

Product Number: ZF24GL100A1  
Product Name: 24G Antenna

# Specification For Approval

Date: 2022 / 08/ 30

File No.: 220830001

Version: 1.0

Customer: \_\_\_\_\_

Customer P/N: /  
\_\_\_\_\_

INVAX P/N: ZF24GL100A1  
\_\_\_\_\_

Description : Antenna  
\_\_\_\_\_  
\_\_\_\_\_

|                       |                                            |
|-----------------------|--------------------------------------------|
| Cortec Checked By:    | <div>R@ D Dept<br/>20220830<br/>Jack</div> |
| Customer Approved By: |                                            |

**Cortec Technology Inc.**  
Dongguan ZhiFeng Communication Technology Co., Ltd.  
Shenzhen Zhi Feng Electronic Technology Co., Ltd.  
Dongguan Lanyi Communication Technology Co., Ltd.

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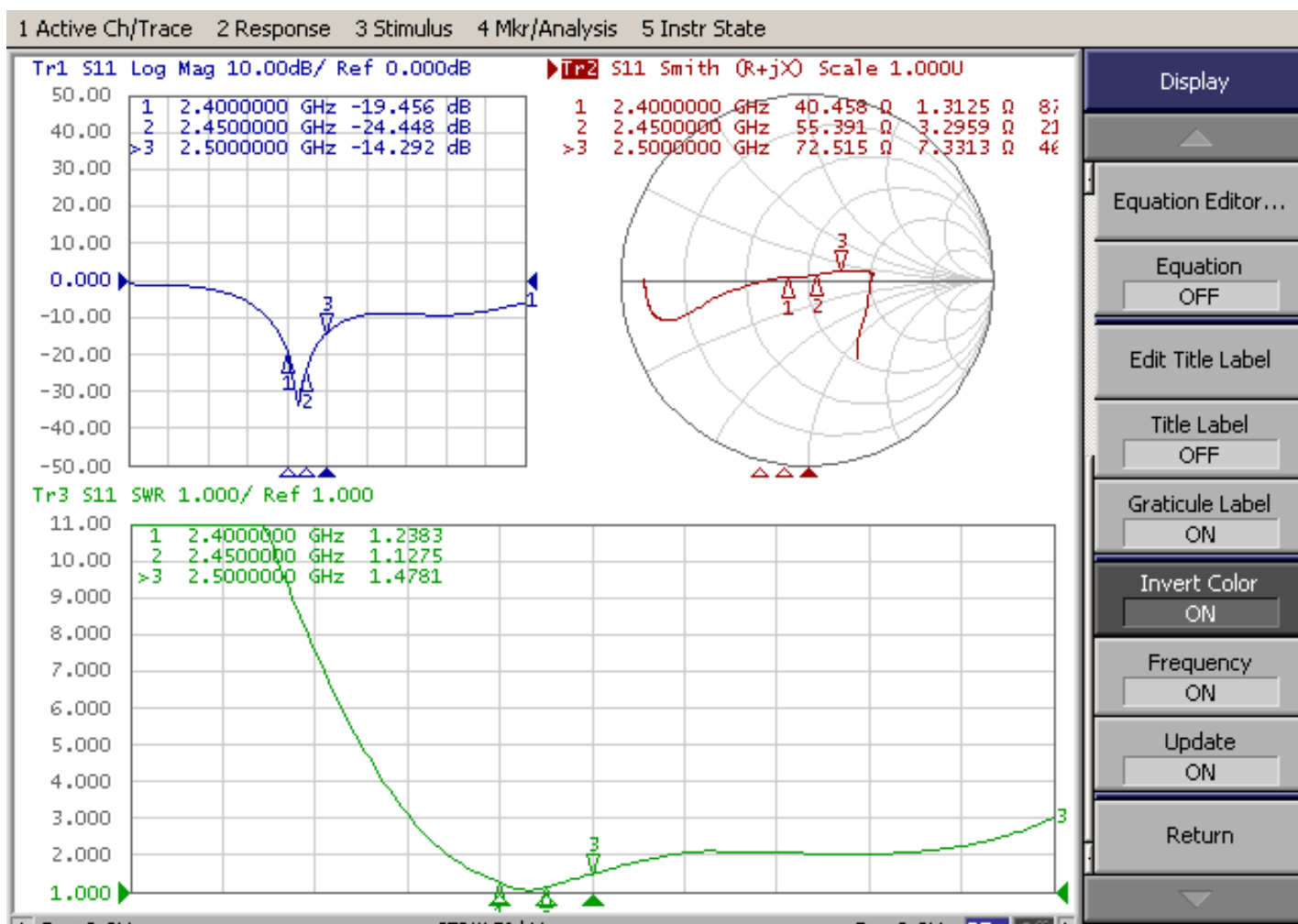
## 1. Reliability Testing

