



Antenna Part Specification

Customer name:	Tianjian
Project name:	M01
Material category:	BT antenna
Version:	V1.0
Date:	2023.08.14



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变更记录栏 Change record			
编制/变更日期 Compile / change date	变更理由 Reason for change	变更内容 Changed content	版本 Version
2023.08.14	初版发行 first edition	初版发行 first edition	V1.0



一：无源测试报告

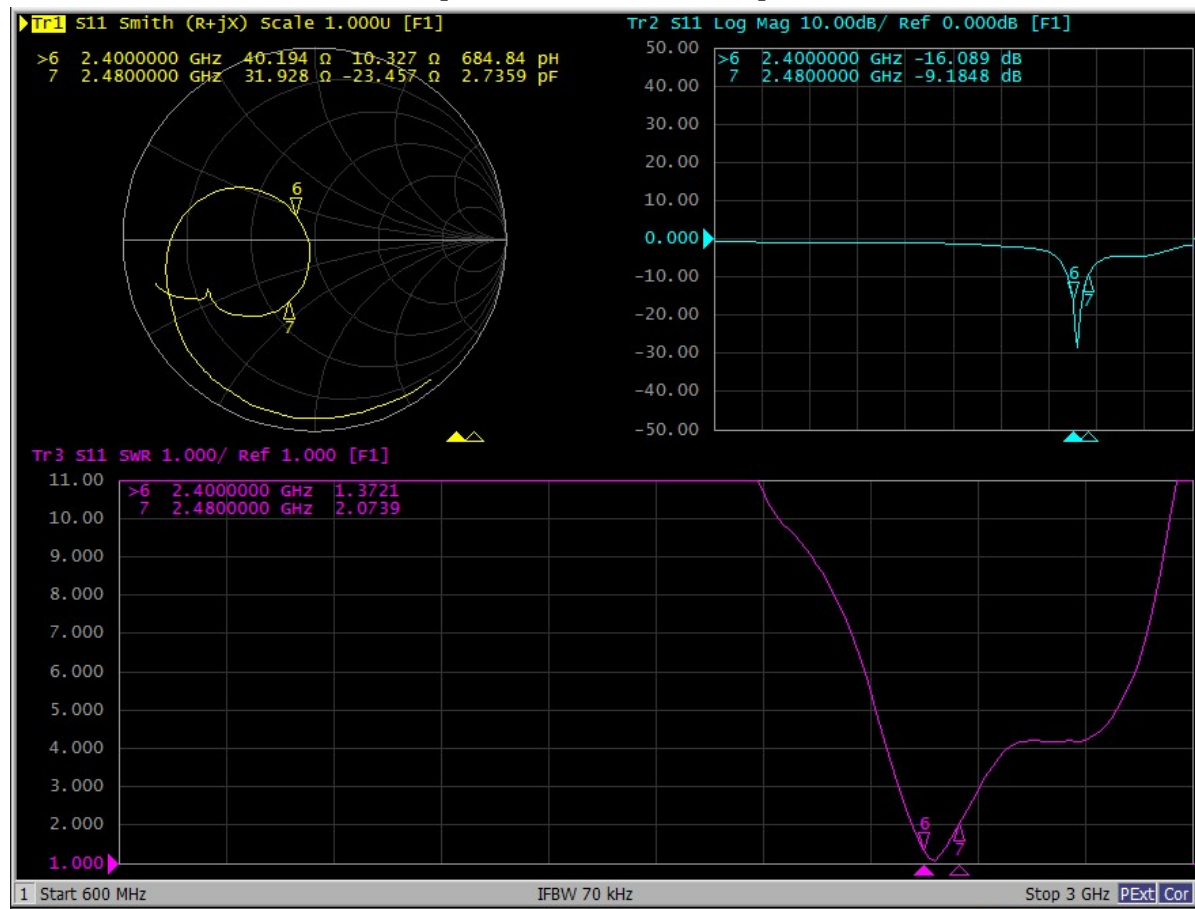
I: The report of passive data



Angilent E5071C

左耳天线 S 参数（自由空间）

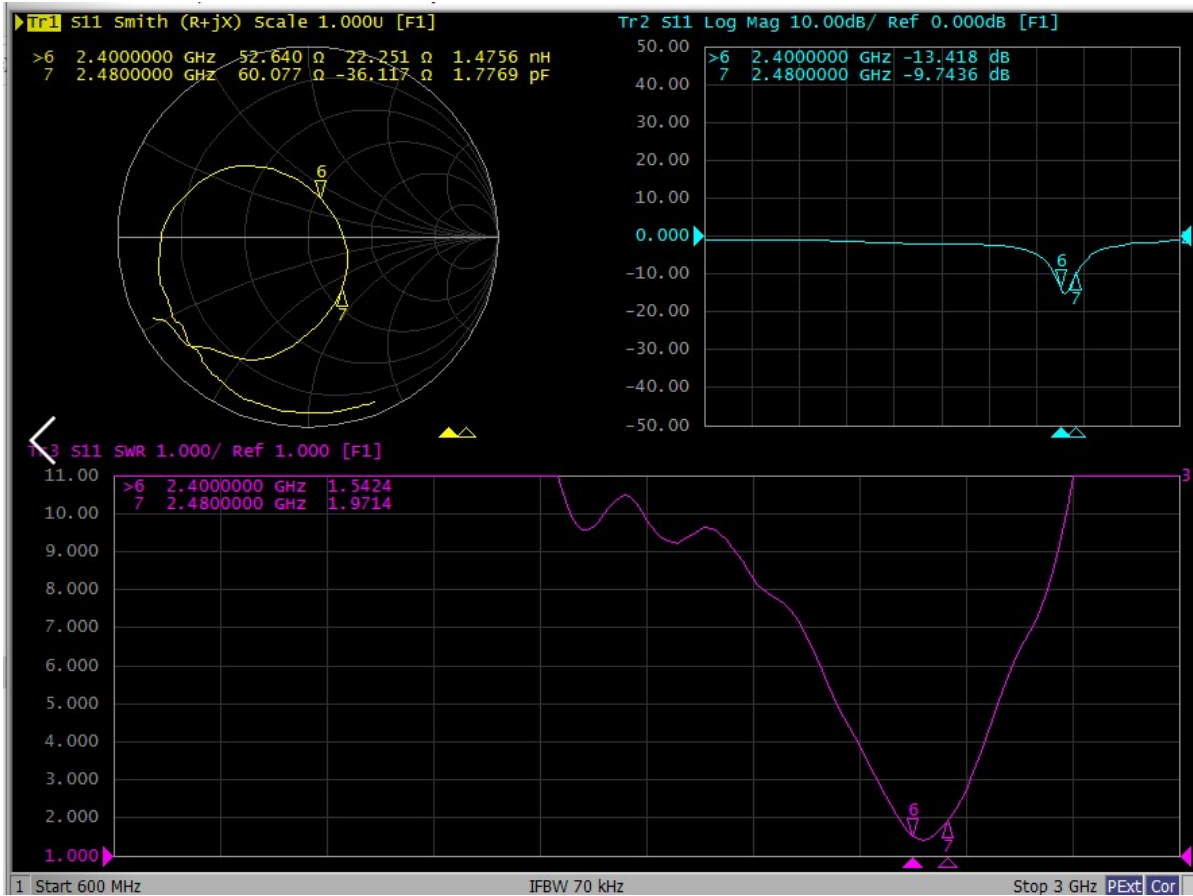
Left antenna VSWR(S11) parameter (free space)





左耳天线 S 参数 (头模)

Left antenna VSWR(S11) parameter (headform)





左耳天线无源效率与增益（自由空间）

Passive efficiency and gain of left ear antenna (free space)

L			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency
2400	-3.03	-6.30	23.43
2410	-3.23	-6.32	23.35
2420	-3.26	-6.39	22.97
2430	-2.99	-6.20	24.00
2440	-3.01	-6.19	24.06
2450	-2.65	-5.74	26.66
2460	-2.31	-5.31	29.41
2470	-2.47	-5.40	28.84
2480	-2.42	-5.33	29.28
Average value	-2.82	-5.91	25.78

左耳天线无源效率与增益（头模）

Passive efficiency and gain of left ear antenna (headform)

