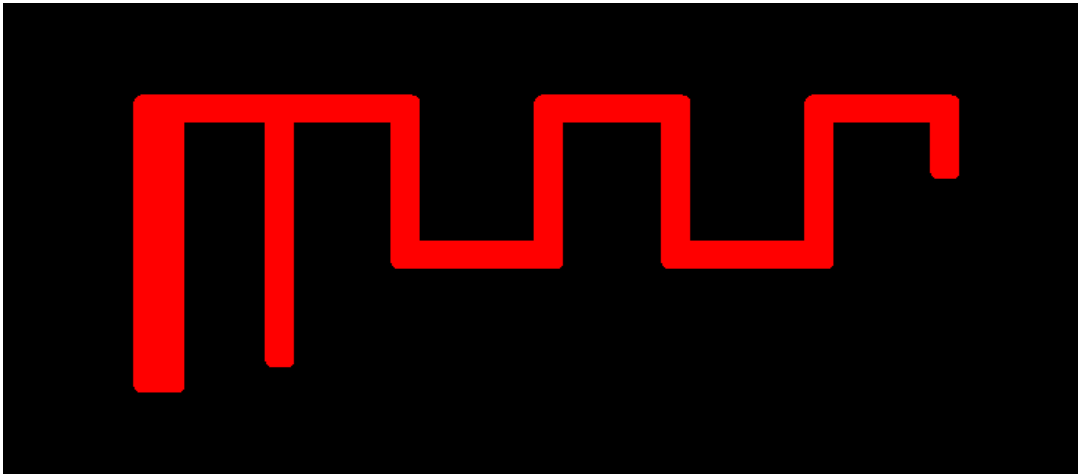


# Antenna Specification

## Specifications Summary

| ITEM                 | SPEC.            |          |  |
|----------------------|------------------|----------|--|
| Model Name           | IBM FM           |          |  |
| Center Frequency     | 85 MHz           | 1.8 dBi  |  |
|                      | 98 MHz           | 1.59 dBi |  |
|                      | 108 MHz          | 1.43 dBi |  |
| MAX. GAIN            | 1.8 dBi          |          |  |
| Polarization         | Horizontal       |          |  |
| Azimuth Beam Pattern | Omni-directional |          |  |
| Impedance            | 50 Ω             |          |  |
| Antenna Length       | 3.3cm            |          |  |

Antenna Photo & Length (mm)

