

ating small color differences between proof and press sheet in order to control a printing operation.

Since, despite adaptation, the level of illumination significantly affects the appearance of an image, the lower level is required in order to appraise the image at a level more similar to that in which it will be finally viewed. Although it is recognized that quite a wide range of illumination levels may be encountered in practical viewing situations, the level chosen is felt to be fairly representative of the range we normally encounter.

The introduction of this lower level of illumination has created considerable discussion in some portions of the industry, and concerns have been raised about the possibility of confusion. To help alleviate these concerns the following caution has been inserted into the final version of the standard:

**NOTE:** "Critical comparison" is carried out under illumination levels that are considerably higher than those used for normal viewing. This is to ensure that subtle differences between

### Shall vs. Should

In standards language, the words "shall" and "should" have specific meanings. "Shall" means that you must do something in order to comply with the standard. "Should" means that it is really preferable to do something and you should try very hard to do it.

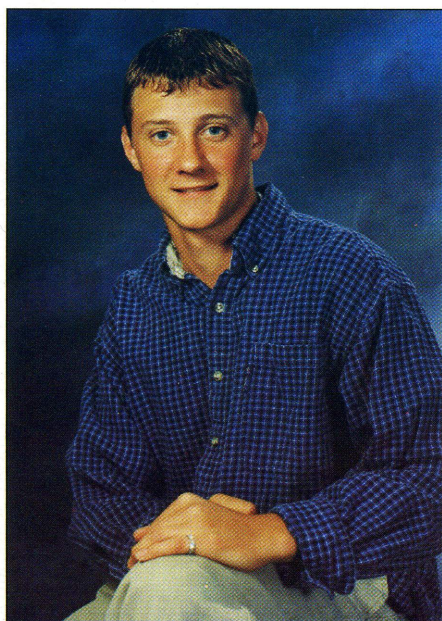
*two hard copy images, for instance a contract proof and a press sheet, can be easily distinguished. For this reason all comparisons between any two or more such images must be carried out under P1 conditions. However, evaluation of the tone reproduction and aesthetic quality of a single image, as it will be perceived by the reader of the print, is best judged under the final viewing to be used for that assessment. But where this is not known, or cannot be easily simulated, it is*

*best to at least use illumination levels more typical of those used for normal viewing. Such a procedure will ensure, for example, that shadow detail is not lost to the viewer. For these applications P2 conditions should be used.*

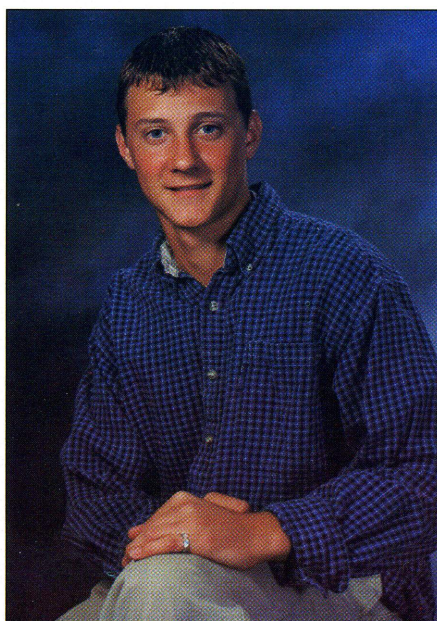
David McDowell reports an experience that highlights the practical aspects of this issue:

"I was recently shown an image with a series of different highlight placements. The image contained some fine lace that was close to the color of the background. The selection I made looking at these in the office was *not* the same as the image I picked as most acceptable in the viewing booth. What looked good in the office was washed out in the booth. A short time later I was looking at a national ad for one of the large retail chains. It had a series of colored illustrations of black lawn mowers and grills against a dark background. My first reaction (at home in the easy chair) was 'Who ever decided on these color separation aims? I can hardly see the image.' But, when I put

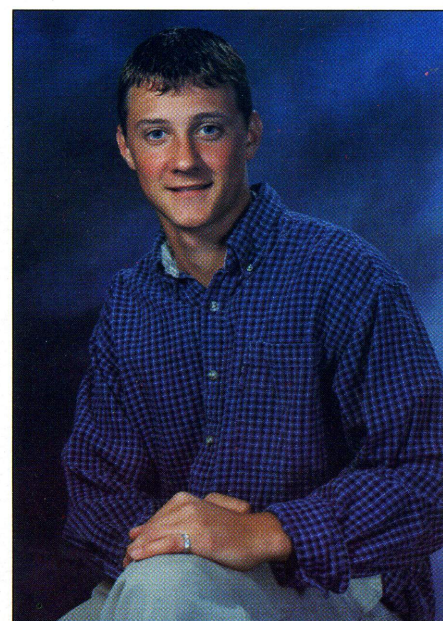
The daylight balanced film used to photograph the three images here has a fixed spectral sensitivity and clearly records the differences produced by the interaction of the film spectral sensitivity and the spectral power distribution of light sources.



Tungsten



D<sub>50</sub>



Fluorescent