

Appendix A for BT LE Test Data

Product Name: BT RCU
Test Model: WH-323A

Environmental Conditions

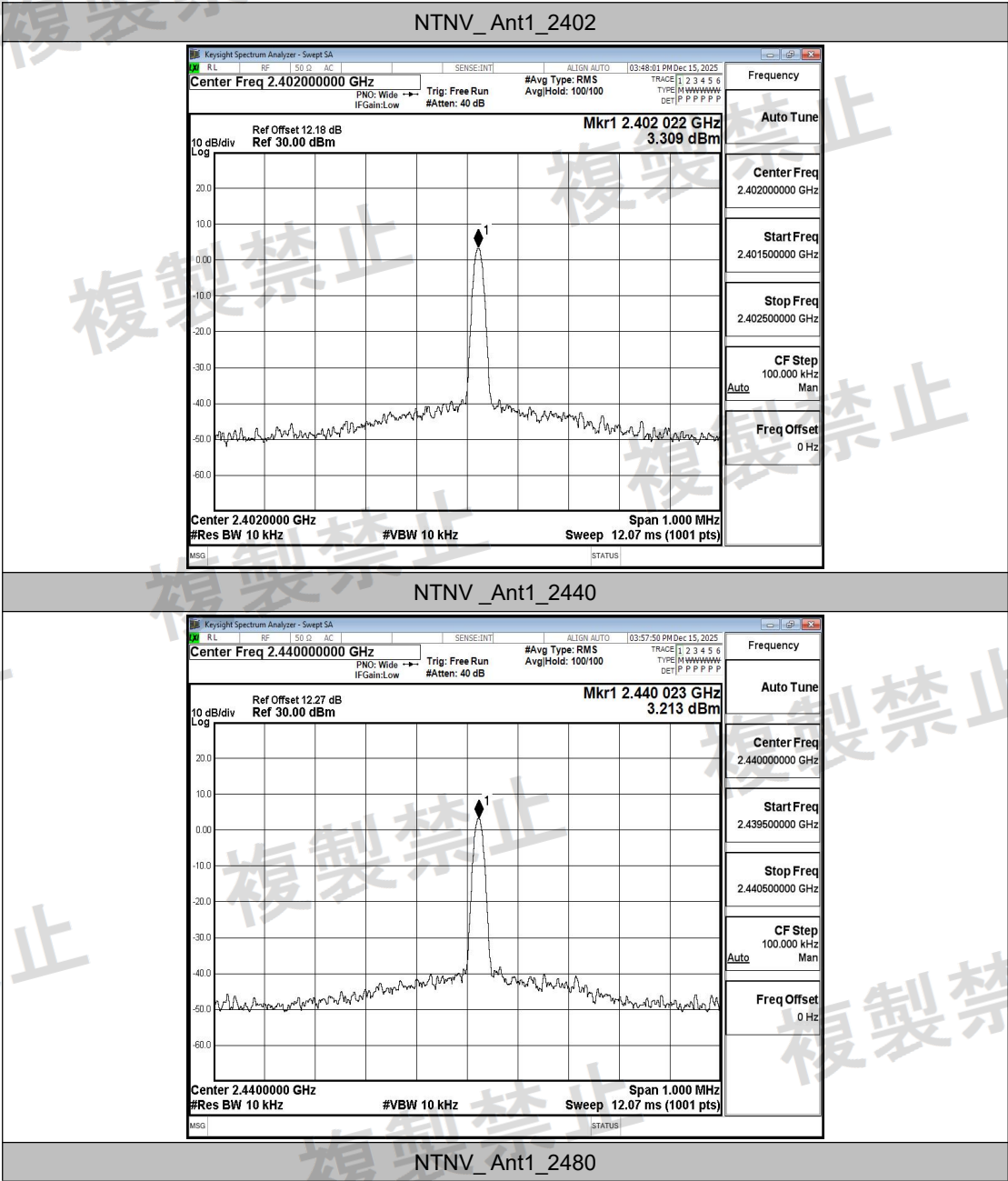
Temperature:	23.8°C
Relative Humidity:	52.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Suichao Lai
Supervised by:	Yan Chen

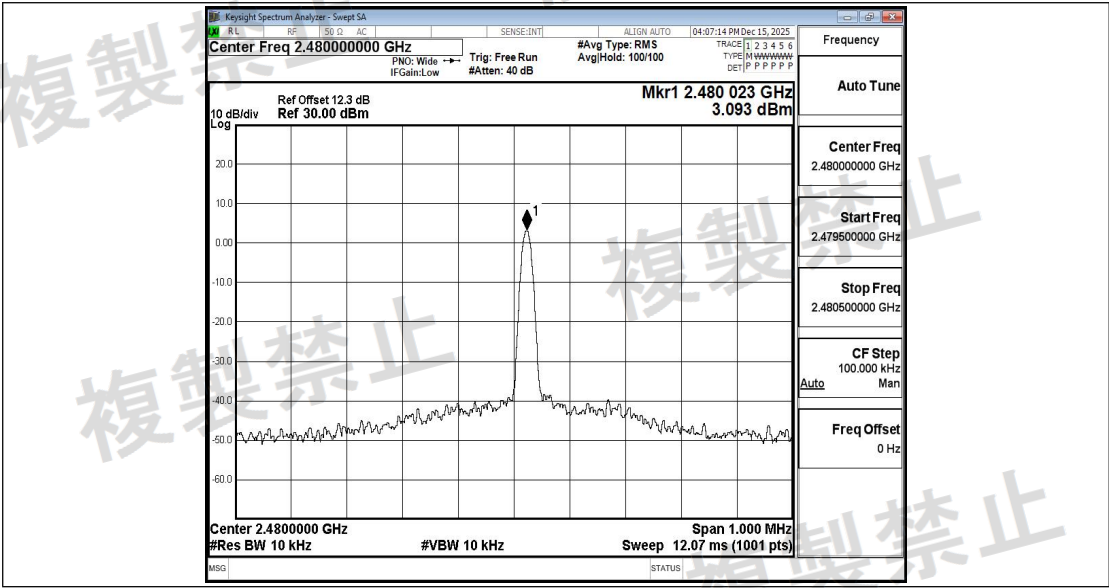
A.1 Frequency Error

Test Result

TestCondition	TestMode	Antenna	Frequency[MHz]	Result[ppm]	Limit[ppm]	Verdict
NTNV	Frequency Error	Ant1	2402	9.15903	±50	PASS
			2440	9.42623	±50	PASS
			2480	9.27419	±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	-0.96	0.8017	≤10	PASS
			2440	-0.22	0.9506	≤10	PASS
			2480	-0.17	0.9616	≤10	PASS

