

Shenzhen Tianlianling Technology Co., Ltd.

Antenna Test Report

Item name: SGUAI-T30
Part No.: PCB Antenna

Person in charge: Chen Shu

Version: V1

Date: 2023.04.14

Tel: 0755-85263741 Fax: 0755-85263741
Company address: 5D, Building L, No. 26, Lane 2,
Liuxian 1st Road, District 71, Baoan District, Shenzhen

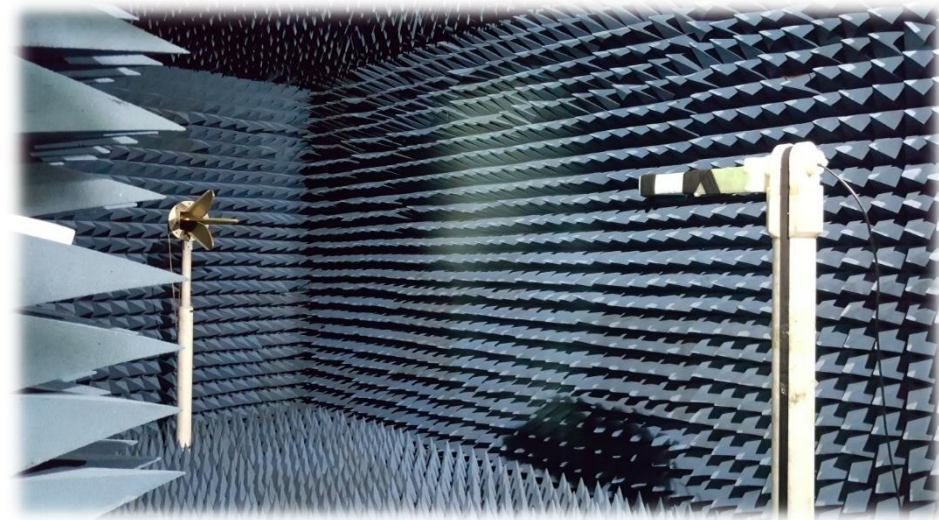
公司网址: <http://www.tll-skylink.com>

R & D environment

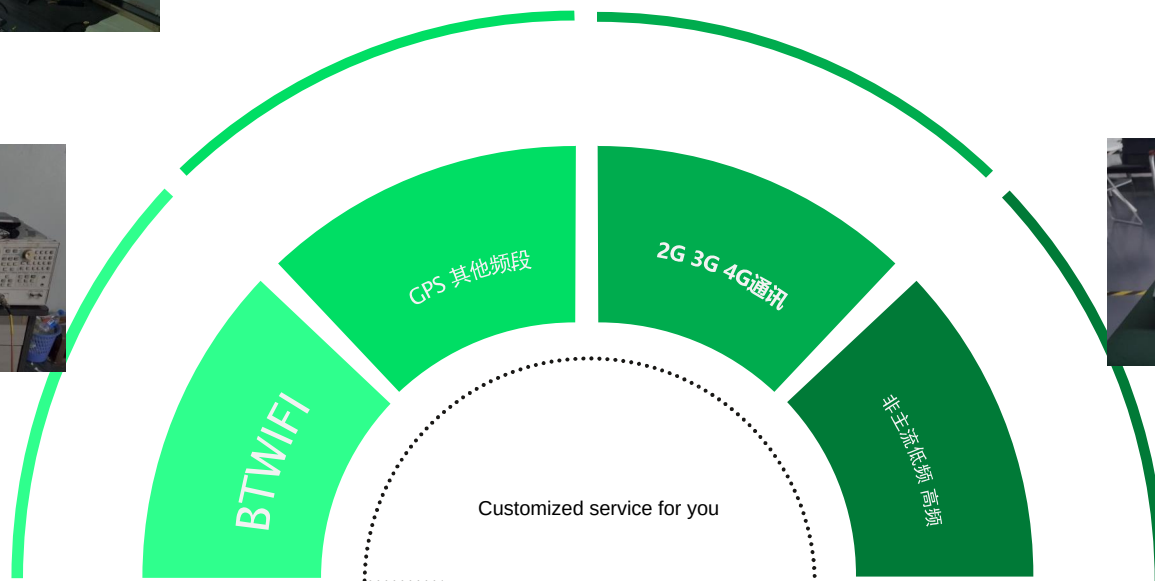
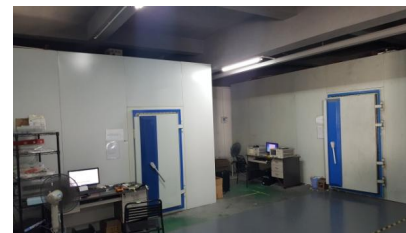
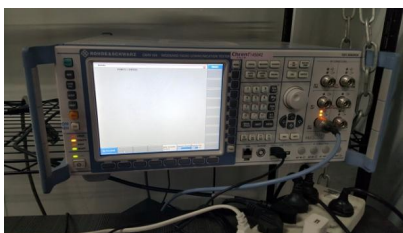
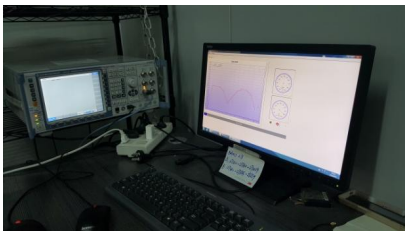
微波暗室

