



# Antenna Test Report

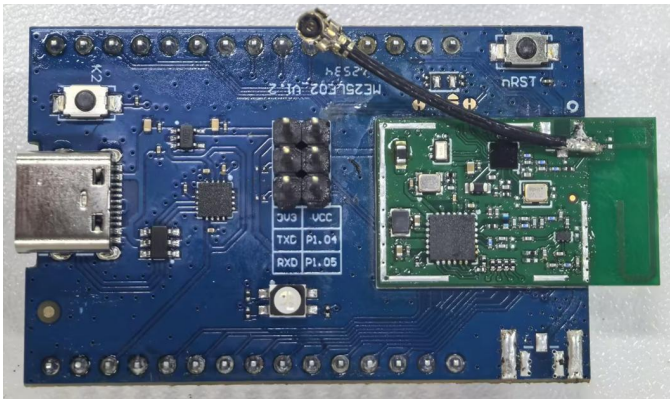
|            |           |             |               |
|------------|-----------|-------------|---------------|
| Project No | CS25201B  | PCB Version | ME25LS03_V1.0 |
| Tester     | Mo Qi     | Date        | 2026/06/08    |
| Auditing   | Jinbei Li | Date        | 2026/06/08    |
| Approval   |           | Date        |               |

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## 一、Project Information

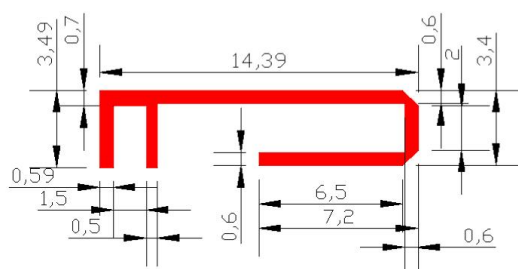
1. Antenna Coding: ANT-BBNCNC25009
2. Antenna Type: PCB onboard Antenna
3. Model of the DUT: ME25LS03\_V1.0
- 4 .Test Data : 2026.06.08
- 5 .Product picture:

|                       |                                                                                      |
|-----------------------|--------------------------------------------------------------------------------------|
| Product appearance    |   |
| PCB board and antenna |  |

## 二、Technical Specification

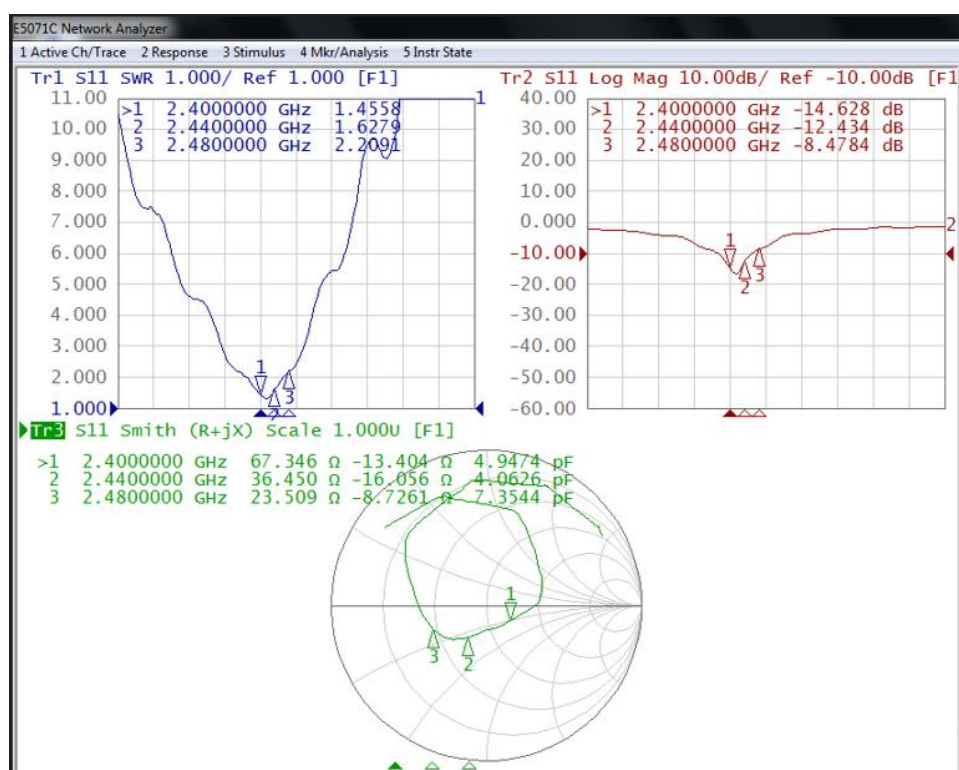
| Electrical Specifications         |                  |
|-----------------------------------|------------------|
| Frequency Range                   | 2400-2480 MHz    |
| Peak Gain                         | 2.42 dBi         |
| Efficiency                        | 66.54%           |
| Return Loss                       | $\leq -8.47$ dB  |
| VSWR                              | $\leq 2.20$      |
| Bandwidth ( $S_{11} \leq -10$ dB) | 140 MHz          |
| Input Impedance                   | 50 $\Omega$      |
| Radiation direction               | Omni             |
| Polarization Type                 | Linear           |
| Lightning Protection              | DC grounding     |
| Power Capacity                    | 1000mW (30dBm)   |
| Mechanical Specifications         |                  |
| Antenna Size                      | 14.4 x3.5mm      |
| Core Radiator                     | Copper           |
| Substrate material                | FR4              |
| Substrate thickness               | 1.0 mm           |
| Substrate Size (mm)               | 15mm*6.2mm*1.0mm |
| Coaxial wire                      | 无                |
| Connect Type                      | 无                |
| Operating Temperature             | -40 to +85° C    |
| Storage Temperature               | -40 to +85° C    |

