

T5C LED

isollux™



Next Generation LED Upgrades for T5 Fluorescent

Products with the power and photometry to deliver perfect results every time.

T5C LED

LED UPGRADE FOR T5 FLUORESCENT

With the EU ban of T5 Fluorescent fixtures now in place, T5C offers customers a viable option to keep and maintain their existing stock of T5 fluorescent fixtures with a simple and effective LED upgrade. T5C delivers up to 60% energy savings, in luminaire, and after all losses whether upgrading from high efficiency (HE) or high output (HO) T5 tubes. It installs in minutes and is fully compatible with all lighting controls.

Selecting the LED Driver

The LED driver is used to set light output and integrate with any existing lighting controls. Light output is determined by the driver's output current set from a range of common values to deliver a one-for-one replacement, increase or decrease output via DIP switch, DALI or NFC.

Why replace the driver?

Replacing the LED driver is essential to optimise power and maintenance savings whilst ensuring the long term safety of the fixture. Reliance on old electronics in circuit, that were designed for fluorescent are incapable of offering the same performance and energy savings. Do it well, do it once, to optimise power savings, and ensure a safe, professional LED upgrade.

BENEFITS:

- One-for-One replacement for all T5 fluorescent tubes
- Photometric equivalent performance to T5 in all recessed and IP rated enclosures
- Delivers up to 60% energy saving
- Fully compatible with lighting controls
- High Density Array with Dual Die LED
- Extremely long life with low lumen depreciation
- Fast efficient installation
- Magnetic or direct fix
- Ten year warranty

TECHNICAL SPECIFICATIONS:

- 170lm/W (Tube Only)
- 154lm/W (Standard louvre)
- Lifetime L90/100k Hrs @ Ta 25°C
- CCT : 2700K / 4000K / 5000K / 6000K / AMB* / AMX*
- CRI85 | CRI95
- SDCM 3
- Lengths (mm): 550 | 850 | 1150 | 1500
- IK08 Polycarbonate food grade lens
- IP20 and IP65 in suitable enclosure
- Suitable for ambient applications between -40°C to +50°C



Performance in Fixture

The T5C delivers identical light output in all types of fixtures including; lensed and open troffers, louvre fixtures and IP-rated enclosures. With the same profile and easy installation simply adjust the drive current to set the required light output and achieve up to 61% energy savings, compared to TT Fluorescent, after all losses, whether replacing HE or HO T5 fluorescent.

Performance comparison between T5 Fluorescent and Isollux T5C in recessed fixture (Standard Louvre)

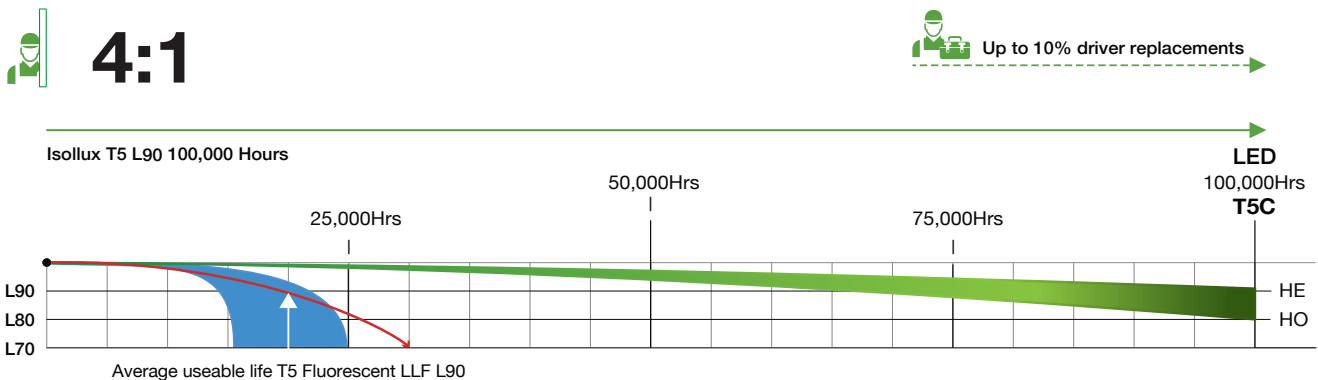
Original T5 Length	T5 Power	Inc Ballast	Req' Output	T5C All Losses	Photometered	Vdc	mA	Inc Driver*	Saving
T5 HO - 550mm	24W	28W	1,382lm	134lm/W	1,645lm	36	300mA	12.3W	56%
T5 HE - 850mm	21W	24W	1,545lm	134lm/W	1,919lm	36	350mA	14.3W	40%
T5 HE - 1150mm	28W	34W	2,175lm	136lm/W	2,232lm	36	400mA	16.4W	52%
T5 HE - 1450mm	35W	40W	2,695lm	137lm/W	2,802lm	36	500mA	20.5W	49%
T5 HO - 1150mm	54W	63W	3,415lm	138lm/W	3,387lm	36	600mA	24.5W	61%
T5 HO - 1450mm	80W	92W	5,326lm	142lm/W	5,396lm	36	950mA	38W	59%

