

3m Compliant EMC Anechoic Test Chambers (Fully)



GLOBAL EMC
ELECTROMAGNETIC SHIELDING & ANECHOICS EST. 1994

Choose This Test Chamber For

Conforming to NSA and SVSWR validation criteria in accordance with CISPR 16-1-4, the 3m-FAC-C is the perfect solution to perform tests in accordance with a wide range of standards. Whether performing EMC Emissions and Immunity testing or Radio measurements the 3m-FAC-C is a cost-effective and multi-functional solution to EMC testing requirements.



Compliant

Radiated Emission - Electro-Magnetic Interference (EMI) to CISPR 16-1-4 / EN55016-1-4.



Immunity

Compliant Radiated Immunity - Electro-Magnetic Susceptibility (EMS) to EN/IEC6100-4-3.



Components

Smaller table top products and EUT's that do not require wheeled access into the test chamber.



Fully Anechoic

Fully anechoic test chamber with latest generation anechoic absorbers to all walls, ceiling and floor.

Test More, Wait Less

The versatility and testing speed of the 3m-FAC-C, fully anechoic test chamber is unmatched with other testing facilities.

Performing EMC Emissions and Immunity testing quickly and seamlessly in one test chamber with only a minimal reconfiguration between tests. This reduces delays, lead times and increase the throughput of products.

A combination of high-performance GF 102 ferrite tiles and latest generation pyramidal Absorbers are used to create optimum performance inside the chamber. The inclusion of absorbing material to the floor area mimics free-space conditions allowing a fixed antenna. The absorbers are easily repaired or replaced if accidentally damaged, using the fast and convenient "plug-in" base system.

The fully anechoic test chamber is fully configurable to your exact requirements but as standard comes in two dimensions. The 3m-FAC-C and the 3m-FAC-C-L for larger test items (EUT's). Please see the specification below for further details.



3m

A 3-meter test distance between the antenna and equipment under test is available in this test chamber.

This test distance is widely used and accepted around the world in a large range of regulatory or standard-based test configurations.

Fully-Anechoic

Designed to CISPR 16-1-4 as a test chamber without ground plane under free-space conditions.

Anechoic absorbers are installed to all walls, ceiling and floor area. Leaving only a small walkway available on the floor for ease of access.

