

D135A Antenna Test Report V1

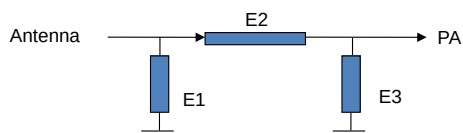
Date: 2025/9/1

Purpose of this report Optimize antenna matching network

Conclusion of this report Optimize the antenna matching network to its optimal state

Antenna	Frequency band	Material	Performance Requirements
Bluetooth	2400-2480MHz	On-board	/

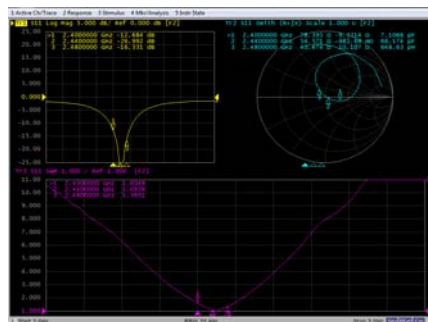
Passive Antenna Matching Circuit:



BT	
Element	
E1(0402)	NG
E2(0402)	1.5PF
E3(0402)	0.7PF

Passive S11 Parameter Testing for Antennas:

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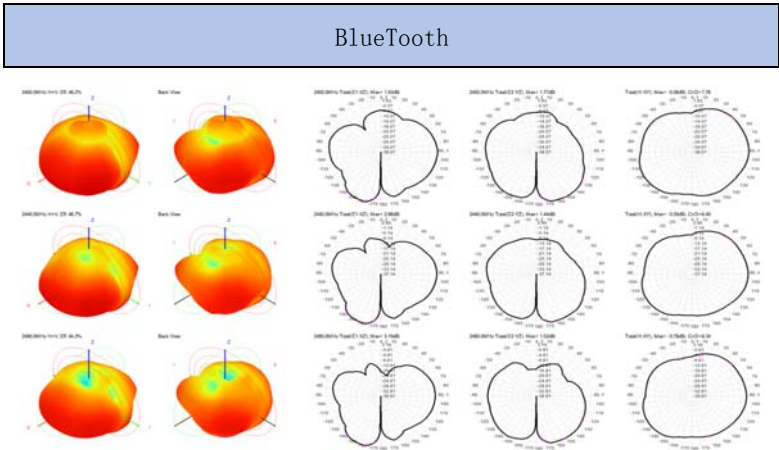


Freq (MHz)	2400	2440	2480
SWR	1.60	1.09	1.36
Log Mag	-12.68	-26.99	-16.33

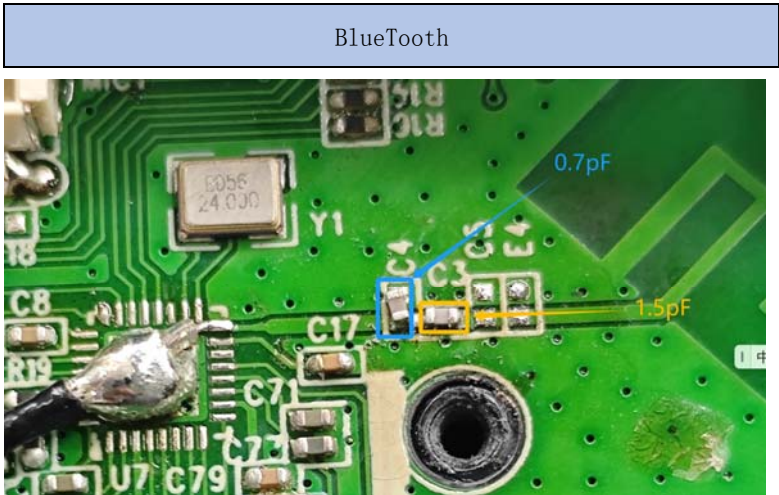
Antenna passive efficiency and gain test:

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Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400	2.42	44.84
2410	2.75	45.36
2420	3.15	46.73
2430	3.30	46.94
2440	3.32	46.18
2450	3.32	45.71
2460	3.30	44.77
2470	3.28	44.64
2480	3.18	43.74
2490	3.18	43.16
2500	3.08	42.01

Antenna passive radiation pattern:



Antenna location and matching image:



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