

Appendix A for BT LE Test Data

Product Name: Tilta Lite Control Handle - Silver

Test Model: TKL-SG-CH-S

Environmental Conditions

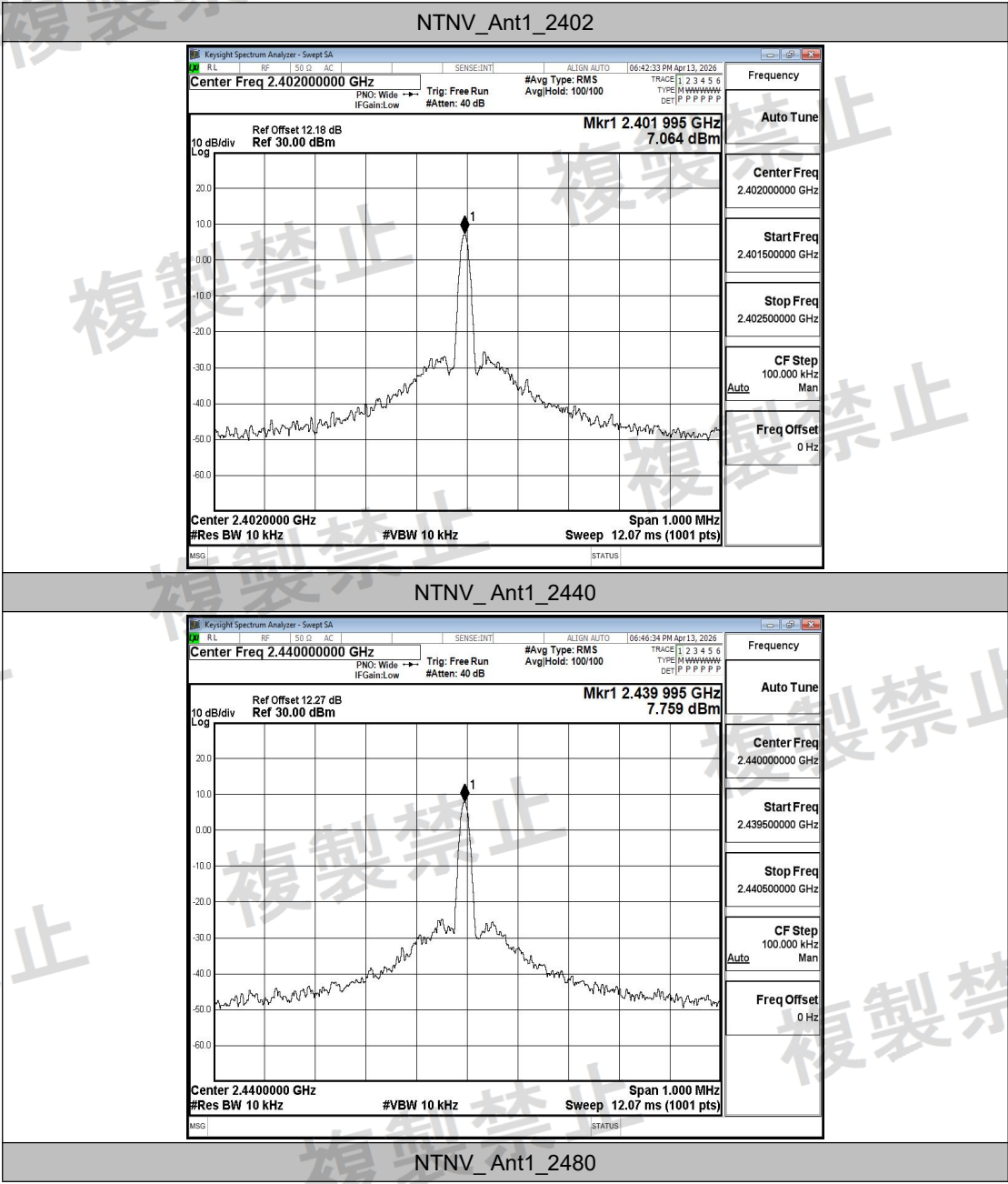
Temperature:	23.8°C
Relative Humidity:	52.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhao Xing Hai
Supervised by:	Fengliu Tang

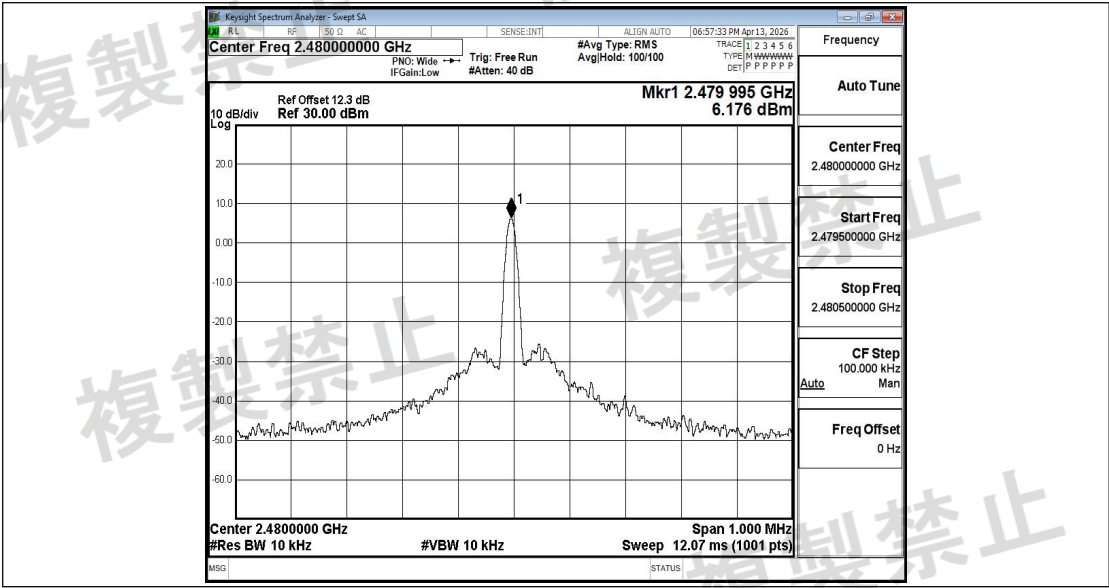
A.1 Frequency Error

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTNV	Frequency Error	Ant1	2402	-2.08160	±50	PASS
			2440	-2.04918	±50	PASS
			2480	-2.01613	±50	PASS

Test Graphs

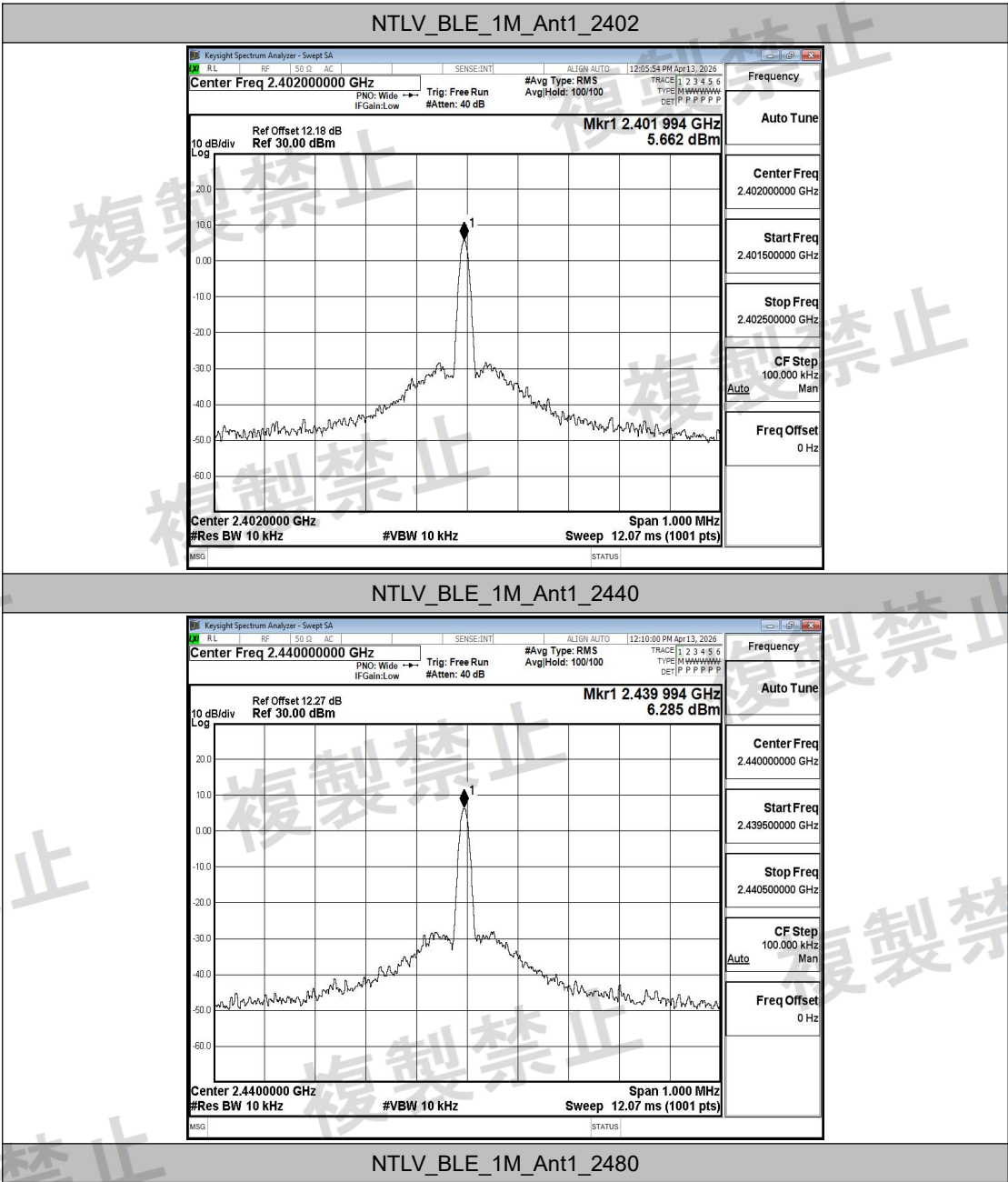


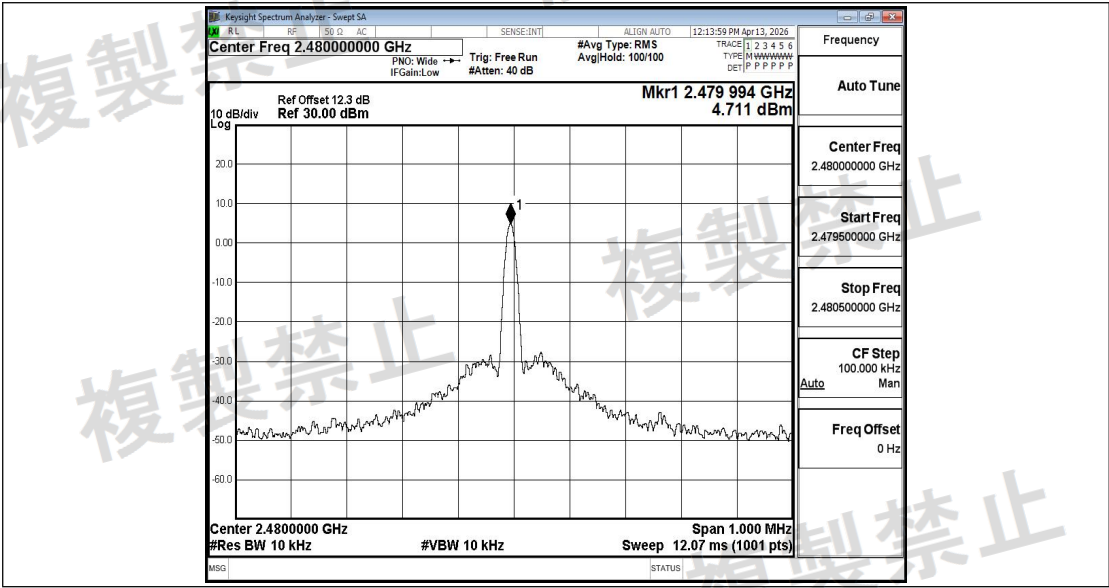


Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTLV	BLE_1M	Ant1	2402	-2.49792	±50	PASS
			2440	-2.45902	±50	PASS
			2480	-2.41936	±50	PASS

Test Graphs

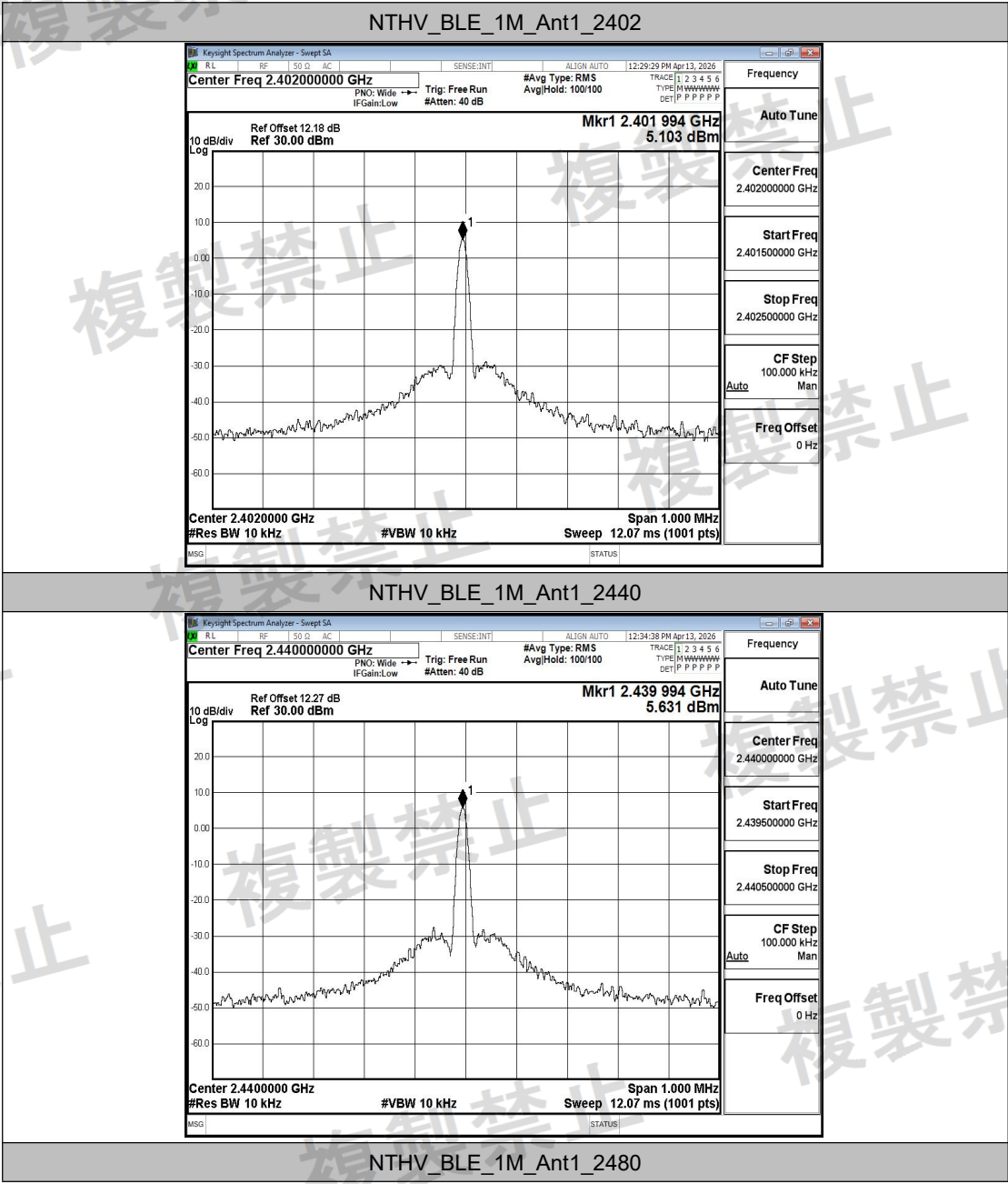


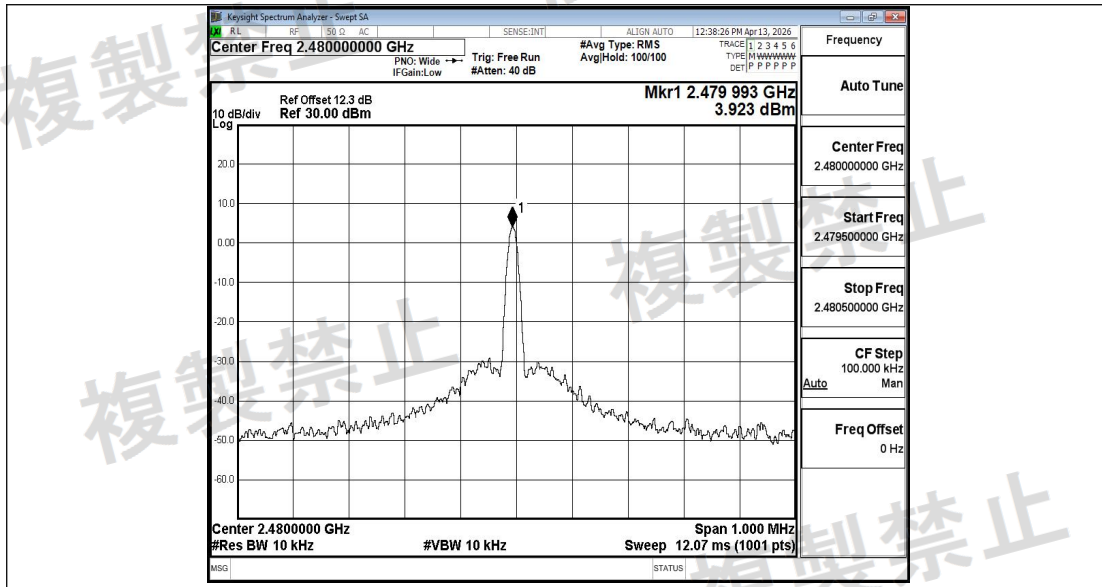


Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTHV	BLE_1M	Ant1	2402	-2.49792	±50	PASS
			2440	-2.45902	±50	PASS
			2480	-2.82258	±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	0.16	1.0375	≤10	PASS
			2440	0.27	1.0641	≤10	PASS
			2480	0.28	1.0666	≤10	PASS