and ancillary equipment

1. 2G/3G communication microwave anechoic chamber
2. 4G Microwave Anechoic Room Communication Product 2.CMW500
3. Agilent Network Analyzer
4. HP Network Analyzer
5. GPS101 etc.



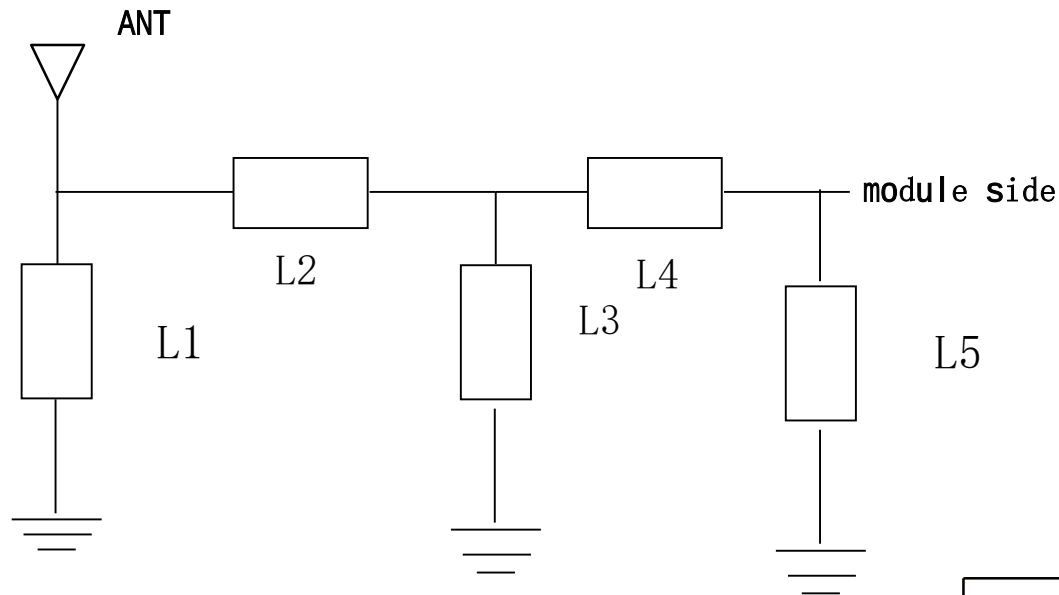
R & D equipment



Information description:

client's name	model	Antenna
Little water monster	***	PCB
frequency		
BT	2400~2500MHz	