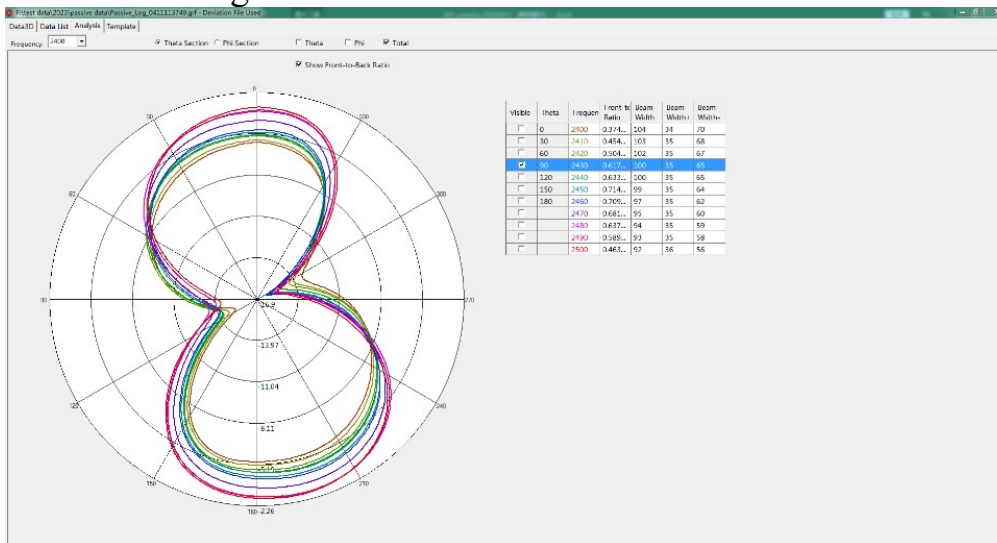
L			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency
2400	-5.1	-11.1	7.8
2410	-5.0	-11.2	7.6
2420	-5.0	-11.3	7.5
2430	-4.7	-11.1	7.7
2440	-4.6	-11.1	7.7
2450	-4.2	-10.8	8.3
2460	-3.8	-10.5	8.9
2470	-3.8	-10.6	8.7
2480	-3.9	-10.6	8.7
Average value	-4.45	-10.92	8.11



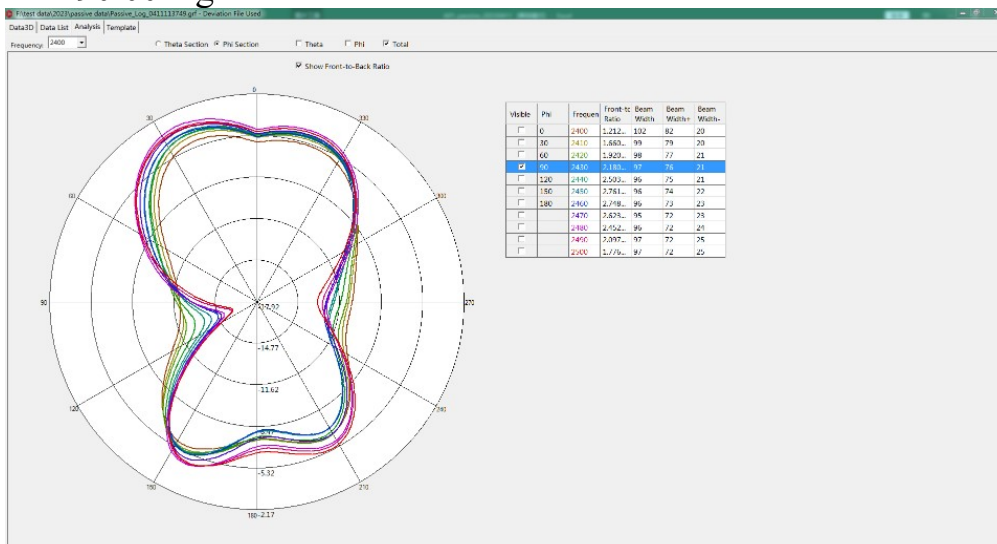
天线无源方向图（自由空间）

Antenna radiation pattern (free space)