Tolerance								
Test Condition	Test Mode	Antenna	Frequency[MHz]	Power (mW)	Rated Power (mW)	Result (%)	Limit (%)	Verdict
NTNV	BLE_1M	Ant1	2402	1.0375	1.5	-30.83	+20	PASS
			2440	1.0641	1.5	-29.06	+20	PASS
			2480	1.0666	1.5	-28.89	+20	PASS

Test Result

Antenna Power							
TestCondition	TestMode	Antenna	Freq(M Hz)	Result(dBm)	Result(mW)	Limit(mW)	Verdict
NTLV	BLE_1M	Ant1	2402	-1.36	0.7311	≤10	PASS
			2440	1.07	1.2794	≤10	PASS
			2480	-0.51	0.8892	≤10	PASS

Tolerance								
Test Condition	Test Mode	Antenna	Freq(MHz)	Power (mW)	RatedPower (mW)	Result (%)	Limit (%)	Verdict
NTLV	BLE_1M	Ant1	2402	0.7311	1.5	-51.26	20	PASS
			2440	1.2794	1.5	-14.71	20	PASS
			2480	0.8892	1.5	-40.72	20	PASS

Test Result

Antenna Power							
TestCondition	TestMode	Antenna	Freq(MHz)	Result(dBm)	Result(mW)	Limit(mW)	Verdict
NTHV	BLE_1M	Ant1	2402	-1.82	0.6577	≤10	PASS
			2440	0.22	1.0520	≤10	PASS
			2480	-1.49	0.7096	≤10	PASS

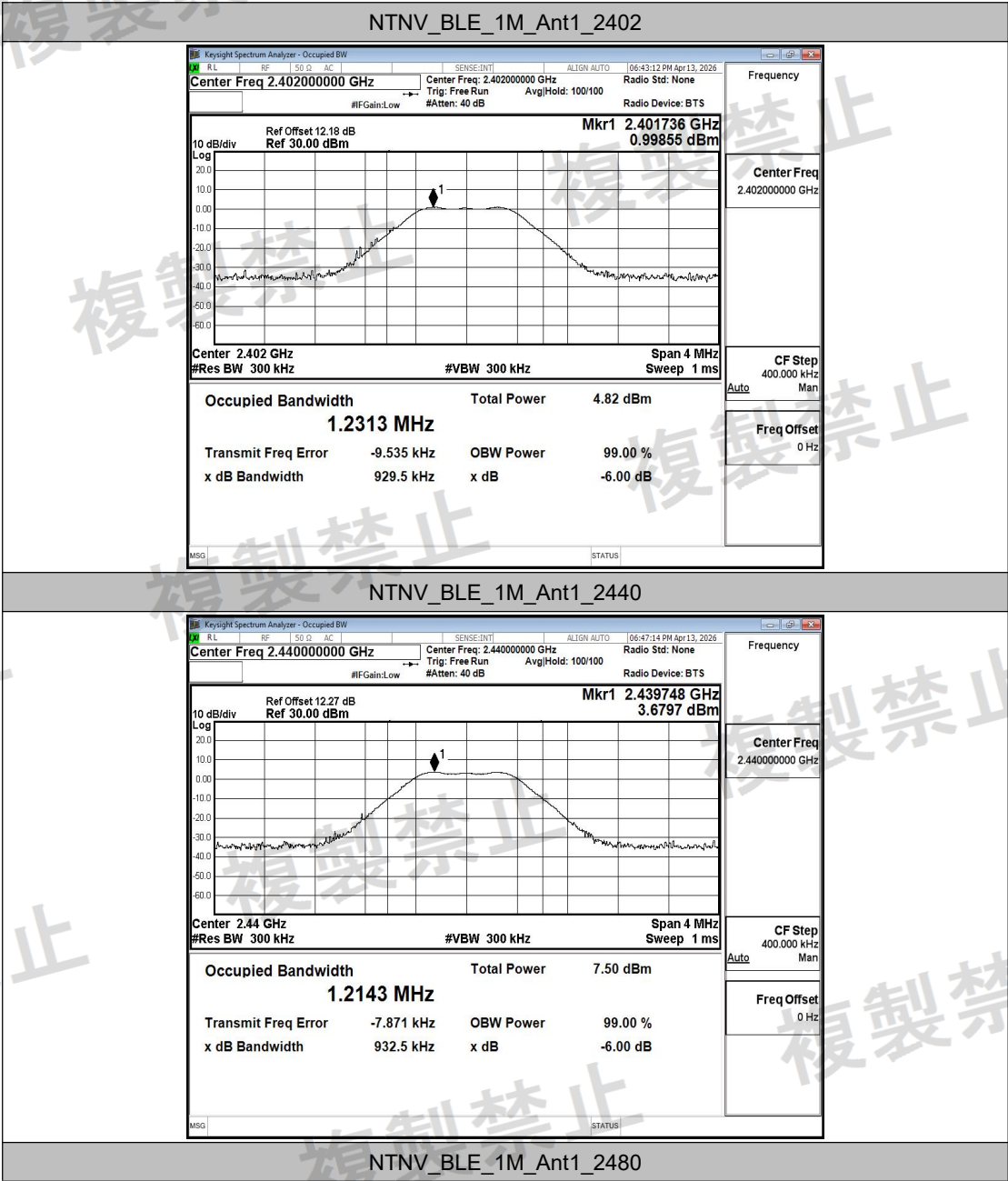
Tolerance								
Test Condition	Test Mode	Antenna	Freq(MHz)	Power (mW)	RatedPower (mW)	Result (%)	Limit (%)	Verdict
NTHV	BLE_1M	Ant1	2402	0.6577	1.5	-56.15	20	PASS
			2440	1.0520	1.5	-29.87	20	PASS
			2480	0.7096	1.5	-53.69	20	PASS

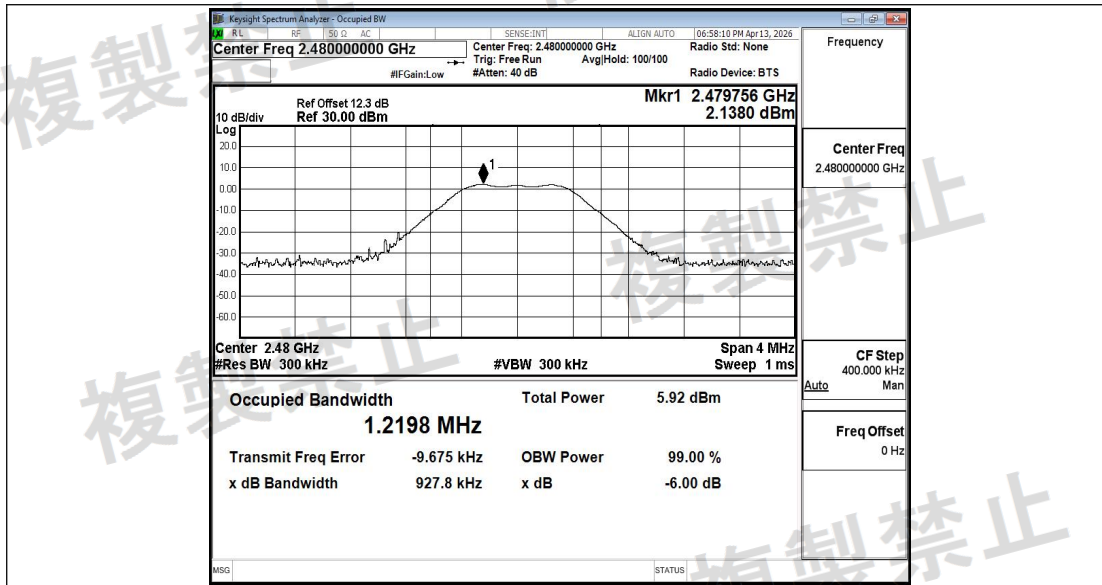
A.3 Occupied Bandwidth

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	1.231	≤26	PASS
			2440	1.214	≤26	PASS
			2480	1.220	≤26	PASS

Test Graphs

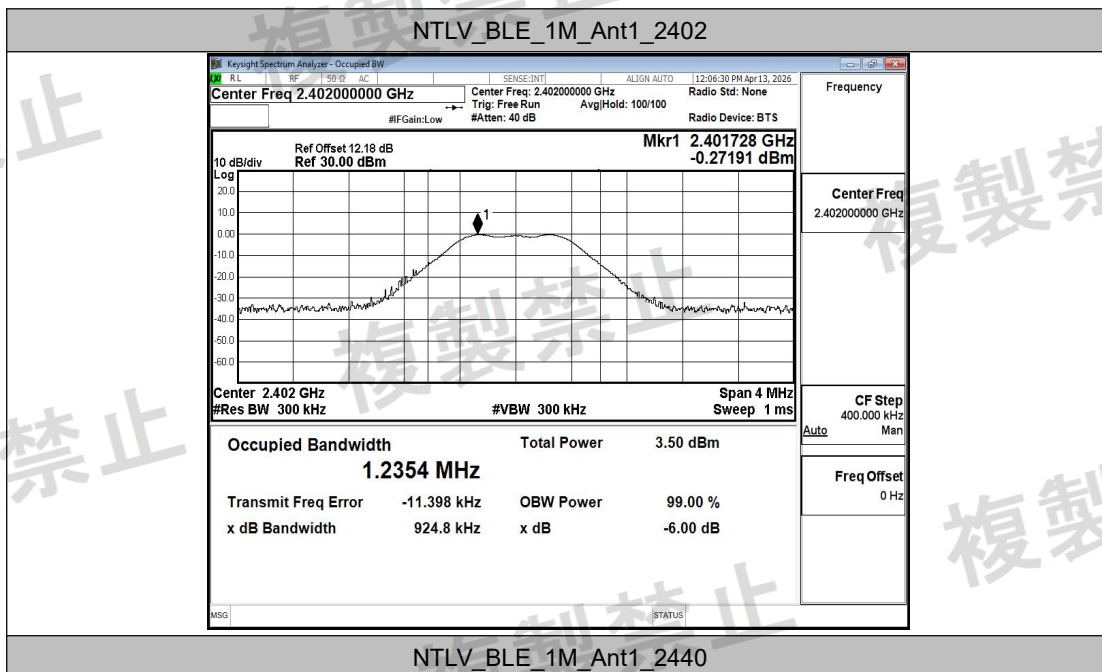


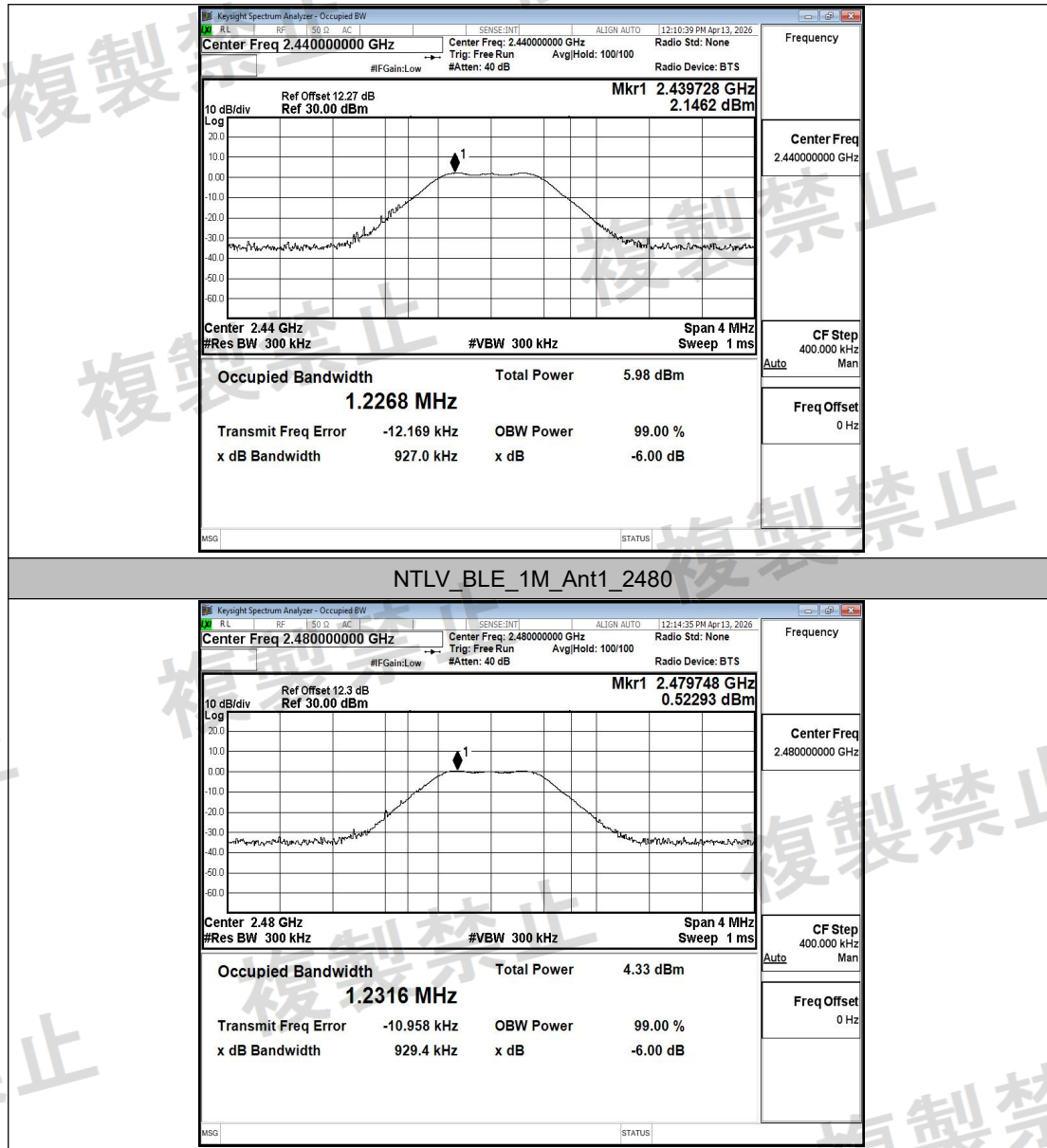


Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTLV	BLE_1M	Ant1	2402	1.235	≤26	PASS
			2440	1.227	≤26	PASS
			2480	1.232	≤26	PASS

