

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

Product Name: VITURE One Neckband

Trade Mark: VITURE

Test Model: V1218

FCC ID: 2BBOT-V1218

### Environmental Conditions

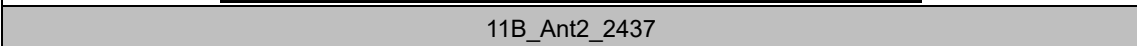
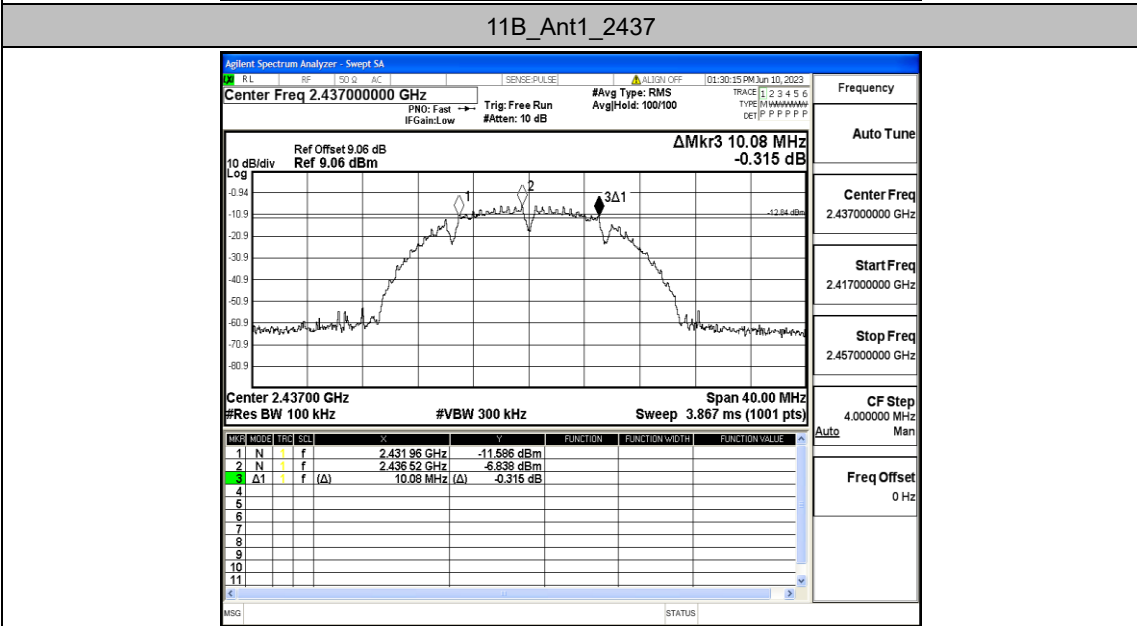
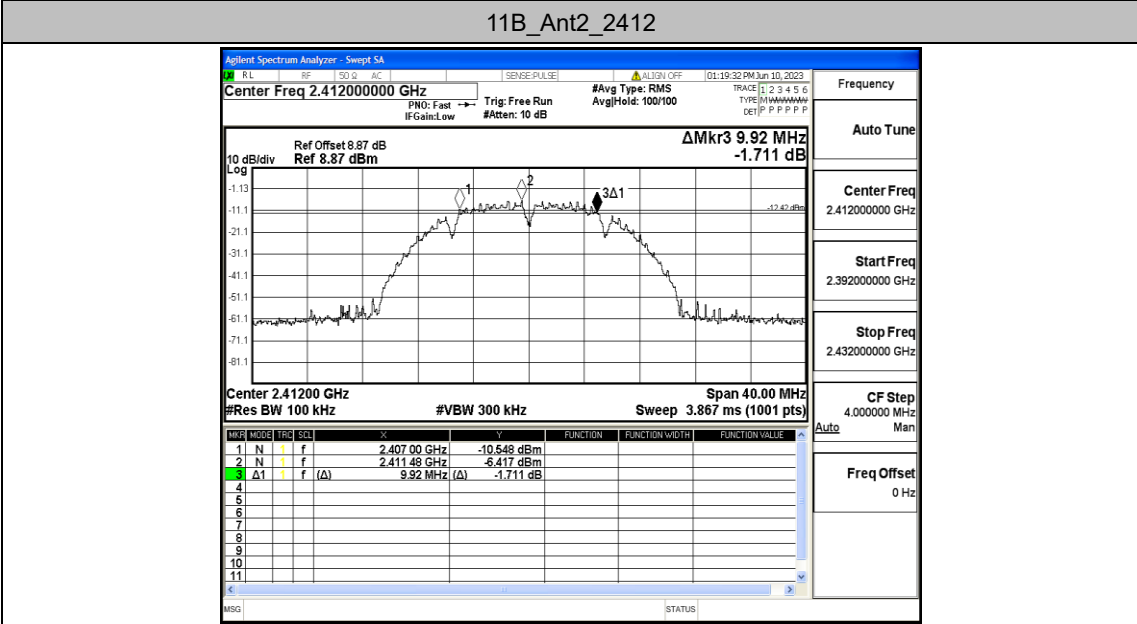
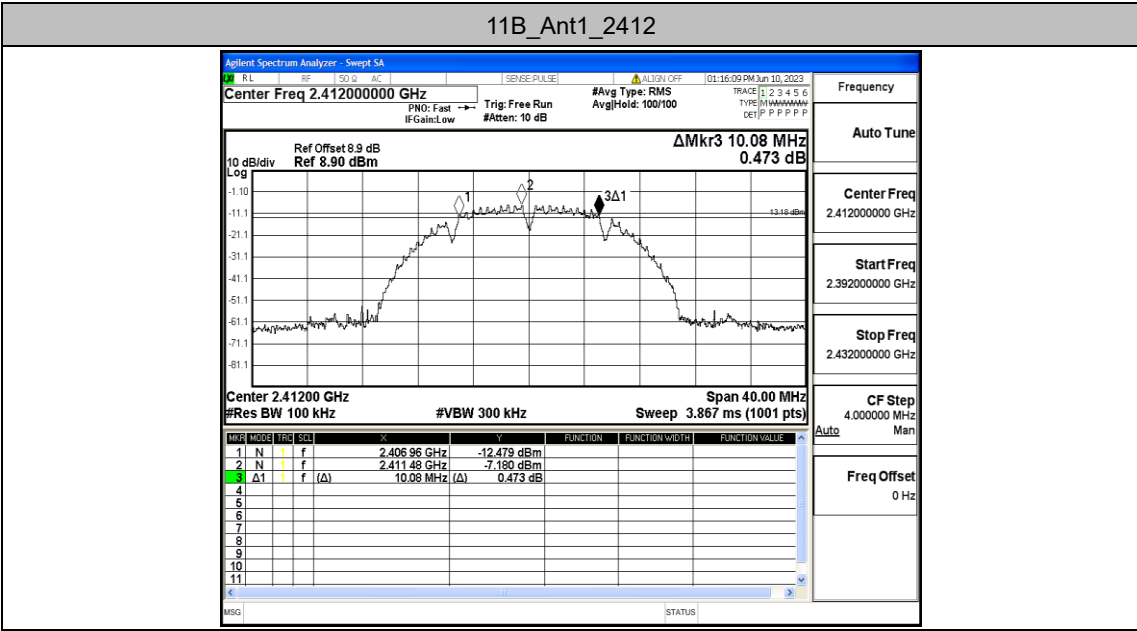
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

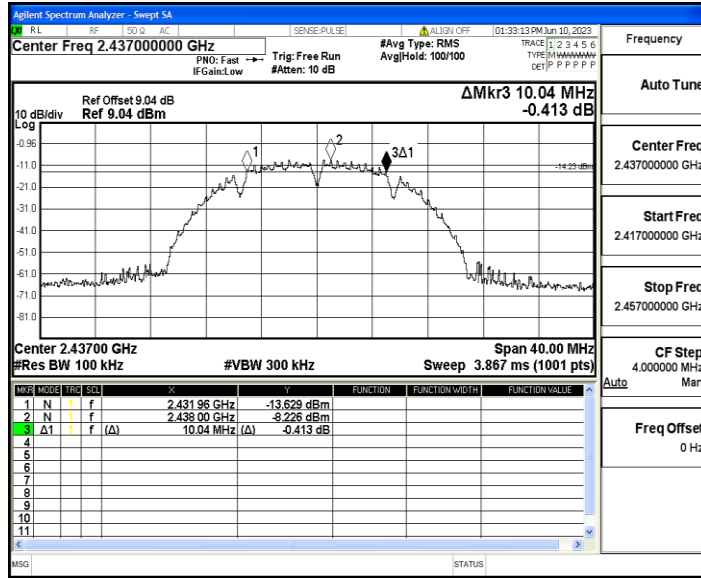
## Appendix A: DTS Bandwidth

### Test Result

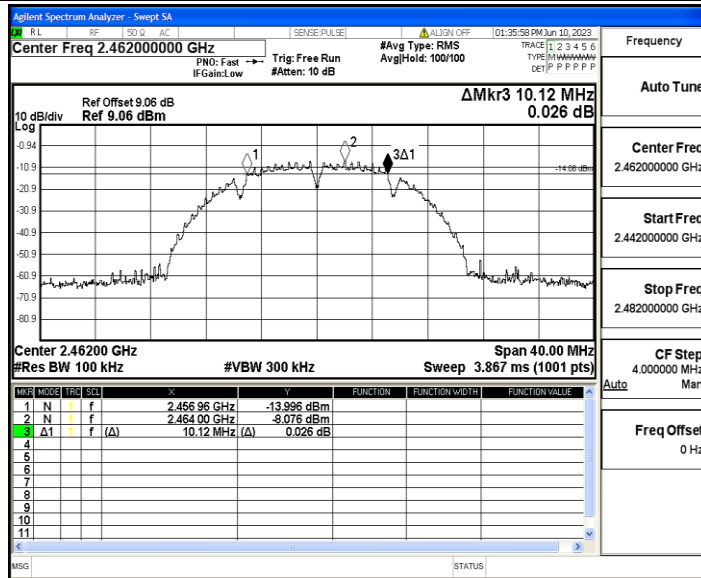
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.080	2406.960	2417.040	0.5	PASS
	Ant2	2412	9.920	2407.000	2416.920	0.5	PASS
	Ant1	2437	10.080	2431.960	2442.040	0.5	PASS
	Ant2	2437	10.040	2431.960	2442.000	0.5	PASS
	Ant1	2462	10.120	2456.960	2467.080	0.5	PASS
	Ant2	2462	10.080	2456.960	2467.040	0.5	PASS
11G	Ant1	2412	16.280	2403.880	2420.160	0.5	PASS
	Ant2	2412	16.320	2403.840	2420.160	0.5	PASS
	Ant1	2437	15.640	2428.880	2444.520	0.5	PASS
	Ant2	2437	15.640	2428.880	2444.520	0.5	PASS
	Ant1	2462	16.280	2453.880	2470.160	0.5	PASS
	Ant2	2462	15.680	2454.480	2470.160	0.5	PASS
11N20MIMO	Ant1	2412	17.120	2403.560	2420.680	0.5	PASS
	Ant2	2412	17.120	2403.600	2420.720	0.5	PASS
	Ant1	2437	16.160	2428.440	2444.600	0.5	PASS
	Ant2	2437	16.120	2428.440	2444.560	0.5	PASS
	Ant1	2462	16.320	2454.440	2470.760	0.5	PASS
	Ant2	2462	16.280	2454.480	2470.760	0.5	PASS
11N40MIMO	Ant1	2422	33.920	2405.680	2439.600	0.5	PASS
	Ant2	2422	35.120	2404.480	2439.600	0.5	PASS
	Ant1	2437	35.040	2419.480	2454.520	0.5	PASS
	Ant2	2437	35.040	2419.480	2454.520	0.5	PASS
	Ant1	2452	35.520	2434.080	2469.600	0.5	PASS
	Ant2	2452	35.520	2434.080	2469.600	0.5	PASS

