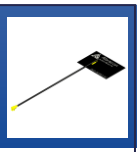
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Cellular 4G LTE FPC Antenna



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30 x 20 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

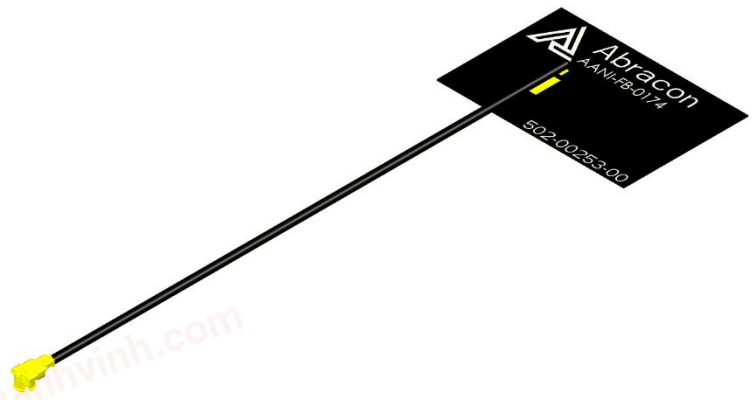
Features

- Frequency Range: LTE 698-960/1710-2690 MHz
- LTE Peak Gain: 0.37 / 2.7 dBi
- LTE Efficiency: 37 / 59 %
- Ground Plane Independent
- Flexible to Fit Inside Plastic Enclosures
- Fully Customizable Cable Length and Connector Options

Applications

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

Product Image



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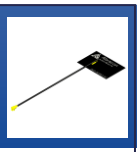
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RoHS/RoHS II Compliant
MSL Level = N/A

Electrical Specification

Parameter	Specification		Unit
Operating Frequency	698-960	1710-2690	MHz
VSWR	< 3.2	< 2.3	:1
Peak Gain	0.37	2.7	dBi
Maximum Efficiency	37	59	%
Average Efficiency	25	43	
Impedance	50		Ω
Polarization	Linear		-
Radiation Pattern (Azimuth)	Omni-directional		-
Maximum Input Power	5		W

Mechanical Specification

Parameter	Specification
Antenna Dimensions	30 x 20 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)	75 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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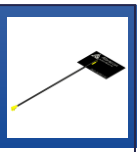
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RoHS/RoHS II Compliant
MSL Level = N/A

Ordering Information

Part Number	Description	Connector Option
AANI-FB-0174-1	Cellular 4G LTE FPC Antenna with IPEX-1 connector and 75 mm cable length	u.FL/IPEX-1/MHF1
AANI-FB-0174-2	Cellular 4G LTE FPC Antenna with IPEX-4 connector and 75 mm cable length	w.FL/IPEX-4/MHF4
AANI-FB-0174-3	Cellular 4G LTE FPC Antenna with IPEX-1 connector and 150 mm cable length	u.FL/IPEX-1/MHF1
AANI-FB-0174-4	Cellular 4G LTE FPC Antenna with IPEX-4 connector and 150 mm cable length	w.FL/IPEX-4/MHF4
AANI-FB-0174-5	Cellular 4G LTE FPC Antenna with IPEX-1 connector and 200 mm cable length	u.FL/IPEX-1/MHF1
AANI-FB-0174-6	Cellular 4G LTE FPC Antenna with IPEX-4 connector and 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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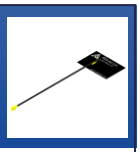
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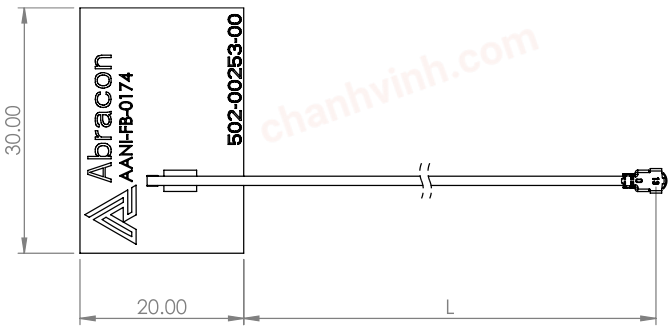


