

A man in a blue shirt is holding a Philips LED tube light in a factory setting. The background shows industrial machinery and structures. The lighting is bright and focused on the man and the light tube.

PHILIPS

LEDlamps

LEDtube



The right LEDtube every time

Whatever you need, the Philips MASTER LEDtube portfolio offers it all. From optimised energy efficiency, to the highest light output for even the most demanding applications.

The right LEDtube every time

Whatever you need, the Philips MASTER LEDtube portfolio has it all. We've repositioned the way that our lamps are labelled into three new categories of light output – Standard, High and Ultra output. A simple change that will make it even easier to choose the right lamp, for the right application. From optimised energy efficiency to the highest light output.

A simple switch that comes in a choice of three lengths and color temperatures, with the option of rotating end-caps. So with our lamps, you have the right LEDtube every time.



“LEDtubes make my life a whole lot easier. Faster to fit and safer to install. They're packed full of new technology like end-pin safety and rotating caps. It means I can retrofit LED faster. Great.”

Dick Verhoef - Facilities Manager at Verhoef Access Technology

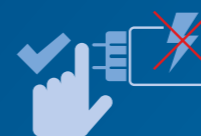
The installer's choice

If you're an installer there are even more reasons for you to choose Philips MASTER LEDtubes. As you'd expect from the world's leading name in lighting, our quality and attention to detail means that we can also make your life safer and easier.



HF compatibility

No wires to replace, no hassle changing drivers; our InstantFit solution works with High Frequency electronic ballast, making it easy and safe for all installation methods. All you have to do is slot the tube into your existing fitting.



Pin safety

With Philips products you can safely touch the other end-cap when installing the tube. The integrated driver is also safely isolated from touchable parts. Philips LED tubes adhere to all UL and IEC pin safety requirements.



Rotating end-caps

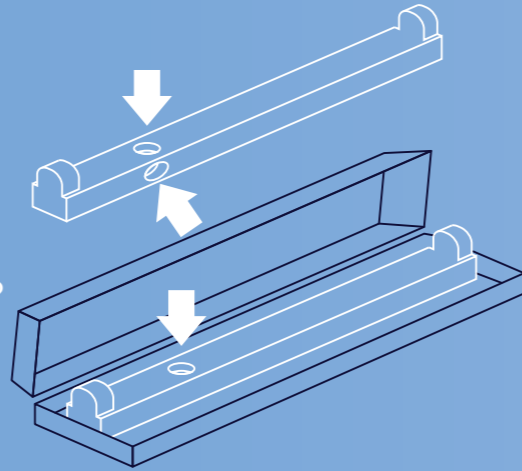
In many applications the pin fitting is rotated. This can be a problem as LEDtubes only provide directional light. MASTER LEDtubes have rotating end-caps to allow you to rotate the tube by up to 90 degrees. So you can always direct the light to best effect.

Finding the right fit



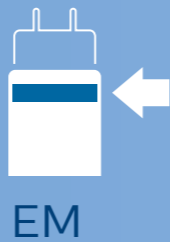
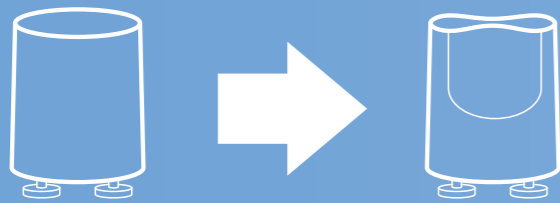
1 Does your luminaire have a starter?

This illustration shows its typical location in an open or closed luminaire with the length of 1200 and 1500 mm tubes.



2 Yes.

The luminaire works on Electro Magnetic ballast. Simply replace the old starter with the new (EM) LED starter included in the packaging. Choose the LEDtube with one ring on the cap.



No.

The luminaire works on High Frequency electronic ballast (HF). Choose MASTER LEDtube InstantFit with the end-cap with two rings. No need to change drivers or rewire. It's a plug and play solution that works straight out of the box.

Quick and easy installation.