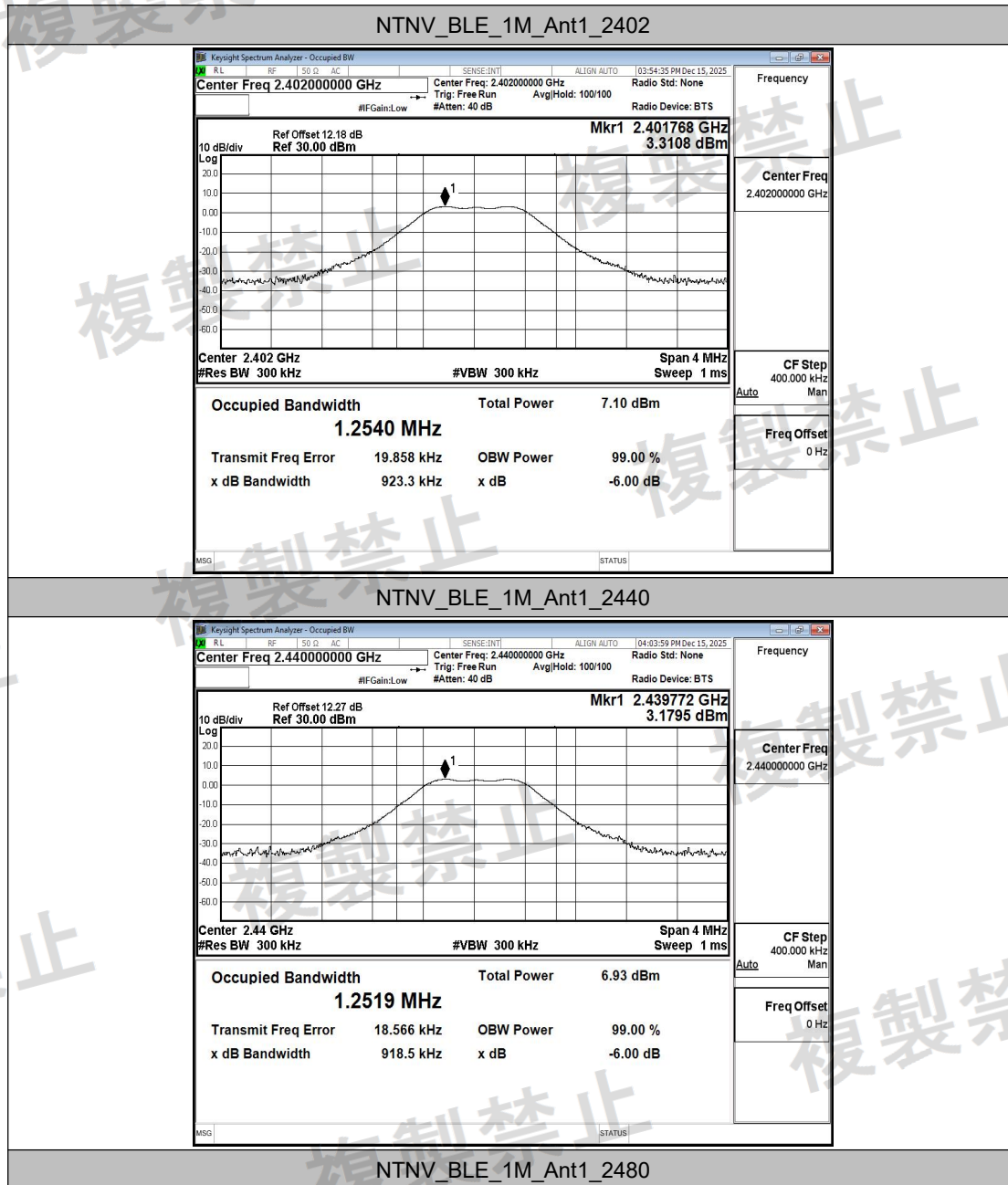
Tolerance								
Test Condition	Test Mode	Antenna	Frequency[MHz]	Power (mW)	Rated Power (mW)	Result (%)	Limit (%)	Verdict
NTNV	BLE_1M	Ant1	2402	0.8017	1	-19.83	+20	PASS
			2440	0.9506	1	-4.94	+20	PASS
			2480	0.9616	1	-3.84	+20	PASS

