Spectroradiometer series

SR-LEDW / SR-LEDH / SR-NIR
SR-UL2s / SR-UL2 / SR-UL1R / SR-3AR

NEW Added Special HighSpeed mode.
Topcon provides wide variety of Spectroradiometer for ultra-low luminance measuring, ultra-high luminance and Near infrared measurement.

SR-LED series is best suited for the inspection of High-intensity LED.

SR series Spectroradiometer is suited to measure Spectral distribution, Luminance, Chromaticity and Correlated color temperature of the light emitted from display device, car interior and lamp.

**Product features**

- **Half band-width is 5nm or less.**
  SR-LEDW-5N has a half-width of 5nm or less, which is required by colorimetry (JIS Z 8724-1997) in a visible light region.

- **Most suitable for measuring directly to ultra-high intensity LED light.**
  Ultra-high intensity LED light can be measured directly without integrating sphere, diffusing board and external ND filter. It is easy to manage by the luminance which repeatability is higher. Also, measurement range of luminance is up to 4,500,000 cd/m² when measurement angle is 1°. *Only SR-LED series

- **High uniformity of the sensitivity on the measurement area.**
  Uniformity of the sensitivity on the measuring area is within 5% in luminance and within 0.001 in chromaticity at measuring angle of 1°. *SR-LED only

- **High accuracy measurement of flashing light.**
  Synchronous measurement function.
  The instrument can detect and measure frequency of flash by inputting synchronous signal. Arbitrary frequency value can be set manually.
  Integral time delay function.
  Following kind of light can be measured with stable: Frequency flashing of light on black screen, Intermittent light, and Periodic flashing light.

- **Spectral observation.**
  SR series can conduct spectral radiance measurement and so that spectral distribution and spectral radiance can be observed.

- **High accuracy Luminance and Chromaticity measurement.**
  Accuracy (Luminance) ±2%, Accuracy (Chromaticity) : dxdy ±0.002
  *In Normal speed mode at measuring angle of 2° for standard illuminant A.

- **High speed measurement for in-line inspection is 0.4sec (minimum).**
  LAN (Ethernet 10/100 BASE-TX) communication allows high speed measurement of 0.4sec.
  *Under Measurement angle 2°, Integral time 100ms, High speed mode and LAN (STB command). *SR-LEDH only

- **FIX mode.**
  Measurement time is faster about 1.5sec than normal when measuring same kind of object in succession. *SR-LEDW, SR-LEDH only

- **SR-NIR can measure spectral distribution in near infrared range (600-1030nm) with high accuracy.**

- **Combine with SR series for visible light, Spectral distribution can be measured from visible to near infrared range (380-1030nm).**

- **No need of warm-up after power on.**
  Measuring field:2° Luminance of object to be measured is 1cd/m² or above.

- **Improvement of chromaticity accuracy.**
  Chromaticity:dx,dy=±0.0013 (for standard illuminant A) *SR-UL2s only

- **SR-UL2s**
  0.0005 to 300,000 cd/m²

- **SR-UL2**
  0.0005 to 300,000 cd/m²

- **SR-UL1R**
  0.001 to 300,000 cd/m²
The SR-NIR achieves high accuracy measurement of very faint Near infrared.

**Measurement reliability**

The SR series spectroradiometer is built-in spectroscope and measure spectral radiance of each wavelength from 380 to 780nm. And luminance, chromaticity, other color data is output using color matching function.

Other measuring instruments can be calibrated using the result data of SR series as reference.

Note: except Near infrared spectroradiometer SR-NIR.

The SR-NIR achieves high accuracy measurement of very faint Near infrared.

**CIE170-2:2015 Color Matching Function**

This color matching function is using cone fundamentals for the Fundamental Chromaticity Diagram with Physiological Axes which was released in 2006.

Visual color difference is obtained the result less than CIE 1931 in the field of OLED, QD, BT2020 with laser, wide color gamut display of HDR and general lighting.

Available to change field of view(2 degree or 10 degree) and CIE(1931 or 170-2) using application software named CS-900A that is standard accessory.

*Even if chromaticity is same due to difference of color range in chromaticity diagram, color tones are different in CIE1931 and CIE170.
Usage

• SR-LEDW / SR-LEDH / SR-UL2s / SR-UL2 / SR-UL1R / SR-3AR

Optical characteristic evaluation of Flat Panel Display (LCD, OLED, QD, LD), Fluorescent material, Large Television, Mobile phone, Automobile (Component, Interior panel and various type of lamp), Indicator (Large Panel LED, Traffic light, mobile phone), Parts for display (LCD module, LED and Optical filter), Material (Back light, Fluorescent material, Optical filter, Organic EL and LED).

