

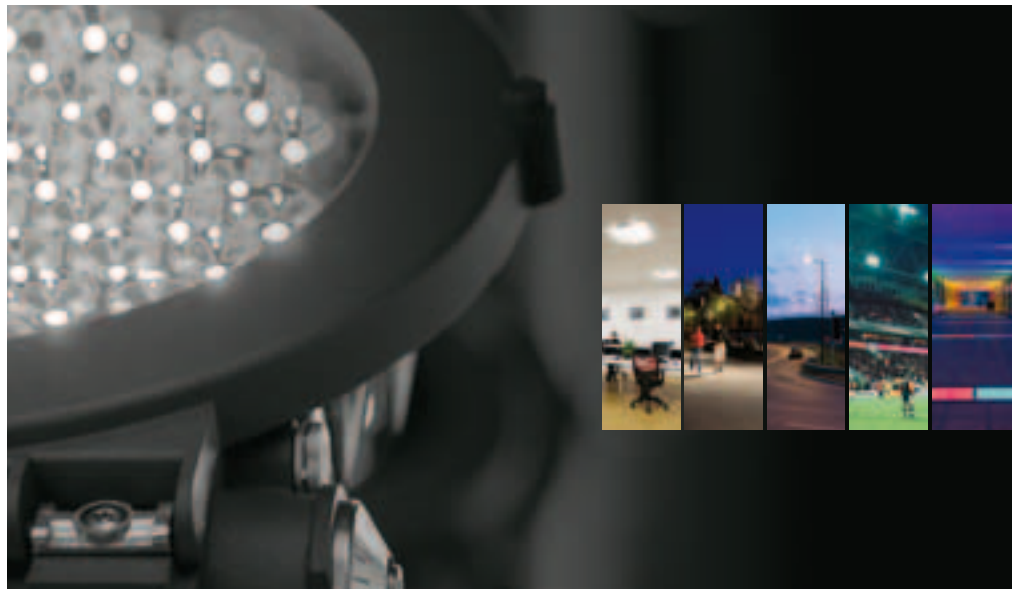
econtrol

5 super sustainable solutions

How can we be more sustainable? On the back page you can find trusted information to help your project be sustainable.

It's LED lighting all the way at L+B 2010

Thorn is moving to a new location at **light+building** (11-16 April) in Frankfurt, Hall 5, Stand A40



InSight

Sign up to receive our free e-newsletter, for all the latest lighting news and information: www.thornlighting.com/newsletter

In this edition:

Roads	2/3
Cityscapes	4/5
Buildings and surrounds	6/7
Sustainability news	8

THORN

www.thornlighting.com

The stand is situated next to Vulkan, our distributor for selling outdoor products in Germany.

Of the 40 designs exhibited, over two thirds include LEDs.

Thorn will present **StyLED**, a breakthrough LED design capable of lighting major traffic routes as well as residential streets. Available in two outlines and four lumen packages, from 3,000lm (45W) to 10,000lm (150W) it moves LED road lighting up a gear.

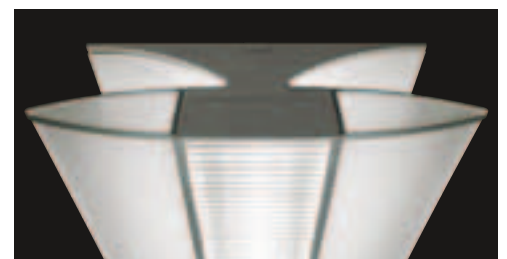
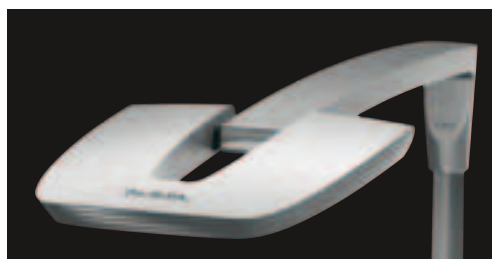
Another exciting exterior debut is **Clan** - a line-up of three column designs and two

lanterns with two light sources, including LEDs. The range brings harmony to urban spaces.

