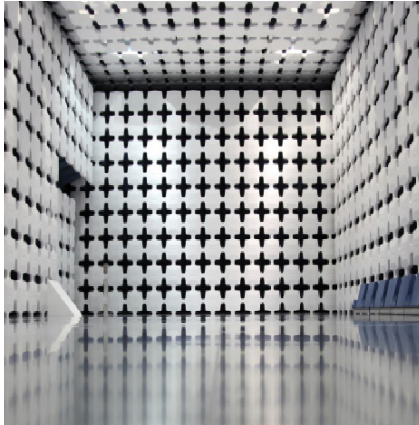


CHAMBERS FACT™ 10 EMC ANECHOIC CHAMBERS



FACT 10

- 9 kHz to 18 GHz Frequency Range
- Emissions and Immunities Measurements
- Full Compliance Testing for Radiated Emissions:
 - ANSI C63.25 Parts 15 and 18
 - EN 50147-2
 - CISPR 11 / EN55011
 - CISPR 16 / EN55016
 - CISPR 22 / EN55022
 - VCCI V-3 / 2003.04
 - Bellcore GR-1089
 - SAE J1113
- Full Compliance Testing for Radiated Immunity:
 - IEC 61000-4-3 / EN61000-4-3
 - SAE J551
 - SAE J1113
- Eligible for FCC 3 Meter Class A & B (3 m and 10 m test methods) Facility Filing
- Available NSA Performance Options (May Require Chamber Modification):
 - 3.0 dB
 - Plus 4.0 dB
 - Premium 3.0 dB
- Available as a Turnkey System:
Chamber, Tower, Turntable, Antennas,
Instrumentation and Software

ETS-Lindgren FACT10 Chambers, for Full Compliance testing, offer semianechoic radiated emissions (RE) and fully anechoic radiated immunity (RI) compliance test capability for most international EMC compliance regulations. The chambers small overall size results from the use of brand hybrid absorber and ferrite tile, which require less volumetric space than traditional absorbers. ETS-Lindgren FACT 10 chambers are large enough to perform 6 meter antenna scans above the ground plane. These chambers can also accommodate large diameter turntables for testing substantial EUTs. ETS-Lindgren FACT 10 chambers are the perfect choice when fullcompliance 10 m range testing is required.

Radiated Emissions Testing

ETS-Lindgrens FACT 10 chambers can be used to perform full compliance testing for ANSI C63.25 (FCC part 15 & 18), EN 50147-2, CISPR 11/EN55011, CISPR 16/EN55016, CISPR 22/ EN55022, Bellcore GR-1089, and SAE J551 (component and full vehicle) testing requirements. At 10 m test distance, ETS-Lindgren guarantees a Normalized Site Attenuation (NSA) deviation better than 4.0 dB from theoretical NSA within a cylindrical quiet zone of 3 m, 4 m, and 6 m diameters over the frequency range of 30 MHz to 1 GHz. The quiet zone at 3 m and 5 m test distance is a cylinder up to 2.0 meters in diameter, following the volumetric test procedure of ANSI C63.25.2. Anticipating tomorrows requirements, the Durasorb hybrid absorber guarantees NSA performance of better than 4 dB deviation from theoretical NSA from 30 MHz to 1 GHz and sVSWR performance of better than 6 dB from 1 GHz to 18 GHz, using the test method defined in ANSI C63.25.1/ CISPR 16. The guaranteed performance for Normalized Site Insertion Loss (NSIL) test per CISPR 16-1-4 for frequency range of 9 kHz to 30 MHz is 4.0 dB at a shorter test distance.

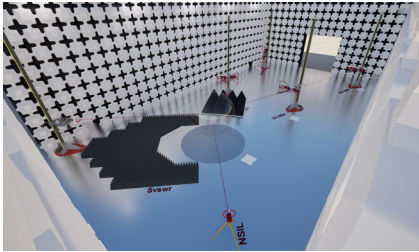
Radiated Immunity Testing

ETS-Lindgrens FACT 10 chambers can also be used to perform full compliance testing for IEC 61000-4-3/EN61000-4-3, ENV 50140 and SAE J-1113 requirements. 3 Meter Test Distance, Field Uniformity (FU) of 0 to 6 dB can be achieved over the frequency range of 80 MHz to 18 GHz. The test aperture for FU is a vertical plane of 1.5 m x 1.5 m at an elevation of 0.8 m to 2.3 m above the ground plane, following the field uniformity test procedure of IEC 61000-4-3. Additionally, DSH1250H can safely withstand continuous field intensity up to 200 V/m and intermittent field intensity up to 500 V/m. This safely exceeds the field intensity requirements of most commercial RI tests.

