

Shenzhen Cicent Communication Technology Co., Ltd.

Antenna Specification

Project Number: A3876

Customer Part Number:

Product Name: A3876 Antenna

Cicent Project Number: SX240323-279E

Innowave Signature:

Issued by	Review	Approval	Date
Zhong Huazhi	Zheng xing	Wu qunyan	2025/08/26

Part I、 Antenna Basic Parameter

1.1 Type of Antenna: FPC Antenna

1.2 Model: A3876

1.3 Dimension: Length, Width and Thickness are $21.47 \times 12.70 \times 0.12\text{mm}$

1.4 Frequency range: 2400MHz ~ 2500MHz

1.5 Gain: Left Ear, -4.29dBi; Right Ear, -2.91dBi

1.6 VSWR: ≤ 2

1.7 Return Loss: $\leq -8\text{dB}$

1.8 Polarization: Linear

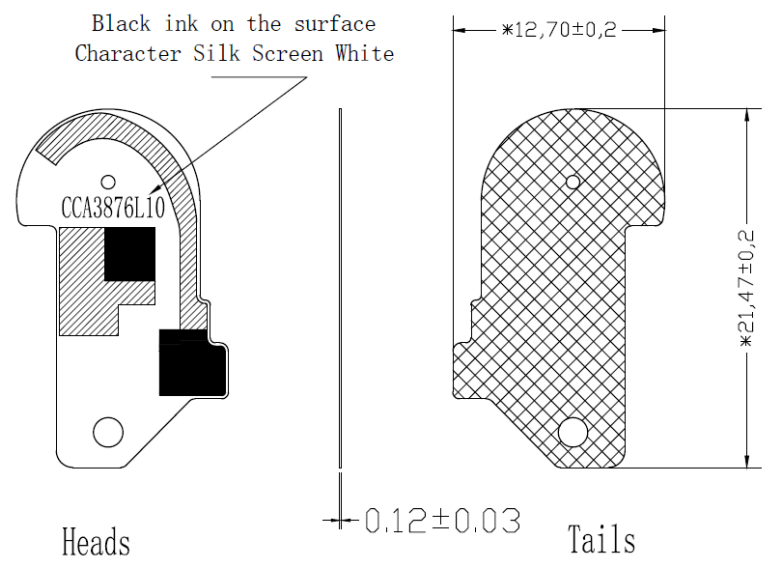
1.9 Radiation: Omni-directional

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

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