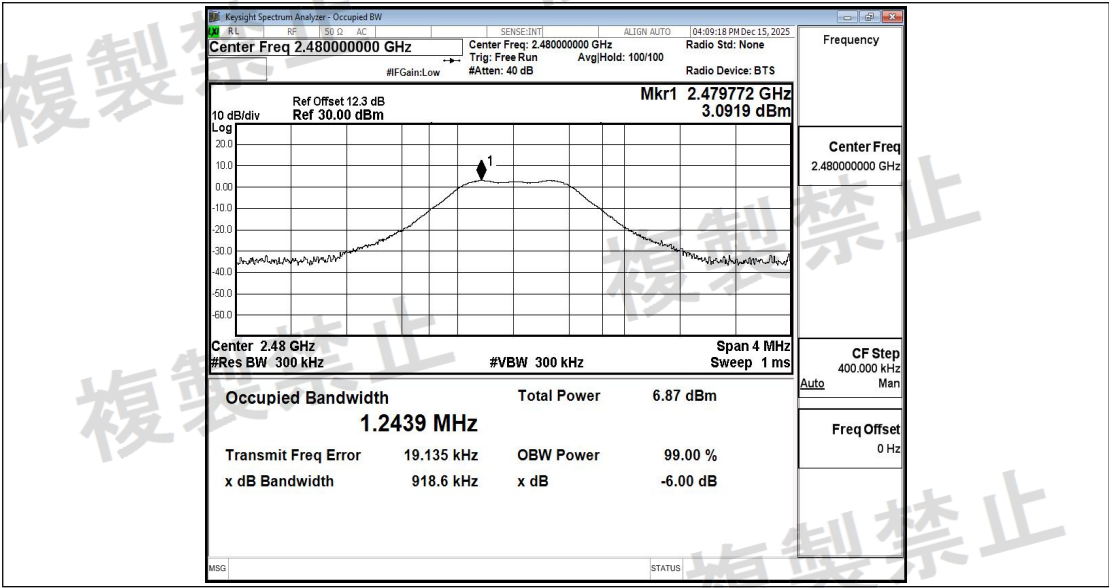
A.3 Occupied Bandwidth

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	1.254	≤26	PASS
			2440	1.252	≤26	PASS
			2480	1.244	≤26	PASS

