



OSRAM SubstiTUBE® T5/T8

# SIMPLY IMPRESSIVE

## THE RIGHT LED TUBE FOR ANY APPLICATION

APRIL 2021

LEDVANCE is licensee of product trademark OSRAM for lamps products in general lighting.



# DURABLE. HIGH-QUALITY. EFFICIENT. TOP BENEFITS GUARANTEE FUTURE-PROOF SOLUTIONS

With their powerful performance and leading in technology, OSRAM SubstiTUBE® LED tubes are superior to conventional T8, T5 and T9 fluorescent lamps in many ways.

## OSRAM SubstiTUBE®



### EASY RETROFIT

Quick, simple and safe replacement with no rewiring



### LOW MAINTENANCE AND OPERATING COSTS

Thanks to a long life of up to 60 000 hours



### HIGH EFFICIENCY

Up to 165 lm/W



### LOW-FLICKER LIGHT

According to the EU 2019/2020 regulation, and already meeting the requirements of 2024



### DIRECT LAMP START

Instant 100 % light, ideal in combination with sensors



### EFFICIENT POWER FACTOR

Pay only for the energy that is used



### GREAT ENERGY SAVINGS

Up to 70 % compared to similar fluorescent lamps



### SAFE SHATTER PROTECTION

Glass body with protective PET sleeve on many SubstiTUBE®



### EXCELLENT ECONOMY

Payback of acquisition and replacement costs possible after only four months



### HIGH-QUALITY FULL GLASS

T5 and T8 range in full glass



### RELIABLE PRODUCT GUARANTEE

3 or 5 years; more information at: [www.ledvance.com/guarantee](http://www.ledvance.com/guarantee)



### APPROVED SAFETY

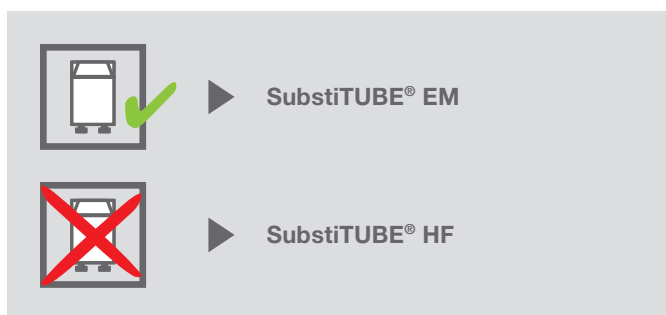
VDE-tested and certified according to IEC 62776: SubstiTUBE® T8 EM PRO UO and PRO, SubstiTUBE® T8 EM Food and Motion Sensor

## FIND THE RIGHT TECHNOLOGY EM OR HF

Are you wondering which technology you need for your luminaire with T8 fluorescent lamp – an EM lamp or an HF lamp? Our insider tip reveals two easy ways to find out.

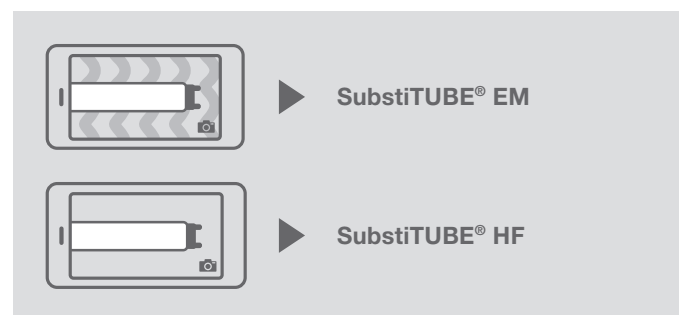
### STARTER TEST

Check whether the luminaire you want to fit the new lamp in has a starter. If it does, you need a **SubstiTUBE® T8 EM** for operation on a CCG. If not, use an ECG-compatible version, either **SubstiTUBE® HF** or **UNIVERSAL**.



### CAMERA TEST

If the luminaire still has a working T8 lamp, take a look at it through a digital camera (such as the one on your smartphone or tablet). If the light flickers, you need a **SubstiTUBE® T8 EM** for operation on a CCG. Otherwise use an ECG-compatible version, either **SubstiTUBE® HF** or **UNIVERSAL**.



## MAKE THE RIGHT CHOICE CONTROL GEAR OVERVIEW

COMPATIBILITY	CCG	ECG*	FOR AC MAINS
SubstiTUBE® EM	✓	✗	✓
SubstiTUBE® UNIVERSAL	✓	✓	✓
SubstiTUBE® HF	✗	✓	✗
SubstiTUBE® AC	✗	✗	✓

\*Compatibility check required

✗ = not compatible    ✓ = compatible

Remember to check the compatibility of the electronic control gear before installation for all ECG-operated types (HF and UNIVERSAL).



