



Imaging Luminance Colorimeter (KS-10) Brochure

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Leader in Lighting & Electrical Test Instruments

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1. Features: High dynamic range | Brightness and Chroma | Contrast |

Uniformity

- The KS-10 series Imaging Luminance and Colorimeter equipped with detector with a resolution of 2 million pixels to 61 million pixels, which provide excellent luminance and chromaticity test solutions.

- The standard software provides the most productive software environment.

Whether it is simple or in-depth analysis, all the results and analysis functions of the software can be efficiently automated.

- Using semiconductor refrigeration technology as low as -45 degrees, can minimize the noise and temperature drift, and reliable analysis can be performed under weak signals as low as 0.0001cd/m² brightness.

- Bandwidth modulation and equipped with DDR buffer memory, it can be read quickly even in a low-configuration operating environment.

- Support the readout and synthesis of region of interest (ROI).

- High dynamic range exposure and ND filter to achieve a wide measurement range.

- The contrast ratio is as high as 1000000:1.

2. Specification

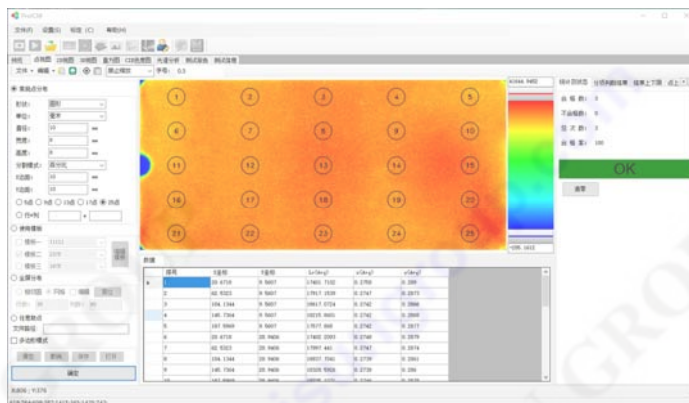
LISUN Model	KS-2	KS-10	KS-16	KS-24	KS-36	KS-61
detector	1/1.2"	4/3"	4/3"	APS-C	Full Size	Full Size
Total pixels	2.28 million	11.2 million	16.21 million	24.34 million	36.17 million	60.92 million
Pixel resolution	1900*1200	4100*2732	4634*3500	6228*4156	7338*4930	9560*6372
Pixel size	5.68μm	4.63μm	3.8μm	3.76μm	4.88μm	3.76μm
refrigerating system	Secondary refrigeration (as low as -45°C)					
Dynamic Range	>1000000:1 (Multiple exposure or optional ND filter)					
Pixel depth	16bits readout					
Exposure time	16uSec to 60Sec					
Spatial measurement functions	Luminance, CIE chromaticity coordinates, color temperature, dominant wavelength, tristimulus value					
luminance	Measure range	0.0001 to 100,000cd/m ² (Use ND can be higher)				
	Accuracy	±3%				

	Repeatability(δ)	$\pm 0.5\%$
Chroma	Based on standard A light source	± 0.002
	Based on LED light source	± 0.002
	Based on standard display	± 0.002
	Other uncalibrated light sources	± 0.01
	Repeatability(δ)*1	± 0.0003
Lens type	24mm、28mm、35mm、50mm、100mm F mount lens	
Dimension	240*150*160 (Length * Width * Height) without lens length	
Port	LAN	
Operate temperature	5 to 50°C	
Voltage	AC power adapter	

The measurement of luminance and chromaticity is based on LISUN conditions (using standard light source with 1000cd/m² luminance, LED backlight, LCD display with 6500K color temperature).

3. Software features:

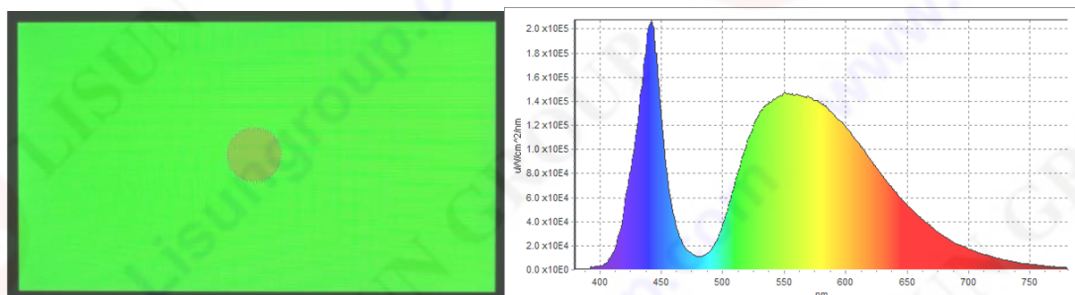
- Various layouts of test points can be arbitrarily distributed according to the identified area, such as: tangent circle distribution in the whole area, pick points at will, or import test point location information files derived from the test point distribution map designed by CAD. Multiple test point templates can be distributed at the same time.
- The section luminance analysis function can automatically or manually obtain the section luminance distribution of the area.
- Processing and analysis various filtering algorithms, pixel merging, dead pixel removal, etc.
- Pseudo-color, contour, histogram, chromaticity diagram, 3D diagram and other graphics processing.
- Automatically save test data and upload data to the server.
- It can be connected to various programmable power supplies, code scanning guns and other external devices and read data.
- Support various customized test function modules.



