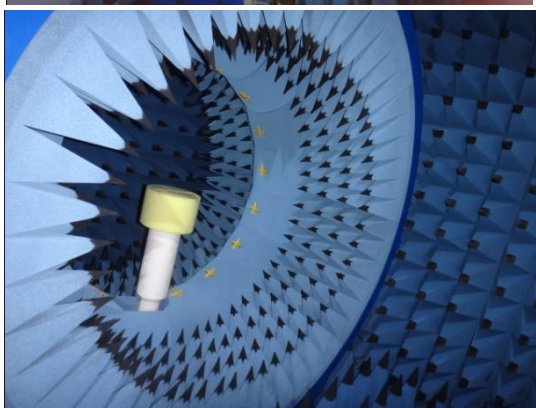


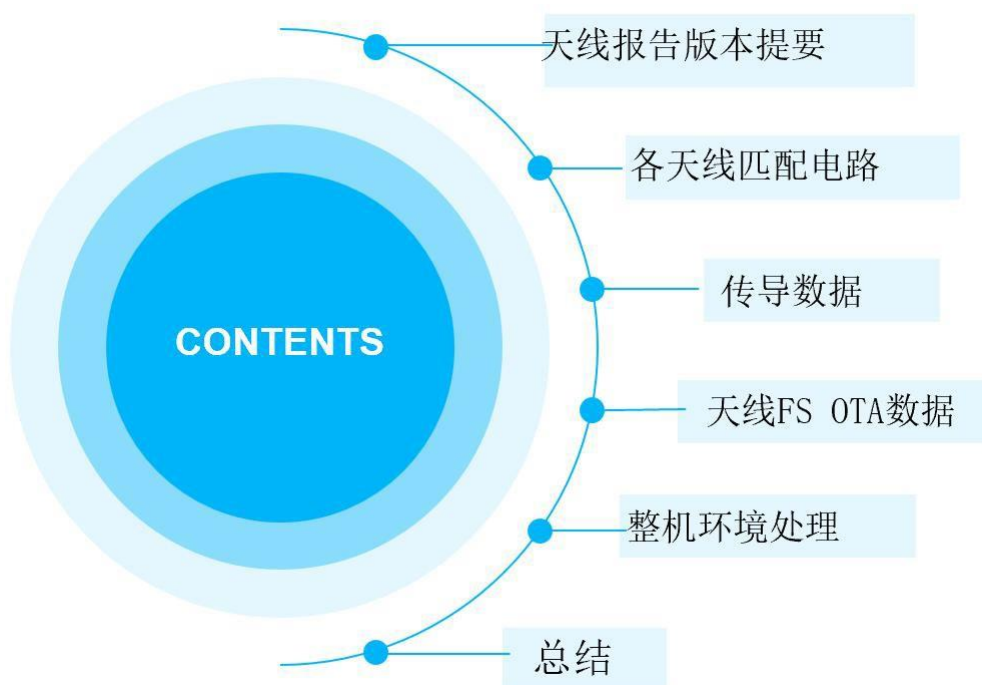
test report



Customer name		Project name	ring
Debugging frequency band	2.4-2.5G	Structural mode	Onboard
Radio frequency engineer	Wugong	construction engineer	
Antenna type	PIFA	date	2026-1-5



Imported from France's SATIMO company's StarLab 3D laboratory, it can accurately and quickly test the TRP, TIS, efficiency, gain, Apple chart, directional chart and other parameter data of communication terminal products such as mobile phones, tablet computers and notebooks.

