

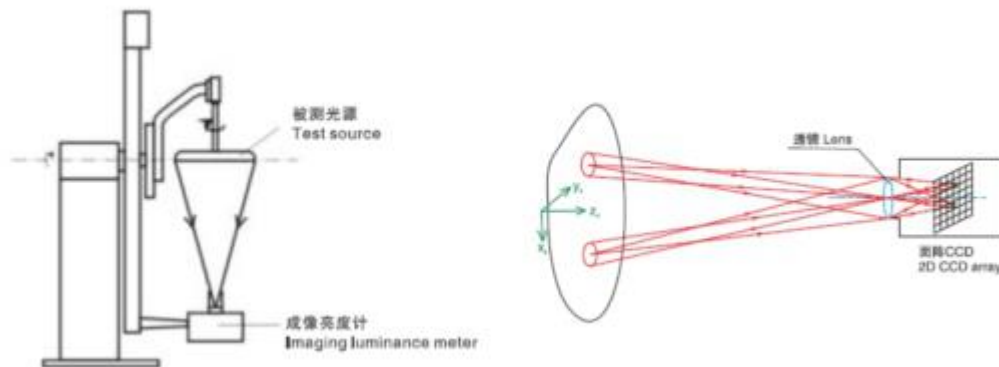
## GO-NR1000 NEAR-FIELD GONIOPOTOMETER



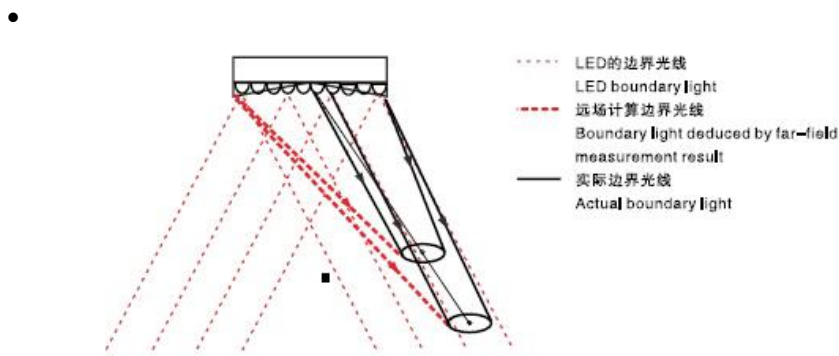
### • Description

- **Near-field photometry, to build the light ray model**
- **More convenient and accurate secondary optical design and development of lighting products**
  - Suitable for near-field photometric measurement of LED packages, optical lenses, etc., for secondary optical design;  
The imaging luminance meter uses TE cooling to ensure its stability;
- Can be equipped with photometer and spectroradiometer to measure parameters such as color spatial distribution.
- The near-field goniophotometer adopts a two-dimensional CCD imaging luminance meter. As the figure shows, imaging

- luminance meter rotates around the test source to realize the luminance distribution measurement of the tested light source for
- every angle.i.e.,the luminous flux of every direction of each lighting-emitting point. The actual ray model can be deduced,
- which can be input into optical design software for better luminaire and field design.



- The traditional goniophotometer realizes the light distribution measurement at a distance long enough, meeting far-field measurement condition. However, when the illuminated surface is close to the light source, the light distribution is very different from which in far-field measurement condition. As the figure shows, the light distribution in every distance for luminaires which includes multiple LEDs with certain beam angle differs greatly.



LED灯具不同距离被照面的光线

Light ray in every distance of emitted surface by LED luminaires

- Near-field goniophotometer can establish the actual light ray model of tested sample, providing more detailed data for optical design.

## • Parameter

- **◆ Basic working principles**

- GO-NR1000 near-field goniophotometer is applicable for near-field photometric measurement of small size sources, and can obtain the luminance distribution. The total luminous flux, illuminance distribution of every plane, and far-field luminous intensity distribution can be acquired by establishing the ray model of light via algorithm. The combination of output ray model and optical software, such as Tracepro, makes it more convenient and accurate to do the secondary optical design and development.

