

TRI BAND WI-FI 6E/7 PCB ANTENNA



AANI-FB-0083

Request Samples



Check Inventory



41 x 9 x 0.7 mm
RoHS Compliant
MSL Level = N/A

Features

- Compact Design with High Efficiency Up to 90%
- Easy Installation on Flat 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

- WiFi/WLAN coverage
 - WiFi 7 (802.11be)
 - WiFi 6/6E (802.11ax)
 - WiFi 4/5 (802.11b/g/n/ac)
- Bluetooth® / ZigBee® / Thread/ Matter
- Router and Networking
- Home Automation and Remote Sensing

Product Image



TRI BAND WI-FI 6E/7 PCB ANTENNA



AANI-FB-0083

Request Samples



Check Inventory



41 x 9 x 0.7 mm
RoHS Compliant
MSL Level = N/A

Electrical Specification

Parameter	Specification			Unit
Operating Frequency	2400 – 2483.5	5150 - 5850	5925 - 7125	MHz
VSWR (Typ.)	< 2.5			
Peak gain	2.6	3.9	4.2	dBi
Efficiency (Avg.)	91.5	87.3	72.1	%
Impedance	50			Ω
Polarization	Linear			
Radiation Pattern	Omni-directional			

Mechanical Specification

Parameter	Specification
Antenna Dimensions	41 x 9 x 0.7 mm
Antenna Type	Flexible Printed Circuit
Mounting Type	Adhesive
RF Connector ⁽¹⁾	u.FL/IPEX-1/MHF1, w.FL/IPEX-4/MHF4
RF Cable Type ⁽¹⁾	Ø1.13 mm
Cable Length ⁽¹⁾	50 mm, 100 mm, 150 mm, 200 mm, 250 mm, 300 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

TRI BAND WI-FI 6E/7 PCB ANTENNA



AANI-FB-0083

Request Samples



Check Inventory



41 x 9 x 0.7 mm
RoHS Compliant
MSL Level = N/A

Ordering Information

Part Number	Description	Connector Option
AANI-FB-0083-0050I	TRI BAND WI-FI 6E/7 PCB ANTENNA with MHF1 connector and 50mm cable	u.FL/IPEX-1/MHF1
AANI-FB-0083-0050W	TRI BAND WI-FI 6E/7 PCB ANTENNA with MHF4 connector and 50mm cable	w.FL/IPEX-4/MHF4
AANI-FB-0083-0100I	TRI BAND WI-FI 6E/7 PCB ANTENNA with MHF1 connector and 100mm cable	u.FL/IPEX-1/MHF1
AANI-FB-0083-0100W	TRI BAND WI-FI 6E/7 PCB ANTENNA with MHF4 connector and 100mm cable	w.FL/IPEX-4/MHF4
AANI-FB-0083-0150I	TRI BAND WI-FI 6E/7 PCB ANTENNA with MHF1 connector and 150mm cable	u.FL/IPEX-1/MHF1
AANI-FB-0083-0150W	TRI BAND WI-FI 6E/7 PCB ANTENNA with MHF4 connector and 150mm cable	w.FL/IPEX-4/MHF4
AANI-FB-0083-0200I	TRI BAND WI-FI 6E/7 PCB ANTENNA with MHF1 connector and 200mm cable	u.FL/IPEX-1/MHF1
AANI-FB-0083-0200W	TRI BAND WI-FI 6E/7 PCB ANTENNA with MHF4 connector and 200mm cable	w.FL/IPEX-4/MHF4
AANI-FB-0083-0250I	TRI BAND WI-FI 6E/7 PCB ANTENNA with MHF1 connector and 250mm cable	u.FL/IPEX-1/MHF1
AANI-FB-0083-0250W	TRI BAND WI-FI 6E/7 PCB ANTENNA with MHF4 connector and 250mm 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](#)