Test Graphs

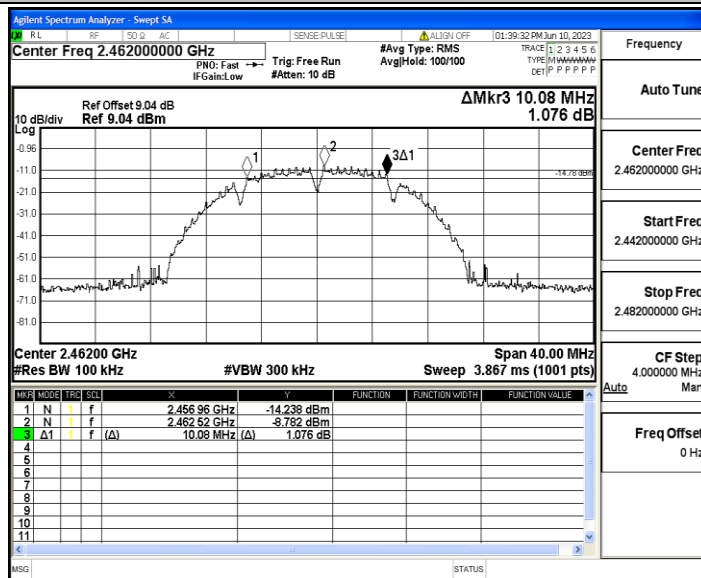




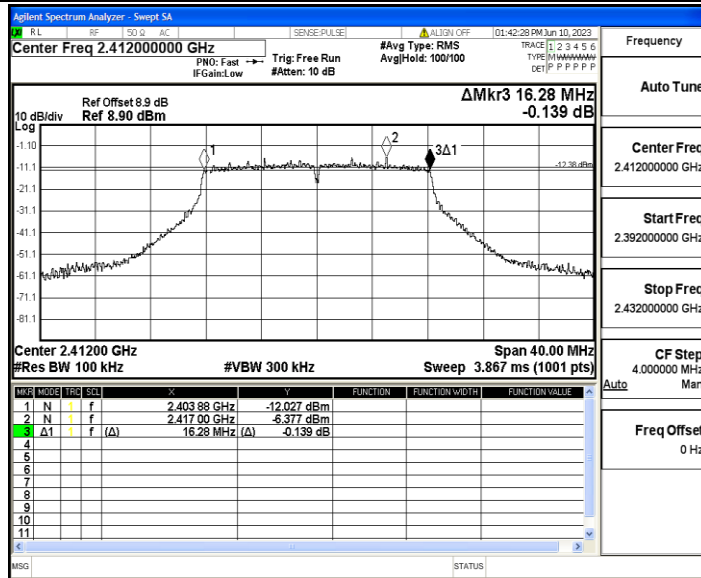
11B\_Ant1\_2462



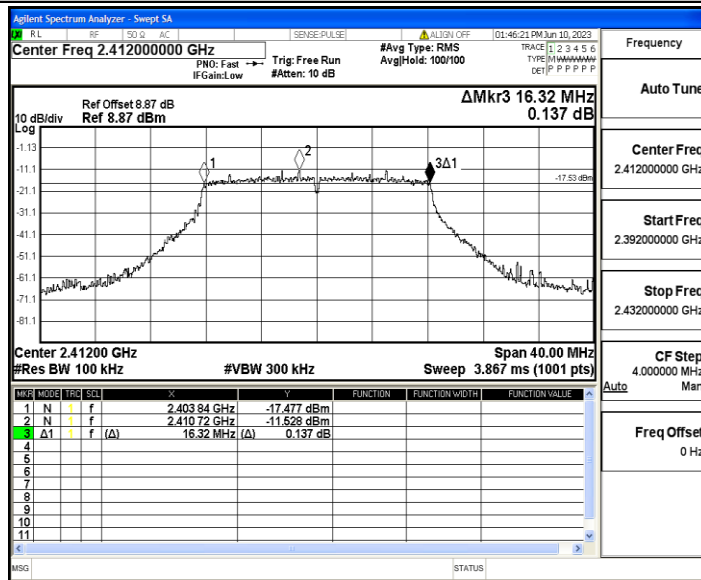
11B\_Ant2\_2462



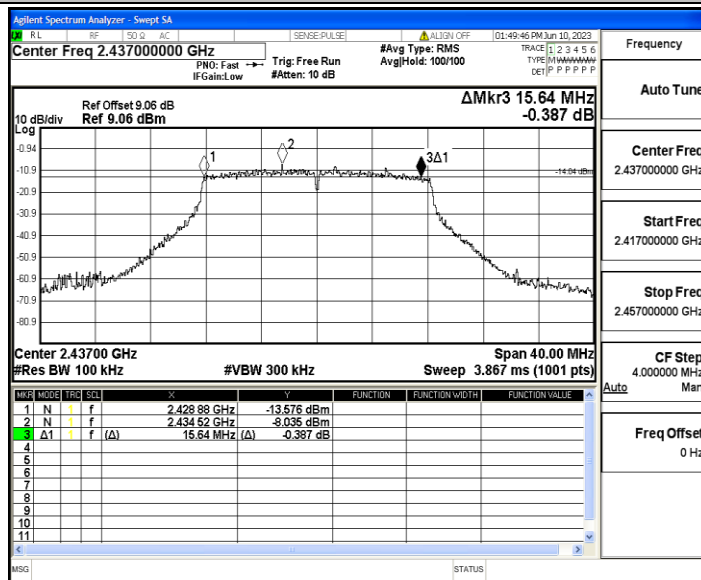
11G\_Ant1\_2412



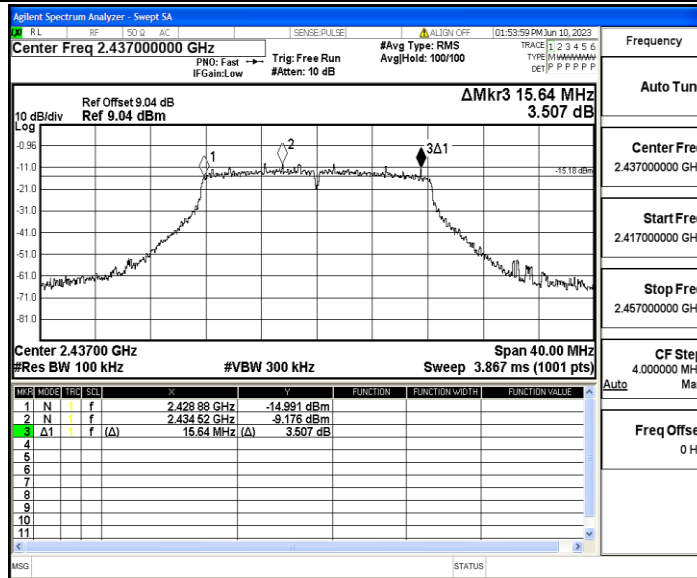
11G\_Ant2\_2412



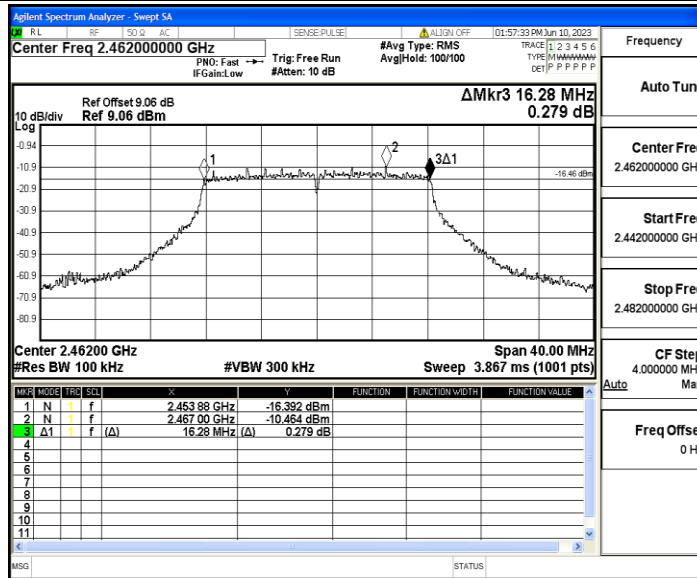
11G\_Ant1\_2437



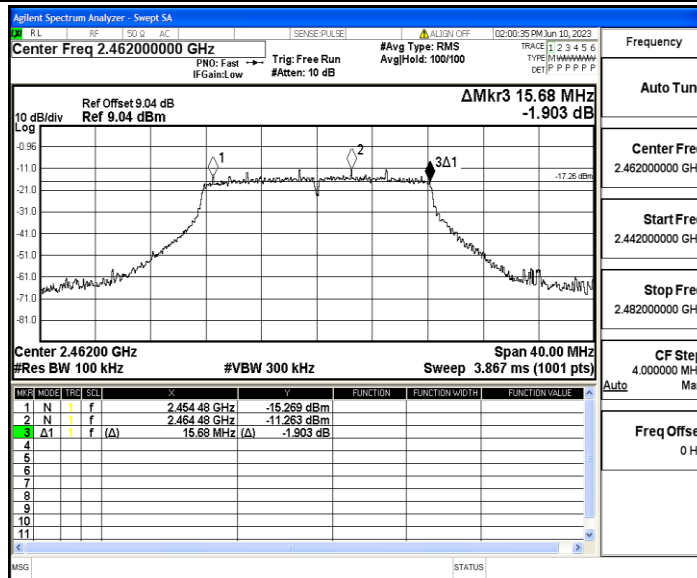
11G\_Ant2\_2437



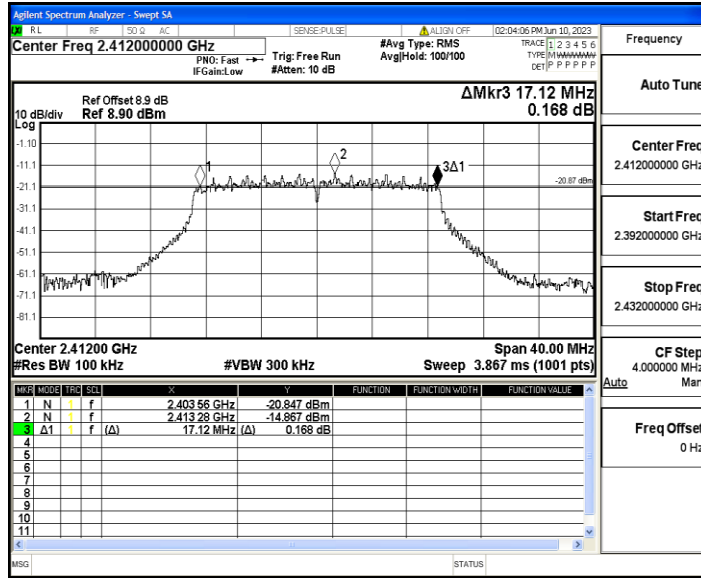
11G\_Ant1\_2462



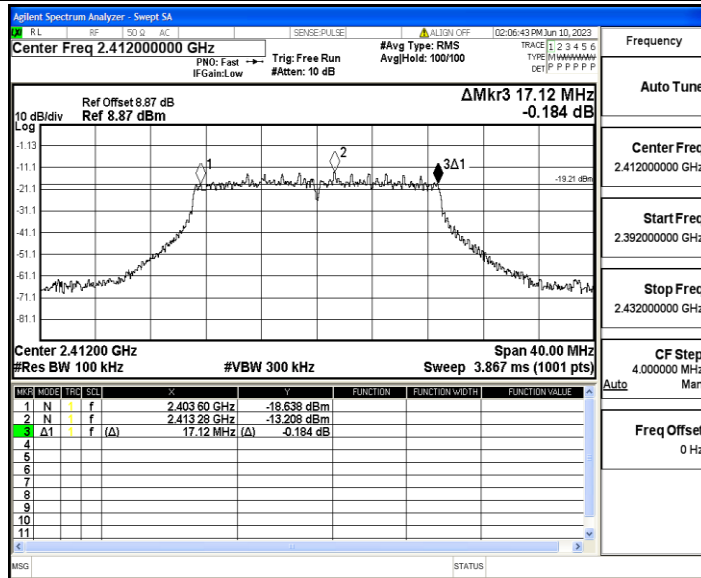
11G\_Ant2\_2462



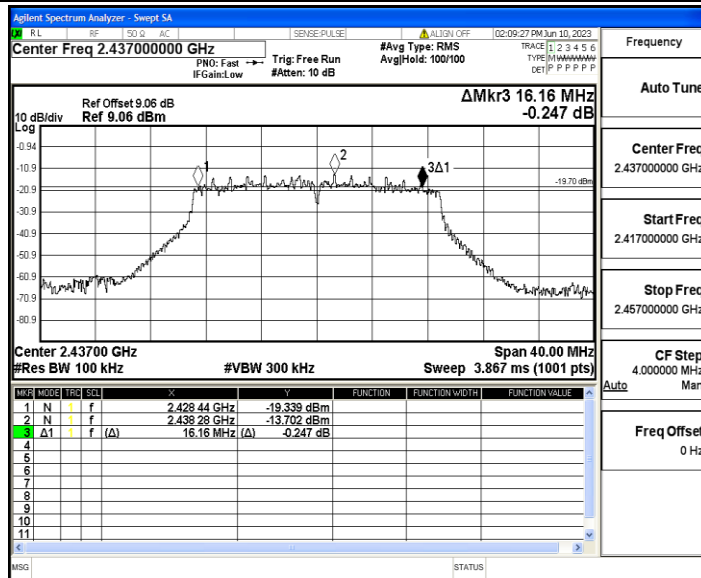
11N20MIMO\_Ant1\_2412



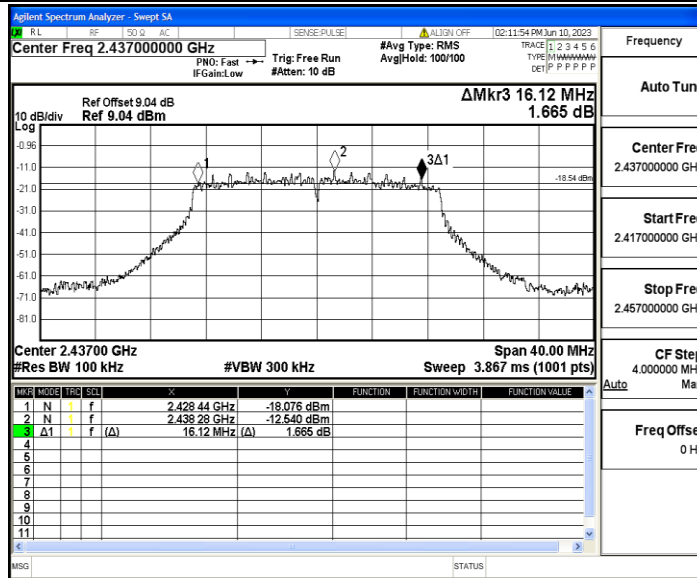
11N20MIMO\_Ant2\_2412



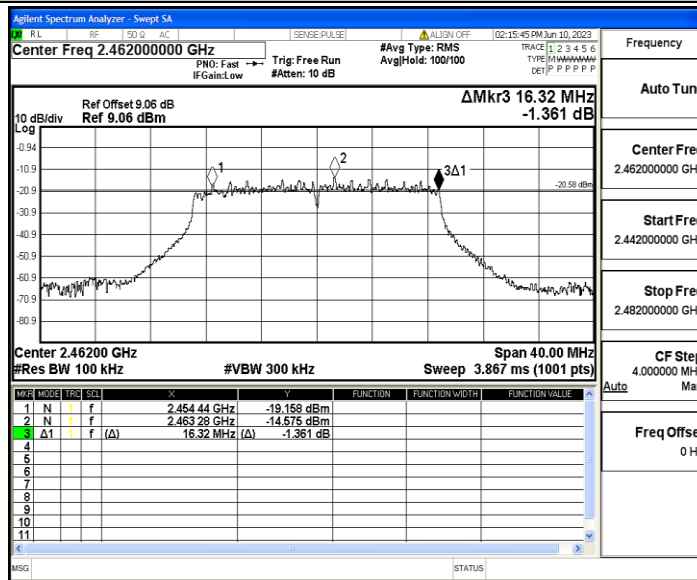
11N20MIMO\_Ant1\_2437



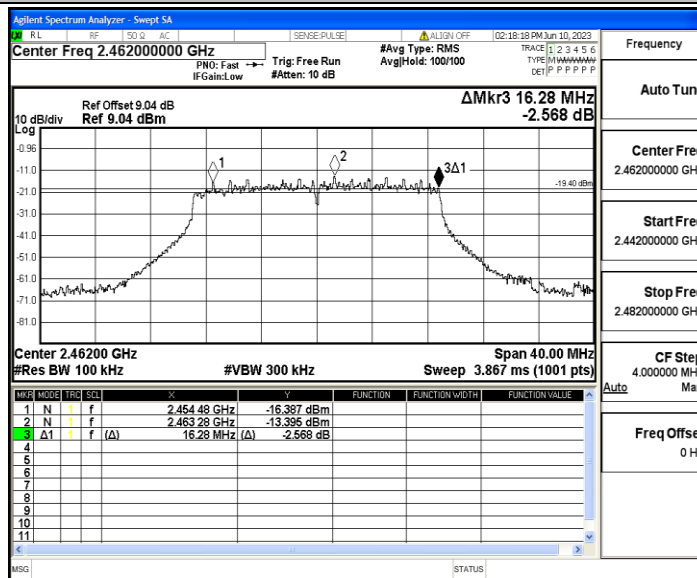
11N20MIMO\_Ant2\_2437



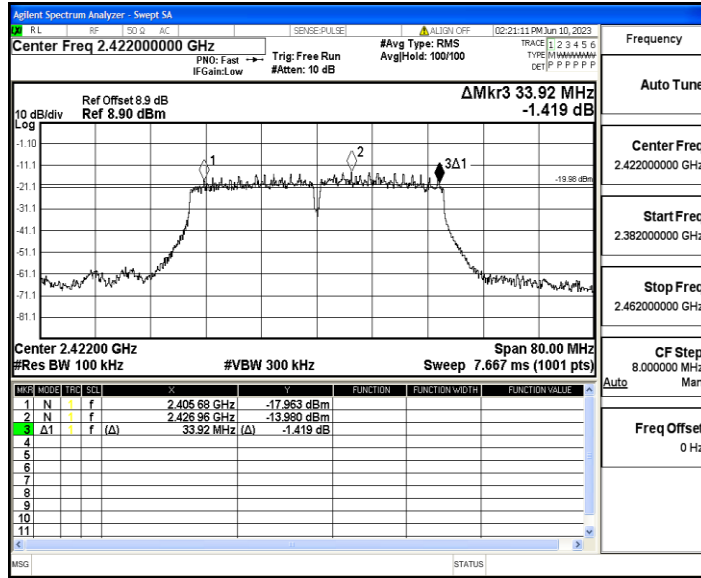
11N20MIMO\_Ant1\_2462



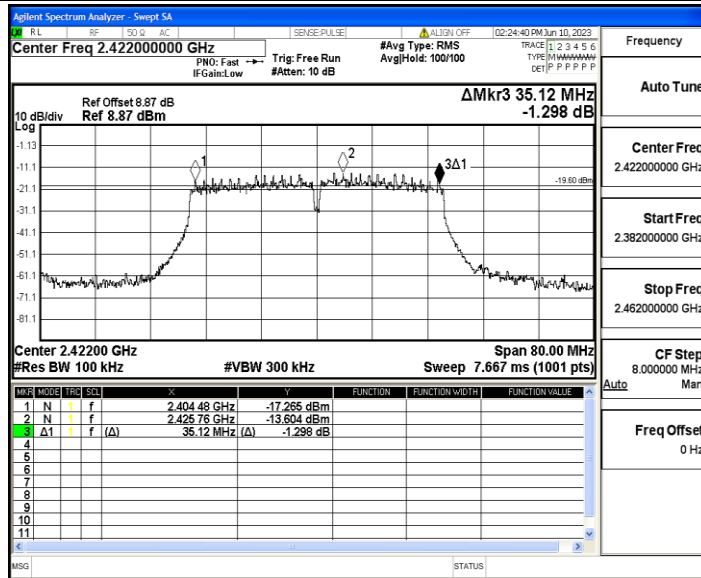
11N20MIMO\_Ant2\_2462



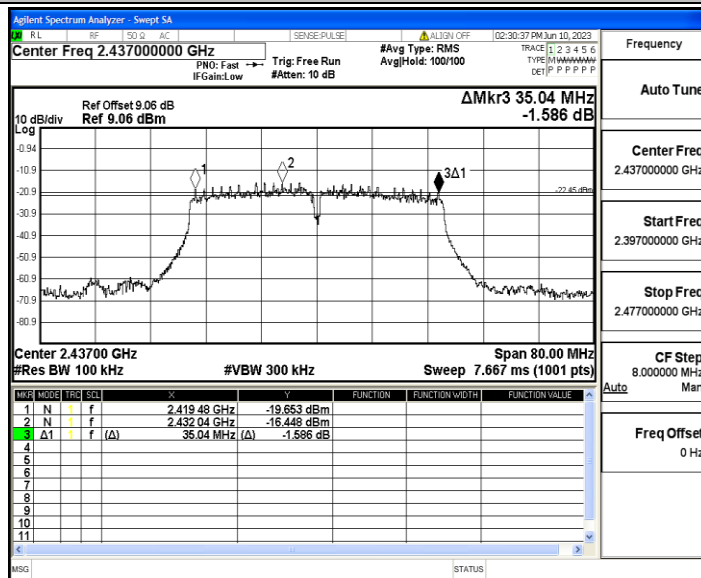
11N40MIMO\_Ant1\_2422



11N40MIMO\_Ant2\_2422

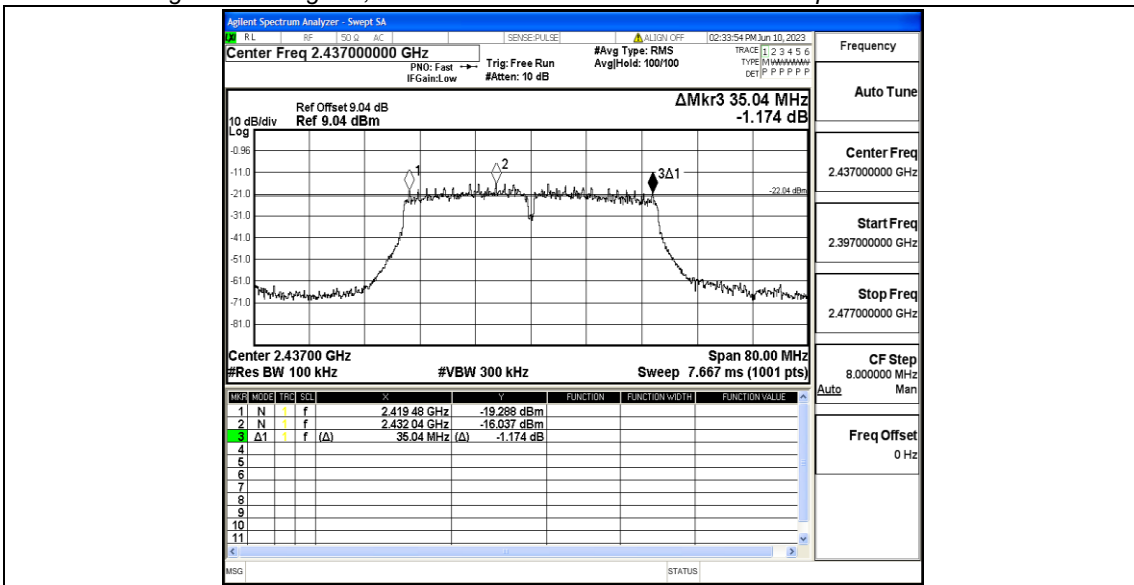


11N40MIMO\_Ant1\_2437

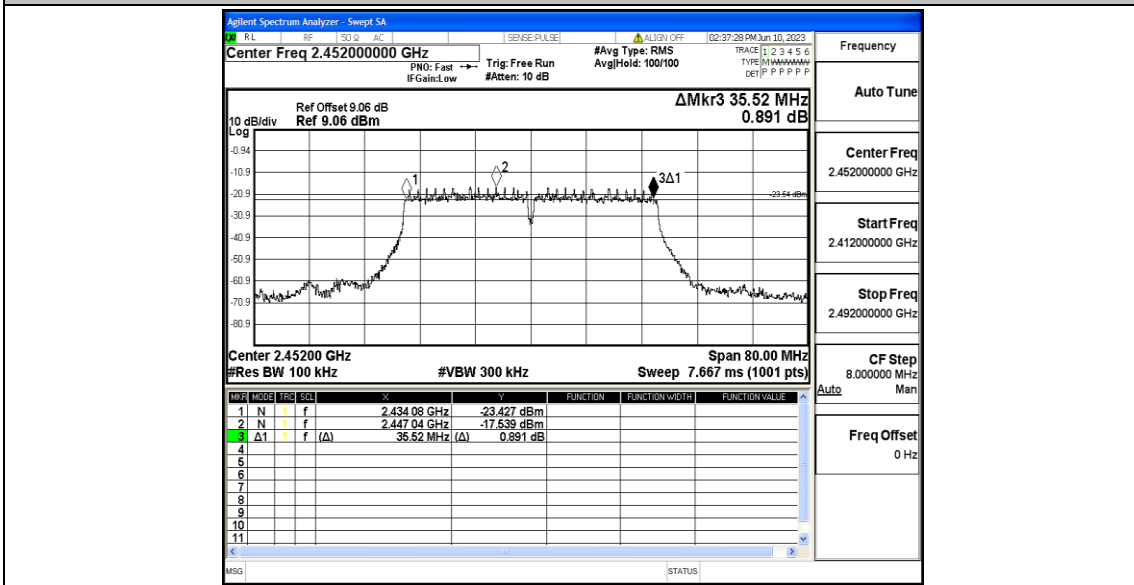


11N40MIMO\_Ant2\_2437

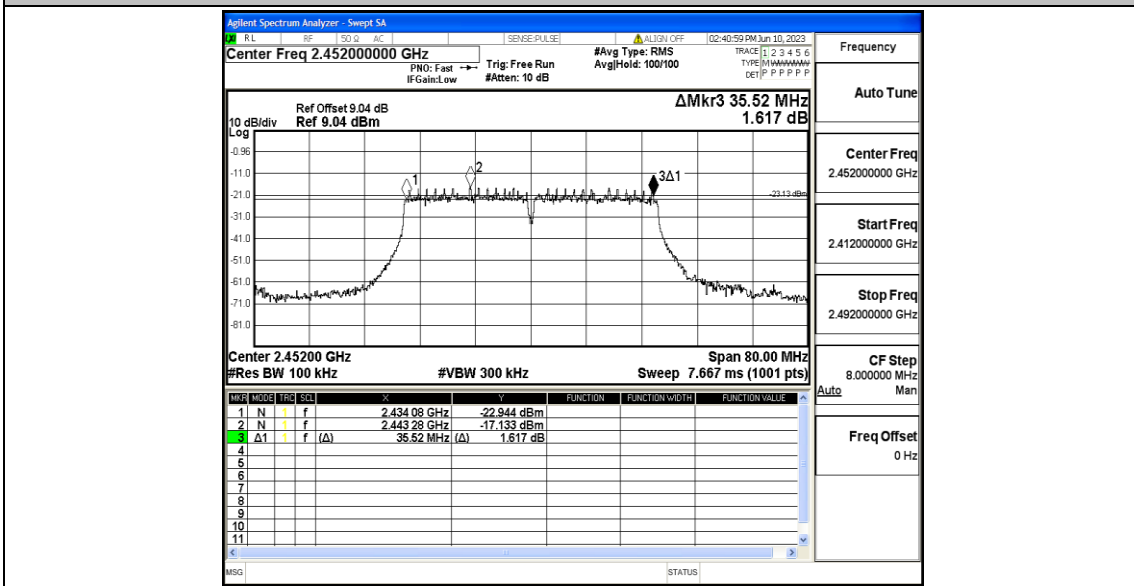




11N40MIMO\_Ant1\_2452



11N40MIMO\_Ant2\_2452

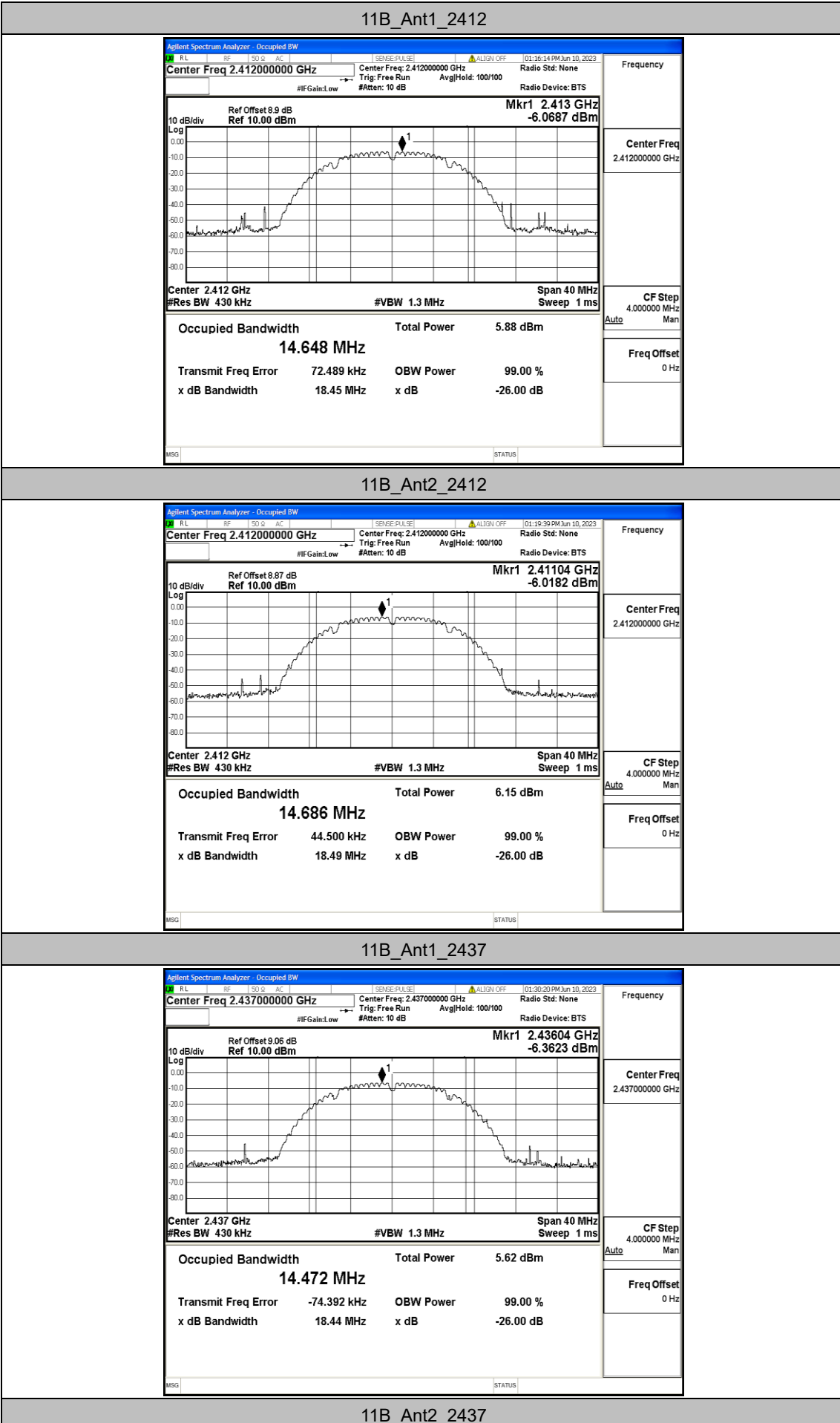


