Antenna Part Specification

Project name：	D3200
Material category：	BT/WIFI antenna
Antenna type：	PIFA
Antenna polarity:	elliptical polarization
Version：	V1.0
Date：	2025.7.29
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

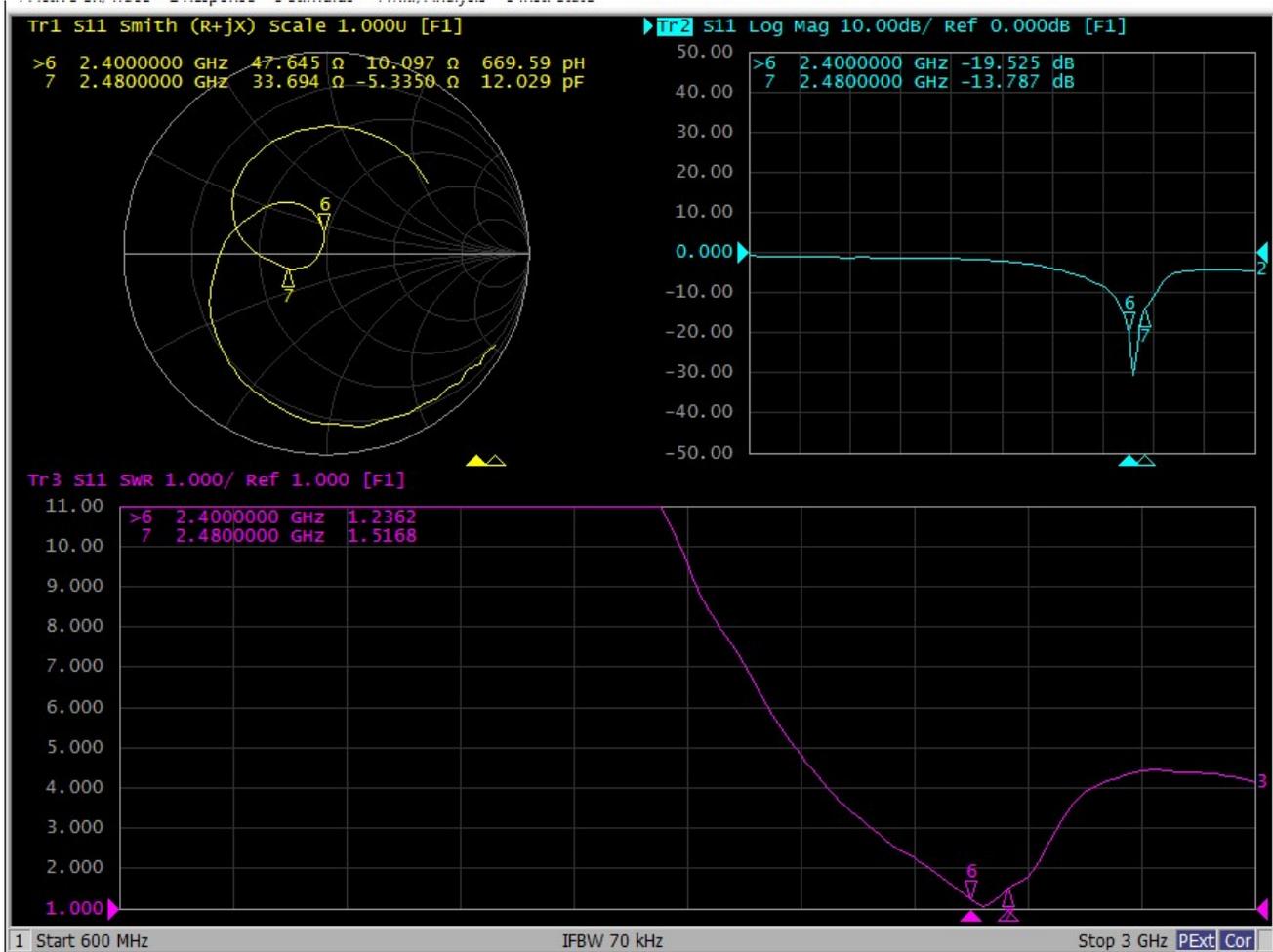| Change record			
Compile / change date	Reason for change	Changed content	Version
2025.7.29	First edition	First edition	V1.0

