

## What's Good About Fluorescent Lighting?

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The virtues of fluorescent lighting are widely recognized. For one thing, fluorescents are high-efficacy (energy-efficient) lamps that, when compared with ordinary incandescents, produce up to four times more light (measured in lumens) for a given amount of electricity consumed (measured in watts). For another, fluorescents are long-lasting; they commonly have up to 10 times the lamp life of standard incandescent bulbs.

For these reasons fluorescents are widely accepted for commercial and industrial applications – at the office, in factories, in stores and shops – especially in situations where a lot of light is constantly required and the cost of lighting is a major consideration (as in, say, a 24-hour supermarket).

Despite their obvious advantages, however, fluorescents – to paraphrase the famous lament of comedian Rodney Dangerfield – just “don't get no respect.” You might find fluorescent lighting in some office settings for example, but almost never in an executive office setting. Fluorescents might be used to light up a diner, but they are seldom installed in a fine restaurant where an ambience of intimacy is a selling point. And in the home, a fluorescent tube might be tucked in there above a kitchen stove, but you'll rarely find one in a living room where a warm, cozy atmosphere is desired. In short, fluorescents have been plagued by a reputation for producing a flat, unflattering light that is incompatible with high-quality interiors.

In reality, as we shall see, the old raps against fluorescents no longer hold true. But first, it must also be admitted that fluorescents do have a past to live down. When commercially feasible fluorescent lighting first came on the market some 60 years ago, it was widely thought to be harsh,

muddy and vaguely annoying. Why? In the beginning, fluorescents came in only two colors (Figure 1): “warm white” (which does look muddy) and “cool white” (which does look cold). Then, too, the early ballasts utilized to convert house current for fluorescent use created a flicker that, while not actually visible, could be perceived by many. Finally, the relatively primitive fixtures, the ineffective lenses and baffles (if any) then in use, plus the poorly conceived lighting plans and place-

ments common to that era, did little (if anything) to enhance the quality of fluorescent light.

In the years since, however, fluorescents have undergone startling improvements. One of the most significant of these appeared in the 1970s when a lamp called *triphosphor fluorescent* (Figure 2) was developed. A spectrum breakdown of this white light shows only three primary colors (hence its triphosphor name): red,

Figure 1.  
The Color Wheel As Seen In . . .

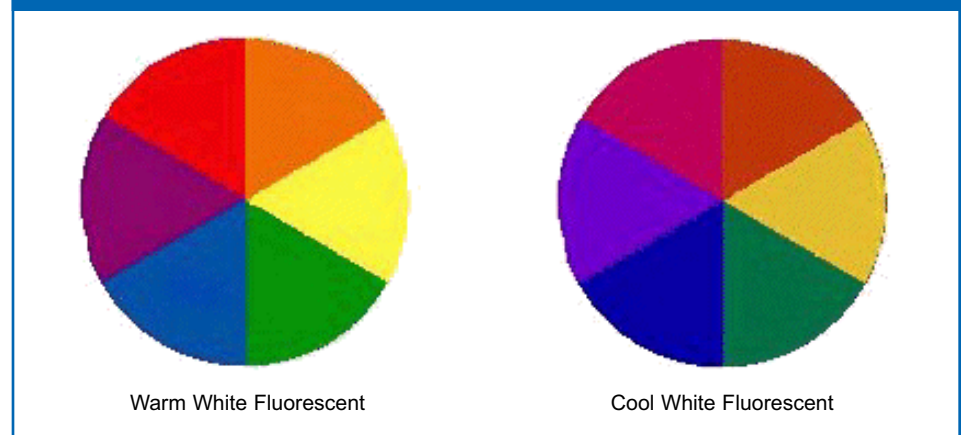
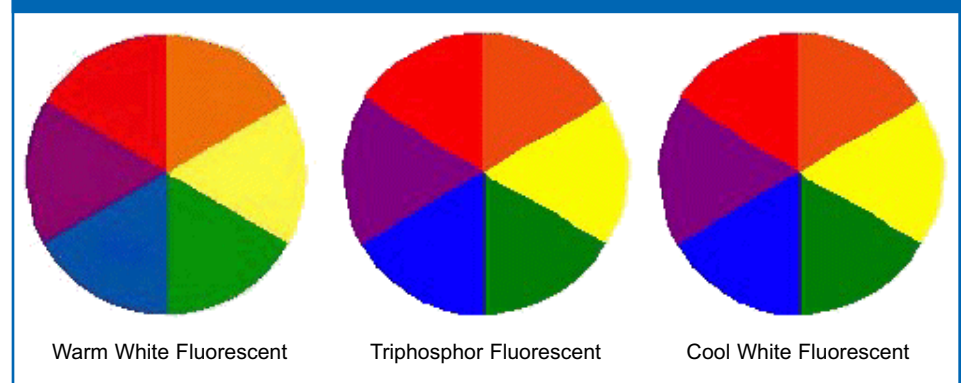


