



# Horn<sup>TM</sup> 5

5 GHz Beamwidth Horn Antenna

Models: Horn-5-30, Horn-5-45, Horn-5-60, and Horn-5-90

Isolation Antenna Horns for airFiber® LTU and airMAX®

Designed for Increased Co-Location Performance

Dual-Linear Polarization

# Overview

Ubiquiti Networks launches a new family of beamwidth isolation horn antennas.

## Modular Design

With flexible sectorization for optional antenna beamwidths, the horn antennas are interchangeable and improve beam-shaping for specific deployment and environment needs. Sector horn antennas are designed to increase co-location performance without sacrificing gain.

## Scalability

There are two symmetrical horn antennas:

- Horn-5-30: 30° beamwidth
- Horn-5-45: 45° beamwidth

These models offer breakthrough scalability options for wireless systems. Unique beam performance and great co-location characteristics allow for a higher density of sectors than traditional sector technology.

## Enhanced Co-Location

There are two asymmetrical horn antennas:

- Horn-5-60: 60° beamwidth
- Horn-5-90: 90° beamwidth

These models have naturally attenuated side lobes and extremely low back radiation. They offer best front-to-back ratio in the industry and the lowest side lobe radiation.

Asymmetrical horn antennas are ideal for cluster sector installations with high co-location requirements.

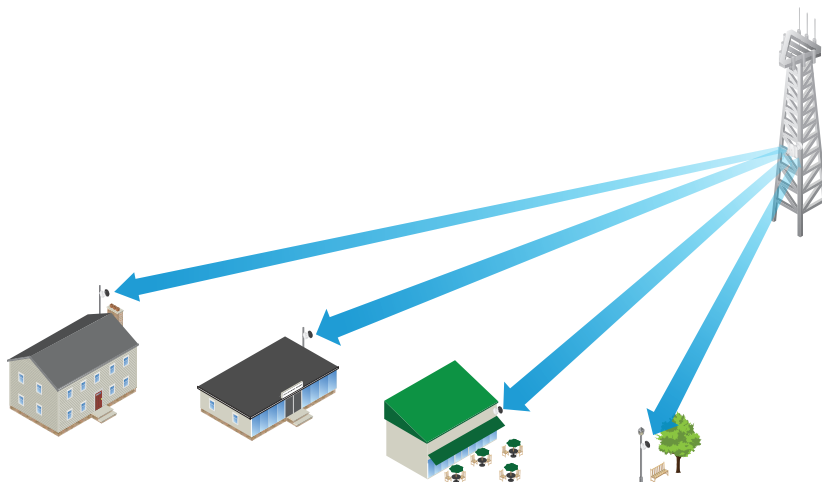
## Versatility

The horn antennas can be used with the following radios:

- airFiber LTU™ AF-LTU
- IsoStation IS-5AC
- IsoStation IS-M5
- PrismStation PS-5AC

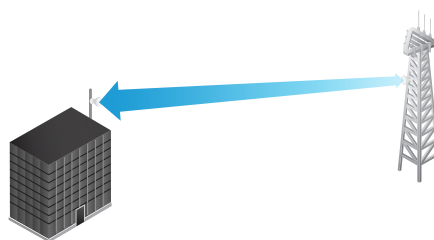
## Application Example

### PtMP Client Links



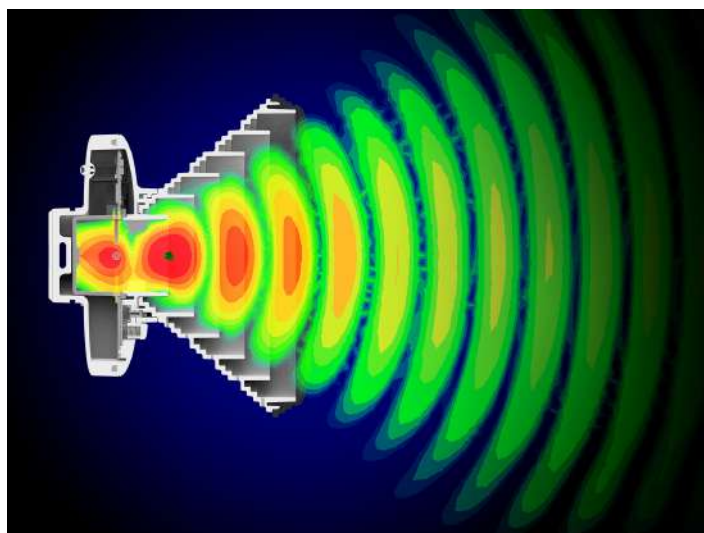
*The PrismStation™ 5AC (with a horn antenna) is used as an AP to communicate with the IsoStation™ 5AC for each client in an airMAX PtMP (Point-to-MultiPoint) network.*

### PtP Link



*Use an IsoStation 5AC on each side of a PtP (Point-to-Point) link.*

## Beam Performance Perfected







# Modular Design

The horn antennas come with precise radiation angles for specific beam shaping, ranging from 30° to 90°, making them suitable for a wide range of installations.