AANI-FB-0174

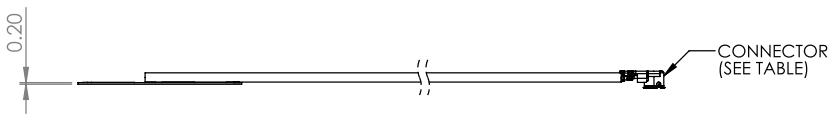
Request Samples | Check Inventory

30 x 20 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

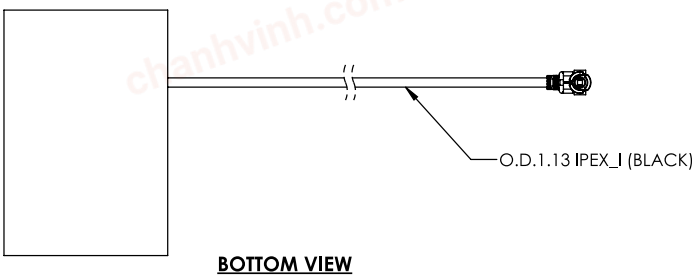
Product Dimensions



TOP VIEW

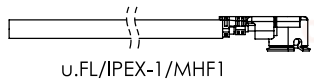


FRONT VIEW

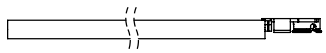


BOTTOM VIEW

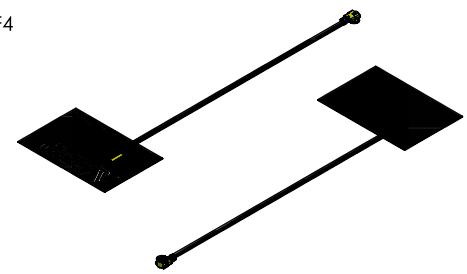
CONNECTOR



u.FL/IPEX-1/MHF1



w.FL/IPEX-4/MHF4



PART NUMBER	CABLE LENGTH (L)	CONNECTOR
AANI-FB-0174-1	75	u.FL/IPEX-1/MHF1
AANI-FB-0174-2	75	w.FL/IPEX-4/MHF4
AANI-FB-0174-3	150	u.FL/IPEX-1/MHF1
AANI-FB-0174-4	150	w.FL/IPEX-4/MHF4
AANI-FB-0174-5	200	u.FL/IPEX-1/MHF1
AANI-FB-0174-6	200	w.FL/IPEX-4/MHF4

Unit: mm

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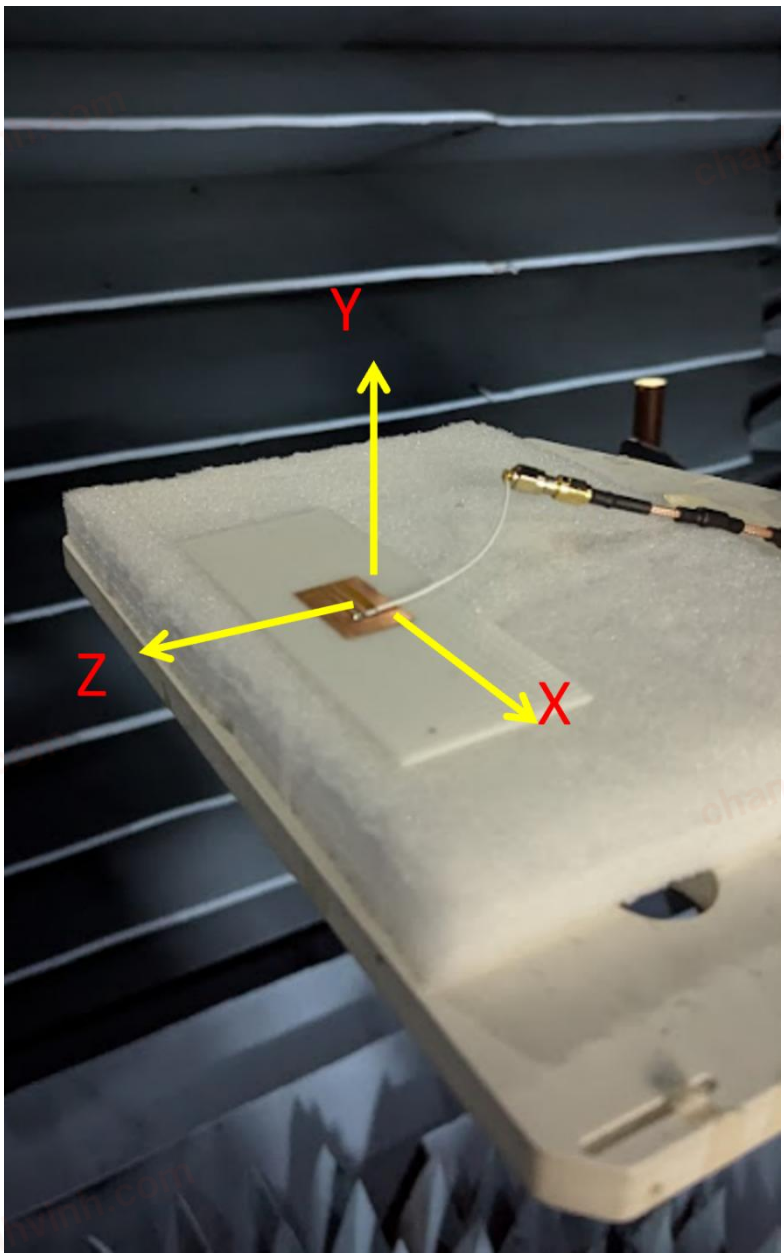


