

Spectrum Genius

- PC Version -

Instructions

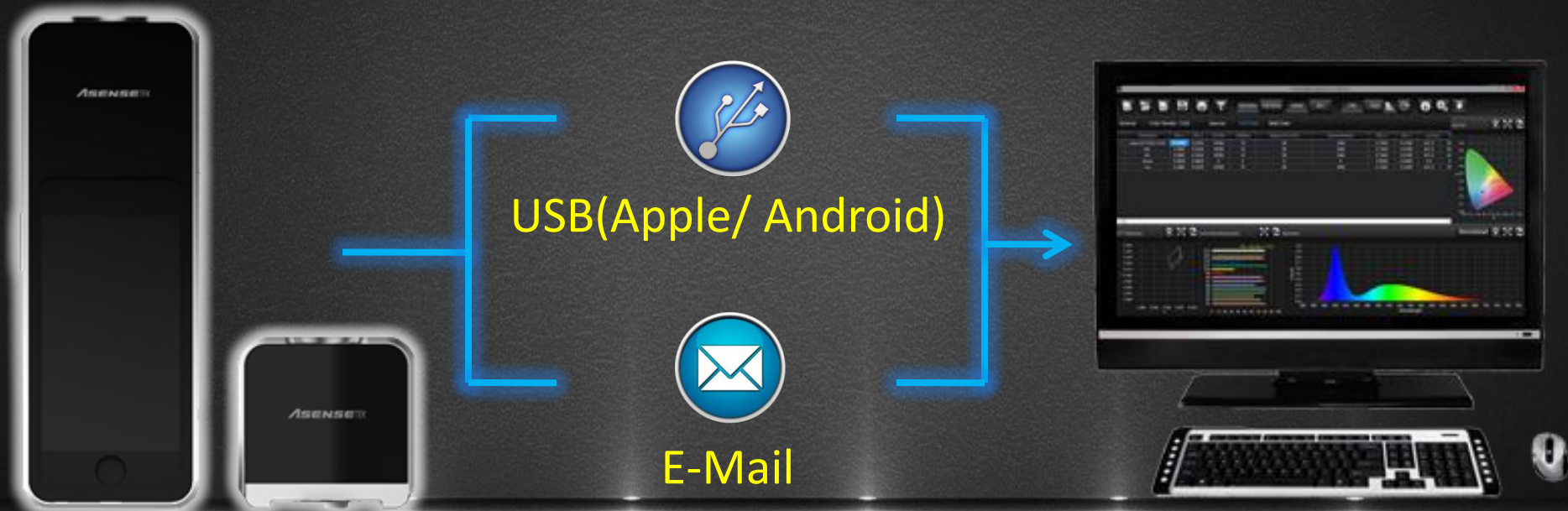


ASENSETEK

VLATECH

1) Transmit the data of Lighting Passport to the PC

◆ Two way to transmit the data



1-1) For "Apple", transmit the data to the PC.



◆ Open the iTunes and make the iDevice connect with the computer, then click the iDevice.



ASENSE TEK

VLA TECH

1-1) For "Apple", transmit the data to the PC.



◆ In the iDevice menu, click the application.



1-1) For "Apple", transmit the data to the PC.



◆ Scroll down the bar



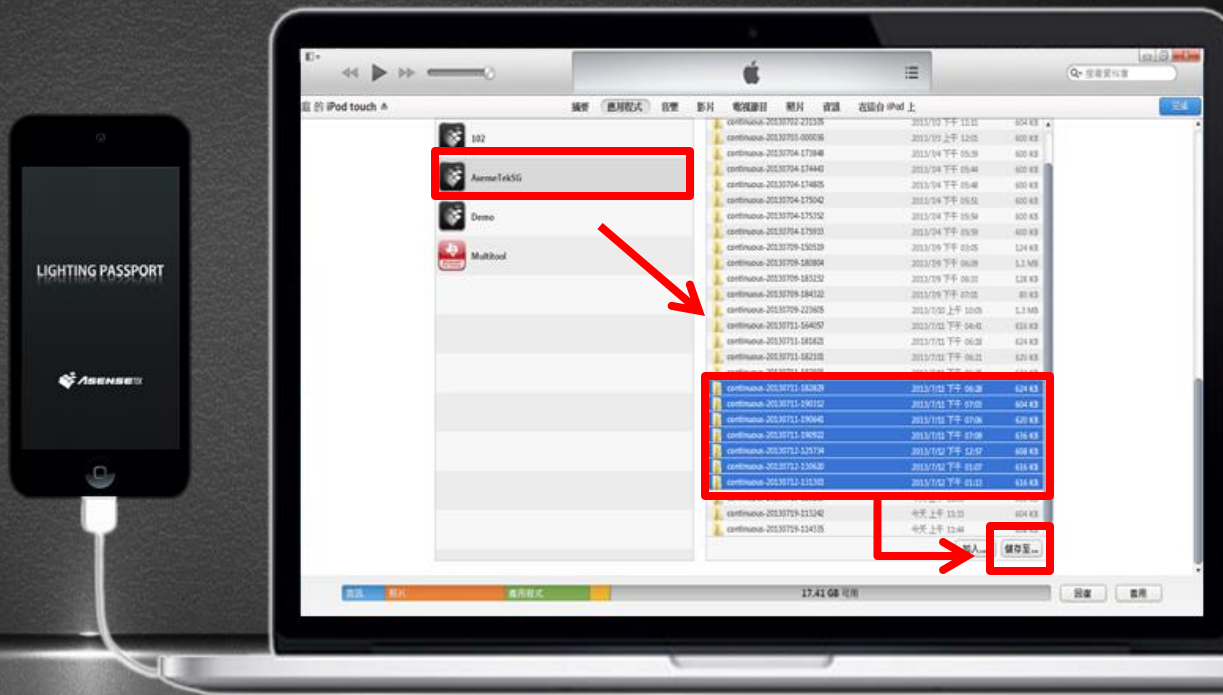
AsenseTek

VIA TECH

1-1) For "Apple", transmit the data to the PC.



