

SEKONIC

merging technology for the next generation of
image makers

Abstract blue smoke or liquid swirls on a dark blue background, creating a sense of motion and fluidity.

INTRODUCING THE SPECTROMASTER C-800

The Ultimate Tool for Color Interpretation and Control.



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WHAT IS THE SPECTROMASTER C-800?

- SPECTROMETER (COLOR METER)

- Measures Color Temperature (K)
- Expanded Color Interpretation
- Provides Color Compensation DATA
- For Film or Digital, Still or Motion
- For all Light Sources

- ILLUMINANCE METER

- Measures Brightness of Light Sources
- Provides LUX, Foot-Candle, LUX SECOND and FOOT-CANDLE Second Measurements
- Provides AMBIENT or FLASH Measurements



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WHO NEEDS THE SPECTROMASTER?



- COLOR BALANCE
 - ALL LIGHT SOURCES (LED, HMI, FLUORESCENT, ETC)
 - CAMERA AND LIGHT SOURCES (WHITE BALANCE)
- COLOR CONTROL
 - CREATIVE LIGHTING
 - ACCURATE COLOR REPRODUCTION
- BRIGHTNESS CONTROL
 - CONSISTENT AND EVEN LIGHTING

WHY THE C800 SPECTROMASTER?

Key Features:



- **Measures all light sources**

(LED, HMI, Fluorescent, Tungsten, Natural and Flash)

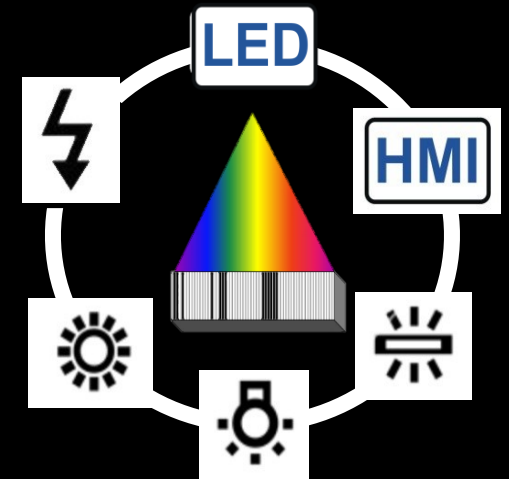
- **Fine Pitch Output Wavelength** *(in 1 nm)*

- **Wide Color Temp Range** (1,600 to 40,000K)

- **Wide Illumination Range** (1 to 200,000lx, 20 to 20,480lx·s)

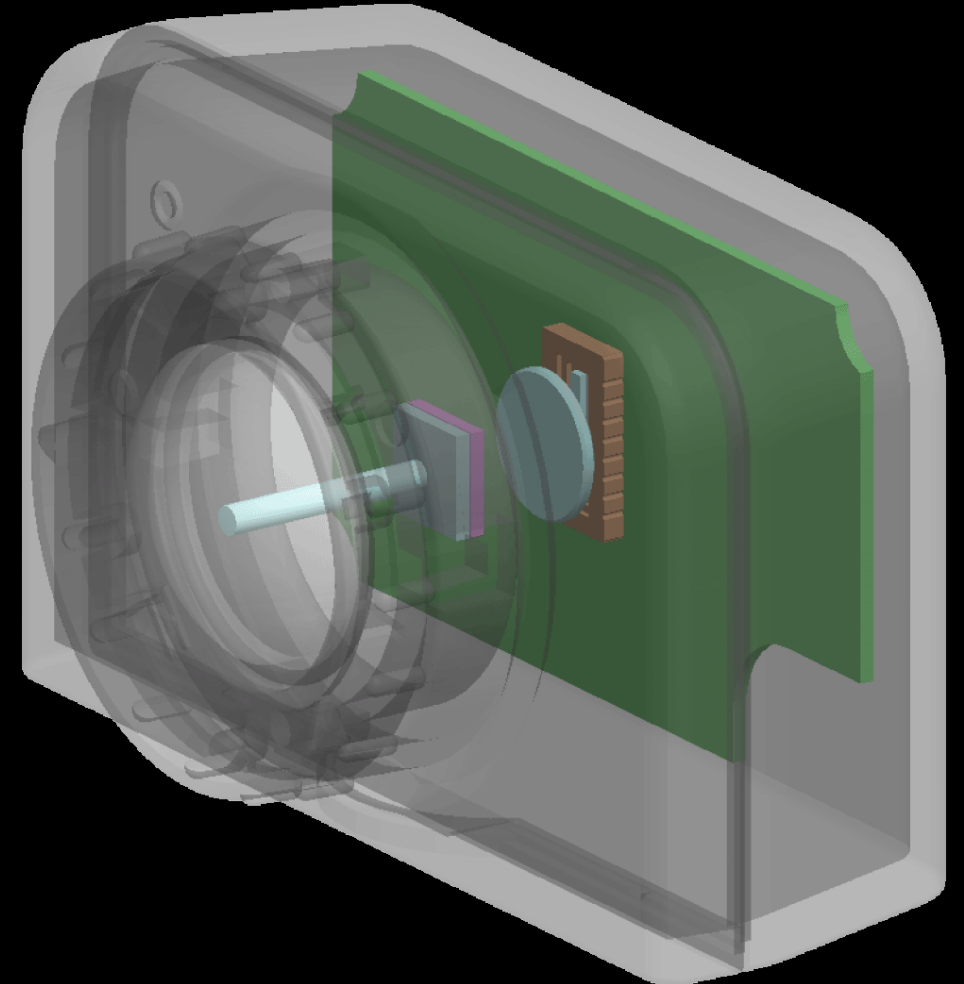
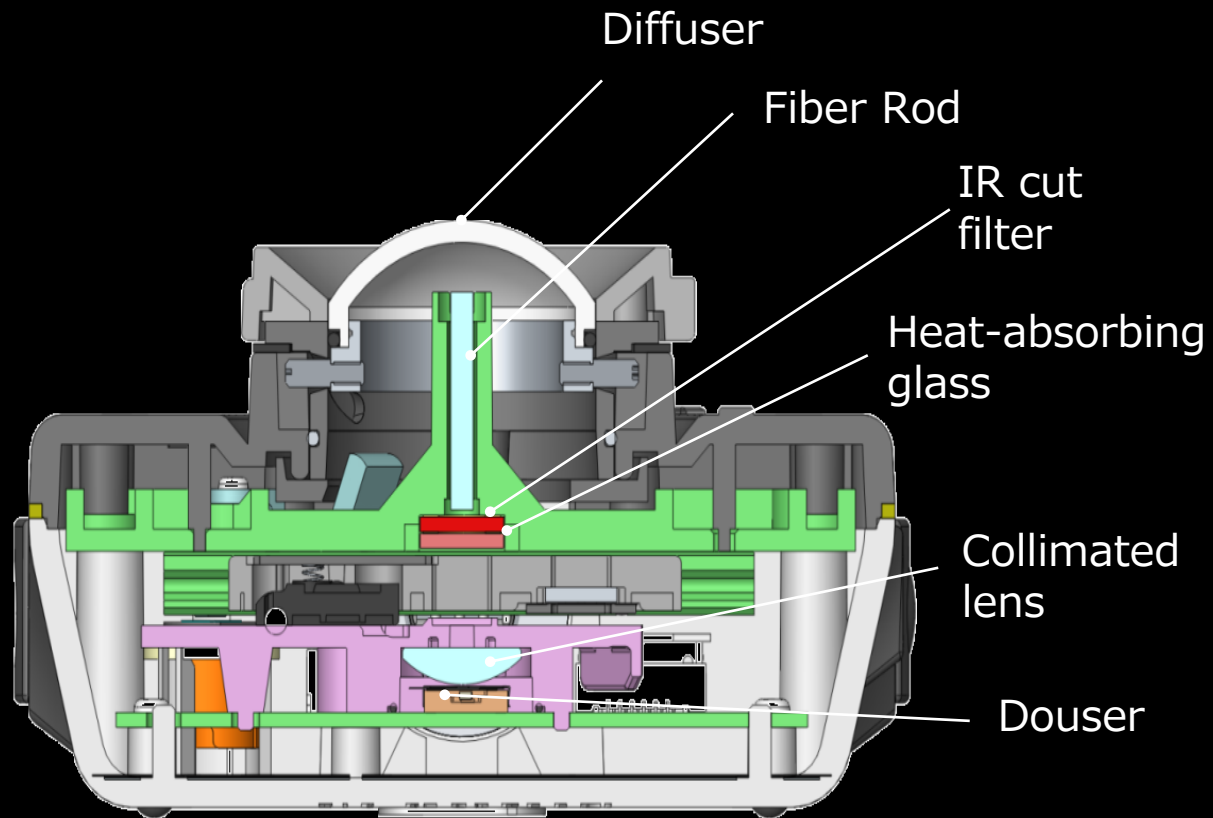
- **Full Spectral Data** (Spectrum Graph, Comparisons)

- **Multiple measuring modes** (Kelvin, Illuminance, CRI, CRI Comparison, TM-30, SSI, TLCI/TLMF, Color Correction LB/CC Filters, White Balance, Delta UV)



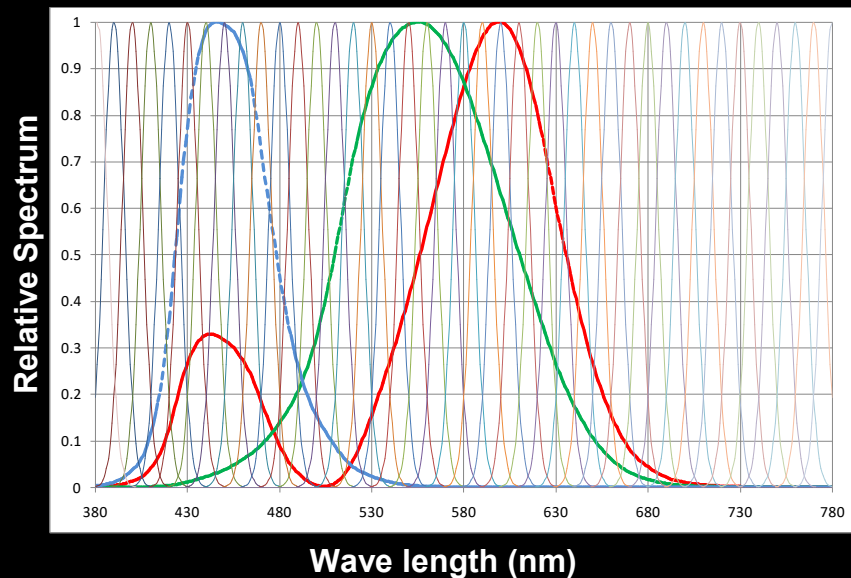
THE HEART OF C-800 SERIES TECHNOLOGY

Incorporates CMOS Linear Sensor



C-800 VS VISUAL COLOR SPECTRUM

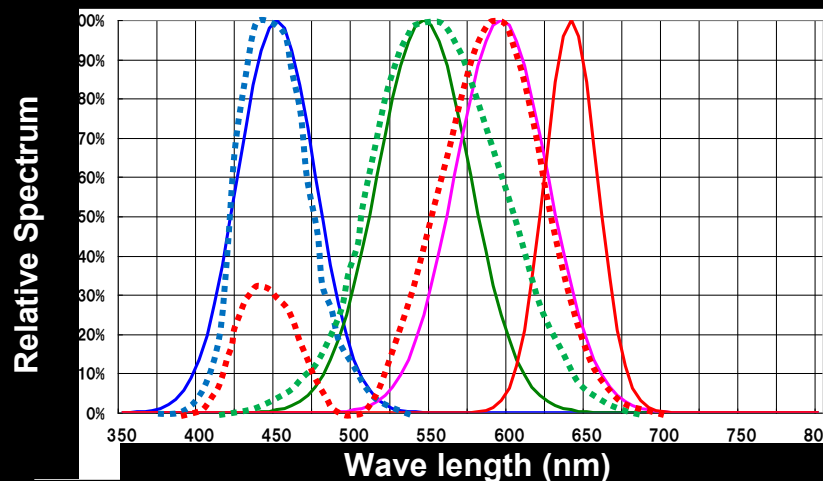
C-800 (Spectrum Characteristic)



