

2.4 GHz External Whip Antenna



AANE-WH-0207

Request Samples



Check Inventory



Ø 10 x 108 mm

RoHS/RoHS II Compliant

MSL Level = N/A

Features

- Cost-Effective 2.4GHz Dipole Antenna
- Peak Gain 2.7 dBi
- High Efficiency up to 92%
- Swivel Connector Design for Straight, Right-Angle and 45-Degree Positioning
- Weather-Proof Antenna Housing Optional
- Fully Customizable Connectors

Applications

- Bluetooth® / ZigBee® / Thread/ Matter/Wi-Fi®
- Bluetooth® / Wi-Fi® Modules
- Medical Wearables & Tele-Medicine
- Smart Home & Smart Building
- Asset Tracking & Telematics
- Smart Metering
- Intelligent Lighting

Product Image



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Electrical Specification

Parameter	Specification	Unit
Operating Frequency	2400 - 2500	MHz
VSWR (Typ.)	< 1.5	
Peak Gain	2.7	dBi
Maximum Efficiency	92	%
Average Efficiency	86	%
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 10 x 108 mm
Weight	6.4 g
Material ⁽¹⁾	TPEE
Recommended Torque for Mounting	0.565 N·m
Color	Black
Antenna Type	Whip (Dipole)
RF Connector ⁽²⁾	RP-SMA(M)

(1): UV Resistant optional

(2): Fully Customizable Connectors

Environmental Specification

Parameter	Specification
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
IP Rating	IP65 (Optional)
RoHS Complaint	Yes



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Ordering Information

Part Number	Description	Connector Option
AANE-WH-0207-1	2.4 GHz External Whip Antenna with RP-SMA(M) Connector, IP-Rated & UV-Resistant Housing	RP-SMA(M)
AANE-WH-0207-2	2.4 GHz External Whip Antenna with SMA(M) connector, IP-Rated & UV-Resistant Housing	SMA(M)
AANE-WH-0207-3	2.4 GHz External Whip Antenna with RP-SMA(M) connector	RP-SMA(M)
AANE-WH-0207-4	2.4 GHz External Whip Antenna with SMA(M) connector	SMA(M)

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



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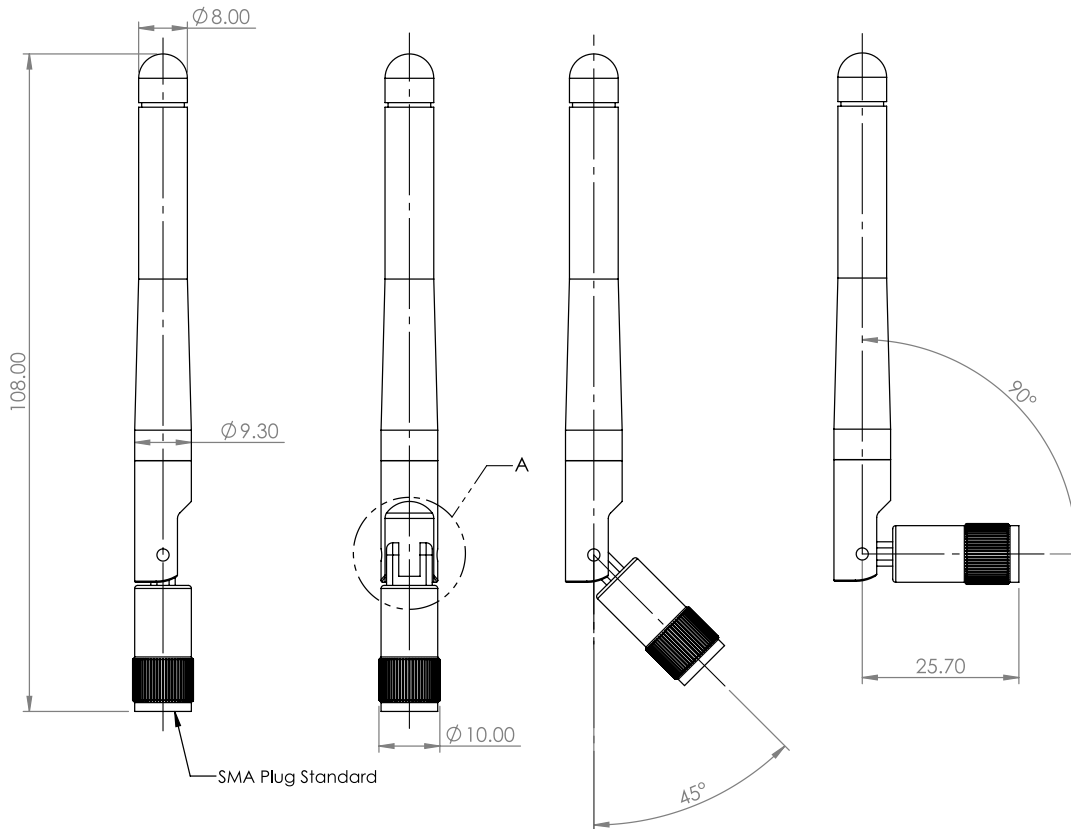


