

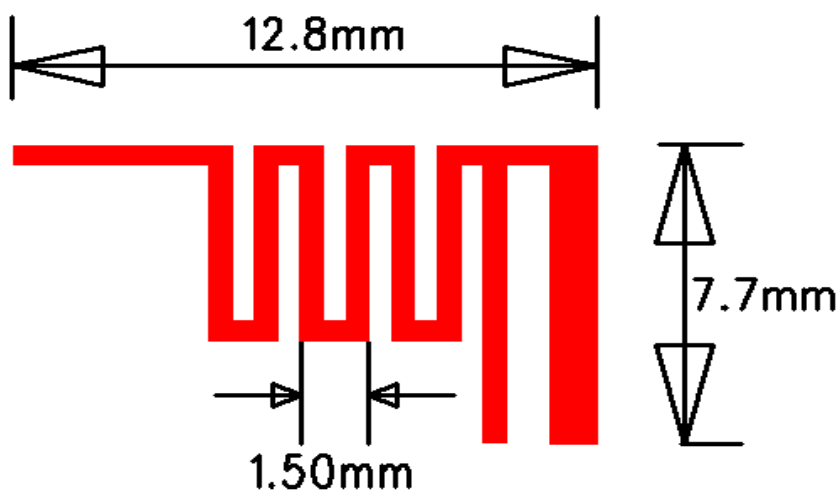
# Antenna Specification

## Specifications

### Summary

| ITEM                 | SPEC.            |          |
|----------------------|------------------|----------|
| Model Name           | IBM 2.4 GHz      |          |
| Center Frequency     | 2402 MHz         | 2.34 dBi |
|                      | 2441 MHz         | 2.07dBi  |
|                      | 2480 MHz         | 1.45 dBi |
| MAX. GAIN            | 2.34 dBi         |          |
| Polarization         | Horizontal       |          |
| Azimuth Beam Pattern | Omni-directional |          |
| Impedance            | 50 $\Omega$      |          |
| Antenna Length       | 36.0 mm          |          |

