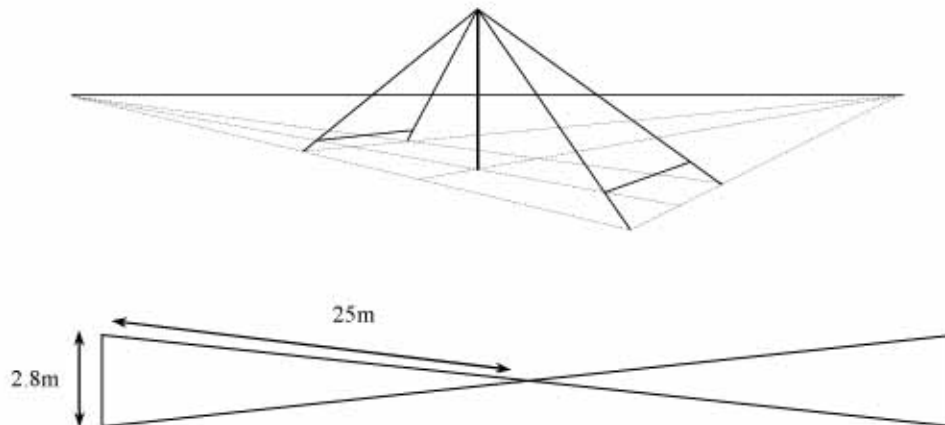


PRODUCT STATUS: COTS
VERSION: 1.0



SPECIFICATIONS:

PRODUCT FEATURES:

- No matching unit required - ideal for frequency-agile radios.
- Small, lightweight and rapidly erected in the field.
- Stainless steel components

PRODUCT APPLICATIONS:

- Tactical HF communications.
- EW and jamming.

Electrical:	
Frequency range	2.5 – 30 MHz
VSWR	< 2.5 : 1
Nominal input impedance	50 Ω
Connectors	SO 230 ("UHF" connector)
Feed power handling	100 W (CW); 400 W (PEP)
Gain	- 10 dBi (< 10 MHz), 0 dBi (≥ 10 MHz)
Polarisation	Linear (Predominantly Horizontal)
Mechanical:	
Dimensions	Deployed: Height: based on 8 m Mast; 50 m x 2.8 m
Dimensions packed	Deployed: Height: based on 8 m Mast; 50 m x 2.8 m Packed: 220 mm x 300 mm x 140 mm (excluding mast) Mounting brackets: Stainless steel for up to 50 mm poles
Weight	2 kg (excluding mast)
Material	Insulators, nylon anchor rope and pegs
Mounting Method	Mast mounted (8 m – 12 m supplied separately)
Environmental:	
Wind survival	160 km/h (Without ice)
Temperature (operational)	-30° C (no icing) to +70° C
Water ingress rating	IP65 (NEMA 4X)

PRODUCT DESCRIPTION:

The DIPL-A0039 is a broadband 2.5-30 MHz travelling-wave dipole that uses a patented technology to offer excellent VSWR and good efficiency across the entire HF frequency range.

This antenna is ideal for short to medium-range tactical communications and jamming applications. Being small and light weight (only 2 kg) when stored makes it very portable for the field.

The average erection time is within 30 minutes by two people in the field. This can be reduced depending on the type of mast used.

