

Appendix A for BT LE Test Data

Product Name: BT RCU

Test Model: WH-329

Environmental Conditions

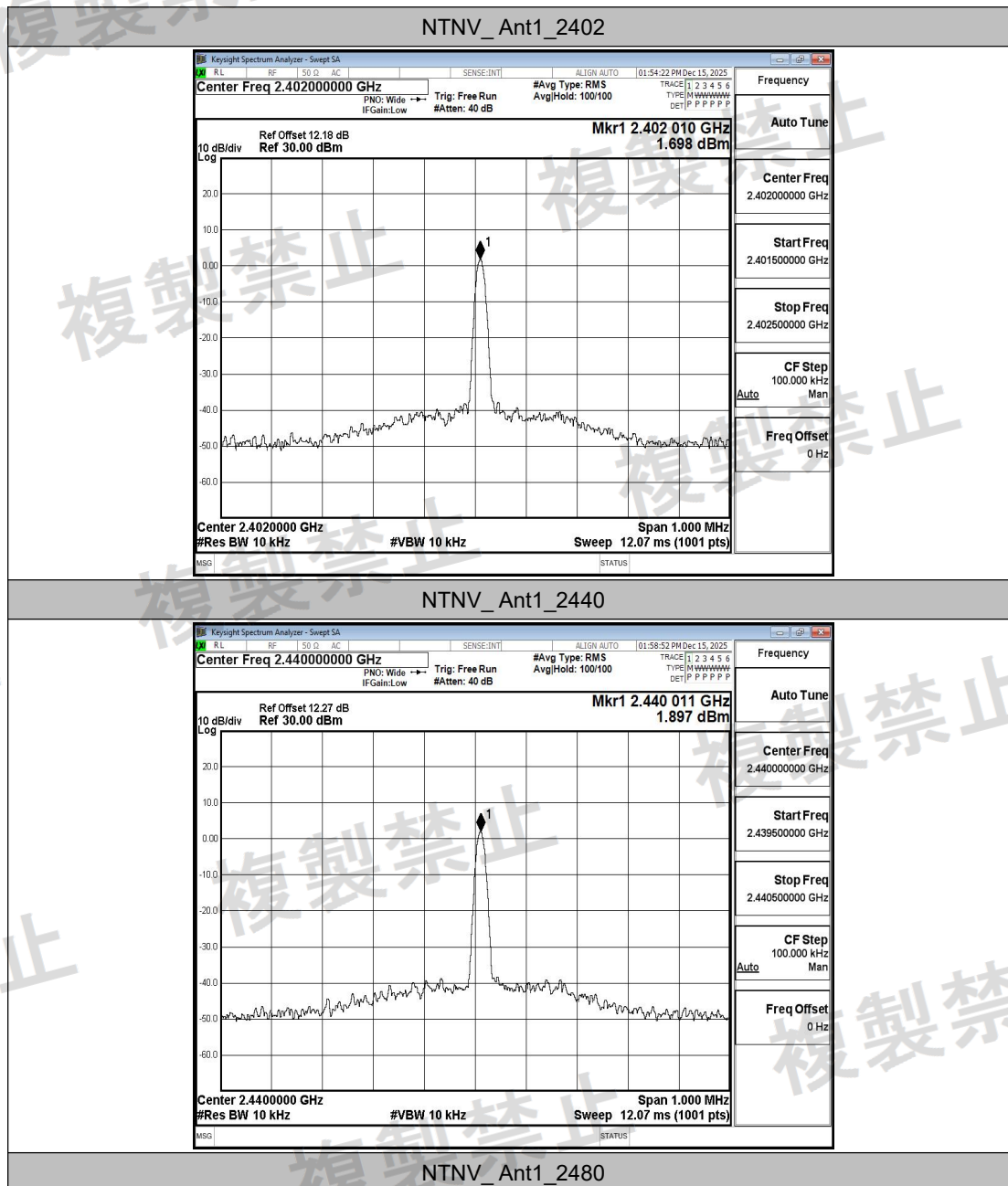
Temperature:	23.8°C
Relative Humidity:	52.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Suichao Lai
Supervised by:	Yan Chen

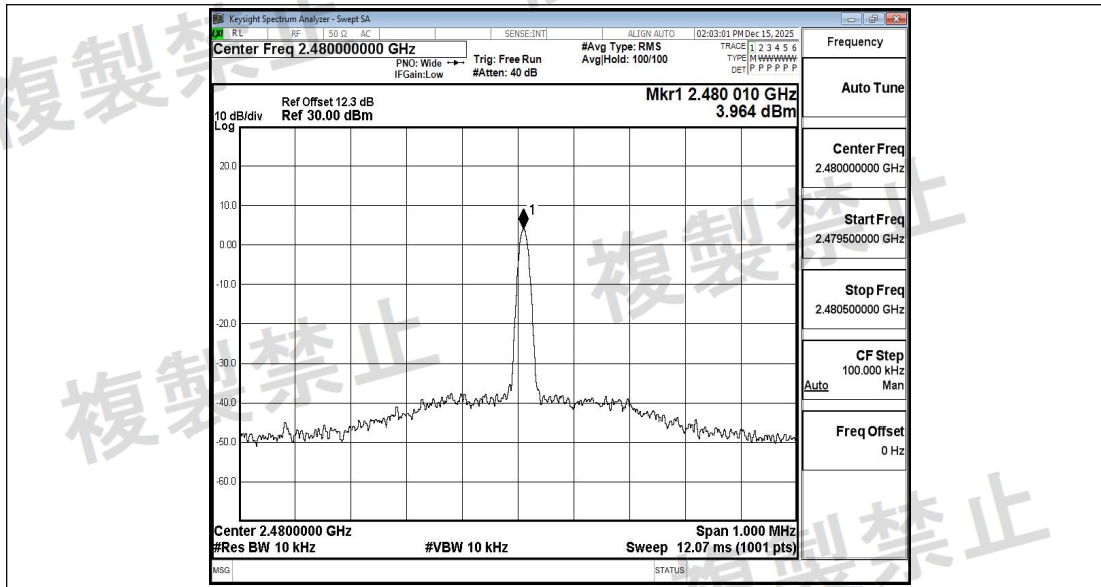
A.1 Frequency Error

Test Result

TestCondition	TestMode	Antenna	Frequency[MHz]	Result[ppm]	Limit[ppm]	Verdict
NTNV	Frequency Error	Ant1	2402	4.16320	±50	PASS
			2440	4.50820	±50	PASS
			2480	4.03226	±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	BLE_1M	Ant1	2402	-0.87	0.8185	≤10	PASS
			2440	-0.20	0.9550	≤10	PASS
			2480	-0.15	0.9661	≤10	PASS

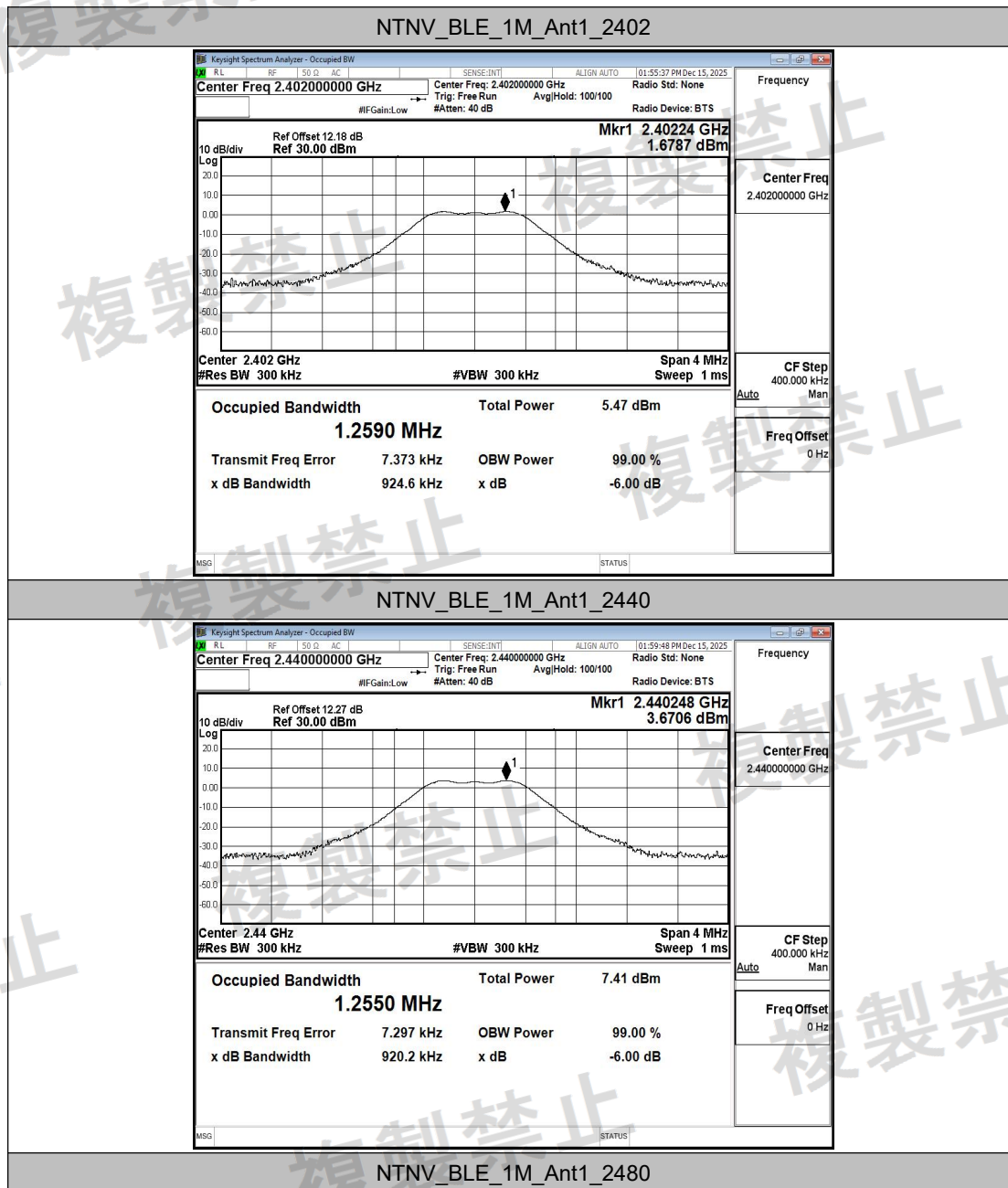
Tolerance								
Test Condition	Test Mode	Antenna	Frequency[MHz]	Power (mW)	Rated Power (mW)	Result (%)	Limit (%)	Verdict
NTNV	BLE_1M	Ant1	2402	0.8185	1	-18.15	+20	PASS
			2440	0.9550	1	-4.50	+20	PASS
			2480	0.9661	1	-3.39	+20	PASS

