



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: laser engraving machine

Trade Mark: DAJA

Test Model: A7miniPro

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung
Test Date:	2025-01-03



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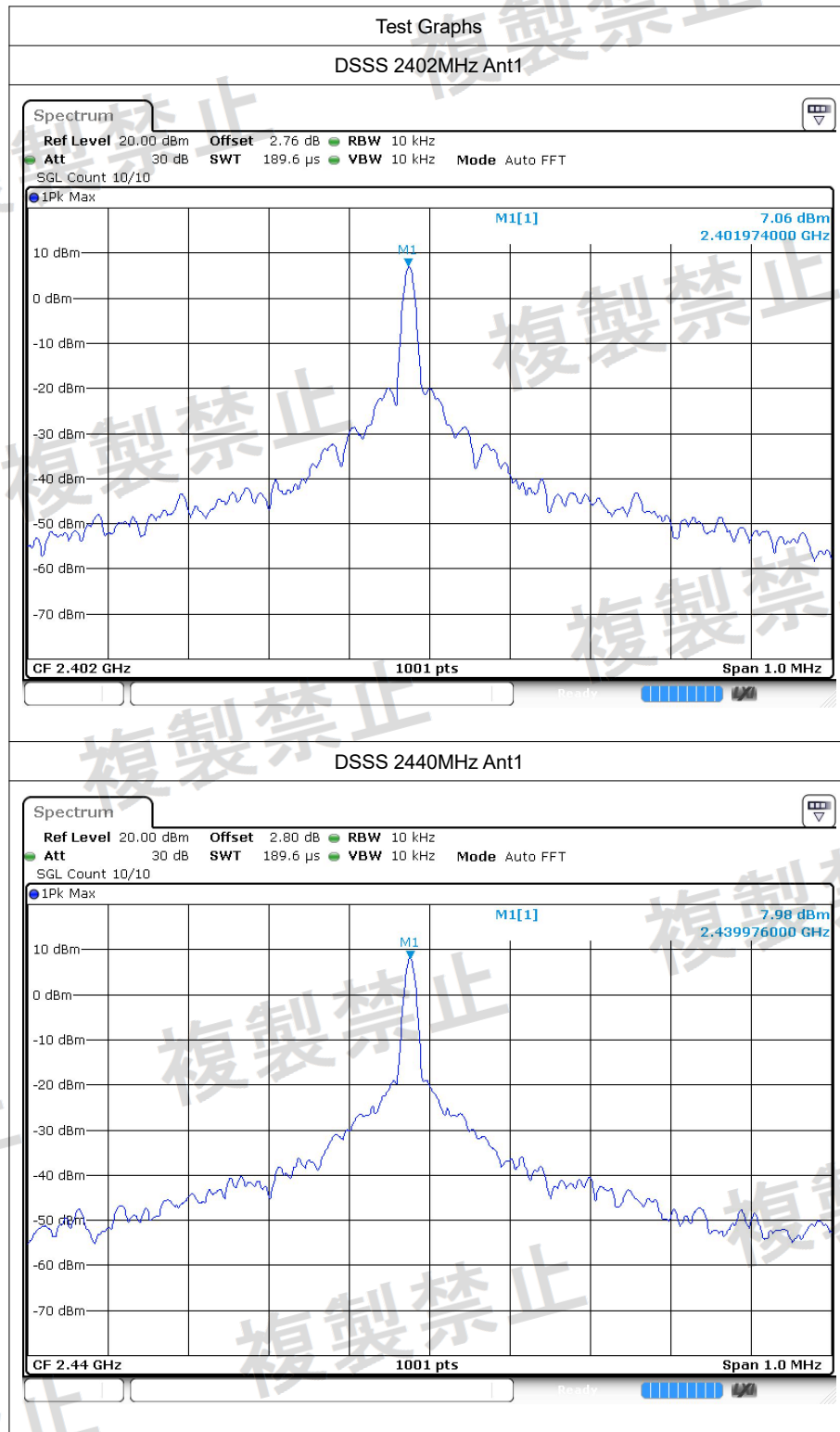
1 Frequency Error

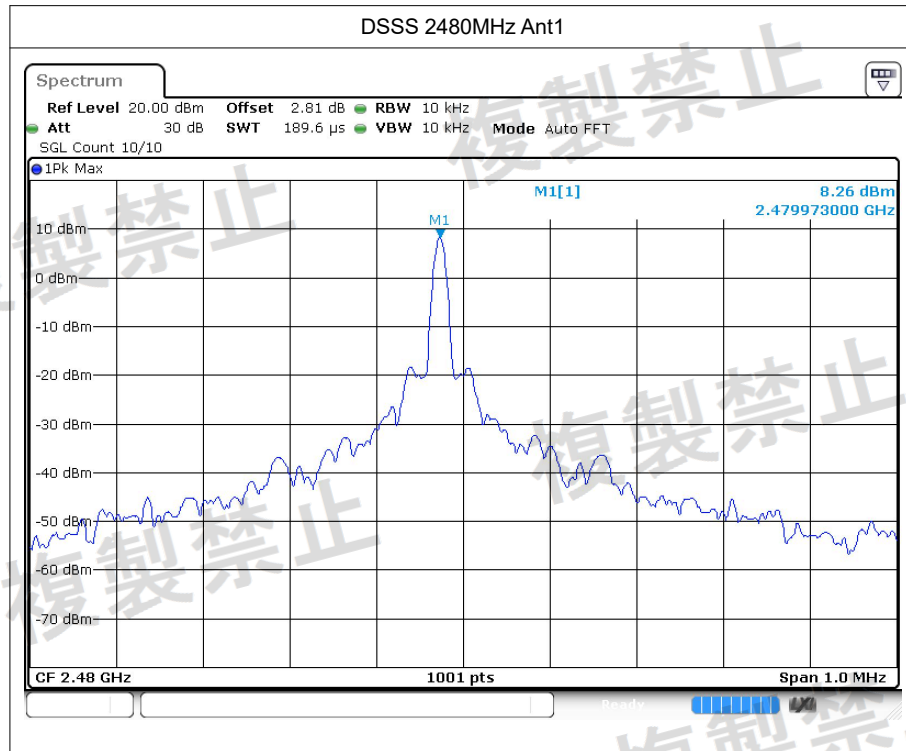
1.1 Test Result

Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
DSSS	2402	Ant1	2401.974	-26000	-10.82	50	Pass
DSSS	2440	Ant1	2439.976	-24000	-9.84	50	Pass
DSSS	2480	Ant1	2479.973	-27000	-10.89	50	Pass



1.2 Test Graphs







2 Antenna and EIRP Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Power (dBm)	Power (dBm/MHz)	Antenna Power (mW)	Declared Power (mW)	Tolerance (%)	Upper Limit (%)	Verdict
BLE 1M	2402	Ant1	0.82	-	1.21	1.5	-19.48	20	Pass
BLE 1M	2440	Ant1	0.91	-	1.23	1.5	-17.79	20	Pass
BLE 1M	2480	Ant1	0.29	-	1.07	1.5	-28.73	20	Pass
BLE 2M	2402	Ant1	-1.57	-	0.7	1.5	-53.56	20	Pass
BLE 2M	2440	Ant1	0.52	-	1.13	1.5	-24.85	20	Pass
BLE 2M	2480	Ant1	0.01	-	1	1.5	-33.18	20	Pass



3 EIRP Power

3.1 Test Result

Mode	Frequency (MHz)	Antenna	Power (dbm)	Gain (dBi)	EIRP Power (dbm)	Limit (dbm)	Verdict
BLE 1M	2402	Ant1	0.82	3.26	4.08	12.14	Pass
BLE 1M	2440	Ant1	0.91	3.26	4.17	12.14	Pass
BLE 1M	2480	Ant1	0.29	3.26	3.55	12.14	Pass
BLE 2M	2402	Ant1	-1.57	3.26	1.69	12.14	Pass
BLE 2M	2440	Ant1	0.52	3.26	3.78	12.14	Pass
BLE 2M	2480	Ant1	0.01	3.26	3.27	12.14	Pass