Find the full compatibility list online:  
[www.ledvance.com/compatibility](http://www.ledvance.com/compatibility)

# APPLICATION MATRIX

## T8 LED TUBES

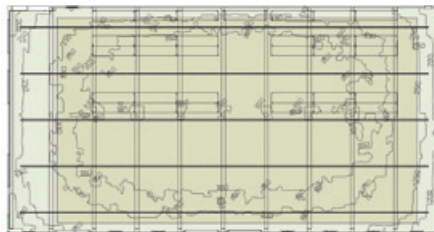
OSRAM SubstiTUBE® T8 PORTFOLIO		PRO UO	PRO	ADVANCED UO	ADVANCED	VALUE	CONNECTED	FOOD	MOTION SENSOR
	<b>INDUSTRY</b> Typical operating time: 24 h/day, 6 days/week Recommended illuminance: 200–500+ lux	✓	✓	✓	✓				
	<b>WAREHOUSE</b> Typical operating time: 24 h/day, 6 days/week Recommended illuminance: 200–300 lux	✓	✓	✓	✓	✓	✓		✓ <sup>1</sup>
	<b>CAR PARK</b> Typical operating time: 24 h/day, 7 days/week Recommended illuminance: 75–300 lux			✓	✓	✓	✓		✓ <sup>1</sup>
	<b>RETAIL</b> Typical operating time: 15 h/day, 7 days/week Recommended illuminance: 500+ lux	✓	✓	✓	✓				
	<b>FOOD DISPLAY</b> Typical operating time: 15 h/day, 7 days/week Recommended illuminance: Special spectrum with a high CRI R9 value, shatter protection							✓	
	<b>OFFICE</b> Typical operating time: 14 h/day, 5 Days/week Recommended illuminance: 500+ lux	✓		✓					
	<b>RESIDENTIAL</b> Typical operating time: 2.7 h/day, 7 days/week Recommended illuminance: 100+ lux					✓			✓
	<b>OUTDOOR/ PUBLIC TRANSPORT</b> Typical operating time: 10 h/day, 7 days/week Recommended illuminance: 5–500+ lux	✓	✓	✓	✓				
	<b>PUBLIC BUILDING/ SPORTS AND LEISURE</b> Typical operating time: 15 h/day, 7 days/week Recommended illuminance: 100–500+ lux	✓	✓	✓	✓		✓		

<sup>1</sup> < 10 light points

# IT ALL ADDS UP OSRAM SubstiTUBE®

There are many different facets to the cost-effectiveness of the SubstiTUBE® LED tubes, including energy efficiency, lifetime and product guarantee. It's a fact that a switch from fluorescent lamps to OSRAM SubstiTUBE® can pay for itself in less than a year. From that point on, every hour of operation means savings, savings, savings – money, energy and CO<sub>2</sub> emissions. And there is another important aspect. As early as 2023, conventional T8 fluorescent tubes may no longer be placed on the market under the EU Single Lighting Regulation. With OSRAM SubstiTUBE® LED tubes you are already prepared for the future.

## PAYBACK USING THE EXAMPLE OF A WAREHOUSE:



- A warehouse with a floor area of 1 351 m<sup>2</sup> is to be upgraded
- The ceiling height is between 6.3 and 8.3 m and the mounting height is 6 m

155 OSRAM SubstiTUBE® Advanced Ultra Output 23.1 W/4 000 K 1 500 mm LED tubes are to be installed. This LED tube is suitable for challenging lighting tasks thanks to its high luminous flux.

## HERE IS HOW THE COSTS ARE CALCULATED BEFORE AND AFTER THE UPGRADE:

Period:  
5 years

Electricity price:  
0.13 €

CO<sub>2</sub> emissions:  
474 g/kWh

	Old	New	Savings
Total costs	18 278 €	8 406 €	9 871 €
Electricity costs	17 813 €	6 05 €	11 762 €
Investment costs	465 €	2 356 €	-1 891 €
Material costs	0	0	0
Maintenance costs	0	0	0
Reduced maintenance intervals	–	3.33	–
Power consumption	137 020 kWh	46 540 kWh	90 480 kWh
CO <sub>2</sub> emissions	64 947 kg	22 060 kg	42 888 kg
<b>Calculation parameters</b>			
Number of light points	155	155	
Operating hours	13 000 h	13 000 h	
System wattage	10 540 watts	3 580 watts	
Rated life	15 000 hours	50 000 hours	
Price/unit	3 €	15 €	
Maintenance costs/unit	10 €	10 €	

## THE POTENTIAL SAVINGS ARE ENORMOUS:

Total savings  
**54 %**

Total CO<sub>2</sub> savings  
**66 %**

Payback time in months  
**11.3**

Energy savings in kWh  
**452 400**

Cost savings for electricity  
**66 %**

Do you want to upgrade to energy-saving LED lamps? We're happy to advise you and prepare a non-binding calculation for your property. We'll find the right products for you in our extensive range. By the way, installing the fluorescent tubes is quick and simple and can be done without significantly restricting business operations.

# THE NEW HIGHLIGHTS FIT FOR MANY TASKS

The LEDVANCE LED lamp portfolio includes a wide range of powerful and durable OSRAM SubstiTUBE® LED tubes. The new 2021 generation of the SubstiTUBE® UN/HF and AC can master any challenge in your day-to-day work with ease.



