

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

Product Name: 4K Set Top Box

Trade Mark: N/A

Test Model: Box R 4K-SX6BHES

FCC ID: 2AOVU-SN6BHXY

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

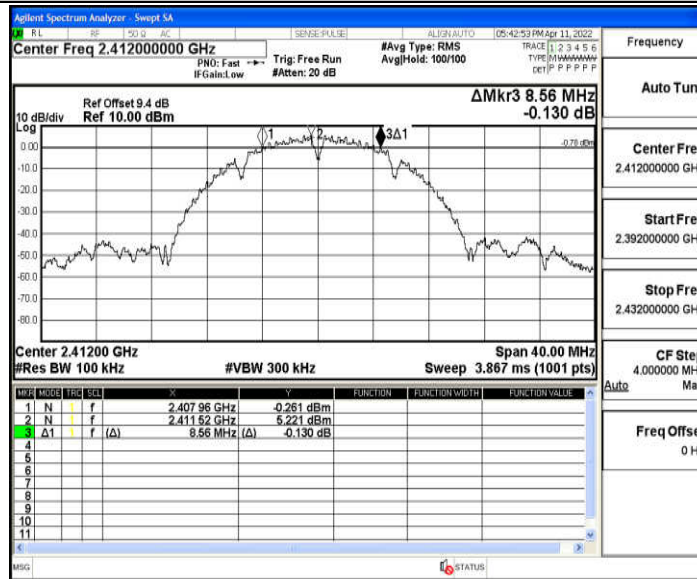
Appendix A: DTS Bandwidth

Test Result

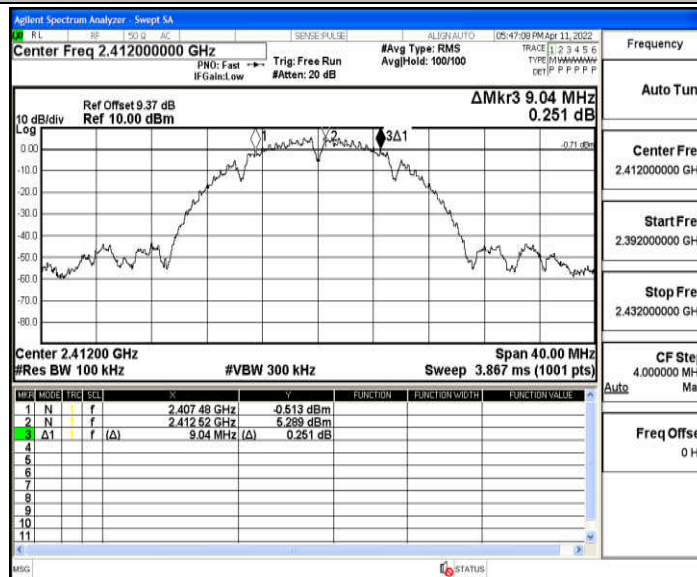
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.560	2407.960	2416.520	0.5	PASS
	Ant2	2412	9.040	2407.480	2416.520	0.5	PASS
	Ant1	2437	8.560	2432.480	2441.040	0.5	PASS
	Ant2	2437	8.080	2433.000	2441.080	0.5	PASS
	Ant1	2462	9.040	2457.480	2466.520	0.5	PASS
	Ant2	2462	9.040	2457.520	2466.560	0.5	PASS
11G	Ant1	2412	15.080	2404.480	2419.560	0.5	PASS
	Ant2	2412	15.680	2403.880	2419.560	0.5	PASS
	Ant1	2437	13.280	2430.360	2443.640	0.5	PASS
	Ant2	2437	14.080	2430.400	2444.480	0.5	PASS
	Ant1	2462	13.840	2455.720	2469.560	0.5	PASS
	Ant2	2462	15.720	2454.440	2470.160	0.5	PASS
11N20MIMO	Ant1	2412	14.240	2405.360	2419.600	0.5	PASS
	Ant2	2412	15.040	2404.480	2419.520	0.5	PASS
	Ant1	2437	15.920	2429.480	2445.400	0.5	PASS
	Ant2	2437	15.640	2428.880	2444.520	0.5	PASS
	Ant1	2462	15.120	2454.440	2469.560	0.5	PASS
	Ant2	2462	15.080	2454.480	2469.560	0.5	PASS
11N40MIMO	Ant1	2422	35.040	2404.480	2439.520	0.5	PASS
	Ant2	2422	35.120	2404.480	2439.600	0.5	PASS
	Ant1	2437	33.840	2419.480	2453.320	0.5	PASS
	Ant2	2437	33.840	2420.680	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

