


## 1. Specification

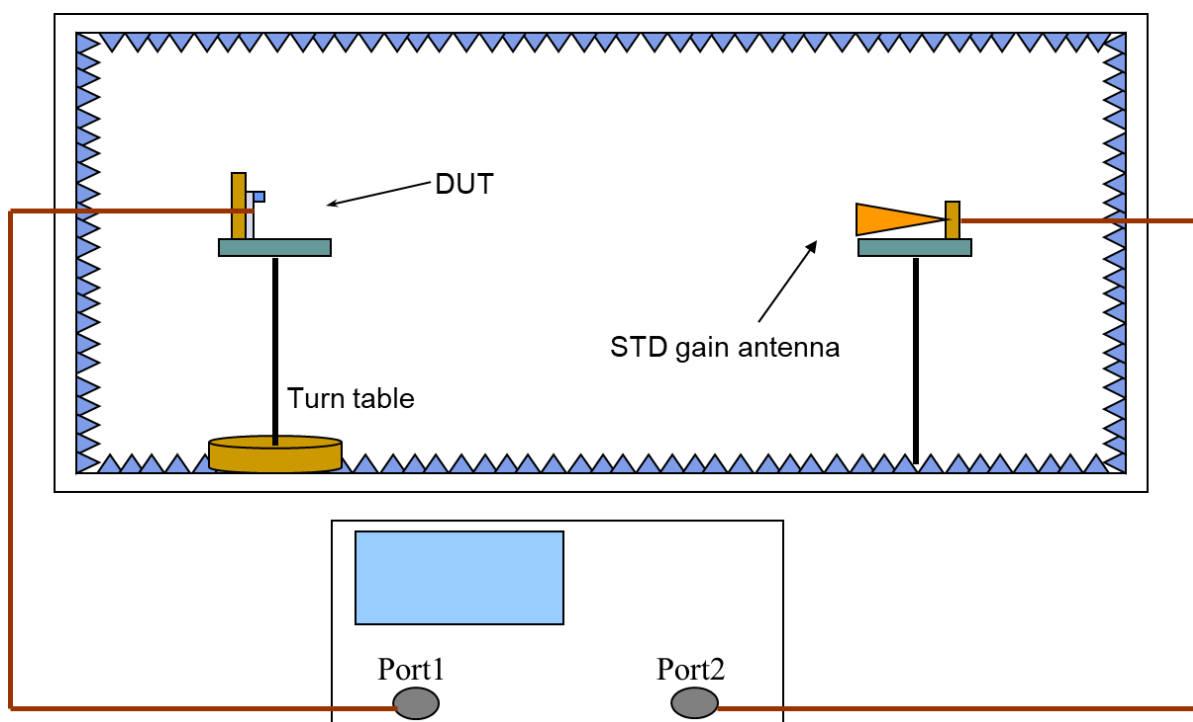
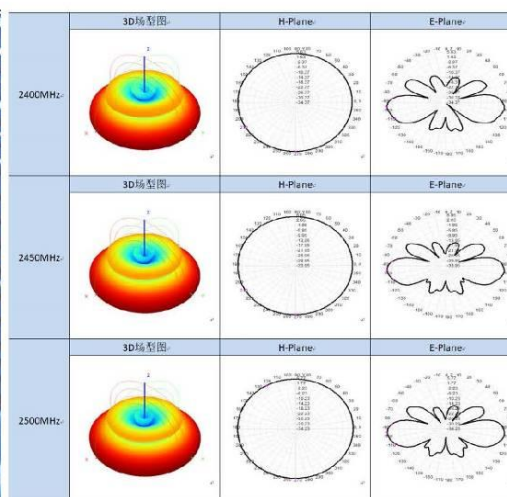
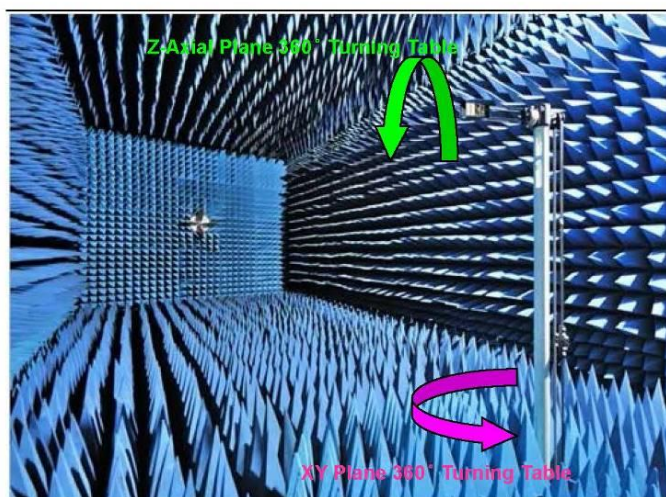
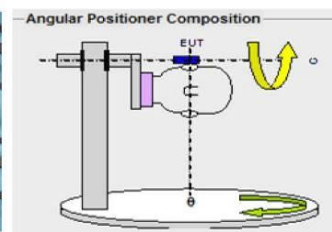
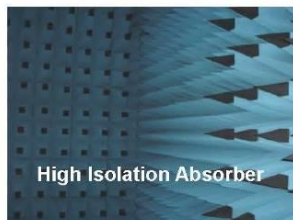
| Sample Photo   |                   |              |
|--|-------------------|--------------|
|  |                   |              |
| A. Electrical Characteristics  |                   |              |
| Frequency  | 2400-2500MHz      | 5150-5850MHz |
| S.W.R.   | <2.0              | <2.0         |
| Antenna Gain   | 9dBi              | 12dBi        |
| Polarization   | Vertical          | Vertical     |
| Horizontal Beamwidth   | 74-77°            | 43-60°       |
| Vertical Beamwidth   | 43-44°            | 19-25°       |
| F/B  | >18dB             | >17dB        |
| Impedance  | 50Ohm             | 50Ohm        |
| Max. Power   | 50W               | 50W          |
| B. Material & Mechanical Characteristics   |                   |              |
| Connector Type   | N connector       |              |
| Dimension  | 140*120*25mm      |              |
| Radome material  | ABS               |              |
| Weight   | 0.30Kg            |              |
| C. Environmental   |                   |              |
| Operation Temperature  | - 40 °C ~ + 85 °C |              |
| Storage Temperature  | - 40 °C ~ + 85 °C |              |
| Operation Humidity   | < 95%             |              |
| Rated Wind Velocity  | 36.9m/s           |              |

