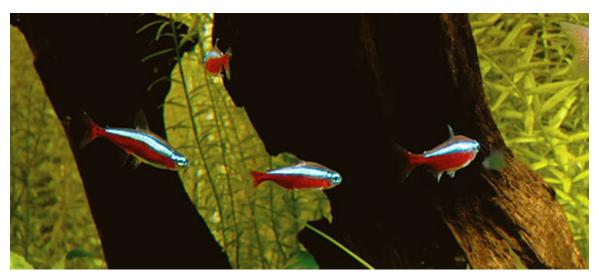
#### Fluorescent Bulb Selection Guide

Drs. Foster & Smith Educational Staff



# Characteristics of different Flourescent Bulbs

50/50 Bulbs Actinic (Blue) Bulbs High K-Rating Bulbs Natural Daylight/Plant Bulbs White Bulbs

# 50/50 Bulbs (Half Actinic, Half Daylight or White Light)

These fluorescent tubes produce 50% actinic blue light, and 50% white light or natural sunlight. They are designed to provide your corals with the extra blue light they need, while providing white light to maximize the appearance of your aquarium inhabitants.

50/50 Bulb

or your aquariant	Color Rating	Watts/ Bulb Size	Manufacturer's Comments
Coralife 50/50 bulbs	50% - 6,000°K 50% - Actinic	15W-18"-T8 17W-24"-T8 25W-36"-T8 32W-48"-T8	50/50 lamps are a mixture of 50% 6000°Kelvin natural daylight and 50% Actinic 03 blue. These full-spectrum lamps enhance color and clarity while providing the tank's inhabitants with the proper light required for essential biochemical reactions.

Zoo Med Reef Sun	50% - 6,500°K 50% - Actinic	15W-18"-T8 17W-24"-T8 25W-36"-T8 32W-48"-T8	50/50 combination of trichromatic daylight phosphor and actinic 420 phosphor in the same lamp. Provides high intensity full spectrum illumination, strong in the short wavelength blue region, balanced with 6500°K daylight for natural color enhancement and viewing pleasure.
URI Actinic White	50% - Actinic 50% - 12,000°K	30W-36"-T12 40W-48"-T12	Includes internal reflector.
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### **Actinic Bulbs - Blue Light Waves Only**

In nature, blue light travels deeper into the water than does the other colors in the light spectrum, such as reds, yellows, and greens. Actinic bulbs produce only the blue end of the light spectrum. Actinic bulbs are recommended for deep water invertebrates, and fish that don't like bright light, such as African Cichlids. Actinic blue bulbs are normally used in combination with other broader spectrum (5,000°K-10,000°K) bulbs. They can also be used to simulate dusk and dawn in your aquarium, providing your aquarium inhabitants with more realistic sunrise and sunset conditions.

	Color Rating	Watts/ Bulb Size	Manufacturer's Comments
Zoo Med Coral Sun Actinic 420	Actinic	15W-18"-T8 17W-24"-T8 25W-36"-T8 32W-48"-T8	High intensity actinic lamp with strong emissions in the short wavelength region of the spectrum, peaking at 420 nm. Simulates the short wavelength blue light which penetrates to reef depths in nature.
Coralife Actinic Blue Lamps	Actinic	15W-18"-T8 17W-24"-T8 25W-36"-T8 32W-48"-T8	Designed to condition the tank before and after the daylight cycle and enhance the vibrant colors of the fish and invertebrates.  Best when used in conjunction with daylight (trichromatic) or 50/50 lamps.

URI Actinic "03"

Actinic

30W-36"-T12 40W-48"-T12

Includes internal reflector.

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### High K-Rating Bulbs - 15,000°K - 20,000°K

These bulbs have a higher temperature rating than "white light," which means they produce even more of the blue light waves. They are best suited for marine reef aquariums. Depending on the type of corals in your aquarium, these bulbs rarely need to be supplemented with Actinic bulbs.

**High K-Rating Bulb** 

	Color Rating	Watts/ Bulb Size	Manufacturer's Comments
Hagen Power- Glo Bulbs	18,000°K	15W-18"-T8 20W-24"-T8 30W-36"-T10 40W-48"-T10	Promotes coral, invertebrate and plant growth. High intensity photosynthetic deep marine spectrum. Total illumination for living corals, marine algae and freshwater plants.
Hagen Aqua- Glo Bulbs	18,000°K	15W-18"-T8 20W-24"-T8 30W-36"-T8 40W-48"-T8	Generates an ideal fish colour-enhancing spectrum and delivers a strong photosynthetic range of light very capable of stimulating vigorous plant growth.
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# Natural Daylight/Plant Bulbs - 5,000K - 7,500K

These fluorescent bulbs are designed to mimic natural sunlight, and considered "full spectrum," which means they contain all the different colors of light in the light spectrum. Plants need the red, orange and yellow colors found in the lower end of the light spectrum in order for photosynthesis to occur. Although these bulbs are well suited for many different aquarium applications, they are especially recommended for planted freshwater aquariums. They are also good lamps to be used in conjunction with actinic bulbs in the reef aquarium.

**Natural Daylight Bulb** 

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	Color Rating	Watts/ Bulb Size	Manufacturer's Comments
Zoo Med Flora Sun	5,000°K	15W-18"-T8 17W-24"-T8 25W-36"-T8 32W-48"-T8	Peak emissions in the blue and red regions. Emission spectrum closely matches absorption curve of chlorophyll-A, promoting maximum photosynthesis.

Zoo Med Tropic Sun	5,500°K	15W-18"-T8 17W-24"-T8 25W-36"-T8 32W-48"-T8	Balanced full spectrum daylight lamp, which simulates natural sunlight. Brings out the natural beauty of aquarium fish and plants while enhancing clarity.
Zoo Med Ultra Sun Trichromatic	6,500°K	15W-18"-T8 17W-24"-T8 25W-36"-T8 32W-48"-T8	High intensity trichromatic full spectrum daylight lamp CRI rating of 98 provides excellent color rendition and contrast perception. Balanced coverage of the full spectrum of visible light as well as UVA.

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#### White Bulbs - 8,000°K - 14,000°K

These bulbs have a higher temperature rating, which means they produce light waves in the higher end of the spectrum, towards the blue end. While these bulbs can be used in a variety of applications, they are most often used in marine reef aquariums. Depending on the type of coral contained in

White Bulb

your aquarium, these bulbs may not contain enough of the blue light waves to maintain proper health of your marine invertebrates. Therefore, supplementing these bulbs with an actinic bulb is recommended.

	Color Rating	Watts/ Bulb Size	Manufacturer's Comments
Coralife 10,000°K Lamp	10,000°K	15W-18"-T8 17W-24"-T8 25W-36"-T8 32W-48"-T8	High-intensity, purified super daylight with rare earth color-enhancing phosphors lamp simulates the midday tropical sun.  Sparkling, blue-white daylight rays and bright, high-intensity output.

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