

New Compact EMC Chamber at LNE in Paris

AR France has recently completed the successful installation of a new compact EMC Chamber at LNE (French national laboratory) in Trappes, Paris.

Working with our partner ETS-Lindgren, a custom compact chamber was designed to enable the customer to perform complaint radiated immunity testing between 80MHz – 6GHz. What made this chamber unique, apart from the colour of absorber which was requested by the customer, is its size. Working with the restrictions posed by the host building, the chamber external dimensions measure 7.5m x 3.7m x 3.7m.

The Series 101 chamber, which is of pan shield construction, is semi anechoic and fully compliant to EN61000-4-6 with very good field uniformity up to 3GHz using the 16 point calibration method.

LNE will be performing immunity tests in this facility using the AR ATR80M6G “Radiant Arrow” which is a wide band, high gain, log periodic antenna. Covering 80MHz to 6GHz in one antenna it is uniquely suited for use in both traditional applications as well as in compact chambers such as this. The proprietary design utilising a “bent element” approach provides a size reduction of approximately 60% without sacrificing key electrical performance such as gain and beamwidth. The considerable size reduction minimizes field loss resulting from “room loading” something which is often an issue when conventional log periodics are used in small enclosures.

For more information on the ATR80M6G please visit the AR RF/Microwave Instrumentation website www.arww-rfmicro.com