

Appendix A. Test Result of Antenna Power, Antenna Power Tolerance and E.I.R.P

Antenna Power

Test Conditions	Modulation	Frequency (MHz)	Reading Value (dBm)	Antenna Power (mW/MHz)	Limit (mW/MHz)	Result
V _{nom}	GFSK(2Mbps)	Hopping	10.04	0.26	3.0000	Pass
	GFSK(2Mbps)-AFH		10.12	2.03	3.0000	Pass

Antenna Power (mW/MHz) = $10^{(\text{Reading value (dBm)}/10)}$ / Burst Ratio / Spread bandwidth (MHz).

Antenna Power Tolerance

Test Conditions	Modulation	Frequency (MHz)	Declared Antenna Power (mW/MHz)	Antenna Power (mW/MHz)	Antenna Power Tolerance (%)	Limit (%)	Result
V _{nom}	GFSK(2Mbps)	Hopping	0.26	0.26	0.00	+20	Pass
	GFSK(2Mbps)-AFH		2.03	2.03	0.00	+20	Pass

Note: Antenna Power Tolerance (%) = $(\text{Antenna Power (mW/MHz)} - \text{Declared Antenna Power (mW/MHz)}) / \text{Declared Antenna Power (mW/MHz)} * 100\%$.

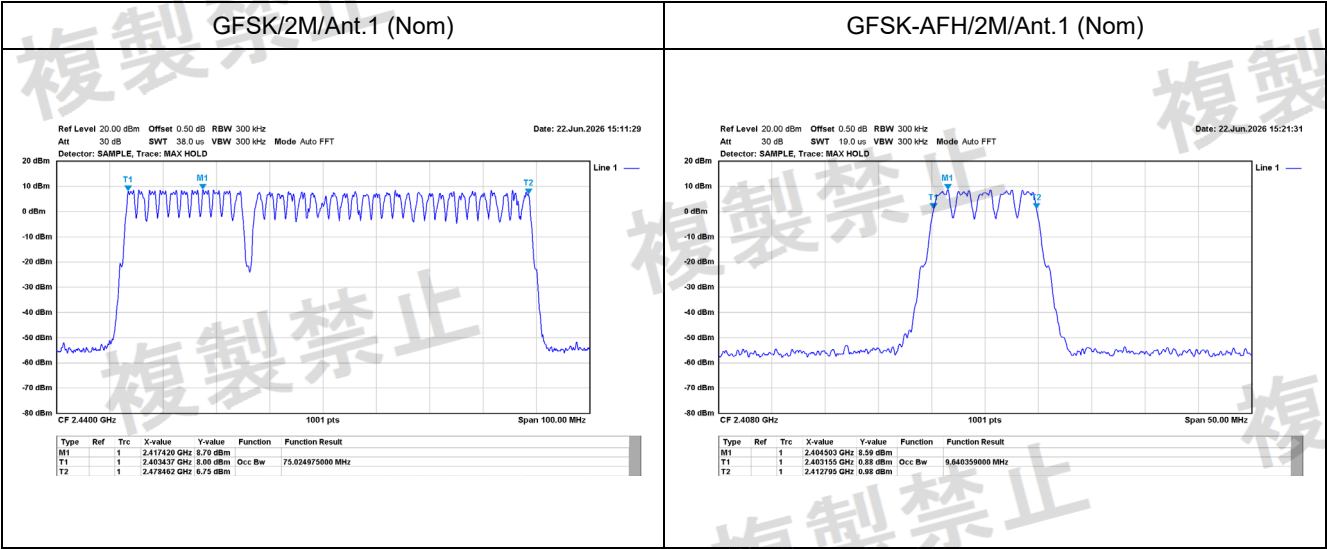
E.I.R.P.

Test Conditions	Modulation	Frequency (MHz)	Antenna Power (dBm/MHz)	Maximum Antenna Gain (dBi)	E.I.R.P. (dBm/MHz)	Limit (dBm/MHz)	Result
V _{nom}	GFSK(2Mbps)	Hopping	-5.85	3.00	-2.85	6.91	Pass
	GFSK(2Mbps)-AFH		3.07	3.00	6.07	6.91	Pass

Note: E.I.R.P. (dBm/MHz) = Antenna Power (dBm/MHz) + Maximum Antenna Gain (dBi).

