Workplace Safety

Consider Beam Patterns When Choosing the Safest Flashlight for Your Job

Brought To You by Streamlight | Jan 17, 2022

Streamlight makes serious lighting tools. Streamlight makes them for a wide variety of applications but, typically, there is no one light that works well in all situations. Flashlight choice depends on intended use. You need to consider your applications and how you will be using the light to select the light that's best for your specific needs.

To help you determine the right light for you, Streamlight created an interactive, online beam demonstration. You can check it out by ***clicking here***. More information on their different beam patterns can also be ***found here***.

Use this beam information, as well as the information provided below, to choose a light that meets your needs and will last.

BATTERY TYPE

Can the budget pay for disposable batteries or does frequent use demand rechargeable options?

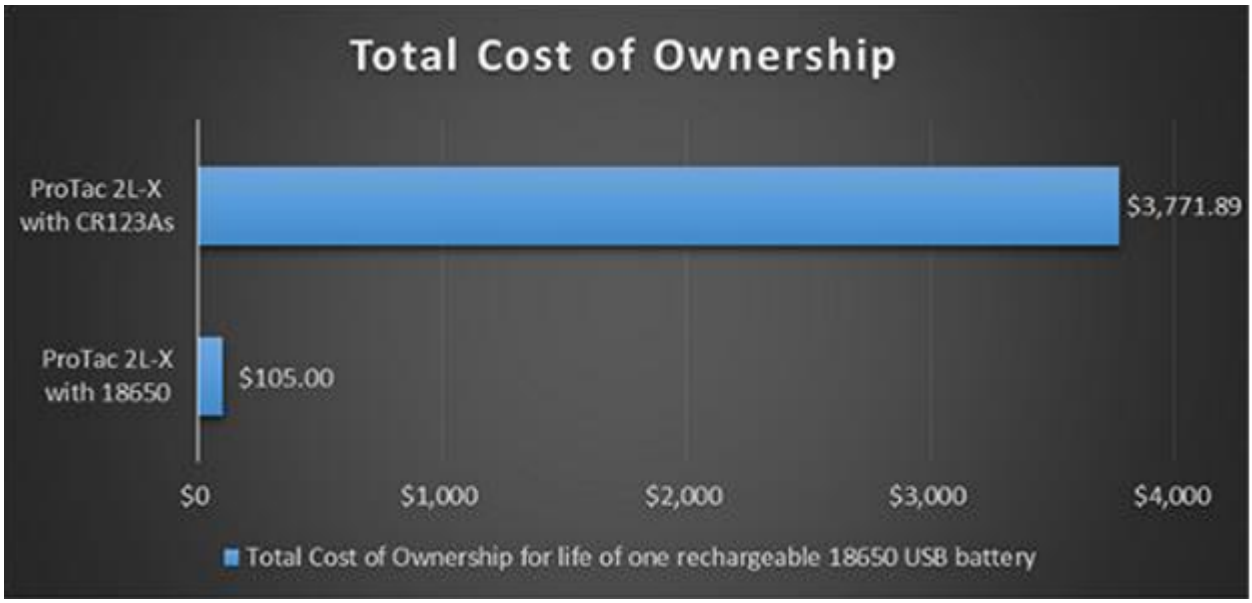
- **Disposable:** Disposable batteries, either alkaline or lithium, have excellent storage life, 7 and 10

years respectively. They generally offer longer run times for a given bulb power, are typically lower in initial purchase price and are easier to keep spares on hand. Their operating costs are considerably higher than rechargeable lights (see chart) and they are seldom as bright. Lithium cells have high energy density, but are even more costly than alkaline.

- **Rechargeable:** Rechargeable flashlights using nickel metal hydride (NiMH) or lithium-ion batteries feature extraordinarily low operating expenses and are well suited for frequent use. Depending on the model, they often store conveniently in custom charger holders. Their initial purchase price can be higher, but cost savings are seen over the total life of ownership.
- **Rechargeable SL-B26™ Protected Li-Ion USB Rechargeable Battery Pack:** Turn high-performance lights into a rechargeable system using a USB rechargeable lithium-ion SL-B26 battery pack. Streamlight's SL-B26 battery pack features an integrated charging port and on-board safety circuit. It provides an alternate power source for their products that accept SL-B26 battery packs or standard CR123A batteries, giving users Multi-Fuel innovation to ensure they always have a beam when it's needed. As with other rechargeable flashlights, the initial purchase price is higher, but there is significant cost savings over the total life of ownership.

Battery Cost Analysis - SL-B26 Battery Pack vs CR123A		
	ProTac 2L-X with SL-B26 Battery Pack	ProTac 2L-X with CR123As
Purchase Price of Light	$105.00	$89.25
Cost of Replacement Batteries	$21.00	$6.43
Maximum Available Run Time Per Battery Charge In Hours	3.25	2.75
Cost of replaceable batteries over the life of one rechargeable SL-B26 battery pack.	$21.00	$3628.64
Total Cost of Ownership for life of one rechargeable SL-B26 battery pack.	$105.00	$3771.89

Take a look at the total cost of ownership chart:



LUMENS AND CANDELA

“Lumens" of a bulb is a measurement of the entire output of the bulb. (Focus is not considered.)

"Lumens" of LEDs is a measurement of all the light inside the "beam angle".

"Candela" or "Peak beam intensity" is a measure of the brightest spot in a focused beam.

BULB TYPE

Historically, flashlights were available with several different kinds of bulbs, such as xenon and halogen incandescent lamps. Nowadays, as technology has evolved, most flashlights depend on LEDs, which are cost efficient and long lasting, to produce light.

By using LEDs, Streamlight has the flexibility to adjust a flashlight's output and beam patterns to meet a customer's needs. The following are the different types of "bulbs" they use:

- **LEDs (Light Emitting Diodes):** Solid-state construction. A high-intensity "solid-state" bulb which lasts up to 100,000 hours. Do not require periodic replacement. Able to run for very long periods of time on very little power. Available in various colors including Ultraviolet. Streamlight pairs LEDs with a Streamlight-engineered reflector and other technology to increase the brightness and create an intense beam of light that pierces the darkness.
- **"Chip On Board" (COB) LED:** Multiple LED chips (typically nine or more) that are packaged together as one lighting module. The LED chip diode is built directly on the circuit board. When it is lit up, it looks more like a lighting panel than multiple individual lights.
- **Combination LED/COB LED:** Combines the intense brightness of a Streamlight LED for distance lighting and a COB LED for a smooth, flood beam for up-close work. Provides a multi-function flashlight to provide you flexibility for your lighting tasks.

Previously Featured on Streamlight's Learning Center.

For more information on Streamlight's flashlight offering, please visit MSCDirect.com.