

# 承 认 书

## APPROVAL SHEET

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: Antenna\_White WiFi Halow Antenna\_2dBi\_Omnidirectional\_  
Impedance 50Ω\_SMA Female Connector with Internal Thread\_  
915MHz\_NA\_No Feeder\_Total Length 200mm\_Thickened Copper  
Tube

客 户 料 号

CUSTOMER P/N: 1015020044

优比电子料号

Youbi P/N: UB02S186W3D1279A REV: B

|              | MANUFACTURER<br>SIGNATURE                                                           | CUSTOMER<br>SIGNATURE |
|--------------|-------------------------------------------------------------------------------------|-----------------------|
| CHECKED BY:  |  |                       |
| APPROVED BY: |                                                                                     |                       |
| DATE:        | 2024/7/16                                                                           |                       |

Modification History

| Version | Content Revision | Issued by | Date      |
|---------|------------------|-----------|-----------|
| A       | Original version | lina      | 2024-5-22 |
| B       | Extra plug       | Sam       | 2024-7-16 |
|         |                  |           |           |
|         |                  |           |           |
|         |                  |           |           |
|         |                  |           |           |
|         |                  |           |           |

## *Content*

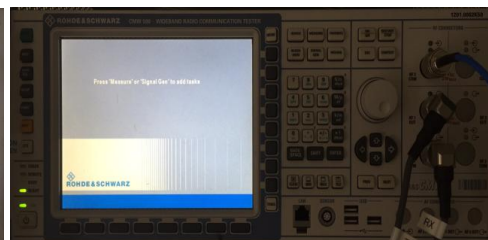
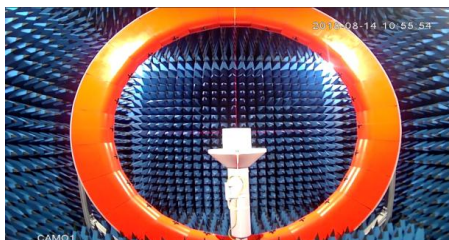
| <i>Item</i> | <i>Description</i>       |
|-------------|--------------------------|
| 1.-----     | Electrical Specification |
| 2.-----     | Test Items and Equipment |
| 3.-----     | S Parameter              |
| 4.-----     | Efficiency and Gain      |
| 5.-----     | Radiation Pattern        |
| 6.-----     | Mechanical Specification |

## 1.Electrical Specification:

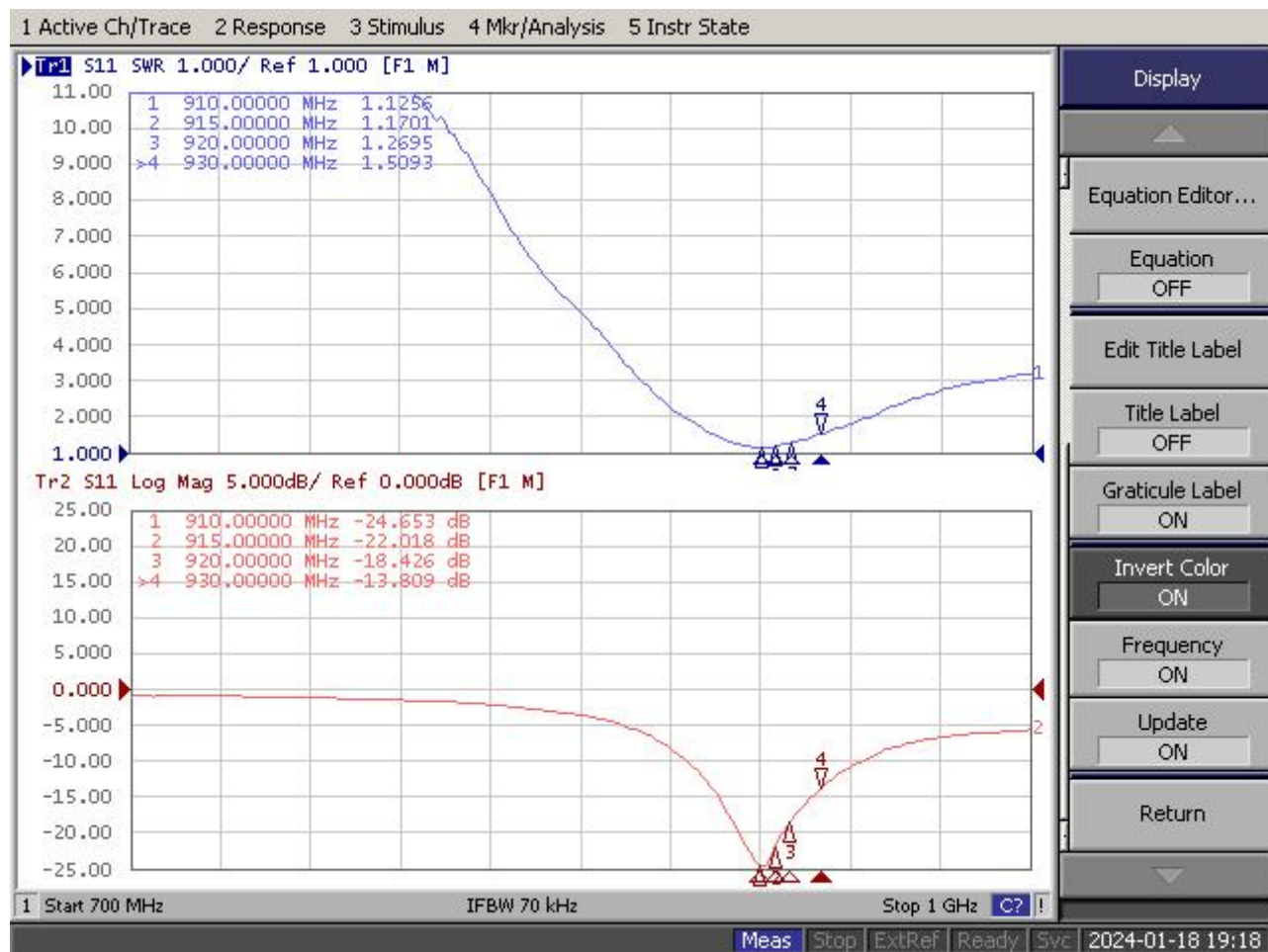
| Characteristics       | Specifications      | Unit |
|-----------------------|---------------------|------|
| Outline Dimensions    | 200 x Ø 13mm        | mm   |
| Frequency             | 900-930             | MHz  |
| Impedance             | 50                  | Ω    |
| VSWR                  | ≤ 2.0               |      |
| Polarization          | Linear Polarization |      |
| Gain                  | 2±0.5               | dBi  |
| Efficiency            | > 70                | %    |
| Connector Type        | SMA                 |      |
| Operating temperature | -40℃~+85℃           |      |
| Storage Temp          | 10℃~40℃             |      |
| Apparent salt spray   | 48/H                | H    |

