

UWB FPC Antenna



AANI-FB-0112

Request Samples



Check Inventory



18.5 x 15.5 x 0.2 mm

RoHS/RoHS II Compliant

MSL Level = N/A

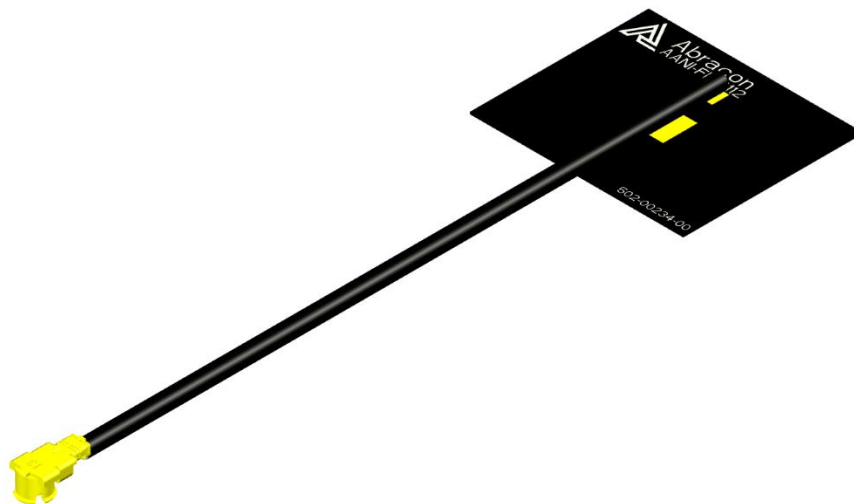
Features

- Frequency Range: 6.24-8.24 GHz (UWB Channels 5,6,8,9)
- Compact & Low-Profile
- Peak Gain: 4.1 dBi
- Efficiency: 56 %
- Easy Installation on Both Flat and Curved Surfaces
- Strong Adhesive in High-Temperature Environment
- Fully Customizable Cable Length and Connector Options

Applications

- UWB (Ultra-Wide Band)
- Secure Car Access
- Item Tracking
- Indoor Navigation
- Hands-Free Payment
- Smart Access
- Object Detection

Product Image



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Electrical Specification

Parameter	Specification				Unit
Operating Frequency	6240-6739 US UWB channels 5	6739-7238 US UWB channels 6	7238-7737 US UWB channels 8	7737-8236 US UWB channels 9	MHz
VSWR	< 2.0				
Peak Gain	3.1	4.1	3.9	3.3	dBi
Maximum Efficiency	56	53	53	52	%
Average Efficiency	53	50	51	50	%
Impedance	50				Ω
Polarization	Linear				
Radiation Pattern (Azimuth)	Omni-directional				
Max Input Power	5				W

Mechanical Specification

Parameter	Specification
Dimensions	18.5 x 15.5 x 0.2 mm
Antenna Type	Flexible PCB
Mounting Type	Adhesive
RF Connector ⁽¹⁾	u.FL/IPEX-1/MHF1
RF Cable Type ⁽¹⁾	Ø1.37 mm
Cable Length ⁽¹⁾	100 ± 5 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



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REVISED: 06-08-24

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Ordering Information

Part Number	Description	Connector Option
AANI-FB-0112-1	UWB FPC Antenna with MHF1 connector and 100 mm cable	u.FL/IPEX-1/MHF1
AANI-FB-0112-2	UWB FPC Antenna with MHF4 connector and 100 mm cable	w.FL/IPEX-4/MHF4

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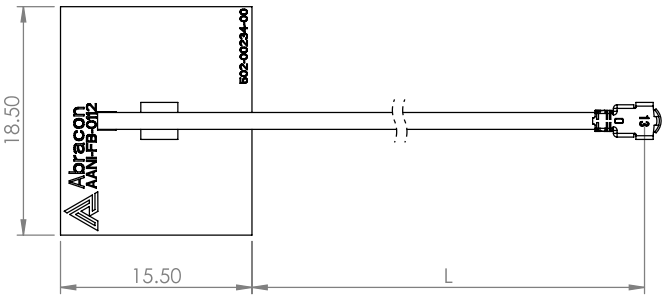


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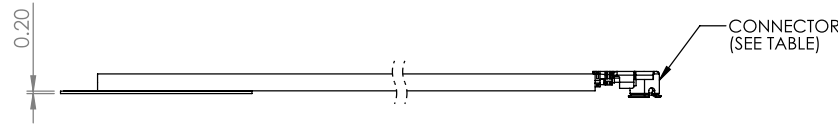


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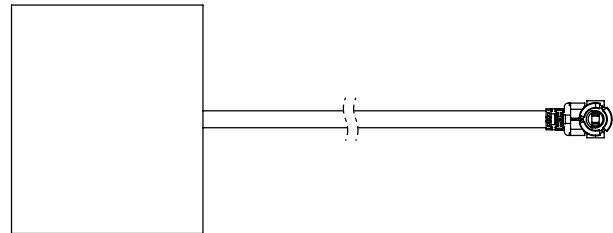
Product Dimensions



TOP VIEW

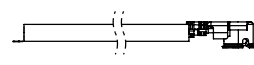


FRONT VIEW

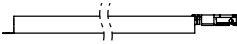


BOTTOM VIEW

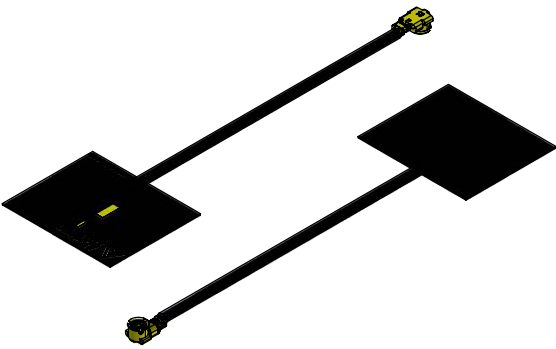
CONNECTOR



U.FL/IPEX-1/MHF1



W.FL/IPEX-4/MHF4



PART NUMBER	CABLE LENGTH (L)	CONNECTOR
AANI-FB-0112-1	100	U.FL/IPEX-1/MHF1
AANI-FB-0112-2	100	W.FL/IPEX-4/MHF4

Unit: mm

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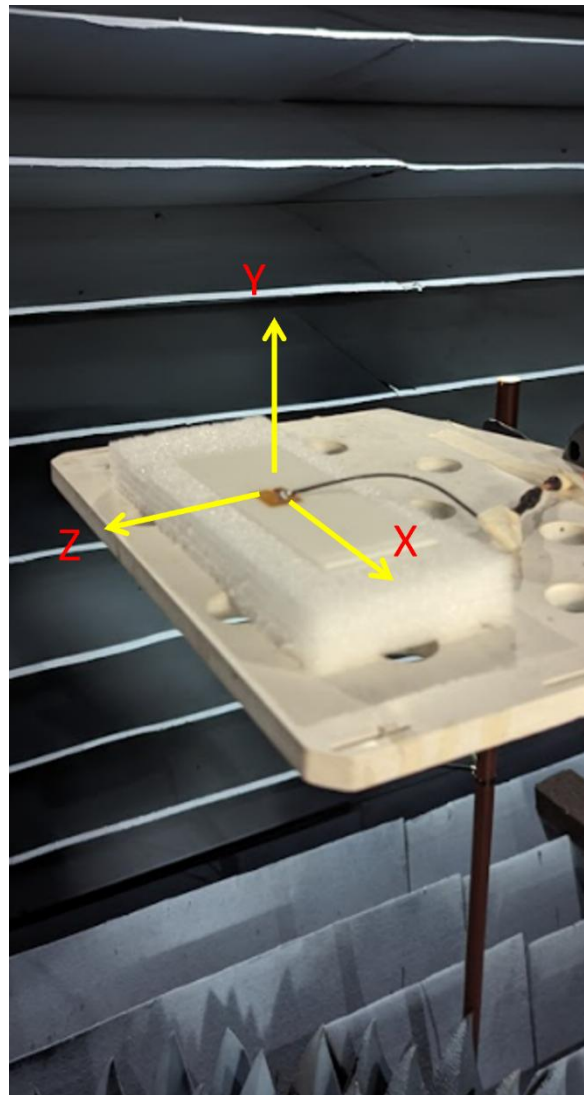