Appendix B. Test Result of Occupied Bandwidth

Test Conditions	Modulation	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)	Result
V _{nom}	GFSK(2Mbps)	Hopping	75.02	≤ 83.50	Pass
	GFSK(2Mbps)-AFH		9.64	≤ 83.50	Pass



Appendix C. Test Result of Frequency Tolerance

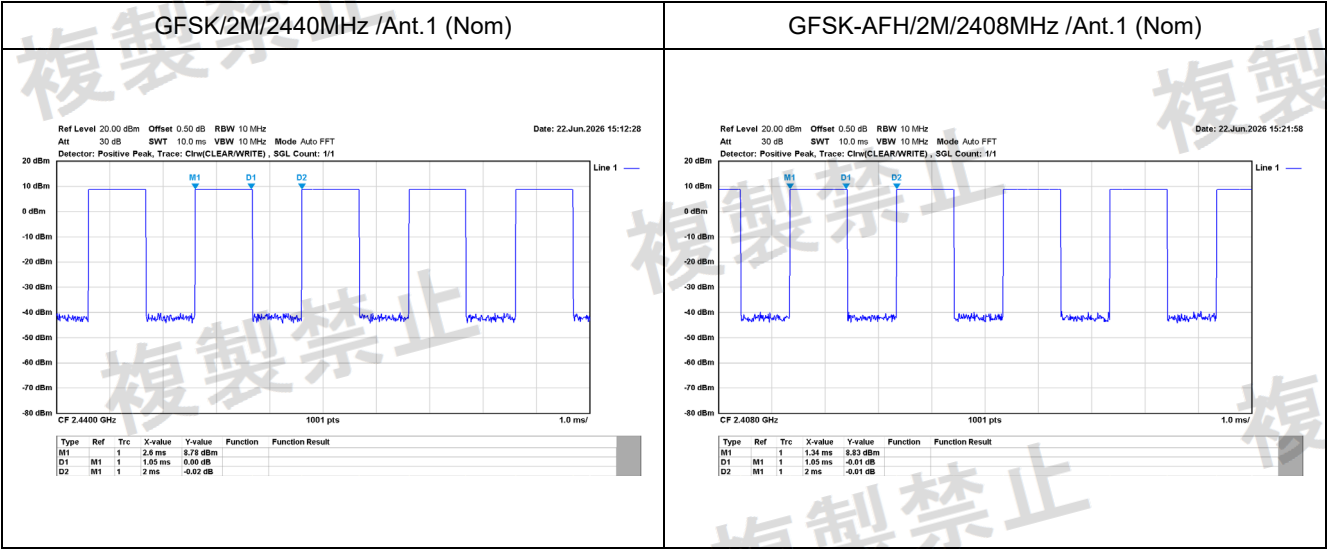
Test Conditions	Modulation	Frequency (MHz)	Reading Value (MHz)	Frequency Tolerance (ppm)	Limit (ppm)	Result
V _{nom}	GFSK(2Mbps)	2404	2403.9931	-2.87	± 50	Pass
		2440	2439.9928	-2.95	± 50	Pass
		2478	2477.9928	-2.91	± 50	Pass
	GFSK(2Mbps)-AFH	2404	2403.9931	-2.87	± 50	Pass
		2408	2407.9931	-2.87	± 50	Pass
		2412	2411.9928	-2.99	± 50	Pass

Appendix D. Test Result of Dwell Time

Test Conditions	Modulation	Frequency (MHz)	ON Time (ms)	OFF Time (ms)	Burst Ratio	Dwell Time (sec)	Limit (sec)	Result
V _{nom}	GFSK(2Mbps)	2440	1.05	0.95	0.53	0.21	0.40	Pass
	GFSK(2Mbps)-AFH	2408	1.05	0.95	0.53	0.20	0.40	Pass

Note:

1. Burst Ratio = ON Time (ms) / (ON Time (ms) + OFF Time (ms))
2. Dwell Time = (spreading rate * 0.4) * (Burst Ratio / Channel Number)