## OSRAM SubstiTUBE® T5 HF

The retrofit solution for use with electronic control gear. Compared to conventional T5 fluorescent lamps, the SubstiTUBE® T5 HF saves up to 50 % of energy and ensures short payback times.

- Can be operated on compatible ECGs<sup>1</sup> (not compatible with direct mains connection, 220–240 V AC)
- Extremely high luminous flux of up to 5 600 lumen
- High efficiency of up to 155 lm/W
- Glass lamp tube with shatter protection



## OSRAM SubstiTUBE® T5 AC MAINS

LED tubes for operation on AC mains, achieving energy savings of up to 50 % and guaranteeing short payback times.

- Mains connection, 220–240 V AC (not compatible with ECGs<sup>1</sup>)
- Extremely high luminous flux of up to 5 600 lumen
- High efficiency of up to 155 lm/W
- Lifetime up to 50 000 hours
- Low-flicker in accordance with EU 2019/2020 (already meets the requirements of 2024)
- Glass lamp tube with shatter protection



## OSRAM SubstiTUBE® T8 HF

The T8 retrofit solution for operation on ECGs<sup>1</sup> offers an excellent price/performance ratio, high energy savings (up to 60 %) and short payback times.

- Can be operated on compatible ECGs<sup>1</sup> (not compatible with direct mains connection, 220–240 V AC and CCG)
- High luminous efficacy of up to 3 700 lumen
- High efficiency of up to 161 lm/W
- Lifetime up to 60 000 hours (PRO UO/PRO) or 30 000 hours (VALUE)
- Glass lamp tube with shatter protection for PRO UO and PRO Segment



## OSRAM SubstiTUBE® T8 UN

Whether it's CCG, ECG<sup>1</sup> or AC mains, the SubstiTUBE® T8 UN is suitable for all operating modes, which avoids keeping double the stock of T8 LED tubes. It also offers short payback times and high energy savings (up to 60 %).

- For operation on ECG<sup>1</sup>, CCG or AC mains
- High luminous efficacy of up to 3 700 lumen
- High efficiency of up to 161 lm/W
- Lifetime up to 60 000 hours (PRO UO) or 30 000 hours (VALUE)
- Low-flicker in accordance with EU 2019/2020 (already meets the requirements of 2024)
- Glass lamp tube with shatter protection for PRO UO Segment

## LOW-FLICKER AND FUTURE-PROOF

### BETTER LIGHT INCREASES PRODUCTIVITY AND SAFETY

From 2021, flicker and stroboscopic effects for LED lamps are regulated in the Single Lighting Regulation (SLR).

A distinction is made between SVM<sup>2</sup> and P<sub>st</sub>LM<sup>3</sup>.

► From 09/2021: SVM ≤ 0.9 / P<sub>st</sub>LM ≤ 1; from 09/2024: SVM ≤ 0.4





The new LED tube product highlights from LEDVANCE already meet the requirements of 2024.

<sup>1</sup>For more information on ECG compatibility go to [ledvance.com/compatibility](https://ledvance.com/compatibility) | <sup>2</sup>SVM (stroboscopic effects) can occur when non-compliant light sources illuminate a moving object. Stroboscopic effects may lead to dangerous situations as the perceptibility of rotating or moving objects may be limited (e.g. rotating machine parts are perceived as stationary) | <sup>3</sup>P<sub>st</sub>LM (perception of short-term light modulation) refers to visible flickering, e.g. on screens. This can cause discomfort, visual fatigue and headaches.



