

Critical Aquarium Lighting Considerations

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To maintain a healthy environment for your aquatic life, your goal must be to simulate - as closely as possible - the environment and conditions your aquatic life experiences in the wild. Lighting is one of the critical conditions you need to replicate.

Since the plants and animals you bring into your home are no longer exposed to natural sunlight, providing the proper spectrum and intensity of light is vital for their overall good health. When choosing lighting for your aquatic ecosystem, several factors will affect your decision:

- **Freshwater Aquariums**
 - Are live plants part of your setup or is it a fish-only aquarium?
- **Saltwater Aquariums**
 - Do you have corals or only fish? If corals, which type(s) of corals?
- **Depth of Your Aquarium**
 - Deeper aquariums need more intense lighting.

There is an unending variety of lighting systems available to the aquarist to meet the needs of every application. Make sure you know the lighting intensity and spectrum requirements of the plants and/or animals you are keeping in your aquarium. A general "rule of thumb" is to provide between 2 to 5 watts of lighting for every gallon of water. Live freshwater plants have much more specific lighting requirements than do freshwater fish. In the saltwater reef aquarium, different corals have different lighting requirements as well.

Thorough research on your part will ensure that you provide the proper lighting to meet the needs of all your aquarium inhabitants. Once you have determined what your aquatic inhabitants require, you can identify your ideal lighting system. Please refer to our [Lighting Systems Selection Guide](#) for help.

For more information on this subject, please read [*How to Properly Illuminate Your Aquarium.*](#)