

Appendix RF Test Data for BLE

Company : SANWA SUPPLY INC.

EUT : wireless mouse

Model Number : 400-MAWBS237

Report No. : CTA26012201201

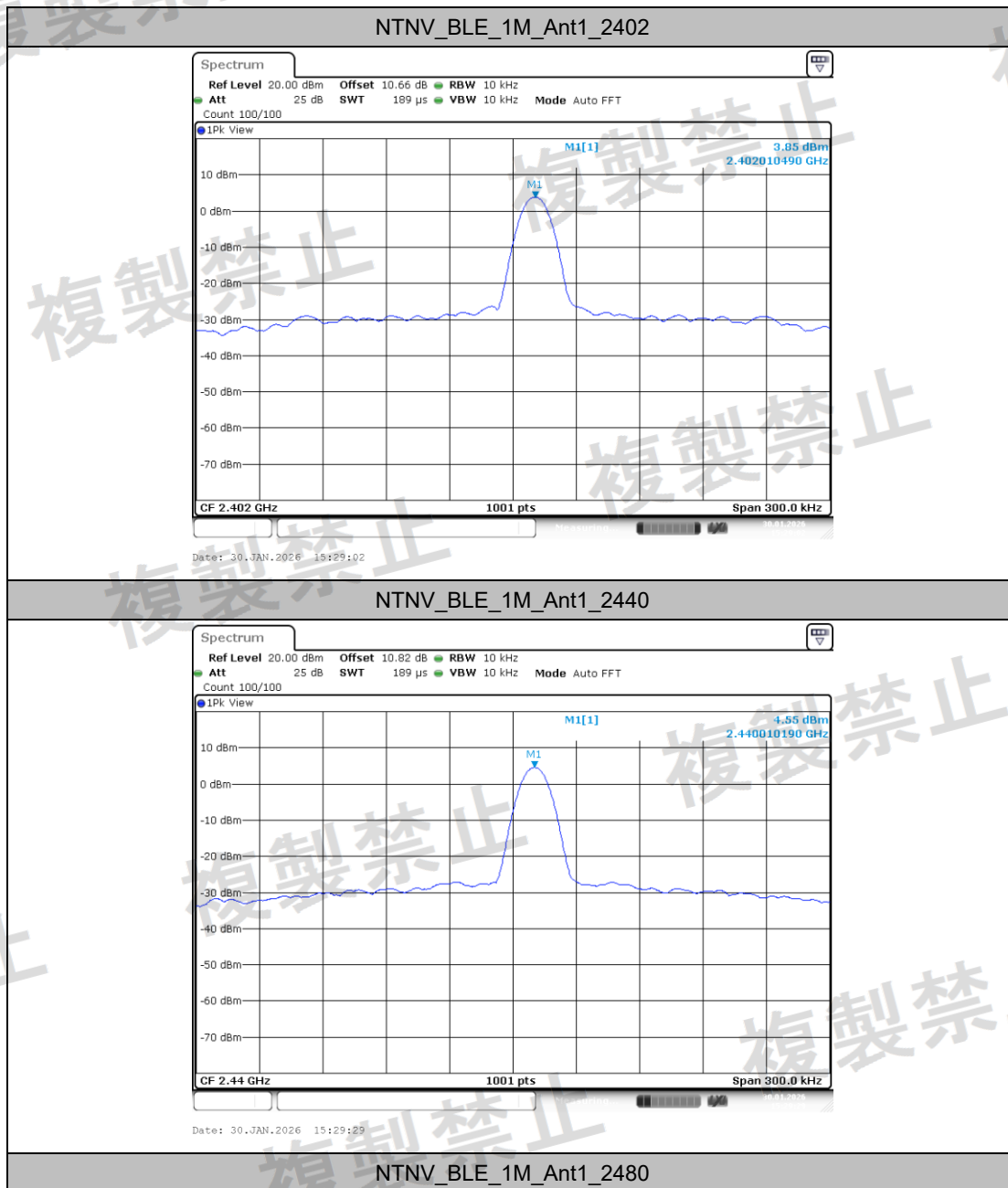
Reviewed By : Eric Wang

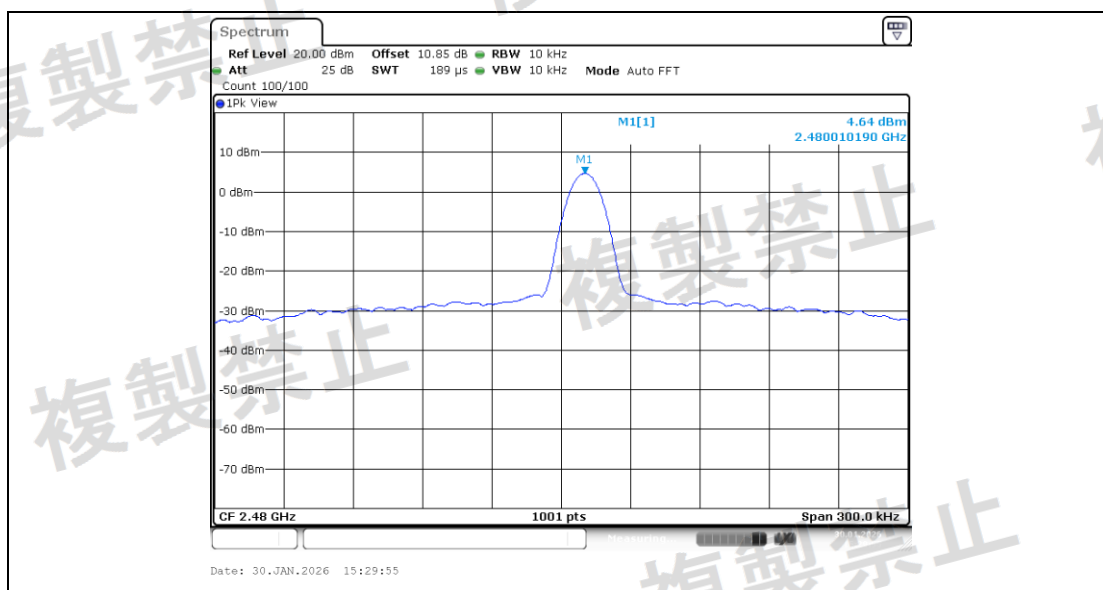
Appendix A: Frequency Error

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTNV	BLE_1M	Ant1	2402	4.36719	±50	PASS
			2440	4.17623	±50	PASS
			2480	4.10887	±50	PASS