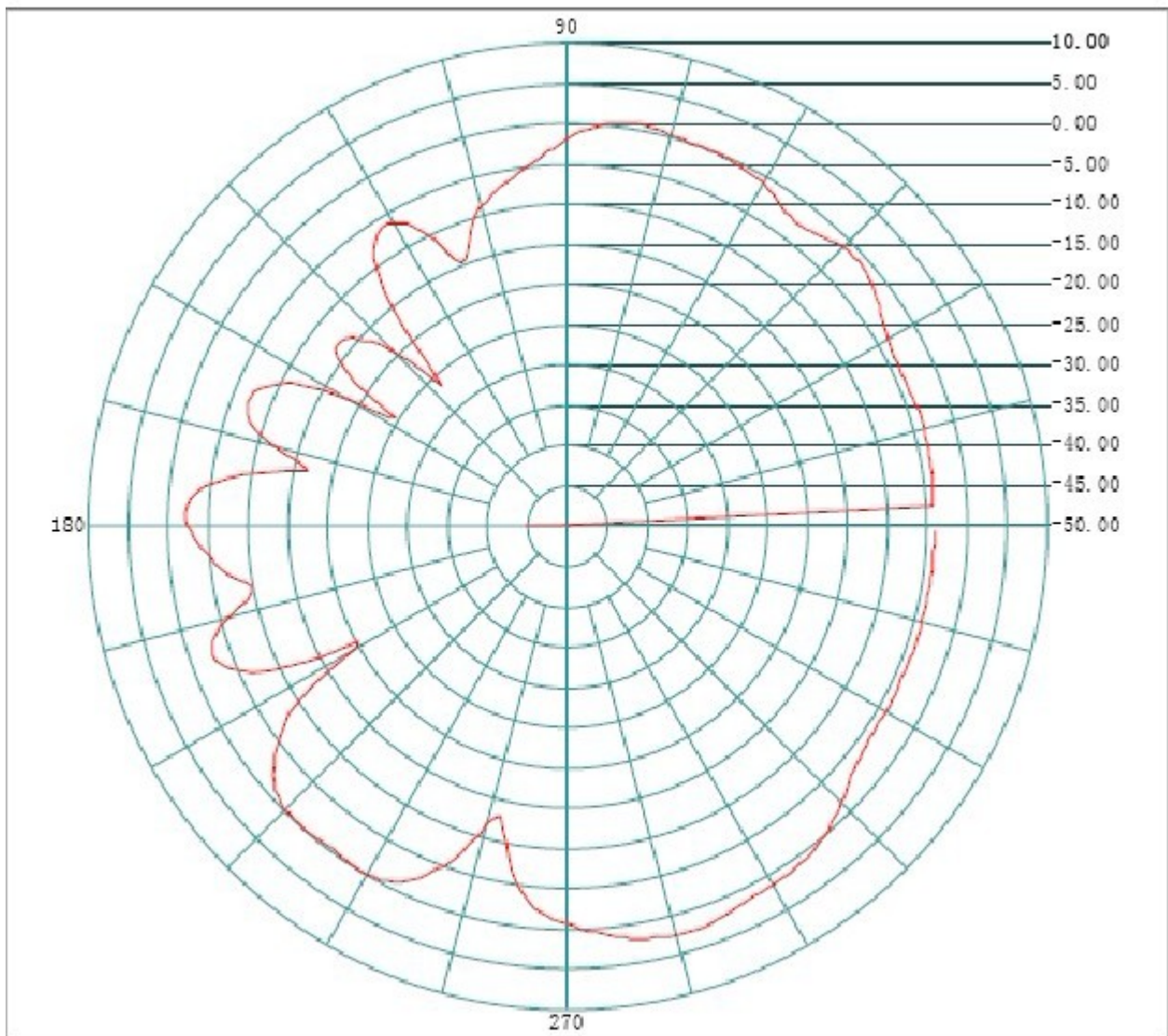
### Antenna Photo & Length (mm)



|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| Test Address | 16 Tzu Chiang Road, Hsinchu Industrial District Hsinchu Hsien 303, Taiwan |
| Test Date    | 2009-04-14                                                                |
| Manufacture  | Advanced Ceramic X Corp.                                                  |

