

# SPECIFICATION FOR APPROVAL

CUST OMER: Shenzhen Ai-Thinker Technology Co., LtdCUS PART NO: Ra-03SCHPART NAME: 868MHz AntennaEdition: 1.0

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

|                                |       |
|--------------------------------|-------|
| Product specification .....    | - 3 - |
| 1. Antenna shape .....         | - 3 - |
| 2. Performance parameter ..... | - 3 - |
| 3. VSWR .....                  | - 4 - |
| 4. Passive test data: .....    | - 4 - |
| 5. Radiation pattern .....     | - 5 - |

# Product specification

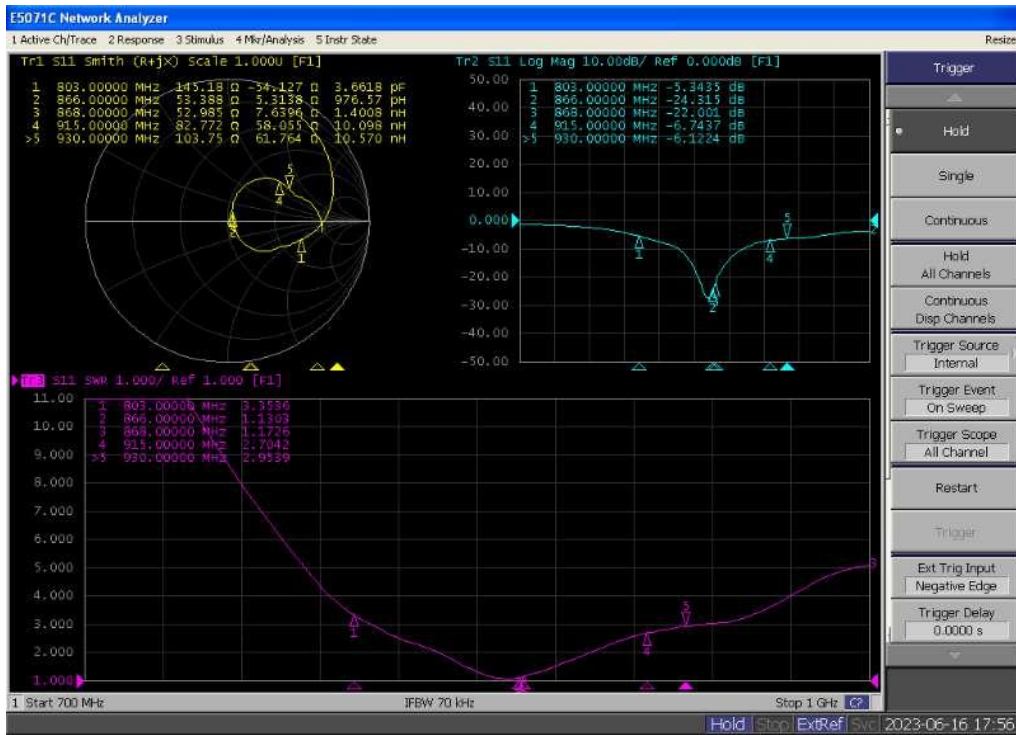
## 1. Antenna shape



## 2. Performance parameter

|                           |                     |
|---------------------------|---------------------|
| Name                      | 2.4G WLAN Antenna   |
| Model Type                | PCB Print Antenna   |
| ELECTRICAL SPECTFICATIONS |                     |
| Frenquency Range          | 2400-2500MHz        |
| Band Width                | 100MHz              |
| Impedance                 | 50 $\Omega$         |
| VSWR                      | < 3.5               |
| Max Gain                  | 2.33dBi             |
| Polarization              | Vertical/Horizontal |
| Radiation                 | Omnidirectional     |
| Power                     | 50 W                |

