

LED Retrofit Module E4-Series 24LED 60W

Renovation to LED technology while preserving the original structure of the luminaire

Retrofit is the direct replacement of old lighting technologies with newer, more efficient ones, using the previous installations. It is the perfect lighting solution for sustainable consumption, high efficiency and high performance.
This lighting system is very suitable in cases where a correct balance is required between the benefits of LED lighting and the use of previous resources, obtaining significant savings in its implementation and a major increase in well-being and safety in cities.

Retrofit is a safe bet in favour of ecology, as it prioritises the minimisation of waste generated by taking advantage of existing structures. It also stands out for the low consumption of LED technology and its great durability, offering responsible lighting by controlling the light emitted to the upper hemisphere of the luminaire.
Aditionally, the installation of the Retrofit modules is simple and versatile, fitting into the different structures through different adaptive frames.

Retrofit Module E4 offers the possibility of including a cutomized and pre-programmed dimming profile, with several levels and up to 5 steps. This makes possible to regulate the luminous intensity and the power emitted in certain time slots, adapting the operation of the lighting according to the user's habits.
Additionally, the E4 series allows DALI2 dimming options, CLO (Constant Lumen Output) and communication via NFC, expanding the possibilities of adaptation to different contexts. With flexible lighting, adapted to each situation, maximum levels of efficiency can be achieved.

Ref.	63159800

Other features	
Number of LEDs	24
Lighting control	Programmable
Power	60.00 W

Packaging info	
Box	1 pcs.

Physical data	
Net weight	1,800.00 g
Gross volume	10.25 dm^3
Gross weight	3,500.00 g
Width	294.00 mm
Height	296.00 mm
Depth	102.00 mm
Main product weight	1,800.00 g

Highlights

- **It allows to preserve the old luminaires without affecting the current environment:** adaptable to any size of ornamental luminaire and with the possibility of customising the base plate on demand
- **Benefits from the latest advances in LED technology** by reducing the initial investment
- **Energy saving:** long maintenance-free service life, which increases savings compared to other technologies, achieving savings of up to 80%
- **Maximum electrical safety regardless of the condition of the installation:** independent LED module, Class I and SELV certified
- **Flawless thermal management:** passive cooling system of the light source, by means of high quality thermopolymer heat sinks stabilised against UV radiation
- **Commitment to responsible lighting:** reduction of the flux emitted to the upper hemisphere
- **IP68 connector - PLUG AND PLAY:** supplied with a tubular IP68 connector for quick and safe installation of the lighting
- **Driver, optical group and IP68 connections:** offers integral protection to all optical and electronic elements against water and dust
- **100% made in Televes:** technology designed and manufactured in our cutting edge facilities, guaranteeing total control, with demanding quality monitoring, over each of the production phases

Discover

Our ranges of luminaires encompass a wide range of powers and number of LEDs, in addition to being customizable in the types of lighting control, colour temperatures, optics and their light distribution, and finishes. **A product can be configured according to these parameters, and ordered by its numerical or logical reference**, as follows:

Selecting the luminaire by the numerical reference:

This is a numerical code made up of 14 digits:

- The first 6 digits represent a code that depends on the Series of the luminaire, the number of LEDs and the power

- The next 8 digits allow you to choose the configurable parameters of the luminaire: lighting control, colour temperature, type of optics and finish

Series		Dimming		Colour Temperature		Optics		Finish	
631703	*Urban Alameda E 24LED 53W*	**00**	*No Dimming*	**18**	*PC Amber*	**02**	*SP*	**02**	*Black*
631713	*Urban Alameda E 24LED 39W*	**01**	*Dimming*	**22**	*2200K*	**11**	*D90*	**xx**	*Custom*
				27	*2700K*	**17**	*T2-C90*		
				30	*3000K*	**18**	*T3-B90*		
				40	*4000K*				

Selecting the luminaire by logical reference:

This is an alphanumeric code composed of an unlimited number of characters, describing the luminaire's characteristics using logical abbreviations, to facilitate its interpretation. It is divided into 2 groups of characters, separated by a hyphen:

- The first group specifies: the luminaire series, the number of LEDs, the colour temperature, and the lighting control
- The second group specifies: the type of optics, the finish and the power

