

Appendix A for 2.4G Test Data

Product Name: Mini Car PCB module TX(offroad/ police car)

Test Model: HG-XCFKTX-2.4G

Environmental Conditions

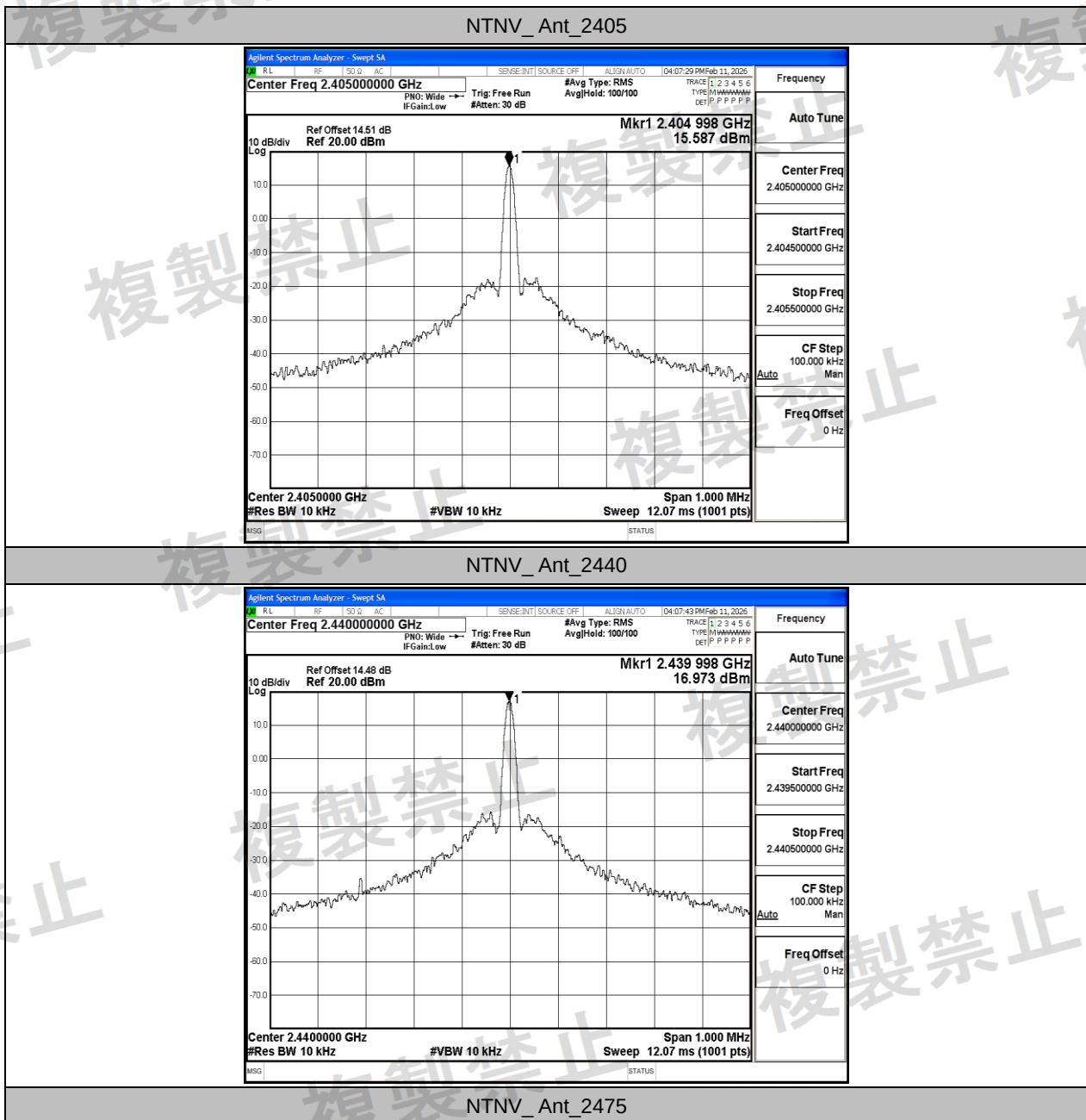
Temperature:	24.1°C
Relative Humidity:	52.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang Hai
Supervised by:	Yan Chen

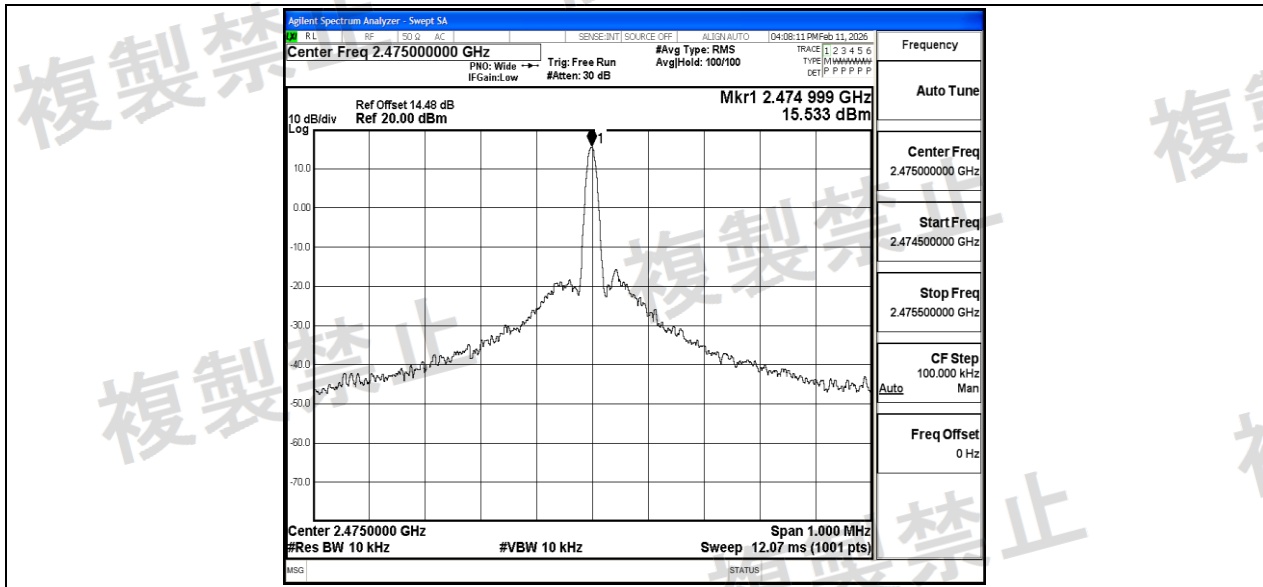
A.1 Frequency Error

Test Result

TestCondition	TestMode	Antenna	Frequency[MHz]	Result[ppm]	Limit[ppm]	Verdict
NTNV	Frequency_Error	Ant	2405	-0.83160	±50	PASS
			2440	-0.81967	±50	PASS
			2475	-0.40404	±50	PASS

Test Graphs





A.2 Antenna Power

Test Result

Antenna Power							
TestCondition	TestMode	Antenna	Frequency[MHz]	Result(dBm)	Result(mW)	Limit(mW)	Verdict
NTNV	2.4G	Ant	2405	2.70	1.8621	≤10	PASS
			2440	2.93	1.9634	≤10	PASS
			2475	2.80	1.9055	≤10	PASS

