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Annex for SRD 2.4G

Test Report No.: CTL2602028031-MIC03

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MIC: 219-269111

1. Frequency Error

1.1 Test Result

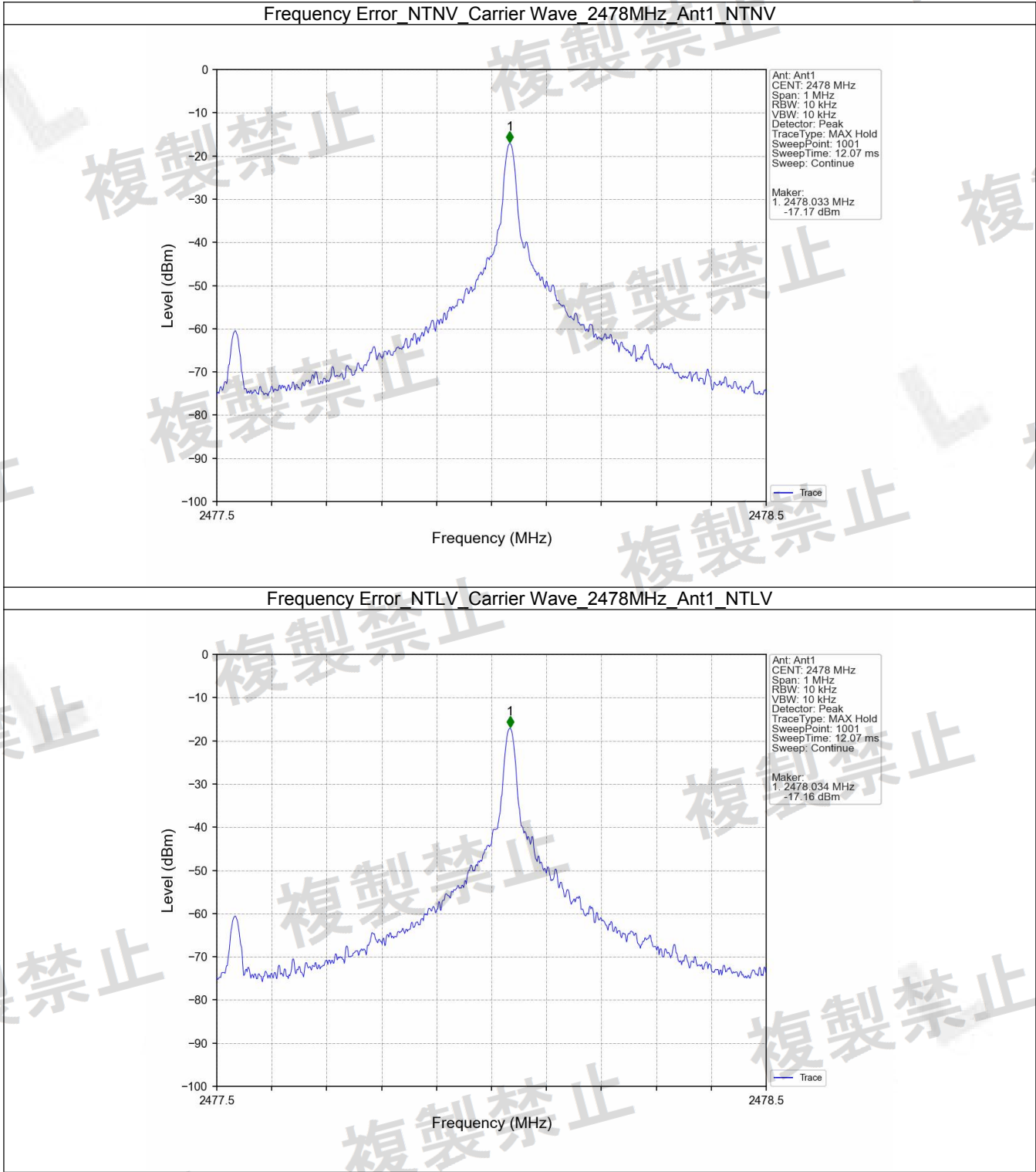
1.1.1 Ant1

Ant1							
ENV	Mode	TX Type	Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)		Verdict
					Result	Limit	
NTNV	Carrier Wave	SISO	2478	2478.033	13.32	-50 to 50	Pass
NTHV	Carrier Wave	SISO	2478	2478.034	13.72	-50 to 50	Pass
NTHV	Carrier Wave	SISO	2478	2478.034	13.72	-50 to 50	Pass

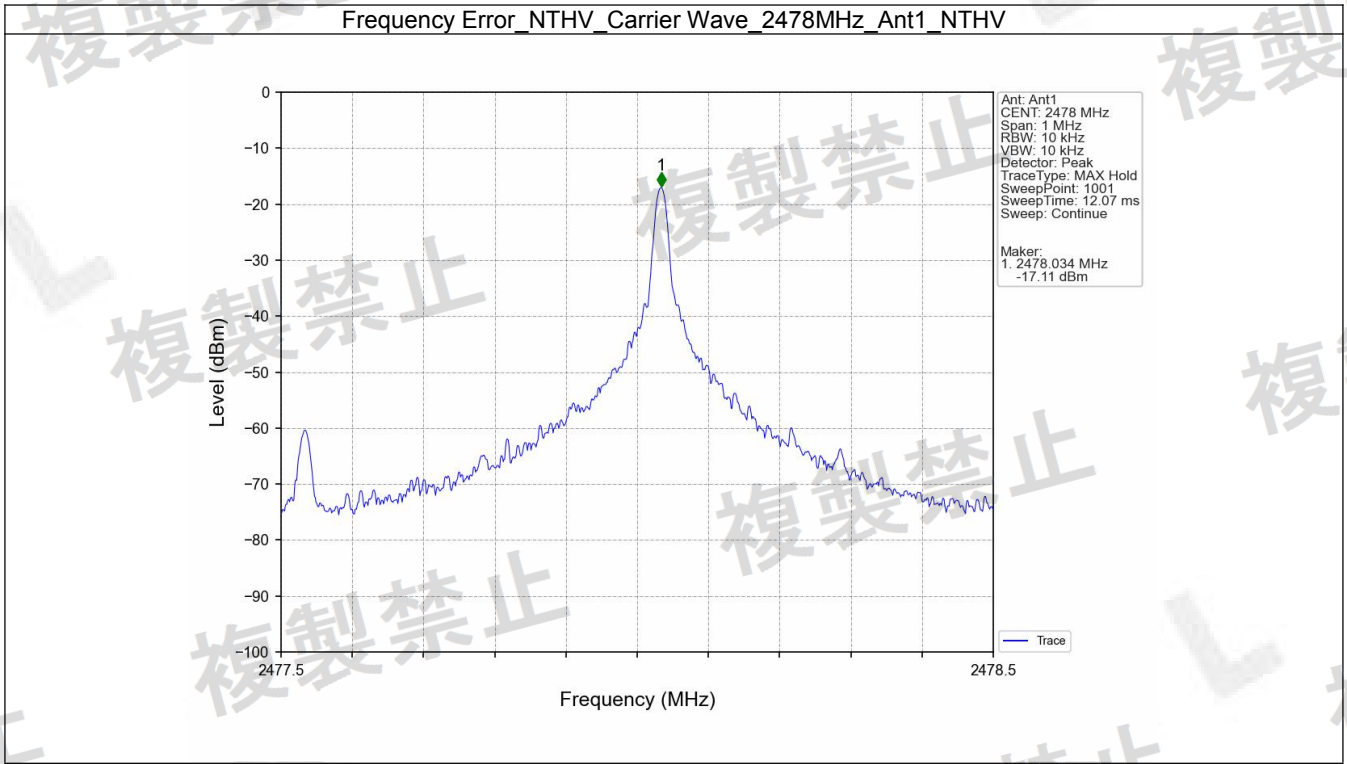
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1.2 Test Graph