• SR-NIR

- For measuring NIR LED illumination of the safety prevention in automobile.
- For measuring NIR LED illumination of the monitoring camera.
- For measuring NIR beam coming from remote controller.
- For measuring Transmission characteristics in NIR of optical film and lens.
- For monitoring output of NIR LED of near-infrared range
- Other near-infrared measurement.

Color Systems Display of Calculation Results

• Computing

- common with SR-LEDW / SR-LED / SR-UL2 / SR-UL1R / SR-3AR

Not only spectral distribution but also chromaticity, Tristimulus value, luminance and correlated color temperature can be determined by calculation immediately. Tristimulus value X,Y,Z, at 10 degree observers can be determined also.

<table>
<thead>
<tr>
<th>Measuring angle status when displayed data was measured</th>
<th>Measuring the current measuring field</th>
<th>The current color matching function type</th>
</tr>
</thead>
<tbody>
<tr>
<td>No entry</td>
<td>C</td>
<td>No correction factor is valid</td>
</tr>
<tr>
<td>F1</td>
<td>CIE 1931</td>
<td>Spectral correction factor is valid</td>
</tr>
<tr>
<td>F2</td>
<td>CIE 170-2</td>
<td>XYZ correction factor is valid</td>
</tr>
<tr>
<td>F3</td>
<td>both of spectral and XYZ correction factor are valid</td>
<td></td>
</tr>
</tbody>
</table>

- Luminance / Chromaticity mode (L,v, x,y)

- Radiance / Luminance mode (Le, Lv)

| #10 AUTO ABS 2.0 | Le=9.728E-02 W/sr/m^2 | Lv=3.652E+01 cd/m^2 |

- Tristimulus value mode (XYZ)

| #10 AUTO ABS 2.0 | X=3.612E+01 cd/m^2 | Y=3.652E+01 cd/m^2 | Z=1.626E+01 cd/m^2 |

- Correlated color temperature / Deviation mode (Tc, duv, Lv)

| #10 AUTO ABS 2.0 | Tc = 3632K 2.0 | duv = 0.0813 2.0 | Lv=3.652E+01 cd/m^2 |

- Luminance / Chromaticity mode (Lv, u'/v')

| #10 AUTO ABS 2.0 | u'= 0.2284 2.0 | v'= 0.5195 2.0 | Lv=3.652E+01 cd/m^2 |

Block diagram

Telescopic system makes it possible to measure the absolute value of the spectral radiance of light sources or objects without coming in contact with them. This optics also make it possible to verify the object to measure through a finder.

Provides high accuracy of spectrophotometry per 1 nm and a host of calculation features.
Standard accessory software can control Spectroradiometer and can process measured data with simple operation.

**Colorimetry software CS-900A (Standard accessory)**

The CS-900A for Windows can control the SR series and collect, save, and graph measured data. The measurement time can be shortened by selecting Colorimetry mode. In Colorimetry mode, the instrument will omit spectral radiance data and send the measured data of luminance, chromaticity, and color temperature.

* Judging the unevenness of LED color, classifying LED color into ANSI rank, and judging whether or not measured color data fall within certain rank.
* You can specify area in the color diagram and CS-900A judge whether or not color data fall within the area.

**Total luminous flux measuring function**

SR series mounted to Integrating sphere, CS-900A has a function to calculate Total luminous flux from SR series measured data.
* Integrating sphere, standard light, Auxiliary light, and adapter for SR series should be purchased by customer.

**Color rendering index (CRI)**

Color rendering index is measure of how well light source render the color of object compared to reference light source. Ideal light source for CRI is rated as 100. Light sources with a high CRI are desirable. The lower the CRI rating, the less accurately colors will be reproduced.

**Evaluation for Accessible design**

Age-related luminance contrast, which is used in illumination and visual display design, can be evaluated complying with JIS S 0031. Evaluation items:
1. Contrast ratio CR
2. Weber ratio $C_w$
3. Michelson contrast $C_m$
Evaluation based on Photopic and Scotopic are also available when entering their sensitivity data into software.

