



### Spectrum Genius Agricultural Lighting, A Grow Light Efficient Detection

Spectrum Genius Agricultural Lighting (SGAL) is a professional app for checking growth lamps and horticultural lighting, it allows user checking the grow light distribution at each wavelengths; its unique "PAR Action Spectrum Benchmark" can help user to analyze the target growth light source more effective.

With the worldwide first smart spectrometer, Lighting Passport, SGAL will provide several unique convenience features for users, they can directly check the measurement spectrum and active radiation spectrum to analyze the effectiveness of the target growth light source with the two spectral comparison; "Weighted Spectrum", it will helps users choose more efficient growth light, help the plants grow healthier.

### The Flexible Measurement Mode



#### 《Diary》

An unique function for recording the light source information and growth change day by day, it can also help user to make an intelligent management and analyze those data to improve efficiency and quality.

#### 《Single》

Single mode is for measuring unitary light source

《Multiple》

Multiple mode is for averaging more than one light sources.

**Provide you all necessary measurement information.**

#### **Import PAR reference**

Users can import their original PAR reference to their SGAL by PC, and Asensetek will also update the built-in PAR reference continuously.

#### **Custom PPF range**

We are going to allow users to customize the PPF range, which will help users effectively sieve out their need from numerous growth light commodities.

**With those features, will be more efficient.**

#### **1. PAR Reference, lets you understand the real needs of plants**

SGAL has built several PAR Action Spectrum Benchmarks for users checking. With this feature, users can directly check the needs of the plants being cultivated by comparing the measurement spectrum and Benchmark's spectrum.

#### **2. Weighted spectrum, no more excess and deficiency**

When users select the their needed PAR reference, SGAL will automatically compute the YPF of each wavelength and weighted spectrum. This feature helps users choose more efficient growth light, helping the plants grow healthier.

#### **3. Comparison Mode, Your product's advantage is obvious.**

SGAL allows user to check two different grow light source, and compare their original spectrum, weighted spectrum, PPF, YPF, Efficiency, R/B, R/FR, CCT, CRI(Ra), Illuminance,  $\lambda_p$ ,  $\lambda_D$ ; user also can check the PPF and YPF value of each peak wavelength by slide the slider.

#### **4. Email Share, the essential of mobile generation**

With the mobile email system, the measurement data can be sent immediately to your designated users, and the unique "Smart Pass" function also allows users who have SGAL app to import the email shared measurement data.

## Spectrum Genius Agricultural Lighting (SGAL)

Price Limited free

Language Traditional Chinese, Simplified Chinese, English

Measured data

- Spectrum
- PAR Weighted Spectrum
- PPFD (400 nm ~700 nm)
- PPFD IR (701 nm ~780 nm)
- PPFD R (600 nm ~700 nm)
- PPFD G (500 nm ~599 nm)
- PPFD B (400 nm ~499 nm)
- PPFD UV (380 nm ~399 nm)
- YPPFD (400 nm ~700 nm)
- YPPFD IR (701 nm ~780 nm)
- YPPFD R (600 nm ~700 nm)
- YPPFD G (500 nm ~599 nm)
- YPPFD B (400 nm ~499 nm)
- YPPFD UV (380 nm ~399 nm)
- Efficiency (%)
- R/B
- R/IR
- Illuminance (lx)
- $\lambda_p$  (nm)
- $\lambda_d$  (nm)
- CCT
- CRI (Ra)
- CIE 1931
- CIE 1976

Key Functions Photograph, Note, Auto Connection, Data Comparison, Smart Pass, Absorption Spectrum Reference