

buying fluorescent lamps.

by Randal Smith



Image courtesy Philips Lighting

Few things are less thrilling than shopping for light bulbs (aka lamps). But today some less-than-scrupulous companies are selling fluorescent lamps using less than completely forthright claims. Here are some facts to keep in mind when you are faced with a hard sell for fluorescent lamps. Most of these tips are from the ANSI standards for fluorescent lamps.

• **Rated Life**

Unlike incandescent lamps, which burn out based on the amount of time they are operated, fluorescent lamps are rated based on

how frequently they are started. The more frequently a fluorescent lamp is started, the more quickly it will wear out. In order to standardize life ratings, all fluorescent lamps are supposed to be rated on the “3-hour burn”. This means that the fluorescent lamp is run for 3 hours, turn off for a few minutes, then restarted. So, the life rating of 20,000 hours on a typical fluorescent lamp is based on it being on at least, but no more than 3 hours every time it is started.

If a fluorescent lamp is started less frequently than 3 hours, it should last longer, or less long if started more frequently. But the 3 hour burn is the standard for testing fluorescent lamp life. Beware when pitched a fluorescent lamp that lasts many times longer than the standard — they are probably basing the claims on much longer burns than 3 hours. Ask for the fine print.

A fluorescent lamp that is rated at 20,000 hours on the standard testing time of 3 hours has a reasonable expectation of lasting over 30,000 hours on a 24 hour testing cycle. So, when you hear claims of super-duper lamps lasting nearly 40,000 hours, demand to know the details of the testing cycle of these lamps.

• **Guaranteed Hours**

The life rating of an electric lamp is **never** a guarantee the lamp will operate for that amount of time. When a lamp is rated for 20,000 hours (or any other time period) it means that of a large statistical sample of that product, 50% of the lamps **will be burned** out at that time. It does NOT mean that the lamps are guaranteed to last that long. Many lamp manufacturers offer very good warranties on their lamps, but they can not guarantee that your lamp will still be running at 19,999 hours. You should be skeptical of “guarantees” of lamp life.

• **“Free Replacements”**

We heard of a sales gimmick on a seemingly magic lamp that cost \$18 that normally sells for \$2. If the lamp burns out early, you get a “free” replacement that you have to install yourself. Let’s see — most of the cost of relamping is in the labor, not in the cost of the lamp. With a markup of 900%, there seems to be nothing free about it since you paid the cost of 9 lamps and only get 2 lamps. Paying \$16 more is not free.

Caveat emptor—let the buyer beware. Arm yourself with information to guard against the hard sell.

lighting odds and ends.

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• **LightNow**

(www.lightsearch.com/lightnow/) A Regular email newsletter that is produced in conjunction with Lightsearch and the Lighting Controls Association. Provides a timely update of products, programs and economic forecast.

• **California Lighting Technology Center**

(cltc.ucdavis.edu/cltc/) The mission of the CLTC is to foster the application of energy-efficient lighting by facilitating technology demonstrations, development, outreach and educational activities, in partnership with the lighting industry, lighting professionals, and the electric utility community.

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