



Antenna Part Specification

Customers:	Risuntek
Project name:	TWS-2072
Antenna type:	FPC
Antenna morphology:	Monopole
Antenna directional characteristics:	Omnidirectional
Antenna polarization characteristics:	Elliptical polarization
Connection type:	Cable welding method
Antenna version:	V4
Specification version:	V2.0
Date:	2024.04.26
Supplier Address:	505-506 ,ABlock,Donglian Building,Chuangye 2 road,Baoan District,Shenzhen,Guangdong,P.R china
Supplier:	Shenzhen Cicent Communication Technology Co., Ltd.



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Change record			
Compile / change date	Reason for change	Changed content	Version
2024.04.15	First edition	First edition	V1.0
2024.04.26	Trial production status	Trial production status	V2.0

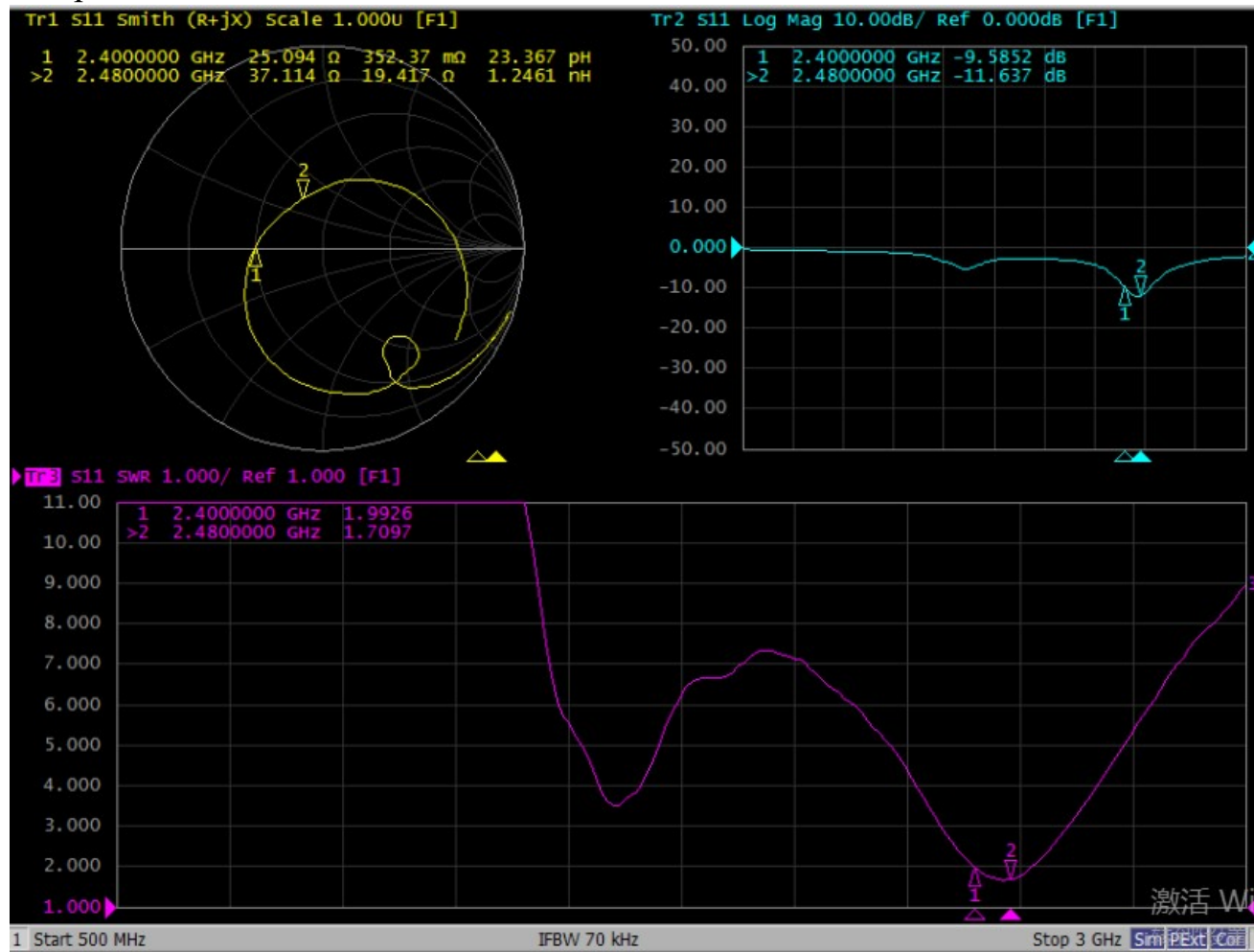


I: The report of passive data



Agilent E5071C

S11 parameter:





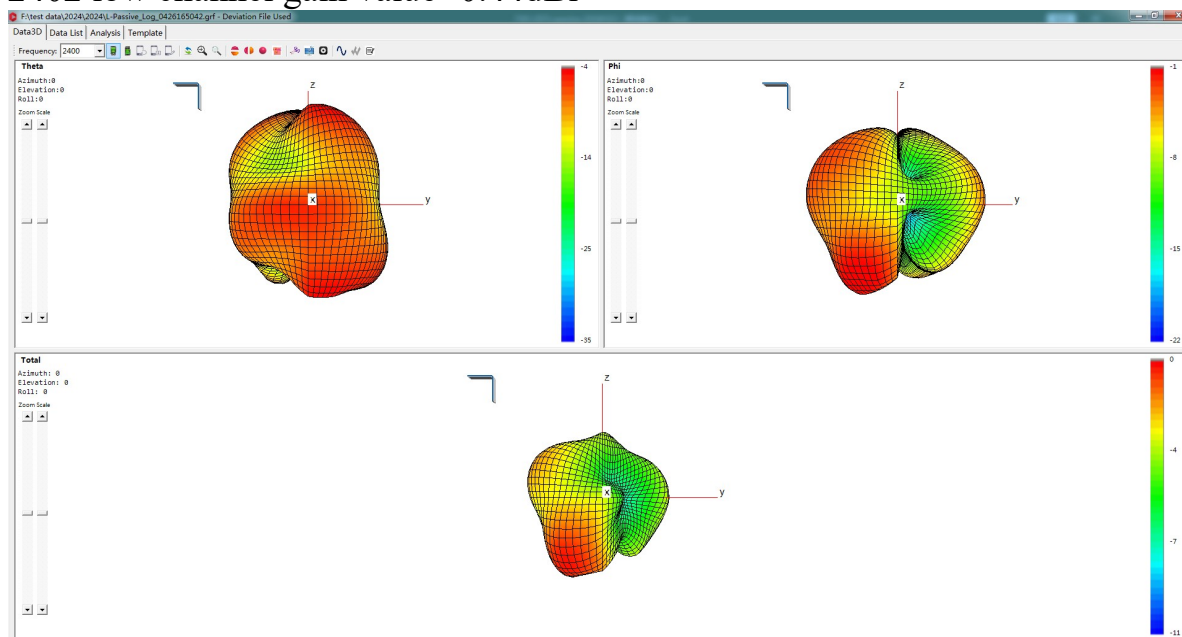
Efficiency:

L			
Frequency (MHz)	Efficiency	Efficiency (dB)	Gain (dBi)
2400	36.1%	-4.43	-0.44
2410	36.5%	-4.38	-0.41
2420	37.0%	-4.32	-0.44
2430	36.0%	-4.44	-0.62
2440	34.6%	-4.61	-0.87
2450	35.0%	-4.56	-0.93
2460	34.0%	-4.68	-1.11
2470	36.0%	-4.44	-0.93
2480	37.4%	-4.28	-0.89
Average value	35.8%	-4.46	-0.74

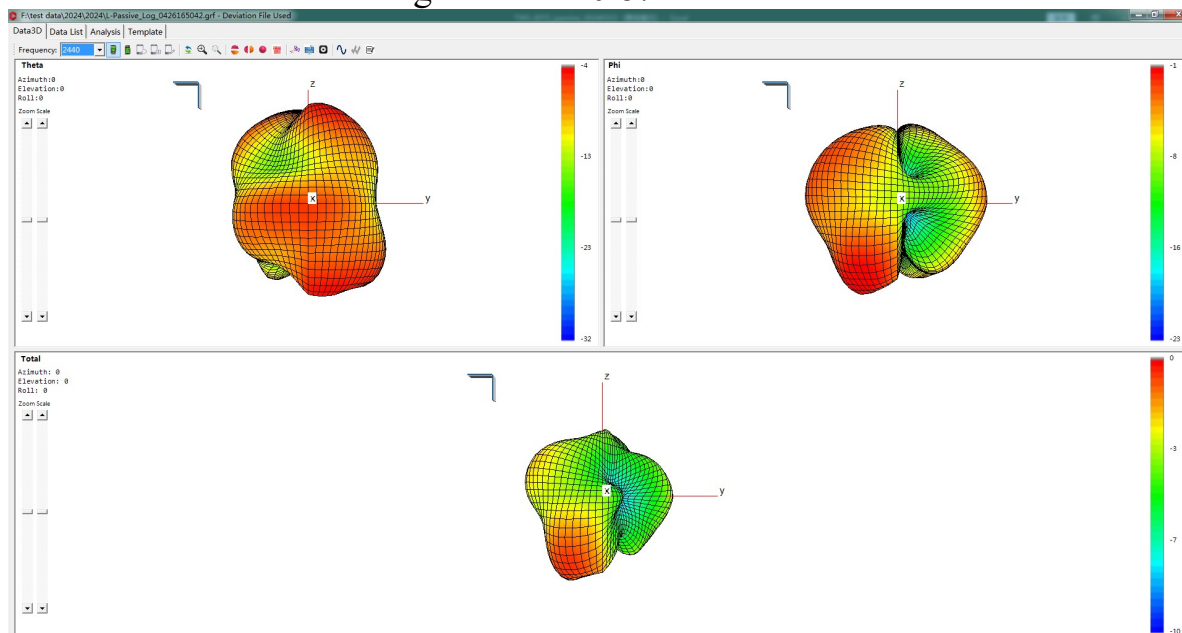


3D Antenna radiation pattern(Unit: dBi):

