

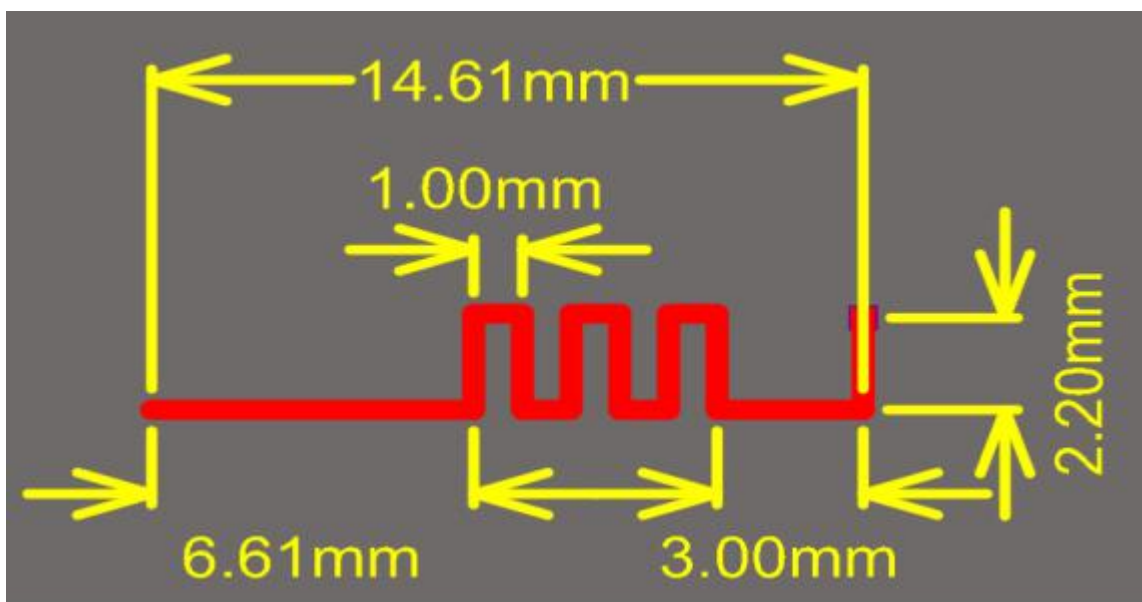
Antenna Specification

Specifications

Summary

ITEM	SPEC.	
Antenna Type	PCB Antenna	
Center Frequency	2402 MHz 2441 MHz 2480 MHz	2.34 dBi 2.07dBi 1.45 dBi
MAX. GAIN	2.34dBi	
Polarization	Horizontal	
Azimuth Beam Pattern	Omni-directional	
Impedance	50 Ω	
Antenna Length	14.61 cm	
Model Name	HD409	
manufacturer	Shenzhen Hangshi Eelectronic Technology Co. , Ltd.	
Address	Hangshi Technology Park, Democracy West Industry Area, Shajing Town, Bao' an District, Shenzhen, China.	

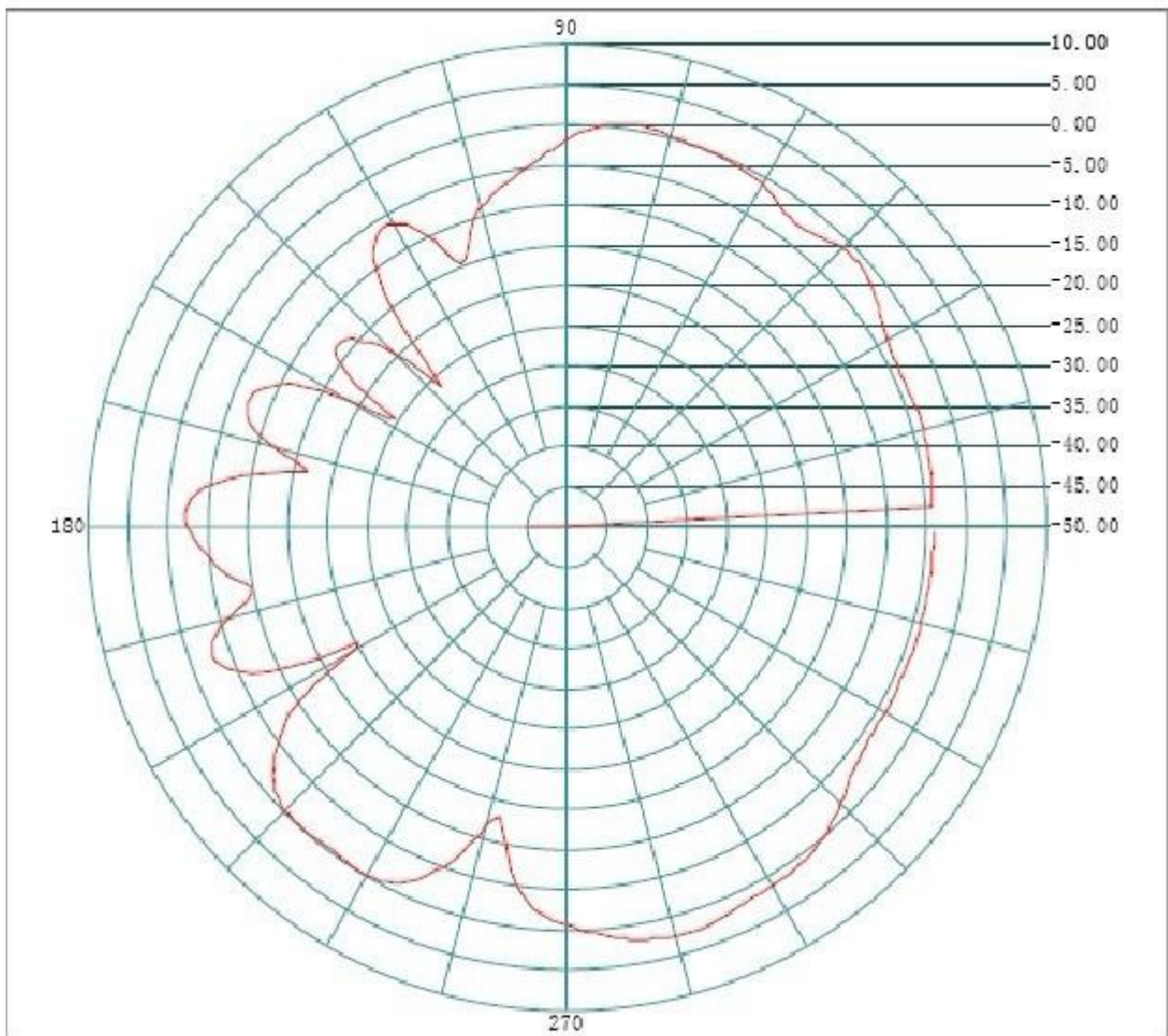
Antenna Photo & Length (mm)



Test Address	16 Tzu Chiang Road, Hsinchu Industrial District Hsinchu Hsien 303 , Taiwan
Test Date	2019-10-11
Test Instrument	vector network analyzer - R&S ZVB20

1. Main antenna : 2402 MHz

1.1 Horizontal



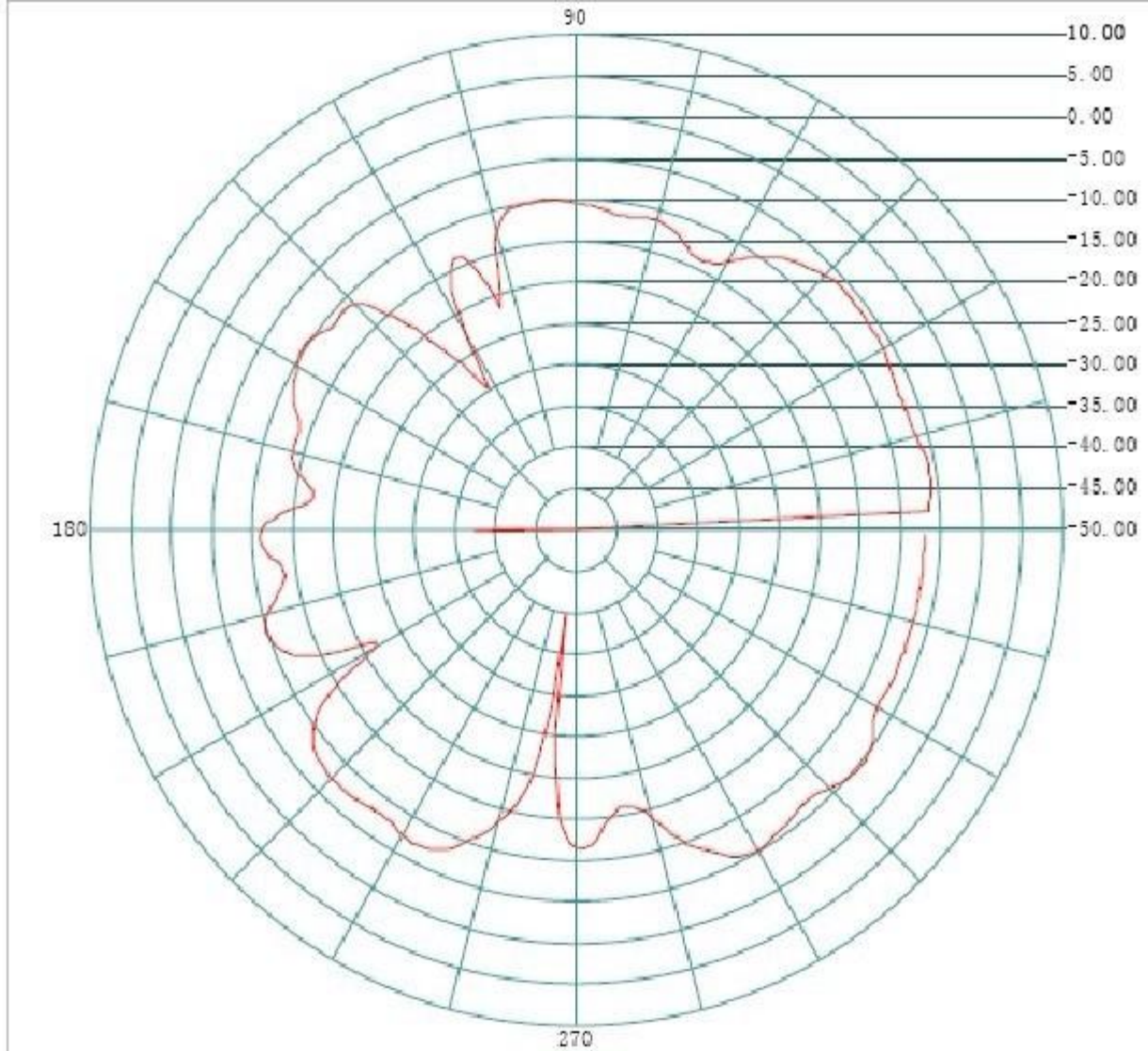
Frequency(MHZ): **2402** Antenna Polarity: **Horizontal**

