Antenna Specification

Manufacture： TUYA

Product Name： WBR3 Antenna

Antenna Type： PCB

Test Date： 2019.05.20

Tested by： Long Wang

Approved by： Licco

Content

1.General Description 1

2.Test Configurations 2

2.1 Test Environment 2

2.2 Test Equipment 2

2.3 Test Principle 2

3.Test Results 3

3.1 Gain and Efficiency 3

3.2 Radiation Pattern 4

4.Antenna Dimensions 6

5.EUT Photo 6

6.Test Setup Photo 7

1.General Description

Manufacturer	Hangzhou Tuya Information Technology Co.,Ltd
Address	Room 701,Building 3,More Center,No.87 GuDun Road, Hangzhou, Zhejiang,China
Test Location	Room 106, Building 3, Letong Science Park, No. 500, Qiuyi Road, Binjiang District, Hangzhou
Product Name	WBR3 Antenna
Product model	WBR3
Antenna Type	PCB Antenna
Test Items	Gain; Efficiency; Radiation Pattern
Test Frequency	2400-2500MHz
Test Standard	ANSI/IEEE Std 149-1979

2.Test Configurations

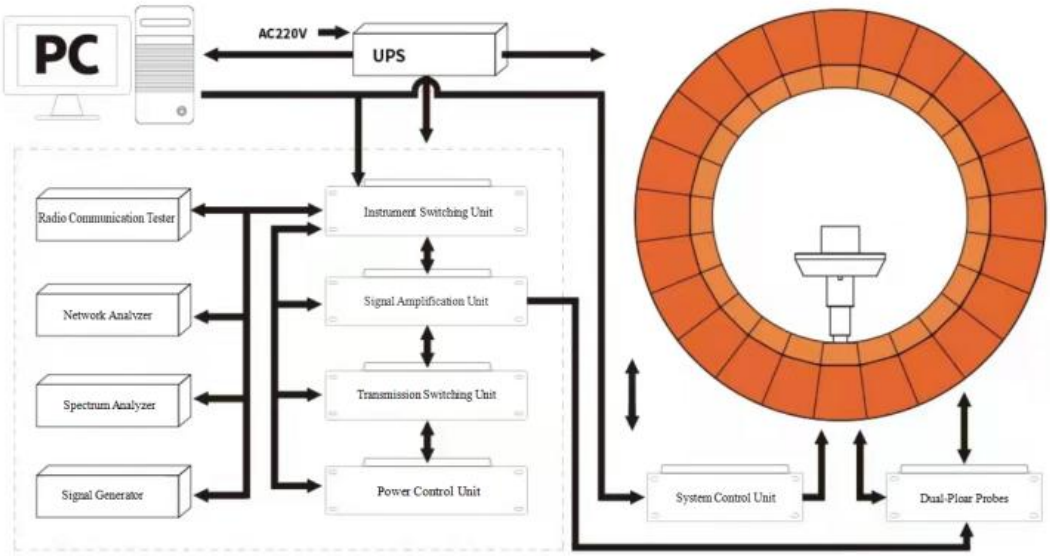
2.1 Test Environment

Temperature (°C)	25
Humidity (%RH)	60
Atmospheric Pressure (kPa)	100.5

2.2 Test Equipment

Test System	TEM 24 Multi-probe Microwave Chamber
Test Instrument	Agilent E5071B

2.3 Test Principle



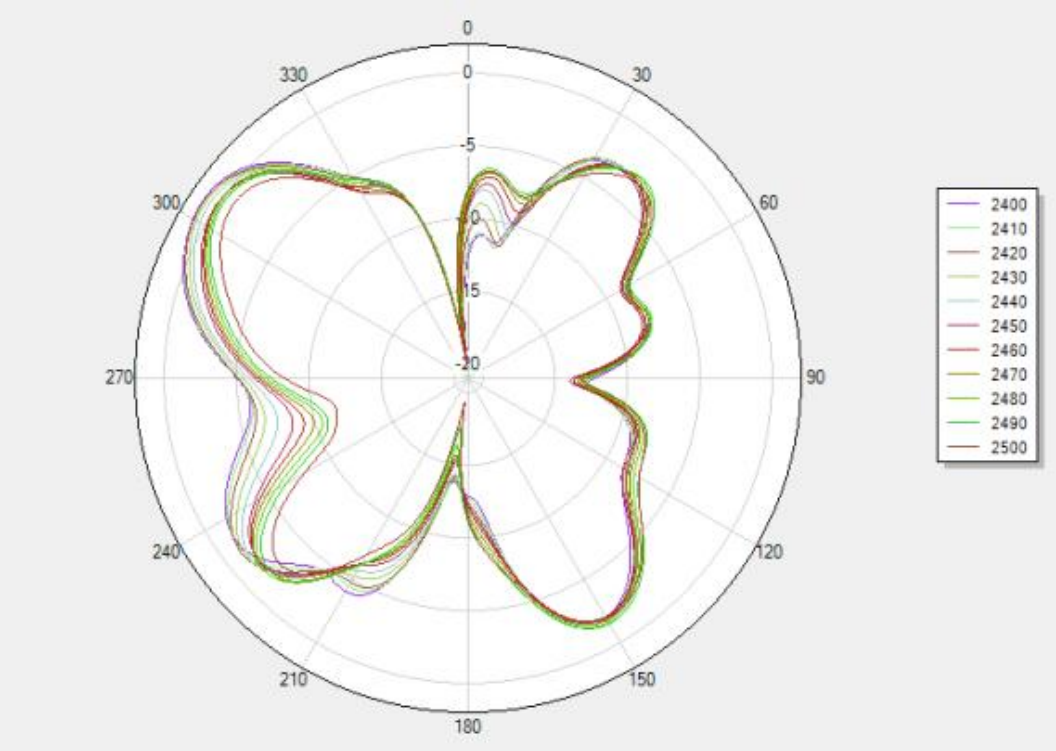
3.Test Results

3.1 Gain and Efficiency

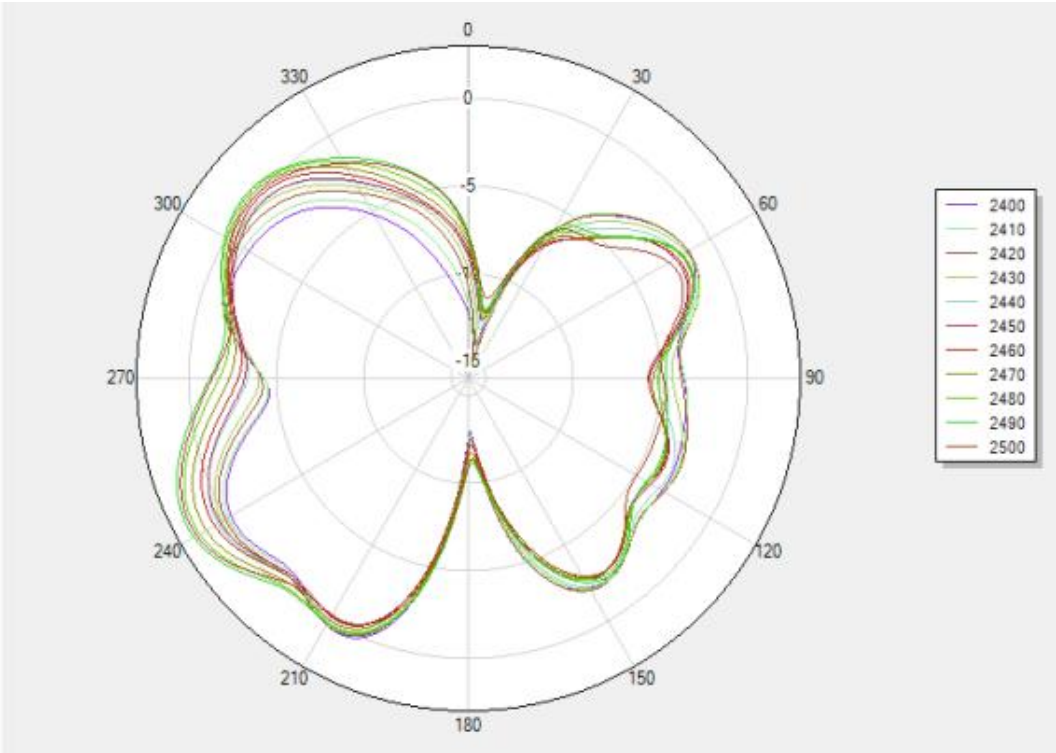
Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
2400	1.62	52.29
2410	1.71	52.17
2420	1.93	53.14
2430	1.98	54.16
2440	2.00	57.62
2450	2.17	59.64
2460	2.45	61.55
2470	2.38	60.64
2480	2.54	62.86
2490	2.30	59.85
2500	2.49	60.41

