

Your Computer Workstation Should Receive Appropriate Lighting and Guard Against Glare

FACT SHEET 88-006-0411

The lighting you need in your work area depends on the task you're performing. Bright lights are important when you're working with printed materials. However, bright

lights can cause glare when working on a computer screen.

Lighting Levels

Traditional offices have lighting levels ranging from 300 to 500 lux. If you are in a specialized office area such as a CAD (computer-aided design) office, a lower



level of ambient light along with supplementary desk fixtures to illuminate the reading tasks can help increase the contrast on the screen and decrease eye fatigue.

Because there are so many factors that affect the lighting in your work area, it is important that your workstation lighting is both adjustable and under your control. Whether it's lowering a blind or turning off a bright overhead light, you must be able to adjust the lighting for the task at hand.

If you use a task light, it should:

- Be directed at your work, not diffused.
- Be mounted to the side of the desk.
- Be out of your line of sight/not shine in your eyes.

Glare

Glare is a difficult lighting problem to eliminate. *Direct glare* occurs when a light source (the sun, overhead lights, etc.) enters the eye directly. *Reflective glare* occurs when a light source bounces off a surface (walls, the monitor, etc.) then enters the eye. Both can cause discomfort and interfere with a visual task. Even a low level of glare can cause enough eyestrain to impair your performance.

Glare Control

 Use indirect lighting so that the highest light level comes from the sides rather than from in front of you or behind you.

- Make sure your workstation has matte or nongloss surfaces.
- Install blinds on windows near your computer.
- Install grid or parabolic diffusers on overhead lights to soften the light.
- Adjust brightness and contrast on your display screen.
- Cover the screen with glare filters.
- Tilt your monitor.
- Arrange monitor so it is at right angles to sources of illumination such as windows and overhead lights.
- Wear medium to dark clothing.

Quick Tip: Turn off some lights. If you are viewing the monitor screen by itself, you can reduce glare (and you will not strain your eyes) by turning off all other lights and reading by the light emitting from the screen.

When all other methods fail, consider:

Hoods. Hoods offer a simple and inexpensive solution to screen glare. Although available from manufacturers, they may be constructed out of cardboard and tape—black cardboard with a matte finish is best.

Glare Filters

- Glare filters are made of either a hard glass, plastic, or loosely woven mesh. Most filters increase your screen's contrast by reducing the reflected glare more than the emitted light.
- Glare screens are available with privacy screens built in.
- Hard filters use anti-reflective coatings. Because
 the attachment of a hard filter often leaves a gap
 between the filter and screen, they can trap dust or
 create more reflection problems than they solve.
 Generally, the closer they are mounted to the
 screen, the better.
- Mesh filters are particularly effective when there is a bright light reflecting directly off the screen. Unfortunately, they also partially obscure the screen image.