

Shenzhen Cicent Communication Technology Co., Ltd.

505-506, ABlock, Donglian Building, Chuangye 2 road, Baoan District, Shenzhen, Guangdong, P.R china

Antenna Specification

Project Number: P79

Customer Part Number: 1001500239、 1001500240

Product Name: P79 Antenna

Cicent Project Number: SX250518-279E

Innowave Signature:

Issued by	Review	Approval	Date
Chen Shigui	Liu Jianli	Hong Yangxin	2025/07/23

Part I、 Antenna Basic Parameter

1.1 Type of Antenna: FPC Antenna

1.2 Model: P79

1.3 Dimension: Length, Width and Thickness are $22.99\text{ mm} \times 3.76\text{ mm} \times 0.11\text{mm}$

1.4 Frequency range: 2400MHz ~ 2500MHz

1.5 Gain: Left Ear, -3.02 dBi; Right Ear, -2.59 dBi

1.6 VSWR: < 2.8

1.7 Polarization: Linear

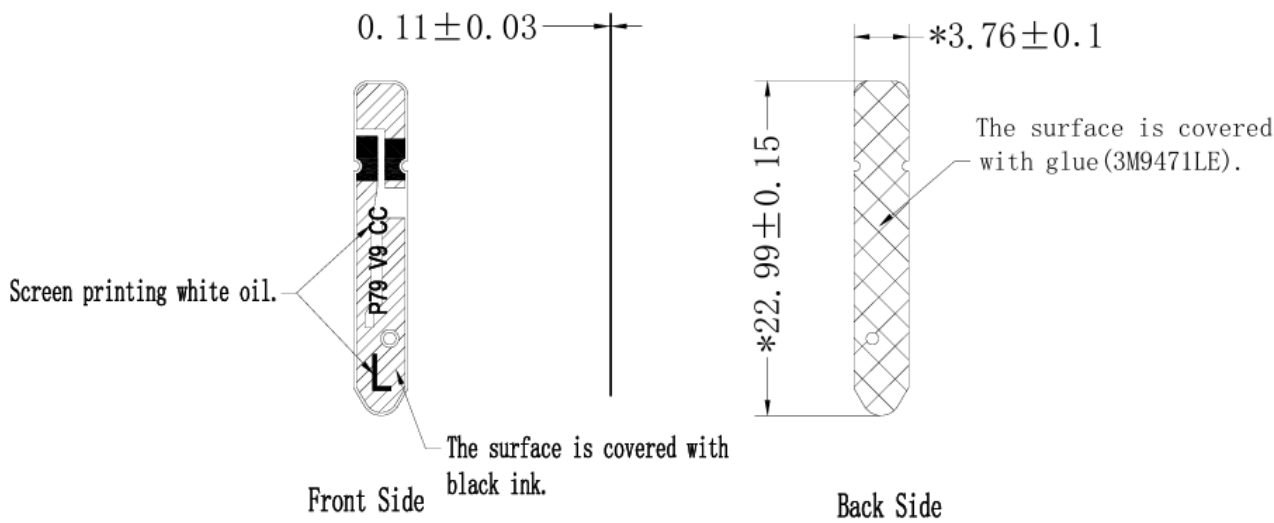
1.8 Radiation: Omni-directional

1.9 Manufacturer: Shenzhen Cicent Communication Technology Co., Ltd.