2402 low channel gain value -0.44dBi

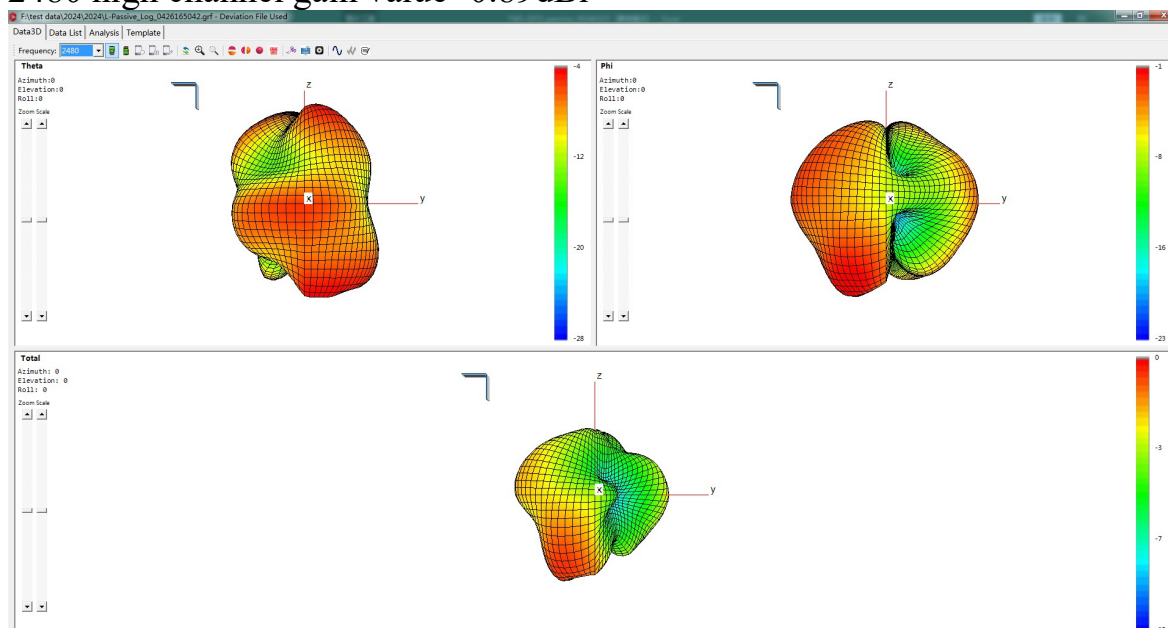


2441 intermediate channel gain value -0.87dBi

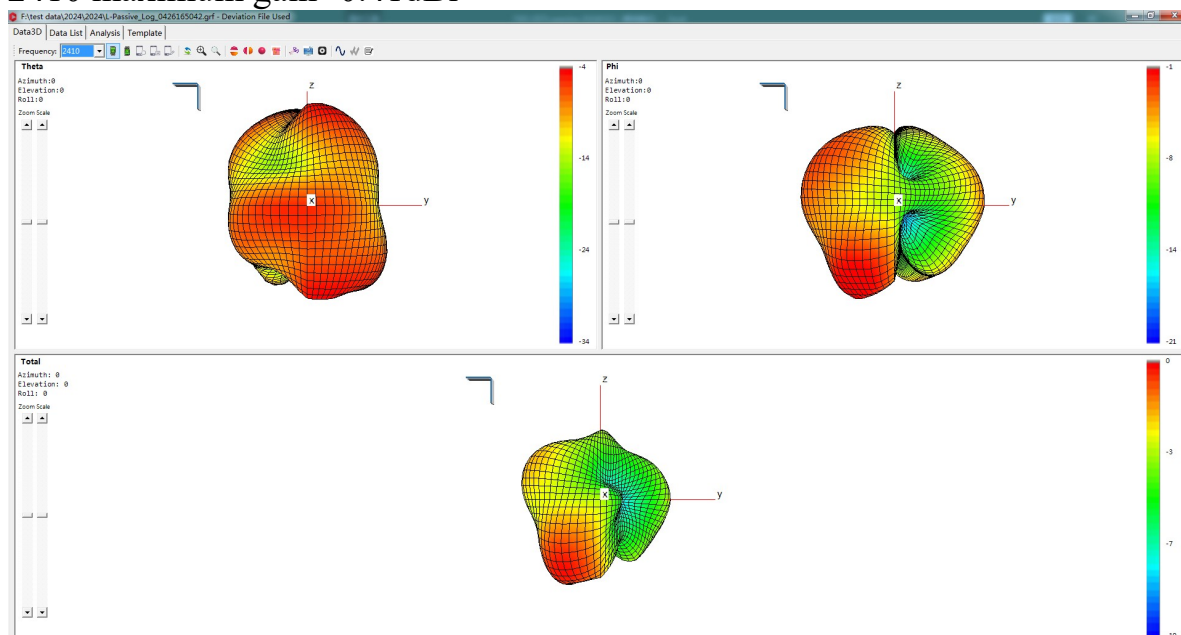