..... $X(\lambda)$ $Y(\lambda)$ $Z(\lambda)$

- SPECTROMETER Designed for Photo/Video Shooters
- 1 NANOMETER output wavelength pitch
- Accurate measurements of all light sources including Led, HMI and FLUORESCENT

C-500 (Four Sensors' Spectrum Characteristic)



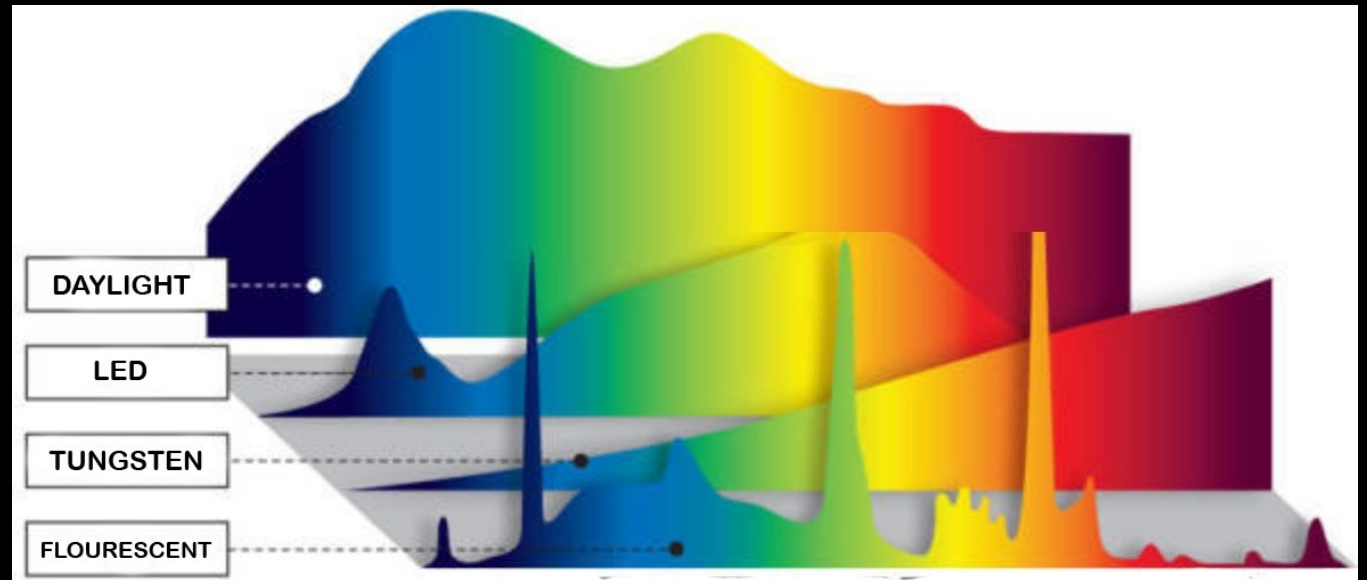
— Blue — Green Red(D) — Red(F)

- Conventional Color Meter can't see the full spectrum of LED, OLED, Etc.
- Traditional color reference standards no longer apply to new light source (blackbody radiator)
- CRI (Color Rendering Index) is no longer the preferred standard of color referencing

ACCURATELY MEASURES COLOR CHARACTERISTICS OF ALL LIGHT SOURCES

Sekonic's CMOS Linear Sensor Precisely measures any light source

- MEASURE LED, FLUORESCENT, TUNGSTEN, HMI, DAYLIGHT, FLASH AND ALL NATURAL SOURCES
- ACCURATELY MEASURE LED LIGHTING
- ACCURATELY MEASURE FLUORESCENT LIGHTING.
- VISUALLY DISPLAY AND COMPARE LIGHT FROM DIFFERENT SOURCES.





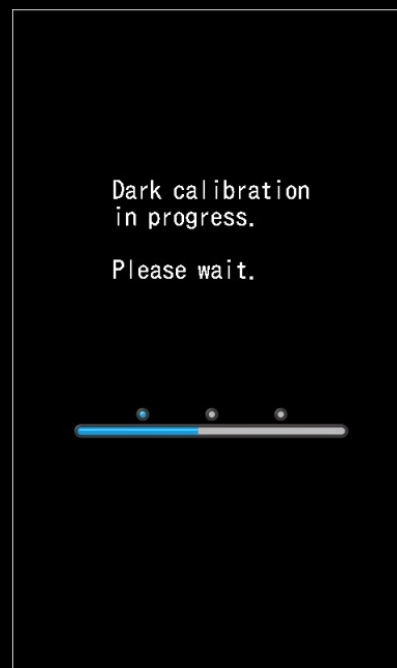
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SPECTROMASTER C-800

QUICK TOUR



Power Up



Before measuring, select
Ambient or Flash mode

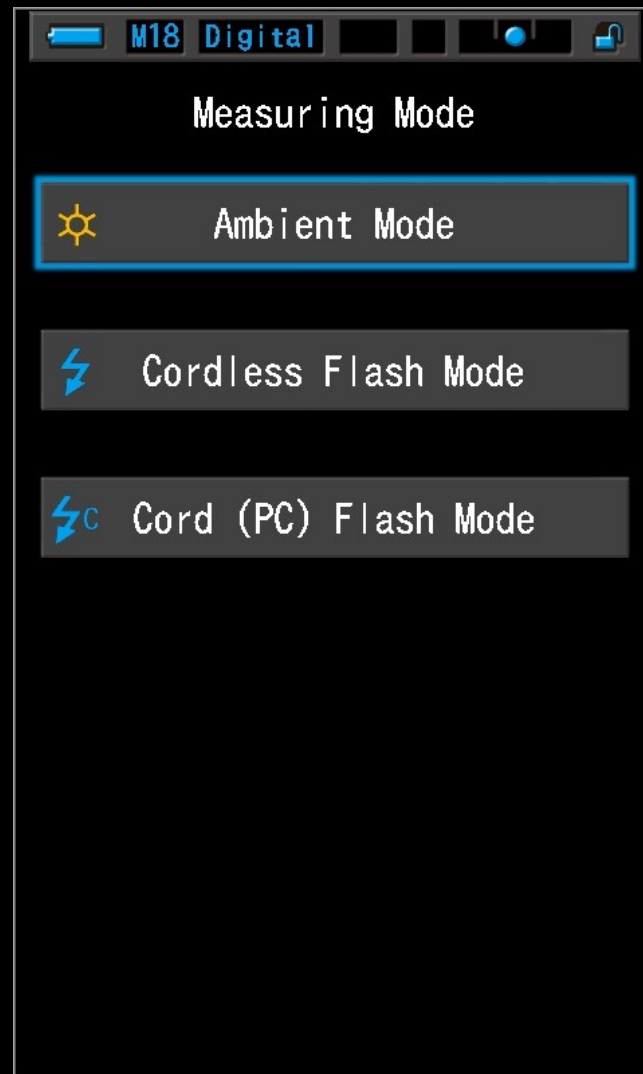
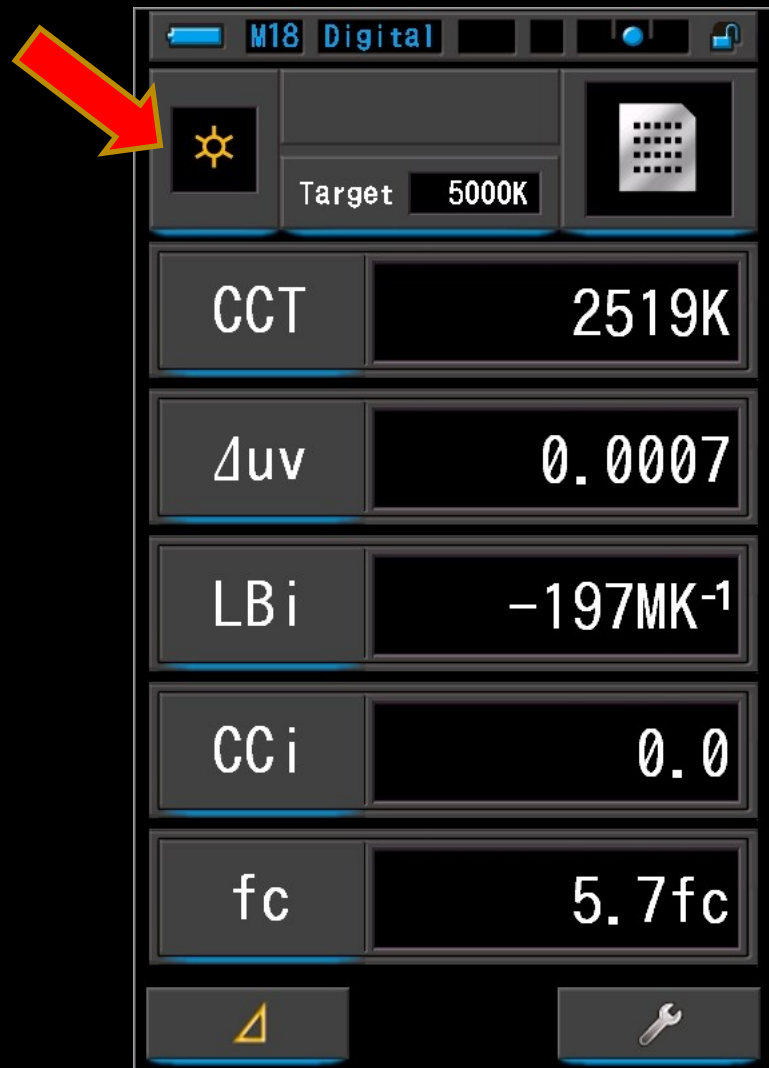


