

# LTE External Puck Antenna



**AEACBK081014-S698**

Request Samples



Check Inventory



Ø 81.3 x 14.6 mm  
RoHS/RoHS II Compliant  
MSL Level = N/A

## Features

- Supports 698 MHz to 2690 MHz
- VSWR:  $\leq 3.2$
- Peak Gain: 2.8 dBi
- Efficiency: up to 48 %
- Weather-proof and IP67 rating
- Heavy duty permanent screw mount
- Easy installation with customizable cable & connector
- RoHS compliant

## Applications

- Internet of Things (IoT) devices
- LTE-M, Cat M, Cat M1, NB-IoT
- LTE CAT 1 up to CAT 20 supported
- CBRS and 5G bands supported
- Smart Home networking
- Networking & Telecommunication

## Product Image



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## Electrical Specification

Parameter	Specification		Unit
Operating Frequency	698-960	1710-2690	MHz
VSWR (Typ.)	< 3.2		
Peak Gain	0.4	2.8	dBi
Efficiency (Maximum)	41	48	%
Impedance	50		Ω
Polarization	Linear		
Radiation Pattern (Azimuth)	Omni-directional		
Input Power (Ambient 25°C)	5		W

Please note: All measurement data is based on the standard configuration (conducted in free space unless otherwise specified).

## Mechanical Specification

Parameter	Specification
Dimensions	Ø 81.3 x 14.6 mm
Material	UV Resistant ABS
Recommended Torque for Mounting	0.565 N·m
Color	Black
Antenna Type	Puck
Cable Type & Length	3M RG174 (fully customizable)
RF Connector	SMA(M) (fully customizable)
Mounting Type	Screw

## Environmental Specification

Parameter	Specification
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
IP Rating	IP67 (Excluding cable outlet)
Relative Humidity	Up to 95 %
Vibration	10 ~ 55 Hz with 1.5 mm amplitude 2 hours
RoHS Compliant	Yes



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## Ordering Information

Part Number	Description	Connector Option
AEACBK081014-S698	LTE External Antenna with SMA (M) connector and 3000mm and RG-174 cable	SMA (M)
AEACBK081014-S698-1	LTE External Antenna with SMA (M) connector and 2000mm and RG-174 cable	SMA (M)
AEACBK081014-S698-2	LTE External Antenna with SMA (M) connector and 1000mm and RG-174 cable	SMA (M)
AEACBK081014-S698-3	LTE External Antenna with SMA (M) connector and 250mm and RG-174 cable	SMA (M)

Note: Different cable and connector configurations that are not listed may be available upon request via [Abracon online support](#)

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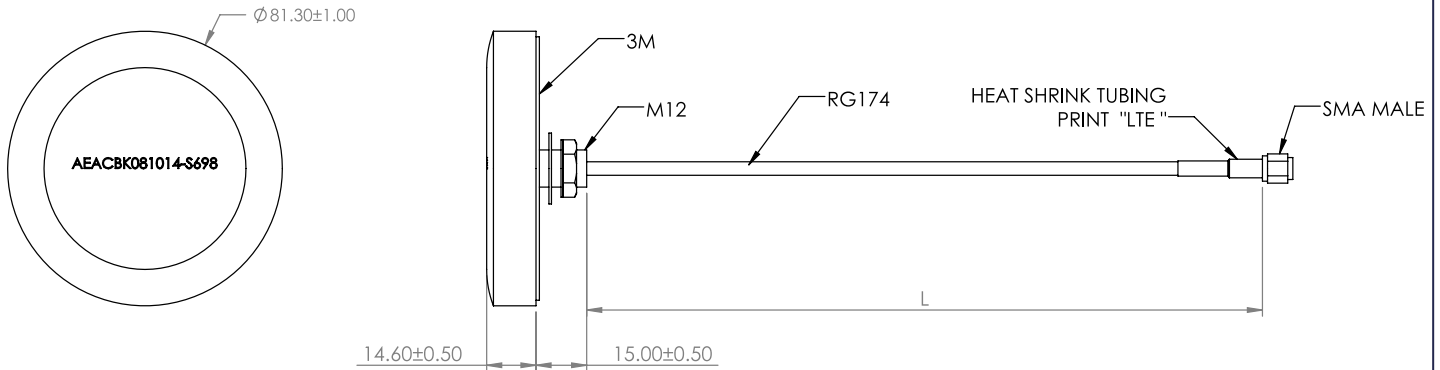


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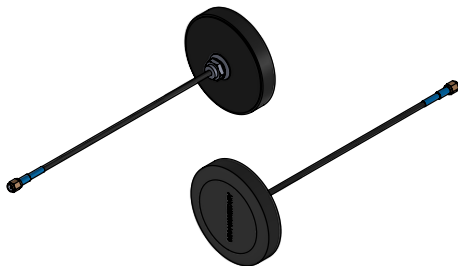
Ø 81.3 x 14.6 mm  
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## Product Dimensions