# OSRAM SubstiTUBE®

## PORTFOLIO OVERVIEW

Product name	GTIN (EAN)	Same length as FL (W)	W	lm	lm/W	K	t <sub>90</sub> <sup>2</sup>
<b>OSRAM SubstiTUBE® T8 EM PRO ULTRA OUTPUT UO (CCG, 230 V AC MAINS)</b> 							
<b>High performance LED tubes for electromagnetic control gears (CCG), shatter protection</b>							
SubstiTUBE® PRO Ultra Output EM 14.3 W/3000K 1200 mm	4058075453968	36	14.3	2250	160	3 000	60 000
SubstiTUBE® PRO Ultra Output EM 14.3 W/4000K 1200 mm	4058075453982	36	14.3	2500	175	4 000	60 000
SubstiTUBE® PRO Ultra Output EM 14.3 W/6500K 1200 mm	4058075454002	36	14.3	2500	175	6 500	60 000
SubstiTUBE® PRO Ultra Output EM 21.1 W/3000K 1500 mm	4058075454026	58	21.1	3330	160	3 000	60 000
SubstiTUBE® PRO Ultra Output EM 21.1 W/4000K 1500 mm	4058075454040	58	21.1	3700	175	4 000	60 000
SubstiTUBE® PRO Ultra Output EM 21.1 W/6500K 1500 mm	4058075454064	58	21.1	3700	175	6 500	60 000
<b>OSRAM SubstiTUBE® T8 EM PRO (CCG, 230 V AC MAINS)</b> 							
<b>High performance LED tubes for electromagnetic control gears (CCG), shatter protection</b>							
SubstiTUBE® PRO EM 6.7 W/4000K 600 mm	4058075454088	18	6.7	1 100	165	4 000	60 000
SubstiTUBE® PRO EM 6.7 W/6500K 600 mm	4058075454101	18	6.7	1 100	165	6 500	60 000
SubstiTUBE® PRO EM 10.3 W/4000K 900 mm	4058075454125	30	10.3	1 700	165	4 000	60 000
SubstiTUBE® PRO EM 10.3 W/6500K 900 mm	4058075454149	30	10.3	1 700	165	6 500	60 000
SubstiTUBE® PRO EM 12.1 W/4000K 1100 mm	4058075454163	38	12.1	2 000	165	4 000	60 000
SubstiTUBE® PRO EM 12.1 W/6500K 1100 mm	4058075454187	38	12.1	2 000	165	6 500	60 000
SubstiTUBE® PRO EM 12.7 W/4000K 1200 mm	4058075454200	36	12.7	2 100	165	4 000	60 000
SubstiTUBE® PRO EM 12.7 W/6500K 1200 mm	4058075454224	36	12.7	2 100	165	6 500	60 000
SubstiTUBE® PRO EM 18.8 W/4000K 1500 mm	4058075454248	58	18.8	3 100	165	4 000	60 000
SubstiTUBE® PRO EM 18.8 W/6500K 1500 mm	4058075454262	58	18.8	3 100	165	6 500	60 000
<b>OSRAM SubstiTUBE® T8 EM ADVANCED ULTRA OUTPUT UO (CCG, 230 V AC MAINS)</b> 							
<b>LED tubes for electromagnetic control gear (CCG)</b>							
SubstiTUBE® Advanced Ultra Output EM 15.6 W/3000K 1200 mm	4058075454620	36	15.6	2 250	145	3 000	50 000
SubstiTUBE® Advanced Ultra Output EM 15.6 W/4000K 1200 mm	4058075454644	36	15.6	2 500	160	4 000	50 000
SubstiTUBE® Advanced Ultra Output EM 15.6 W/6500K 1200 mm	4058075454668	36	15.6	2 500	160	6 500	50 000
SubstiTUBE® Advanced Ultra Output EM 23.1 W/3000K 1500 mm	4058075454682	58	23.1	3 330	145	3 000	50 000
SubstiTUBE® Advanced Ultra Output EM 23.1 W/4000K 1500 mm	4058075454705	58	23.1	3 700	160	4 000	50 000
SubstiTUBE® Advanced Ultra Output EM 23.1 W/6500K 1500 mm	4058075454729	58	23.1	3 700	160	6 500	50 000
<b>OSRAM SubstiTUBE® T8 EM ADVANCED (CCG, 230 V AC MAINS)</b> 							
<b>LED tubes for electromagnetic control gear (CCG)</b>							
SubstiTUBE® Advanced EM 7.3 W/4000K 600 mm	4058075454743	18	7.3	1 100	150	4 000	50 000
SubstiTUBE® Advanced EM 7.3 W/6500K 600 mm	4058075454767	18	7.3	1 100	150	6 500	50 000
SubstiTUBE® Advanced EM 14 W/4000K 1200 mm	4058075454781	36	14.0	2 100	150	4 000	50 000
SubstiTUBE® Advanced EM 14 W/6500K 1200 mm	4058075454804	36	14.0	2 100	150	6 500	50 000
SubstiTUBE® Advanced EM 20.6 W/4000K 1500 mm	4058075454828	58	20.6	3 100	150	4 000	50 000
SubstiTUBE® Advanced EM 20.6 W/6500K 1500 mm	4058075454842	58	20.6	3 100	150	6 500	50 000

<sup>1</sup>For more information and precise guarantee conditions go to [www.ledvance.com/guarantee](http://www.ledvance.com/guarantee) | <sup>2</sup>L70/B50



