

# 380-470 MHz 2-Element Folded Dipole Array Antenna 3-6 dBd 300W



## Specifications

Model	<b>AD2-380470-3-300</b>
Frequency (continuous)	380-470 MHz
Gain	3-6 dBd
Impedance	50 ohms
VSWR	< 1.5:1
Polarization	Vertical
Maximum input power	300 W
Vertical beamwidth	35°
Connector	N-Male or 7-16 DIN (opt.) on harness feed cable
Dimensions (H x D) (max)	1560x440 mm
Weight (antenna + clamps)	7 kg
Rated Wind Velocity	216 km/h
Mounting	On 50-60 mm dia. mast tube
Operating Temperature	-40°C to +70°C
Lightning protection	DC Ground

## Applications

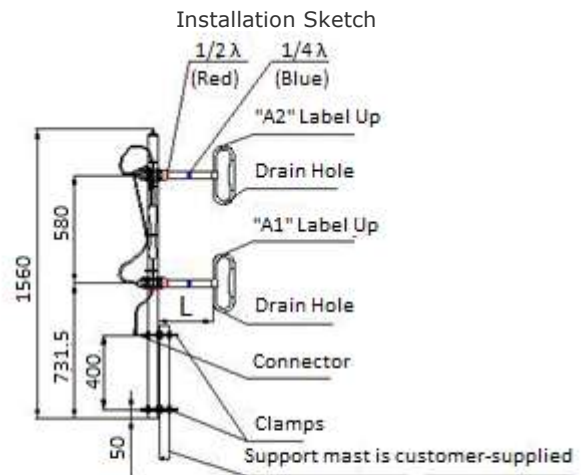
- UHF Band TETRA Communications
- Wireless Paging System
- Wireless Data transmission system
- Wireless Video System

## Features

- Broad Band, Low VSWR
- Medium Gain
- 2-element dipole array antennas
- 300W High Power
- Pattern Adjustable Offset circular, cardioids, or bidirectional

## Note:

Main mast and bracket are included.



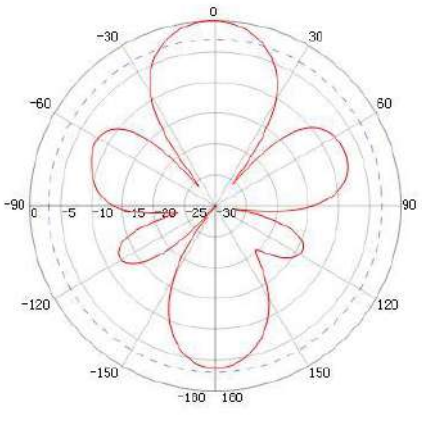
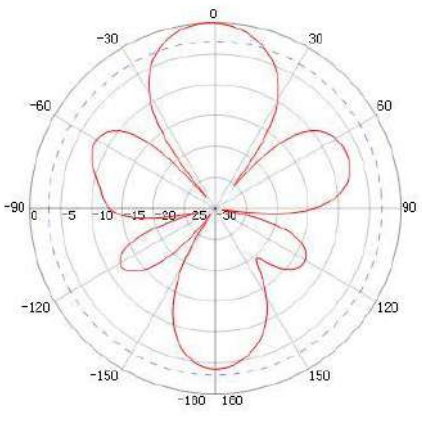
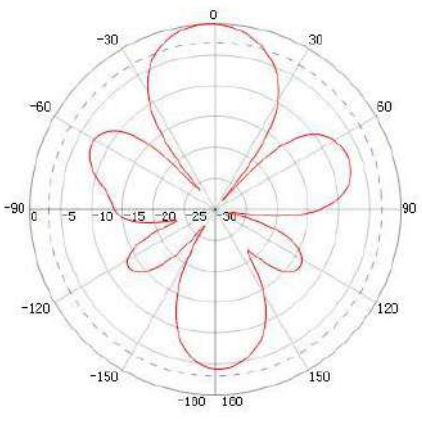
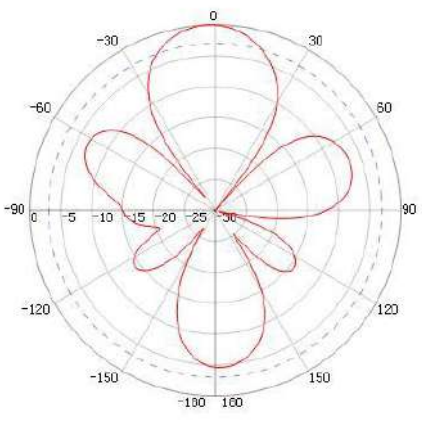
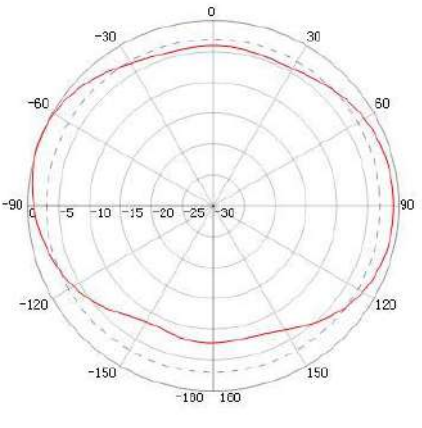
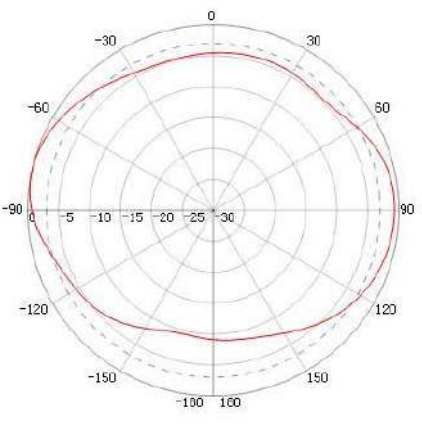
1/4 λ L=174 ± 10 mm (spacing from tower)	H-Plane gain 6.1 dBd
1/2 λ L=300 ± 10 mm (spacing from tower)	H-Plane gain 6.1 dBd

