

RF Test Data

For

Project No.:	25CST100002M01
Client:	Suzhou Yunyuhua Information Technology Co., Ltd.
Manufacturer:	Hubei province zuan ma zhi kong technology co., ltd
Product Description:	Wireless controller
Model No.:	T50
Test Engineer:	Li Jun
Test Date:	2025-10-15

Test Summary

Item	Result
Frequency Error	Pass
Occupied Bandwidth	Pass
Spread Bandwidth	Pass
Antenna Power	Pass
Spurious Emission Intensity	Pass
Secondary Radiated Emission	Pass

1. Frequency Error

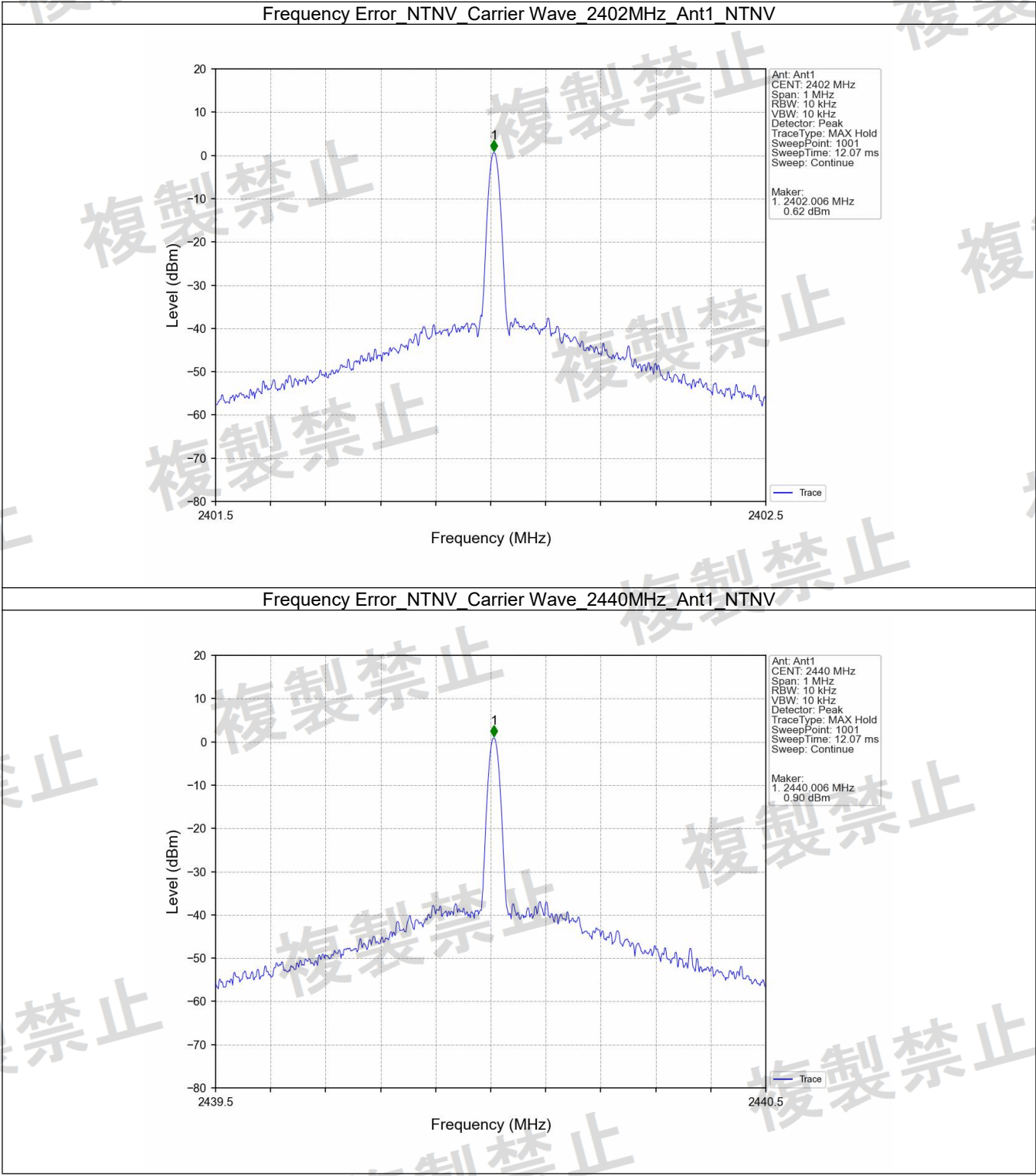
1.1 Test Result

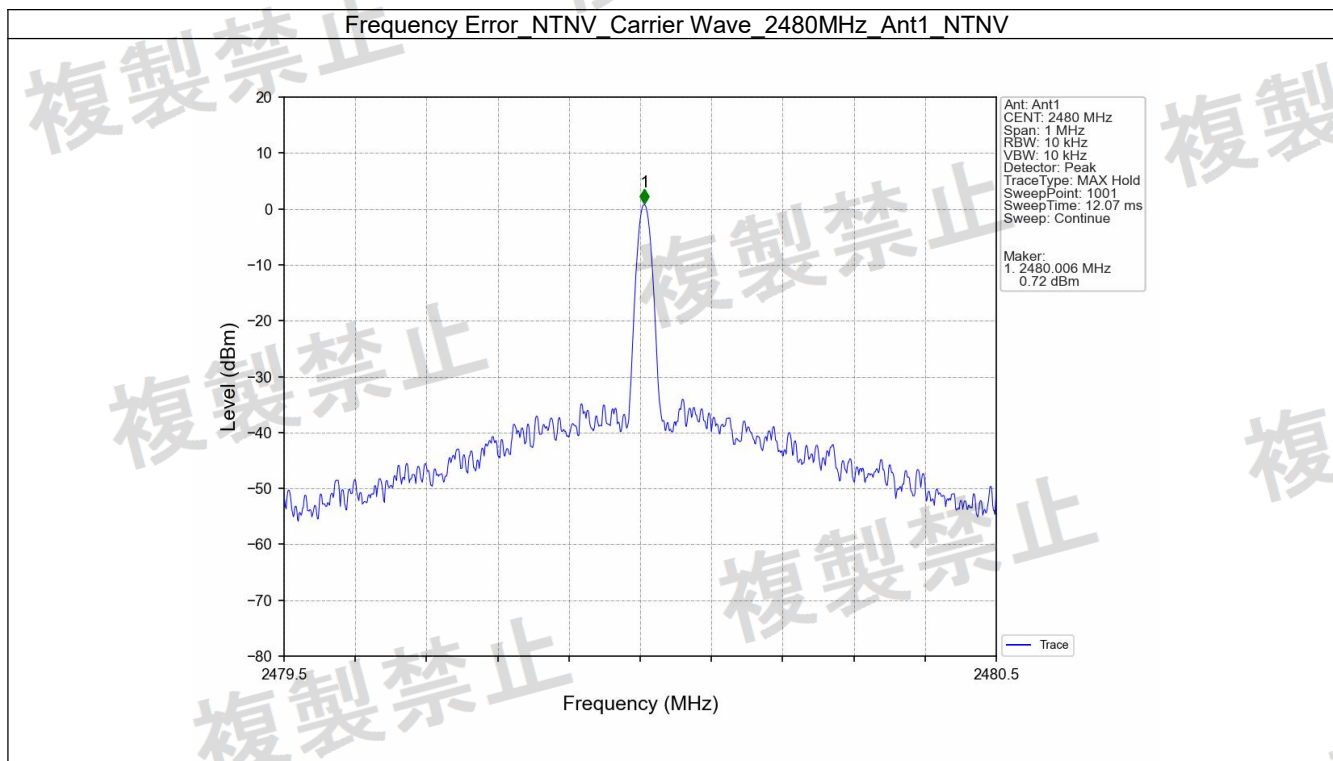
1.1.1 Ant1

Ant1							
ENV	Mode	TX Type	Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)		Verdict
					Result	Limit	
NTNV	Carrier Wave	SISO	2402	2402.006	2.50	-50 to 50	Pass
			2440	2440.006	2.46	-50 to 50	Pass
			2480	2480.006	2.42	-50 to 50	Pass