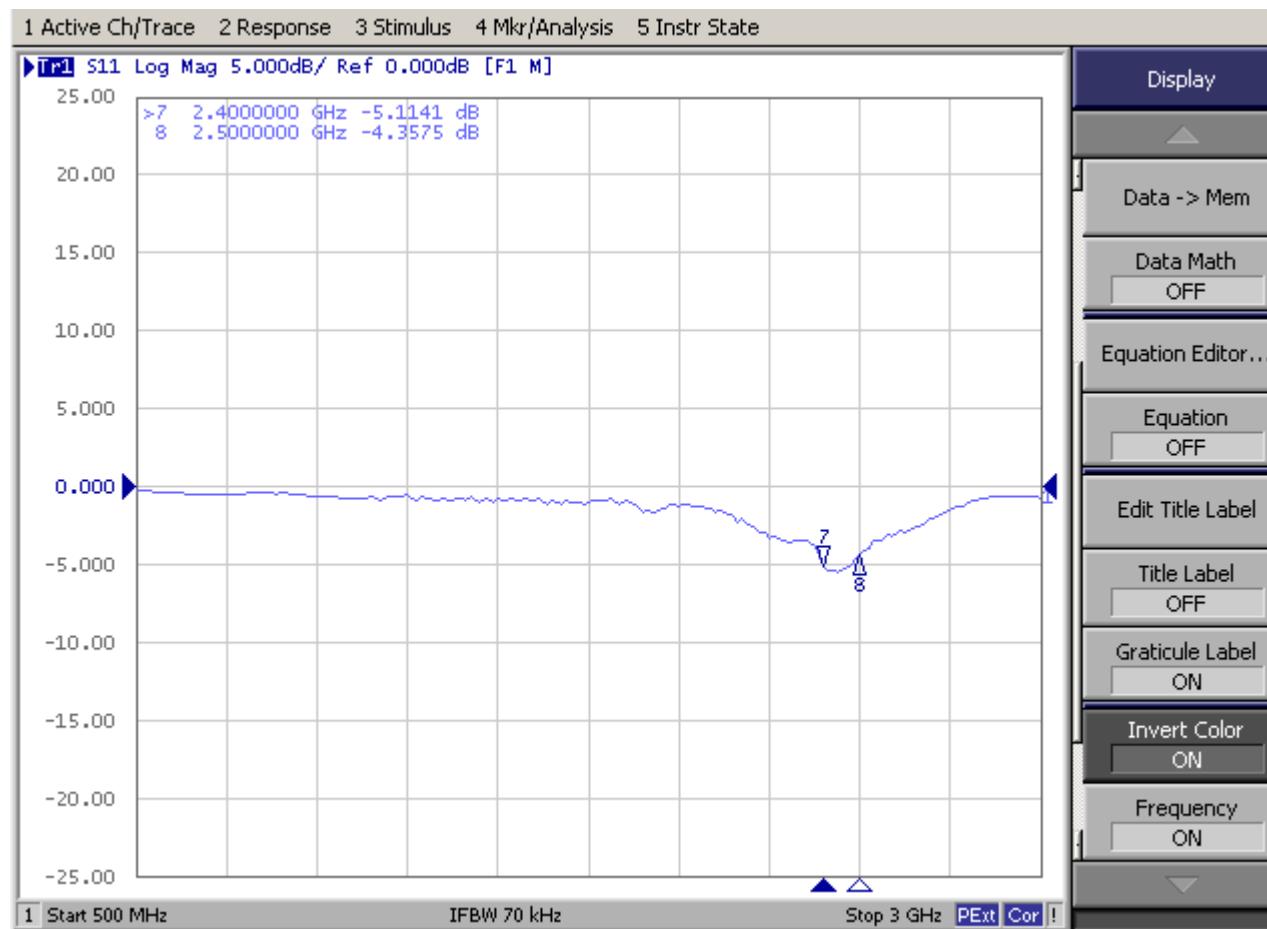
Antenna Matching Circuit



原主板匹配不变

	value
L1 (0201)	/
L2 (0201)	/
L3 (0201)	/
L4 (0201)	/
L5 (0201)	/

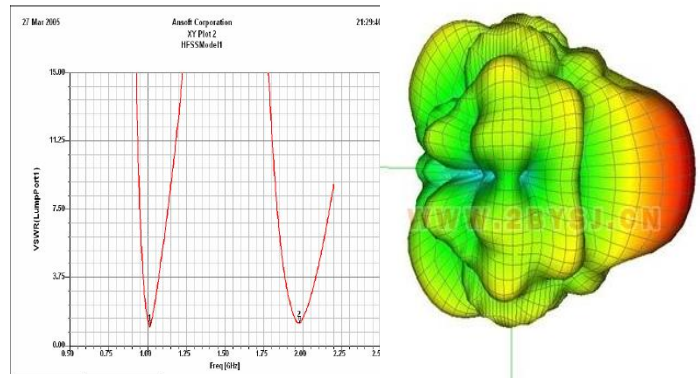
Return loss



Testing ability

passive test

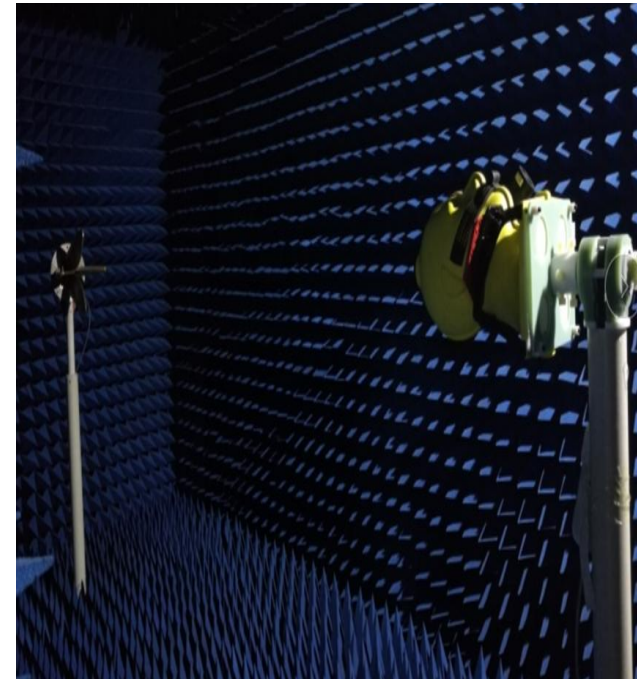
- impedance
- VSWR
- gain
- efficiency
- direction map



active test

- 2G 3G 4G
- WIFI 2.4G&5.8G
- BT
- GPS
- NB-IOT
- TRP
- 0~7.5G