### 三、The shape and size of the antenna



### 四、The result of the test

#### 1 .VSWR & Return loss & Smith

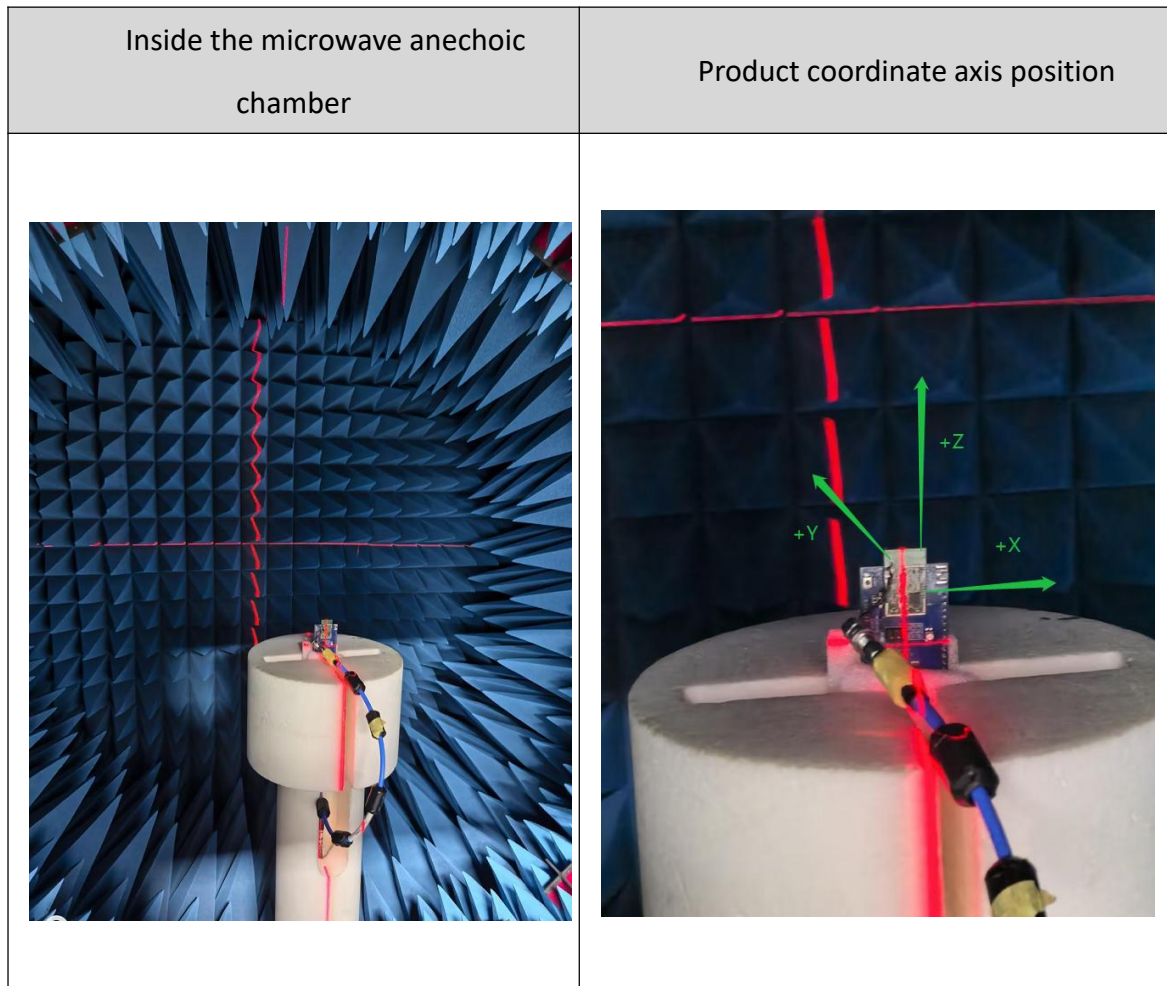


| Frequency (MHz)       | Return Loss (dB) | VSWR |
|-----------------------|------------------|------|
| 2402                  | -14.62           | 1.45 |
