Lighting Passport Product Collection

Lighting Passport
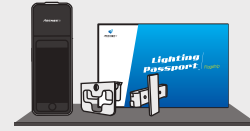
| Standard | Flagship |

Lighting Passport Pro

| Essence | Standard | Flagship |

APP

Spectrum Genius Mobile	Spectrum Genius Essence	Spectrum Genius Transmittance	Spectrum Genius Agricultural Lighting	Spectrum Genius Studio
Lighting Manufacturing	Lighting Manufacturing	Industry about	Grow Light Manufacturing	TV / Broadcasting
Lighting Designing	Lighting Designing	Transmittance. i.g.	Plant Grow	Studio / Film
Sales/ Promotion	Sales/ Promotion	Glass / Filter / Membrane	Plant Factory	Photography

PC Software

| Spectrum Genius Standard | Spectrum Genius Advanced |

For more up-to-date information, please check the official website.

Taipei Headquarter

ASENSETEK
Extend your sense

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Lighting Passport ™

The World's First Handheld Smart Spectrometer

Everyone who cares about light deserves to own it.

ASENSETEK
Extend your sense

Lighting Passport ™

The World's First Smart Spectrometer

More applications coming soon!!

Unique Design

Remote Control
Stand creates easy and stable ways of measuring.

Device Connecter
Clipper creates firm attachment to handheld devices.

Lighting Passport has the most advanced technology with a control system perfectly integrated with smart devices. You can easily establish good and seamless communication with others and get access to Lighting Design, Interior Design, Grow Light, TV, Film, and other photometry related markets in a smoother way.

Controlled by mobile applications, the capability of measurement can be constantly updated for users to get the most suitable measurement reports for light and photometry.

Patent / Application Number

TW I503527	TW M400587	DE 202014100392.4
TW I453380	TW M475700	US 9,074,940
TW 102214581	TW M487431	CN 3214265
TW 105201688	CN 201620105629.7	

Outstanding Features

Portable Engineer 17mm Thickness, Comprehensive reports allows you to share and compare the measurement anytime, anywhere.

NIST Traceable Verification and criterion. The output wavelength pitch is 1 nm displayed with high-resolution in full color screen.

PC Software Spectrum Genius PC version allows user to do data analysis, project management, report printing, and Excel exporting.

Auto Dark Calibration This advanced technology allows users to automatically re-calibrate the meter during boot ups.

Smart Pass The receivers install our APPs on SMART devices > Open the (.ast) file with the APP > Easy review of the measurement & full APP functions.

Social Media Integration User can share measurement data via social media including: Twitter, Facebook/ Messenger, WeChat, Line, WhatsApp, SMS, and others.

Applicable Mobile Devices

iOS devices:
iPhone 4S, iPhone 5/ 5C/ 5S/ 6/ 6+/6S/6S+, iPod touch 5, iPad mini/ mini2, the New iPad (iPad 3), iPad Air and later version.

Android devices:
Support Android 4.4.2 and above version with BT4.0 (BLE, Bluetooth Low Energy) module, and now optimized for Samsung S4/ S5/ Note3, LG Nexus 5, LG G3/G4, Sony Z1/ Z2 and later version.

Lighting Passport Pro
Product Matrix

- ● Package Content
- △ Free Download
- ○ Choose and Buy

	Pro Essence	Pro Standard	Pro Flagship
Accessory			
Protective Bag	●	●	●
Stand	●	●	●
Clipper		●	●
iPod Touch			●
Tripod Adaptor	○	○	●
Pocket Bag	●	●	●
APP			
Spectrum Genius Mobile		△	△
Spectrum Genius Essence	△		
Spectrum Genius Transmittance	○	△	△
Spectrum Genius Agricultural Lighting	○	△	△
Spectrum Genius Studio (iPad)	○	△	△
Spectrum Genius Studio	○	△	△
PC Software			
Spectrum Genius Standard	○	●	●
Spectrum Genius Advanced	○	○	○

* For more up-to-date information, please check the official website.

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Facebook : https://www.facebook.com/lighting.passport
Twitter : https://twitter.com/Asensetek

Lighting Passport | Pro
™

The World's First
Handheld Smart Spectrometer

Flicker Index | Flicker Percentage | Flicker Frequency | | | Foot Candle | CIE 1931 | CIE 1976

°C / °F | PPFD | SDCM | SGM SGE SGT | Purity | Duv | SP ratio

Humidity | TLCI (Qa) | GAI | SGAL SGS

CRI (Ra) | CRI | | More applications coming soon!!

