

# 915/2400 MHz Weather-Proof Whip Antenna



**AANE-WH-0145**

Request Samples



Check Inventory



Ø8.8 x 77.0 mm

RoHS/RoHS II Compliant

MSL = N/A

## Features

- 915/2400 MHz LPWA/ISM Antenna
- Peak Gain: 1.2/1.8 dBi
- High Efficiency Up to 72%
- Fixed Right-Angle Connector
- IP66 Rated and UV Resistant
- Fully Customizable Connectors

## Applications

- LPWA/LoRa/SigFox Applications
- Bluetooth/BLE/Matter/Thread
- Intelligent Lighting
- Smart Metering Solutions
- Smart Irrigation Systems
- Home Automation and Fire Prevention
- Agriculture/Environment Sensing

## Product Image



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## Electrical Specification

Parameter	Specification		Unit
Operating Frequency	902-928	2400-2483	MHz
VSWR (Typ.)	< 2.0		
Peak Gain	Free Space	-0.7	dBi
	On Metal	1.2	
Maximum Efficiency	Free Space	38.2	%
	On Metal	62.8	
Impedance	50		Ω
Polarization	Linear		
Radiation Pattern (Azimuth)	Omni-directional		
Input Power (Ambient 25°C)	5		W

## Mechanical Specification

Parameter	Specification
Dimensions	Ø8.8 x 77.0 mm
Metal Plate Dimension	200 x 100 mm
Material	UV Resistant TPEE
Recommended Torque for Mounting	0.565 N·m
Color	Black
Antenna Type	Whip (Monopole)
RF Connector <sup>(1)</sup>	SMA(M)

(1): Fully customizable RF Connectors

## Environmental Specification

Parameter	Specification
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
IP Rating	IP66
RoHS Complaint	Yes



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## Ordering Information

Part Number	Description	Connector Option
AANE-WH-0145-1	915/2400 MHz Weather-Proof Whip Antenna with SMA(M) Connector, IP66 Rated & UV-Resistant Housing	SMA(M)
AANE-WH-0145-2	915/2400 MHz Weather-Proof Whip Antenna with RP-SMA(M) Connector, and IP66 Rated & UV-Resistant Housing	RP-SMA(M)

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



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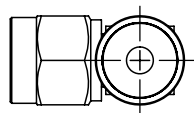


Ø8.8 x 77.0 mm

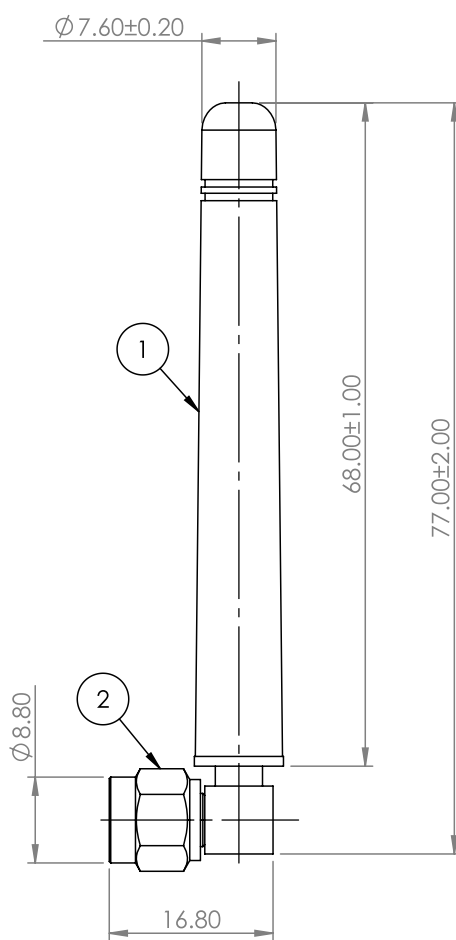
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MSL = N/A

