



TAOGLAS®



Datasheet

Asteor

Part No:
CMA100.A.BIVW.002

Description

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

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: Ø200x35mm

IP67 Rated Enclosure

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 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	$\varnothing 200 \times 35\text{mm}$
Weight	250g
Material	White ASA
Connector	SMA Male
Cable	300mm TGC-200

Environmental	
Waterproof Rating	IP67
Operation Temperature	-40°C to 85°C
Humidity	Non-condensing 65°C 95% RH

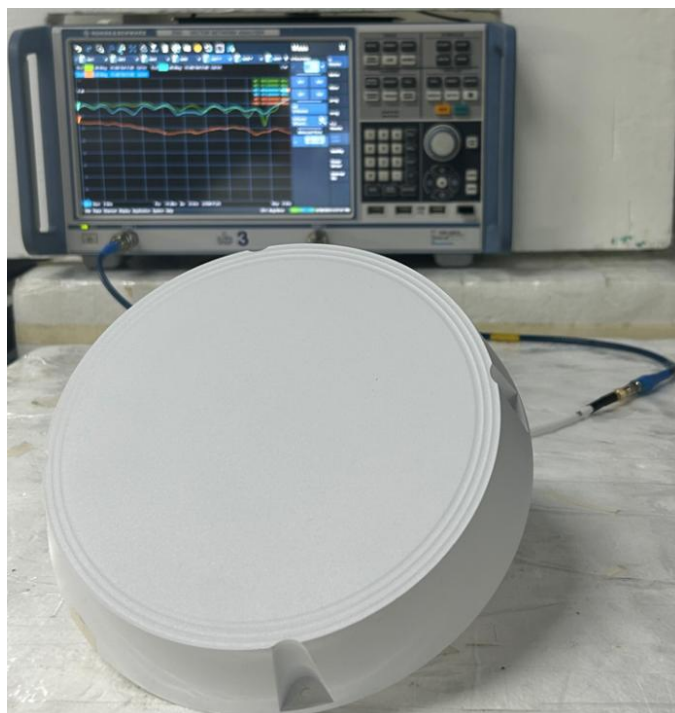
3. Antenna Characteristics

3.1 Test Setup – S11/VSWR/Return Loss

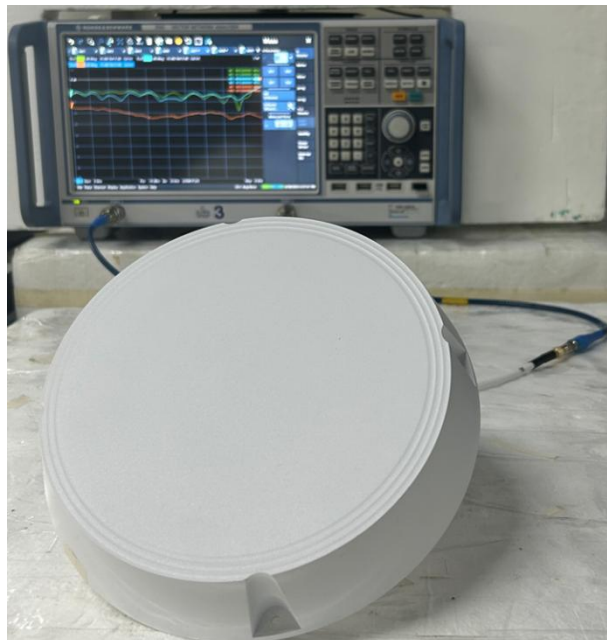
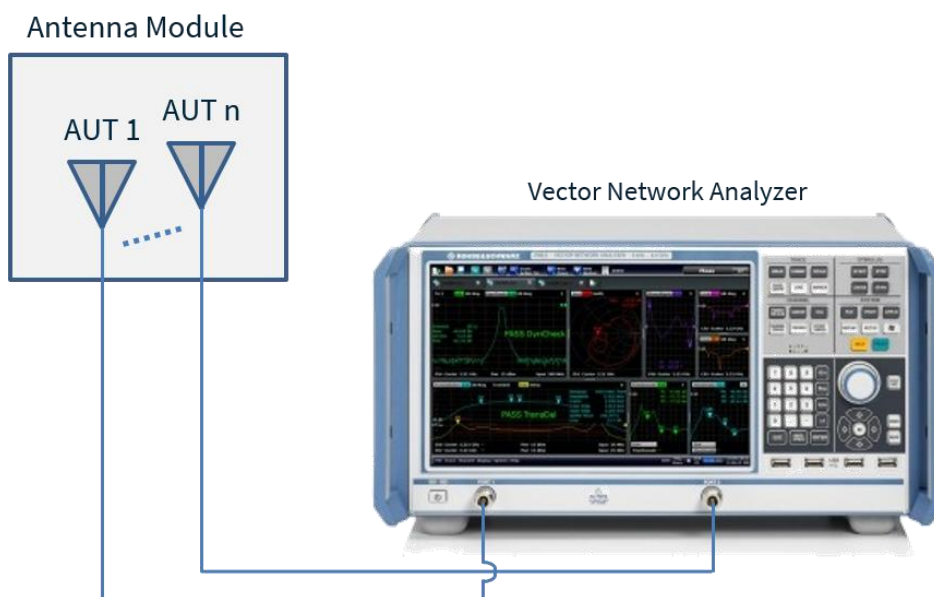
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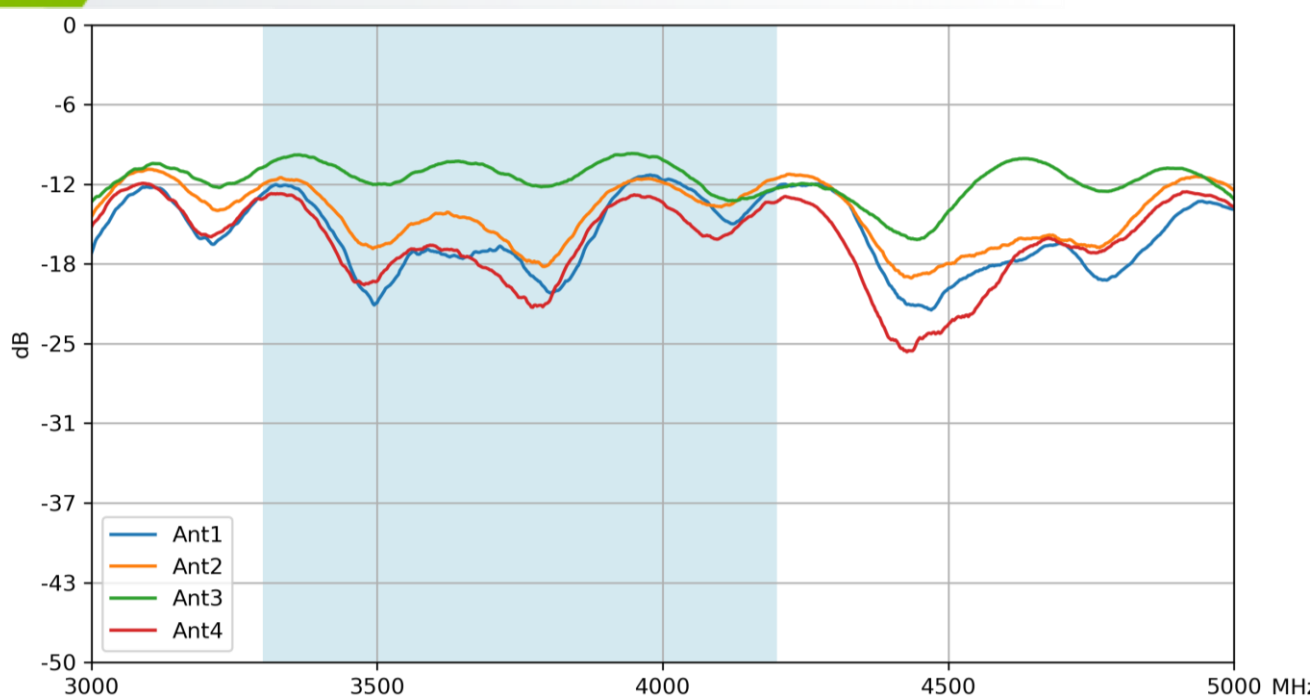
Vector Network Analyzer



