BuR



Challenge

The open-plan bureau was equipped with 4x18W T8 fluorescent lamp recessed luminaires. The general lighting led to high energy costs, frequent replacement of lamps and high maintenance costs. Due to the use of conventional ballasts with low lamp supply frequency, the light was not stable and made the required visual performance difficult.

LED Lighting Concept

The personal advisory took place on site. BuR Lighting 40W LED Panel luminaires were used. These were grouped and assigned to different circuits in the room. This resulted in an uncomplicated and energy-efficient operation of the luminaires. The light colour was set at 4,000 Kelvin. The correct arrangement of the BuR Lighting LED luminaires led to a significant increase in illuminance in the working plane level and to a better illumination.

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: Recessed LED Panel Luminaire
- Art.-No.: 3214040P18040NN
- Frame: Aluminum
- Height: 10mm ultraflat
- LED Driver Input Voltage: 100V-240V
- LEDs: Samsung 5630SMD
- Wattage: 40W
- Beam Angle: 180°
- Protection Rating: IP40

BuR Lighting Bünte & Remmler GmbH & Co. KG Heedfelder Str. 61-63 58509 Lüdenscheid Germany Fon: +49 2351 96 36 65 Fax: +49 2351 96 92 48 Mobil: +49 152 23897612 Email: m.hoffmeister@bur.lighting Web: www.bur.lighting Lighting Quality

- Smooth LED illumination
- Wide-beam illumination of the working plane
- Average illuminance: E_m=744 Lux
 - High uniformity of illuminance: E_{min}/E_m= 0,42
- Pleasant light colour: 4.000 Kelvin
- Very good colour rendering: Ra>80
- High visual comfort

Savings and Benefits

- LED Panels with higher protection rating
- Electronic LED Driver
- High-Frequency Control of LEDs
- LED Life Span: 50.000 h
- Luminous Efficacy: 100 Im/W
- Energy Savings p.a.: 5.508 kWh
- CO₂-Reduction p.a.: 2.947 kg
- Reduction of Maintenance Costs p.a.: 83%
- Return on Investment: 2,8 Years

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