Test Graphs



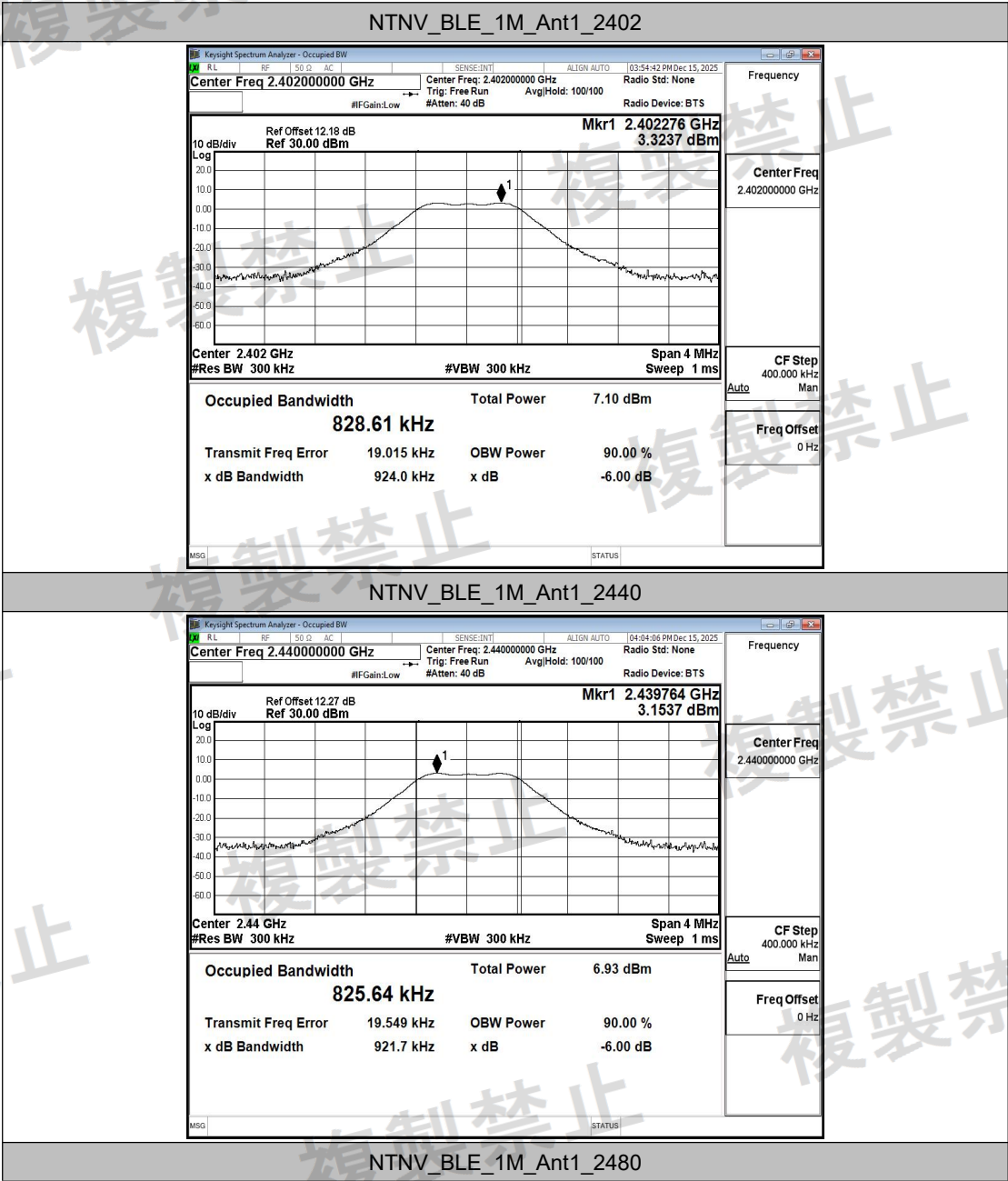


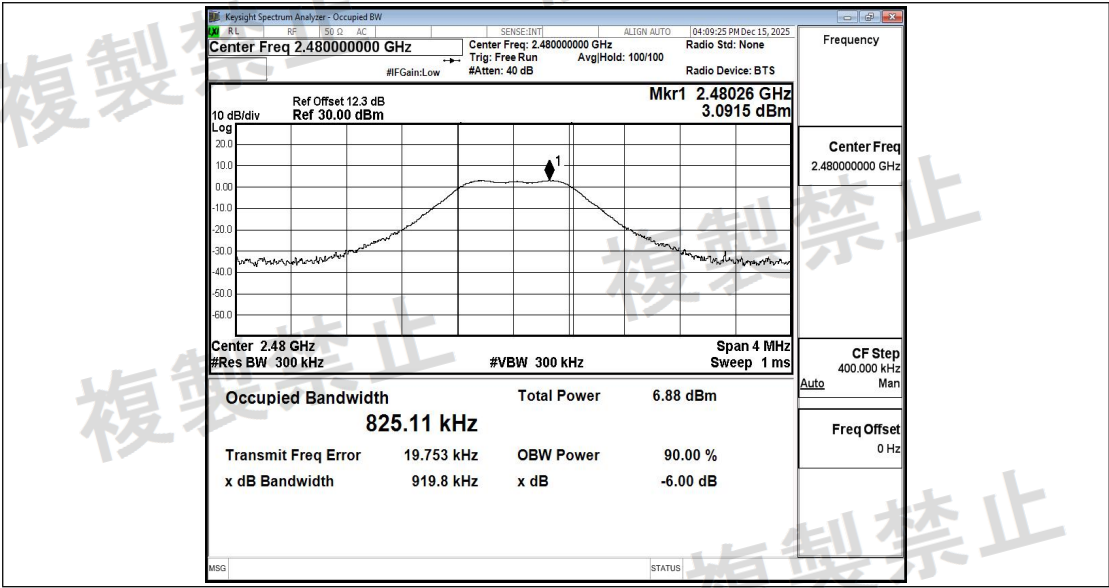
A.4 Spread Bandwidth

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	0.829	---	PASS
			2440	0.826	---	PASS
			2480	0.825	---	PASS