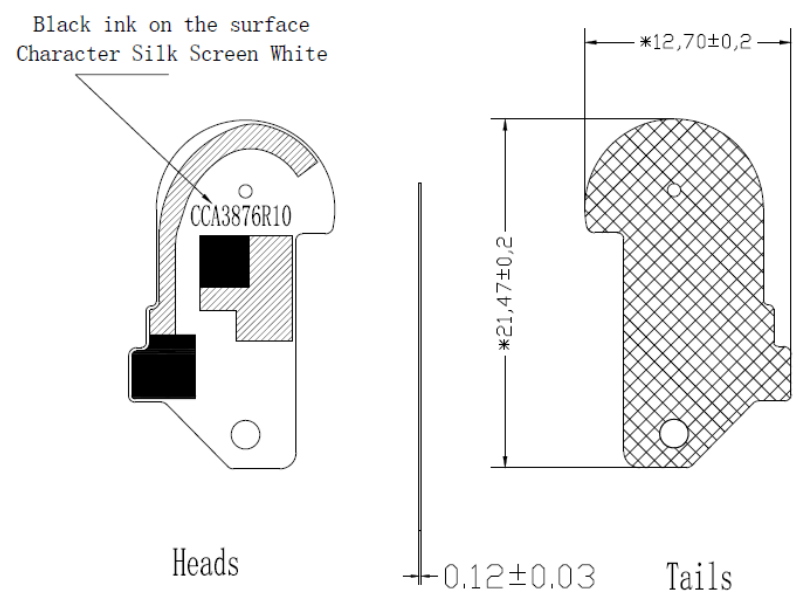
Part II、 Antenna Dimension

2.1 Left Ear Antenna Drawings



Left ear antenna drawings, unit: mm

2.2 Right Ear Antenna Drawings

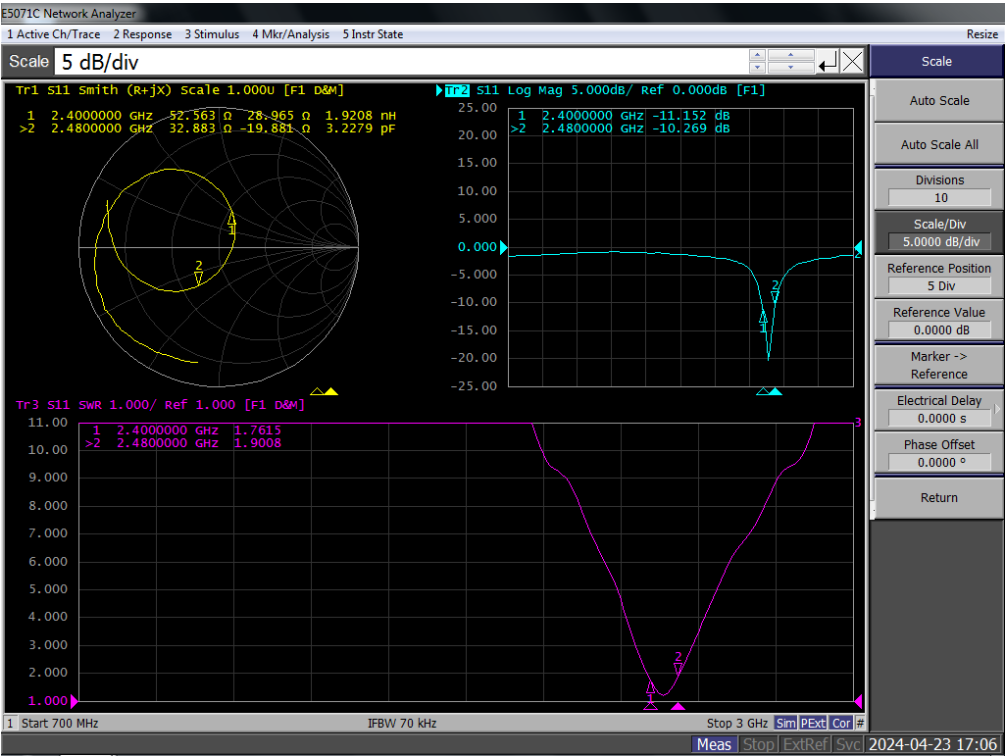


Right ear antenna drawings, unit: mm

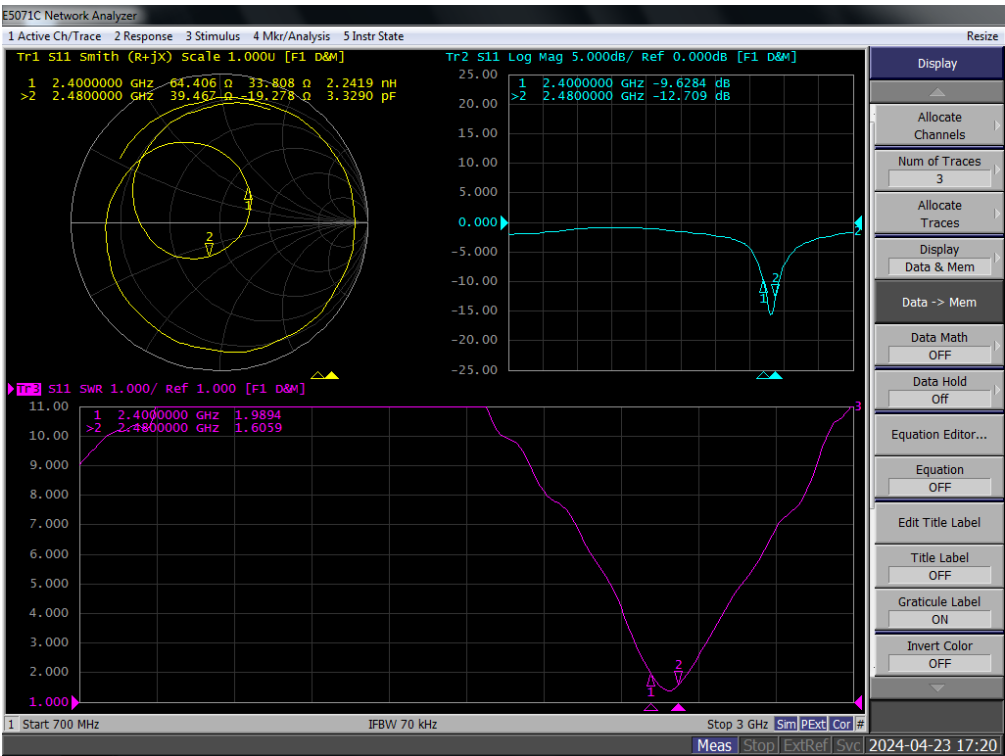
Part III、Electricity Performance

3.1 Return Loss

The figure below shows the return loss value of the antenna operating band.



Left ear



Right ear

3.2 Antenna Efficiency

Left Ear			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency(%)
2400	-4.86	-7.14	19.34
2410	-4.52	-6.85	20.66
2420	-4.34	-6.66	21.60
2430	-4.29	-6.71	21.33
2440	-4.45	-6.91	20.38
2450	-4.40	-6.89	20.44
2460	-4.63	-7.17	19.20
2470	-4.51	-7.12	19.40
2480	-4.54	-7.10	19.50
2490	-5.03	-7.59	17.40
2500	-5.41	-8.05	15.68
Average	-4.6	-7.1	19.5

