

# Antenna Report

Product Name: MS-370 Dongle

Manufacture: Dingnan Jinpeng Electronic Co., LTD

Address: Jinpeng Industrial Park, Futian Industrial Park, Dingnan County,  
Ganzhou City, Jiangxi Province

Antenna Type: PCB antenna

Antenna Size: 7.88mm\*2.13m

Project Engineer: Issac

Test Standards: ANSI/IEEE Std 149-2021

Test software being used: Emquest

Software Version: 1.1

Test Result: PASS

Issued Date: 2022-03-21

| Name                | Parameter            | Method                                     | Standard no.            |
|---------------------|----------------------|--------------------------------------------|-------------------------|
| Antenna performance | Radiation efficiency | IEEE Standard Test Procedures for Antennas | ANSI/IEEE Std 149- 2021 |

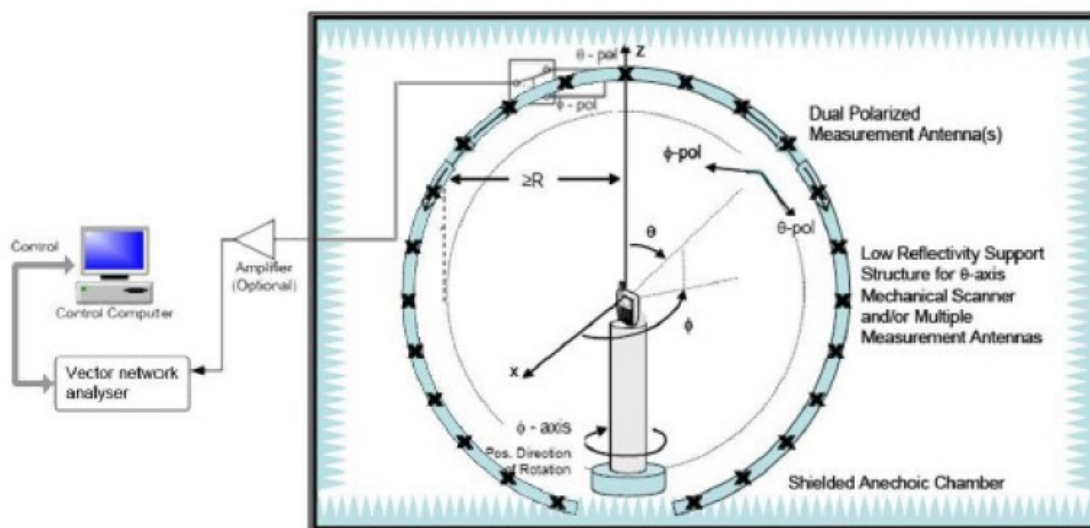
| Equipment               | Manufacturer | Mode No | Serial No  | Cal date   | Cal Due    |
|-------------------------|--------------|---------|------------|------------|------------|
| Network Analyzer        | Agilent      | E5071B  | MY48360957 | 2021/5/20  | 2022/5/19  |
| Quad-Ridge Horn Antenna | ETS          | Apr-64  | 62743      | 2021/5/20  | 2022/5/19  |
| 700 MHz-6 GHz           | ETS          | 7006    | 59957      | 2021/12/17 | 2022/12/16 |
| MAPS Controller         |              |         |            |            |            |
| Switch Control System   | ETS          | 7001    | MY42001152 | 2021/12/17 | 2022/12/16 |

## 2 Test Temperature and Humidity

Temperature: 23.2°C

Humidity: 65%

## Test Setup



|         |                                                     |
|---------|-----------------------------------------------------|
| Name    | Shenzhen RFI-LAB Communication Technology Co.,Ltd.  |
| Address | 10/F A, Lingyun Bld, Liufang Rd, Baoan District, SZ |
| Tel     | 13682621346                                         |
| E-mail  | rfi-lab@tech-now.com                                |

