

## SPIC-300 光谱彩色照度计 SPIC-300 spectral color illuminometer

- SPIC-300以国际专利设计为核心，引领移动光谱测量新时代。它集成高端智能配置，一键操作，一步完成测量和分析，数据实时读取，既适用野外、建筑、室内、工作场所、商场等现场照明测量，也可用于照明产品的研发、质检、产线监控环节。

SPIC-300 takes the international patented design as the core, leading the new era of mobile spectral measurement. It integrates high-end intelligent configuration, one click operation, one-step measurement and analysis, and real-time data reading. It is not only applicable to field lighting measurement, building, indoor, workplace, shopping mall and other on-site lighting measurement, but also used for lighting product research and development, quality inspection, and production line monitoring.



**现场光谱测量新时代**  
Field spectral measurement in new era

### 特点与优势 Characteristics and advantage

- 可测量参数
- 相对光谱功率分布  $P(\lambda)$
- 照度 (E)
- S/P ratio
- 显色性 (CRI)
- 相关色温 (CCT)
- CIE 1931, 1960及1976色坐标
- 色容差 (SDCM)
- 电视照明一致性指数(TLCI)
- 色彩逼真度指数(Rf)
- 色彩饱和度指数(Rg)

**特点与优势 Characteristics and advantage**

● 光度、色度、辐射度测量进入光谱时代

SPIC-300倡导光谱测量，探究光的本质，获得光度、色度和辐射度的详尽参数。

评价明暗

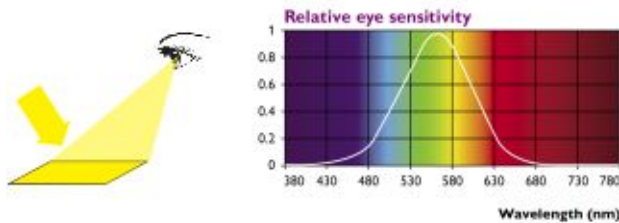
Photometric, colorimetric and radiometric measurements enter the spectral era

SPIC-300 advocates spectral measurement to explore the nature of light and obtain detailed parameters of luminosity, chromaticity and radiance.

Evaluate light and shade

$$E_v = 683 \int E(\lambda)V(\lambda)d\lambda$$

Available quantities:  $E_v, \Phi_v, I_v, \dots$



illuminance on working surface



500lx

200lx

● 表示色温

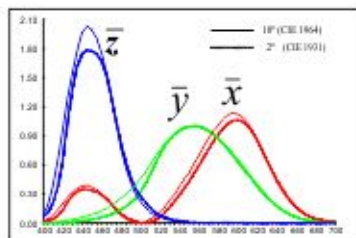
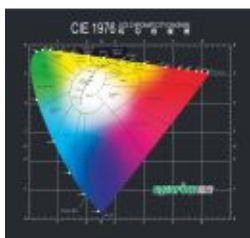
Represents color temperature

$$X = k \int E(\lambda)\bar{x}(\lambda)d\lambda$$

$$Y = k \int E(\lambda)\bar{y}(\lambda)d\lambda \quad x = \frac{X}{X+Y+Z} \quad y = \frac{Y}{X+Y+Z}$$

$$Z = k \int E(\lambda)\bar{z}(\lambda)d\lambda$$

Available quantities: (x,y),(u',v'), duv, CCT.....



2200 Kelvin

**特点与优势 Characteristics and advantage**

- 深入分析光源显色性  
In depth analysis of light source color rendering

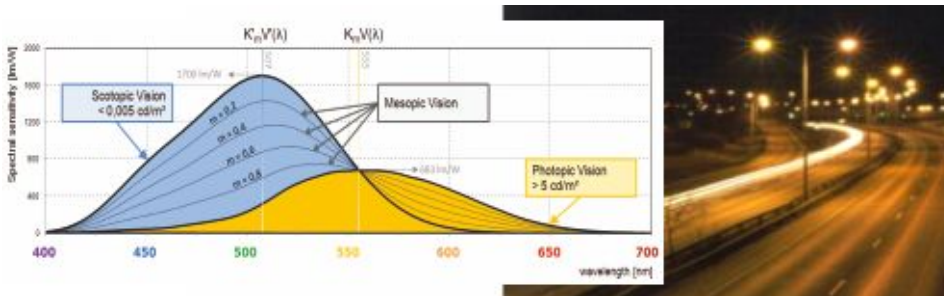


Ra:72; R9>0



Ra:82; R9:-90

- 特殊显色指数R9对于LED产品的颜色质量评价尤为重要，R9值越大，颜色一般更加鲜艳。  
The special color rendering index R9 is particularly important for the color quality evaluation of LED products. The larger the R9 value, the more bright the color is.
- 明视觉、中间视觉以及暗视觉光度测量，自动计算S/P值，应用于道路及室内照明等设计与研究。  
Photometric measurement of bright vision, intermediate vision and dark vision, automatic calculation of S/P value, applied to the design and research of roads and indoor lighting.



