

Project no. 337-068

Development of LED light sources and lamps

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Working on the basis of promising results from project 336-054, a diode light source (LED) of 3-6 W is being developed which can replace a 25-40 W bulb, and three prototypes - for a desk lamp, dining table lamp and bathroom lamp - are being designed and developed for applications where bulbs have traditionally been used. 10-15 designers are receiving training on LED technology.

Results:

- A 5-6 W LED light source, which can replace a 25-40 W omnidirectional bulb in an architect's lamp. The quality of the light from the LED light source is high, and its colour temperature and intensity can be regulated by the user. This light source has a measured energy efficiency of 45-50 lm/W and a Ra value of up to 92.
- A dining/meeting table pendant with a power consumption of 40 W.
- A dining/meeting table pendant with a power consumption of 35-40 W, with the option of a dynamic colour shift to mood lighting with an extra consumption of 5 W.
- A table lamp with a power consumption of 18 W.
- Seat furniture for mood lighting and reading purposes with a power consumption of 36 W.
- Start of a new company, "Morfofo". This company is based solely on the development, production and marketing of energy-saving LED products for lighting.
- New LED-based lighting products could be on the market by the end of 2007.
- LED seminar held at Risø, the Danish National Laboratory, with 150 delegates from Danish companies and institutions.