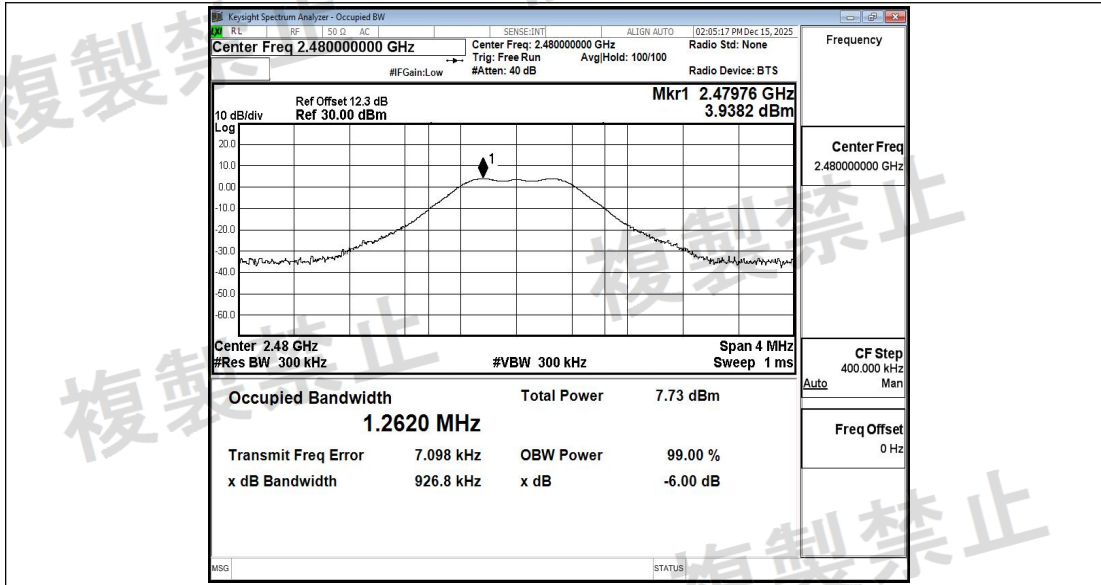
A.3 Occupied Bandwidth

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	1.259	≤26	PASS
			2440	1.255	≤26	PASS
			2480	1.262	≤26	PASS

