



Antenna Part Specification

Project name:	25X7
Material category:	BLE antenna
Antenna type:	PIFA
Manufacturer:	Shenzhen Cicent Communication Technology Co., Ltd.
Manufacturer address:	505-506 ,ABlock,Donglian Building,Chuangye 2 road,Baoan District,Shenzhen,Guangdong,P.R china
Version:	V3.0
Date:	2025.07.22



Contents

I: The report of passive data 3
 II: 3D Active test report of antenna 6
 III: Matching circuit..... 6
 IV: Antenna structure diagram file 7

Change record			
Compile / change date	Reason for change	Changed content	Version
2025.05.07	First edition	First edition	V1.0
2025.05.28	Antenna modification	Antenna modification	V2.0
2025.07.22	Antenna optimization	Update of image files and RF data	V3.0

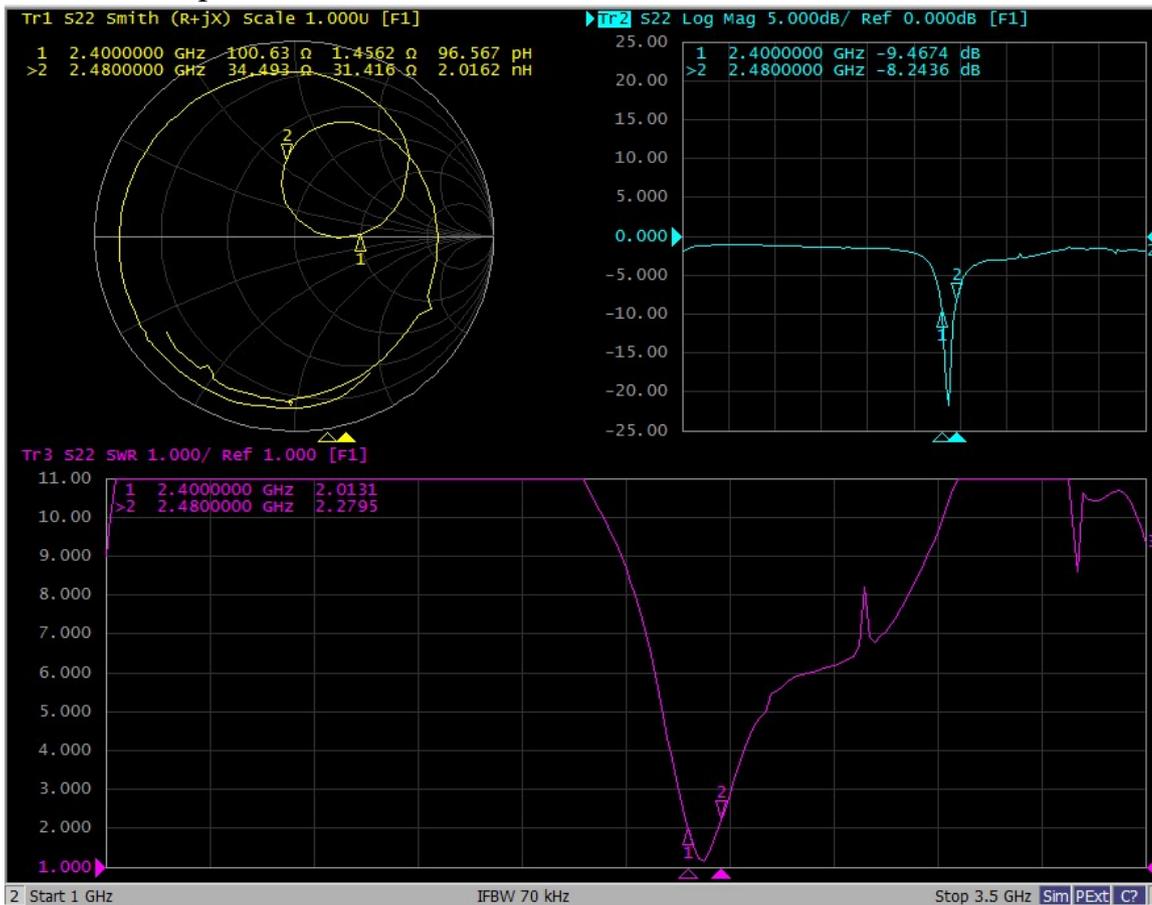


I: The report of passive data



Agilent E5071C

antenna S11 parameter:

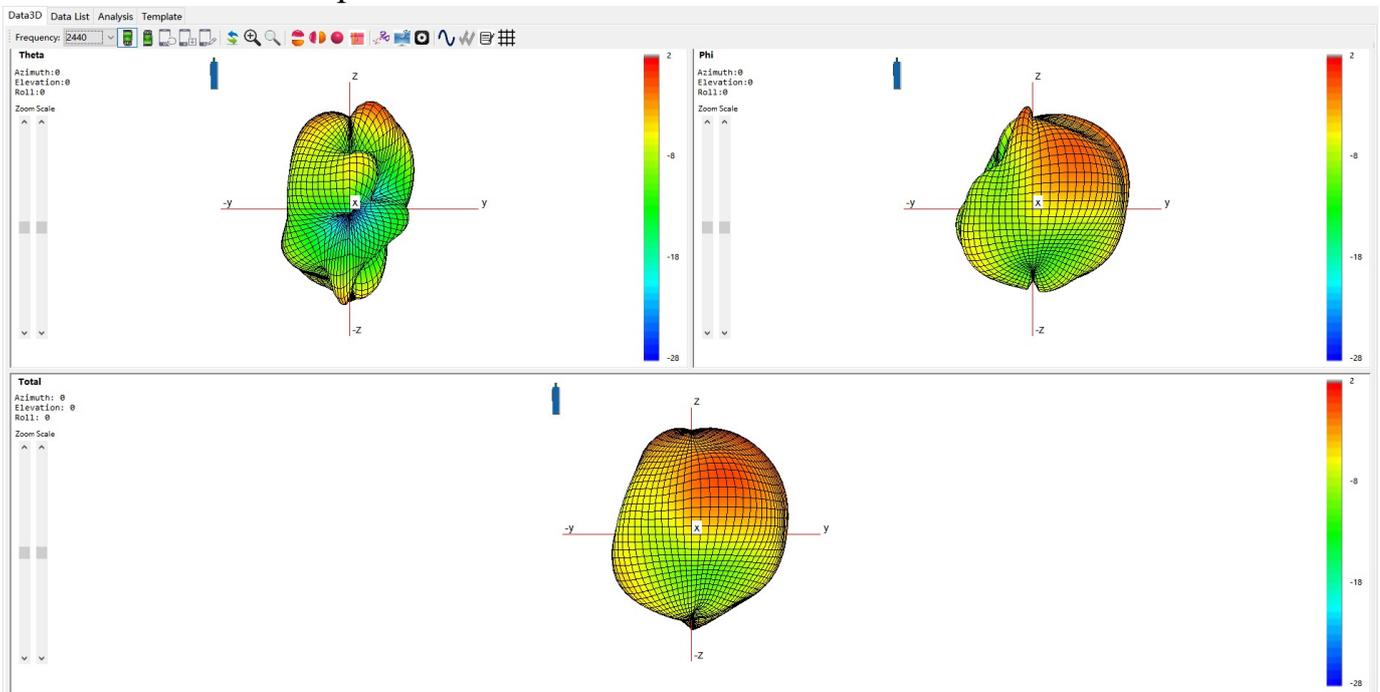




Efficiency:

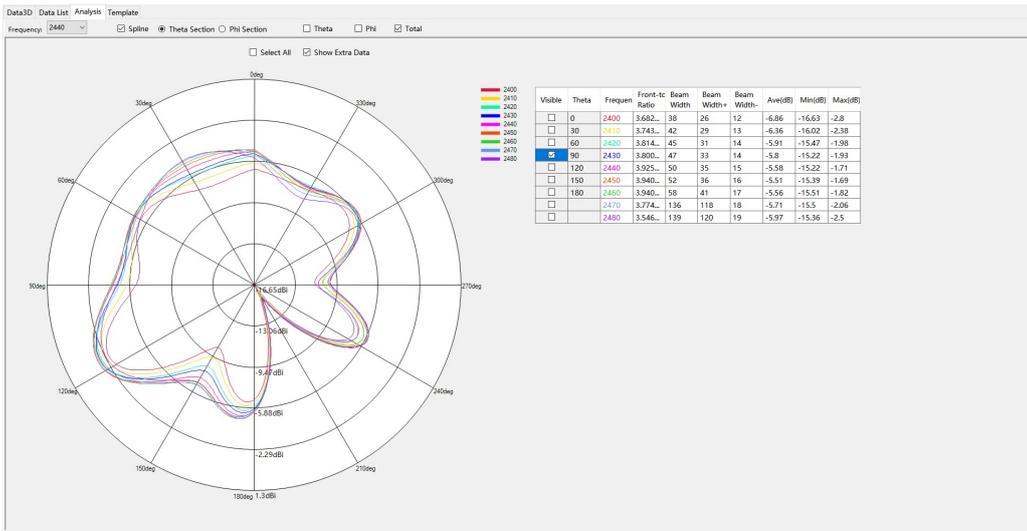
2400-2480 MHz			
Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain (dBi)
2400	36.9	-4.3	0.0
2410	37.5	-4.3	0.4
2420	37.9	-4.2	0.8
2430	38.3	-4.2	1.1
2440	39.5	-4.0	1.2
2450	40.2	-4.0	1.3
2460	41.5	-3.8	1.2
2470	39.7	-4.0	1.0
2480	37.9	-4.2	0.8
AVG	38.8	-4.1	0.8