3.1 Support optional spectral analysis module

- Built-in spectrometer, connected to the optional built-in spectral analysis module, giving it the function of a single-point spectroradiometer; through automatic calibration, the accuracy of the imaging Luminance colorimeter is improved to the level of a spectral radiometer; it also provides spectroradiometer

The spectral analysis data of the meter.



3.2 Spectral Analysis Module Parameters

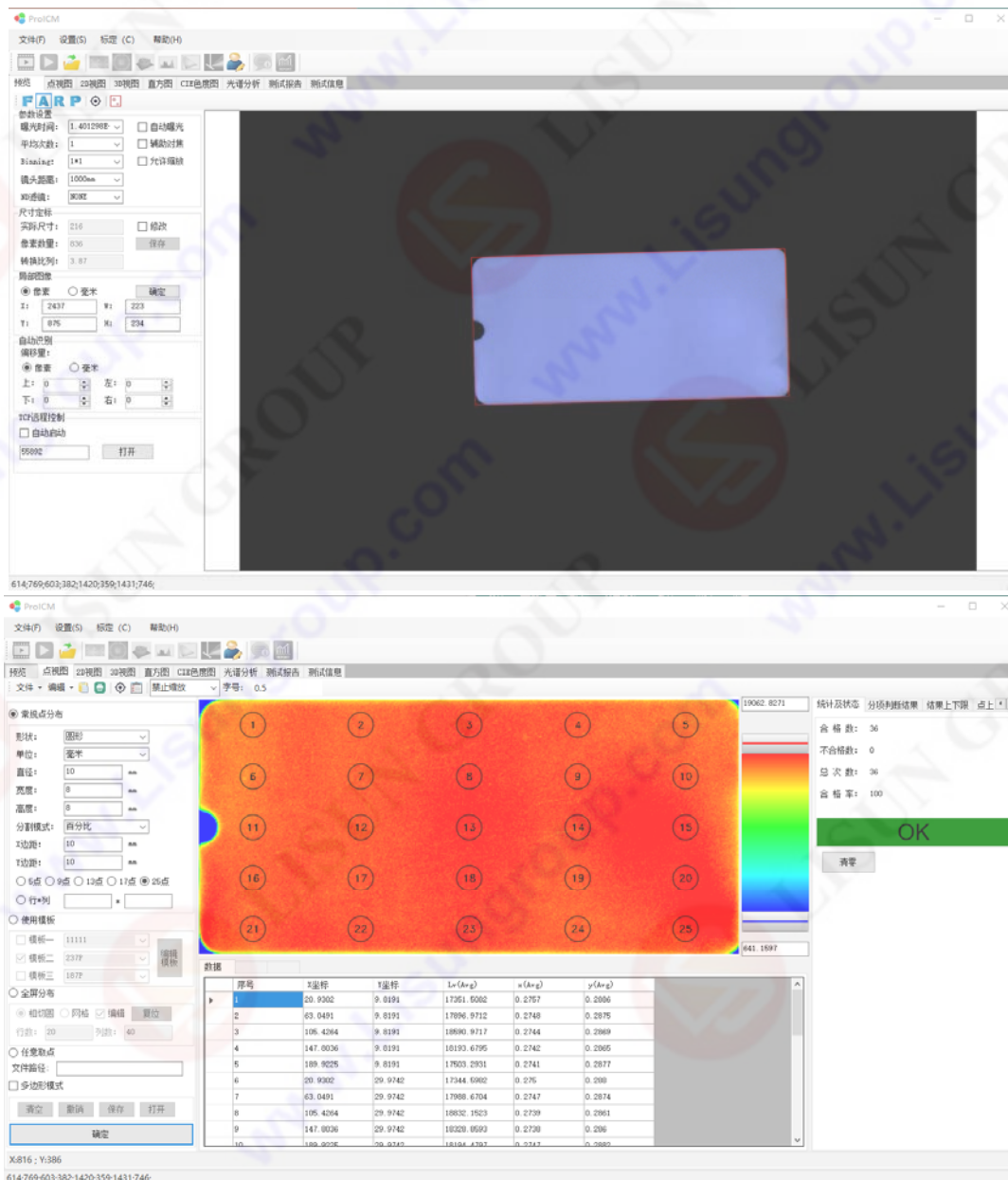
Wavelength Range	380~780nm	
Spectral Resolution	1nm	
SNR	150:1	
AD	16bits	
Exposure Time	3mSec to 10Sec	
Spatial Measurement Function	Luminance, CIE chromaticity coordinates, color temperature, dominant wavelength, tristimulus value, spectral distribution, peak wavelength	
Luminance	Measuring range	1 to 100,000cd/m ²
	Accuracy	±0.3%
	Repeatability (δ)	±0.5%
Chroma	Based on standard A light source	±0.002
	Repeatability (δ)	±0.0003
Port	USB2.0	