Test Graphs



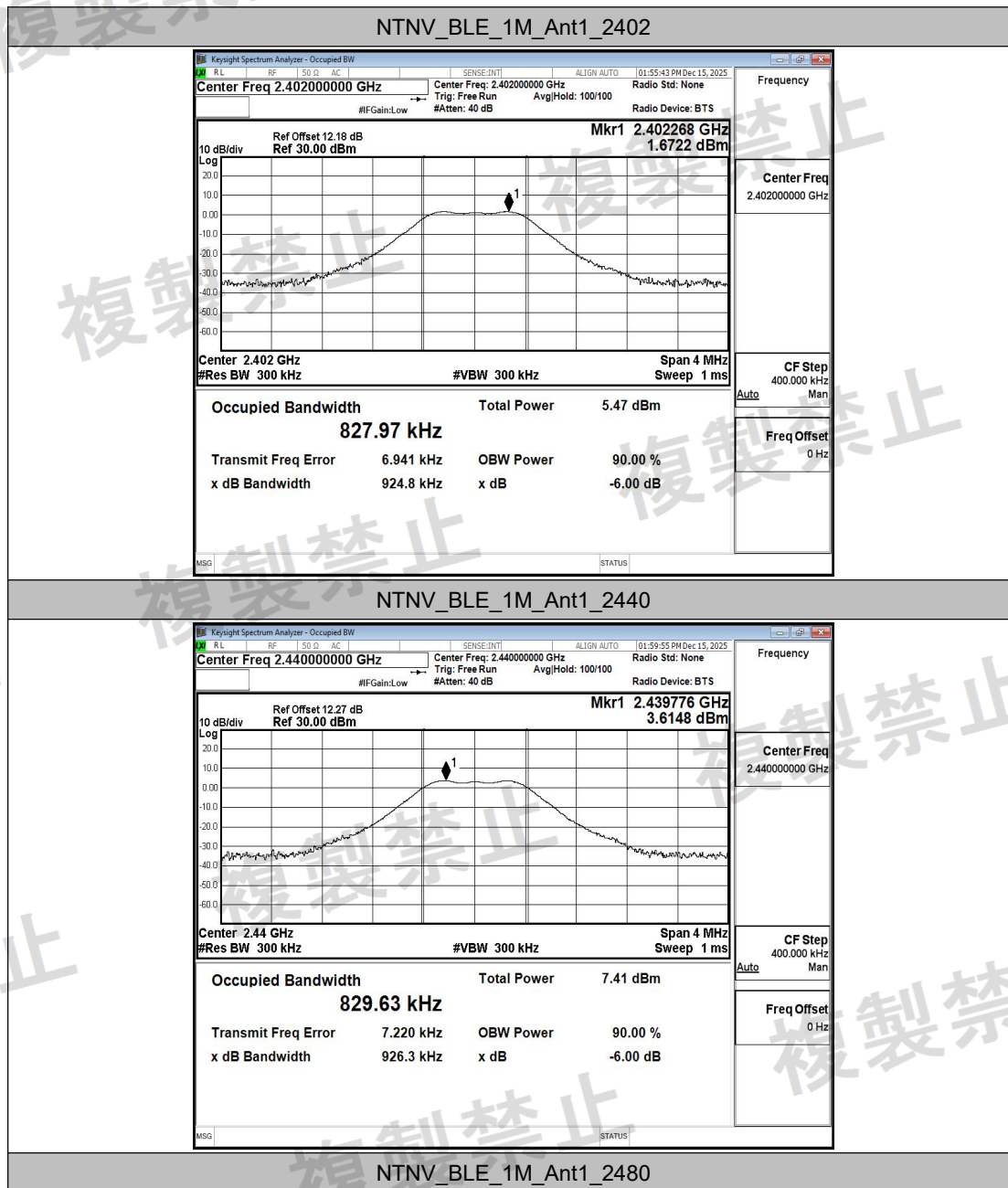


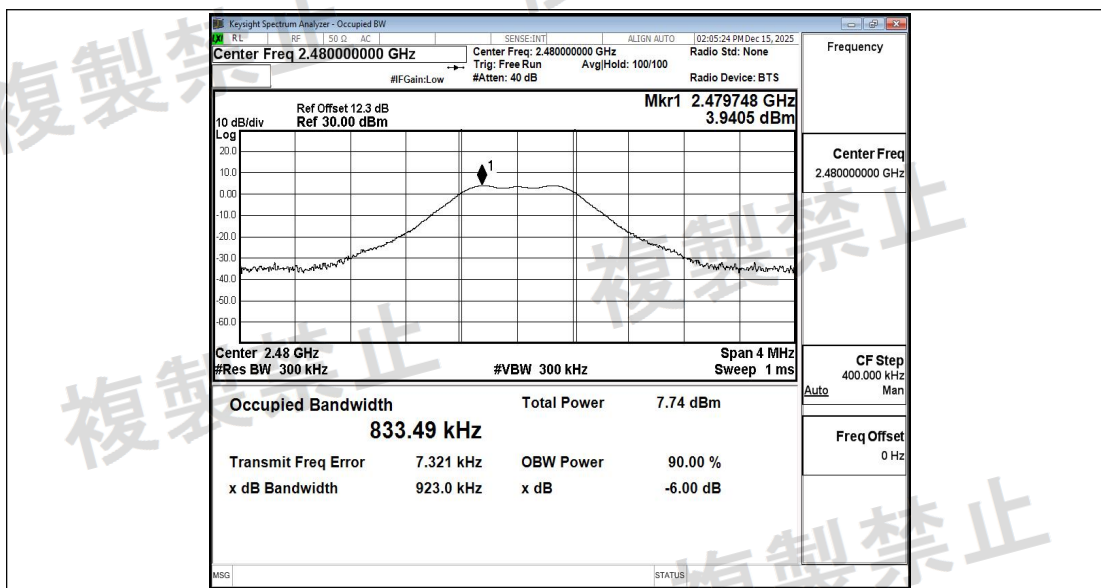
A.4 Spread Bandwidth

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	0.828	---	PASS
			2440	0.830	---	PASS
			2480	0.833	---	PASS

