

# How to Optimize Light



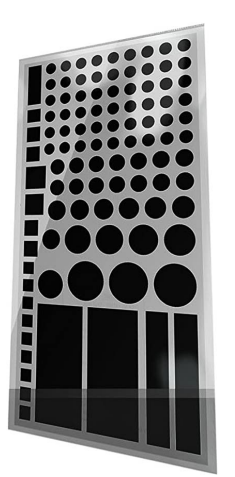
One

## Create Blackout Conditions Overnight

Even small amounts of light can be too stimulating overnight and can delay the body clock.

Install blackout curtains. Use an eye mask. Cover up power lights and other small sources of light with blackout stickers.

Place dim nightlights in hallways and bathrooms so you don't have to turn on bright lights in the middle of the night. If you wake up and can't sleep, use an amber-tinted reading light instead of turning on a lamp or overhead lighting.



Two

## Reduce Evening Light As Much As Possible in the 3-5 Hours Before Sleep

Evening light from screens and other sources of artificial light can be enough to suppress natural melatonin production, to impact your ability to get sleepy and to worsen sleep quality. Too much light in the evening can also delay the body clock.

Because the impact of light on sleep lingers for a few hours, it's good practice to reduce the amount of light you're exposed to in the 3-5 hours before bedtime (not just right before you are trying to sleep). Start to reducing unnecessary light 4-5 hours before bedtime and, as you get closer to your bedtime, become more mindful of reducing light as much as you can.