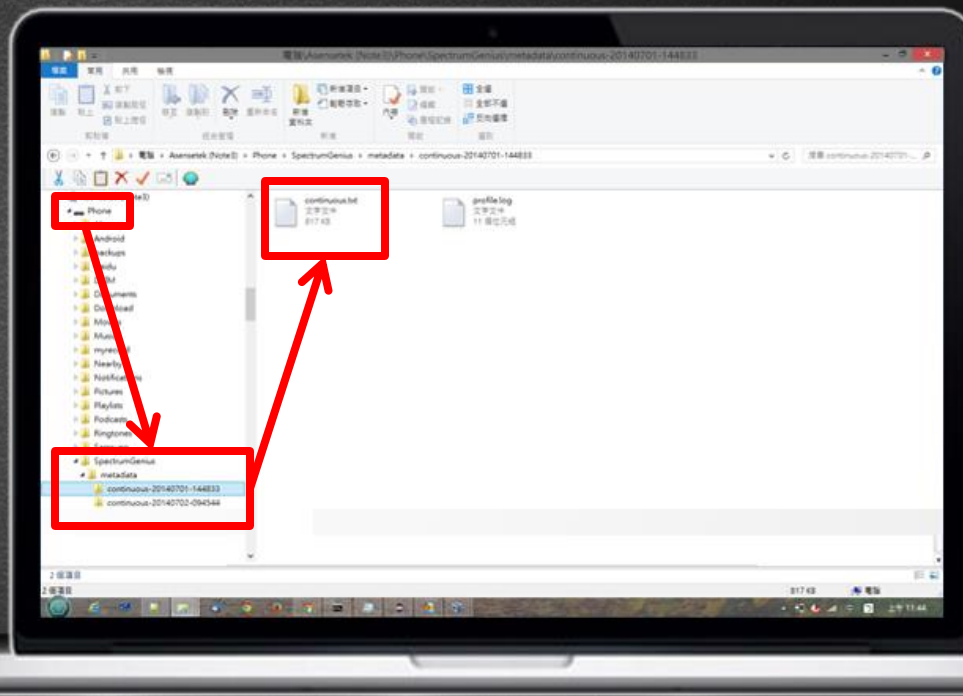
◆ Click the "SGM" folder, select the data, then click the "Save as".



1-2) For "Android", transmit the data to the PC.



◆ Choose your smart device and click the "SpectrumGenius" folder, select the data, then save the **txt data** to the PC folder.



1-3) Transmit the data to the PC by " E-mail "



◆ Click the "Record(s)" and select the data then email to the computer.



2) Execute SPECTRUM GENIUS PC Ver.

◆ Please click the SpectrumGenius.exe to run the program. If you are the Advanced User, remember to insert the Hard Key.



Windows 8 User should install the driver first, the driver is attached in the "USB_Key_Driver " folder in the CD.

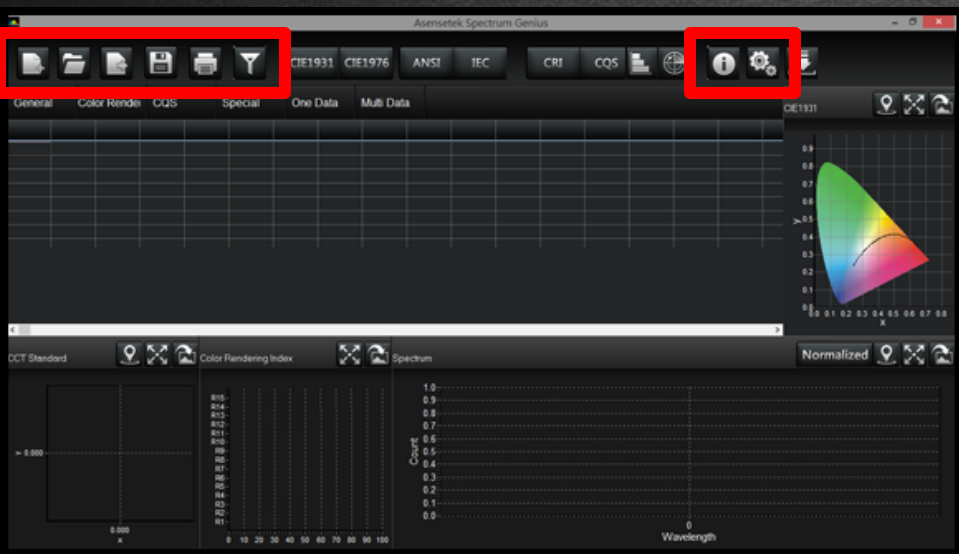










ASENSE TEK



3-1) UI Instruction

◆ Users can use the top left buttons to open the data; save as .dat file or Excel file (.csv); setting data filter and parameter; print the report.