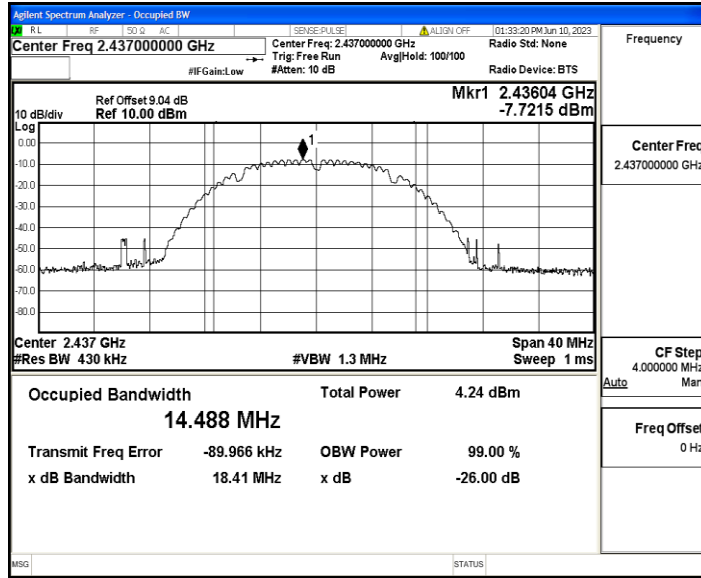
## Appendix B: Occupied Channel Bandwidth

### Test Result

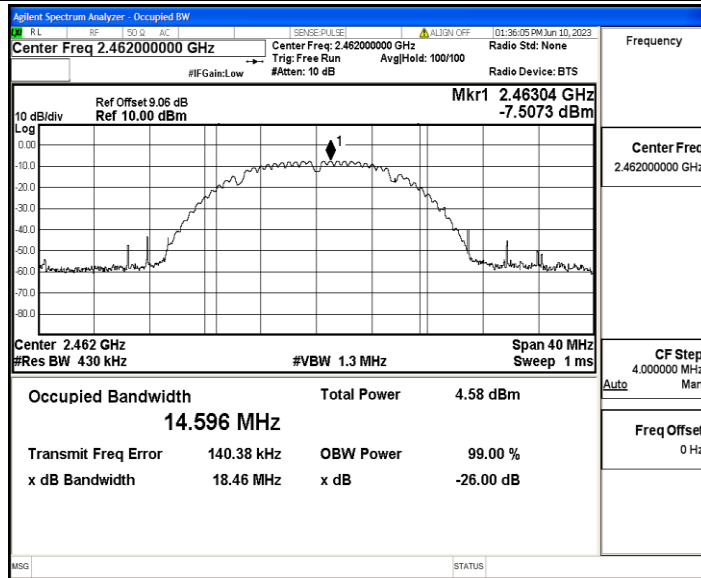
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.648	2404.7485	2419.3965	---	---
	Ant2	2412	14.686	2404.7015	2419.3875	---	---
	Ant1	2437	14.472	2429.6896	2444.1616	---	---
	Ant2	2437	14.488	2429.6660	2444.1540	---	---
	Ant1	2462	14.596	2454.8424	2469.4384	---	---
	Ant2	2462	14.604	2454.8396	2469.4436	---	---
11G	Ant1	2412	16.690	2403.7356	2420.4256	---	---
	Ant2	2412	16.833	2403.6464	2420.4794	---	---
	Ant1	2437	16.548	2428.7108	2445.2588	---	---
	Ant2	2437	16.644	2428.6536	2445.2976	---	---
	Ant1	2462	16.605	2453.7823	2470.3873	---	---
	Ant2	2462	16.710	2453.7212	2470.4312	---	---
11N20MIMO	Ant1	2412	17.739	2403.1902	2420.9292	---	---
	Ant2	2412	17.738	2403.1827	2420.9207	---	---
	Ant1	2437	17.825	2428.0195	2445.8445	---	---
	Ant2	2437	17.851	2427.9916	2445.8426	---	---
	Ant1	2462	17.775	2453.1933	2470.9683	---	---
	Ant2	2462	17.732	2453.2250	2470.9570	---	---
11N40MIMO	Ant1	2422	36.225	2403.9367	2440.1617	---	---
	Ant2	2422	36.189	2403.9913	2440.1803	---	---
	Ant1	2437	36.104	2418.9276	2455.0316	---	---
	Ant2	2437	36.035	2418.9787	2455.0137	---	---
	Ant1	2452	36.446	2433.7872	2470.2332	---	---
	Ant2	2452	36.358	2433.8749	2470.2329	---	---