## 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) |

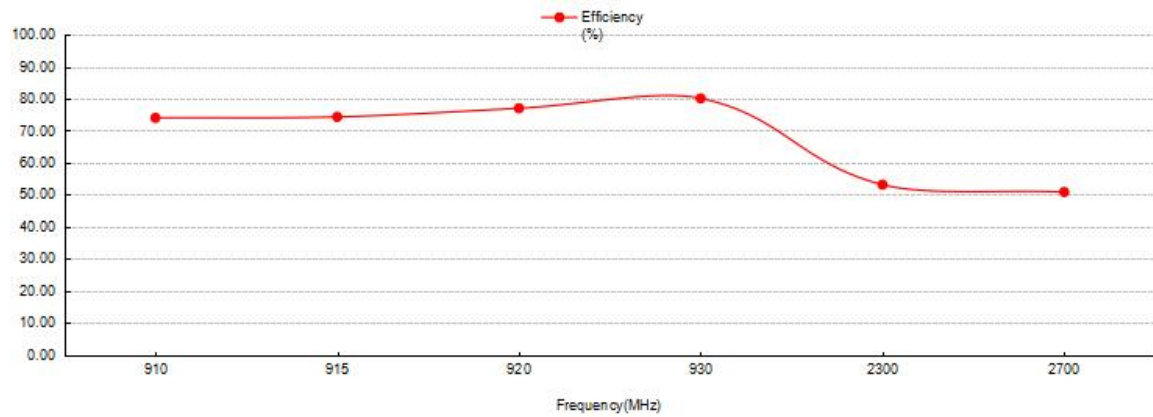
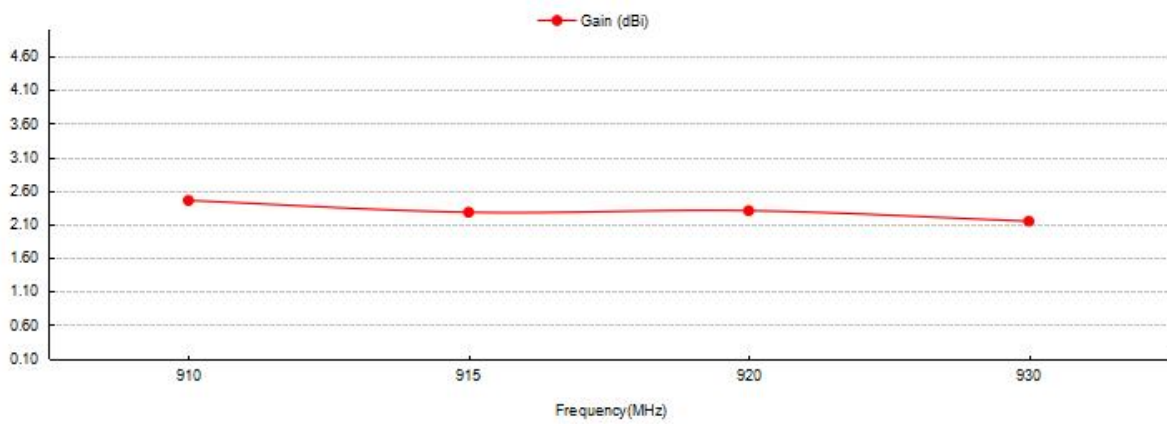


