

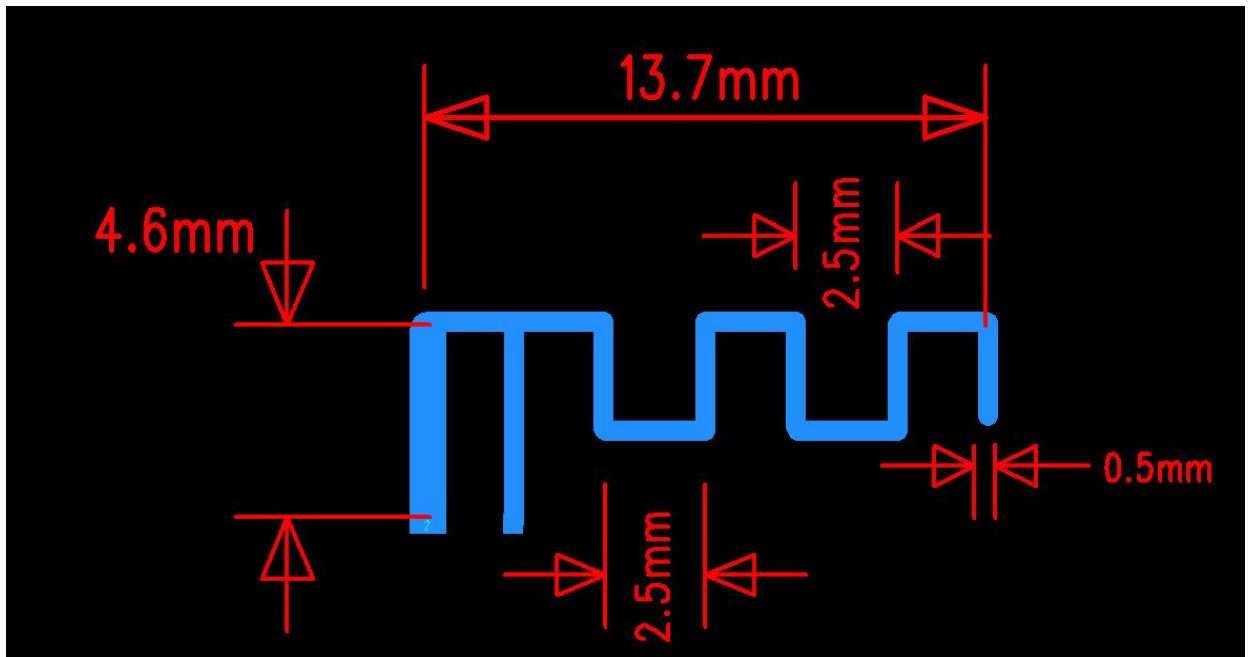
## ShenZhen Lenodell Technology Co.,Ltd

Add: 5th Floor, Building B, Wentao Industrial Park, Yongxin Street,  
Yingrenshi Community, Shiyan Street, Baoan District, Shenzhen

