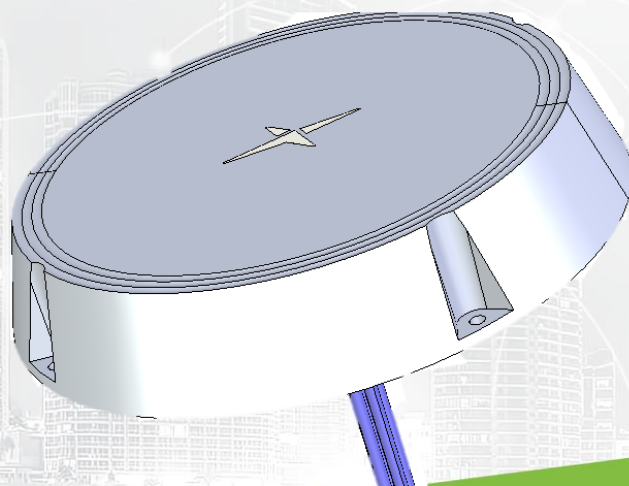




# TAOGLAS®



# Datasheet

## Asteor

**Part No:**  
CMA100.A.BIVW.002

### Description

C-Band 5G 4\*MIMO Ceiling Mount Antenna with 300mm TGC-302 SMA Female with antenna detection function

### Features:

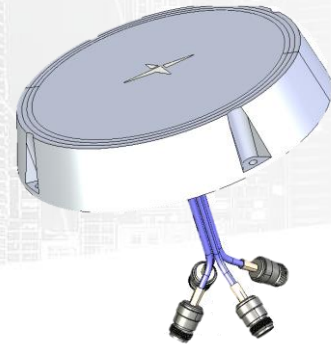
- 4x4 C-Band/CBRS Ceiling/Wall Mount Antenna
- Omnidirectional Radiation Patterns allow various mounting options
- 4 High performance 3.2-4.5GHz Elements
- Dimensions:  $\varnothing$ 200x35mm
- Cables: 300mm TGC-200
- Connectors: SMA Male Straight
- RoHS and REACH Compliant

|           |                                |           |
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# 1. Introduction



The Asteor CMA100 is a ceiling/wall mount antenna designed for use in-building to provide coverage on C-Band/CBRS frequencies from 3300 to 4200MHz. This discrete product can be mounted inconspicuously on office walls or ceilings for private 5G networks. The antenna is mounted either by thread or by the 4 cornered through holes.

The C-Band frequency is becoming an extremely important part of the 5G spectrum, the C-Band provides an open frequency span for people who wish to establish a private network on this band for secure networking and fast speeds. C-band technology helps reduce outages and downtime in 5G networks. It accomplishes this by improving the reliability and strength of the signal.

Typical Applications include

- Offices and Industrial Plants
- Stadiums and Theatres
- Warehouses
- First Responder Bases

The cables and connectors are fully customizable, for further information about this product please contact your regional Taoglas customer support team.

## 2. Specification

| Wi-Fi Electrical             |                 |         |                |                   |                 |           |              |                   |                  |
|------------------------------|-----------------|---------|----------------|-------------------|-----------------|-----------|--------------|-------------------|------------------|
| Band                         | Frequency (MHz) | Antenna | Efficiency (%) | Average Gain (dB) | Peak Gain (dBi) | Impedance | Polarization | Radiation Pattern | Max. input power |
| 5GNR<br>42,43,48,49,52,77,78 | 3300-4200       | Ant1    | 54.6           | -2.63             | 4.82            | 50 Ω      | Linear       | Omni              | 10W              |
|                              |                 | Ant2    | 57.3           | -2.42             | 5.07            |           |              |                   |                  |
|                              |                 | Ant3    | 51.1           | -2.91             | 4.55            |           |              |                   |                  |
|                              |                 | Ant4    | 54.6           | -2.63             | 5.19            |           |              |                   |                  |

| Mechanical |               |
|------------|---------------|
| Dimensions | ∅200 x 35mm   |
| Weight     | 150g          |
| Material   | White ASA     |
| Connector  | SMA Male      |
| Cable      | 300mm TGC-200 |

| Environmental         |                            |
|-----------------------|----------------------------|
| Operation Temperature | -40°C to 85°C              |
| Humidity              | Non-condensing 65°C 95% RH |