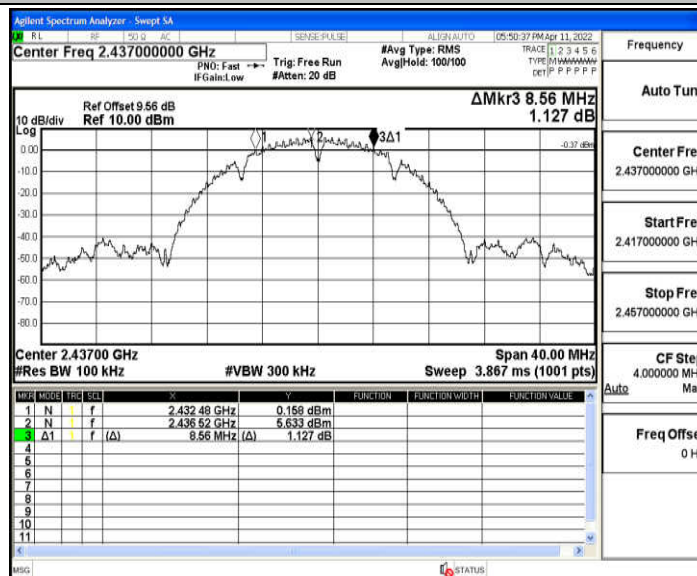
11B_Ant1_2412



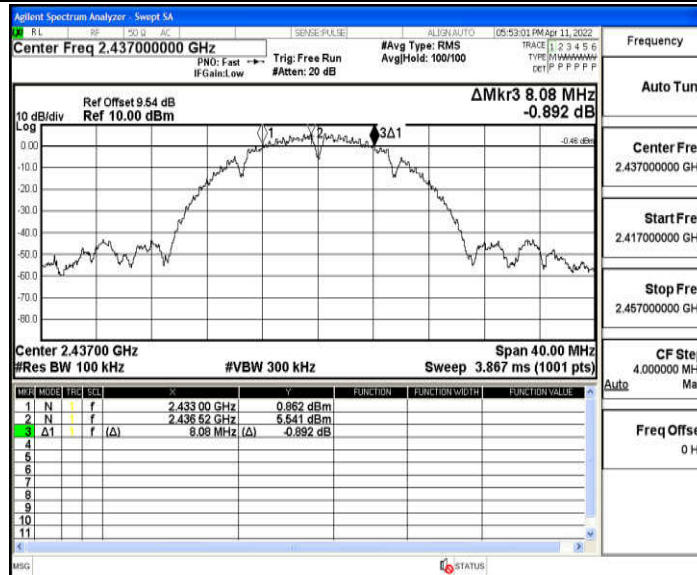
11B_Ant2_2412



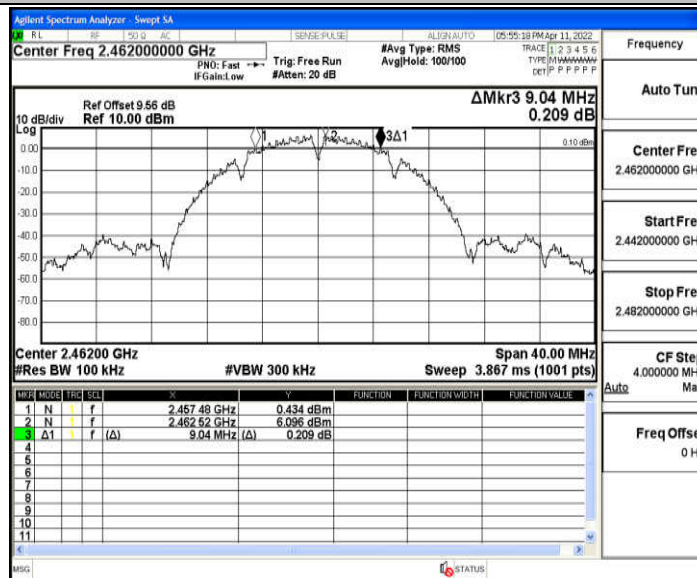
11B_Ant1_2437



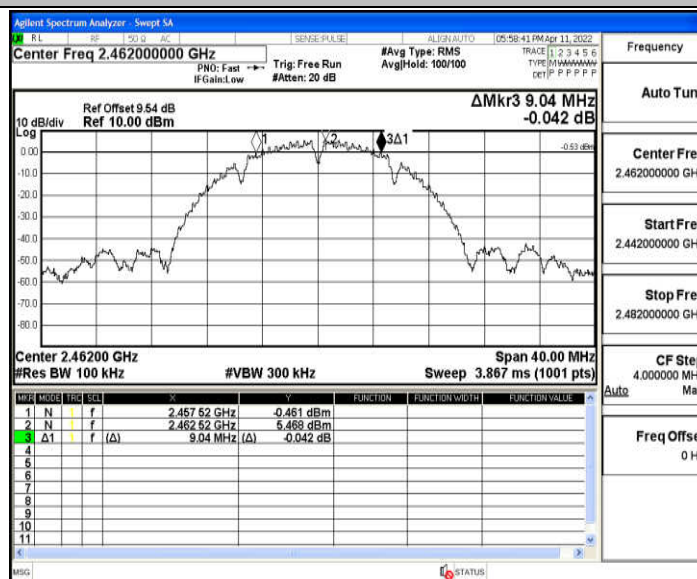
11B_Ant2_2437



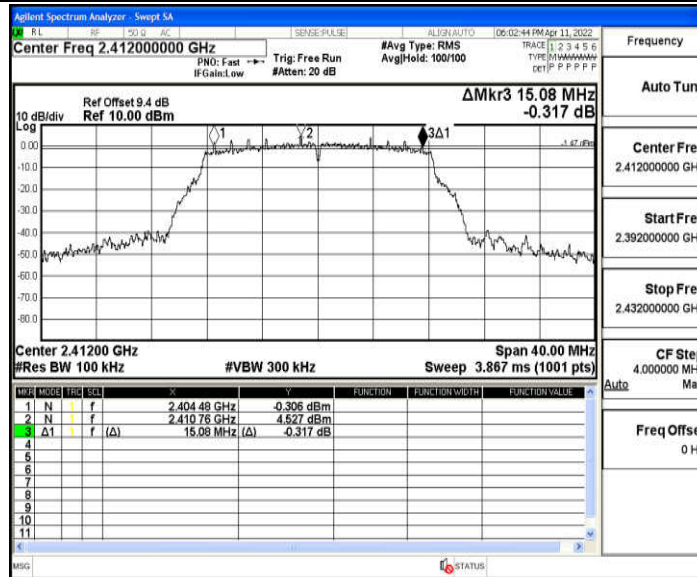
11B_Ant1_2462



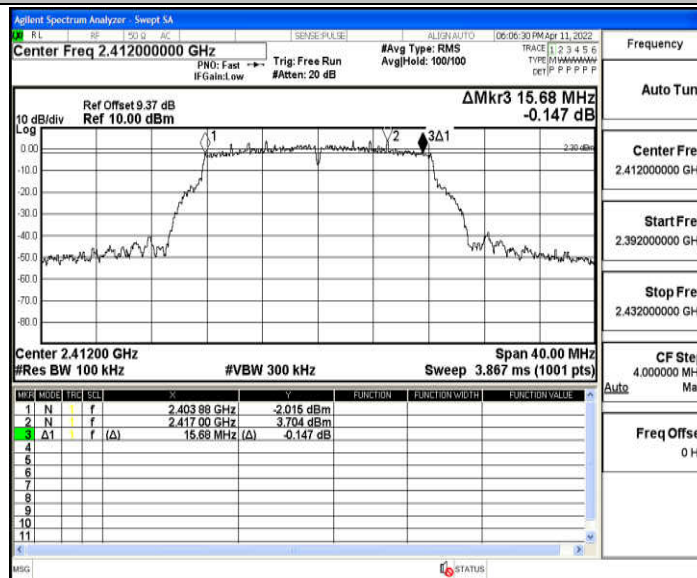
11B_Ant2_2462



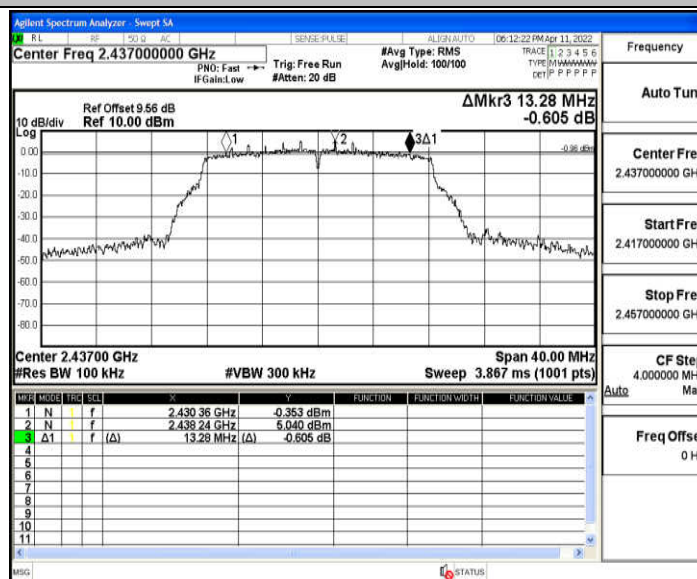
11G_Ant1_2412



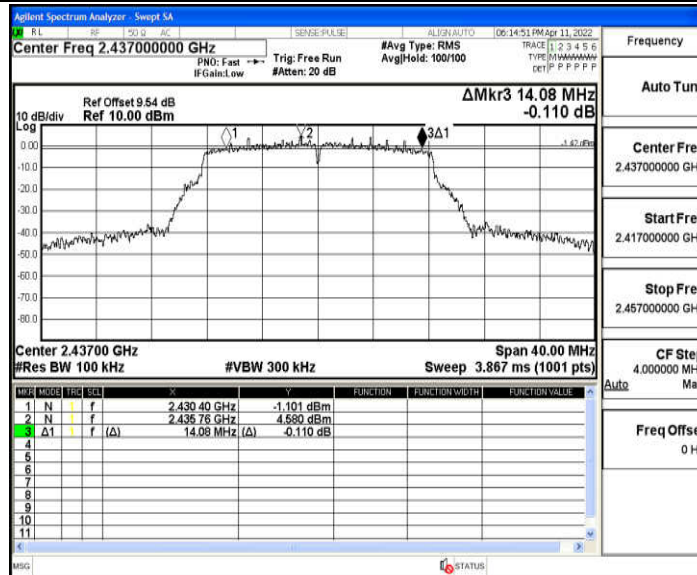
11G_Ant2_2412



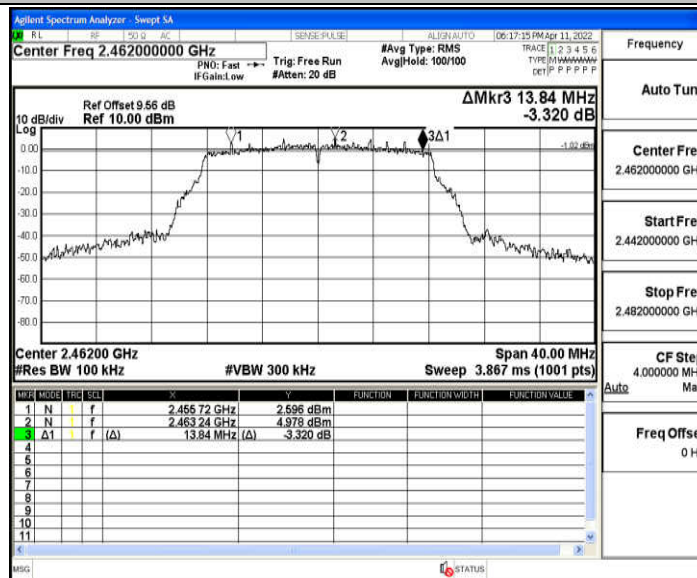
11G_Ant1_2437



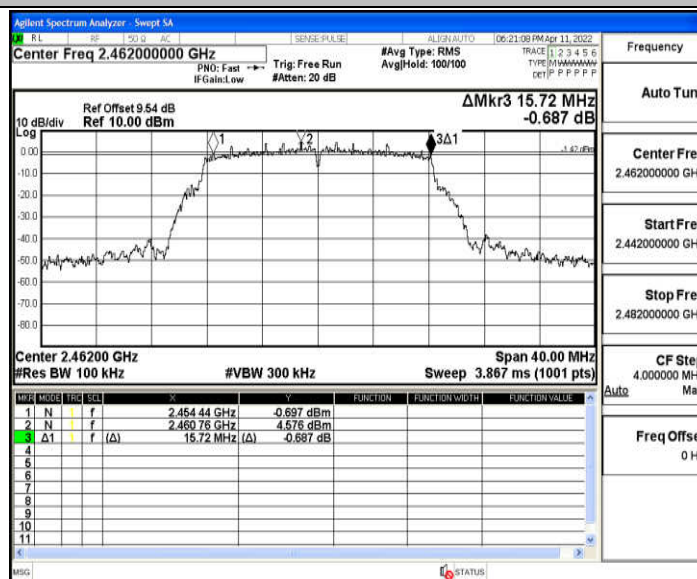
11G_Ant2_2437



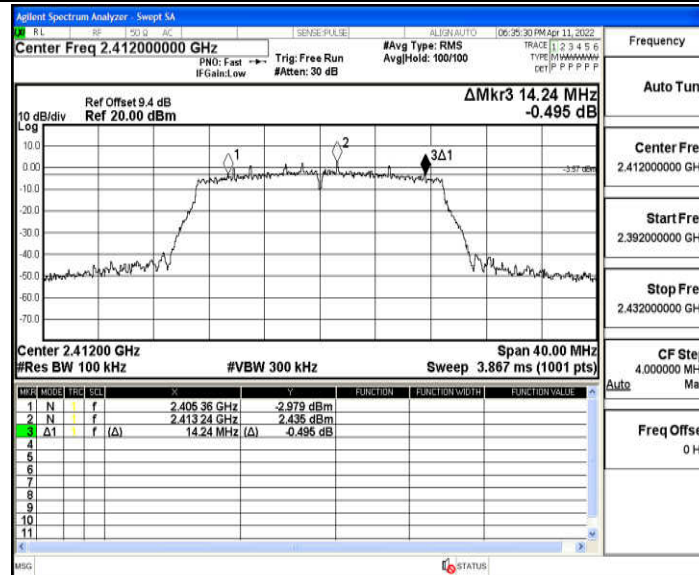
11G_Ant1_2462



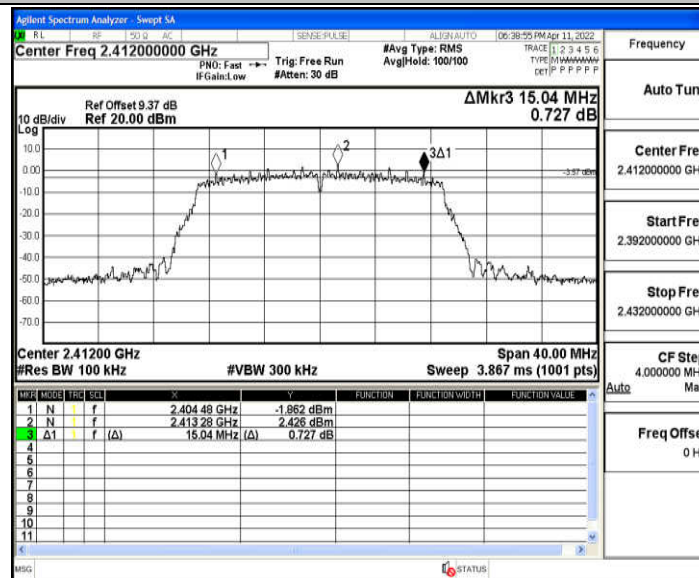
11G_Ant2_2462



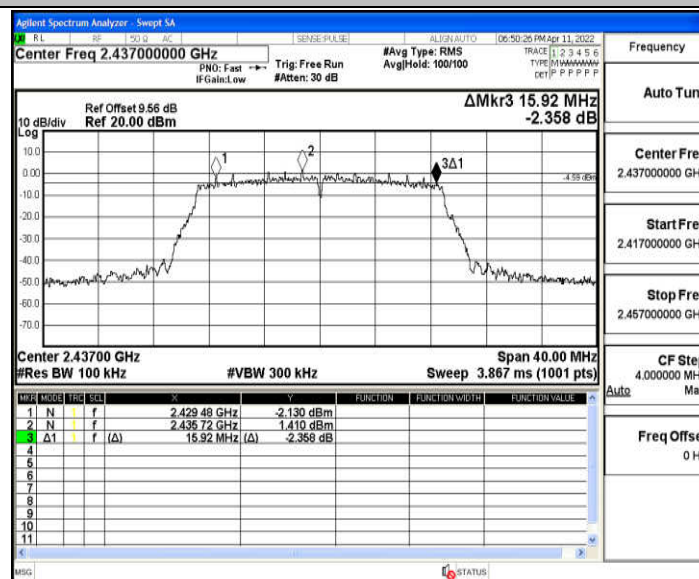
11N20MIMO_Ant1_2412



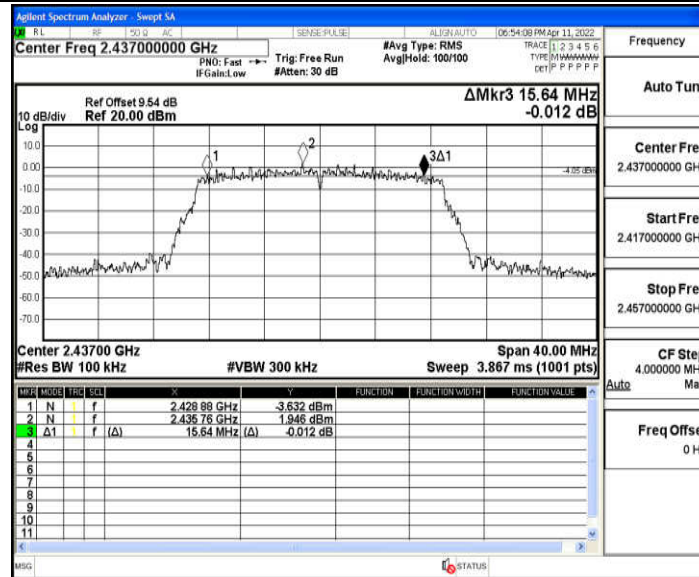
11N20MIMO_Ant2_2412



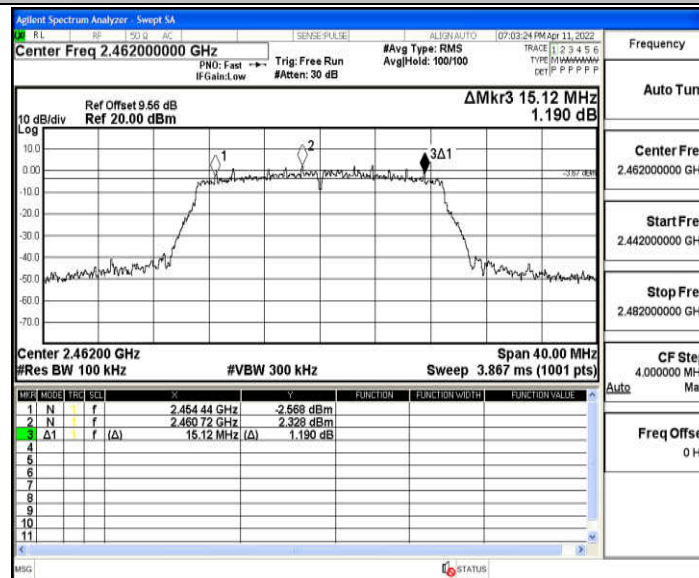
11N20MIMO_Ant1_2437



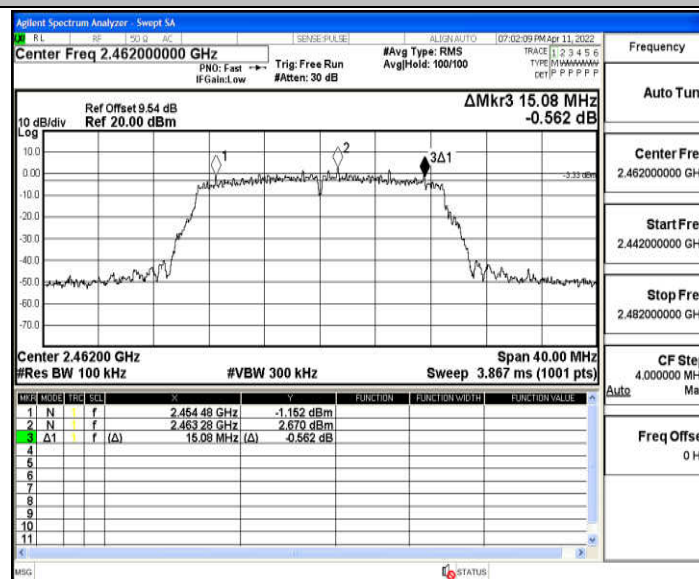
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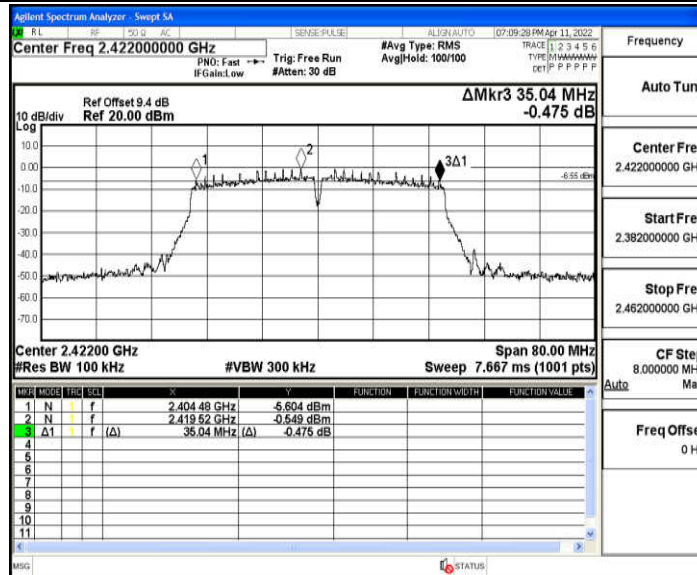
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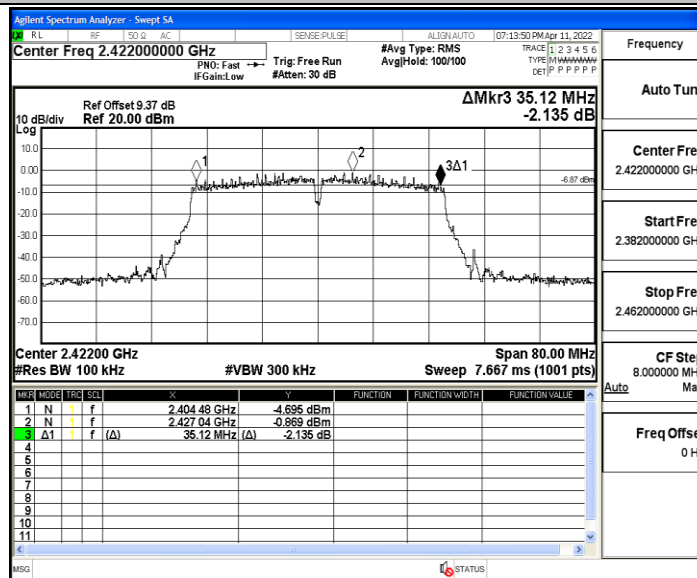
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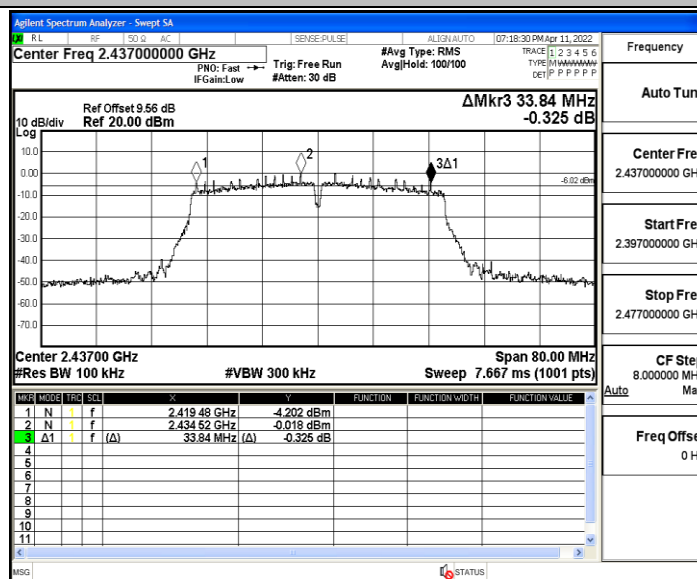
11N40MIMO_Ant1_2422



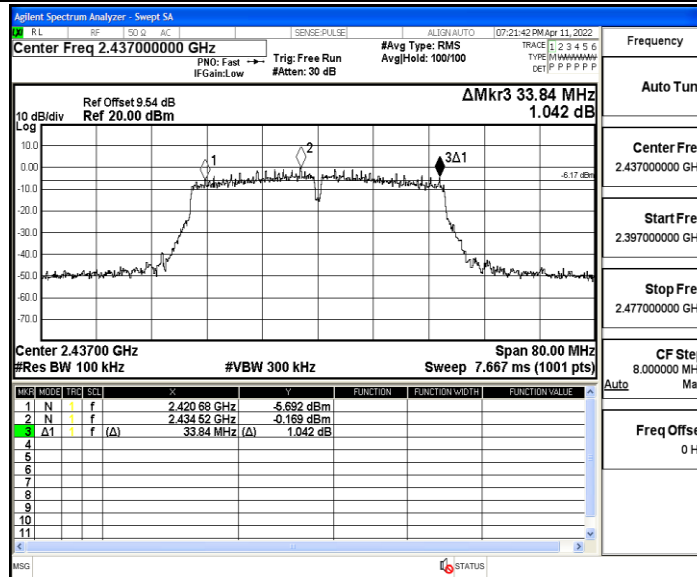
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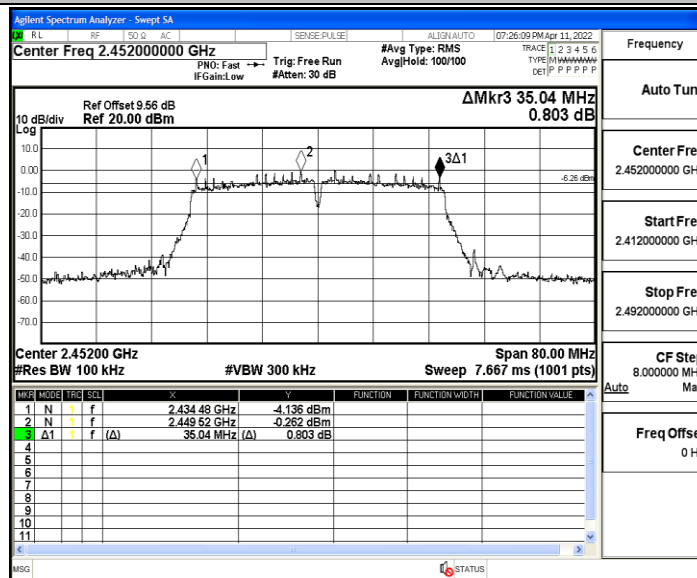
11N40MIMO_Ant1_2437



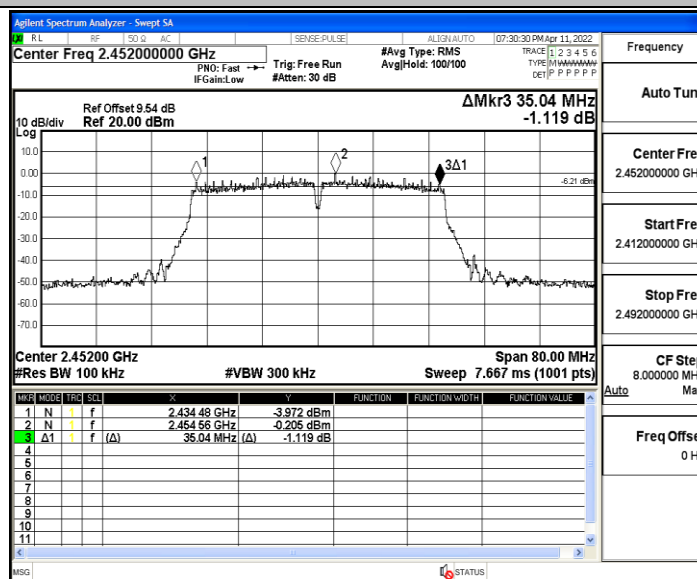
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



