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Performance.
Smart.

Ultra Series M24VMACB

Airgain Embedded Antenna Preliminary Engineering Data Sheet

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Revision History (Required)

Revision	Date	Note
3815C-02-00-001-1 Rev.1.0	July 7, 2022	Initial Draft
3815C-02-00-001-1 Rev.1.1	August 15,2022	Added peak gain and Radiation Patterns

Disclaimers

The information in this document is provided in connection with Airgain Antenna products and is proprietary and confidential. Airgain may make changes at any time, without notice.

Please verify with Airgain before finalizing a product design.

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1. Airgain M24VMACB Embedded Antenna

The Model M24VMACB Embedded Antenna provides a high efficiency, embedded antenna solution for LTE applications in the 900~920MHz band.

2. Features

The Airgain M24VMACB embedded antenna includes the following features:

- LTE
- Surface mount component
- 0.6 dBi peak gain @908 GHz
- High efficiency
- Quick integration

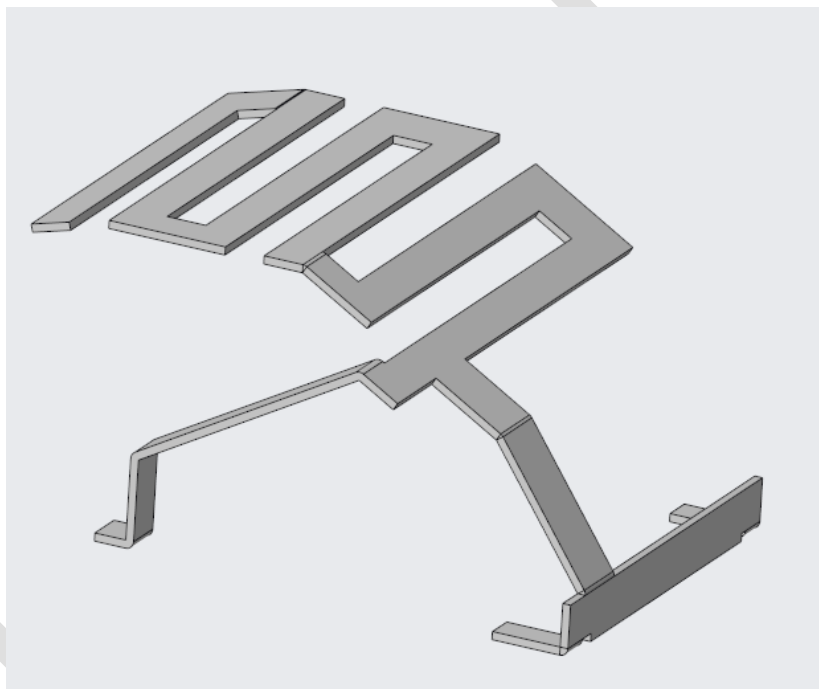


Figure 1: Model M24VMACB Embedded Antenna

3. Specifications and Interface

Standard	LTE
Frequency range	900~920MHz
Peak gain	0.6 dBi@908MHz
VSWR	< 2:1
Feed impedance	50 ohms
Power handling	30 dBm
Interface	PCB surface mount
Antenna dimensions	29.37 x 25.5x 15.53 mm
Weight	TBD g
Temperature range	Operating: -40° C to +75° C (-40° F to +167° F) Storage: -40° C to +85° C (-40° F to +185° F)
Humidity range	0% to 95% non-condensing

