



CROSSED-LOOP RECEIVE ANTENNA

02-00379 | 1-30MHz

01

Data Sheet

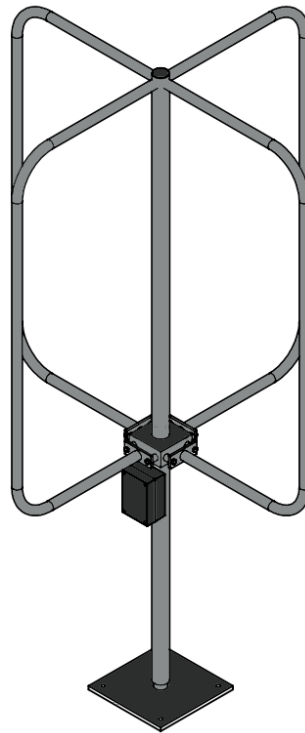


Figure 1 – Installed Antenna

The Lencom® 02-00379 Crossed-Loop antenna is designed as a high quality receive antenna that performs across all elevations. It is a high-gain, low noise and high IMD (intermodulation distortion) immunity.

As such, this is an ideal antenna for receiving sounding or near-vertical incidence (NVIS) signals.

The 02-00379 Crossed-Loop is almost perfectly omnidirectional.

Constructed from high quality aluminium, the antenna is fitted with dual amplifiers to allow each of the crossed loop signals to be detected, augmented and passed into a single combiner with a 50Ω output.

The antenna is fed at the base of the loop via a standard N-type connector.

External power requirement: DC 24V or 48V back-fed on coaxial cable. A DC insertion unit is provided with each antenna. Where DC power is not available, an option is available without amplification.

Key Characteristics¹

<i>Frequency range</i>	1-30MHz
<i>Power rating</i>	Receive only
<i>Output impedance</i>	50Ω
<i>Isotropic gain</i>	Up to 5dbi
<i>Radiation pattern</i>	Omnidirectional (refer radiation plots below)
<i>RF connector type</i>	N-type (other connectors available on request)
<i>Wind rating</i>	260km/h (no ice)

Radiation Patterns

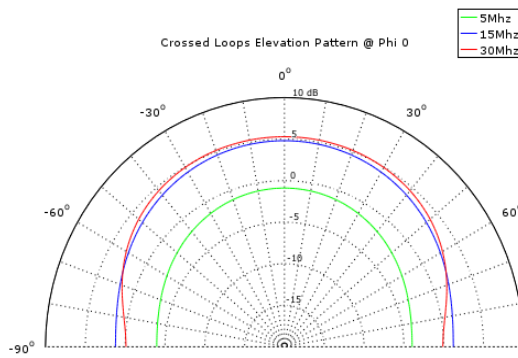


Figure 2
 Radiation Pattern (vertical plane 45° from both loops)

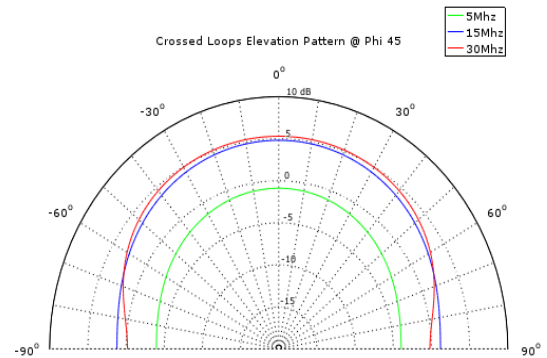


Figure 3
 0° (vertical plane co-incident with one loop)

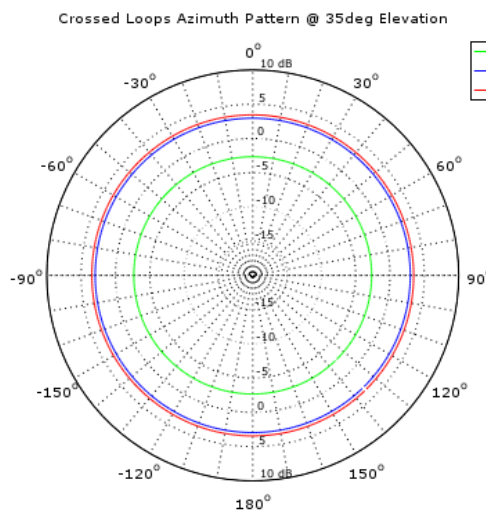


Figure 3 – Radiation Pattern (0° vertical plane co-incident with one loop)

Modelled above perfect earth; Azimuth slice taken at an elevation of 35degrees from horizon;
 Elevation slice taken at an azimuth angle of 90degrees from broadside

¹ Specifications subject to change without notice