

Look at an object with straight black lines.

The most common signs of poor quality loupes are low resolution, chromatic aberration and spherical aberration. Resolution is defined as an optical system's ability to form distinguishable images of objects separated by small distances, or to recognize fine detail.

- When comparing different loupes, look at the testing objects and select an area of tiny details that can only be seen with magnification.
- Chromatic aberration refers to color distortion. Because each color has a different wavelength, uncorrected optics cause the various wavelengths to focus at different points in space. The first color that generally comes out of focus is blue; when looking at black lines on white paper, poor quality loupes will display a blue haze just to the side of the black lines.
- Spherical aberration refers to the flatness of the image. When viewed through loupes, an object that exhibits spherical aberrations would appear to be curved or spherical. The lines would not be straight.
- Viewing colorful or complex objects such as anatomical models or the inside of your hand does not give you the opportunity to evaluate loupes for their true optical performance, as most people are not trained to see the differences on such complex images. A simple piece of graph paper, however, can reveal the difference between mediocre and high quality loupes.

