

Shenzhen HemingWei Technology Co., Ltd

Antenna Specification

Project Number: S40

Customer Part Number:

Product Name: PCB Antenna

HemingWei Project Number: X3192

I、Antenna Basic Parameter

1.1 Type of Antenna: PCB Antenna

1.2 Model: S40

1.3 Dimension: Length and width are $18.9\text{mm} \times 7.3\text{mm}$

1.4 Frequency range: $2400\text{MHz} \sim 2500\text{MHz}$

1.5 Gain: 1.75dBi

1.6 VSWR: < 2

1.7 Return Loss: $< -10\text{dB}$

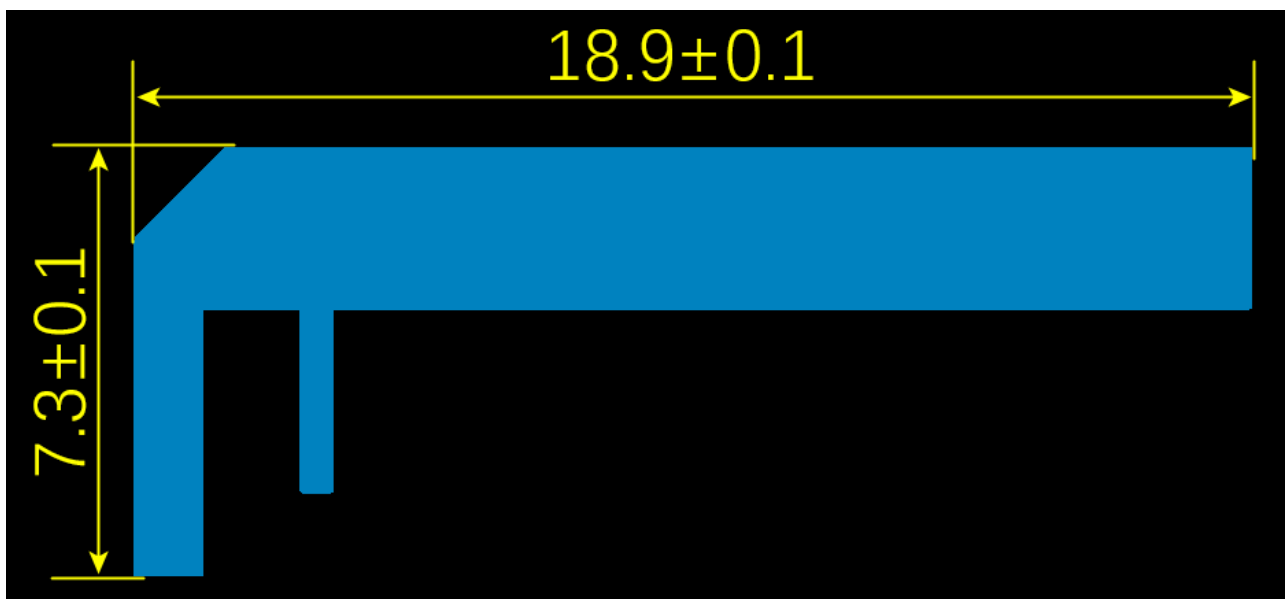
1.8 Polarization: Linear

1.9 Radiation: Omni-directional

1.10 Manufacturer: Shenzhen HemingWei Technology Co., Ltd

1.11 Address: 4th Floor, Building D, Aimet Electric Appliances (Shenzhen), No. 4
Huangfengling Industrial Avenue, Shiyan Street, Bao'an District, Shenzhen
City, Guangdong Province