1.2.1 Ant1



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2. Occupied Bandwidth

2.1 Test Result

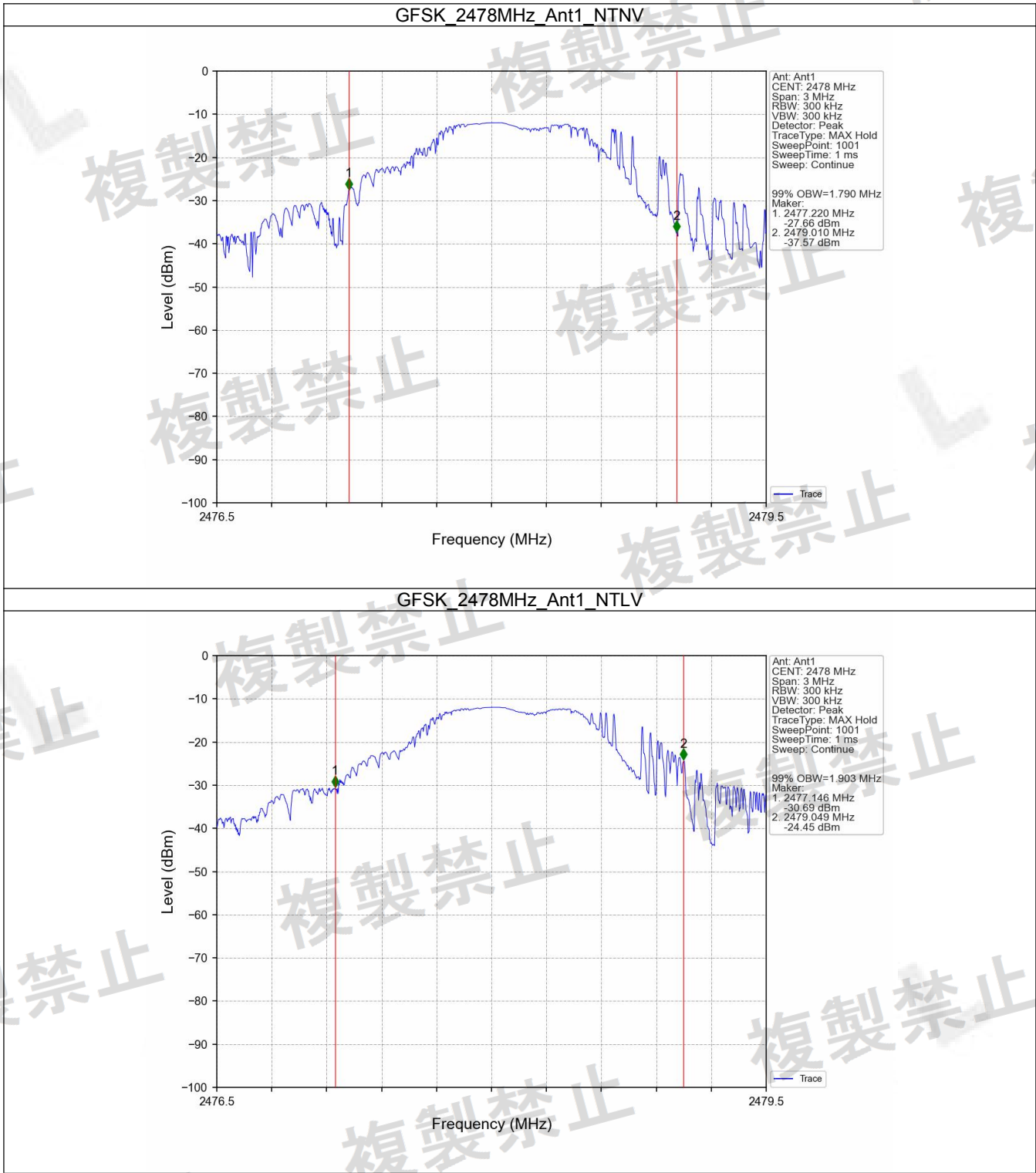
2.1.1 OBW

ENV	Mode	TX Type	Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
				ANT1	Limit	
NTNV	GFSK	SISO	2478	1.790	<=26	Pass
NTLV	GFSK	SISO	2478	1.903	<=26	Pass
NTHV	GFSK	SISO	2478	1.914	<=26	Pass

