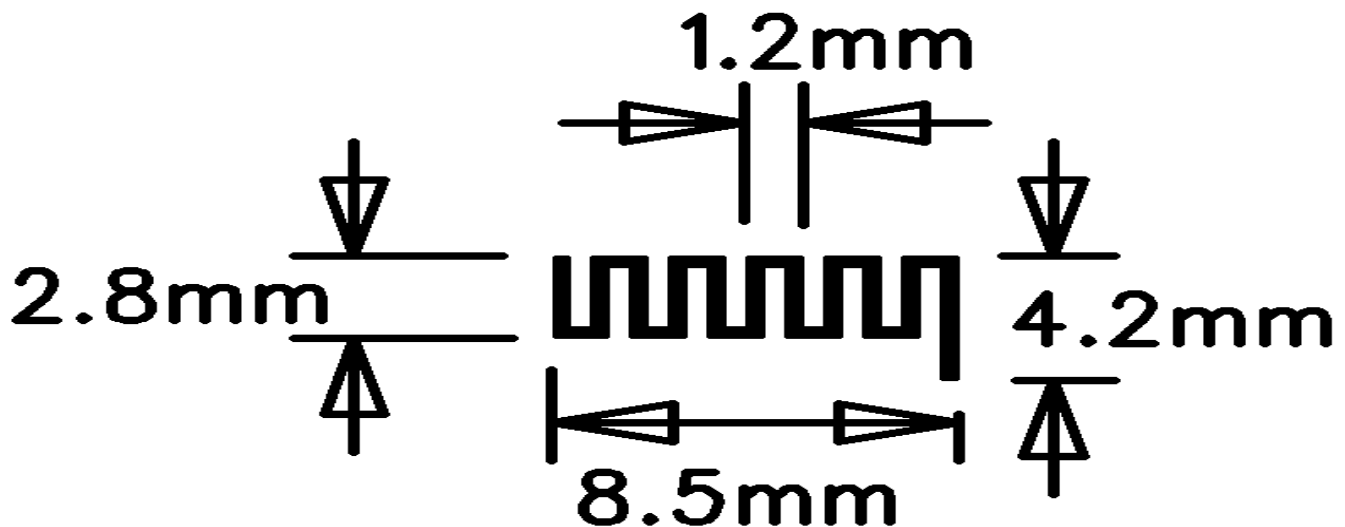


# Antenna Specification

## Specifications Summary

| ITEM                 | SPEC.            |          |
|----------------------|------------------|----------|
| Model Name           | IBM 2.4 GHz      |          |
| Center Frequency     | 2402 MHz         | 2.18dBi  |
|                      | 2441 MHz         | 2.01dBi  |
|                      | 2480 MHz         | 1.40 dBi |
| MAX. GAIN            | 2.18 dBi         |          |
| Polarization         | Horizontal       |          |
| Azimuth Beam Pattern | Omni-directional |          |
| Impedance            | 50 $\Omega$      |          |
| Antenna Length       | 3.1cm            |          |

