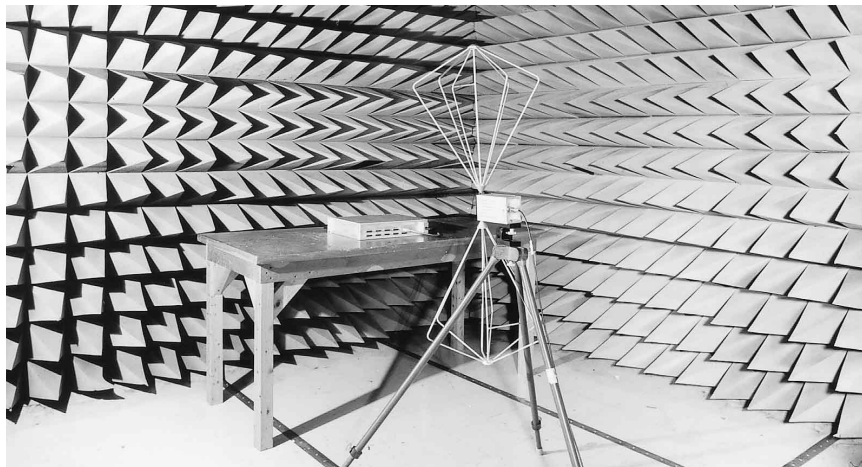


Comprehensive EMI/EMC/Safety Compliance and Design Services

Chomerics, world leader in the manufacture of EMI shielding materials, offers full service compliance testing to meet emissions, immunity, susceptibility and safety requirements for commercial, military and government electronics.

What sets us apart from other test services are 35 years of experience in the EMI shielding industry, our EMI and safety design capabilities, and the in-house availability of our entire line of shielding materials.



Design Services

Foremost in our commitment to finding and solving EMI and safety design problems is providing expert design assistance. After evaluating your product, we will identify trouble areas and suggest practical solutions. With your design criteria in mind, our engineers will look across the full range of EMI and safety possibilities, including:

- EMI/EMC Packaging Design
- EMI/EMC Board-Level Design
- Safety Construction Review
- EMC/Safety Components Advice
- Prototype Fabrication Assistance

Full-Range Test Capabilities

Chomerics' three shielded enclosures for commercial and military equipment testing include two measuring 22x10x10 feet and one measuring 20x16x10 feet. They include three adjacent 8x8x8 foot shielded rooms for test and EUT support equipment. The 20x16x10 room is a semi-anechoic facility with absorber cones. One of the 22x10x10-foot test chambers is a fully-anechoic, ferrite-lined enclosure that meets the field uniformity requirements of EN 61000-4-3.

For commercial equipment emissions testing, Chomerics operates

temperature-controlled 3- and 10-meter open field test sites, both of which exhibit characteristics accepted and on file with the FCC. One site is equipped with a flush mounted, 14-foot diameter, 5000 lb. capacity turntable. Both sites are equipped for 50 Hz/60 Hz power.

Frequency range of measurement for both emissions and susceptibility is DC to 100 GHz. Radiated susceptibility test equipment allows for field level testing to 200 volts/meter up to 40 GHz. A separate 16x12x10-foot shielded enclosure is set up specifically for shielding effectiveness testing on cables, cabinets, shielded windows, shielded air vents, EMI gaskets and composite panels. In addition, transfer impedance measurement capabilities (30 MHz to 1 GHz) are available for planar materials per ASTM D4935 and EMI gaskets per SAE 1705.

For safety testing, our state-of-the-art laboratory includes a temperature/humidity chamber, computer-controlled equipment to perform leakage testing, and a ground controlled, programmable power source. These enable us to evaluate your product to all power line voltages and frequencies.

Safety Testing — UL, CSA and European Standards

Chomerics has extensive safety testing experience in evaluating products and determining conformance with global requirements.

Products are evaluated for compliance with US Low Voltage, Medical Device and Machinery directives. Services include product evaluations to safety standards, and assembly or evaluation of technical files when making a CE Self-Declaration. We can provide verification reports outlining conformance to product specific standards, third party review, and certification programs including notified body review.

“Q” Test Program

The Q Test Program is for customers who can ship their equipment to our laboratory, but are not present for the test. Every Q Test customer receives a completion date based on availability, schedules and deadlines, with a typical turnaround of 10 days to two weeks. This allows us the flexibility to place your equipment into the queue for testing within the specified period.

