

# PRODUCT DATASHEET DULUX LED S9 EM & AC MAINS 4W 840 G23

OSRAM DULUX LED S EM & AC MAINS | LED replacement for short CFLni with 2-pin G23 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
- Lifetime up to 30,000 h
- Single-ended two-pin plug-in G23 base
- Type of protection: IP20
- Mercury-free lamps



## TECHNICAL DATA

## Electrical data

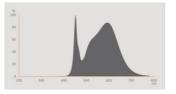
Nominal wattage	4 W
Construction wattage	4.00 W
Nominal voltage	220240 V
Operating mode	CCG, AC Mains
Claimed equiv. conventional lamp power	9 W
Nominal current	18 mA
Type of current	AC
Inrush current	4 A
Suitable for DC input	Yes
Input voltage DC	186260 V <sup>1)</sup>
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	21
Max. lamp number on MCB B10 A - CCG without compensation	14
Max. lamp number on MCB B10 A - CCG with compensation	18
Max. lamp number on MCB B16 A	27
Max. lamp number on MCB B16 A - CCG without compensation	23
Max. lamp number on MCB B16 A - CCG with compensation	29
Total harmonic distortion	≤ 30 %
Power factor $\lambda$	> 0.90

1) Permitted voltage range

# Photometrical data

Luminous flux	550 lm
Nominal useful luminous flux 90°	500 lm
Luminous efficacy	137 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 sdcm
Flickering metric (Pst LM)	1.0

#### Stroboscope effect metric (SVM)



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	165.00 mm
Diameter	32.30 mm
Tube diameter	26,0 mm
Maximum diameter	33 mm
Product weight	41.00 g

## Temperatures & operating conditions

Ambient temperature range	-20+45 °C <sup>1)</sup>
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
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)	G23
Mercury content	0.0 mg
Mercury-free	Yes
Design / version	Frosted

## Capabilities

Dimmable	No
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# Certificates & Standards

Energy efficiency class	D <sup>1)</sup>
Energy consumption	5.00 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 S9 EM

# LOGISTICAL DATA

## 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)	G23
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

Claim of equivalent power	No
Length	165.00 mm
Height	32.30 mm
Width	32.30 mm
Chromaticity coordinate x	0.381
Chromaticity coordinate y	0.379
R9 Colour rendering index	0.00
Beam angle correspondence	SPHERE_360
Survival factor	0.90
Displacement factor	0.90
LED light source replaces a fluorescent light source	No
EPREL ID	604657,1412870,2206845
Model number	AC35191,AC47837,AC71139

## Safety advice

- 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	
POF	Legal information	Informationstext 18 Abs 4 ElektroG	
POF	Declarations of conformity	DULUX LED	
POF	Declarations of conformity UKCA	DULUX LED	
POF	Declarations of conformity UKCA	DULUX LED	
	Photometric and lighting design files	Document name	
	IES file (IES)	DULUX S9LED 4,5W840 230V EMG23	

	Photometric and lighting design files	Document name	
	LDT file (Eulumdat)	DULUX S9LED 4,5W840 230V EMG23	
1	UGR file (UGR table)	DULUX LED S9 EM 4W 840 G23 OSRAM	
	Light distribution curve type cone	DULUX LED S9 EM 4W 840 G23 OSRAM	
	Light distribution curve type polar	DULUX S9LED 4,5W840 230V EMG23	
1	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
4058075558045	Folding box 1	27 mm x 49 mm x 105 mm	53.00 g	0.14 dm <sup>3</sup>
4058075558052	Shipping box 10	138 mm x 110 mm x 219 mm	700.00 g	3.32 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.