Test Graphs



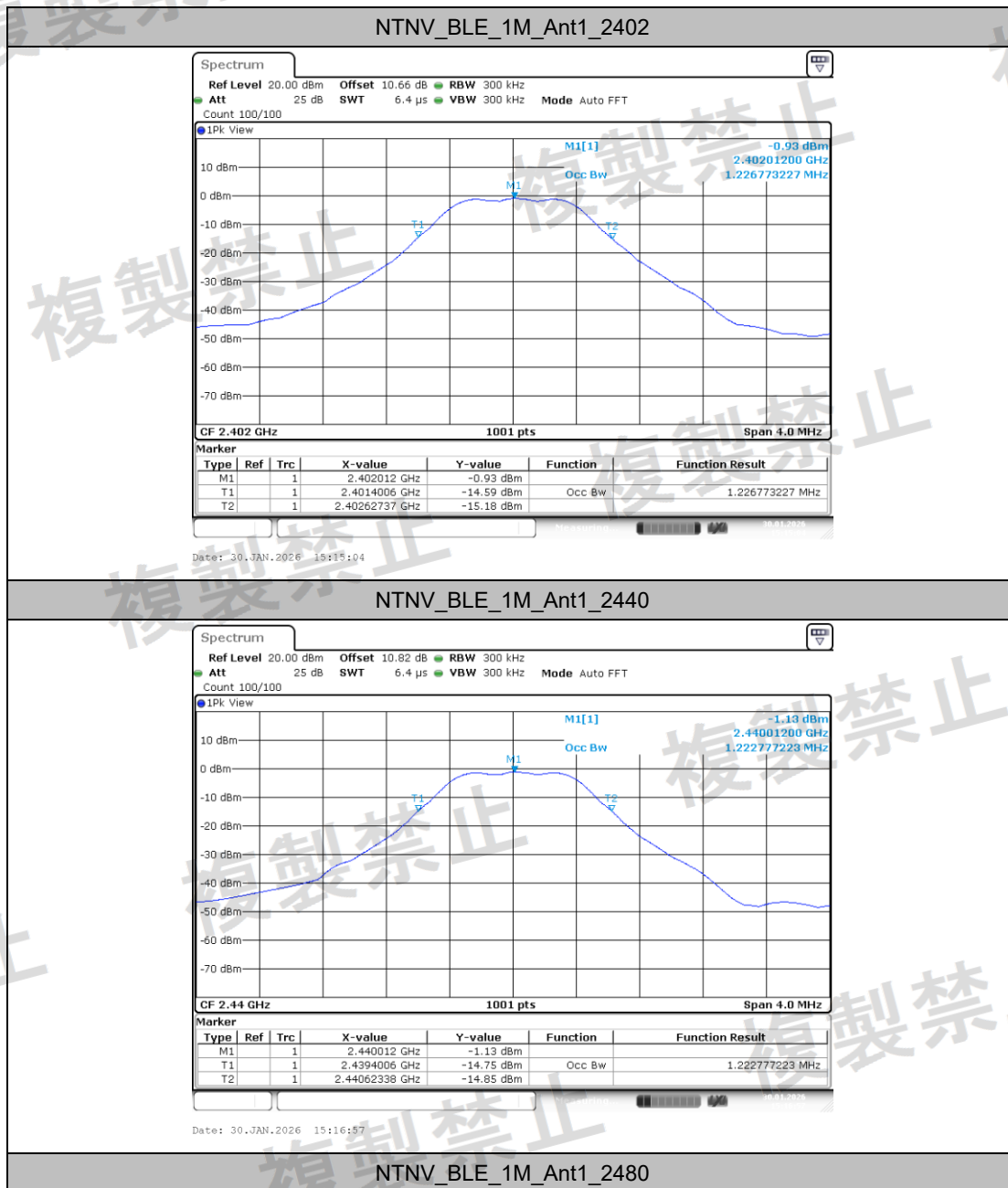


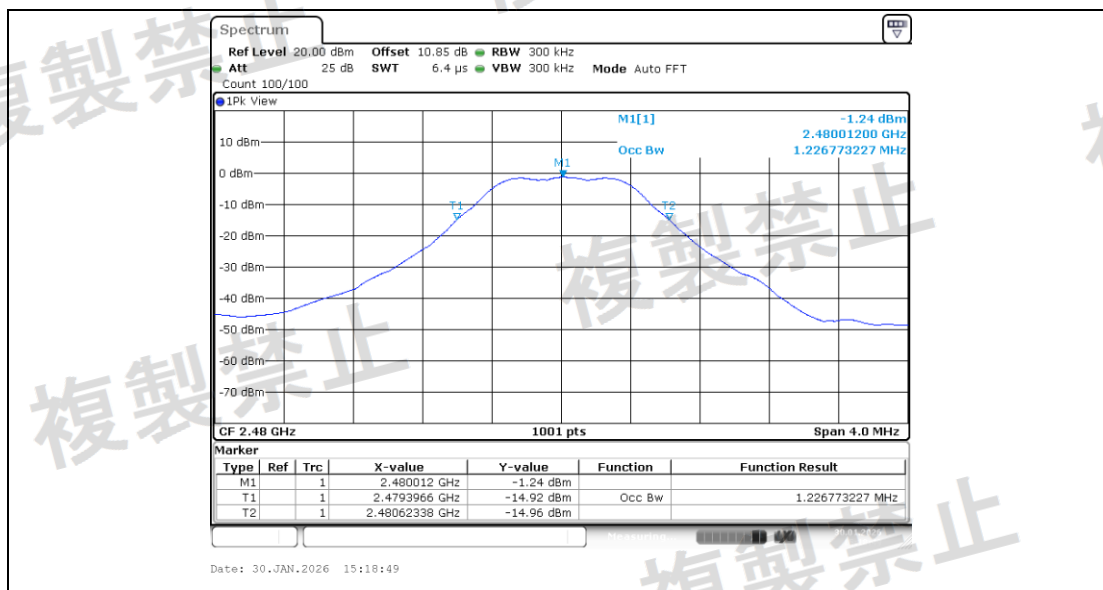
Appendix B: Occupied Bandwidth

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	1.227	≤26	PASS
			2440	1.223	≤26	PASS
			2480	1.227	≤26	PASS

