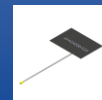


GNSS L1 Flexible FPC Antenna



AFAG4330-SG3

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43 x 30 x 0.2 mm

RoHS/RoHS II Compliant

MSL Level = N/A

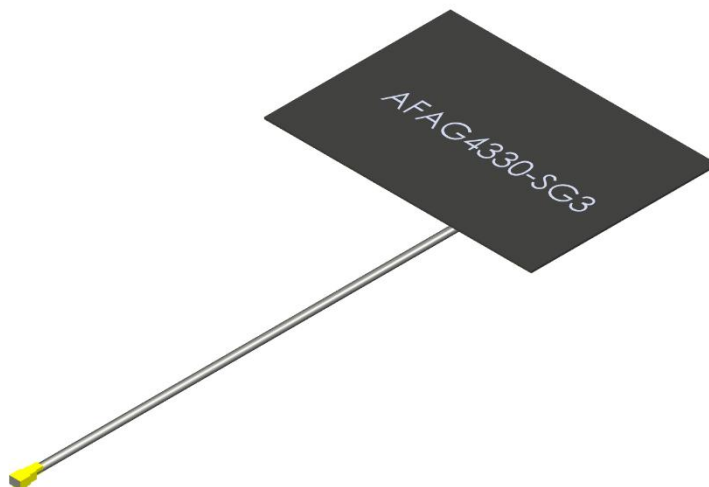
Features

- Multiband Multi-Constellation Passive GNSS Antenna
- GNSS Peak Gain: 6.3 dBi
- 43 x 30 mm in Size
- Ground Plane Independent
- Flexible to Fit Inside Plastic Enclosures
- Fully Customizable Cable Length and Connector Options

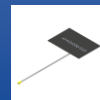
Applications

- UAVs and Drones
- Robotics and Autonomous Driving
- Real-Time Kinematic (RTK)
- Intelligent Transportation
- Precision Land Survey Positioning
- Precision Agriculture

Product Image



GNSS L1 Flexible FPC Antenna



AFAG4330-SG3

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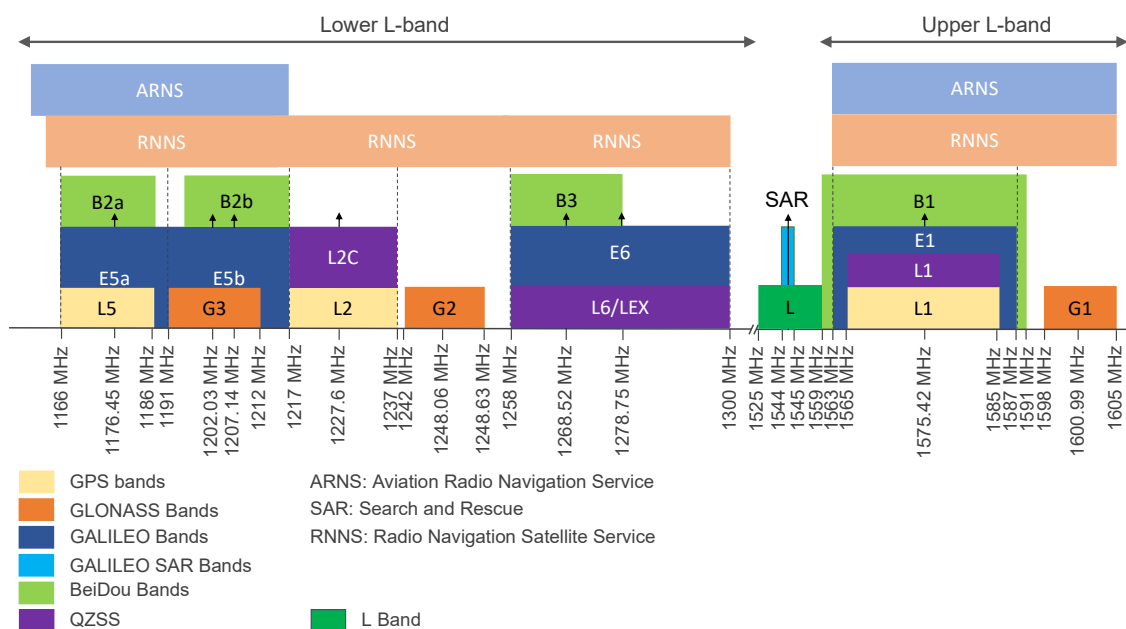
43 x 30 x 0.2 mm