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MSL Level = N/A

Measurement Setup photo



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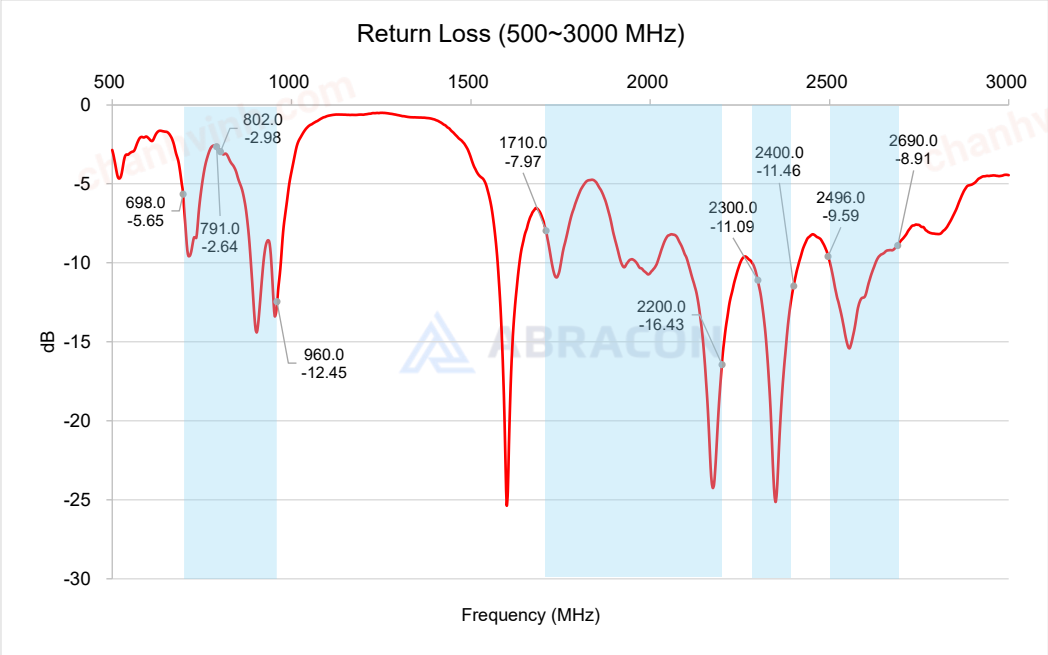