### Test Graphs

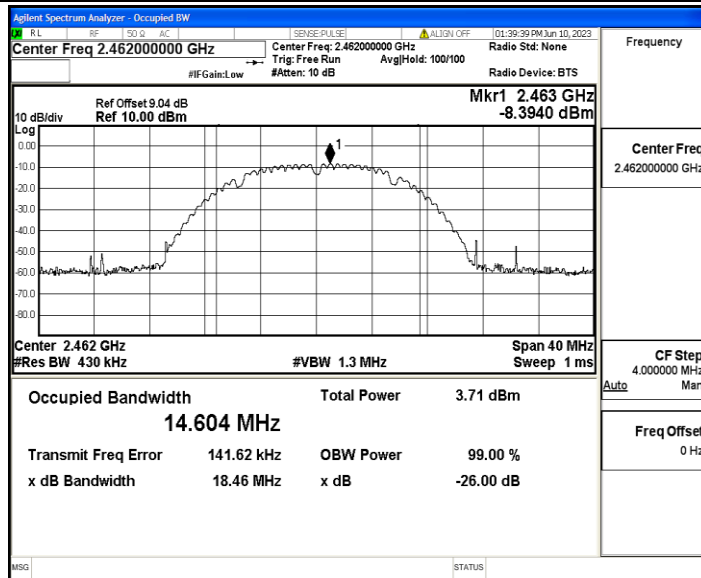




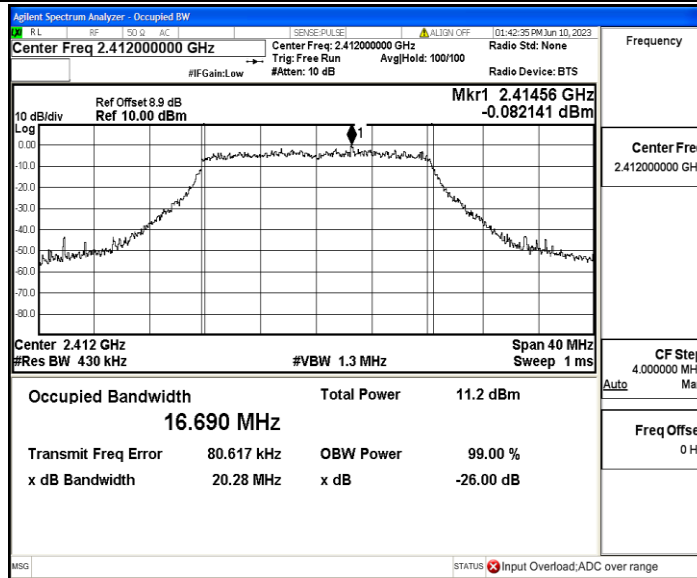
11B\_Ant1\_2462



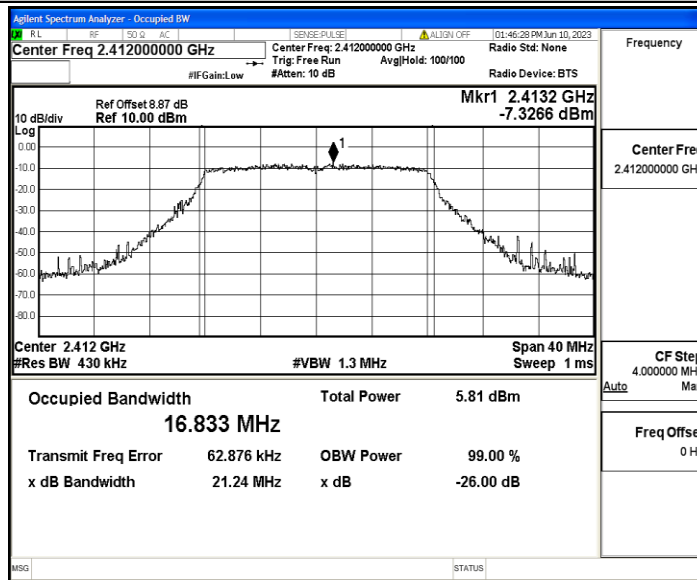
11B\_Ant2\_2462



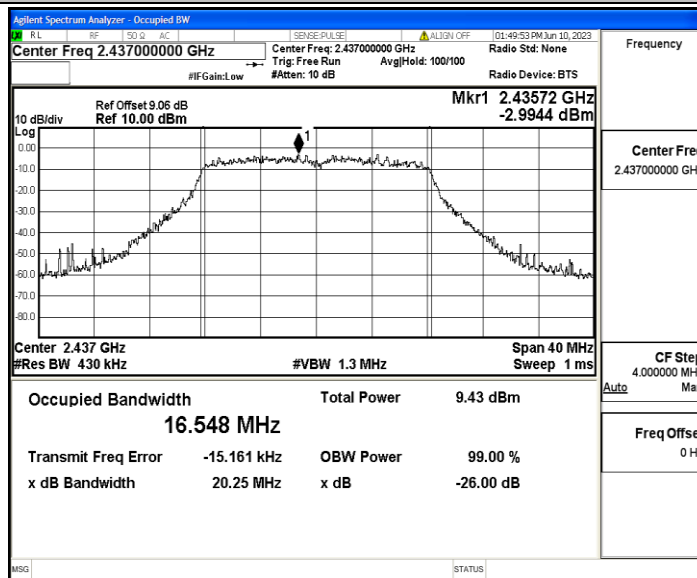
11G\_Ant1\_2412



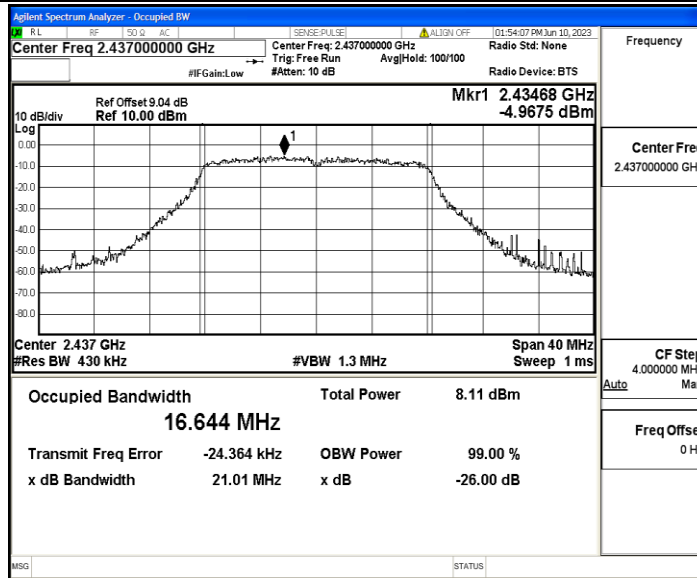
11G\_Ant2\_2412



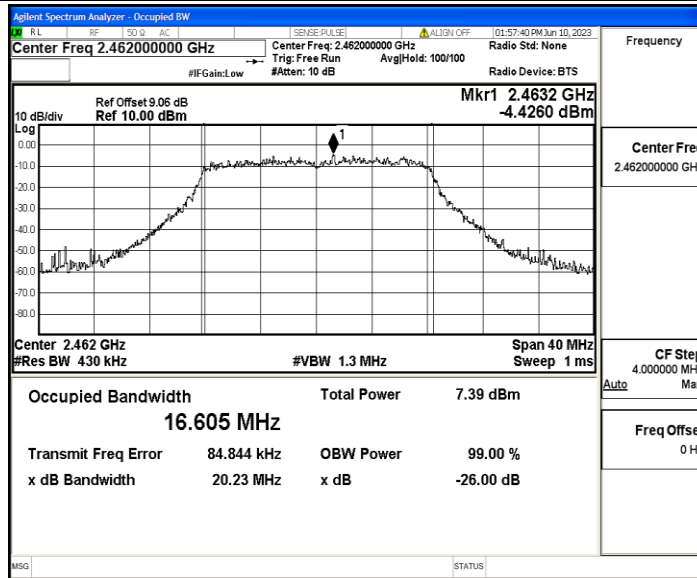
11G\_Ant1\_2437



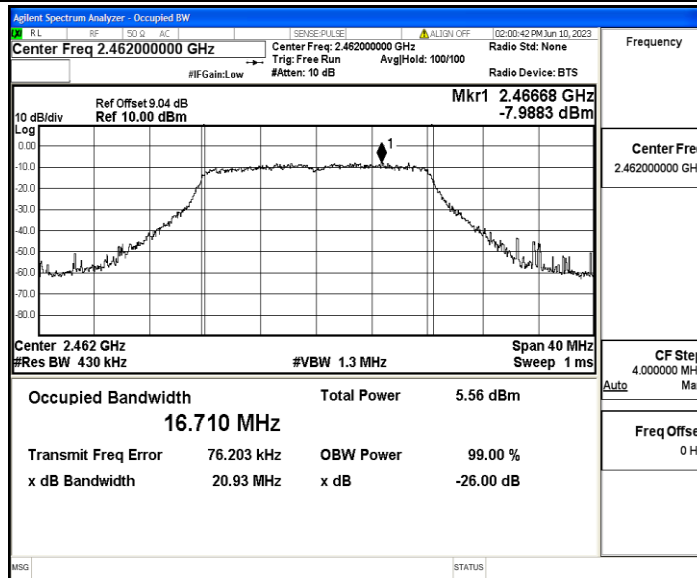
11G\_Ant2\_2437



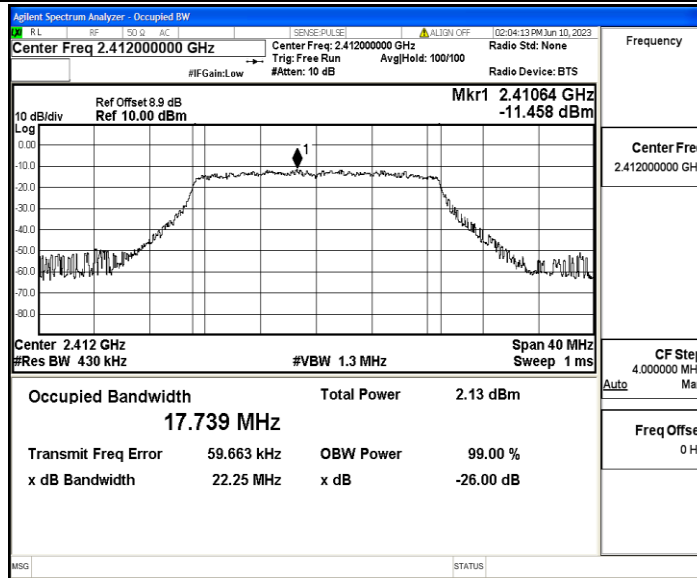
11G\_Ant1\_2462



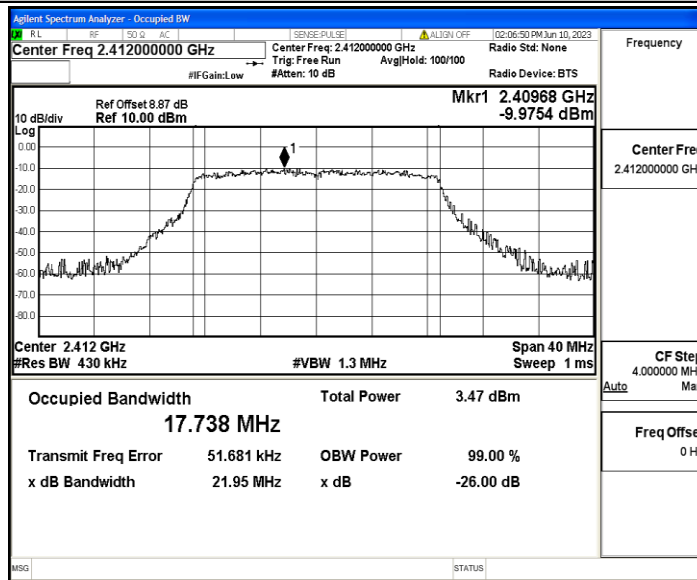
11G\_Ant2\_2462



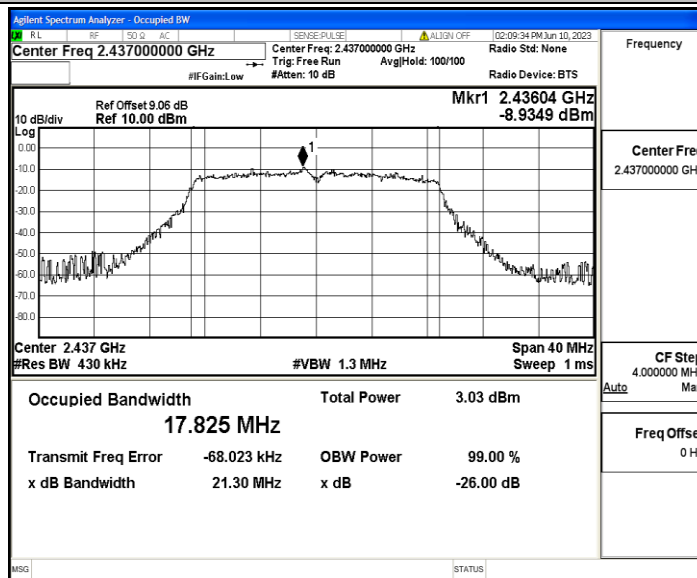
11N20MIMO\_Ant1\_2412



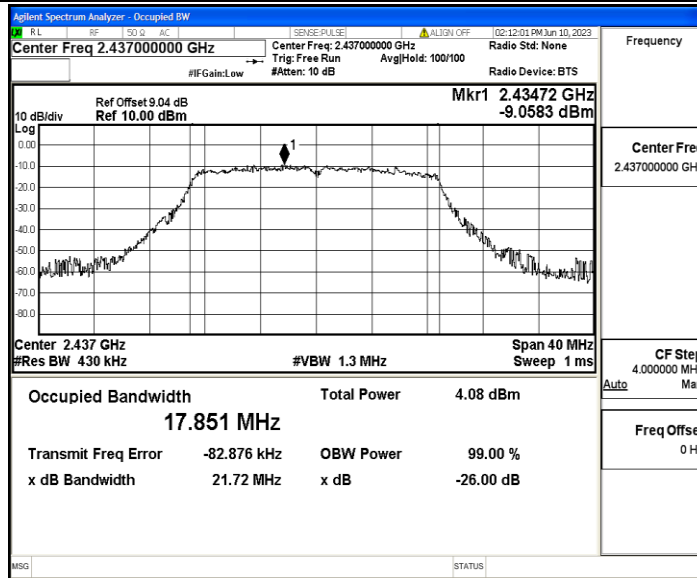
11N20MIMO\_Ant2\_2412



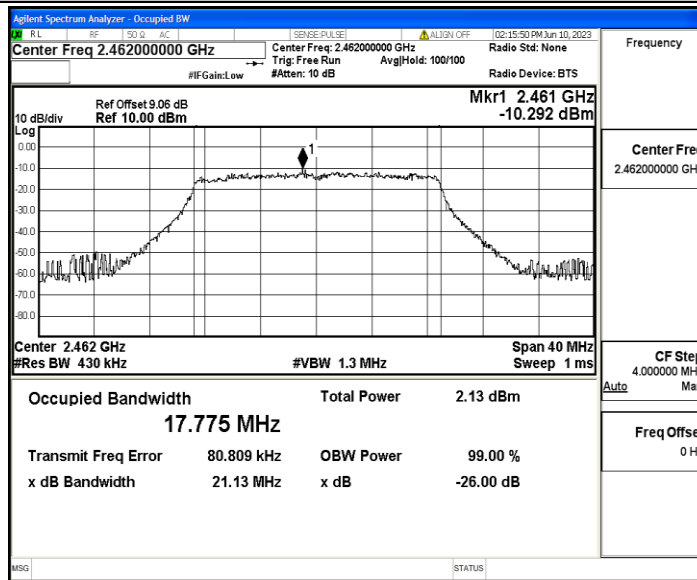
11N20MIMO\_Ant1\_2437



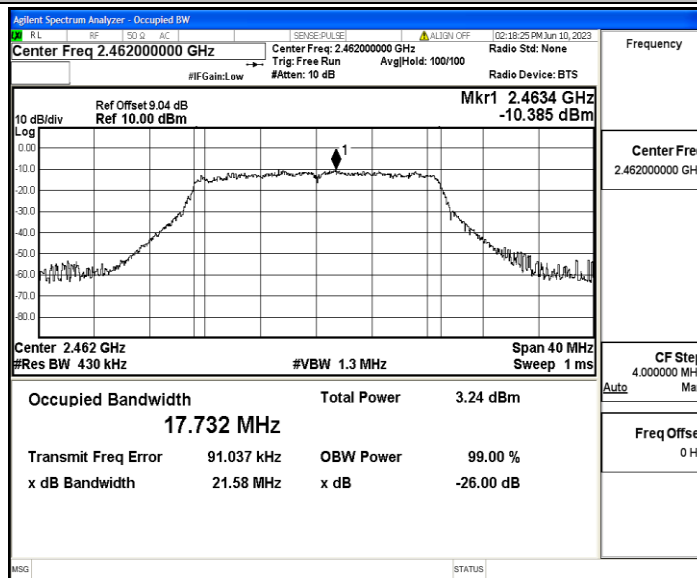
11N20MIMO\_Ant2\_2437



11N20MIMO\_Ant1\_2462

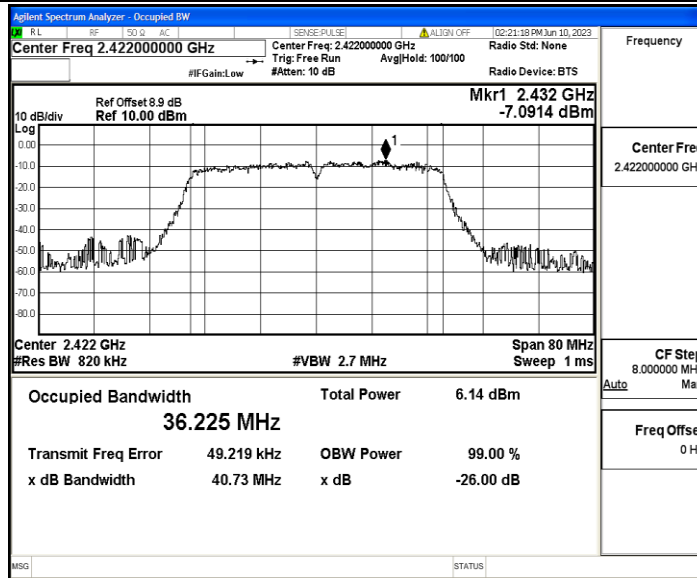


11N20MIMO\_Ant2\_2462

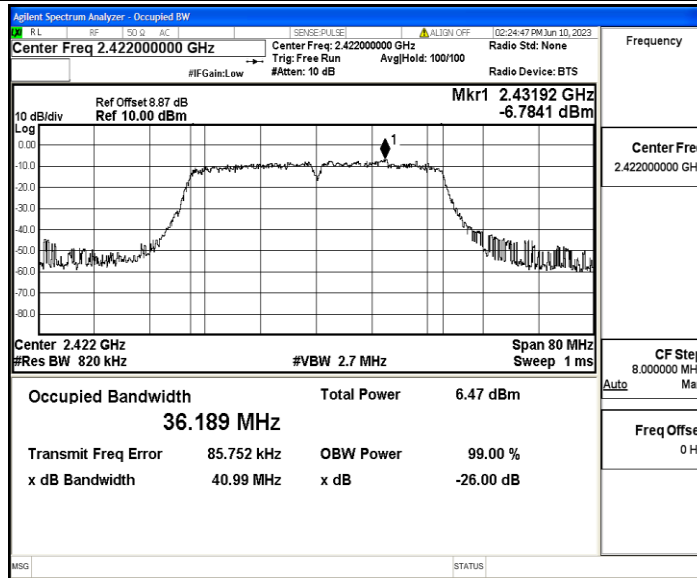


11N40MIMO\_Ant1\_2422

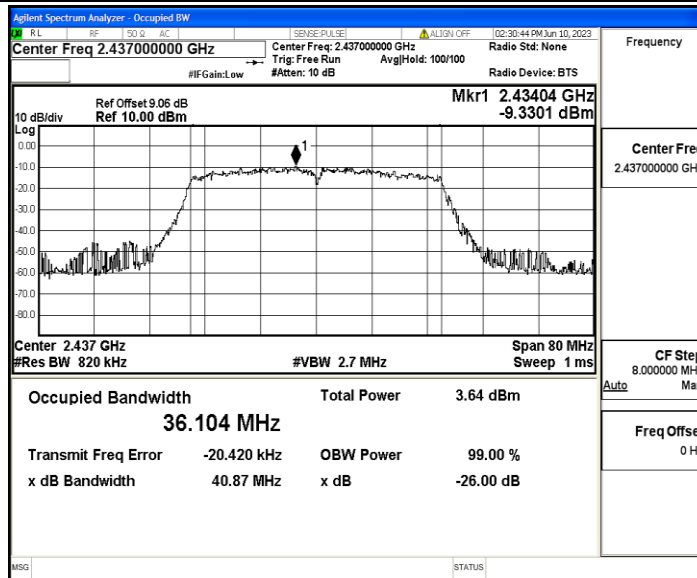




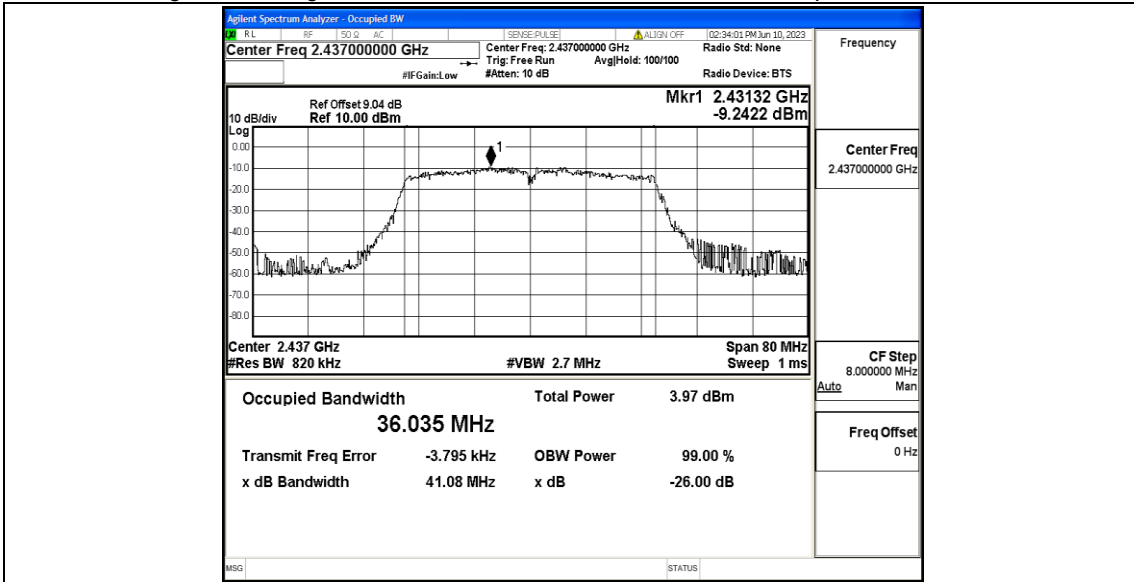
11N40MIMO\_Ant2\_2422



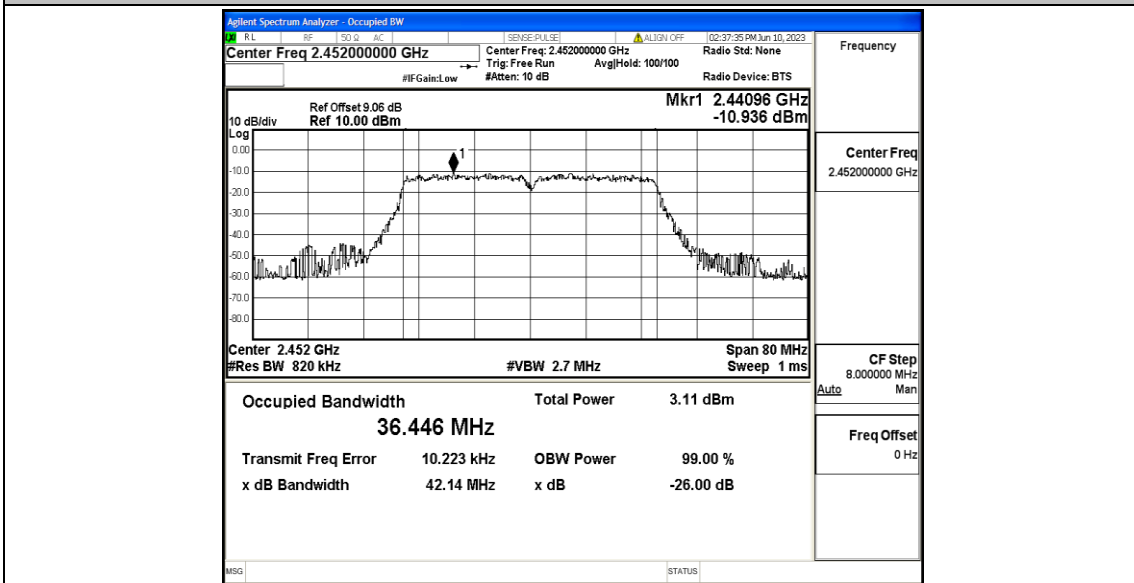
11N40MIMO\_Ant1\_2437



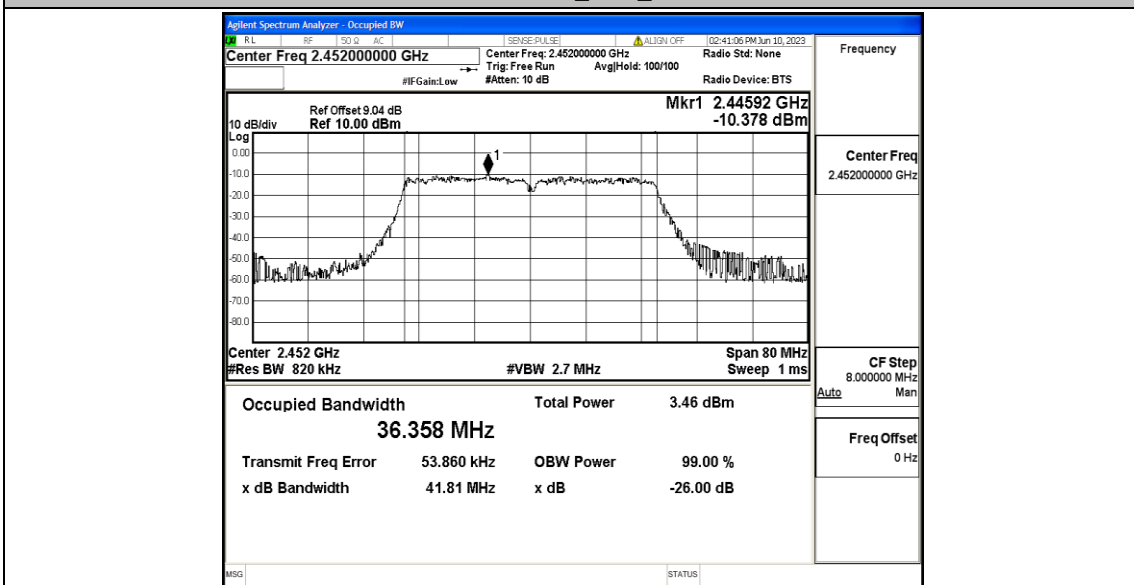
11N40MIMO\_Ant2\_2437



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	1.66	≤30.00	PASS
	Ant2	2412	1.03	≤30.00	PASS
	Ant1	2437	2.82	≤30.00	PASS
	Ant2	2437	1.33	≤30.00	PASS
	Ant1	2462	1.71	≤30.00	PASS
	Ant2	2462	0.73	≤30.00	PASS
11G	Ant1	2412	2.43	≤30.00	PASS
	Ant2	2412	0.00	≤30.00	PASS
	Ant1	2437	2.04	≤30.00	PASS
	Ant2	2437	0.70	≤30.00	PASS
	Ant1	2462	1.01	≤30.00	PASS
	Ant2	2462	-0.27	≤30.00	PASS
11N20MIMO	Ant1	2412	-3.36	≤30.00	PASS
	Ant2	2412	-2.08	≤30.00	PASS
	total	2412	0.34	≤30.00	PASS
	Ant1	2437	-2.51	≤30.00	PASS
	Ant2	2437	-1.49	≤30.00	PASS
	total	2437	1.04	≤30.00	PASS
	Ant1	2462	-3.37	≤30.00	PASS
	Ant2	2462	-2.23	≤30.00	PASS
total	2462	0.25	≤30.00	PASS	
11N40MIMO	Ant1	2422	-1.78	≤30.00	PASS
	Ant2	2422	-0.63	≤30.00	PASS
	total	2422	1.84	≤30.00	PASS
	Ant1	2437	-2.26	≤30.00	PASS
	Ant2	2437	-1.93	≤30.00	PASS
	total	2437	0.92	≤30.00	PASS
	Ant1	2452	-2.57	≤30.00	PASS
	Ant2	2452	-2.51	≤30.00	PASS
	total	2452	0.47	≤30.00	PASS