## 1. Main antenna : 2402 MHz

### 1.1 Horizontal



Frequency(MHZ): **2402**

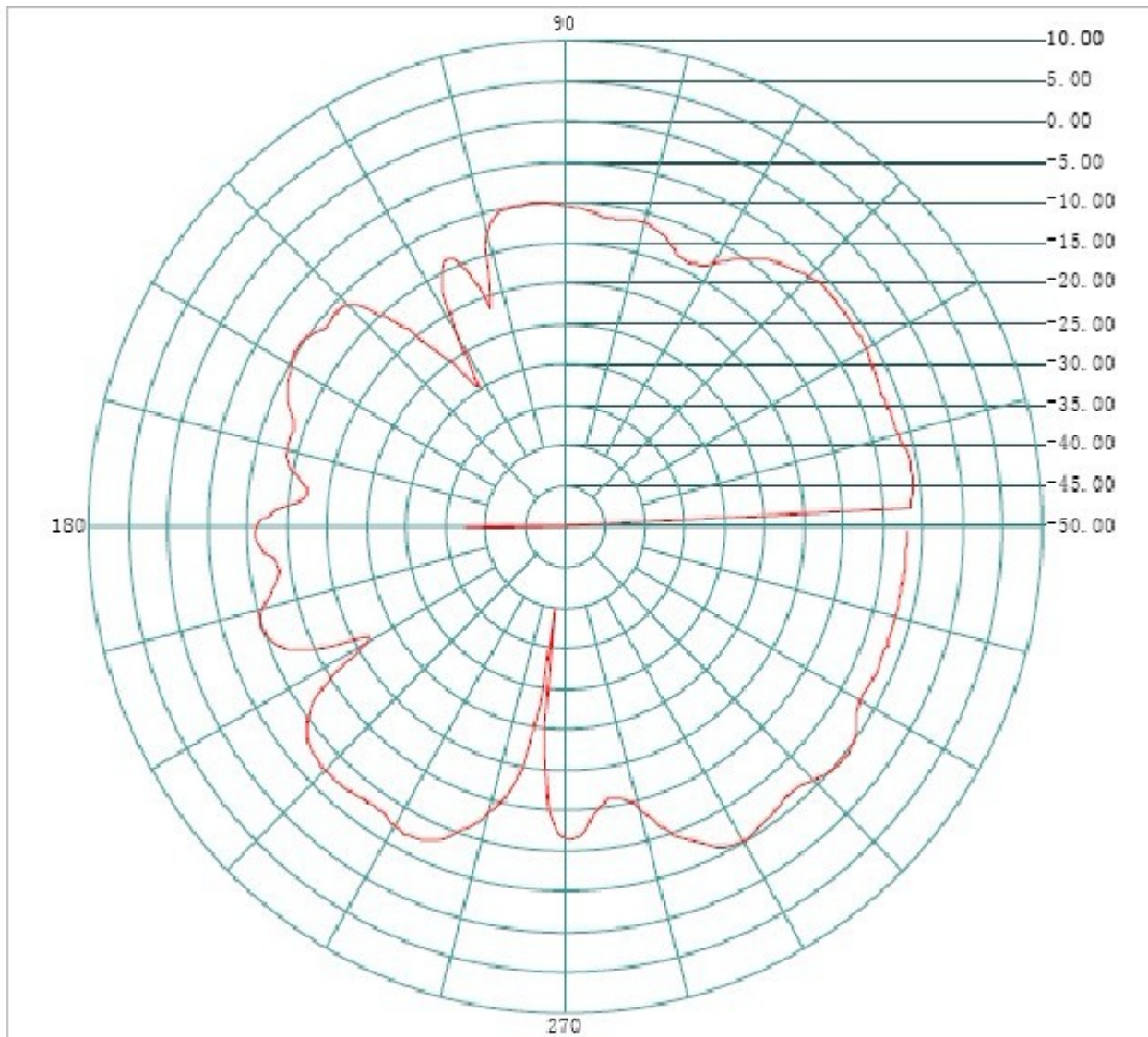
Antenna Polarity: **Horizontal**

Maximum Gain(dBi): **2.34**

Average Gain(dBi) : **-2.48**

Minimum Gain(dBi): **-55.18**

