



Compact Fully Anechoic Chamber CAC-S™ (26 MHz - 18 GHz)

The TDK fully anechoic chamber CAC- S^{TM} , with a size of 7.5 m long, 4.0 m wide and 3.0 m high (24'-7" x 13'-1" x 9'-10"), is the most compact anechoic test facility to perform radiated EMC measurements between 26 MHz and 18 GHz. A major advantage of this chamber is that it can be constructed within most industrial buildings and office areas.

The space saving characteristics are obtained by the use of a particular absorber installation technique which was invented and patented by TDK - the double layer technique. TDK ferrite tiles X-131 are mounted onto dielectric panels to cover the complete frequency range from 26 MHz to 1,000 MHz.

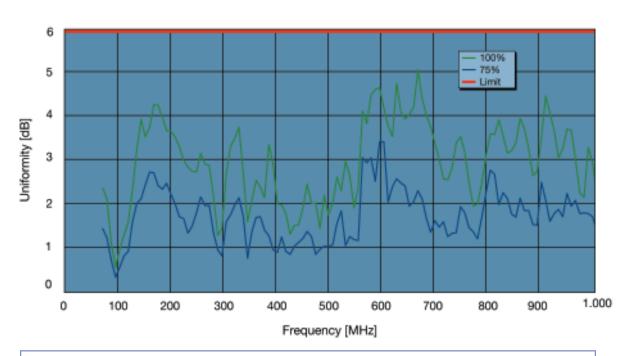
By installing TDK IP-045C wedge-shaped, resistive absorbers in selected areas of ceiling and walls, the frequency range can be extended up to 18 GHz. White end caps complete the absorbers and greatly improve the illumination levels inside the chamber.

CAC-S enables the user to carry out radiated immunity measurements in full compliance with IEC 1000-4-3 standard over the frequency range from 26 MHz to 18 GHz. 3-meter radiated emissions measurements can be performed at a fixed receive antenna height in the 30 MHz to 18 GHz frequency range. This makes the CAC-S an ideal facility to test small apparatus.

- Radiated emissions: Pre compliance with EN 50147-2, ANSI C63.4, CISPR 22
- Radiated immunity: Full compliance with IEC 1000-4-3
- Fully lined double layer ferrite tile and partially lined IP-045C absorber (TDK hybrid technology)
- Space saving: 7.5 m long, 4.0 m wide and 3.0 m high (24'-7" L x 13'-1" W x 9'-10" H)
- Frequency range: 26 MHz 18 GHz
- Turnkey solution

Anechoic Chambers

Example of actual field uniformity results in a TDK compact fully anechoic chamber CAC- S^{TM} (measured by ARC Seibersdorf).



Dimensions	7.5 m long, 4.0 m wide and 3.0 m high (24'-7" L × 13'-1" W × 9'-10" H)
Absorbers	X-131 fully lined double layer ferrite IP-045C partially lined absorber
NSA test volume (@ 3 m)	1.0 m Ø, 1.0 m high
Field uniformity area (-0, +6dB)	1.5 m \times 1.5 m (4'-11"), 0.8 m from floor
Radiated emissions	Pre-compliance with EN 50147-2
Radiated immunity	Compliance with IEC 1000-4-3
EMI frequency range	30 MHz - 18 GHz
EMS frequency range	26 MHz - 18 GHz



TDK RF Solutions Inc.

1101 Cypress Creek Rd. Cedar Park, Texas 78613 USA

 Phone:
 1-512-258-9478

 Fax:
 1-512-258-0740

 E-mail:
 chambers@tdkrf.com

 World Wide Web:
 www.tdkrfsolutions.com

TDK Electronics Europe GmbH.

Wanheimer Str. 57 40472 Düsseldorf, Germany

Phone: +49/211-9077-139 Fax: +49/211-9077-294