

Molde University Library

- / Molde, Norway.
- / Fluorescent lighting replacement
- / 80.4% energy saving
- / Wireless lighting controls



The Brief

The library at Molde University College is open from 07:00 in the morning until 23:00 at night, and the lights are on all of this time. The original lighting system installed at the library featured luminaires with fluorescent tubes and therefore were due an upgrade, as the University sought to lower energy costs and increase control and monitoring of their lighting system.



The Solution

To maximise energy savings and light management, we proposed LED luminaires controlled by a [wireless lighting control system](#). The work was carried out by local installer iElektro, by Per Even Sandnes Pettersen and Helge Ivar Orset. They explain that energy savings were a motivating factor for this investment. “For this reason, we measured the energy consumption of the old installation for 27 days prior to the change, and then we measured the energy consumption for a similar period of time after the new solution was installed.”



The Result

The result was astonishing: The old installation used a total of 30,68KWh/ day. With the new solution the energy consumption was reduced to 6:02KWh/ day. This was an 80.4% energy saving. In addition, there is no maintenance cost since there are no fluorescent tubes that need to be replaced. Modern LED light sources have a very long life-time.

The wireless technology is a protocol controlling the luminaires, enabling them to communicate with each other. Each luminaire has a built-in presence detector that dims the light when there is no one in the room. The change from old to new solution was completed in only two work days.