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M1

天线性能测试规格书

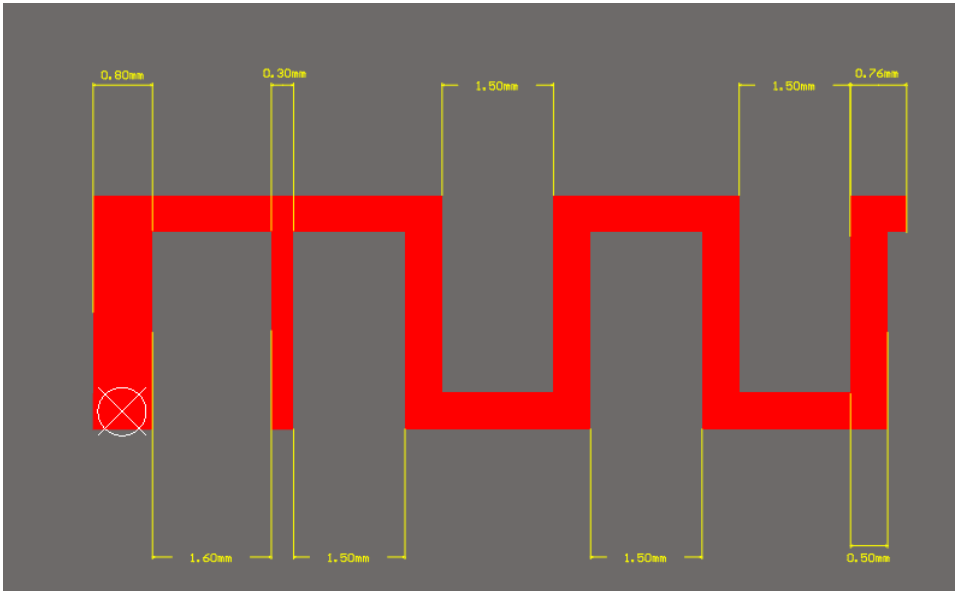
Antenna specification

# APPlications

※Bluetooth Home RF

※ISM band 2.4GHz applications

## 1. Dimensions



## 2. Specifications

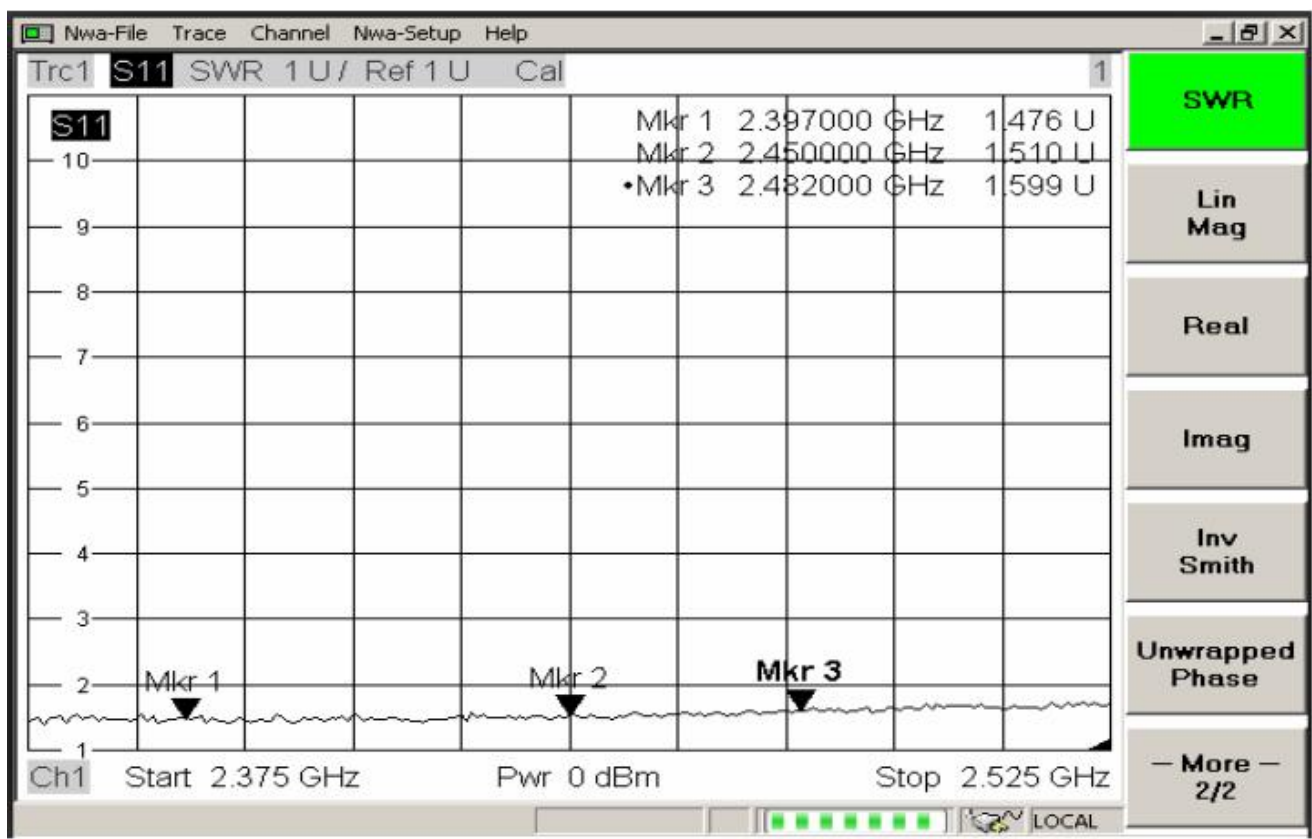
| number | Item                      | Specifications |
|--------|---------------------------|----------------|
| 1      | Working Central Frequency | 2441 MHz       |
| 2      | Band Width                | (2402-2480)MHz |
| 3      | Gain                      | 0dBi           |
| 4      | VSWR                      | ≤2.0           |
| 5      | Antenna type              | PCB antenna    |

