

Appendix RF Test Data for 2.4G

Company : SANWA SUPPLY INC.

EUT : wireless receiver

Model Number : SANWA RC19E2

Report No. : CTA26033000801

Reviewed By : Eric Wang

Appendix A: Frequency Error

Test Result

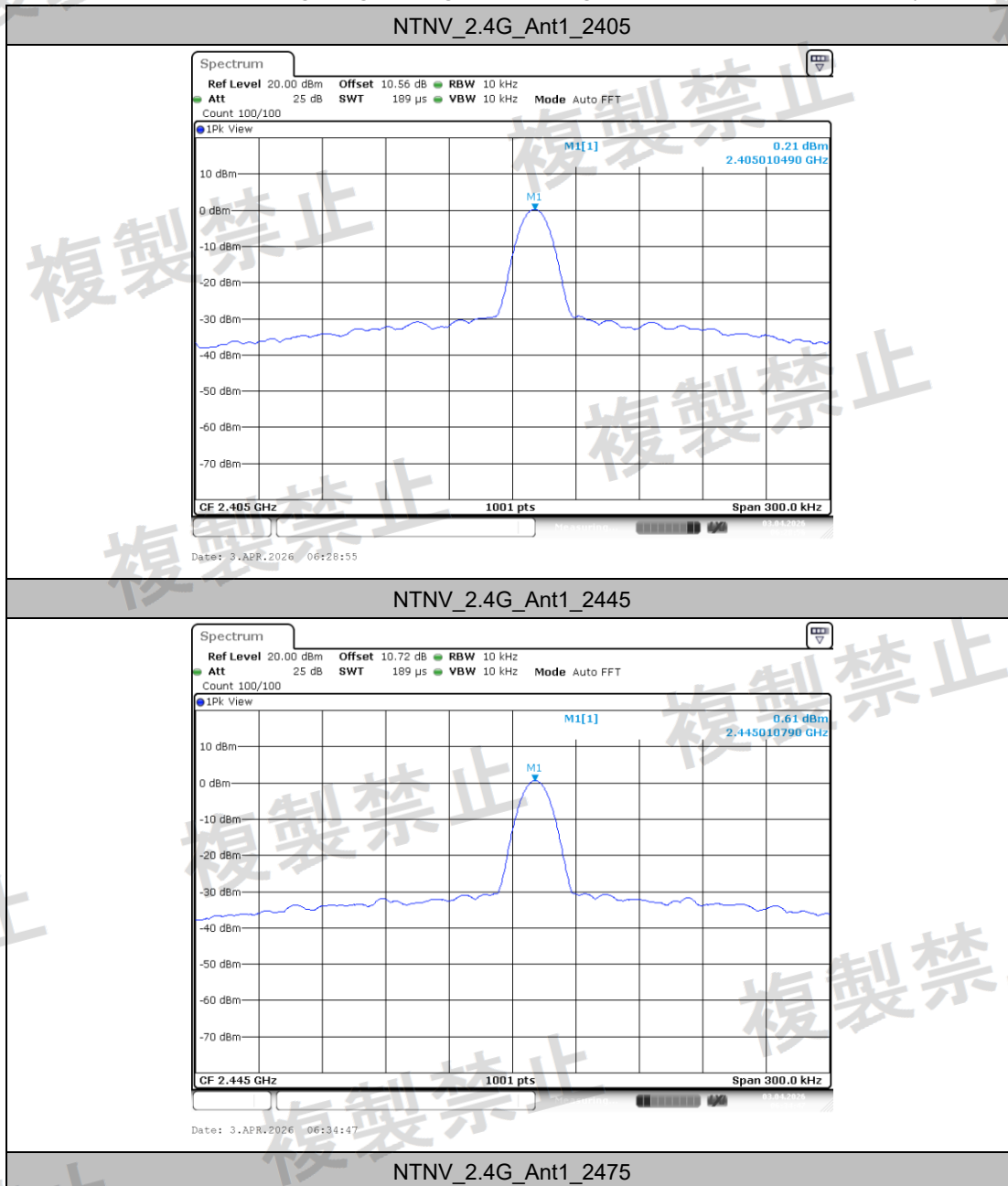
TestCondition	TestMode	Antenna	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTNV	2.4G	Ant1	2405	4.36175	±50	PASS
			2445	4.41309	±50	PASS
			2475	4.48081	±50	PASS

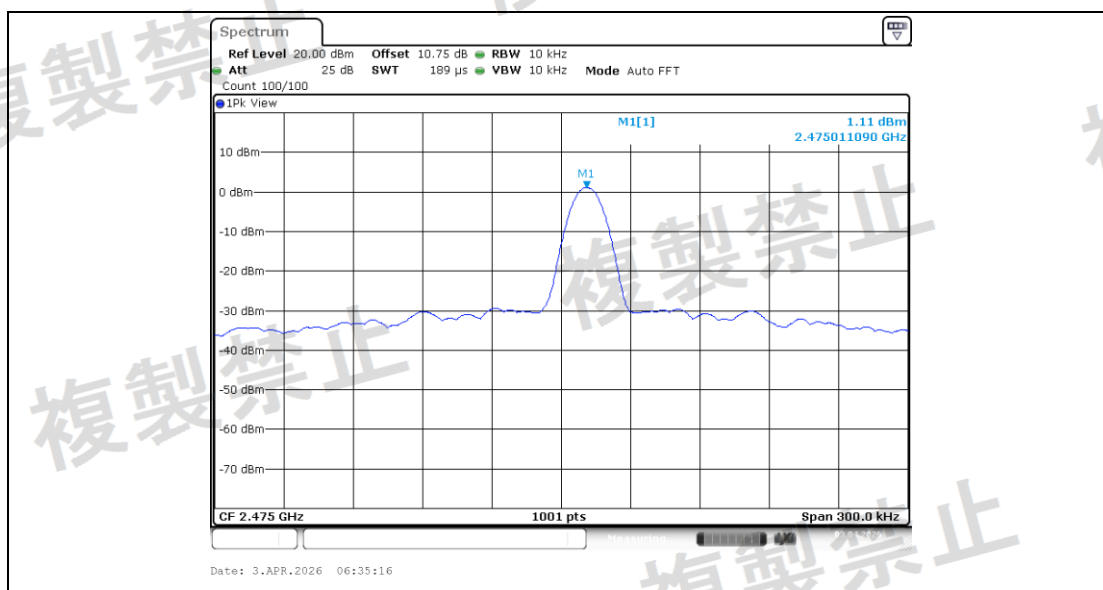
TestCondition	TestMode	Antenna	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTLV	2.4G	Ant1	2405	4.19674	±50	PASS
			2445	4.24089	±50	PASS
			2475	4.22037	±50	PASS

TestCondition	TestMode	Antenna	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTHV	2.4G	Ant1	2405	4.19658	±50	PASS
			2445	4.23341	±50	PASS
			2475	4.22178	±50	PASS

Test Graphs

Note: We test Normal Voltage, High Voltage, Low Voltage, and recorded the worst test plot.