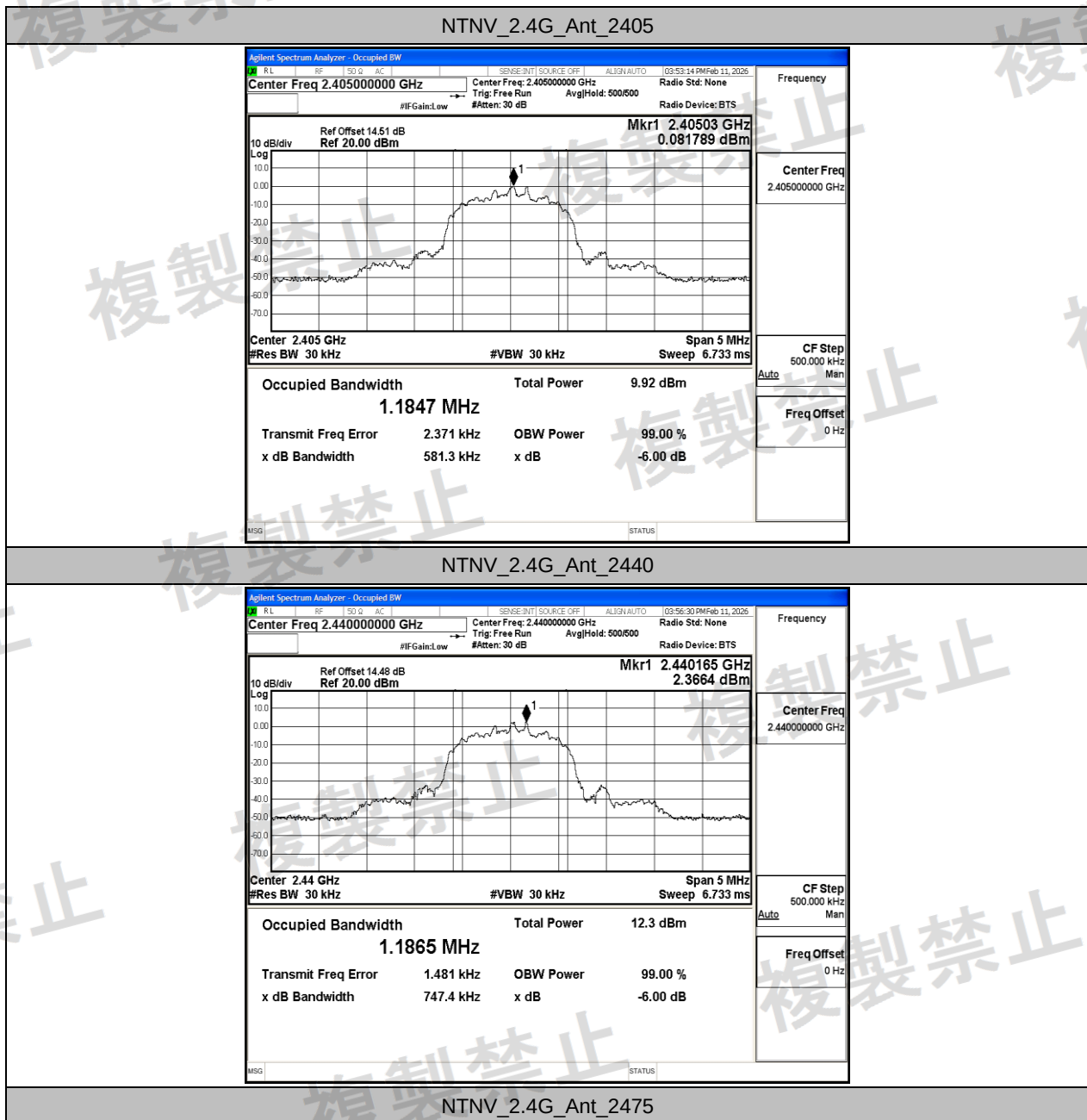
Tolerance								
Test Condition	Test Mode	Antenna	Frequency[MHz]	Power (mW)	RatedPower (mW)	Result (%)	Limit (%)	Verdict
NTNV	2.4G	Ant	2405	1.8621	2	-6.90	+20	PASS
			2440	1.9634	2	-1.83	+20	PASS
			2475	1.9055	2	-4.73	+20	PASS

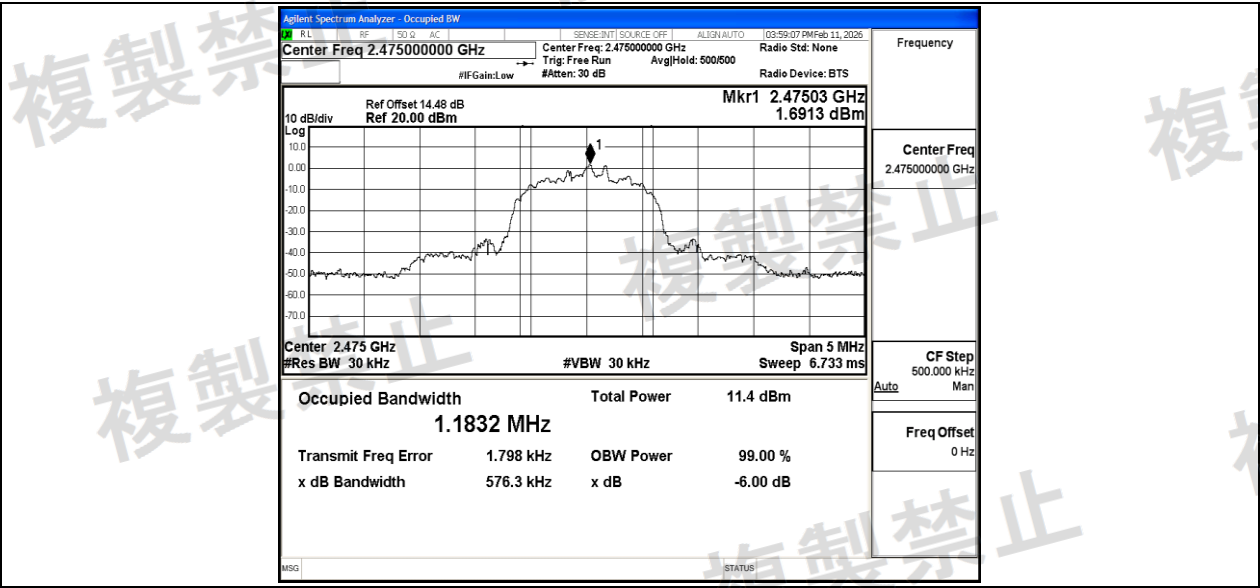
A.3 Occupied Bandwidth

Test Result

TestCondition	TestMode	Antenna	Frequency[MHz]	Result [MHz]	Limit [MHz]	Verdict
NTNV	2.4G	Ant	2405	1.185	≤83.5	PASS
			2440	1.187	≤83.5	PASS
			2475	1.183	≤83.5	PASS