Test Graphs

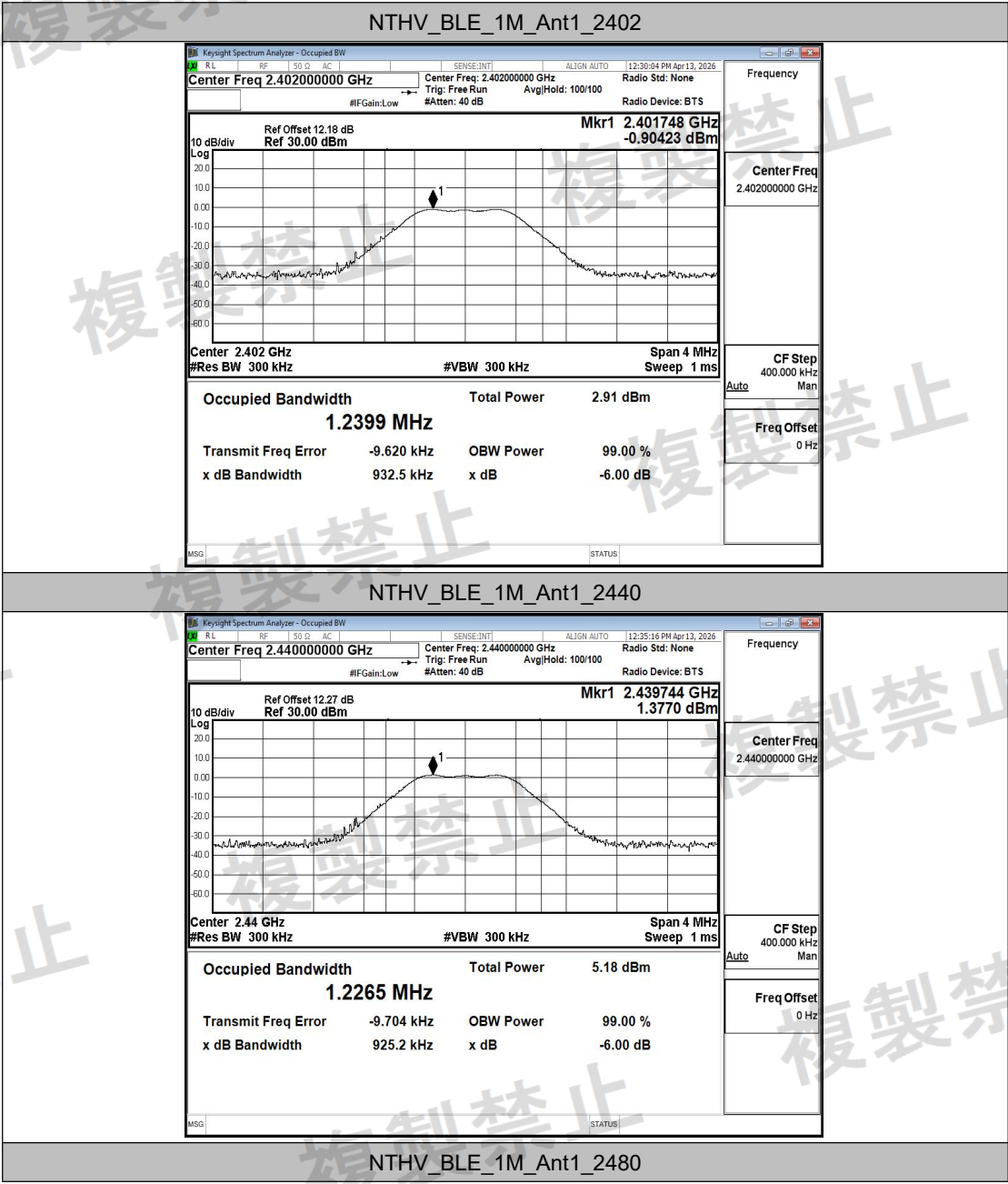


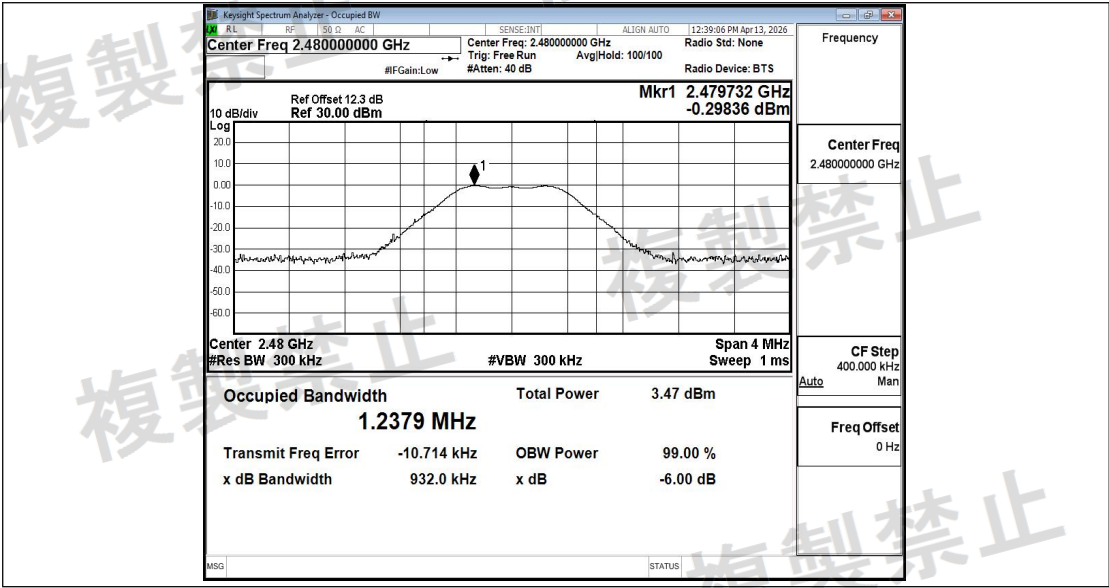


Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTHV	BLE_1M	Ant1	2402	1.240	≤26	PASS
			2440	1.227	≤26	PASS
			2480	1.238	≤26	PASS

Test Graphs



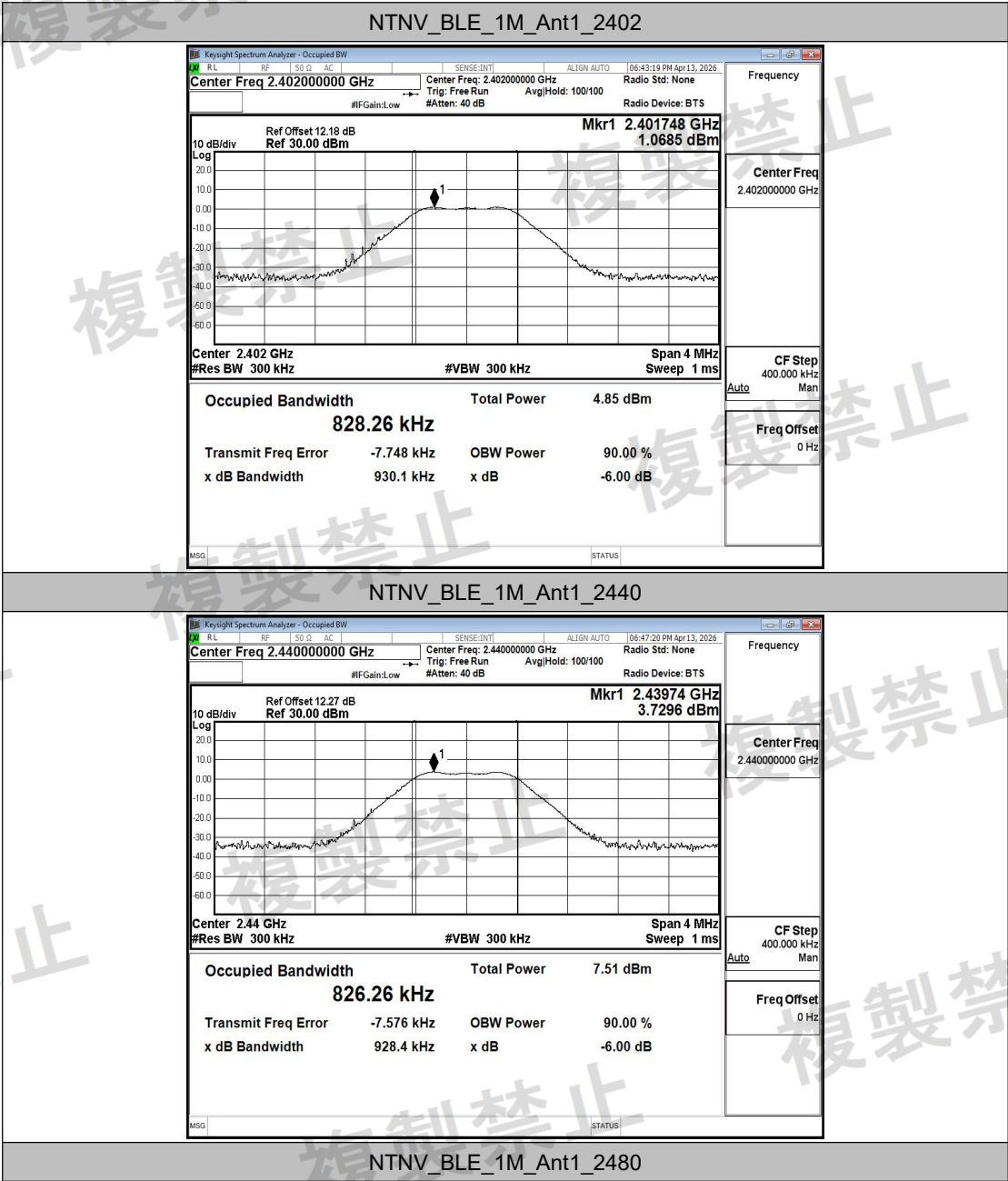


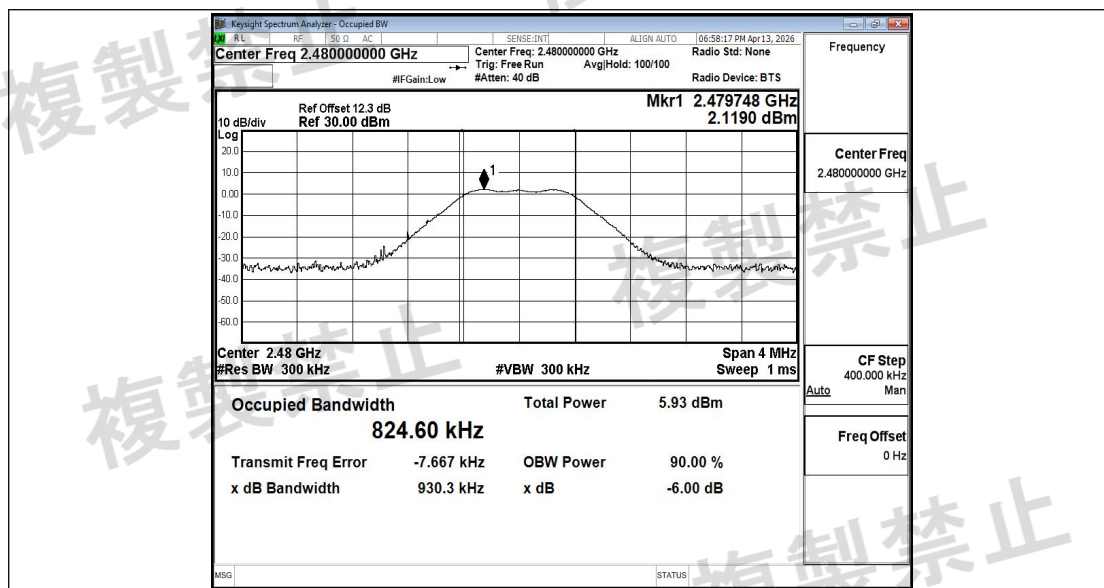
A.4 Spread Bandwidth

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	0.828	---	PASS
			2440	0.826	---	PASS
			2480	0.825	---	PASS

Test Graphs

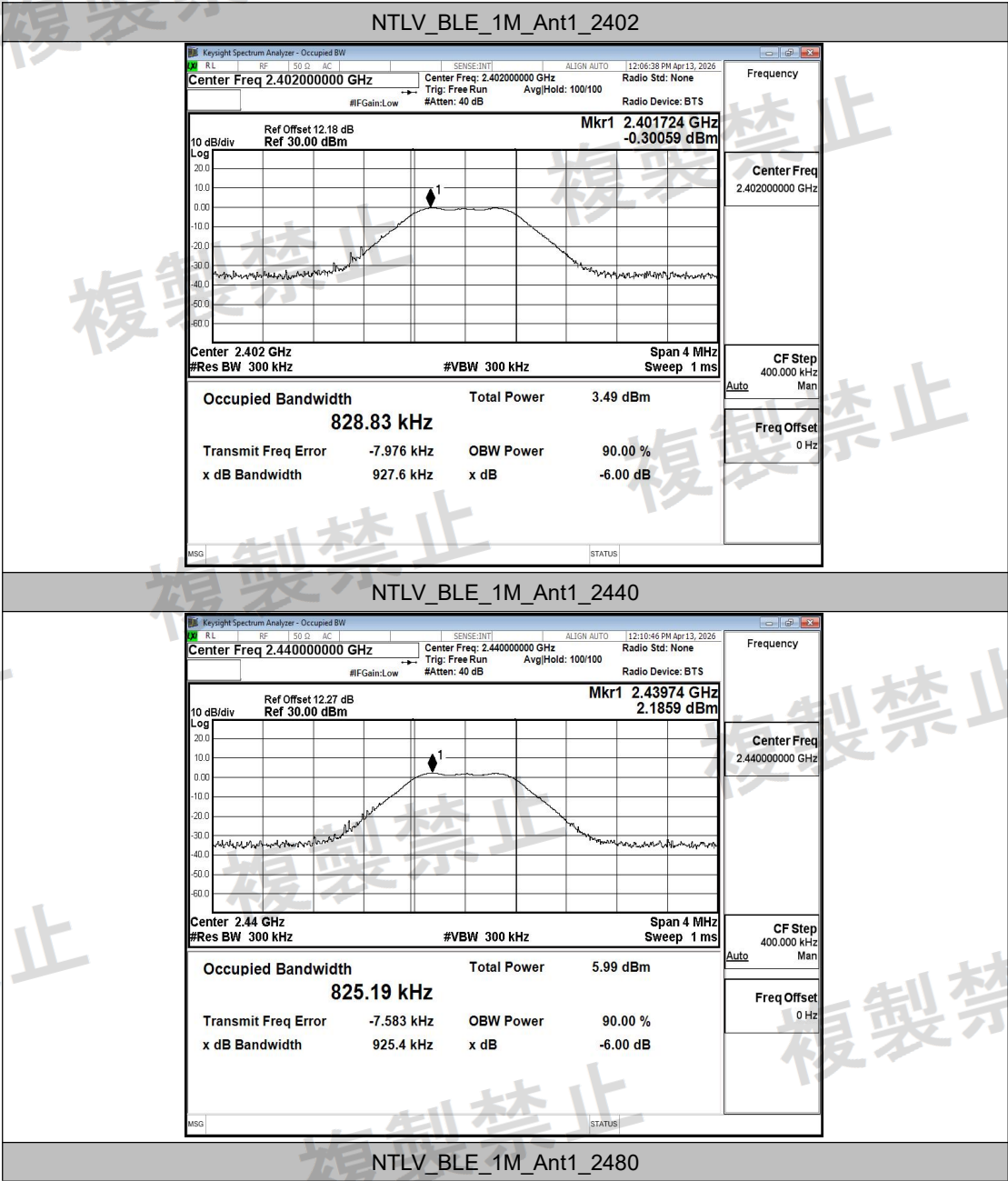


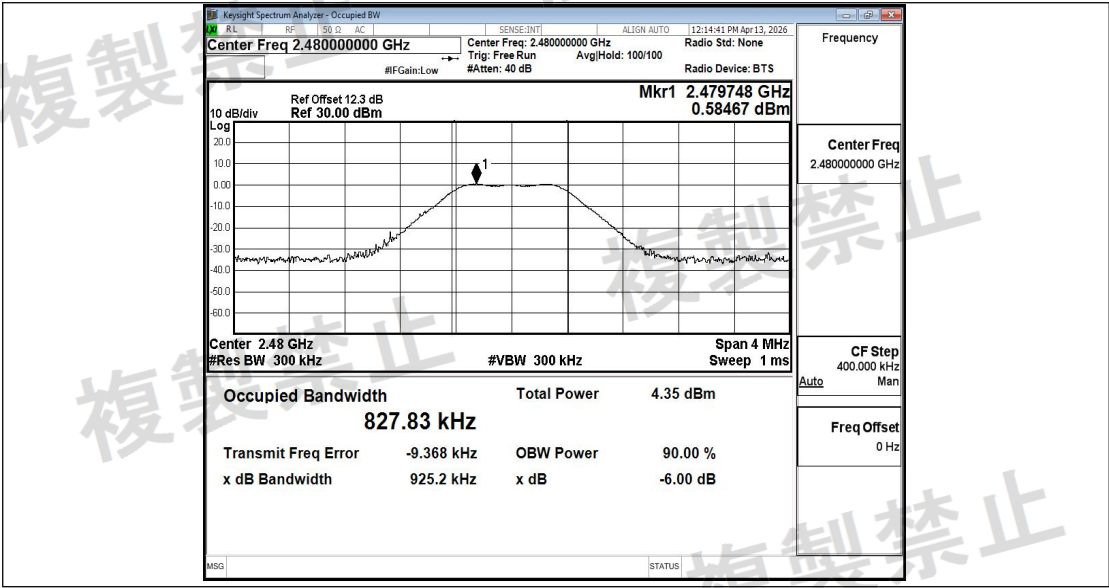


Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTLV	BLE_1M	Ant1	2402	0.829	---	PASS
			2440	0.825	---	PASS
			2480	0.828	---	PASS