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1, mechanical dimension

a, antenna dimension



b. antenna final figure

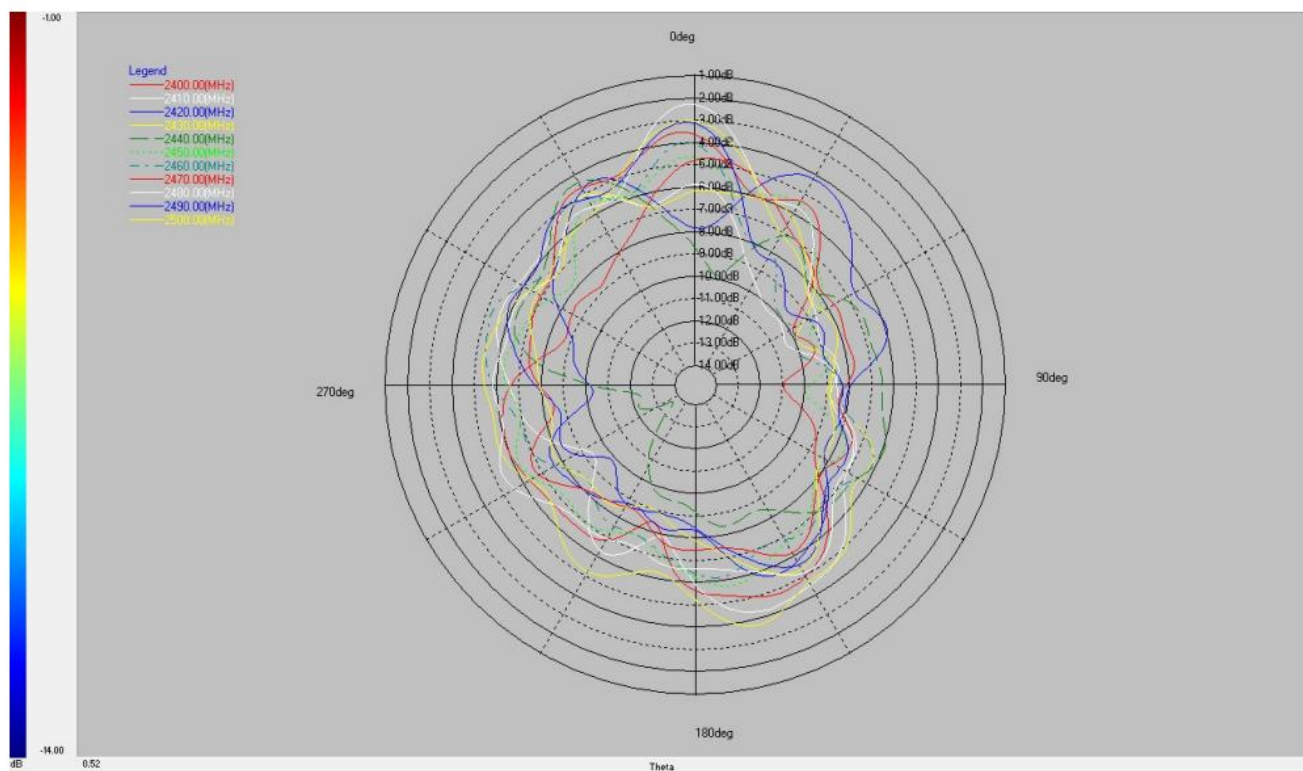


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## 1. 2D Radiation Pattern

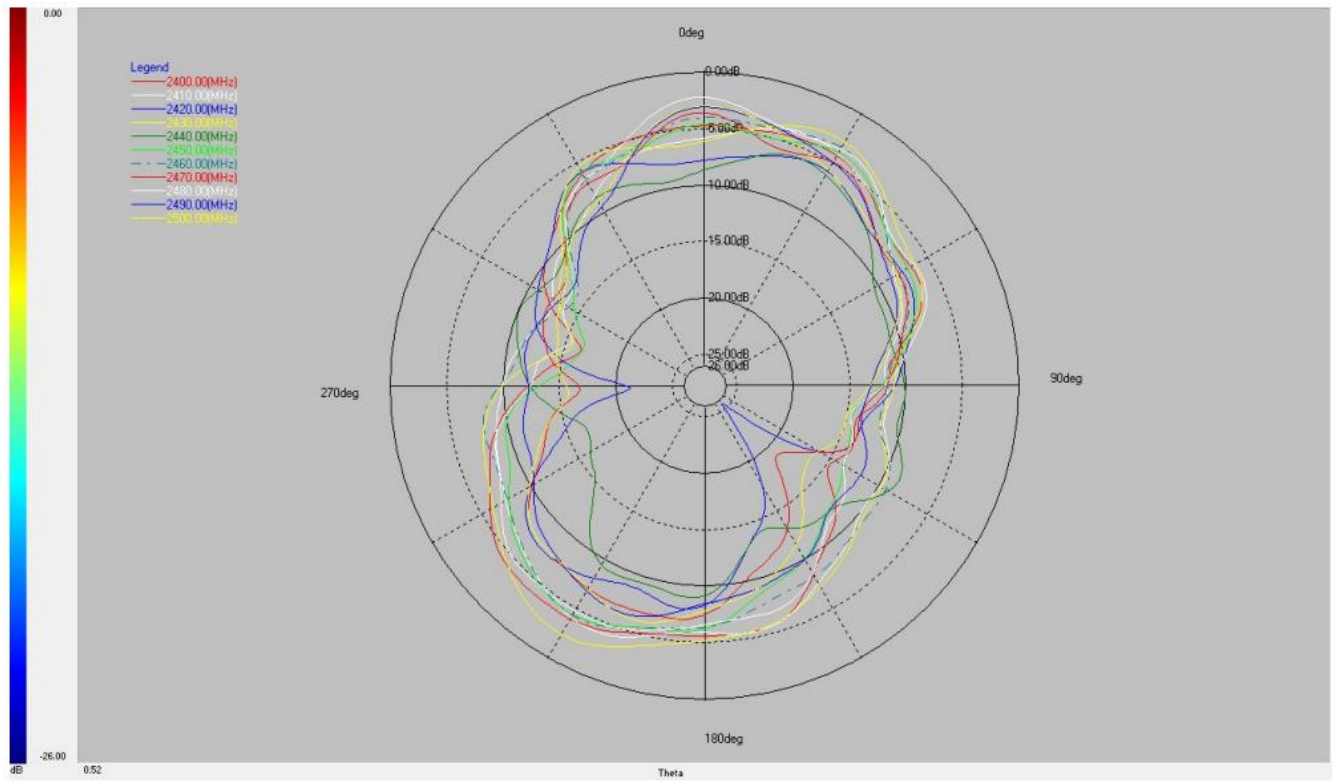
Phi=0°



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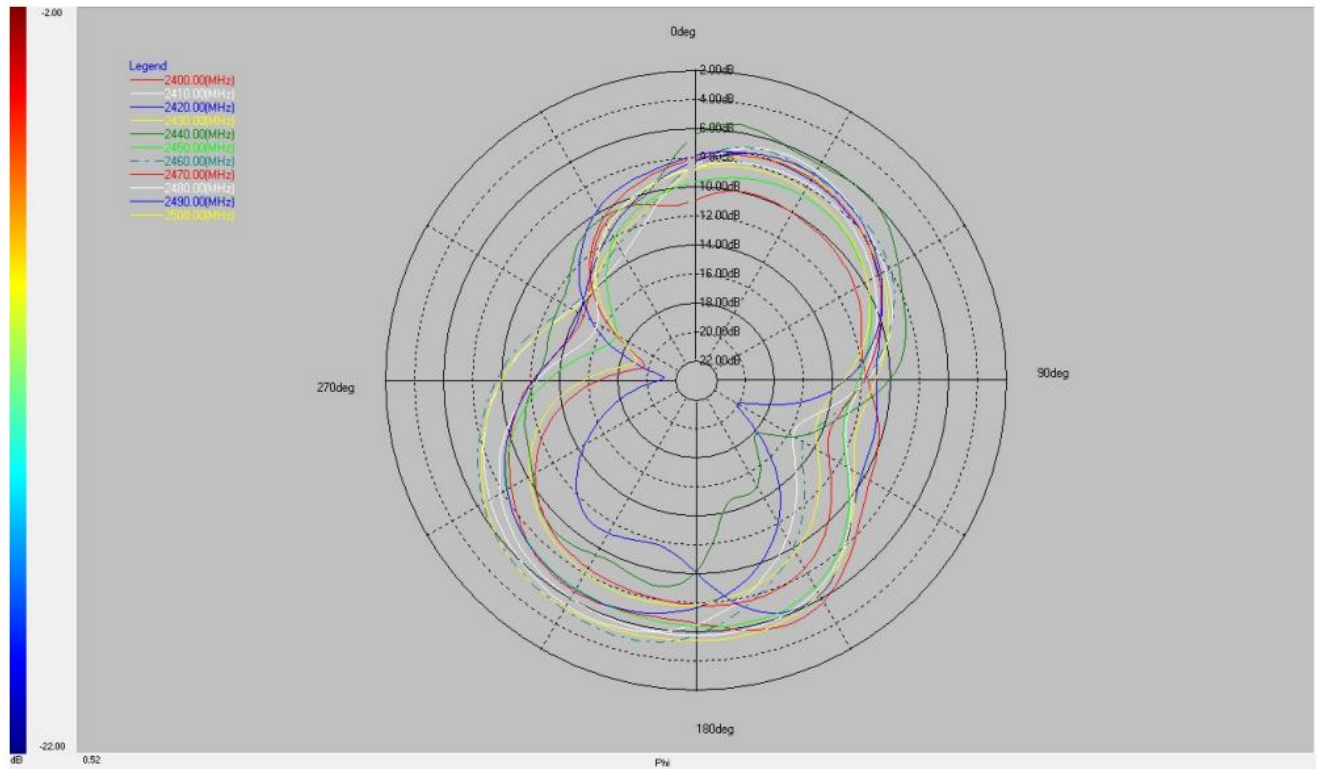
Phi=90°



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Theta=90°



d. antenna model: L-003-F2

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### 2, antenna specification

#### Bluetooth mechanical specification

##### 2400-2500MHZ

| Electrical specifications |                               |
|---------------------------|-------------------------------|
| Frequency range (MHz)     | 2400-2500                     |
| Polarization              | Linear                        |
| Gain (dBi)                | -2.41                         |
| Impedance ( $\Omega$ )    | 50                            |
| Directivity               | Omni-directional              |
| VSWR                      | $\leq 2.0$ (Center frequency) |

| Mechanical specifications                    |        |
|----------------------------------------------|--------|
| Texture of material                          |        |
| Immersion tin length                         |        |
| Operation Temperature ( $^{\circ}\text{C}$ ) | -30~60 |
| Humidity (%)                                 | 5~95   |