Test Graphs



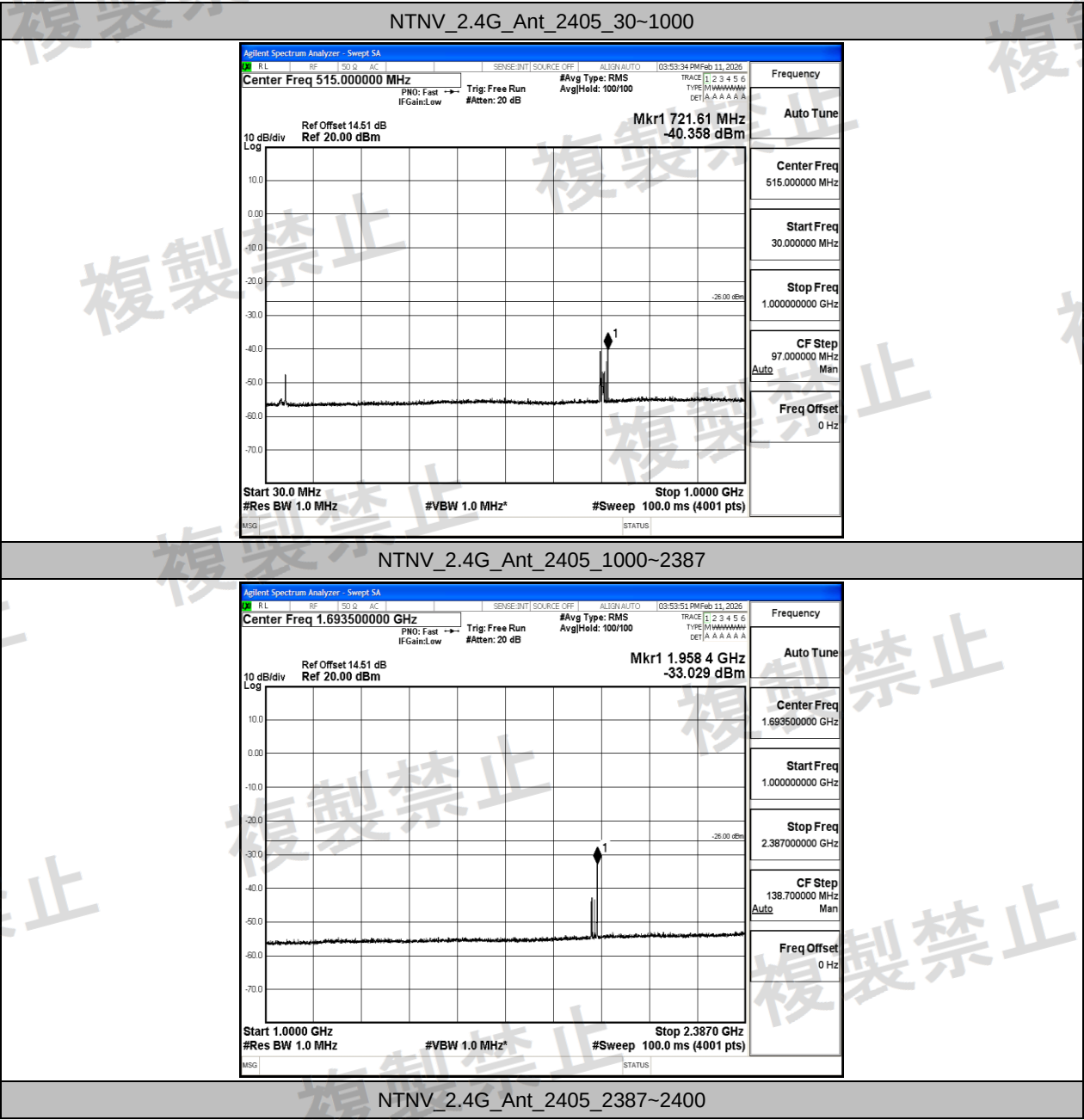


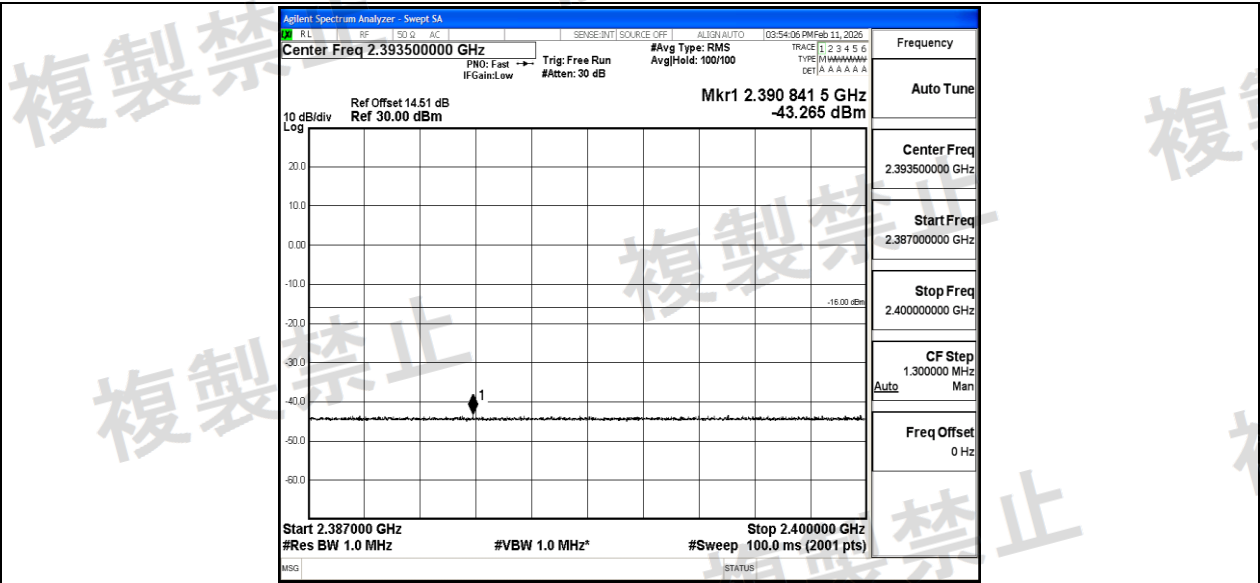
A.4 Spurious Emission of TX

Test Result

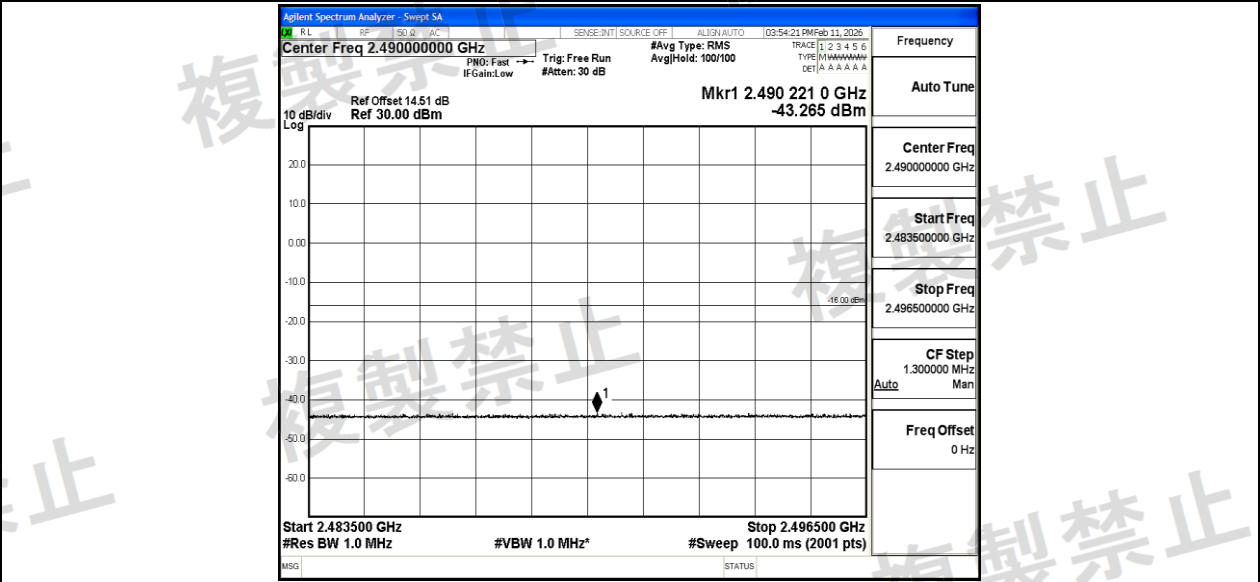
TestCondition	TestMode	Antenna	Frequency[MHz]	Freq.Range [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	2.4G	Ant	2405	30~1000	-40.36	≤-26	0.09204	≤2.5	PASS
				1000~2387	-33.03	≤-26	0.49774	≤2.5	PASS
				2387~2400	-43.27	≤-16	0.04710	≤25	PASS
				2483.5~2496.5	-43.27	≤-16	0.04710	≤25	PASS
				2496.5~13000	-45.24	≤-26	0.02992	≤2.5	PASS
			2440	30~1000	-48.72	≤-26	0.01343	≤2.5	PASS
				1000~2387	-41.94	≤-26	0.06397	≤2.5	PASS
				2387~2400	-43.63	≤-16	0.04335	≤25	PASS
				2483.5~2496.5	-43.21	≤-16	0.04775	≤25	PASS
				2496.5~13000	-39.25	≤-26	0.11885	≤2.5	PASS
			2475	30~1000	-45.85	≤-26	0.02600	≤2.5	PASS
				1000~2387	-41.55	≤-26	0.06998	≤2.5	PASS
				2387~2400	-43.45	≤-16	0.04519	≤25	PASS
				2483.5~2496.5	-43.25	≤-16	0.04732	≤25	PASS
				2496.5~13000	-43.67	≤-26	0.04295	≤2.5	PASS

