

Rigshospitalet Elevator Ceiling



Taking care of good lighting

Large hospitals have a lot of advantages: patients can be treated more efficiently, due to a higher number of staff available, and it is more cost effective to offer highly specialised treatments.

The Rigshospitalet, or National hospital, is the largest medical building in all of Denmark. It is 16 stories high, and one of the tallest buildings in the central part of Copenhagen.

LED iBond was involved in a recent refurbishment of the elevator infrastructure, which is essential in keeping the hospital functional.

Lighting challenges

Elevators are not typically places that would evoke strong thoughts about light. However, in Rigshospitalet it was important to make the lighting as comfortable as possible for patients, especially when being transported on a bed. This is a highly unusual situation, but making sure as little glare as possible disturbs patients was key in this installation. Also, downtime of elevators had to be kept to a minimum, which meant that a situation that is quick to install and required minimum maintenance would be favoured. Lastly, long lifetime and efficiency are required to keep running costs low, a fact that will eventually benefit the patients.

The LED iBond solution

Instead of replacing every light in the elevator, which would have necessitated the removal of the elevator ceiling anyhow, LED iBond designed a ceiling with integrated lighting. This meant that the installation could be finished within a few hours per elevator.

Likewise, the LED iBond technology enabled a custom distribution of the LEDs. A circular pattern was chosen, so there was minimum glare in the centre of the elevator cabin - where typically rolling beds are placed when transporting patients.

Our solution is designed to last a minimum of 100.000hrs, so maintenance is minimised for years to come. Also outstanding is the efficiency of this custom solution: the entire ceiling consumes just over 20W, whilst delivering an average of 130lux on the floor. Compared to the previous solution in place, a series of T8 fluorescents, this represents an energy saving of more than 85% - whilst also increasing the lux level by 30%.

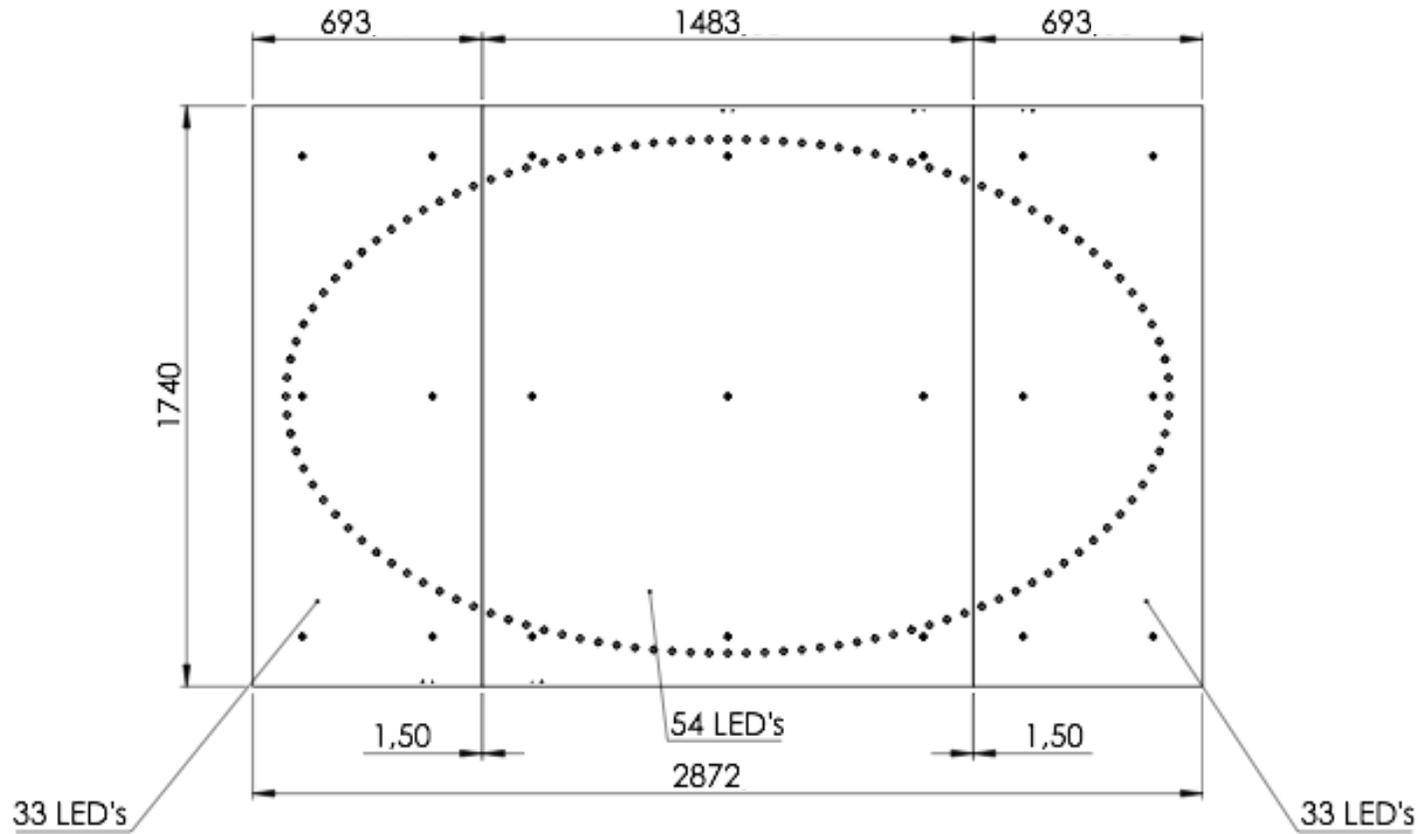
Additionally, to make sure everything is safe in the case of a blackout, the system is backed up with an integrated emergency battery pack, ensuring that minimum light levels are maintained in the unlikely case of a power drop, until the hospital's generator powers up the emergency system.



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Project responsible:
Rigshospitalet Facility
Management

Installation date:
December 2015

Luminous flux per unit:
2500 lm
Wattage per unit:
20 W
Colour temperature:
3000K

Special features:
Emergency back up
Total Units installed: 22

For more information, please visit
www.ledibond.com