Test Graphs

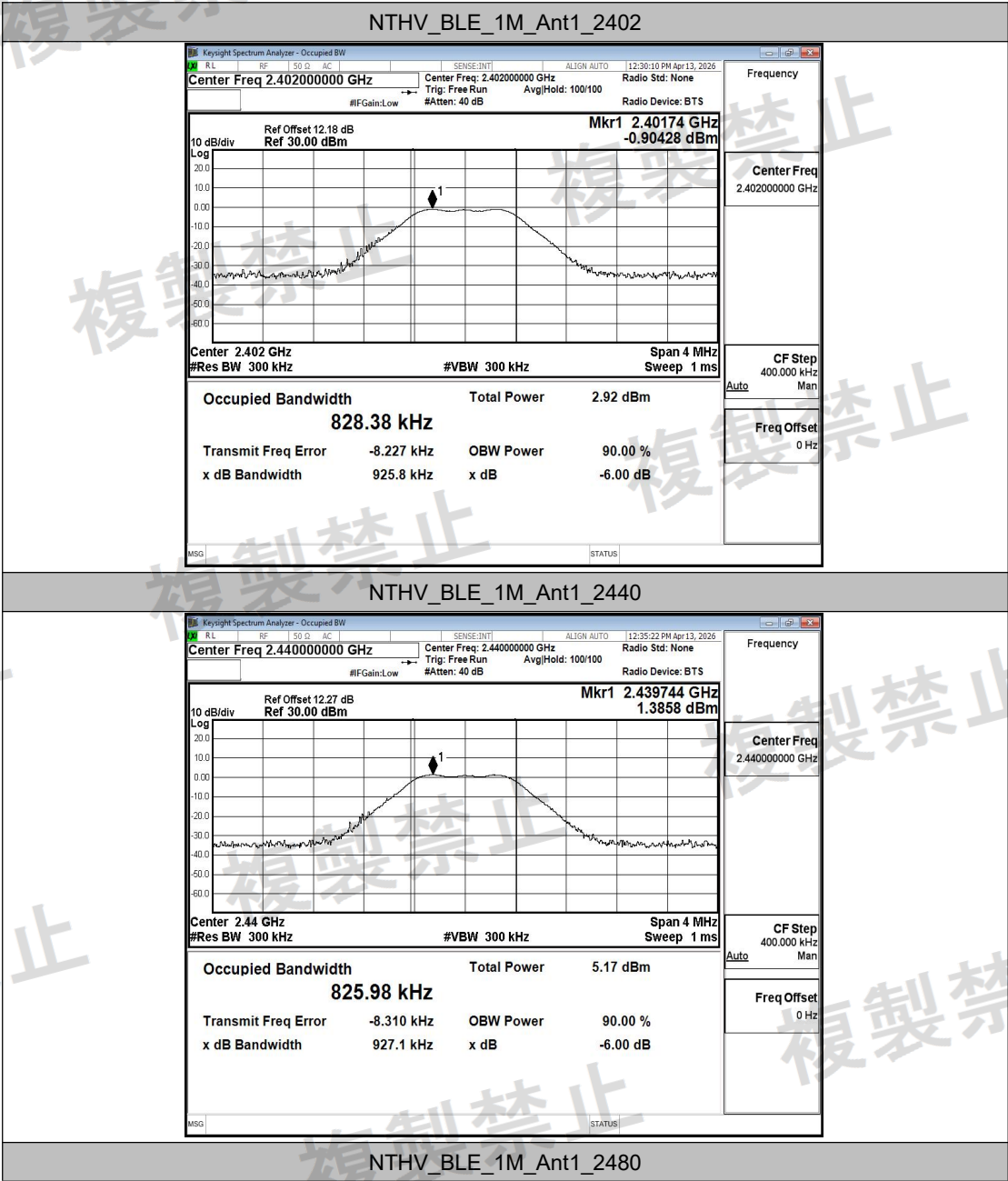


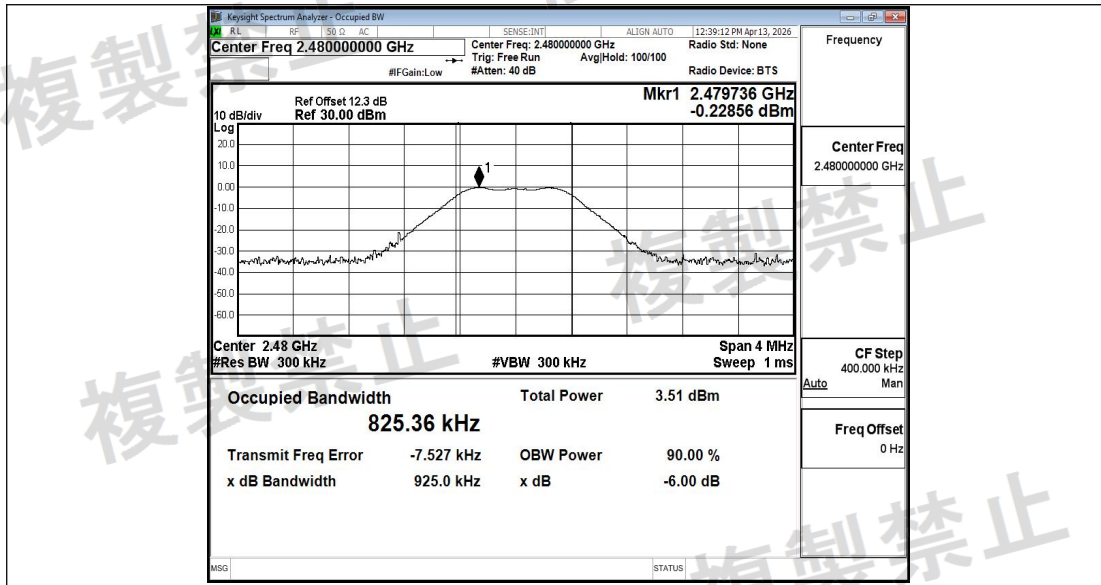


Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTHV	BLE_1M	Ant1	2402	0.828	---	PASS
			2440	0.826	---	PASS
			2480	0.825	---	PASS