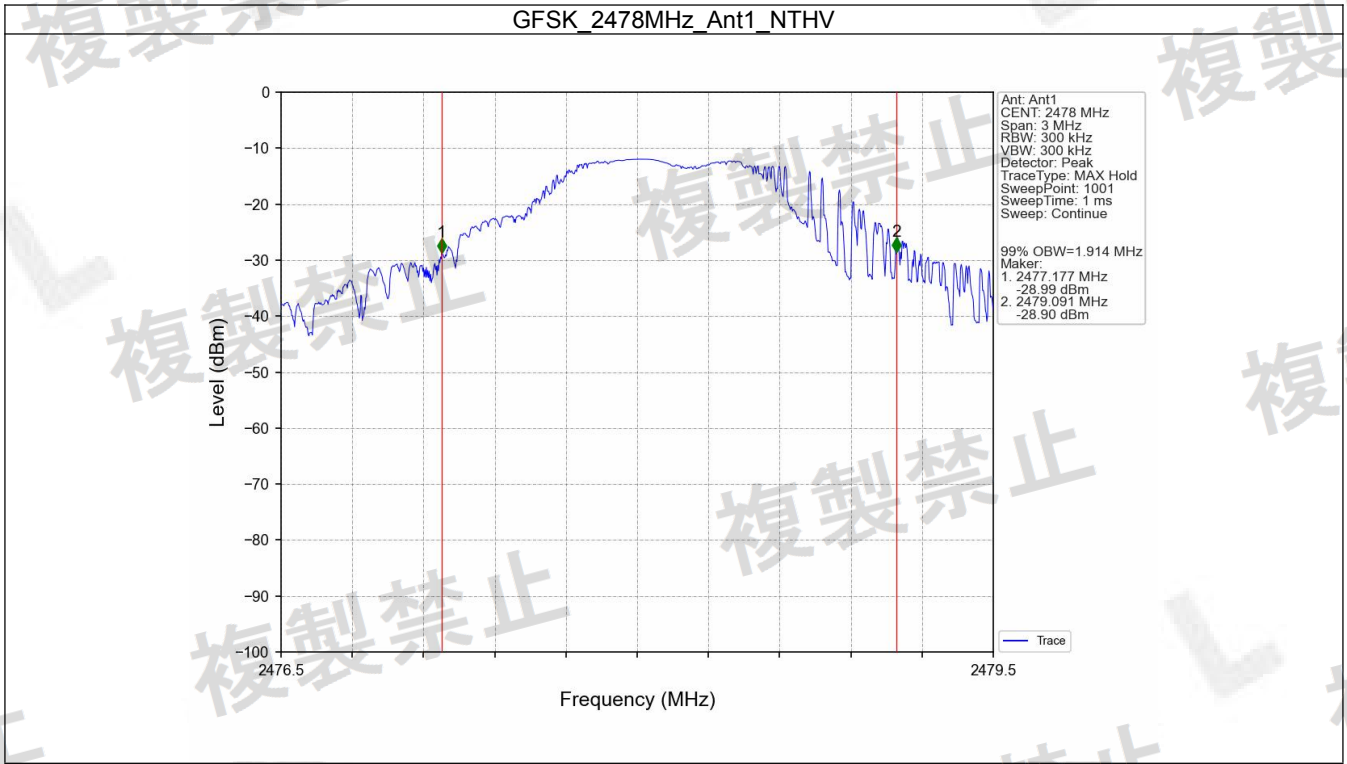
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2.2 Test Graph

2.2.1 OBW



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3. Antenna Power

3.1 Test Result

3.1.1 Power

ENV	Mode	TX Type	Frequency (MHz)	ANT	Antenna Power (mW)		Nominal Power (mW)	Tolerance (%)		Verdict
					Measured	Limit		Measured	Limit	
NTNV	GFSK	SISO	2478	1	0.045	<=10.00	0.050	-10	<=20	Pass
NTLV	GFSK	SISO	2478	1	0.050	<=10.00	0.050	0.00	<=20	Pass
NTHV	GFSK	SISO	2478	1	0.046	<=10.00	0.050	-8	<=20	Pass

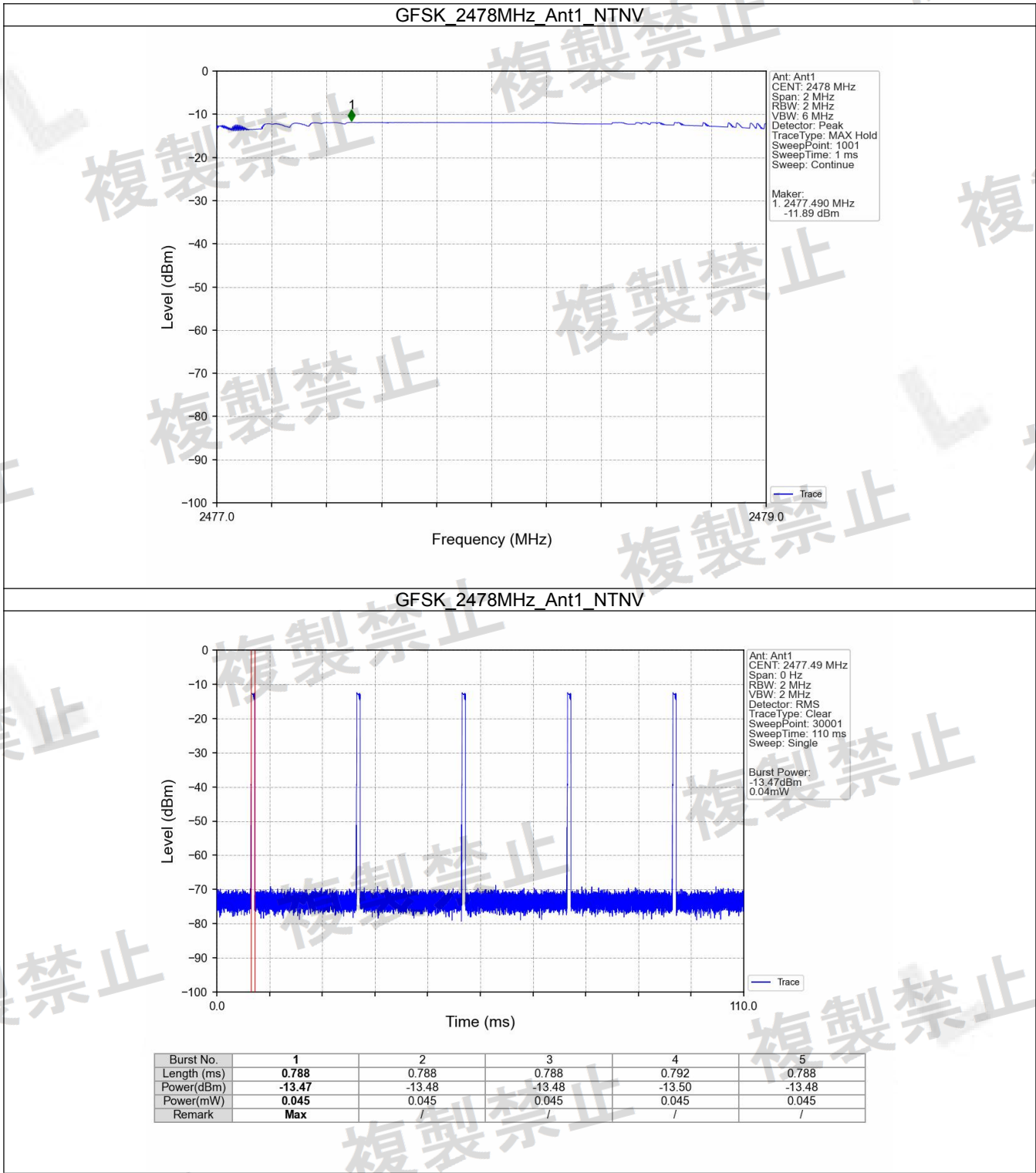
3.1.2 EIRP

ENV	Mode	TX Type	Frequency (MHz)	ANT	Gain (dBi)	EIRP (dBm)		Verdict
						Result	Limit	
NTNV	GFSK	SISO	2478	1	-7.40	-20.87	<=12.14	Pass
NTLV	GFSK	SISO	2478	1	-7.40	-20.45	<=12.14	Pass
NTHV	GFSK	SISO	2478	1	-7.40	-20.78	<=12.14	Pass

