



# **Antenna Specification**

Manufacture: TUYA

Product Name: CBU Antenna

Antenna Type: PCB

Test Date: 2020.11.24

Tested by: Yinhua Zhang

Approved by: Licco



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## 1.General Description

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

## 2.Test Configurations

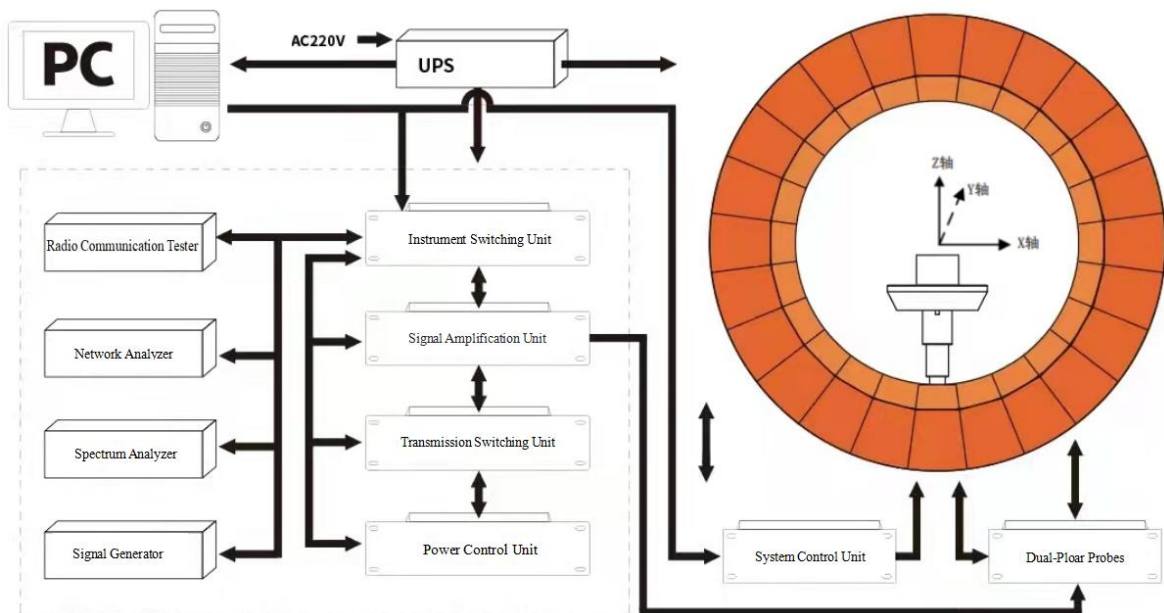
### 2.1 Test Environment

|                            |       |
|----------------------------|-------|
| 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