**TOP VIEW**

**SIDE VIEW**



Part Number	Cable Length (mm)	Connector
AEACBK081014-S698	3000	SMA (M)
AEACBK081014-S698-1	2000	
AEACBK081014-S698-2	1000	
AEACBK081014-S698-3	250	

Unit: mm

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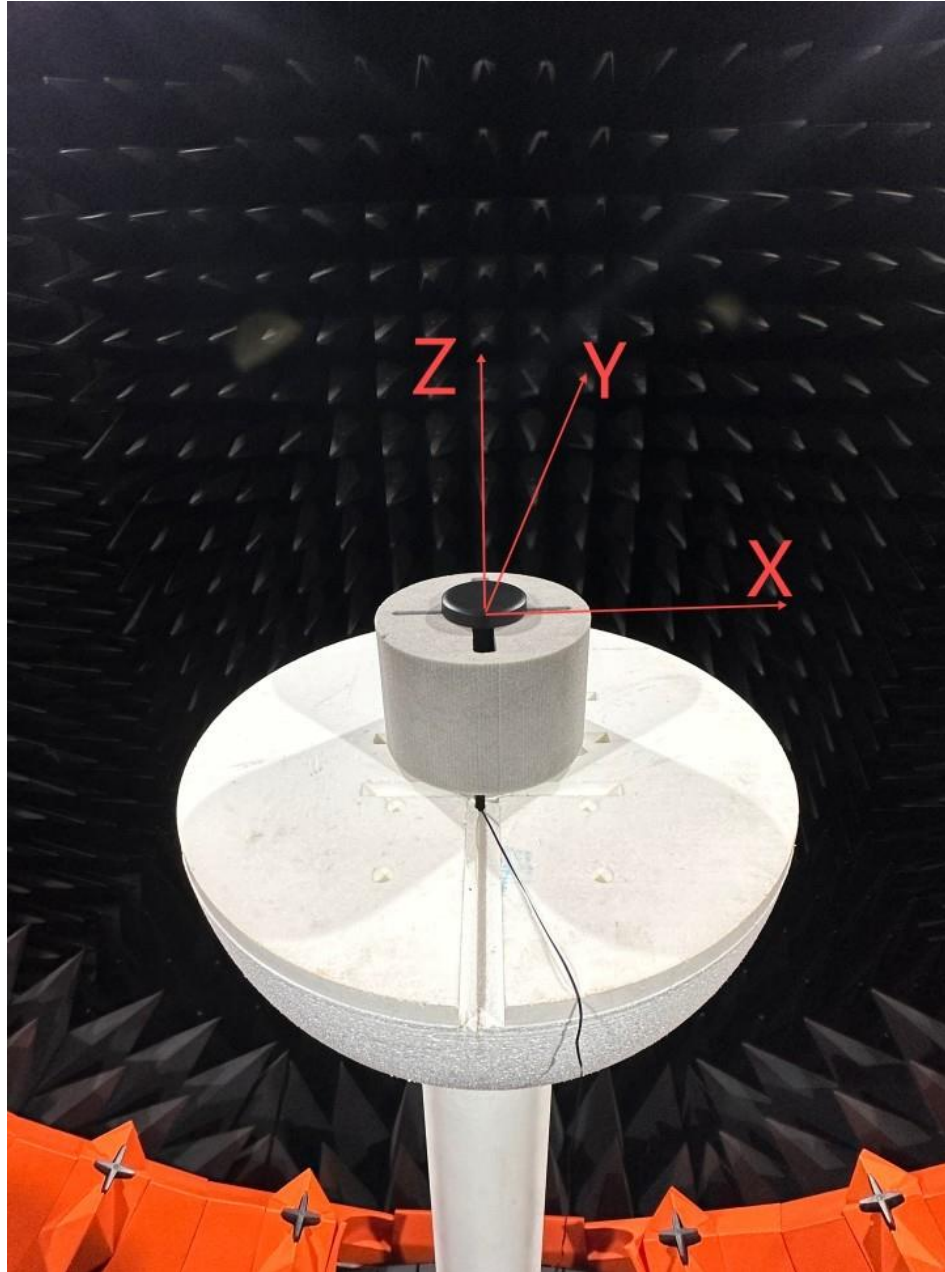


