



Antenna Part Specification

Customer name:	LianChuang
Project name:	T1209
Material category:	BT antenna
Version:	V1.0
Date:	2023.09.15



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Change record			
Compile / change date	Reason for change	Changed content	Version
2023.09.15	first edition	first edition	V1.0

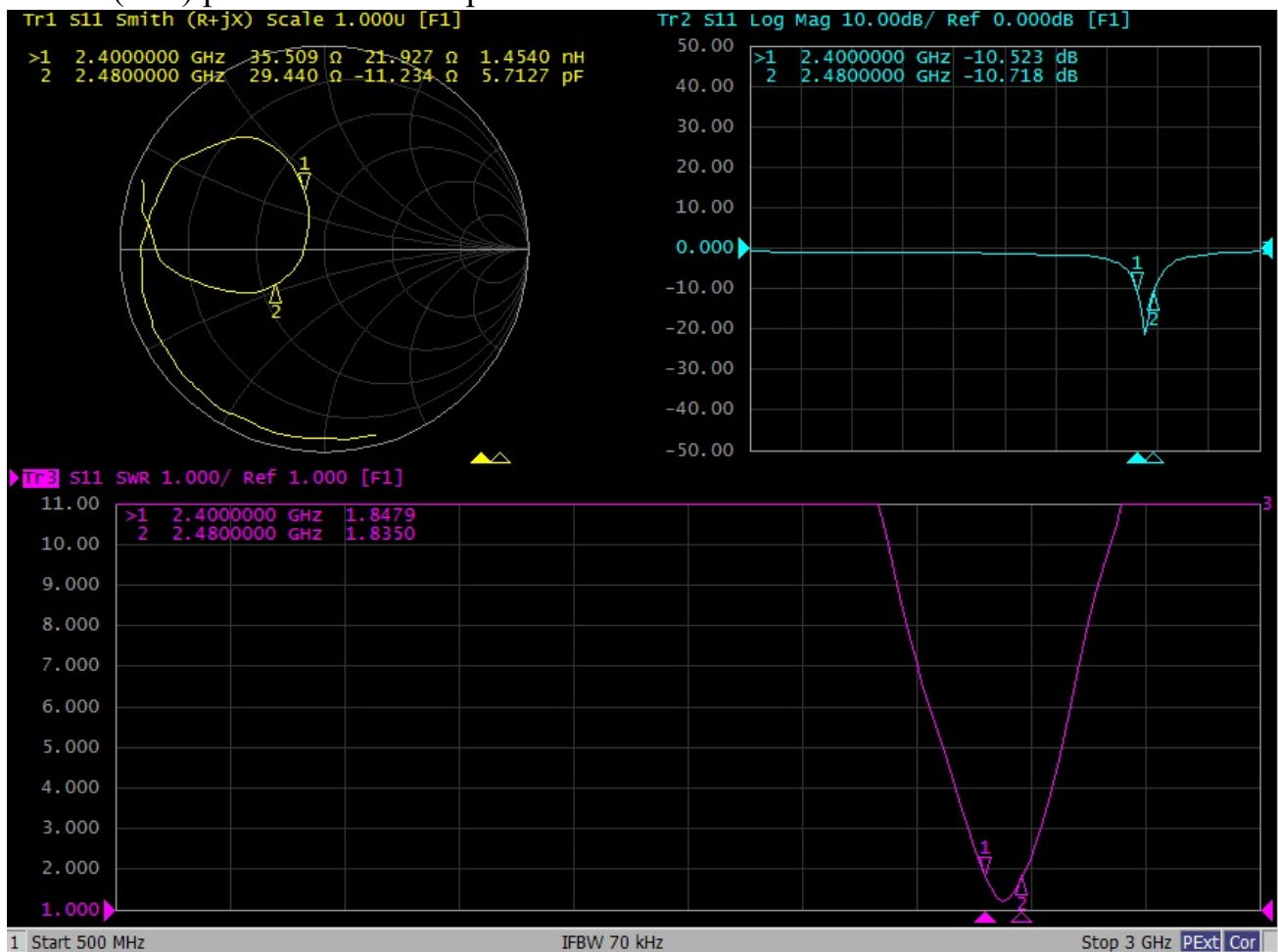


I: The report of passive data



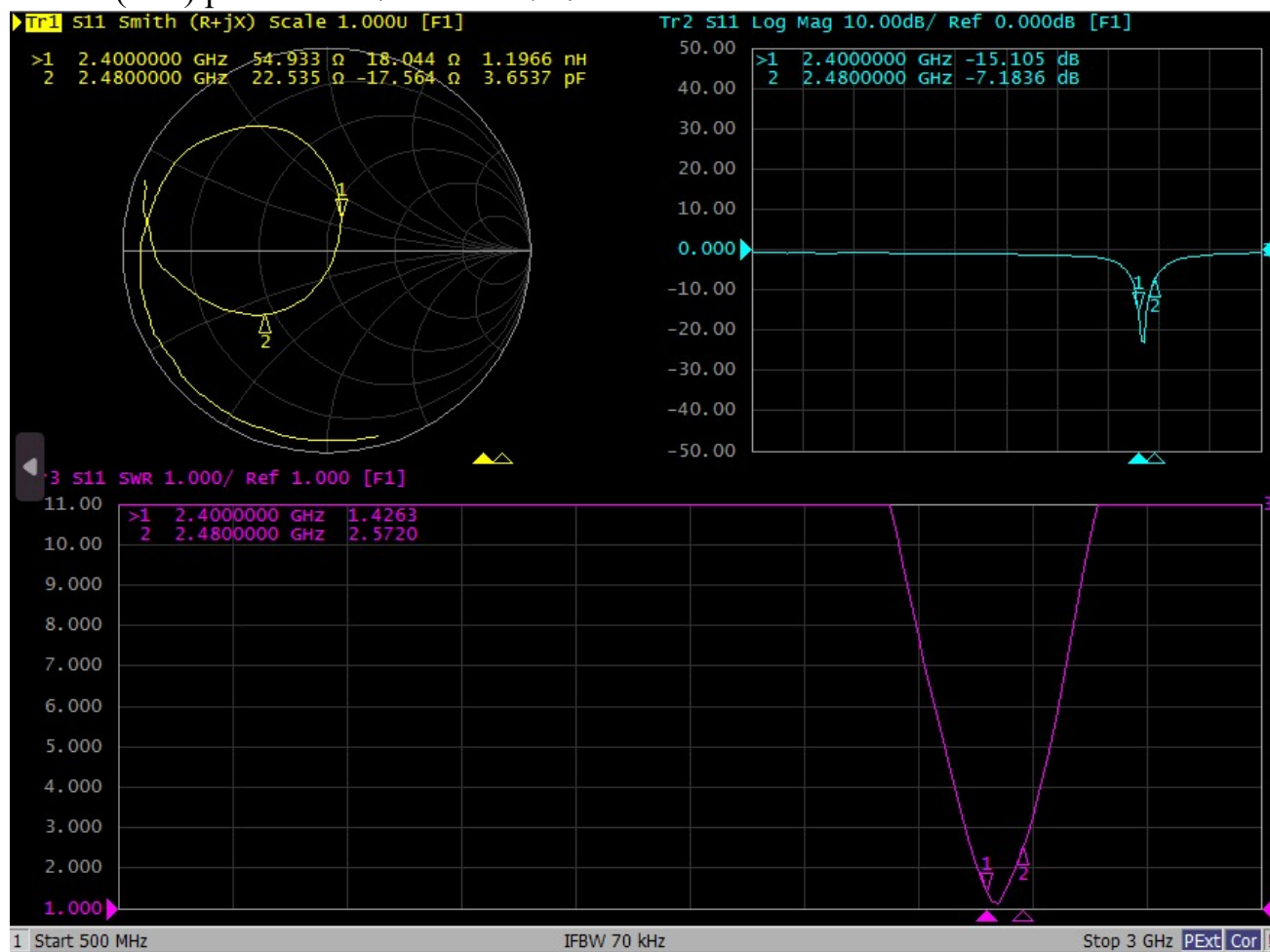
Angilent E5071C

VSWR(S11) parameter (free space) :