1.10 Address: 505-506 ,A Block,Donglian Building,Chuangye 2 road,Baoan District,Shenzhen,Guangdong,P.R china

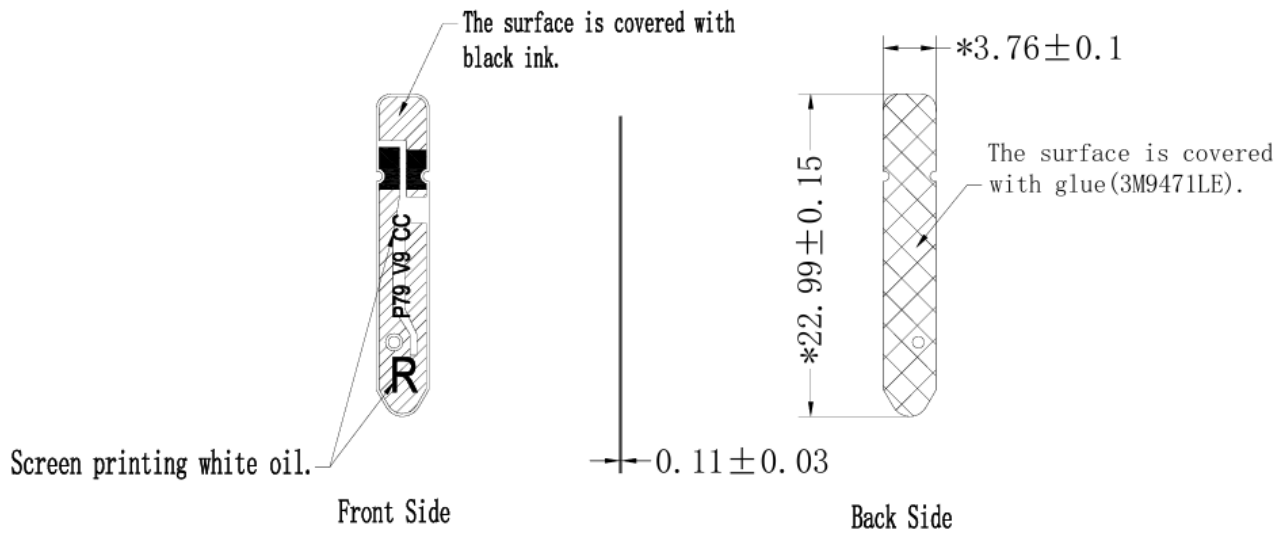
Part II、Antenna Dimension

2.1 Left Ear Antenna Drawings



Left ear antenna drawings, unit: mm

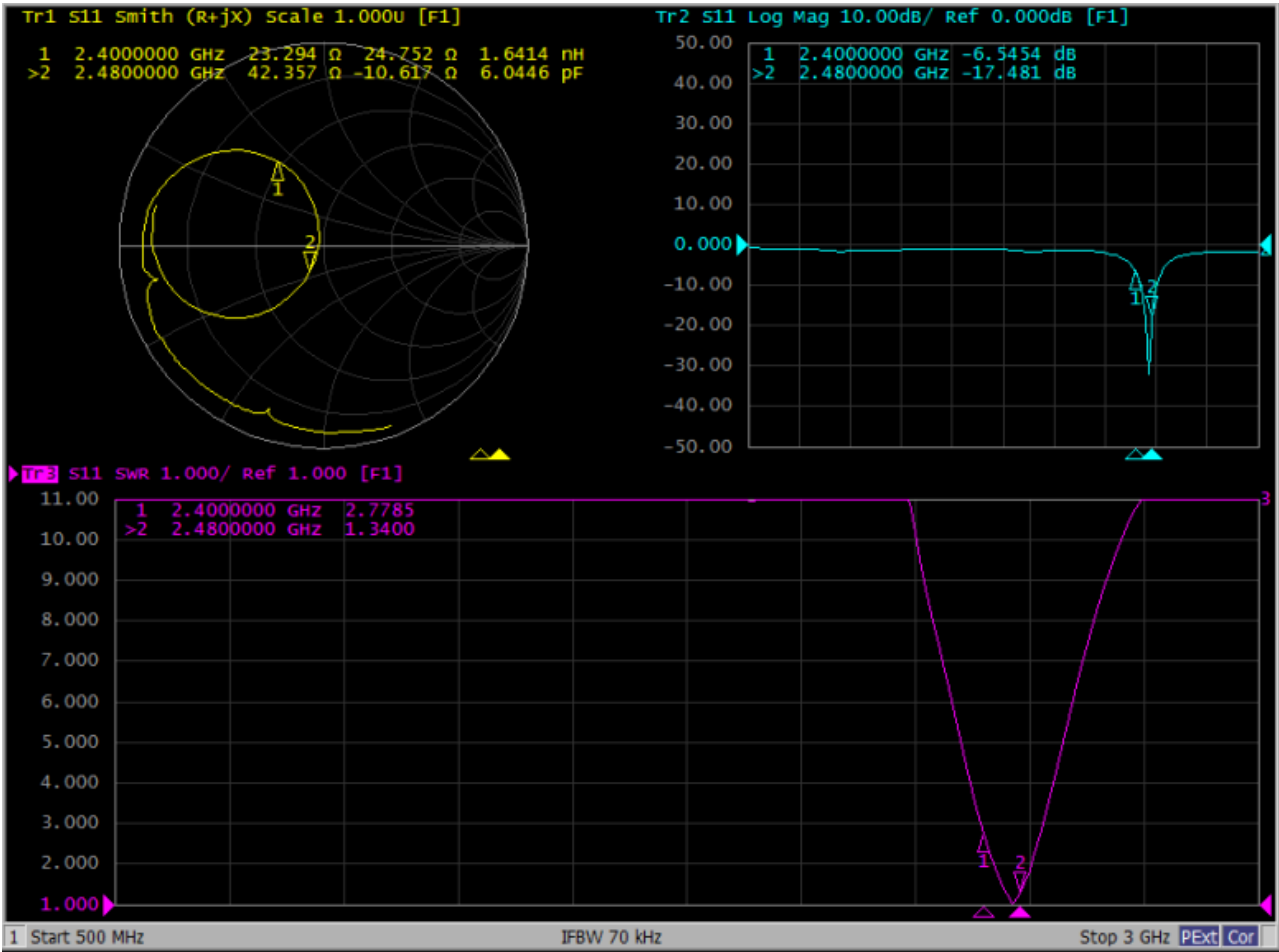
2.2 Right Ear Antenna Drawings



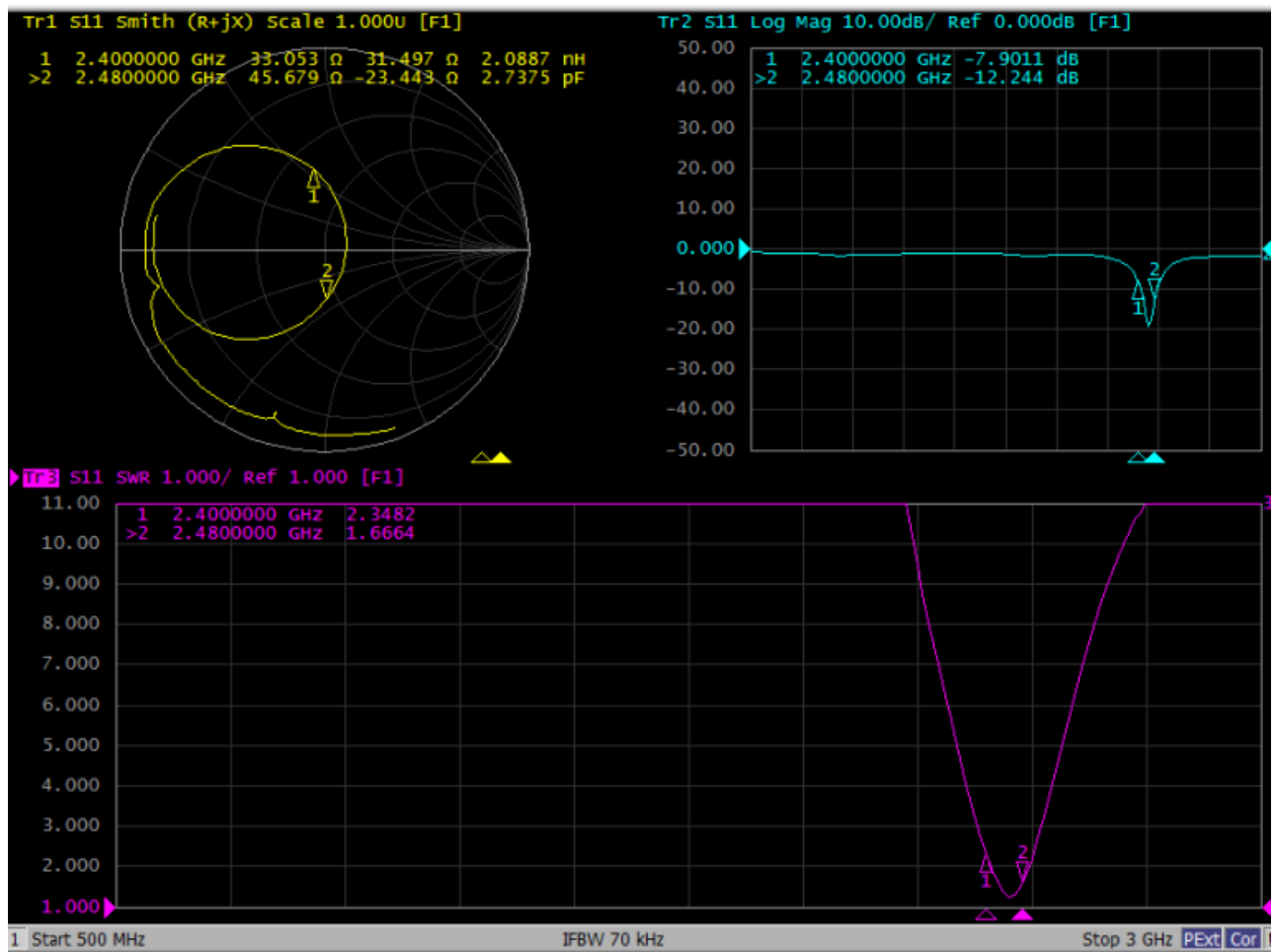
Right ear antenna drawings, unit: mm

Part III、Electricity Performance

3.1 Return Loss



Left ear (Free space)



Right ear (Free space)