# OSRAM SubstiTUBE® PORTFOLIO OVERVIEW

Product name	GTIN (EAN)	Same length as FL (W)	W	lm	lm/W	K	t <sub>90</sub> <sup>2</sup>
<b>OSRAM SubstiTUBE® T8 EM VALUE (CCG, 230 V AC MAINS)</b>							
<b>Economic LED tubes for electromagnetic control gears (CCG)</b>							
SubstiTUBE® Value EM 7.3 W/3000K 600 mm	4058075454446	18	7.3	720	100	3 000	30 000
SubstiTUBE® Value EM 7.3 W/4000K 600 mm	4058075454460	18	7.3	800	110	4 000	30 000
SubstiTUBE® Value EM 7.3 W/6500K 600 mm	4058075454484	18	7.3	800	110	6 500	30 000
SubstiTUBE® Value EM 16.4 W/3000K 1200 mm	4058075454507	36	16.4	1620	100	3 000	30 000
SubstiTUBE® Value EM 16.4 W/4000K 1200 mm	4058075454521	36	16.4	1800	110	4 000	30 000
SubstiTUBE® Value EM 16.4 W/6500K 1200 mm	4058075454545	36	16.4	1800	110	6 500	30 000
SubstiTUBE® Value EM 20 W/3000K 1500 mm	4058075454569	58	20.0	1980	100	3 000	30 000
SubstiTUBE® Value EM 20 W/4000K 1500 mm	4058075454583	58	20.0	2200	110	4 000	30 000
SubstiTUBE® Value EM 20 W/6500K 1500 mm	4058075454606	58	20.0	2200	110	6 500	30 000
<b>OSRAM SubstiTUBE® T8 EM ADVANCED UO CONNECTED (CCG, 230 V AC MAINS)</b>							
<b>LED tubes for electromagnetic control gears (CCG), shatter protection</b>							
SubstiTUBE® Connected Advanced Ultra Output 7.5 W/4000K 600 mm	4058075187337	18	7.5	1100	147	4 000	50 000
SubstiTUBE® Connected Advanced Ultra Output 7.5 W/6500K 600 mm	4058075187351	18	7.5	1100	147	6 500	50 000
SubstiTUBE® Connected Advanced Ultra Output 16 W/4000K 1200 mm	4058075187375	36	16.0	2400	150	4 000	50 000
SubstiTUBE® Connected Advanced Ultra Output 16 W/6500K 1200 mm	4058075187399	36	16.0	2400	150	6 500	50 000
SubstiTUBE® Connected Advanced Ultra Output 24 W/4000K 1500 mm	4058075187634	58	24.0	3600	150	4 000	50 000
SubstiTUBE® Connected Advanced Ultra Output 24 W/6500K 1500 mm	4058075187658	58	24.0	3600	150	6 500	50 000
<b>LEDVANCE CONNECTED SENSOR</b>							
<b>Connected Sensor for OSRAM SubstiTUBE® T8 EM ADVANCED UO Connected LED tubes</b>							
SubstiTUBE® Connected Sensor Low Bay LB	4058075232969	Installation height up 4.0 m	–	–	–	–	50 000
SubstiTUBE® Connected Sensor High Bay HB	4058075232983	Installation height up 4.0 m	–	–	–	–	50 000
<b>Connected Sensor Remote for LEDVANCE Connected Sensor HB and LB</b>							
SubstiTUBE® Connected Sensor Remote	4058075374034	–	–	–	–	–	50 000
<b>OSRAM SubstiTUBE® T8 EM FOOD (CCG, 230 V AC MAINS)</b>							
<b>LED tubes for electromagnetic control gears (CCG), shatter protection, for food presentation</b>							
SubstiTUBE® Food EM 7.9 W/3300K 900 mm	4058075292475	30	7.9	750	95	3 300	50 000
SubstiTUBE® Food EM 11.6 W/3300K 1200 mm	4058075292499	36	11.6	1 100	95	3 300	50 000
SubstiTUBE® Food EM 17.9 W/3300K 1500 mm	4058075292512	58	17.9	1 700	95	3 300	50 000
<b>OSRAM SubstiTUBE® T8 EM MOTION SENSOR (CCG, 230 V AC MAINS)</b>							
<b>LED tubes with integrated microwave sensor for electromagnetic control gears (CCG), shatter protection</b>							
SubstiTUBE® MS EM 7.3 W/4000K 600 mm	4058075292413	18	7.3	1 100	150	4 000	50 000
SubstiTUBE® MS EM 14 W/4000K 1200 mm	4058075292437	36	14.0	2 100	150	4 000	50 000
SubstiTUBE® MS EM 20.6 W/4000K 1500 mm	4058075292451	58	20.6	3 100	150	4 000	50 000
<b>OSRAM SubstiTUBE® T8 UNIVERSAL PRO ULTRA OUTPUT UO (ECG, CCG, 230 V AC MAINS)</b>							
<b>LED tubes for electronic control gears (ECG), electromagnetic control gears (CCG) and AC mains, shatter protection</b>							
SubstiTUBE® PRO UO UN 7.5 W/3000K 600 mm	4058075546752	18	7.5	1 000	135	3 000	60 000
SubstiTUBE® PRO UO UN 7.5 W/4000K 600 mm	4058075546776	18	7.5	1 100	145	4 000	60 000
SubstiTUBE® PRO UO UN 7.5 W/6500K 600 mm	4058075546790	18	7.5	1 100	145	6 500	60 000
SubstiTUBE® PRO UO UN 15 W/4000K 1200 mm	4058075546813	36	15.0	2 400	160	4 000	60 000
SubstiTUBE® PRO UO UN 15 W/6500K 1200 mm	4058075546837	36	15.0	2 400	160	6 500	60 000
SubstiTUBE® PRO UO UN 23 W/4000K 1500 mm	4058075546851	58	23.0	3 700	160	4 000	60 000
SubstiTUBE® PRO UO UN 23 W/6500K 1500 mm	4058075546875	58	23.0	3 700	160	6 500	60 000

<sup>1</sup>For more information and precise guarantee conditions go to [www.ledvance.com/guarantee](http://www.ledvance.com/guarantee) | <sup>2</sup>L70/B50 | <sup>3</sup>For more information on ECG compatibility go to [www.ledvance.com/compatibility](http://www.ledvance.com/compatibility)