# Antenna Report

## Specifications

Summary

ITEM

SPEC

Model Name : MS-370 Dongle

Center Frequency 2408MHz 2.18dBi

2440MHz 2.01dBi

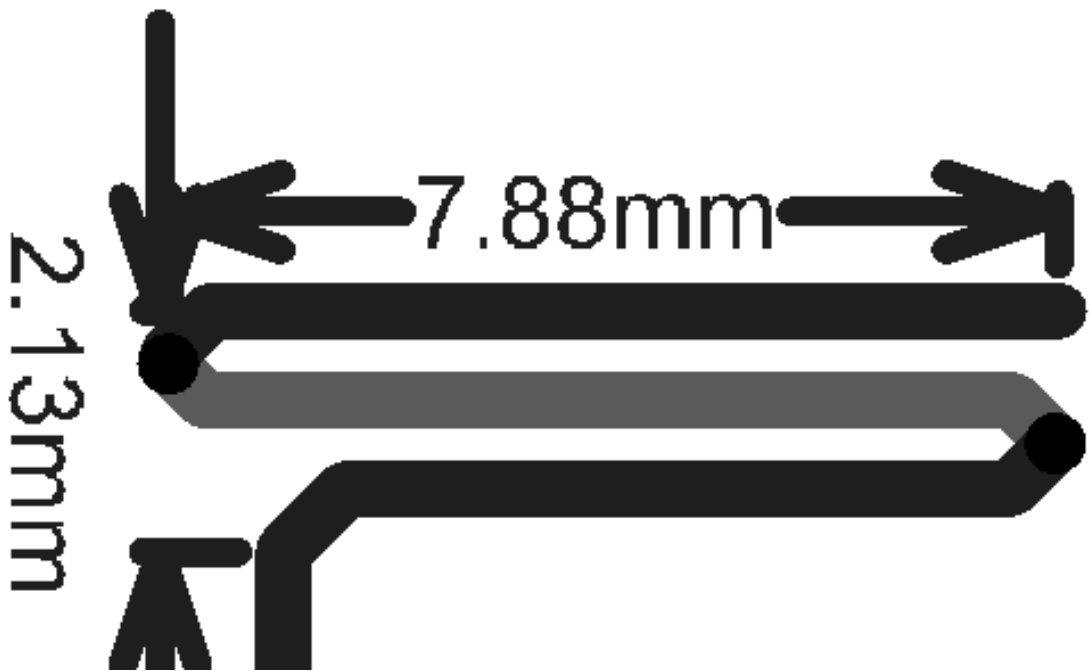