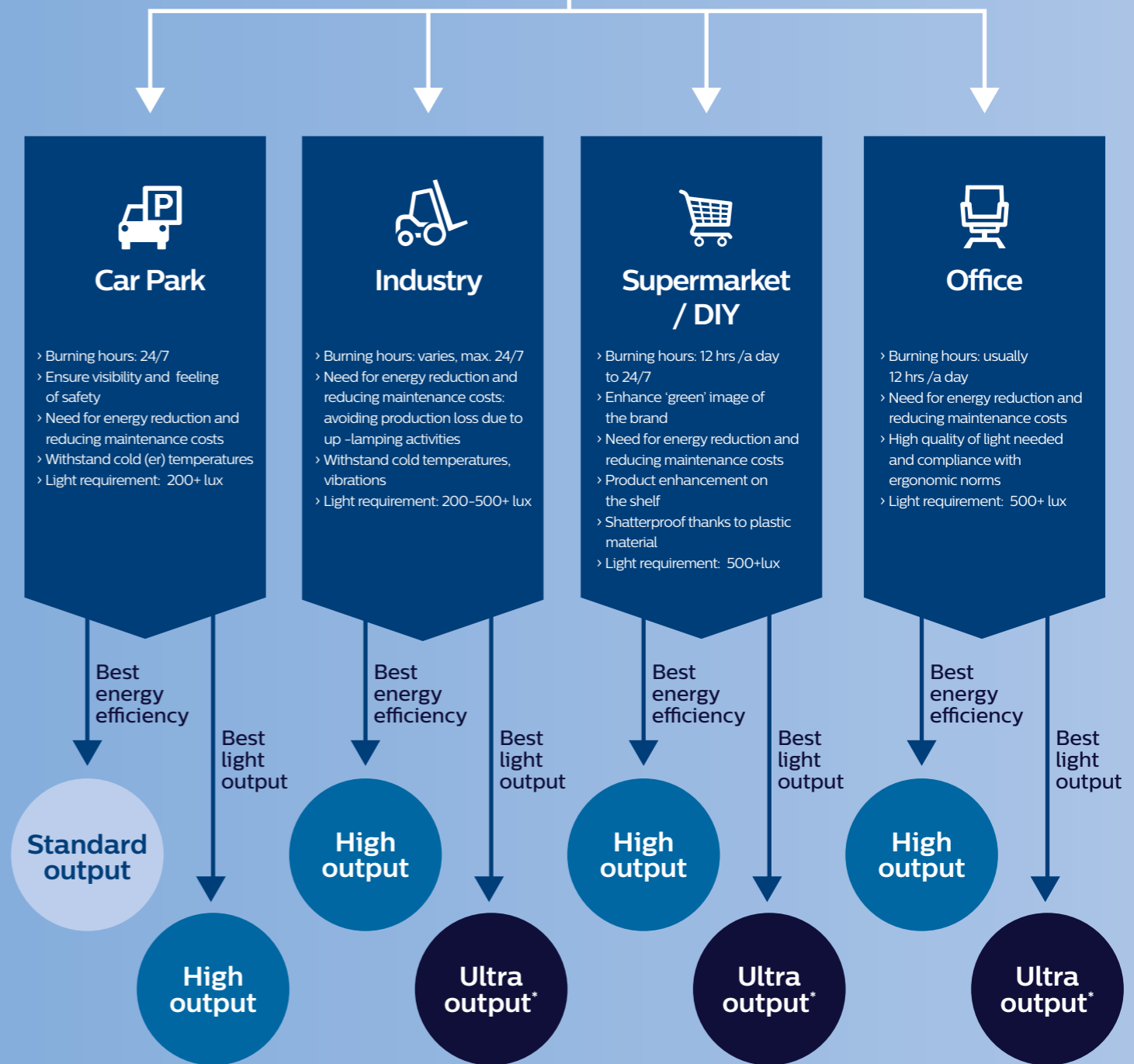
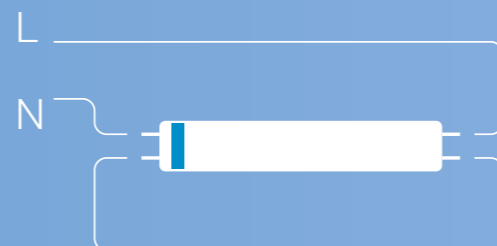
Check the ballast compatibility list on www.philips.com/ledtube



3 No.

Your luminaire works on High Frequency Electronic Ballast (HF) but you can't use MASTER LEDtube InstantFit or your ballast is not compatible.

Cut wires, remove ballast and connect direct to mains. Use the MASTER LEDtube EM with one ring on the cap.