TRI BAND WI-FI 6E/7 PCB ANTENNA



AANI-FB-0083

Request Samples



Check Inventory

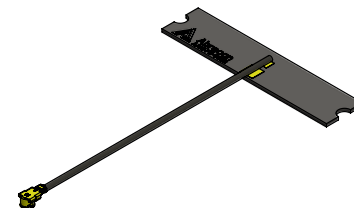
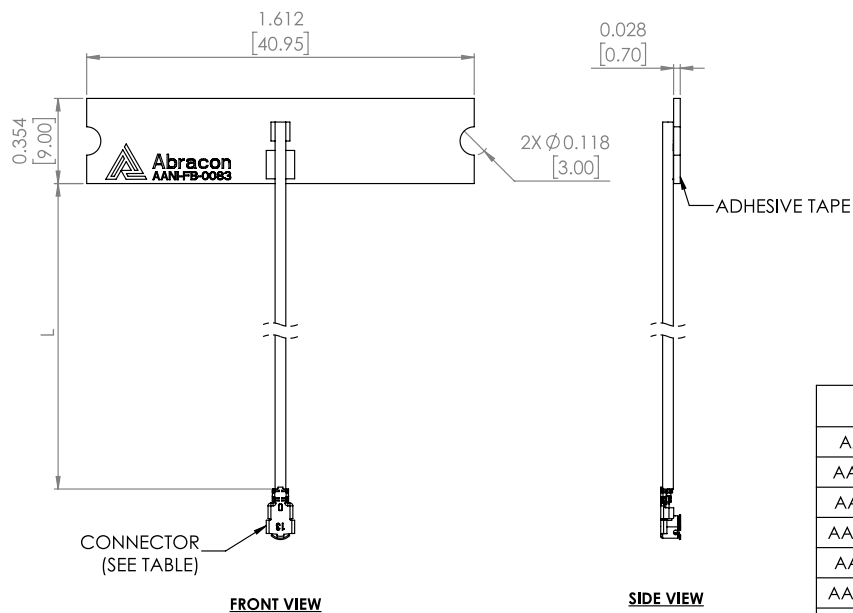


41 x 9 x 0.7 mm

RoHS Compliant

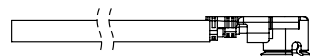
MSL Level = N/A

Product Dimensions

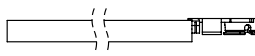


PART NUMBER	CABLE LENGTH (L)	CONNECTOR
AANI-FB-0083-0050I	1.968[50]	u.FL/IPEX-1/MHF1
AANI-FB-0083-0050W	1.968[50]	w.FL/IPEX-4/MHF4
AANI-FB-0083-00100I	3.937[100]	u.FL/IPEX-1/MHF1
AANI-FB-0083-00100W	3.937[100]	w.FL/IPEX-4/MHF4
AANI-FB-0083-00150I	5.905[150]	u.FL/IPEX-1/MHF1
AANI-FB-0083-00150W	5.905[150]	w.FL/IPEX-4/MHF4
AANI-FB-0083-00200I	7.874[200]	u.FL/IPEX-1/MHF1
AANI-FB-0083-00200W	7.874[200]	w.FL/IPEX-4/MHF4
AANI-FB-0083-00250I	9.842[250]	u.FL/IPEX-1/MHF1
AANI-FB-0083-00250W	9.842[250]	w.FL/IPEX-4/MHF4
AANI-FB-0083-00300I	11.811[300]	u.FL/IPEX-1/MHF1
AANI-FB-0083-00300W	11.811[300]	w.FL/IPEX-4/MHF4

CONNECTOR



u.FL/IPEX-1/MHF1



w.FL/IPEX-4/MHF4

Unit : inches[mm]

