

5 THINGS TO THINK ABOUT WHEN BUYING A DESK LAMP (TASK LIGHT)

- 1 A typical computer screen produces about 20-25 foot candles (FC) or measured light - to avoid head ache's from your eyes dilating back and forth from your screen to your desk you want at least a 3 to 1 contrast ratio of light (20 - 25 FC from your screen, 60-75FC on your desk)
- 2 Be aware of Glare issues, purchase a task lamp with an adjustable head and arm
- 3 Adults should purchase a high quality fixture with various lamp wattage options that will last a lifetime
- 4 The task lamp should have a dimmer or two position (high low) switch. (cord dimmers can be purchased for fixtures that do not have dimming options)
- 5 The adjustable lamp head should be cool to the touch or have a handle that protects you from high heat

HERE IS A GUIDE FOR SELECTING A DESK LAMP BASED ON THE USERS AGE, TYPE OF TASK, OR BOTH.

5-12 year old Childs desk

- Typical child will have a short time at desk, 1-2 hrs at a time
- Younger eyes dilate much easier, so contrast ratios can be lower, desk could be illuminated with 25-50FC.

Fixture light source options:

Incandescent lamp:

Use no more than 40 watts

Advantage: Inexpensive

Disadvantage: larger lamp and base, yellow light source producing less contrast on white paper. High in energy, short lamp life @ 750 hrs, and lower light levels produced

Halogen lamp source:

Use no more than 20 watt,

Advantage: Small lamp with small head & base, Whiter light source producing better contrast on white paper, easier on eyes, longer lamp life @ 2000hrs, higher light output

Disadvantage: A little more costly than an Incandescent, and because of the smaller lamp envelope size the fixture will be hotter to the touch at the fixture head than a larger Incandescent of the same wattage.

Fluorescent source:

Use at least a 9watt 3500K compact fluorescent lamp, (K= Kelvin or color of light - 3500K is very clean white color)

Advantage: Great color of white, 3500K is whiter than halogen, Cool to touch, flat light with even light spread producing less shadows, longer lamp life @ 10,000 hr, higher light levels produced

Disadvantage: A little more costly than a 20 watt halogen, larger fixture head and base

Led source:

Use at least 2 watts

Advantage: Very small head and base, very cool to touch, price point in line with 50 watt Halogen, and even longer lamp life @ 50,000 hrs

Disadvantage: Costly for child, Color shifting occurs, not as bright as a Halogen, Poor color rendition.

13-24 teen, college

- Typical student will spend 2-6 hrs at a time at desk
- Still young eyes will dilate easily, so contrast ratios can be lower, desk could be illuminated with 20-75FC.

Fixture light source options:

Incandescent lamp:

Use at least 60 watts

Advantage: Inexpensive

Disadvantage: larger lamp and base, yellow light source producing less contrast on white paper. High in energy, short lamp life @ 750 hrs, and lower light levels produced

Halogen lamp source:

Use at least 50 watt

Advantage: Small lamp with small head & base, Whiter light source producing better contrast on white paper, easier on eyes, longer lamp life @ 2000hrs, higher light output

Disadvantage: A little more costly than an Incandescent, and because of the smaller lamp envelope size the fixture will be hotter to the touch at the fixture head than a larger Incandescent of the same wattage.

Fluorescent source:

Use at least a 9watt 3500K compact fluorescent lamp, (K= Kelvin or color of light - 3500K is very clean white color)

Advantage: Great color of white, 3500K is whiter than halogen, Cool to touch, flat light with even light spread producing less shadows, longer lamp life @ 10,000 hr, higher light level produced

Disadvantage: A little more costly than a halogen, larger fixture head and base

Led source

Use at least 5 watts

Advantage: Very small head and base, very cool to touch, price point in line with 50 watt Halogen, and even longer lamp life @ 50,000 hrs

Disadvantage: Expensive for teens, color shifting occurs, not as bright as a Halogen, Poor color rendition

25-75 years old. Just for bill paying desk

- Not a lot of time spent at the desk so contrast ratios are not as important

Incandescent lamp:

Use at least 60 watts

Advantage: Inexpensive

Disadvantage: larger lamp and base, yellow light source producing less contrast on white paper. High in energy, short lamp life @ 750 hrs, and lower light levels produced

Halogen lamp source:

Use at least 35 watt

Advantage: Small lamp with small head & base, Whiter light source producing better contrast on white paper, easier on eyes, longer lamp life @ 2000hrs, higher light output

Disadvantage: A little more costly than an Incandescent, and because of the smaller lamp envelope size the fixture will be hotter to the touch at the fixture head than a larger Incandescent of the same wattage.