Maximum Value(dBi): 2.34

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

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

1.2 Vertical



Frequency(MHZ): **2402** Antenna Polarity: **Vertical**

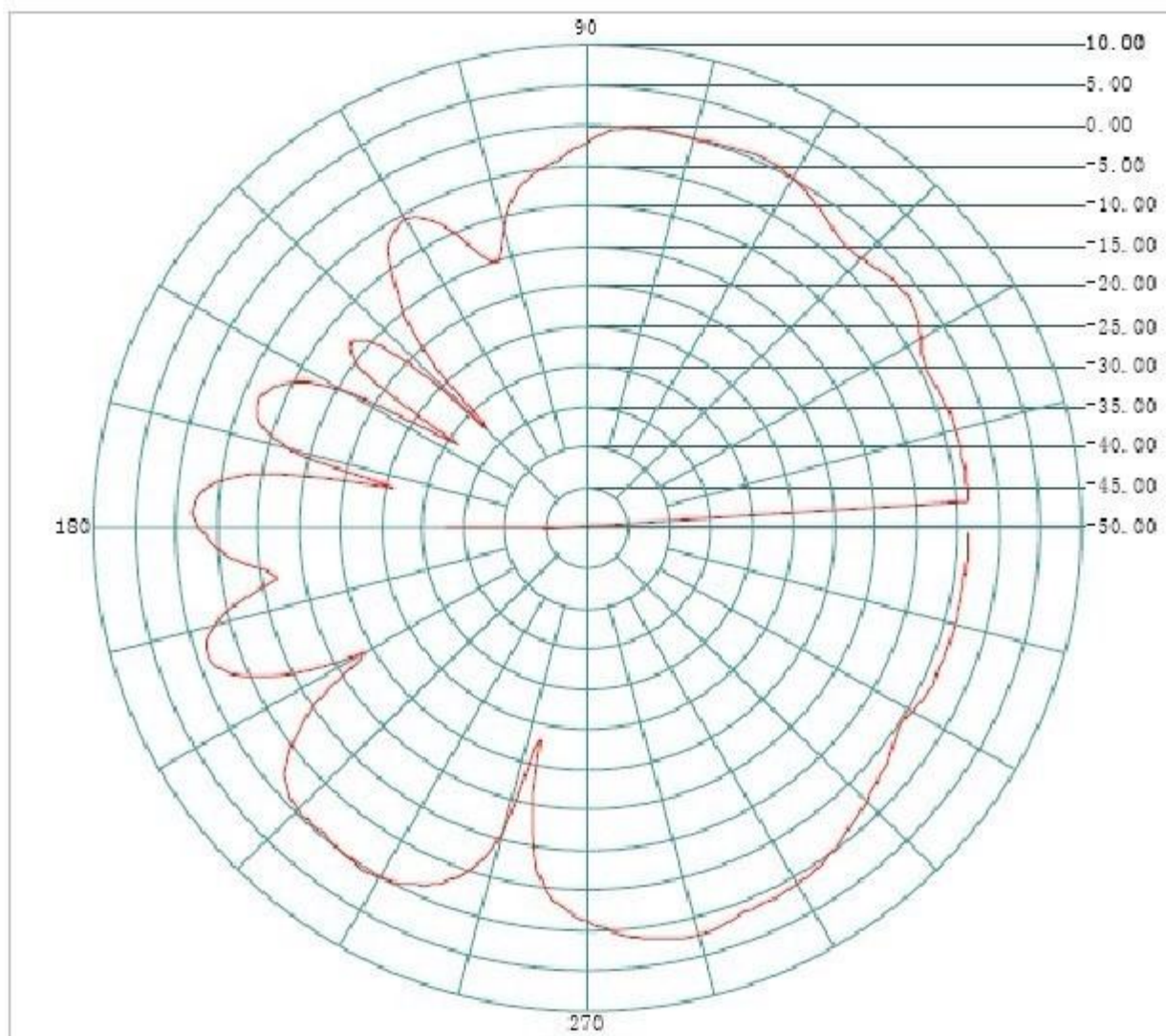
Maximum Value(dBi): **-4.51**

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

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

2. Main antenna : 2441 MHz

2.1 Horizontal



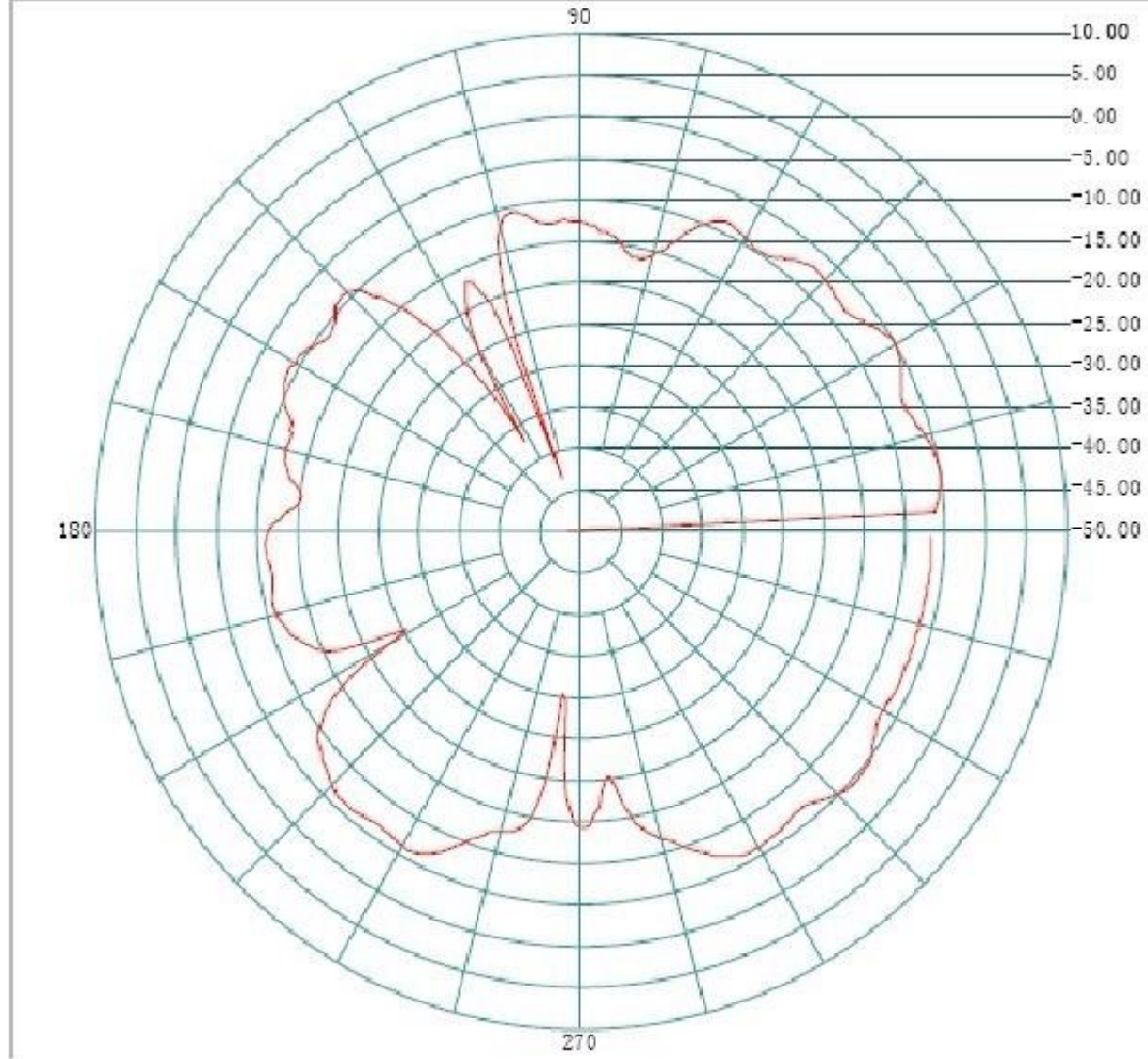
Frequency(MHZ): **2441** Antenna Polarity: **Horizontal**

Maximum Value(dBi): 2.07

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

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

2.2 Vertical



Frequency(MHZ): **2441** Antenna Polarity: **Vertical**

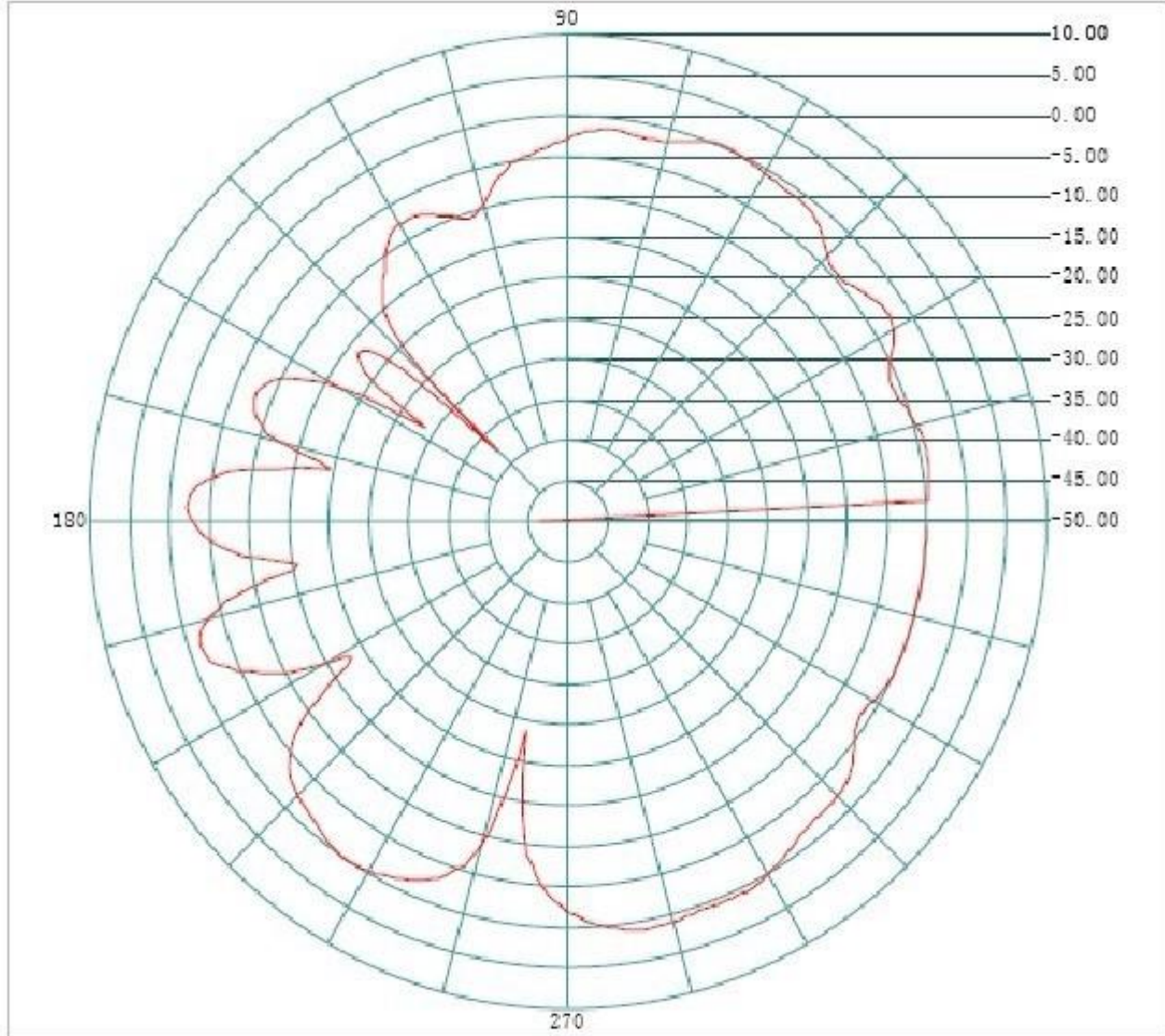
Maximum Value(dBi): **-4.29**

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

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

2. Main antenna : 2480 MHz

2.1 Horizontal



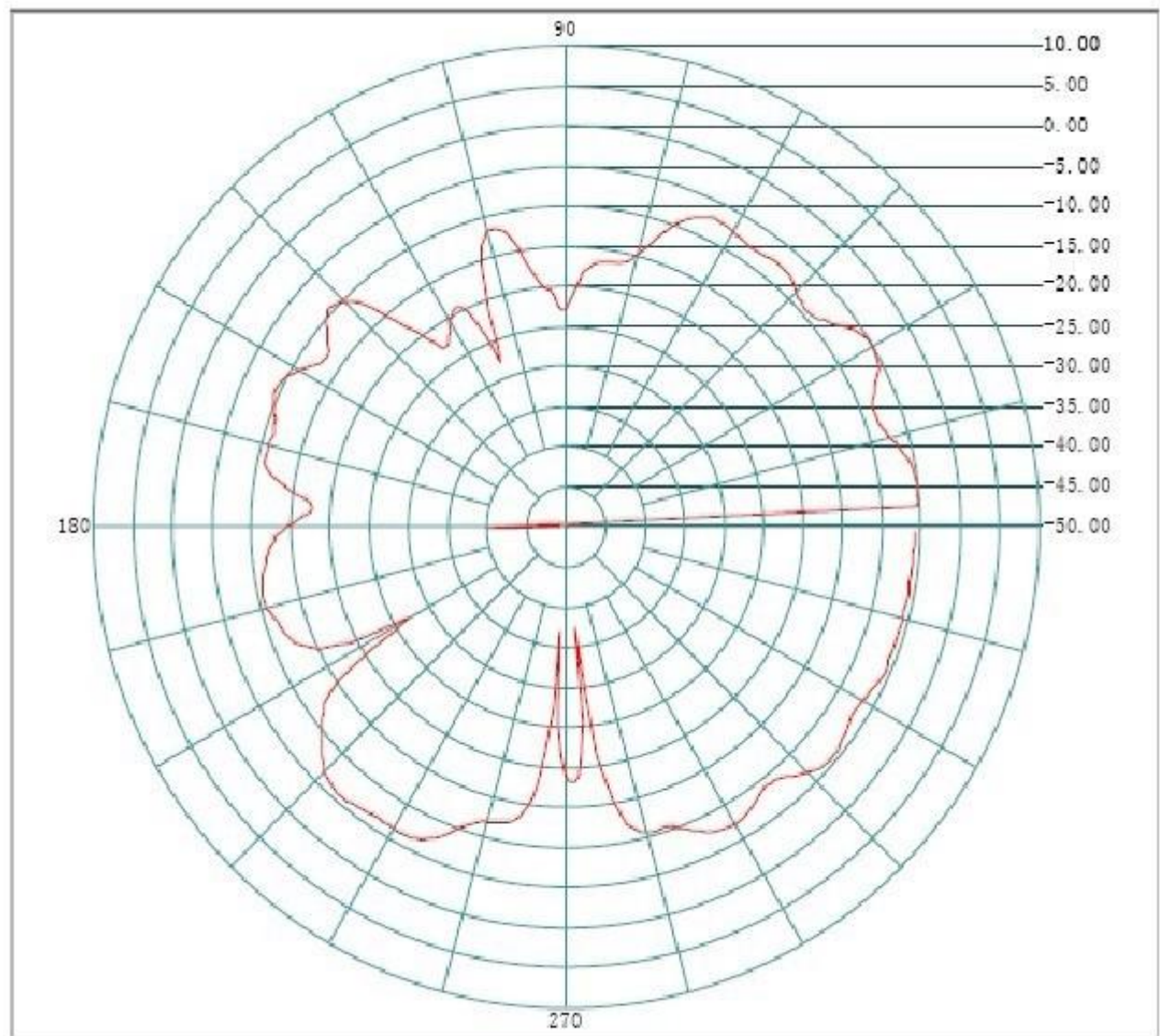
Frequency(MHZ): **2480** Antenna Polarity: **Horizontal**

Maximum Value(dBi): **1.45**

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**