### 3.Gain

| Frequency | E Total. dB(dB) | Efficiency( ) |
|-----------|-----------------|---------------|
| 2400MHz   | -3.86886        | 16.23%        |
| 2410MHz   | -3.80462        | 17.25%        |
| 2420MHz   | -3.58124        | 17.64%        |
| 2430MHz   | -3.50624        | 18.48%        |
| 2440MHz   | -3.41955        | 17.65%        |
| 2450MHz   | -3.26336        | 17.72%        |
| 2460MHz   | -2.9754         | 17.49%        |
| 2470MHz   | -2.67499        | 17.49%        |
| 2480MHz   | -2.41254        | 17.15%        |

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### 4. INSERTION LOSS/RETURN LOSS/VSWR

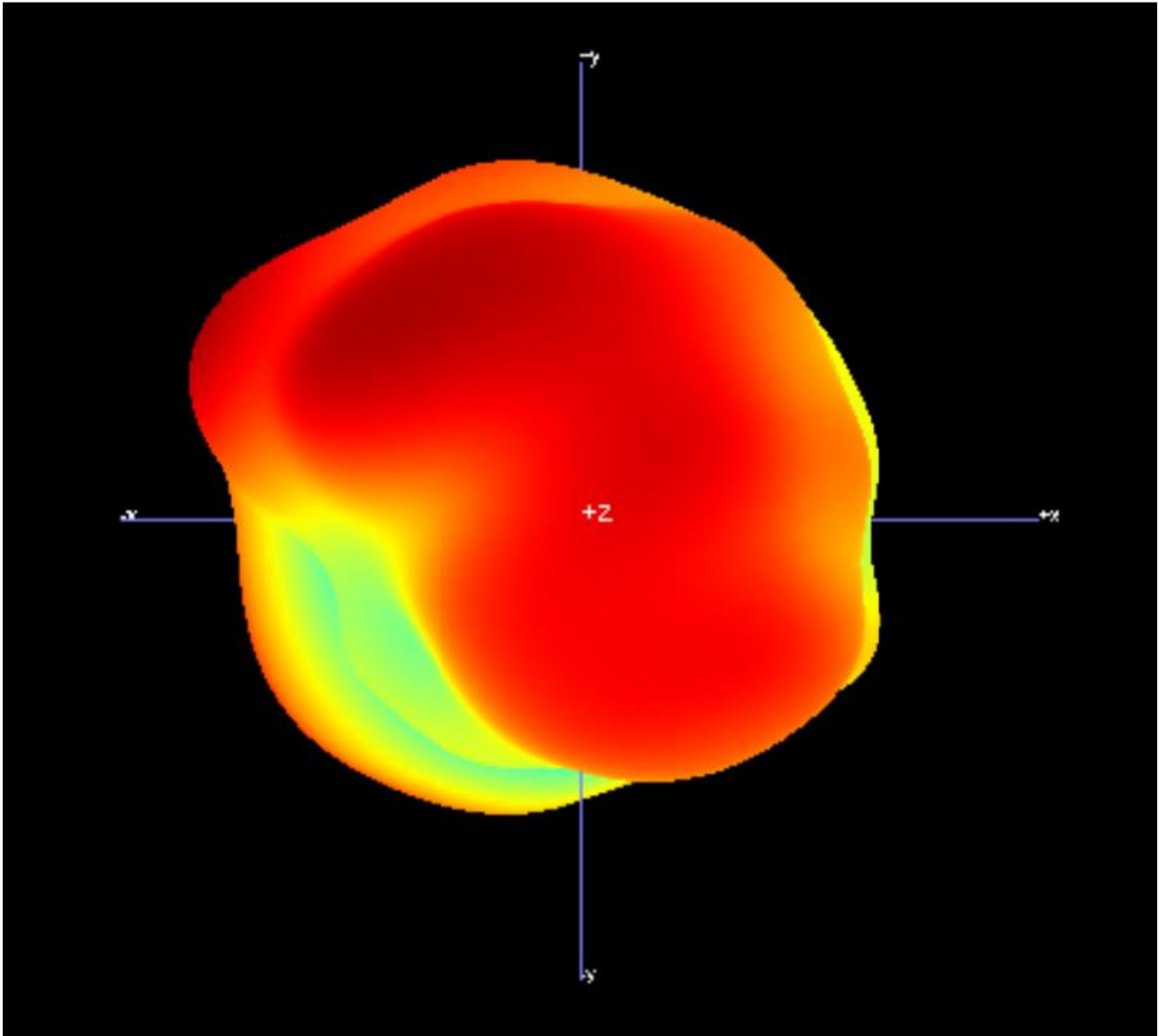
| Frequency | Input impedance( $\Omega$ ) | Return loss( dB) | VSWR  |
|-----------|-----------------------------|------------------|-------|
| 2400MHz   | 38.886                      | -6.354           | 2.512 |
| 2402MHz   | 37.336                      | -6.412           | 2.543 |
| 2440MHz   | 22.254                      | -6.753           | 2.501 |
| 2480MHz   | 18.320                      | -6.613           | 2.522 |
| 2500MHz   | 18.715                      | -6.702           | 2.518 |

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### 5. 3D Pattern

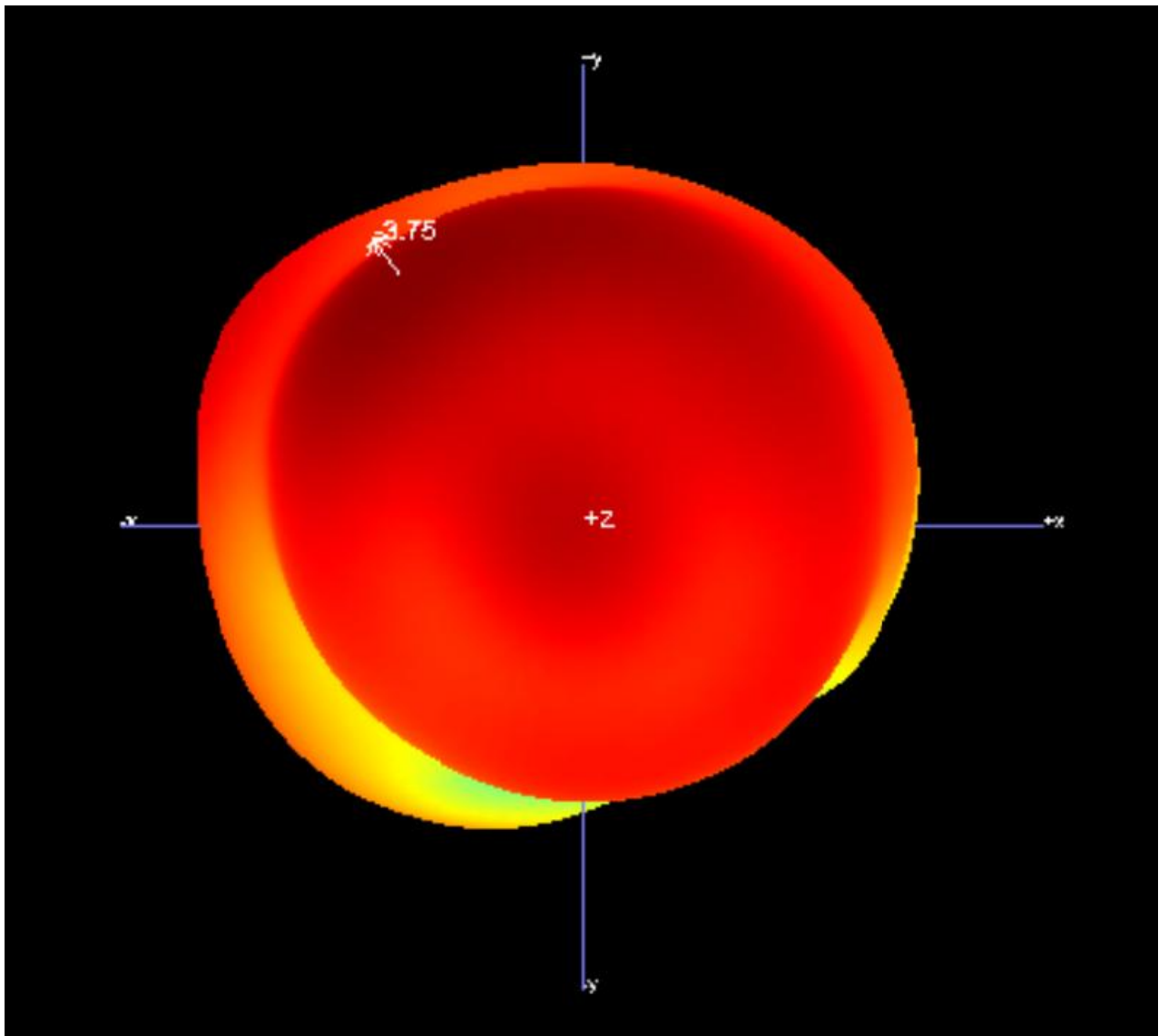


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2440MHZ





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2450MHZ