## 1.2 Vertical



Frequency(MHZ): **2402**

Antenna Polarity: **Vertical**

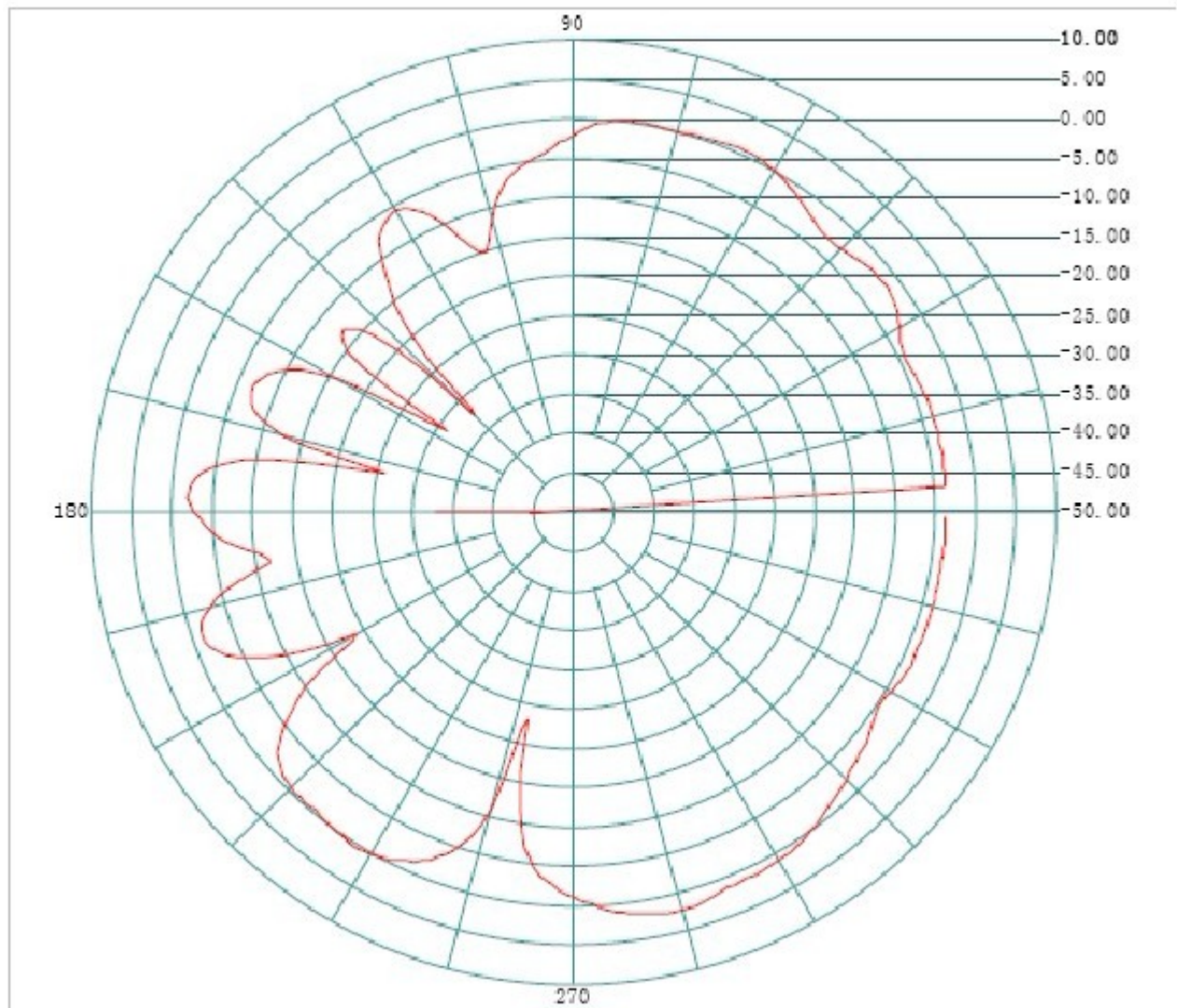
Maximum Gain(dBi): **-4.51**

Average Gain(dBi) : **-8.98**

Minimum Gain(dBi): **-62.3**

## 2. Main antenna : 2441 MHz

### 2.1 Horizontal



Frequency(MHZ): **2441**