Display Modes

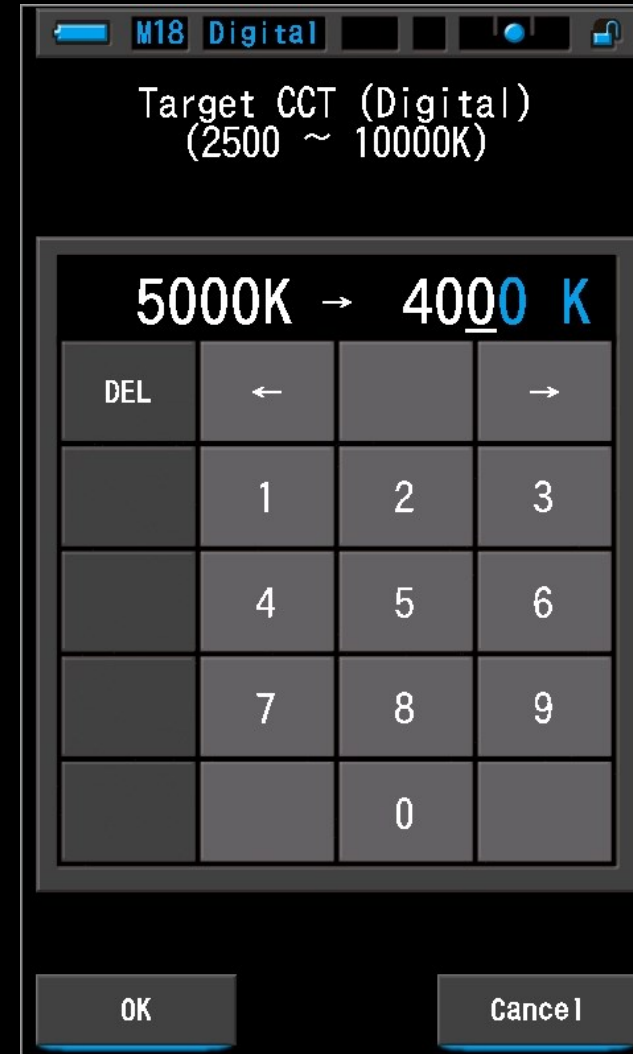


Text Screen

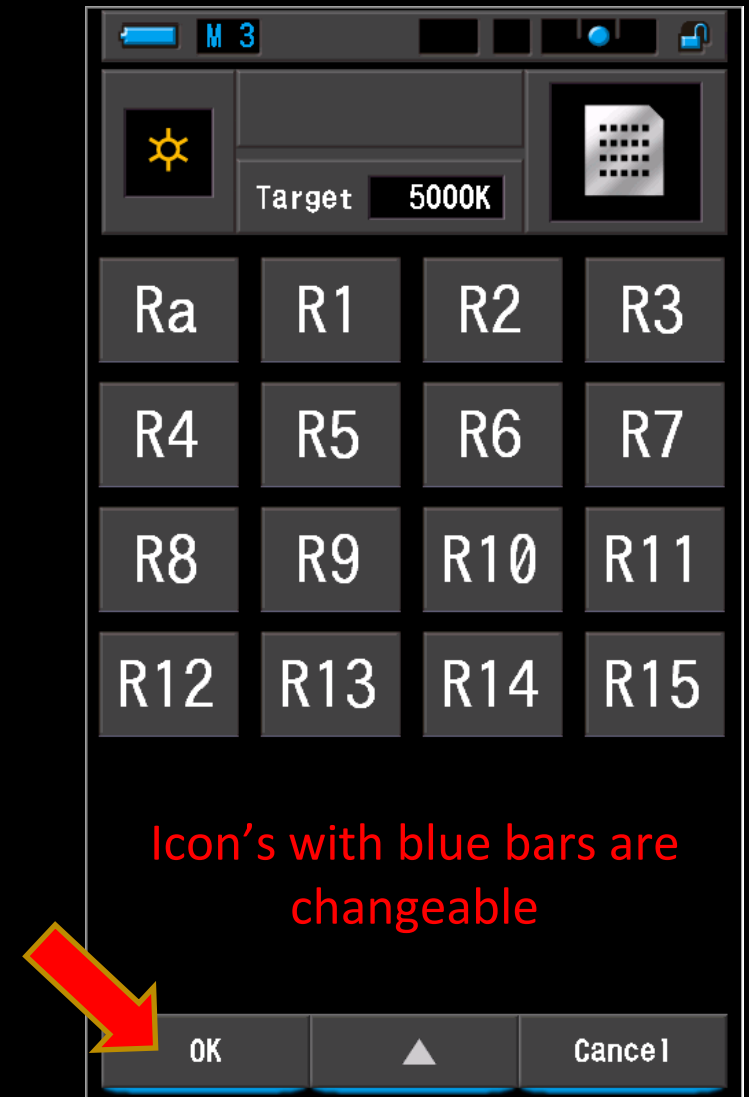
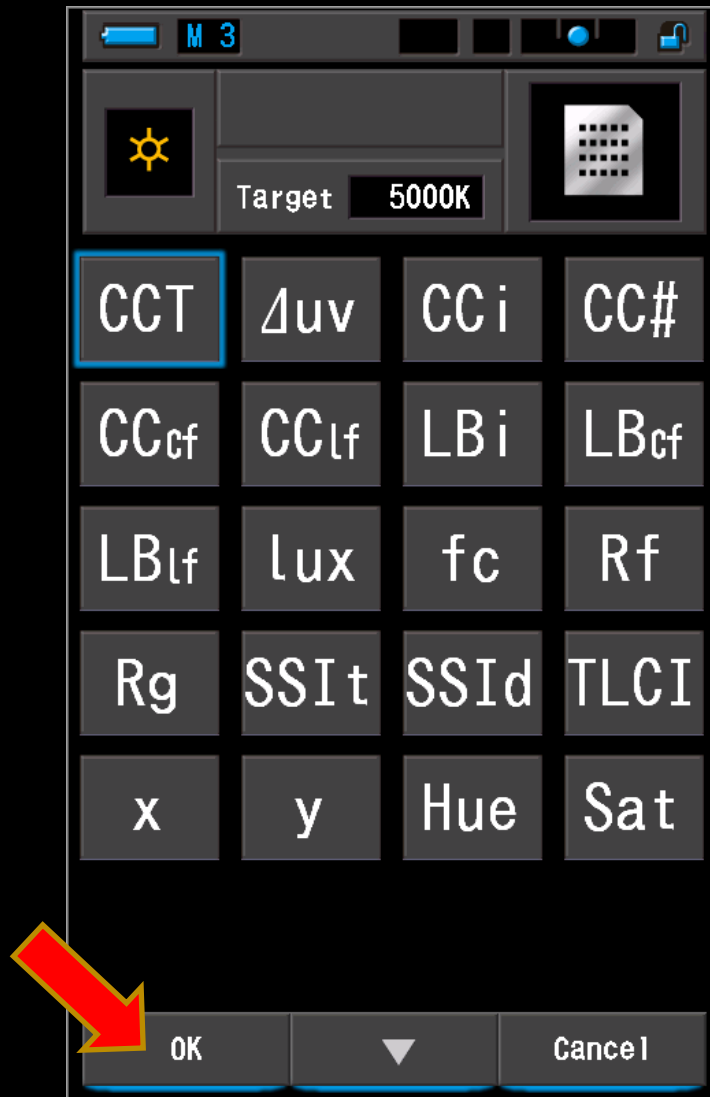
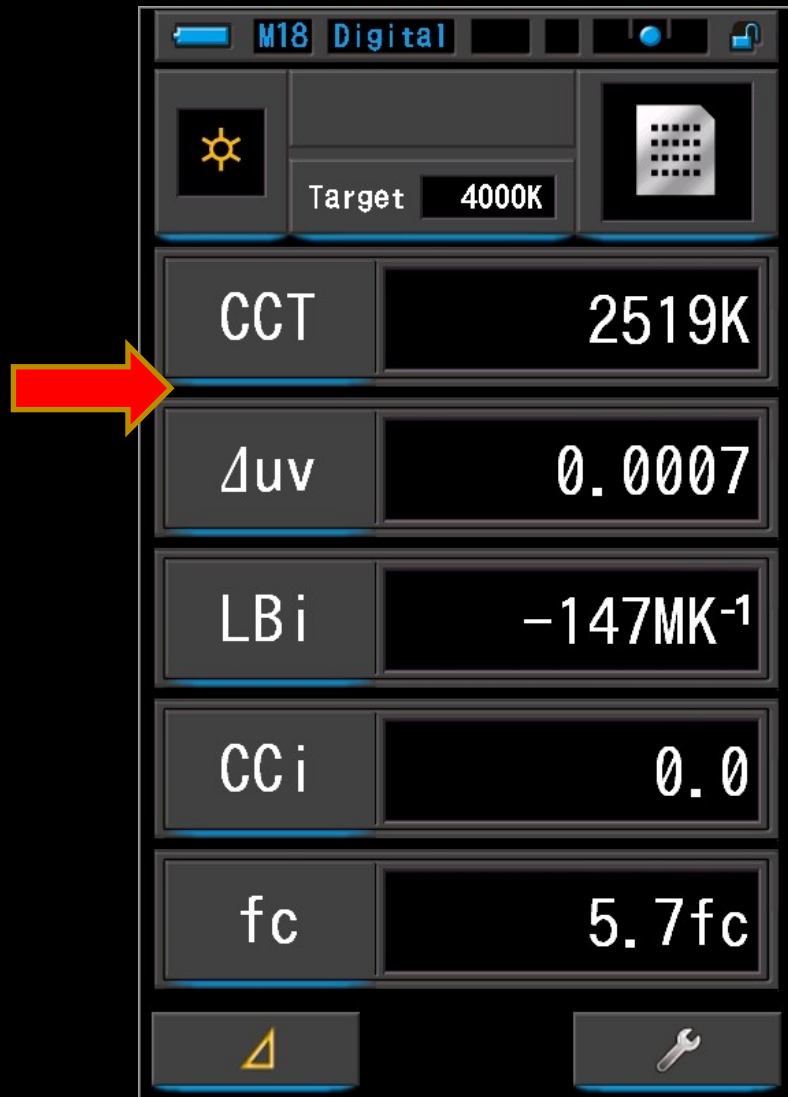
Before measuring, select
Ambient or Flash mode



