

Antenna Report

Product Name: KB-042,MS-258

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:8.5mm*3.7m

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

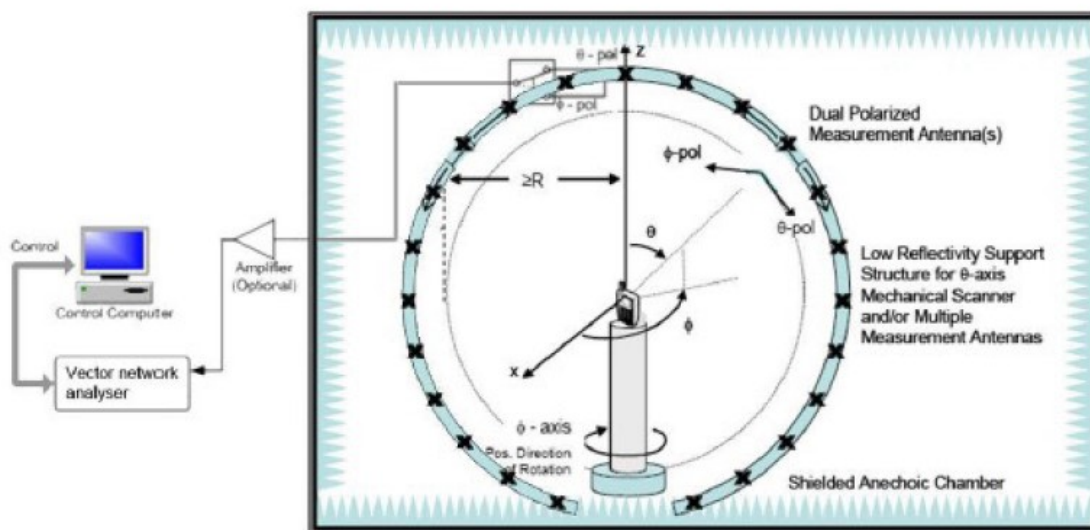
Equipment	Manufacturer	Mode No	Serial No	Cal date	Cal Due
Network Analyzer	Agilent	E5071B	MY48360957	2021/5/20	2022/5/19
Quad-Ridge Horn Antenna	ETS	Apr-64	62743	2021/5/20	2022/5/19
700 MHz-6 GHz MAPS Controller	ETS	7006	59957	2021/12/17	2022/12/16
Switch Control System	ETS	7001	MY42001152	2021/12/17	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 : KB-042,MS-258 Dongle