1.2 Test Graph

1.2.1 Ant1





2. Occupied Bandwidth

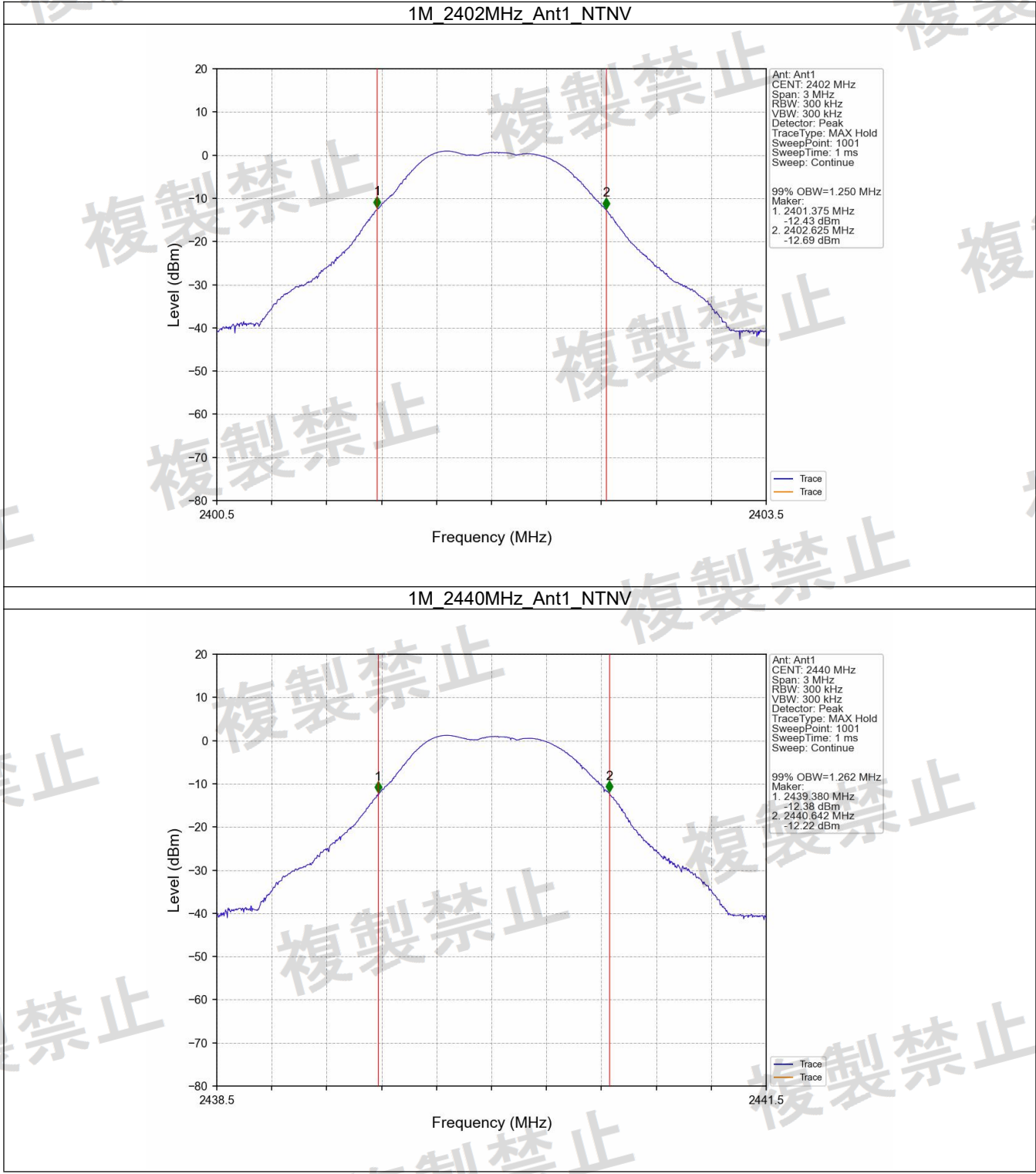
2.1 Test Result

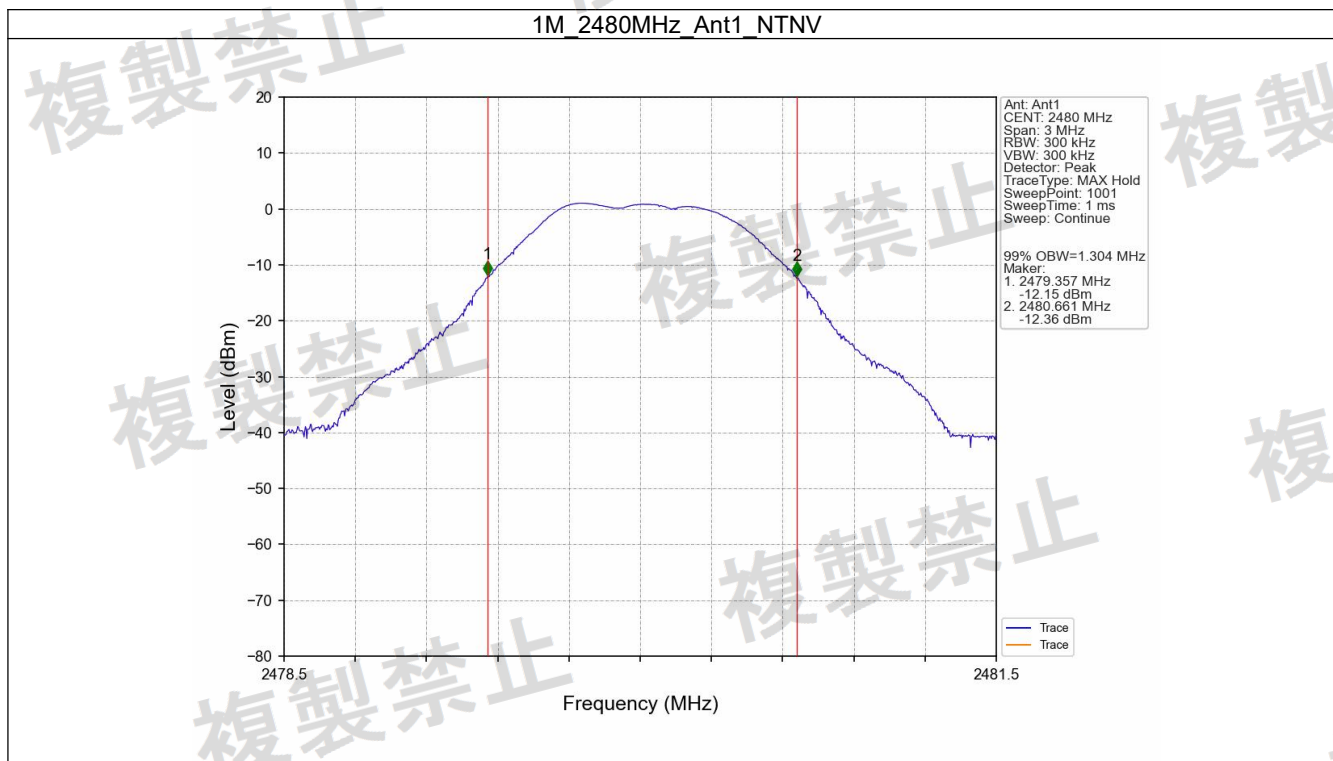
2.1.1 OBW

ENV	Mode	TX Type	Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
				ANT1	Limit	
NTNV	1M	SISO	2402	1.250	≤ 26	Pass
			2440	1.262	≤ 26	Pass
			2480	1.304	≤ 26	Pass

