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.87	-37.99	≤-24.13	PASS
	Ant2	Low	2412	7.08	-39.66	≤-22.92	PASS
	Ant1	High	2462	6.27	-46.19	≤-23.73	PASS
	Ant2	High	2462	6.29	-47.81	≤-23.71	PASS
11G	Ant1	Low	2412	-0.36	-41.16	≤-30.36	PASS
	Ant2	Low	2412	0.46	-41.35	≤-29.54	PASS
	Ant1	High	2462	-0.64	-47.92	≤-30.64	PASS
	Ant2	High	2462	-0.27	-48.49	≤-30.27	PASS
11N20MIMO	Ant1	Low	2412	-0.41	-38.85	≤-30.41	PASS
	Ant2	Low	2412	-0.36	-37.41	≤-30.36	PASS
	Ant1	High	2462	-1.23	-48.14	≤-31.23	PASS
	Ant2	High	2462	-1.09	-48.44	≤-31.09	PASS
11N40MIMO	Ant1	Low	2422	-4.06	-41.25	≤-34.06	PASS
	Ant2	Low	2422	-3.58	-43.83	≤-33.58	PASS
	Ant1	High	2452	-3.89	-47.19	≤-33.89	PASS
	Ant2	High	2452	-7.99	-48.5	≤-37.99	PASS

