



Antenna Part Specification

Customer name:	SHENZHEN SWETZ SOUND TECHNOLOGY CO., LIMITED
Project name:	TE252B(S6)
Antenna type:	L-FPC-Antenna
Antenna morphology:	PIFA
Version:	V1.0
Date:	2024.11.26
Manufacturer:	Shenzhen Cicent Communication Technology Co., Ltd.
Manufacturer Address:	505-506 ,A Block, Donglian Building, Chuangye 2 road, Baoan District, Shenzhen, Guangdong, P.R china



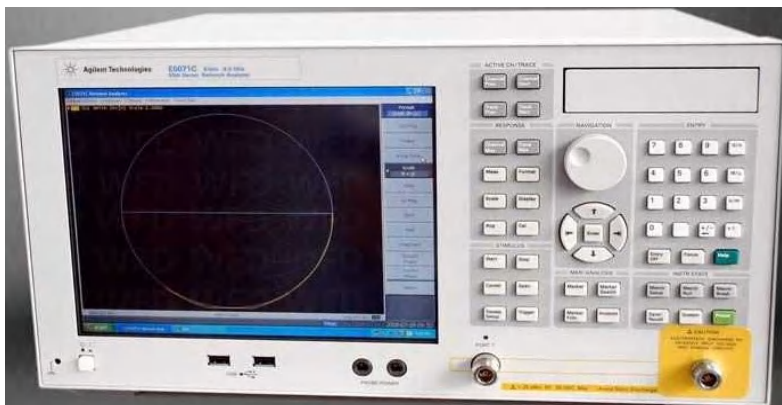
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IV: Whole machine environment treatment.....	7
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Change record			
Compile / change date	Reason for change	Changed content	Version
2024.11.26	First edition	First edition	V1.0