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## Measurement Setup photo





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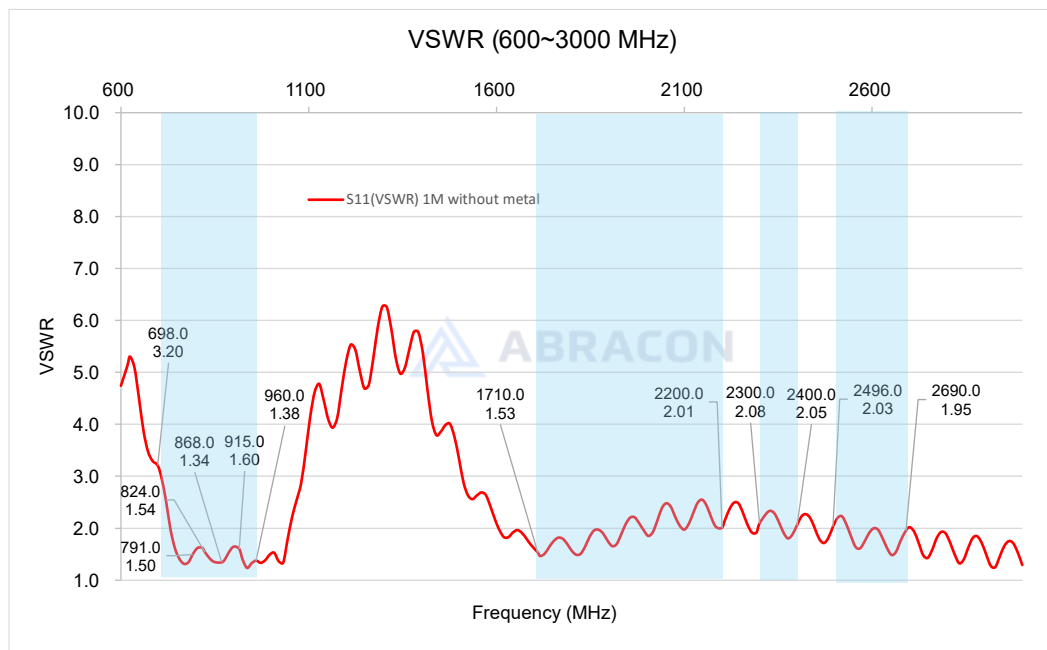
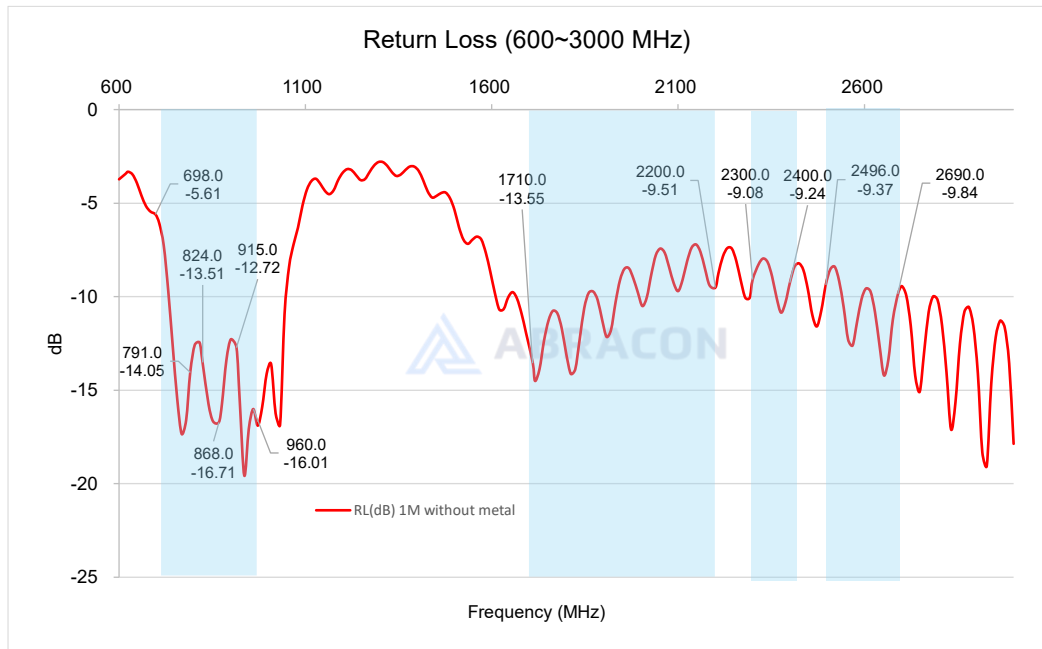


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## Reflection Characteristics – Return Loss & VSWR





