

# 868/915MHz ISM/LoRA Flexible PCB Antenna



**AANI-FB-0085**

Request Samples



Check Inventory



79 x 10 x 0.2 mm  
RoHS Compliant  
MSL Level = N/A

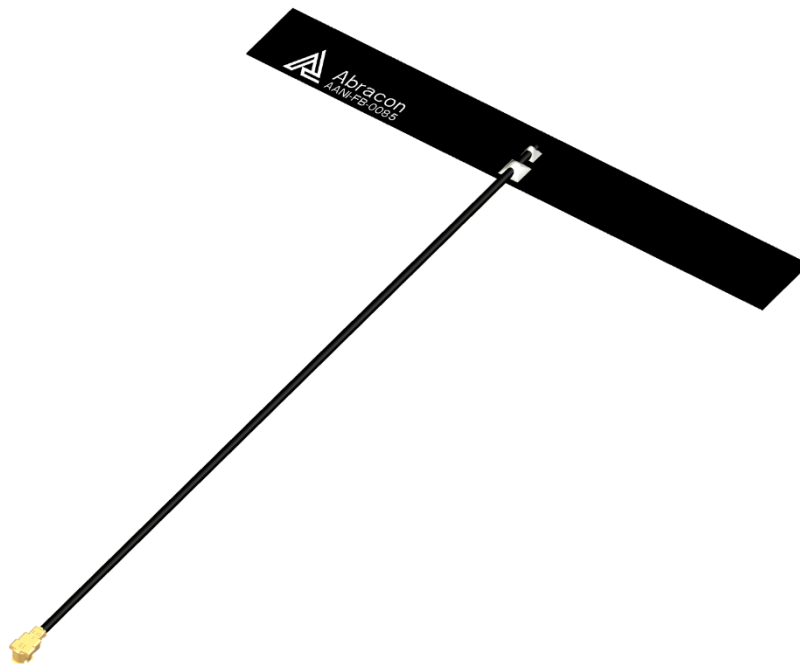
## Features

- Compact Design with High Efficiency Up to 70%
- Easy Installation on Both Flat and Curved Surfaces
- Can be Installed on Plastic and Human Body
- Strong Adhesive in High-Temperature and Humid Environment
- Fully Customizable Cable Length and Connector Options
- RoHS Compliant

## Applications

- Sub-GHz/LoRa/Sigfox
- Smart Lighting
- Utility & Smart Metering
- Amazon Sidewalk
- Traffic Control and Monitoring
- Energy Generation and Storage System

## Product Image



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## Electrical Specification

Parameter	Specification		Unit
Operating Frequency	868	915	MHz
VSWR (Typ.)	< 2.0		
Peak Gain	0.4	1.5	dBi
Efficiency	60	70	%
Impedance	50		$\Omega$
Polarization	Linear		
Radiation Pattern (Azimuth)	Omni-directional		

## Mechanical Specification

Parameter	Specification
Antenna Dimensions	79 x 10 x 0.2 mm
Antenna Type	Flexible Printed Circuit
Mounting Type	Adhesive
RF Connector <sup>(1)</sup>	u.FL/IPEX-1/MHF1, w.FL/IPEX-4/MHF4
RF Cable Type <sup>(1)</sup>	$\varnothing$ 1.13 mm
Cable Length <sup>(1)</sup>	100 mm, 150 mm, 200 mm

(1): Fully customizable RF Cable & Connector

## Environmental Specification

Parameter	Specification
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
RoHS Complaint	Yes
PB Free	Yes



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## Ordering Information

Part Number	Description	Connector Option
AANI-FB-0085-0100I	868/915MHz ISM/LoRA Flexible PCB Antenna with MHF1 connector and 100mm cable	u.FL/IPEX-1/MHF1
AANI-FB-0085-0100W	868/915MHz ISM/LoRA Flexible PCB Antenna with MHF4 connector and 100mm cable	w.FL/IPEX-4/MHF4
AANI-FB-0085-0150I	868/915MHz ISM/LoRA Flexible PCB Antenna with MHF1 connector and 150mm cable	u.FL/IPEX-1/MHF1
AANI-FB-0085-0150W	868/915MHz ISM/LoRA Flexible PCB Antenna with MHF4 connector and 150mm cable	w.FL/IPEX-4/MHF4
AANI-FB-0085-0200I	868/915MHz ISM/LoRA Flexible PCB Antenna with MHF1 connector and 200mm cable	u.FL/IPEX-1/MHF1
AANI-FB-0085-0200W	868/915MHz ISM/LoRA Flexible PCB Antenna with MHF4 connector and 200mm cable	w.FL/IPEX-4/MHF4