## Order Information:

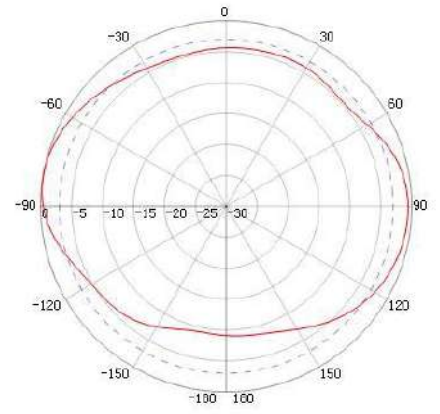
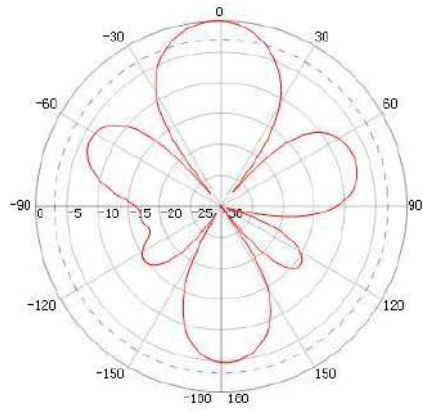
AD2-380470-3-300-NF  
AD2-380470-3-300-DIN

2-Element Dipole Antenna 380-470 MHz, 3-6 dBd, 300W with N-female connector  
2-Element Dipole Antenna 380-470 MHz, 3-6 dBd, 300W with 7-16 DIN female connector

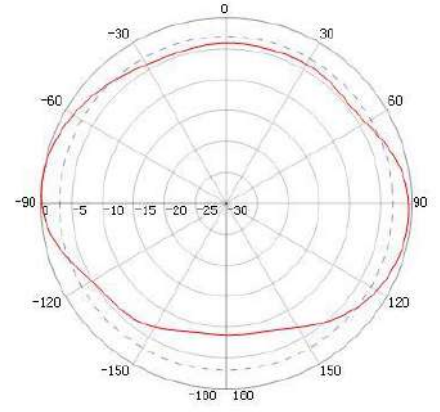
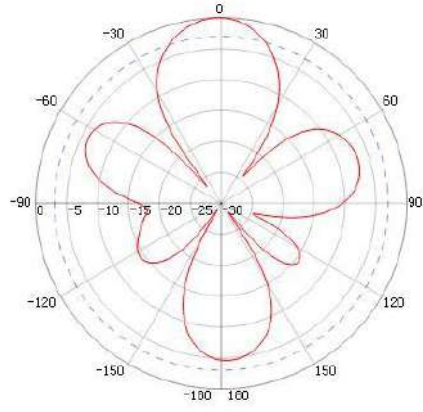
# E-plane and H-plane radiation patterns $1/2\lambda$

Freq	E Pattern	H Pattern
400 MHz	 The E-plane radiation pattern at 400 MHz is plotted on a polar coordinate system with angles from 0 to 180 degrees. The main lobe is oriented along the 0-degree axis, with a peak value of approximately 30 dB. There are four side lobes, two on each side of the main lobe, with peak values of about 15 dB. The pattern is symmetric about the 0-degree axis.	
405 MHz	 The E-plane radiation pattern at 405 MHz is similar to the 400 MHz pattern, with a main lobe at 0 degrees and four side lobes. The peak values are slightly higher, with the main lobe reaching about 32 dB and side lobes at 16 dB.	
410 MHz	 The E-plane radiation pattern at 410 MHz shows a main lobe at 0 degrees and four side lobes. The main lobe peak is approximately 33 dB, and the side lobes are at about 17 dB.	
415 MHz	 The E-plane radiation pattern at 415 MHz has a main lobe at 0 degrees and four side lobes. The main lobe peak is about 34 dB, and the side lobes are at approximately 18 dB.	
400 MHz	 The H-plane radiation pattern at 400 MHz is plotted on a polar coordinate system. The main lobe is oriented along the 90-degree axis, with a peak value of approximately 30 dB. There are four side lobes, two on each side of the main lobe, with peak values of about 15 dB. The pattern is symmetric about the 90-degree axis.	
405 MHz	 The H-plane radiation pattern at 405 MHz is similar to the 400 MHz pattern, with a main lobe at 90 degrees and four side lobes. The peak values are slightly higher, with the main lobe reaching about 32 dB and side lobes at 16 dB.	

