GTEM! TEST CELLS 5503 Electric Field Generator

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ETS-Lindgren's Model 5503 Striplinetype Electric Field Generator is an ideal alternative to the Model 5502 H/V Field Generator when only a vertical Efield is desired. This E-field generator features a frequency range of 10 kHz to 30 MHz and generates a large area uniform vertical electrical field.

The model 5503 top plate consists of four separate tube conductors that are connected in parallel at the feed and load ends. This four-wire transmission line acts as a plate conductor at frequencies up to 30 MHz. A vertical, quasi-static TEM mode electric field is produced between the four-wire system and the ground plane of a semi-anechoic chamber. The width-to-height ratio of the "four-wire plate" is designed for an impedance match to a 50 Ω system without an input transformer.

An external forced-air-cooled load is used to terminate the model 5503. The cooling system maintains proper operating temperature and is monitored by a temperature sensor. The load housing is connected to a plate in the chamber floor. A pulley systems allows users to manually adjust the height to accommodate various equipment under test (EUT) sizes. The E-field generator is easy to assemble and disassemble, and can be removed from the chamber when needed.

Key Features

- Generates Large Area
- Uniform Vertical Electric Field
- 10 kHz to 30 MHz Frequency Range
- Accommodates Various EUT Sizes with Adjustable Height Feature
- Temperature Maintained with External Forced-air Cooling, and Monitored by Temperature Sensor
- Easy to Assemble/Disassemble and Remove from the Chamber

Specifications

Electrical Specifications

Frequency Minimum: 10 kHz Frequency Maximum: 30 MHz

Input Impedance: 50 Ω
Max RF Input Power: 10 kW
RF Connector: 1-5/8" EIA

Typical Field Strength: at 10 KW: 75 V/m to 300 V/m

Other Specifications

- Two I/O Transition Plates
- Two Hinged Crossbars
- 12 Conductor Tubes
- 28 Kwik-Flange Clamps
- One High Power RF Load Assembly