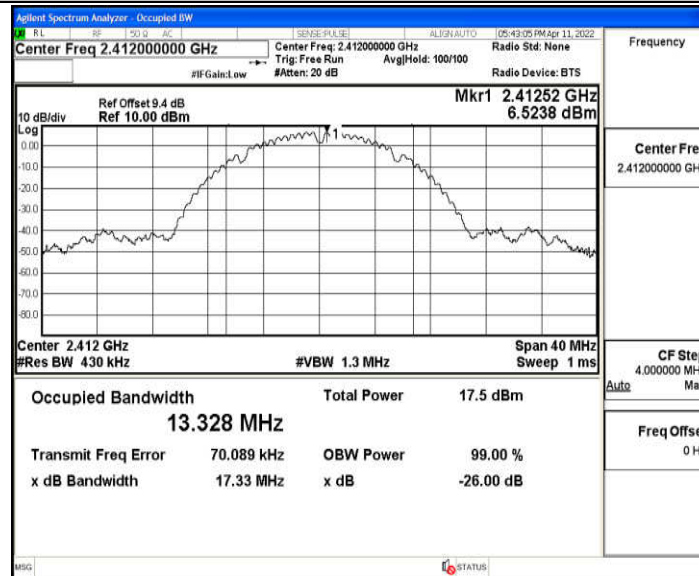
Appendix B: Occupied Channel Bandwidth

Test Result

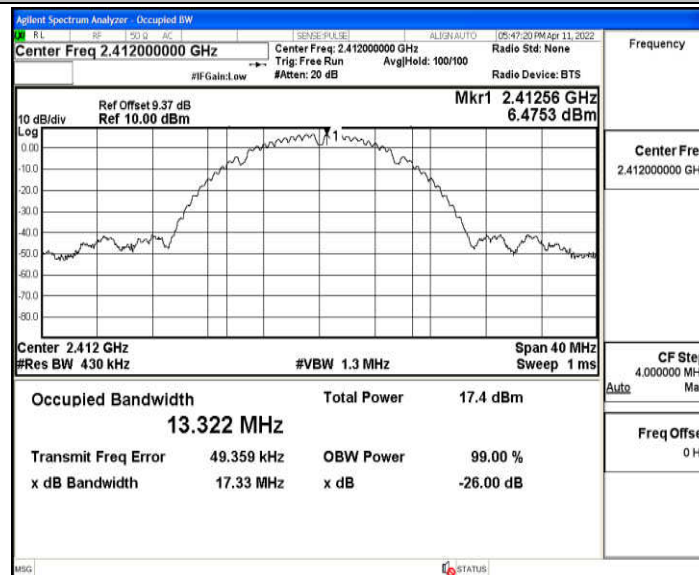
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.328	2405.406	2418.734	---	---
	Ant2	2412	13.322	2405.388	2418.710	---	---
	Ant1	2437	13.453	2430.295	2443.748	---	---
	Ant2	2437	13.350	2430.328	2443.678	---	---
	Ant1	2462	13.371	2455.390	2468.761	---	---
	Ant2	2462	13.336	2455.392	2468.728	---	---
11G	Ant1	2412	16.787	2403.627	2420.414	---	---
	Ant2	2412	16.592	2403.737	2420.329	---	---
	Ant1	2437	16.854	2428.559	2445.413	---	---
	Ant2	2437	16.630	2428.724	2445.354	---	---
	Ant1	2462	16.795	2453.636	2470.431	---	---
	Ant2	2462	16.546	2453.776	2470.322	---	---
11N20MIMO	Ant1	2412	17.765	2403.143	2420.908	---	---
	Ant2	2412	17.656	2403.229	2420.885	---	---
	Ant1	2437	17.815	2428.101	2445.916	---	---
	Ant2	2437	17.583	2428.242	2445.825	---	---
	Ant1	2462	17.779	2453.164	2470.943	---	---
	Ant2	2462	17.590	2453.274	2470.864	---	---
11N40MIMO	Ant1	2422	36.016	2404.055	2440.071	---	---
	Ant2	2422	36.186	2404.015	2440.201	---	---
	Ant1	2437	36.002	2419.044	2455.046	---	---
	Ant2	2437	36.117	2418.991	2455.108	---	---
	Ant1	2452	36.071	2434.073	2470.144	---	---
	Ant2	2452	36.150	2433.940	2470.090	---	---

