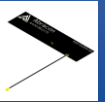


Wideband 5G/4G Cellular Flexible PCB Antenna



AANI-FB-0175

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115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

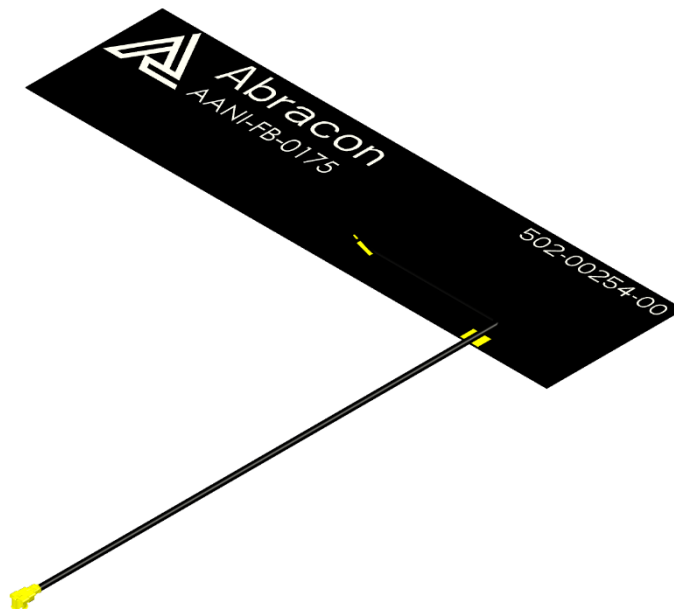
Features

- Frequency Range: 698-960/1710-2690/3300-5925 MHz
- Peak Gain: 2.4 / 3.6 / 4.8 dBi
- Efficiency: 68% / 68% / 64%
- Ground Plane Independent
- Flexible to Fit Inside Plastic Enclosures
- Fully Customizable Cable Length and Connector Options

Applications

- Internet of Things (IoT) Devices
- CBRS and 5G Bands Supported
- LTE-M, Cat M, Cat M1, NB-IoT
- LTE CAT 1 up to CAT 20 Supported
- Smart Home Networking
- Networking & Telecommunication

Product Image

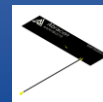


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115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Electrical Specification

Parameter	Specification				Unit
Operating Frequency	698-960	1710-2690	3300-5000	5150-5925	MHz
Band	5,8,12,13,14,17,18,19,20,26,27,28,29	1,2,3,4,7,9,23,25,30,35,38,39,40	22,42,48,77,78,79	LTE5200/Wi-Fi5800	:1
VSWR	3.2	2.0	2.2	3.4	-
Peak Gain	2.4	3.6	4.8	2.1	dBi
Maximum Efficiency	68	68	64	50	%
Average Efficiency	58	59	56	36	
Impedance	50				Ω
Polarization	Linear				-
Radiation Pattern (Azimuth)	Omni-directional				-
Maximum Input Power	5				W

Mechanical Specification

Parameter	Specification
Antenna Dimensions	115.8 x 30.4 x 0.2 mm
Antenna Type	Flexible PCB
Mounting Type	Adhesive Mount
RF Connector ⁽¹⁾	u.FL/IPEX-1/MHF1
RF Cable Type ⁽¹⁾	Ø1.13 mm
Cable Length ⁽¹⁾	100 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 Compliance	Yes

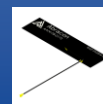


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RoHS/RoHS II Compliant
MSL Level = N/A

Ordering Information

Part Number	Description	Connector Option
AANI-FB-0175-1	Wideband 5G/4G Cellular Flexible PCB Antenna with IPEX-1 connector & 100 mm cable length	u.FL/IPEX-1/MHF1
AANI-FB-0175-2	Wideband 5G/4G Cellular Flexible PCB Antenna with IPEX-4 connector & 100 mm cable length	w.FL/IPEX-4/MHF4
AANI-FB-0175-3	Wideband 5G/4G Cellular Flexible PCB Antenna with IPEX-1 connector & 150 mm cable length	u.FL/IPEX-1/MHF1
AANI-FB-0175-4	Wideband 5G/4G Cellular Flexible PCB Antenna with IPEX-4 connector & 150 mm cable length	w.FL/IPEX-4/MHF4
AANI-FB-0175-5	Wideband 5G/4G Cellular Flexible PCB Antenna with IPEX-1 connector & 200 mm cable length	u.FL/IPEX-1/MHF1
AANI-FB-0175-6	Wideband 5G/4G Cellular Flexible PCB Antenna with IPEX-4 connector & 200 mm cable length	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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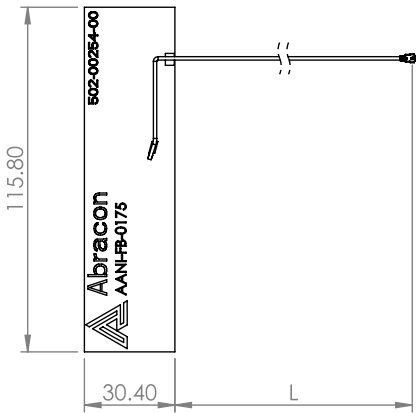


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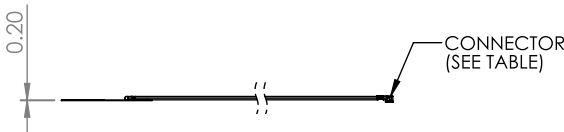


115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

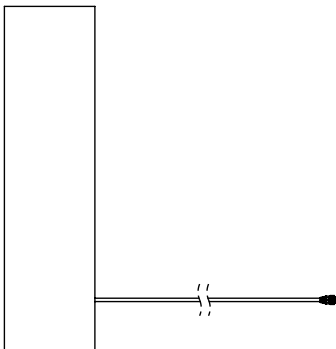
Product Dimensions



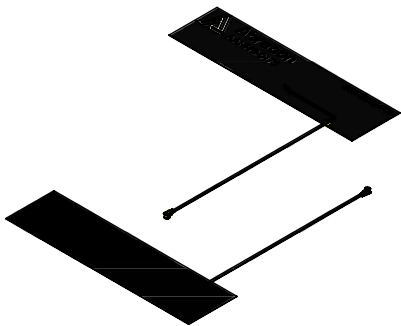
TOP VIEW



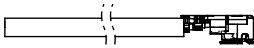
FRONT VIEW



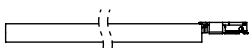
BOTTOM VIEW



CONNECTOR



u.FL/IPEX-1/MHF1



w.FL/IPEX-4/MHF4

PART NUMBER	CABLE LENGTH (L)	CONNECTOR
AANI-FB-0175-1	100	u.FL/IPEX-1/MHF1
AANI-FB-0175-2	100	w.FL/IPEX-4/MHF4
AANI-FB-0175-3	150	u.FL/IPEX-1/MHF1
AANI-FB-0175-4	150	w.FL/IPEX-4/MHF4
AANI-FB-0175-5	200	u.FL/IPEX-1/MHF1
AANI-FB-0175-6	200	w.FL/IPEX-4/MHF4

