**Shenzhen DEWEIMA Communication Equipment Co.Ltd**

# SPECIFICATION SHEET FOR APPROVAL

| | |
|---|---|
| **CUSTOMER NAME** | Siweipu |
| **CUSTOMER P/N** | FD2 Built in beacon module |
| **PART NAME** | 2.4GWIFI antenna |
| **Material code** | |
| **APPROVAL REV.** | DWM-V1.0 |

| **CONTRACTOR** | | | **DATE：2024-01-16** |
|---|---|---|---|
| **QA CHECKED** | **ME CHECKED** | **RF CHECKED** | **MANAGER CHECKED** |
| 高春彦 | 段燕林 | 陈显叶 | 余奇 |

| **CUSTOMER** | | **DATE：** |
|---|---|---|
| **Approved By** | **Checked By** | **Prepared By** |
| | | |

**TEL：13603094246**

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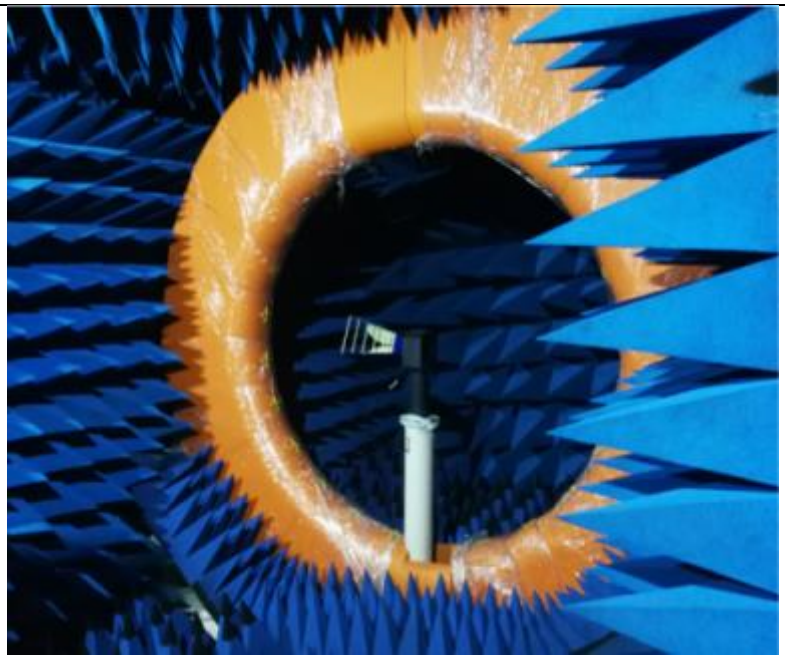
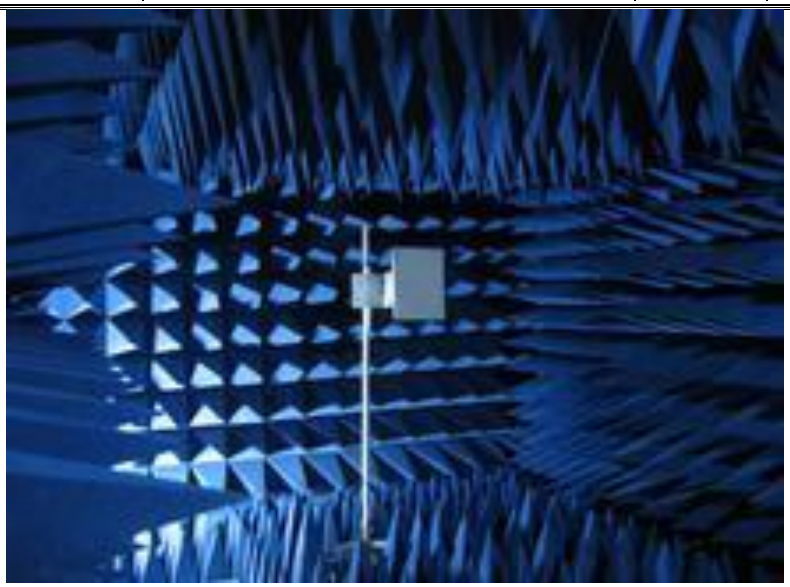
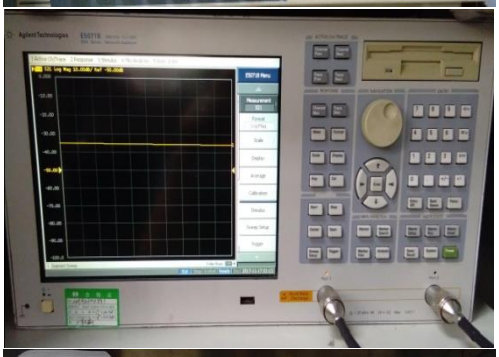
**1. Product Application**