Test Graphs



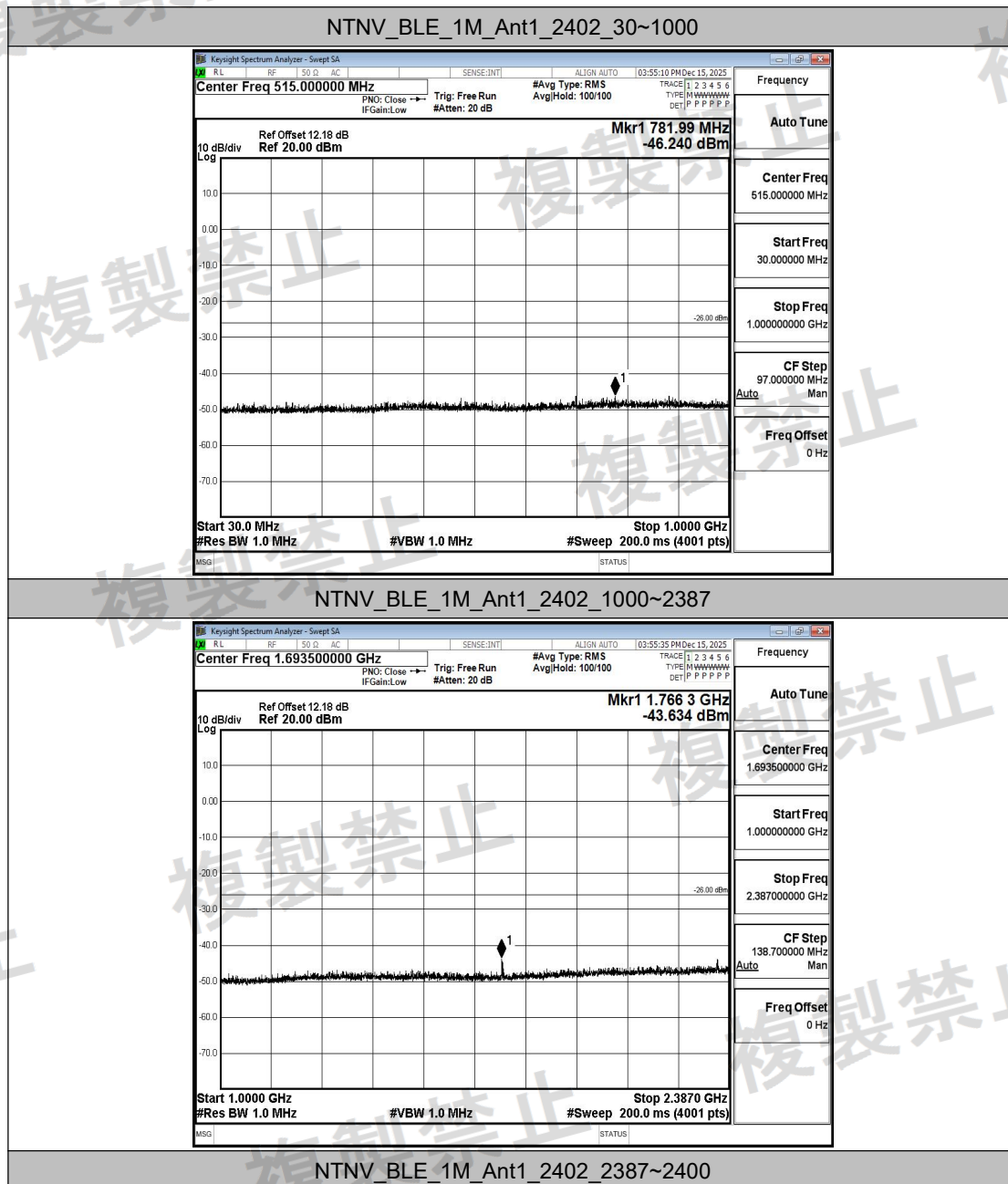


A.5 Spurious Emission of TX

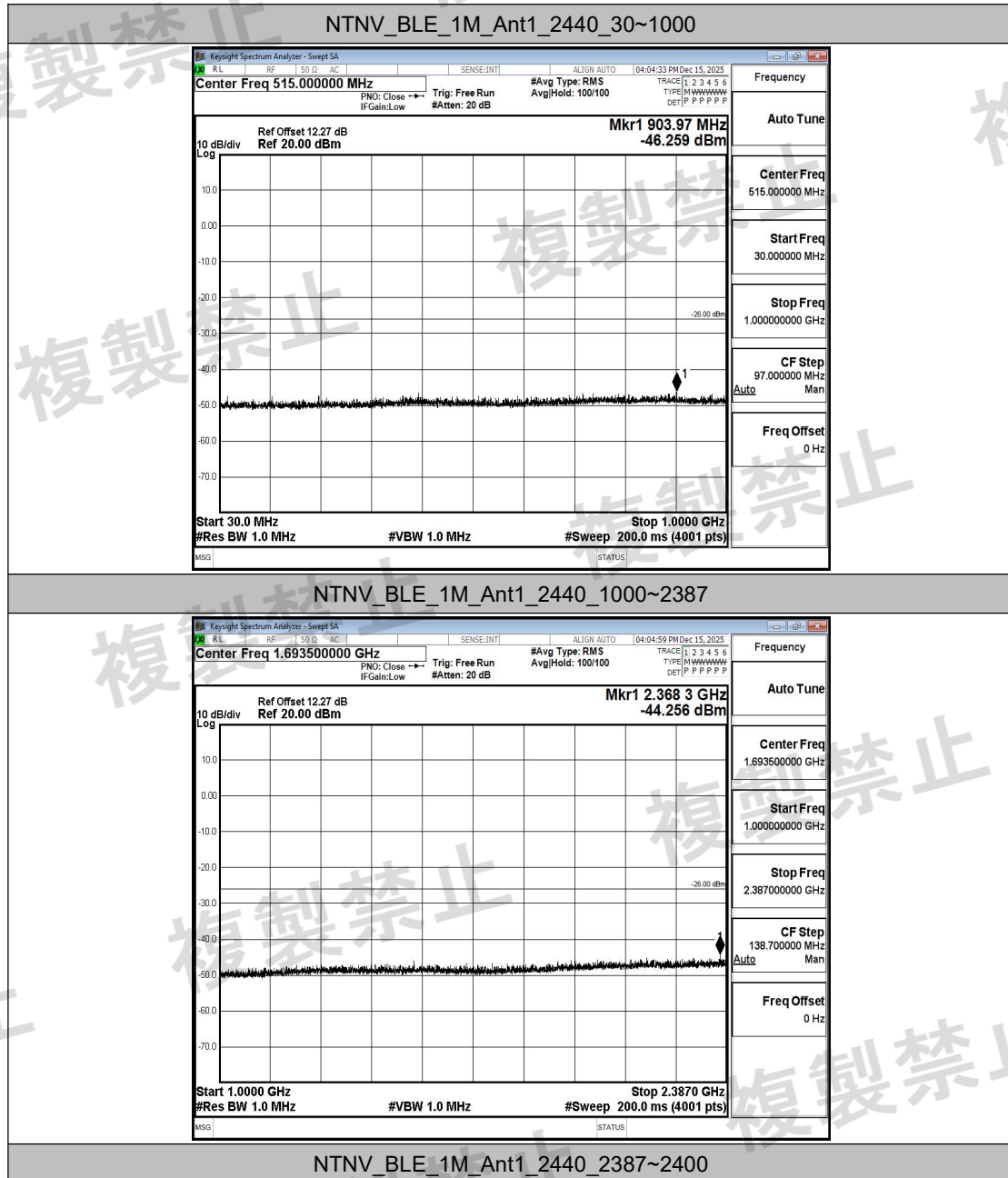
Test Result

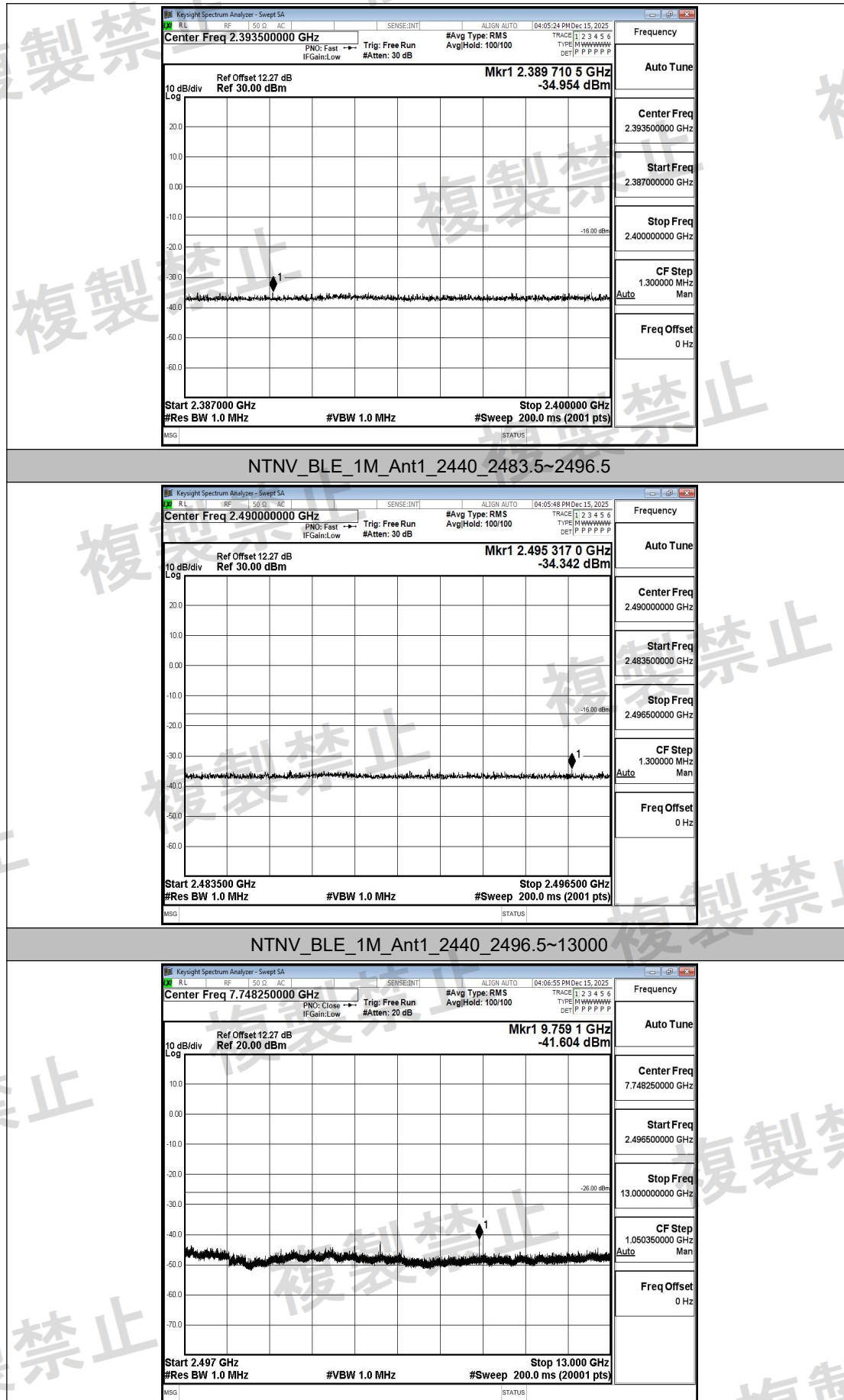
TestCondition	TestMode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~1000	781.99	-46.24	≤-26	0.02377	≤2.5	PASS
				1000~2387	1766.32	-43.63	≤-26	0.04335	≤2.5	PASS
				2387~2400	2399.98	-30.90	≤-16	0.81283	≤25	PASS
				2483.5~2496.5	2494.37	-34.06	≤-16	0.39264	≤25	PASS
				2496.5~13000	4804.64	-42.88	≤-26	0.05152	≤2.5	PASS
			2440	30~1000	903.97	-46.26	≤-26	0.02366	≤2.5	PASS
				1000~2387	2368.28	-44.26	≤-26	0.03750	≤2.5	PASS
				2387~2400	2389.71	-34.95	≤-16	0.31989	≤25	PASS
				2483.5~2496.5	2495.32	-34.34	≤-16	0.36813	≤25	PASS
				2496.5~13000	9759.15	-41.60	≤-26	0.06918	≤2.5	PASS
			2480	30~1000	898.64	-46.04	≤-26	0.02489	≤2.5	PASS
				1000~2387	1769.44	-40.44	≤-26	0.09036	≤2.5	PASS
				2387~2400	2393.42	-34.54	≤-16	0.35156	≤25	PASS
				2483.5~2496.5	2494.67	-34.43	≤-16	0.36058	≤25	PASS
				2496.5~13000	2537.46	-29.08	≤-26	1.23595	≤2.5	PASS