- Horn designed for improved beam shaping
- Enhanced co-location performance
- Single button release for ease of changing antennas

# Model Comparison



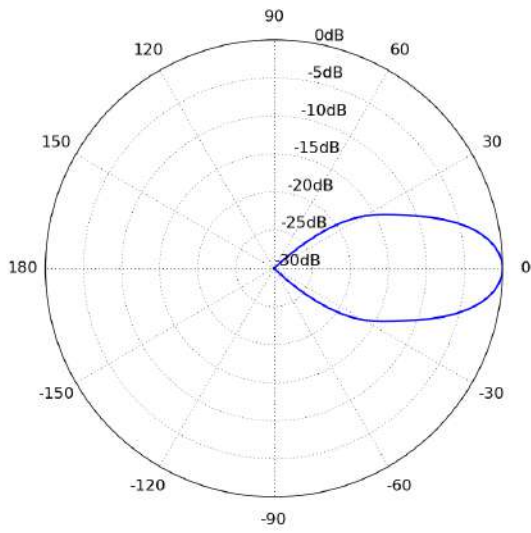
	Horn-5-30	Horn-5-45	Horn-5-60	Horn-5-90
Beamwidth	 30°	 45°	 60°	 90°
Gain	19 dBi	15.5 dBi	16 dBi	13 dBi



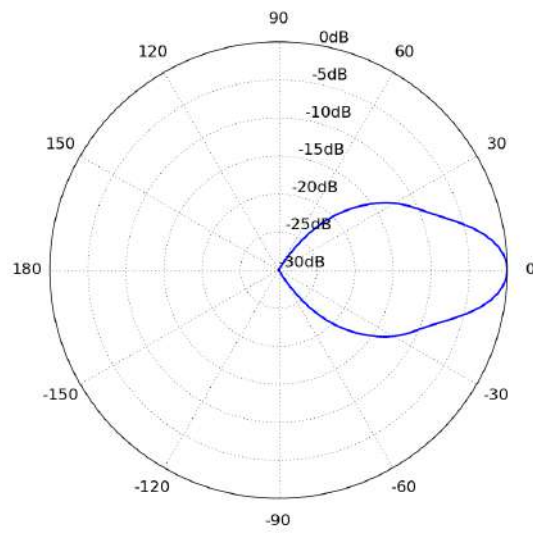
PS-5AC with Horn-5-45 Mounted on Pole

Horn-5-30	
Dimensions	Ø 221.4 x 184.2 mm (8.71 x 7.3")
Weight	1.1 kg (38.8 oz)
Supported Frequency Range	5.15 - 5.85 GHz
Gain	19 dBi
HPOL Beamwidth	30°
VPOL Beamwidth	30°
Elevation Beamwidth	30°
Maximum VSWR	1.7:1
Wind Survivability	200 km/h (125 mph)
Wind Loading	56 N @ 200 km/h (12.6 lbf @ 125 mph)
Polarization	Dual-Linear
Cross-Pol Isolation	17 dB

