



T5HO FLUORESCENT LIGHTING

This exciting new lighting technology has been selected as a complete platform for the first ever comprehensive GLO high output lighting center. After having reviewed various alternatives we easily came to the conclusion that this technology was best and allowed us to capitalize on our successful and proven lighting spectrums, marketed as; Life Glo, Power Glo and Marine Glo.

T5HO high output lighting has proven itself to be efficient, reliable, durable, and at the same time delivers the higher light levels required by many reefs and heavily planted aquariums. Please review some of the following points that support the fact that High Output T5 is the fluorescent lighting technology of choice to support photosynthesis, provide excellent aquatic visual presentation and is economic versus other high output lighting formats.

Efficiency

T5HO lamps in terms of a high output form of lighting are energy efficient when compared to for example, metal halide. A premium brand metal halide at 6500K and 250W for example puts out 18,000lm. Four T5HO 54W Life Glo's at 6700K, totaling 216W, measured at 35 degrees C will generate 4500lm per bulb, delivering a total of 18,000 lm. At 216 watts, higher efficiency is a fact. This comparative is a fair one when considering that two bulbs of relatively similar color temperatures were selected.

It is no wonder that serious planted aquariums and reefs can now obtain excellent results with fluorescent lighting, as compared to the past. It is important to realize as well that T5HO bulbs can be placed 5.08 cm. (2 in.) above water surface without having any significant effect on aquarium water temperature (when using a lighting system such as the GLO T5HO Linear Fluorescent Lighting System, in an open top aquarium), metal halide has to be a minimum of 15.24 cm to 20.34 cm (6 in. to 8 in.) above water surface. It is easily understood that this is a big advantage in terms of efficient light transmission into an aquarium. Furthermore, T5HO delivers even light dispersion and heat dissipation, metal halide seriously heats aquarium water and often requires the use of aquarium chillers that render it's use an expensive proposition in many cases.

Consider efficiency in terms of light output per bulb surface area and T5HO again shines when compared to other linear fluorescent lamps. To make a fair comparison the ultimate is to select two bulbs of the same spectrum. Compare a Life Glo T5HO 54W against its own T8 40W version. The T5HO has a surface area of 174 sq.cm. and generates 4500lm(35 deg.C), the T8 has a surface area of 300 sq.cm. and delivers 3320lm (both are rounded off to the nearest decimal point). The result is that the T5HO version puts out 26 lm/sq.cm and the T8 puts out 11 lm/sq.cm., that is a serious difference, especially in light of this type of comparison.

It is also a fact that in many commercial applications T5HO with its lower energy consumption, more even lighting dispersion and excellent bulb life is starting to displace metal halide lighting.