- **Specifications:**

- • Rotating range of horizontal axis ( $\gamma$  axis) :  $-118^{\circ}\sim+118^{\circ}$
- • Rotating range of vertical axis (C axis) :  $0^{\circ}\sim360^{\circ}$
- • Angle accuracy of rotation:  $\pm 0.1^{\circ}$
- • Size of emitting area of test source: 0.5mm-30mm (Or customized)
- • Accuracy of image luminance meter: CLASS 1
- • Luminance measurement repeatability:  $\pm 1\%$
- • Measurement range of luminance:  $1\text{mcd/m}^2 \sim 2\text{kcd/m}^2 \sim 200\text{kcd/m}^2 \sim 20000\text{kcd/m}^2$

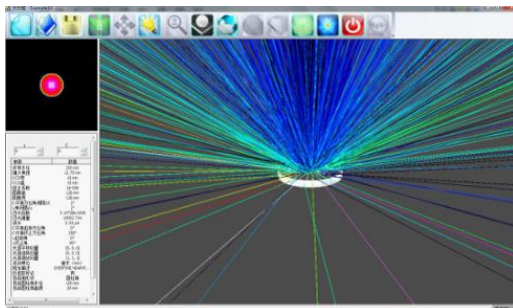
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- **◆ File format**

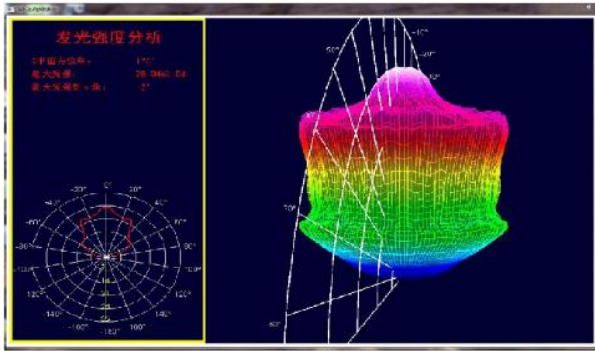
- Light output format: Tracepro, etc.

- **◆ Test interface**

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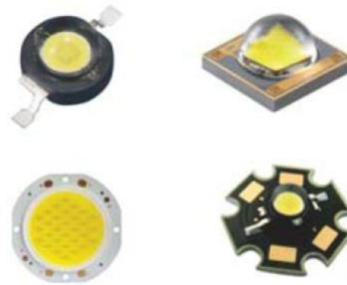
- **Light ray measurement interface**



- **Light ray measurement interface**

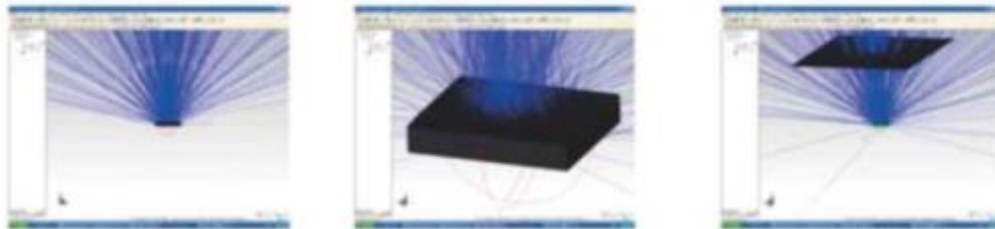
- **Application**

- GO-NR1000 is suitable for small led source such as LED package



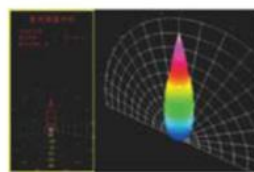
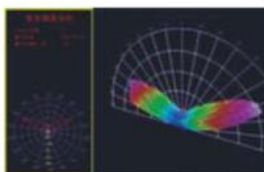
封装LED LED package

- **Ray model of light source**



- **Illuminance distribution in every plane**

- **Luminance intensity distribution in near-field**



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