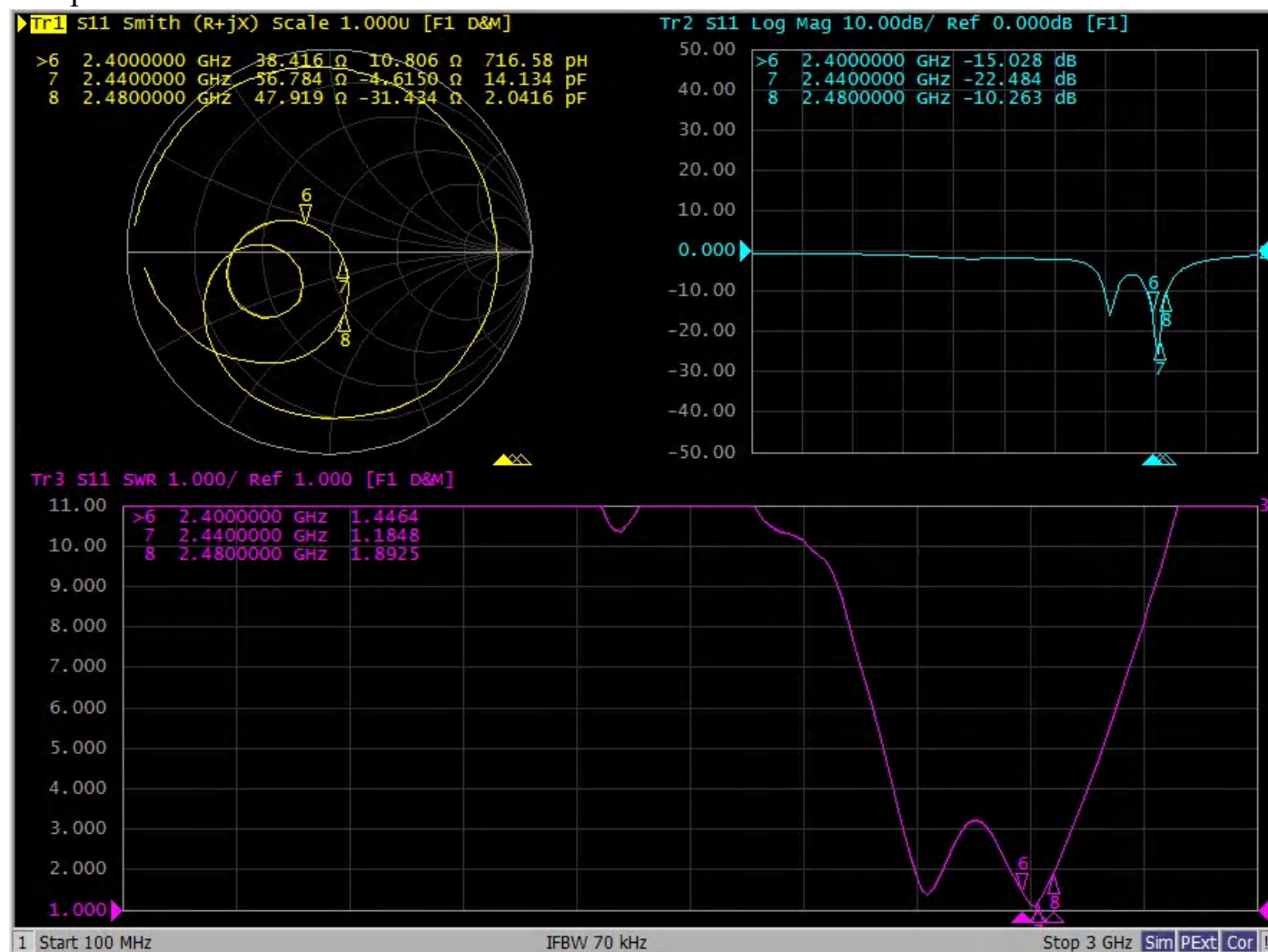


I: The report of passive data



Angilent E5071C

S11 parameter:

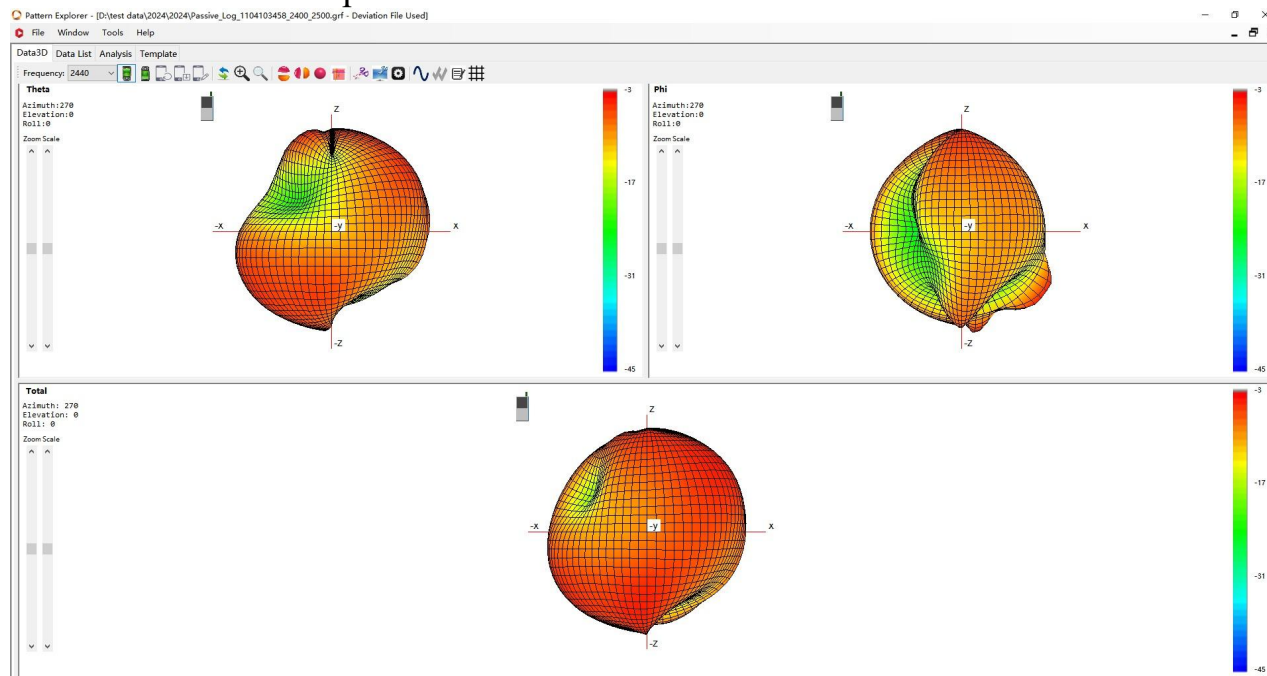




Efficiency:

Frequency (MHz)	Gain (dBi)	Efficiency (db)	Efficiency (%)
2400	-3.13	-6.45	22.66
2410	-3.05	-6.33	23.27
2420	-3.14	-6.29	23.50
2430	-3.38	-6.45	22.65
2440	-3.68	-6.66	21.58
2450	-3.77	-6.56	22.08
2460	-4.04	-6.66	21.58
2470	-3.85	-6.39	22.97
2480	-3.46	-6.04	24.91
Average value	-3.50	-6.42	22.80