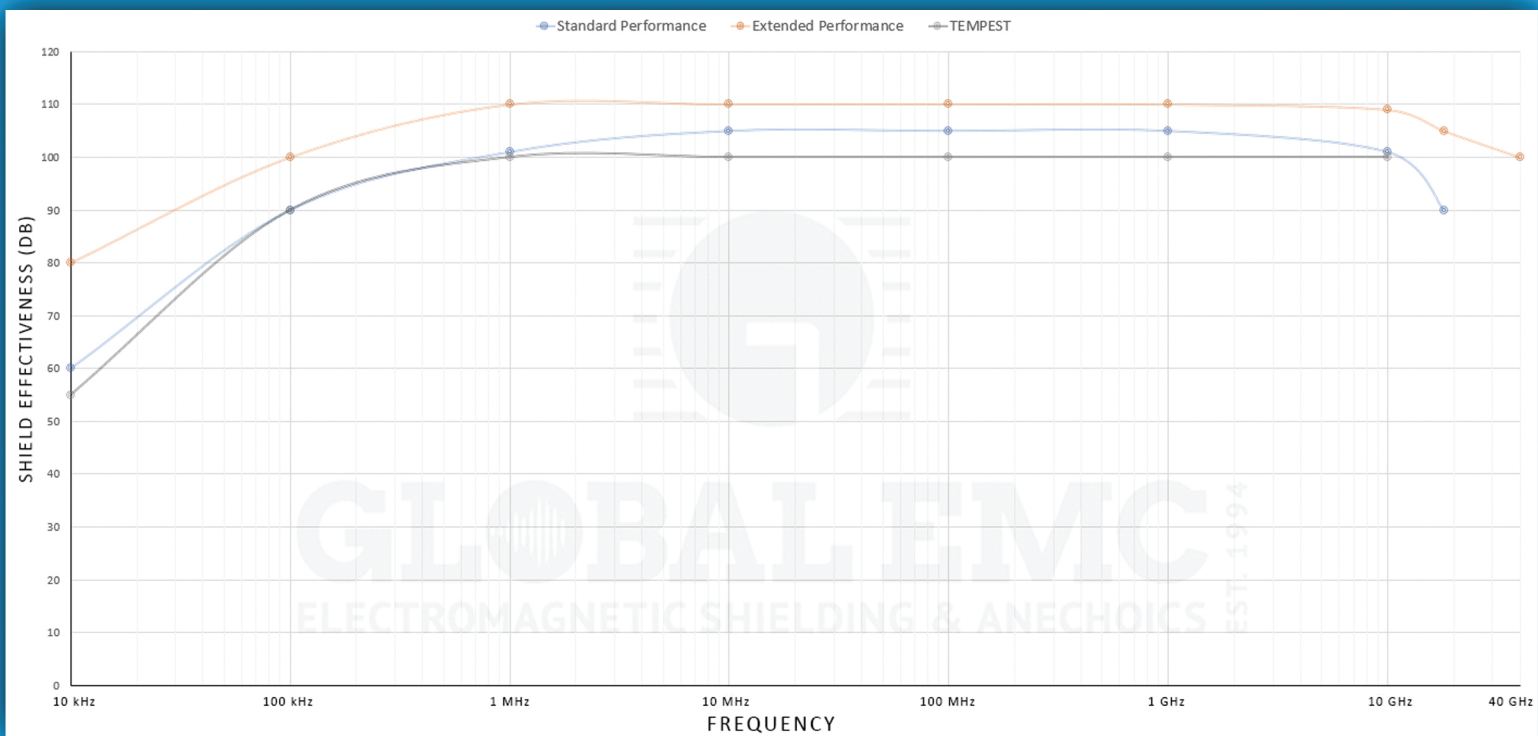
Test Facility

Having a maximum height of 4.4 meters, the test chamber has the ability to be installed in smaller host buildings where space is limited.

Performance and accuracy are maintained through careful design and high manufacturing standards.



Shielding Effectiveness tested to EN50147-1



High-Performance Anechoic Lining

Ferrite Tiles & Absorbers – The walls and ceiling of the test chamber are precisely lined with the latest generation gapless Hybrid Pyramid absorbers and Ferrite tiles.

The Pyramidal absorbers are precisely doped to ensure a smooth transition between the high performance of the Ferrite tiles at lower frequencies to the Pyramidal absorbers in higher frequencies.

The “plug-in” base system of the absorbers means that individual absorber cones can be replaced if accidentally damaged during operation of the test chamber. This reduces the cost of repairs and time taken for the test chamber to become fully operational again.

