

# Mouse Antenna Specification

## Antenna overview

1. Antenna Type and Model:  
Type: PCB Antenna  
Model: PIFA Antenna
2. Gain: about 3.22dBi(Peak)
3. Antenna Directivity Coefficient: about 1.8 @2450MHz
4. Antenna Polarization characteristic: elliptical polarization
5. Inside or outside: Inside
6. Name of Manufacturer: Shenzhen Bailihe Technology Co., LTD (深圳市百里和科技有限公司)
7. Name of Laboratory: Shenzhen Bailihe Technology Co., LTD (深圳市百里和科技有限公司)

## Mouse PIFA Antenna

The Mouse antenna adopts the ultra-small PIFA antenna, and because of the limited area of PCB, the gain of antenna will be smaller than that of the other antennas. The communication distance can reach about 15 ~ 20 meters. The size of the Mouse Module PCB antenna is 12.0\* 3.0mm, and the thickness of PCB is 1.6mm. The specific size of the antenna is shown in figure 1, the physical object is shown in figure 2.

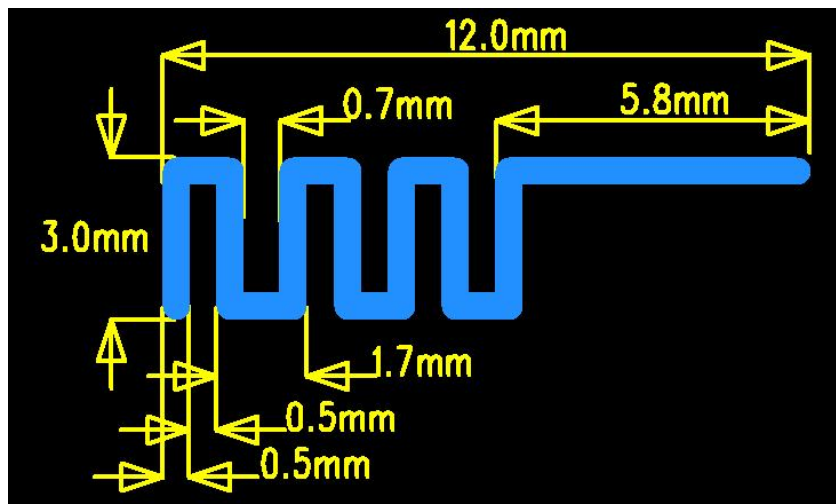
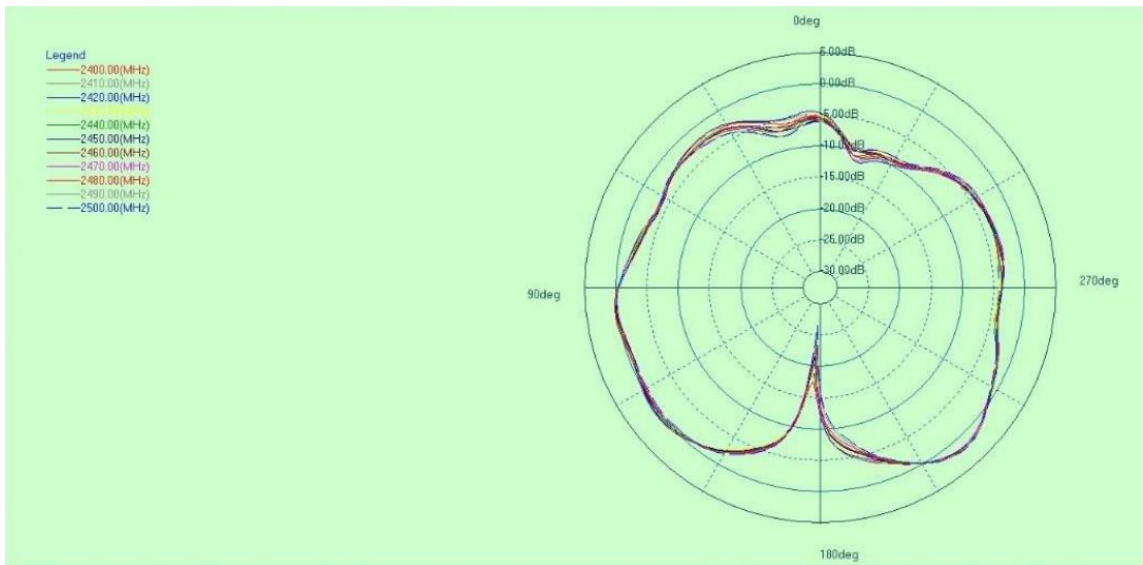