Test Graphs



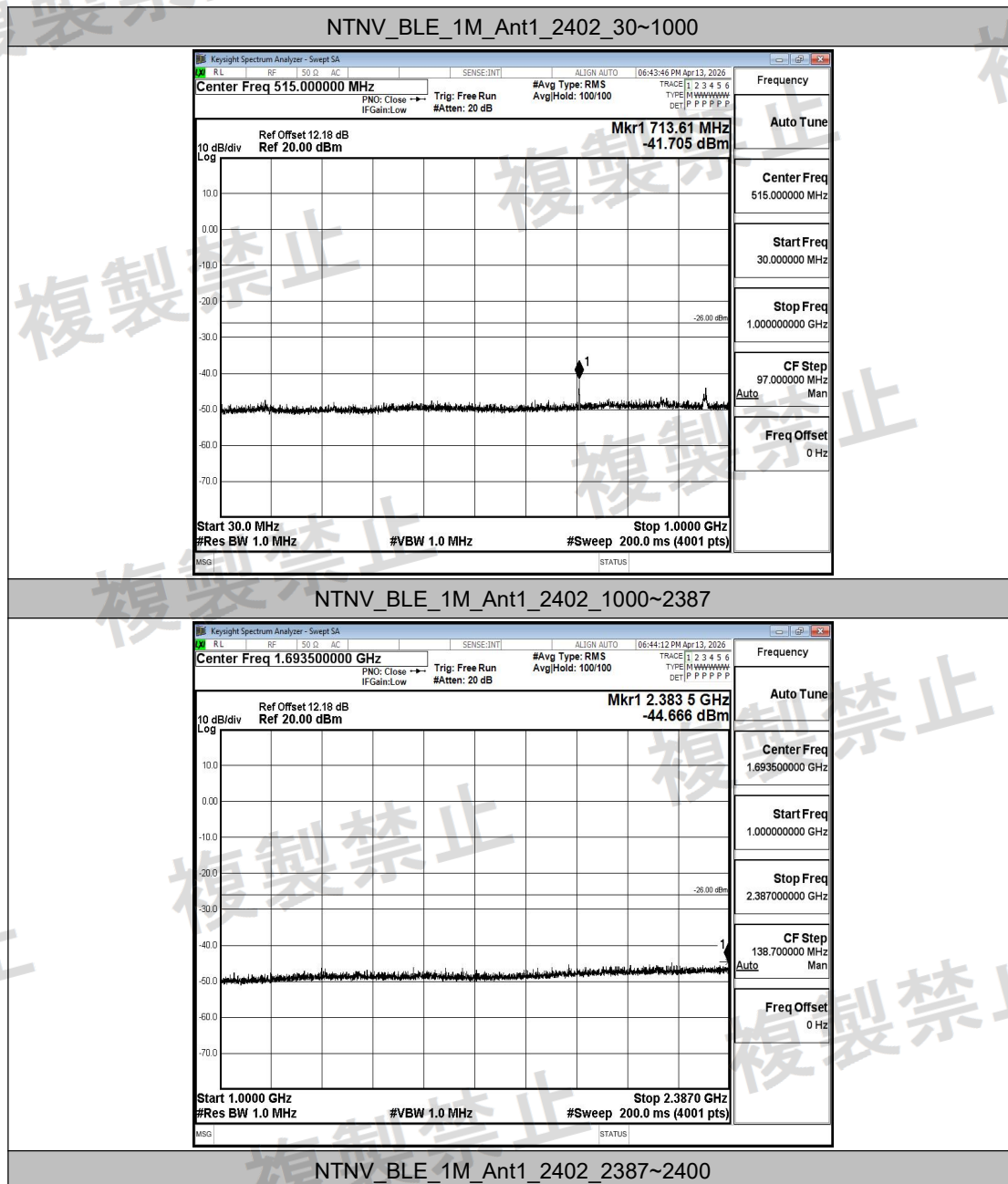


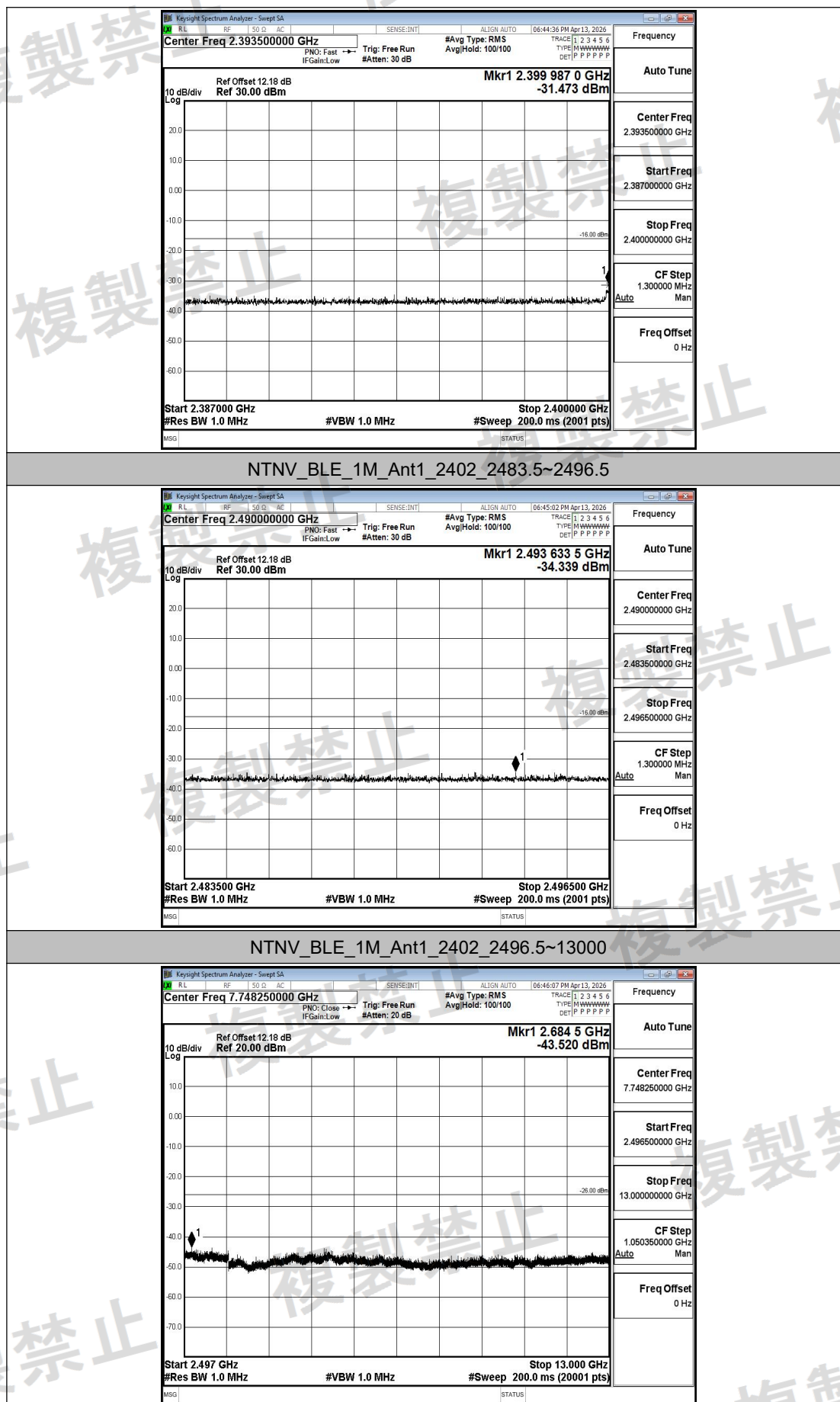
A.5 Spurious Emission of TX

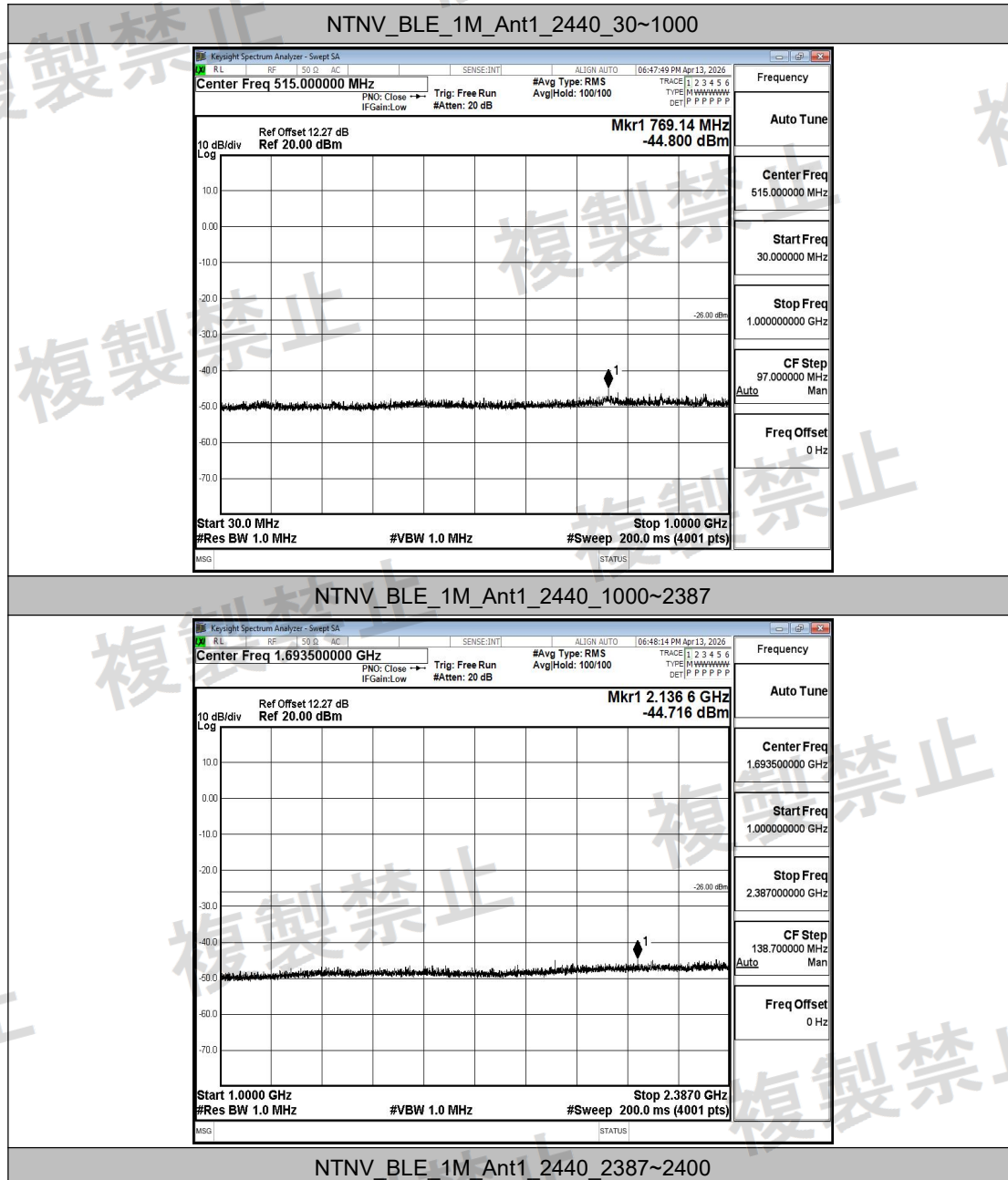
Test Result

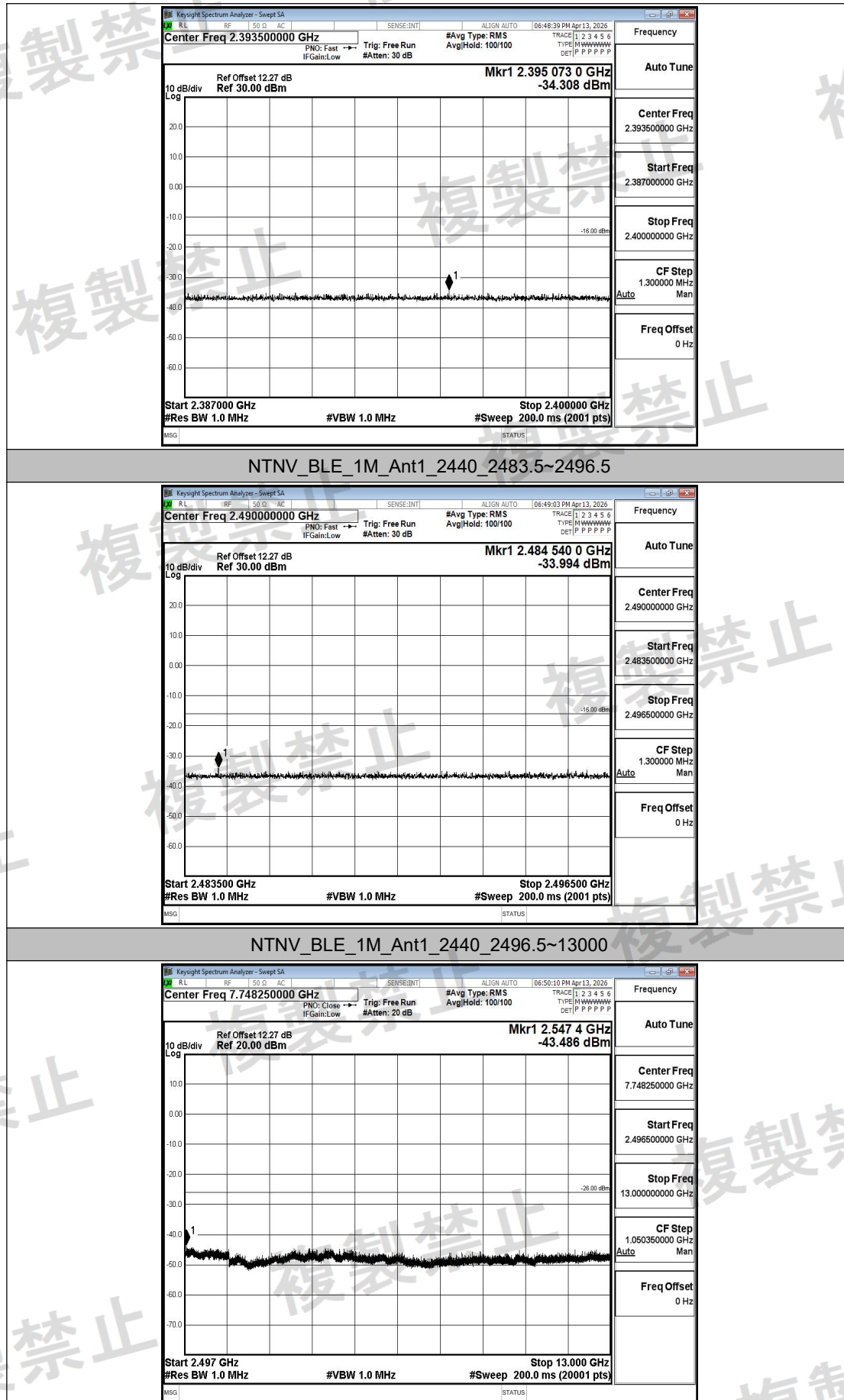
TestCondition	TestMode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~1000	713.61	-41.71	≤-26	0.06745	≤2.5	PASS
				1000~2387	2383.53	-44.67	≤-26	0.03412	≤2.5	PASS
				2387~2400	2399.99	-31.47	≤-16	0.71285	≤25	PASS
				2483.5~2496.5	2493.63	-34.34	≤-16	0.36813	≤25	PASS
				2496.5~13000	2684.51	-43.52	≤-26	0.04446	≤2.5	PASS
			2440	30~1000	769.14	-44.80	≤-26	0.03311	≤2.5	PASS
				1000~2387	2136.65	-44.72	≤-26	0.03373	≤2.5	PASS
				2387~2400	2395.07	-34.31	≤-16	0.37068	≤25	PASS
				2483.5~2496.5	2484.54	-33.99	≤-16	0.39902	≤25	PASS
				2496.5~13000	2547.44	-43.49	≤-26	0.04477	≤2.5	PASS
			2480	30~1000	773.75	-46.09	≤-26	0.02460	≤2.5	PASS
				1000~2387	2340.54	-44.29	≤-26	0.03724	≤2.5	PASS
				2387~2400	2389.50	-34.23	≤-16	0.37757	≤25	PASS
				2483.5~2496.5	2494.79	-34.51	≤-16	0.35400	≤25	PASS
				2496.5~13000	2684.51	-43.01	≤-26	0.05000	≤2.5	PASS