Frequency Test Range

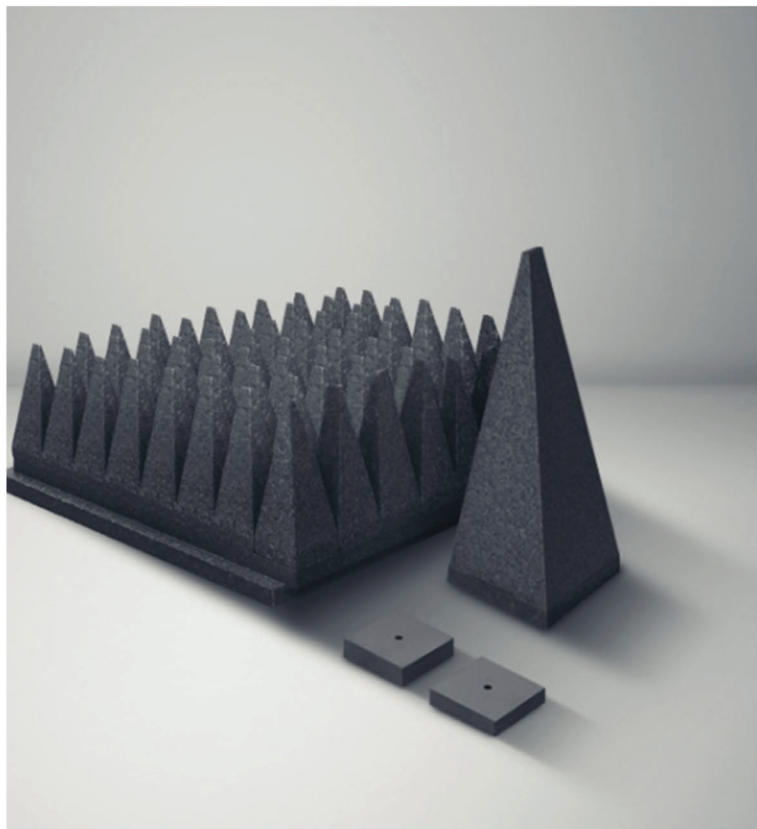
| Low | High | Optional |
|-------|------|----------|
| 80MHz | 6GHz | 18GHz |

Minimum Dimensions (3m-FAC-C)

| Length | Width | Height |
|--------|-------|--------|
| 8.00m | 4.20m | 4.00m |

Minimum Dimensions (3m-FAC-C-L)

| Length | Width | Height |
|--------|-------|--------|
| 9.00m | 5.00m | 5.00m |



Key Features

Radiated immunity – Compliant to IEC/EN 61000-4-3 80 MHz – 6,000 MHz (18 GHz optional).

Shield effectiveness to EN 50147-1.

Bespoke solution upon request. Test facility can be configured to your exact requirements.

Industry-leading low maintenance shielded door with copper-beryllium knife-edge seals.

Latest technology high-performance GF 102 ferrite tiles to all walls, ceiling and partial floor covering.

Radiated emissions – Compliant to CISPR 16-1-4 frequency range of 30 MHz to 6 GHz (18 GHz optional).

Designed and manufactured to the highest standards in Great Britain.

Up to 3 meters measuring distance between the Antenna and EUT.

Lighting, power filter, penetration and static ventilation panels all as standard.

Moulded polystyrene pyramidal Hybrid Absorbers to all walls, ceiling and partial floor covering. (Absorber coverage as far as physically possible).

Full Specification

External Dimensions

3m-FAC-C – 8.0m (L) x 4.2m (W) x 4.0m (H). 3m-FAC-C-L – 9.0m (L) x 5.0m (W) x 5.0m (H).

Shield

Modular 2mm steel “pan” shield.

Filters

1 x 32A 230V Single phase (2 line).

Access Ramp

This feature is optional.

Additional Options Include:

Turntable, mast, controller, Air conditioning / HVAC, Anti chamber (control room), Fume extraction, Fire detection, CCTV, White caps to absorbers, additional filters & Audio communication.

*All dimensions and quantities can be altered upon request (subject to compatibility).

Shielded Pedestrian Door (Clear Opening)

1000mm (W) x 2000mm (H)*

Frequency Test Range

30 MHz to 18 GHz (40 GHz optional).

Penetration Panel Connectors

2 x Precision N type, & 2 x Fibre.

Lighting

4 x LED Lighting 1 x Emergency light.

Steel Structure

Self-supporting structure to industry standards.

Floor Loading (Standard)

500kg/m².*

Honeycomb Vents

2 x 300mm (W) x 300mm (H) (static air).

Power Distribution

4 x 230V AC DSSO Sockets.



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4A Hamilton Rd, Sutton-in-Ashfield, Nottinghamshire, NG17 5LD, United Kingdom



www.globalemcc.co.uk



info@www.globalemcc.co.uk



+44(0)1623 755539