

915MHz Copper Spring Antenna

## Product Specification



## Catalogue

|                                       |       |
|---------------------------------------|-------|
| Note: Revision History .....          | - 2 - |
| 1. Description.....                   | - 3 - |
| 2. Technical Parameter.....           | - 3 - |
| 3. Size .....                         | - 3 - |
| 4. Gain, 2D&3D Radiation Pattern..... | - 3 - |
| 4.1 Gain.....                         | - 3 - |
| 4.2 2D Radiation Pattern.....         | - 4 - |
| 4.3 3D Radiation Pattern.....         | - 5 - |
| 5. VSWR Chart.....                    | - 7 - |

### Note: Revision History

| Revision | Date    | Comment                           |
|----------|---------|-----------------------------------|
| V1.0     | 2014-12 | First release                     |
| V2.0     | 2016-06 | Typesetting, measurements revised |
| V2.1     | 2017-06 | Logo updated                      |
| V2.2     | 2019-6  | Update size                       |
|          |         |                                   |
|          |         |                                   |

## 1. Description

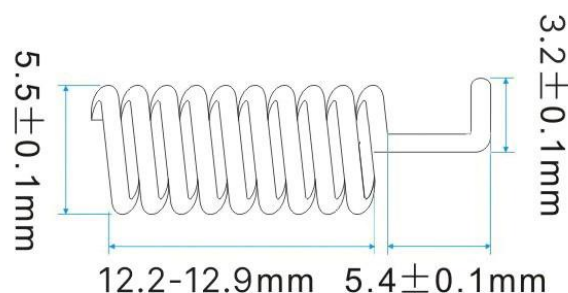
SW915-TH12, a copper spring antenna, is designed specially for 915MHz wireless communication. It has good VSWR, Compact dimensions, easy installation, stable performance, with good anti-vibration and anti-aging ability.

It complied with and passed ROHS certification.

## 2. Technical Parameter

- Frequency Range: 915 MHz
- VSWR:  $\leq 1.5$
- Gain: 0.66 dBi
- Input impedance: 50  $\Omega$
- Max power: 5 W
- Height:  $12.5 \pm 1$  mm
- Interface form: welding directly
- Antenna Color: copper
- Weight: 1 g
- Wire diameter: 0.8mm