How to Make Sure Light is Working For and Not Against You

# REDUCE EVENING LIGHT



## Turn off and dim lights.

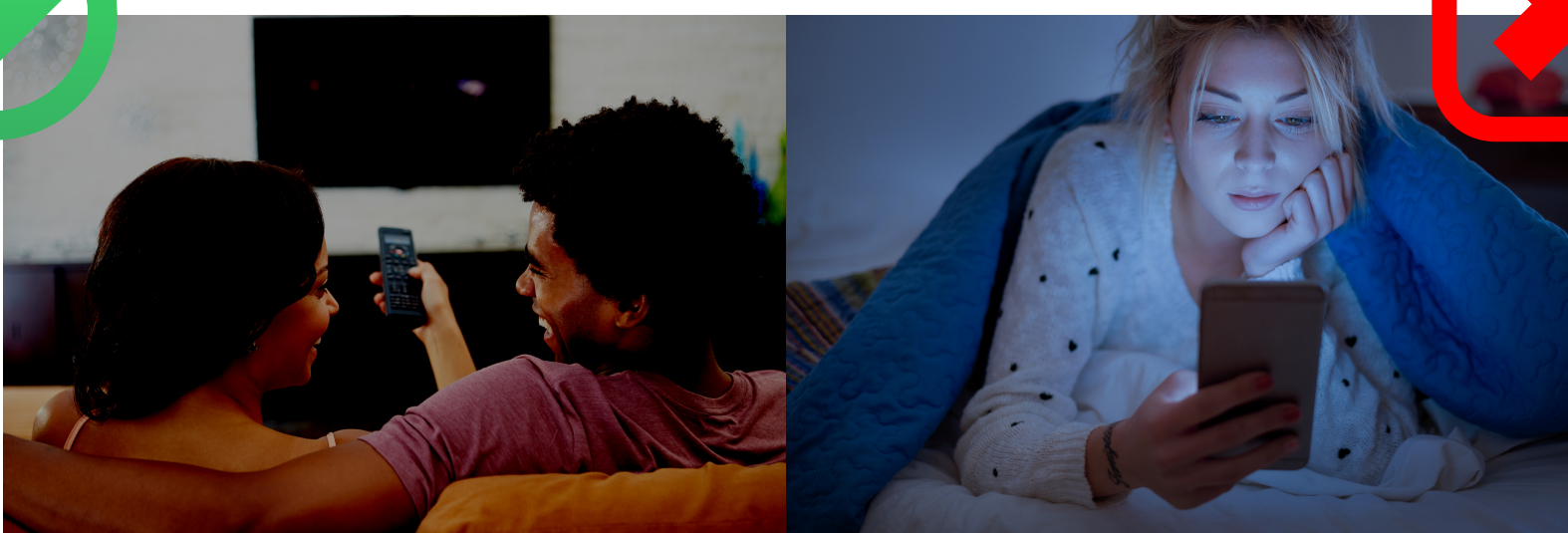
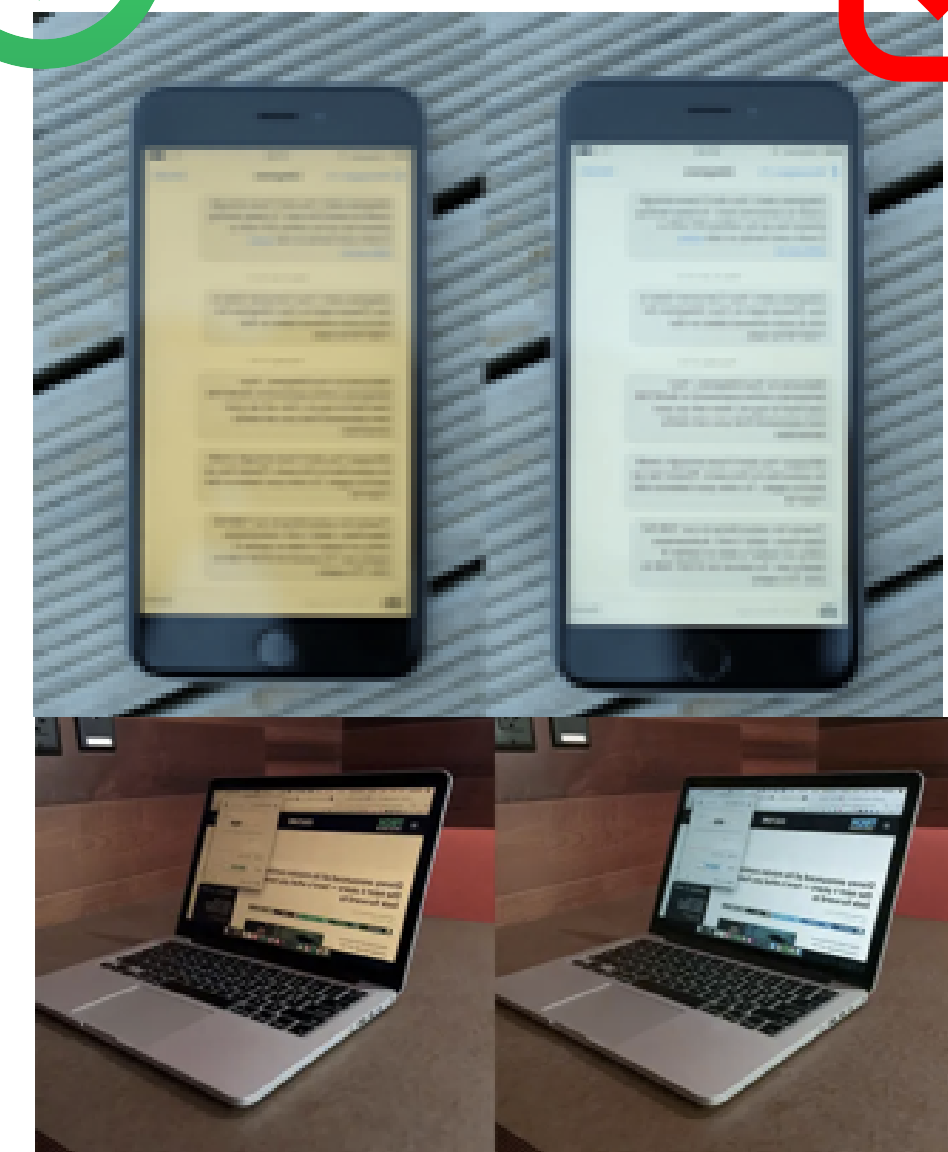
Turn off unnecessary, bright lights in the evening. Bright white LED lights in particular emit a lot of alerting blue-spectrum light.