传导测试 & TRP&TIS
传导测试 & TRP&TIS
传导测试 & TRP&TIS
传导测试
非信令模式下 传导测试 &
扫描干扰分析

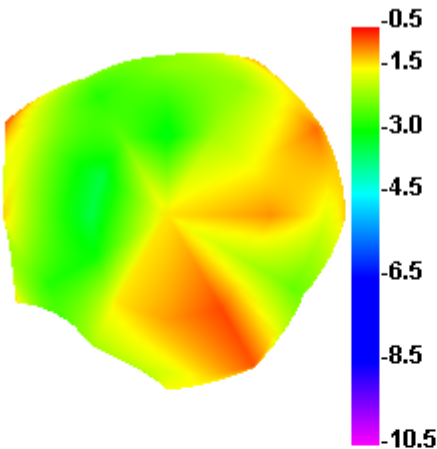


Efficiency/Gain

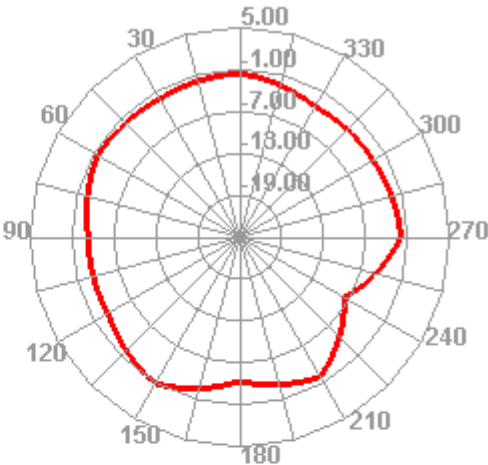
Fre (MHz)	Eff (%) (dB)	Gain (dB)
2400	44. 94	-0. 5
2410	45. 46	-0. 53
2420	45. 25	-0. 39
2430	44. 39	-0. 11
2440	43. 89	-0. 35
2450	39. 97	-0. 65
2460	36. 9	-0. 74
2470	39. 3	0. 15
2480	39. 97	0. 73
2490	42. 74	1. 32
2500	40. 67	1. 19

