KONICA MINOLTA

2D Color Analyzer NEW

CA-2500

Ideal for display image quality adjustment and inspection on smart phones and tablet PCs

Newly developed software provides excellent operability.

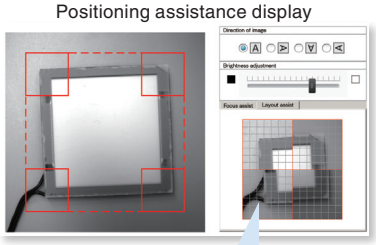
Features

Software *Can also be used with current 2D Color Analyzer CA-2000

Newly developed software CA-S25w (included) provides excellent functionality and ease of use to make measurements of luminance and chromaticity distribution simple.

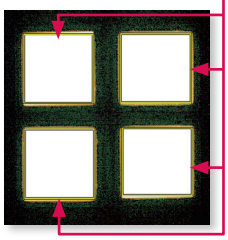
- **New subject setting assistance function**
  Measurement preparations are easier with focus adjustment section views and positioning assistance display.
- **Automatic extraction function**
  When measuring subjects with rectangular light-emitting areas, the light-emitting area of each subject is automatically extracted and set as the evaluation range.
- **Multi-subject measurements possible**
  Individual evaluation of multiple subjects can be performed with a single measurement.
- **Customers can develop their own software**
  The SDK (Software Development Kit) for CA-2500 is included.

Positioning assistance display

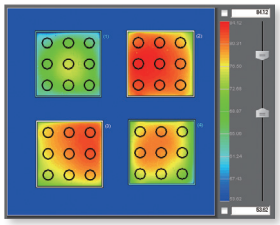


Enlarged views of the four corner areas make positioning easier.

Light-emitting areas extracted by automatic extraction function.



Multi-subject measurements



Hardware

The new CA-2500 provides improved performance while inheriting the high-grade optical system of the current CA-2000.

- **Expanded low-luminance limit**
  Lower limit of the measurement range is expanded from 0.1 cd/m^2 to 0.05 cd/m^2.
- **Improved durability**
  Service life measurement cycles increased to approximately 5 times that of the current CA-2000.

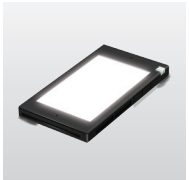
Applications

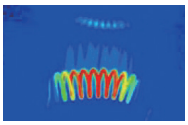
Simultaneous luminance/chromaticity distribution measurement of multiple small- or medium-sized LCD or organic EL panels

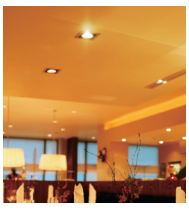
Luminance/chromaticity measurement of single large-sized LCD or organic EL panels

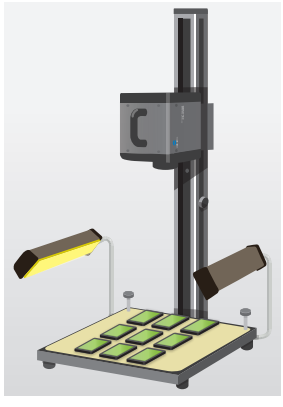
Luminance distribution measurements in illumination field

Measurements of luminance/correlated color temperature distribution of various light-emitting subjects



