

The right LED tube every time

Industry leading LED range of T5 and T8 tube replacements

Fluorescent replacements – a huge market opportunity for LEDs

Replacing fluorescent lights with LEDs saves money on energy and maintenance. Installers who know this can offer their customers an attractive payback time for their investment.

There are many LED tubes on the market. Most, though, have poor build quality and the cheap ones are a false economy. Installation and maintenance are what dominate tube replacement costs. There, we are unique. Nobody touches us on speed of installation and reliability.

With our leading LED range we want to make installers aware that our tubes are an attractive and risk-free investment for them.

T5 and T8: key benefits

Fast installation and reliably long life

Philips MASTER LEDtubes have 100% safe, hassle-free installation with a simple lamp-for-lamp replacement. Our EM/mains and InstantFit HF tubes fit straight into existing luminaires.

Our InstantFit range works with the widest range of existing ballasts (600, 1200 and 1500mm InstantFit version lists are regularly updated). Please see www.philips.com/ledtube for the latest on ballast compatibility.

Uniform light distribution with exceptional efficiency

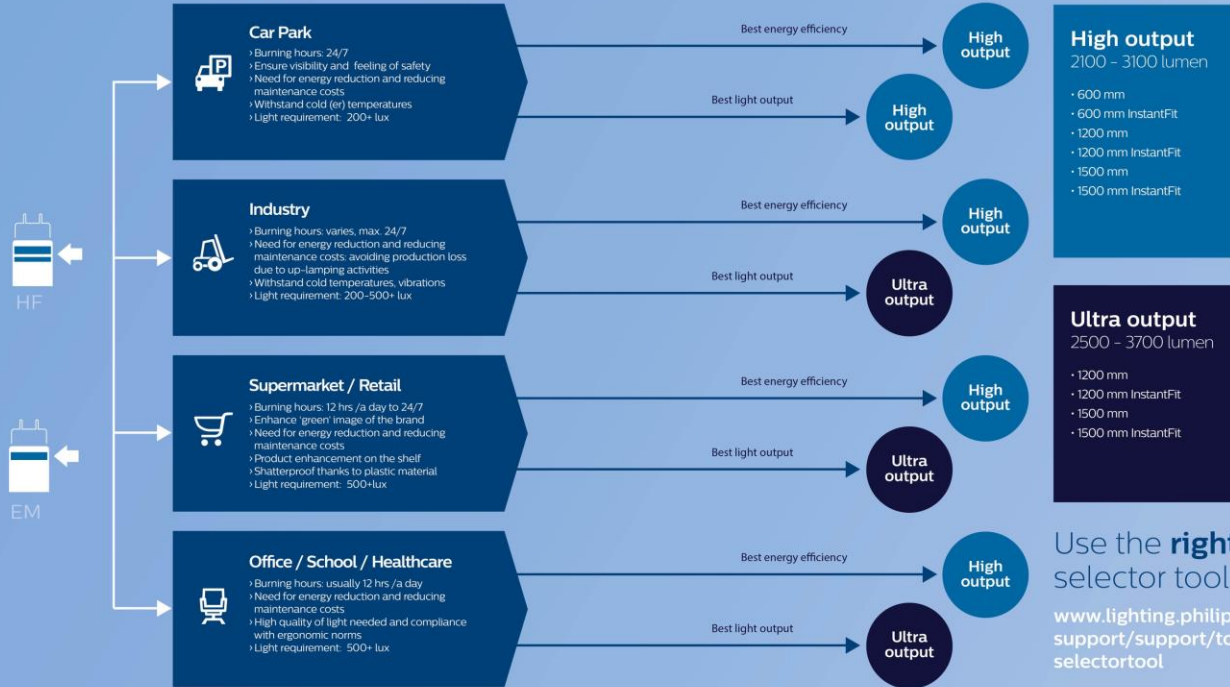
Our unique design creates a perfectly uniform light. All T8 MASTER LEDtubes have rotating end-caps to easily direct the light where it is needed.

We have the widest range on the market. The High Output (HO) range can be used almost anywhere indoors. The Ultra-efficient Ultra Output (UO) has best in class efficiency (up to 156 Lumen/W) and the exceptional light quality and output needed to see fine detail for industry, retail, offices, schools and healthcare.

Dimming functionality

Building on the latest InstantFit technology innovation Philips Master LEDtubes can now offer dimming functionality for defined tube/ballast combination.

How to find the right tube



Use the **right** selector tool



www.lighting.philips.com/main/support/support/tools/ledtube-selectortool

Selector tool is currently only available for T8 LED tube.

