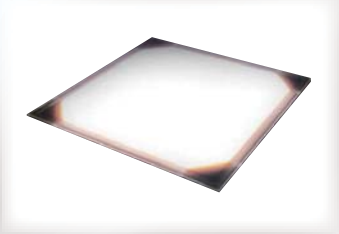
reference exhibit

TOPCON

Ultimate and Versatile 2D Spectroradiometer is finally released!!

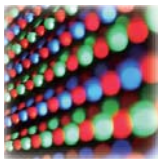
2D Spectroradiometer **SR-5000**

High precise and accurate measurement by 1nm spectral technology with powerful data analysis software.



- Spectrum measurement with 1376 x 1024 pixel.
- Spectral analysis enable various kind of usage.
- World first complete traceability and calibration for Luminance and Chromaticity.

It can be sensing for a various object and purpose by analyzing the image that contains the detailed information such as spectrum.


- Evaluation of luminance, chromaticity, optical spectrum for LCD, OLED and related materials.
- Evaluation of emission spectrum distribution characteristics for meter of automotive, the light of interior(exterior).
- Evaluation of luminance, chromaticity, optical spectrum for light-emitting part of LED(OLED).
- Evaluation of visualization for color shading(concentration) of paint.
- Analysis and applications for the medical field.

Specifications

Detector		1.4 mega pixel CCD image sensor
Objective lens		Standard lens: Focal length f=32mm
		Standard lens+Attachment wide lens: Focal length f=24mm *1
Effective pixel		1376X1024
Data bit		14bit
Measurement range		0.5 to 5,000,000cd/m^2
Wave length range		380 to 780nm
Spectral accuracy		±0.5nm (On Hg emission line)
Spectral band width		7nm (Half width)
Wave length resolution		1nm
Linearity in luminance		±2% *2, *3
Chromaticity accuracy		±0.002 *2, *3, *6
Repeatability	Luminance	0.5% *2, *4
	Chromaticity	0.001 *2, *5
Measurement time		Approx. 65 sec <
Interface		USB3.0/External trigger
Power supply		AC100-240V(50/60Hz) Dedicated AC adapter(standard accessory)
Power consumption		Approx. 20W
Operating condition		Temperature:5-35ºC, Humidity: 85%R.H. or less (No condensation)
External dimensions (Protruding parts not included)		Standard type: W162XH202XD373mm
		Wide type : W162XH202XD407mm
Weight		Approx. 5.5kg

*1: Standard lens + Attachment lens, *2: Standard illuminant A, *3: At the center of CCD, *4: Within 2σ, *5: Max value - Min value
*6: For reference of surface with the color glass (O-55, Y-48, A-73B, IRA-05, T-44, R-61, B-46, V-44, G-54)

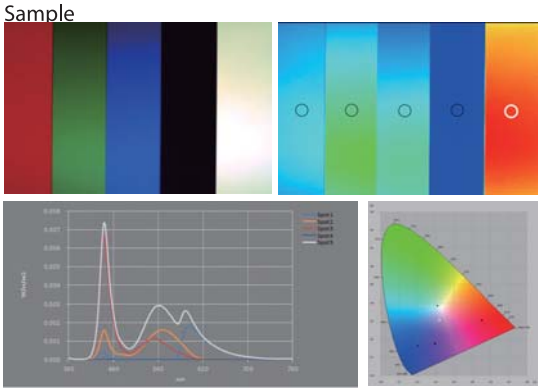
Measurement area: Standard lens

Measurement distance (mm)	400	500	1,000	1,500	2,000	2,500
Display size (inch)	10.4	12.9	25.4	37.8	50.5	62.5
Horizonal (mm)	211.1	262.7	516.8	770.3	1027.0	1271.6
Vertical (mm)	157.6	196.0	385.8	574.9	766..6	949.1

Measurement area: Wide lens

Measurement distance (mm)	400	500	1,000	1,500	2,000	2,500
Display size (inch)	14.4	17.6	34.2	50.7	67.3	83.7
Horizonal (mm)	292.4	359.2	696.6	1031.4	1369.4	1704.4
Vertical (mm)	218.2	268..1	519.9	769.8	1022.1	1272.2

Sample



ISO 14001 JACO EC97J1081 — UKAS ENVIRONMENTAL MANAGEMENT 051

JCSS 0073

TOPCON TECHNOHOUSE has been certified as a provider of optical solutions, according to the Japanese Measurement Law.

We will issue a calibration certificate bearing the JCSS logo, which guarantees the accuracy of illuminance (illuminance meter), and luminosity (lamp) based on national standards.

*Some screens are simulated.
*The specifications and external appearances of product in this catalogue may be changed without prior notice due to improvements.
*The catalogue includes products that are sold separately.
*The actual color of products may differ slightly from the catalogue due to lighting and printing conditions.

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SAFETY PRECAUTIONS

Make sure to carefully read the "Manual" to ensure that you use the product properly and safely.
- Always connect the instrument to the specified power supply voltage. Improper connection may cause a fire or electric shock.
- Be sure to use the specified batteries. Using improper batteries may cause a fire or electric shock.

For more information please visit our website.

http://www.topcon-techno.co.jp/en/

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