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

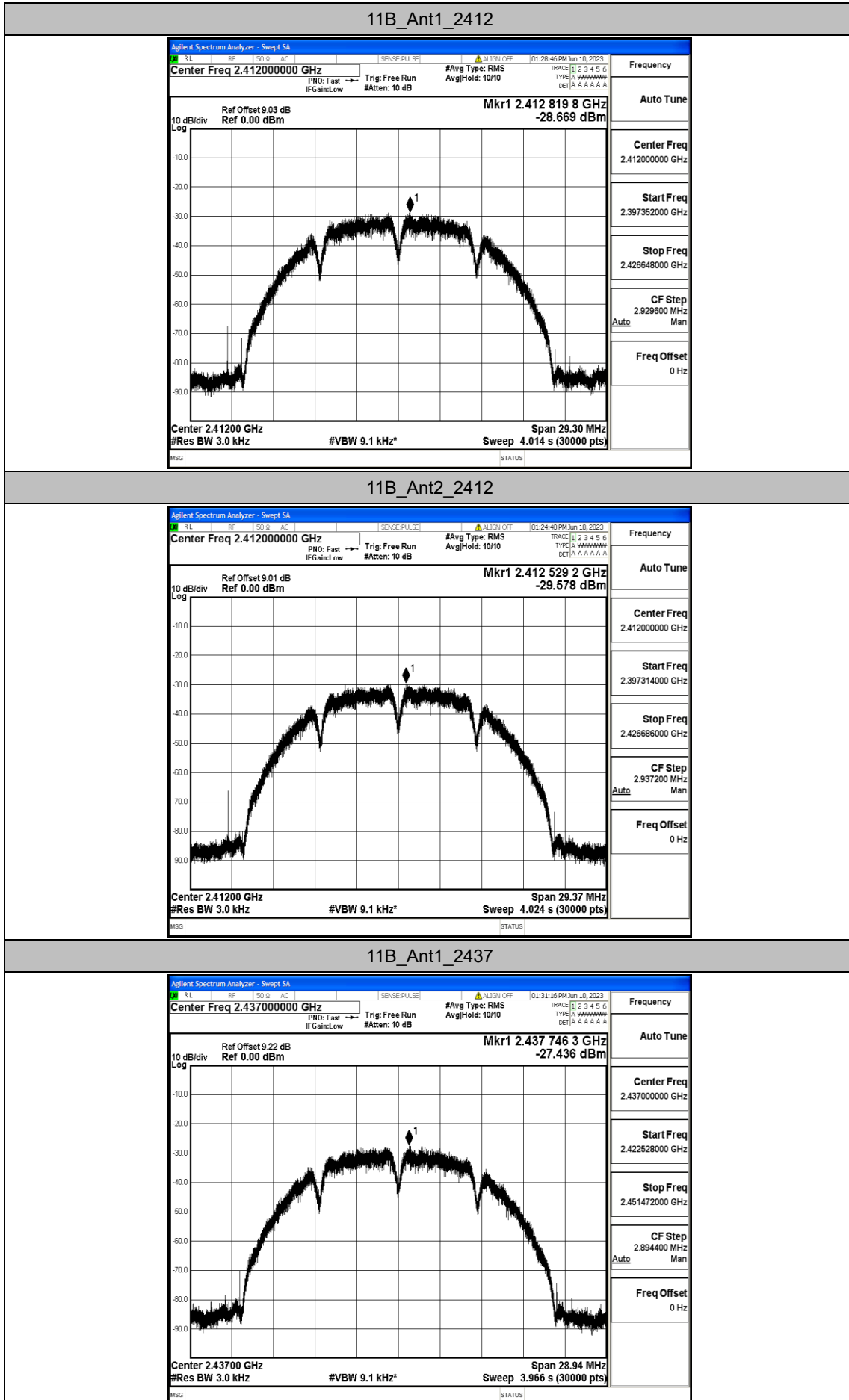
## Appendix D: Maximum power spectral density

### Test Result

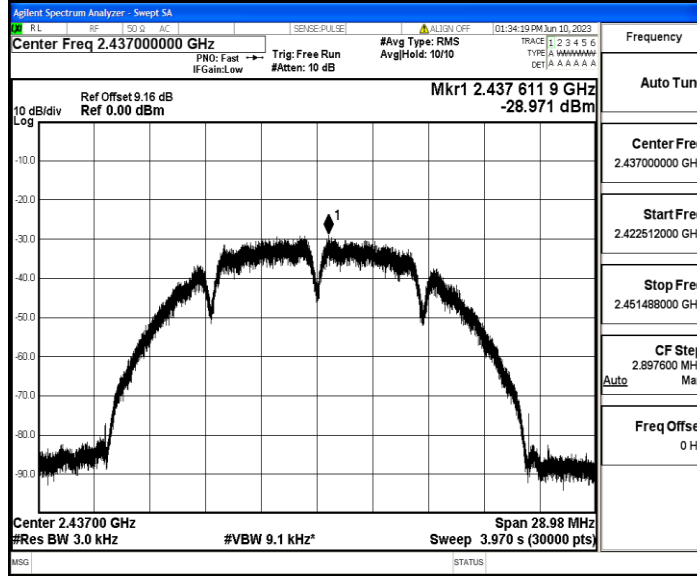
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-28.67	≤8.00	PASS
	Ant2	2412	-29.58	≤8.00	PASS
	Ant1	2437	-27.44	≤8.00	PASS
	Ant2	2437	-28.97	≤8.00	PASS
	Ant1	2462	-28.64	≤8.00	PASS
	Ant2	2462	-29.31	≤8.00	PASS
11G	Ant1	2412	-26.79	≤8.00	PASS
	Ant2	2412	-30.14	≤8.00	PASS
	Ant1	2437	-27.99	≤8.00	PASS
	Ant2	2437	-29.37	≤8.00	PASS
	Ant1	2462	-29.49	≤8.00	PASS
	Ant2	2462	-29.84	≤8.00	PASS
11N20MIMO	Ant1	2412	-31.01	≤8.00	PASS
	Ant2	2412	-29.33	≤8.00	PASS
	total	2412	-27.08	≤8.00	PASS
	Ant1	2437	-29.34	≤8.00	PASS
	Ant2	2437	-27.56	≤8.00	PASS
	total	2437	-25.35	≤8.00	PASS
	Ant1	2462	-30.63	≤8.00	PASS
	Ant2	2462	-29.31	≤8.00	PASS
	total	2462	-26.91	≤8.00	PASS
11N40MIMO	Ant1	2422	-28.52	≤8.00	PASS
	Ant2	2422	-28.28	≤8.00	PASS
	total	2422	-25.39	≤8.00	PASS
	Ant1	2437	-29.66	≤8.00	PASS
	Ant2	2437	-29.51	≤8.00	PASS
	total	2437	-26.57	≤8.00	PASS
	Ant1	2452	-32.21	≤8.00	PASS
	Ant2	2452	-32.42	≤8.00	PASS
	total	2452	-29.30	≤8.00	PASS