2.2 Test Graph

2.2.1 OBW





3. Spread Bandwidth

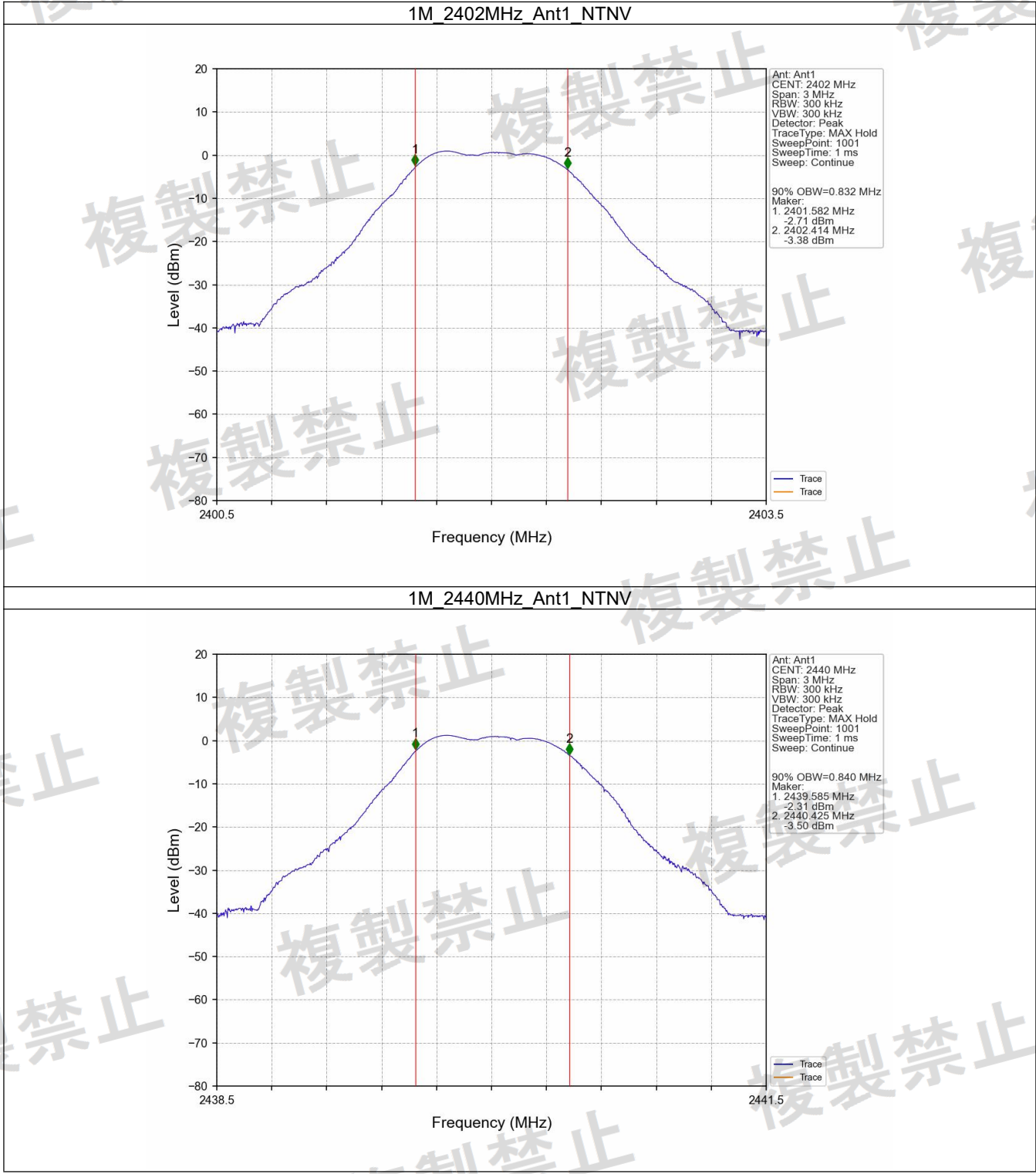
3.1 Test Result

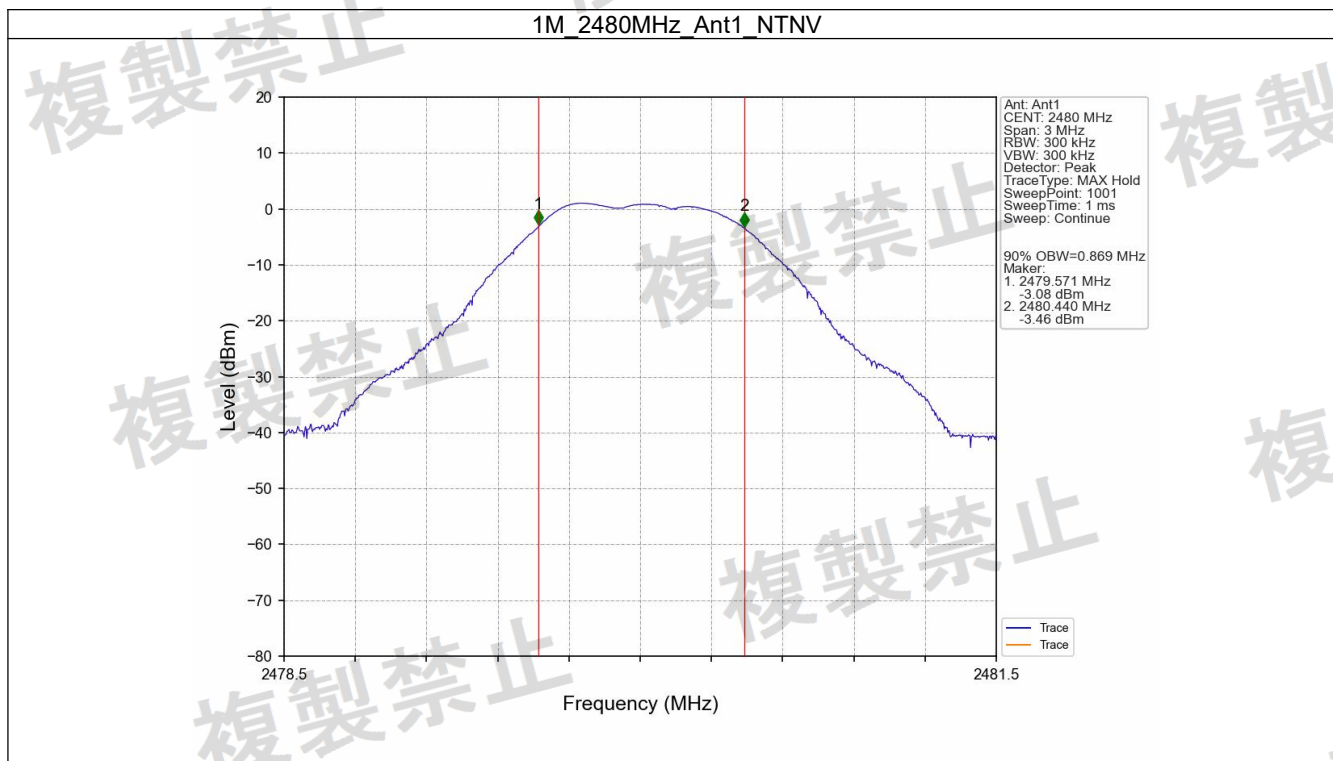
3.1.1 SPBW

ENV	Mode	TX Type	Frequency (MHz)	Spread Bandwidth (MHz)		Verdict
				ANT1	Limit	
NTNV	1M	SISO	2402	0.832	≥ 0.5	Pass
			2440	0.840	≥ 0.5	Pass
			2480	0.869	≥ 0.5	Pass