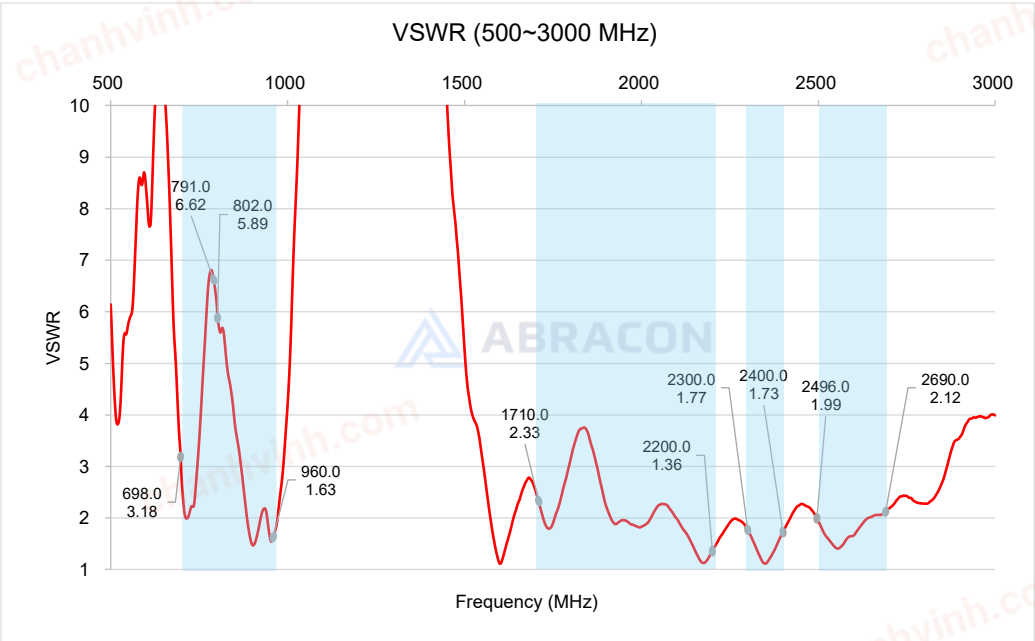
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30 x 20 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Reflection Characteristics – Return Loss & VSWR





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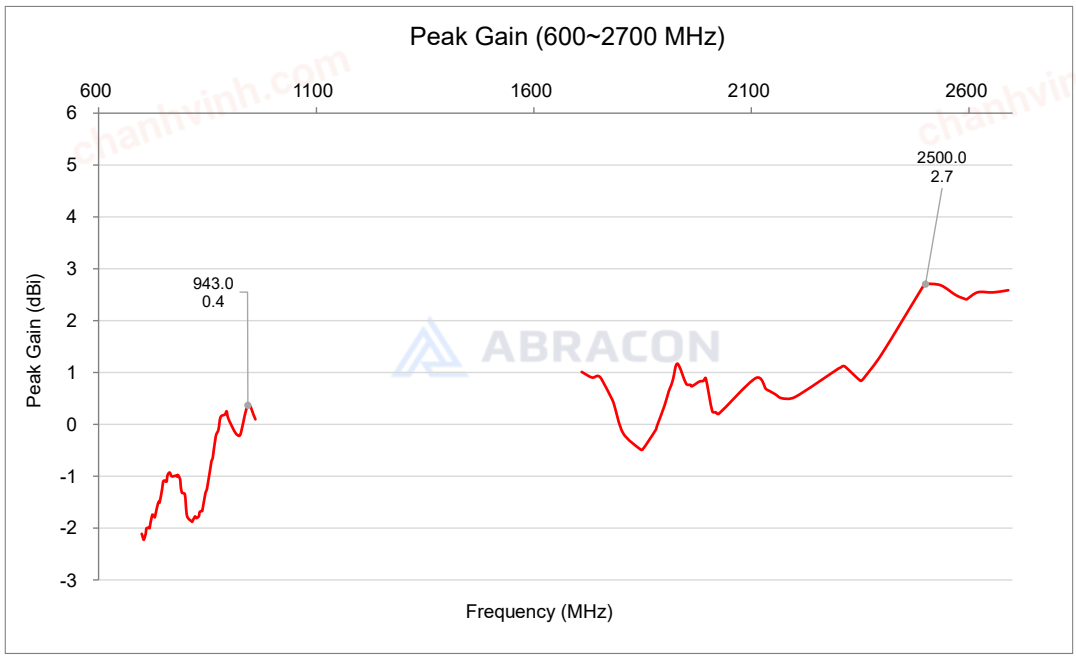


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30 x 20 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Radiation Characteristics – Peak Gain