Appendix B: Occupied Bandwidth

Test Result

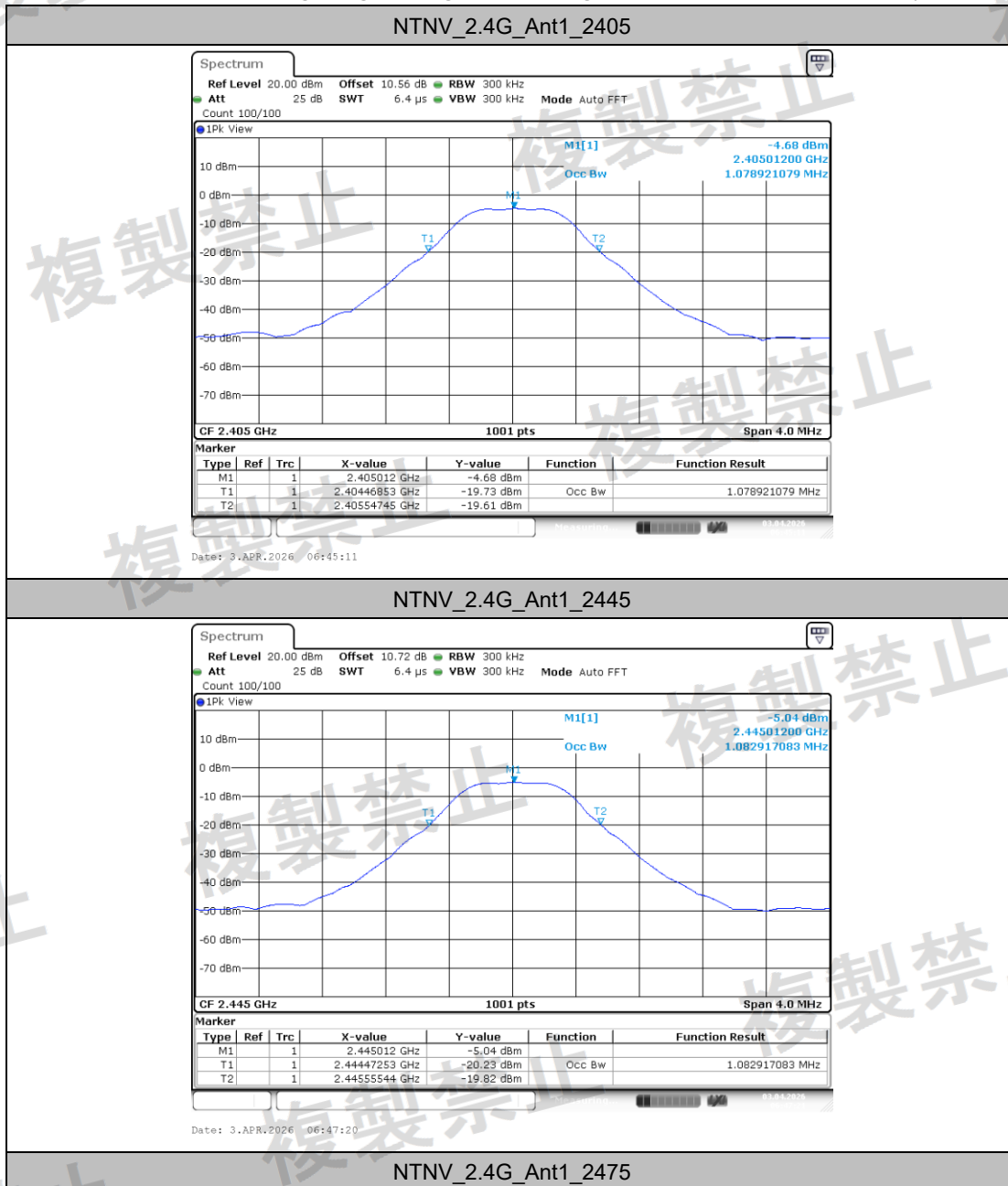
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	2.4G	Ant1	2405	1.079	≤26	PASS
			2445	1.083	≤26	PASS
			2475	1.084	≤26	PASS

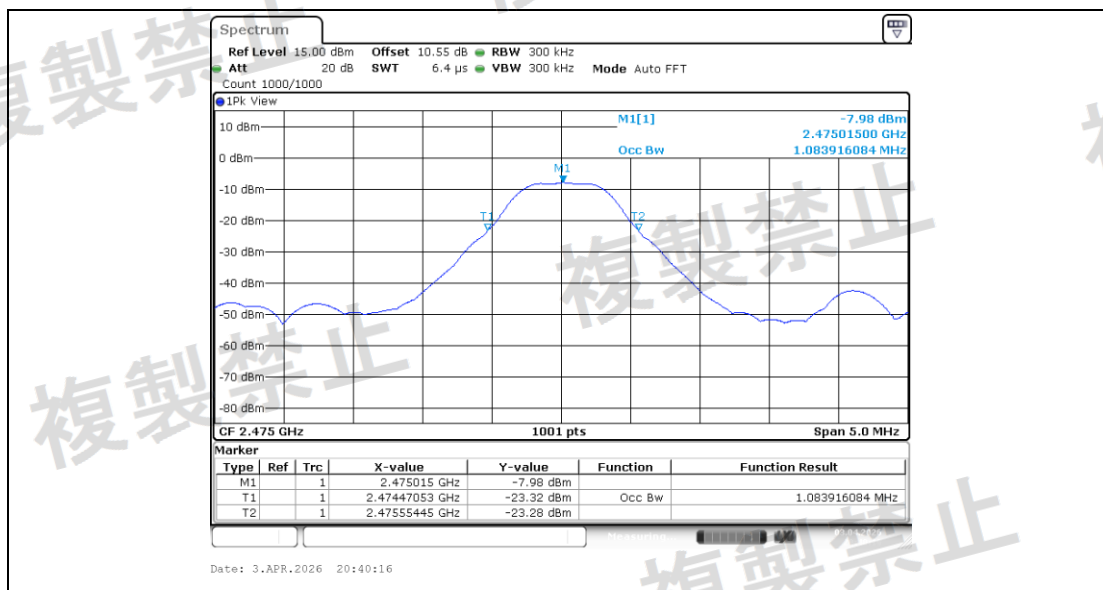
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTLV	2.4G	Ant1	2405	1.074	≤26	PASS
			2445	1.082	≤26	PASS
			2475	1.080	≤26	PASS

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTHV	2.4G	Ant1	2405	1.071	≤26	PASS
			2445	1.078	≤26	PASS
			2475	1.078	≤26	PASS

Test Graphs

Note: We test Normal Voltage, High Voltage, Low Voltage, and recorded the worst test plot.





Appendix C: Spread Bandwidth

Test Result

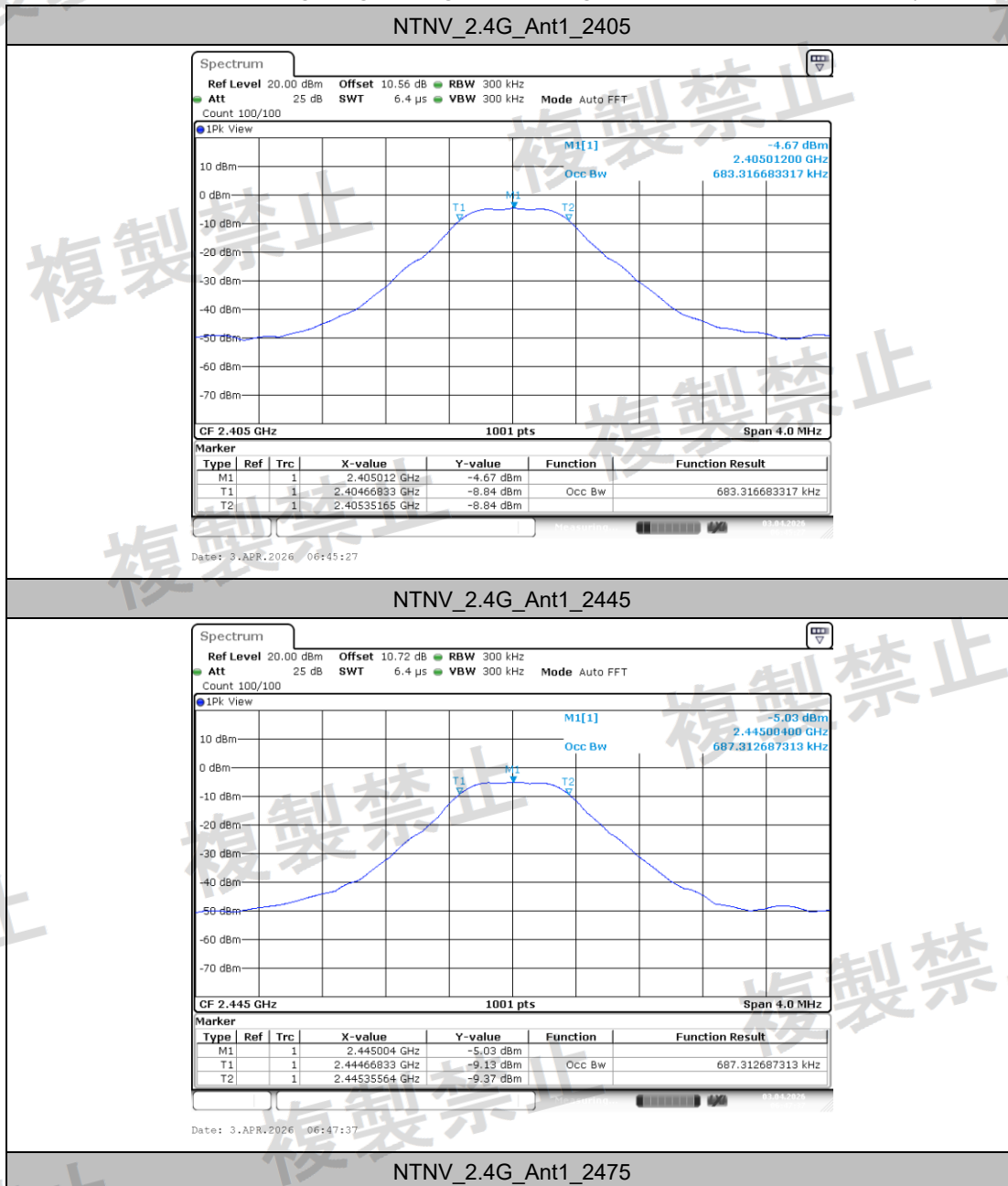
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	2.4G	Ant1	2405	0.683	≥0.5	PASS
			2445	0.687	≥0.5	PASS
			2475	0.687	≥0.5	PASS

