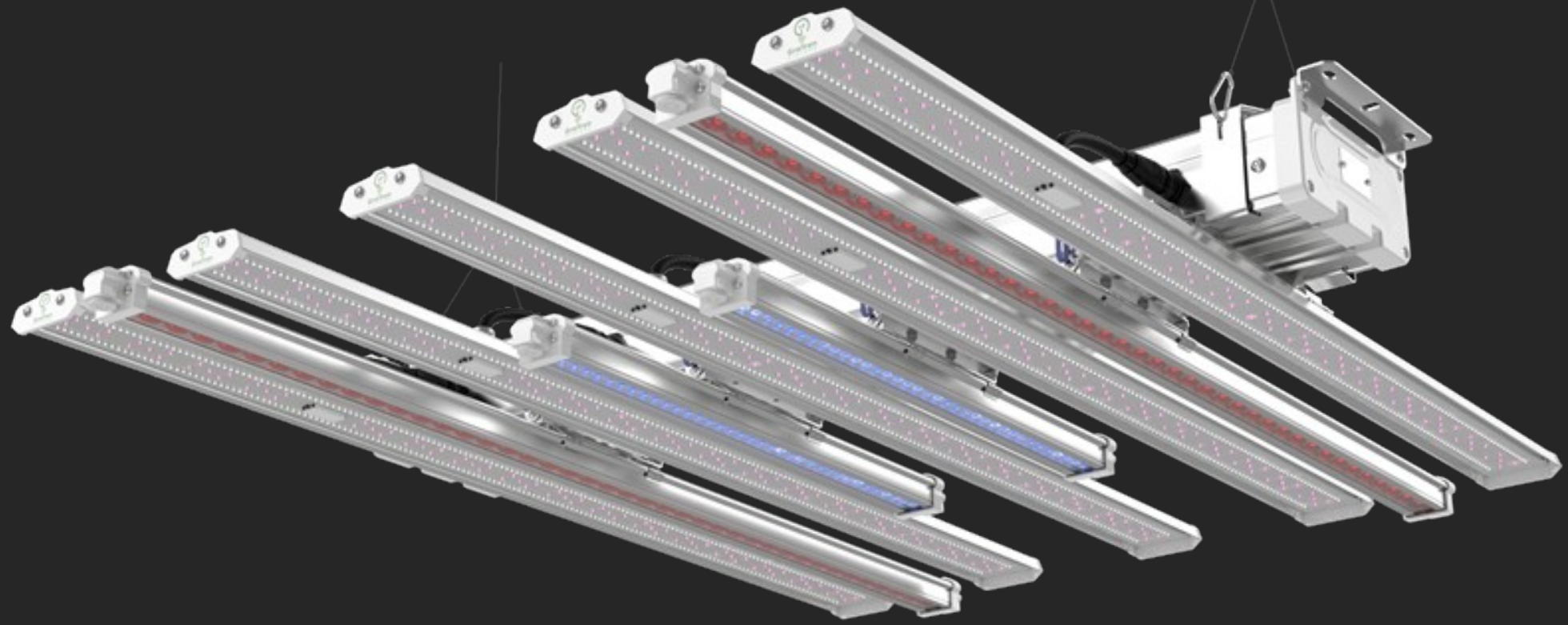
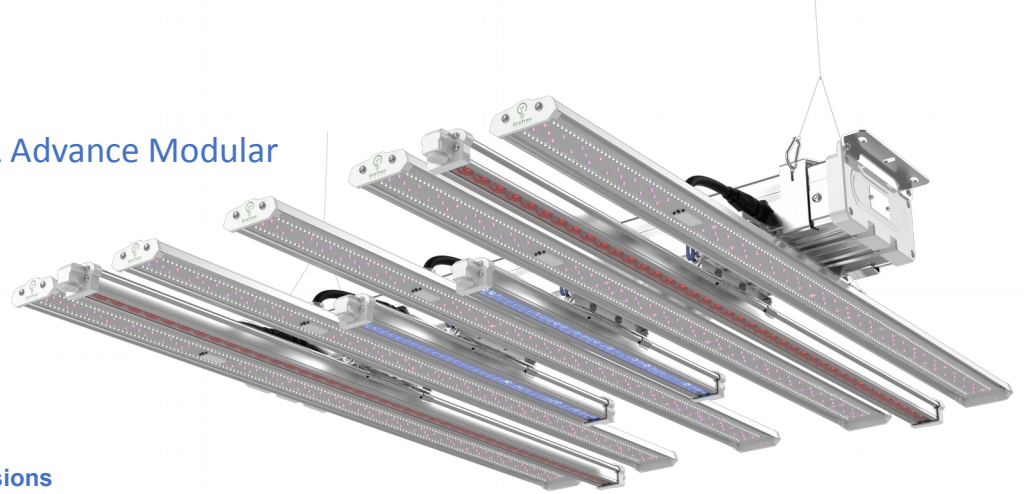