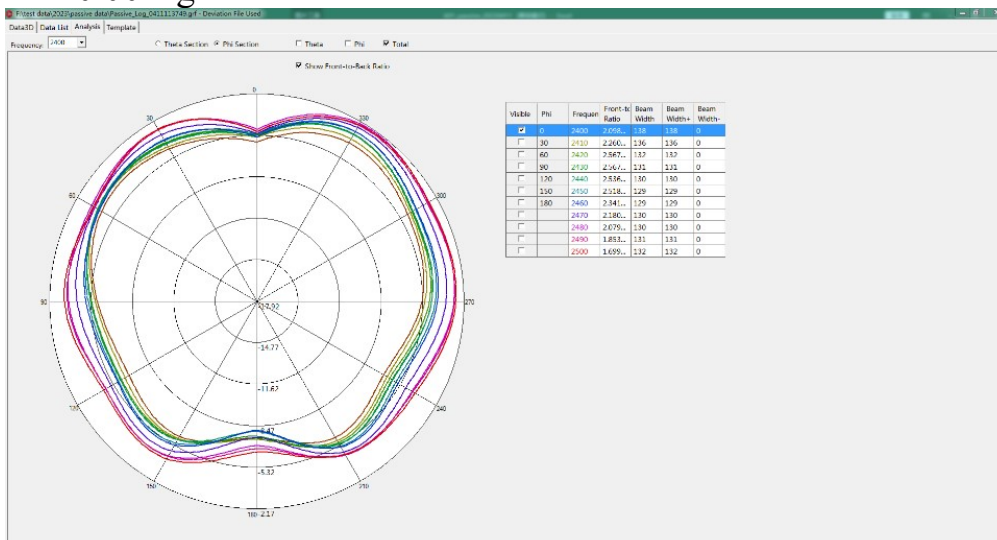
Theta=90.00deg



Phi=90.00deg

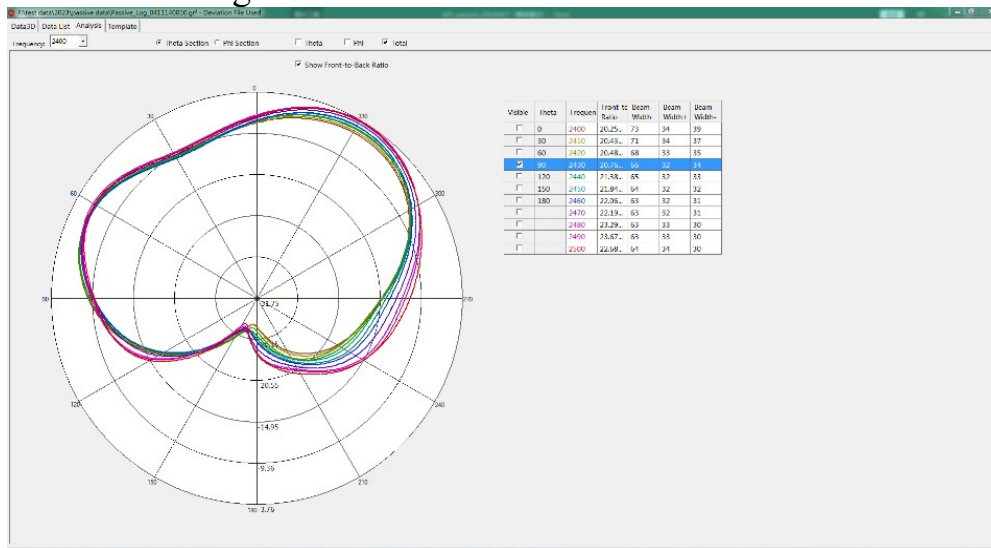


Phi=0.00deg