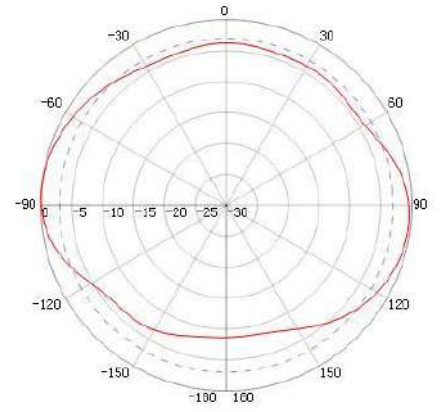
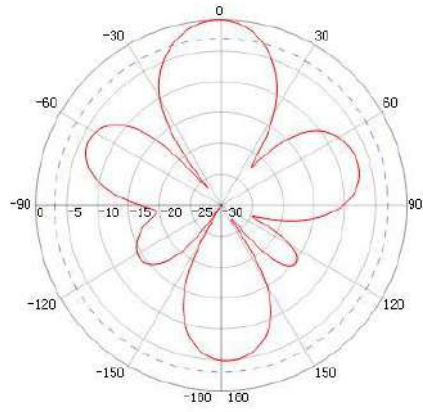
420 MHz



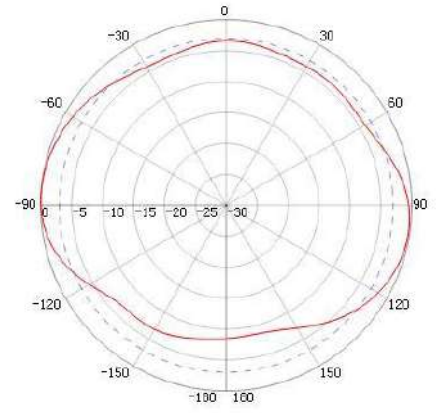
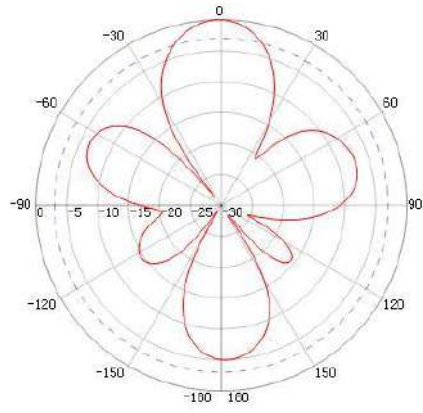
425 MHz



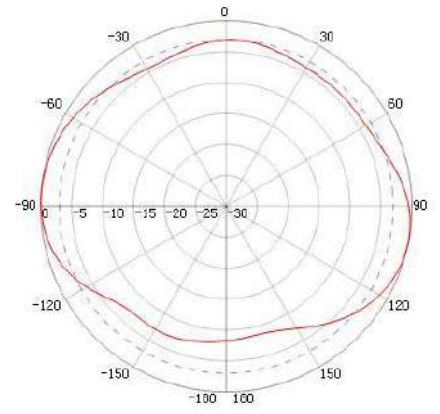
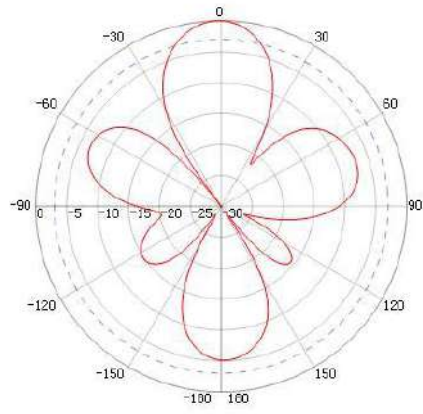
430 MHz



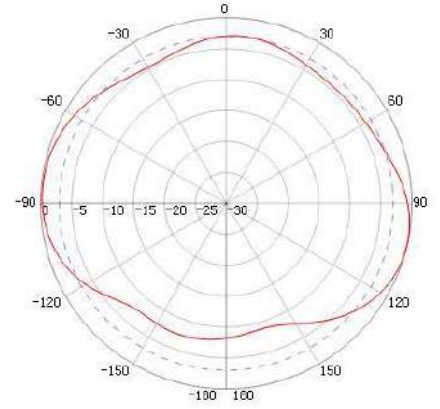
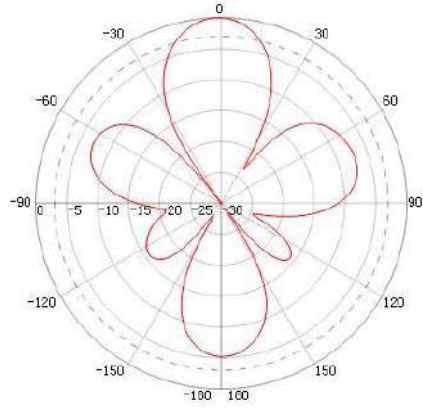
435 MHz