| 2440                  | -12.43           | 1.62 |
| 2480                  | -8.47            | 2.20 |
| Bandwidth (S11≤-10dB) | 140              |      |

## 2. Antenna Testing Environment

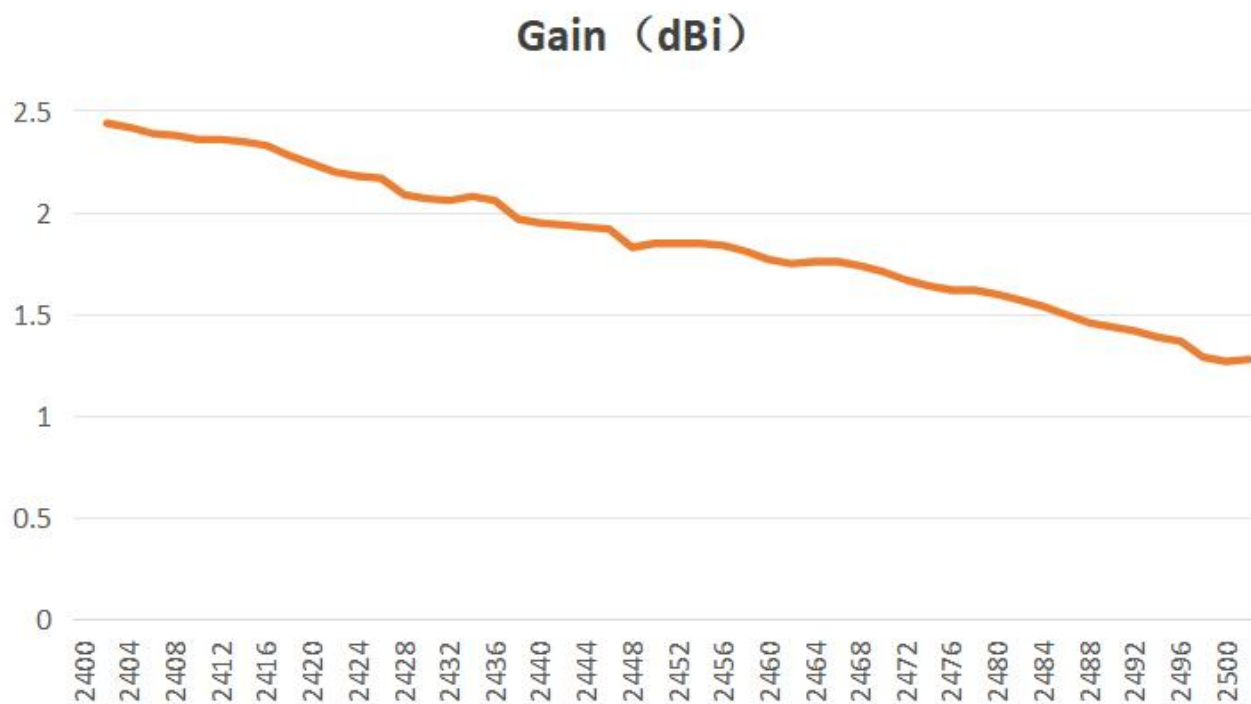
(1).Test Equipment : SATIMO, SY-24M, Agilent-E5071C

