

# **Antenna Specification**

## **Internal antenna**

**Model: FRX-LW088-21**

### **Antenna introducing**

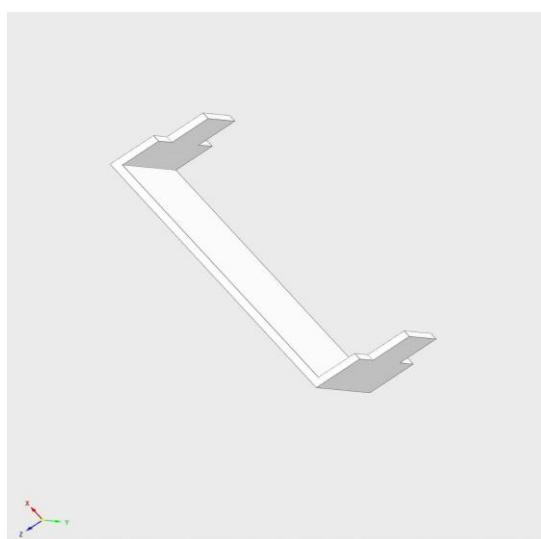
antenna Made work in 2.4~2.5&4.9~5.825GHz especially suit for WLAN system.Design by dipole antenna theory, supply high gain ,high efficiency ,better port matching make wireless communication easily.

### **Features**

- IEEE802.11 a/b/g/n/ac
- Peak gain 2.5dBi for 2G and 3dBi for 5G
- High efficiency
- Good port matching

