



## SWE056

PN: SW22013EB56

### Features:

- Antenna for 868MHz.
- Small size.
- Impedance 50 Ohm.

### Applications:

- Remote monitoring.
- Network Devices.
- Gateway.
- Others.

## 1. Electrical Specification

|                               |                  |
|-------------------------------|------------------|
| Standards                     | ISM-868MHz       |
| Frequency range (MHz)         | 868              |
| Peak Gain (dBi)               | 2.91             |
| Average Gain (dB)             | -1.53            |
| VSWR                          | 1.15             |
| Return Loss                   | -22.86           |
| Efficiency (%)                | 70.37%           |
| Polarization mode             | Linear           |
| Radiation pattern             | Omni-Directional |
| Output impedance ( $\Omega$ ) | 50               |
| Max. Input Power(W)           | 25               |

**Note:**All parameters are measured with Sunnyway RF's EVK which size is 150\*90mm

## 2. Mechanical and Environmental Specification

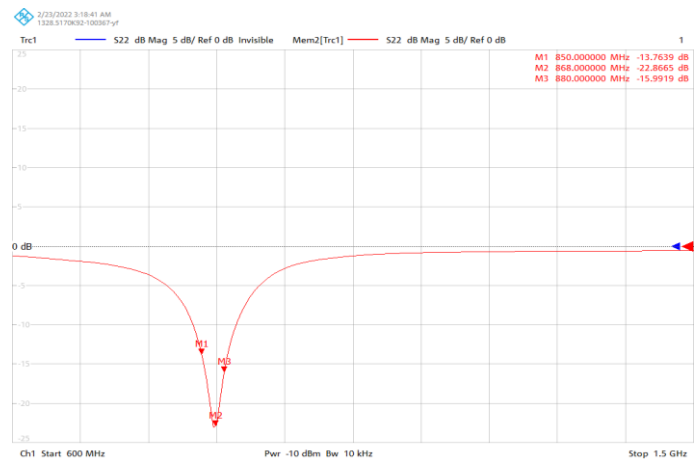
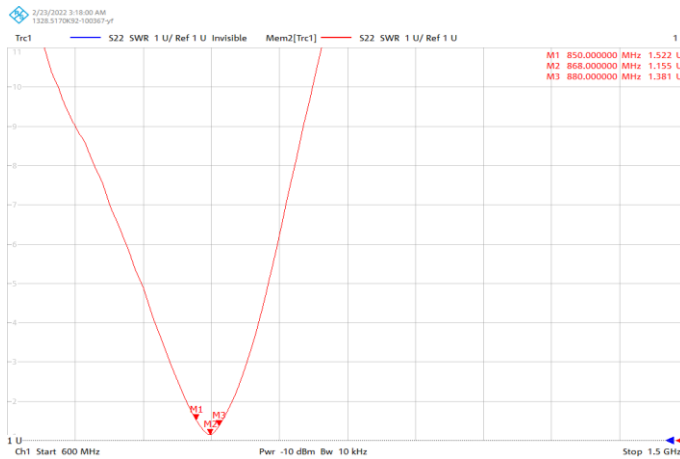
|                            |                                 |
|----------------------------|---------------------------------|
| Mounting Type              | Connector Mount                 |
| Connector Type             | SMA-Male Standard (Right-Angle) |
| Antenna size(mm)           | 48.6X $\phi$ 8mm                |
| Material                   | ABS                             |
| Operating Temperature (°C) | - 40 °C ~ + 85 °C               |
| Storage Temperature(°C)    | - 40 °C ~ + 85 °C               |

### 3. Antenna parameters

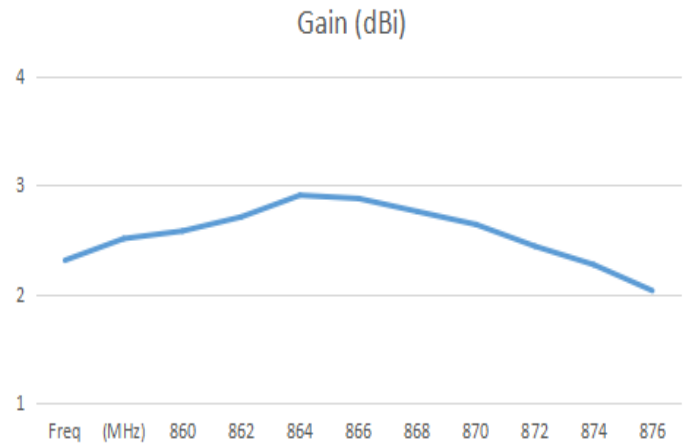
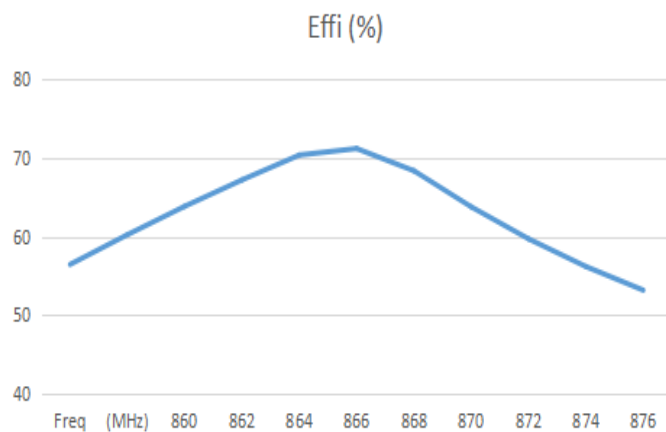
#### 3.1 General Data