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Measurement Setup photo





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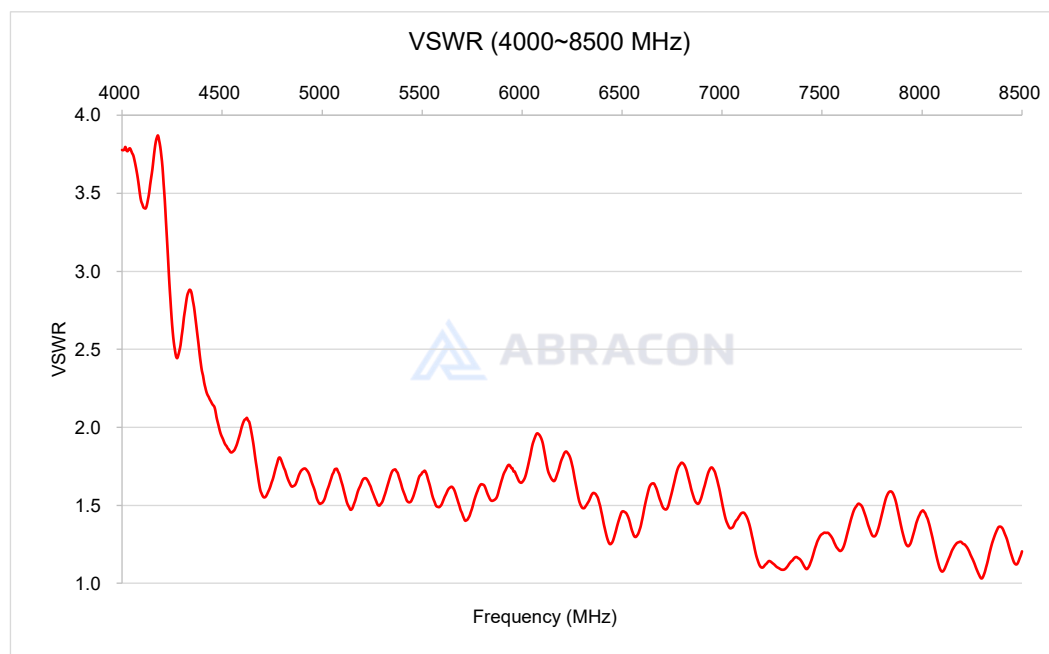
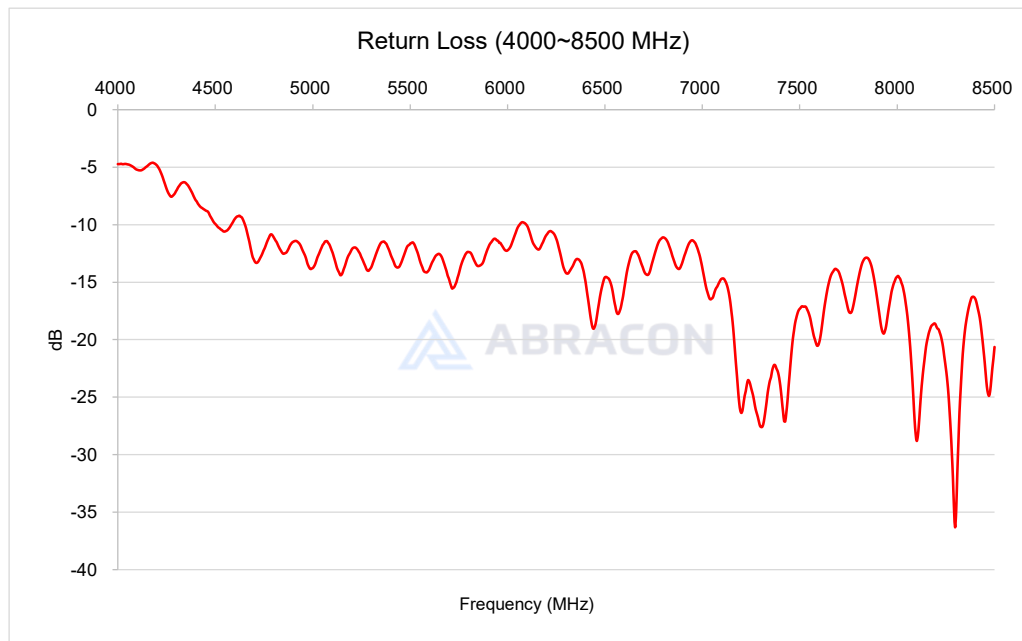


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Reflection Characteristics –Return Loss & VSWR





