# LED Lighting for the Industry - High Rise Warehouse





#### Challenge

In the newly built 8m high hall, a wide variety of industrial materials such as large wire containers are stored in the high-bay warehouse area. In the front area, medical technology products are stored on lower shelves. The task was to combine the horizontal and vertical LED lighting of the warehouses with optimum illumination of the shipping area.

## **LED Lighting Concept**

The personal consultation took place on site. 56x robust 120W LED High Bay luminaires with ZigBee control technology were used. ZigBee Control supports the permanent alignment of daylight and artificial light with radio-controlled data and signal transmission. ZigBee® is a registered trademark of the ZigBee® Alliance.

## **BuR Lighting Lighting Design**

BuR Lighting designs with DIALux evo are based on:

### EN 12464-1 Norm

Illumination of Indoor Workplaces

### **ASR A3.4 Workplaces Guideline**

Technical rules for the illumination of workplaces

#### **BuR Lighting Luminaires**

- Article: LED High Bay ZigBee
- Art.-No.: 4111120P09040VZ
- Housing: Aluminum Die-Cast
- LED Driver Input Voltage: 100V-240V
- LEDs: Nichia Chip
- Wattage: 120W
- Beam Angle: 90°
- Protection Rating: IP65
- Intelligent Lighting Control: ZigBee

# **Lighting Quality**

- High quality controllable LED illumination
- Deep-wide-beam illumination of the working plane and the stocking area
- Average illuminance: E<sub>m</sub>=260 Lux
- High uniformity of illuminance: E<sub>min</sub>/E<sub>m</sub>= 0,62
- Pleasant light colour: 4.000 Kelvin
- Very good colour rendering: Ra>80
- High visual comfort

#### **Savings and Benefits**

- Radio controlled LED Luminaires
- Sealed Wide Voltage LED Drivers
- · Lighting Control according to Daylight
- LED Life Span: 50.000 h
- Luminous Efficacy: 130 lm/W
- High Energy- and CO<sub>2</sub>-Savings p.a
- Lowest Maintenance Costs
- Less Installation Work due to the special Cable Length