# Bright Future



Leon van de Pas is general manager of Large Luminous Surfaces, a department of Philips Lighting.

'**Philips luminous textile with Kvadrat Soft Cells' has been on the market for almost a year now. How would you describe the product?** Leon van de Pas: Soft light, soft touch, soft sound. It's a fusion of a luminaire, an acoustic panel, a wall decoration and a screen for the display of low-resolution dynamic images. It can also function as an architectural element. Architects who see the product for the first time take a moment to stand still and think about what it is, and that's precisely what is so inspiring. Philips started 120 years ago by making light bulbs; later extended the business to include luminaires and controls; and is now, thanks to the LED revolution, moving to services and solutions.

Luminous textile panels [LTP] are a giant step forward, because these are no longer standard products – this is a solution that allows creatives to combine freedom of design with simplicity of installation, aided by the crucial development of low-res video images and central management.

**What makes it such an interesting step for Philips to take?** A product that gives the customer a say in the size of the panel, the textile and the content also gives us a more direct contact with architects and interior architects. It leads us along a different route to the market. Moreover, we're tapping into an entirely new market, as these panels are integrated seamlessly into walls and ceilings. We make artistic impressions and sketches of interiors for clients, which is highly unusual for Philips. And along with the panels we're offering solution services rather than a ready-made product. Philips is investing heavily in the industry's design world.

**How did the idea for the panels come about?** In 2010 I was asked to check out Lumalive, one of the ventures belonging to Philips' incubator programme. Lumalive revolved around the development of wearables with integrated LED lighting. In my first week on the job, we decided to stop those activities, which had too little connection with the core lighting business. I started looking for a market niche based on our know-how of LEDs and textiles.

The following week, when I heard that Kvadrat was looking for a lighting partner to integrate LEDs into their Kvadrat Soft Cells acoustic wall and ceiling panels, I flew to Denmark for a meeting with Anders Byriel, the CEO of Kvadrat. The combination of textile, acoustics and lighting gave me an insight into a wide range of fresh possibilities. In just four days during my third week, we built the first prototype of what was to become the luminous textile panel. Kvadrat subsequently organized workshops with architects, which included brainstorming sessions on product specifications.

**What were the conclusions?** That this particular fusion is unique. What proved interesting in the workshops were thickness, acoustic properties, and the freedom of design provided by size and fabric choice. Screens that display dynamic images, for instance, are often made from smooth PVC foil, but architects like texture. The textile we used had to satisfy their preferences and to be of superior quality – which explains our partnership with Kvadrat. Specifications were based on price as well, of course.

One thing we learned from the workshops was that architects hadn't been sitting around waiting for yet another high-resolution display. An architect put it quite nicely when he said: 'The power of the panels is that you experience the dynamic but don't actually see it.' The low-resolution display so vital to the creation of the desired atmosphere resulted from positioning the LEDs at intervals of 6 cm, which turned out to be the optimum balance of resolution and price. The success of the display also depended on hiding the LED light source!

**How do you make sure the product offers customers a quality image?** That's our trade secret. Between the LEDs and the outer layer of textile is a diffusion layer. Philips has many patents relating to textiles and LEDs.

**Can you give us an example of how these panels might be used?** In November 2011 we launched the product, together with Kvadrat, with an incredible one-off presentation by artist Olafur Eliasson in London. Since then our luminous textile panels have really taken off. We've made installations for banks, private hospitals, for real-estate titan Jones Lang LaSalle and for airports. **...**

## Luminous textile panels represent a breakthrough into the (interior) architecture market for Philips Lighting, explains Leon van de Pas.

Words **Femke de Wild**
Photos **courtesy of Philips**

## Design Ideas

In 2006 Daniel Rybakken designed Daylight Comes Sideways, a lamp that evokes the illusion of natural light. At the 2012 Salone del Mobile in Milan, Luceplan introduced Rybakken's new Counterbalance light, along with a display of the designer's earlier work. For this exhibition, he developed a model of the Daylight lamp that included the use of luminous textile panels. 'I try to create a suggestion of daylight with many of my projects,' he says, 'and the luminous textile panel technique, which combines light and movement, really comes in handy. It's also easy to work with on different scales, which makes it quite interesting for large installations.'