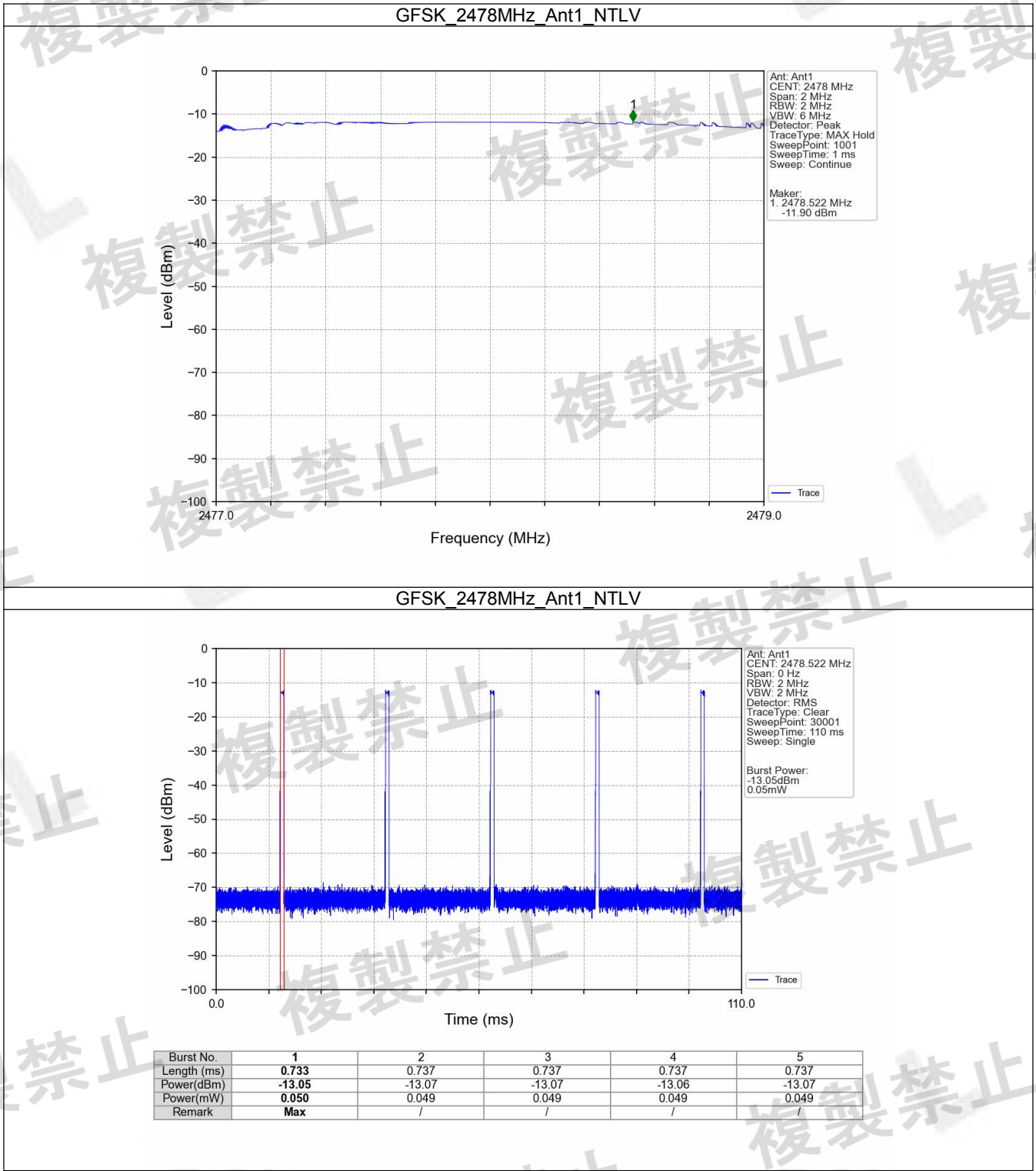
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3.2 Test Graph