(2).Test Environment : The microwave unreflected chamber

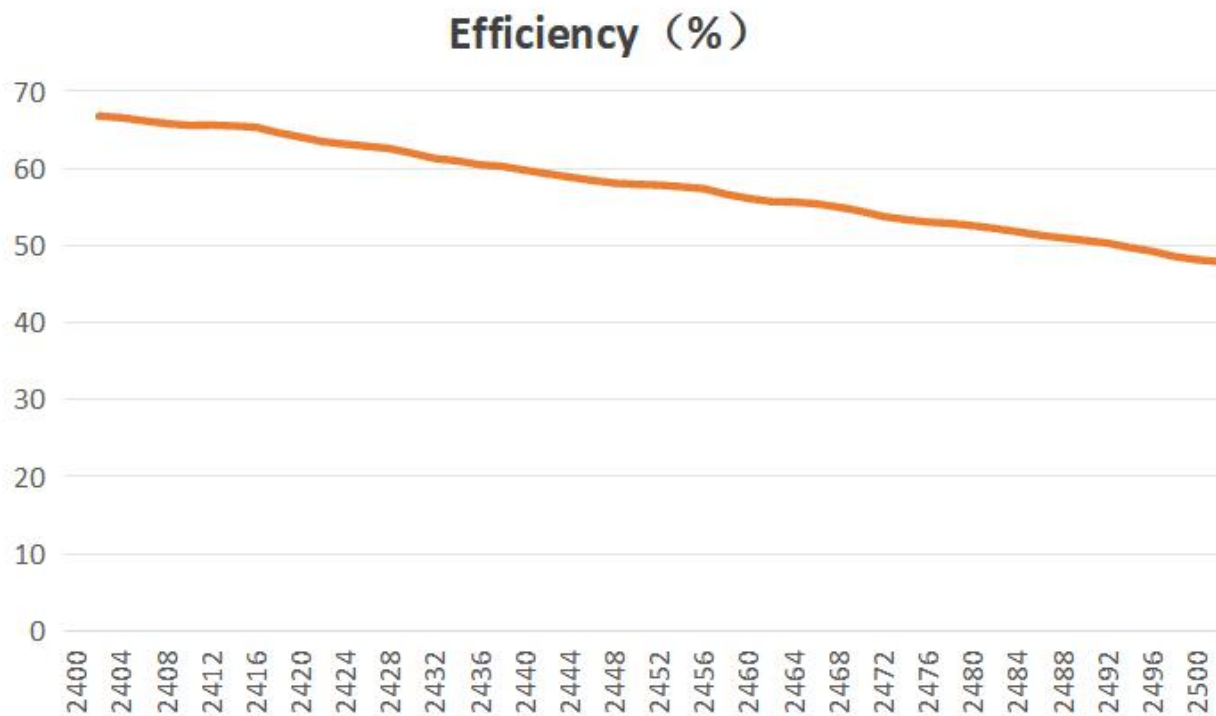


### 3 .Gain and Efficiency

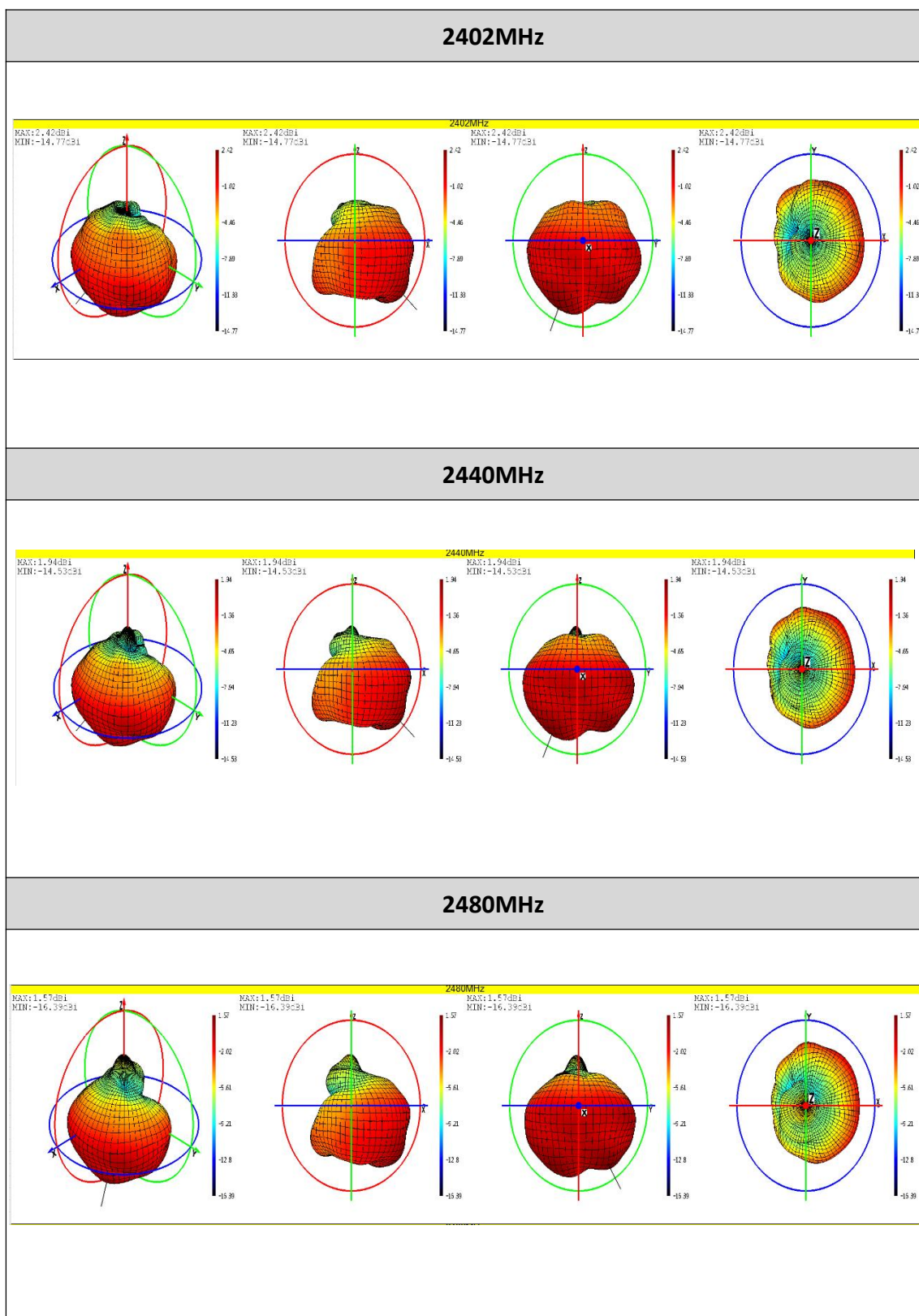
#### (1).Antenna Efficiency



#### (2).Antenna Gain

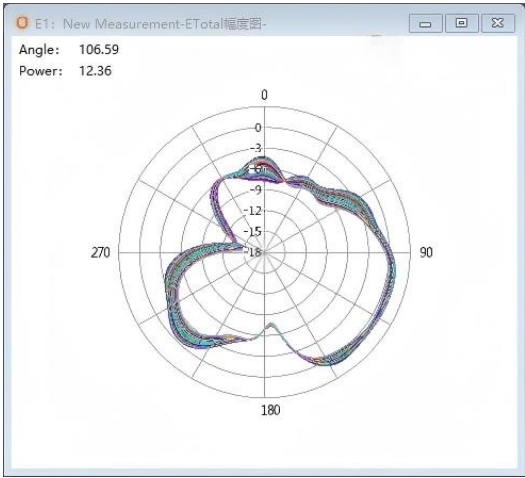


#### 4 .3D Radiation Pattern

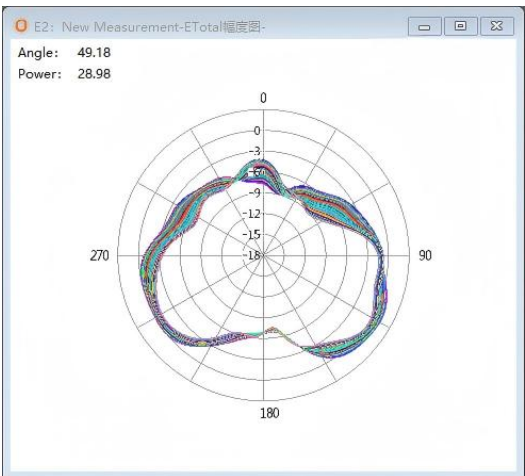


5.2D Radiation Pattern

E1, XZ-Face,  $\phi=0^\circ$  ; (E1,  $\theta=0\sim360^\circ$  ,  $\phi=0^\circ$  )



E2, YZ-Face,  $\phi=90^\circ$  ; (E2,  $\theta=0\sim360^\circ$  ,  $\phi=90^\circ$  )



H, XY-Face,  $\theta=90^\circ$  ; (H,  $\phi=0\sim360^\circ$  ,  $\theta=90^\circ$  )

