



Appendix Test Data for WLAN(2. 4G) (Conducted Measurement)

Product Name: Magic AI Glasses
Trade Mark: MAGIC MAN 2 WORLD TOUR
Test Model: Magic AI Glasses J
FCC ID: 2BTYX-MAGICAI

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

Appendix A: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	11.120	2405.960	2417.080	0.5	PASS
11B	Ant1	2437	12.040	2431.000	2443.040	0.5	PASS
11B	Ant1	2462	12.080	2456.000	2468.080	0.5	PASS
11G	Ant1	2412	16.120	2403.840	2419.960	0.5	PASS
11G	Ant1	2437	16.200	2428.880	2445.080	0.5	PASS
11G	Ant1	2462	15.880	2454.040	2469.920	0.5	PASS
11N20SISO	Ant1	2412	16.320	2403.600	2419.920	0.5	PASS
11N20SISO	Ant1	2437	16.080	2428.400	2444.480	0.5	PASS
11N20SISO	Ant1	2462	16.800	2453.640	2470.440	0.5	PASS
11N40SISO	Ant1	2422	36.080	2404.000	2440.080	0.5	PASS
11N40SISO	Ant1	2437	35.520	2419.560	2455.080	0.5	PASS
11N40SISO	Ant1	2452	35.760	2434.160	2469.920	0.5	PASS
11AX20SISO	Ant1	2412	17.520	2402.600	2420.120	0.5	PASS
11AX20SISO	Ant1	2437	17.560	2428.240	2445.800	0.5	PASS
11AX20SISO	Ant1	2462	18.400	2452.600	2471.000	0.5	PASS
11AX40SISO	Ant1	2422	36.240	2403.280	2439.520	0.5	PASS
11AX40SISO	Ant1	2437	36.000	2418.120	2454.120	0.5	PASS
11AX40SISO	Ant1	2452	37.440	2433.200	2470.640	0.5	PASS

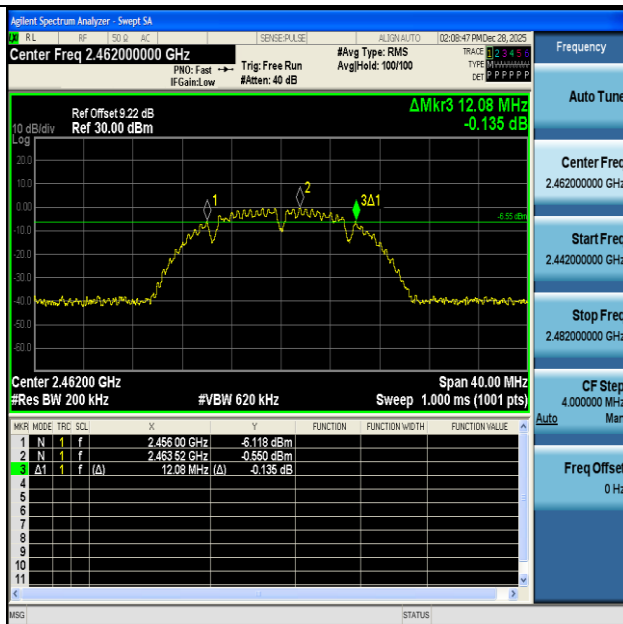
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