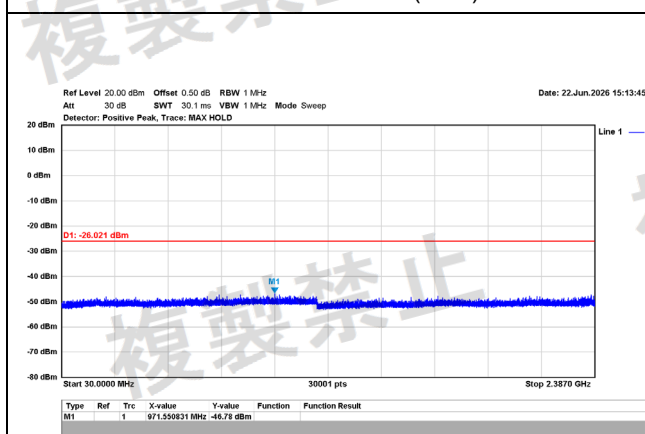


Appendix E. Test Result of Unwanted Emission Strength

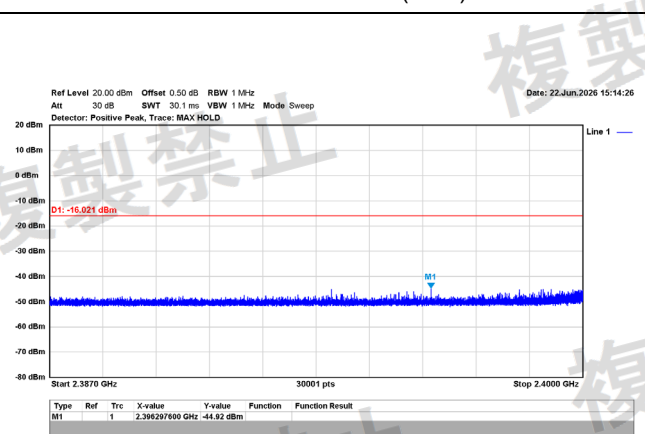
Test Conditions	Modulation	Frequency Range (MHz)	Measurement Value (μW/MHz)	Limit (μW/MHz)	Result
V _{nom}	GFSK(2Mbps)	30 ~ 2387	0.02099	2.50000	Pass
		2387 ~ 2400	0.03221	25.00000	Pass
		2483.5 ~ 2496.5	0.02655	25.00000	Pass
		2496.5 ~ 12500	0.06887	2.50000	Pass
	GFSK(2Mbps)-AFH	30 ~ 2387	0.02046	2.50000	Pass
		2387 ~ 2400	0.03926	25.00000	Pass
		2483.5 ~ 2496.5	0.01936	25.00000	Pass
		2496.5 ~ 12500	0.06531	2.50000	Pass

Measurement Value = (Worst value) x (Number of antenna ports).

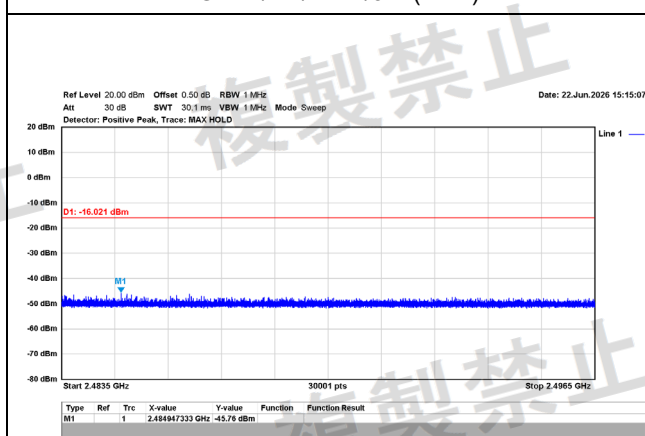
GFSK/2M/Ant.1/1-4 (Nom)



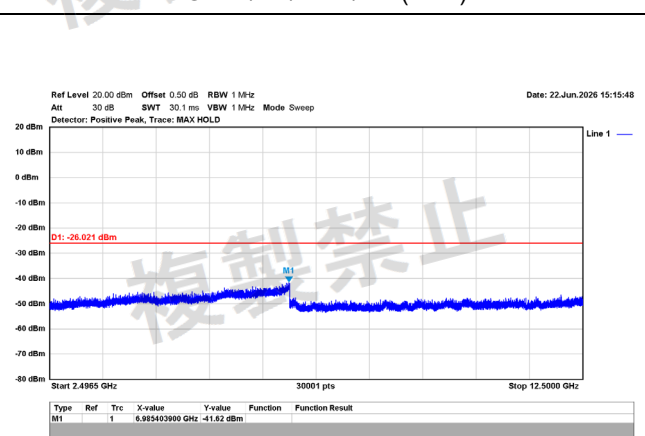
GFSK/2M/Ant.1/2-4 (Nom)



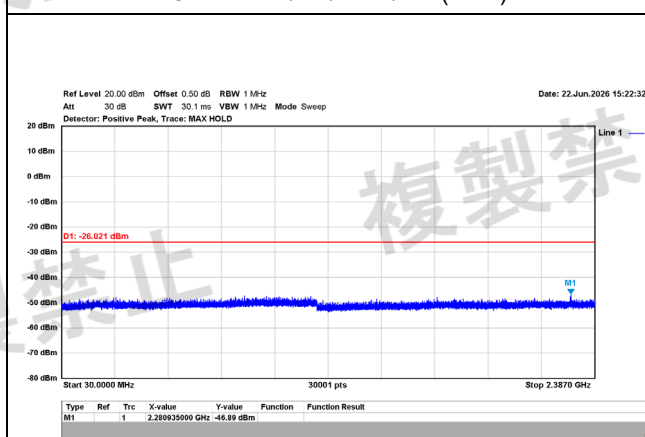
GFSK/2M/Ant.1/3-4 (Nom)