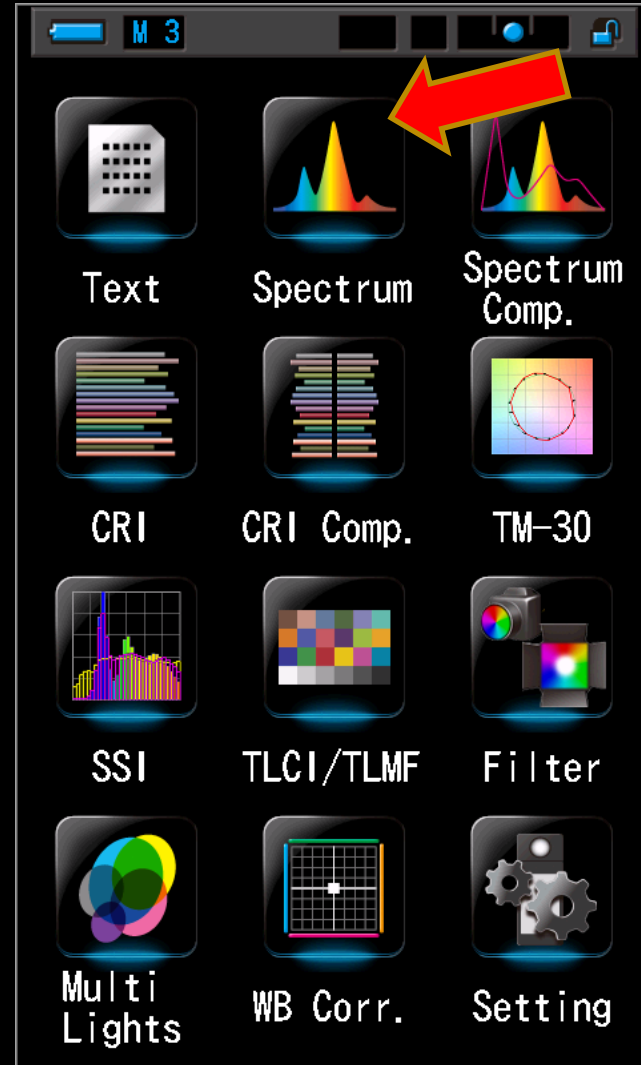
Selecting Kelvin Temperature



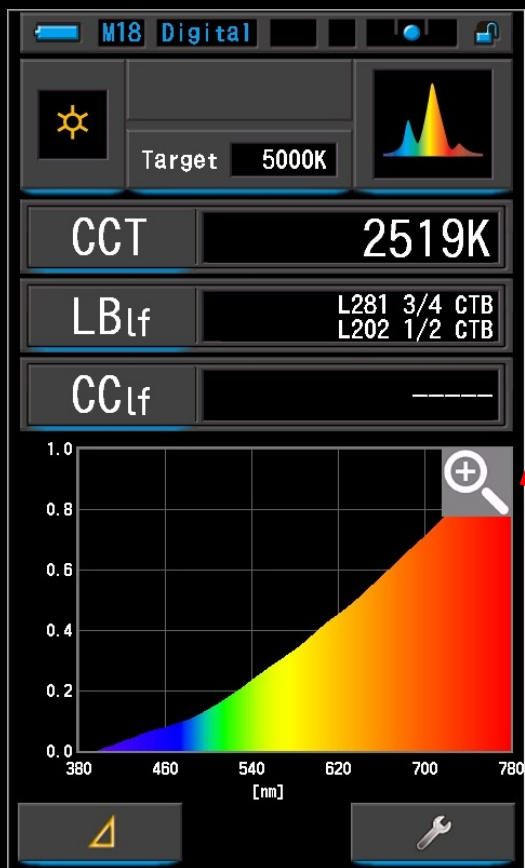
Selecting the Display Item



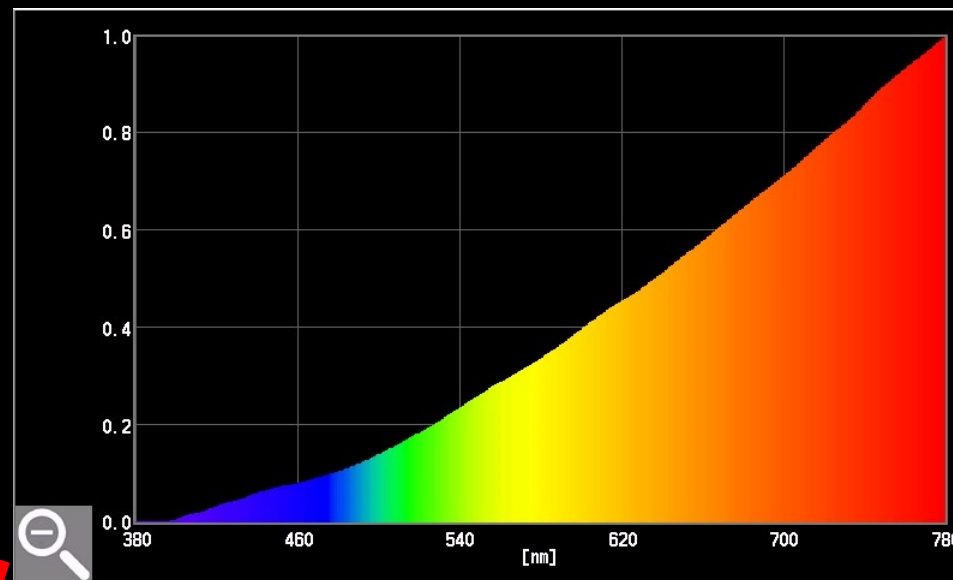
Changing Display Mode



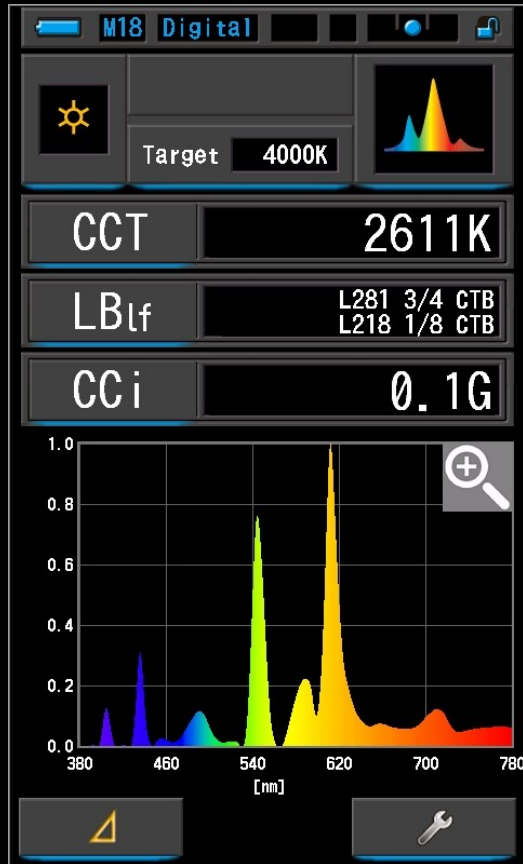
Spectrum Reading with Enlargement



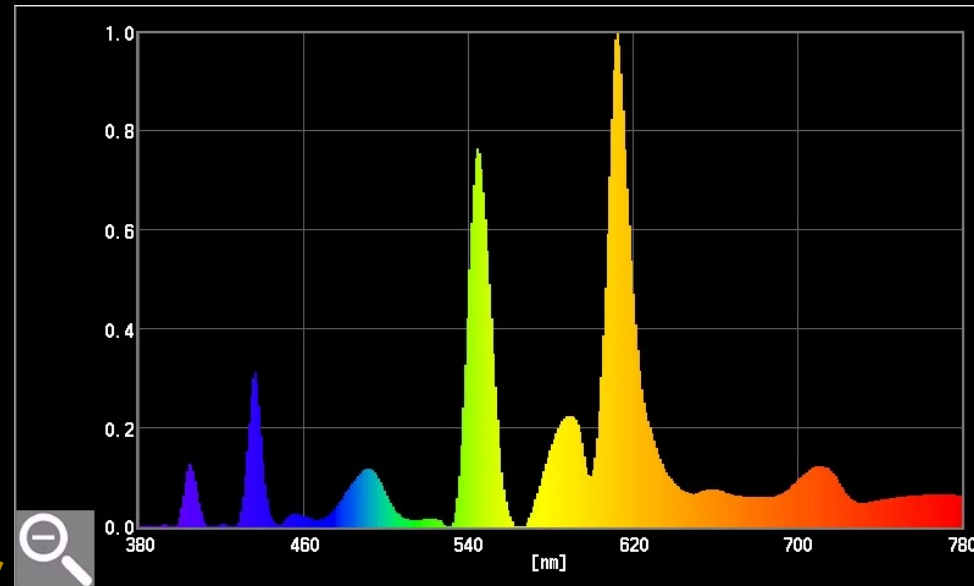
Tungsten Lamp



Spectrum Reading With Enlargement

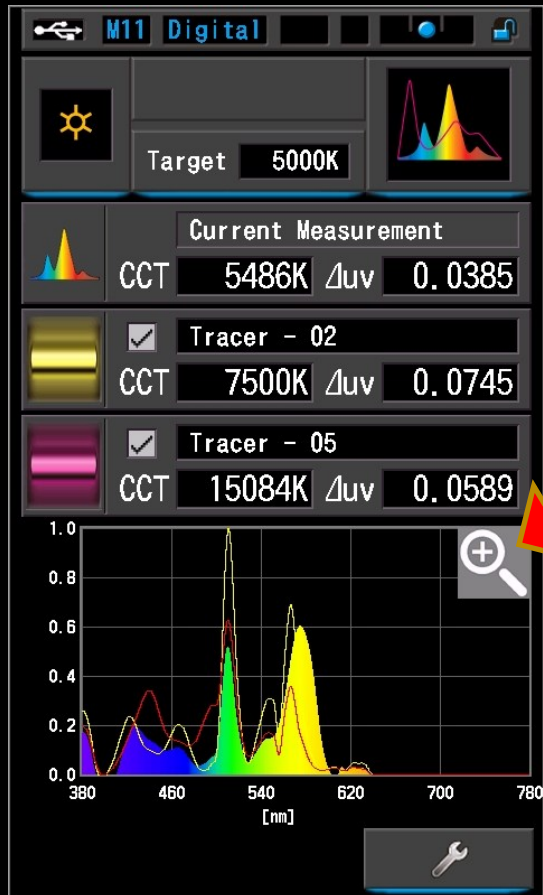