VSWR(S11) parameter (headform) :





Efficiency:

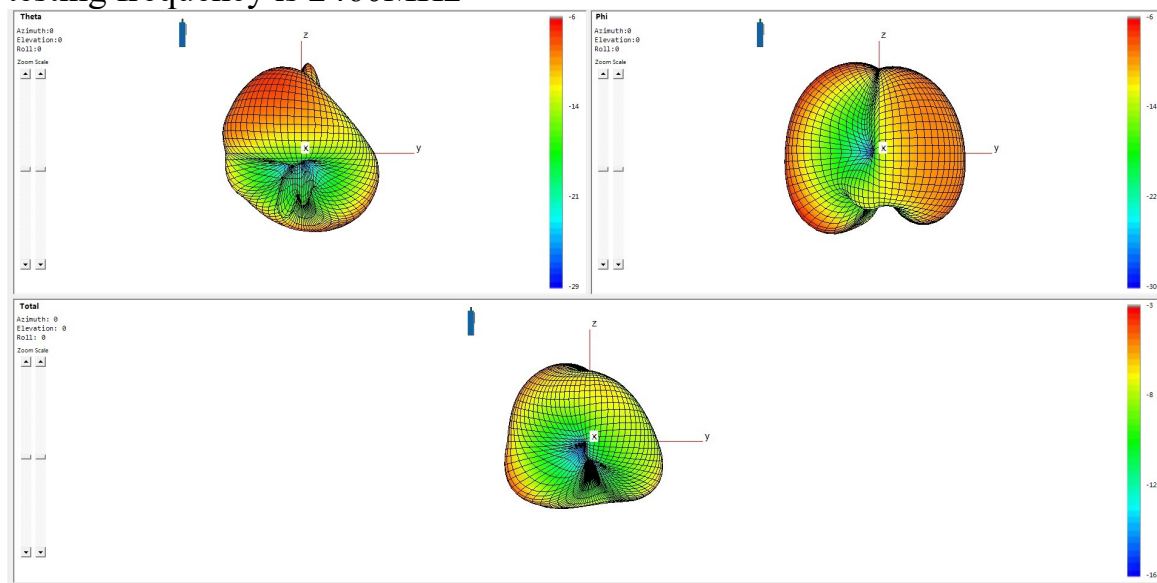
free space			
Frequency (MHz)	Efficiency	Efficiency (dB)	Gain (dBi)
2400	18.8%	-7.25	-3.69
2410	19.7%	-7.05	-3.48
2420	20.2%	-6.94	-3.39
2430	21.3%	-6.71	-3.20
2440	20.9%	-6.80	-3.30
2450	21.9%	-6.59	-3.09
2460	22.5%	-6.48	-3.07
2470	20.4%	-6.91	-3.52
2480	18.6%	-7.30	-3.90
Average value	20.5%	-6.89	-3.40

headform			
Frequency (MHz)	Efficiency	Efficiency (dB)	Gain (dBi)
2400	7.4%	-11.28	-6.65
2410	7.9%	-11.00	-6.28
2420	8.4%	-10.78	-5.93
2430	8.3%	-10.79	-5.93
2440	8.1%	-10.94	-6.14
2450	8.1%	-10.93	-6.19
2460	7.7%	-11.15	-6.47
2470	8.0%	-10.96	-6.34
2480	8.1%	-10.92	-6.45
Average value	8.0%	-10.97	-6.27