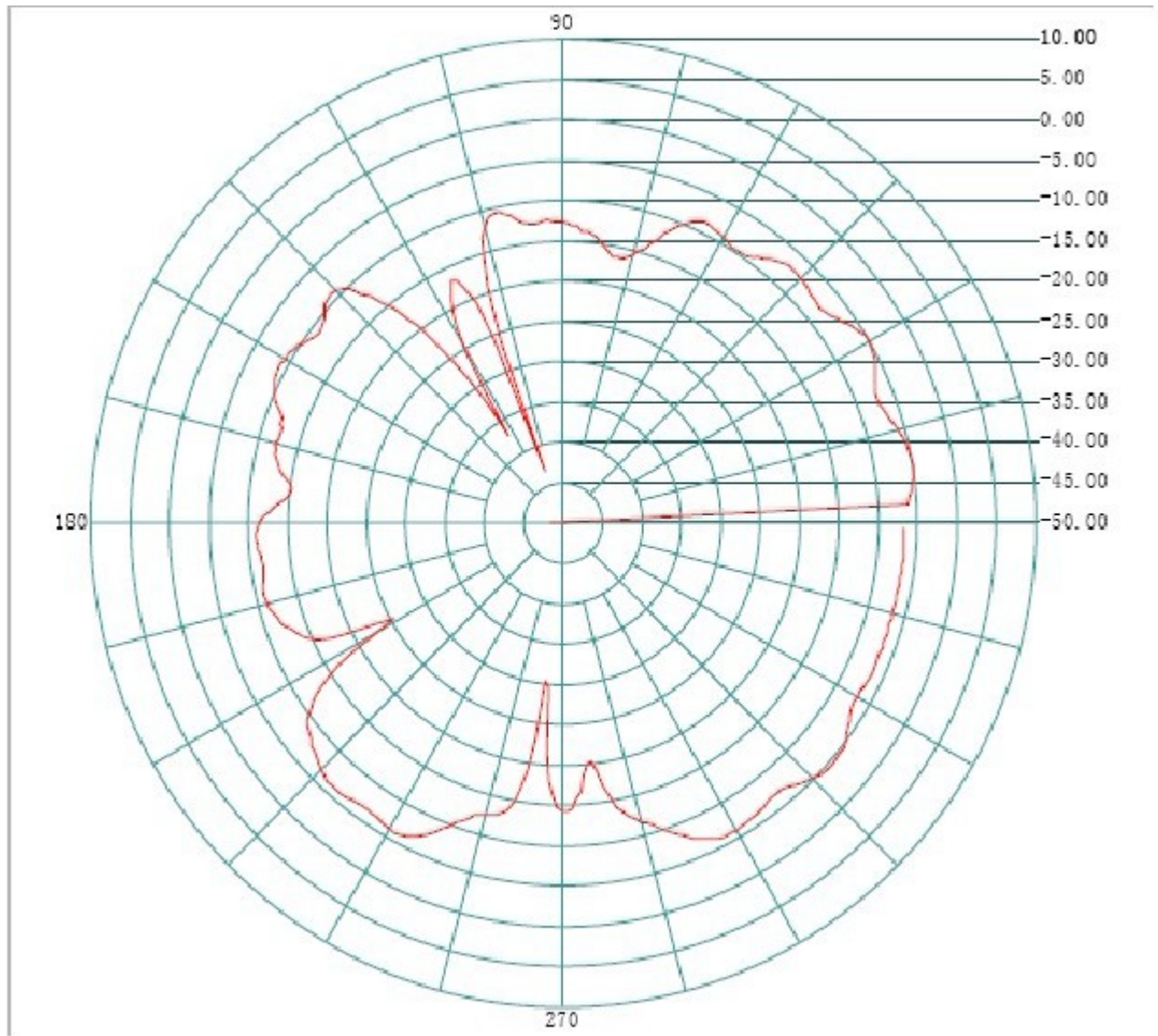
Antenna Polarity: **Horizontal**

Maximum Gain(dBi): **2.07**

Average Gain(dBi) : **-2.54**

Minimum Gain(dBi): **-66.98**

## 2.2 Vertical



Frequency(MHZ): **2441**

Antenna Polarity: **Vertical**

