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## SPECIFICATION FOR APPROVAL

Customer:

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X.WFTX.AK1XXX-000

Part Number:

\_\_\_\_\_

2.4G/5.8G built-in PCB antenna

Specification:

\_\_\_\_\_

Sample No:

\_\_\_\_\_

Date of issue:

2021-06-10

Part Rev.

A.0

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### 1. Scope of application:

Mainly used for receiving and transmitting signals in various communication equipment;

### 2. Structural characteristics:

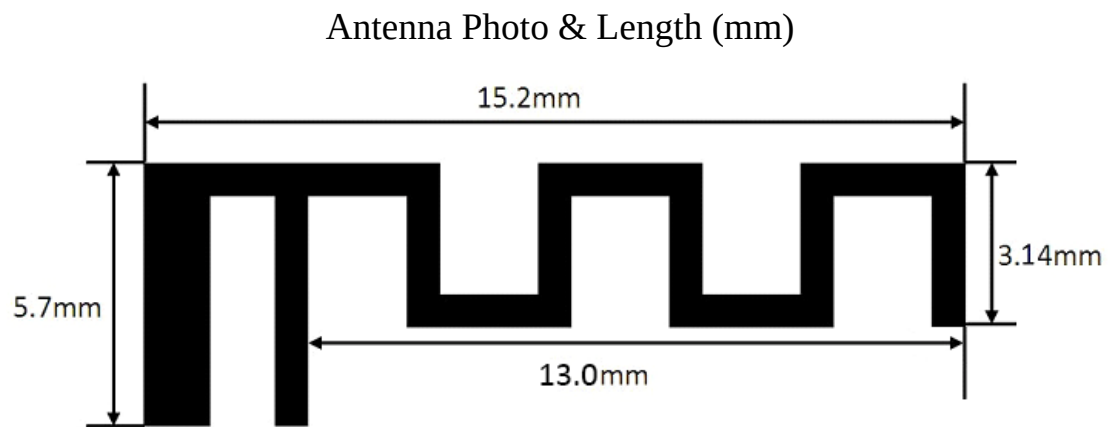
Antenna unit: PCB antenna

### 3. Electrical specifications:

performance index :

| Electric and steam performance index of product |                                                       |
|-------------------------------------------------|-------------------------------------------------------|
| Operating frequency range                       | 2400-2480MHz<br>5100-5800MHz                          |
| Standing wave ratio                             | 2400-2480MHz: <3.5<br>5100-5800MHz: <3.5              |
| Antenna gain                                    | 2400-2480MHz:2dBi±0.5dBi<br>5100-5800MHz: 2dBi±0.5dBi |
| Radiation efficiency                            | 2400-2480MHz: >35%<br>5100-5800MHz: >35%              |
| impedance                                       | 50ohm                                                 |
| Product Material Description                    |                                                       |
| hardware                                        | PCB                                                   |
| Product environment description                 |                                                       |
| working temperature                             | -30℃~+85℃                                             |
| Storage temperature                             | 30℃~+85℃                                              |
|                                                 |                                                       |

#### 4. External dimensions of antenna:



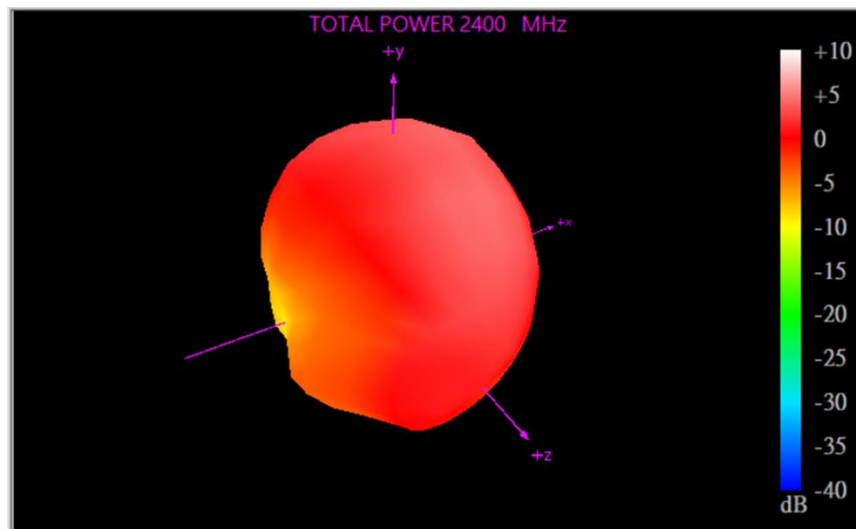
| WIFI 2.4G |               |           |
|-----------|---------------|-----------|
| Fre.(MHz) | Efficiency(%) | Gain(dBi) |
| 2400      | 47.83%        | 2.00      |
| 2420      | 48.75%        | 1.43      |
| 2440      | 52.27%        | 1.99      |
| 2460      | 48.77%        | 1.89      |
| 2480      | 46.37%        | 1.87      |