ASENSETEK

| CQS | Lux | Foot Candle | 1931 | 1976

Product Features

- **Evolving Platform**
- **Precision Mode**
- **Flicker Measurement**
- **PC Control**
- **Environment Temperature and Relative Humidity Recording**
- **Enhanced Battery Duration**

V1AEH31

Lighting Passport Pro

Specifications

Product Type	Pro Essence	Pro Standard	Pro Flagship
Size	Width : 68.5 mm Depth : 17 mm Height : 56 mm		Width : 68.5 mm Depth : 17 mm Height : 189 mm (Includes iPod touch)
Net Weight	79 g ± 1 g		214 g ± 2 g
Wavelength Range	380 ~ 780 nm		
Illuminance Range	Measurable: 5 ~ 50,000 lux Reliable Chromaticity: 100 ~ 50,000 lux	Measurable: 5 ~ 50,000 lux Reliable Chromaticity: 50 ~ 50,000 lux	
Output Wavelength Pitch	1 nm		
Optical Resolution (FWHM)	10 nm	8 nm	
Repeatability (2σ)	*x, y : < 0.001	* x, y : < 0.0005	
Accuracy (@ 1,000 lux Standard Light Source)	x, y : ± 0.003 Illuminance : ± 5 % CCT : ± 3 %	x, y : ± 0.002 Illuminance : ± 3 % CCT : ± 2 %	
Flicker Measurement Capability	Range: 5 ~ 200 Hz Accuracy : ± 5 % (Up to 600 Hz @ over 30,000 lux)		
Integration Time	6 ms ~ 16 s		
Operating Temperature/ Humidity Range	0 ~ 35 °C, relative humidity under 80 % with no condensation		
Storage Temperature/ Humidity Range	-10 ~ 45 °C, relative humidity of 85 % or less (@ 35 °C) with no condensation		
APPs	SGE, SGT, SGAL, SGS, SGS (iPad)	SGM, SGT, SGAL, SGS, SGS (iPad)	

*In Precision Mode (@ 1,000 lux Standard Light Source)

Applicable Mobile Devices

iOS devices:
iPhone 4S , iPhone 5/ 5C/ 5S/ 6/ 6+/ 6S/6S+,
iPod touch 5, iPad mini/ mini2, the New iPad (iPad 3),
iPad Air and later version.

Android devices:
Support Android 4.4.2 and above version with BT4.0 (BLE,
Bluetooth Low Energy) module, and now optimized for
Samsung S4/ S5/ Note3, LG Nexus 5, LG G3/ G4, Sony Z1/
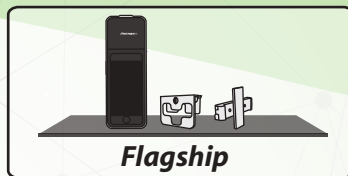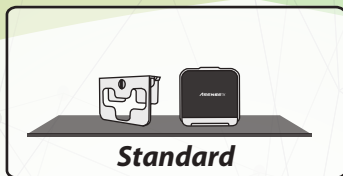Z2 and later version.

APP Functions

APP Type	Spectrum Genius Essence (SGE)	Spectrum Genius Mobile (SGM)	
Applicable Model	Pro Essence	Pro Standard	Pro Flagship
Measurement Mode	Single, Multiple, Subtract Background	Single, Multiple, Continuous, Subtract Background	
Measurement Capability	CCT CIE 1931 CIE 1976 Spectrum C78.377-2008 IEC-SDCM CRI (Ra) R1 ~ R15 CQS TLCI (Qa) Gamut Area Index (GAI) Illuminance Foot Candle λp Flicker Index Flicker Perentage Flicker Frequency TM-30-15 #(Rf/ Rg/ Diagram)	CCT Purity Duv SP ratio CIE 1931 Flicker Index CIE 1976 Flicker Perentage Spectrum Flicker Frequency C78.377-2008 TM-30-15 (Rf/ Rg/ Diagram) IEC-SDCM CRI (Ra) CRI (Re) R1 ~ R15 CQS TLCI (Qa) Gamut Area Index (GAI) Illuminance Foot Candle PPFD λp λD	
Key Features	Automatically Record Temperature & Humidity Photograph Note Auto Connection Auto Dark Calibration Data Comparison GPS Orientation Smart Pass # Social Media Integration	Automatically Record Temperature & Humidity Photograph Note Data Filter Auto Connection Auto Dark Calibration Data Comparison WiFi Transfer GPS Orientation Smart Pass# Social Media Integration	
Language (* SGM / SGE)	Traditional Chinese, Simplified Chinese, English, Japanese, German, French, Russian, Italian, Turkish, Spanish		

* ASENSETEK reserves the right to modify the specification of its products without prior notice.
Please check the official website for updates.