Test Graphs



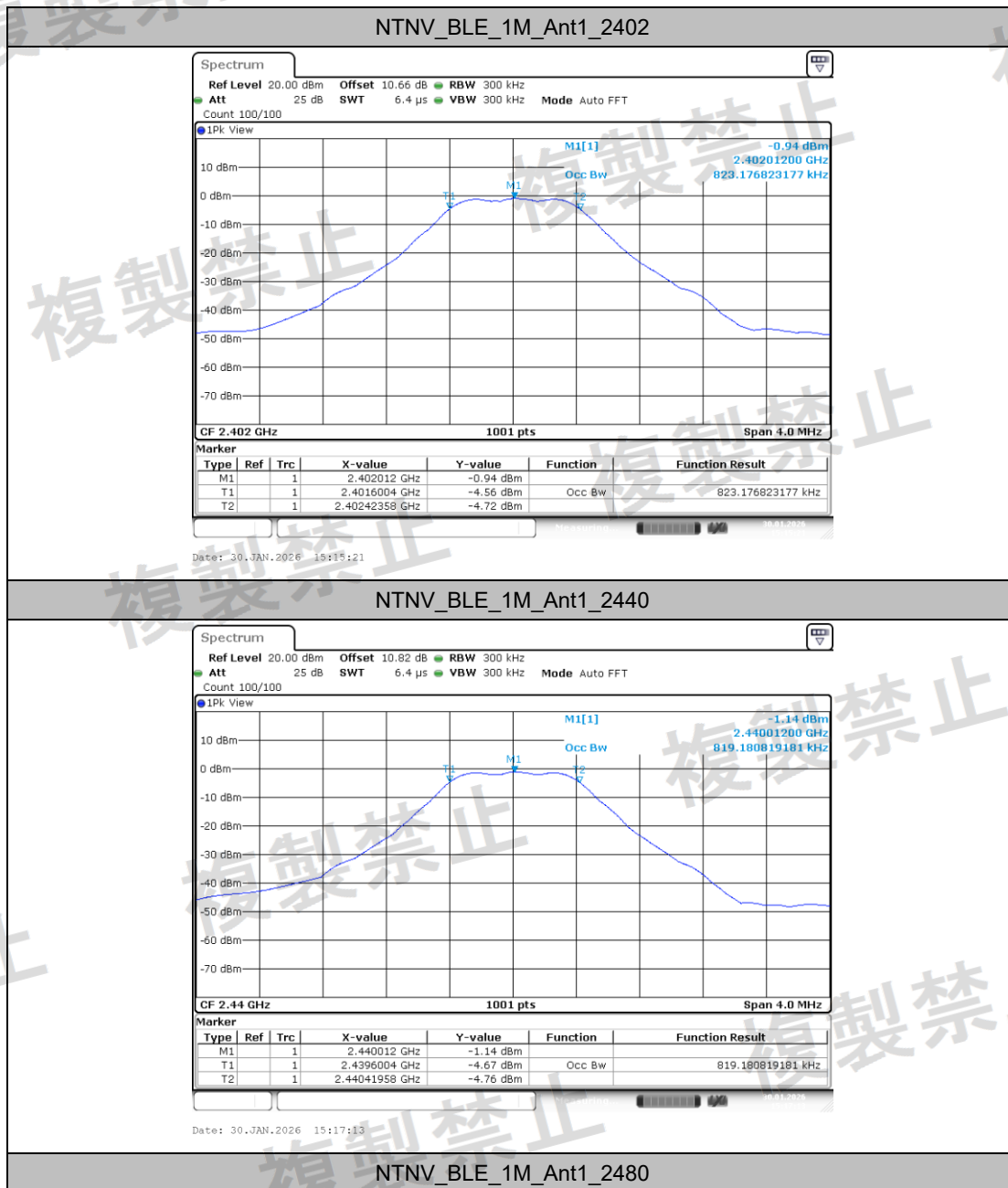


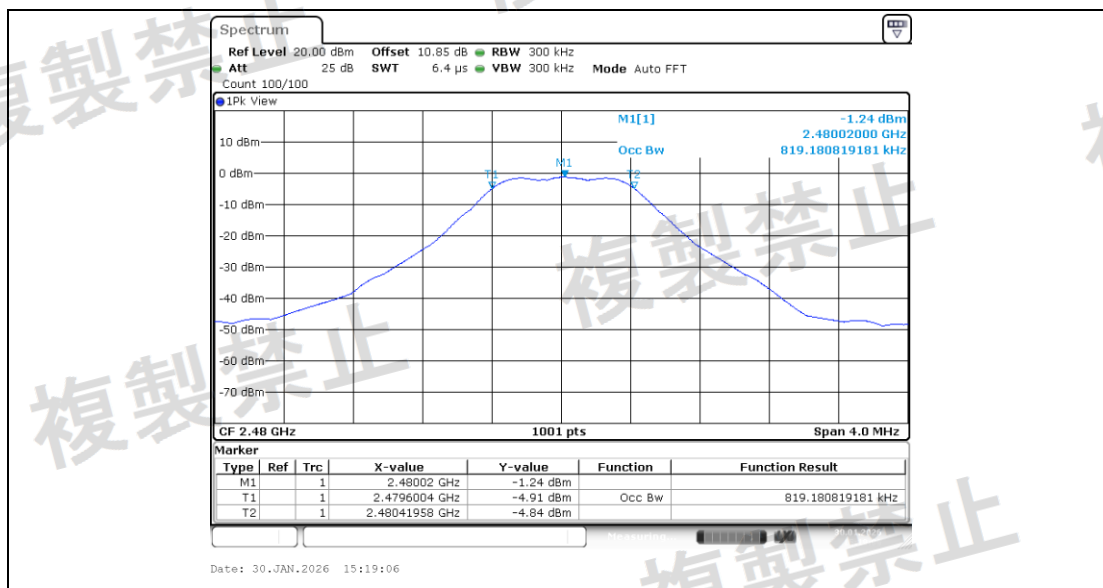
Appendix C: Spread Bandwidth

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	0.823	≥0.5	PASS
			2440	0.819	≥0.5	PASS
			2480	0.819	≥0.5	PASS