Unit: mm

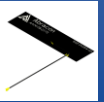


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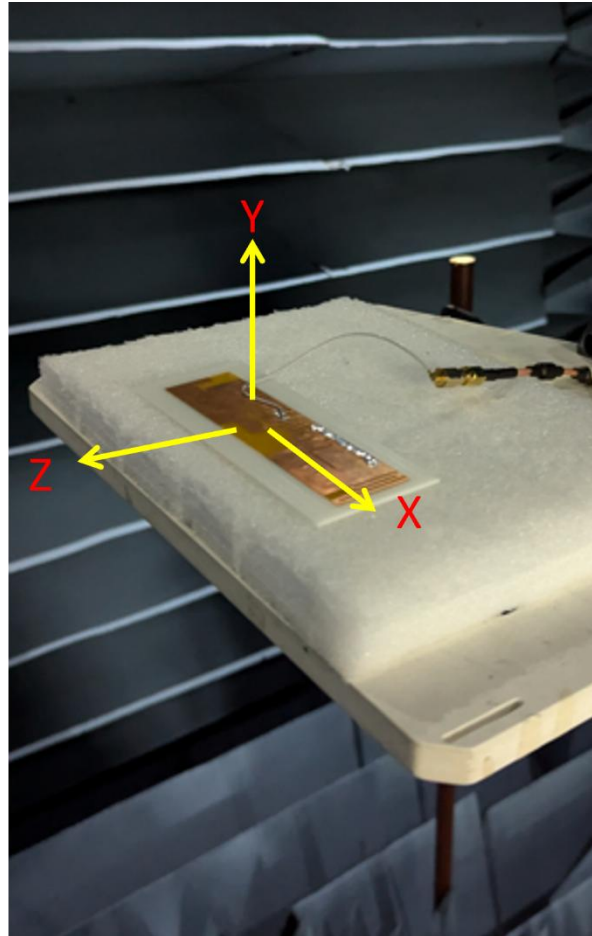


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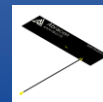


115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Measurement Setup photo



Wideband 5G/4G Cellular Flexible PCB Antenna



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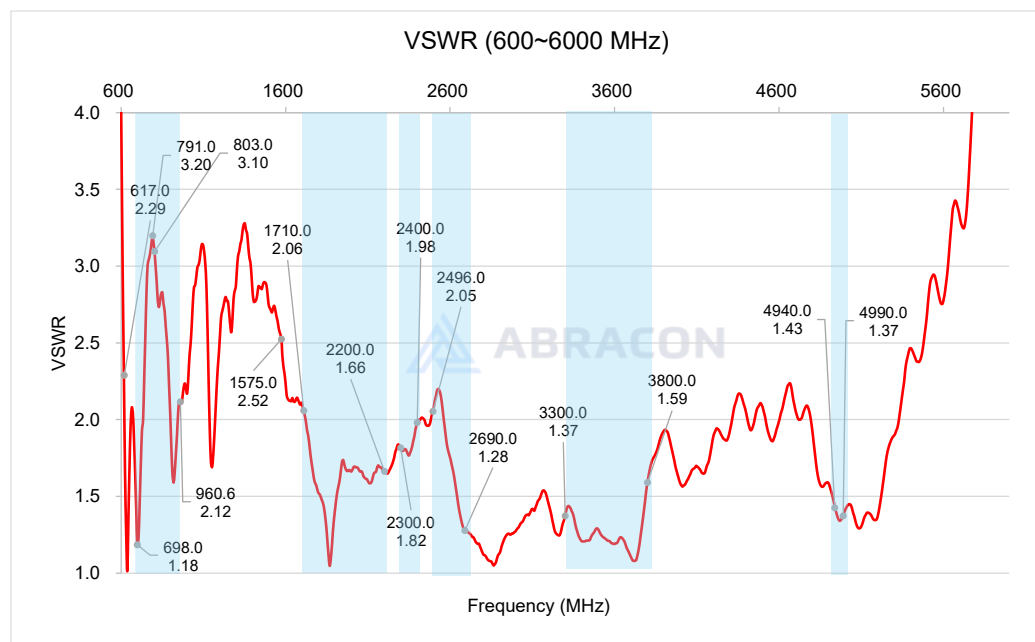
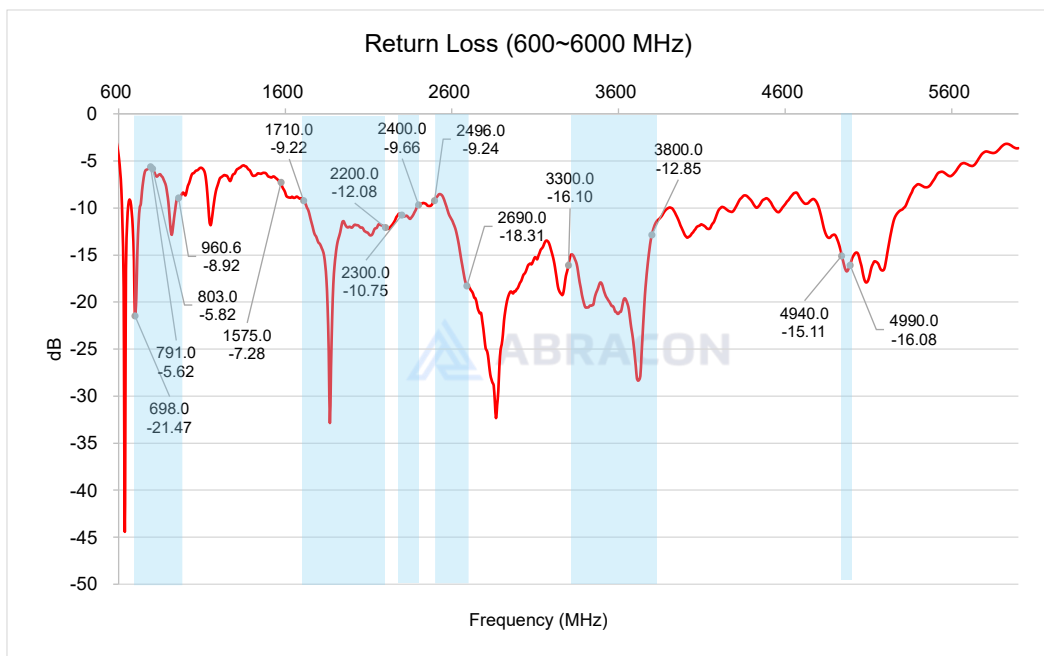


