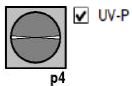
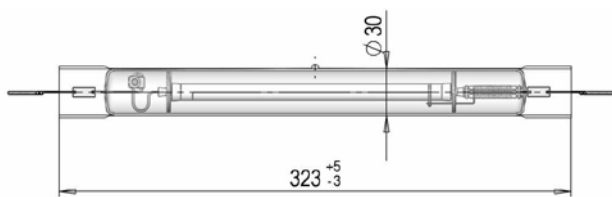


Grow Green HPS

NH 1000W DE EL 2.2

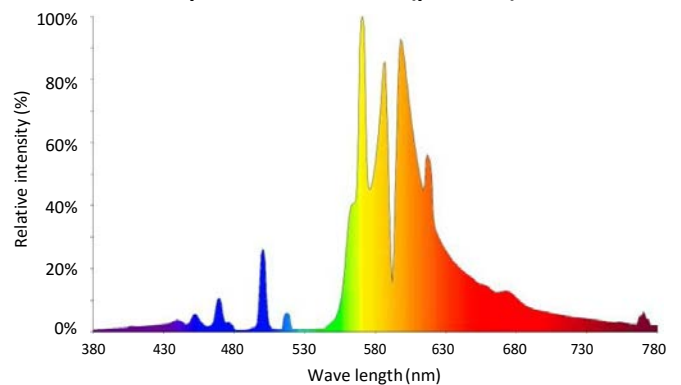
	High pressure sodium lamp for plant growth
Description	Spectral distribution optimized for photosynthesis efficiency High red light ratio and blue output for healthy plant growth and robustness Superior μmol output within the PAR spectral range (Photosynthesis Active Radiation) Economic (long average life, high μmol output, low energy consumption) Easy lamp change
Application	Efficient growth lighting in professional greenhouses

1. Specifications

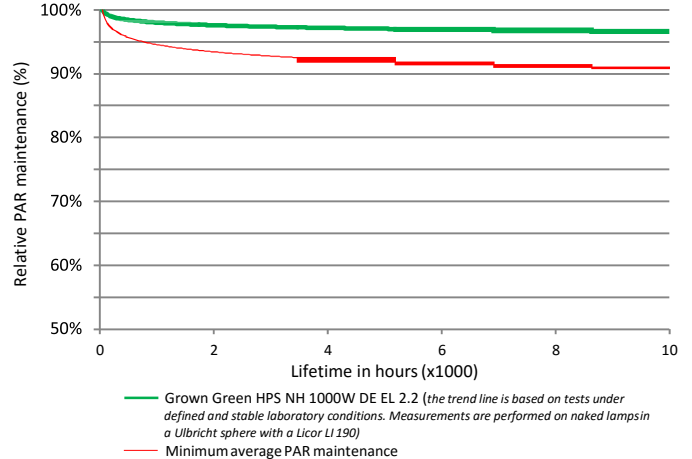


Designation	Grown Green HPS NH 1000W DE EL 2.2
Part number	16000311 / 16000420
ILCOS-Code	ST-1000-E230/S-Litze-33,5/330
Lamp wattage	1000 W
Lamp current	4,8 A
Lampe voltage	230 V
Ignition voltage	3,2 kV (peak to earth)
PAR	2100 $\mu\text{mol}/\text{s}$
Lifetime	10000 h
Power supply (PS)	1000W/400V electronic / 100-150kHz
PS output power	1015 W
Base	cables
Lamp holder	K12x30S
Bulb contour	tubular
Bulb type	clear

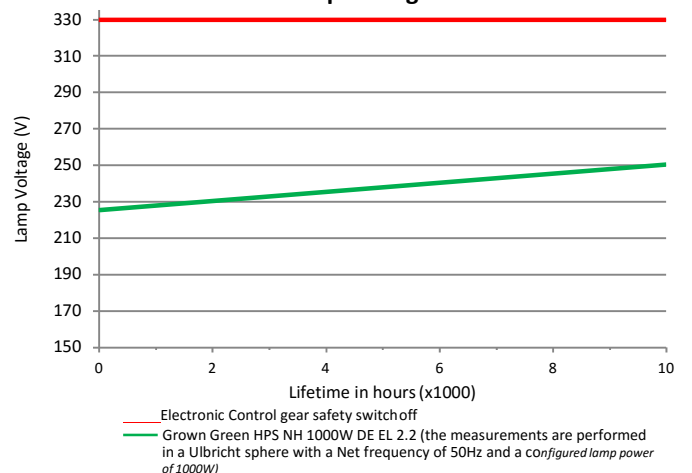
Spectral distribution (per 5nm)



PAR Maintenance



Lamp Voltage

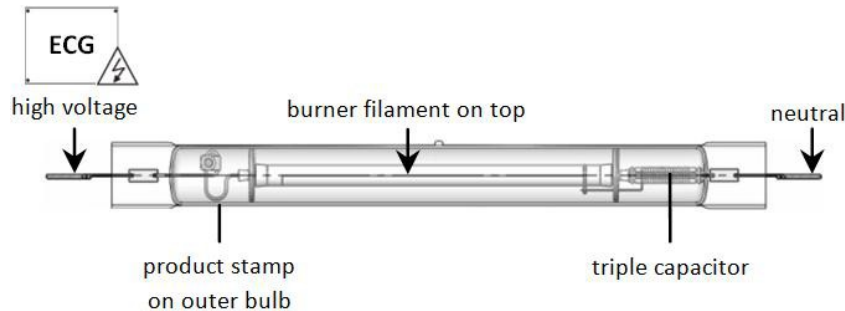


2. Installation and safety instructions

Installation The lamps must be installed by an expert and operated in accordance with the mounting specifications into fixtures intended for this type of lamp, along with the components intended and suitable for that purpose.

Use protective thin gloves when installing the lamp, avoid fingerprints.

Correct insertion and connection of the lamp is required:



Usage The lamp must be ignited at specified ignition voltage and operated at rated lamp power (+/- 3%)

The electronic control gear needs to comply with the specifications set out in the datasheet. The lamp technically can dim, but is then excluded from warranty.

The lamp must be operated with switching cycle intervals which are longer than 180 minutes

Safety Only operate the lamp in its designated operating position.

Lamps should never be operated beyond their rated useful life. The risk of a lamp burst increases with lamp age, temperature, improper operation and improper handling. Replace the lamp at or before the end of its rated life. Group relamping is always recommended.

Never operate a lamp above or below its rated current or voltage. This may cause the lamp to leak or burst.

Always turn off the electrical power before inserting, removing, or cleaning the lamp.

Lamps are designed to be used in open fixtures. When used in closed fixture, overheating of the lamp will occur.

Never bump, drop, apply excessive stress, or scratch the lamp. This could cause the lamp to burst! Do not operate any lamps with any traces of scratches, cracks, or physical damage.

Clean any dirt, oil, or lint away from the lamp with alcohol and a lint-free cloth or tissue. Dirt or other contaminants will affect light output and may cause the lamp to overheat and decrease lamp life.

Electrical connections should be clean and in good condition. Replace lamp holders and sockets when needed. Affix the lamp securely in the socket. Improper installations will cause electrical arcing, overheating and short life to lamp and socket.

Never touch the lamp when it is on, or soon after it has been turned off, as it is hot and will cause serious burns. Lamps should be allowed to cool for a minimum of 10 minutes after the lamp is turned off.

Do not use lamp in close proximity of paper, cloth or other combustible material that can cause a fire hazard.

Do not look directly at the operating lamp for any period of time; this may cause serious eye injury.