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

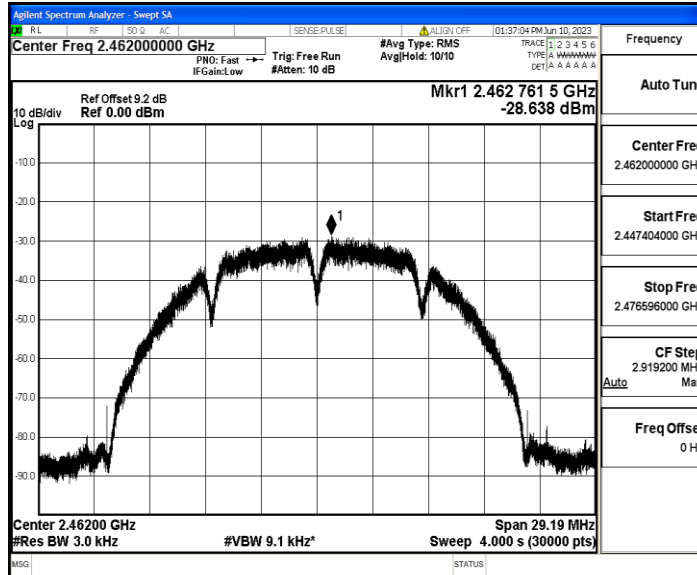
### Test Graphs



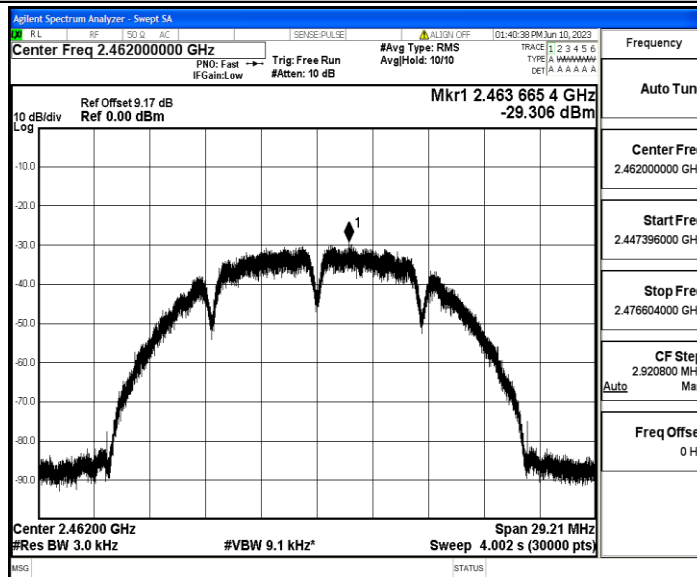
11B\_Ant2\_2437



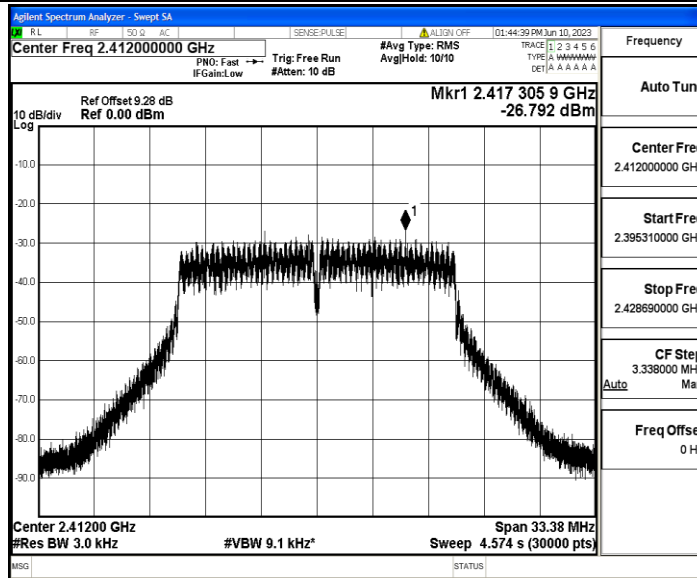
11B\_Ant1\_2462



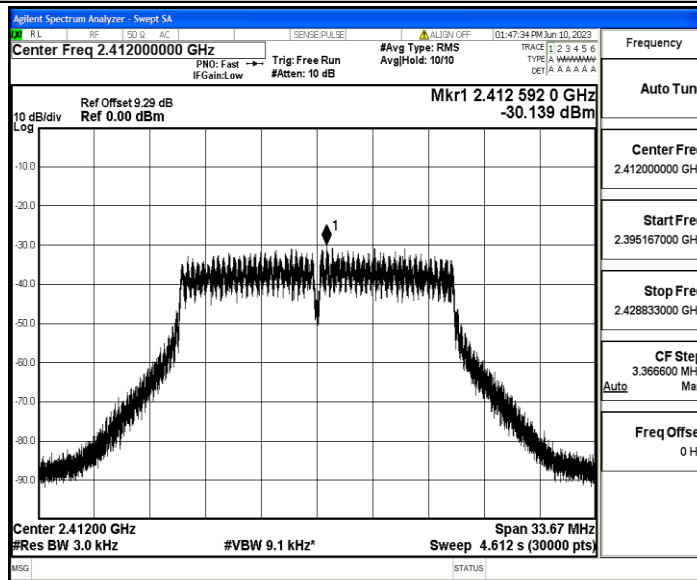
11B\_Ant2\_2462



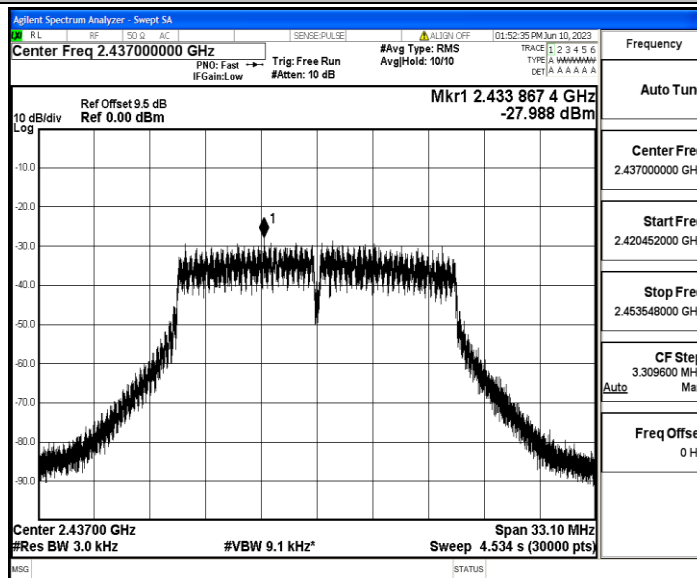
11G\_Ant1\_2412



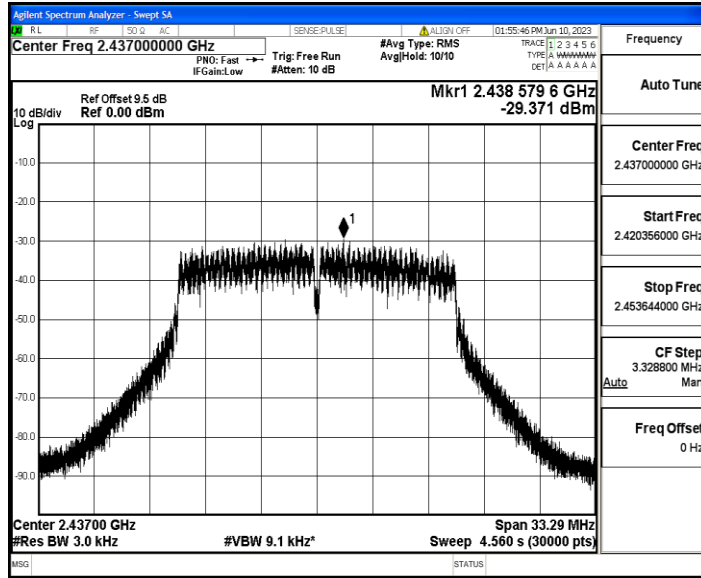
11G\_Ant2\_2412



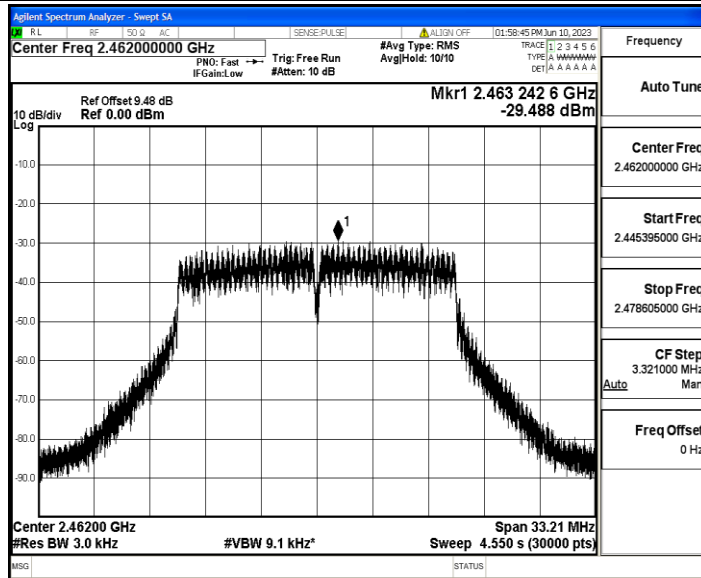
11G\_Ant1\_2437



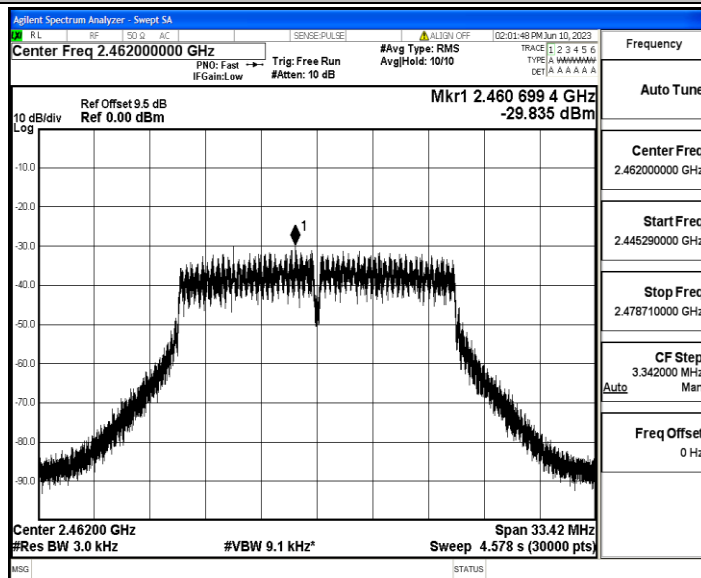
11G\_Ant2\_2437



11G\_Ant1\_2462

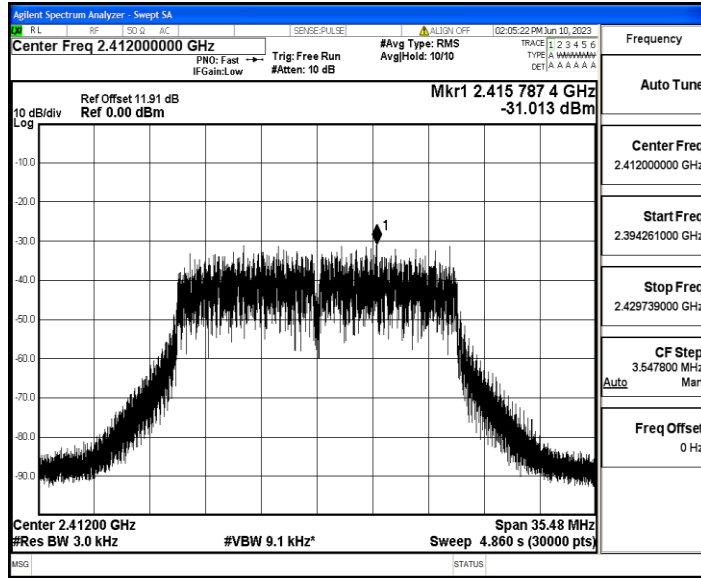


11G\_Ant2\_2462

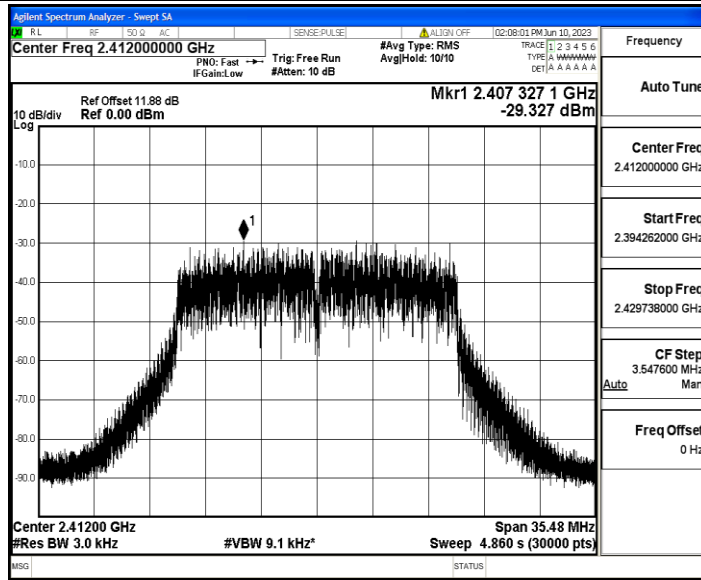


11N20MIMO\_Ant1\_2412

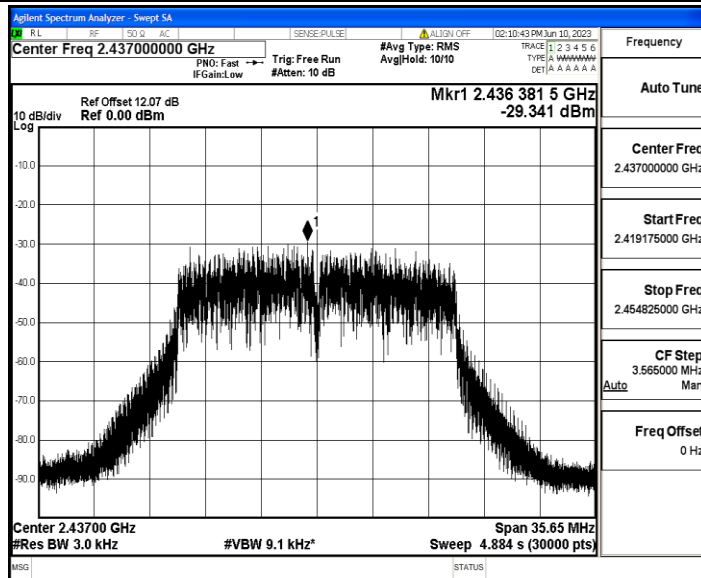




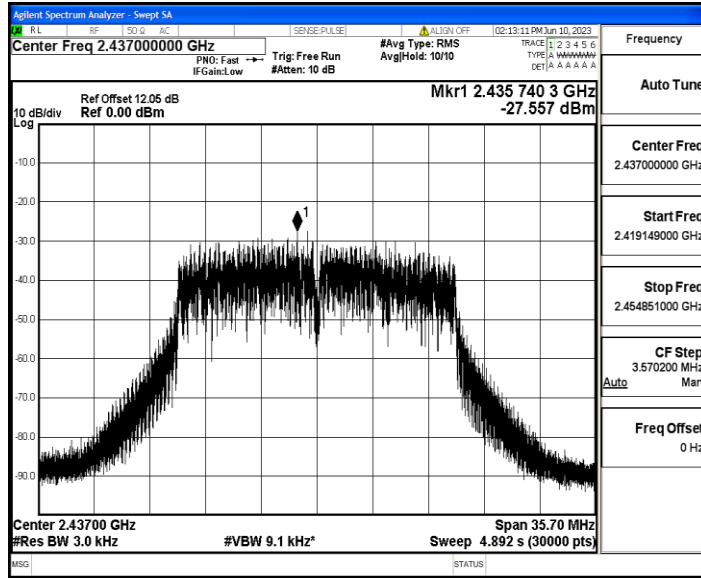
11N20MIMO\_Ant2\_2412



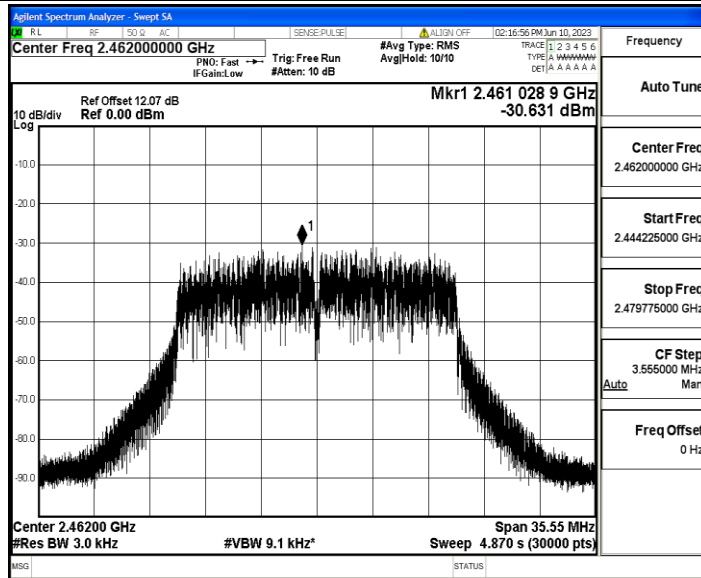
11N20MIMO\_Ant1\_2437



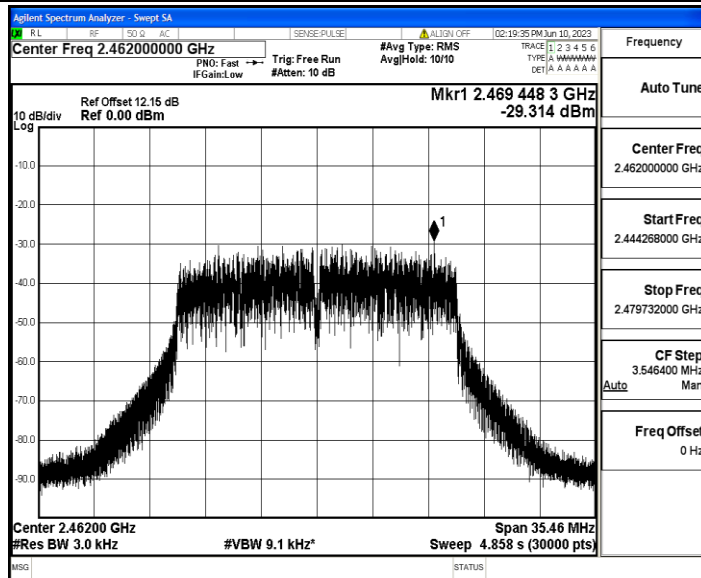
11N20MIMO\_Ant2\_2437



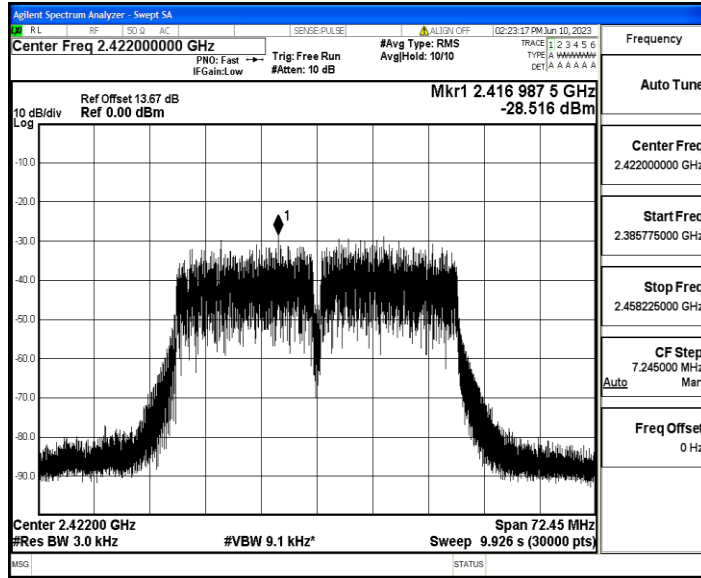
11N20MIMO\_Ant1\_2462



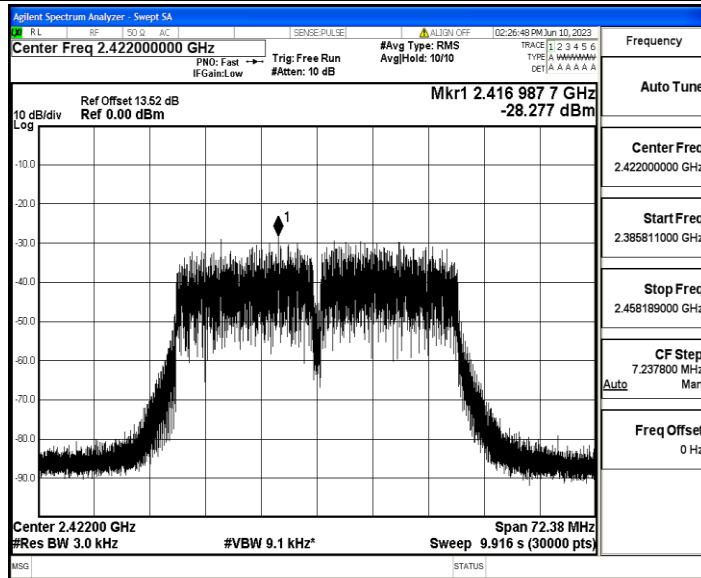
11N20MIMO\_Ant2\_2462



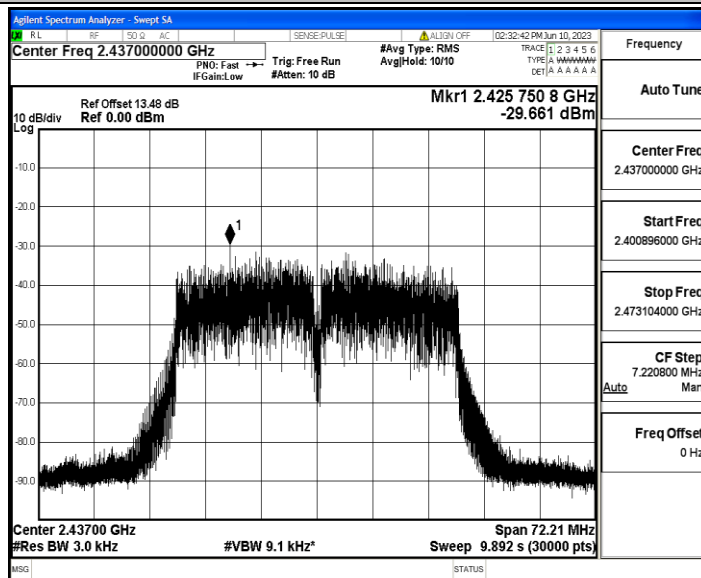
11N40MIMO\_Ant1\_2422