Ø 10 x 108 mm

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Product Dimensions



Unit : mm

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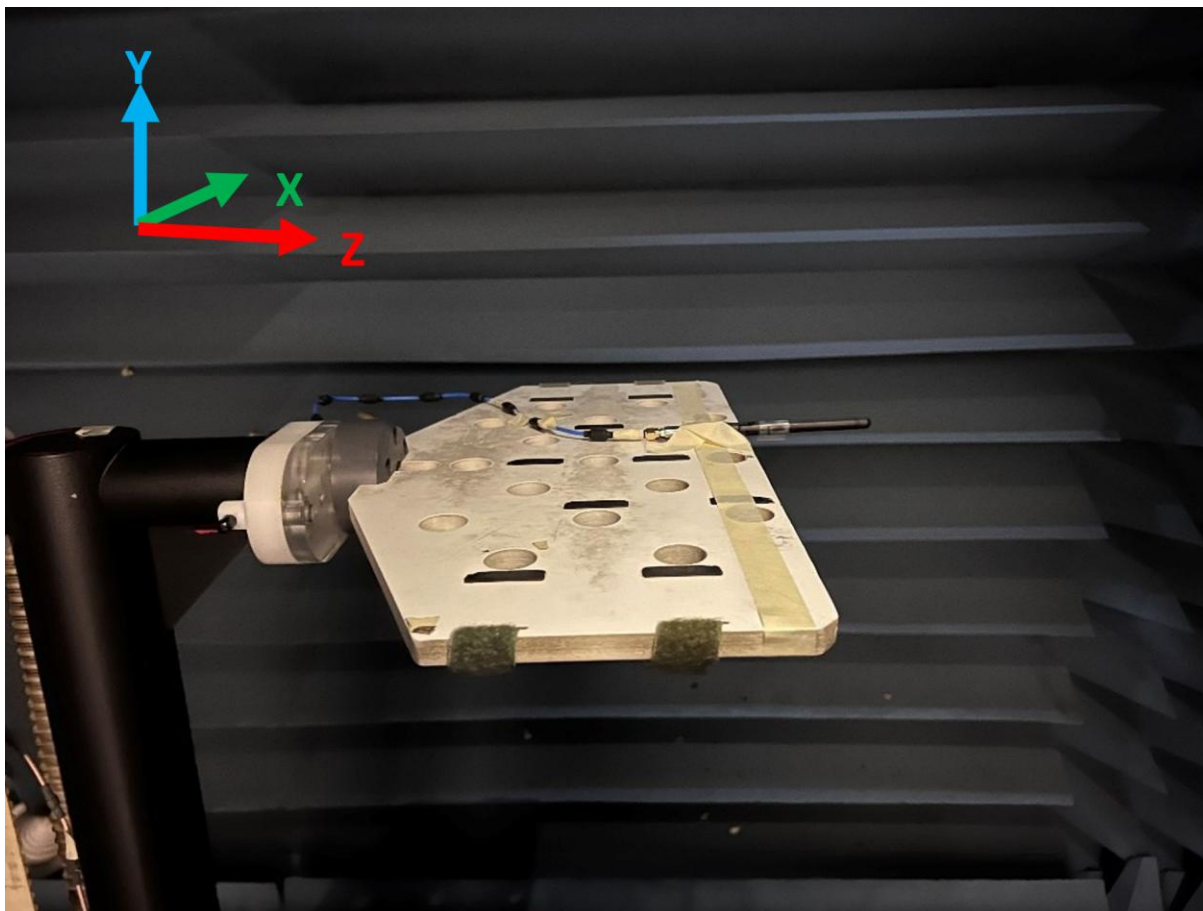