Test Graphs



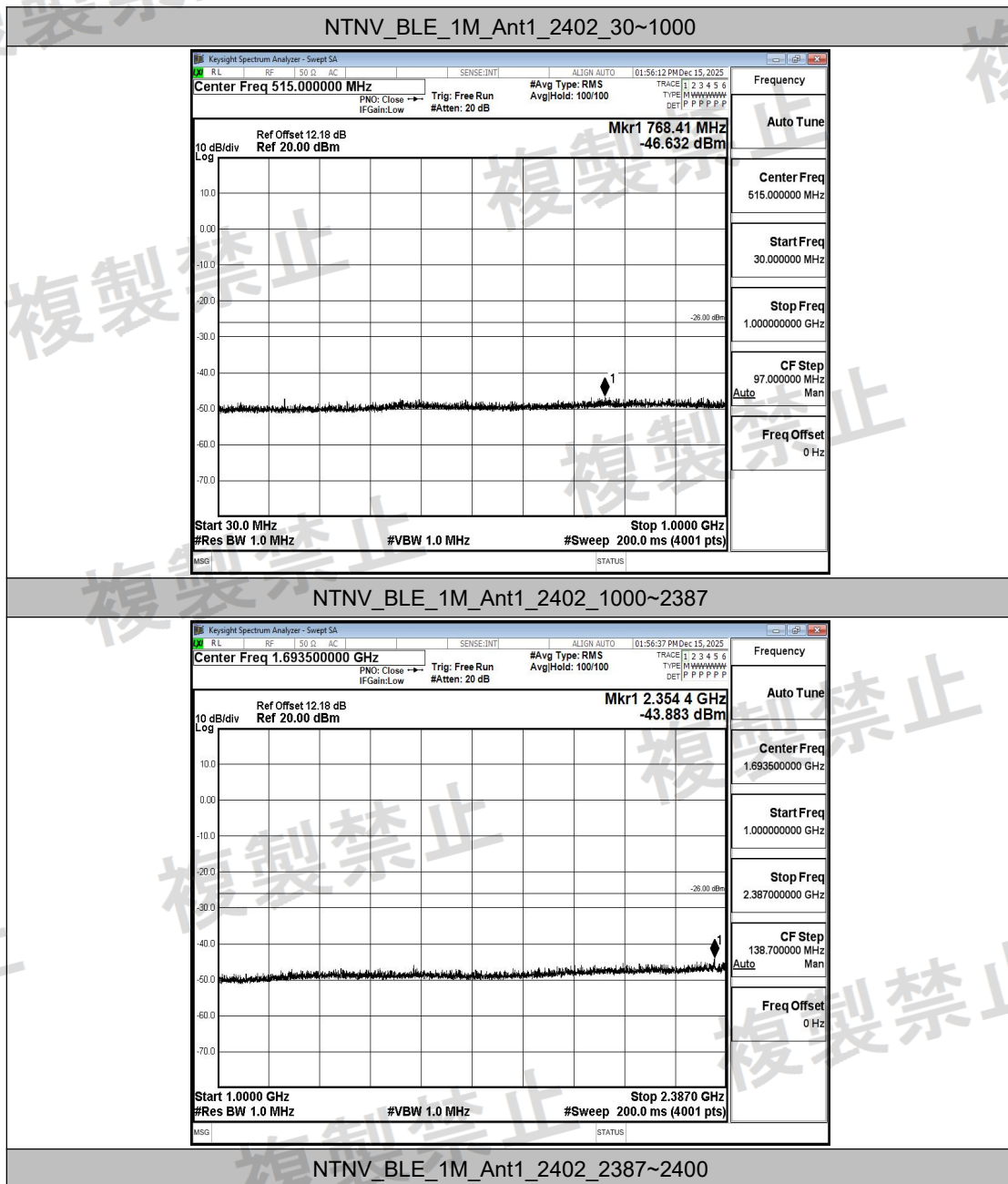


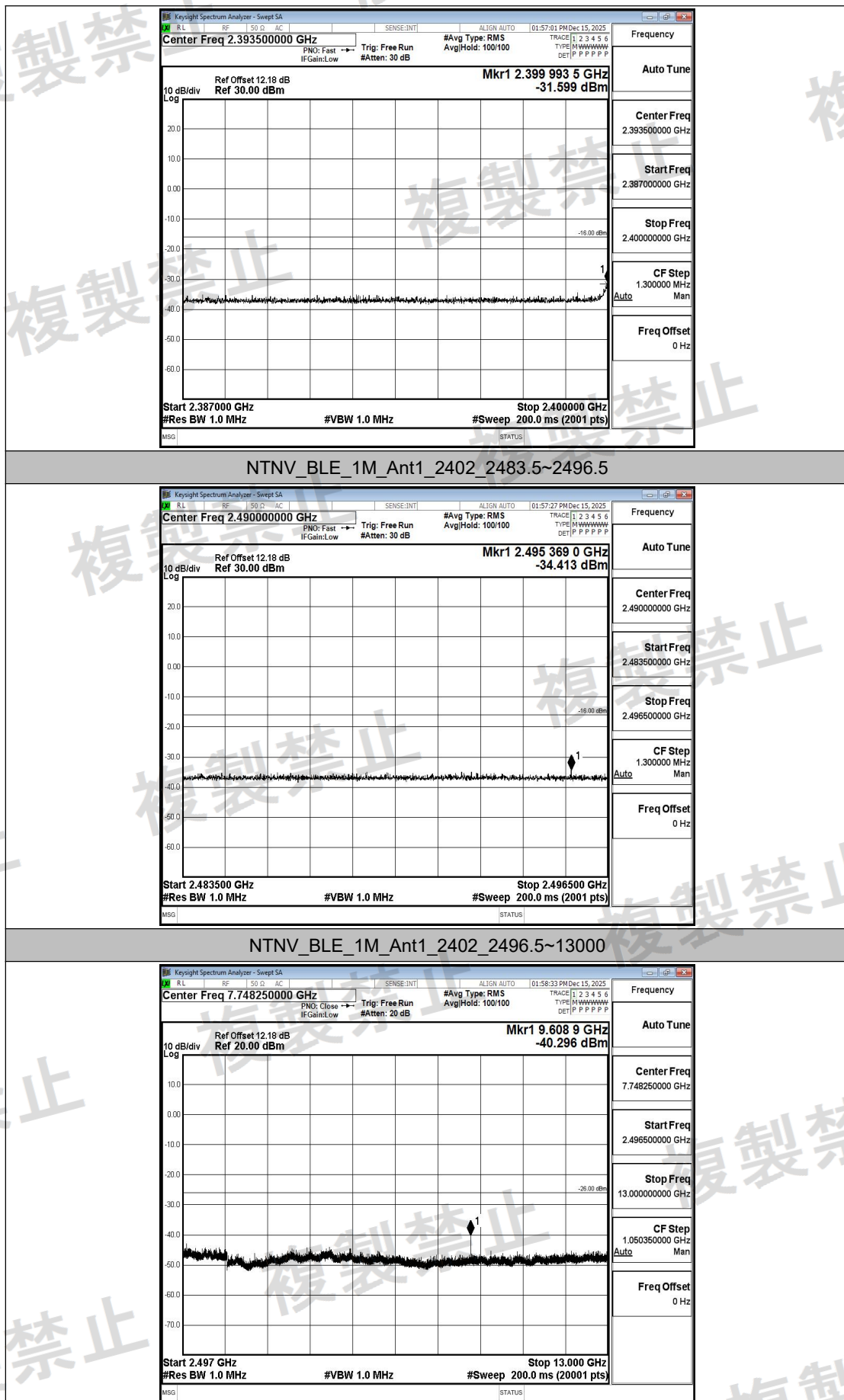
A.5 Spurious Emission of TX

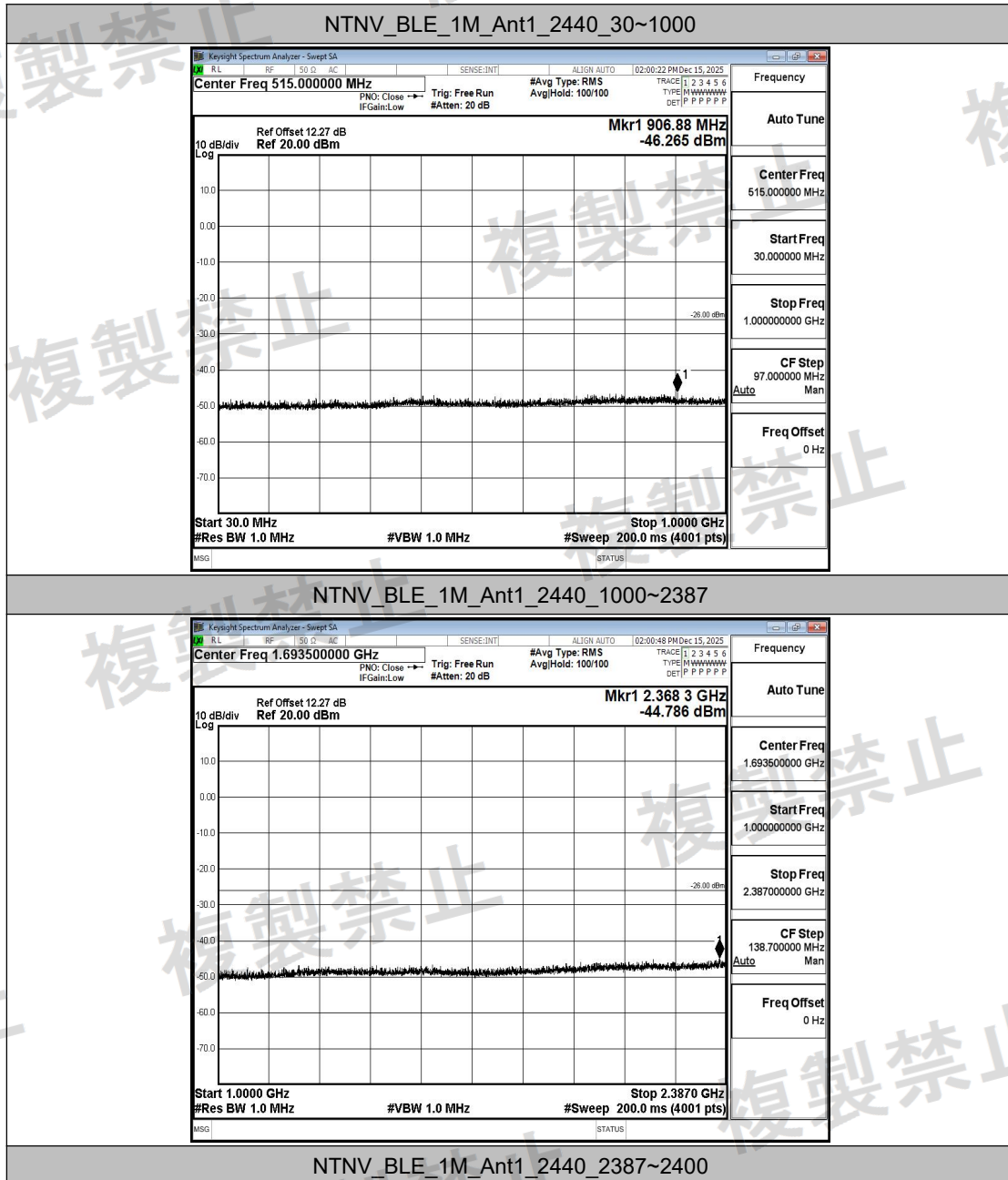
Test Result

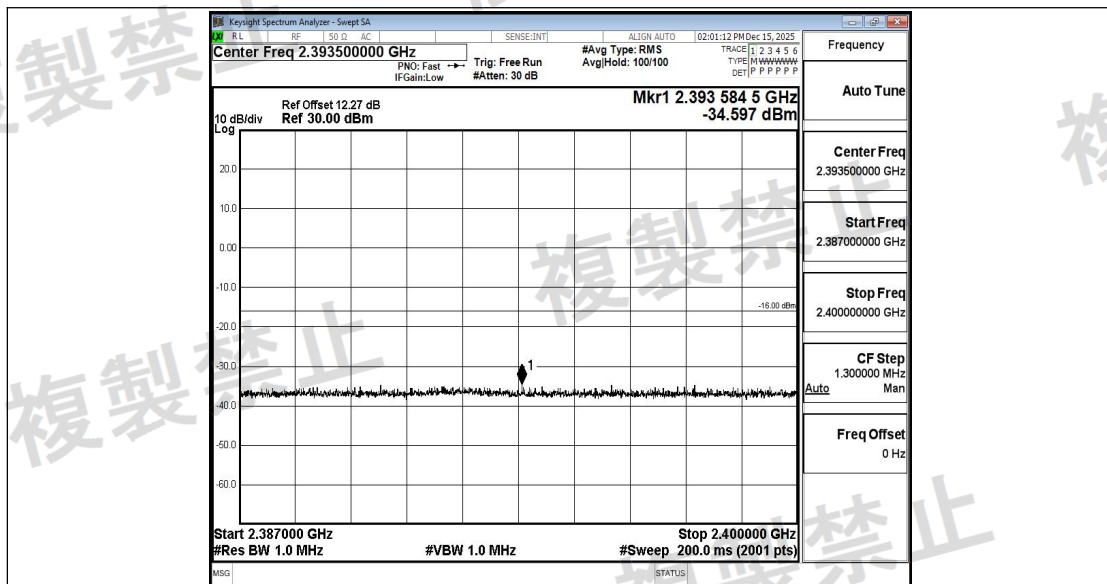
TestCondition	TestMode	Antenna	Freq(MHz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~1000	768.41	-46.63	≤-26	0.02173	≤2.5	PASS
				1000~2387	2354.41	-43.88	≤-26	0.04093	≤2.5	PASS
				2387~2400	2399.99	-31.60	≤-16	0.69183	≤25	PASS
				2483.5~2496.5	2495.37	-34.41	≤-16	0.36224	≤25	PASS
				2496.5~13000	9608.95	-40.30	≤-26	0.09333	≤2.5	PASS
			2440	30~1000	906.88	-46.27	≤-26	0.02360	≤2.5	PASS
				1000~2387	2368.28	-44.79	≤-26	0.03319	≤2.5	PASS
				2387~2400	2393.58	-34.60	≤-16	0.34674	≤25	PASS
				2483.5~2496.5	2488.08	-34.15	≤-16	0.38459	≤25	PASS
				2496.5~13000	9759.15	-39.21	≤-26	0.11995	≤2.5	PASS
			2480	30~1000	880.21	-46.07	≤-26	0.02472	≤2.5	PASS
				1000~2387	2216.05	-45.26	≤-26	0.02979	≤2.5	PASS
				2387~2400	2399.50	-34.85	≤-16	0.32734	≤25	PASS
				2483.5~2496.5	2486.38	-34.66	≤-16	0.34198	≤25	PASS
				2496.5~13000	9921.42	-40.28	≤-26	0.09376	≤2.5	PASS