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



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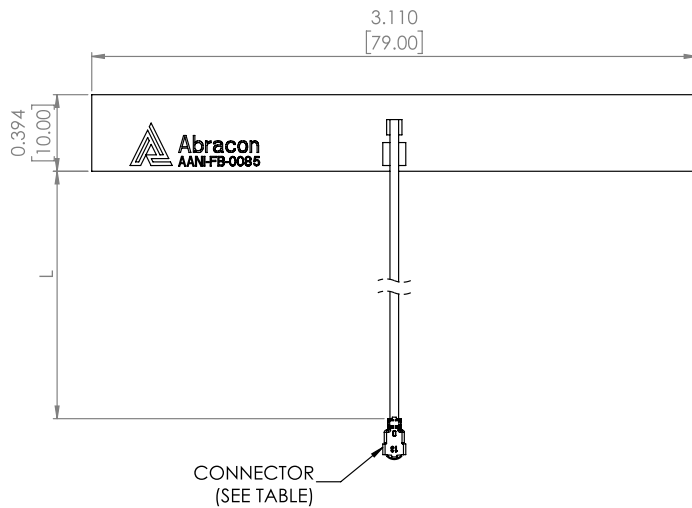


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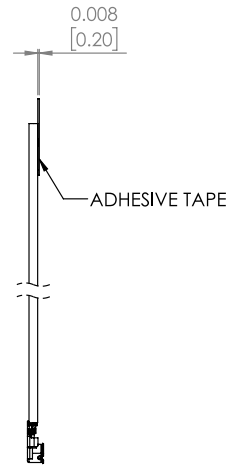


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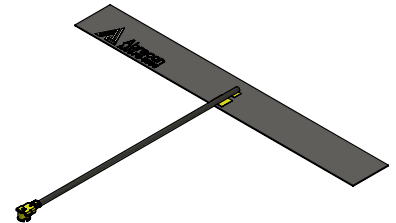
## Product Dimensions



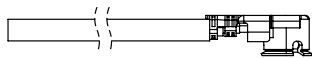
**FRONT VIEW**



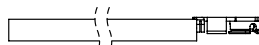
**SIDE VIEW**



### CONNECTOR



u.FL/IPEX-1/MHF1



w.FL/IPEX-4/MHF4

PART NUMBER	CABLE LENGTH (L)	CONNECTOR
AANI-FB-0085-0100I	3.937[100]	u.FL/IPEX-1/MHF1
AANI-FB-0085-0100W	3.937[100]	w.FL/IPEX-4/MHF4
AANI-FB-0085-0150I	5.905[150]	u.FL/IPEX-1/MHF1
AANI-FB-0085-0150W	5.905[150]	w.FL/IPEX-4/MHF4
AANI-FB-0085-0200I	7.874[200]	u.FL/IPEX-1/MHF1
AANI-FB-0085-0200W	7.874[200]	w.FL/IPEX-4/MHF4

Unit : inches[mm]



