

# Antenna Specification

Product description: 2.4G PCB Antenna

Uni Link's part number: ANTENNA-2400

Issue Date: 2024-09-10

Note: 2400-2500MHz

Manufacturer: Shenzhen Sonoff Technologies Co.,Ltd.

Address: 3F & 6F, Bldg A, No. 663, Bulong Rd, Shenzhen, Guangdong, China

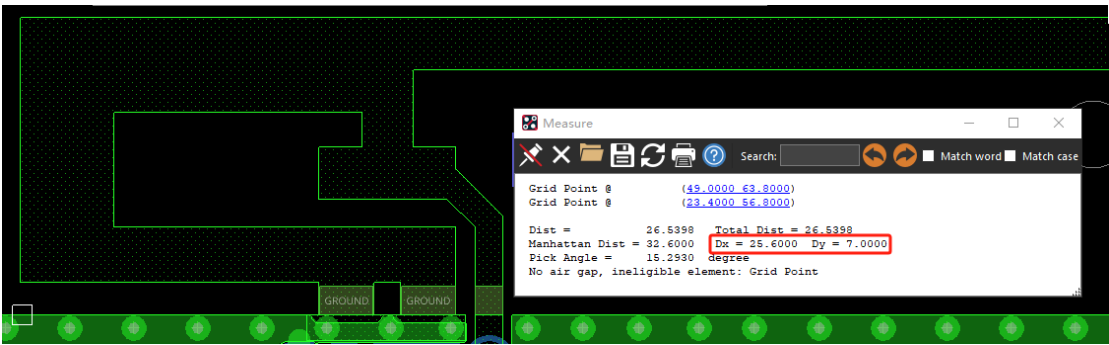
## 1、（PRODUCT TECHNICAL SPECIFICATION）

| Electrical Specifications                 |                      |
|-------------------------------------------|----------------------|
| Frequency Range (MHz)                     | 2400-2500            |
| Input Impedence ( $\Omega$ )              | 50                   |
| V.S.W.R                                   | $\leq 1.5$           |
| Gain (dBi)                                | 1.66                 |
| Polarization Type                         | Horizontal           |
| Power Capacity (w)                        | 2                    |
| Mechanical Specifications                 |                      |
|                                           |                      |
| Radiator                                  | Cuprum               |
| Connect Type                              | PCB                  |
| Working Temp( $^{\circ}\text{C}$ )        | -10~40               |
| Storage Temperature( $^{\circ}\text{C}$ ) | -20~55               |
| antenna size                              | 25.6mm x 7mm x 0.1mm |