Center Frequency 2403MHz 2.18dBi

2440MHz 2.01dBi

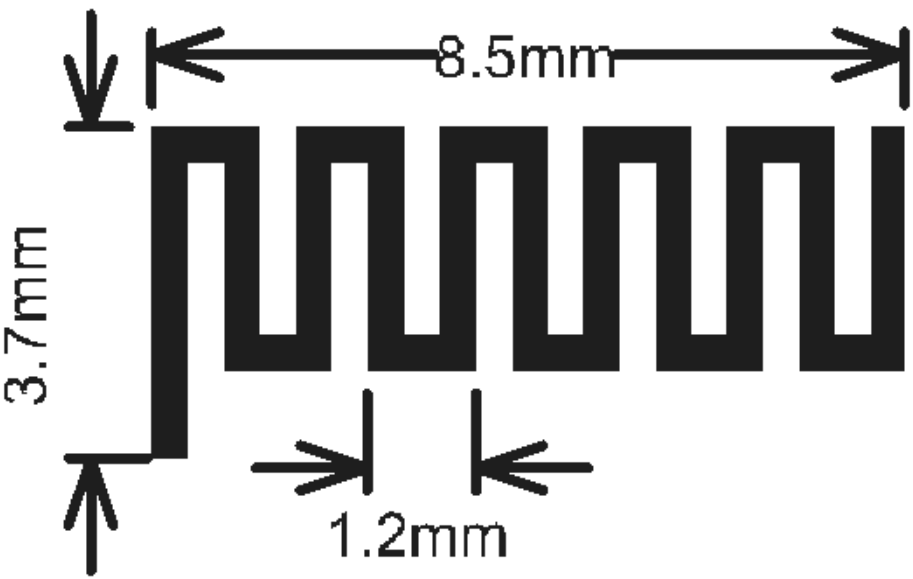
2480MHz 1.40dBi

MAX. GAIN 2.18 dBi

Polarization Horizontal

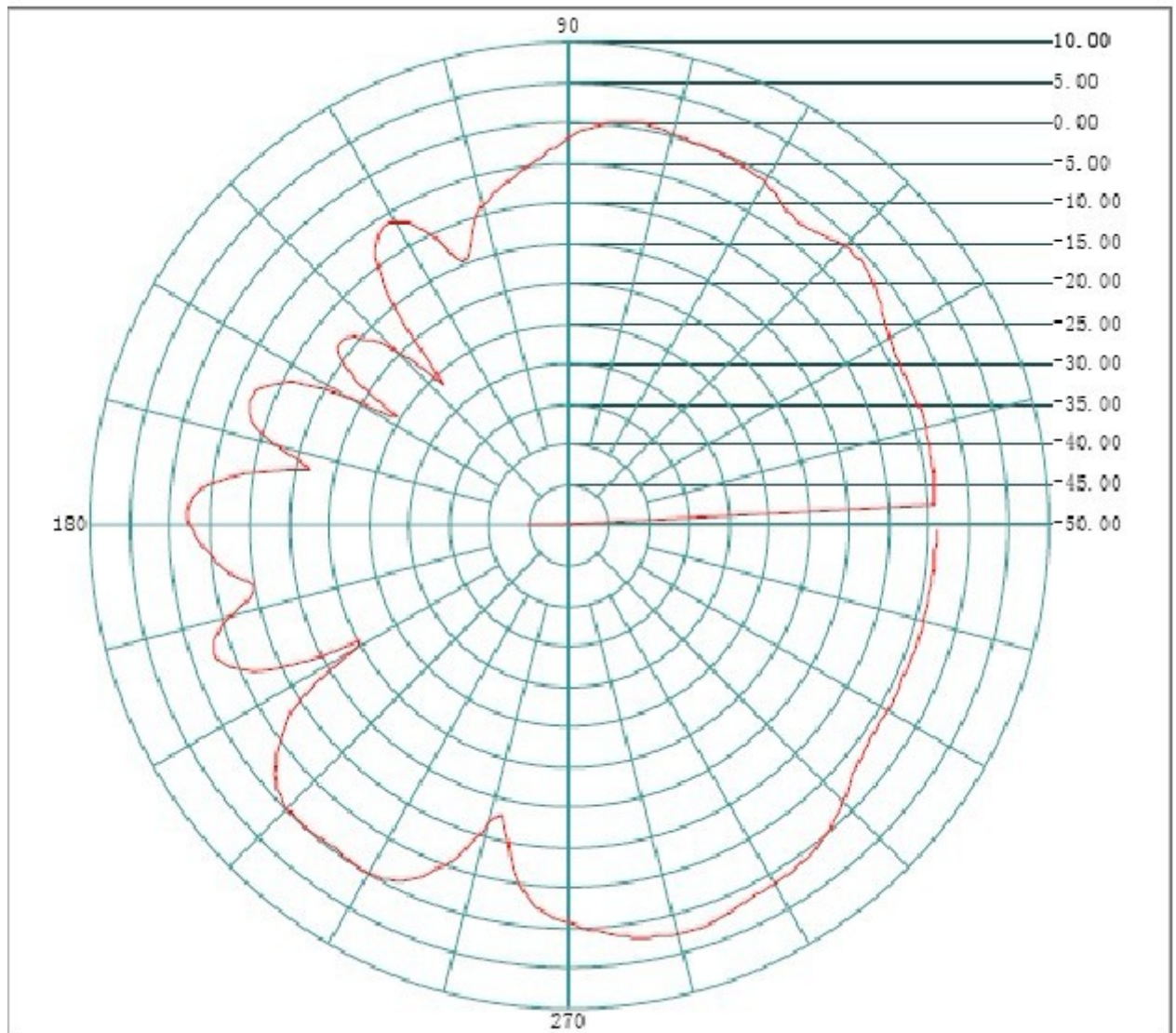
Azimuth Beam Pattern Omni directional

Impedance 50Ω



1. Main antenna : 2403 MHz

1.1 Horizontal



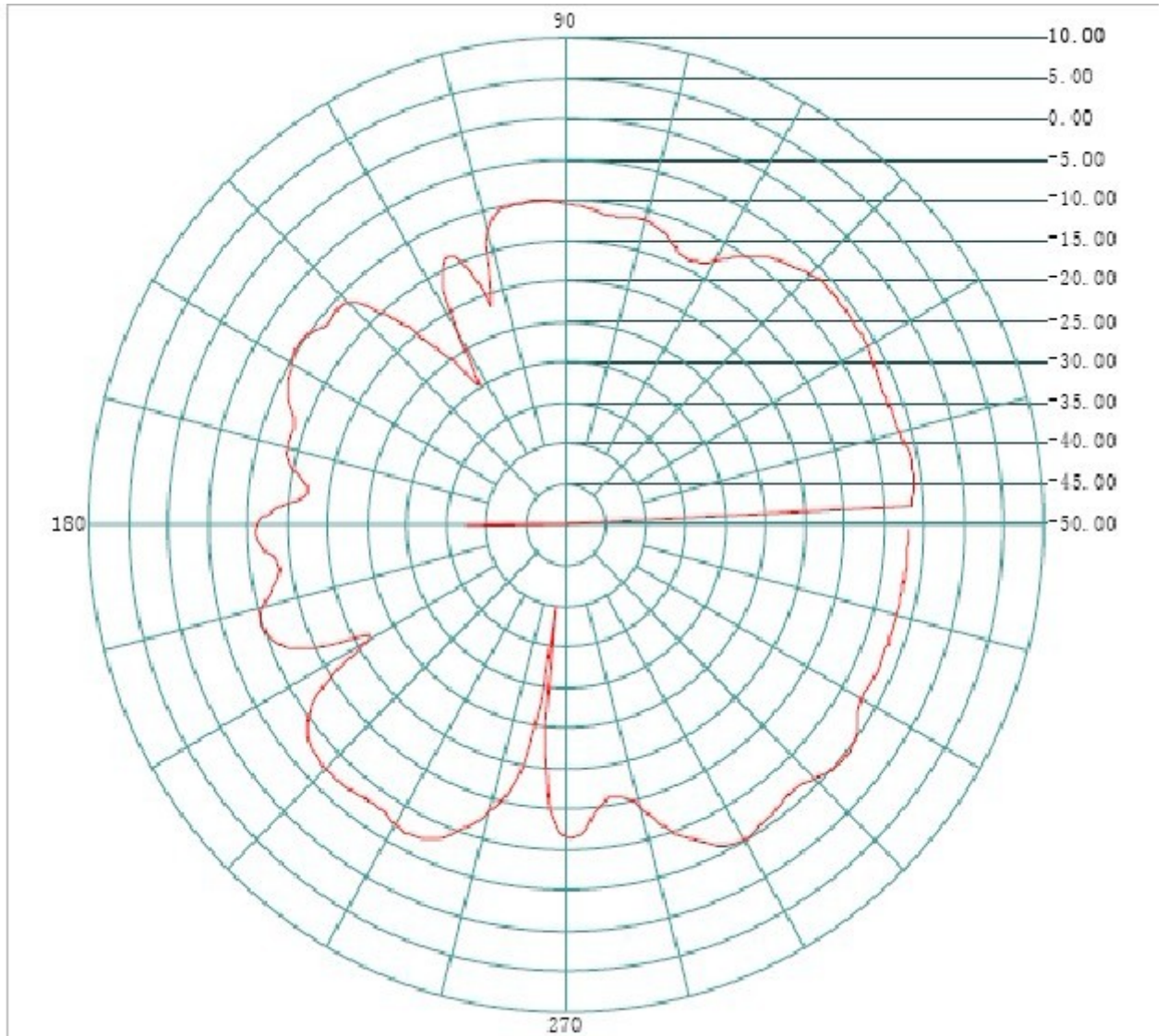
Frequency (MHz): 2403 Antenna Polarity: Horizontal

Maximum Value (dBi): 2.18

Average Gain (dBi) : -2.48

Minimum Gain (dBi):-55.18

1.2 Vertical



Frequency(MHZ): **2403**

Antenna Polarity: **Vertical**

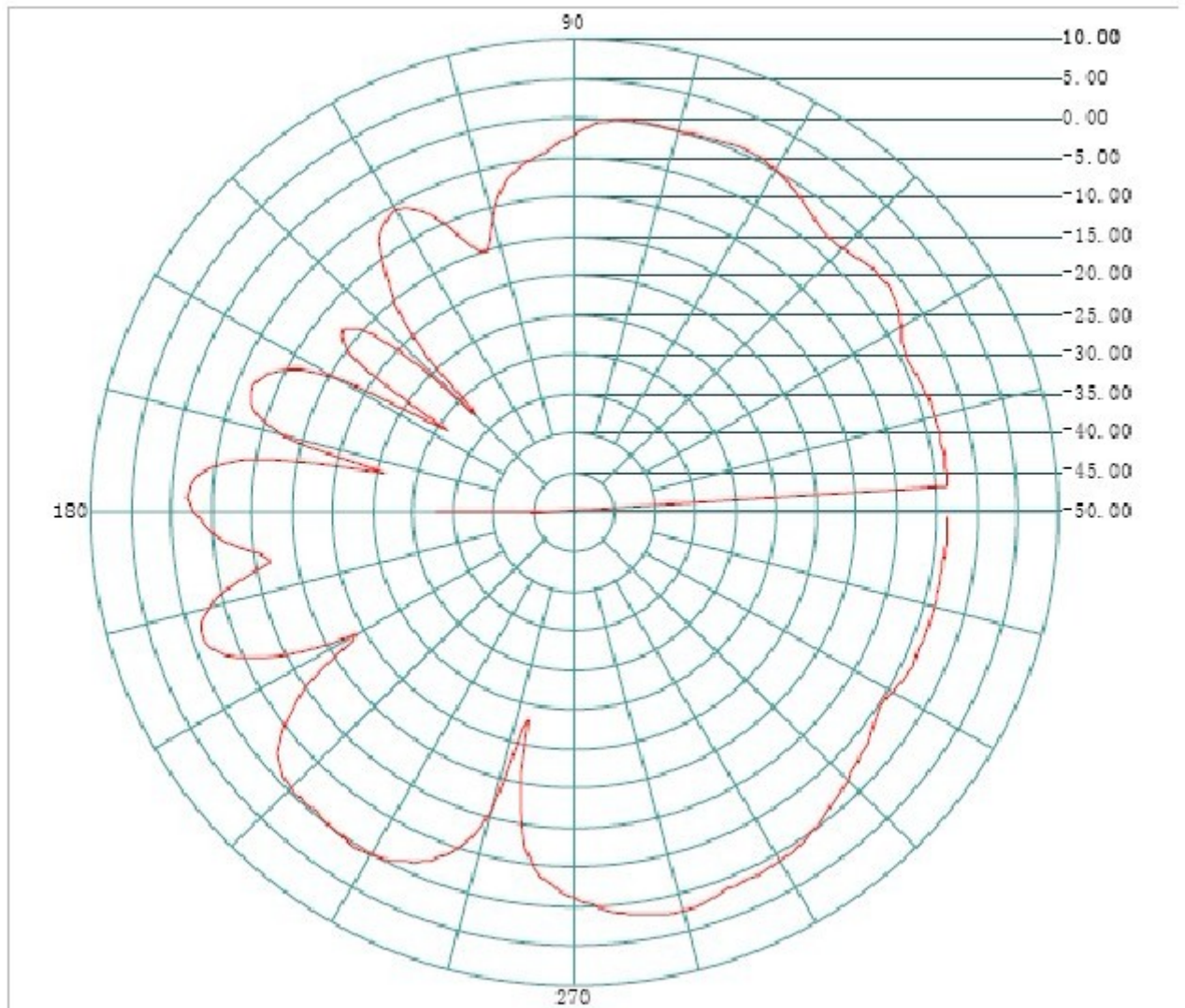
Maximum Value(dBi): **-4.51**

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

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

2. Main antenna : 2440 MHz