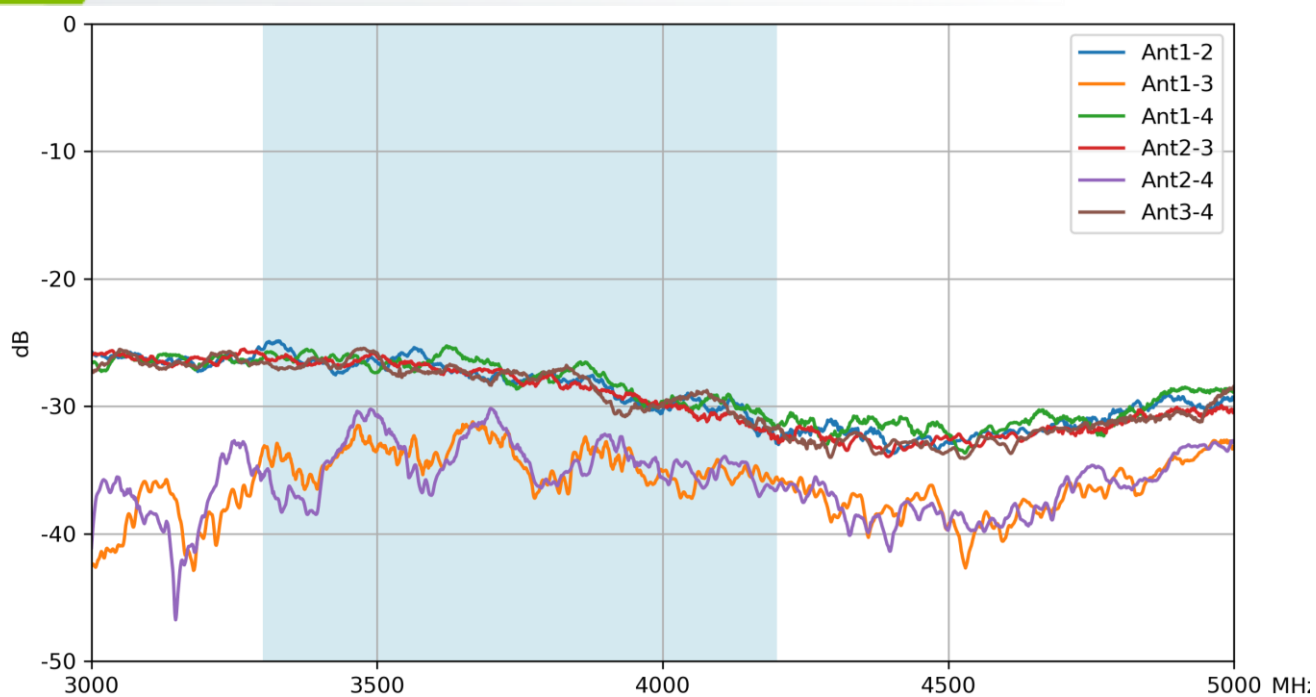
3.2 Test Setup – Isolation



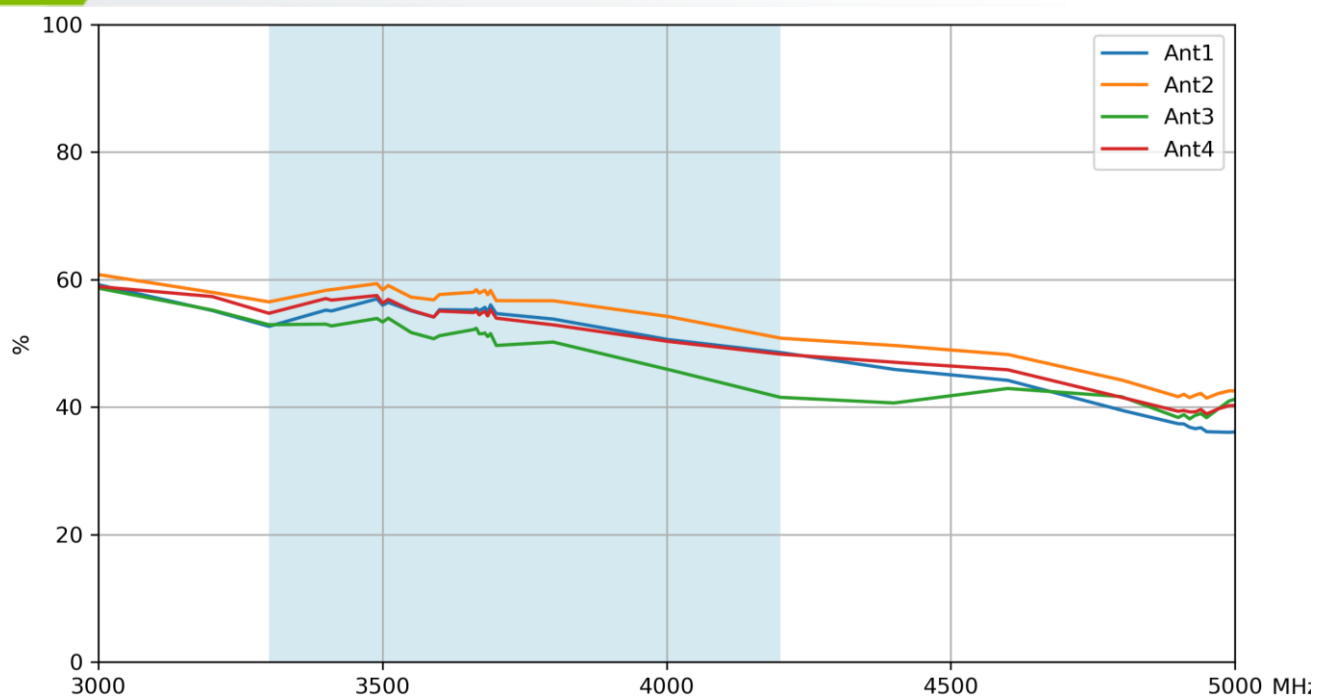
3.3 Return Loss



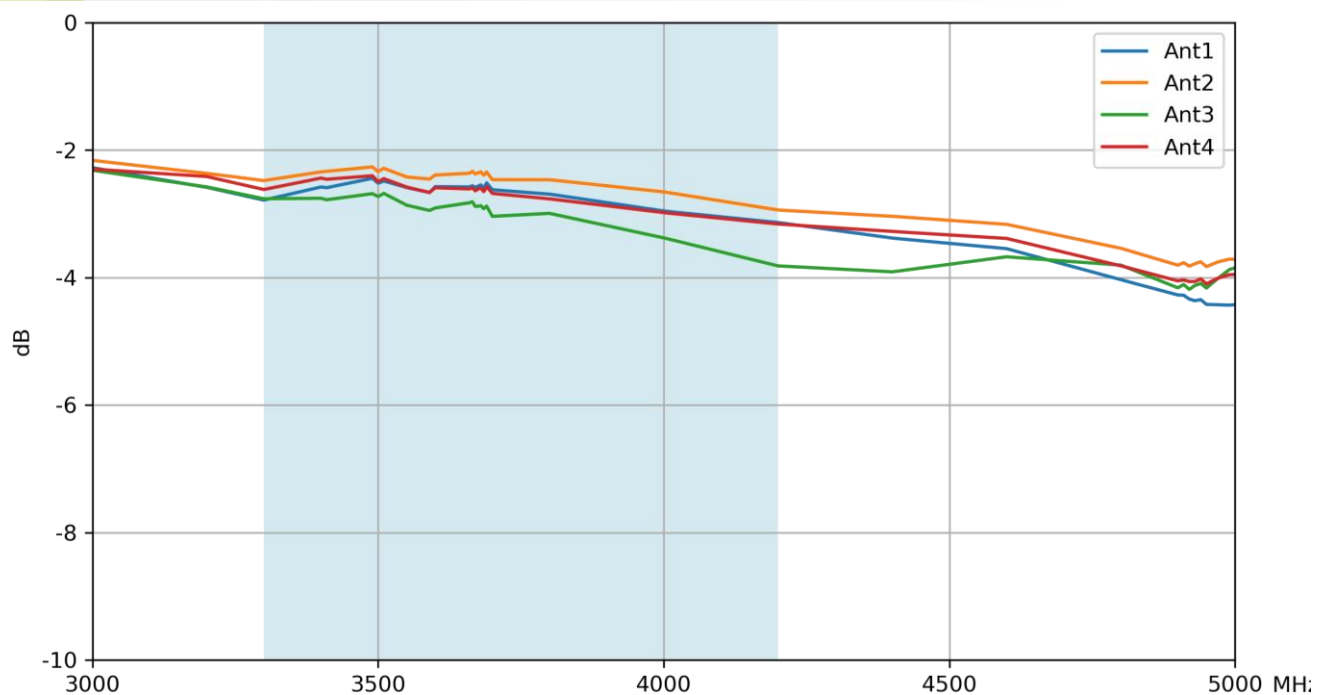
3.4 Isolation



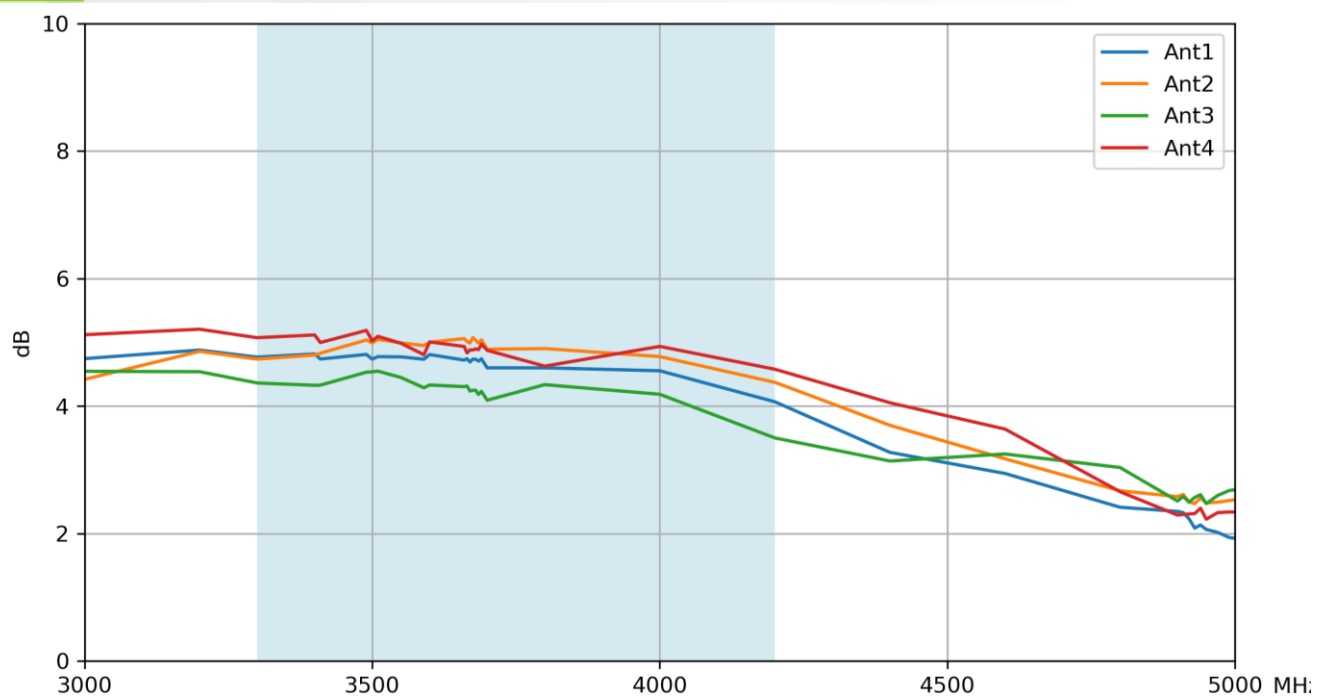
3.5 Efficiency



3.6 Average Gain

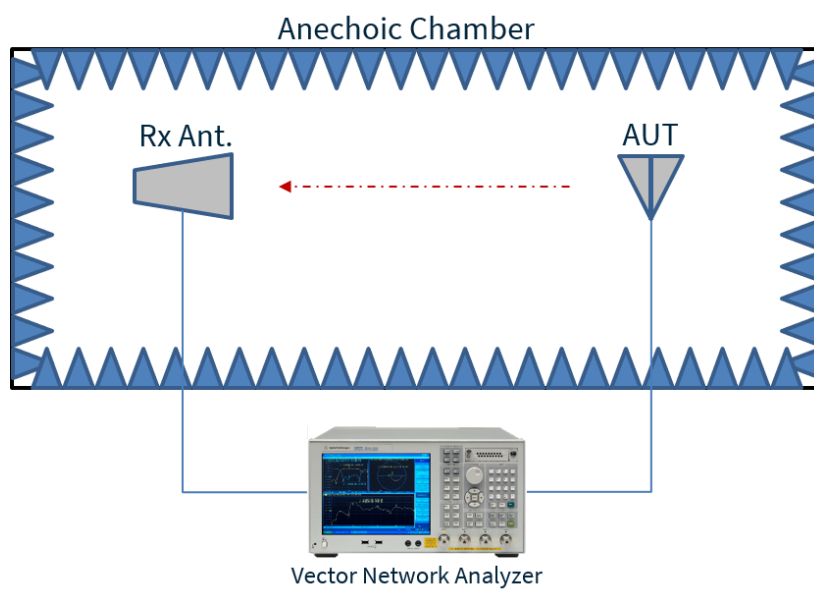