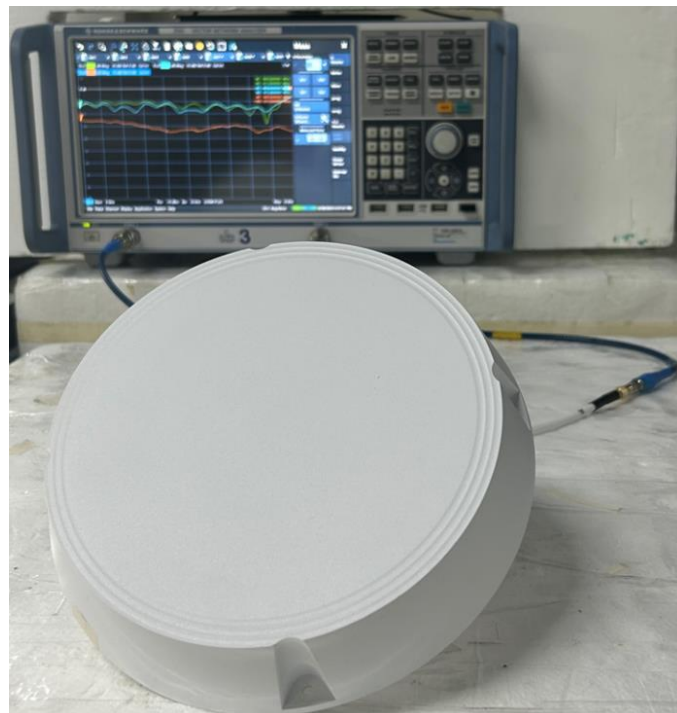
### 3. Antenna Characteristics

#### 3.1 Test Setup – S11/VSWR/Return Loss

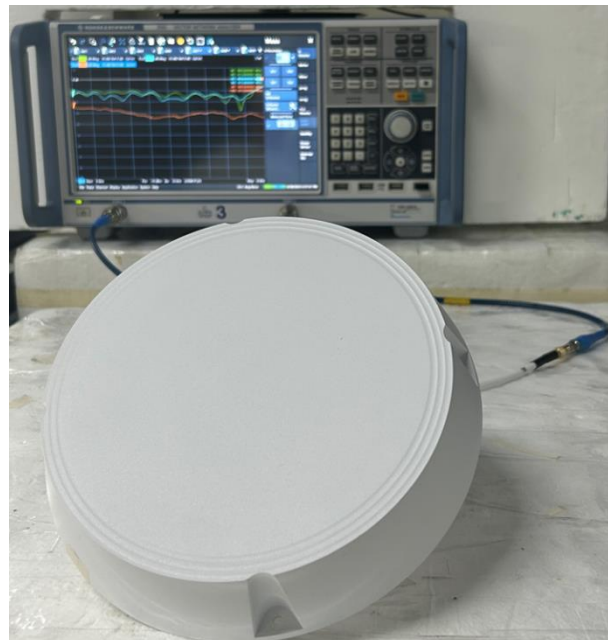
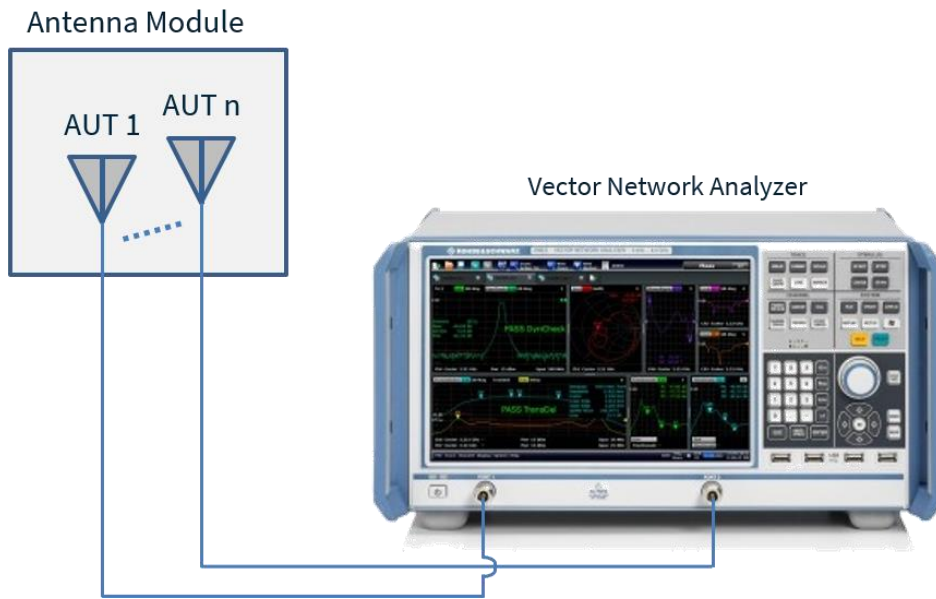
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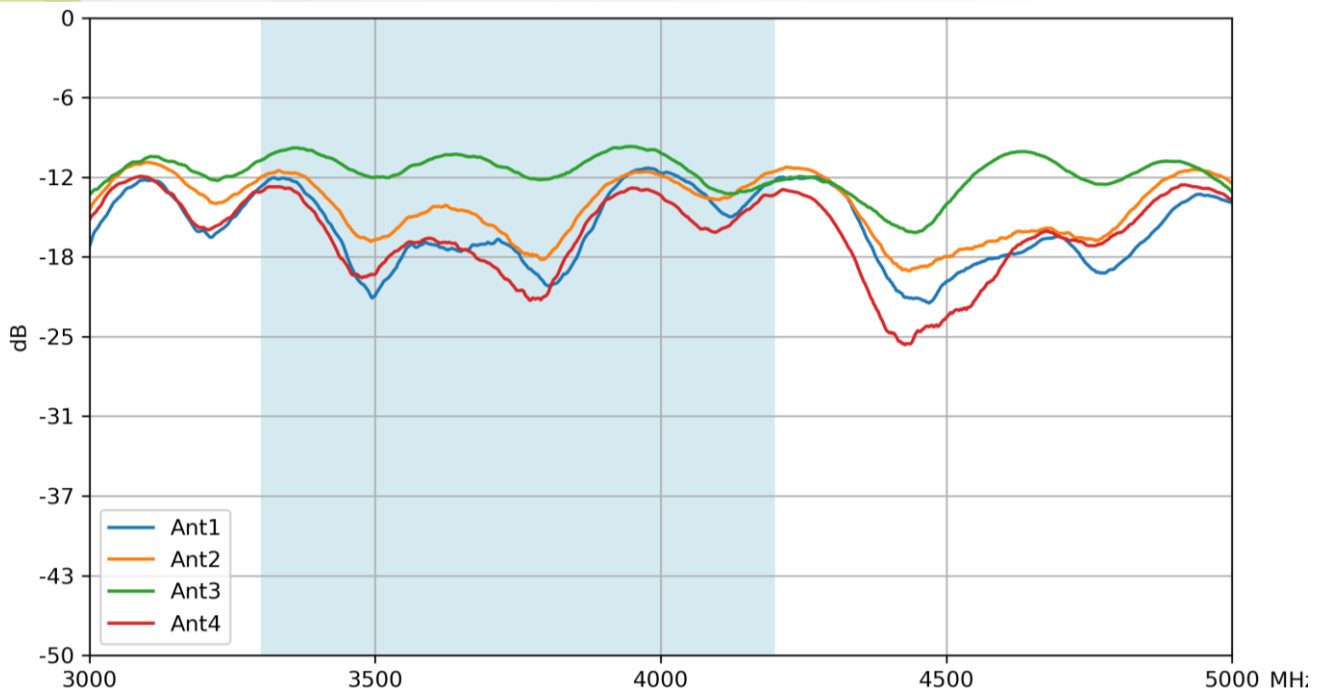
Vector Network Analyzer