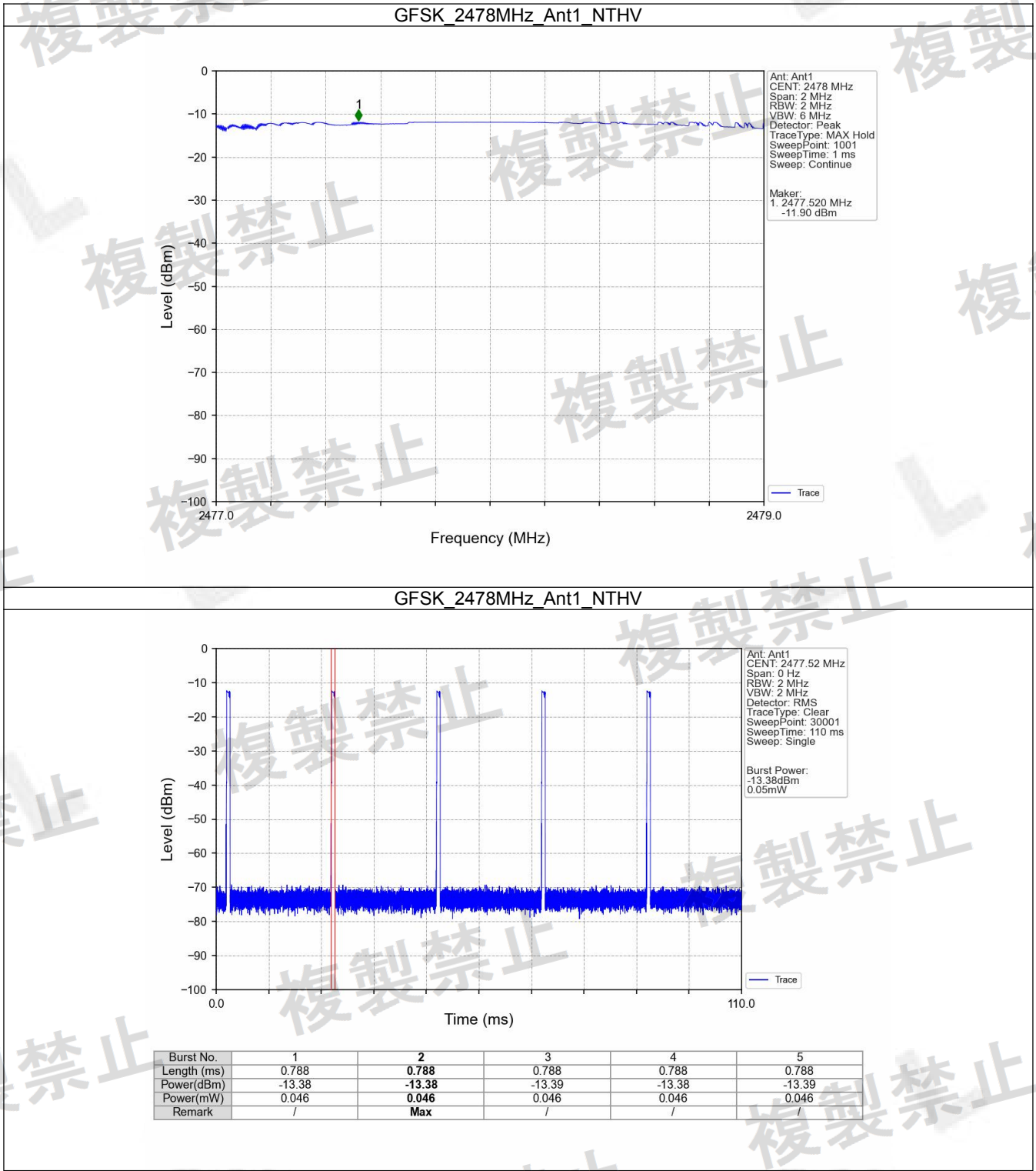
3.2.1 Power



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MIC: 219-269111



MIC: 219-269111

4. Spurious Emission Intensity

4.1 Test Result

4.1.1 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)		
GFSK	SISO	2478	1	30	2387	2196.5	-62.69	0.001	/	/	2.5	Pass
				2387	2400	2398.063	-62.63	0.001	/	/	25	Pass
				2483.5	2496.5	2484.28	-39.41	0.115	/	/	25	Pass
				2496.5	12500	2497.5	-53.84	0.004	/	/	2.5	Pass

4.1.2 TxSe_NTLV

NTLV												
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)		
GFSK	SISO	2478	1	30	2387	720	-39.18	0.121	/	/	2.5	Pass
				2387	2400	2397.452	-63.51	0.000	/	/	25	Pass
				2483.5	2496.5	2484.592	-39.50	0.112	/	/	25	Pass
				2496.5	12500	12435.5	-63.25	0.000	/	/	2.5	Pass

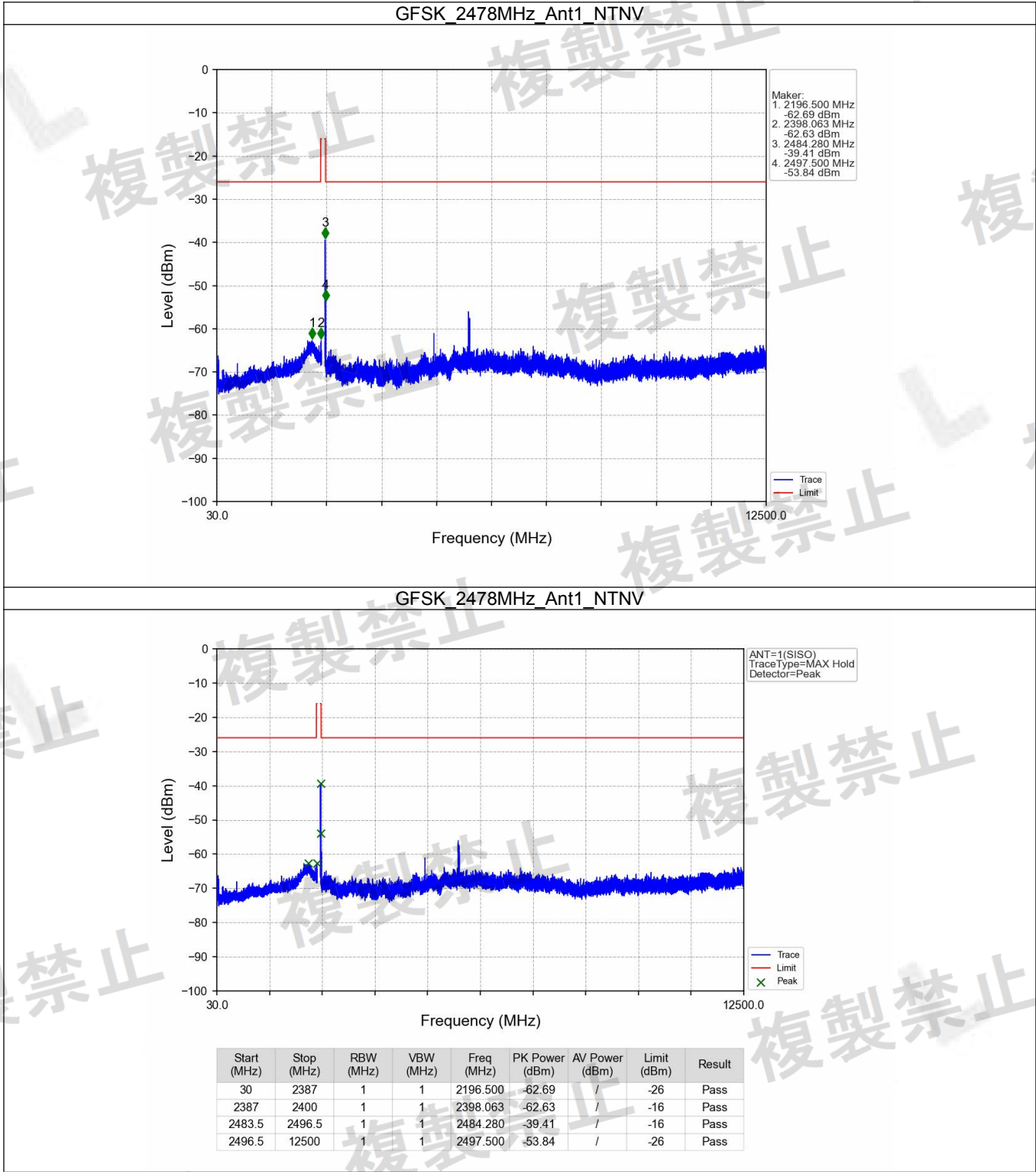
4.1.3 TxSe_NTHV

NTHV												
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)		
GFSK	SISO	2478	1	30	2387	2206	-61.96	0.001	/	/	2.5	Pass
				2387	2400	2397.53	-62.36	0.001	/	/	25	Pass
				2483.5	2496.5	2485.424	-39.49	0.112	/	/	25	Pass
				2496.5	12500	5780.5	-53.72	0.004	/	/	2.5	Pass