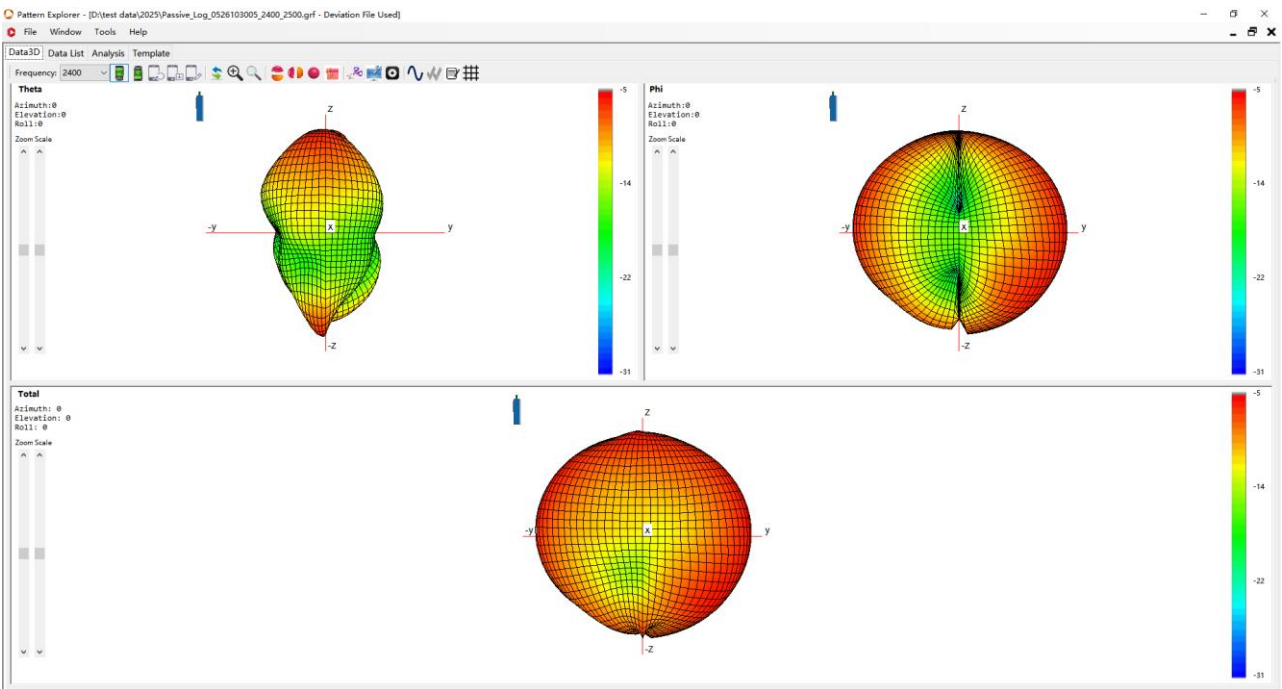
3.2 Antenna Efficiency

Left ear (Free space)			
Frequency / MHz	Efficiency / %	Efficiency / dB	Gain / dBi
2400	21.9%	-6.61	-4.03
2410	23.5%	-6.30	-3.69
2420	24.7%	-6.07	-3.41
2430	25.9%	-5.86	-3.20
2440	26.5%	-5.76	-3.07
2450	26.6%	-5.76	-3.02
2460	26.3%	-5.80	-3.08
2470	24.8%	-6.05	-3.33
2480	23.3%	-6.33	-3.60
Average	24.8%	-6.06	-3.38

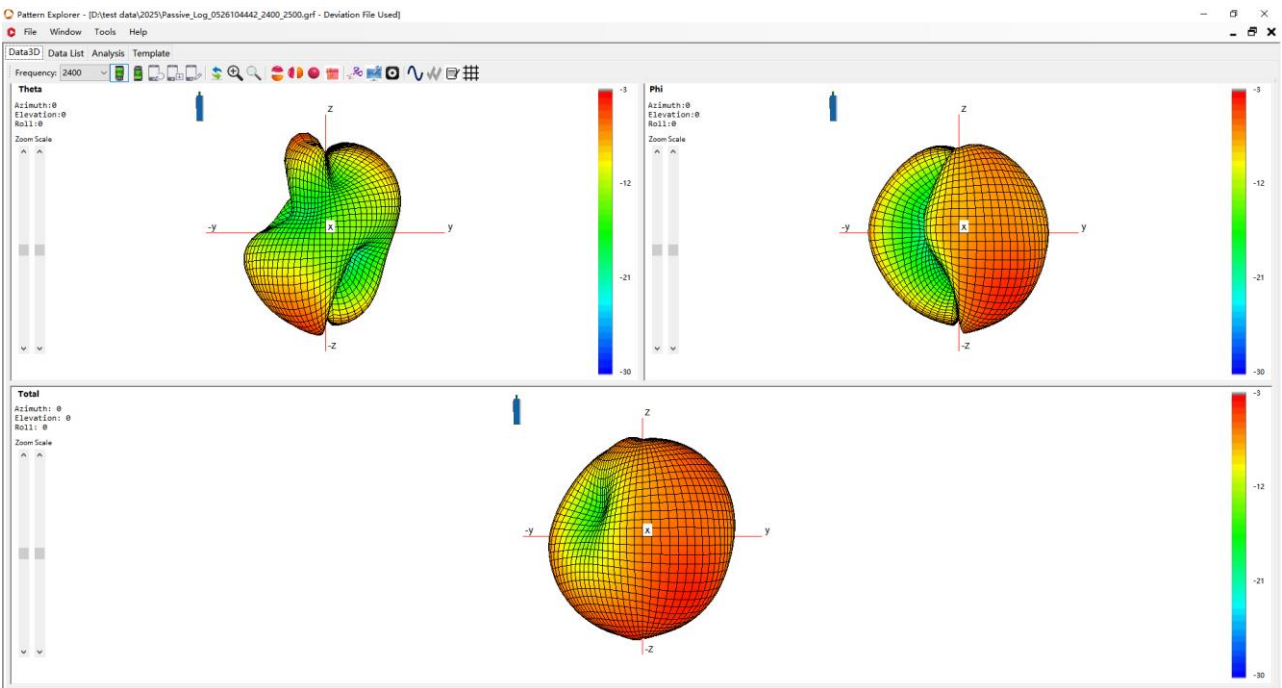
Right ear (Free space)			
Frequency / MHz	Efficiency / %	Efficiency / dB	Gain / dBi
2400	23.9%	-6.21	-3.31
2410	25.7%	-5.91	-2.94
2420	26.7%	-5.74	-2.79
2430	27.2%	-5.66	-2.66
2440	27.2%	-5.65	-2.59
2450	26.7%	-5.73	-2.66
2460	26.2%	-5.82	-2.77
2470	25.3%	-5.97	-2.89
2480	23.6%	-6.26	-3.27
Average	25.8%	-5.88	-2.88

