Color Temperature

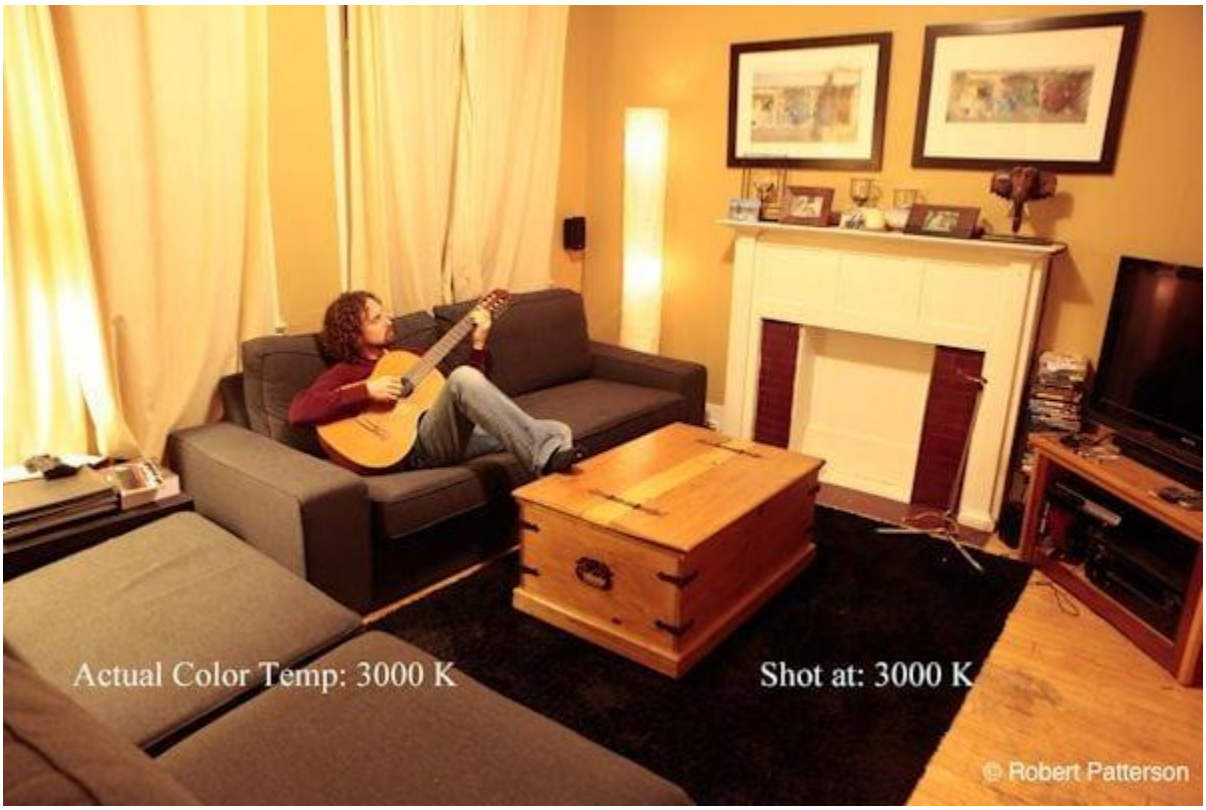
Color Temperature refers to the color of a light source. Different types of light sources have an inherent color that must be considered before you begin shooting. This color is measured in degrees Kelvin (K).

Natural daylight is blue in its color and will be somewhere between 5600 and 10000 K. Interior light is generally much warmer and closer to the red end of the spectrum and will usually measure around 3000 K, though this number can vary greatly depending on the type of light source. Traditional tungsten light bulbs are usually around 2500 to 3000 K but other types of lightbulbs, such as fluorescent, can vary greatly in color temperature.

Try using and comparing different while balance settings on your camera to see the results. You will find that using a low Kelvin value white balance (3000 K for interior light) in an outdoor setting will produce horrible overly blue imagery. Conversely, an outdoor white balance setting shot in artificial lighting can turn out very orange.

Most cameras now have many different white balance options and can even directly dial in the color temperature you wish to use. While you are more or less restricted to using the necessary setting for your light source, it can be very handy to adjust slightly making your image warmer or cooler as desired. This can also be done in photo editing software.

Interior light at 3000K shot at 3000K. Colors appear normal.



Interior light at 3000K shot at 9000K. The image shifts into the orange end of the spectrum.

Daylight at 6000K shot at 6000K. Colors appear normal.

Daylight at 6000K shot at 10000K. Color is shifted into the orange end of the spectrum.

Daylight at 6000K shot at 2500K. Color is shifted to the blue end of the spectrum.