|   |                    |                    |
|---|--------------------|--------------------|
| 6 | Azimuth Beam width | Omni - directional |
| 7 | Impedance          | 50 欧姆              |
| 8 | Modulation mode    | GFSK               |

### 3. 仪器测试、软件仿真参数

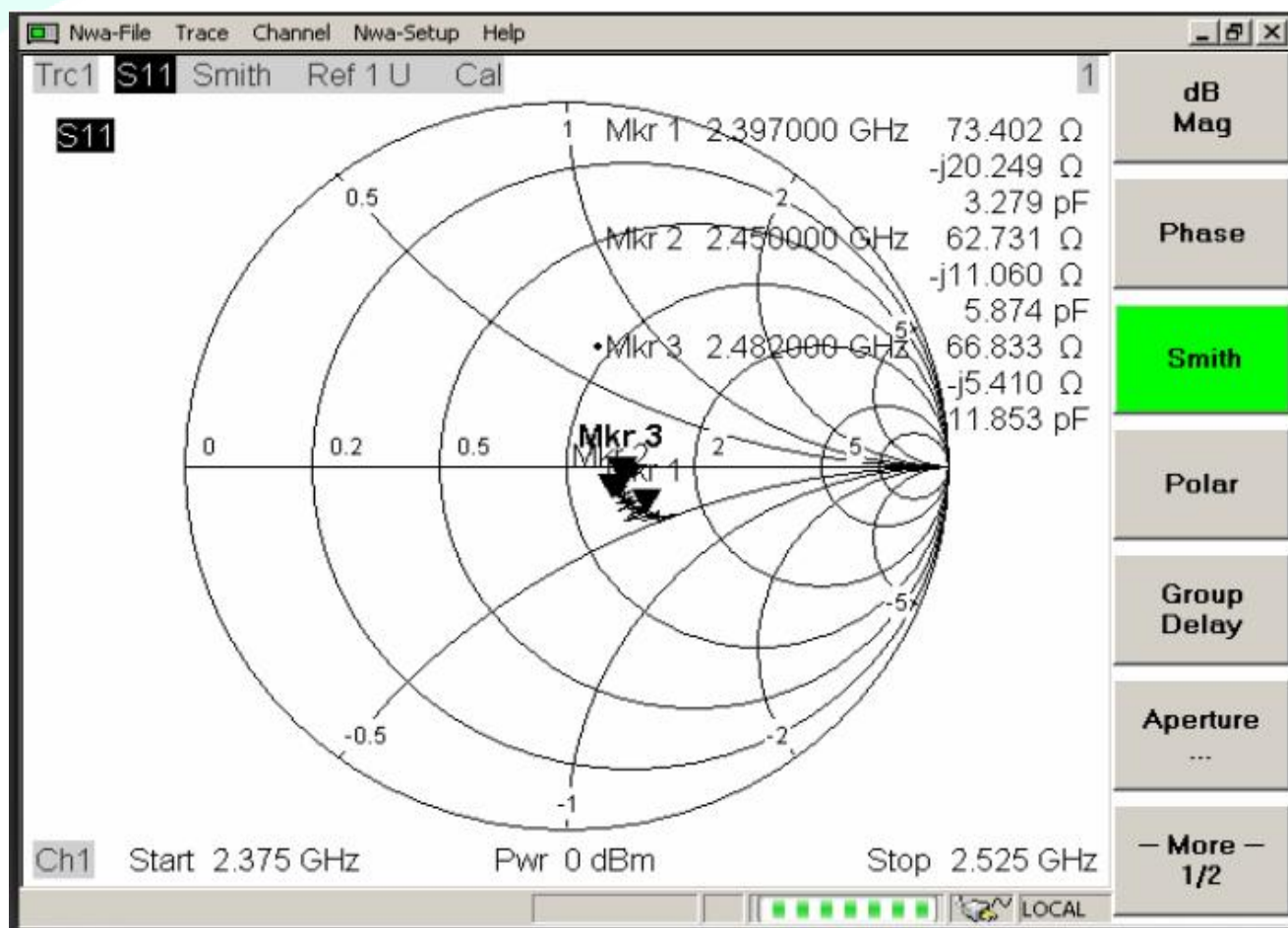
#### ① VSWR

Mkr1: 2397MHz 1.47    Mkr2: 2450MHz 1.51    Mkr3: 2482 MHz 1.59



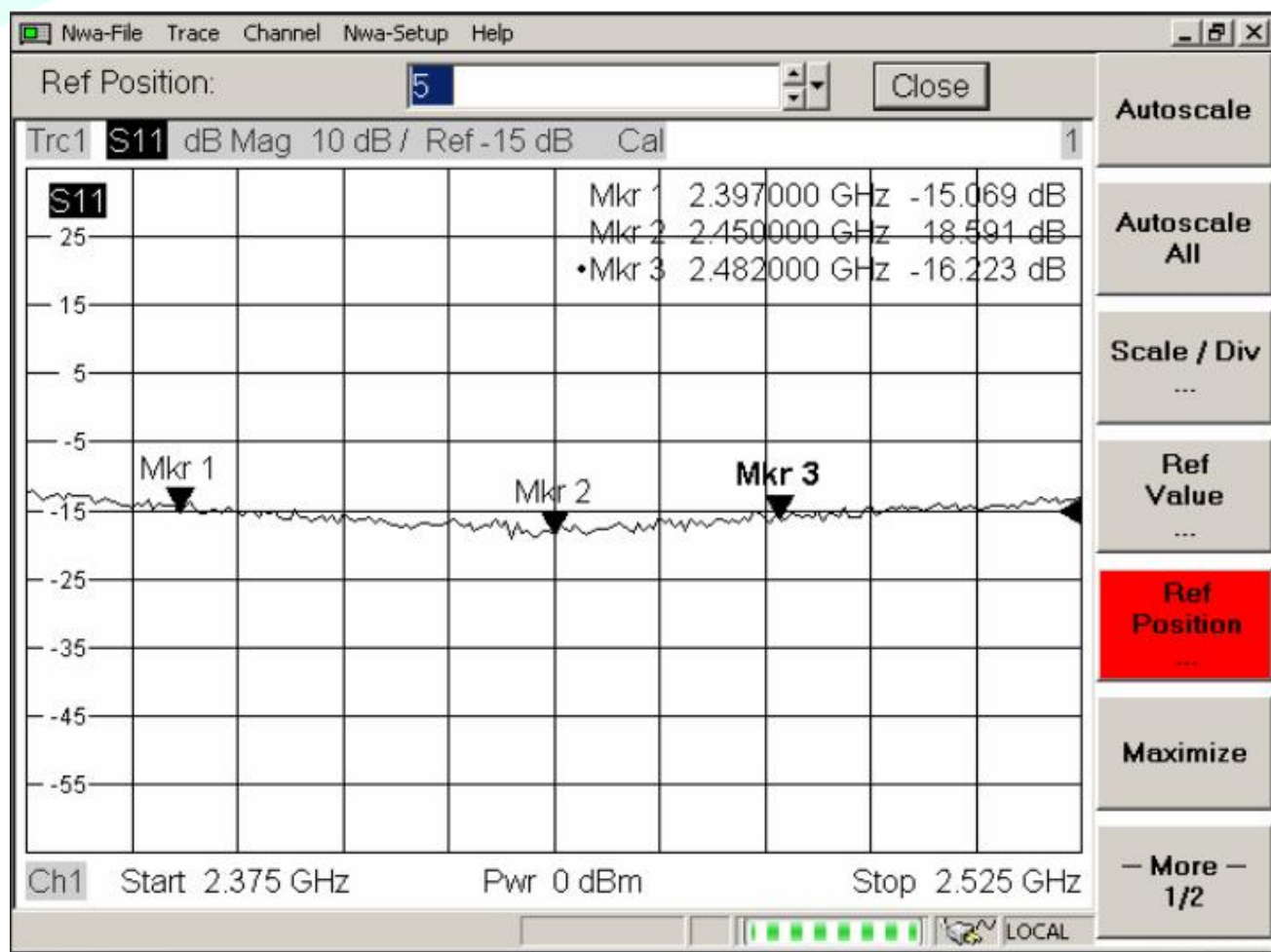
#### ②Smith Char

Mkr1: 2397MHz 73.4    Mkr2: 2450MHz 62.7    Mkr3: 2482MHz 66.8