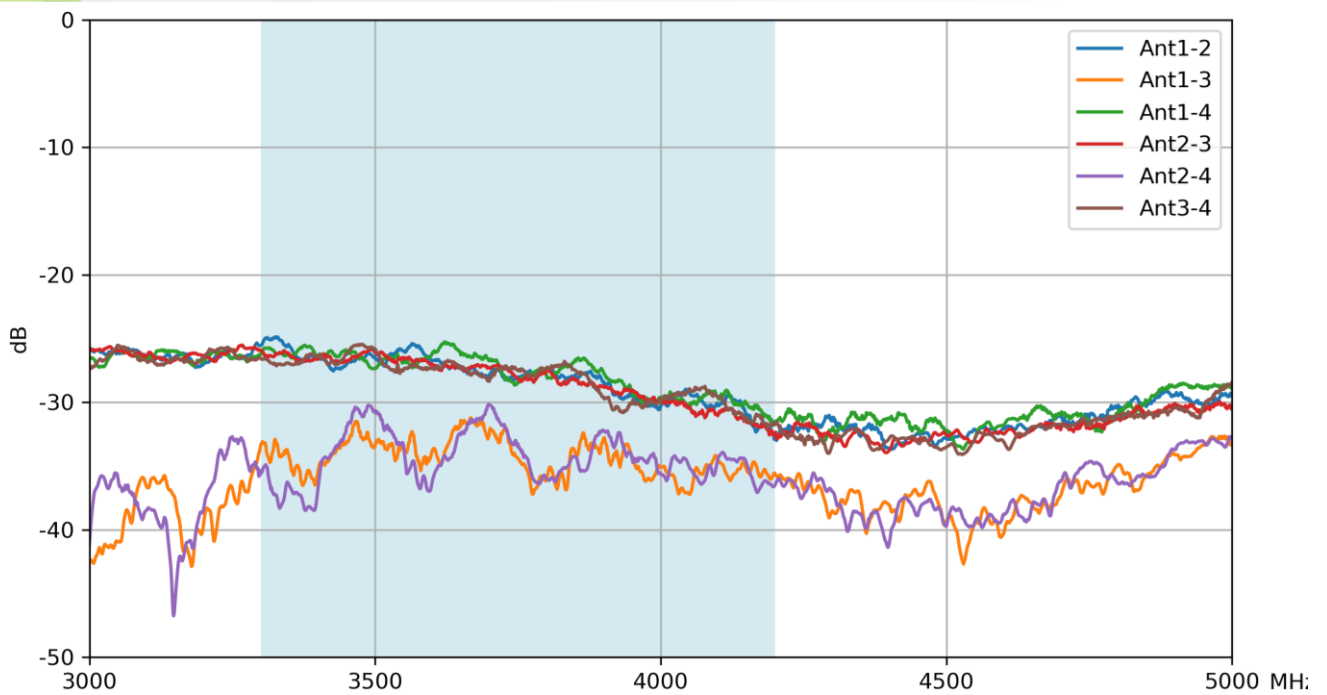
### 3.2 Test Setup – Isolation



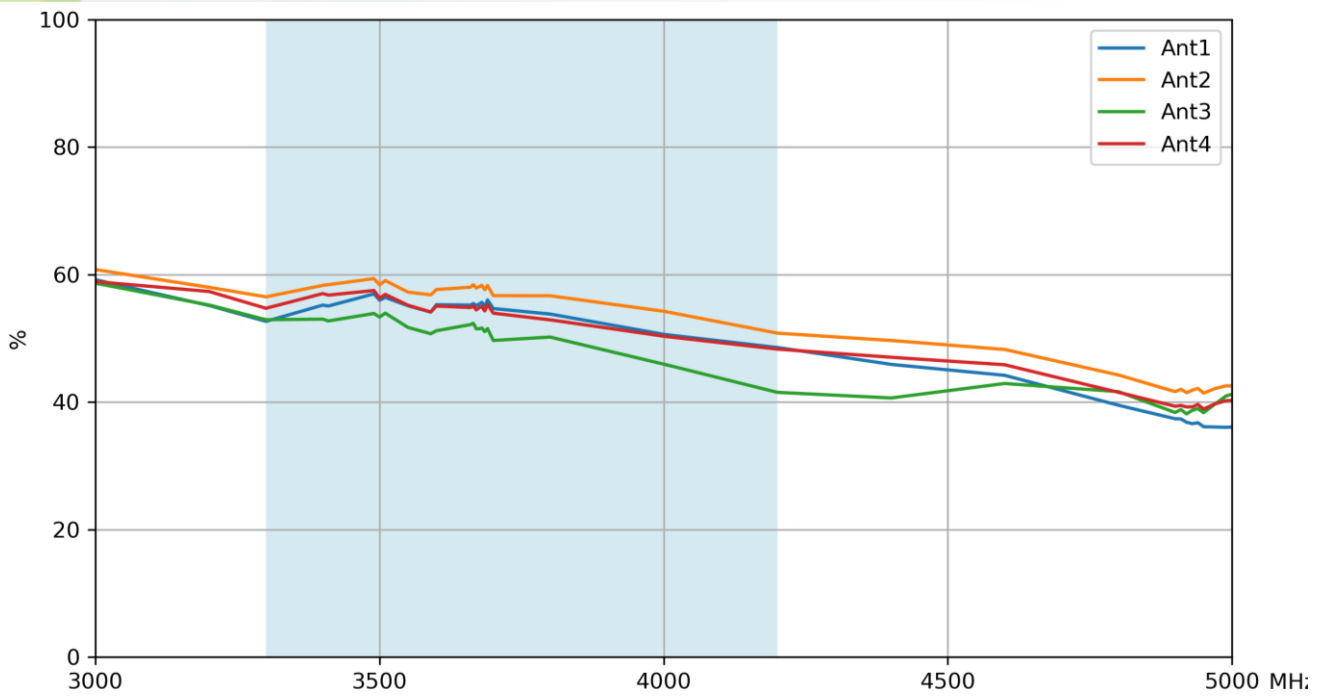
### 3.3 Return Loss



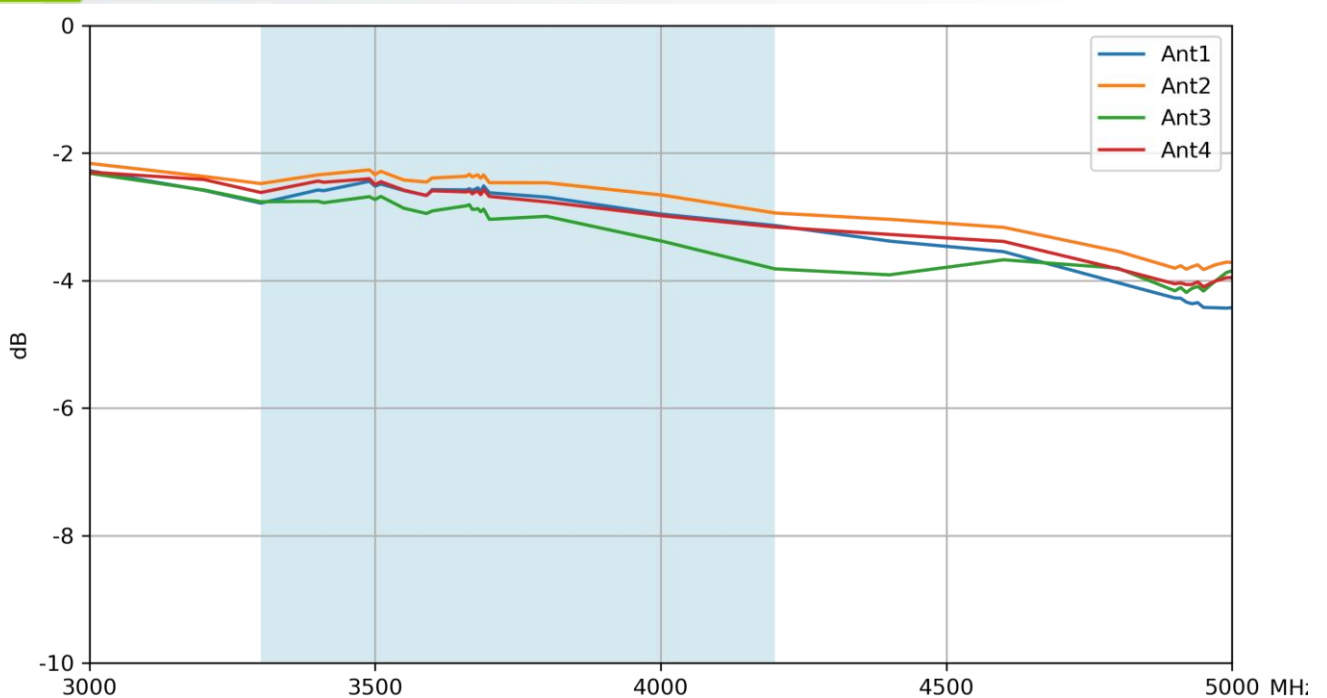