TRI BAND WI-FI 6E/7 PCB ANTENNA



AANI-FB-0083

Request Samples

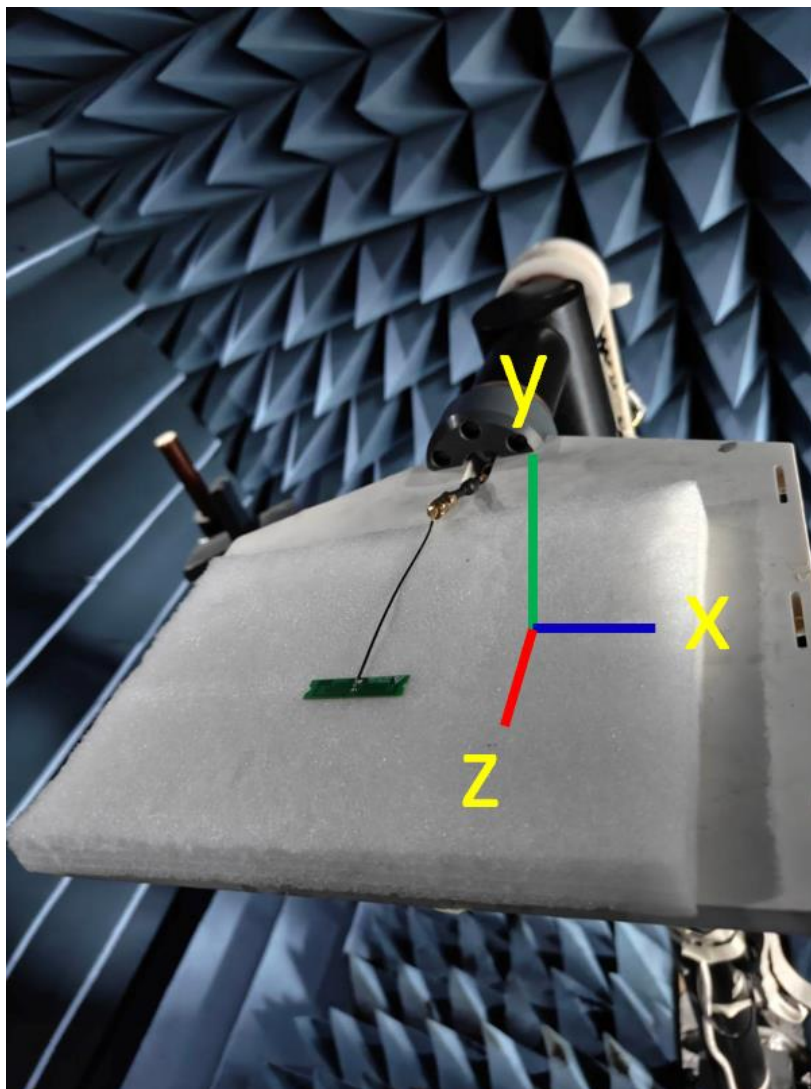


Check Inventory



41 x 9 x 0.7 mm
RoHS Compliant
MSL Level = N/A