2474MHz 1.40dBi

MAX. GAIN 2.18 dBi

Polarization Horizontal

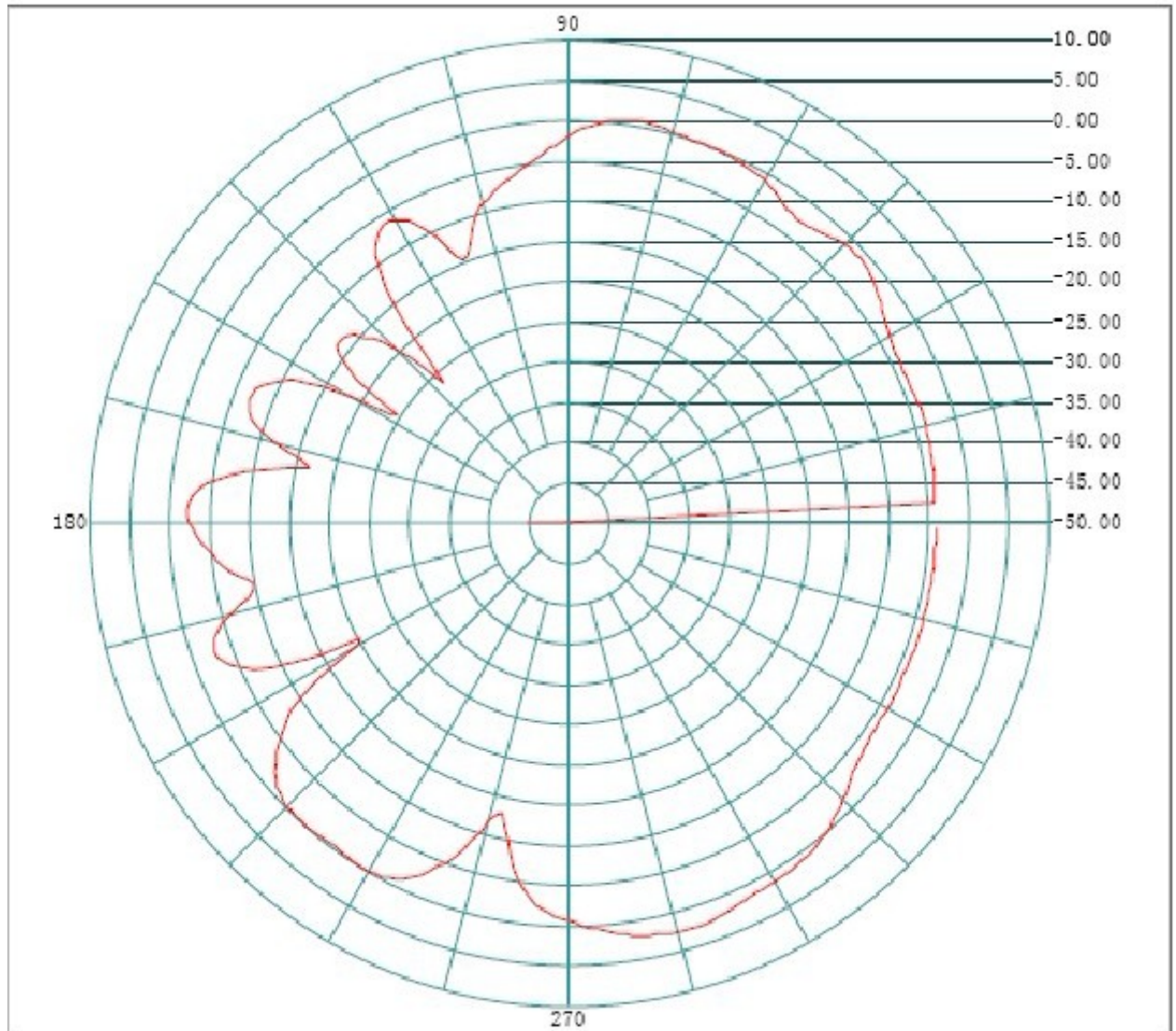
Azimuth Beam Pattern Omni directional