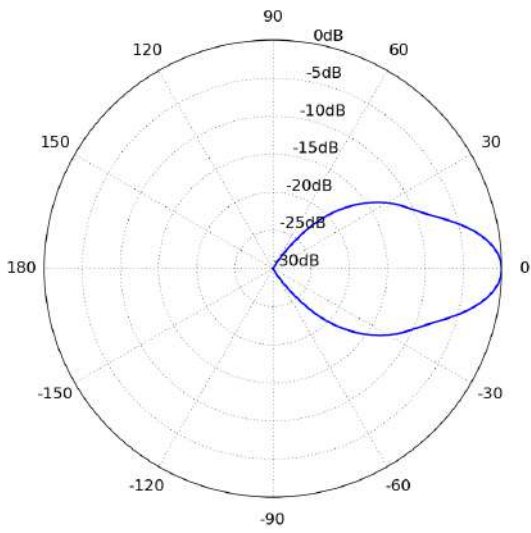
Vertical Azimuth



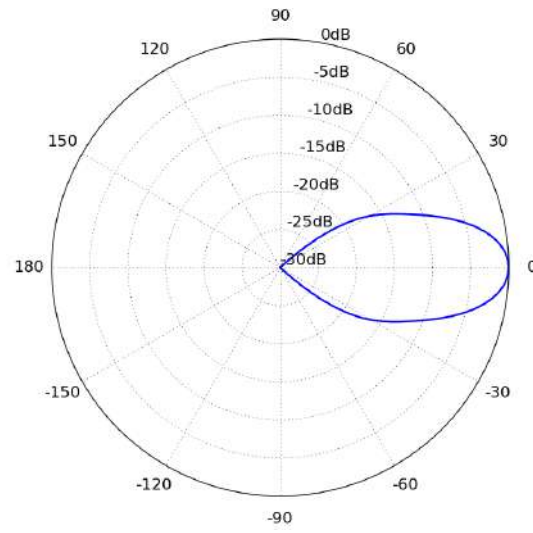
Vertical Elevation



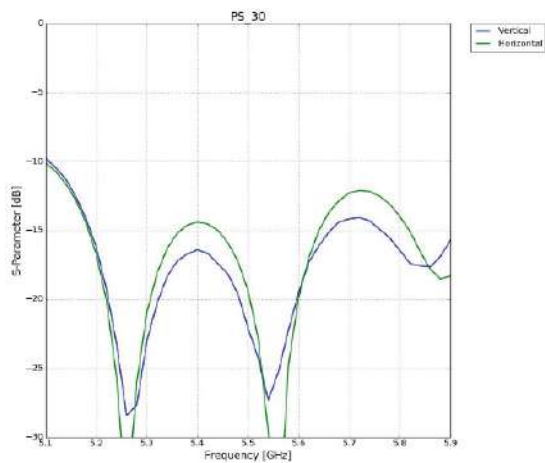
Horizontal Azimuth



Horizontal Elevation



Return Loss

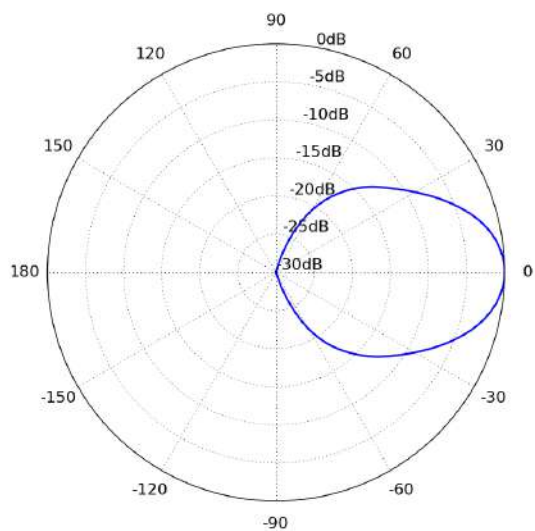


# Horn<sup>TM</sup> 5 45

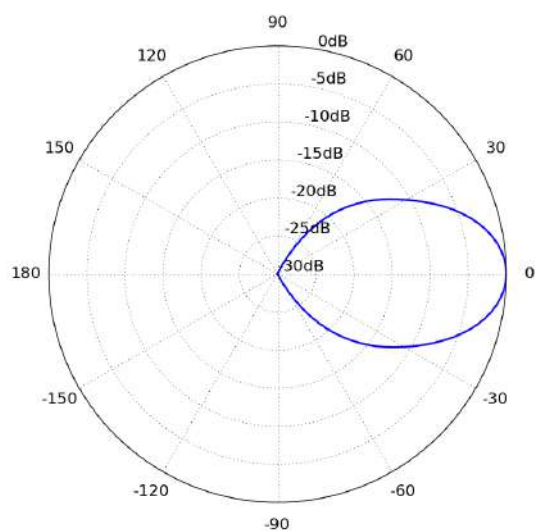
## Specifications

Horn-5-45	
Dimensions	Ø 175 x 96 mm (6.9 x 3.78")
Weight	1.34 kg (47.23 oz)
Supported Frequency Range	5.15 - 5.85 GHz
Gain	15.5 dBi
HPOL Beamwidth	45°
VPOL Beamwidth	45°
Elevation Beamwidth	45°
Maximum VSWR	1.7:1
Wind Survivability	200 km/h (125 mph)
Wind Loading	56 N @ 200 km/h (12.6 lbf @ 125 mph)
Polarization	Dual-Linear
Cross-Pol Isolation	17 dB