3.2 Test Graph

3.2.1 SPBW





4. Antenna Power

4.1 Test Result

4.1.1 Power

ENV	Mode	TX Type	Frequency (MHz)	ANT	Antenna Power (mW)		Nominal Power (mW)	Tolerance (%)		Verdict
					Measured	Limit		Measured	Limit	
NTNV	1M	SISO	2402	1	1.006	≤ 10.00	1.000	0.60	20	Pass
			2440	1	1.111	≤ 10.00	1.000	11.10	20	Pass
			2480	1	1.118	≤ 10.00	1.000	11.80	20	Pass

4.1.2 EIRP

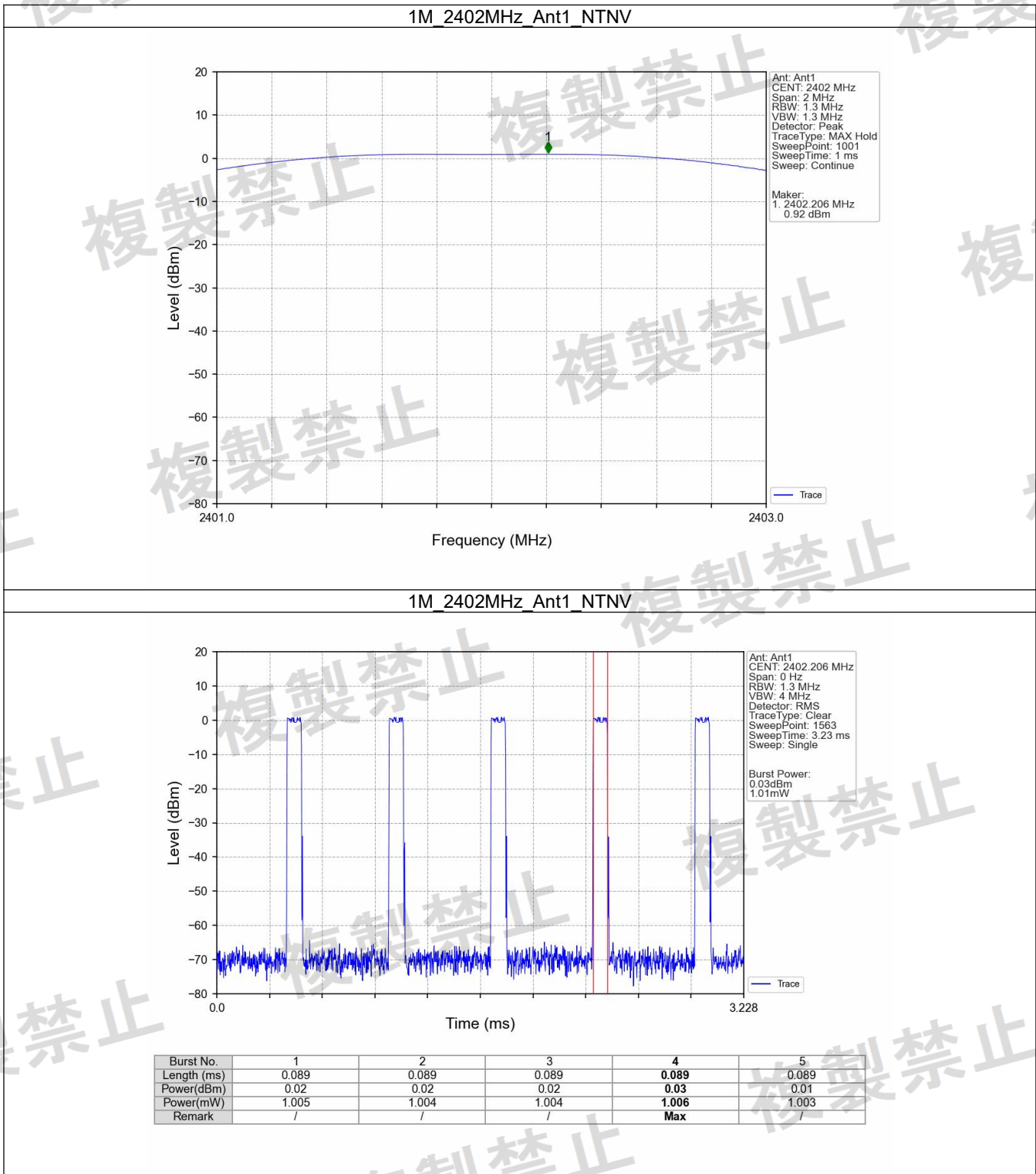
ENV	Mode	TX Type	Frequency (MHz)	ANT	Antenna Power (dBm)	EIRP (dBm)		Verdict
						Result	Limit	
NTNV	1M	SISO	2402	1	0.03	2.67	≤ 12.14	Pass
			2440	1	0.46	3.10	≤ 12.14	Pass
			2480	1	0.48	3.12	≤ 12.14	Pass

