



A SENSE TEK

Extend your sense



Spectrum is like the fingerprint of all things on earth.

With it, we can find the **ESSENCE** of every thing.



Where the SPECTRUM can be applied for?

Lighting



Light Fixture

Photography



Film

Colors



Screen

Biomedical



Analysis



The Mobile Generation, you have the Better Choice.



*Lighting
Passport*™



What is the Lighting Passport?



Lighting Passport is the **world's first smart spectrometer** which uses smart devices' application feature to operate.

Not only a meter, but also a Platform.



By the App development, **your idea can be realized.**

Flexible Options, and App Remote Control



We provide "Stand" and "Clipper" to make Lighting Passport's user have more flexible options in use.

Industrial Design make meter extend a new sense.

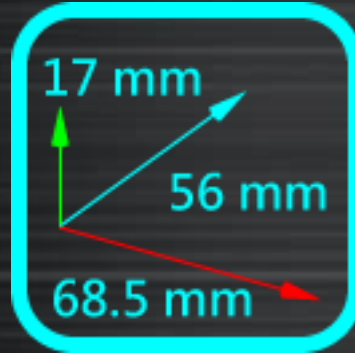


In Flagship set, we provide a **iPod Touch 5** and a special case to make Lighting Passport with iPod Touch like a unity.

