

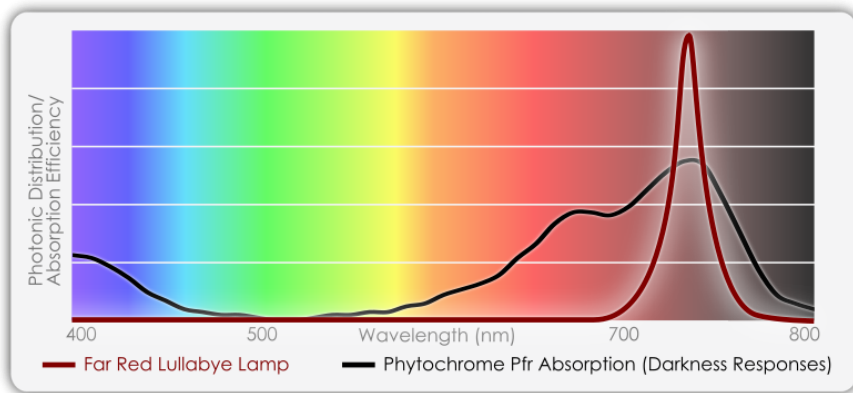
TotalGrow™ Far Red Lullaby Lamp



Amplify short-day responses in plants for enhanced flowering

- Accelerate the transition into darkness-induced “rest” with 730nm far-red light
- Enable longer periods of high-intensity lighting for increased growth rates and yields
- Reduce the need for shade curtains and naturally short days
- Minimal power consumption and electrical infrastructure needs with simple installations

The Science of Photoperiodic “Dark” Lighting



Day-length perception in plants often determines flowering vs. vegetative growth responses. Short day crops like cannabis naturally require approx. 12+ hours of continuous darkness to flower which begins with a slow deactivation of the Phytochrome photoreceptor before the plant is fully “asleep.”

The TotalGrow Far Red Lullaby Lamp specifically targets the absorption peak of Phytochrome Pfr to accelerate this process, reducing the 12-hour darkness requirement and allowing more daily light accumulation and growth. The exact darkness requirement varies by crop and environment, but a 13-hour day / 11-hour night is generally possible for an additional hour of daily growth.

This 730nm far red radiation also generally induces stretching.

Item	TG1B-3A-110G
Product Type	Light Bulb
Power Consumption	17W
Projected Service Life	50,000 hours
Photon Flux Output	34 $\mu\text{mol/s}$
Spectrum	730nm
Output Efficiency	2.0 $\mu\text{mole/J}$
Typical Coverage	40 sq. ft.
Typical Lighting Schedule	13 hr. Day / 1 hr. Lullaby / 10 hr. Dark
Waterproof	IP65
Warranty	5 years