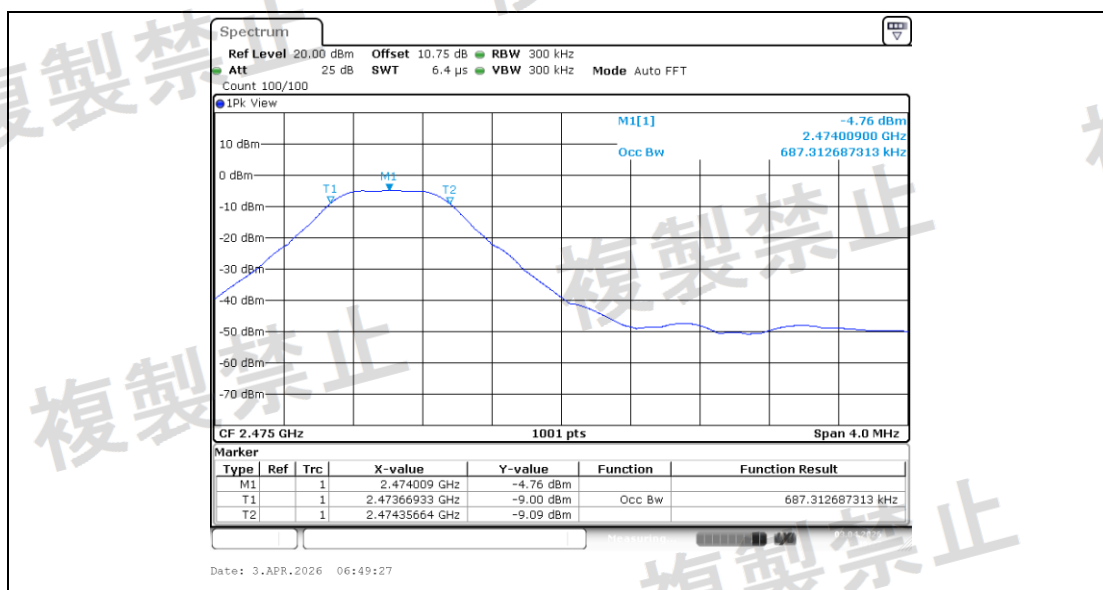
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTLV	2.4G	Ant1	2405	0.681	≥0.5	PASS
			2445	0.685	≥0.5	PASS
			2475	0.686	≥0.5	PASS

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTHV	2.4G	Ant1	2405	0.682	≥0.5	PASS
			2445	0.686	≥0.5	PASS
			2475	0.684	≥0.5	PASS

Test Graphs

Note: We test Normal Voltage, High Voltage, Low Voltage, and recorded the worst test plot.