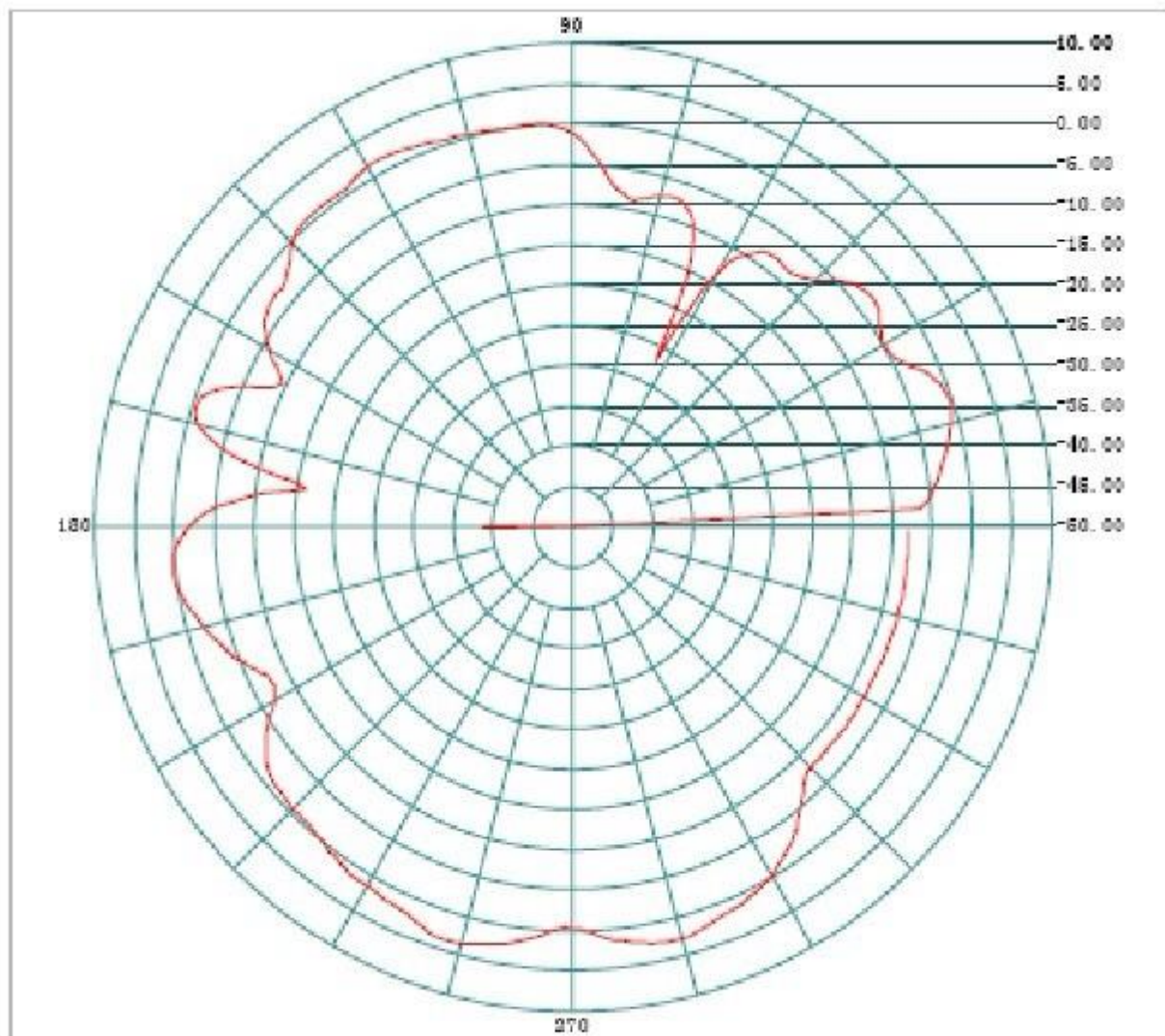


Manufacture: Time Technology Japan Co., Ltd.

|                 |                                                                           |
|-----------------|---------------------------------------------------------------------------|
| Test Address    | 16 Tzu Chiang Road, Hsinchu Industrial District Hsinchu Hsien 303, Taiwan |
| Test Date       | 2009-04-14                                                                |
| Test Instrument | vector network analyzer - R&S ZVB20                                       |