Powering the Science of Growth

TECHNICAL DATASHEET

SURYA Advance Modular



Product features

Housing material Aluminum
Finishing Anodic oxidation
Optics materials Silica gel (transmission >99%)
Radiation angle 120°
Protection degree LED compartment IP65 (dust and watertight)
Lamps can be cleaned by using pressurized water,
the complete electrical circuit is sealed waterproof.
Lighting impact resistance IK07

Technical data

Power* 600 Watt (± 5%)
PF > 0.95
Voltage range 100-240VAC/100-277 VAC
Current range 6.0A - 2.16A
Frequency range 50/60 Hz
Inrush current < max. 25A (t< 1 msec)
Isolation class Class I
Operation conditions 0°C to 50°C /32°F to 122°F (95% RH)
Storage conditions 0°C to 60°C /32°F to 140°F (85% RH)

Optical properties

PPF (µMol/s) 1380µMol/s - 1640µMol/s
Efficacy (µMol/J) 2.3µMol/J(higher up to 2.7µMol/J can reach based on request)*
Warranty 5 years
Customized lens customized lens 30° to 130° etc. are available for laser and UV

Control

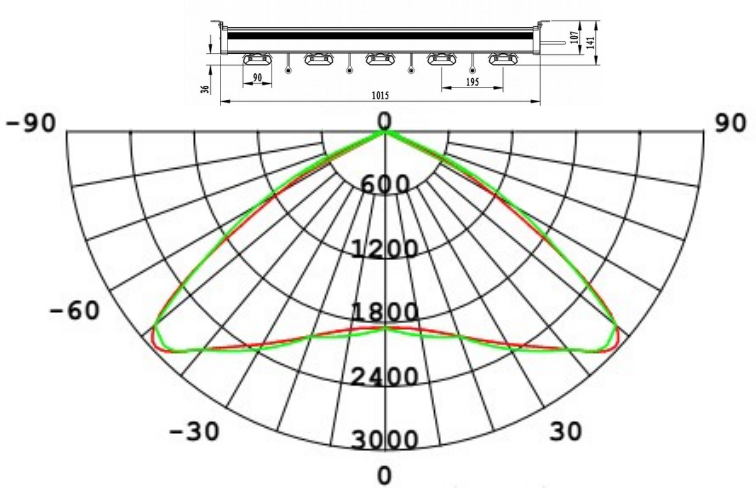
GroTron APP BLE mesh/ Wi-Fi

Weight and dimensions

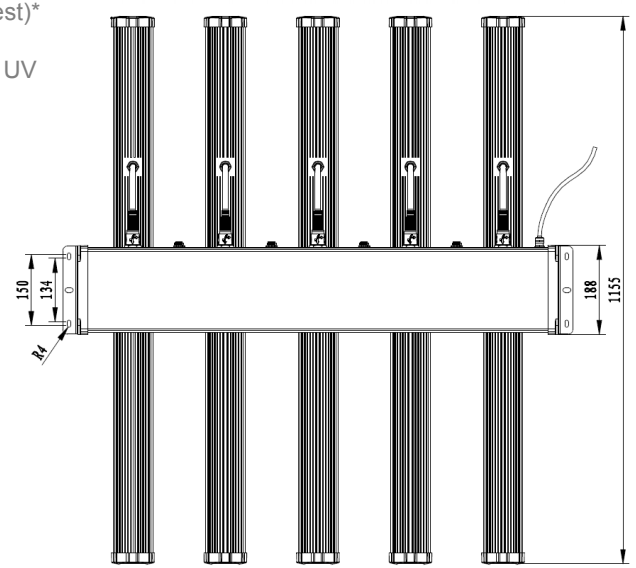
Net weight 20.5kg/45lb
Gross weight (approx.) 22kg/48.5lb (including hanging ropes, plugs)
Product dimensions 1253x1111mm/49.3”x43.7”
Carton dimensions (L x W x H) 1260x309x140mm(lamp) + 1250x140x105mm(brackets)
45.6” x12.2” x 5.5”(lamp) + 49.2”x5.5”x4.1”(brackets)

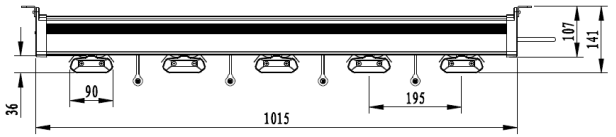
Mounting

Hanging installation, ceiling mounted



*Cost of LED’s differ





SURYA

Description:

UV out: For external UV fixtures 385nm/345nm optional 310nm

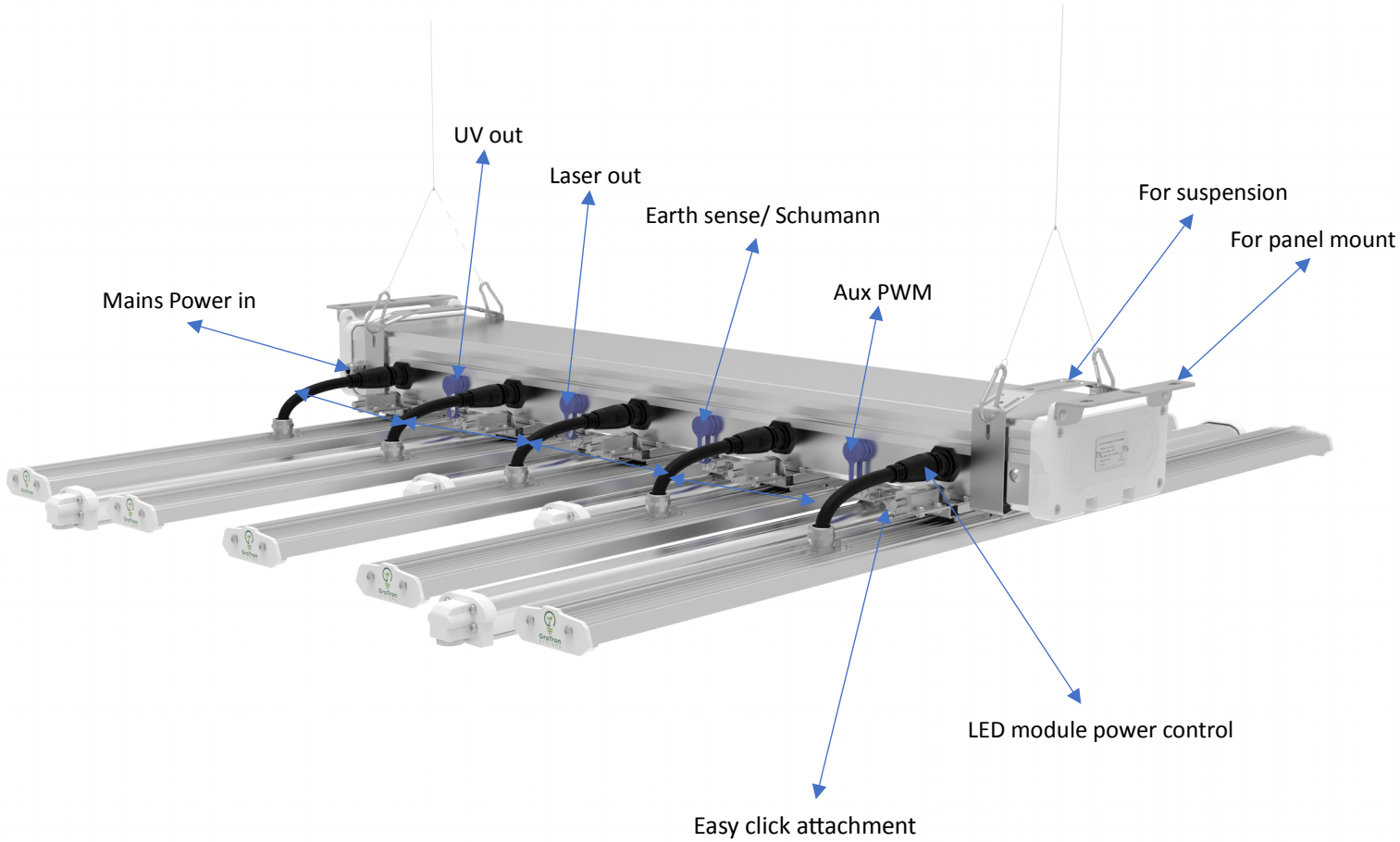
Laser out: For laser modules with 660nm and 450nm