In-APP Purchase

Lighting Passport
Product Matrix

Package Content
Free Download
Choose and Buy

		Standard	Flagship
Accessory			
	Protective Bag	●	●
	Stand	●	●
	Clipper	●	●
	iPod Touch		●
	Tripod Adaptor	○	○
	Pocket Bag	○	○
APP			
	Spectrum Genius Mobile	△	△
	Spectrum Genius Transmittance	△	△
	Spectrum Genius Agricultural Lighting	△	△
	Spectrum Genius Studio (iPad)	△	△
	Spectrum Genius Studio	△	△
PC Software			
	Spectrum Genius Standard	●	●
	Spectrum Genius Advanced	○	○

* For more up-to-date information, please check the official website.

Lighting Passport ™

The World's First
Handheld Smart Spectrometer

Spectrum

Comparison

Cool Whi... CRI Standard A

CIE 1931

Product Features

High-resolution Touch Screen

Stylish Design

Data Filter

Evolving Platform

Remote Measurement

Flexible Use

V1AEH31

Lighting Passport ™

Specifications

Product Type	Standard	Flagship
Size	Width ： 68.5 mm Depth ： 17 mm Height ： 56 mm	Width ： 68.5 mm Depth ： 17 mm Height ： 189 mm (Includes iPod touch)
Net Weight	76.5 g ± 1 g	211 g ± 2 g
Wavelength Range	380 ~ 780 nm	
Illuminance Range	Measurable: 5 ~ 50,000 lux / ※20 ~ 200,000 lux Reliable Chromaticity: 50 ~ 50,000 lux / ※200 ~ 200,000 lux	Measurable: 5 ~ 50,000 lux Reliable Chromaticity: 50 ~ 50,000 lux
Output Wavelength Pitch	1 nm	
Optical Resolution (FWHM)	8 nm	
Repeatability (2σ)	x, y ： < 0.001	
Accuracy (@ 1,000 lux Standard Light Source)	x, y ： ± 0.002 Illuminance ： ± 3 % CCT ： ± 2 %	
Integration Time	6 ms ~ 16 s	
Operating Temperature/ Humidity Range	0 ~ 35 °C, relative humidity under 80 % with no condensation	
Storage Temperature/ Humidity Range	-10 ~ 45 °C, relative humidity of 85 % or less (@ 35 °C) with no condensation	
APPs	SGM, SGT, SGAL, SGS, SGS (iPad)	

(※ High intensity model available)

Applicable Mobile Devices

iOS devices:
iPhone 4S ,iPhone 5/ 5C/ 5S/ 6/ 6+/ 6S/6S+,
iPod touch 5, iPad mini/ mini2, the New iPad (iPad 3), iPad
Air and later version.

Android devices:
Support Android 4.4.2 and above version with BT4.0 (BLE,
Bluetooth Low Energy) module, and now optimized for
Samsung S4/ S5/ Note3, LG Nexus 5, LG G3/ G4, Sony Z1/
Z2 and later version.

APP Functions

APP Type	Spectrum Genius Mobile (SGM)	
Adaptive Model	Standard	Flagship
Measurement Mode	Single, Multiple, Continuous, Subtract Background	
Measurement Capability	CCT Duv CIE 1931 CIE 1976 Spectrum C78.377-2008 IEC-SDCM CRI (Ra) CRI (Re) R1 ~ R15 CQS TLCI (Qa) Gamut Area Index (GAI) Illuminance	Foot Candle PPFD λp λD Purity SP ratio TM-30-15 (Rf/ Rg/ Diagram)
Key Features	Photograph Note Data Filter Auto Connection Auto Dark Calibration	Data Comparison WiFi Transfer GPS Orientation #Smart Pass Social Media Integration
Language (SGM)	Traditional Chinese, Simplified Chinese, English, Japanese, German, French, Russian, Italian, Turkish, Spanish	

* ASENSETEK reserves the right to modify the specification of its products without prior notice.
Please check the official website for updates.

