

# PRODUCT DATASHEET DULUX LED L24 HF & AC MAINS 12W 830 2G11

OSRAM DULUX LED L HF & AC MAINS | LED replacement for CFLni with 4-pin 2G11 base for ECG



#### Areas of application

- General illumination within ambient temperatures from -20...+45  $^{\circ}\text{C}$
- Offices, public buildings
- Shops
- Hotels, restaurants
- Industry

#### Product benefits

- Easy installation
- Low energy consumption
- Not suitable for operation with conventional control gear
- Easy relamping thanks to compact design
- Operation directly on 230 V AC mains possible

#### **Product features**

- LED replacement for conventional compact fluorescent lamps for use in ECG luminaires or on AC mains
- Lifetime up to 30,000 h
- Single-ended four-pin plug-in 2G11 base
- Type of protection: IP20
- Mercury-free lamps





## TECHNICAL DATA

## Electrical data

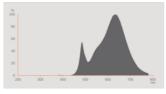
| Nominal wattage                        | 12 W                   |
|--|------------------------|
| Construction wattage                   | 12.00 W                |
| Nominal voltage                        | 220240 V               |
| Operating mode                         | ECG, AC Mains 1)       |
| Claimed equiv. conventional lamp power | 24 W                   |
| Nominal current                        | 52 mA                  |
| Type of current                        | AC                     |
| Inrush current                         | 6 A                    |
| Suitable for DC input                  | Yes                    |
| Input voltage DC                       | 186260 V <sup>2)</sup> |
| Operating frequency                    | 50/60 Hz               |
| Mains frequency                        | 50/60 Hz               |
| Max. lamp number on MCB B10 A          | 170                    |
| Max. lamp number on MCB B16 A          | 270                    |
| Total harmonic distortion              | ≤ 30 %                 |
| Power factor λ                         | > 0.90                 |

<sup>1)</sup> Check ECG compatibility at ledvance.com/compatibility

## Photometrical data

| Luminous flux                           | 1350 lm    |
|---|------------|
| Nominal useful luminous flux 90°        | 1350 lm    |
| Luminous efficacy                       | 112 lm/W   |
| Lumen main.fact.at end of nom.life time | 0.70       |
| Light color (designation)               | Warm White |
| Color temperature                       | 3000 K     |
| Color rendering index Ra                | 80         |
| Light color                             | 830        |
| Standard deviation of color matching    | ≤6 sdcm    |
| Flickering metric (Pst LM)              | 1.0        |
| Stroboscope effect metric (SVM)         | 0.4        |

<sup>2)</sup> Permitted voltage range



EPREL data spectral diagram PROF LEDr 3000K

# Light technical data

| Beam angle          | 140 °    |
|---------------------|----------|
| Warm-up time (60 %) | < 0.50 s |
| Starting time       | < 0.5 s  |

## Dimensions & Weight



| Overall length   | 324.50 mm |
|------------------|-----------|
| Diameter         | 44.00 mm  |
| Tube diameter    | 17,0 mm   |
| Maximum diameter | 44 mm     |
| Product weight   | 104.00 g  |

# Temperatures & operating conditions

| Ambient temperature range            | -20+45 °C <sup>1)</sup> |
|--------------------------------------|-------------------------|
| Maximum temperature at tc test point | 70 °C                   |

<sup>1)</sup> Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

## Lifespan

| Lifespan L70/B50 at 25 °C                    | 30000 h |
|--|---------|
| Number of switching cycles                   | 200000  |
| Lumen maintenance at end of service lifetime | 0.70    |
| Rated lamp survival factor at 6,000 h        | ≥ 0.90  |

# Additional product data

| Base (standard designation) | 2G11    |
|-----------------------------|---------|
| Mercury content             | 0.0 mg  |
| Mercury-free                | Yes     |
| Design / version            | Frosted |