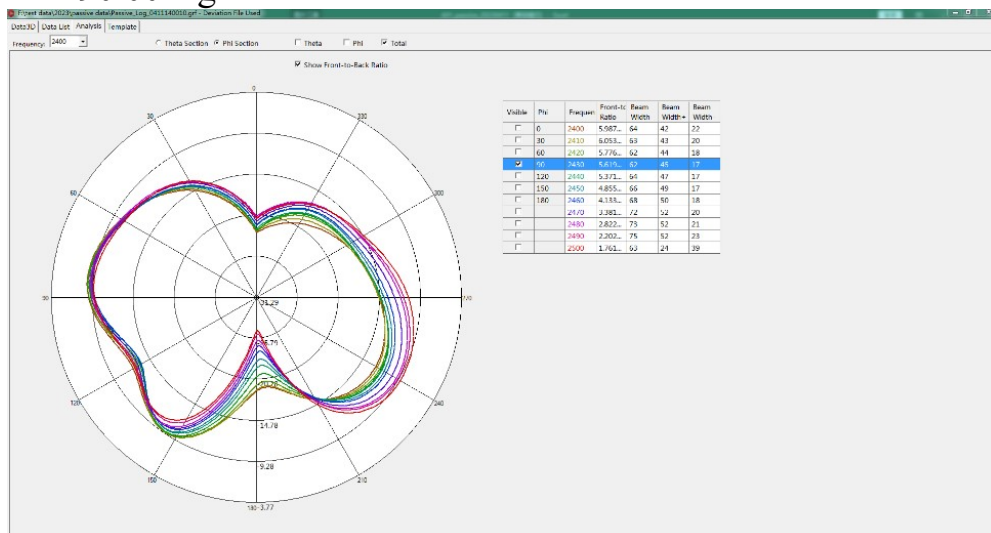




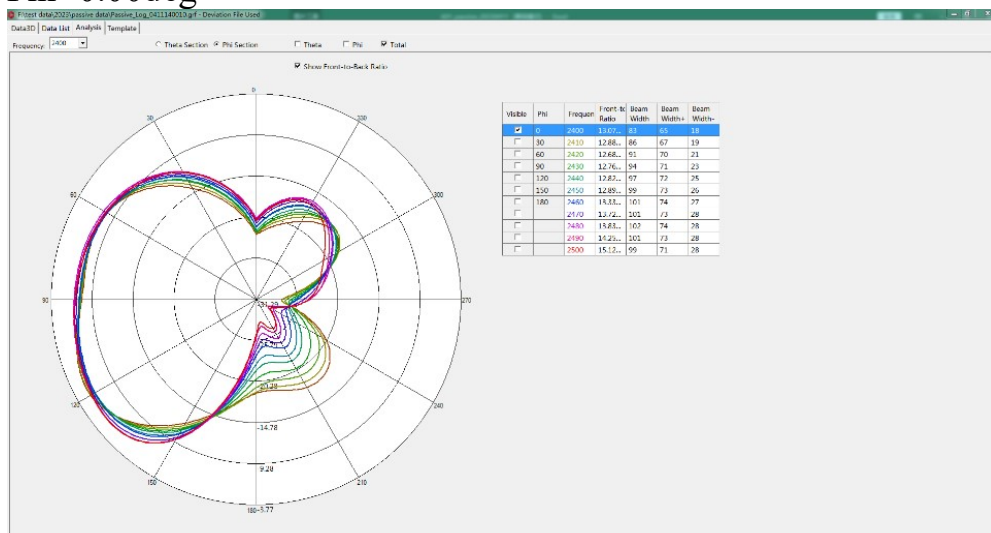
天线无源方向图（头模） Antenna radiation pattern (headform) Theta=90.00deg