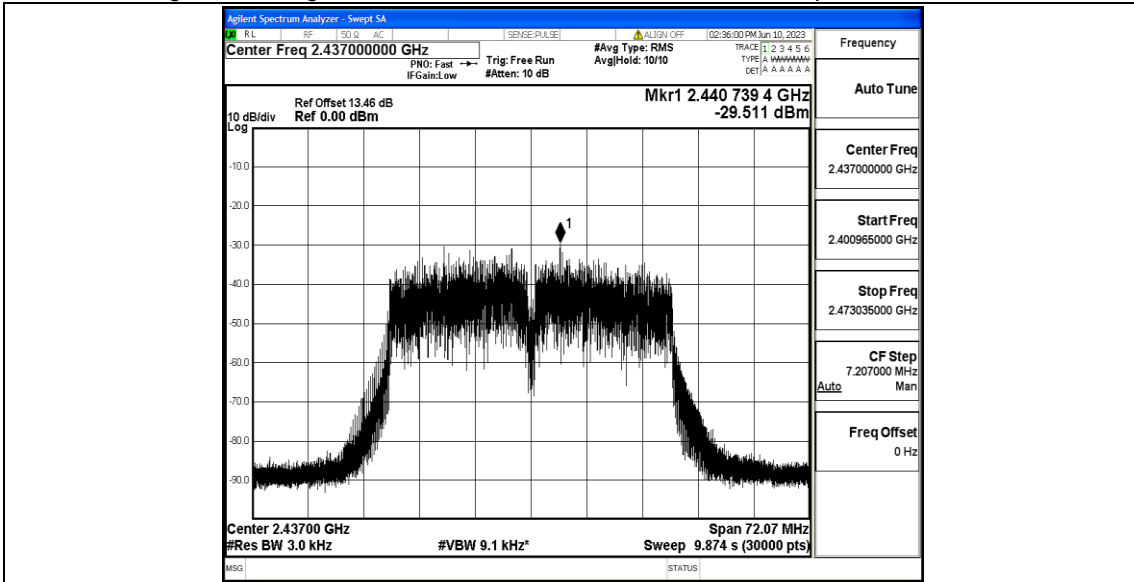
11N40MIMO\_Ant2\_2422



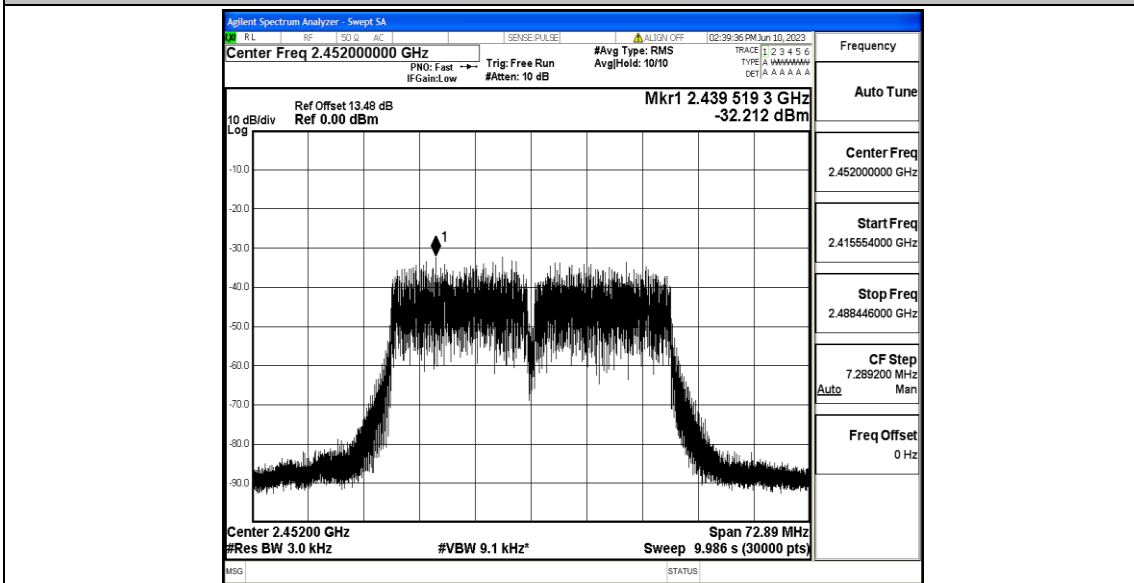
11N40MIMO\_Ant1\_2437



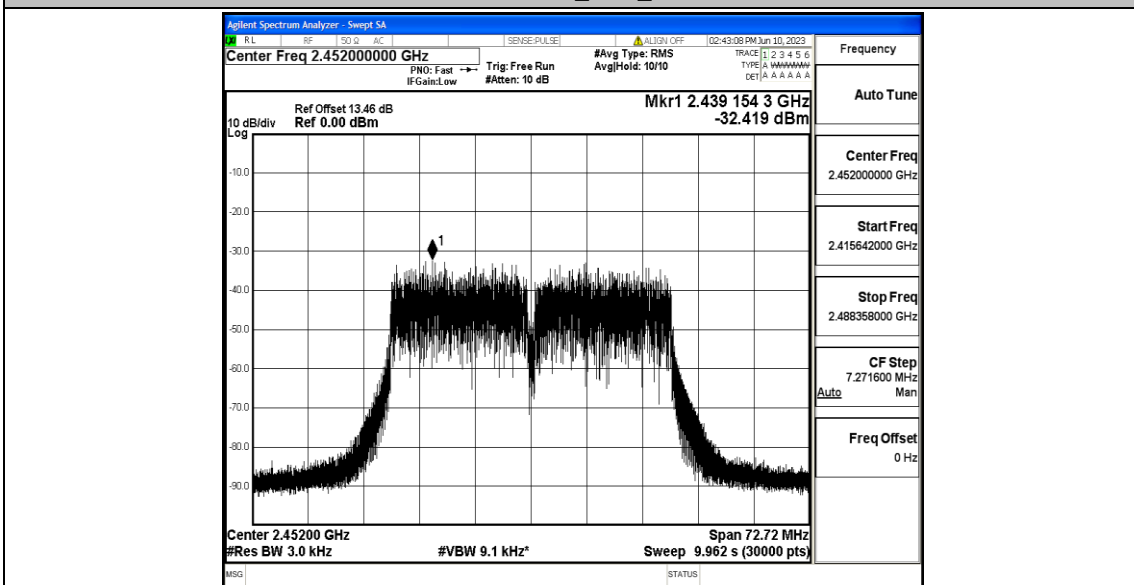
11N40MIMO\_Ant2\_2437



11N40MIMO\_Ant1\_2452



11N40MIMO\_Ant2\_2452



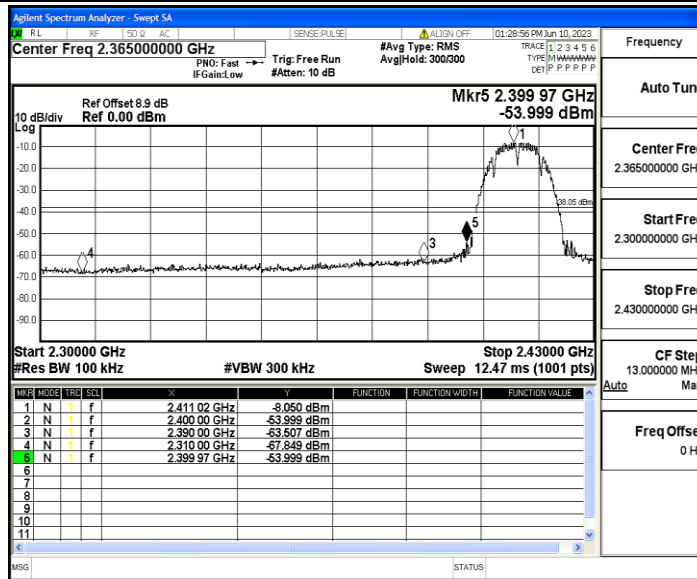
## Appendix E: Band edge measurements

### Test Result

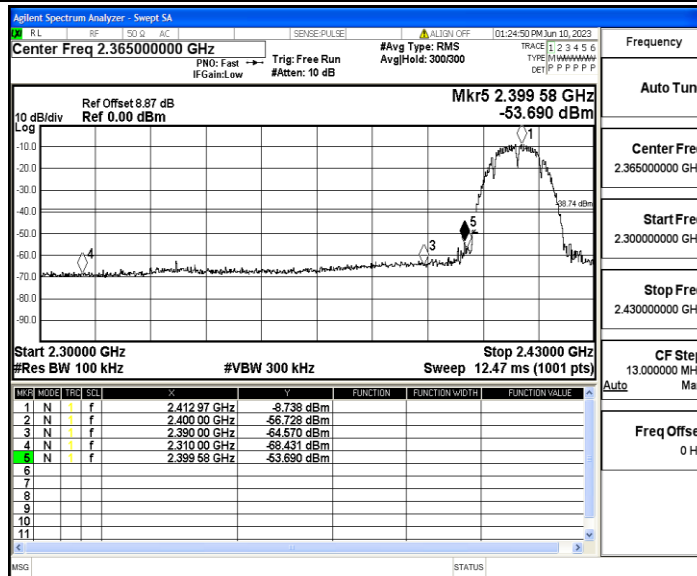
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-8.05	-54	≤-38.05	PASS
	Ant2	Low	2412	-8.74	-53.69	≤-38.74	PASS
	Ant1	High	2462	-8.28	-62.53	≤-38.28	PASS
	Ant2	High	2462	-8.75	-62.94	≤-38.75	PASS
11G	Ant1	Low	2412	-8.38	-47.47	≤-38.38	PASS
	Ant2	Low	2412	-11.24	-49.81	≤-41.24	PASS
	Ant1	High	2462	-9.95	-60.23	≤-39.95	PASS
	Ant2	High	2462	-11.65	-63.65	≤-41.65	PASS
11N20MIMO	Ant1	Low	2412	-14.58	-53.29	≤-44.58	PASS
	Ant2	Low	2412	-13.19	-51.95	≤-43.19	PASS
	Ant1	High	2462	-14.54	-63.56	≤-44.54	PASS
	Ant2	High	2462	-13.35	-64.6	≤-43.35	PASS
11N40MIMO	Ant1	Low	2422	-13.85	-53.72	≤-43.85	PASS
	Ant2	Low	2422	-13.60	-54.87	≤-43.6	PASS
	Ant1	High	2452	-17.54	-63.62	≤-47.54	PASS
	Ant2	High	2452	-17.17	-62.97	≤-47.17	PASS

