# Antenna Specification

Manufacture：Hangzhou Tuya Information Technology Co.,Ltd

Product Name：CB2S Antenna

Antenna Type：PCB

# 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 | CB2S Antenna |
| Product model | CB2S |
| Antenna Type | PCB Antenna |
| Items | Gain; Efficiency; Radiation Pattern |
| Frequency | 2400-2500MHz |
| Standard | ANSI/IEEE Std 149-1979 |

# 2.Test Configurations

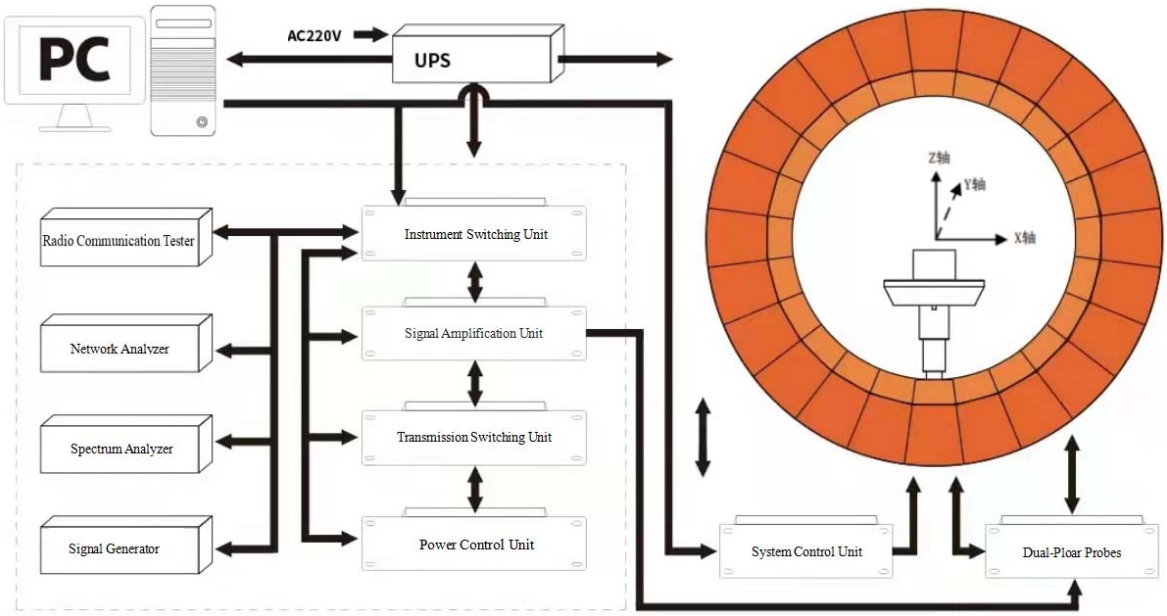
## 2.1 Test Environment

| | |
|---|---|
| Temperature (℃) | 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