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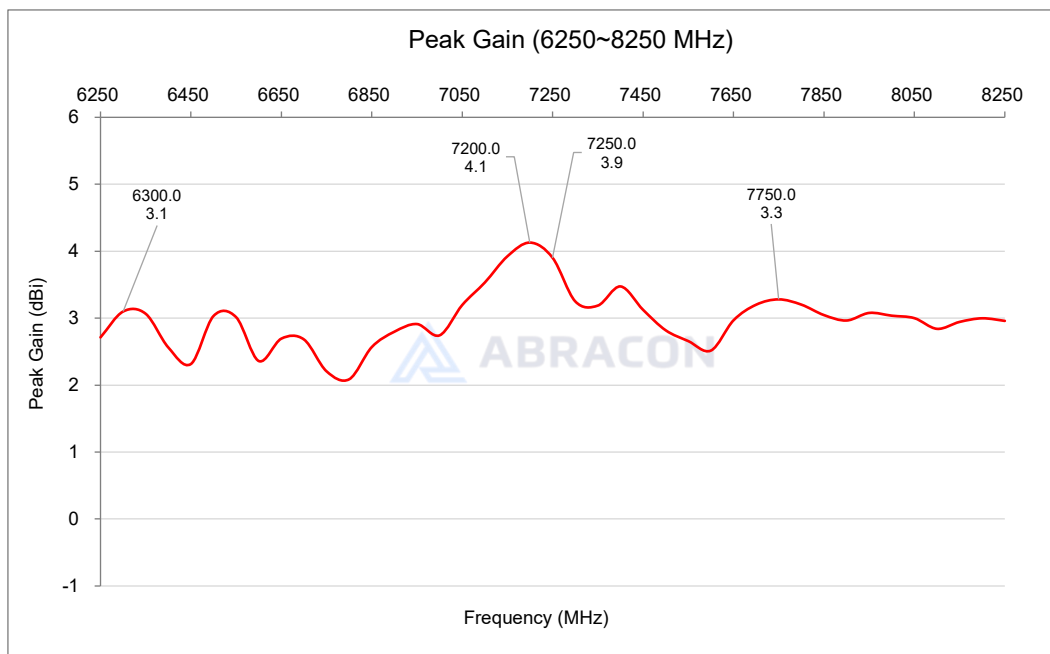


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Radiation Characteristics – Peak Gain & Average Gain





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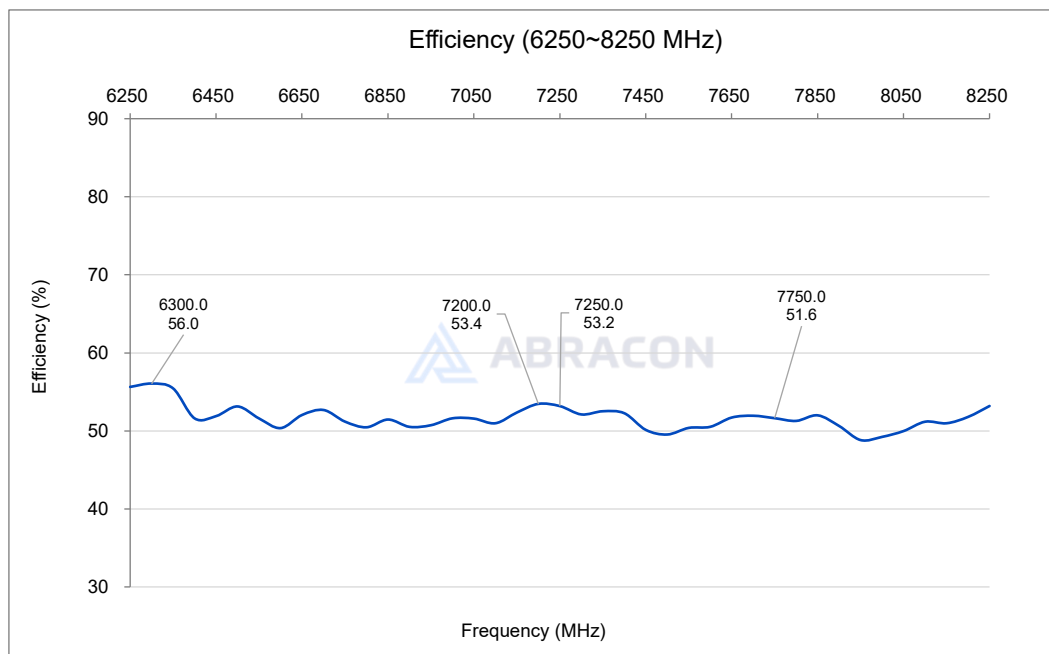