Fluorescent

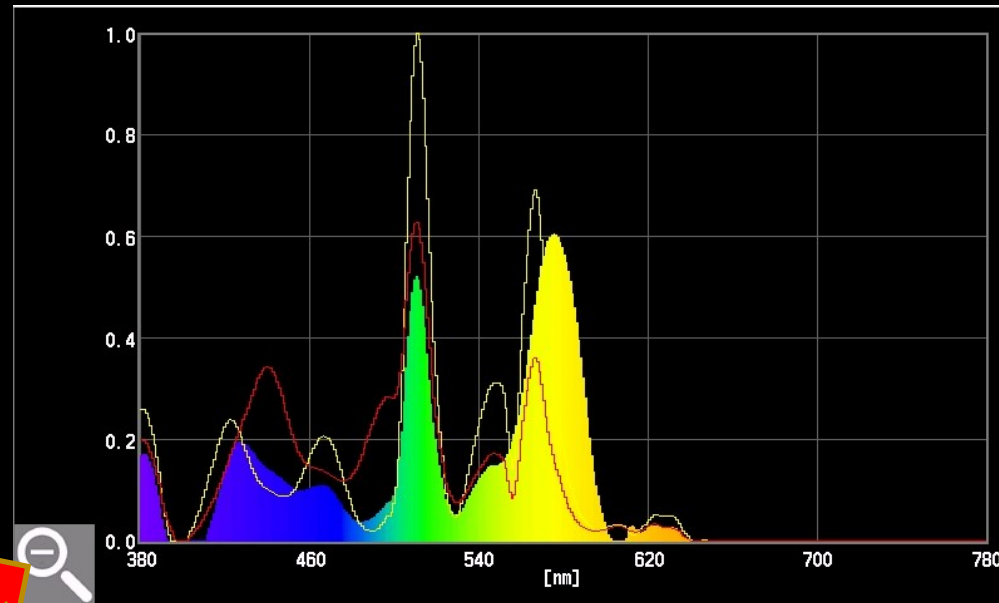


Spectrum Comparison

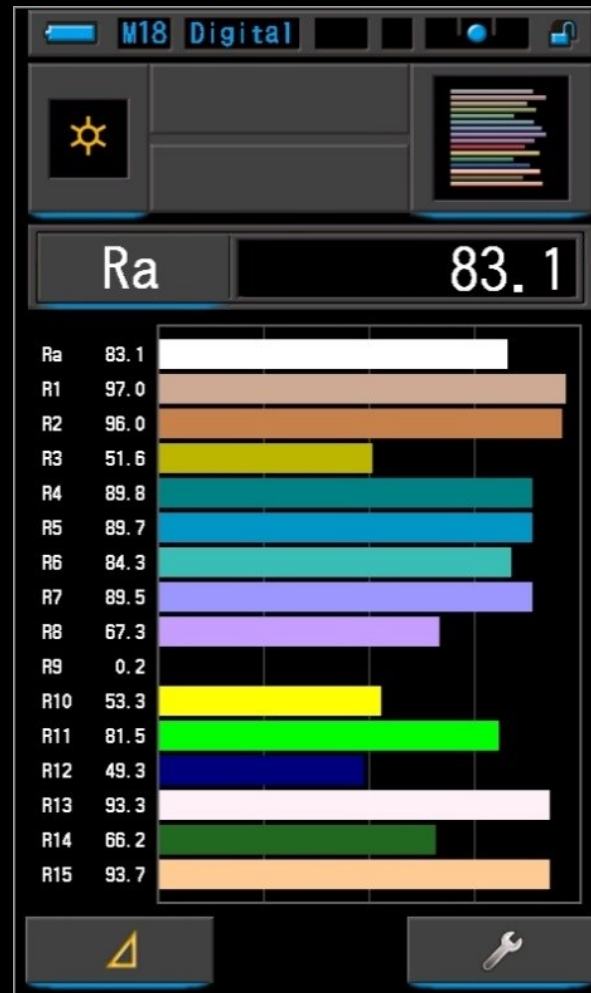
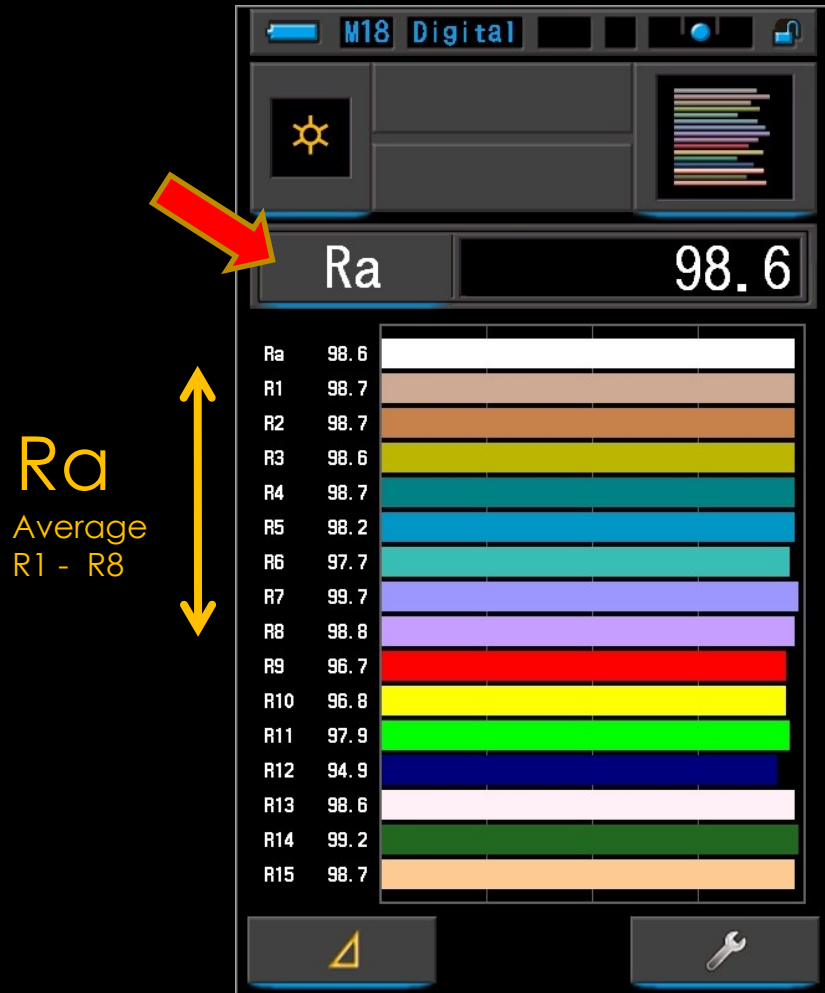
Three light comparison



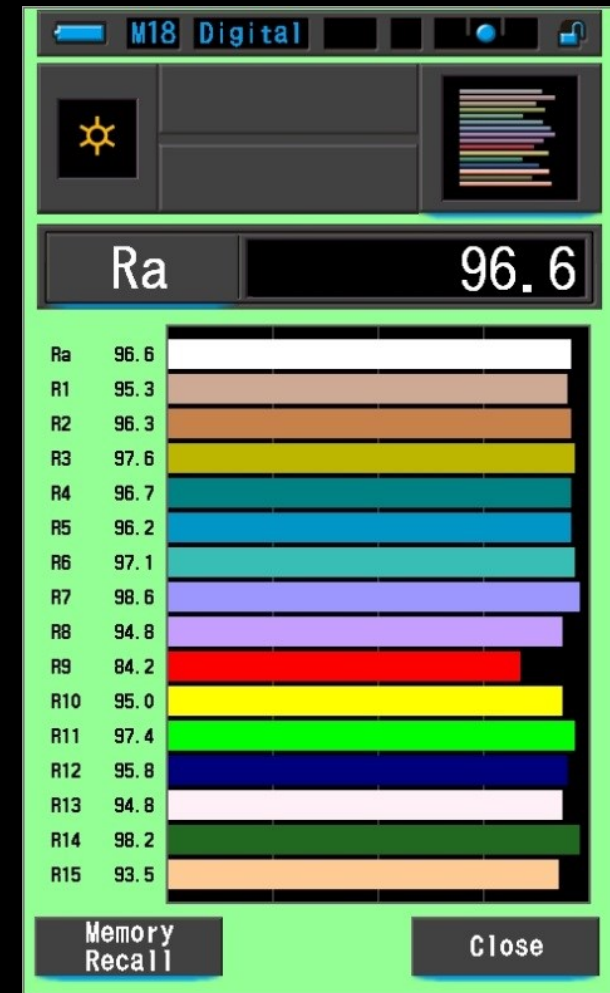
Currently Measured Light
Memorized value 1 - Yellow Outline
Memorized value 2 - Red Outline



CRI - Color Rendering Index

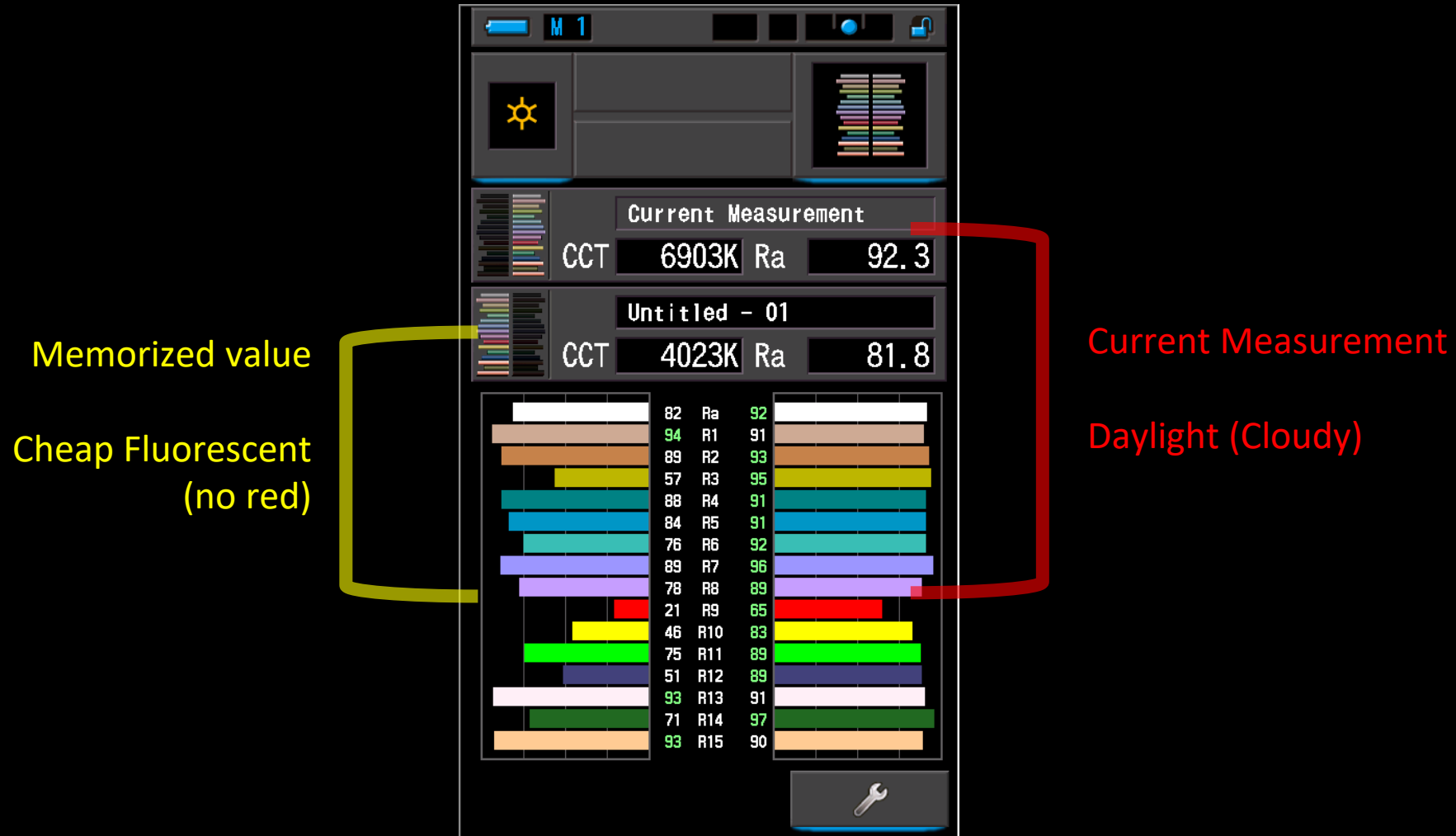


Cheap Fluorescent
(no red)