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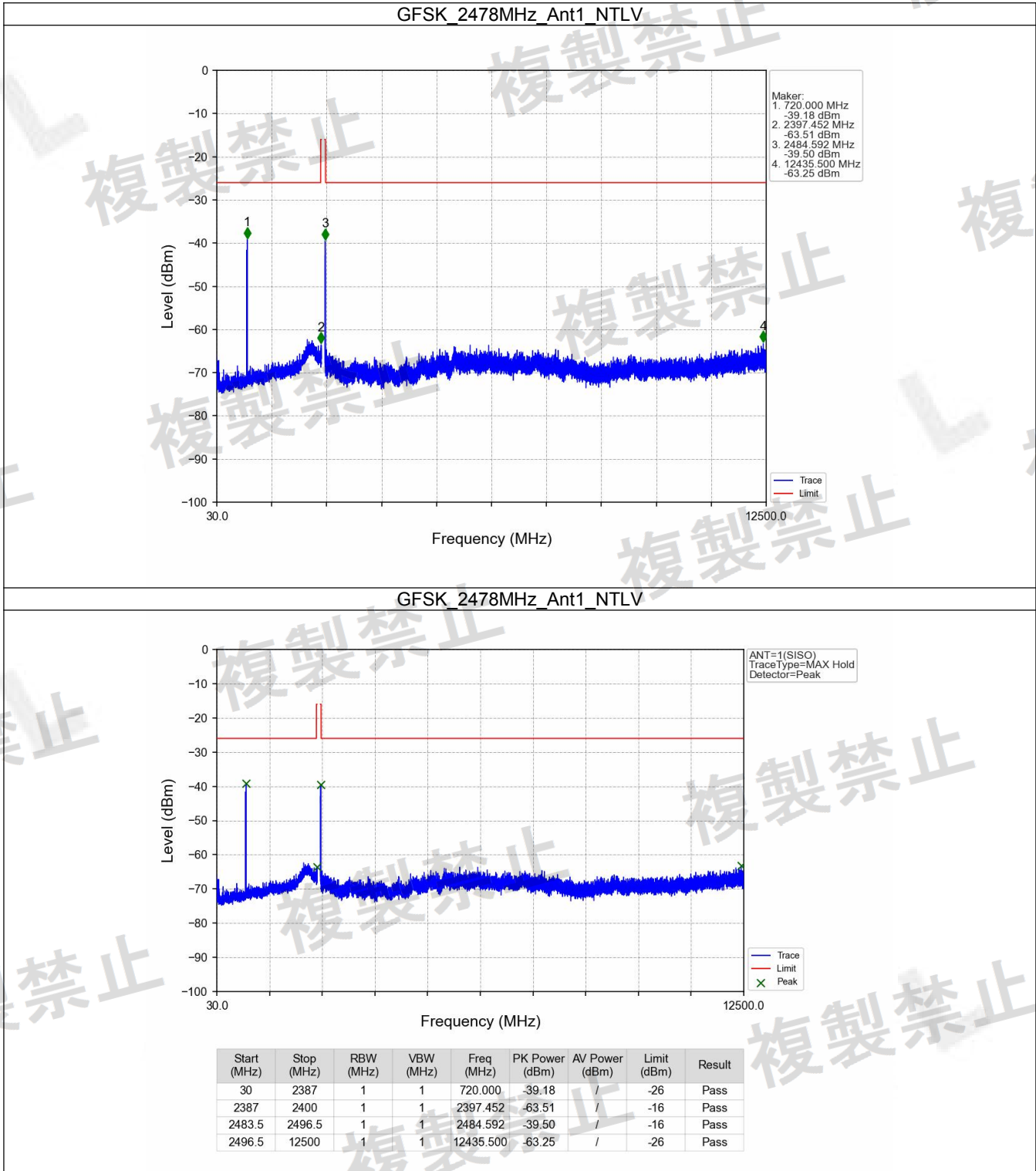
4.2 Test Graph

4.2.1 TxSe_NTNV



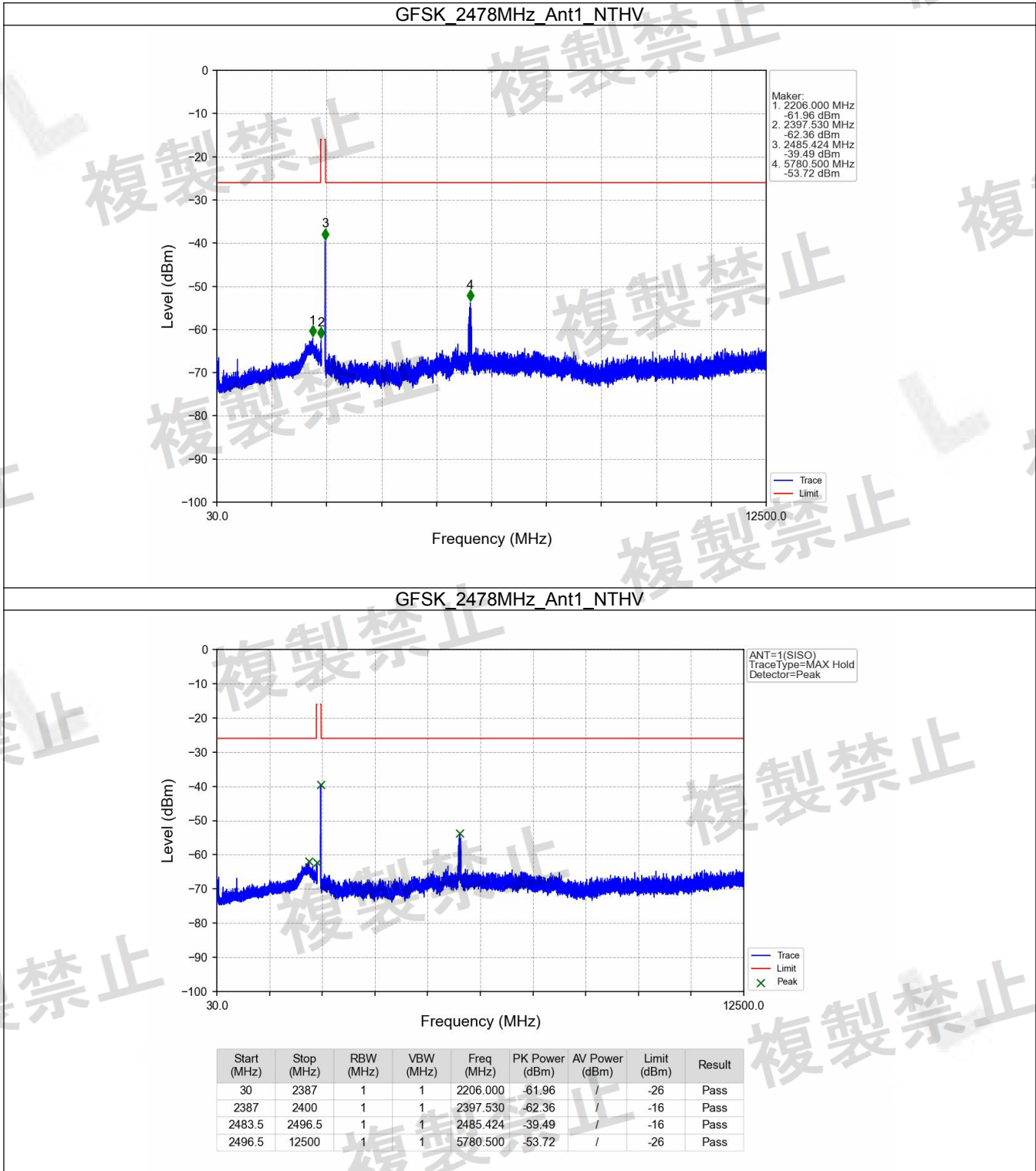
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4.2.2 TxSe_NTLV