|                   |        |
|-------------------|--------|
| FRE (MHz)         | 868    |
| VSWR              | 1.15   |
| Return Loss       | -22.86 |
| Eff (%)           | 70.37  |
| Average Gain (dB) | -1.53  |

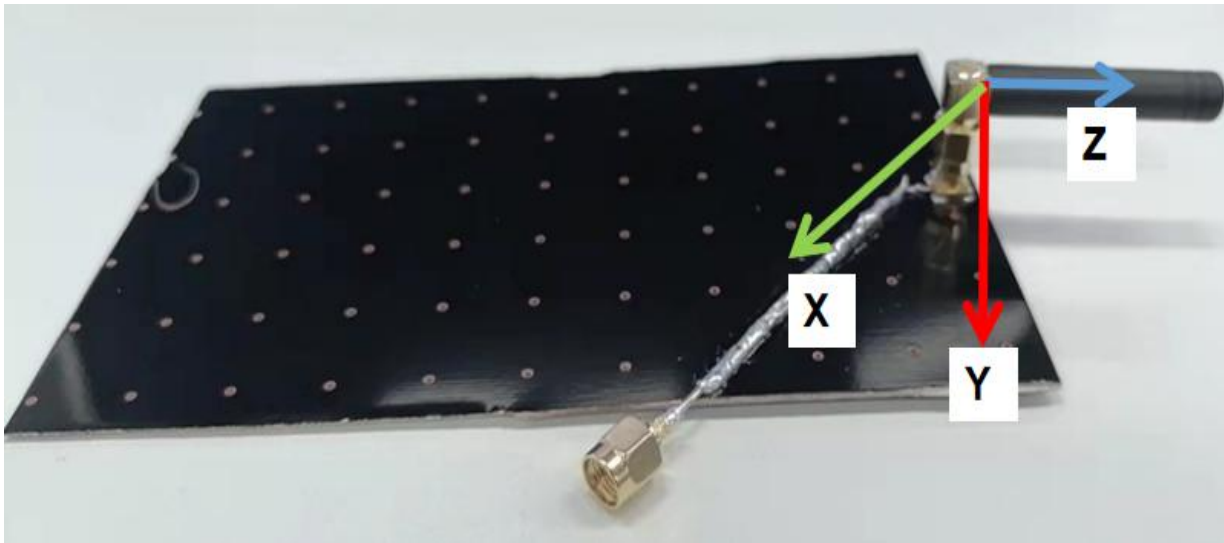
#### 3.2 VSWR and Return Loss



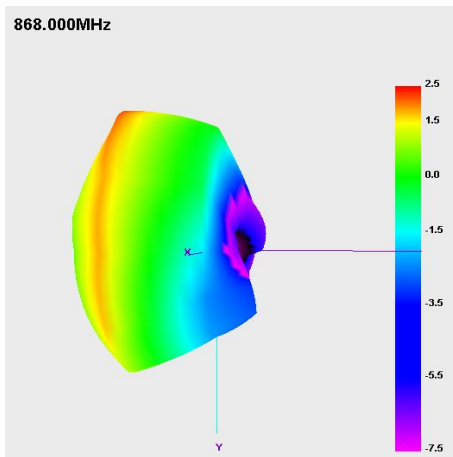
#### 3.3 Efficiency and Gain



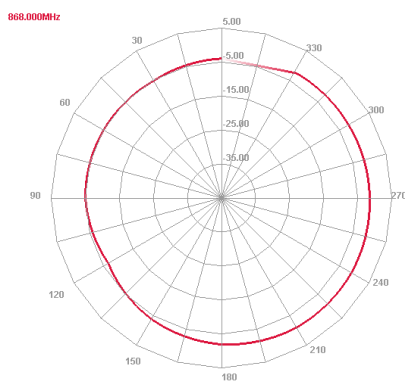
### 3.4 Directional pattern



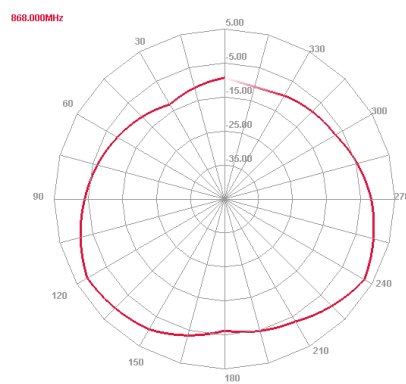
EVK size is 150\*90mm