2480 high channel gain value -0.89dBi



2410 maximum gain -0.41dBi

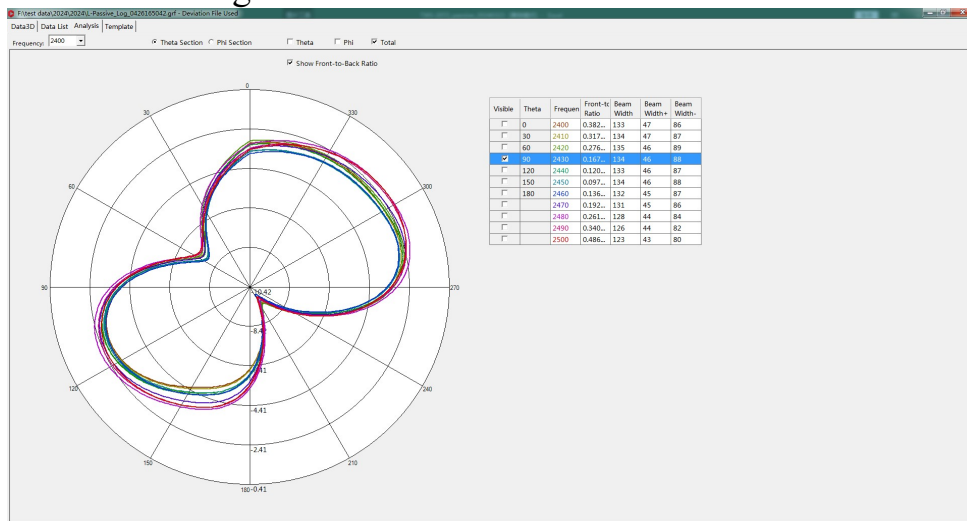




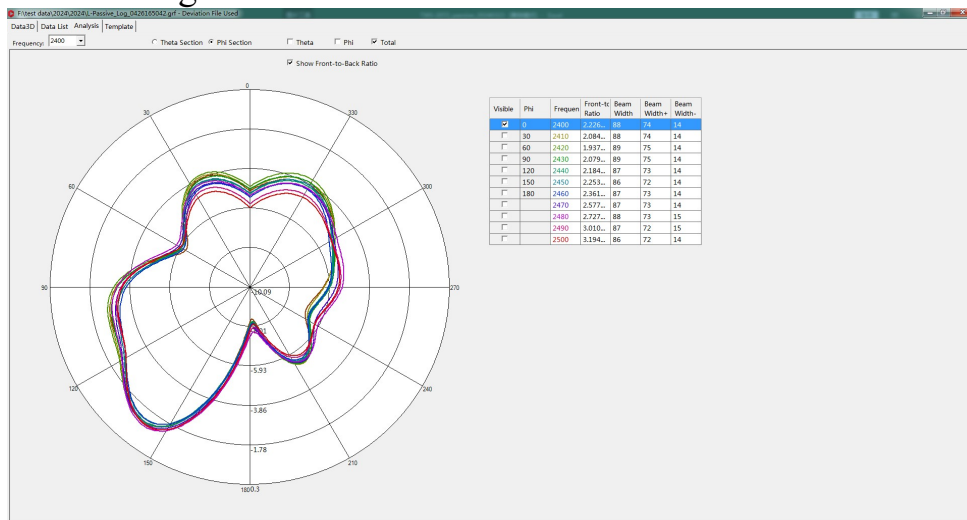
Antenna radiation pattern(Unit: dBi):