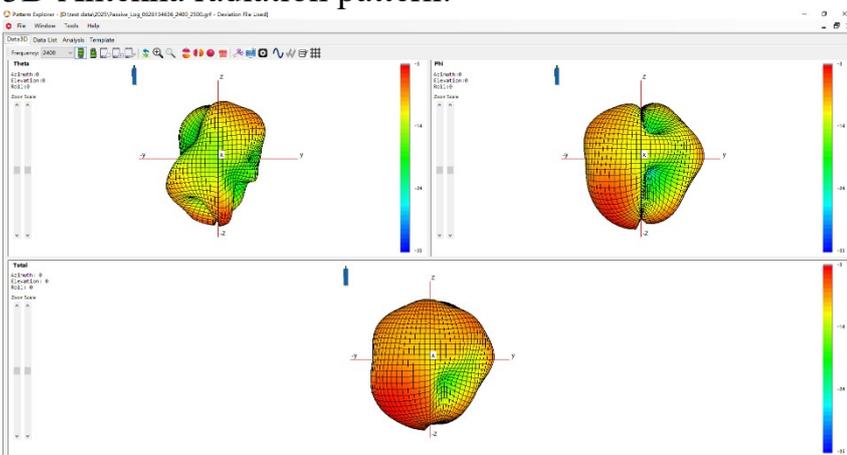I: The report of passive data

Angilent E5071C

S11 parameter：

antenna efficiency and gain:

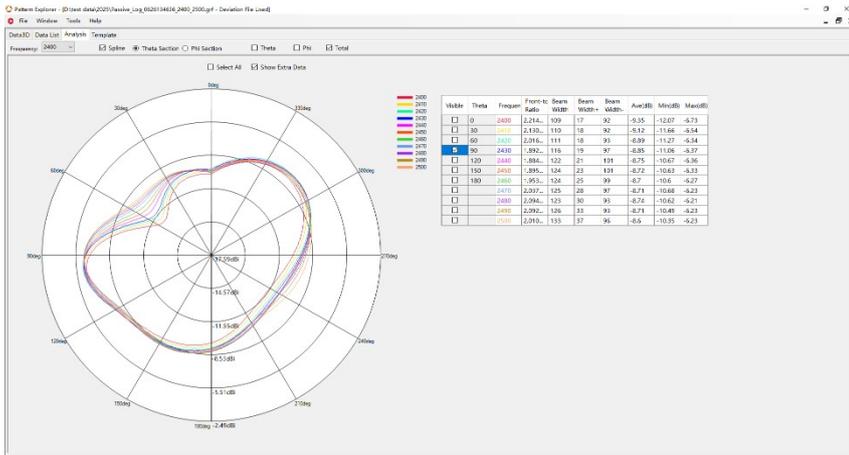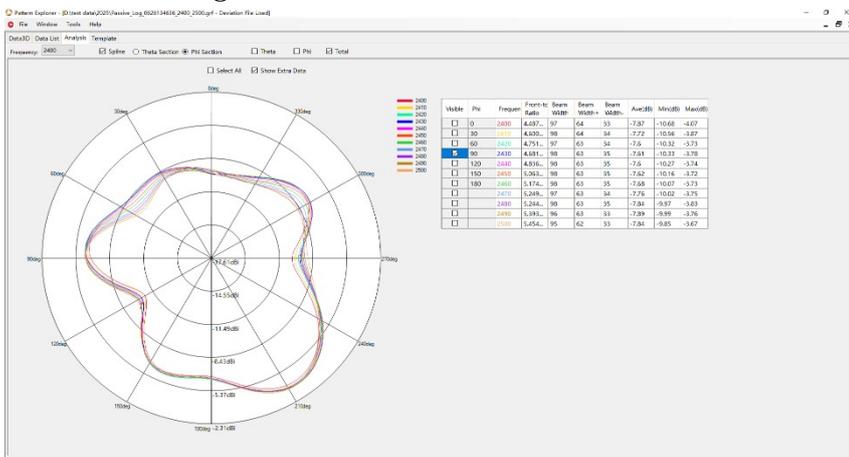| BT/WIFI 2.4G free			
Frequency（MHz）	Efficiency（dB)	Gain（dBi）	Efficiency（%)
2400	−8.0	−3.3	15.8
2410	−7.9	−3.1	16.4
2420	−7.7	−2.9	16.9
2430	−7.7	−2.9	16.9
2440	−7.7	−2.8	17.0
2450	−7.7	−2.7	17.0
2460	−7.7	−2.7	17.0
2470	−7.8	−2.7	16.8
2480	−7.8	−2.7	16.6
AVG	−7.77	−2.86	16.71

