

BROAD-SPECTRUM LED GROW LIGHT



TECHNICAL DETAILS

INTRODUCTION DESIGN

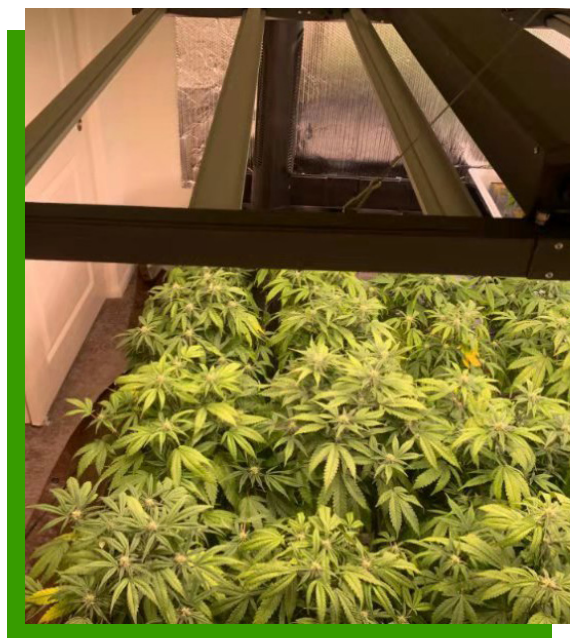


SARIN's LED Broad-Spectrum Grow Lights are designed from the ground up to maximize marijuana cultivation. The reserved AC parallel connector is used to connect multiple lights in parallel with an AC plug. You can also network up to 50 lights using the RJ-45 ports on the driver box, or up to 2,000 with our controller.

This allows you to integrate these lights into your existing control system to automate usage and scheduling with ease. The aircraft aluminum housing optimizes heat dissipation, which not only increases the lifespan of your fixture but also prevents damage and dehydration of your plants.

Main Features

- High Photosynthetic Photon Efficacy of $2.6\mu\text{mol}/\text{J}$
- Works with all known 0-10V and PWM control systems (we also offer a Bluetooth controller)
- Ultraviolet light module add-ons available
- 30% Stronger than natural sunlight with a 450nm peak value of blue light and 660nm of red light
- Five-year warranty with fixture running 24/7



SARIN LED VS. HPS/HID

KEY BENEFITS



Enriched and tailored spectrum for
~25% higher light absorption



Improve plant health and flower
quality and density



Increase crop yield ~15%



Accelerate harvest cycle ~15-20%



Less heat which reduces climate
control costs



Better visual aesthetics, robust
colors, emphasized natural hues



Significantly lower energy
consumption



Use fewer resources like water
and fertilizer



Stimulates photosynthetic
processes for higher potency



Longer lifespan with minimal
maintenance



Protects plants from burning with
lights close to canopy



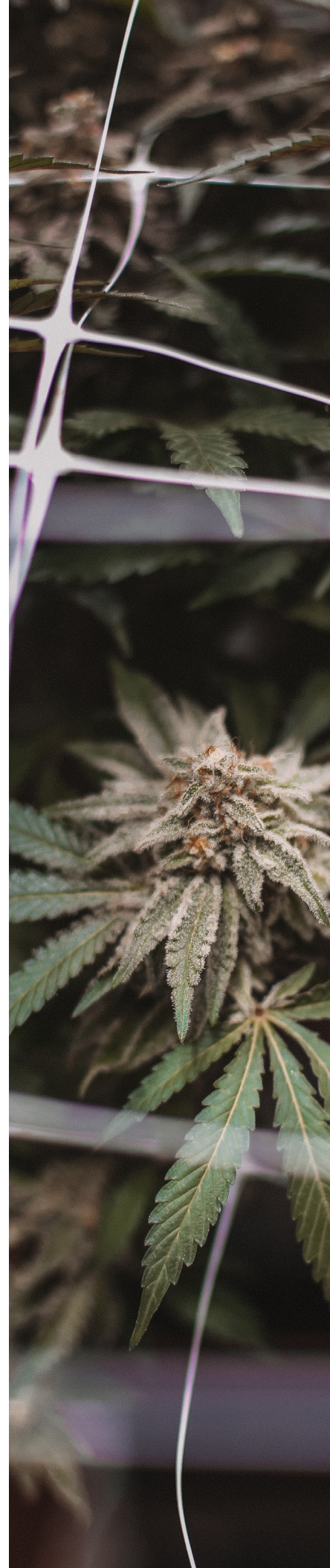
Easy installation and system
implementation



