

ARUNA HORTICULTURE LIGHTING

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High Pressure Sodium
1000W HB 400V EL

Horizontal burning position
Clear bulb
High efficacy / Low operating cost
Superior life hours
Aruna Active Antenna Technology

Application areas:

- Horticulture lighting
- Street lighting

ANSI CODE/Ballast:

- EB

Product data

Physical Data/ Requirements

Base Designation	K12 x 30S
Bulb Designation	UV
Bulb Diameter (mm)	32
Max Overall Length (MOL) (mm)	394
Light Center Length (LCL) (mm)	-
Effective Arc Length (mm)	-
Max Base Temperature (°C)	250
Max Bulb Temperature (°C)	700
Luminaire type	ENCLOSED
Socket Pulse Rating (kV)	≥ 5
Socket Style	-

Performance Data

Light Output (Lumens 100Hrs)	140000
Lamp Lumens Per Watt	140
Mean Output (Lumens)	120000
Rated Life (Hrs. 10 Hr.1Strat)	20000
Color Temperature (K)	2000
Chromaticity (CIE-x/y)	0.532, 0.421
Color Rendering Index (CRI)	39
To 90% Warm Up Time (min)	4
Hot Restart Time (min)	10-15
Burning Position	HORIZONTAL ±15 °
Photon Flux PPF (μmol/s)	2100

Electrical Data/ Requirements

Lamp Wattage (W)	1000
Operating Voltage (V)	250
Operating Current (A)	4.0
Dimmable	-
Ballast	Electronic
Min. Open Circuit Voltage (RMS)	360
Min Max Starting Puls (Peak V)	3500 – 4000V

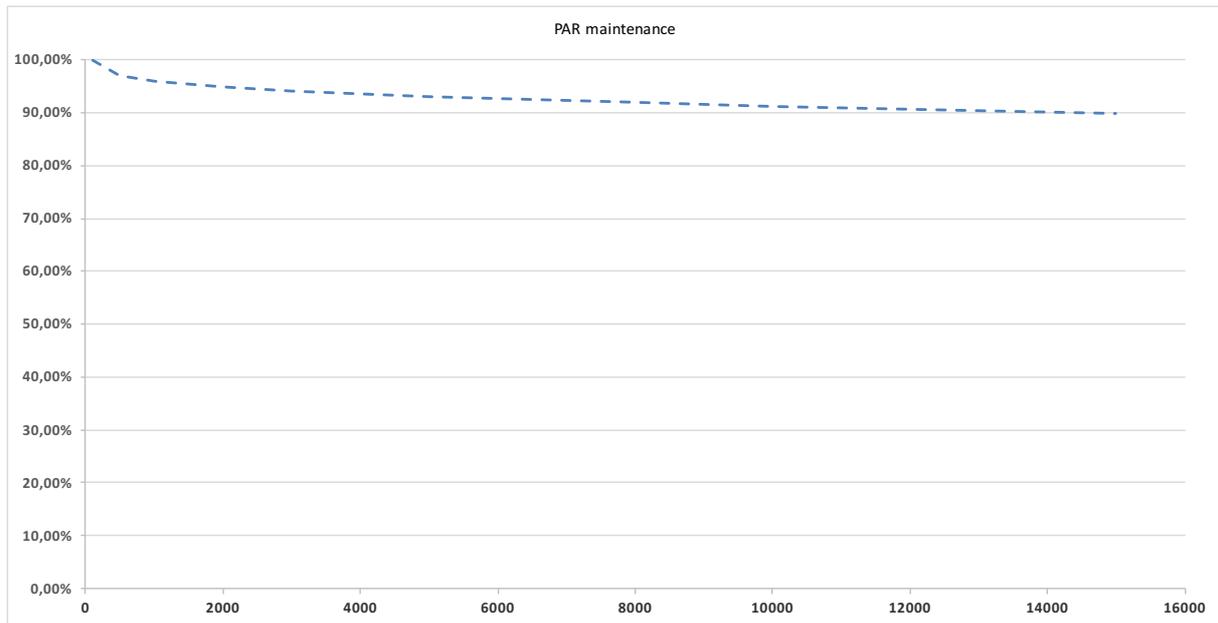
Order Information

Product Code	AHL000002
Pcs/package	-
Pcs/Box	50
Name Description	HPS/HB/1000W/400V/EL

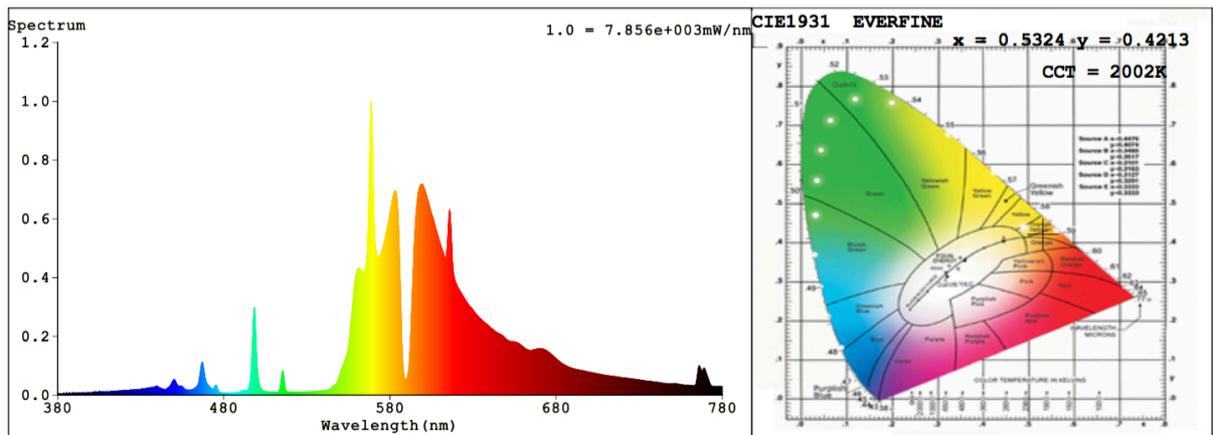
Environmental parameters

Mercury content	42 mg
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Lumen maintenance



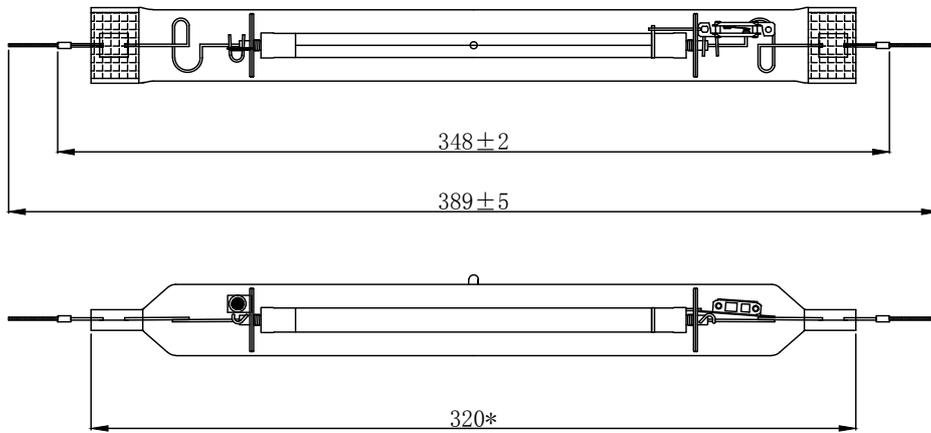
Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Line Drawing



Warning

This lamp can cause skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than few minutes unless adequate shielding or other safety precautions are used.

Safety instructions

A lamp breaking is extremely unlikely to have any impact on your health. If a lamp breaks, ventilate the room for 30 minutes and remove parts, preferably wearing gloves. Seal the parts and take it to your local waste facilities for proper recycling. Do not use a vacuum cleaner.

1. This lamp is intended for use in open fixtures since it contains a special shield which was designed to contain a ruptured arc tube and thereby minimize the resultant risks of personal injury, property damage, burns and fire. In applications where an additional measure of safety is desired, an enclosed fixture may be used with a lens/diffuser material able to contain hot lamp fragments (up to 1200 °C for a ceramic arc tube and 1100 °C for quartz). If you are uncertain, contact your fixture manufacturer.
2. High Pressure Sodium Lamps are constructed of an outer glass jacket and internal arc tube. The arc tube operates under high pressure and temperatures as high as 1000 °C. The arc tube and outer jacket may unexpectedly rupture due to internal causes or external factors such as system malfunction or misapplication, creating a risk of personal injury, property damage, burns and fire. To reduce this risk, these instructions must be adhered to.
3. Do not operate lamps in excess of rated voltages of the ballast as this will increase lamp pressure and the possibility of shattering.
4. This lamp must be used only with proper circuit and auxiliary equipment and suitable ballast.
5. This lamp must be operated with a suitable fixture, ballast and igniter, which have an ANSI designation identical to the ANSI designation in this catalog.
6. Do not use this lamp in a fixture designed for less than the rated lamp wattage.
7. Failure to comply may result in poor lamp performance and possible personal injury or property damages for which the manufacturer will not be held responsible.
8. Do not scratch the glass of the bulb or subject this lamp to undue pressure as either may cause the lamp to break. Replace scratched, cracked, broken or damaged bulbs immediately.
9. The lamp should be screwed firmly, but not forcibly, into the socket to reduce the possibility of loosening due to vibration. Use of excessive force may result in lamp breakage.
10. Do not touch hot lamps with fingers, skin or any flammable material. Lamps remain hot after being turned off.
11. This lamp must be shielded from direct contact with rain, sleet, snow and other liquids to reduce the possibility of breakage. This lamp may implode if broken. Use eye protection and gloves when handling this lamp.
12. In a continuously operating system (24 hours/day, 7 days/week), turn lamps off once per week for at least 1 hour. Failure to comply increases the risk of rupture.
13. When operating this lamp, the base temperature should not exceed 210 °C for Mogul base and 190 °C for Medium base, the outer envelope should not exceed 400 °C. The recommended ambient temperature limit for this lamp is -40 °C minimum and +40 °C maximum.
14. Do not use this lamp in a location subject to vibration or shock, unless an adequate vibration-proof fixture is used.
15. Do not use this lamp in a corrosive atmosphere unless an adequate corrosion-resistant fixture is used.
16. Replace lamp at or before the end of its rated life. Allowing lamps to burn until they fail may increase the risk of inner arc tube rupture.
17. Electrically insulate any metal support in contact with glass to reduce the possibility of decomposition of the glass.
18. Do not look directly at the lamp during operation to avoid eye inflammation from short wave ultraviolet radiation.
19. Do not paint the lamp to prevent its overheating or breakage.
20. Do not use this lamp in an ignitable atmosphere (for example gasoline, inflammable spray, thinner, lacquer, dust, etc.) to prevent a fire or explosion unless an adequate fixture is used.
21. Do not use this lamp in a powdery or dusty atmosphere in order to eliminate the overheating of the lamp unless an adequate fixture is used.
22. The radiation from this lamp may cause colored objects to fade unless an adequate fixture is used.
23. Follow all instructions in the manufacture's catalog or on the individual box of instruction sheet.