An example of a logical reference: UA2418D-D90BL53

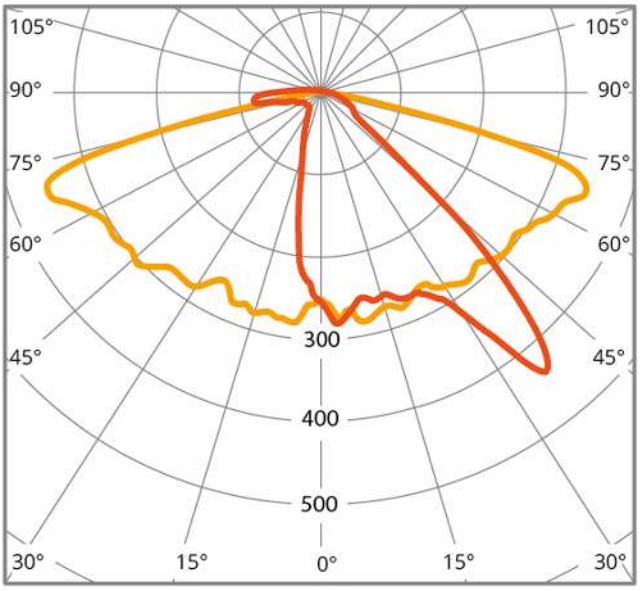
- UA – *Urban Alameda*
- 24 – *24 LEDs*
- 18 – *Colour Temperature: PC Amber*
- D – *Dimming included*

- D90 – *D90 Optics*
- BL – *Black colour*
- 53 – *53W Power*

Range & LED number		Colour Temperature		Dimming		Optics	Finish		Power	
UA24	*Urban Alameda E 24LED*	**18**	*PC Amber*	**(ø)**	*No Dimming*	**SP**	**BL**	*Black*	**53**	*53W*
		22	*2200K*	**D**	*Dimming*	**D90**	**xx**	*Custom*	**39**	*39W*
		27	*2700K*			**T2-C90**				
		30	*3000K*			**T3-B90**				
		40	*4000K*							