# Capabilities

| Dimmable | No |
|----------|----|
|          |    |

## Certificates & Standards

| Energy efficiency class                      | E 1)            |
|--|-----------------|
| Energy consumption                           | 12.00 kWh/1000h |
| Type of protection                           | IP20            |
| Standards                                    | CE / EAC / UKCA |
| Photobiological safety group acc. to EN62778 | RG0             |

<sup>1)</sup> Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowest efficiency)

## Country-specific categorizations

| Order reference | DULUX LED L24 H |
|-----------------|-----------------|
|                 |                 |

## LOGISTICAL DATA

| Temperature range at storage | -20+80 °C |
|------------------------------|-----------|
|------------------------------|-----------|

# Energy labelling regulation data acc EU 2019/2015

| Lighting technology used                            | LED          |
|---|--------------|
| Non-directional or directional                      | NDLS         |
| Mains or non-mains                                  | MLS          |
| Light source cap-type (or other electric interface) | 2G11         |
| Connected light source (CLS)                        | No           |
| Color-tuneable light source                         | No           |
| Envelope  | No           |
| High luminance light source                         | No           |
| Anti-glare shield                                   | No           |
| Correlated colour temperature type                  | SINGLE_VALUE |
| Standby power                                       | 0 W          |
| Claim of equivalent power                           | No           |
| Length  | 324.50 mm    |
| Height  | 44.00 mm     |

| Width  | 44.00 mm                |
|--|-------------------------|
| Chromaticity coordinate x                            | 0.433                   |
| Chromaticity coordinate y                            | 0.403                   |
| R9 Colour rendering index                            | 1                       |
| Beam angle correspondence                            | SPHERE_360              |
| Survival factor                                      | 0.90                    |
| Displacement factor                                  | 0.90                    |
| LED light source replaces a fluorescent light source | No                      |
| EPREL ID   | 604662,1412851,2206842  |
| Model number   | AC35196,AC47842,AC71209 |

## Safety advice

- Always check the latest update of the compatibility list available on www.ledvance.com/ecg-compatibility.
- Not suitable for operation with conventional control gear.
- The operating temperature range of DULUX LED is restricted. In case of doubt regarding suitability of the application please measure Tc temperature on the product prior to installation.
- All electrical connections must be made by a qualified person.
- Not suitable for emergency lighting.
- Do not touch the lamp if broken.
- Must not be used if outer bulb is defective.

## DOWNLOAD DATA

|     | Documents and certificates             | Document name  |
|-----|--|--|
| POF | User instruction / safety instructions | DULUX LED L HF   |
| POF | Extended installation guide            | Installation instructions LED TUBE T8, T5 und DULUX LED 2024 10 EN |
| POF | Legal information                      | Informationstext 18 Abs 4 ElektroG                                 |
| PDF | Declarations of conformity             | DULUX LED  |
| PDF | Declarations of conformity             | DULUX LED  |
| PDF | Declarations of conformity UKCA        | DULUX LED  |
| POF | Declarations of conformity UKCA        | DULUX LED  |

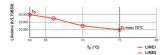
| Photometric and lighting design files | Document name                               |
|---------------------------------------|---|
| IES file (IES)                        | DULUX L24LED 12W830 230VHF2G11              |
| LDT file (Eulumdat)                   | DULUX L24LED 12W830 230VHF2G11              |
| Light distribution curve type polar   | DULUX L24LED 12W830 230VHF2G11              |
| Spectral power distribution           | EPREL data spectral diagram PROF LEDr 3000K |

## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume               |
|---------------|------------------------------|--------------------------------------|--------------|----------------------|
| 4058075559219 | Folding box<br>1             | 27 mm x 49 mm x 408 mm               | 131.00 g     | 0.54 dm <sup>3</sup> |
| 4058075559226 | Shipping box<br>10           | 420 mm x 288 mm x 62 mm              | 1840.00 g    | 7.50 dm <sup>3</sup> |

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

## ADDITIONAL CATALOG INFORMATION



## **DISCLAIMER**

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.