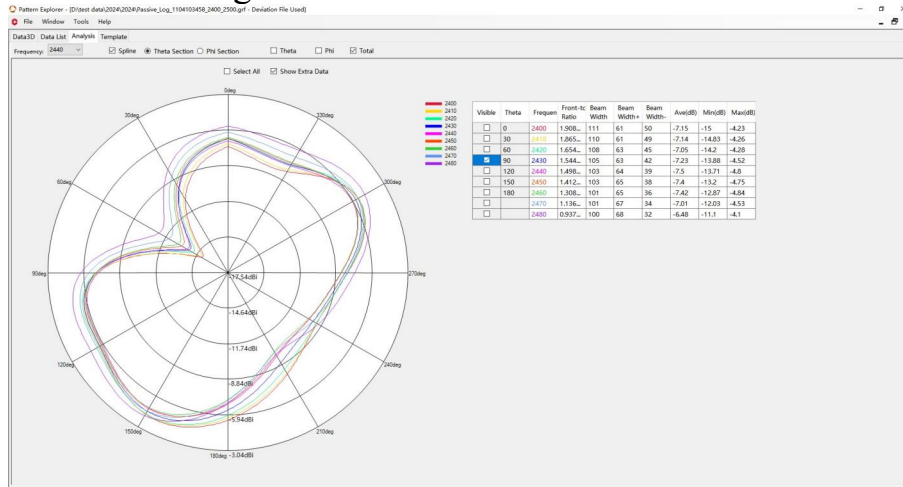
Antenna 3D radiation pattern:



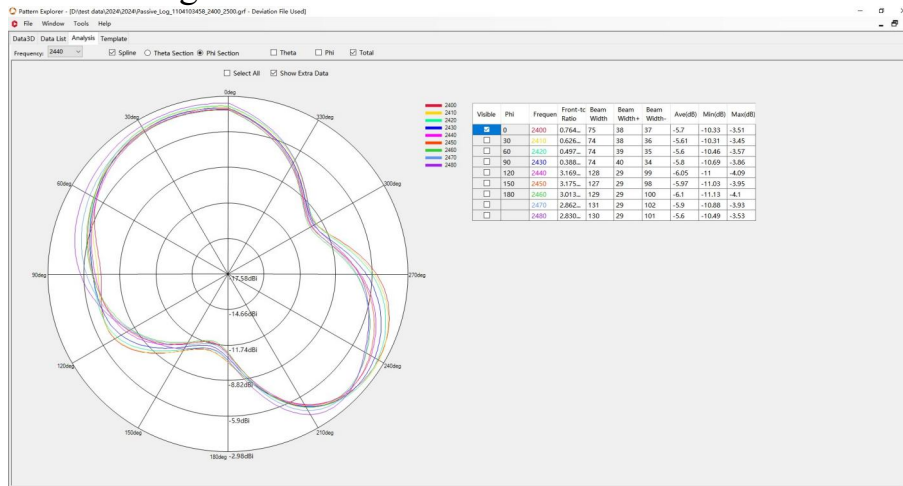


Antenna 2D radiation pattern:

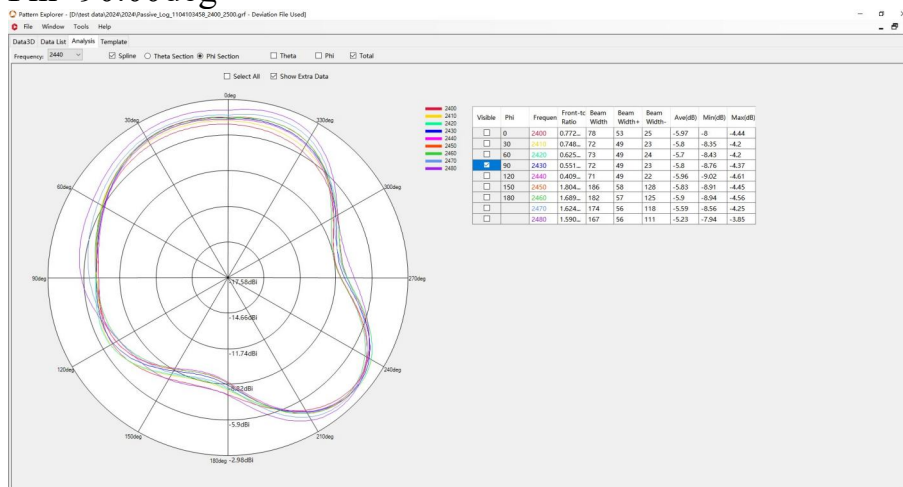
Theta=90.00deg



Phi=0.00deg



Phi=90.00deg





II: 3D Active test report of antenna

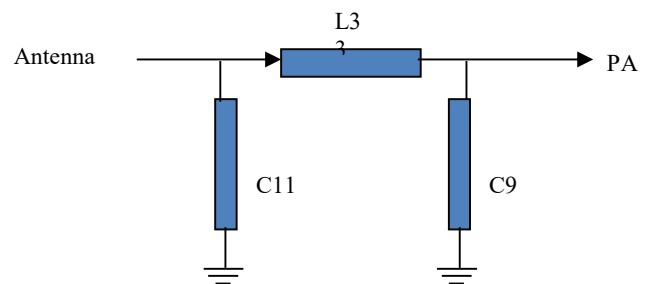
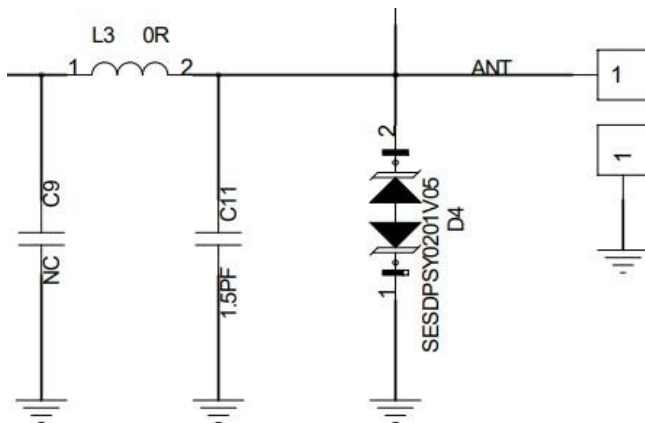
Free	Channel	TRP (dBm)	TIS (dBm)
L	CH 0	8.2	-90.3
	CH 39	8.4	-90.9
	CH 78	7.8	-89.3