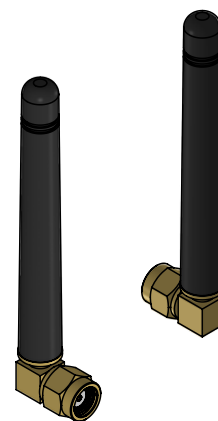
## Product Dimensions



TOP VIEW



FRONT VIEW



Unit : mm

No.	Name	Material	Finish
1	Body	TPEE	Black
2	Connector	SMA(M)	Au-Plated

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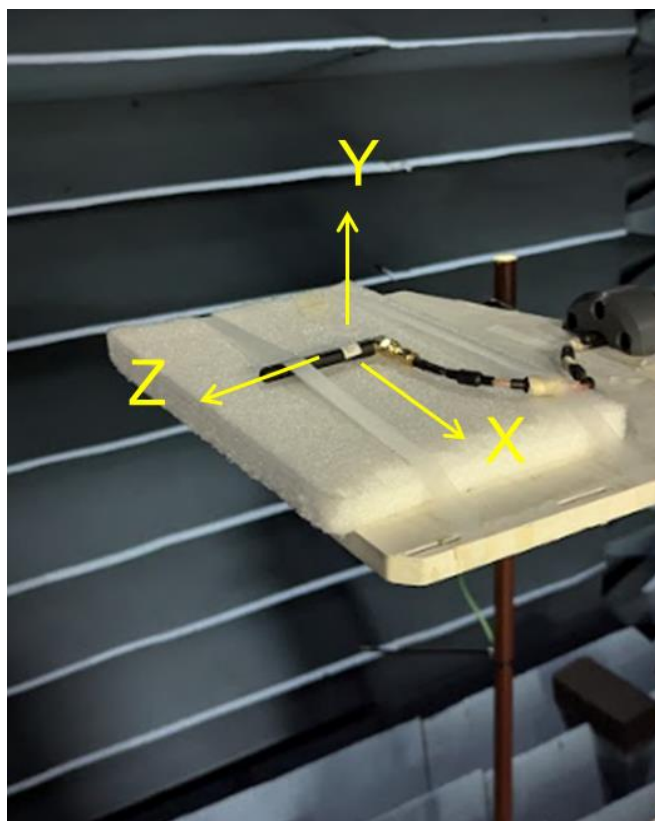


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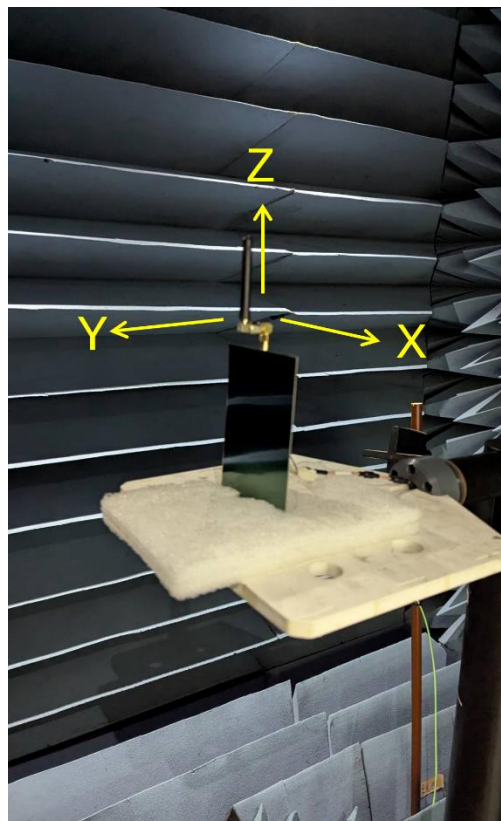
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## Measurement Setup



