



### Challenge

The bar storage system was rebuilt and was no longer adequately lit due to the new arrangement of shelves and storage areas. The existing lighting did not take into account the illumination of the vertical storage areas.

### LED Lighting Concept

The personal consultation took place on site. BuR Lighting supplied 36x 40W DALI LED Linear Trunk system luminaires in combination with DALI lighting control technology. The system luminaires were installed in 2 rows of continuous rows. The opal diffuser of the LED modules is strongly glare-free and optimally matched to the narrow beam light distribution. The energy-efficient new lighting resulted in very uniform illumination of the shelving surfaces and stored goods. The luminaire modules are prepared for 3-phase operation. In this building, the luminaires can be individually controlled via DALI for each continuous row.

### 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

### Lichtqualität

- Smooth LED illumination
- Narrow beam illumination of the narrow aisles and shelving areas
- Average illuminance:  $E_m=521$  Lux
- High uniformity of vertical illuminance on the shelving surfaces
- Pleasant light colour: 4.000 Kelvin
- Very good colour rendering:  $Ra>80$
- High visual comfort

### BuR Lighting Luminaires

- Article: LED Linear Trunk System
- Art.-No.: 4811040P12040DN
- Housing: Aluminum - superslim
- LED Driver Input Voltage: 220V-240V
- LEDs: Nichia Chips
- Wattage: 40W
- Beam Angle: 120°
- Installation: Suspension-/Ceiling-Mounting
- Intelligent Lighting Control: DALI

### Savings and Benefits

- LED System Luminaires - superslim
- Electronic LED Drivers
- High-Frequency Control of LEDs
- LED Life Span: 50.000 h
- Luminous Efficacy: 110 lm/W
- High Energy Savings p.a.: 70%
- High CO<sub>2</sub>-Reduction p.a.: 62%
- Reduction of Maintenance Costs p.a.: 75%
- Long-Lasting Operation of the Luminaires