

# STOVE LITE

A hot idea for lighting

## Stove Lite Buying Guide

Important things you need to know before you purchase a Stove Lite Thermoelectric Lantern

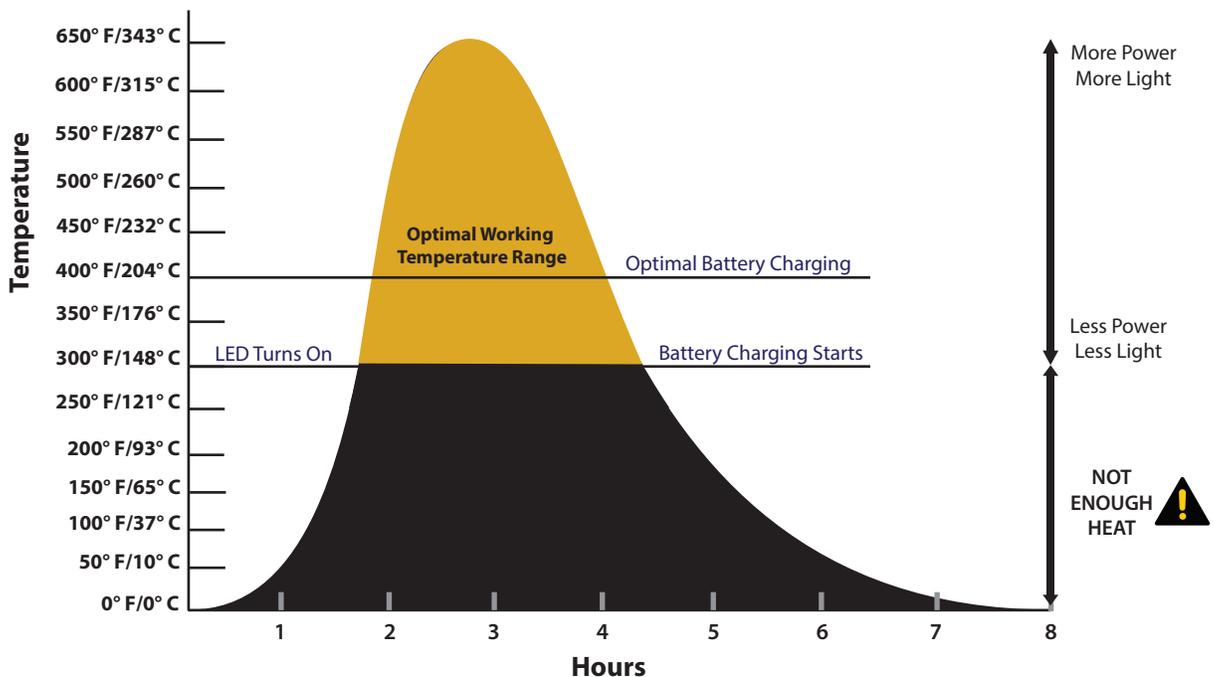
### The top of your stove must get hot

Stove Lites are designed to operate on stoves with top surface temperatures between 300° F and 650° F. The cooling fan begins to spin at 250° F, but actual LED illumination does not start until the stove top reaches 300° F. The chart below shows the Stove Lite's *Optimum Working Temperature Range*. Note the optimal battery charging only occurs when the stove exceeds 400° F.

If your stove is maintaining surface temperatures over 400° F, you can expect the Stove Lite to charge in as little as 12 hours. If on the other hand, temperatures drop below the *Optimum Working Temperature Range* during a refueling cycle (overnight burn for example), power generation may be intermittent.

The Activation Temperature Chart below shows the temperatures required for the Stove Lite to operate. If the surface of your stove does not reach the temperatures required for Activation the Stove Lite will not work!

**Convection or cabinet style stoves as well as gas or pellet stoves do not get hot enough for the Stove Lite to work properly. If the surface of your stove does not reach the temperatures required for activation the Stove Lite will not work!**



Patent Pending

## Here is how to measure if your stove top is hot enough:

Place a bimetallic surface thermometer\* on the hottest area of your stove top and operate your stove as you would normally do at various burn rates (high, medium, & low) and keep note of the temperatures. Try to get a sense of how long during a 24 hour period your stove will be operating in the *Optimal Working Temperature Range*. If you find that your stove only reaches this range for short period of time (less than 2 hours) then we do not recommend buying a Stove Lite.

*\*You can purchase a bimetallic thermometer from your local stove and fireplace shop.*

## How hot and how long your stove remains in the Optimal Working Temperature Range determines how much power is produced.

Power generation is proportional to how hot the surface of the stove is within the *Optimal Working Temperature Range* and also the duration the surface remains within the range. Generally speaking the hotter the surface is within this range the more power will be generated and the less time it will take to charge the internal battery.

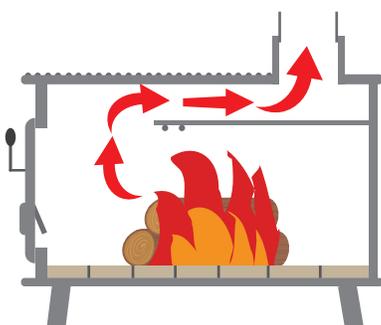
On a hot stove it may be possible to charge the on-board battery enough to partially recharge a phone or tablet over one eight hour refueling cycle. If on the other hand, the stove reaches the *Optimal Working Temperature Range* for only 1 hour a day, it may take a few days to fully charge the internal battery.

*(Note: The Stove Lite will only charge cell phones and tablets when it is used off the stove. Do not attempt to charge devices when the Stove Lite is on a hot stove. Overheating of charging cables and devices will occur and create a hazardous condition.)*

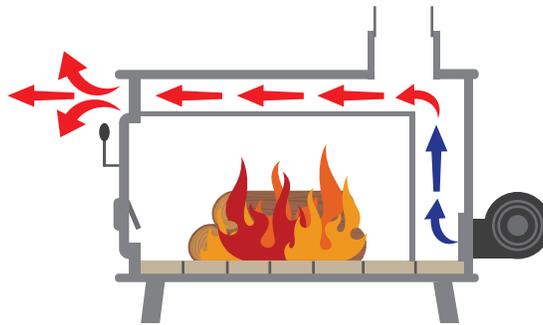
## Stove top surface temperatures will vary depending on a number of factors.

Stove top surface temperatures will vary during each stage of a typical refueling cycle. Burning green wood or large chunks of wood will reduce surface temperatures. How the wood is loaded and the frequency that you refuel the stove will also affect surface temperatures. It is not uncommon for there to be a 200° F or more temperature difference from one area of the stove top to another and hot spots may change from day to day.

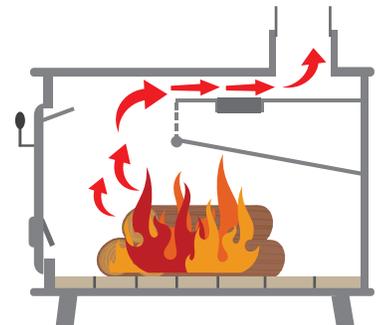
There must be direct contact of the Stove Lite to the stoves surface. Stoves with textured top plates or stoves with furniture detailing ridges that hold the Stove Lite up off the surface of the stove will lower performance and should be avoided. Bowed or warped top plates may also prevent good contact. Confirm that the Stove Lite will sit flat on the hottest area on the stoves top. (The diameter of the Stove lite is 7")



Uneven Stove Surface  
**Not Good**



Convection Stove  
**Not Good**



Stove With Hot and Flat Top  
**Good**