For interiors, Thorn reveals a replacement of the Menlo range with a new family of direct/indirect fluorescents. Under the slogan, '**Menlo**³ - lighting to the power of 3', it offers 3 optical choices, 3 geometric shapes and 3 mounting options.

These are only three of the products exhibited - but they show vividly the scope and potential of Thorn's new product development programme.

Visit: www.thornlighting.com/lightandbuilding



Thorn offer road lighting advice



The Borough of Mäder in Austria has cut its energy consumption on road lighting by 49 per cent while simultaneously improving illumination levels. This startling information is revealed by the Borough's Mayor, Rainer Siegele, in Thorn's road lighting microsite. The dedicated site features specific individuals and municipalities who care about lighting and how their communities have benefited from using the latest equipment. Mäder's savings were brought about by a planned conversion programme to Thorn lanterns operating via a **Telea** remote monitoring system.

Christophe Durand, Thorn Product Manager - Road Lighting, explains: "Good lighting makes an enormous difference to virtually any town by reducing accidents, removing crime and promoting the longer use of facilities. What is not as well known is that roads can be lit sustainably. The site shows how our road lighting products can reduce energy consumption, and hence CO₂ emissions, whilst almost eliminating light wastage. Equally important they can adapt to changes in usage patterns and demographics, bringing light when and where its needed." The microsite also covers standards, lamps, circuits and controls, car parks, pedestrian crossings, tunnels and support systems.

Photo: Joss Guest



Visit: www.thornlighting.com/road_lighting



Dyana now with LEDs

The demand for energy efficient road lighting capable of virtually maintenance-free operation for 12 years is fully met by the new range of **Dyana LED** lanterns.

Distinctive product design, outstanding optics and great versatility are all on offer:

- 2 versions: 3000lm (36 LEDs) and 5000lm (60 LEDs) for S6 to S2 classification
- 2 patented optics (intensive and extensive), shielded with flat glass
- Neutral white light (4200K)
- Electronic ballast to further reduce power
- 2 mounting options: top and side entry

Pedestrian crossings in a new light

At a time when almost one in four of Europe's 8,000 pedestrian fatalities occur on supposedly "safe" crossings, Thorn has developed the **IVS** - identification, visibility and safety - lighting system, comprising of a dedicated lantern and LED signalling accessory.

The lantern's double asymmetric distribution, spreads light from the direction of the approaching traffic over the marked crossing and surrounding area without leaving areas of shadow or affecting motorists. Vertical illuminance, too, is generous - highlighting pedestrians. Such is the improvement that a 150W rated IVS lantern can replace a conventional 250W fitting.

Finally, with six existing designs to choose from the lantern style can be matched to the overall lighting scheme.

Photo: Joss Guest



Lighting the way at UN Climate Summit

Last year's climate change conference (COP15) used sustainable lighting in the form of Thorn's **Adelle** lantern. The arrivals area of the Copenhagen's Bella Center was lit by local architect SLA with nine of the LED lanterns. The temporary urban space was entitled "White Balance".

The post-top mounted luminaire combines a ring of 32 x 1.1W LEDs with a funnel-shaped canopy to create a soft indirect light. The product has recently been upgraded with 3800K, 100 lm/W LEDs.



Underneath the arches

Arcueil-Cachan in the southern suburbs of Paris is dominated by this spectacular aqueduct, which has recently been made even more magical by a lighting scheme by Roger Narboni. Its 77 arches are 38 metres tall and span a distance of one kilometre.

Main lighting is by 142 special, two-metre-long, **Corniche** luminaires using orange coloured fluorescent tubes, which are installed underneath the arches.

More dramatic effects are achieved with 156 **MiniPinspot LED** specials mounted on the parapet. Each has a trio of 1.2W cyan LEDs and OMP glass optics. The spotlights are DMX controlled so they can project waves of blue light along the top of the structure, symbolising the flow of water across the aqueduct.