Test Graphs

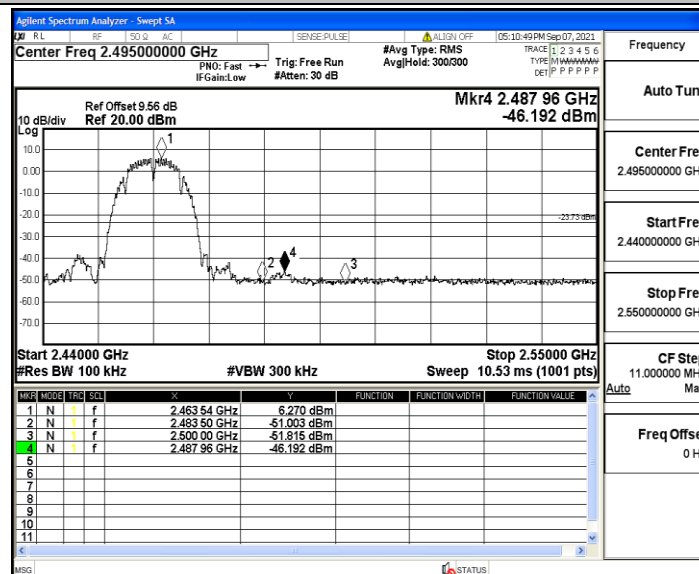
11B_Ant1_Low_2412



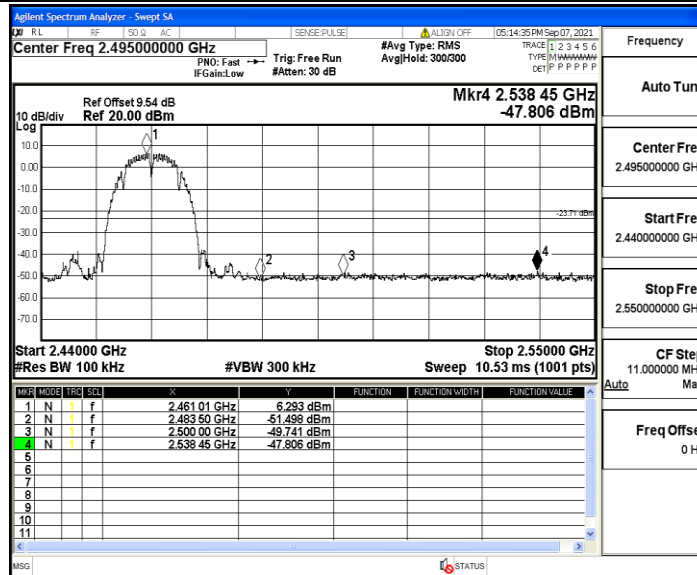
11B_Ant2_Low_2412



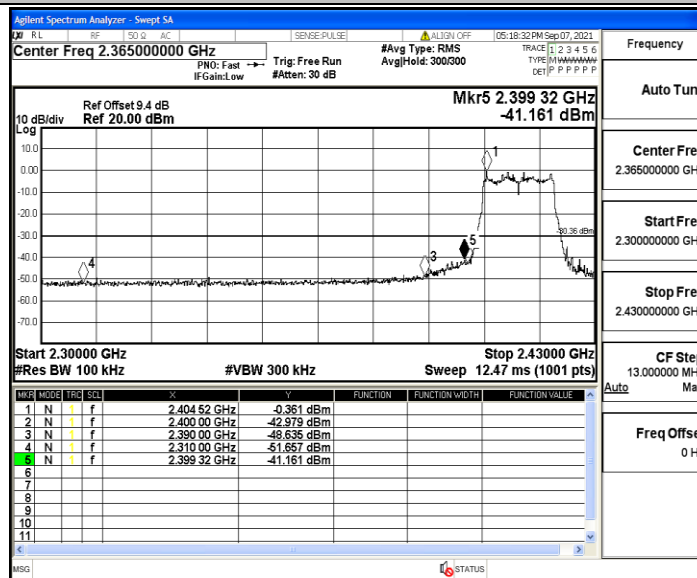
11B_Ant1_High_2462



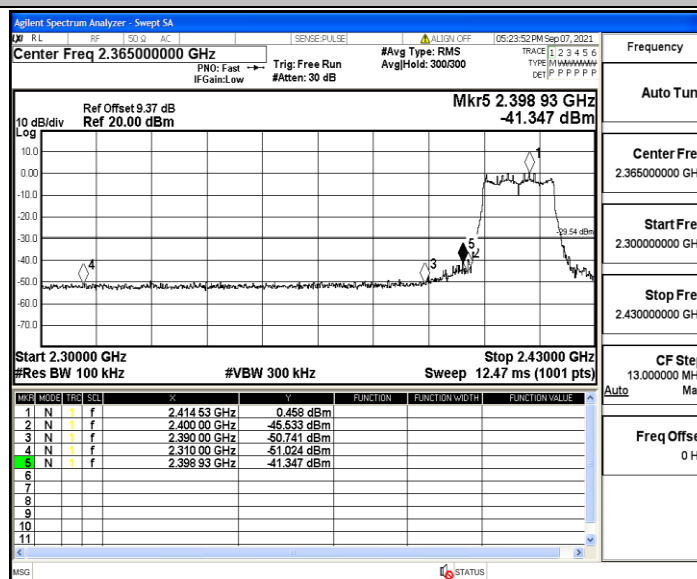
11B_Ant2_High_2462



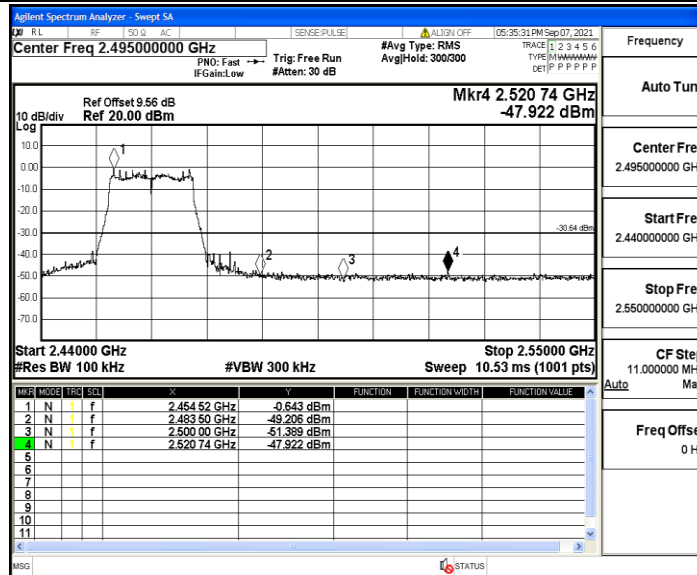
11G_Ant1_Low_2412



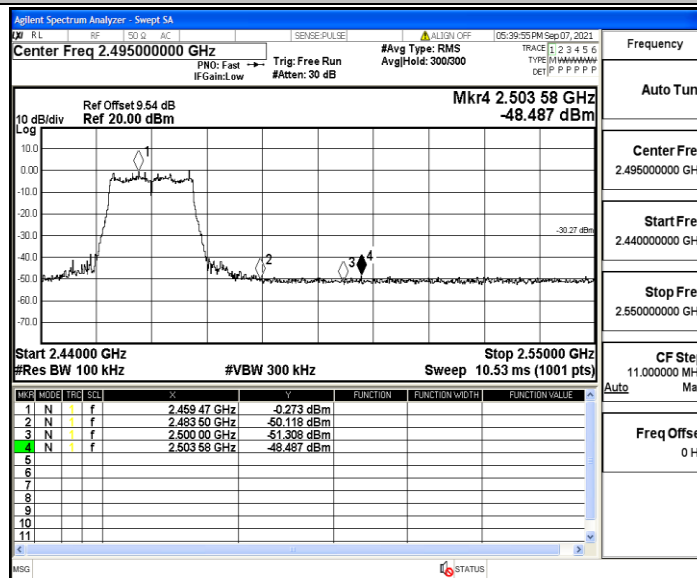
11G_Ant2_Low_2412



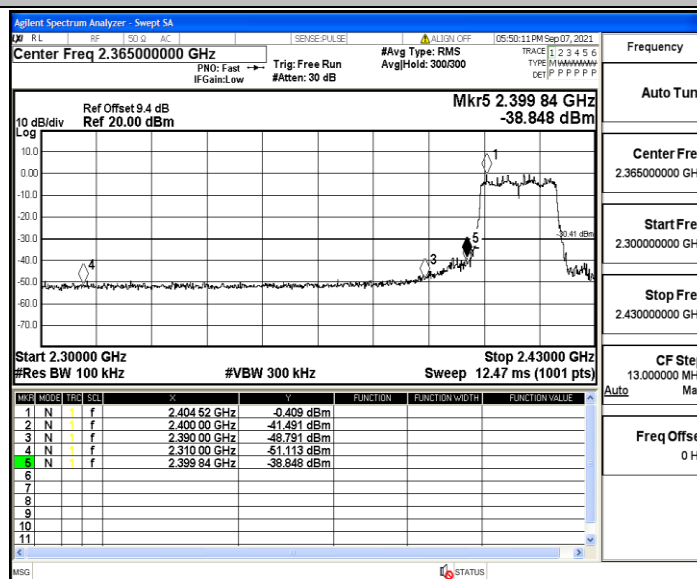
11G_Ant1_High_2462



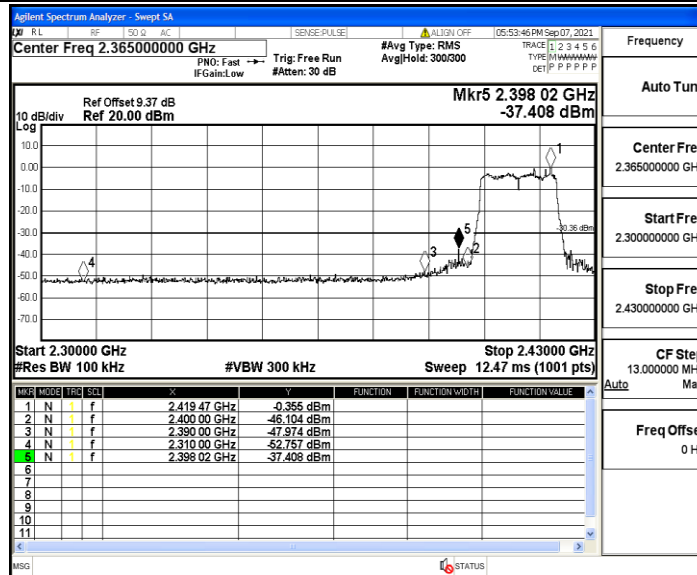
11G_Ant2_High_2462



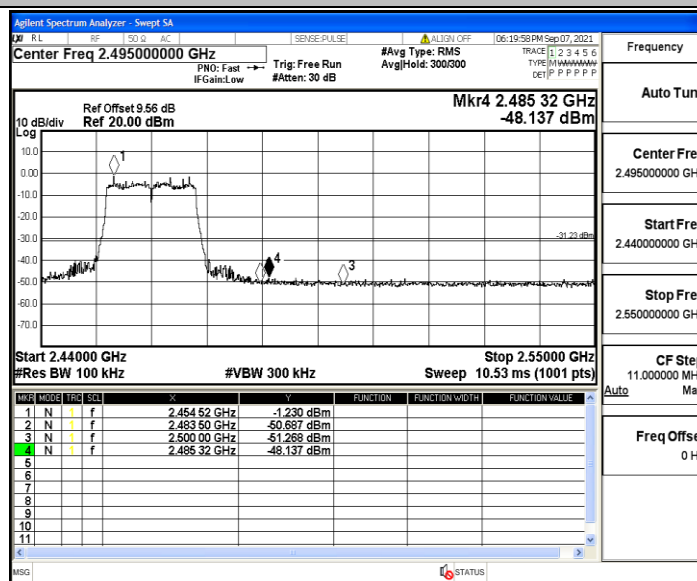
11N20MIMO_Ant1_Low_2412



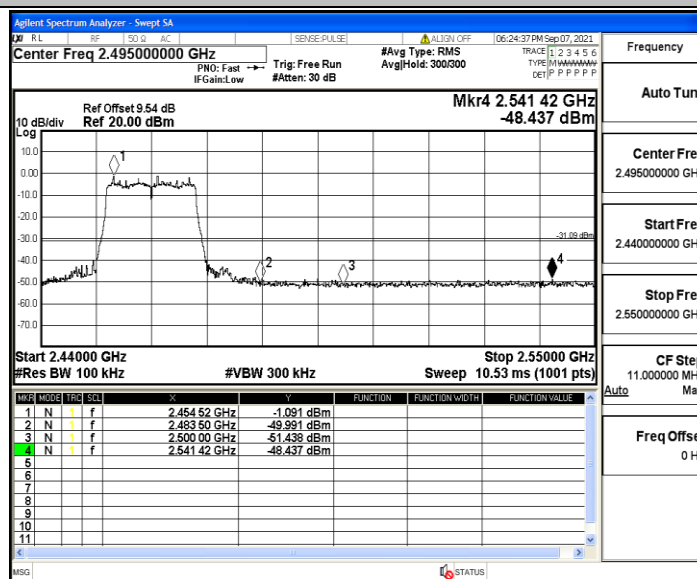
11N20MIMO_Ant2_Low_2412



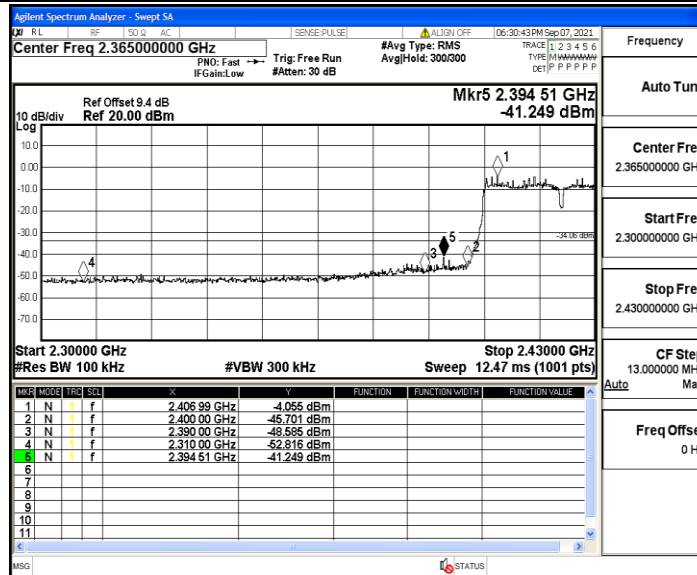
11N20MIMO_Ant1_High_2462



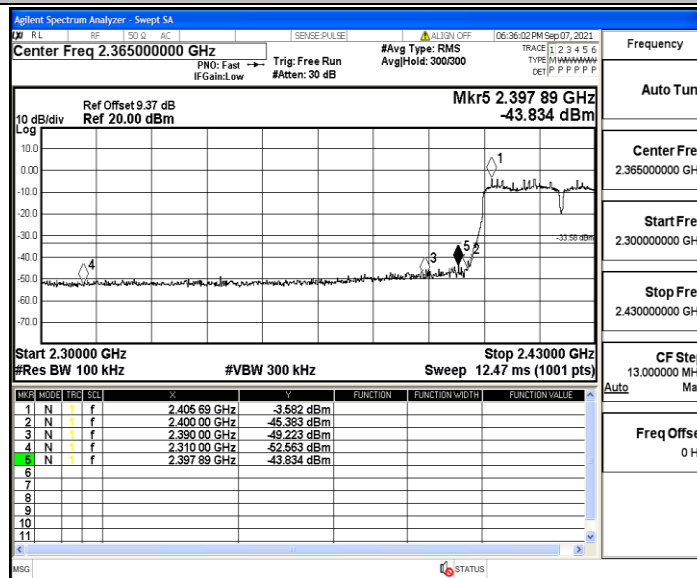