| Test Item                                | Procedure                                           | Requirement                                                              |
|------------------------------------------|-----------------------------------------------------|--------------------------------------------------------------------------|
| 1. Visual inspection and Dimension Check | Applicable methods using x5 magnification           | follow specification                                                     |
| 2. Rapid Changing of Temperature         | -40°C (30minutes) to 90°C (30minutes);<br>24 cycles | After 2 hours recovery:<br>1. no visible damage<br>2. Freq. Tol.: < ±5%  |
| 3. Damp Heat                             | 24 hours at 60°C;<br>90 ~ 95% RH                    | After 2 hours recovery:<br>1. no visible damage<br>2. Freq. Tol. : < ±5% |
| 4. Endurance                             | 24 hours at 90°C                                    | After 2 hours recovery:<br>1. no visible damage<br>2. Freq Tol.: < ±5%   |

## 2. Specification

| A. Electrical Characteristics |                       |
|-------------------------------|-----------------------|
| S.W.R.                        | 2400-2500 MHz: <= 1.6 |
| Antenna Gain                  | 4.57dBi               |
| Impedance                     | 50 Ohm                |
| B. Material                   |                       |
| Material of Radiator          | Cu (Plated)           |
| Connector Type                | <b>IPEX</b>           |
| C. Environmental              |                       |
| Operation Temperature         | - 30 °C ~ + 85 °C     |
| Storage Temperature           | - 30 °C ~ + 85 °C     |

### 3、S Parameter Test data



### 4、Antenna Radiation Pattern

Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m

Quiet Zone: 600mm @1 GHz

Isolation: >100dB @ 1 MHz ~ 10 GHz

Testing Equipment: Agilent 5071B

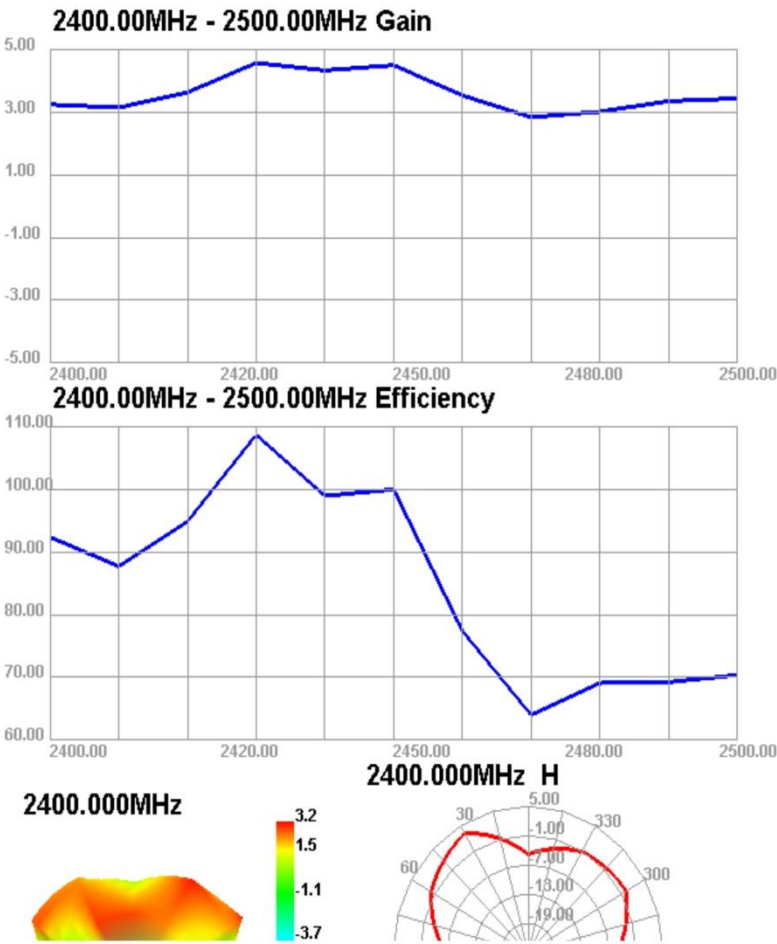
Received Antenna: 0.6 ~ 6.0 GHz for Gain Calibration