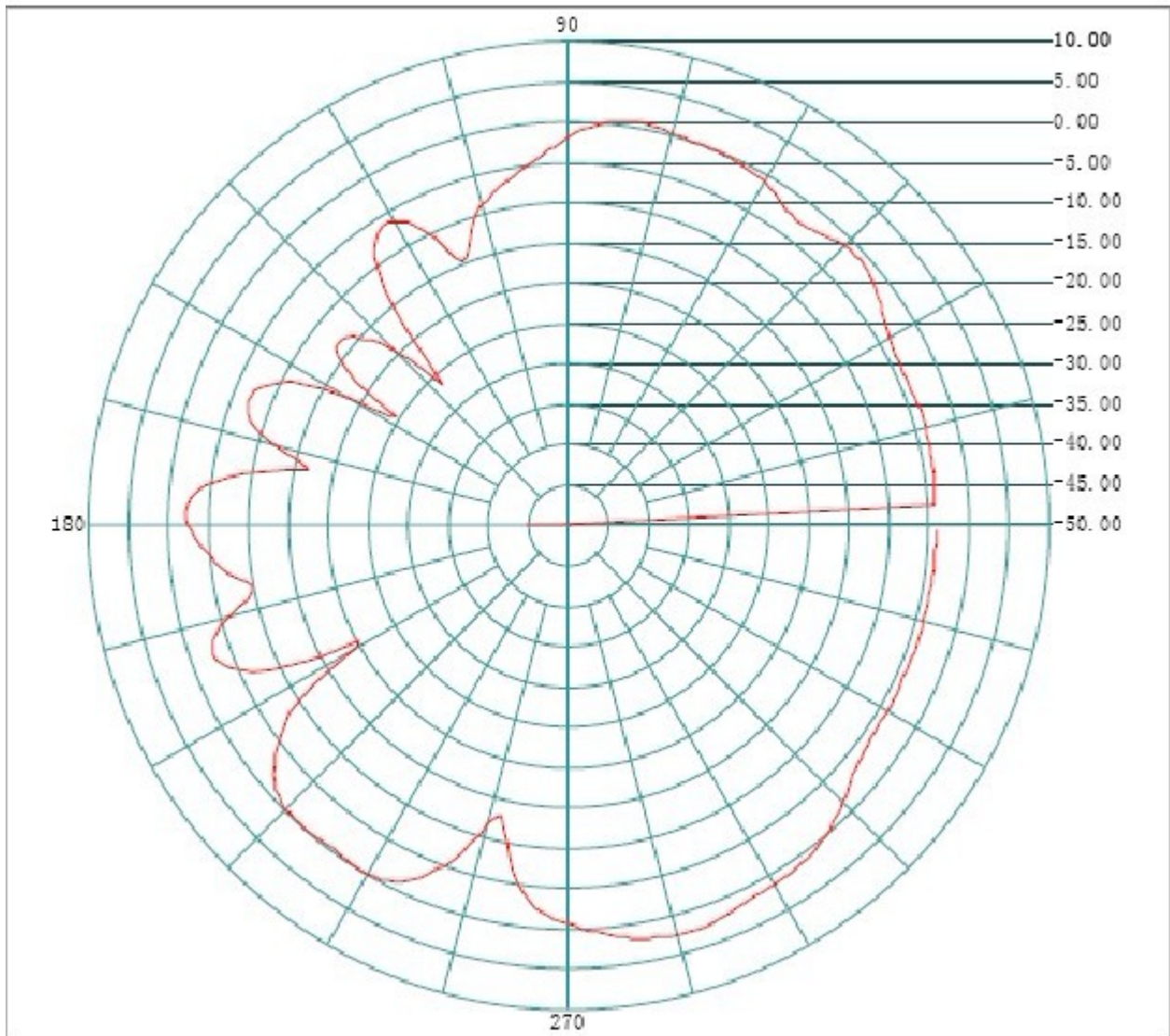
## Antenna Photo & Length (mm)



|                 |                                                                           |
|-----------------|---------------------------------------------------------------------------|
| Test Address    | 16 Tzu Chiang Road, Hsinchu Industrial District Hsinchu Hsien 303, Taiwan |
| Test Date       | 2022-08-24                                                                |
| Test Instrument | vector network analyzer - R&S ZVB20                                       |

