

# SPECIFICATION FOR APPROVAL

CUST OMER: Shenzhen Ai-Thinker Technology Co., Ltd

CUS PART NO: ESP-12F

PART NAME: 2.4G WLAN Antenna

Edition: 1.0

|          |            |            |
|----------|------------|------------|
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## Directory

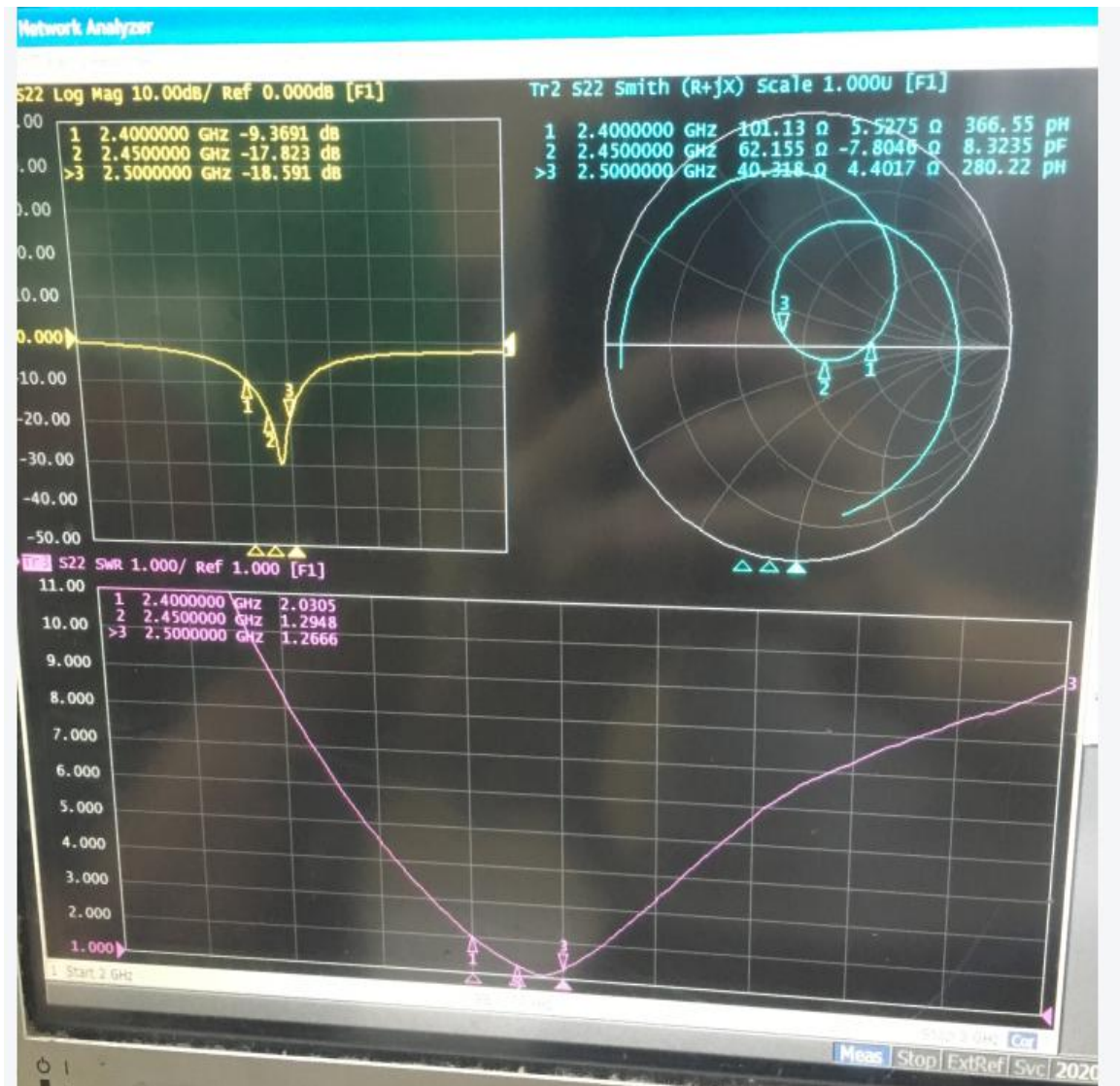
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# Product specification

## 1、Performance parameter

|                           |                          |
|---------------------------|--------------------------|
| Name                      | <u>2.4G WLAN Antenna</u> |
| Model Type                | PCB Print Antenna        |
| ELECTRICAL SPECTFICATIONS |                          |
| Frenquency Range          | 2400-2500MHz             |
| Band Width                | 100MHz                   |
| Impedance                 | 50 $\Omega$              |
| VSWR                      | < 2.0                    |
| Max Gain                  | 1.97dBi                  |
| Polarization              | Vertical/Horizontal      |
| Radiation                 | Omnidirectional          |
| Power                     | 50 W                     |
| MECHANICAL SPECTFICATIONS |                          |
| Connector                 | Welding type             |
| Working Temperature       | -40°C - + 85°C           |
| Limit Temperature         | -40°C - + 125°C          |

## 2、VSWR

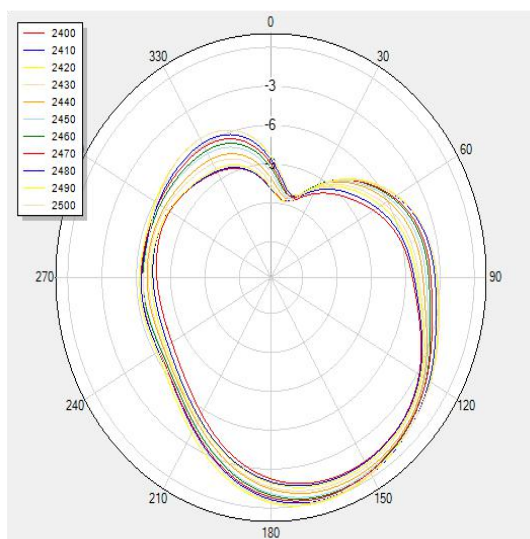


## 3、Passive test data:

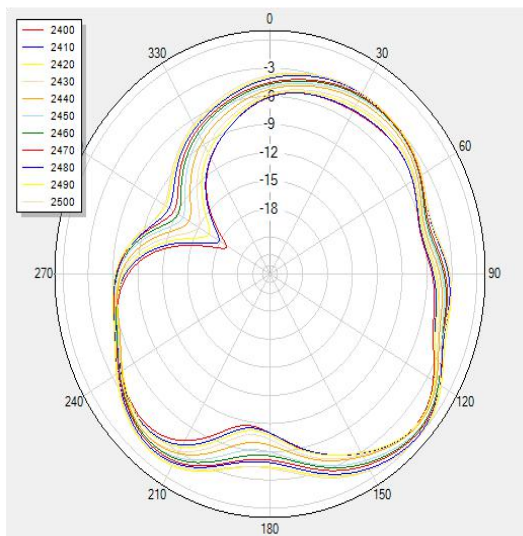
| Frequency (MHz) | 2400  | 2410  | 2420  | 2430  | 2440  | 2450  | 2460  | 2470  | 2480  | 2490  | 2500  |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Gain (dBi)      | 1.27  | 1.26  | 1.62  | 1.35  | 1.39  | 1.64  | 1.89  | 1.97  | 1.96  | 1.84  | 1.71  |
| Efficiency (%)  | 48.62 | 48.84 | 51.31 | 49.07 | 49.85 | 53.47 | 54.63 | 55.12 | 55.21 | 55.09 | 53.65 |

#### 4、Radiation pattern

**H Theta=90**



**V Phi=90**



**V Phi=0**