Test Graphs



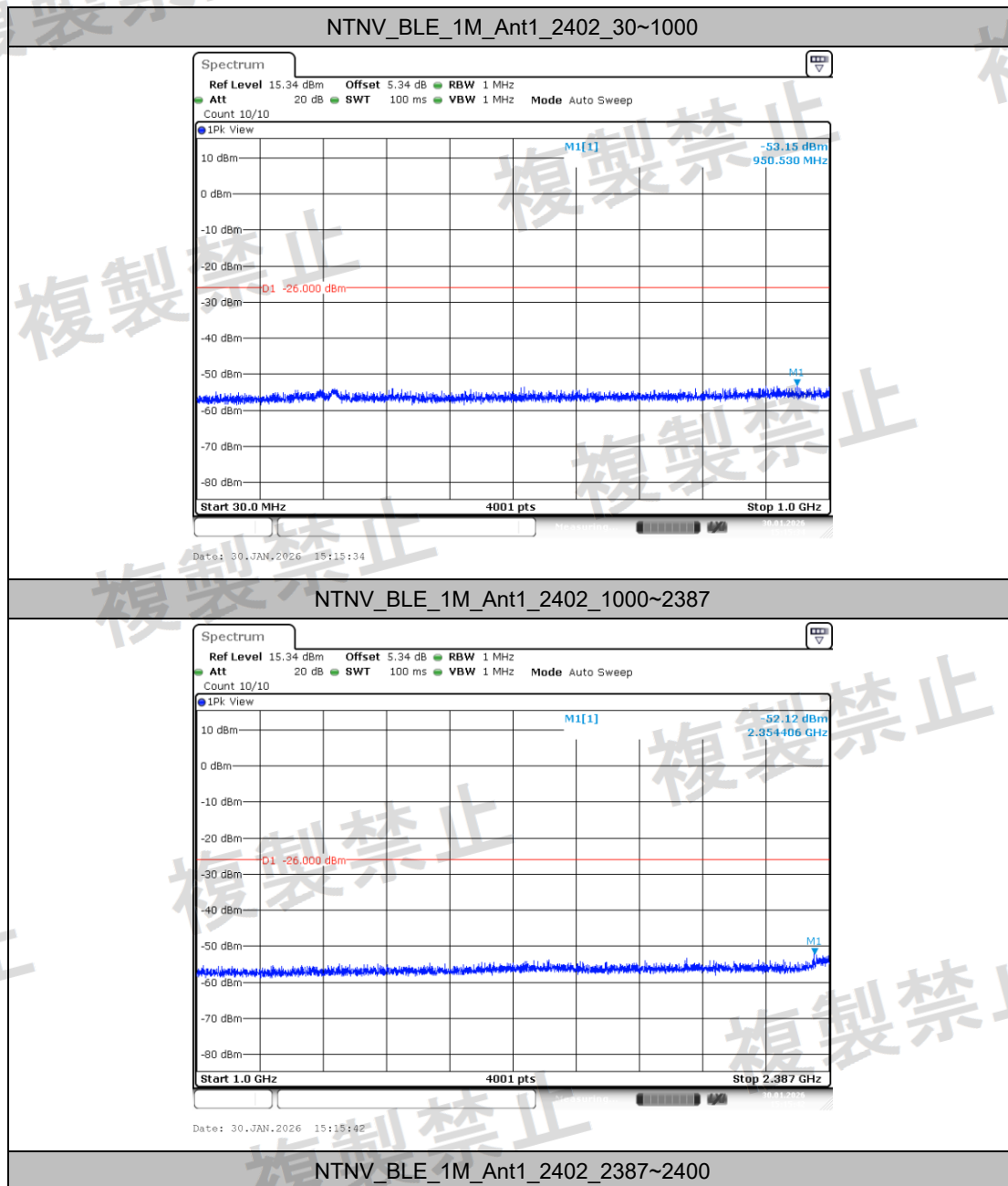


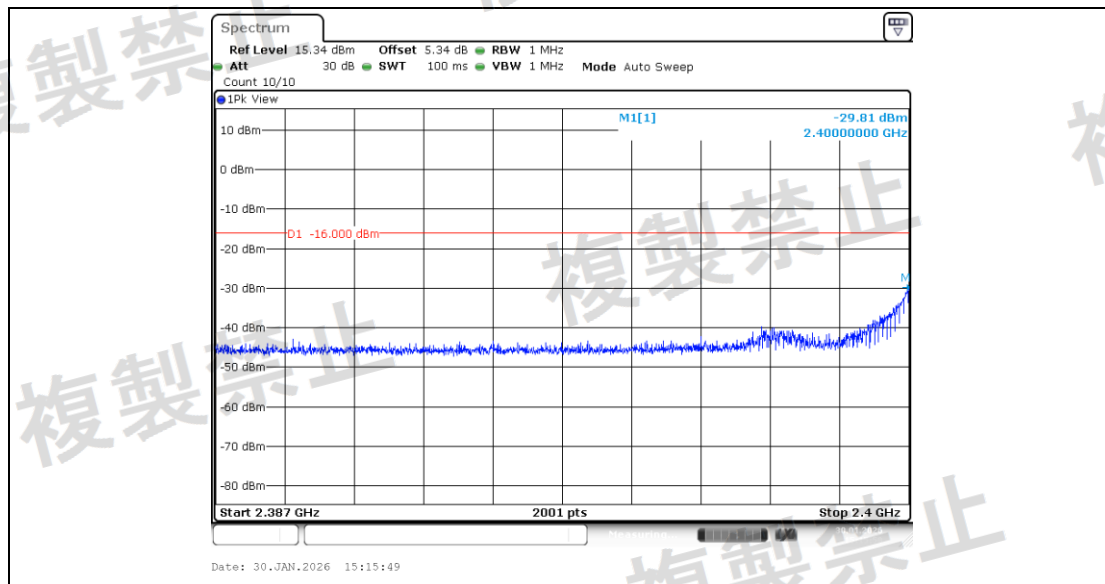
Appendix D: Spurious Emission of TX

Test Result

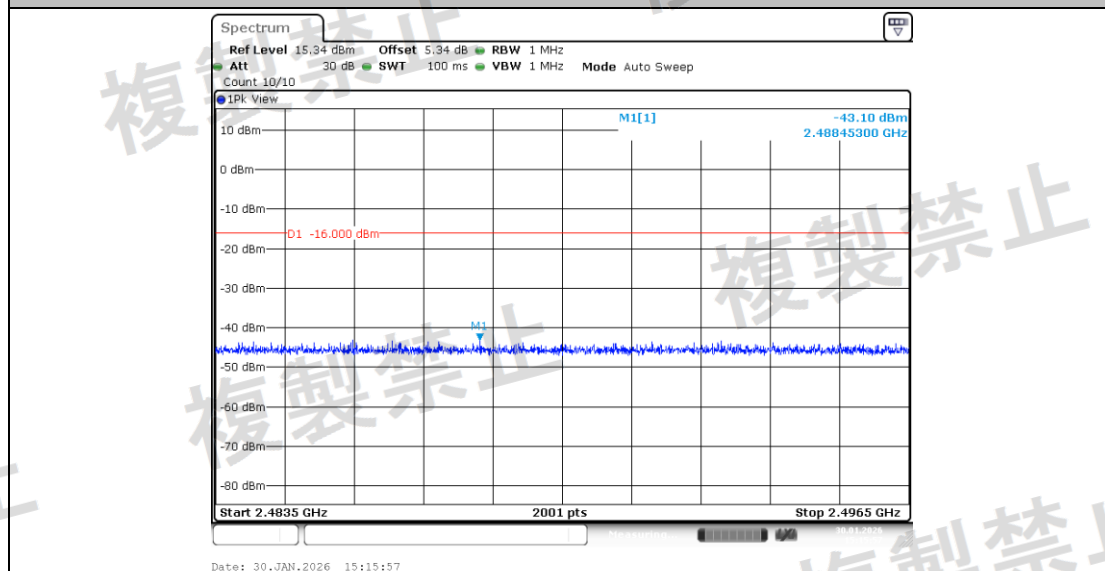
TestCondition	TestMode	Antenna	Freq(MHz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~1000	950.53	-53.15	≤-26	0.00484	≤2.5	PASS
				1000~2387	2354.41	-52.12	≤-26	0.00614	≤2.5	PASS
				2387~2400	2400.00	-29.81	≤-16	1.04472	≤25	PASS
				2483.5~2496.5	2488.45	-43.10	≤-16	0.04898	≤25	PASS
				2496.5~13000	5198.53	-35.31	≤-26	0.29444	≤2.5	PASS
			2440	30~1000	239.52	-52.19	≤-26	0.00604	≤2.5	PASS
				1000~2387	1684.14	-53.43	≤-26	0.00454	≤2.5	PASS
				2387~2400	2387.96	-43.38	≤-16	0.04592	≤25	PASS
				2483.5~2496.5	2487.63	-43.17	≤-16	0.04819	≤25	PASS
				2496.5~13000	4879.74	-43.19	≤-26	0.04797	≤2.5	PASS
			2480	30~1000	237.82	-53.01	≤-26	0.00500	≤2.5	PASS
				1000~2387	1957.38	-52.63	≤-26	0.00546	≤2.5	PASS
				2387~2400	2393.18	-43.54	≤-16	0.04426	≤25	PASS
				2483.5~2496.5	2484.19	-40.48	≤-16	0.08954	≤25	PASS
				2496.5~13000	4959.57	-41.92	≤-26	0.06427	≤2.5	PASS

