

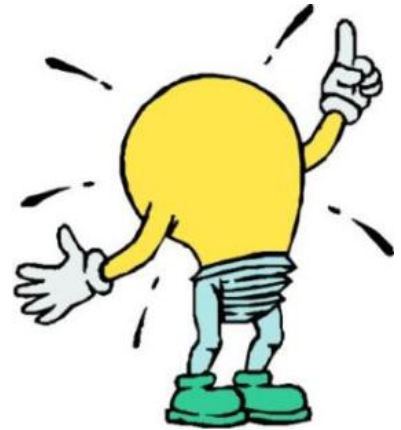
WHAT LIGHT IS RIGHT?

Why is wattage important?

The watt is a measure of work defined as one joule per second.

The law of the conservation of energy states that energy cannot be created nor destroyed; it can only be transformed.

A light bulb converts electrical energy into light and heat. Because energy is conserved, a 100 watt light bulb will convert 100 watts of electrical energy into heat and light.



As indoor gardeners we are concerned with maximizing the conversion of electrical energy into light while minimizing the amount converted into heat. Thus, we need to find a lamp that will most efficiently convert electrical energy to light with a sufficient wattage to supply our grow room with enough light energy so our plants can flourish.

It is recommended to have 40-50 watts per square foot in your grow area.

Grow Room Areas and their Corresponding Optimum Lamp Wattage:

Area of Grow Area ¹	Optimum Wattage ²
2.0 sq. ft.	100 watts
4.0 sq. ft.	200 watts
8.0 sq. ft.	400 watts
10.0 sq. ft.	500 watts
12.0 sq. ft.	600 watts
16.0 sq. ft.	800 watts
20.0 sq. ft.	1000 watts

Various bulb sizes and lamps are available at the Organic Garden Center to light any size grow room!

¹Area = (length of grow room) x (width of grow room)

²Optimum Wattage = 50 watts per square foot