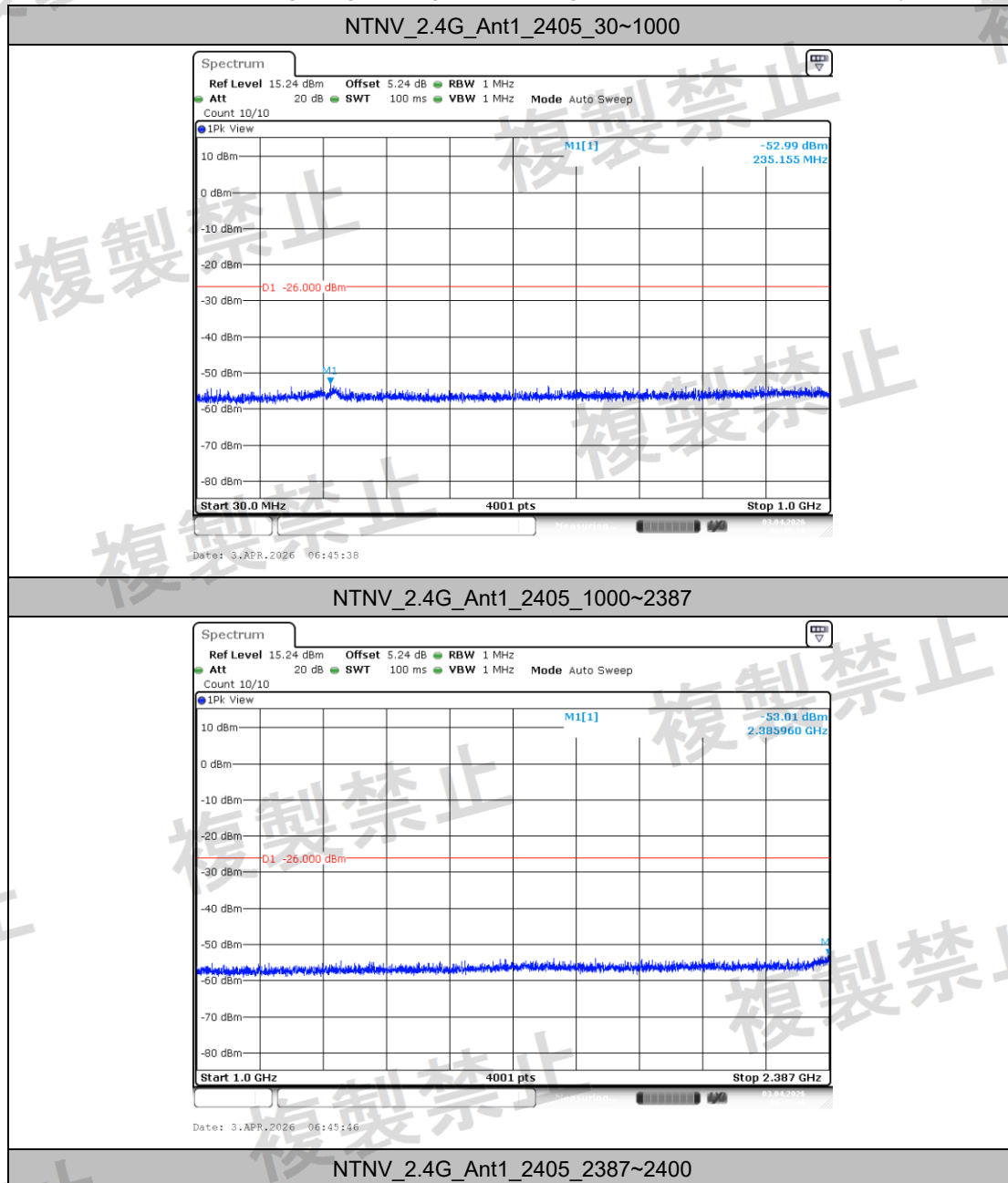
Appendix D: Spurious Emission of TX

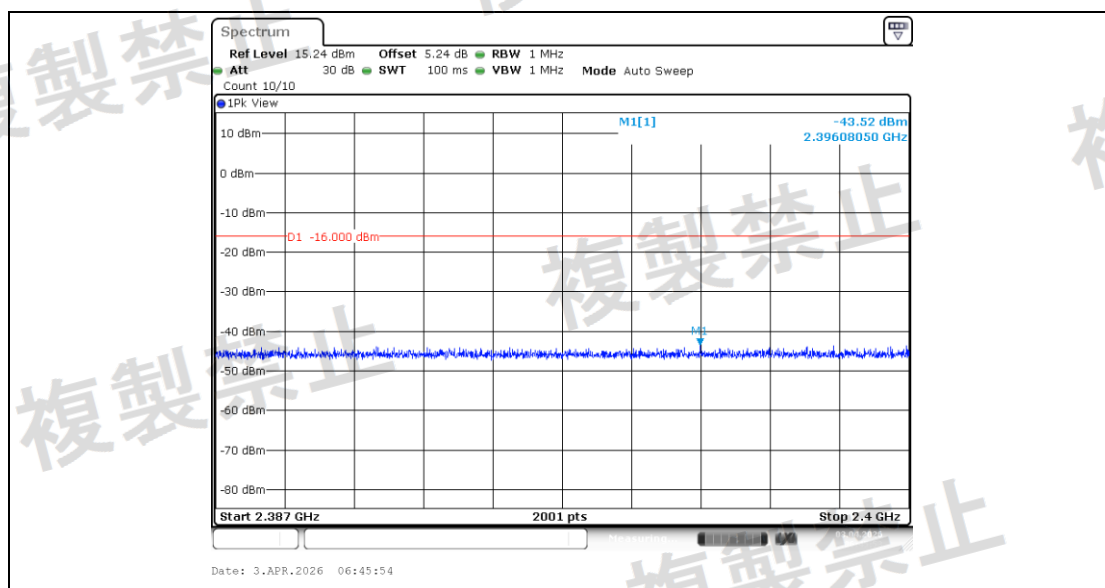
Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	2.4G	Ant1	2405	30~1000	235.16	-52.99	≤-26	0.00502	≤2.5	PASS
				1000~2387	2385.96	-53.01	≤-26	0.00500	≤2.5	PASS
				2387~2400	2396.08	-43.52	≤-16	0.04446	≤25	PASS
				2483.5~2496.5	2483.52	-43.14	≤-16	0.04853	≤25	PASS
				2496.5~13000	4809.90	-44.95	≤-26	0.03199	≤2.5	PASS
			2445	30~1000	865.41	-53.08	≤-26	0.00492	≤2.5	PASS
				1000~2387	1783.31	-53.72	≤-26	0.00425	≤2.5	PASS
				2387~2400	2391.29	-43.36	≤-16	0.04613	≤25	PASS
				2483.5~2496.5	2493.90	-42.92	≤-16	0.05105	≤25	PASS
				2496.5~13000	4889.72	-45.56	≤-26	0.02780	≤2.5	PASS
			2475	30~1000	904.70	-42.67	≤-26	0.05408	≤2.5	PASS
				1000~2387	1997.95	-53.32	≤-26	0.00466	≤2.5	PASS
				2387~2400	2389.87	-43.19	≤-16	0.04797	≤25	PASS
				2483.5~2496.5	2486.95	-43.06	≤-16	0.04943	≤25	PASS
				2496.5~13000	5225.83	-41.26	≤-26	0.07482	≤2.5	PASS

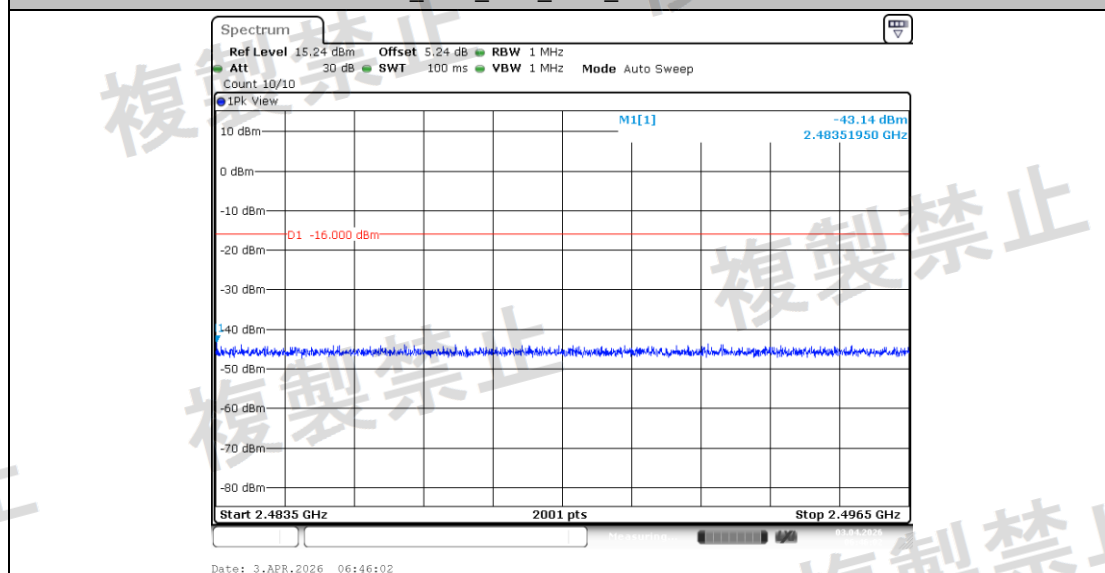
Test Graphs

Note: We test Normal Voltage, High Voltage, Low Voltage, and recorded the worst test plot.