3.3 Radiation Pattern

3.3.1 3D Pattern

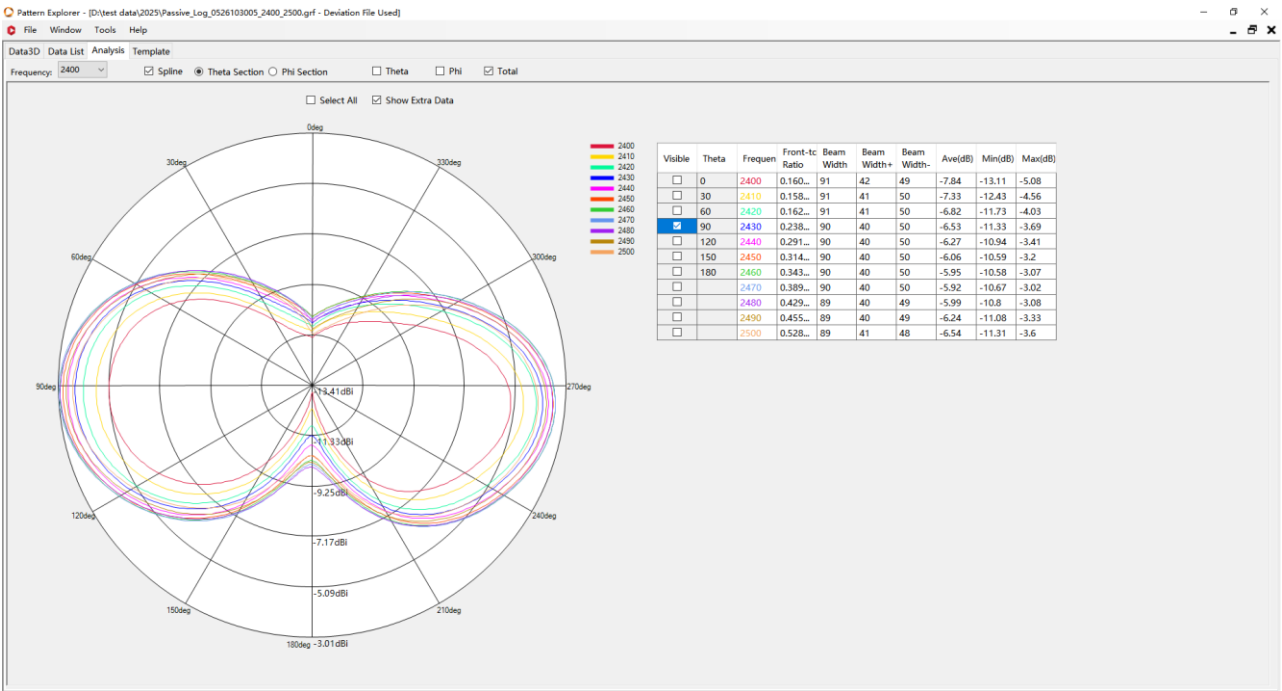


Left Ear 3D Antenna Pattern, Free space, unit: dBi

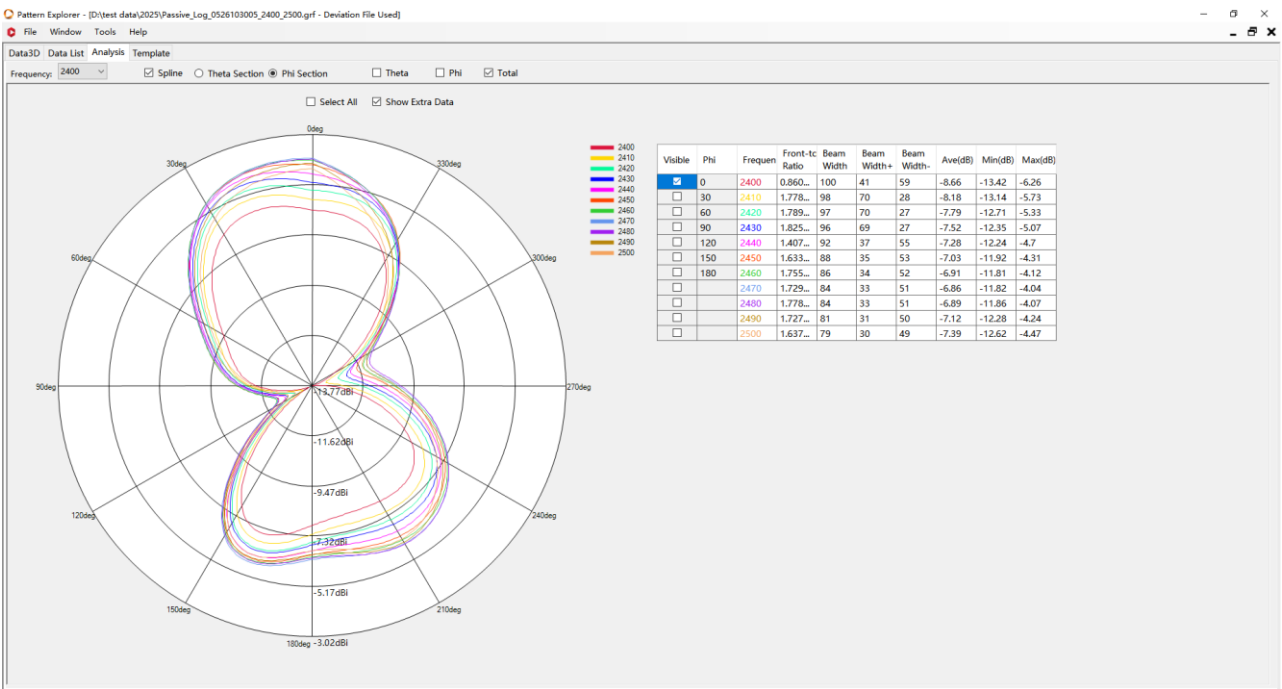