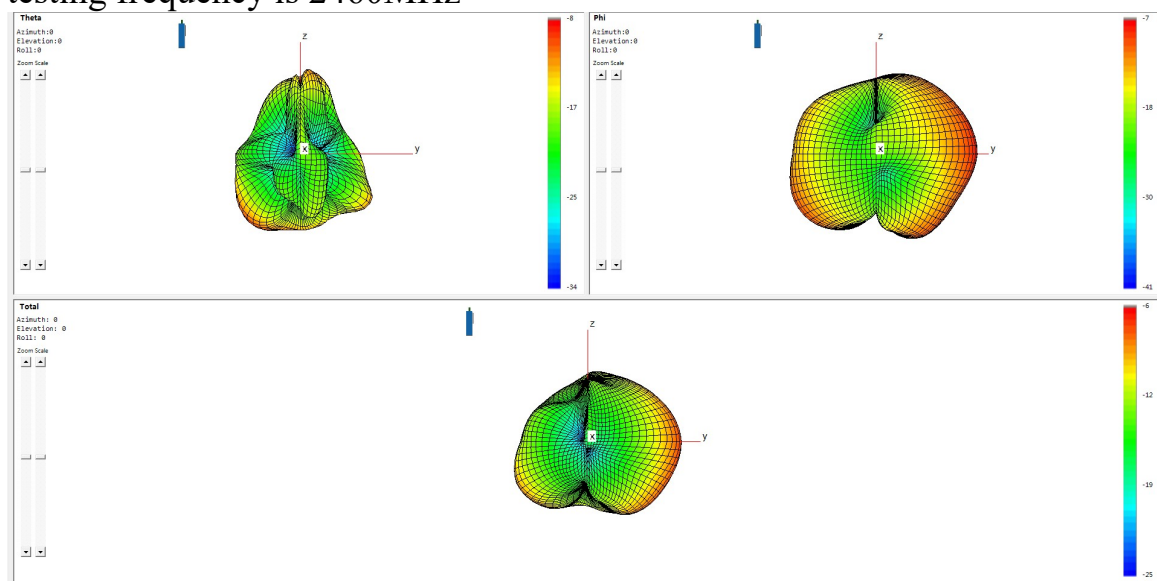
3D Antenna radiation pattern (free space) : The

