

# APPROVAL SHEET

## 承认书

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**CUSTOMER** 客户: 安帝爱(深圳)科技有限公司  
**DESCRIPTION** 产品: 2.4G Double copper tube antenna  
**PART NUMBER** 规格: 3dBi IPEX Length=200MM

<b>calibration</b>	<b>audit</b>	<b>make</b>
shiqnghua	liangzhuning	dengjie

# RF Antenna Assembly

## Specification

### 1. Electrical Properties :

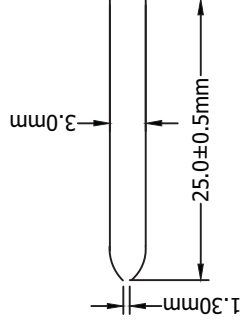
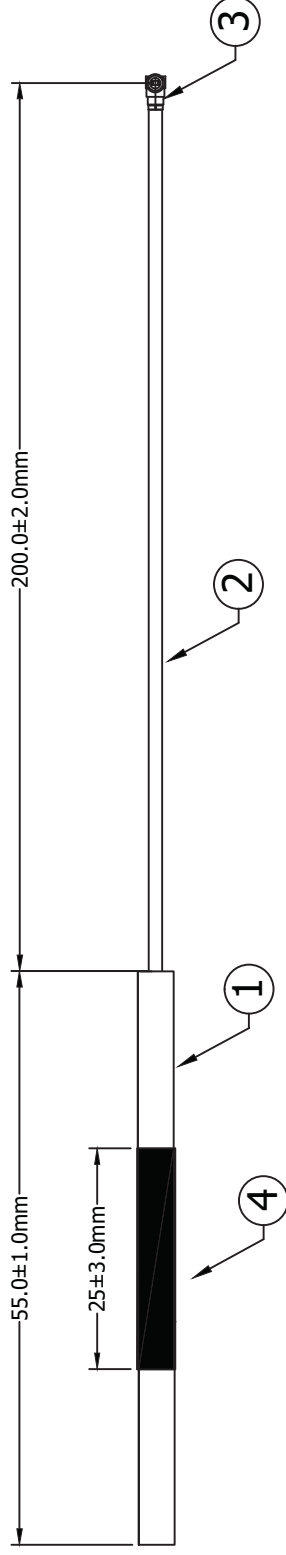
- 1.1 Frequency Range..... 2.4GHz ~ 2.5GHz
- 1.2 Impedance ..... 50Ω Nominal
- 1.3 VSWR ..... 1.93 : 1 Max.
- 1.4 Return Loss..... -10 dB Max.
- 1.5 Radiation ..... Omni-directional
- 1.6 Gain(peak)..... 3.0 dBi
- 1.7 Cable Loss..... 1.0dB Max.
- 1.8 Polarization..... Linear, Vertical
- 1.9 Admitted Power..... 1W
- 1.10 Cable..... Black Coaxial Cable

### 2. Physical Properties :

- 2.3 Tube..... Brass, Ni Plated
- 2.4 Operating Temp. .... -10°C ~ +60°C
- 2.5 Storage Temp. .... -10°C ~ +70°C
- 2.6 Color ..... Black

# DRAWING

REV.	DESCRIPTION	DATE
A	INITIAL DESIGN	2021.11.08



## BILL OF MATERIALS

ITEM	QTY	PART NO	DESCRIPTION
1	2	25-5106-17	2.4G 2DBI天线铜管 (无底塞) ; $\Phi 3.0 \times 25.0 \times 1.3$ 孔
2	1	21-11301-01-09	SHEN YU OD1.13mm Black Coaxial Cable
3	1	23-20278-02-01	I-PEX 20278-112R-13 Plug or Equivalent
4	1	28-8103-19	HEAT SHRINK TUBING $\Phi 3.0 \text{MM} \times 25 \text{MM}$