Headform	Channel	TRP (dBm)	TIS (dBm)
L	CH 0	-1.1	-82.3
	CH 39	-1.2	-83.2
	CH 78	-1.5	-82.5



OTA Standard Chamber

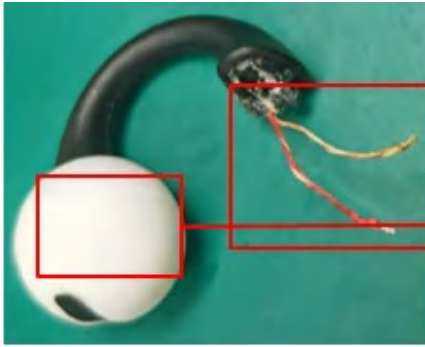
III: Matching circuit



Element	Value
C11(0201)	1.5pF
L3(0201)	0R
C9(0201)	N/A



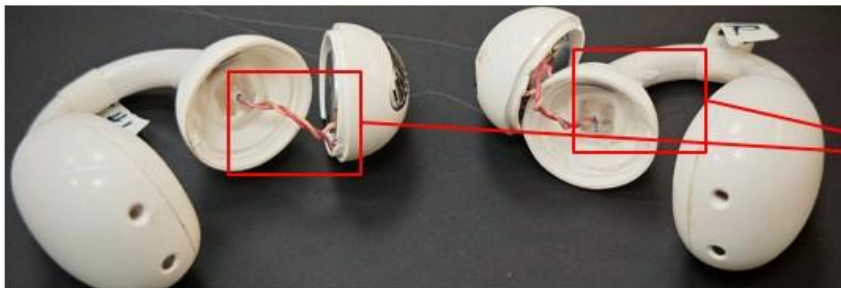
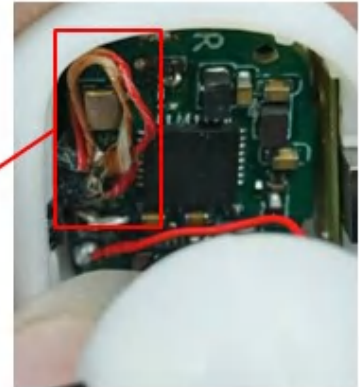
IV: Whole machine environment treatment



The exposed horn wires at both ends of the C-bridge are **15mm** in length.



