

PRODUCT DATASHEET

DULUX LED D18 EM & AC MAINS 7W 840 G24D-2

OSRAM DULUX LED D EM & AC MAINS | LED replacement for CFLni with 2-pin G24d base for CCG



Areas of application

- 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
- Rotatable base around its longitudinal axis ($\pm 90^\circ$)
- Lifetime up to 30,000 h
- Single-ended two-pin plug-in G24d base
- Type of protection: IP20
- Mercury-free lamps



TECHNICAL DATA

Electrical data

Nominal wattage	7 W
Construction wattage	7.00 W
Nominal voltage	220...240 V
Operating mode	Conventional control gear (CCG), AC
Claimed equiv. conventional lamp power	18 W
Nominal current	32 mA
Type of current	AC
Inrush current	14.4 A
Suitable for DC input	Yes
Input voltage DC	186...260 V ¹⁾
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	125
Max. lamp number on MCB B10 A - CCG with compensation	9
Max. lamp number on MCB B16 A	51
Max. lamp number on MCB B16 A - CCG without compensation	176
Max. lamp number on MCB B16 A - CCG with compensation	11
Total harmonic distortion	≤ 30 %
Power factor λ	> 0.90

¹⁾ Permitted voltage range

Photometrical data

Luminous flux	770 lm
Nominal useful luminous flux 90°	870 lm
Luminous efficacy	110 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Color rendering index Ra	80
Light color	840
Standard deviation of color matching	≤6 sdcn
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 4000K

Light technical data

Beam angle	120 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

Dimensions & Weight



Overall length	148.00 mm
Diameter	35.00 mm
Tube diameter	27,0 mm
Maximum diameter	38 mm
Product weight	52.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+45 °C ¹⁾
Maximum temperature at tc test point	73 °C

1) Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

Lifespan

Lifespan L70/B50 at 25 °C	30000 h
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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)	G24d-2
Mercury content	0.0 mg
Mercury-free	Yes
Design / version	Frosted

Capabilities

Dimmable	No
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Certificates & Standards

Energy efficiency class	E ¹⁾
Energy consumption	7.00 kWh/1000h
Type of protection	IP20
Standards	CE / EAC / UKCA
Photobiological safety group acc. to EN62778	RG0

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

Country-specific categorizations

Order reference	DULUX LED D18 E
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LOGISTICAL DATA

Temperature range at storage	-20...+80 °C
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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)	G24d-2
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	148.00 mm
Height	35.00 mm
Width	35.00 mm
Chromaticity coordinate x	0.381
Chromaticity coordinate y	0.379
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	604647,1412862,2206792,2324414
Model number	AC35181,AC47819,AC71077,AC81497

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 T_c 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
	User instruction / safety instructions	DULUX LED D EM
	Extended installation guide	Installation instructions LED TUBE T8, T5 und DULUX LED 2024 10 EN
	Legal information	Informationstext 18 Abs 4 ElektroG
	Declarations of conformity	DULUX LED
	Declarations of conformity	LEDTUBE

Documents and certificates		Document name
	Declarations of conformity UKCA	DULUX LED
	Declarations of conformity UKCA	LEDTUBE
Photometric and lighting design files		Document name
	IES file (IES)	DULUX D18LED 7W840230VEMG24D-2
	IES file (IES)	DULUX LED D18 EM 7W 840 G24D-2 OSRAM
	LDT file (Eulumdat)	DULUX D18LED 7W840230VEMG24D-2
	LDT file (Eulumdat)	DULUX LED D18 EM 7W 840 G24D-2 OSRAM
	UGR file (UGR table)	DULUX LED D18 EM 7W 840 G24D-2 OSRAM
	Light distribution curve type cone	DULUX LED D18 EM 7W 840 G24D-2 OSRAM
	Light distribution curve type polar	DULUX D18LED 7W840230VEMG24D-2
	Light distribution curve type polar	DULUX LED D18 EM 7W 840 G24D-2 OSRAM
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 4000K

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075558502	Folding box 1	37 mm x 49 mm x 151 mm	65.00 g	0.27 dm ³
4058075558519	Shipping box 10	203 mm x 110 mm x 165 mm	749.00 g	3.68 dm ³

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.