Standard output	High output	Ultra output
1600 - 2000 lumen	2100 - 3100 lumen	2500 - 3700 lumen
<ul style="list-style-type: none"> • 1200 mm ROT • 1200 mm InstantFit • 1500 mm • 1500 mm ROT InstantFit 	<ul style="list-style-type: none"> • 1200 mm ROT • 1200 mm ROT InstantFit • 1500 mm ROT • 1500 mm ROT InstantFit 	<ul style="list-style-type: none"> • 1200 mm ROT • 1500 mm ROT
		*Available from May 2015 onwards

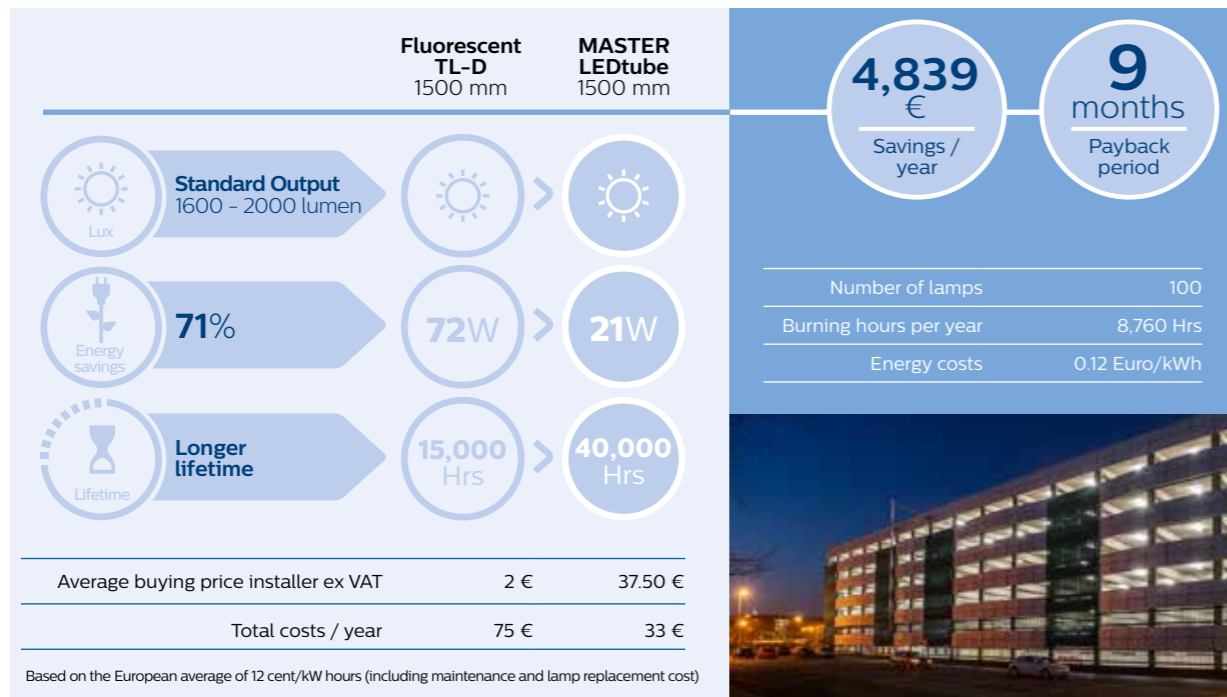
Choosing the **right tube** for your application

Your lighting requirements will vary enormously, depending on where and when it will be used. Whether you need **optimised energy efficiency** or the **highest light output**, we've made it easy to find the right LEDtube every time.



New standard for car parks

Car parks and transportation networks need to feel bright and welcoming 24 hours a day. White LED light has a higher perceived brightness and superior color rendering, so people feel safer. And because LED is highly reliable and energy efficient, your customers will welcome the savings too.