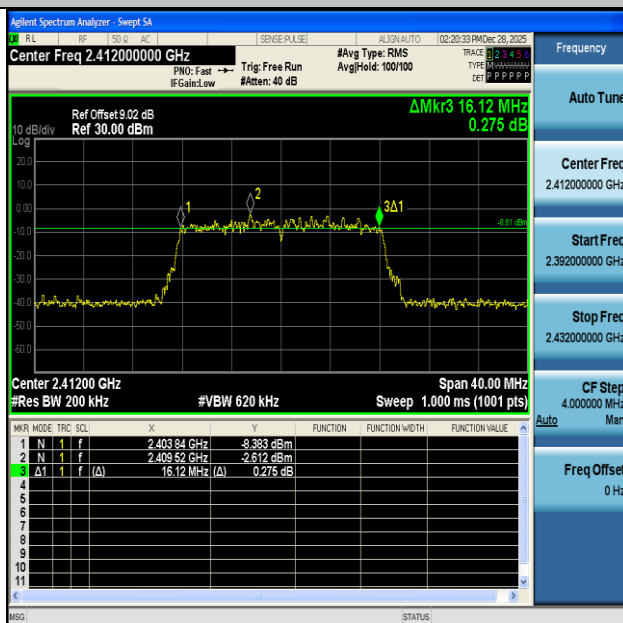


Test Graphs





11B-Ant1-2462-PASS

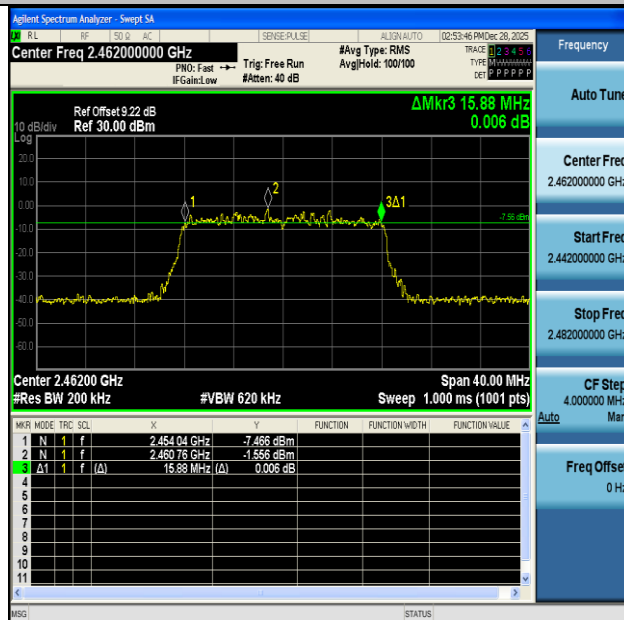


11G-Ant1-2412-PASS



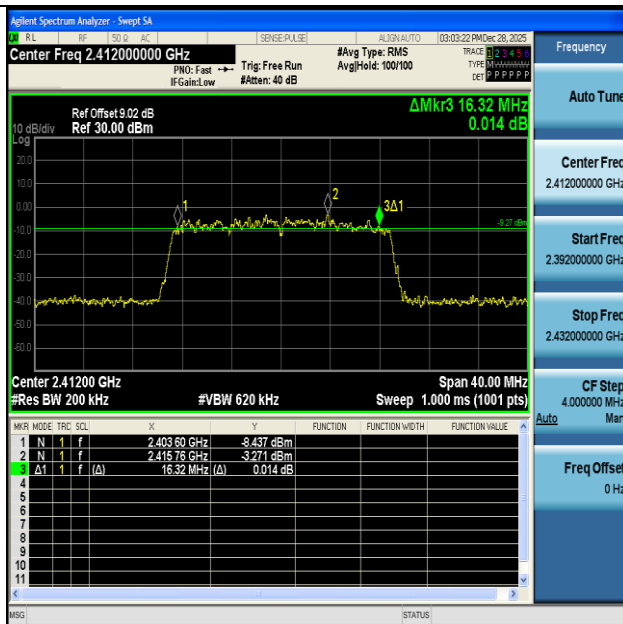


11G-Ant1-2437-PASS

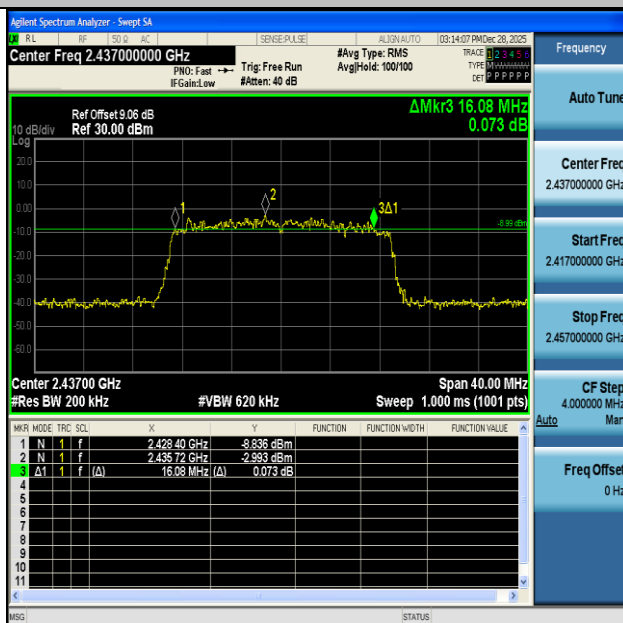


11G-Ant1-2462-PASS



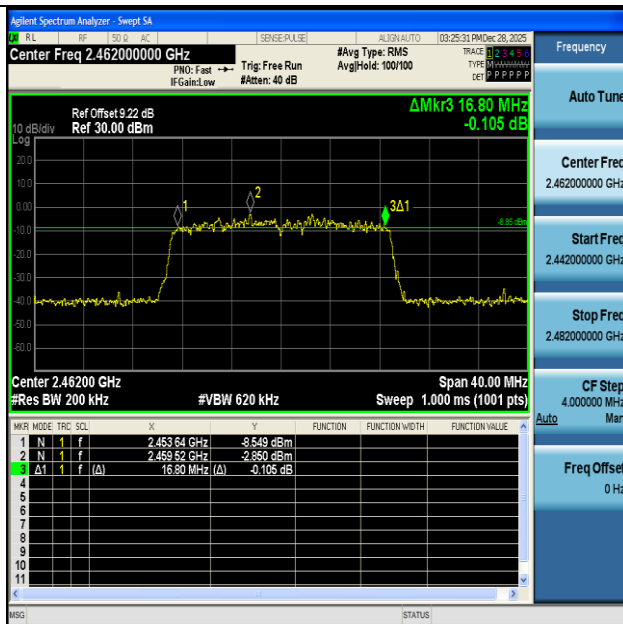


11N20SISO-Ant1-2412-PASS

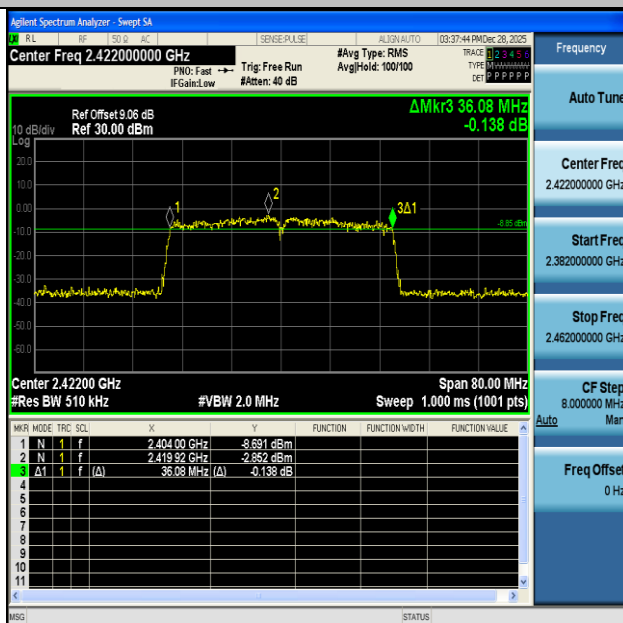


11N20SISO-Ant1-2437-PASS



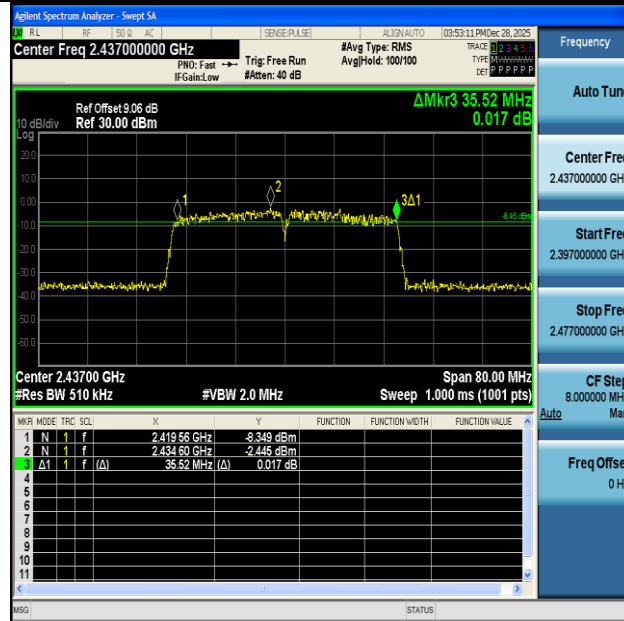


11N20SISO-Ant1-2462-PASS

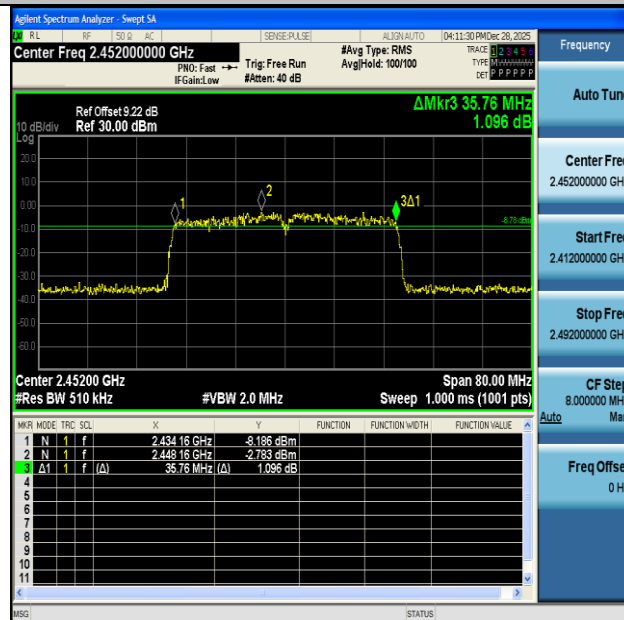


11N40SISO-Ant1-2422-PASS



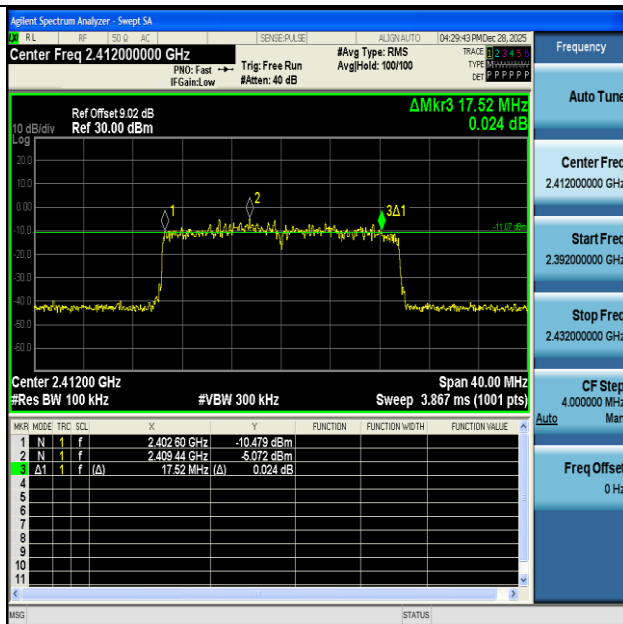


11N40SISO-Ant1-2437-PASS

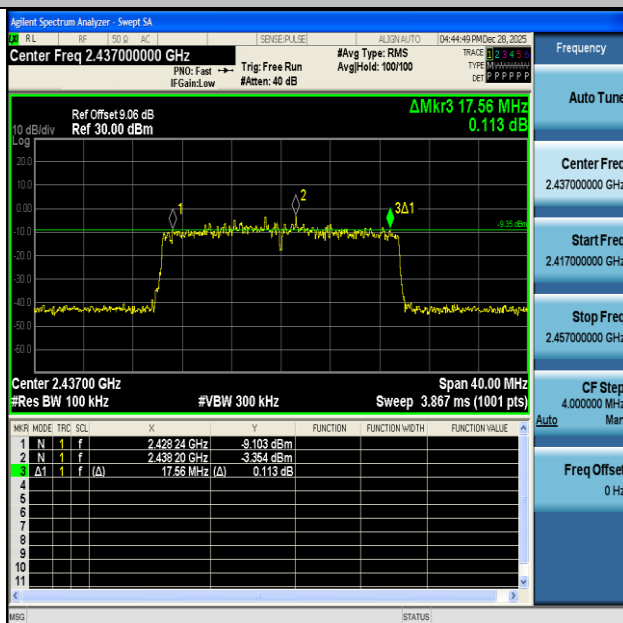


11N40SISO-Ant1-2452-PASS



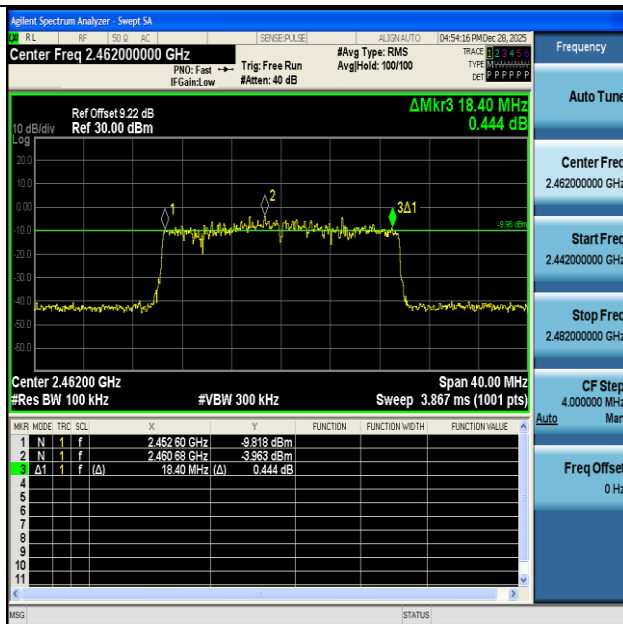


11AX20SISO-Ant1-2412-PASS

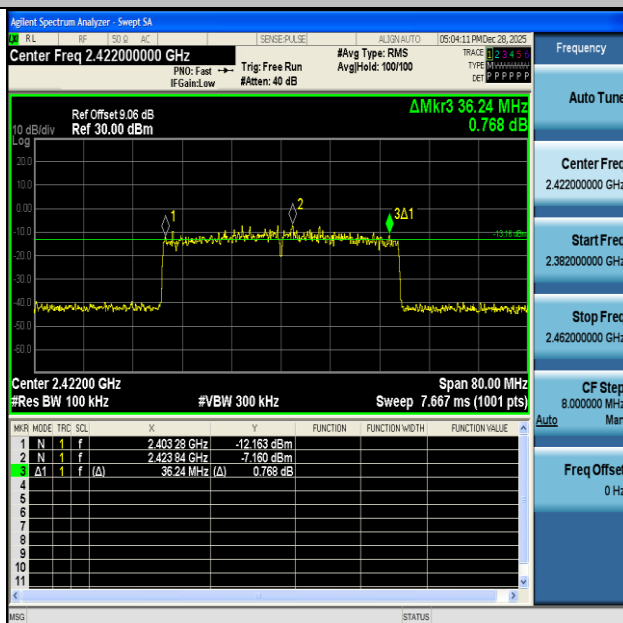


11AX20SISO-Ant1-2437-PASS



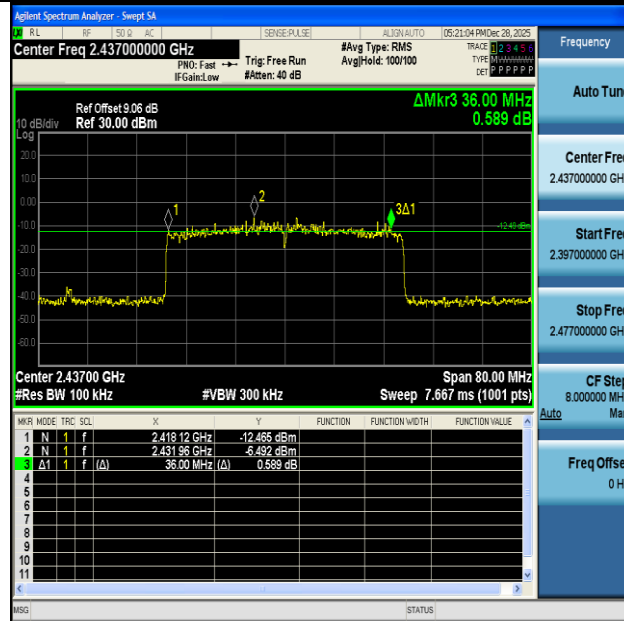


11AX20SISO-Ant1-2462-PASS

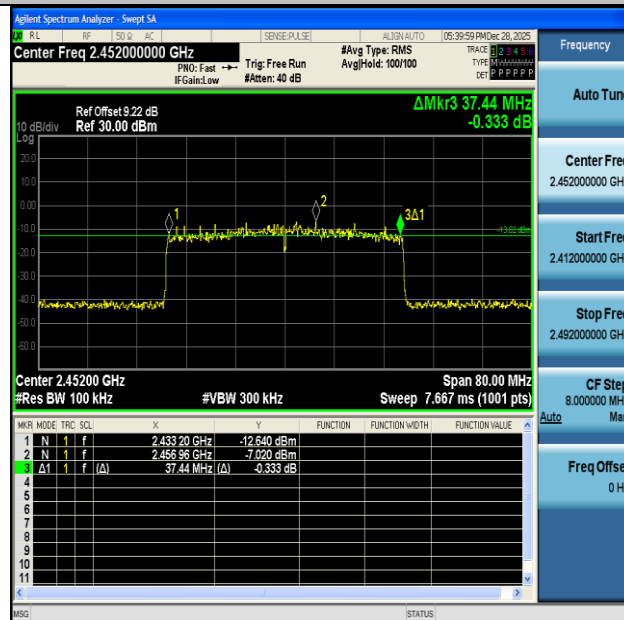


11AX40SISO-Ant1-2422-PASS





11AX40SISO-Ant1-2437-PASS



11AX40SISO-Ant1-2452-PASS





Appendix B: Occupied Channel Bandwidth

Test Result

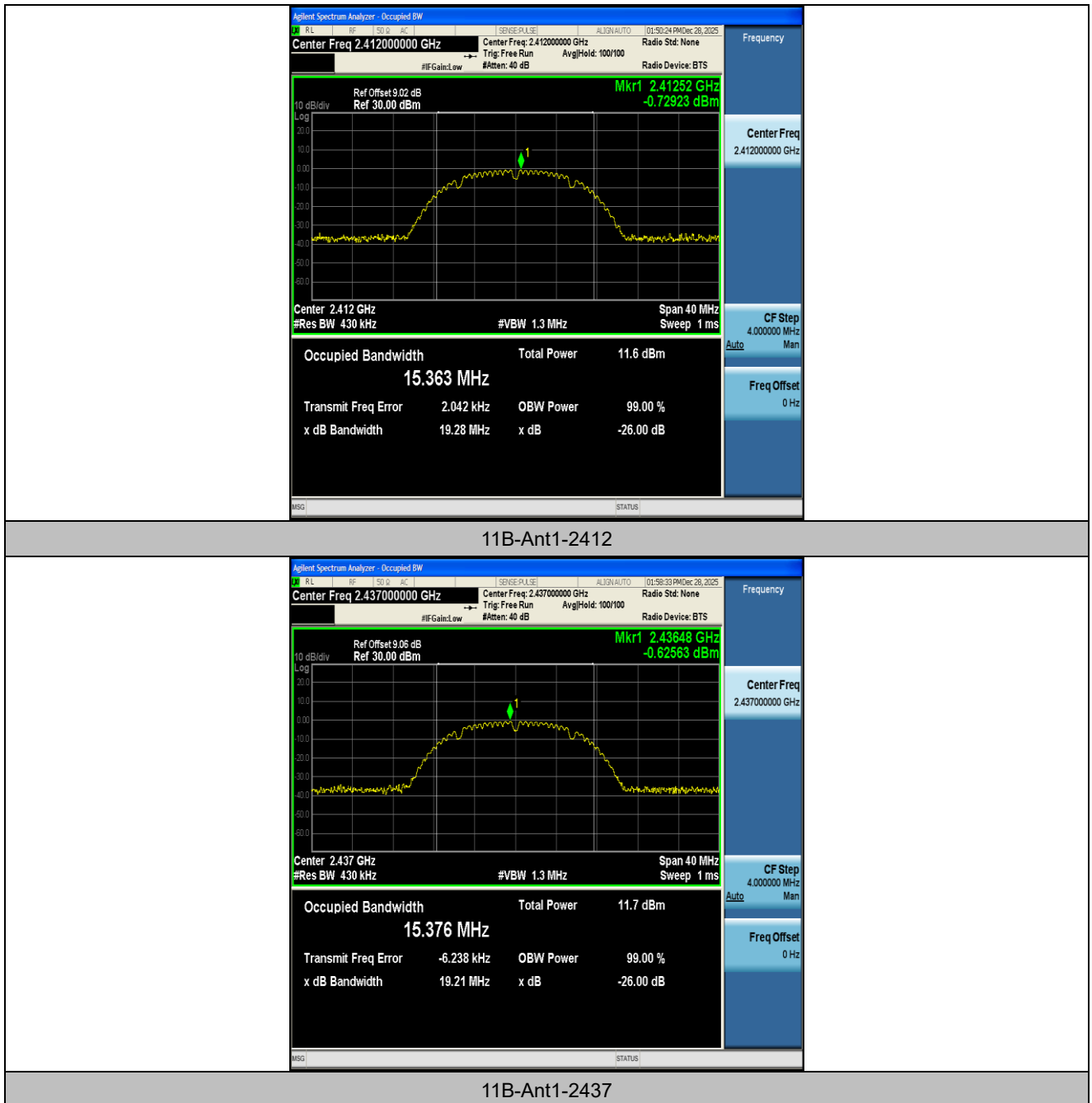