Photos: Xavier Boymond

Gidy cuts its bills

Fifty-eight **Legend Classic** lanterns with 100W HST lamps and electronic gear are providing a more pleasant urban environment for the picturesque town of Gidy, near Orléans, France.

As well as helping to save energy, the decorative street lanterns are designed to make the installation as unobtrusive as possible and preserve the atmosphere of the historic town centre.

Only five columns were required for the main square, fitted with Eiffel twin arm brackets. These were augmented by 150W **Qba** intensive floodlights mounted on the church to highlight the tower.

Photo: Ad'hoc



Spring line-up

Thorn has introduced a series of slim tubular lighting columns. The **Alumet** range is aimed at landscape architects and planners.

The luminaires come with either an opal or clear diffuser. The former takes twin 54W T16 (T5) lamps and the clear diffusers offer three choices of optics: Fresnel rings or a glass top lens to suit a 35-150W HIT-CE lamp, or multi-layered directional spotlights for added drama. The spotlights take white or coloured LEDs or 35W HIR-CE 111 lamps.

An external lampshield (180 degree) with arabesque or perforated mesh patterns adds further flexibility.



Base LED acclaimed for energy savings

Before

Last year the corridors in Aalborg University, Denmark looked like this. An aged installation of compact fluorescent downlights, producing a mere 70 lux.

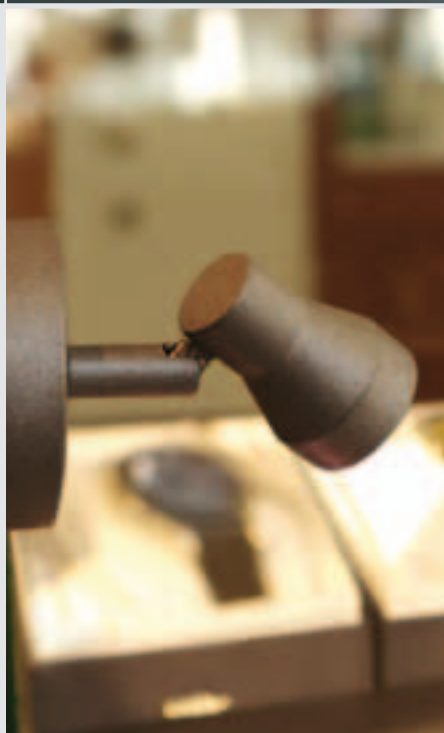
After

This picture shows a remarkable change. Over 100 **Base LED 650** downlights have more than doubled the illuminance (180 lux) with a better light distribution. But perhaps equally important, is a 30 per cent energy saving, plus extended time-frames for renewal and maintenance.

Base LED 650 has a big brother at L+B – Base LED 1000. At 20W and with a 1,000 luminaire-lumen package, it outperforms 26W TC-D downlights, yet lasts over 50,000 hours. Available in 2700K and 3500K options (Ra > 90) it is dimmable to 10 per cent.

A cool way to heat up sales

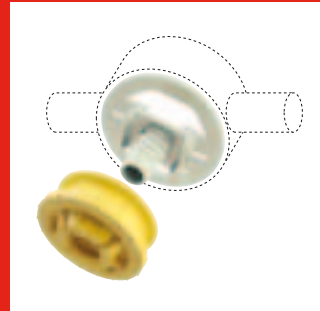
LEDs lighting the entire interior of a watch shop? Pretty unusual? Yes – but so is DEAL Hodinářství's newly opened store in Ostrava, Czech Republic. It was important to use a cool light source as fine timepieces and leather watch straps are highly susceptible to heat damage; and the fittings had to be inconspicuous. **Base LED** downlights comprise the primary light source, supplemented by tiny **D-CO LED** spotlights and downlights.