Direction map

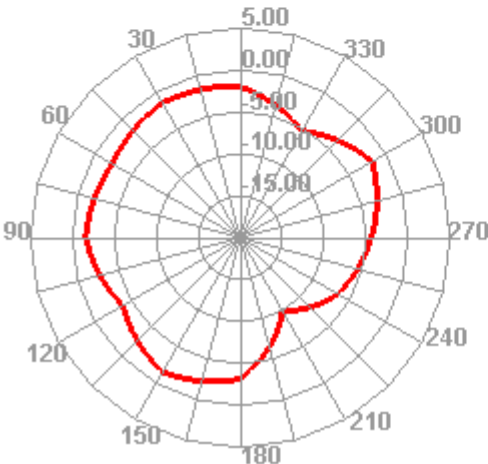
2400.000MHz



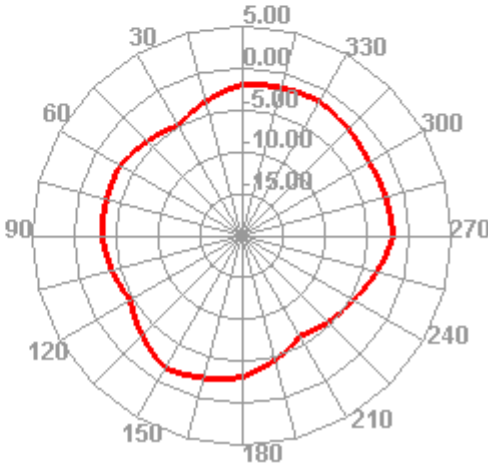
2400.000MHz H



2400.000MHz E1



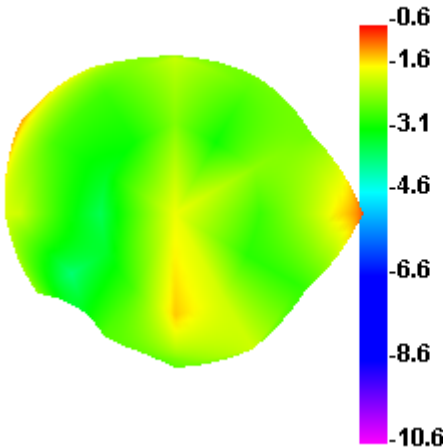
2400.000MHz E2



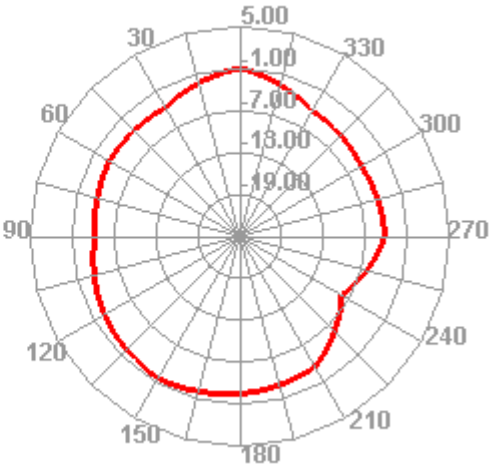
Direction map



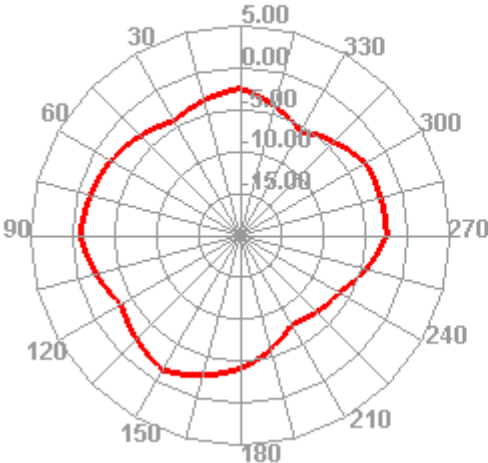
2450.000MHz



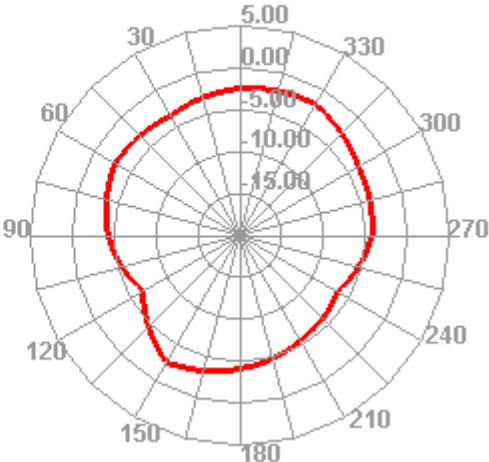
2450.000MHz H



2450.000MHz E1

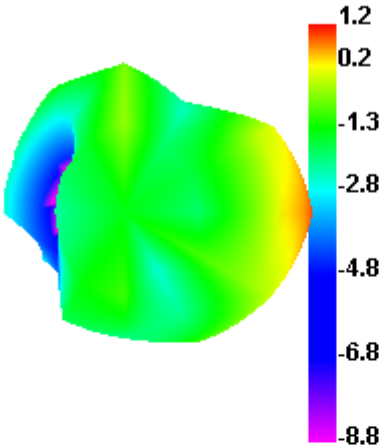


2450.000MHz E2

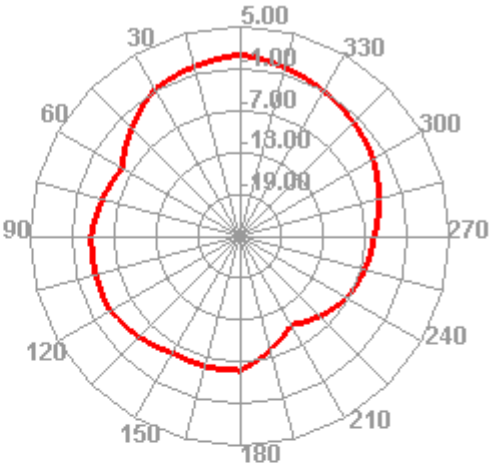