Test Graphs

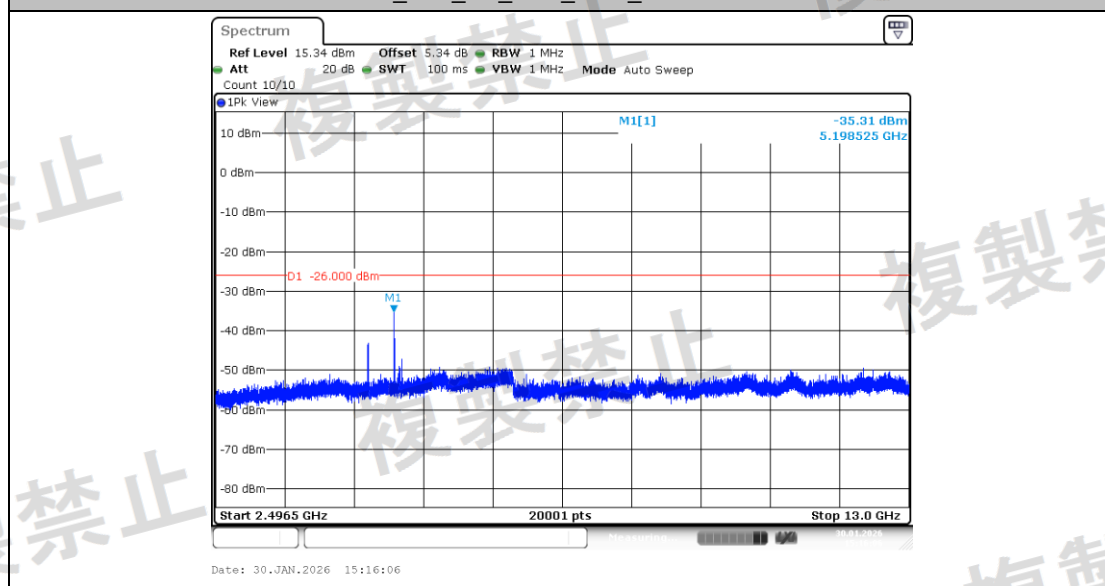


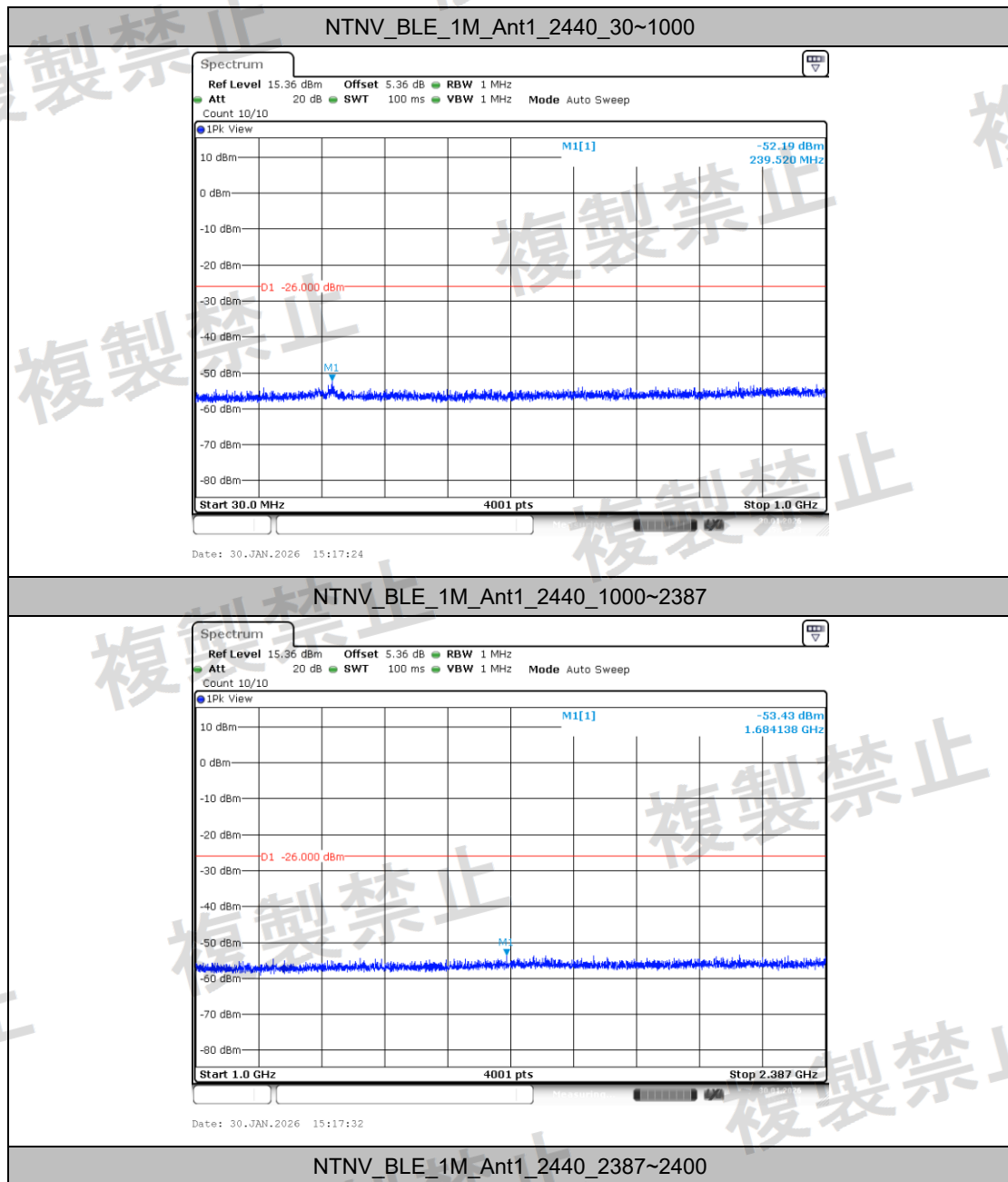


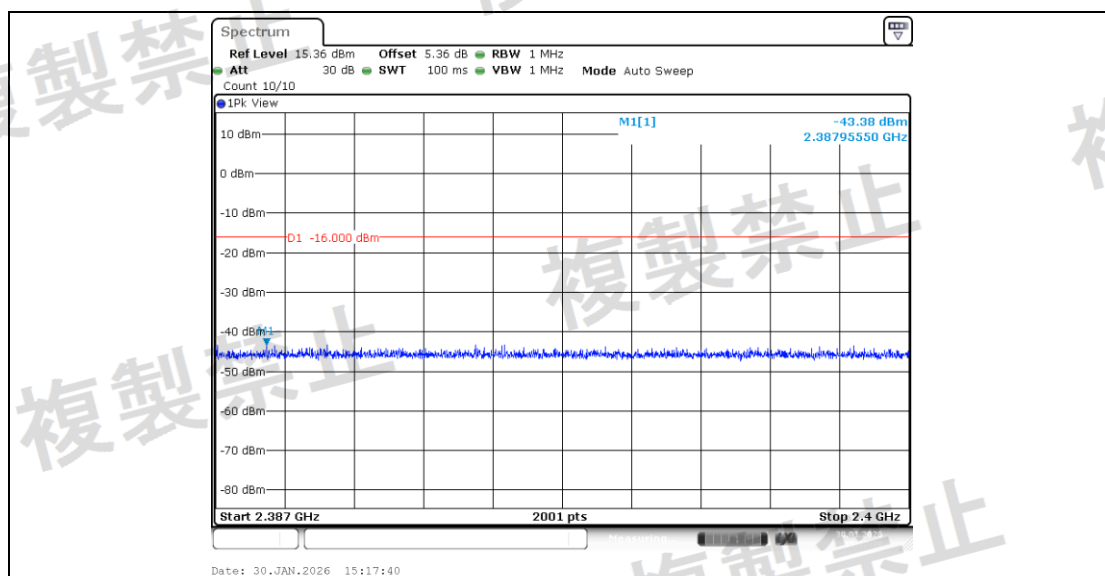
NTNV_BLE_1M_Ant1_2402_2483.5~2496.5