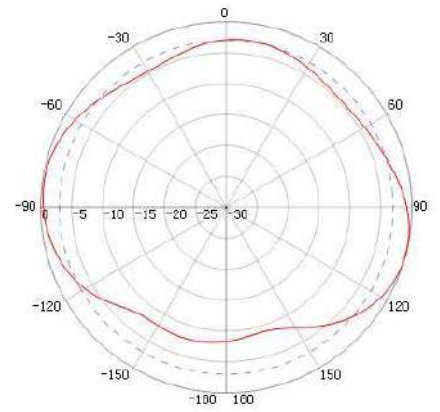
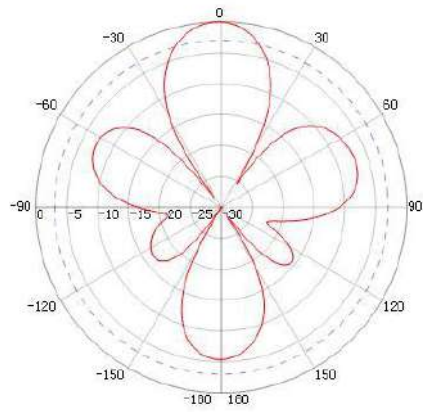
440 MHz



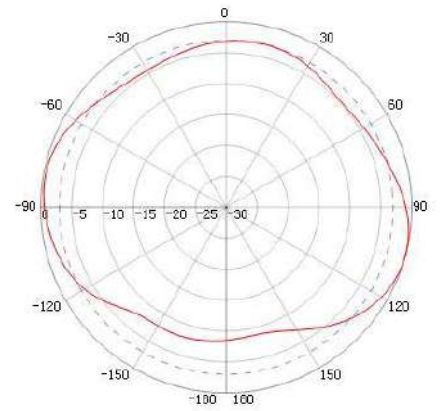
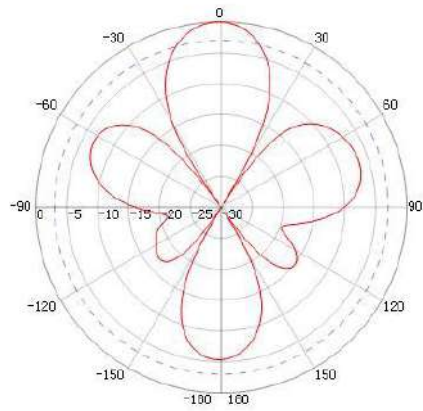
445 MHz



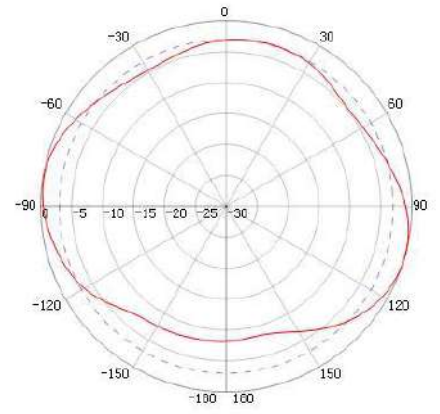
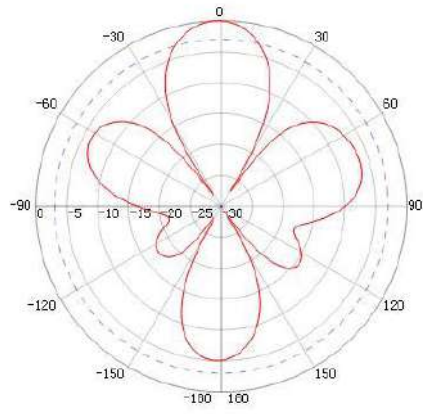
450 MHz



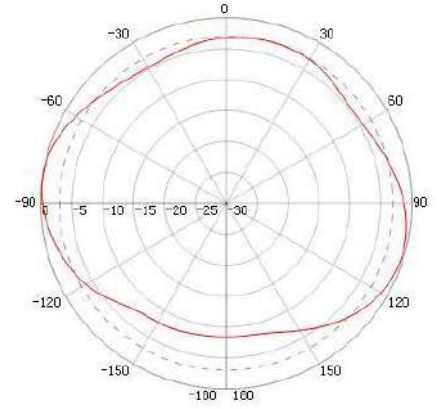
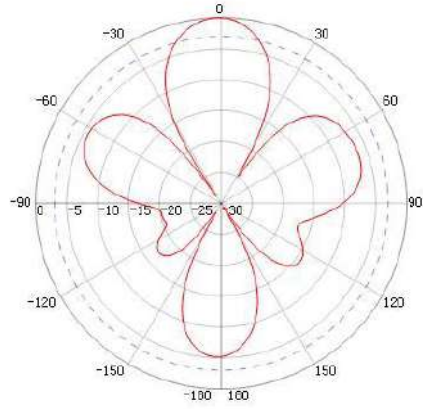
455 MHz