11N20MIMO_Ant2_High_2462



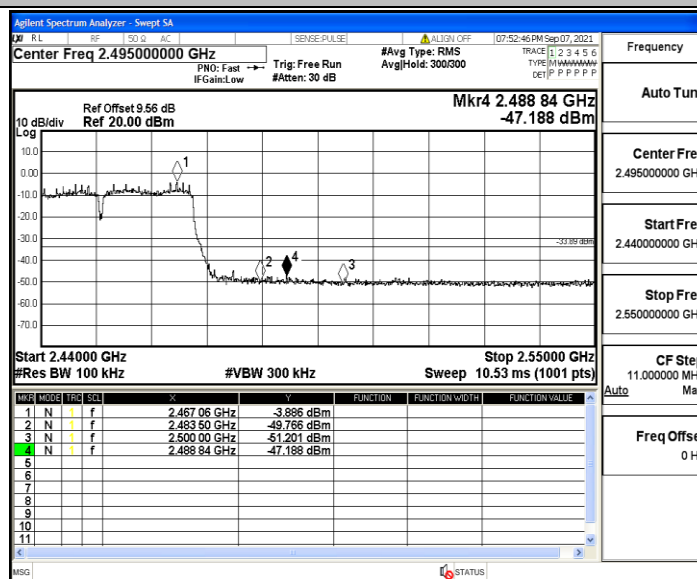
11N40MIMO_Ant1_Low_2422



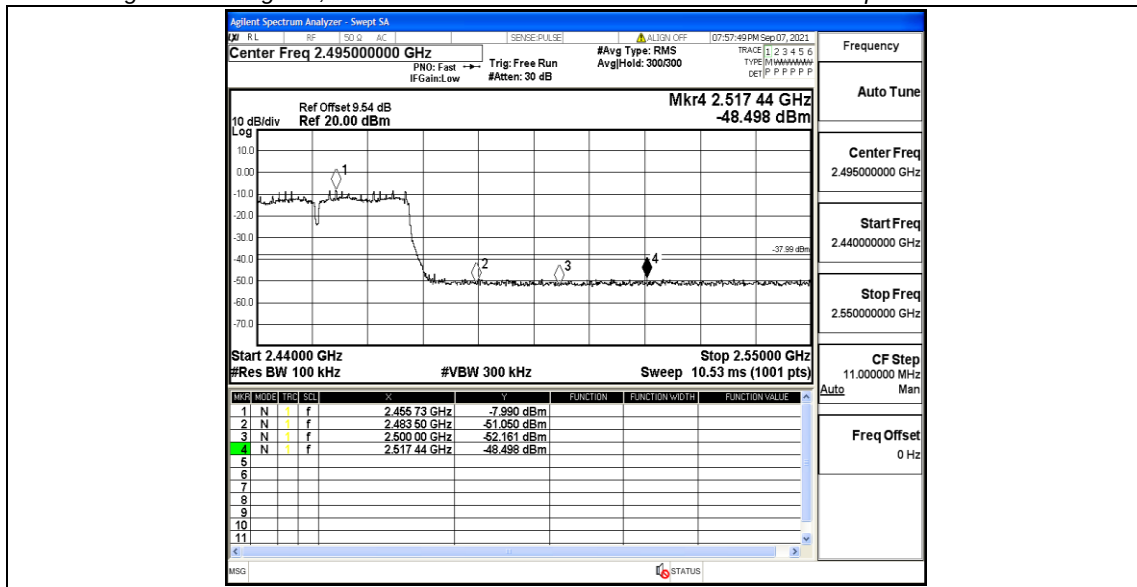
11N40MIMO_Ant2_Low_2422



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	6.04	6.04	---	PASS
			30~1000	6.04	-53.41	≤-23.97	PASS
			1000~26500	6.04	-47.78	≤-23.97	PASS
	Ant2	2412	Reference	6.76	6.76	---	PASS
			30~1000	6.76	-43.18	≤-23.24	PASS
			1000~26500	6.76	-43.78	≤-23.24	PASS
	Ant1	2437	Reference	4.73	4.73	---	PASS
			30~1000	4.73	-54.16	≤-25.27	PASS
			1000~26500	4.73	-48.21	≤-25.27	PASS
	Ant2	2437	Reference	5.16	5.16	---	PASS
			30~1000	5.16	-42.16	≤-24.85	PASS
			1000~26500	5.16	-42.14	≤-24.85	PASS
	Ant1	2462	Reference	5.74	5.74	---	PASS
			30~1000	5.74	-54.81	≤-24.26	PASS
			1000~26500	5.74	-48.52	≤-24.26	PASS