Measurement Setup photo



TRI BAND WI-FI 6E/7 PCB ANTENNA



AANI-FB-0083

Request Samples



Check Inventory

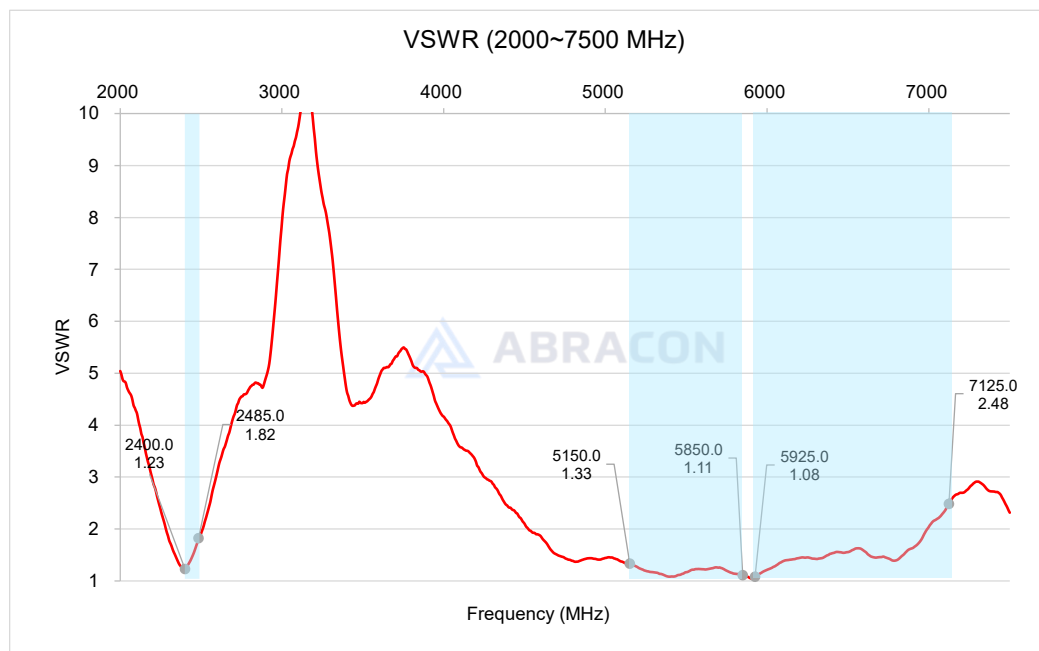
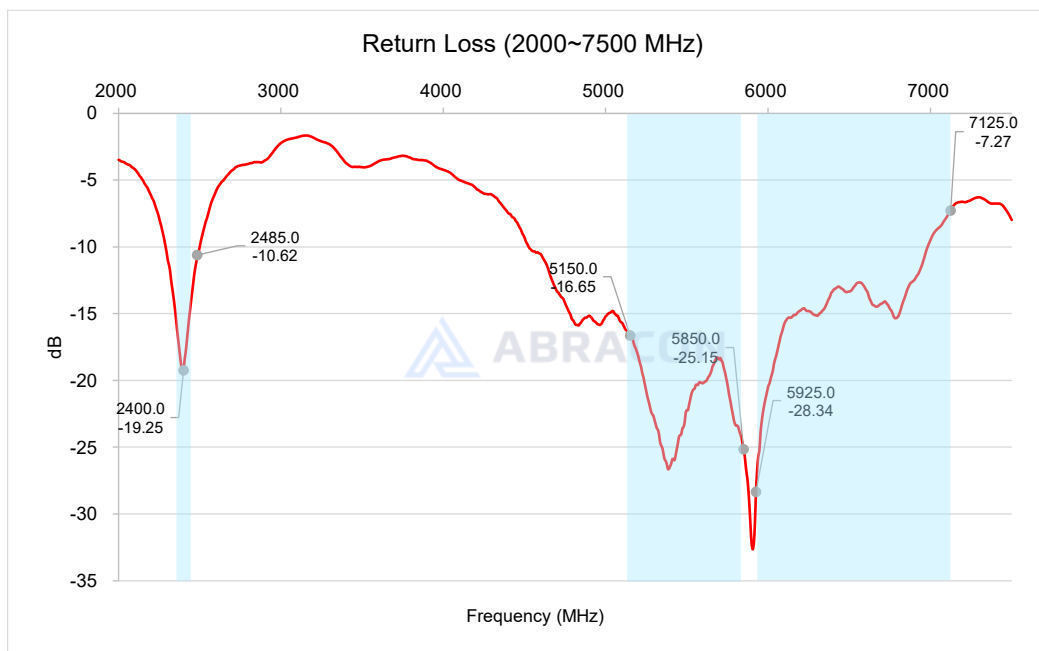