### ③Return Loss

Mkr1: 2397MHz -15    Mkr2: 2450MHz -18    Mkr3: 2482 MHz -16

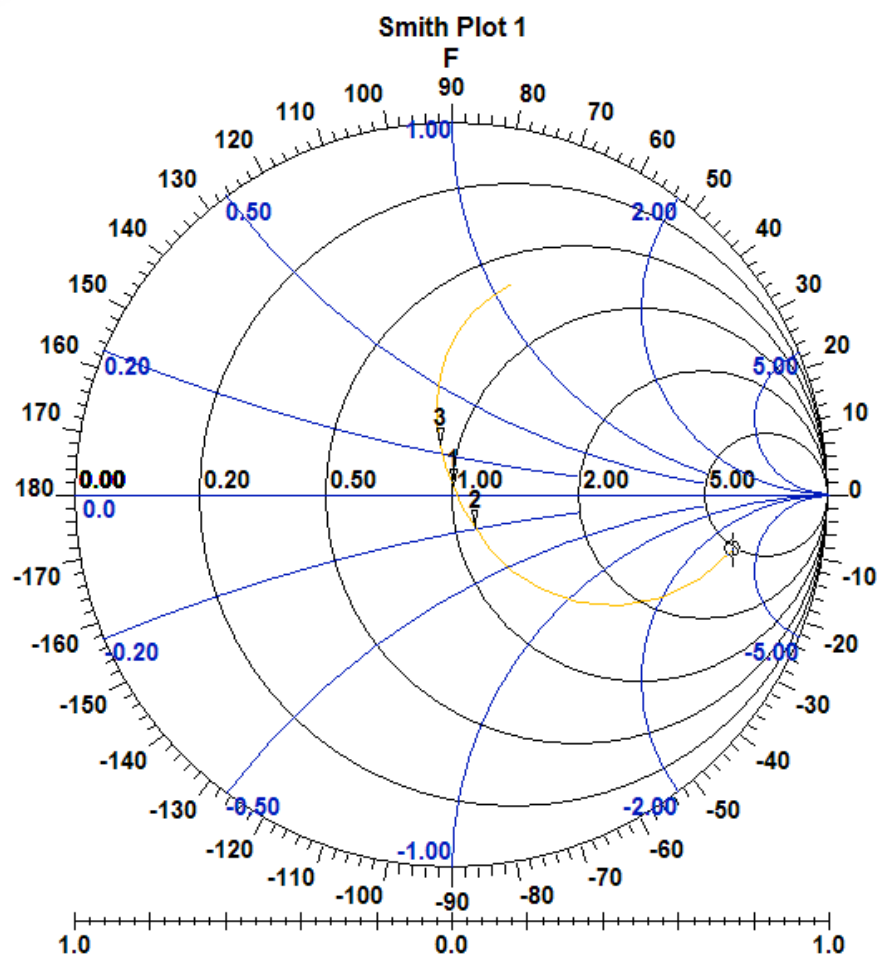


#### ④Smith Char 仿真

Mkr1: 2400MHz 1.234

Mkr2: 2500MHz 1.051

Mkr3: 2600MHz 1.322