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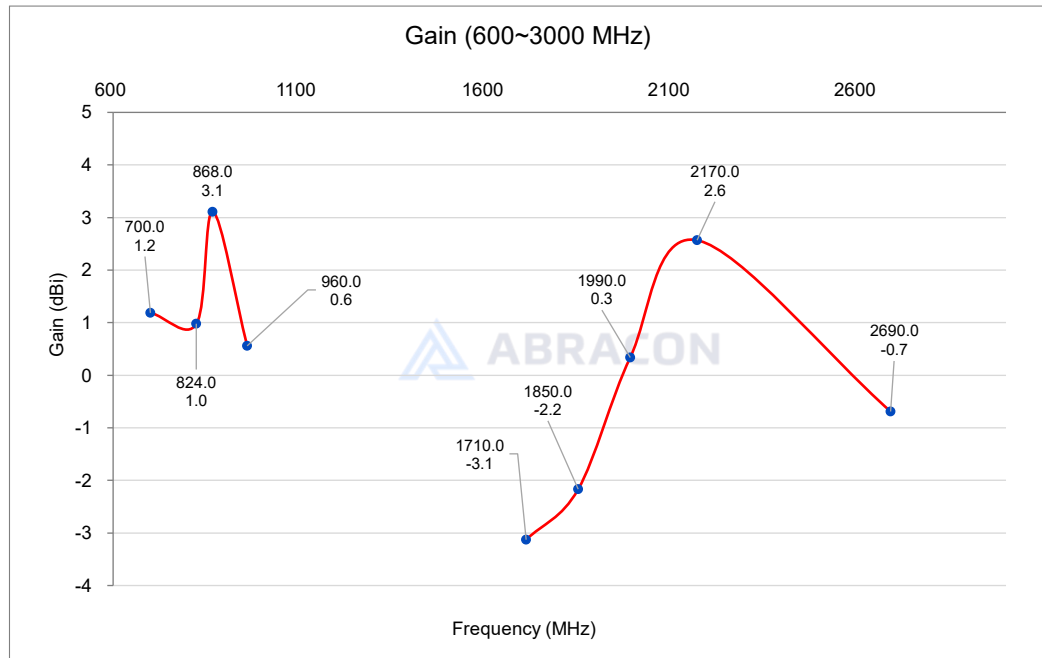


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## Radiation Characteristics – Peak Gain



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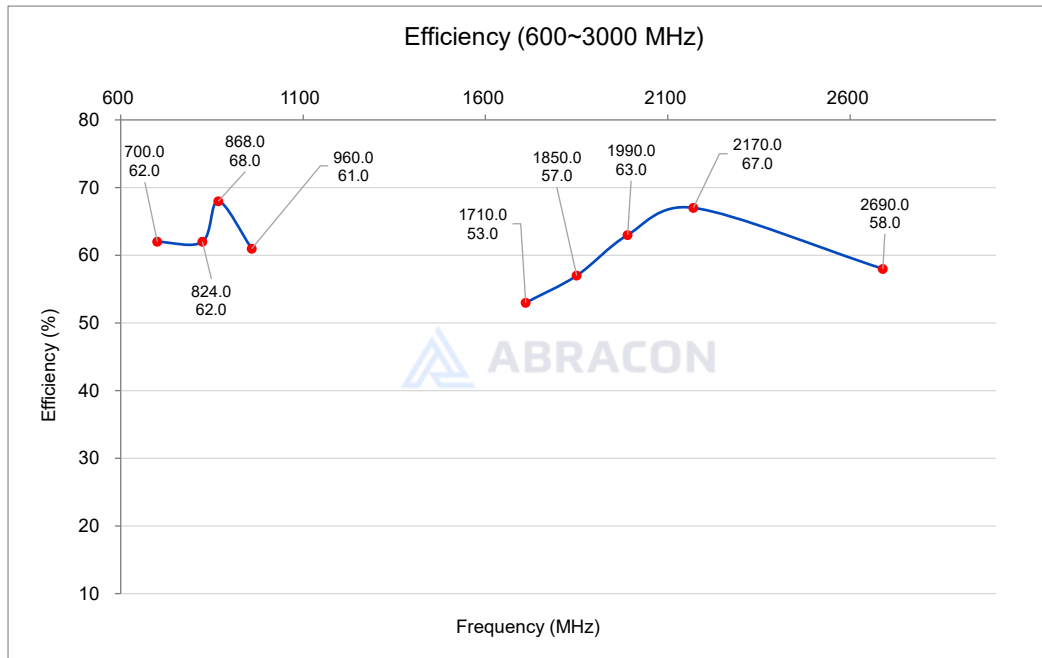


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## Radiation Characteristics – Total Efficiency (%)





