



Antenna Part Specification

Customers:	Tianjian
Project name:	Scala
Antenna type:	L-BT Antenna
Antenna model:	SX230813-178ENZ
Antenna version number:	L6
Version:	V1.0
Date:	2024.03.23
Manufacturer Address	505-506 ,A Block, Donglian Building, Chuangye 2 road, Baoan District, Shenzhen, Guangdong, P.R china



Contents

I: The report of passive data	3
II: 3D Active test report of antenna	7
III: Matching circuit.....	7
IV: Structure file	8

Change record			
Compile / change date	Reason for change	Changed content	Version
2024.03.23	First edition	First edition	V1.0

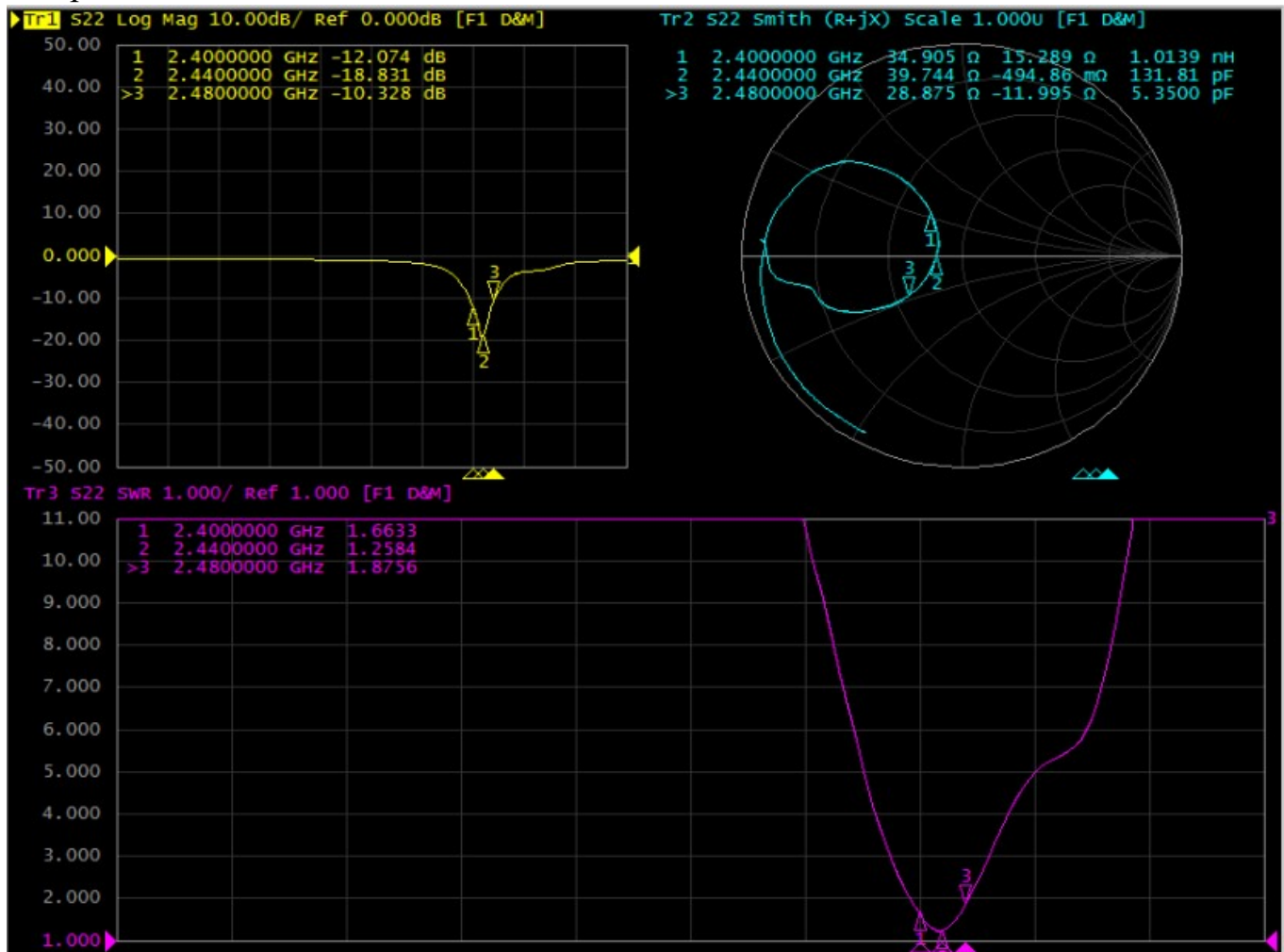


I: The report of passive data



Angilent E5071C

S11 parameter:



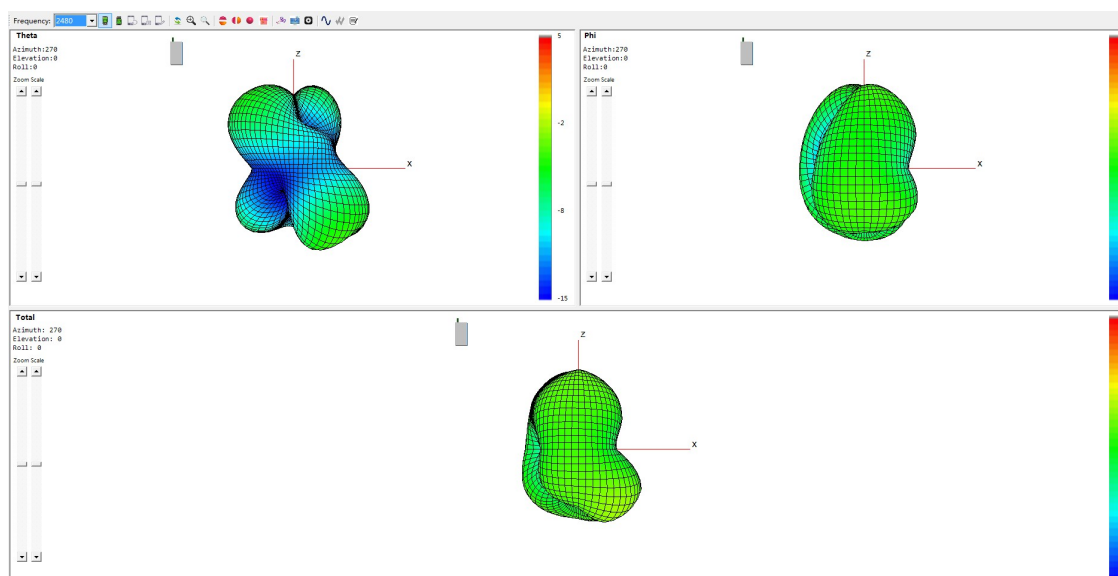
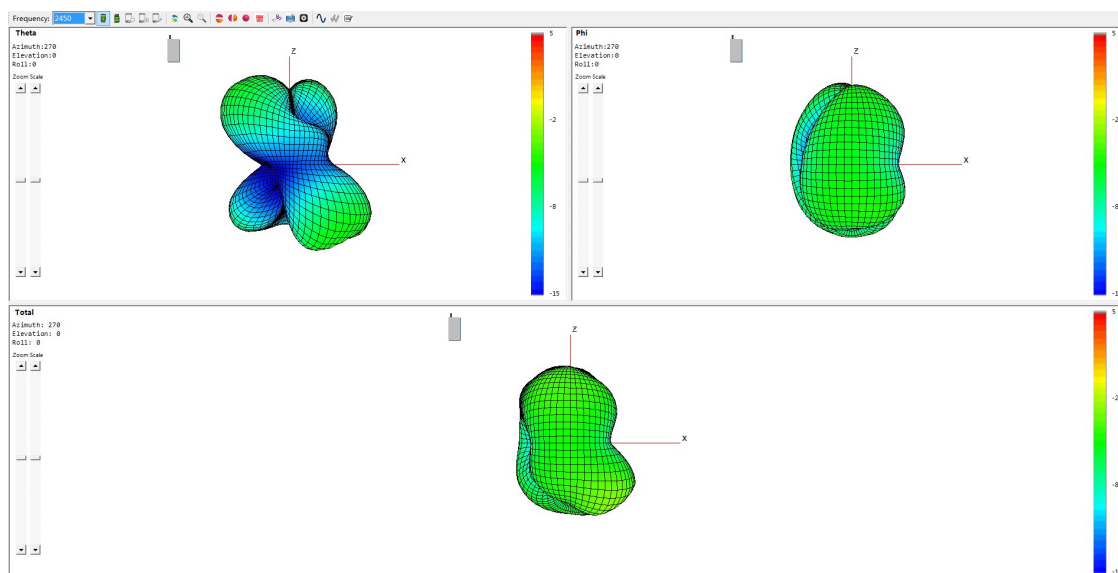
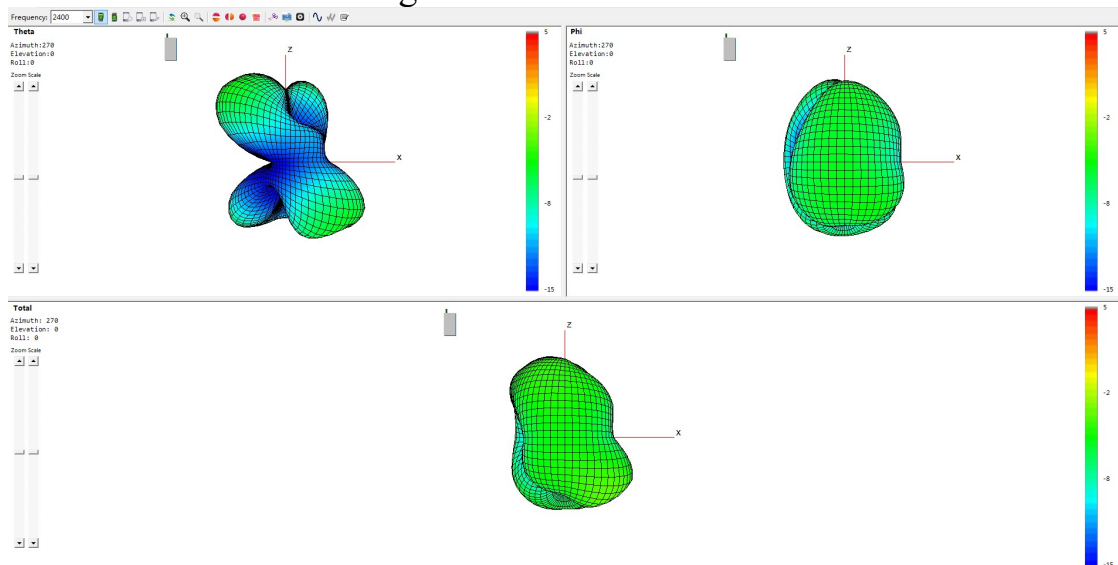