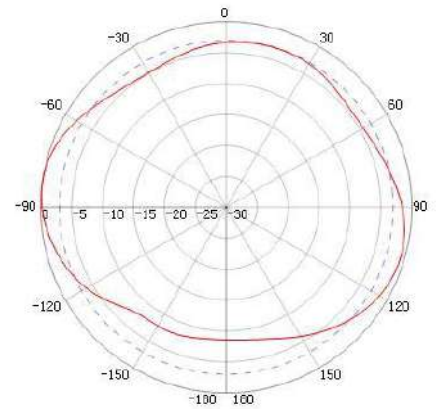
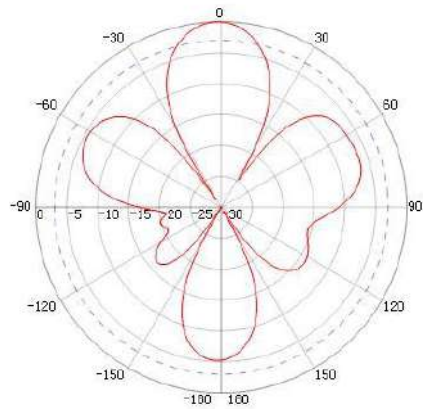
460 MHz



465 MHz



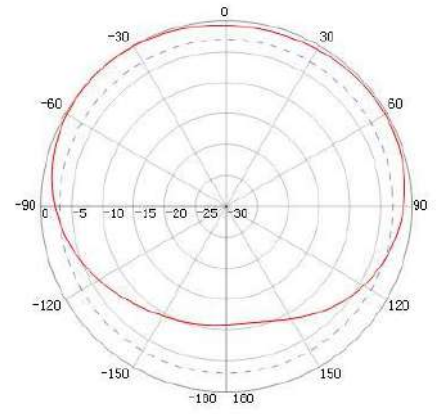
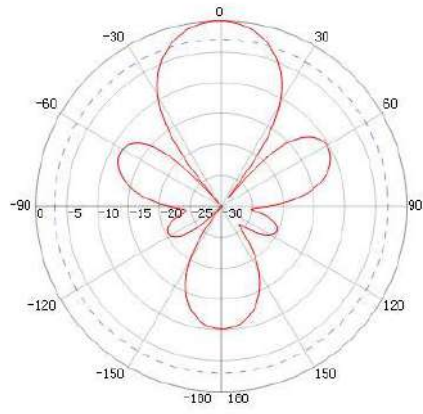
470 MHz



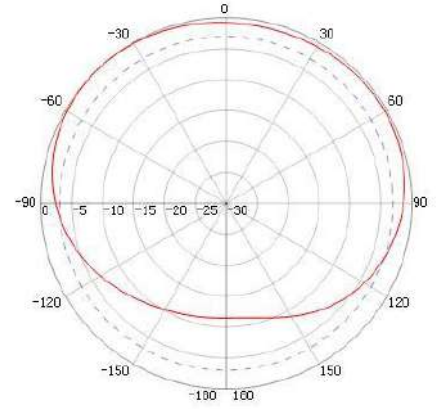
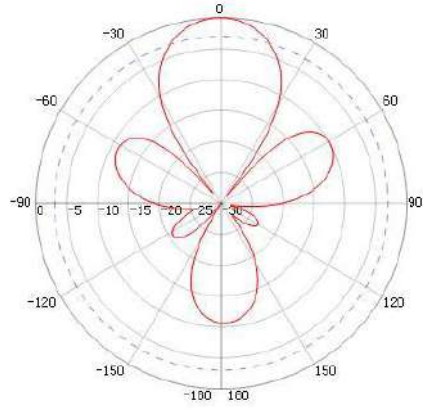
### E-plane and H-plane radiation patterns $1/4\lambda$

Freq	E Pattern	H Pattern
400 MHz		

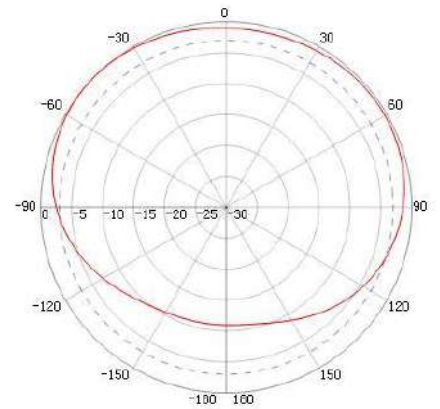
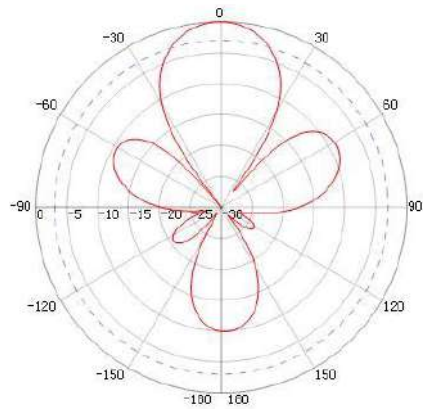
405 MHz