41 x 9 x 0.7 mm

RoHS Compliant

MSL Level = N/A

Reflection Characteristics – Return Loss & VSWR



TRI BAND WI-FI 6E/7 PCB ANTENNA



AANI-FB-0083

Request Samples



Check Inventory

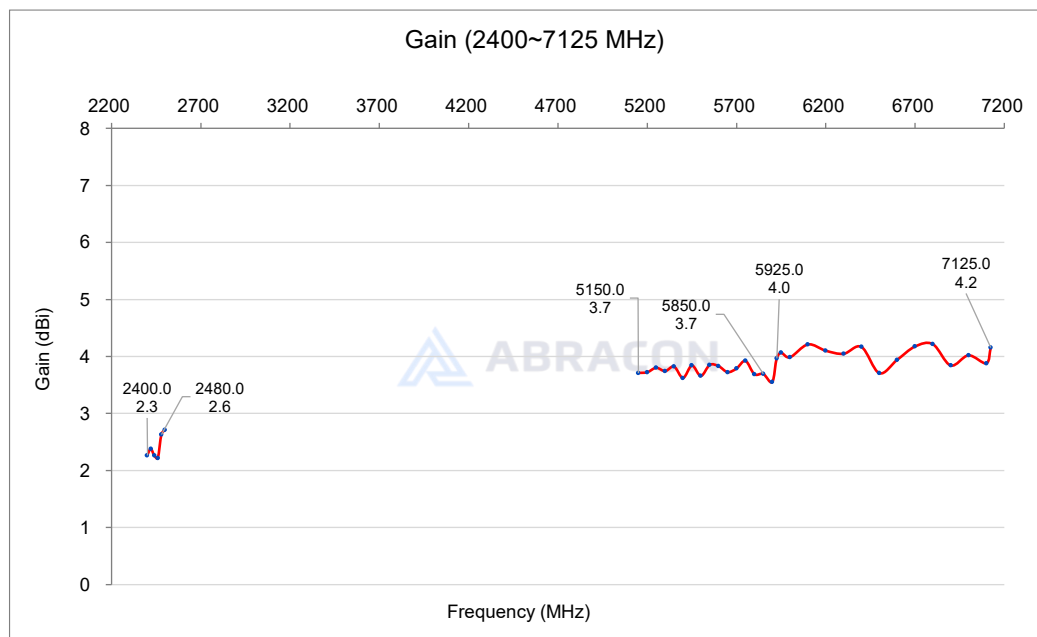


41 x 9 x 0.7 mm

RoHS Compliant

MSL Level = N/A

Radiation Characteristics – Peak Gain



TRI BAND WI-FI 6E/7 PCB ANTENNA



AANI-FB-0083

Request Samples

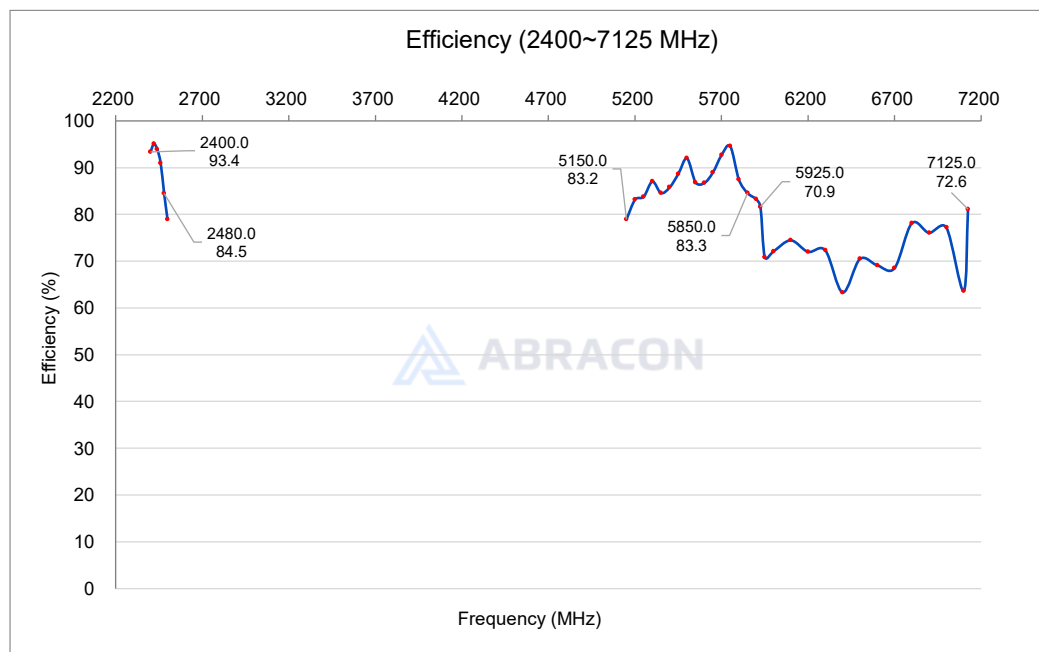


