



Antenna Part Specification

Customers:	Tianjian
Project name:	Scala
Antenna type:	R-BT Antenna
Antenna model:	SX230813-178ENZ
Antenna version number:	R4
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



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

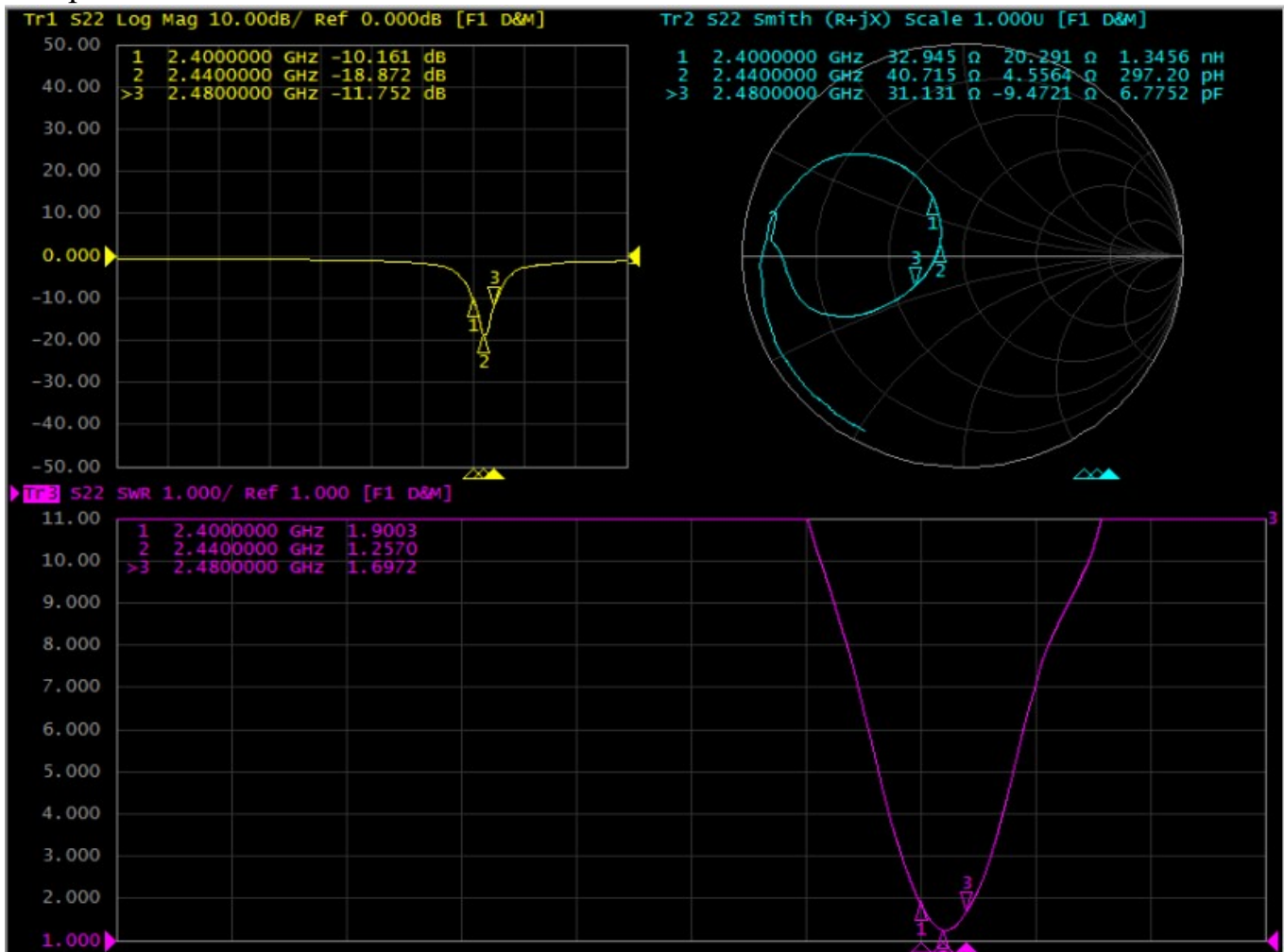


I: The report of passive data



Angilent E5071C

S11 parameter:



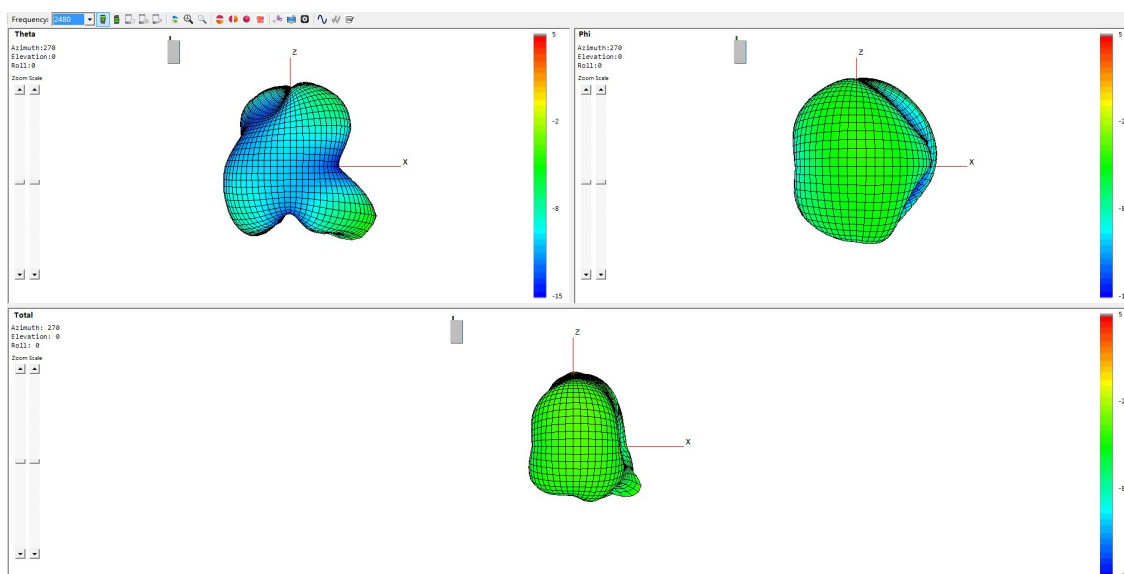
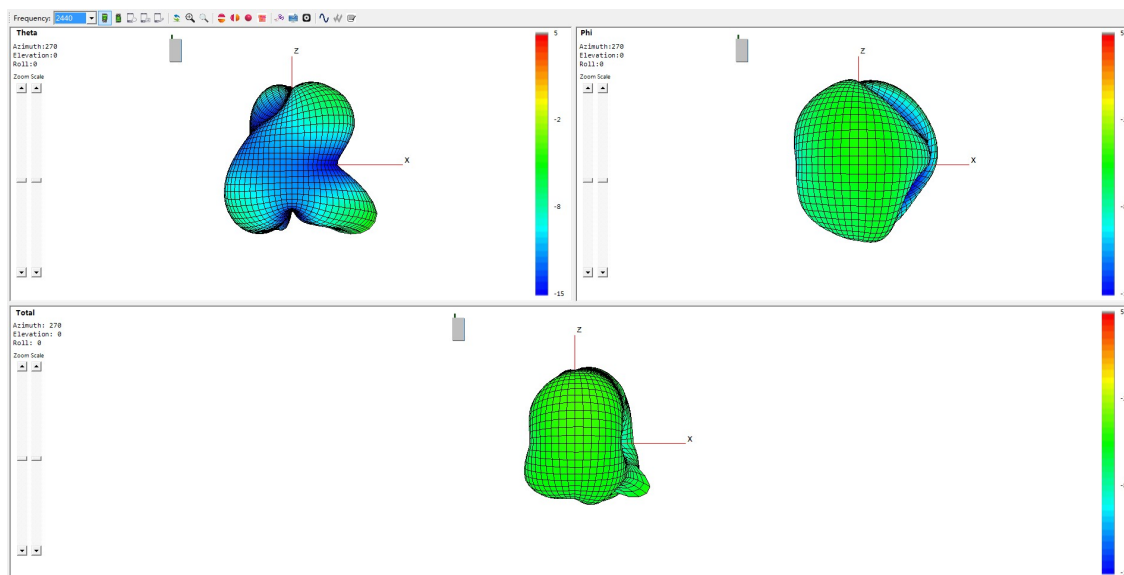
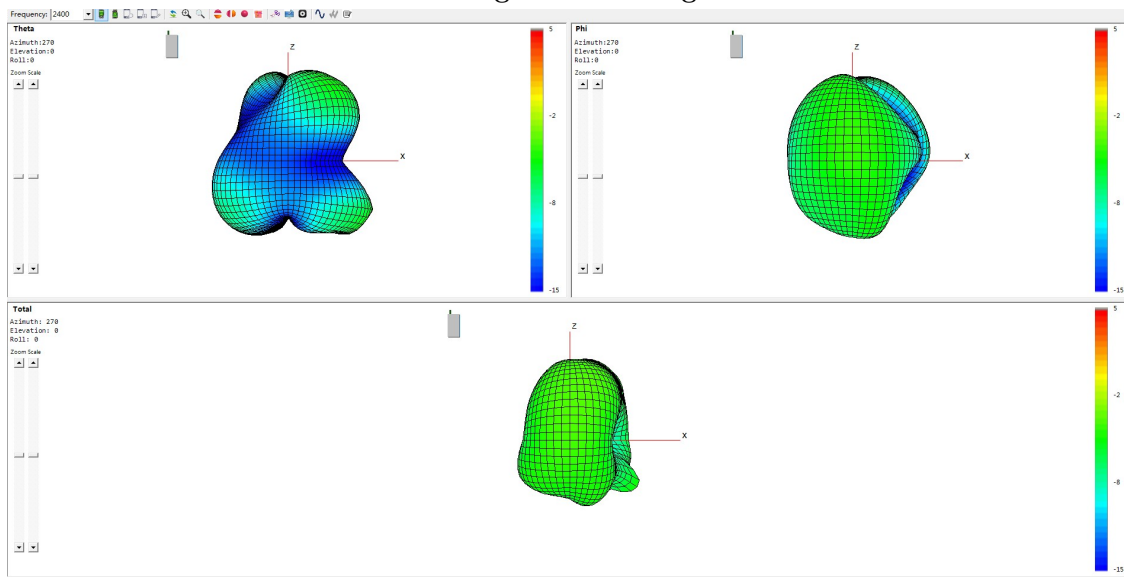