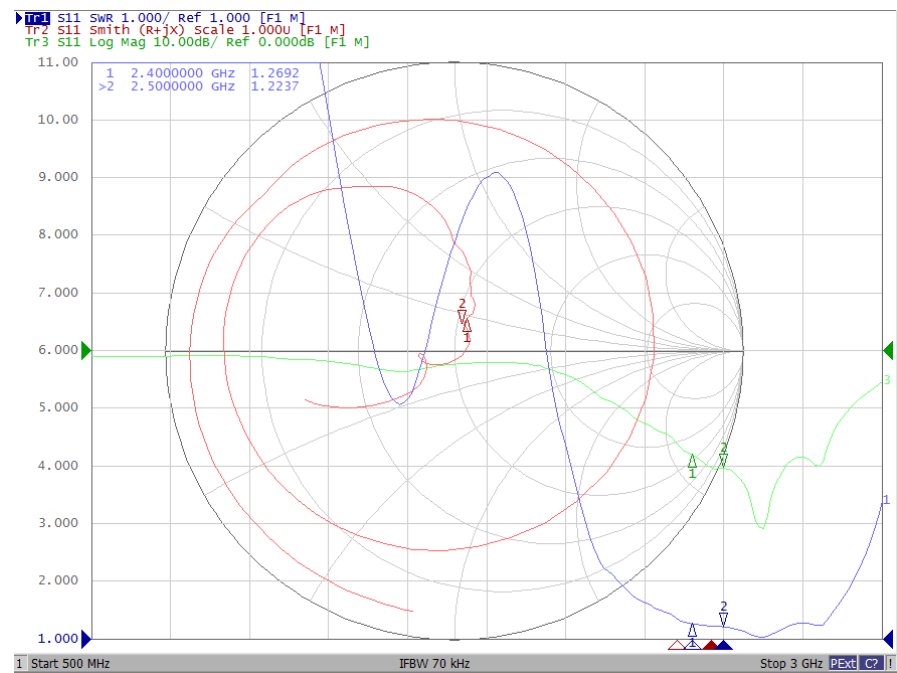
II、Antenna Dimension



Antenna Drawings, unit: mm

III、 Electricity Performance

3.1 Return Loss



Return Loss

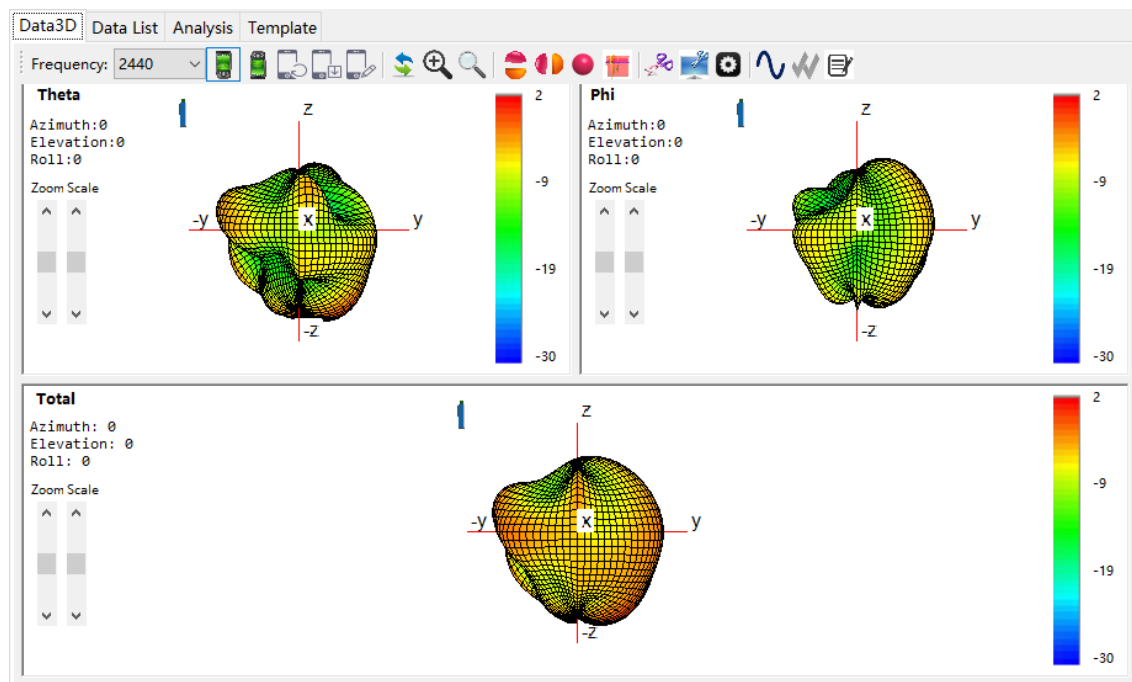
3.2 Antenna Efficiency

Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	1.60	-4.15	38.46
2410	1.73	-4.19	38.11
2420	1.12	-4.24	37.67
2430	1.24	-4.29	37.24
2440	1.27	-4.27	37.41
2450	1.67	-4.09	38.99
2460	1.42	-4.08	39.08
2470	1.17	-4.17	38.28
2480	1.75	-4.00	39.81
2490	1.25	-4.06	39.26
2500	1.40	-4.01	39.72
Average	1.42	-4.14	38.55