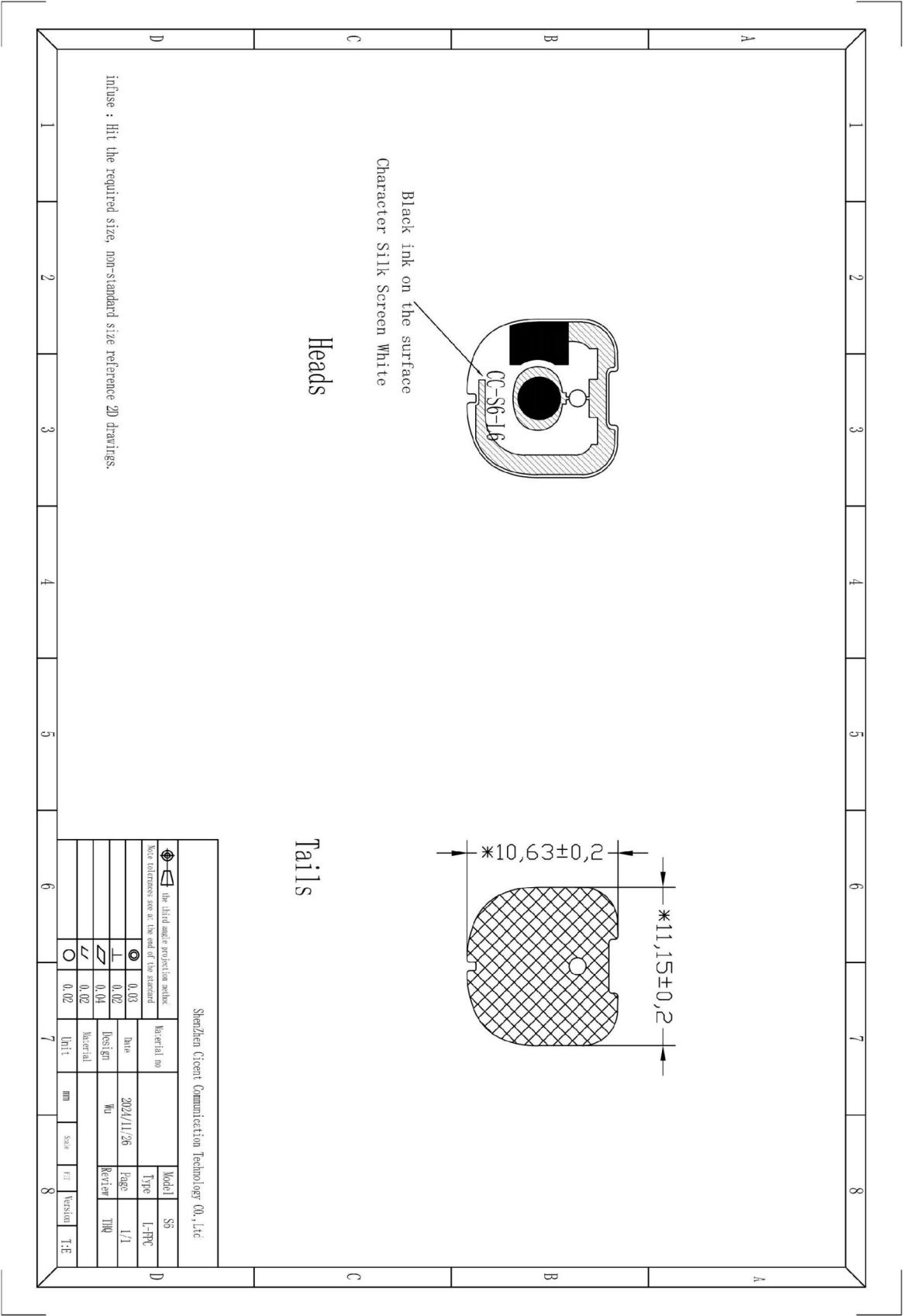
The speaker wires at the **L&R** ear motherboard should be placed on the side away from the chip and socket, and can be placed tightly against the **side wall**.



Twist the horn wire **2-3** times, otherwise it will affect the power level.



V: Structure file





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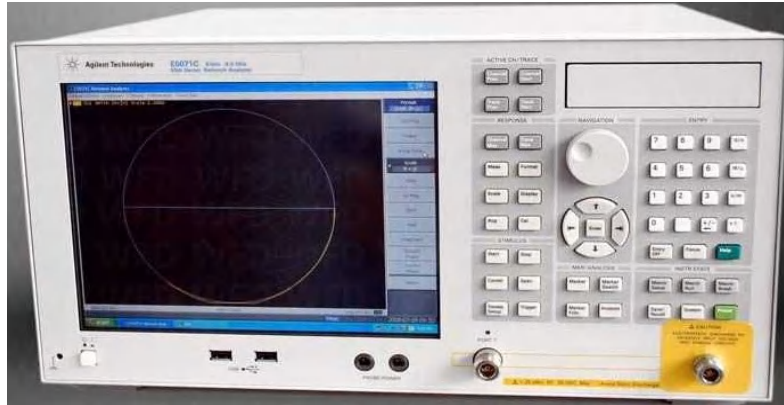
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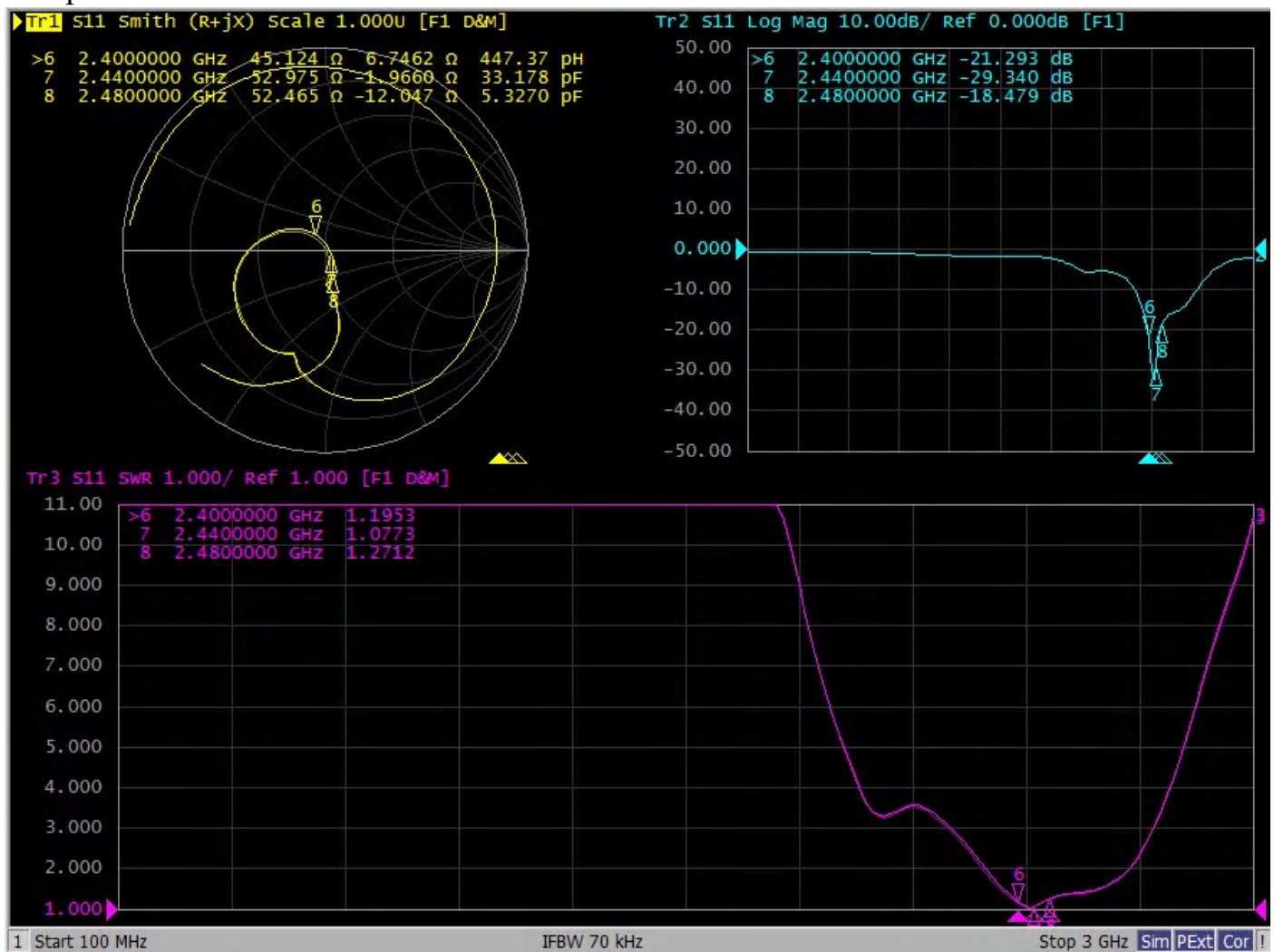


