

# Antenna REPORT

Product : PCB Antenna

Model Name : YC1021-ANT

Manufacture's name : Xiamen Apt Electronic Tech co.,Ltd.

Address : 3F, Factory No.7, Bldg No. 124, Hongtangtou 1st Rd., Tong'an Dist.,  
Xiamen City, Fujian, China, 361100

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## 1 Test Summary

| Name                         | Parameter            | Method                                                               | Standard no.           |
|------------------------------|----------------------|----------------------------------------------------------------------|------------------------|
| Mobile communication antenna | Antenna gain         | Generic specification for antennas used in the mobile communications | GB/T 9410-2008         |
|                              | Radiation pattern    |                                                                      |                        |
| Antenna                      | Radiation efficiency | IEEE Standard Test Procedures for Antennas                           | ANSI/IEEE Std 149-1979 |
|                              | Gain and directivity |                                                                      |                        |

**2 EUT Description**

|                 |                                                |
|-----------------|------------------------------------------------|
| Product Name    | PCB Antenna                                    |
| Sample Model    | YC1021-ANT                                     |
| Size            | /                                              |
| Test Item       | Antenna gain; Radiation pattern and efficiency |
| Antenna Type    | PCB Antenna                                    |
| Frequency Range | 2400MHz-2500MHz                                |

### 3 Test Data

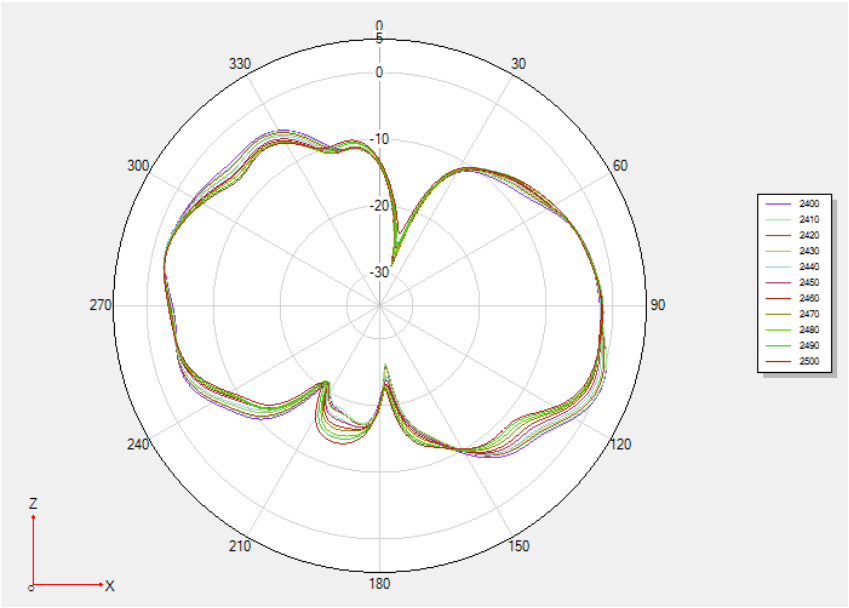
#### 3.1 Typical free space efficiency and gain

| Frequency/MHz | Efficiency / dB | Efficiency / % | Max Gain/dBi | Avg Gain/dBi |
|---------------|-----------------|----------------|--------------|--------------|
| 2400          | -3              | 50.12          | 0.72         | -3           |
| 2410          | -2.92           | 51.05          | 0.64         | -2.92        |
| 2420          | -2.98           | 50.35          | 0.25         | -2.98        |
| 2430          | -2.93           | 50.93          | 0.02         | -2.93        |
| 2440          | -2.91           | 51.17          | -0.26        | -2.91        |
| 2450          | -2.94           | 50.82          | -0.63        | -2.94        |
| 2460          | -3.2            | 47.86          | -0.84        | -3.2         |
| 2470          | -3.34           | 46.34          | -0.99        | -3.34        |
| 2480          | -3.4            | 45.71          | -0.91        | -3.4         |
| 2490          | -3.56           | 44.06          | -0.93        | -3.56        |
| 2500          | -3.76           | 42.07          | -1.08        | -3.76        |

### 3.2 Typical free space radiation pattern

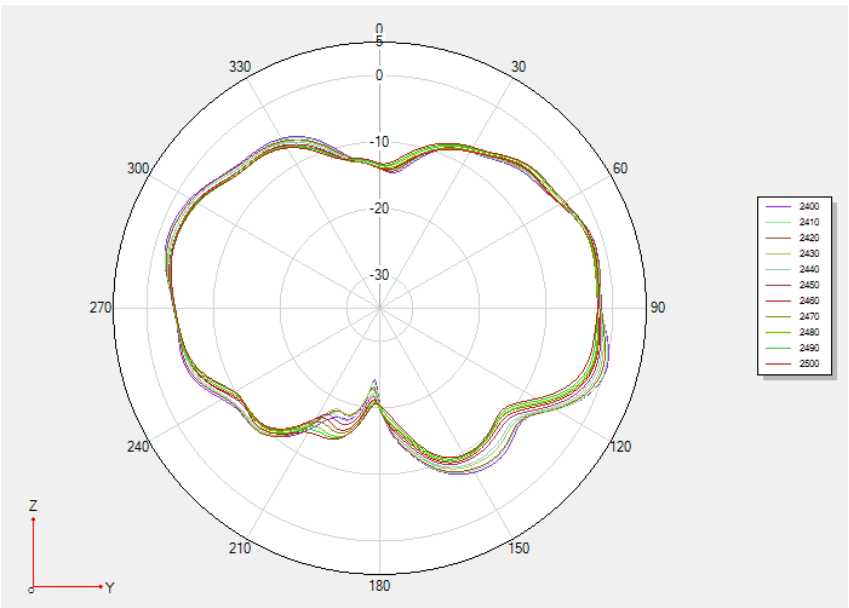
(1) X-Z Plane:

V Phi=0



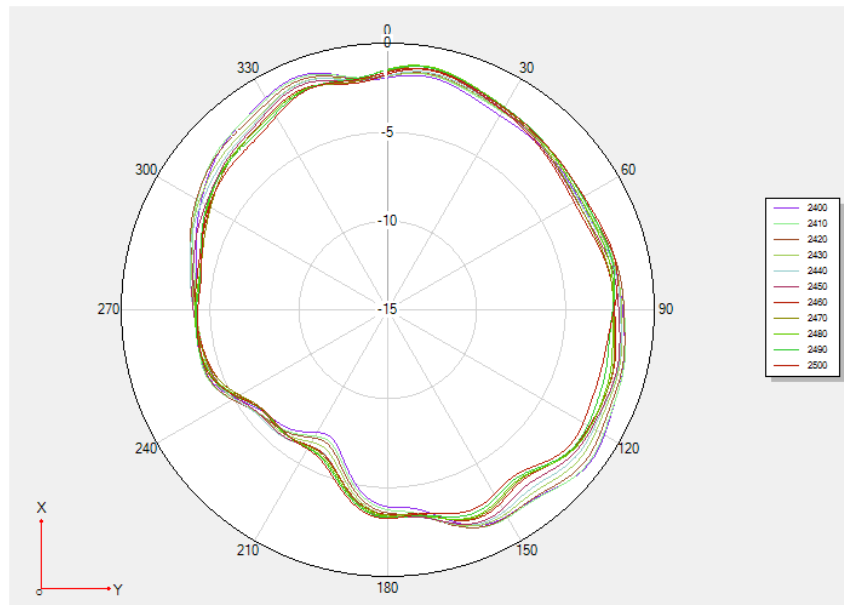
(2) Y-Z Plane:

V Phi=90



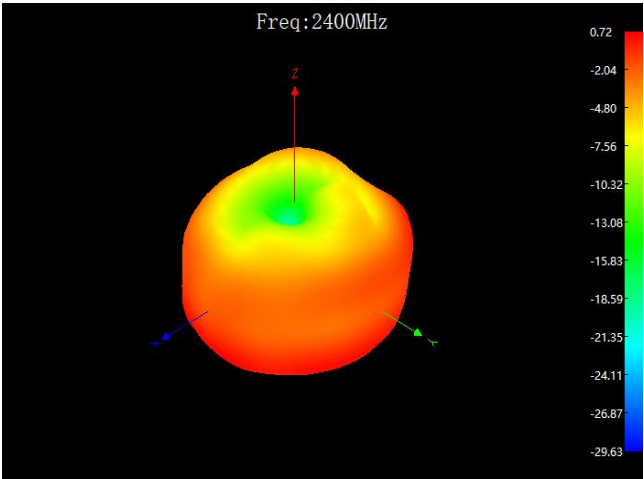
(3)X-Y Plane:

H Theta=90

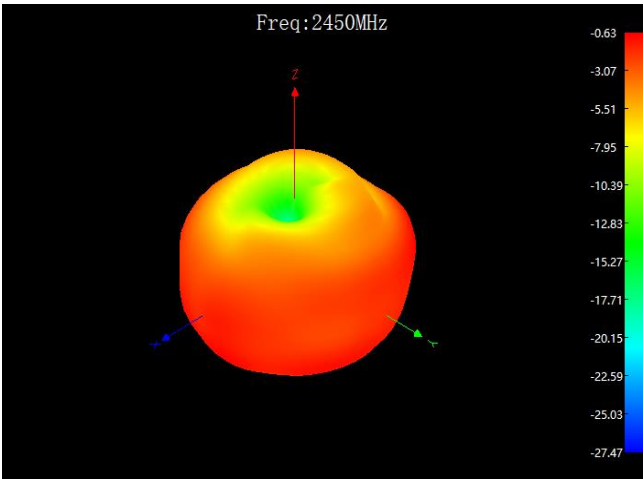


3.3 3D Pattern

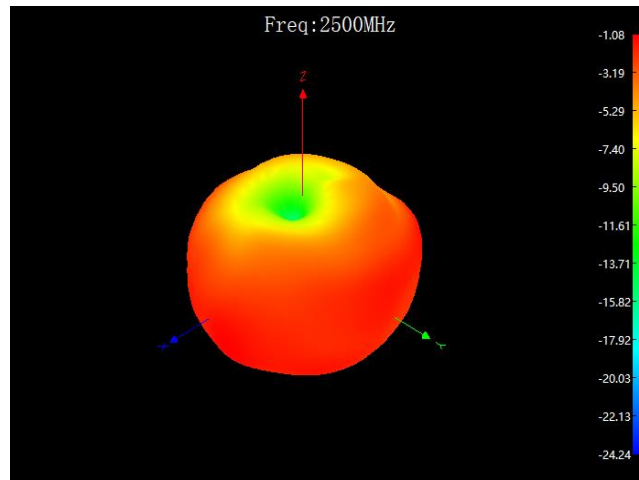
3D Pattern for 2400MHz



3D Pattern for 2450MHz



### 3D Pattern for 2500MHz



## 4 EUT appearance