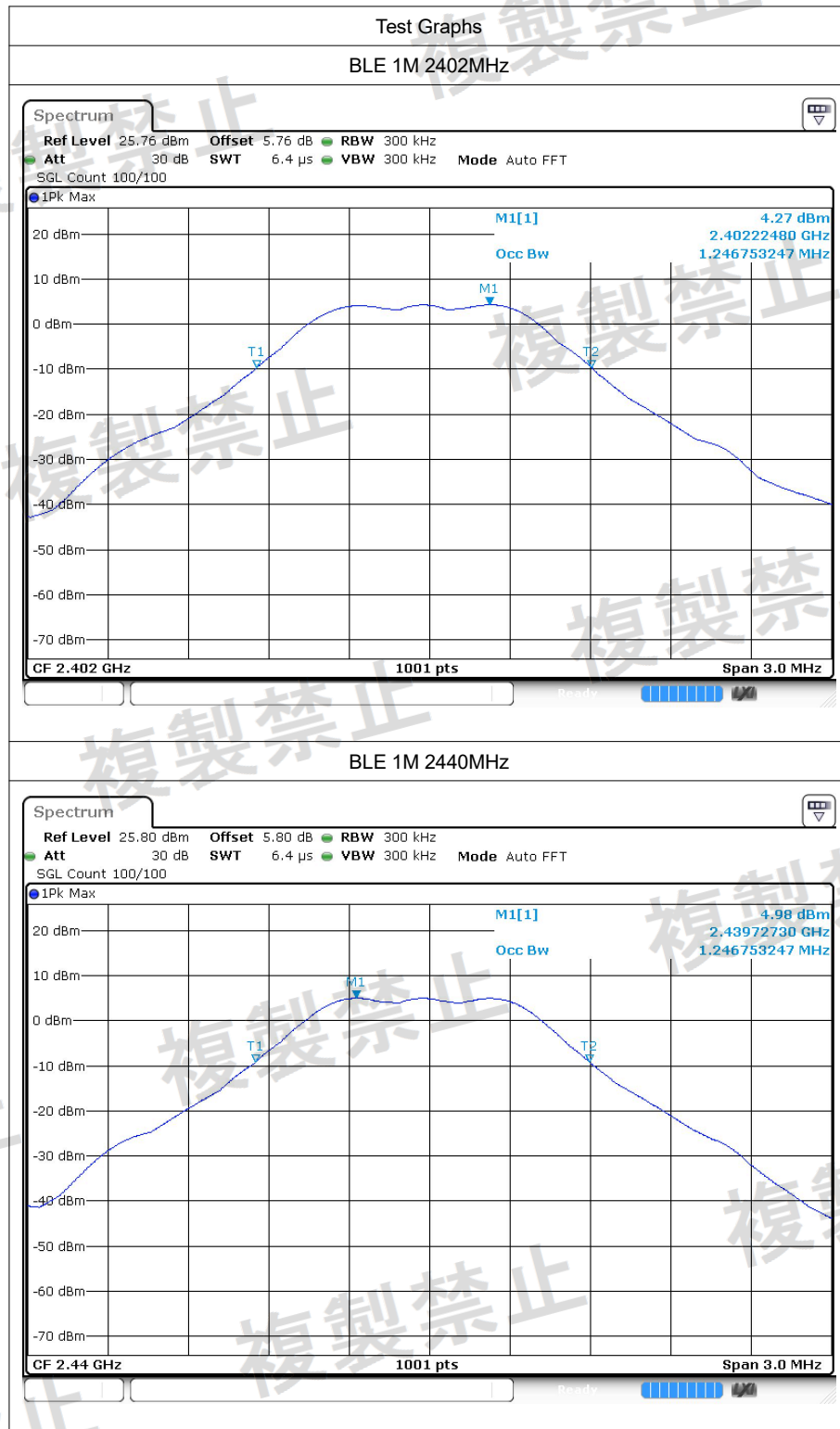
4 Occupied Channel Bandwidth

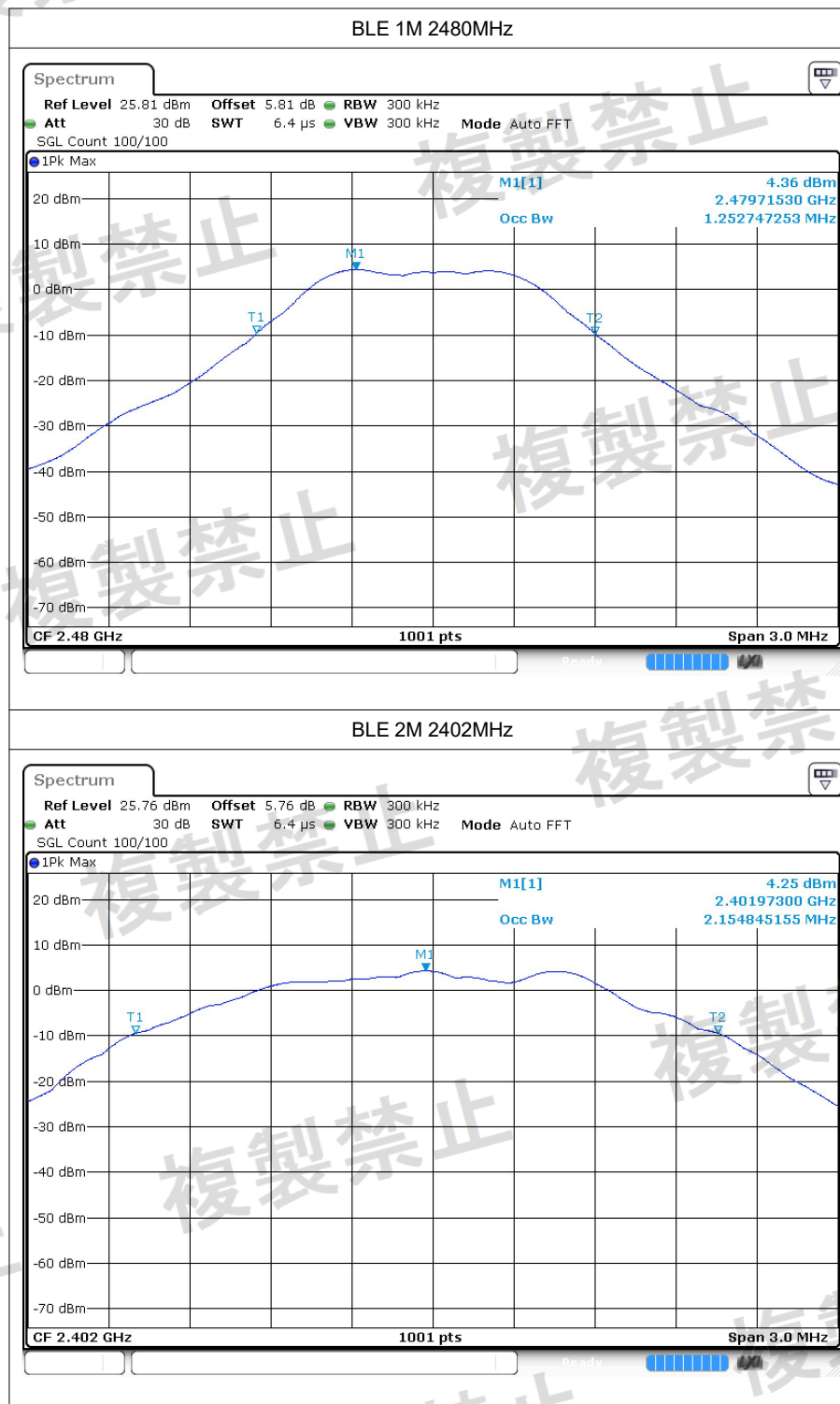
4.1 Test Result

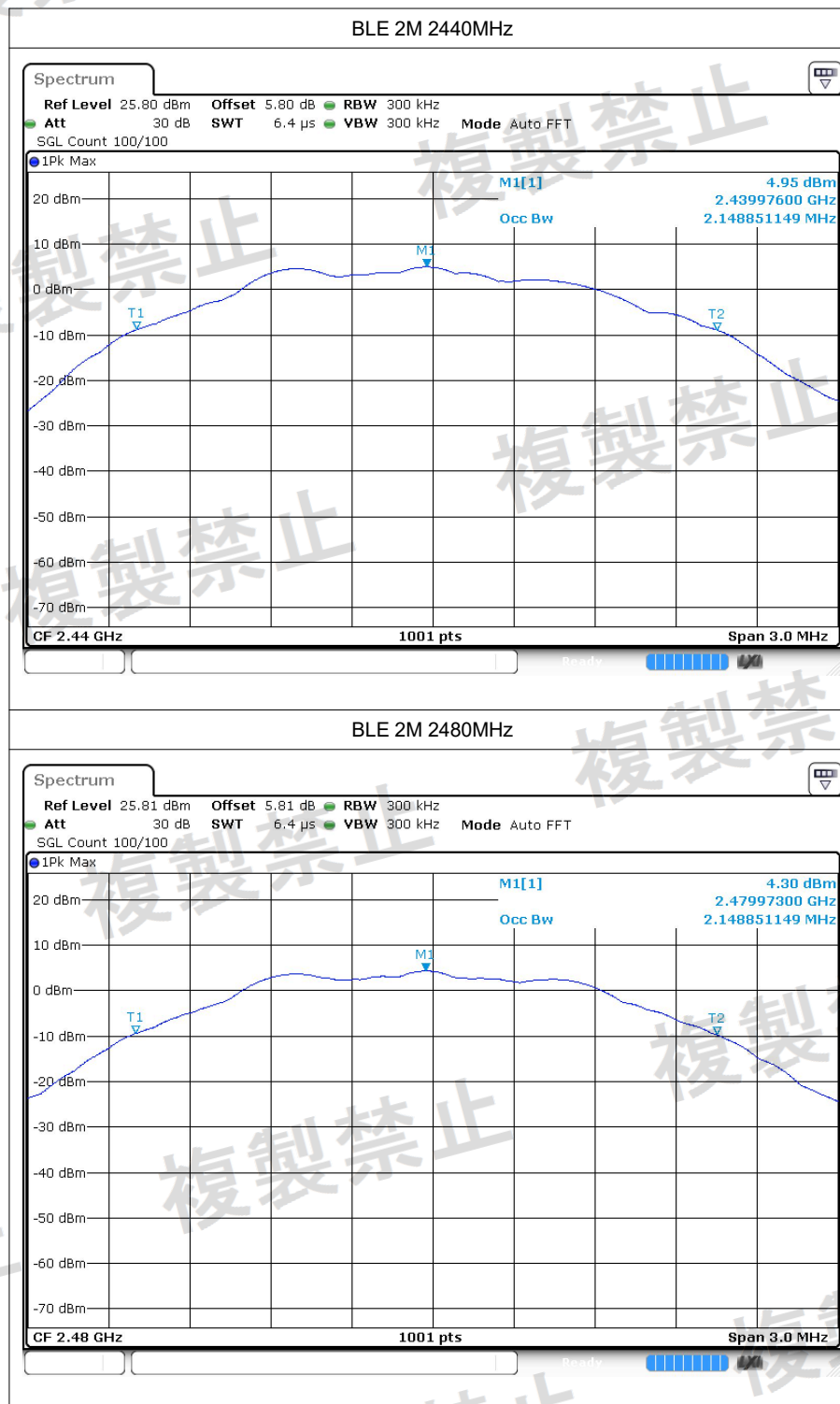
Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
BLE 1M	2402	Ant1	1.247
BLE 1M	2440	Ant1	1.247
BLE 1M	2480	Ant1	1.253
BLE 2M	2402	Ant1	2.155
BLE 2M	2440	Ant1	2.149
BLE 2M	2480	Ant1	2.149



4.2 Test Graphs









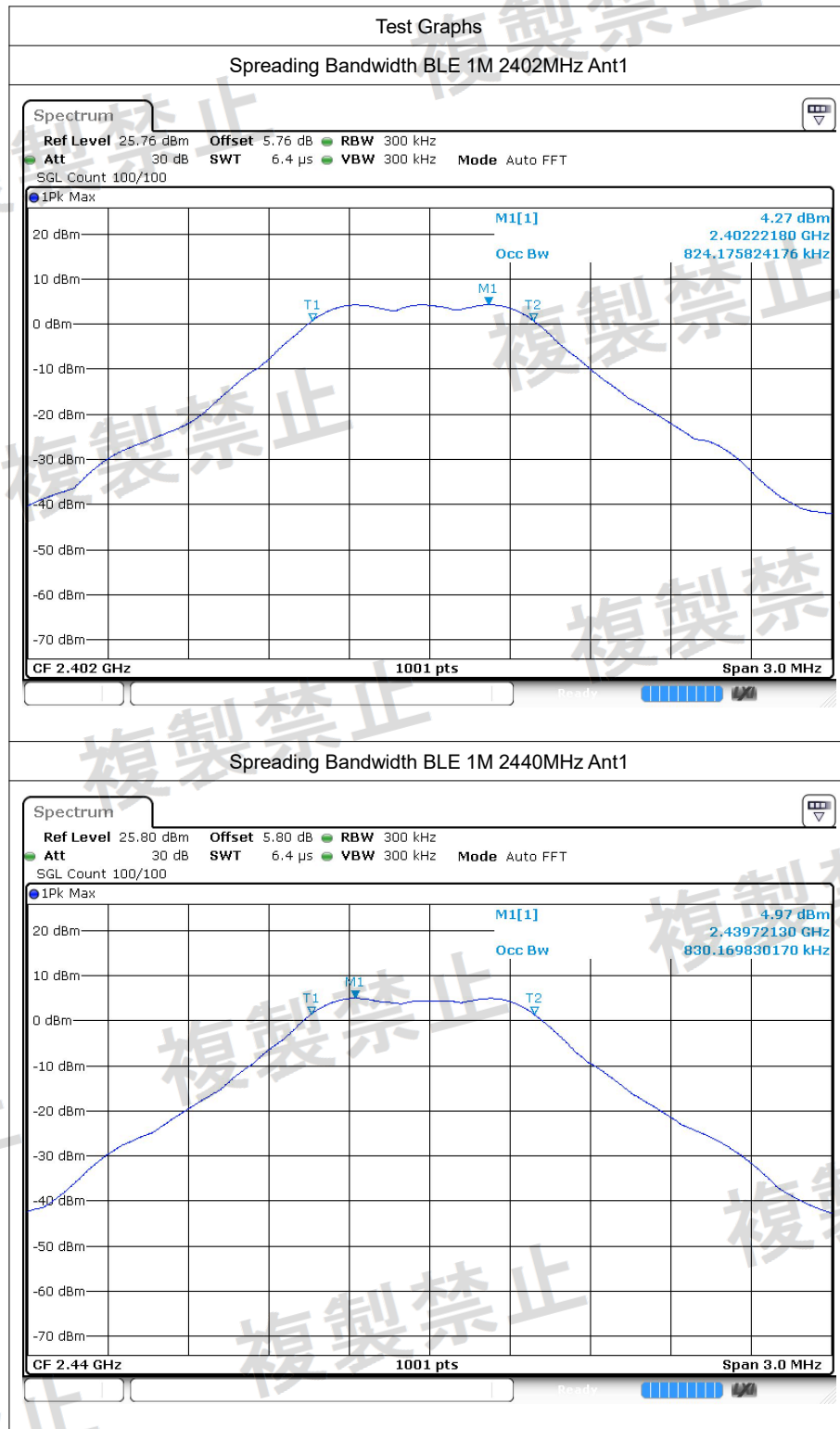
5 Spread Spectrum Bandwidth (90%)

