

## PRODUCT DATASHEET

### ST8V-EM 20 W/6500 K 1500 mm

SubstiTUBE T8 EM VALUE | Economic LED tubes for electromagnetic control gears (CCG)



#### Areas of application

- General illumination within ambient temperatures from -20...+45 °C
- Corridors, stairways, parking garages
- Industry
- Warehouses
- Cooling and storage rooms
- Domestic applications
- Supermarkets and department stores

#### Product benefits

- No bending thanks to glass tube
- Energy savings of up to 68 % (compared to T8 fluorescent lamp on CCG)
- Quick, simple and safe replacement without rewiring
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Very high resistance to switching loads
- Also suitable for operation at low temperatures

#### Product features

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires or on AC mains
- Low flicker according to EU 2019-2020 ( $SVM \leq 0.4$  /  $PstLM \leq 1$ )
- Single and tandem operation on conventional control gear (0.6 m version)
- Tube made of glass



- Mercury-free and RoHS compliant
- Uniform illumination
- Type of protection: IP20

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## TECHNICAL DATA

### Electrical data

|                        |         |
|------------------------|---------|
| Nominal wattage        | 20 W    |
| Construction wattage   | 20.00 W |
| Nominal voltage        | 230 V   |
| Nominal current        | 150 mA  |
| Type of current        | AC      |
| Power factor $\lambda$ | > 0.50  |

### Photometrical data

|                                         |                     |
|-----------------------------------------|---------------------|
| Luminous flux                           | 2400 lm             |
| Nominal useful luminous flux 90°        | 2400 lm             |
| Luminous efficacy                       | 120 lm/W            |
| Lumen main.fact.at end of nom.life time | 0.70                |
| Light color (designation)               | Daylight            |
| Color temperature                       | 6500 K              |
| Color rendering index Ra                | ≥80                 |
| Light color                             | 865                 |
| Standard deviation of color matching    | ≤6 sdc <sub>m</sub> |

### Light technical data

|               |         |
|---------------|---------|
| Beam angle    | 160 °   |
| Starting time | < 0.5 s |

### Dimensions & Weight

|                |            |
|----------------|------------|
| Overall length | 1514.20 mm |
| Diameter       | 28.00 mm   |
| Base diameter  | 25,7 mm    |
| Product weight | 230.00 g   |

### Temperatures & operating conditions

|                           |              |
|---------------------------|--------------|
| Ambient temperature range | -20...+50 °C |
|---------------------------|--------------|

### Lifespan

|                            |       |
|----------------------------|-------|
| Number of switching cycles | 50000 |
|----------------------------|-------|

### Additional product data

|                             |        |
|-----------------------------|--------|
| Base (standard designation) | G13    |
| Mercury content             | 0.0 mg |
| Mercury-free                | Yes    |

### Capabilities

|          |    |
|----------|----|
| Dimmable | No |
|----------|----|

### Certificates & Standards

|                    |      |
|--------------------|------|
| Type of protection | IP20 |
| Standards          | CE   |

### Country-specific categorizations

|                 |                 |
|-----------------|-----------------|
| Order reference | ST8V-1.5M 20W/8 |
|-----------------|-----------------|

### LOGISTICAL DATA

|                              |              |
|------------------------------|--------------|
| Temperature range at storage | -20...+80 °C |
|------------------------------|--------------|

### Energy labelling regulation data acc EU 2019/2015

|                                                     |            |
|-----------------------------------------------------|------------|
| Light source cap-type (or other electric interface) | G13        |
| Length                                              | 1514.20 mm |
| Height                                              | 28.00 mm   |
| Width                                               | 28.00 mm   |

### EQUIPMENT / ACCESSORIES

- Suitable for operation with low-loss and conventional control gears

### Safety advice

- Not suitable for operation with electronic control gear.
- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.

### DOWNLOAD DATA

| Photometric and lighting design files                                              |                     | Document name             |
|------------------------------------------------------------------------------------|---------------------|---------------------------|
|  | IES file (IES)      | ST8V 1.5M 20W 865 230V EM |
|  | LDT file (Eulumdat) | ST8V 1.5M 20W 865 230V EM |

| Photometric and lighting design files                                                                                | Document name             |
|----------------------------------------------------------------------------------------------------------------------|---------------------------|
|  Light distribution curve type polar | ST8V 1.5M 20W 865 230V EM |

## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4058075493902 | Sleeve<br>1                  | 1,570 mm x 28 mm x 28 mm             | 283.00 g     | 1.23 dm <sup>3</sup>  |
| 4058075493919 | Shipping box<br>25           | 1,622 mm x 158 mm x 176 mm           | 8745.00 g    | 45.10 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 current information see [www.ledvance.com/substitute](http://www.ledvance.com/substitute)

## Legal advice

– When used to replace a T8 fluorescent lamp the total energy efficiency and light distribution depends on the design of the lighting system.

## DISCLAIMER

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