Graphic documentation

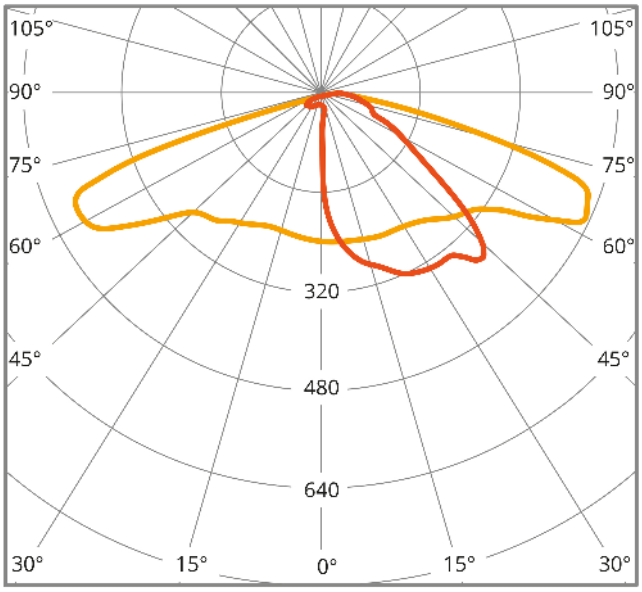
ME



cd/klm C0 - C180 C90 - C270 $\eta = 88\%$

Light distribution curve

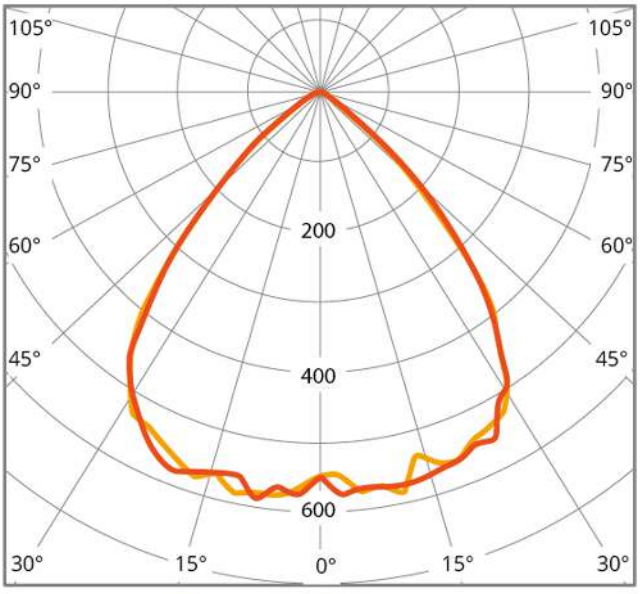
P



cd/klm C0 - C180 C90 - C270 $\eta = 94\%$

Light distribution curve

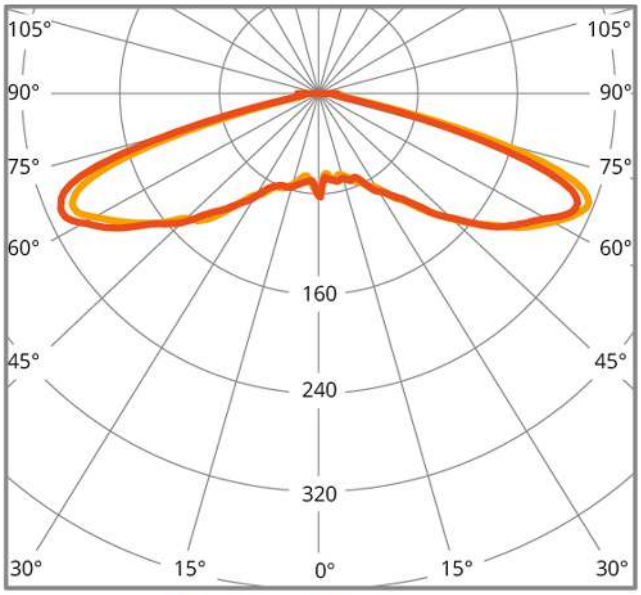
S90



cd/klm C0 - C180 C90 - C270 $\eta = 100\%$

Light distribution curve

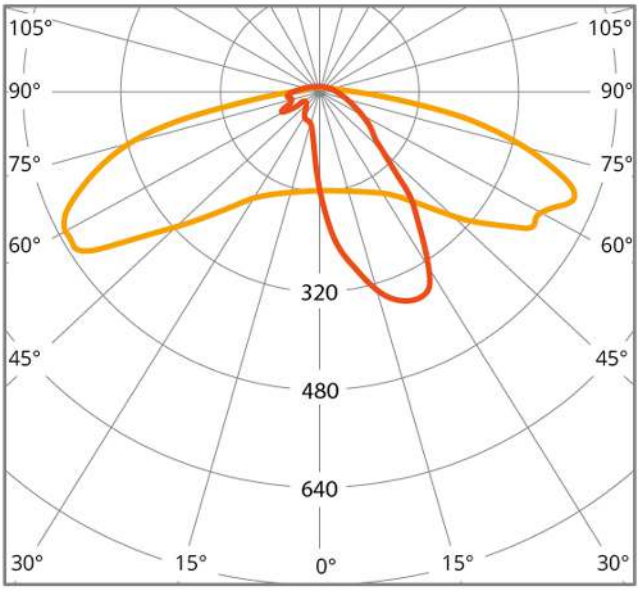
SP



cd/klm C0 - C180 C90 - C270 $\eta = 96\%$

Light distribution curve

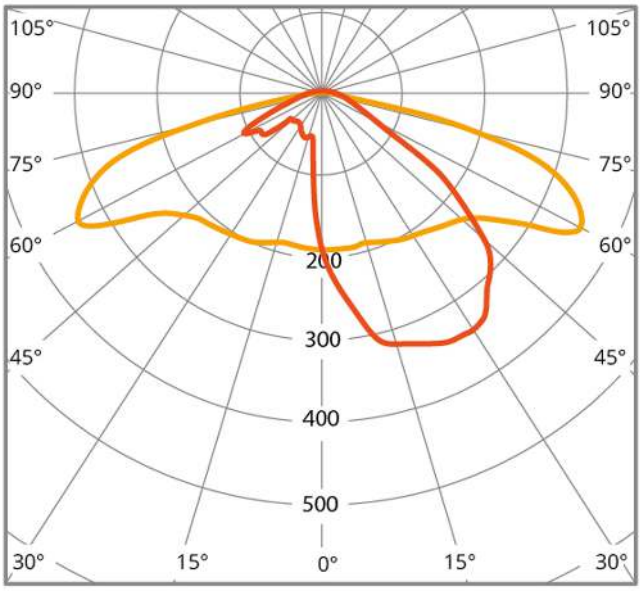
T2



cd/klm C0 - C180 C90 - C270 $\eta = 90\%$

Light distribution curve

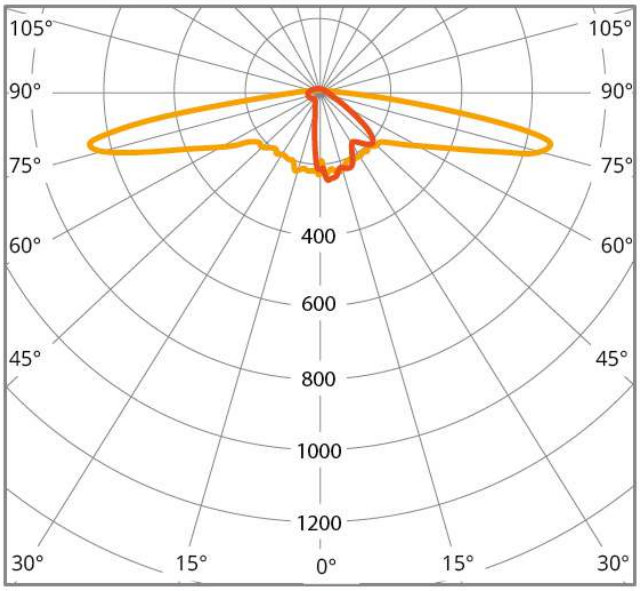
T3



cd/klm C0 - C180 C90 - C270 $\eta = 92\%$

Light distribution curve

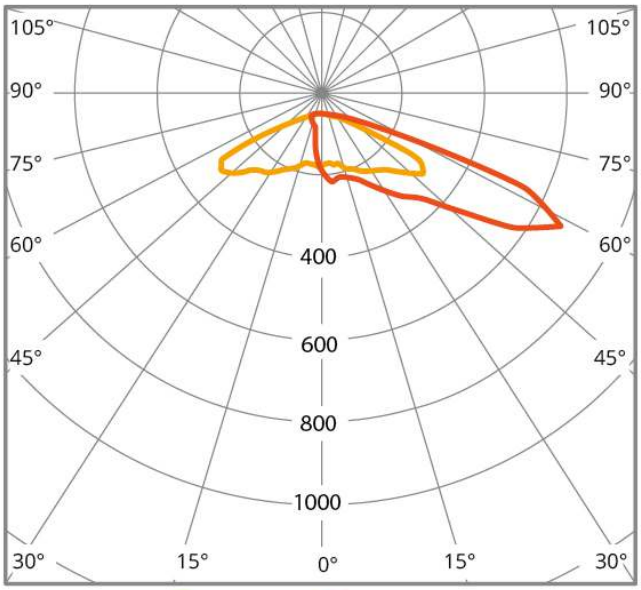
SCL



cd/klm C0 - C180 C90 - C270 $\eta = 86\%$

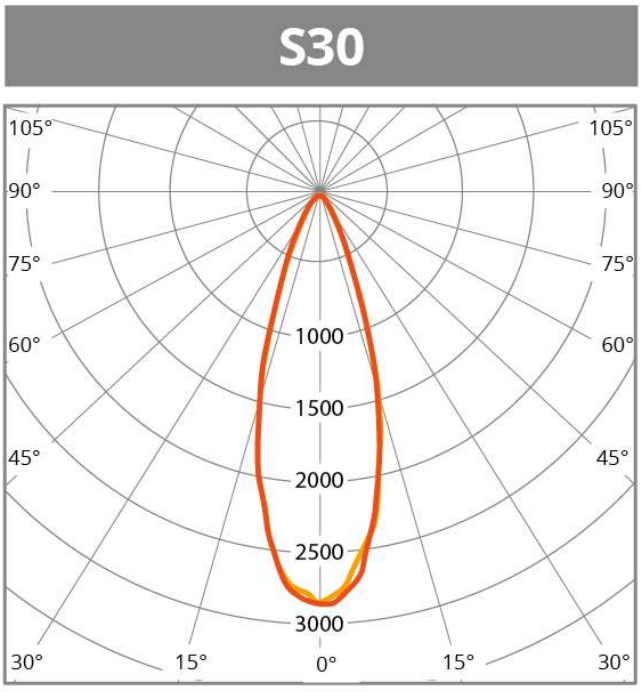
Light distribution curve

APZ



cd/klm C0 - C180 C90 - C270 $\eta = 96\%$

Light distribution curve



Light distribution curve

Features



Technology adapted to all contexts

The Retrofit module makes it possible to upgrade old lighting installations with the latest LED technology. With Retrofit the lighting system is renewed while making the best possible use of previous resources. This is especially important in historical or monumental areas, where preserving the existing luminaires is key, minimising the aesthetic impact and protecting the cultural heritage.
Retrofit is also a highly versatile solution, which can be installed on almost any existing luminaire thanks to the adaptable frames or by creating a bespoke base plate.



Maximum security

The Retrofit module has the highest levels of electrical protection: the SELV certificate provides an output voltage of less than 60V, minimising the risk of electrocution in the case of system failure. In addition, its driver, optical group and IP67 connections offer integral protection to all optical and electronic elements against water and dust ingress, eliminating any effect caused by external agents.