\# In-APP Purchase

Lighting Passport GateKeeper™

Program Features

Software	Spectrum Genius GateKeeper
Measurement Mode	Single, Multiple

Measurement Capability		
	CCT	TLCI(Qa)
	Duv	GAI
	CIE 1931	Illuminance
	CIE 1976	Foot Candle
	C78.377-2008	PPFD
	IEC-SDCM	λp
	CRI (Ra)	λD
	CRI (Re)	Purity
	R1 ~ R15	SP ratio
	CQS	TM-30-15

Key Features		
	(1) Multi CIE 1931 Display	(7) Zoom In/Out
	(2) Multi CIE 1976 Display	(8) Normalized Spectrum
	(3) Multi Spectrums Display	(9) Light Source Benchmark
	(4) Multi C78.377-2008 Display	(10) Print Report (Company's Logo)
	(5) Multi IEC-SDCM Display	(11) TM-30-15 Diagram
	(6) Coordinates Display	(12) Q1~Q15

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　Please check the official website for updates.

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Website : http://www.asensetek.com
Fecebok : https://www.facebook.com/lighting.passport
Twitter : https://twitter.com/Asensetek

Ingress Protection　**Easy Installation**　**Semi-Automatic**　**Multiple Control**　**Flexible Development** {SDK}

Data Filter　**.CSV Output**　**Print Report**　**PC Control**　**Precision Mode**

Approval, ACceptance, Analysis
All In One Step!!
Lighting Passport Gatekeeper

Lighting Passport Gatekeeper is a powerful spectrometer designed for quality control and batch testing in lighting production line. It allows people a simple and easy way of getting Quality Control, Quality Assurance, Yield Rate Analysis, and fast-and-detailed Inspection Report.

Lighting Passport Gatekeeper has the industrial level of structure and durability, and a wider illuminance measurement range for different measurement requirements (20 lux ~ 200,000 lux).

With **Spectrum Genius Gatekeeper,** it will be the best manufacturing reporter and quality analyzer in your production line. By customizing your own filters, the software helps analyze large amounts of test results per the preset filter conditions. It easily turns it up a notch for your enterprise to excel in the intense and competitive markets.

Gatekeeper

PC

Product Features

Industrial Grade Design Stronger & More Durable	Industrial Connector Speedier & Steadier	Industrial Software UI More Practical & User-Friendly

Specifications

V1AEH31

Product Type	GateKeeper
Size	Width：110 mm Depth：29 mm Height：65 mm
IP Code	IP 54
Net Weight	350 g ± 1 g
Wavelength Range	380 ~ 780 nm
Illuminace Range	Measurable:　　20~ 200,000 lux Reliable Chromaticity:　200 ~ 200,000 lux
Output Wavelength	1 nm
Optical Resolution (FWHM)	8 nm
Repeatability (2σ)	x, y ： ＜ 0.001
Accuracy (@ 10,000 lux Standard Light Source)	x, y ： ± 0.002 Illuminace：± 3 % CCT：± 2 %
Integration Time	6 ms ~ 16 s
Operating Temperature/ Humidity Range	0 ~ 35 ℃, relative humidity under 80% with no condensation
Storage Temperature/ Humidity Range	-10 ~ 45 ℃, relative humidity of 85% or less (@ 35 ℃) with no condensation

※ **ASENSETEK reserves the right to modify the specification of its products without prior notice. Please check the official website for updates.**

Program Features

Software	Spectrum Genius Light Cube
Tunable Items	CCT TM-30 Rf Lux TM-30 Rg Duv PPFD R CRI PPFD G CQS PPFD B TLCI Qa Spectrum
Key Features	Light Library Establishment Data Storage Data Import

Spectrum **Lux** **CRI** **TLCI** **CCT** **PPFD** **TM-30** **Duv**

Light Cube Optional Accessories

Accessories Type
50 × 50 × 60 cm Light Cube Viewing Cabinet
Ceiling Installation Kit
Wireless Sender

※ *ASENSETEK reserves the right to modify the specification of its products without prior notice.*

Light Cube

ASENSETEK

Master in Light and Color

Experience the NEW era of SMART lighting.

Light Cube is a powerful **Lighting Simulation System** which includes a "**Spectral Power Distribution Simulator—Light Cube,**" a "**SMART Spectrometer—Lighting Passport Pro,**" and a multi-functional software "**SMART Tunable Software—Spectrum Genius Light Cube.**" With the help of this powerful system, users get to control not only the color and lightness of the light source, but also intelligently customize the CCT, CRI, Duv, illuminance, Spectrum, PPFD, and TM-30 Rf/Rg by accurately entering the target values or easily dragging the control bars.