Free Space



On Metal

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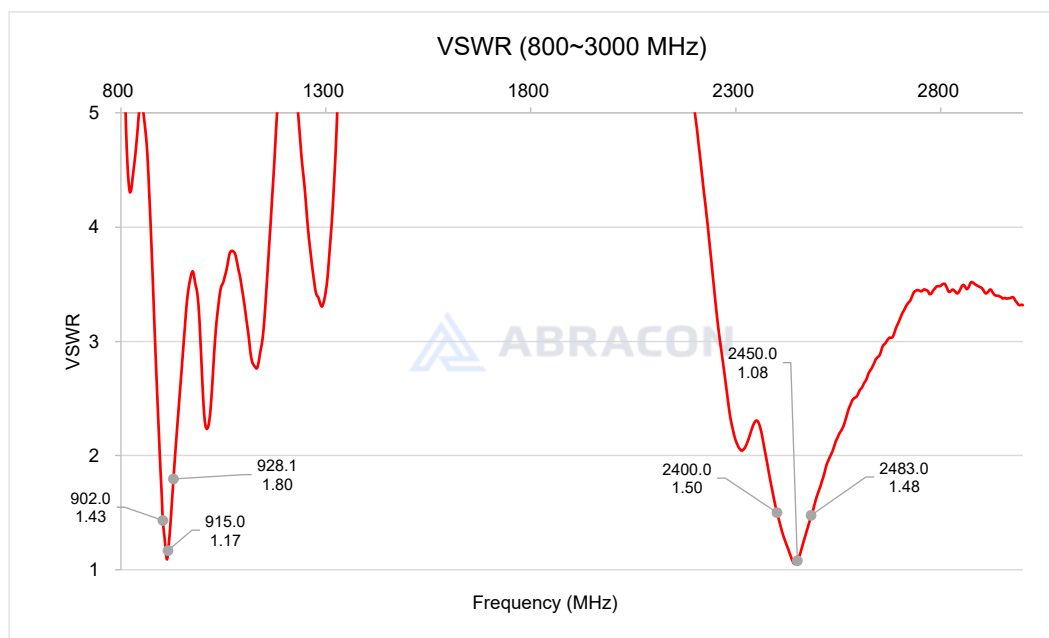
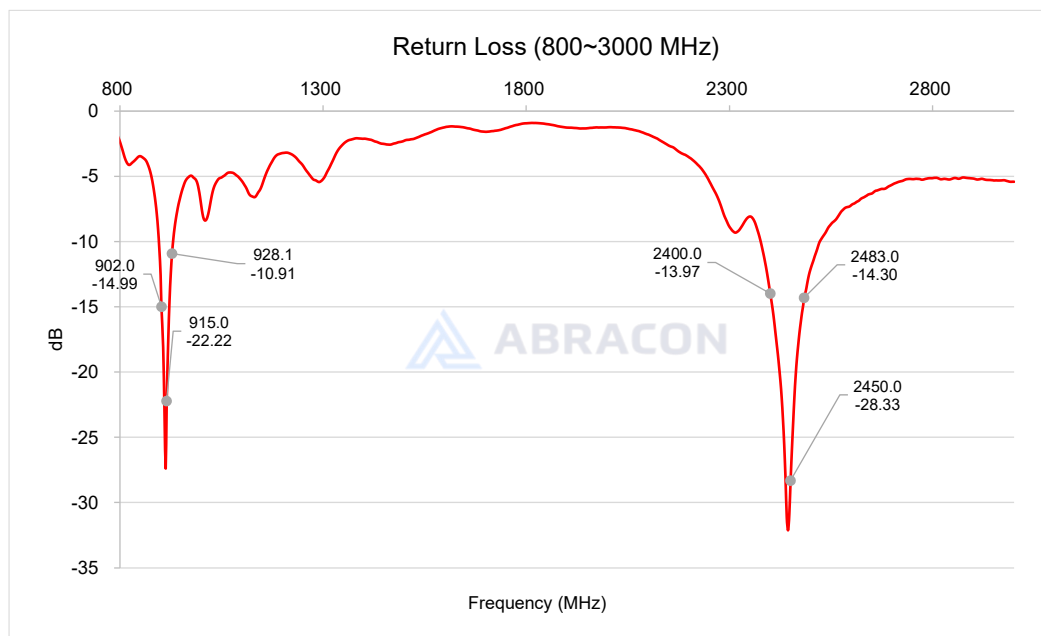


Ø8.8 x 77.0 mm

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## Reflection Characteristics – Return Loss & VSWR (Free Space)



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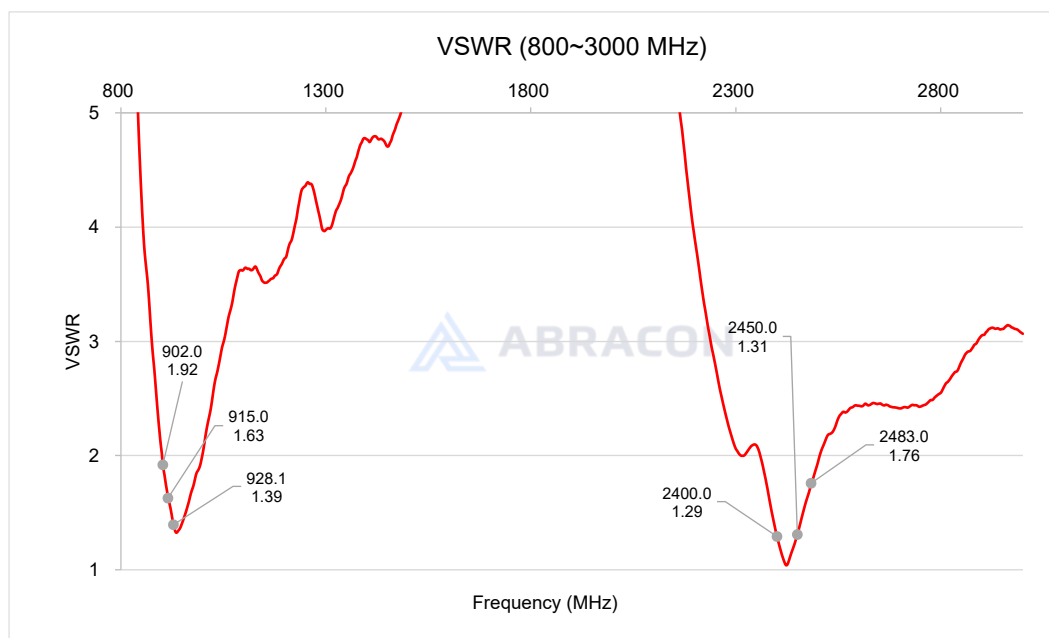
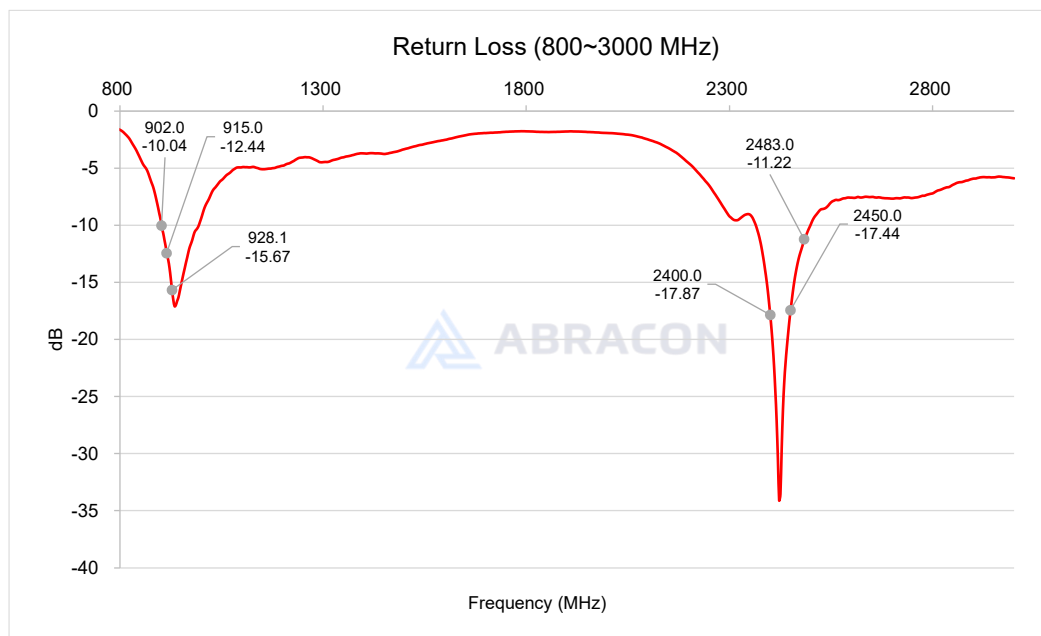