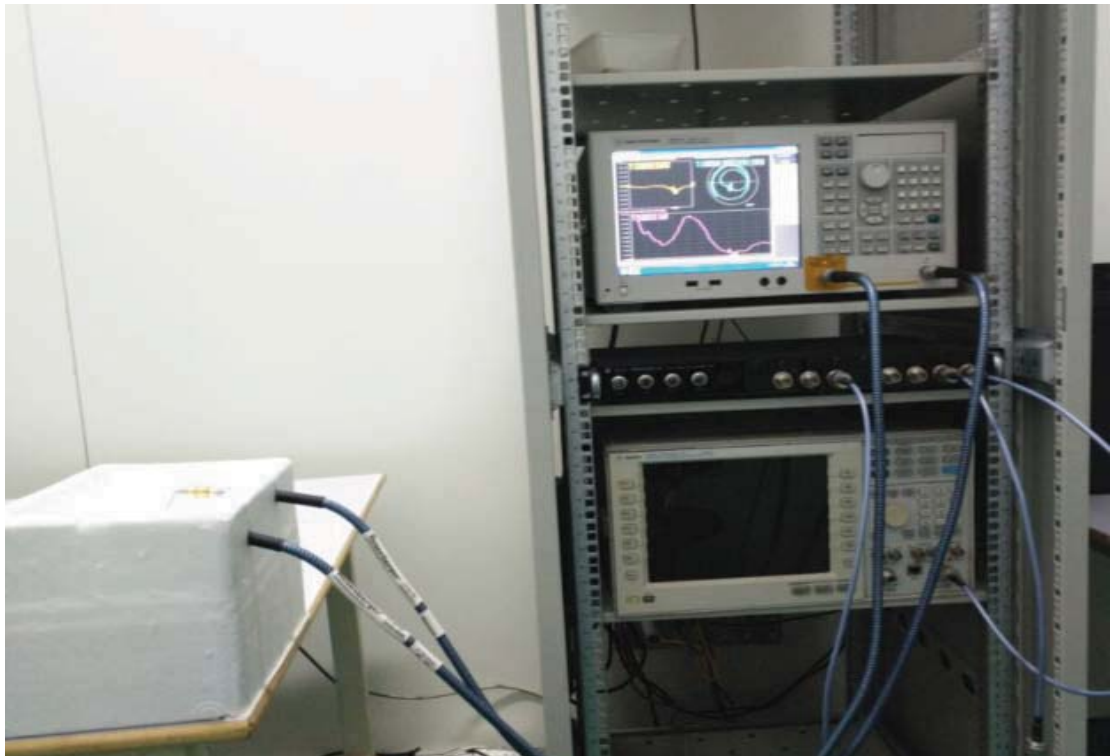
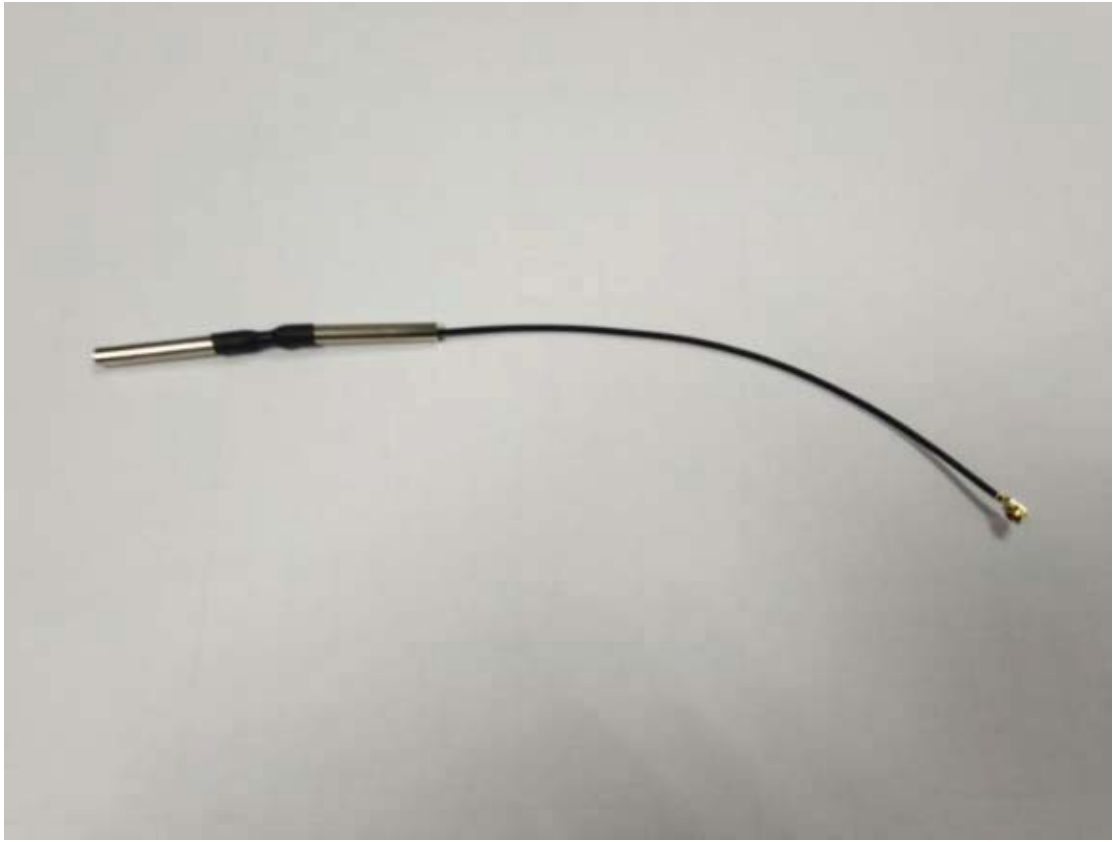
### Specification:

1. Frequency Rang: 2.4GHz~2.5GHz
2. Return Loss: -10dB or less
3. VSWR: 1.92 Max
4. Gain: 2.0 dBi

TITLE:	Antenna Assembly	APPROVED	
P/N:	30-01062-08	CHECKED	DENG HF
CUSTOMER:	03-06-02-104LF	SCALE: NONE	
DRAW NO.:	20211108001	UNIT: mm	REV.B
DIMENSIONS TOLERANCES UNLESS OTHERWISE NOTED		DRAWN	
一般公差	.XXX ±0.1	DENG HF	
	.XX ±0.5	Deng jie	
	X ±1.0		
TOLERANCE	X ±3.0		

深圳市科创电子材料有限公司  
Shenzhen Kotron Materials Co., LTD







# 1. 2400 MHz

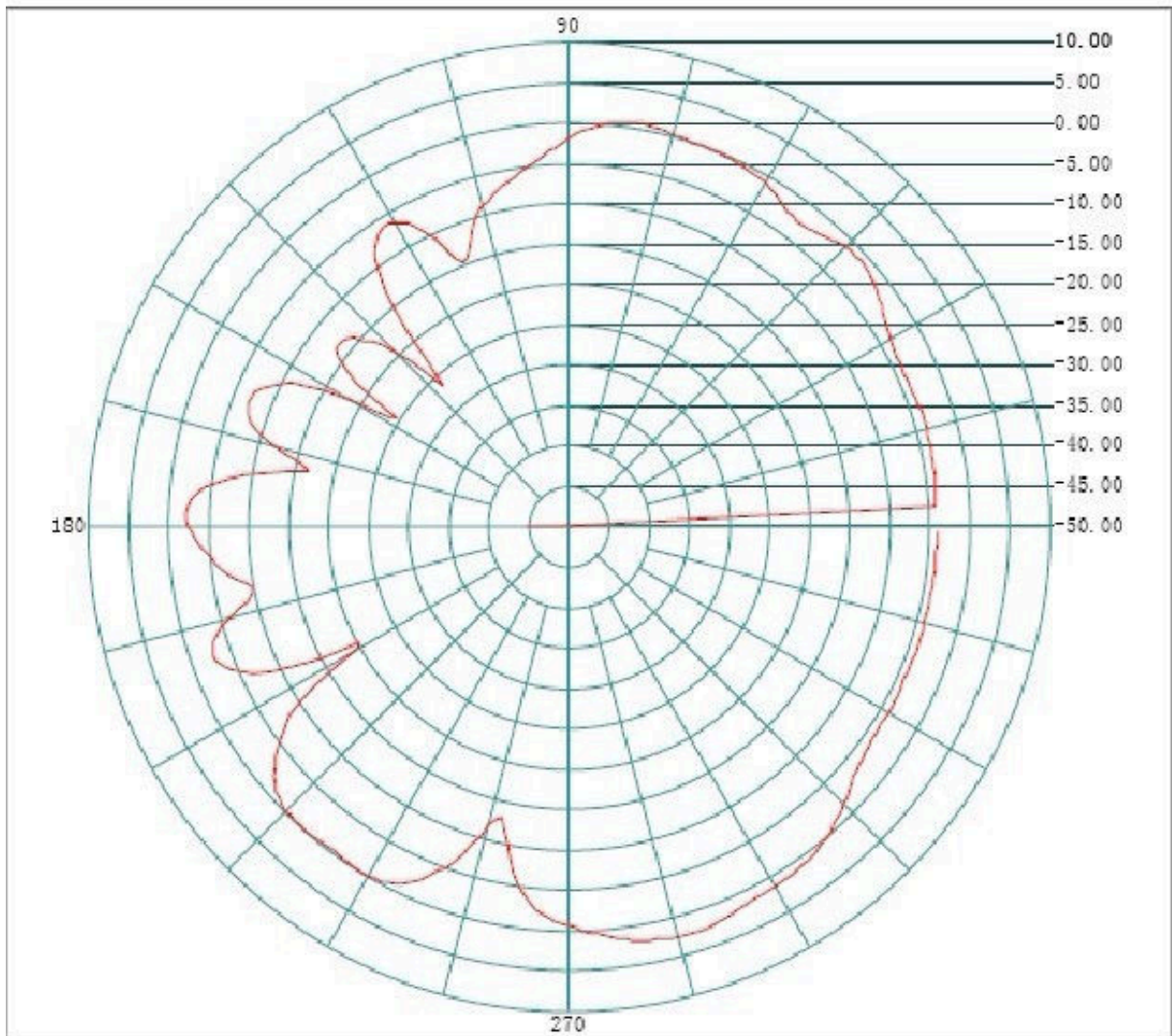