I: The report of passive data



Angilent E5071C

S11 parameter:



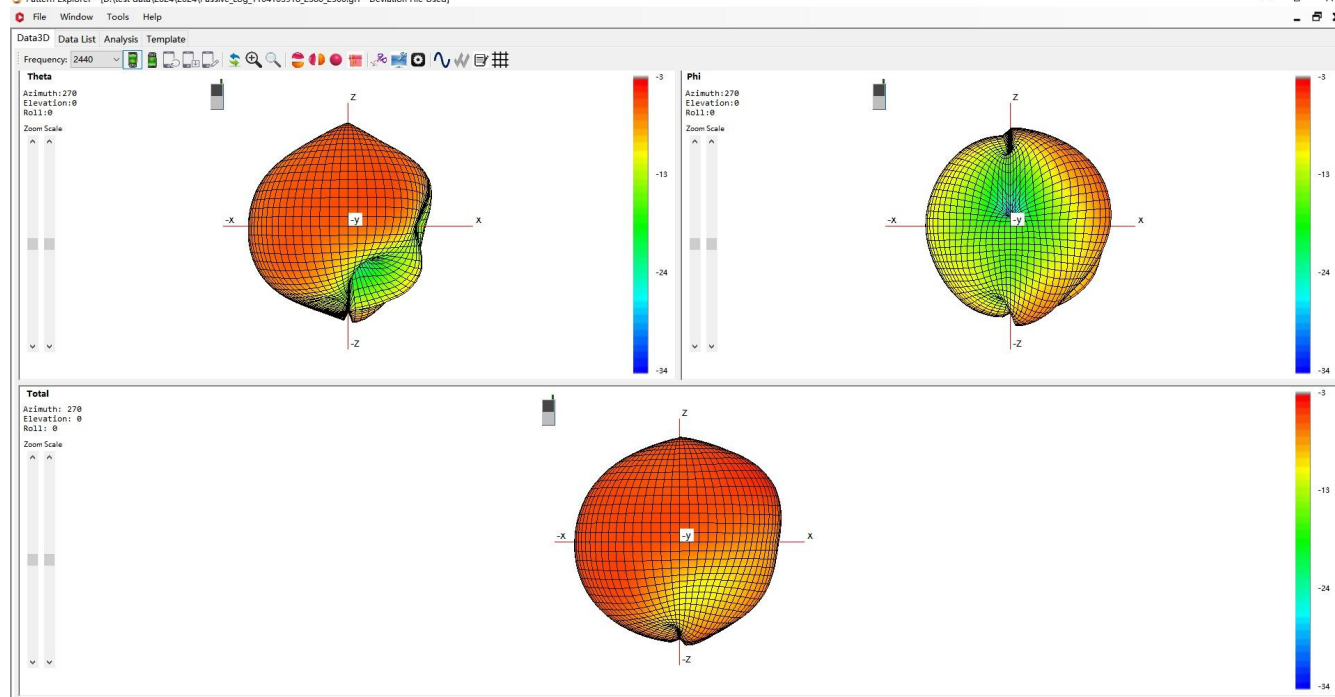


Efficiency:

Frequency (MHz)	Gain(dBi)	Efficiency (db)	Efficiency (%)
2400	-3.64	-6.29	23.50
2410	-3.51	-6.21	23.95
2420	-3.54	-6.22	23.88
2430	-3.75	-6.45	22.63
2440	-4.05	-6.75	21.15
2450	-4.05	-6.69	21.41
2460	-4.27	-6.82	20.80
2470	-4.07	-6.59	21.93
2480	-3.84	-6.26	23.64
Average value	-3.86	-6.48	22.54

Antenna 3D radiation pattern:

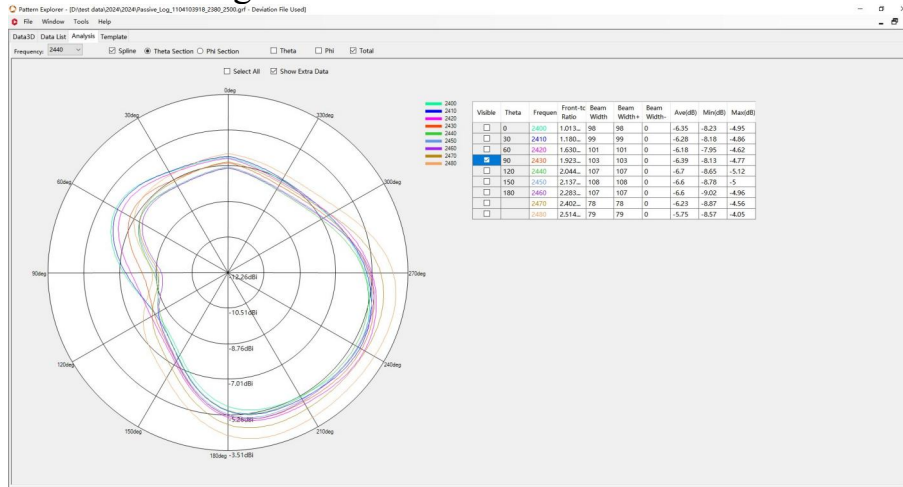
Pattern Explorer - (D:\test data\2024\2024\Passive_Log_1104103918_2380_2500.grf - Deviation File Used)



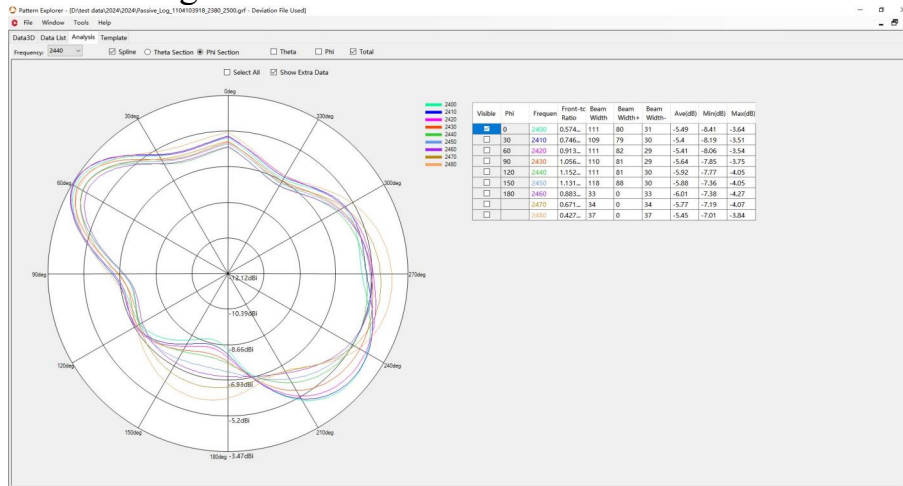


Antenna 2D radiation pattern:

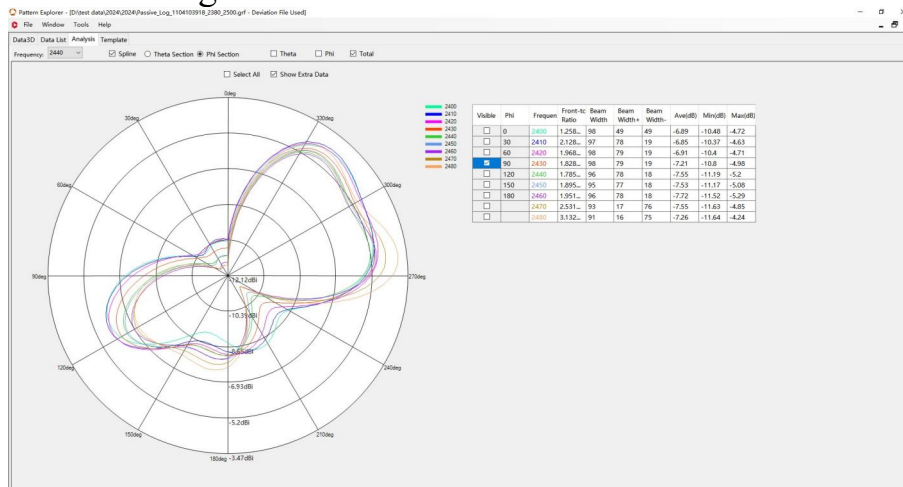
Theta=90.00deg



Phi=0.00deg



Phi=90.00deg





II: 3D Active test report of antenna

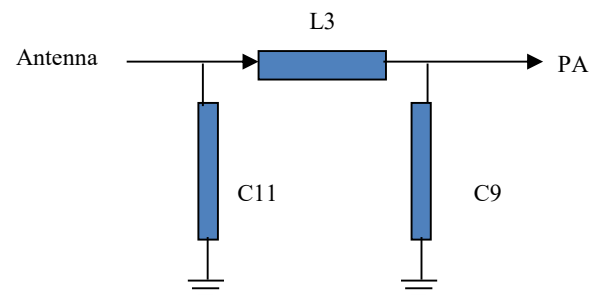
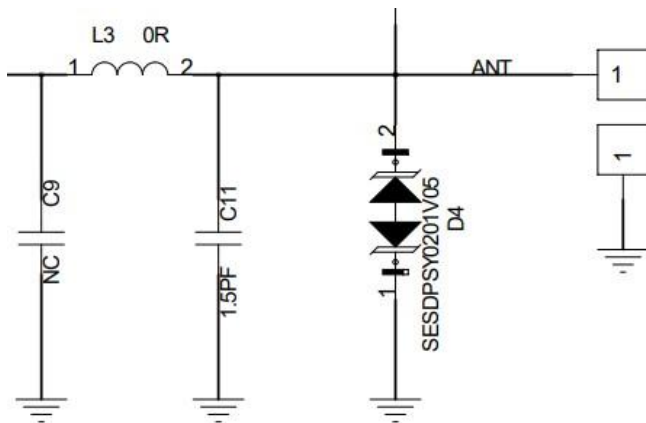
Free	Channel	TRP (dBm)	TIS (dBm)
R	CH 0	8.6	-90.6
	CH 39	8.3	-91.2
	CH 78	7.3	-89.5

Headform	Channel	TRP (dBm)	TIS (dBm)
R	CH 0	-1.0	-83.4
	CH 39	-1.4	-83.1
	CH 78	-1.5	-82.6



OTA Standard Chamber

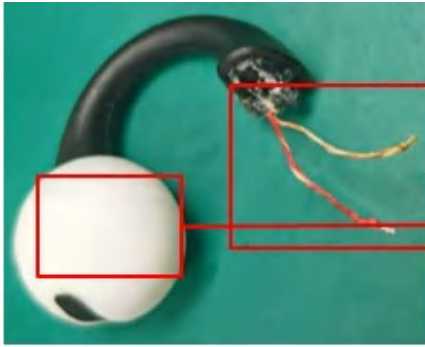
III: Matching circuit



Element	Value
C11(0201)	1.0pF
L3(0201)	0Ω
C9(0201)	N/A



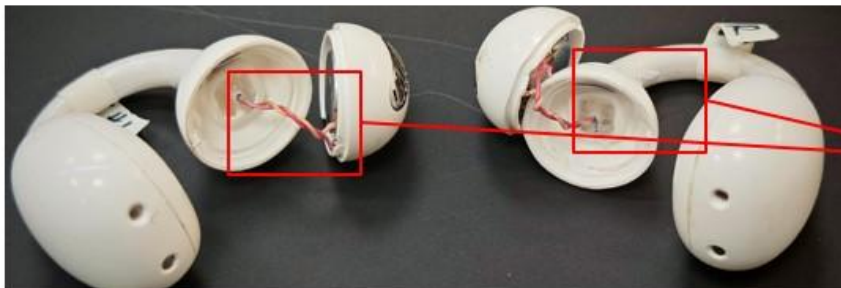
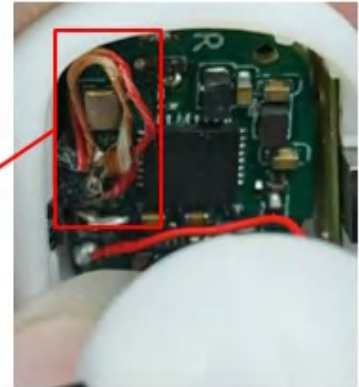
IV: Whole machine environment treatment



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