## 1. Main antenna : 2402 MHz

### 1.1 Horizontal



Frequency(MHZ): **2402**

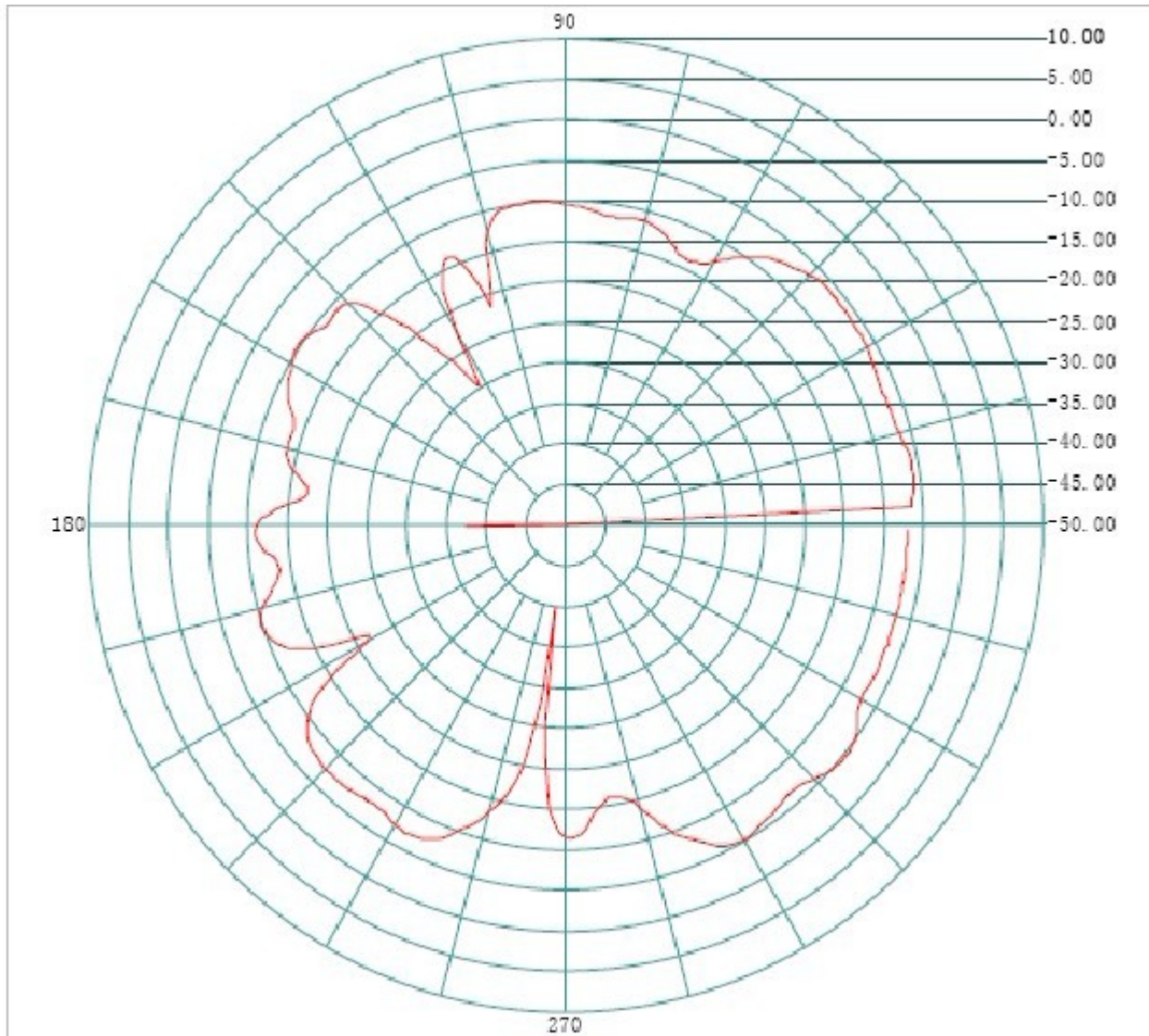
Antenna Polarity: **Horizontal**

Maximum Value(dBi): **2.18**

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

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

## 1.2 Vertical



Frequency(MHZ): **2402**