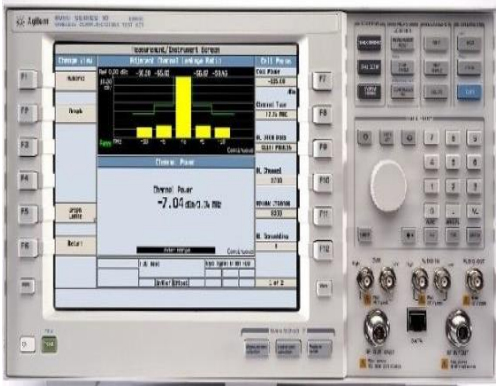
Terminal of the antenna products can only be used for 2.4G WIFI antenna.

**2. The test environment, equipment**

| Item | Description | Test Condition | Requirement |
|---|---|---|---|
| 2.1 | Passive testing | The VSWR measurement devices are connected in sequence: Agilent5071B Network Analyzer →measurement Cable → Customer-providing Devices. | VSWR：<br>**2400MHz-2500MHz＜2.0** |
| | | Test equipment | |
| | | | |
| Item | Description | Test Condition | Requirement |

| | | | |
|---|---|---|---|
| 2.2 | Active test | Follow picture shows the measurement condition of the antenna been put on the measurement device, which is used for all measurement of electric performances. | Antenna gain:<br>**2400MHz-2500MHz**：2±1dBi<br><br>Antenna efficiency:<br>**2400MHz-2500MHz**：＞50％ |
| 2.3 | Microwave Anechoic（Satimo&ETS） | Test equipment/测试设备 | |
| | |  | |

| | | |
|---|---|---|
| | |  |
| 2.4 | CMW500<br>Agilent5071B<br>AgilentE4405B<br>Agilent8960 | <br>  <br> |

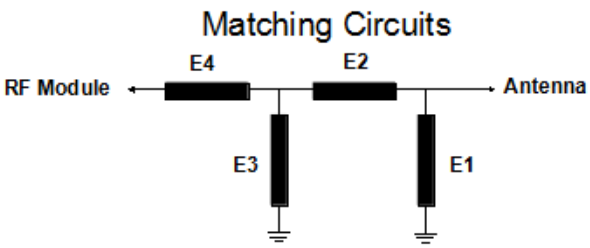


## 3.Technology Parameters

| | |
|---|---|
| Frequency Range | **2400MHz-2500MHz** |
| Operating Humidity | 85% R.H.MAX |
| Temperature Rating | -40℃～+85℃ |

3.1 The matching test value

| Element | Value |
|---|---|
| E1(0402) | |
| E2(0402) | |
| E3(0402) | |
| E4(0402) | |
| | |