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Radiation Characteristics – Total Efficiency (%)



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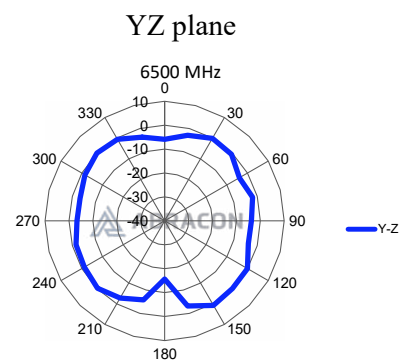
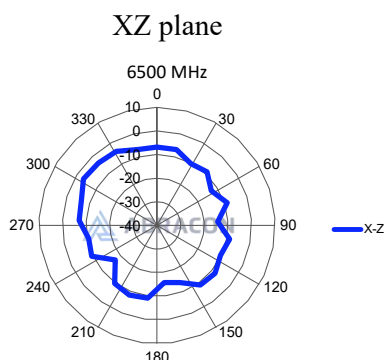
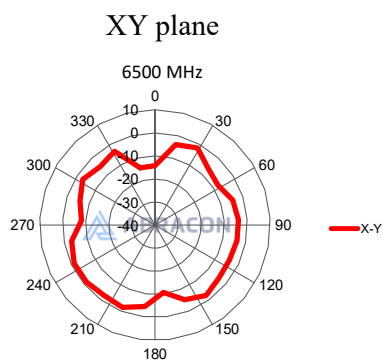
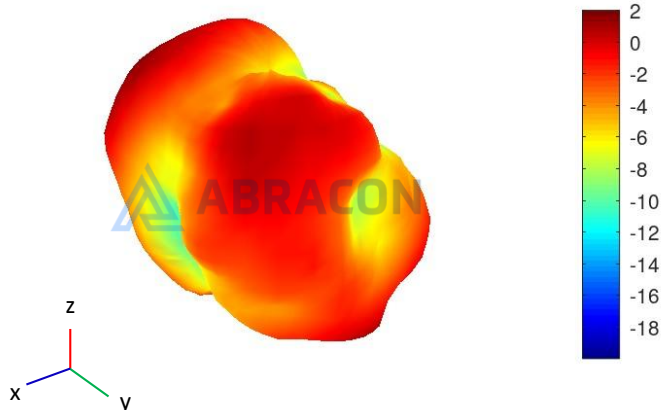
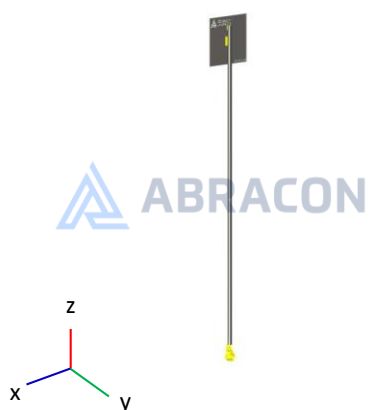
18.5 x 15.5 x 0.2 mm

RoHS/RoHS II Compliant

MSL Level = N/A

Radiation Characteristics – 3D & 2D Pattern

6500MHz (Channel 5, 7)



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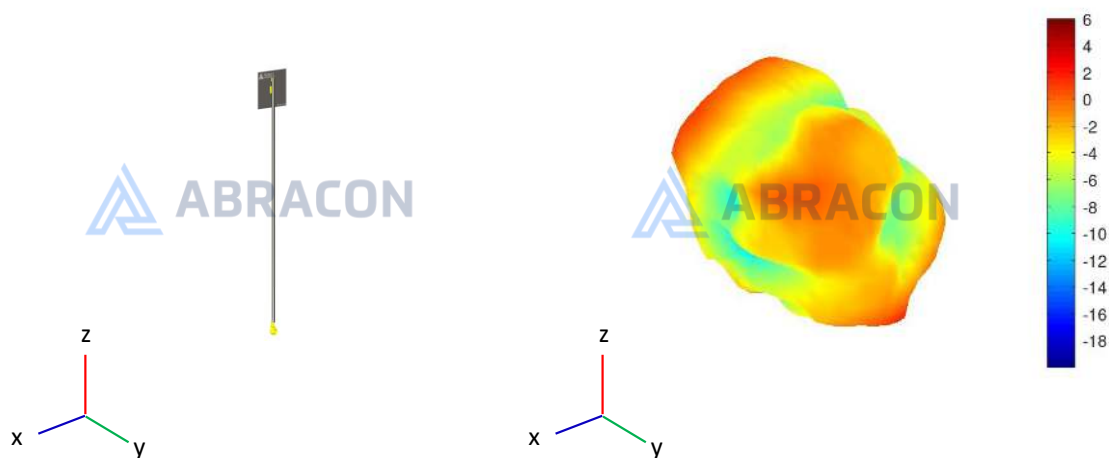


