## Project no. 339-040

## Quality assurance of luminaires with LEDs

Project manager: Danish Lighting Center – Kenneth Munck – Tel.: +45 4717 1800

Quality criteria and test methods are developed, and existing trial facilities at Fotonik DTU and SBi are adapted to test a range of LED fixtures from Danish and international manufacturers. These results will be compiled into a guide which will make it easier for users to select good, energy-efficient LED lighting.

## Implementation of the project:

The method for this project is to develop criteria for quality assessment of available LED fixtures and LED light sources, and subsequently to use trial subjects in a laboratory and in realistic lighting situations to measure and assess the light, visibility and convenience aspects of these fixtures, as well as determine their energy consumption and efficiency.

Within this project, a number of LED fixtures and LED lighting solutions from the market are collated and presented.

Over the past 4-5 years, a large range of LED fixtures and LED light sources have been presented in the international arena. 10-15 of these fixtures and LED solutions underwent testing and quality assurance as part of the project, taking into account convenience, visual and technical lighting parameters such as dazzle, contrast, visual comfort, energy consumption, spectral distribution and colour reproduction index and light emission.

## **Project status:**

The project has been completed and a project report has been compiled.

The results of the project are also being reported via project 339-044, Demonstration and training in the use of fixtures with LED light sources.



