

IHS Ready to Grow Genoa Horticultural Lights

Genoa Family Product Datasheet

GENOA-xxx-xxx-CASED-1CH-01.

The Genoa LED Grow Light range from IHS is designed for simple installation in polytunnels and small greenhouses. Genoa has a lightweight design, with an integrated heatsink for optimal thermal management and a tailored optical design, incorporating industry leading LEDs from OSRAM Opto Semiconductors. Multiple light recipes are available to suit a wide range of horticultural applications, however, if you have a specific requirement, custom modules can be created.

The Ready to Grow range of products from IHS are a culmination of many years of experience in the electronics and LED industries, allowing users to easily install and start to run. Using only component parts from industry experts such as OSRAM Opto Semiconductors, these horticultural lights offer superior quality at competitive prices.



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APPLICATIONS INCLUDE

- » Horticultural lighting
- » Environmental chambers
- » Poly tunnels
- » Greenhouses
- » Indoor farming
- » Schools and universities
- » Research institutes
- » Indoor home growing

TECHNICAL FEATURES

Beam Options	90 and 60 degree
Standard Light Recipe	8
Impact Resistance	IK08
Type of Protection	IP65
Lifetime (L70/B50)	50,000 hours
Operating Temperature Range	-30...45 °C
CE marked	Yes
Dimensions (W x D)	339mm x 233mm
Weight:	2.8kg
Customisation Available	Yes

PRODUCT OPTIONS

IHS Part Number	LED Recipe
GENOA-FLOWER-WIDE-CASED-1CH-01.	Genoa LED Grow Light - 90 degree Lens, Flowering
GENOA-FLOWER-NARROW-CASED-1CH-01.	Genoa LED Grow Light - 60 degree Lens, Flowering
GENOA-FRUIT-WIDE-CASED-1CH-01.	Genoa LED Grow Light - 90 degree Lens, Fruiting
GENOA-FRUIT-NARROW-CASED-1CH-01.	Genoa LED Grow Light - 60 degree Lens, Fruiting
GENOA-SEED-WIDE-CASED-1CH-01.	Genoa LED Grow Light - 90 degree Lens, Seeding
GENOA-SEED-NARROW-CASED-1CH-01.	Genoa LED Grow Light - 60 degree Lens, Seeding
GENOA-BIO-WIDE-CASED-1CH-01.	Genoa LED Grow Light - 90 degree Lens, Biomass
GENOA-BIO-NARROW-CASED-1CH-01.	Genoa LED Grow Light - 60 degree Lens, Biomass
GENOA-SUPFLOWER-WIDE-CASED-1CH-01.	Genoa LED Grow Light - 90 degree Lens, Supplemental Flowering
GENOA-SUPFLOWER-NARROW-CASED-1CH-01.	Genoa LED Grow Light - 60 degree Lens, Supplemental Flowering
GENOA-SUPFRUIT-WIDE-CASED-1CH-01.	Genoa LED Grow Light - 90 degree Lens, Supplemental Fruiting
GENOA-SUPFRUIT-NARROW-CASED-1CH-01.	Genoa LED Grow Light - 60 degree Lens, Supplemental Fruiting
GENOA-SUPSEED-WIDE-CASED-1CH-01.	Genoa LED Grow Light - 90 degree Lens, Supplemental Seeding
GENOA-SUPSEED-NARROW-CASED-1CH-01.	Genoa LED Grow Light - 60 degree Lens, Supplemental Seeding
GENOA-SUPBIO-WIDE-CASED-1CH-01.	Genoa LED Grow Light - 90 degree Lens, Supplemental Biomass
GENOA-SUPBIO-NARROW-CASED-1CH-01.	Genoa LED Grow Light - 60 degree Lens, Supplemental Biomass

CUSTOM PRODUCT OPTIONS


Our standard Genoa range already has a great number of options, but if you do not see the recipe you require, we can easily customise the light mix for you. We have a simple online tool available for making this customisation process as simple as possible: [Please visit www.i-hled.co.uk/pyo/](http://www.i-hled.co.uk/pyo/).


STANDARD PRODUCT OPTIONS

Our Genoa range of products support 4 areas of horticulture: Biomass, Seeding, Flowering and Fruiting.

There are two products available for each of these 4 areas of horticulture; one for an environment with existing daylight and one for an environment with limited or no daylight.

Finally all of these options can be selected with a different beam angle: Wide (90° beam angle) or Narrow (60° beam angle).

 Products with this symbol have been designed to work in applications where there is already available daylight. We are assuming the end application gets enough good quality daylight and these products offer increases in critical wavelengths.