Note: The ballast losses attributed above are averaged across a limited range in a diverse market, minor differences may occur in practice. Savings exclude power factor correction which is assumed neutral between the fluorescent and LED.

Comparative Maintenance

Isollux high density LED arrays, combined with dual-die technology not only delivers class leading energy savings, but ensures the T5C maintains a consistent light output with only 10% losses at 100,000 Hours (L90/100K/Hrs). Five times the life of a T5 Fluorescent.

Upgrading to T5C will deliver a maintenance free interval between 50-100k/Hrs subject to the LED driver specified by Isollux or your contractor. With a minimum average maintenance free period of 10 years operating 14 hrs a day.



Significant Embedded Carbon Savings

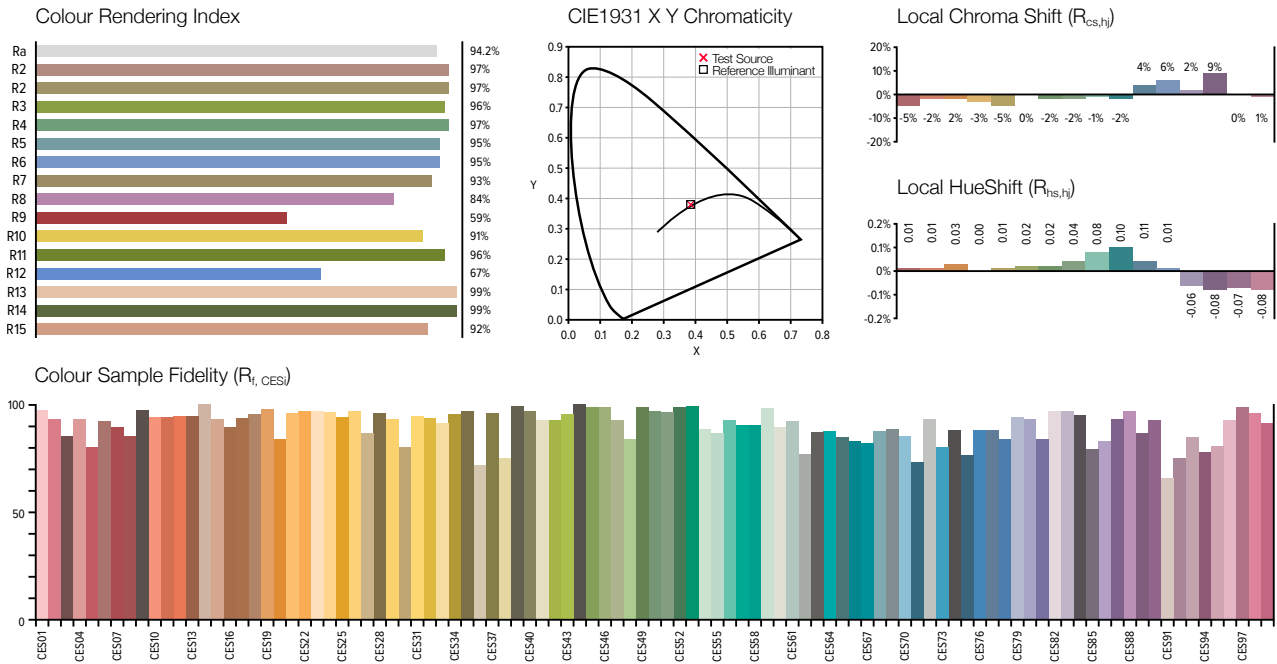
Maintaining and upgrading your T5 Fluorescent to Isollux T5C LED not only makes sense economically with quantifiable CAPEX and OPEX savings compared to replacing your luminaire with a new LED luminaire, it delivers significant embedded carbon savings with a fully serviceable long term solution in line with the best objectives of the EU's motive to remove T5 Fluorescent from the supply chain. T5C is engineered to offer a genuine alternative to replacing the entire fixture whilst avoiding unnecessary cost and unnecessary waste.