Test Mode	Antenna	Channel Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	15.363	2404.3205	2419.6835	---	---
11B	Ant1	2437	15.376	2429.3058	2444.6818	---	---
11B	Ant1	2462	15.357	2454.3328	2469.6898	---	---
11G	Ant1	2412	16.426	2403.7934	2420.2194	---	---
11G	Ant1	2437	16.396	2428.8207	2445.2167	---	---
11G	Ant1	2462	16.409	2453.7852	2470.1942	---	---
11N20SISO	Ant1	2412	17.593	2403.2390	2420.8320	---	---
11N20SISO	Ant1	2437	17.574	2428.2322	2445.8062	---	---
11N20SISO	Ant1	2462	17.548	2453.2299	2470.7779	---	---
11N40SISO	Ant1	2422	36.049	2404.0463	2440.0953	---	---
11N40SISO	Ant1	2437	36.040	2419.0916	2455.1316	---	---
11N40SISO	Ant1	2452	35.996	2434.0309	2470.0269	---	---
11AX20SISO	Ant1	2412	18.822	2402.5693	2421.3913	---	---
11AX20SISO	Ant1	2437	18.945	2427.5424	2446.4874	---	---
11AX20SISO	Ant1	2462	18.990	2452.5035	2471.4935	---	---
11AX40SISO	Ant1	2422	37.796	2403.1995	2440.9955	---	---
11AX40SISO	Ant1	2437	37.826	2418.1412	2455.9672	---	---
11AX40SISO	Ant1	2452	37.587	2433.2800	2470.8670	---	---

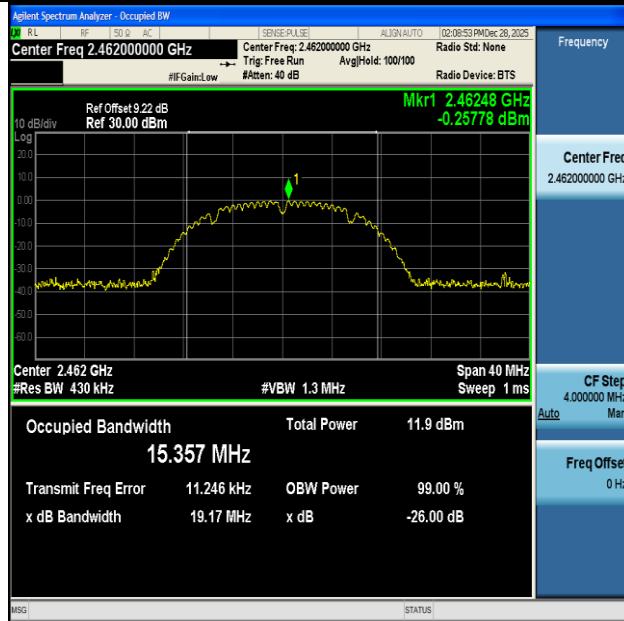
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