VSWR1= 1.051  
2.500GHz

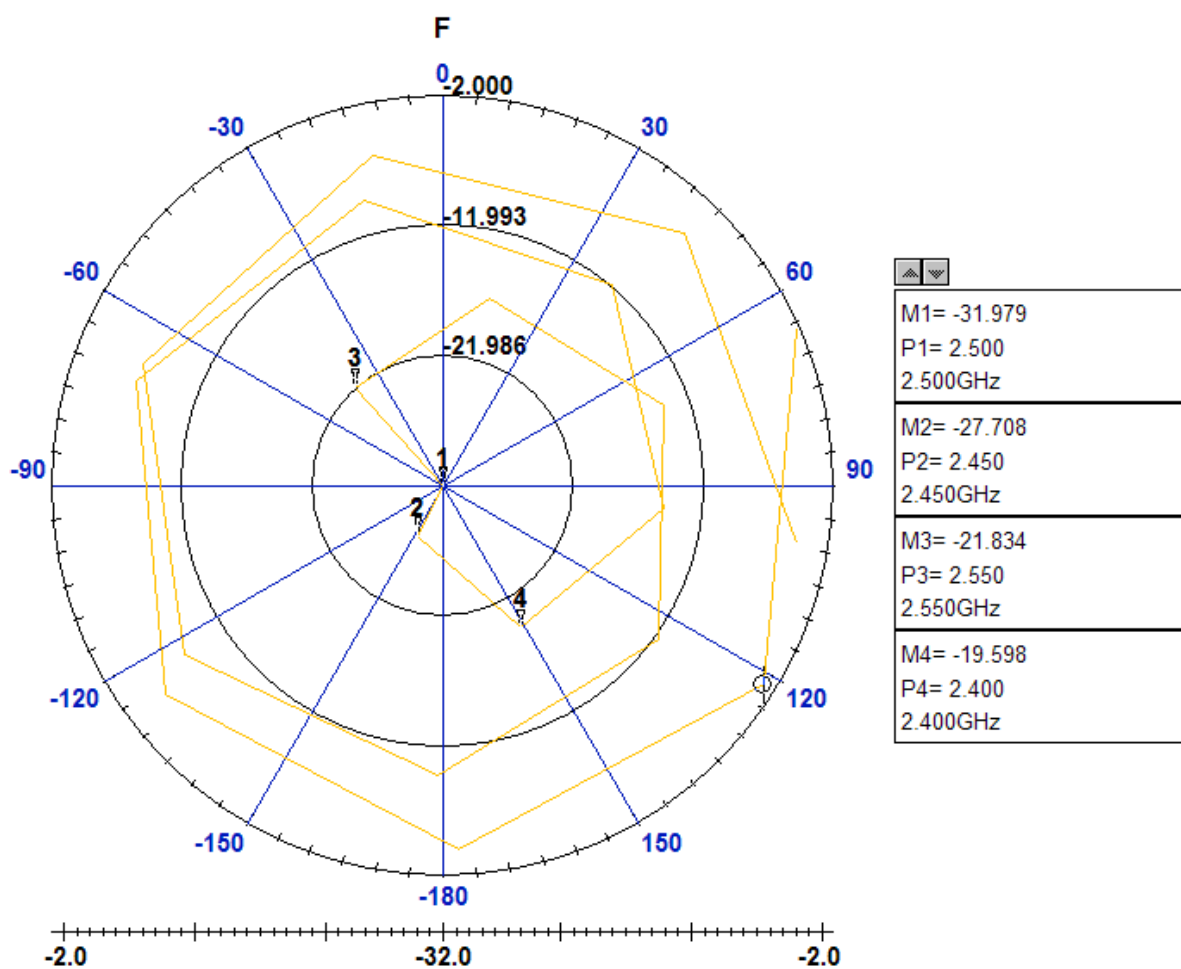
VSWR2= 1.234  
2.400GHz

VSWR3= 1.322  
2.600GHz

### ⑤Return Loss 仿真

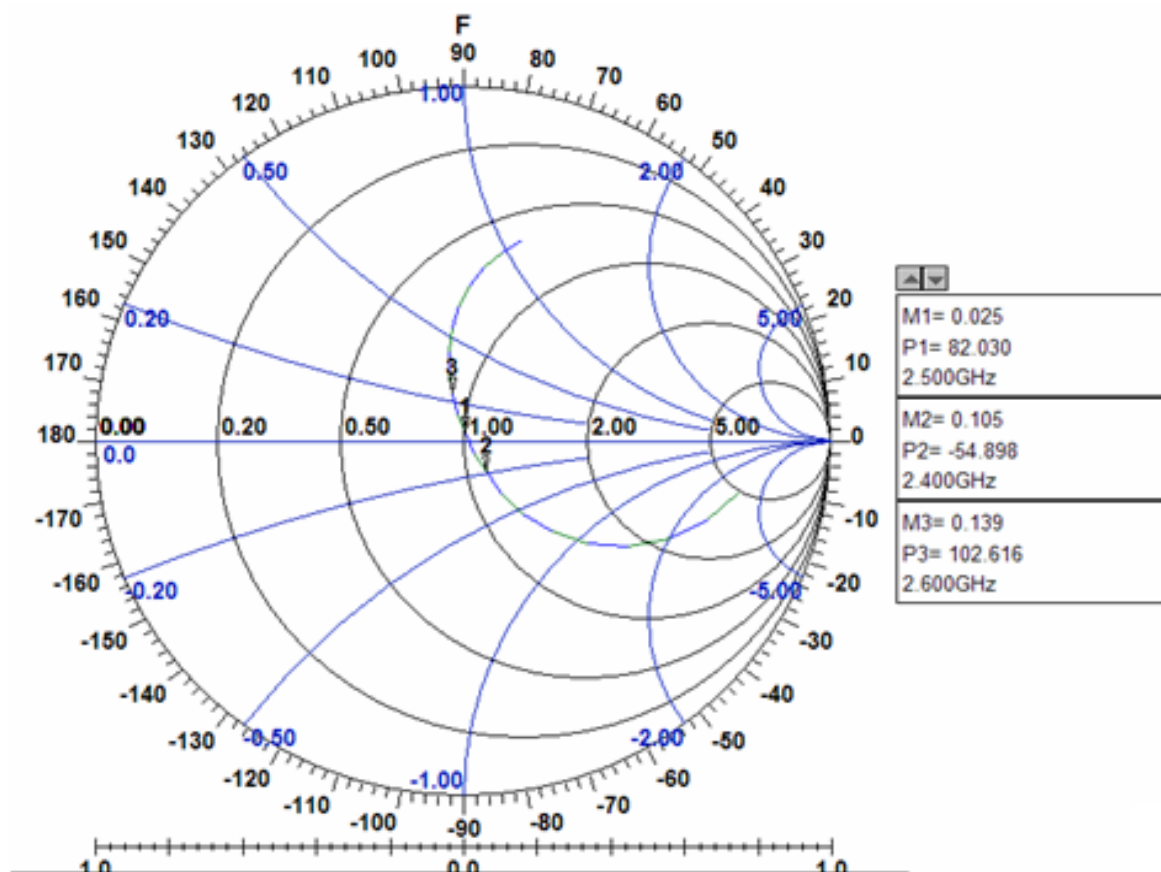
Mkr1: 2400MHz -19.59    Mkr2: 2450MHz -27.70    Mkr3: 2500MHz -31.97