5.1 Test Result

Mode	Frequency (MHz)	Antenna	90% OBW (MHz)	Limit (MHz)	Verdict
BLE 1M	2402	Ant1	0.824	0.5	Pass
BLE 1M	2440	Ant1	0.83	0.5	Pass
BLE 1M	2480	Ant1	0.827	0.5	Pass
BLE 2M	2402	Ant1	1.382	0.5	Pass
BLE 2M	2440	Ant1	1.352	0.5	Pass
BLE 2M	2480	Ant1	1.385	0.5	Pass

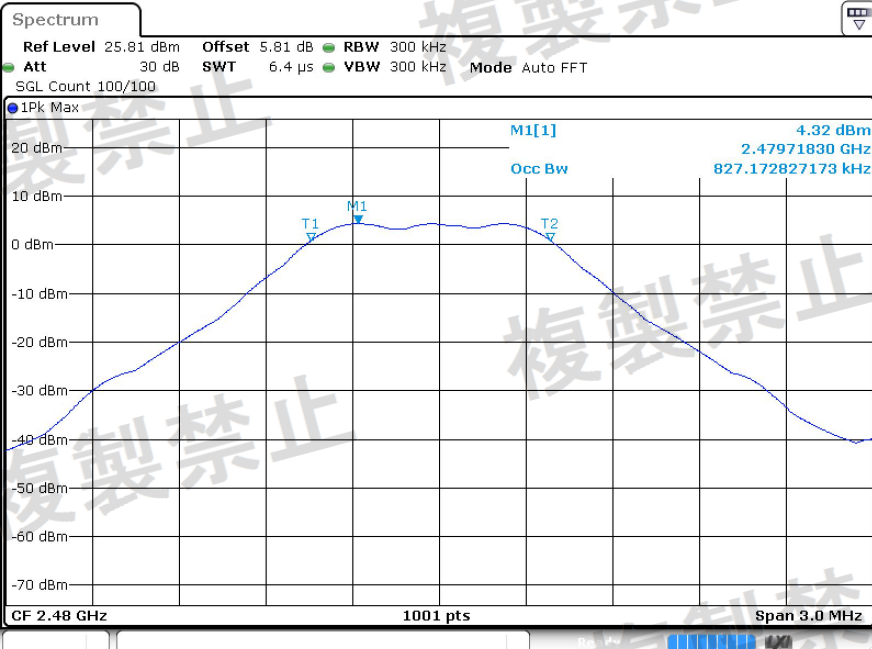


5.2 Test Graphs

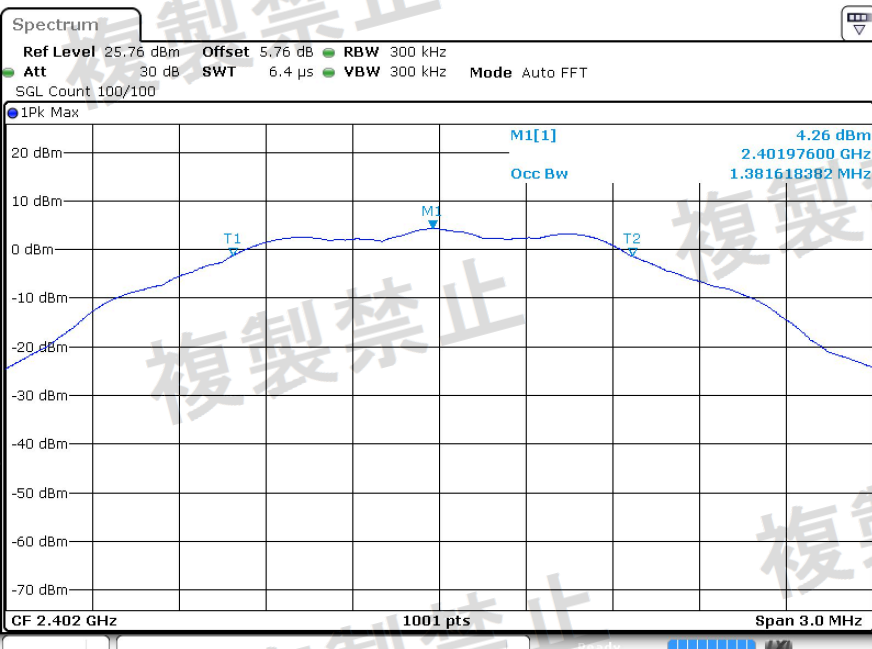


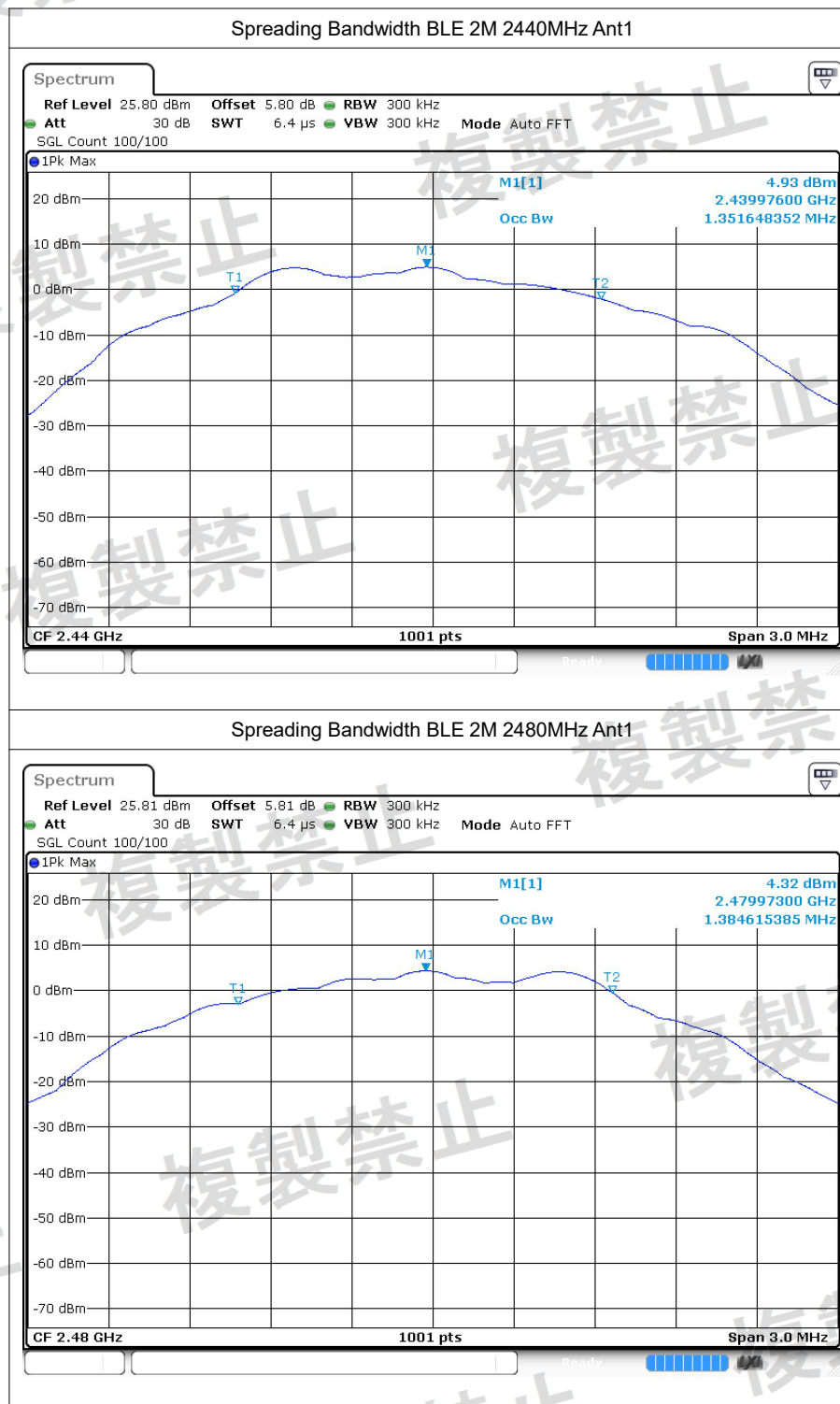


Spreading Bandwidth BLE 1M 2480MHz Ant1



Spreading Bandwidth BLE 2M 2402MHz Ant1





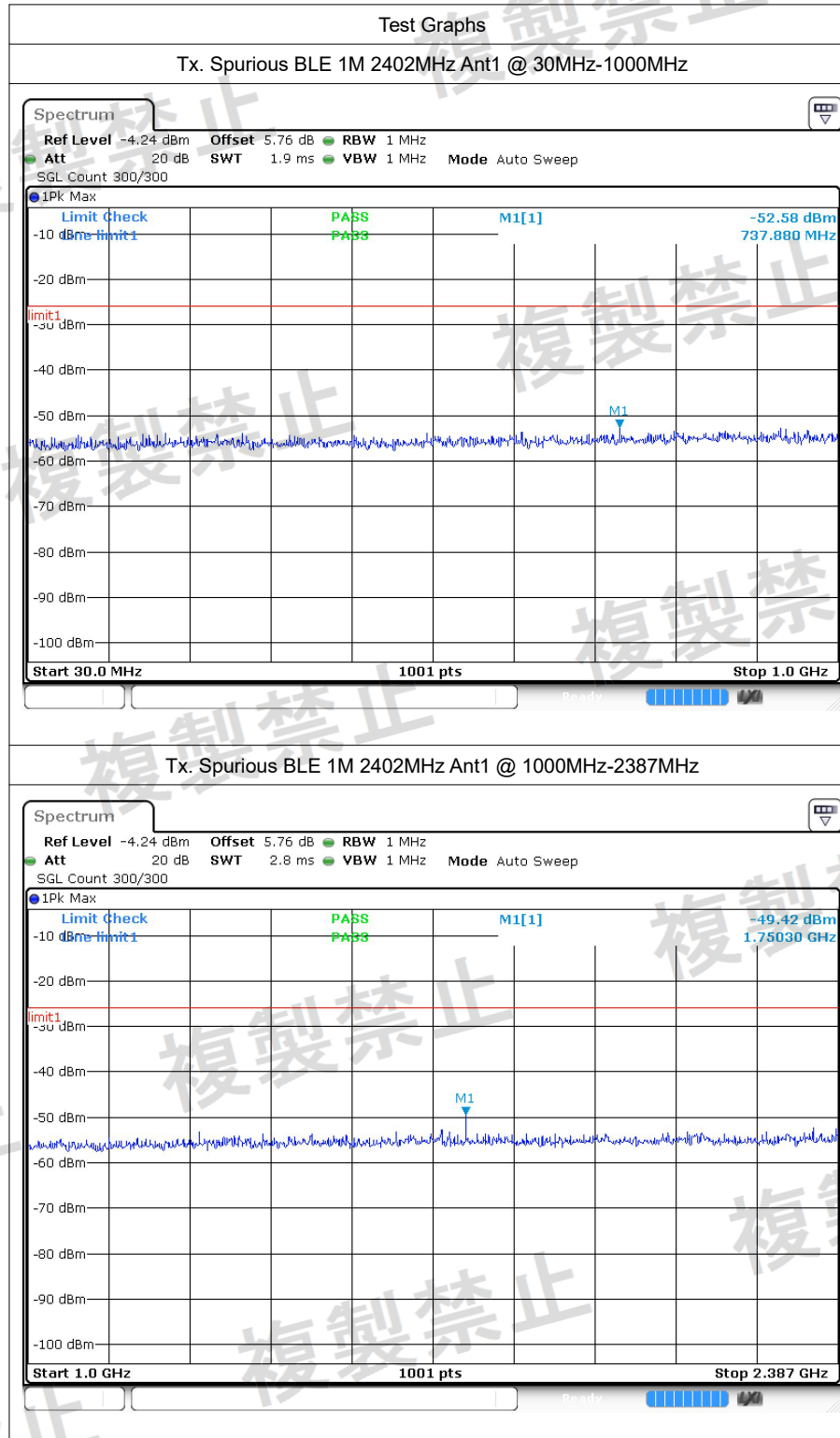


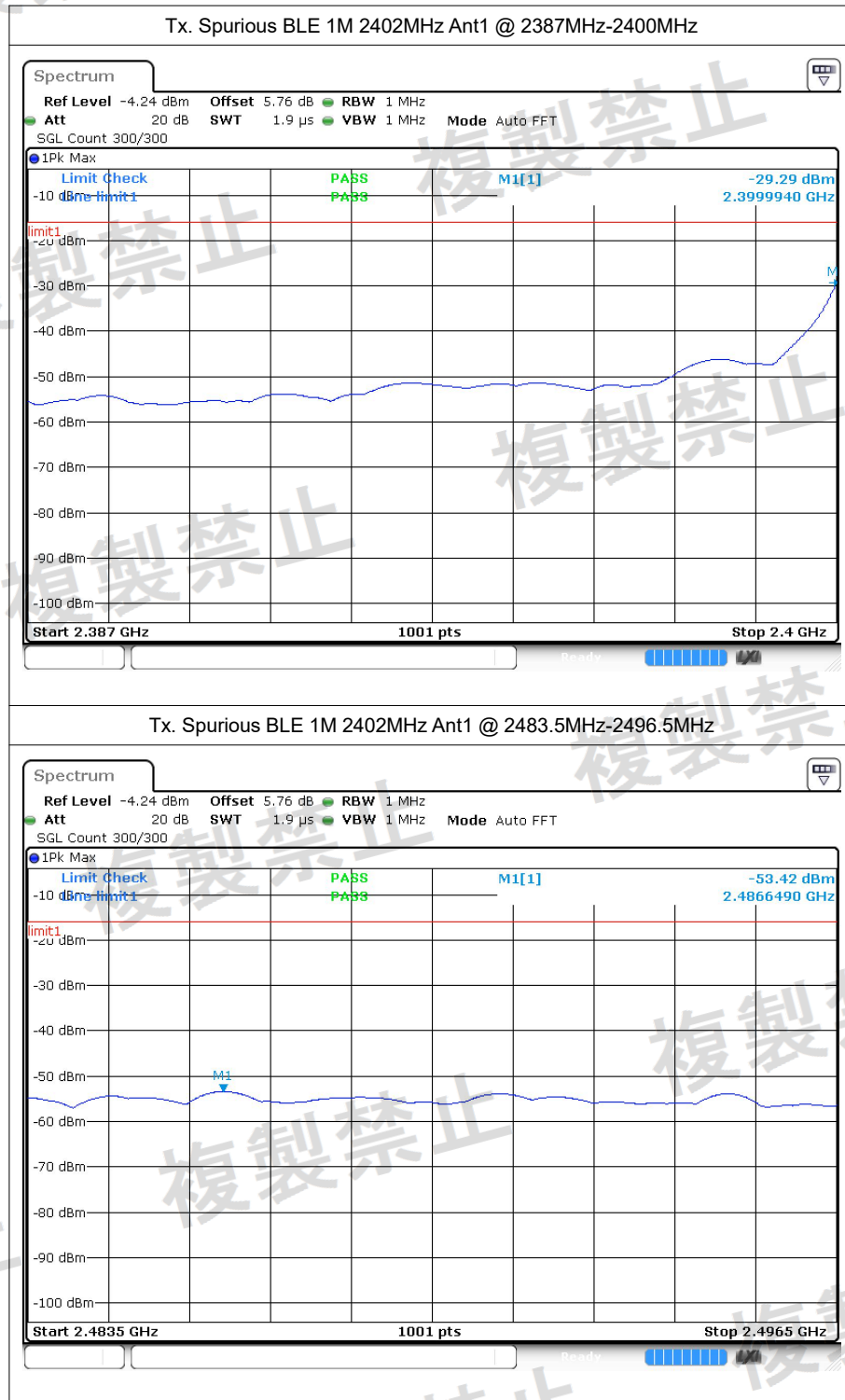
6 Tx Spurious Emission

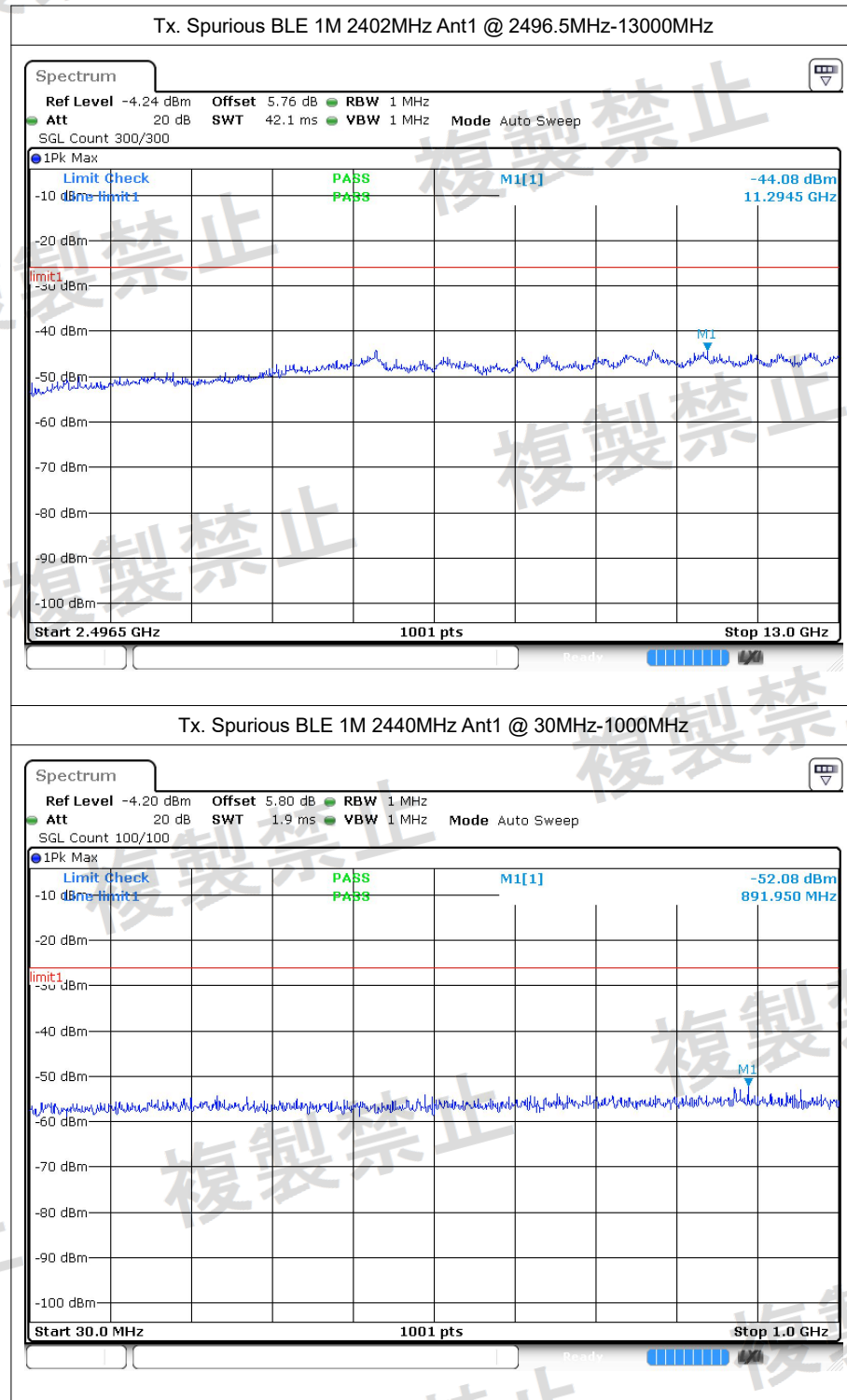
6.1 Test Result

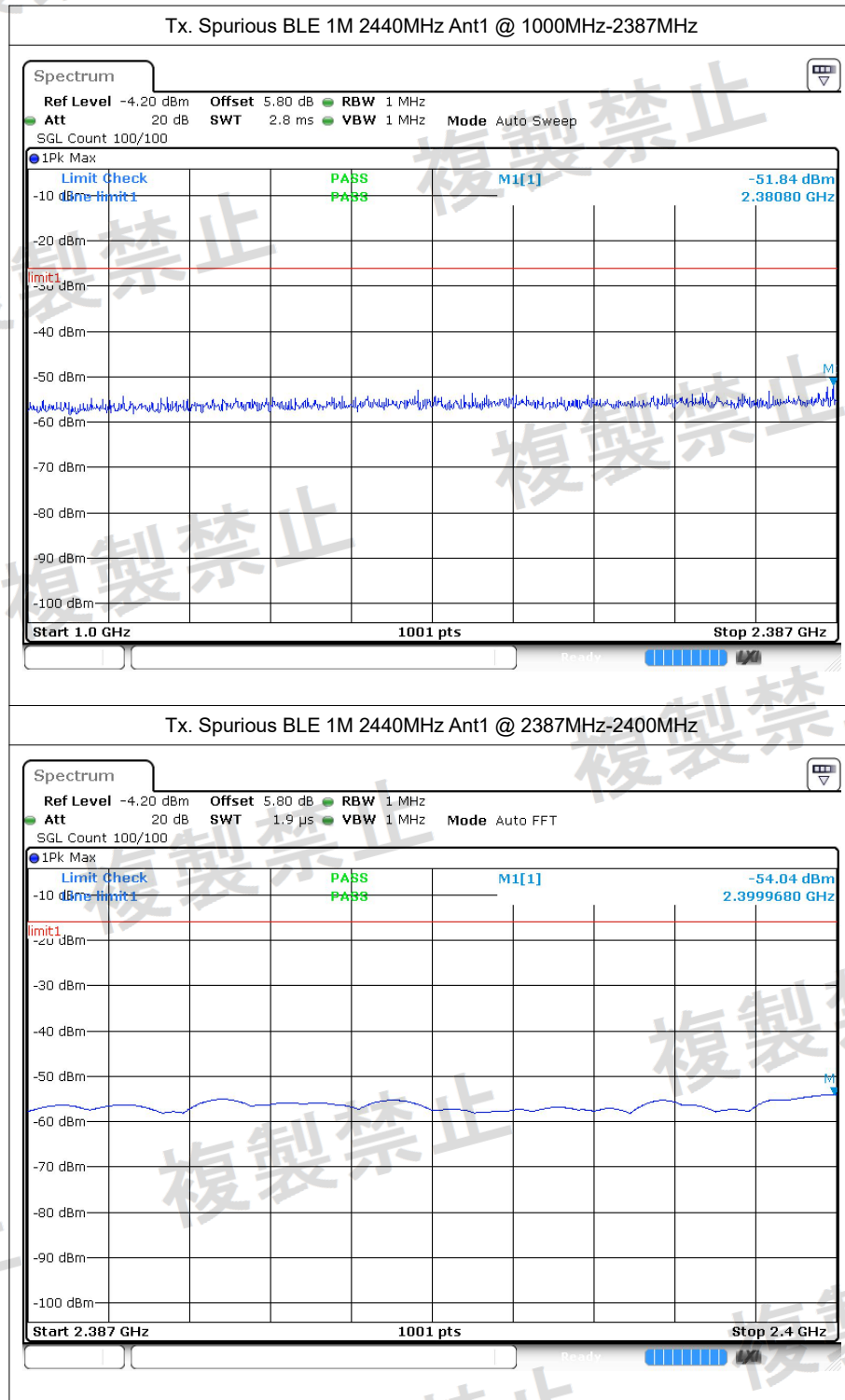
Mode	Frequency (MHz)	Antenna	Range (MHz)	Emission Frequency (MHz)	Max Value (dBm)	Limit Start(dBm)	Limit Stop (dBm)	Verdict
BLE 1M	2402	Ant1	30-1000	737.88	-52.58	-26	-26	Pass
BLE 1M	2402	Ant1	1000-2387	1750.3	-49.42	-26	-26	Pass
BLE 1M	2402	Ant1	2387-2400	2399.99	-29.29	-16	-16	Pass
BLE 1M	2402	Ant1	2483.5-2496.5	2486.65	-53.42	-16	-16	Pass
BLE 1M	2402	Ant1	2496.5-13000	11294.5	-44.08	-26	-26	Pass
BLE 1M	2440	Ant1	30-1000	891.95	-52.08	-26	-26	Pass
BLE 1M	2440	Ant1	1000-2387	2380.8	-51.84	-26	-26	Pass