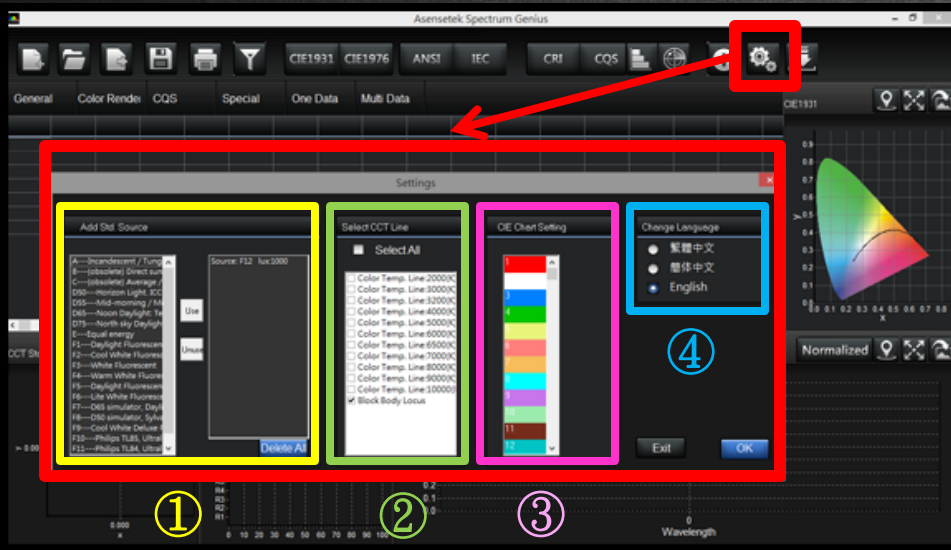
| | | | |
|---|---|---|--|
|  | Import File (APP Data .txt) |  | Print Report |
|  | Open File (Open .csv or .dat) |  | Data Filter (Filtering Criteria) |
|  | Export File (Save as .csv file) |  | About (Version Info.) |
|  | Save File (Save as .dat file) |  | Settings (Parameter settings) |

* ①②③ are for Advanced Users only.

3-2) UI Instruction



In the "Settings" page, users can customize a lot of advanced parameter settings, then get more convenient in analyzing data.



① **Add Std. Source:** Add the benchmark light source to compare with the measurement data.

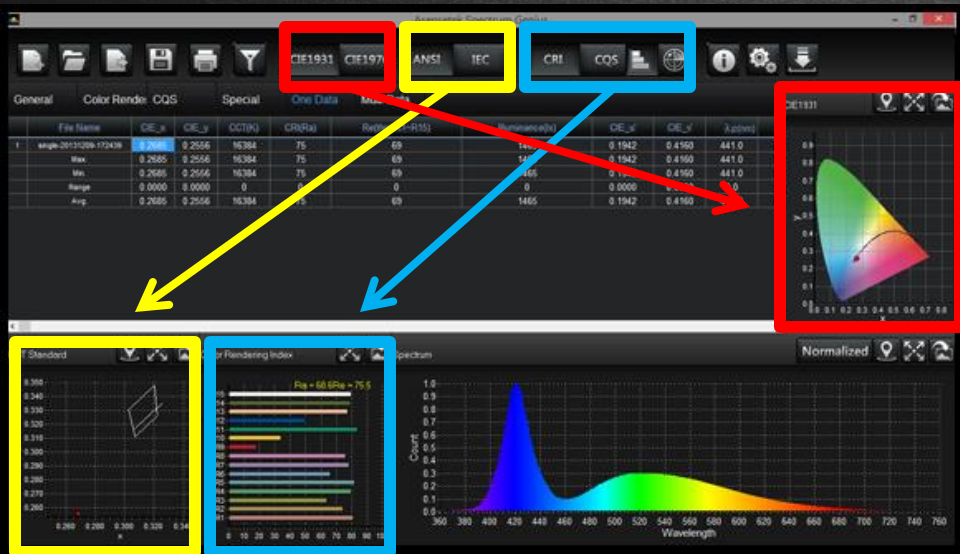
② **Select CCT Line:** Control the display of the Planckian Locus and the Isotemperature Line.

③ **Set Colors of Data :** Set the measure data's color of coordinate point and spectrum line.

④ **Change Language:** Switching the locales.

3-3) UI Instruction

◆ Users can view the different charts by switch.



CIE1931 CIE1976

CIE1931/ CIE1976
(Color Coordinates Switch)

ANSI IEC

C78.377/ SDCM
(CCT Standard Switch)

CRI CQS

CRI/ CQS
(CQS only for Advanced users)

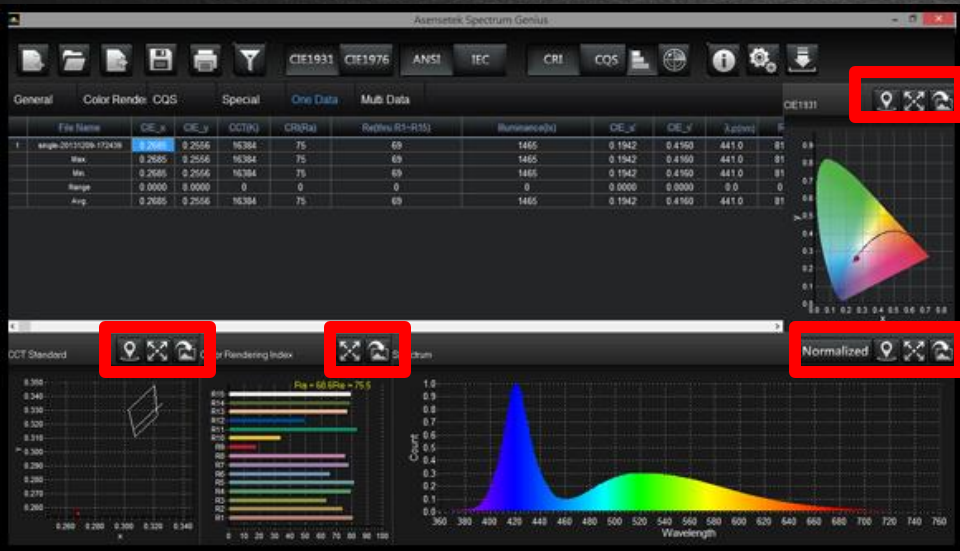


Radar chart/ Bar chart
(For R1 - R15/ Q1 - Q15)

* ①②④ are for Advanced Users only.