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4.2.3 TxSe_NTHV



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5. Secondary Radiated Emission

5.1 Test Result

5.1.1 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)		
GFSK	SISO	2478	1	30	1000	500	-73.18	0.048	/	/	4	Pass
				1000	12500	2436	-63.34	0.463	/	/	20	Pass

5.1.2 RxSe_NTLV

NTLV												
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)		
GFSK	SISO	2478	1	30	1000	500	-73.22	0.048	/	/	4	Pass
				1000	12500	2158	-62.52	0.560	/	/	20	Pass

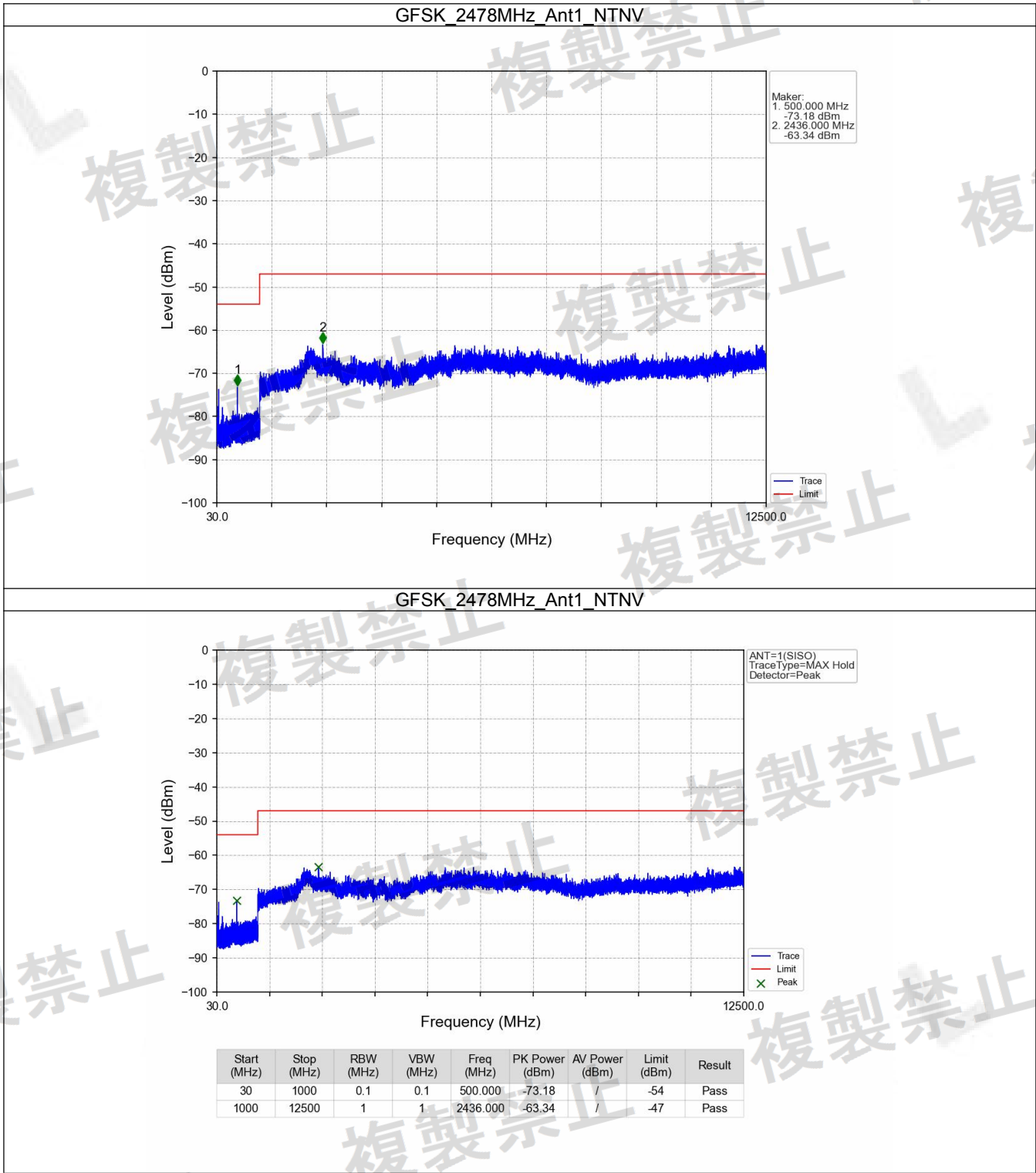
5.1.3 RxSe_NTHV

NTHV												
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)		
GFSK	SISO	2478	1	30	1000	704.25	-39.72	106.660	-92.76	0.001	4	Pass
				1000	12500	2439	-60.73	0.845	/	/	20	Pass