## 3. Size



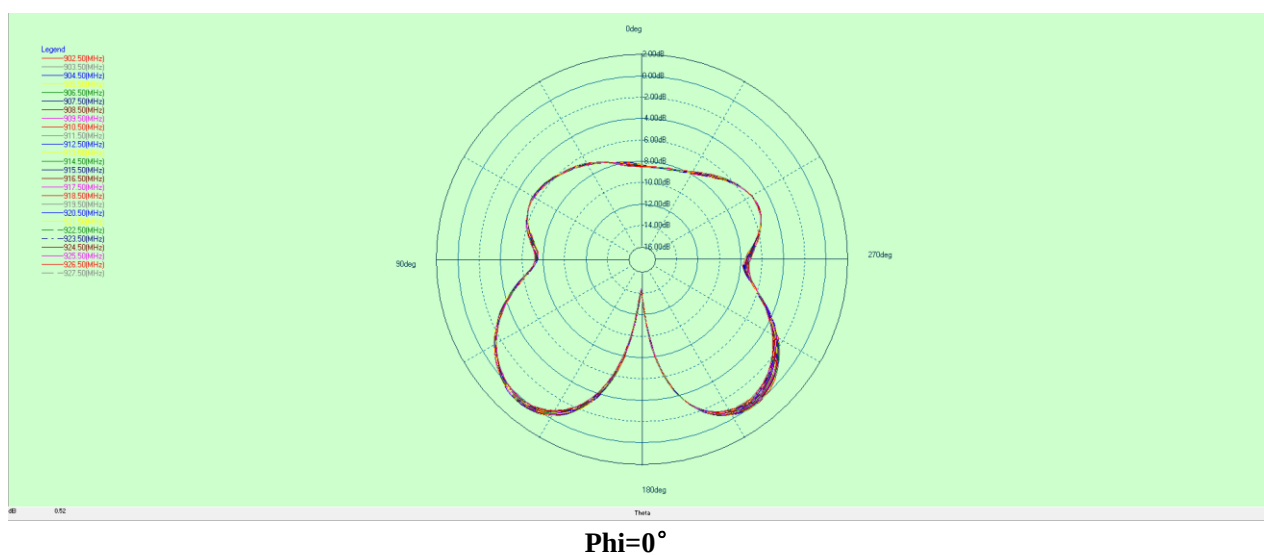
## 4. Gain, 2D&3D Radiation Pattern

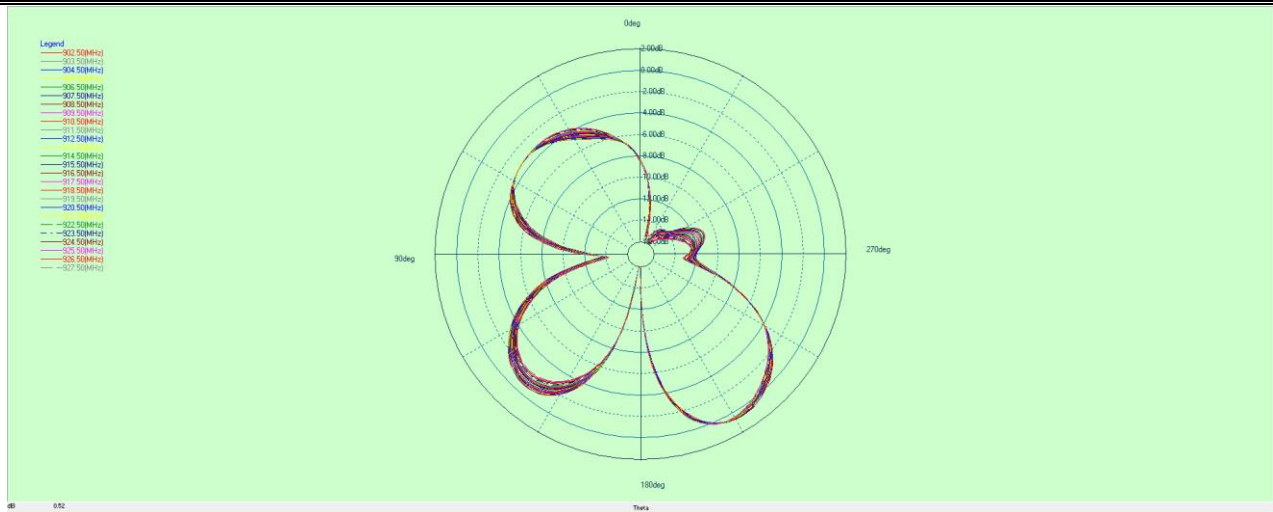
### 4.1 Gain

| Frenquency (MHz) | Gain (dBi) |
|------------------|------------|
| 902.5            | 0.65       |
| 903.5            | 0.66       |
| 904.5            | 0.66       |
| 905.5            | 0.65       |
| 906.5            | 0.64       |
| 907.5            | 0.62       |
| 908.5            | 0.60       |