### 3. S Parameter



|                  |        |        |        |        |
|------------------|--------|--------|--------|--------|
| Frequency (MHz)  | 910    | 915    | 920    | 930    |
| Return Loss (dB) | -24.65 | -22.01 | -18.42 | -13.80 |
| VSWR             | 1.12   | 1.17   | 1.26   | 1.50   |

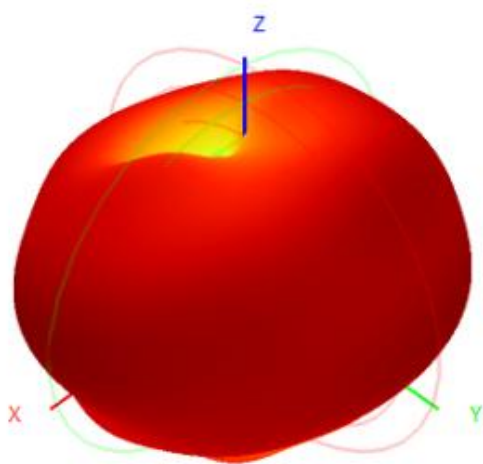
#### 4. Efficiency and Gain



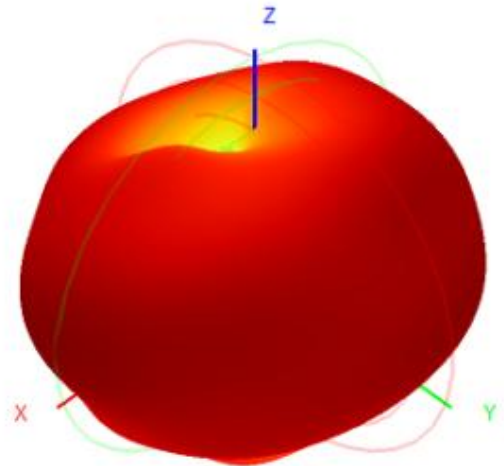
| Frequency (MHz) | 910   | 915   | 920   | 930   |
|-----------------|-------|-------|-------|-------|
| Efficiency (%)  | 73.98 | 74.28 | 76.96 | 80.06 |
| Gain (dBi)      | 2.45  | 2.28  | 2.30  | 2.14  |

