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 35º 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(35º 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.

Reliable Performance

T5HO has proven from the very beginning to be a reliable lighting technology and as such is used in many industrial and commercial lighting applications, not the case for Power Compact Fluorescent. Initially Power Compact suffered from reliability issues, it has improved but still suffers in terms of durability.

No protective lenses are required for T5HO fluorescent, impressive for a high output lighting system, especially when compared to metal halide lighting.

Linear fluorescent lighting has a long manufacturing history; some other high output forms of lighting do not.

Durability

T5HO utilizes special technology to counteract the effect of mercury on phosphors and as a result improves long term durability and keeps light levels closer to initial output performance. In fact there is significantly less mercury present within T5HO lamps. Versus other high output or very high output lighting formats, T5HO is the longest lasting in terms of optimal performance. VHO fluorescent usually has to be replaced every 6 months for optimal performance, metal halide usually requires annual bulb replacement, T5HO can provide 18 months of close to optimal performance.

High Output Performance

When combined with efficient reflectors, light levels are dramatically enhanced. The GLO T5HO fluorescent lighting program also offers a parabolic type shaped reflector that makes the most of our T5HO lamps.

Compact dimensions allow significant numbers of T5HO bulbs to be used, allowing maximum lighting potential for aquariums that require it while providing the advantages of a fluorescent format. The fact that these lamps are linear also means that the design of an efficient reflector is more easily achieved versus metal halide and power compact.