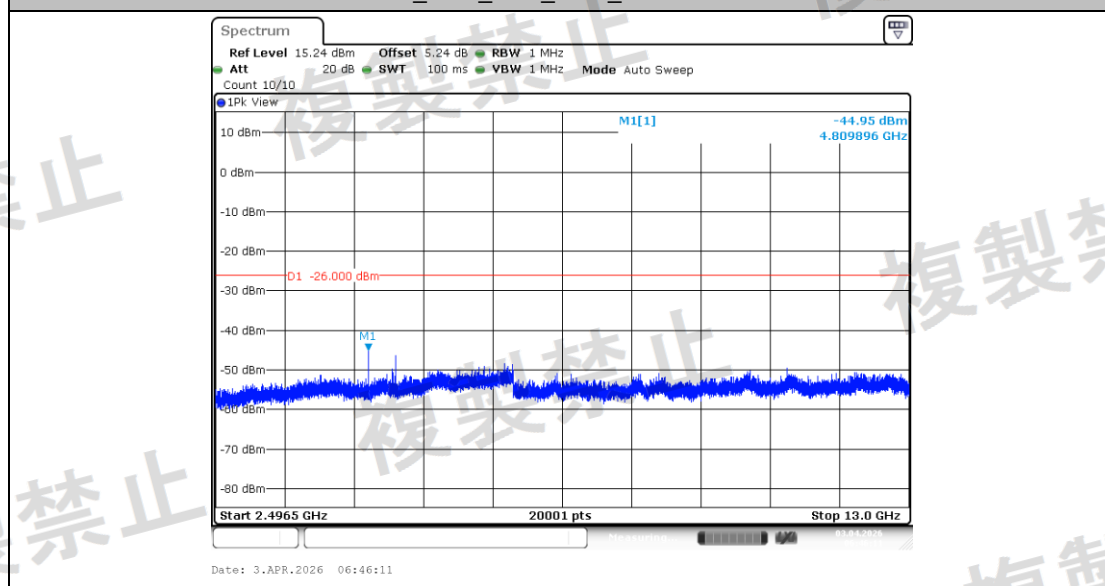


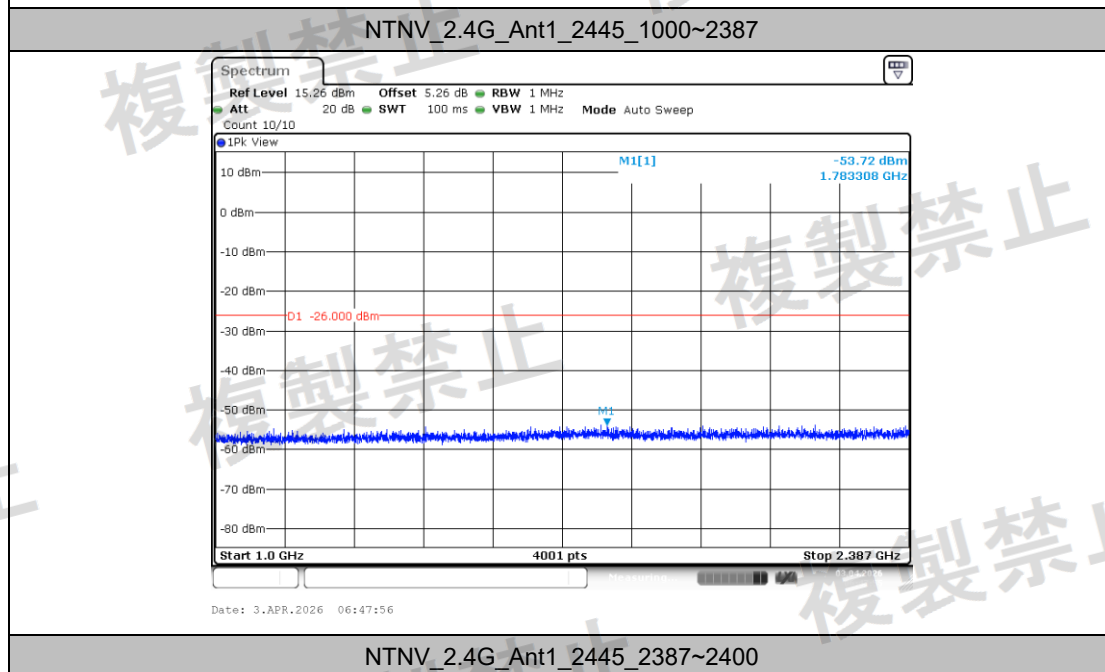
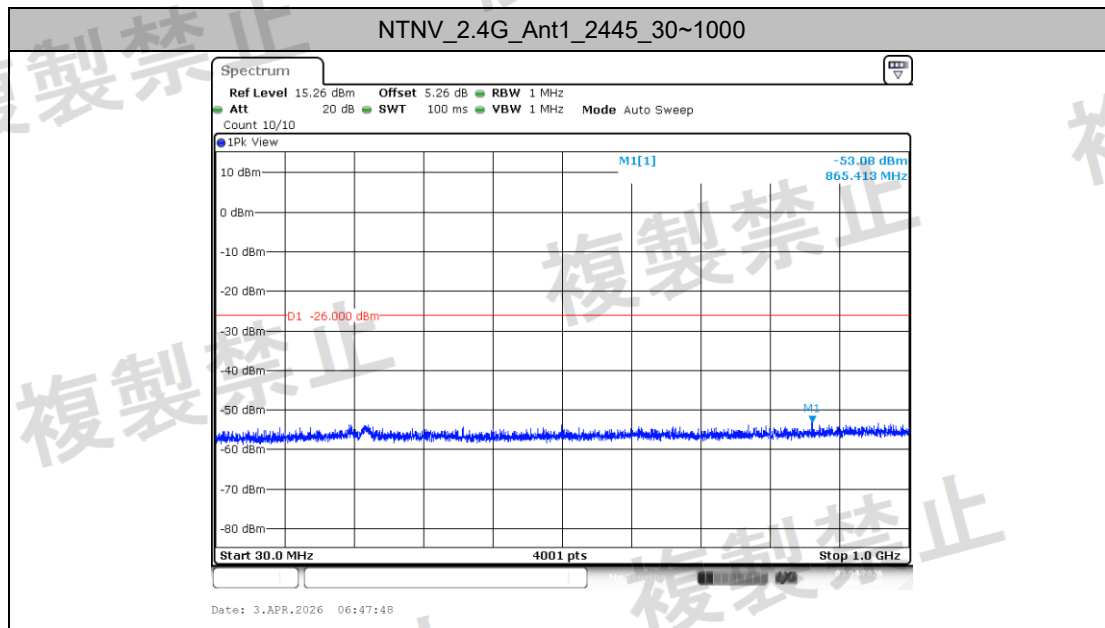