## Test Equipment & Conditions

1. Network Analyzer: Keysight E5071C

2. 3D Chamber Test System

- .Chamber Size: 9 x 5 x 4 m<sup>3</sup>
- .Freq. Range: 0.4 ~ 18.0 GHz
- .Double Ridge Horn Antenna
- .VNA: Agilent E5071C
- .3D Turning Table and Positioner
- .ADT Solution 3D Testing Software





Product Number: BGS-AN2458-14012025G  
Product Name: 2.4/5.8GHz Flat Panel Antenna

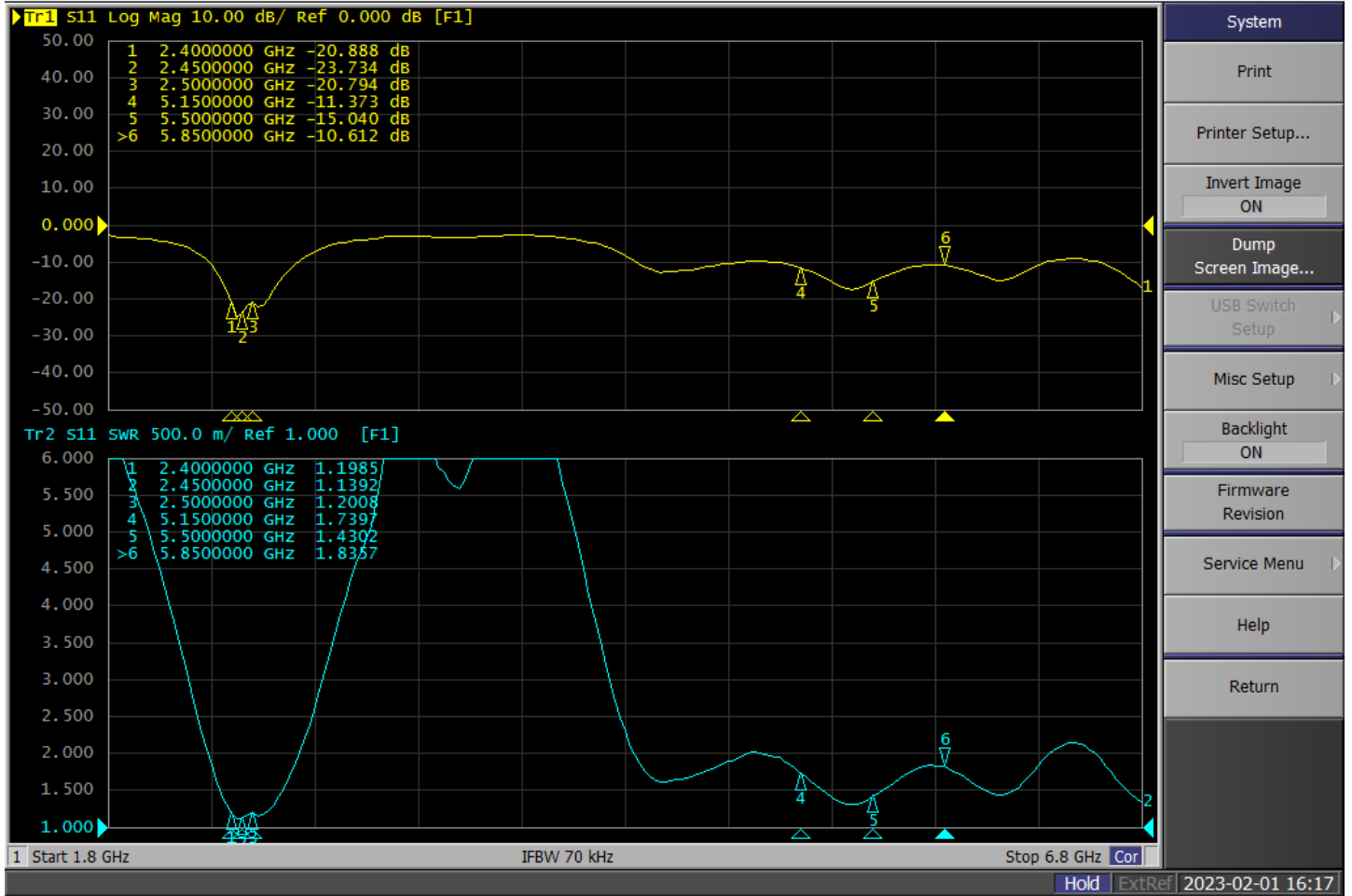
## 2. Antenna - S Parameter Test Data

### 2.1 VSWR

E5063A Network Analyzer

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

Resize





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## 2.2 Gain:

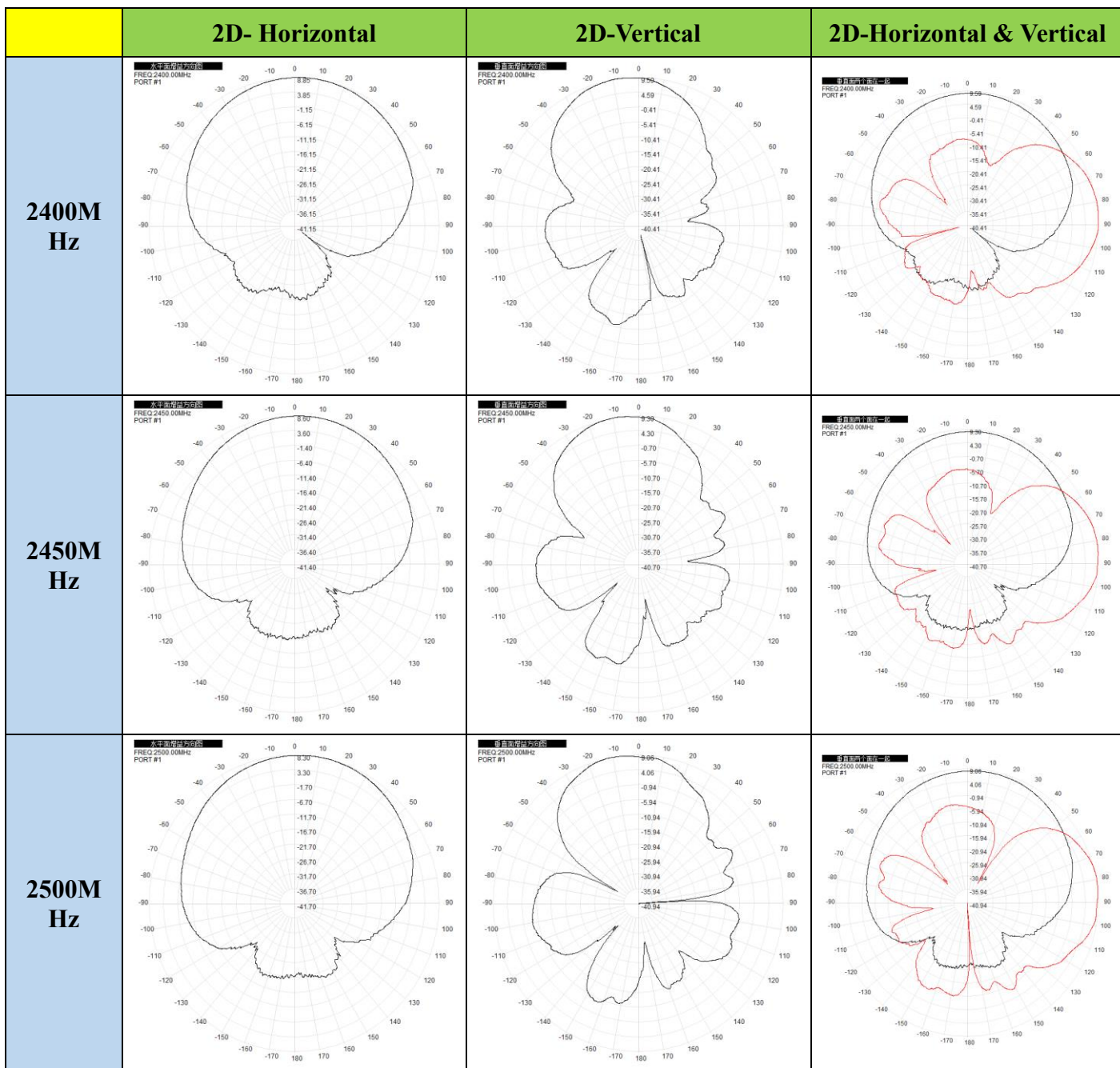
| Frequency(MHz) | Gain(dBi) |
|----------------|-----------|
| 2400           | 9.5913    |
| 2410           | 9.4423    |
| 2420           | 9.2006    |
| 2430           | 9.2808    |
| 2440           | 9.2012    |
| 2450           | 9.3022    |
| 2460           | 9.1597    |
| 2470           | 9.2641    |
| 2480           | 9.0367    |
| 2490           | 9.035     |
| 2500           | 9.0594    |

| Frequency(MHz) | Gain(dBi) |
|----------------|-----------|
| 5150           | 11.952    |
| 5200           | 11.726    |
| 5250           | 11.622    |
| 5300           | 11.275    |
| 5350           | 11.311    |
| 5400           | 11.307    |
| 5450           | 11.394    |
| 5500           | 11.119    |
| 5550           | 11.341    |
| 5600           | 11.655    |
| 5650           | 11.621    |
| 5700           | 12.138    |
| 5750           | 11.981    |
| 5800           | 11.867    |
| 5850           | 12.476    |