RoHS/RoHS II Compliant

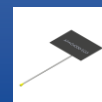
MSL Level = N/A

GNSS Frequency Bands Covered

	L1 1575.42MHz	L2 1227.6MHz	L5 1176.45MHz	
GPS	■	□	□	
GLONASS	■	□	□	
Galileo	■	□	□	□
BeiDou	□	□	□	
QZSS	■	□	□	□
IRNSS/NAVIC			□	
SBAS	■		□	



GNSS L1 Flexible FPC Antenna



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43 x 30 x 0.2 mm

RoHS/RoHS II Compliant

MSL Level = N/A

Electrical Specifications

Parameter	Specification	Unit
Frequency*	GPS: L1 GLONASS: G1 Beidou: B1 Galileo: E1 QZSS: L1 SBAS: L1/E1/B1	
VSWR (Typ.)	< 2.5	
Peak Gain	6.3	dBi
Average Gain	1 ~ 2	dBi
Efficiency	> 79	%
Input Power	< 3	W
Impedance	50	Ω
Polarization	Linear	
Radiation Pattern (Azimuth)	Omni-directional	

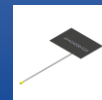
* All test measurements were conducted with the antenna on a 2 mm thick ABS surface. Please note that the operating frequency shifts with a change in housing material and thickness.

Mechanical Specifications

Parameter	Specification
Antenna Dimension	43 x 30 x 0.2 mm
Material	FPC
Mounting Type*	Adhesive Tape (3M 467MP)
RF Connector	u.FL/IPEX-1/MHF1
RF Cable	Ø1.13 mm, L = 240 ± 5 mm

* Please note: This antenna cannot be mounted on top of metal directly.

GNSS L1 Flexible FPC Antenna



AFAG4330-SG3

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43 x 30 x 0.2 mm

RoHS/RoHS II Compliant

MSL Level = N/A

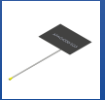
Environmental Specification

Parameter	Specification
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
RoHS Compliance	Yes
MSL	Not Applicable
Vibration	10 ~ 55 Hz with 1.5 mm amplitude 2 hrs

Ordering Information

Part Number	Description	Connector Option
AFAG4330-SG3	GNSS L1 Flexible FPC Antenna with IPEX-1 connector with 240mm cable length	u.FL/IPEX-1/MHF1
AFAG4330-SG3-1	GNSS L1 Flexible FPC Antenna with IPEX-1 connector with 100mm cable length	u.FL/IPEX-1/MHF1

GNSS L1 Flexible FPC Antenna



AFAG4330-SG3

Request Samples

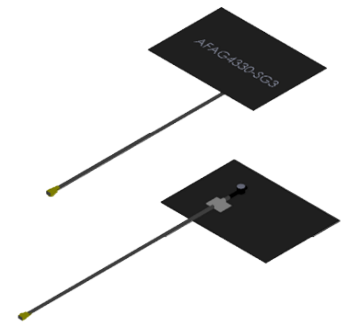
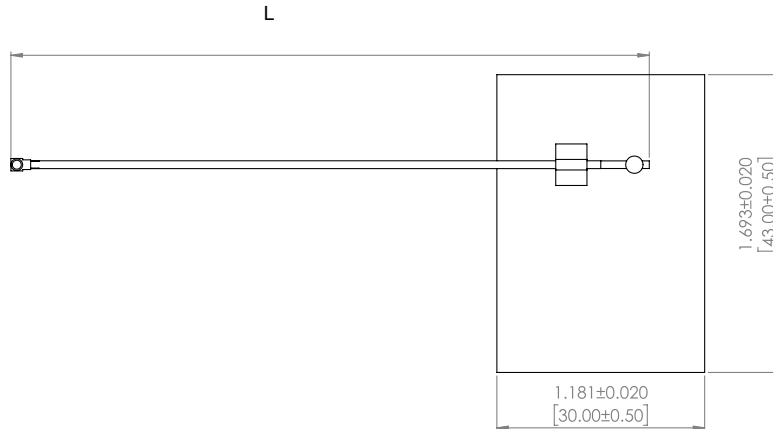


Check Inventory



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

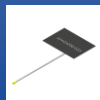
Product Dimensions



Unit: mm

Part Number	Cable Length (L) (mm)	Connector
AFAG4330-SG3	240	u.FL/IPEX-1/MHF1
AFAG4330-SG3-1	100	u.FL/IPEX-1/MHF1