2402 low channel gain value -0.44dBi

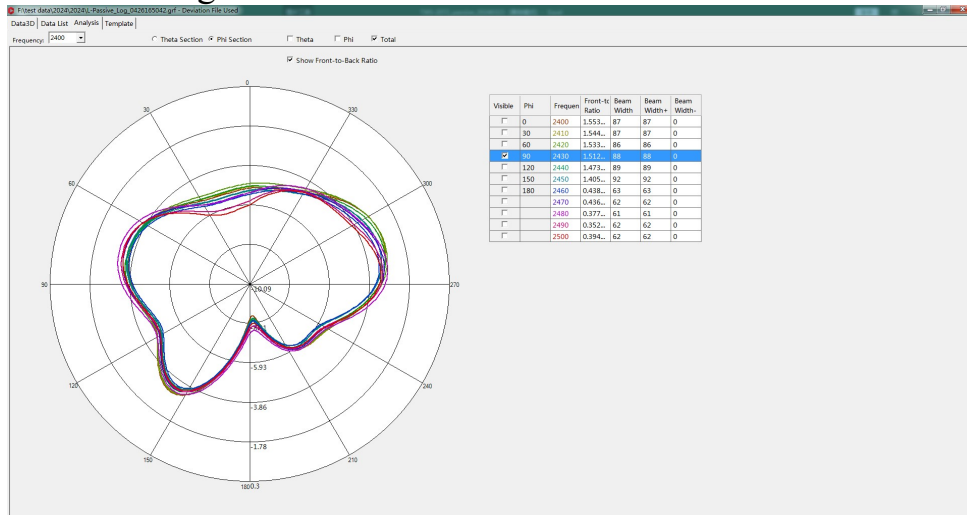
Theta=90.00deg



Phi=0.00deg



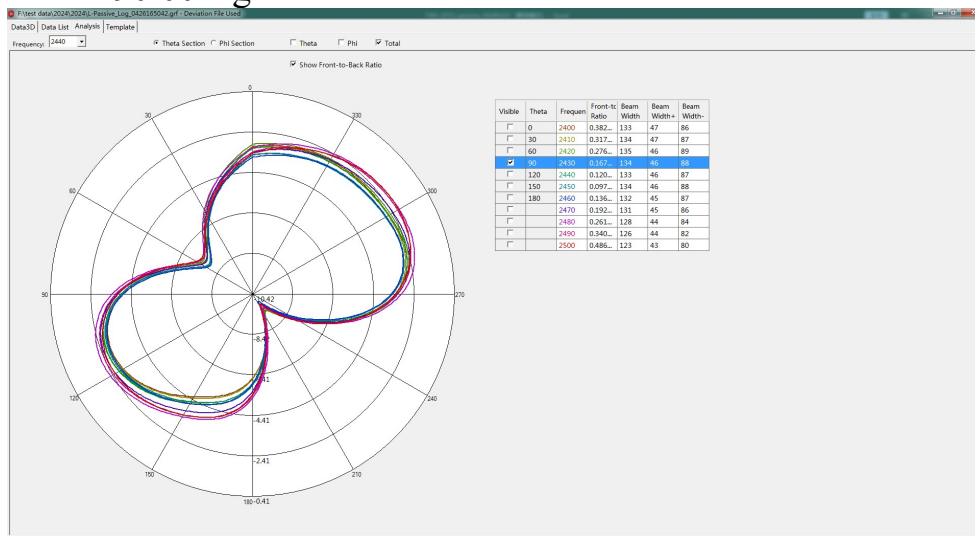
Phi=90.00deg



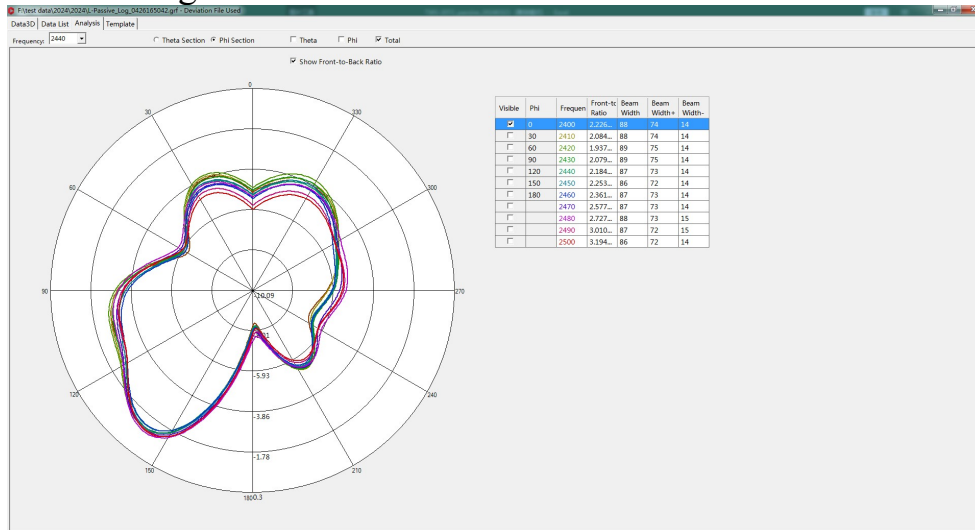


2441 intermediate channel gain value -0.87dBi

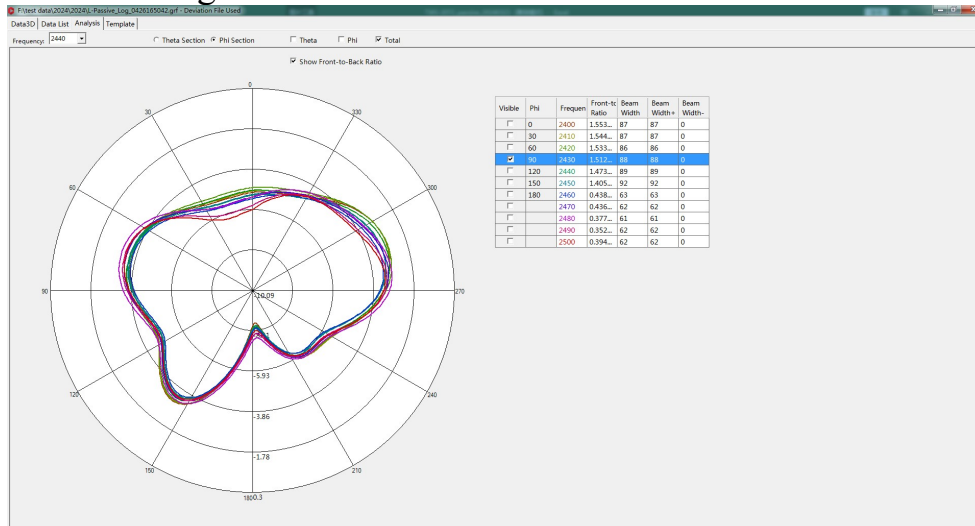
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Phi=0.00deg