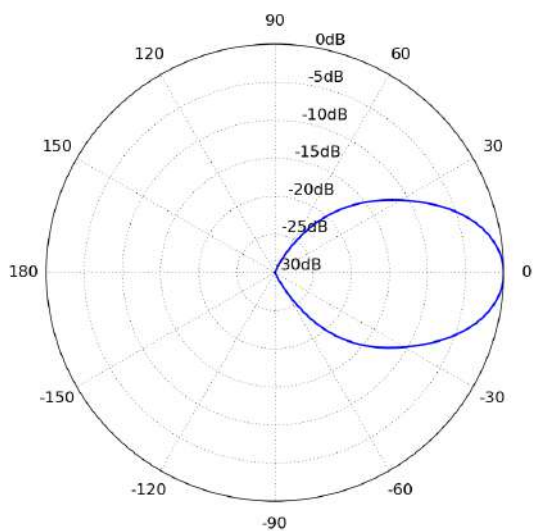
Vertical Azimuth



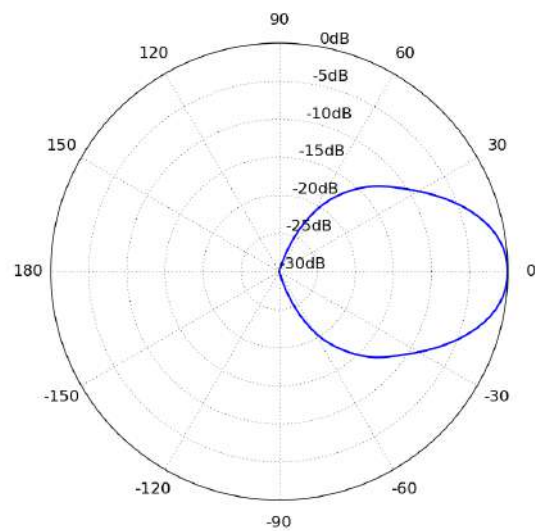
Vertical Elevation



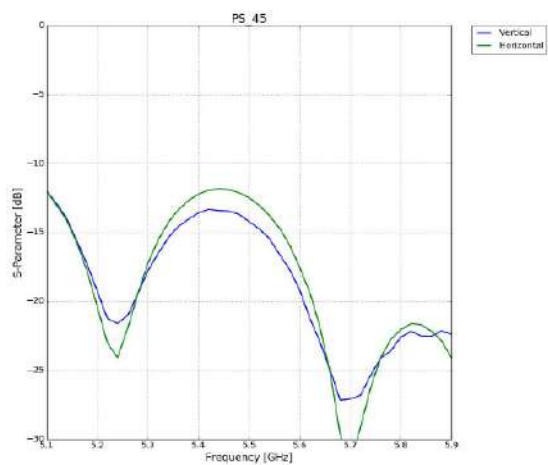
Horizontal Azimuth



Horizontal Elevation



Return Loss



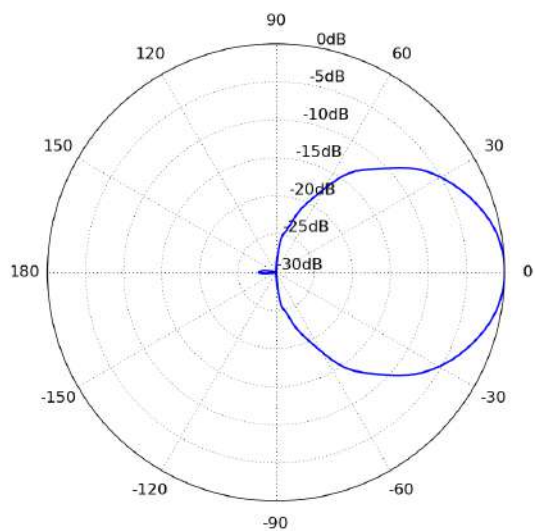
# Horn<sup>TM</sup> 5 60

## Specifications

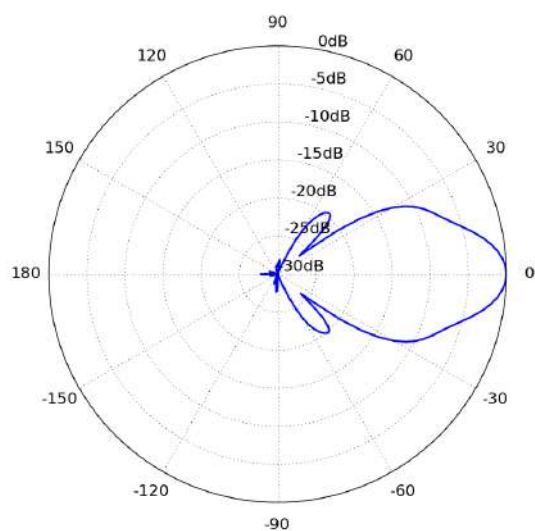
Horn-5-60	
Dimensions	161.6 x 173.3 x 170.9 mm (6.4 x 6.82 x 6.73")
Weight	720g (25.39 oz)
Supported Frequency Range	5.15 - 5.85 GHz
Gain	16 dBi
HPOL Beamwidth	60°
VPOL Beamwidth	60°
Elevation Beamwidth	30°
Maximum VSWR	2:1
Wind Survivability	200 km/h (125 mph)
Wind Loading	50 N @ 200 km/h (11.2 lbf @ 125 mph)
Polarization	Dual-Linear
Cross-Pol Isolation	17 dB



