

BBMS-3000双向反射透射空间分布测量系统(BSDF) BBMS-3000 Bidirectional Reflection Transmission Spatial Distribution Measurement System (BSDF)

- BBMS-3000双向反射透射空间分布测量系统可全方位分析测量材料的反射、透射空间分布特性。可测参数包括材料的双向透射分布 (BTDF)、双向反射分布 (BRDF)、反射比分布、透射比分布、总反射 (TIR)、总散射 (TIS) 等，系统可以导出标准文件至lighttools、Tracepro、Zemax、Speos等光学软件中，用于辅助光学材料或系统的模拟、设计。

The BBMS-3000 bidirectional reflection transmission spatial distribution measurement system can comprehensively analyze and measure the spatial distribution characteristics of reflection and transmission of materials. The measurable parameters include bidirectional transmission distribution (BTDF), bidirectional reflection distribution (BRDF), reflectance distribution, transmittance distribution, total reflection (TIR), total scattering (TIS), etc. The system can export standard files to lighttools, Tracepro, Zemax, Speos and other optical software for assisting the simulation and design of optical materials or systems



特点与优势 Characteristics and advantage**● 测试功能:**

Test function:

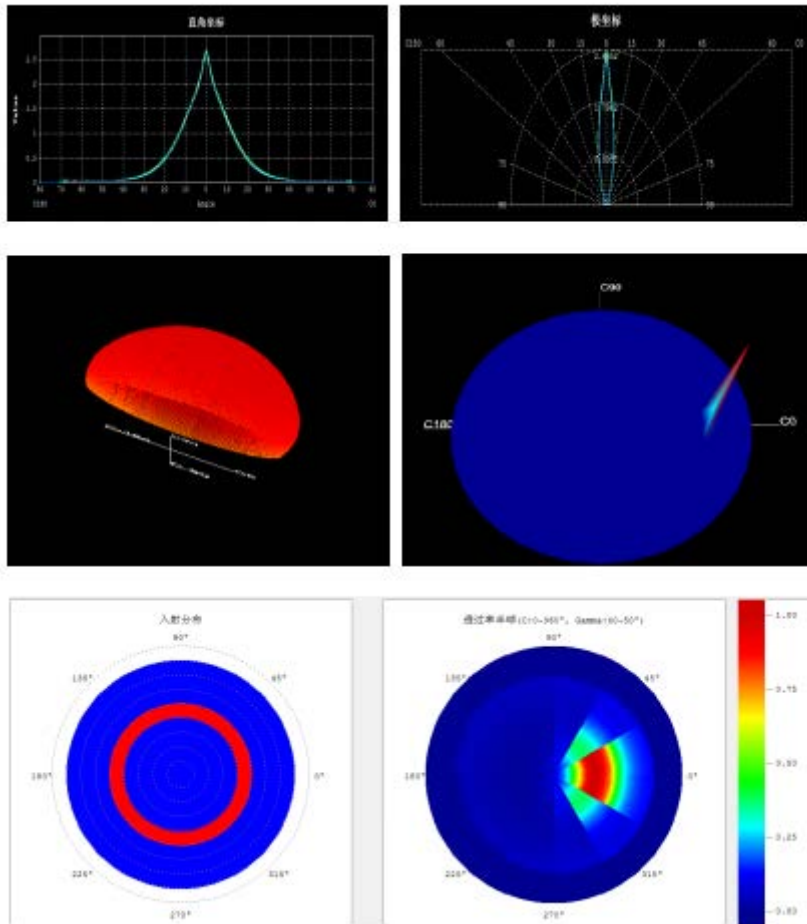
- 数据导出标准ASCII格式的文件，可导入Lighttools、Tracepro、SpTest function:eOS以及Zemax中
Data can be exported to files in standard ASCII format and imported into Lighttools, Tracepro, SpeOS and Zemax
- 双向反射分布函数BRDF
BRDF
- 双向透射分布函数BTDF
Bidirectional transmission distribution function BTDF
- 反射比分布
Reflectance distribution
- 透射比分布
Transmittance distribution
- 总反射率TIR计算
Total reflectivity TIR calculation
- 总散射率TIS计算
Total scattering rate TIS calculation

● 主要特点:

Main features:

- 系统采用四轴精密转动，实现多类光学材料的光线透反射空间分布测量
The system adopts four axis precision rotation to measure the spatial distribution of light transmission and reflection of various optical materials
- 绝对法测量，测试结果不受样品形态影响；
Absolute method measurement, and the test result is not affected by the sample shape;
- 采用双光路设计，实现高稳定度，高精度测量；
Double optical path design is adopted to achieve high stability and high precision measurement;
- 入射光源波长覆盖可见与近红外波段（可根据用户要求定制），光斑直径大小可切换
The wavelength of the incident light source covers the visible and near-infrared bands (customized according to user requirements), and the spot diameter can be switched
- 转角分辨率高达 0.01° 、定位精度高达 0.1° 非常适用于镜面&非镜面材料的BRDF/BTDF的精细测量；
The angular resolution is up to 0.01° , and the positioning accuracy is up to 0.1° , which is very suitable for fine measurement of BRDF/BTDF of mirror and non mirror materials;
- 符合ASTM E2387 (Standard Practice for Goniometric Optical Scatter Measurements)的设计要求
Meet the design requirements of ASTM E2387 (Standard Practice for Goniometric Optical Scanner Measurements)
- 测试数据可导入Lighttools、Tracepro、SpeOS以及Zemax中
Test data can be imported into Lighttools, Tracepro, SpeOS and Zemax

特点与优势 Characteristics and advantage



技术参数 Specifications

型号	BBMS-3000
测试类型	In-plane/Out-of-plane BSDF
测试参数	BRDF、BTDF、反射比、透射比、TIS、TIS
光源	激光, 覆盖可见-近红外范围 (特殊可定制)
入射天顶角	0°~ + 90°
入射方位角	0°~ 360°
接收天顶角	-90°~ + 90°
接收方位角	0°~ 360°
角度分辨率	0.01°
角度重复精度	0.1°
动范测量范围	>10 ⁸