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› [VIVOSUN 400 Watt HPS Grow Light Bulb Instruction Manual](#)

VIVOSUN B00PTPLFBE

VIVOSUN 400 Watt HPS Grow Light Bulb Instruction Manual

Model: B00PTPLFBE

Brand: VIVOSUN

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your VIVOSUN 400 Watt High Pressure Sodium (HPS) Grow Light Bulb. Please read these instructions thoroughly before installation and operation to ensure proper function and longevity of the product.

2. SAFETY INFORMATION

- **Electrical Safety:** Always disconnect power before installing, removing, or handling the bulb. Ensure all electrical connections are secure and comply with local electrical codes.
- **Heat Warning:** HPS bulbs generate significant heat. Do not touch the bulb with bare hands during or immediately after operation. Allow sufficient cooling time. Ensure adequate ventilation around the fixture.
- **Eye Protection:** The intense light emitted by HPS bulbs can be harmful to eyes. Always wear appropriate eye protection when working near an operating HPS light.
- **Proper Handling:** Handle the bulb by its base, not the glass. Avoid dropping or subjecting the bulb to impact.
- **Compatibility:** Use only with compatible 400W electronic or magnetic ballasts. Using an incompatible ballast can damage the bulb and pose a safety risk.
- **Disposal:** Dispose of used bulbs according to local regulations, as they may contain hazardous materials.

3. PRODUCT FEATURES

- **Wattage:** 400W HPS bulb compatible with electronic and magnetic ballasts.
- **Lumen Output:** 55,000 Lumens for high brightness.
- **Color Temperature:** Optimized 2100K red & orange spectrum.
- **PAR Value:** High Photosynthetic Active Radiation (PAR) to stimulate flower growth and enhance fruiting.
- **Base Type:** E39 base.
- **Lumen Maintenance:** Maintains over 90% of initial lumen output after 5,000 hours of operation.

- **Lifespan:** Rated for 24,000 hours.

4. SETUP

4.1. Unpacking

Carefully remove the bulb from its packaging. Inspect for any visible damage. Do not use if the bulb appears cracked or broken.

4.2. Installation

1. Ensure the power to the grow light fixture is turned off at the main switch.
2. Handle the bulb by its ceramic base, avoiding contact with the glass envelope.
3. Screw the E39 base of the HPS bulb into the compatible socket of your grow light reflector. Ensure it is securely tightened but do not overtighten.
4. Verify that the bulb is properly seated in the socket.
5. Connect the grow light fixture to a compatible 400W electronic or magnetic ballast.

