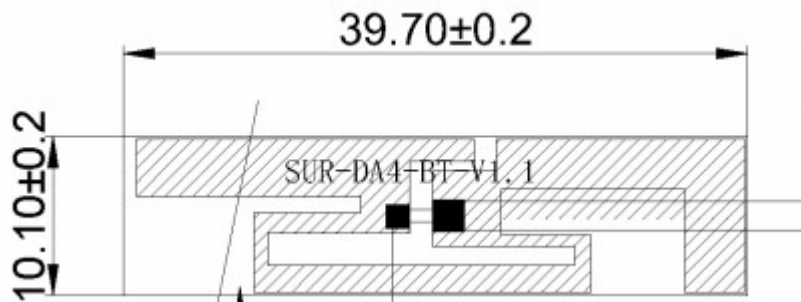


## 1、Antenna Information



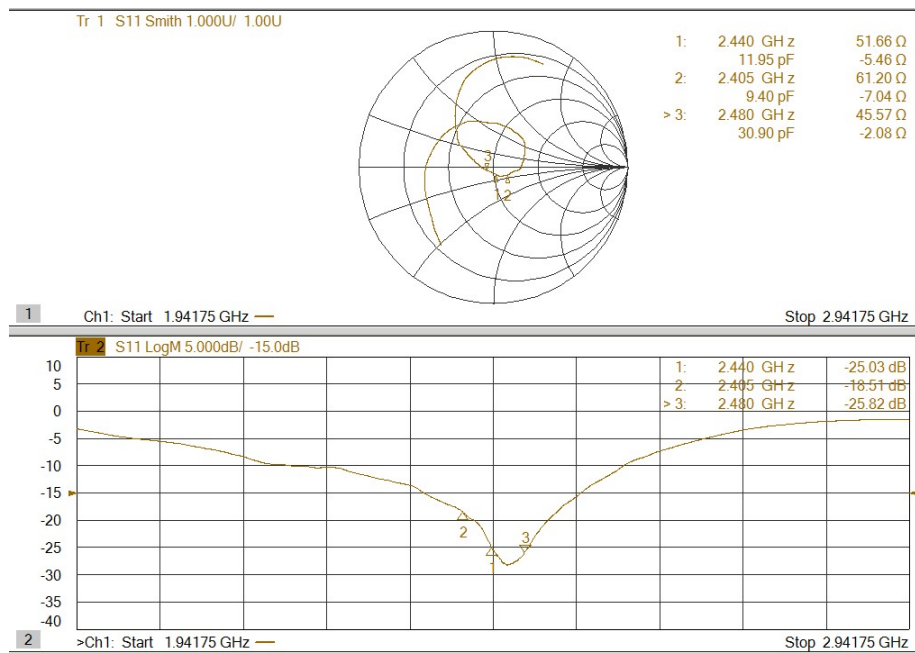
BLE Antenna

|               |                                       |
|---------------|---------------------------------------|
| Product Model | DA4                                   |
| Antenna Model | DA4-BLE                               |
| Antenna Type  | PCB                                   |
| Manufacturer  | Shenzhen Surbaner Technology CO.,LTD. |

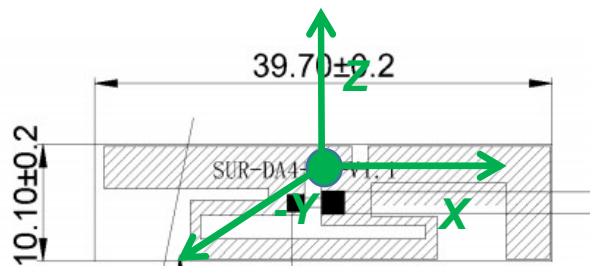
## 2、Electrical Specifications

|                 |                 |
|-----------------|-----------------|
| Frequency Range | 2400~2500MHz    |
| Bandwidth       | 100 MHz         |
| Input Impedence | 50Ω             |
| S11             | ≤ -10 dB        |
| Gain            | Peak Gain 1 dBi |

## 3、Antenna S11



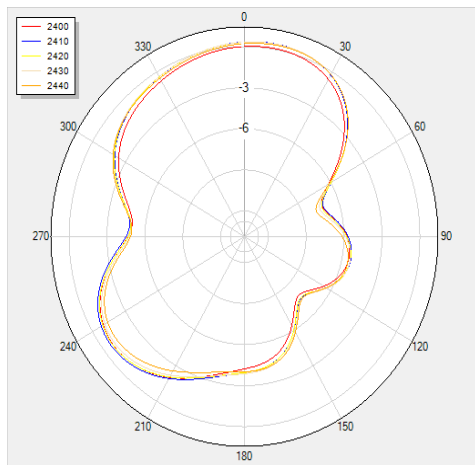
#### 4、Plane Definition Radiation



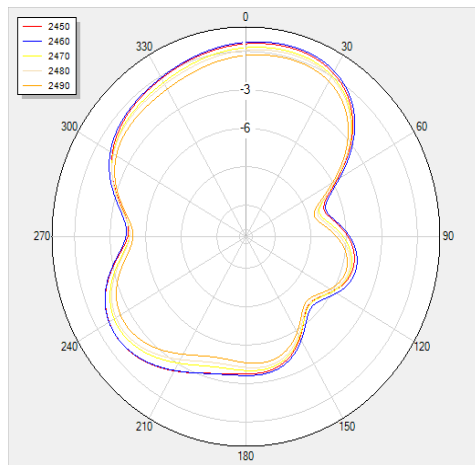
|          |           |
|----------|-----------|
| XY Plane | Theta=90° |
| XZ Plane | Phi=0°    |
| YZ Plane | Phi=90    |

#### 5、Pattern

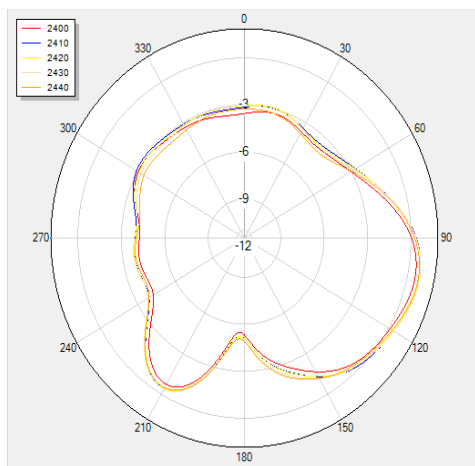
**H Theta=90**



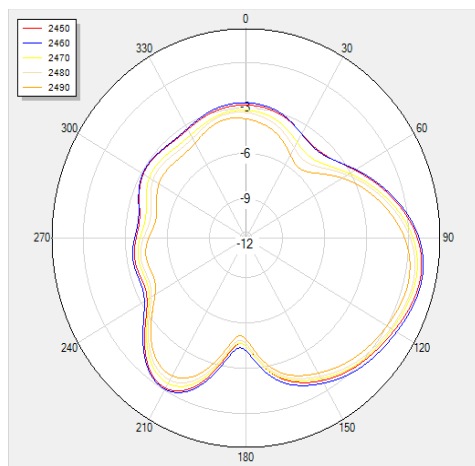
**H Theta=90**



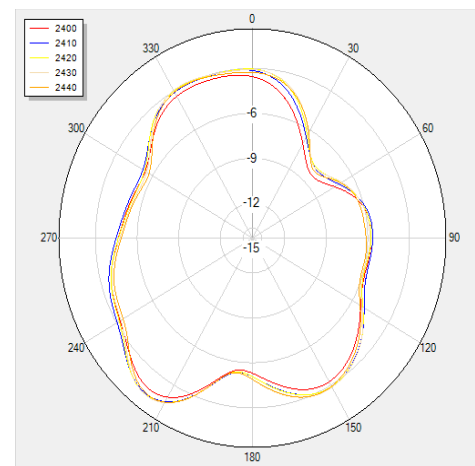
**V Phi=0**



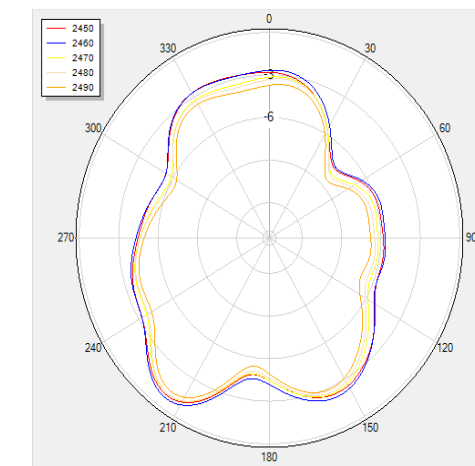
**V Phi=0**



**V Phi=90**



**V Phi=90**



## 6. Test Results

| Frequency<br>ID | Frequency<br>(MHz) | Gain<br>(dBi) | Efficiency<br>(dB) | Efficiency<br>(%) |
|-----------------|--------------------|---------------|--------------------|-------------------|
| 1               | 2400               | 0.45          | -3.96              | 40.2              |
| 2               | 2410               | 0.38          | -3.81              | 41.6              |
| 3               | 2420               | 0.51          | -3.88              | 40.9              |
| 4               | 2430               | 1             | -3.85              | 41.2              |
| 5               | 2440               | 0.45          | -3.86              | 41.1              |
| 6               | 2450               | 0.36          | -3.69              | 42.8              |
| 7               | 2460               | 0.45          | -3.62              | 43.5              |
| 8               | 2470               | 0.48          | -3.70              | 42.7              |
| 9               | 2480               | 0.49          | -3.78              | 41.9              |
| 10              | 2490               | 0.58          | -3.82              | 41.5              |
| 11              | 2500               | 0.43          | -3.93              | 40.5              |