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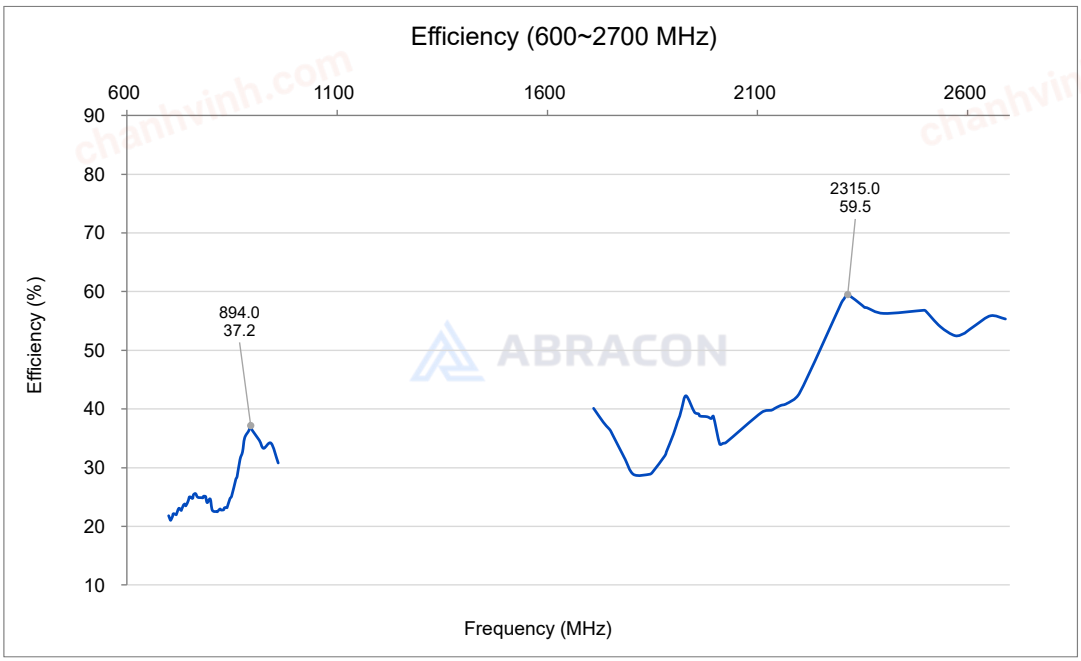


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30 x 20 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Radiation Characteristics – Total Efficiency (%)



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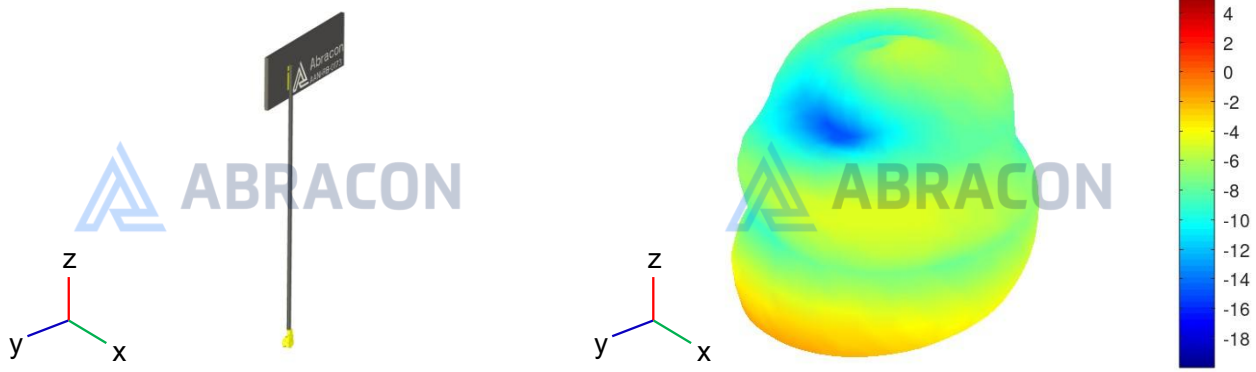
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Request Samples | Check Inventory

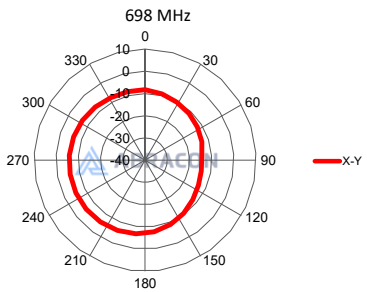
30 x 20 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Radiation Characteristics – 3D & 2D pattern