NTNV_2.4G_Ant1_2405_2483.5~2496.5

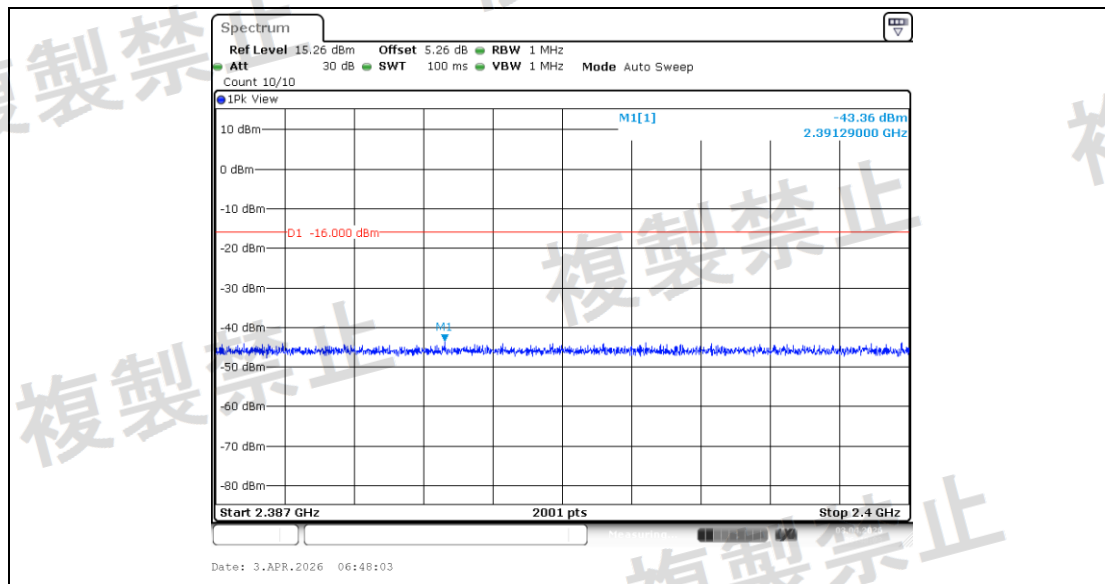


NTNV_2.4G_Ant1_2405_2496.5~13000

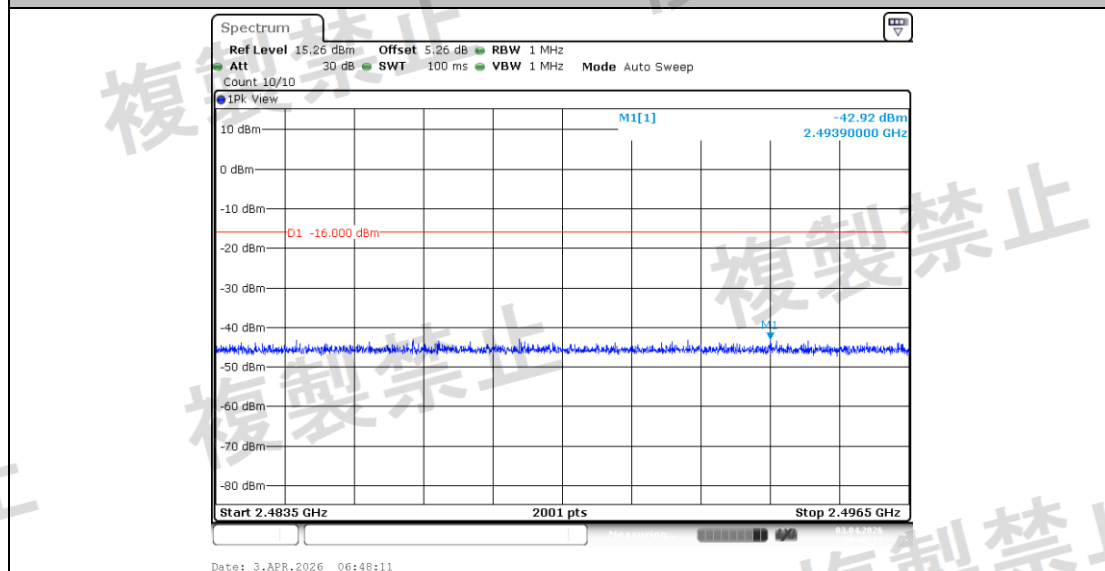




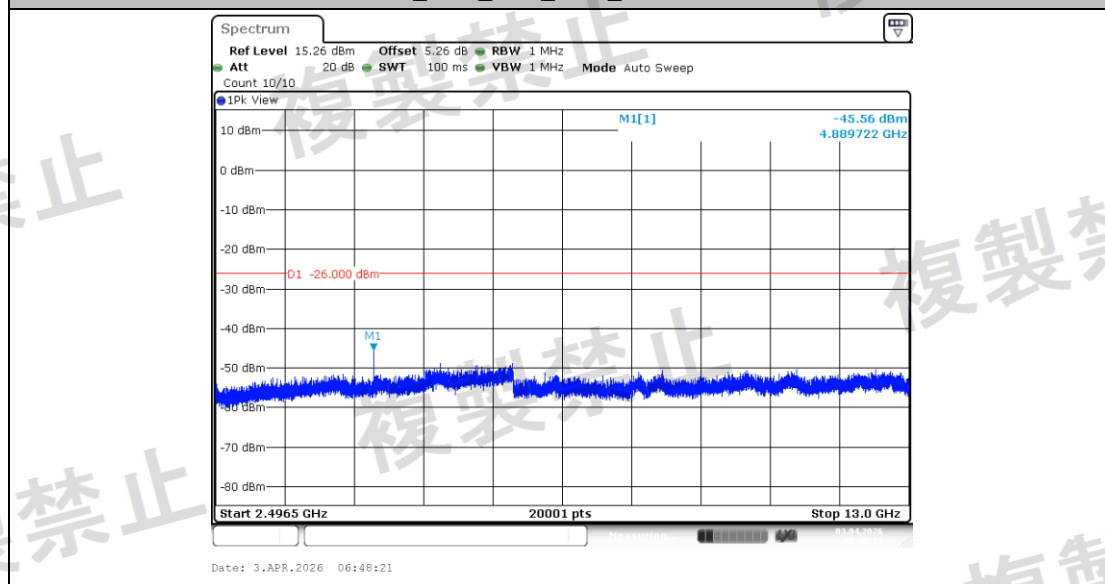
NTNV_2.4G_Ant1_2445_2387~2400

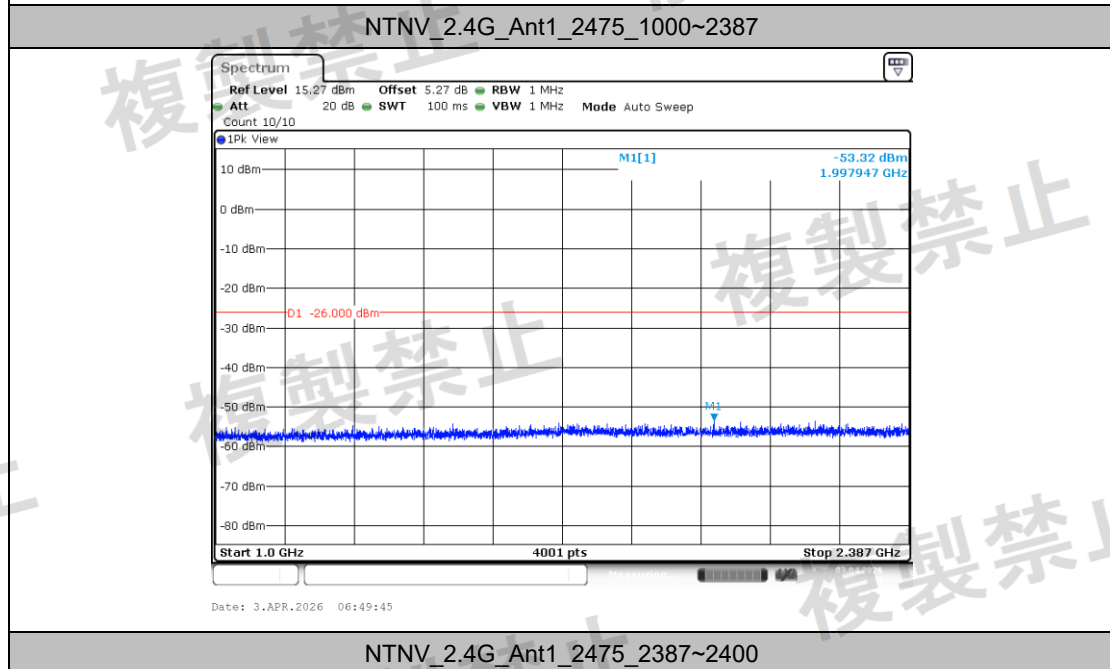
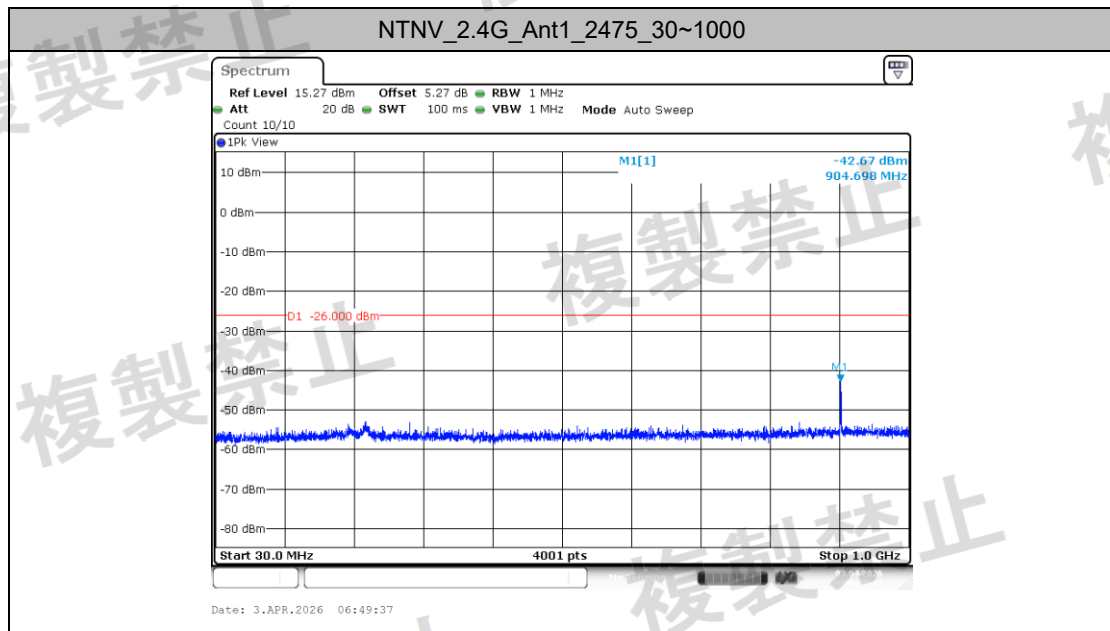