Flexible control methods



Environmentally friendly and safe





UVA TREATMENT

Powdery mildew and botrytis are systemic problems that have plagued cultivators for centuries. Cannabis is highly susceptible to both of these diseases, particularly in indoor operations where humidity and air quality is key. Once mold has fully set in there is no cure, which means prevention and early treatment is critical. So what are your options?

SARIN UVA LIGHT MODULES

Studies have proven ultraviolet radiation to be an effective weapon against mold and mildew. Incorporate UVA capabilities directly to your grow light with two (2) optional 100W LED light modules which emit high-intensity energy at 400nm.

HOW IT WORKS

Schedule your UVA modules to run once per day for 15 minutes and spores on or near the plants are destroyed. Did you know that in moderate doses, UV light also stimulates a photomorphogenic response which boosts THC, CBD, and terpene production?

ALTERNATIVES

CHEMICALS: Poisonous fungicides effectively fight powdery mildew. However, they can be harmful to a consumer's health and should not be used on flowering or fruiting plants.

SULFUR: Coating plants with sulfur is a fairly widespread treatment against powdery mildew but not ideal for cannabis cultivation, as the flowers preserve the flavor and aroma of this substance.

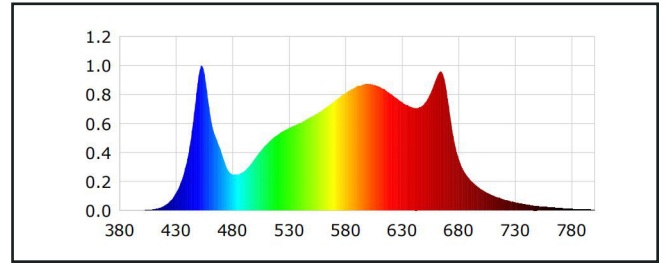
SYNTHETICS: Frequency altered water is advertised as a treatment that can be used throughout a plant's lifecycle. Like normal water it helps wash away mildew, but can increase humidity.

BICARBONATE: Spraying your plants with baking soda dissolved in water can help against powdery mildew, but you should avoid it during flowering if you don't want visible remains to build up.

HOME REMEDIES: Natural methods like potassium bicarbonate, mouthwash, vinegar, milk, and neem oil are sometimes used. Results vary but are usually moderate at best.

TECHNICAL DATA

480W MODEL



PHOTOMETRIC PARAMETERS

EI: 0.08
PAR: 256.992 W
PF1: 194.273 $\mu\text{mol/s}$ (400~500nm)
PF3: 554.511 $\mu\text{mol/s}$ (600~700nm)

Energy Efficiency Class: A++ (EU 874-2012)
PPF: 1299.348 $\mu\text{mol/s}$
PF2: 480.557 $\mu\text{mol/s}$ (500~600nm)
Pffr: 40.556 $\mu\text{mol/s}$ (700~800nm)

Radiant Power: 263.441 W
R/B: 2.0
PPE: 2.565 $\mu\text{mol/s/w}$
PF: 1269.964 $\mu\text{mol/s}$

