



Antenna Part Specification

Project name:	YF39C
Antenna name:	R-BT antenna
Version:	V2.0
Date:	2026. 3. 12
Manufacturer:	Shenzhen Cicent Communication Technology Co., Ltd.
Manufacturer address:	505-506 ,ABlock,Donglian Building,Chuangye 2 road,Baoan District,Shenzhen,Guangdong,P.R china



Contents

I: The report of passive data	3
II: 3D Active test report of antenna	6
III: Antenna matching circuit	6
IV: Precautions for complete machine assembly.....	7
V: Antenna structure diagram file	8

Change record			
Compile / change date	Reason for change	Changed content	Version
2025.12.25	First edition	First edition	V1.0
2026.3.12	Antenna panel frame update	Antenna panel frame update	V2.0



I: The report of passive data



Agilent E5071C

Antenna S11 parameter: (R-free)

E5071C Network Analyzer

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

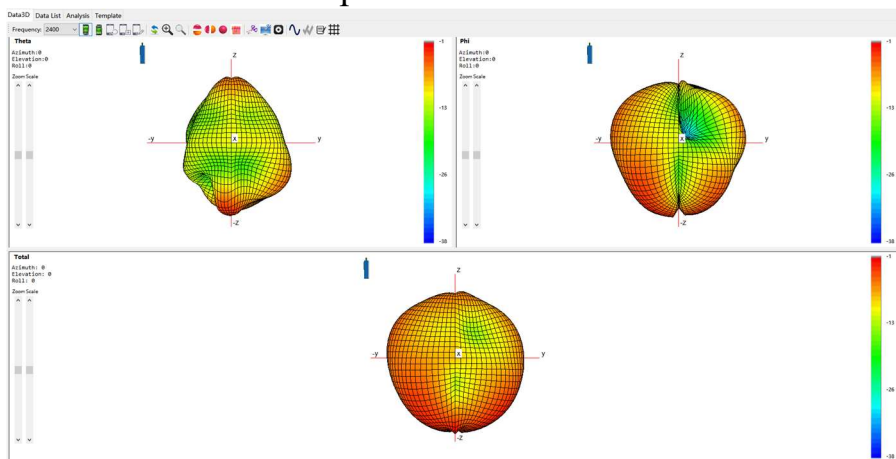




Antenna efficiency and gain: (R-free)

R-free			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	-2.0	-6.1	24.4
2410	-1.9	-6.2	24.3
2420	-1.8	-6.2	24.2
2430	-2.0	-6.3	23.7
2440	-2.0	-6.3	23.4
2450	-1.9	-6.3	23.3
2460	-1.9	-6.3	23.4
2470	-1.9	-6.4	23.1
2480	-1.9	-6.4	23.1
average	-1.9	-6.3	23.7

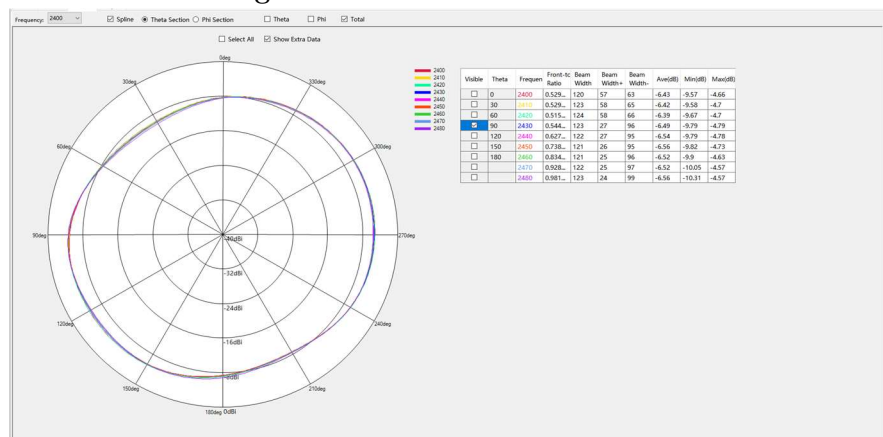
3D Antenna radiation pattern: (R-free)



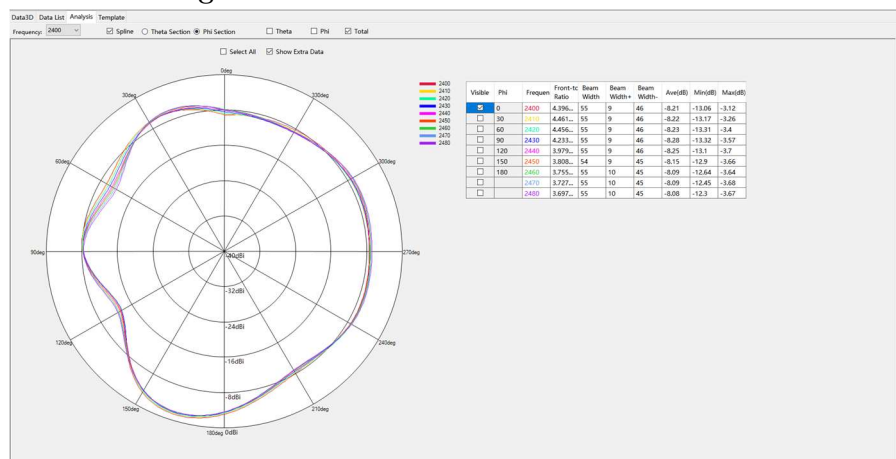


2D Antenna radiation pattern: (R-free)

