



PROJECT NAME

CATALOG NO.

TYPE

DATE

NOTE

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

30-day 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-APL/830**

NIT	400	APL	8	30	(Blank)
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Series

NIT - Nite Grower

Wattage

Equivalent

400 - 400W

HID - equivalent

Version Type

APL - APL light source

LEP - Luxim light source

CRI

8 - 85+ CRI

Nominal CCT

30 - 3000K

55 - 5500K

Distribution Type

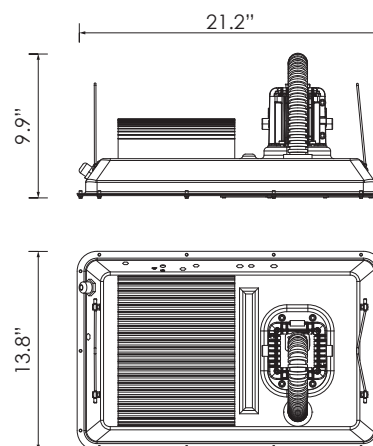
(Blank) = Special design
for Horticulture

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

SUMMARY

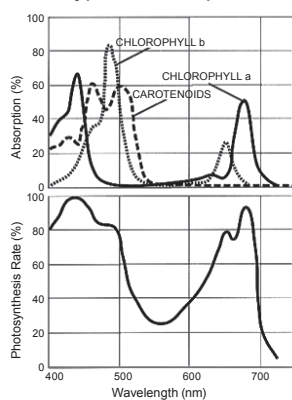
Input Voltage	120V-277V
Input Frequency	50/60 Hz
Input Power	235W
Initial Lumen Output	12,560 lm (3000K)
Power Factor	> 0.95
THD (Max.)	20%
Efficacy	53 LPW
Controls/Dimming	Comes standard with 0-10V and Tx-Rx Digital Control
Dimming Range	20-100%
CRI	> 85
CCT	3000K, 5500K
Lumen Maintenance (%)	80
Source-PAR (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

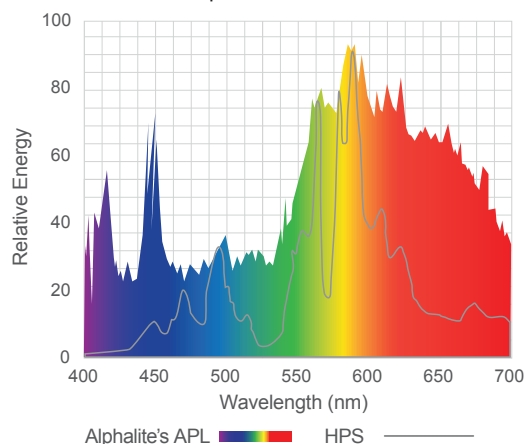


PHOTOMETRICS

Typical PAR Spectrum

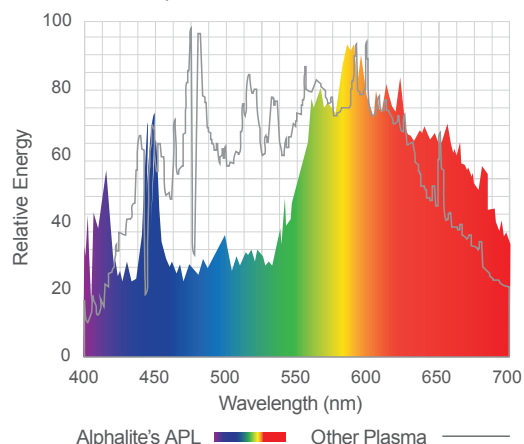


Spectral Power Distribution Comparison — HPS Vs APL



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.