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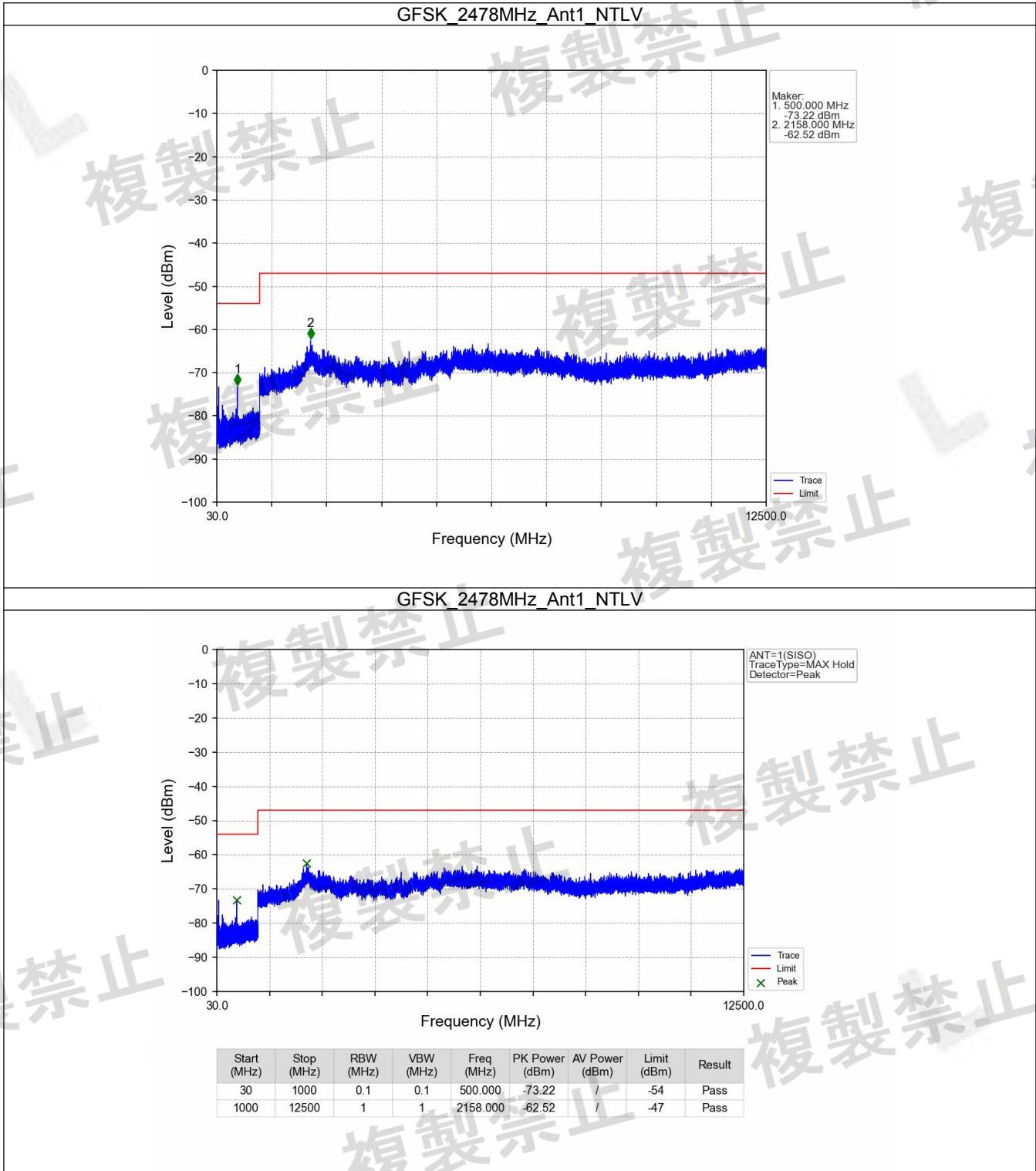
5.2 Test Graph

5.2.1 RxSe_NTNV



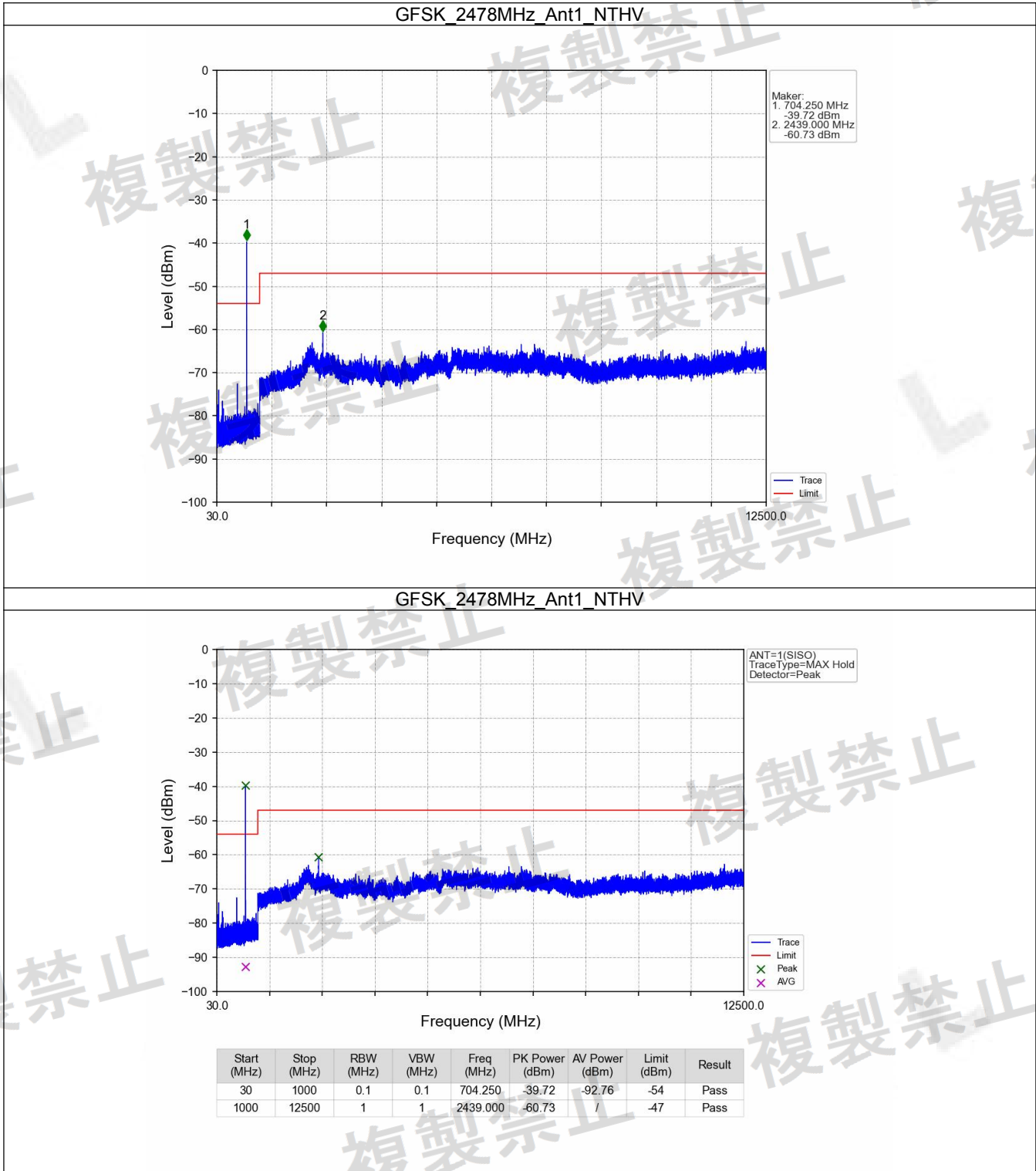
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5.2.2 RxSe_NTLV



MIC: 219-269111

5.2.3 RxSe_NTHV



MIC: 219-269111