Figure 1 :Mouse Antenna size

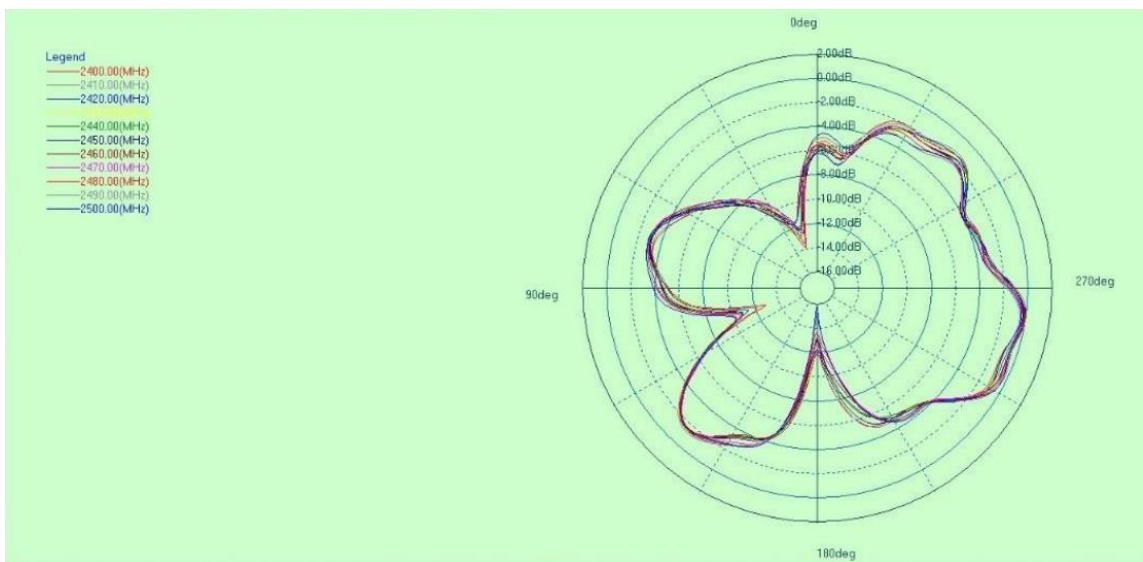


| Frequency | Gain (dBi)  | Efficiency (%) |
|-----------|-------------|----------------|
| 2400MHz   | 2.89        | <b>52</b>      |
| 2410MHz   | 2.83        | 52             |
| 2420MHz   | 2.90        | 52             |
| 2430MHz   | 3.17        | 52             |
| 2440MHz   | 3.12        | 51             |
| 2450MHz   | <b>3.22</b> | 51             |
| 2460MHz   | 3.06        | 51             |
| 2470MHz   | 2.94        | 51             |
| 2480MHz   | 3.11        | 51             |
| 2490MHz   | 3.16        | 51             |
| 2500MHz   | 2.85        | 50             |

1D Radiation Pattern



PHI=0



PHI=90

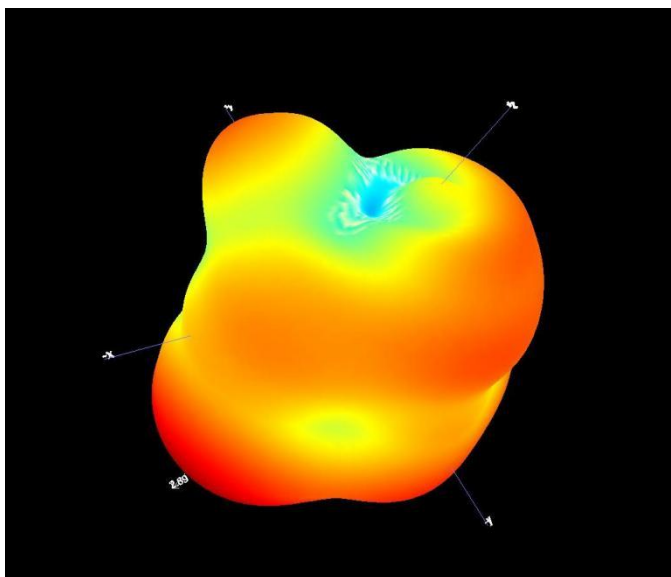


THETA=90

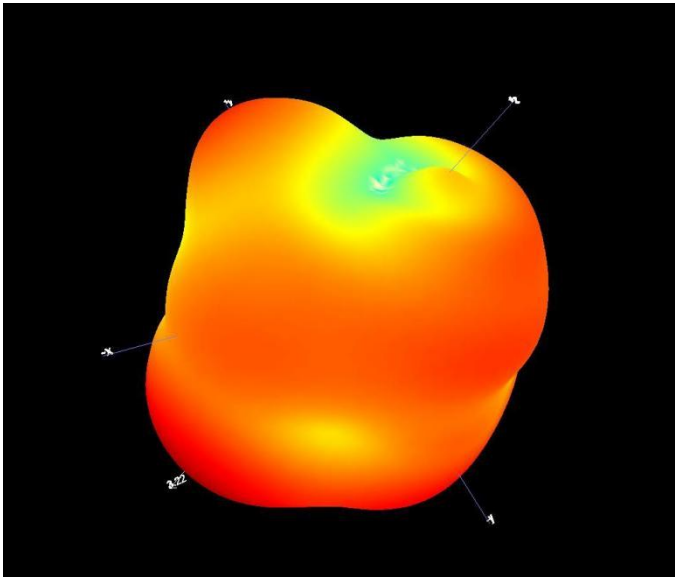
## ANNEX B RADIATION PATTERN

### B.1 3D Pattern

#### B1.1 3D Pattern for 2400MHz



#### B1.2 3D Pattern for 2450MHz



B1.3 3D Pattern for 2500MHz

