Catherina Square LV, smart LED solution

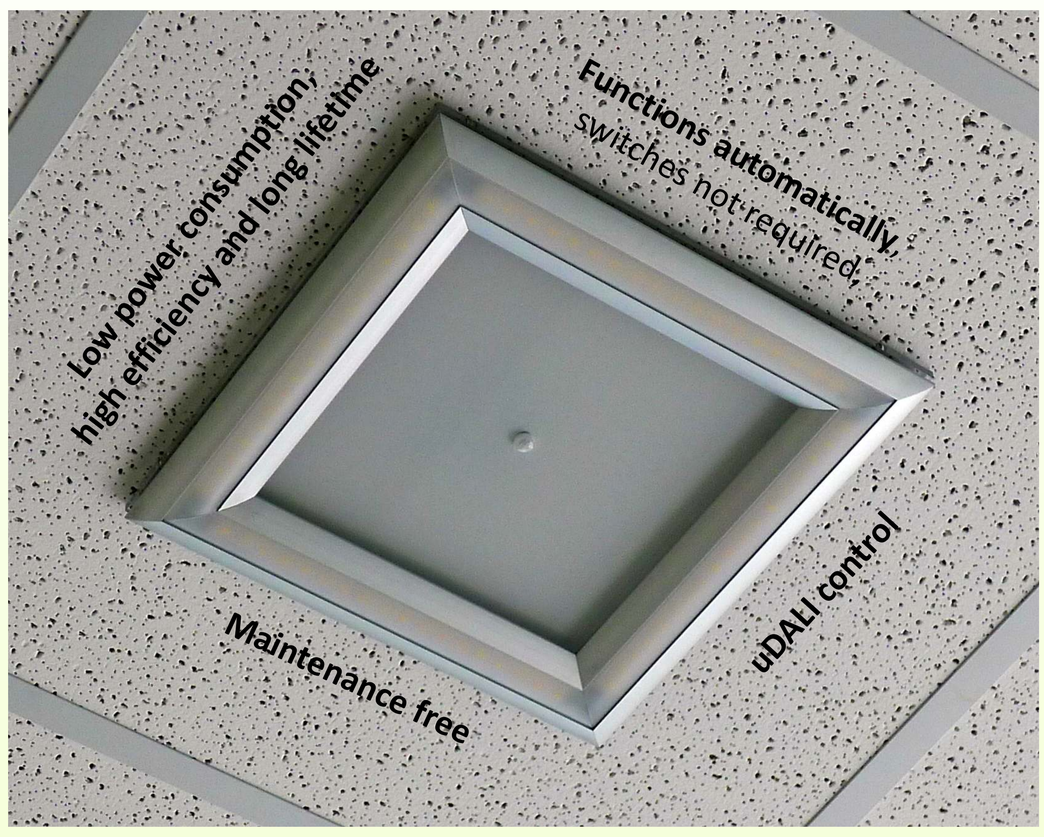
low power consumption corridor illumination

Futuro Lighting

Imagine that the light goes along with you, and that is on the place where you really need it. This not only reduces power consumption, but also gives the impression of interactivity. Moreover, during the night lighting provides accent decorative illumination. All major parameters are remotely adjustable, according to user needs. The entire installation is controlled by a central module that decides when the lighting to be activated. During the day, when there is sufficient ambient light, the fixtures are disconnected from the electrical supply and total consumption of the system is negligible (less than 1.5 W).

Significant reduction of greenhouse gas generation (CO_2) by reducing electricity consumption has a positive impact on ecology. Using ecological, durable materials and technologies for long life products, the company seeks to minimize the generation of waste in the future. FuturoLighting products have a long lifespan, and hence there is no need to change them often.

FuturoLighting is a privately owned company based in Slovakia whose focus is on LED lighting solutions for all applications. We are supporting our customers with developing and production of customized LED lighting solutions for demanding environments which also require high energy efficiency, long lifetime, and easy maintenance. For more information about FuturoLighting, its products and customizable solutions please visit our web page www.futurolighting.com.