	Ant2	2462	Reference	6.23	6.23	---	PASS
			30~1000	6.23	-44.54	≤-23.77	PASS
			1000~26500	6.23	-45.47	≤-23.77	PASS
11G	Ant1	2412	Reference	-1.36	-1.36	---	PASS
			30~1000	-1.36	-49.91	≤-31.36	PASS
			1000~26500	-1.36	-51.55	≤-31.36	PASS
	Ant2	2412	Reference	0.43	0.43	---	PASS
			30~1000	0.43	-49.18	≤-29.57	PASS
			1000~26500	0.43	-49.97	≤-29.57	PASS
	Ant1	2437	Reference	-1.49	-1.49	---	PASS
			30~1000	-1.49	-50.44	≤-31.49	PASS
			1000~26500	-1.49	-51.1	≤-31.49	PASS
	Ant2	2437	Reference	-0.72	-0.72	---	PASS
			30~1000	-0.72	-50.1	≤-30.72	PASS
			1000~26500	-0.72	-51.25	≤-30.72	PASS
	Ant1	2462	Reference	-1.12	-1.12	---	PASS
			30~1000	-1.12	-50.82	≤-31.12	PASS
			1000~26500	-1.12	-51.02	≤-31.12	PASS
	Ant2	2462	Reference	-1.17	-1.17	---	PASS
			30~1000	-1.17	-51.22	≤-31.17	PASS