> Choose Standard Output LEDtubes for the **best energy efficiency**



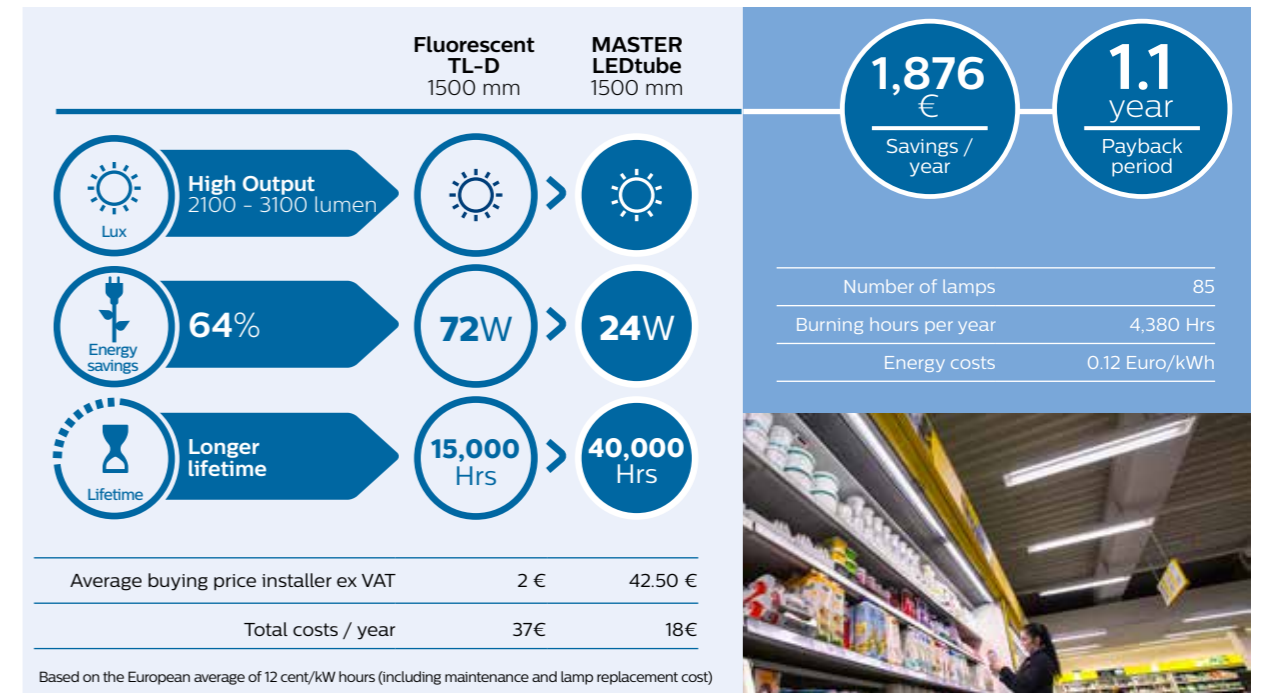
Calculate your **energy savings** today

www.philips.com/ledtube



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 LEDtubes you can light up sales at the same time as reducing energy and maintenance costs.