Find the full compatibility list online:  
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Product name	GTIN (EAN)	Same length as FL (W)	W	lm	lm/W	K	t <sub>90</sub> <sup>2</sup>
<b>OSRAM SubstiTUBE® T8 UNIVERSAL VALUE (ECG<sup>3</sup>, CCG, 230 V AC MAINS)</b>							
<b>LED tubes for electronic control gear (ECG), electromagnetic control gear (CCG) and AC mains</b>							
						GLASS	LEDVANCE 3 year guarantee
SubstiTUBE® Value UN 18 W/3000K 1200 mm	4058075546899	36	18.0	1850	103	3 000	30 000
SubstiTUBE® Value UN 18 W/4000K 1200 mm	4058075546912	36	18.0	2 000	110	4 000	30 000
SubstiTUBE® Value UN 18 W/6500K 1200 mm	4058075546936	36	18.0	2 000	110	6 500	30 000
SubstiTUBE® Value UN 24 W/3000K 1500 mm	4058075546950	58	24.0	2 550	105	3 000	30 000
SubstiTUBE® Value UN 24 W/4000K 1500 mm	4058075546974	58	24.0	2 800	115	4 000	30 000
SubstiTUBE® Value UN 24 W/6500K 1500 mm	4058075546998	58	24.0	2 800	115	6 500	30 000
<b>OSRAM SubstiTUBE® T8 HF PRO ULTRA OUTPUT UO (ECG<sup>3</sup>)</b>							
<b>LED tubes for electronic high frequency control gears (ECG), shatter protection</b>							
						GLASS	LEDVANCE 5 year guarantee
SubstiTUBE® PRO UO HF 15 W/4000K 1200 mm	4058075545014	36	15.0	2 400	165	4 000	60 000
SubstiTUBE® PRO UO HF 15 W/6500K 1200 mm	4058075545038	36	15.0	2 400	165	6 500	60 000
SubstiTUBE® PRO UO HF 23 W/4000K 1500 mm	4058075545076	58	23.0	3 700	165	4 000	60 000
SubstiTUBE® PRO UO HF 23 W/6500K 1500 mm	4058075545151	58	23.0	3 700	165	6 500	60 000
<b>OSRAM SubstiTUBE® T8 HF PRO (ECG<sup>3</sup>)</b>							
<b>LED tubes for electronic high frequency control gears (ECG), shatter protection</b>							
						GLASS	LEDVANCE 5 year guarantee
SubstiTUBE® PRO HF 7.5 W/3000K 600 mm	4058075545052	18	7.5	1 000	130	3 000	60 000
SubstiTUBE® PRO HF 7.5 W/4000K 600 mm	4058075545090	18	7.5	1 100	145	4 000	60 000
SubstiTUBE® PRO HF 7.5 W/6500K 600 mm	4058075545113	18	7.5	1 100	145	6 500	60 000
SubstiTUBE® PRO HF 14 W/3000K 1200 mm	4058075545137	36	14.0	1 900	136	3 000	60 000
SubstiTUBE® PRO HF 14 W/4000K 1200 mm	4058075545175	36	14.0	2 100	150	4 000	60 000
SubstiTUBE® PRO HF 14 W/6500K 1200 mm	4058075545205	36	14.0	2 100	150	6 500	60 000
SubstiTUBE® PRO HF 20 W/3000K 1500 mm	4058075545229	58	20.0	2 800	140	3 000	60 000
SubstiTUBE® PRO HF 20 W/4000K 1500 mm	4058075545243	58	20.0	3 100	155	4 000	60 000
SubstiTUBE® PRO HF 20 W/6500K 1500 mm	4058075545267	58	20.0	3 100	155	6 500	60 000
<b>OSRAM SubstiTUBE® T8 HF VALUE (ECG<sup>3</sup>)</b>							
<b>Economic LED tubes for electronic high frequency control gears (ECG)</b>							
						GLASS	LEDVANCE 3 year guarantee
SubstiTUBE® Value HF 8 W/6500K 600 mm	4058075545380	18	8.0	800	100	6 500	30 000
SubstiTUBE® Value HF 8 W/4000K 600 mm	4058075545366	18	8.0	800	100	4 000	30 000

<sup>1</sup>For more information and precise guarantee conditions go to [www.ledvance.com/guarantee](http://www.ledvance.com/guarantee) | <sup>2</sup>L70/B50 | <sup>3</sup>For more information on ECG compatibility go to [www.ledvance.com/compatibility](http://www.ledvance.com/compatibility)

## MAKE YOUR JOB EASIER TOOLS FOR REAL PROS

The TCO calculator and online training platform from LEDVANCE provide you with exactly the information you need for advising your customers and for a time-saving, successful installation.

### TCO CALCULATOR

Quickly compare different lamp technologies and calculate potential energy and cost savings as well as payback times for your project. You can adjust the calculation parameters at any time and save the results as a PDF for your customer consultations.