3.7 Peak Gain

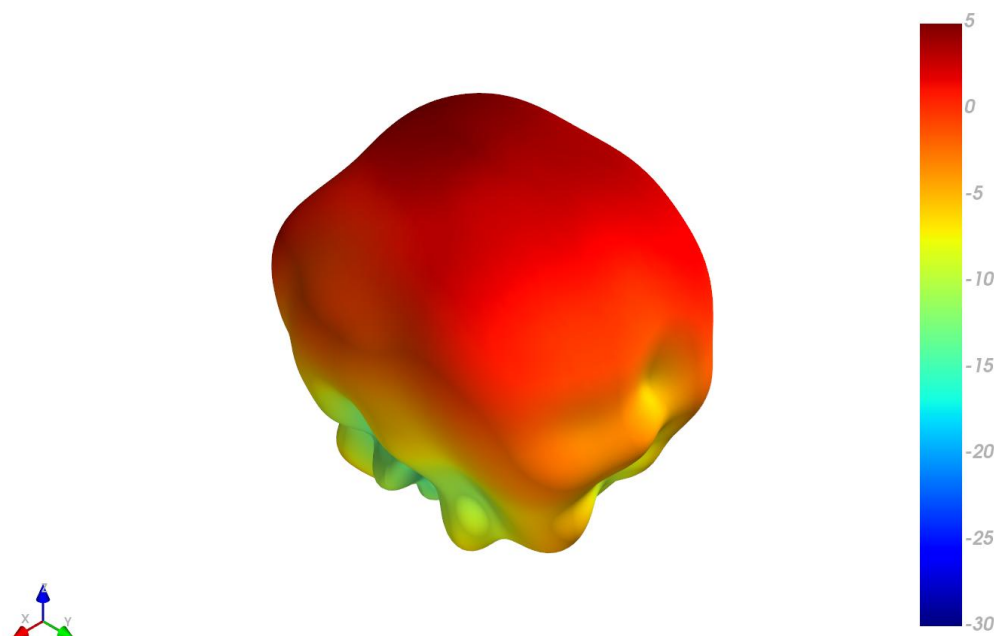


4. Radiation Patterns

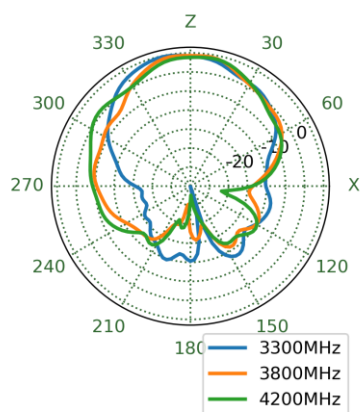
4.1 Test Setup



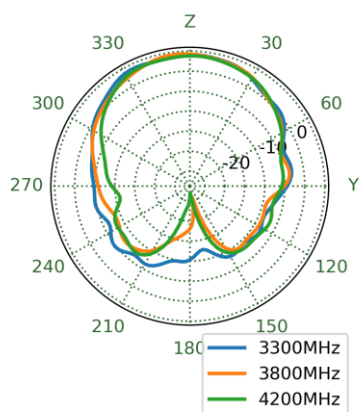
4.2 Antenna 1 - Patterns at 3800 MHz



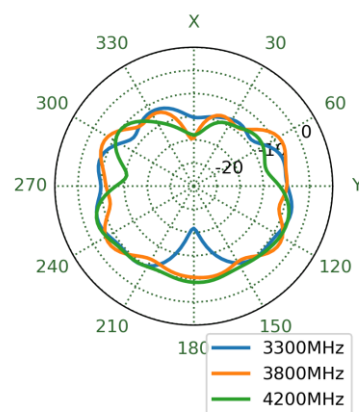
XZ Plane



