

EMC ANTENNAS MODEL 3142E



MODEL 3142E

- 30 MHz to 6 GHz Frequency Range for Emissions Testing
- Flexible Mounting
- Avg. 2:1 VSWR Above 50 MHz
- For Emissions and Immunity Testing
- Individually Calibrated

ETS-Lindgren's Model 3142E BiConiLog™ Antenna enables users to measure a frequency range of 30 MHz to 6 GHz in one sweep, negating the need for multiple antennas and time-consuming equipment setup. Accuracy and repeatability are improved, while time and money are saved. This BiConiLog is designed as a dual-purpose antenna that can be used for both immunity and emission testing. Available as antenna+pre-amp package as 3142E-PB.

Frequency Range

The 3142E antenna increases the upper frequency limit to accommodate the new upper limit of 6 GHz included in the IEC 61000-4-3 standard.

VSWR Levels

The average VSWR is 2:1 above 50 MHz, an excellent level at this low frequency for an antenna this size.

Emissions and Immunity Antenna

Emission measurements can be performed without having to change antennas. For immunity measurements, the 3142E covers the typical 80 MHz to 6 GHz range.

Flexible Mounting

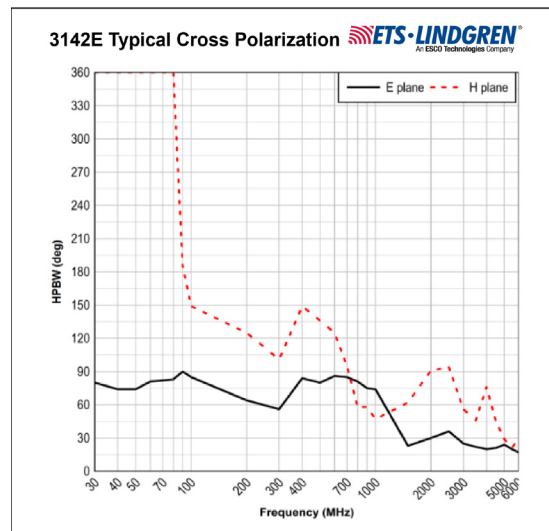
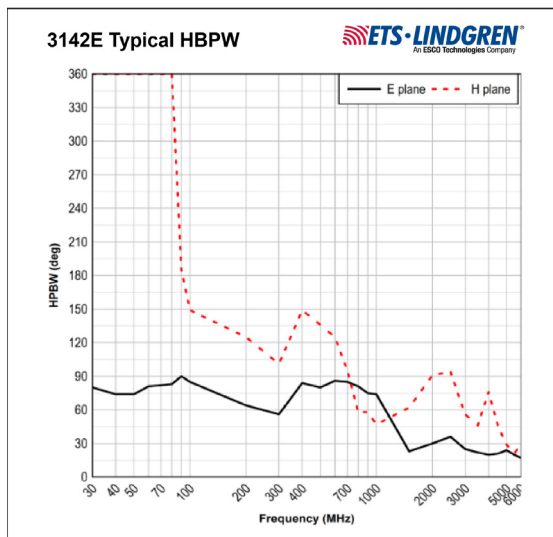
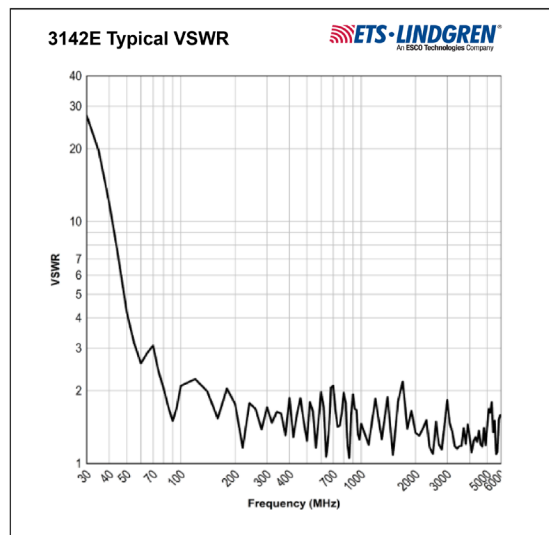
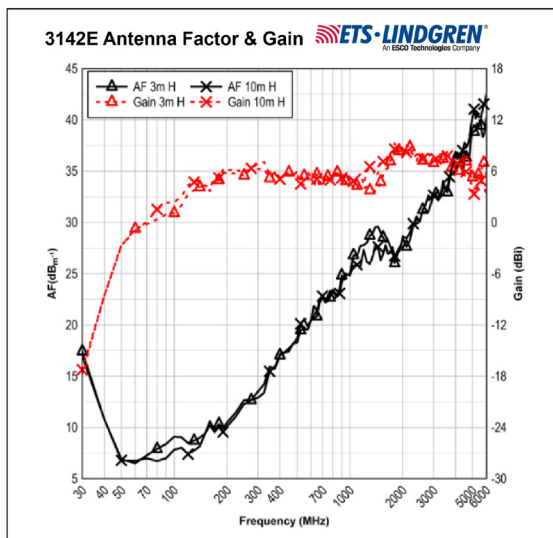
The model 3142E comes with a bracket that accepts either a 1/4 in 20 thread screw

