

# Electromagnetic Compatibility (EMC) Testing

# **CE Marking and Directives**

CE marking a product for sale in Europe and issuing a Declaration of Conformity is a manufacturer's assertion that a product meets the requirements of all applicable European Directives.

For electrical and electronic equipment and systems these most commonly include: the Electromagnetic Compatibility (EMC), Low Voltage (LV) and the Radio Equipment Directives. Testing to standards demonstrates products conform to these Directives



The EMC Directive 2014/30/EU (which superseded 2004/108/EC) applies to most electrical / electronic equipment, systems and installations.

Manufacturers of electronic and electrical apparatus are required to demonstrate that apparatus meets the essential requirements of the Directive; in essence:

- radiated or conducted emissions from the apparatus should not affect the intended function of radio, telecommunication and other apparatus where the apparatus is used
- the apparatus performance should not be unduly degraded when subjected to electromagnetic disturbances (radiated or conducted) present where it is used

The EMC Directive also applies to Fixed Installations; operators of these are required to ensure that electrical/electronic equipment is installed following the manufacturer's EMC instructions and using good engineering practices. This needs to be documented.

## **UKAS Accreditation**

All Eurofins York (formerly York EMC Services) Testing Laboratories are accredited by UKAS to ISO 17025 for electromagnetic compatibility testing under the EMC Directive, ensuring that tests are consistently carried out correctly, giving our customers a high level of confidence in the results.





# Why Use Eurofins York?

- Access to knowledgeable and skilled engineers from 4 locations across the UK
- Access to testing accredited by UKAS to ISO 17025
- Third party product assessment providing assurance to your customers
- We pride ourselves on being able to deliver solutions to our customers' problems





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# Why Carry Out Testing?



- Testing for electromagnetic compatibility provides, for example, the design, product approvals or project engineer with the assurance that their product meets the technical EMC requirements appropriate for the product i.e. it demonstrates fitness for purpose.
- For most electrical and electronics equipment sold in Europe, conformance with the EMC Directive is a legal requirement for CE Marking. Testing to standards is the simplest way of demonstrating conformance.
- The test report can be included within the legally required Technical Documentation for the equipment as evidence of meeting the essential requirements of the EMC Directive. This is as important as carrying out the tests themselves.
- Proof of EMC performance is often a contractual requirement, even outside Europe.
- Product liability risks can be minimised by ensuring due diligence has been applied to EMC at the design stage.

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## **BEIS Notified Body**

Eurofins York is a Type A BIS-appointed Inspection Body (No. 5562) for the assessment of EMC Technical Documentation under the EMC Directive.

# **Design Modification and Advice**

The engineers at Eurofins York are highly experienced, well qualified and equipped to assist customers with EMC design issues as they arise during testing; thus significantly increasing the likelihood of a successful test.

# **York Training** Academy

Eurofins York has an international reputation for providing Training Courses for individuals and organisations. Our training portfolio ranges from one day introductory courses to advanced in-depth workshops.

Available at our UK-wide locations, as bespoke in-house courses, or through on-demand online training modules to watch in your own time, we are able to accommodate you and your colleagues changing needs.

For more information visit: <a href="http://www.yorkemc.com/services/training/">http://www.yorkemc.com/services/training/</a> or email training@vorkemc.com

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