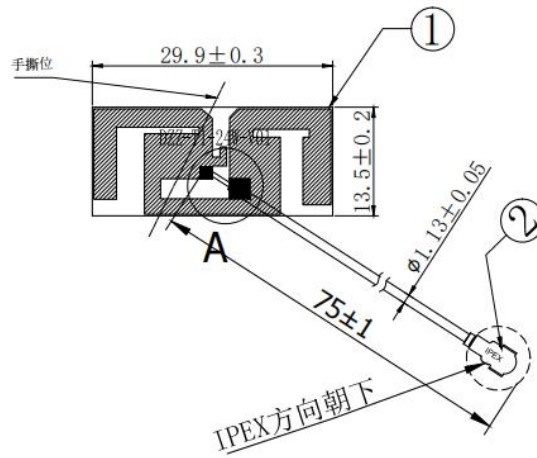


## 1、Antenna picture



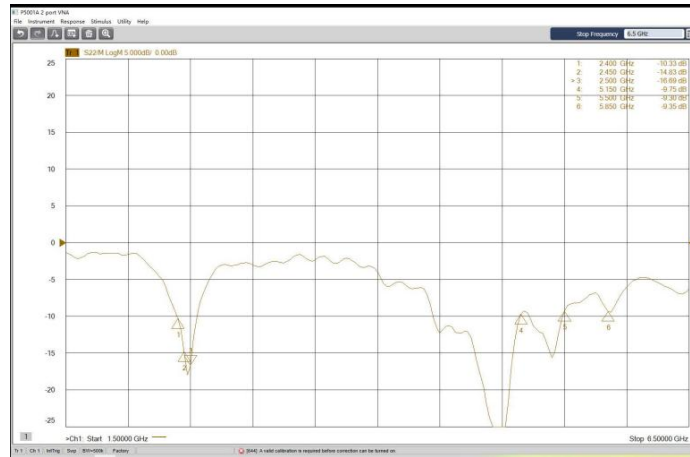
Zigbee antenna

## 2、Electrical Specifications

|                 |                                                                                                                                                                                                                  |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency Range | 2400~2500MHz                                                                                                                                                                                                     |
| Bandwidth       | 100 MHz                                                                                                                                                                                                          |
| Input Impedence | 50Ω                                                                                                                                                                                                              |
| S11             | ≤ -10 dB                                                                                                                                                                                                         |
| Gain            | Peak Gain 0dBi                                                                                                                                                                                                   |
| Manufacturer    | Lumi United Technology Co., Ltd<br>Room 801-804, Building 1, Chongwen Park,<br>Nanshan iPark, No. 3370, Liuxian Avenue,<br>Fuguang Community, Taoyuan Residential<br>District, Nanshan District, Shenzhen, China |

## 3、Antenna S11

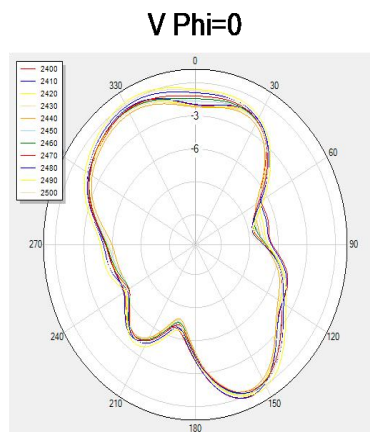
Manufacturer: Shenzhen Zhongtian Xun Communication Technology Co., Ltd.  
Address: No.34 Shilong Avenue, Shiyan Town, Baoan District, Shenzhen (Tengda Industrial Park)



#### 4、Plane Definition Radiation

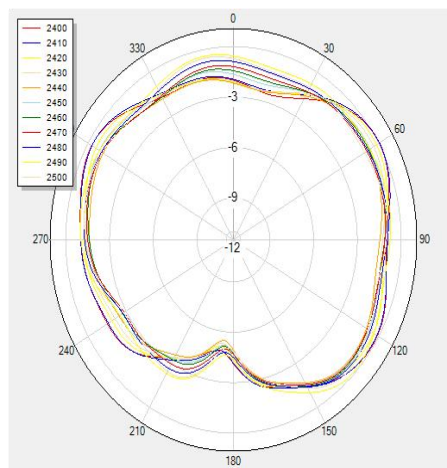
|          |           |
|----------|-----------|
| XY Plane | Theta=90° |
| XZ Plane | Phi=0°    |
| YZ Plane | Phi=90    |

Phi=0°



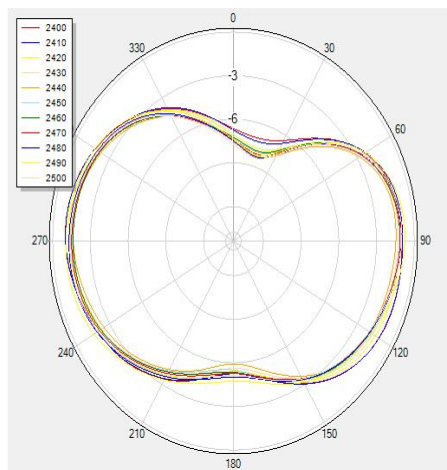
Phi=90°

V Phi=90



Theta=90°

H Theta=90



## 5.Test Results

| Frequency<br>ID | Frequency<br>(MHz) | Gain<br>(dBi) | Efficiency<br>(dB) | Efficiency<br>(%) |
|-----------------|--------------------|---------------|--------------------|-------------------|
|-----------------|--------------------|---------------|--------------------|-------------------|

|           |             |       |       |       |
|-----------|-------------|-------|-------|-------|
| <b>1</b>  | <b>2400</b> | -0.82 | -3.58 | 43.84 |
| <b>2</b>  | <b>2410</b> | -0.71 | -3.69 | 42.8  |
| <b>3</b>  | <b>2420</b> | -0.54 | -3.95 | 40.26 |
| <b>4</b>  | <b>2430</b> | -0.14 | -3.53 | 44.36 |
| <b>5</b>  | <b>2440</b> | -0.19 | -3.87 | 41    |
| <b>6</b>  | <b>2450</b> | 0     | -3.82 | 41.51 |
| <b>7</b>  | <b>2460</b> | -0.09 | -3.78 | 41.9  |
| <b>8</b>  | <b>2470</b> | -0.21 | -3.79 | 41.78 |
| <b>9</b>  | <b>2480</b> | -0.15 | -3.47 | 45    |
| <b>10</b> | <b>2490</b> | -0.66 | -3.87 | 41.02 |
| <b>11</b> | <b>2500</b> | -0.95 | -3.71 | 42.53 |