### 3.4 Isolation



### 3.5 Efficiency

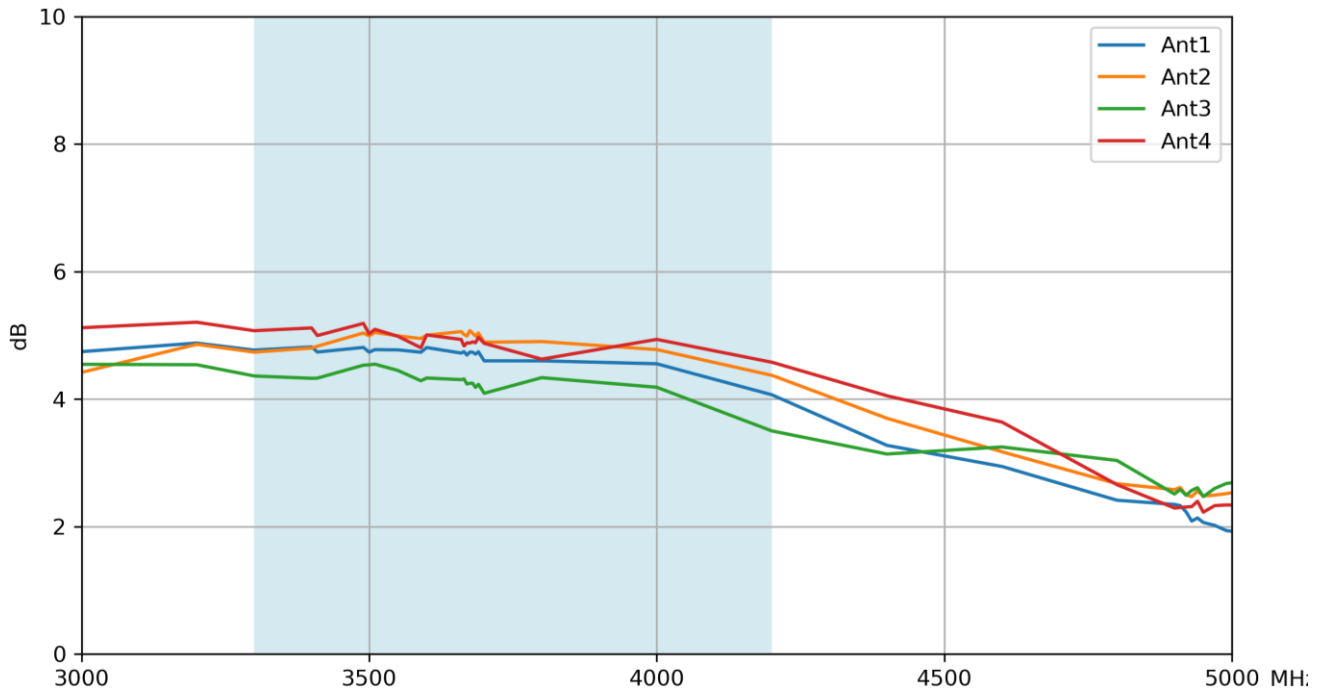


### 3.6 Average Gain



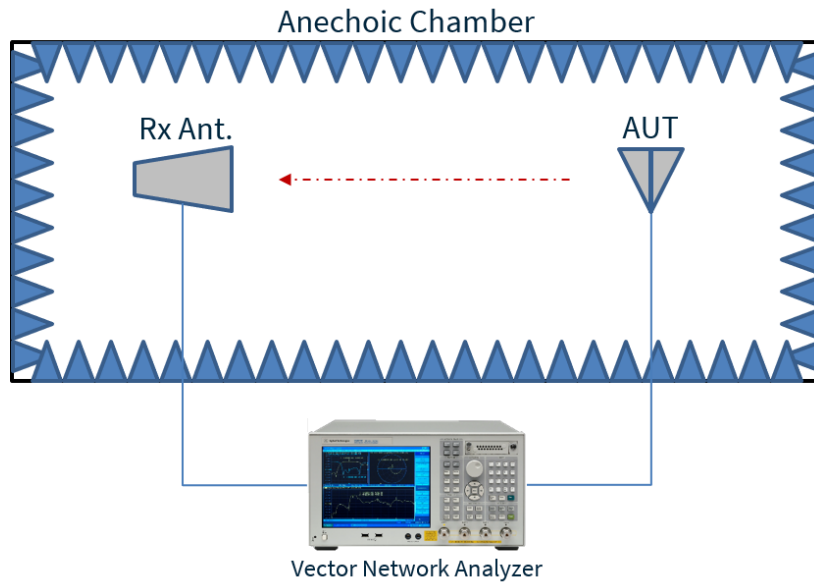


### 3.7 Peak Gain

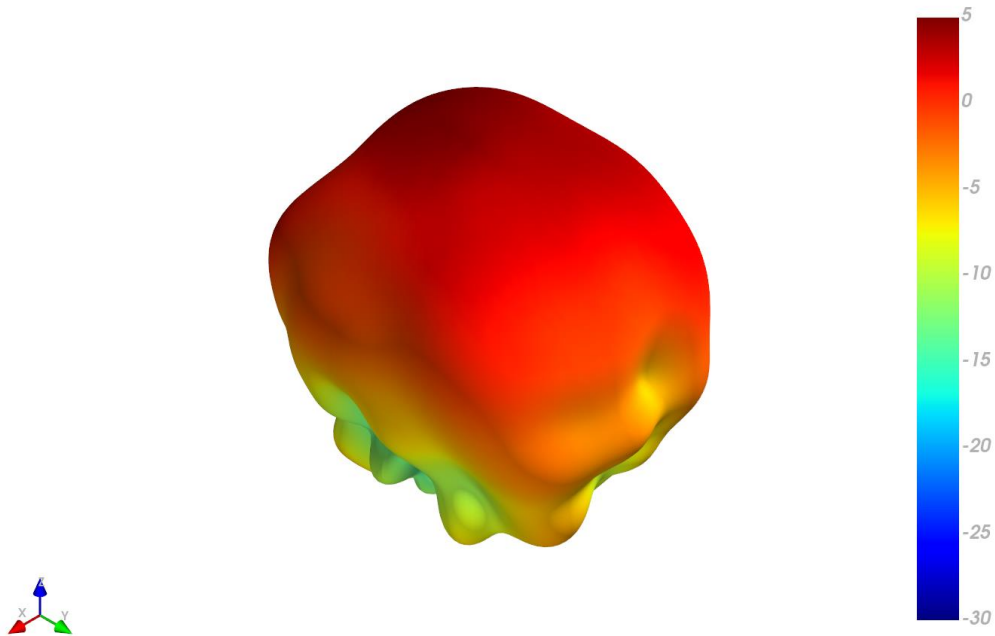


