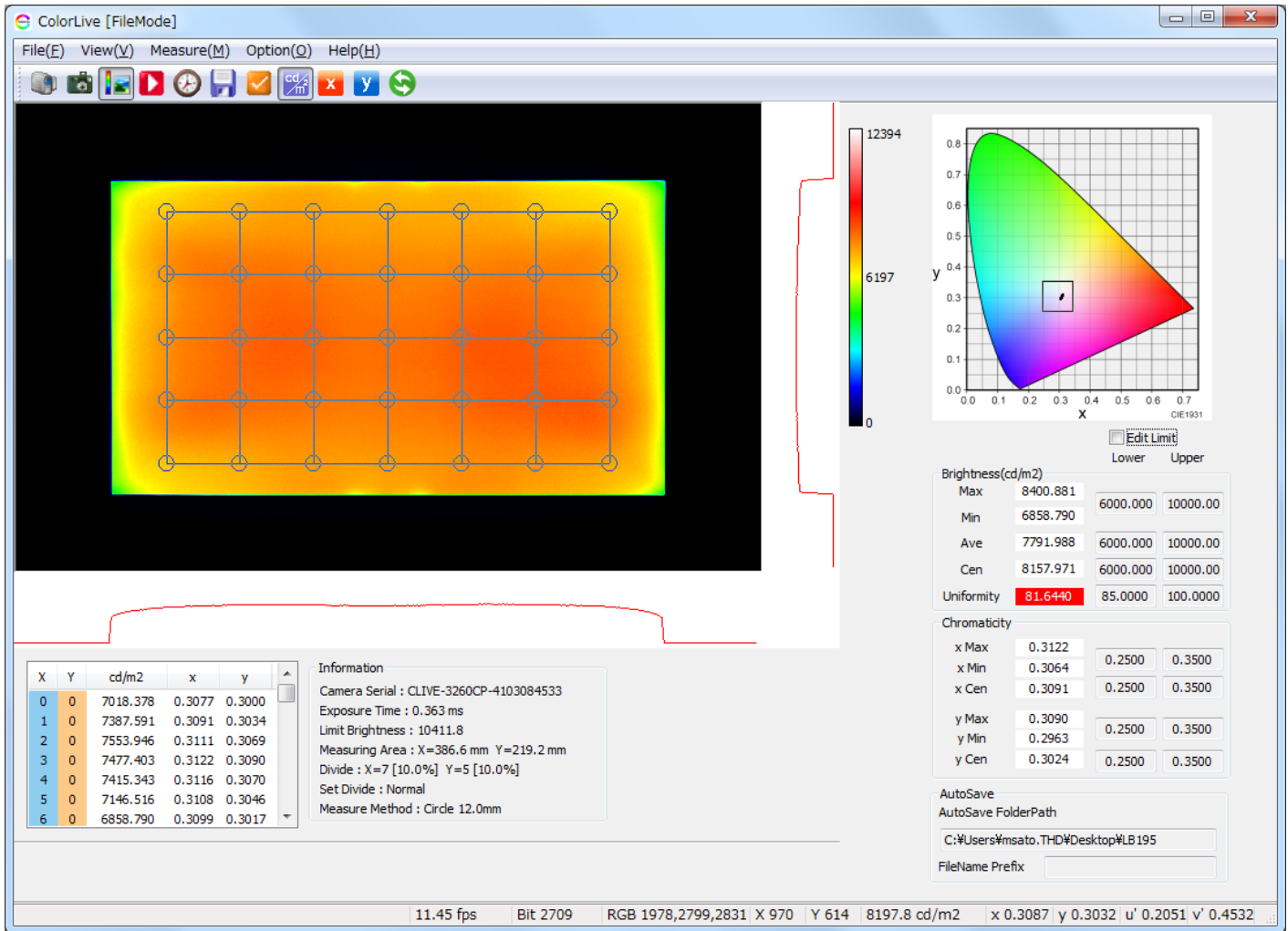# 2-D Luminance Uniformity Analyzer
ColorLive CL-300

For luminance and chromaticity uniformity measurement of variously sized flat display such as Back light, Front light, LCD, Flat light, OLED and Digital signage.

ColorLive [FileMode]

File(F) View(V) Measure(M) Option(O) Help(H)

X	Y	cd/m2	x	y
0	0	7018.378	0.3077	0.3000
1	0	7387.591	0.3091	0.3034
2	0	7553.946	0.3111	0.3069
3	0	7477.403	0.3122	0.3090
4	0	7415.343	0.3116	0.3070
5	0	7146.516	0.3108	0.3046
6	0	6858.790	0.3099	0.3017

Information
Camera Serial : CLIVE-3260CP-4103084533
Exposure Time : 0.363 ms
Limit Brightness : 10411.8
Measuring Area : X=386.6 mm Y=219.2 mm
Divide : X=7 [10.0%] Y=5 [10.0%]
Set Divide : Normal
Measure Method : Circle 12.0mm

Edit Limit
Lower Upper

Brightness(cd/m2)
		Lower	Upper
Max	8400.881	6000.000	10000.00
Min	6858.790		
Ave	7791.988	6000.000	10000.00
Cen	8157.971	6000.000	10000.00
Uniformity	81.6440	85.0000	100.0000

