

# CXS230/1200/2500

## Image Luminance Colorimeter



Large-scale scientific research-grade CMOS image sensor and high-precision matching XYZ color filter that conforms to the CIE human visual function



Aluminum alloy body

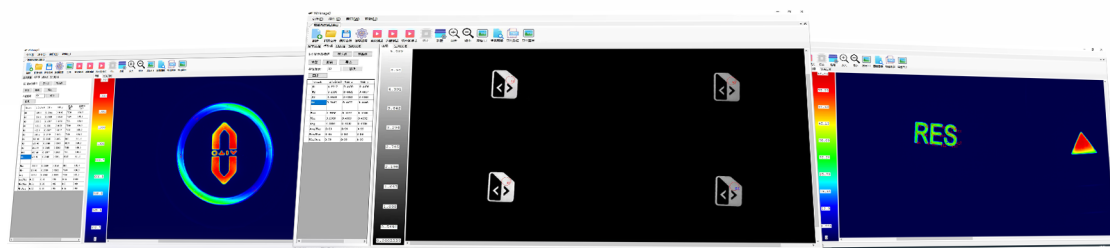


Million or even tens of millions of detector dots matrix, Capture the entire scene, simultaneously measuring the luminance and chromaticity of each point



## Product description

CXS series Image Luminance Colorimeter can meet the test requirements if various light-emitting devices in car, display, lighting and other industries, matching a user-friendly software. Built-in high precision matching XYZ filter that conforms to the CIE human eye visual function.



## Features

Strictly match the color filters of CIE XYZ to accurately obtain true and accurate brightness and chromaticity data

Different resolutions can be selected according to user application , provide customers with the most cost-effective solution that meets their needs.

Rich software functions, single-point, multi-point, regional brightness and chromaticity uniform distribution pseudo-color map, etc., each parameter can be set to determine the upper and lower limits

Equipped with 10 input and 10 output interfaces , trigger test with PLC and other automation equipment, output qualified or unqualified indication, and provide SDK software package developed by company

## Technical

Parameters	Model		
	CXS-230	CXS-1200	CXS-2500
Pixs	2.3 million	12 million	25 million
resolution	1920*1200	4096*3000	5120*5120
Pix size	4.5*4.5um	3.45*3.45um	2.5*2.5um
Scale size	2/3"(8.6*5.4mm)	1.1"(14.1*10.3mm)	1.1"(12.8*12.8mm)
Exposure time	50us-10s	1us-10s	12us-10s
Test Speed	< 3S (Exposure time less than 500ms)		
Test Function	Luminance L , Chromatic coordinates x,y ,CCT,peak wavelength , Luminance and color uniformity		
Luminance range	0.001-1000kcd/m2(it can customized range according to real demands.)		
Luminance accuracy	±3% (Under standard A light source)		
chromaticity accuracy	dx, dy: ±0.003 (Under standard A light source)		
Lens	lens size 16mm,25mm,50mm .		
Communication port	USB 3.0		
Size	186*100*130mm (not include lens)		

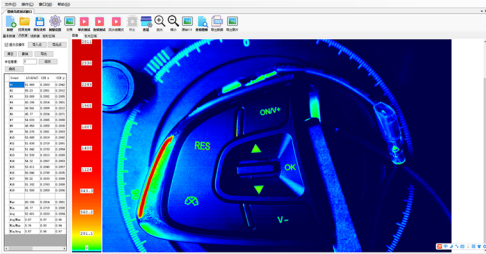
# Lens choose

## Model

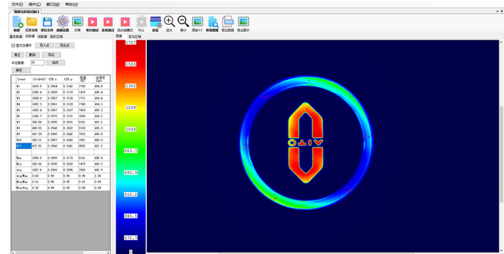
Lens Focus	50mm		25mm		16mm		12mm	
optical distortion	0.01%		0.04%		0.07%		0.39%	
View	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical
	16.1°	11.8°	31.6°	23.4°	47.7°	35.9°	61.0°	46.7°
Test Distance	Measured size (mm)							
100mm	—	—	—	—	88	65	118	86
150mm	—	—	85	62	132	97	177	129
250mm	71	52	141	103	221	162	394	216
400mm	113	83	226	166	353	259	471	345
500mm	141	103	283	207	442	323	589	431
1000mm	283	207	565	414	883	647	1178	863
2000mm	565	414	1413	1035	1766	1294	2355	1725