testing frequency is 2460MHz



3D Antenna radiation pattern (headform) : The

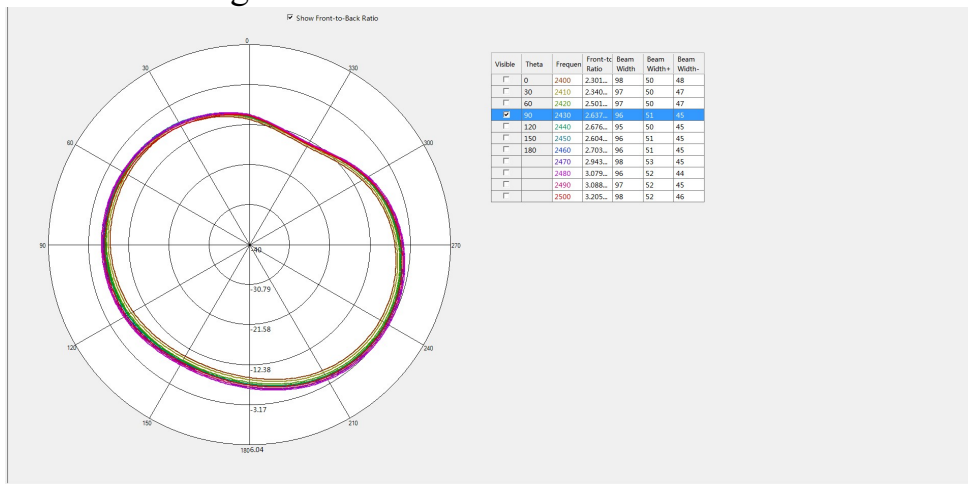
testing frequency is 2460MHz



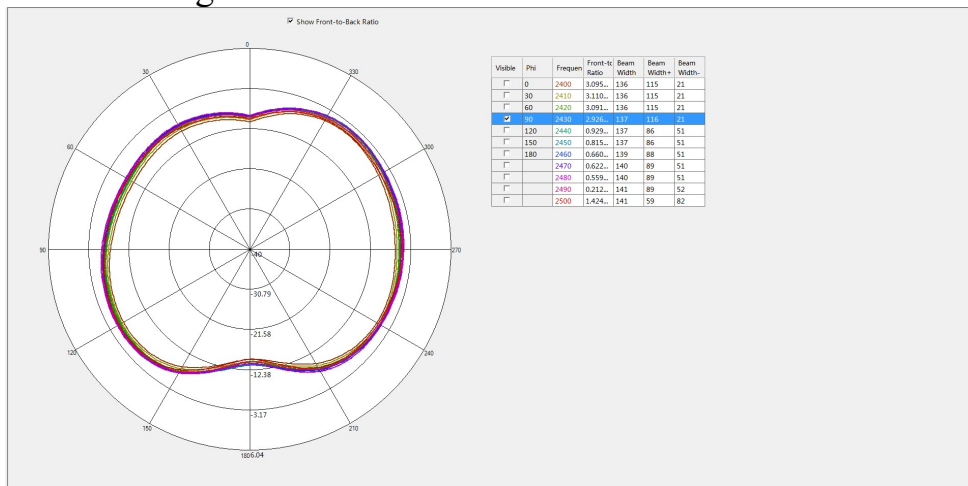


2D Antenna radiation pattern (free space) :