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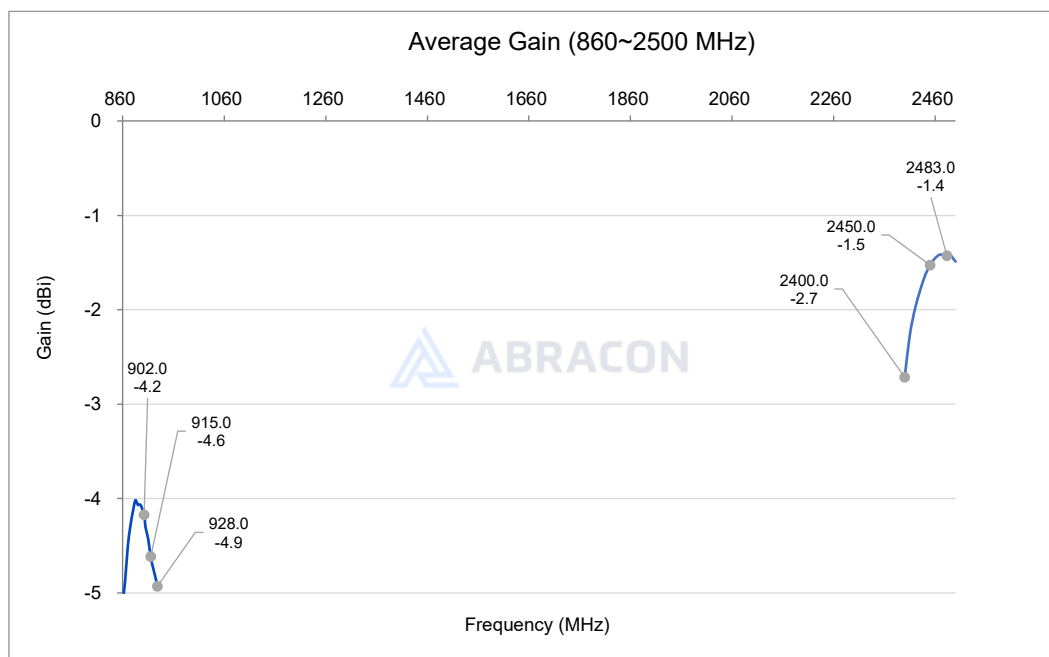
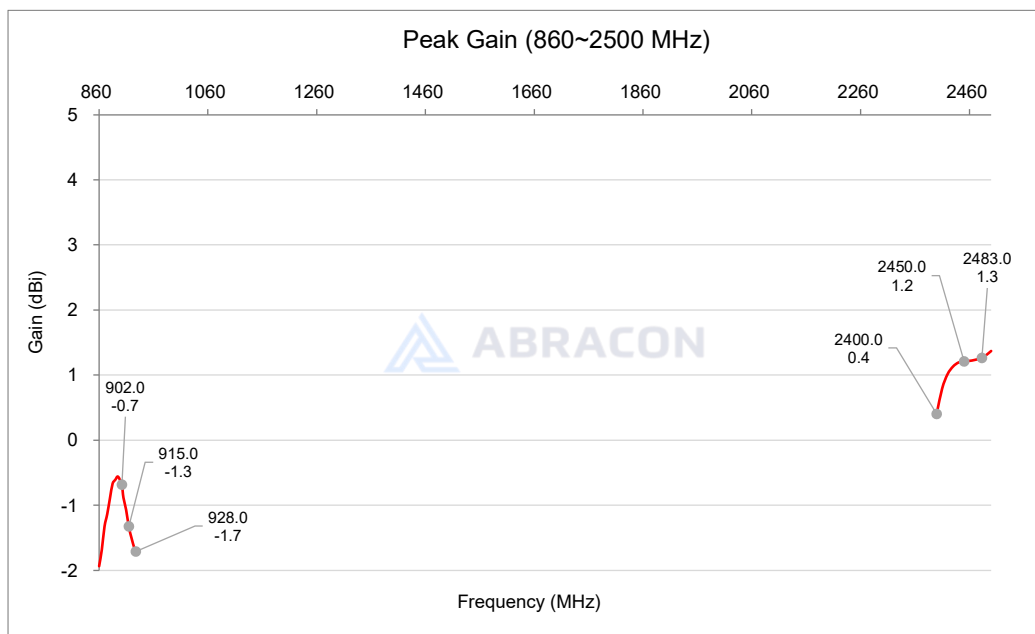


