



Antenna Part Specification

Project name:	A2502
Antenna name:	WIFI/BT antenna
Version:	V1.0
Date:	2026.05.15
Manufacturer:	Shenzhen Cicent Communication Technology Co., Ltd.
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
2026.05.15	First edition	First edition	V1.0

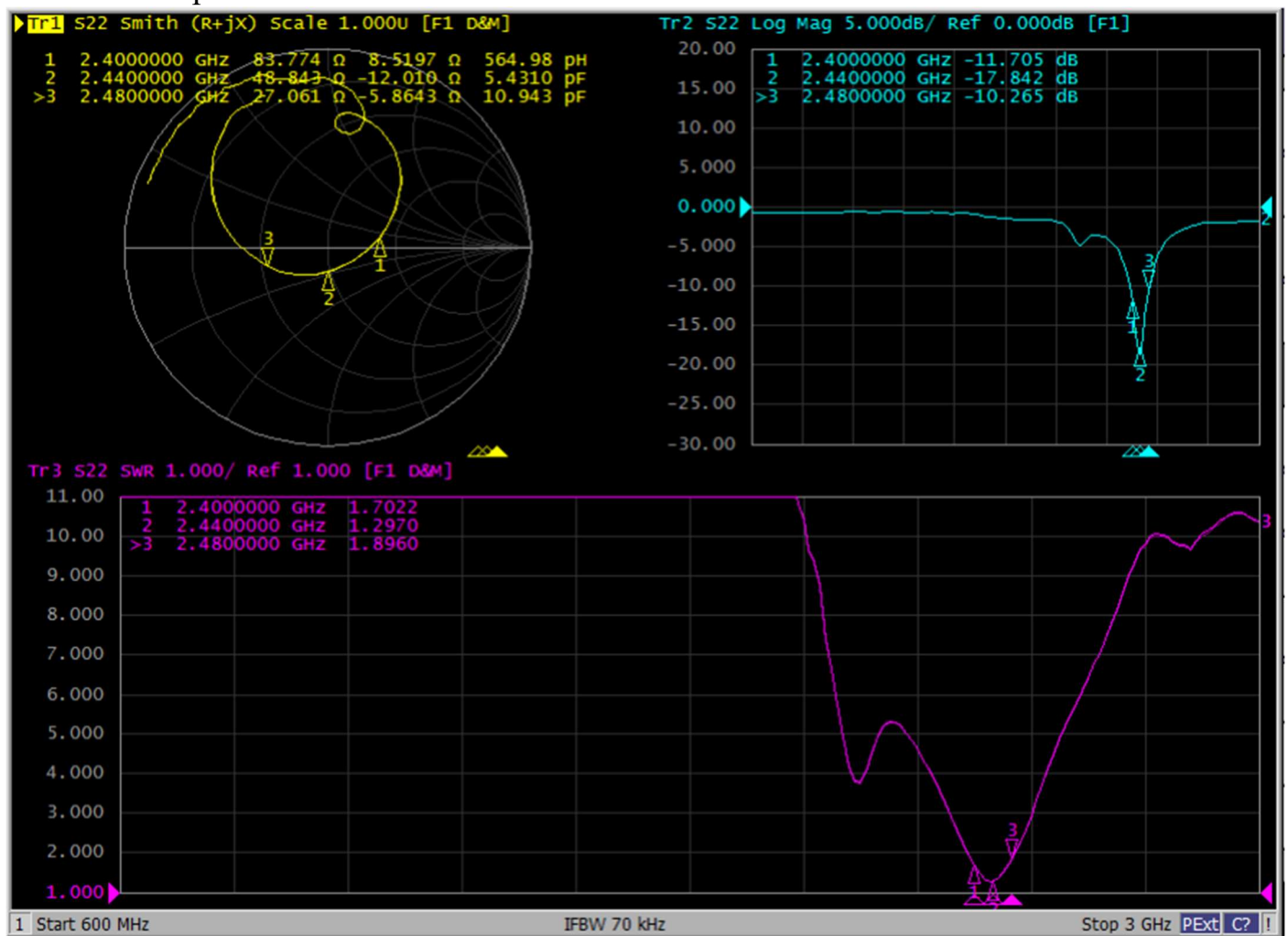


I: The report of passive data



Angilent E5071C

Antenna S11 parameter:

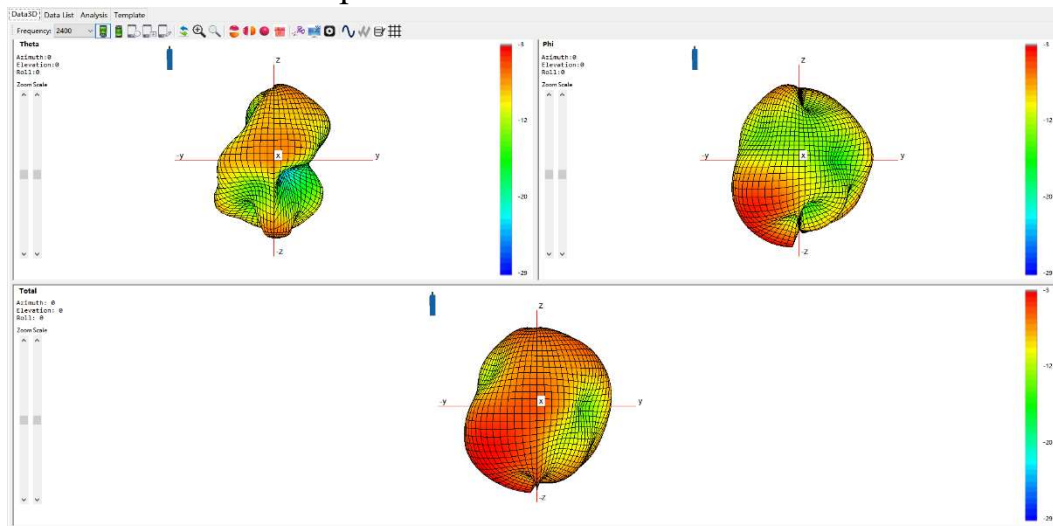




Antenna efficiency and gain:

free			
Frequency (MHz)	Efficiency (dB)	Gain (dBi)	Efficiency (%)
2400	-7.61	-3.13	17.34
2410	-7.58	-3.04	17.46
2420	-7.62	-3.09	17.32
2430	-7.84	-3.27	16.45
2440	-8.05	-3.44	15.69
2450	-8.21	-3.48	15.10
2460	-8.43	-3.58	14.36
2470	-8.58	-3.69	13.86
2480	-8.76	-3.79	13.31
average	-8.08	-3.39	15.65

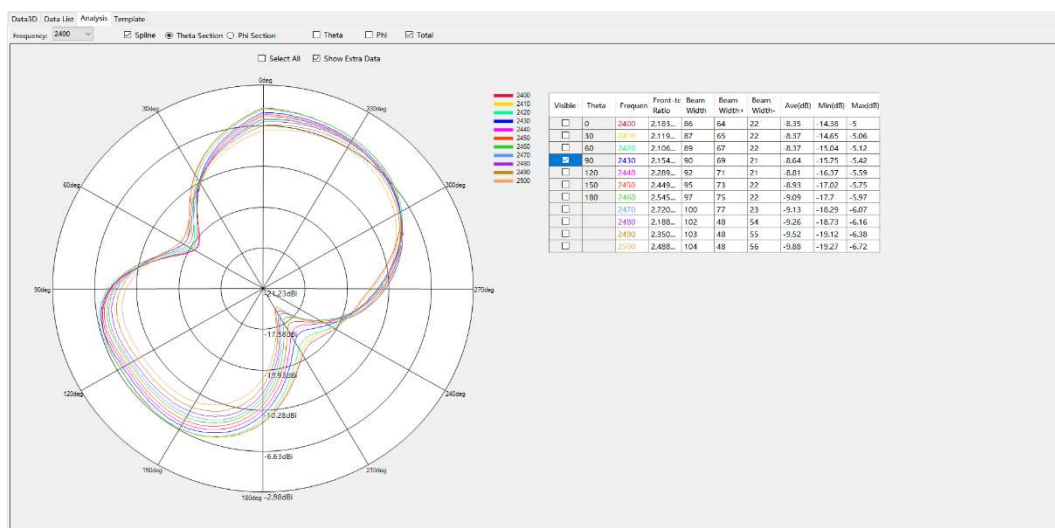
3D Antenna radiation pattern:



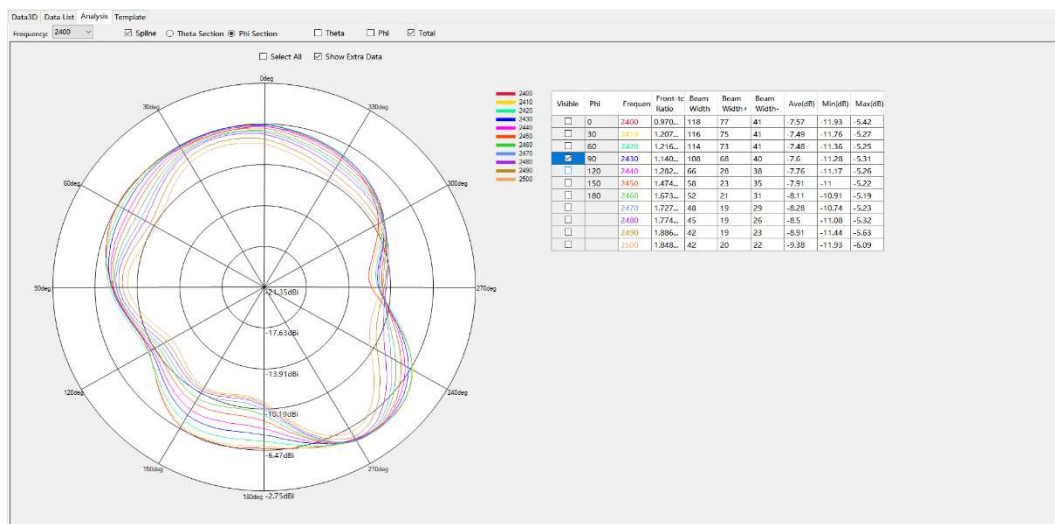


2D Antenna radiation pattern:

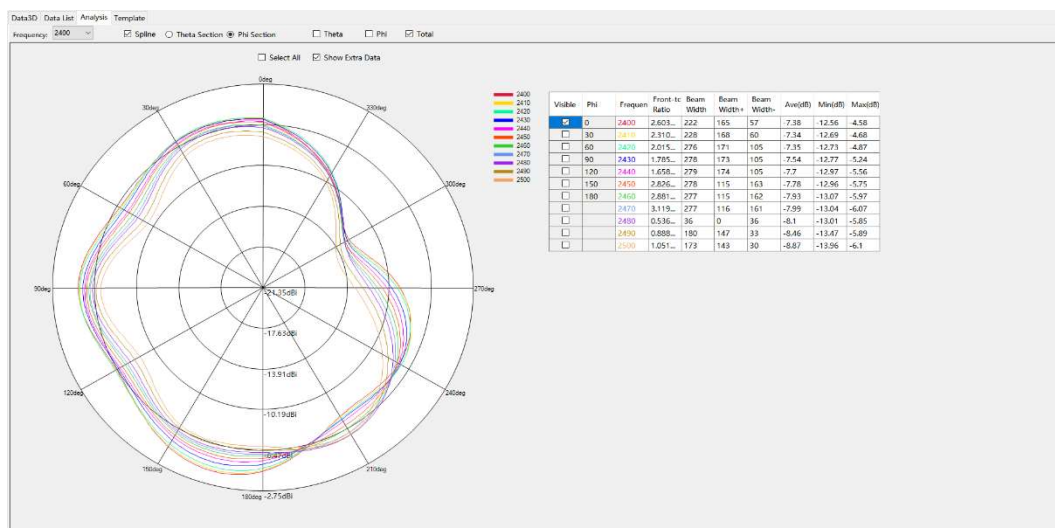
Theta = 90°



Phi=90°



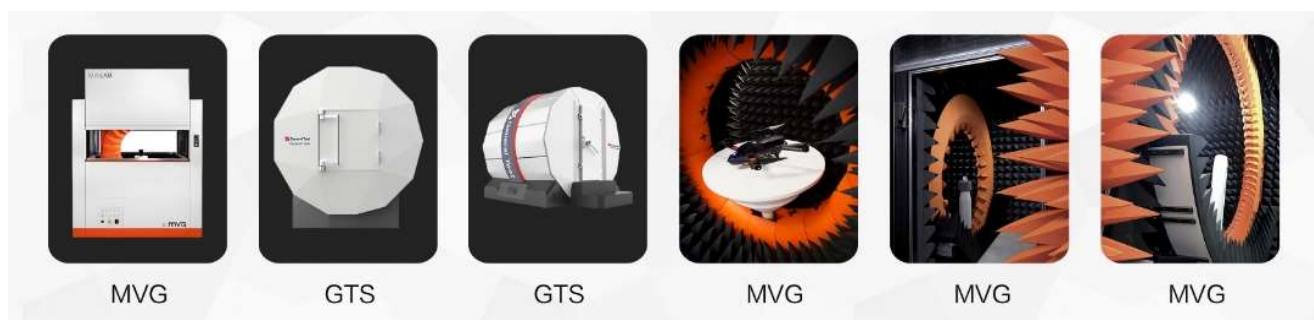
Phi=0°





II: 3D Active test report of antenna

		free	
BT	Channel	TRP (dBm)	TIS (dBm)
	CH 0	6.3	-89.3
	CH 39	7.8	-90.2
	CH 78	6.1	-89.5



OTA Standard Chamber

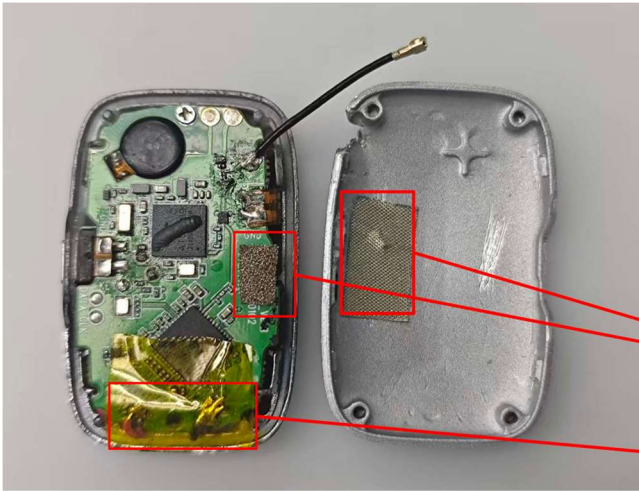
III: Antenna matching circuit



Element	Value
E1(0201)	ESD
E2(0201)	2pF
E3(0201)	0Ω
E4(0201)	N/A



IV: Precautions for environmental treatment of the complete machine



The board and the metal upper shell should be properly grounded.

Apply insulating tape to the battery cable to prevent it from being short-circuited by the metal upper shell.



V: Antenna structure diagram file