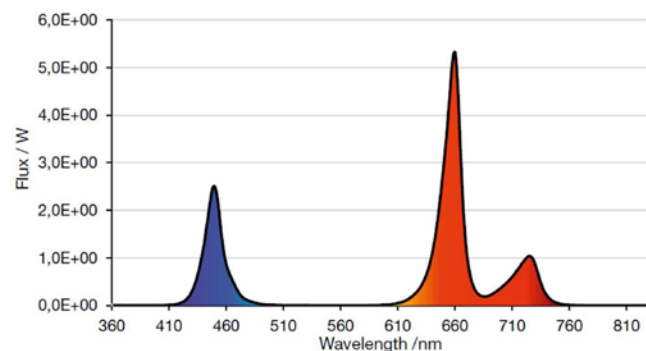
 Products with this symbol have been designed to replicate crucial wavelengths for their end application. We are assuming the end application has no daylight, and these products offer the only source of useable wavelengths. In this case we are supplementing our existing products with a broader spectrum to help mimic natural sunlight.

Flowering with existing daylight

GENOA-FLOWER-WIDE-CASED-1CH-01.

GENOA-FLOWER-NARROW-CASED-1CH-01.

20% Deep Blue (450nm) & 60% Hyper Red (660nm)
& 20% Far Red (730nm)

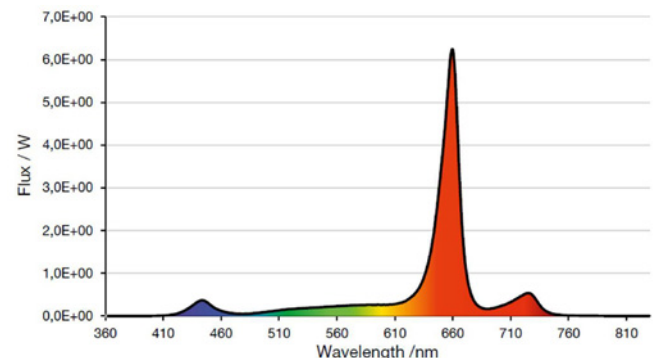


Fruiting with existing daylight

GENOA-FRUIT-WIDE-CASED-1CH-01.

GENOA-FRUIT-NARROW-CASED-1CH-01.

20% White (CRI70/4000K) & 70% Hyper Red (660nm)
& 10% Far Red (730nm)



STANDARD PRODUCT OPTIONS

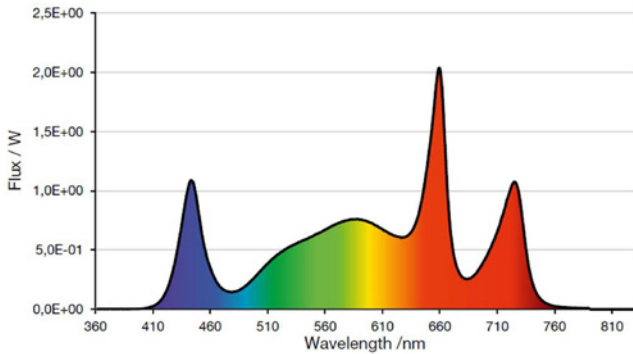
Flowering with no or limited daylight



GENOA-SUPFLOWER-WIDE-CASED-1CH-01.

GENOA-SUPFLOWER-NARROW-CASED-1CH-01.

60% White (CRI70/4000K) & 20% Hyper Red (660nm) & 20% Far Red (730nm)



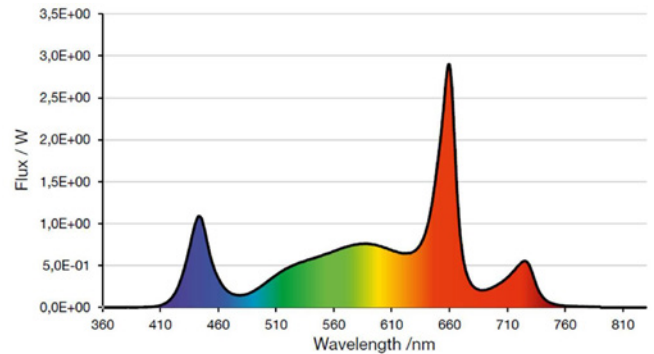
Fruiting with no or limited daylight



GENOA-SUPFRUIT-WIDE-CASED-1CH-01.

GENOA-SUPFRUIT-NARROW-CASED-1CH-01.

60% White (CRI70/4000K) & 30% Hyper Red (660nm) & 10% Far Red (730nm)



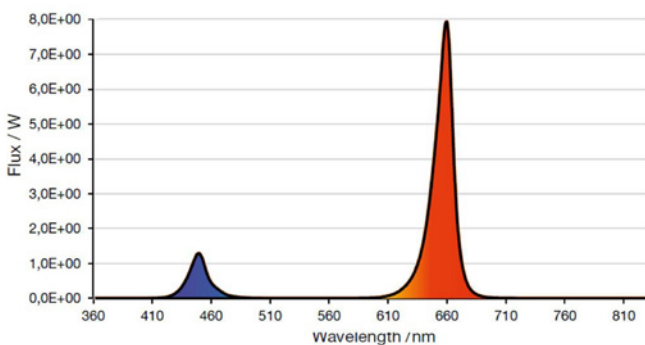
Biomass with existing daylight



GENOA-BIO-WIDE-CASED-1CH-01.