NTVN_2.4G_Ant1_2445_2483.5~2496.5

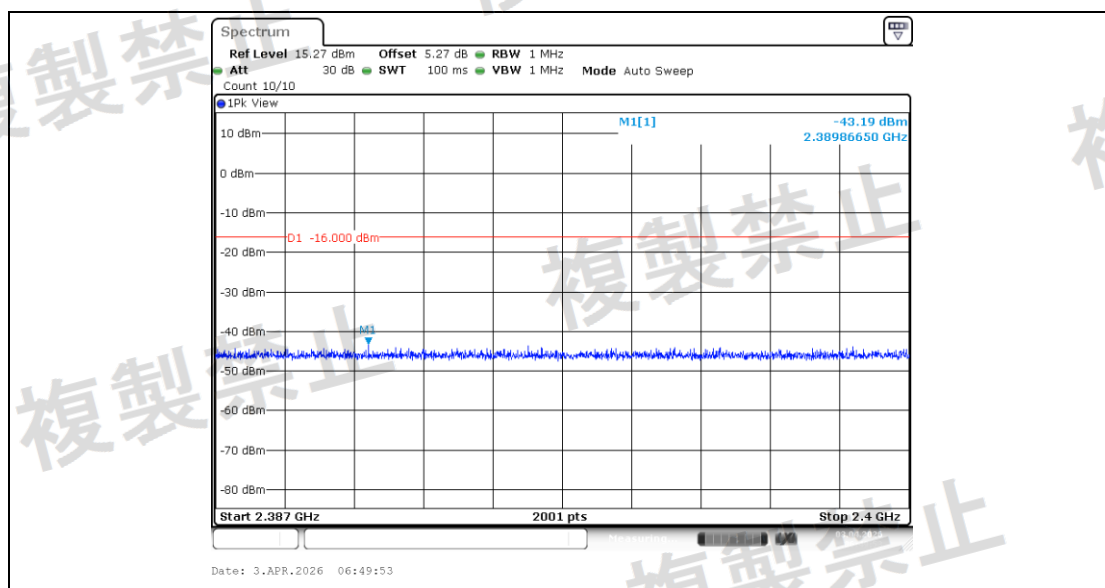


NTVN_2.4G_Ant1_2445_2496.5~13000

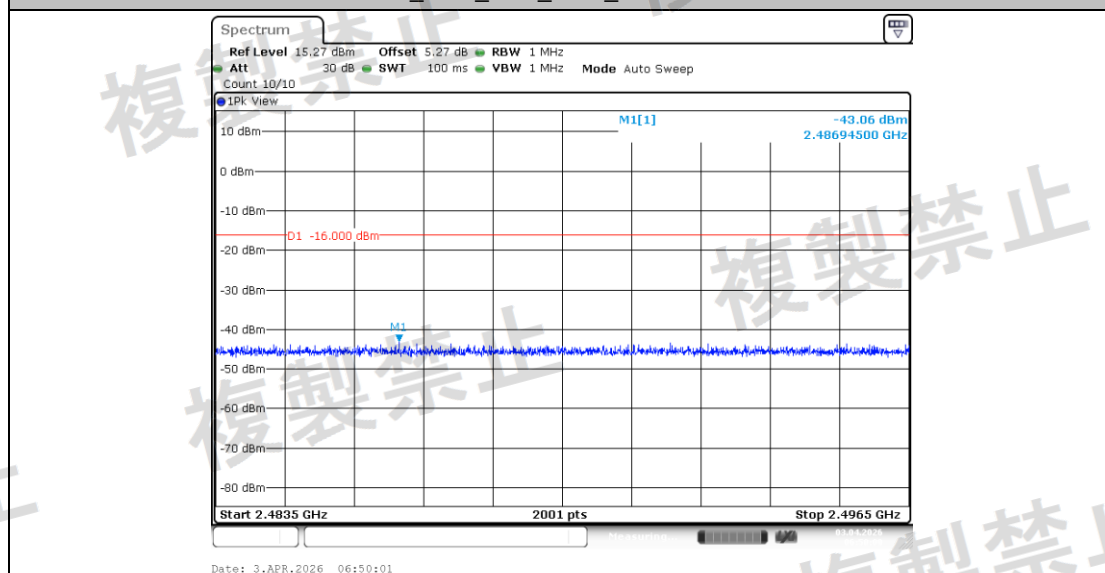




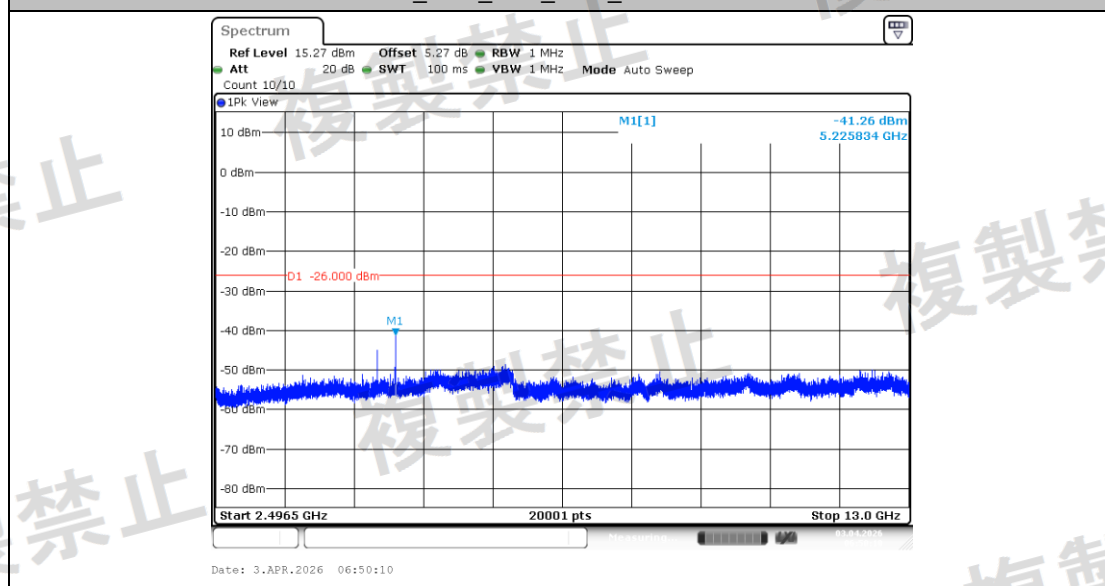
NTNV_2.4G_Ant1_2475_2387~2400



NTNV_2.4G_Ant1_2475_2483.5~2496.5



NTNV_2.4G_Ant1_2475_2496.5~13000



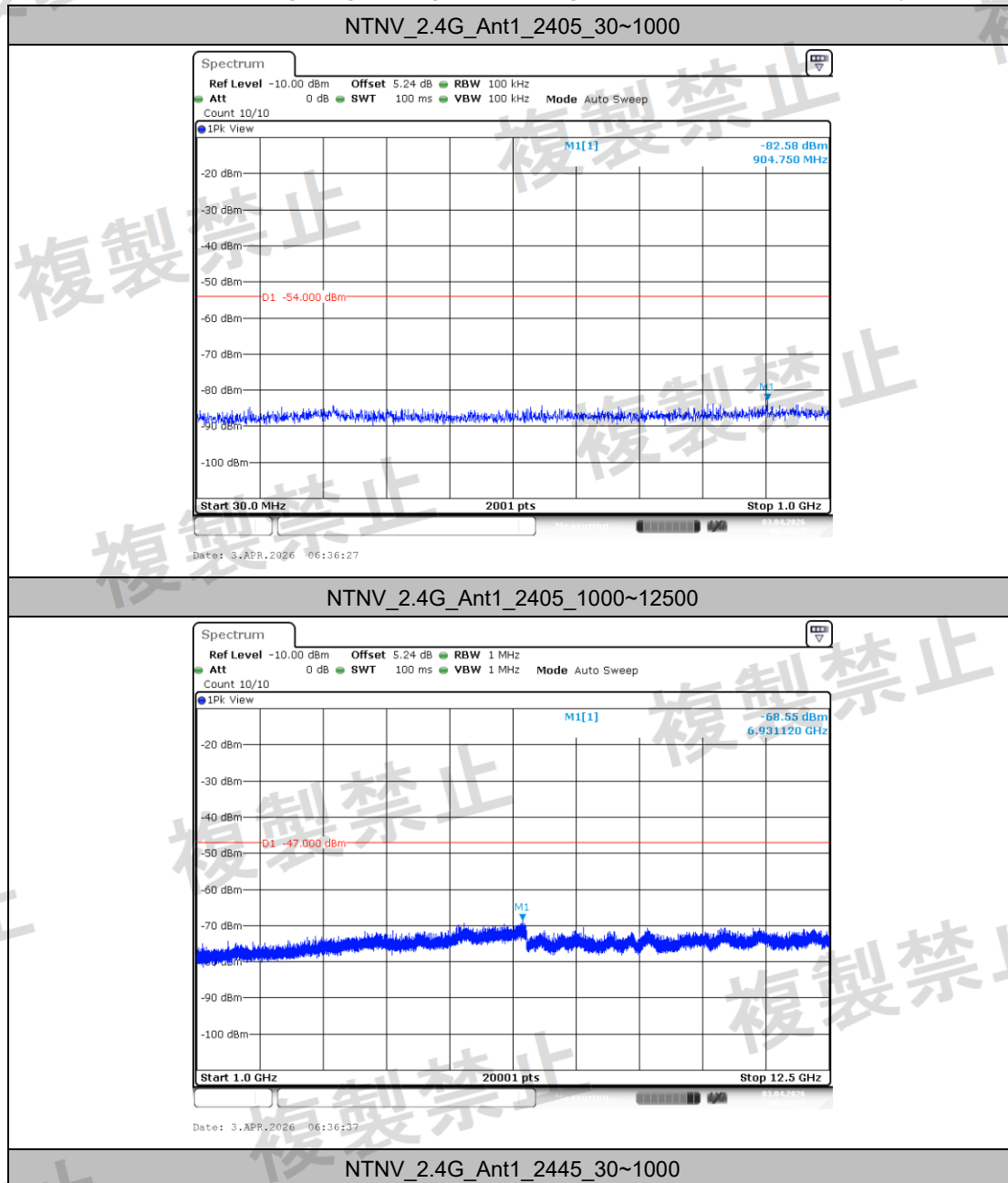
Appendix E: Spurious Emission of RX

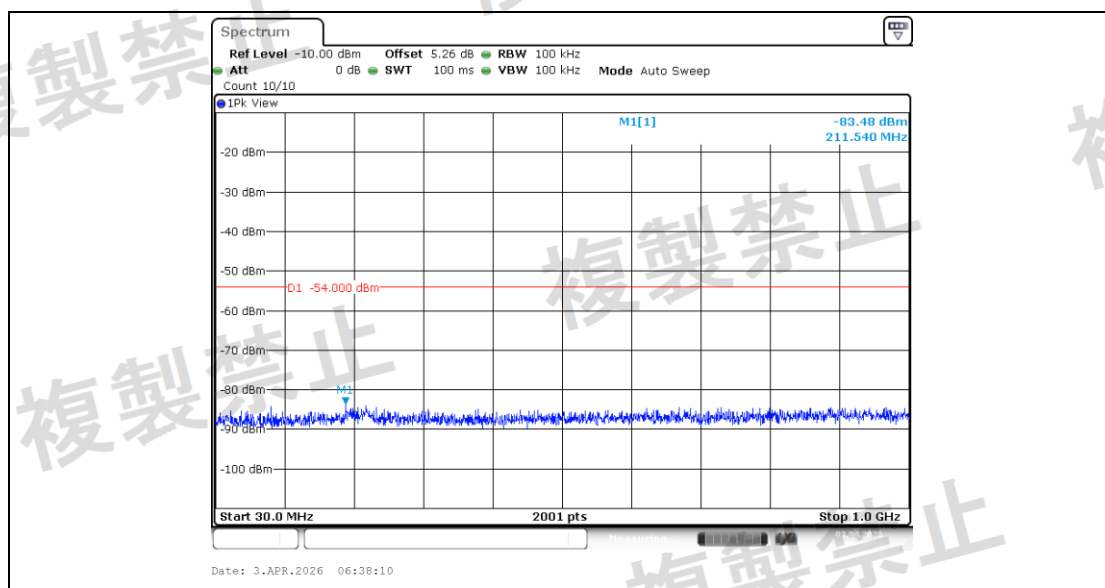
Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	2.4G	Ant1	2405	30~1000	904.75	-82.58	≤-54	0.00552	≤4	PASS