Test Graphs

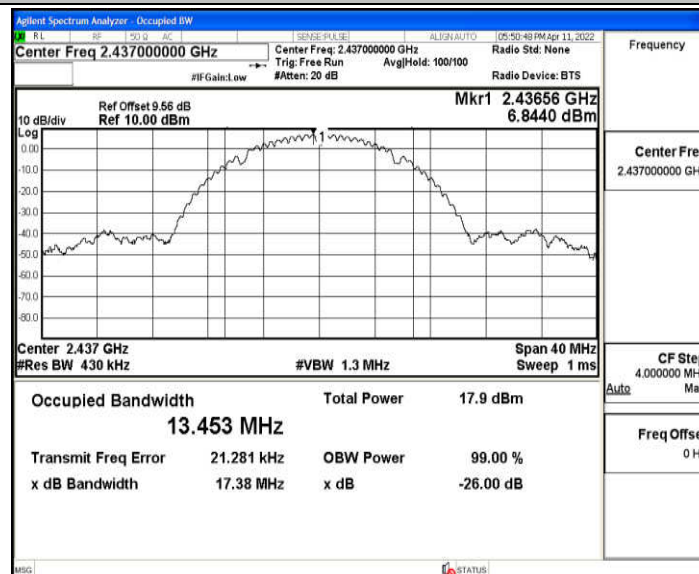
11B_Ant1_2412



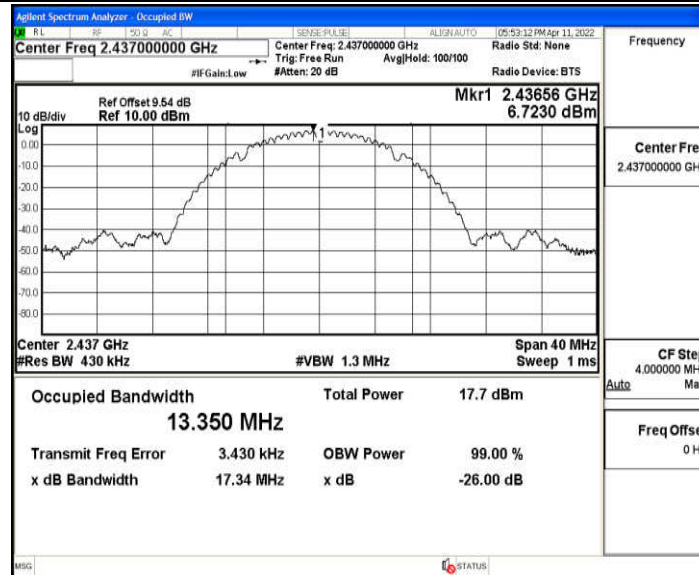
11B_Ant2_2412



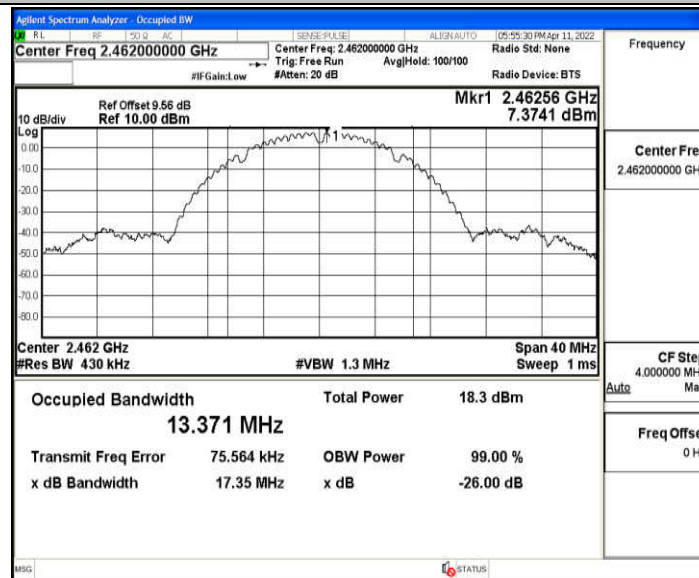
11B_Ant1_2437



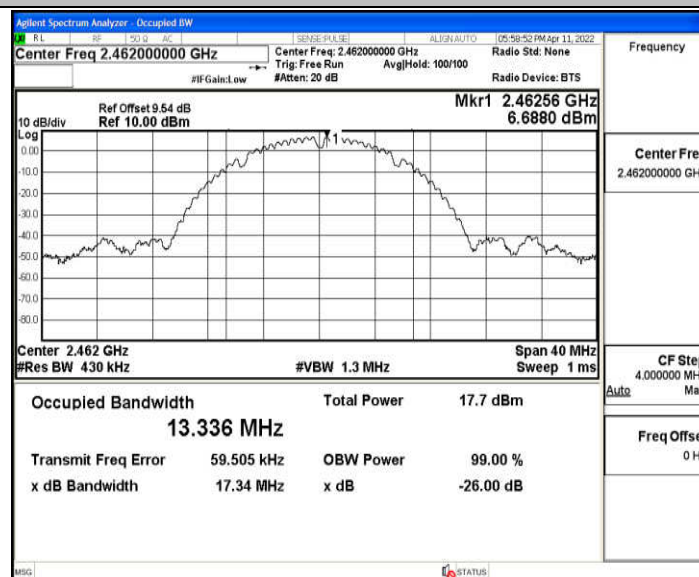
11B_Ant2_2437



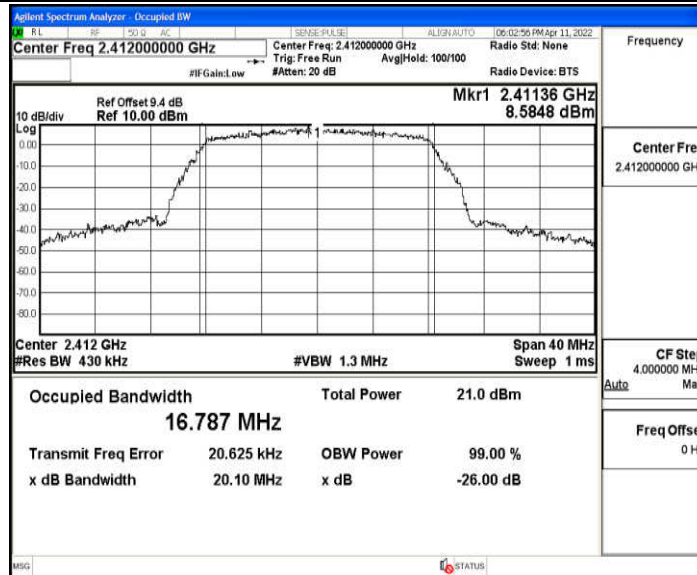
11B_Ant1_2462



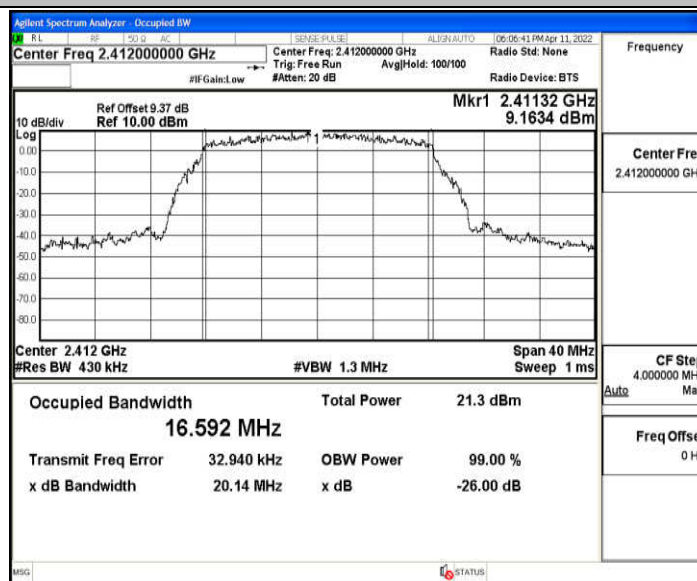
11B_Ant2_2462



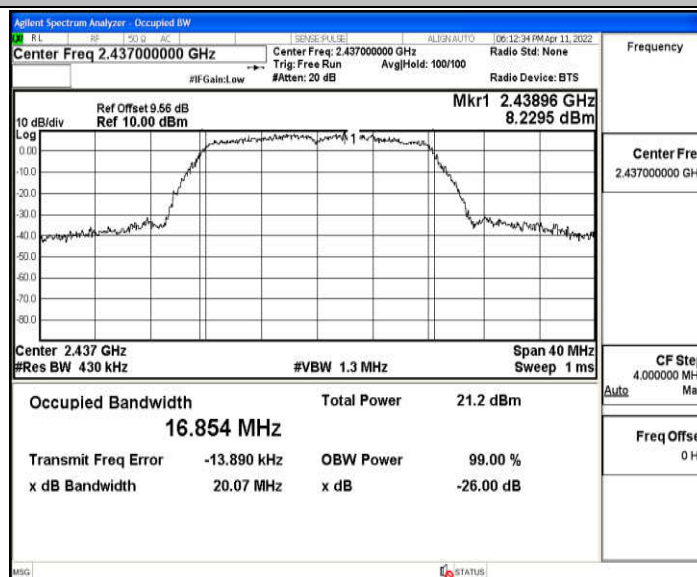
11G_Ant1_2412



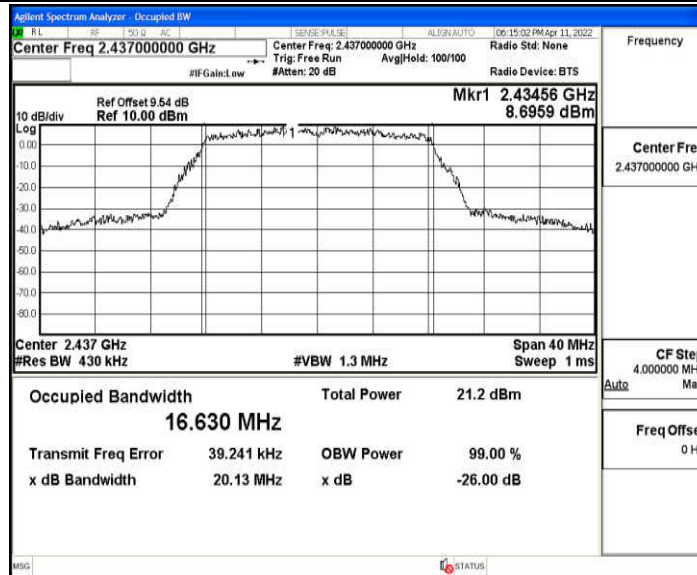
11G_Ant2_2412



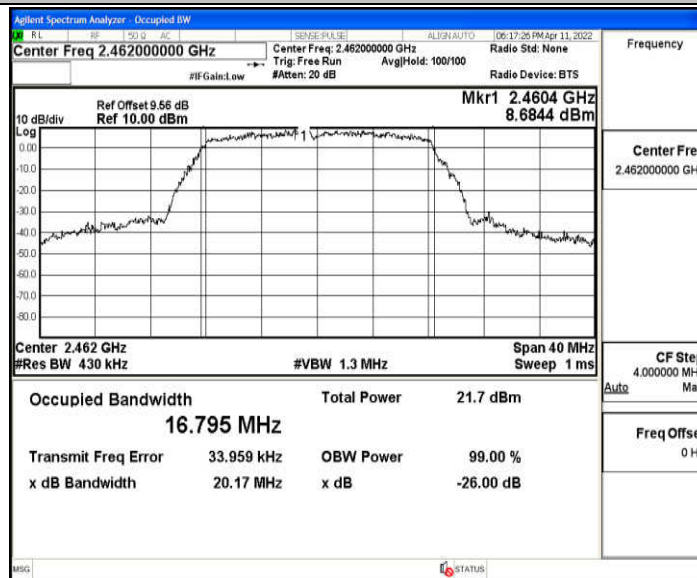
11G_Ant1_2437



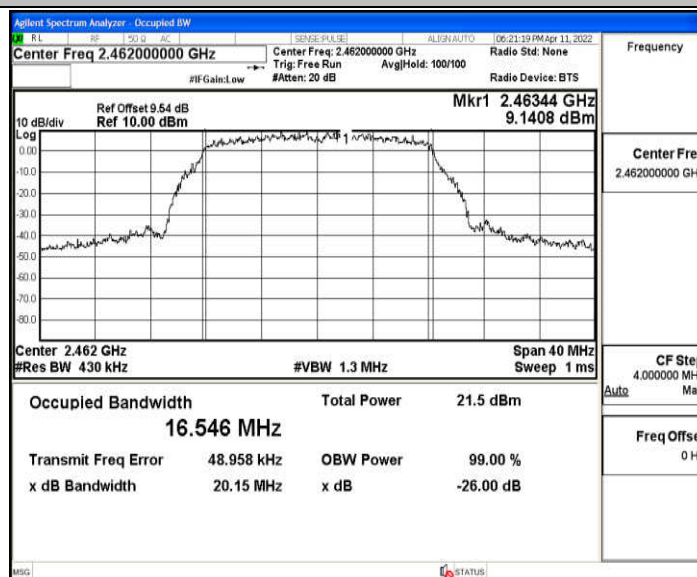
11G_Ant2_2437



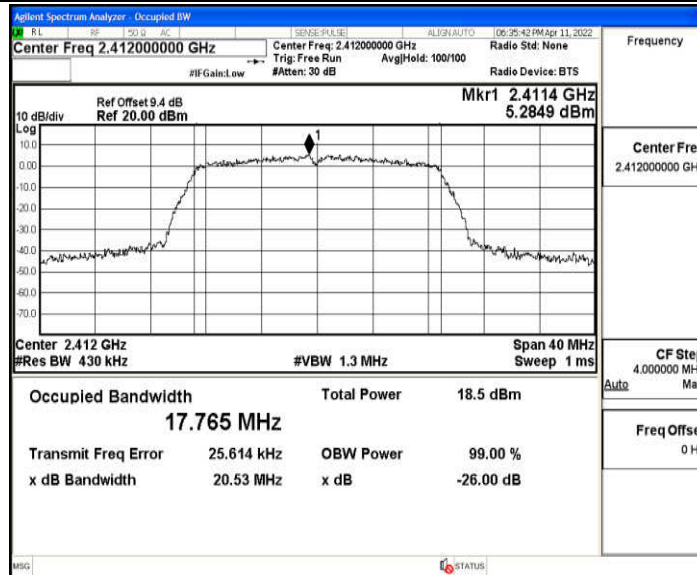
11G_Ant1_2462



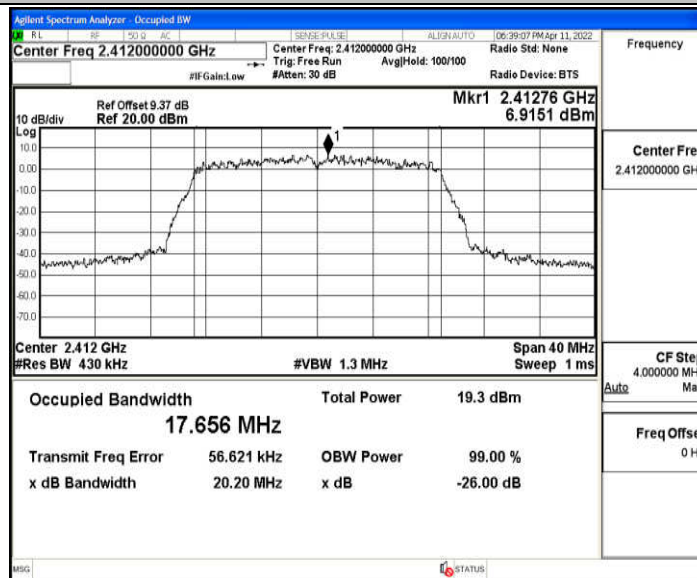
11G_Ant2_2462



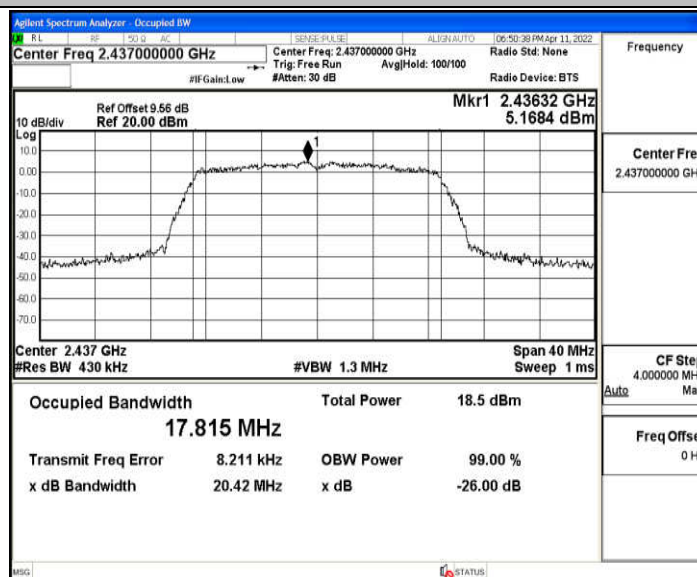
11N20MIMO_Ant1_2412



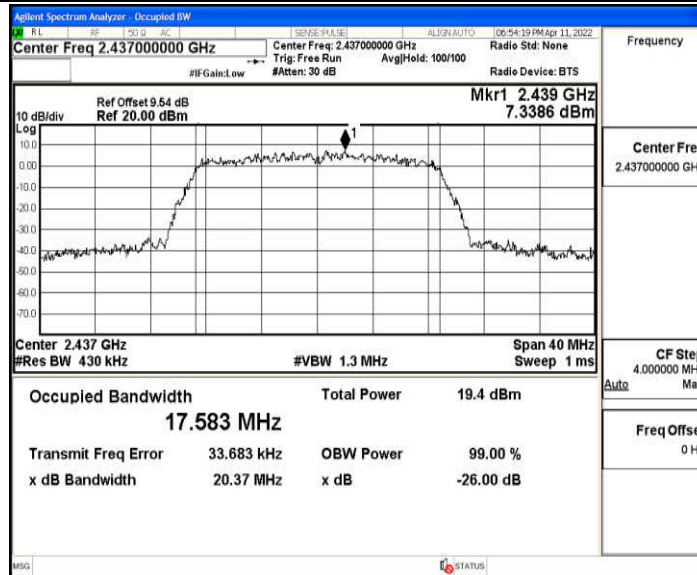
11N20MIMO_Ant2_2412



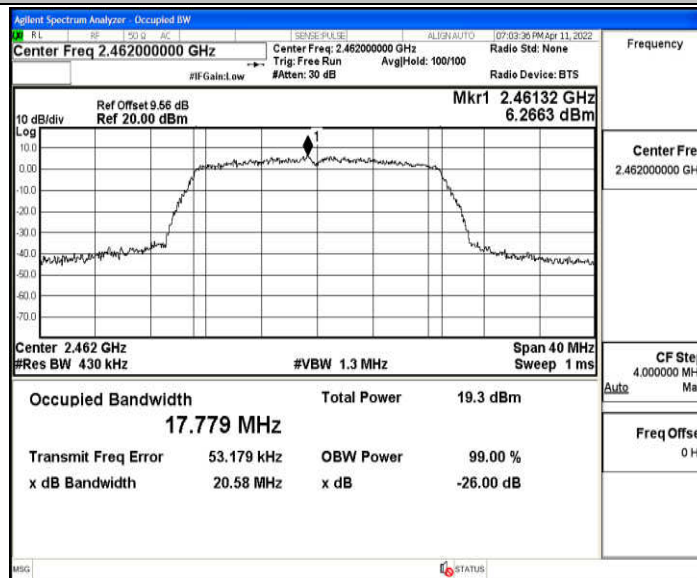
11N20MIMO_Ant1_2437



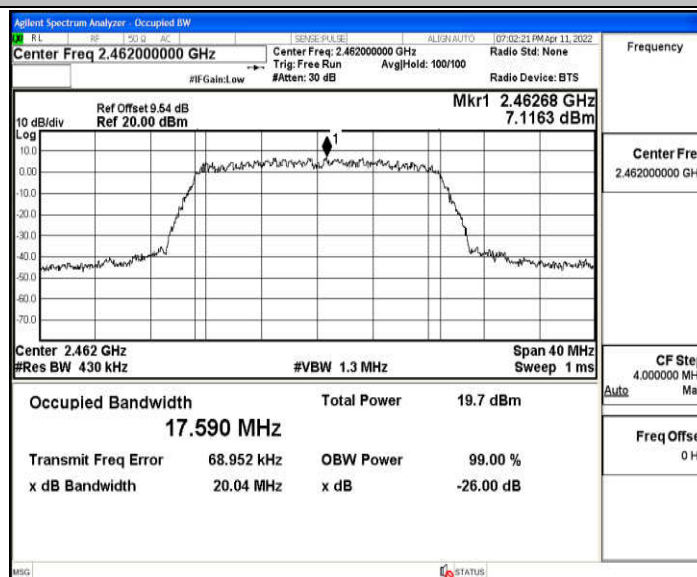
11N20MIMO_Ant2_2437



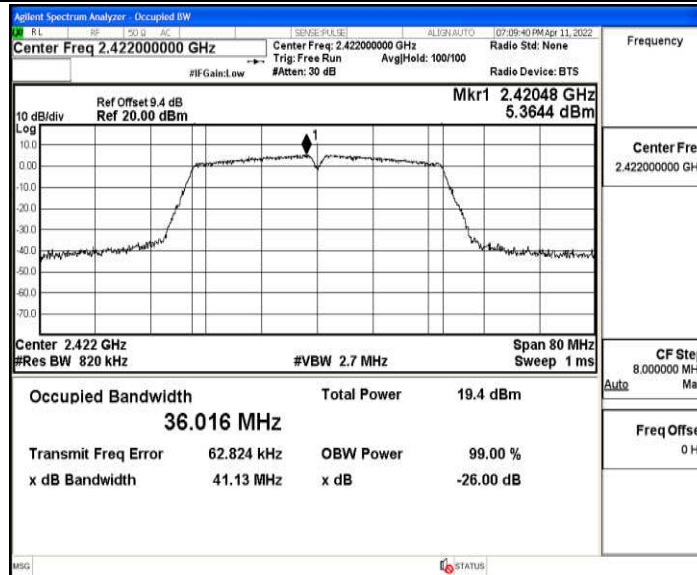
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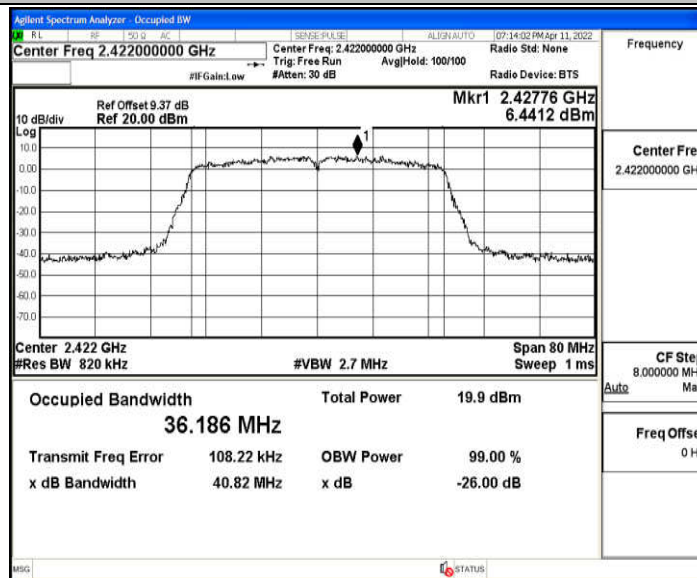
11N20MIMO_Ant2_2462



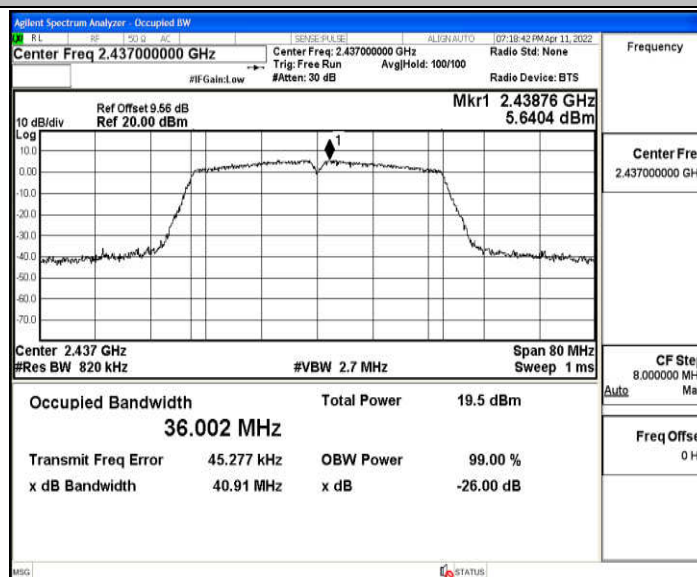
11N40MIMO_Ant1_2422



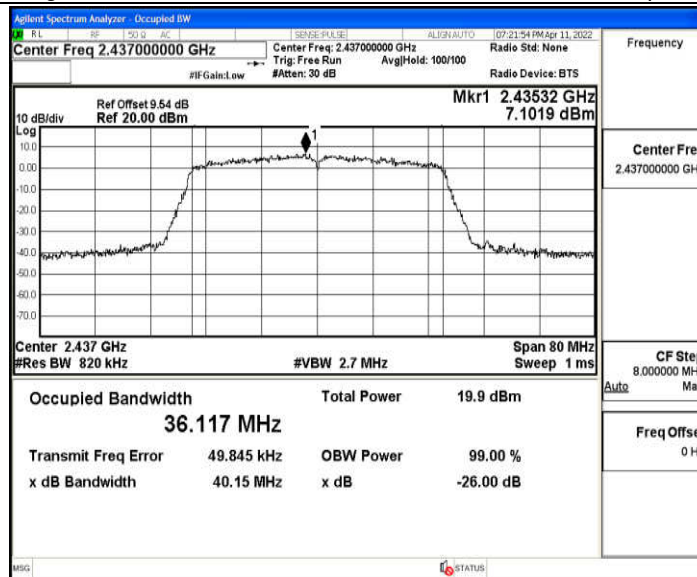
11N40MIMO_Ant2_2422



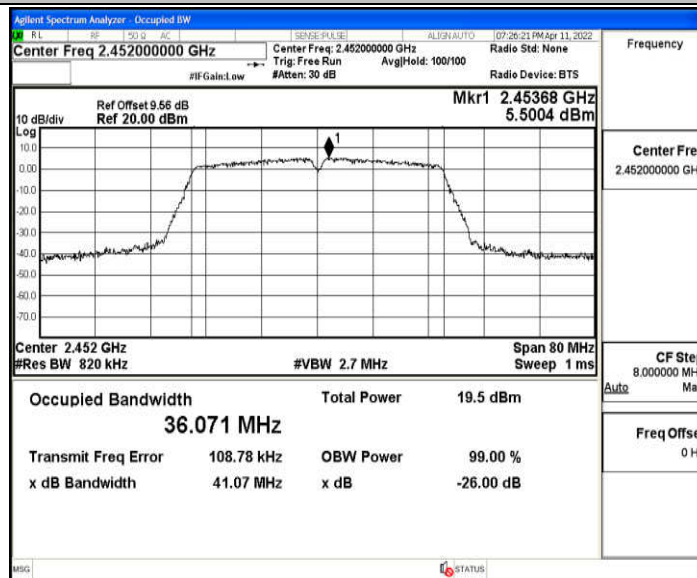
11N40MIMO_Ant1_2437



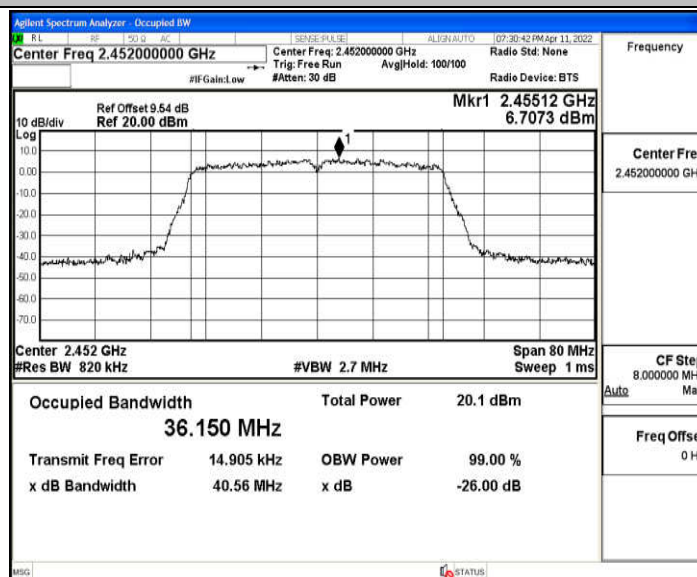
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



Appendix C: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	14.47	≤30.00	PASS
	Ant2	2412	14.47	≤30.00	PASS
	Ant1	2437	14.88	≤30.00	PASS
	Ant2	2437	14.66	≤30.00	PASS
	Ant1	2462	15.43	≤30.00	PASS
	Ant2	2462	14.68	≤30.00	PASS
11G	Ant1	2412	14.93	≤30.00	PASS
	Ant2	2412	14.90	≤30.00	PASS
	Ant1	2437	15.15	≤30.00	PASS
	Ant2	2437	14.90	≤30.00	PASS
	Ant1	2462	15.67	≤30.00	PASS
	Ant2	2462	15.14	≤30.00	PASS
11N20MIMO	Ant1	2412	12.30	≤30.00	PASS
	Ant2	2412	12.52	≤30.00	PASS
	total	2412	15.42	≤30.00	PASS
	Ant1	2437	12.52	≤30.00	PASS
	Ant2	2437	12.47	≤30.00	PASS
	total	2437	15.51	≤30.00	PASS
	Ant1	2462	13.10	≤30.00	PASS
	Ant2	2462	12.72	≤30.00	PASS
	total	2462	15.92	≤30.00	PASS
11N40MIMO	Ant1	2422	12.48	≤30.00	PASS
	Ant2	2422	12.57	≤30.00	PASS
	total	2422	15.54	≤30.00	PASS
	Ant1	2437	12.72	≤30.00	PASS
	Ant2	2437	12.52	≤30.00	PASS
	total	2437	15.63	≤30.00	PASS
	Ant1	2452	12.55	≤30.00	PASS
	Ant2	2452	12.54	≤30.00	PASS
	total	2452	15.56	≤30.00	PASS

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

Appendix D: Maximum power spectral density

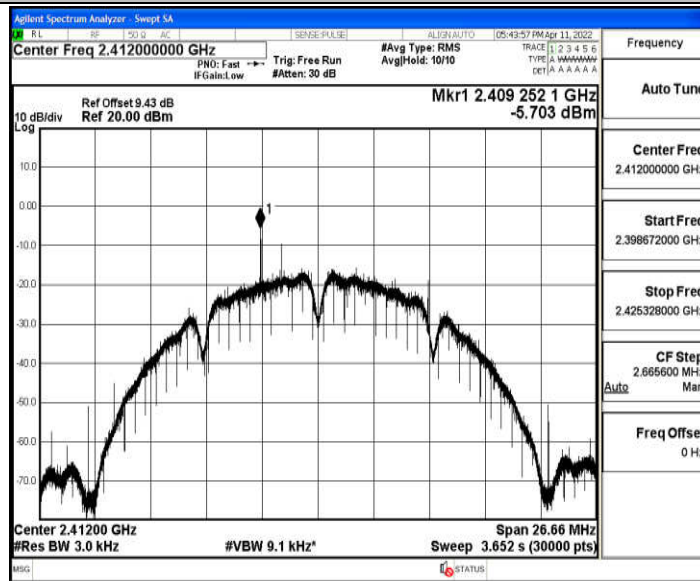
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-5.7	≤8.00	PASS
	Ant2	2412	-8.76	≤8.00	PASS
	Ant1	2437	-7.56	≤8.00	PASS
	Ant2	2437	-15.46	≤8.00	PASS
	Ant1	2462	-9.98	≤8.00	PASS
	Ant2	2462	-6.21	≤8.00	PASS
11G	Ant1	2412	-15.22	≤8.00	PASS
	Ant2	2412	-15.95	≤8.00	PASS
	Ant1	2437	-15.36	≤8.00	PASS
	Ant2	2437	-15.85	≤8.00	PASS
	Ant1	2462	-15.38	≤8.00	PASS
	Ant2	2462	-16.02	≤8.00	PASS
11N20MIMO	Ant1	2412	-17.25	≤8.00	PASS
	Ant2	2412	-18.84	≤8.00	PASS
	total	2412	-14.96	≤8.00	PASS
	Ant1	2437	-17.99	≤8.00	PASS
	Ant2	2437	-18	≤8.00	PASS
	total	2437	-14.98	≤8.00	PASS
	Ant1	2462	-18.24	≤8.00	PASS
	Ant2	2462	-17.6	≤8.00	PASS
	total	2462	-14.90	≤8.00	PASS
11N40MIMO	Ant1	2422	-21.14	≤8.00	PASS
	Ant2	2422	-21.51	≤8.00	PASS
	total	2422	-18.31	≤8.00	PASS
	Ant1	2437	-20.59	≤8.00	PASS
	Ant2	2437	-21.01	≤8.00	PASS
	total	2437	-17.78	≤8.00	PASS
	Ant1	2452	-20.68	≤8.00	PASS
	Ant2	2452	-21.27	≤8.00	PASS
	total	2452	-17.95	≤8.00	PASS

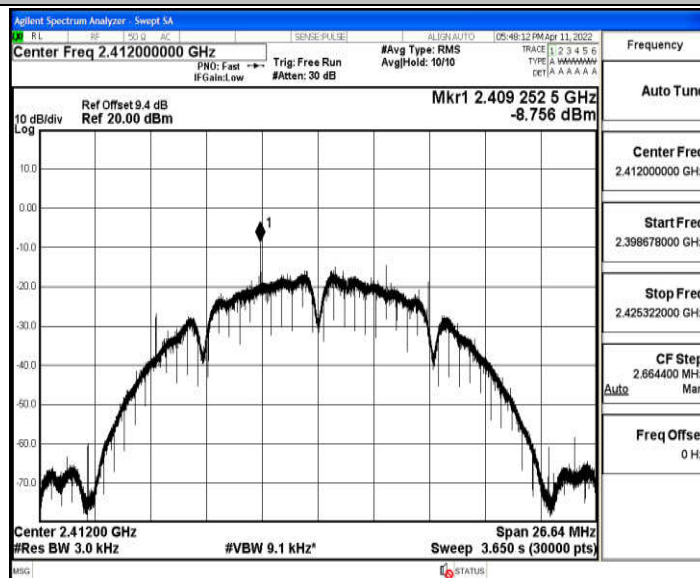
Note: The Duty Cycle Factor is compensated in the test result.