4. Radiation Patterns

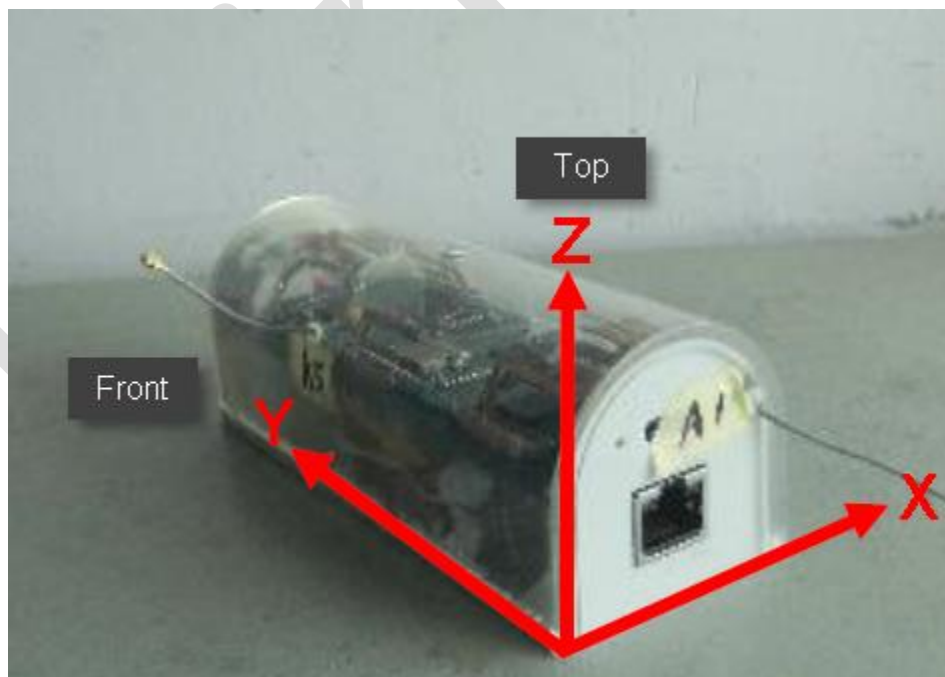


Figure 2: Model M24VMACB Measurement Axes

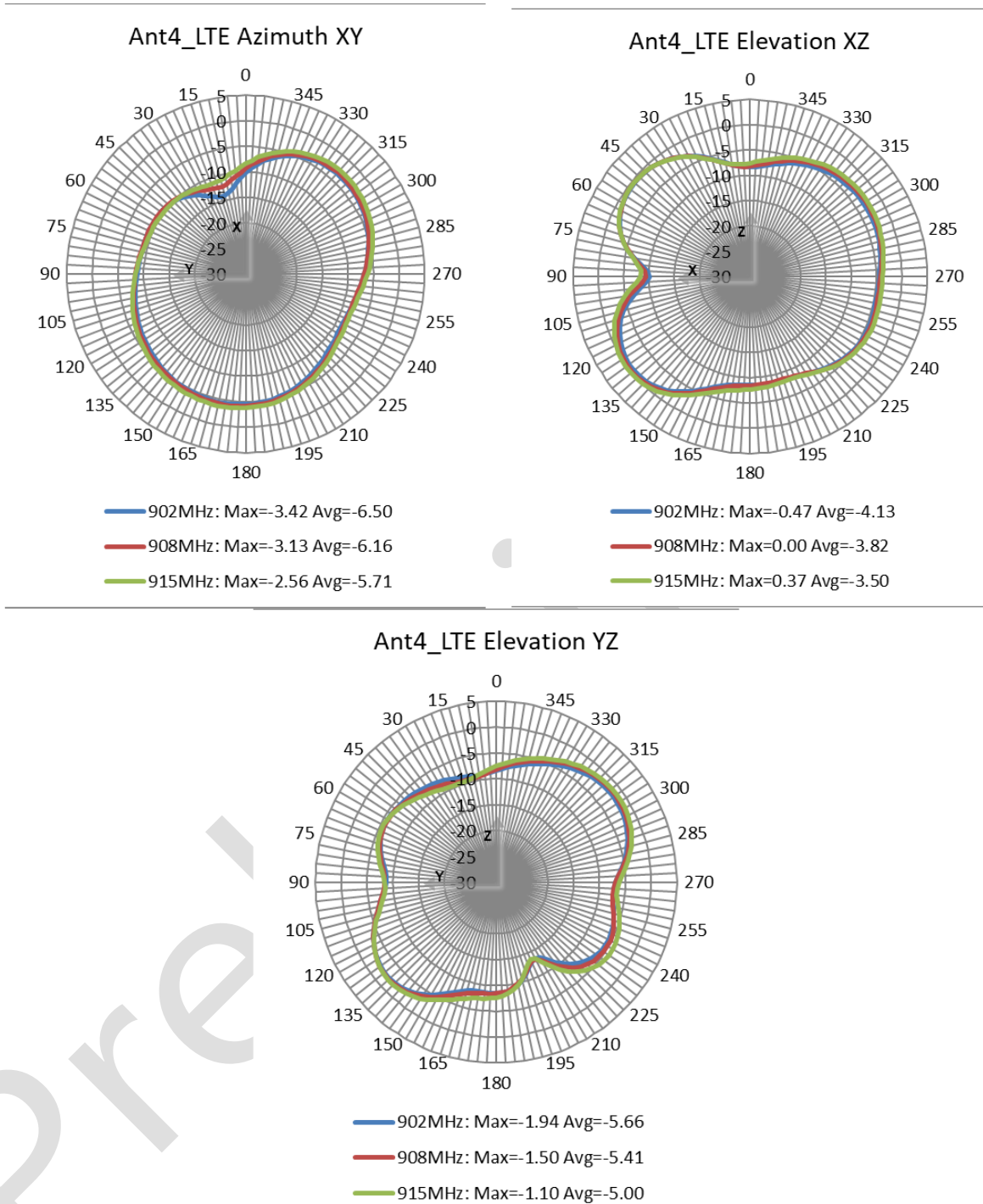


Figure 3: Model M24VMACB Radiation Patterns at 902MHz & 908MHz & 915MHz

5. Dimensions

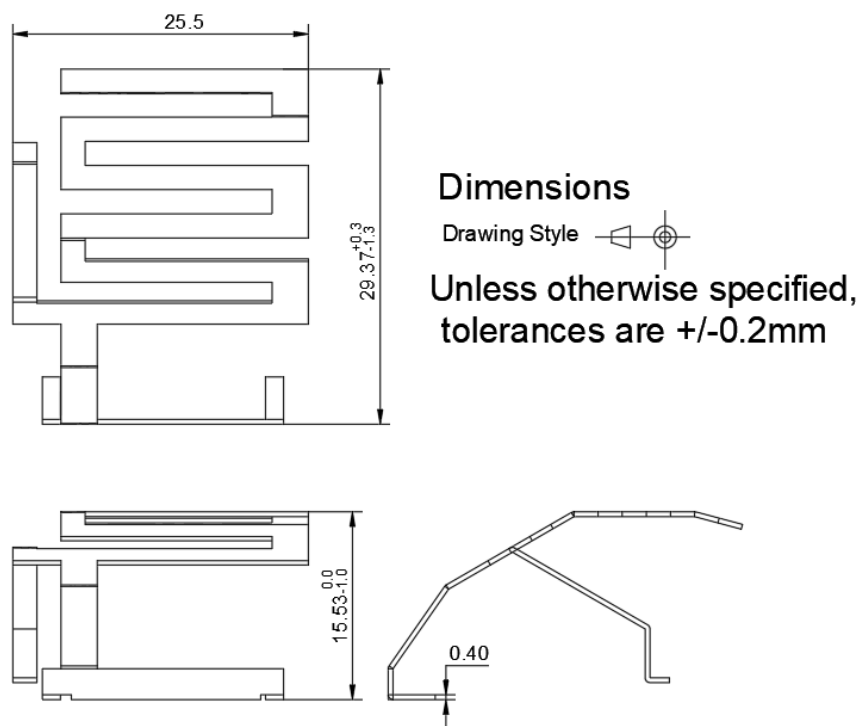
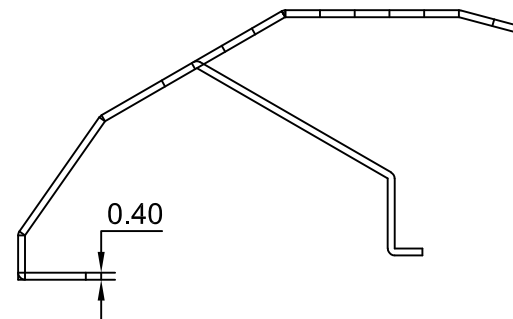
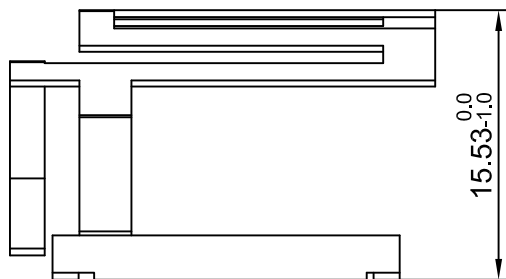
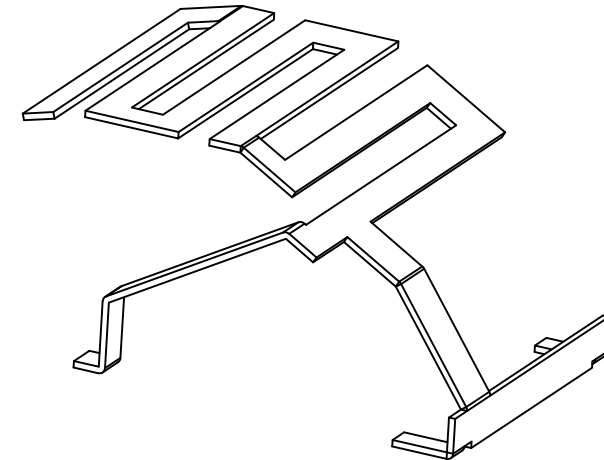