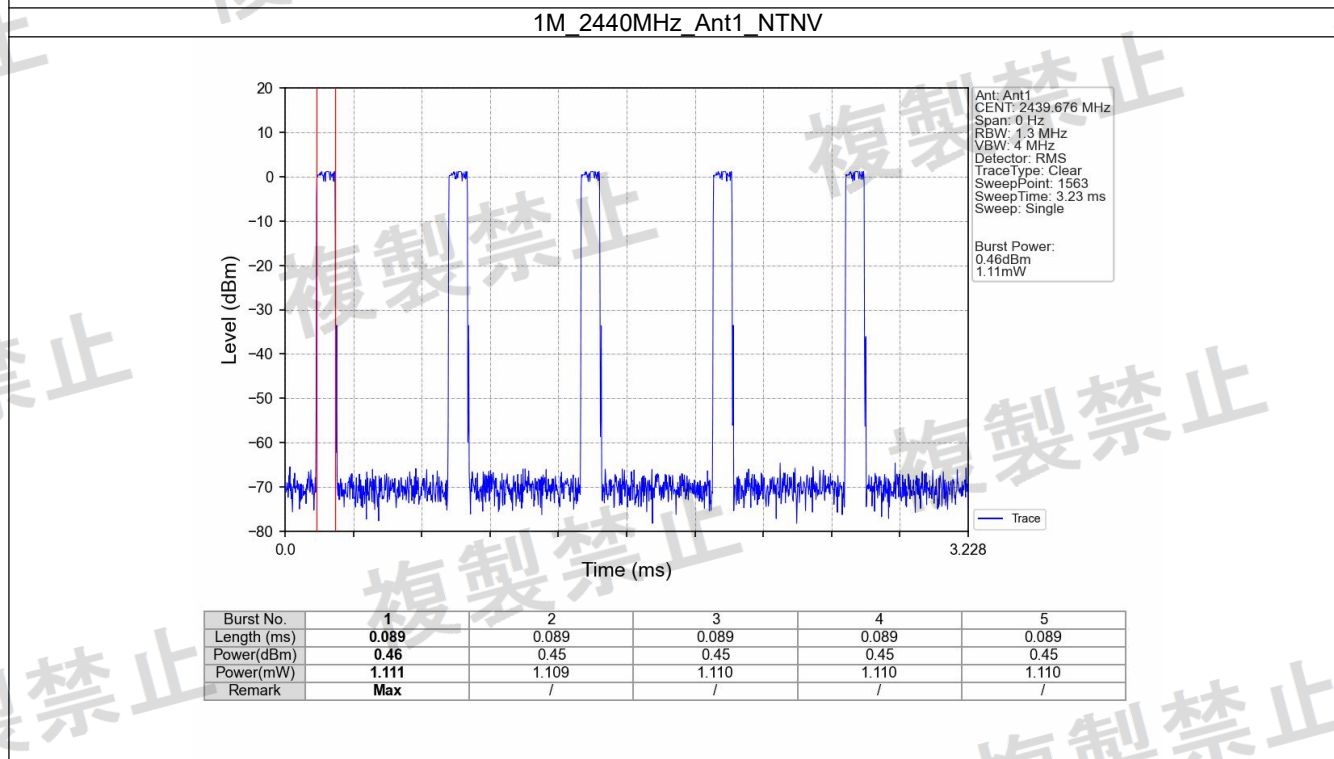
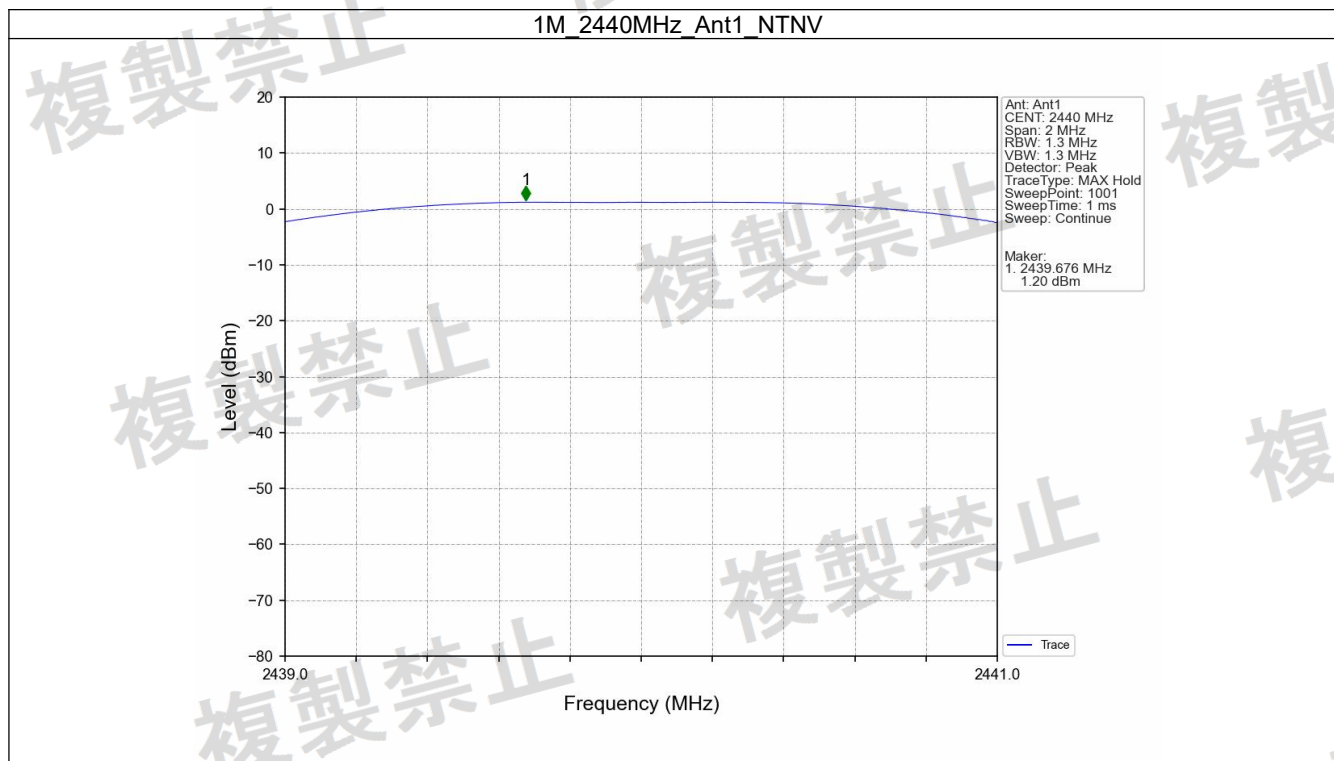
Note: ANT Gain=2.64dBi