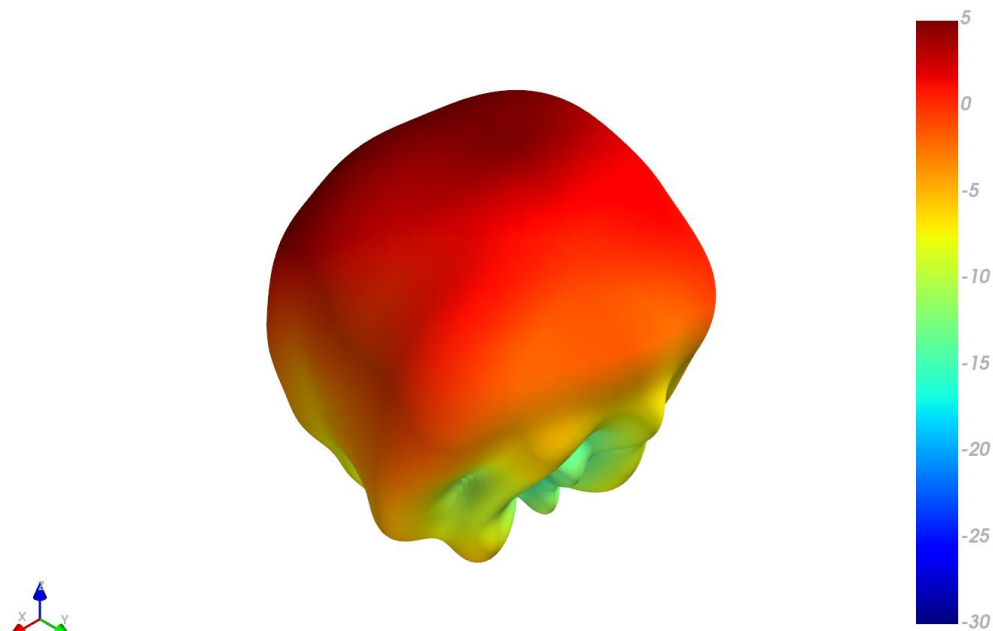
YZ Plane



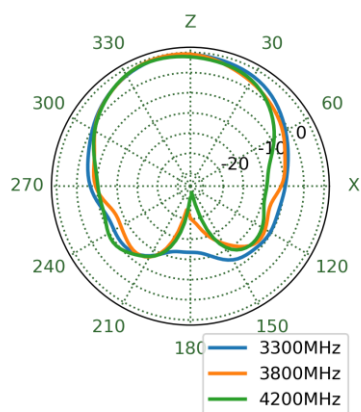
XY Plane



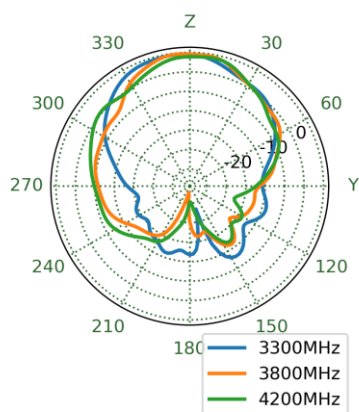
4.3 Antenna 2 - Patterns at 3800 MHz



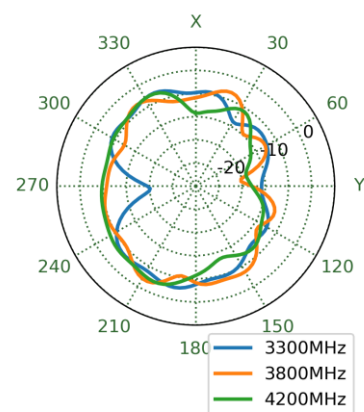
XZ Plane



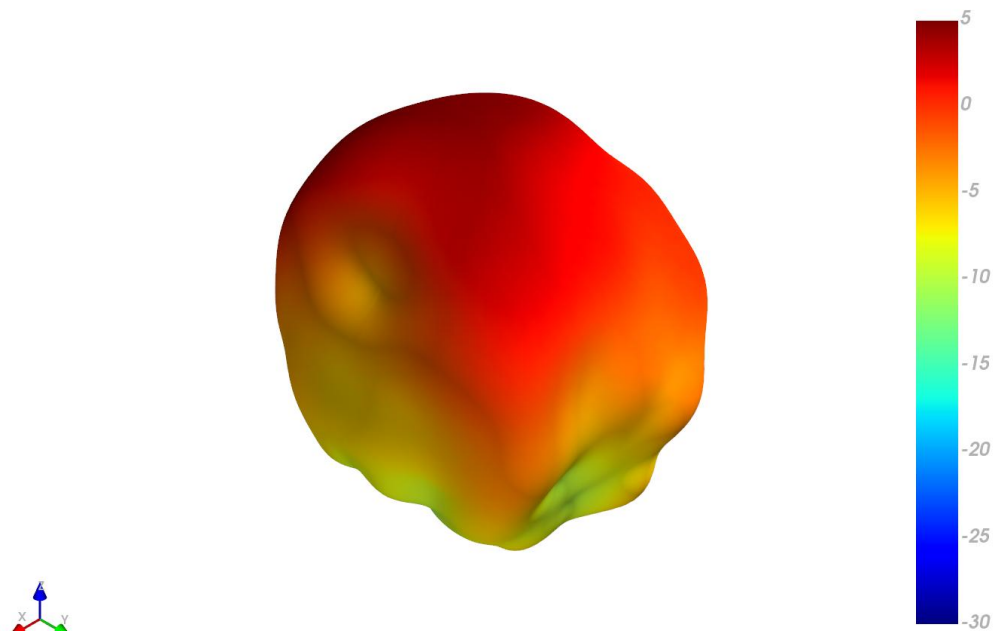
YZ Plane