2、PRODUCT PICTURE



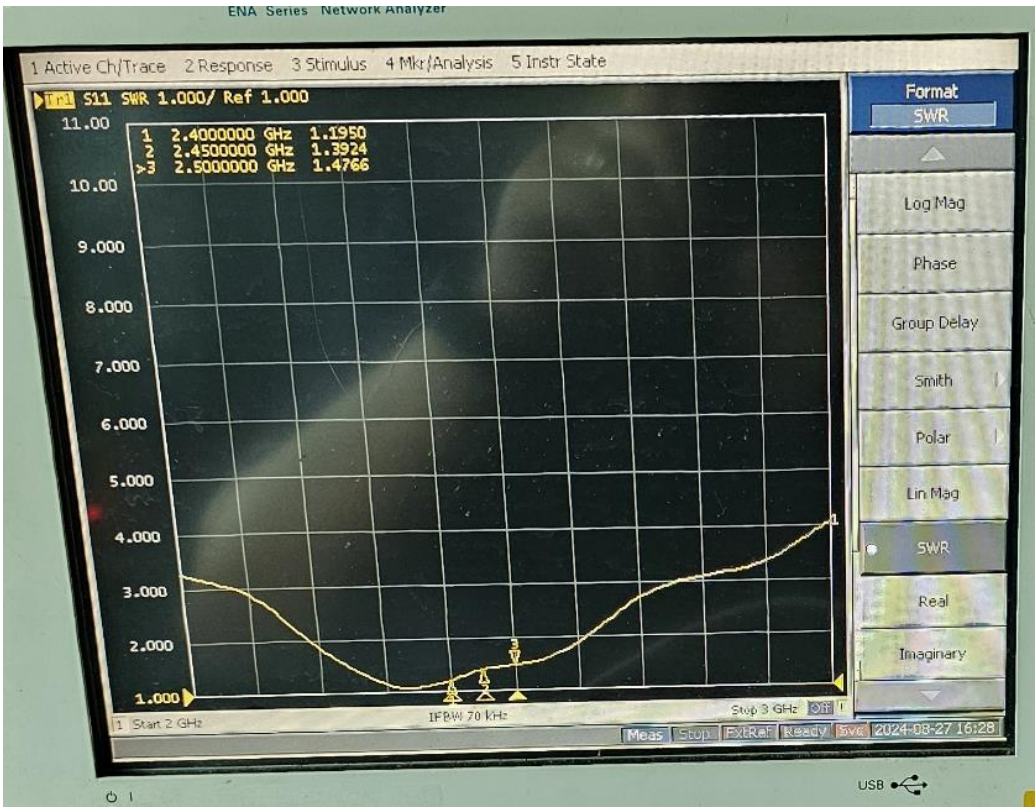
3、PRODUCT SPECIFICATION CHART



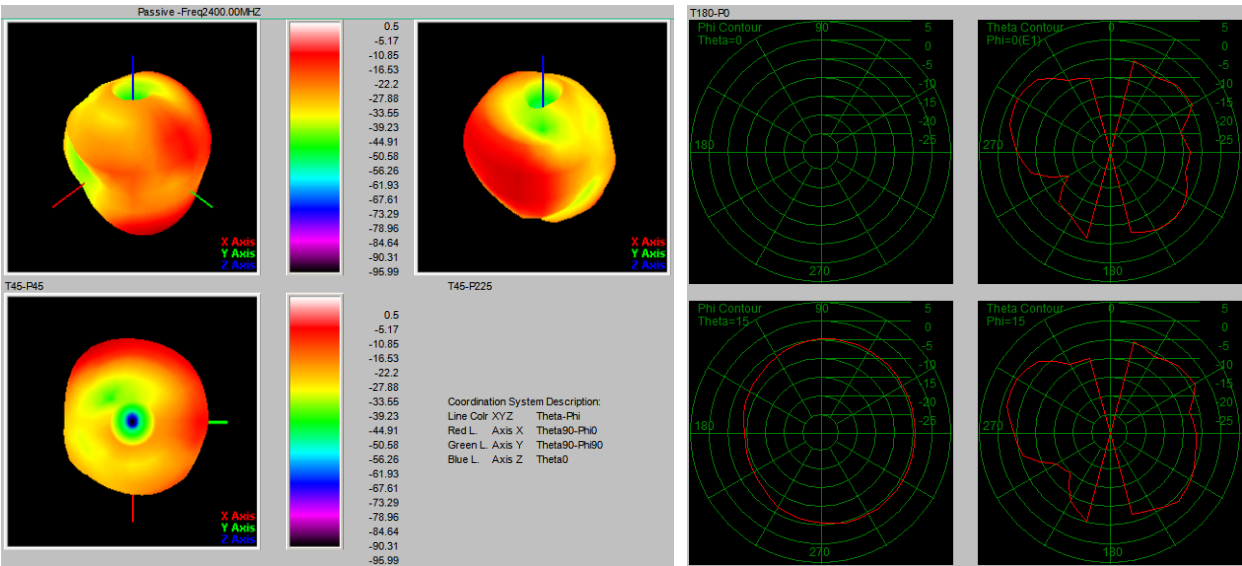
4、Antenna Gain

| Test Point ID | Freq. (MHz) | TRP (dBm) | Gain (dBi) | Directivity (dBi) | Efficiency (%) | Efficiency (dB) | Max (dBm) | Theta of Max | Phi of Max | Min (dBm) | Theta of Min | Phi of Min | AVG (dBm) | Max/Min (dB) | Max/AVG (dB) | Min/AVG (dB) |
|---------------|-------------|-----------|------------|-------------------|----------------|-----------------|-----------|--------------|------------|-----------|--------------|------------|-----------|--------------|--------------|--------------|
| 1             | 2400.0      | 2400.00   | 0.50       | 5.20              | 33.9%          | -4.70           | 0.50      | 13500        | 9000       | -95.99    | 0            | 0          | -4.91     | 96.49        | 5.41         | -91.08       |
| 2             | 2410.0      | 2410.00   | 0.62       | 5.46              | 32.8%          | -4.84           | 0.62      | 12000        | 6000       | -95.99    | 0            | 0          | -4.83     | 96.61        | 5.45         | -91.16       |
| 3             | 2420.0      | 2420.00   | 0.98       | 5.86              | 32.5%          | -4.88           | 0.98      | 12000        | 6000       | -95.99    | 0            | 0          | -4.62     | 96.97        | 5.60         | -91.37       |
| 4             | 2430.0      | 2430.00   | 1.66       | 6.19              | 35.2%          | -4.53           | 1.66      | 12000        | 6000       | -95.99    | 0            | 0          | -4.12     | 97.65        | 5.78         | -91.87       |
