## DESCRIPTION AND USE OF THE EMCO MODEL 93110B HIGH PERFORMANCE BICONICAL ANTENNA

## **General Description**

The EMCO Model 93110B is a High performance Biconical Antenna designed to operate over the 30 to 300 MHz frequency range. Its lightweight construction provides for ease in portability and storage.

The Biconical elements are made from aluminum rods and are joined by tack welds. The elements mount in a balun network which is fabricated of aluminum and the necessary impedance-matching components.

The Model 93110B can be used for horizontal as well as vertical RF measurements. When the 93110B is used vertically, the same element orientation need not be maintained from measurement to measurement. Measurement repeatability is assured by the balun design. A 20 dB pre-amp is recommended in line with the receive antenna to minimize the required transmitted power and to reduce the possibility of saturation of the transmitting antenna.

This model has not been characterized by individual calibration and therefore is not intended for use in regulatory compliance measurement applications.

## **Specifications**

Frequency Range:

30 to 300 MHz

Impedance:

Matched to 50  $\Omega$ 

Assembled Length:

(tip-to-tip)

132.1 cm (52.0")

Element Diameter:

50.8 cm (20.0")

Balun Depth (max.):

55.9 cm (22")

Power Capability:

Refer to Table 1

Connector:

Type N

Weight:

2.7 kg (6 lb)