## 1.1 Horizontal

Frequency(MHZ): 2400

Antenna Polarity: Horizontal

Maximum Value(dBi): 3.00

Average Gain(dBi) : -2.41





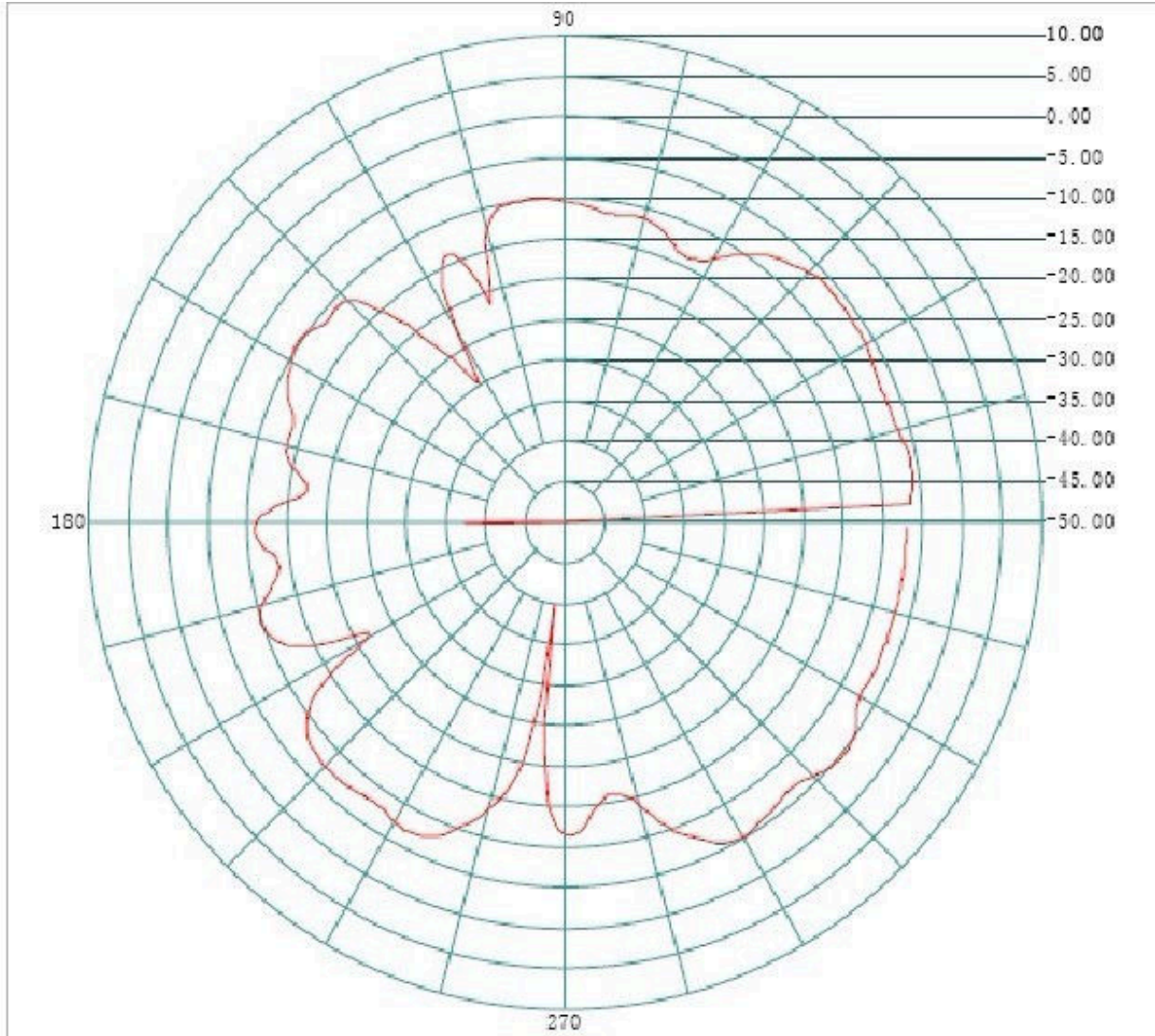
**1.2 Vertical**

Frequency(MHZ): 2400

Antenna Polarity: Vertical

Maximum Value(dBi): -4.38

Average Gain(dBi) : -8.91



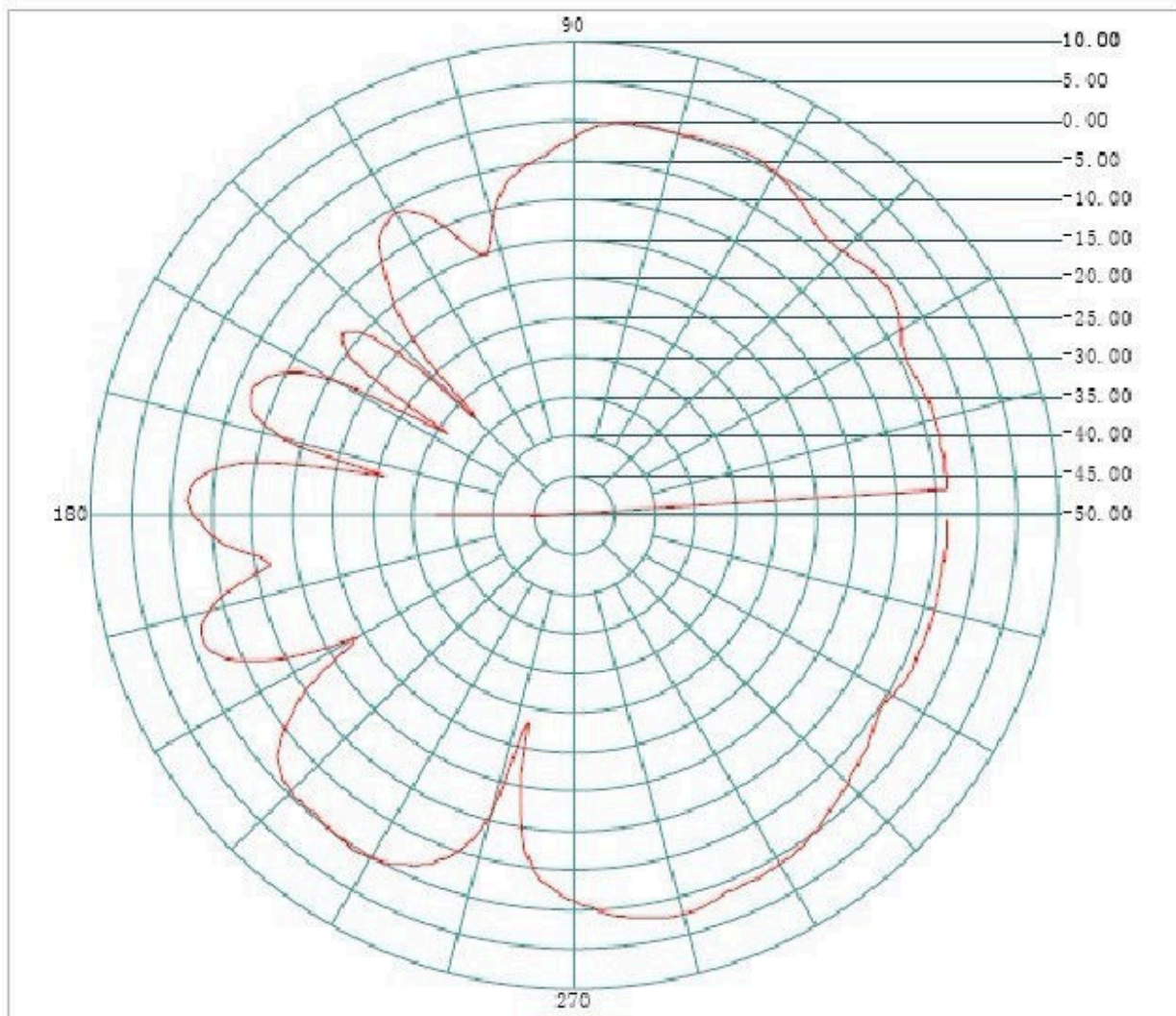
## 2. 2440 MHz

### 2.1 Horizontal

Frequency(MHZ): 2440      Antenna Polarity: Horizontal

Maximum Value(dBi): 2.98

Average Gain(dBi) : -2.56