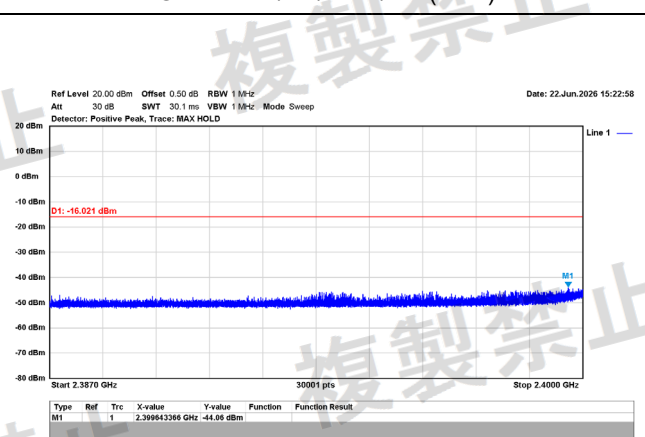
GFSK/2M/Ant.1/4-4 (Nom)

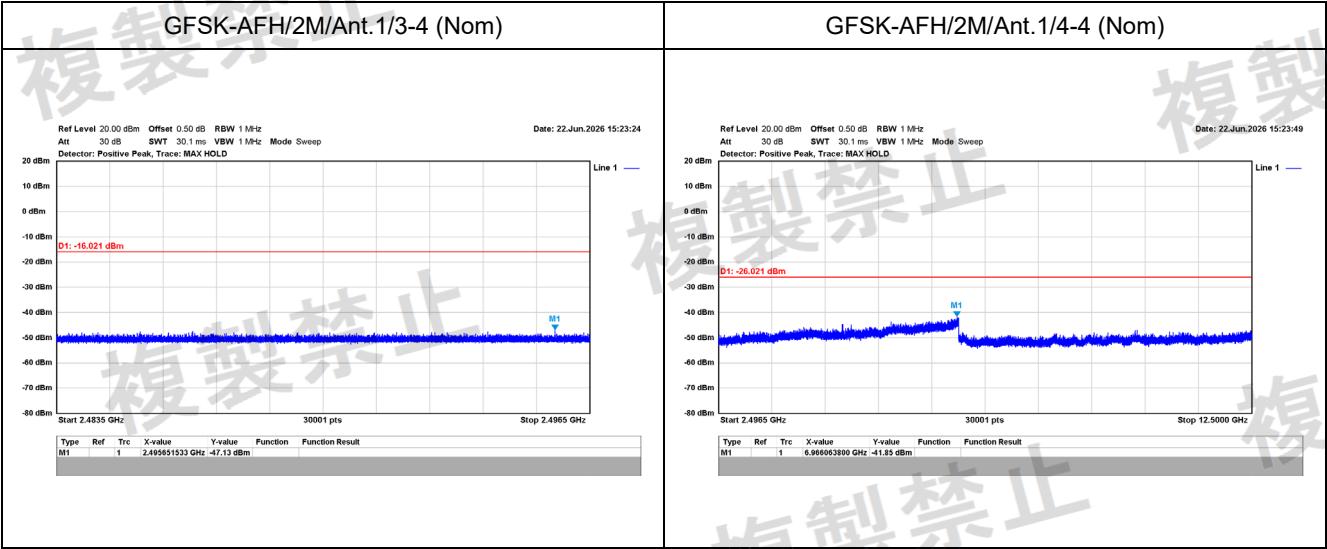


GFSK-AFH/2M/Ant.1/1-4 (Nom)