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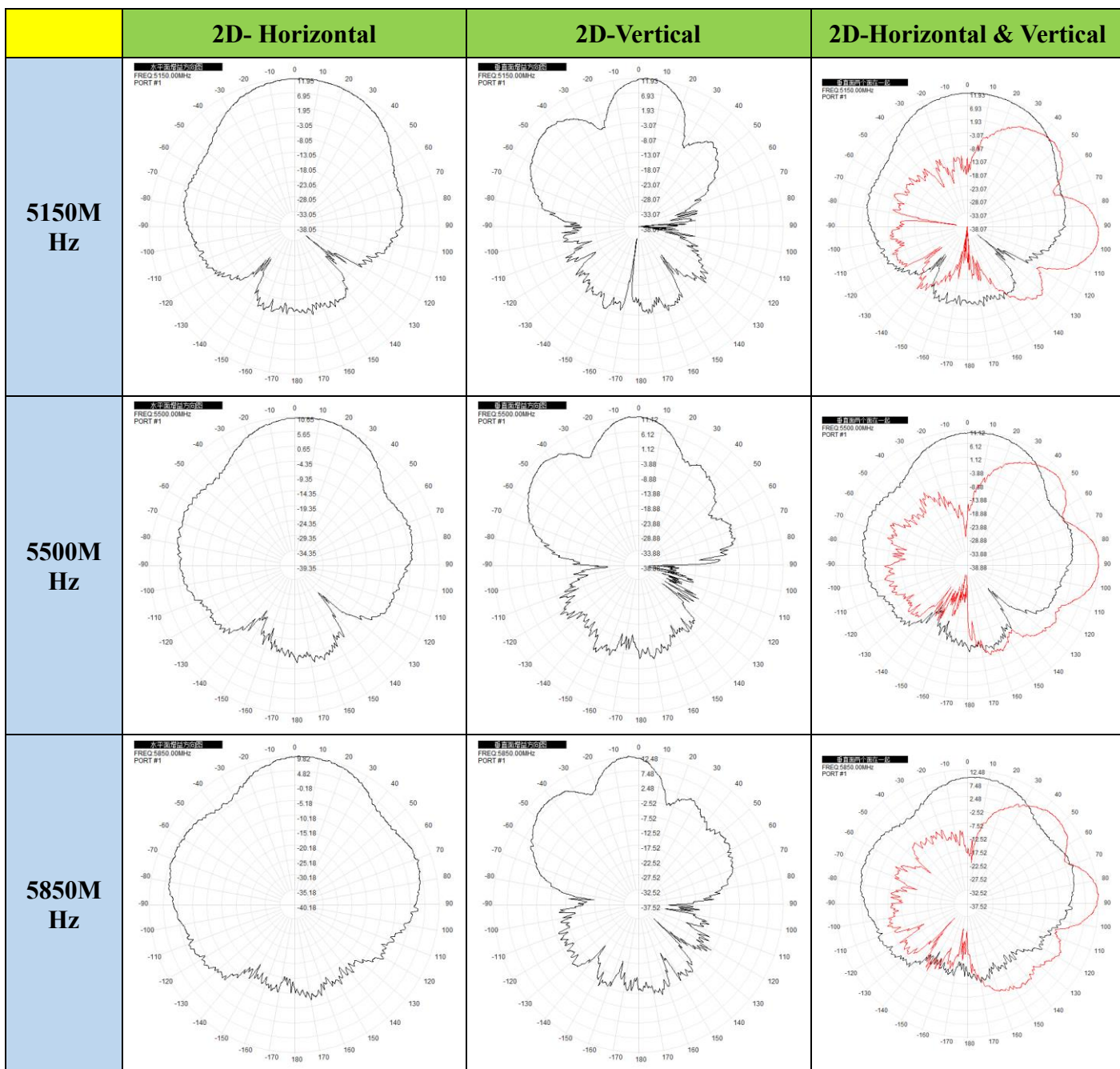
## 2.3 Radiation Pattern