### **Antenna size**

12.0mm\*1.9mm\*3.0mm

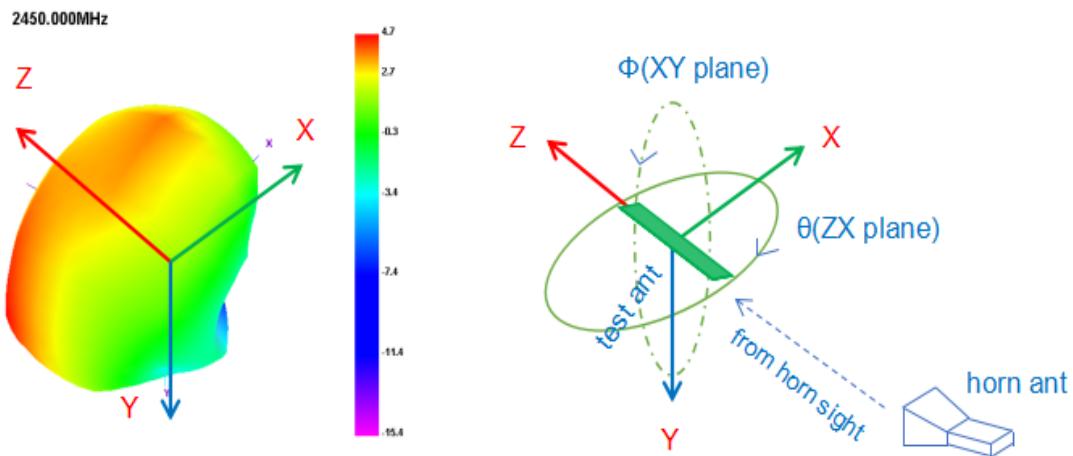


## Antenna electrical properties

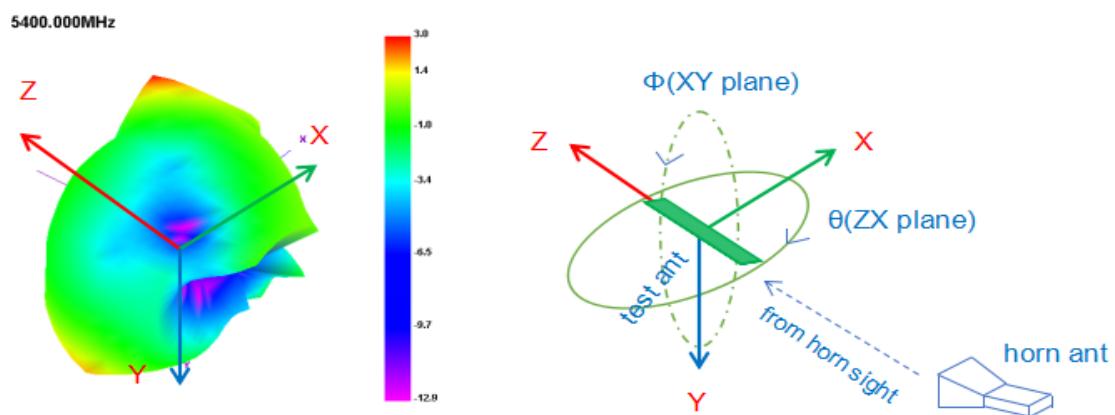
|                |                        |
|----------------|------------------------|
| Frequency      | 2.4~2.5&4.9~5.825GHz   |
| Impedance      | 50ohm nominal          |
| V.S.W.R        | $\leq 2.0$             |
| Return loss    | $\leq -10\text{dB}$    |
| Radiation      | Omni-directional       |
| Gain(Peak)     | 2G:2.52dBi/ 5G:2.95dBi |
| Polarization   | Linear                 |
| Admitted Power | 2W                     |
| Efficiency     | 2G:68%/ 5G:63%         |

## Antenna total gain and efficiency

|     | Freq. (MHz) | Gain (dBi) | Efficiency (%) |
|-----|-------------|------------|----------------|
| ANT | 2400        | 2.45       | 65%            |
|     | 2450        | 2.36       | 68%            |
|     | 2500        | 2.52       | 67%            |



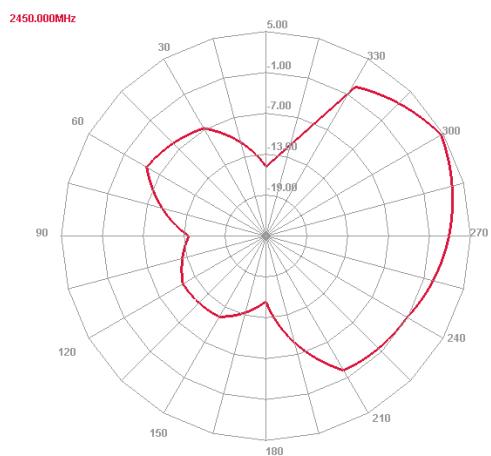
|     | <b>Freq. (MHz)</b> | <b>Gain (dBi)</b> | <b>Efficiency (%)</b> |
|-----|--------------------|-------------------|-----------------------|
| ANT | 5100               | 2.75              | 62%                   |
|     | 5400               | 2.95              | 65%                   |
|     | 5850               | 2.8               | 62%                   |



## Radiation Pattern

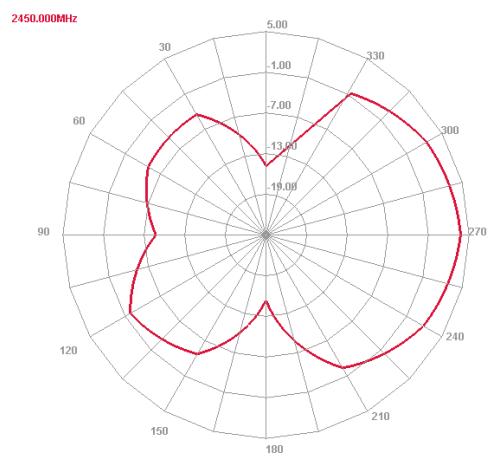
|     | <b>Freq. (MHz)</b> | <b>Gain (dB)</b> |
|-----|--------------------|------------------|
| ANT | 2450               | 2.50             |