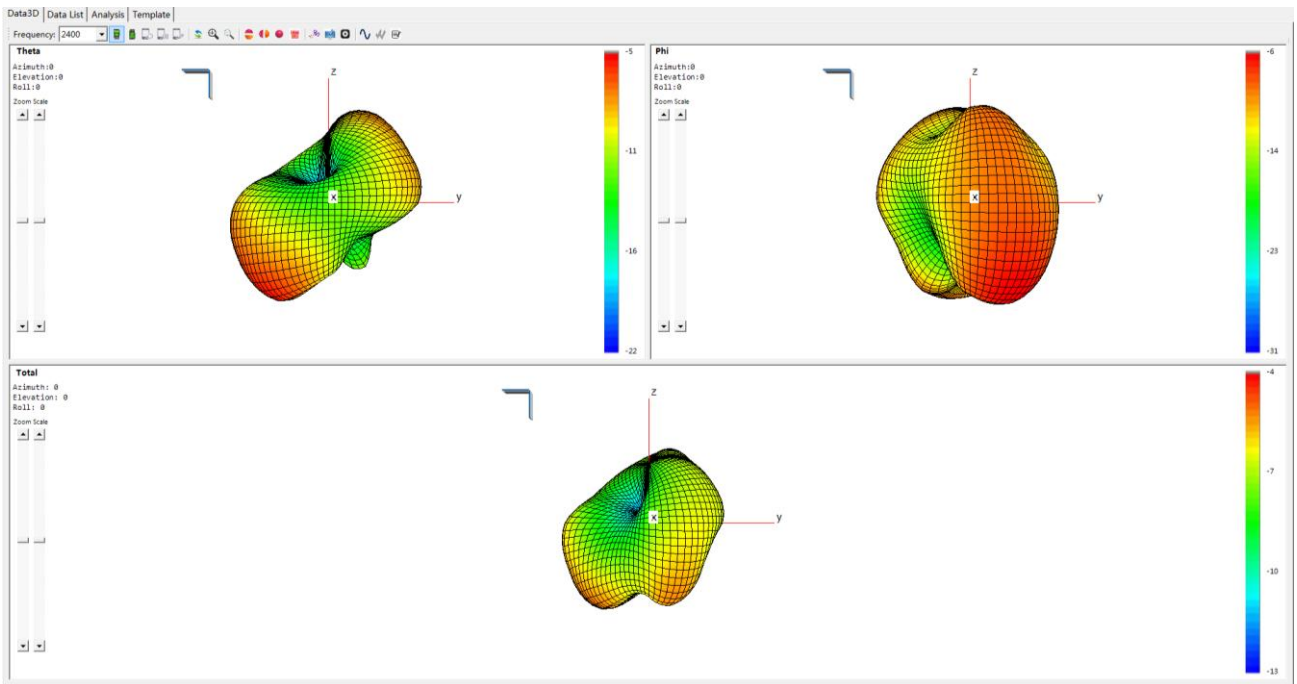
Free space efficiency

Right Ear			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency(%)
2400	-5.47	-8.20	15.14
2410	-4.91	-7.62	17.32
2420	-4.50	-7.09	19.55
2430	-4.09	-6.83	20.73
2440	-3.83	-6.69	21.43
2450	-3.47	-6.41	22.84
2460	-3.33	-6.44	22.71
2470	-3.07	-6.25	23.69
2480	-2.91	-6.16	24.21
2490	-3.18	-6.55	22.11
2500	-3.50	-6.96	20.14
Average	-3.8	-6.8	20.9