GENOA-BIO-NARROW-CASED-1CH-01.

10% Deep Blue (450nm) & 90% Hyper Red (660nm)



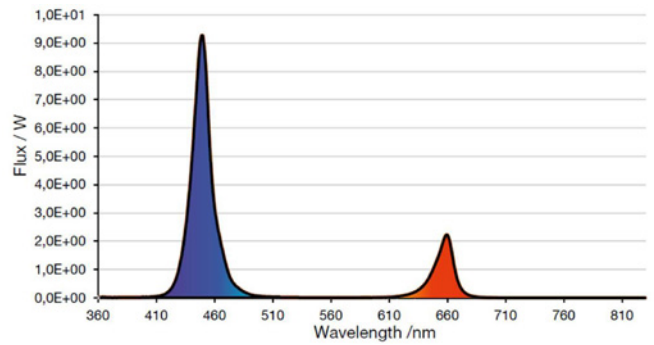
Seeding with existing daylight



GENOA-SEED-WIDE-CASED-1CH-01.

GENOA-SEED-NARROW-CASED-1CH-01.

75% Deep Blue (450nm) & 25% Hyper Red (660nm)



STANDARD PRODUCT OPTIONS

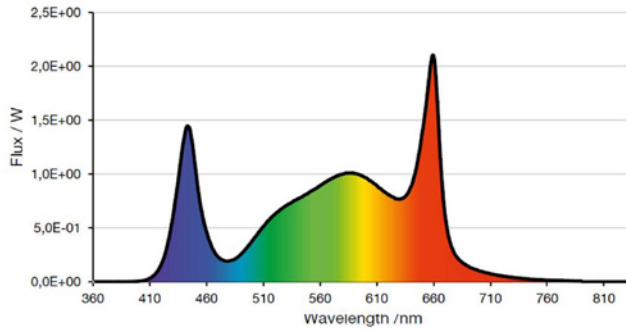
Biomass with no or limited daylight



GENOA-SUPBIO-WIDE-CASED-1 CH-01.

GENOA-SUPBIO-NARROW-CASED-1 CH-01.

80% White (CRI70/4000K) & 20% Hyper Red (660nm)



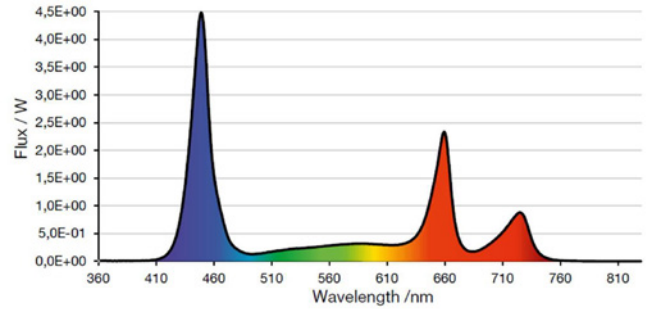
Seeding with no or limited daylight



GENOA-SUPSEED-WIDE-CASED-1 CH-01.

GENOA-SUPSEED-NARROW-CASED-1 CH-01.

35% Deep Blue (450nm) & 25% White (CRI70/4000k) & 25% Hyper Red (660nm) & 15% Far Red (730nm)



TECHNICAL DRAWING (MM)



INSTALLATION

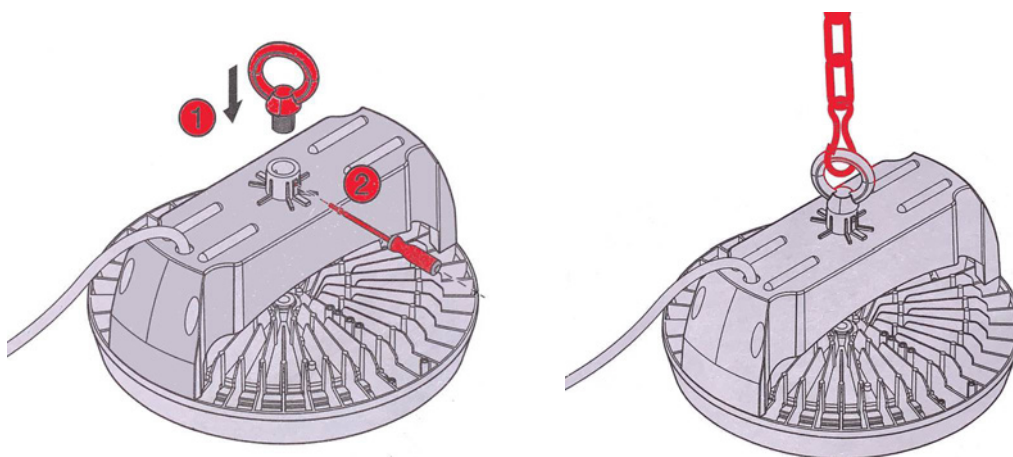
The lamp is supplied with the LED driver already connected. No internal connections are required by the installer.