Double Ridged Horn Antenna

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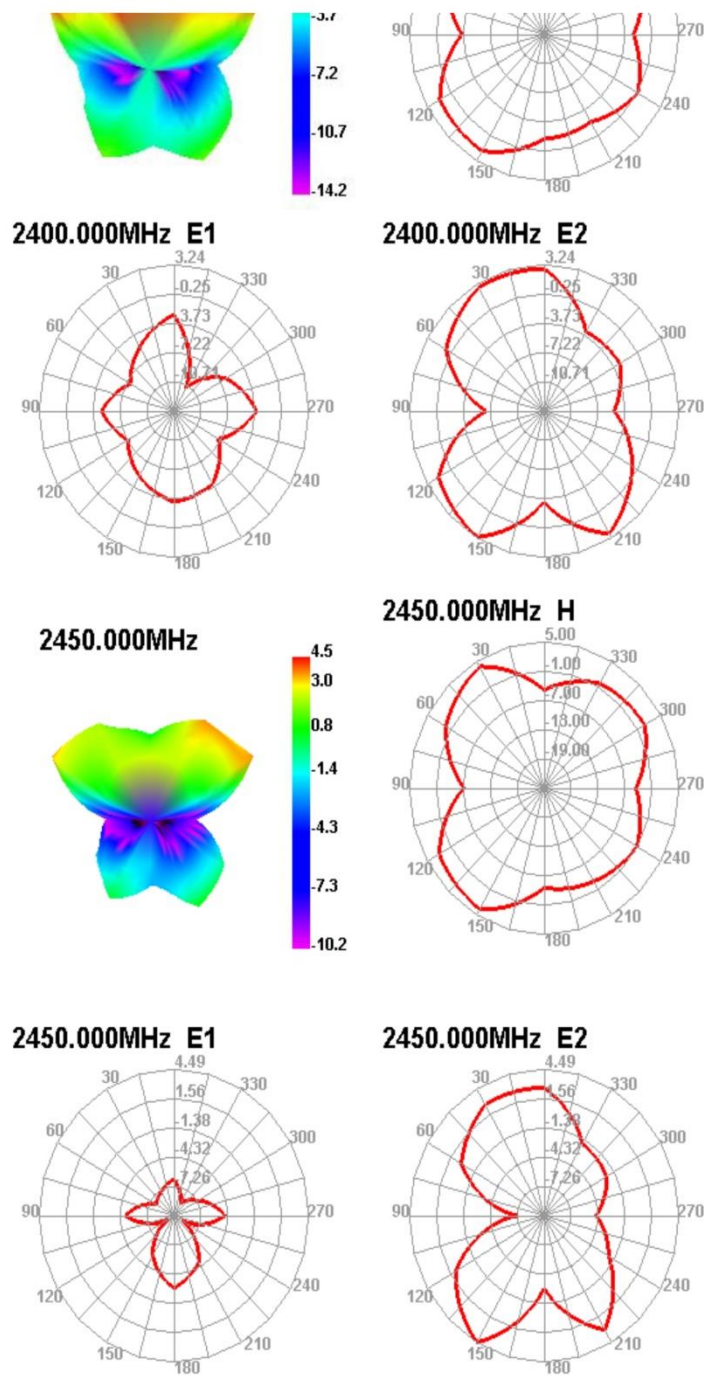
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| Passive Test For WIFI1 |          |           |            |            |         |          |          |          |
|------------------------|----------|-----------|------------|------------|---------|----------|----------|----------|
| Freq (MHz)             | Effi (%) | Effi (dB) | Gain (dBi) | Gain (dBd) | UHS (%) | DHIS (%) | Max (dB) | Min (dB) |
| 2400                   | 92.37    | -0.34     | 3.24       | 1.09       | 43.69   | 48.683   | 3.24     | -14.19   |
| 2410                   | 87.71    | -0.57     | 3.14       | 0.99       | 41.592  | 46.123   | 3.14     | -14.42   |
| 2420                   | 94.86    | -0.23     | 3.63       | 1.48       | 45.175  | 49.682   | 3.63     | -12.72   |
| 2430                   | 98.98    | 0.36      | 4.57       | 2.42       | 51.878  | 56.8     | 4.57     | -11.45   |
| 2440                   | 98.93    | -0.05     | 4.33       | 2.18       | 47.504  | 51.426   | 4.33     | -10.85   |
| 2450                   | 99.97    | 0         | 4.49       | 2.34       | 48.101  | 51.873   | 4.49     | -10.19   |
| 2460                   | 77.4     | -1.11     | 3.53       | 1.38       | 37.145  | 40.255   | 3.53     | -11.75   |
| 2470                   | 64.01    | -1.94     | 2.84       | 0.69       | 30.451  | 33.56    | 2.84     | -13.21   |
| 2480                   | 69.1     | -1.61     | 3.01       | 0.86       | 32.7    | 36.403   | 3.01     | -13.14   |
| 2490                   | 69.26    | -1.6      | 3.35       | 1.2        | 32.517  | 36.744   | 3.35     | -13.78   |
| 2500                   | 70.37    | -1.53     | 3.43       | 1.28       | 32.84   | 37.531   | 3.43     | -14.81   |