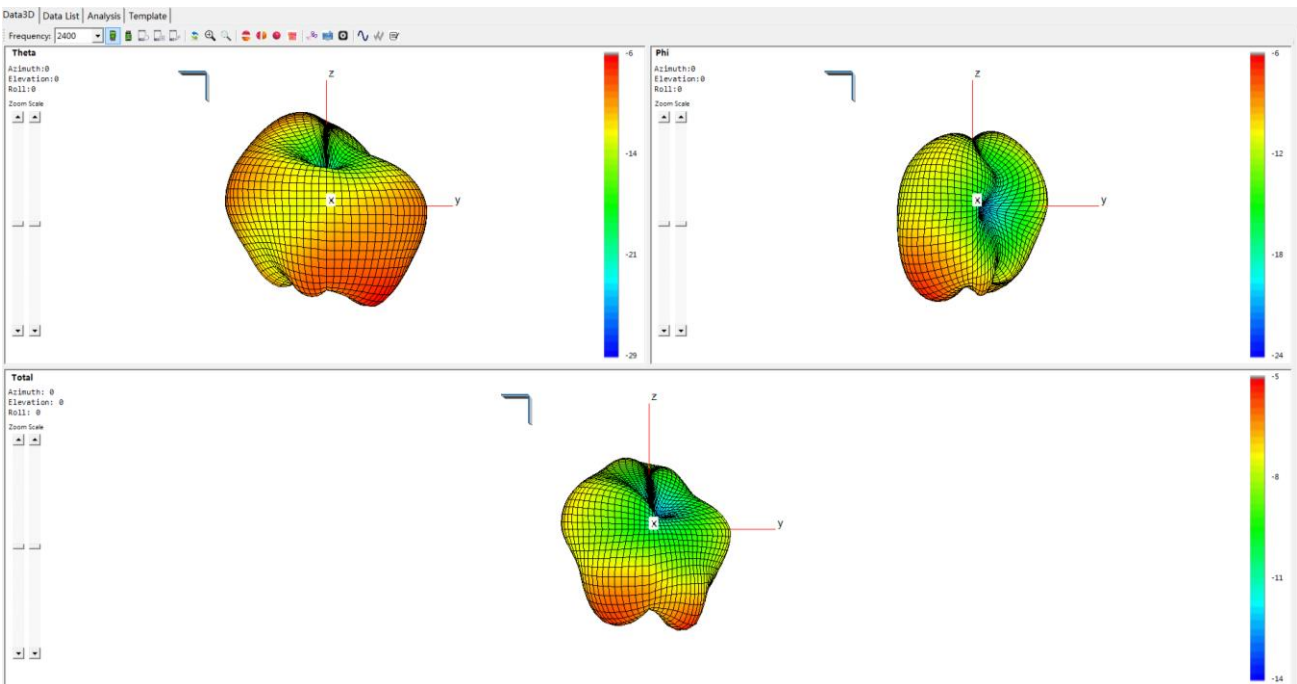
Free space efficiency

3.3 Radiation Pattern

3.3.1 3D Pattern

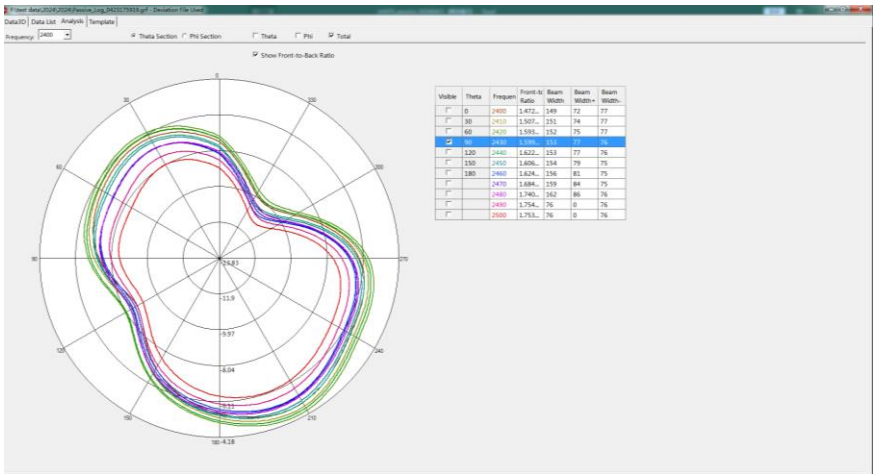


Left Ear 3D Antenna Pattern, unit: dBi