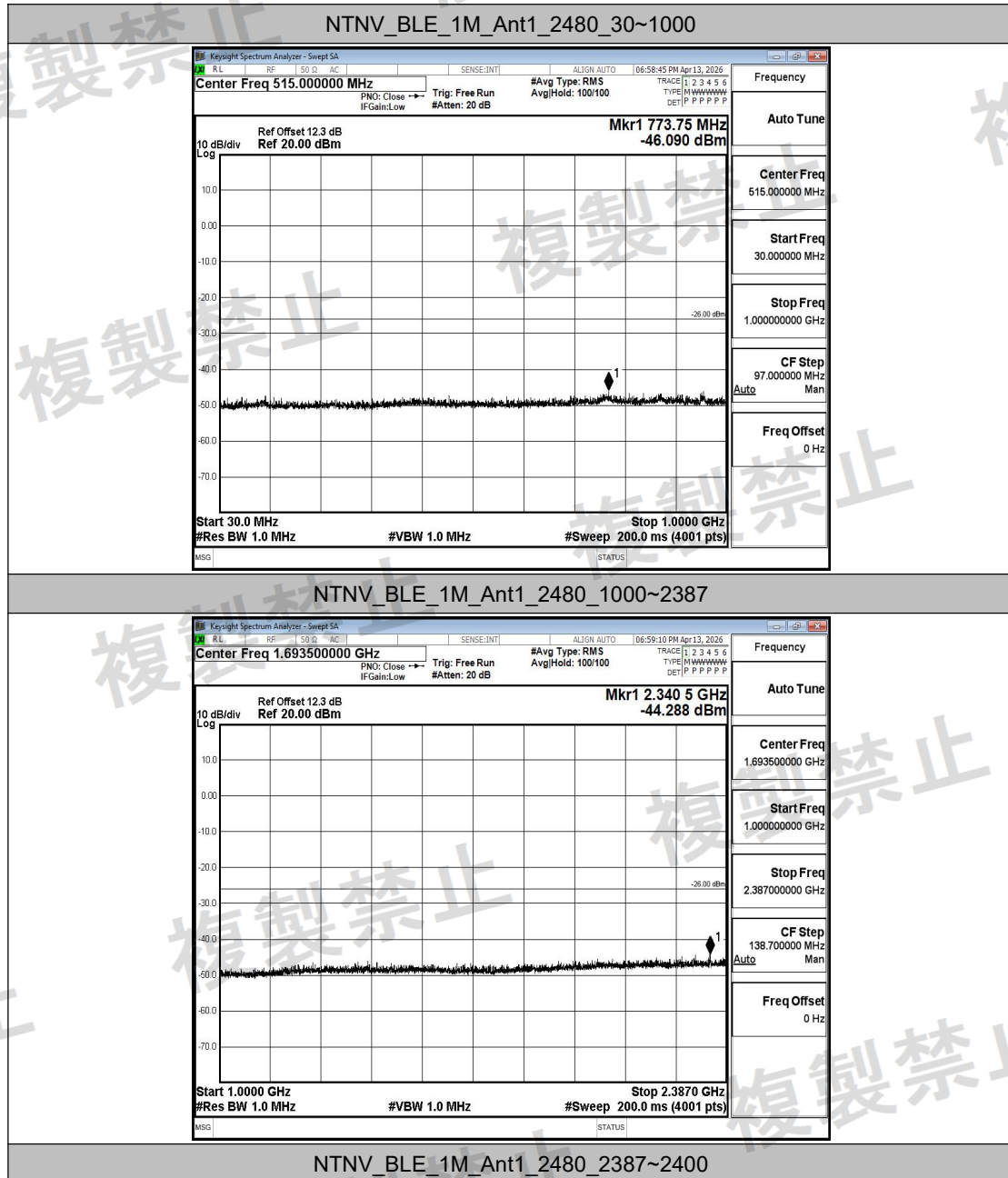
Test Graphs









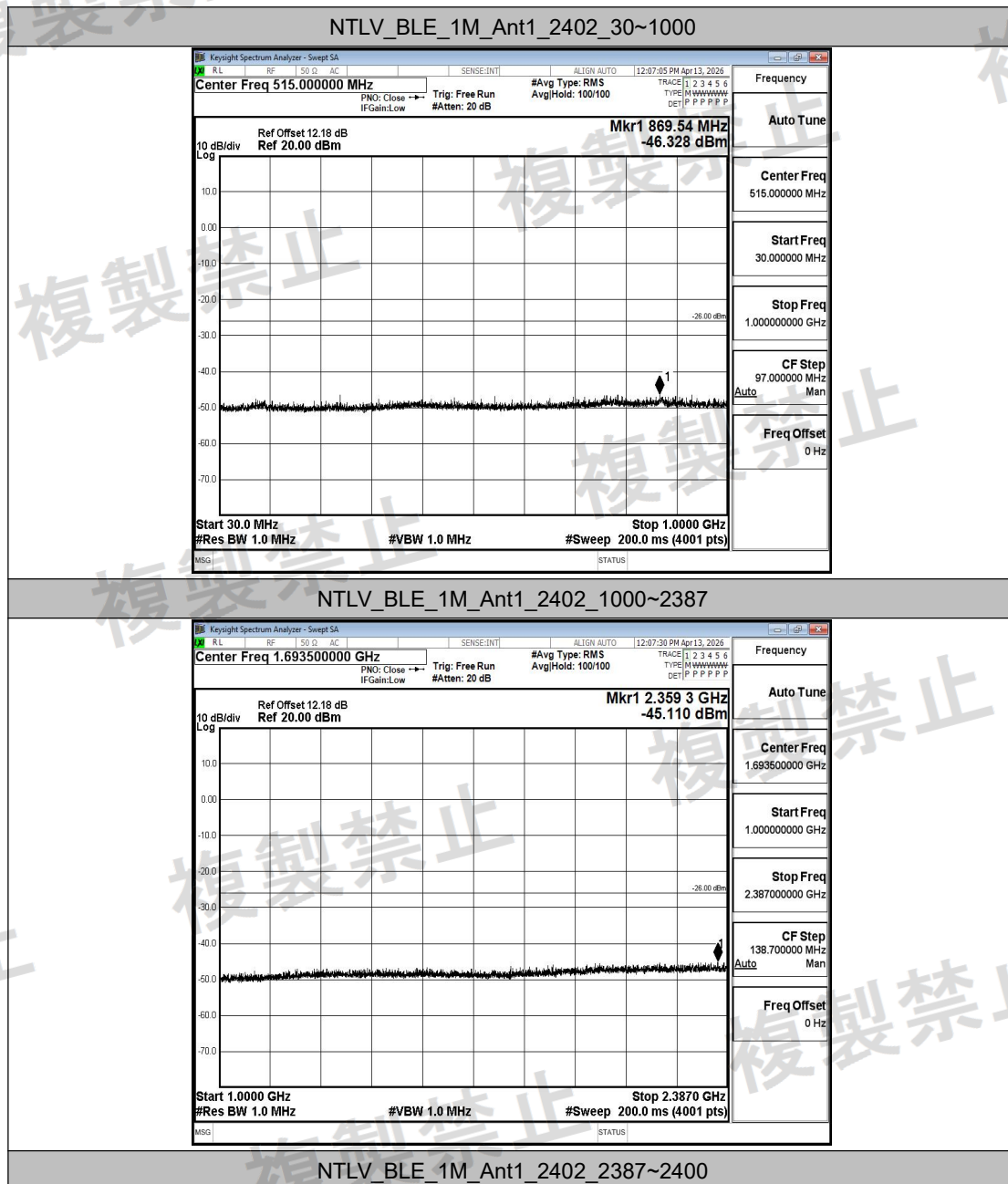


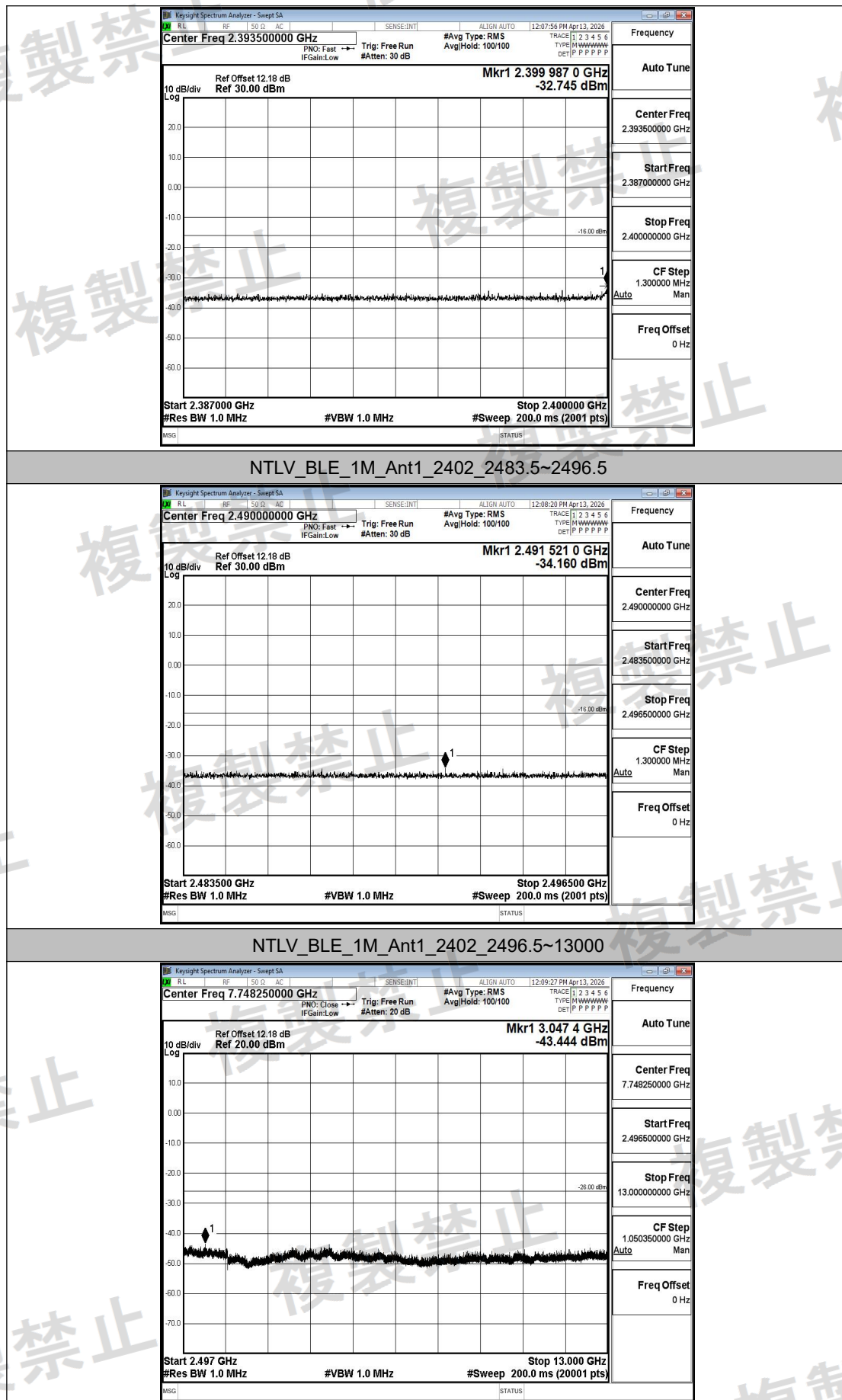


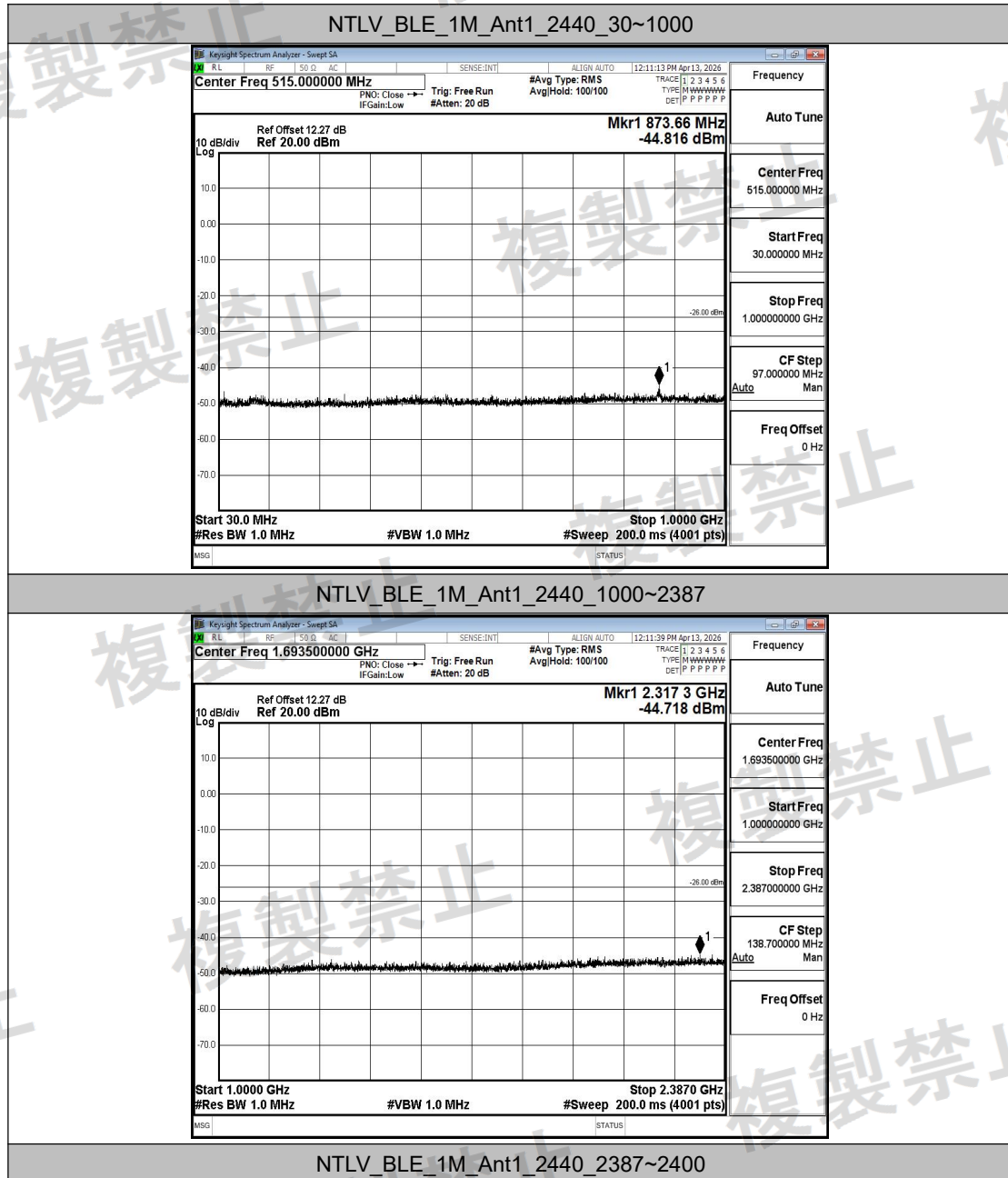
Test Result

TestCondition	TestMode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTLV	BLE_1M	Ant1	2402	30~1000	869.54	-46.33	≤-26	0.02328	≤2.5	PASS
				1000~2387	2359.26	-45.11	≤-26	0.03083	≤2.5	PASS
				2387~2400	2399.99	-32.75	≤-16	0.53088	≤25	PASS
				2483.5~2496.5	2491.52	-34.16	≤-16	0.38371	≤25	PASS
				2496.5~13000	3047.41	-43.44	≤-26	0.04529	≤2.5	PASS
			2440	30~1000	873.66	-44.82	≤-26	0.03296	≤2.5	PASS
				1000~2387	2317.30	-44.72	≤-26	0.03373	≤2.5	PASS
				2387~2400	2392.02	-34.32	≤-16	0.36983	≤25	PASS
				2483.5~2496.5	2494.92	-34.81	≤-16	0.33037	≤25	PASS
				2496.5~13000	5180.67	-39.61	≤-26	0.10940	≤2.5	PASS
			2480	30~1000	870.26	-46.20	≤-26	0.02399	≤2.5	PASS
				1000~2387	2272.92	-44.57	≤-26	0.03491	≤2.5	PASS
				2387~2400	2398.82	-34.53	≤-16	0.35237	≤25	PASS
				2483.5~2496.5	2495.09	-34.20	≤-16	0.38019	≤25	PASS
				2496.5~13000	3182.90	-42.41	≤-26	0.05741	≤2.5	PASS