Check Inventory



115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Reflection Characteristics – Return Loss & VSWR

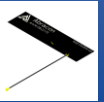


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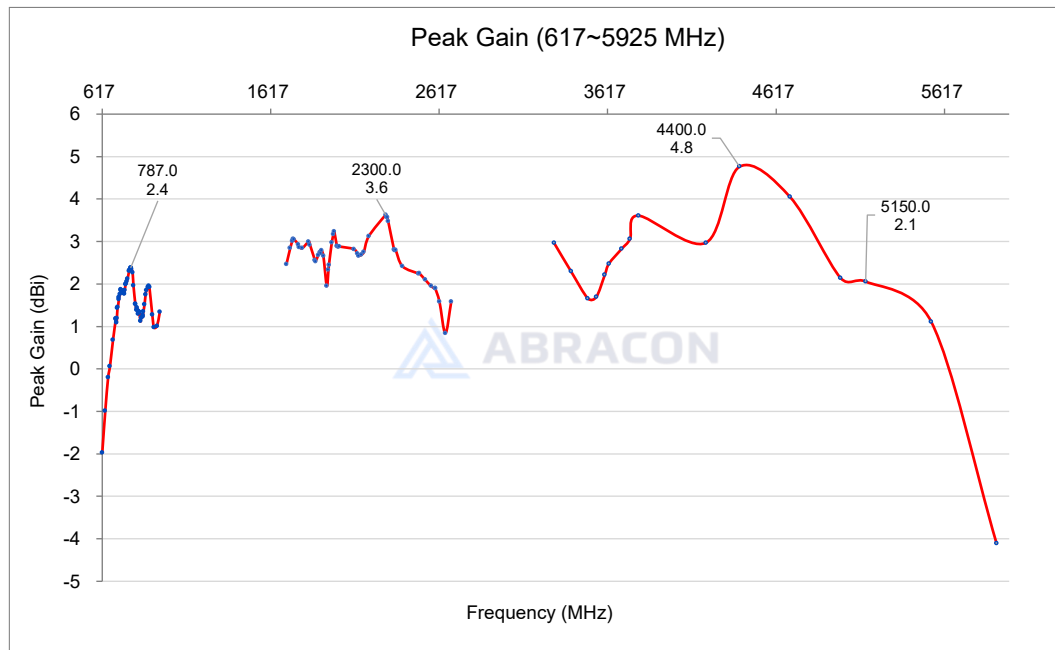


Check Inventory



115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Radiation Characteristics – Peak Gain

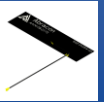


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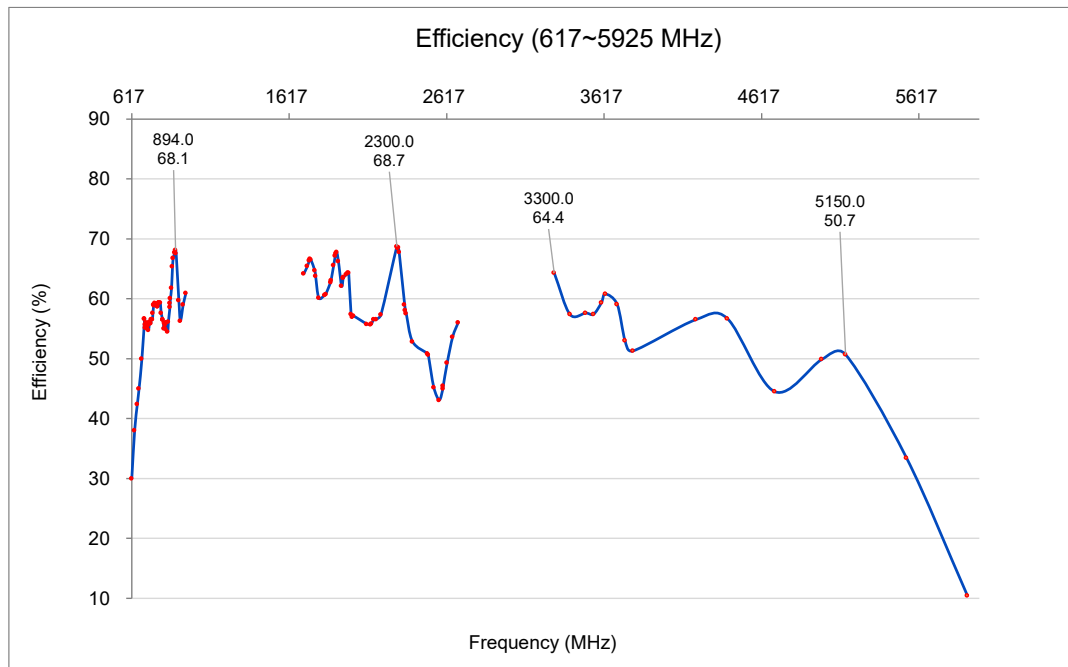


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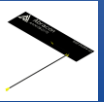


115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Radiation Characteristics – Total Efficiency (%)



