

# RF-FOB-319

## Antenna info

### Overview:

- **Antenna description:**

The antenna is a PCB antenna. Shaped in a circular form and used in a monopole arrangement.

### Power:

- Unit is powered by a 3V CR2032 lithium battery.

### Antenna design:

Frequency 319.508 MHz

Length 4.5 inches

Diameter 0.065 inches

Capacitance 8.114 pF

Inductance 17.719 nH

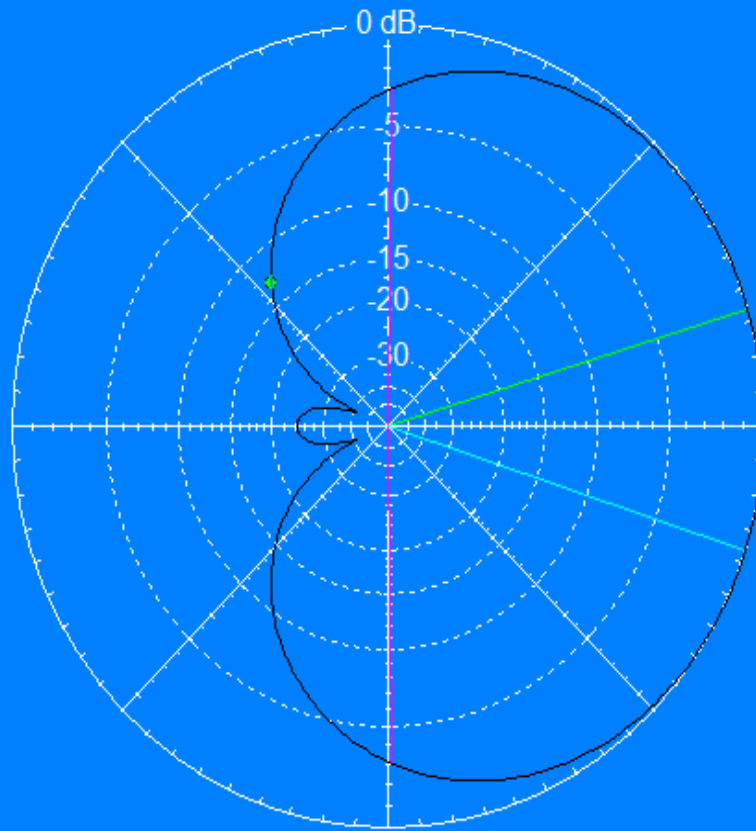
Quarter Wavelength 0.115 m

Antenna Length 65.10 %

Radiation Resistance 0.00 Ohms

Total Field

EZNEC Demo



319.508 MHz

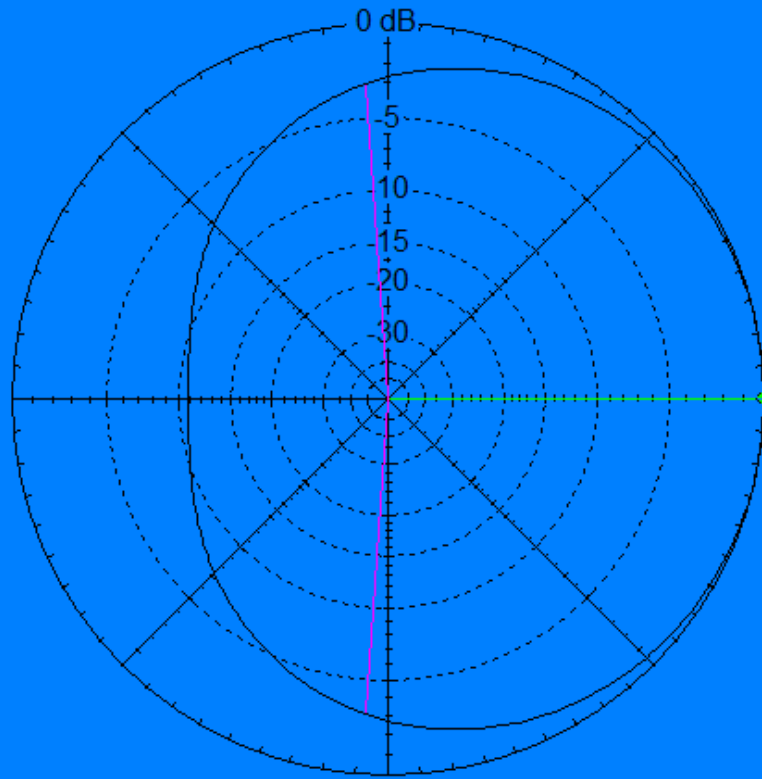
Azimuth Plot  
Elevation Angle 0.0 deg.  
Outer Ring 3.59 dBi

Cursor Az 131.0 deg.  
Gain -9.34 dBi  
-12.92 dBmax

Slice Max Gain 3.59 dBi @ Az Angle = 17.0 deg.  
Front/Back 31.95 dB  
Beamwidth 178.6 deg.; -3dB @ 270.7, 89.3 deg.  
Sidelobe Gain 3.59 dBi @ Az Angle = 342.0 deg.  
Front/Sidelobe 0.0 dB

Total Field

EZNEC Demo



319.508 MHz

Azimuth Plot  
Elevation Angle 53.0 deg.  
Outer Ring -4.7 dBref

Cursor Az 0.0 deg.  
Gain -4.7 dBref  
0.0 dBmax

Slice Max Gain -4.7 dBref @ Az Angle = 0.0 deg.  
Front/Back 10.87 dB  
Beamwidth 188.0 deg.; -3dB @ 266.0, 94.0 deg.  
Sidelobe Gain < -100 dBi  
Front/Sidelobe > 100 dB