Test Graphs

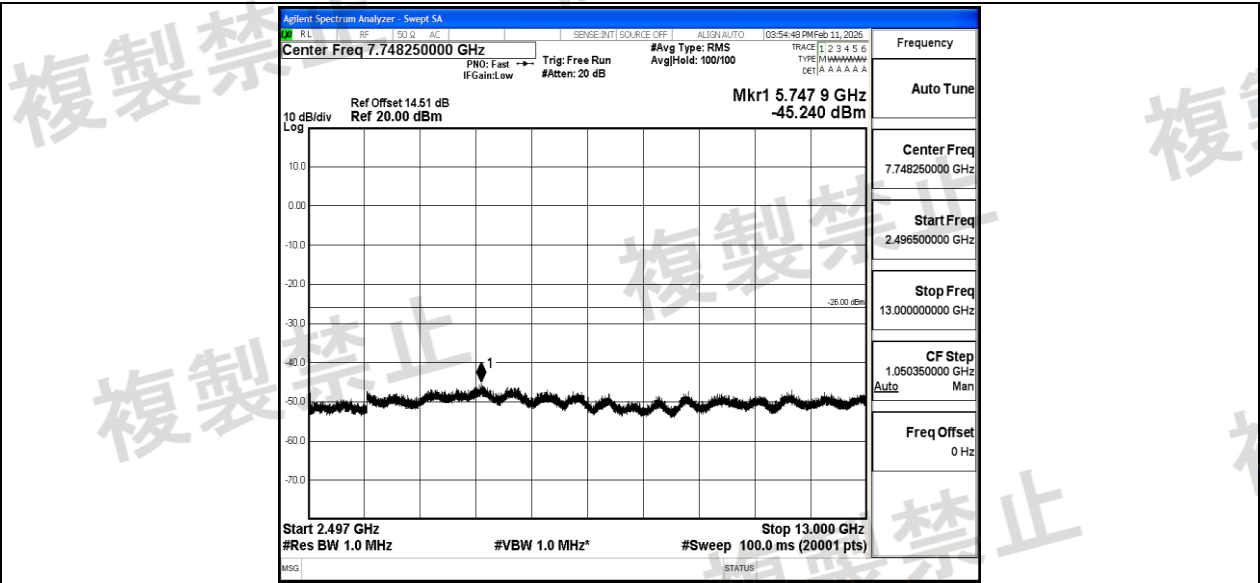




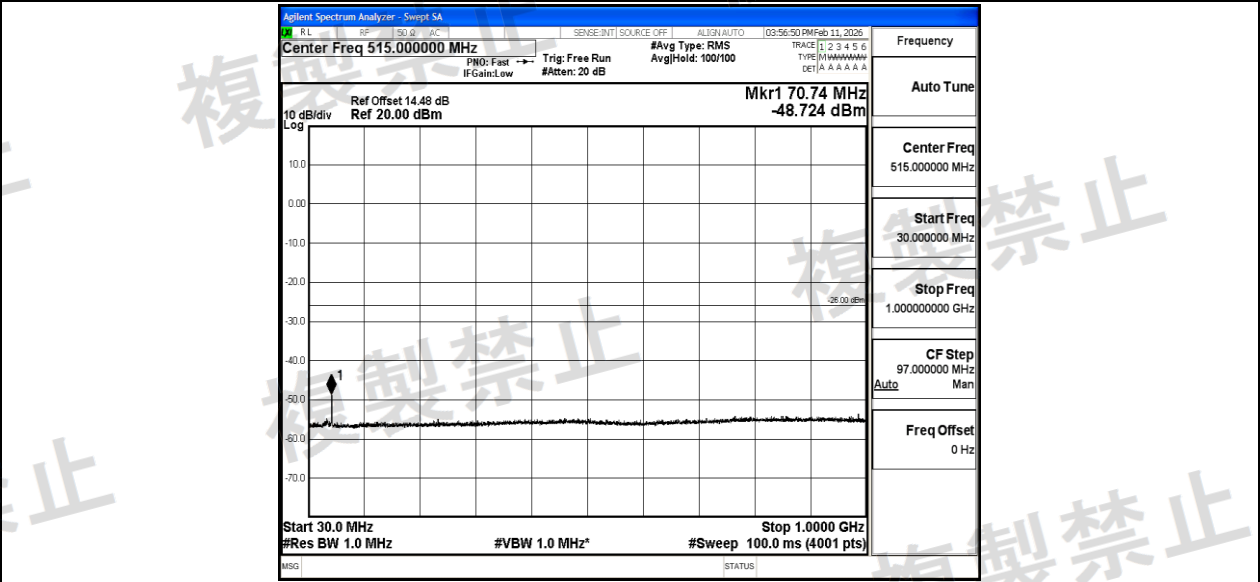
NTNV_2.4G_Ant_2405_2483.5~2496.5



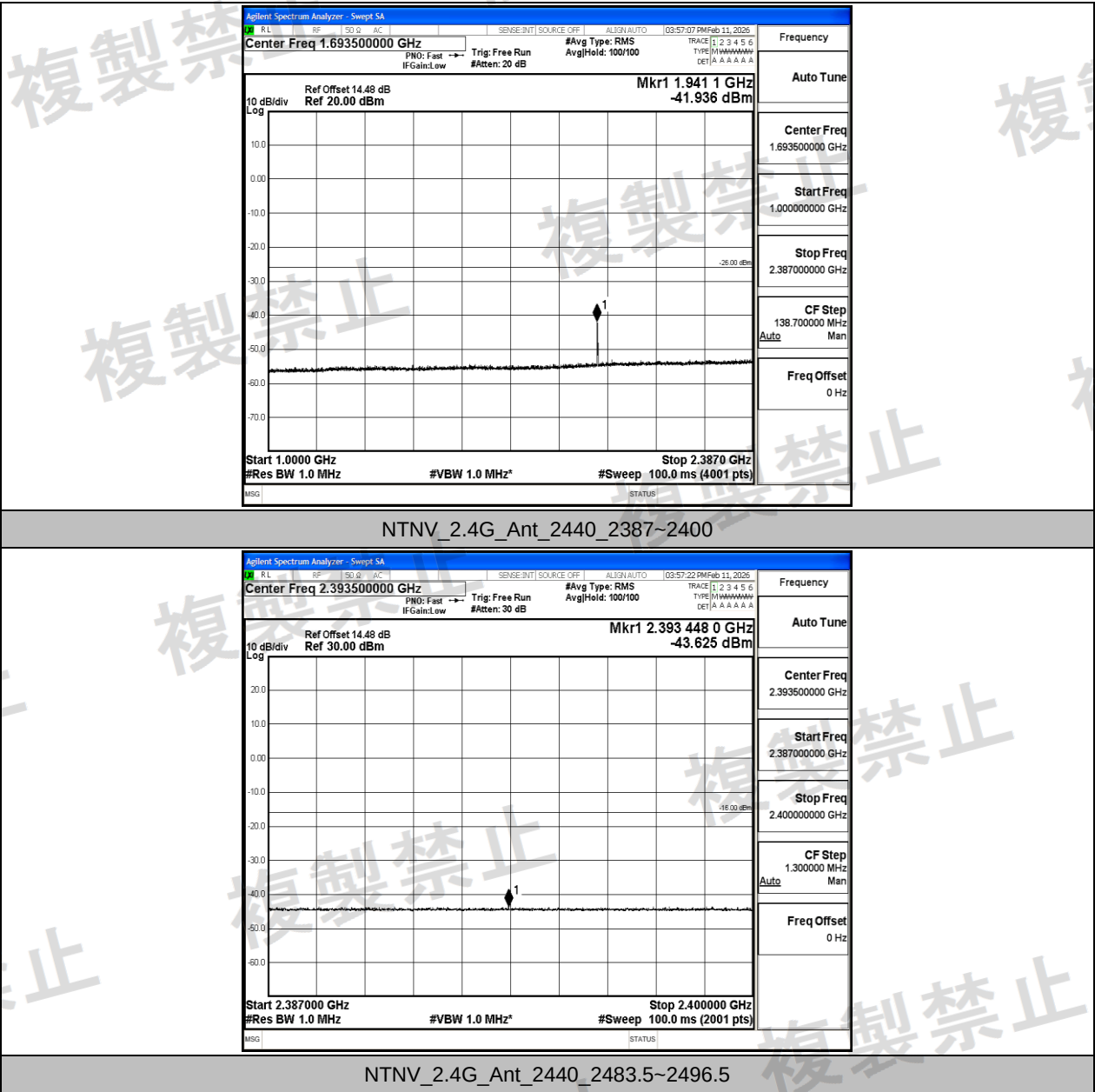
NTNV_2.4G_Ant_2405_2496.5~13000

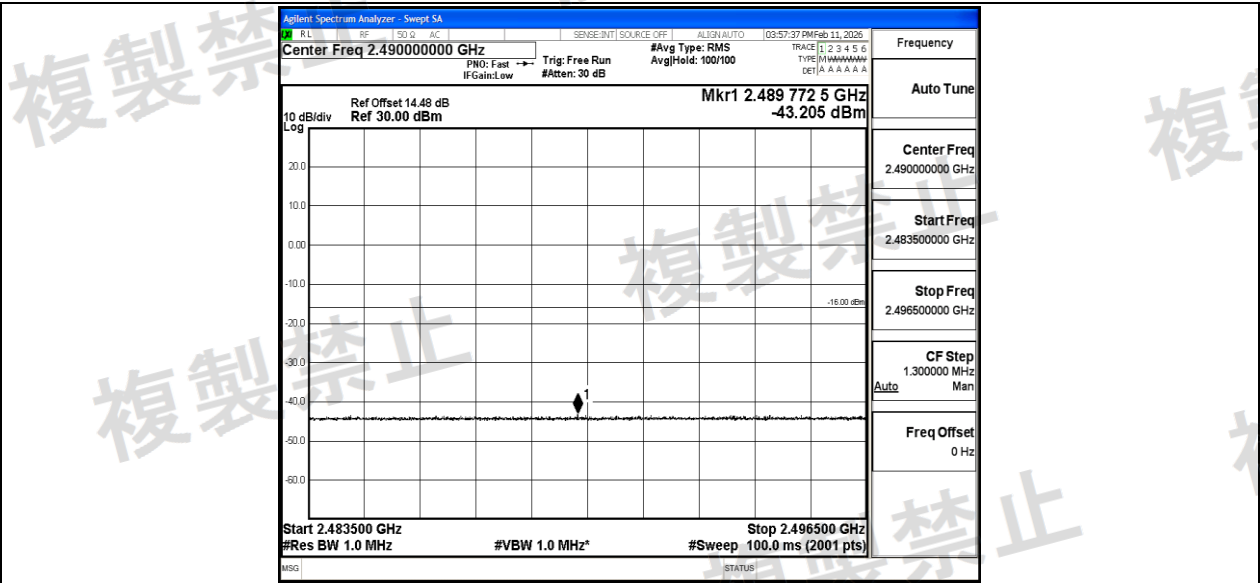