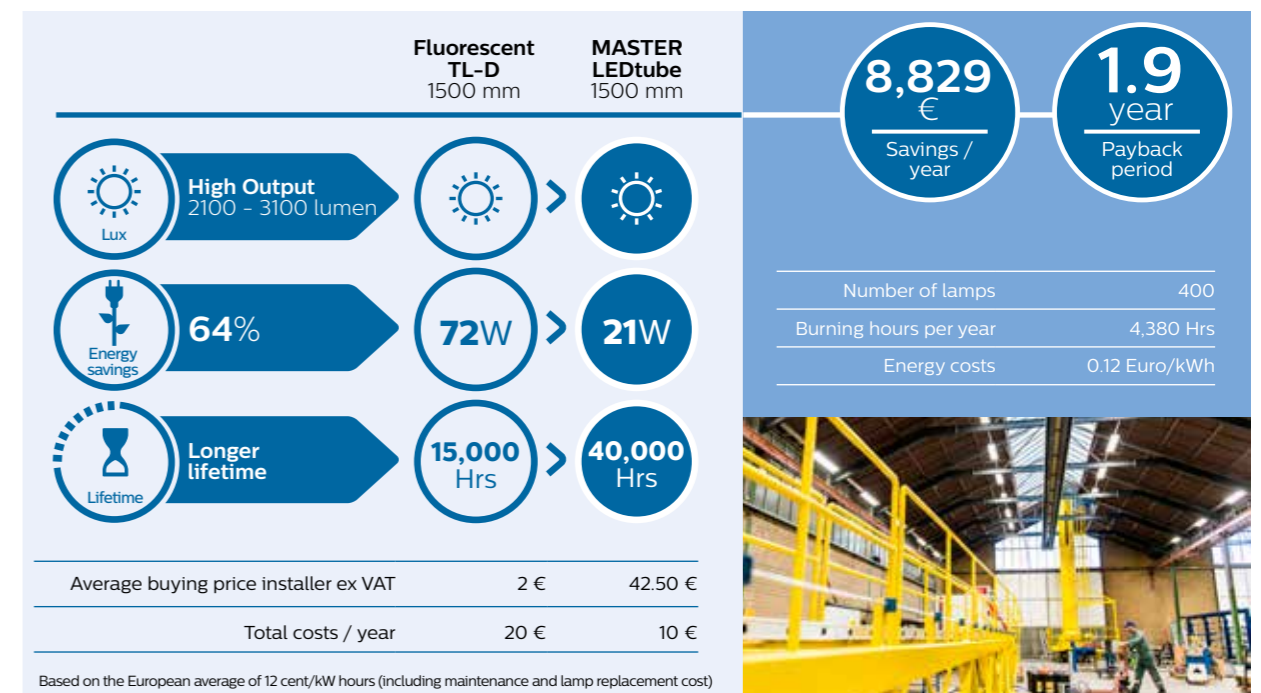


> Choose High Output LEDtubes for **high light output with the best lm/w**



High output for highly-efficient industry

Industrial customers demand 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.

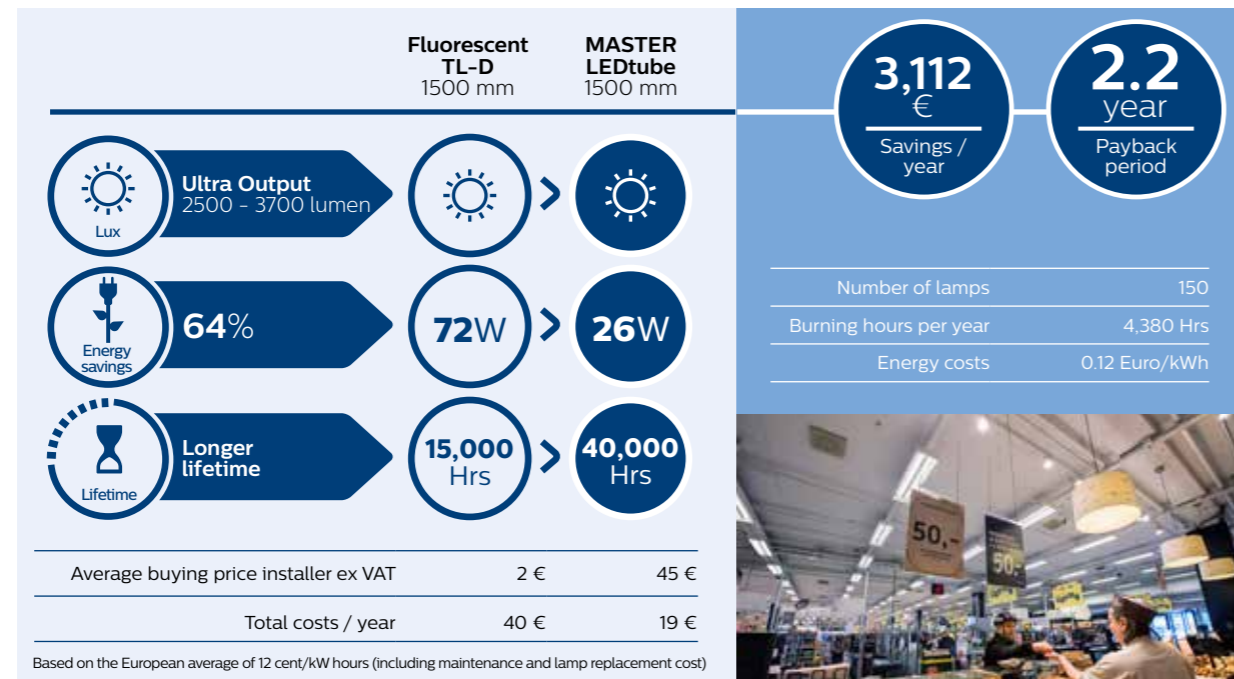


> Choose High Output LEDtubes for **high light output with the best lm/w**



Ultra output for supermarkets and DIY

Beautiful lighting brings out the best in the products on display and enhances the shopping experience for customers. But with lamps burning for up to 18 hours a day, food retailers want solutions that will reduce energy and maintenance costs – and show their green credentials in the best light.