Test Graphs

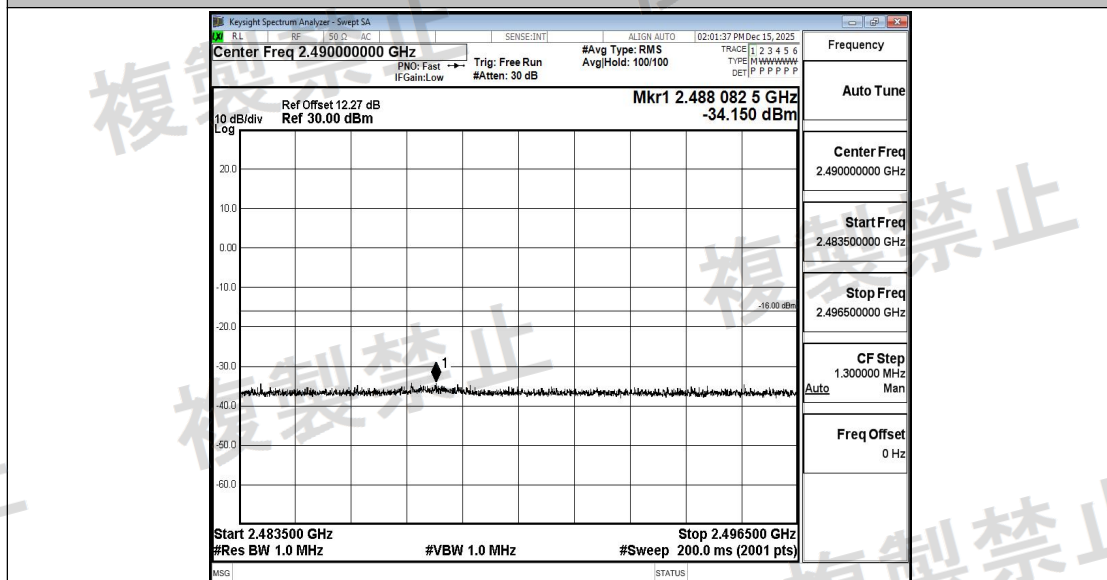




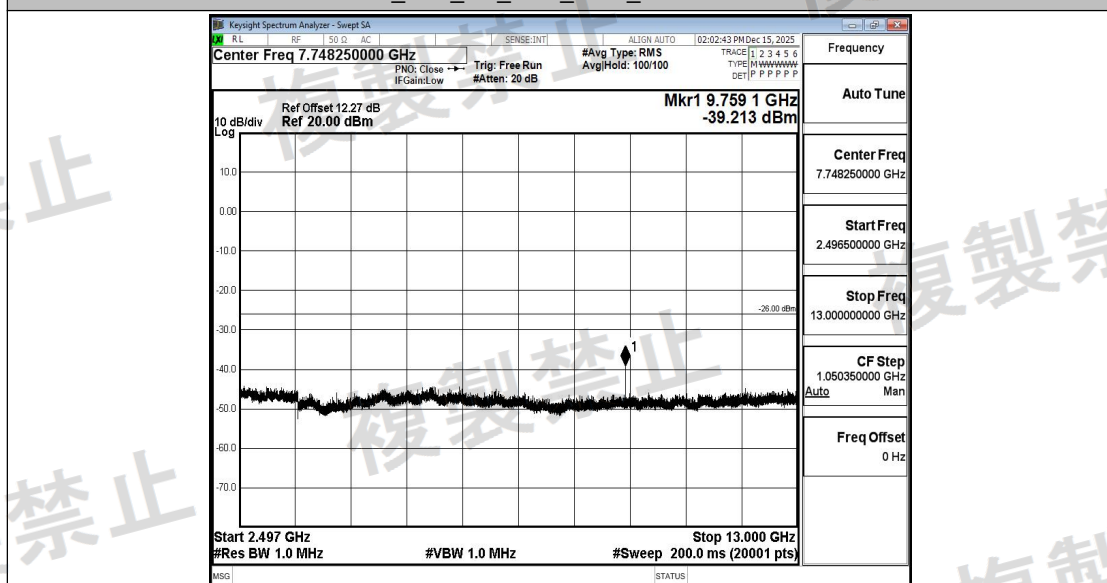




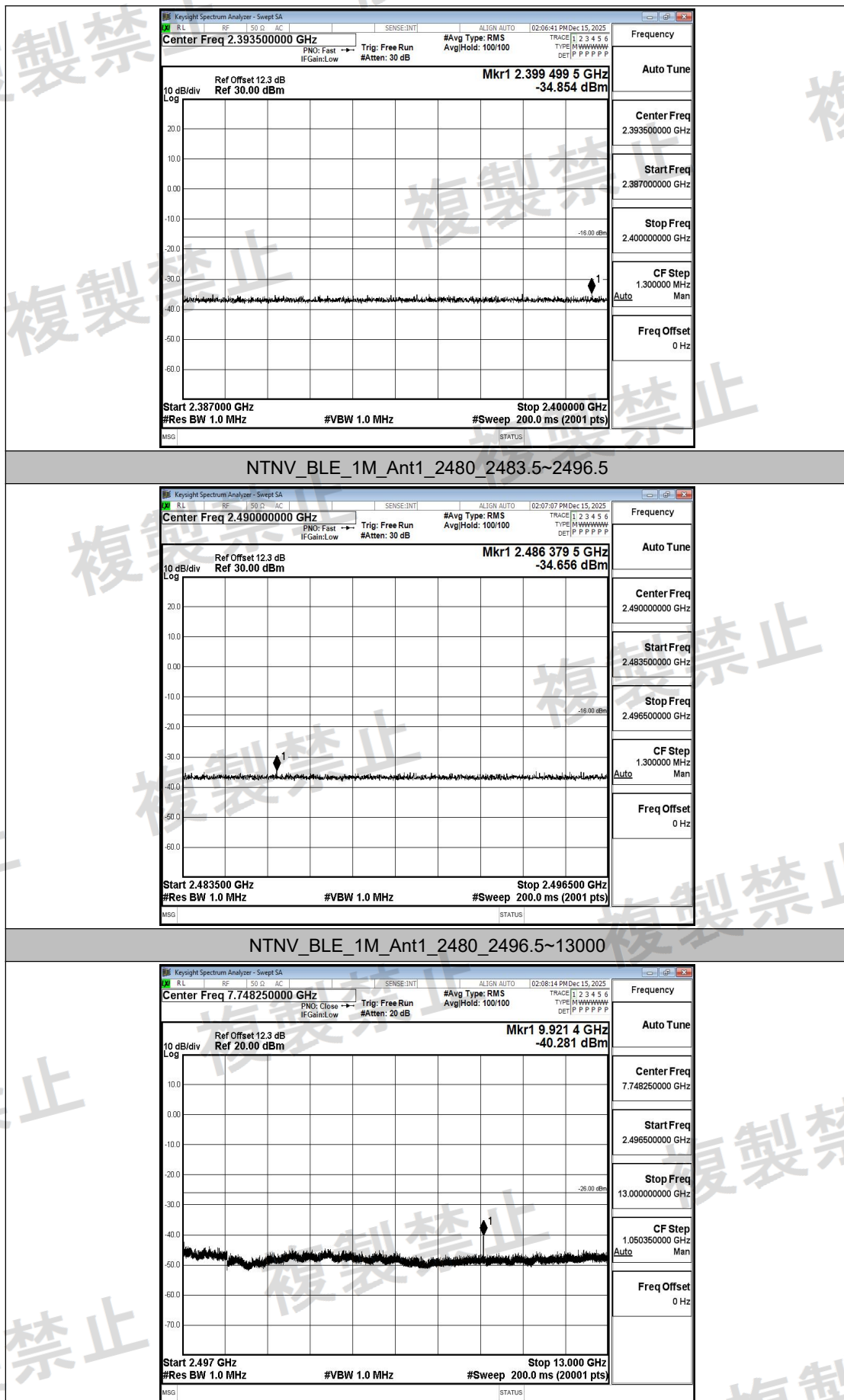
NTNV_BLE_1M_Ant1_2440_2483.5~2496.5



NTNV_BLE_1M_Ant1_2440_2496.5~13000







A.6 Spurious Emission of RX

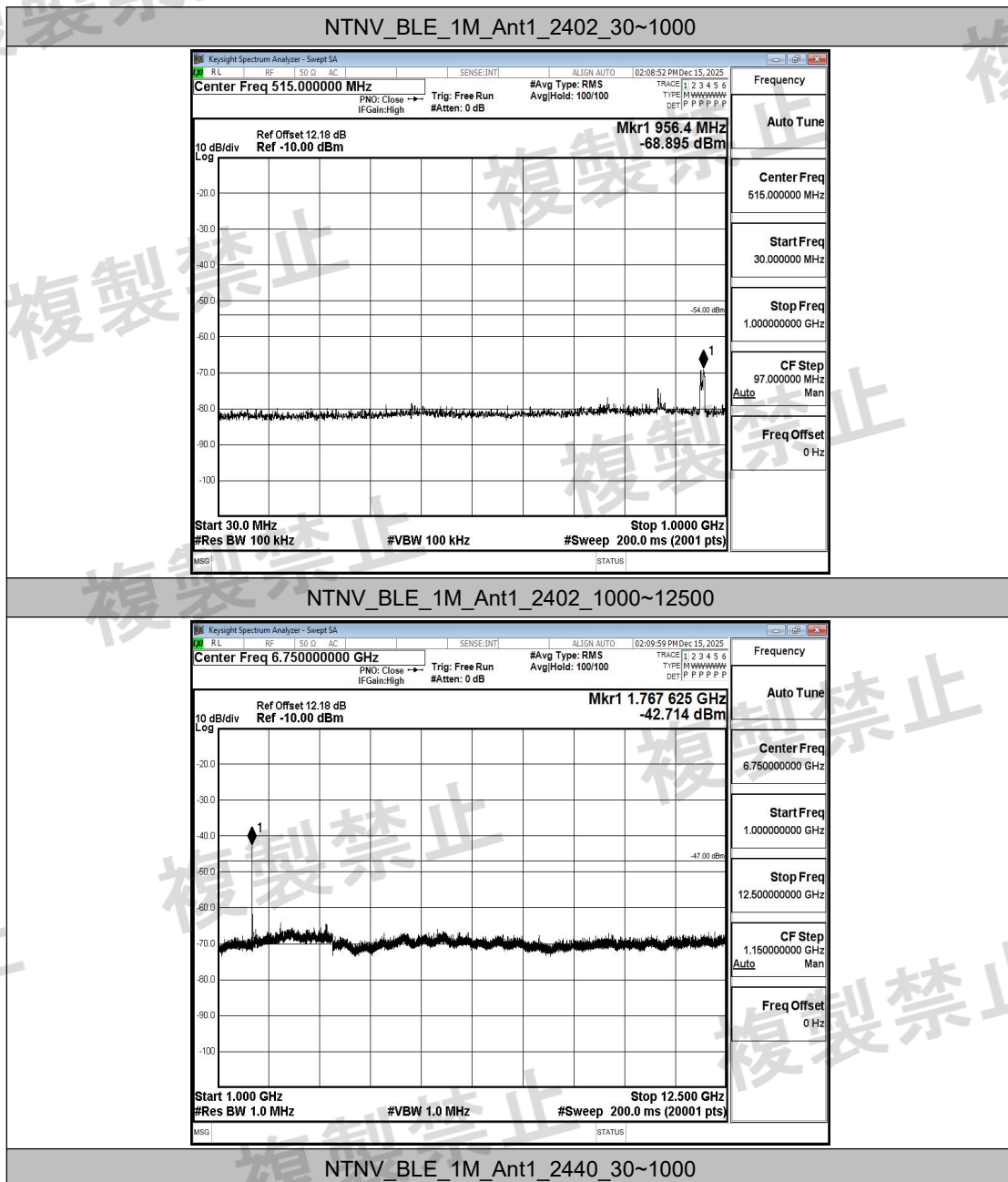
Test Result

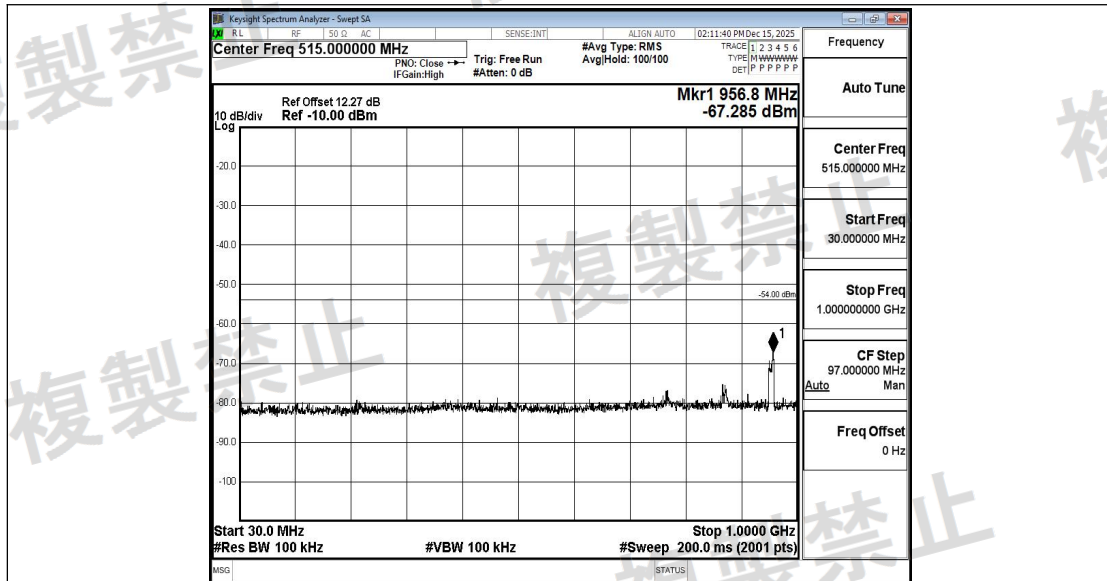
TestCondition	TestMode	Antenna	Freq(MHz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~1000	956.35	-68.90	≤-54	0.12882	≤4	PASS
				1000~12500	1767.63	-42.71	≤-47	53.57967	≤20	PASS
			2440	30~1000	956.84	-67.29	≤-54	0.18664	≤4	PASS