Ø8.8 x 77.0 mm

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## Radiation Characteristics – Peak Gain & Average Gain (Free Space)



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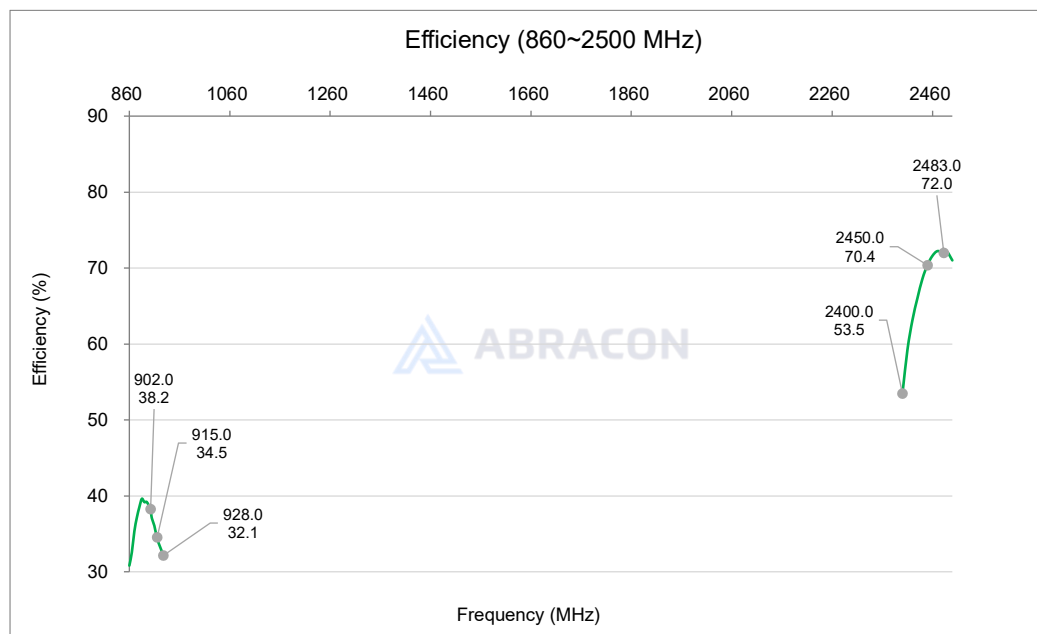


Ø8.8 x 77.0 mm

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## Radiation Characteristics – Total Efficiency (%) (Free Space)