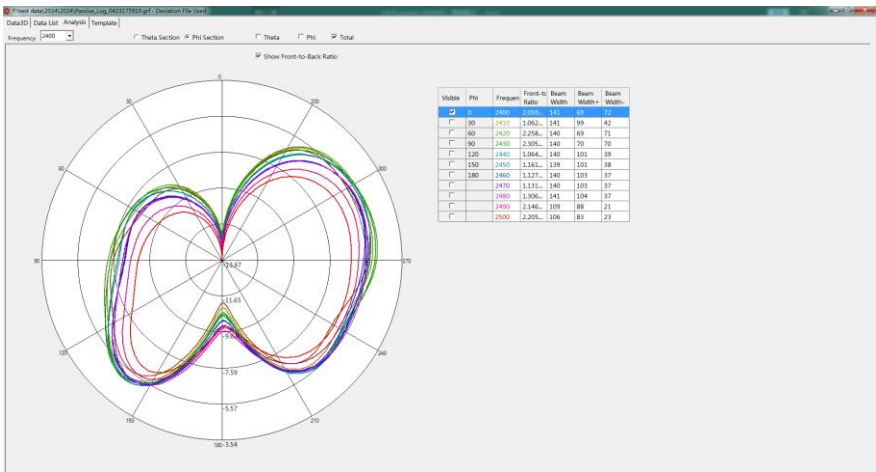


Right Ear 3D Antenna Pattern, unit: dBi

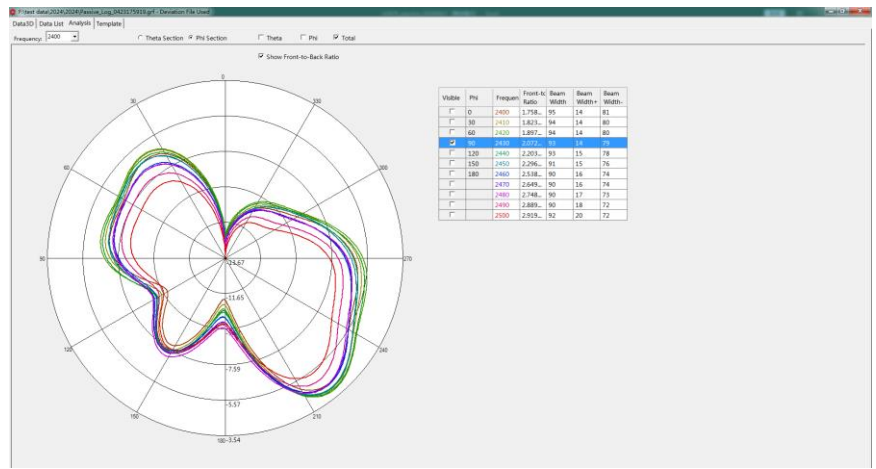
3.3.2 2D Pattern