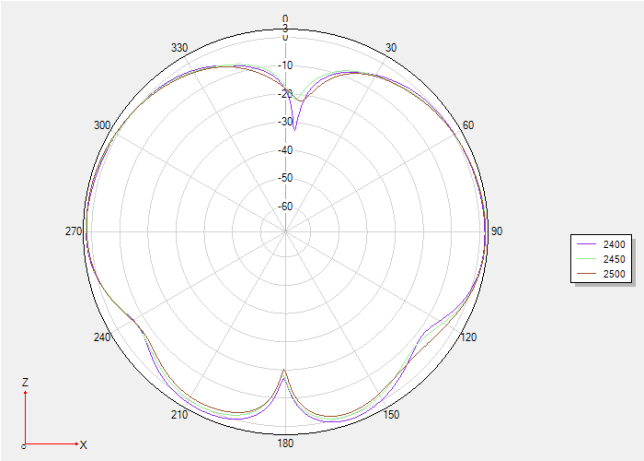


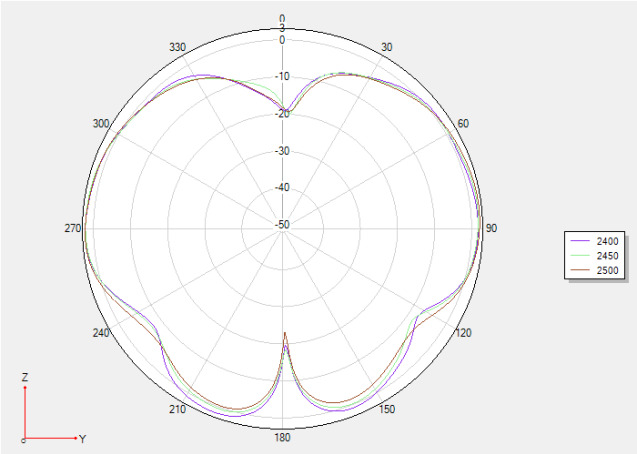
3.2 VSWR

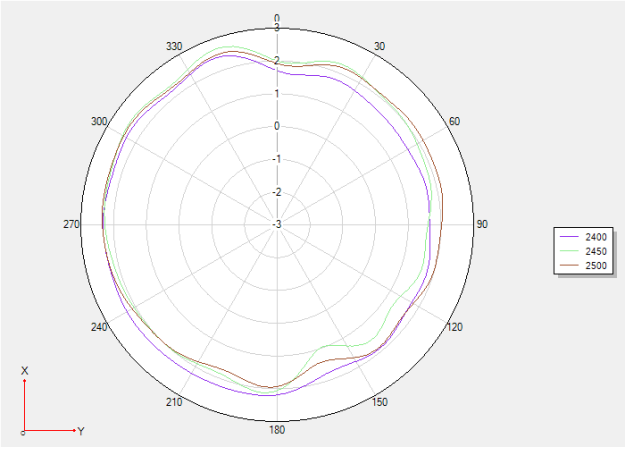
**3.3. Efficiency And Gain**

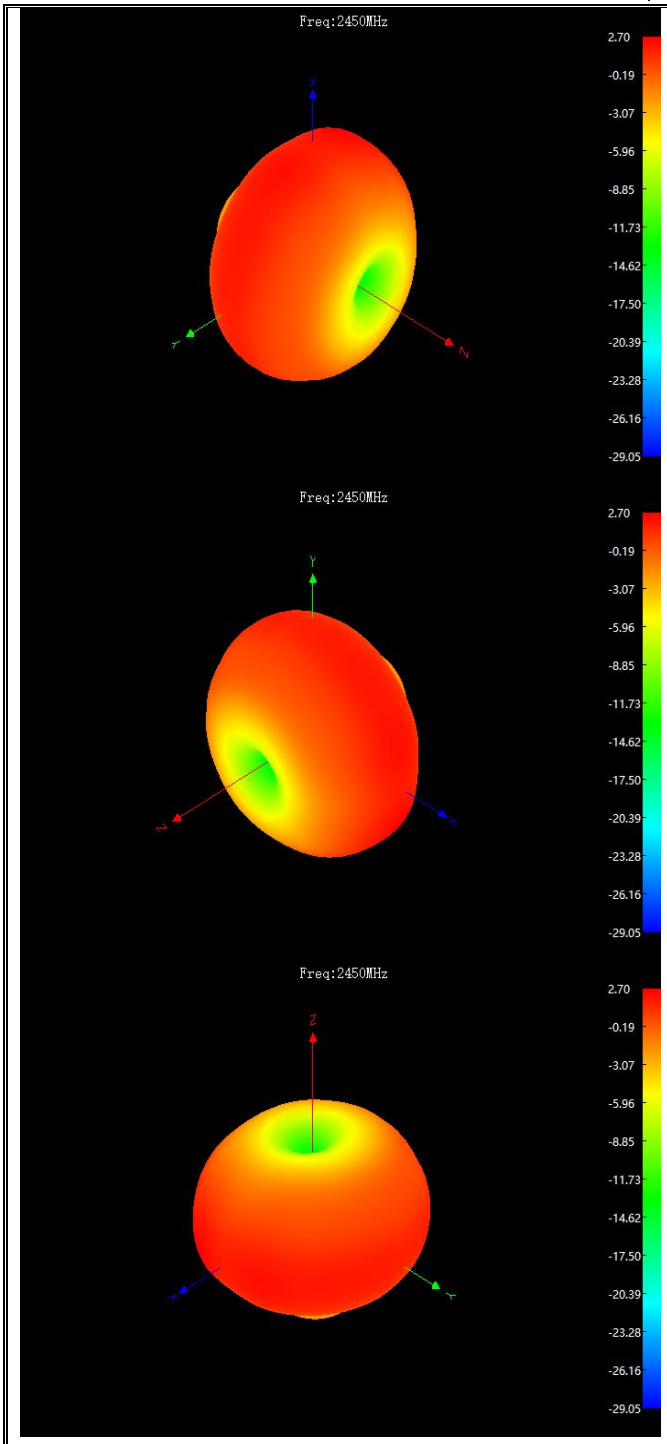
| Frequency/Mhz | Efficiency / % | MaxGain/dBi |
|---|---|---|
| 2400 | 51.12 | 2.45 |
| 2410 | 49.66 | 2.6 |
| 2420 | 52.11 | 2.5 |
| 2430 | 51.61 | 2.45 |
| 2440 | 50.31 | 2.33 |
| 2450 | 52.11 | 2.7 |
| 2460 | 51.78 | 2.6 |
| 2470 | 50.15 | 2.56 |
| 2480 | 52.28 | 2.73 |
| 2490 | 53.79 | 2.78 |
| 2500 | 51.45 | 2.66 |