## 4. Radiation Patterns

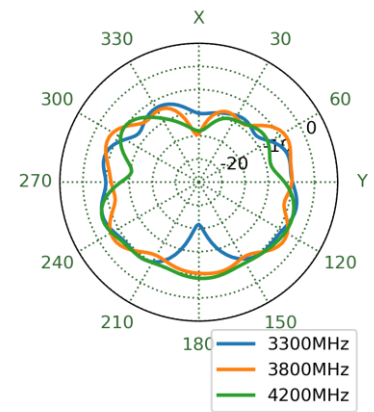
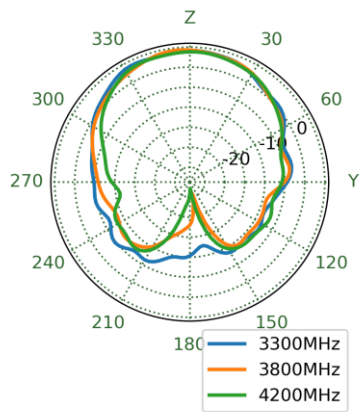
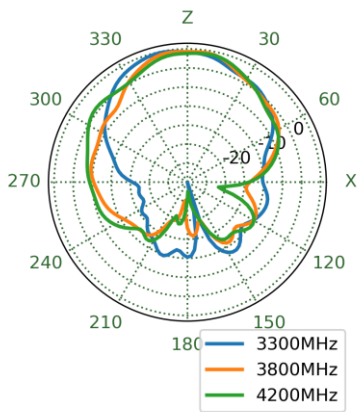
### 4.1 Test Setup