**E1 Face**



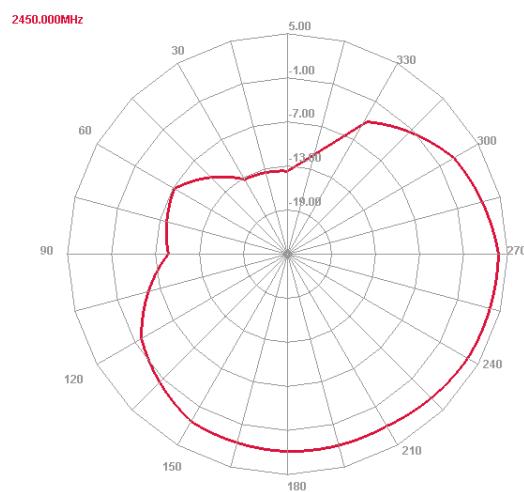
ZX plane

**E2 Face**



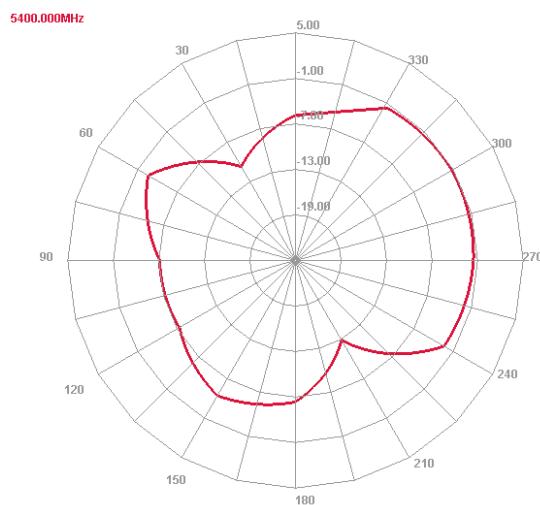
ZY plane

**Horizontal**

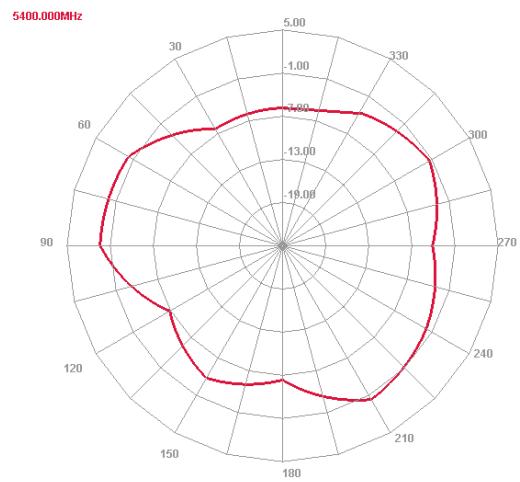


XY plane

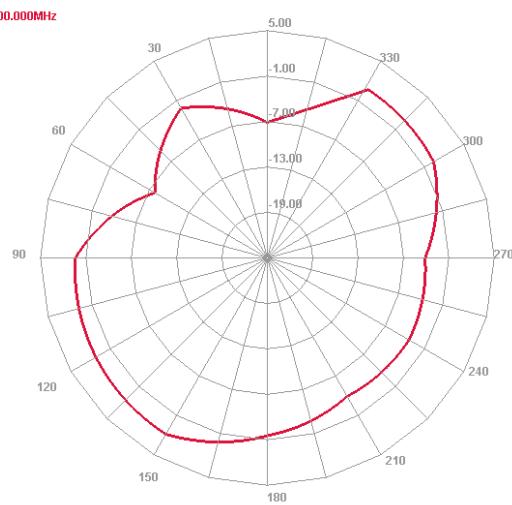
|     | <b>Freq. (MHz)</b> | <b>Gain (dB)</b> |
|-----|--------------------|------------------|
| ANT | 5400               | 2.86             |

**E1 Face**

ZX plane

**E2 Face**

ZY plane

**Horizontal**

XY plane