Impedance 50Ω



## 1. Main antenna : 2408 MHz

### 1.1 Horizontal



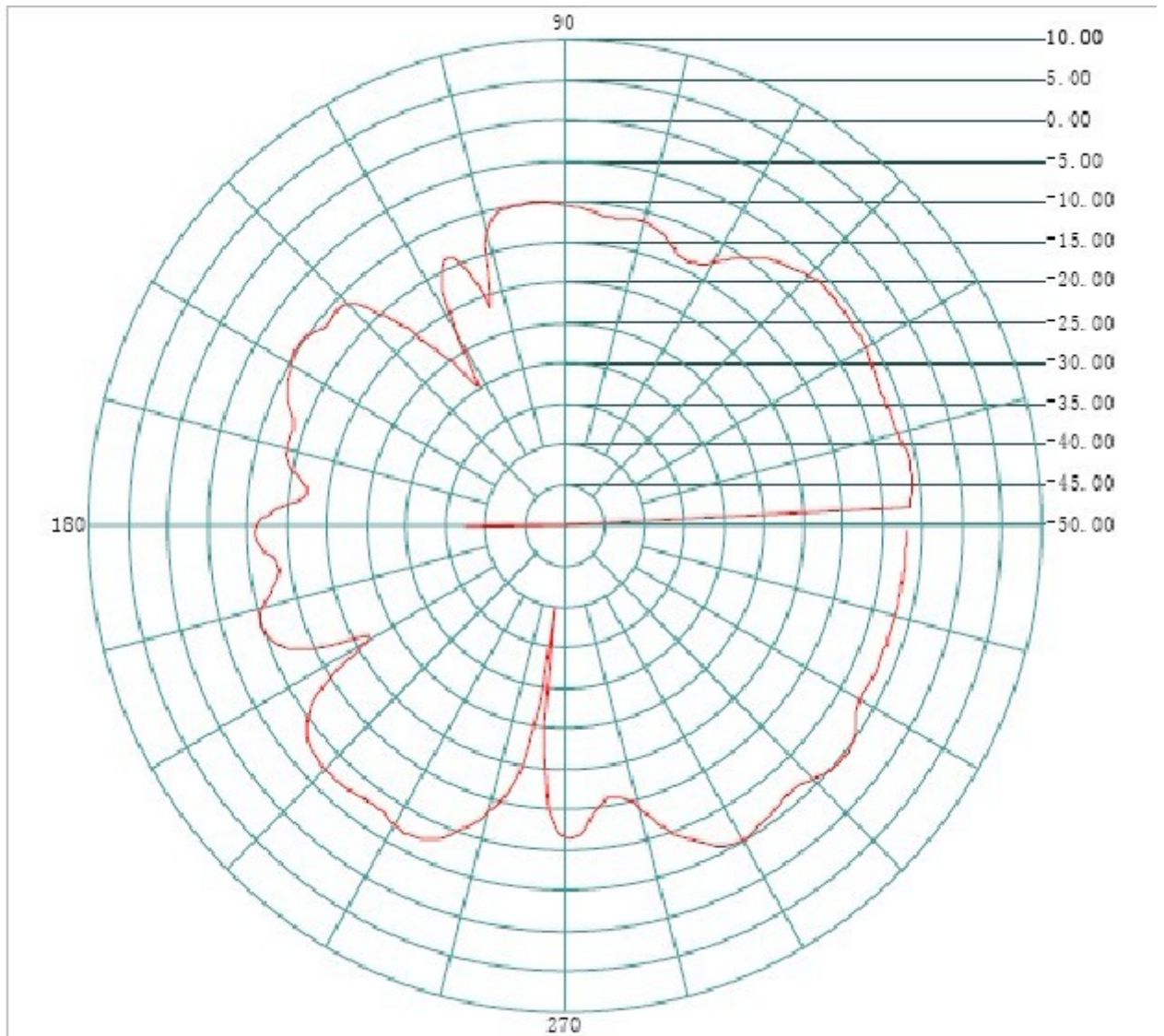
Frequency (MHz): 2408    Antenna Polarity: Horizontal