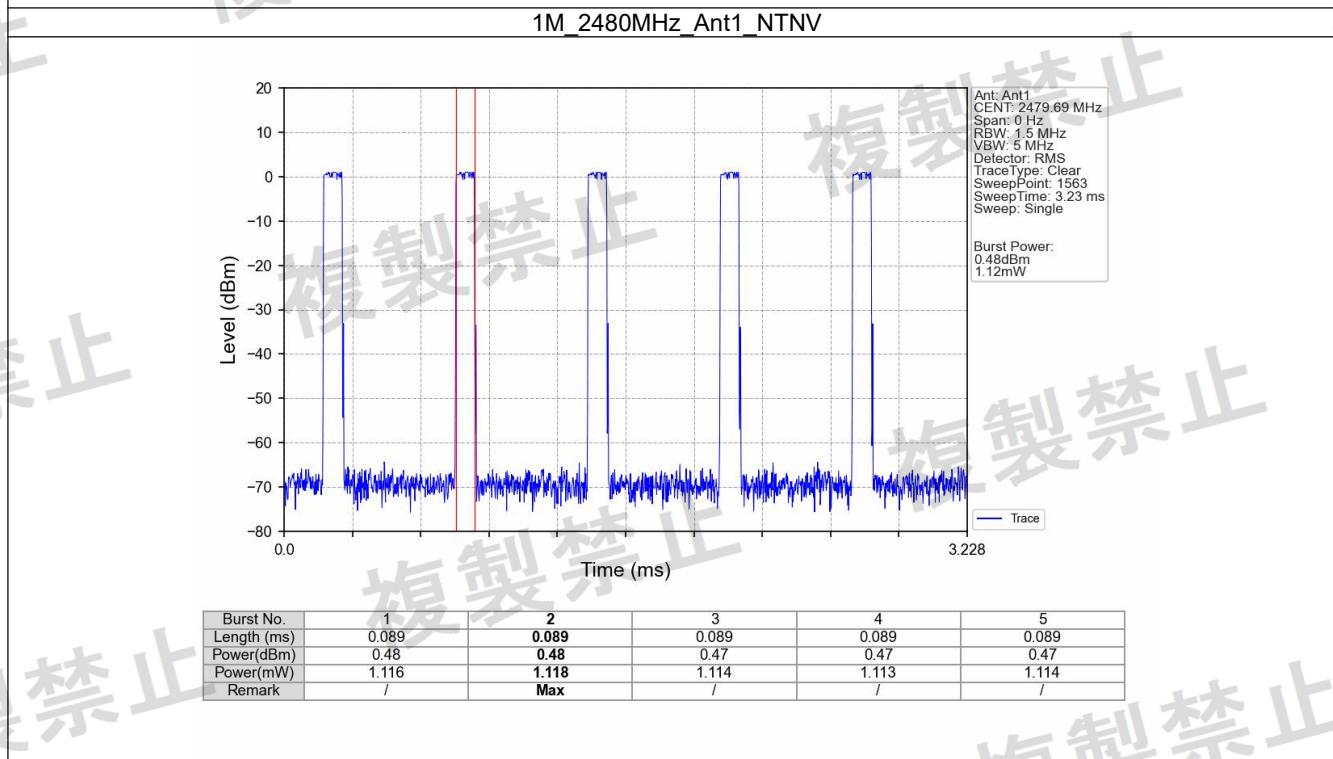
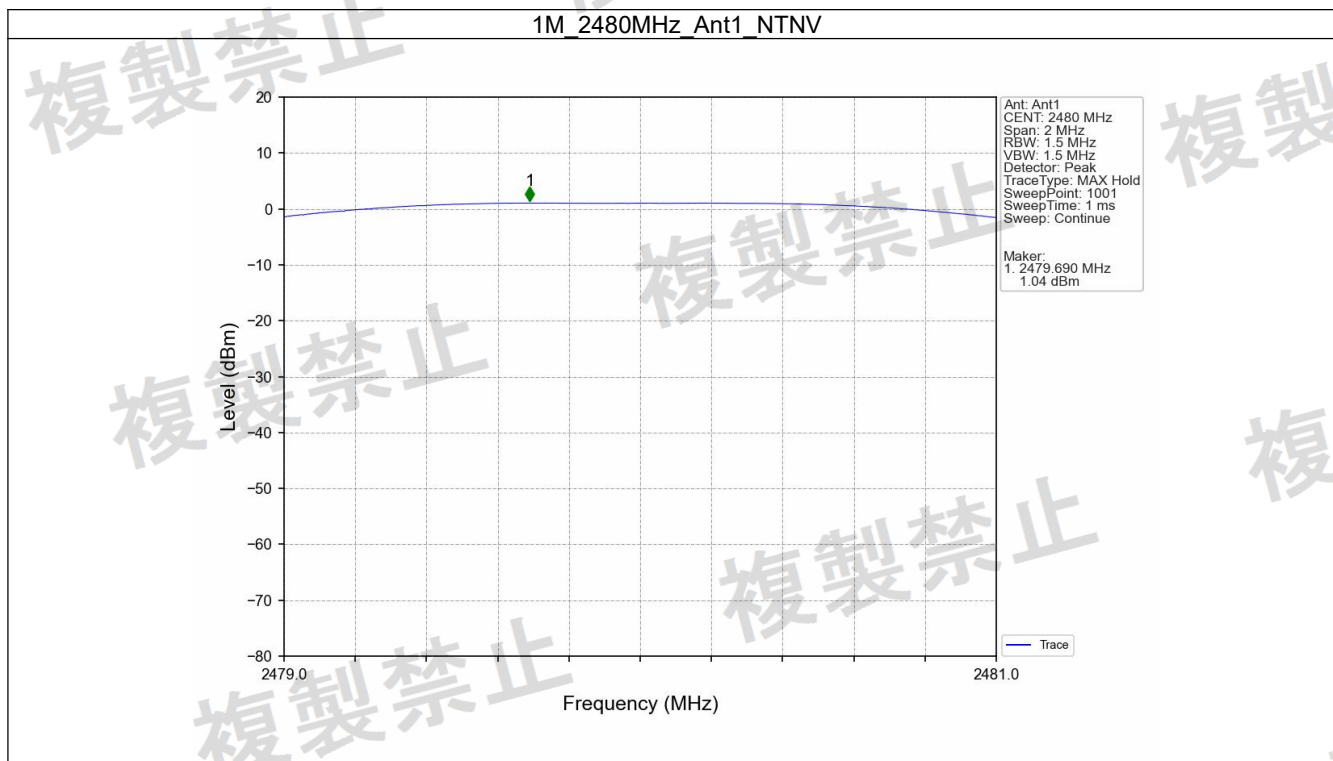
EIRP=Conduction Power+ANT Gain