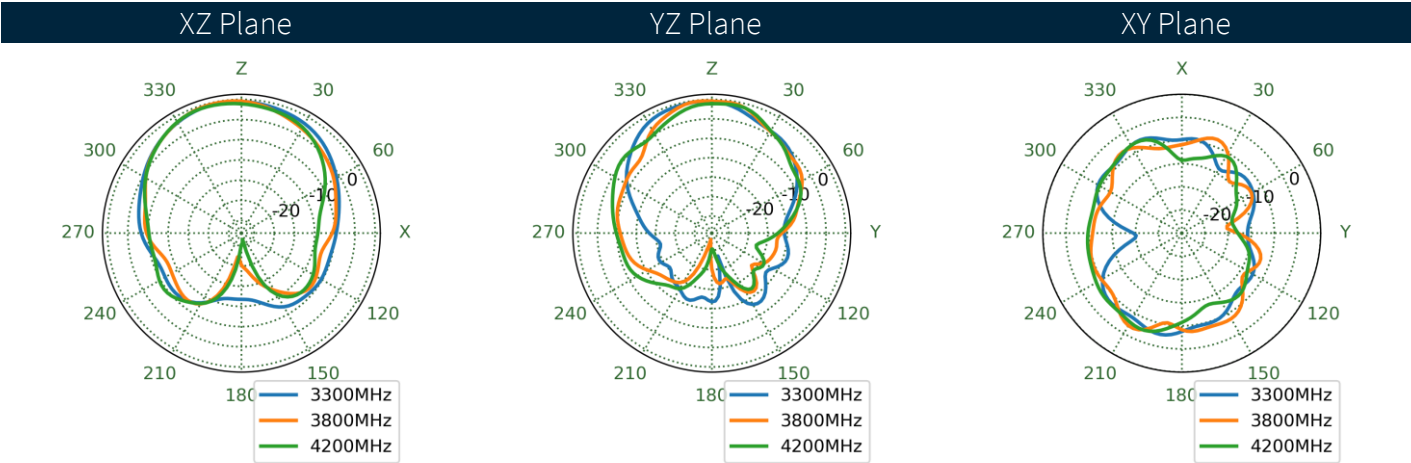
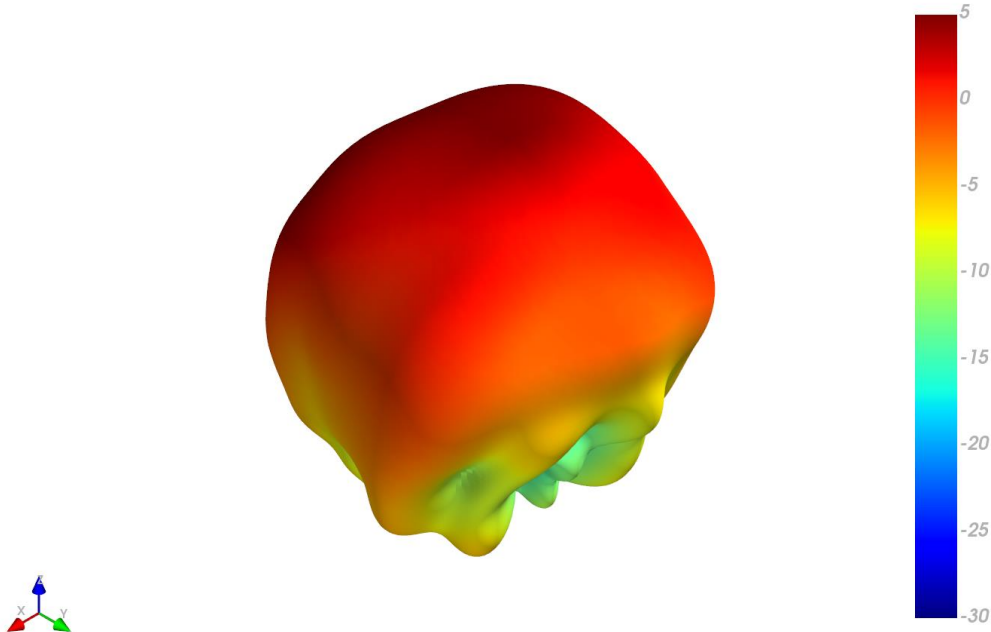
## 4.2 Antenna 1 - Patterns at 3800 MHz