Check Inventory



41 x 9 x 0.7 mm
RoHS Compliant
MSL Level = N/A

Radiation Characteristics – Total Efficiency (%)



TRI BAND WI-FI 6E/7 PCB ANTENNA



AANI-FB-0083

Request Samples



Check Inventory



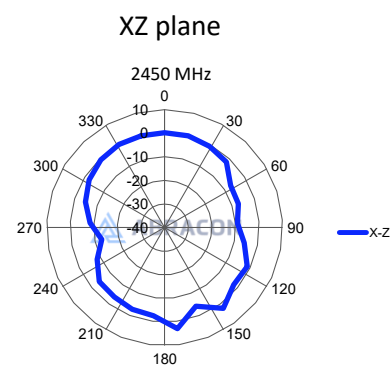
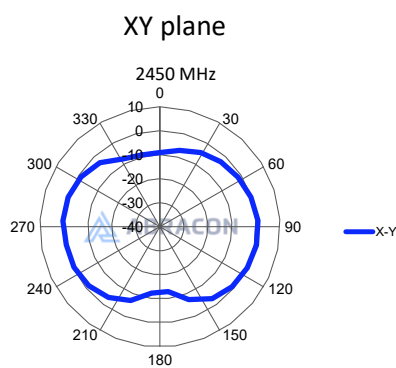
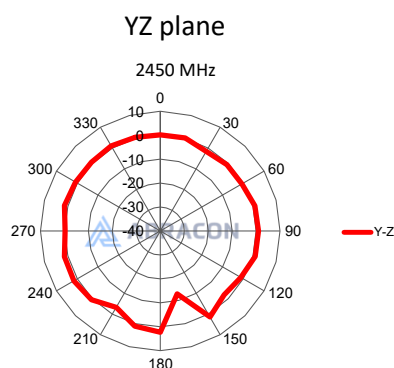
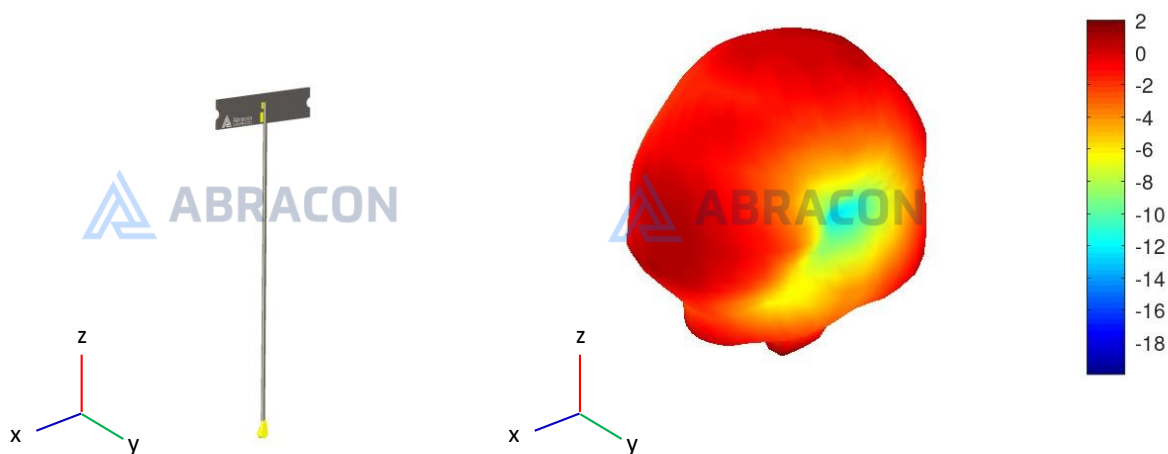
41 x 9 x 0.7 mm