			1000~26500	-1.17	-51.48	≤-31.17	PASS
11N20MIMO	Ant1	2412	Reference	-0.70	-0.70	---	PASS
			30~1000	-0.70	-50.07	≤-30.7	PASS
			1000~26500	-0.70	-51.72	≤-30.7	PASS
	Ant2	2412	Reference	-3.64	-3.64	---	PASS

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
			30~1000	-3.64	-51.48	≤-33.64	PASS
			1000~26500	-3.64	-51.17	≤-33.64	PASS
	Ant1	2437	Reference	-2.06	-2.06	---	PASS
			30~1000	-2.06	-50.45	≤-32.06	PASS
			1000~26500	-2.06	-51.34	≤-32.06	PASS
	Ant2	2437	Reference	-2.64	-2.64	---	PASS
			30~1000	-2.64	-51.71	≤-32.64	PASS
			1000~26500	-2.64	-51.28	≤-32.64	PASS
	Ant1	2462	Reference	-2.44	-2.44	---	PASS
			30~1000	-2.44	-50.49	≤-32.44	PASS
			1000~26500	-2.44	-51.28	≤-32.44	PASS
	Ant2	2462	Reference	-3.94	-3.94	---	PASS
			30~1000	-3.94	-52.56	≤-33.94	PASS