HF Travelling Wave Dipole

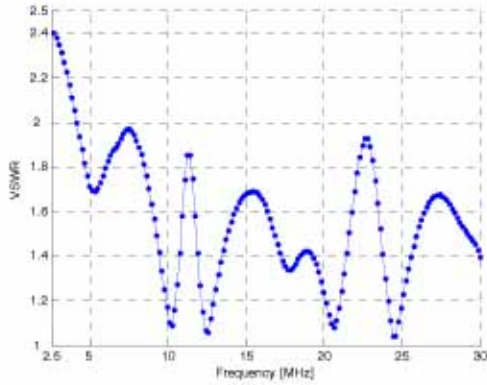
2.5 – 30 MHz

Product Code: DIPL-A0039

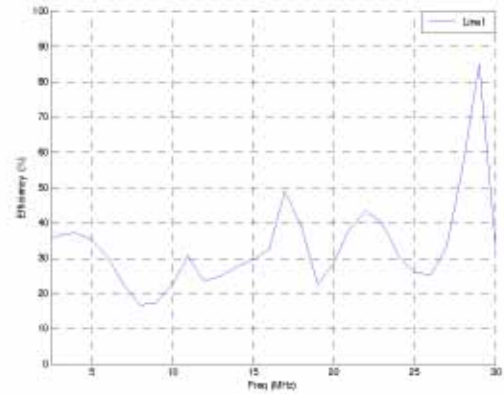
PRODUCT STATUS: COTS

VERSION: 1.0

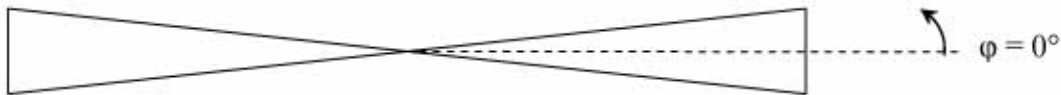
MEASURED VSWR



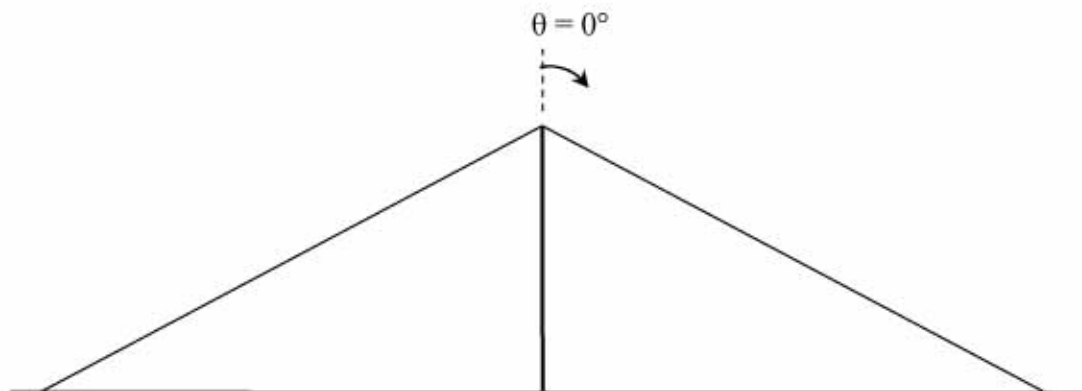
SIMULATED EFFICIENCY



All azimuth patterns are for $\Theta = 60^\circ$, i.e. a takeoff angle of 30° above the horizon



Orientation for azimuth patterns – top view.



Orientation for elevation patterns – front view.

HF Travelling Wave Dipole

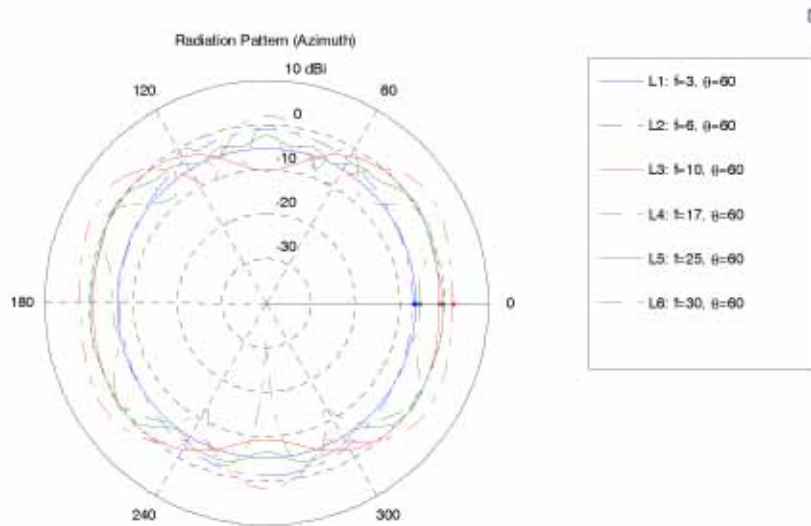
2.5 – 30 MHz

Product Code: DIPL-A0039

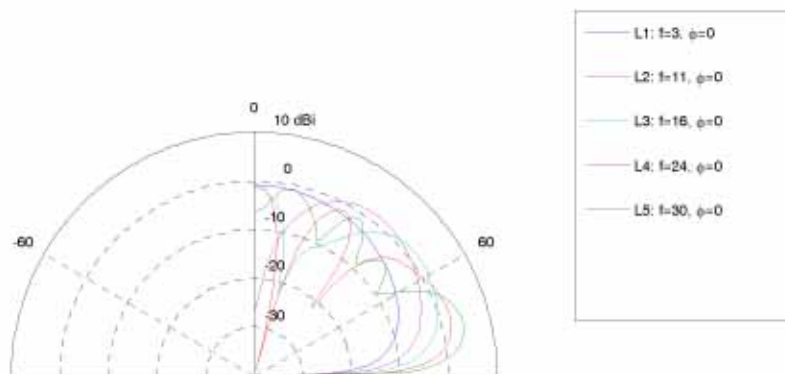
PRODUCT STATUS: COTS

VERSION: 1.0

SIMULATED AZIMUTH PATTERN AT $\theta = 60^\circ$



SIMULATED AZIMUTH PATTERN AT $\theta = 60^\circ$



SIMULATED ELEVATION PATTERN AT $\theta = 90^\circ$