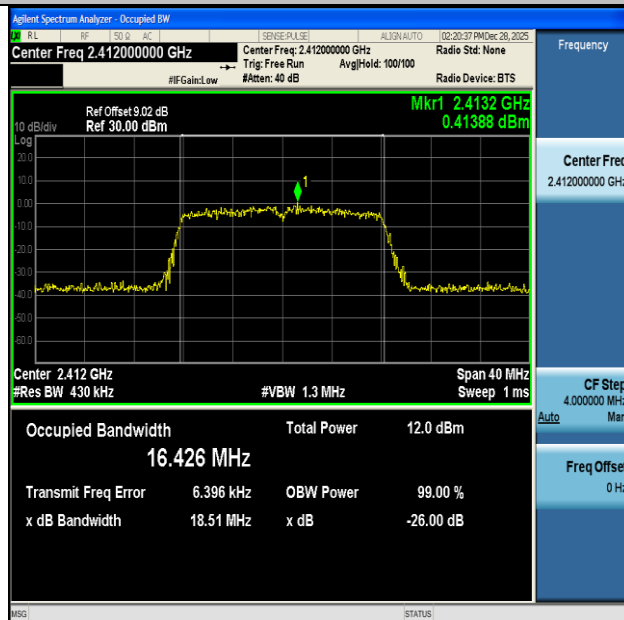


Test Graphs



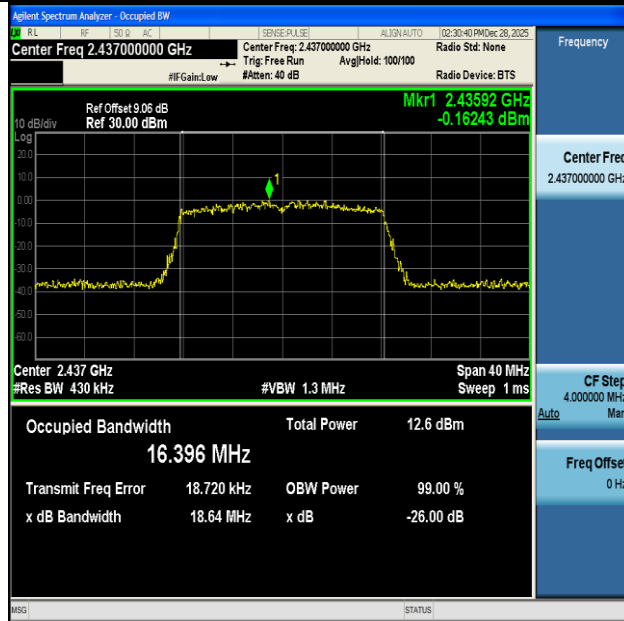


11B-Ant1-2462



11G-Ant1-2412



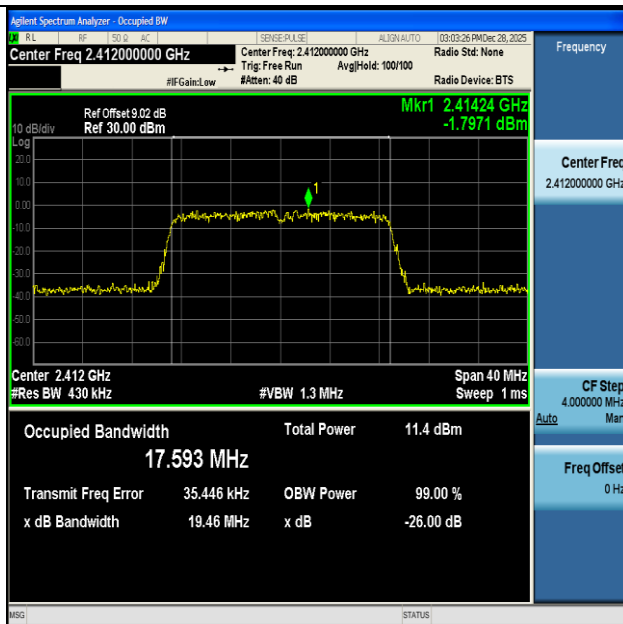


11G-Ant1-2437

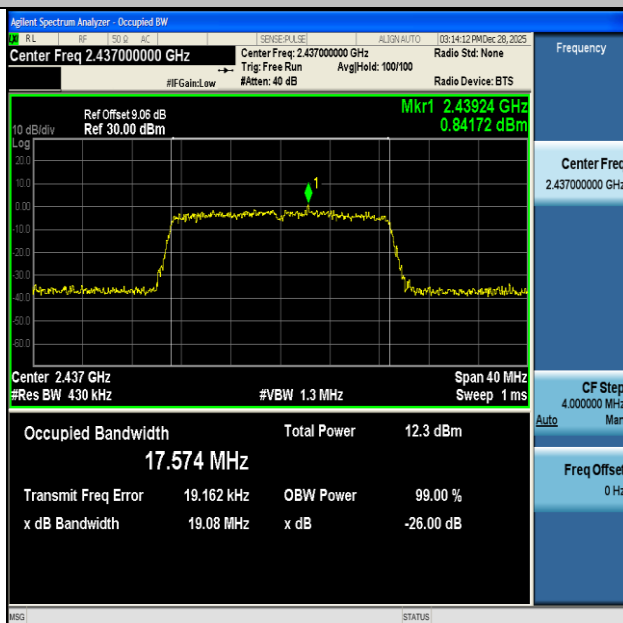


11G-Ant1-2462



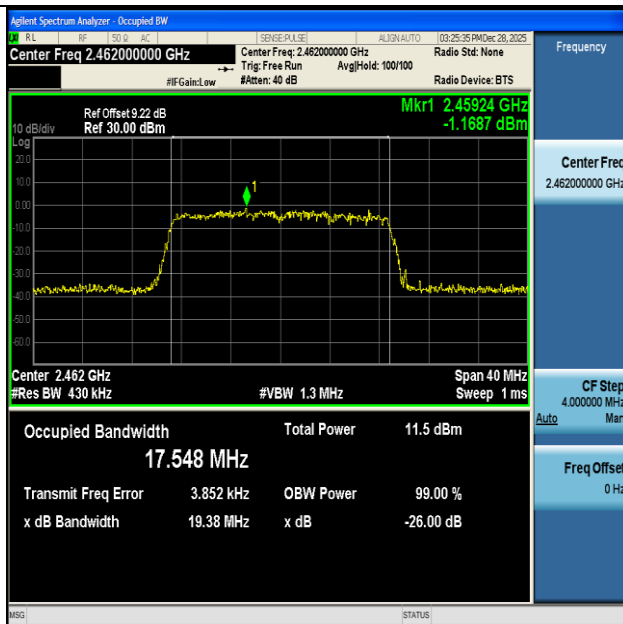


11N20SISO-Ant1-2412

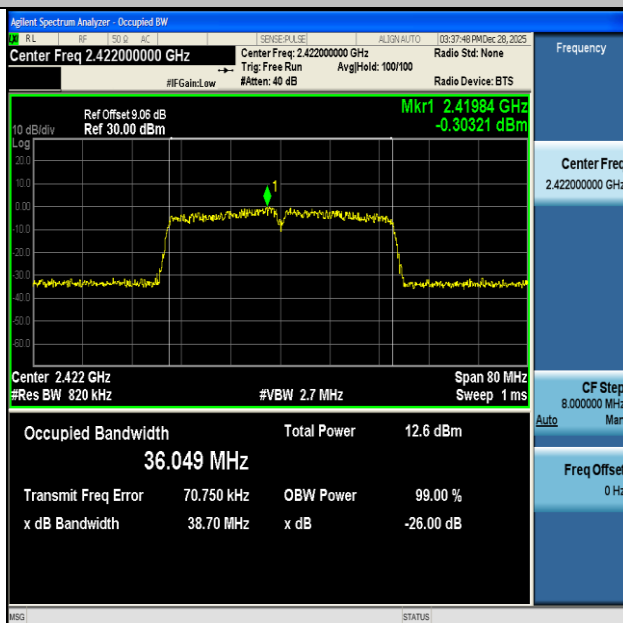


11N20SISO-Ant1-2437



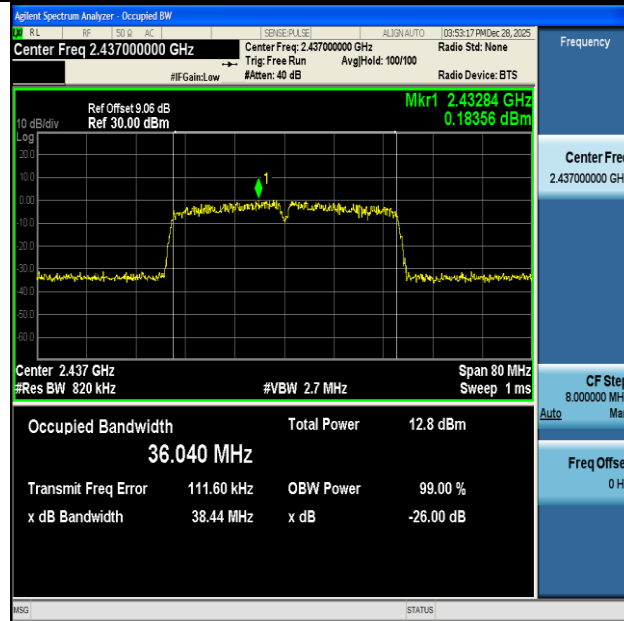


11N20SISO-Ant1-2462

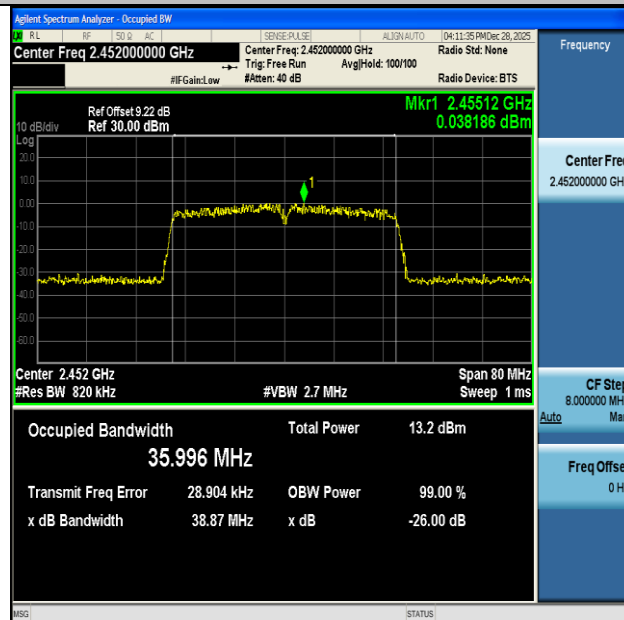


11N40SISO-Ant1-2422



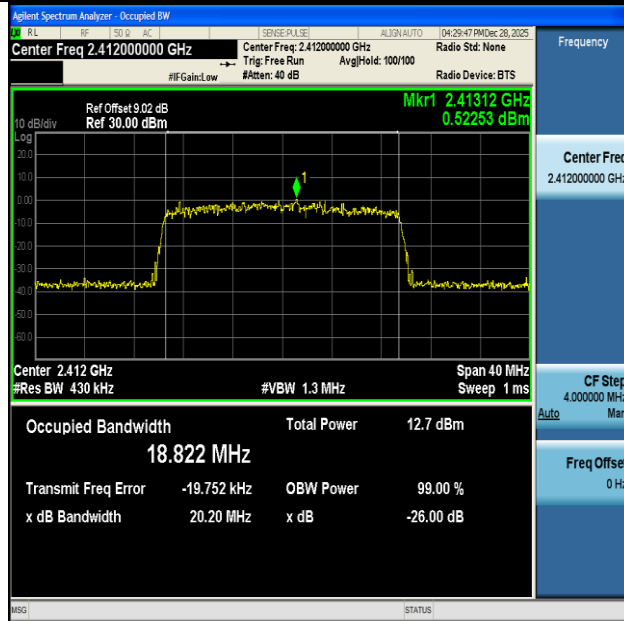


11N40SISO-Ant1-2437



11N40SISO-Ant1-2452



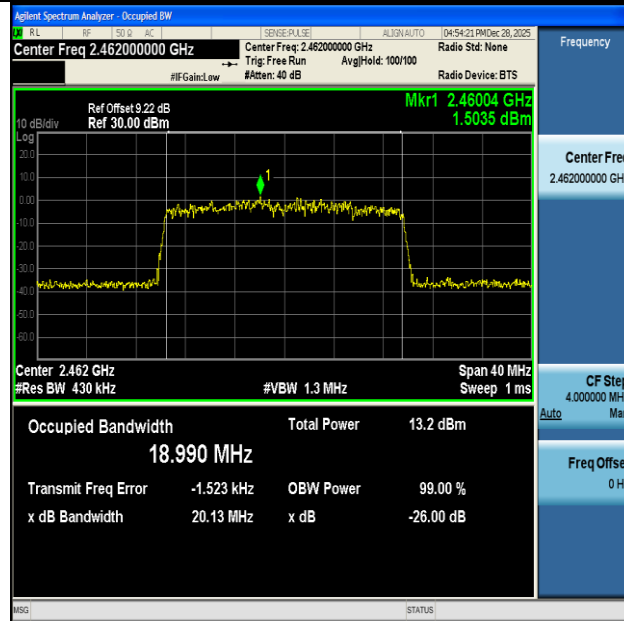


11AX20SISO-Ant1-2412

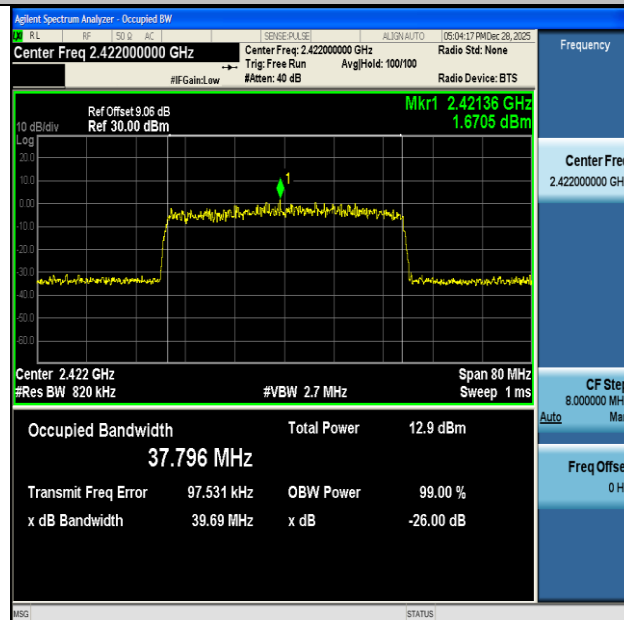


11AX20SISO-Ant1-2437



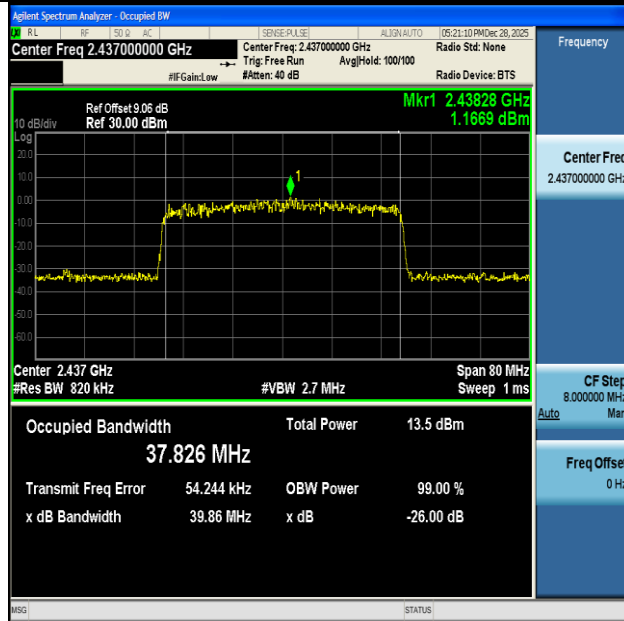


11AX20SISO-Ant1-2462

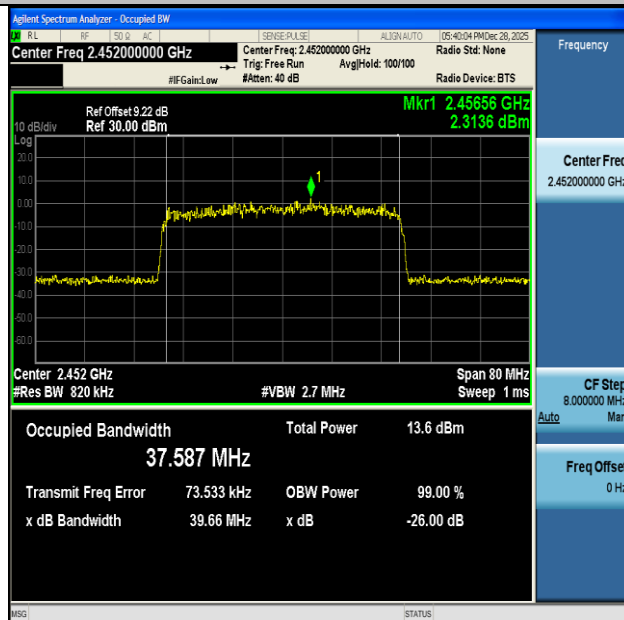


11AX40SISO-Ant1-2422





11AX40SISO-Ant1-2437



11AX40SISO-Ant1-2452





Appendix C: Maximum Average conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11B	Ant1	2412	8.95	≤30.00	PASS
11B	Ant1	2437	8.75	≤30.00	PASS
11B	Ant1	2462	9.04	≤30.00	PASS
11G	Ant1	2412	7.68	≤30.00	PASS
11G	Ant1	2437	8.03	≤30.00	PASS
11G	Ant1	2462	8.39	≤30.00	PASS
11N20SISO	Ant1	2412	8.14	≤30.00	PASS
11N20SISO	Ant1	2437	7.80	≤30.00	PASS
11N20SISO	Ant1	2462	7.54	≤30.00	PASS
11N40SISO	Ant1	2422	7.57	≤30.00	PASS
11N40SISO	Ant1	2437	6.97	≤30.00	PASS
11N40SISO	Ant1	2452	7.11	≤30.00	PASS
11AX20SISO	Ant1	2412	6.15	≤30.00	PASS
11AX20SISO	Ant1	2437	8.19	≤30.00	PASS
11AX20SISO	Ant1	2462	7.67	≤30.00	PASS
11AX40SISO	Ant1	2422	7.41	≤30.00	PASS
11AX40SISO	Ant1	2437	8.15	≤30.00	PASS
11AX40SISO	Ant1	2452	8.07	≤30.00	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)





Appendix D: Maximum Average power spectral density

Test Result

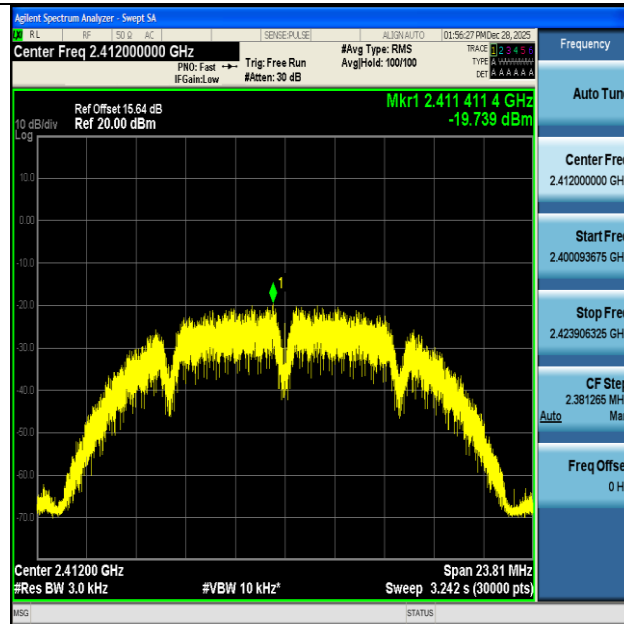
Test Mode	Antenna	Frequency [MHz]	Raw. Data [dBm/3-100kHz]	Dc. Factor	Result [dBm/3-100kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-26.36	6.62	-19.74	≤8.00	PASS
11B	Ant1	2437	-26.00	6.62	-19.38	≤8.00	PASS
11B	Ant1	2462	-25.68	6.76	-18.92	≤8.00	PASS
11G	Ant1	2412	-28.23	9.72	-18.51	≤8.00	PASS
11G	Ant1	2437	-28.20	9.58	-18.62	≤8.00	PASS
11G	Ant1	2462	-28.17	9.58	-18.59	≤8.00	PASS
11N20SISO	Ant1	2412	-29.67	9.44	-20.23	≤8.00	PASS
11N20SISO	Ant1	2437	-30.18	9.44	-20.74	≤8.00	PASS
11N20SISO	Ant1	2462	-28.30	9.44	-18.86	≤8.00	PASS
11N40SISO	Ant1	2422	-31.02	9.59	-21.43	≤8.00	PASS
11N40SISO	Ant1	2437	-32.10	9.59	-22.51	≤8.00	PASS
11N40SISO	Ant1	2452	-32.04	9.59	-22.45	≤8.00	PASS
11AX20SISO	Ant1	2412	-30.44	10.07	-20.37	≤8.00	PASS
11AX20SISO	Ant1	2437	-30.17	10.07	-20.10	≤8.00	PASS
11AX20SISO	Ant1	2462	-29.32	9.90	-19.42	≤8.00	PASS
11AX40SISO	Ant1	2422	-33.94	9.92	-24.02	≤8.00	PASS
11AX40SISO	Ant1	2437	-33.2	9.92	-23.28	≤8.00	PASS
11AX40SISO	Ant1	2452	-32.84	9.90	-22.94	≤8.00	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)