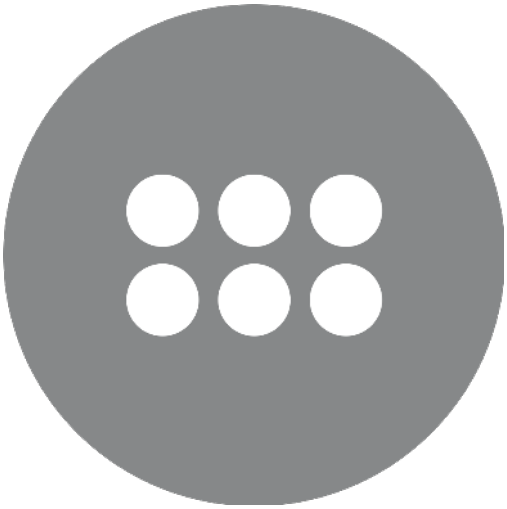
Flawless thermal management

The Retrofit module has a passive cooling system for the light source. High thermal conductivity is guaranteed by the innovative, high-quality heatsinks made of thermopolymer of our own design, resulting in high temperature stability. The heatsink ensures thermal protection of the electronics, regardless of the geometry of the luminaire where it is installed, maximising the lifetime of the LED module and improving its efficiency.



Great return of investment

The use of existing structures combined with the high efficiency of LED technology and its long service life, results in reduced costs and a quick return on the initial investment.



Control and connectivity

This range is equipped with D4i (Digital Illumination Interface Alliance) certified drivers, which have the ability to store luminaire data. At the same time, D4i defines how to feed from the driver to other DALI2 devices connected through the bus, simplifying communication with sensors.
In addition, E4 Series offers dimming options such as DALI2 and CLO, and schedules and lighting curves can be programmed via NFC.



Design and manufacture 100% made in Televes

Our cutting-edge facilities include all the means for the creation of this luminaire, from start to finish. This involves everything from the electronic and mechanical design, using advanced simulation processes, to the manufacture of the circuits, boards and all the elements of the chassis, using meticulous construction processes and assembly on robotised lines. An in-house design and manufacturing process also offers other advantages, such as quality verification at every point of development.



A world of possibilities

Each situation requires specific lighting features, that's why our luminaires offer multiple alternatives to meet the needs of each context:

- A wide selection of highly homogeneous colour temperatures (SDCM<3): PC Amber, 2,200, 2,700, 3,000, 4,000, 5,000 and 5,700ºK
- 11 different types of optics are available to achieve lighting adapted to any environment: P, SP, ME, T2, T3, T4, APZ, SCL, S30, S60 and S90
- CRI>70 and available on request CRI>0 and CRI>90

And if you don't find what you are looking for, we have even more

options available on request. We are pleased to study your project in a tailored, non-binding way. Contact us, and we will help you choose the perfect lighting.

Televes®

Technical specifications : Ref. 63159800

Number of leds		24									
Power	W	60									
Pre-programmed dimming		No									
Control interface		Dali 2									
Optic type options		P	SP	S30	S60	S90	T2	T3	ME	APZ	SCL	T4
Lens type		PC lens	PC lens	PC lens	PC lens	PC lens	PC lens	PC lens	PC lens	PC lens	PC lens	PC lens
Color temperature options		2200K		2700K		3000K		4000K		PC Amber		
Luminous flux	lm	7200		7800		8100		9000		3768		
Lighting efficiency	lm/W	120		130		135		150		62.8		
LED current	mA	325		325		325		325		650		
Duration	h	100000										
Working life		L90B10										
Constant ligh output (CLO)		Yes										
Standard Deviation Colour Matching (SDCM)		< 3										
Color rendering index (CRI)		70										
CE Mark		Yes										
ENEC Certificate		No										
Protection Class IEC		Class I										
EU RoHS Compliant		Yes										
IK Rating (light module)		10										
IK Rating (whole luminaire)		10										
IP Rating (light module)		68										
IP Rating (whole luminaire)		66										
Color		Black										
Material		Aluminium										
Material cover		Without cover										
Fixation Material		Aluminium										
Mounting method		Other										
Surface protection		Powder coating										
Number of LED modules		2										
Minimum power factor		0.9500										
Lighting source type		LED										
Replaceable light source		Yes										
Cable		Yes										
Power consumption tolerance	%	5										
Lighting flux tolerance	%	8										
Electric connection		3-pole waterproof connector										
Inrush current	A	54										
Input voltage Max	Vac	240										
Input voltage Min	Vac	220										
Mains frequency		50 Hz										
Max. Operating temperature	°F	104										
Min. Operating temperature	°F	-31										