Free Space Efficiency

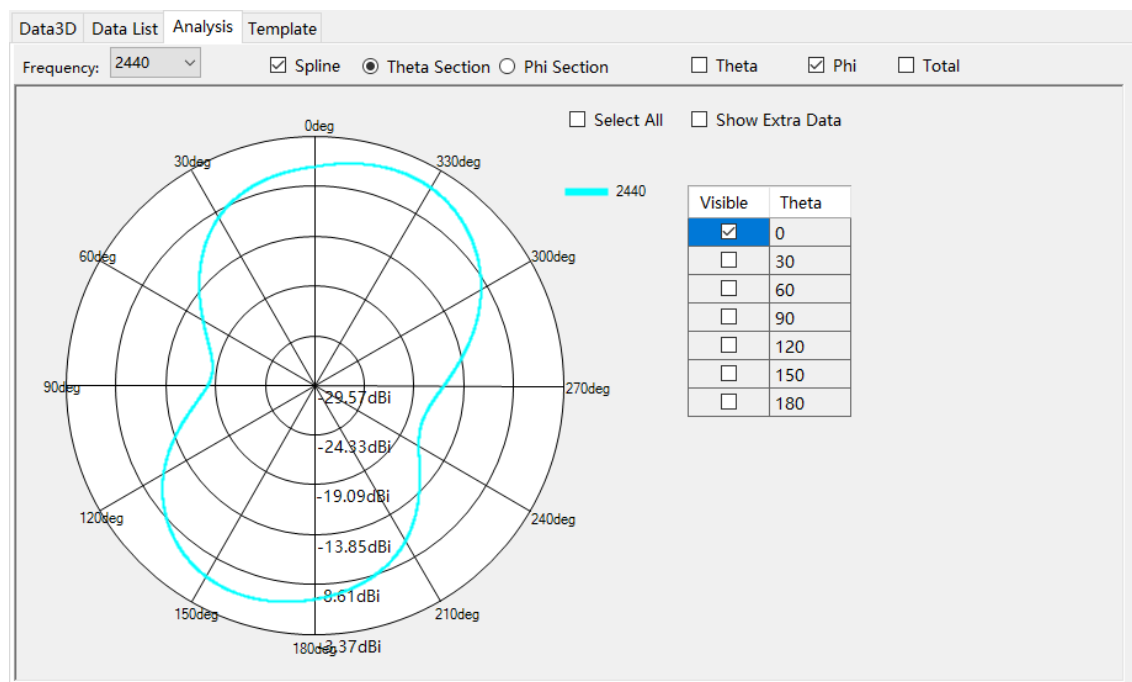
3.3 Radiation Pattern

3.3.1 3D Pattern

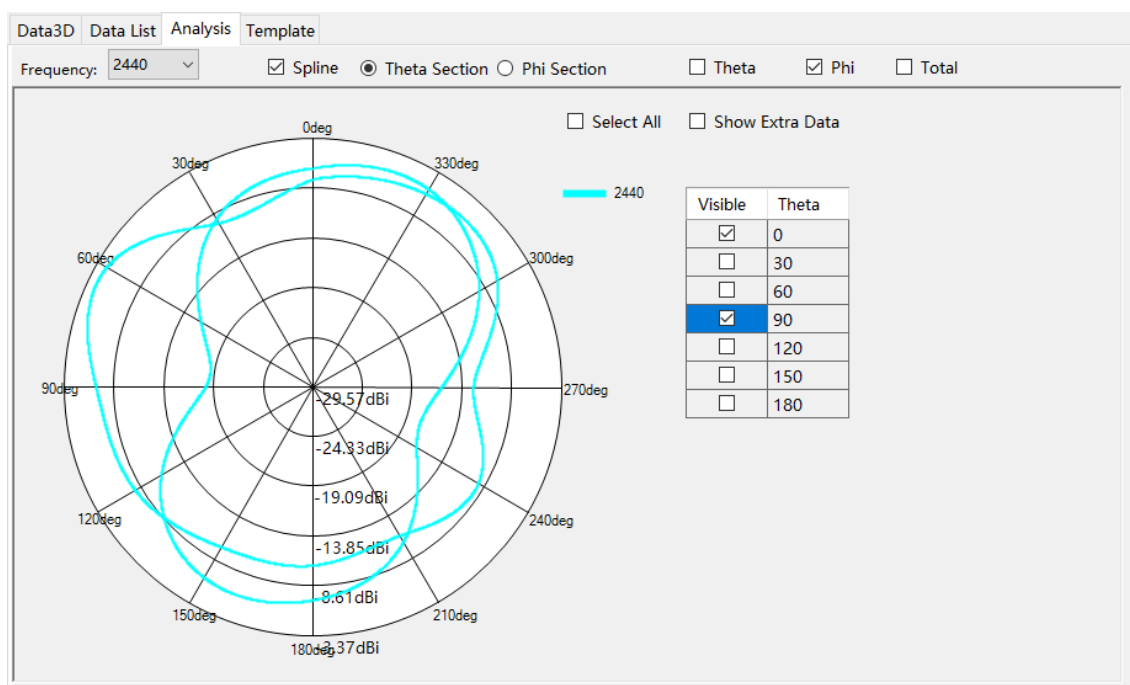


3D Antenna Pattern

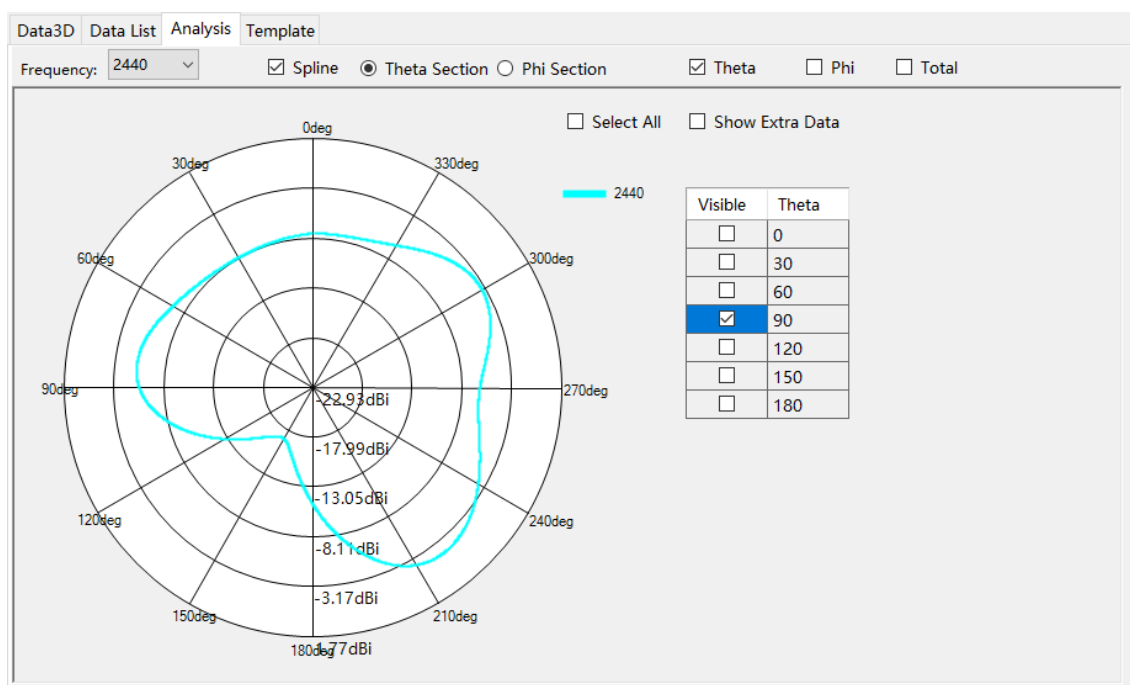
3.3.2 2D Pattern



Phi=0°, 2D Antenna Pattern



Phi=90⁰, 2D Antenna Pattern



Theta=90⁰, 2D Antenna Pattern

IV、 Test Equipment

4.1 Compact OTA Test System



Model: General Test RayZone 2800

Calibration Date: 2025/01/17

4.2 Test Equipment



Model: KEYSIGHT E5071C

Calibration Date: 2025/3/10

4.3 Testing Software



Testing Software Name: Libra

4.4 Antenna Test Photo