3-4) UI Instruction

◆ The small function keys will help users to check the charts by a much convenient way, and save the required chart directly.



①



Show Coordinate
(Show the coordinate on chart)

②



Zoom In/ Zoom Out
(Zoom in/ out the chart.)

③



Save Image
(Save the chart as an image.)

④



Normalized
(Switch the Normalized or not)

3-5) UI Instruction

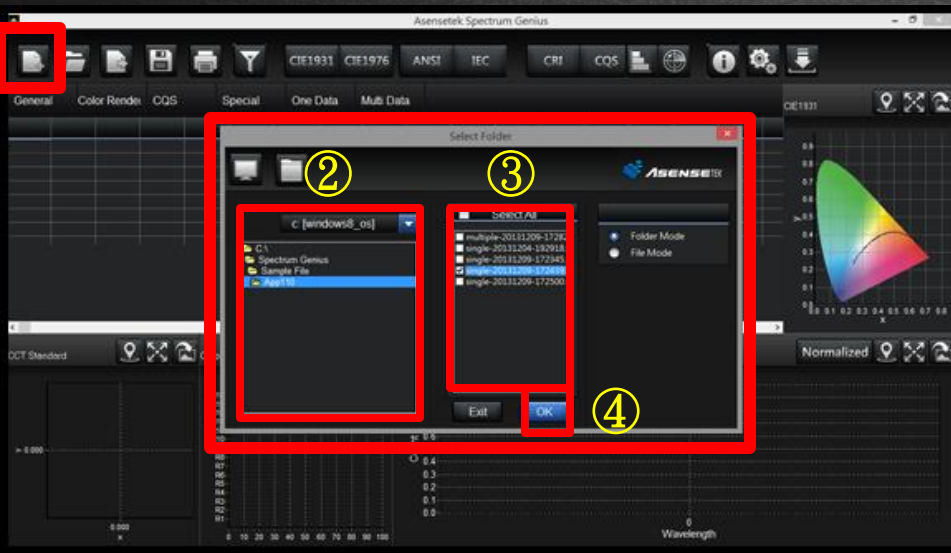
◆ Users can select and check CIE 1931, CIE 1976, C78.377-2008, IEC-SDCM, CRI, CQS, Radar chart, Bar chart.



4) New File – load the measuring data

◆ Click "New File" to choose the folder which you "save as", then select the single, multiple and continuous data (.txt file) you want

①



to analyze and click "OK".

Standard User can only read one continuous data at most, 10 single and multiple data at most one time.

When the hard key is working, the red led will light.



5) General (One Data)

◆ Here, you can check the Max., Min., Range and Avg. of CIE_x, CIE_y, CIE_u', CIE_v', CCT, CRI, Illuminance, λ_p of measuring data.

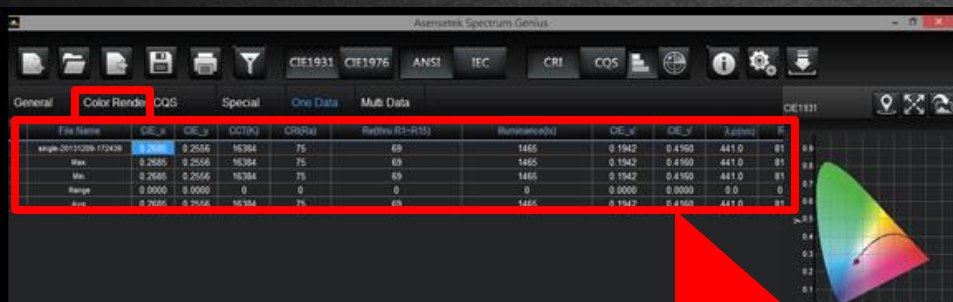
Planckian Locus and Isotemperature Line can be showed by "Select CCT Line" of Settings page.



| | File Name | CIE_x | CIE_y | CCT | CRI | Illuminance | CIE_u' | CIE_v' | λ_p |
|---|------------------------|--------|--------|------|-----|-------------|--------|--------|-------------|
| 1 | single-20130709-133628 | 0.3126 | 0.3312 | 6495 | 74 | 11830 | 0.1969 | 0.4695 | 445.0 |
| | Max. | 0.3126 | 0.3312 | 6495 | 74 | 11830 | 0.1969 | 0.4695 | 445.0 |
| | Min. | 0.3126 | 0.3312 | 6495 | 74 | 11830 | 0.1969 | 0.4695 | 445.0 |
| | Range | 0.0000 | 0.0000 | 0 | 0 | 0 | 0.0000 | 0.0000 | 0.0 |
| | Avg. | 0.3126 | 0.3312 | 6495 | 74 | 11830 | 0.1969 | 0.4695 | 445.0 |

6) CRI

◆ Here, you can check the Max., Min., Range and Avg. of R1 to R15 of measuring data.