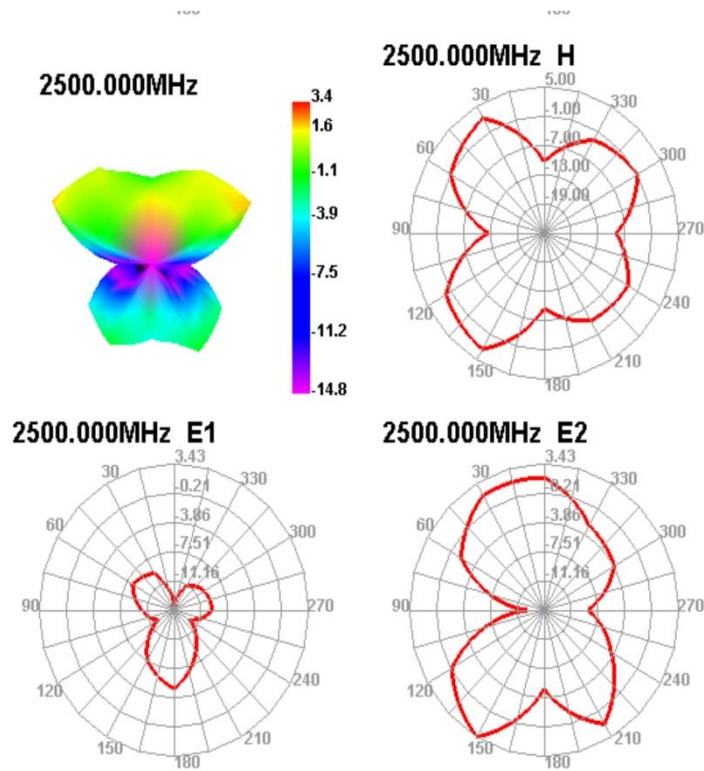
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| Attenut<br>Hor | Attenut.<br>Ver |
|----------------|-----------------|
| 51.59          | 51.29           |
| 50.23          | 49.94           |
| 50.68          | 50.46           |
| 50.88          | 50.56           |
| 50.24          | 49.98           |
| 50.38          | 50.16           |
| 49.33          | 49.05           |
| 49.47          | 49.17           |
| 50.28          | 50.02           |
| 50.1           | 49.74           |
| 49.02          | 48.64           |

| Application Information |              |
|-------------------------|--------------|
| 04Version               | 4.68.283     |
| TotalTime               | 5m 56s 110ms |
| AdditionalInfor         | NULL         |

5、anical DrawingSee attached files

**Product Name: 24GAntenna**

A thin, curved metal rod, likely a catheter or probe, lying horizontally. It features a black sleeve covering a portion of its length and a small, gold-colored fitting or connector at one end. The rod is positioned against a plain, light-colored background.