2.1 Horizontal



Frequency(MHZ): **2440**

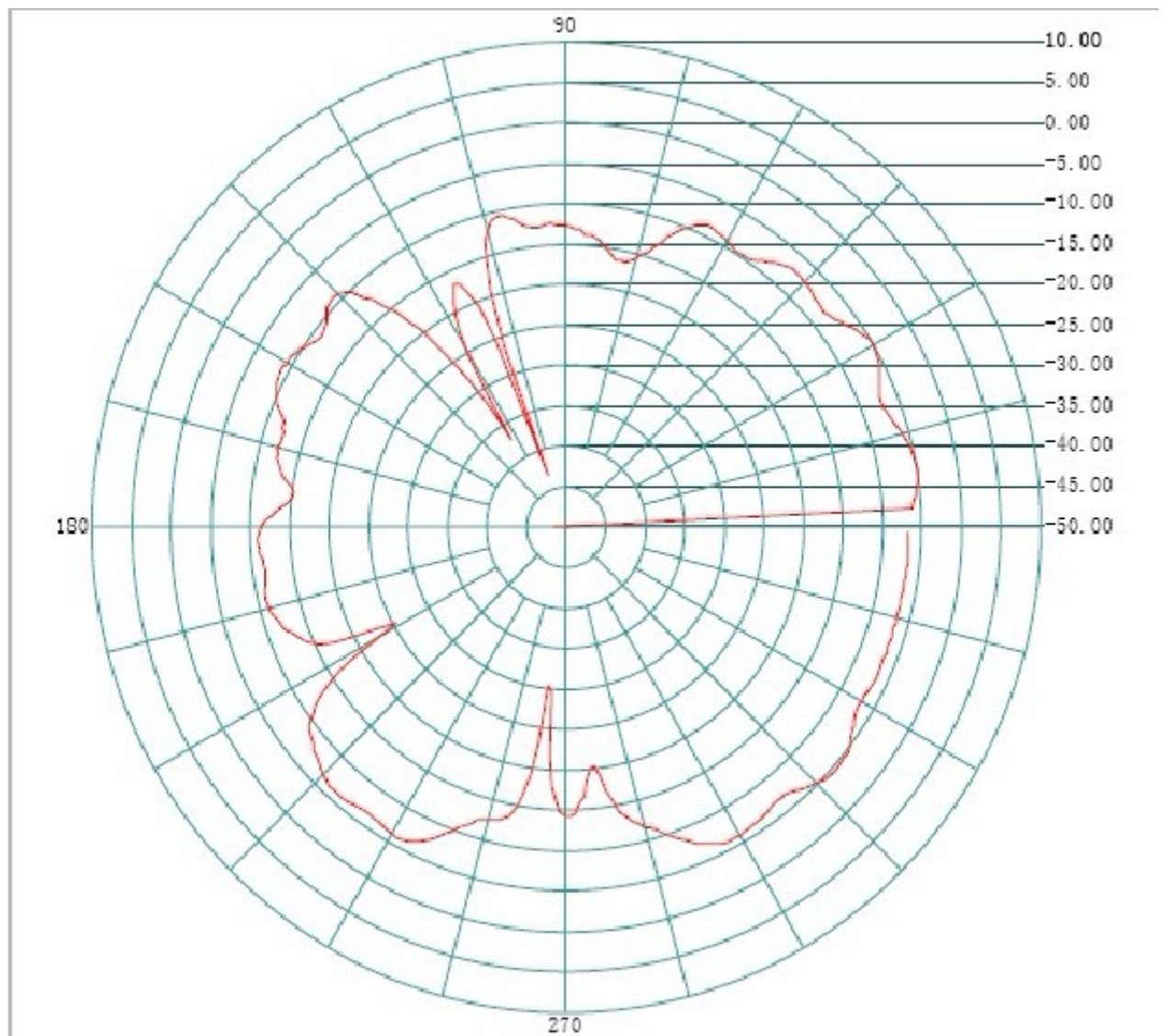
Antenna Polarity: **Horizontal**

Maximum Value(dBi): **2.01**

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

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

2.2 Vertical



Frequency(MHZ): **2440**

Antenna Polarity: **Vertical**

