

SON AGRO 430 Watt HPS Lamps

A 30% increase over standard high pressure sodium in the blue region of the spectrum to enhance natural plant growth.



Ideal for greenhouses and other agricultural lighting

► Additional “Blue” Spectral Energy

Creates the correct balance of “red” and “blue” energy to enhance natural plant growth

► 6% Higher Lumen Output

More light for the same energy consumed compared to standard 400 watt high pressure sodium systems

► Interchangeable with Standard 400 Watt HPS Systems

No additional investment required to operate



PHILIPS

SON AGRO 430 Watt HPS Lamps

Electrical, Technical and Ordering Data (Subject to change without notice)

Bulb Temperature (Max.)	450° C	Lamp Current, Amps, RMS Nom	4.2
Bulb Press Temperature (Max.)	210° C	Color Temperature	2100K
Lamp Current and Crest Factor (Max.)	1.8	Starter Pulse Voltage — Peak	2500 Min., 4000 Max.
Warm-up Time to 90% Brightness	5 minutes	Pulse Width @ 90% Peak	1 Micro-Second Minimum
Re-start Time for Hot Lamps	2 minutes	Pulse Per Cycle (Min.)	(Lag-1 per Cycle) (Lead-1 per 1/2 Cycle)
Ballast Type	S51 ³	Open Circuit Volts RMS (Min.)	198

Product Number	Description	Nominal Wattage	Bulb	Base	MOL (In.)	LCL (In.)	Bulb Finish	Operating Position	Approx. Initial Lumens ²	Rated Average Life (Hrs.) ¹	Mean Lumens	CRI
31710-7	SON AGRO	430	ED-18	Mogul	9 ¾	5 ¾	Clear	Universal	54,000	16,000	48,600	21

1. Based on survival of at least 50% of the lamps, operated under specified test conditions @ 11 or more operating hours per start.

2. Based on photometry of 100-hour lamps in vertical position at rated watts. Lumen output rating applies to all operating positions.

3. Follow ballast manufacturer's recommendations regarding proximity of ballast to sockets. Use lamp in fixtures which do not redirect a substantial portion of the energy toward the arc tube.

MOL = Maximum Overall Length.

LCL = Light Center Length.

C.I.E. Color Coordinates

430 Watts X .524 Y .409

Radiant Flux 132 W

Radiant Efficiency 300 MW/W

Conversion Factor 2.5 MW/lm

Philips SON AGRO Lamps, background information

The sun's spectrum contains visible light in every color of the rainbow, as well as invisible radiation, i.e. heat (infrared) beyond the red end of the spectrum, and UV radiation (ultraviolet) at the other extreme.

Plants need most of their light from the orange-red area of the spectrum, as well as energy from the blue region of the spectrum. The blue part of the sun's spectrum, in combination with other growth factors such as temperature, humidity and nutrition, ensures each plant's natural shape and prevents unnatural elongation of the stems. Regular high pressure sodium lamps lack this blue radiation, so new standards for optimal growth conditions were called for.