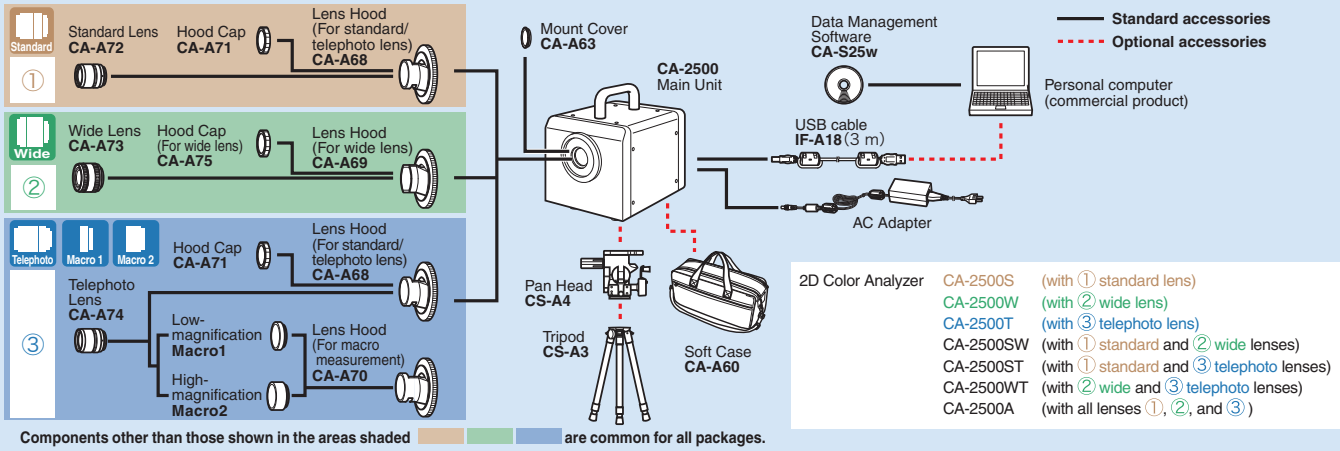






Giving Shape to Ideas

System Configuration



2D Color Analyzer	CA-2500S	(with ① standard lens)
	CA-2500W	(with ② wide lens)
	CA-2500T	(with ③ telephoto lens)
	CA-2500SW	(with ① standard and ② wide lenses)
	CA-2500ST	(with ① standard and ③ telephoto lenses)
	CA-2500WT	(with ② wide and ③ telephoto lenses)
	CA-2500A	(with all lenses ①, ②, and ③)

Components other than those shown in the areas shaded are common for all packages.

* Each lens comes with a lens cap, mount cap, and calibration data DVD.

Measurable object size with typical measurement distances (Width/height of measurement square)

Distance (mm)	Standard lens			Wide lens			Telephoto lens			Low magnification macro ring			High magnification macro ring		
	Measurement size (mm)	Measurable display size (inches)		Measurement size (mm)	Measurable display size (inches)		Measurement size (mm)	Measurable display size (inches)		Measurement size (mm)	Measurable display size (inches)		Measurement size (mm)	Measurable display size (inches)	
		16 : 9	4 : 3		16 : 9	4 : 3		16 : 9	4 : 3		16 : 9	4 : 3		16 : 9	4 : 3
250	98	4.4	4.8	190	8.6	9.3									
300	121	5.5	6	235	11	12							27	1.2	1.3
500	212	9.6	10.4	416	19	20				57	2.5	2.8			
1000	439	20	22	869	39	43	130	5.9	6.4						
2000	892	40	44	1776	80	87	275	12	14						
3000	1345	61	66	2682	121	132	420	19	21						
5000	2252	102	111	4495	203	221	711	32	35						

Main Specifications CA-2500

Model		CA-2500S	CA-2500W	CA-2500T		
Measurement points (Resolution)		980 x 980 (Available to select 490 x 490 or 196 x 196 by using Data Management Software CA-S25w or CA-S20w)				
Color indication modes		XYZ, $L_v$xy, L_vu'v', TΔuv, Dominant wavelength, Excitation purity, L_v contrast				
Measurement lens		Standard lens	Wide lens	Telephoto lens	With low-magnification macro ring	With high-magnification macro ring
Measurement luminance range (including ND filter use)		0.05 - 100,000 cd/m²	0.05 - 100,000 cd/m²	0.25 - 100,000 cd/m²	0.25 - 100,000 cd/m²	0.5 - 100,000 cd/m²
Accuracy (*1)	Luminance	±3 %	±3 %	±3 %	±3 %	±3 %
	Chromaticity	±0.005	±0.005	±0.005	±0.005	±0.005
		Temperature/humidity drift (within the operating temperature/humidity range) Luminance: ±2% of change compared to reference temperature and relative humidity of 23°C and 40% Chromaticity: ±0.004 of change compared to reference temperature and relative humidity of 23°C and 40%				
Repeatability (*2)	Luminance	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %
	Chromaticity	0.001	0.001	0.001	0.001	0.001
Inter-point error (*3)	Luminance (*4)	±2 %	±2 %	±2 %	±2 %	±2 %
	Chromaticity (*4)	±0.002	±0.002	±0.002	±0.002	±0.002
	Luminance (*5)	±3 %	±3 %	±3 %	±3 %	±3 %
	Chromaticity (*5)	±0.003	±0.003	±0.003	±0.003	±0.003
Size	Body only	160 (W) × 164 (H) × 192 (D) mm (Height including handle: 211 mm)				
	When lens and lens hood are attached	224 (D) mm	219 (D) mm	224 (D) mm	230 (D) mm	237 (D) mm
Weight		3.5 kg approx. (when standard lens and lens hood are attached)				