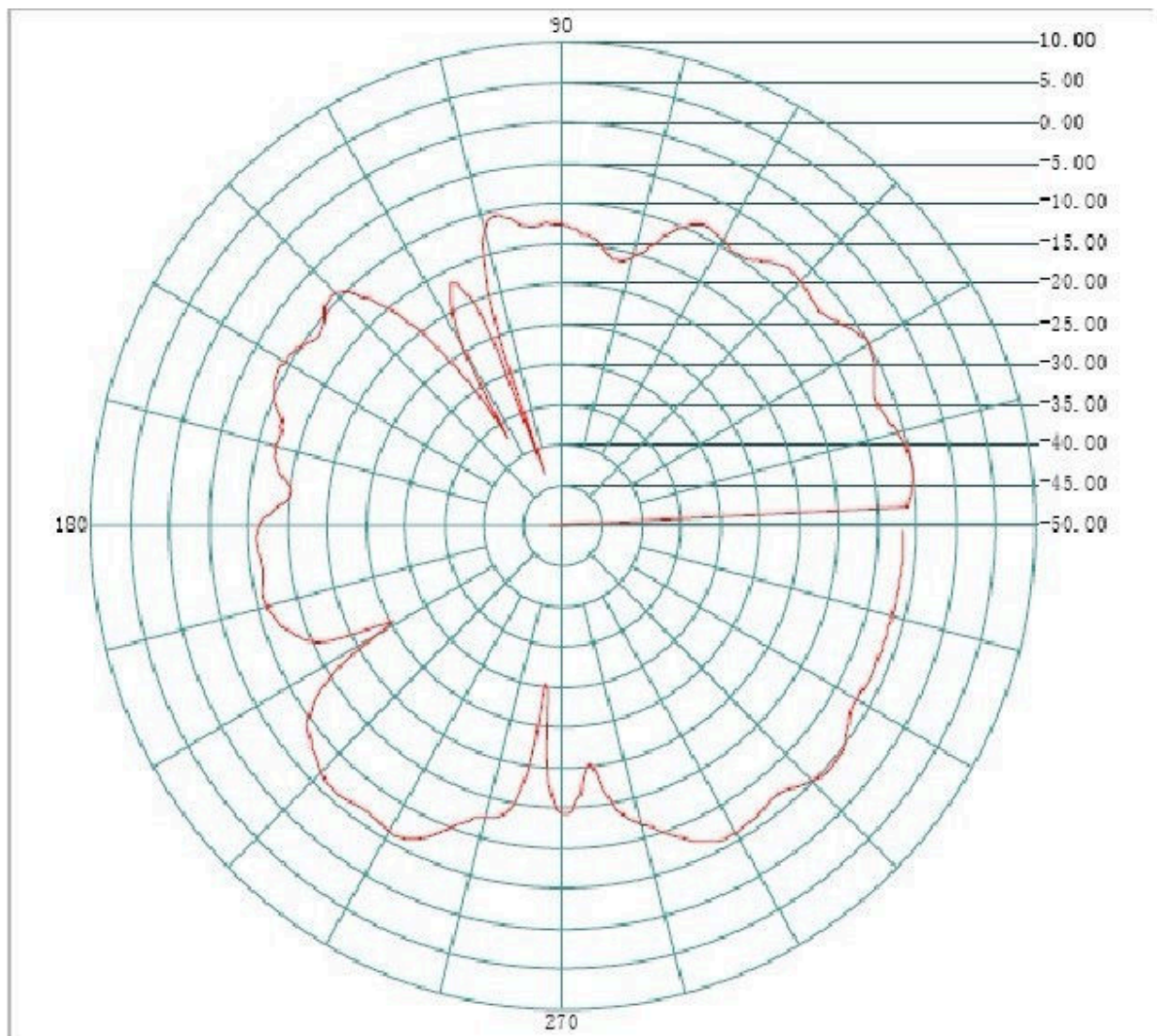


## 2.2 Vertical

Frequency(MHZ): 2440      Antenna Polarity: Vertical

Maximum Value(dBi) -4.28

Average Gain(dBi) : -8.83



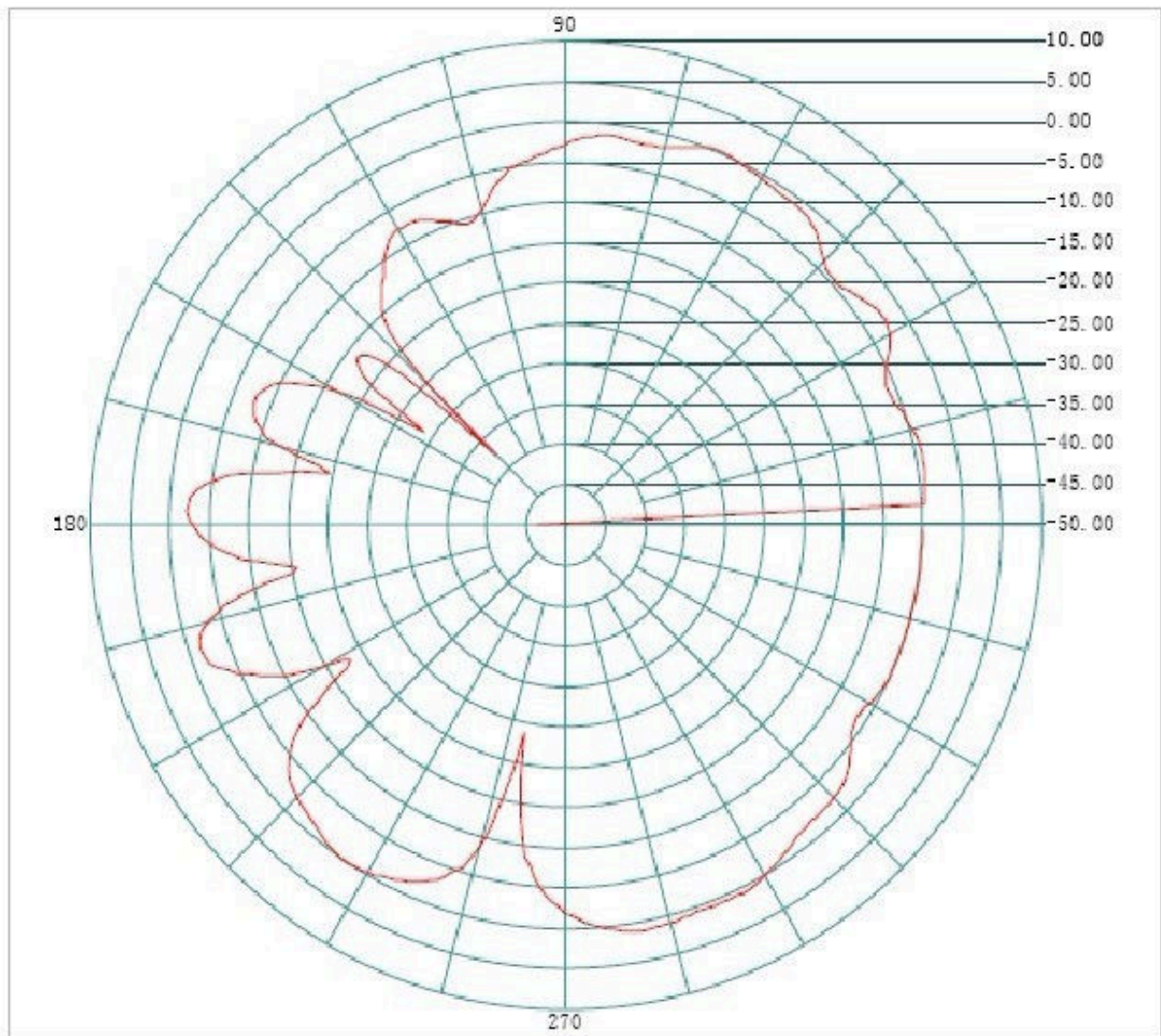
### 3. 2480 MHz

#### 3.1 Horizontal

Frequency(MHZ): 2480      Antenna Polarity: Horizontal

Maximum Value(dBi): 1.47

Average Gain(dBi) : -3.34



### 3.2 Vertical

Frequency(MHZ): 2480

Antenna Polarity: Vertical

Maximum Value(dBi):

-4.93

Average Gain(dBi) :

-9.05