Colour Rendering

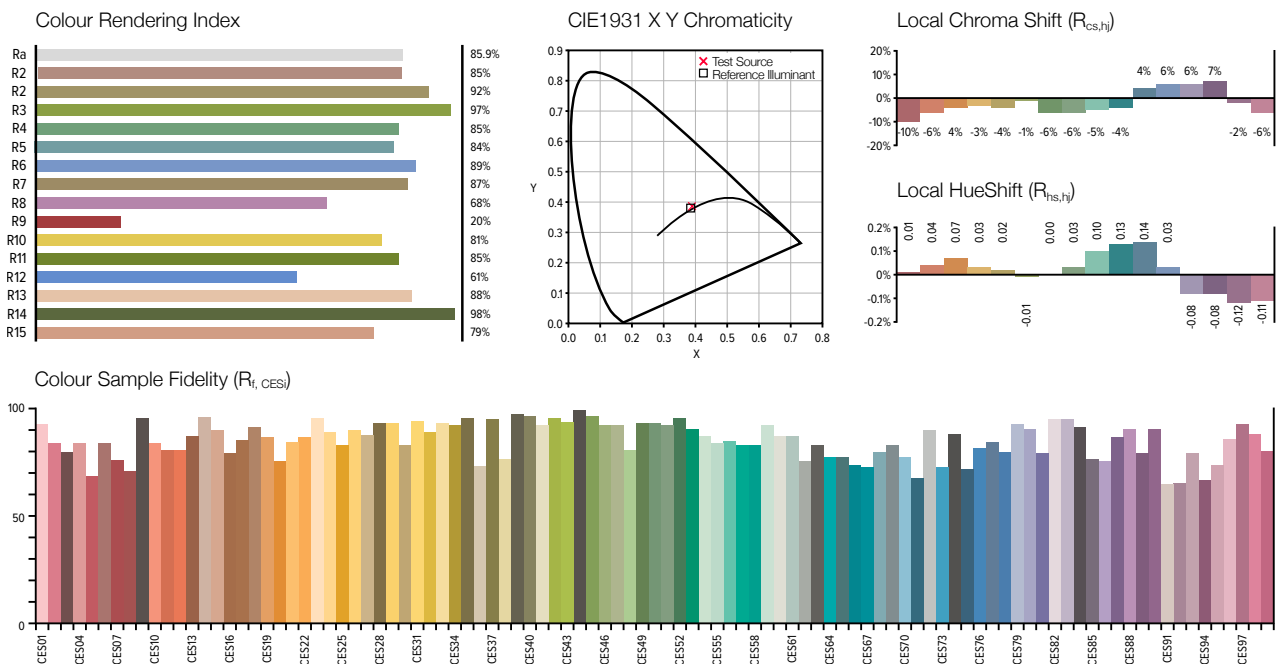
T5C revitalises any environment, replacing the dull, unsaturated colours emitted by fluorescent lighting with vibrant, true tones only achievable through advanced LED technology.

Choose between CRI 85 for the greatest savings and CRI 95 for the highest possible colour accuracy, both with an SDCM ≤ 3 , a neutral bias and rich full colour spectrum, with positive R9 for accurate and vivid reds.

Ra95



Ra85



Simple to Order

Because T5C has sufficient power to match or exceed the light output of both HE or HO fluorescent tubes, customers only need to determine the length of the tube they need to replace.

Product Options

Product Code	Length	Max Watts	Lm/W @ 4,000k	Max Output	Lm/Maintenance	Warranty
T5C-HE-0550-YYY	549mm	15 Watts	170lm/W	2,550lm	L90 / 100k/hrs	10 Years
T5C-HE-0850-YYY	849mm	25 Watts	170lm/W	4,250lm	L90 / 100k/hrs	10 Years
T5C-HE-1150-YYY	1149mm	30 Watts	170lm/W	5,100lm	L90 / 100k/hrs	10 Years
T5C-HE-1500-YYY	1449mm	40 Watts	170lm/W	6,800lm	L90 / 100k/hrs	10 Years

Where **(X)** = Correlated Colour Temperature (CCT and can be: 3,000k **(3)** | 4,000k **(4)** | 5,000k **(5)** | 6,000k **(6)**)

Where **(YY)** - CRI and can be (85) or (95) (Note CRI95 will result in a 10% reduction in stated efficacy)

Or replace all with Ambrite™ **(AMX)** or **(AMH)**, for photosensitive applications, from pharmacy to wildlife protection.