Daniel Rybakken used Philips' luminous textile technique to update his Daylight Comes Sideways lamp.

## 'Architects haven't been waiting for yet another high-resolution display'

## Large Luminous Surfaces

**Parent company** Philips Lighting BV
**Location** High Tech Campus, Eindhoven, the Netherlands
**Website** luminous-textile.com
**Established** 2011
**Annual turnover** See annual report at philips.com
**Area of distribution** Worldwide
**Markets** Hospitality, retail, office, healthcare, high-end residential
**First product** Luminous textile panels, in collaboration with Kvadrat Soft Cells
**Collaborating architects** Various
**Staff** >30 (expanding rapidly)

## How It Works

Kvadrat Soft Cells provides Philips with customized Soft Cell panels per individual project. LED strips are mounted on the acoustic foam at a Philips factory. Attached to each multicoloured LED is a chip that controls the light source. An integrated driver box holds the necessary electronics. The individual LEDs are managed by this driver box, where video content can be stored or into which it can be streamed.

Installing the panel and connecting the system require only a power supply and an internet cable. Any smartphone or computer can be used to manage the driver box. In collaboration with various media designers, Philips develops video content that is easy to download from a dedicated website: llcontent.com. Customized content can be developed quite easily as well. The system uses standard open-source software that allows customers to determine the dynamic content themselves or with external media designers.

Connecting the panel requires only a power supply and an internet cable.

Luminous textile panels are available in a selection of fabrics by Kvadrat.

## Kvadrat & Philips

'We had already worked with architects on projects that combined textile and lighting, so we knew this was a big topic,' says Anders Byriel, CEO of Kvadrat. 'Although the ambition to integrate technology into our products had been discussed, it was a goal that we found difficult to realize. Philips has a considerable number of patents in the fields of technology and lighting, as do we in the areas of acoustic panels and textiles. We decided to join forces. With the resulting luminous textile panels, we can offer architects a high-tech product that's easy to combine with our Soft Cells. Members of architecture's avant-garde have been coming up with applications that we ourselves had not anticipated. We're currently working on projects beyond our imagination.'

For a hospital Philips developed panels with moving images for individual patient rooms.



# 'Design and light may affect the patient's wellbeing'

**...** Our initial drive has centred on four market segments: hospitality, retail, office and healthcare. But we've also been involved in several small-scale projects. Artists have made special digital pieces using the panels, and a group of young techies developed an interactive installation for a festival.

**Since one of the four segments is healthcare, do you work in close cooperation with Philips Medical?** Philips Medical has done a great deal of research on how design and light may affect the wellbeing of patients. That branch of the company had already shown the positive effects of light and colour, and we can build on those findings. Whereas Philips Medical is occupied with the design of equipment and the environment in which it's used, we are continuing into spaces such as waiting rooms, for example. Imagine that as you wait you see a chess board on which a match is going on, with moves made every two minutes. Before you know it, you're playing the game in your mind.

**The product has been on the market for only a short time. Are you still developing these panels?** The panels are being used more and more for a range of applications, which means they need to address wholly different demands. We're still working on this round the clock, as it were. The textile we use will remain in constant development, too, and the central easy management aspect of the panels is a vital feature that we're working on to full capacity.

**How does the central management feature work?** Large retail chains want to be able to press a button at the main office and manage installations in their stores all over the world. Such a system allows them to maintain control of what is displayed on the screens. The panels can be managed with any smartphone or computer via our purpose-designed content manager, but you can also stream content to the screens. Managing it all

from a central hub enables you to avoid situations in which personnel try to do the job individually. What's more, you can convey a clear message worldwide. We're working on an even more highly developed system for a large bank that wants to manage panels at various locations from a central point, but under no circumstances can it be done via their rigorously protected server.