Install dimmer switches. In addition to using blue light filters, manually dim the brightness of all screens as much as you can tolerate. Reduce the brightness of the TV by changing both the brightness and backlighting settings.

TIP: Many TVs will allow you to save this dimmer setting so that you can easily switch between the brighter settings for the day and the dimmer settings for the evening.

## Filter blue-spectrum light on all devices

Automate blue-light filters on all electronics to turn on 3-5 hours before your intended sleep time and to turn off in the morning. These filters are built into iPhones and Androids. F. lux is a free blue light filter software for computers. NOTE: While these filters can help, they only reduce the impact of light by about 50%.



## Choose light sources that are further away.

When using electronics in the evening, it's generally better to watch something on a screen that is further away because the impact of light reduces the farther you are from the light source.

Watching a TV across the room is less harmful than watching on a handheld device or on a laptop.



# REDUCE EVENING LIGHT

## Use less harmful light sources.

Purchase light bulbs that emit less blue light or smart lights that can be programmed to shift to dimmer, less harmful light in the evening. Choose incandescent lightbulbs over LEDs in the evening. Use a dim, amber reading light as you get closer to bedtime.



## Use blue-light blocking glasses.



Glasses with amber tinted lenses filter harmful blue light. Blue light blocking glasses with clear lenses are often marketed for eye strain but don't filter as much blue light.



## TIPS

- **GET THE ENTIRE HOUSEHOLD ON THE SAME PAGE.** If others are watching a bright TV or keeping the lights on full blast, it's hard to avoid obtaining too much light in the evening.
- **AUTOMATE** by building these best practices into routines. This will save you from having to remember what to do in the moment. For example, create a ritual of dimming/turning off unnecessary lights and manually turning down the brightness of your screens right after dinner.



Three

## Increase Morning Light

Bright light in the morning is a powerful signal to your body clock that the day has started. Without the anchoring effects of morning light, the body clock tends to drift later. Natural sunlight (even on cloudy days!) is the best source of bright light in the morning.

Morning and daytime light reduces the impact of the light in the evening. This means that, if you are outside all day in the sun, your evening screen time may not impact sleep as much! As a bonus, daytime light boosts alertness and improves mood & energy.

### DO

Go outside for 5-10 minutes shortly after waking up. During the day, get outside as much as you can.

**\*\*This is by far the most powerful option but do what is realistic right now.\*\***

Use a light wake-up alarm.

In the morning, open the blinds even if you are still sleeping.

Manually increase the brightness of your devices in the morning.

If inside, let in as much natural sunlight as possible.

### DON'T

Don't spend time in dim or dark environments.

**NOTE:** This is common if you have a basement room or a room that doesn't receive natural sunlight!

Don't use blue light blocking glasses and dark sunglasses, especially in the morning. Blue spectrum light is helpful during the day.

Don't use blue light filters on your devices during the day.



## Action Steps

- ☐ Set an alarm on repeat 3 hours before your intended bedtime as a reminder to start reducing light around the home.
- ☐ Install and automate blue-light filters on all devices to start 3-5 hours before sleep and to end at the time you wake-up.
- ☐ Create and save a TV setting with lower brightness and backlighting.
- ☐ Read through this guide and circle/highlight any steps you would like to implement
- ☐ Jot down any other items needed in the space below.
- ☐ Jot down action steps to take in the space below.
- ☐ Place an order or schedule a time to shop.
- ☐ Set up your first version then use it and improve it.
- ☐ Set a deadline to have everything set up and working for you.

To do

To buy

- a light wake-up alarm
- dimmer switches
- lightbulbs
- blue light blocking glasses
- blinds & installation
- hardware reading light
- nightlights
- blackout stickers
- eye mask

Done by