**Display**
- Spectral radiance graph, other graph
- Colorimetry data
- Spectral radiance data / Spectral irradiance data peak wavelength
- Measurement conditions / Note
- Chromaticity diagram
- xy diagram
- u’v’ diagram
- a*b* diagram
- u’v’ diagram
- Hue-chroma diagram

**Table: Colorimetry software CS-900A (Standard accessory)**

<table>
<thead>
<tr>
<th>Display</th>
<th>Color system</th>
<th>Function</th>
<th>Condition setting</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>:</td>
<td>: Spectral radiance graph, other graph</td>
<td>: Fundamental operations of Spectral data</td>
<td>: Auto/Frequency/Integral time, Integ. delay mode, Measurement speed, Measurement angle, Average, Single / Interval / Continue</td>
<td>: CIE standard observer, Light source, Color Rendering Index</td>
</tr>
</tbody>
</table>

**Software requirement**
- OS: Windows® 7 Ultimate / Professional (32bit/64bit)
- Windows® 8.1 Pro or more (32bit/64bit)
- Windows® 10 Pro or more (32bit/64bit)
- CPU: Intel® Core™ i3 2.4GHz or more
- *In the 64bit, the CS-900A support and 64 only.
- HDD: 1GB or more
- Memory: 1GB or more
- Port: USB 2.0 (1pce), RS-232C serial port
- *use inter-link RS-232C cable for DOS/V

NEW This new Color Matching Function is corresponded to the latest CIE 170-2:2015 technical report.
### Specification

<table>
<thead>
<tr>
<th>SR-LEDW-SN</th>
<th>SR-LEDW</th>
<th>SR-LEDH</th>
<th>SR-NIR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Optical system</strong></td>
<td>Objective lens: f= 82 mm f/2.5, Eyepiece lens: 5º view field, Diaptor adjustment range: ±1 diopter</td>
<td>Objective lens: f= 82 mm f/2.5, Eyepiece lens: 5º view field</td>
<td>Objective lens: f= 82 mm f/2.5, Eyepiece lens: 5º view field</td>
</tr>
<tr>
<td><strong>Dispersing element</strong></td>
<td>Electronically cooled linear CCD</td>
<td>Electronically cooled back incidence type CCD</td>
<td>Electronically cooled linear CCD</td>
</tr>
<tr>
<td><strong>Photoradetector</strong></td>
<td>Electronically cooled linear CCD</td>
<td>Electronically cooled back incidence type CCD</td>
<td>Electronically cooled linear CCD</td>
</tr>
<tr>
<td><strong>Measuring distance</strong></td>
<td>350 mm to ∞ (distance from metallic tip of objective lens)</td>
<td>350 mm to ∞ (distance from metallic tip of objective lens)</td>
<td>350 mm to ∞ (distance from metallic tip of objective lens)</td>
</tr>
<tr>
<td><strong>Wavelength range</strong></td>
<td>380nm to 780nm</td>
<td>600 to 1030nm</td>
<td>About 406 mm x 150 mm x 239 mm (L x W x D)</td>
</tr>
<tr>
<td><strong>Spectral accuracy</strong></td>
<td>±0.3nm (on Hg emission line)</td>
<td>±0.5nm (on Hg emission line)</td>
<td>Electronically cooled back incidence type CCD</td>
</tr>
<tr>
<td><strong>Spectral band width</strong></td>
<td>5nm or less (half width)</td>
<td>5 to 9nm (half width)</td>
<td>5 to 9nm (half width)</td>
</tr>
<tr>
<td><strong>Wavelength resolution</strong></td>
<td>1nm</td>
<td>1nm</td>
<td>1nm</td>
</tr>
<tr>
<td><strong>Measuring mode</strong></td>
<td>Auto / Manual (integral time / frequency), synchronous, FIX (INTEGR / FREQ)</td>
<td>Auto / Manual (integral time / frequency), FIX</td>
<td>Auto / Manual (integral time / frequency), FIX</td>
</tr>
<tr>
<td><strong>Calculation function</strong></td>
<td>Luminance ±2%, Chromaticity (x, y) ±0.002 (for standard illuminant A)</td>
<td>with in ±7% (600 to 1030nm for Topcon Standard light)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Repeatability</strong></td>
<td>Luminance ±2%, Chromaticity (x, y) ±0.002 (for standard illuminant A)</td>
<td>with in ±7% (600 to 1030nm for Topcon Standard light)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Repeatability</strong></td>
<td>Luminance ±0.003 (for standard illuminant A)</td>
<td>with in ±7% (600 to 1030nm for Topcon Standard light)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td>Provided AC adapter AC100V-240V, 50/60Hz, DC12V</td>
<td>Approx.36W</td>
<td>Approx.36W</td>
</tr>
<tr>
<td><strong>Power consumption</strong></td>
<td>Approx.33W</td>
<td>Approx.33W</td>
<td>Approx.33W</td>
</tr>
<tr>
<td><strong>External dimensions</strong></td>
<td>About 406 mm x 150 mm x 239 mm (L x W x D)</td>
<td>About 413 mm x 98 mm x 231.5 mm (L x W x D)</td>
<td>About 5.5 kg (main unit only)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>About 5.3 kg (main unit only)</td>
<td>About 5.3 kg (main unit only)</td>
<td>About 5.5 kg (main unit only)</td>
</tr>
</tbody>
</table>