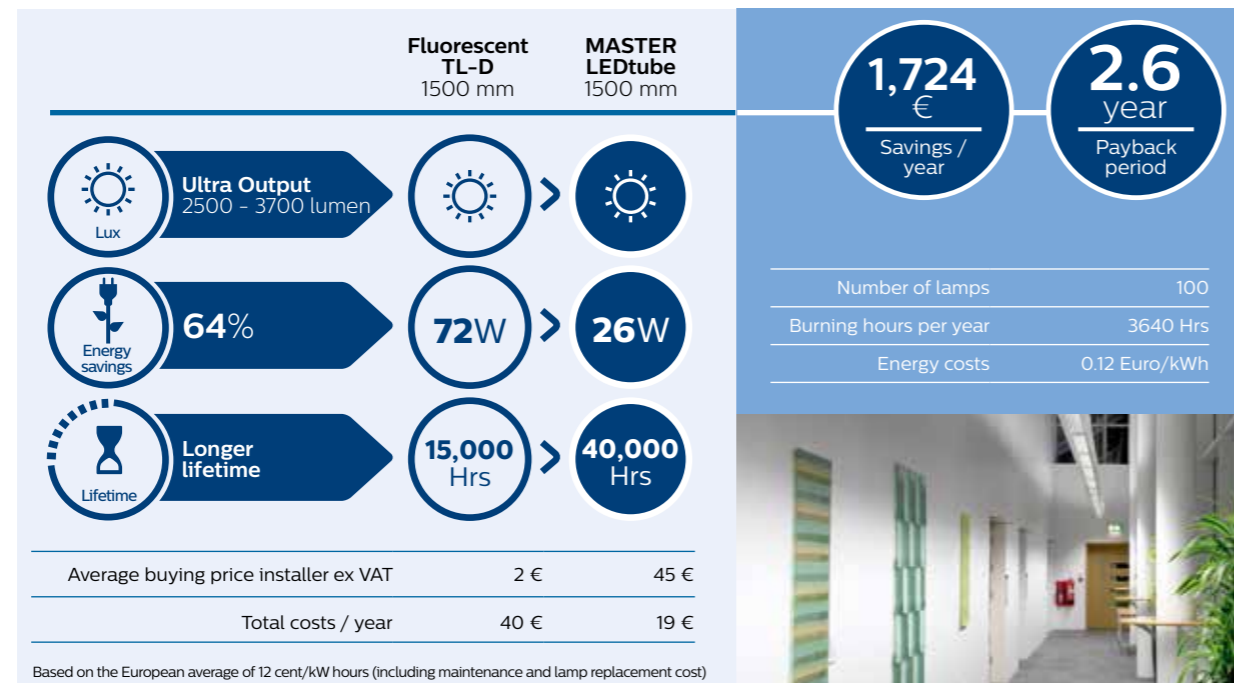


> Choose Ultra Output* LEDtubes for the **best light output** in the most demanding retail applications



Ultra output for ultra-efficient offices

Office and school lighting can influence energy levels, performance and wellbeing. Our solutions shine with impressive, high quality light to create the most comfortable ambience that complies with all office norms and still saves on energy. So business is always a pleasure.



> Choose Ultra Output* LEDtubes for the **best light output** in the most demanding office applications

*Available from May 2015 onwards



Case study

Multi-storey savings with MASTER LEDtube

Background

As part of its ongoing carbon reduction programme, St Helens Metropolitan Borough Council has upgraded lighting in a multi-storey car park from fluorescent to LED lighting.

The Solution

Around 500 Philips MASTER LEDtube, supplied through Specialist Lamp Distributors (a subsidiary of Edmundson Electrical), have been retrofitted to existing twin T8 fluorescent luminaires at the car park. As well as improving the lighting quality and visibility for drivers, the project has delivered significant reductions in energy and maintenance costs.

Frank Kelly Building Services Engineering Manager for the Council, explained: "Upgrading to LED light sources seemed to be the obvious solution and a key consideration was ensuring that light levels would be maintained, given the safety aspects of car park lighting. Having considered a number of options it was clear that Philips offered the quality and reliability that we required," he continued.