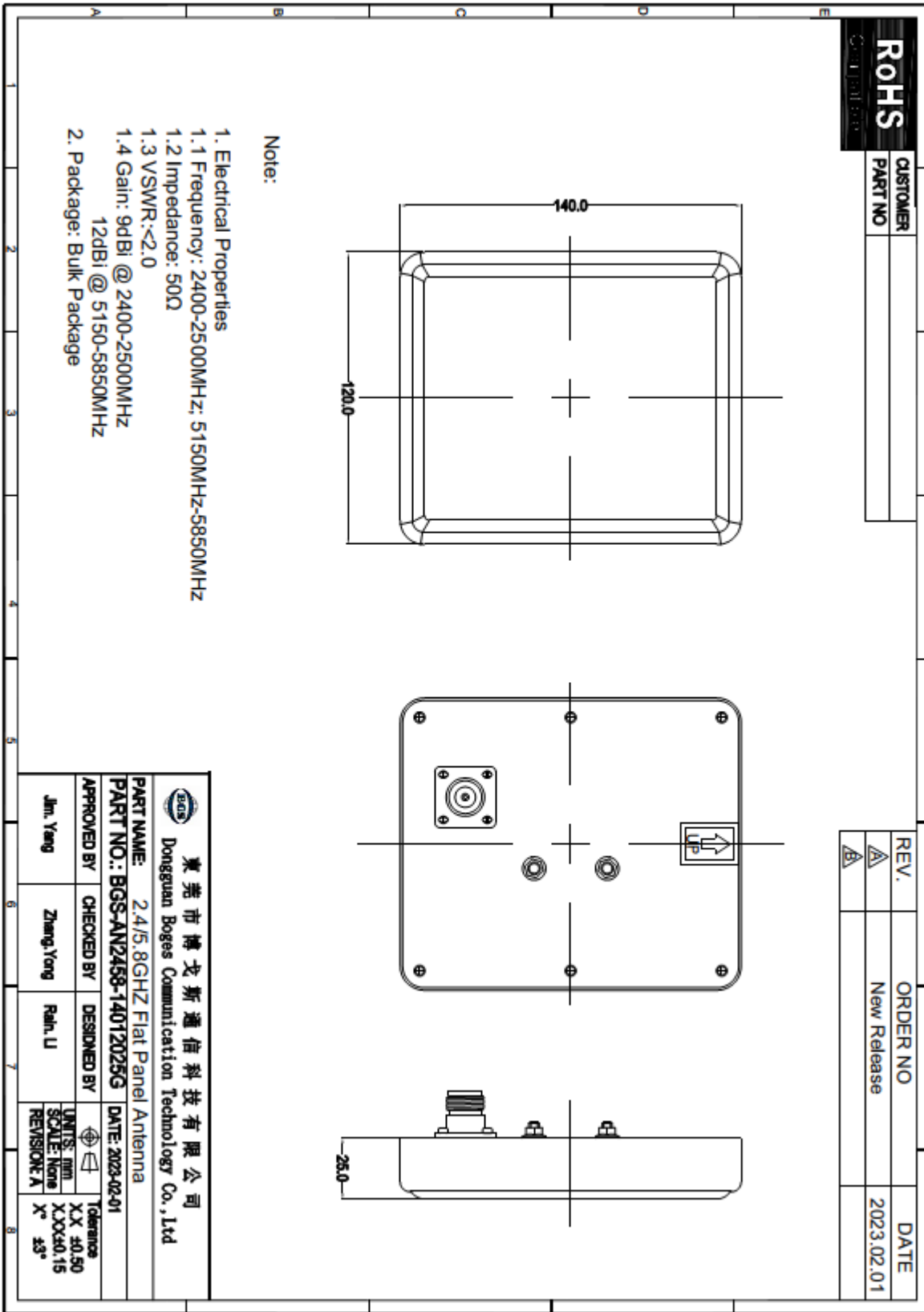
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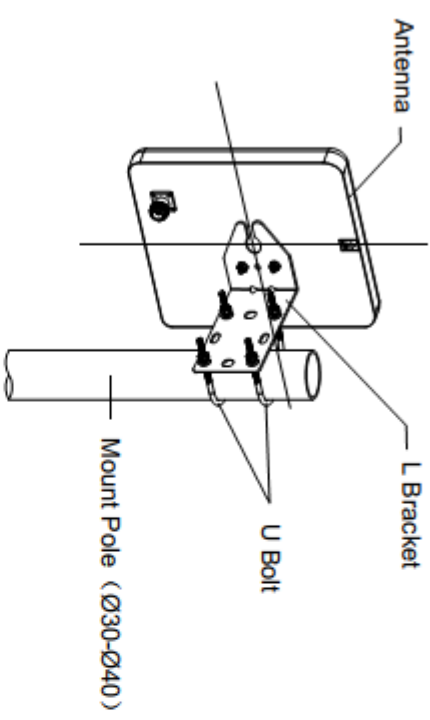
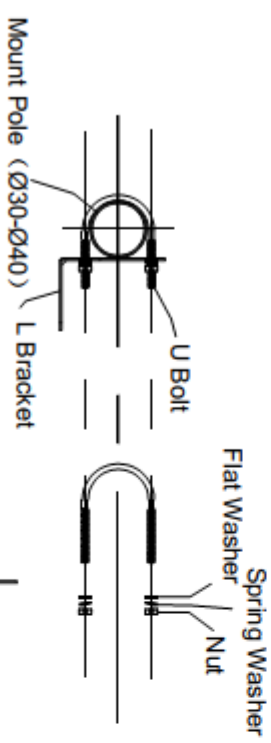