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Measurement Setup



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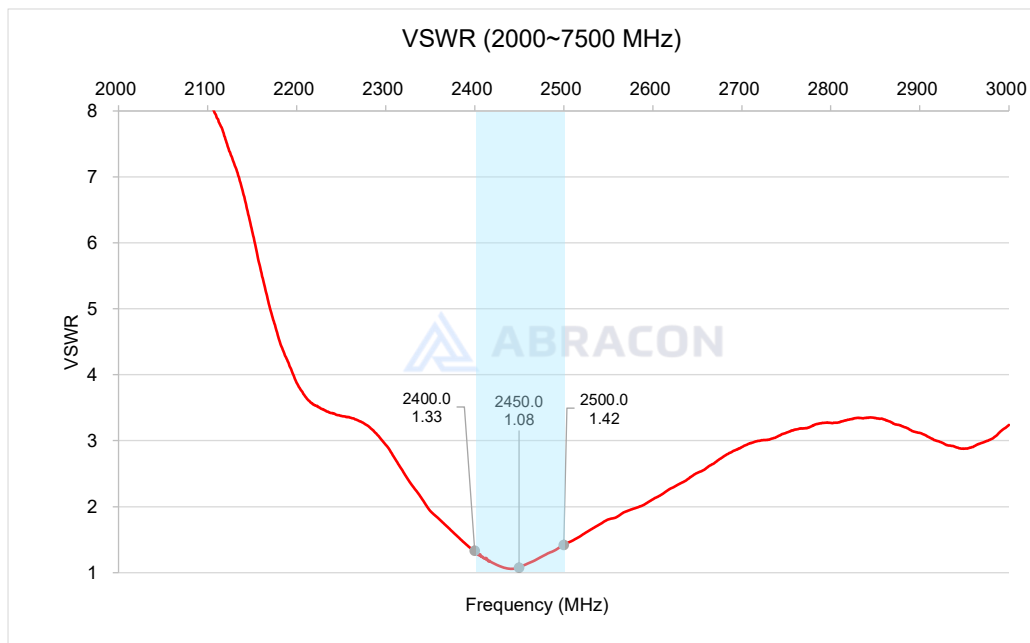
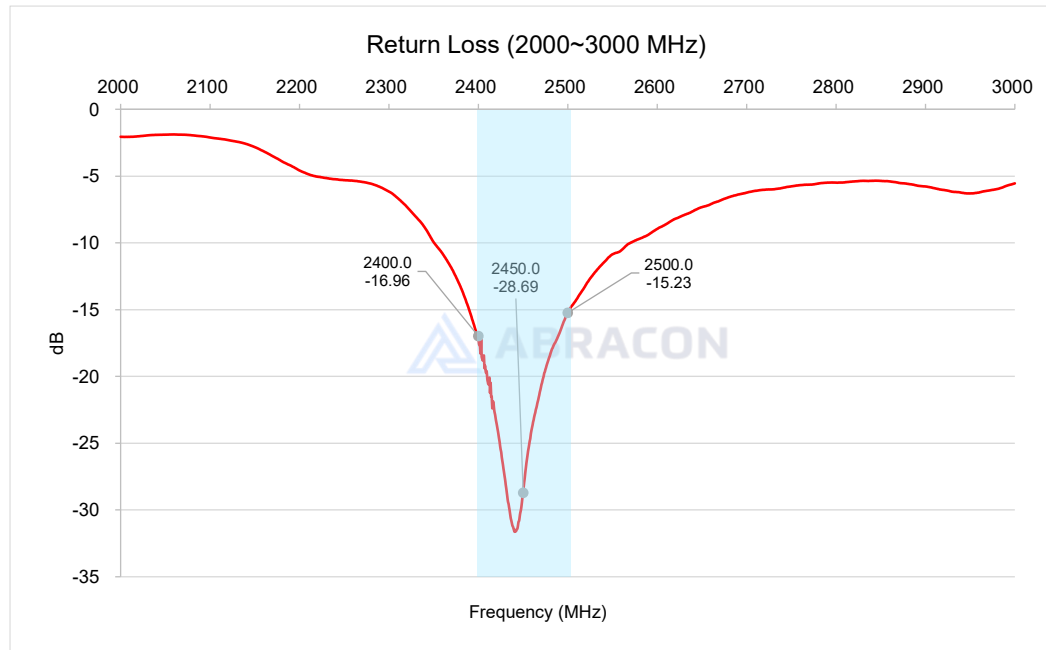


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Reflection Characteristics – Return Loss & VSWR



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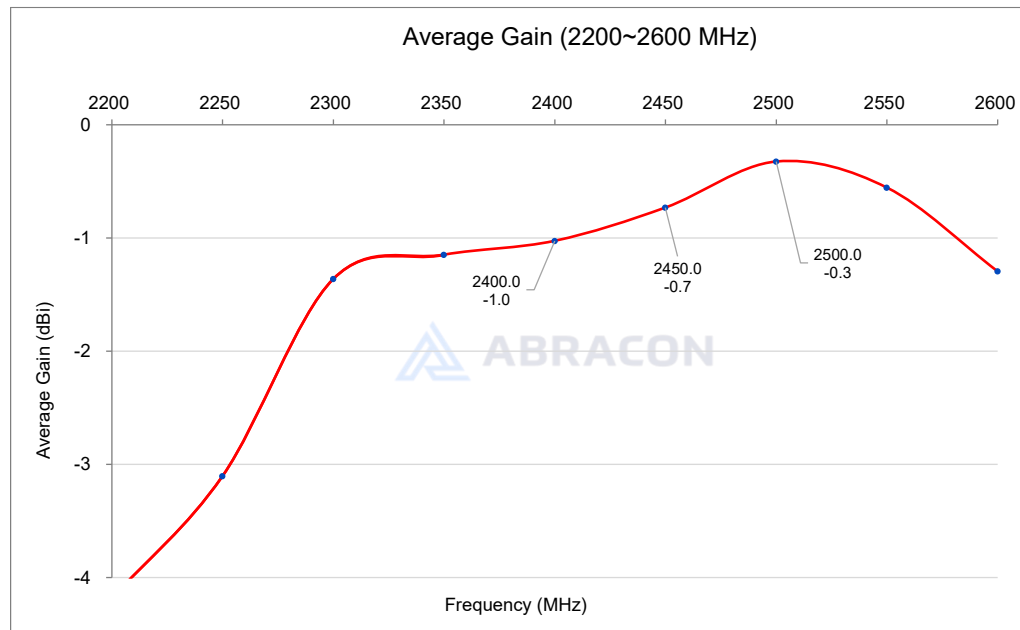
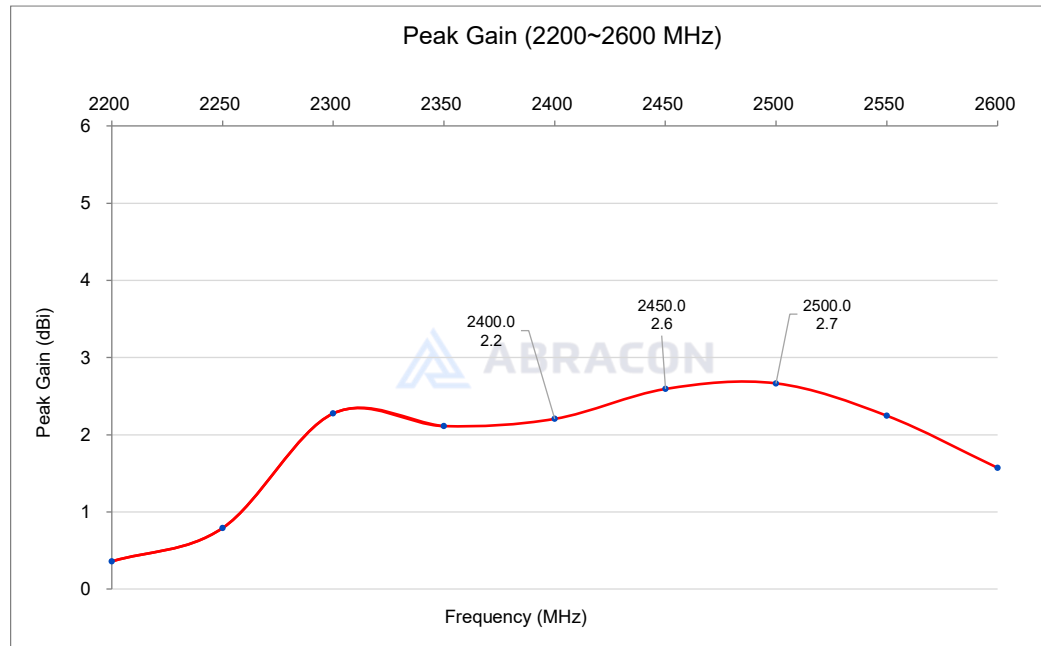


Ø 10 x 108 mm

RoHS/RoHS II Compliant

MSL Level = N/A

Radiation Characteristics – Peak Gain & Average Gain



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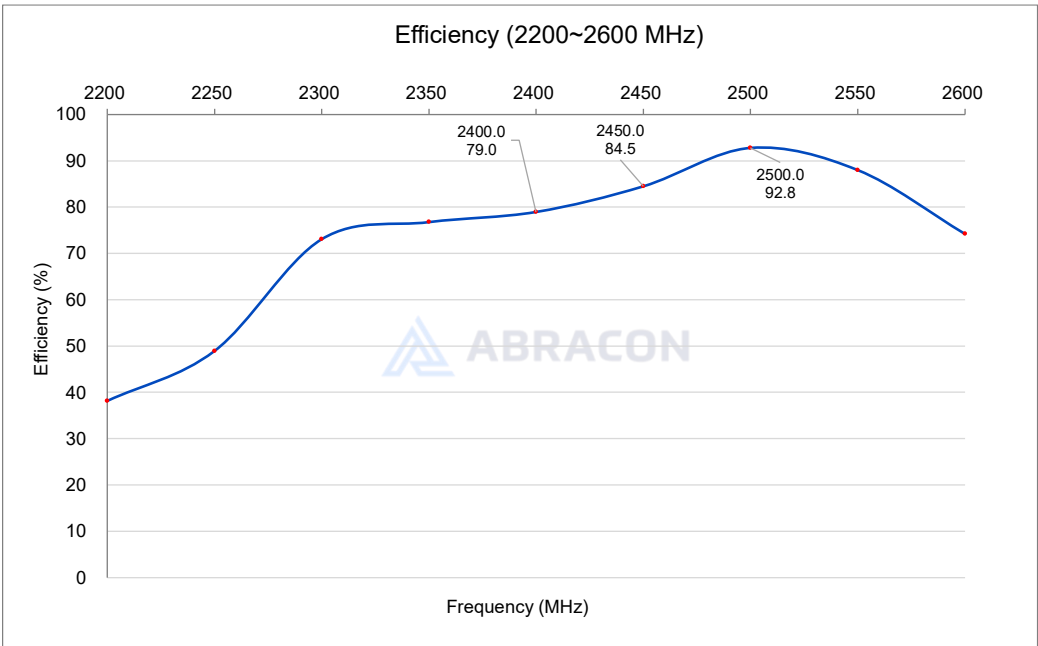