Right ear BT antenna efficiency and gain:

R			
Frequency point MHz	gain (dBi)	efficiency (dB)	efficiency %
2400	-3.3	-6.0	25.3
2410	-3.3	-6.0	25.1
2420	-3.2	-6.0	24.9
2430	-3.3	-6.2	23.9
2440	-3.4	-6.4	23.1
2450	-3.3	-6.3	23.6
2460	-3.4	-6.4	23.0
2470	-3.0	-6.1	24.4
2480	-2.9	-5.9	25.4
average value	-3.2	-6.1	24.3



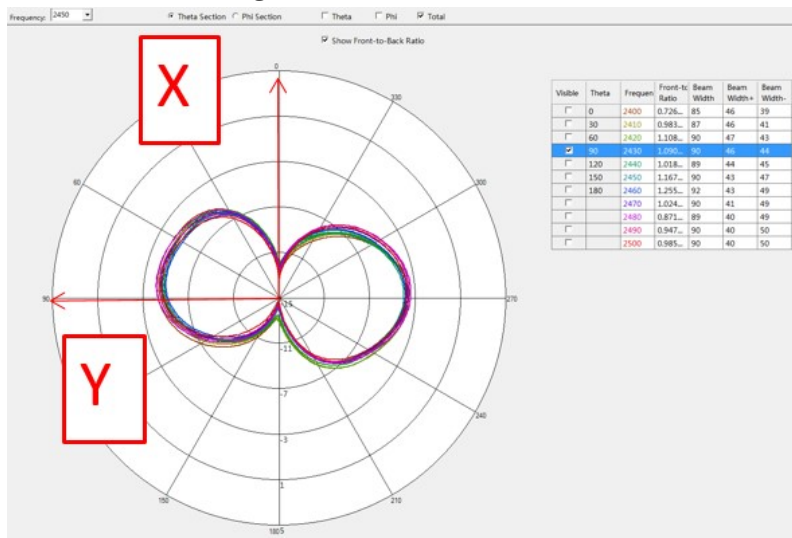
Passive 3D directional diagram of right ear antenna:



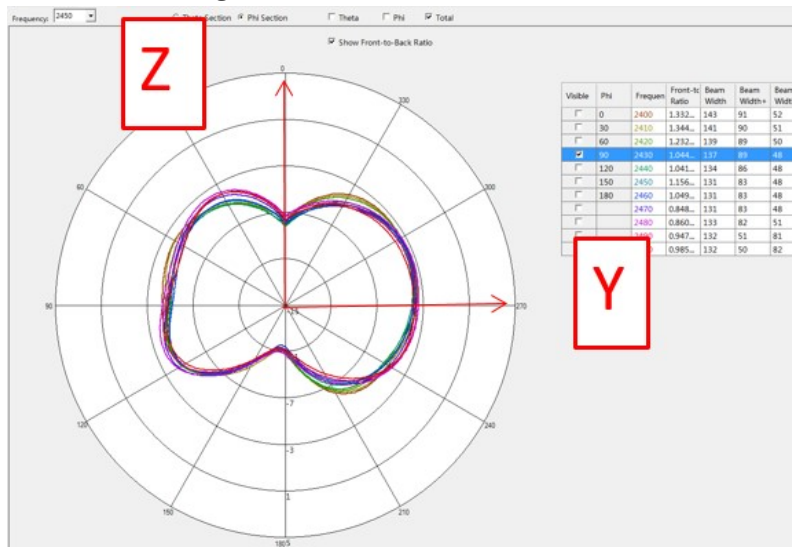


Passive 2D directional pattern of right ear antenna:

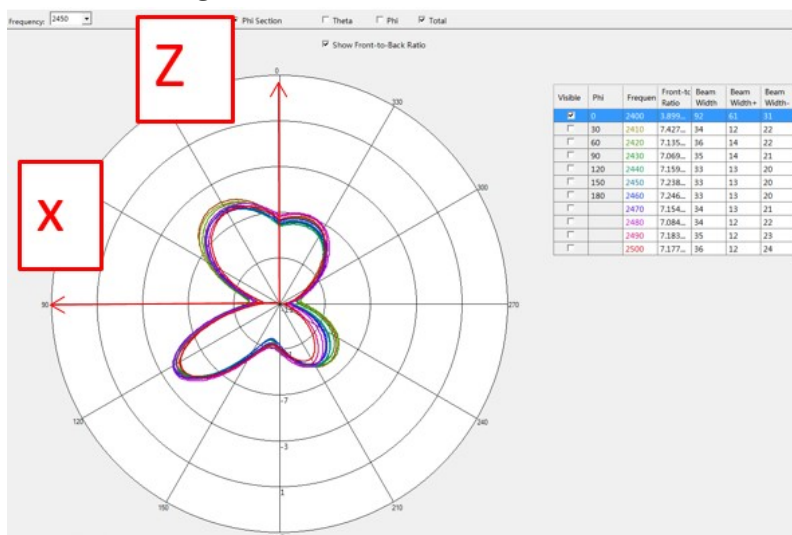
Theta=90.00deg



Phi=90.00deg



Phi=0.00deg





II: 3D Active test report of antenna

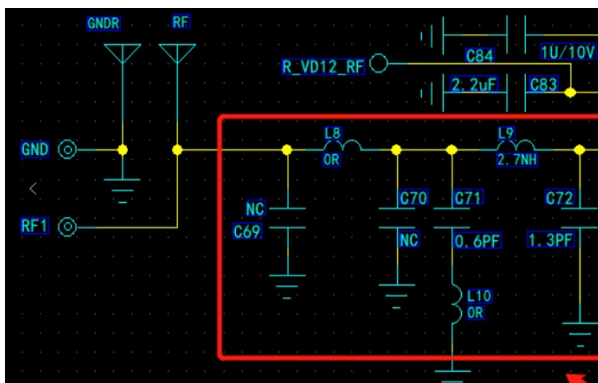
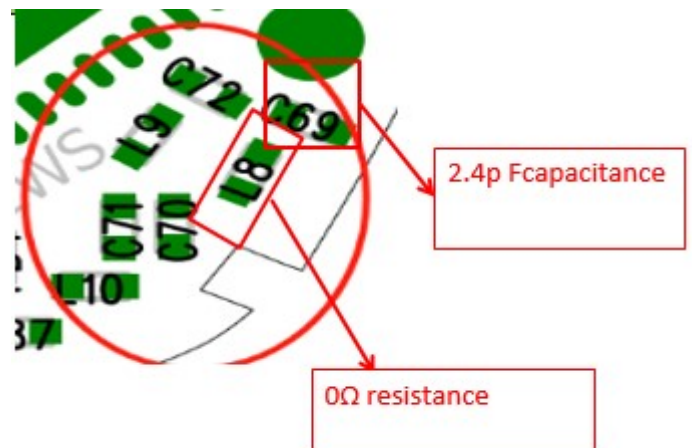
	Channel	TRP (dBm)	TIS (dBm)
R	CH 0	4.9	-89.6
	CH 39	4.8	-89.7
	CH 78	3.7	-89.1



OTA Standard Chamber

III: Matching circuit

Tag number	Match value
C69	2.4pF fcapacitance
L8	0Ω resistance
C70	NC





IV: Structure file