NTNV_2.4G_Ant_2440_30~1000

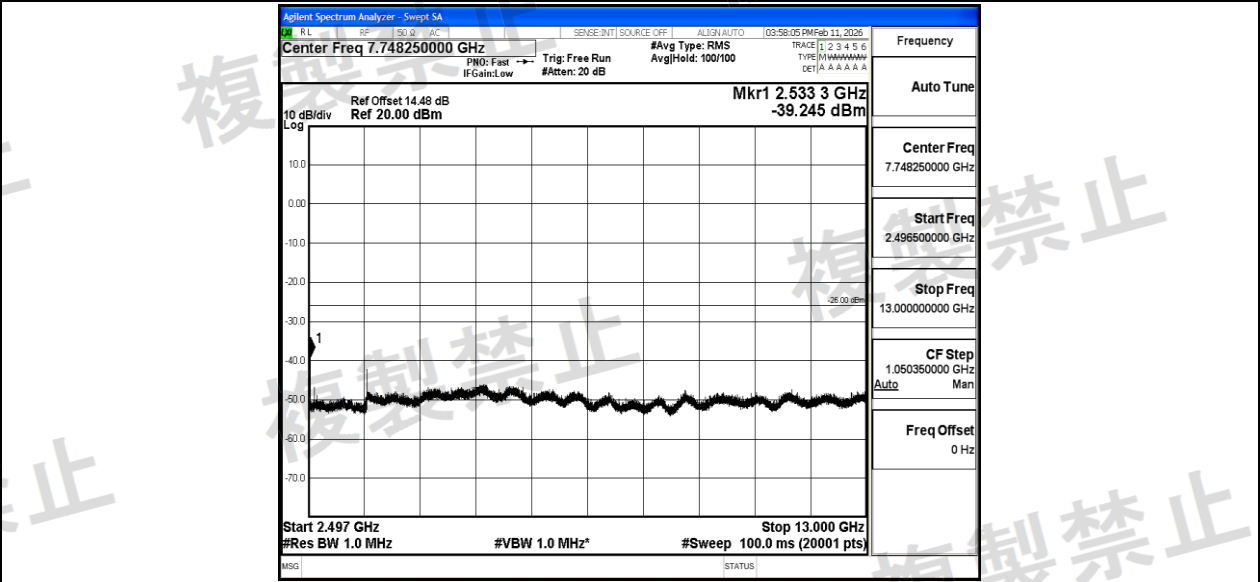


NTNV_2.4G_Ant_2440_1000~2387

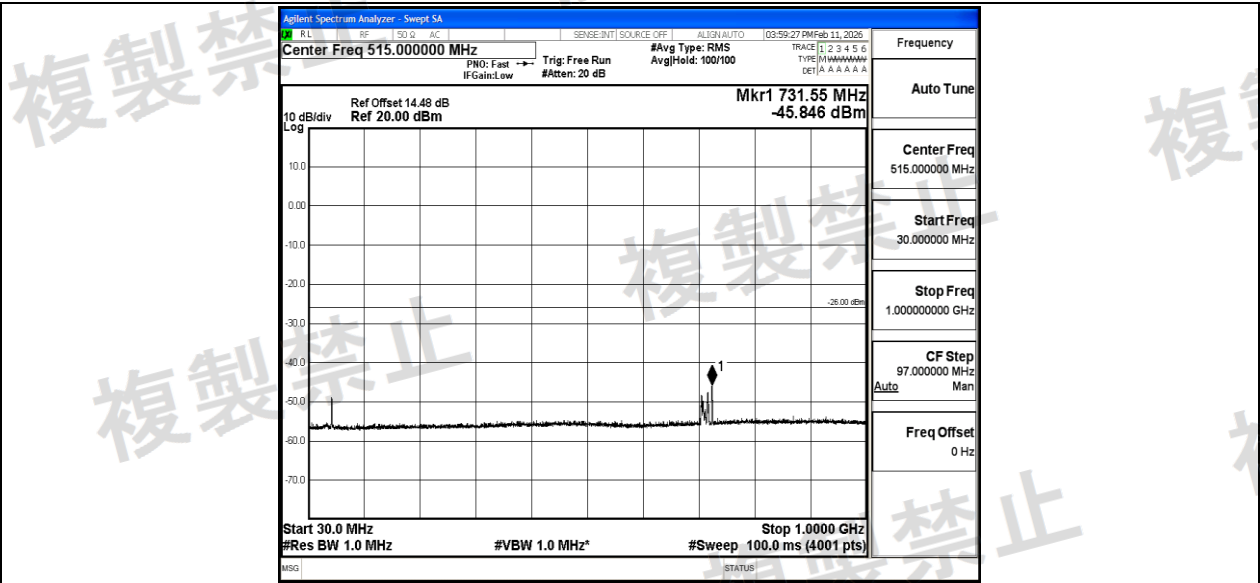




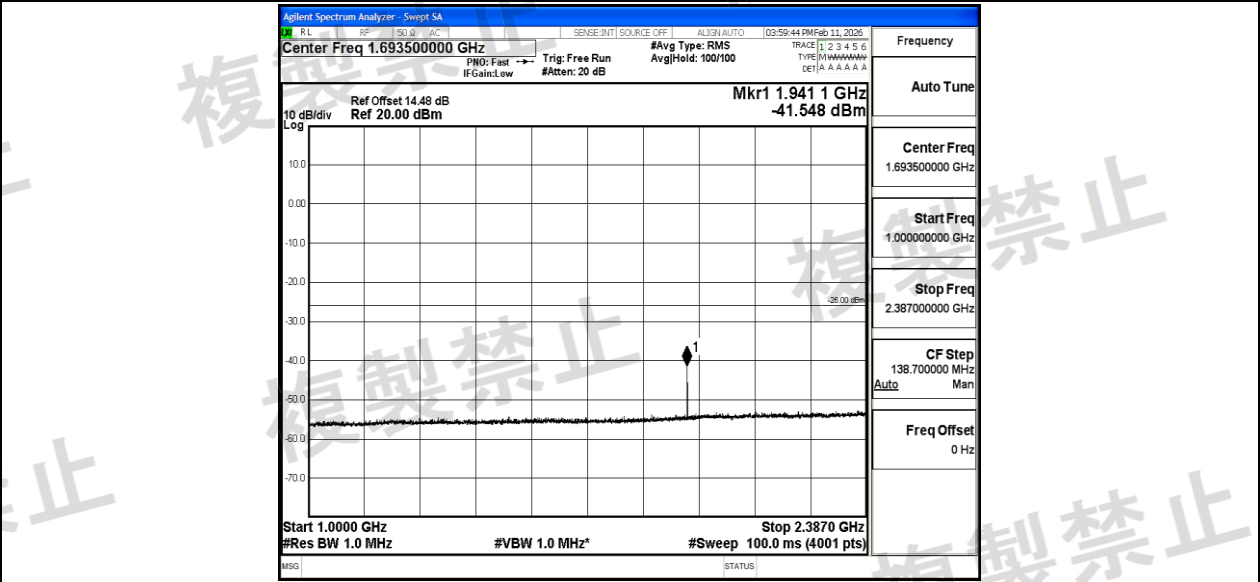
NTNV_2.4G_Ant_2440_2496.5-13000



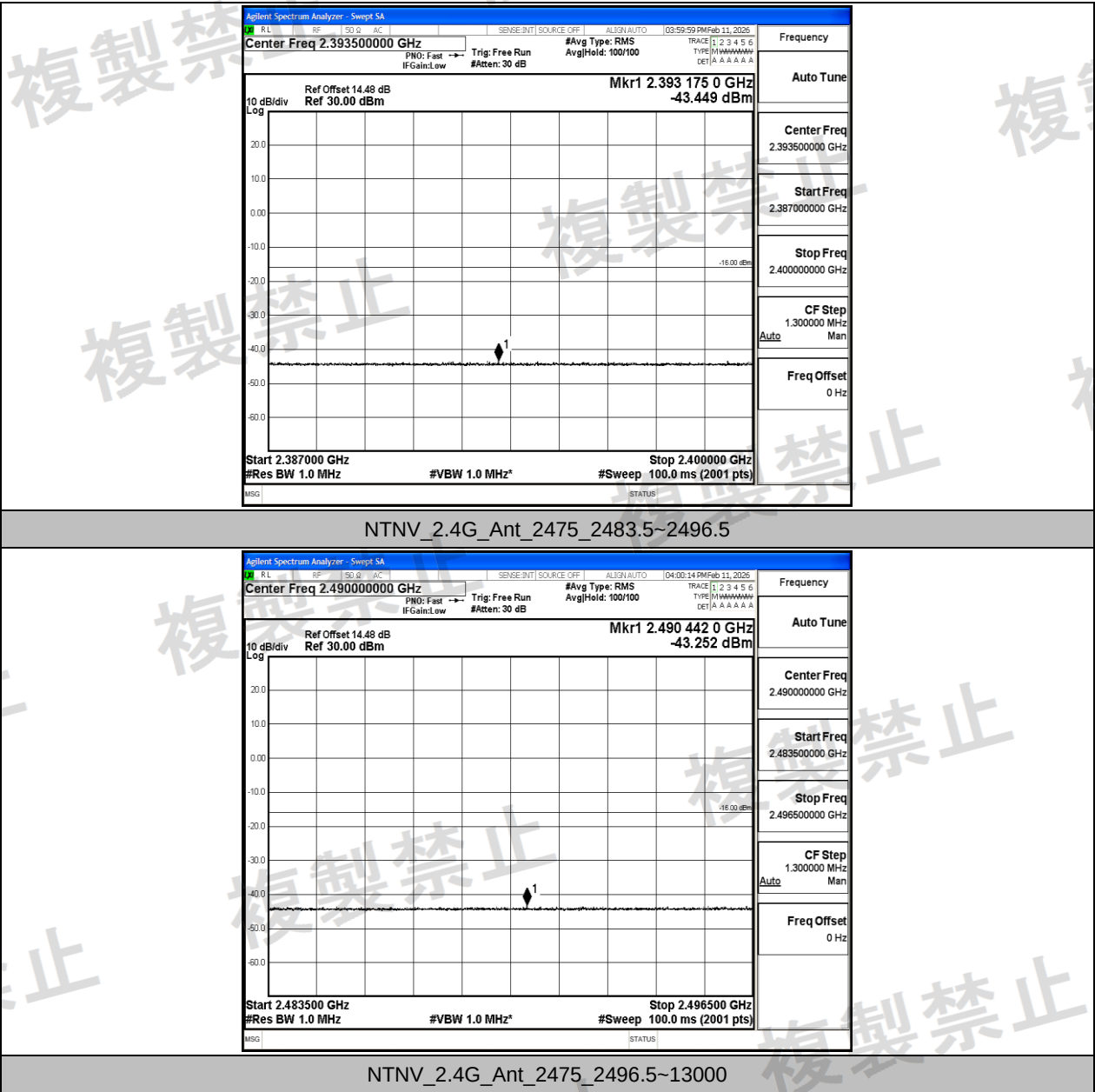
