

FAQ - Horticultural Lighting

13) How long should I run my lights?

This depends on the type of plants and whether you have natural sunlight available to your garden. As a general rule, when you are in a vegetative stage of plant growth and you have no natural sunlight, run your lights 14-18 hours a day. If you have natural sunlight, it will vary because the sunlight may or may not be direct. It will take a little experimenting to find the best length of time to run your lights. If you are actively fruiting and flowering, the rule is to run your lights 12 hours a day if you have no natural light.

14) How high do I need to hang my lights above my plants?

The higher the wattage the further away you want the light to be from your plants due to the amount of heat. HID lighting will be further away than a fluorescent fixture because of this. When mounting your lighting fixture take into account the type of plant and how tall the plant will grow. You want to keep the light as close as you can, but not so close to burn the plant. A simple rule is "if it is comfortable for the back of your hand, it will be a safe distance for your plants". Doing a little research on the type of plant and where it comes from will help in determining how much (or little) light your plants like. With fast growing plants, you may need to check the hanging height on a regular basis as plants that get too close to the lamp will be severely burned.

15) How big of an area will my light cover?

The size of the garden area will determine the wattage you need. If we assume that the plants will get no sunlight, a 1000 watt light will cover about 7 x 7 feet of growing area. A 600 watt will cover 6 x 6 feet, a 400 watt will cover 4 x 4 feet, and a 250 watt will cover 3 x 3 feet. These sized areas would be considered the "Primary Growing" areas. These lights will light-up larger areas, but plants placed outside of the Primary Growing area, will stretch and bend toward the light; a phenomenon called phototropism. Keep these areas of coverage in mind when using multiple fixtures. The best results occur when the areas of coverage overlap.

16) Why do I need glass to get the ETL Listing on a Metal Halide light?

Edison Testing Laboratories has stated that for a metal halide fixture to maintain its ETL Listing, that an additional tempered safety lens is required. The purpose of the glass is to prevent UV exposure in the event of an outer jacket failure.

17) Can I run a 1000 watt bulb in my 400 watt lighting system?

No! The internal components of the ballast are designed to send the correct voltage and current for the rated lamp. Mixing lamps and ballasts will result in premature failure and will void the manufacturers' warranty. Consider the size area you want your garden to be prior to making a lighting purchase. It is better to grow into a fixture than out of one.

18) Can I run a 430 watt bulb in a 400 watt lighting system?

Yes, the internal components of 400 watt and 430 watt ballasts are almost identical. You will only get 400 watts of light out of the 430 watt lamp, however.

19) Do I need to wear gloves when handling an HID light bulb?

Manufacturers do not state that gloves are required when handling their lamps. It is recommended that your hands be thoroughly washed prior to handling HID lamps though.

20) What is a conversion bulb?

A lamp that operates on the opposite ballast it was originally designed for. For example, a 940 watt conversion lamp is an HPS lamp that runs on a 1000 watt Metal Halide Ballast. There are also MH lamps that are designed to operate on HPS ballasts. These bulbs allow the grower to purchase the ballast of their choice and offer the flexibility of growing a variety of plant types by simply changing the lamp they need.

21) How do I clean the inside of my Sun System® Reflector?

Warm water and mild dish soap are the best to clean and maintain the highly reflective finish. Avoid bleach, ammonia and other harsh or abrasive cleaners.