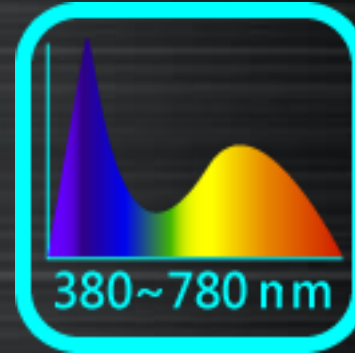
The Specification of Lighting Passport



Size



Wavelength Range



Illuminance Range



Net Weight



Integration Time

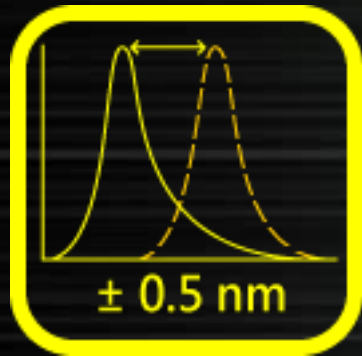


Optical Resolution



The Accuracy of Lighting Passport

Wavelength



Chromaticity
Coordinates



Illuminance



Color
Temperature

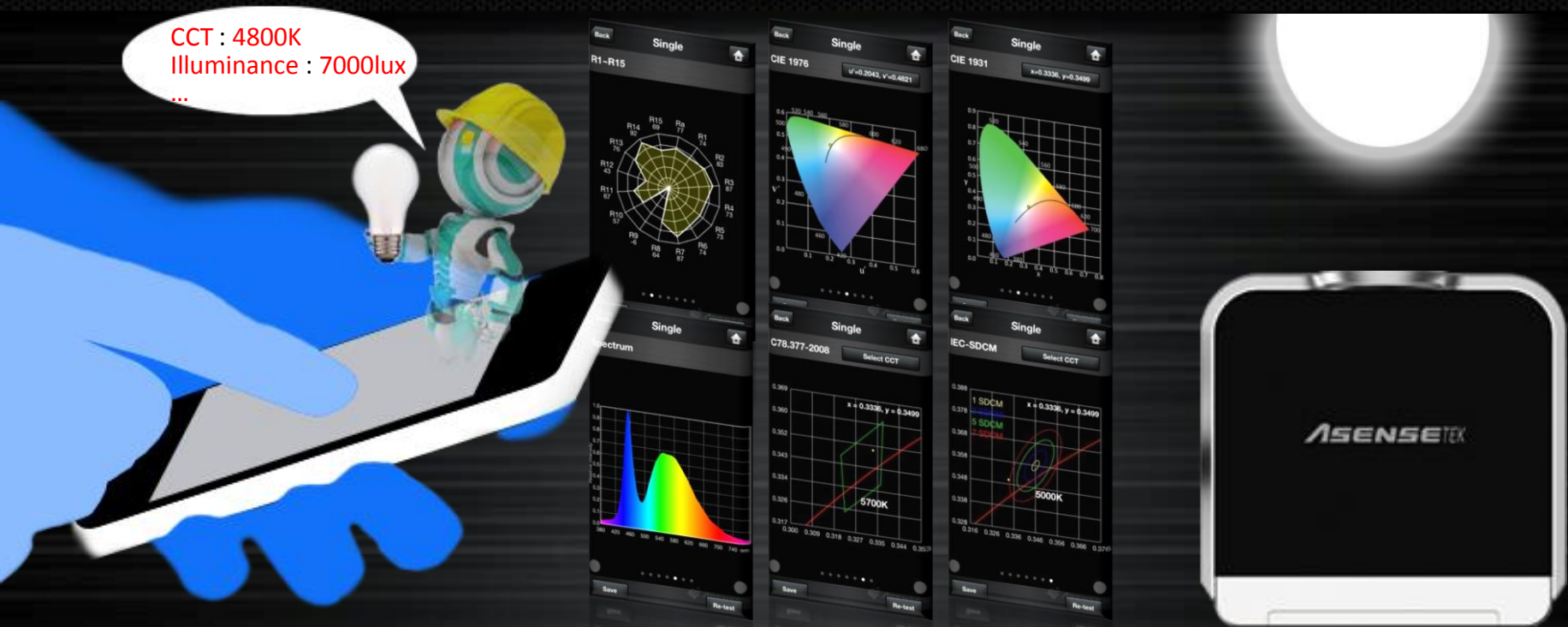


Repeatability (2σ): x,y < 0.001

The Correction System of Lighting Passport is **NIST Traceable**.

*Measurement Condition: with NIST Traceable instrument and standard light source

Handy Laboratory and Portable Engineer



By the preceding statement, Lighting Passport can promptly provide accurate and complete measurement result anytime anywhere.

Most Comprehensive and Flexible Options



Essence
Classic, Suitability



Standard
Professionalism,
Full Completion



Flagship
Industrial Design Appearance,
Long-Term & Frequent Usage

Detail Specification (Standard and Flagship)

Wavelength Range	380 ~ 780 nm	Measurement Mode	Single
Illuminance Range	Measurable : 5~50,000 lux Reliable Chromaticity : 50~50,000 lux		Multiple Continuous * Subtract Background
Optical Resolution	8 nm	Measurement Capability	CCT
Repeatability (2σ)	x,y : < 0.001		CRI
Accuracy (@1,000 lux Standard Light Source)	Wavelength : ± 0.5 nm x,y : ± 0.002 Illuminance : ± 3% CCT : ± 2%		Re (R1-R15) R1 ~ R15 CQS
Integration Time	6ms ~ 16s		Illuminance Foot Candle CIE 1931 CIE 1976 Spectrum Diagram
Language	Traditional Chinese Simplified Chinese English / Japanese French / German Russian / Italian		C78.377-2008 IEC-SDCM λp λD Purity Duv SP ratio PPFD * Comparison



Detail Specification (Essence)

Wavelength Range	380 ~ 780 nm	Measurement Mode	Single
Illuminance Range	Measurable : 5~50,000 lux Reliable Chromaticity : 100~50,000 lux		Multiple * Subtract Background
Optical Resolution	10 nm	Measurement Capability	CCT
Repeatability (2σ)	x,y : < 0.0015		CRI
Accuracy (@1,000 lux Standard Light Source)	Wavelength : ± 0.5 nm x,y : ± 0.003 Illuminance : $\pm 5\%$ CCT : $\pm 3\%$		R1 ~ R15
Integration Time	6ms ~ 16s		CQS
Language	Traditional Chinese Simplified Chinese English / Japanese French / German Russian / Italian		Illuminance Foot Candle CIE 1931 CIE 1976 Spectrum Diagram C78.377-2008 IEC-SDCM λ_p * Comparison



What kinds problems can be fixed by Lighting Passport in lighting industry ?