RoHS Compliant

MSL Level = N/A

Radiation Characteristics – 3D & 2D pattern

2450MHz



TRI BAND WI-FI 6E/7 PCB ANTENNA



AANI-FB-0083

Request Samples

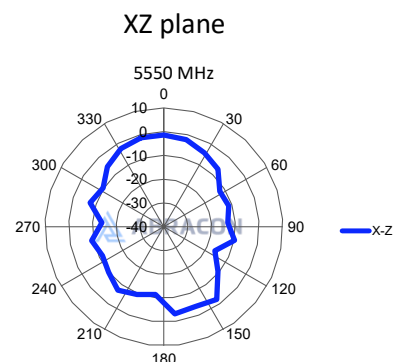
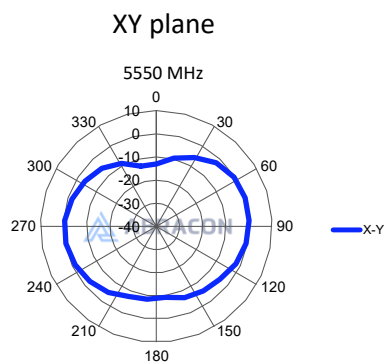
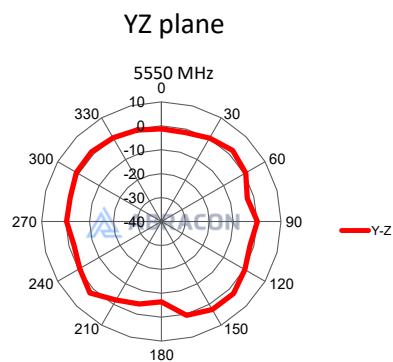
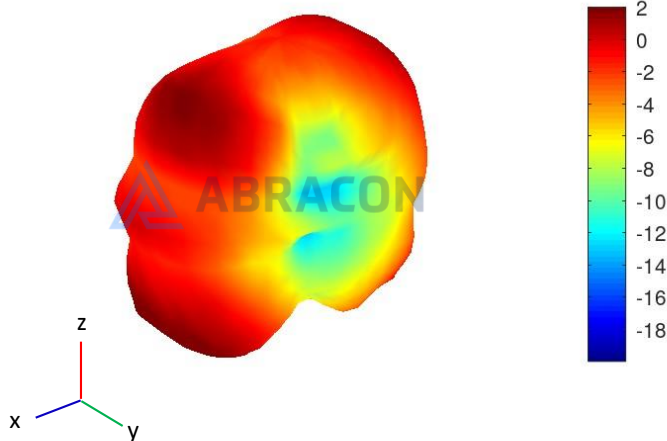
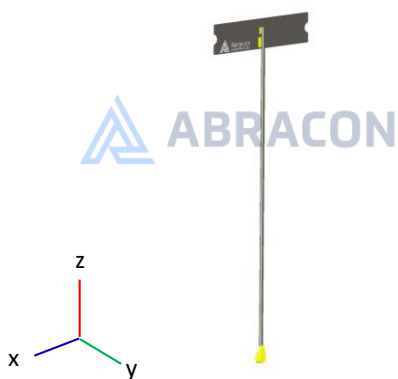