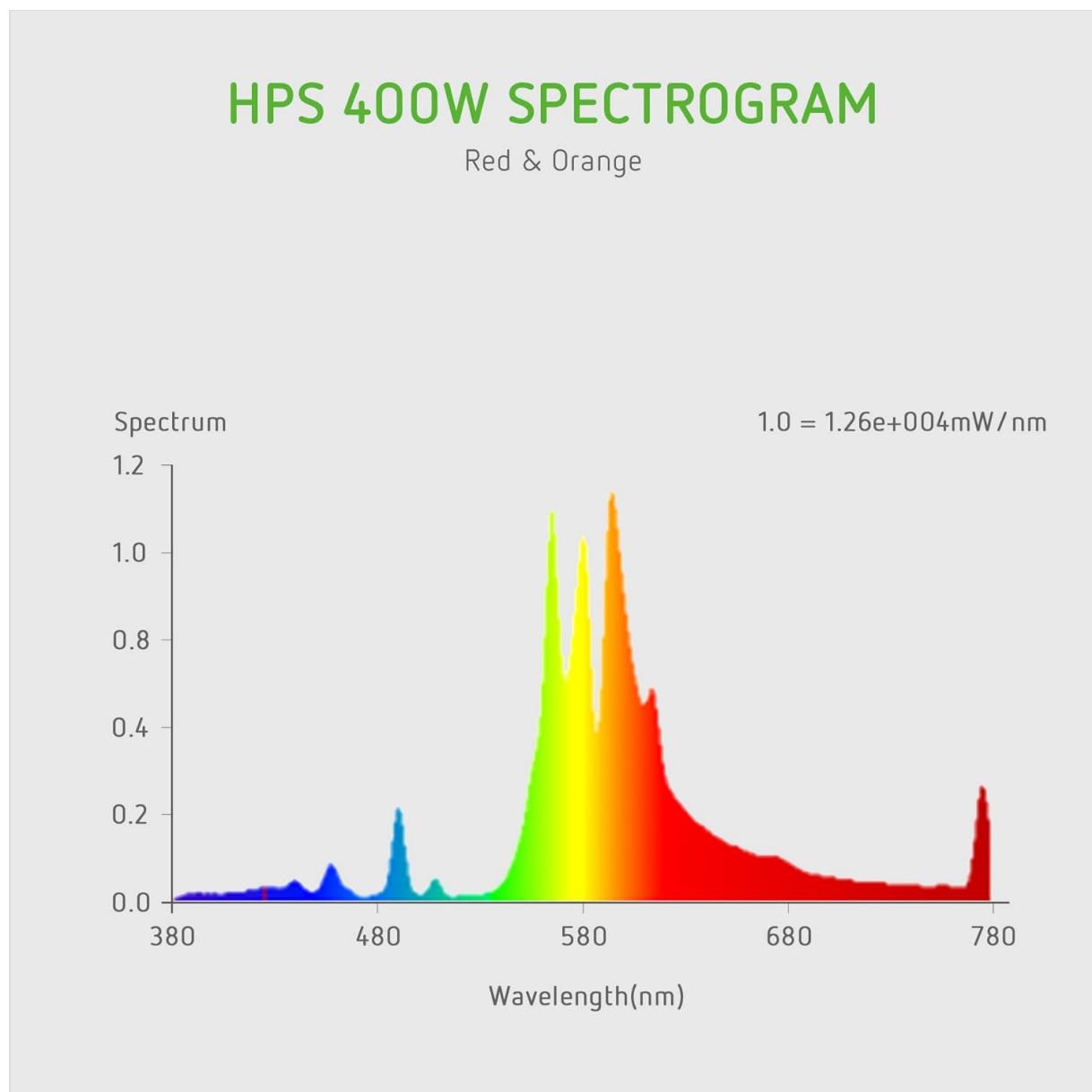


Figure 1: VIVOSUN 400W HPS Grow Lamp Parameters. This image displays the physical dimensions of the bulb (approximately 11 inches long and 2 inches wide at the base) and a table of key specifications including Initial Lumens (55,000), Color Temp (2100K), CRI (24), Base (E39), and Glass Size (T46).

5. OPERATING INSTRUCTIONS

5.1. Initial Startup

After installation, turn on the power. The bulb requires approximately 2-3 minutes to reach full brightness. During this warm-up period, the light intensity and color may fluctuate.

5.2. Re-strike Time

If the bulb is turned off, allow at least 5 minutes before attempting to re-strike it. Attempting to re-strike a hot HPS bulb too quickly can reduce its lifespan or prevent it from igniting.

5.3. Light Spectrum

The VIVOSUN 400W HPS bulb produces a red and orange spectrum light, which is ideal for stimulating flowering and fruiting stages of plant growth.