Check Inventory

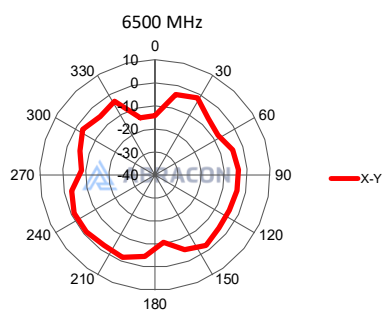


18.5 x 15.5 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

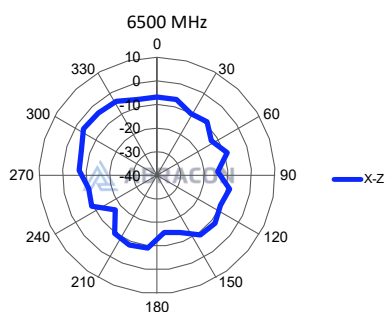
7000MHz (Channel 6)



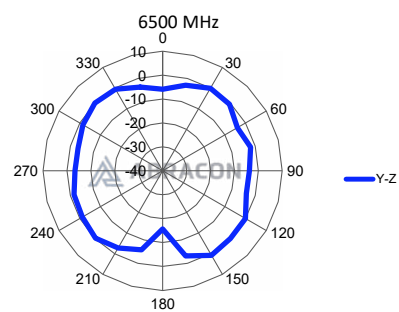
XY plane



XZ plane



YZ plane



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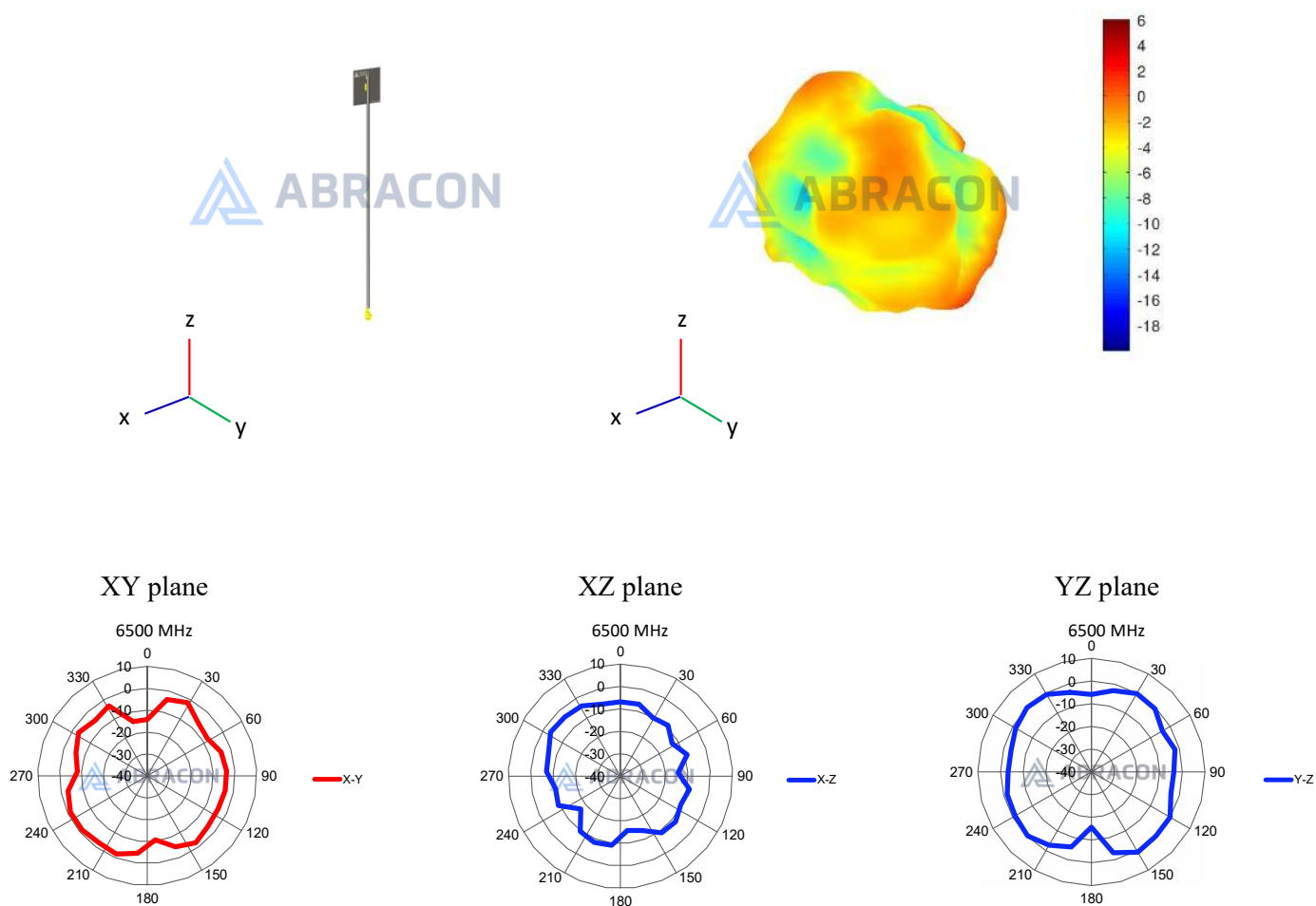