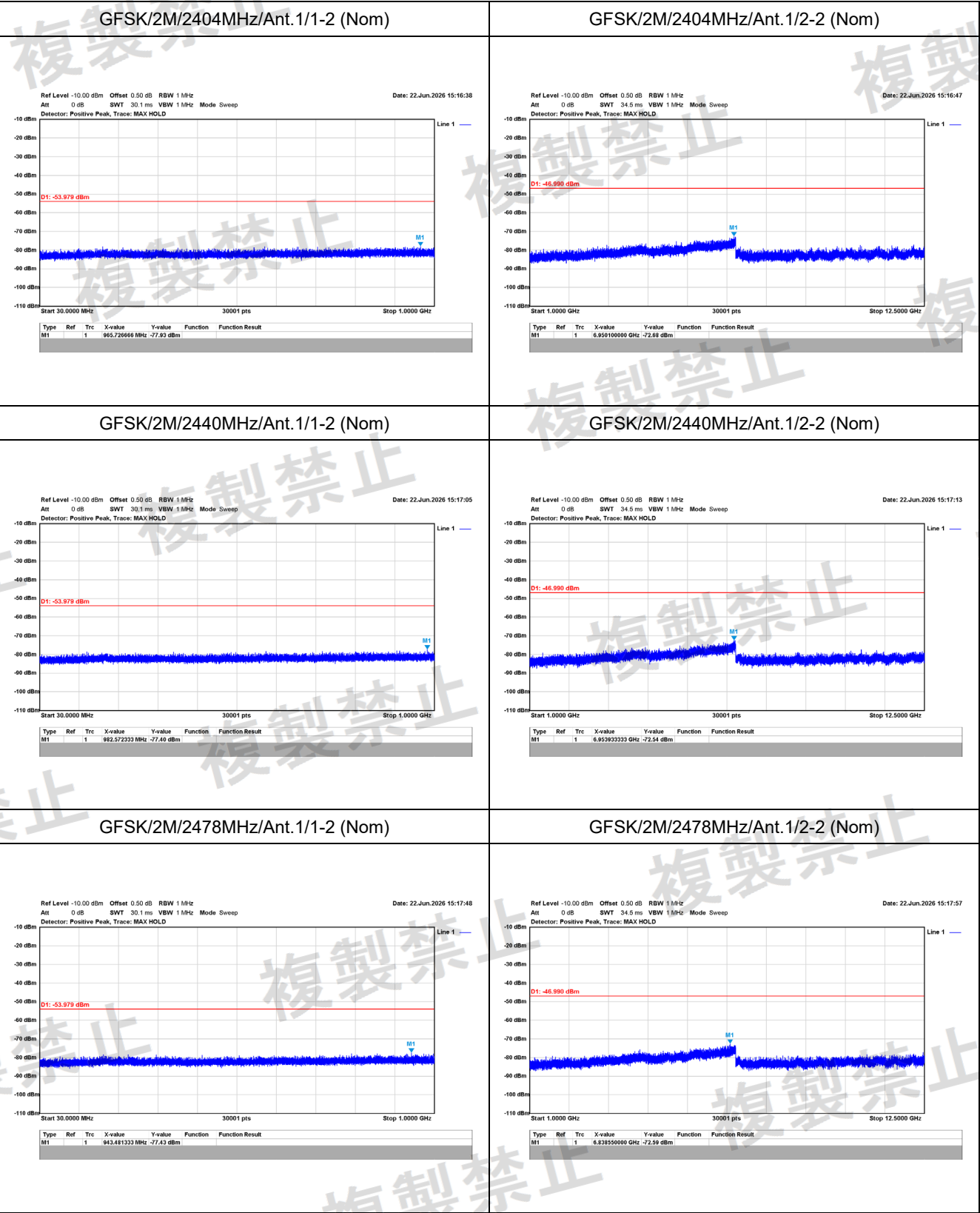
GFSK-AFH/2M/Ant.1/2-4 (Nom)