Performance figures based on 4,000k @ CRI85 in an open fixture operating at Ta25°C

No Losses at Low Temperature

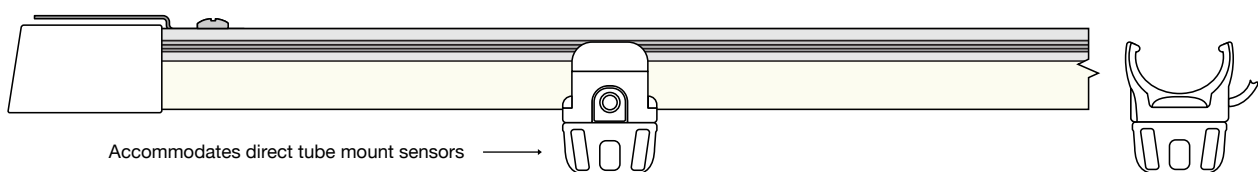
Unlike T5 fluorescent, Isollux T5C LED upgrades do not suffer a progressive loss in light output as the ambient temperature drops. T5C will deliver significant additional savings and increased lux levels at temperatures as low as -40°C, and are suitable for use as replacements within IP-rated enclosures.

Integration with existing sensors and controls

T5C is engineered for seamless integration with lighting controls and building management systems, including DALI 2, DALI D4i, Casambi, ZigBee and Bluetooth control systems. Functionality is provided by the LED driver so it is essential to specify the correct LED driver. Upgrading your facility to T5C LED also offers the opportunity to add or update control systems, bringing additional functionality and savings to your property portfolio.

Accommodates tube mount sensors

The design of the T5C includes a return edge that securely captures latch-on sensors, eliminating the need for ugly adaptors or the expense of replacing working components. The design of the T5C simplifies installation and ensures compatibility with existing controls.



Simple and Fast Installation

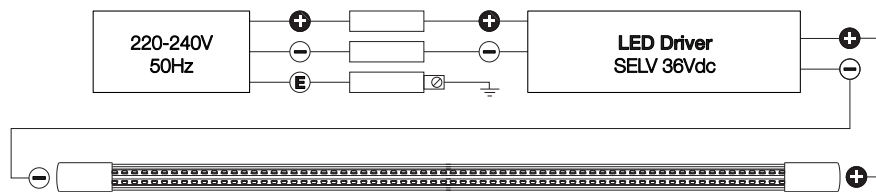
There is no need to strip or run new cables, provided the fixture is in good working order the installation takes just a few minutes.

Step 1 - Fitting the T5C

Once isolated from the power supply, simply remove the louvre or lens from the fixture, and the tombstone lamp holders from either end. Separate the cables from the lamp holders, and connect to the T5C using the WAGO connectors provided. The magnetic mount makes positioning a breeze.

Stage 2 - Fitting the LED Driver

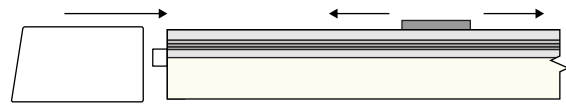
Remove and replace the original fluorescent ballast with an LED driver that matches the required functionality, check polarity and re-connect the original cables to the LED driver. Replace the lens or louvre, test and re-energise the lighting circuit for final visual confirmation.



Note: Drive Current (mA) subject to length and lumen output requirements

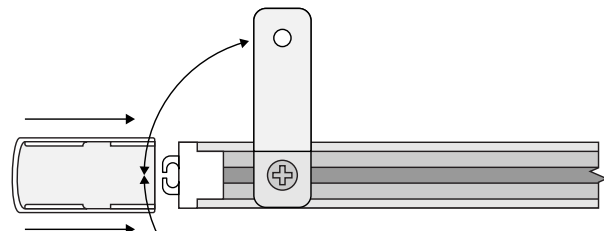
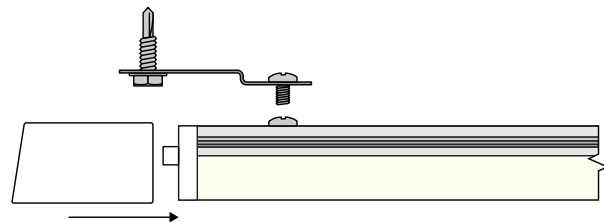
Magnetic catch

The included magnetic catch is a simple, effective solution to secure the T5C tube into the existing fixture. It can be fixed at any point along the length of the tube.



Seismic Mounts

Seismic mounts are provided for regions where regulations require a mechanical mount between the components. A pair of brackets are provided that can be used to mount the T5C at any point along its length and rotated to a safe position before fixing directly to the luminaire.



Accommodates left, right or centrally mounting options

Ensuring Correct Airflow

The brackets are designed to ensure a small but essential gap between the fixture and the heatsink to reduce thermal load and optimise performance and longevity.



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