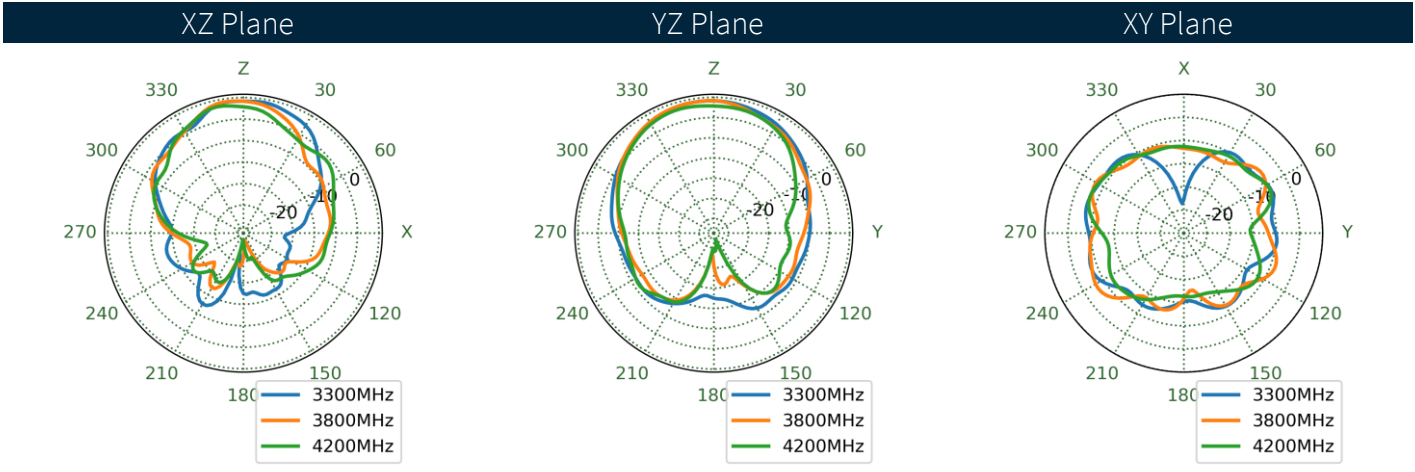
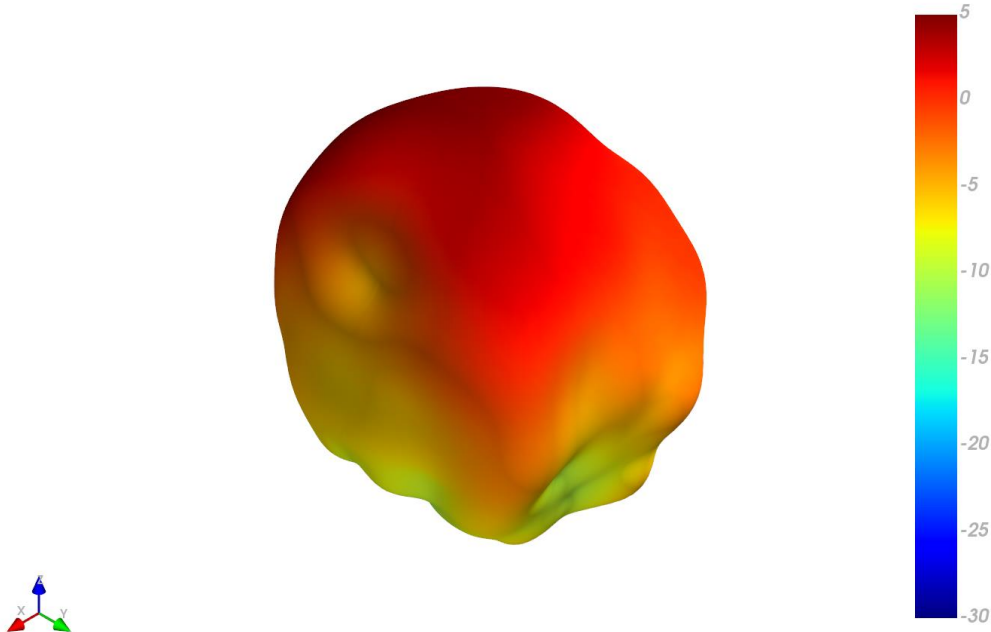
XZ Plane                      YZ Plane                      XY Plane



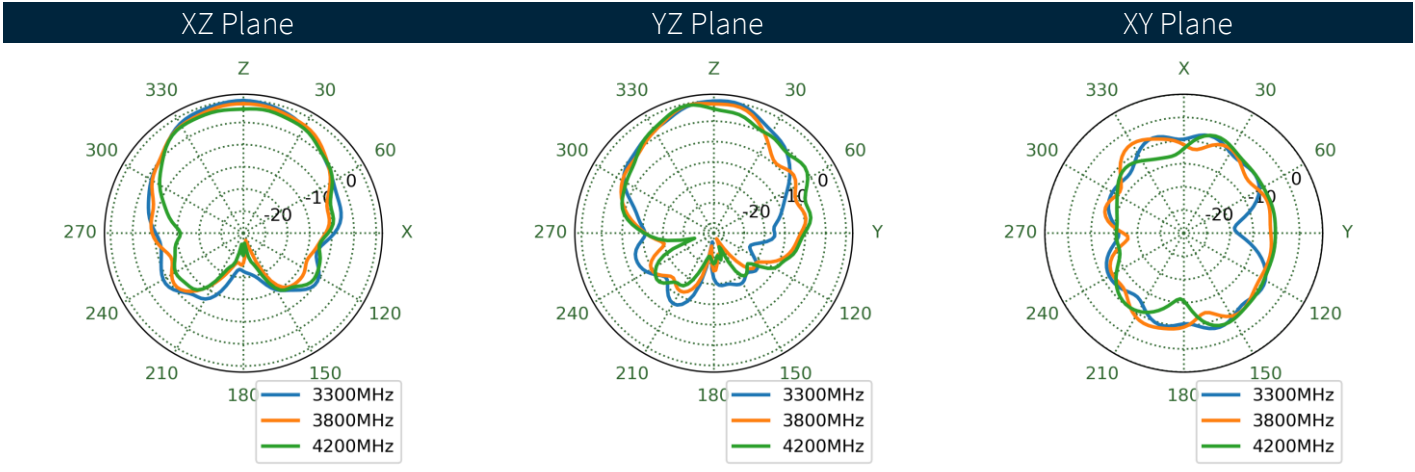
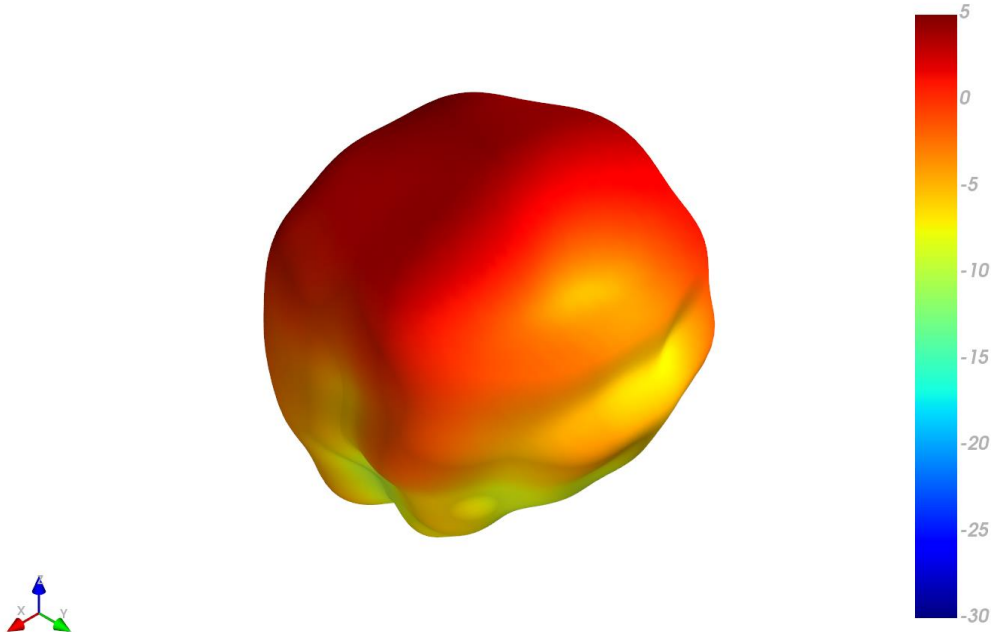
4.3 Antenna 2 - Patterns at 3800 MHz