3.2 Radiation Pattern

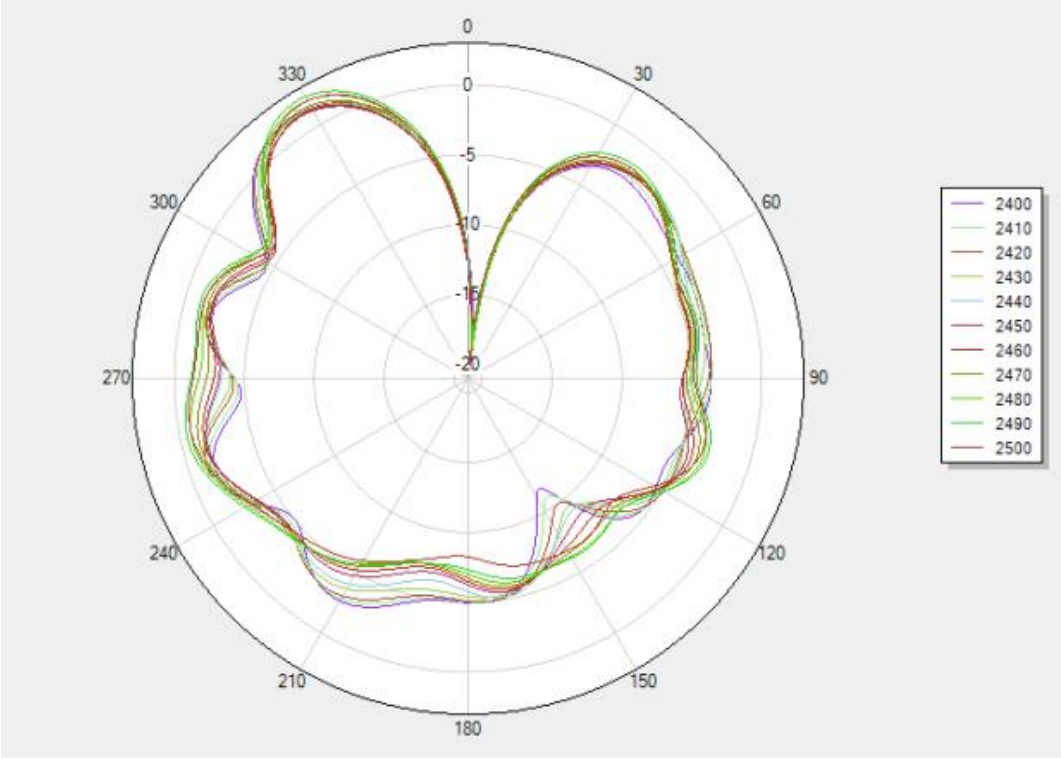
Phi 0 2D



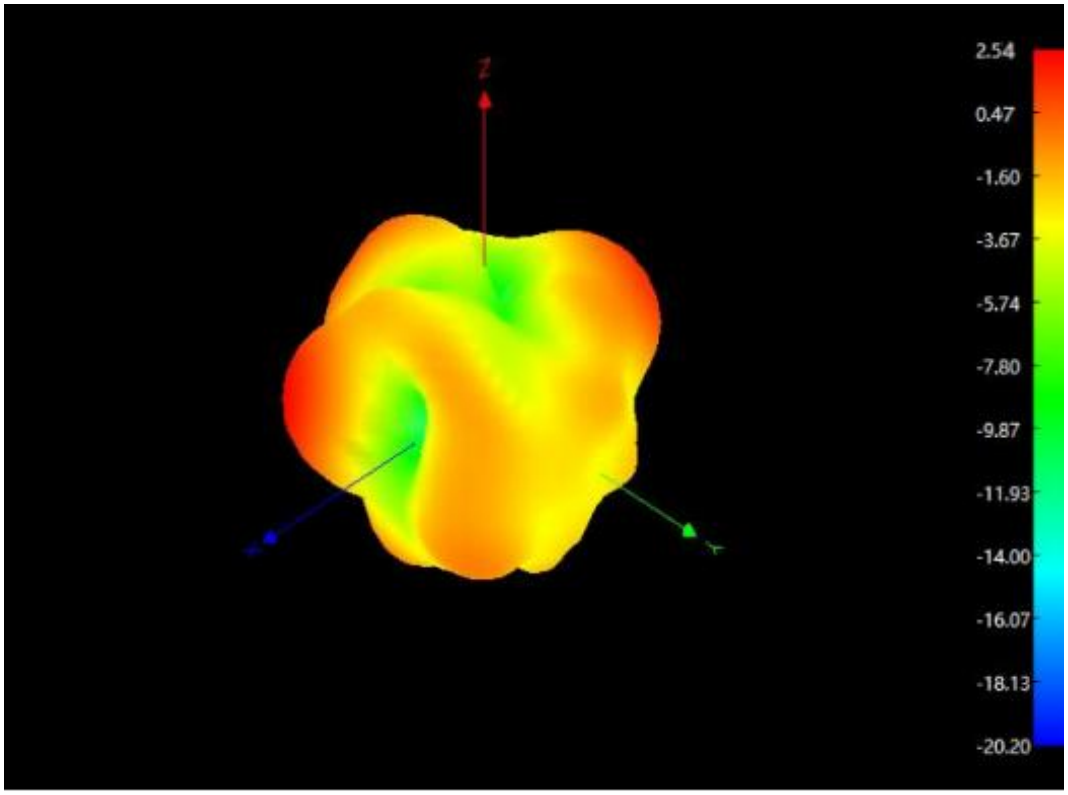
Phi 90 2D



Theta 90 2D

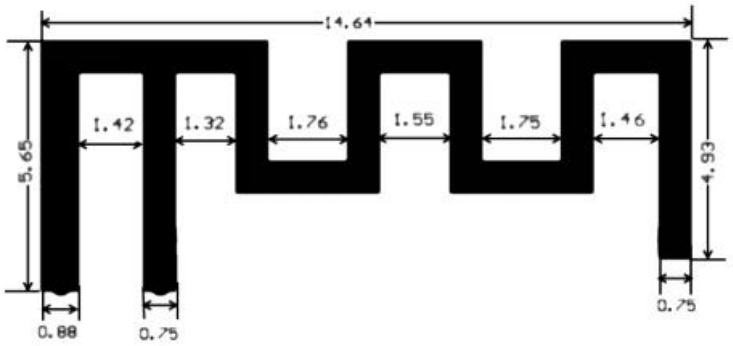


2480MHz 3D

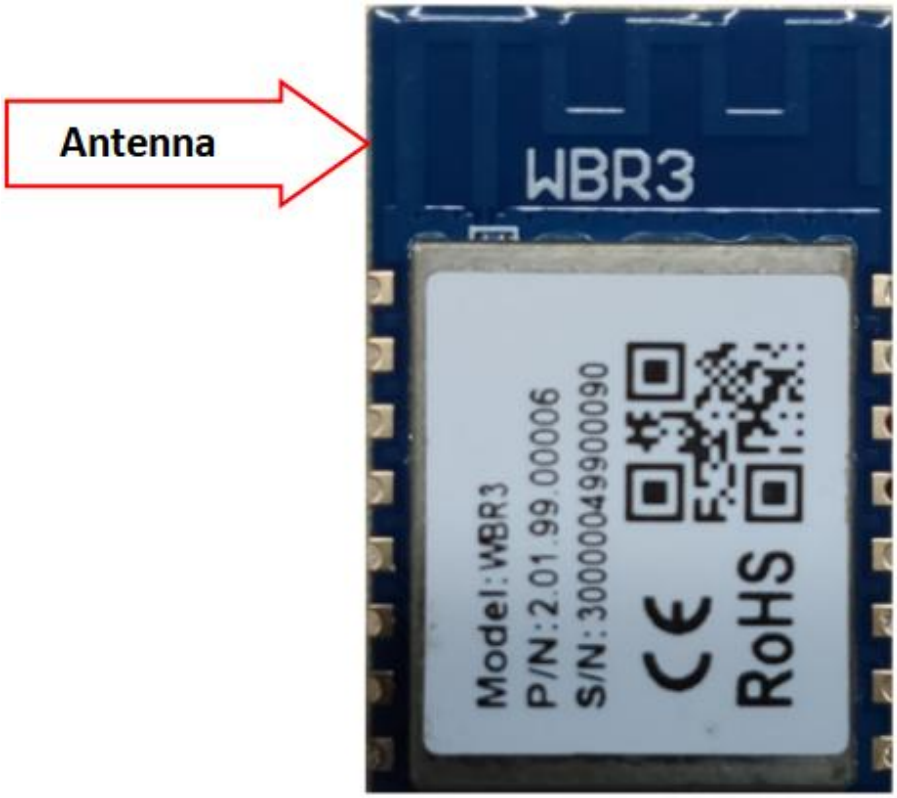