| 909.5            | 0.58       |
| 910.5            | 0.57       |
| 911.5            | 0.54       |
| 912.5            | 0.52       |

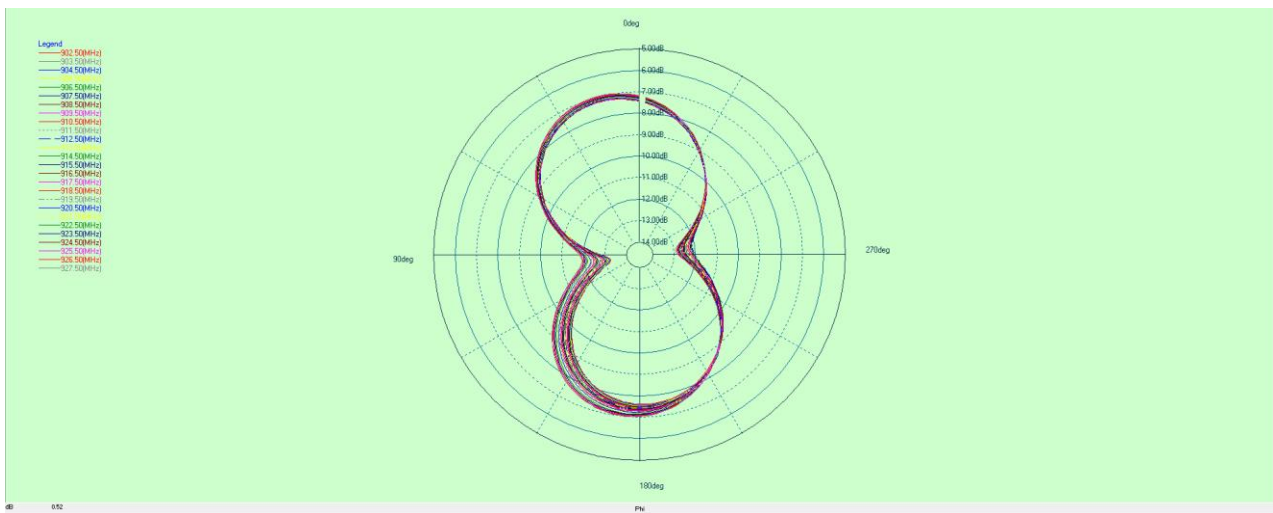
|       |      |
|-------|------|
| 913.5 | 0.51 |
| 914.5 | 0.50 |
| 915.5 | 0.49 |
| 916.5 | 0.48 |
| 917.5 | 0.47 |
| 918.5 | 0.47 |
| 919.5 | 0.47 |
| 920.5 | 0.46 |
| 921.5 | 0.45 |
| 922.5 | 0.43 |
| 923.5 | 0.42 |
| 924.5 | 0.41 |
| 925.5 | 0.40 |
| 926.5 | 0.38 |
| 927.5 | 0.37 |