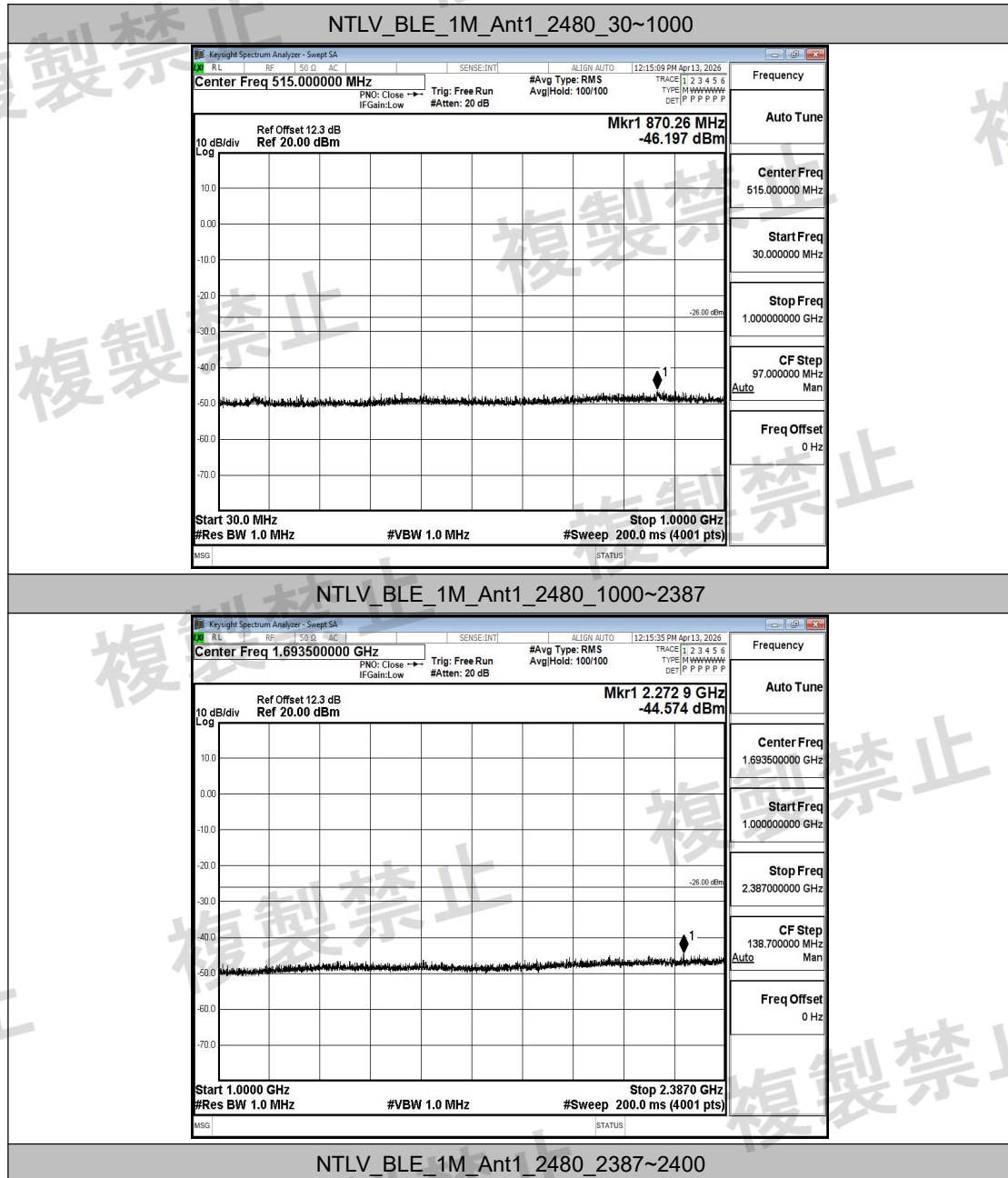
Test Graphs

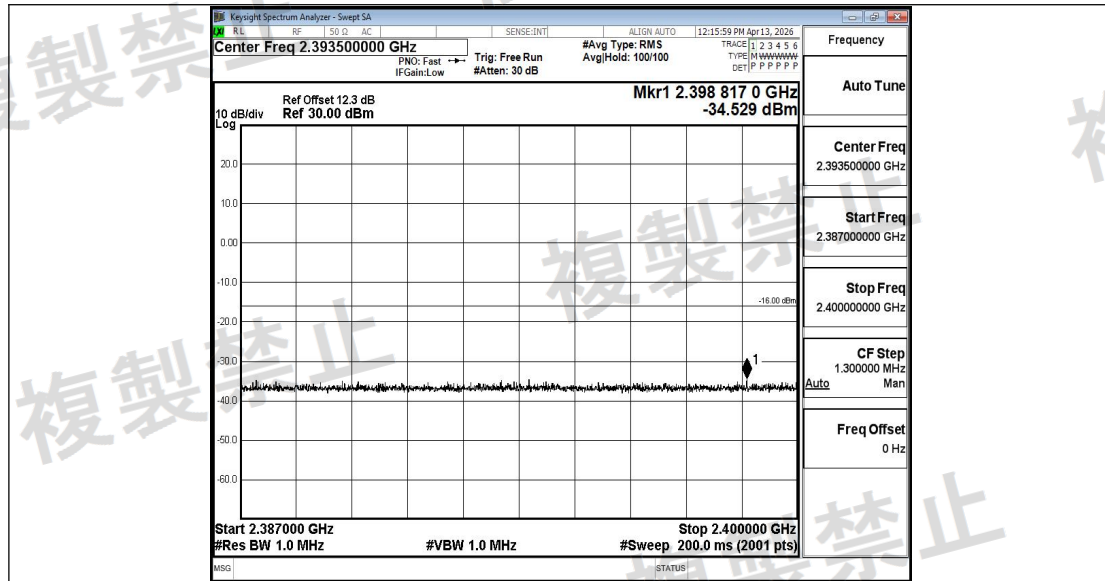




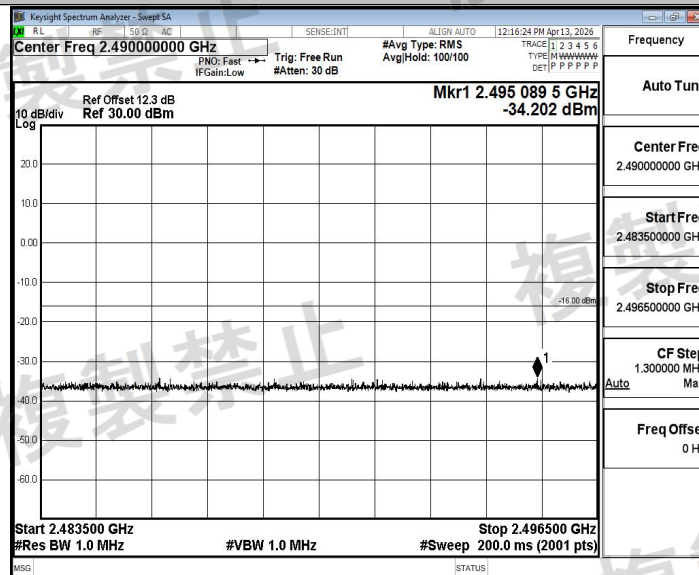




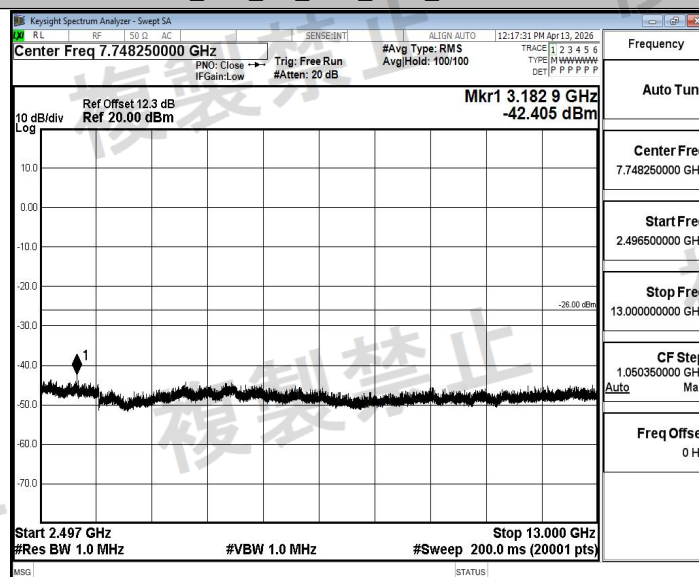




NTLV_BLE_1M_Ant1_2480_2483.5~2496.5



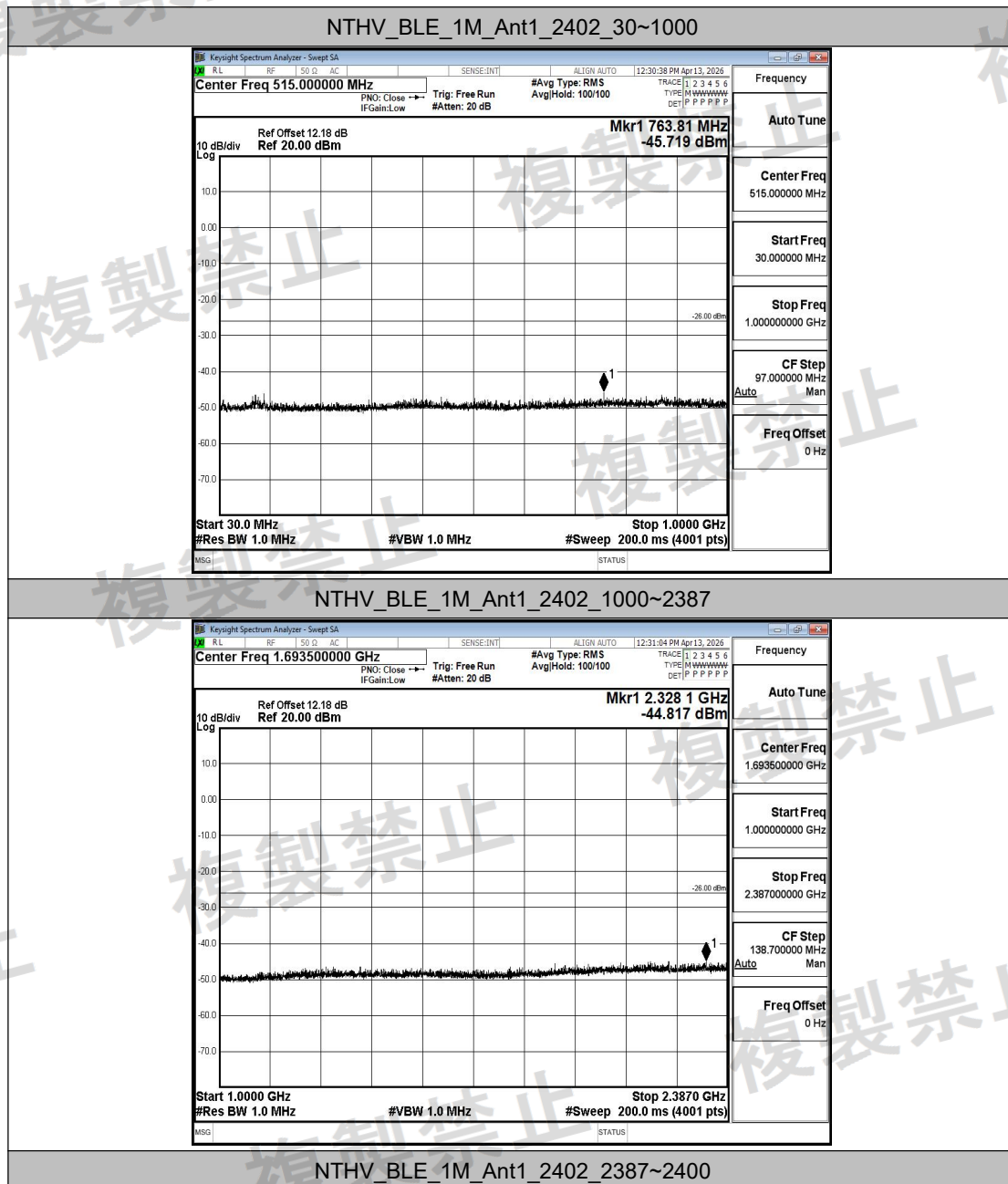
NTLV_BLE_1M_Ant1_2480_2496.5~13000



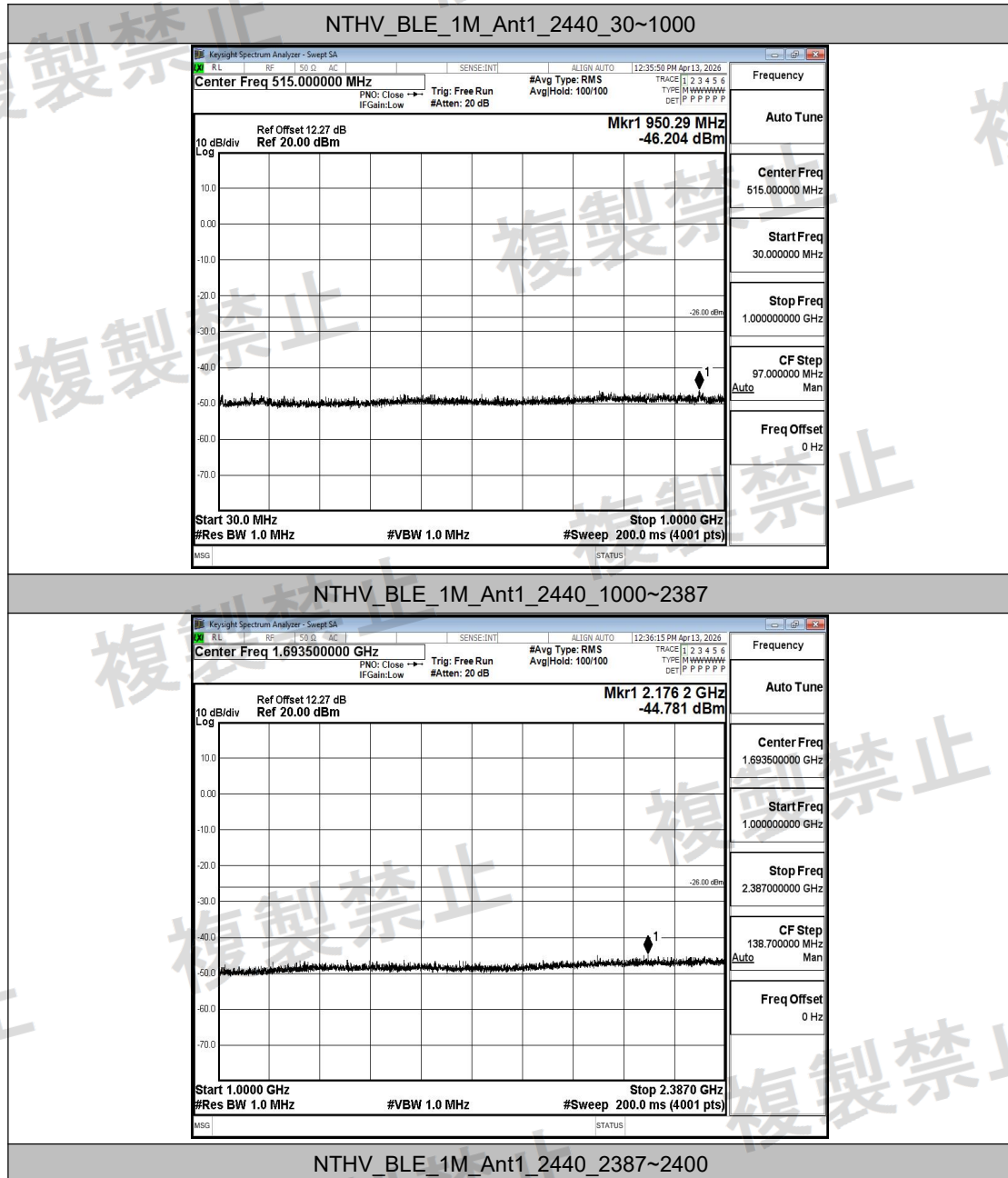
Test Result

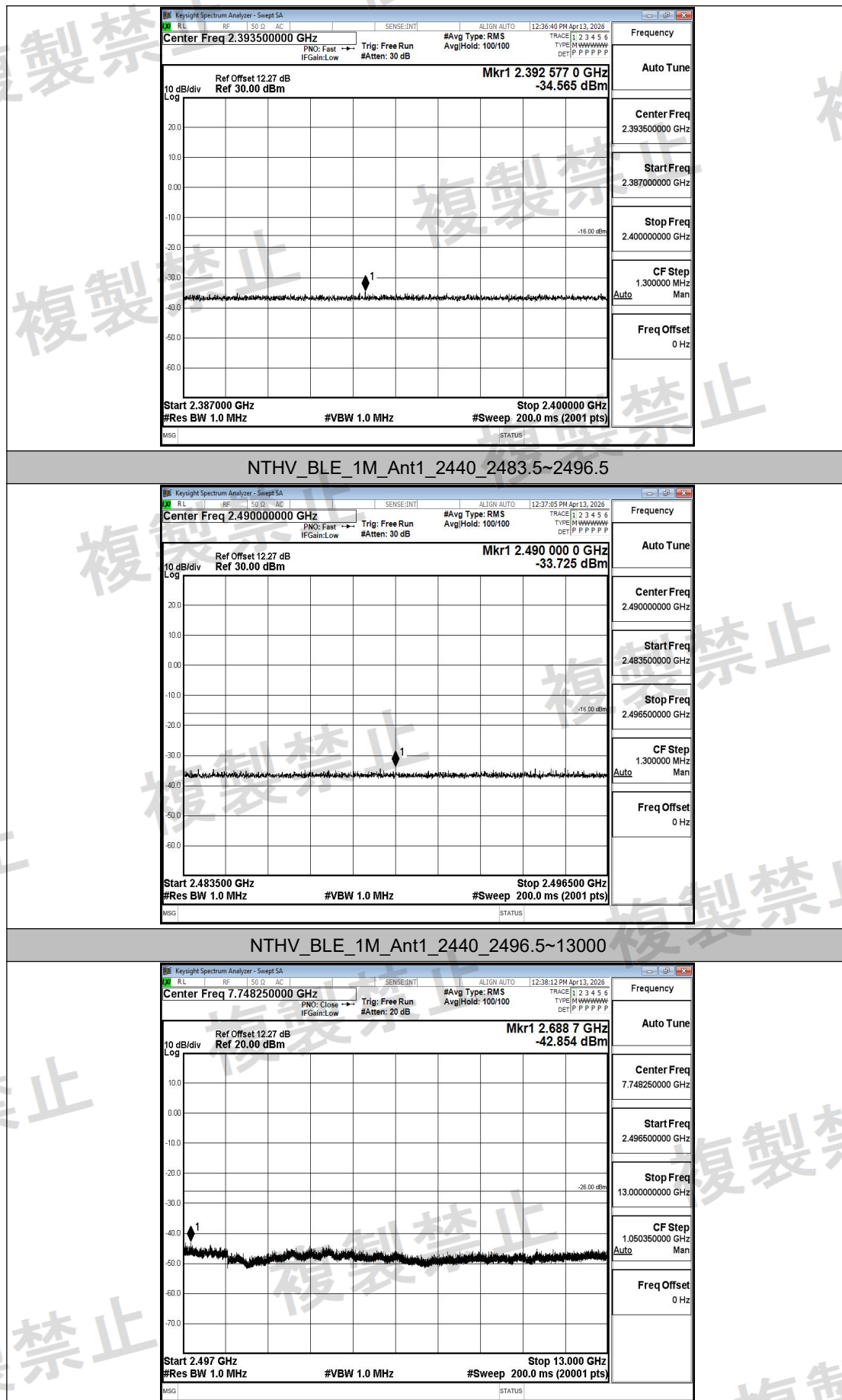
TestCondition	TestMode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTHV	BLE_1M	Ant1	2402	30~1000	763.81	-45.72	≤-26	0.02679	≤2.5	PASS
				1000~2387	2328.05	-44.82	≤-26	0.03296	≤2.5	PASS
				2387~2400	2399.95	-33.58	≤-16	0.43853	≤25	PASS
				2483.5~2496.5	2488.71	-33.86	≤-16	0.41115	≤25	PASS
				2496.5~13000	2565.82	-43.00	≤-26	0.05012	≤2.5	PASS
			2440	30~1000	950.29	-46.20	≤-26	0.02399	≤2.5	PASS
				1000~2387	2176.18	-44.78	≤-26	0.03327	≤2.5	PASS
				2387~2400	2392.58	-34.57	≤-16	0.34914	≤25	PASS
				2483.5~2496.5	2490.00	-33.73	≤-16	0.42364	≤25	PASS
				2496.5~13000	2688.71	-42.85	≤-26	0.05188	≤2.5	PASS
			2480	30~1000	94.51	-45.91	≤-26	0.02564	≤2.5	PASS
				1000~2387	2052.73	-43.61	≤-26	0.04355	≤2.5	PASS
				2387~2400	2387.12	-34.67	≤-16	0.34119	≤25	PASS
				2483.5~2496.5	2489.93	-34.09	≤-16	0.38994	≤25	PASS
				2496.5~13000	3148.24	-43.49	≤-26	0.04477	≤2.5	PASS