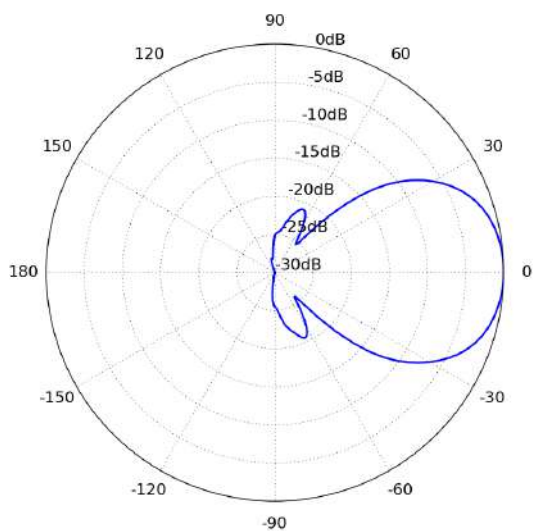
Vertical Azimuth



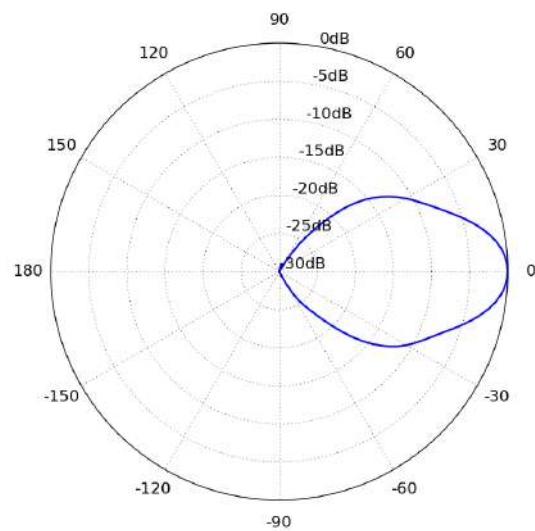
Vertical Elevation



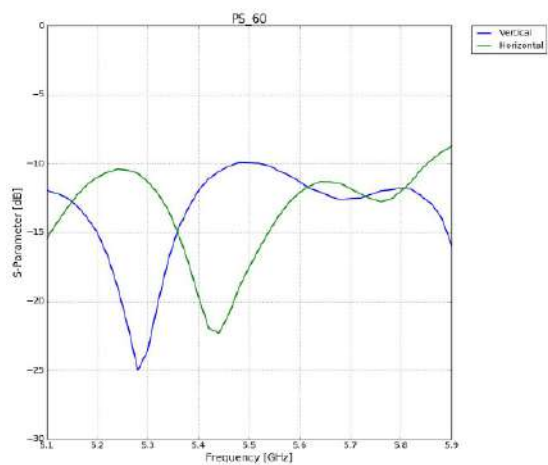
Horizontal Azimuth



Horizontal Elevation



Return Loss

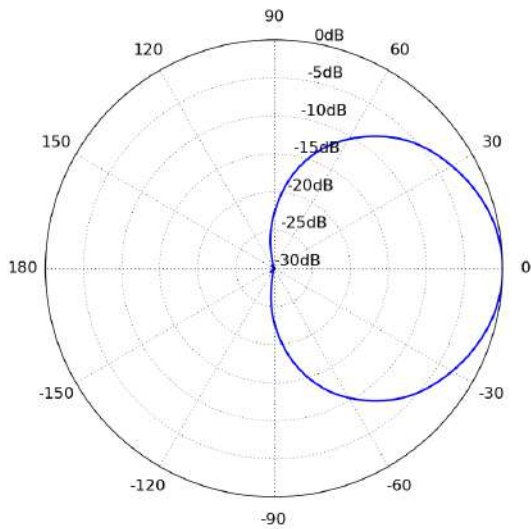


# Horn<sup>TM</sup> 5 90

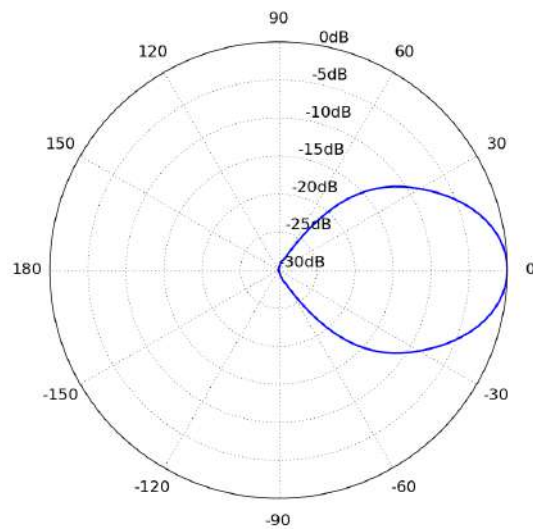
## Specifications

Horn-5-90	
Dimensions	152.1 x 186.8 x 113.2 mm (5.99 x 7.35 x 4.46")
Weight	920 g (32.45 oz)