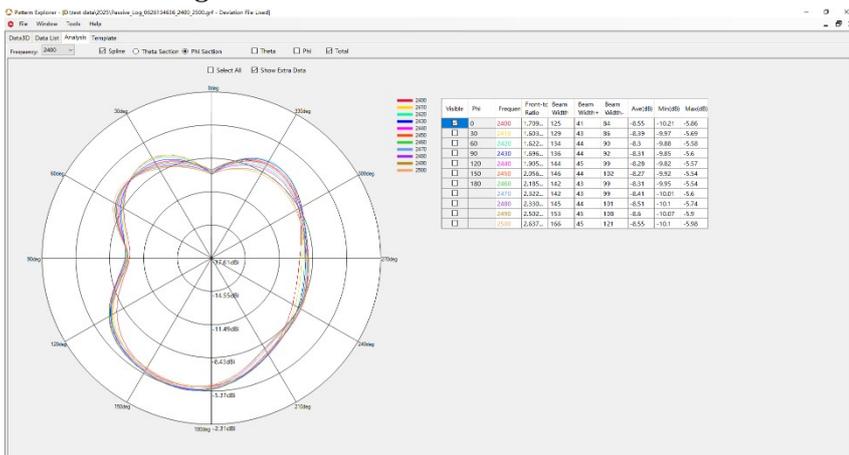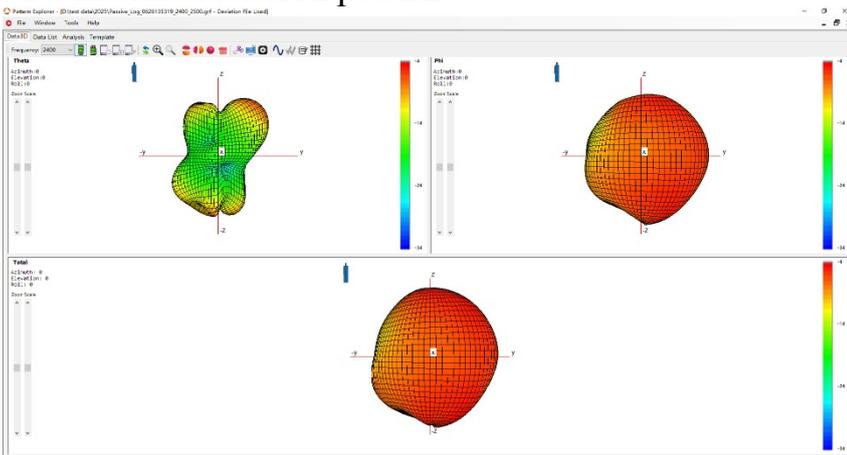3D Antenna radiation pattern:

Antenna radiation pattern:

Theta=90.00deg

Phi=90.00deg

Phi=0.00deg

antenna efficiency and gain:

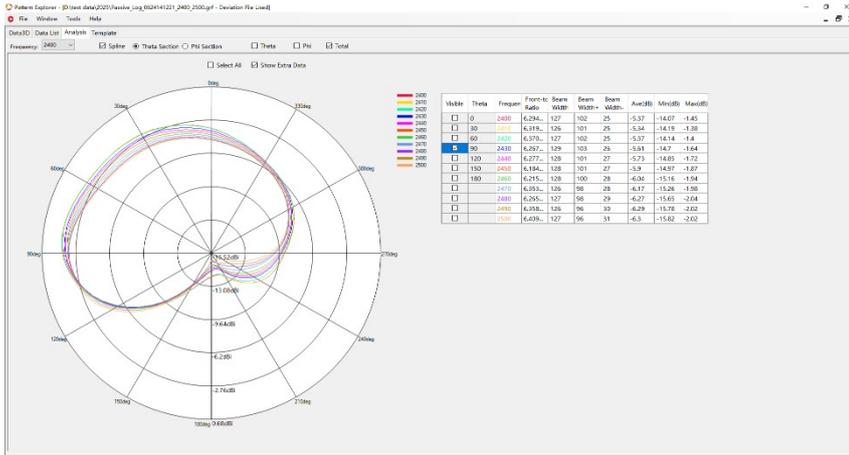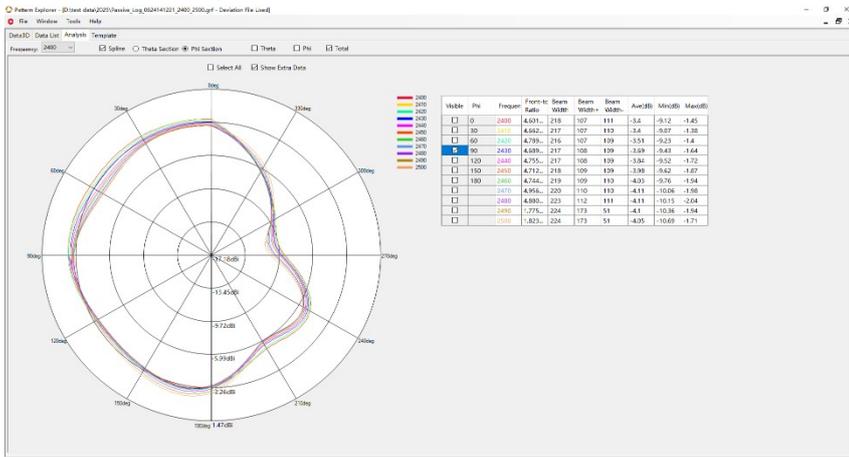| BT/WIFI 2.4G The prototype is on top of the charging case			
Frequency（MHz）	Efficiency（dB）	Gain（dBi）	Efficiency（%）
2400	−6.1	−1.1	24.3
2410	−6.1	−1.0	24.5
2420	−6.0	−0.8	24.9
2430	−5.9	−0.5	25.5
2440	−5.8	−0.2	26.0
2450	−5.8	−0.1	26.3
2460	−5.8	0.1	26.5
2470	−5.8	0.3	26.3
2480	−5.8	0.4	26.3
AVG	−5.91	−0.32	25.63

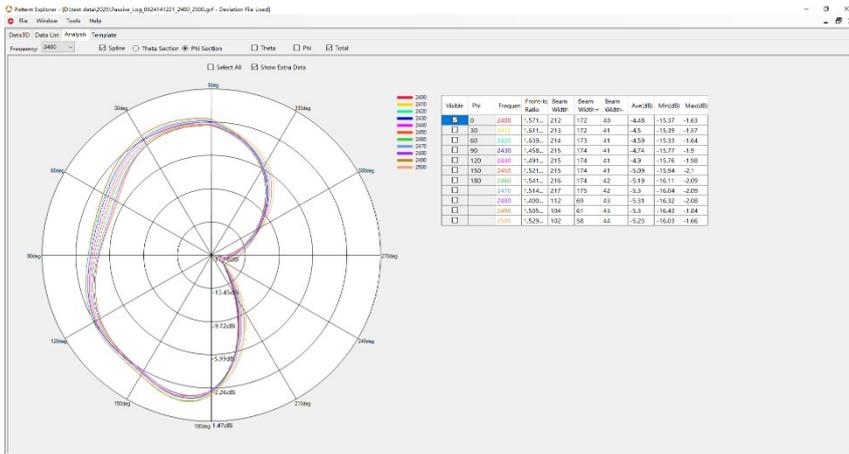3D Antenna radiation pattern:

Antenna radiation pattern:

Theta=90.00deg

Phi=90.00deg

Phi=0.00deg

II：Active OTA data of antenna

free			
	Channel	TRP（dBm）	TIS（dBm）
BT	CH 0	2.5	-87.8
	CH 39	3.0	-88.2
	CH 78	2.3	-87.4

11M	Channel	TRP（dBm）	TIS（dBm）
WiFi B	CH 1	5.3	-83.1
	CH 7	6.2	-81.9
	CH 13	6.3	-83.4

54M	Channel	TRP（dBm）	TIS（dBm）
WiFi G	CH 1	7.2	-70.6
	CH 7	8.3	-70.2
	CH 13	3.2	-71.6

The prototype is on top of the charging case			
	Channel	TRP（dBm）	TIS（dBm）
BT	CH 0	4.1	-89.2
	CH 39	4.8	-90.1
	CH 78	4.0	-89.4

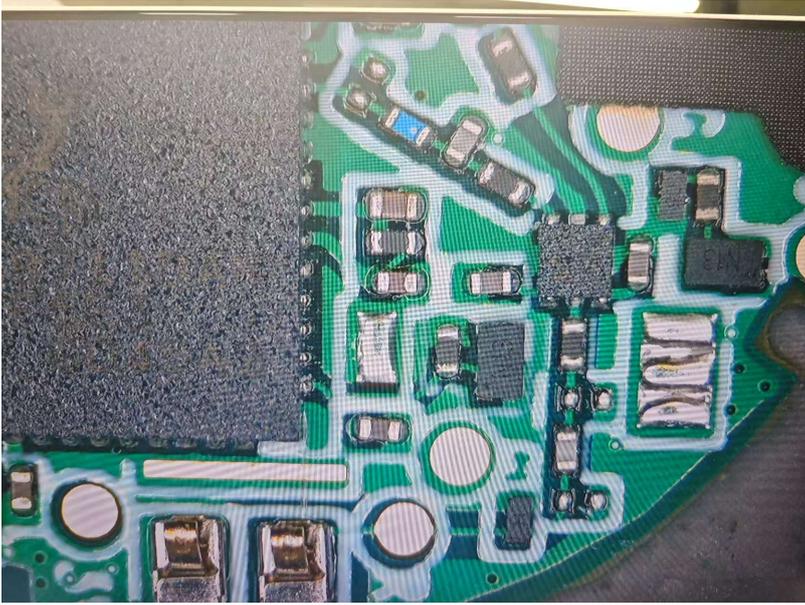| 11M	Channel	TRP（dBm）	TIS（dBm）
WiFi B	CH 1	7.7	-85.0
	CH 7	8.0	-83.9
	CH 13	8.3	-86.5

54M	Channel	TRP（dBm）	TIS（dBm）
WiFi G	CH 1	9.8	-72.3
	CH 7	10.4	-71.6
	CH 13	5.0	-73.2

OTA Standard Chamber

III：Matching circuit

remarks:The original antenna matching of the motherboard has not been modified.

深圳市思讯通信技术有限公司

Ⅳ： Structure file

Note: LAP process: radium engraving + plating (cu:7-9um, Ni:1-3um)

21.06±0.2

22.18±0.2

CCD32V8

		Material no	Date	Model	D3200
				Type	LDS antenna
		Design	Wu	Page	1/1
		Material		Review	THQ
		Unit	mm	Version	R:A

LDS line length

Note tolerances see at the end of the standard

the third angle projection method

⊕ 0.03
⊥ 0.02
∠ 0.04
// 0.02
○ 0.02

Scale   Fit

ShenZhen Cicent Communication Technology CO.,Ltd

Cicent