ELECTRIC PARAMETERS

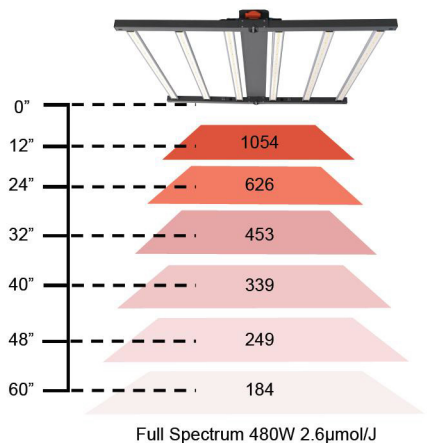
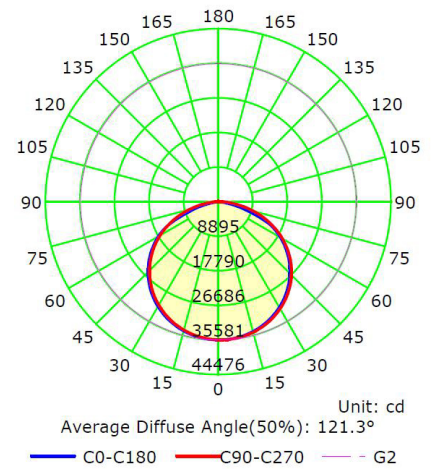
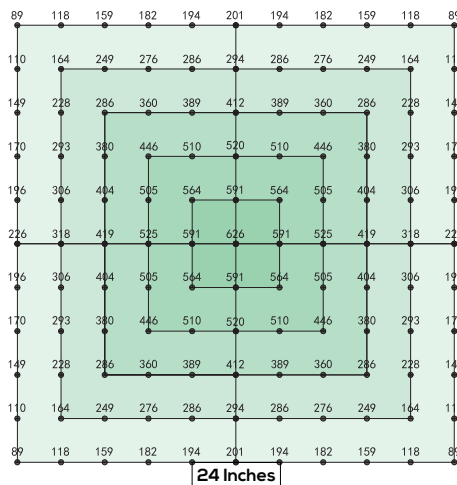
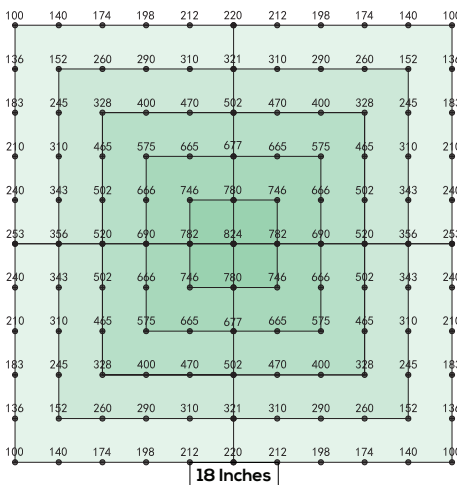
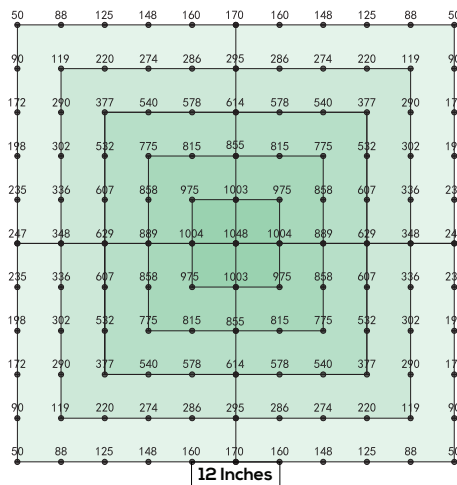
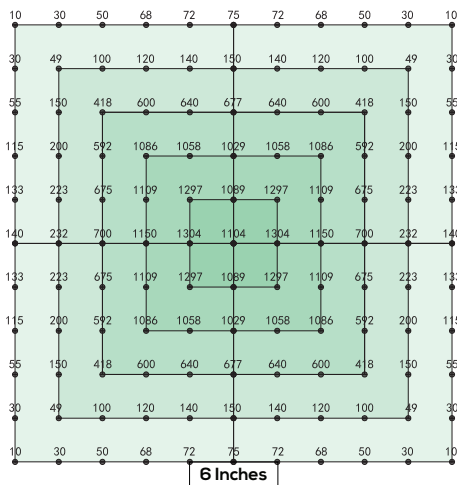
Voltage: AC120V **Current:** 4 Amps
Voltage: AC277V **Current:** 1.86 Amps
Voltage: AC480V **Current:** 1 Amp

