



U2200 antenna test report V1

date: 2024/4/2

Main objectives of this report: Antenna matching debugging

Main conclusions of this report:

Antenna type

PCB Antenna

manufacturer:

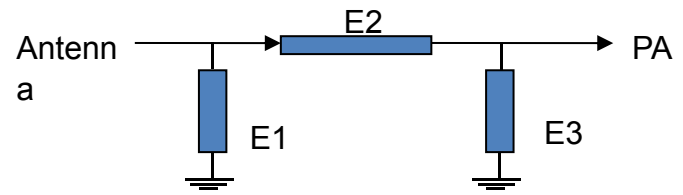
Shenzhen Shanxu Electronics Co., LTD

Manufacturer's
address:

Shenzhen Baoan District Shajing Gonghe Zhongxi Industrial Park D second floor

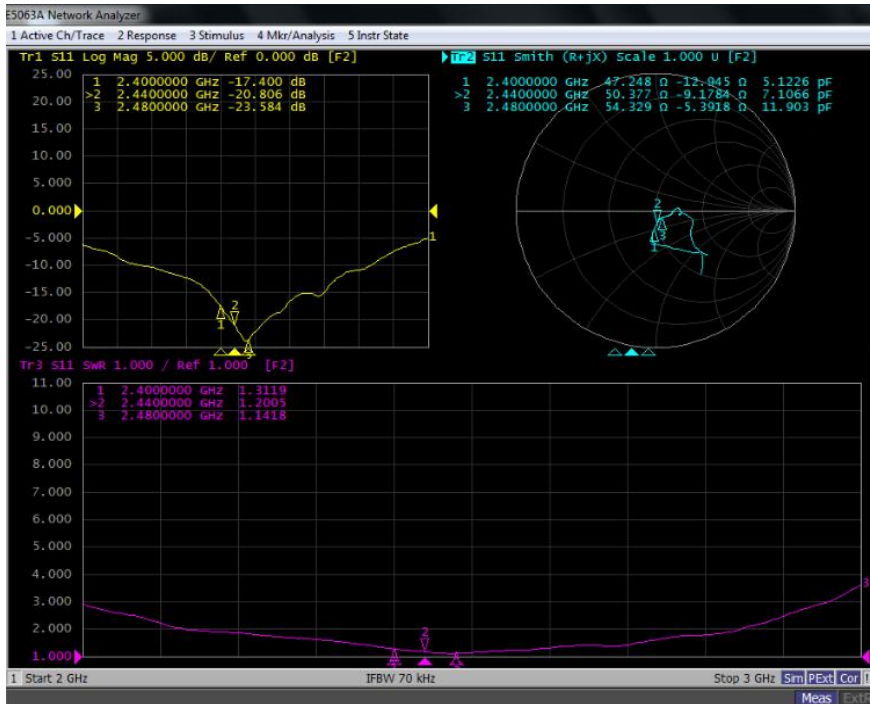
antenna	Frequency band	Frequency band	Performance requirement
BT	2400-2480MHz	onboard	Performance requirements according to customer requirements

Antenna end matching circuit:



BT	
Element	
E1(0402)	0.5pF
E2(0402)	0Ω
E3(0402)	NG

Antenna passive S11 parameter test:

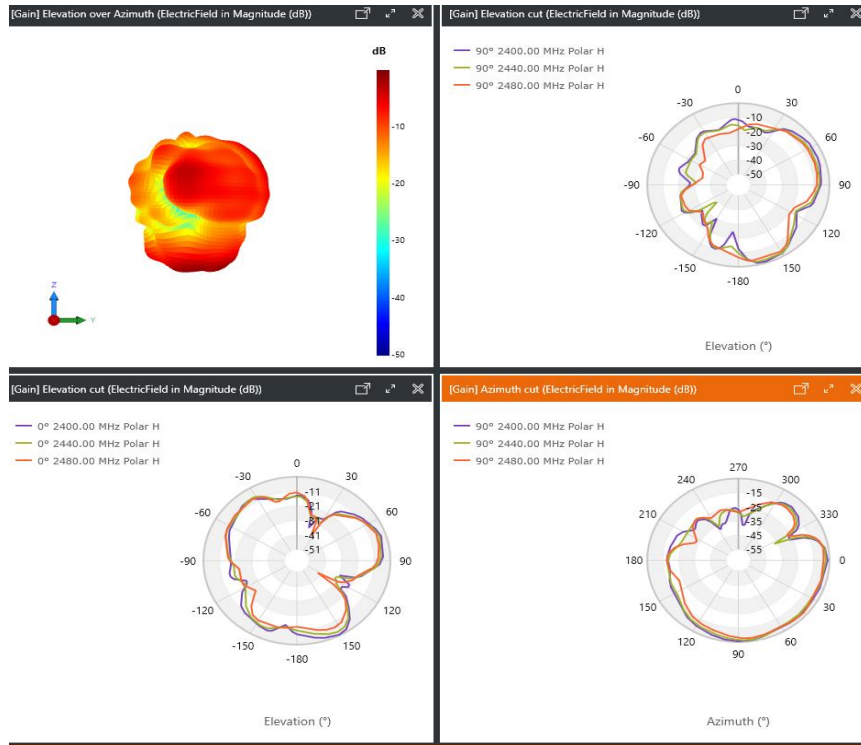


Freq (MHz)	2400	2440	2480
SWR	1.31	1.12	1.14
Log Mag	-17.40	-20.80	-23.58

Antenna passive efficiency and gain test:

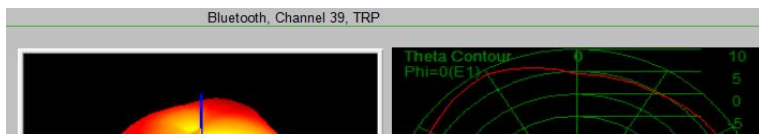
After optimization and matching		
Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400	1.49	37.00
2410	1.55	37.00
2420	1.58	37.00
2430	1.57	37.00
2440	1.63	37.00
2450	1.62	37.00
2460	1.59	37.00
2470	1.59	37.00
2480	1.56	37.00
2490	1.68	37.00
2500	1.76	37.00

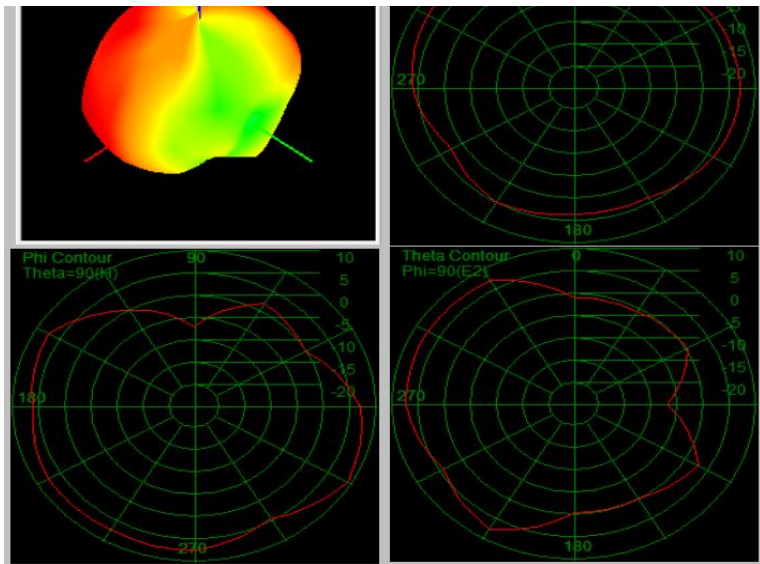
Antenna passive radiation pattern:



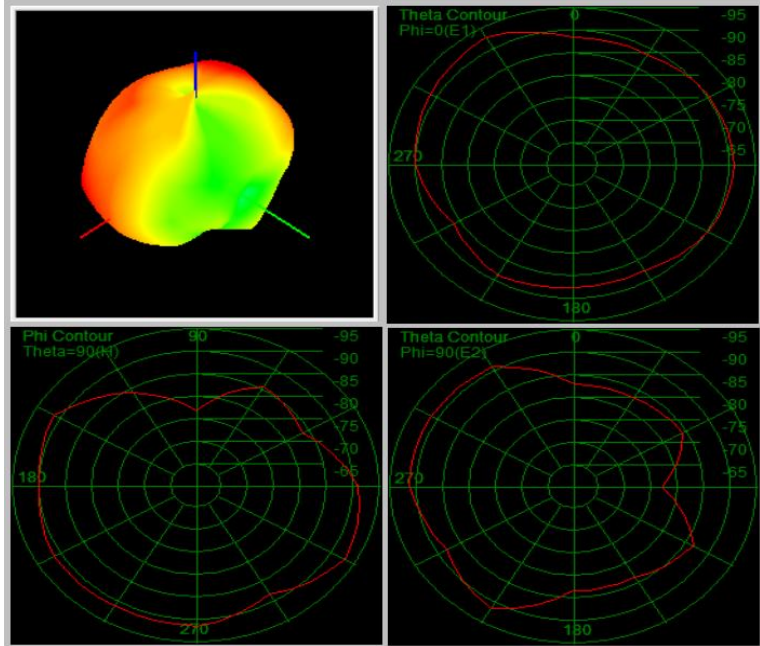
Antenna OTA test:

After optimization and matching		
Channels	TRP	TIS
0	4.67	-90.66
39	5.08	-88.88
78	4.74	-89.15





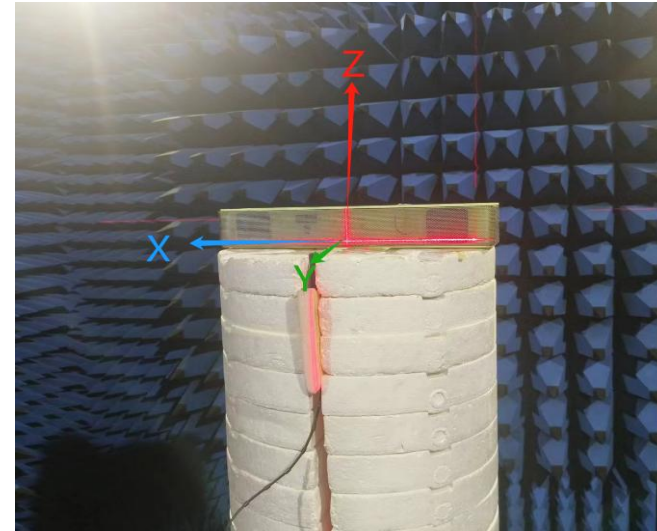
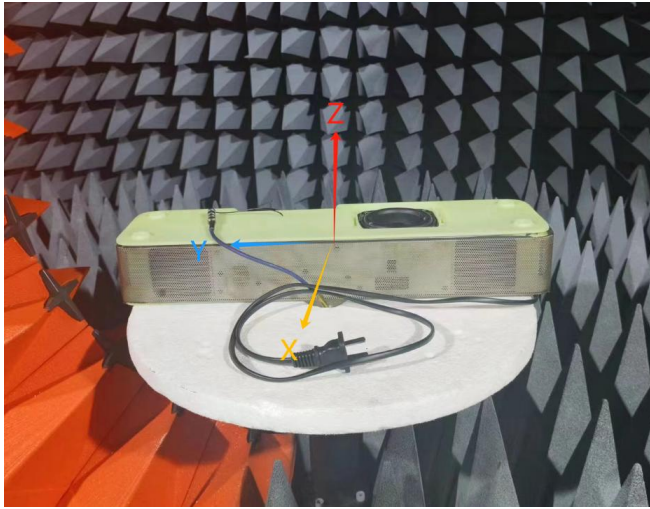
Bluetooth, Channel 39, TIS



Antenna picture:

passive

active



Antenna size:

unit: mm