Manufacturer



Sales/ Retailer



End-User



The problem of Manufacturer in lighting industry



Instruments

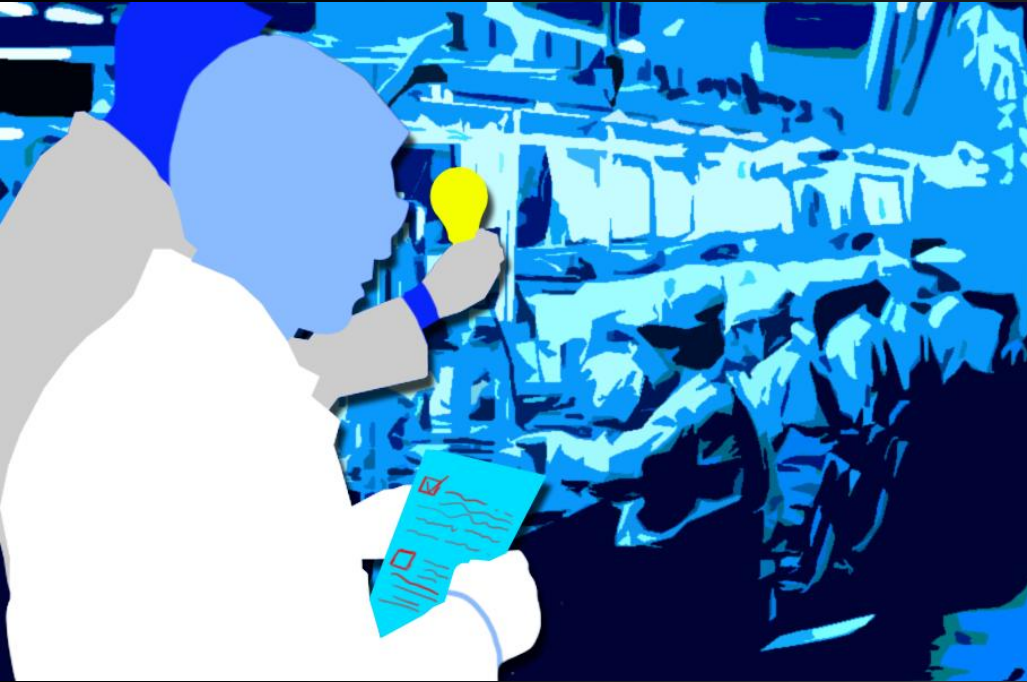


Time



Manufacturer should **spend a lot of time and money to develop** product, and those Instruments are usually **not portable size, limited information, and need with computer.**