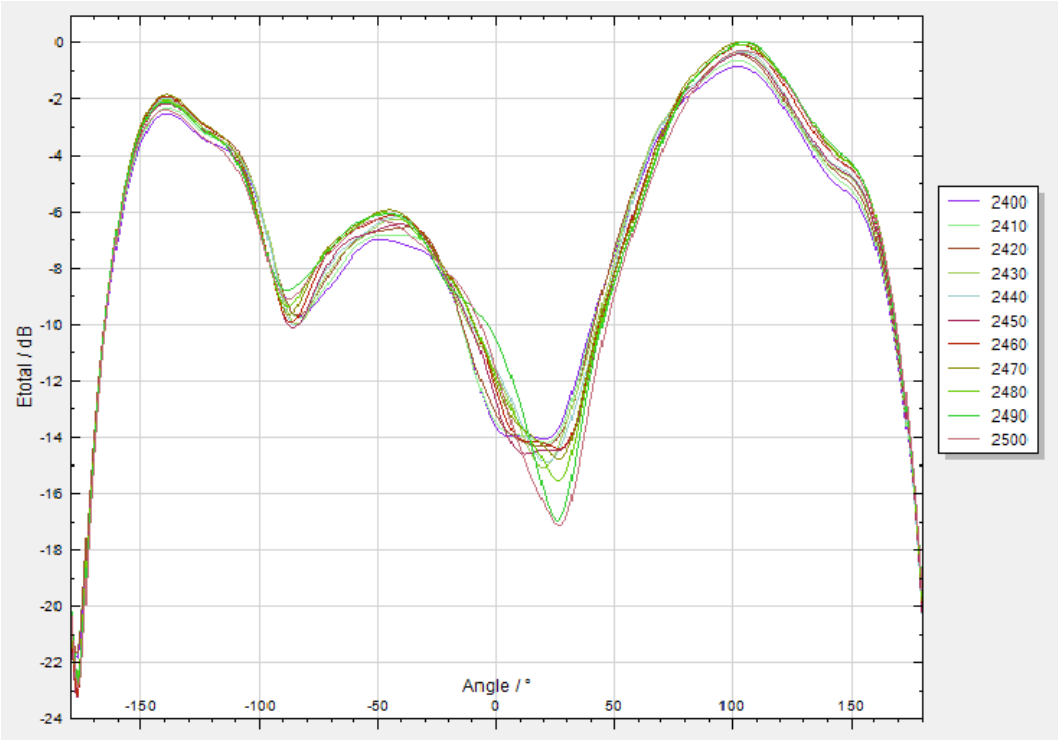
# 3.Test Results

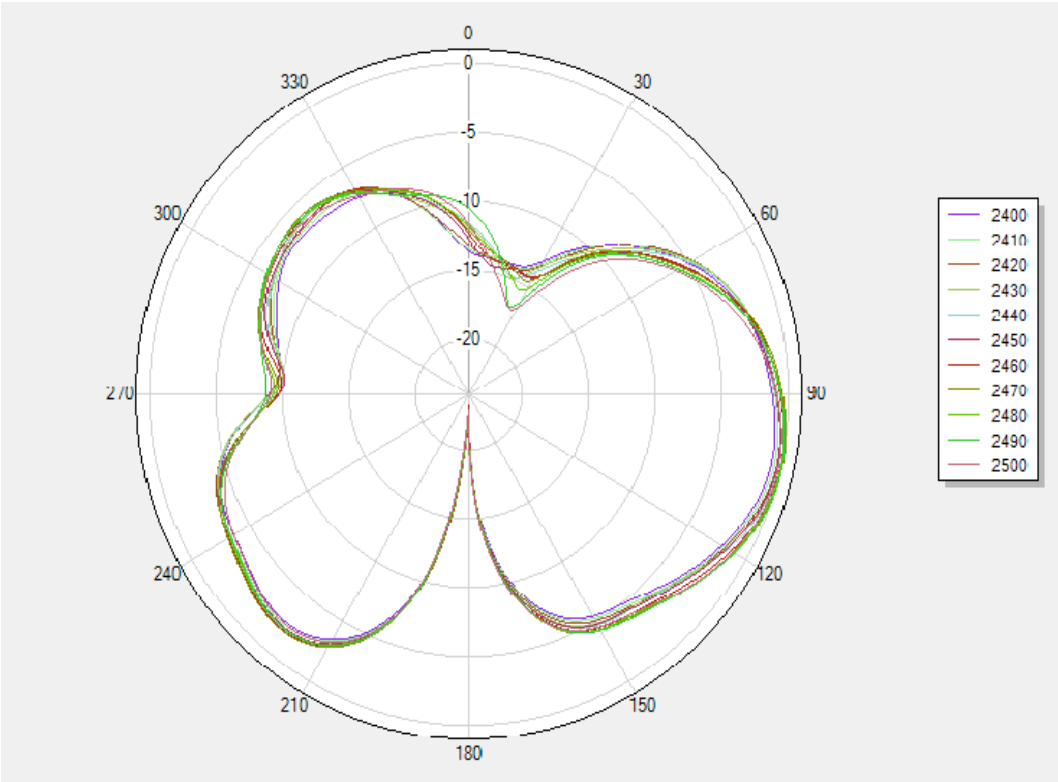
## 3.1 Gain and Efficiency

| Frequency (MHz) | Peak Gain (dBi) | Efficiency (%) |
|---|---|---|
| 2400 | 0.46 | 44.36 |
| 2410 | 0.71 | 45.71 |
| 2420 | 0.92 | 45.92 |
| 2430 | 0.91 | 45.6 |
| 2440 | 0.95 | 45.6 |
| 2450 | 0.93 | 45.29 |
| 2460 | 1.27 | 46.45 |
| 2470 | 1.37 | 46.88 |
| 2480 | 1.25 | 47.21 |
| 2490 | 1.24 | 46.67 |
| 2500 | 1.05 | 44.87 |