"**Light Cube**" is the perfect system for researches of all kinds, allowing users to save the money, cut down the maintenance, and increase the efficacy and chance of success in their studies.

"SMART Spectrometer—Lighting Passport Pro"

Lighting Passport in this SPD Simulation System, plays the core role of a sensing device that swiftly and precisely collects all measured parameters and further feeds the data back to Light Cube for processing and generating the best simulation results. More, environmental influence is also measured and compensated.
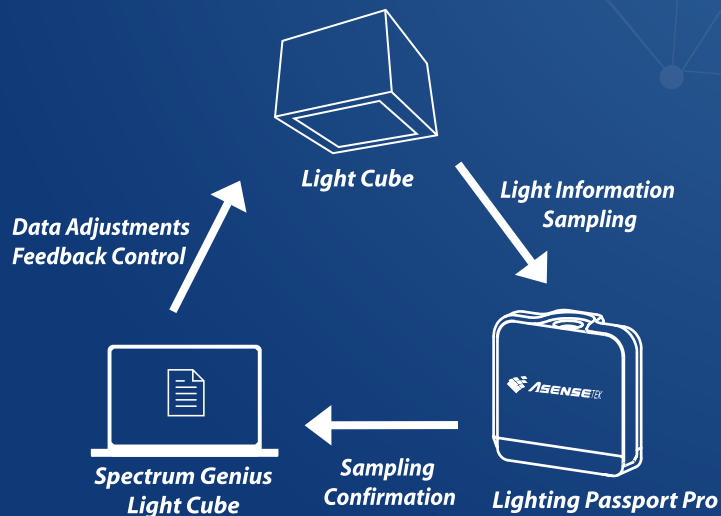
"Spectral Power Distribution Simulator—Light Cube"

Through accurate communication and control of "Spectrum Genius Light Cube" software, the system can effortlessly simulate the SPD of any light sources, including LED and other traditional lights. The spectral inputs can either come from direct data input into the software, or spectral parameters collected from the Lighting Passport Pro.

"SMART Tunable Software—Spectrum Genius Light Cube"

"Spectrum Genius Light Cube" is a state-of-the-art software that seamlessly connect the Lighting Passport with the Light Cube, enabling the users to conduct detailed control settings over CCT, CRI, TM-30, PPFD etc… and further manipulate their customized spectrums.

Light Cube

Data Adjustments Feedback Control

Light Information Sampling

Spectrum Genius Light Cube

Sampling Confirmation

Lighting Passport Pro

Application Range：

- **Dimmable Lighting Research**
- **Black-body Radiation Simulation**
- **Lighting Research**
- **Grow Light Research**
- **Human Centric Research**
- **Studio Lighting Research**

Light Cube Specifications

V1AFK07

Size & Net Weight	300 × 300 × 200 mm, 7 kg	
Wavelength Range	380 - 780 nm	
Tunable Channel	11	
Channel Resolution	10 bit (1024 steps dimmable for each channel)	
Lifetime	>10,000 hours	
* Smart Tuning Range	CCT：2,000 ~ 10,000K	TLCI(Qa)：60 ~ 100
	CRI (Ra)：60 ~ 100	TM-30-Rf：50 ~ 100
	Duv：-0.05 ~ +0.05	TM-30-Rg：60 ~ 140
	CQS：60 ~ 100	
Max Flux and Illuminance	6,500K：1700 lm, 1 meter：850 lux	
	5,000K：2400 lm, 1 meter：1250 lux	
Short-term stability	6,500K<±10K, 5,000K<±5K	
	Illuminance <±0.5%	
Long-term stability	6,500K<±25K, 5,000K<±15K	
	Illuminance <±1.5%	
Electrical	110/ 230V, 50/ 60Hz, 150W Maximun	
Connection	USB Cable, Wireless Control (Option)	
Operating Temperature/ Humidity Range	0 ~ 35 ℃, relative humidity under 80 % with no condensation	
Storage Temperature/ Humidity Range	-10 ~ 45 ℃, relative humidity of 85 % or less (@ 35 ℃) with no condensation	
Scope of Delivery	Light Cube, Power Cord, USB Cable	

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* Smart Tuning Mode uses our own patented technology and algorithm to find out the optimal solution.

The only tool you need.

Fractical and Convenient Functions

Diary   Single   Multiple   Comparison

APP Introduction

Spectrum Genius Agricultural Lighting (SGAL) is now available. SGAL is a professional application for evaluating, selecting, and monitoring grow lights to produce indoor plants with higher efficiency.

Use SGAL with your Lighting Passport spectrometer to record and share valuable data, make rational decisions, and track history. With our spectrometer, you will improve your growing efficiency and make your decisions on the reliable readings from our state-of-the-art invention-SGAL.

The BEST tool for grow light measurement.
Making your study easier and faster!

Smart Diary on Plant Growth

Use the unique "diary mode" function to record light source information and plant growth daily or weekly. Use this information to analyze and efficiently manage your horticultural business. Our spectrometer and software help you make smarter decisions from the reliable readings of our state-of-the-art invention-SGAL.

Quick Measurement & Data Analysis

You can either select "Single Mode" to take a swift measurement, or you can choose to run "Multiple Mode" on a series of light sources for comparison and analysis. "Comparison Mode" then allows you to distinguish the differences between two grow light sources. Also, you can see both the original spectrum and the weighted spectrum at one time. What's best is that we simply give you everything: PPFD, YPFD, Efficiency (%), R/ B, R/IR, DLI, CCT, Illuminance (lx), λp (nm) and etc..
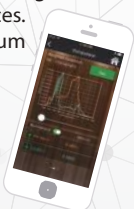
SGAL Reference Generator & Import Reference Data

"SGAL Reference Generator" is a Macro Excel program. You can import your own plant growth PAR data to the reference library of SGAL APP via this tool.
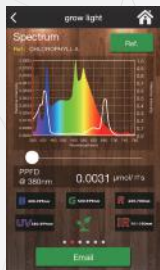
Built-in Reference Spectrum

SGAL provides a lot of built-in plant growth reference spectrum, such as Action Spectrum, DIN, Chlorophyll A/ B/ f, β-Carotene, Phytochrome, and the commonly used medicinal plant.

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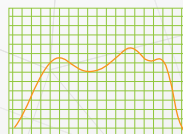
Provide Spot-on Information

"Ref. Spectrum" helps users to understand the true spectral needs of various plants, analyzes if the light source is suitable, and further adjusts the light source accordingly.

"Weighted Spectrum" on the other hand, helps users to analyze / monitor the effectiveness of the light source at different wavelengths, to guarantees a more effective light source and a better environment for the health and growth of the plants.

Your One-for-all choice

Traditionally, it requires not only a PAR meter, but a lux meter, a spectrometer, DLI meter, one or two meters for R/ IR, R/ B just to get a complete data for developers to spend more time analyzing, comparing, determining the perfect grow light. What a waste of time! With Lighting Passport all you need is one.

Available on the **App Store**

ANDROID APP ON **Google play**

PAR + R/ IR + lux + ▨ = 🌱

✱ For iPad user, please search it in the iPhone App Store.

⚙ APP Functions

V1AEH31

Measurement Mode	Diary, Single, Multiple	
Measurement Capability	PPFD (400 nm ~ 700 nm)	*Original Spectrum*
	PPFD IR (701 nm ~ 780 nm)	*PPFD Spectrum*
	PPFD R (600 nm ~ 700 nm)	*Weighted Spectrum*
	PPFD G (500 nm ~ 599 nm)	*Efficiency (%)*
	PPFD B (400 nm ~ 499 nm)	*R/ B*
	PPFD UV (380 nm ~ 399 nm)	*R/ IR*
	YPFD (400 nm ~ 700 nm)	*DLI*
	YPFD (380 nm ~ 780 nm)	*Illuminance (lux)*
	YPFD IR (701 nm ~ 780 nm)	*Peak Wavelength (λp)*
	YPFD R (600 nm ~ 700 nm)	*Dominant Wavelength (λD)*
	YPFD G (500 nm ~ 599 nm)	*CCT*
	YPFD B (400 nm ~ 499 nm)	*CRI (Ra)*
	YPFD UV (380 nm ~ 399 nm)	*CIE 1931/ CIE 1976*
Key Features	Photograph, Note, Auto Connection, Data Comparison #Smart Pass, Absorption Spectrum Reference Import Reference Spectrum, Social Media Integration #In-APP Purchase	
Language	Traditional Chinese, Simplified Chinese, English, German	

✱ *ASENSETEK reserves the right to modify the specification of its products without prior notice. Please check the official website for updates.*

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Spectrum Genius Studio APP

A New Way to Evaluate Studio Lights

Complete and Useful Information

TLCI	TLMF	sRGB Color Checker	Colorists Advice	Smart Filter

WB White Balance	Exposure Compensation	Aperture	Shutter	ISO	LBi	CCi

Introduction

TLCI is the new evaluation standard for lights and luminaires used in Television and Film industry. "Spectrum Genius Studio (SGS)", the 2 APPs for iPad and iPhone (iPod touch), give you the ability to get all the TLCI information easily and quickly.

"Spectrum Genius Studio" follows the standards of Television Lighting Consistency Index (TLCI) set up by European Broadcasting Union (EBU). When working together with Lighting Passport, SGS allows professionals like producers, colorists, gaffers, and technicians to get full and detailed information about the TLCI of a specific light source or the entire set up. In a single touch of finger, all the readings and information will be displayed on your iPad immediately. You can easily store and save the measurement results, or share them with your colleagues or clients instantly.

SGS added with several popular parameters of professional photography, such as LBi, CCi, White Balance, Exposure Value, Exposure Compensation, ISO, Aperture, and Shutter. It provides accurate information for photographers to create pictures of styles.

SGS Function Introduction

Television Lighting Consistency Index (TLCI)

TLCI is a value for evaluating lights and luminaires, it awards a single number value on a scale from 0 to 100. TLCI scores lights in five categories ranging from the poorest quality (<25) to the highest category (>85), where a score of greater than 90 is widely regarded as the minimum for television use.

1	100 / 85
2	75
3	50
4	25
5	0

Television Lighting Matching Factor (TLMF)

Television Lighting Matching Factor (TLMF), allows users to set the data of their preferable Fresnel or Flood Light as a reference by themselves. When users select the TLMF reference to be the benchmark, the Assessment Index, ColorChecker Chart, Colorists Advice, and Spectrum Reference will base on it to calculate.

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Spectrum Genius Studio APP
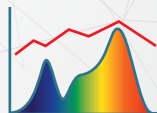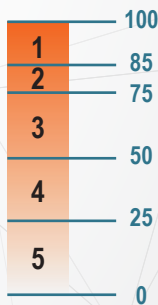
ColorChecker Chart

ColorChecker Chart will show the color differences on the screen between the reference light source and the measurement light source.

In the color patch, you may visually get the difference between the "Reference Light Source" and "Measurement Light Source." Also the Q value at the bottom of each color patch tells you the percentage of similarity between the "Reference" & "Measurement" light sources.

| Reference Light Color |
| Measurement Light Source Color |
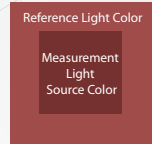
50
(Q value)
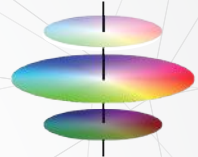
Colorists Advice

Colorists Advice provides a great convenience for Gaffer, Camera Operator, and Colorist. Camera operator can use this guide to adjust their camera when needed, while visual effect colorist can either enhance or decrease the lightness, chromaticity, and hue in each of the 12 color sectors to get the best end result.

Smart Filter

Smart Filter provides users with the filter suggestions for changing the color temperature of the luminaires. Users just need to set their target color temperature, SGS will match the best fitting filter according to their measurements, and then calculates new values of TLCI, CCT, CRI and other parameters after applying the suggested filter.
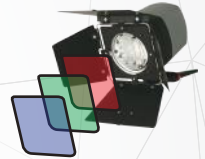
Around the world including BBC, NBC, CNN, Disney and ITV, to name a few, recommend TV professionals to use TLCI as light standard. With TLCI, colorists can handle their job faster on-site, studios can reduce the cost of post-production.

Spectrum Genius Studio and the world's first smart spectrometer-Lighting Passport can provide the best user experience for TV professionals.

Available on the App Store

Available on the App Store

SGS
For iOS Devices

SGS (iPad)
For iPad only

V1AEH31

APP Functions

| Measurement Mode	Single	
Measurement Capability	TLCI(Qa) TLMF CCT CRI CQS ColorChecker Chart (24 Q values) Colorists Advice Distance from Blackbody Locus Spectrum Diagram	Illuminance LBi CCi White Balance Exposure Compensation Exposure Value ISO Aperture Shutter
Key Features	Smart Filter, Import User-defined Filter, Photograph, Note, Auto Connection E-mail Sharing (.csv Output), #Smart Pass, Social Media Integration Direct Compatibility with EBU TLCI Software # In-APP Purchase	
Language	Traditional Chinese, Simplified Chinese, English	

* The items in green are for SGS APP.

* ASENSETEK reserves the right to modify the specification of its products without prior notice. Please check the official website for updates.

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The best partner for Lens, Filter and Film.
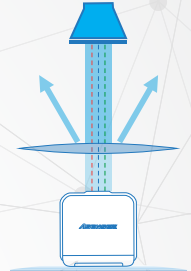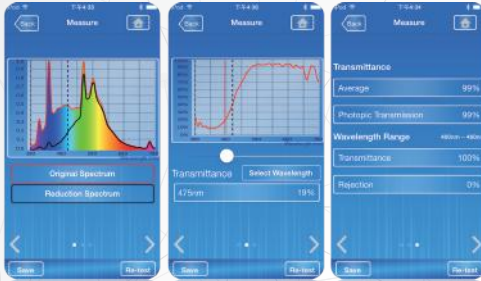
APP Introduction

"Spectrum Genius Transmittance" is an APP for measuring the transmittance of a light source coming out of a filtering sample. In a single click of finger, users can get the transmittance rate at every 5 nm and further compare the results of various tested objects. This APP can be extensively used for lens, filter, film and membrane of all kinds.

With Spectrum Genius Transmittance and Lighting Passport, people in the lighting related industry can easily and intuitively distinguish good quality products from the failing ones when making their purchase decisions. Manufacturers and procurements alike will benefit a lot from our state-of-the-art invention of SGT.
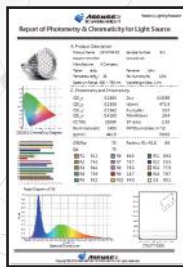
Available on the App Store

* For iPad user, please search it in the iPhone App Store.

V1AEH31

APP Functions

Measurement Capability	Visible Light Spectrum
	Visible Light Transmittance (every 5 nm)
	Visible Light Average Transmittance
	Visible Light Photopic Transmittance
Key Features	Transmittance of Specific Wavelength Range
	Rejection of Specific Wavelength Range
	Records Comparison
	Photograph
	Note
	Auto Connection
	# Smart Pass
	Social Media Integration #In-APP Purchase
Language	Traditional Chinese, Simplified Chinese, English, Japanese, French

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Practical and Convenient Functions

Data Filter	.CSV Output	Print Report	WiFi Transfer	PC Control

PC Software Introduction

"Spectrum Genius Standard" and "Spectrum Genius Advanced" are PC software for operating professional data analysis on data taken by Lighting Passport. They allow users to import multiple measurement results for further analysis, then output them into professional reports.

The Advanced version has a huge library of reference spectrums for users to benchmark with their imported measurement data. Try it now to experience more convenient and advanced features.

Software Specification *(The items in green are for Pro only.)*

V1AEH31

Generic Analysis Projects (Standard/ Advanced)	CIE x, y, u', v' CCT Duv CRI (Ra) (R1-R8) Re (R1-R15) R1 ~ R15 R1 ~ R15 Radar/ Bar Chart CQS TLCI (Qa) GAI GAI BB8 GAI BB15 Illuminance Foot Candle	PPFD CIE 1931/ 1976 Diagram Peak Wavelength (λp) Dominant Wavelength (λD) Purity FWHM SP ratio C78.377-2008 Diagram IEC-SDCM Diagram Spectrum Diagram *Flicker Index* *Flicker Percentage* *Flicker Frequency* TM-30-15 Rf/ Rg
Generic Key Features (Standard/ Advanced)	*PC Control Measurement,* Data Filter, CSV Output, DAT Output, Print Report, *Automatically Record Temperature & Humidity, Precision Mode,* GPS Orientation, Save Images	
Additional Key Features (Advanced Only)	Multi CIE 1931 Display Multi CIE 1976 Display Multi Spectrums Display Multi C78.377-2008 Display Coordinates Display, Zoom In/ Out, Normalized Spectrum, Light Source Benchmark, Print Report (Company's Logo)	Multi IEC-SDCM Display Multi GPS Map Display TM-30-15 Diagram Q1 ~Q15
Language	Traditional Chinese, Simplified Chinese, English, German	

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