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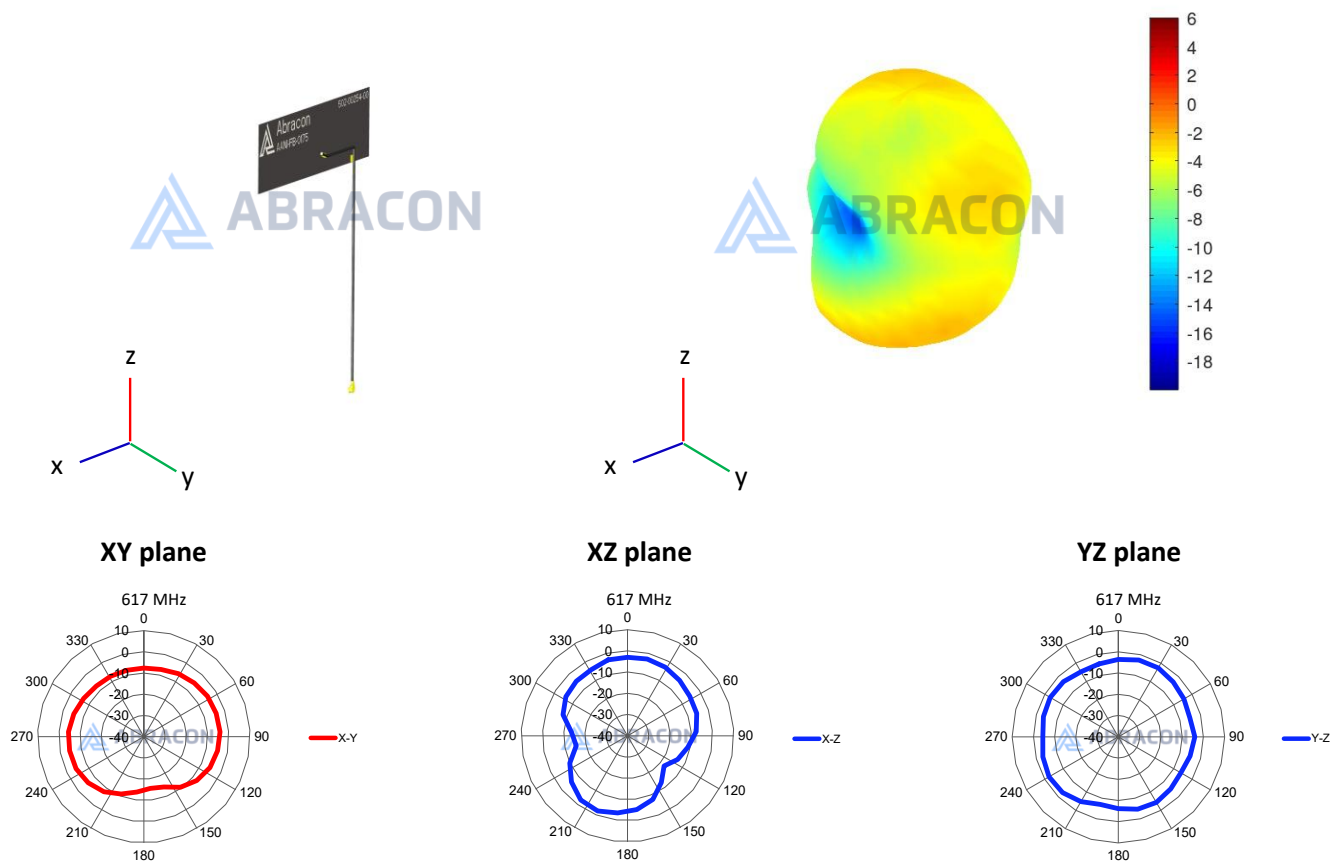
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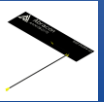
115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Radiation Characteristics – 3D & 2D pattern

3D & 2D Pattern @ 617 MHz



Wideband 5G/4G Cellular Flexible PCB Antenna



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Request Samples

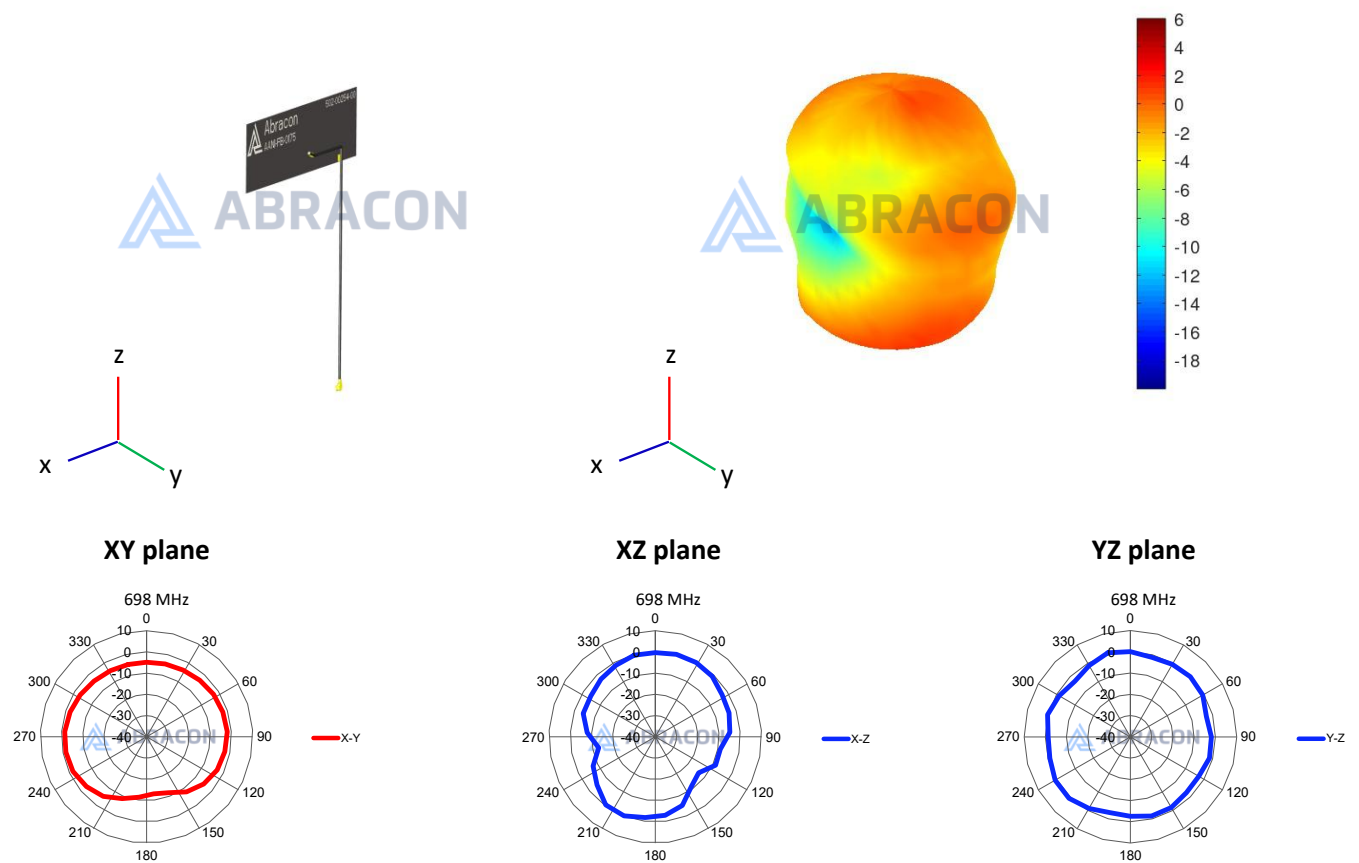


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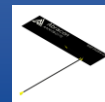