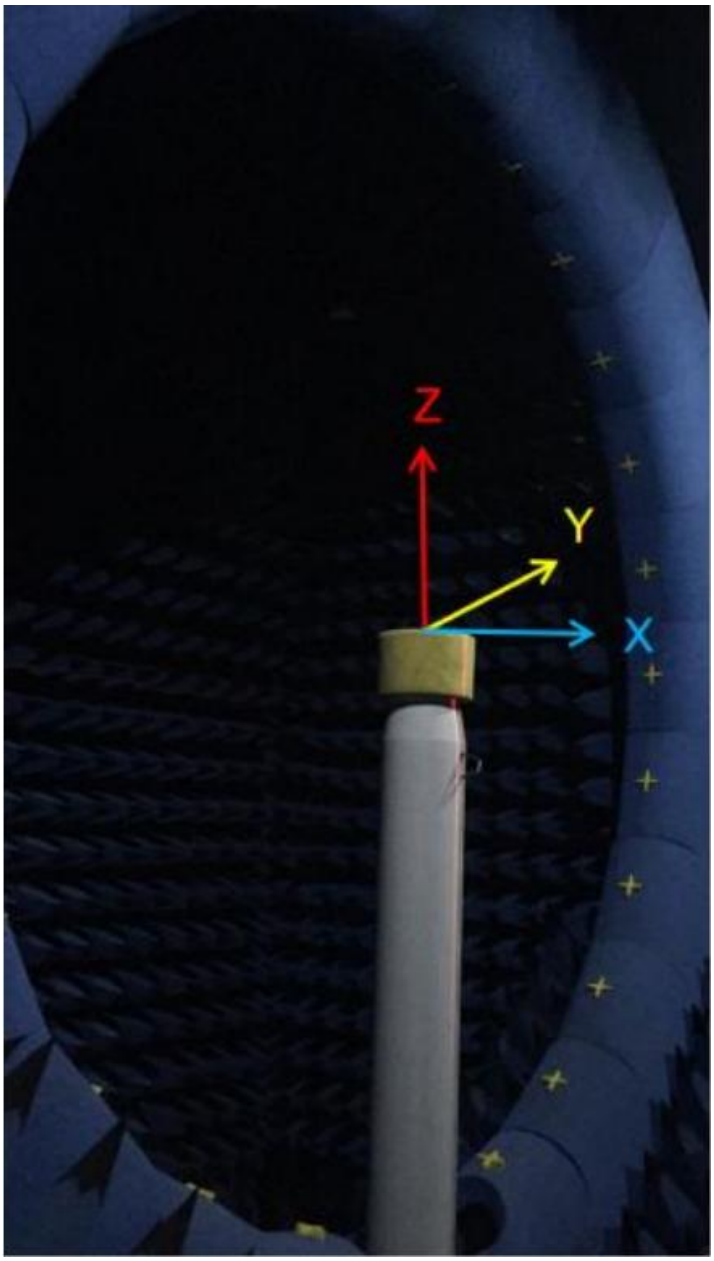


4.Antenna Dimensions

Unit： mm



5.EUT Photo



6.Test Setup Photo