How to find the right output and calculate your savings?

For ultra-output applications, our solutions meet lighting industry standards (EN12464-1) by providing high light levels without causing discomfort or glare*.

Lux

Working, typing reading and data processing require sufficient light with a minimum lux level



Sufficient light

- > Key parameter for minimum required light is indicated in EN12464-1 in lux (lumens per square meter).
- > EN12464-1 prescribes minimum lux values, uniformity of illumination, and color rendering index, depending on the task.

Unified Glare Rating (UGR)

The amount of glare, annoyance or reflection created by high or non-uniform brightness must be kept to a minimum



Discomfort glare

- > Sensation of annoyance or reflection caused by high or non-uniform brightness (eg. on computer screen).
- > Amount of glare is indicated in EN 12464-1 standard by Unified Glare Rating (UGR).

Calculate your own **savings** on www.philips.com/ledtube



Currently only available for T8 LED tube

Lighting requirements

EN12464-1 prescribes minimum lux values, uniformity of illumination and color rendering index, depending on the task



Supermarkets / Retail

- › For Supermarket and Retail applications 500 lux counts as minimum value.
- › UGR standard for Supermarket applications is also set at max 19 UGR.



Industrial

- › For Industry applications, there are many sub segments, each having their own specific standards. In the storage industry segment 300 lux counts as minimum value.
- › UGR standard for Industry applications is set at max 25 UGR.



Office / School / Healthcare

- › For Office applications 500 lux counts as minimum value for writing, typing, reading, data processing, conference and meeting rooms.
- › UGR standard for Office applications is set at max 19 UGR.
- › For most Healthcare applications 200 lux counts as minimum value.
- › UGR standard for applications is set at max 22 UGR.

* Final light quality, besides the LED tube, also depends on application circumstances like e.g. type of luminaire used and amount of daylight.

Calculate your
own **savings** on
www.philips.com/ledtube






Currently only available for T8 LED tube



High output for higher standards in car parks

High Output LED tubes raise the standards in car parks even higher. With a light output of up to 3100 lumen they provide maximum visibility and safety – particularly important in car parks that operate right around the clock.

	Fluorescent TL-D 1500 mm		MASTER LEDtube HO 1500 mm
 Lux	High Output 2100 - 3100 lumen	>	588 lx
 Lifetime	Longer lifetime	>	15,000 Hrs
 Energy savings	64%	>	72W
Average buying price installer ex VAT	2 €		27 €
Total costs / year	40 €		26 €

Based on the European average of 12 cent/kW hour (including maintenance and lamp replacement cost)

4,517 € Savings / year	6.1 months Payback period
Number of lamps	85
Burning hours per year	8,760 Hrs
Energy costs	0.12 Euro/kWh