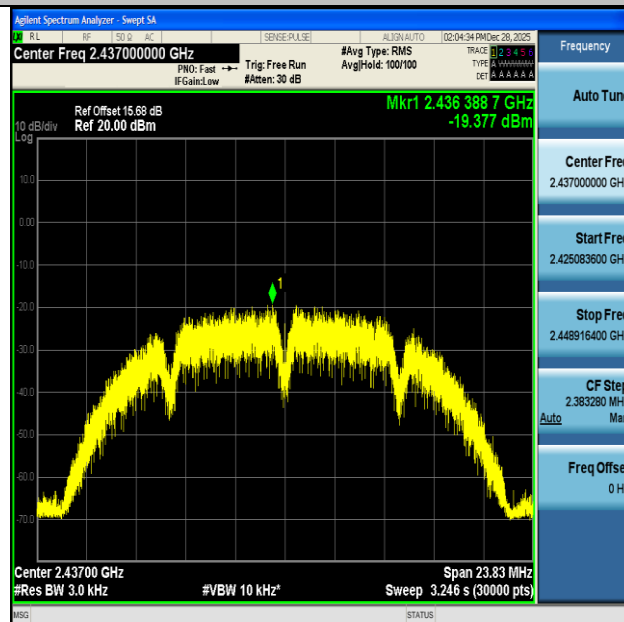




Test Graphs

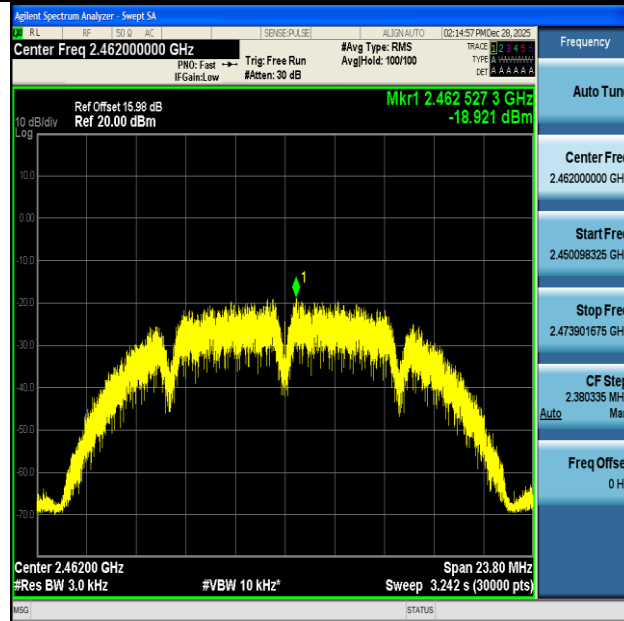


11B-Ant1-2412-PASS

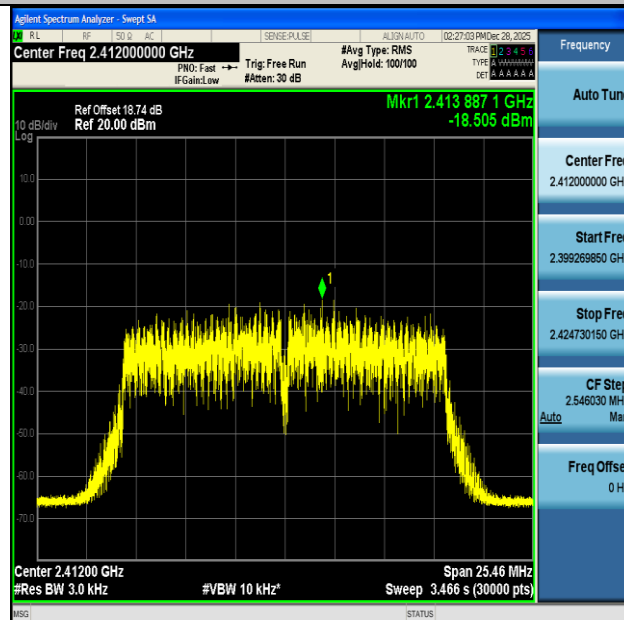


11B-Ant1-2437-PASS



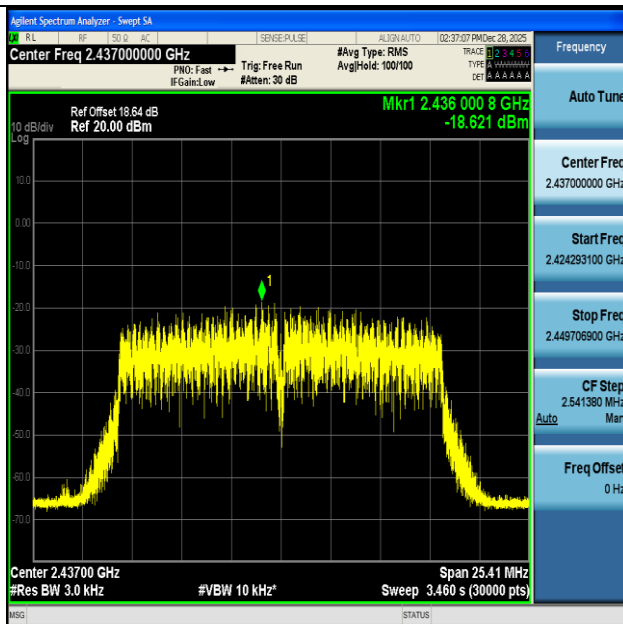


11B-Ant1-2462-PASS

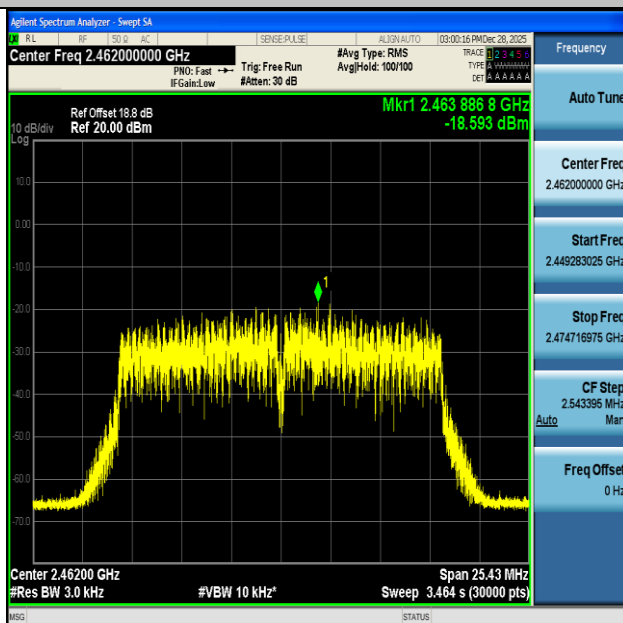


11G-Ant1-2412-PASS



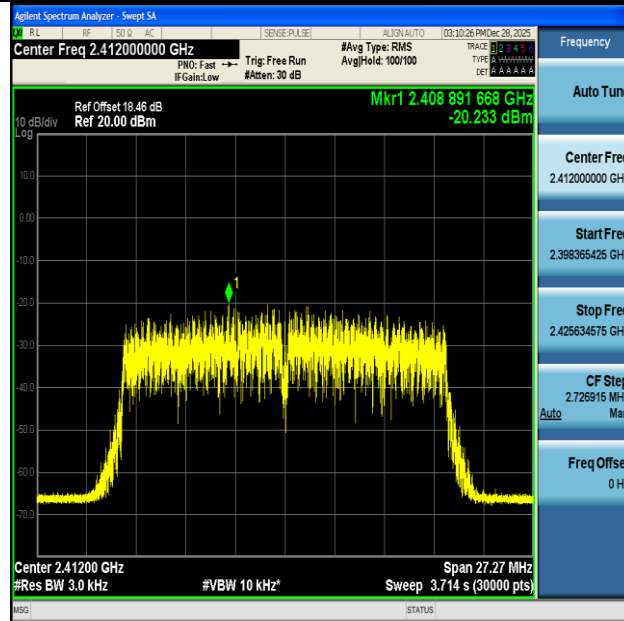


11G-Ant1-2437-PASS

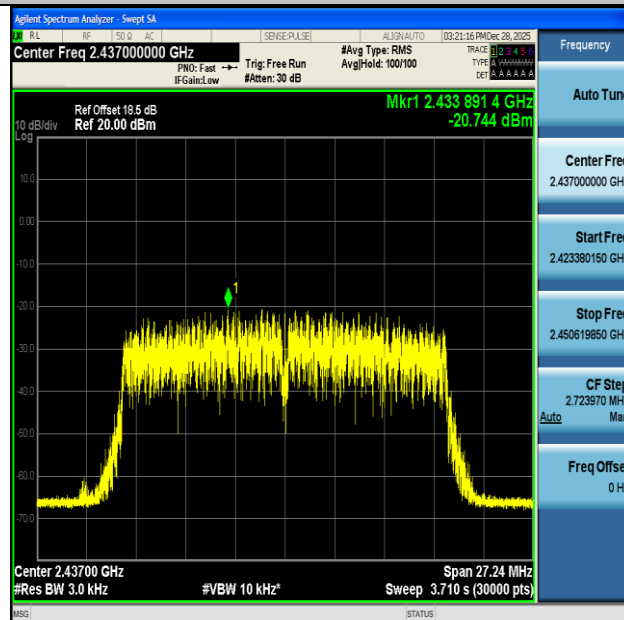


11G-Ant1-2462-PASS



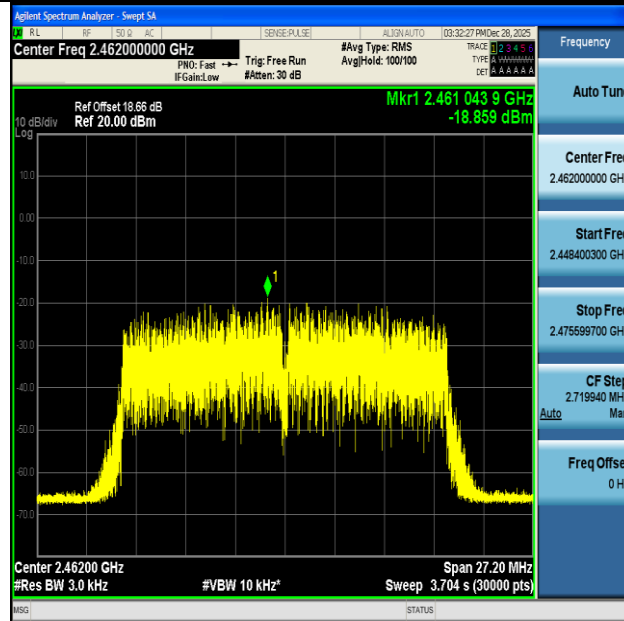


11N20SISO-Ant1-2412-PASS

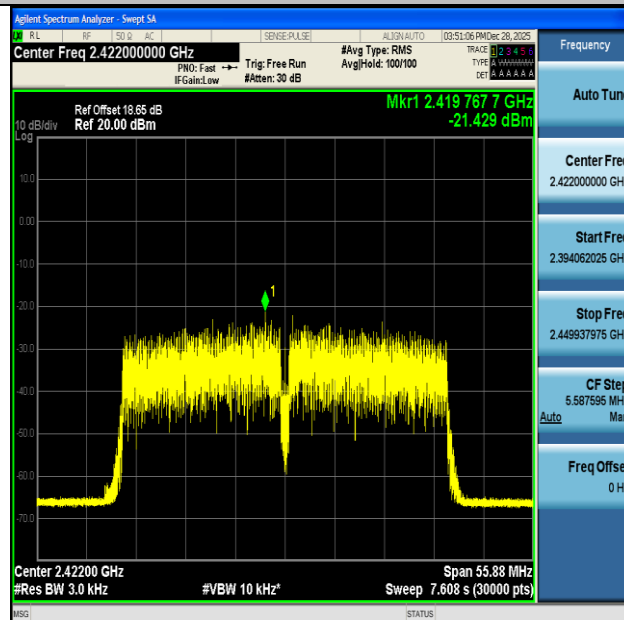


11N20SISO-Ant1-2437-PASS



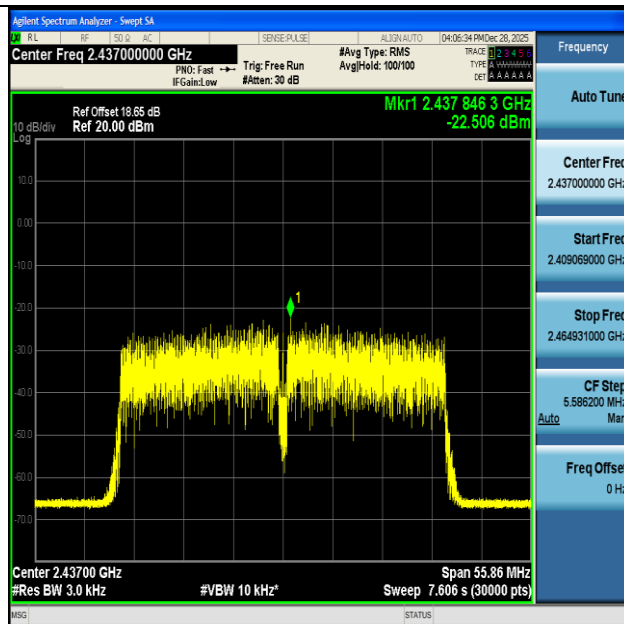


11N20SISO-Ant1-2462-PASS

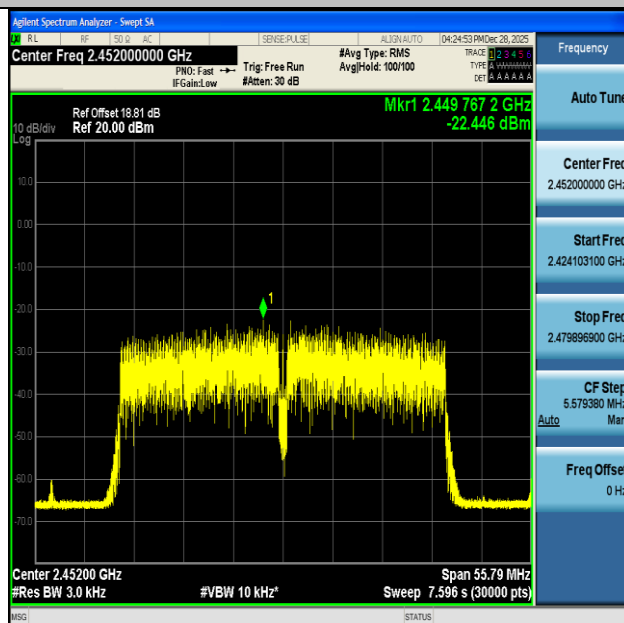


11N40SISO-Ant1-2422-PASS



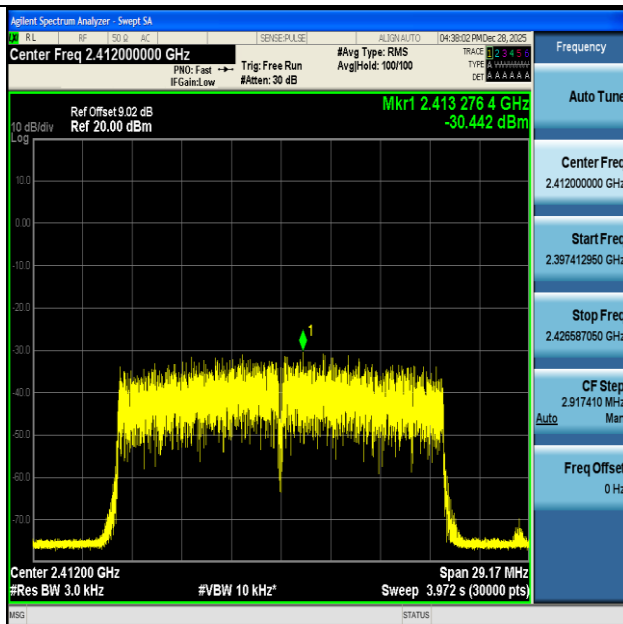


11N40SISO-Ant1-2437-PASS

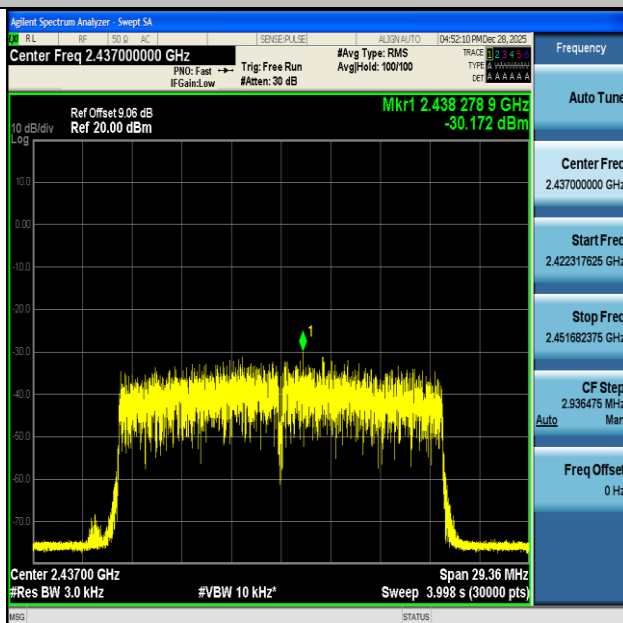


11N40SISO-Ant1-2452-PASS



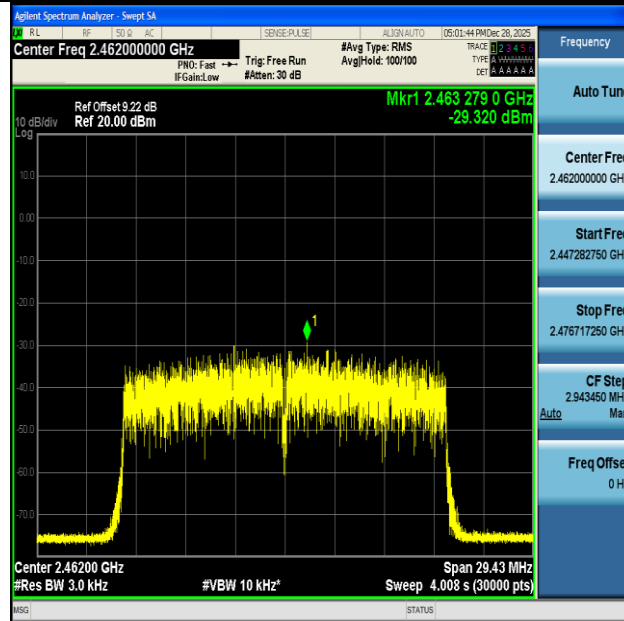


11AX20SISO-Ant1-2412-PASS

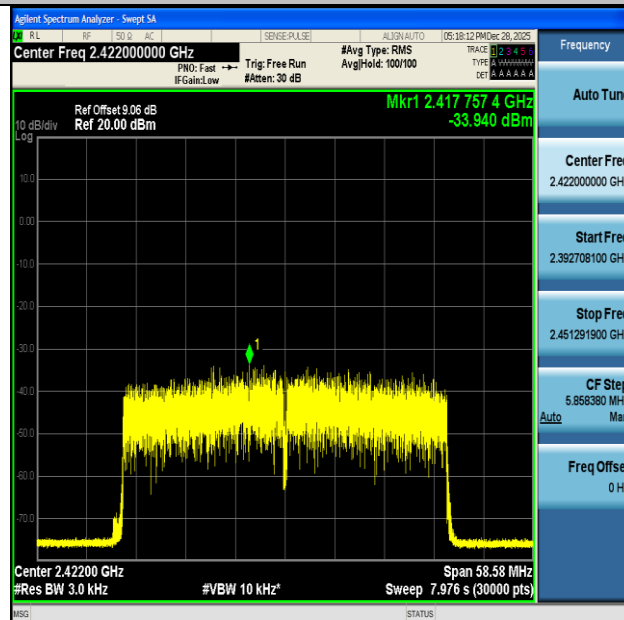


11AX20SISO-Ant1-2437-PASS