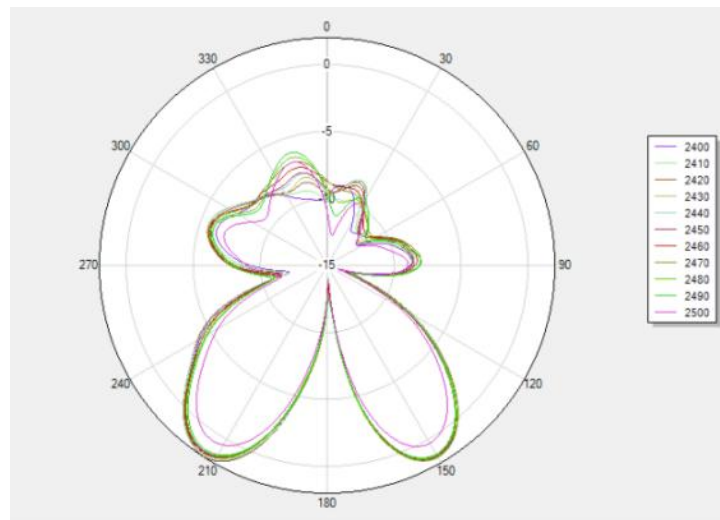
## 3.Test Results

### 3.1 Gain and Efficiency

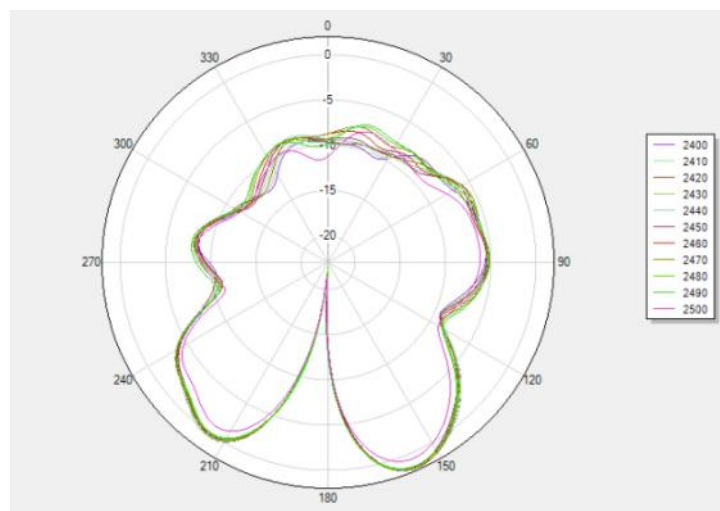
| Frequency (MHz) | Peak Gain (dBi) | Efficiency (%) |
|-----------------|-----------------|----------------|
| 2400            | 2.11            | 32.36          |
| 2410            | 2.18            | 32.3           |
| 2420            | 2.21            | 32.1           |
| 2430            | 2.06            | 32.4           |
| 2440            | 2.07            | 32.9           |
| 2450            | 1.91            | 30.9           |
| 2460            | 2.04            | 30.8           |
| 2470            | 2.09            | 30.7           |
| 2480            | 1.98            | 31.6           |
| 2490            | 1.91            | 30.6           |
| 2500            | 1.03            | 30.5           |

## 3.2 Radiation Pattern

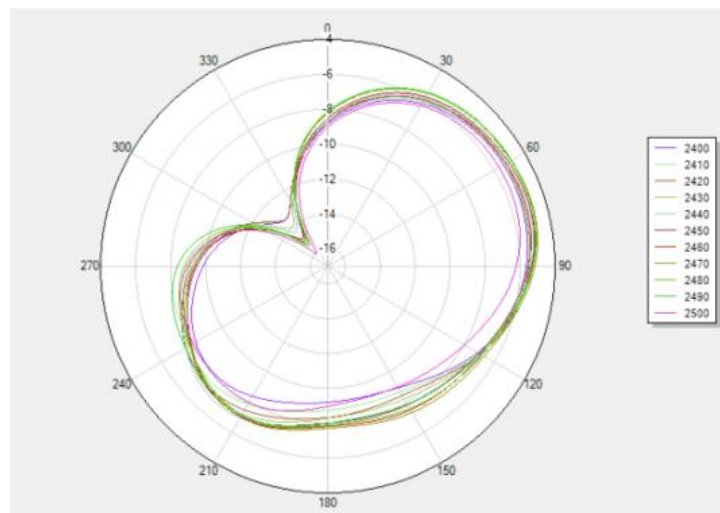
Phi 0 2D

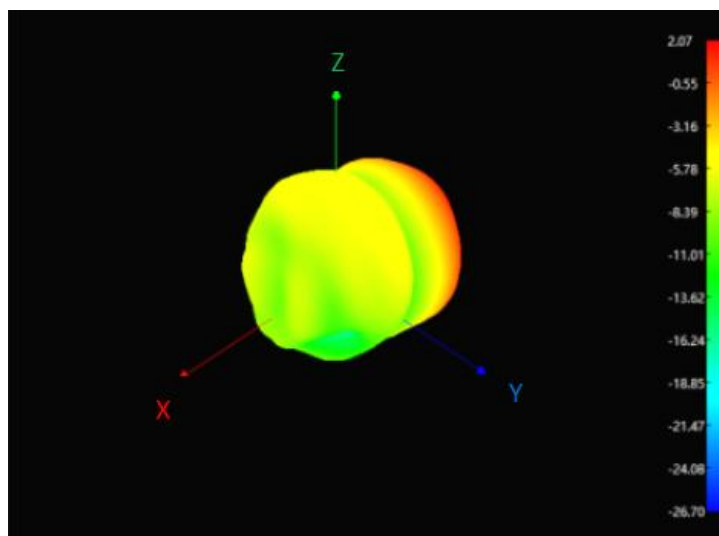


Phi 90 2D

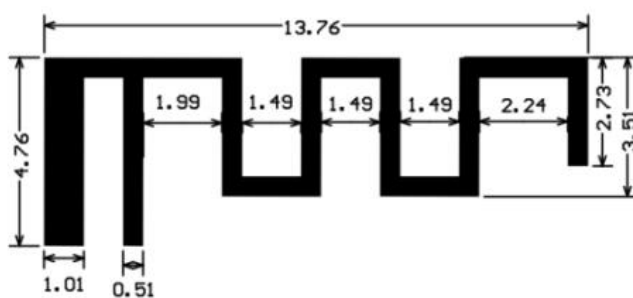


Theta 90 2D





## 4. Antenna Dimensions



单位: mm

Unit

## 6.Test Setup Photo