ITEM CODES

480W, IP42, 120-277V: **30981**
 480W, IP65, 120-277V: **30983**
 480W, IP65, 277-480V: **30986**

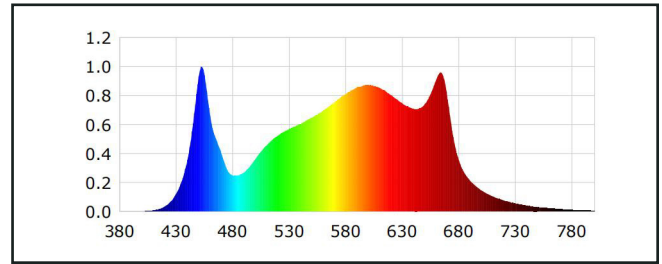
UVA Module Pair, 100-277V: **11047**
 UVA Module Pair, 277-480V: **11048**
 Grow Light Control System: **30989**

480W MODEL ABOVE 5' x 5' GRID



TECHNICAL DATA

660W MODEL



PHOTOMETRIC PARAMETERS

EI: 0.08

PAR: 372.093 W

PF1: 282.416 $\mu\text{mol/s}$ (400~500nm)

PF3: 802.492 $\mu\text{mol/s}$ (600~700nm)

Energy Efficiency Class: A++ (EU 874-2012)

PPF: 1779.648 $\mu\text{mol/s}$

PF2: 694.732 $\mu\text{mol/s}$ (500~600nm)

PFfr: 58.820 $\mu\text{mol/s}$ (700~800nm)

Radiant Power: 381.443 W

R/B: 2.0

PPE: 2.609 $\mu\text{mol/s/w}$

PF: 1838.547 $\mu\text{mol/s}$

ELECTRIC PARAMETERS

Voltage: AC120V **Current:** 5.5 Amps

Voltage: AC277V **Current:** 2.66 Amps

Voltage: AC480V **Current:** 1.38 Amps

ITEM CODES

660W, IP42, 120-277V: **10983**

660W, IP65, 120-277V: **30984**

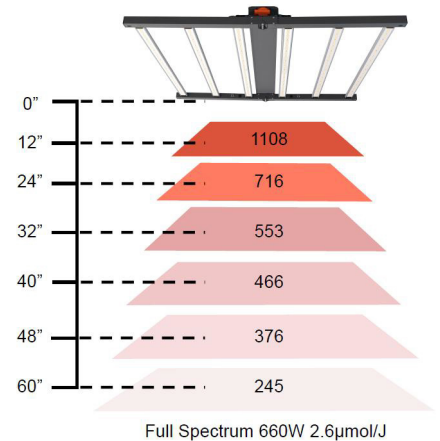
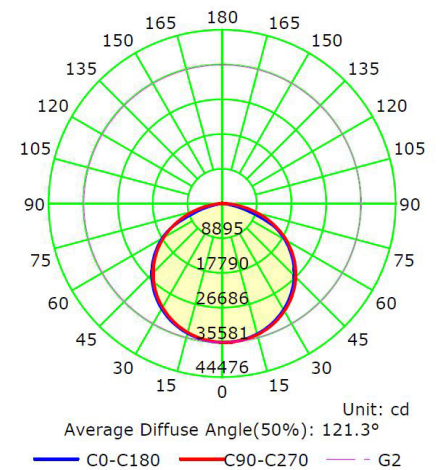
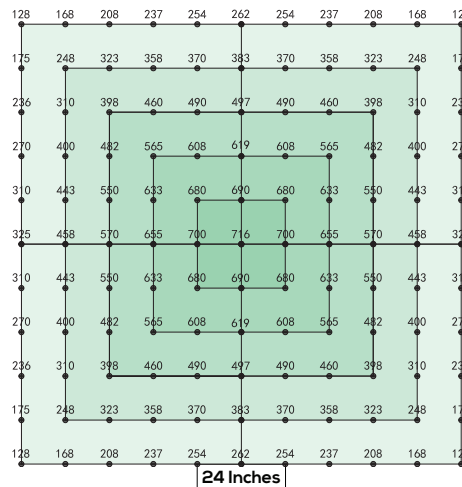
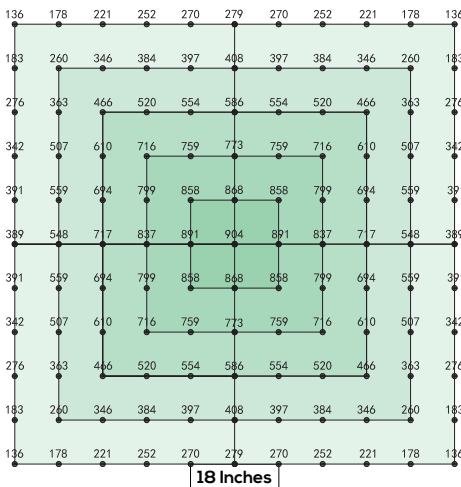
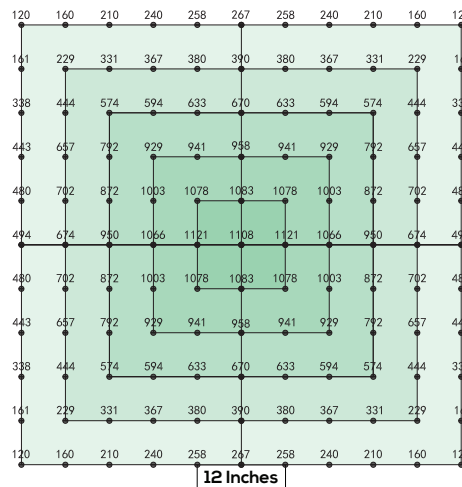
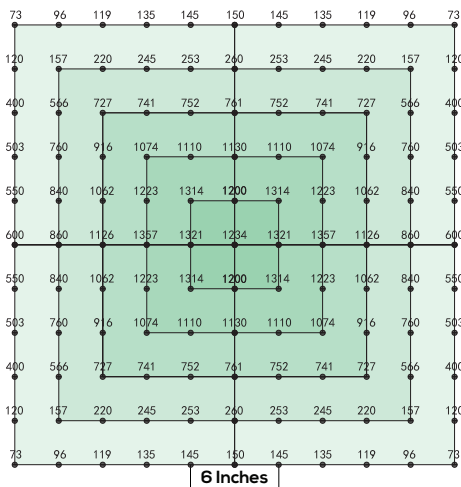
660W, IP65, 277-480V: **30987**