115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

3D & 2D Pattern @ 698 MHz



Wideband 5G/4G Cellular Flexible PCB Antenna



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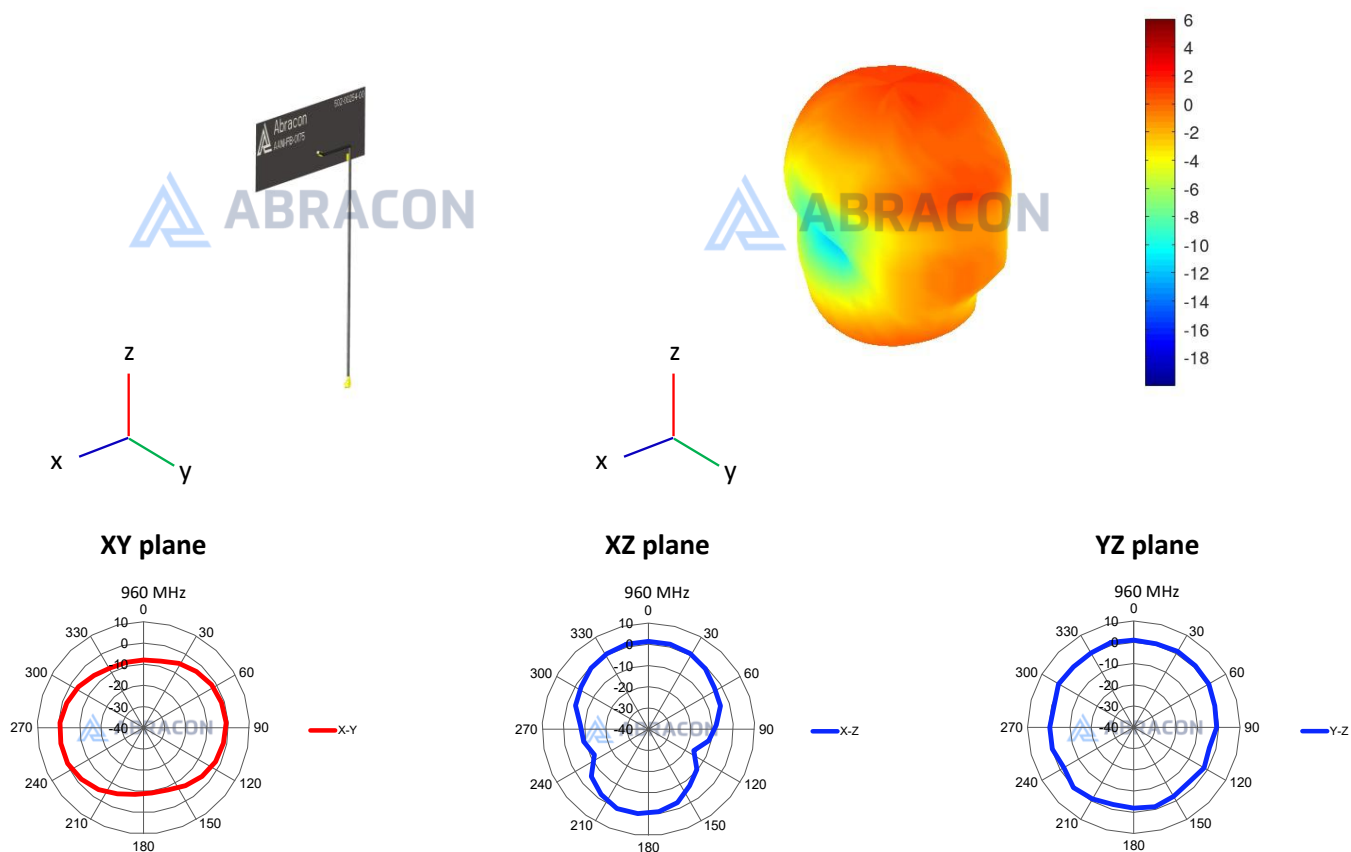


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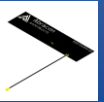


115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

3D & 2D Pattern @ 960 MHz



Wideband 5G/4G Cellular Flexible PCB Antenna



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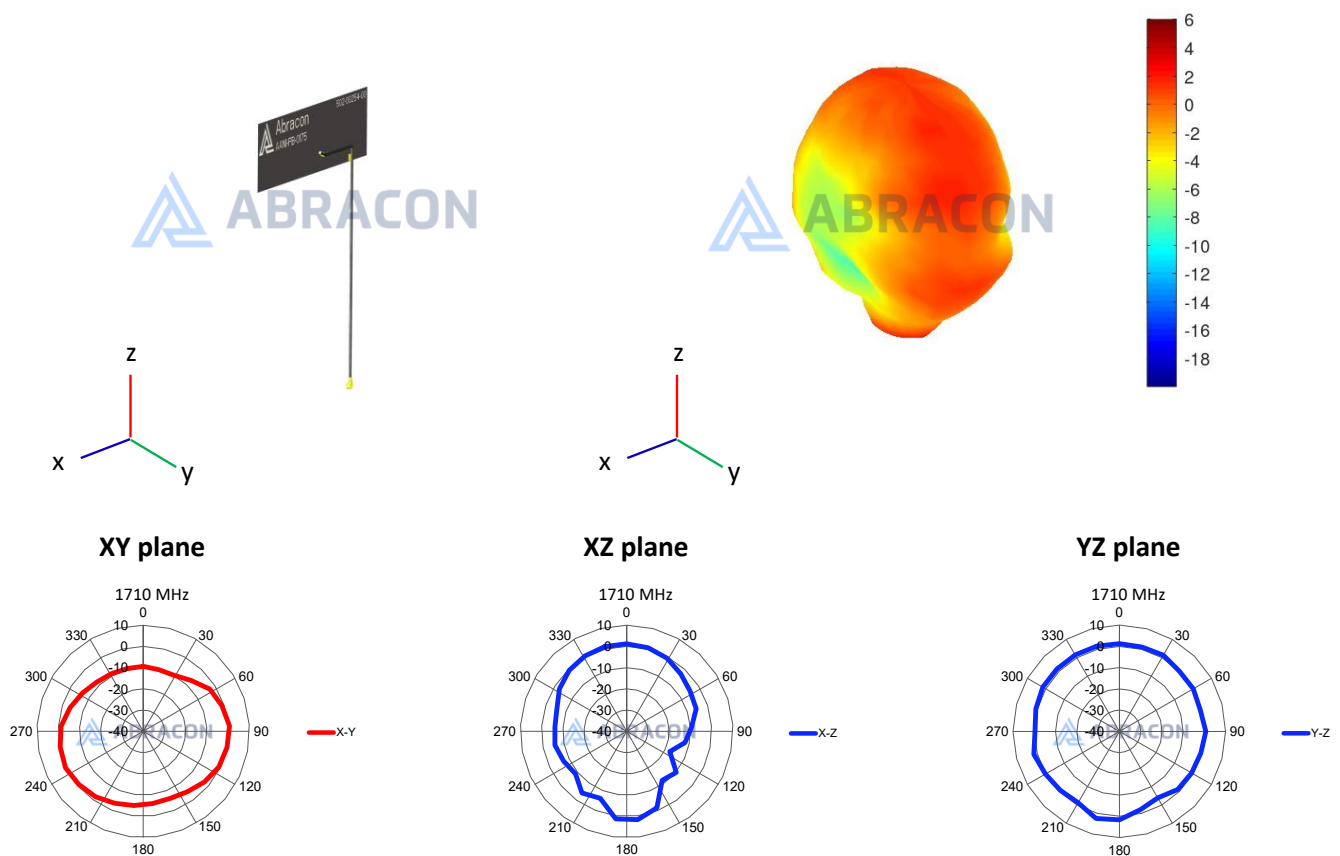


