

## PRODUCT DATASHEET

### LED Line 118 177 300° 20W 830 Clear R7s

LED LINE R7S | LED lamps with retrofit base R7s



#### Areas of application

- General illumination within ambient temperatures from -20...+40 °C
- Outdoor use in suitable outdoor luminaires only

#### Product benefits

- Fits into most R7s luminaires thanks to excentric base
- Good all-around light emission
- Lower thermal output (compared with the standard reference product)
- Long lifetime of up to 15,000 h
- Three year guarantee
- Lower energy consumption than incandescent or halogen lamps

#### Product features

- LED alternative to conventional R7s lamps
- Good quality of light; color rendering index  $R_a \geq 80$ ; constant chromaticity



TECHNICAL DATA

Electrical data

|  |             |
|--|-------------|
| Nominal wattage                        | 20 W        |
| Construction wattage                   | 20.00 W     |
| Nominal voltage                        | 220...240 V |
| Operating mode                         | AC Mains    |
| Claimed equiv. conventional lamp power | 177 W       |
| Nominal current                        | 148 mA      |
| Type of current                        | AC          |
| Inrush current                         | 8.2 A       |
| Operating frequency                    | 50/60 Hz    |
| Mains frequency                        | 50/60 Hz    |
| Max. lamp number on MCB B10 A          | 54          |
| Max. lamp number on MCB B16 A          | 74          |
| Total harmonic distortion              | 114.8 %     |
| Power factor $\lambda$                 | > 0.50      |

Photometrical data

|   |                     |
|---|---------------------|
| Luminous flux                           | 3000 lm             |
| Luminous efficacy                       | 150 lm/W            |
| Lumen main.fact.at end of nom.life time | 0.93                |
| Light color (designation)               | Warm White          |
| Color temperature                       | 3000 K              |
| Color rendering index Ra                | 80                  |
| Light color                             | 830                 |
| Standard deviation of color matching    | ≤6 sdc <sub>m</sub> |
| Flickering metric (Pst LM)              | 1.0                 |
| Stroboscope effect metric (SVM)         | 0.4                 |



EPREL data spectral diagram PROF  
LEDr 3000K

Light technical data

|                     |          |
|---------------------|----------|
| Beam angle          | 300 °    |
| Warm-up time (60 %) | < 0.50 s |
| Starting time       | < 0.5 s  |

Dimensions & Weight



|                  |           |
|------------------|-----------|
| Overall length   | 118.00 mm |
| Diameter         | 28.00 mm  |
| Maximum diameter | 28 mm     |
| Product weight   | 95.00 g   |

Temperatures & operating conditions

|                                      |              |
|--------------------------------------|--------------|
| Ambient temperature range            | -20...+40 °C |
| Maximum temperature at tc test point | 88.8 °C      |

Lifespan

|  |         |
|--|---------|
| Lifespan L70/B50 at 25 °C                    | 15000 h |
| Number of switching cycles                   | 100000  |
| Lumen maintenance at end of service lifetime | 0.93    |

Additional product data

|                             |  |
|-----------------------------|--|
| Base (standard designation) | R7s  |
| Mercury content             | 0.0 mg   |
| Mercury-free                | Yes  |
| Design / version            | Clear  |
| Product remark              | 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 | No |
|----------|----|

### Certificates & Standards

|  |                 |
|--|-----------------|
| Energy efficiency class                      | D <sup>1)</sup> |
| Energy consumption                           | 20.00 kWh/1000h |
| Type of protection                           | IP20            |
| Standards                                    | CE / EAC / UKCA |
| 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 | LEDLI118177 20W |
|-----------------|-----------------|

### 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) | R7s          |
| 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                           | Yes          |
| Length  | 118.00 mm    |
| Height  | 28.00 mm     |
| Width   | 28.00 mm     |
| Chromaticity coordinate x                           | 0.4339       |
| Chromaticity coordinate y                           | 0.4033       |
| R9 Colour rendering index                           | 1            |
| Beam angle correspondence                           | SPHERE_360   |
| Survival factor                                     | 0.9          |

|  |                         |
|--|-------------------------|
| Displacement factor                                  | 0.70                    |
| LED light source replaces a fluorescent light source | No                      |
| EPREL ID   | 1856536,2201949,2506954 |
| Model number   | AC58977,AC71612,AC92028 |

### Safety advice

- Do not touch the lamp if broken.
- Must not be used if outer bulb is defective.
- To ensure full light efficiency and product lifetime, it is recommended to detach any glass or cover of the luminaire.

### DOWNLOAD DATA

| Documents and certificates  |                                 | Document name                               |
|---|---------------------------------|---|
|     | Declarations of conformity      | LED LINE 118 R7S                            |
|     | Declarations of conformity      | LED special lamps                           |
|   | Declarations of conformity UKCA | LED LINE 118 R7S                            |
|   | Declarations of conformity UKCA | LED special lamps                           |
| Photometric and lighting design files   |                                 | Document name                               |
|  | 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               |
|---------------|------------------------------|--------------------------------------|--------------|----------------------|
| 4099854248153 | Folding box<br>1             | 30 mm x 49 mm x 155 mm               | 110.00 g     | 0.23 dm <sup>3</sup> |
| 4099854248160 | Shipping box<br>6            | 112 mm x 111 mm x 131 mm             | 720.00 g     | 1.63 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 Guarantee see [www.osram-lamps.com/guarantee](http://www.osram-lamps.com/guarantee)
  - For further products and actual information concerning LED lamps see [www.osram-lamps.com/led-lamps](http://www.osram-lamps.com/led-lamps)
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