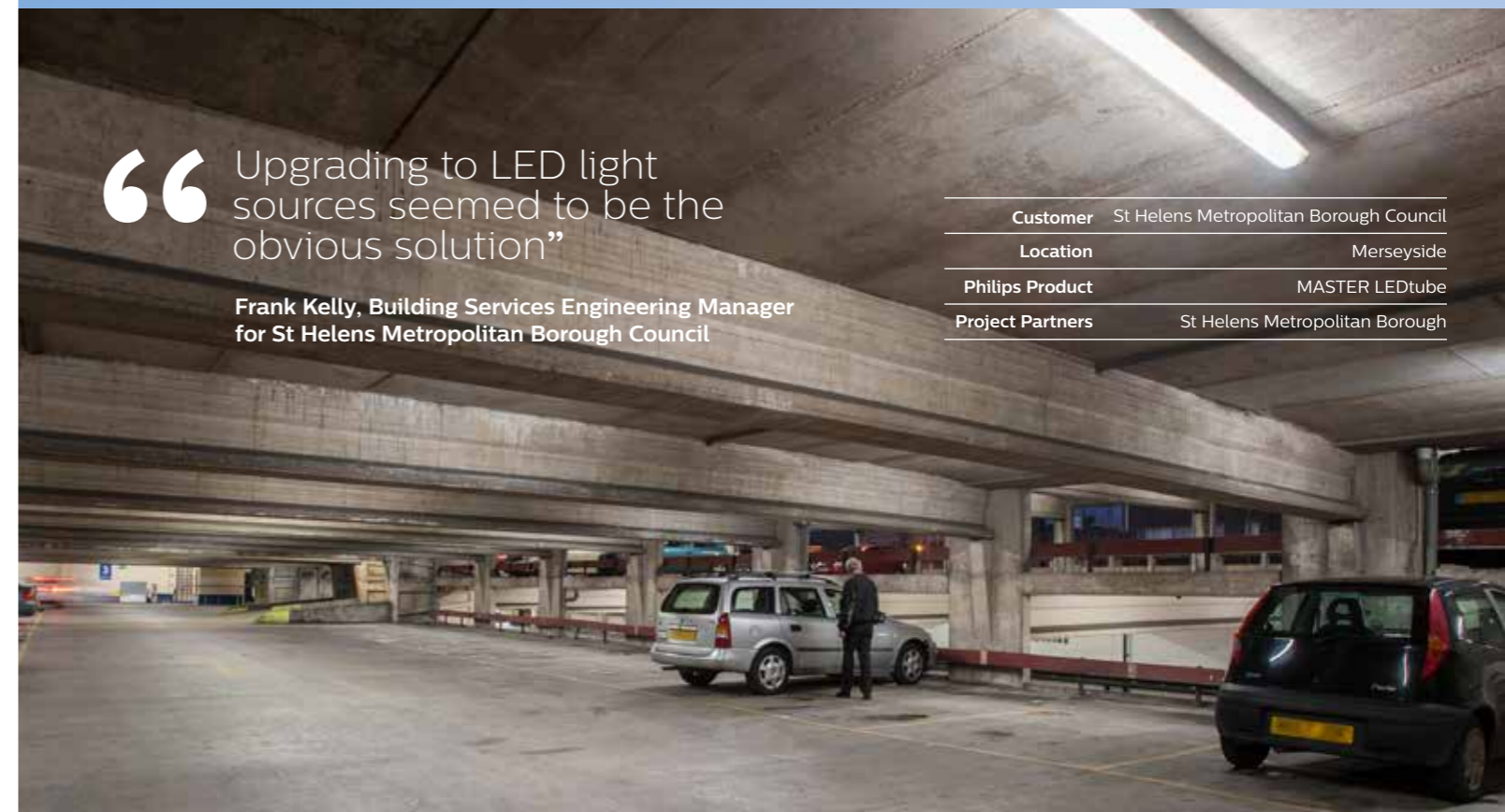
The MASTER LEDtube design integrates LED light sources into a traditional fluorescent –style tube. The work was carried out with minimum disruption to car park users, thanks to the ease of simply retrofitting the MASTER LEDtube into the existing fittings. In addition, the unique design of MASTER LEDtube creates a perfectly uniform visual appearance that cannot be distinguished from traditional fluorescent.

In order to qualify for Council funding, the project needed to deliver a return on investment within four years. This will be achieved through the savings on energy consumption alone. Plus there will be a significant reduction in the costs associated with changing lamps, as the MASTER LEDtube will provide a 40,000 hour life, compared to a typical life of 15,000 hours for the previous T8 tubes.

