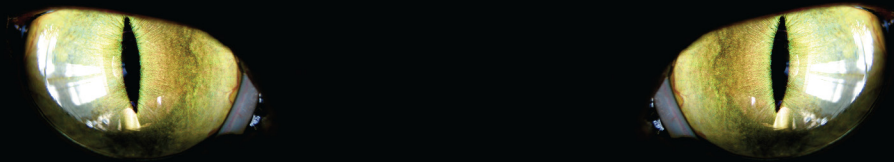


NEW



Pierce through the darkness.

CS-2000A Spectroradiometer

World's top level capability to detect extremely low luminance
Highly precise spectral radiance/chromaticity measurement possible from 0.0005 cd/m²

0.0005 CD/M2 OPENS NEW WORLDS

With 10 times better low-luminance performance than even our CS-2000, which was awarded the ADY 2008 grand prize, the CS-2000A helps open up a new stage of display development by enabling the measurement of contrast ratios up to 1 million to 1*1 which is being targeted by the latest FPD technology. *1 maximum luminance 500 cd/m³

SCOTOPIC VISION MEASUREMENT

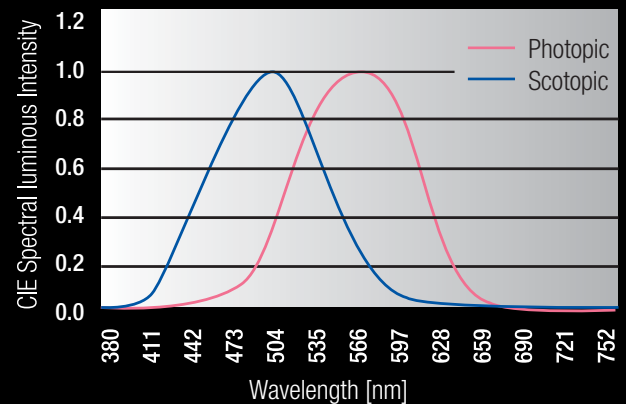
It is known that the sensitivity of human vision shifts to blue region in dark environments, but past instruments did not have scotopic measurement function. CS-2000A achieves sufficient capability to make it possible with CS-S10w Professional (standard accessory).

SCOTOPIC VISION

In the human eye, there are 2 types of photoreceptor cells, which are cone cells and rod cells. Cone cells are sensitive to color and rod cells are sensitive to only brightness. As brightness decreases, the activity of rod cells becomes stronger, and the condition in which only rod cells are working is called scotopic vision. The peak of spectral luminous efficiency of scotopic vision is shifted toward blue from the green peak of photopic vision (vision under brighter conditions) and thus blue objects are perceived to be brighter.

APPLICATIONS FOR NEW ILLUMINATION DEVICES

The CS-2000A is applicable for the evaluation and quality control of new illumination devices such as LEDs. The CS-S10w Professional Software included as a standard accessory provides pass/fail judgement by dominant wavelength and color rendering index, which are both widely used in the LED and lighting industries.



SPECIFICATIONS

Measuring Angle (selectable)	1°/0.2°/0.1°	Repeatability:	x: 30/10,000 y: 35/10,000 (0.001 ~ 0.003cd/m ²)	
Wavelength range	380 ~ 780 nm	Chromaticity	x: 10/10,000 y: 15/10,000 (0.003 ~ 0.1cd/m ²)	
Wavelength resolution	0.9nm/Pixel	(Measuring angle 1°)	x: 6/10,000 y: 6/10,000 (0.1 ~ 0.2cd/m ²)	
Display wavelength bandwidth	1.0 nm	x: 4/10,000 y: 4/10,000 (0.2 ~ 5,000cdm ²)	Polarization error	2% or less (400 ~ 780 nm) : 1°
Wavelength precision	±0.3 nm @(435.8 nm, 546.1 nm, 643.8 nm).		3% or less (400 ~ 780 nm) : 0.1° 0.2°	
Spectral bandwidth	5 nm or less (half bandwidth)	Measurement time	2 ~ 243 sec.	
Measurement luminance range	1° : 0.0005 ~ 5,000 cd/m ²	Color space	L _v x y, L _v u'v', L _v TΔuv, XYZ, spectral graph, dominant wavelength, excitation purity, scotopic luminance (with usage of CS-S10w Professional)	
(Standard light source A)	0.2° : 0.0125 ~ 125,000 cd/m ²	Interface	USB 1.1	
Accuracy: Luminance	±2%	Operating temperature/humidity range	5 to 30°C, relative humidity 80% or less with no condensation	
Accuracy: Chromaticity	x,y : ±20/10,000(0.001 ~ 0.05 cd/m ²)	Power	AC adapter (100-240v ~ , 50/60 Hz)	
(Measuring angle 1°)	x,y : ±15/10,000(0.05 cd/m ² ~)	Size	158(W) x 262(H) x 392(D) mm	
Repeatability: luminance	1.5 % (0.0005 ~ 0.001cd/m ²)	Weight	6.2 kg	
(Measuring angle 1°)	0.7 % (0.001 ~ 0.003cd/m ²)			
	0.25% (0.003 ~ 0.05cd/m ²)			
	0.15% (0.05 ~ 5,000cd/m ²)			

*The condition for accuracy and repeatability is for standard light source A at 23 ± 2°C and a relative humidity of 65% or less.



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.

The specifications and drawings given here are subject to change without prior notice.
 - If you have any questions about the specifications, please contact your Konica Minolta representative.



Certificate No.:YKA 0927154
 Registration Date:March 3, 1995



Certificate No.:JQA-E-80027
 Registration Date:March 12, 1997