Hollywood
Fluorescent

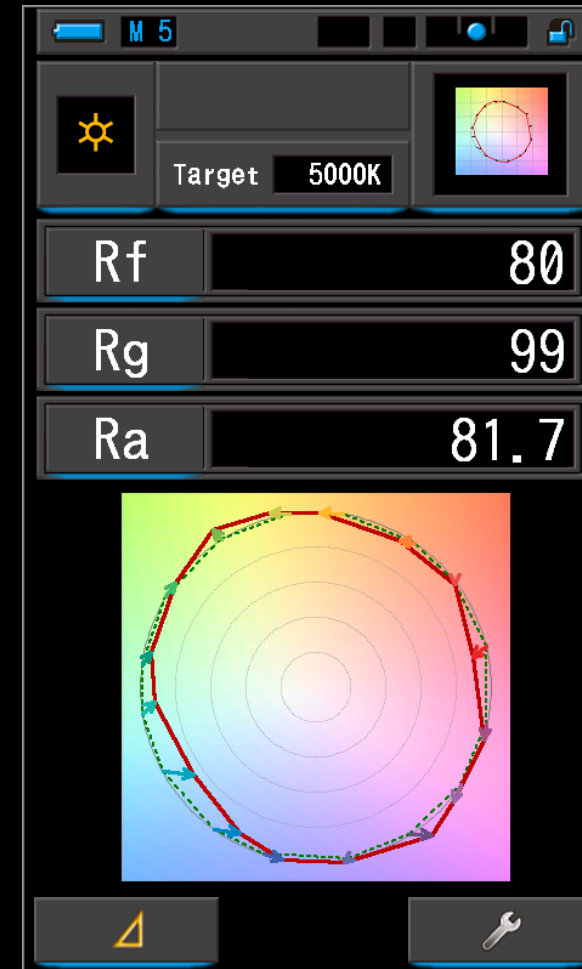
NEW... CRI Comparison



New... TM-30-15 Mode

- **Rf** - Fidelity index = Accurate rendition of color (0 to 100)
- **Rg** - Gamut index = Average level of saturation relative to reference illuminant (60 to 140)
- **Ra** - Same as CRI's Ra
- **Color vector graphic** - illustrates average hue and saturation changes in each of 16 hue bins. The reference source is normalized to a black circle, whereas the test source is represented by the red line.

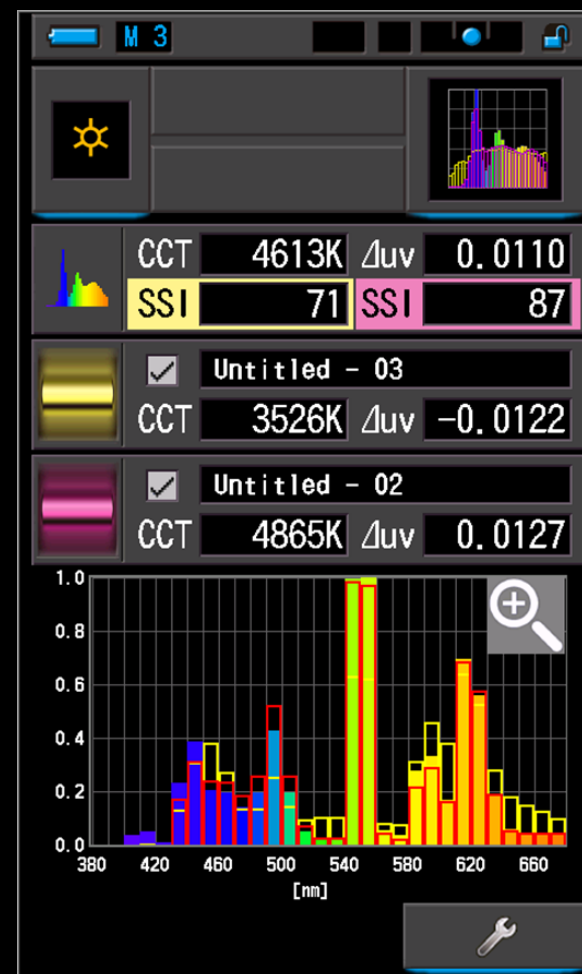
*IES: Illuminating Engineering Society
TM-30-15: Technical Memorandum 30-15*



New...SSI Mode

- Defined by Academy of Motion Picture Arts and Sciences, Science and Technology Council
- Index defines how close a test spectrum is to a reference spectrum (CIE illuminant and actual light source)
- Number is similar to CRI – above 90 is good, below 60 may have problems

*Academy of Motion Picture
SSI: Spectral Similarity Index*



New...TLCI and TLMF Mode

Television Lighting Consistency Index

- TLCI uses the latest color science and a mathematical model of a broadcast camera to calculate the color response that would result when using a video camera. Seeing the colors as they would be shown during a broadcast (on TV).

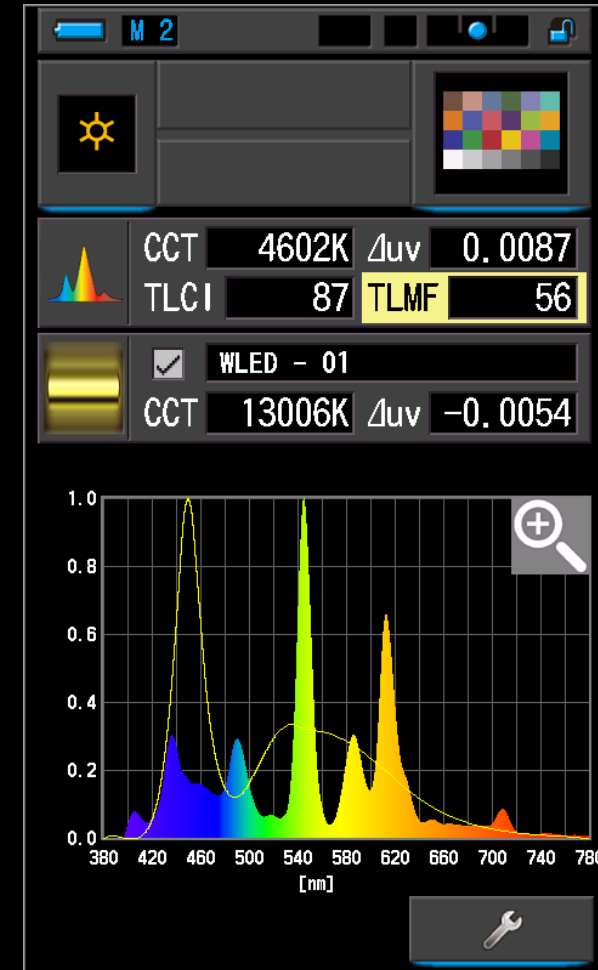
Television Luminaire Matching Factor

- There is a new companion metric to TLCI called TLMF which provides comparing two different light sources, rather than to a perfect reference, and see if they will play well together.

Alan Roberts UK Television Engineer

TLCI: Television Lighting Consistency Index

TLMF: Television Luminaire Matching Factor

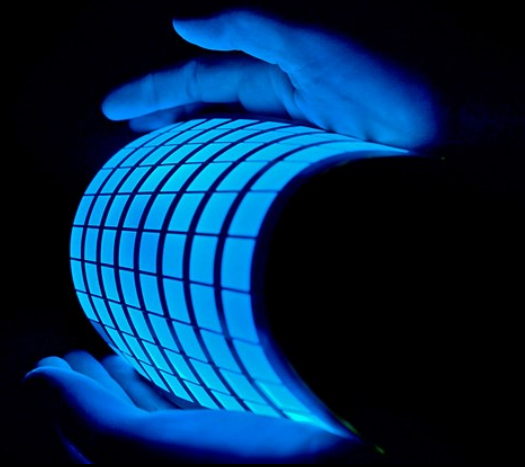


Multi Lights

Four light Comparison



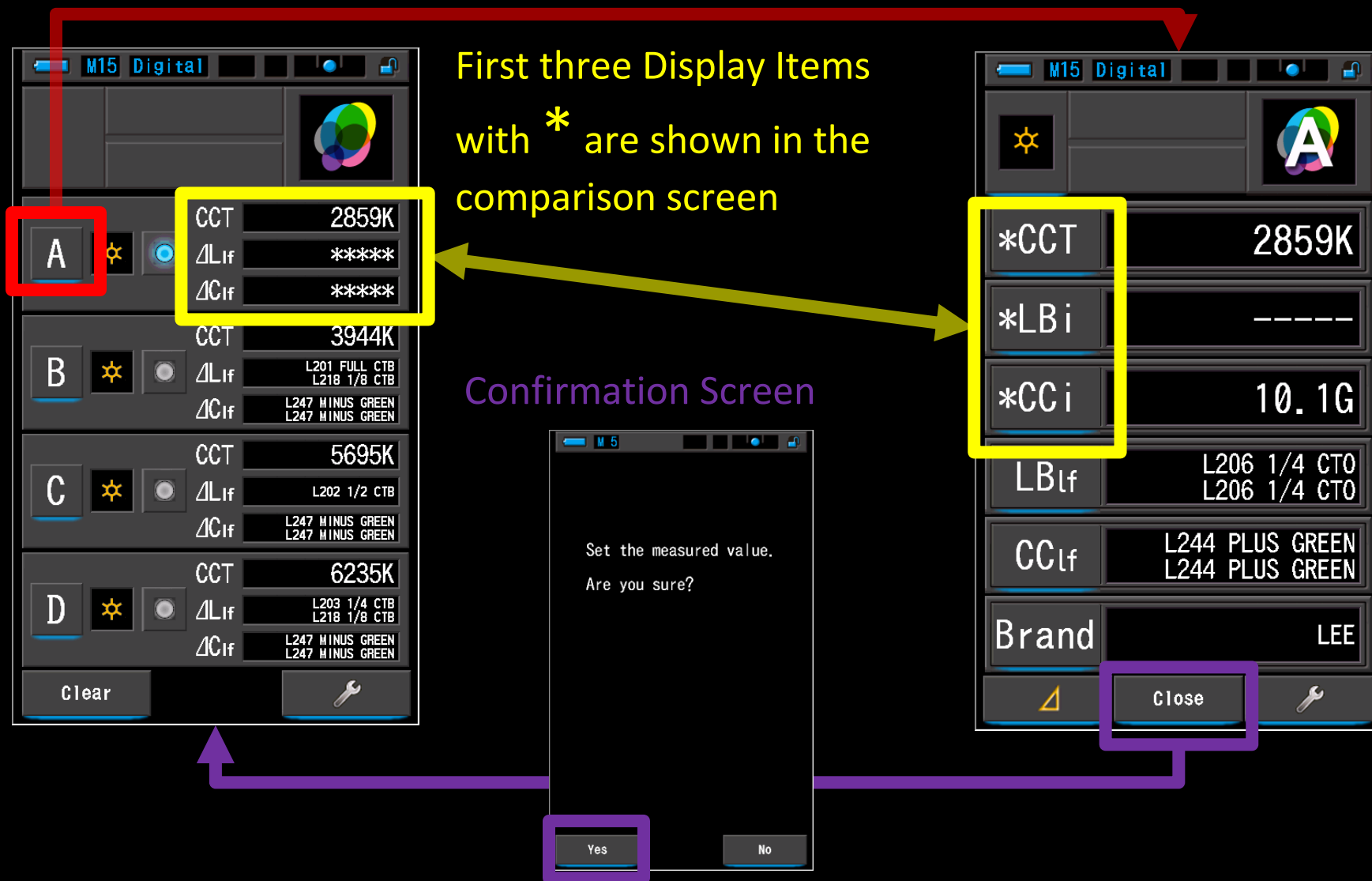
M15 Digital	
A	<div><div>CCT</div><div>2859K</div><div><div><div>ΔLIf</div><div>*****</div></div><div><div>ΔCIf</div><div>*****</div></div></div></div>
B	<div><div>CCT</div><div>3944K</div><div><div><div>ΔLIf</div><div>L201 FULL CTB L218 1/8 CTB</div></div><div><div>ΔCIf</div><div>L247 MINUS GREEN L247 MINUS GREEN</div></div></div></div>
C	<div><div>CCT</div><div>5695K</div><div><div><div>ΔLIf</div><div>L202 1/2 CTB</div></div><div><div>ΔCIf</div><div>L247 MINUS GREEN L247 MINUS GREEN</div></div></div></div>
D	<div><div>CCT</div><div>6235K</div><div><div><div>ΔLIf</div><div>L203 1/4 CTB L218 1/8 CTB</div></div><div><div>ΔCIf</div><div>L247 MINUS GREEN L247 MINUS GREEN</div></div></div></div>
<div>Clear</div> <div></div>	



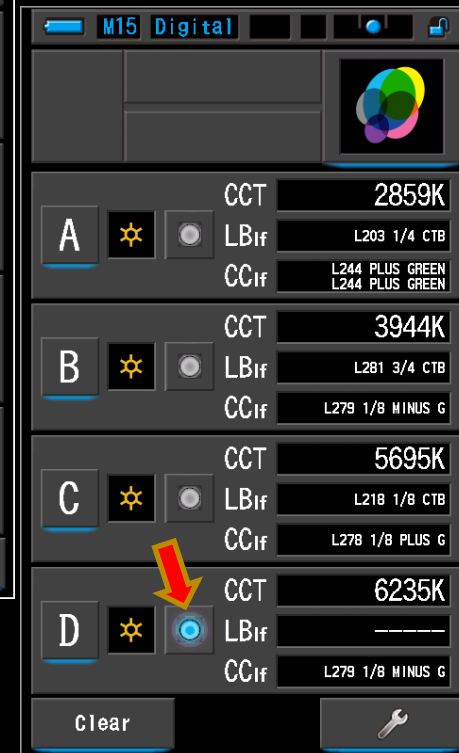
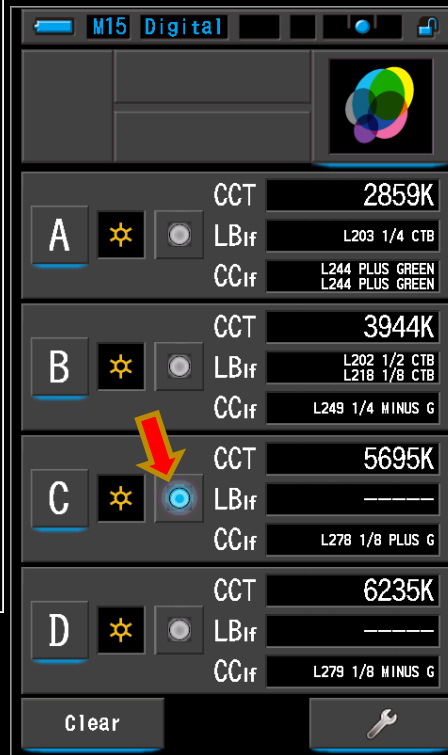
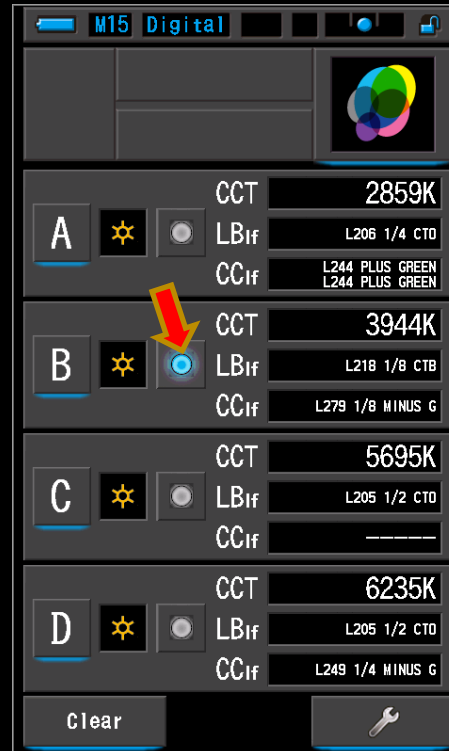
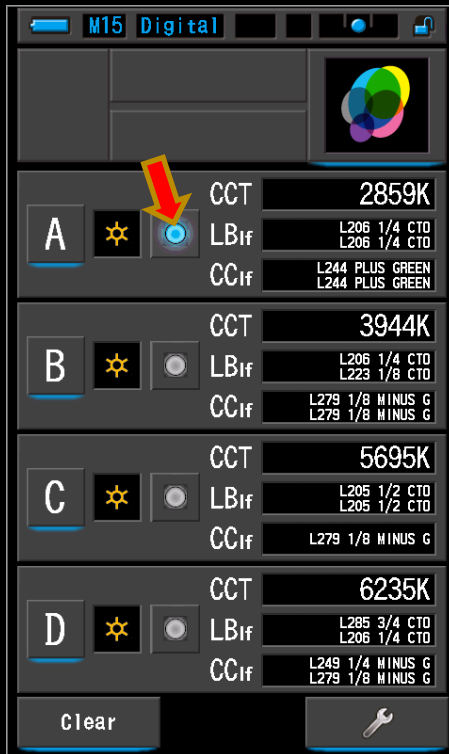
Multi Lights

Comparison Screen

Individual Measuring Screen

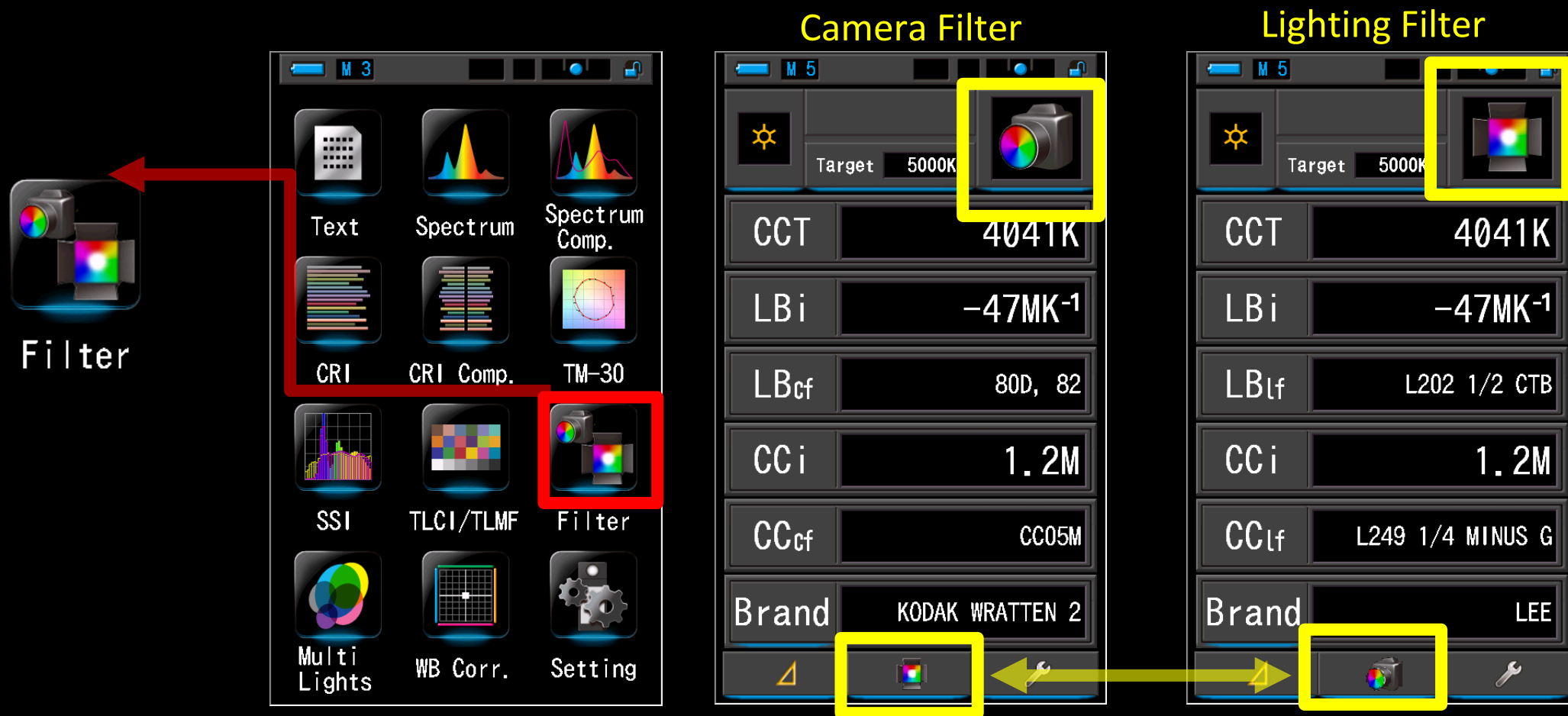


Multi Lights



The Main light selected automatically adjusts the filtration for the other lights to match Main light