### Dimensions

- **SR-LEDH**

- **SR-LEDW / SR-UL2s / SR-UL2 / SR-UL1R / SR-3AR / SR-NIR**

---

1. Measuring angle 2° in normal speed mode
2. Measuring angle 2° in normal speed mode
3. Measuring angle 2° in normal speed mode
4. SR-LEDH can not measure quantity of luminance. The value is for reference, when measuring standard illuminant A. The measuring distance is the distance from the metallic tip of the objective lens.

---

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>350</th>
<th>400</th>
<th>500</th>
<th>600</th>
<th>800</th>
<th>1000</th>
<th>2000</th>
<th>5000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measurement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Distance (mm)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SR-LEDW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SR-LEDH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SR-NIR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Specification**

<table>
<thead>
<tr>
<th>SR-UL2s</th>
<th>SR-UL2</th>
<th>SR-UL1R</th>
<th>SR-3AR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measuring diameter (mmø)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2º</td>
<td>10.0</td>
<td>11.7</td>
<td>15.1</td>
</tr>
<tr>
<td>1º</td>
<td>4.99</td>
<td>5.84</td>
<td>7.55</td>
</tr>
<tr>
<td>0.2º</td>
<td>1.90</td>
<td>1.17</td>
<td>1.51</td>
</tr>
<tr>
<td>0.1º</td>
<td>0.50</td>
<td>0.59</td>
<td>0.76</td>
</tr>
<tr>
<td><strong>Measuring angle</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>350mm to 780mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spectral accuracy</strong></td>
<td>±0.3nm (on Hg emission line)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spectral band width</strong></td>
<td>5 to 8nm (half width)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Wavelength resolution</strong></td>
<td>1nm</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Measurement mode</strong></td>
<td>Auto/manual (integral time/frequency), external vertical sync signal input</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Calculation function</strong></td>
<td>Spectral radiance (W/m²/m/mm²)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Repeatability</strong></td>
<td>Luminance: ±2% Chromaticity(x,y): ±0.0003 (for standard illuminant A)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Minimum luminance display</strong></td>
<td>5.000E-06</td>
<td>1.000E-05</td>
<td>1.000E-03</td>
</tr>
<tr>
<td><strong>Polarization error</strong></td>
<td>Luminance 1% or less, Spectral radiance 2% or less (400nm to 780nm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Humidity</strong></td>
<td>80% R.H. and below (No condensation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>About</strong></td>
<td>About 406 mm x 150 mm x 239 mm (L x W x D)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>About 5.5 kg (main unit only)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*1: 2º from 10 times continuous measurement at measuring angle 2º in normal speed mode.

*2: Max value - Min value from 10 times continuous measurement at measuring angle 2º in normal speed mode.

*3: Measurable range in Normal and High speed mode.

*4: The measuring distance is the distance from the metallic tip of the objective lens.

*5: The values in this table are design reference values and may differ somewhat from the actual diameter.

**System Diagram**

1/2-inch CCD camera (*)

1/2-inch CCD camera IA-2

White standard board WS-3

ND Filter (10X, 100X set)

Attachment Lens AL-6, AL-11, AL-12

Luminance adapter 2x-30

Attachment Lens AL-4

Fiber probe FP-3


RS-232C Interlink cable (*)

LAN(10/100BASE-TX) cable(*)

USB cable (Standard accessory)

Colorimetry program CS-900A (Standard accessory)

*1: 2º from 10 times continuous measurement at measuring angle 2º in normal speed mode.

*2: Max value - Min value from 10 times continuous measurement at measuring angle 2º in normal speed mode.

*3: Measurable range in Normal and High speed mode.

*4: The measuring distance is the distance from the metallic tip of the objective lens.

*5: The values in this table are design reference values and may differ somewhat from the actual diameter.
Optional accessories

**Attachment lens 3 sets AL-6 / AL-11 / AL-12**

These lenses make focal length shorter and make measurement area shrink.

<table>
<thead>
<tr>
<th>Measurement distance (mm)</th>
<th>AL-6</th>
<th>AL-11</th>
<th>AL-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>2º</td>
<td>0.10 to 0.11</td>
<td>0.15 to 0.19</td>
<td>0.32 to 0.40</td>
</tr>
<tr>
<td>5º</td>
<td>0.20 to 0.29</td>
<td>0.15 to 0.19</td>
<td>0.32 to 0.40</td>
</tr>
<tr>
<td>1º</td>
<td>0.00 to 0.08</td>
<td>0.06 to 0.08</td>
<td>0.16 to 0.20</td>
</tr>
</tbody>
</table>

*Measurement distance may differ slightly depending on aperture mirror machining accuracy.