Test Graphs

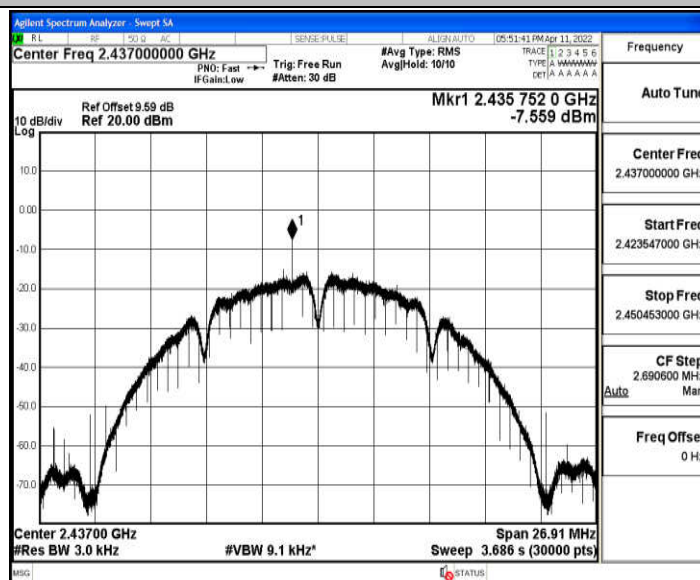
11B_Ant1_2412



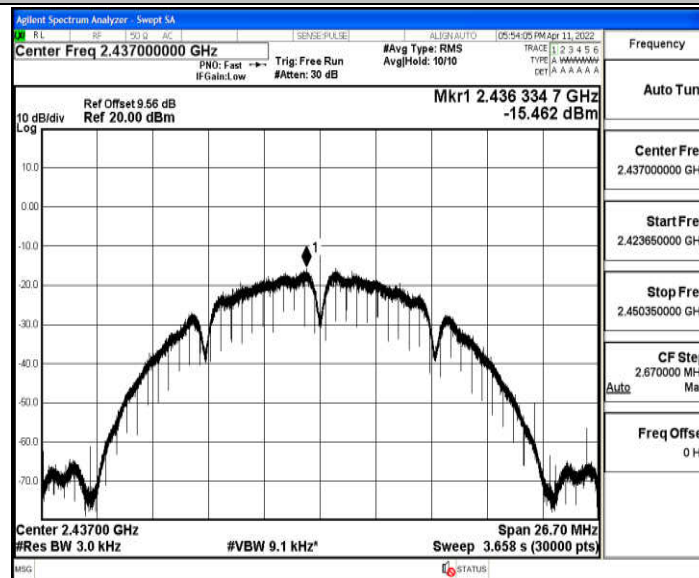
11B_Ant2_2412



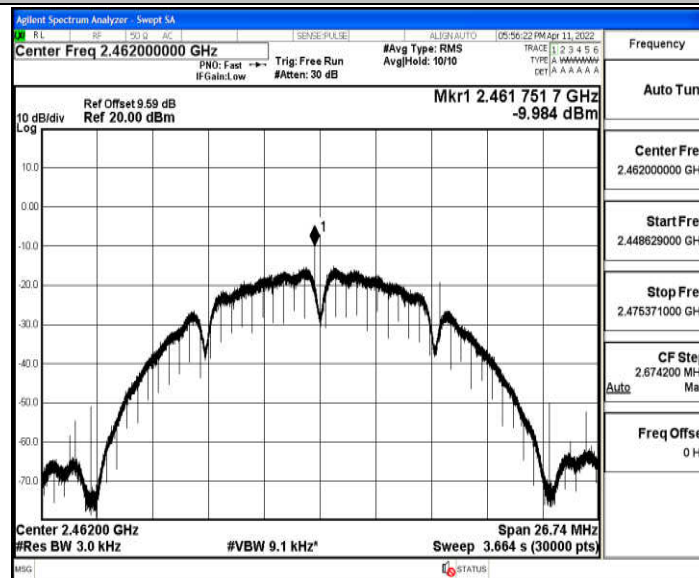
11B_Ant1_2437



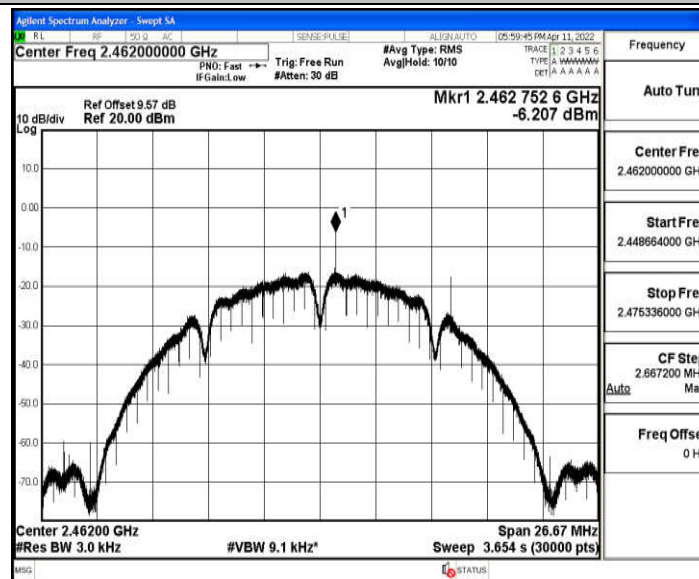
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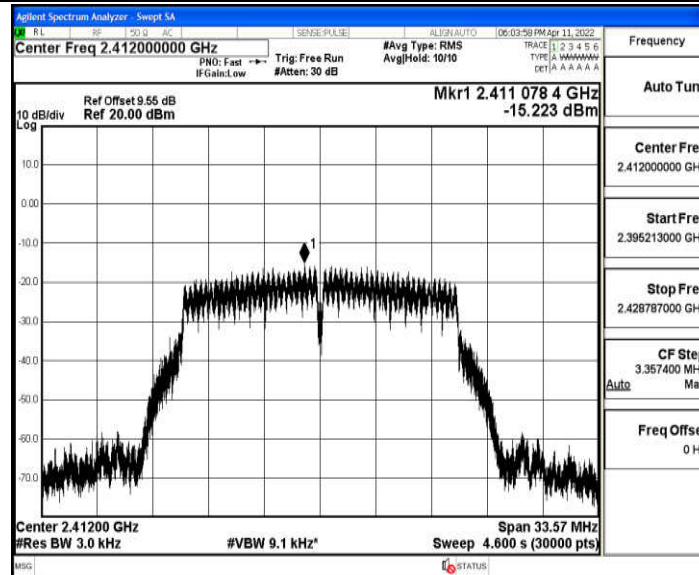
11B_Ant1_2462