## 4.2 2D Radiation Pattern



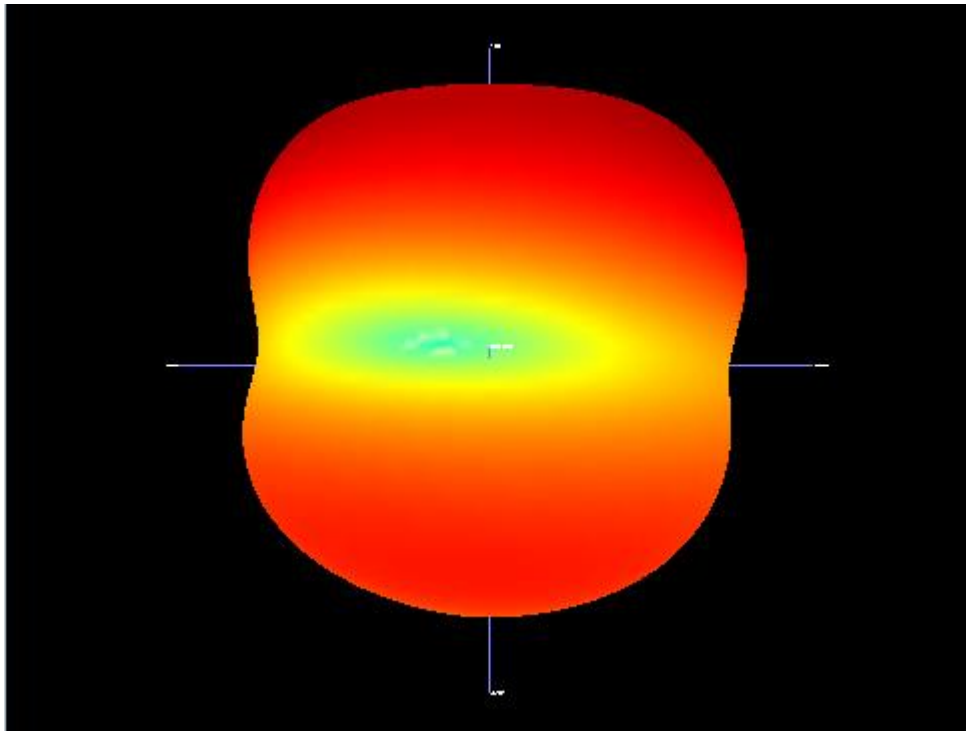


$\Phi = 90^\circ$

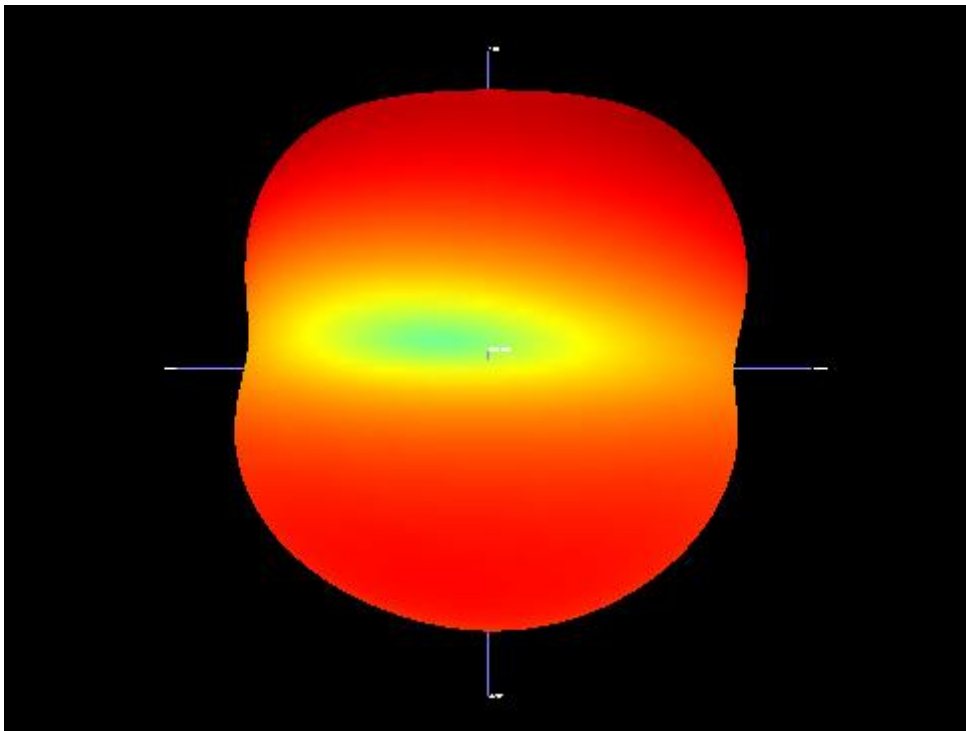


$\Theta = 90^\circ$

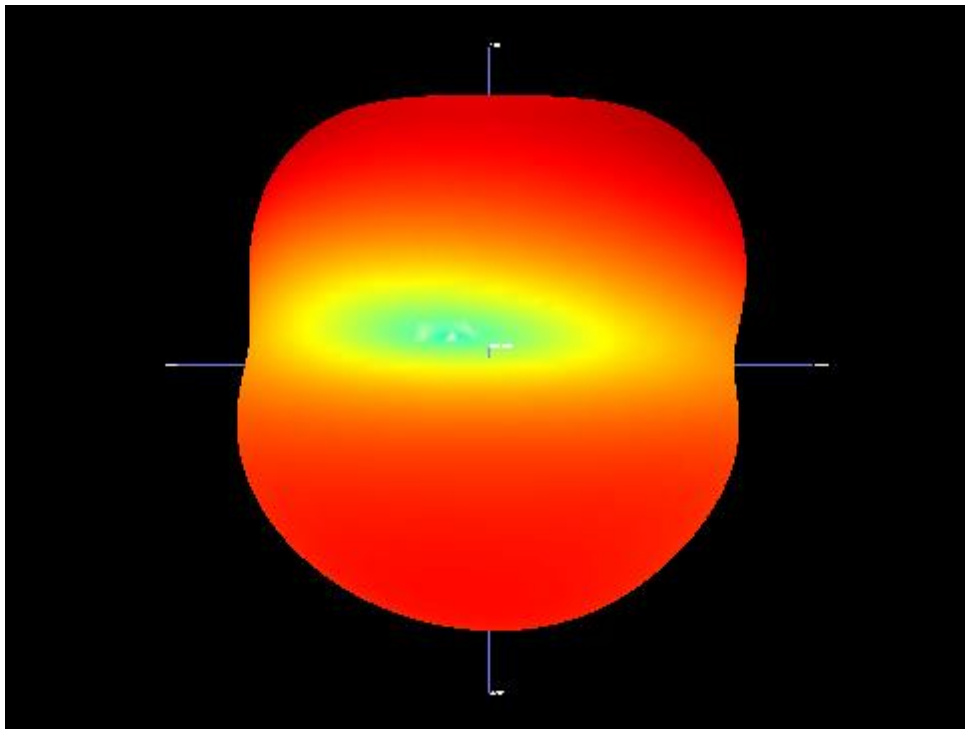
### 4.3 3D Radiation Pattern



902.5MHz



915.5MHz



927.5MHz

## 5. VSWR Chart

Antennas have been tested under wireless simulated environment by Network Analyzer

