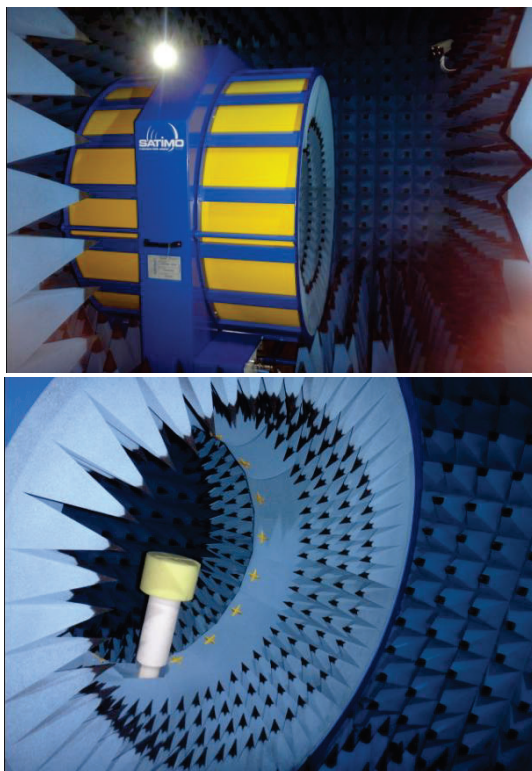


WIFI Antenna Test and gain report



Customer Name	Topwise	project name	PR800
Debugging frequency band	WIFI-2. 4G/5. 8G	Structural method	FPC+Copper axis
RF Engineer	XITIAN XIE	Structural Engineer	QUAN DU
Antenna type	PIFA	date	2024/12/25



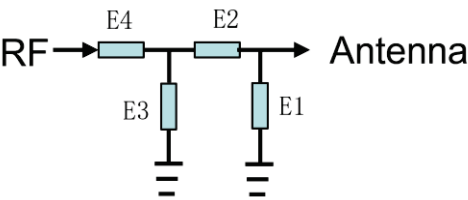
Imported from France's SATIMO StarLab 3D laboratory, capable of accurately and quickly testing mobile phones, tablets, and pens TRP of communication terminal products such as laptops TIS、Efficiency, gain, apple chart, directional chart and other parameter data

Summary of Antenna Report Version

version	date	Content Overview
V1.0	2024-12-05	3.0 version antenna test report
V2.0	2024-12-05	Module relocation using 3.0 version antenna test report