| WIFI 5.8G |               |           |
|-----------|---------------|-----------|
| Fre.(MHz) | Efficiency(%) | Gain(dBi) |
| 5100      | 64.73%        | 1.28      |
| 5150      | 66.26%        | 1.85      |
| 5200      | 65.25%        | 2.00      |
| 5250      | 66.39%        | 1.19      |
| 5300      | 65.16%        | 1.92      |
| 5350      | 65.24%        | 1.05      |
| 5400      | 66.38%        | 1.84      |
| 5450      | 64.92%        | 1.18      |
| 5500      | 65.13%        | 1.98      |
| 5550      | 66.11%        | 1.25      |
| 5600      | 65.26%        | 1.11      |
| 5650      | 65.12%        | 1.26      |
| 5700      | 66.39%        | 1.07      |

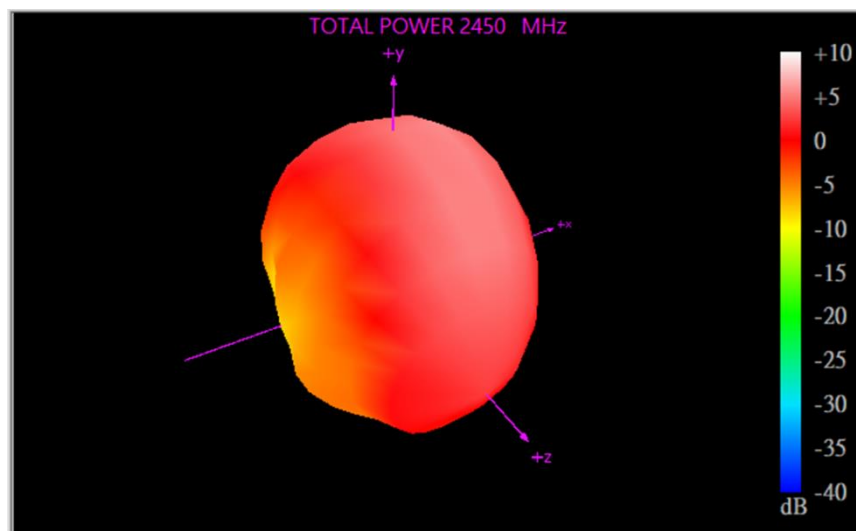
|      |        |      |
|------|--------|------|
| 5750 | 64.73% | 2.00 |
| 5800 | 65.86% | 1.29 |

## TEST SETUP

Radiation Pattern of WIFI Antenna (2400MHz)