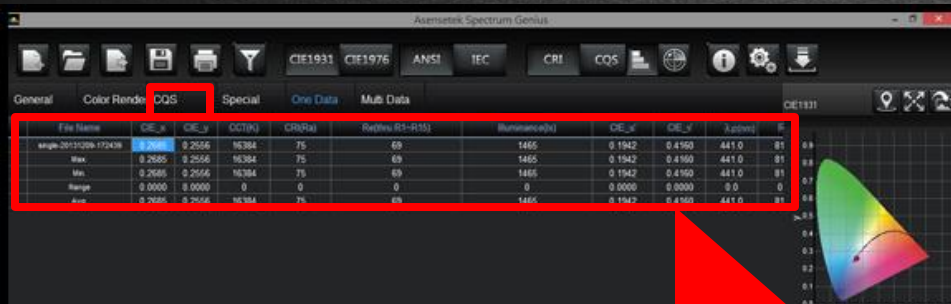


| | File Name | R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | J15 |
|---|------------------------|-------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|
| 1 | single-20130709-133628 | 71.18 | 77.4 | 81.0 | 74.7 | 72.7 | 70.0 | 83.5 | 63.6 | -19.6 | 45.5 | 71.4 | 49.5 | 71.9 | 89.2 | 65.5 |
| | Max. | 71.18 | 77.4 | 81.0 | 74.7 | 72.7 | 70.0 | 83.5 | 63.6 | -19.6 | 45.5 | 71.4 | 49.5 | 71.9 | 89.2 | 65.5 |
| | Min. | 71.18 | 77.4 | 81.0 | 74.7 | 72.7 | 70.0 | 83.5 | 63.6 | -19.6 | 45.5 | 71.4 | 49.5 | 71.9 | 89.2 | 65.5 |
| | Range | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Avg. | 71.18 | 77.4 | 81.0 | 74.7 | 72.7 | 70.0 | 83.5 | 63.6 | -19.6 | 45.5 | 71.4 | 49.5 | 71.9 | 89.2 | 65.5 |

* This function is for Advanced Users only.

7) CQS

◆ Here, you can check the Max., Min., Range and Avg. of Q1 to Q15 of measuring data.



| | File Name | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|---|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | single-20130709-133628 | 73.1 | 87.3 | 71.8 | 65.8 | 67.9 | 69.7 | 76.9 | 87.1 | 79.7 | 60.2 | 53.6 | 52.0 | 52.1 | 27.7 | 46.7 |
| | Max. | 73.1 | 87.3 | 71.8 | 65.8 | 67.9 | 69.7 | 76.9 | 87.1 | 79.7 | 60.2 | 53.6 | 52.0 | 52.1 | 27.7 | 46.7 |
| | Min. | 73.1 | 87.3 | 71.8 | 65.8 | 67.9 | 69.7 | 76.9 | 87.1 | 79.7 | 60.2 | 53.6 | 52.0 | 52.1 | 27.7 | 46.7 |
| | Range | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Avg. | 73.1 | 87.3 | 71.8 | 65.8 | 67.9 | 69.7 | 76.9 | 87.1 | 79.7 | 60.2 | 53.6 | 52.0 | 52.1 | 27.7 | 46.7 |

* Standard User only can check Qa, λ_d and Purity.

8) Special

◆ Here, you can check the Max., Min., Range and Avg. of Qa, λ_d , Purity, FWHM, PPFD, SP Ratio of measuring data.

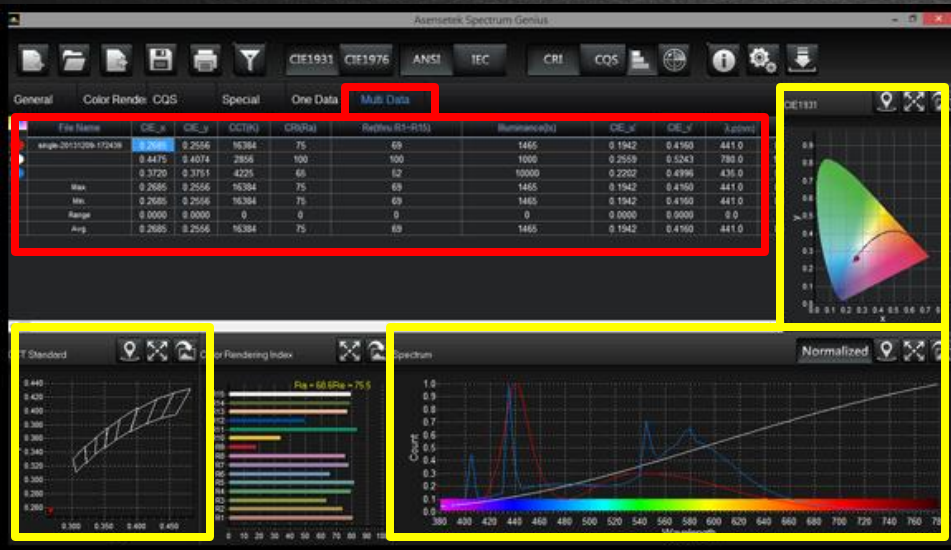


| | File Name | Qa | λ_d | Purity | FWHM | PPFD | SP ratio |
|---|------------------------|------|-------------|--------|------|-------|----------|
| 1 | single-20130709-133628 | 64.8 | 490.4 | 0.1 | 32.7 | 100.3 | 2.1 |
| | Max. | 64.8 | 490.4 | 0.1 | 32.7 | 100.3 | 2.1 |
| | Min. | 64.8 | 490.4 | 0.1 | 32.7 | 100.3 | 2.1 |
| | Range | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Avg. | 64.8 | 490.4 | 0.1 | 32.7 | 100.3 | 2.1 |

9) General (Multi Data)

◆ This function can support you to **analyze and compare** two or more measuring data. In the charts (**yellow box**), users can not only

check the bits at corresponding positions of those data, can also go to "Settings" page to add the custom benchmark light source, and compare with the Lighting Passport measurement data.