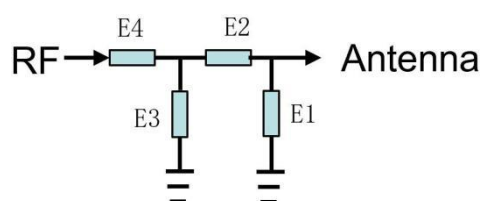


Summary of antenna report version

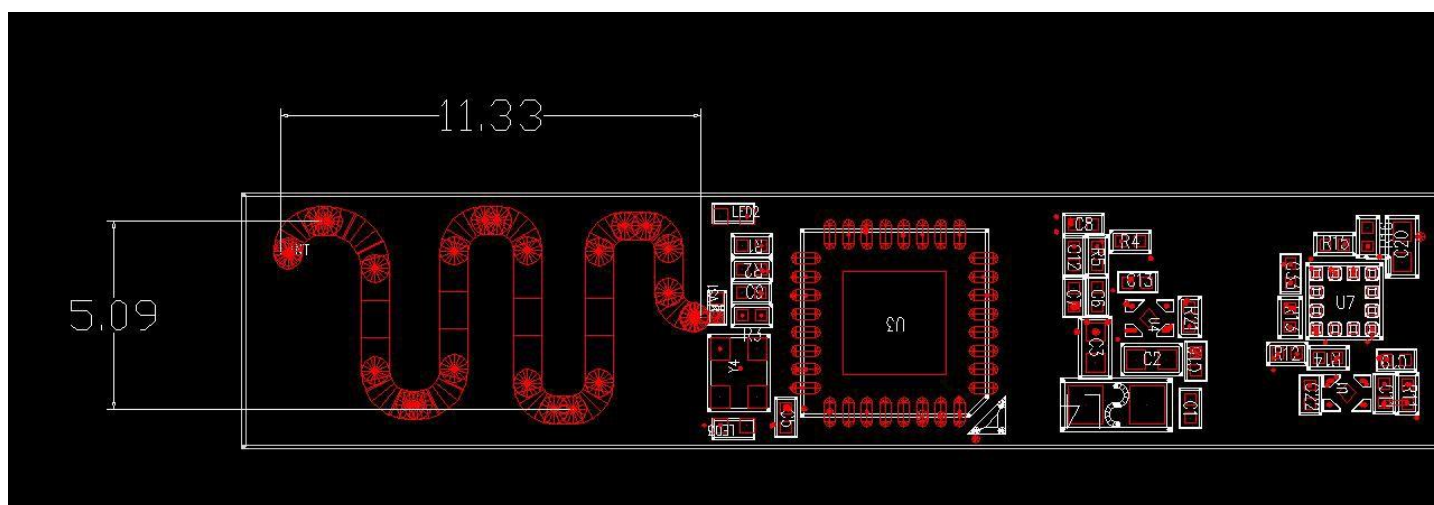
version	date	Content overview
V1.0	2025-12-30	Antenna efficiency test report
V2.0	2026-1-5	Modify the antenna efficiency test report

Main antenna matching circuit Unchanged

Element	E1	E2	E3	E4
Value				



Antenna size diagram



Passive standing wave diagram



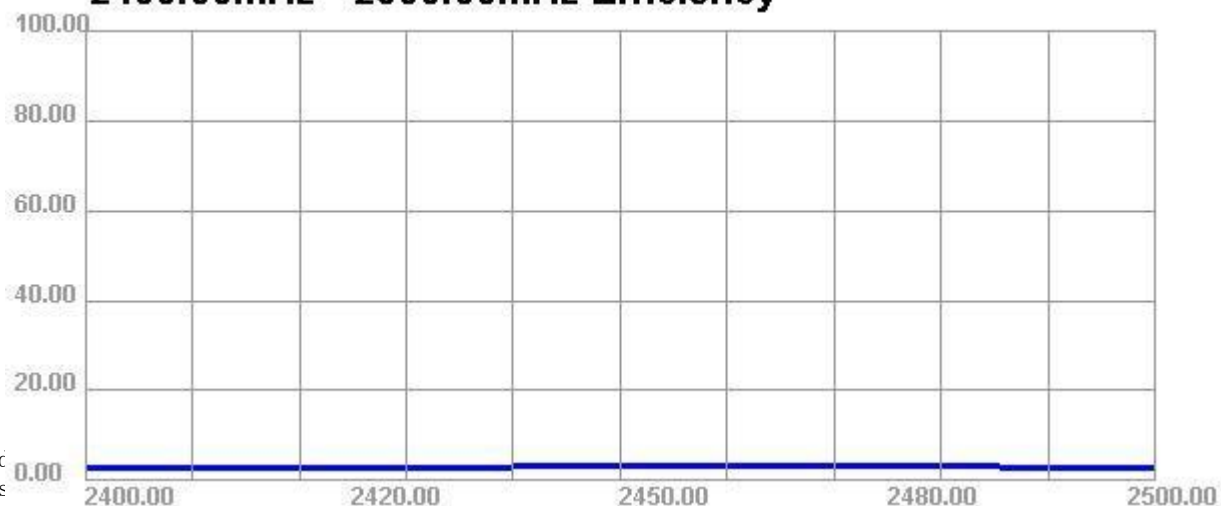
Antenna efficiency

Passive Test For 2.4G		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	2.85	-11.46
2410	2.78	-11.64
2420	2.91	-11.5
2430	2.83	-11.65
2440	3.08	-11.4
2450	3.15	-11.37
2460	3.22	-11.44
2470	3.11	-11.7
2480	3.26	-11.59
2490	2.93	-12.12
two thousand and five hundred	2.89	-12.1