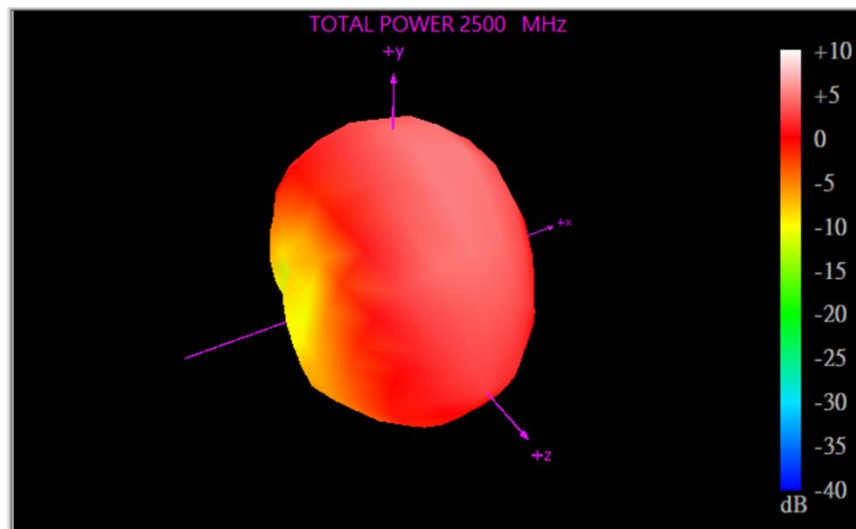


Radiation Pattern of WIFI Antenna (2450MHz)

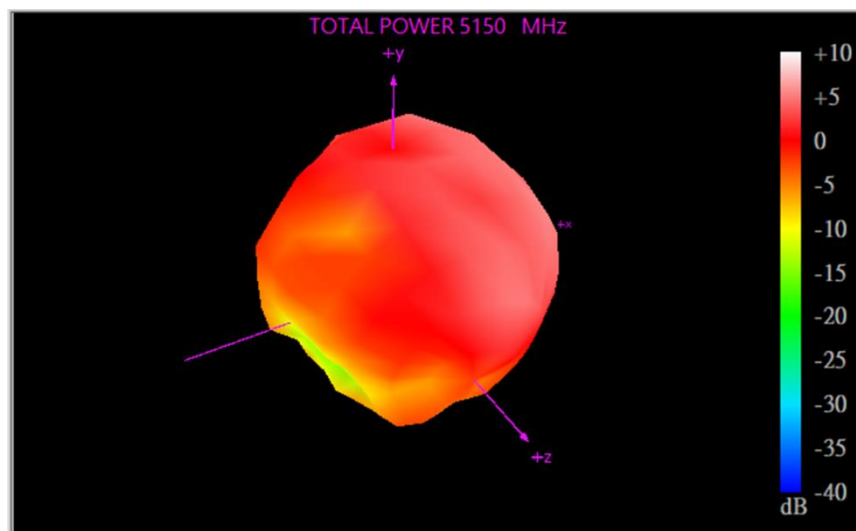


## TEST SETUP

Radiation Pattern of WIFI Antenna (2500MHz)

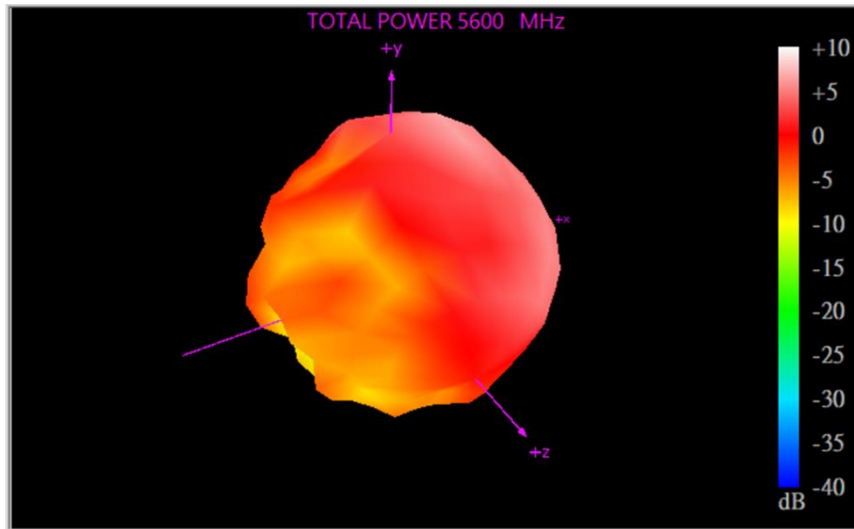


Radiation Pattern of WIFI Antenna (5150MHz)



## TEST SETUP

Radiation Pattern of WIFI Antenna (5600MHz)



Radiation Pattern of WIFI Antenna (5850MHz)