WIFI matching circuit – no changes made

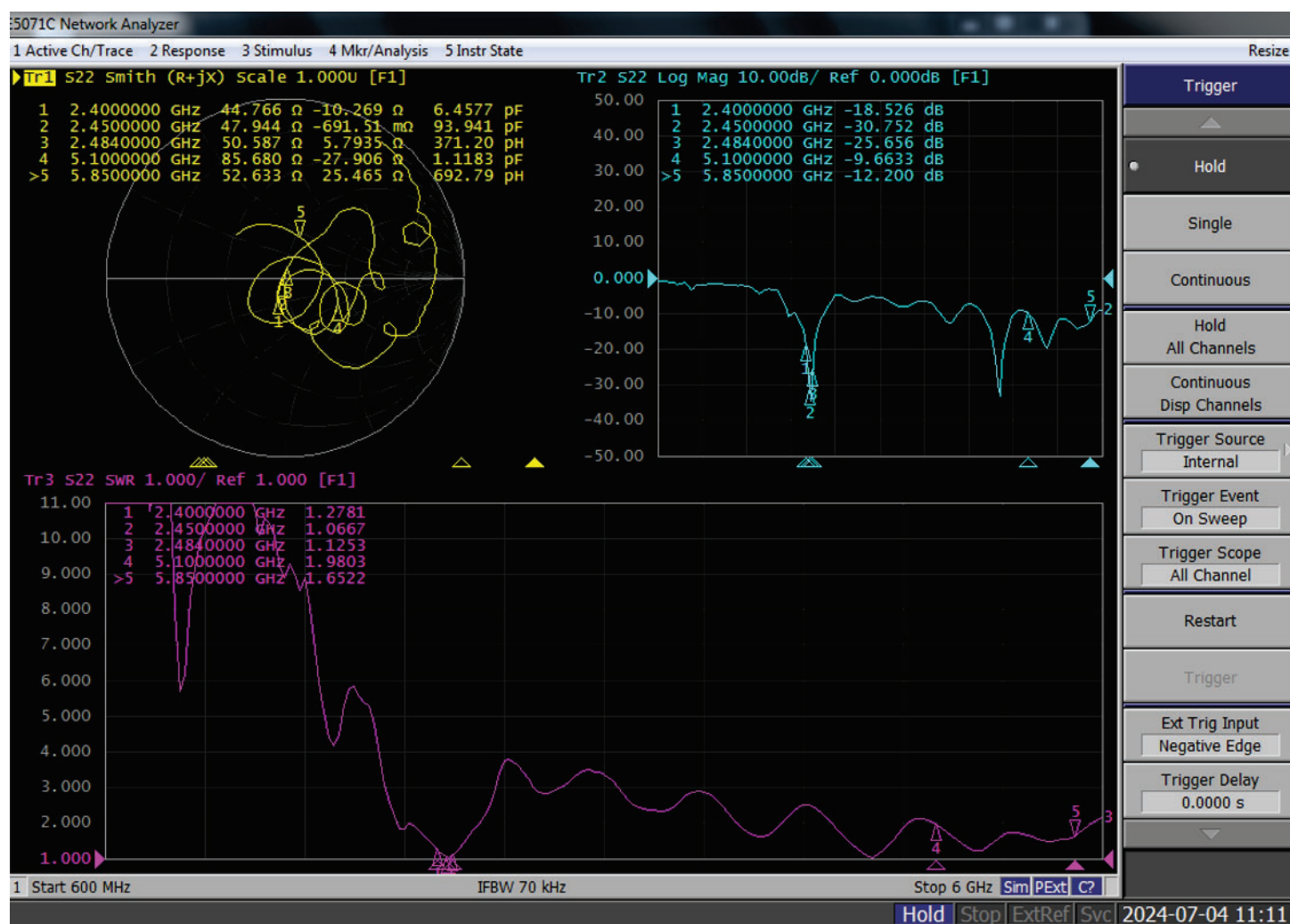
Element	E1	E2	E3	E4
Value	NC	0 欧	NC	0 欧



WIFI OTA

Band	Channel	TRP(dBm)	TIS(dBm)	Band	Channel	TRP(dBm)	TIS(dBm)
2.4G (B mode 11M)	1	13.6	-86.1	5G A mode(54M)	36	13.2	-72.0
	6	12.5	-82.8		64	14.3	-72.8
	13	12.7	-85.4		161	12.6	-70.4
2.4G (G mode 54M)	1	13.7	-71.8				
	6	13.1	-67.3				
	13	13.1	-70.6				
2.4G (N mode CMS7)	1	13.6	-68.0				
	6	13.2	-65.3				
	13	13.1	-66.4				

Passive standing wave diagram:

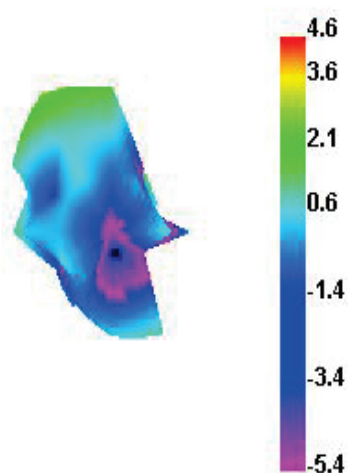


Passive efficiency+gain

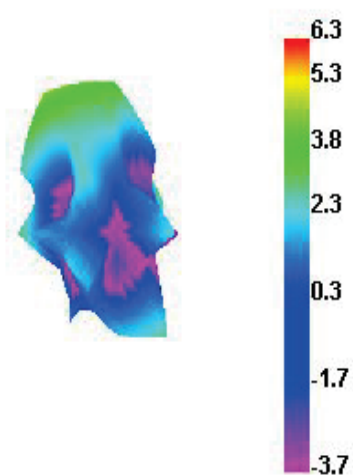
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	53.12	-2.75	4.64
2410	54.22	-2.66	4.77
2420	57.61	-2.39	5.04
2430	56.93	-2.45	5.21
2440	55.09	-1.86	5.83
2450	60.47	-1.52	6.3
2460	64.47	-1.28	6.5
2470	64.23	-1.29	6.47
2480	68.92	-1.03	6.61
2490	68.79	-1.04	6.62
2500	67.44	-1.11	6.43

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	53.03	-2.76	3.2
5200	53.8	-2.69	3.5
5250	58.63	-2.32	4.07
5300	51.15	-2.91	3.75
5350	50.5	-2.97	4.09
5400	50.16	-3	4.17
5450	51.44	-2.89	4.46
5500	48.25	-3.17	4.04
5550	43.51	-3.61	3.77
5600	39.71	-3.99	2.33
5650	37.13	-4.36	1.34
5700	41.26	-3.78	1.54
5750	45.88	-3.22	2.07
5800	43.74	-3.47	1.88
5850	43.27	-3.53	1.59

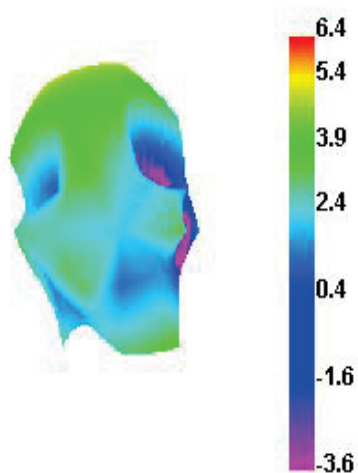
2400.000MHz



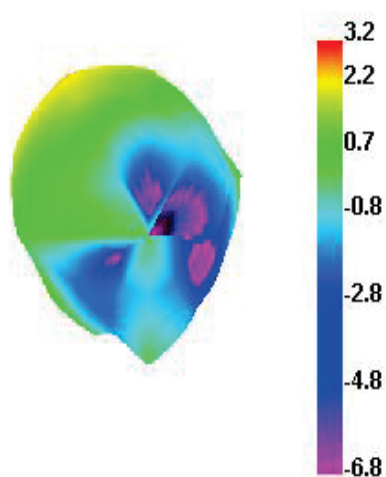
2450.000MHz



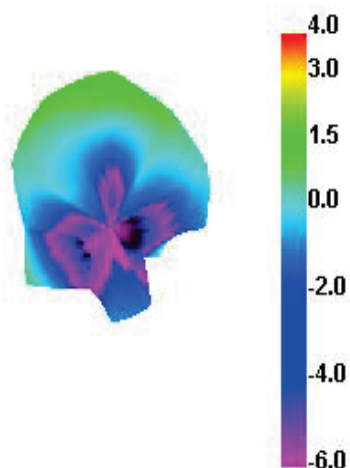
2500.000MHz



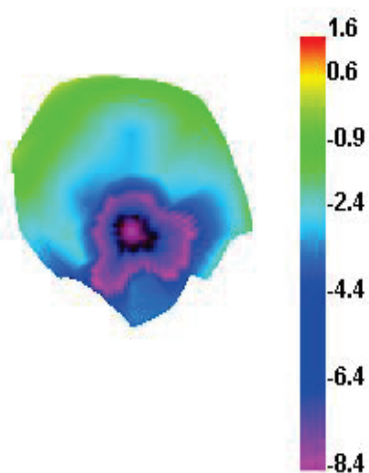
5150.000MHz



5500.000MHz



5850.000MHz



The placement of copper axis is shown in the following figure