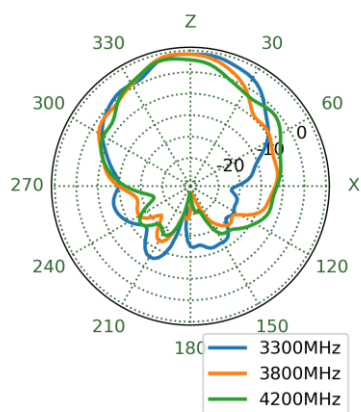
XY Plane



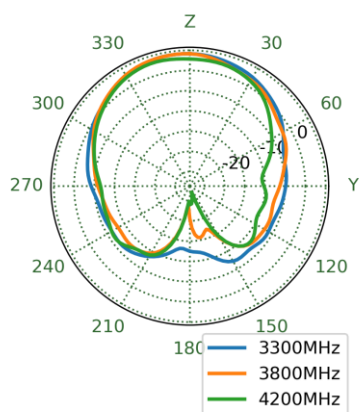
4.4 Antenna 3 - Patterns at 3800 MHz



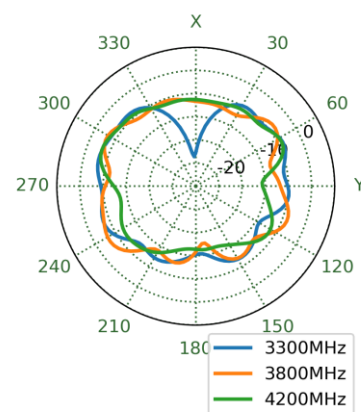
XZ Plane



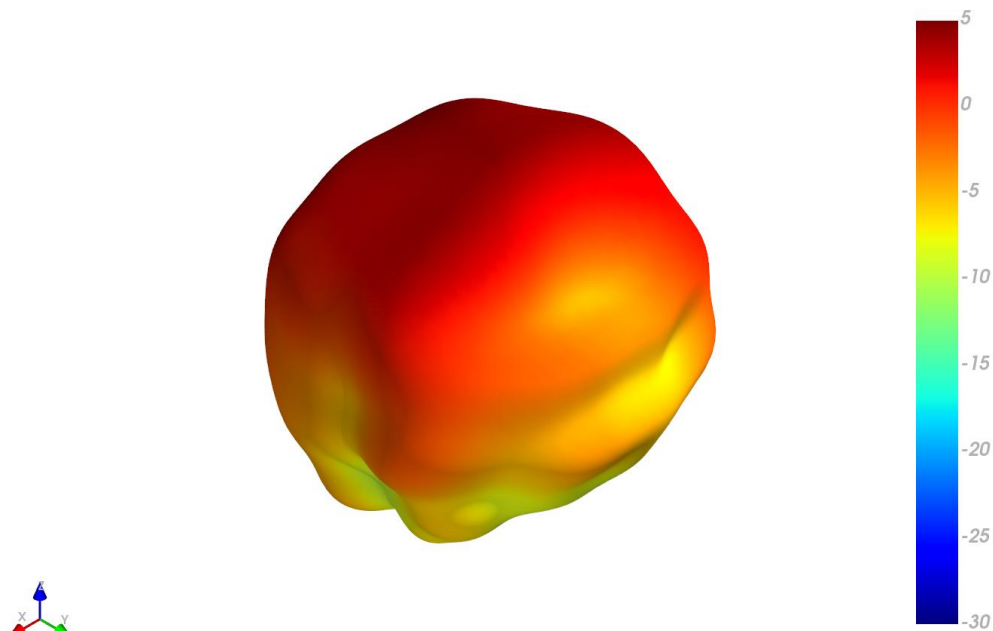
YZ Plane



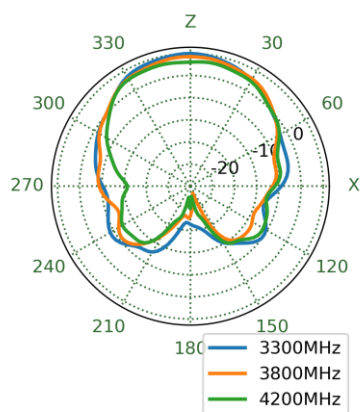
XY Plane