| 5             | 2440.0      | 2440.00   | 1.56       | 6.25              | 33.9%          | -4.69           | 1.56      | 12000        | 6000       | -95.99    | 0            | 0          | -4.34     | 97.55        | 5.90         | -91.65       |
| 6             | 2450.0      | 2450.00   | 1.39       | 6.19              | 33.1%          | -4.80           | 1.39      | 12000        | 6000       | -95.99    | 0            | 0          | -4.44     | 97.38        | 5.83         | -91.55       |
| 7             | 2460.0      | 2460.00   | 1.45       | 6.10              | 34.2%          | -4.65           | 1.45      | 12000        | 6000       | -95.99    | 0            | 0          | -4.31     | 97.44        | 5.76         | -91.68       |
| 8             | 2470.0      | 2470.00   | 1.34       | 5.81              | 35.8%          | -4.46           | 1.34      | 12000        | 6000       | -95.99    | 0            | 0          | -4.33     | 97.33        | 5.67         | -91.66       |
| 9             | 2480.0      | 2480.00   | 1.20       | 5.39              | 38.1%          | -4.20           | 1.20      | 12000        | 6000       | -95.99    | 0            | 0          | -4.44     | 97.19        | 5.64         | -91.55       |
| 10            | 2490.0      | 2490.00   | 1.21       | 5.38              | 38.3%          | -4.17           | 1.21      | 12000        | 6000       | -95.99    | 0            | 0          | -4.51     | 97.20        | 5.71         | -91.48       |
| 11            | 2500.0      | 2500.00   | 1.24       | 5.30              | 39.3%          | -4.06           | 1.24      | 12000        | 6000       | -95.99    | 0            | 0          | -4.46     | 97.23        | 5.70         | -91.53       |