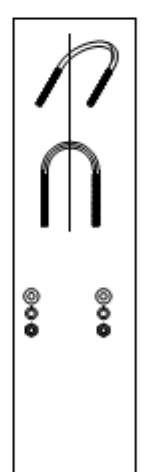
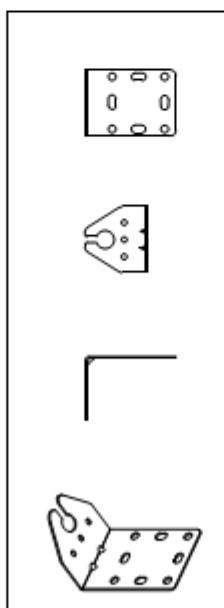



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### 3. Mechanical Drawing



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|  |  |           |         |
|--|--|-----------|---------|
| <b>RoHS</b>  |  | CUSTOMER  | PART NO |
|   |  |           |         |
|    |  |           |         |
|   |  |           |         |
|   |  | U Bolt    |         |
|   |  | L Bracket |         |
|   |  |           |         |
| <b>PART NAME:</b> Antenna Accessories<br><b>PART NO.:</b> BGS-AN2458-14012025G<br><b>DATE:</b> 2023-02-01<br><b>APPROVED BY:</b> Jm. Yang<br><b>CHECKED BY:</b> Zhang, Yong<br><b>DESIGNED BY:</b> Rui, U<br><b>UNITS:</b> mm<br><b>SCALE:</b> None<br><b>REVISION:</b> A<br><b>Tolerance:</b> XX ±0.50<br>XX40.15<br>X° ±3° |  |           |         |