				1000~12500	3402.93	-51.61	≤-47	6.90240	≤20	PASS
			2480	30~1000	957.81	-72.18	≤-54	0.06053	≤4	PASS
				1000~12500	3445.48	-48.51	≤-47	14.09289	≤20	PASS

Test Result_Step2

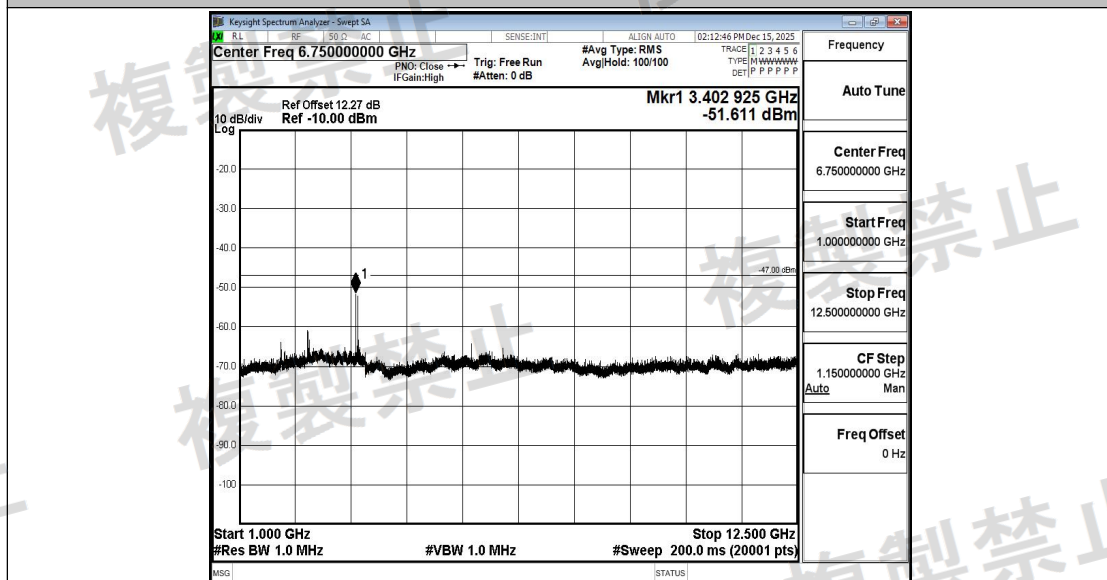
TestCondition	TestMode	Antenna	Freq(MHz)	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	BLE_1M	Ant1	2402	1767.63	-80.04	≤-47	0.00991	≤20	PASS
				3402.93	-61.25	≤-47	0.74989	≤20	PASS
			2440	3443.75	-64.74	≤-47	0.33574	≤20	PASS
				3417.88	-52.01	≤-47	6.29506	≤20	PASS
			2480	3445.48	-65.91	≤-47	0.25645	≤20	PASS

Test Graphs

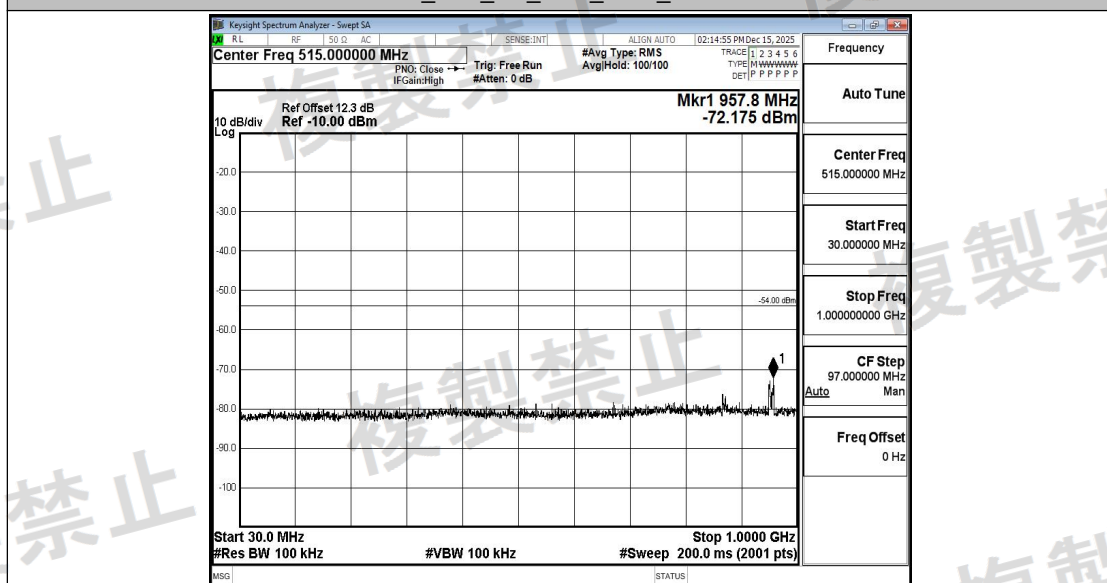


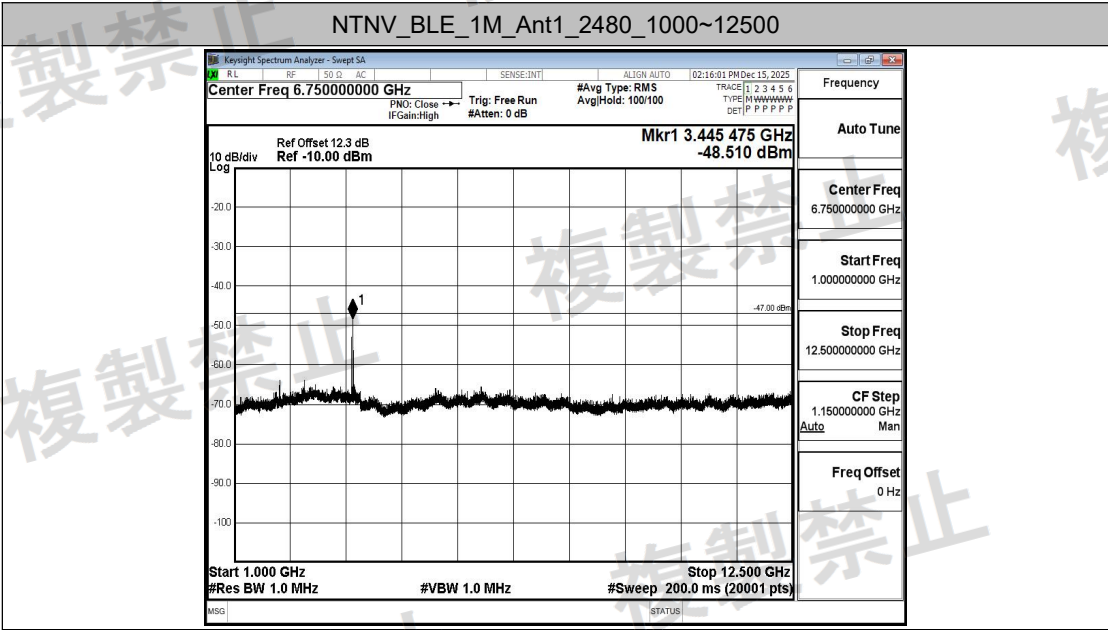


NTNV_BLE_1M_Ant1_2440_1000~12500

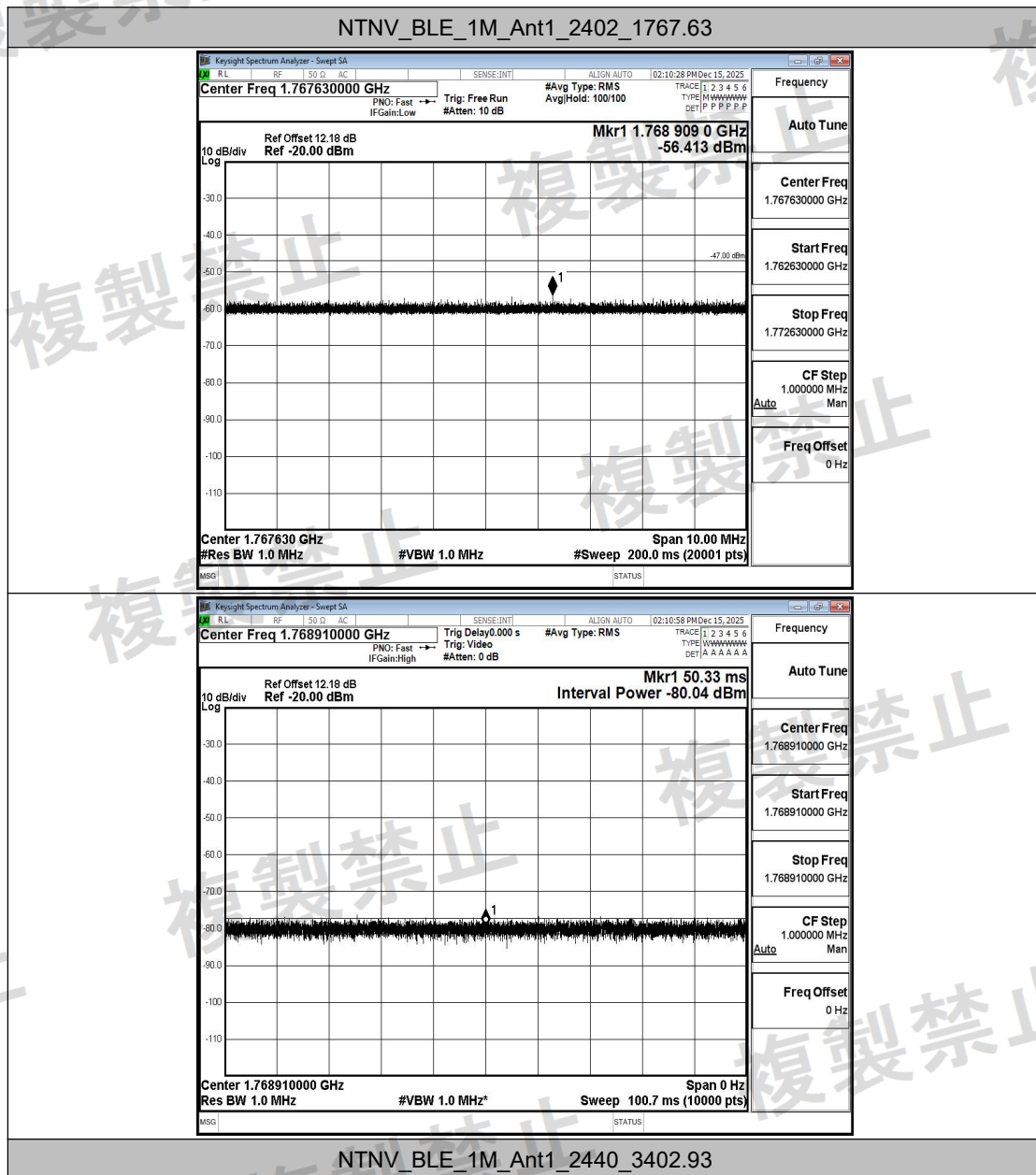


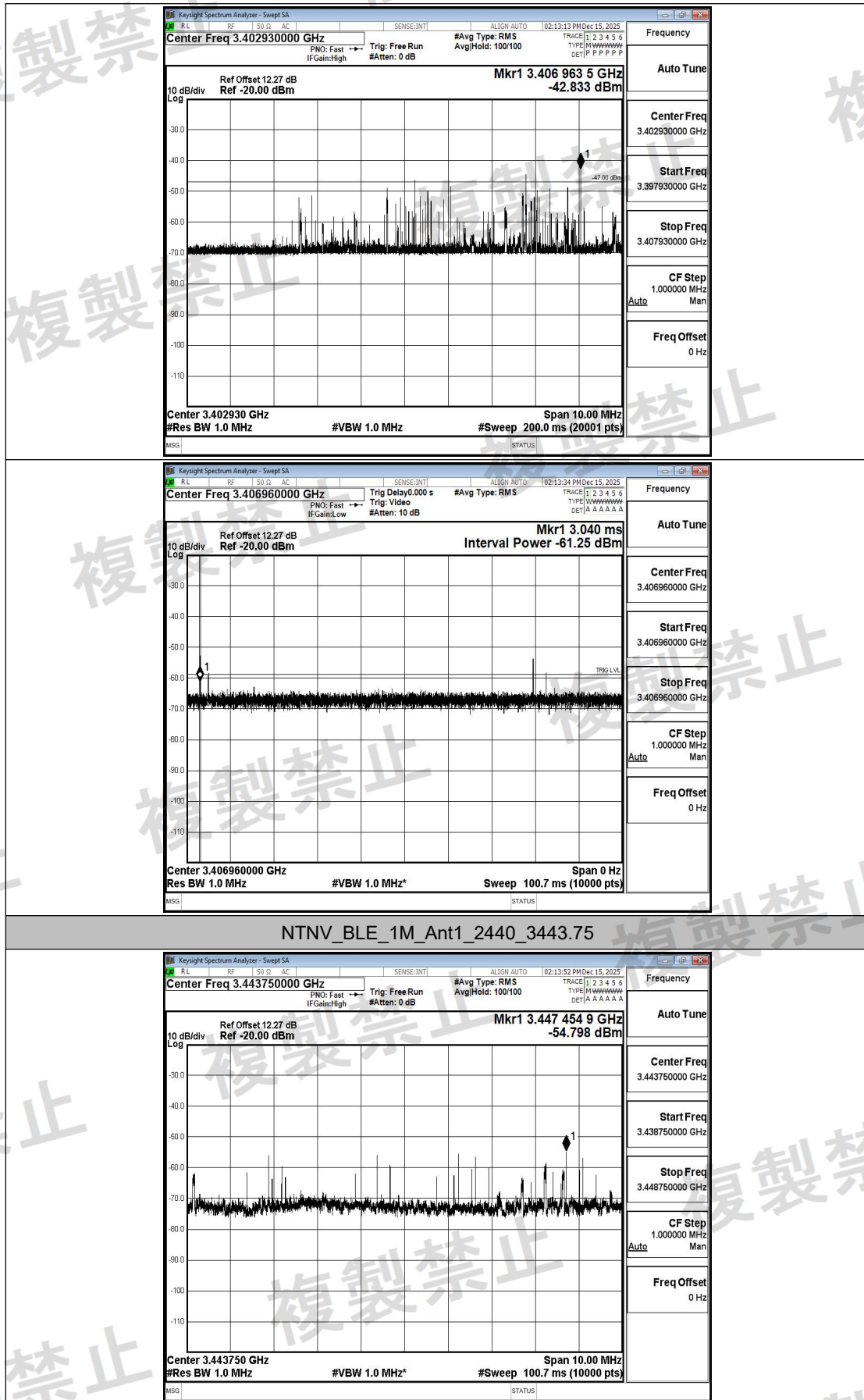