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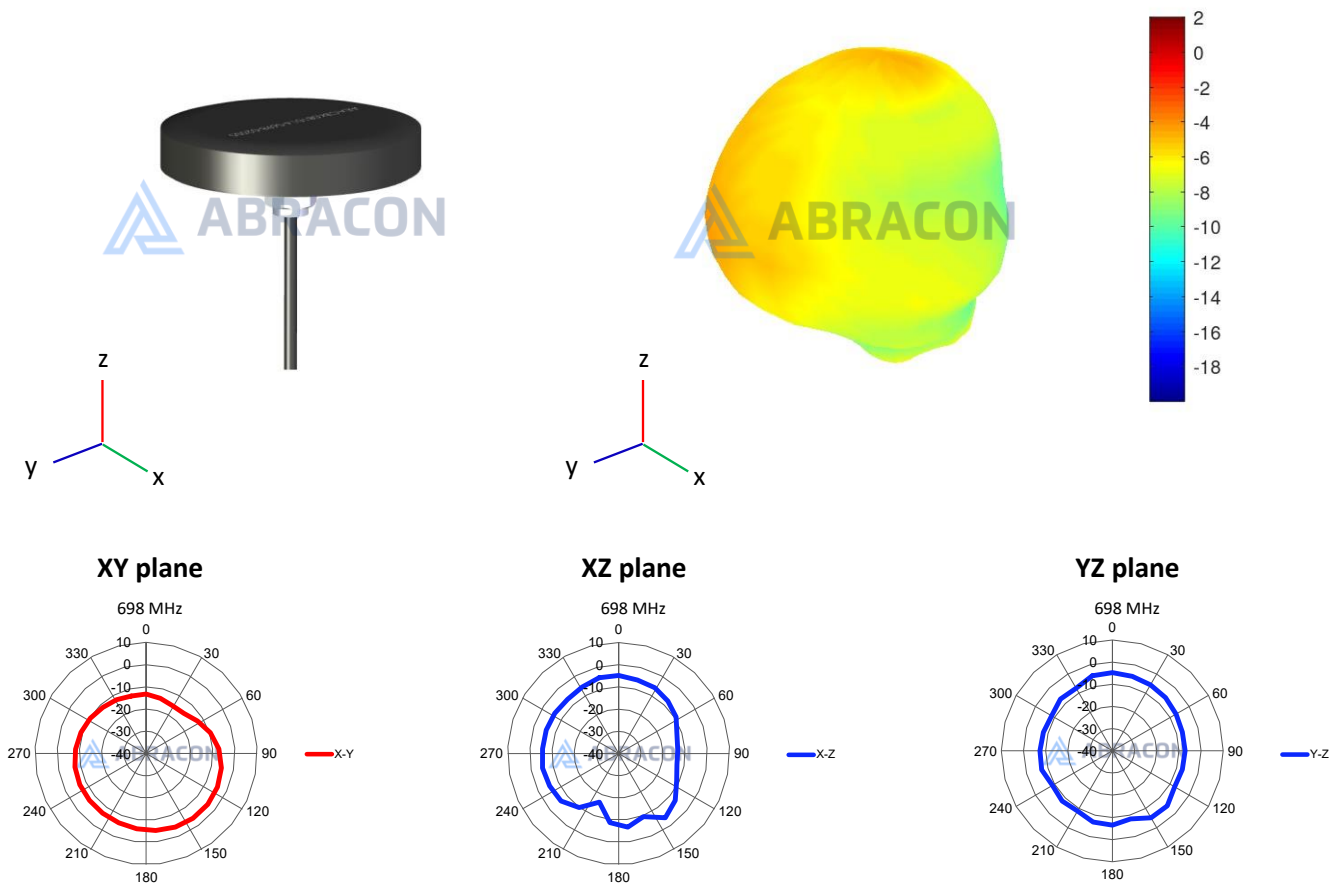
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## Radiation Characteristics – 3D & 2D pattern