Antenna Polarity: **Vertical**

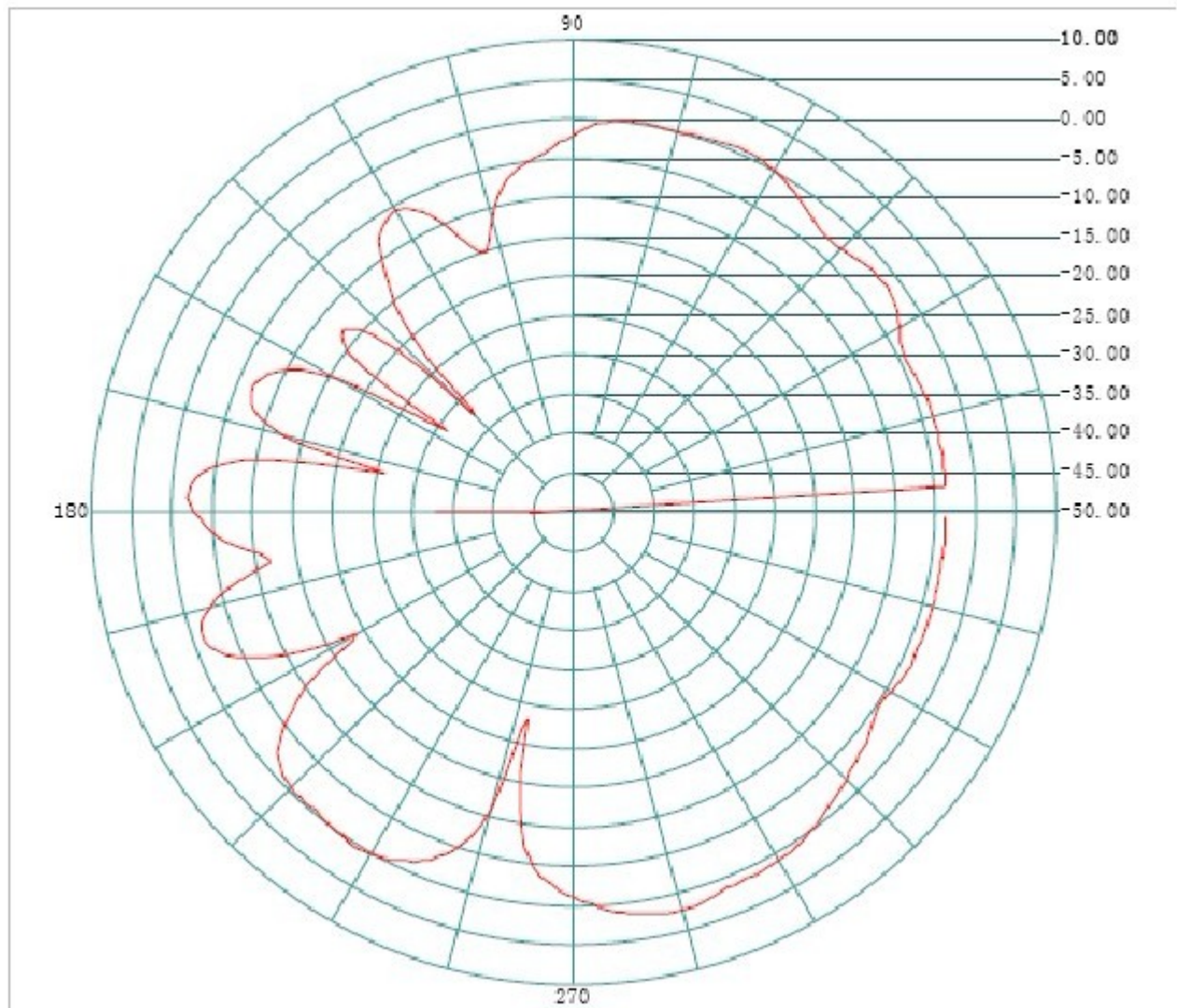
Maximum Value(dBi): **-4.51**

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

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

## 2. Main antenna : 2441 MHz

### 2.1 Horizontal



Frequency(MHZ): **2441**

Antenna Polarity: **Horizontal**