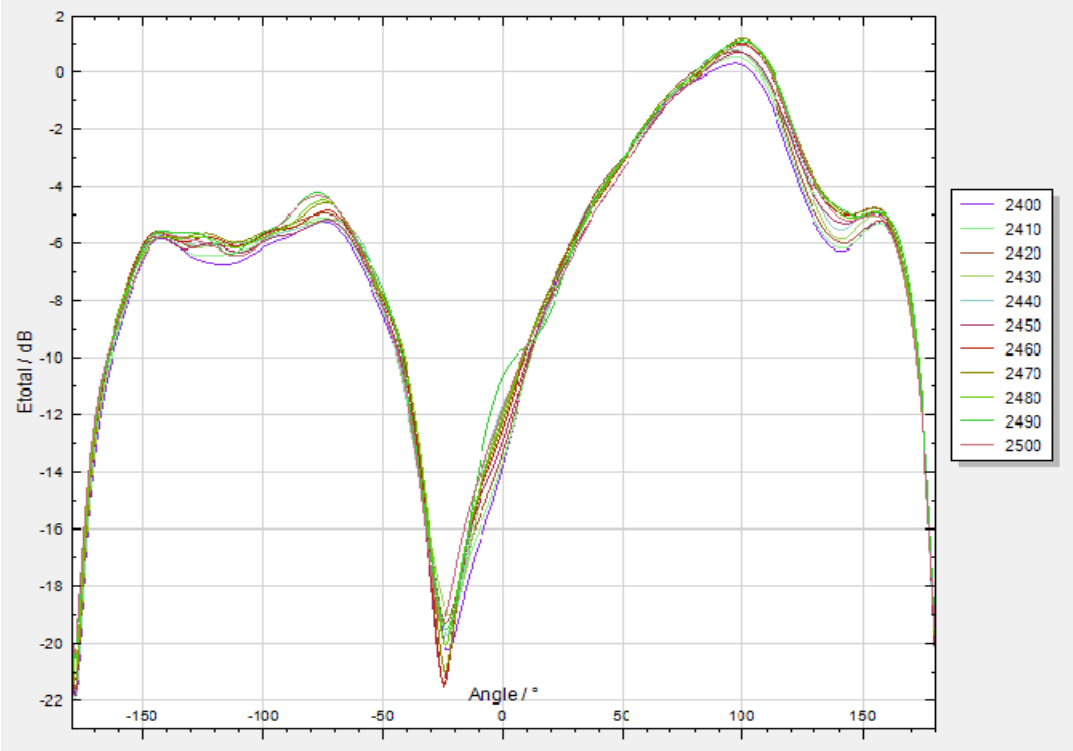
## 3.2 Radiation Pattern

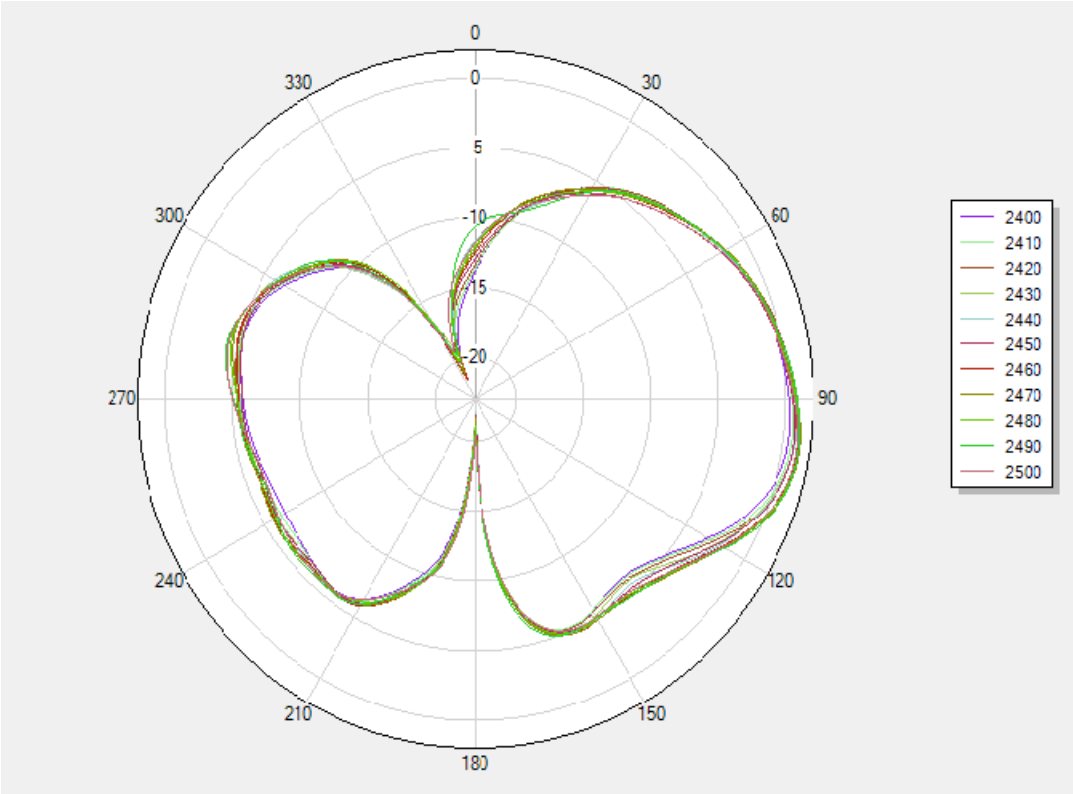
**Phi 0**



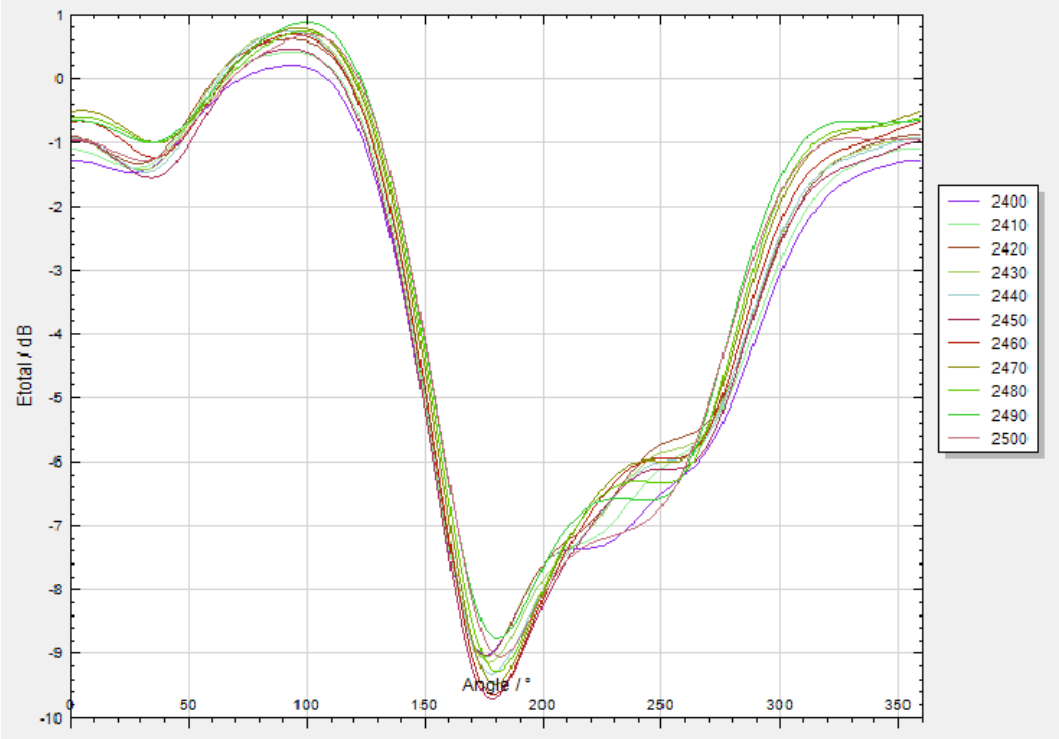



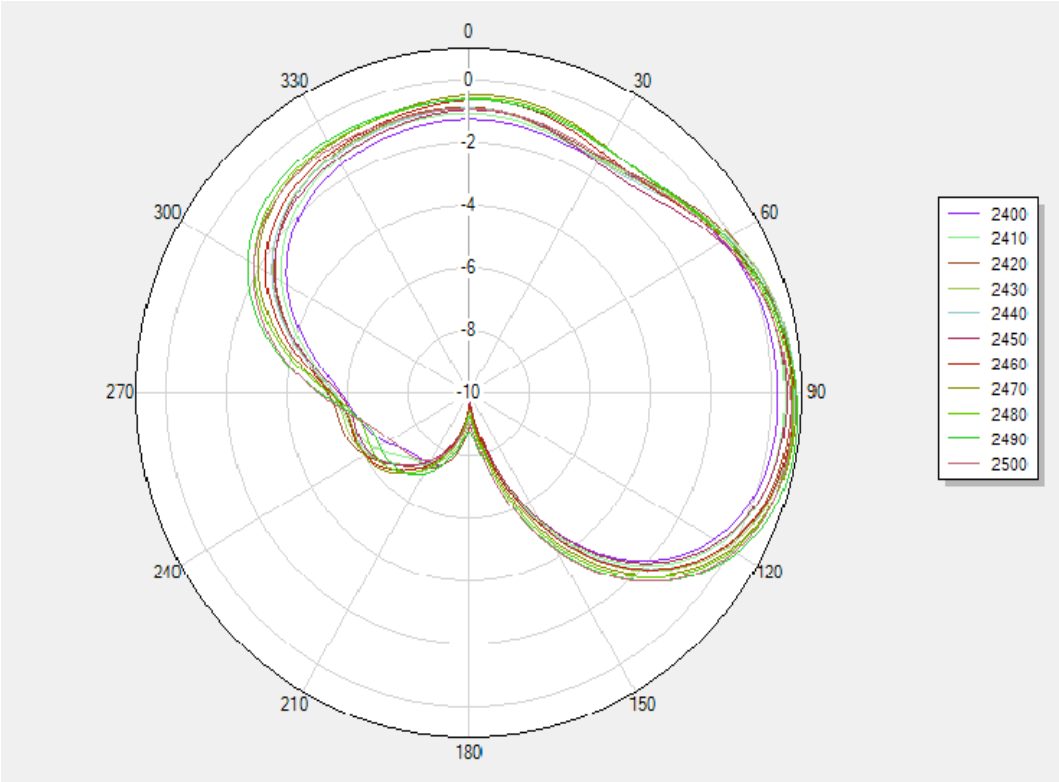