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Radiation Characteristics – Total Efficiency (%)



Radiation Characteristics –3D & 2D Pattern



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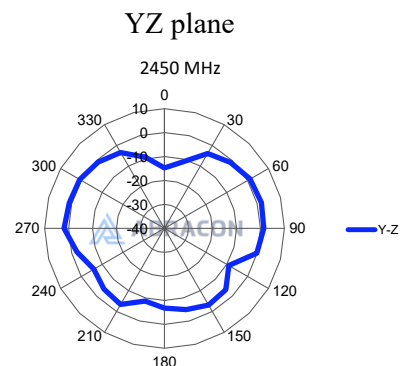
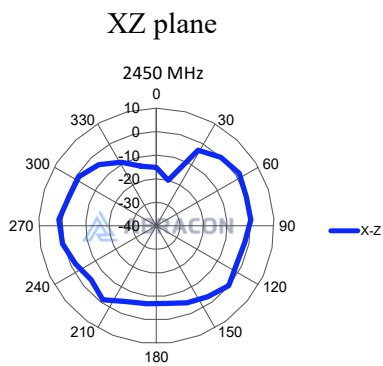
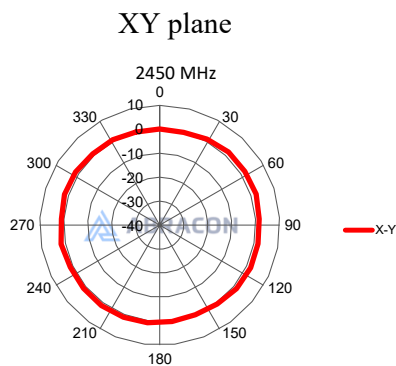
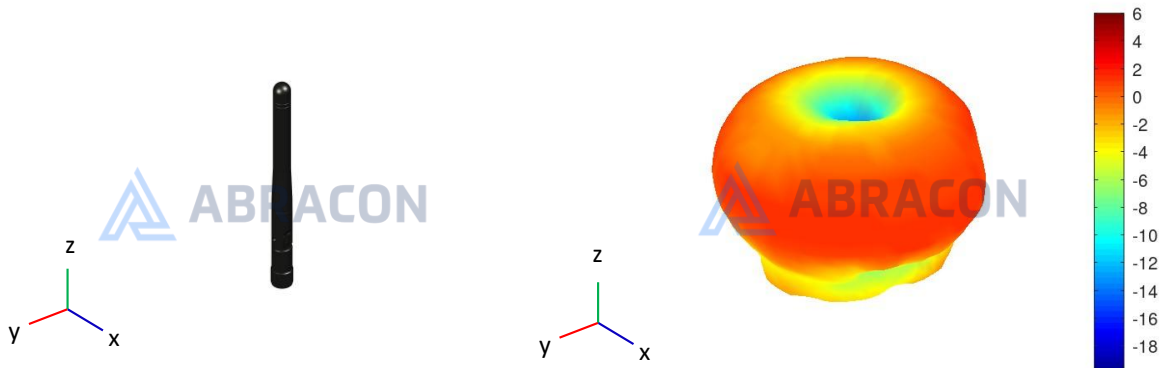


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2450MHz



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Packaging

Number of antennas / PE bag: 30 pcs

Number of PE bags / carton: 8

Total antennas / carton: 240 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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