Direction map

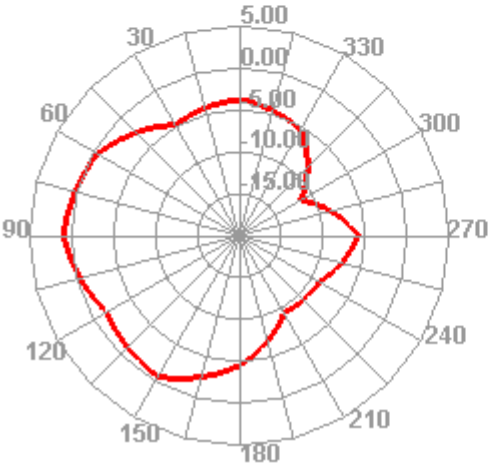
2500.000MHz



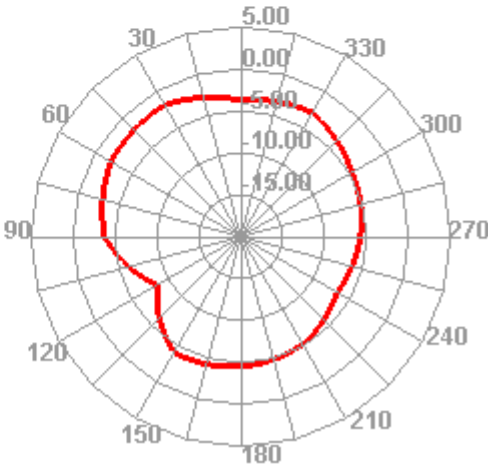
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



Summarize

- 1: The antenna is an on-board antenna, and there are no assembly instructions and environmental treatment documents, please be aware;
- 2: The efficiency of the onboard antenna is greater than 35%, and there is no problem with the measured data, and the final test is subject to the customer.



THANK
YOU