Maximum Value (dBi): 2.18

Average Gain (dBi) : -2.48

Minimum Gain (dBi):-55.18

## 1.2 Vertical



Frequency(MHZ): **2408**

Antenna Polarity: **Vertical**

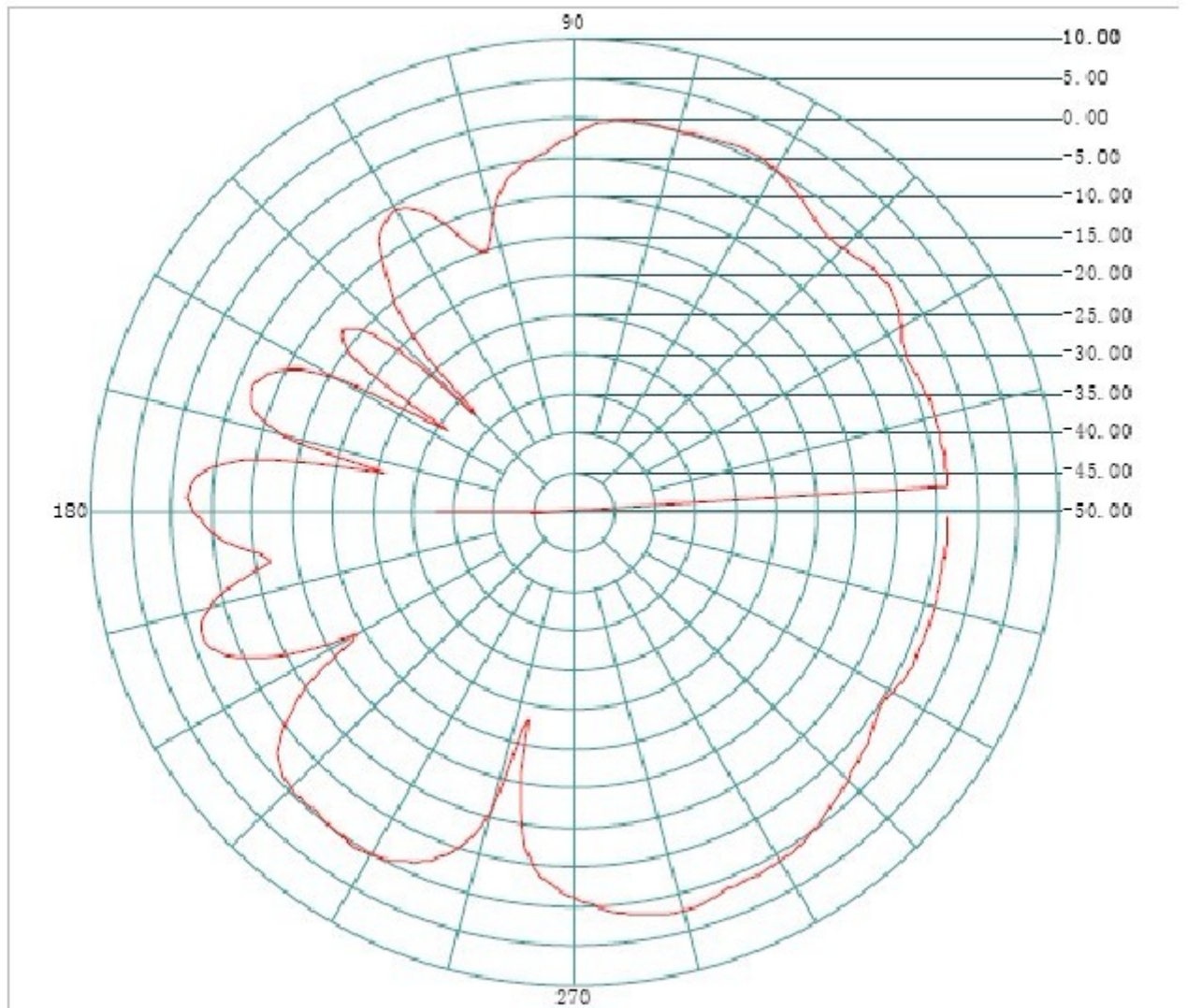
Maximum Value(dBi): **-4.51**

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

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

