# **USING GROW LIGHTS**

## **Recommended Light to Plant Distance**

Plant types are generally categorized into high or low light level plant categories. The PAR value of a plant light equates to the amount of light energy that a plant can absorb. The higher the PAR, the more intense the light energy a plant can absorb facilitating accelerated vegetative and/or flowering growth. Below are the plant types and recommended optimal light energy absorption distances based on this LED Grow Light:

### Why use LED Grow Lights

- Grow plants during the winter for a head start on spring vegetable plants
- Grow plants that are out of season throughout the year
- Grow plants anywhere including garages, basements, closets, kitchens or warehouses

#### **Benefits of Supplemental Lighting**

Use of a supplemental light source including LED lighting can have an impact on:

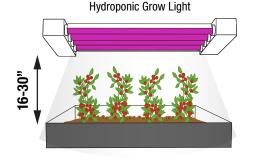
Sweetness

Acidity

Texture

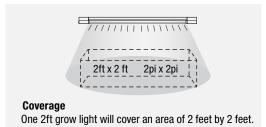
Color

- Fruit number
- · Fruit weight
- · Stem (diameter/length)
- Leaf length
- · Shoot dry weight
- Bud Size
- Leaf Size



## **High light plants**

i.e. cannabis, tomatoes, peppers, perennials, etc Seedlings Stage – 6" thru 2 weeks of vegetative stage Vegetative and/or Flowering Stage – 16-30"

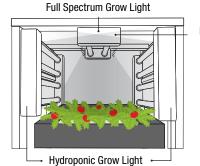


#### Low light plants

i.e. herbs and leafy greens (such as basil lettuce) Seedlings Stage – 12" thru 2 weeks of vegetative stage Vegetative and/or Flowering Stage – 24-30"

## **Optimal Growth**

Optional Grow Layout



Hang or Flush Mount

The Feit Electric full spectrum and hydroponic lights can both either hung or flush mounted above the plant. For optimal light absorption of flowering & budding plants, it is recommended to hang or flush mount the full spectrum above the plant and mount/position the hydroponic lights shining inward on either side of the plant mounted to any structure.

## **Plants in Vegetative Growth Stage**

- -The recommended growth cycle is 18 hours of light during the vegetative growth stage. This light cycle will create an environment that mimics the photoperiod in the summer with long days. It is during the vegetative growth stage that cloning, transplanting, pruning, and bending are all initiated.
- -Turn your LED grow light ON for 18 hours a day and then turn the light OFF and leave your plant in the dark for another 6 hours. Most plants will need four to six weeks in the vegetative cycle before reaching the start the flowering stage.

## **Plants in Budding and Flowering Growth Stage**

- -Pre-flowers are the first indication that the plant is ready to move into the budding and/or flowering stage of growth.
- -The pre-flowers grow at branch internodes just behind the leaf spur typically around the fourth week of vegetative growth, when the plant is six to eight weeks old.
- -When you start seeing pre-flowers forming this means that the plants are ready to go into the flowering stage. You can continue to grow in the vegetative growth stage or switch to flowering at this point. The pre-flower looks like a regular female flower with white fuzzy pistils. The pre-flowering can take from one to two weeks.
- -Wait to induce flowering until pre-flowers have appeared. Induce flowering by switching your light cycle to 12 hours of uninterrupted darkness and 12 hours of light.

#### Notes:

- If LED grow light is installed as flush mount fixture under a cabinet or canopy where distance cannot be adjusted, mount at the min of 24" distance
- If LED grow light can be hung from a ceiling, cabinet or canopy, use the supplied hanging assembly or purchase separately a chain to adjust height of LED light to maintain the recommended distances as the plant grows
- For taller plants including tomatoes and cannabis, mounting one (1) grow light overhead and one (1) grow light as a side light on either side of the plant will provide additional supplemental light supporting fuller plant growth for a bushy plant.

All information provided should be used only as a suggestion. No expressed guarantees of plant health or growth are guaranteed or implied with the use of these lights. Variables such as soil, water, humidity, temperature and other factors will impact all plants health.