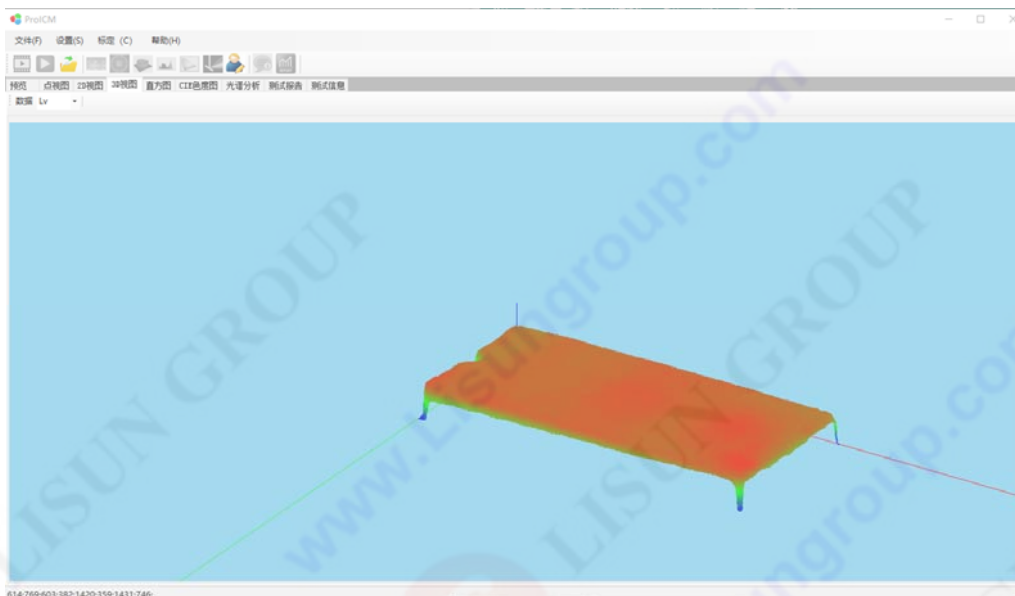
- The measurement of luminance and chromaticity is based on LISUN conditions (using standard light source with 1000cd/m² luminance, LED backlight, LCD display with 6500K color temperature).
- Specifications and appearance are subject to change without prior notice.

4. ProICM professional analysis software: easy to operate | modular | multi-language | customization

4.1 Easy to operate

- The UI interface is designed based on the operator's logic, so you can quickly master the operation without the need for professional technicians.





4.2 Modularity

- Adopt modular design for each analysis function, and open each functional analysis module according to needs, without cumbersome operation procedures.



4.3 Multilingual

- Support simplified Chinese, English, Chinese and other languages.



4.4 Customization

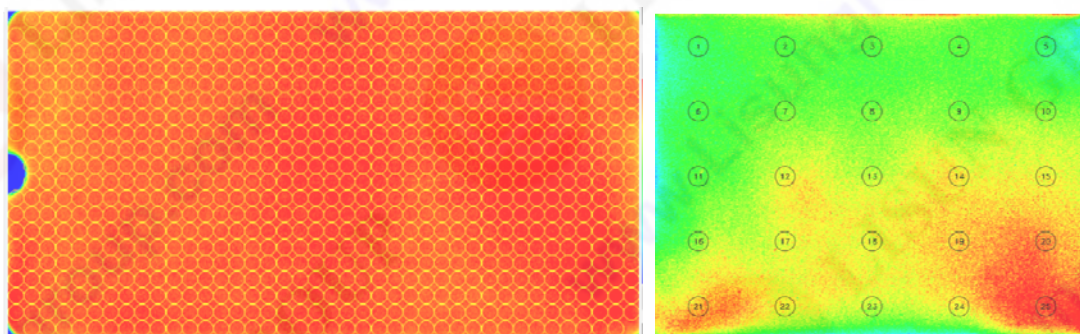
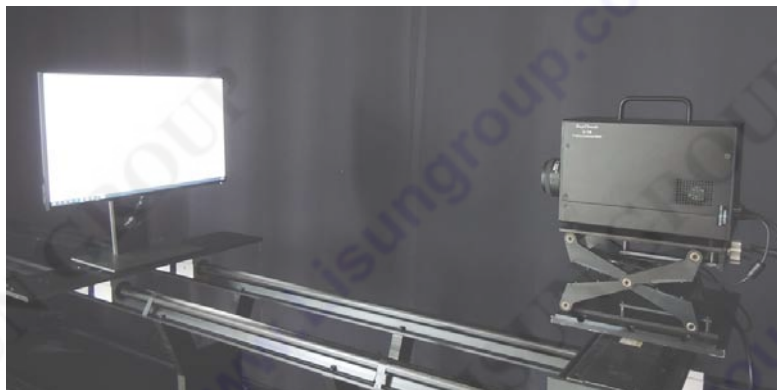
- ProICM is a set of open and modular test software. You can freely choose a test module to test separately. We provide test programs covering most products. You can choose and match various standard test modules, and of course you can customize a test program module.

