



# FIRST CLASS ILLUMINATION

## Ulrich Haberland stadium, Leverkusen

### FACTS AT A GLANCE

#### LIGHT AT THE HIGHEST LEVEL

The new lighting in the women's Bundesliga stadium of Bayer 04 Leverkusen complies with UEFA's Level D requirements. This means that the lighting is designed not only for horizontal illuminance but also meets specifications for vertical illuminance. The color rendering index (CRI) of 80 exceeds the requirements.

#### THE RIGHT LIGHT IN THE RIGHT PLACE

The smart arena floodlights impress with optimized illuminance while simultaneously reducing glare for the surroundings.

#### **ONE SINGLE SOURCE**

LEDVANCE accompanied the modernization of lighting with comprehensive project management - from planning and coordinating trades to final implementation.

### SPECIFY

#### **CUSTOMIZED LIGHTING**

Every project is unique. In this regard, LEDVANCE develops solutions specifically tailored to customer needs based on the CCE principle (Configuration, Customization, Engineering) - from connection type and light output to light management functions.

# INDIVIDUAL, COMPLIANT, IN TOP FORM – SPORTS FACILITY LIGHTING WITH LEDVANCE

Ready for the big stage: LEDVANCE develops a sustainable and modern lighting concept for the Ulrich-Haberland Stadium of Bayer 04 Leverkusen, perfectly combining the requirements of UEFA with efficiency and sustainability interests.

#### THE CHALLENGE

The Ulrich-Haberland Stadium is the home stadium of Bayer 04 Leverkusen's women's Bundesliga team. In order to meet UEFA's Level-D requirements for hosting European Cup matches, the existing lighting of the stadium was to be modernized with LED technology and the illuminance level increased. Additionally, in the context of the modernization, considerations had to be made regarding the surrounding residential areas and the nearby highway in terms of glare and ambient light levels.

#### **THE SOLUTION**

As a sustainability partner in the field of lighting, LEDVANCE develops and implements a future-proof and customertailored lighting concept for both indoor and outdoor areas for Bayer 04 Leverkusen. In this context, the company also realized a new lighting concept for the Ulrich-Haberland Stadium, where the four existing floodlight towers were equipped with modern arena floodlights. For optimal light distribution and an illuminance level of 800 lux, additional floodlights were installed, including some on a specifically constructed 30-meter-high mast.

#### THE BENEFITS

The existing infrastructure in the stadium, such as the four light towers, was largely integrated into the new lighting concept. However, to meet the UEFA requirements of a minimum average vertical illuminance of >350 lx in all directions, additional lighting positions had to be created. Therefore, another 30-meter-high light tower and additional luminaires were installed on the opposite terrace. In combination with the significantly improved light quality and intensity of the installed arena floodlights, the Level-D guidelines of UEFA are now also met. The reduced glare of the floodlights also minimizes potential lighting disturbance on the adjacent highway and residential area. Furthermore, due to the significantly longer rated lifetime of the luminaires, future maintenance efforts are reduced, resulting in cost and sustainability benefits.

"The strategic partnership with Ledvance sets new standards in lighting quality and sustainability, both in the BayArena and in our properties."

Felix Duden, Geschäftsführer TecArena-Plus GmbH (Bayer 04 Leverkusen)

#### THE SUMMARY

As a sustainability partner, LEDVANCE designed a customized LED-based lighting concept for the Ulrich-Haberland Stadium of Bayer 04 Leverkusen. By installing a new floodlight mast and replacing the existing luminaires with smart arena floodlights, not only is the illuminance and light distribution optimized, but maintenance efforts are also reduced. With the new lighting, the Ulrich-Haberland Stadium also meets the Level-D requirements of UEFA.



Field illumination inclusive new mast

Mast 3 Dach Mast 1 Mast 1 Mast 4 Mast 5 Mast 2