### 3D & 2D Pattern @ 698 MHz



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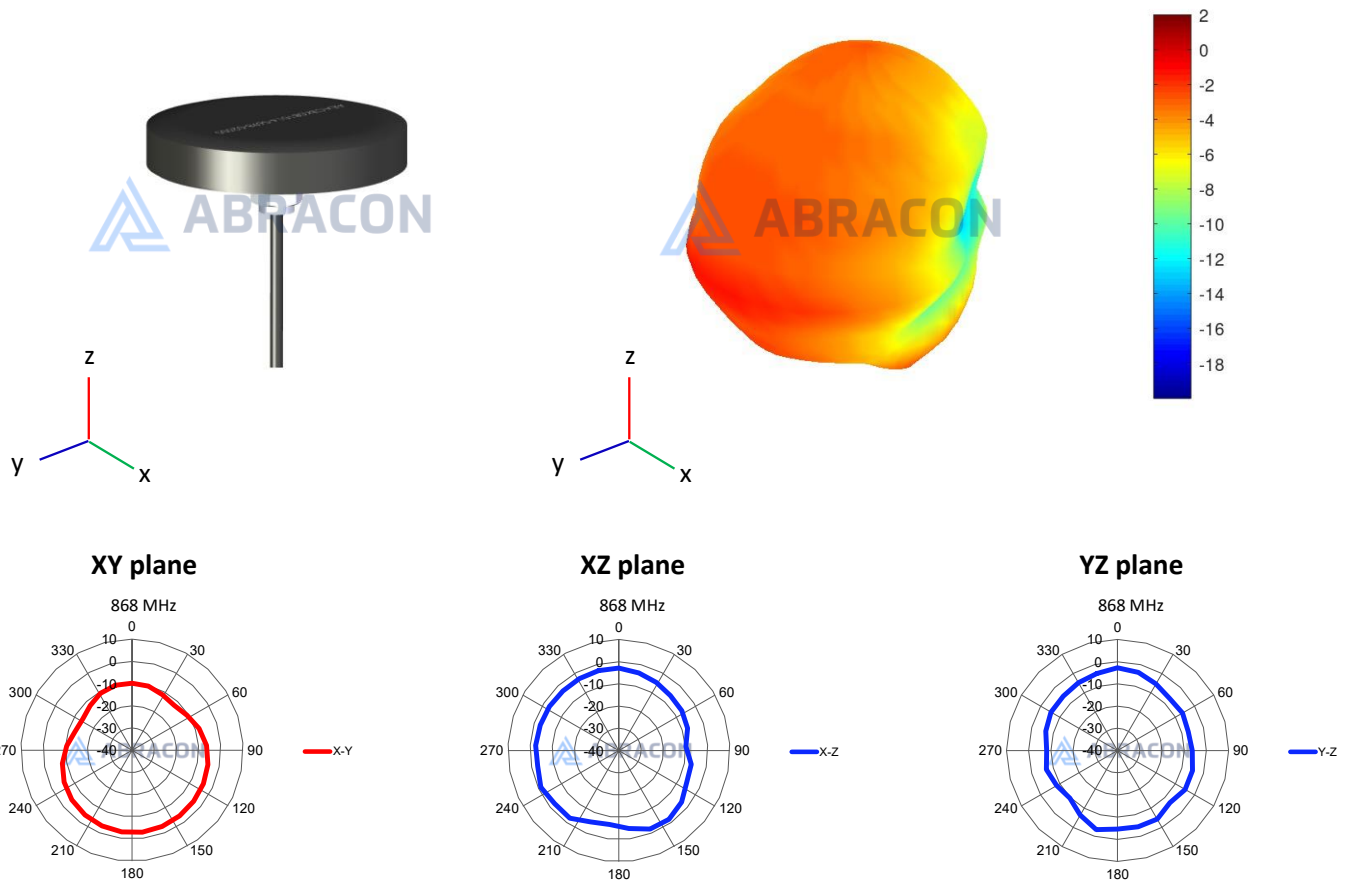


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## 3D & 2D Pattern @ 868 MHz



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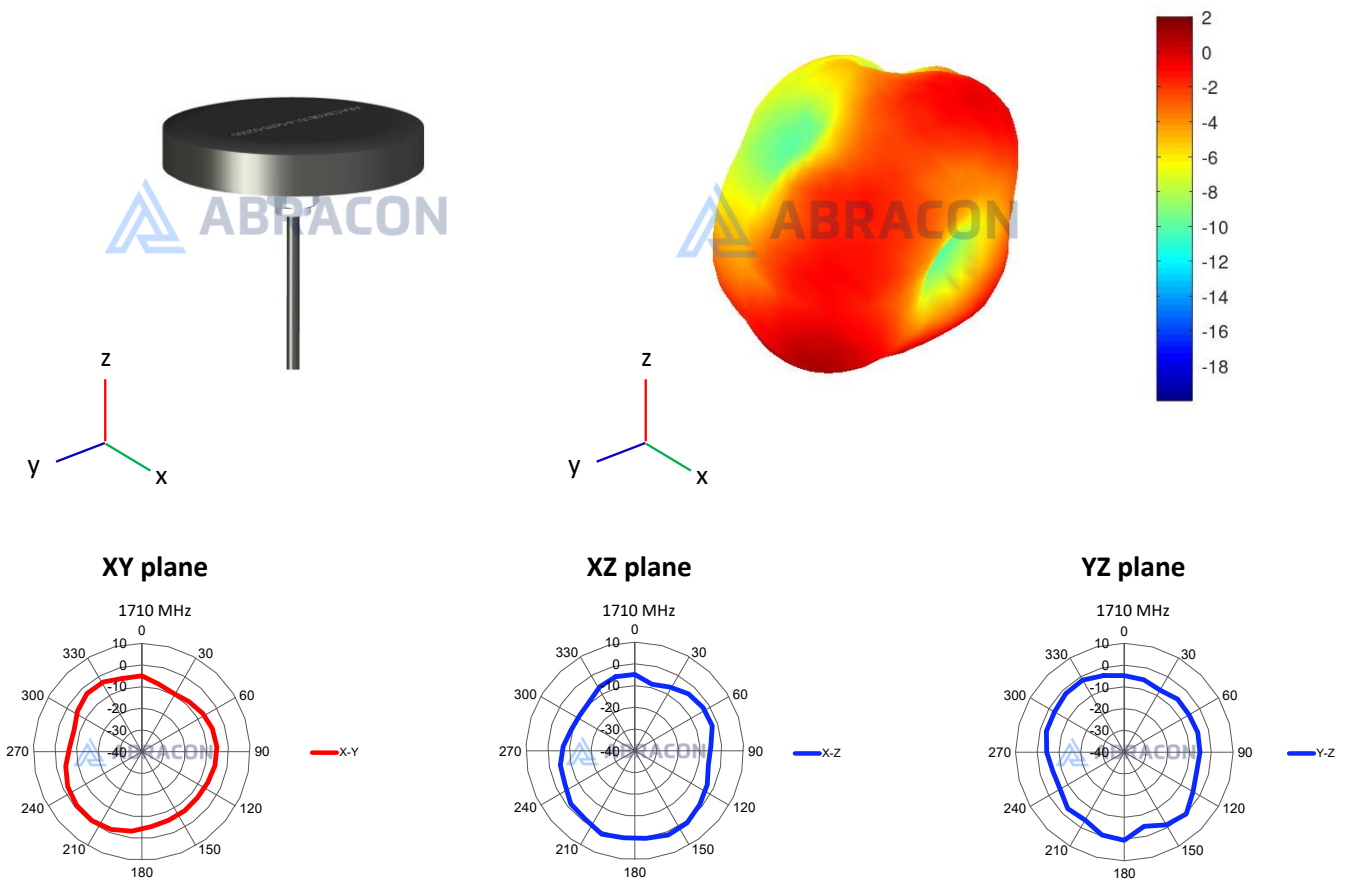