## 2. Main antenna : 2440 MHz

### 2.1 Horizontal



Frequency(MHZ): **2440**

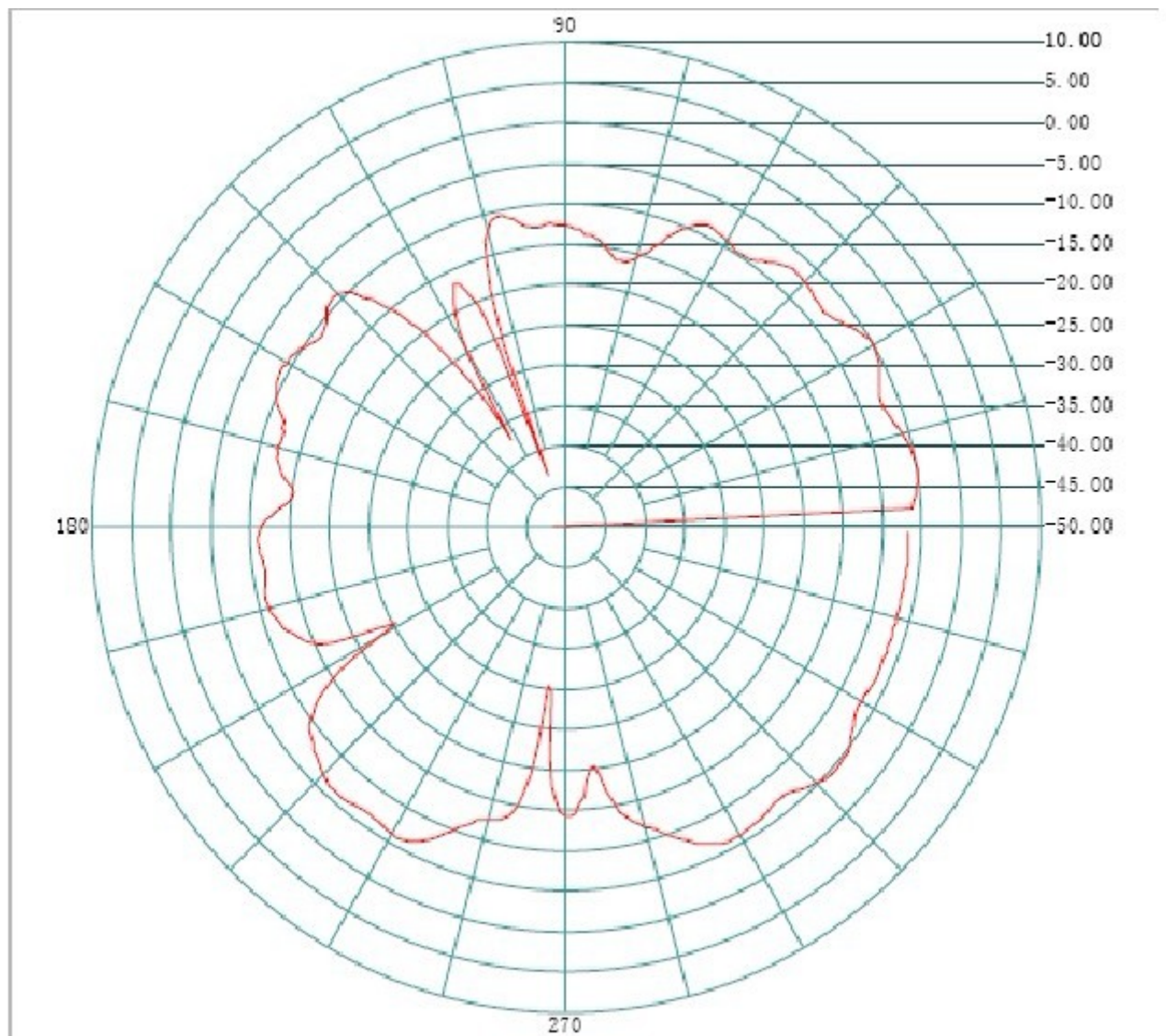
Antenna Polarity: **Horizontal**

Maximum Value(dBi): **2.01**

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

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

## 2.2 Vertical



Frequency(MHZ): **2440**

Antenna Polarity: **Vertical**