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7500MHz (Channel 8)



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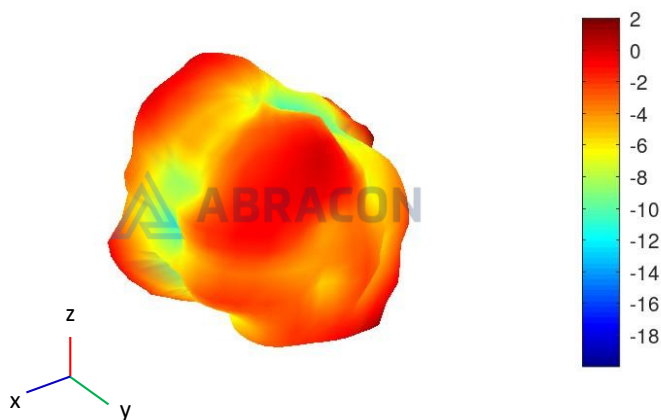
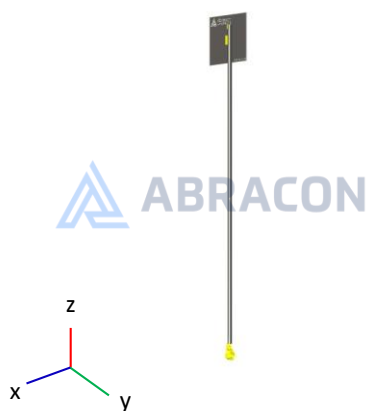


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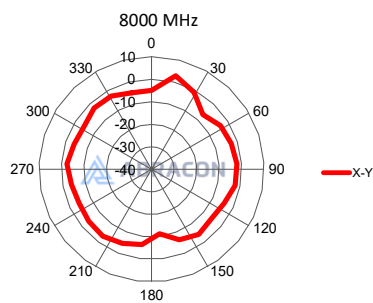


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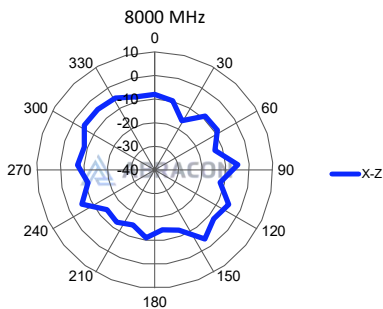
8000MHz (Channel 9)



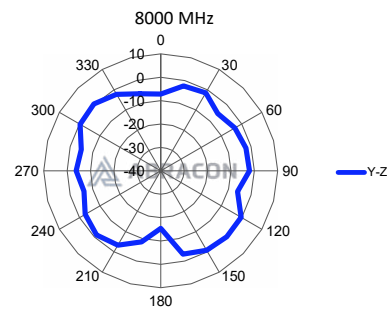
XY plane



XZ plane



YZ plane



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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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