BLE 1M	2440	Ant1	2387-2400	2399.97	-54.04	-16	-16	Pass
BLE 1M	2440	Ant1	2483.5-2496.5	2489.83	-54.27	-16	-16	Pass
BLE 1M	2440	Ant1	2496.5-13000	12239.5	-44.18	-26	-26	Pass
BLE 1M	2480	Ant1	30-1000	892.92	-52.28	-26	-26	Pass
BLE 1M	2480	Ant1	1000-2387	2268.5	-53.23	-26	-26	Pass
BLE 1M	2480	Ant1	2387-2400	2394.15	-54.5	-16	-16	Pass
BLE 1M	2480	Ant1	2483.5-2496.5	2487.46	-44.11	-16	-16	Pass
BLE 1M	2480	Ant1	2496.5-13000	10644.5	-43.38	-26	-26	Pass
BLE 2M	2402	Ant1	30-1000	961.72	-52.57	-26	-26	Pass
BLE 2M	2402	Ant1	1000-2387	1663	-52.7	-26	-26	Pass
BLE 2M	2402	Ant1	2387-2400	2399.99	-17.28	-16	-16	Pass
BLE 2M	2402	Ant1	2483.5-2496.5	2489.77	-54.68	-16	-16	Pass
BLE 2M	2402	Ant1	2496.5-13000	12648.5	-44.21	-26	-26	Pass
BLE 2M	2440	Ant1	30-1000	917.15	-51.68	-26	-26	Pass
BLE 2M	2440	Ant1	1000-2387	2379.4	-52.13	-26	-26	Pass
BLE 2M	2440	Ant1	2387-2400	2391.53	-54.03	-16	-16	Pass
BLE 2M	2440	Ant1	2483.5-2496.5	2489.17	-54.05	-16	-16	Pass
BLE 2M	2440	Ant1	2496.5-13000	6992.5	-45	-26	-26	Pass
BLE 2M	2480	Ant1	30-1000	838.66	-53.16	-26	-26	Pass
BLE 2M	2480	Ant1	1000-2387	2120.3	-53.44	-26	-26	Pass
BLE 2M	2480	Ant1	2387-2400	2388.79	-54.37	-16	-16	Pass
BLE 2M	2480	Ant1	2483.5-2496.5	2487.48	-45.18	-16	-16	Pass
BLE 2M	2480	Ant1	2496.5-13000	10256.5	-44.8	-26	-26	Pass