Give it a try at:

[tco.ledvance-calculator.com](http://tco.ledvance-calculator.com)

### NEW: THE ONLINE TRAINING PLATFORM

Many application-oriented eLearning courses for professional users, practical advice on installation, integrated standards checks, planning tips and much more. Sign up and learn more at:

[training.ledvance.com](http://training.ledvance.com)

### BLANKO TCO CALCULATOR FOR LAMPS

COMPARE LAMP TECHNOLOGIES
























Compare different lamp technologies and calculate possible energy and cost savings as well as payback times for your project in no time!

- Change all calculation parameters according to your project
- Calculate payback times in no time
- Save the results as PDF for your customer calls

[tco.ledvance-calculator.com](http://tco.ledvance-calculator.com)

# OSRAM SubstiTUBE®

## PORTFOLIO OVERVIEW

Product name	GTIN (EAN)	Same length as FL (W)	W	lm	lm/W	K	t <sub>90</sub> <sup>2</sup>
<b>OSRAM SubstiTUBE® T5 HO HF (ECG<sup>3</sup>)</b>     							
<b>LED tubes for electronic high frequency control gears, shatter protection</b>							
SubstiTUBE® T5 HF 37 W/3000K 1449 mm	4058075542945	80	37.0	5 050	136	3 000	50 000
SubstiTUBE® T5 HF 37 W/4000K 1449 mm	4058075542969	80	37.0	5 600	151	4 000	50 000
SubstiTUBE® T5 HF 37 W/6500K 1449 mm	4058075542983	80	37.0	5 600	151	6 500	50 000
SubstiTUBE® T5 HF 26 W/3000K 1149 mm	4058075543003	54	26.0	3 600	138	3 000	50 000
SubstiTUBE® T5 HF 26 W/4000K 1149 mm	4058075543027	54	26.0	4 000	154	4 000	50 000
SubstiTUBE® T5 HF 26 W/6500K 1149 mm	4058075543041	54	26.0	4 000	154	6 500	50 000
SubstiTUBE® T5 HF 26 W/3000K 1449 mm	4058075543065	49	26.0	3 600	138	3 000	50 000
SubstiTUBE® T5 HF 26 W/4000K 1449 mm	4058075543089	49	26.0	4 000	154	4 000	50 000
SubstiTUBE® T5 HF 26 W/6500K 1449 mm	4058075543102	49	26.0	4 000	154	6 500	50 000
<b>OSRAM SubstiTUBE® T5 HE HF (ECG<sup>3</sup>)</b>     							
<b>LED tubes for electronic high frequency control gears, shatter protection</b>							
SubstiTUBE® T5 HF 18 W/3000K 1449 mm	4058075543126	35	18.0	2 550	142	3 000	50 000
SubstiTUBE® T5 HF 18 W/4000K 1449 mm	4058075543140	35	18.0	2 800	156	4 000	50 000
SubstiTUBE® T5 HF 18 W/6500K 1449 mm	4058075543164	35	18.0	2 800	156	6 500	50 000
SubstiTUBE® T5 HF 17 W/3000K 1149 mm	4058075543188	28	17.0	2 150	126	3 000	50 000
SubstiTUBE® T5 HF 17 W/4000K 1149 mm	4058075543201	28	17.0	2 400	141	4 000	50 000
SubstiTUBE® T5 HF 17 W/6500K 1149 mm	4058075543225	28	17.0	2 400	141	6 500	50 000
SubstiTUBE® T5 HF 10 W/3000K 849.0 mm	4058075543249	21	10.0	1 350	135	3 000	50 000
SubstiTUBE® T5 HF 10 W/4000K 849.0 mm	4058075543263	21	10.0	1 500	150	4 000	50 000
SubstiTUBE® T5 HF 10 W/6500K 849.0 mm	4058075543287	21	10.0	1 500	150	6 500	50 000
SubstiTUBE® T5 HF 7 W/3000K 549.0 mm	4058075543300	14	7.0	900	129	3 000	50 000
SubstiTUBE® T5 HF 7 W/4000K 549.0 mm	4058075543324	14	7.0	1 000	143	4 000	50 000
SubstiTUBE® T5 HF 7 W/6500K 549.0 mm	4058075543348	14	7.0	1 000	143	6 500	50 000
<b>OSRAM SubstiTUBE® T5 HO AC-MAINS (230V AC MAINS)</b>     							
<b>LED tubes for operation on AC mains connection, shatter protection</b>							
SubstiTUBE® T5 220-240V AC 37 W/4000K 1449 mm	4058075543362	80	37.0	5 600	151	4 000	50 000
SubstiTUBE® T5 220-240V AC 37 W/6500K 1449 mm	4058075543386	80	37.0	5 600	151	6 500	50 000
SubstiTUBE® T5 220-240V AC 26 W/4000K 1149 mm	4058075543409	54	26.0	4 000	154	4 000	50 000
SubstiTUBE® T5 220-240V AC 26 W/6500K 1149 mm	4058075543423	54	26.0	4 000	154	6 500	50 000
SubstiTUBE® T5 220-240V AC 26 W/4000K 1449 mm	4058075543447	49	26.0	4 000	154	4 000	50 000
SubstiTUBE® T5 220-240V AC 26 W/6500K 1449 mm	4058075543461	49	26.0	4 000	154	6 500	50 000
<b>OSRAM SubstiTUBE® T5 HE AC-MAINS (230V AC MAINS)</b>     							
<b>LED tubes for operation on AC mains connection, shatter protection</b>							
SubstiTUBE® T5 220-240V AC 18 W/4000K 1449 mm	4058075543485	35	18.0	2 800	156	4 000	50 000
SubstiTUBE® T5 220-240V AC 18 W/6500K 1449 mm	4058075543508	35	18.0	2 800	156	6 500	50 000
SubstiTUBE® T5 220-240V AC 16 W/4000K 1149 mm	4058075543522	28	16.0	2 400	150	4 000	50 000
SubstiTUBE® T5 220-240V AC 16 W/6500K 1149 mm	4058075543546	28	16.0	2 400	150	6 500	50 000
SubstiTUBE® T5 220-240V AC 8 W/4000K 549.0 mm	4058075543560	14	8.0	1 200	150	4 000	50 000
SubstiTUBE® T5 220-240V AC 8 W/6500K 549.0 mm	4058075543584	14	8.0	1 200	150	6 500	50 000
<b>OSRAM SubstiTUBE® T9 (CCG, 230V AC MAINS)</b>   							
<b>Circular LED tube for electromagnetic control gear (CCG) and AC mains</b>							
SubstiTUBE® T9 22 EM 12 W/4000K	4058075135444	22	12.0	1 200	100	4 000	30 000
SubstiTUBE® T9 22 EM 12 W/6500K	4058075135468	22	12.0	1 200	100	6 500	30 000
SubstiTUBE® T9 32 EM 20 W/4000K	4058075135482	32	20.0	2 000	100	4 000	30 000
SubstiTUBE® T9 32 EM 20 W/6500K	4058075135505	32	20.0	2 000	100	6 500	30 000