Technical Specifications

Electrical	
Frequency Minimum	30 MHz
Frequency Maximum	6 GHz
VSWR (Average)	2:1
Impedance (Nominal)	50
Maximum Continuous Power	30 MHz–60 MHz: 500 W 60 MHz–600 MHz: 1 kW 600 MHz–1 GHz: 500 W 1 GHz–6 GHz: 200 W
Connectors	Type N (F)
Peak Power	1.3 kW
Pattern Type	Directional
Polarization	Linear
Physical	
Height	76.2 cm (30.0 in)
Width	133.9 cm (52.7 in)
Length	139.2 cm (54.8 in)
Weight	5.7 kg (12.6 lb)

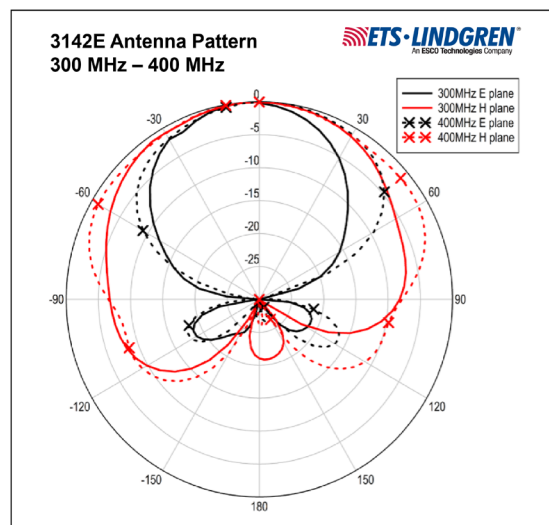
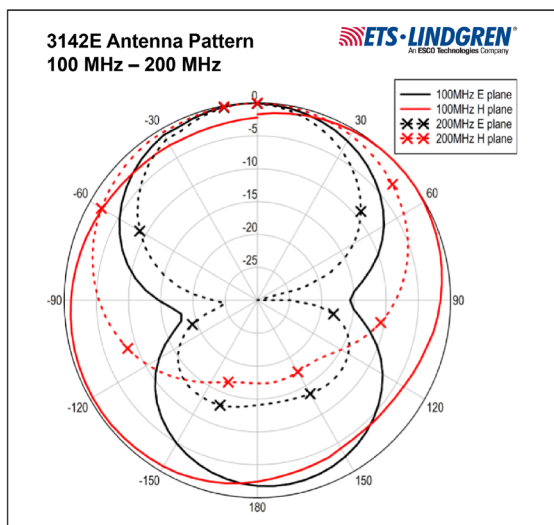
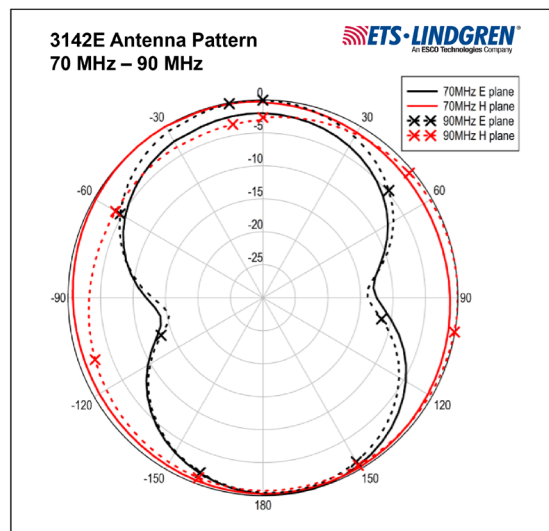
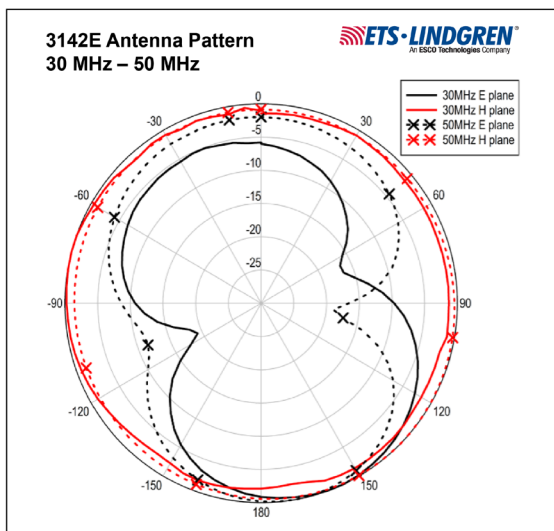
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Distance for the ANSI 3-meter and 10-meter calibrations is measured from the antenna midpoint, and for SAE 1-meter calibrations the distance is measured from the antenna tip. Midpoint is defined as half the distance between the small elements and the bowties, which is about 45 cm from the small end tip.