**Do you have other plans for the product?** The luminous textile panel is the first proposal put forward by Philips Large Luminous Surfaces [LLS]. As we continue to work closely with leading global architects, LLS will come out with additional spatial solutions. I'm thinking of things like different materials, lighting systems and functions or features for specific applications – like multifaceted content management for retailers, hoteliers and other clients with lots of subsidiaries.

In the hospitality sector, for example, you find hotel chains close to amusement parks, which often face the problem of kids with adrenaline still racing through their bodies at day's end – and not at all ready to go to sleep. The right kinds of images above their beds could get them to bed, calm them in a playful way and lull them to sleep. For intensive-care units in hospitals, we are looking for solutions such as a ceiling that can change instantly from atmospheric to functional light. Integrating projectors, sound and interactivity can open new fields of application, such as theatres, home cinemas, conference-call rooms and so forth.

Specialists are now based in over 12 countries in Europe, and we have outposts in New York, China and Dubai. This may not be the time for us to reveal loads of plans – instead, let's have the amazing creative minds among your readers surprise us with *their* ideas. _
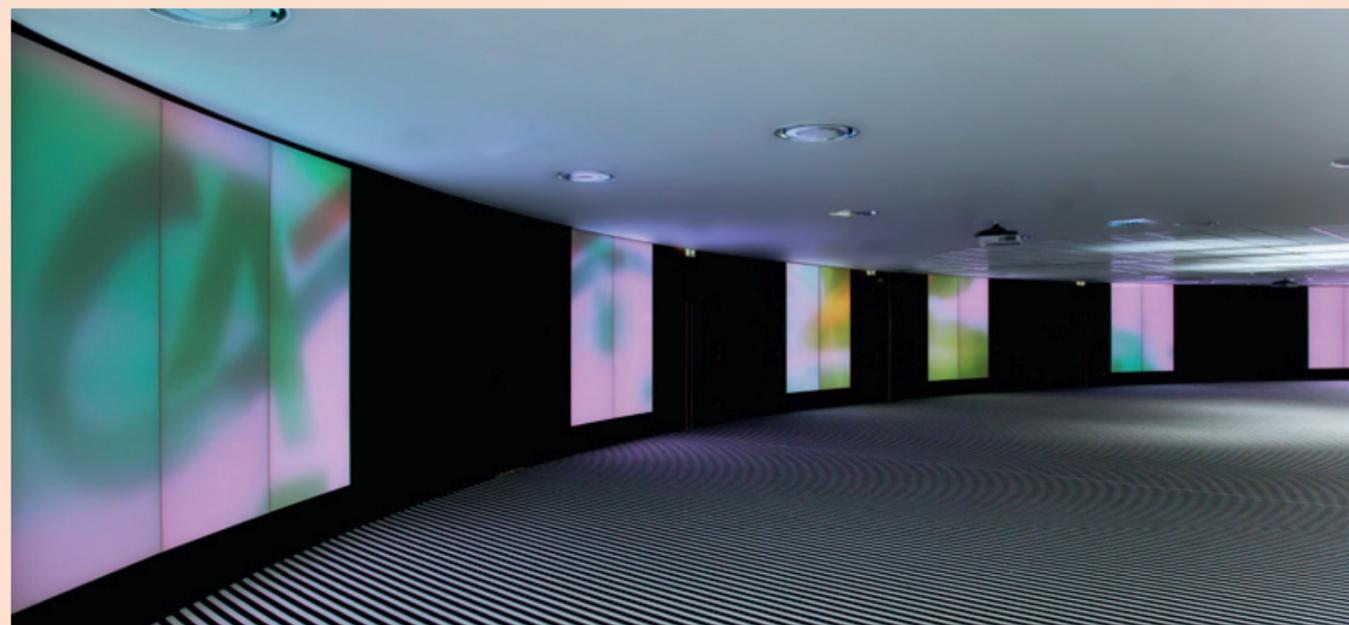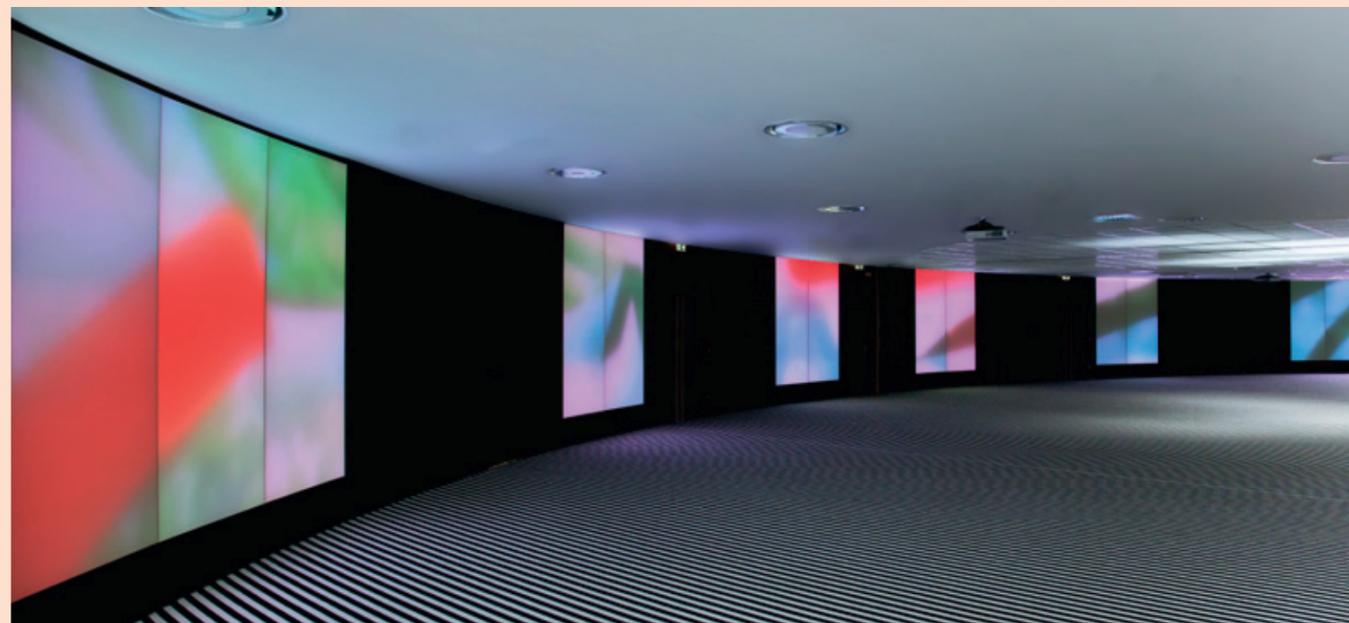


Initial plans for a green wall in a large hall of French bank Crédit Agricole's exhibition-congress centre were scrapped in favour of luminous textile panels.
Images BLD AV Media





The LTPs in the ceiling, displaying images of clouds drifting by, will completely transform the atmosphere of the reception area at Jones Lang LaSalle, Vivaldi Plaza, Moscow.

## Luceplan & Philips

The CEO of Luceplan Scandinavia, Michael Anker, predicts a great future for luminous textile panels. 'We use the panels as an addition to all kinds of projects,' he says. 'So many lighting projects lack movement. In a large reception area, for example, you don't want a flat, static image. We solve two problems with these panels: we're able to create the perfect atmosphere and, at the same time, regulate the acoustics.

'It's also an interesting product from a marketing perspective, because the client has the opportunity to determine the content and to manage the system from a central hub. In our showroom at Pakhus 48 in Copenhagen, where we represent brands such as Kvadrat and Luceplan, the panels are a big attraction point. They make the space come alive.'