Mkr4: 2550MHz -21.83



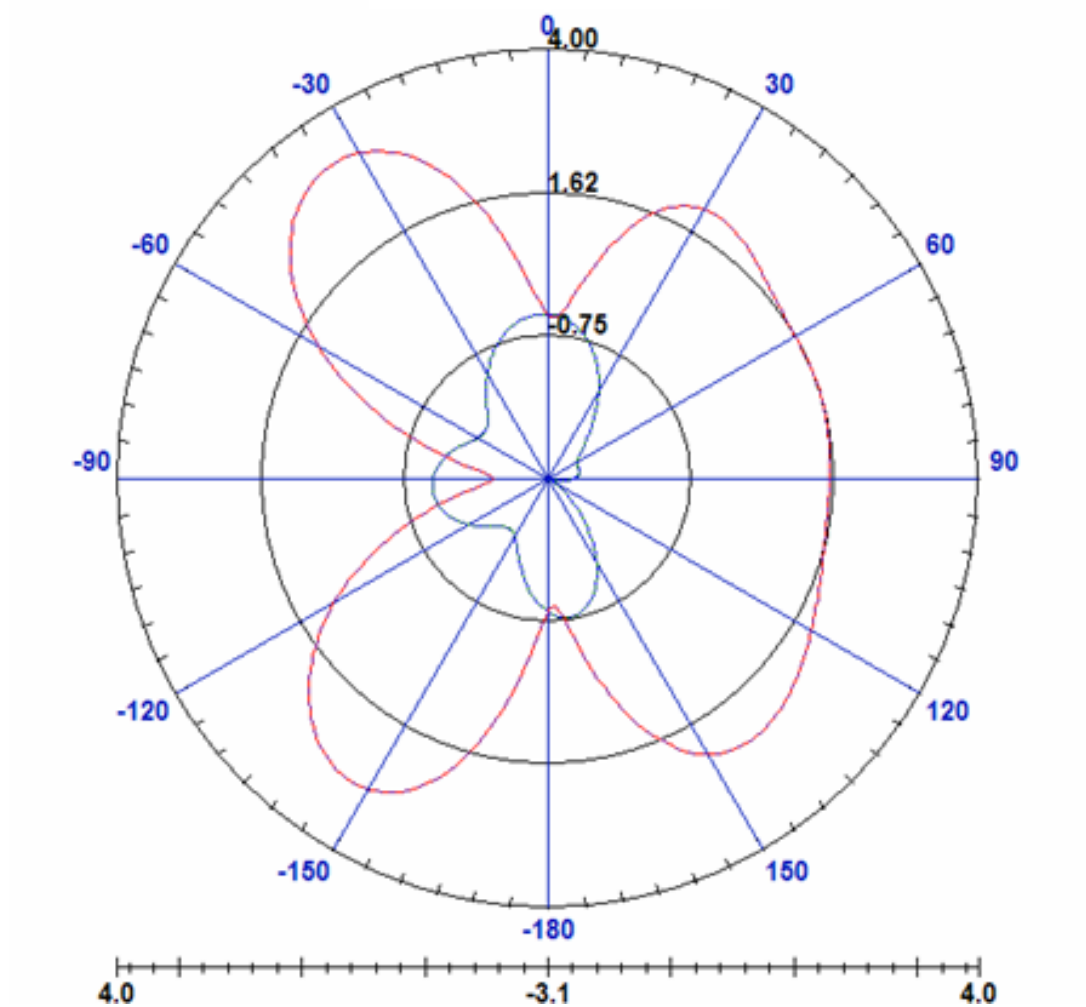
## ⑥Phase 仿真

Mkr1: 2400MHz -54.89    Mkr2: 2500MHz -82.03    Mkr3: 2600MHz -102.6

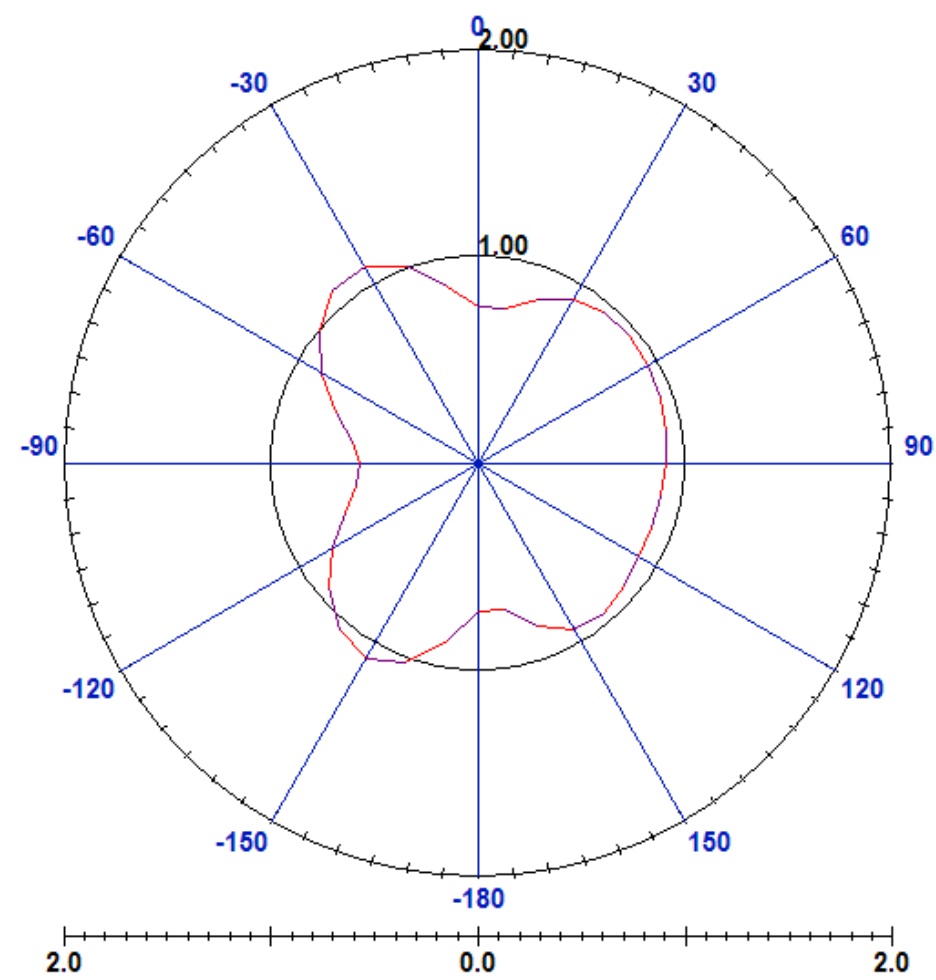