# Software function

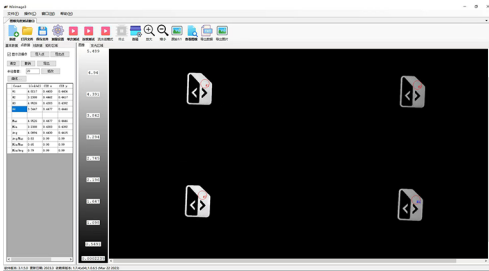
Rich software functions, single-point, multi-point, regional brightness and chromaticity uniform distribution pseudo-color map, etc., each parameter can be set to determine the upper and lower limits



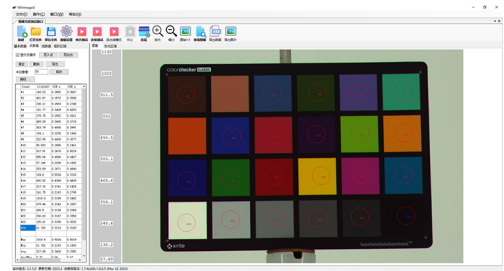
Car steering wheel button backlight test



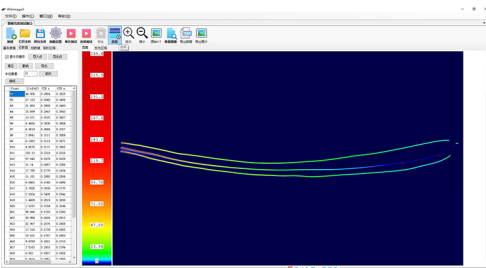
Car button backlight test



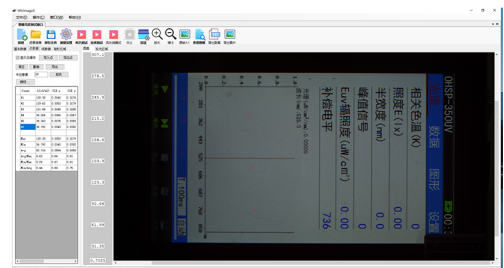
Car glass button backlight test



color card test

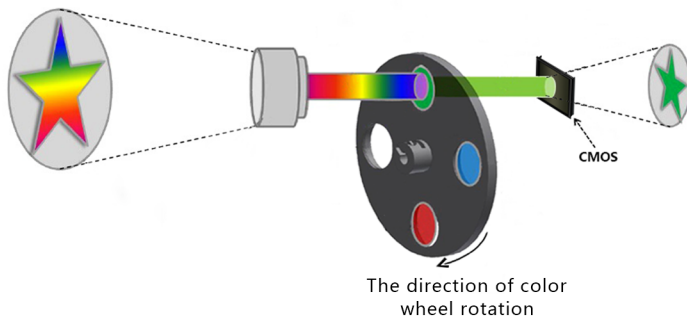


Car Ambient Light Test

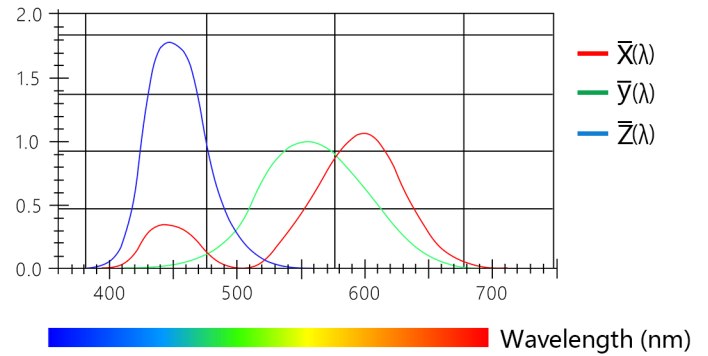


Display Test

# Principle



## CIE color matching function curve



# Application

Luminance , color, uniformity of LCD/OLED/LED display

Luminance , color, uniformity of BLU backlight

Automotive/Aviation Dashboard, Illuminated Character Keys

Luminance , color, uniformity of Lighting keyboard

Lighting , indoor, street road , tunnel .etc



Display



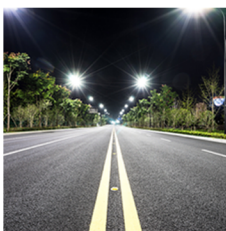
Car Dashboard



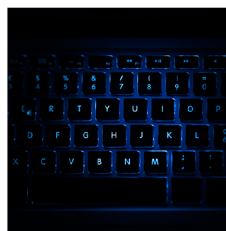
Car Ambient Light



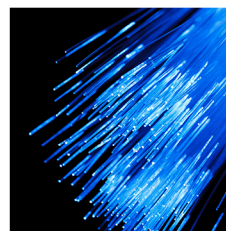
Car button backlight



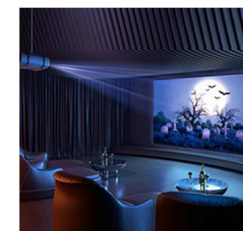
Road Luminance



Keyboard Backlight



lighting fiber



Projector

[WWW.HOPOOCOLOR.COM](http://WWW.HOPOOCOLOR.COM)

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