Right Ear 3D Antenna Pattern, Free space, unit: dBi

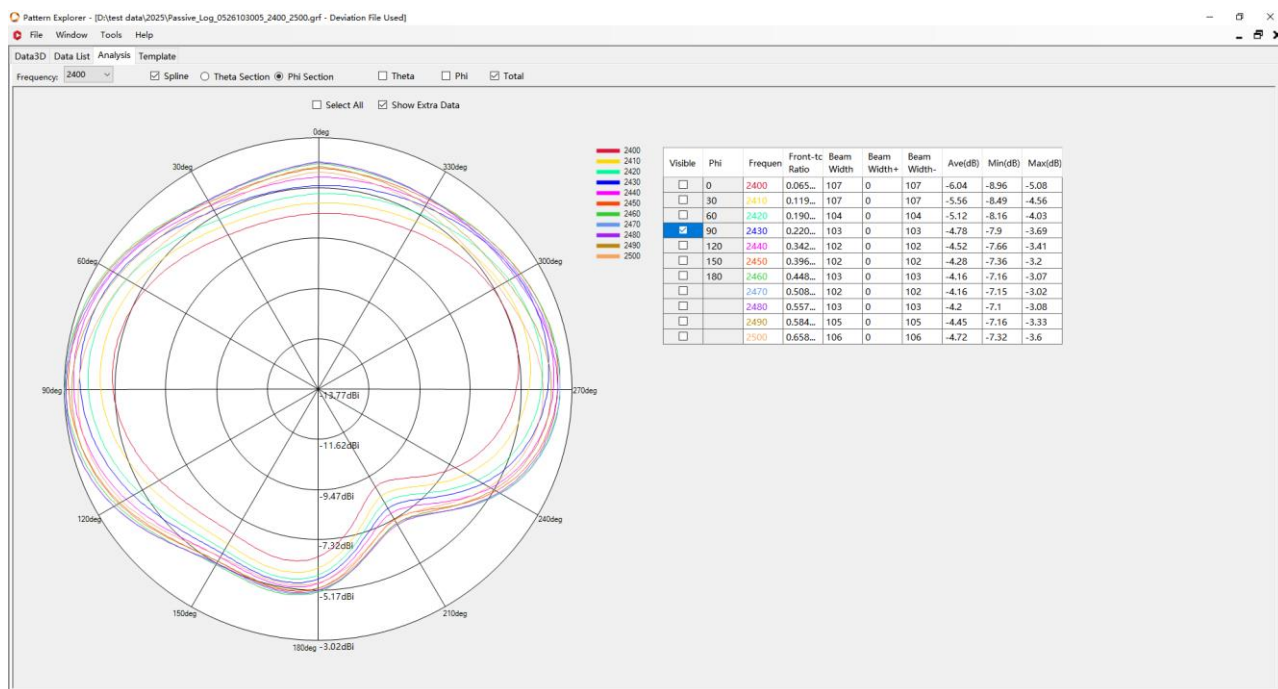
3.3.2 2D Pattern



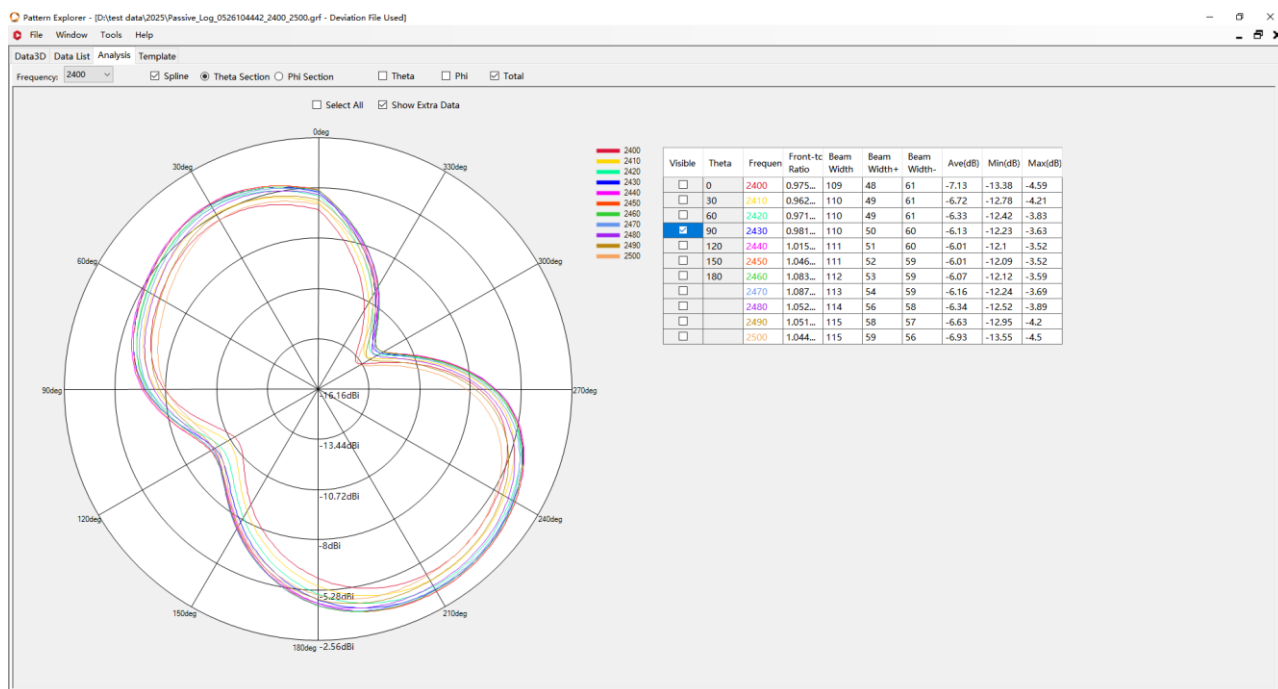
Theta=90° , Left Ear 2D Antenna Pattern, Free space, unit: dBi



