



# PARKING IN CONNECTED LIGHT

## PARKING GARAGE ARABELLAPARK, MUNICH

### FACTS AT A GLANCE

#### LIGHTING AS NEEDED

The dimmable OSRAM SubstiTUBE T8 EM Connected LED tubes wireless combined via Zigbee 3.0 with the LEDVANCE SubstiTUBE Connected sensors together provide flexible and powerful lighting. The SubstiTUBE Connected sensors also enable two-step dimming of 20 or 100 percent light output.

#### HIGH ENERGY SAVING

The OSRAM SubstiTUBE T8 EM Connected LED tubes save up to 73 percent energy compared to conventional fluorescent lamps.

#### LOW FLICKER WITH GUARANTEE

The OSRAM SubstiTUBE T8 combines the EU standards for low flicker light with the proven 5-year guarantee from LEDVANCE.

### SubstiTUBE T8 EM Connected SubstiTUBE Connected Sensor



LEDVANCE is the licensee of product trademark OSRAM in general lighting



# THE RIGHT LIGHT IN THE RIGHT PLACE - OSRAM SubstiTUBE T8 EM CONNECTED

**SubstiTUBE T8 LED TUBES PROVIDE PERFECTLY ADJUSTED LIGHTING IN EVERY SITUATION WITH SIGNIFICANTLY REDUCED ENERGY CONSUMPTION.**

## THE CHALLENGE

How do you ensure that lighting is as efficient as possible and at the same time user-friendly? This was a particular challenge for Bavaria Parkgaragen GmbH, which operates the Arabellapark parking garage in Munich. For the lighting of the permanent parking level on the 3rd basement level and its access and exit ramps, Bavaria Parkgaragen GmbH was therefore looking for a connected, LED-based lighting solution that would meet all the requirements of innovative garage lighting.

## THE SOLUTION

Intelligent lighting brings the light to the right place at the right time. With this in the back of mind, LEDVANCE replaced the parking level's conventional fluorescent lamps with highly efficient, dimmable OSRAM SubstiTUBE T8 EM Connected LED tubes. In addition, LEDVANCE SubstiTUBE Connected sensors were installed, connected to the OSRAM SubstiTUBE T8 EM Connected LED tubes via Zigbee 3.0.

The result: a smart sensor control system that adapts the lighting to the situation on the parking level as required, thus significantly reducing energy consumption.

## THE BENEFIT

The OSRAM SubstiTUBE T8 EM Connected LED tube also impresses with a full-glass finish, integrated splinter protection foil, a high efficiency of 175 lm/W, a lifetime of up to 60 000 hours and a LEDVANCE product guarantee of five years. In addition, the modern LED tubes offer an EU-compliant and therefore future-proof solution. This is because, among other things, as part of the Single Lighting Regulation (SLR), many conventional fluorescent tubes will be progressively phased out from September 2021.



A winning team: The OSRAM SubstiTUBE T8 EM Connected and the LEDVANCE SubstiTUBE Connected sensor work together to provide perfect light at all times.

## SUMMARY

The Bavaria Parkgaragen GmbH wanted to equip the permanent parking level in the 3rd basement of the garage at Munich's Arabellapark with LED-based lighting. For this purpose, LEDVANCE installed dimmable OSRAM SubstiTUBE T8 EM Connected LED tubes and LEDVANCE SubstiTUBE Connected sensors on the parking level, which were connected via Zigbee 3.0. A solution that combines flexibly controllable, optimized lighting conditions with significantly reduced energy consumption and long-term compliance with EU regulations.



Parking in the best lighting conditions: OSRAM SubstiTUBE T8 EM Connected LED tubes make it possible.

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