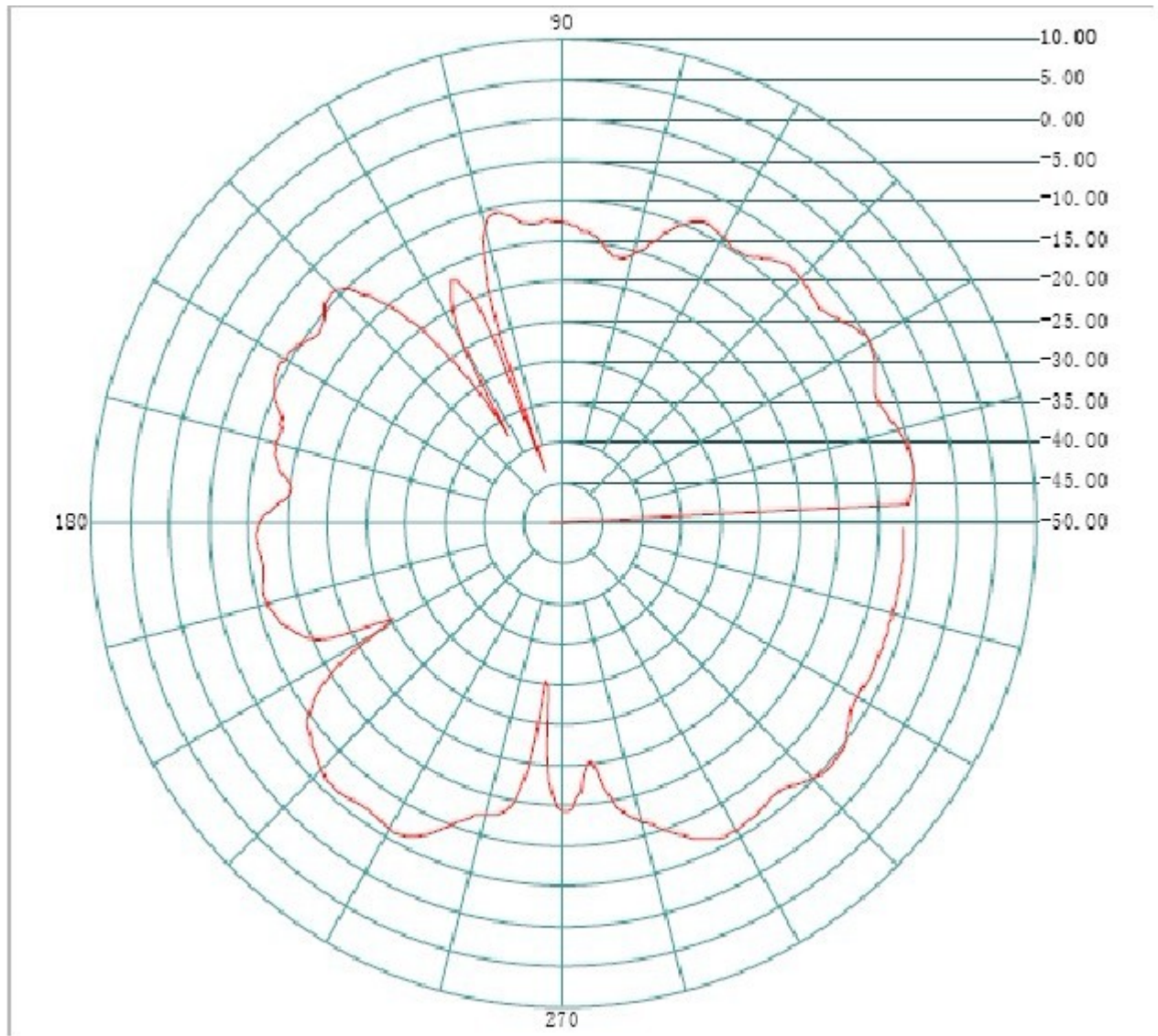
Maximum Value(dBi): **2.01**

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

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



## 2.2 Vertical



Frequency(MHZ): **2441**

Antenna Polarity: **Vertical**

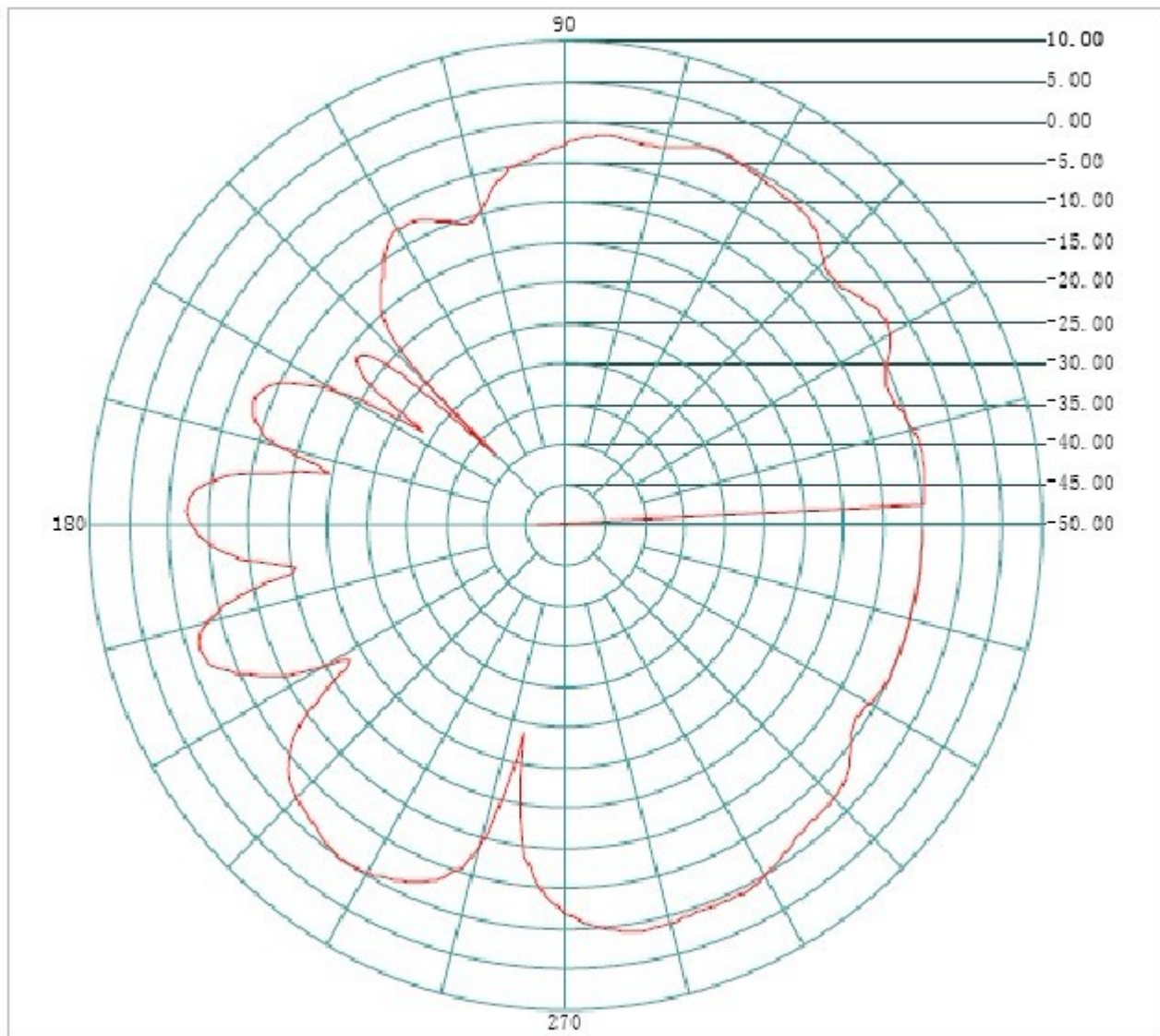
Maximum Value(dBi): **-4.29**