Check Inventory



115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

3D & 2D Pattern @ 1710 MHz

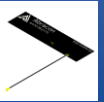


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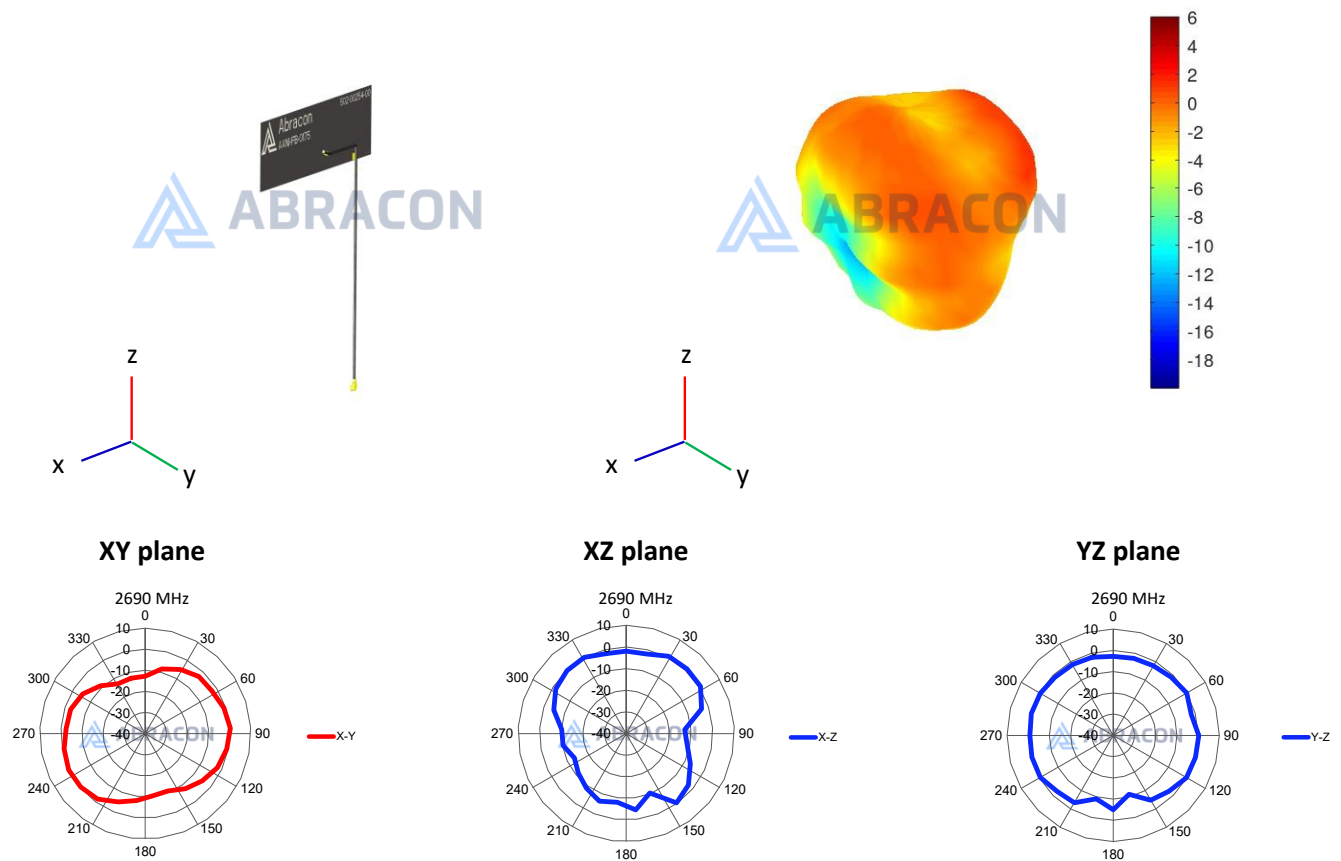


Check Inventory



115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

3D & 2D Pattern @ 2690 MHz

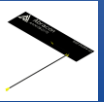


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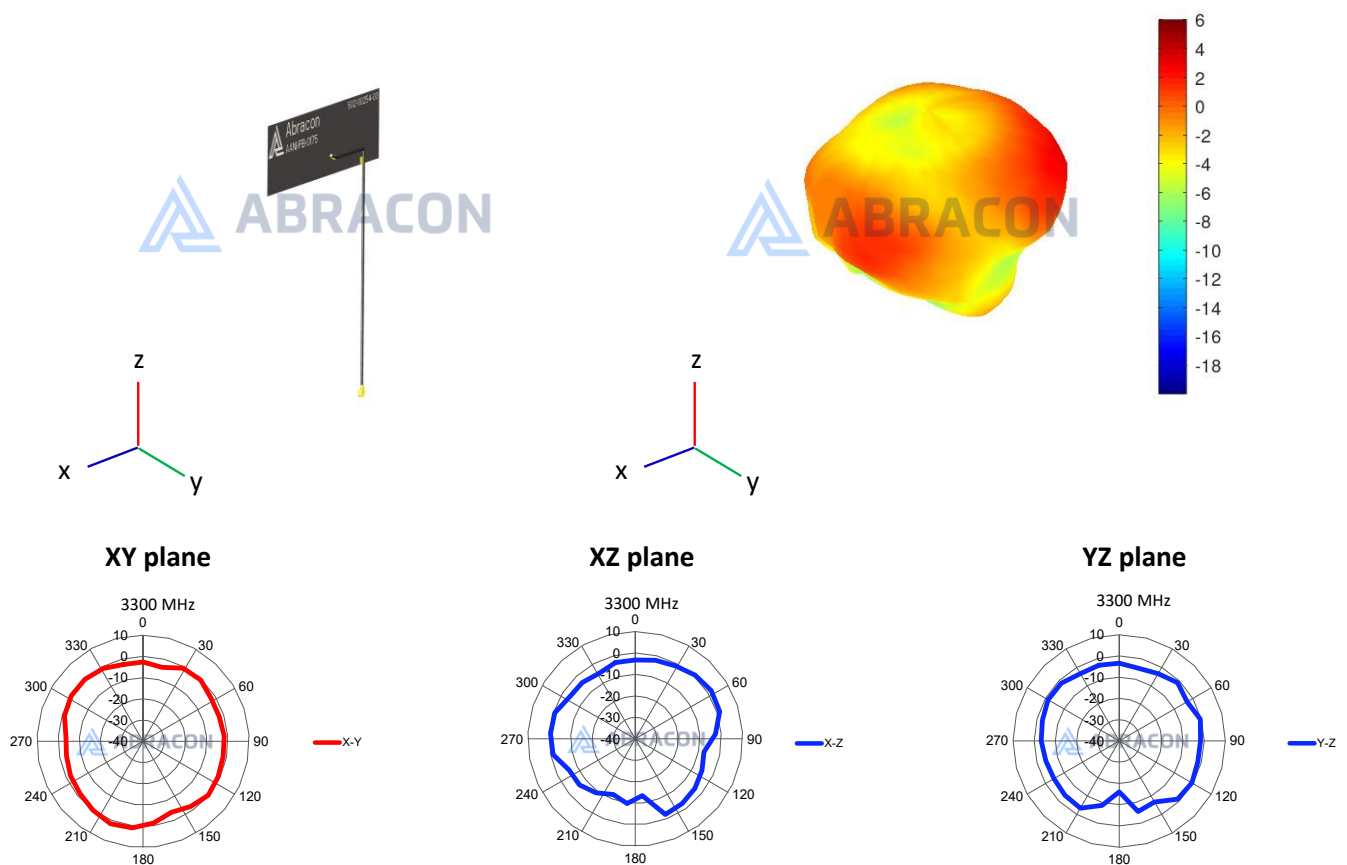


