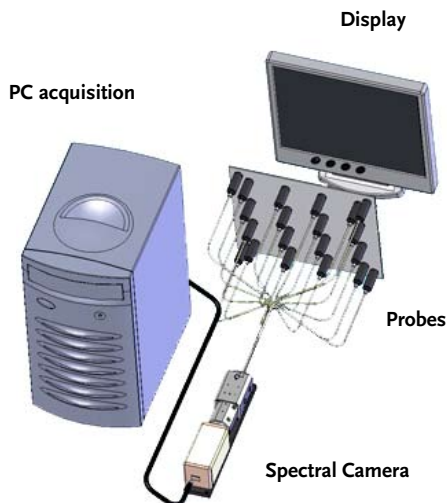


SPECTRAL CAMERA *For FPD and LED*

Hyperspectral solution for quality control of displays and LED panels



Spectral Camera with multichannel fiber optics is capable of providing color, contrast, luminance, uniformity and gamma measurement at multiple locations simultaneously in flat panel displays. All multiple locations are measured in real time. A traditional spectrometer measures a single point and needs scanning.

Up to 100 measurement probes can be used without any moving parts, allowing larger screens to be measured at once, even on line in the production line.

SYSTEM

SPECIM's hyperspectral system for FPDs consists of a Spectral Camera integrating ImSpector V8E, imaging spectrograph and fiber optics.

Applications

- LED and CCFL
- Display backlights
- Flat panel displays
- LED lamps or arrays



Multipoint display test station prototype.
Courtesy: Isuzu Optics, Taiwan

Preliminary information

Performance achievable

HYPERSPECTRAL SYSTEM	SPECIFICATIONS
Screen size	No limitations
Spectral range	380-800 nm
Spectral resolution	5 nm
Number of channels	Up to 100
Luminance range (without ND filters)	0.1 to 10 000 cd/m ²
Luminance accuracy	+/- 2% @ 2856 K
Color accuracy (x&y)	+/- 0.005
Probes	10 mm collimated lens or cosine diffuser
Acceptance angle (FOV)	1 or 2 degrees (lens)
Measurement time/DUT	< 1 s
Camera	USB, Firewire or CameraLink, 12 or 14 bits



The measurement follow the requirements of ISO 13406-2 standard

Software

Spectral imaging software for camera control and on line calculation of DUT parameters is available

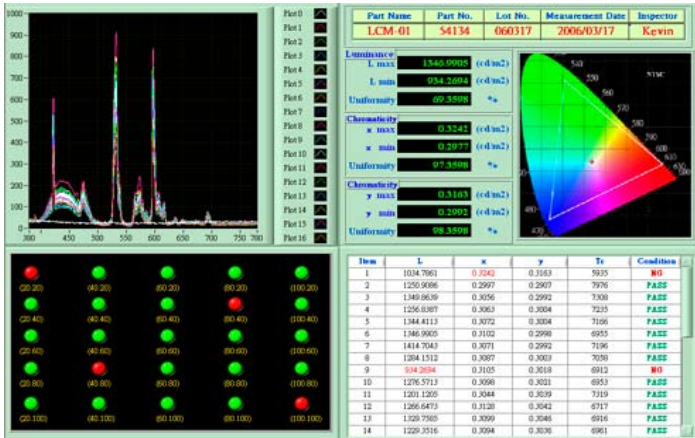


Image courtesy: Isuzu Optics, Taiwan