

# PRODUCT DATASHEET DULUX LED D13 EM & AC MAINS V 6W 830 G24D-1

DULUX LED D EM & AC MAINS V | LED replacement for CFLni with 2-pin G24d base for CCG and AC mains operation



#### Areas of application

- General illumination within ambient temperatures from -20...+45  $^{\circ}\text{C}$
- Supermarkets and department stores
- Walkways and corridors
- Hotels, restaurants

#### Product benefits

- Easy installation
- Low energy consumption
- 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 CCG luminaires or on AC mains
- Lifetime up to 30,000 h
- Rotatable base around its longitudinal axis (± 90°)
- Single-ended two-pin plug-in G24d base
- Type of protection: IP20
- Mercury-free lamps





# TECHNICAL DATA

# Electrical data

Nominal wattage	6 W
Construction wattage	6.00 W
Nominal voltage	220240 V
Operating mode	CCG, AC Mains
Claimed equiv. conventional lamp power	13 W
Nominal current	29 mA
Type of current	AC
Inrush current	14.4 A
Suitable for DC input	Yes
Input voltage DC	186260 V <sup>1)</sup>
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	41
Max. lamp number on MCB B10 A - CCG without compensation	138
Max. lamp number on MCB B10 A - CCG with compensation	10
Max. lamp number on MCB B16 A	52
Max. lamp number on MCB B16 A - CCG without compensation	221
Max. lamp number on MCB B16 A - CCG with compensation	12
Total harmonic distortion	≤ 30 %

<sup>1)</sup> Permitted voltage range

# Photometrical data

Luminous flux	600 lm
Luminous efficacy	100 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
Rated LLMF at 6,000 h	0.90
Flickering metric (Pst LM)	1.0

Stroboscope effect metric (SVM)	0.4
---------------------------------	-----



EPREL data spectral diagram PROF LEDr 3000K

# Light technical data

# Dimensions & Weight



Overall length	138.00 mm
Diameter	35.00 mm
Tube diameter	27,0 mm
Product weight	50.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+45 °C <sup>1)</sup>
Maximum temperature at tc test point	73 °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
Lumen maintenance at end of service lifetime	0.70

# Additional product data

Base (standard designation) G24d-1
------------------------------------

Mercury-free	Yes
Design / version	Frosted

# Capabilities

#### Certificates & Standards

Energy efficiency class	F 1)
Energy consumption	6.00 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 D13 E

#### LOGISTICAL DATA

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

# Energy labelling regulation data acc EU 2019/2015

Non-directional or directionalNDLSMains or non-mainsMLSLight source cap-type (or other electric interface)G24d-1Connected light source (CLS)NoColor-tuneable light sourceNoEnvelopeNoHigh luminance light sourceNoAnti-glare shieldNoCorrelated colour temperature typeSINGLE_VALUEClaim of equivalent powerNoLength138.00 mmHeight35.00 mmWridth35.00 mmChromaticity coordinate x0.433Chromaticity coordinate y0.403	Lighting technology used	LED
Light source cap-type (or other electric interface)  Connected light source (CLS)  No  Color-tuneable light source  No  Envelope  No  High luminance light source  No  Anti-glare shield  Correlated colour temperature type  SINGLE_VALUE  Claim of equivalent power  Length  Height  35.00 mm  Width  Chromaticity coordinate x  O433	Non-directional or directional	NDLS
Connected light source (CLS)  Color-tuneable light source  No  Envelope  No  High luminance light source  No  Anti-glare shield  No  Correlated colour temperature type  SINGLE_VALUE  Claim of equivalent power  No  Length  138.00 mm  Height  Width  35.00 mm  Chromaticity coordinate x	Mains or non-mains	MLS
Color-tuneable light source  Envelope  No  High luminance light source  No  Anti-glare shield  No  Correlated colour temperature type  Claim of equivalent power  Length  Height  35.00 mm  Width  Chromaticity coordinate x	Light source cap-type (or other electric interface)	G24d-1
Envelope No High luminance light source No Anti-glare shield No Correlated colour temperature type SINGLE_VALUE Claim of equivalent power No Length 138.00 mm Height 35.00 mm Width 35.00 mm Chromaticity coordinate x 0.433	Connected light source (CLS)	No
High luminance light source  Anti-glare shield  No  Correlated colour temperature type  SINGLE_VALUE  Claim of equivalent power  No  Length  138.00 mm  Height  35.00 mm  Width  35.00 mm  Chromaticity coordinate x  0.433	Color-tuneable light source	No
Anti-glare shield No  Correlated colour temperature type SINGLE_VALUE  Claim of equivalent power No  Length 138.00 mm  Height 35.00 mm  Width 35.00 mm  Chromaticity coordinate x 0.433	Envelope	No
Correlated colour temperature type  Claim of equivalent power  No  Length  138.00 mm  Height  35.00 mm  Width  35.00 mm  Chromaticity coordinate x  0.433	High luminance light source	No
Claim of equivalent power No  Length 138.00 mm  Height 35.00 mm  Width 35.00 mm  Chromaticity coordinate x 0.433	Anti-glare shield	No
Length       138.00 mm         Height       35.00 mm         Width       35.00 mm         Chromaticity coordinate x       0.433	Correlated colour temperature type	SINGLE_VALUE
Height 35.00 mm  Width 35.00 mm  Chromaticity coordinate x 0.433	Claim of equivalent power	No
Width 35.00 mm Chromaticity coordinate x 0.433	Length	138.00 mm
Chromaticity coordinate x 0.433	Height	35.00 mm
	Width	35.00 mm
Chromaticity coordinate y 0.403	Chromaticity coordinate x	0.433
	Chromaticity coordinate y	0.403

0.00
SPHERE_360
0.90
0.90
No
1404746,2206806,2324420
AC46414,AC71062,AC81482

#### Safety advice

- Not suitable for tandem operation.
- 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.
- Do not touch the lamp with bare fingers.
- Must not be used if outer bulb is defective.
- Lamp not suitable for emergency operation.

#### **DOWNLOAD DATA**

	Documents and certificates	Document name	
PDF	User instruction / safety instructions	DULUX LED EM VALUE	
PDF	Legal information	Informationstext 18 Abs 4 ElektroG	
PDF	Declarations of conformity	DULUX LED	
PDF	Declarations of conformity	LEDTUBE	
PDF	Declarations of conformity UKCA	DULUX LED	
PDF	Declarations of conformity UKCA	LEDTUBE	
	Photometric and lighting design files	Document name	
	IES file (IES)	DULUX LED D13 EM V 6W 830 G24D-1 LEDV	
	LDT file (Eulumdat)	DULUX LED D13 EM V 6W 830 G24D-1 LEDV	

Photometric and lighting design files	Document name
UGR file (UGR table)	DULUX LED D13 EM V 6W 830 G24D-1 LEDV
Light distribution curve type cone	DULUX LED D13 EM V 6W 830 G24D-1 LEDV
Light distribution curve type polar	DULUX LED D13 EM V 6W 830 G24D-1 LEDV
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
4058075823099	Folding box 1	37 mm x 37 mm x 151 mm	63.00 g	0.21 dm <sup>3</sup>
4058075823105	Shipping box 10	193 mm x 82 mm x 165 mm	729.00 g	2.61 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.

#### **DISCLAIMER**

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