UVA Module Pair, 100-277V: **11047**

UVA Module Pair, 277-480V: **11048**

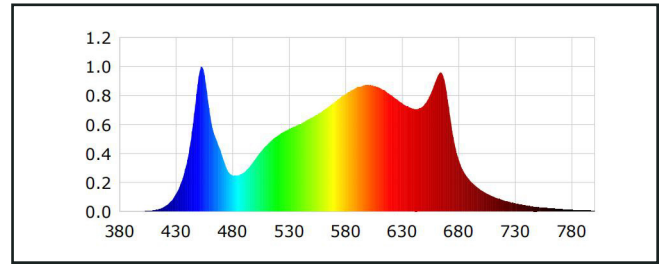
Grow Light Control System: **30989**

660W MODEL ABOVE 5' x 5' GRID



TECHNICAL DATA

960W MODEL



PHOTOMETRIC PARAMETERS

EEl: 0.09

PAR: 513.255 W

Pf1: 382.858 $\mu\text{mol/s}$ (400~500nm)

Pf3: 1109.115 $\mu\text{mol/s}$ (600~700nm)

Energy Efficiency Class: A++ (EU 874-2012)

PPF: 2455.160 $\mu\text{mol/s}$

Pf2: 963.177 $\mu\text{mol/s}$ (500~600nm)

PfFr: 79.338 $\mu\text{mol/s}$ (700~800nm)