NTNV_2.4G_Ant_2475_30-1000

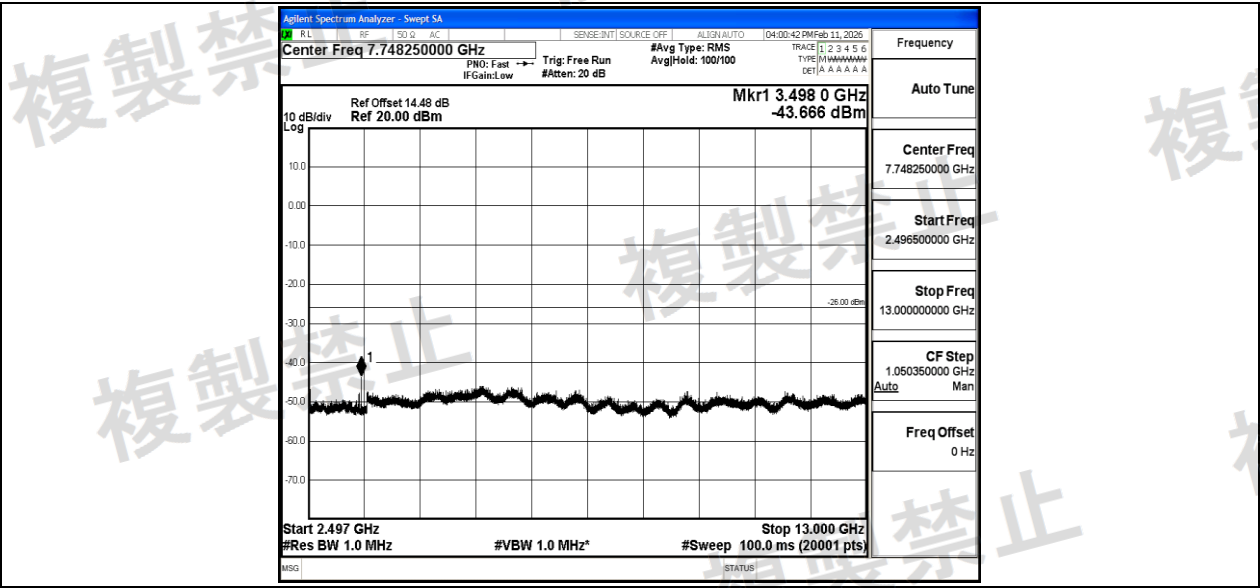


NTNV_2.4G_Ant_2475_1000~2387



NTNV_2.4G_Ant_2475_2387~2400



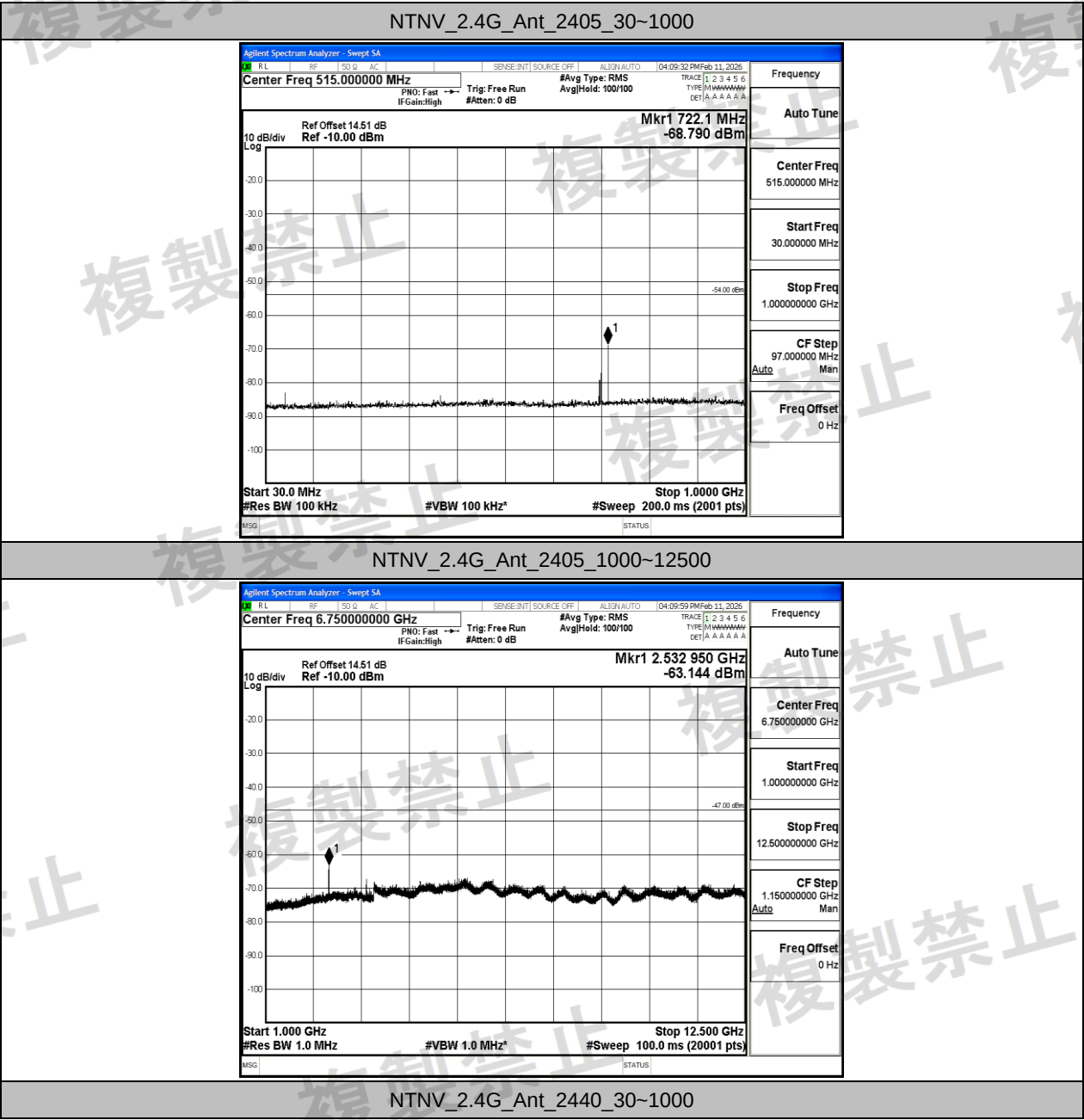


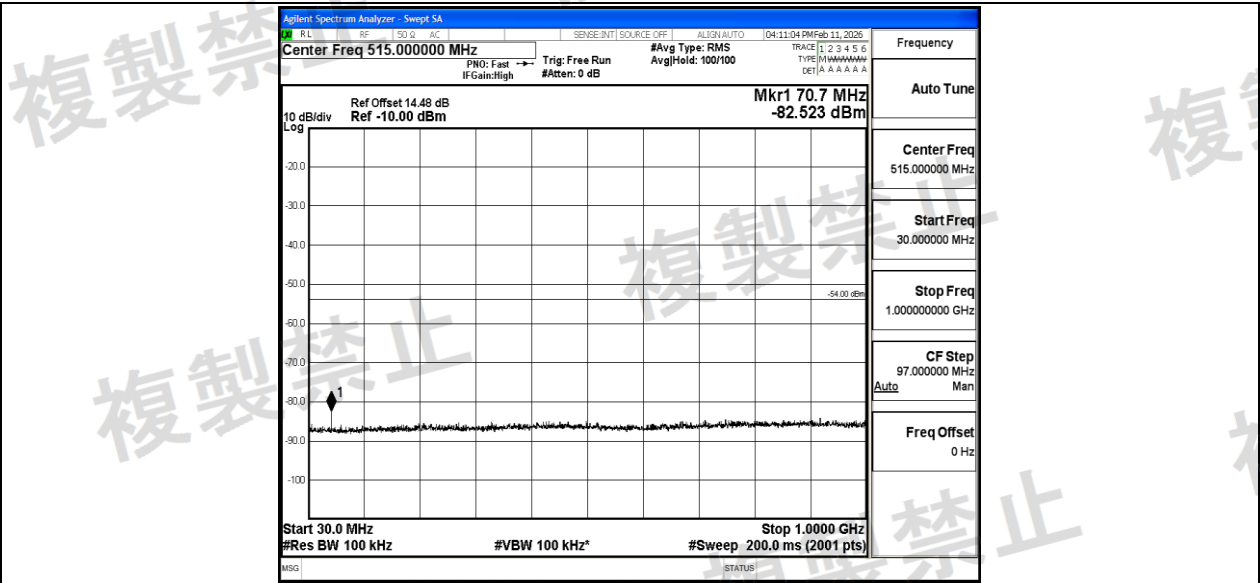
A.5 Spurious Emission of RX

