

# 7 ways to improve your task lighting

1. Make sure you have enough light. Depending on the task, you may need 50 footcandles or more.
2. Use color temperatures that are in the 3000°K to 3500°K range for the most natural looking light.
3. Use high color rendering lamps. Find a CRI that is 80 or higher (preferably 90-100) to show colors accurately.
4. Save energy with more efficient light sources. Some undercabinet lights can use up to 40 watts per foot. New subminiature T2 technology can deliver 50-60% more light using only 25% of the electricity!
5. Keep the heat down by using efficient light sources. Watts produce light and heat - the more efficient the lamp, the less heat build up!
6. Use lighting that has optimal distribution for task areas. Choose a light source that can offer a wide distribution (75 degrees or more).
7. Hide a smaller fixture more easily by using new fluorescent technology that produces more light in a smaller tube!

## Pros and Cons of Different Light Sources

	Halogen	Xenon	PRIORI T2
<b>Light Sources</b>	An incandescent lamp filled with halogen gas, usually low voltage. Has excellent color rendering however, it is starting to become an 'old' technology due to high heat and short lamp life.	An incandescent lamp filled with xenon gas, available in low voltage and 120V versions. Has excellent color rendering and can last three to four times longer than a similar halogen lamp.	Often thought of as an inferior light source due to associations with original old-fashioned tubes. Huge strides have been made in color offerings and performance that require a new look.
<b>Advantages</b>	<ul style="list-style-type: none"> <li>Great color temperature</li> <li>Offers great color rendering</li> <li>Dimmable</li> <li>High light output</li> </ul>	<ul style="list-style-type: none"> <li>Cooler operating than halogen</li> <li>Offers great color rendering</li> <li>Dimmable</li> <li>Three times longer life than halogen</li> </ul>	<ul style="list-style-type: none"> <li>Coolest operating light source</li> <li>Offers good color rendering</li> <li>Four times longer life than halogen</li> <li>High light output, highly efficient</li> </ul>
<b>Disadvantages</b>	<ul style="list-style-type: none"> <li>Operates very HOT and adds heat to interior spaces</li> <li>Short lamp life requires frequent lamp purchases and replacements</li> </ul>	<ul style="list-style-type: none"> <li>Operates hot and adds heat to interior spaces</li> <li>Slightly lower color temperature can add yellow/amber tones to colors</li> </ul>	<ul style="list-style-type: none"> <li>Not easily dimmed (requires specialized ballast and dimmer)</li> <li>Associated myths about poor performance and mercury issues linger although regulations have repaired these problems</li> </ul>
<b>Facts &amp; Figures</b>	<ul style="list-style-type: none"> <li>Color temperature: 3000°K</li> <li>Average rated life: 2,500 hrs</li> <li>Color rendering index: 100</li> <li>Wattage: 70</li> <li>Footcandles: 84</li> <li>Footcandles/watt ratio: 1.2</li> <li>Operating temperature: 180°F</li> </ul>	<ul style="list-style-type: none"> <li>Color temperature: 2800°K</li> <li>Average rated life: 8,000 hrs</li> <li>Color rendering index: 100</li> <li>Wattage: 40</li> <li>Footcandles: 36</li> <li>Footcandles/watt ratio: 0.9</li> <li>Operating temperature: 137°F</li> </ul>	<ul style="list-style-type: none"> <li>Color temperature: 3000°K</li> <li>Average rated life: 8,000 hrs</li> <li>Color rendering index: 90</li> <li>Wattage: 8</li> <li>Footcandles: 72</li> <li>Footcandles/watt ratio: 9.0</li> <li>Operating temperature: 98.8°F</li> </ul>
<b>Bottom Line</b>	More and more, halogen lamps are being replaced with Xenon to reduce heat build up and frequent lamp replacement.	Xenon is an affordable, dimmable and convenient task light choice with an extended lamp life, although it is not the most efficient alternative.	Fluorescent light has come a long way since its introduction and now competes for favorite due to great color rendering, low heat output and high light output. It is not only affordable and attractive, but also the most efficient alternative.



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