## 1. Main antenna : 85 MHz

### 1.1 Horizontal



Frequency(MHZ): **85**

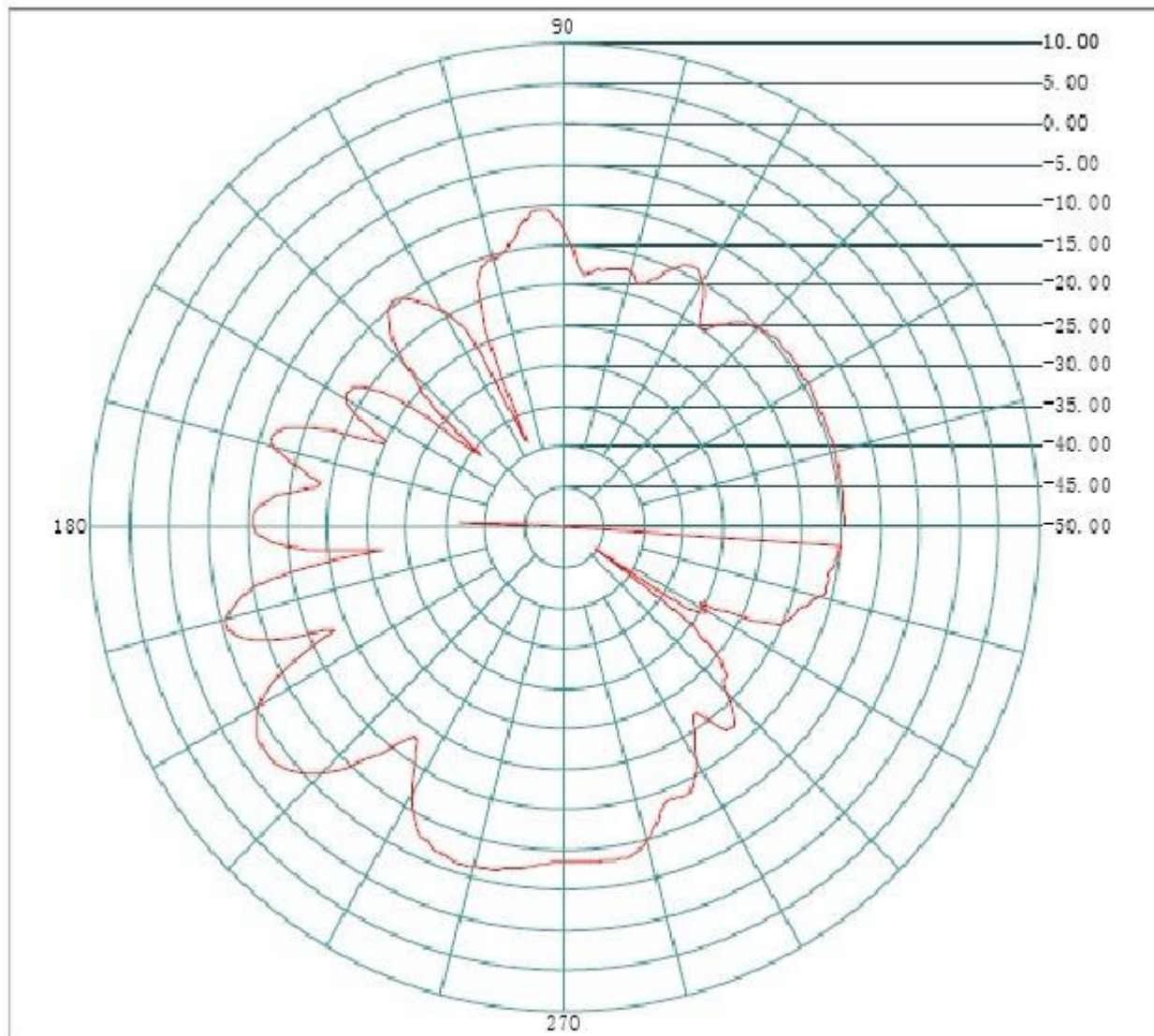
Antenna Polarity: **Horizontal**

Maximum Value(dBi): **1.8**

Average Gain(dBi) : **-1.42**

Minimum Gain(dBi): **-61.26**