Phi=90.00deg



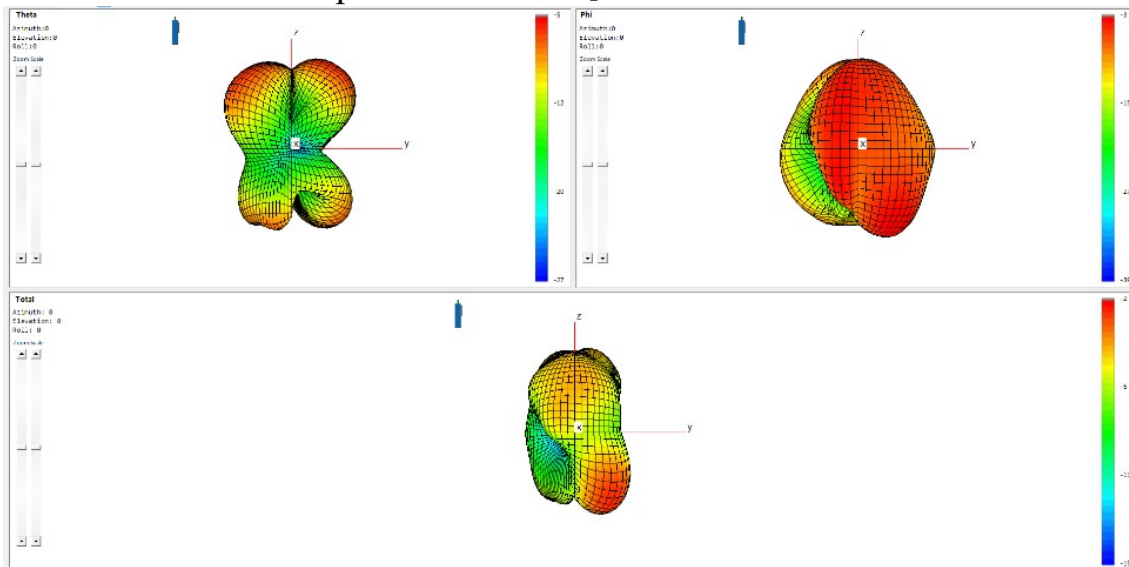
Phi=0.00deg





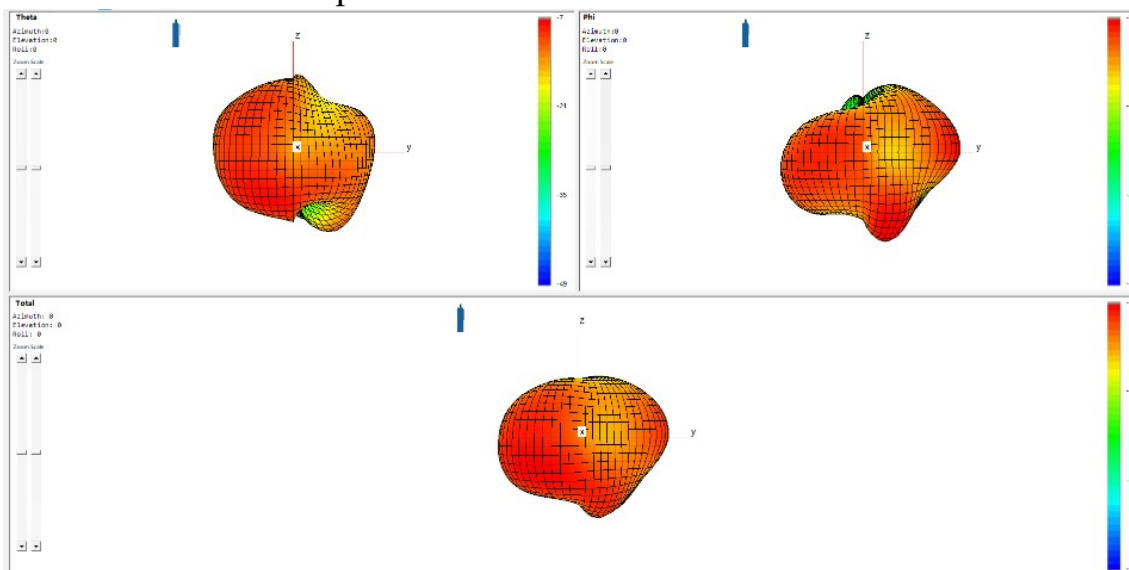
天线无源 3D 方向图（自由空间）

3D Antenna radiation pattern (free space)



天线无源 3D 方向图（头模）

3D Antenna radiation pattern (headform)





二：暗室有源测试数据

II: 3D Active test report of antenna

Free/自由空间	Channel	TRP (dBm)	TIS (dBm)
L	CH 0	1.1	-90.2
	CH 39	0.4	-91.6
	CH 78	-0.4	-92.7

Headform/头模	Channel	TRP (dBm)	TIS (dBm)
L	CH 0	-6.2	-81.8
	CH 39	-7.1	-81.8
	CH 78	-7.3	-82.2

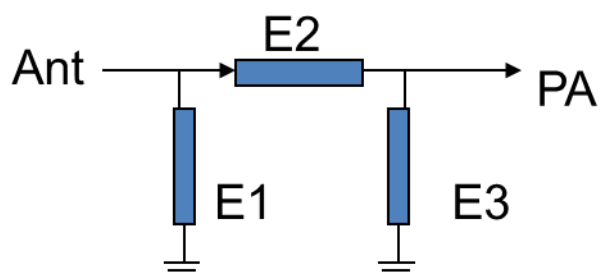


OTA Standard Chamber

三：匹配电路

III: Matching circuit

Element	Value
E1	0.5pF
E2	0Ω
E3	N/A



Red box position matches bit and 0.5pF capacitor