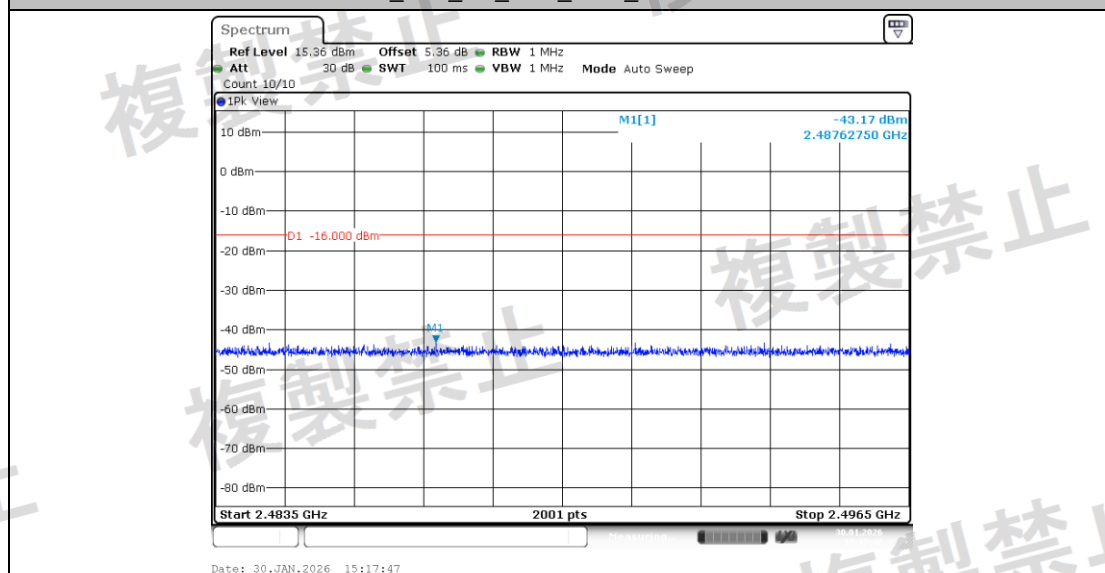
NTNV_BLE_1M_Ant1_2402_2496.5~13000



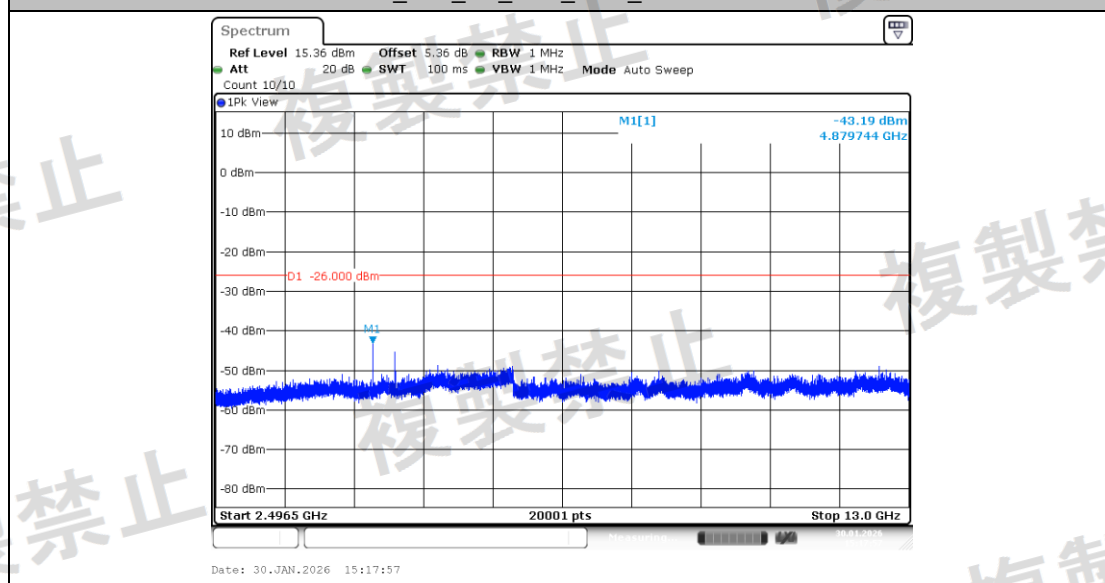


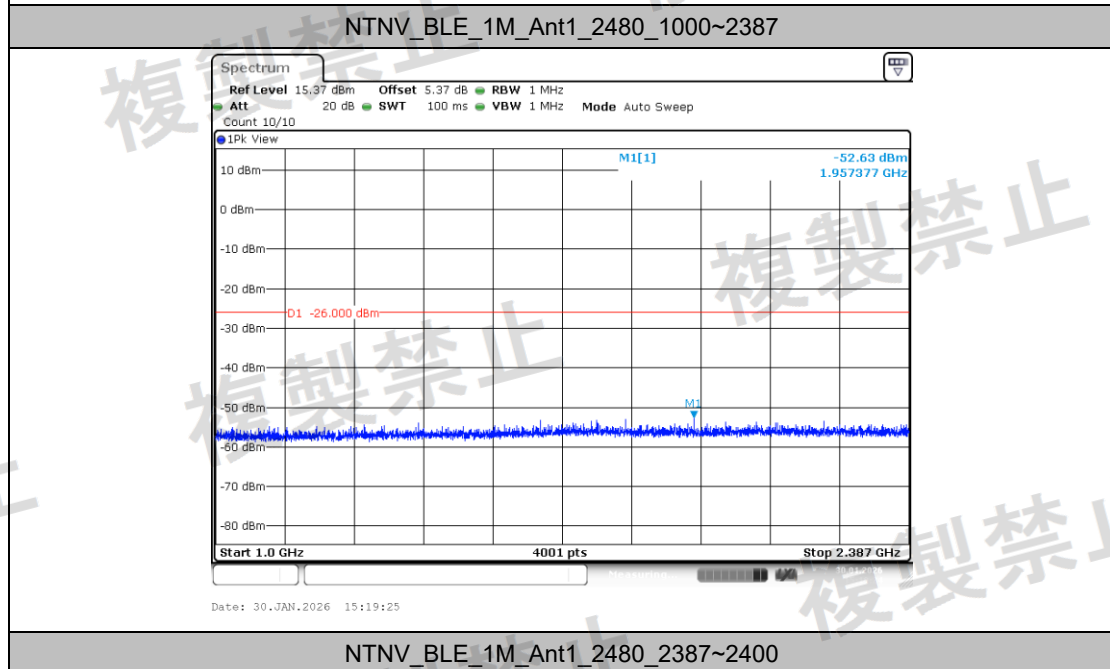
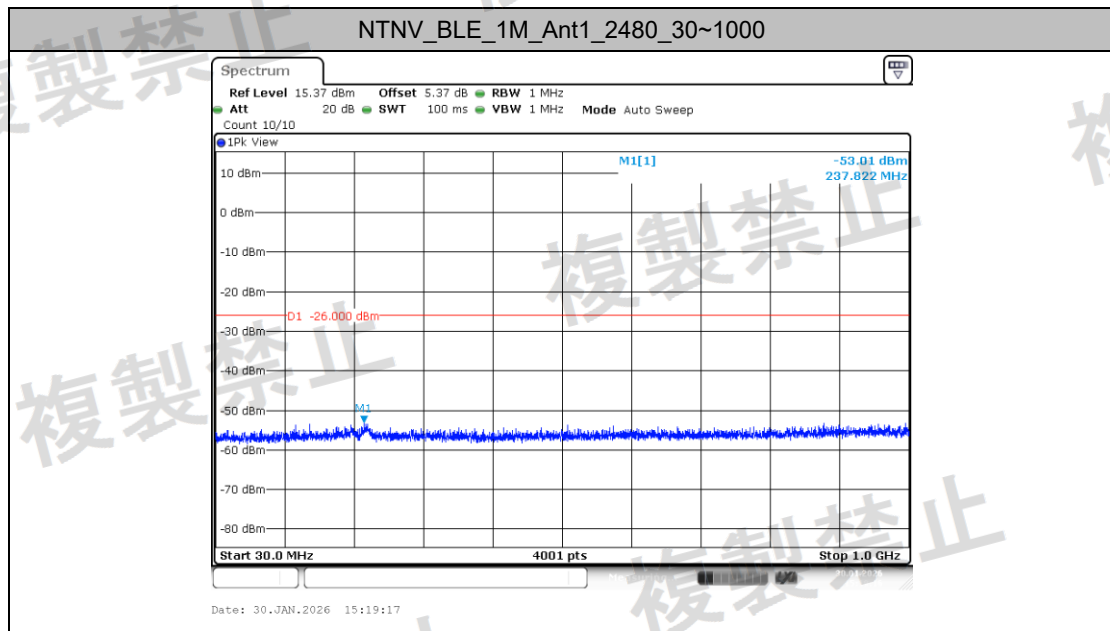