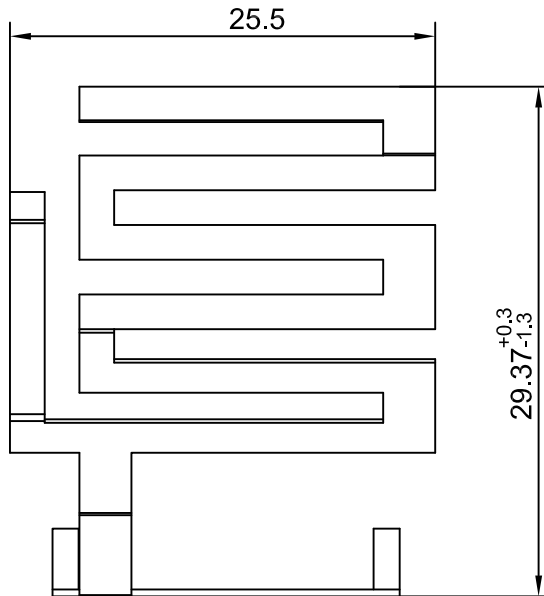


Figure 4: Model M24VMACB Dimensions

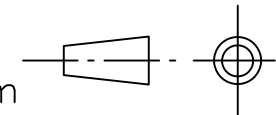
6. ROHS

Airgain M24VMACB embedded antennas are RoHS compliant.

REV	DESCRIPTION	BY	DATE
V1	INITIAL DESIGN	BWU	7/July/2022



DRAWING SYMBOL



Units: mm

NOTES:

1. Material: Copper-Nickel-Zinc Alloy C7701-H 0.4mm thickness
2. Part to be free of burrs, stains and oils.
3. Unless otherwise specified dimension tolerances are +/-0.2mm

Unless otherwise specified angle tolerances are $\pm 3^\circ$

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PCB No.	Project Ultra ANTENNA			
Drawn by BWU	Date 7/July/2022	Title	M24VMACB_FAB	
Checked by	Date	Size B	Number 3815C-12-00-001-1	Rev. V1
Approved by	Date	Layer		Scale
		File		Sheet 1 of 1