## 5. Radiation Pattern

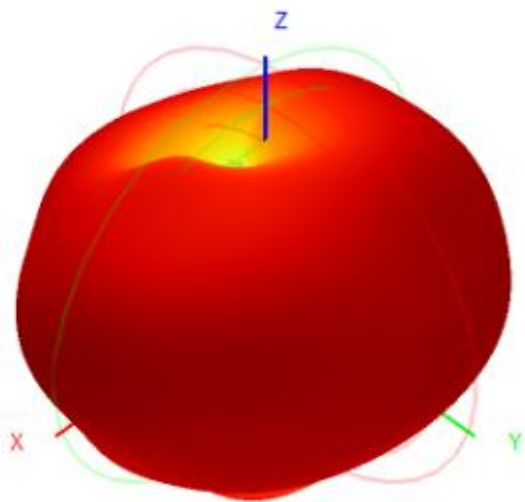
### 5-1 Antenna 3D Radiation Pattern



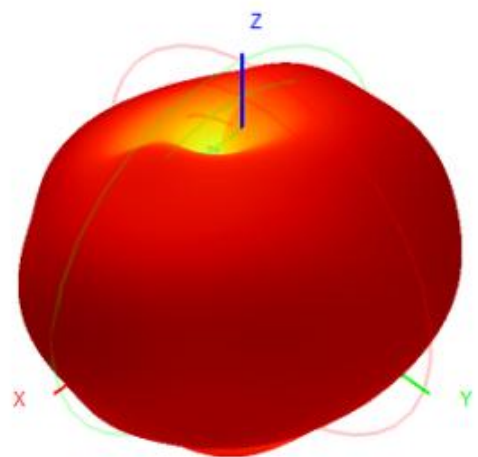
910MHz



915MHz

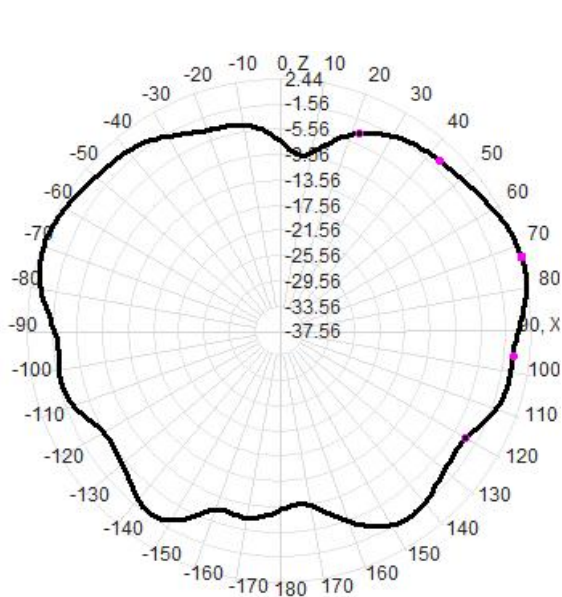


920MHz

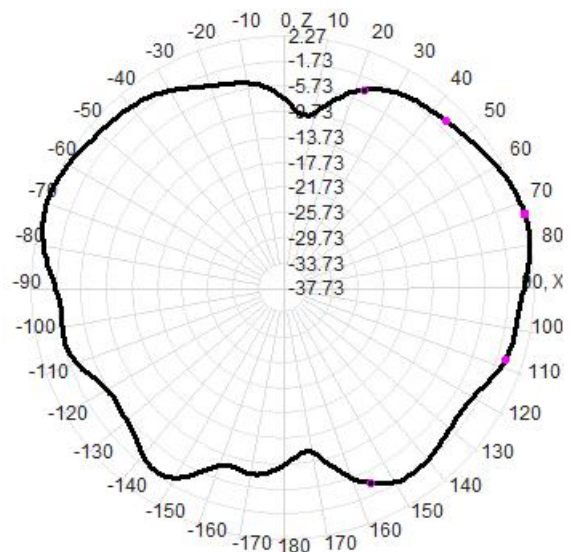


930MHz

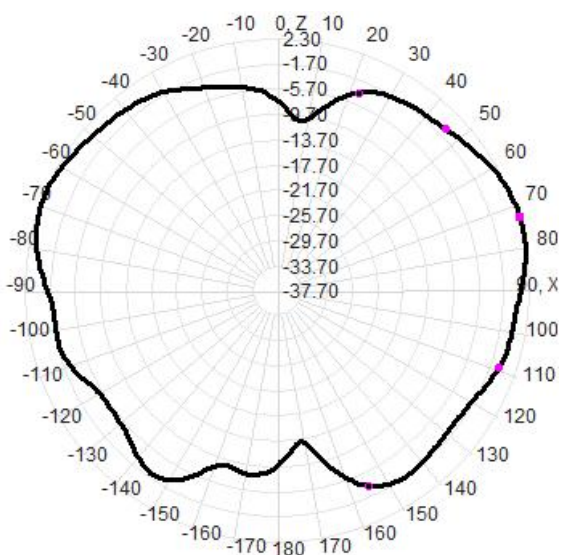
## 5-2 Antenna 2D Radiation Pattern



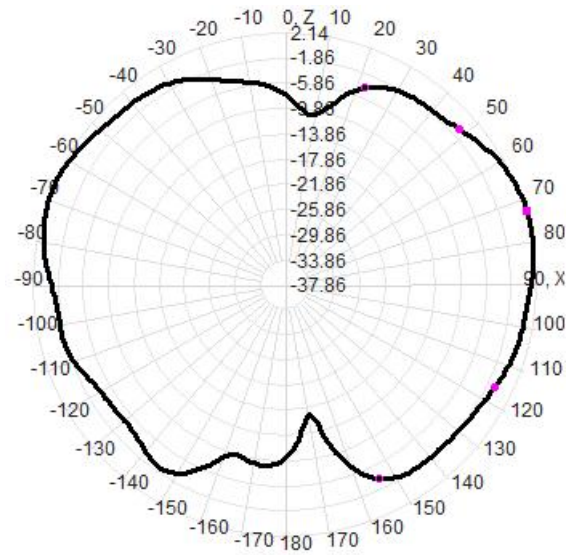
910MHz



915MHz



920MHz



930MHz

## 6. Mechanical Specification:

