

PRODUCT FAMILY DATASHEET

SubstiTUBE Advanced UO UN

LED tubes for electronic and electromagnetic control gears, shatterproof



AREAS OF APPLICATION

- General illumination within ambient temperatures from -25...+50 °C
- Supermarkets and department stores
- Industry
- Illumination of production areas

PRODUCT BENEFITS

- Also suitable for operation at low temperatures
- High luminous flux for sophisticated lighting tasks
- Easy installation
- No bending thanks to glass technology

PRODUCT FEATURES

- Mercury-free and RoHS compliant
- Type of protection: IP20
- Lifetime: up to 60,000 h
- Shatterproof according IEC 61549 AMD 2:2010 -810-1 4.4.1 (Certificate in preparation)
- Compatible with conventional and many common electronic control gears (see also compatibility list) and line voltage
- High color consistency: ≤ 5 SDCM



TECHNICAL DATA

Product description	Electrical data								
	Rated wattage	Nominal voltage	Operating frequency	Nominal wattage	Nominal current	Type of current	Max. lamp no. on circuit break. B16 A - CCG without compensation	Max. lamp no. on circuit break. B10 A - CCG with compensation	Max. lamp no. on circuit break. 10 A (B)
ST8AU-UN 15 W/3000K 1200 mm ¹⁾	15.00 W	220...240 V	50...60 Hz	15.00 W	0.076 A	AC	103	37	53
ST8AU-UN 15 W/4000K 1200 mm ¹⁾	15.00 W	220...240 V	50...60 Hz ²⁾	15.00 W	0.075 A ³⁾	AC	103	37	68
ST8AU-UN 15 W/6500K 1200 mm ¹⁾	15.00 W	220...240 V	50...60 Hz ²⁾	15.00 W	0.075 A ³⁾	AC	103	37	68
ST8AU-UN 23 W/4000K 1500 mm ¹⁾	23.00 W	220...240 V	50...60 Hz ²⁾	23.00 W	0.11 A ⁴⁾	AC	69	37	43
ST8AU-UN 23 W/6500K 1500 mm ¹⁾	23.00 W	220...240 V	50...60 Hz ²⁾	23.00 W	0.11 A ⁴⁾	AC	69	37	43

Product description	Photometrical data								
	Max. lamp no. on circuit break. B16 A - CCG with compensation	Max. lamp no. on circuit break. B10 A - CCG without compensation	Max. lamp no. on circuit break. 16 A (B)	Color temperature	Nominal luminous flux	Rated luminous flux	Lumen main.fact.at end of nom.life time	Light color (designation)	
ST8AU-UN 15 W/3000K 1200 mm ¹⁾	62	68	56	3000 K	2200 lm	2200 lm	0.70	Warm White	
ST8AU-UN 15 W/4000K 1200 mm ¹⁾	62	68	103	4000 K	2400 lm	2400 lm	0.70	Cool White	
ST8AU-UN 15 W/6500K 1200 mm ¹⁾	62	68	103	6500 K	2400 lm	2400 lm	0.70	Cool Daylight	
ST8AU-UN 23 W/4000K 1500 mm ¹⁾	62	43	69	4000 K	3700 lm	3700 lm	0.70	Cool White	
ST8AU-UN 23 W/6500K 1500 mm ¹⁾	62	43	69	6500 K	3700 lm	3700 lm	0.70	Cool Daylight	

Product description	Light technical data						Dimensions & weight				Temperatures & operating conditions
	Color temperature	Luminous flux	Color rendering index Ra	Warm-up time (60 %)	Starting time	Rated beam angle (half peak value)	Tube diameter	Product weight	Overall length	Base diameter	Ambient temperature range
ST8AU-UN 15 W/3000K 1200 mm ¹⁾	3000 K	2200 lm	83	< 2.00 s	< 0.5 s	160.00 °	26 mm	239.00 g	1213 mm		-20...+50 °C
ST8AU-UN 15 W/4000K 1200 mm ¹⁾	4000 K	2400 lm	83	< 0.50 s	< 0.5 s	160.00 °	26.7 mm	239.00 g	1200 mm	28.0 mm	-20...+50 °C

Product description	Color temperature	Luminous flux	Color rendering index Ra	Light technical data			Dimensions & weight				Temperatures & operating conditions
				Warm-up time (60 %)	Starting time	Rated beam angle (half peak value)	Tube diameter	Product weight	Overall length	Base diameter	Ambient temperature range
ST8AU-UN 15 W/6500K 1200 mm ¹⁾	6500 K	2400 lm	83	< 0.50 s	< 0.5 s	160.00 °	26.7 mm	239.00 g	1200 mm	28.0 mm	-20...+50 °C
ST8AU-UN 23 W/4000K 1500 mm ¹⁾	4000 K	3700 lm	83	< 0.50 s	< 0.5 s	160.00 °	26.7 mm	295.00 g	1500 mm	28.0 mm	-20...+50 °C
ST8AU-UN 23 W/6500K 1500 mm ¹⁾	6500 K	3700 lm	83	< 0.50 s	< 0.5 s	160.00 °	26.7 mm	295.00 g	1500 mm	28.0 mm	-20...+50 °C

Product description	Maximum temperature at test point	Lifespan		Additional product data		Capabilities	Certificates & standards	Country-specific categorizations
		Nominal lamp life time	Number of switching cycles	Base (standard designation)	Mercury-free	Dimmable	Type of protection	ILCOS
ST8AU-UN 15 W/3000K 1200 mm ¹⁾		60000 h	200000	G13	Yes	No	IP20	DR-15/830-G13-25.5/1213
ST8AU-UN 15 W/4000K 1200 mm ¹⁾	53 °C	60000 h	200000	G13	Yes	No	IP20	
ST8AU-UN 15 W/6500K 1200 mm ¹⁾	53 °C	60000 h	200000	G13	Yes	No	IP20	
ST8AU-UN 23 W/4000K 1500 mm ¹⁾	62 °C	60000 h	200000	G13	Yes	No	IP20	
ST8AU-UN 23 W/6500K 1500 mm ¹⁾	62 °C	60000 h	200000	G13	Yes	No	IP20	

Product description	Logistical data
	Temperature range at storage
ST8AU-UN 15 W/3000K 1200 mm ¹⁾	-20...+80 °C
ST8AU-UN 15 W/4000K 1200 mm ¹⁾	-20...+80 °C
ST8AU-UN 15 W/6500K 1200 mm ¹⁾	-20...+80 °C

Logistical data

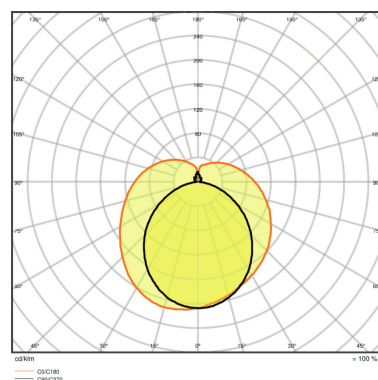
Product description	Temperature range at storage
ST8AU-UN 23 W/4000K 1500 mm ¹⁾	-20...+80 °C
ST8AU-UN 23 W/6500K 1500 mm ¹⁾	-20...+80 °C

¹⁾ When used to replace a T8 fluorescent lamp the total energy efficiency and light distribution depends on the design of the lighting system/Not usable in luminaires with serial lamp connection, i.e. more than one tube at one magnetic ballast (tandem circuitry)

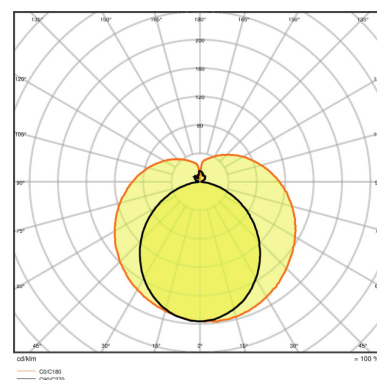
²⁾ 20-75KHz for ECG (HF)

³⁾ 390 mA for ECG (HF)

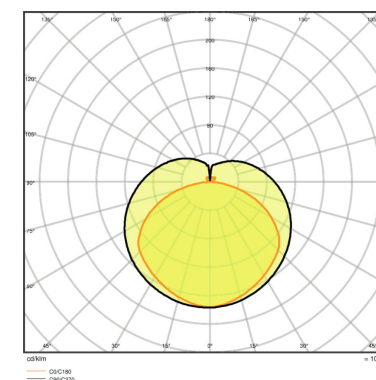
⁴⁾ 476 mA for ECG (HF)



ST8AU-UN 15 W/4000K 1200 mm



ST8AU-UN 15 W/6500K 1200 mm



ST8AU-UN 23 W/4000K 1500 mm

ST8AU-UN 15 W/3000K 1200 mm,
 ST8AU-UN 15 W/4000K 1200 mm,
 ST8AU-UN 15 W/6500K 1200 mm,
 ST8AU-UN 23 W/4000K 1500 mm,
 ST8AU-UN 23 W/6500K 1500 mm

SAFETY ADVICE

Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.

APPLICATION ADVICE

For more detailed application information and graphics please see product datasheet.

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075359130	Shipping carton box 10	1352 mm x 210 mm x 115 mm	3369.00 g	32.65 dm ³
4058075137776	Shipping carton box 10	1352 mm x 210 mm x 115 mm	3369.00 g	32.65 dm ³
4058075137790	Shipping carton box 10	1352 mm x 210 mm x 115 mm	3369.00 g	32.65 dm ³
4058075137813	Shipping carton box 10	1652 mm x 210 mm x 115 mm	4130.00 g	39.90 dm ³
4058075137837	Shipping carton box 10	1652 mm x 210 mm x 115 mm	4130.00 g	39.90 dm ³

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

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

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