

### Coverage Area

Not unlike HID lighting, the coverage of your LED grow lights will depend upon the mounting height of the bar. (There is a sticker on the back of each bar that shows recommendations for the model you are using.)

Your mounting height will be determined by the light requirements of your plants as well as your plant's access to natural sunlight or other forms of artificial lighting. Determining the ideal distance to mount each LGM grow light will require some trial and error on your part. We recommend that you begin by mounting the bars at the maximum recommended height to allow plants to adjust to the quality wavelengths emitted from our LED grow lights and then adjust according to your plant's reaction.

*As a general rule of thumb:*

Estimated coverage area as primary lighting for each LGM3 is a 1' x 3' area (30cm x 90cm). Approximate coverage for the LGM540 is 1.25' x 3.75' (38cm x 114cm).

As supplemental lighting (greenhouse or a room with access to sunlight) the LGM5 is recommended, allowing approximately 1.5' x 4.5' (46cm x 137cm) of coverage out of each bar.

### Power Supply

Standard power adapters included with each bar are AC input 100-240V-, 1.1A, 50-60 HZ and output 24V DC. These will plug into any standard wall socket. Bars are shipped with country specific power supplies. The bars have a DC power connector on each end that allows power to flow through the bar for connection to another bar. The limit on this "chaining" is 4 bars in a series. There are a wide variety of power supplies available for use in chaining. For simple setups, you can just swap out the wall plug supplies for a single large supply without any additional cost. For larger setups, LED Grow Master can provide large supplies that will power many strings of 4 bars easily. Most of these power supplies will work on both 120vac and 240vac.

When operated on 240vac, the cost of operation drops about 40% over the same setup running on 120vac.

LED Grow Master supplies commercial power supplies for larger setups. Our best value unit is 960 watts, which is about 100 LGM5 bars. It is light weight and electronic. Power supplies are available in either shelf mount or DIN mount. Keep in mind that when powering bars for commercial use, it is recommended that a maximum of 4 bars be used per power drop. The use of automotive or high-voltage cable type 00 is recommended. We do not supply this cable because it is always less expensive for the grower to purchase it locally from an electrical supply house. The "Aluminum Multi Conductor Parallel & Tee Tap Connectors" are recommended for tapping into the buss cables. (positive or negative). Commercial growers "should" use 3-phase power. The commercial power supplies we feature are 92% efficient, compared to only 80% for single-phase type units. Efficiency relates to how much energy is lost during the convert from AC to DC, something which most commercial growers are sensitive to. Ideally, one should run our products on photovoltaic or wind power, as our products are the only plant growing option for operating off the grid. More options are available if you would like to run "off the grid" using solar/battery setups. For larger commercial setups requiring 1000 or more bars you have the option of special bar to bar cables as well as engineering drawings needed to show bar mounting and power drops.