3D Antenna radiation pattern:

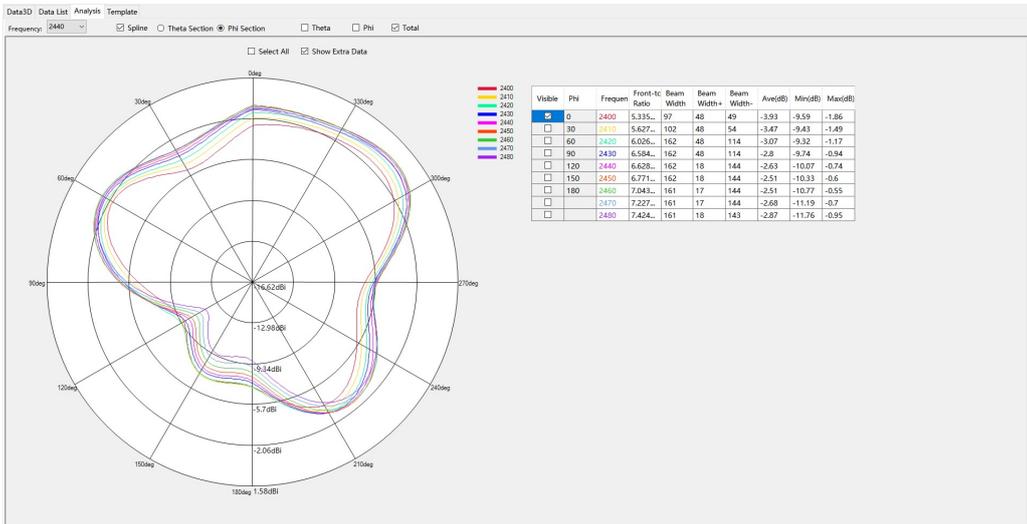




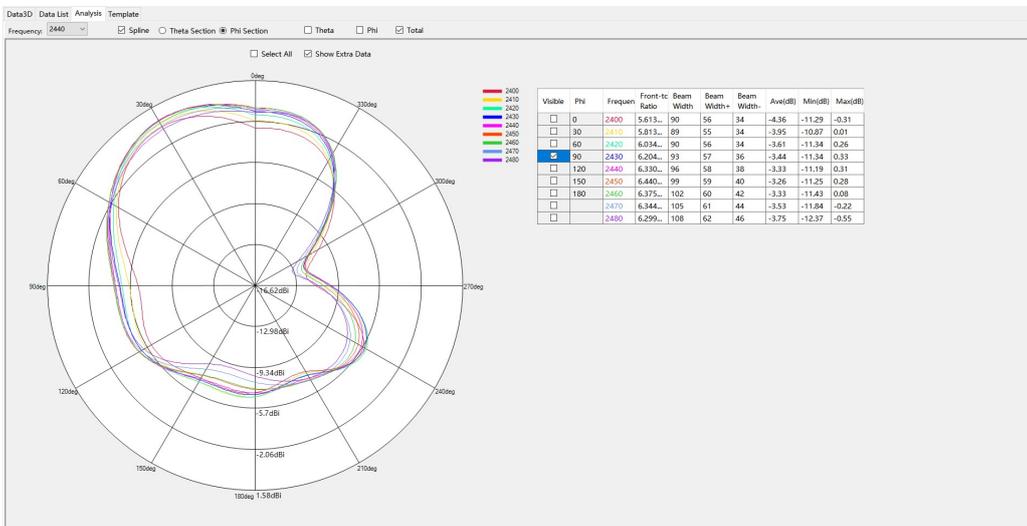
2D Antenna radiation pattern: Theta=90°



Phi=0°



Phi=90°





II: 3D Active test report of antenna

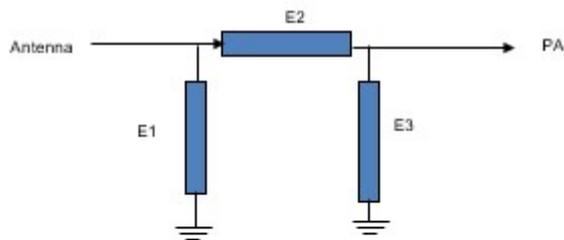
No-load state			
OTA	Channel	TRP (dBm)	TIS (dBm)
BLE	CH 0	5.3	-90.2
	CH 20	6.7	-93.5
	CH 39	5.8	-93.3

Load status			
OTA	Channel	TRP (dBm)	TIS (dBm)
BLE	CH 0	5.3	-90.0
	CH 20	6.7	-93.0
	CH 39	5.6	-92.7



OTA Standard Chamber

III: Matching circuit



Element	Value
E1(0201)	N/A
E2(0201)	0Ω
E3(0201)	N/A



IV: Antenna structure diagram file