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115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

3D & 2D Pattern @ 3300 MHz

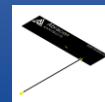


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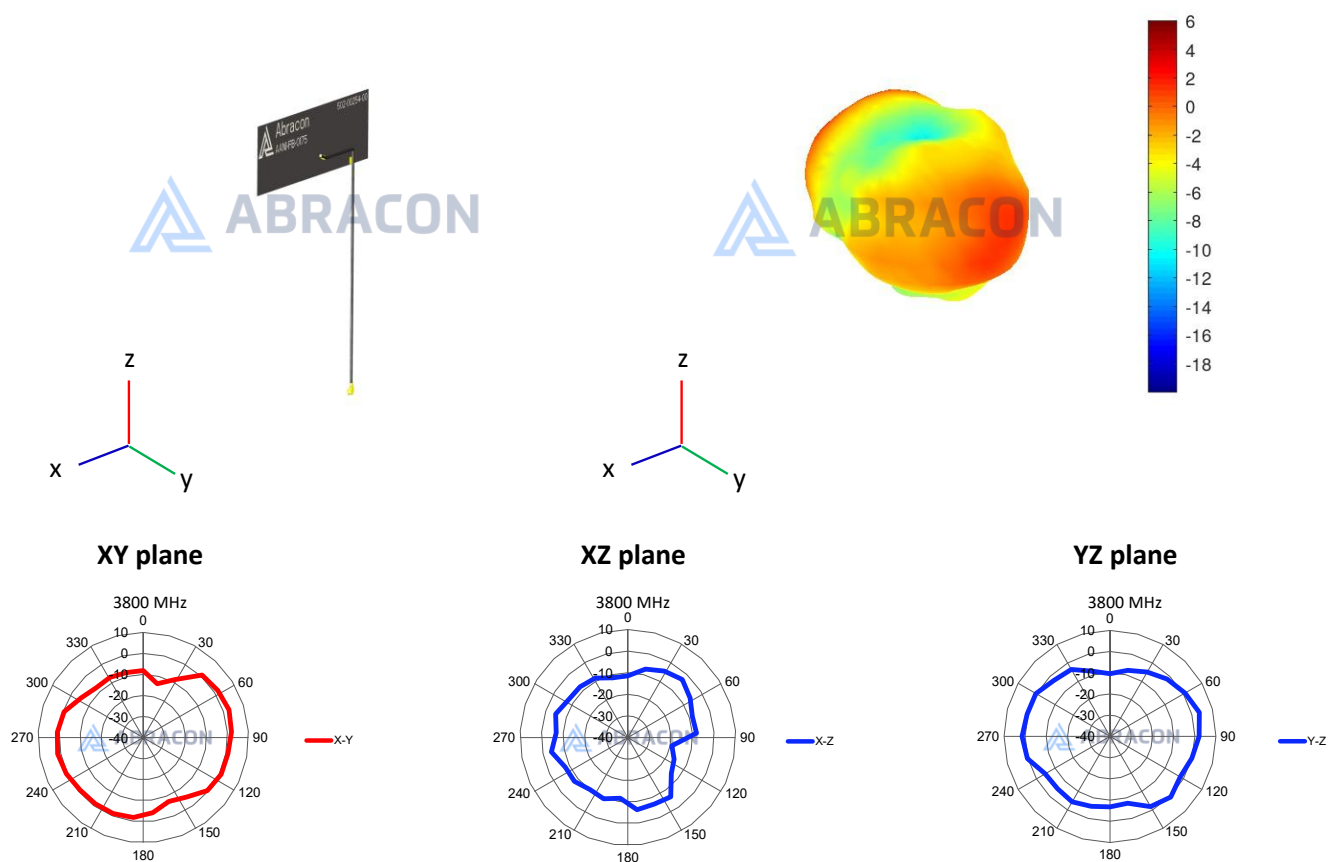


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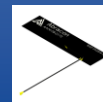