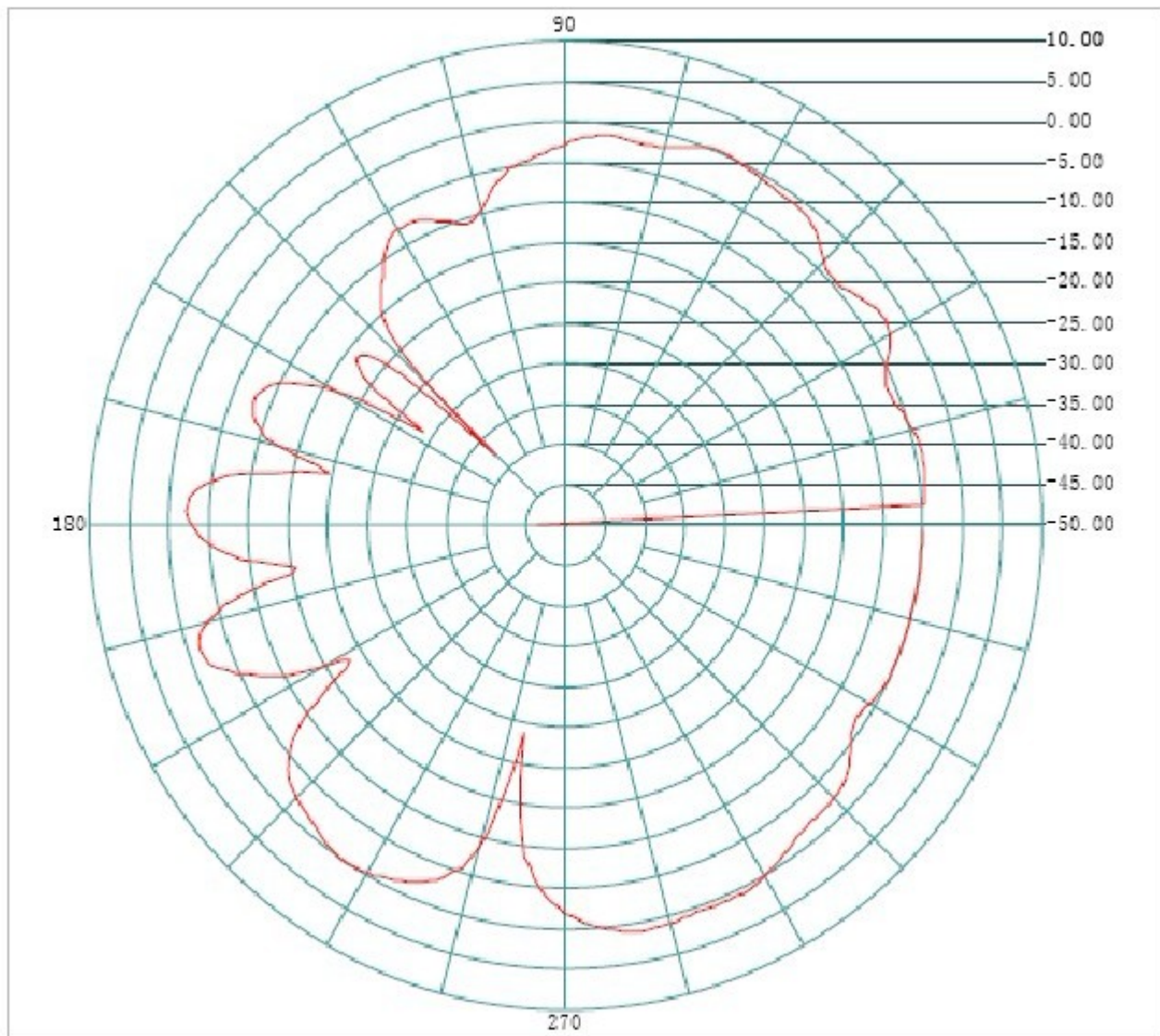
Maximum Gain(dBi): **-4.29**

Average Gain(dBi) : **-8.81**

Minimum Gain(dBi): **-51.4**

## 2. Main antenna : 2480 MHz

### 2.1 Horizontal



Frequency(MHZ): **2480**

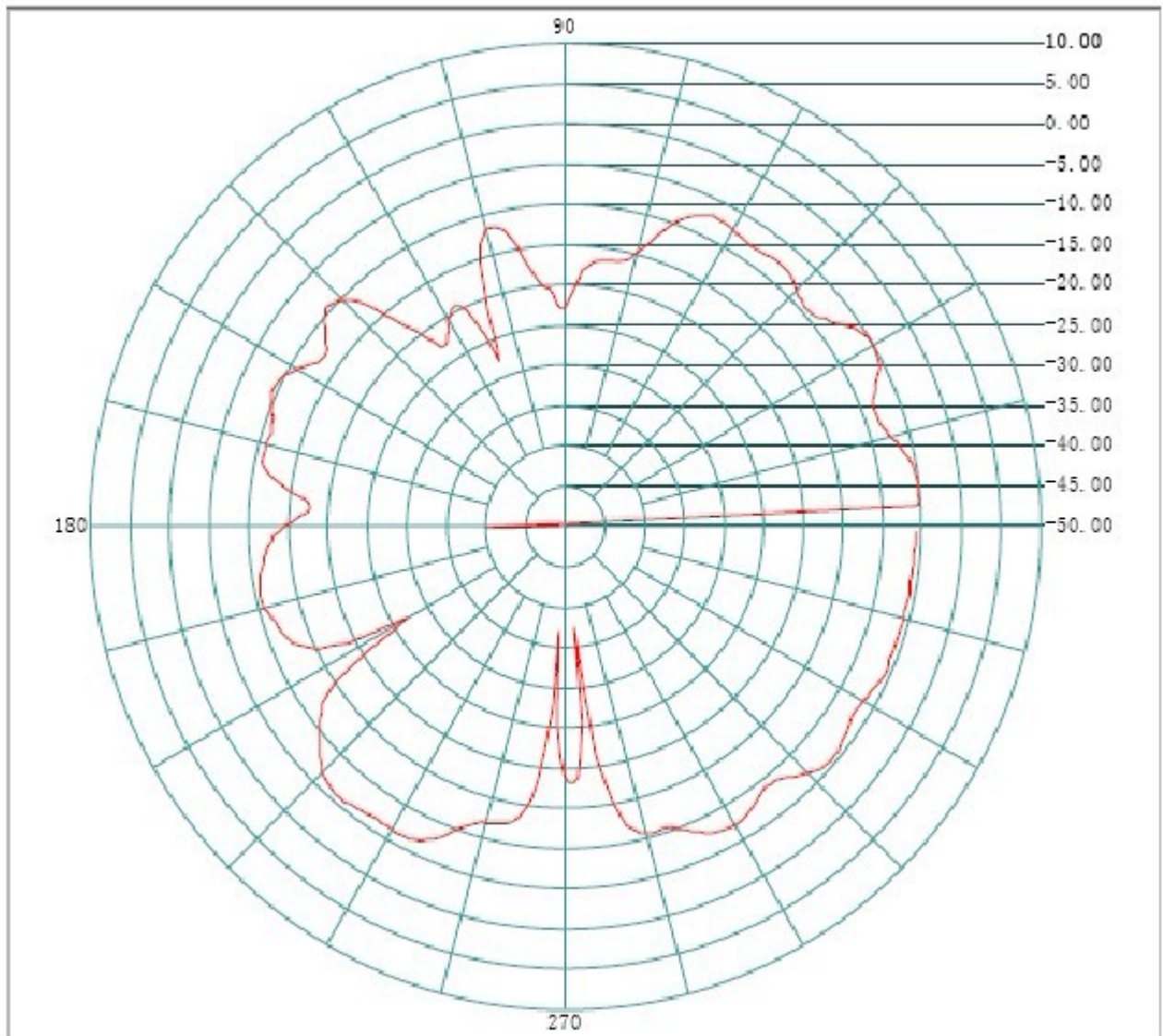
Antenna Polarity: **Horizontal**

Maximum Gain(dBi): **1.45**

Average Gain(dBi) : **-3.34**

Minimum Gain(dBi): **-53.4**

## 2.2 Vertical



Frequency(MHZ): **2480**

Antenna Polarity: **Vertical**

Maximum Gain(dBi): **-4.95**

Average Gain(dBi) : **-9.06**

Minimum Gain(dBi): **-60.00**