

ILLUMINATOR

The World's Most Advanced LED Grow Lights

Owner's Guide

ProSource Worldwide, Inc.
[Http://www.ProSourceWorldwide.com](http://www.ProSourceWorldwide.com)

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Thank you for purchasing the Illuminator LED Grow Light!

At ProSource Worldwide, we take great pride in the quality of our lighting systems and we understand that the best advertisement for any product is an excited and enthusiastic owner. That's why your complete satisfaction is our main priority.

In order to insure that you get the best possible results from your new lighting system, we have prepared a few tips and recommendations. Please note that these are general guidelines, not hard and fast rules. Individual plants, growing styles, and gardens vary dramatically. So, it's impossible to give precisely detailed instructions. These suggestions are based on our own research, as well as feedback from customers like you. So, if you have any suggestions or feedback, please feel free to call us, toll-free, at 1-866-921-5553 or visit us online at www.prosourceworldwide.com.

GARDENING RECOMMENDATIONS

Watering: We have found that plants under Illuminator LED Grow Lights will often require less watering than plants under conventional lighting. This is due to the lack of evaporation from the soil, which is normally caused by ambient heat and air flow. So, if you are used to using a particular brand of soil, or your own mixture, you might want to add ingredients to improve your soil's drainage, increase the ambient temperature, or simply water less.

Nutrition: We strongly advise caution when feeding your plants! Most gardeners observe that their plants not only require less water with Illuminator LED Grow Lights, they also require less supplemental nutrition. Since your plants don't need massive doses of nutrients, it is very easy to over-feed them, and this can cause nutrient burn and related issues. Generally, most nutrients should be used at half-strength, or less, when used with Illuminator LED Grow Lights.

Installation Recommendations:

The following are recommendations for hanging your light and the area it will cover. Since no two gardens are exactly alike, we suggest you experiment with variations in the distance from your plants and your total grow area to see what works best for you.

Important Note: Too much light will cause serious damage to seedlings and young plants! Plants at the earliest stages of development must be placed the farthest distances from the light.

Light Height: When first introducing LED lights to your plants, please hang them at 20" or higher. When you first see growth start to occur, you can then lower the light to the appropriate distance from the top of the plants for the remainder of the vegetative cycle.

Ideal height for the lights are as follows:

90W – 16" vegetative, 12" or closer for flowering

180W – 16-18" vegetative, 14" or closer for flowering

350W – 18-24" vegetative, 18" or closer for flowering

Vegetative Growth Stage

Light Model	Distance Above Canopy	Maximum Coverage	Light Footprint
90W	12" – 24"	16 square feet	4' x 4'
180W	12" – 36"	25 square feet	5' x 5'
350W	18" – 48"	30 square feet	6' x 5'
700W	24" – 60"	63 square feet	9' x 7'

Flowering & Fruiting Stage

Light Model	Distance Above Canopy	Maximum Coverage	Light Footprint
90W	6" or closer	4 square feet	2' x 2'
180W	6" – 18"	9 square feet	3' x 3'
350W	6" – 18"	16 square feet	4' x 4'
700W	10" – 18"	24 square feet	6' x 4'

Growing With Illuminator LED Grow Lights

For Soil Based Grows:

1. During vegetative growth, keep ambient temperatures between 78-80 degrees. During flowering, temperatures should be kept to 85 degrees. Temperatures over 89 degrees will stress your plants and temperatures less than 80 degrees will greatly reduce your plants ability to transpire which is vital for the flowering process to function properly.
2. Use a light, airy soil that incorporates perlite and vermiculite to ensure proper draining. Your Illuminator LED Grow Light emits very little heat which means evaporation is greatly reduced. So your soil needs to be well drained to prevent root rot and oxygen depletion to the root system. *Recommended soils are Sunshine Mix #4 or Promix.*
3. To support adequate plant transpiration, humidity should be at 40%. Any higher and the rate of transpiration slows.

For Hydroponic Growing:

Follow the same guidelines as above but you must keep in mind your reservoir temperature. While you want ambient temperatures at 85 degrees for flowering, you must maintain a reservoir temperature at 65 degrees. If your reservoir temperature increases over 70 degrees, the water is no longer able to hold onto enough oxygen – even if you have an airtor. Reduced oxygen levels in the reservoir will lead to reduced yield and poor results. We recommend using a chiller or keep your reservoir tank in another, cooler location.

You may also keep ambient air temperatures at 76-78 degrees and supplement your Illuminator LED Grow Lights with a secondary source of heat. You can use seedling heat mats, small wattage HPS lights (for both heat and added specral benefit), or CFLs in the 2700k to 3000k range, 50-100W at most. Keep in mind that supplemental light from HPS or CFL is not necessary for great results with your Illuminator LED Grow Lights but can give a double benefit of heat (if needed) and increased yield.

Frequently Asked Questions

How tall can my plants get under a 90W Illuminator? 180W Illuminator?

The 90W Illuminator can sustain a plant up to about 3 ft tall while the 180W Illuminator can support plants over 4ft tall.

How many plants can I grow with my Illuminator?

The answer is – it depends. You could grow a single small/medium sized plant with the 90W light or 9 very small plants in a SOG arrangement. The number of plants you have per light depends on the finished size of the plants you want to grow as well as the dimensions of the space you wish to cover.

There are several diodes in my light that do not light up or are very dim, is this normal?

Yes, these are infrared diodes. You won't be able to see the light coming off of these diodes but they are working to help your plants grow.

When do I lower my lights for flowering?

First, switch to a 12 on 12 off lighting schedule. Then, drop the lights down only when you see buds forming. Dropping too soon can lead to reduced growth and yield.

These lights work so great, I want to tell others about them. Can I make some money if I tell my friends to buy your lights?

You sure can! Just join our affiliate program at <http://www.ledgrowlightsaffiliate.com/>. We give you a special website address coded to you so when they make a purchase, you make money. Great for website owners!

TECHNICAL SPECIFICATIONS

<i>Operating Temperature:</i>	<i>-4°F - 104°F (-20°C - 40°C)</i>
<i>Storage Temperature:</i>	<i>-40°F - 185°F (-40°C - 85°C)</i>
<i>Lighting Time:</i>	<i>24 Hour Approved</i>
<i>Voltage:</i>	<i>20v (US) or 220v (Europe)</i>

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