

TECHNICAL SPECIFICATIONS AND COMPARISONS

The following are the technical specifications for the JTV Energy Lights®. You will see below several charts comparing the wavelengths of the JTV Energy Light Fluorescent to Sun light and to Cool White Fluorescent tubes. As you can see the JTV Energy Lights wavelength spectrum is very similar to Sunlight. This means you are getting the benefits of sunlight indoors when you are working under these tubes.

In contrast, the Cool White Fluorescent tube's wavelength is very different from sunlight. Cool White tubes are what you will find in most offices, factories and school buildings.

As you can see from the graphs below there is also a difference in two measurable variables. One is the color temperature of a light source, which is measured to determine light quality. Color temperature has no relationship to room temperature and pertains only to the appearance of the light source. Color temperature refers to the temperature in degrees Kelvin at which a blackbody, a theoretical perfect radiator, would have to be heated to match most nearly the perceived color of the light source.

For example, most Cool White fluorescent lights cast a yellowish or green tint and measure between 4200K-4500K. Using this same indicator, JTV Energy Lights® measures approximately 5700K, the same as ideal natural outdoor light, with the perfect blend of phosphors to also match natural light.

The other variable is the International Color Rendering Index (CRI), which pertains to the way colors of objects appear under a lamp compared to a standard reference source and is dependent upon the spectral power distribution. Scientists judge the color-rendering capability of light, or seeability, by the CRI scale. The scale runs from 1 to 100. All colors appear "true" under natural daylight, which has a (CRI) of 100...perfect light. JTV Energy Lights® has a CRI of 91.1, the closest match to perfect natural daylight provided by any fluorescent light while the Cool Whites are a very distant third at 68.

The end result is people feel better, work better, are less prone to headaches and fatigue, and are more productive when they are under JTV Energy Lights.