The problem of Manufacturer in lighting industry



Incoming Inspection

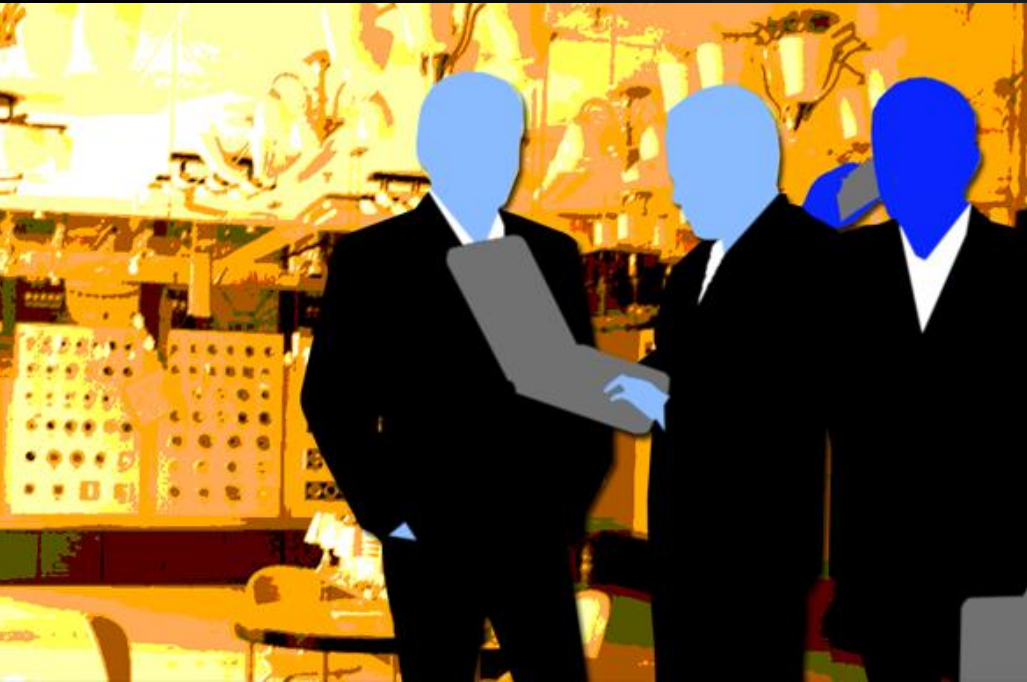


Quality Control



In **QC, QA and Incoming Inspection**, manufacturer usually cannot have effective checking, and the check report is difficult to **analyze and compare**.

The problem of Sales/ Retailer in lighting industry



Persuasiveness



Engineering Support



Consumers not only need Sales/ Retailer provide the product specifications, but also start to request **persuasiveness report and professional product answer.**

The problem of Sales/ Retailer in lighting industry



Compare



Explanation



When Sales/ Retail face to consumers or buyer, it is **difficult to provide a visual comparison and strong explanation** without a convenient tool.

The problem of End-User in lighting industry



Construction Project Acceptance Check

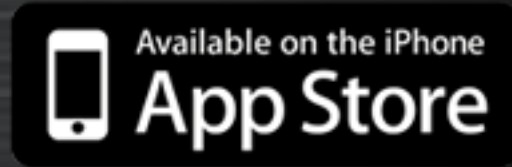


LED lighting is a different light source with traditional lighting, and builder and lighting designer need **spend much time in product choice and finish check.**

Now, Lighting Passport with the APP will change everything.



Spectrum Genius



“**Spectrum Genius Mobile**” is an APP used in conjunction with the “**Lighting Passport**”, it provides users comprehensive lighting measurement functions.

Other complete follow-up support Spectrum Genius PC version



PC Software, it can help users analyze the multi-measurement data, export Excel file, save as the project, and print out the report.

Why Lighting Passport can be trusted?

工業技術研究院
Industrial Technology Research Institute


Test Report


Date Issued : 2013-08-12
Report No. : 10207C02625-1-2-02
Version : A

Service Item : Spectrometer
Brand Name : ASENPTEK
Model/Item No./Style) : ALP-01
Serial No. : 0901130010705

Client
Company Name : ASENPTEK INCORPORATION
Address : 8F., No.43, Faxing Rd., Xindian Dist., New Taipei City 23150, Taiwan (R.O.C.)

Result of Service Item, performed by ITRI Laboratory, is specified on the next/ following page(s).
This report, including a signature page and content, is a total of 3 pages.
The validity of this report no longer exists if signature page and content are separated.


Jia-Loy Druce
General Director
Center for Measurement Standards


Bor-Jiunn Wen
Department Manager


20130813 14:23:34 6312006041682054
Center for Measurement Standards

Report

Date Issued : 2013-08-12
Report No. : 10207C02635-1-2-02
Version : A

Client
Company Name : ASENPTEK INCORPORATION
Address : 8F., No.43, Faxing Rd., Xindian Dist., New Taipei City 23150, Taiwan (R.O.C.)

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This report, including a signature page and content, is a total of 3 pages.
The validity of this report no longer exists if signature page and content are separated.


Bor-Jiunn Wen
Department Manager

20130813 14:39:46 6312006041682231
Center for Measurement Standards

中国计量科学研究院

校准证书

证书编号: OX20131257

客户名称 京东方光科技有限公司

器具名称 照明护照


型号/规格 ALP-01


出厂编号 0002130018014

生产厂商 群智科技股份有限公司

客户地址 北京市朝阳区酒仙桥路10号

校准日期 2013年9月23日

校准人: 


1
校准专用章

地址: 中国·北京北三环东路18号 邮编: 100013
电话: +86-10-64218631 传真: +86-10-64254577
网址: www.nim.ac.cn 电子邮箱: yw@nim.ac.cn

第十页 共十三页
日期: 100913
传真: +86-10-64254577
电子邮箱: yw@nim.ac.cn

Swissmetro AG

Certificate of Calibration No 116-02292

Client Spectrometer ASENPTEK ALP-01
Date 2013.09.23.02

Order Calibration of the Illuminance display

Apparatus Aemeterik Incorporation
BY No. 43, Faxing Rd.
Xindian Dist.
New Taipei City
23150, Taiwan (R.O.C.)

