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 50W or 37W IR lamp**

**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