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## 3D & 2D Pattern @ 1710 MHz



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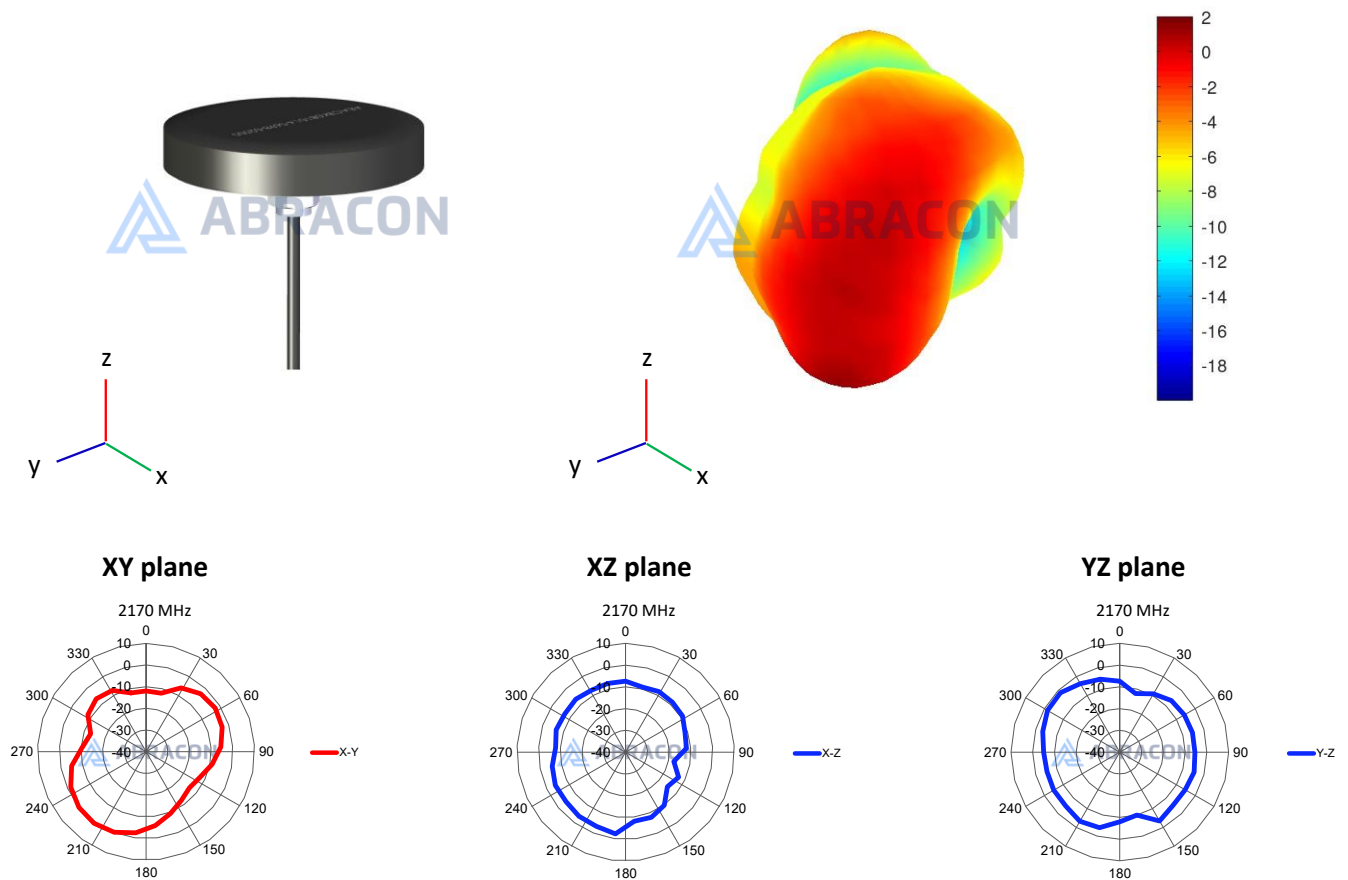