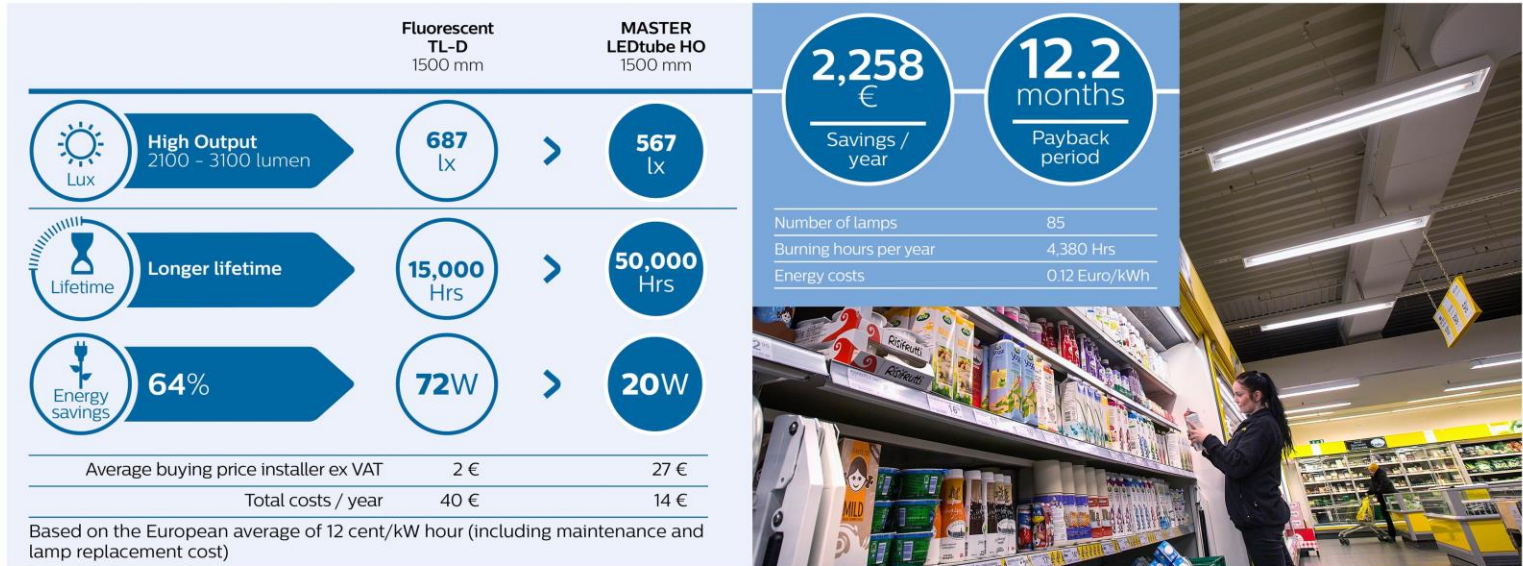


› Choose High Output LED tubes for **high light output** with the **best lm/w**



High output on the high street

Retail stores and hospitality venues know light has the power to attract. It creates irresistible displays, brings brands to life and encourages customers to spend longer in store. With our LED tubes you can light up sales at the same time as reducing energy and maintenance costs.

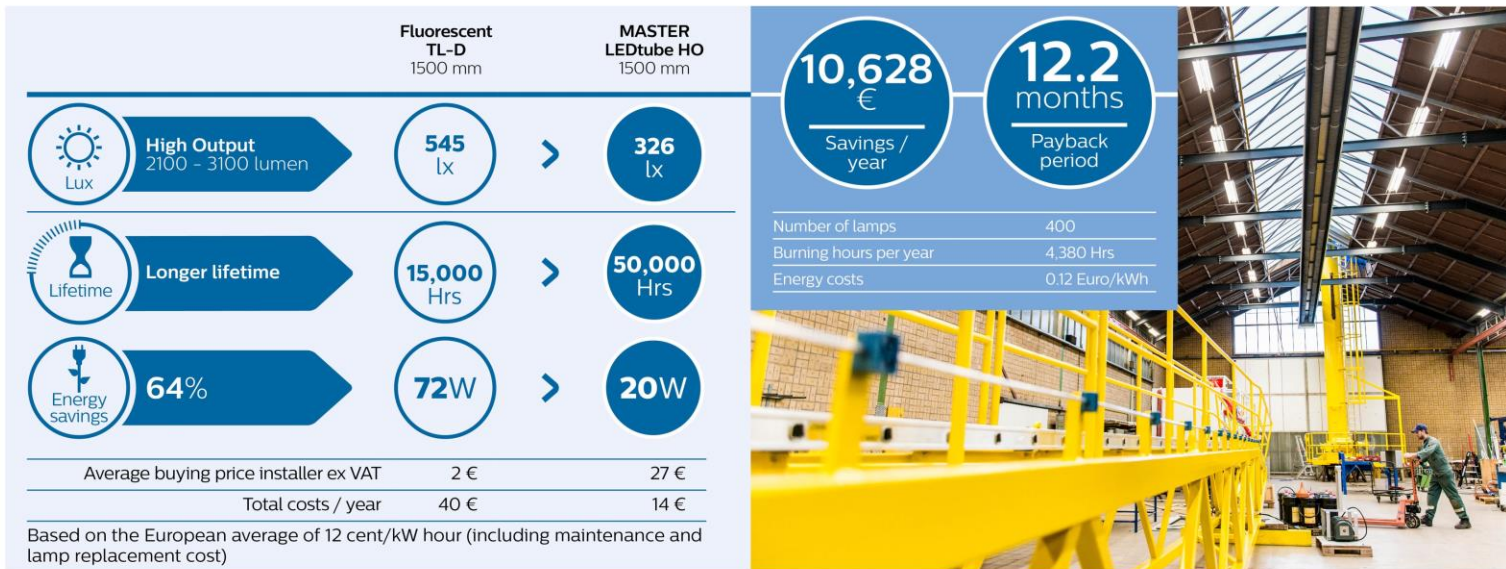


> Choose High Output LED tubes for **high light output** with the **best lm/w**



High output for highly-efficient industry

Industry demands high visibility, efficiency and safety. But 24/7 operations can run up expensive energy bills. Our solutions save energy and maintain their energy efficiency, even in extremely cold conditions. So they reduce maintenance costs and avoid expensive production down time.