## 1.2 Vertical



Frequency(MHZ): **85**

Antenna Polarity: **Vertical**

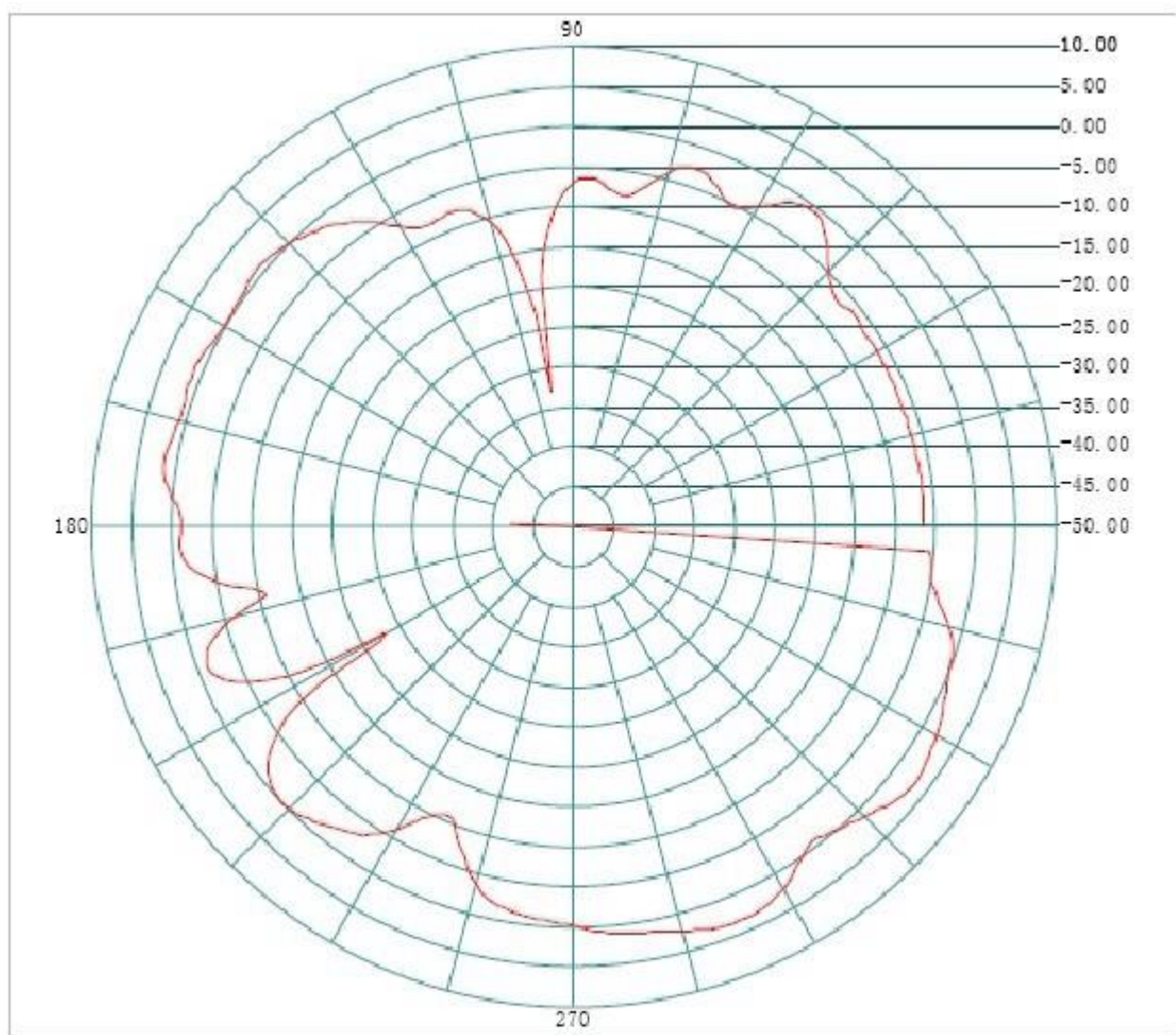
Maximum Value(dBi): **-2.99**

Average Gain(dBi) : **-11.5**

Minimum Gain(dBi): **-63.1**

## 2. Main antenna : 98 MHz

### 2.1 Horizontal



Frequency(MHZ): **98**

