

# sanlight

*better light,*  
*better plants*

[www.sanlight.info](http://www.sanlight.info)

## S4W

no-compromise lighting for  
large areas under cultivation

### MAXIMUM EFFICIENCY AND PERFORMANCE

As with all our products, when developing model S4W the focus has been on maximum light output for minimum power consumption. By using the highest quality LEDs (Osram special selections) and electronics specially adapted to these, the individual light sources reach an efficiency level of up to  $2.9\mu\text{mol}/\text{J}$ . Combined with outstanding passive temperature dissipation, a very high photon flux (PPF) of  $300\mu\text{mol}/\text{s}$  is generated, with optimum spectral distribution for only 140 W electrical output.



### NO PHOTON IS WASTED

A special secondary lens has been developed for the S4W which directs the light sharply and very efficiently onto your plants. Particularly in open spaces, this has the advantage of illuminating only those areas which are actually planted. When the S4W is used in enclosed indoor cultivation areas, no photons are wasted on the side walls. The whole light output of S4W lights reaches your plants by a direct route – i.e. without losses.



## LONG LIFE

The S4W system has a serviceable life of approx. 80,000 hours. This corresponds to a period of use of 9 years in continuous operation. The warranty period is 3 years. If your S4W suffers damage through external influences, the lights can be quickly and easily repaired by the manufacturer in Austria at modest cost. A long-term supply of spare parts is also guaranteed.

## WELL PROTECTED

The secondary lens at the same time creates the best possible protection for the high-quality LEDs. This makes the light robust, and gives it a long and maintenance-free life. Dirt can easily be removed.

## SAFE

The S4W light runs on safety extra-low voltage (SELV). This means that all electrical components connected to the control gear are fully non-hazardous and cannot cause any electric shocks.

## FLEXIBLE & MODULAR

You can illuminate your area with one or more modules, according to your requirements, and react very flexibly to rapidly changing lighting needs. A framework system makes it possible to fix several modules in place easily and neatly.



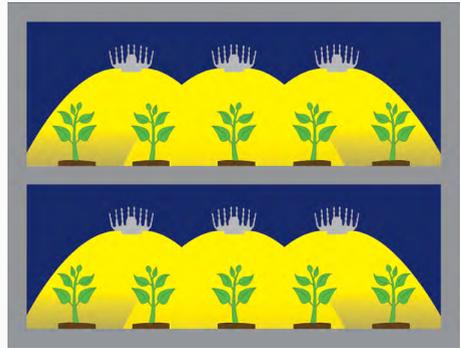
## PASSIVE COOLING

Passive cooling does not simply make silent and maintenance-free operation of your light source possible. It also makes it easy to regulate the ambient temperature range for your plants. When outside temperatures are high, the heat rising from the S4W module can simply be carried away – your cultivation volume remains pleasantly cool. If heat is required in the area of the plants, this can easily be directed down onto the plants by a fan.



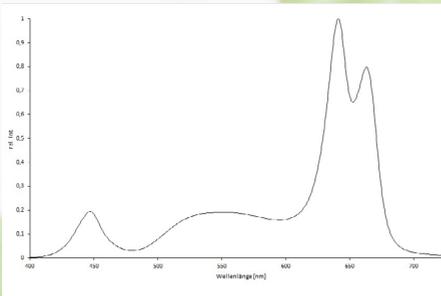
## PERFECT FOR SPACE-SAVING MULTI-LEVEL CULTIVATION

As well as directing the light perfectly, when the secondary lens was developed attention was paid to a characteristic of light emission which makes space-saving cultivation of plants possible. The light can be mounted up to 15cm above the top of the plant without sacrificing homogeneity. The S4W thus makes very economic cultivation in multi-level systems possible. The surface area under cultivation can be multiplied on the same footprint.

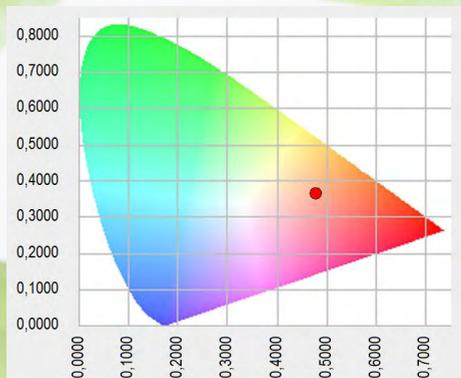


## FULL LIGHT SPECTRUM

As it is not only the rate of photosynthesis but also the hormone balance of a plant which is decisive in growing vigorous high-yielding plants, the light spectrum of S4W is orientated towards natural sunlight. Light with all wavelengths from 400nm to 730nm (PAR range) is emitted in the right proportions. In contrast to traditional discreet light spectra (eg NDL, CFL and also many LED solutions), the continuous light spectrum of the S4W avoids saturation effects in the plants, and improves the efficiency of photosynthesis. The spectrum is suitable for all stages of growth – from the vegetative to the reproductive growth phase.



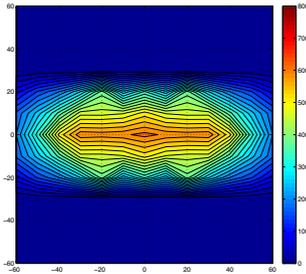
**Spectral Power Distribution:**  
7,6% blue (400nm-500nm)  
22,4% green (501nm-600nm)  
70% red (601nm-700nm)



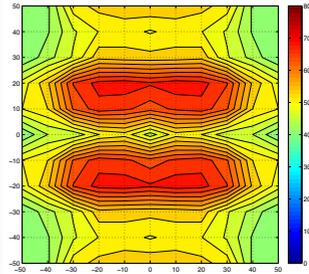
pleasant warm white color impression

## PERFECT ILLUMINATION

The even emission characteristics of S4W lights is a result of the perfect secondary lens, and makes even distribution of light over your cultivated area possible. All plants in the cultivation area will be provided with the same quantity of light. This results in homogenous plant growth, which can be measured in higher yields with uniformly high quality.



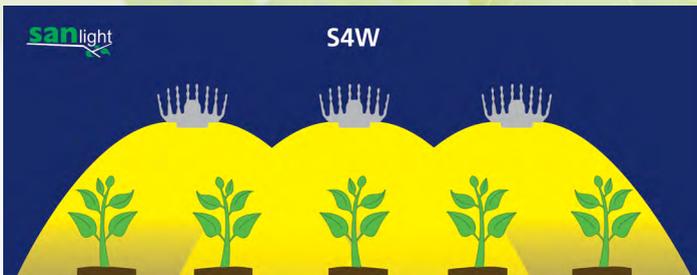
1 x S4W @ 15 cm  
Illuminated surface: 120x40 cm



3 x S4W in Growbox 100x100 cm  
Ø PPF=525  $\mu\text{mol}/(\text{m}^2 \cdot \text{s})$   
Min. PPF=470  $\mu\text{mol}/(\text{m}^2 \cdot \text{s})$

## NO SHADOWS

By using the S4W module, your plants will be exposed to light from several light sources/sides. This keeps shadows to a minimum. More leaves can be exposed, which leads to better growth and higher yields.



## BEST QUALITY – 100% MADE IN AUSTRIA

Development and manufacture of the SANlight S4W takes place in Austria using regional resources. This not only guarantees the best quality, but also extraordinary customer service. You will be professionally looked after by our team both before and after purchase.

## THE MANUFACTURER

The M30 LED system is produced by the Austrian company SANlight whose core competence is the development and manufacturing of high-quality LED luminaires for research and professional plant production.

The realization of ground-breaking, energy-efficient and durable products in conjunction with utilizing resources from regional partners are of particular importance to our company. Besides own products, SANlight offers the development and manufacturing of custom-built luminaire systems according to customer specifications.

Our capability to rapidly develop new market innovations enables us to continually provide cutting-edge technology to our customers. Small production batches furthermore guarantee up-to-date LED-technology at any time.

Besides the development and manufacturing of products for the end-consumer SANlight strongly cooperates with research partners in botany, phytochemistry and biotechnology.

SANlight offers

- development of custom projects
- manufacturing of custom products
- own products
- lighting specific measurements
- counseling

AVAILABLE AT