

EMC Antennas
**Log Periodic
Antenna**

Model 3148B

**3-D Patterns
Available at
www.ets-lindgren.com/3148**

FEATURES:

- **200 MHz to 2 GHz Frequency Range**
- **High Gain**
- **1.2:1 VSWR**
- **Individually Calibrated**
- **Flexible Mounting Systems**



ETS-Lindgren's Model 3148B Log Periodic Antenna

The ETS-Lindgren Model 3148B Log Periodic Antenna is specifically designed for making CISPR 16-1 measurements which require a 20 dB difference in the cross polarization rejection. This is achieved using an engineering design and manufacturing process that offsets all of the elements in a precision pattern. The excellent cross-polarization property ensures minimum measurement uncertainty for radiated emissions and normalized site attenuation measurement.

The precision construction of the assembly of the boom and elements result in excellent VSWR and optimal phase relationship.

The Model 3148B antenna features relatively constant linear gain (measures in far field without any sudden “dips” or “bumps”).

A Type N connector is provided.

**FEATURES
Frequency Range**

The frequency range of the Model 3148B is 200 MHz to 2 GHz. This makes the Model 3148B ideal for CISPR 16 testing and other standards based on it, such as CISPR 25.

High Gain

The Model 3148B's design provides a balance between the shortest antenna and the highest possible gain, with a 5 dB average gain over its frequency.

Low VSWR

The choice of spacing between booms and the changing element diameter provide excellent impedance of the antenna. This results in a in low VSWR.

Individually Calibrated

The Model 3148B is individually calibrated at 1 m per SAE ARP 958 and 3 m and 10 m per ANSI C63.5. This antenna also comes with a signed Certificate of Calibration Conformance.

Flexible Mounting System

The Model 3148D antenna includes both an EMCO classic mount and a rear “stinger” mount.

STANDARD CONFIGURATION

- Antenna
- Individually Calibrated at 1 m per SAE ARP 958 and 3 and 10 m per ANSI C63.5-1988. Actual antenna factors, uncertainty values, and a signed Certificate of Calibration Conformance included in manual.

OPTIONS

- ETS-Lindgren non-metallic, non-reflective tripods
- Support Rod Antenna mount with insert drilled to accept ETS-Lindgren or other tripod with standard ¼ in x 20 threads

Electrical Specifications

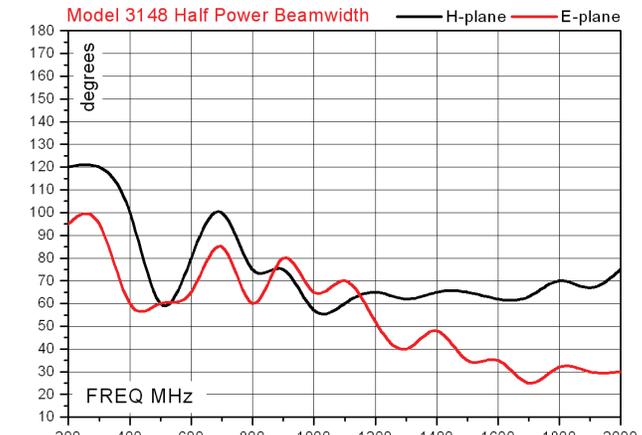
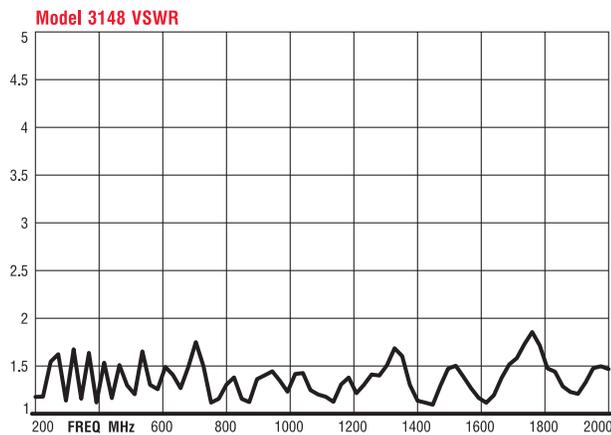
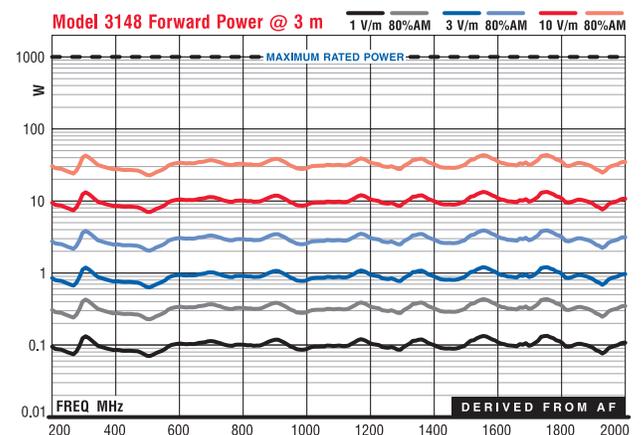
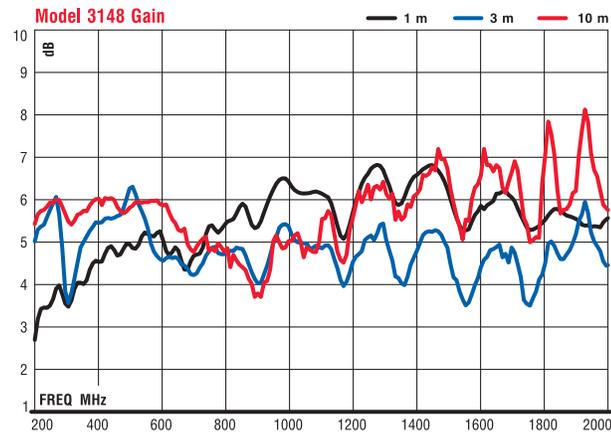
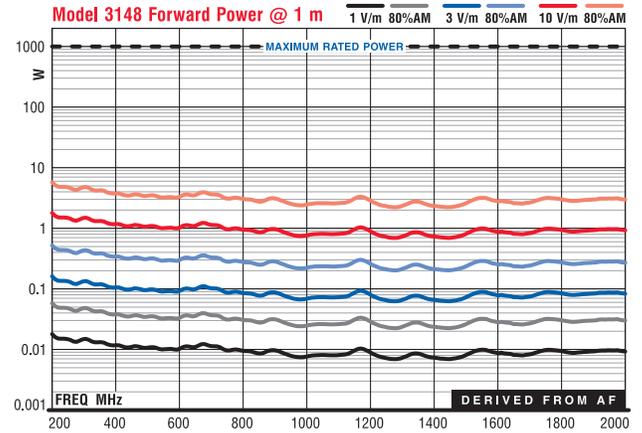
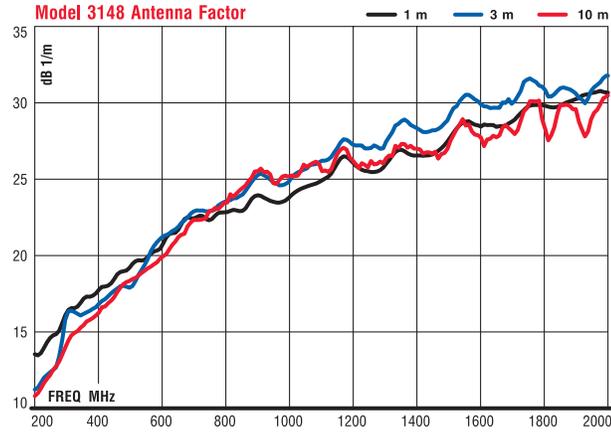
MODEL	FREQUENCY RANGE	VSWR RATIO (AVG)	MAXIMUM CONTINUOUS POWER	PEAK POWER	IMPEDANCE (NOMINAL)	CONNECTOR
3148	200 MHz – 2 GHz	1.2:1	1 kW	1.3 kW	50 Ω	Type N female