To avoid damage, the hanging eye is not fitted during transit, and must be installed before use.

Screw the eye into the threaded hole in the top of the lamp.

The hook should thread fully into the hole. Locate the locking screw on the side of the hole and loosen it if necessary, to allow the hook to be threaded fully into the hole.

Once the hook is fully inserted and tight, tighten the locking screw to stop the hook from moving.



MOUNTING

The Lamp is designed to be suspended from the ceiling by using a chain or similar. A suitable chain will need to be supplied by the customer.

The weight of the lamp must be supported by the chain. No strain is to be applied to the supply cable.

For electrical installation, please refer to our 'Genoa Instruction Manual'.

IMPORTANT INFORMATION AND PRECAUTIONS



Genoa Grow Lights when powered up, are very bright. Thus it is advised that you do not look directly at them. Turn the Genoa Grow Lights product away from you and do not shine into the eyes of others.



Genoa Grow Lights, when operated, can reach high temperatures thus there is a risk of injury if they are touched.



DO NOT HOT PLUG ON LED SIDE OF POWER SUPPLY.



DO NOT TOUCH or PUSH on the LED as this can cause irreparable damage.

SAFETY INFORMATION



The LED module itself and all its components must not be mechanically stressed.



Assembly must not damage or destroy conducting paths on the circuit board.



To avoid mechanical damage to the connecting cables, the boards should be attached securely to the intended substrate. Heavy vibration should be avoided.



Observe correct polarity! Depending on the product, incorrect polarity will lead to emission of red or no light. The module can be destroyed!



Pay attention to standard ESD precautions when installing the OSOLON® SSL 80 1 PowerStars.



Damage by corrosion will not be accepted as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.



For outdoor usage, a housing is definitely required to protect the board against environmental influences. The design of the housing must correspond to the IP standards in the application. It is also the responsibility of the user to ensure any housings or modifications keep the Tc junction temperature to within stated ranges.



To also ease the luminaire/installation approval, electronic control gear for LED or LED modules should carry the CE mark and be ENEC certified. In Europe the declarations of conformity must include the following standards: CE: EC 61374-2-13, EN 55015, IEC 61547 and IEC 61000-3-2 - ENEC: 61374-2-13 and IEC/EN 62384.



The evaluation of eye safety occurs according to the standard IEC 62471:2006 ("photobiological safety of lamps and lamp systems"). Within the risk grouping system of this CIE standard, the LED specified in this data sheet falls into the class "moderate risk" (exposure time 0.25s). Under real circumstances (for exposure time, eye pupils, observation distance), it is assumed that no endangerment to the eye exists from these devices. As a matter of principle, however, it should be mentioned that intense light sources have a high secondary exposure potential due to their blinding effect. As is also true when viewing other bright light sources (e.g. headlights), temporary reduction in visual acuity and afterimages can occur, leading to irritation, annoyance, visual impairment and even accidents, depending on the situation.

FURTHER INFORMATION

The values contained in this datasheet can change due to technical innovation. Any such changes will be made without separate notification. Intelligent Horticultural Solutions is a division of Intelligent Group Solutions, delivering superior LED solutions to the rapidly evolving and highly important horticultural lighting market.

All trademarks recognised.



Unit 2, Berkshire Business Centre,
Berkshire Drive, Thatcham,
Berkshire, RG19 4EW

+44 (0)1635 294606

info@i-hled.co.uk

www.i-hled.co.uk

ABOUT IHS

LEDs are producing revolutionary advancements in many areas of technology and life, but none more so important than in Horticulture. The complexities and knowledge required is growing daily, with different plants requiring different spectral illumination and control.

Intelligent Horticultural Solutions (IHS) was formed in 2017 to support the development of products in the fast moving and exciting area of LED lighting. We have brought together key horticultural LED manufacturers, leveraging their 20+ years of experience in general LED lighting in order to offer development platforms and custom growing solutions.

IHS is part of the [Intelligent Group Solutions Ltd](#) (IGS) group of companies founded in 2001 which operate from the head office in Thatcham, Berkshire. Sister divisions specialise in a variety of opto and mainstream electronics distribution, design as well as prototyping and assembly services. The horticultural specialism has evolved, due to market demand in the LED division, Intelligent LED Solutions (ILS).

INTELLIGENT GROUP SOLUTIONS DIVISIONS