Check Inventory



41 x 9 x 0.7 mm
RoHS Compliant
MSL Level = N/A

5550MHz



TRI BAND WI-FI 6E/7 PCB ANTENNA



AANI-FB-0083

Request Samples



Check Inventory

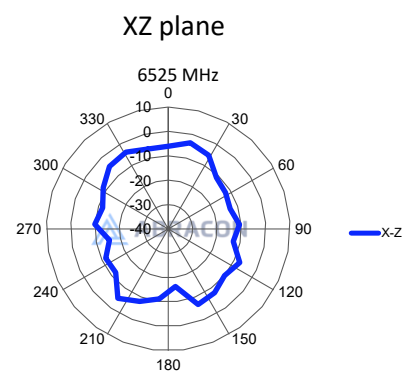
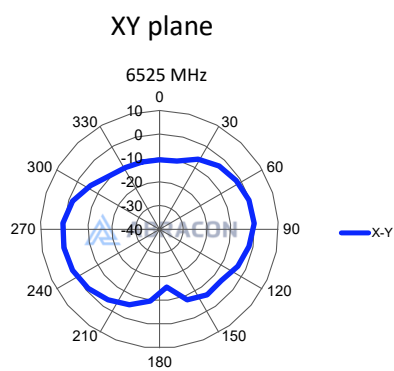
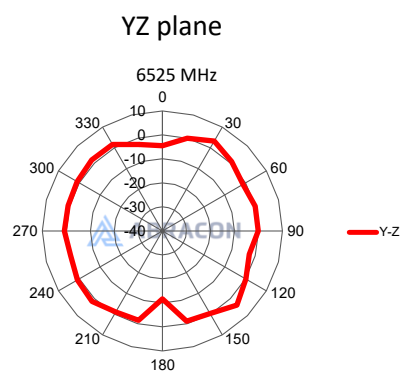
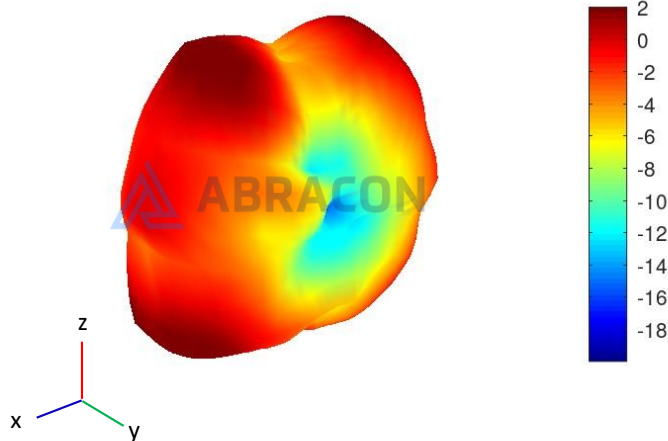
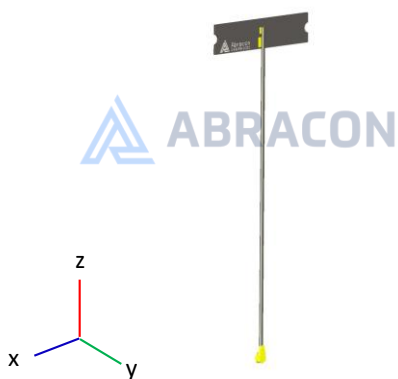


41 x 9 x 0.7 mm

RoHS Compliant

MSL Level = N/A

6525MHz



TRI BAND WI-FI 6E/7 PCB ANTENNA



AANI-FB-0083

Request Samples



Check Inventory



41 x 9 x 0.7 mm

RoHS Compliant

MSL Level = N/A

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.



5101 Hidden Creek Ln Spicewood TX 78669
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 08-12-24

ABRACON IS
ISO9001-2015
CERTIFIED