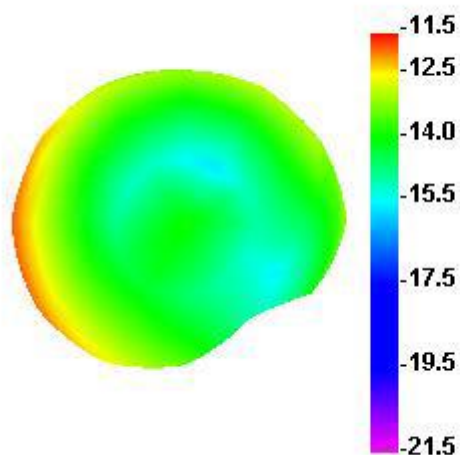
2400.00MHz - 2500.00MHz Gain



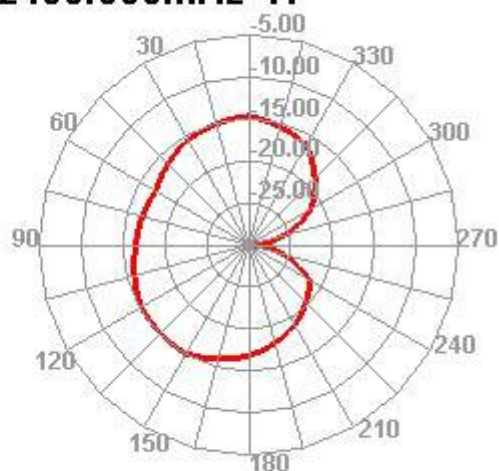
2400.00MHz - 2500.00MHz Efficiency



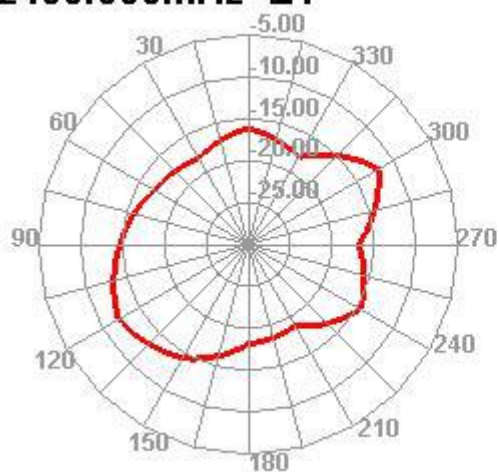
2400.000MHz



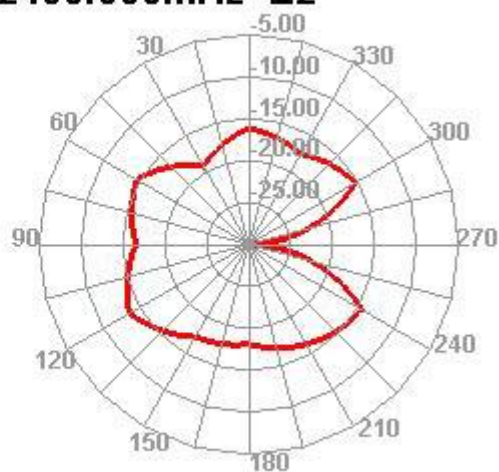
2400.000MHz H



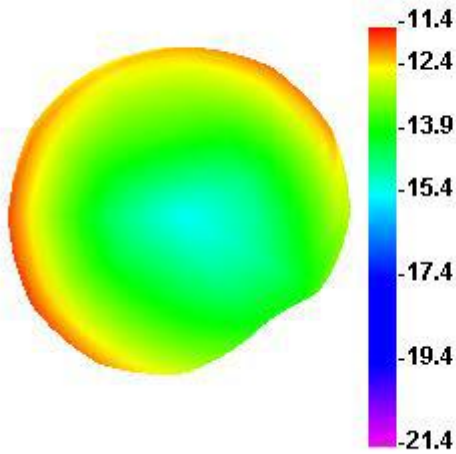
2400.000MHz E1



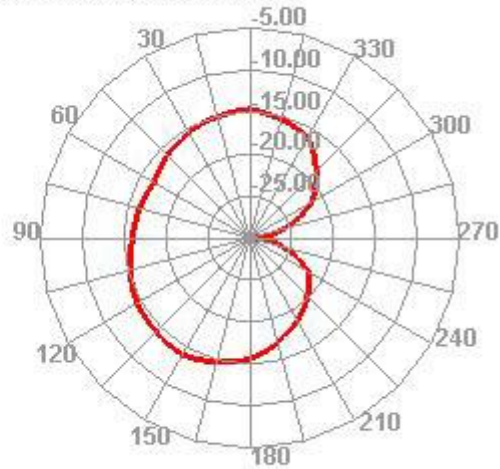
2400.000MHz E2



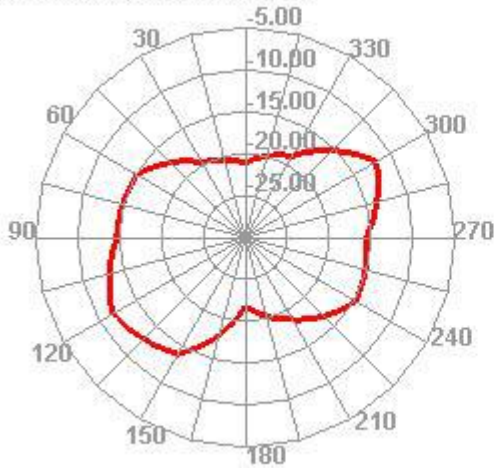
2450.000MHz