GNSS L1 Flexible FPC Antenna



AFAG4330-SG3

Request Samples



Check Inventory

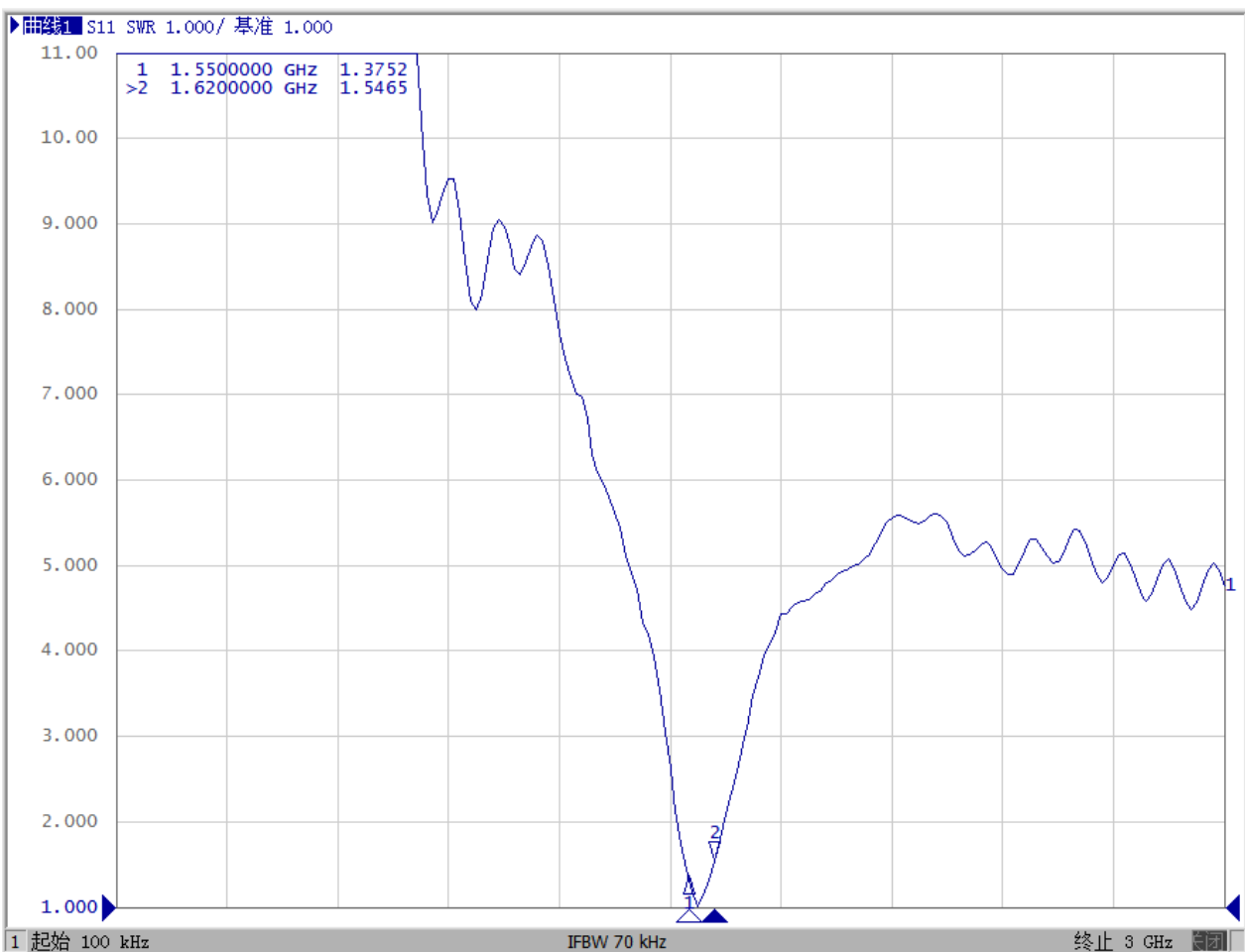


43 x 30 x 0.2 mm

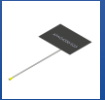
RoHS/RoHS II Compliant

MSL Level = N/A

Reflection Characteristics – VSWR



GNSS L1 Flexible FPC Antenna



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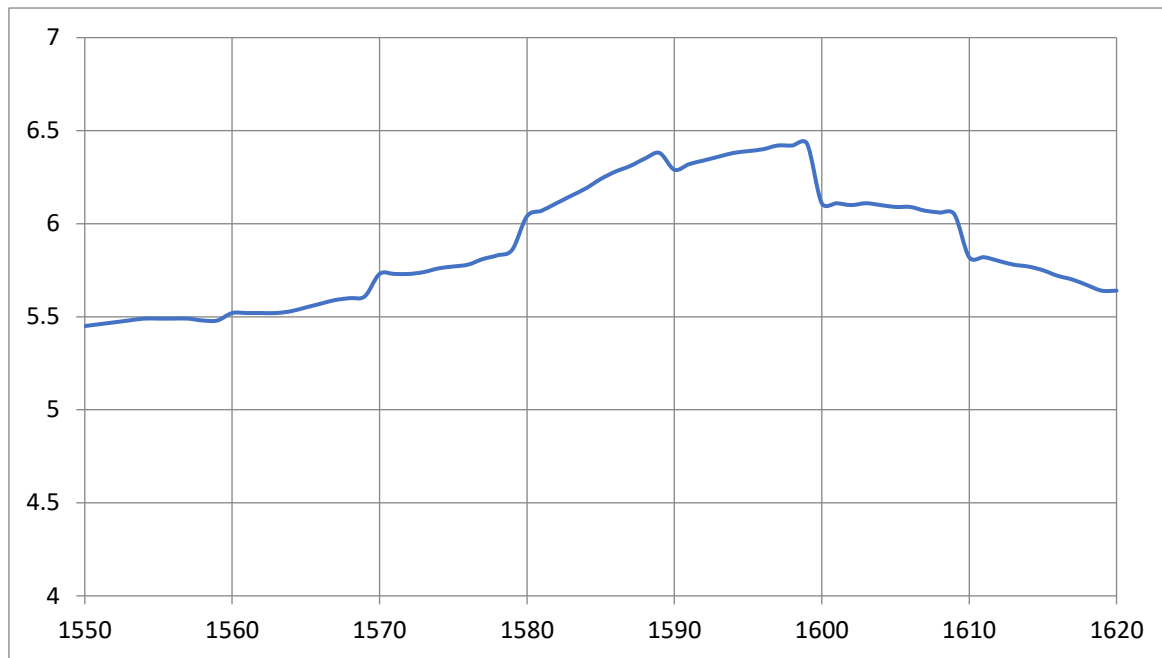