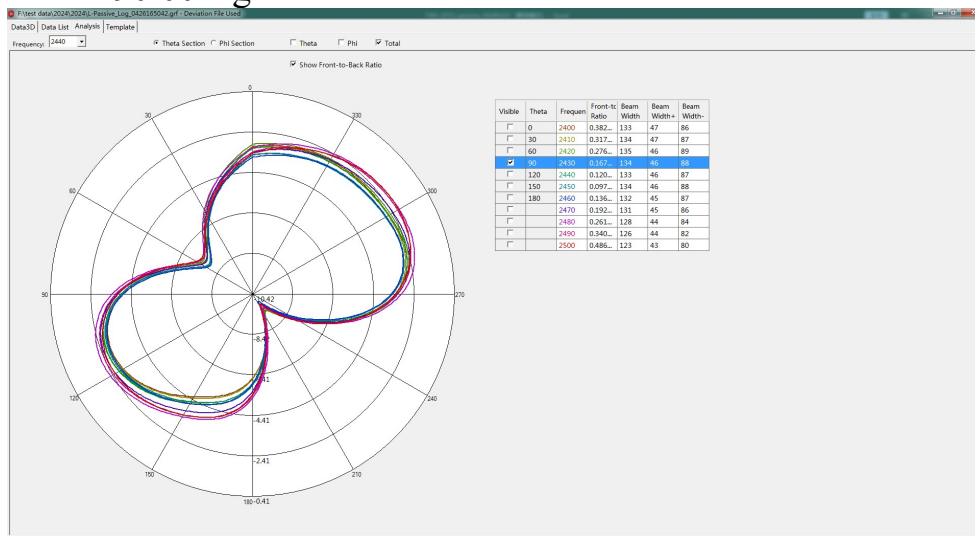
Phi=90.00deg



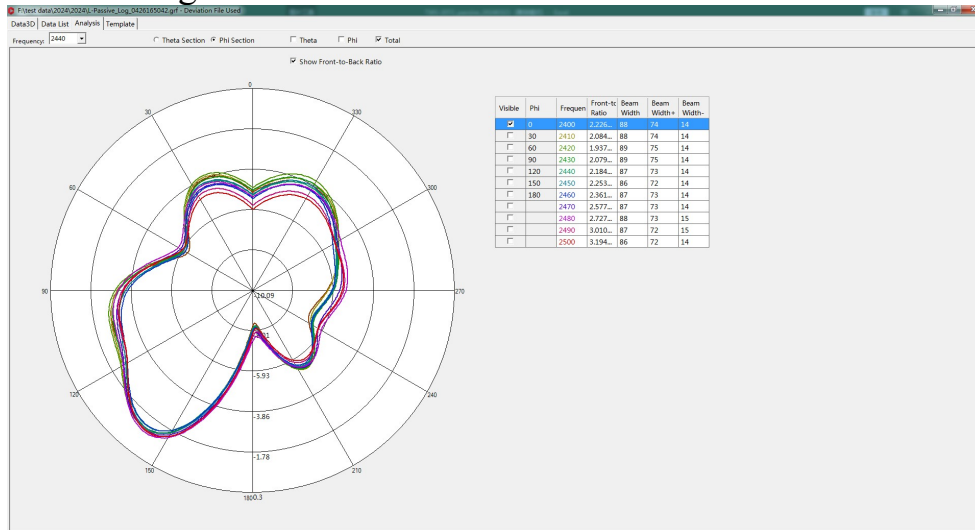


2480 high channel gain value -0.89dBi

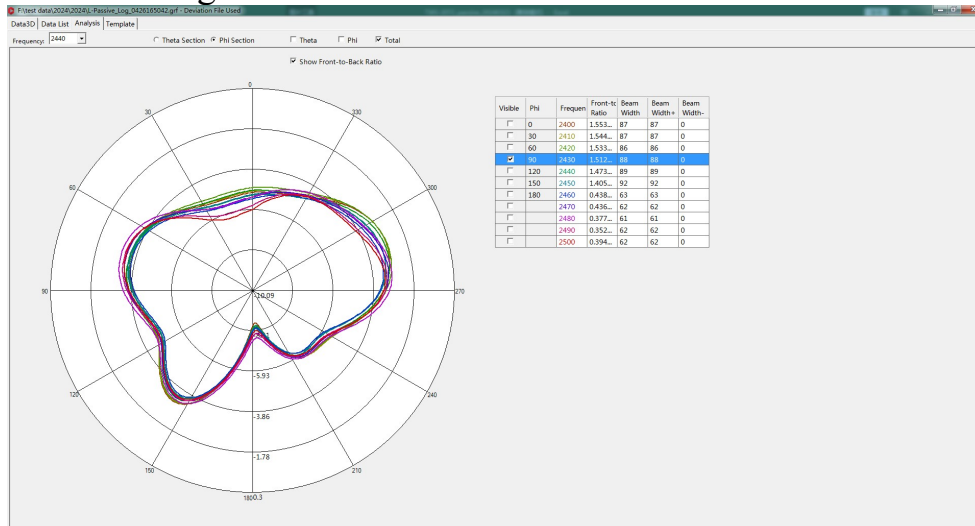
Theta=90.00deg



Phi=0.00deg



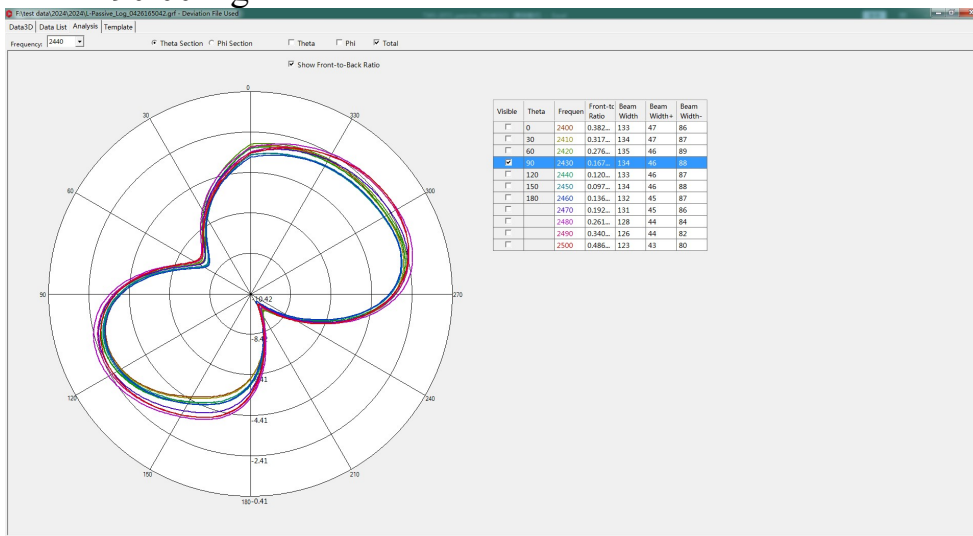
Phi=90.00deg



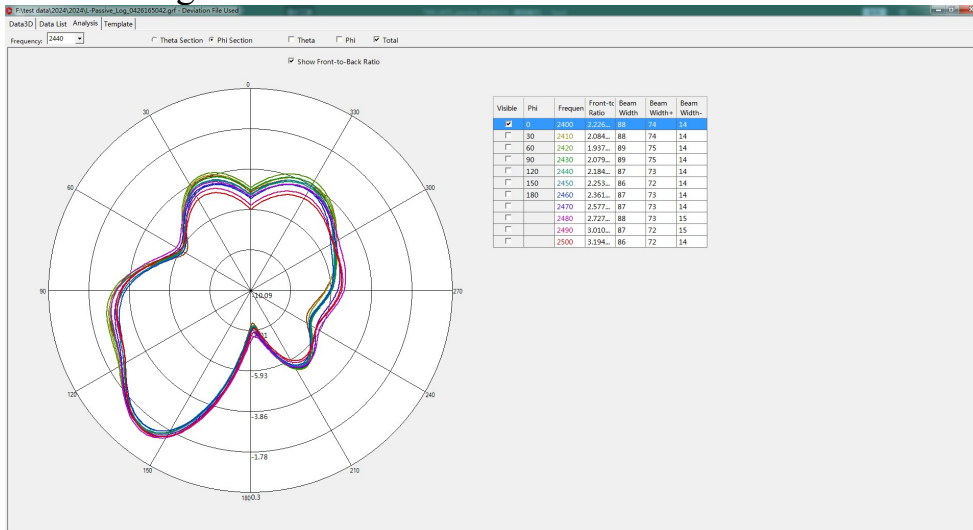


2410 maximum gain -0.41dBi

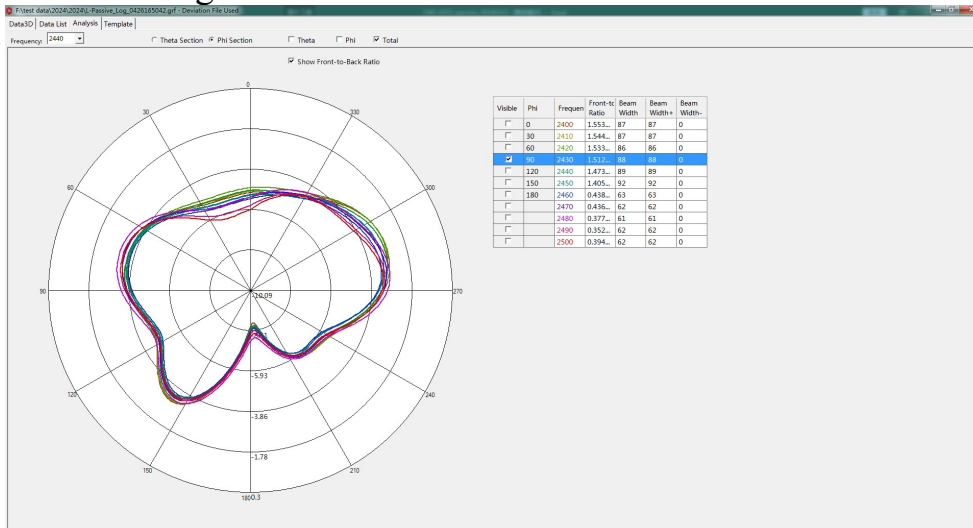
Theta=90.00deg



Phi=0.00deg



Phi=90.00deg





II: 3D Active test report of antenna

Free space	Channel	TRP(dBm)	TIS (dBm)
L	CH 0	4.5	-91.0
	CH 39	5.6	-91.4
	CH 78	6.1	-91.9