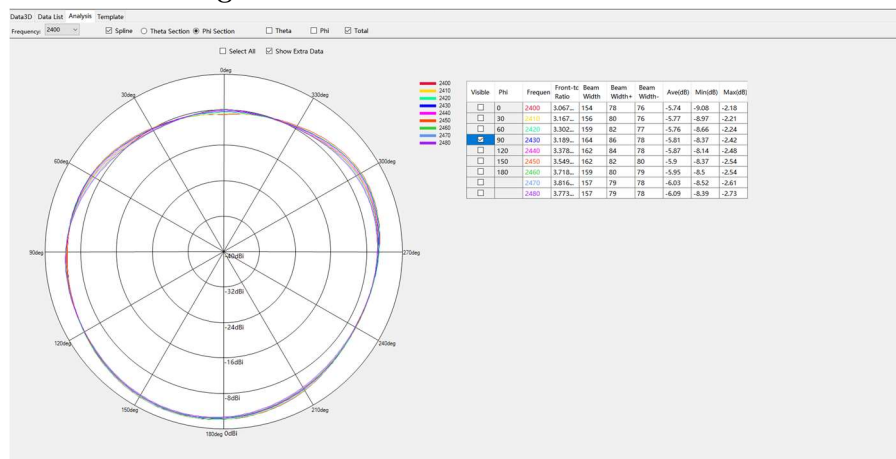
Theta=90.00deg



Phi=0.00deg



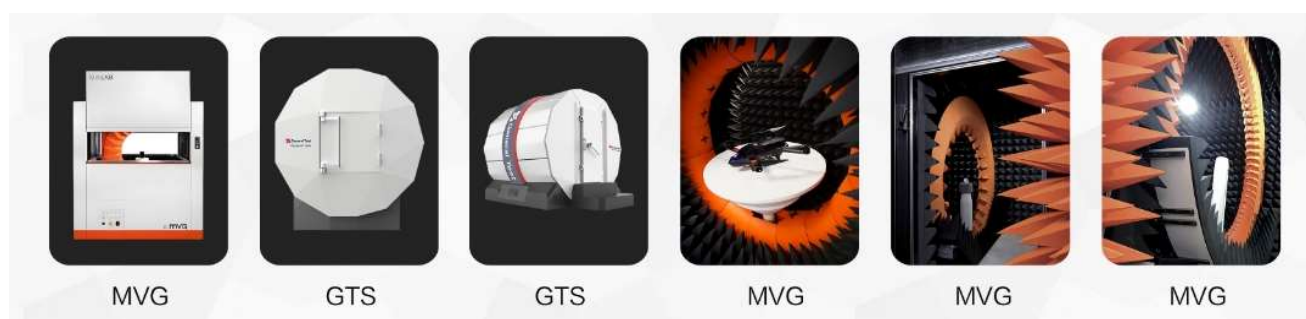
Phi=90.00deg





II: 3D Active test report of antenna

		free	
	Channel	TRP (dBm)	TIS (dBm)
R	CH 0	5.3	-87.5
	CH 39	6.5	-88.3
	CH 78	6.1	-85.5



OTA Standard Chamber

III: Antenna matching circuit

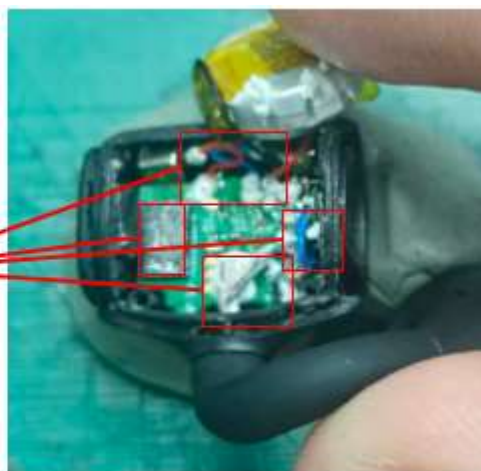


Figure number	matching value
C1	1.5NH
C2	OR
C3	N/A



IV: Precautions for complete machine assembly

1. The switch cable should be placed with its side facing the speaker cable.
2. The speaker cable should be pressed onto the bottom of the battery as shown in the diagram.
3. The charging welding wires are placed on the side wall between the charging pins as shown in the diagram.
4. The mainboard is attached with an insulating double-sided adhesive foam for securing the battery.



For the right ear,

1. Place the battery negative pole towards the antenna.
2. Extend the battery positive wire outwards and place it towards the speaker.
3. Thread the battery negative wire from below the battery





V: Antenna structure diagram file