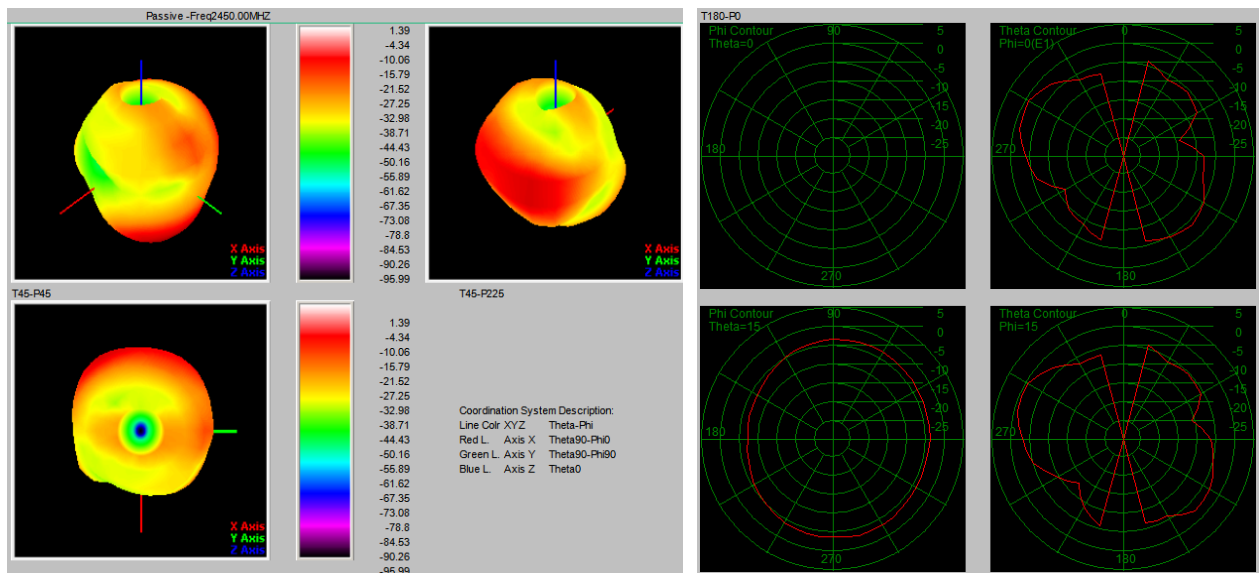
5、Image of antenna field shape test



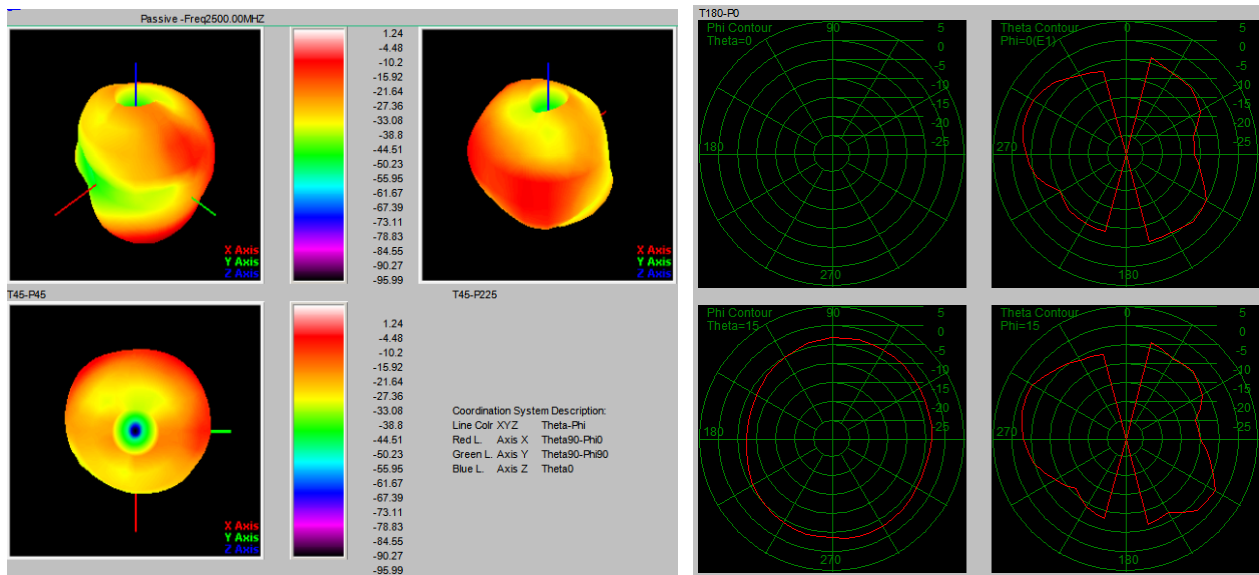
6、2D and 3D



2400MHz



2450MHz



2500MHz