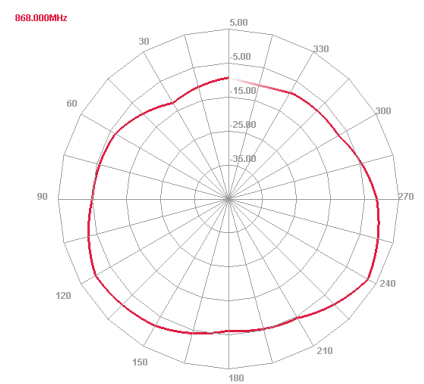
Horizontal



E1 Face

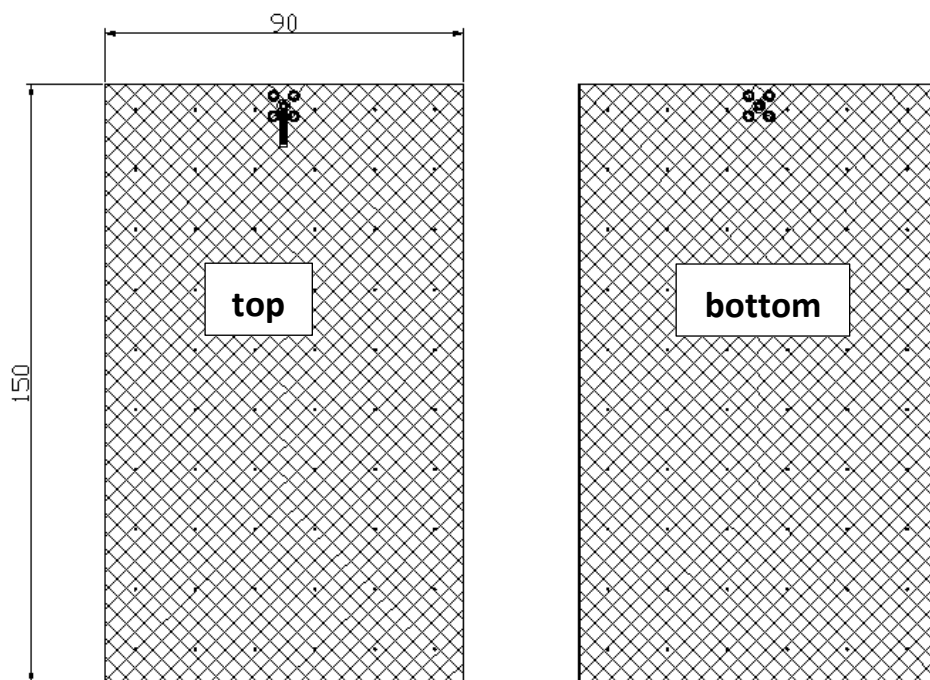


E2 Face

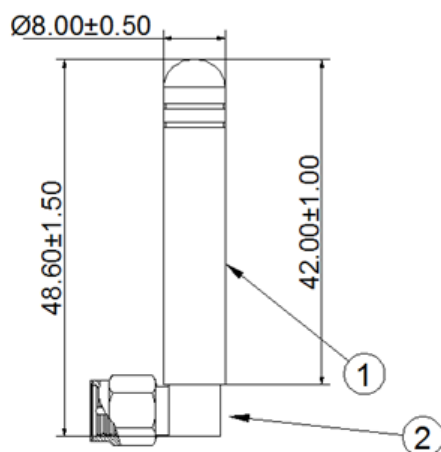


## 4. Host PCB Size

SUNYUAN RF's EVK size:



## 5. Antenna Drawing



| Series | Component name | Specification | Color | Quantity |
|--------|----------------|---------------|-------|----------|
| 1      | noumenon       | ABS           | black | 1        |
| 2      | SMA            | SMA-J         | Gold  | 1        |