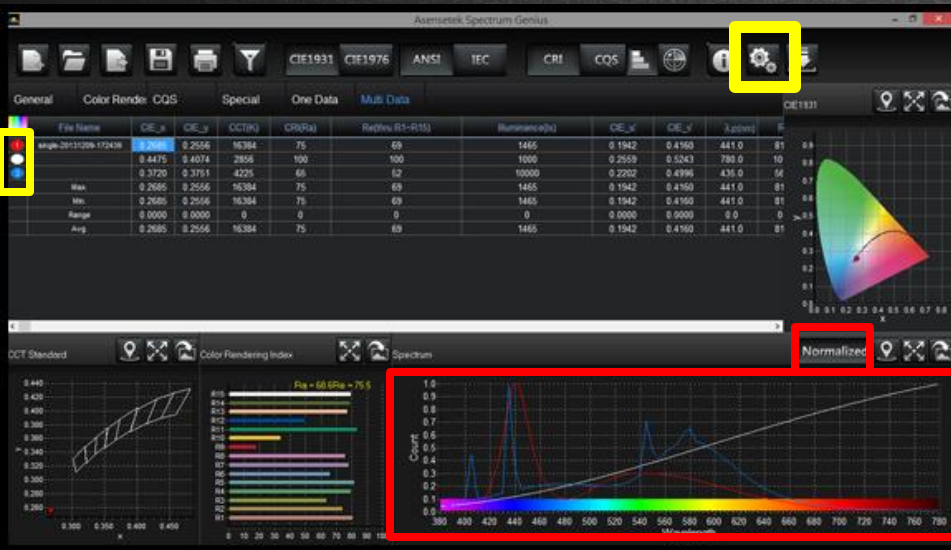


* This function is for Advanced Users only.

10) Normalized and Palette Generators(Multi Data)

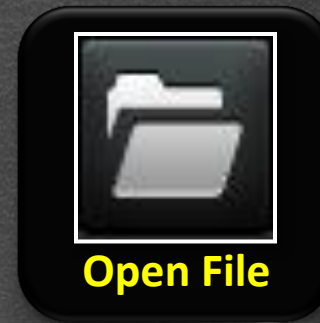
◆ "Normalized" button can switch the normalization display in the spectrum chart of all measuring data; users can also change the label

color of data items in the "Settings" page, and the data's spectrum color line will follow the setting change.



11) Open File/ Save File

◆ After you review the measurement data, You can save this project as **".dat file"** (maybe you have multiple measurement data) by the third icon **"Save File"**; You can open **".dat file"** and **"excel file"** by the second icon **"Open file "**.



12) Export

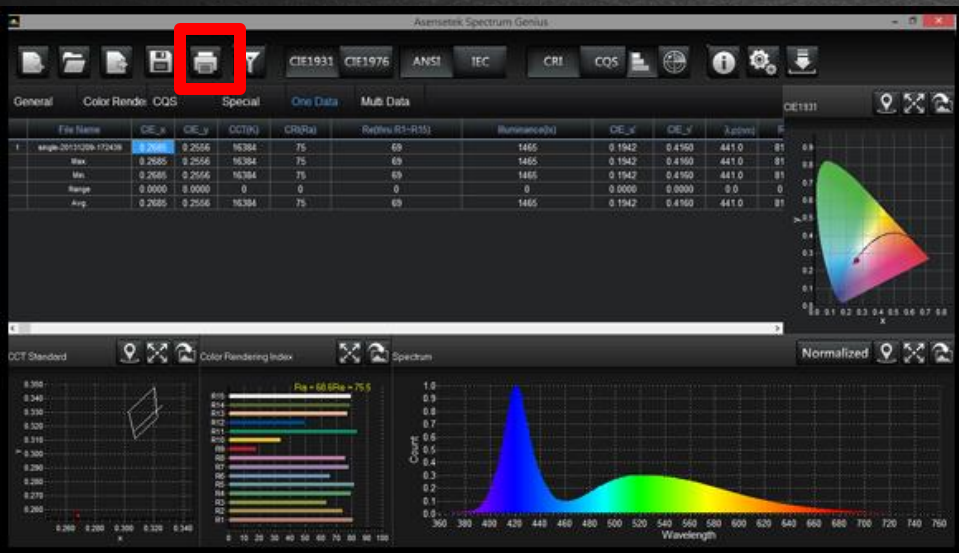
◆ You can export the Excel (.csv) form.