Supported Frequency Range	5.15 - 5.85 GHz
Gain	13 dBi
HPOL Beamwidth	90°
VPOL Beamwidth	90°
Elevation Beamwidth	45°
Maximum VSWR	2:1
Wind Survivability	200 km/h (125 mph)
Wind Loading	46 N @ 200 km/h (10.3 lbf @ 125 mph)
Polarization	Dual-Linear
Cross-Pol Isolation	17 dB

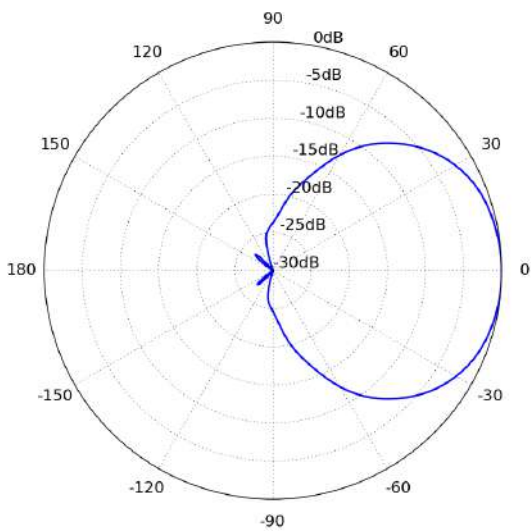
Vertical Azimuth



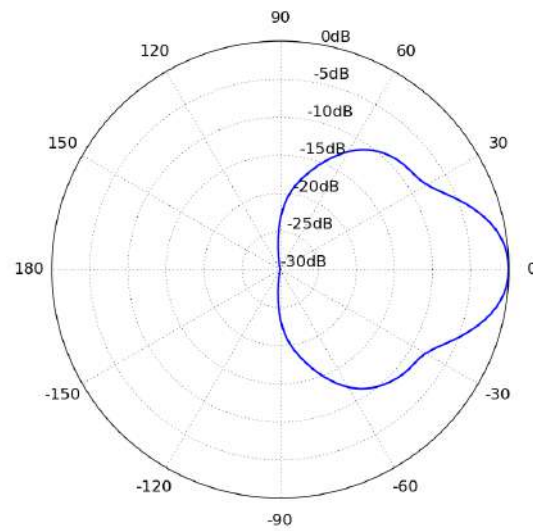
Vertical Elevation



Horizontal Azimuth



Horizontal Elevation



Return Loss