Test Graphs

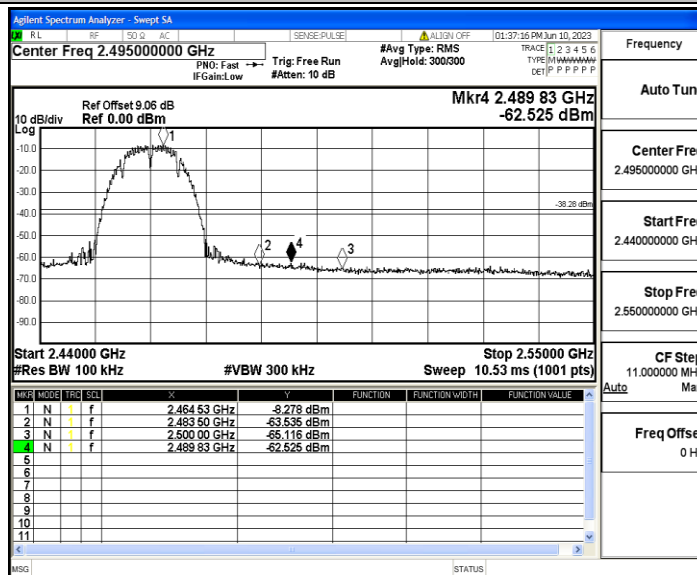
11B\_Ant1\_Low\_2412



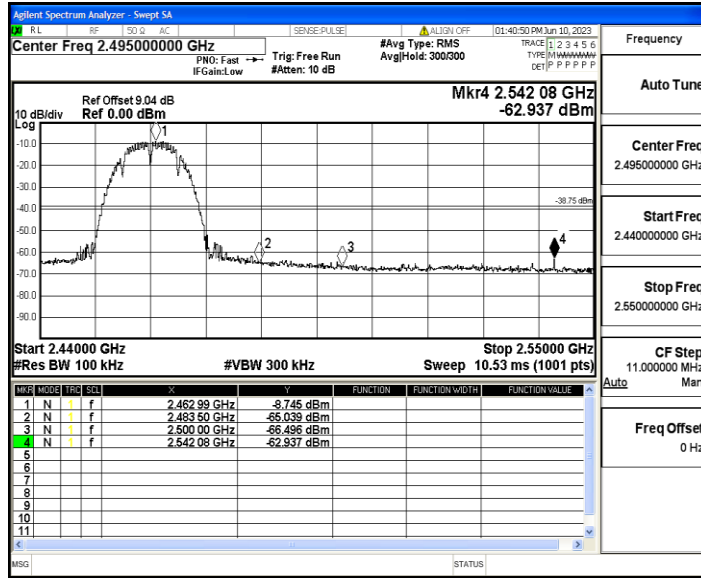
11B\_Ant2\_Low\_2412



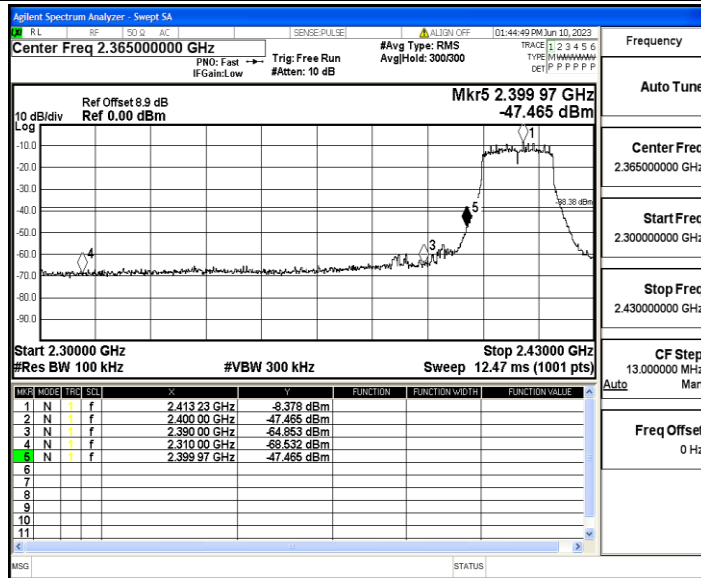
11B\_Ant1\_High\_2462



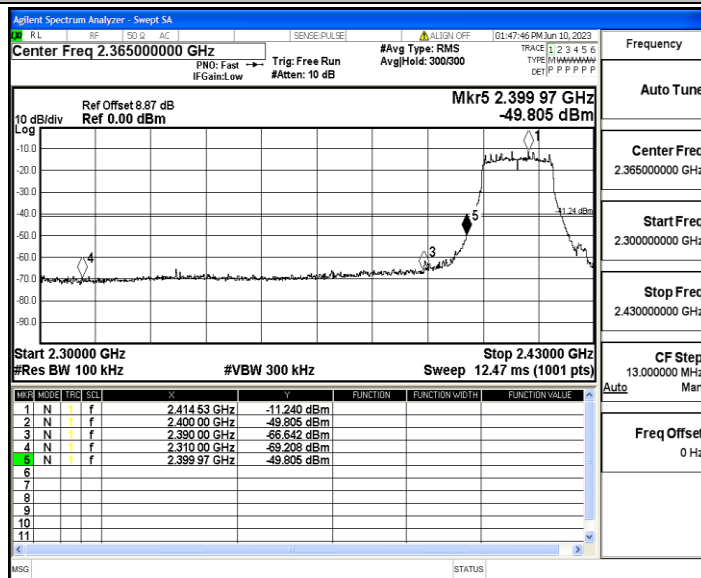
11B\_Ant2\_High\_2462



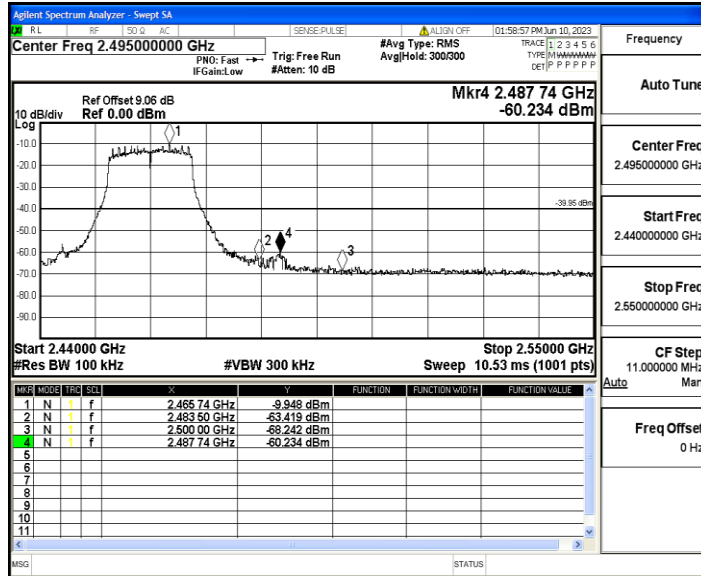
11G\_Ant1\_Low\_2412



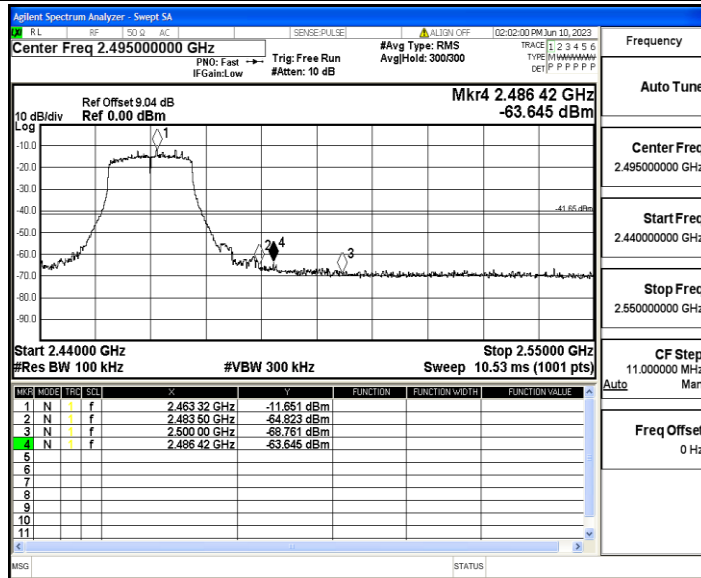
11G\_Ant2\_Low\_2412



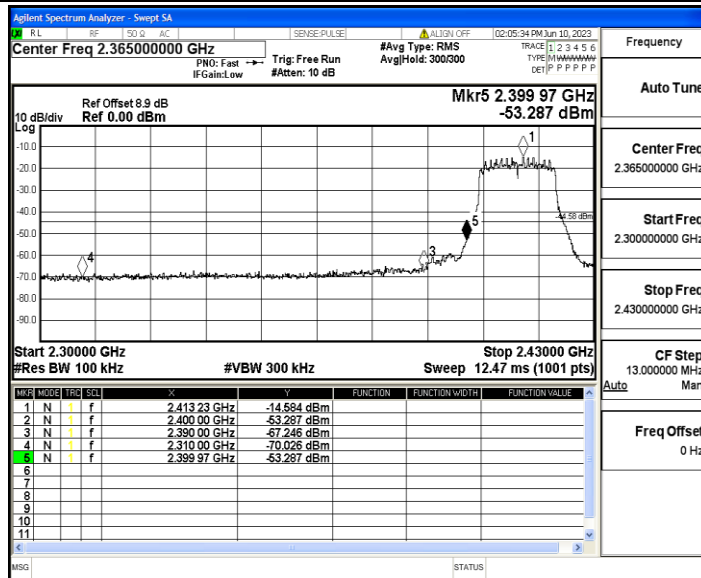
11G\_Ant1\_High\_2462



11G\_Ant2\_High\_2462

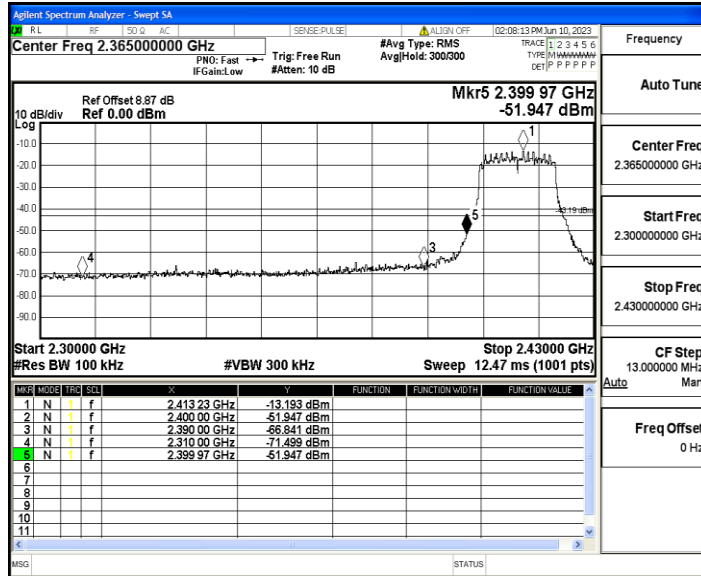


11N20MIMO\_Ant1\_Low\_2412

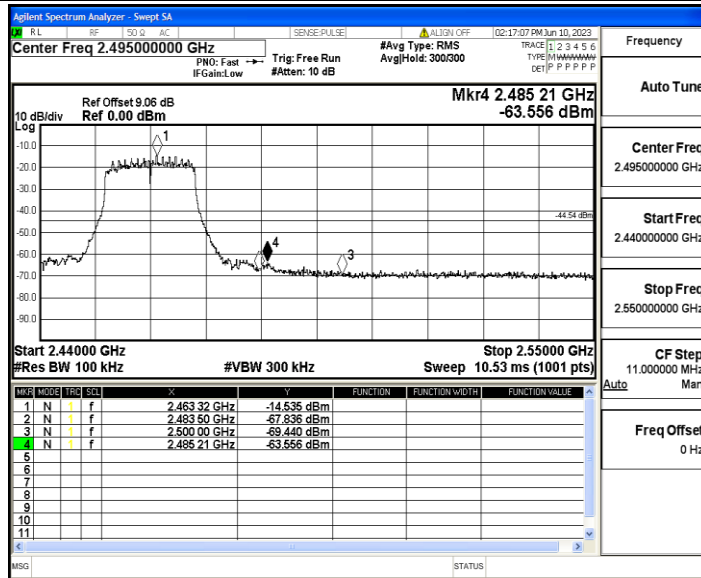


11N20MIMO\_Ant2\_Low\_2412

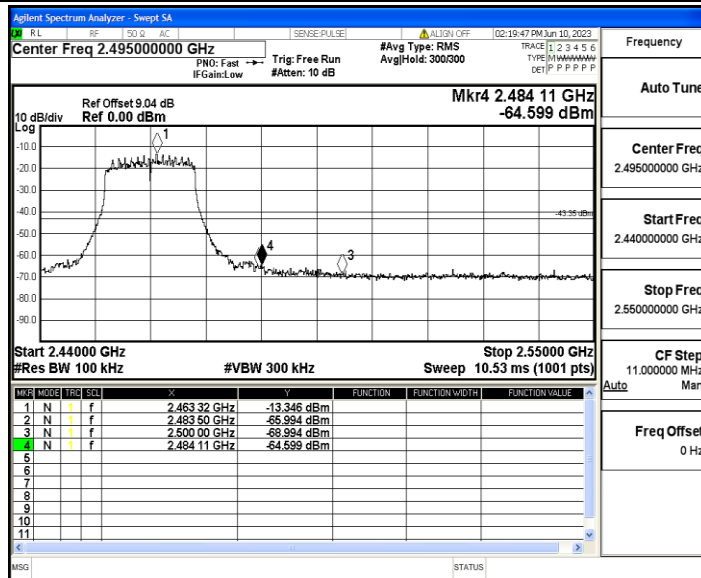




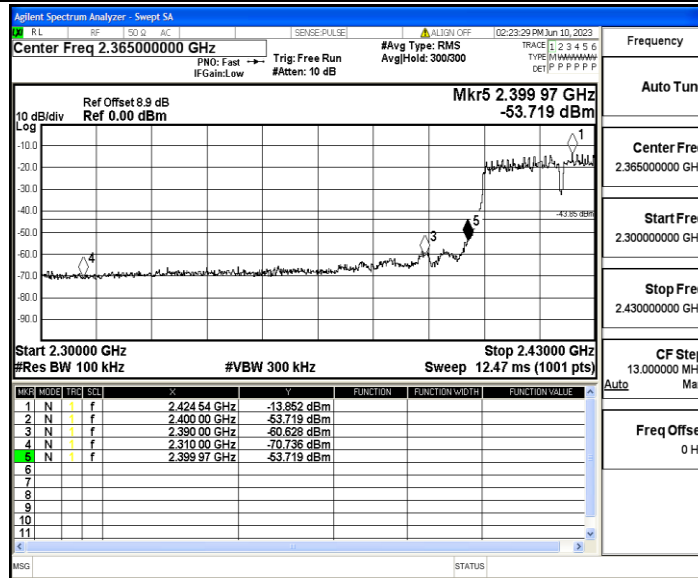
11N20MIMO\_Ant1\_High\_2462



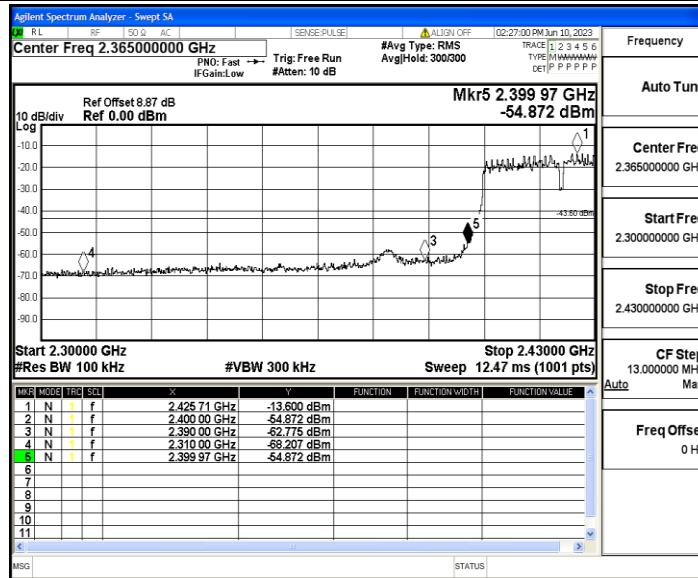
11N20MIMO\_Ant2\_High\_2462



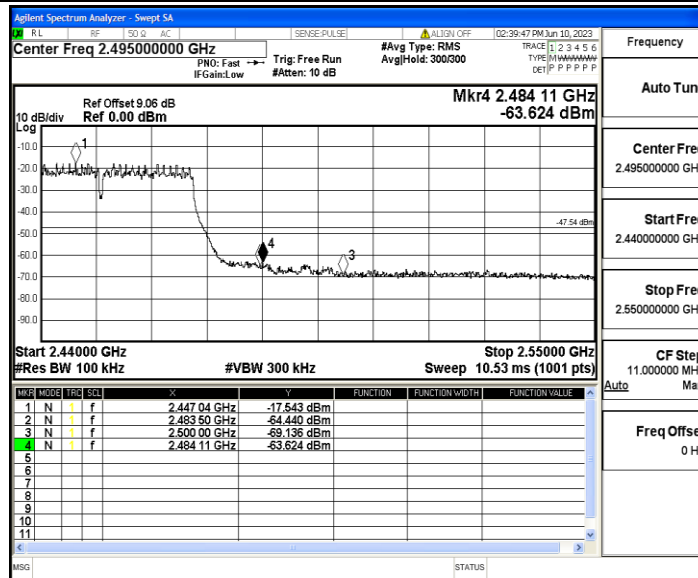
11N40MIMO\_Ant1\_Low\_2422



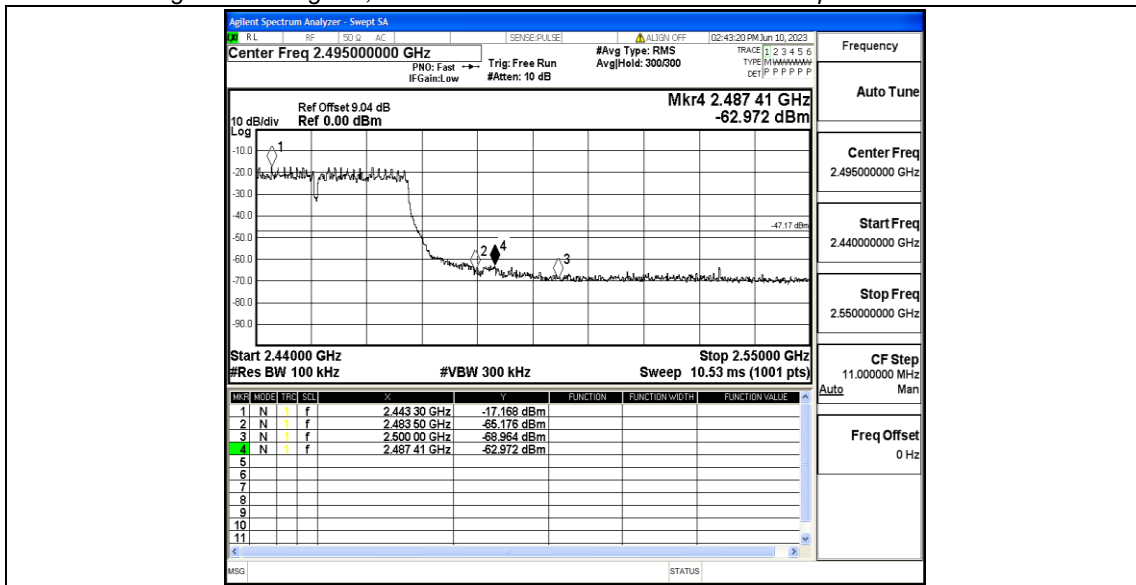
11N40MIMO\_Ant2\_Low\_2422



11N40MIMO\_Ant1\_High\_2452



11N40MIMO\_Ant2\_High\_2452



## Appendix F: Conducted Spurious Emission

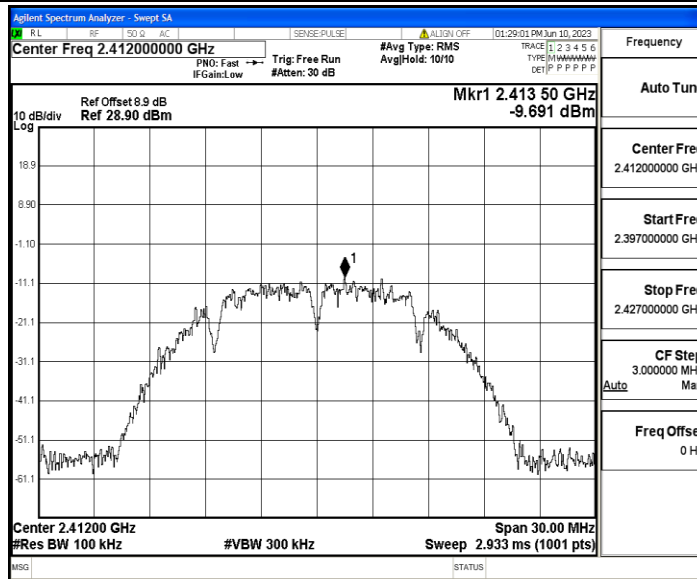
### Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict	
11B	Ant1	2412	Reference	-9.69	-9.69	---	PASS	
			30~1000	-9.69	-62.89	≤-39.69	PASS	
			1000~26500	-9.69	-50.39	≤-39.69	PASS	
	Ant2	2412	Reference	-9.64	-9.64	---	PASS	
			30~1000	-9.64	-63.08	≤-39.64	PASS	
			1000~26500	-9.64	-50.4	≤-39.64	PASS	
	Ant1	2437	Reference	-8.17	-8.17	---	PASS	
			30~1000	-8.17	-63.3	≤-38.17	PASS	
			1000~26500	-8.17	-50.3	≤-38.17	PASS	
	Ant2	2437	Reference	-9.44	-9.44	---	PASS	
			30~1000	-9.44	-62.87	≤-39.44	PASS	
			1000~26500	-9.44	-50.12	≤-39.44	PASS	
	Ant1	2462	Reference	-9.77	-9.77	---	PASS	
			30~1000	-9.77	-62.03	≤-39.77	PASS	
			1000~26500	-9.77	-49.8	≤-39.77	PASS	
	Ant2	2462	Reference	-9.64	-9.64	---	PASS	
			30~1000	-9.64	-62.5	≤-39.64	PASS	
			1000~26500	-9.64	-50.93	≤-39.64	PASS	
	11G	Ant1	2412	Reference	-9.42	-9.42	---	PASS
				30~1000	-9.42	-63.08	≤-39.42	PASS
				1000~26500	-9.42	-49.75	≤-39.42	PASS
		Ant2	2412	Reference	-14.56	-14.56	---	PASS
				30~1000	-14.56	-63.26	≤-44.56	PASS
				1000~26500	-14.56	-50.55	≤-44.56	PASS
Ant1		2437	Reference	-12.08	-12.08	---	PASS	
			30~1000	-12.08	-62.87	≤-42.08	PASS	
			1000~26500	-12.08	-49.37	≤-42.08	PASS	
Ant2		2437	Reference	-11.23	-11.23	---	PASS	
			30~1000	-11.23	-62.47	≤-41.23	PASS	
			1000~26500	-11.23	-49.85	≤-41.23	PASS	
Ant1		2462	Reference	-12.13	-12.13	---	PASS	
			30~1000	-12.13	-61.64	≤-42.13	PASS	
			1000~26500	-12.13	-50.14	≤-42.13	PASS	
Ant2		2462	Reference	-11.65	-11.65	---	PASS	
			30~1000	-11.65	-63.15	≤-41.65	PASS	
			1000~26500	-11.65	-49.4	≤-41.65	PASS	
11N20MIMO		Ant1	2412	Reference	-15.03	-15.03	---	PASS
				30~1000	-15.03	-61.87	≤-45.03	PASS
				1000~26500	-15.03	-50.29	≤-45.03	PASS
		Ant2	2412	Reference	-13.58	-13.58	---	PASS
				30~1000	-13.58	-62.88	≤-43.58	PASS

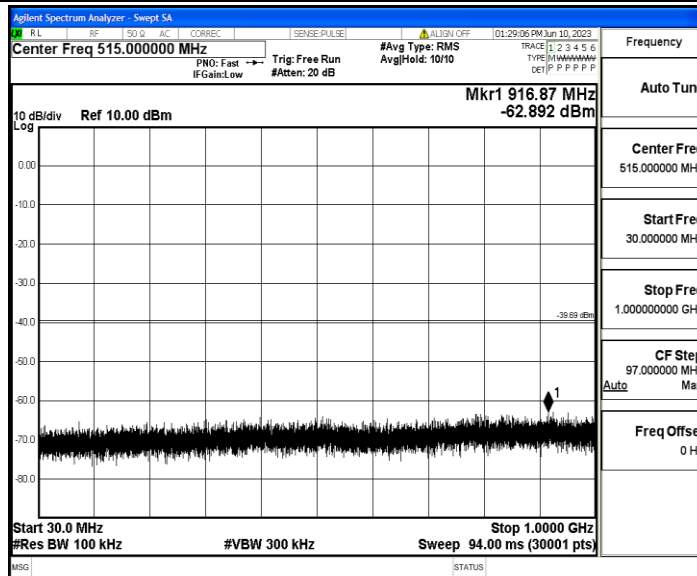
	Ant1	2437	1000~26500	-13.58	-50.12	≤-43.58	PASS
			Reference	-16.10	-16.10	---	PASS
			30~1000	-16.10	-61.93	≤-46.1	PASS
	Ant2	2437	1000~26500	-16.10	-50.1	≤-46.1	PASS
			Reference	-13.37	-13.37	---	PASS
			30~1000	-13.37	-63.05	≤-43.37	PASS
	Ant1	2462	1000~26500	-13.37	-50.66	≤-43.37	PASS
			Reference	-15.14	-15.14	---	PASS
			30~1000	-15.14	-62.84	≤-45.14	PASS
	Ant2	2462	1000~26500	-15.14	-50.54	≤-45.14	PASS
			Reference	-14.34	-14.34	---	PASS
			30~1000	-14.34	-62.73	≤-44.34	PASS
11N40MIMO	Ant1	2422	1000~26500	-14.34	-50.75	≤-44.34	PASS
			Reference	-15.33	-15.33	---	PASS
			30~1000	-15.33	-62.85	≤-45.33	PASS
	Ant2	2422	1000~26500	-15.33	-50.17	≤-45.33	PASS
			Reference	-15.98	-15.98	---	PASS
			30~1000	-15.98	-62.7	≤-45.98	PASS
	Ant1	2437	1000~26500	-15.98	-49.82	≤-45.98	PASS
			Reference	-16.67	-16.67	---	PASS
			30~1000	-16.67	-62.27	≤-46.67	PASS
	Ant2	2437	1000~26500	-16.67	-50.08	≤-46.67	PASS
			Reference	-16.91	-16.91	---	PASS
			30~1000	-16.91	-62.64	≤-46.91	PASS
Ant1	2452	1000~26500	-16.91	-50.23	≤-46.91	PASS	
		Reference	-18.17	-18.17	---	PASS	
		30~1000	-18.17	-62.62	≤-48.17	PASS	
Ant2	2452	1000~26500	-18.17	-50.31	≤-48.17	PASS	
		Reference	-17.12	-17.12	---	PASS	
		30~1000	-17.12	-61.99	≤-47.12	PASS	
			1000~26500	-17.12	-50.21	≤-47.12	PASS

Test Graphs

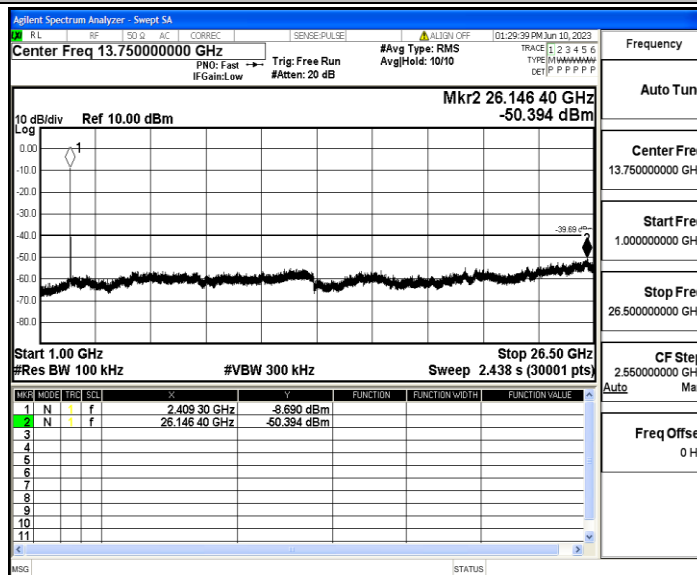
11B\_Ant1\_2412\_0~Reference



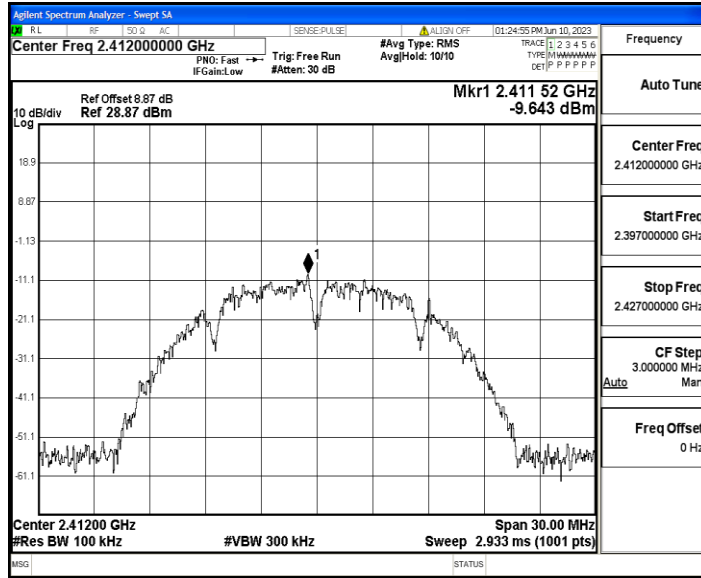
11B\_Ant1\_2412\_30~1000



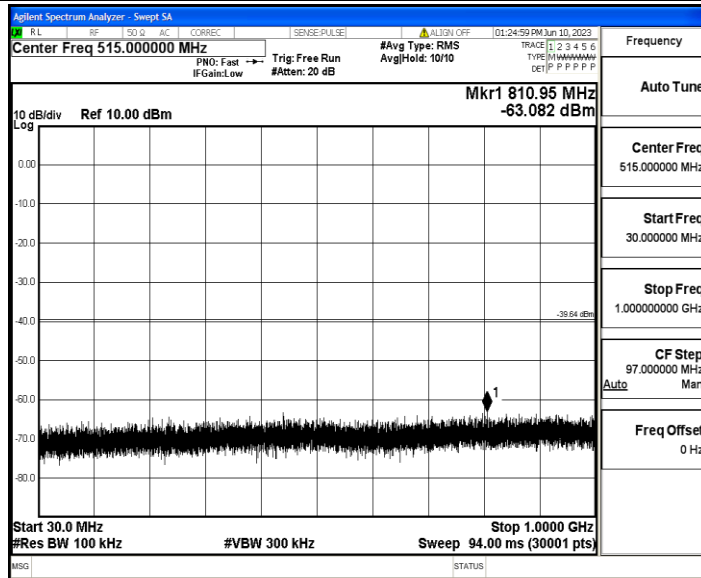
11B\_Ant1\_2412\_1000~26500



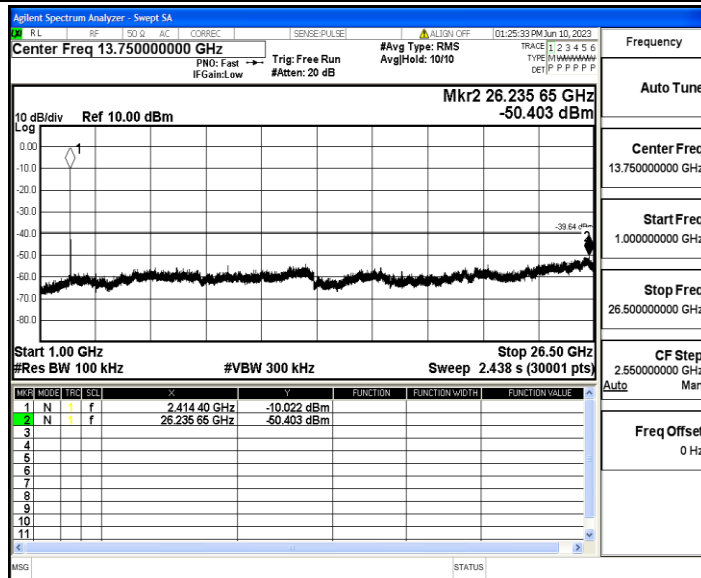
11B\_Ant2\_2412\_0~Reference



11B\_Ant2\_2412\_30~1000



11B\_Ant2\_2412\_1000~26500



11B\_Ant1\_2437\_0~Reference