Test Graphs

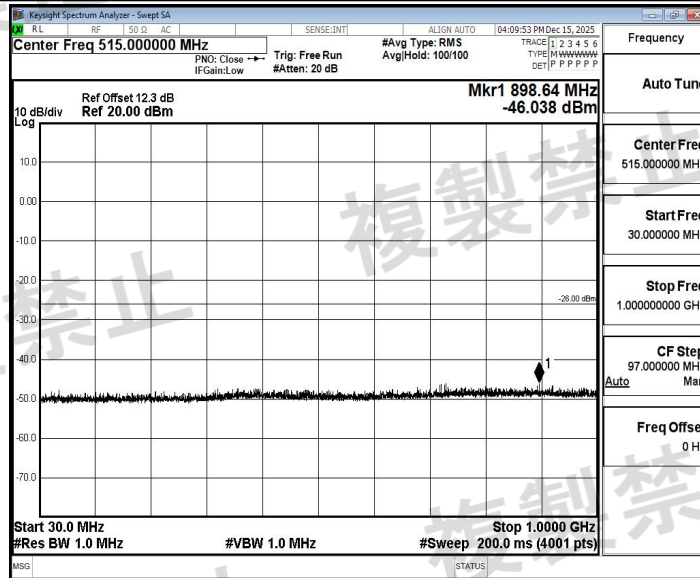




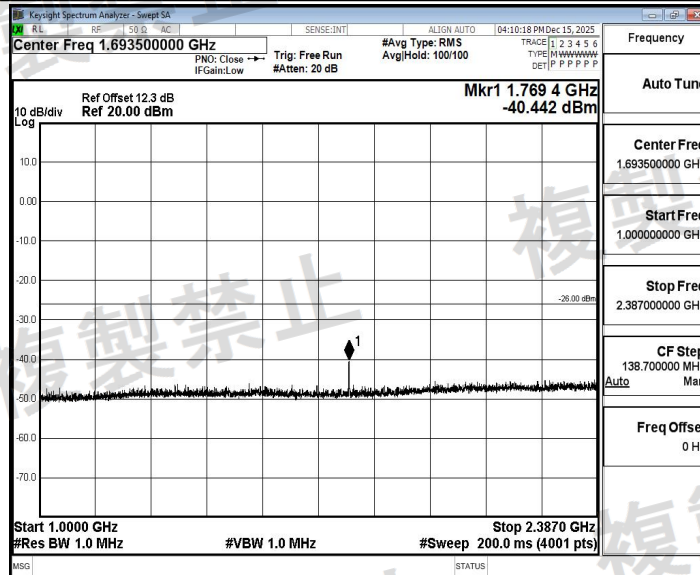




NTNV_BLE_1M_Ant1_2480_30~1000



NTNV_BLE_1M_Ant1_2480_1000~2387



NTNV_BLE_1M_Ant1_2480_2387~2400



A.6 Spurious Emission of RX

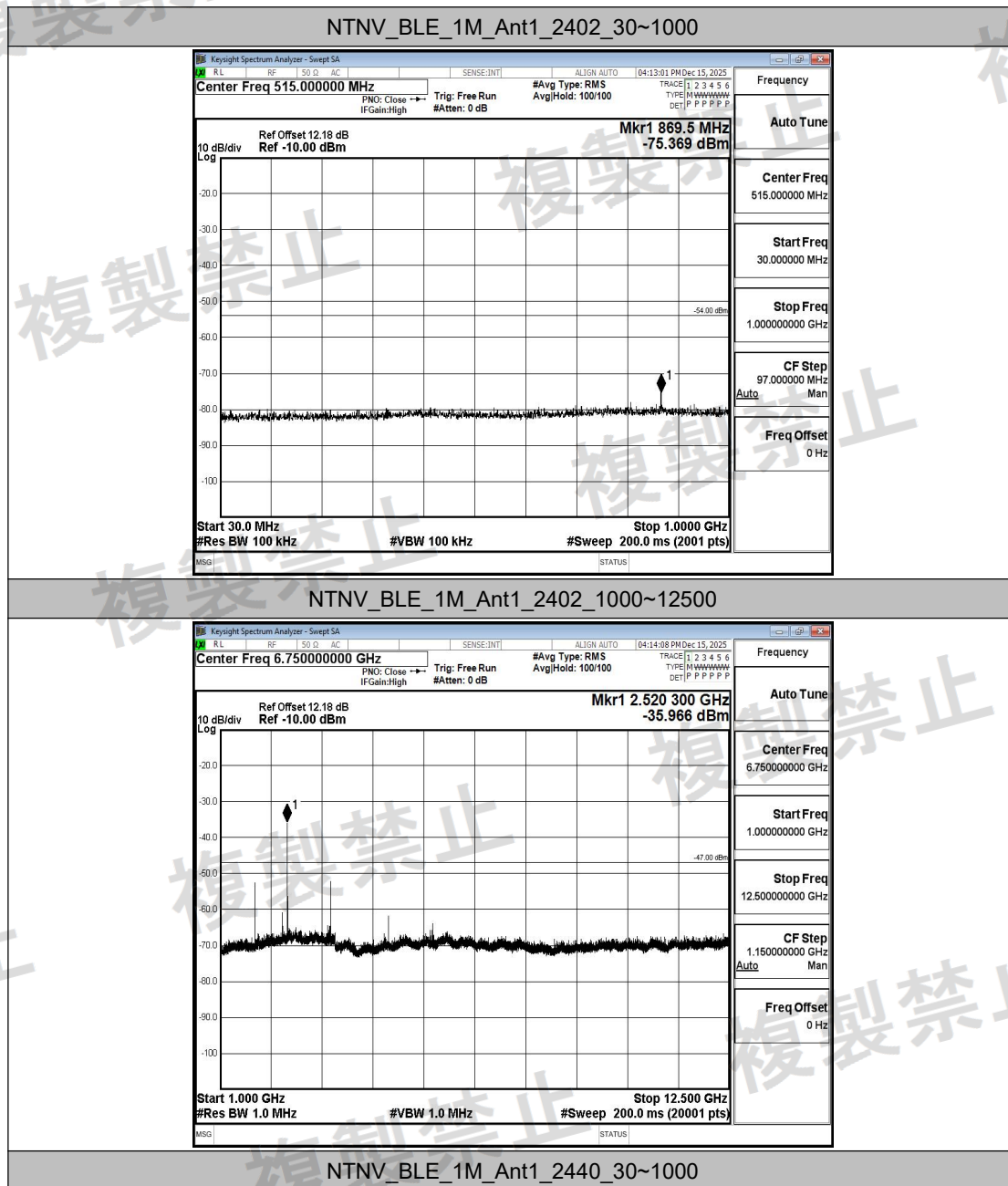
Test Result

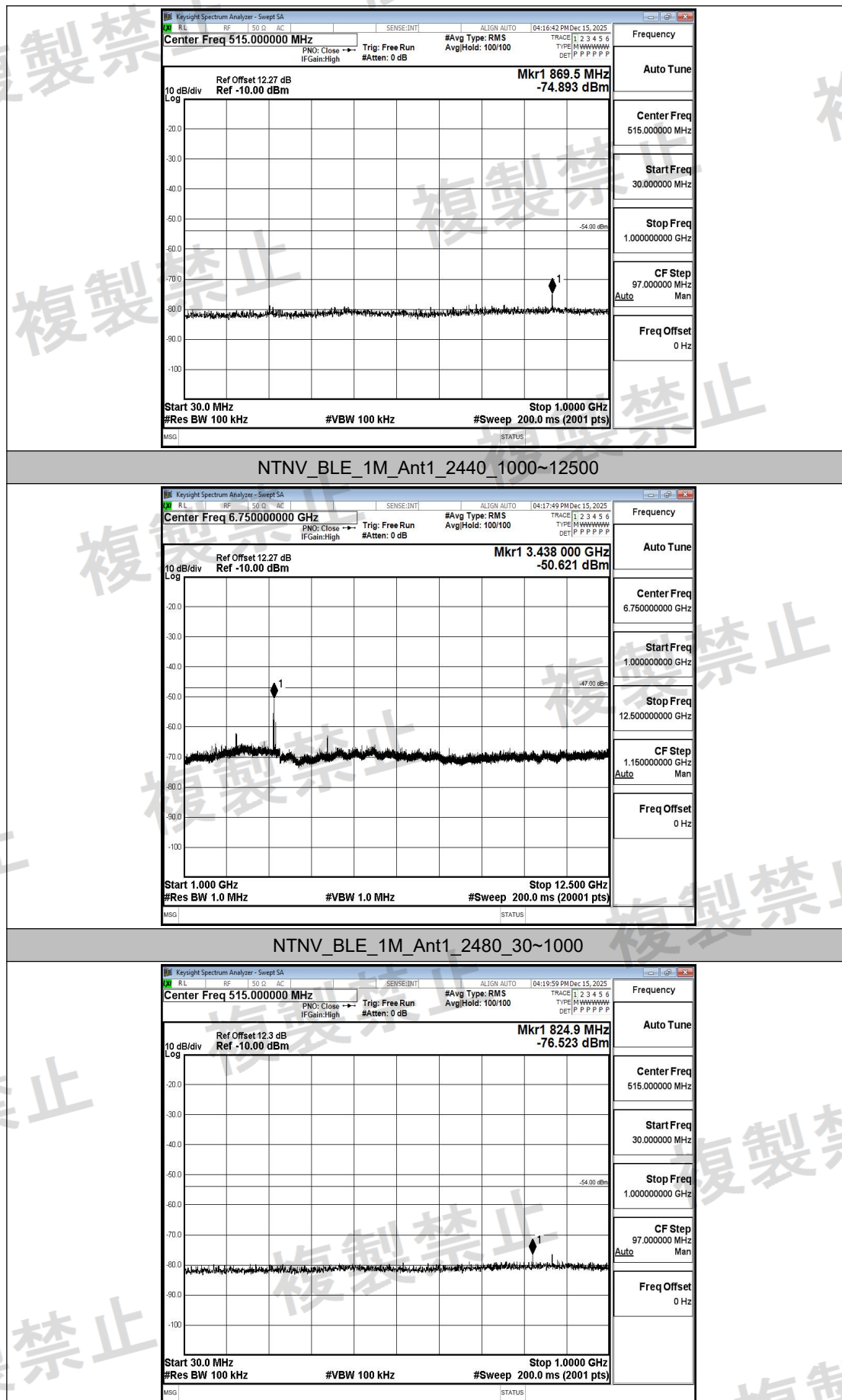
TestCondition	TestMode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~1000	869.54	-75.37	≤-54	0.02904	≤4	PASS
				1000~12500	2520.3	-35.97	≤-47	252.92980	≤20	PASS
			2440	30~1000	869.54	-74.89	≤-54	0.03243	≤4	PASS
				1000~12500	3438	-50.62	≤-47	8.66962	≤20	PASS