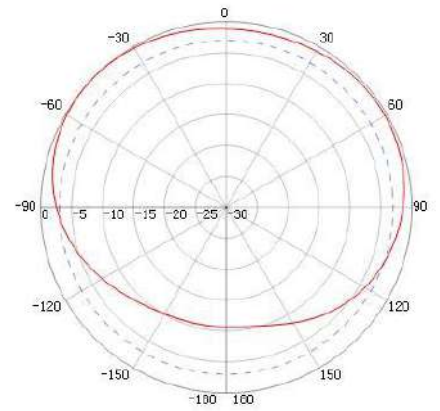
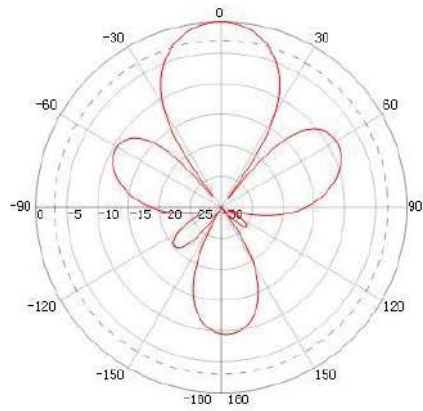
410 MHz



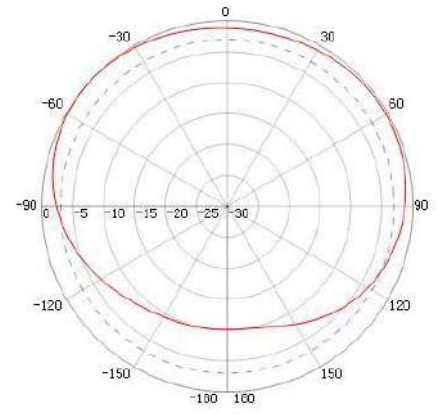
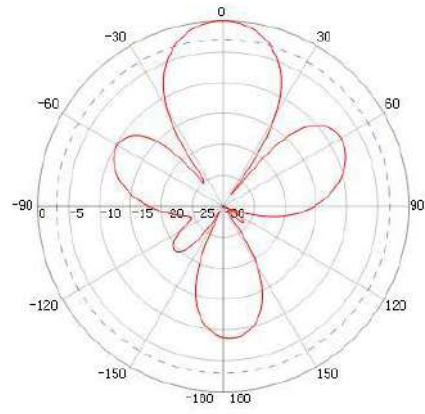
415 MHz



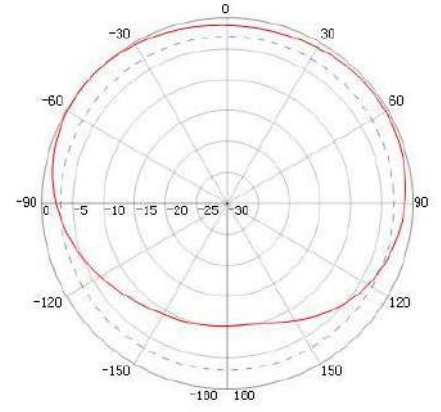
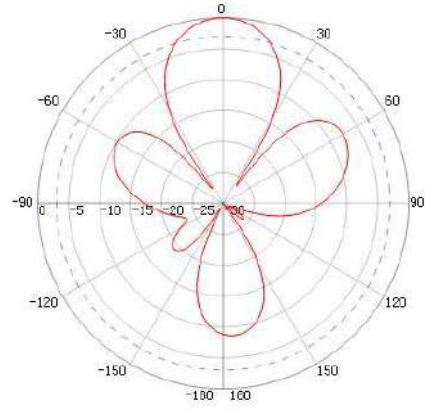
420 MHz



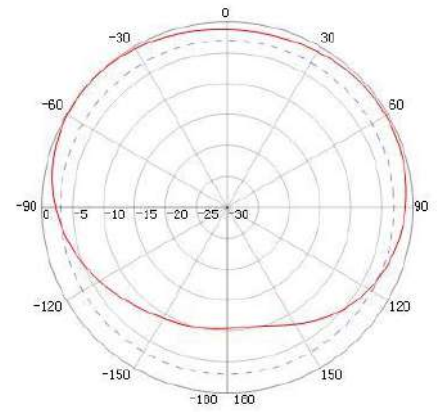
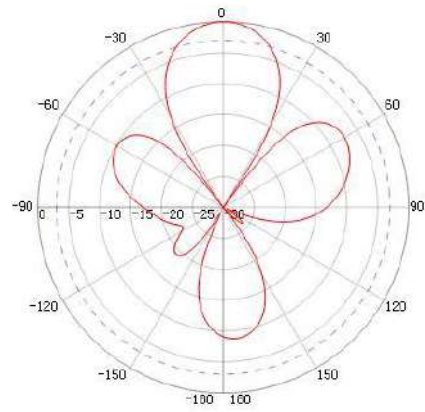
425 MHz



