# Photography: Color Correction

Correct to “E”

## Color Perception

What color your eye sees is a combination of 3 items. The spectrum of the light, the spectral reflectivity of the object and the spectral response of your eye.

1. Color perception: 3 main contributors



Figure 13 illustrates the effects of low color temperature light source on a blue object. The eye sees the object as a dark green vs. the blue which would be seen in sunlight.

Figure 13 shows the effect of color temperature & intensity on a series of Munsell colors. The colors in the 6329K column correspond to those in the EV=0 column.

1. Same Munsell Colors from T: A 🡪 D65 & Ev: +⅓ 🡪 -1



## Color Correction

The human eye sees red, green and blue content of a grey scale object at equal energy levels with light source near 5500K. At this point X=Y=Z. Where this point falls is dependent on which version of the CMFs you choose to use.

1. Relative X & Z vs. CCT

Figure 14 shows the relative power of the red and blue tri-stimulus value where Y=1.