Physical Specifications

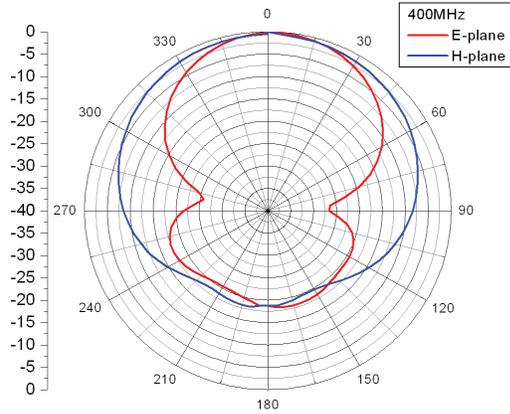
MODEL	WIDTH *	DEPTH	HEIGHT	WEIGHT
3148	85.6 cm 33.7 in	86.7 cm 34.1 in	11.6 cm 4.6 in	2.0 kg 4.5 lb

* At widest point

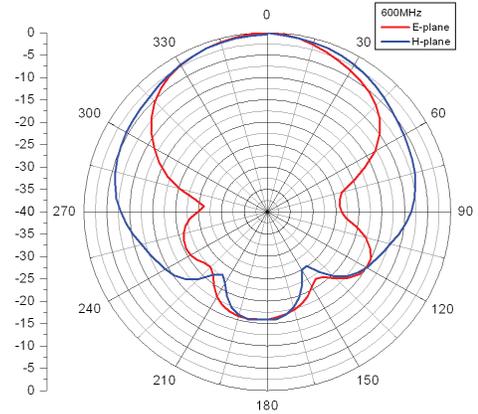
Model 3148D Technical Data



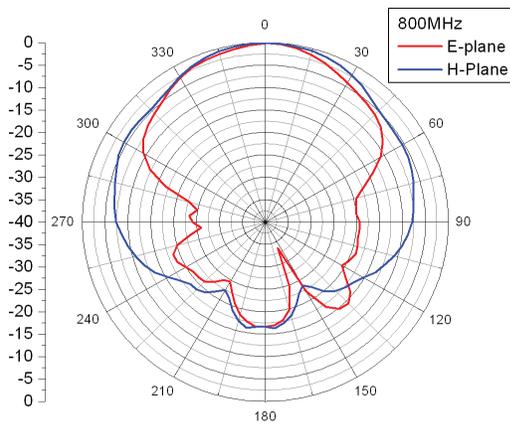
Model 3148D 400 MHz Typical Performance



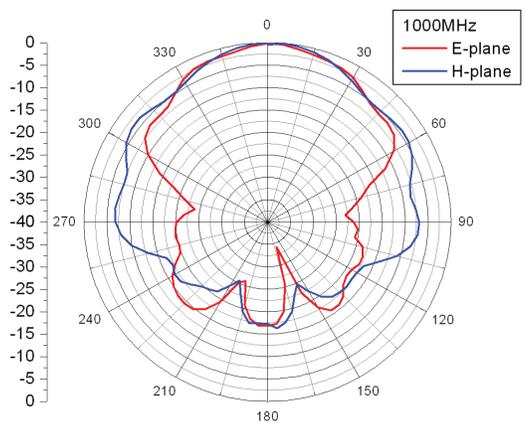
Model 3148D 600 MHz Typical Performance



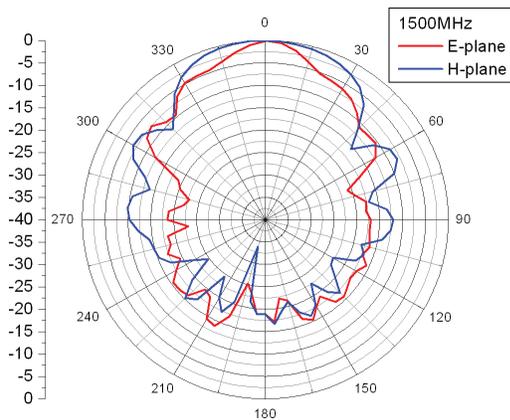
Model 3148D 800 MHz Typical Performance



Model 3148D 1000 MHz Typical Performance



Model 3148D 1500 MHz Typical Performance



Model 3148D 2000 MHz Typical Performance