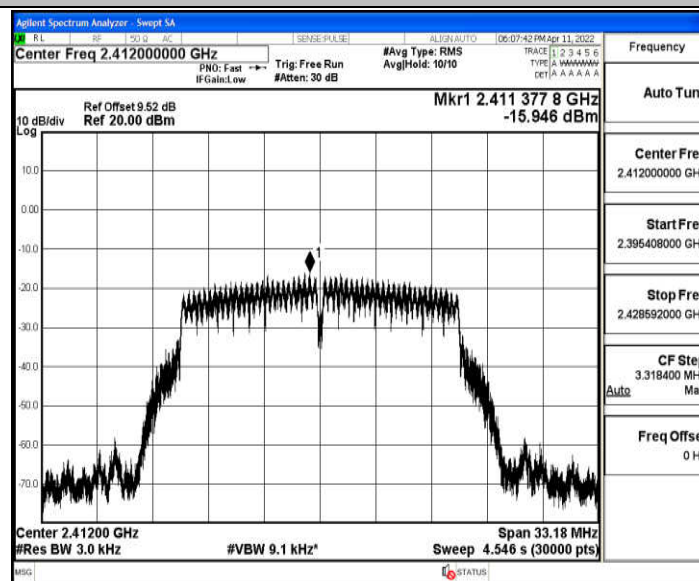
11B_Ant2_2462



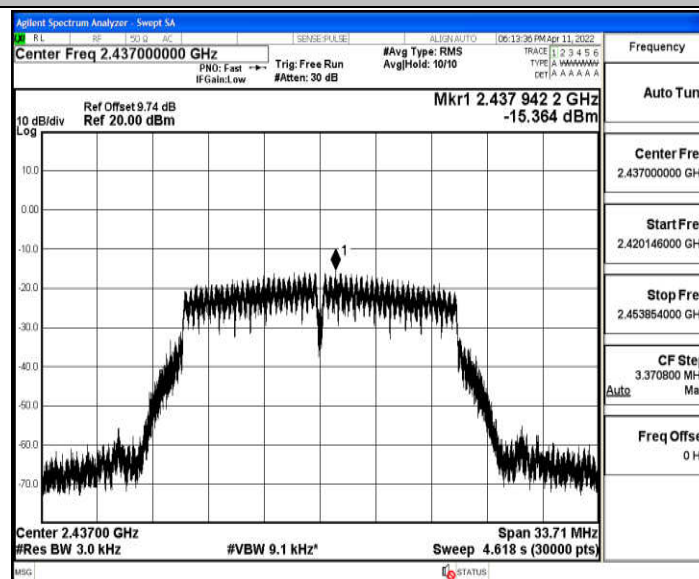
11G_Ant1_2412



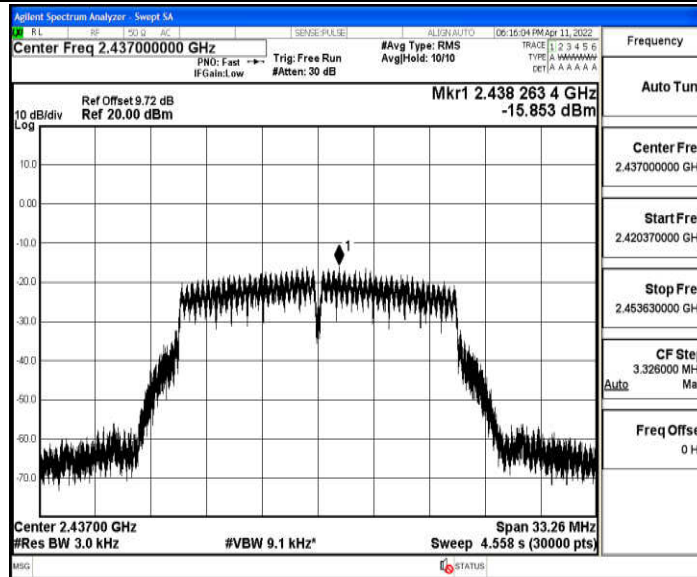
11G_Ant2_2412



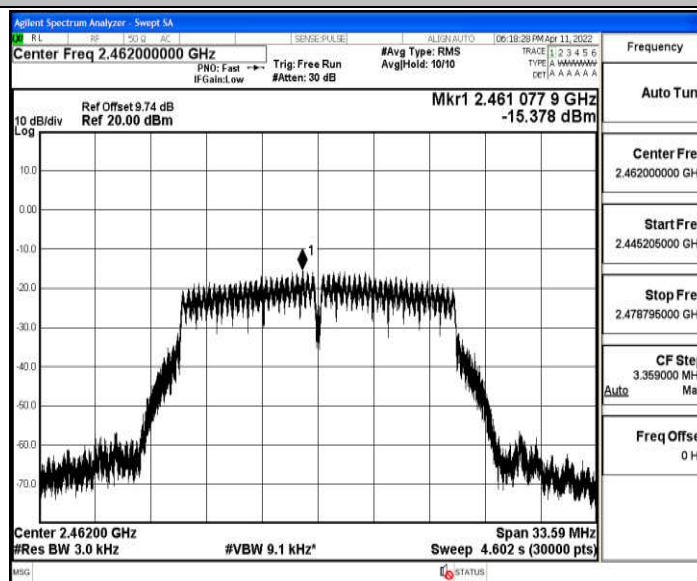
11G_Ant1_2437



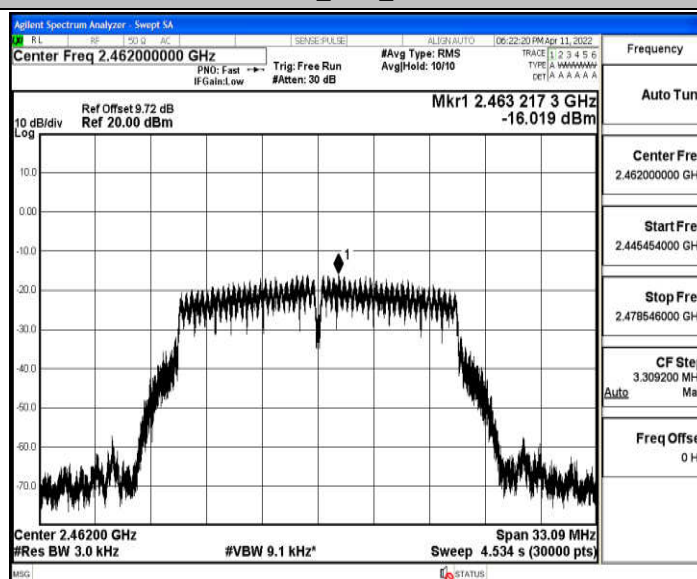
11G_Ant2_2437



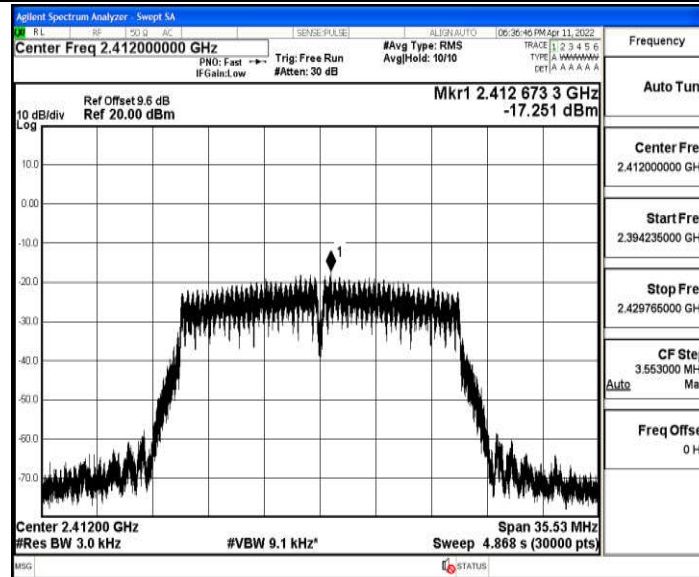
11G_Ant1_2462



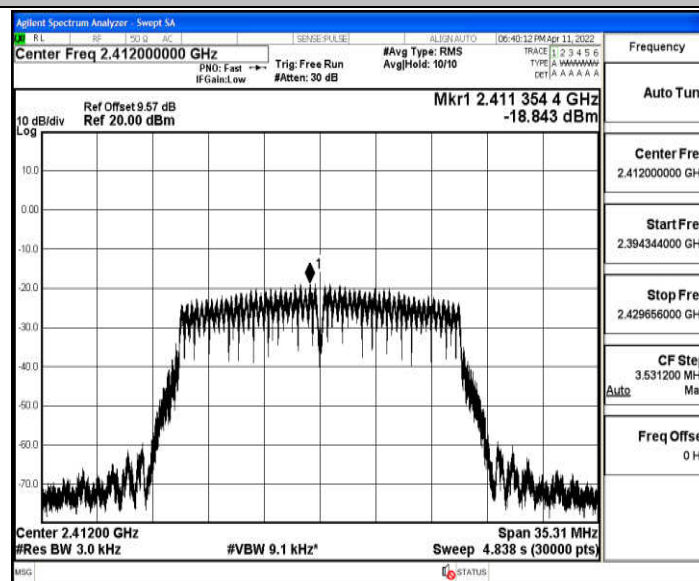
11G_Ant2_2462



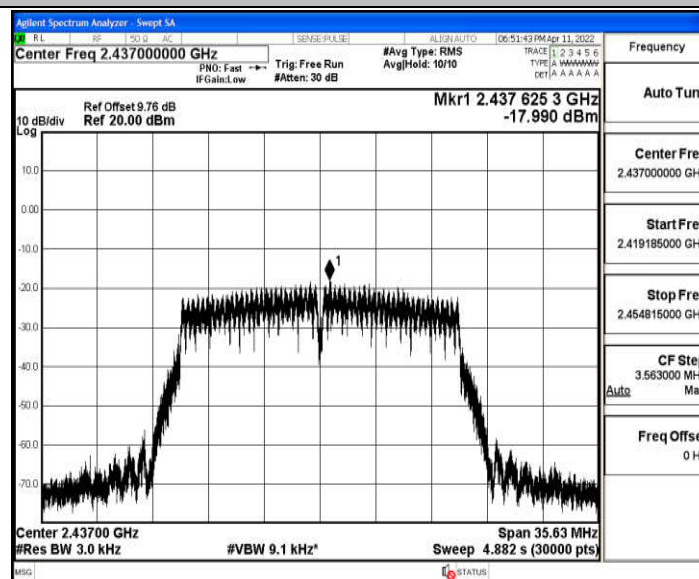
11N20MIMO_Ant1_2412



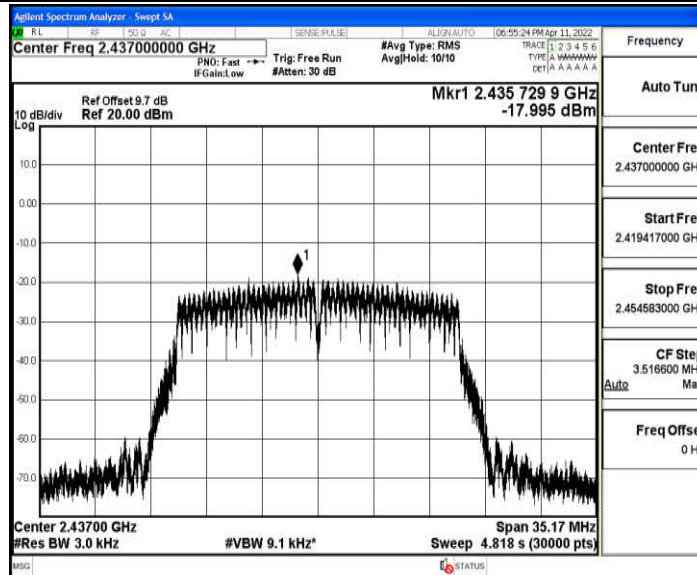
11N20MIMO_Ant2_2412



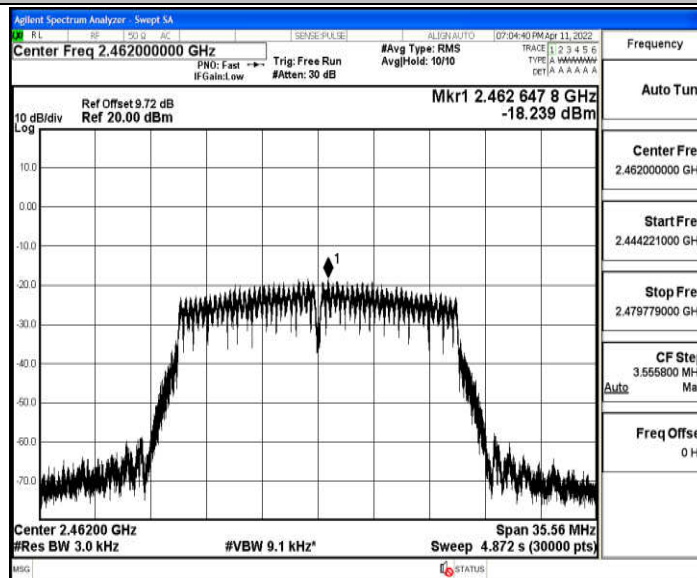
11N20MIMO_Ant1_2437



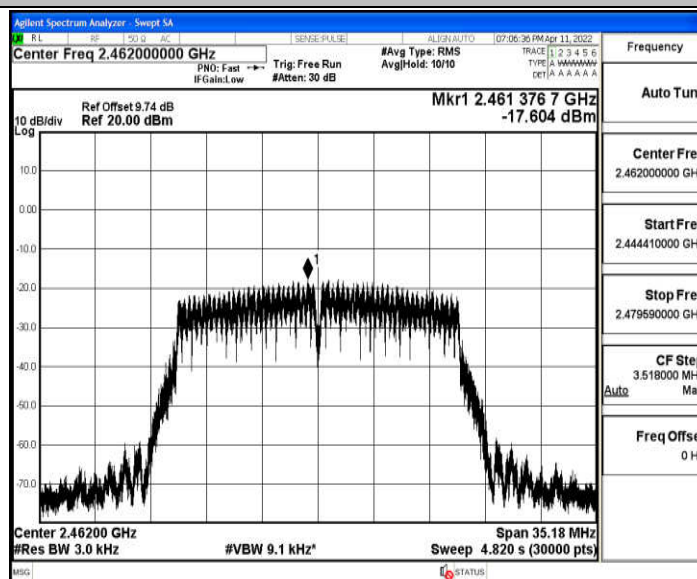
11N20MIMO_Ant2_2437



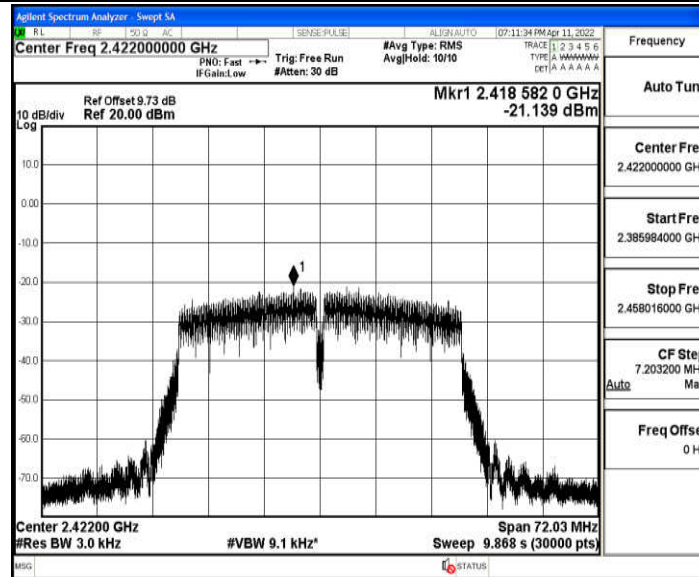
11N20MIMO_Ant1_2462



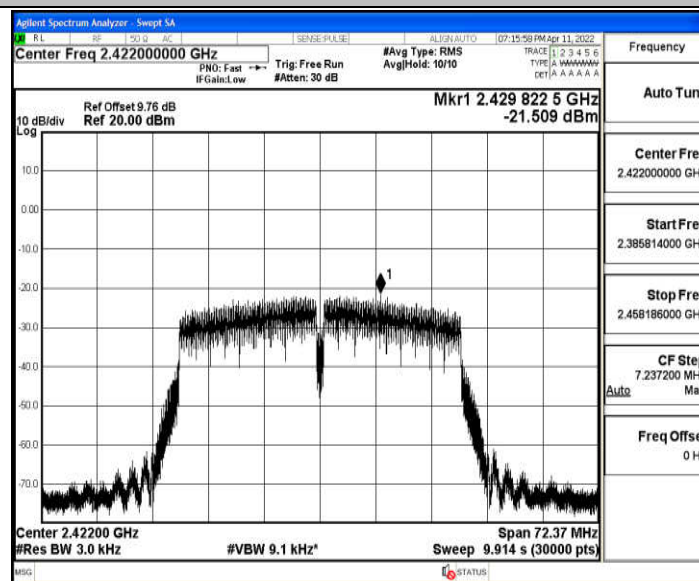
11N20MIMO_Ant2_2462



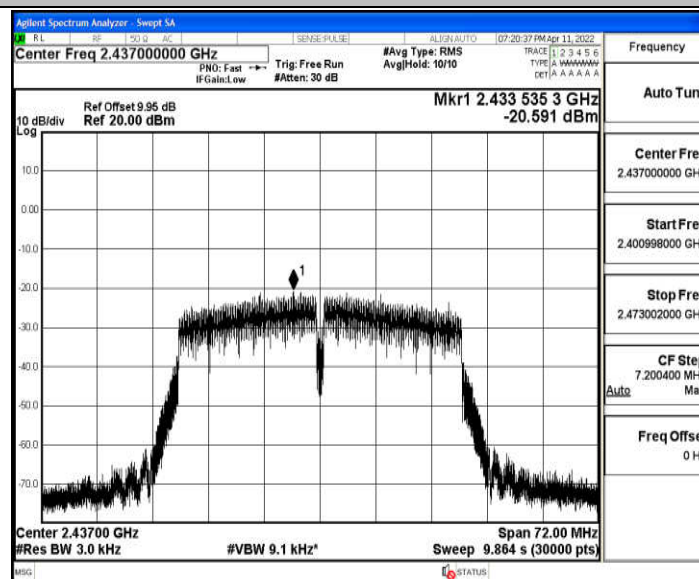
11N40MIMO_Ant1_2422



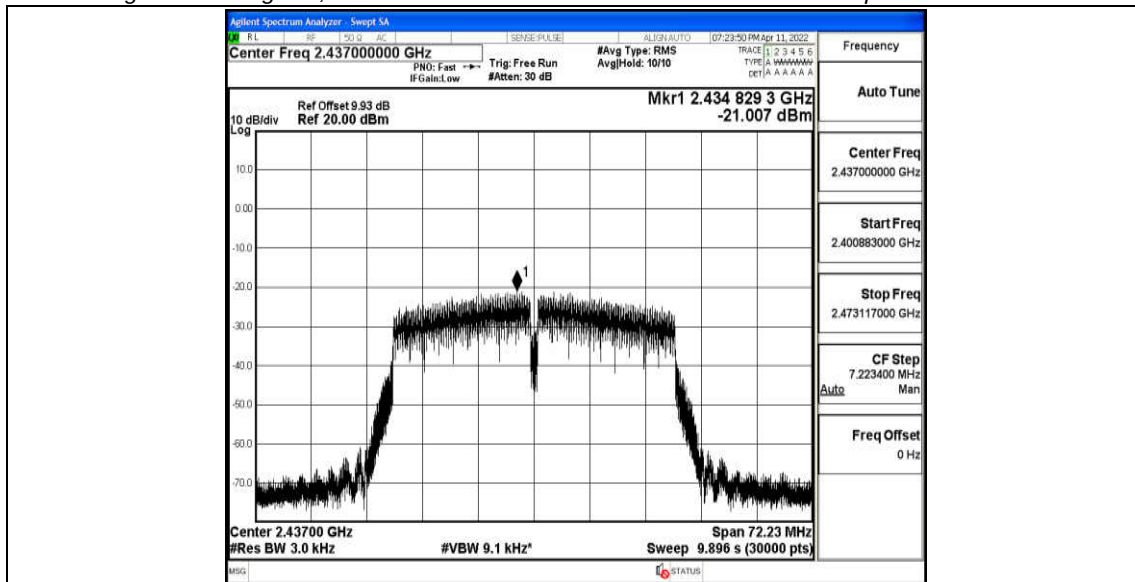
11N40MIMO_Ant2_2422



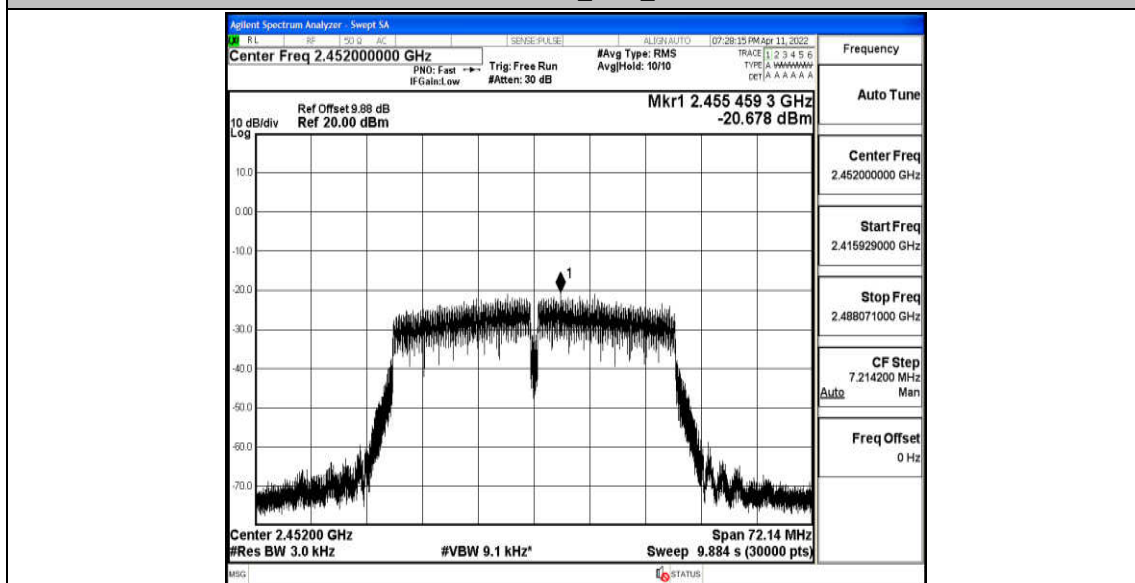
11N40MIMO_Ant1_2437



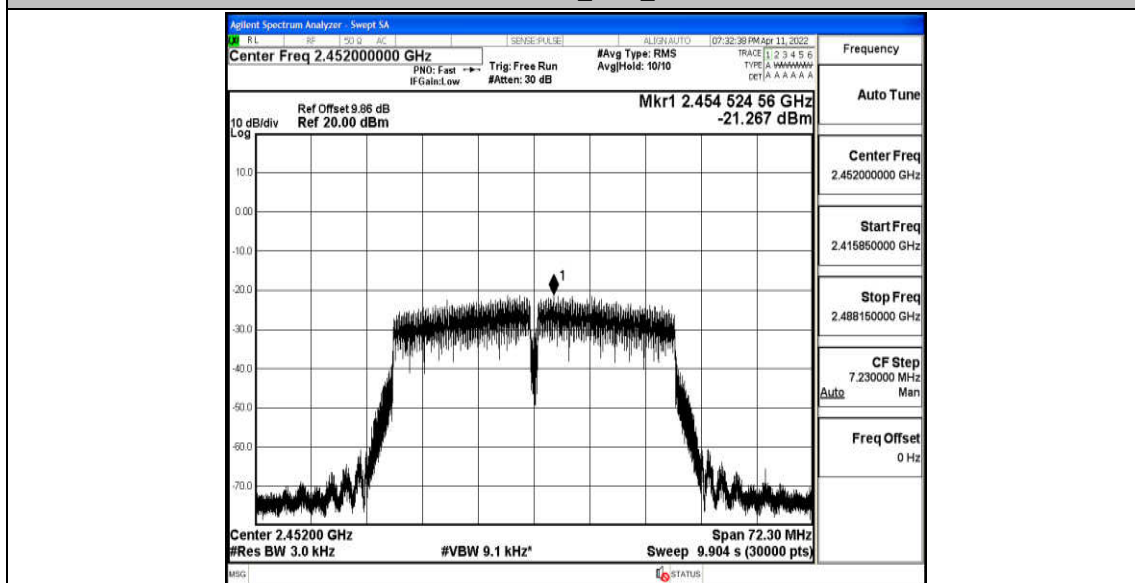
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