4.2 Test Graph

4.2.1 Power







5. Spurious Emission Intensity

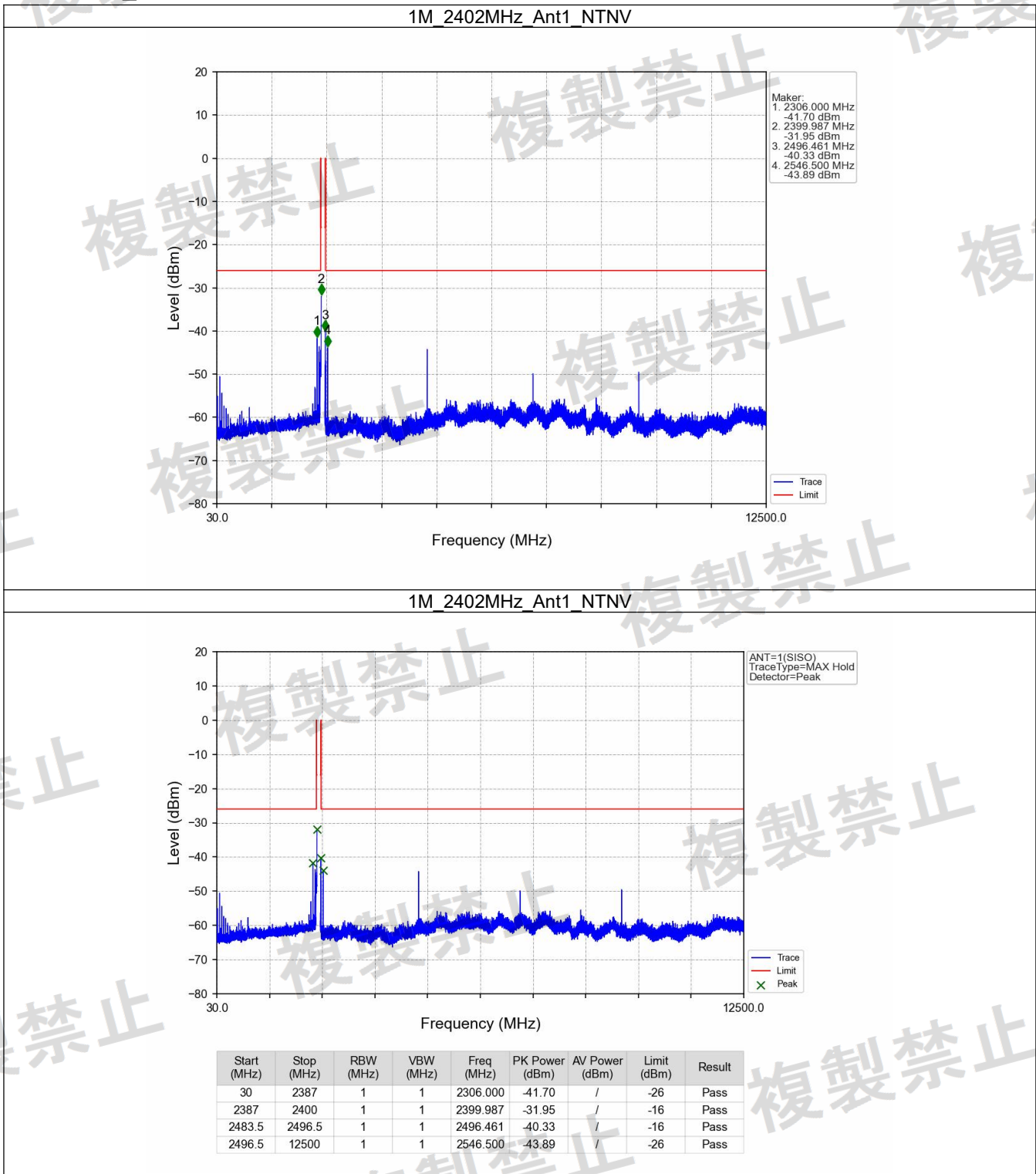
5.1 Test Result

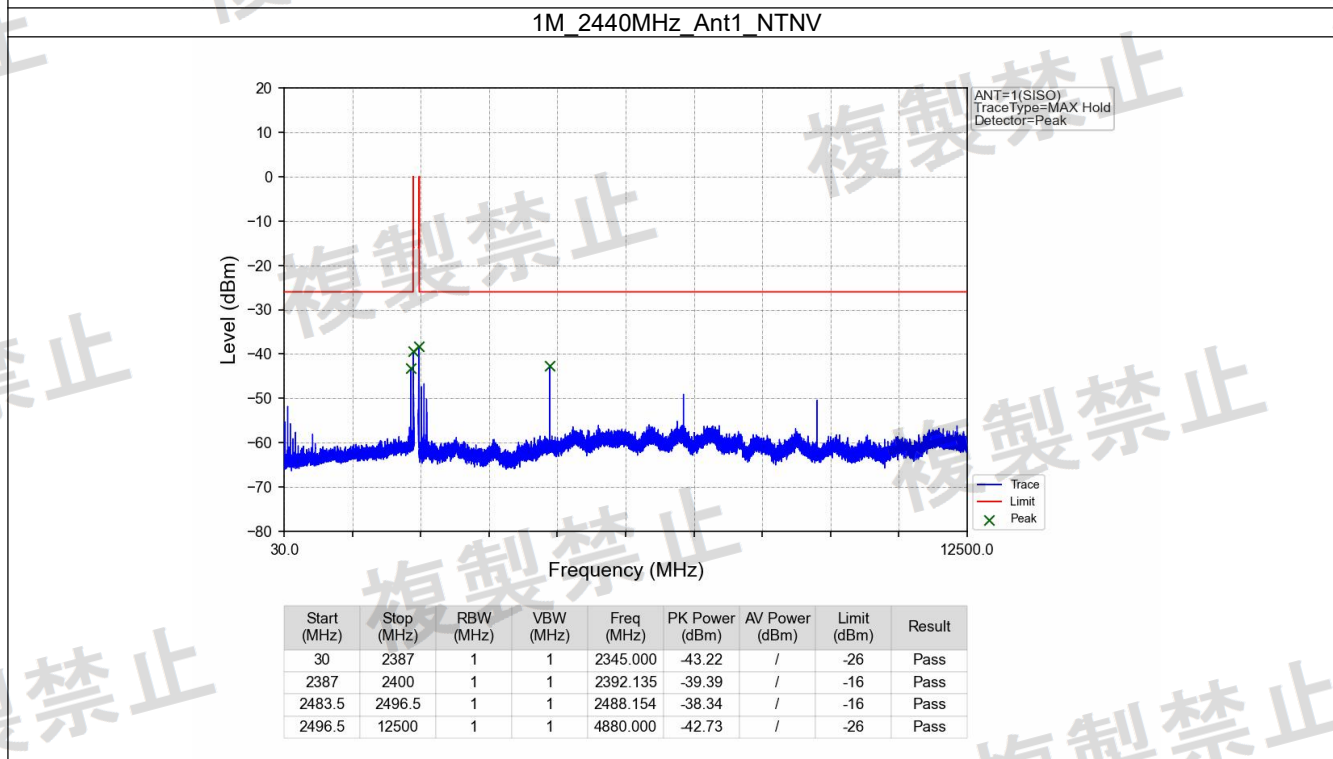
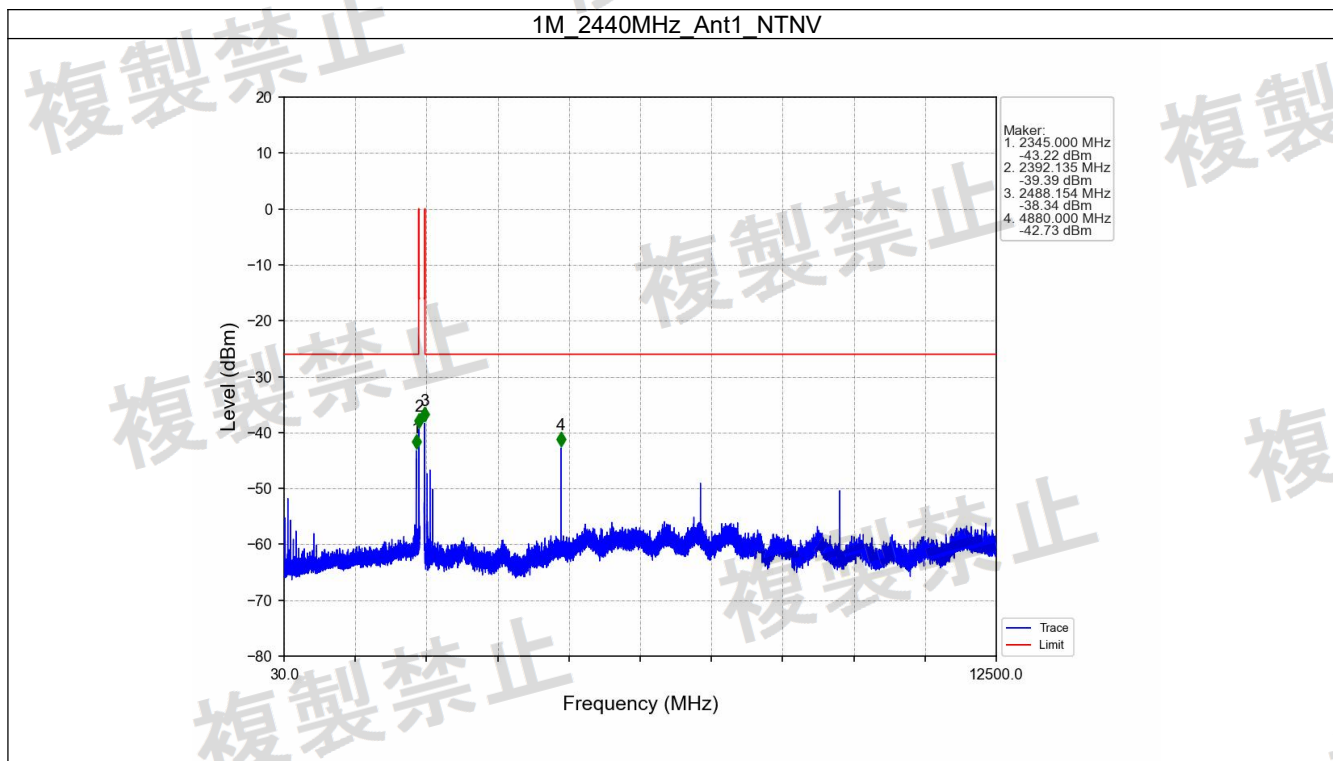
5.1.1 TxSe_NTNV