			2480	30~1000	824.92	-76.52	≤-54	0.02228	≤4	PASS
				1000~12500	5812.18	-52.97	≤-47	5.04661	≤20	PASS

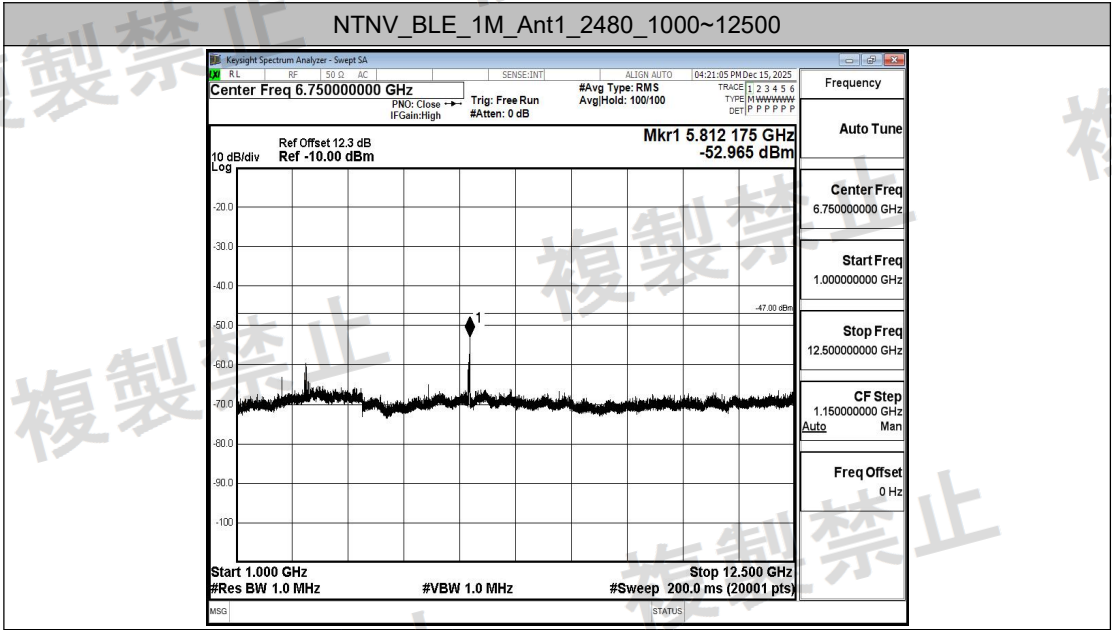
Test Result_Step2

TestCondition	TestMode	Antenna	Freq(M Hz)	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	BLE_1M	Ant1	2402	1783.73	-79.94	≤-47	0.01014	≤20	PASS
				2520.30	-77.44	≤-47	0.01803	≤20	PASS
				3497.80	-54.20	≤-47	3.80189	≤20	PASS
			2440	3419.03	-49.21	≤-47	11.99499	≤20	PASS
				3438.00	-61.42	≤-47	0.72111	≤20	PASS
			2480	5812.18	-54.34	≤-47	3.68129	≤20	PASS

Test Graphs







Test Graphs_Step2