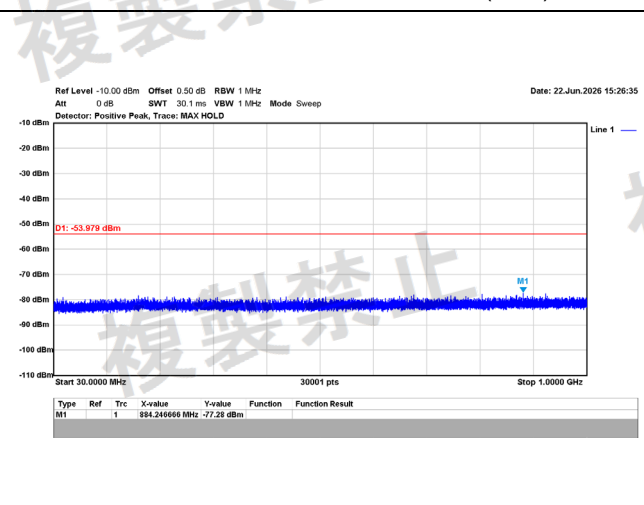


Appendix F. Test Result of Secondary Radiated Emission Strength

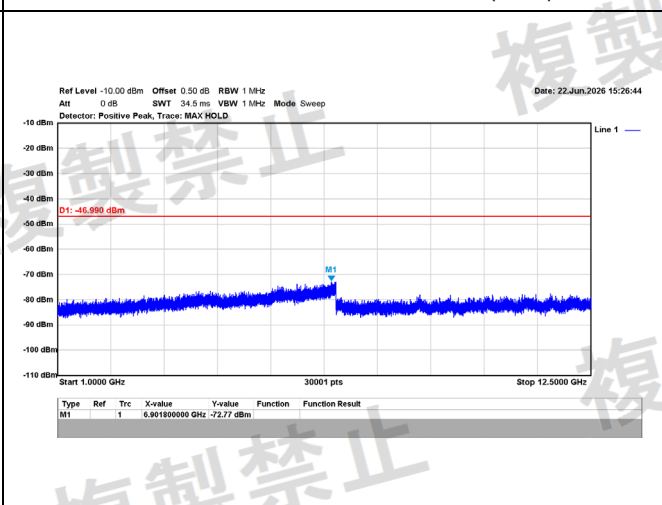
Test Conditions	Modulation	Frequency (MHz)	Frequency Range (MHz)	Measurement Value (nW)	Limit (nW)	Result
V _{nom}	GFSK(2Mbps)	2404	30 ~ 1000	0.01611	4.00000	Pass
			1000 ~ 12500	0.05395	20.00000	Pass
		2440	30 ~ 1000	0.01820	4.00000	Pass
			1000 ~ 12500	0.05572	20.00000	Pass
		2478	30 ~ 1000	0.01807	4.00000	Pass
			1000 ~ 12500	0.05508	20.00000	Pass
	GFSK(2Mbps)-AFH	2404	30 ~ 1000	0.01871	4.00000	Pass
			1000 ~ 12500	0.05284	20.00000	Pass
		2408	30 ~ 1000	0.01892	4.00000	Pass
			1000 ~ 12500	0.05916	20.00000	Pass
		2412	30 ~ 1000	0.01641	4.00000	Pass
			1000 ~ 12500	0.05470	20.00000	Pass



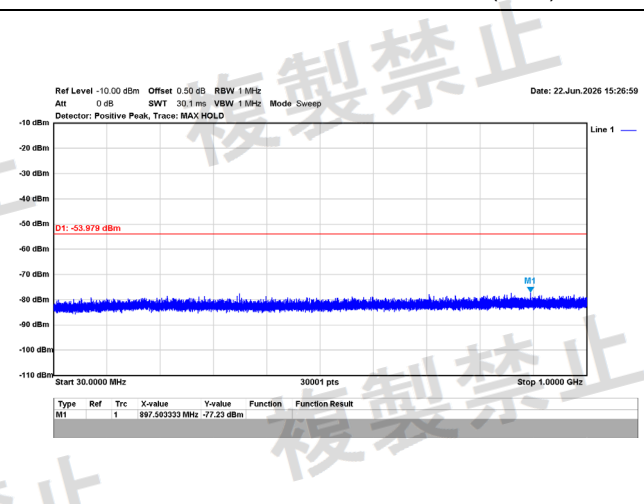
GFSK-AFH/2M/2404MHzAnt. 1/1-2 (Nom)



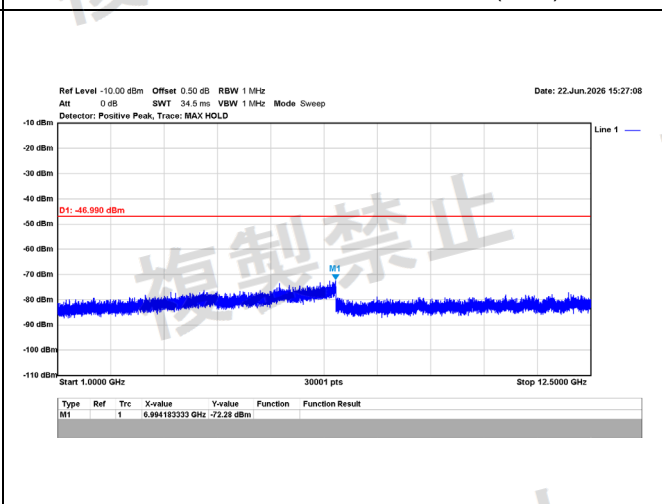
GFSK-AFH/2M/2404MHzAnt. 1/2-2 (Nom)