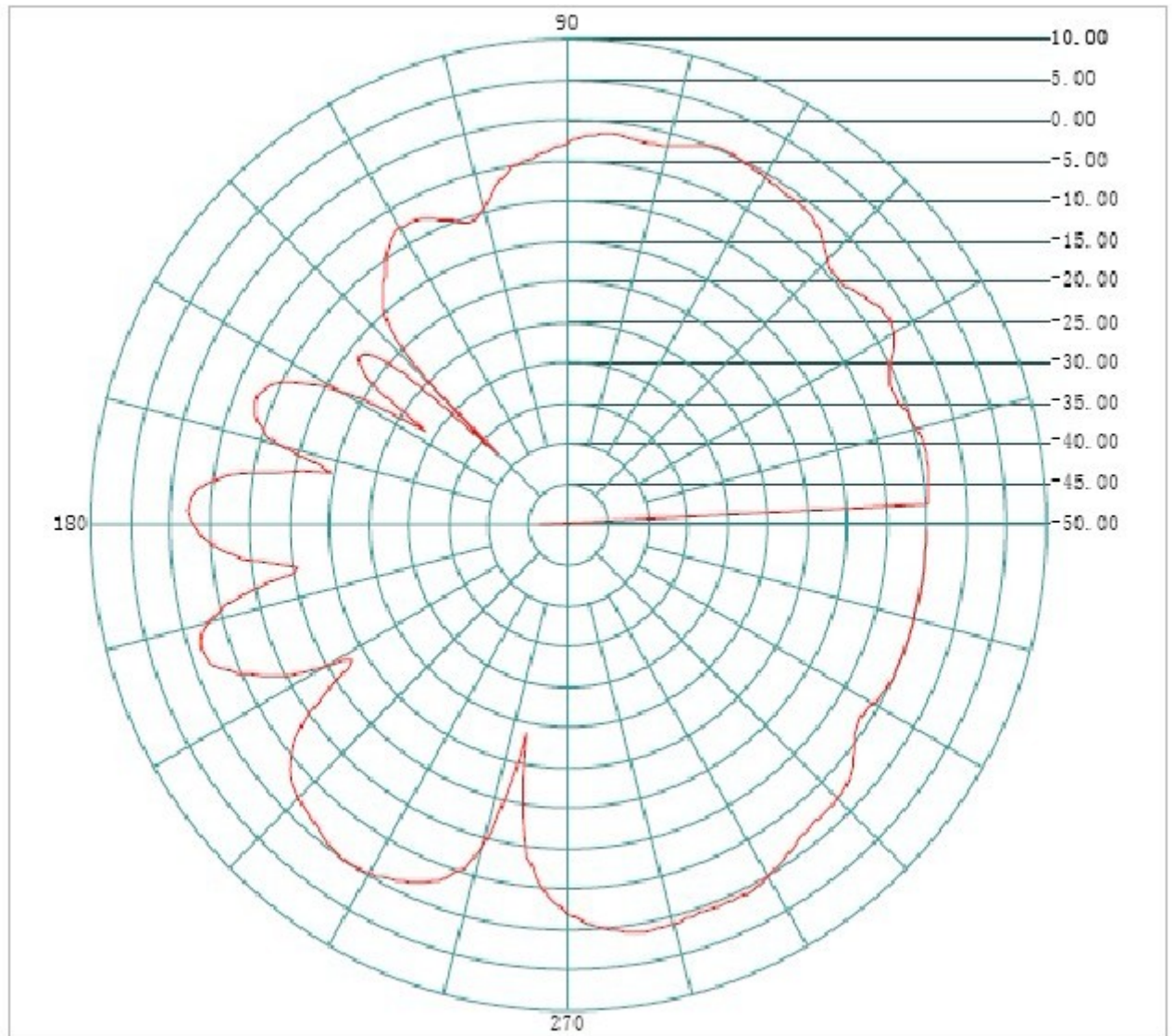
Maximum Value(dBi): **-4.29**

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

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

3. Main antenna : 2480 MHz

3.1 Horizontal



Frequency(MHZ): **2480**

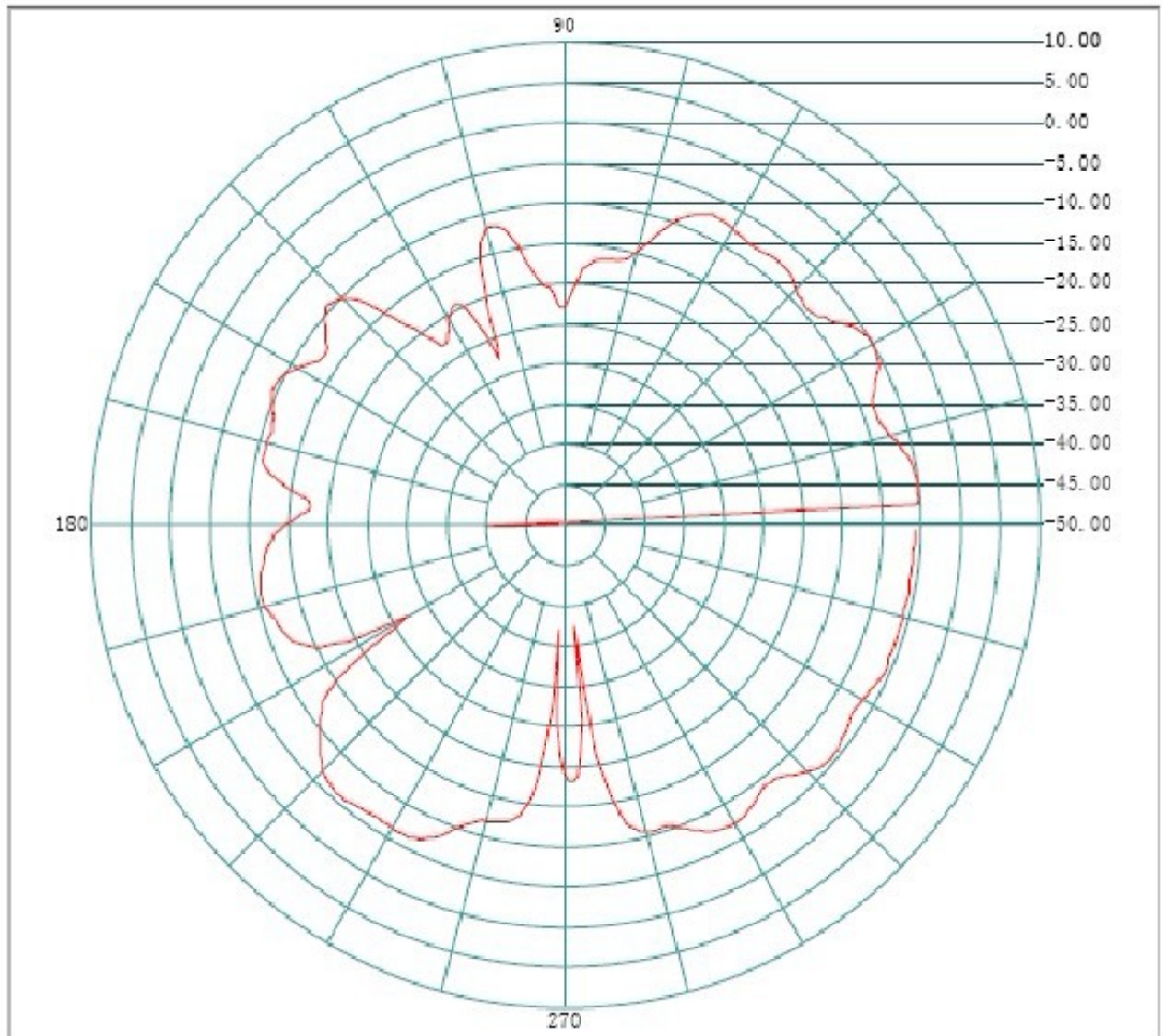
Antenna Polarity: **Horizontal**

Maximum Value(dBi): **1.40**

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

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

3.2 Vertical



Frequency(MHZ): **2480**

Antenna Polarity: **Vertical**

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

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

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

ANNEX C TEST SETUP PHOTO