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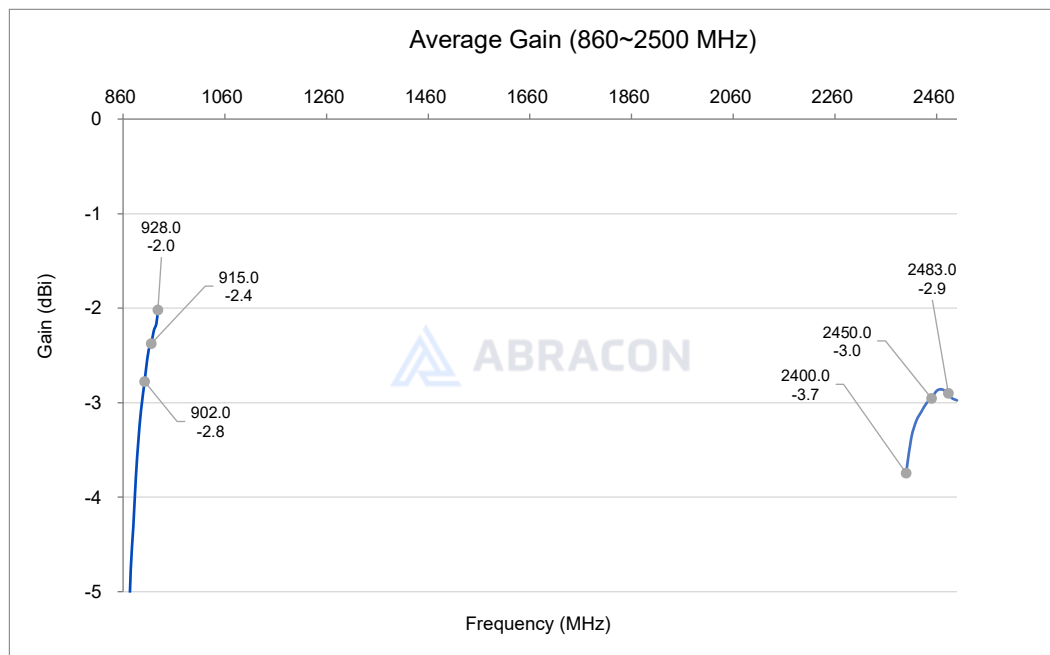
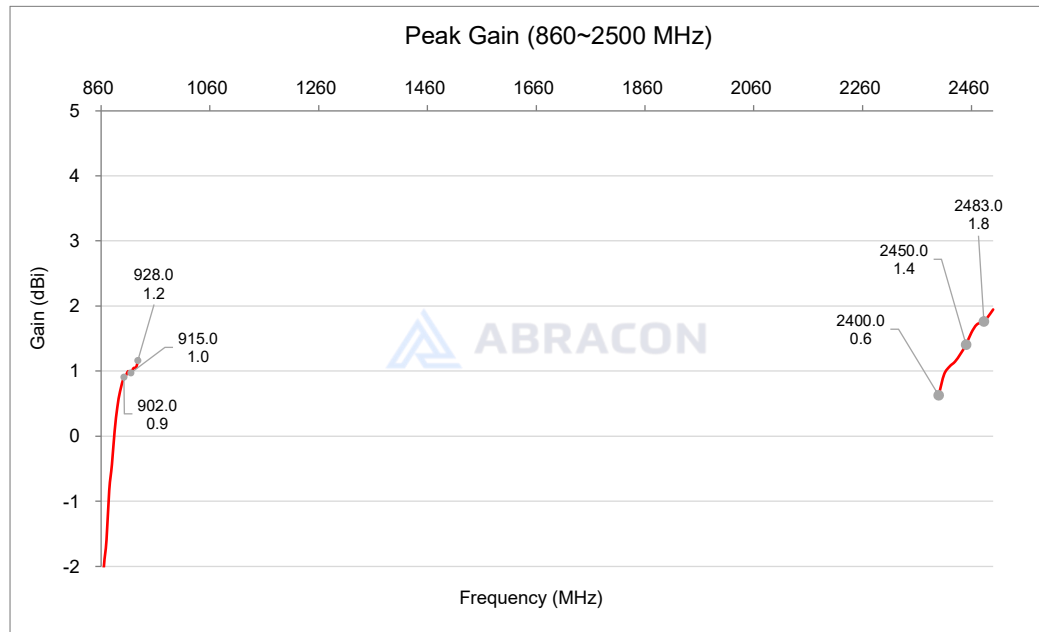


Ø8.8 x 77.0 mm

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## Radiation Characteristics – Peak Gain & Average Gain (On Metal)