#### 4. Radiation Patterns

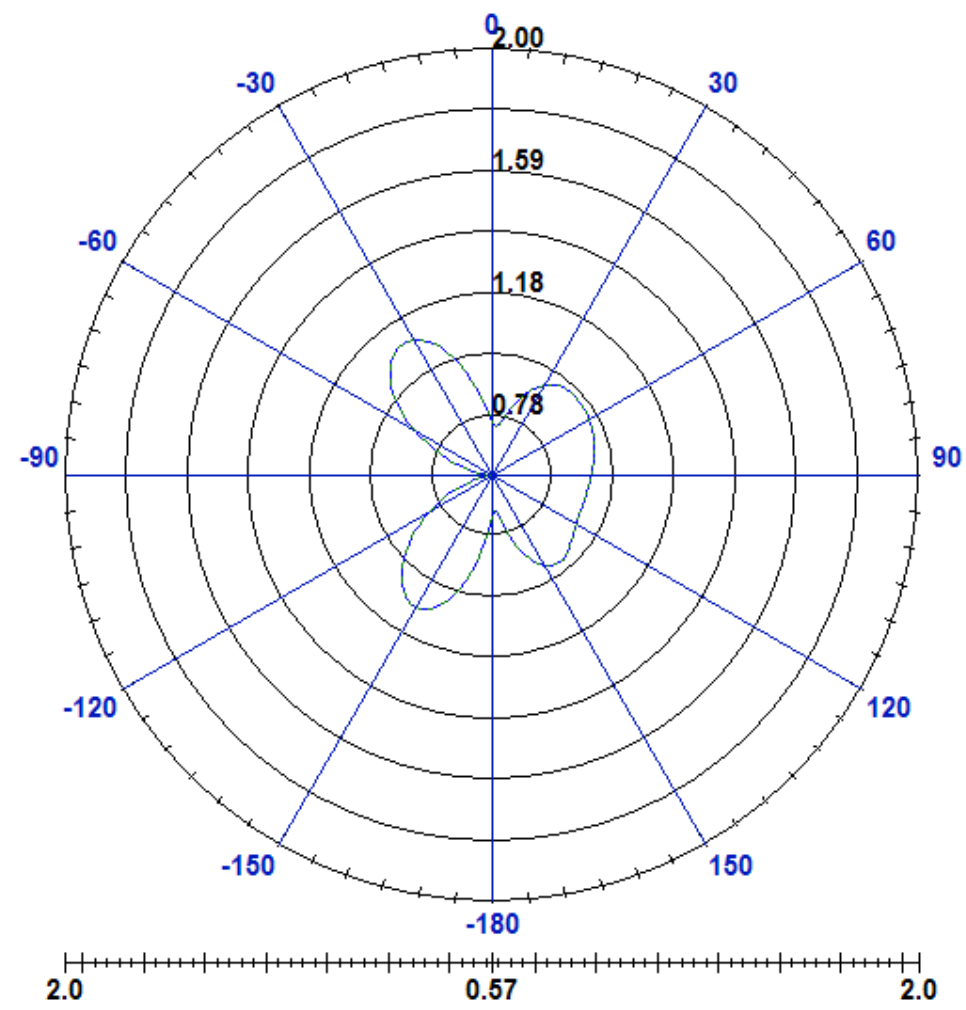
XY-plane



XZ-plane



YZ-plane

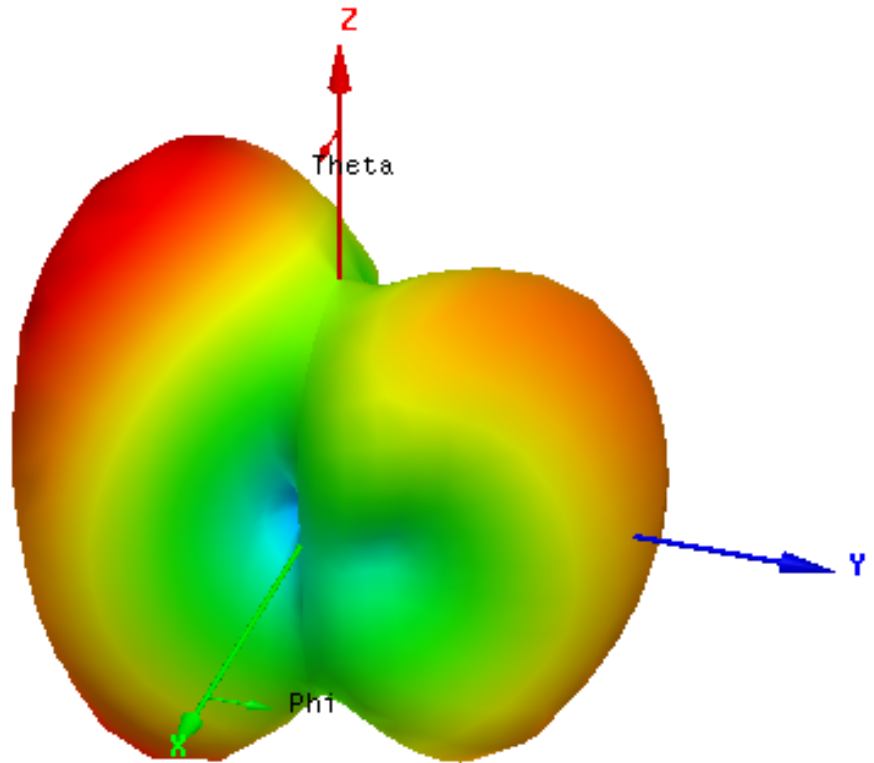


3D 辐射场型图

**rETotal[V]**



1.1041e+000  
1.0490e+000  
9.9383e-001  
9.3871e-001  
8.8358e-001  
8.2845e-001  
7.7333e-001  
7.1820e-001  
6.6307e-001  
6.0794e-001  
5.5282e-001  
4.9769e-001  
4.4256e-001  
3.8744e-001  
3.3231e-001  
2.7718e-001  
2.2206e-001



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