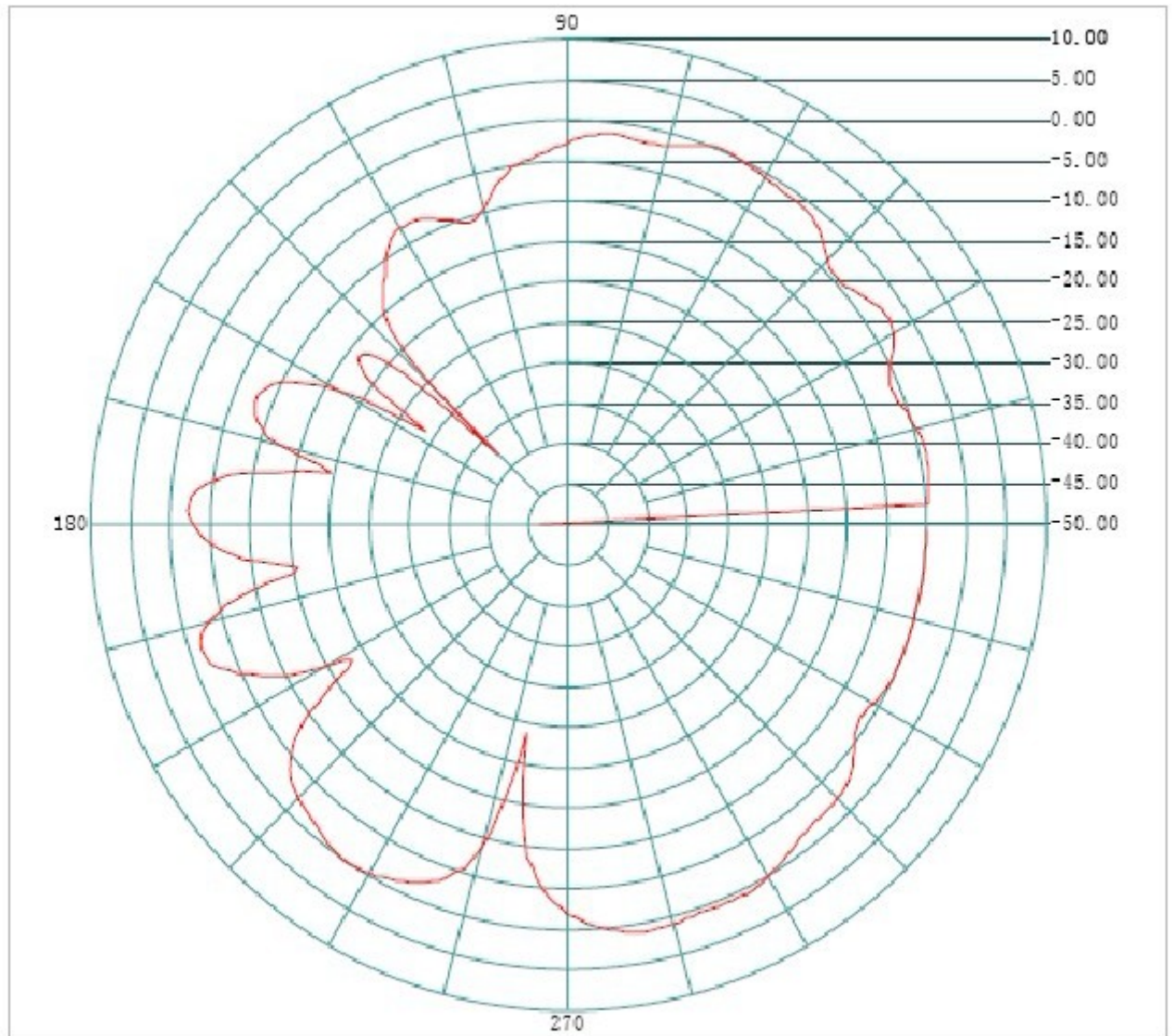
Maximum Value(dBi): **-4.29**

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

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

### 3. Main antenna : 2474 MHz

#### 3.1 Horizontal



Frequency(MHZ): **2474**

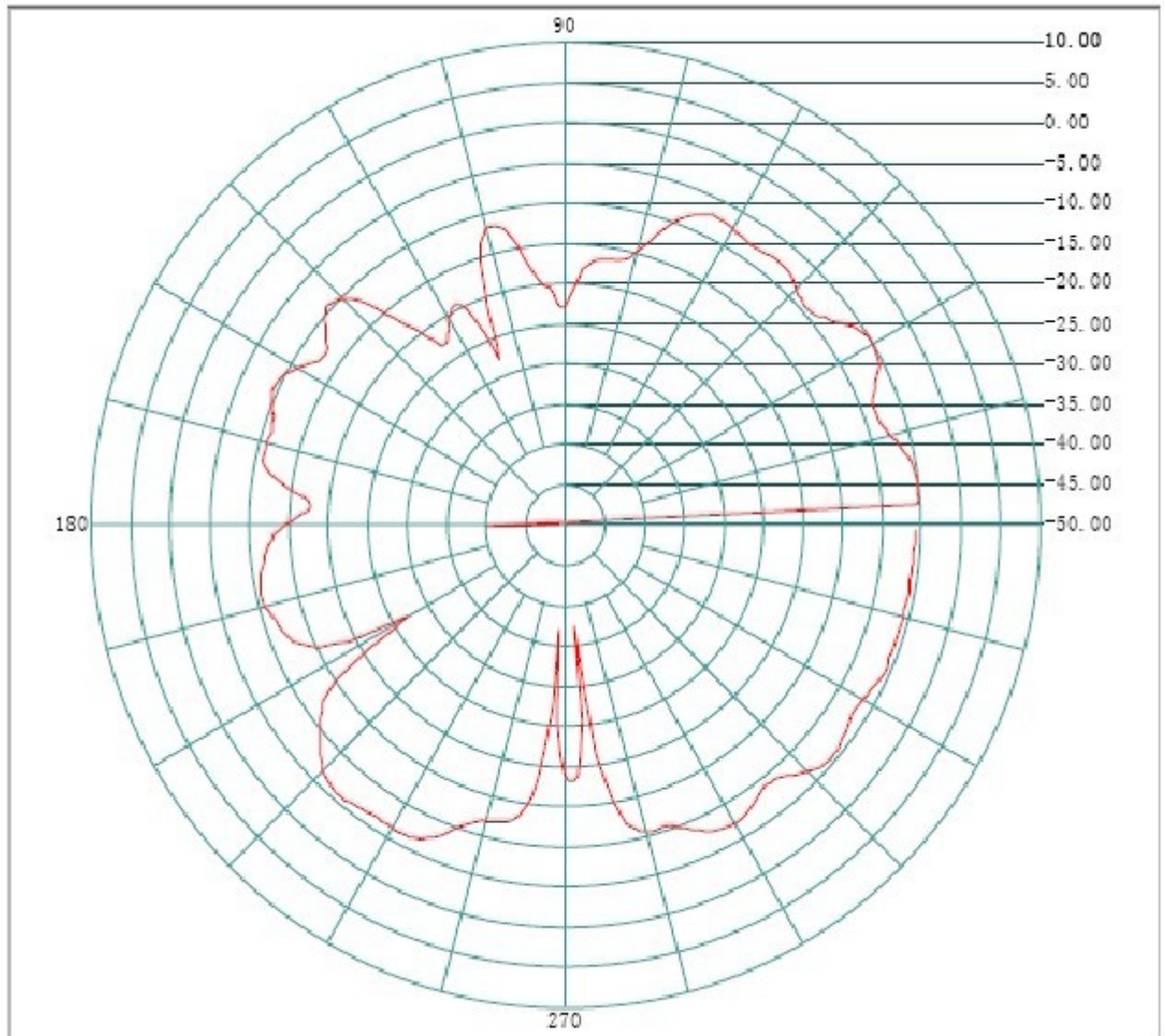
Antenna Polarity: **Horizontal**

Maximum Value(dBi): **1.40**

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

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

### 3.2 Vertical



Frequency(MHZ): **2474**

Antenna Polarity: **Vertical**

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

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

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

## ANNEX C TEST SETUP PHOTO