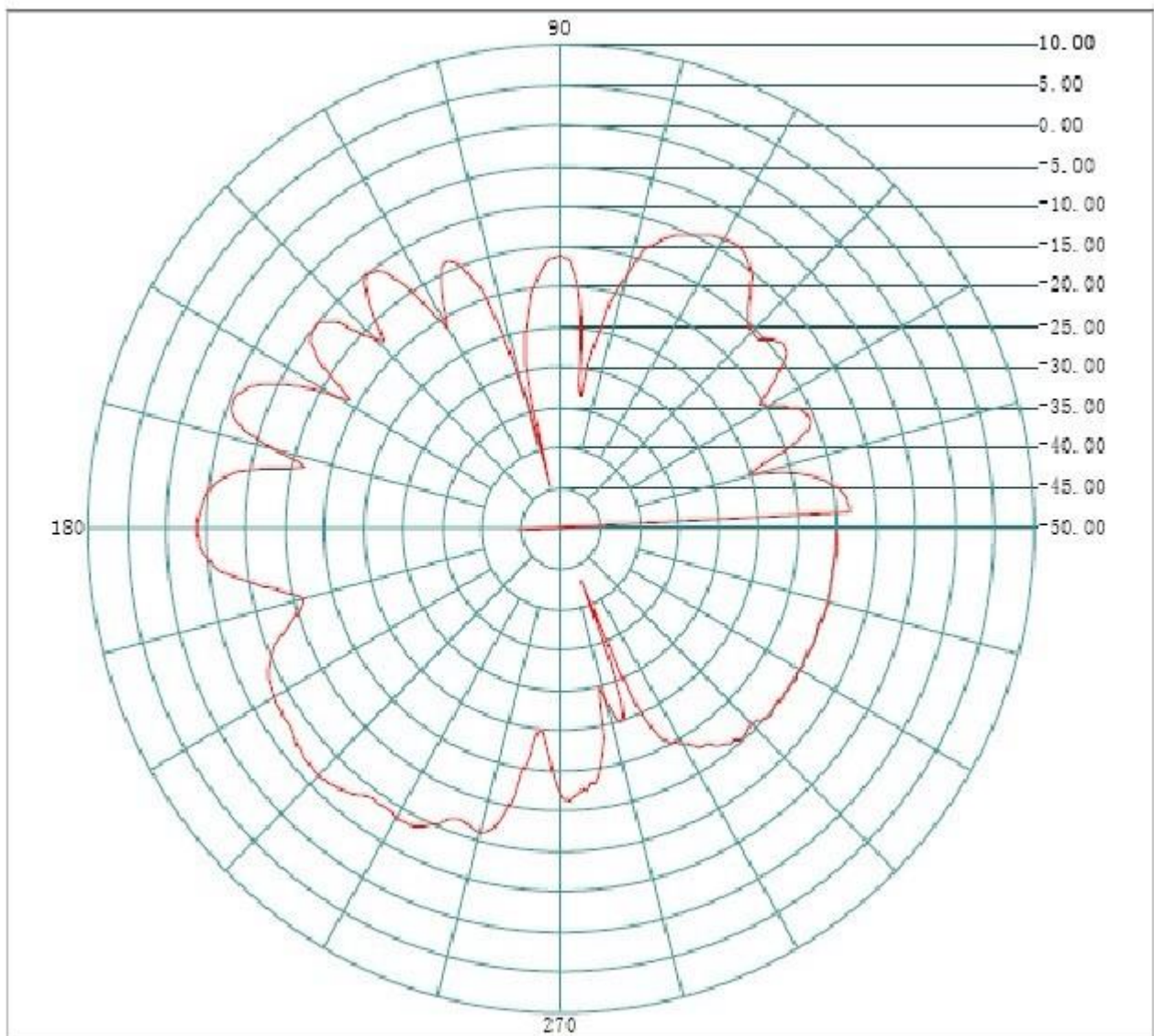
Antenna Polarity: **Horizontal**

Maximum Value(dBi): **1.59**

Average Gain(dBi) : **-1.41**

Minimum Gain(dBi): **-57.8**

## 2.2 Vertical



Frequency(MHZ): **98**

Antenna Polarity: **Vertical**