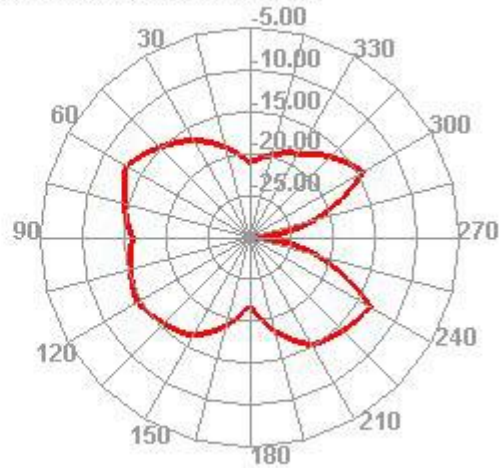
2450.000MHz H



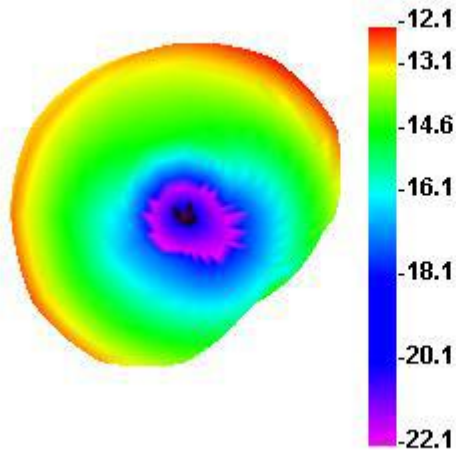
2450.000MHz E1



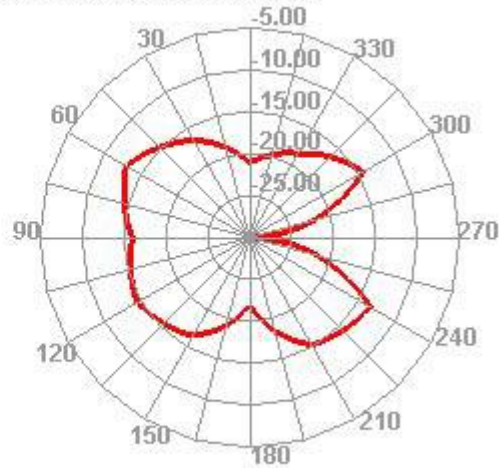
2450.000MHz E2

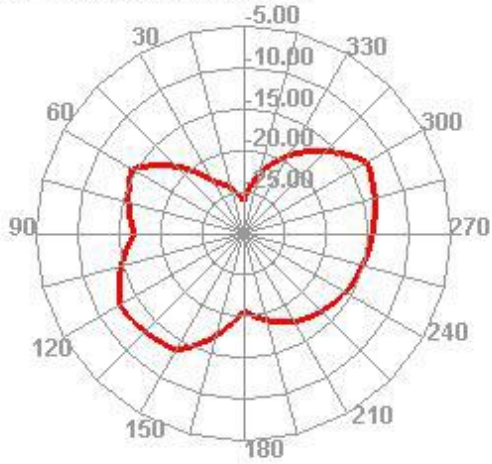
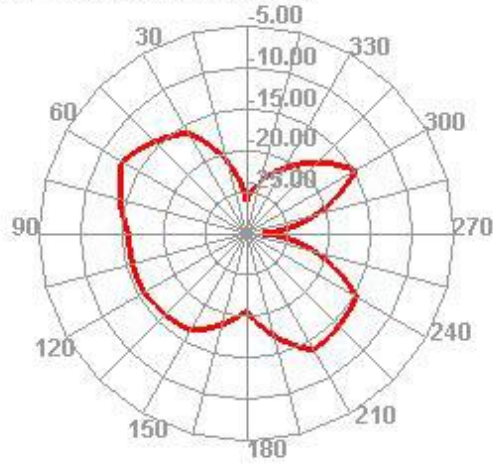


2500.000MHz

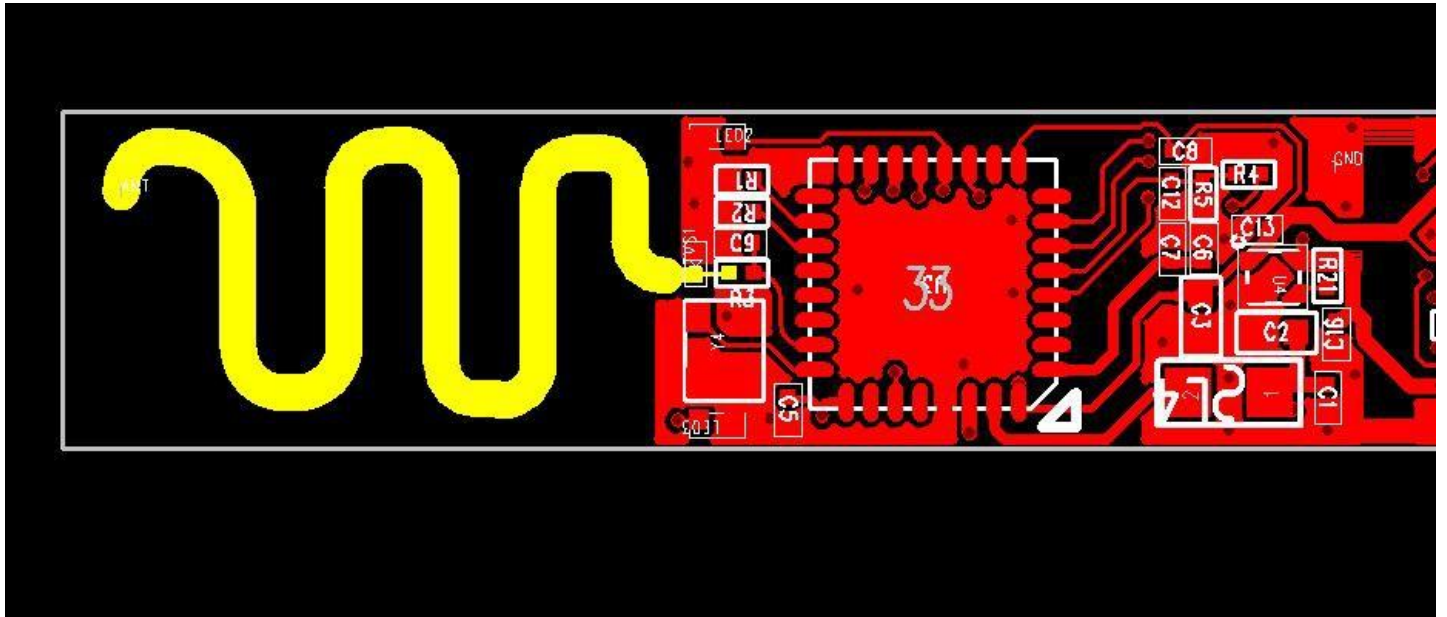


2450.000MHz E2



2500.000MHz E1**2500.000MHz E2**

Antenna pattern



Precautions:

1. This antenna is only suitable for debugging the prototype. Material changes of the motherboard PCB or RF circuit and changes of accessories (such as camera, screen, speaker, motor, battery and casing technology) must be tested and verified by our company before use.
2. If third-party verification is required for this project, please send the prototype to our company at least one working day in advance, and then send it for testing, so as to avoid delaying the project progress by sending it for two or more times!