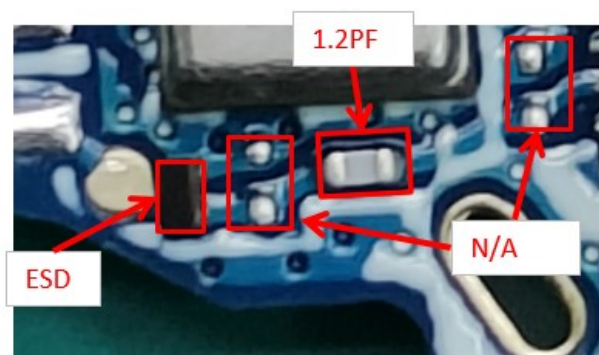
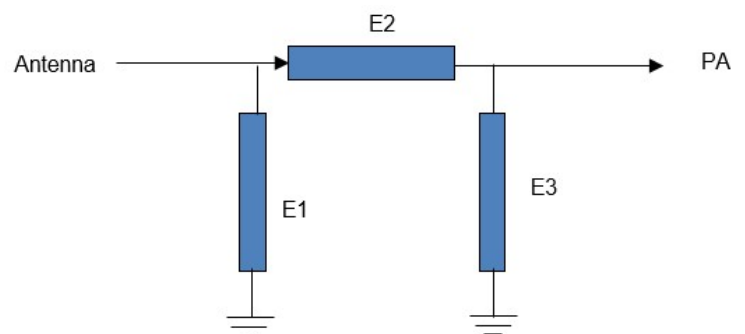
Headform	Channel	TRP(dBm)	TIS (dBm)
L	CH 0	1.2	-87.5
	CH 39	1.5	-87.9
	CH 78	1.5	-88.0



OTA Standard Chamber

III: Matching circuit

Element	Value
E1(0201)	N/A
E2(0201)	1.2PF
E3(0201)	N/A





IV: Installation precautions



As shown in the above figure, the welding point between the horn and the antenna FPC cable should not be raised during assembly; Keep the battery in its original state, with a layer of magnetic separator attached to it. The button ribbon cable needs to be fixed and pasted on the bracket, and the L and R ears should be consistent!



As shown in the above figure, the assembly of the speaker and antenna FPC cables needs to be glued in the same way as this trial production. Pay attention to the amount of glue applied and the pressure holding state, which need to be consistent with this trial production state. Otherwise, there is a risk of consistency. The L and R ears should be consistent!



The wiring inside the speaker chamber is bent and assembled as shown in the above picture, with the left and right ears being the same.



V: Structure file:

