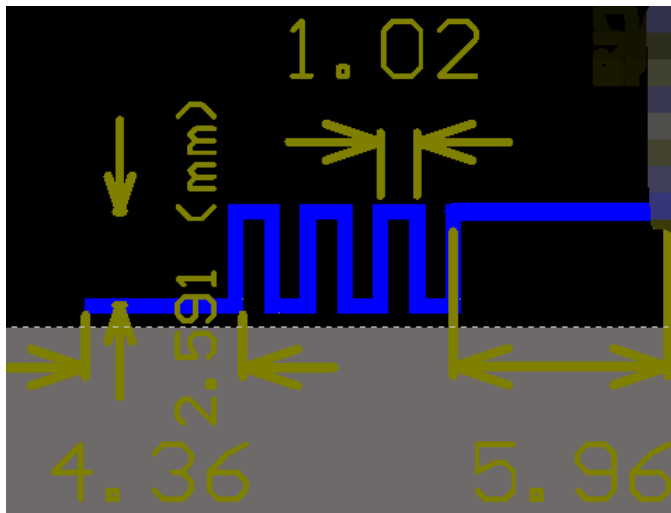


Antenna Specification

Specifications Summary

ITEM	SPEC.	
Model Name	IBM 2.4 GHz	
Center Frequency	2402 MHz	2.24 dBi
	2441 MHz	2.20 dBi
	2480 MHz	1.81 dBi
MAX. GAIN	2.24 dBi	
Polarization	Horizontal	
Azimuth Beam Pattern	Omni-directional	
Impedance	50 Ω	
Antenna Length	3.2cm	

Antenna Photo & Length (mm)

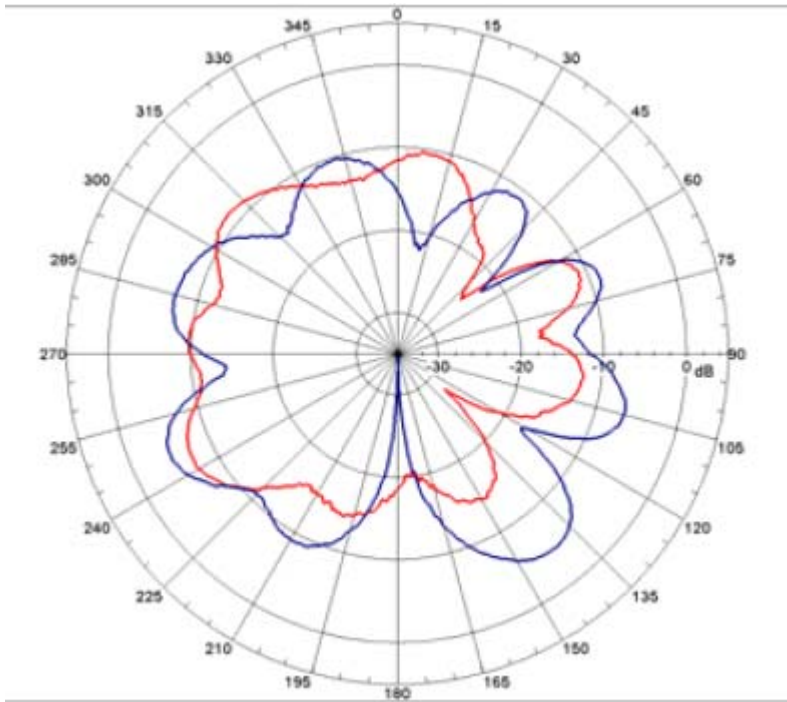


Test Address	Building A, Qiaohongsheng Cultural and Creative Park, Yintian Industrial Zone, Xixiang Street, Bao'an District, Shenzhen
Test Date	2023-05-20
Test Instrument	vector network analyzer - R&S ZVB20

1. Main antenna : 2402 MHz

(green line: horizontal power)
(red line: vertical power)

1.1 Horizontal



Frequency(MHZ): **2402**

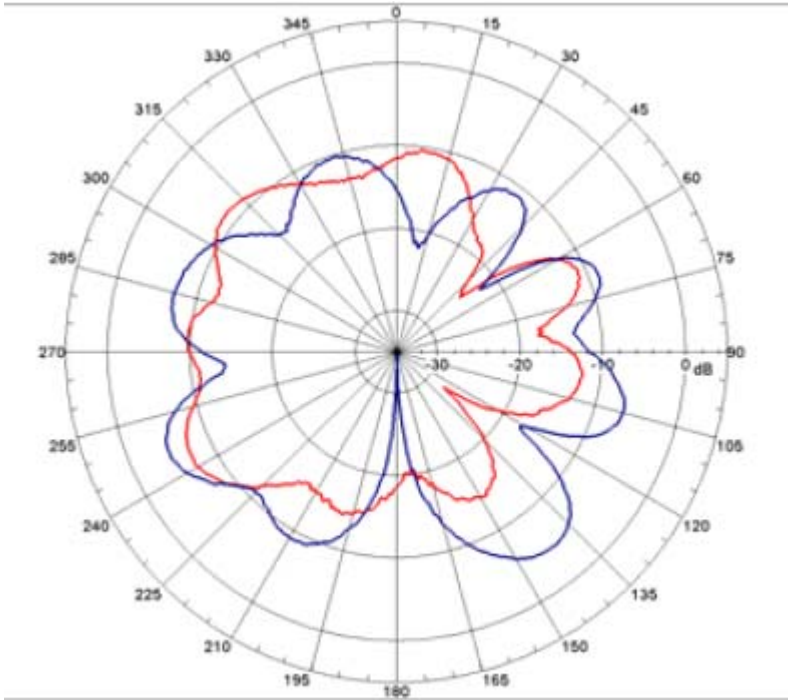
Antenna Polarity: **Horizontal**

Maximum Value(dBi): **2.24**

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

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

1.2 Vertical



Frequency(MHZ): **2402**

Antenna Polarity: **Vertical**

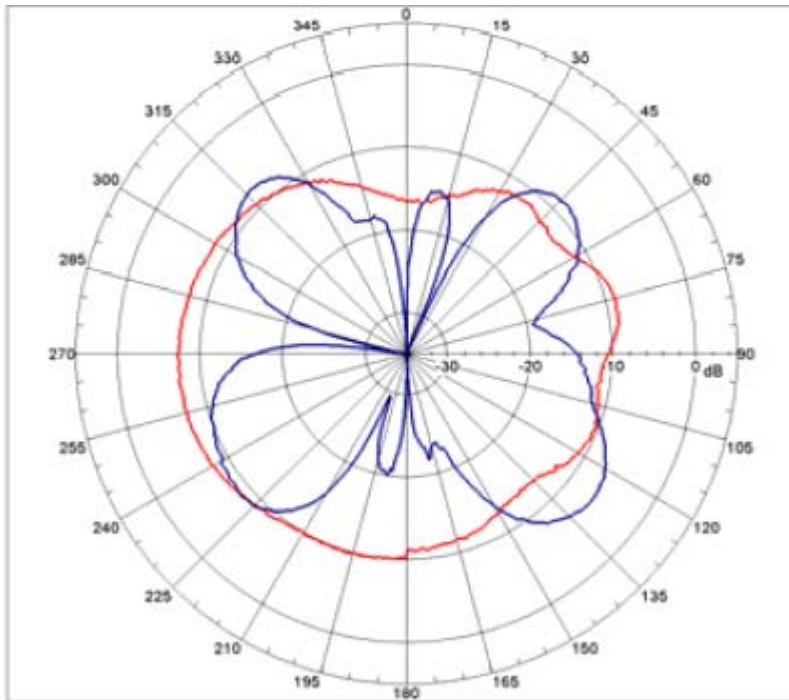
Maximum Value(dBi): **-4.51**

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

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

2. Main antenna : 2441 MHz

2.1 Horizontal



Frequency(MHZ): **2441**

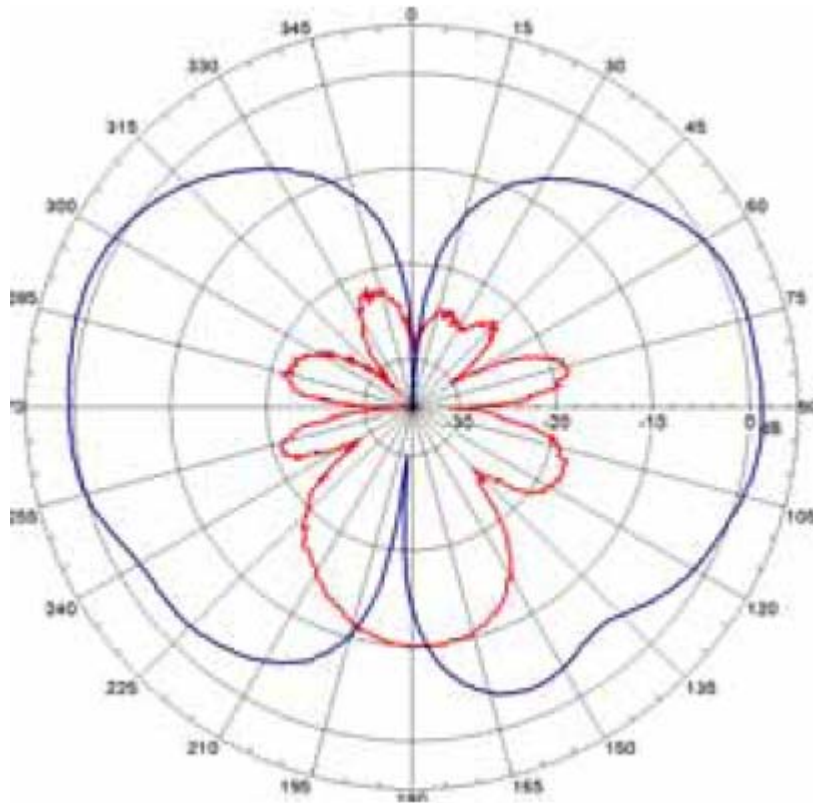
Antenna Polarity: **Horizontal**

Maximum Value(dBi): **2.20**

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

Minimum Gain(dBi): **-64.78**

2.2 Vertical



Frequency(MHZ): **2441**

Antenna Polarity: **Vertical**

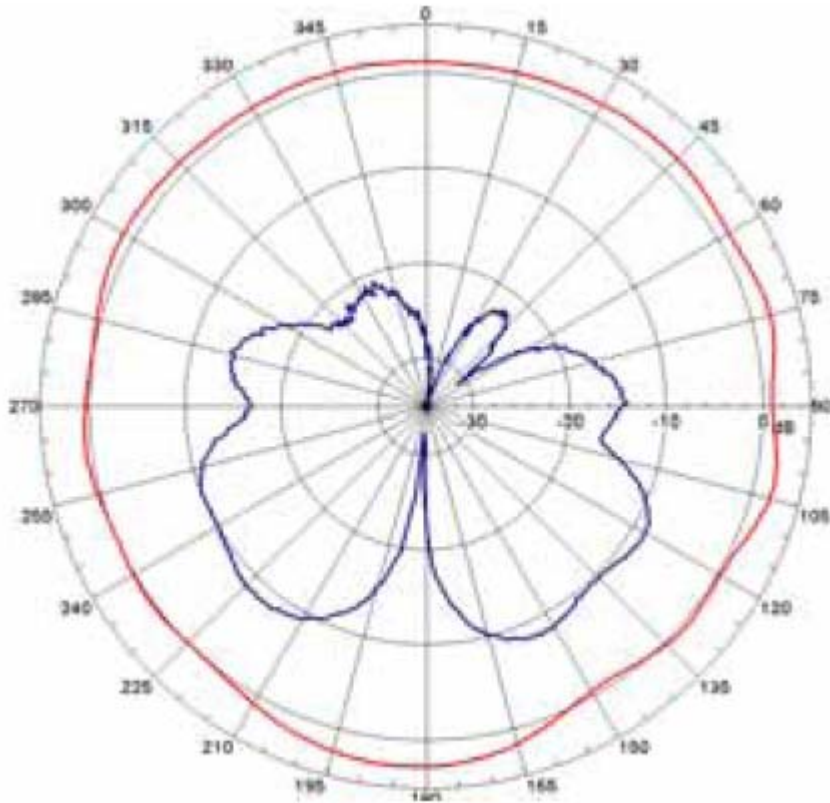
Maximum Value(dBi): **-4.29**

Average Gain(dBi) : **-8.41**

Minimum Gain(dBi): **-47.4**

2. Main antenna : 2480 MHz

2.1 Horizontal



Frequency(MHZ): **2480**

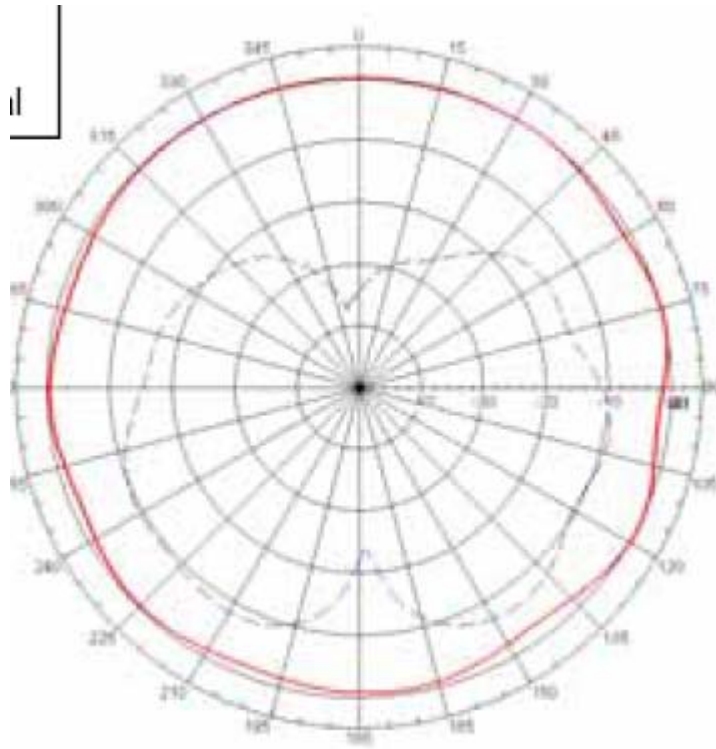
Antenna Polarity: **Horizontal**

Maximum Value(dBi): **1.81**

Average Gain(dBi) : **-4.34**

Minimum Gain(dBi): **-55.4**

2.2 Vertical



Frequency(MHZ): **2480**

Antenna Polarity: **Vertical**

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

Average Gain(dBi) : **-14.06**

Minimum Gain(dBi): **-64.00**