Check Inventory

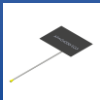


43 x 30 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Peak Gain



GNSS L1 Flexible FPC Antenna



AFAG4330-SG3

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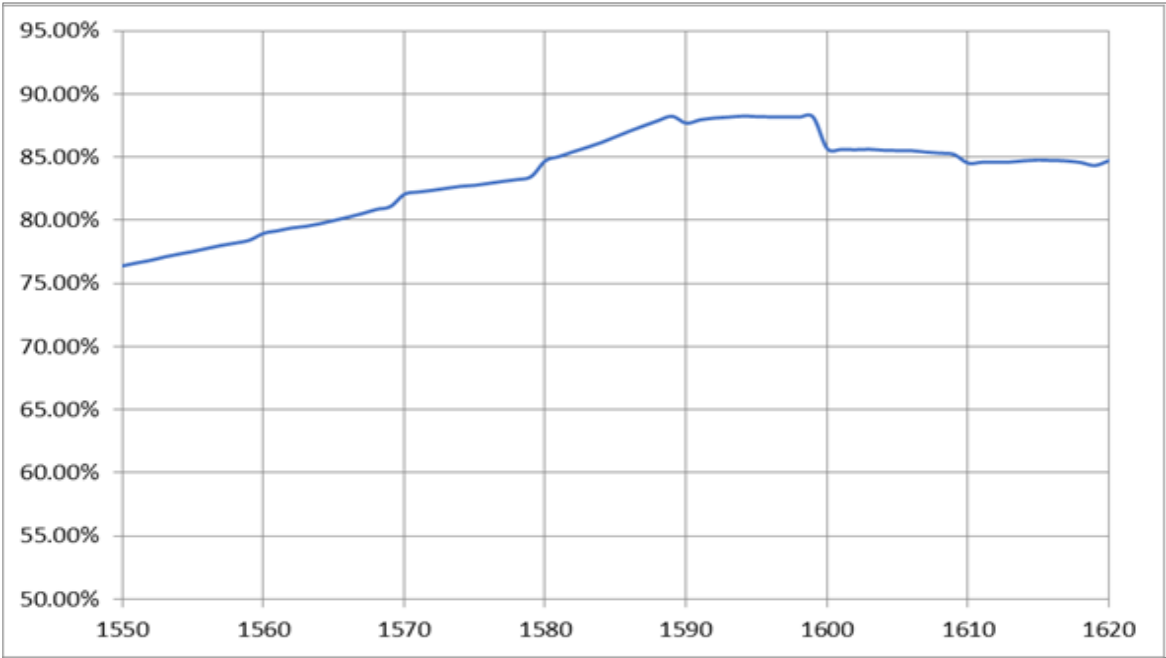


Check Inventory



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

Efficiency



Frequency (MHz)	1561	1575	1602
Maximum gain (dB)	5.52	5.78	6.10
Radiation Efficiency (%)	79.18%	82.77%	85.59%