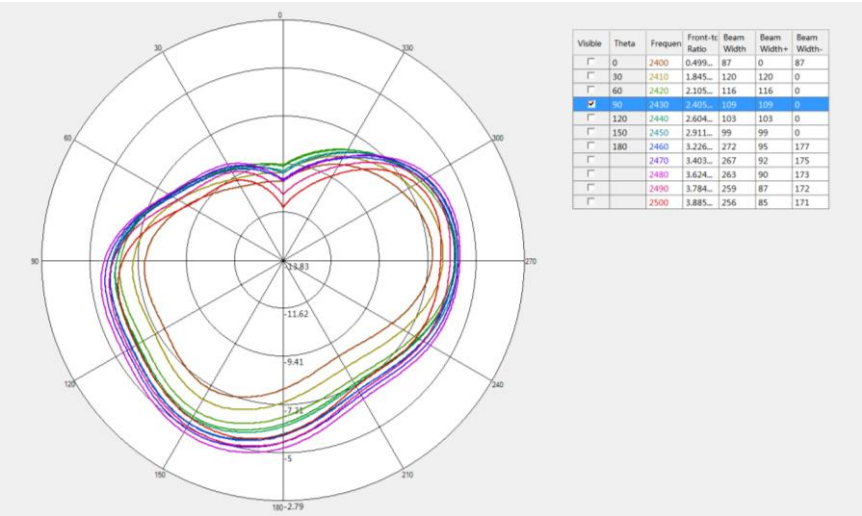
Theta=90° , Left Ear 2D Antenna Pattern, unit: dBi



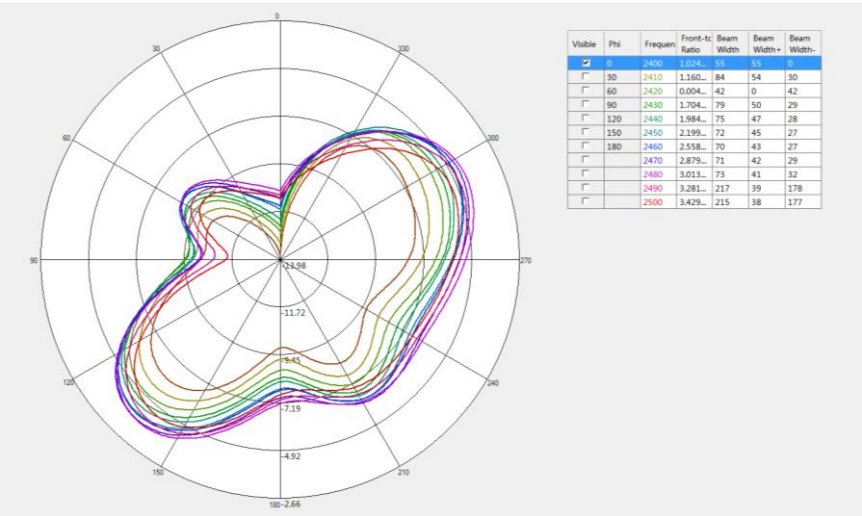
Phi=0° , Left Ear 2D Antenna Pattern, unit: dBi