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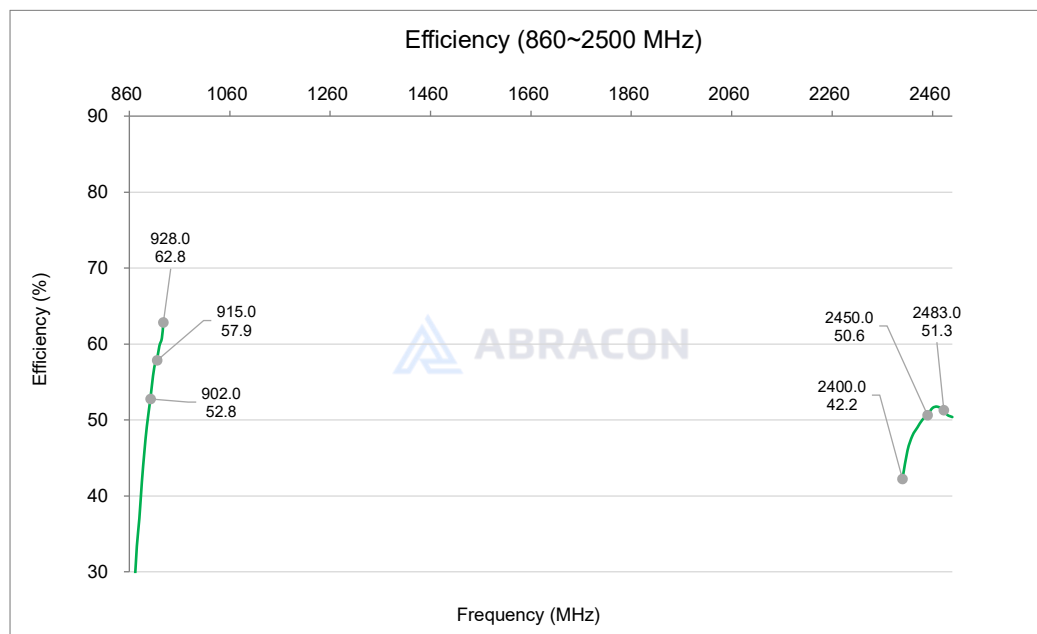


Ø8.8 x 77.0 mm

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## Radiation Characteristics – Total Efficiency (%) (On Metal)



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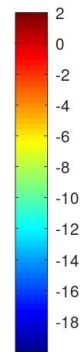
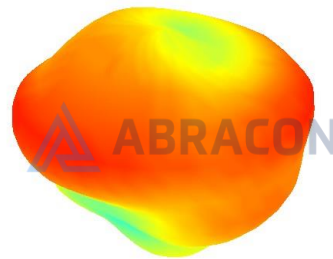
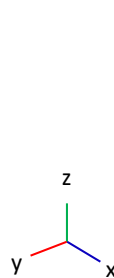
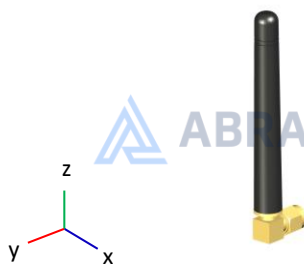
Ø8.8 x 77.0 mm

RoHS/RoHS II Compliant

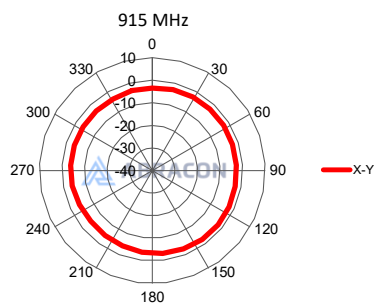
MSL = N/A

## Radiation Characteristics – 3D & 2D Pattern (Free Space)

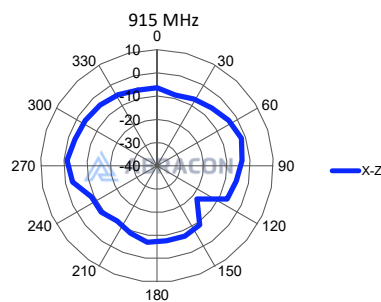
915MHz



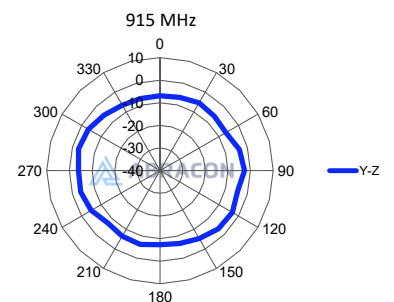
XY plane



XZ plane



YZ plane



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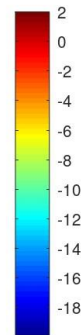
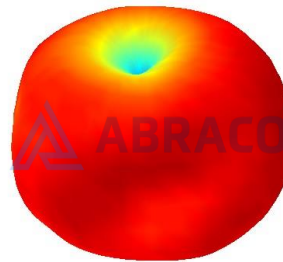
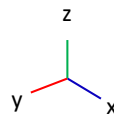
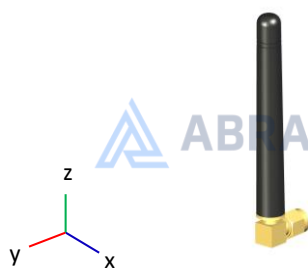


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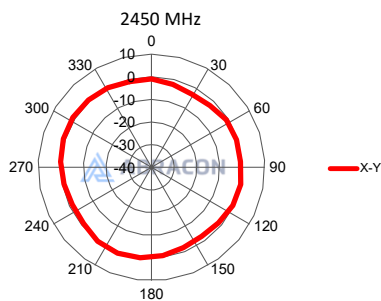
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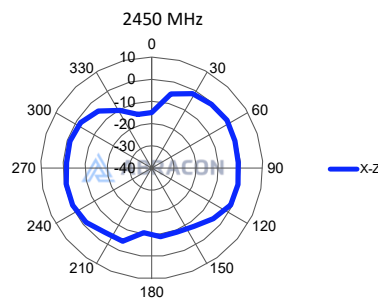
2450MHz