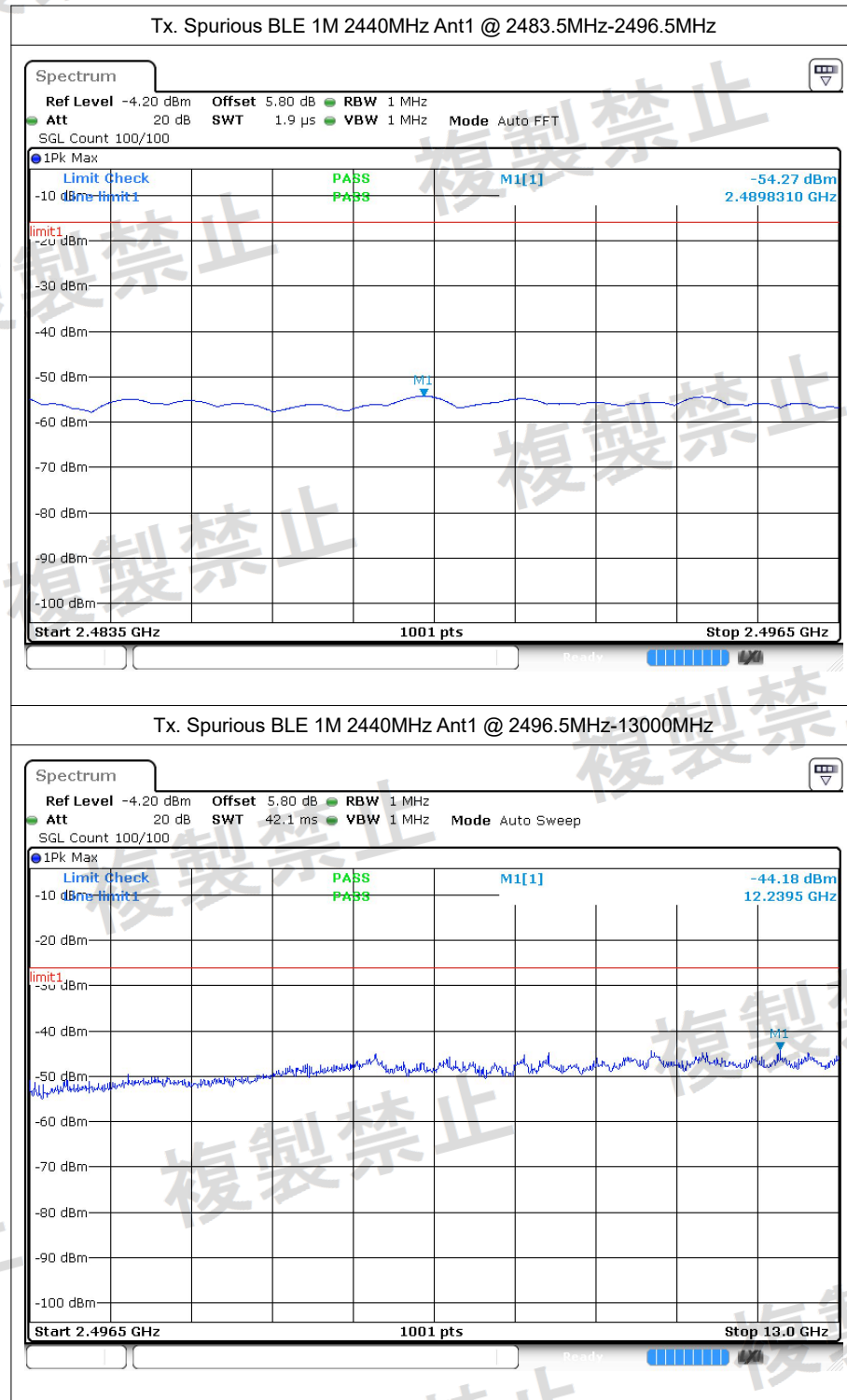
6.2 Test Graphs

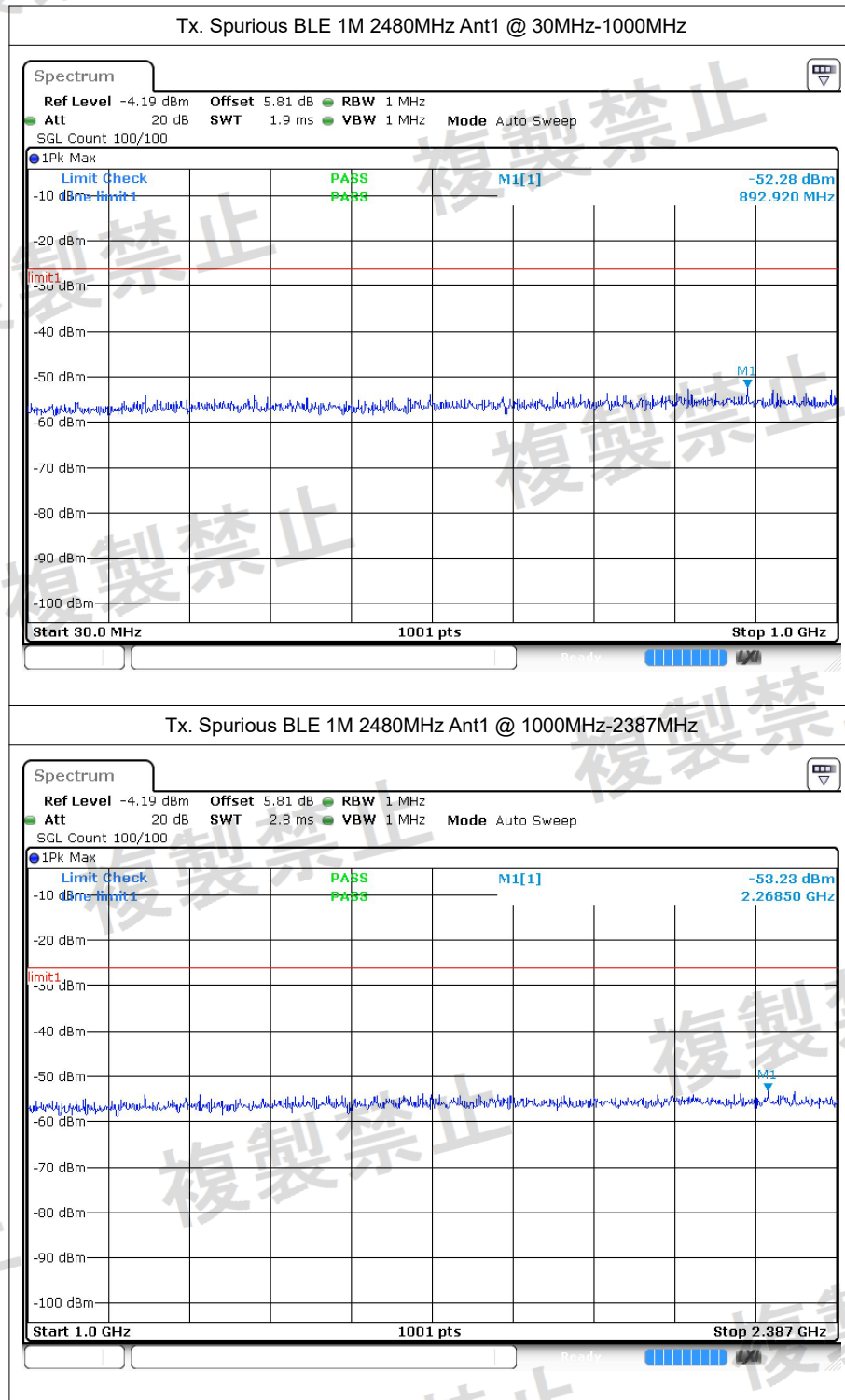


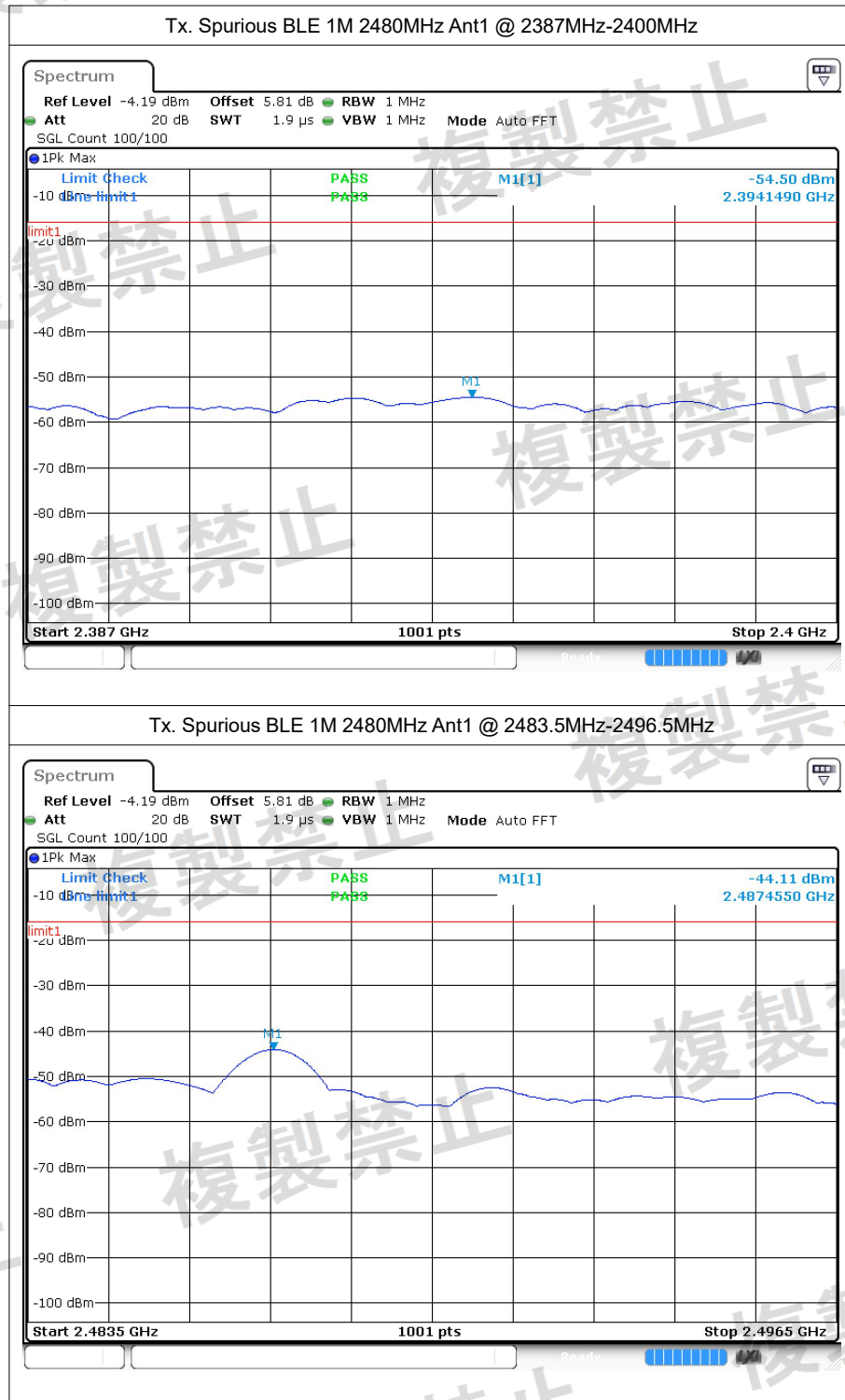


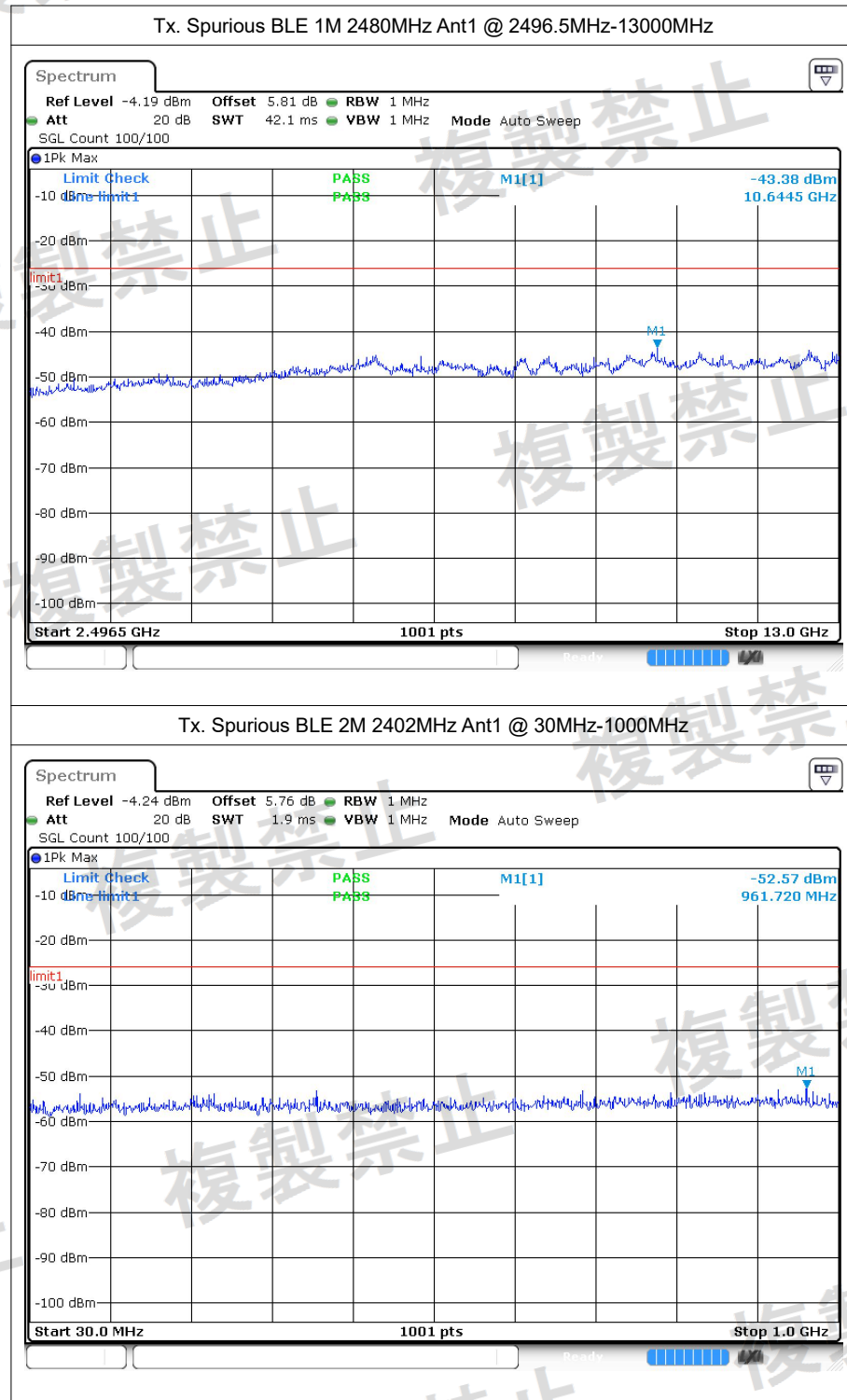