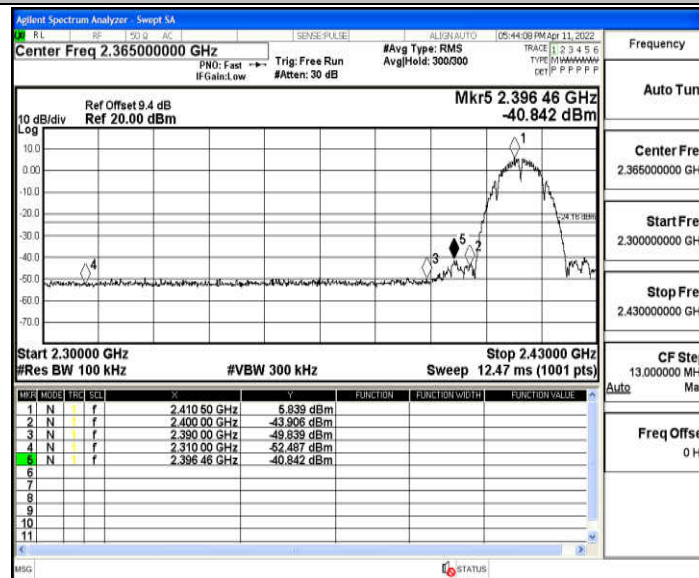
Appendix E: Band edge measurements

Test Result

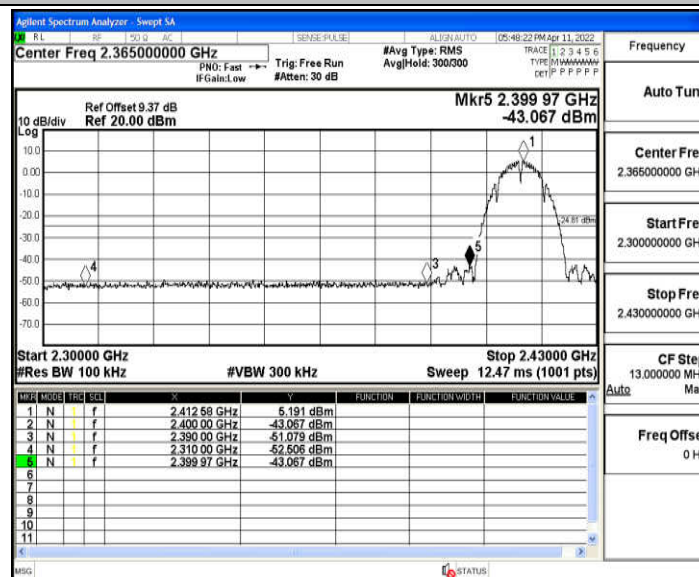
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.84	-40.84	≤ -24.16	PASS
	Ant2	Low	2412	5.19	-43.07	≤ -24.81	PASS
	Ant1	High	2462	6.29	-48.33	≤ -23.72	PASS
	Ant2	High	2462	5.50	-48.11	≤ -24.5	PASS
11G	Ant1	Low	2412	4.45	-38.69	≤ -25.55	PASS
	Ant2	Low	2412	4.30	-39.2	≤ -25.7	PASS
	Ant1	High	2462	5.64	-47.32	≤ -24.37	PASS
	Ant2	High	2462	5.35	-47.46	≤ -24.65	PASS
11N20MIMO	Ant1	Low	2412	2.74	-41.78	≤ -27.26	PASS
	Ant2	Low	2412	2.28	-42.32	≤ -27.72	PASS
	Ant1	High	2462	3.51	-47.75	≤ -26.49	PASS
	Ant2	High	2462	2.70	-47.89	≤ -27.3	PASS
11N40MIMO	Ant1	Low	2422	-0.44	-39.52	≤ -30.44	PASS
	Ant2	Low	2422	-0.27	-38.87	≤ -30.27	PASS
	Ant1	High	2452	-0.20	-46.13	≤ -30.2	PASS
	Ant2	High	2452	-0.43	-48.14	≤ -30.43	PASS