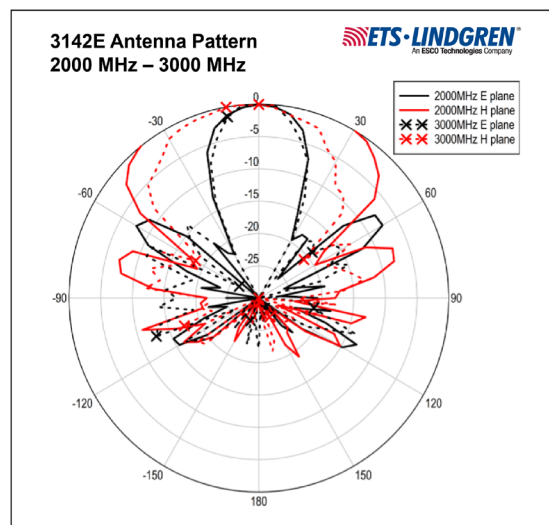
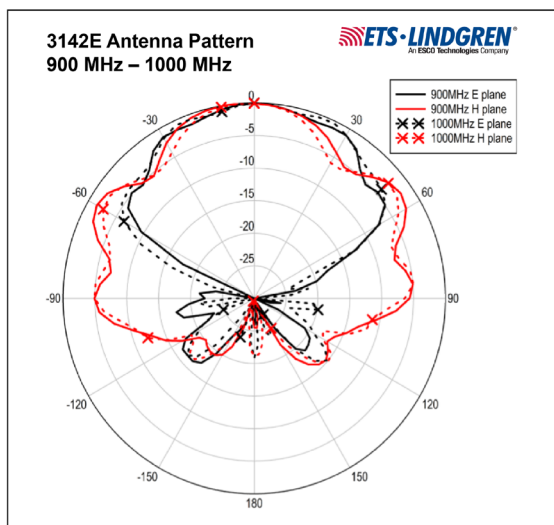
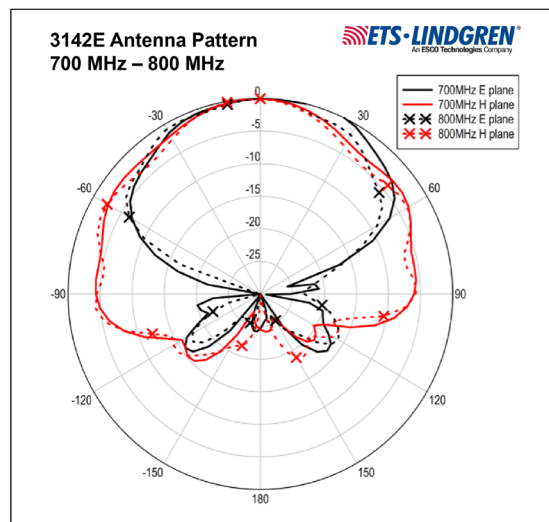
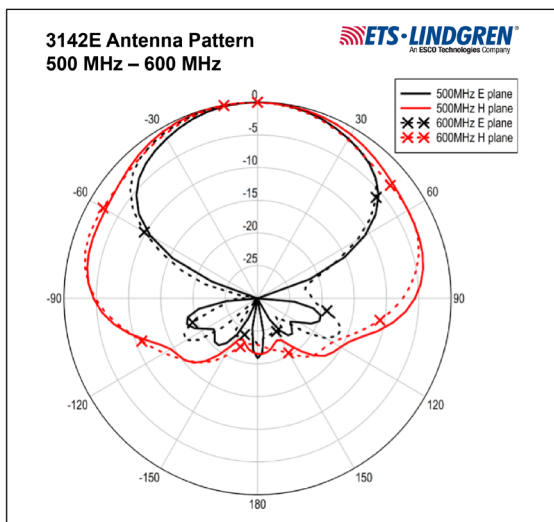
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Antenna Patterns



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