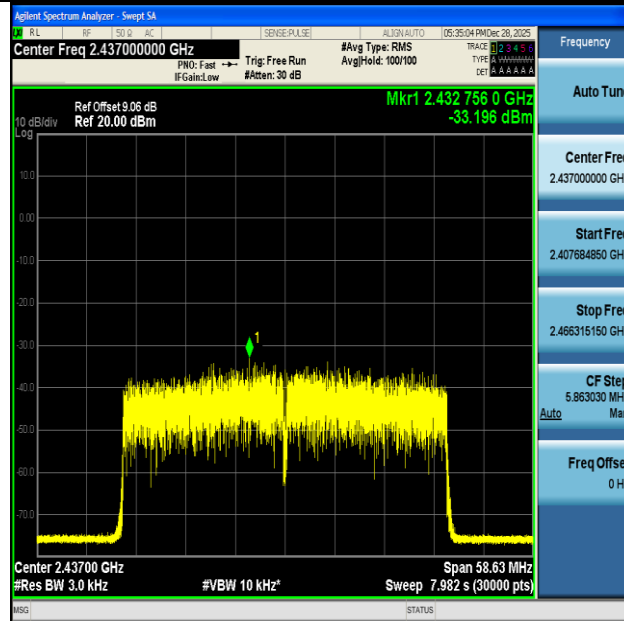


11AX20SISO-Ant1-2462-PASS

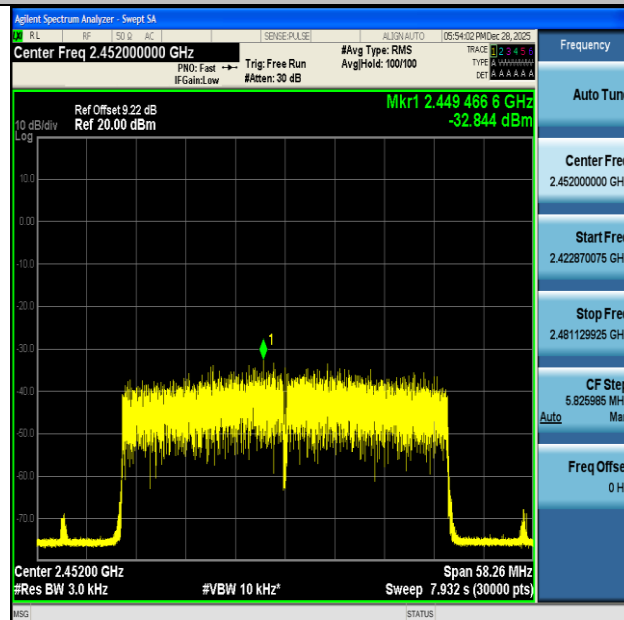


11AX40SISO-Ant1-2422-PASS





11AX40SISO-Ant1-2437-PASS



11AX40SISO-Ant1-2452-PASS





Appendix E: Band edge measurements

Test Result

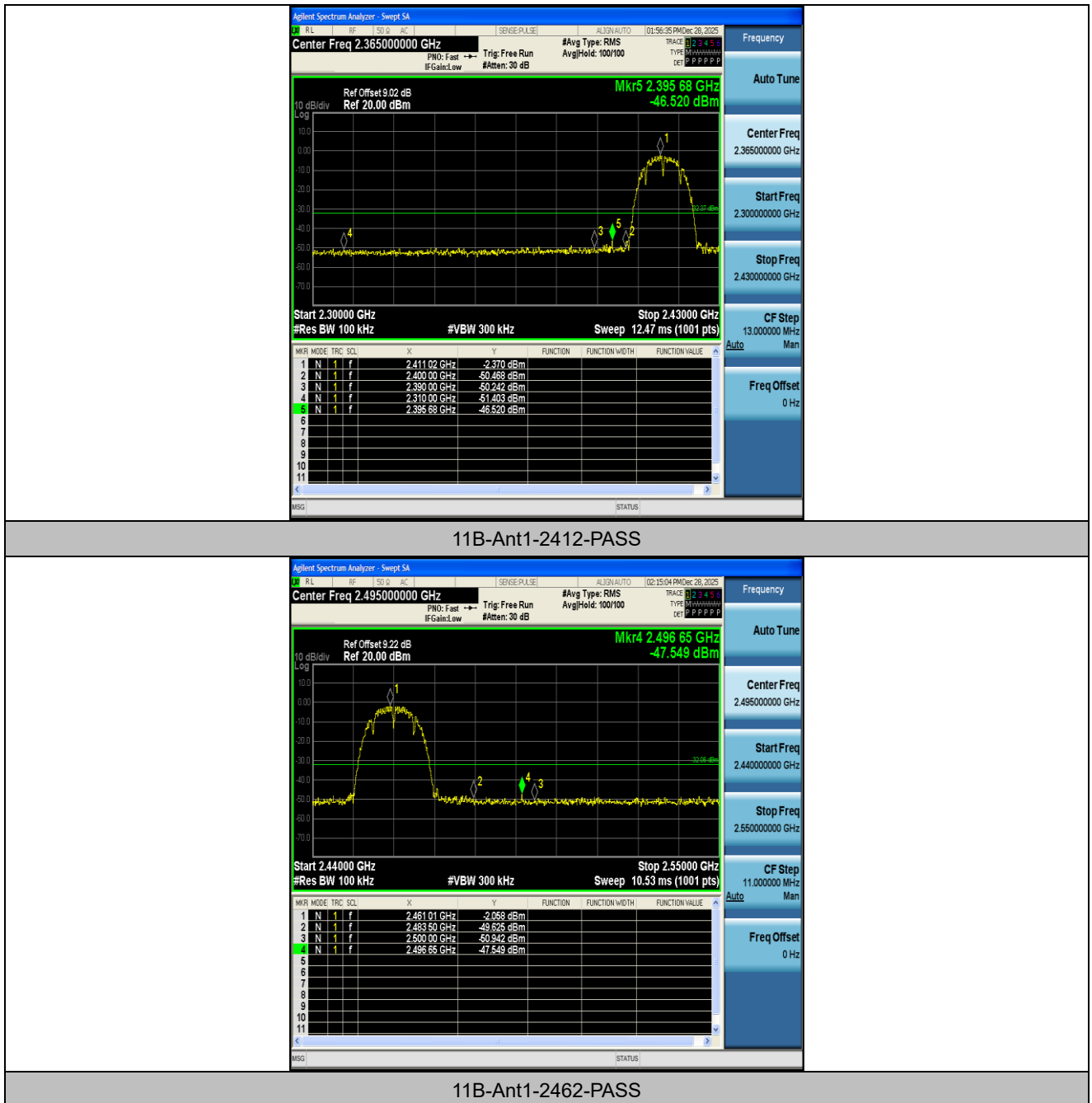
Test Mode	Antenna	Ch. Name	Frequency.[MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	-2.37	-46.52	≤ -32.37	PASS
11B	Ant1	High	2462	-2.06	-47.55	≤ -32.06	PASS
11G	Ant1	Low	2412	-3.63	-49.11	≤ -33.63	PASS
11G	Ant1	High	2462	-3.08	-48.52	≤ -33.08	PASS
11N20SISO	Ant1	Low	2412	-4.24	-48.69	≤ -34.24	PASS
11N20SISO	Ant1	High	2462	-3.49	-49.34	≤ -33.49	PASS
11N40SISO	Ant1	Low	2422	-6.19	-48.85	≤ -36.19	PASS
11N40SISO	Ant1	High	2452	-6.45	-49.1	≤ -36.45	PASS
11AX20SISO	Ant1	Low	2412	-5.25	-48.82	≤ -35.25	PASS
11AX20SISO	Ant1	High	2462	-3.59	-49.22	≤ -33.59	PASS
11AX40SISO	Ant1	Low	2422	-7.33	-49.53	≤ -37.33	PASS
11AX40SISO	Ant1	High	2452	-6.56	-48.97	≤ -36.56	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