Earth sense/Schumann: Intelligent microprocessor controlled grounding system with sensory feedback and Schumann resonance at 7.83Hz generated and injected directly into the potted soil and environment

Aux PWM: Output for peripheral devices with dimming and function control

LED module power control:

4 channel control cable, 2 x red, 1 x white/blue, 1 x IR



SURYA

System description

•Sensors plug:

SURYA range of sensors connect here, included are CO2, Light, PH, Relative Humidity, External Temperature and Molecular sensor

All sensors are dynamic and system can autotune

•Laser module:*

Each unit has 25W of laser 660nm / 450nm per fixture we recommend 2 units

•UV module:

UVA optional UVB or combination are available, Programable increased production of THC

•LED module:

4 channels plus 2 more configurable with the APP with Scalar effect (proprietary, not disclosed)

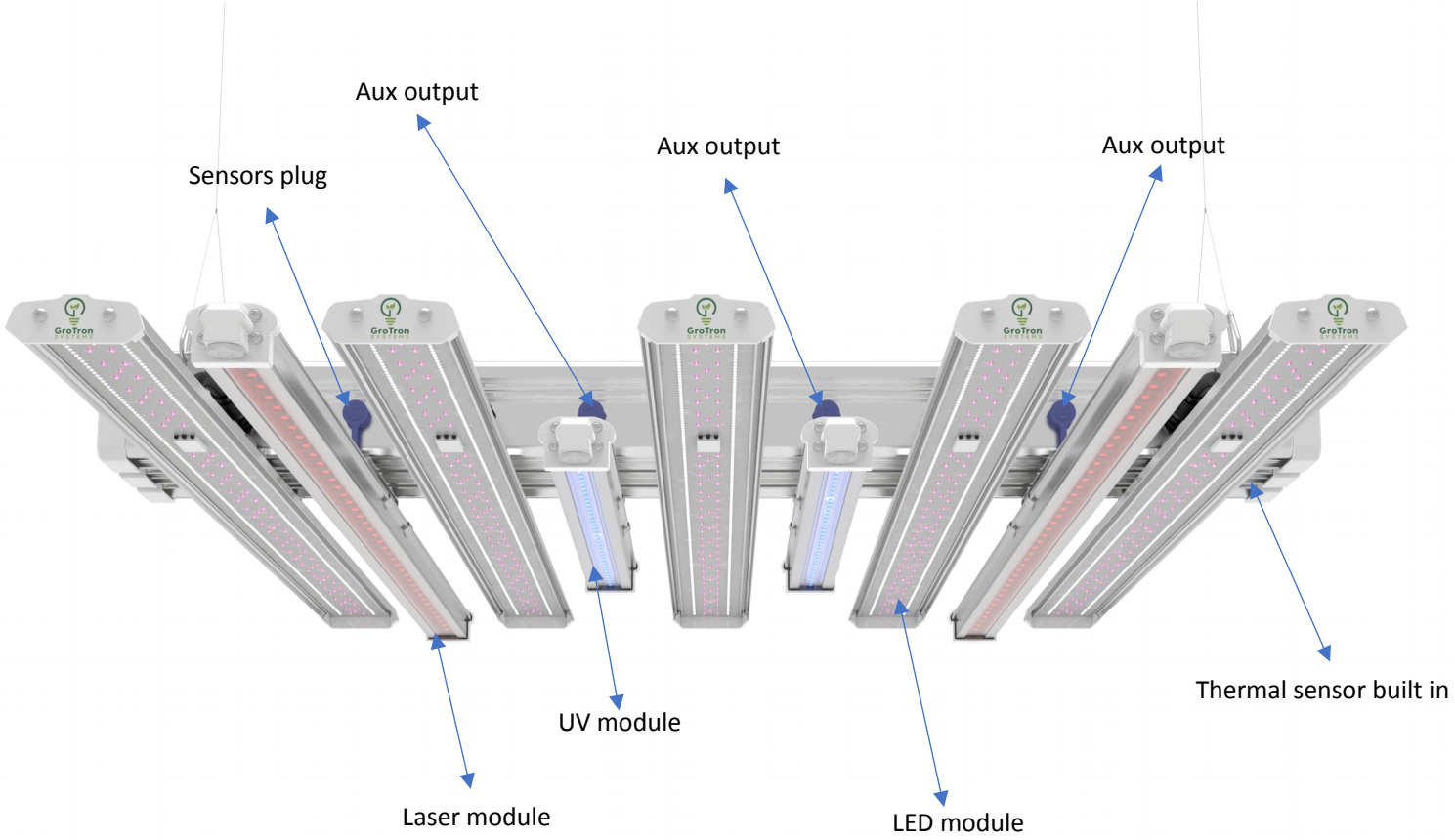
•Aux output:

Up to 4 external devices can be controlled by each of the Advance systems through the GroTron APP, Other lights, Airconditioning, Humidifiers, CO2, Pumps, Motors etc..

It can also dynamically control these devices based on sensory input

•Thermal sensor:

Automatic power level control if environmental factors change outside of operating or programmed parameters, alarm feature