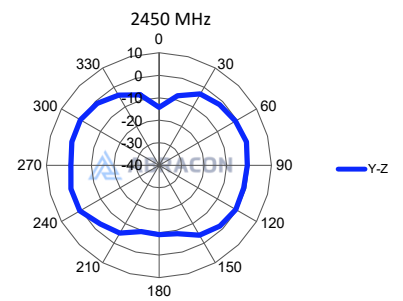
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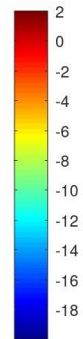
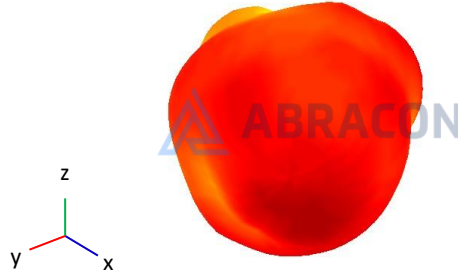
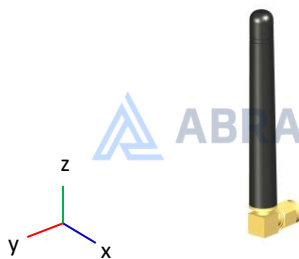
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RoHS/RoHS II Compliant

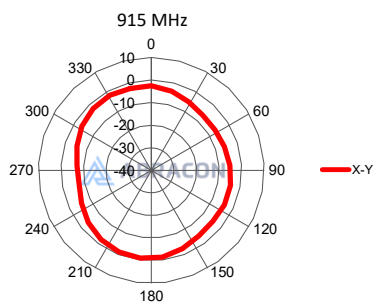
MSL = N/A

## Radiation Characteristics – 3D & 2D Pattern (On Metal)

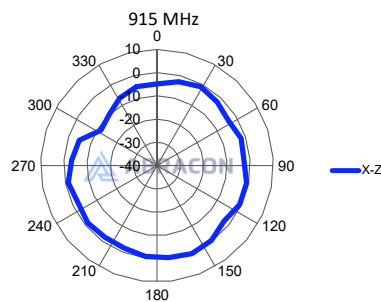
915MHz



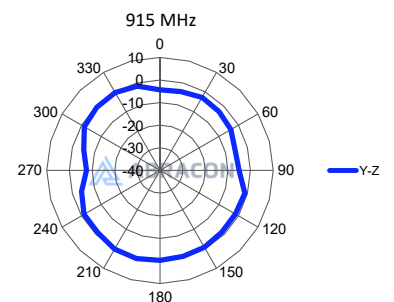
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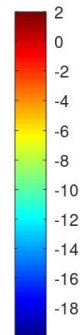
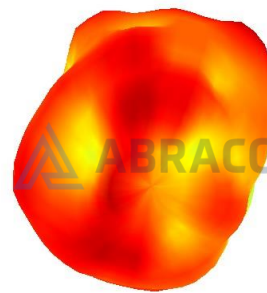
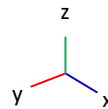
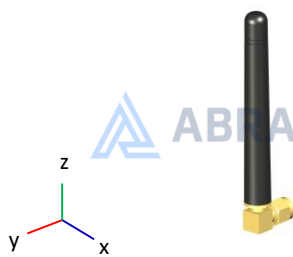


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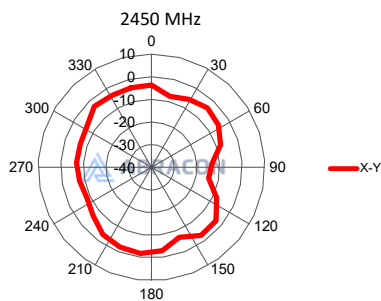
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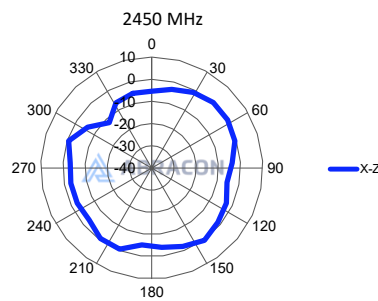
2450MHz



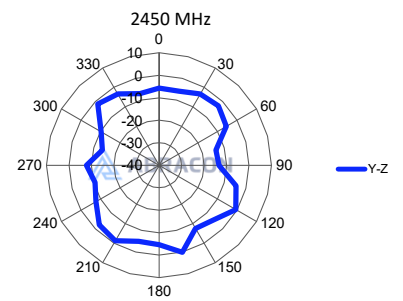
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## Packaging

Number of antennas / PE bag: 40 pcs

Number of PE bags / carton: 10

Total antennas / carton: 400 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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