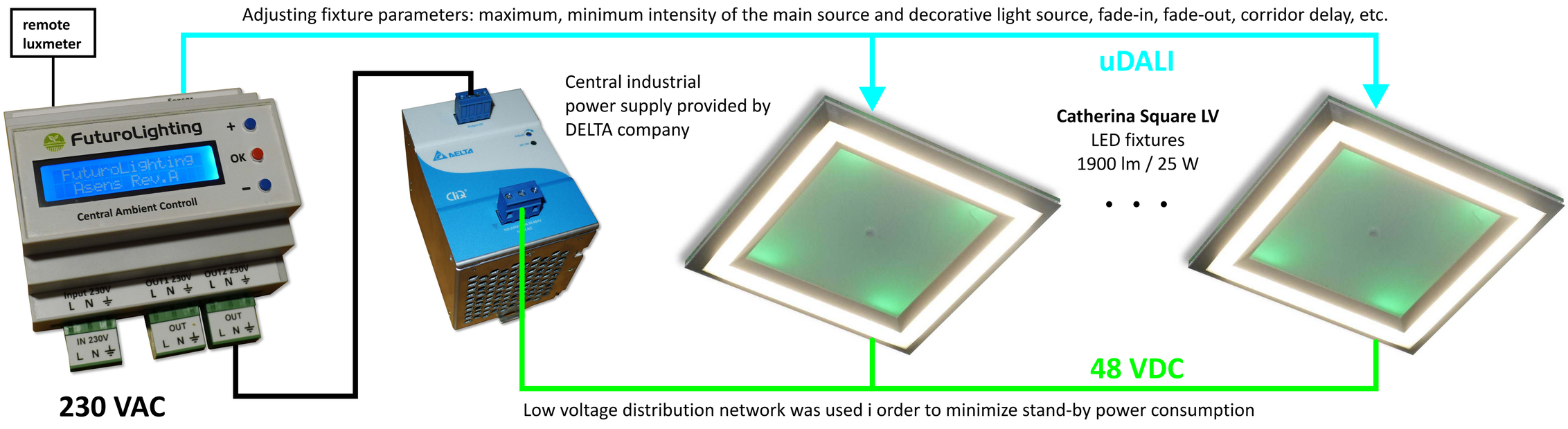


Installation with Catherina Square LV fixtures during a day with system power consumption below 1,5 W

Installation with Catherina Square LV fixtures in stand by mode during a night (accent illumination activated)