SURYA

SURYA Advance 600W

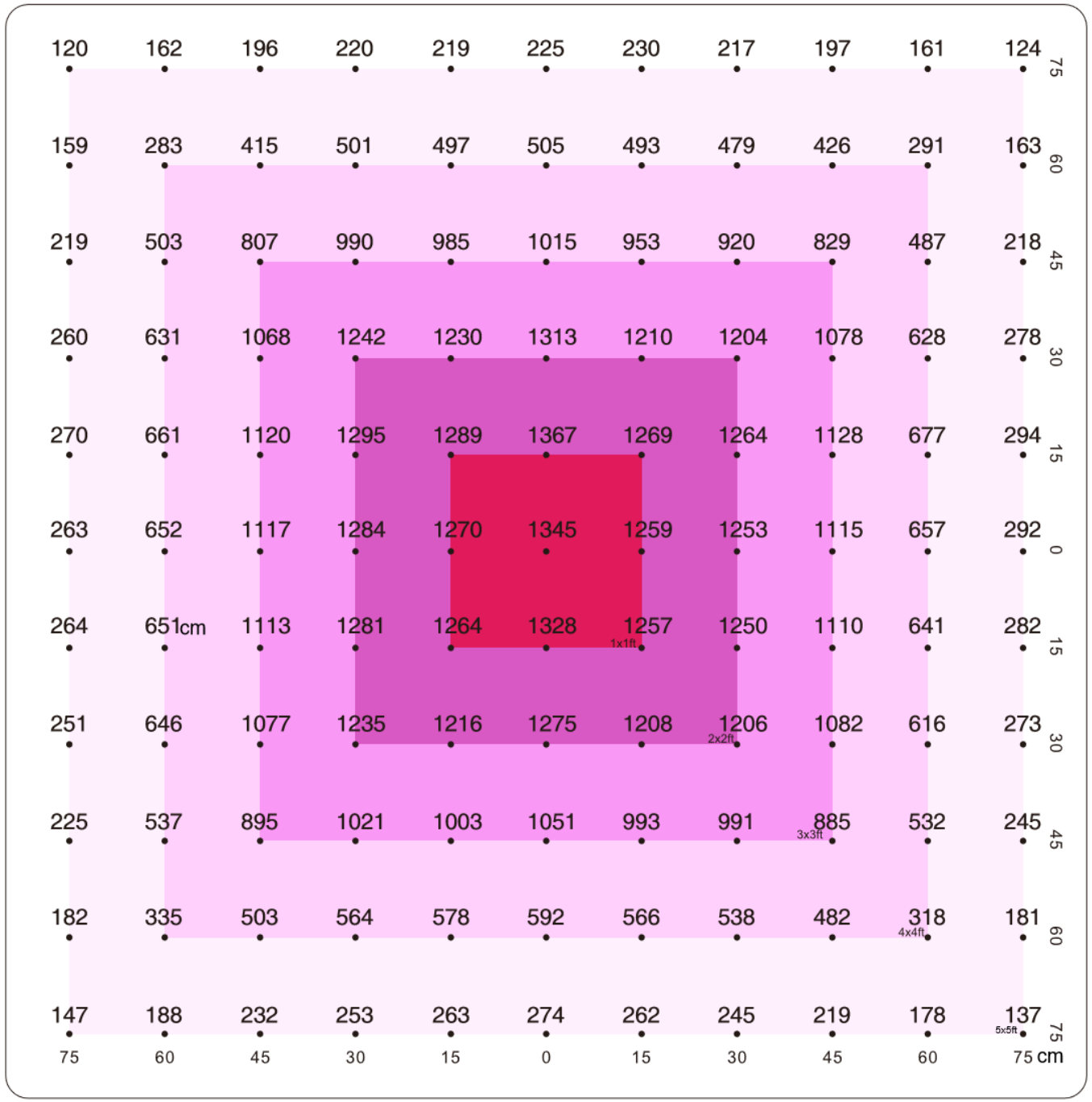
No Laser, no lower canopy

PPF output > 1367umol/s

At 9” height

System Efficacy >2.3µmol/

J



SURYA Advance 600W

With Laser, no lower canopy

PPF output > 1640umol/s

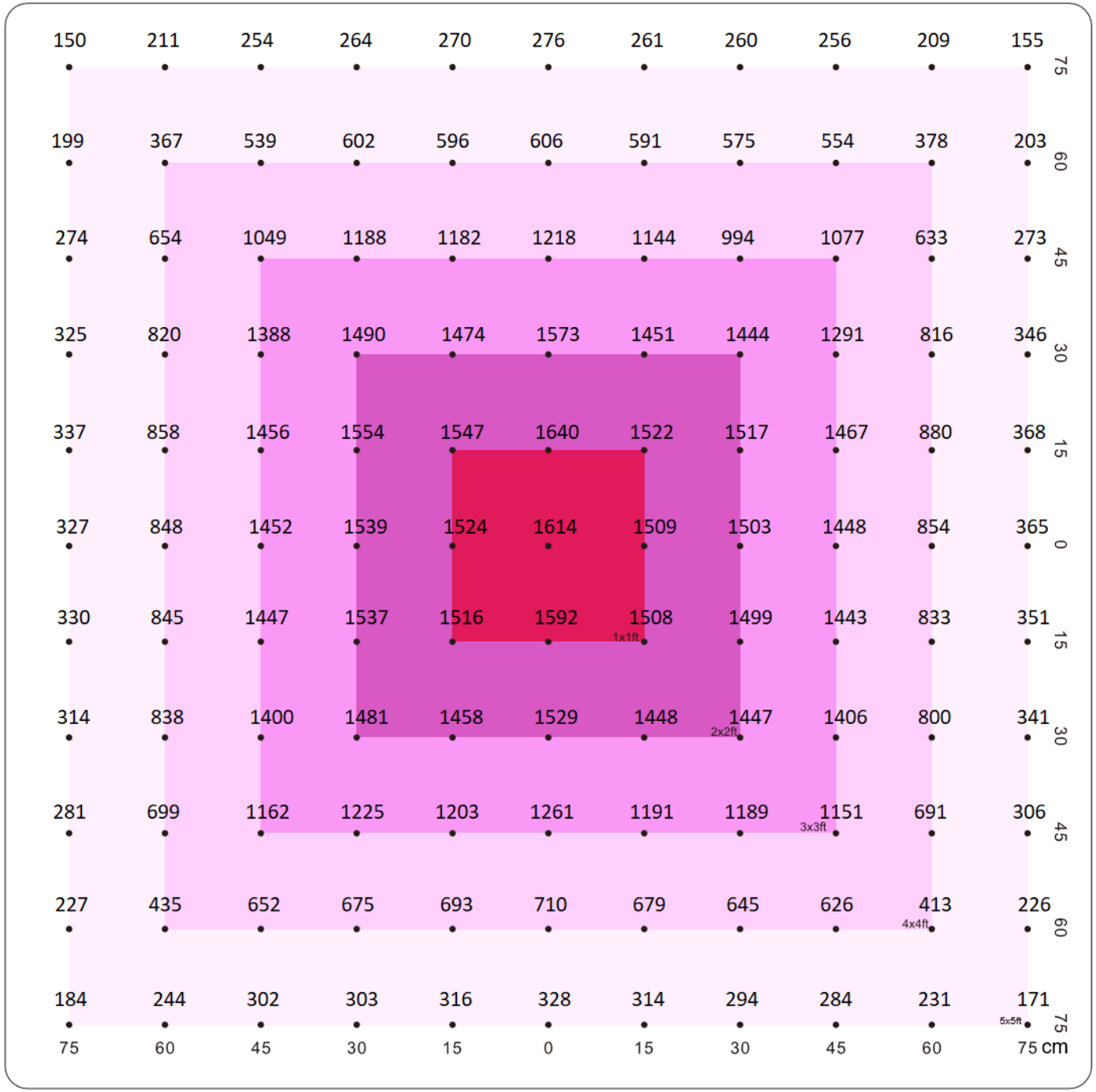
At 9” height

Output power automatically adjust when laser system is on to keep the total power at 600W

System Efficacy >2.7μmol/J

Other unique advantages of the laser system not directly reflected in the efficacy as follows:

- photophilous crops thrive and have stronger disease resistance
- increase yield and quality
- fruit coloring is early and uniform
- effectively prevent plant diseases and insect pests
- shortened phases of plant development
- produce more vigorous plants
- promote gibberellic acid (GA) â hydroxylase gene (S h expression)
- formation of proteolytic enzymes, increase of auxin content, hydrolysis of starch which increases the concentration of sugars, GA increases the concentration of sugars which form essential oil through acetyl co-A and mevalonic acid synthesis pathways, translates into increase in oil content
- effect on GA, result in cell elongation and increase in the cell vacuoles which lead to potassium increase as it is found in the cellular sap vacuoles which controls cell osmotic pressure and electrical balance



Advance with lower canopy/ interlighting system

•Lower canopy/inter-lighting:

Each Advance unit can command up to 30 lower canopy or interlighting units per channel x 4 channels

If required for very large and dense strain, these units guarantee light energy at lower canopy for more and bigger buds

Our lower canopy comes with condom sleeve for removal after every harvest

Lower canopy @ 40W – 60W with 3 spectrum selector through APP