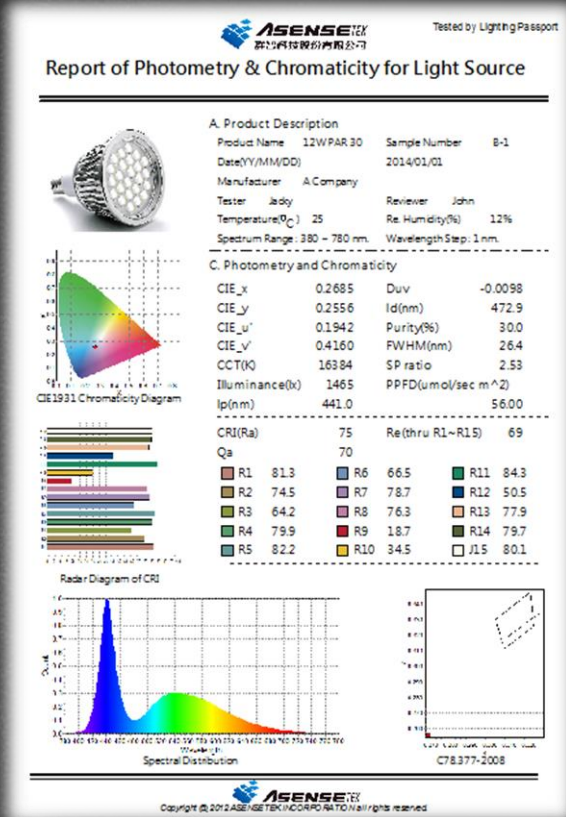
| | A | B | C | D | E | F | G | H | I |
|----|------------|--------|--------|------|-----|-------------|--------|--------|---|
| | File Name | CIE_x | CIE_y | CCT | CRI | Illuminance | CIE_u' | CIE_v' | |
| 1 | continuous | 0.4764 | 0.4177 | 2537 | 97 | 28142 | 0.27 | 0.5325 | |
| 2 | | 0.4773 | 0.4177 | 2526 | 97 | 29295 | 0.2705 | 0.5326 | |
| 3 | | 0.4774 | 0.4177 | 2524 | 97 | 44432 | 0.2706 | 0.5327 | |
| 4 | | 0.4771 | 0.4172 | 2525 | 97 | 29442 | 0.2706 | 0.5324 | |
| 5 | | 0.4768 | 0.4179 | 2534 | 97 | 45476 | 0.2701 | 0.5327 | |
| 6 | | 0.4771 | 0.4181 | 2532 | 97 | 45898 | 0.2702 | 0.5328 | |
| 7 | | 0.477 | 0.4175 | 2529 | 97 | 43606 | 0.2704 | 0.5325 | |
| 8 | | 0.4763 | 0.4173 | 2530 | 97 | 45874 | 0.27 | 0.5324 | |
| 9 | | 0.4771 | 0.418 | 2536 | 97 | 46829 | 0.2703 | 0.5327 | |
| 10 | | 0.475 | 0.4184 | 2560 | 97 | 43399 | 0.2687 | 0.5326 | |
| 11 | | 0.476 | 0.4176 | 2542 | 97 | 47121 | 0.2697 | 0.5324 | |
| 12 | | 0.4766 | 0.4178 | 2536 | 97 | 28176 | 0.27 | 0.5326 | |
| 13 | | 0.4755 | 0.4173 | 2555 | 97 | 24098 | 0.2695 | 0.5322 | |
| 14 | | 0.4779 | 0.418 | 2521 | 97 | 43162 | 0.2708 | 0.5329 | |
| 15 | | 0.4753 | 0.4183 | 2522 | 97 | 44919 | 0.269 | 0.5326 | |
| 16 | | 0.4774 | 0.4175 | 2526 | 97 | 41069 | 0.2707 | 0.5326 | |
| 17 | | 0.4777 | 0.4178 | 2522 | 97 | 28452 | 0.2705 | 0.5328 | |
| 18 | | 0.4771 | 0.4174 | 2526 | 97 | 46848 | 0.27 | 0.5325 | |
| 19 | | 0.4768 | 0.4182 | 2536 | 97 | 43948 | 0.2709 | 0.5331 | |
| 20 | | 0.4784 | 0.4184 | 2517 | 97 | | | | |

13-1) Print Report

◆ You can print the professional report.

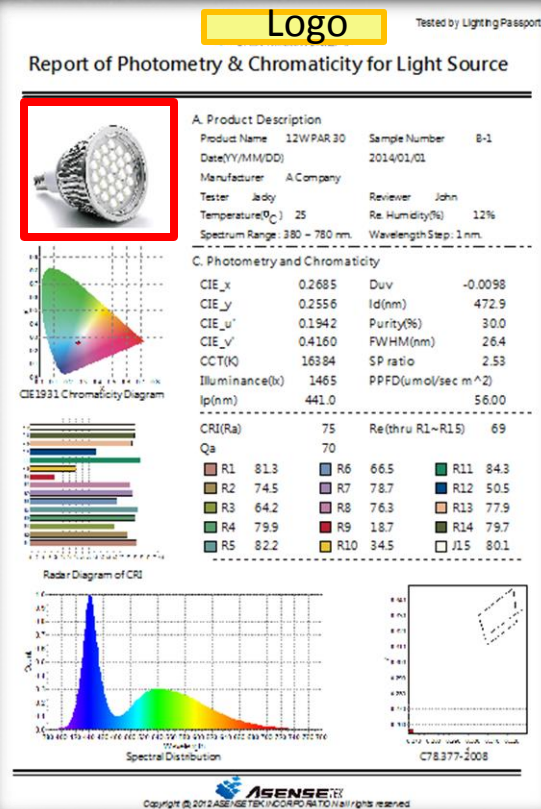
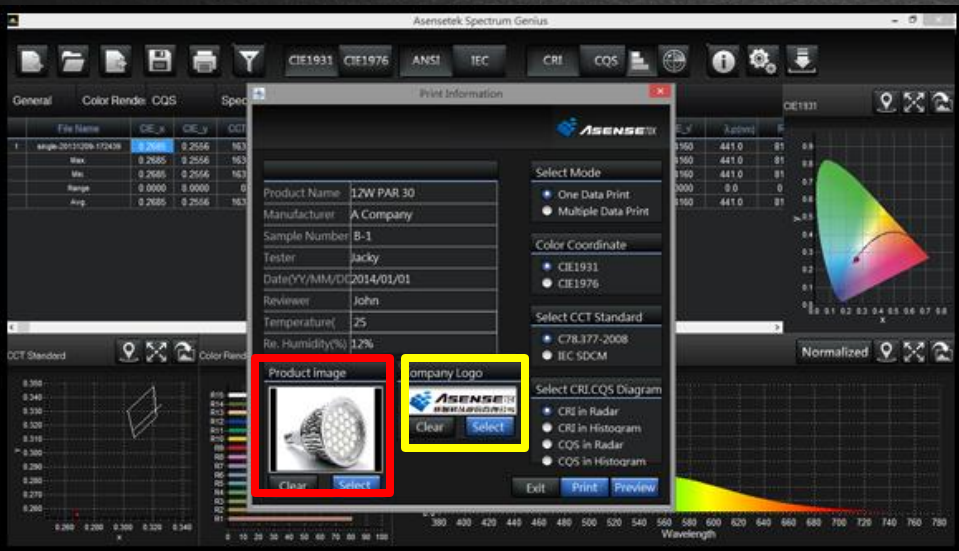


Print Report



13-2) Print Report

- ◆ You can also add the product picture in the reports.
- * Advanced User can put their logo on the report.