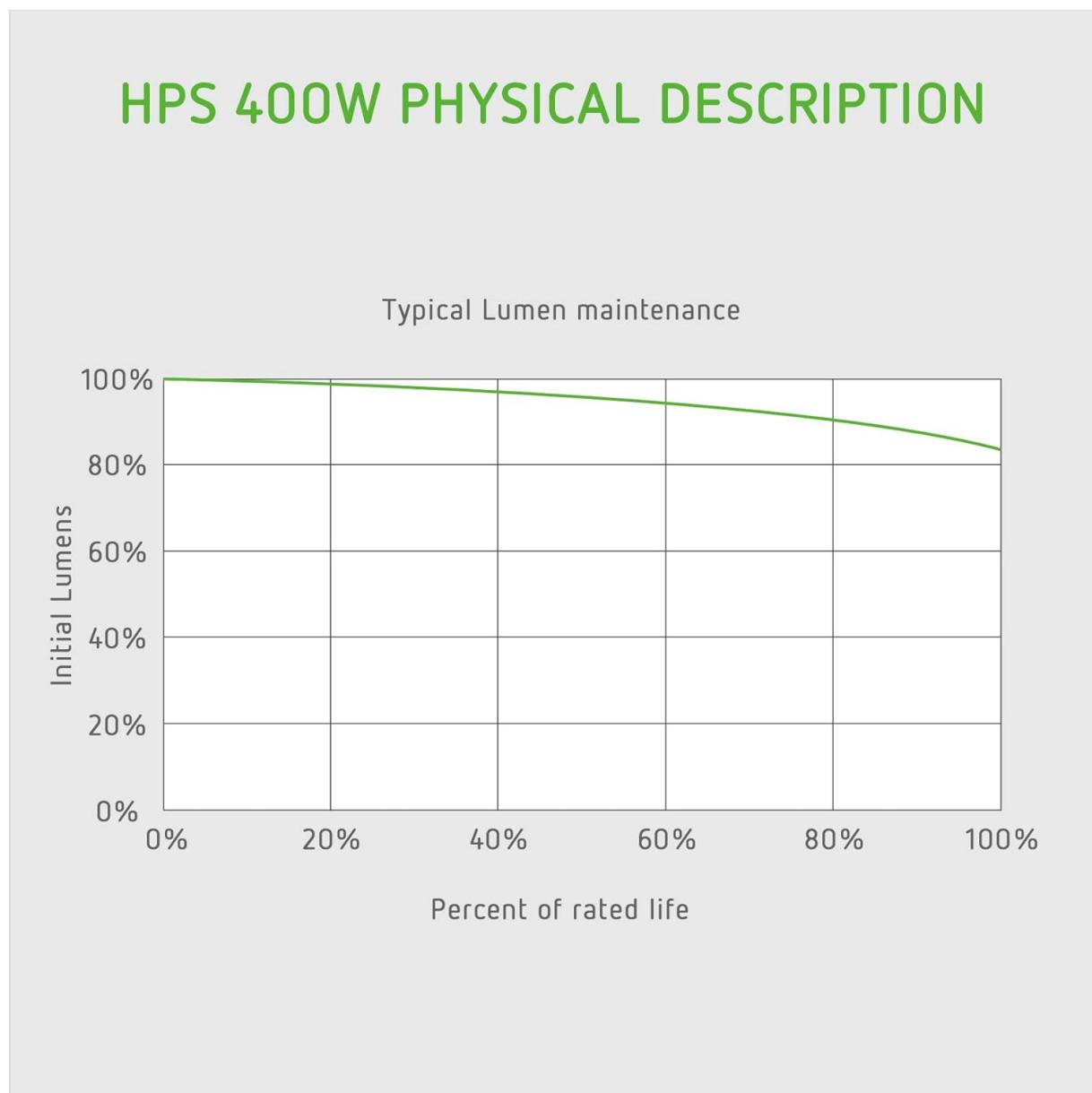
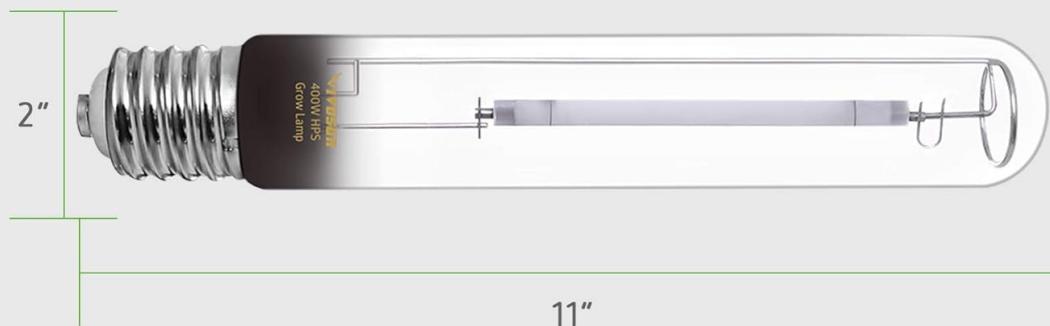


Figure 2: HPS 400W Spectrogram. This graph illustrates the light output intensity across different wavelengths (nm), highlighting the dominant red and orange spectra produced by the bulb, which are beneficial for plant flowering.

GROW LAMP PARAMETER



HPS 400w

Both MH and HPS are used with air-cooled reflectors Kit and Wing Reflector Kit

Initial Lumens	Color Temp	CRI	Base	Glass Size
55,000	2100k	24	E39	T46

Figure 3: VIVOSUN HPS Grow Light Bulb promoting flowering and fruiting. This image visually represents how the HPS bulb's light spectrum supports the growth stages from seed to mature, fruiting plant.

6. MAINTENANCE

6.1. Cleaning

Ensure the bulb is cool and power is disconnected before cleaning. Gently wipe the glass envelope with a soft, dry cloth to remove dust or debris. Do not use abrasive cleaners or liquids directly on the bulb.

6.2. Lumen Depreciation

Over time, all HPS bulbs experience a gradual decrease in light output (lumen depreciation). This VIVOSUN bulb is designed to maintain over 90% of its initial lumen output after 5,000 hours of operation. For optimal plant growth, consider replacing the bulb after approximately 12-18 months of continuous use, even if it still lights up.

HPS 400W PHYSICAL DESCRIPTION

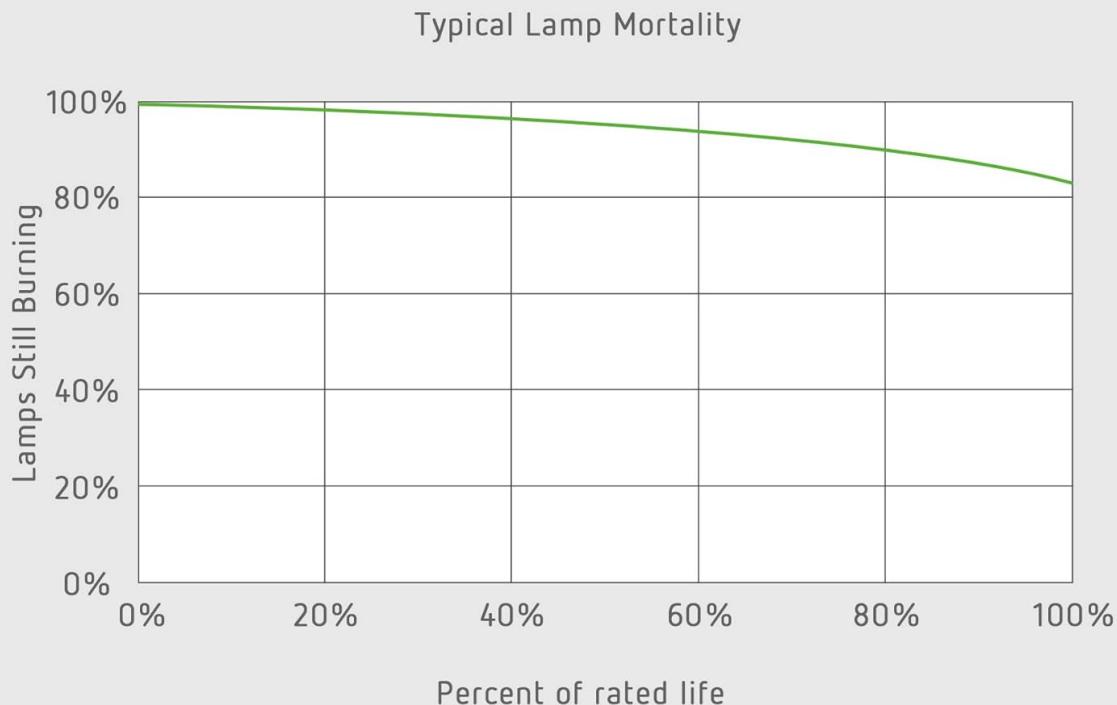


Figure 4: Typical Lumen Maintenance. This graph illustrates the percentage of initial lumens maintained by the HPS 400W bulb over its rated life, showing a gradual decrease but remaining above 80% for a significant portion of its lifespan.

6.3. Lamp Mortality

The bulb has a rated lifetime of 24,000 hours. While designed for durability, factors such as frequent on/off cycles, improper voltage, or physical shock can affect its lifespan.

PROMOTE FLOWERING AND FRUITING



High Pressure Sodium bulbs give off a natural spectrum with higher 2100K high-PAR value, promoting an incredible flowering phase and fruiting.

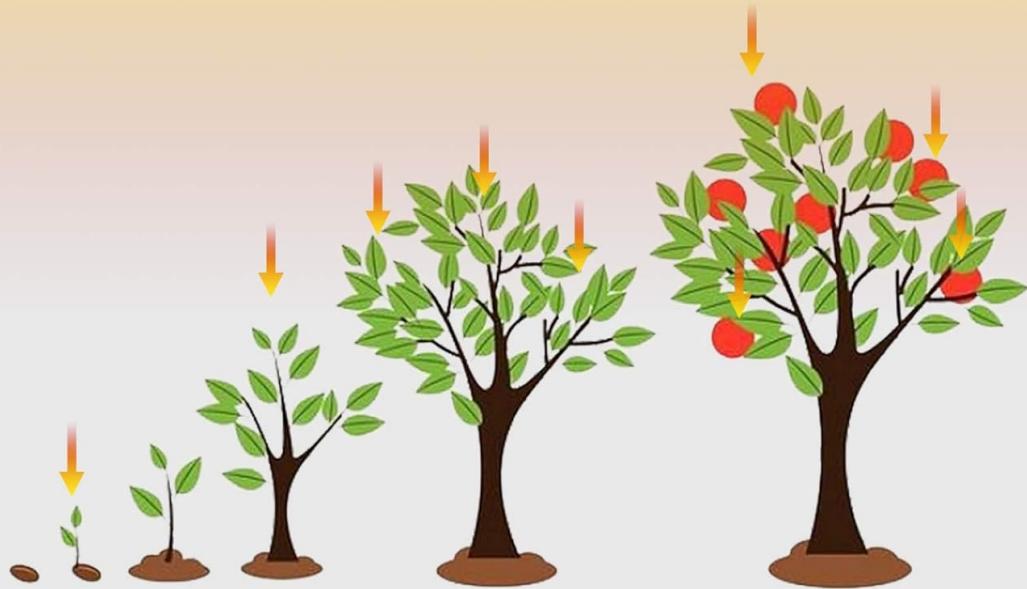


Figure 5: Typical Lamp Mortality. This graph shows the percentage of lamps still burning over the rated life, indicating the expected reliability and failure rate of the HPS 400W bulb over time.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Bulb does not light up	No power, incorrect wiring, faulty ballast, loose connection, damaged bulb.	Check power supply. Verify all wiring and connections. Ensure ballast is compatible and functional. Re-seat the bulb. Replace bulb if damaged.
Bulb flickers or cycles on/off	Aging bulb, improper voltage, faulty ballast, overheating.	Replace bulb if it's near end of life. Check voltage supply. Inspect ballast. Ensure adequate ventilation to prevent overheating.
Reduced light output	Lumen depreciation (normal aging), dirty bulb, incorrect ballast.	Clean bulb surface. Consider replacing bulb if it has exceeded its optimal operational hours. Verify ballast compatibility.

Problem	Possible Cause	Solution
Bulb takes too long to start	Aging bulb, low voltage, faulty ignitor in ballast.	Replace bulb. Check power supply. Consult ballast manual for ignitor issues.

8. SPECIFICATIONS

Specification	Value
Brand	VIVOSUN
Light Type	HPS (High Pressure Sodium)
Wattage	400 Watts
Bulb Base	E39
Light Color	Red, Orange (2100K CCT)
Brightness	55,000 Lumens
Rated Lifetime	24,000 hours
Lumen Maintenance	Over 90% after 5,000 hours
Startup Time	2-3 minutes for full bright
Re-strike Time	At least 5 minutes after power off
Product Dimensions	12 x 3 x 3 inches
Item Weight	6.7 ounces
Indoor/Outdoor Usage	Indoor

9. OFFICIAL PRODUCT VIDEO

Your browser does not support the video tag.

Video 1: VIVOSUN High Pressure Sodium HPS Grow Light Bulb Lamp. This video provides a visual overview of the VIVOSUN HPS grow light bulb, demonstrating its features, manufacturing process, compatibility with VIVOSUN digital ballasts, and its application in stimulating plant growth.

10. WARRANTY AND SUPPORT

VIVOSUN products are manufactured to high-quality standards. For information regarding warranty coverage, technical support, or replacement parts, please refer to the official VIVOSUN website or contact VIVOSUN customer service directly. Keep your purchase receipt as proof of purchase for any warranty claims.