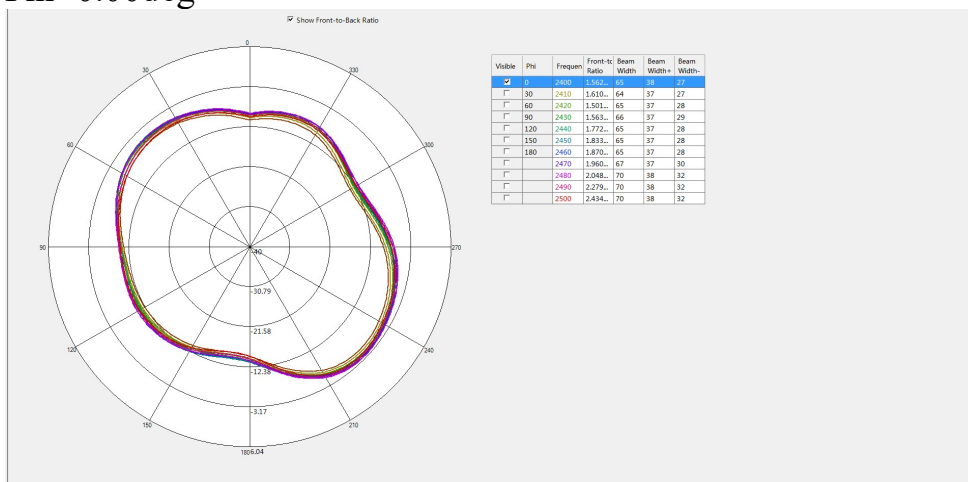
Theta=90.00deg



Phi=90.00deg



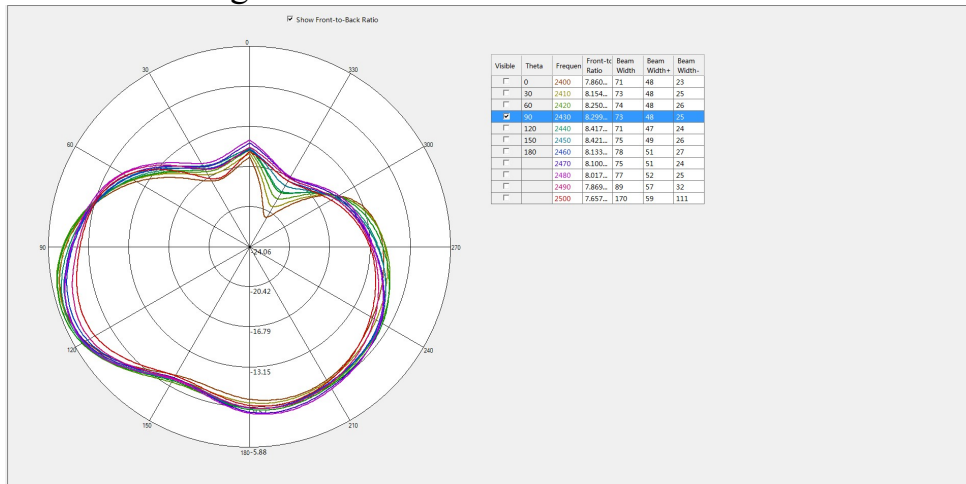
Phi=0.00deg



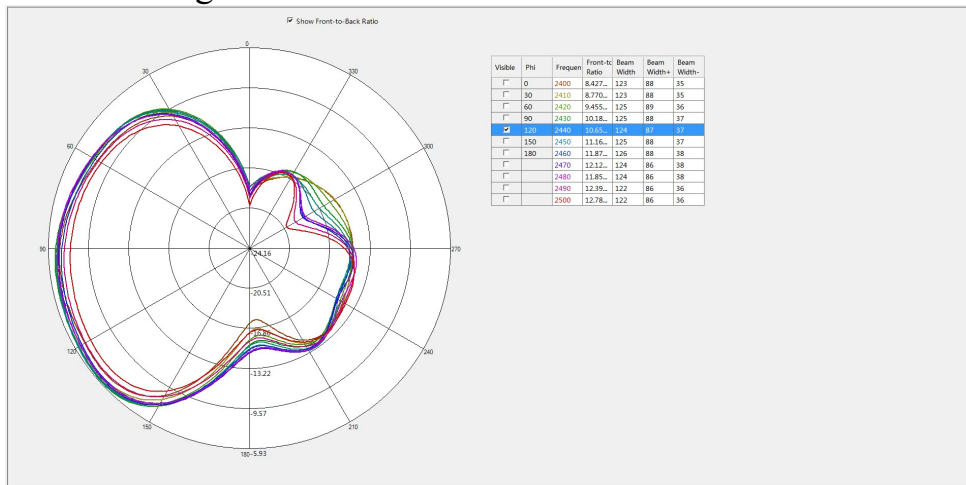


2D Antenna radiation pattern (headform) :

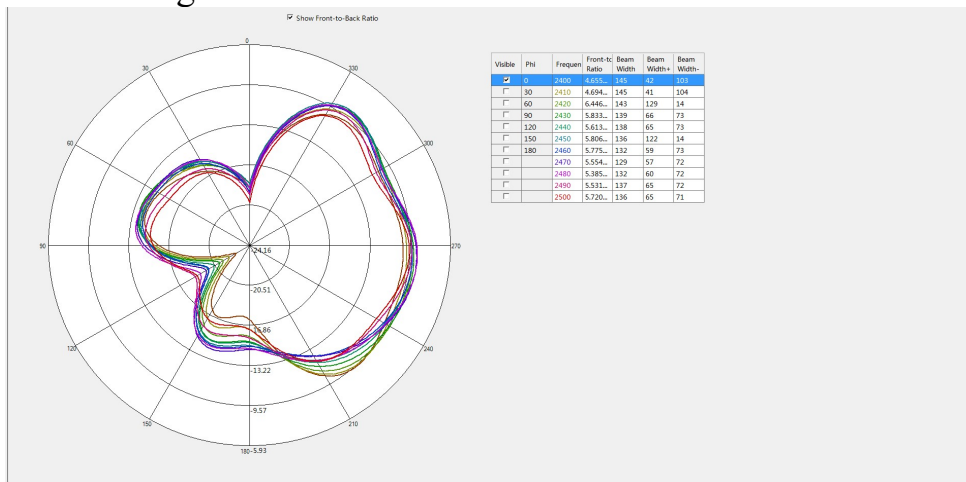
Theta=90.00deg



Phi=90.00deg



Phi=0.00deg





II: 3D Active test report of antenna

free space	Channel	TRP (dBm)	TIS (dBm)
R	CH 0	2.9	-88.0
	CH 39	3.8	-88.5
	CH 78	1.3	-88.2

headform	Channel	TRP (dBm)	TIS (dBm)
R	CH 0	-1.0	-82.6
	CH 39	-1.6	-83.3
	CH 78	-3.3	-82.1

