

# PRODUCT DATASHEET

## ST9-EM 22 123° 12 W/4000K G10q

SubstiTUBE T9 EM | Circular LED tube for electromagnetic control gear (CCG) and AC mains



### AREAS OF APPLICATION

- General illumination within ambient temperatures from -20...+45 °C
- Corridors, stairways, parking garages
- Domestic applications
- Decorative applications

### PRODUCT BENEFITS

- Quick, simple and safe replacement without rewiring
- Energy savings of up to 50% (compared to T9 fluorescent lamp on CCG)
- Also suitable for operation at low temperatures
- Operation directly on 230 V AC mains possible

### PRODUCT FEATURES

- LED alternative to classic T9 fluorescent lamps in CCG luminaires
- Uniform illumination
- Lifetime: up to 30,000 h
- Mercury-free and RoHS compliant
- Luminous efficacy: up to 100 lm/W



## TECHNICAL DATA

### Electrical data

Rated wattage	12.00 W
Nominal voltage	220...240 V
Operating frequency	50...60 Hz
Nominal wattage	12.00 W
Nominal current	0.06 A
Type of current	AC
Max. lamp no. on circuit break. 10 A (B)	80
Max. lamp no. on circuit break. B10 A - CCG without compensation	80
Max. lamp no. on circuit break. B16 A - CCG without compensation	140
Max. lamp no. on circuit break. 16 A (B)	140
Power factor $\lambda$	> 0.90

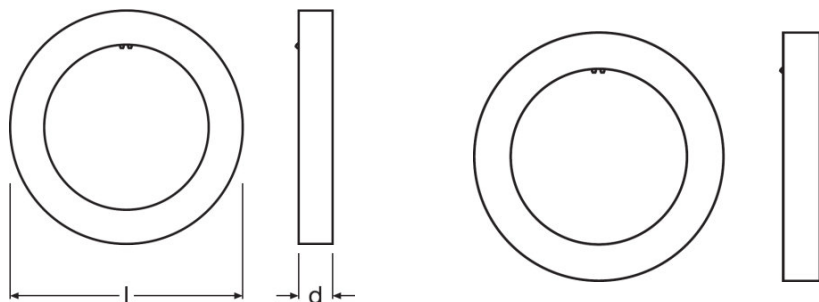
### Photometrical data

Rated color temperature	4000 K
Nominal luminous flux	1200 lm
Rated luminous flux	1200 lm
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Luminous flux	1200 lm
Color rendering index Ra	$\geq 80$
Standard deviation of color matching	$\leq 6$ sdc <sub>m</sub>

### Light technical data

Starting time	< 0.5 s
Warm-up time (60 %)	< 0.50 s
Rated beam angle (half peak value)	123.00 °

Dimensions & weight



<b>Product weight</b>	143.00 g
<b>Overall length</b>	205.0 mm

Temperatures & operating conditions

<b>Ambient temperature range</b>	-20...+45 °C
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Lifespan

<b>Lifespan</b>	30000 h
<b>Nominal lamp life time</b>	30000 h
<b>Rated lamp life time</b>	30000 h
<b>Number of switching cycles</b>	200000

Additional product data

<b>Base (standard designation)</b>	G10q
<b>Mercury-free</b>	Yes

Capabilities

<b>Dimmable</b>	No
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Certificates & standards

<b>Type of protection</b>	IP20
<b>Standards</b>	CE
<b>Photobiological safety group EN62778</b>	RG0
<b>Energy efficiency class</b>	A+
<b>Energy consumption</b>	12 kWh/1000h

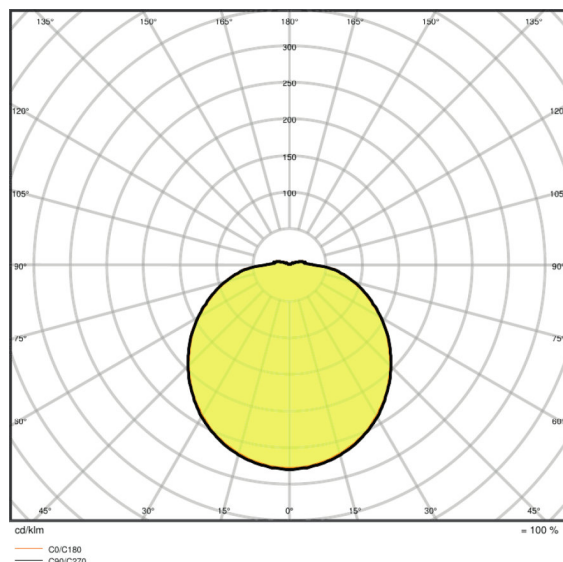
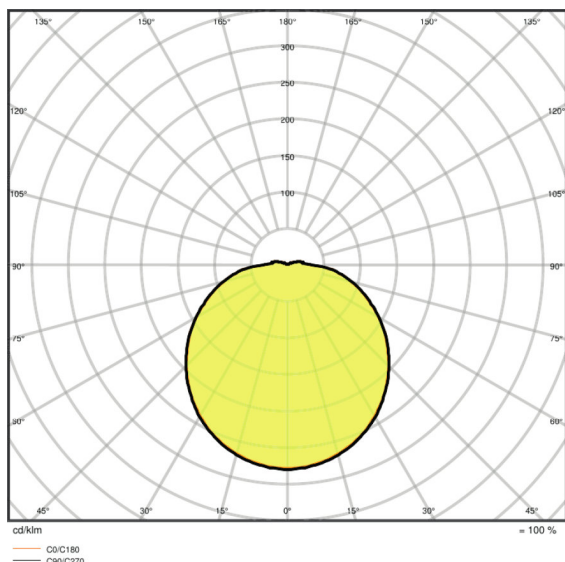
Country-specific categorizations

<b>Order reference</b>	ST9-22 12W/840
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Logistical data

Temperature range at storage	-20...+65 °C
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Light Distribution



— LDC typ polar

LDC typ polar

EQUIPMENT / ACCESSORIES

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

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.

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075135444	Folding carton box 1	38 mm x 214 mm x 245 mm	194.00 g	1.99 dm <sup>3</sup>
4058075135451	Shipping carton box 10	385 mm x 232 mm x 237 mm	2608.00 g	21.17 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.

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**REFERENCES / LINKS**

For current information see

▶ [www.ledvance.com/substitute](http://www.ledvance.com/substitute)

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**LEGAL ADVICE**

When used to replace a T9 fluorescent lamp the total energy efficiency and light distribution depends on the design of the lighting system.

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**DISCLAIMER**

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