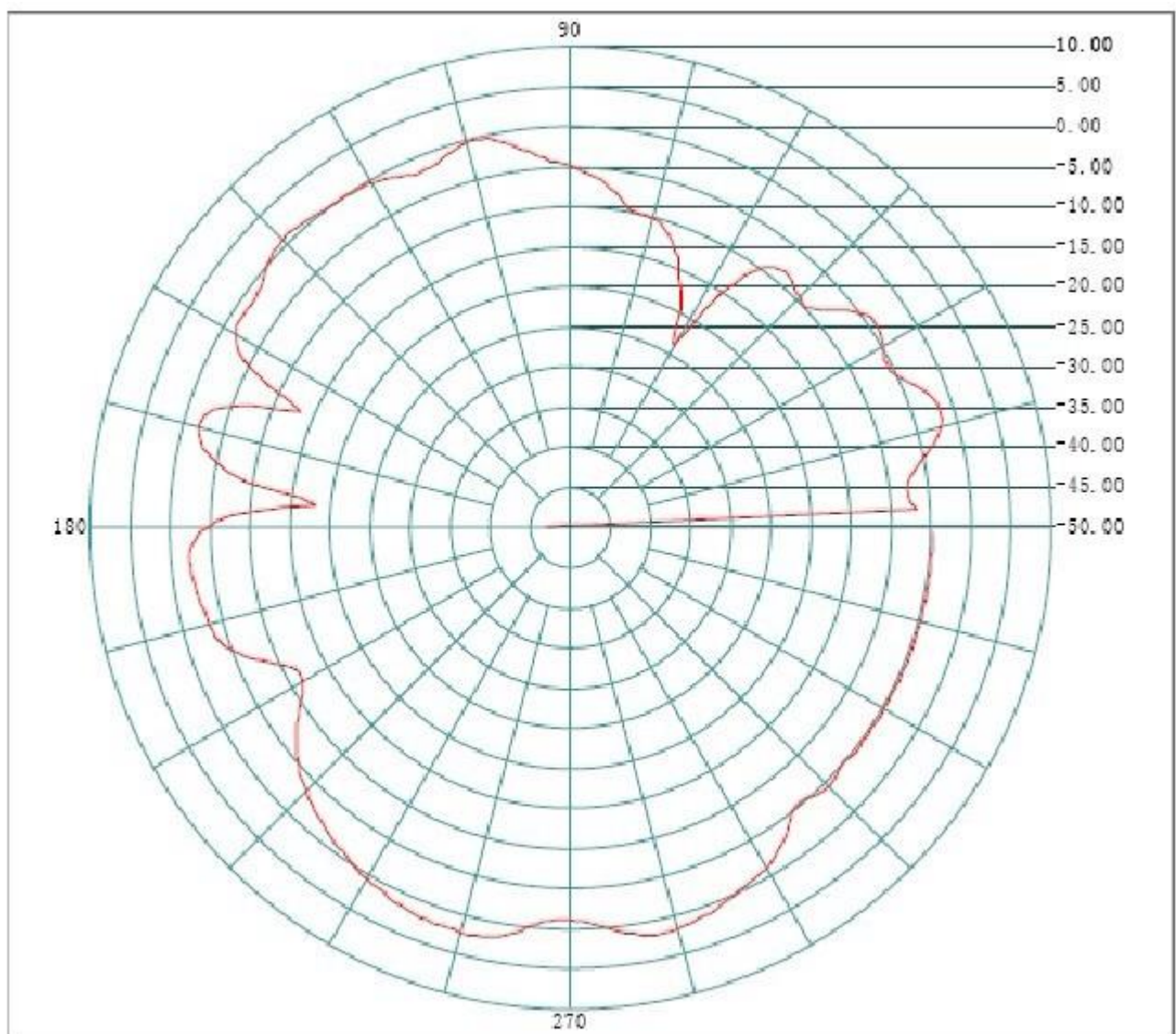
Maximum Value(dBi): **-3.9**

Average Gain(dBi) : **-11.5**

Minimum Gain(dBi): **-55.3**

## 2. Main antenna : 108MHz

### 2.1 Horizontal



Frequency(MHZ): **108**

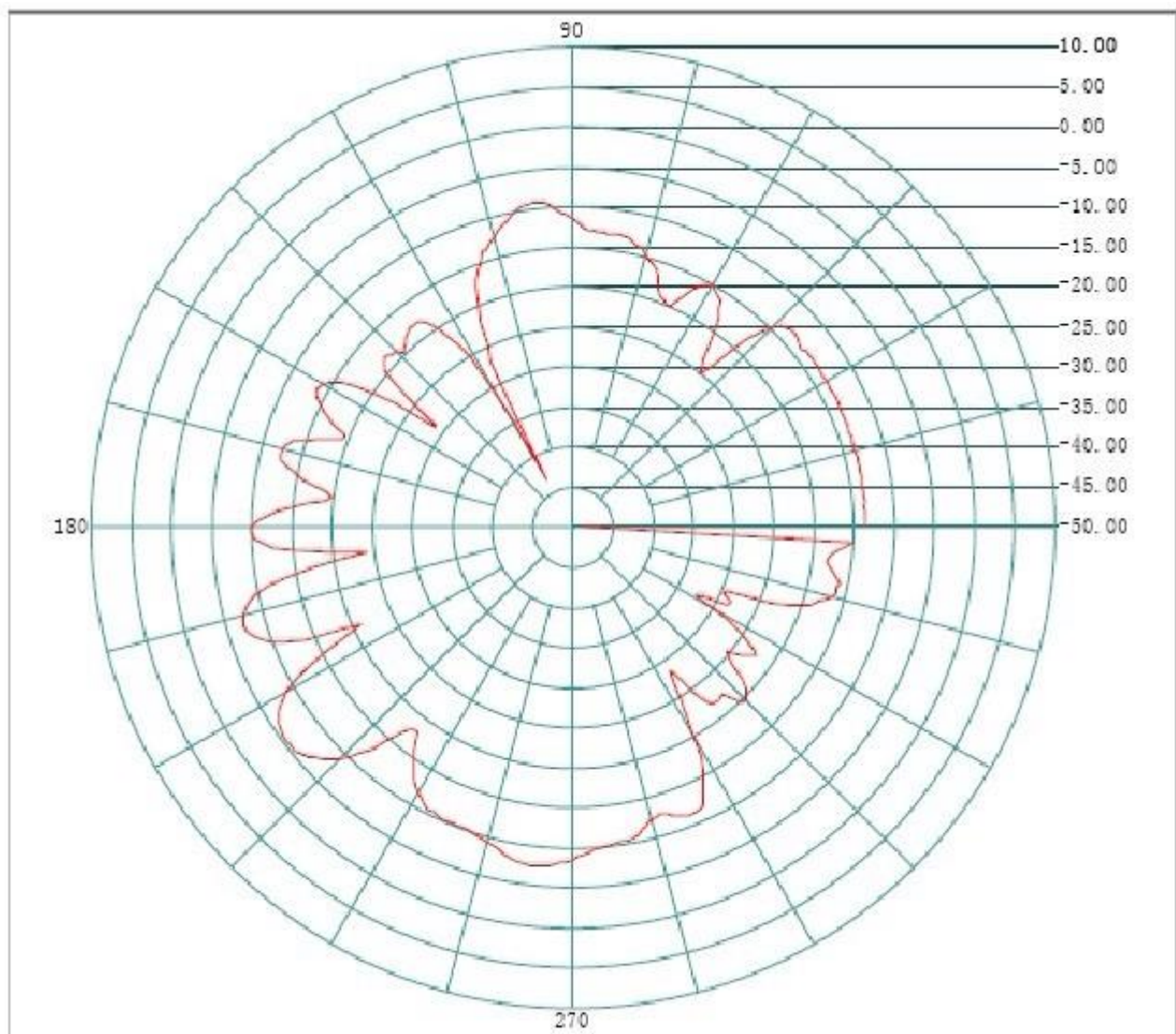
Antenna Polarity: **Horizontal**

Maximum Value(dBi): **1.43**

Average Gain(dBi) : **-2.44**

Minimum Gain(dBi): **-53.04**

## 2.2 Vertical



Frequency(MHZ): 108

Antenna Polarity: **Vertical**

Maximum Value(dBi): **-5.38**

Average Gain(dBi) : **-12.6**

Minimum Gain(dBi): **-48.4**