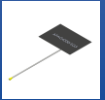


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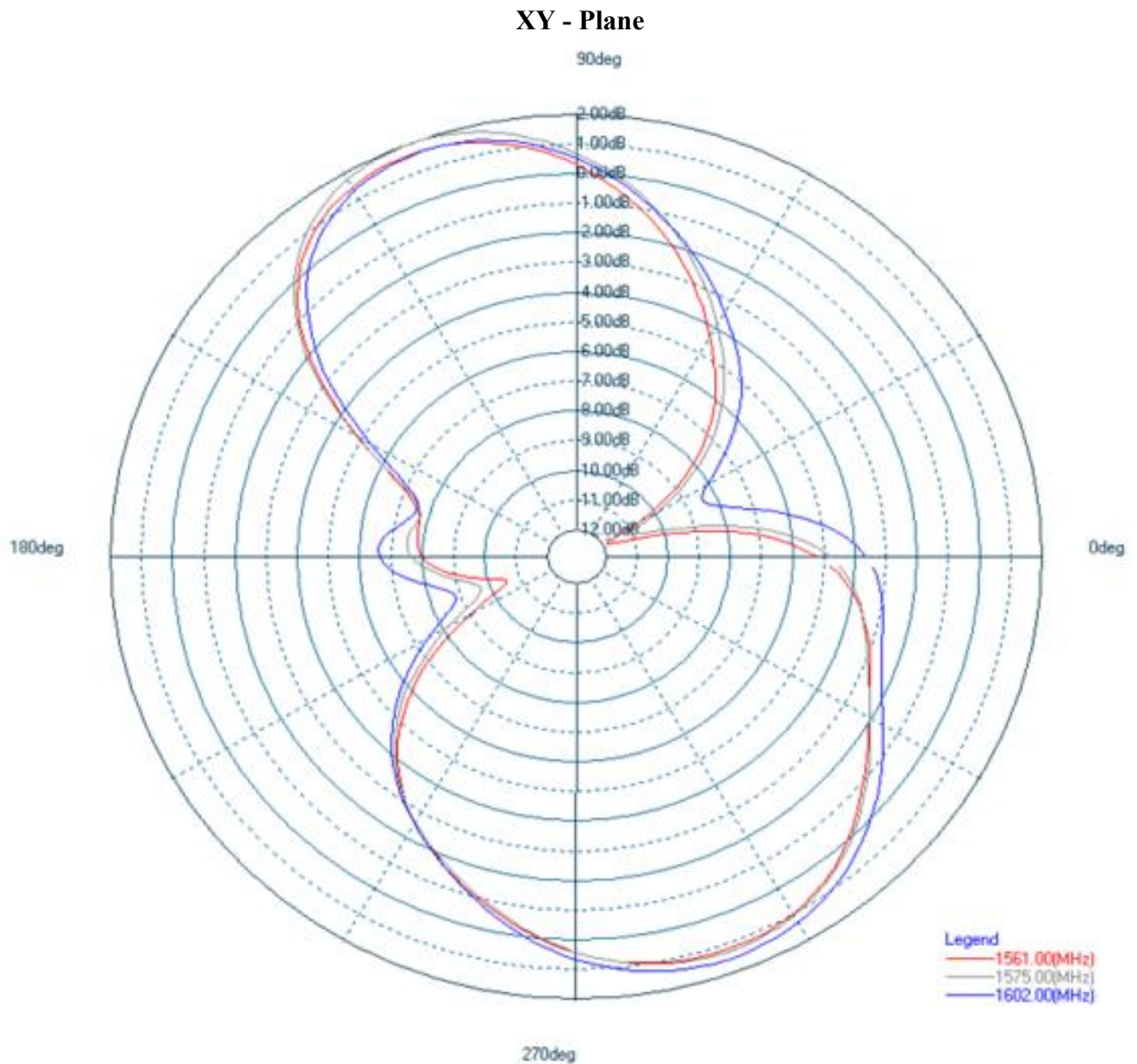