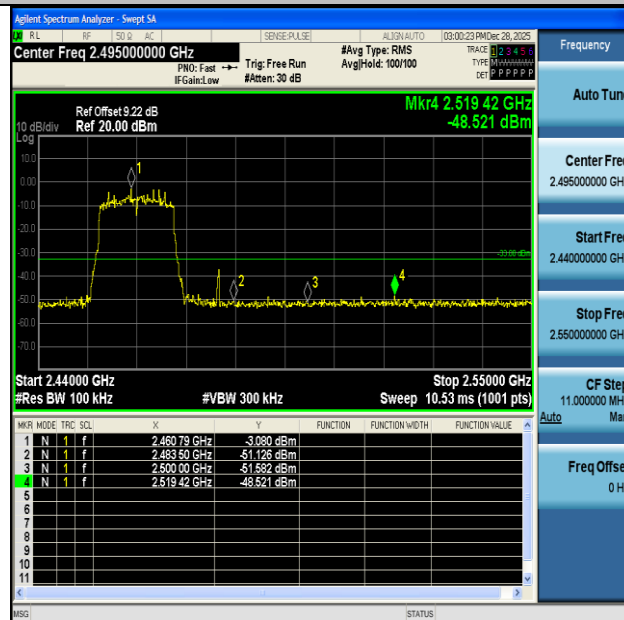


Test Graphs



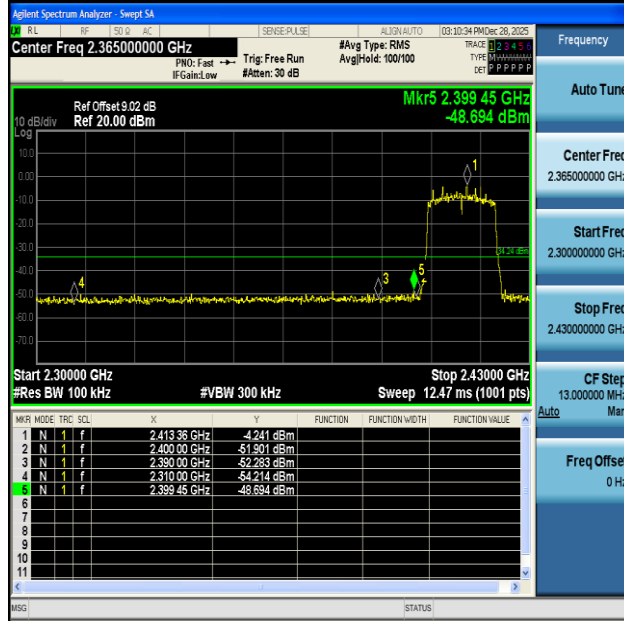


11G-Ant1-2412-PASS

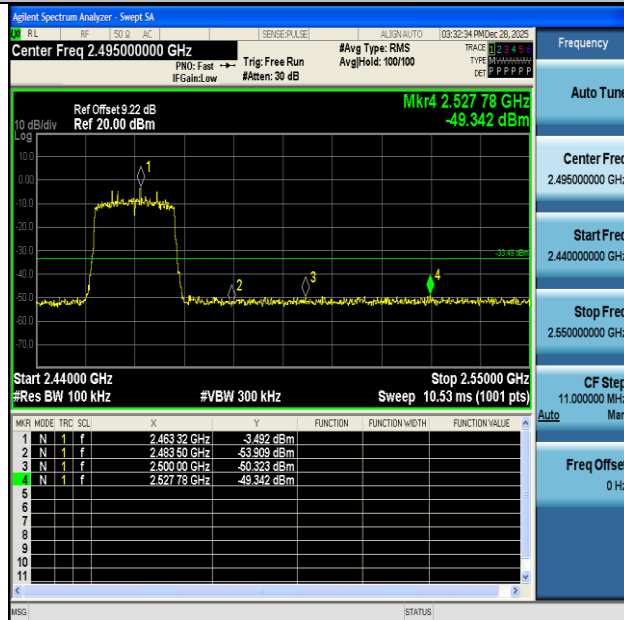


11G-Ant1-2462-PASS



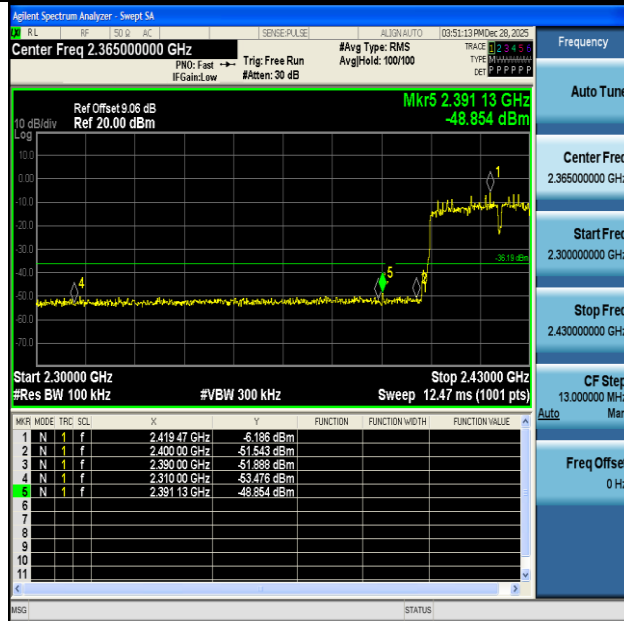


11N20SISO-Ant1-2412-PASS

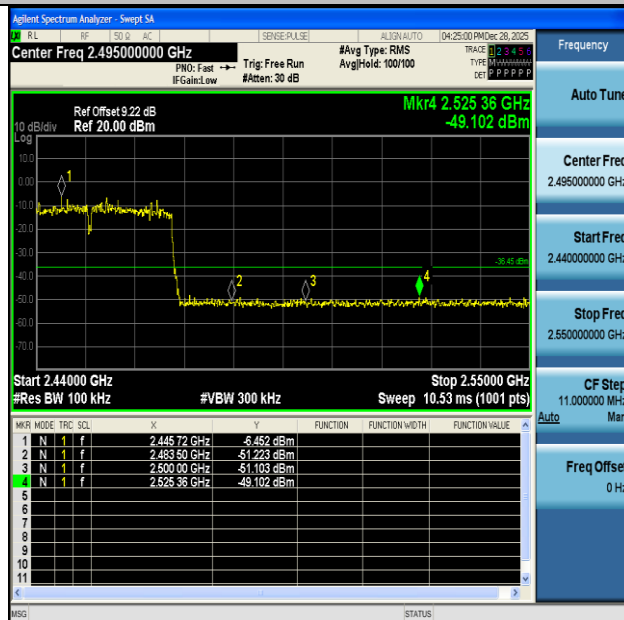


11N20SISO-Ant1-2462-PASS



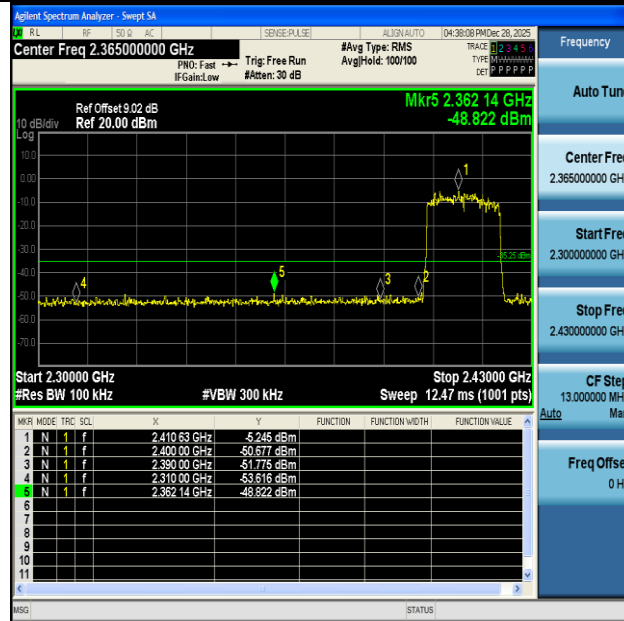


11N40SISO-Ant1-2422-PASS

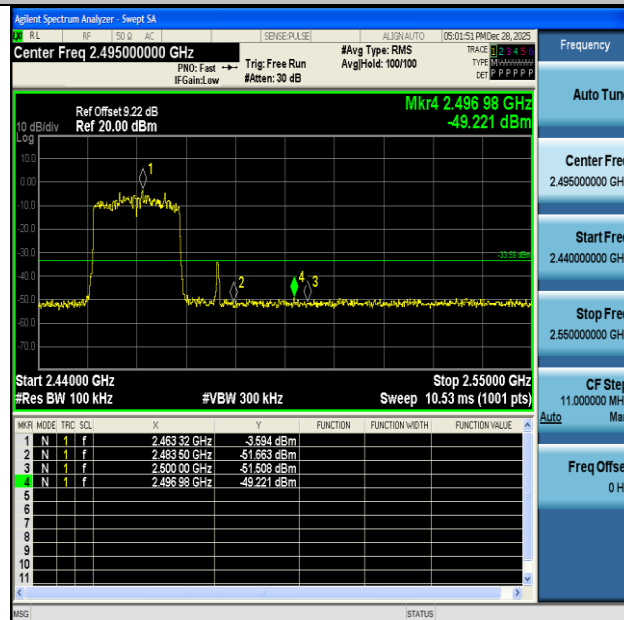


11N40SISO-Ant1-2452-PASS



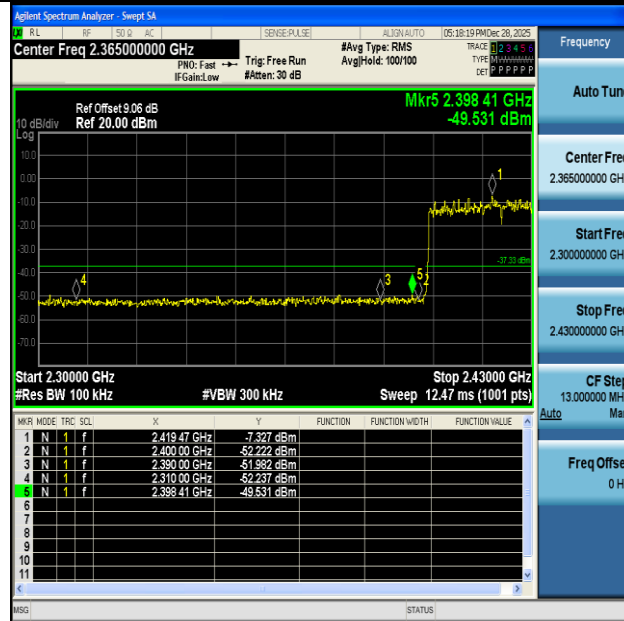


11AX20SISO-Ant1-2412-PASS

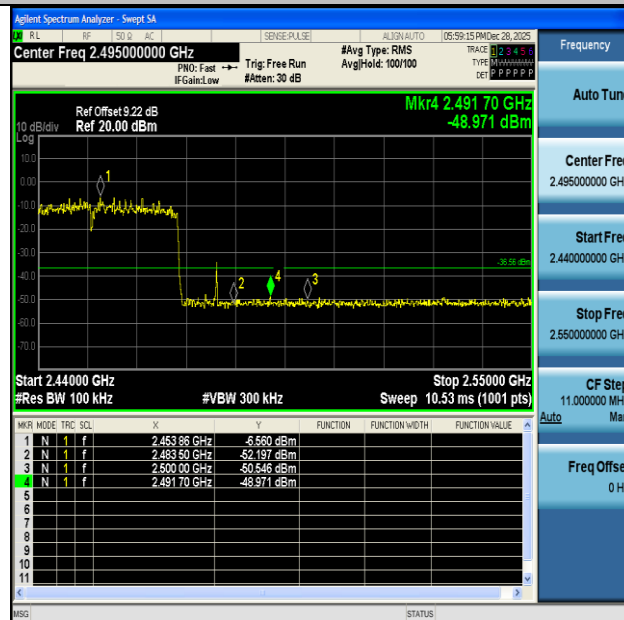


11AX20SISO-Ant1-2462-PASS





11AX40SISO-Ant1-2422-PASS



11AX40SISO-Ant1-2452-PASS





Appendix F: Conducted Spurious Emission

Test Result

Test Mode	Antenna	Frequency [MHz]	Freq. Range [Mhz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	-3.24	-3.24	---	PASS
11B	Ant1	2412	30~1000	-3.24	-62.17	≤-33.24	PASS
11B	Ant1	2412	1000~26500	-3.24	-37.69	≤-33.24	PASS
11B	Ant1	2437	0~Reference	-2.74	-2.74	---	PASS
11B	Ant1	2437	30~1000	-2.74	-62.38	≤-32.74	PASS
11B	Ant1	2437	1000~26500	-2.74	-37.38	≤-32.74	PASS
11B	Ant1	2462	0~Reference	-3.08	-3.08	---	PASS
11B	Ant1	2462	30~1000	-3.08	-61.92	≤-33.08	PASS
11B	Ant1	2462	1000~26500	-3.08	-37.58	≤-33.08	PASS
11G	Ant1	2412	0~Reference	-4.64	-4.64	---	PASS
11G	Ant1	2412	30~1000	-4.64	-62.77	≤-34.64	PASS
11G	Ant1	2412	1000~26500	-4.64	-37.91	≤-34.64	PASS
11G	Ant1	2437	0~Reference	-3.06	-3.06	---	PASS
11G	Ant1	2437	30~1000	-3.06	-72.46	≤-33.06	PASS
11G	Ant1	2437	1000~26500	-3.06	-47.29	≤-33.06	PASS
11G	Ant1	2462	0~Reference	-6.19	-6.19	---	PASS
11G	Ant1	2462	30~1000	-6.19	-72.85	≤-36.19	PASS
11G	Ant1	2462	1000~26500	-6.19	-47.73	≤-36.19	PASS
11N20SISO	Ant1	2412	0~Reference	-5.27	-5.27	---	PASS
11N20SISO	Ant1	2412	30~1000	-5.27	-72.83	≤-35.27	PASS
11N20SISO	Ant1	2412	1000~26500	-5.27	-47.06	≤-35.27	PASS
11N20SISO	Ant1	2437	0~Reference	-7.11	-7.11	---	PASS
11N20SISO	Ant1	2437	30~1000	-7.11	-72.96	≤-37.11	PASS
11N20SISO	Ant1	2437	1000~26500	-7.11	-47.33	≤-37.11	PASS
11N20SISO	Ant1	2462	0~Reference	-3.20	-3.20	---	PASS
11N20SISO	Ant1	2462	30~1000	-3.20	-72.84	≤-33.2	PASS
11N20SISO	Ant1	2462	1000~26500	-3.20	-47.17	≤-33.2	PASS
11N40SISO	Ant1	2422	0~Reference	-7.95	-7.95	---	PASS
11N40SISO	Ant1	2422	30~1000	-7.95	-72.77	≤-37.95	PASS
11N40SISO	Ant1	2422	1000~26500	-7.95	-47.77	≤-37.95	PASS
11N40SISO	Ant1	2437	0~Reference	-10.47	-10.47	---	PASS
11N40SISO	Ant1	2437	30~1000	-10.47	-72.02	≤-40.47	PASS
11N40SISO	Ant1	2437	1000~26500	-10.47	-47.58	≤-40.47	PASS
11N40SISO	Ant1	2452	0~Reference	-7.67	-7.67	---	PASS
11N40SISO	Ant1	2452	30~1000	-7.67	-72.45	≤-37.67	PASS
11N40SISO	Ant1	2452	1000~26500	-7.67	-47.95	≤-37.67	PASS
11AX20SISO	Ant1	2412	0~Reference	-3.38	-3.38	---	PASS





11AX20SISO	Ant1	2412	30~1000	-3.38	-72.23	≤ -33.38	PASS
11AX20SISO	Ant1	2412	1000~26500	-3.38	-47.49	≤ -33.38	PASS
11AX20SISO	Ant1	2437	0~Reference	-6.41	-6.41	---	PASS
11AX20SISO	Ant1	2437	30~1000	-6.41	-72.36	≤ -36.41	PASS
11AX20SISO	Ant1	2437	1000~26500	-6.41	-47.63	≤ -36.41	PASS
11AX20SISO	Ant1	2462	0~Reference	-3.66	-3.66	---	PASS
11AX20SISO	Ant1	2462	30~1000	-3.66	-72.75	≤ -33.66	PASS
11AX20SISO	Ant1	2462	1000~26500	-3.66	-47.48	≤ -33.66	PASS
11AX40SISO	Ant1	2422	0~Reference	-10.51	-10.51	---	PASS
11AX40SISO	Ant1	2422	30~1000	-10.51	-72.25	≤ -40.51	PASS
11AX40SISO	Ant1	2422	1000~26500	-10.51	-47.4	≤ -40.51	PASS
11AX40SISO	Ant1	2437	0~Reference	-9.30	-9.30	---	PASS
11AX40SISO	Ant1	2437	30~1000	-9.30	-72.02	≤ -39.3	PASS
11AX40SISO	Ant1	2437	1000~26500	-9.30	-47.9	≤ -39.3	PASS
11AX40SISO	Ant1	2452	0~Reference	-8.49	-8.49	---	PASS
11AX40SISO	Ant1	2452	30~1000	-8.49	-72.44	≤ -38.49	PASS
11AX40SISO	Ant1	2452	1000~26500	-8.49	-47.2	≤ -38.49	PASS

Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.