Radiant Power: 525.877 W

R/B: 2.1

PPE: 2.544 $\mu\text{mol/s/w}$

PF: 2534.612 $\mu\text{mol/s}$

ELECTRIC PARAMETERS

Voltage: AC120V **Current:** 8 Amps

Voltage: AC277V **Current:** 3.73 Amps

Voltage: AC480V **Current:** 2 Amps

ITEM CODES

960W, IP42, 120-277V: **30982**

960W, IP65, 120-277V: **30985**

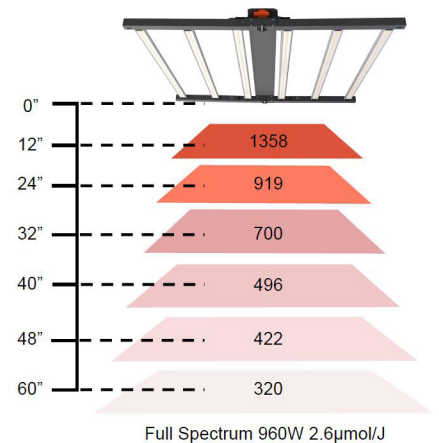
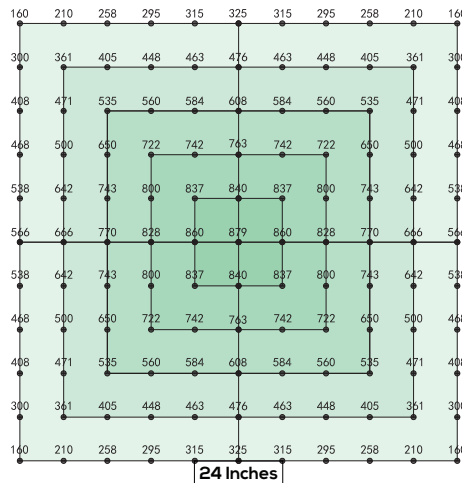
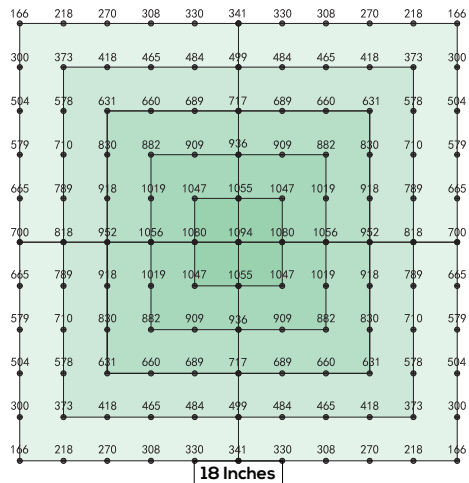
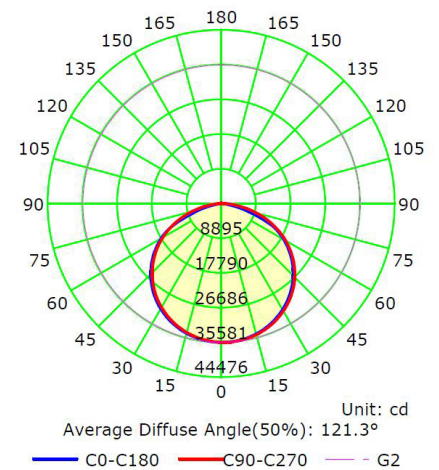
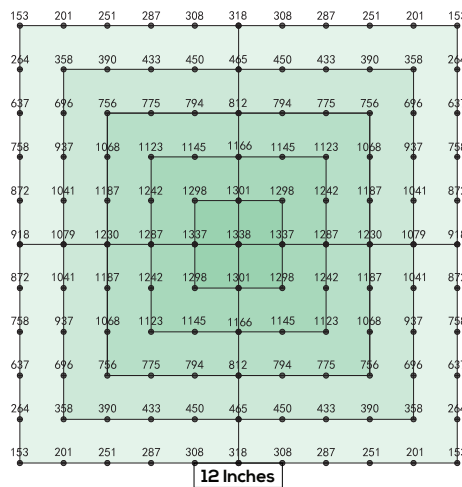
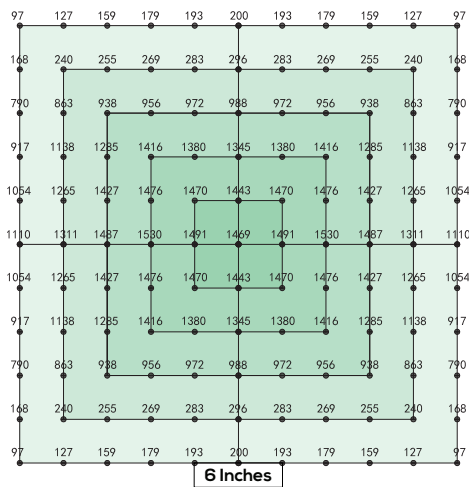
960W, IP65, 277-480V: **30988**

UVA Module Pair, 100-277V: **11047**

UVA Module Pair, 277-480V: **11048**

Grow Light Control System: **30989**

960W MODEL ABOVE 5' x 5' GRID





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