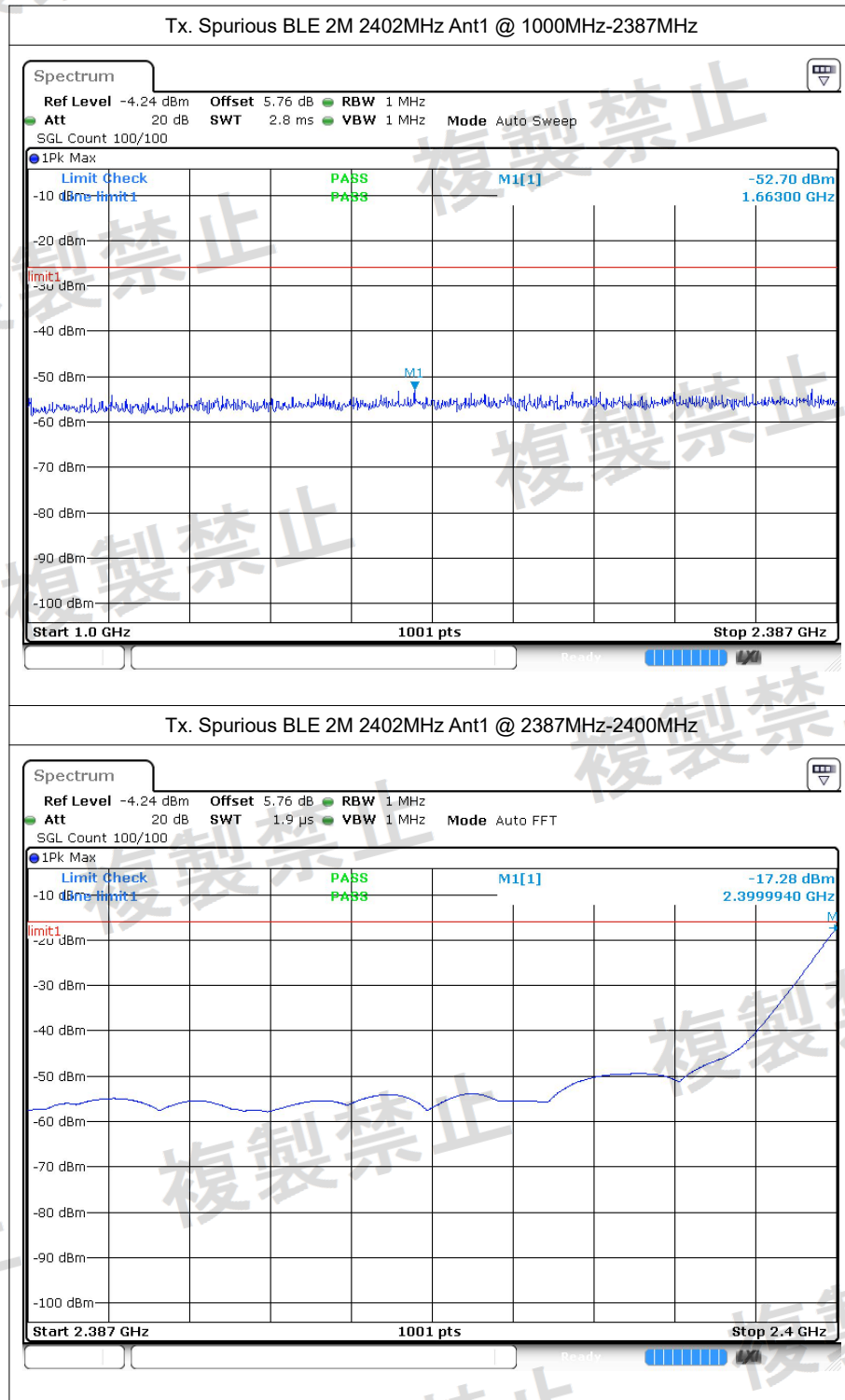


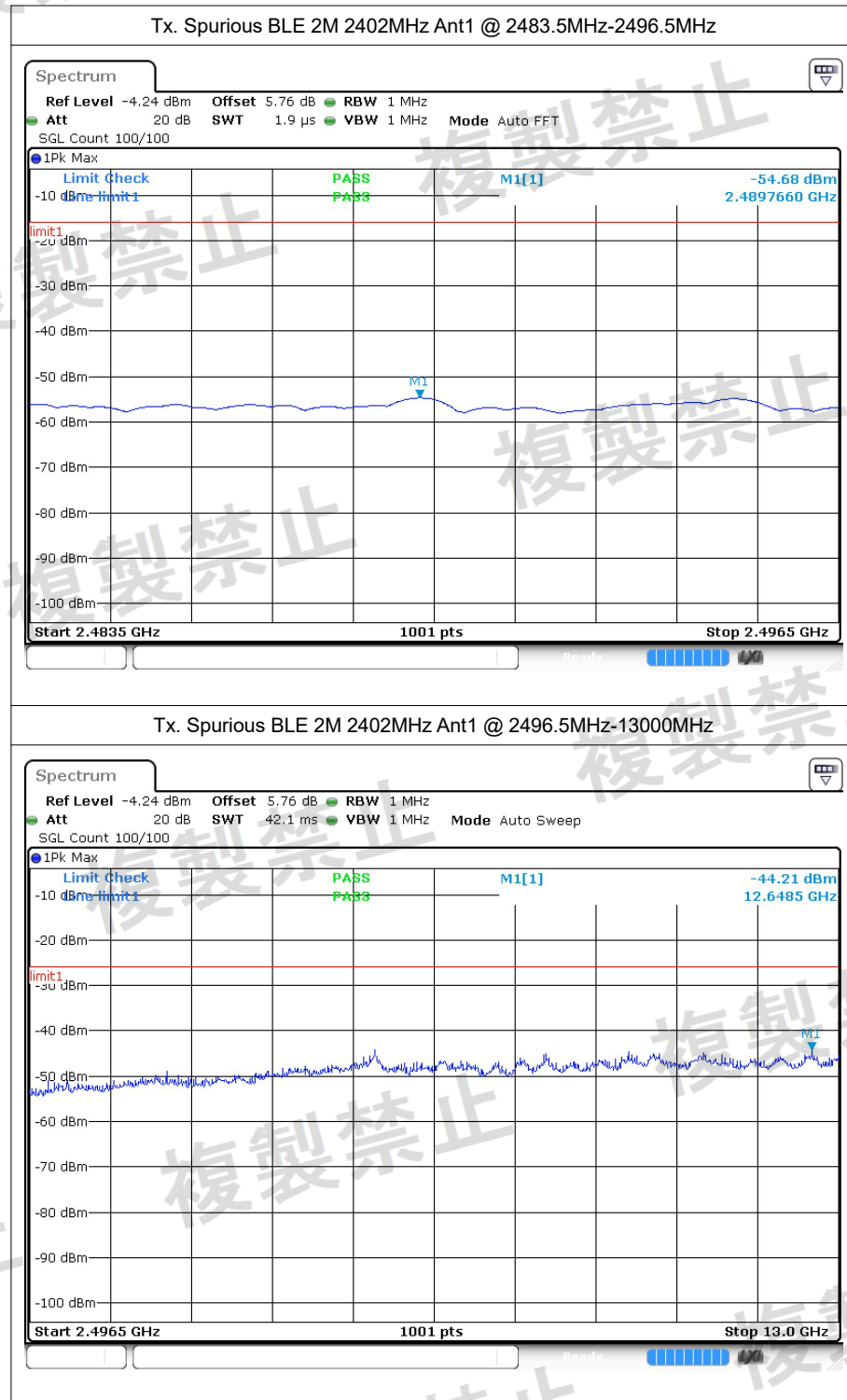


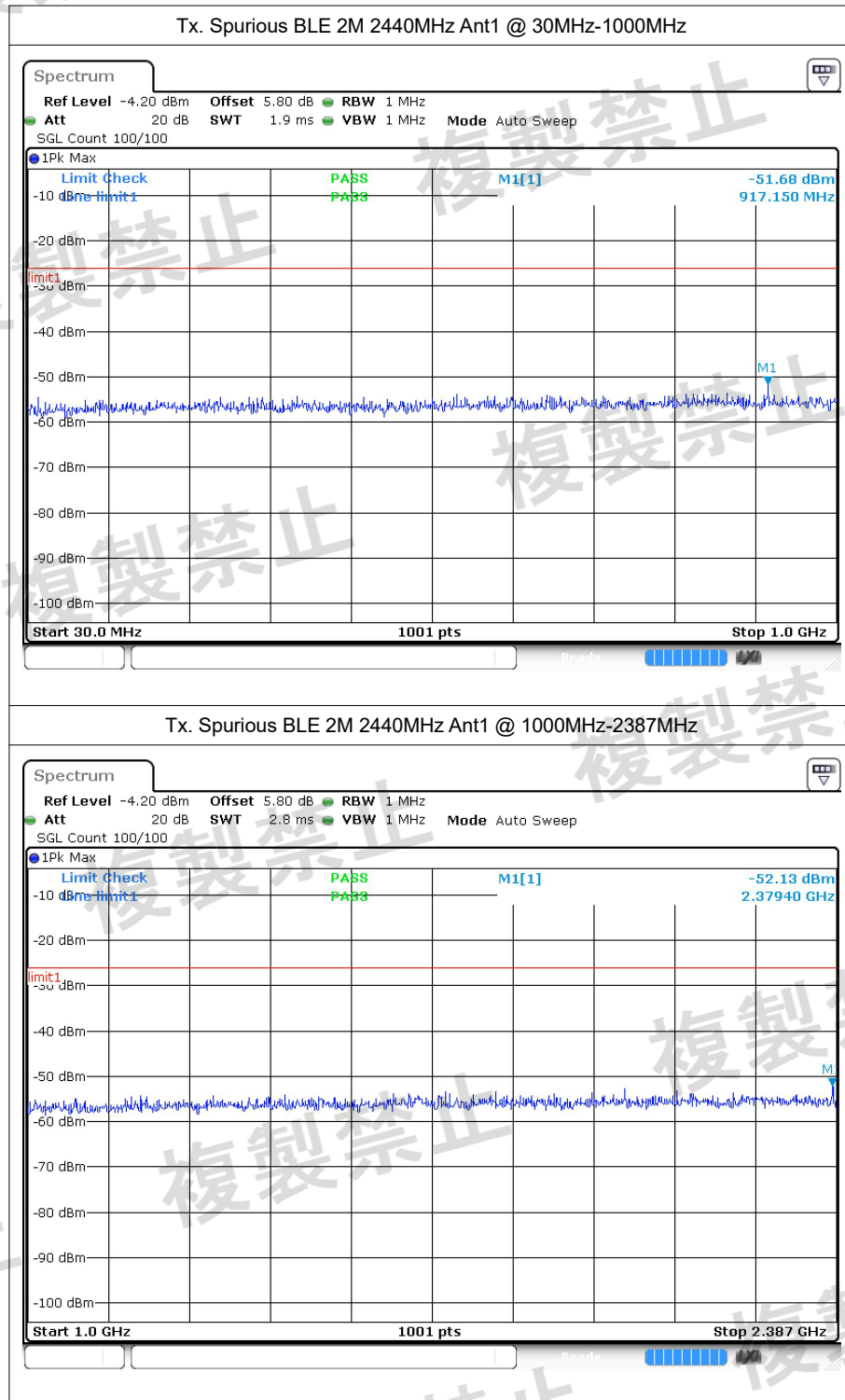


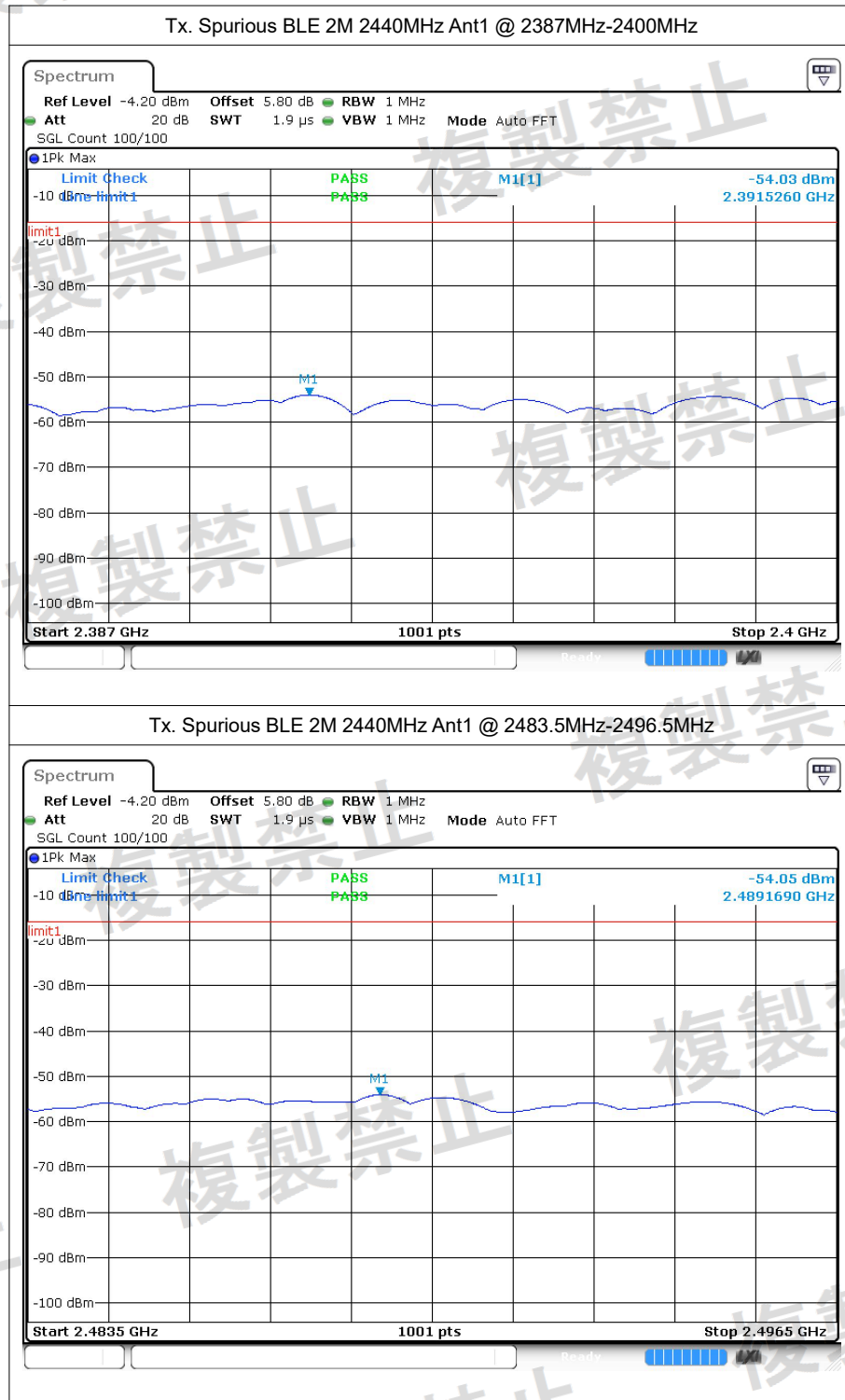


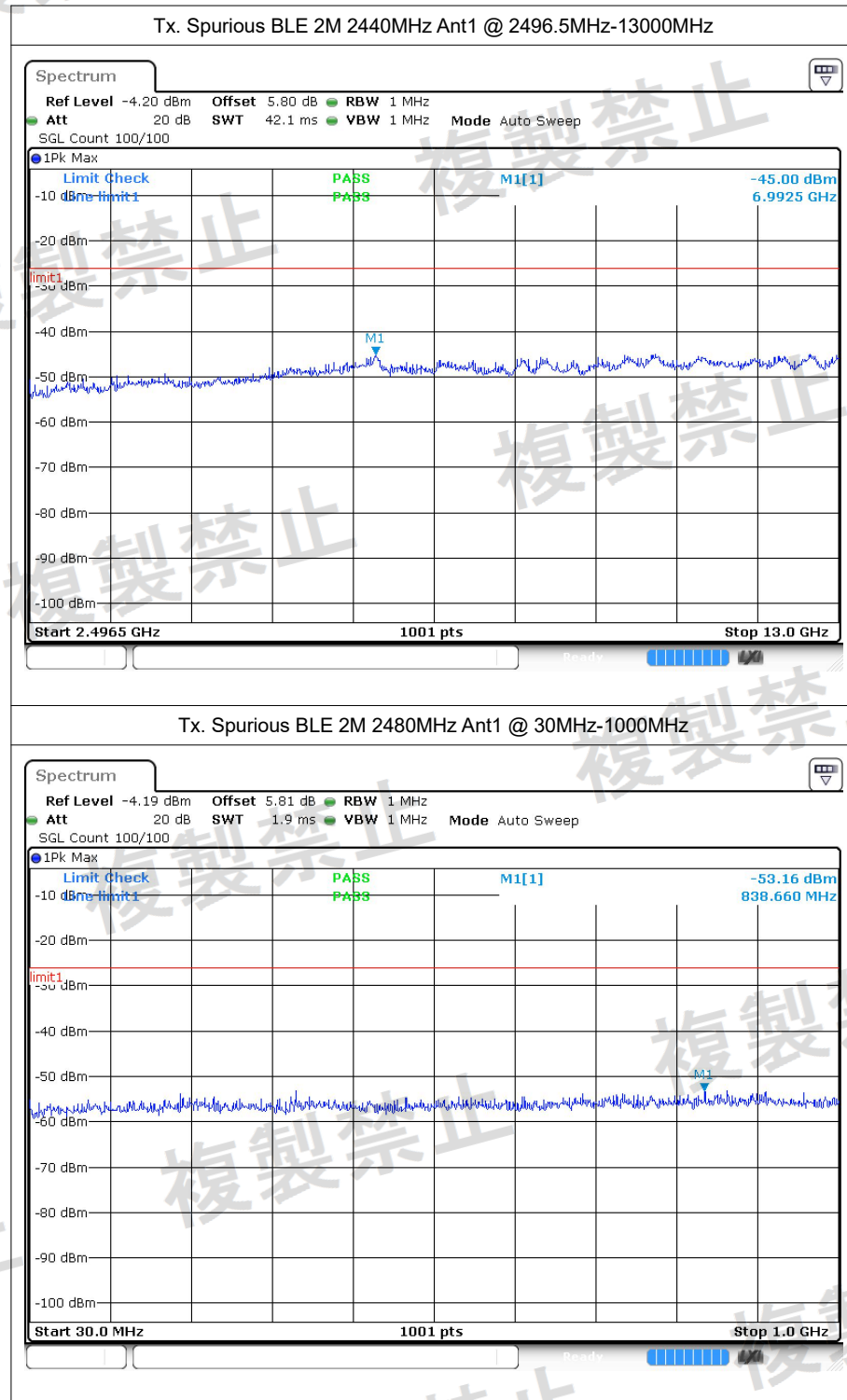