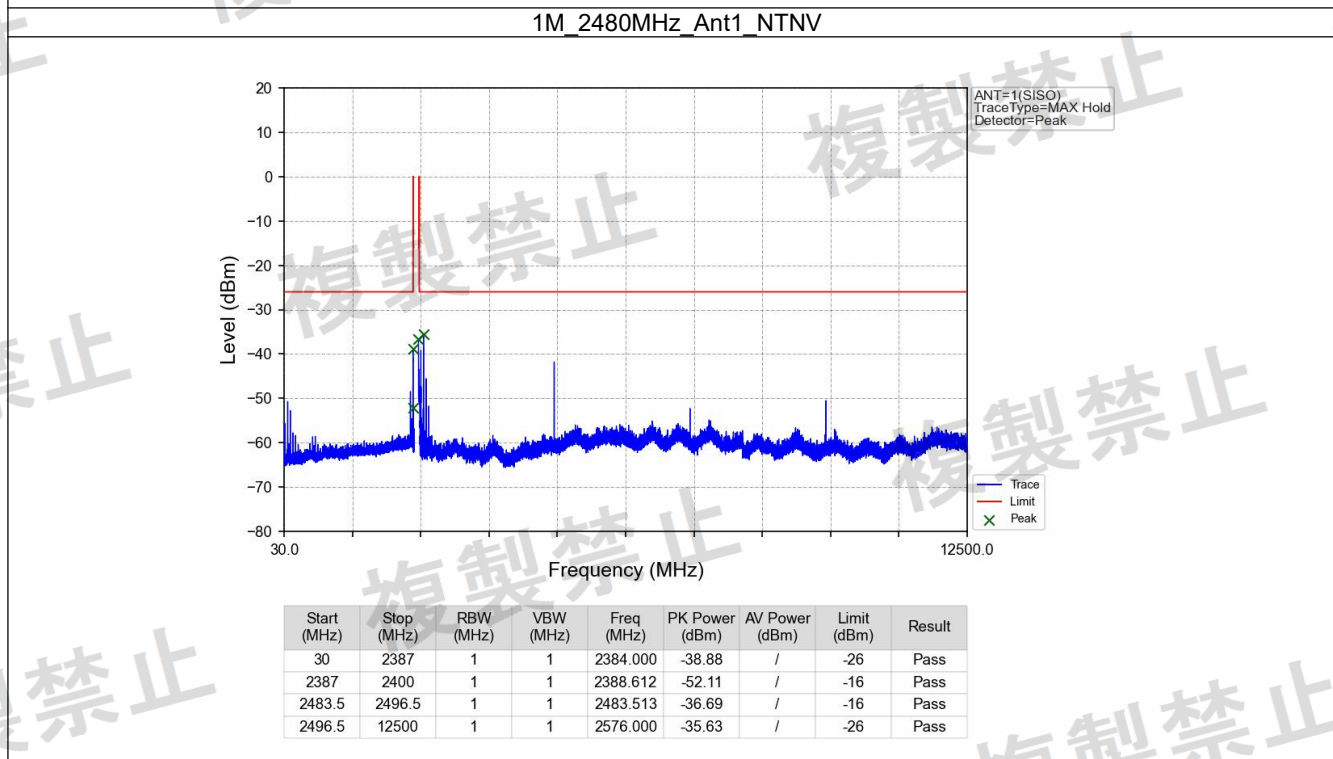
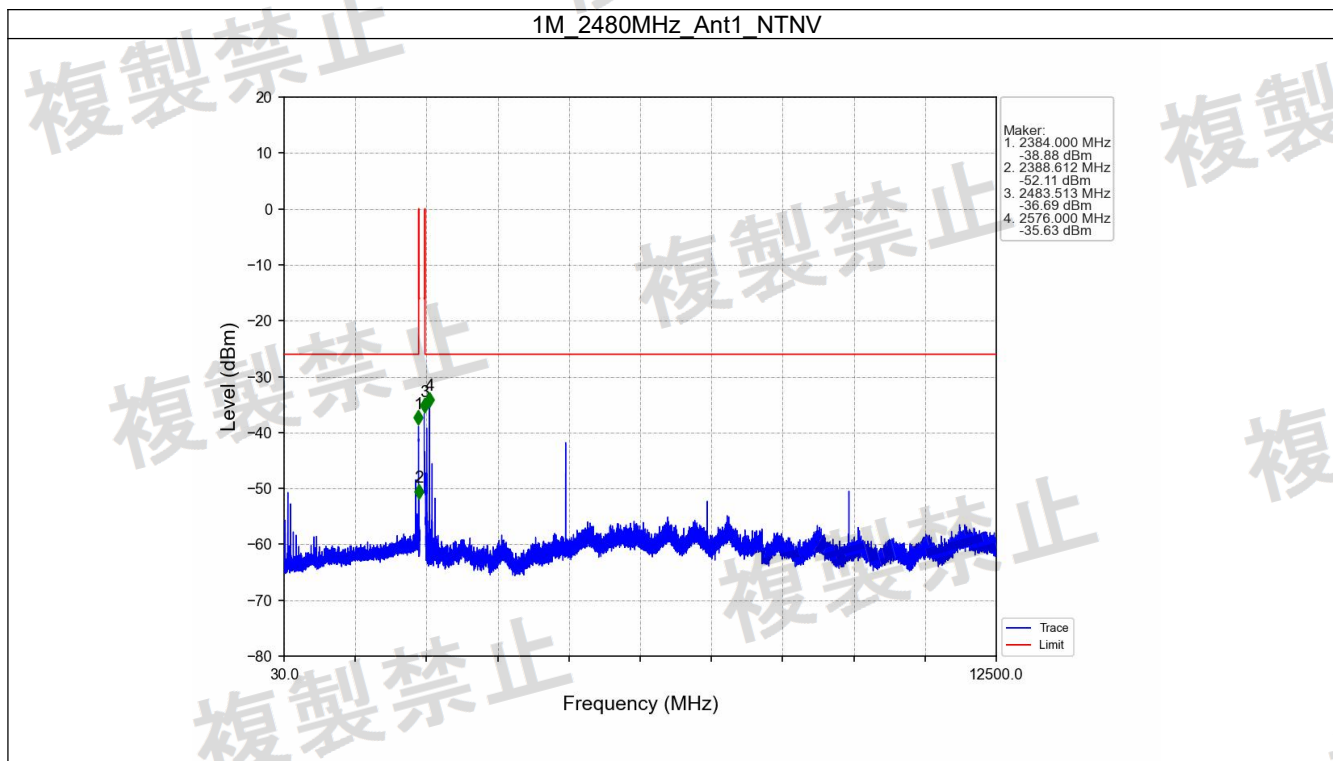
NTNV												
Mode	TX Type	Freq. (MHz)	ANT	Freq. Range		Marker					Limit (uW /MHz)	Verdict
				Start (MHz)	Stop (MHz)	Freq. (MHz)	PK Power (dBm /MHz)	PK Power (uW /MHz)	AV Power (dBm /MHz)	AV Power (uW /MHz)		
1M	SISO	2402	1	30	2387	2306	-41.70	0.068	/	/	2.5	Pass
				2387	2400	2399.987	-31.95	0.638	/	/	25	Pass
				2483.5	2496.5	2496.461	-40.33	0.093	/	/	25	Pass
				2496.5	12500	2546.5	-43.89	0.041	/	/	2.5	Pass
		2440	1	30	2387	2345	-43.22	0.048	/	/	2.5	Pass
				2387	2400	2392.135	-39.39	0.115	/	/	25	Pass
				2483.5	2496.5	2488.154	-38.34	0.147	/	/	25	Pass
				2496.5	12500	4880	-42.73	0.053	/	/	2.5	Pass
		2480	1	30	2387	2384	-38.88	0.129	/	/	2.5	Pass
				2387	2400	2388.612	-52.11	0.006	/	/	25	Pass
				2483.5	2496.5	2483.513	-36.69	0.214	/	/	25	Pass
				2496.5	12500	2576	-35.63	0.274	/	/	2.5	Pass

5.2 Test Graph

5.2.1 TxSe_NTNV







6. Secondary Radiated Emission

6.1 Test Result

6.1.1 RxSe_NTNV

NTNV												
Mode	TX Type	Freq. (MHz)	ANT	Freq. Range		Marker					Limit (nW)	Verdict
				Start (MHz)	Stop (MHz)	Freq. (MHz)	PK Power (dBm)	PK Power (nW)	AV Power (dBm)	AV Power (nW)		
1M	SISO	2402	1	30	1000	990	-74.34	0.037	/	/	4	Pass
				1000	12500	5319.5	-60.57	0.877	/	/	20	Pass
		2440	1	30	1000	990	-74.95	0.032	/	/	4	Pass
				1000	12500	6780.5	-60.96	0.802	/	/	20	Pass
		2480	1	30	1000	990.05	-75.00	0.032	/	/	4	Pass
				1000	12500	5905.5	-60.82	0.828	/	/	20	Pass

6.2 Test Graph

6.2.1 RxSe_NTNV

