



Antenna Part Specification

Customer name:	EDIFIER
Project name:	X5 EVO
Material category:	BT ANTENNA-R-FPC
Version:	V2.0
Date:	2025.03.20
Manufacturer Address:	505-506 ,ABlock,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
2025.03.13	first edition	first edition	V1.0
2025.03.20	Update image files	Update image files	V2.0

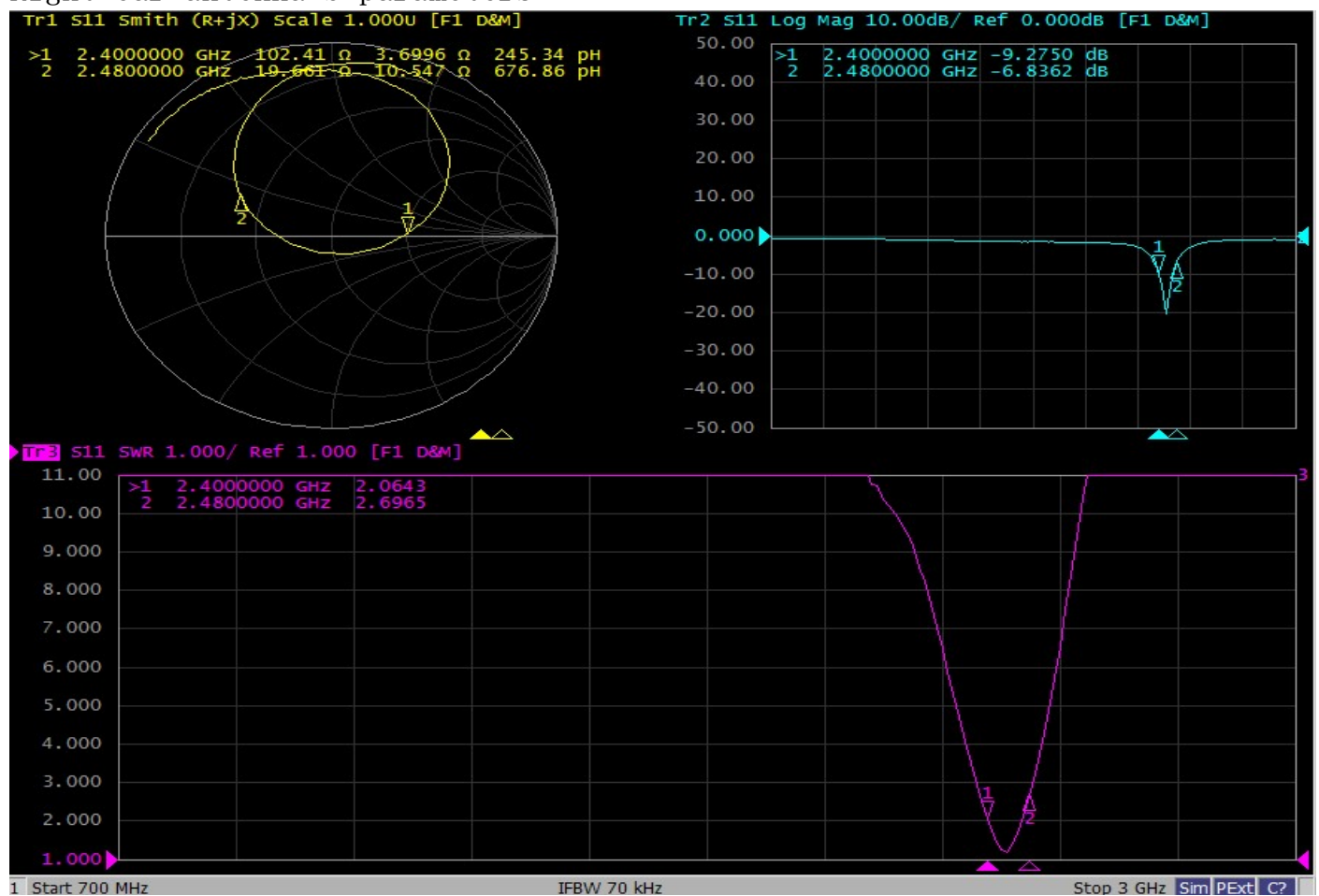


I: The report of passive data



Angilent E5071C

Right ear antenna S parameters



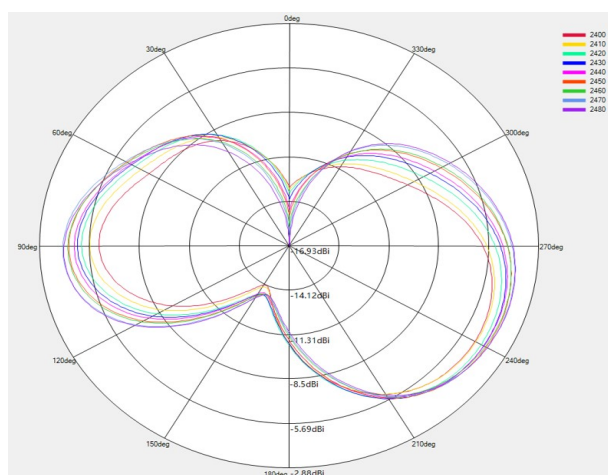


Efficiency and gain of left ear antenna:

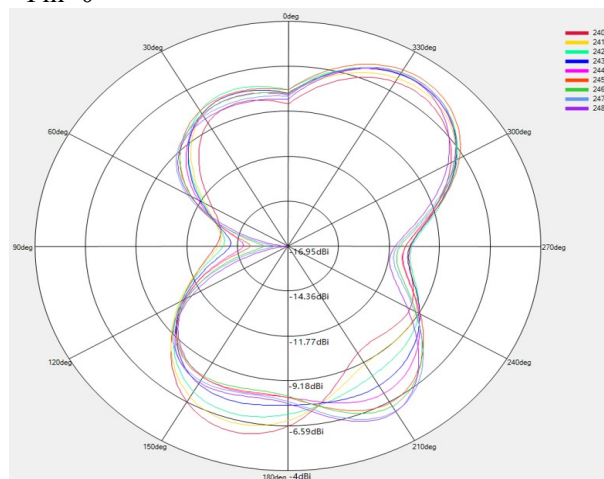
R FS			
Frequency MHz	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	-3.05	-7.19	19.08
2410	-3.01	-6.92	20.33
2420	-3.07	-6.69	21.43
2430	-3.30	-6.60	21.90
2440	-3.40	-6.57	22.04
2450	-3.23	-6.35	23.18
2460	-3.33	-6.44	22.71
2470	-3.18	-6.30	23.42
2480	-3.36	-6.47	22.55
Average value	-3.22	-6.61	21.85

Right ear antenna wireless passive 2D directional pattern:

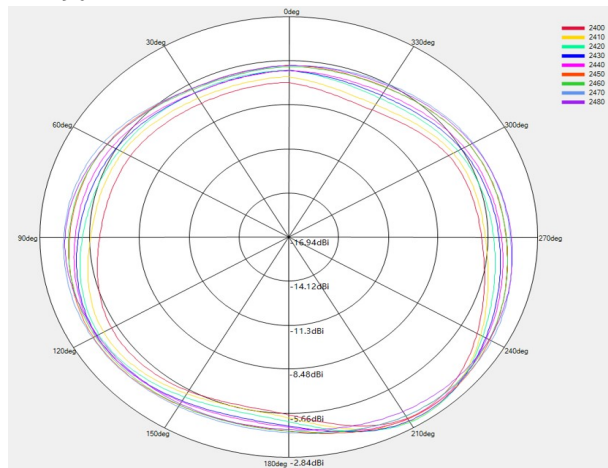
Theta=90°



Phi=0°



Phi=90°





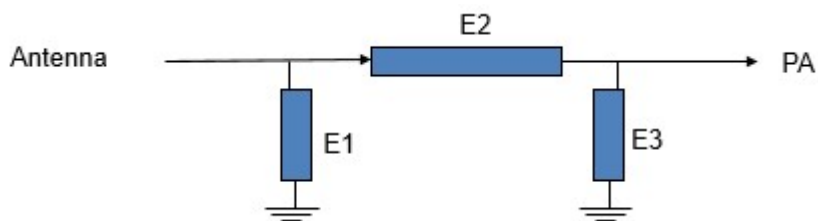
II: 3D Active test report of antenna

		free space		headform	
R	Channel	TRP	TIS	TRP	TIS
	CH 0	5.4	-85.7	-1.3	-80.9
	CH 2	5.5	-91.0	-1.2	-85.0
	CH 39	6.1	-92.4	-1.4	-87.2
	CH 78	3.5	-92.0	-1.7	-86.3



OTA Standard Chamber

III: Matching circuit

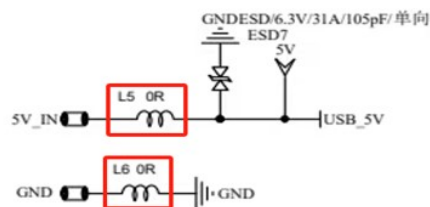


Element	Value
E1(0201)	N/A
E2(0201)	2.0pF
E3(0201)	2.0nH

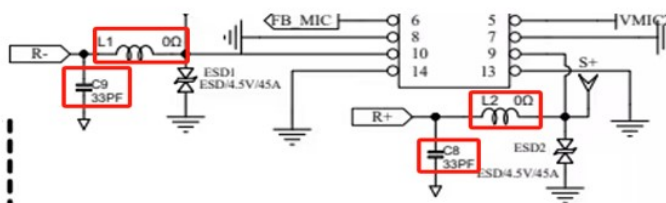
IV: Filter Circuit



Touch string position changed to 33nH



Element	Value
L5	0Ω
L6	0Ω
L1	15nH
L2	15nH
C8	cancel
C9	cancel
R7	33nH



Cancel the C8/C9 parallel capacitors of SPK, replace L1/L2 with 15nH inductors, and replace L5/L6 with 0 Ω.



V: Structure file

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