“Upgrading to LED light sources seemed to be the obvious solution”

Frank Kelly, Building Services Engineering Manager for St Helens Metropolitan Borough Council

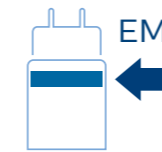
Customer	St Helens Metropolitan Borough Council
Location	Merseyside
Philips Product	MASTER LEDtube
Project Partners	St Helens Metropolitan Borough



Technical specifications

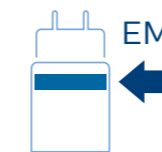


MASTER LEDtube High Output



Product type	LED	Traditional	Rotatable endcap	Lumen output	Operation	Beam angle	CRI	Color temperature	EOC 1 pcs (C)*
MASTER LEDtube	Wattage	Equivalent		Lumen		°		K	
1200mm ROT	20 W	36 W	Yes	1900 lm	EM & Mains	150°	83	3000	871869642198700
1200mm ROT	20 W	36 W	Yes	2100 lm	EM & Mains	150°	83	4000	871869642200700
1200mm ROT	20 W	36 W	Yes	2100 lm	EM & Mains	150°	83	6500	871869642202100
1500mm ROT	23 W	58 W	Yes	2900 lm	EM & Mains	150°	83	3000	8718292178956700
1500mm ROT	23 W	58 W	Yes	3100 lm	EM & Mains	150°	83	4000	8718292178958100
1500mm ROT	23 W	58 W	Yes	3100 lm	EM & Mains	150°	83	6500	8718292178960400
1200mm ROT InstantFit	18 W	36 W	Yes	2100 lm	HF	150°	83	4000	May 2015
1200mm ROT InstantFit	18 W	36 W	Yes	2100 lm	HF	150°	83	6500	May 2015
1500mm ROT InstantFit	25 W	58 W	Yes	3100 lm	HF	150°	83	4000	871869640886500
1500mm ROT InstantFit	25 W	58 W	Yes	3100 lm	HF	150°	83	6500	871869640888900

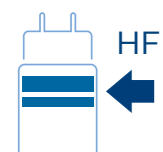
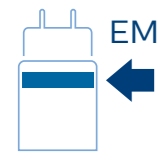
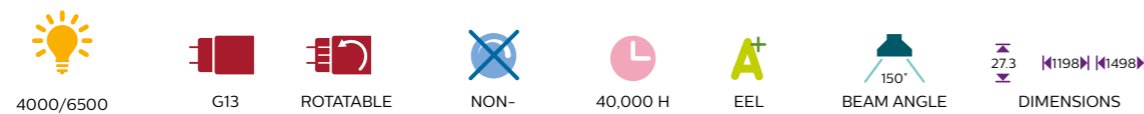
MASTER LEDtube



Product type	LED	Traditional	Rotatable endcap	Lumen output	Operation	Beam angle	CRI	Color temperature	EOC 1 pcs (C)*
MASTER LEDtube	Wattage	Equivalent		Lumen		°		K	
600mm ROT	10 W	18 W	Yes	1000 lm	EM & Mains	150°	83	3000	871869642204500
600mm ROT	10 W	18 W	Yes	1050 lm	EM & Mains	150°	83	4000	871869642206900
600mm ROT	10 W	18 W	Yes	1050 lm	EM & Mains	150°	83	6500	871869642208300
GA110 900mm	15 W	30 W	No	1250 lm	EM & Mains	140°	85	4000	871829123880500
GA110 900mm	15 W	30 W	No	1250 lm	EM & Mains	140°	85	6500	871829123882900
1800mm ROT*	25 W	70 W	Yes	3700 lm	EM & Mains	140°	85	4000	871869648037300

*Available from May 2015 onwards

MASTER LEDtube Standard Output



Product type	LED	Traditional	Rotatable endcap	Lumen output	Operation	Beam angle	CRI	Color temperature	EOC 1 pcs (C)*
MASTER LEDtube	Wattage	Equivalent		Lumen		°		K	
1200mm ROT	14.5 W	36 W	Yes	1600 lm	EM & Mains	150°	83	4000	8718292179308300
1200mm ROT	14.5 W	36 W	Yes	1600 lm	EM & Mains	150°	83	6500	8718292179310600
1500mm	20 W	58 W	No	2000 lm	EM & Mains	150°	83	4000	8718292173451200
1500mm	20 W	58 W	No	2000 lm	EM & Mains	150°	83	6500	8718292173453600
1200mm InstantFit	16.5 W	36 W	No	1600 lm	HF	150°	83	4000	8718292172885600
1200mm InstantFit	16.5 W	36 W	No	1600 lm	HF	150°	83	6500	8718292172887000
1500mm ROT InstantFit	22 W	58 W	Yes	2000 lm	HF	150°	83	4000	871869640078400
1500mm ROT InstantFit	22 W	58 W	Yes	2000 lm	HF	150°	83	6500	871869640080700

Protection starter



Product type	EOC 10 pcs (I)*
Accessory	8718291
Starter EMP	72930300