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## 3D & 2D Pattern @ 2170 MHz



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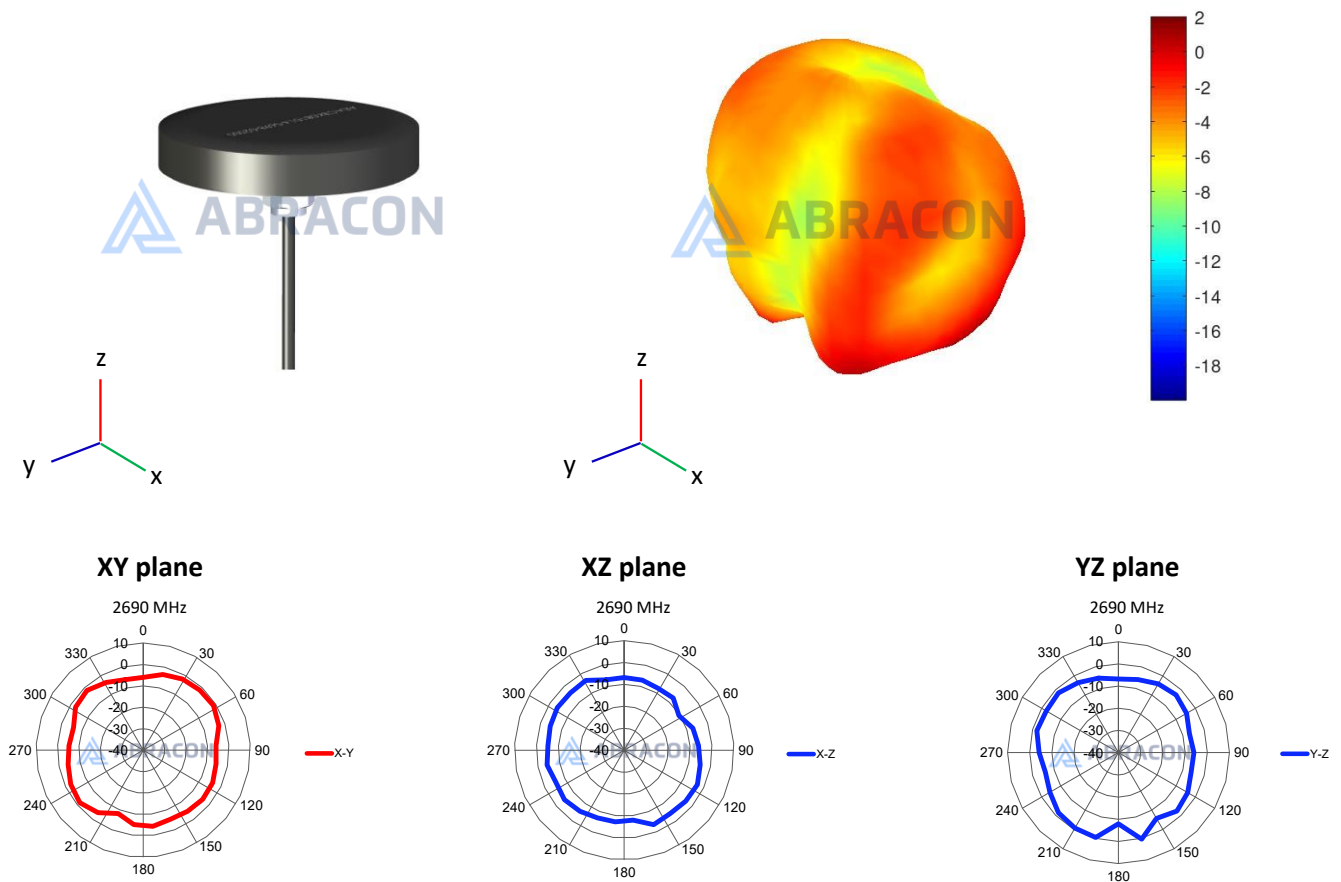


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## 3D & 2D Pattern @ 2690 MHz



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## Packaging

Total antennas / carton: 50 pcs

Carton dimensions: 49.5 x 22.5 x 27 cm

Carton weighs: 5 Kg

**ATTENTION:** Abracon LLC's products are Commercial-Off-The-Shelf ('COTS'), which are designed, intended, and validated for use in commercial, industrial, and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.



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