Efficiency and gain of left ear BT antenna:

L			
Frequency point MHz	gain (dBi)	efficiency (dB)	efficiency %
2400	-3.3	-6.4	23.0
2410	-3.1	-6.2	23.9
2420	-2.9	-6.1	24.8
2430	-2.8	-6.0	24.9
2440	-2.9	-6.0	25.1
2450	-2.8	-5.8	26.5
2460	-2.7	-5.9	25.8
2470	-2.2	-5.4	28.7
2480	-2.1	-5.4	28.9
average value	-2.8	-5.9	25.7



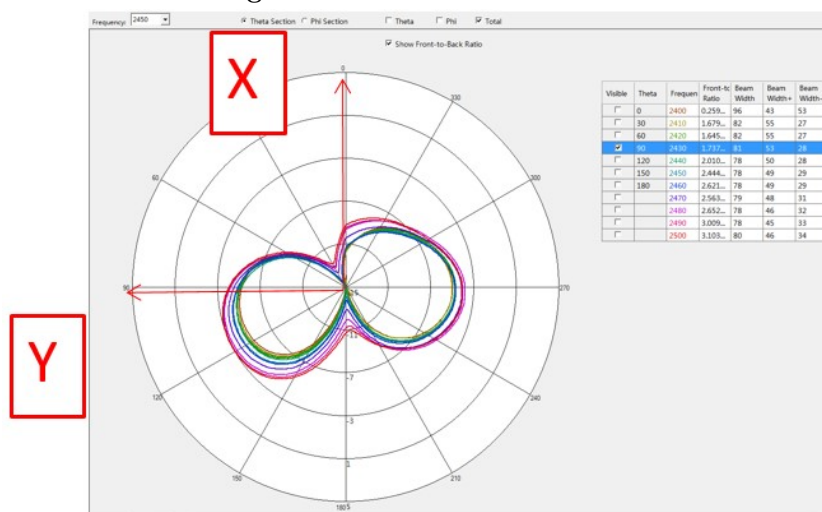
Passive 3D directional diagram of left ear antenna:



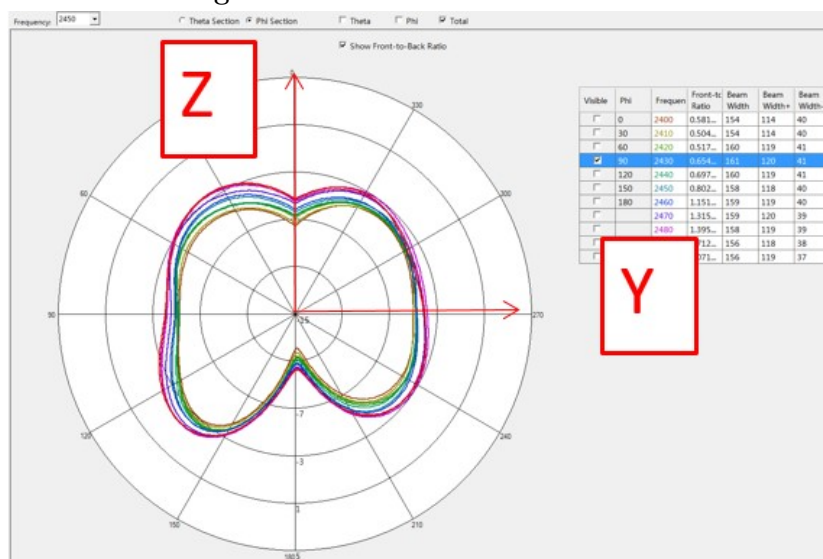


Passive 2D directional pattern of left ear antenna:

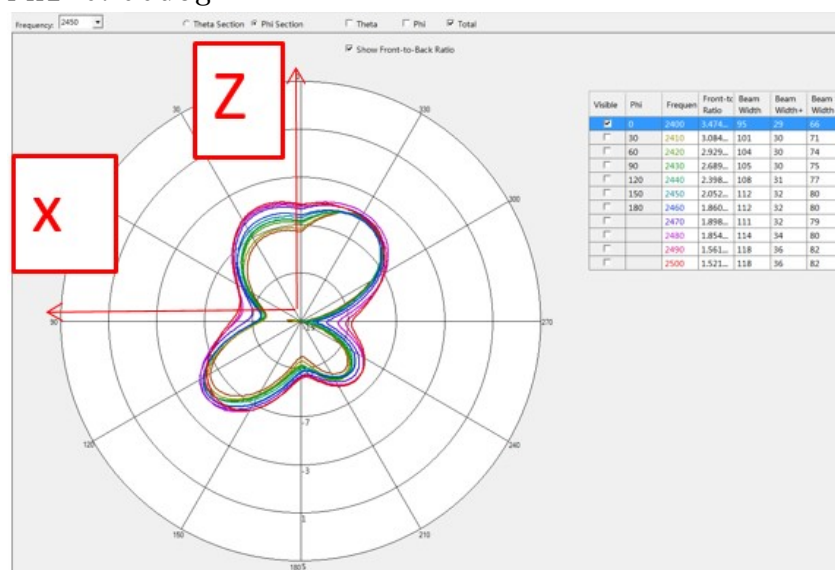
Theta=90.00deg



Phi=90.00deg



Phi=0.00deg





II: 3D Active test report of antenna

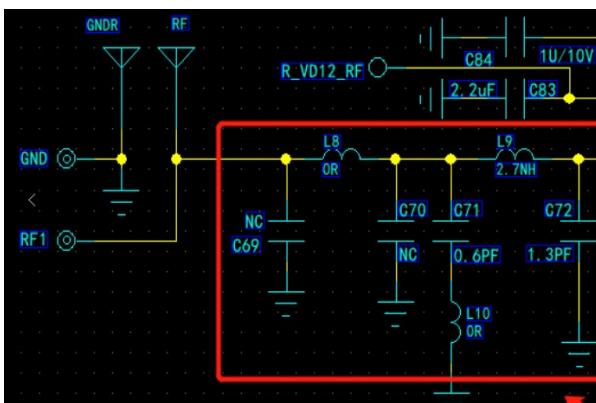
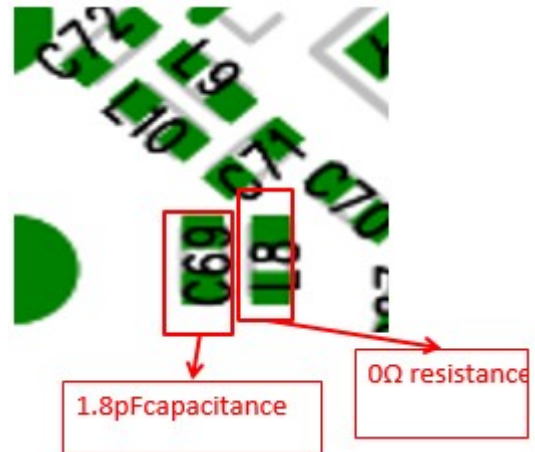
	Channel	TRP (dBm)	TIS (dBm)
L	CH 0	4.4	-89.2
	CH 39	4.7	-89.3
	CH 78	4.3	-89.1



OTA Standard Chamber

III: Matching circuit

Tag number	Match value
C69	1.8p fcapacitance
L8	0 resistance
C70	NC





IV: Structure file