Chromaticity
		Lower	Upper
x Max	0.3122		
x Min	0.3064	0.2500	0.3500
x Cen	0.3091	0.2500	0.3500
y Max	0.3090		
y Min	0.2963	0.2500	0.3500
y Cen	0.3024	0.2500	0.3500

AutoSave
AutoSave FolderPath
C:¥Users¥msato.THD¥Desktop¥LB195
FileName Prefix

11.45 fps   Bit 2709   RGB 1978,2799,2831 X 970   Y 614   8197.8 cd/m2   x 0.3087 y 0.3032 u' 0.2051 v' 0.4532

Features and Sales points

- *Wide measurement range*
- *Luminance and Chromaticity distribution image available*
- *Compact and lightweight*
  Size 100×45×45mm   Camera body 216g
- *Multipoint measurable 1936×1216 points max.*
- *Moire reduction function when measuring LCD*
- *Suitable for both development and mass production lines*

※Camera stand is sold separately.

Automatic judgment function, and external control by customized software behave effectively in your mass production line!

■ Easy installation

Easy installation by USB connection of camera and memory key. After copy of software into your PC, it can be started without USB memory key.

■ Automatic judgment of acceptance/rejection

Judgement of acceptance/rejection can be made by setting the conditions of optical specifications. If measured results are out of specifications, the values are displayed in red color.

After measurement, "Pass" or "Fail" can be displayed in large letters automatically.

■ Wide-angle lens

Distortion correction and peripheral illumination correction let you measure in full-screen.

■ Chromaticity display switching (x,y / u',v')

■ Keylock

In order to prevent malfunctioning or incorrect setting, the system can be administered by password.

■ Multiple languages

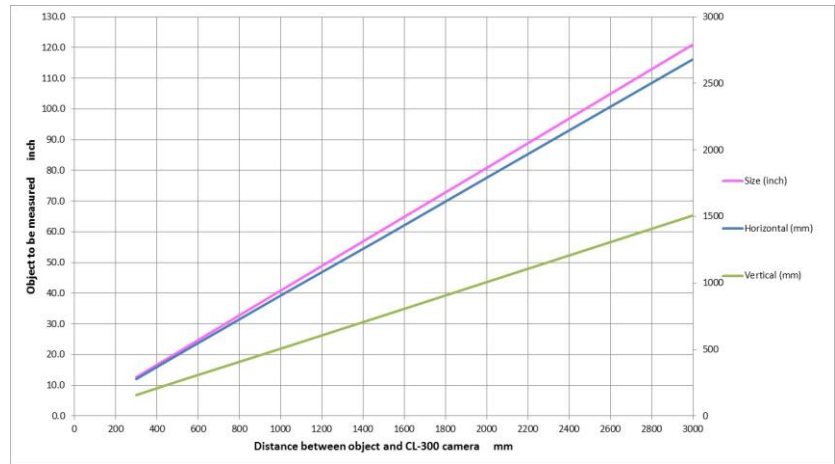English, Chinese and Japanese

■ Data saving

Measured data can be saved by the following file format.
Graphical content : JPEG PNG BMP   Measured value : CSV   Original : CLI
Re-measurement from the original file(CLI) is possible.
Measurement results can be saved automatically in sequential form of last 4 digits of 0001~9999.

■ Custom modification of software

Customized software is available in order to externally control the timing of such measurements and data savings using digital input/output boards etc.

■ Measuring specifications

Name and No.	ColorLive CL-300	
Lens	Focal length 12.5mm	
Camera	2.35million pixel (1936×1216 pixel) 1/1.2 inch CMOS sensor	
Resolution of camera	RGB 4096 gradations each （12bit each）	
Luminance measurement range （*1）	Type L 0.1 ～ 30,000 cd/㎡	
	Type H 5 ～ 800,000 cd/㎡	
Luminance linearity （*1）	±3%	
Chromaticity accuracy （*1）	±0.005	
Repeat accuracy （*1 *2）	Luminance	±0.5%
	Chromaticity	±0.003
Uniformity （*1 *3）	Luminance	±2%
	Chromaticity	±0.003

Contents

・Camera unit
・ 3.0 m USB cable
・USB memory key
(Installation Software, and Manual)
・Carrying case

*1 Based on white point of the white standard light source D65 of RGB backlight at the time of pre-shipment calibration.
*2 Value in 10 iterations.
*3 Value at 81 points within 90% range of camera image.

■ Operating environment

CPU	Intel Core i3 2.0GHz or higher
Memory	2GB or more At least 300MB of free physical memory is needed at program execution.
HDD	More than 500MB of free space is needed when installing.
OS	Windows 7 32bit/64bit Windows 8 32bit/64bit Windows 10 32bit/64bit
USB	Support USB3.0 and 2.0. Recommended 3.0 port if available. Recommended to connect to USB controller with built-in Intel chipset.
Monitor	XGA（1024x768）or better resolution Recommended SXGA（1280x1024）or better resolution with bigger than 17 inches display
Environmental condition	0～35℃（20～80%RH with no condensation）