115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

3D & 2D Pattern @ 3800 MHz



Wideband 5G/4G Cellular Flexible PCB Antenna



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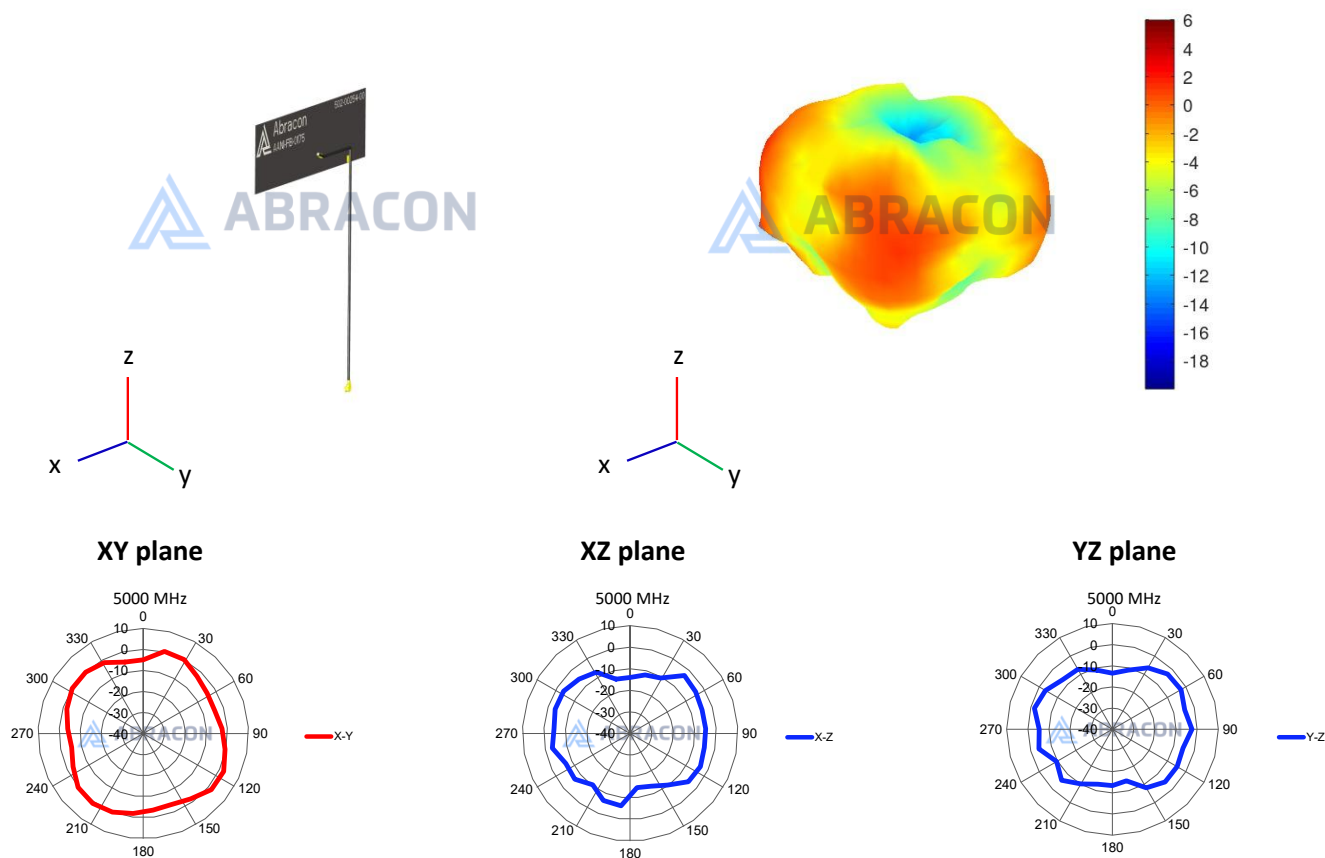


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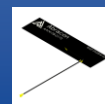


115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

3D & 2D Pattern @ 5000 MHz



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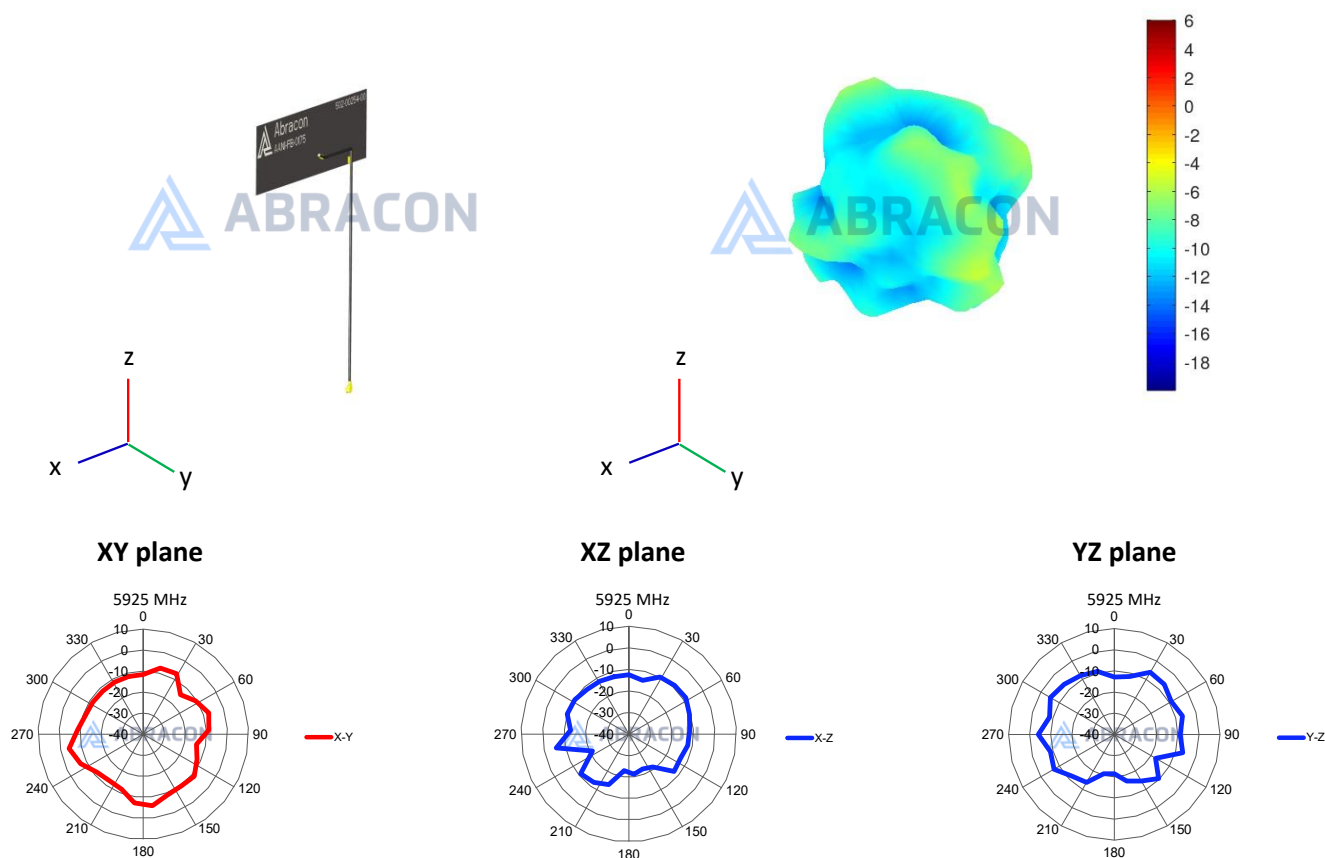


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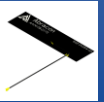


115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

3D & 2D Pattern @ 5925 MHz



Wideband 5G/4G Cellular Flexible PCB Antenna



AANI-FB-0175

Request Samples



Check Inventory



115.8 x 30.4 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Packaging

1. Number of Antenna/ bags: 50 pcs
2. Total Pcs / package: 500 pcs

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