				1000~12500	6931.12	-68.55	≤-47	0.13964	≤20	PASS
			2445	30~1000	211.54	-83.48	≤-54	0.00449	≤4	PASS
				1000~12500	6992.06	-69.08	≤-47	0.12359	≤20	PASS
			2475	30~1000	899.90	-82.96	≤-54	0.00506	≤4	PASS
				1000~12500	6866.14	-68.83	≤-47	0.13092	≤20	PASS

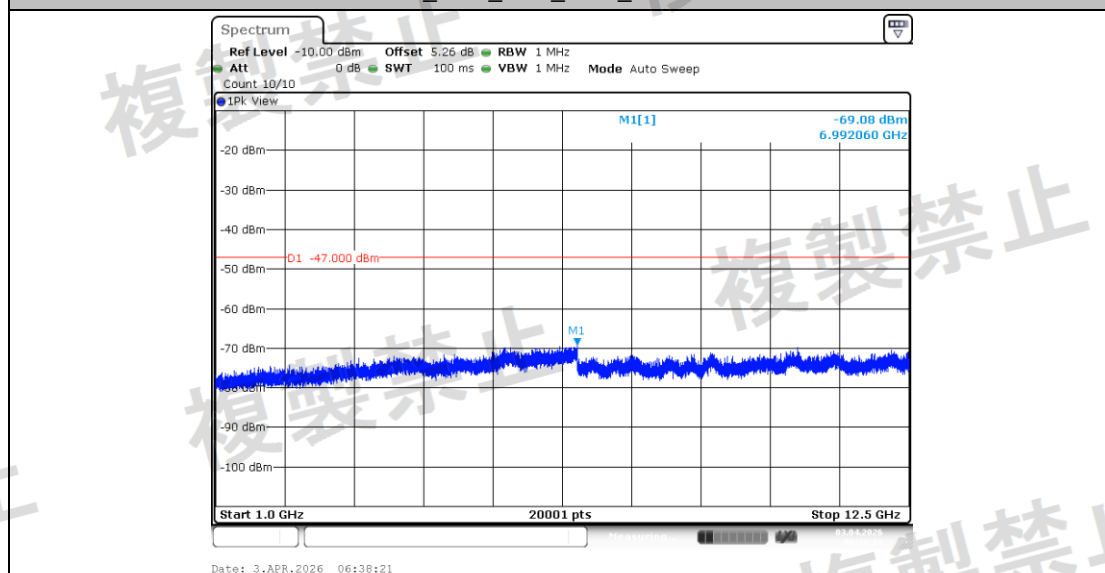
Test Graphs

Note: We test Normal Voltage, High Voltage, Low Voltage, and recorded the worst test plot.





NTNV_2.4G_Ant1_2445_1000~12500



NTNV_2.4G_Ant1_2475_30~1000

