



Right Light Guide for LED Tubes

LED linear tube lights 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 tubes (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 T12, T8 and T5 ballasts.

Pros: Simplest installation with no modification of fixtures.

Cons: Reduced efficiency. LED lamp must be compatible with fluorescent 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 bypassed.

Pros: No compatibility issues with fluorescent ballasts.

Cons: Rewiring required. Also requires non-shunted lamp holders.

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: Rewiring and additional equipment (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.

