

## CX-3B

### Image Luminance Meter

The CX-3B Image Luminance Meter is an instrument for the measurement of the luminance distribution in the field of view by once sampling: it works like up to 8,000,000 micro-luminance-meters working synchronously.

- Convenient to use – Powered by mains supply or external DC power supply, it has a USB interface, it is suitable for both laboratory and field measurement

#### Main characteristics

- High Accuracy – The spectral mismatching of the optical system to the  $V(\lambda)$  function can reach class A or class B (following DIN 5032-7) level
- High Resolution Measurement – CX-3B is equipped with high quality CCD with more than 8 million pixels to achieve very high resolution
- High Dynamic Range – the High Dynamic technology, realizes accurate measurements of objects with great luminance diversity and the luminance range can be in between  $0.001\text{cd/m}^2$  to  $200\text{kcd/m}^2$
- Good Stability – Part models adopt advanced TE-cooling technology to acquire excellent stability and repeatability
- Excellent Image Quality – CX-3B is equipped with high-end lenses of large aperture to measure object from short to very long distances



Technical Specifications	
<b>CCD Pixels</b>	more than 8 million pixels
<b>Measurement function</b>	Single/multi point luminance, luminance uniformity, regional max, min, average, min/max, min/max, min/average values of luminance
<b>Temperature controlling</b>	CCD working temperature: $5^{\circ}\text{C}$ – Temperature stability: $\pm 0.1^{\circ}\text{C}$
<b>Luminance range</b>	$0.001\text{cd/m}^2$ – $2\text{kcd/m}^2$ ~ $200\text{kcd/m}^2$ (density filter added, optional)
<b>Luminance accuracy</b>	$\pm 5\%$
<b>Luminance repeatability (Illuminant A)</b>	0.8%
<b>Measuring distance</b>	150mm to infinite
<b>Minimum measuring area</b>	$\geq 80\text{mm} \times 59\text{mm}$ at 150mm distance
<b>Test mode</b>	Single exposure/Multiple exposure
<b>Communication interface</b>	USB 2.0

Road luminance measurement at all grid points		Threshold Increment (TI) calculation