*1: The specifications above were obtained under Konica Minolta's measurement conditions shown below.
Measurement subject brightness: Standard/wide lens: Approx. 35 cd/m², Telephoto lens: Approx. 140 cd/m²
Low-magnification macro ring and telephoto lens: Approx. 250 cd/m²,
High-magnification macro ring and telephoto lens: Approx. 250 cd/m²
Distance: Minimum distance of each lens, Evaluation: Based on the average obtained within 10% range at the center of the screen, Temperature: 23°C±2°C, Relative humidity: 40%±10%, Measuring light: White, reference light source, Integration: 64 times (Normal mode)

*2: The specifications above were obtained under Konica Minolta's measurement conditions shown below:
Resolution: 196 x 196, Shutter speed: Y measurement: 1/64 sec., XZ measurement: 1/32 sec.
Light intensity level: Midpoint of appropriate light intensity range, Evaluation: Based on the maximum repeatability (2 σ) of all pixels, Temperature: 23°C±2°C, Relative humidity: 40%±10%, Measurement subject: White, reference light source, Integration: 64 times (Normal mode)

*3: The specifications above were obtained under Konica Minolta's measurement conditions shown below.
Measurement subject brightness: Standard/wide lens: Approx. 40 cd/m², Telephoto lens: Approx. 160 cd/m²
Low-magnification macro ring and telephoto lens: Approx. 200 cd/m²,
High-magnification macro ring and telephoto lens: Approx. 350 cd/m²
Distance: Calibration distance of each lens, Resolution: 196 x 196
Evaluation (*4) : Based on the maximum/minimum values obtained in a square at the center of the screen measuring 60% of the height and width of the entire screen
(*5) : Based on the maximum/minimum values obtained in the entire screen
Temperature: 23°C±2°C, Relative humidity: 40%±10%, Measurement subject: White, reference light source, Integration: 64 times (Normal mode)

SAFETY PRECAUTIONS

For correct use and for your safety, be sure to read the instruction manual before using the instrument.

- Always connect the instrument to the specified power supply voltage. Improper connection may cause a fire or electric shock.

CA-S25w System Requirements

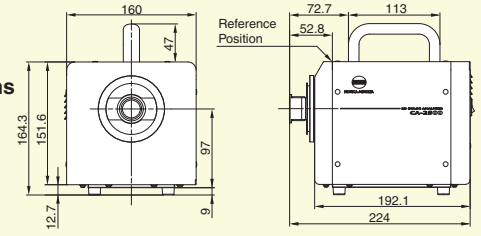
OS	Windows XP Professional 32-bit SP3, 64-bit SP2; Windows 7 Professional 32-bit, 64-bit (English, Japanese and Chinese (Simplified) versions)
CPU	Pentium® 4 2.8 GHz equivalent or higher
Memory	1024 MB or more

- Windows® is a registered trademark or a trademark of Microsoft Corporation in the United States and other countries.
- Pentium® is a registered trademark or a trademark of Intel Corporation in the United States and other countries.

Dimensions

(Unit: mm)

***When standard lens and lens hood are attached**



- The specifications and drawings given here are subject to change without prior notice.
- Some lamp control methods may make accurate measurements difficult. For details, please contact your nearest Konica Minolta sales office or dealer.

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