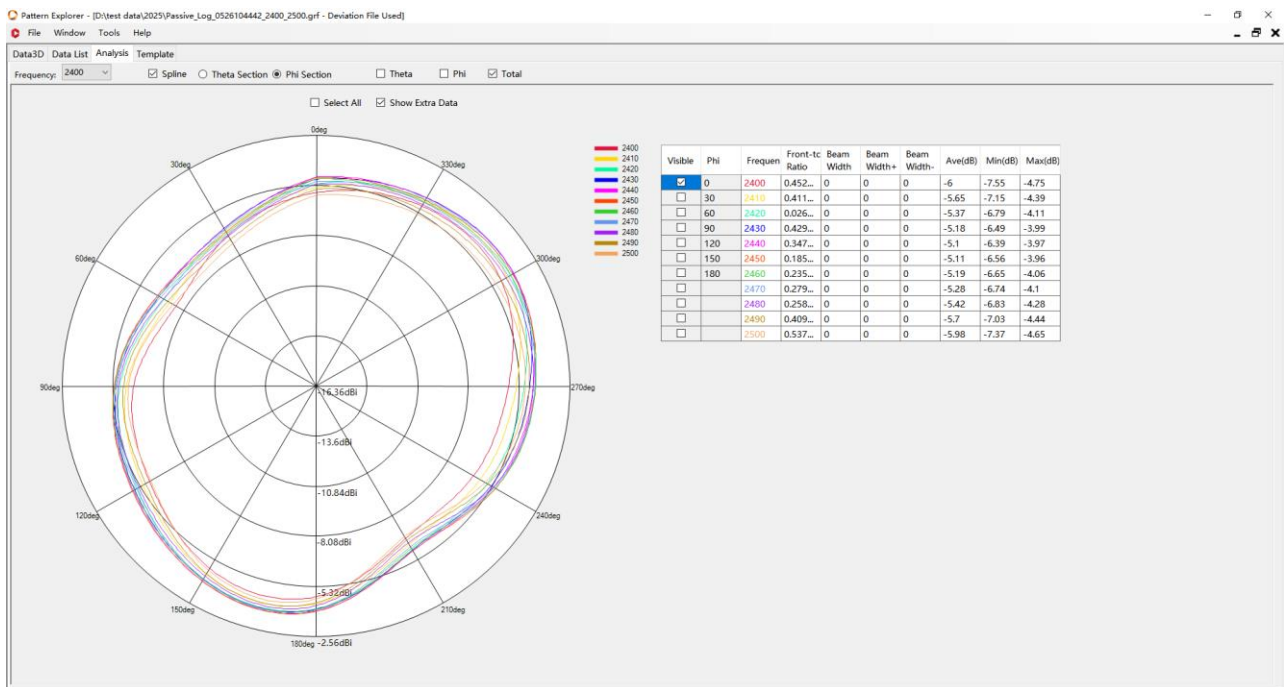
Phi=0° , Left Ear 2D Antenna Pattern, Free space, unit: dBi



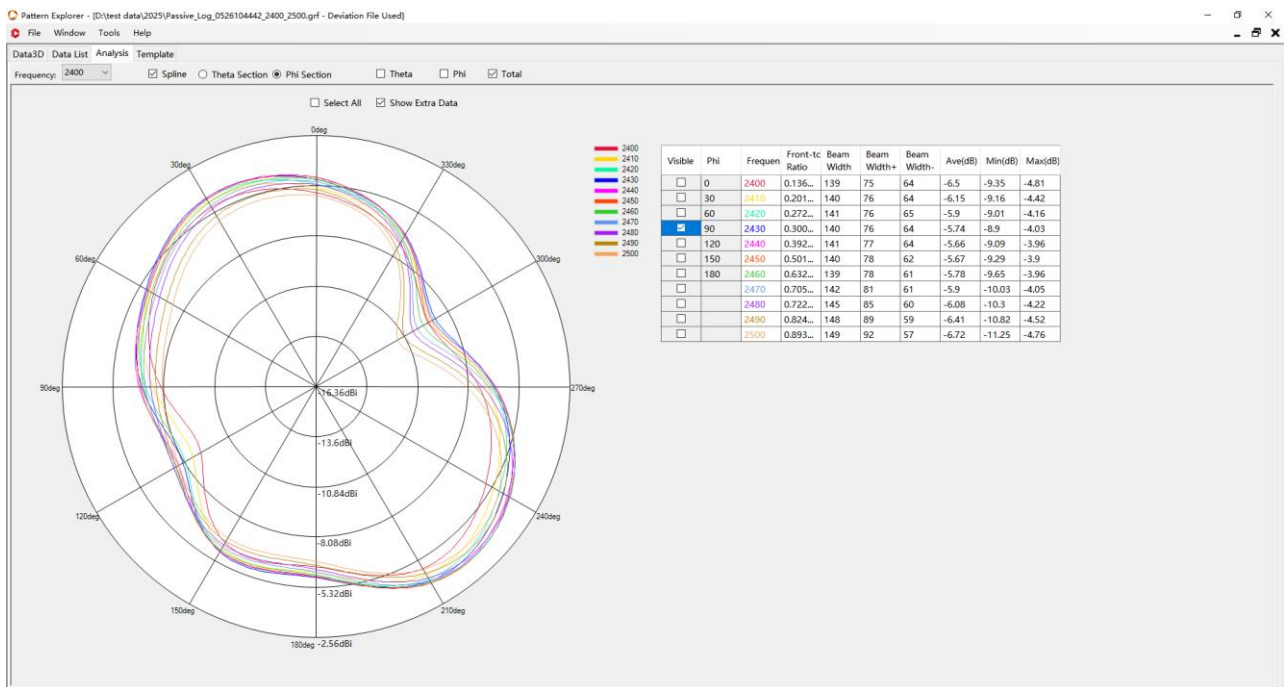
Phi=90° , Left Ear 2D Antenna Pattern, Free space, unit: dBi



Theta=90° , Right Ear 2D Antenna Pattern, Free space, unit: dBi



Phi = 0° , Right Ear 2D Antenna Pattern, Free space, unit: dBi



Phi = 90° , Right Ear 2D Antenna Pattern, Free space, unit: dBi

Part IV、 Test Equipment

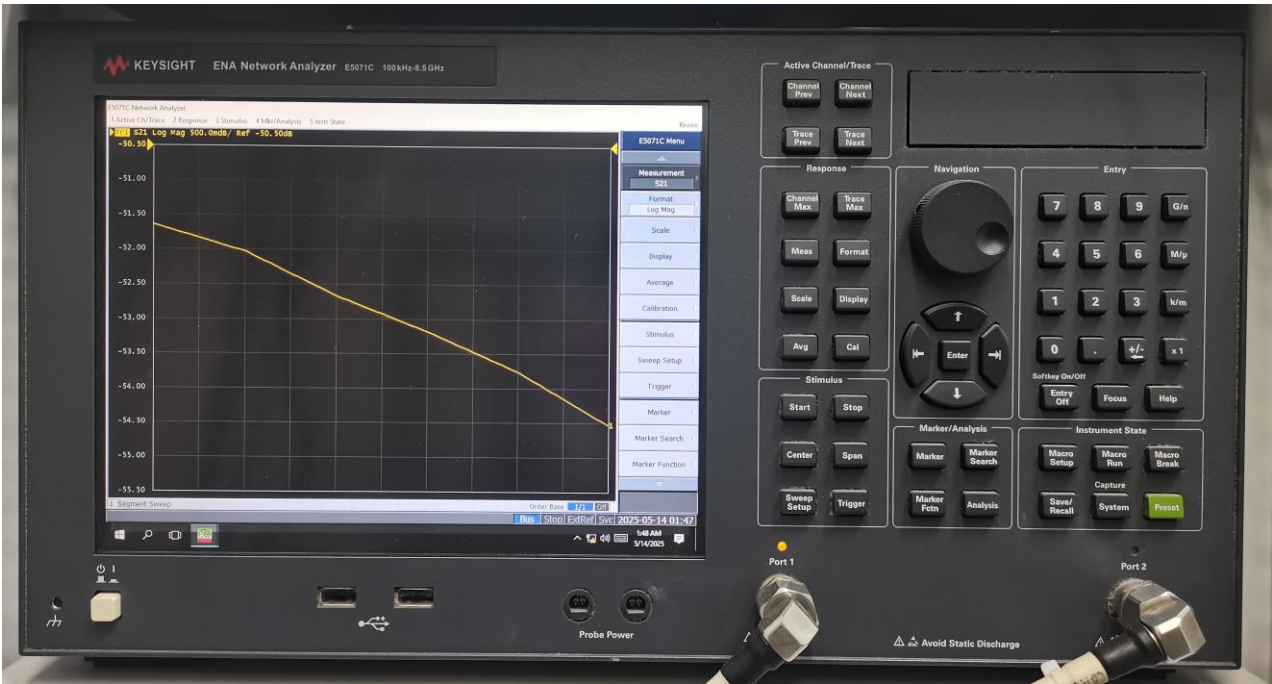
4.1 General Test RayZone1800 Test System



Model: RayZone 1800

Calibration Date: 2024/11/5

4.2 Test Equipment



Model: Keysight ENA Network Analyzer E5071C
Calibration Date: 2024/11/5

4.3 Testing Software



Testing Software Name: Libra