Find the full compatibility list online:  
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# GOOD LIGHT ALL ROUND

## THE FULL LEDVANCE RANGE

LEDVANCE is leading the fight against bad light in every area. That's good news for you because when it comes to future-proof solutions relating to luminaires and lamps, HCL systems, electronic components, light management and smart residential products, you have a competent partner in LEDVANCE on your side for your complex lighting projects. You can always rely on LEDVANCE for excellent brand quality, professional service and a good price/performance ratio.



### AESTHETICALLY FUNCTIONAL LUMINAIRES

The extensive luminaire portfolio covers virtually all professional and residential applications and delivers outstanding quality and functionality. The new BIOLUX HCL system is a winner of the VDE Quality Certificate, and the red dot 2020 Product Design and 2020 German Innovation Awards.

### EACH LAMP A LIGHTING SOLUTION

The lamp portfolio includes a wide choice of shapes and base sizes as well as types with additional functions (e.g. sensors), all with outstanding efficiency and durability. Alongside UV-C and LED lamps, LEDVANCE will continue to offer conventional halogen, energy-saving, fluorescent and gas discharge lamps.

### FLEXIBLE LED STRIP SYSTEM

The LED Strip System includes a large number of flexible LED strips, drivers and matching accessories. With a wide range of luminous fluxes and light colors, the system allows bespoke lighting solutions to be created for virtually any indoor or outdoor application. Easy to plan, easy to combine and easy to install – that's the principle here.

### VIVARES: LIGHT MANAGEMENT, MORE COMFORTABLE THAN EVER

The future-proof IoT light management system (LMS) from LEDVANCE makes it easier and more flexible than ever to always produce optimal lighting conditions for defined requirements. The system is extremely reliable and compatible and offers all LMS components and matching LED luminaires from one source.

### SMART LIGHTING FOR RESIDENTIAL APPLICATIONS

Our smart residential products offer a comprehensive combination of innovation, quality, reliability and user-friendliness. We provide a suitable solution for a variety of requirements that intelligent lighting has to meet.

### MORE INFORMATION AND CLEVER TOOLS

For more information on LEDVANCE's extensive product portfolio and clever apps and tools that will help you in your day-to-day work go to [www.ledvance.com](http://www.ledvance.com)

## ABOUT LEDVANCE

With offices in more than 50 countries and business activities in more than 140 countries, LEDVANCE is one of the world's leading general lighting providers for professional users and end consumers. Having emerged from OSRAM's general lighting division, LEDVANCE offers a wide-ranging portfolio of LED luminaires for a broad spectrum of applications, intelligent lighting products for Smart Home and Smart Building solutions, one of the most comprehensive ranges of advanced LED lamps in the lighting industry, traditional light sources, an LED Strip System and light management systems.



# LEDVANCE

LEDVANCE GmbH  
Parkring 29–33  
85748 Garching  
Germany  
**LEDVANCE.COM**

Partner:



LEDVANCE is licensee of product trademark OSRAM for lamps products in general lighting.

**LEDVANCE.COM**