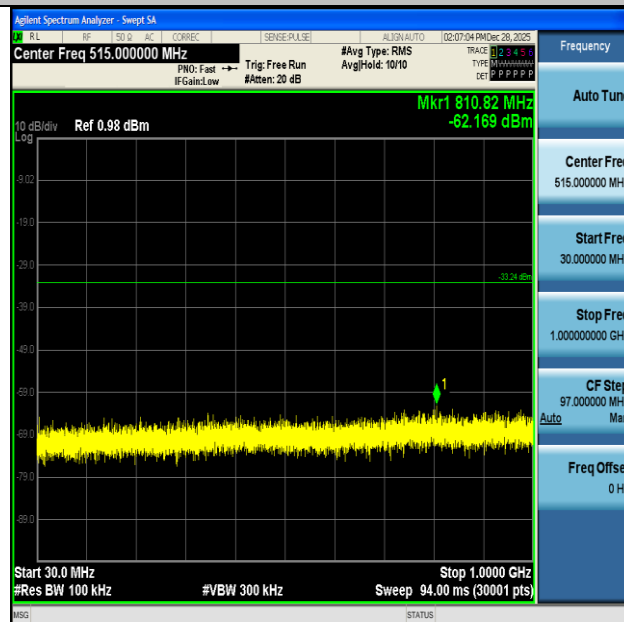




Test Graphs



11B-Ant1-2412-0~Reference-PASS

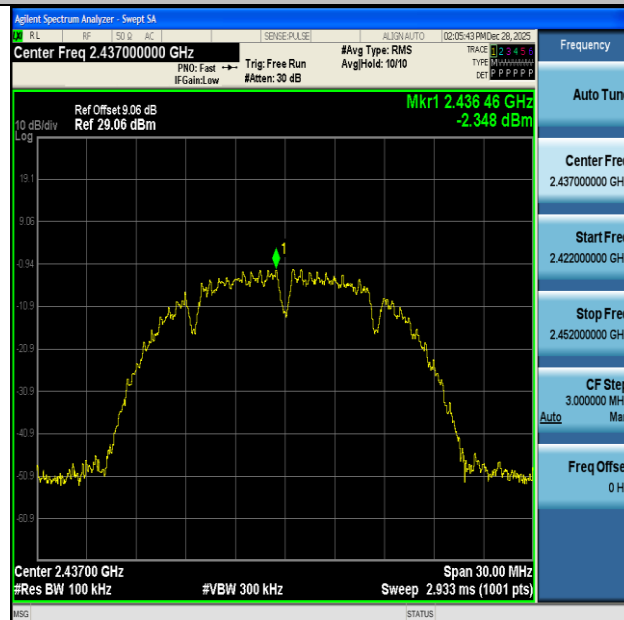


11B-Ant1-2412-30~1000-PASS



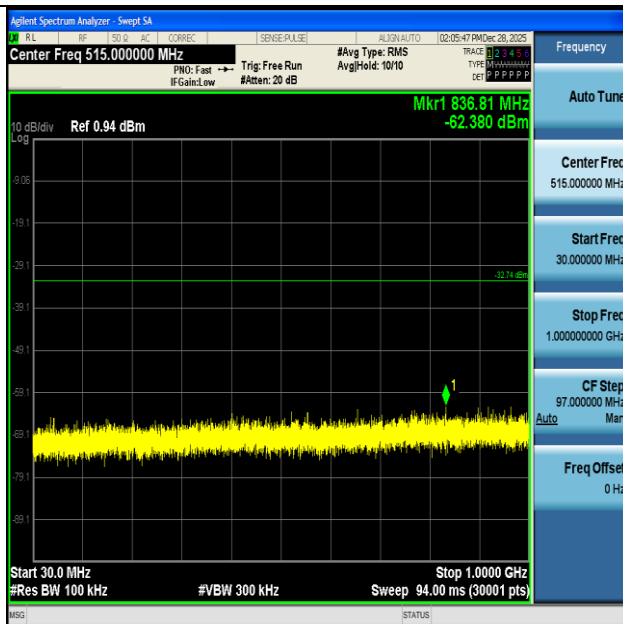


11B-Ant1-2412-1000~26500-PASS

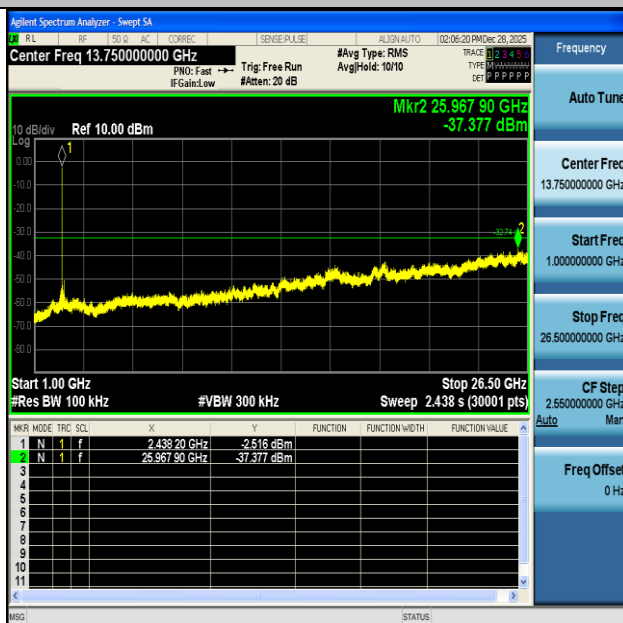


11B-Ant1-2437-0~Reference-PASS



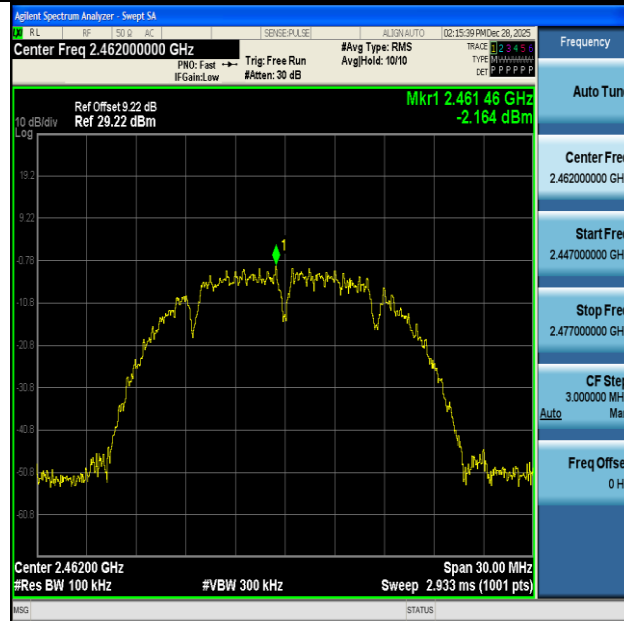


11B-Ant1-2437-30~1000-PASS

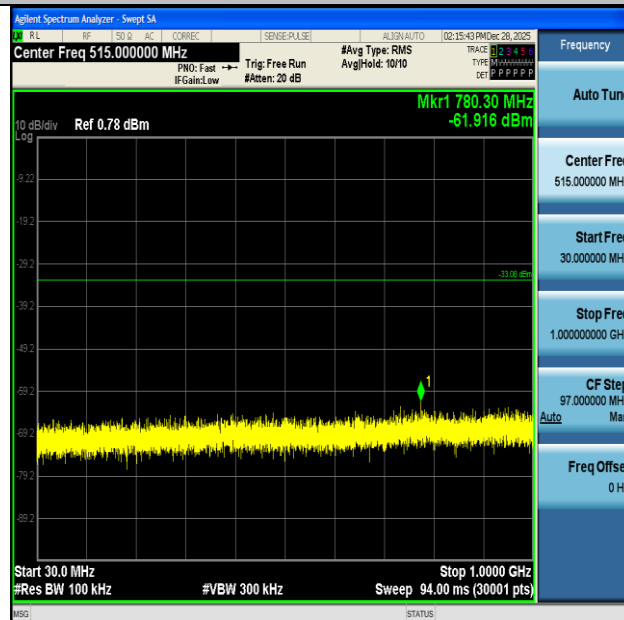


11B-Ant1-2437-1000~26500-PASS



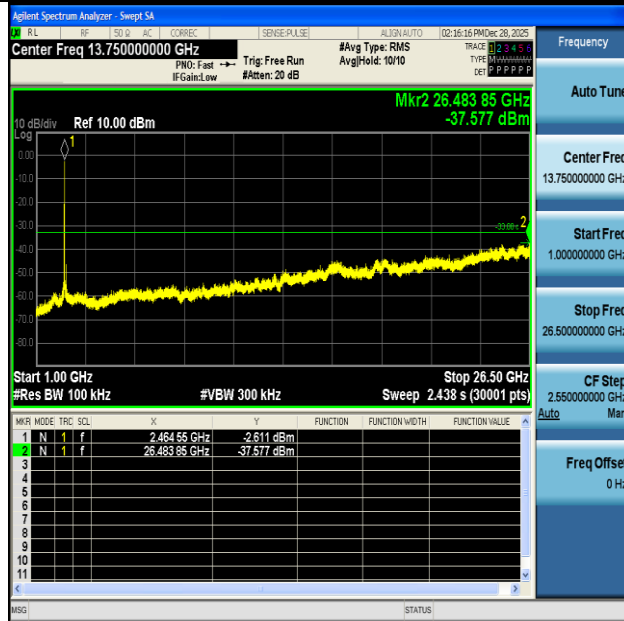


11B-Ant1-2462-0~Reference-PASS

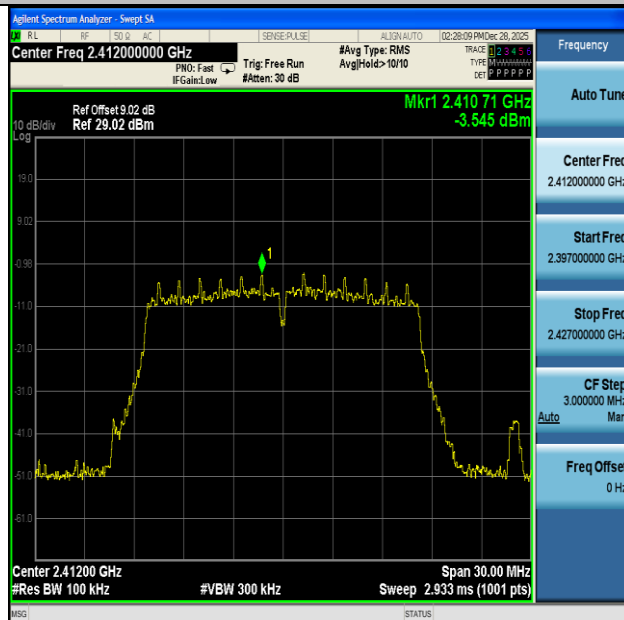


11B-Ant1-2462-30~1000-PASS



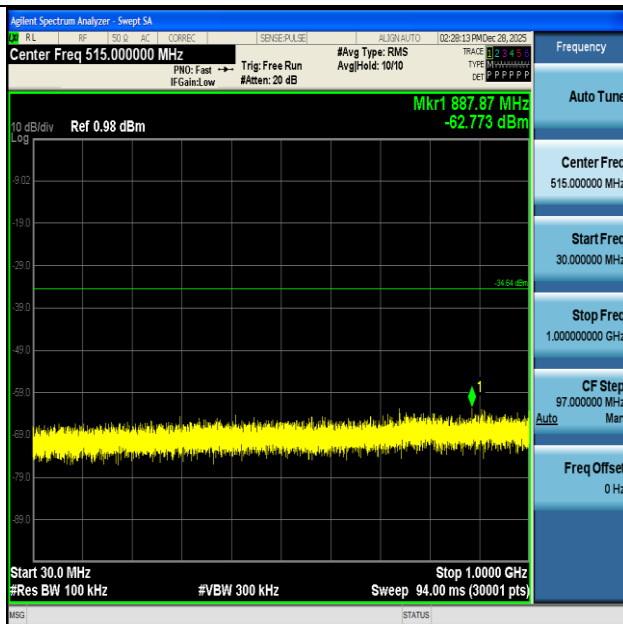


11B-Ant1-2462-1000~26500-PASS

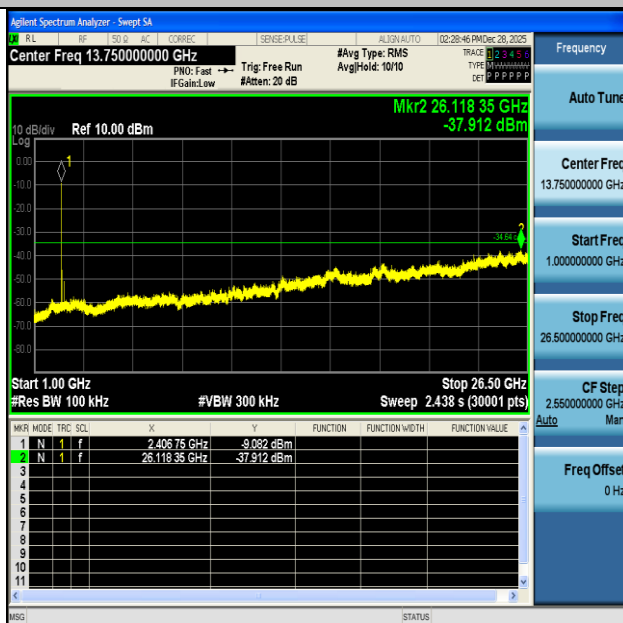


11G-Ant1-2412-0~Reference-PASS



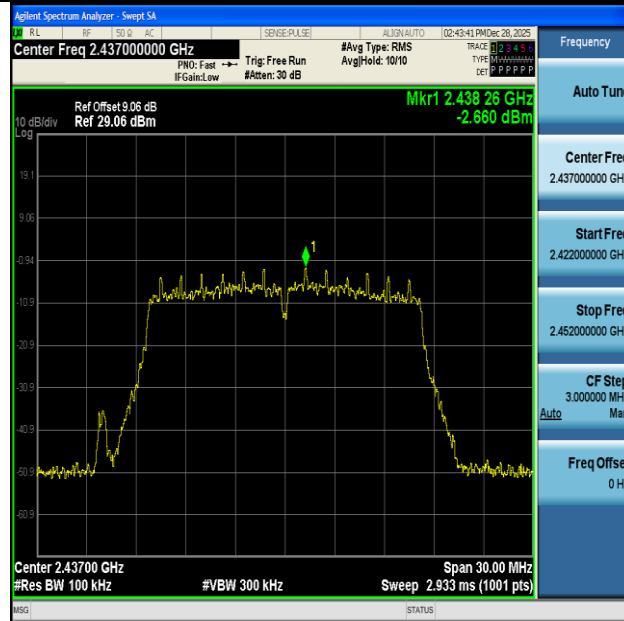


11G-Ant1-2412-30~1000-PASS

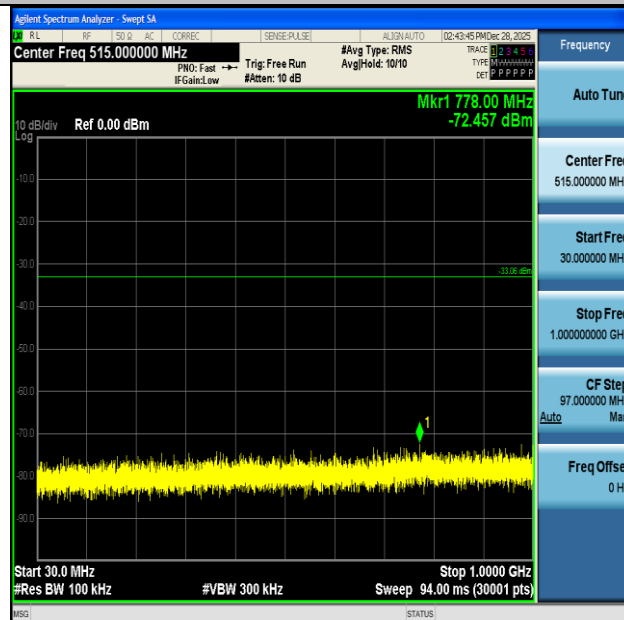


11G-Ant1-2412-1000~26500-PASS



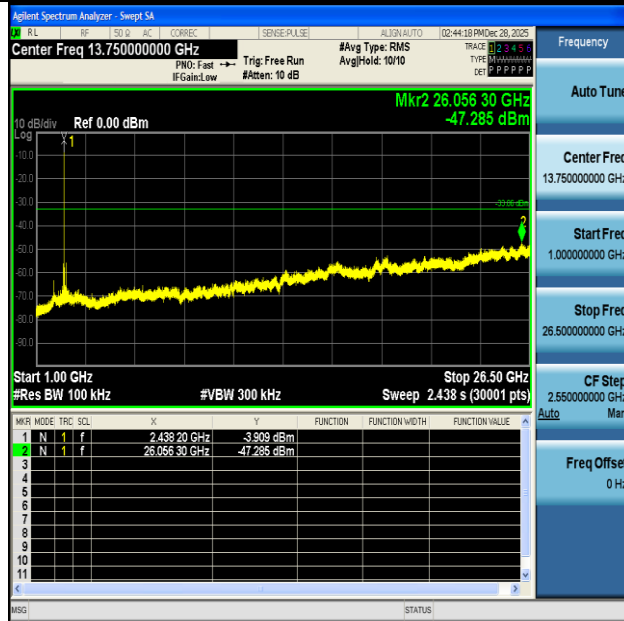


11G-Ant1-2437-0~Reference-PASS

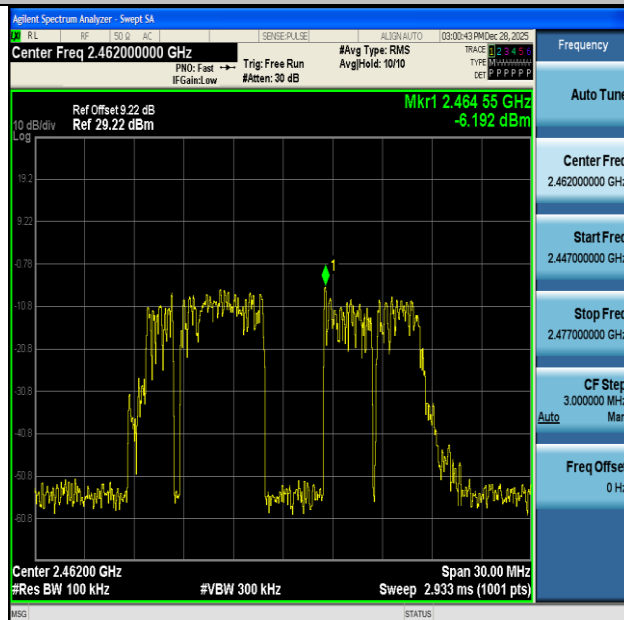


11G-Ant1-2437-30~1000-PASS



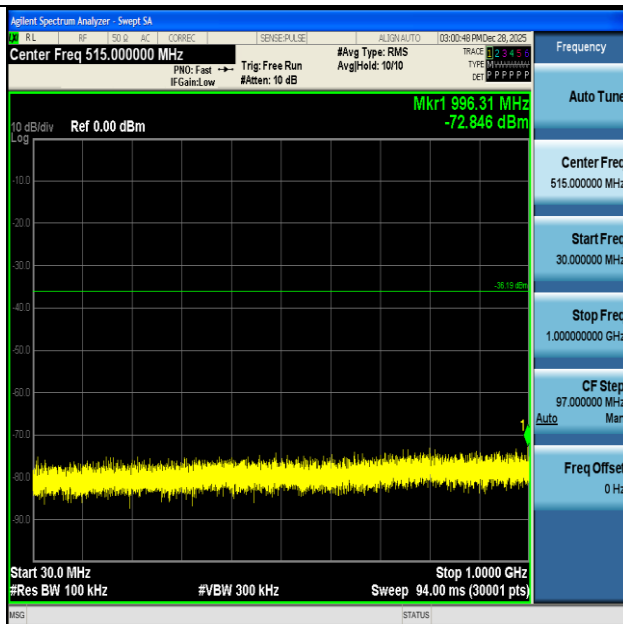


11G-Ant1-2437-1000~26500-PASS

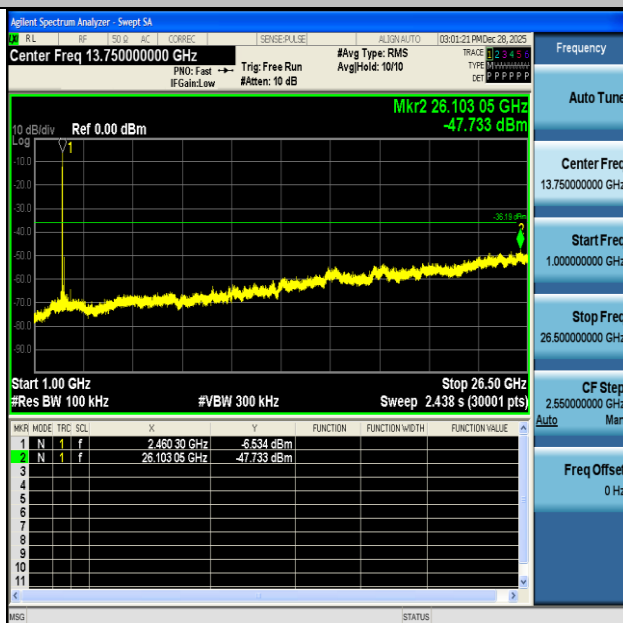


11G-Ant1-2462-0~Reference-PASS





11G-Ant1-2462-30~1000-PASS



11G-Ant1-2462-1000~26500-PASS