Figure 2.  
The Color Wheel As Seen In . . .



cerulean blue and green. Note that there is no yellow – none.

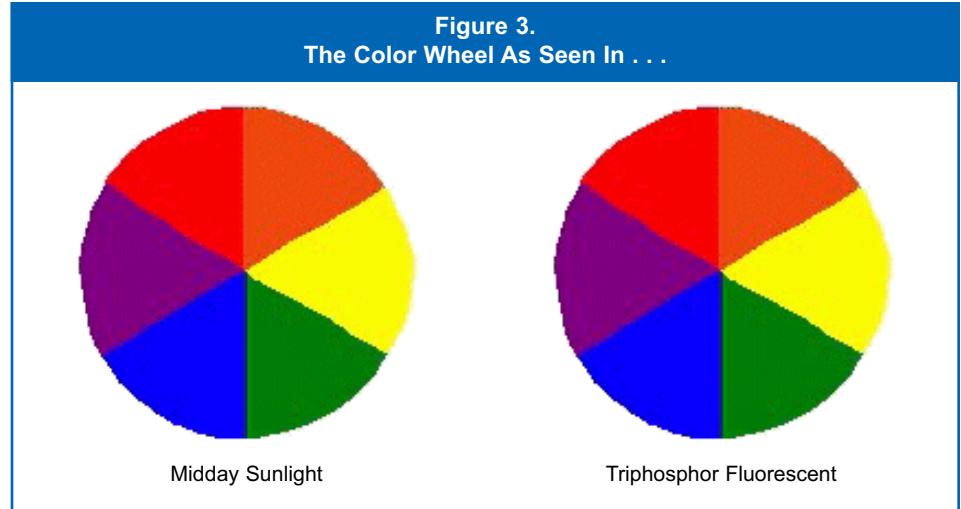
The characteristic of triphosphor fluorescent are:

1. Exact color rendition of ALL colors just as they are seen in daylight
2. Better contrast
3. Less glare
4. Perception of more light produced per watt than other lamps

What all this means is that triphosphor fluorescent produces a comfortable, high-quality interior lighting that is a close match to natural daylight.

Take a triphosphor fluorescent, use it in a fixture designed for good lighting, apply appropriate lensing, and what you will have is an optimally efficient, low maintenance, low-cost solution.

For lighting consultants, one frustration is that the word on fluorescents still hasn't gotten out to the general public. With elephant-like memories and mule-like stubbornness, many people still resist the idea of using fluorescents to meet their lighting needs. Yet, in recent years I've recommended – and installed – triphosphor fluorescent in many appropriate situations and applications. And, yes, our firm now has a growing roster of clients who are surprised and very pleased with the results. ■



### About the Author

Bill Joel received his B.A. from Brown University with creative design courses at the Rhode Island School of Design. He did further studies in interior and lighting design at the New York School of Design and Pratt Institute.

A professional member of AID-ASID from 1963 to 1993, Bill received a Fellowship from ASID in 1978. In 1992, he became one of the first Certified Interior Designers of the Commonwealth of Virginia. His work experience includes residential, commercial and institutional

remodeling and new structures, as well as a number of feasibility studies, all with an emphasis on effective, energy-conscious, quality-lit environments. For more details, consult *Marquis Who's Who in America*. Bill has also served as a member of the FIDER Board of Visitors and Accreditation Committee, Foundation for Interior Design Education and Research; set and lighting designer for the Richmond Forum and Barksdale Theatre; and guest speaker on various radio and TV spots. Bill may be reached at [Rich@RichArtCo.com](mailto:Rich@RichArtCo.com).