PRODUCT DATASHEET
DULUX LED SQ16 EM & AC MAINS 7W 835 GR8

OSRAM DULUX LED SQ EM & AC MAINS | LED replacement for CFLni with 2-pin GR8 base for CCG

Areas of application

- General illumination within ambient temperatures from -20…+45 °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
- Single-ended two-pin plug-in GR8 base
- Type of protection: IP20
- Mercury-free lamps

TECHNICAL DATA

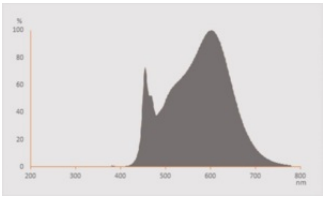
Electrical data

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	16 W
Nominal current	30 mA
Type of current	AC
Inrush current	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	112
Max. lamp number on MCB B16 A	180
Total harmonic distortion	≤ 30 %
Power factor λ	> 0.90

1) Permitted voltage range

Photometrical data

Luminous flux	720 lm
Nominal useful luminous flux 90°	720 lm
Luminous efficacy	102 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Warm White
Color temperature	3500 K
Color rendering index Ra	80
Light color	835
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



LISO spectral power distribution
3500K CRI80 v1

Light technical data

Beam angle	130 °
Warm-up time (60 %)	‹ 0.50 s
Starting time	< 0.5 s

Dimensions & Weight

Overall length	137.10 mm
Diameter	134.00 mm
Tube diameter	13 mm
Maximum diameter	13 mm
Product weight	71.00 g

Temperatures & operating conditions

Ambient temperature range	-20…+45 °C [1)]
Maximum temperature at tc test point	70 °C

1) 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)	GR8
Mercury content	0.0 mg
Mercury-free	Yes
Design / version	Frosted

Capabilities

Dimmable	No

Certificates & Standards

Energy efficiency class	F [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 SQ16

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)	GR8
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	137.10 mm

Height	134.00 mm
Width	134.00 mm
Chromaticity coordinate x	0.407
Chromaticity coordinate y	0.392
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	1404785,1412856,2059900
Model number	AC46463,AC47851,AC64993,AC64993

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.
- 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
PDF	User instruction / safety instructions	DULUX LED SQ16 EM
PDF	Extended installation guide	Installation instructions LED TUBE T8, T5 und DULUX LED 2024 10 EN
PDF	Legal information	Informationstext 18 Abs 4 ElektroG
PDF	Declarations of conformity	DULUX LED
PDF	Declarations of conformity UKCA	DULUX LED

	Photometric and lighting design files	Document name
IES	IES file (IES)	DULUX LED SQ16 EM 7W 835 GR8 OSRAM

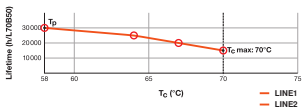
	Photometric and lighting design files	Document name
	LDT file (Eulumdat)	DULUX LED SQ16 EM 7W 835 GR8 OSRAM
	UGR file (UGR table)	DULUX LED SQ16 EM 7W 835 GR8 OSRAM
	Light distribution curve type cone	DULUX LED SQ16 EM 7W 835 GR8 OSRAM
	Light distribution curve type polar	DULUX LED SQ16 EM 7W 835 GR8 OSRAM
	Spectral power distribution	LISO spectral power distribution 3500K CRI80 v1

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075822917	Folding box 1	41 mm x 151 mm x 152 mm	99.00 g	0.94 dm^3
4058075822924	Shipping box 10	426 mm x 161 mm x 164 mm	1205.00 g	11.25 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.

ADDITIONAL CATALOG INFORMATION



DISCLAIMER

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