*Measurement distance is from metal tip of attachment lens to the object.

**Tripod 5N**

Simplifies collimation of measurement object.

- Max height : 1835mm
- Min height : 810mm
- Weight : 4.81Kg (including Tripod stand)

**Fine Adjustment Stand S-4**

Simplifies vertical and lateral collimation.

- Elevation angle : 40º
- Depression angle : 80º
- Weight : Approx. 1.7Kg

**Tripod Tripod-SR**

Simplifies collimation with smooth movement.

- Max height : 1614mm
- Min height : 694mm
- Weight : 3.0Kg (including Tripod stand)

**The adapter for microscope: AL-4**

AL-4 is for connecting between the lens for microscope and objective lens of instrument. It is possible to measure very small area using the lens for microscope.

**Light guide used for remote detection of light from measurement area.**

For measuring illuminance, chromaticity, color temperature, and color rendering index of light from LED, OLED illumination. For measuring illuminance of light from projector.

**Reference White Board WS-3**

Used for measurement of object color or light source with directionality.

- Luminance factor : 99% or above
- (for measurement parameters of 0º incidence and 45º observation)
- Material : Barium sulfate (BaSO₄)
- Dimensions : 78 mm, t = 12.5 mm
- Effective white surface : 40 mm (at center)

**CCD Adapter IA-2**

Adapter for connecting instrument to the CCD camera.

(C Mount, 1/2 size)

**ND filter (10x / 100x set)**

Neutral density filter for measuring higher luminance than the measuring range of instrument.

**Illuminance adapter (Cosine receptor) for SR-series ZV-30**

Complying with JIS C1609-1:2006 AA class. The spectral irradiance and illuminance may be measured by attaching an illuminance adapter to the Spectroradiometer. Calibration of your Spectroradiometer and illuminance adapter is required in Topcon factory before you use the illuminance adapter with your instrument.

- For measuring illuminance, chromaticity, color temperature, and color rendering index of light from LED, OLED illumination. For measuring illuminance of light from projector.

**Measurement range**

<table>
<thead>
<tr>
<th>Measuring angle</th>
<th>SR-LEDW at measuring angle 2º with ZV-30</th>
<th>SR-UL2s at measuring angle 2º with ZV-30</th>
<th>SR-UL1R at measuring angle 2º with ZV-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.001 to 30,000,000 lx</td>
<td>(SR-LEDW at measuring angle 2º with ZV-30)</td>
<td>(SR-UL2s at measuring angle 2º with ZV-30)</td>
<td>(SR-UL1R at measuring angle 2º with ZV-30)</td>
</tr>
<tr>
<td>0.02 to 60,000 lx</td>
<td>(SR-LEDW at measuring angle 2º with ZV-30)</td>
<td>(SR-UL2s at measuring angle 2º with ZV-30)</td>
<td>(SR-UL1R at measuring angle 2º with ZV-30)</td>
</tr>
<tr>
<td>6 to 7,000,000 lx</td>
<td>(SR-LEDW at measuring angle 2º with ZV-30)</td>
<td>(SR-UL2s at measuring angle 2º with ZV-30)</td>
<td>(SR-UL1R at measuring angle 2º with ZV-30)</td>
</tr>
<tr>
<td>2 to 60,000 lx</td>
<td>(SR-LEDW at measuring angle 2º with ZV-30)</td>
<td>(SR-UL2s at measuring angle 2º with ZV-30)</td>
<td>(SR-UL1R at measuring angle 2º with ZV-30)</td>
</tr>
<tr>
<td>600 to 7,000,000 lx</td>
<td>(SR-LEDW at measuring angle 2º with ZV-30)</td>
<td>(SR-UL2s at measuring angle 2º with ZV-30)</td>
<td>(SR-UL1R at measuring angle 2º with ZV-30)</td>
</tr>
</tbody>
</table>

Accuracy Ev ±2%, xy ±0.002 (for standard illuminant A)

**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.

For more information please visit our website.

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

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E-mail: techno-info@topcon.co.jp

Reference White Board WS-3

IMM 0073

TOPCON TECHNOHOUSE Corporation has been certified as a provider of optical devices, according to the Japanese Measurement Law. We are committed to continuous improvement in order to maintain the highest quality products.

ISO 14001

UKAS MANAGEMENT SYSTEMS

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