Fluorescent source:

Use at least a 9watt 3500K compact fluorescent lamp, (K= Kelvin or color of light - 3500K is very clean white color)

Advantage: Great color of white, 3500K is whiter than halogen, Cool to touch, flat light with even light spread producing less shadows, longer lamp life @ 10,000 hr, higher light level produced

Disadvantage: A little more costly than a halogen, larger fixture head and base

Led source:

Use at least 5 watts

Advantage: Very small head and base, very cool to touch, price point in line with 50 watt Halogen, and even longer lamp life @ 50,000 hrs

Disadvantage: Expensive for large or small desk, color shifting occurs, not as bright as a Halogen, Poor color rendition

Home office used 8 hrs a day age 25-55

- Medium to Middle aged eyes dilate slower than younger eyes, contrast ratios need to be higher, desk should be illuminated with 35-75FC.

Incandescent lamp:

Use at least 60 watts

Advantage: Inexpensive

Disadvantage: larger lamp and base, yellow light source producing less contrast on white paper. High in energy, short lamp life @ 750 hrs, and lower light levels produced

Halogen lamp source:

Use at least 50W or 37W IR lamp

Advantage: Small lamp with small head & base, Whiter light source producing better contrast on white paper, easier on eyes, longer lamp life @ 2000hrs, higher light output
Disadvantage: A little more costly than an Incandescent, and because of the smaller lamp envelope size the fixture will be hotter to the touch at the fixture head than a larger Incandescent of the same wattage.

Fluorescent source:

Use at least a 9watt 3500K compact fluorescent lamp, (K= Kelvin or color of light - 3500K is very clean white color)

Advantage: Great color of white, 3500K is whiter than halogen, Cool to touch, flat light with even light spread producing less shadows, longer lamp life @ 10,000 hr, higher light level produced

Disadvantage: A little more costly than a halogen, larger fixture head and base

Led source:

Use at least 5 watts

Advantage: Very small head and base, very cool to touch, price point in line with 50 watt Halogen, and even longer lamp life @ 50,000 hrs

Disadvantage: Expensive for large or small desk, color shifting occurs, not as bright as a Halogen, Poor color rendition

Home office age 50-75

- Older eyes dilate slowly, contrast ratios need to be highest, desk should be illuminated with 50-90FC.

Incandescent lamp:

Use at least 100 watts

Advantage: Inexpensive

Disadvantage: larger lamp and base, yellow light source producing less contrast on white paper. High in energy, short lamp life @ 750 hrs, and lower light levels produced

Halogen lamp source:

At least 50 watt IR lamp,

Advantage: Small lamp with small head & base, Whiter light source producing better contrast on white paper, easier on eyes, longer lamp life @ 2000hrs, higher light output

Disadvantage: A little more costly than an Incandescent, and because of the smaller lamp envelope size the fixture will be hotter to the touch at the fixture head than a larger Incandescent of the same wattage

Fluorescent source

Use at least a 13watt 4100K compact fluorescent lamp, (K= Kelvin or color of light - 4100K is very bright cool white color)

Advantage: Great color of white, 4100K is bright white, Cool to touch, flat light with even light spread producing less shadows, longer lamp life @ 10,000 hr, higher light level produced

Disadvantage: A little more costly than a halogen, larger fixture head and base

Led source

Use at least 5 watts

Advantage: Very small head and base, very cool to touch, price point in line with 50 watt Halogen, and even longer lamp life @ 50,000 hrs

Disadvantage: Expensive for large or small desk, color shifting occurs, not as bright as a Halogen, Poor color rendition