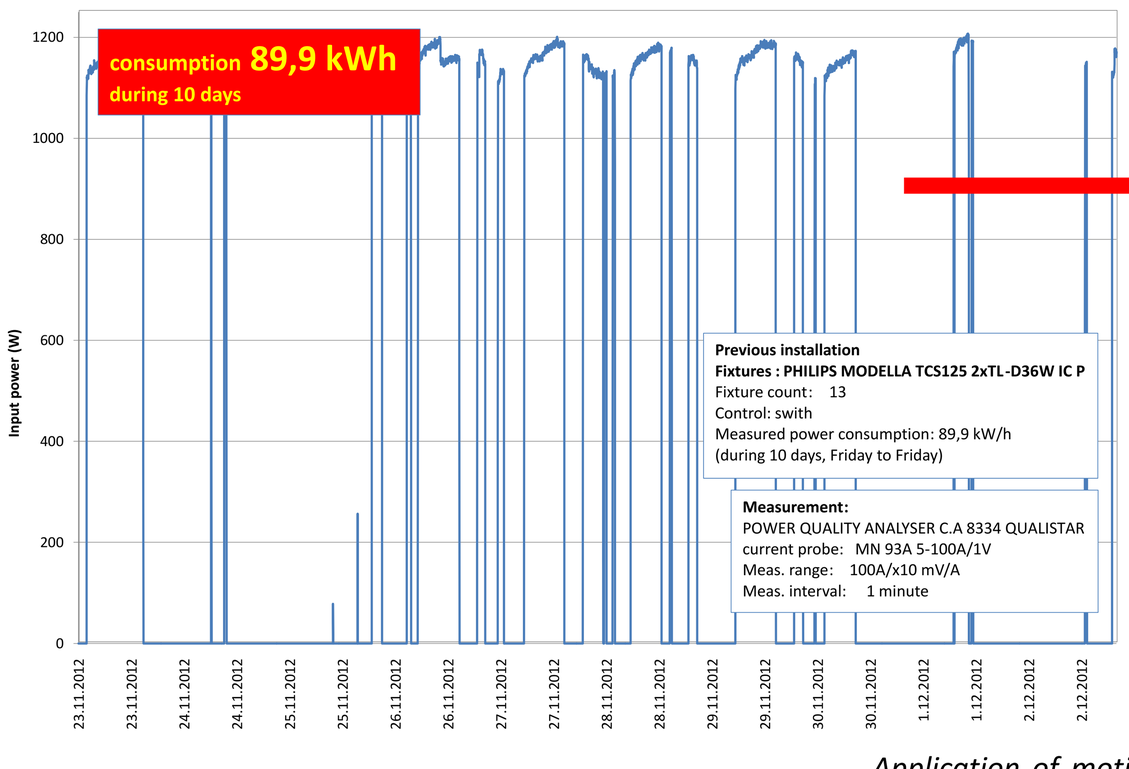
Pozrite si VIDEO ako systém pracuje

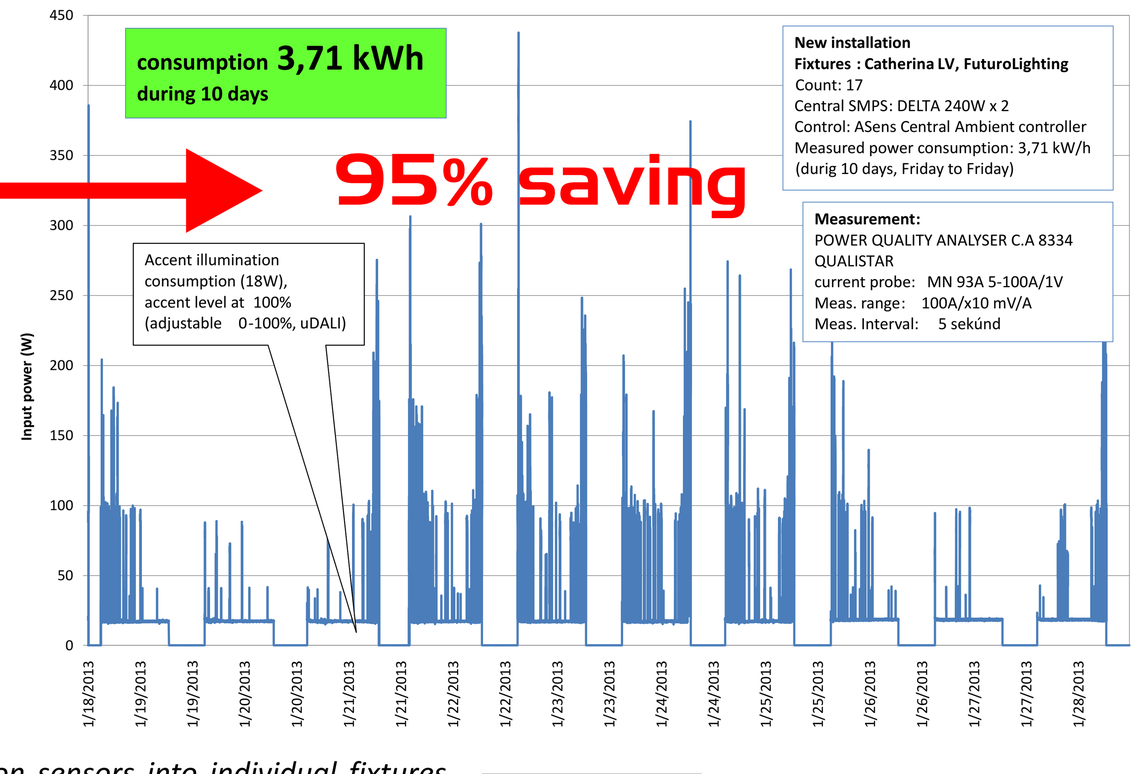
This system was installed at ON Semiconductor facility in Piešťany, where 80 meter corridor was equiped with 17 Catherina Square LV fixtures

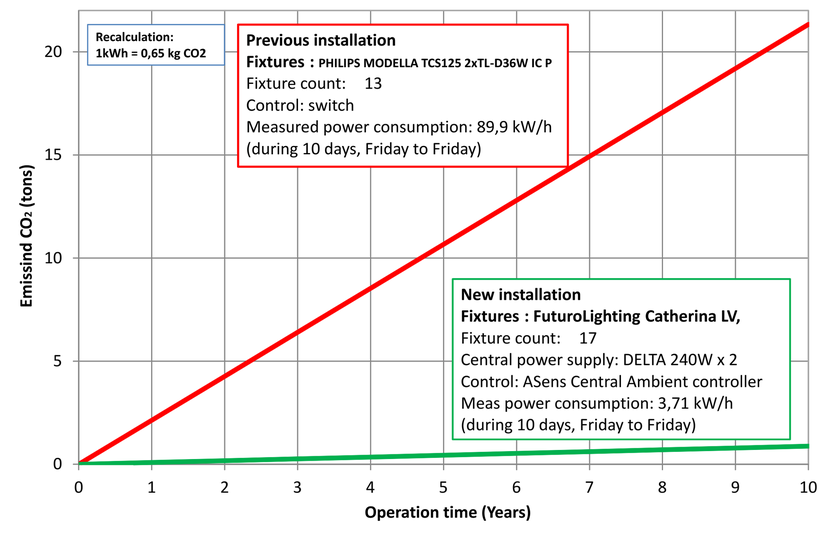


Schematic interpretation of the whole system

Catherina Square LV recessed fixtures CCT 4000K, output >1850 lm, consumption 25 W, uDALI control, were used for this installation. Central ambient control unit ASens measures light intensity and distinguishes between day and night, thus minimizing inactive power consumption. The unit includes uDALI interface for controlling several parameters of the fixtures like maximum, minimum intensity, fade-in, fade-out times, accent illumination, etc. Whole system is powered by central power supplies with high efficiency and long industrial life over 10 years, produced and provided by DELTA company.







Application of motion sensors into individual fixtures with digital control and central ambient sensor allowed to create illumination system, which covers not only energetic and ecology requirements but due to its minimalistic design satisfy esthetical and security aspects. Developed solution decreased consumption of electrical energy in 95% comparing to previous installation. This result was achieved due to autonomous behaviour of individual fixtures and used central ambient control unit. Additionally shown solution improves user and operator comfort and is helpful to decrease criminal activity. Obtained results are shown in charts above.

Made-in Slovakia
Designed and produced in Slovak Republic

Acknowledgment

At this place we would like thank to our partners and suppliers esspecially to OSRAM, Panasonic, CH-Print, Telux, Bayer Material Science, Rutronik, Arrow, Codico, Ekom, RLX, DELTA, Wurth Elektronik, Hernon and others for their support and understanding during realization of this project.

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