

# PRODUCT DATASHEET LED AR111 50 40° DIM S 7.4W 927 G53

LED AR111 DIM S | Low-voltage LED reflector lamps AR111 with retrofit pin base



#### Areas of application

- Shops and exhibition rooms
- Domestic applications
- Commercial applications
- Accent lighting
- Outdoor use in suitable outdoor luminaires only

#### **Product benefits**

- Quick, simple and safe replacement without rewiring
- Design, dimensions, luminous flux comparable to an incandescent or halogen lamp
- Low maintenance costs thanks to long lifetime
- No UV and near-IR radiation in the light beam
- Stepless dimming
- Very high dimmer compatibility, see also www.ledvance.com/dim
- Compatible with many common conventional and electronic control gears (see also compatibility list)
- Instant 100 % light, no warm-up time
- Lower energy consumption than incandescent or halogen lamps

#### Product features

- LED alternative to low voltage halogen lamps
- High color consistency:  $\leq$  4 SDCM
- Dimmable
- Base: G53





- Excellent color rendering (Ra: 97)
- Lifetime up to 40,000 h

## TECHNICAL DATA

# Electrical data

| Nominal wattage                        | 7.4 W                  |
|--|------------------------|
| Construction wattage                   | 7.40 W                 |
| Nominal voltage                        | 12 V                   |
| Operating mode                         | ECG, CCG <sup>1)</sup> |
| Claimed equiv. conventional lamp power | 50 W                   |
| Nominal current                        | 650 mA                 |
| Type of current                        | AC/DC                  |
| Inrush current                         | 20 A                   |
| Operating frequency                    | 50/60 Hz               |
| Mains frequency                        | 50/60 Hz               |
| Max. lamp number on MCB B10 A          | 30                     |
| Max. lamp number on MCB B16 A          | 37                     |
| Total harmonic distortion              | < 50 %                 |
| Power factor $\lambda$                 | 0.50                   |

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

## Photometrical data

| Luminous intensity                      | 1000 cd    |
|---|------------|
| Luminous flux                           | 450 lm     |
| Nominal useful luminous flux 90°        | 450 lm     |
| Luminous efficacy                       | 60 lm/W    |
| Lumen main.fact.at end of nom.life time | 0.70       |
| Light color (designation)               | Warm White |
| Color temperature                       | 2700 K     |
| Color rendering index Ra                | 97         |
| Light color                             | 927        |
| Standard deviation of color matching    | ≤4 sdcm    |
| Rated peak intensity                    | 1000 cd    |
| Rated LLMF at 6,000 h                   | 0.80       |
| Flickering metric (Pst LM)              | 1,0        |
| Stroboscope effect metric (SVM)         | 0,4        |



Everlight 67-23ST RKE 2700K

# Light technical data

| Beam angle          | 40 °     |
|---------------------|----------|
| Warm-up time (60 %) | < 0.50 s |
| Starting time       | < 0.5 s  |

# Dimensions & Weight

| Overall length   | 55.00 mm  |
|------------------|-----------|
| Diameter         | 110.70 mm |
| Maximum diameter | 111 mm    |
| Product weight   | 102.00 g  |

# Temperatures & operating conditions

| Ambient temperature range            | -20+40 °C |
|--------------------------------------|-----------|
| Maximum temperature at tc test point | 69.7 °C   |

# Lifespan

| Lifespan L70/B50 at 25 °C                    | 40000 h |
|--|---------|
| Number of switching cycles                   | 100000  |
| 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) | G53    |
|-----------------------------|--------|
| Mercury content             | 0.0 mg |
| Mercury-free                | Yes    |

| All technical parameters apply to the entire lamp / Due to the complex production process for light-emitting diodes, the typical values shown for the technical LED parameters are purely statistical values that do not necessarily match the actual technical parameters of each individual product, which can vary from the typical value |
|--|
|--|

## Capabilities

| Dimmable | Yes 1) |
|----------|--------|
|          |        |

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

## Certificates & Standards

| Energy efficiency class                      | G <sup>1)</sup> |
|--|-----------------|
| Energy consumption                           | 8.00 kWh/1000h  |
| Type of protection                           | IP20            |
| Standards                                    | CE / UKCA / EAC |
| Photobiological safety group acc. to EN62778 | RG1             |

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

# Country-specific categorizations

| Order reference | LED AR1115040 D |
|-----------------|-----------------|
|                 |                 |

## 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                      | DLS          |
| Mains or non-mains                                  | NMLS         |
| Light source cap-type (or other electric interface) | G53          |
| 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          |
| Networked standby power for CLS                     | 0 W          |
| Claim of equivalent power                           | Yes          |
|   |              |

March 24, 2025, 19:45:44 LED AR111 50 40° DIM S 7.4W 927 G53

| Length   | 55.00 mm        |
|--|-----------------|
| Height   | 110.70 mm       |
| Width  | 110.70 mm       |
| Chromaticity coordinate x                            | 0,458           |
| Chromaticity coordinate y                            | 0,410           |
| R9 Colour rendering index                            | 1               |
| Beam angle correspondence                            | NARROW_CONE_90  |
| Survival factor                                      | 0.9             |
| Displacement factor                                  | /               |
| LED light source replaces a fluorescent light source | No              |
| EPREL ID   | 1368296         |
| Model number   | AC45648,AC45648 |

## Safety advice

- Do not touch the lamp if broken.
- Must not be used if outer bulb is defective.

#### DOWNLOAD DATA

|     | Documents and certificates | Document name |
|-----|----------------------------|---------------|
| PDF | Declarations of conformity | AR111 M1 G53  |
|     |                            |               |

| Photometric and lighting design files | Document name                 |
|---------------------------------------|-------------------------------|
| IES file (IES)                        | LPAR111 5040 7.3W 927 12V G53 |
| LDT file (Eulumdat)                   | LPAR111 5040 7.3W 927 12V G53 |
| Light distribution curve type polar   | LPAR111 5040 7.3W 927 12V G53 |
| Spectral power distribution           | Everlight 67-23ST RKE 2700K   |

#### LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume               |
|---------------|------------------------------|--------------------------------------|--------------|----------------------|
| 4099854048708 | Folding box<br>1             | 113 mm x 66 mm x 113 mm              | 133.00 g     | 0.84 dm <sup>3</sup> |

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume               |
|---------------|------------------------------|--------------------------------------|--------------|----------------------|
| 4099854048715 | Shipping box                 | 238 mm x 208 mm x 123 mm             | 926.00 g     | 6.09 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.

#### References / Links

- For dimming conformity see www.ledvance.com/dim
- For further products and actual information concerning LED lamps see www.ledvance.com/ledlamps
- Further information see www.ledvance.com/low-voltage-ledlamps

#### **DISCLAIMER**

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