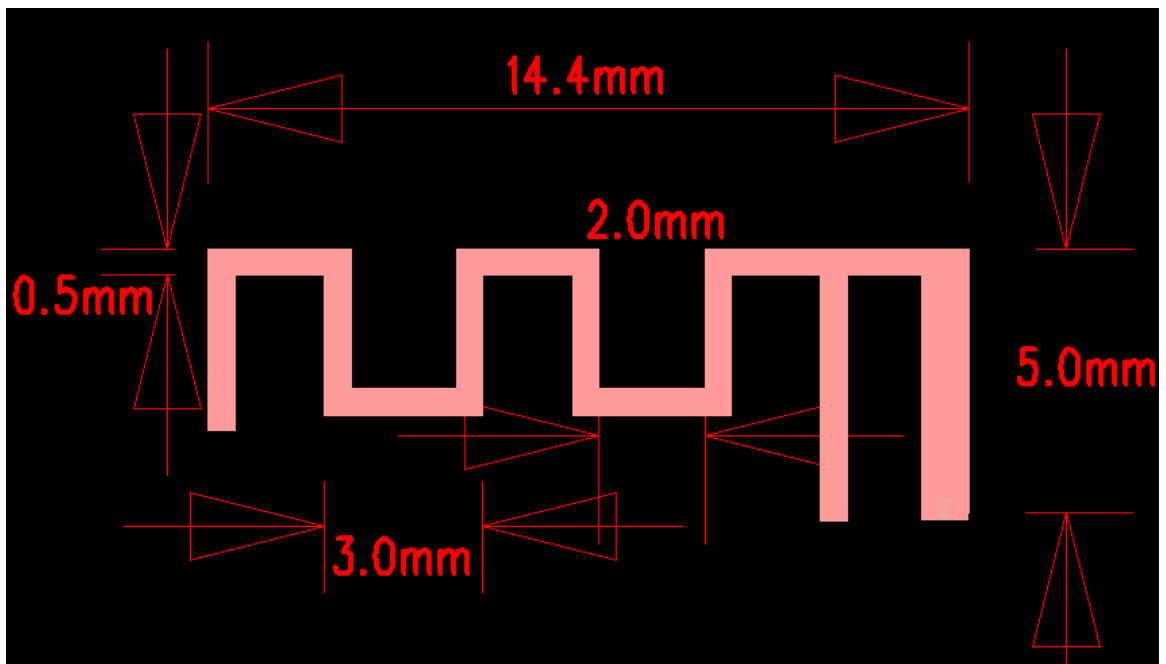


1, mechanical dimension

a, antenna dimension

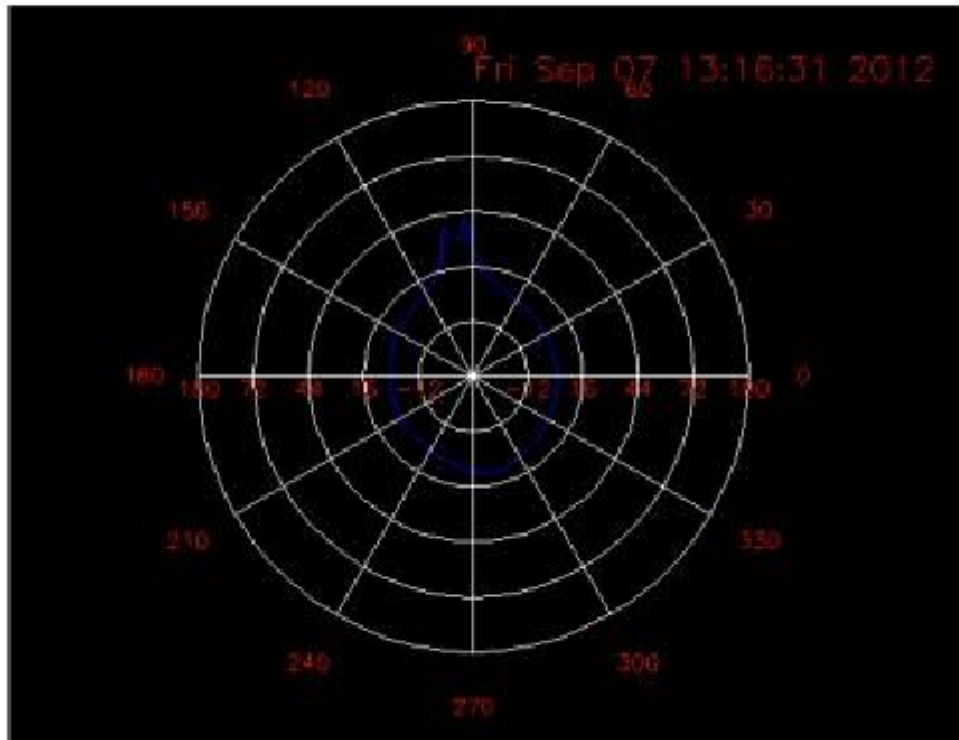


b. antenna final figure



c, antenna direction

## 2.445GHZ radiation pattern



2, antenna specification

### Bluetooth mechanical specification

#### **2400-2500MHZ**

<b>Electrical specifications</b>	
<b>Frequency range (MHz)</b>	<b>2400-2500</b>
<b>Polarization</b>	<b>Linear</b>
<b>Gain (dBi)</b>	<b>-2.41</b>
<b>Impedance (<math>\Omega</math>)</b>	<b>50</b>
<b>Directivity</b>	<b>Omni-directional</b>
<b>VSWR</b>	<b><math>\leq 2.0</math> (Center frequency)</b>

**Mechanical specifications**

<b>Texture of material</b>	
<b>Immersion tin length</b>	
<b>Operation Temperature (°C)</b>	<b>-30~60</b>
<b>Humidity (%)</b>	<b>5~95</b>

**3.Gain**

Frequency	E Total. dB(dBi)	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%

**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

5. 3D Pattern Unit: dBi



-2.41  
-2.57  
-2.73  
-2.89  
-3.05  
-3.21  
-3.37  
-3.53  
-3.69  
-3.85  
-4.01  
-4.17  
-4.33  
-4.49  
-4.65  
-4.81

