

## APPROVAL SHEET

CUSTOMER NAME:

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PRODUCT NAME: 2.4/5.8G W39 White Antenna L=278mm+terminal

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CUSTOMER P/N:

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UB P/N: BL02C300W3Da280A REV: A

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|              |                                                                                     |                       |
|--------------|-------------------------------------------------------------------------------------|-----------------------|
|              | MANUFACTURER<br>SIGNATURE                                                           | CUSTOMER<br>SIGNATURE |
| CHECKED BY:  |  |                       |
| APPROVED BY: |                                                                                     |                       |
| DATE:        | 2022/11/01                                                                          |                       |

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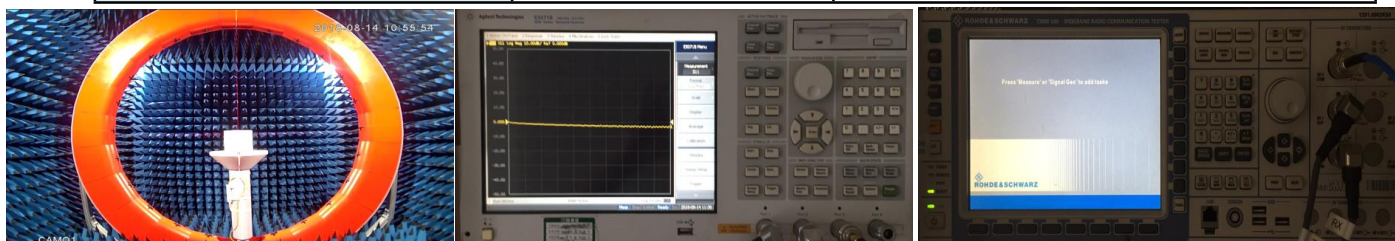
| <i>Item</i> | <i>Description</i>       |
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## 1. Specification table:

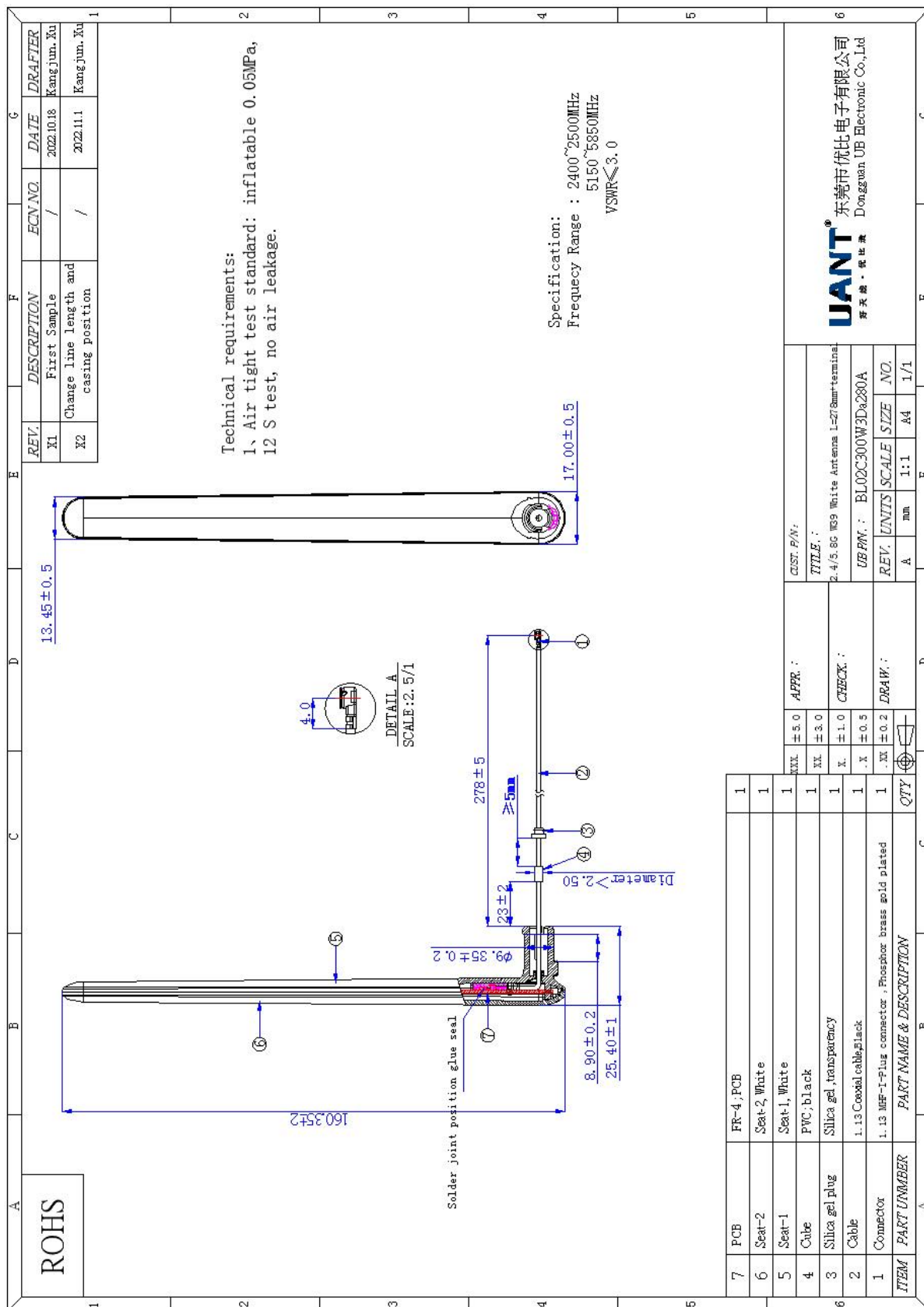
| Electrical Specification |                                 |
|--------------------------|---------------------------------|
| Design Specifications    | Types                           |
| Antenna Type             | External antenna lead wire type |
| Operating Frequency      | 2400-2500MHz;5150-5850MHz       |
| Peak Gain                | 4.02dBi                         |
| Average Efficiency       | 58.27%                          |
| VSWR                     | <3                              |
| Polarization             | Linear                          |
| Axial Ratio              | \                               |
| Radiation pattern        | Omnidirectional                 |
| Impedance                | 50 ohm                          |
| Power handling           | 1W                              |
| Interface                | Coaxial line + terminal         |
| Overall dimensions       | 160.35*17*25.4mm                |
| Operating Temp.          | -20℃~+70℃                       |
| Storage Temp.            | -20℃~+70℃                       |

## 2. Test Items and Equipment

|                                            | Test items                                   | Test equipment                                                                       |
|--------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------|
| S-Parameter                                | 1.Return Loss<br>2.VSWR                      | Network analyzer<br>(Agilent E5071B)                                                 |
| The whole machine of<br>Passive parameters | 1.Frequency<br>2.Gain<br>3.Radiation Pattern | 1.3D microwave darkroom<br>(5m*5m*5m)<br>2.Network analyzer<br>(Agilent E5071B)      |
| The whole machine of<br>Active parameters  | 1.TRP<br>2.TIS                               | 1.3D microwave darkroom<br>(5m*5m*5m)<br>2.Comprehensive test instrument<br>(CMW500) |