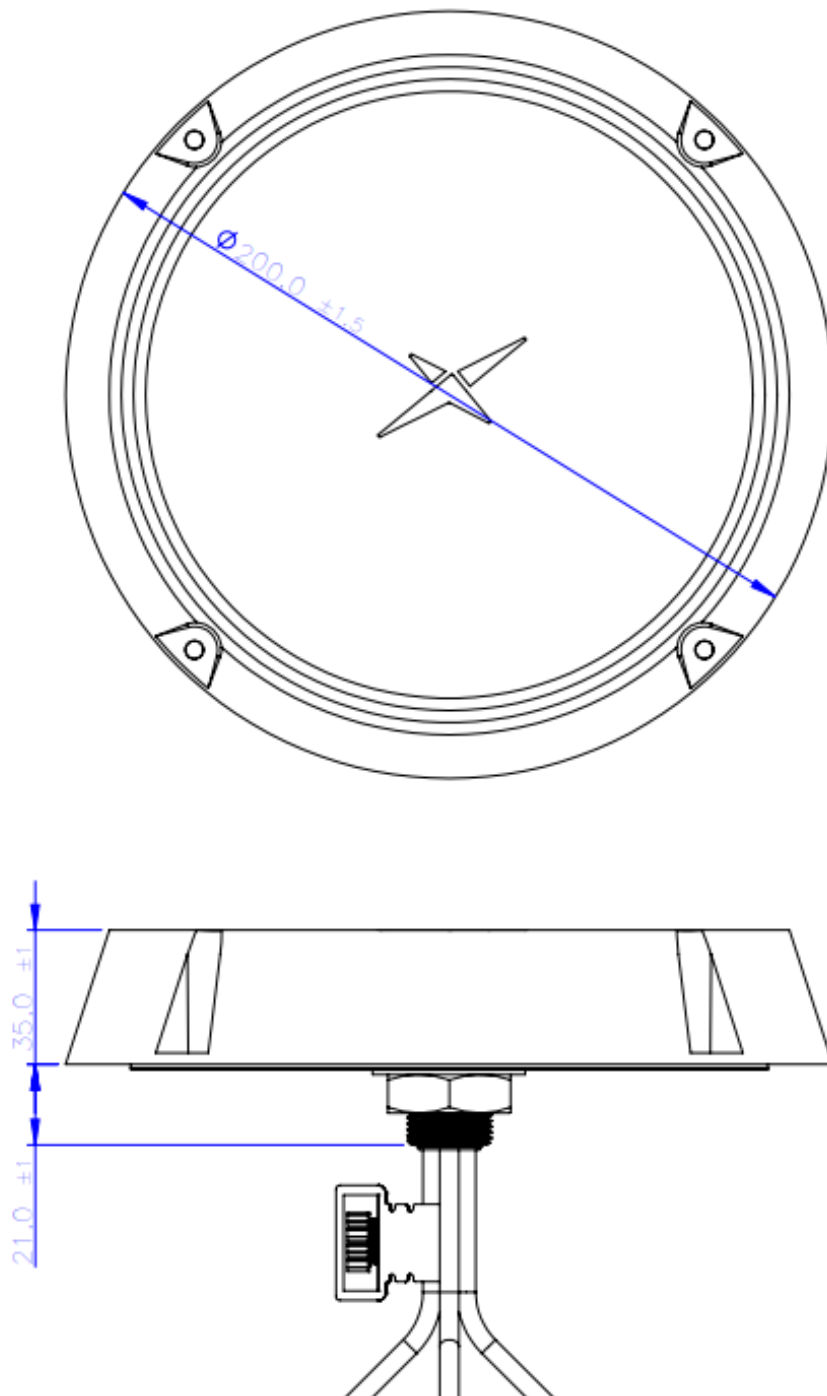
4.4 Antenna 3 - Patterns at 3800 MHz



4.5 Antenna 4 - Patterns at 3800 MHz



## 5. Mechanical Drawing



## 6. Packaging

TBD



Changelog for the datasheet

SPE-23-8-218 - CMA100.A.B1VW.002

**Revision: A (Original First Release)**

Date: 2023-07-17

Notes:

Author: Gary West

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**Previous Revisions**

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