3.4 2D & 3D PHOTO




Freq:2450MHz
2.70
-0.19
-3.07
-5.96
-8.85
-11.73
-14.62
-17.50
-20.39
-23.28
-26.16
-29.05
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-0.19
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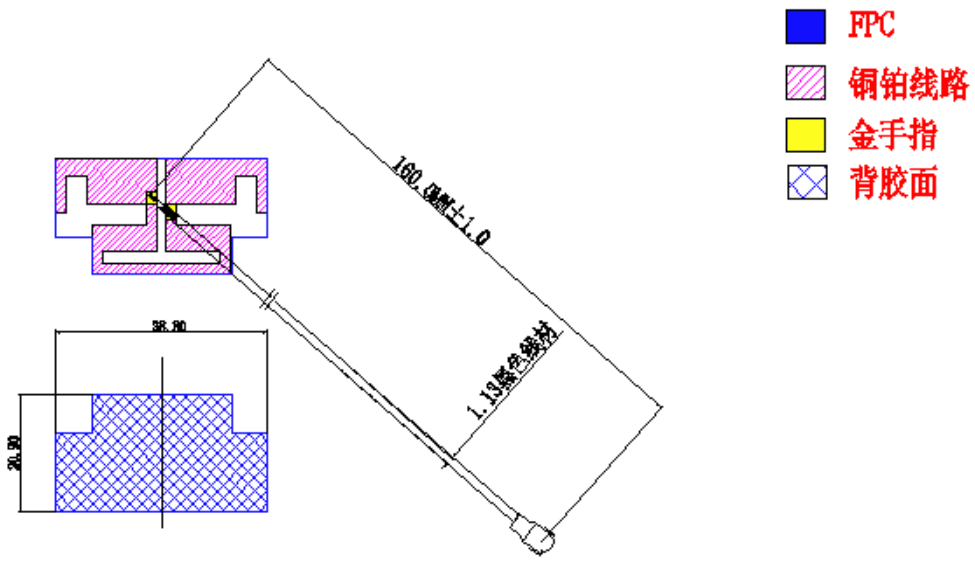
-14.62
-17.50
-20.39
-23.28
-26.16
-29.05

**4. Product photo**




**5.Environmental Performance**

| Item | Description | Test Condition | Requirement |
|---|---|---|---|
| 5.1 | High and low temperature test | Temp.: -40 ℃<br>Time: 48 hours<br><br>Temp.: 85℃<br>Time: 48 hours | 1. No visible damage.<br><br>2. The electric performances reach the standard. |
| Item | Description | Test Condition | Requirement |
| 5.2 | Salt Spray | 5±0.1% Nad salt fog<br>PH Value: 6.5-7.2<br>Temp: 35±1℃<br>Time:24 hours | 1. No color change.<br><br>2. the appearance of the antenna does not flake off. |

**6.Usage Precaution**

| No | Items | Matter |
|---|---|---|
| 6.1 | Precautions | a)Please avoid the cleaning of this producta) |
| No | Items | Matter |
| 6.2 | Stockpile condition | Use this product within 6 months after receipt<br>Condition : Temp: 5~30℃ Humidity:≤70% |

**7. Packing metho**

**Bag shipment，100pcs。**