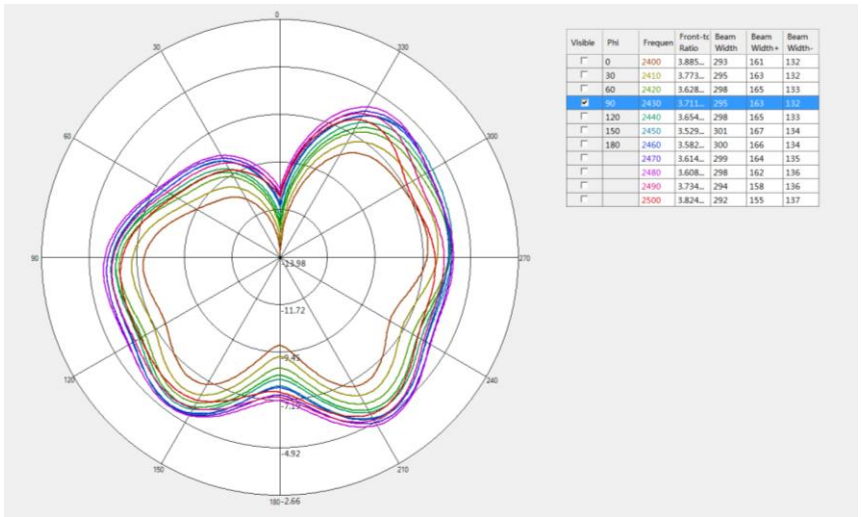
Phi=90° , Left Ear 2D Antenna Pattern, unit: dBi



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



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



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

Part IV、Test Equipment

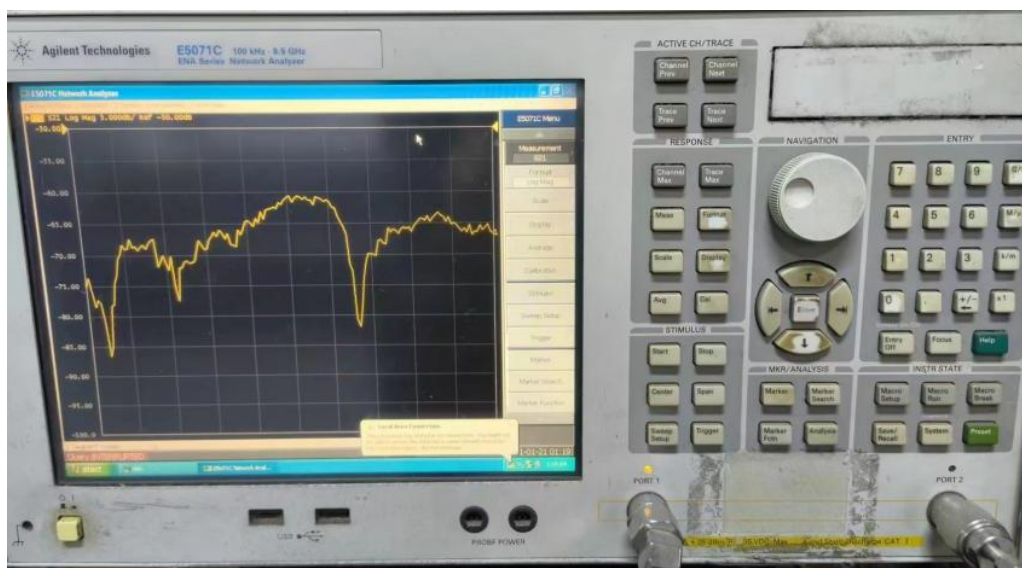
4.1 Compact OTA Test System



Model: RayZone 1800

Calibration Date: 2025/07/13

4.2 Test Equipment



Model: Agilent Technologies E5071C

Calibration Date: 2025/07/13



Model: TRANSCOM INSTRUMENTS T5260C
Calibration Date: 2025/07/13

4.3 Testing Software



Testing Software Name: Libra

4.4 Antenna Test Photo



Left Ear



Right Ear