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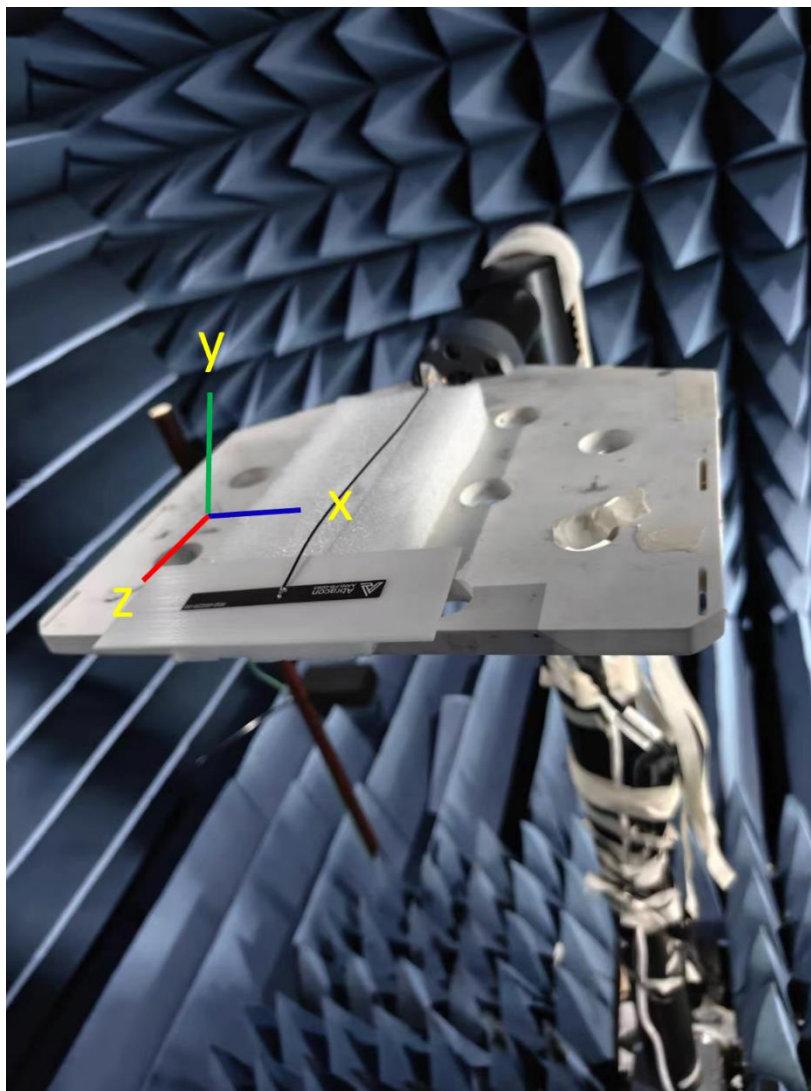


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## Measurement Setup photo



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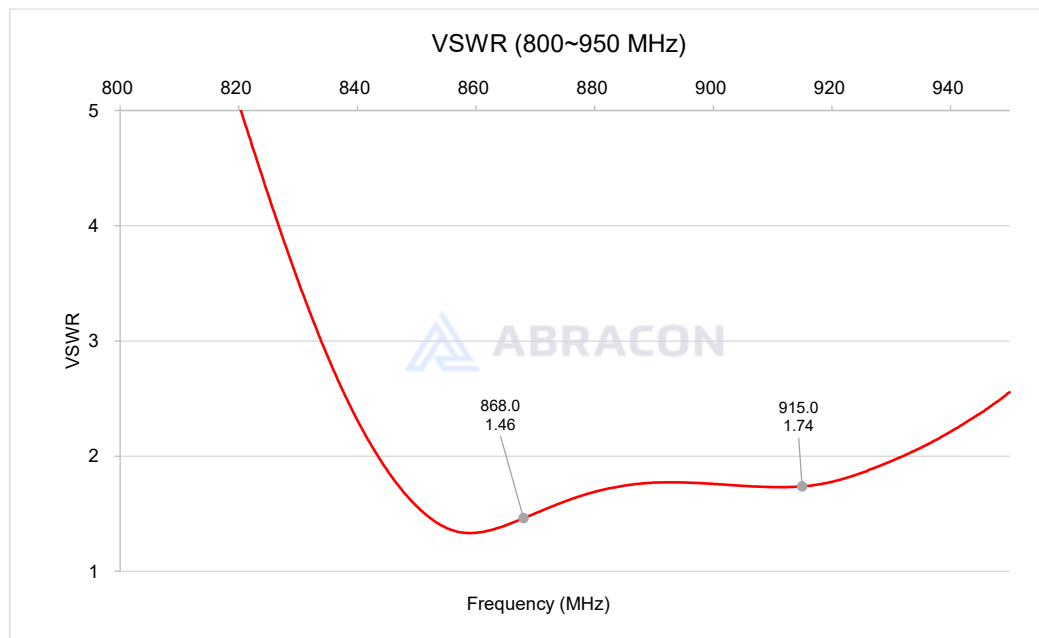
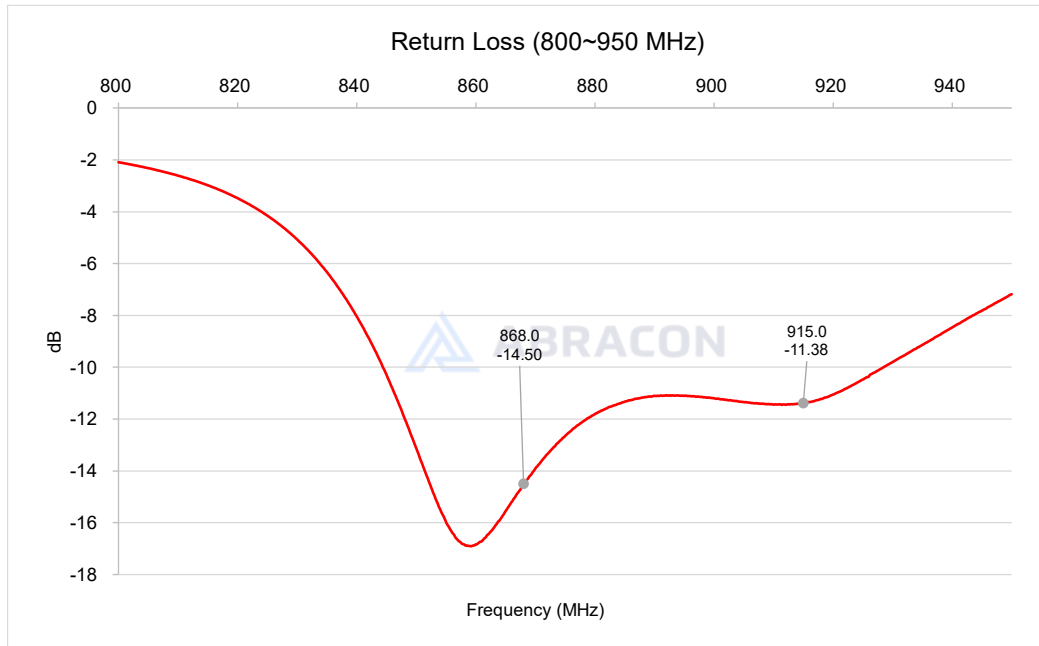


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## Reflection Characteristics – Return Loss & VSWR



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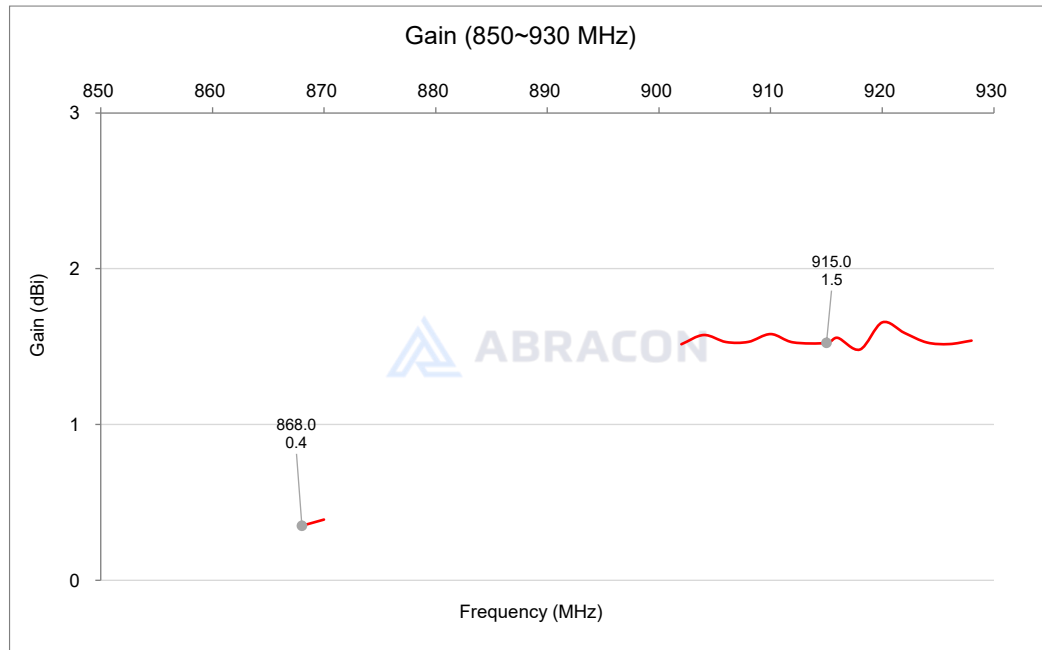


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## Radiation Characteristics – Peak Gain



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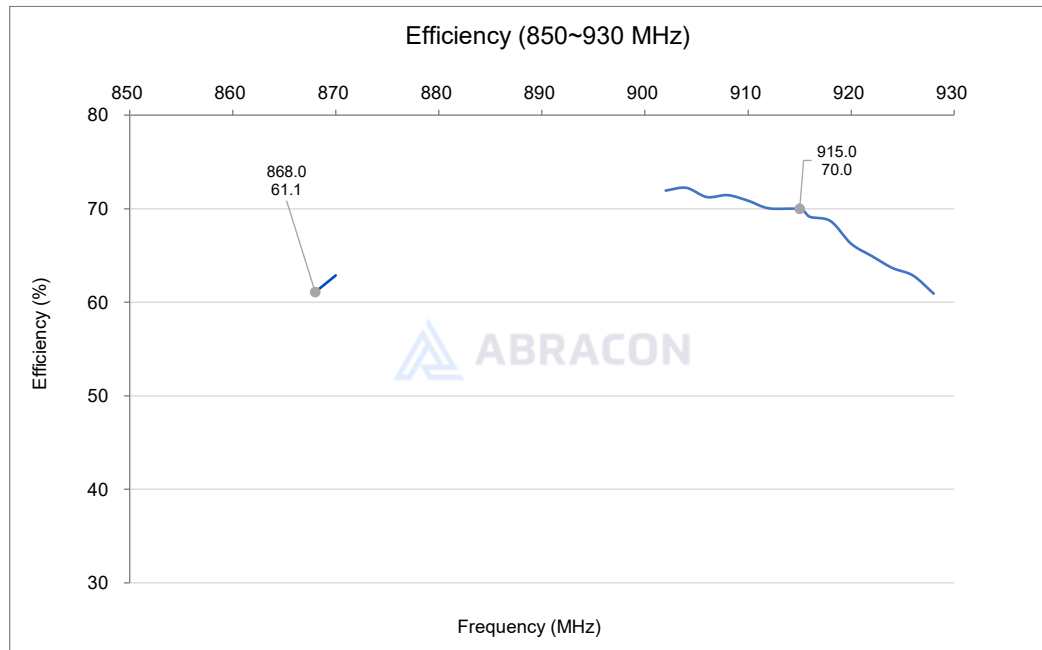


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## Radiation Characteristics – Total Efficiency (%)





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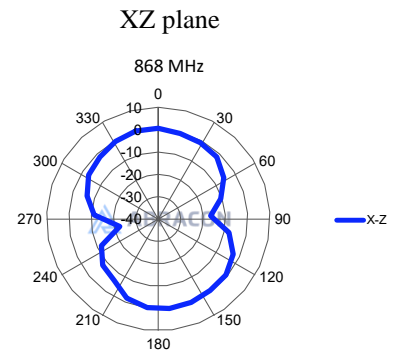
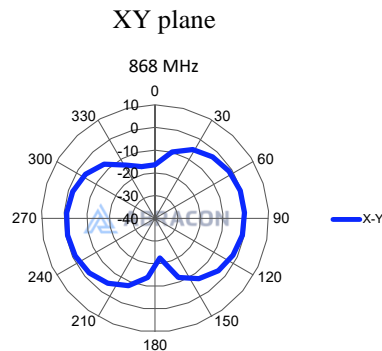
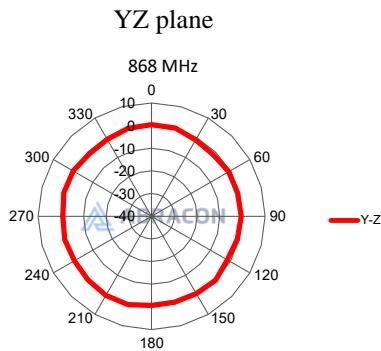
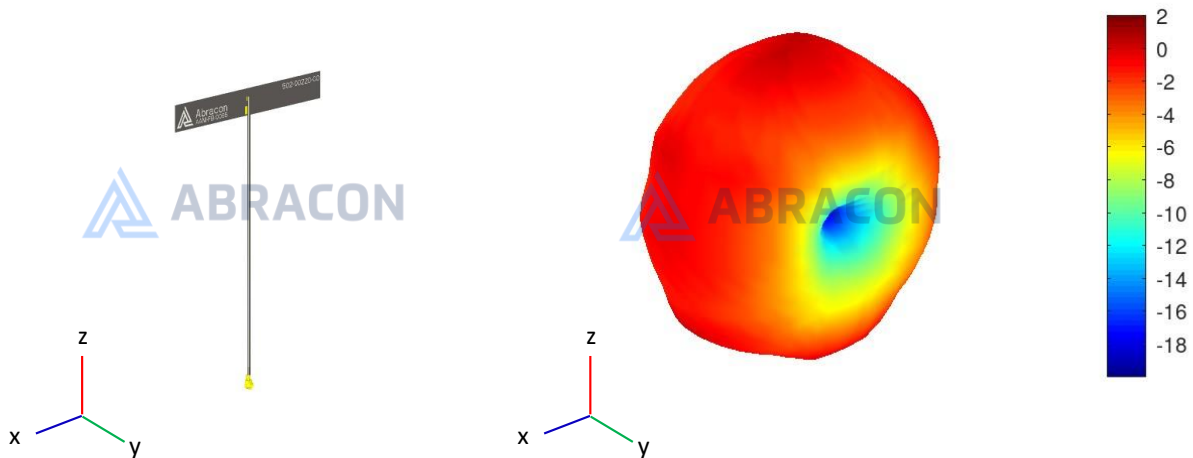
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## Radiation Characteristics – 3D & 2D pattern

868MHz



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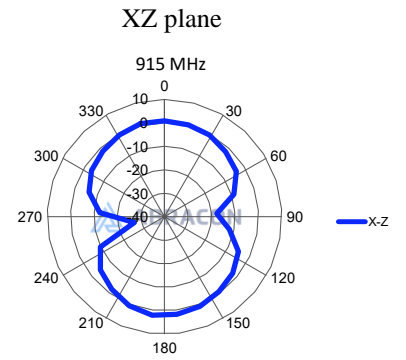
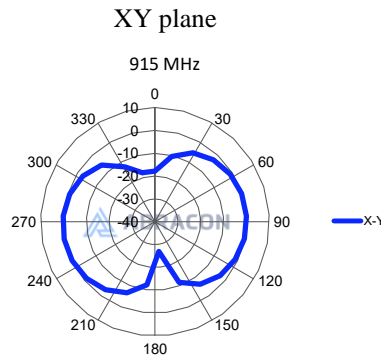
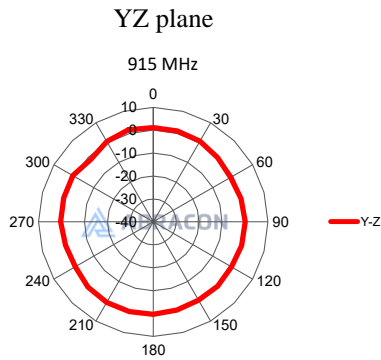
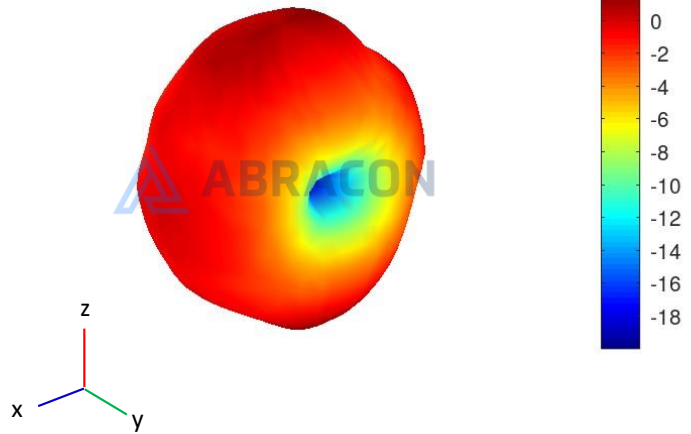
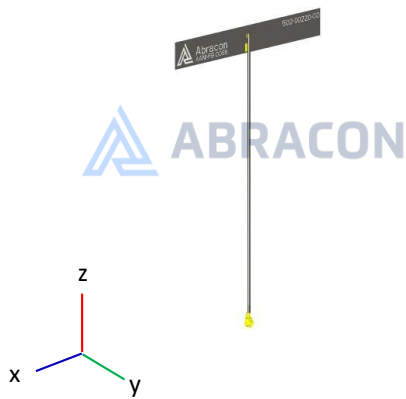


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915MHz



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## Packaging

Number of Antenna/ bags: 50 pcs

Total Pcs / package: 1000 pcs

**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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