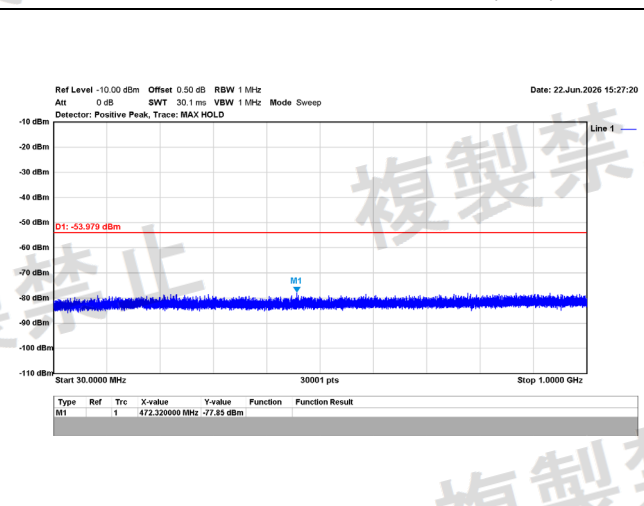
GFSK-AFH/2M/2408MHz/ Ant. 1/1-2 (Nom)



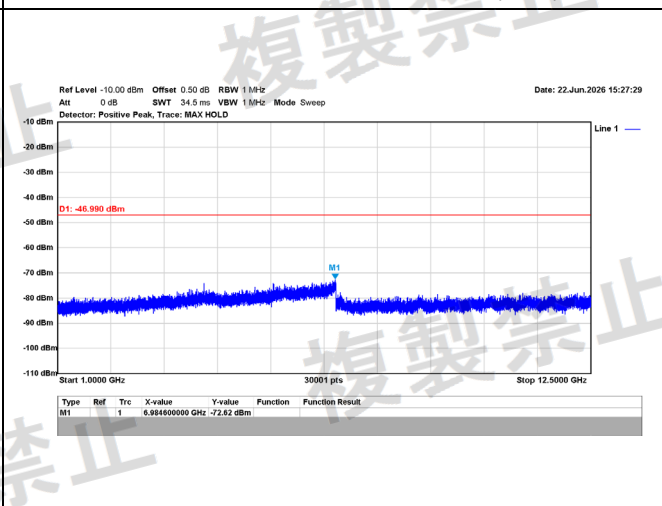
GFSK-AFH/2M/2408MHz/ Ant. 1/2-2 (Nom)



GFSK-AFH/2M/2412MHz/ Ant. 1/1-2 (Nom)



GFSK-AFH/2M/2412MHz/ Ant. 1/2-2 (Nom)

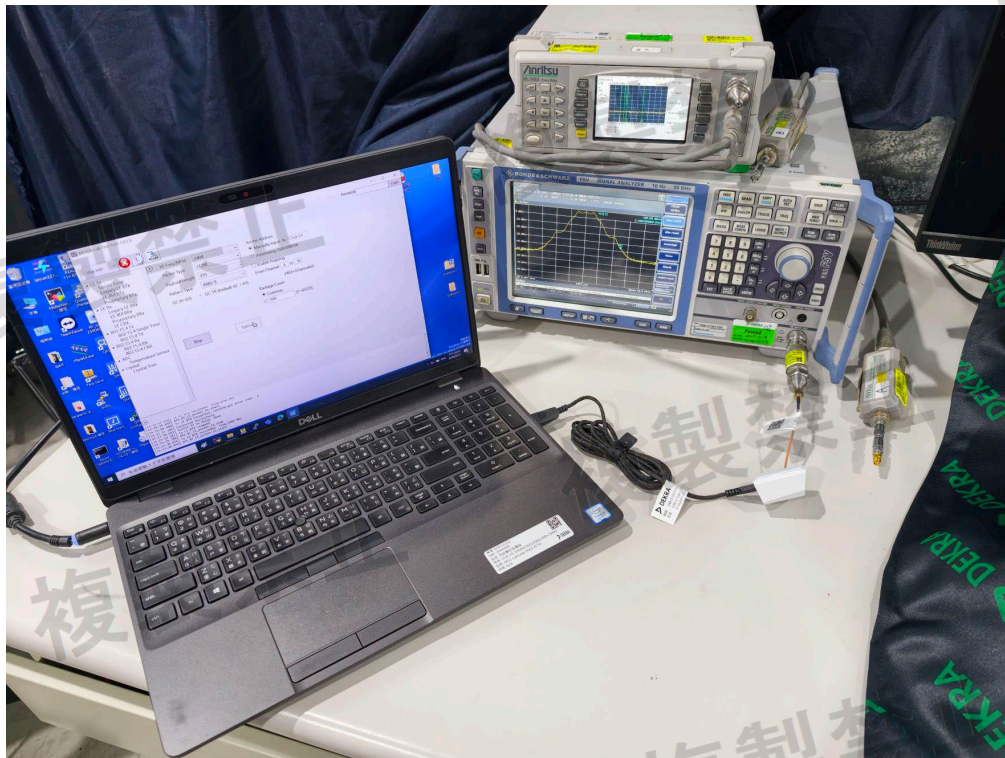


Appendix G. Test Result of Interference Prevention Function

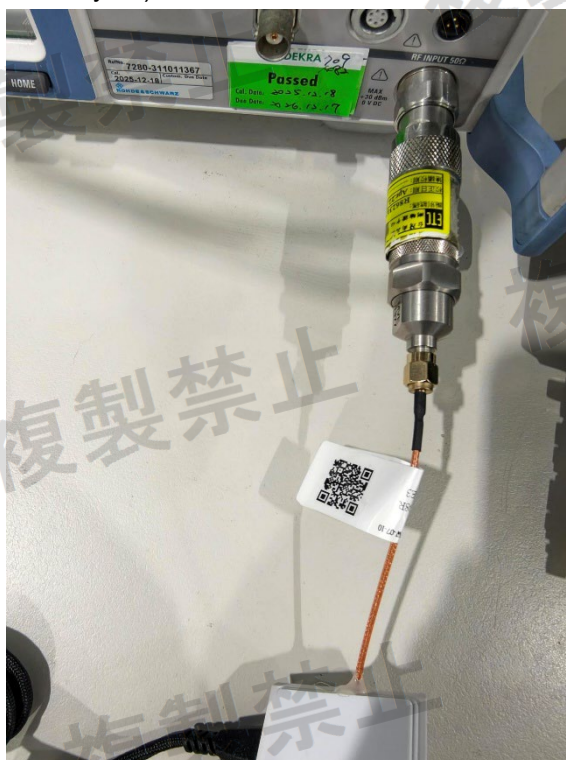
Test Mode	Test Result
Normal Link	Pass

Appendix H. Test Result of Test Setup Photograph

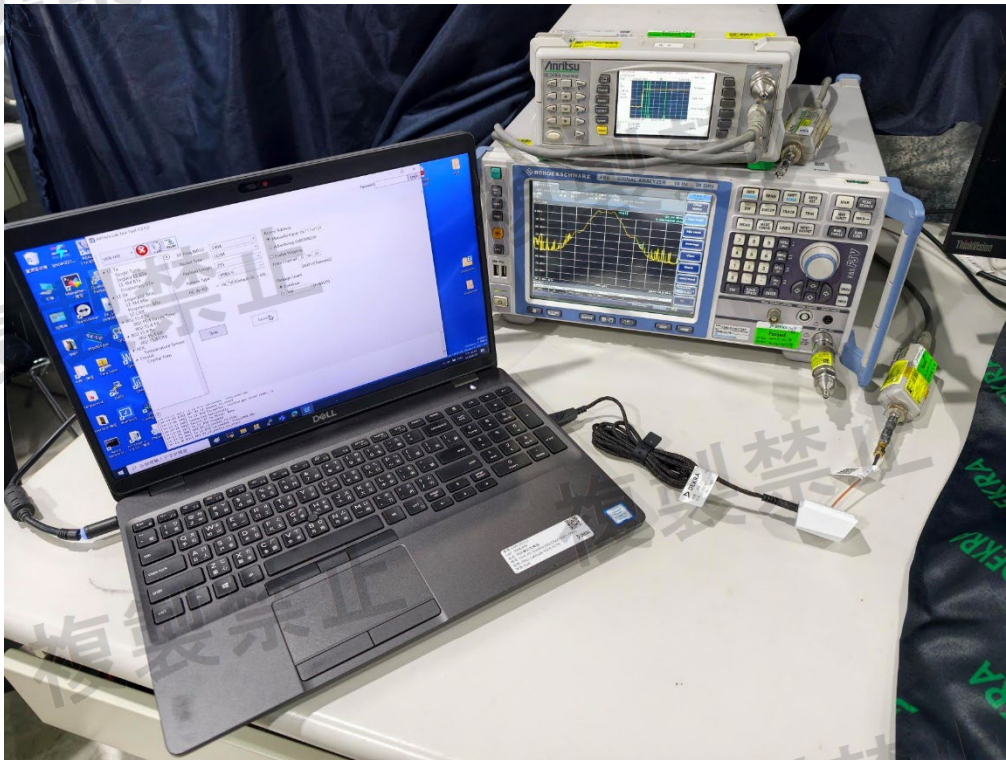
Description: Test Setup (Spectrum Analyzer)



Description: Test Setup (Spectrum Analyzer)



Description: Test Setup (Power Meter)



Description: Test Setup (Power Meter)