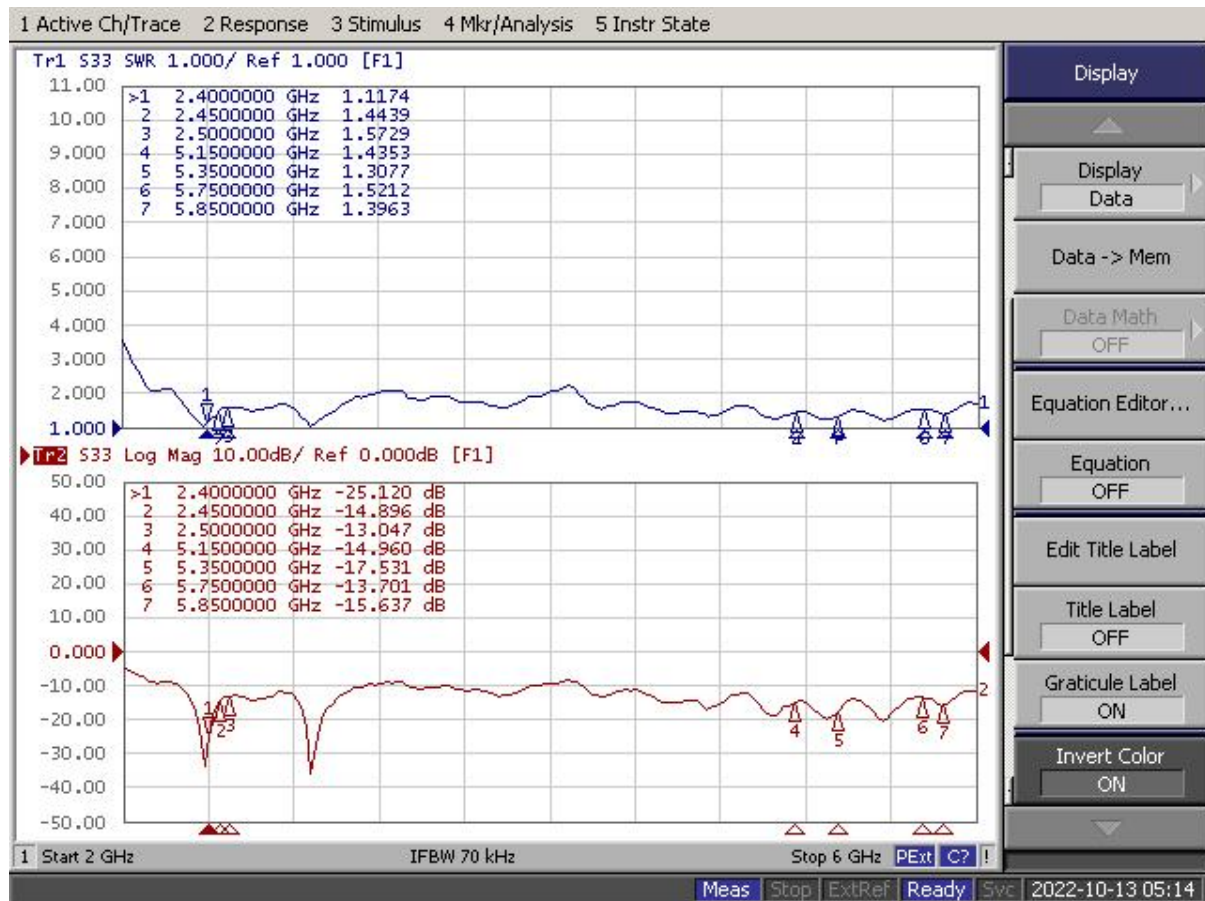


# 3. Mechanical Specification