Tidon boxes clever

Tidon is a new range of recessed gimbal spotlights which reduces running, cooling and maintenance costs without any loss of light. The modular design is available in three configurations: single, twin or triple. Sources range from metal halide (20W/70W) through to halogen (up to 100W) and LEDs. Operating with eight 2.4W Cree LEDs, the solid-state version has a similar lumen output to a 100W tungsten halogen lamp with a fifth of the energy consumption.



Years to evolve...

Imagine being able to install a fluorescent batten in seconds, convert it to emergency mode, or add a motion sensor. With just a push of the hand.

At Thorn, pioneers of the original economical and efficient pack type fluorescent fitting, we not only imagined it, we designed it and are

now manufacturing a range of new **PopPack** fittings.

A radical fixing method cuts installation time in half, while clever plug-in end modules facilitate LED emergency conversion and/or motion and daylight detection.

...seconds to install



Lighting firms initiate LED light engine standardisation

Zhaga

Top manufacturers including Thorn (via parent company Zumtobel), Philips, Osram, Panasonic, Toshiba, Trilux, Cooper, Schreder and Acuity Brands have formed a new organisation – called Zhaga – in a bid to achieve interchangeability between products made by diverse manufacturers, thus preventing fragmentation of the market into incompatible light engines. The “Zhaga standards” will cover the physical dimensions, photometrics and electrical and thermal behaviour of LED light engines (visit: www.zhagastandard.org).

Thorn, again through Zumtobel, has also signed a worldwide cross licensing agreement with Philips allowing the brand to use key patents mainly covering driver and control technologies for changing intensity and colour of conventional and solid state lighting systems.



Simplicity itself

Dimming electric lighting to match the visual task is among the simplest ways of saving energy, reducing CO₂ emissions and improving the working environment.

At Thorn we offer a range of dimmable luminaires and lighting controls including our new range of products incorporating HFE ballasts to provide a simpler, more affordable dimming option to our customers.

Take control of vehicles

Thorn unveils a new concept of adaptive road lighting at L+B, **Comlight**. The intelligent sensor controlled system detects a vehicle's movement and reacts to illuminate it's journey through an urban scene without endangering road safety.

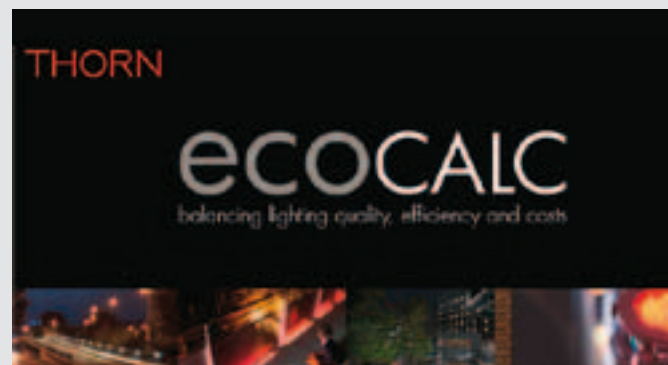
The future of OLED lighting



Thorn is working with Durham University and Cambridge Display Technology (CDT) to develop processes for printing polymeric material (25cm²) that emits white light using low-energy power. The project has the potential, powered by renewable energy, to take lighting off the electricity grid. A small device will be displayed at L+B, inside a task light.

Photo: Joss Guest

Software models through life costs



Thorn has announced a software programme to help specifiers calculate precisely the costs incurred by a lighting solution throughout its service life. The ecoCALC package not only calculates the investment cost, but factors in the financial aspects of an environmentally sound lighting system, including CO₂ emissions, energy consumption, maintenance cost and waste disposal.

Visit: www.thornlighting.com/ecocalc

Your lighting just got better

PEC - Performance, Efficiency, Comfort - is the dynamic, results-orientated programme that underpins the Thorn approach to lighting design and implementation.

With statutory and environmental pressures increasing, PEC offers customers the ability to provide optimum lighting solutions for people and places while conserving energy, cash and raw materials.