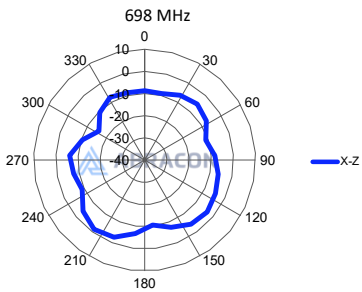
3D & 2D Pattern @ 698 MHz



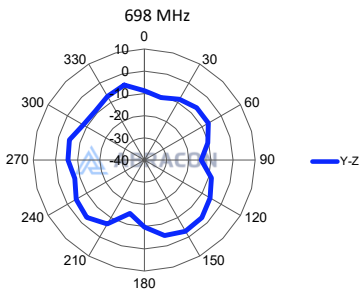
XY plane



XZ plane



YZ plane



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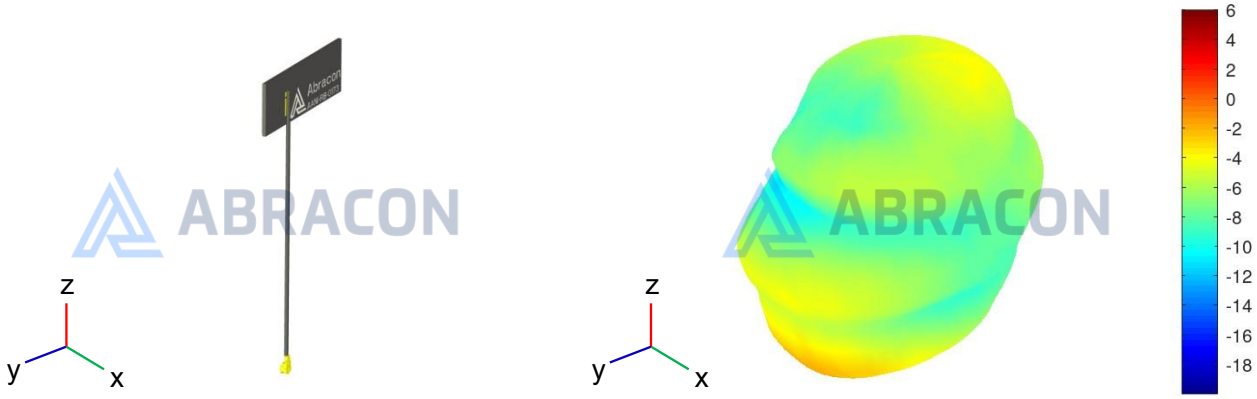


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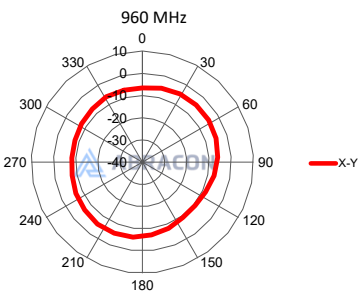
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RoHS/RoHS II Compliant
MSL Level = N/A