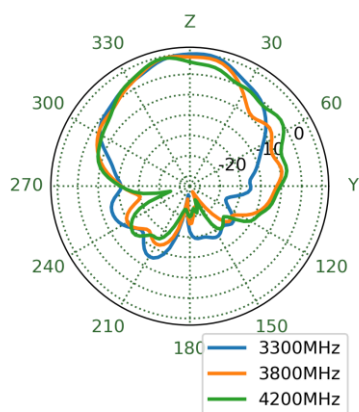
4.5 Antenna 4 - Patterns at 3800 MHz



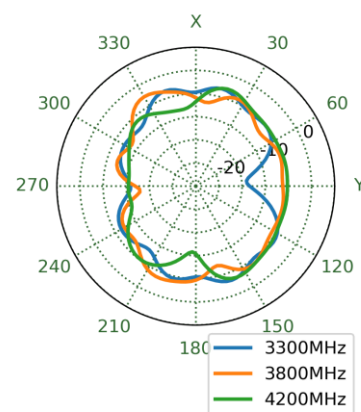
XZ Plane



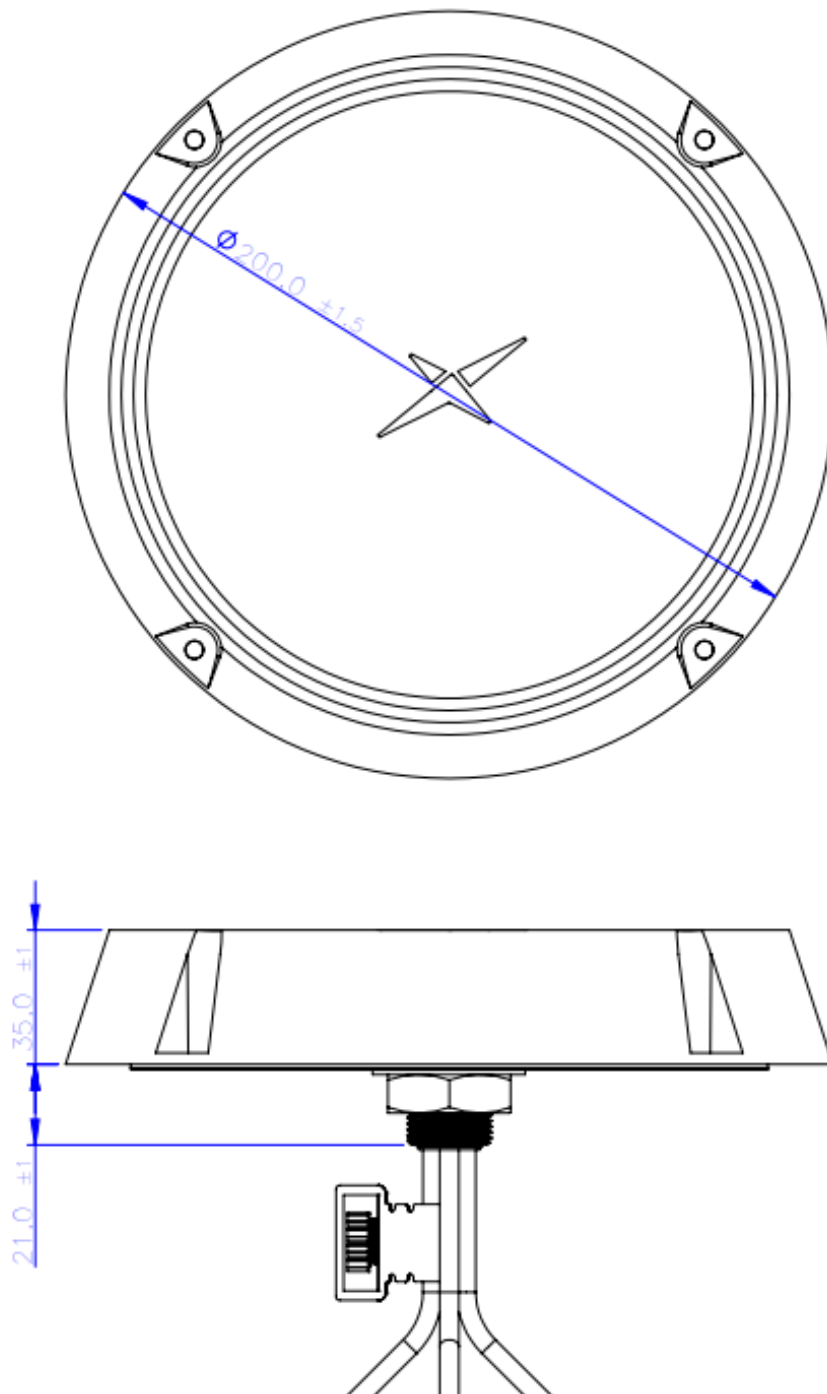
YZ Plane



XY Plane

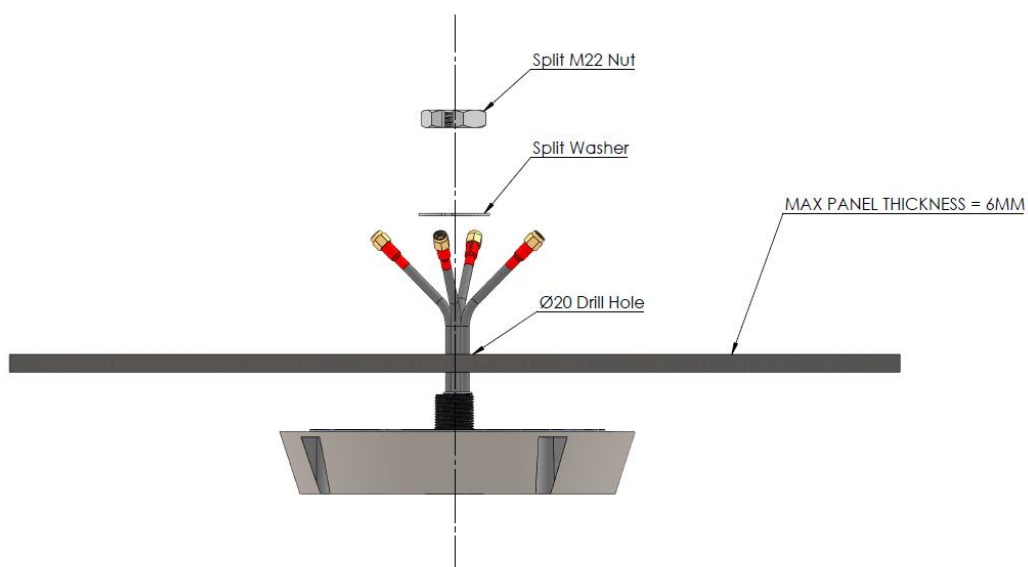


5. Mechanical Drawing

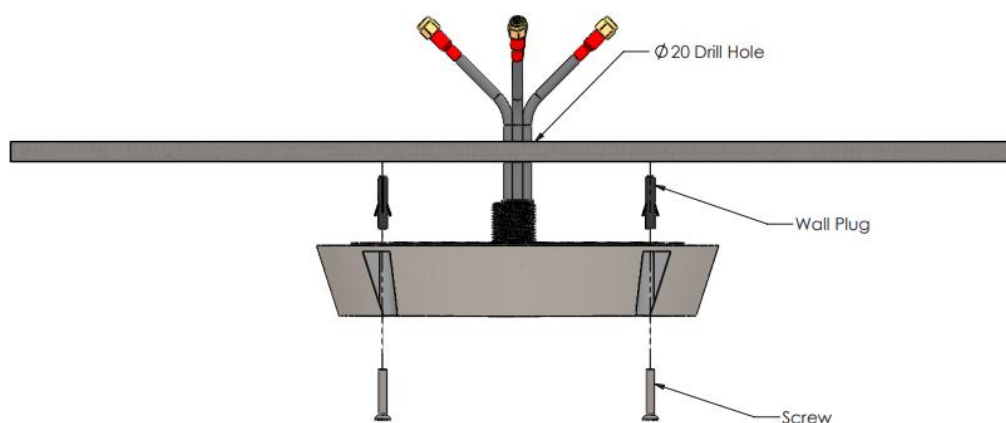


6. Installation Recommendation

6.1 Thread Mounting



6.2 Screw Mounting



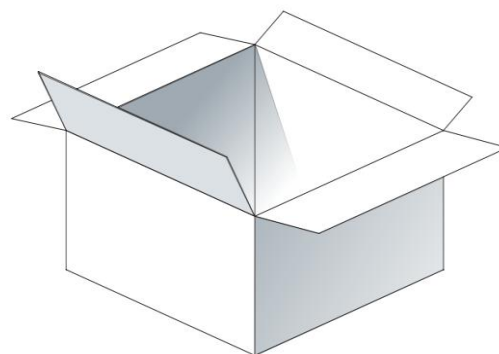
7. Packaging



1 pc CMA100.A.BIVW.002 per PE Bag
Weight: 255g



12 pcs / Carton
Carton: 650x470x270 mm
Weight: 10 kg
Carton Label



Changelog for the datasheet

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

Revision: B (Current Version)

Date:	2024-05-31
Notes:	Installation Recommendation added
Author:	Cesar Sousa

Previous Revisions

Revision: A (Original First Release)

Date:	2023-07-17
Notes:	
Author:	Gary West



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