Test Graphs

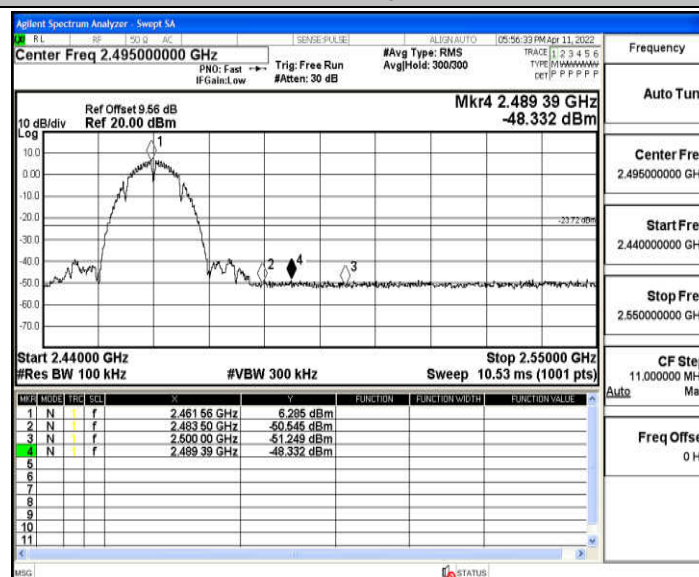
11B_Ant1_Low_2412



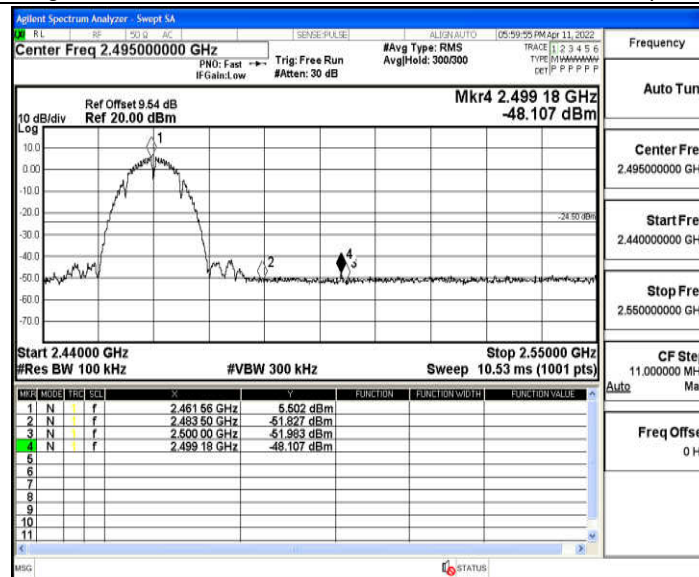
11B_Ant2_Low_2412



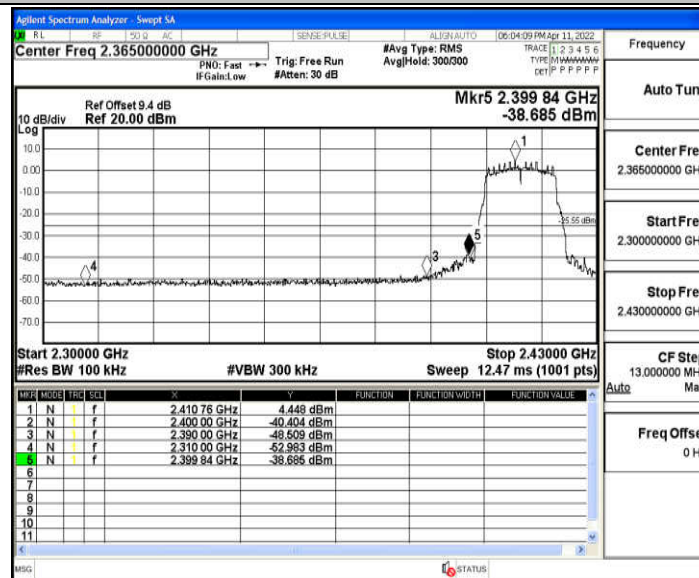
11B_Ant1_High_2462



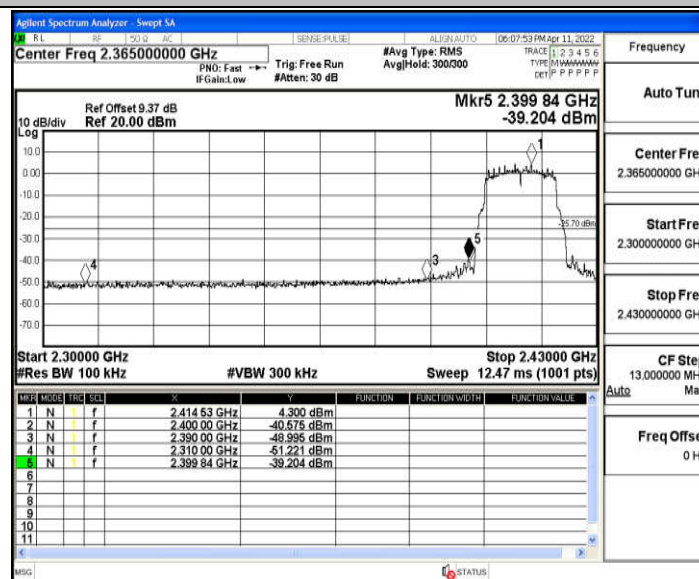
11B_Ant2_High_2462



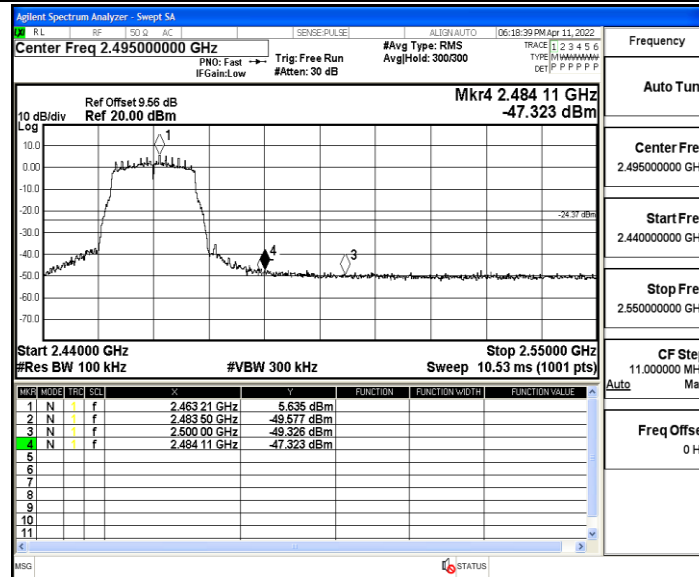
11G_Ant1_Low_2412



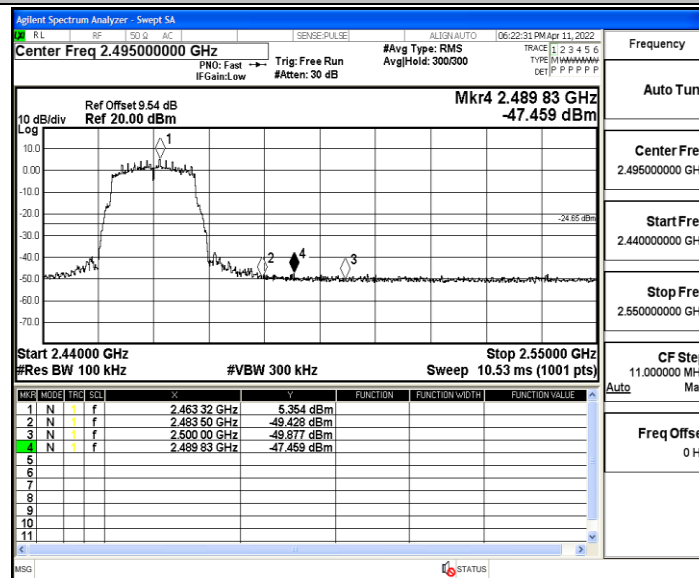
11G_Ant2_Low_2412



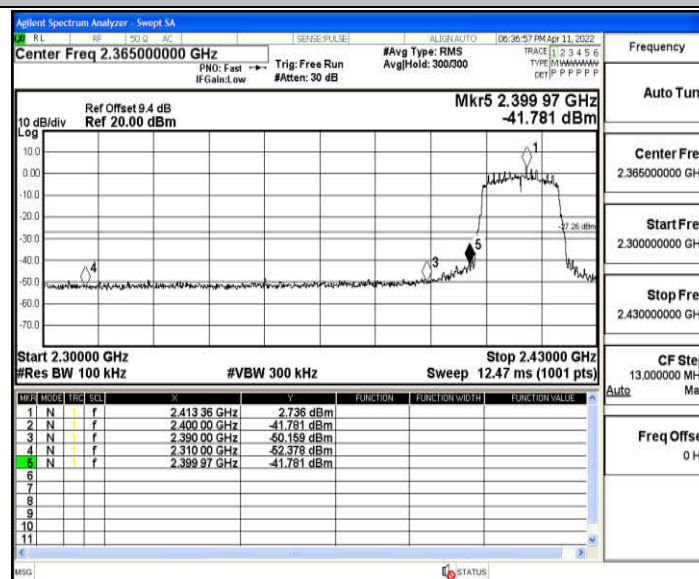
11G_Ant1_High_2462



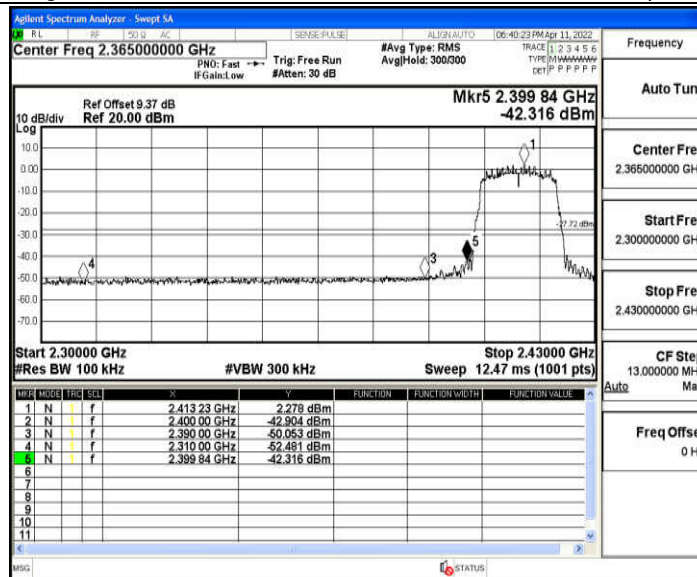
11G_Ant2_High_2462



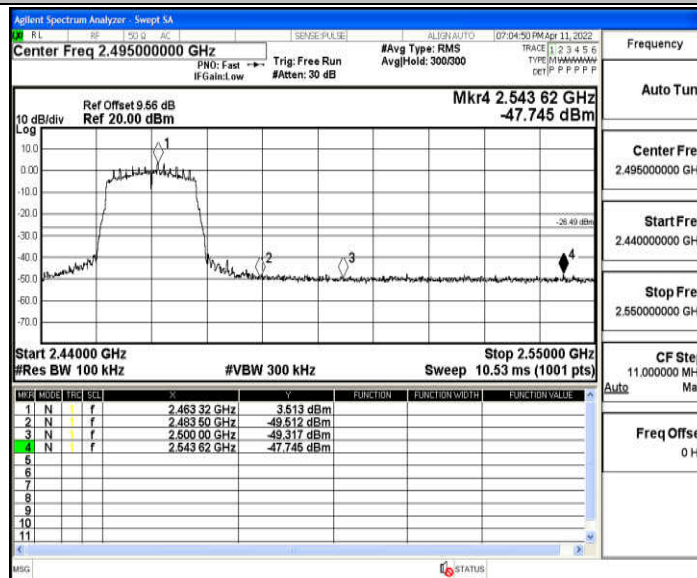
11N20MIMO_Ant1_Low_2412



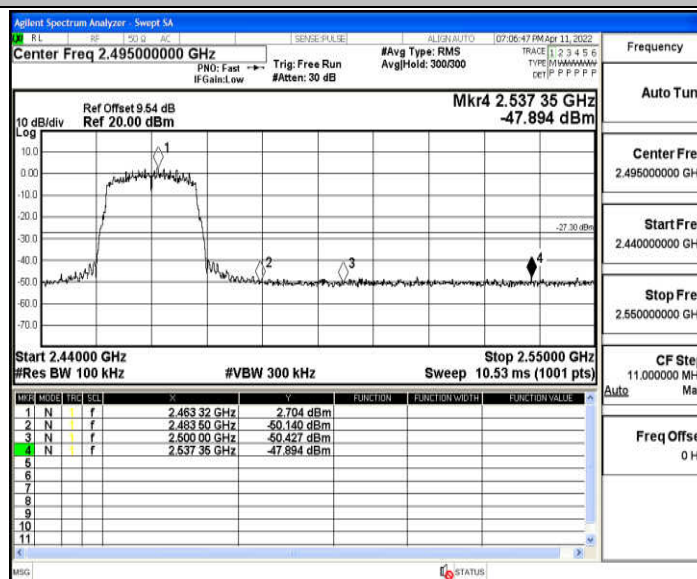
11N20MIMO_Ant2_Low_2412



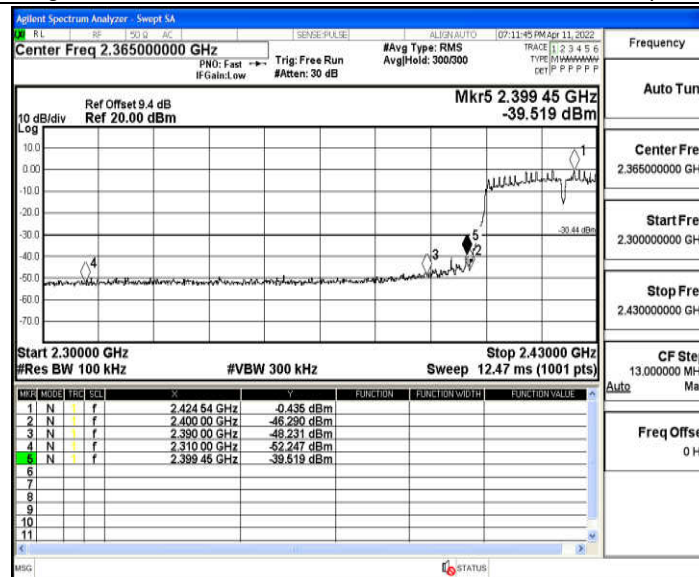
11N20MIMO_Ant1_High_2462



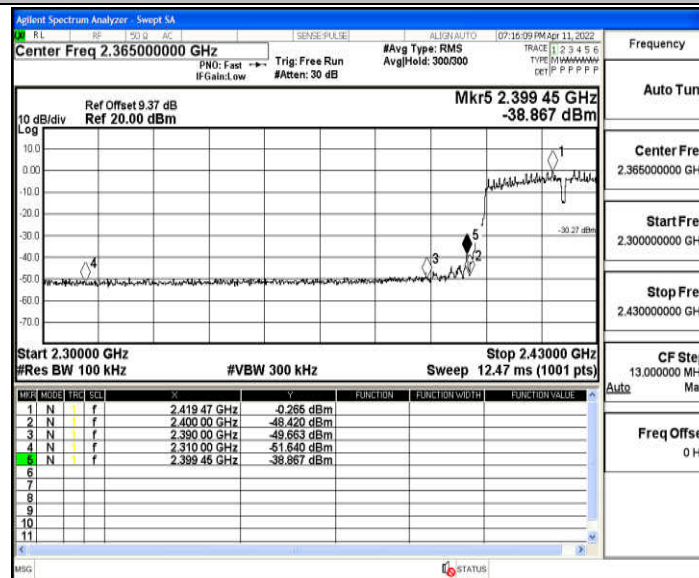
11N20MIMO_Ant2_High_2462



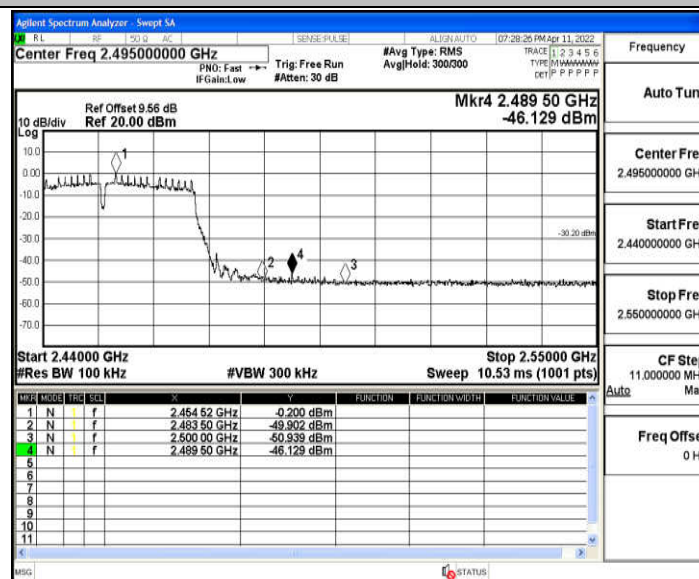
11N40MIMO_Ant1_Low_2422



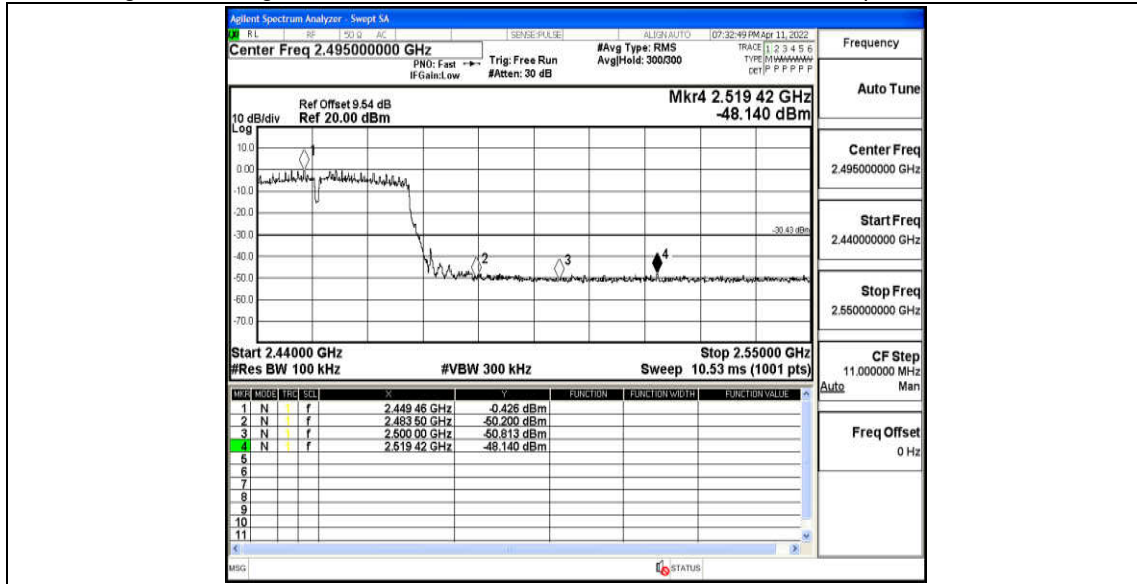
11N40MIMO_Ant2_Low_2422



11N40MIMO_Ant1_High_2452



11N40MIMO_Ant2_High_2452



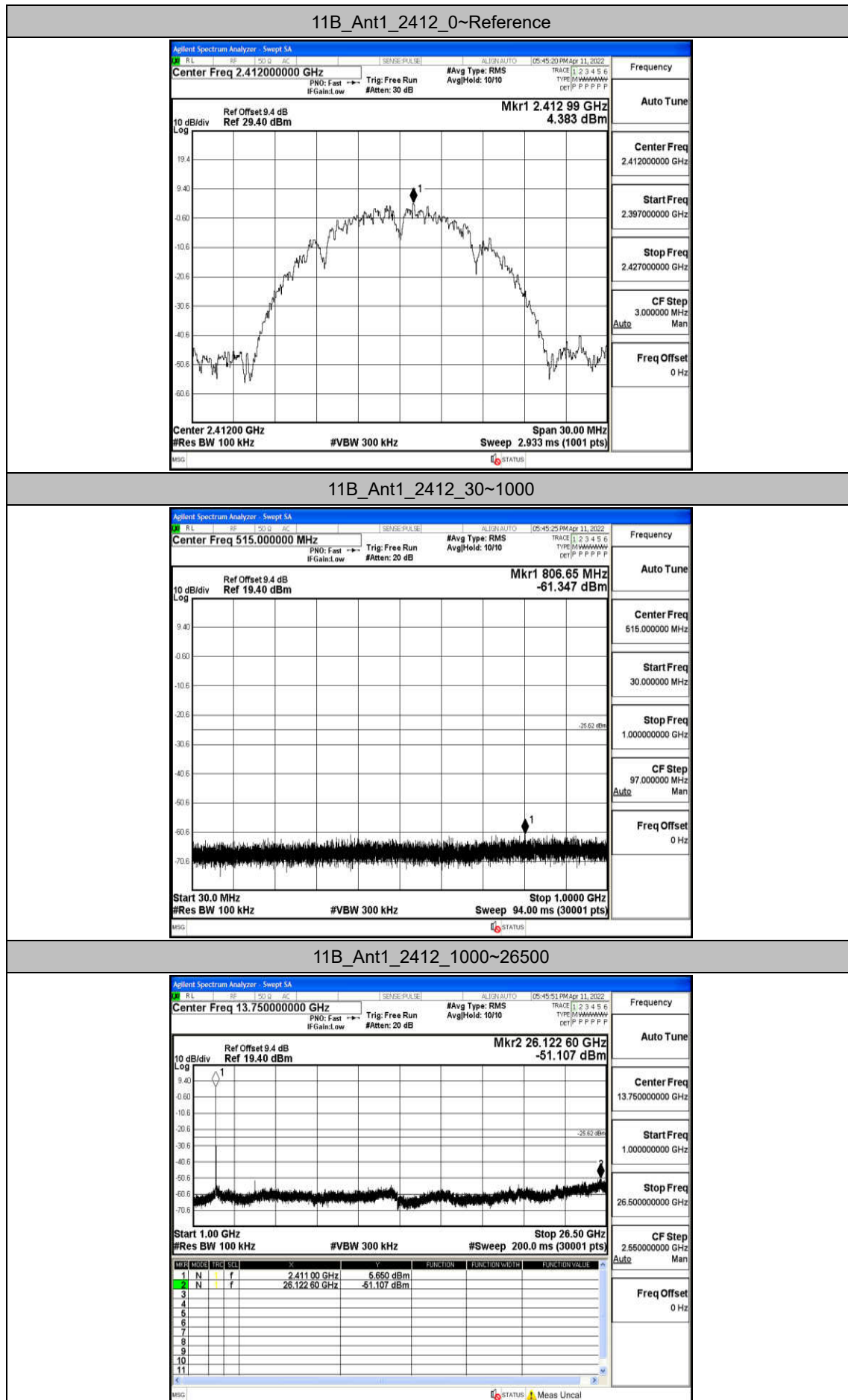
Appendix F: Conducted Spurious Emission

Test Result

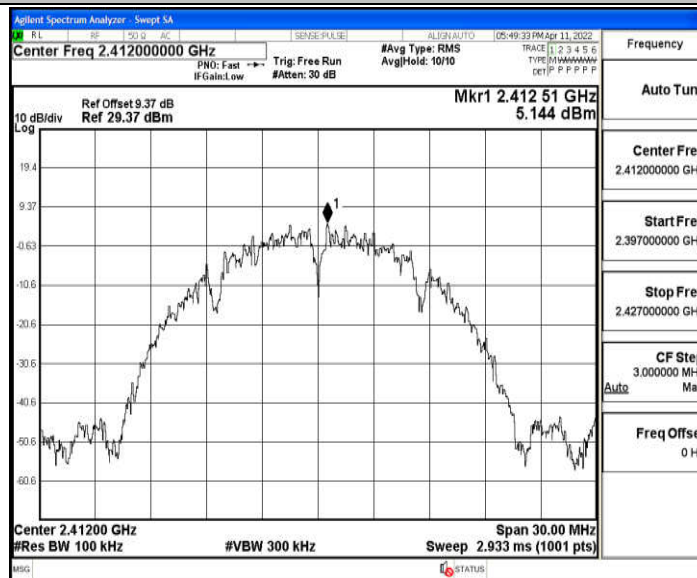
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.38	4.38	---	PASS
			30~1000	4.38	-61.35	≤-25.62	PASS
			1000~26500	4.38	-51.11	≤-25.62	PASS
	Ant2	2412	Reference	5.14	5.14	---	PASS
			30~1000	5.14	-61.94	≤-24.86	PASS
			1000~26500	5.14	-51.28	≤-24.86	PASS
	Ant1	2437	Reference	5.45	5.45	---	PASS
			30~1000	5.45	-60.89	≤-24.55	PASS
			1000~26500	5.45	-50.4	≤-24.55	PASS
	Ant2	2437	Reference	5.17	5.17	---	PASS
			30~1000	5.17	-60.73	≤-24.83	PASS
			1000~26500	5.17	-50.92	≤-24.83	PASS
	Ant1	2462	Reference	5.86	5.86	---	PASS
			30~1000	5.86	-60.15	≤-24.14	PASS
			1000~26500	5.86	-51.05	≤-24.14	PASS
	Ant2	2462	Reference	5.39	5.39	---	PASS
			30~1000	5.39	-61.55	≤-24.61	PASS
			1000~26500	5.39	-49.87	≤-24.61	PASS
11G	Ant1	2412	Reference	3.01	3.01	---	PASS
			30~1000	3.01	-61.82	≤-26.99	PASS
			1000~26500	3.01	-49.92	≤-26.99	PASS
	Ant2	2412	Reference	2.16	2.16	---	PASS
			30~1000	2.16	-60.67	≤-27.84	PASS
			1000~26500	2.16	-50.36	≤-27.84	PASS
	Ant1	2437	Reference	2.41	2.41	---	PASS
			30~1000	2.41	-58.73	≤-27.59	PASS
			1000~26500	2.41	-50.66	≤-27.59	PASS
	Ant2	2437	Reference	4.29	4.29	---	PASS
			30~1000	4.29	-61.01	≤-25.71	PASS
			1000~26500	4.29	-50.33	≤-25.71	PASS
	Ant1	2462	Reference	1.83	1.83	---	PASS
			30~1000	1.83	-61.19	≤-28.17	PASS
			1000~26500	1.83	-50.43	≤-28.17	PASS
	Ant2	2462	Reference	4.75	4.75	---	PASS
			30~1000	4.75	-60.22	≤-25.25	PASS
			1000~26500	4.75	-50.99	≤-25.25	PASS
11N20MIMO	Ant1	2412	Reference	-1.52	-1.52	---	PASS
			30~1000	-1.52	-59.39	≤-31.52	PASS
			1000~26500	-1.52	-50.65	≤-31.52	PASS
	Ant2	2412	Reference	0.94	0.94	---	PASS

			30~1000	0.94	-61.36	≤-29.06	PASS
			1000~26500	0.94	-51.38	≤-29.06	PASS
		Ant1	Reference	1.23	1.23	---	PASS
			30~1000	1.23	-59.09	≤-28.77	PASS
			1000~26500	1.23	-50.22	≤-28.77	PASS
		Ant2	Reference	-0.27	-0.27	---	PASS
			30~1000	-0.27	-60.71	≤-30.27	PASS
			1000~26500	-0.27	-51.1	≤-30.27	PASS
		Ant1	Reference	-0.63	-0.63	---	PASS
			30~1000	-0.63	-58.51	≤-30.63	PASS
			1000~26500	-0.63	-49.73	≤-30.63	PASS
		Ant2	Reference	0.95	0.95	---	PASS
			30~1000	0.95	-60.08	≤-29.05	PASS
			1000~26500	0.95	-51.7	≤-29.05	PASS
11N40MIMO	Ant1	2422	Reference	-4.17	-4.17	---	PASS
			30~1000	-4.17	-59.8	≤-34.17	PASS
			1000~26500	-4.17	-50.43	≤-34.17	PASS
	Ant2	2422	Reference	-0.65	-0.65	---	PASS
			30~1000	-0.65	-60.97	≤-30.65	PASS
			1000~26500	-0.65	-51.14	≤-30.65	PASS
	Ant1	2437	Reference	-1.04	-1.04	---	PASS
			30~1000	-1.04	-61.08	≤-31.04	PASS
			1000~26500	-1.04	-51.12	≤-31.04	PASS
	Ant2	2437	Reference	-1.97	-1.97	---	PASS
			30~1000	-1.97	-61.09	≤-31.97	PASS
			1000~26500	-1.97	-51.88	≤-31.97	PASS
	Ant1	2452	Reference	-0.94	-0.94	---	PASS
			30~1000	-0.94	-59.49	≤-30.94	PASS
			1000~26500	-0.94	-49.33	≤-30.94	PASS
	Ant2	2452	Reference	-1.44	-1.44	---	PASS
			30~1000	-1.44	-60.64	≤-31.44	PASS
			1000~26500	-1.44	-50.88	≤-31.44	PASS

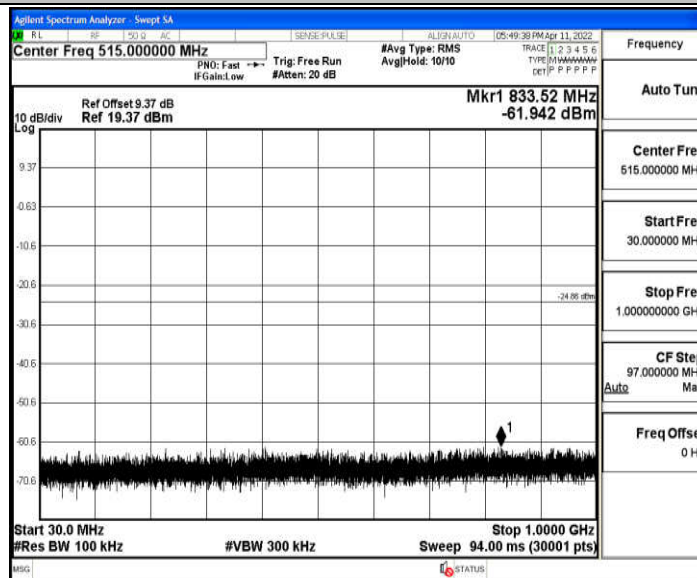
Test Graphs



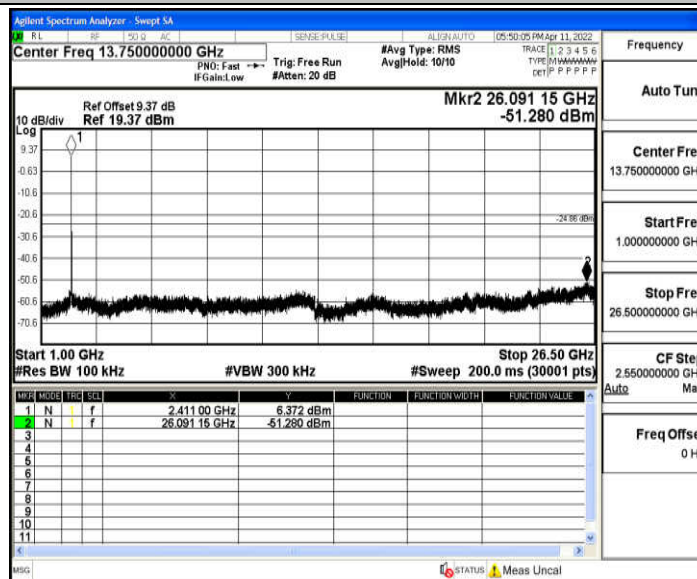
11B_Ant2_2412_0~Reference



11B_Ant2_2412_30~1000



11B_Ant2_2412_1000~26500



11B_Ant1_2437_0~Reference