### 3. VSWR



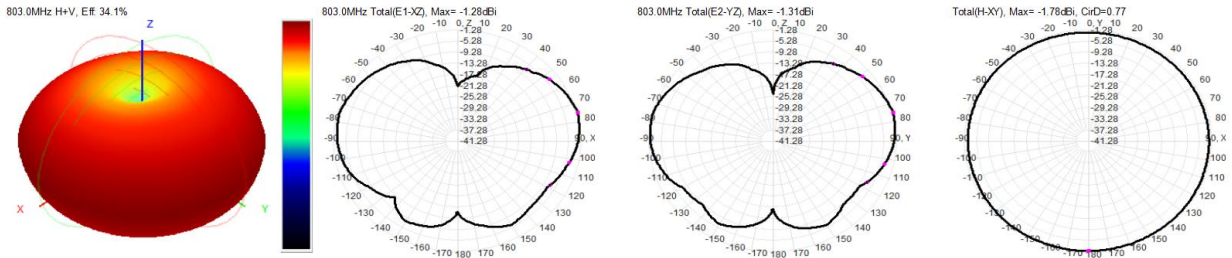
| Freq/MHz | 803MHz | 866MHz | 930MHz |
|----------|--------|--------|--------|
| VSWR     | 3.35   | 1.13   | 2.95   |

### 4. Passive test data:

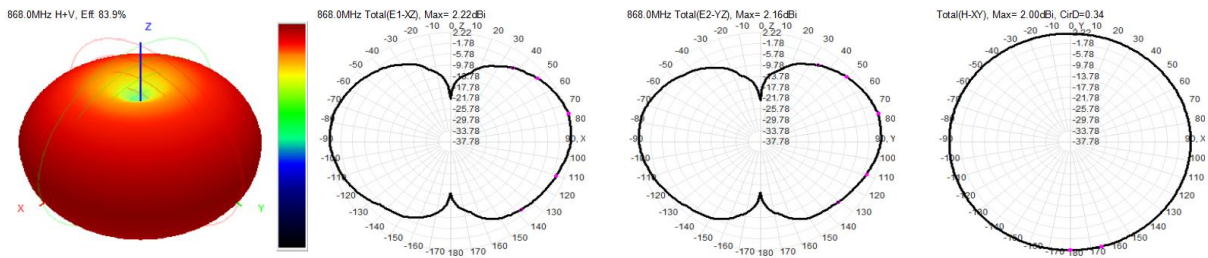
| Frequency (MHz) | Efficiency (dBi) | Gain (dBi) | Efficiency (%) |
|-----------------|------------------|------------|----------------|
| 803.0           | -4.67            | -1.20      | 34.09          |
| 808.0           | -4.34            | -0.93      | 36.77          |
| 813.0           | -3.90            | -0.57      | 40.78          |
| 818.0           | -3.55            | -0.31      | 44.14          |
| 823.0           | -3.30            | -0.09      | 46.76          |
| 828.0           | -2.83            | 0.32       | 52.13          |
| 833.0           | -2.44            | 0.71       | 57.08          |
| 838.0           | -2.06            | 1.03       | 62.21          |
| 843.0           | -1.68            | 1.39       | 67.98          |
| 848.0           | -1.33            | 1.72       | 73.65          |
| 853.0           | -1.03            | 1.99       | 78.96          |
| 858.0           | -0.79            | 2.22       | 83.39          |
| 863.0           | -0.70            | 2.33       | 85.14          |
| 868.0           | -0.76            | 2.27       | 83.91          |
| 873.0           | -0.87            | 2.14       | 81.90          |
| 878.0           | -1.03            | 1.94       | 78.86          |
| 883.0           | -1.22            | 1.70       | 75.44          |
| 888.0           | -1.39            | 1.45       | 72.61          |
| 893.0           | -1.58            | 1.19       | 69.48          |
| 898.0           | -1.72            | 1.02       | 67.23          |
| 903.0           | -1.76            | 0.93       | 66.67          |
| 908.0           | -1.76            | 0.90       | 66.74          |
| 913.0           | -1.70            | 0.94       | 67.67          |
| 918.0           | -1.71            | 0.87       | 67.38          |
| 923.0           | -1.89            | 0.67       | 64.65          |
| 928.0           | -1.96            | 0.60       | 63.72          |
| 933.0           | -2.19            | 0.41       | 60.45          |

## 5. Radiation pattern

### (1) 803MHz



### (2) 868MHz



### (3) 930MHz