Test Result

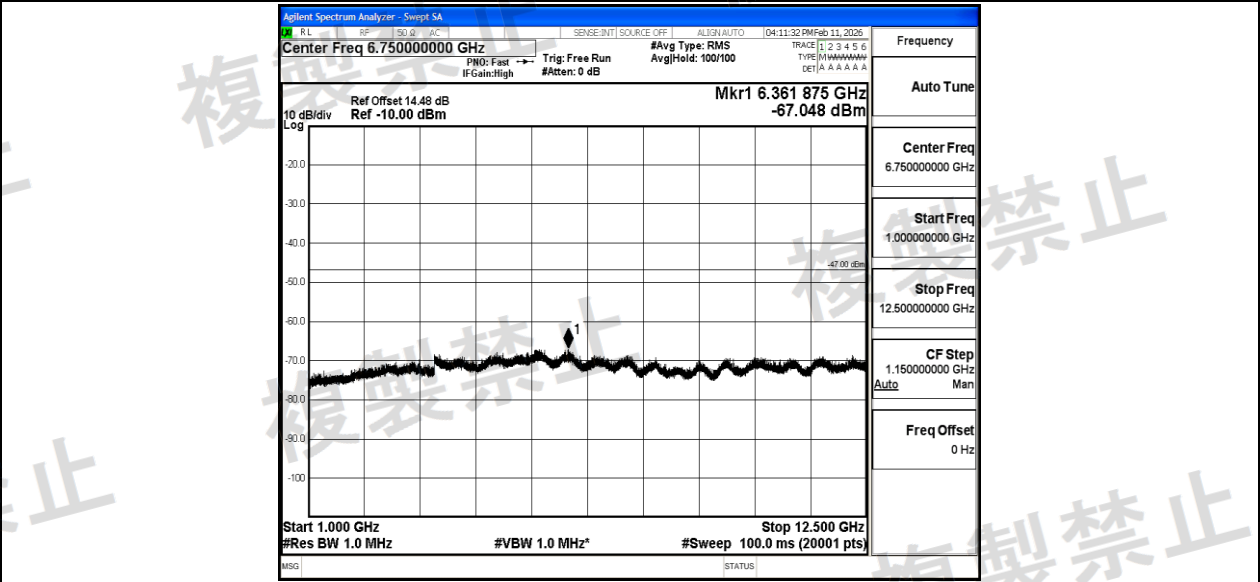
TestCondition	TestMode	Antenna	Frequency[MHz]	Freq.Range [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	2.4G	Ant	2405	30~1000	-68.79	≤-54	0.13213	≤4	PASS
				1000~12500	-63.14	≤-47	0.48529	≤20	PASS
			2440	30~1000	-82.52	≤-54	0.00560	≤4	PASS
				1000~12500	-67.05	≤-47	0.19724	≤20	PASS
			2475	30~1000	-82.84	≤-54	0.00520	≤4	PASS
				1000~12500	-63.52	≤-47	0.44463	≤20	PASS

Test Graphs





NTNV_2.4G_Ant_2440_1000~12500



NTNV_2.4G_Ant_2475_30~1000