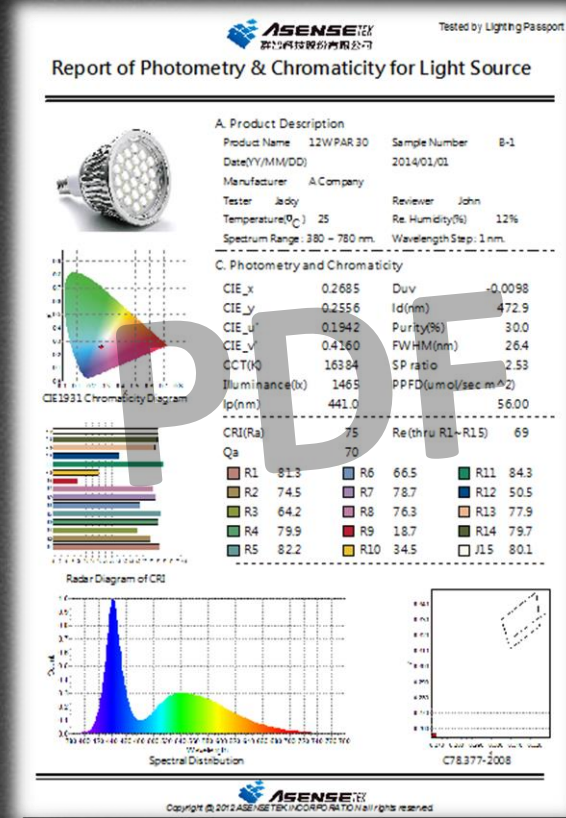


13-3) Print Report

◆ If users want to export the **PDF file**, please download and install the **PDF Printer**.

(* Please refer Bullzip website and get a free download.)

◆ In the preview page, please click the "Printer Setup" and choose the **Bullzip PDF Printer** as the export printer, then click the "Print" to export the **PDF file**.

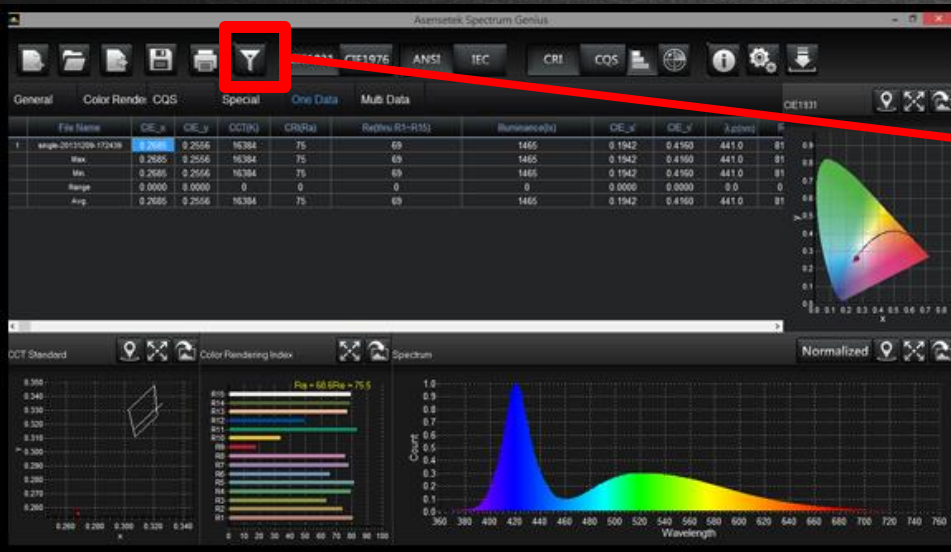


ASENSE TEK

VIA TECH

14) Data Filter

◆ You can set up the lower limit and upper limit Here, and the filter will show the irregular data by red.



The screenshot shows the 'Data Filter' dialog box. A red box highlights the 'CCT' column in the 'Upper Limit' and 'Lower Limit' rows. The values are set to 5000 and 5500 respectively. The text 'Min. 5000' and 'Max. 5500' is overlaid on the dialog.

| | | CRI | CQS | Special | CCT |
|---|------------------------|--------|--------|---------|-----|
| | File Name | CIE_x | CIE_y | CCT | |
| 1 | single-20130709-133628 | 0.3126 | 0.3312 | 6495 | 7 |
| 2 | single-20130709-133808 | 0.3377 | 0.3680 | 5315 | 76 |
| 3 | single-20130709-133956 | 0.4766 | 0.4174 | 2532 | 0 |
| | Max. | 0.4766 | 0.4174 | 6495 | |
| | Min. | 0.3126 | 0.3312 | 2532 | |
| | Average | 0.1640 | 0.0862 | | |
| | | 0.3756 | | | |

15) Update

◆ Users can click the “Check Version” button to download the newest version in the start menu, or click the top right “Update” key.

