

# Assurance in the Lighting Industry



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EMC Consultancy, Research, Testing and Training

*York* **EMC** Services

Eurofins York (formerly York EMC Services) is an established market leader for the provision of Electromagnetic Compatibility (EMC) assurance services to the lighting industry, offering consultancy, testing and training. We have many years of expertise, experience and a solid track record of demonstrating EMC for lighting projects.

## EMC in the Lighting Industry

The technology used within the lighting industry has changed significantly over the last 10 years as the drive for lower energy consumption has become established. The incandescent light bulb, once the mainstay of domestic lighting, has been replaced by lower energy consumption equivalents.

Unlike an incandescent light bulb, compact fluorescent and LED lighting both have the capability to produce significant electromagnetic emissions ranging from harmonics of the mains frequency (50Hz) up to tens or even hundreds of MHz. As both lighting technologies use active electronics, they may also be susceptible to external disturbances such as those generated by mobile phones and present on the ac supply.

## Our expertise

We have in depth knowledge and experience of EMC in the lighting industry. Our experience includes the EMC testing of:

- Standard 50Hz ballast fluorescent lamps
- Street light controllers
- Compact fluorescent lamps for household use
- A comprehensive range of LED street lamps
- LED lamps for household use
- Lighting for medical applications

We also provide design advice and solutions for:

- EMC emissions
- EMC immunity
- Harmonics and flicker
- Electromagnetic fields



One of our real strengths is our capability, being able to apply our expertise to identifying the cause of EMC problems and devising cost effective solutions.

## Services to the Lighting Industry

Eurofins York provides comprehensive assistance to the lighting industry, covering: compliance and regulatory issues, laboratory testing and problem solving.

**Our capabilities and breadth of experience encompass:**

### Testing

- Accredited emissions testing to EN55015
- Accredited harmonics and flicker testing to EN61000-3-2 and EN61000-3-3
- Accredited immunity testing to EN61547
- Assessment of lighting to EN62493 relating to human exposure to electromagnetic fields
- Pre-compliance EMC and safety testing to identify issues at an early stage
- EMC remedial fixes for emissions and immunity test failures
- Subcontract provision of electrical safety and other testing services such as light quality and shock and vibration

### Consultancy

- EMC Technical Documentation preparation
- Notified Body assessment of EMC Technical Documentation
- EMC design consultancy

### Training

- Fundamentals of Design and Testing for EMC Training Course
- EMC Testing Workshop
- Bespoke in-house EMC courses tailored to a company's requirement

## Eurofins York

Eurofins York is an independent regulatory compliance service provider. With over 25 years' experience Eurofins York is able to offer you a full compliance solution including testing, consultancy, training and Test Instrumentation.



Our UKAS accredited test laboratories located near Bristol, Leeds and in Grangemouth, offer a wide range of EMC, Electrical safety, Radio Equipment and Electromagnetic Fields (EMF) compliance services.

Eurofins York is committed to providing excellent customer support to ensure that your needs and requirements are always met. Our highly trained and experienced staff are available to offer their technical expertise and guidance through the compliance process so that it can be achieved in a cost effective manner and add value to the project.

**Our portfolio of services includes:**

### Testing

Electromagnetic Compatibility (EMC), Electrical Safety (LV), Electromagnetic Field (EMF) site surveys, Radio Equipment.

### Consultancy and Research

Planning EMC management strategies, Practical EMC problem solving, EMC legislation.

### Training Courses and Workshops

Scheduled workshops and courses in EMC, Electrical Safety, Radio Equipment, EMF and related disciplines including bespoke and in-house training solutions.

### Test Instrumentation

Design, manufacture and sale of unique Reference Noise and Signal Sources, compact antennas, Harmonics and Flicker generators and a range of accessories used in EMC test laboratories globally.