Filter – Lighting/Camera



You can switch between Camera filter
or Lighting filter with this icon

Filter – Lighting/Camera

M 5

Target 5000K

CCT 4041K

LBi -47MK⁻¹

LBcf 80D, 82

CCi 1.2M

CCcf CC05M

Brand KODAK WRATTEN 2

Camera Filter

M 5

Camera Filter Brand

KODAK WRATTEN 2

FUJIFILM

LEE

OK Cancel

Lighting Filter

M 5

Lighting Filter Brand

LEE

ROSCO CINEGEL

ROSCO E-COLOUR+

OK Cancel

M 5

Target 5000K

CCT 4041K

LBi -47MK⁻¹

LBIf L202 1/2 CTB

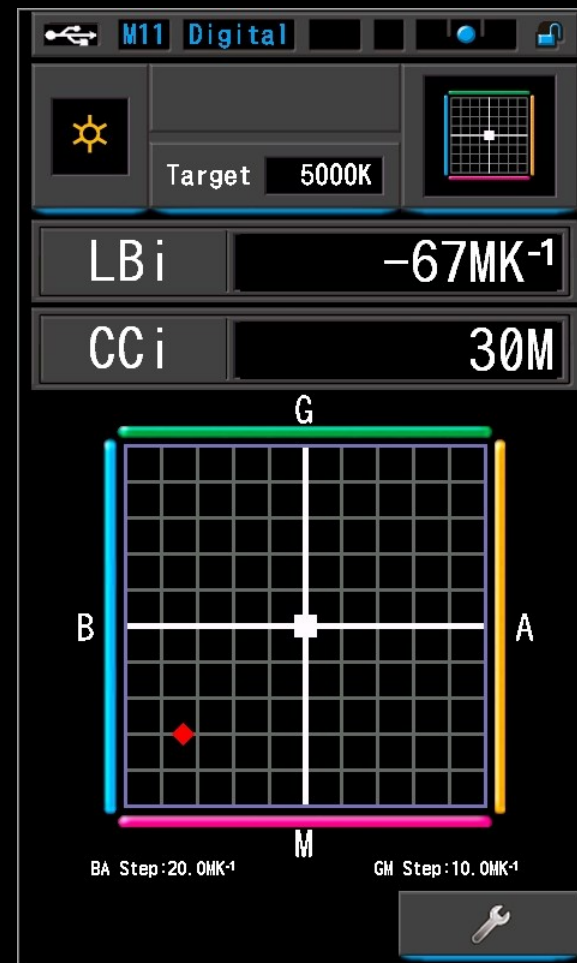
CCi 1.2M

CCIf L249 1/4 MINUS G

Brand LEE

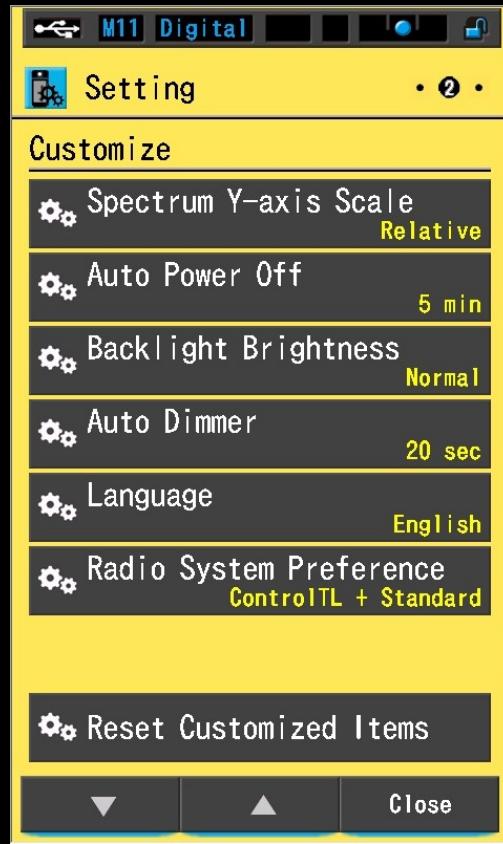
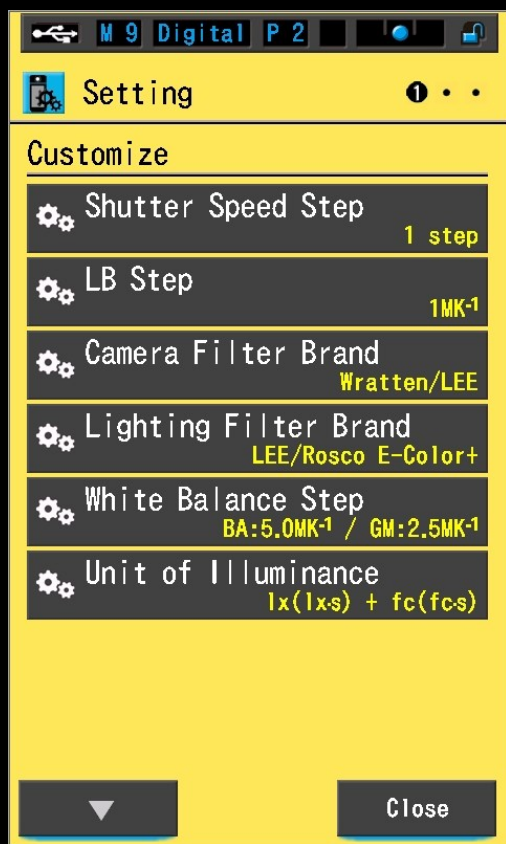
White Balance Correction

Displays the difference between the current measurement value and the target color temperature in a white balance correction graph.



Settings

- Customize
- Edit a Preset
- Dark Calibration
- Display the Information

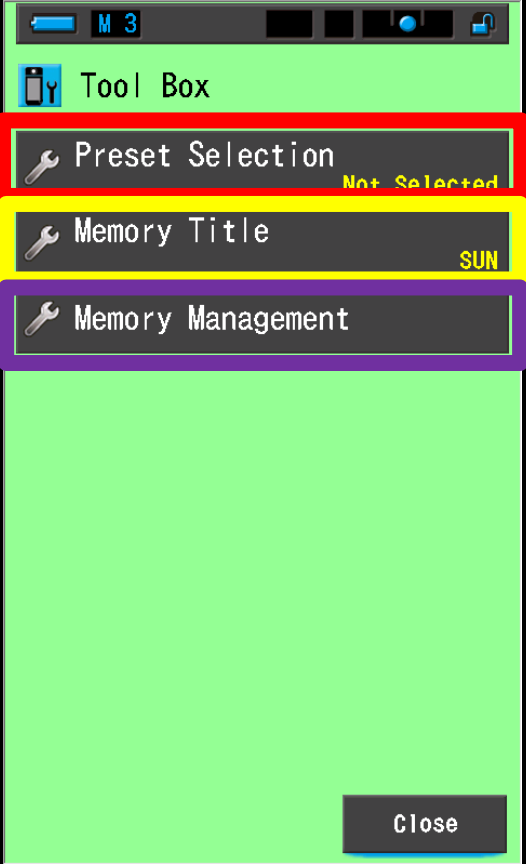


Tool Box

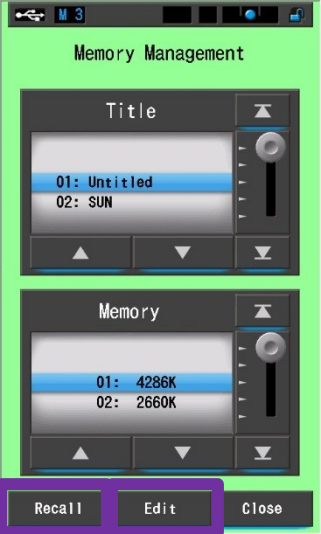
Preset Selection



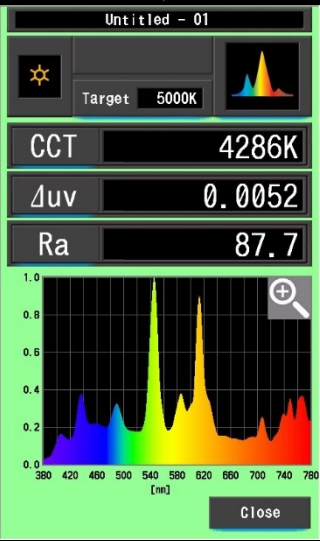
Memory Title



Memory Management



Recall

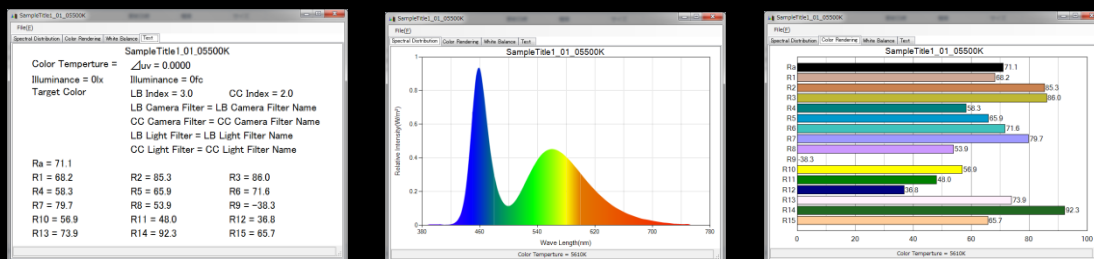


Edit

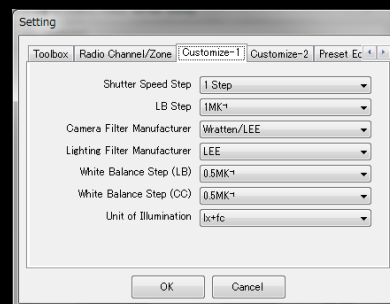
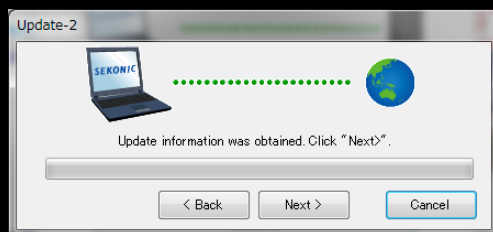


The C-800 Series Software Utility

- The C-800 Series can be synced to the computer and memorized values are displayed in text or graph form, printed, stored and accessed for future use.



- Customized functions can be set within the software
- Update Firmware



Application Software



USB cable

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Comparison Chart

	C-700 (C-700R)	C-800	C-7000
Targeted Users	Photographer, filmmaker	Photographer, filmmaker, some industrial use	Industrial (lighting manufacturer, lighting designer, etc.)
Measuring Range	1,600 to 40,000K 1 to 200,000lx 20 to 20,500lx · s	1,600 to 40,000K 1 to 200,000lx 20 to 20,500lx · s	1,543 to 100,000K 1 to 200,000lx 20 to 20,500lx · s
Measurement Unit	Kelvin, Δuv , LB/CC index, LB/CCIf, LB/CCcf, lx, fc, Hlx, Hfc, Ra, R1 to R15	Kelvin, Δuv , LB/CC index, LB/CCIf, LB/CCcf, lx, fc, Hlx, Hfc, Ra, R1 to R15, Rf, Rg, SSIt, SSId, TLCl, xy, Hue/Saturation,	Kelvin, Δuv , LB/CC index, LB/CCIf, LB/CCcf, lx, fc, Hlx, Hfc, Ra, R1 to R15, XYZ, xyz, u'v', λd, λp, Pe, PPFD
Display Mode	Text, Spectrum, Spectrum comp., CRI, Camera filter, Lighting filter, Multi lights, WB comp.	Text, Spectrum, Spectrum comp., CRI, CRI comp., TM-30-15, SSI, TLCl/TLMF , Filter (Camera or Lighting), Multi lights, WB comp.	Text, Spectrum, Spectrum comp., CRI, CIE1931 (CIE1964), CIE1976,
Other Functions	Up to 99 memory, Digital / Film mode, PocketWizard radio triggering (C-700R)	Up to 99 memory, Memory title can be edited in Utility, Memorized value can be saved back and forth between computer and meter.	Up to 999 memory, 1nm increment spectrum output by Utility, 2° or 10° field of view

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merging technology for the next generation of
image makers

An abstract graphic of flowing, translucent blue liquid or smoke waves, creating a sense of motion and depth against the dark blue background.