# Phi 90


Etotal / dB
Angle / °
2400
2410
2420
2430
2440
2450
2460
2470
2480
2490
2500

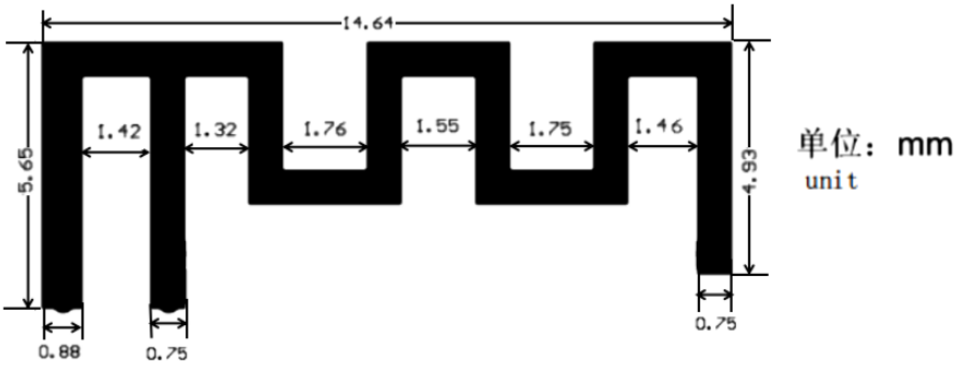

2400
2410
2420
2430
2440
2450
2460
2470
2480
2490
2500