Check Inventory

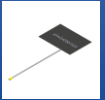


43 x 30 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Radiation Pattern



GNSS L1 Flexible FPC Antenna



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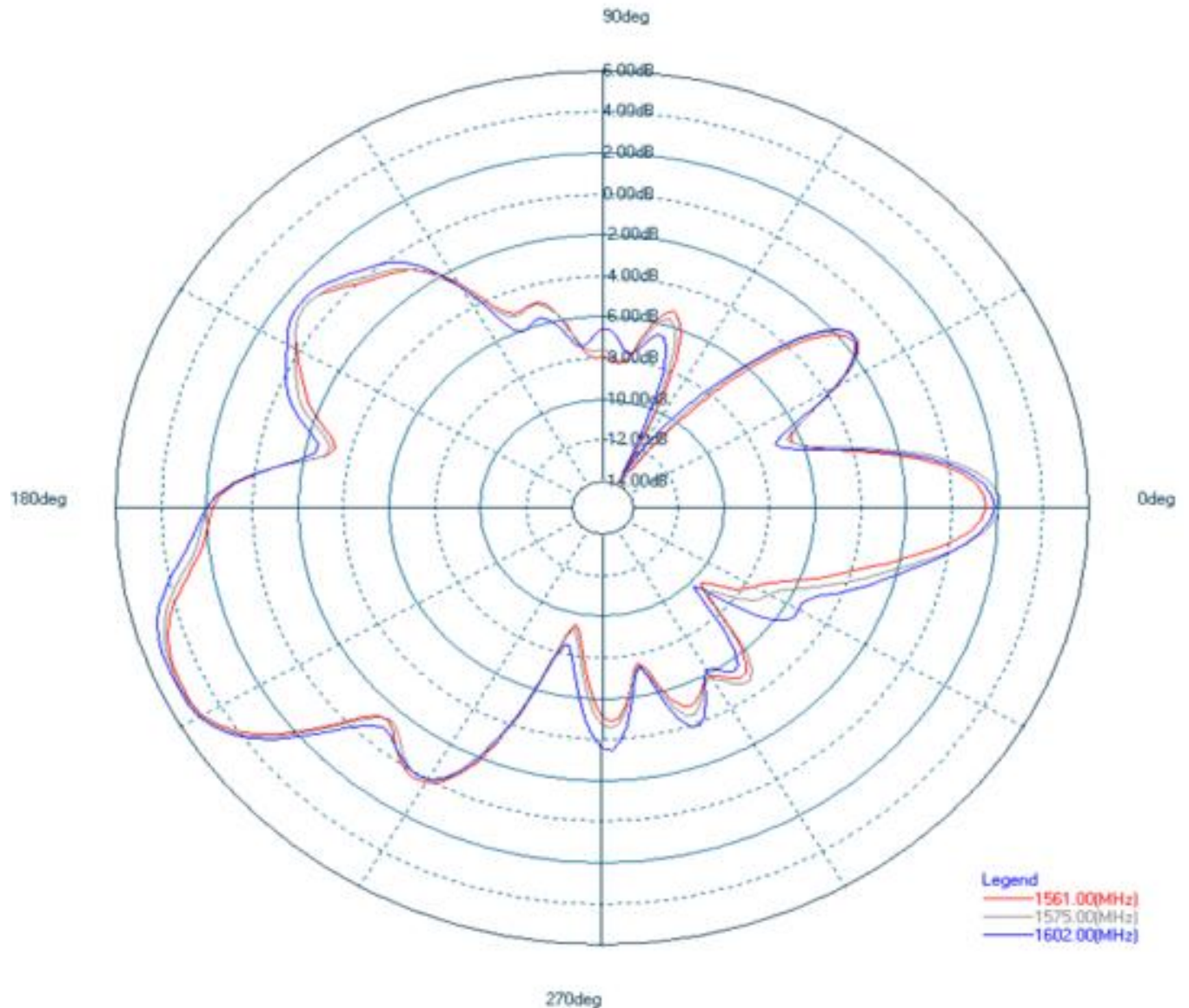