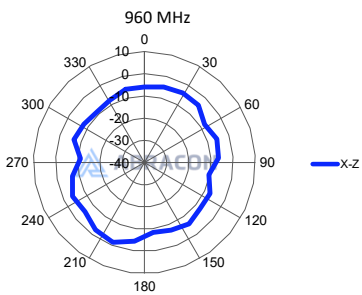
3D & 2D Pattern @ 960 MHz



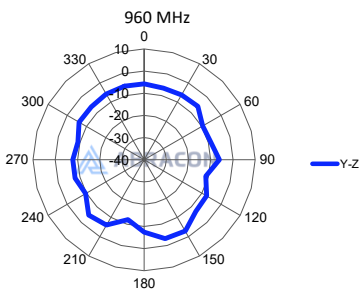
XY plane



XZ plane



YZ plane



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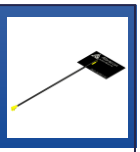
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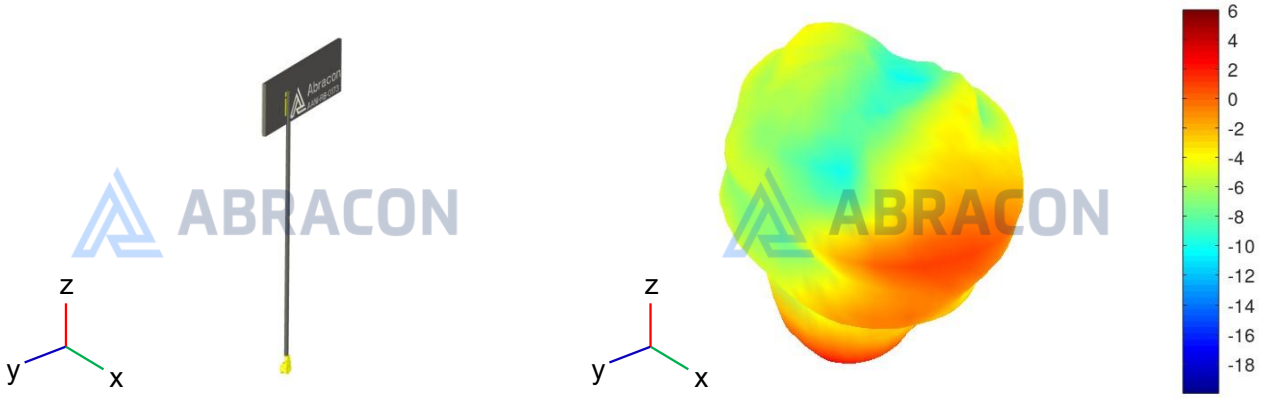


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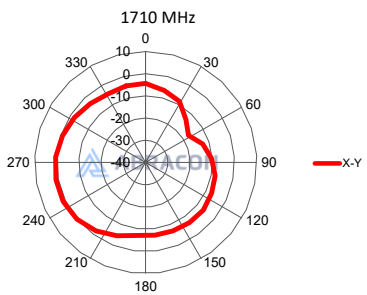
Request Samples | Check Inventory

30 x 20 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

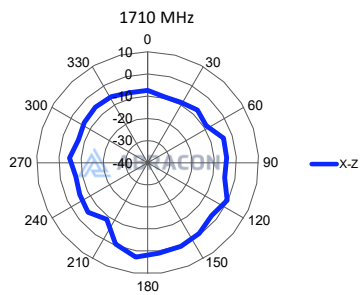
3D & 2D Pattern @ 1710 MHz



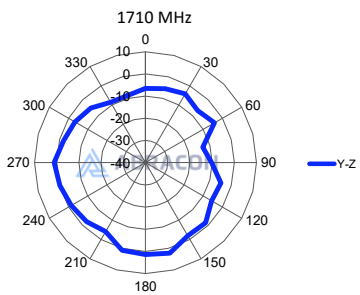
XY plane



XZ plane



YZ plane



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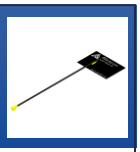
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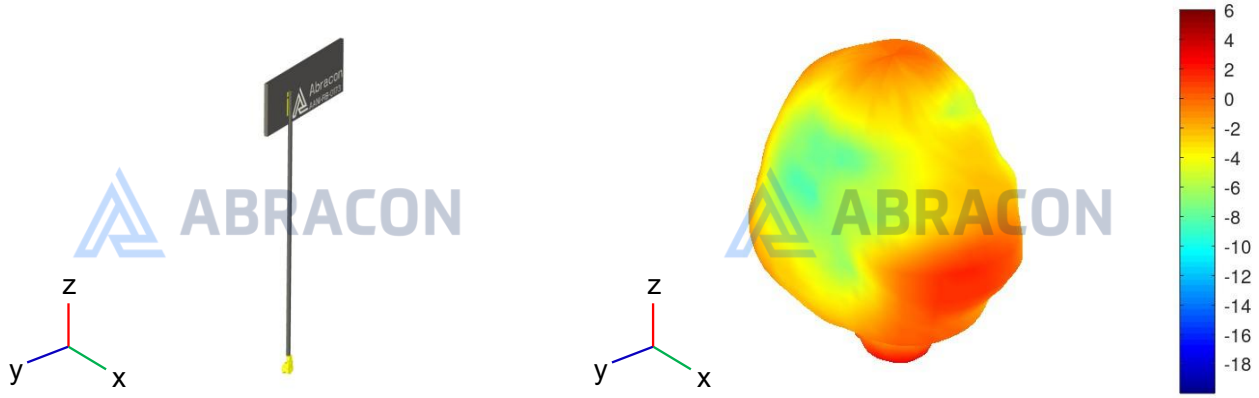


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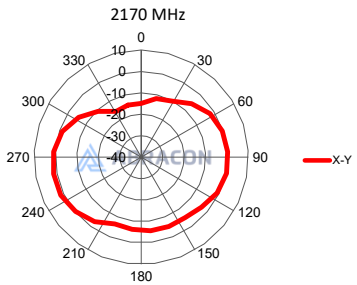
Request Samples | Check Inventory