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

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

## 2. Main antenna : 2480 MHz

### 2.1 Horizontal



Frequency(MHZ): **2480**

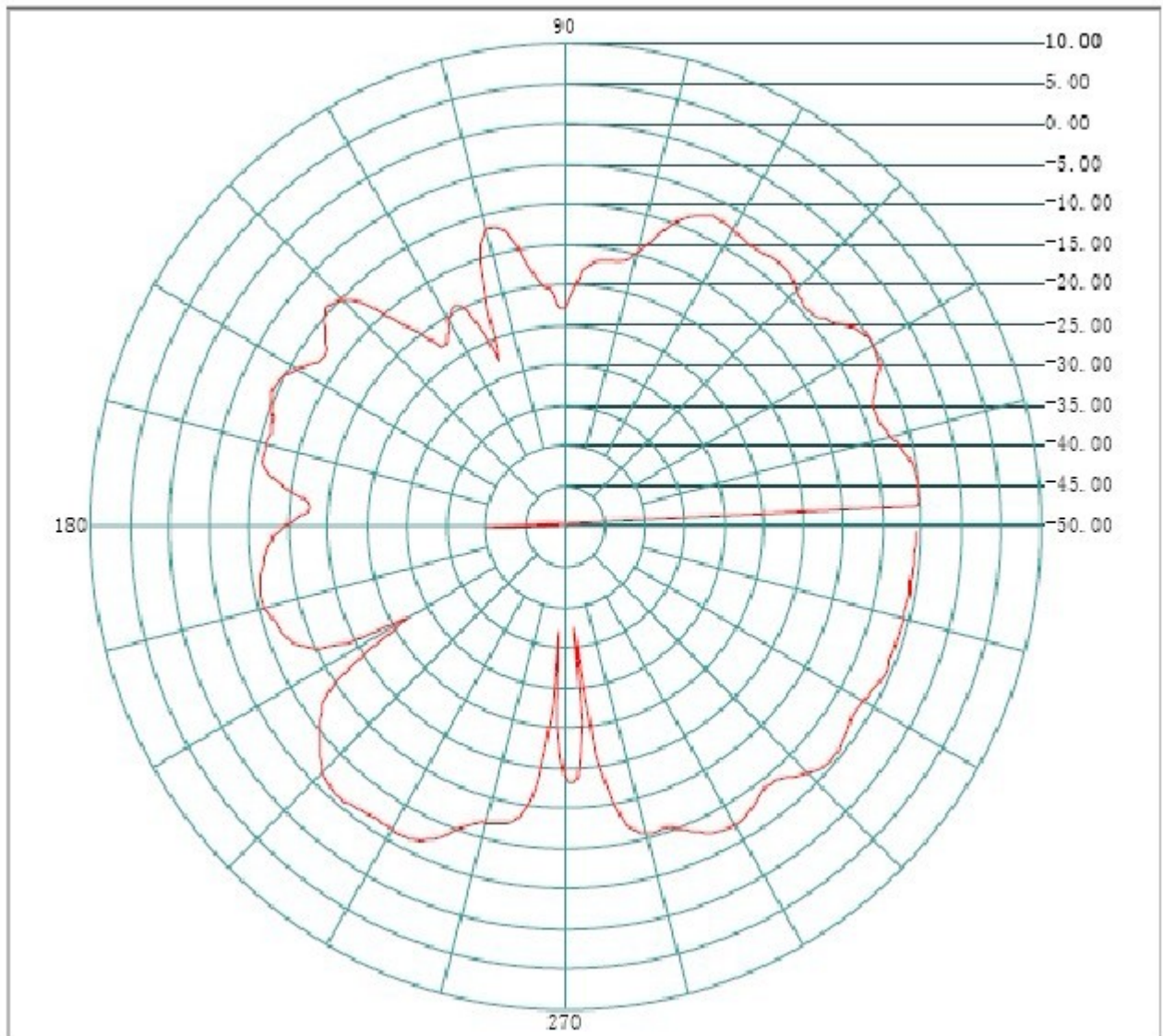
Antenna Polarity: **Horizontal**

Maximum Value(dBi): **1.40**

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

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

## 2.2 Vertical



Frequency(MHZ): **2480**

Antenna Polarity: **Vertical**

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

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

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