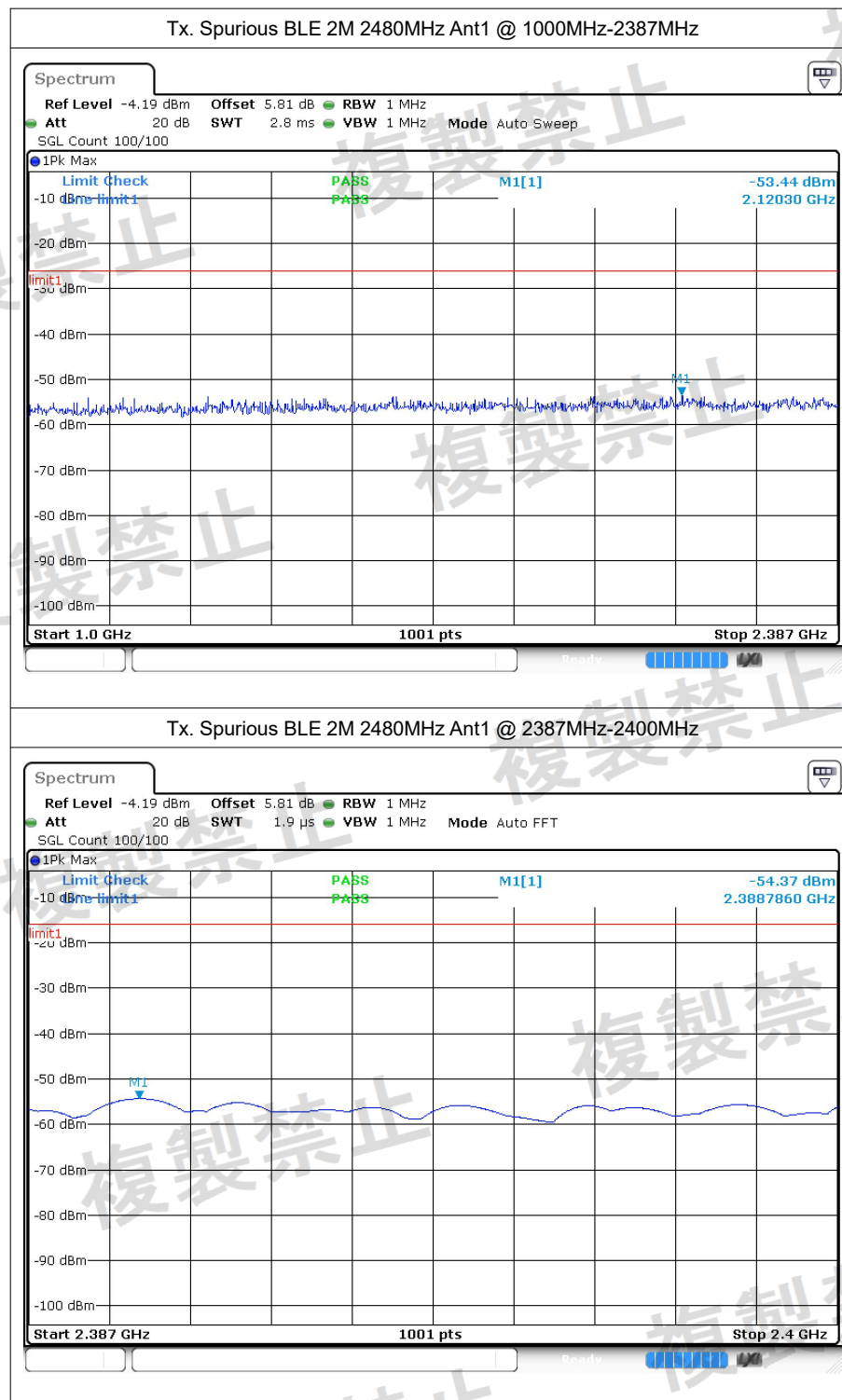


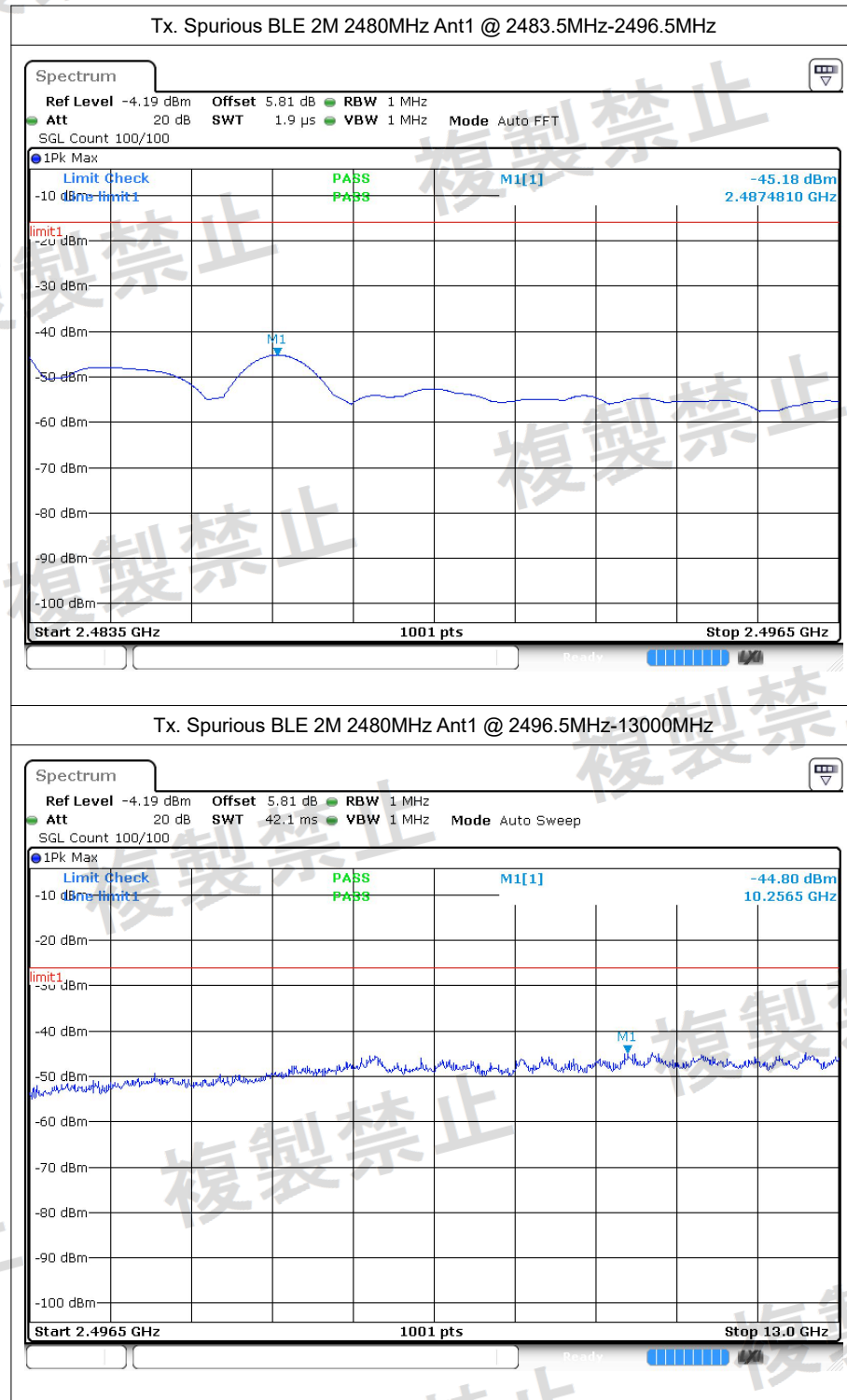














7 Rx Spurious Emission

7.1 Test Result

Mode	Antenna	Range (MHz)	Emission Frequency (MHz)	Max Value (dBm)	Limit (dBm)	Verdict
BLE 1M	Ant1	30-1000	39.21	-72.46	-54	Pass
BLE 1M	Ant1	1000-13000	12670	-64.57	-47	Pass
BLE 2M	Ant1	30-1000	39.21	-72.66	-47	Pass
BLE 2M	Ant1	1000-13000	11160	-64.72	-47	Pass

7.2 Test Graphs