Check Inventory

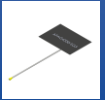


43 x 30 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

XZ - Plane



GNSS L1 Flexible FPC Antenna



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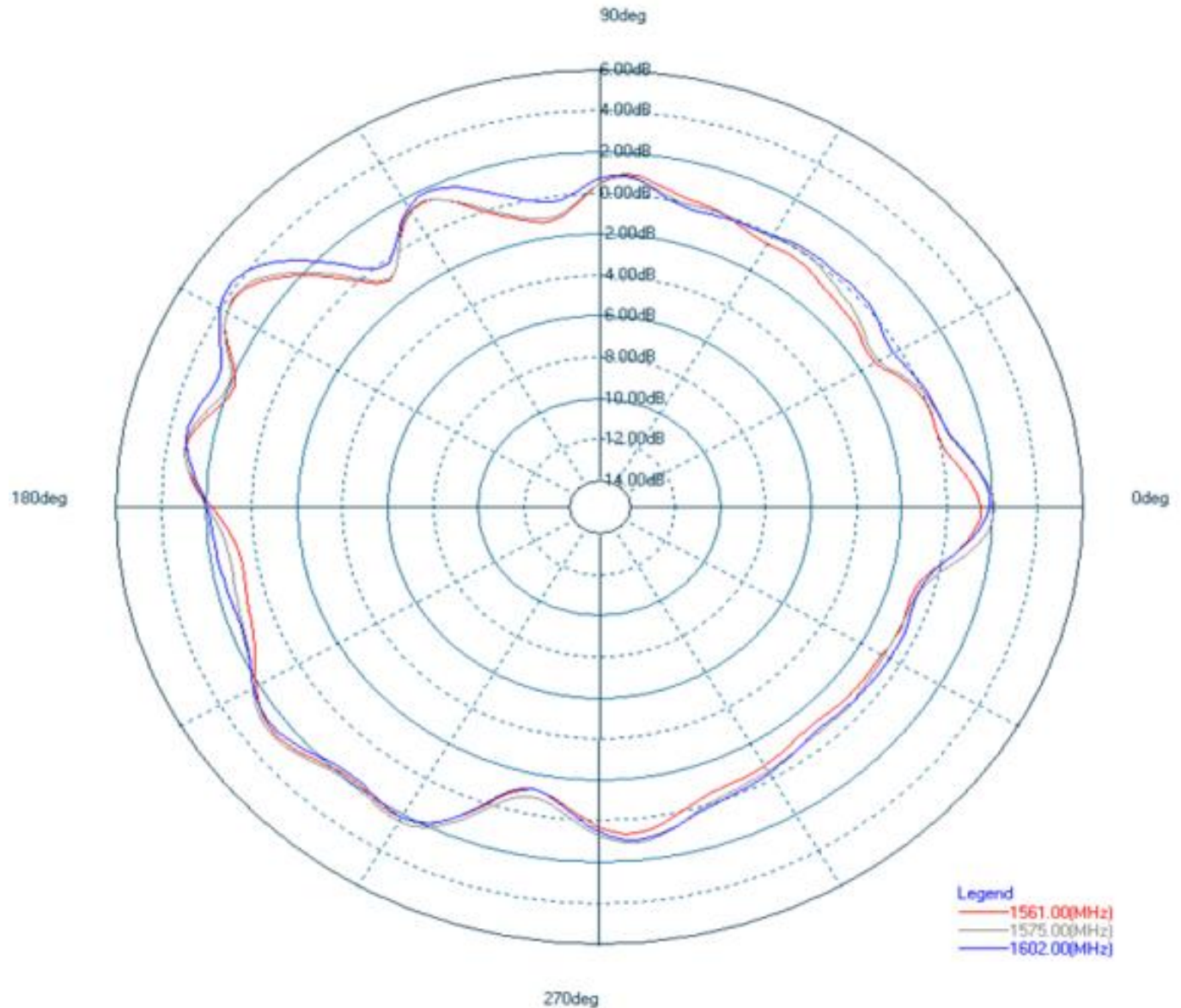


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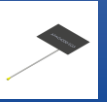


43 x 30 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = N/A

YZ - Plane



GNSS L1 Flexible FPC Antenna



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

Packaging

Number of Antenna/ Grid: 40

Number of Antenna/ Carton: 2000

Dimension of the Carton: 630 x 460 x 105 mm

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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