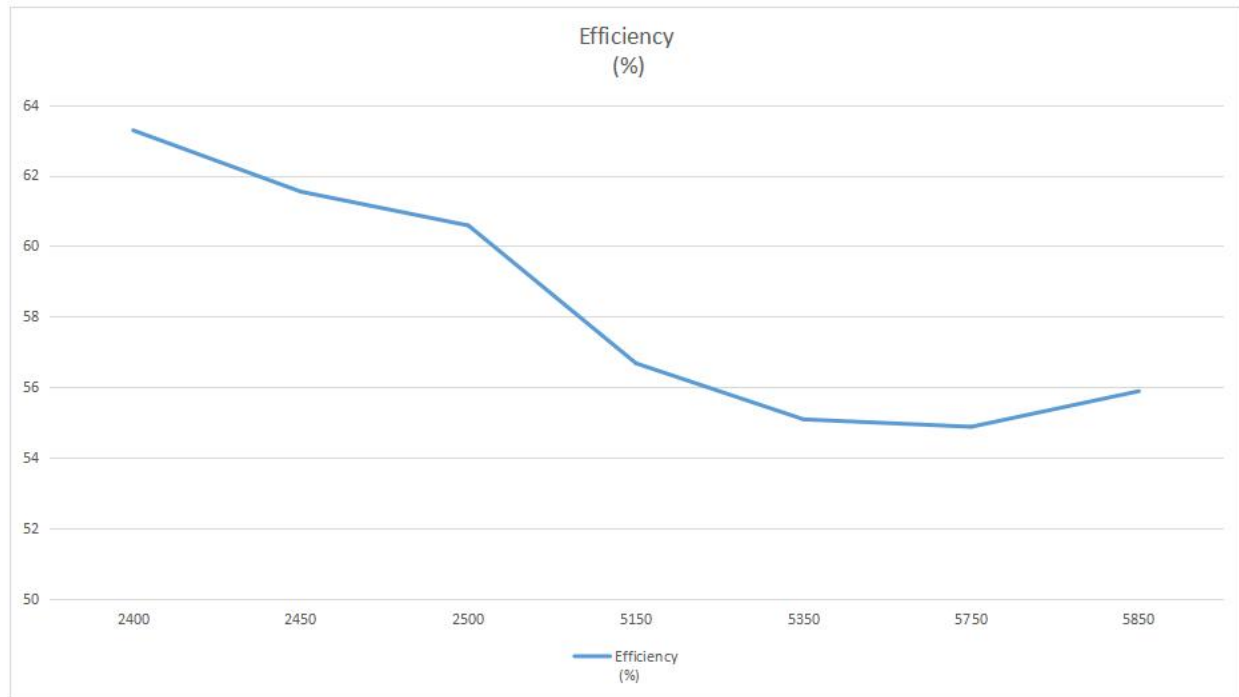
## 4. test report:

### 4.1: S-Parameter

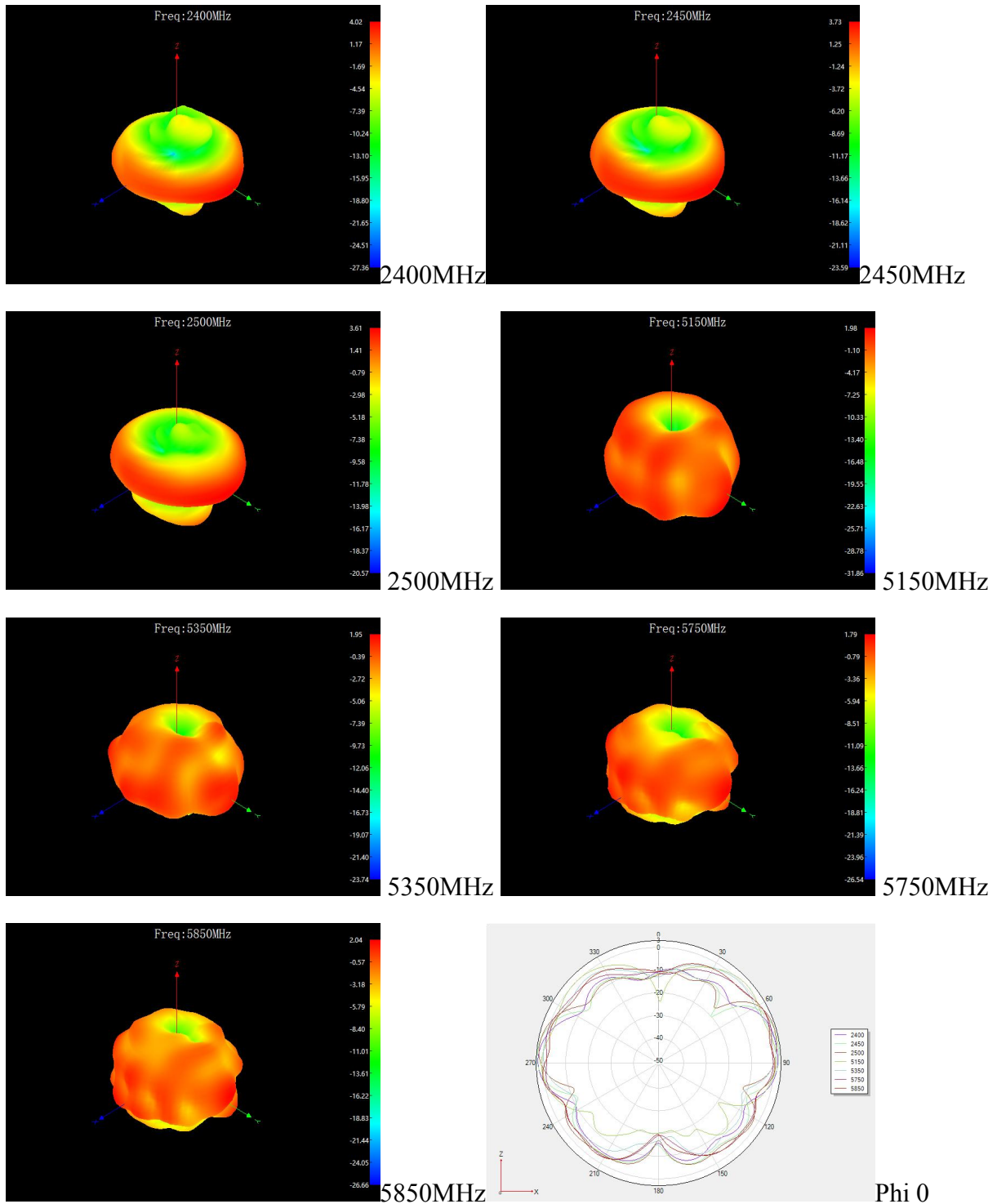


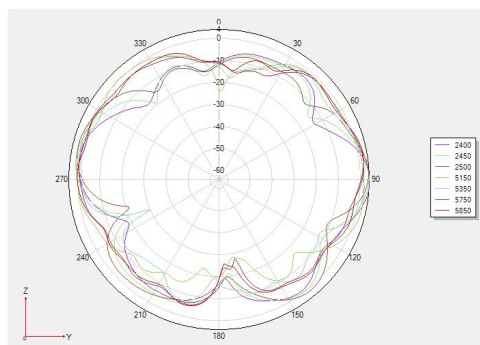
## 4.2: Efficiency and Gain

| Frequency / MHz | Efficiency / dB | Efficiency / % | Gain/ dB |
|-----------------|-----------------|----------------|----------|
| 2400            | -2.42           | 63.28          | 4.02     |
| 2450            | -2.4            | 61.54          | 3.73     |
| 2500            | -2.71           | 60.58          | 3.61     |
| 5150            | -3.31           | 56.67          | 1.98     |
| 5350            | -2.59           | 55.08          | 1.95     |
| 5750            | -3.48           | 54.87          | 1.79     |
| 5850            | -2.85           | 55.88          | 2.04     |

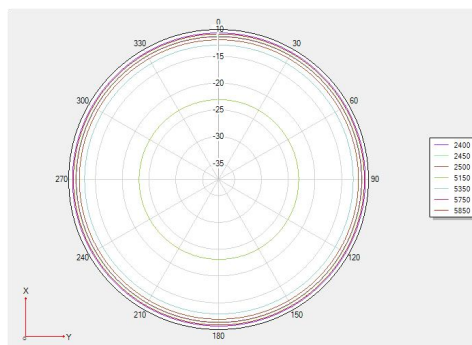


### 4.3: Antenna 2/3D Radiation Pattern





Phi 90



Theta 90