30 x 20 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

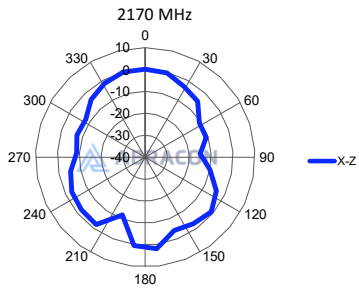
3D & 2D Pattern @ 2170 MHz



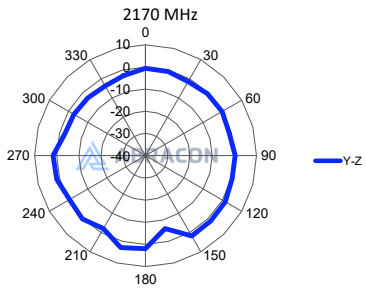
XY plane



XZ plane



YZ plane



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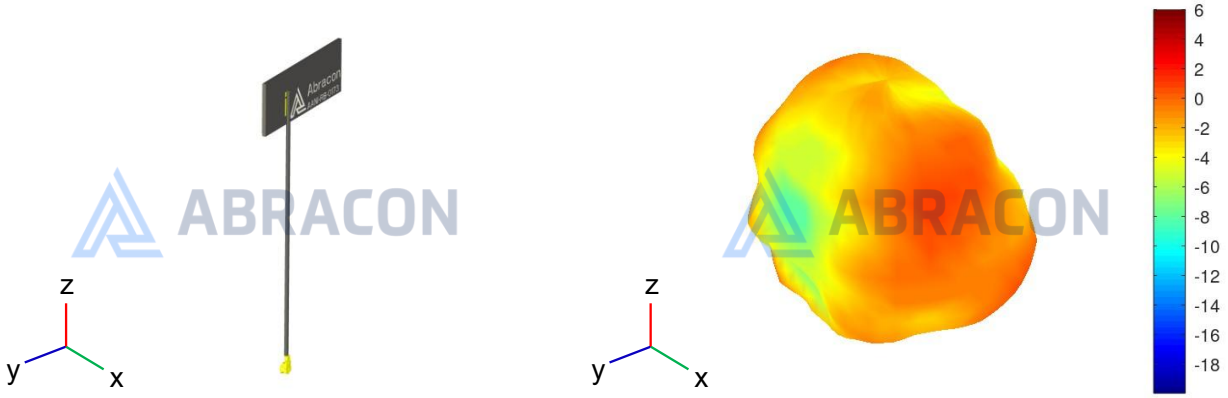


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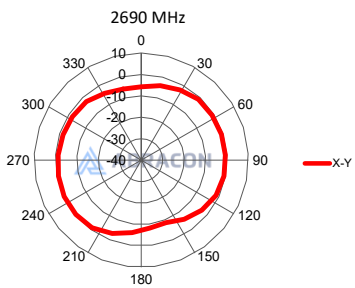
Request Samples | Check Inventory

30 x 20 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

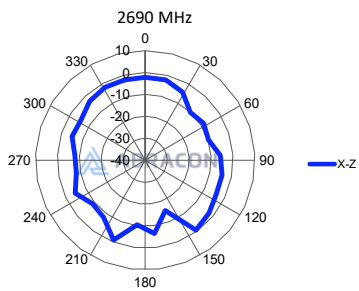
3D & 2D Pattern @ 2690 MHz



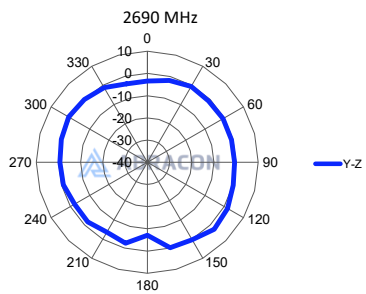
XY plane



XZ plane



YZ plane



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Cellular 4G LTE FPC Antenna



AANI-FB-0174

Request Samples | Check Inventory

30 x 20 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Packaging

4 sets x 25 pcs / per set = 100 pcs in one bag

10 bags x 100 pcs / per bag

Total: 1000 pcs in one package

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.

ABRACON

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