

Right Light Guide for LED Tubes

LED linear lights (TLEDs) are an emerging energy-efficient technology. Use this guide to learn more about them.

1 Why consider LED tubes?

Fluorescent lighting is everywhere. Fluorescent lighting is universal. Look up, and you'll likely find these familiar tubes lining the ceilings of many buildings. Linear fluorescent lamps (LFLs) have largely reached their maximum energy-saving potential, and they also require recycling.

LED lighting is a new alternative.

LED lighting is rapidly evolving and providing an alternative to LFLs. Building owners and facility managers are adopting LED lighting for its long life span, energy efficiency, and controllability.



2 How do you compare products?

Type A – Plug & Play

LED tube with integrated driver on existing ballast:

Linear LED lamp designed to work with compatible fluorescent ballasts. Most products are designed to work with T8 and T5 electronic ballasts.

Pros: Cheapest, simplest install with no fixture modification.

Cons: LED lamp must be compatible with fluorescent electronic ballast.

Type B – Direct Wire

LED tube with integrated driver wired to mains:

Like Type A, this tube operates with an internal driver. The difference is that lamp sockets are directly wired to line voltage and ballast is removed.

Pros: Maintenance costs due to failed ballasts are eliminated.

Cons: Higher install cost. Electrician, wiring, and non-shunted lamp holders required.

Type C – External Driver

LED tube with remote driver rather than integrated:

This tube uses a remote driver. Like Type B it involves electrical modification to the existing fixture, but at low-voltage to the sockets.

Pros: Best overall system compatibility.

Cons: Higher install cost. Wiring and external driver required.

Looking for quality? Check for the DLC mark. The DesignLights Consortium™ (DLC) is dedicated to accelerating the widespread adoption of high-performing, energy efficient commercial lighting solutions. DLC keeps up a qualified products list (QPL) that features lights meeting their performance standards. Check their list at designlights.org/qpl.