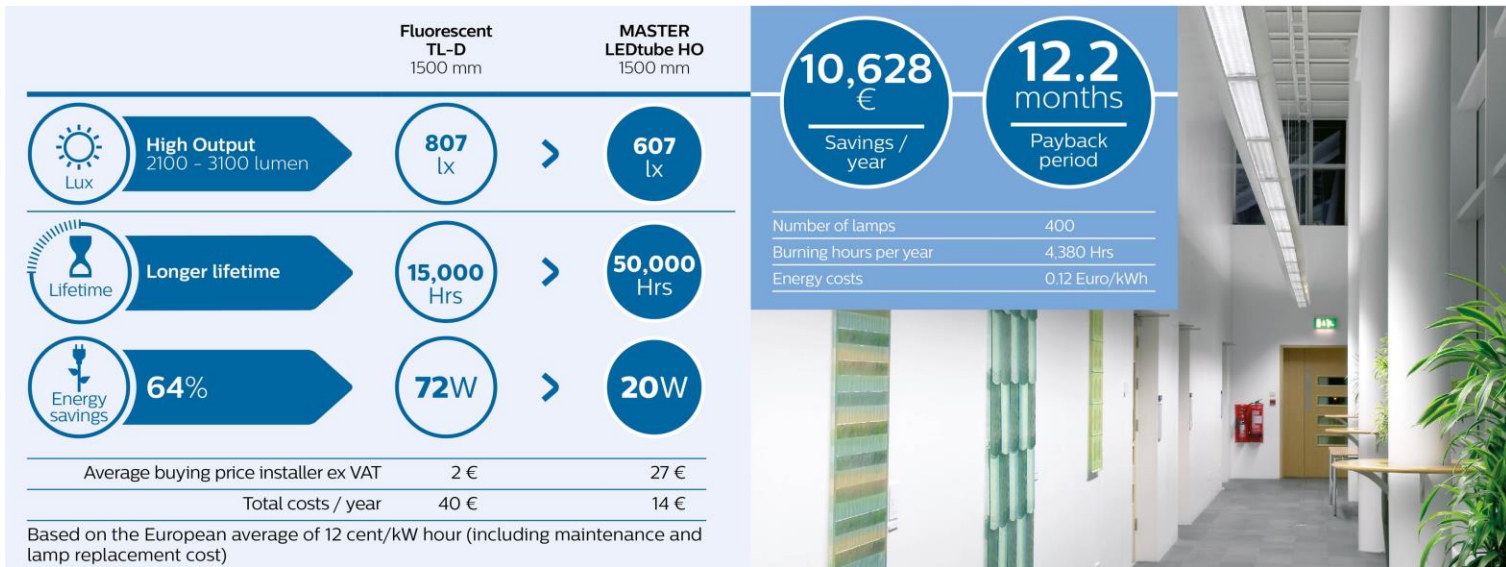


› Choose High Output LED tubes for **high light output** with the **best lm/w**



High output for highly efficient offices

With a light output of up to 3100 lumen, our High Output LED tubes provide brilliant light quality with the best lumen per watt. A simple switch for offices and healthcare settings that saves on energy but feels bright and welcoming.



> Choose High Output LED tubes for **high light output** with the **best lm/w**

Technical specifications

What's new T5

- High Lm/W performance 150 Lm/W
- Small form factor
- High compatibility Level HF ballast

MASTER LEDtube T5



Product type	LED	Rotatable end cap	Lumen output	Operation	Beam angle	CRI	Color temperature	EOC 1 pcs (C)*	Energylabel
MASTER LEDtube (HF)	W	-	lm	-	-	-	K	8718696	-
1500mm HO 26W 830 T5 Instant Fit	26	No	3700	HF	160	83	3000	68552500	A+
1500mm HO 26W 840 T5 Instant Fit	26	No	3900	HF	160	83	4000	68554900	A++
1500mm HO 26W 865 T5 Instant Fit	26	No	3900	HF	160	83	6500	68556300	A++

MASTER LEDtube T8 High Output



Product type	LED	Rotatable end cap	Lumen output	Operation	Beam angle	CRI	Color temperature	EOC 1 pcs (C)*	Energylabel
MASTER LEDtube (EM)	W	-	lm	-	-	-	K	8718696	-
600mm HO 8W 830 T8	8	Yes	1000	EM & Mains	160	83	3000	69747400	A++
600mm HO 8W 840 T8	8	Yes	1050	EM & Mains	160	83	4000	69749800	A++
600mm HO 8W 865 T8	8	Yes	1050	EM & Mains	160	83	6500	69751100	A++
900mm HO 12W 840 T8	12	Yes	1575	EM & Mains	160	83	4000	68708600	A++
900mm HO 12W 865 T8	12	Yes	1575	EM & Mains	160	83	6500	68710900	A++
1200mm HO 14W 830 T8	14	Yes	2000	EM & Mains	160	83	3000	68718500	A++
1200mm HO 14W 840 T8	14	Yes	2100	EM & Mains	160	83	4000	68720800	A++
1200mm HO 14W 865 T8	14	Yes	2100	EM & Mains	160	83	6500	68722200	A++
1500mm HO 20W 830 T8	20	Yes	2900	EM & Mains	160	83	3000	68712300	A++
1500mm HO 20W 840 T8	20	Yes	3100	EM & Mains	160	83	4000	68714700	A++
1500mm HO 20W 865 T8	20	Yes	3100	EM & Mains	160	83	6500	68716100	A++
MASTER LEDtube (HF)	W	-	lm	-	-	-	K	8718696	-
600mm 10 5W 830 T8 InstantFit	10.5	Yes	1000	HF	160	83	3000	5965900	A+
600mm 10 5W 840 T8 InstantFit	10.5	Yes	1050	HF	160	83	4000	5967300	A++
600mm 10 5W 865 T8 InstantFit	10.5	Yes	1050	HF	160	83	6500	5969700	A++
1200mm HO 14W 830 T8 InstantFit	14	Yes	2000	HF	160	83	3000	68752900	A+
1200mm HO 14W 840 T8 InstantFit	14	Yes	2100	HF	160	83	4000	68748200	A++
1200mm HO 14W 865 T8 InstantFit	14	Yes	2100	HF	160	83	6500	68750500	A++
1500mm HO 20W 830 T8 InstantFit	20	Yes	2900	HF	160	83	3000	68758100	A++
1500mm HO 20W 840 T8 InstantFit	20	Yes	3100	HF	160	83	4000	68754300	A++
1500mm HO 20W 865 T8 InstantFit	20	Yes	3100	HF	160	83	6500	68756700	A++

MASTER LEDtube T8 Ultra Output



Product type	LED	Rotatable end cap	Lumen output	Operation	Beam angle	CRI	Color temperature	EOC 1 pcs (C)*	Energylabel
MASTER LEDtube (EM)	W	-	lm	-	-	-	K	8718696	-
1200mm UO 16W 830 T8	16	Yes	2300	EM & Mains	160	83	3000	68736900	A++
1200mm UO 16W 840 T8	16	Yes	2500	EM & Mains	160	83	4000	68738300	A++
1200mm UO 16W 865 T8	16	Yes	2500	EM & Mains	160	83	6500	68740600	A++
1500mm UO 24W 830 T8	24	Yes	3500	EM & Mains	160	83	3000	68742000	A++
1500mm UO 24W 840 T8	24	Yes	3700	EM & Mains	160	83	4000	68744400	A++
1500mm UO 24W 865 T8	24	Yes	3700	EM & Mains	160	83	6500	68746800	A++
MASTER LEDtube (HF)	W	-	lm	-	-	-	K	8718696	-
1200mm UO 16W 830 T8 InstantFit	16	Yes	2300	HF	160	83	3000	68807000	A++
1200mm UO 16W 840 T8 InstantFit	16	Yes	2500	HF	160	83	4000	68796300	A++
1200mm UO 16W 865 T8 InstantFit	16	Yes	2500	HF	160	83	6500	68798700	A++
1500mm UO 24W 830 T8 InstantFit	24	Yes	3500	HF	160	83	3000	68806900	A++
1500mm UO 24W 840 T8 InstantFit	24	Yes	3700	HF	160	83	4000	68802100	A++
1500mm UO 24W 865 T8 InstantFit	24	Yes	3700	HF	160	83	6500	68804500	A++

MASTER LEDtube T8



Product type	LED	Rotatable end cap	Lumen output	Operation	Beam angle	CRI	Color temperature	EOC 1 pcs (C)*	Energylabel
MASTER LEDtube (EM)	W	-	lm	-	-	-	K	8718696	-
1800mm 25W 840 T8	25	Yes	3700	EM & Mains	160	85	4000	48037300	A+

Protection starter



Product type	EOC 10 pcs (I)
Accessory	8718291
Starter EMP	729,28000



Please refer to the site www.philips.com/ledtube for the latest information about ballast compatibility.

* Dimming a LED tube: please refer to the site www.philips.com/ledtube for the latest update on our InstantFit LED tube/dimming ballast compatibility information.