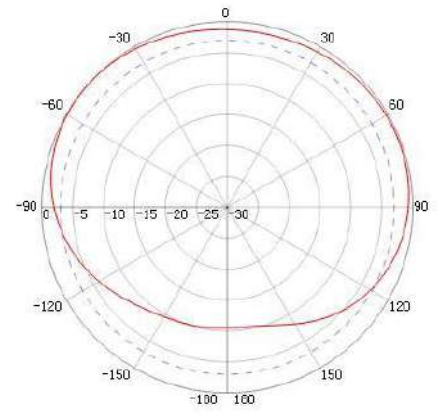
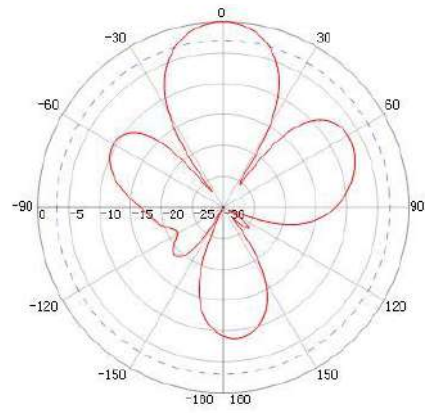
430 MHz



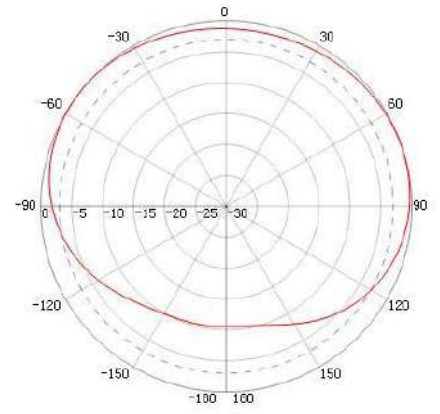
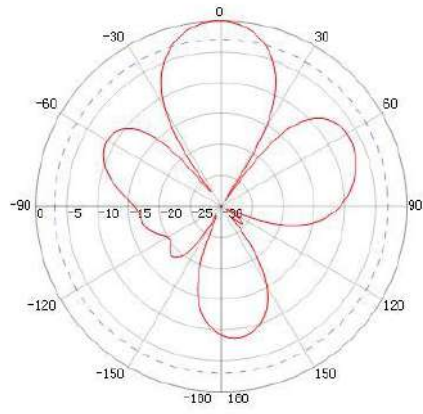
435 MHz



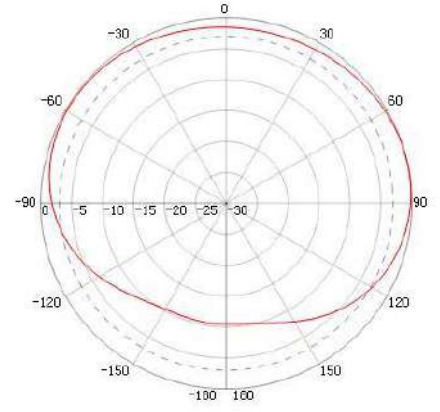
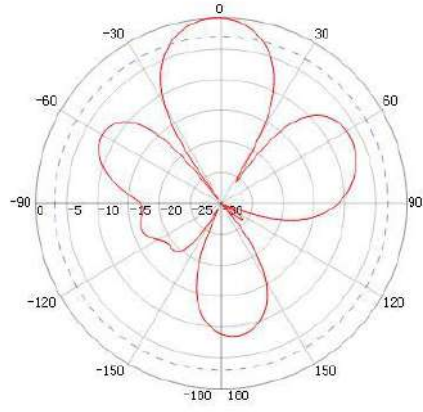
440 MHz



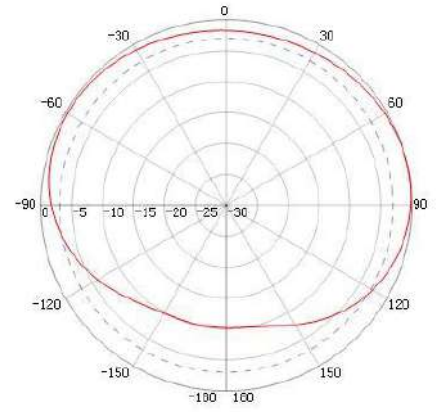
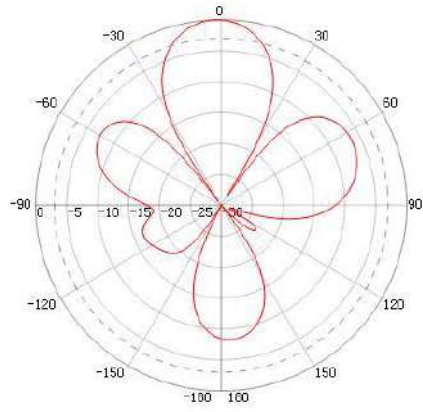
445 MHz



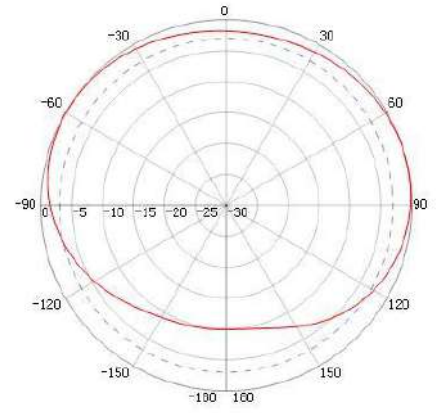
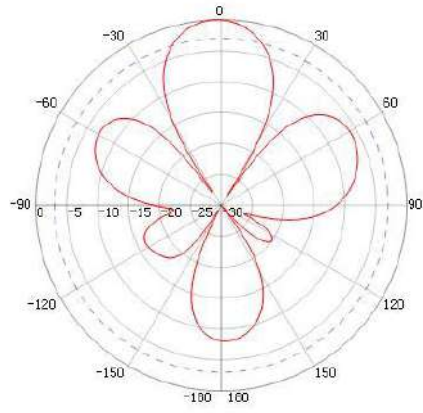
450 MHz



455 MHz

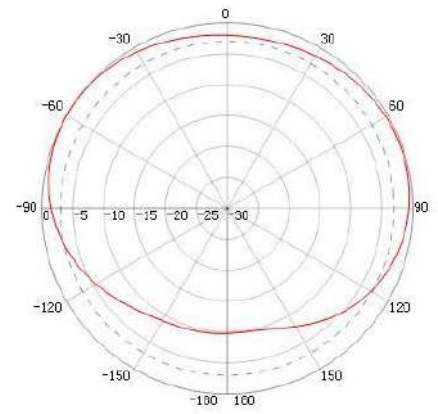
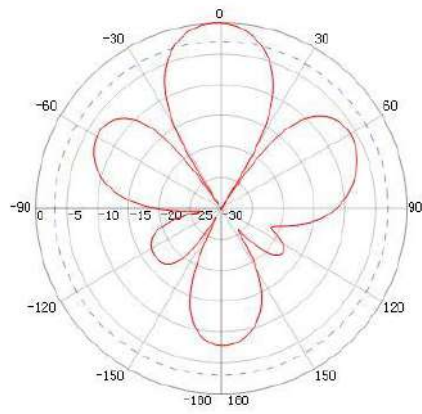


460 MHz

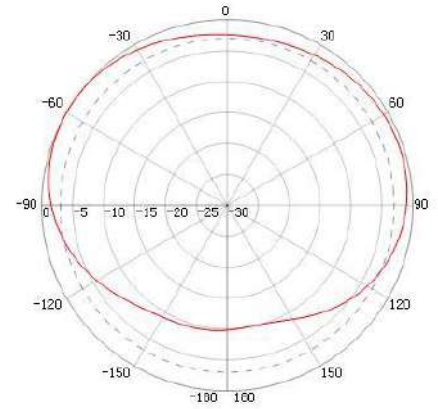
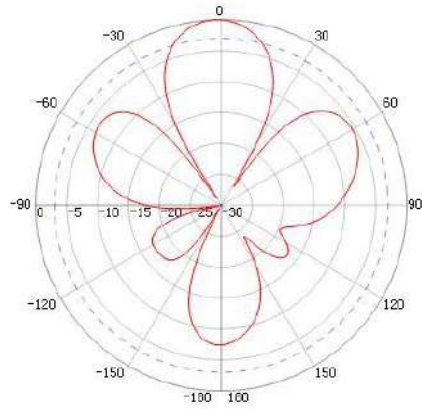




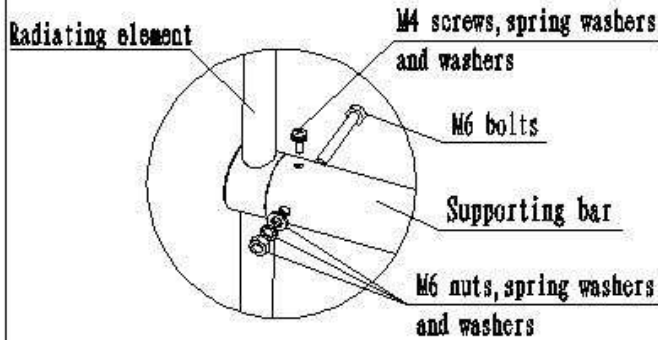
465 MHz



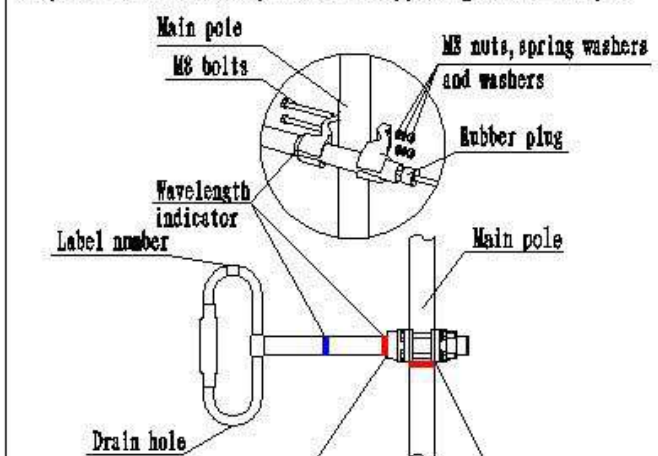
470 MHz



**Step 1: Mount the radiating element to supporting bar**



**Step 2: Fasten the clamp to secure supporting bar to main pole**



While mounting, please notice that the clamps should be set here by the edge of the indicator ( $1/4\lambda$  or  $1/2\lambda$ ) on the bar according to the wavelength.

While mounting, please notice that the clamps should be set here by the edge of the indicator on the main pole.

**Step 3: Mount the antenna main pole to the support mast**