			1000~26500	-3.94	-51.65	≤-33.94	PASS
11N40MIMO	Ant1	2422	Reference	-5.23	-5.23	---	PASS
			30~1000	-5.23	-49.09	≤-35.23	PASS
			1000~26500	-5.23	-52.1	≤-35.23	PASS
	Ant2	2422	Reference	-7.40	-7.40	---	PASS
			30~1000	-7.40	-54.46	≤-37.4	PASS
			1000~26500	-7.40	-52.54	≤-37.4	PASS
	Ant1	2437	Reference	-4.78	-4.78	---	PASS
			30~1000	-4.78	-49.11	≤-34.78	PASS
			1000~26500	-4.78	-51.88	≤-34.78	PASS
	Ant2	2437	Reference	-8.42	-8.42	---	PASS
			30~1000	-8.42	-54.33	≤-38.42	PASS
			1000~26500	-8.42	-51.74	≤-38.42	PASS
	Ant1	2452	Reference	-4.42	-4.42	---	PASS
			30~1000	-4.42	-49.57	≤-34.42	PASS
			1000~26500	-4.42	-51.18	≤-34.42	PASS
	Ant2	2452	Reference	-7.72	-7.72	---	PASS
			30~1000	-7.72	-55.6	≤-37.72	PASS
			1000~26500	-7.72	-52.17	≤-37.72	PASS