Military and Avionics Equipment Qualification

Chomerics is unrivaled in testing to MIL-STD and DO-160 specifications for electromagnetic susceptibility and emissions. Because we work with these specifications on a daily basis, we know them inside and out. Our expert team of test technicians, applications engineers, scientists and EMI/EMC engineers not only test your system to military specifications, but also integrate the proper qualified materials if EMI problems are encountered.

TEST SERVICES	
FCC, CSA, CISPR, VCCI, AUSTEL, EN Testing and Applications Engineering	<ul style="list-style-type: none"> • FCC Part 15/18 Class A/B • CISPR/EN Specifications • VCCI Class A/B • AUSTEL AS3548 • CSA C108.8 Class A/B
FCC Certification	<ul style="list-style-type: none"> • Chomerics Test with FCC Submittal • Manufacturer's Self Declaration
Power Line Harmonics and Flicker	<ul style="list-style-type: none"> • IEC 555-2: (<16A) IEC 1000-3-2 / EN 61000-3-2 • IEC 555-3: (<16A) IEC 1000-3-3 / EN 61000-3-3
EU Commercial Immunity Testing (IEC 801 / EN Series Generic Immunity Standards and Product Specific Standards)	<ul style="list-style-type: none"> • IEC 801-2 / EN 61000-4-2 Electrostatic Discharge up to 27 kV • IEC 801-3 / EN 61000-4-3 Radiated Susceptibility • IEC 801-4 / EN 61000-4-4 Electrical Fast Transient / Burst • IEC 801-5 / EN 61000-4-5 Surge Immunity • IEC 801-6 / EN 61000-4-6 Immunity to Conducted Disturbances • IEC 1000 / EN 61000-4-8, -9, -10 and -11 are also available
Q Testing (No Customer Present)	For customers who prefer to ship their equipment for testing without having to be present. Permits Chomerics Test Services to place the equipment into a queue for timely pass/fail testing at a reduced rate. (10 day to 2 week turnaround)
Cable TV Testing	<ul style="list-style-type: none"> • EN 50083-2 (EMC) • EN 60065 (Safety)
Medical Device Compliance Testing	<ul style="list-style-type: none"> • EN 60601-1-2 Medical Electrical Equipment • FDA Reviewer Guidance for Premarket Notification – 510(K)
Safety Testing UL, CSA and TUV Witnessing for Safety Agency Approvals	<p>Safety evaluations to the European requirements with reports for a Manufacturer's Technical Construction File (TCF)</p> <p>Typical evaluations to safety standards include:</p> <ul style="list-style-type: none"> • EN 60204 • EN 60950-1 • UL 1950-1 • SEMI S-2 • EN 60601-1 • EN 61010-1 • UL 2601-1 • CSA C22.2 No. 950.M89
MIL-STD 461, DO-160, HIRF, GM, Ford, Chrysler Automotive EMC Testing	<ul style="list-style-type: none"> • MIL-STD 461, Test Method RS03, 14 kHz-40 GHz, Up to 200 V/m • RTCA DO-160, Category Y, 30 MHz-18 GHz, Up to 200 V/m • GM9100 / Ford F2AF-1316 / Chrysler PF-9326/SAE J113, J551
Shielding Effectiveness (Enclosures / Components)	<ul style="list-style-type: none"> • MIL-STD 285 • MIL-G-83528 • SAE ARP 1173 • SAE ARP 1705 • Testing from 14 kHz to 40 GHz to a dynamic range of 120 dB.
Test and Design Consultation (Out of Lab)	Chomerics will provide design assistance to whatever extent you require, from consulting help to design and fabrication of prototype enclosures on both a commercial and military design level.
Test and Fix (In Lab)	Value added time utilizing the expertise of an EMC engineer to troubleshoot test failures or consult during testing.
Environmental, Lightning, EMP, Telecom Testing	<ul style="list-style-type: none"> • Typical Lightning Test Tasks: RTCA-DO-160 • Typical Environmental Test Tasks: MIL-STD 810
Accreditations	• FCC • AUSTEL • VCCI • NARTE • NVLAP (12/C01 AND 12/R01)

Call, fax or e-mail for more information about Chomerics Test Services.

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Website: www.chomericstest.com