

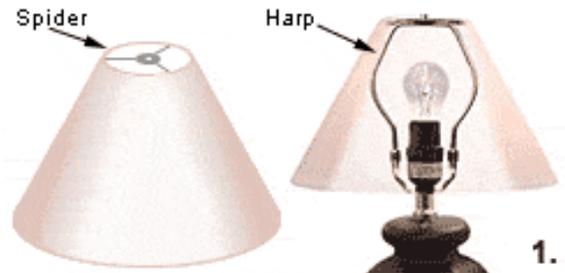
The LumaCross LED bulb is designed for use in shaded table and vertical-oriented floor lamps as a direct replacement for incandescent, CFL and traditional globe-shaped LED bulbs. Given the unusual shape of LumaCross, it is helpful to understand how to evaluate an existing lamp to make sure that your new LumaCross will fit correctly.

**LAMP SHADES.** Lampshades are designed for aesthetics and functionality. They are sized dimensionally to accommodate the lamp base. When considering a shaded table or floor lamp for LumaCross, the shade attachment mechanism (called a “fitter”) is important. There are three primary methods of attaching a lampshade: the Spider-Harp Style Fitter (Fig. 1), the Uno Fitter (Fig. 2), and the Clip-On Fitter (Fig. 3).

One of the most common lampshade fitters used for table and floor lamps is the **Spider-Harp Fitter**. Large base lamps and those with large shades use Spider-Harp Fitters because they are better at securing the shade. As shown in Pic 1, the harp attaches to the lamp base and the spider, which is part of the lampshade, attaches to the top of the harp using a finial screw. When considering replacement of a globe-shaped bulb with a LumaCross bulb in a lamp with a Spider-Harp Fitter, the most important consideration is the height of the harp. Since the LumaCross bulb is 5.1” high, it will typically fit inside harps that are at least 6” high (measured as shown here). For lamps with taller harps, the existing bulb can be unscrewed and the LumaCross screwed in without removing the harp. For shorter harps, removing the harp “saddle” at the harp bottom makes bulb replacement easier.

The **Uno Fitter** sits directly on a specialized light bulb socket and is mainly used on European-style lamps. It is secured by a threaded ring that’s held in place by the light bulb. Since LumaCross uses the same thread-base as standard bulbs, lamps with Uno Fitter attached shades are the easiest to accommodate the cross light bulb.

Because the **Clip-On Fitter** mounts to the top of a globe-shaped bulb, it is not suitable for LumaCross.



# Lamp Fitting Guide

## BULB SIZES

The lighting industry has long ago standardized incandescent light bulb dimensions so that customers purchasing bulbs could be assured they would fit in a wide variety of lamps. When the first LED bulbs were developed, they were engineered to meet the same basic dimensions, although some are unique based on their particular function. The most two commonly used bulbs for table and floor lamps are the A19 bulb and the A21 bulb.

The **A19 bulb** is the most common light bulb size in the world. Often described as a “globe” or “upside-down pear” shape, the bulb was initially created to accommodate the incandescent filament that was mounted across the width of the globe. The dimensions of the A19 are 4.13 inches high with a diameter of 2 3/8 inches.

The **A21 bulb** is less common, and is often the size of a high output, 3-way bulb. It uses the same screw base, so that it can be used in most table and floor lamps equipped with a three-way switch. The A21 bulb is larger to accommodate the heat generated by high wattage produced by 3-way bulbs. The dimensions of the A21 bulb are 5 inches high with a diameter of 2 5/8 inches.

The images at the right show the LumaCross superimposed over the A19 and A21 bulb. With dimensions of 5.1” high and 2.3” wide, the LumaCross is slightly taller than the A19 and basically the same size as the A19. This design was selected to ensure that LumaCross fits virtually all US table lamps.

Screw in bulbs use a base called an Edison Screw or ES base. This base was developed by Thomas Edison for the first light bulbs and is still in use today. The medium or standard screw base is the E26 in North America and the E27 in Europe. The number following the E indicates the size in mm of the external thread screw. Thus a E26 has a 26 mm base diameter. You may see low cost LED bulbs using an E27 base on eBay and Amazon from foreign suppliers. While these technically will work in E26 bases, this is usually a sure indication that the bulb was not strictly designed for the US market and this bulb may lack a proper North American, UL or ETL safety certification and therefore should be avoided.

LumaCross bulbs are equipped with an E26 screw base, making them compatible with virtually all lamps made and sold in the USA.