Turnkey Systems

ETS-Lindgren is an integrated manufacturer producing such well known brands as DSH1250H, Series 81 and Euroshield shielding and RF doors, EMCO antennas, towers, turntables, and test accessories. All of our products are designed to work together for maximum efficiency and performance. In addition to providing performance, our approach simplifies complex decisions and gives you peace of mind with a single source of responsibility.

CHAMBERS FACT™ 10 EMC ANECHOIC CHAMBERS



FACT 10

- FACT MultiAx available. Please see Options for details.

Standard Configuration

- Shielded Chamber
- Anechoic Absorber

Options

- Turnkey Package Including Turntable, Positioners, Instrumentation and Test and Measurement Software
- Chamber Acceptance Testing Options: Normalized Site Insertion Loss (NSIL) CISPR 16-1-4 | 9 kHz to 30 MHz
- Chamber Acceptance Testing Options: Normalized Site Attenuation (NSA) | ANSI C63.25.2, CISPR 16-1-4 | 30 MHz to 1GHz
- Chamber Acceptance Testing Options: Site Voltage Standing Wave Ratio (sVSWR) | ANSI C63.25.1 | CISPR 16-1-4 | 1 GHz to 18 GHz
- Chamber Acceptance Testing Options: Field Uniformity (FU) | IEC 61000-4-3 | 80 MHz to 18 GHz

FACT 10 MultiAx Option

The optional FACT 10 MultiAx configuration is designed for laboratories requiring multiple measurement orientations and flexible EMC validation workflows within a single chamber installation. ETS-Lindgren's proven FACT MultiAx option reduces chamber reconfiguration requirements between measurement types while still supporting:

- Radiated emissions measurements from 30MHz to 1 GHz, at 3.0m test distance, for a 1.5m diameter, 2.0m high quiet zone, with up to 2 independent measurement axis (e.g. one for H polarization and one for V polarization),
- Radiated emissions measurements from 1GHz to 18GHz, at 3.0m test distance, for a 1.5m diameter, 2.0m high quiet zone, with permanent or semi-permanent absorber floor patch installations
- Radiated immunity measurements from 80MHz to 18GHz, at 3.0m test distance, for a 1.5m wide, 1.5m high test area, with permanent or semi-permanent absorber floor patch installations

These configurations are intended to help maintain consistent measurement setups across validation and compliance activities while improving overall laboratory efficiency. Available FACT MultiAx capabilities vary based on chamber geometry, absorber layout, quiet zone dimensions, floor construction, and specific measurement requirements. For more information, contact our local ETS-Lindgren representative.

Technical Specifications

Electrical	
Frequency Range	9 KHz to 18 GHz
Path Length	10 Meter
ANSI C63.25.2 Normalized Site Attenuation	30 MHz to 40 GHz
Physical	
Overall Dimensions ¹	18.67 m L x 9.93 m W x 7.70 m H (61.30 ft x 32.70 ft x 25.30 ft)
Shielded Room Internal Dimensions ¹	18.11 m L x 9.27 m W x 6.65 m H (59.50 ft x 30.50 ft x 21.10 ft)

¹: Chamber dimensions may vary depending on the MultiAx option selected. Contact your local ETS-Lindgren representative for more information.

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Individual Model Specifications

Electrical	Quiet Zone	Normalized Site Attenuation
FACT 10-2.0 Plus	2.0 m	3.5 dB
FACT 10-3.0	3.0 m	4.0 dB
FACT 10-3.0 Plus	3.0 m	3.5 dB
FACT 10-3.0 Premium	3.0 m	3.0 dB
FACT 10-4.0	4.0 m	4.0 dB
FACT 10-4.0 Plus	4.0 m	3.5 dB
FACT 10-4.0 Premium	4.0 m	3.0 dB
FACT 10-5.0 Plus	5.0 m	3.5 dB
FACT 10-6.0 Plus	6.0 m	3.5 dB