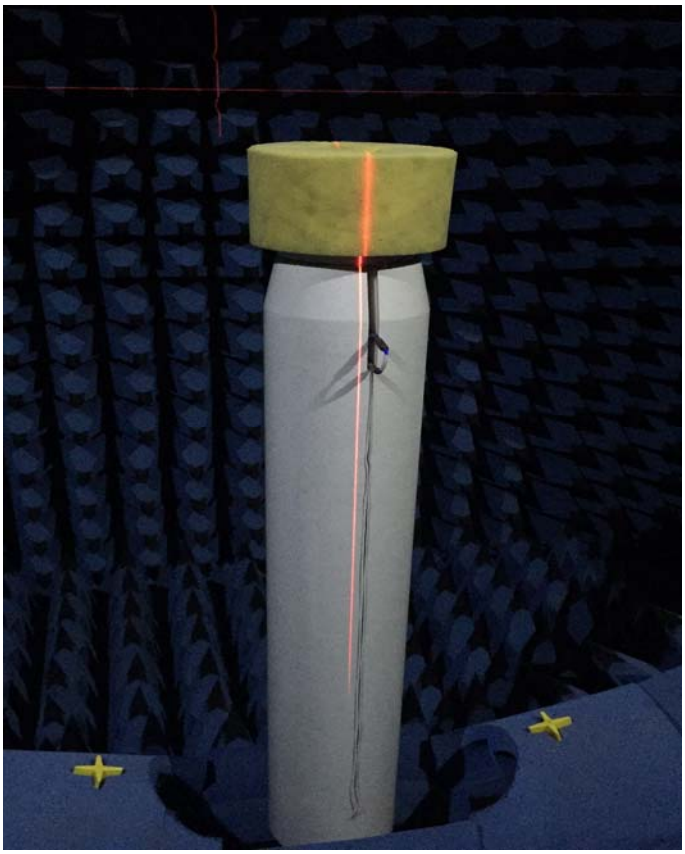
# Theta 90


Etotal / dB
Angle / °
1
0
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10
0
50
100
150
200
250
300
350
2400
2410
2420
2430
2440
2450
2460
2470
2480
2490
2500


0
30
60
90
120
150
180
210
240
270
300
330
0
-2
-4
-6
-8
-10
2400
2410
2420
2430
2440
2450
2460
2470
2480
2490
2500

# 4.Antenna Dimensions



# 5.EUT Photo

# 6.Test Setup Photo