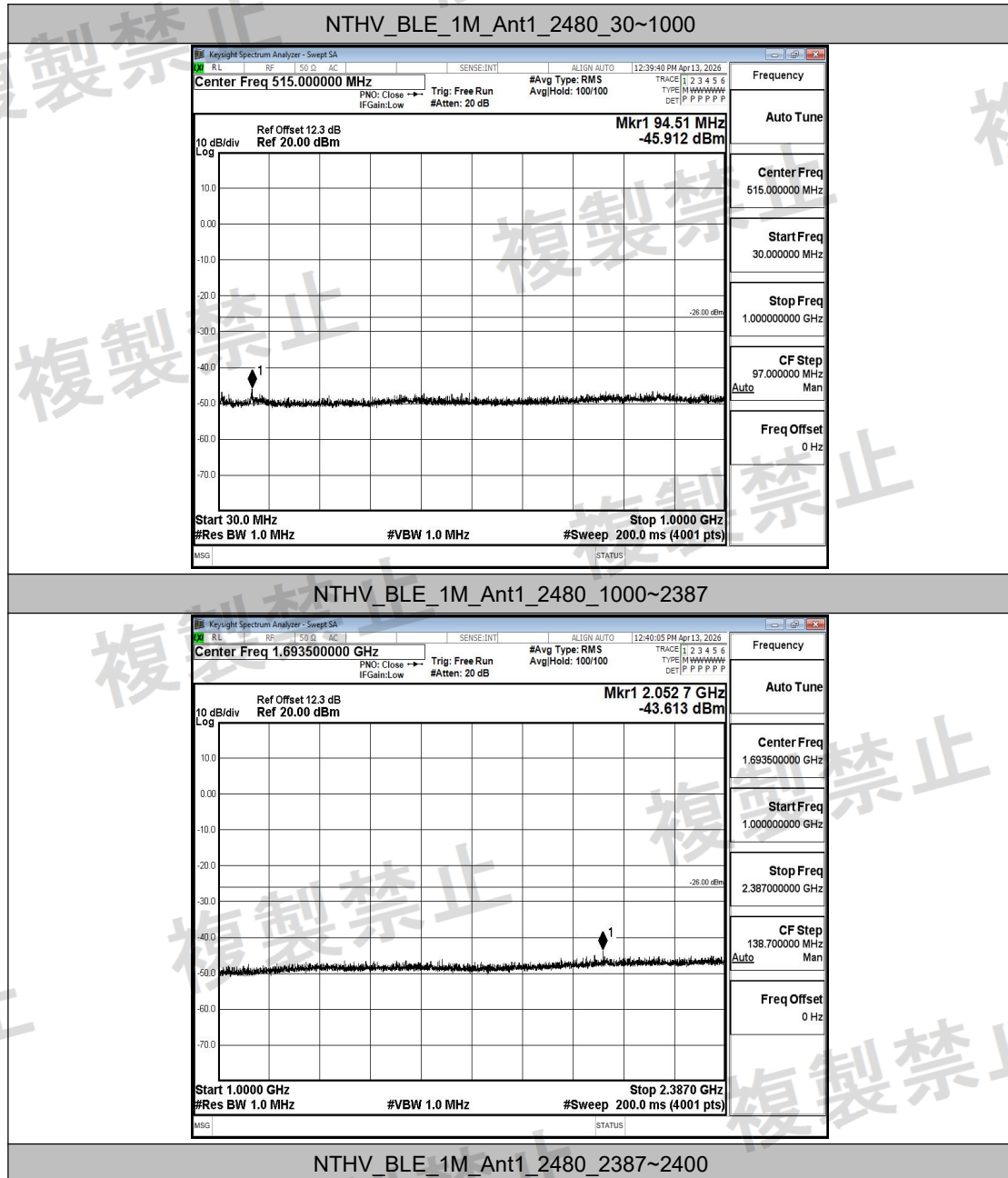
Test Graphs

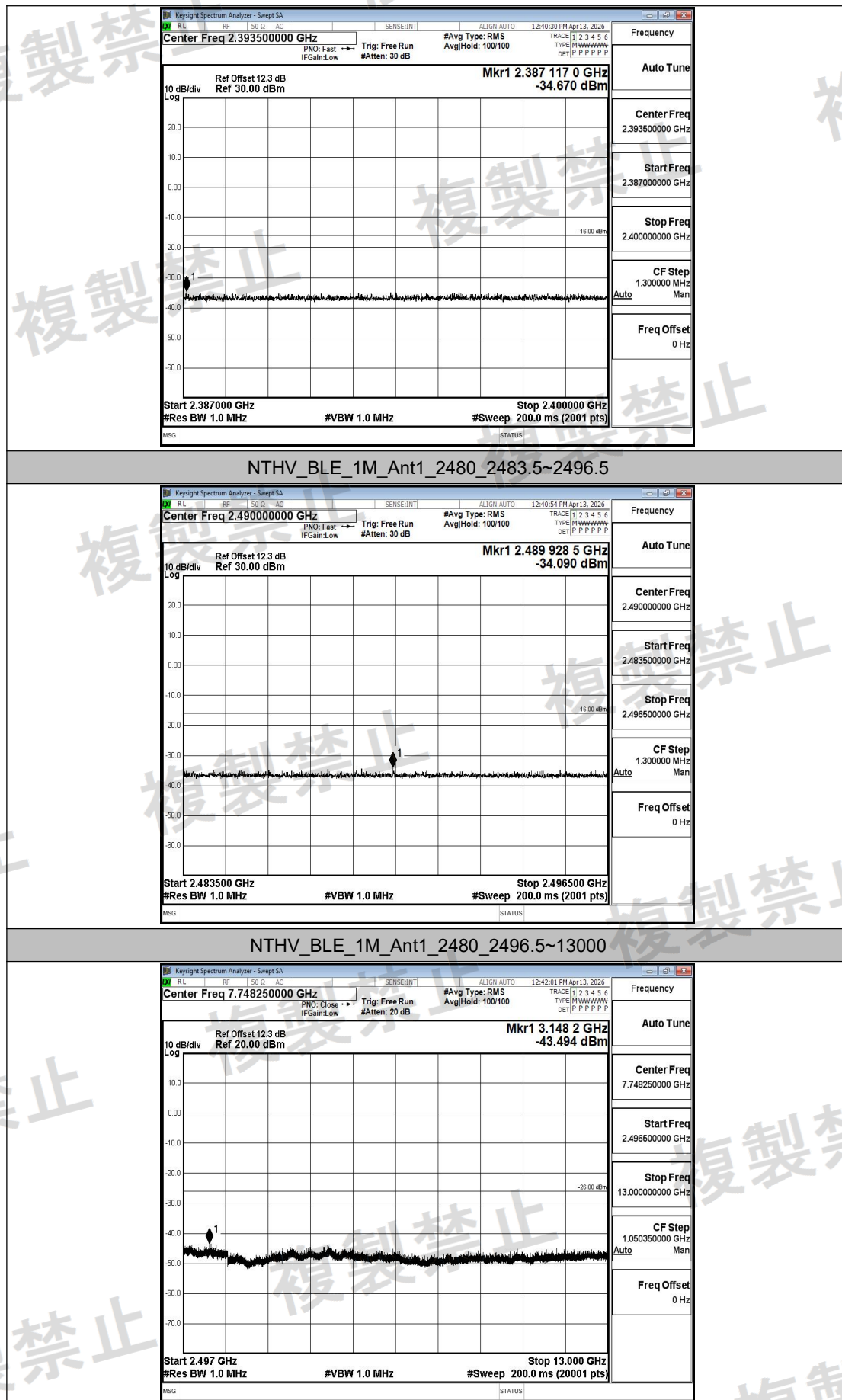










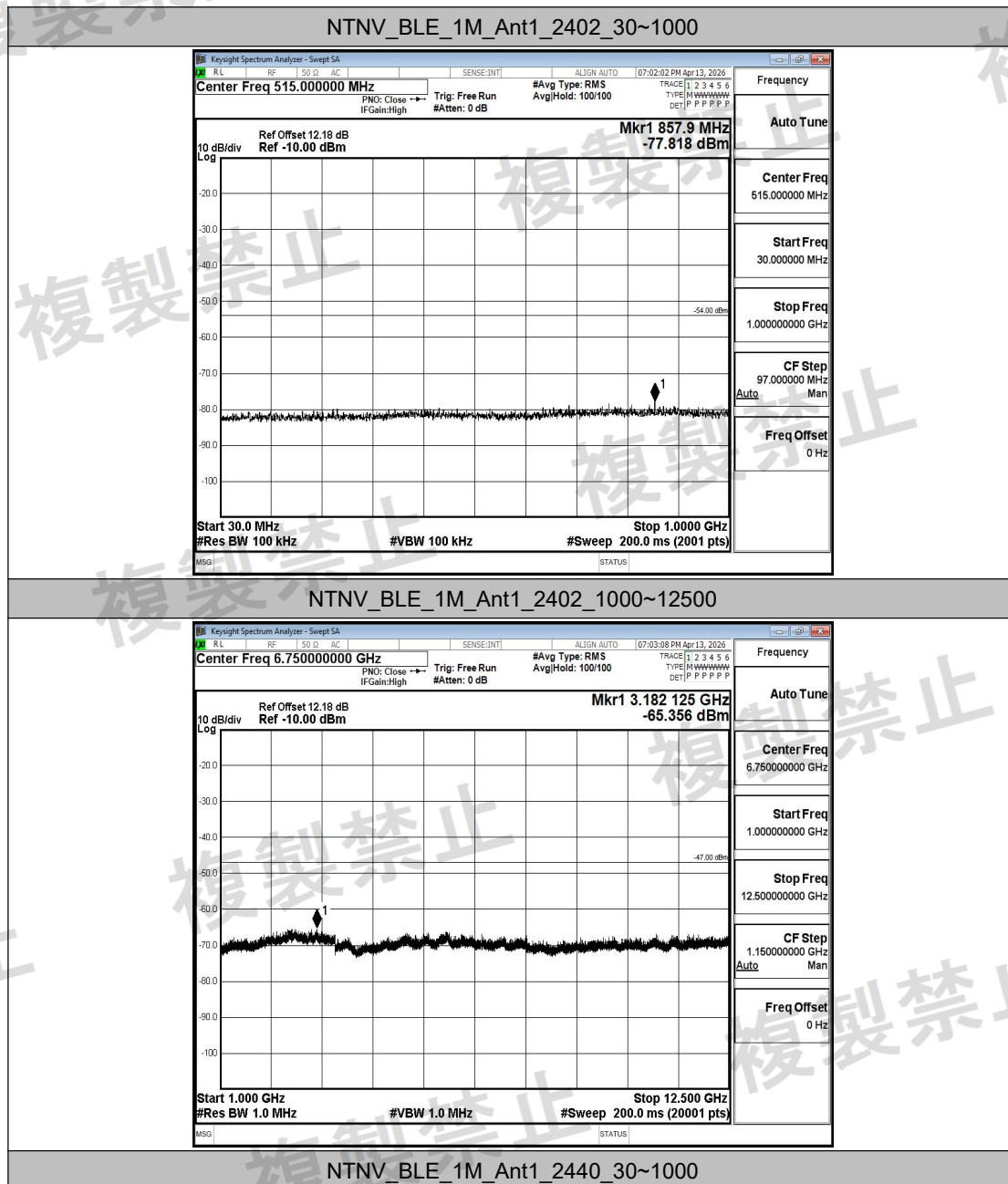


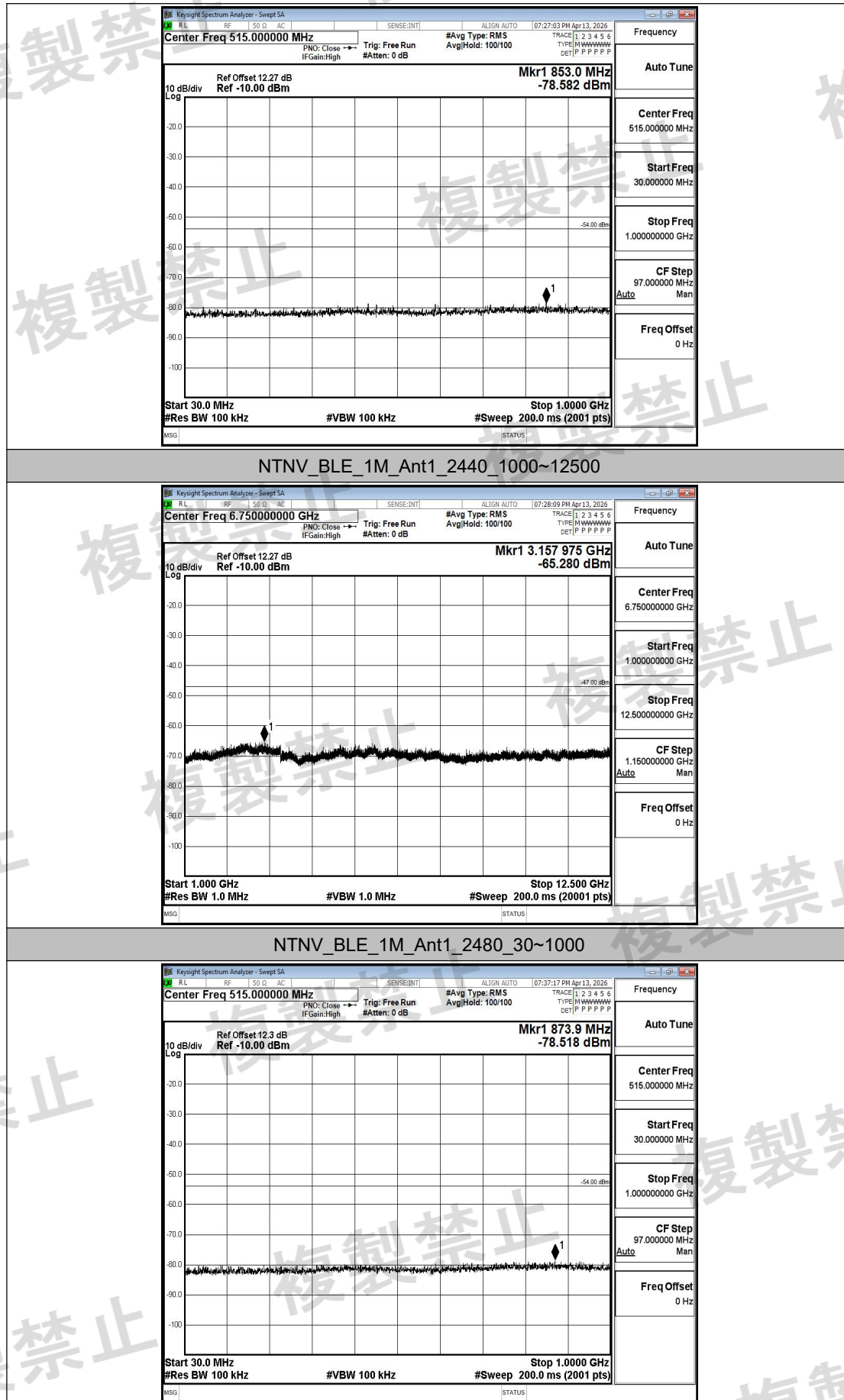
A.6 Spurious Emission of RX

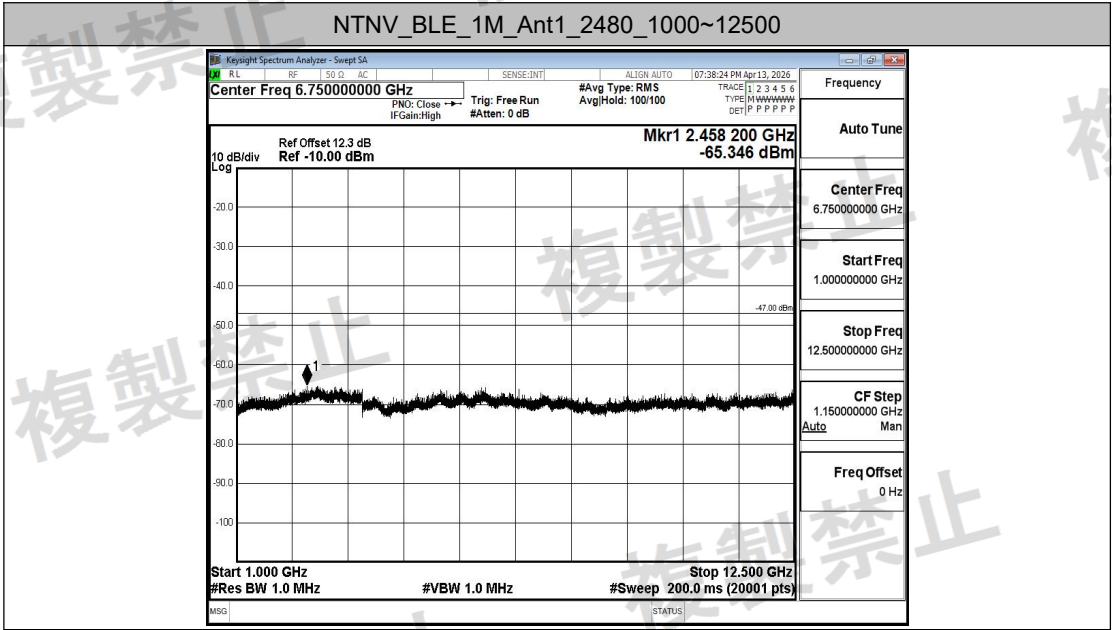
Test Result

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	857.90	-77.82	≤-54	0.01652	≤4	PASS
				1000~12500	3182.13	-65.36	≤-47	0.29107	≤20	PASS
			2440	30~1000	853.05	-78.58	≤-54	0.01387	≤4	PASS
				1000~12500	3157.98	-65.28	≤-47	0.29648	≤20	PASS
			2480	30~1000	873.90	-78.52	≤-54	0.01406	≤4	PASS
				1000~12500	2458.20	-65.35	≤-47	0.29174	≤20	PASS

Test Graphs



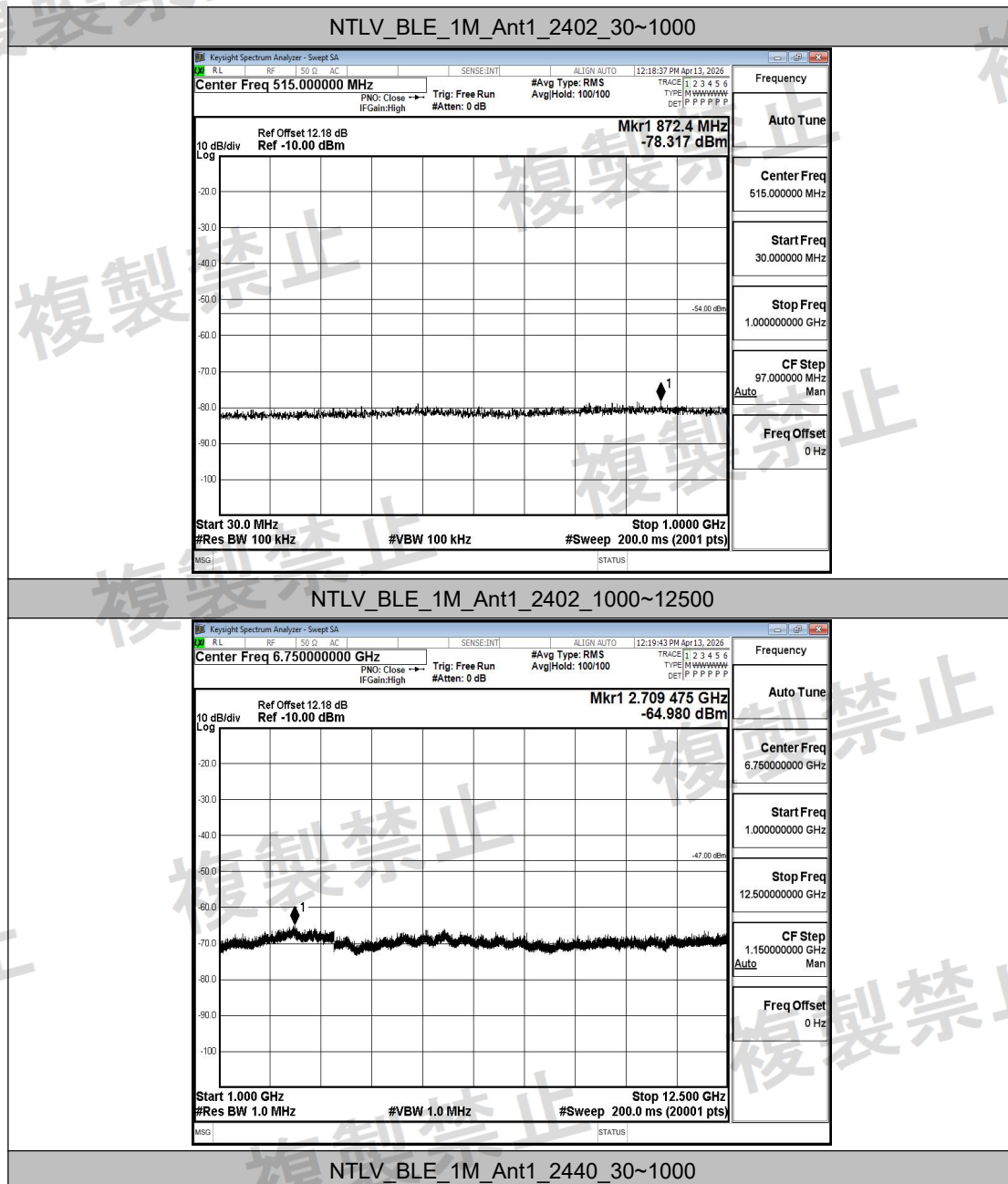




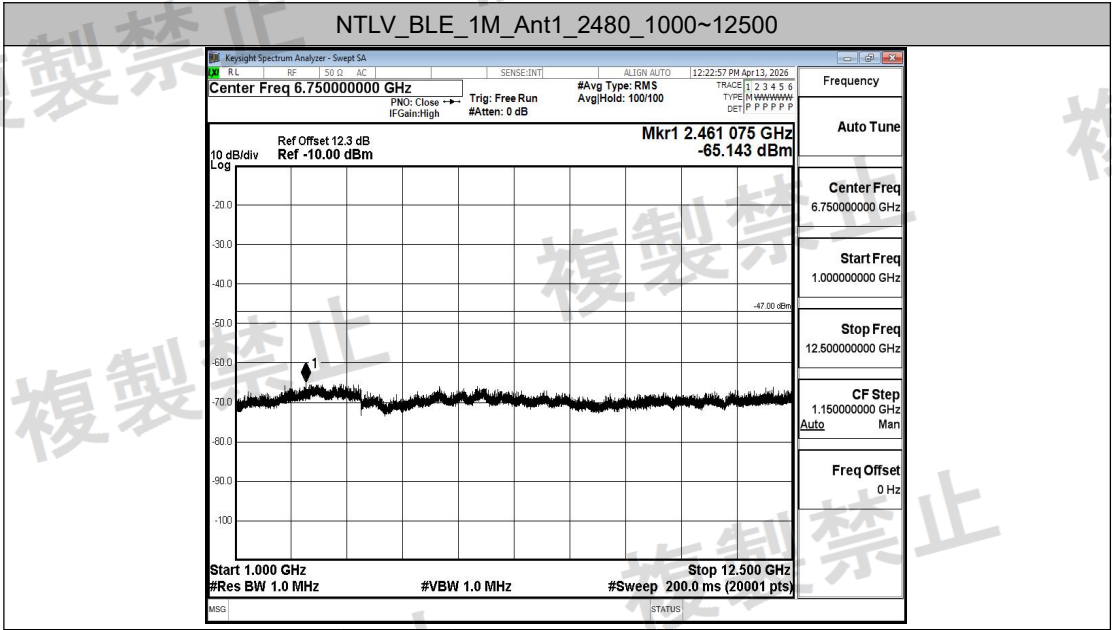
Test Result

TestCondition	TestMode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTLV	BLE_1M	Ant1	2402	30~1000	872.45	-78.32	≤-54	0.01472	≤4	PASS
				1000~12500	2709.48	-64.98	≤-47	0.31769	≤20	PASS
			2440	30~1000	896.21	-77.34	≤-54	0.01845	≤4	PASS
				1000~12500	6119.80	-64.39	≤-47	0.36392	≤20	PASS
			2480	30~1000	842.86	-78.26	≤-54	0.01493	≤4	PASS
				1000~12500	2461.08	-65.14	≤-47	0.30620	≤20	PASS

Test Graphs







Test Result

TestCondition	TestMode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTHV	BLE_1M	Ant1	2402	30~1000	839.47	-78.61	≤-54	0.01377	≤4	PASS
				1000~12500	2665.20	-65.16	≤-47	0.30479	≤20	PASS
			2440	30~1000	768.17	-78.35	≤-54	0.01462	≤4	PASS
				1000~12500	3190.18	-64.16	≤-47	0.38371	≤20	PASS
			2480	30~1000	761.87	-78.06	≤-54	0.01563	≤4	PASS
				1000~12500	2697.98	-64.92	≤-47	0.32211	≤20	PASS

Test Graphs