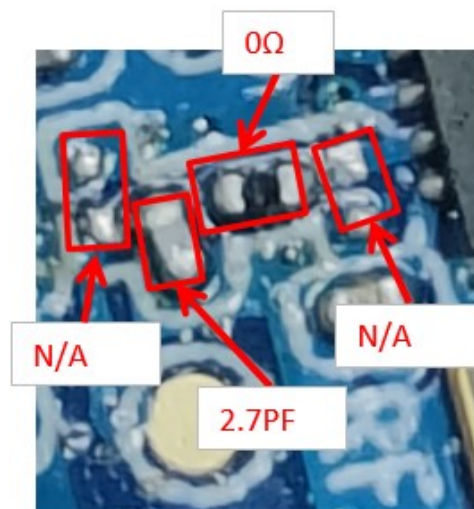
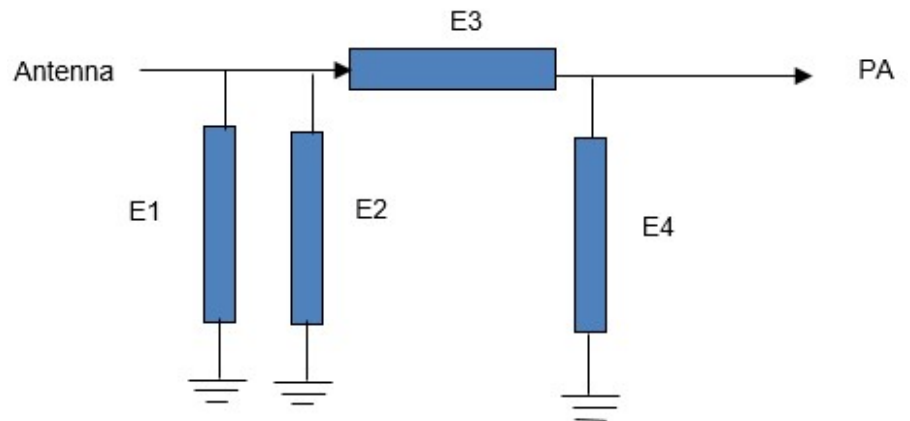


OTA Standard Chamber

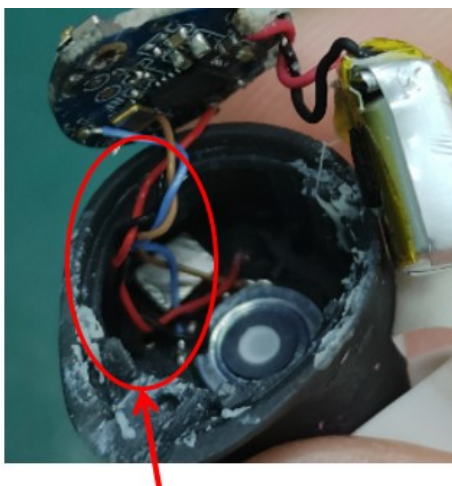


III: Matching circuit

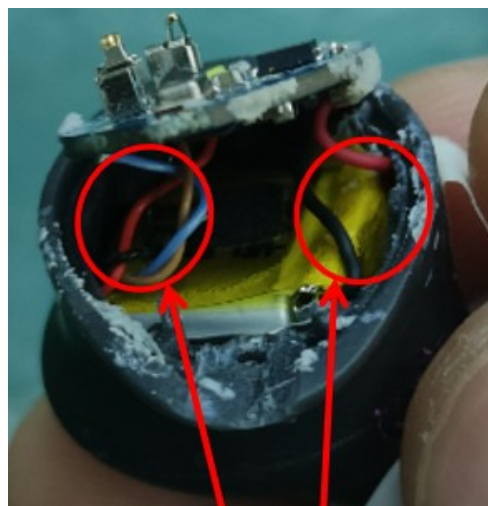
Element	Value
E1(0201)	N/A
E2(0201)	2.7PF
E3(0201)	0Ω
E4(0201)	N/A



IV: Environmental treatment



As shown in the above figure, the battery cable, speaker cable, and charging cable use the original length and are evenly wound. The speaker cable and charging cable are wound separately (about 5 turns) and cannot be wound together. The battery cable also needs to be simply wound



The battery is placed facing upwards, with the speaker cable, charging cable, and battery placement as shown in the above figure!



V: Structure file:

