

NITE GROWER PLASMA GROW LIGHT

NIT400 Series

DESCRIPTION

The Nite Grower utilizes Alphalite's proprietary Advanced Plasma Technology to deliver high intensity, enhanced color spectrum lighting for horticultural applications. The high-efficiency plasma light source dramatically improves upon high intensity discharge sources by offering energy savings, long life, superior color control, improved lumen maintenance, and better optical performance. The Nite Grower fuses cutting-edge plasma technology with precision-engineered, high quality manufacturing to produce a grow system suitable for the most state-of-the-art greenhouses and growing facilities.

APPLICATION

Greenhouse, Agriculture, Grow Operations, Warehouse, Plant and Tissue Growth.

SPECIFICATION FEATURES

Construction

High performance, cutting-edge die-cast magnesium resonator housing improves heat dissipation and reliability. Precision-engineered and manufactured optics to optimize light delivery to the working plane. Features advanced heat management for efficient power supply and driver operation. Convenient suspension mounting. Quality-manufactured die cast aluminum housing.

Electrical

Solid state driver with micro-processor technology delivers superior color performance and reduces color shift. Improved lumen maintenance versus traditional HID. Advanced dimming, monitoring, and communications capabilities.

Mounting

Comes standard equipped with V-hooks for mounting and cord.

Optics

Die formed, 95% reflectivity optical reflectors optimizes performance and light delivery. Single-point source micro-lamp allows for more precise control of optical distribution.

Warranty

1-year limited warranty. See complete warranty terms for details.



NIT400

High Performance
Plasma Horticultural
Grow Light

400W Equivalent

Quick Ship Items

ORDERING INFORMATION

Sample Number: NIT400-2T/830

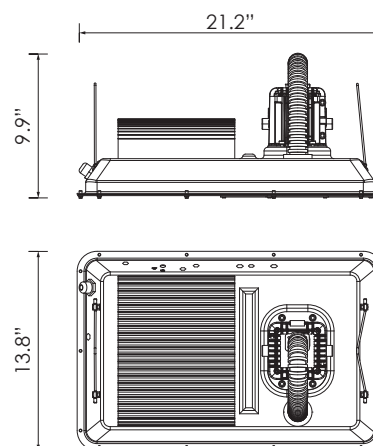
| NIT | 400 | 2T | 8 | 30 | (Blank) |
|------------------------------------|---|--|---------------------------|--|---|
| Series NIT = Nite Grower | Wattage Equivalent 400 = 400W HID equivalent | Version Type 2T = Version 2T | CRI 8 = 85+ CRI | Nominal CCT 30 = 3000K 65 = 6500K | Distribution Type (Blank) = Special design for Horticulture |

| Mounting Height | Coverage Area |
|-----------------|---------------|
| 3' | 4' x 4' |
| 4' | 5' x 5' |

SUMMARY

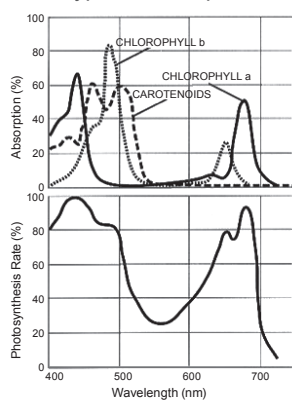
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|-------------------------|---|
| Input Voltage | 120V-277V |
| Input Frequency | 50/60 Hz |
| Input Power | 235W |
| Initial Lumen Output | 12,560 lm (3000K) |
| Power Factor | > 0.95 |
| THD (Max.) | 20% |
| Efficacy | 53 LPW |
| Controls/Dimming | Comes standard with 0-10V and Tx-Rx Digital Control |
| Dimming Range | 20-100% |
| CRI | > 85 |
| CCT | 3000K |
| Lumen Maintenance (%) | 80 |
| Source-PAR (umol/s) | 280 |
| Par-Ratio (red-to-blue) | 2.5 |
| Rated Life (Avg. Hours) | 30,000 hours |
| Start-up Time | 30 sec. |
| Hot Restrike Time | 120 sec. |
| Operating Temp. | -40°C ~ +55°C |

DIMENSIONS

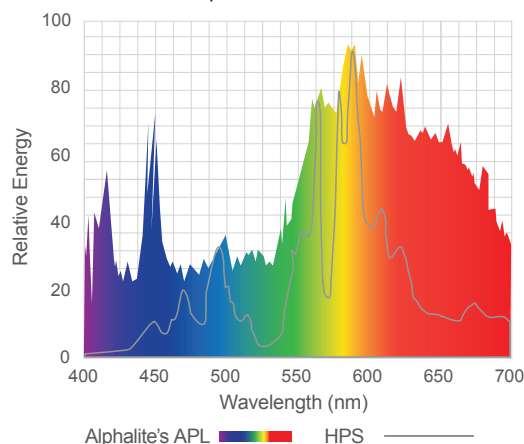


PHOTOMETRICS

Typical PAR Spectrum

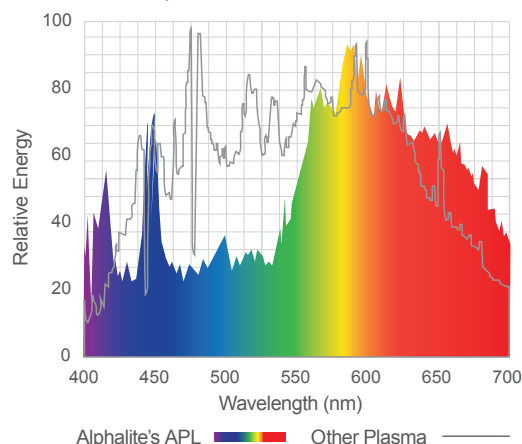


Spectral Power Distribution Comparison — HPS Vs APL



HPS Grow Light Spectrum Lacks a Large Portion of the Red and the Blue Spectrums Needed by Plants for Optimum Growth

Spectral Power Distribution Comparison — Other Plasma Vs APL



Other Plasma Lamp Spectrum Lacks in the Red Spectrum Needed for Flowering Stage and Has Green Spectrum that is Mostly Reflected by the Plants.