NTNV_BLE_1M_Ant1_2440_2483.5~2496.5

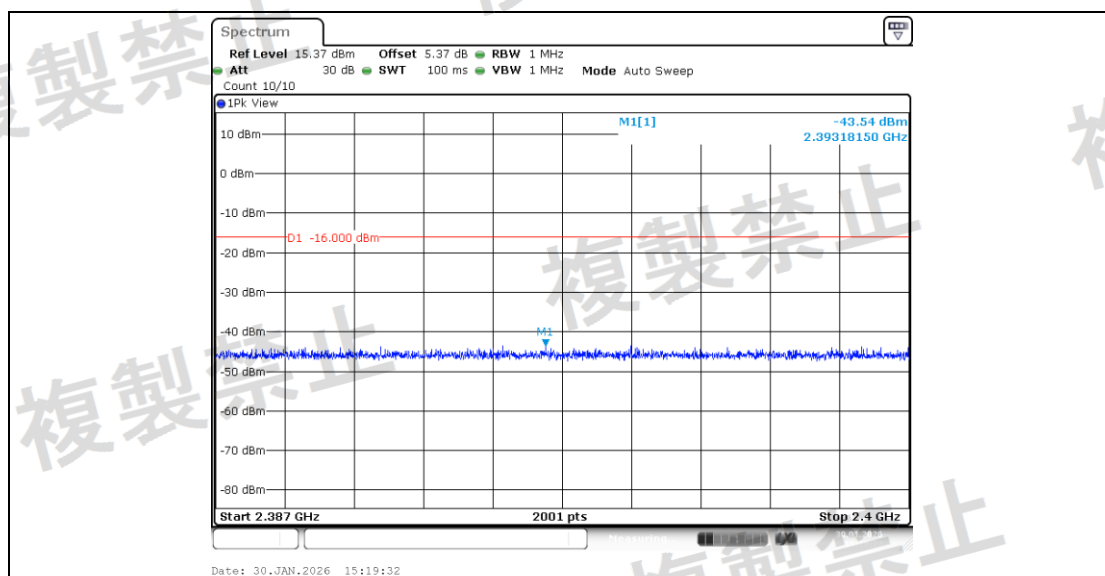


NTNV_BLE_1M_Ant1_2440_2496.5~13000

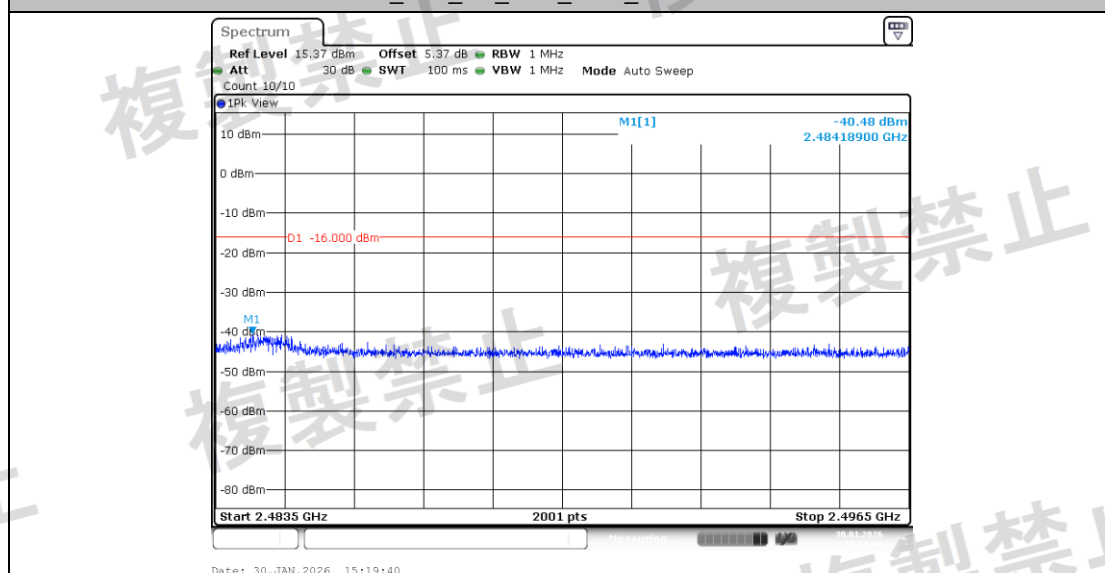




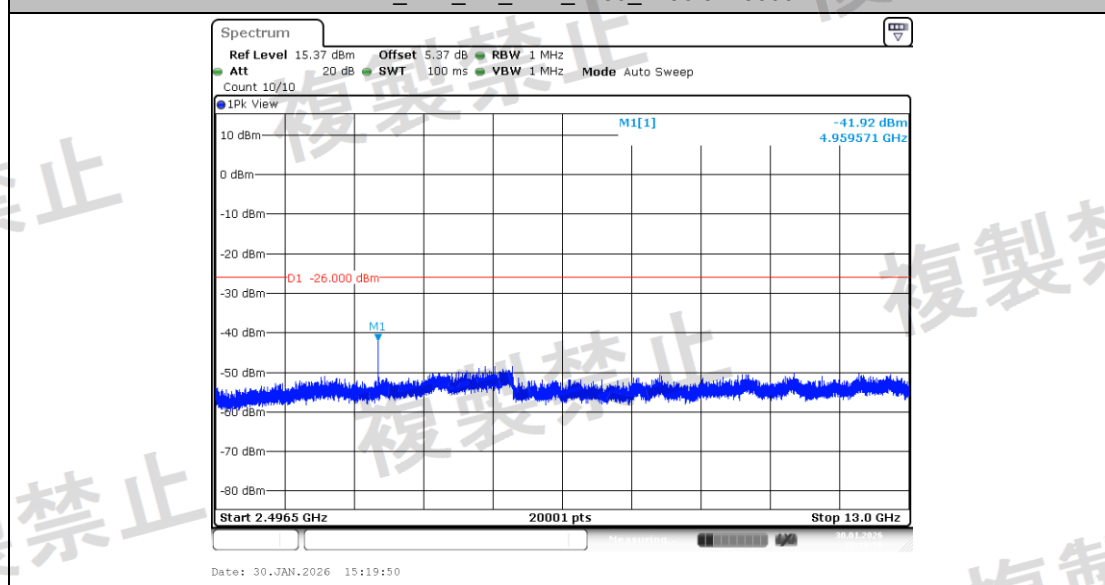
NTNV_BLE_1M_Ant1_2480_2387~2400



NTNV_BLE_1M_Ant1_2480_2483.5~2496.5



NTNV_BLE_1M_Ant1_2480_2496.5~13000

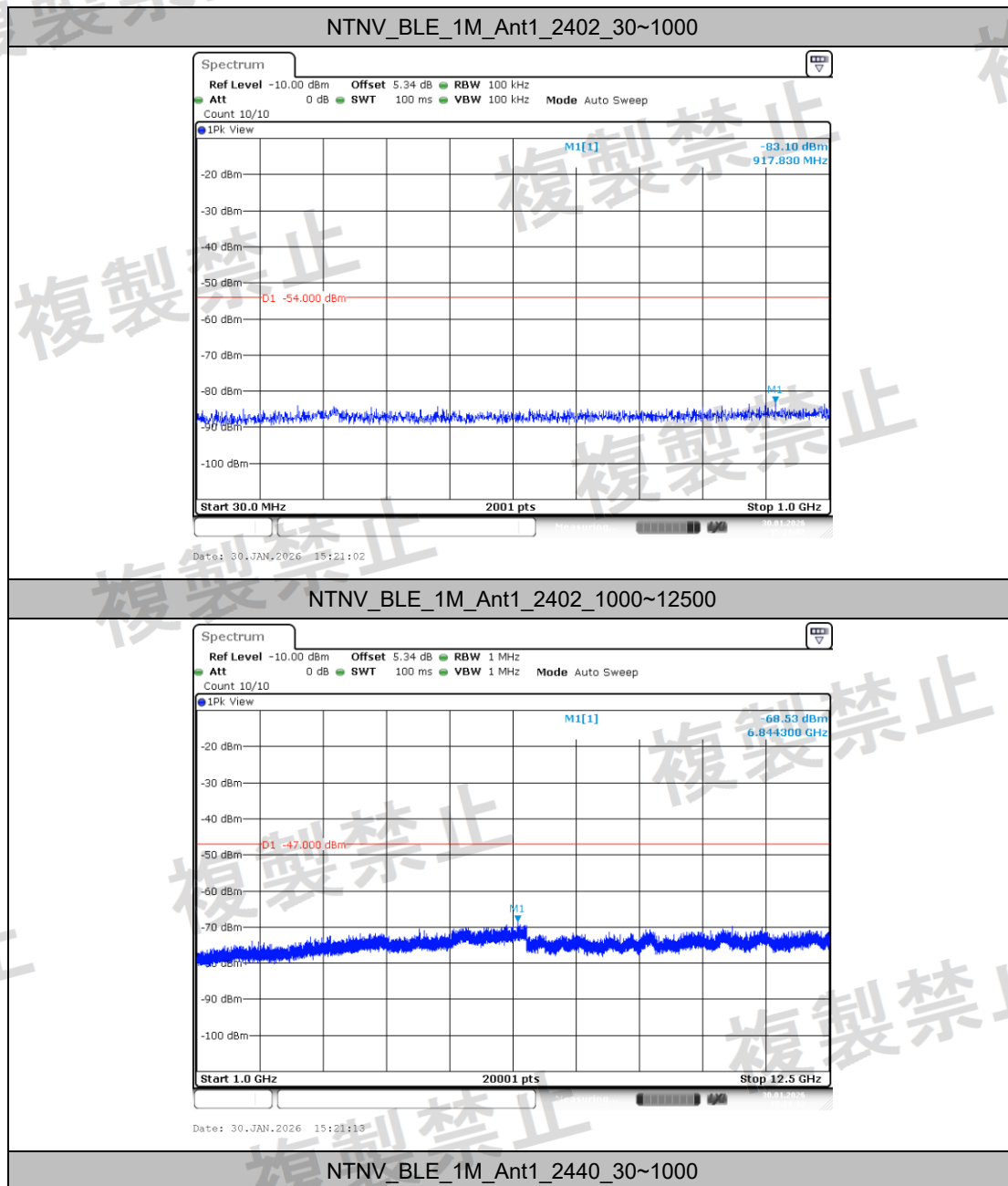


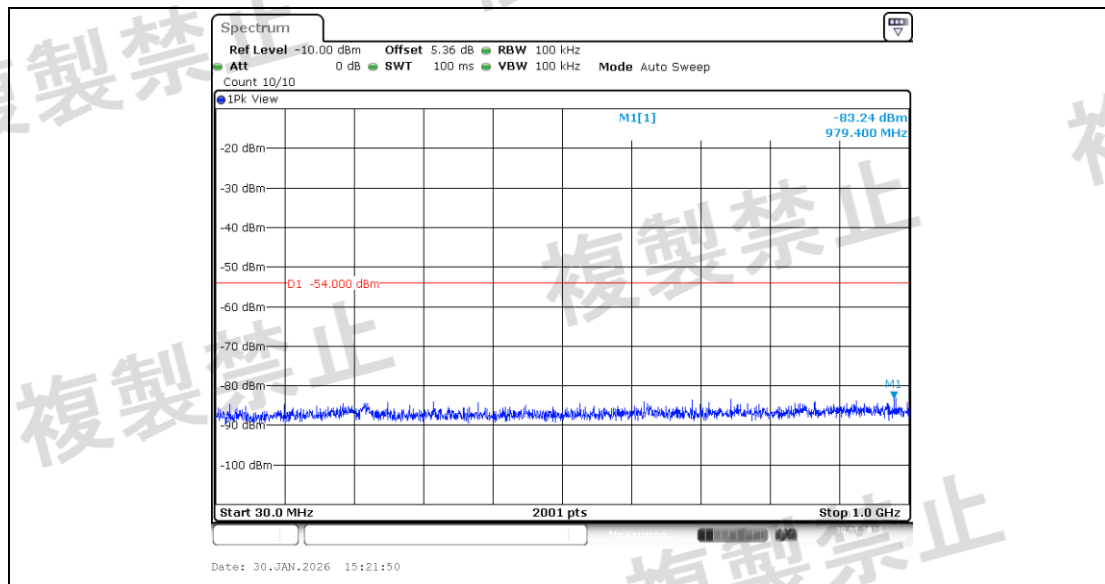
Appendix E: Spurious Emission of RX

Test Result

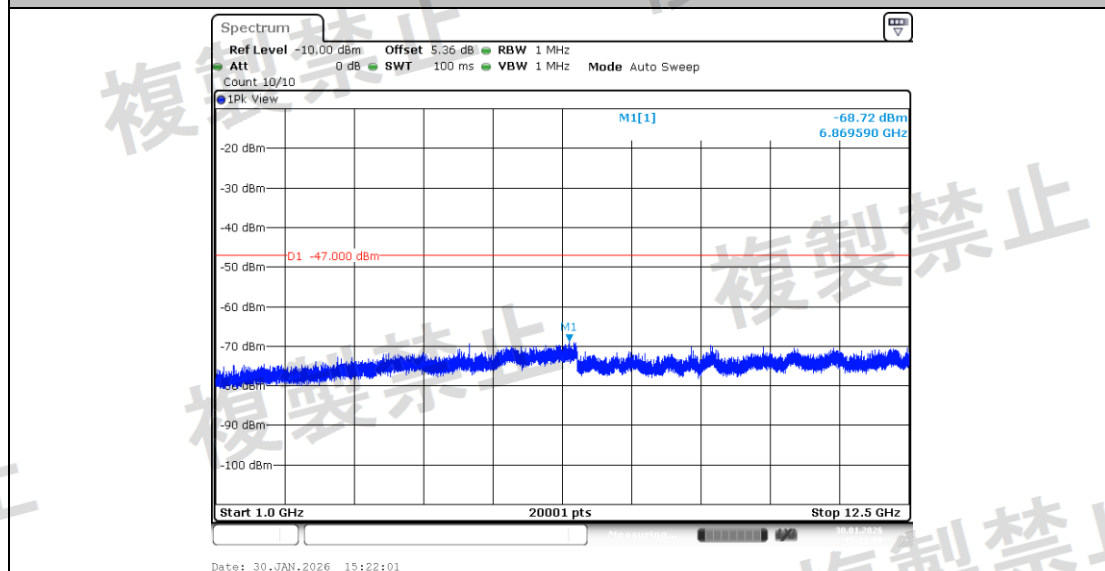
TestCondition	TestMode	Antenna	Freq(MHz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~1000	917.83	-83.10	≤-54	0.00490	≤4	PASS
				1000~12500	6844.30	-68.53	≤-47	0.14028	≤20	PASS
			2440	30~1000	979.40	-83.24	≤-54	0.00474	≤4	PASS
				1000~12500	6869.59	-68.72	≤-47	0.13428	≤20	PASS
			2480	30~1000	989.58	-82.00	≤-54	0.00631	≤4	PASS
				1000~12500	6956.99	-68.46	≤-47	0.14256	≤20	PASS

Test Graphs





NTNV_BLE_1M_Ant1_2440_1000~12500



NTNV_BLE_1M_Ant1_2480_30~1000