NTNV_BLE_1M_Ant1_2480_30~1000

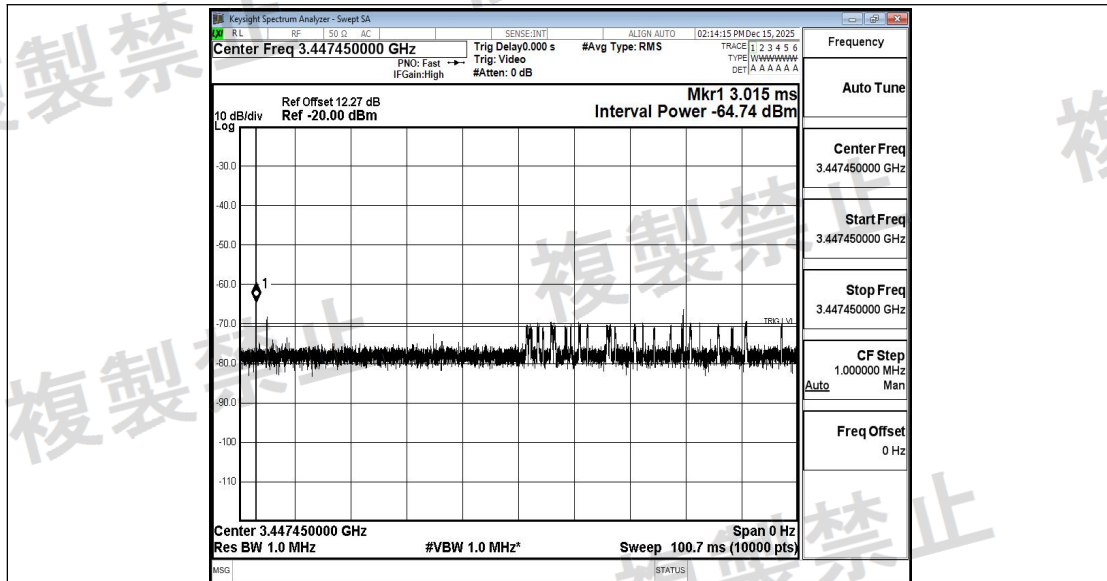




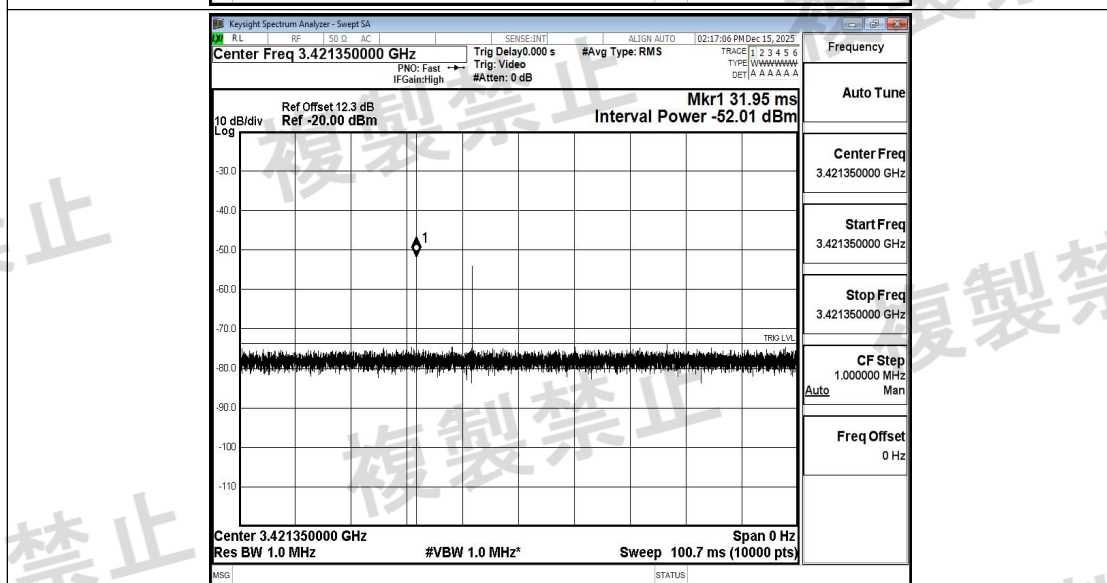
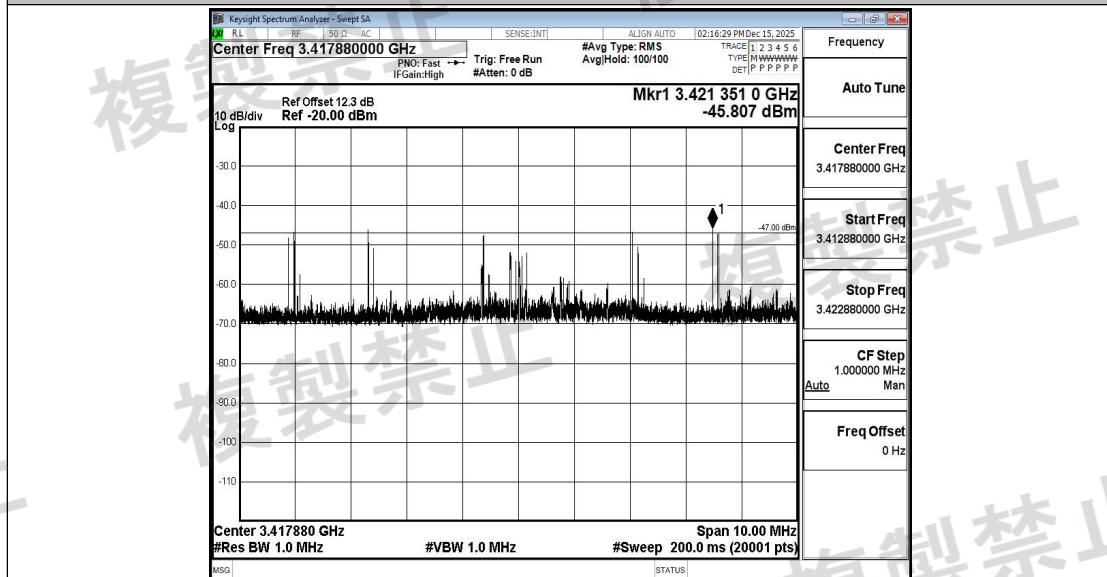
Test Graphs_Step2







NTNV_BLE_1M_Ant1_2480_3417.88



NTNV_BLE_1M_Ant1_2480_3445.48