Represented by Li-wei Druce
E-Mail: liwei@ase.com.tw
3012 Bern
Switzerland

Traceability The reported measurement values are traceable to national standards and thus to internationally supported realizations of the SI units.

Date of Calibration 22.08.2014

Working Calibration label IM.FAS 03.2014

3003 Bern-Wehler, 4 April 2014

For the Measurements Sector Length, Optics and Time

 
Reto Schärer Dr. Rüdiger Thümler, Head of Sector

Calibration factor	Uncertainty
(1.00 ± 0.02)	(1.00 ± 0.02)
(1.00 ± 0.02)	(1.00 ± 0.02)
(1.00 ± 0.02)	(1.00 ± 0.02)
(1.00 ± 0.02)	(1.00 ± 0.02)
(1.00 ± 0.02)	(1.00 ± 0.02)
(1.00 ± 0.02)	(1.00 ± 0.02)
(1.00 ± 0.02)	(1.00 ± 0.02)

20130923 14:39:46 6312006041682231
Center for Measurement Standards

The National Laboratory Validation Testing Report
from Taiwan, China, and Switzerland

Why Lighting Passport can be trusted?

NIST traceable calibration environment

- **1. Location of Test**
 - This test was performed at 9F., No.43, Fuxing Rd., Xindian Dist., New Taipei City 23150, Taiwan (R.O.C.) , Asensetek Lab.
- **2. Calibration System includes**
 - Low pressure line lamp for wavelength calibration
 - Lighting Source System with NIST traceable driver(#0501132531 LPS-100)
 - Spectrophotometer for photometric calibration that traces NIST traceable calibration source (#07099996 IES1000)

The trust from all over the world company

PHILIPS



USHIO

Lighting—Edge Technologies



Lighting
Research Center



MONSANTO

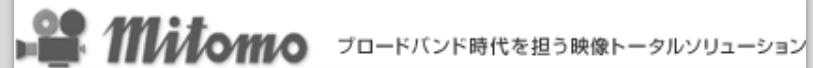


Yamada
CAMERA & VIDEO

The trust from all over the world company



CIRQUE DU SOLEIL



The trust from all over the world company

DM LIGHTING
technologies

ENGINEERING SOLUTIONS | MANUFACTURING EXPERTISE

SDGE *connected*
A Sempra Energy utility™

 **MAGIC
HAND**

SHARP

NP
NATIONAL PHOTO


making a soul evolution
HEART-S

BEARS | BERKELEY EDUCATION ALLIANCE FOR
RESEARCH IN SINGAPORE LIMITED

 **ELECTRO-MAG**

 **lybasé** | Lighting Life
LED

PLASKOLITE, INC.

OPPLE

Kenko

JVCKENWOOD
creates excitement & peace of mind

coloronix®

 Kenko Tokina

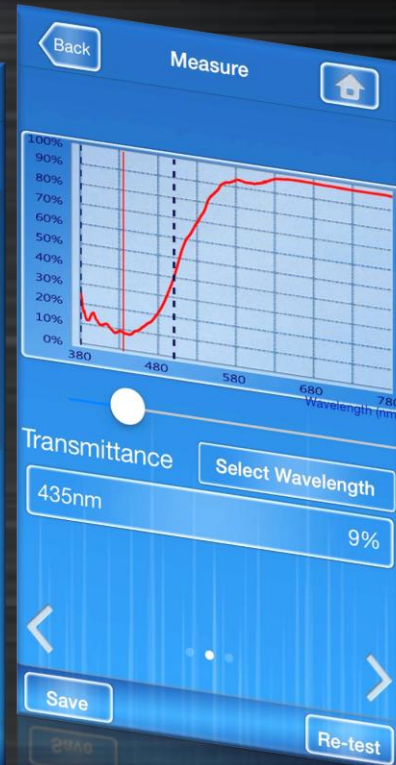
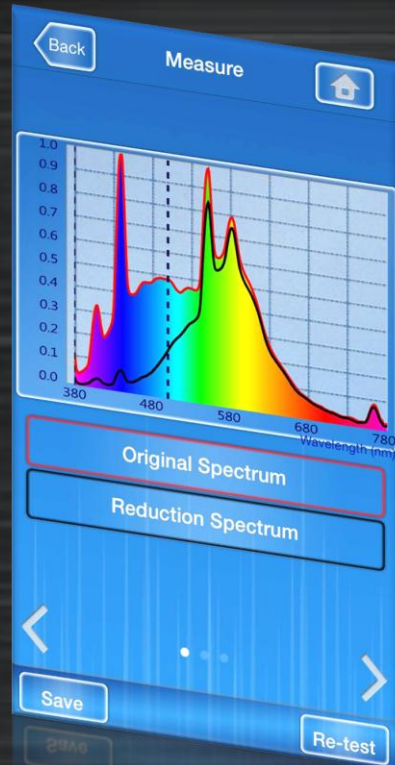
Major safety and wireless certifications approved