5. Application:

5.1 Measurement of display

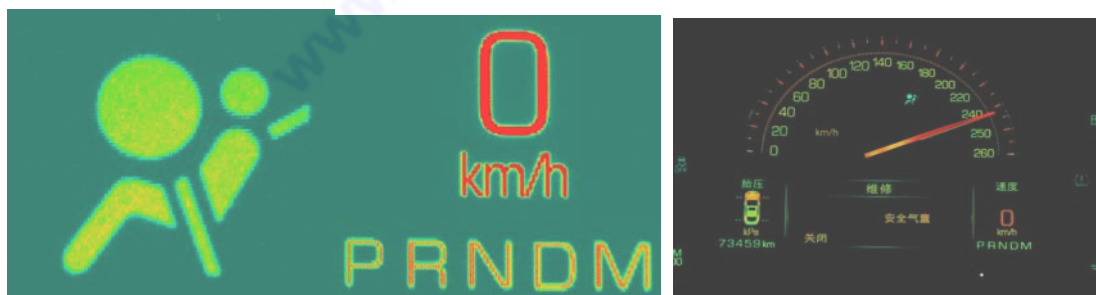
- The measurement of flat-panel displays, including various special-shaped displays, mainly evaluates the luminance and chromaticity uniformity of point distribution and the surface uniformity of pixel distribution, MURA, etc.
- The number of test points, position coordinates, diameter, etc. can be set arbitrarily, and CAD point coordinate files can be imported, full-screen tangent circle

division and grid division methods can be distributed at the same time.



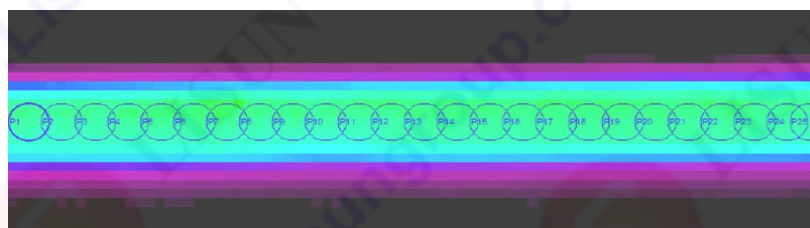
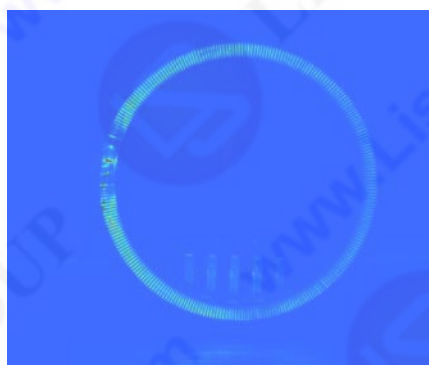
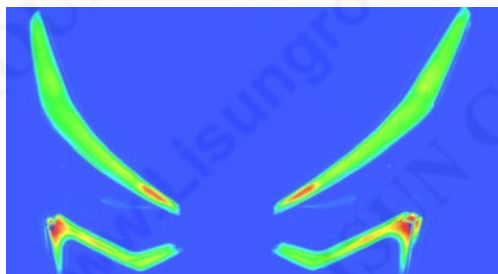
5.2 Measurement of instruments

- Focus on the analysis of brightness and chromaticity of the overall luminous characters and specific icons.



5.3 Measurement of atmosphere lights and car lights

- Pay attention to the linear emission trend of the illuminant and the linear distribution test points to evaluate the uniformity of luminance and chromaticity.



5.4 Measurement of road and indoor glare

- Pay attention to the analysis of road brightness and glare of lighting fixtures and the analysis of indoor uncomfortable glare.

