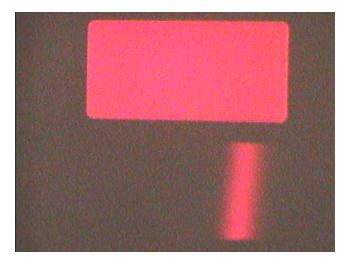
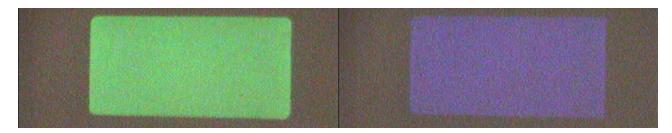
Answer #192

The answer is (c): be like the spectrum above with everything but the red missing, as seen in the photograph below containing both the color patch and its spectrum.



Note that a "positive" filter means one that passes a nararow band of light at the wavelength of the color in the patch.

If the two color patches below are produced by placing additive filters in front of white light, what will their spectra look like?



Click <u>here</u> for the answer.

Your author had an interesting experience recently involving the white light spectrum shown on the Question#192 page. We were possibly in the market for a few more equilateral prisms to use with spectrum demonstrations at the University of Maryland Lecture-Demonstration Facility. At the suggestion of other demonstration colleagues, I went to E-bay, where several people were selling them. To my surprise, TWO sellers were actually using the same picture of the spectrum of white light from our web site (the center photograph of Q#192) as their "sample" spectrum. This was particularly interesting to me because, as anyone know who has attempted to photograph spectra, this is not a simple task. Further, they were selling relatively cheap two-inch prisms while our photos use high-quality 60-mm prisms, so the spectra obtained using their prisms could not have had the great brightness and dispersion available with ours. I asked the University lawyers to send them a threatening letter, along with the suggestion of settling the lawsuit by sending us a few prisms, but I do not think that they took me seriously.

Question of the Week #193 deals with another type of filter.

Archive 10

Question of the Week

Outreach Index Page

Lecture-Demonstration Home Page



For questions and comments regarding the *Question of the Week* contact <u>Dr. Richard E. Berg</u> by e-mail or using phone number or regular mail address given on the <u>Lecture-Demonstration Home Page</u>.

Positive colors and their spectra

Here are the color patches and the respective spectra for the three primary colors of lights, commonly referred to as the "positive" colors: red, green, and blue.