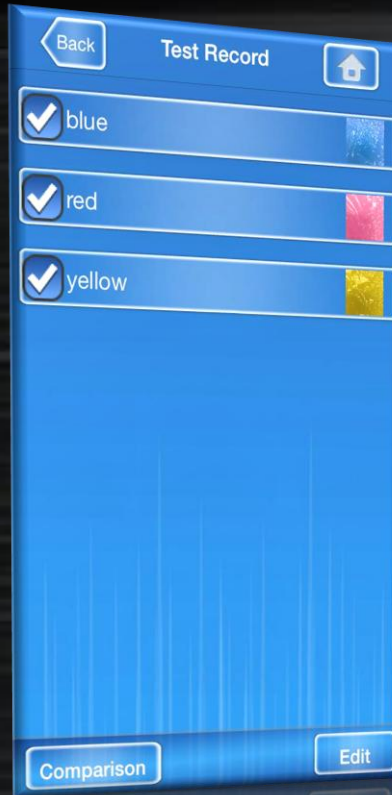
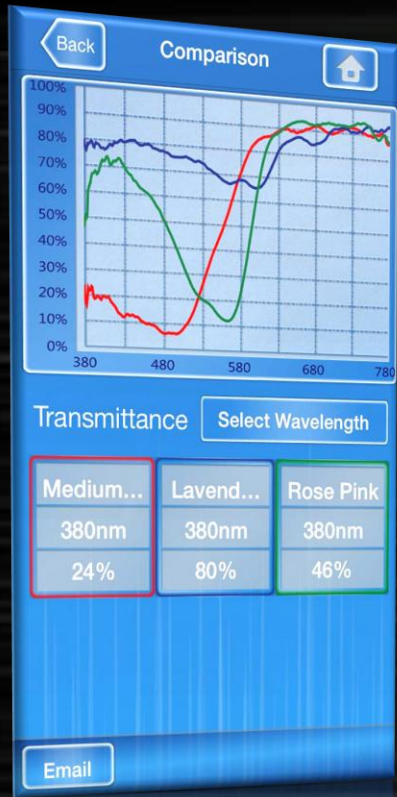
 LIGHTING PASSPORT	Model No : ALP-01 DC 5V \equiv 500mA
FC CONTAINS FCC ID : QOQBLE112 IC : 5123A-BGTBLE112 CMIIT ID : 2013DJ8854  CCAE13LP1170T9	 209 - J00046 RoHS Compliant  Made in Taiwan

Other App for Lighting Passport.

Spectrum Genius Transmittance



Spectrum Genius Transmittance

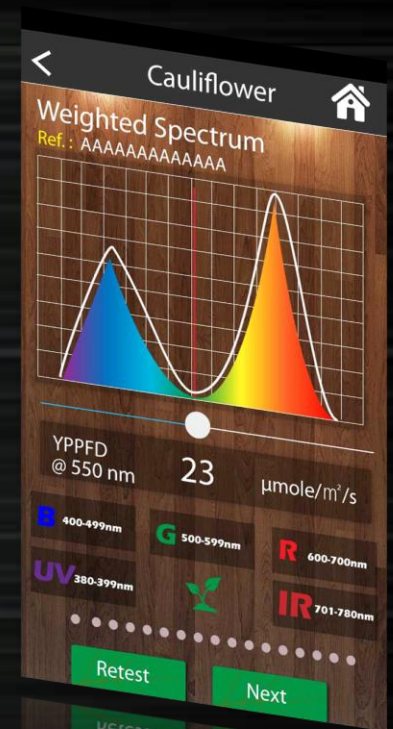
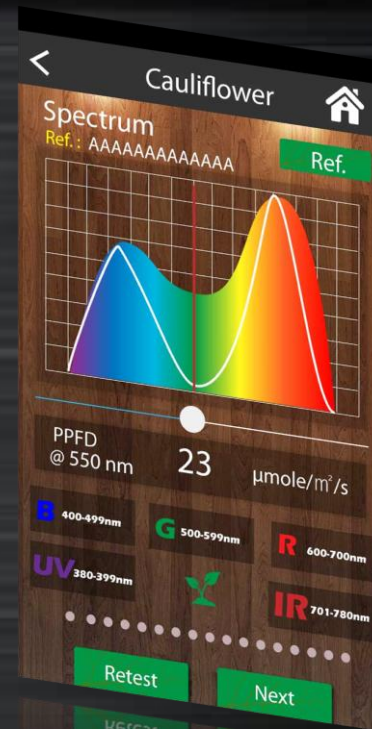


- Users can get the transmittance report of each wavelength, and users can also compare the transmittance of different objects.
- For lighting fixture design, suitable mask or lens with high efficiency and low blue hazard can be chosen.
- **This App can be extensively used in Lens, Filter and Screen Protector.**

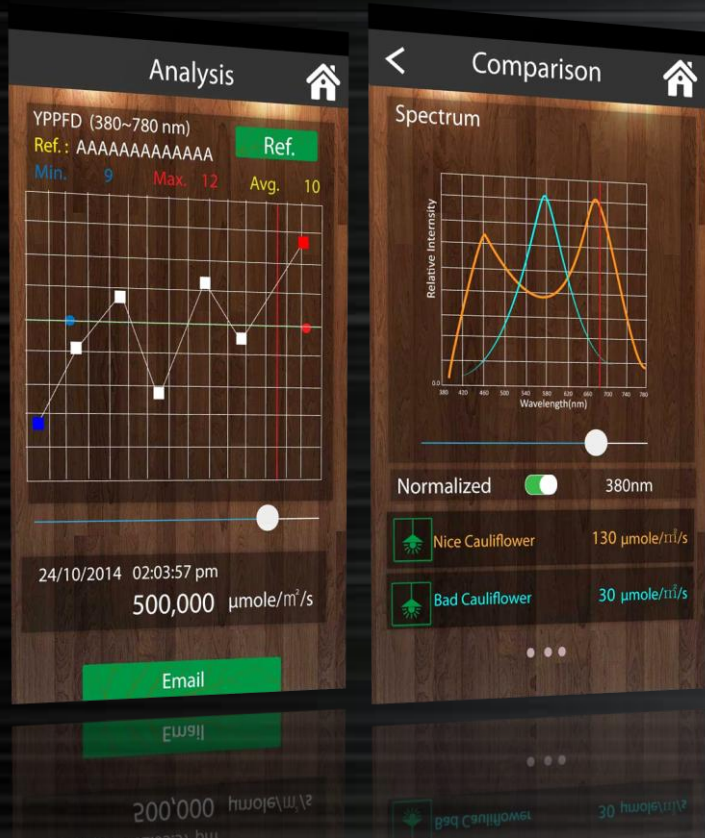


Other App for Lighting Passport.

Spectrum Genius Agricultural Lighting



Spectrum Genius Agricultural Lighting (SGAL)



Users can record daily growth conditions and analyze the data, Sales person can also measure and compare the light needed for plant.

This App can be extensively used in Plant Factory, Horticultural, Plant Growth Lights.



Users can switch the APP by their need

The future has more new APP...



Asensetek will also provide more hardware fittings



Q & A



ASENSETEK

**THE BEST PARTNER
IN LIGHTING INDUSTRY**