### 特点与优势 Characteristics and advantage

- 高端配置，全新测量体验

测量范围宽，测量精度高

国际专利保护：SPIC-300（BW型）采用具有国际专利的SBCT技术，大幅拓宽光度测量范围和提高精度。

光度测量范围:0.1lx~100klx

SBCT：分光-积分相结合方法，是世界公认的光度/辐射度测量的最高精度的方法。

采用专利的复变矩阵杂散光校正技术，使光谱测量中的杂散光控制能力提高1~2个数量级。

High end configuration, new measurement experience

Wide measuring range and high measuring accuracy

International patent protection: SPIC-300 (BW type) adopts the internationally patented SBCT technology, which greatly broadens the photometric measurement range and improves the accuracy.

Photometric measurement range: 0.1lx~100klx

SBCT: Spectrometric integration method is the world recognized method with the highest accuracy for photometric/radiometric measurement.

The patented complex matrix stray light correction technology is adopted to improve the stray light control ability in spectral measurement by 1~2 orders of magnitude.



- 毫秒级超快智能测量

光谱、辐射度、光度、色度及植物光度等毫秒级智能测量分析，快捷高效。

数据可以excel,jpg等多种格式输出

多语言操作系统

Millisecond class ultra fast intelligent measurement

Millisecond level intelligent measurement and analysis of spectrum, radiance, luminosity, chroma and plant luminosity are fast and efficient.

Data can be output in excel, jpg and other formats

Multilingual operating system

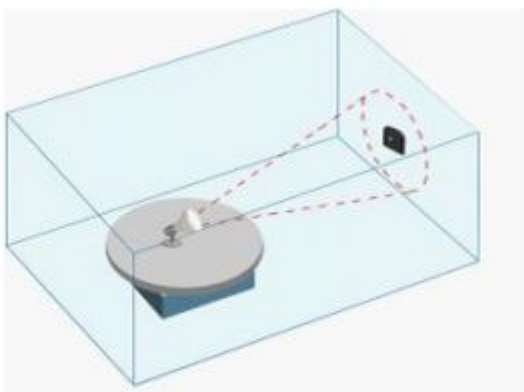
**特点与优势 Characteristics and advantage**

- **精致轻巧 界面直观 易读易用**  
Delicate and lightweight interface, intuitive, easy to read and use



- **5.0寸超大显示屏一键式操作数据实时读取**  
Real time reading of one key operation data of 5.0 inch large display screen

- **可拆卸式探头和无线传输技术使测量更灵活**  
探头能多角度、多场合灵活取样。  
Removable probe and wireless transmission technology make measurement more flexible  
The probe can sample flexibly at multiple angles and occasions.



技术参数 Specifications

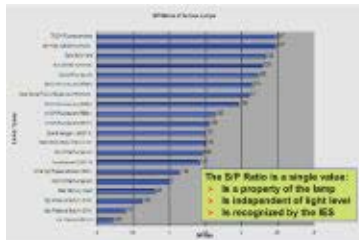
型号	SPIC-300AW	SPIC-300BW	SPIC-300BW-H
光谱范围	(380 ~ 760) nm	(380 ~ 780) nm	
SBCT	No	Yes	
感光面	Φ8 mm	(Φ8+Φ5)mm	
波长准确度	0.5nm		
照度准确度	(4%读数+1 个字)	(3%读数+1 个字)	
存储容量	6G SD 卡 (内置)		
色品坐标准确度	0.001 (相对于稳定度优于 0.0001 的标准光源和 NIM 溯源值)		
杂散光	< 0.3%		
照度范围	1lx ~ 100 klx	0.1 lx ~ 100 klx	0.1 lx ~ 1000 klx
色温范围	1000 K ~ 100000 K		

• 更多智能化测量

室内照明设计：获得S/P比以及IES标准等效照度。

More intelligent measurement

Interior lighting design: obtain S/P ratio and IES standard equivalent illuminance.

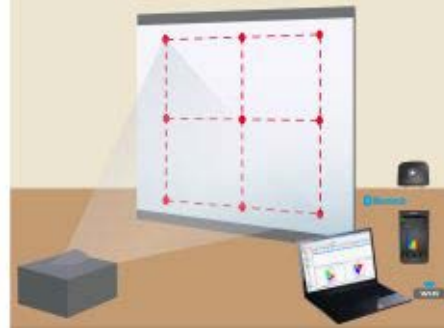
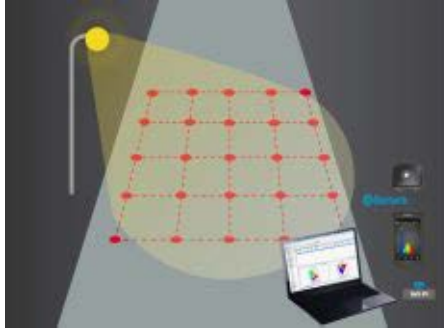


S/P=1.4, E(EVE)=400 lx



S/P=2.0, E(EVE)=300 lx

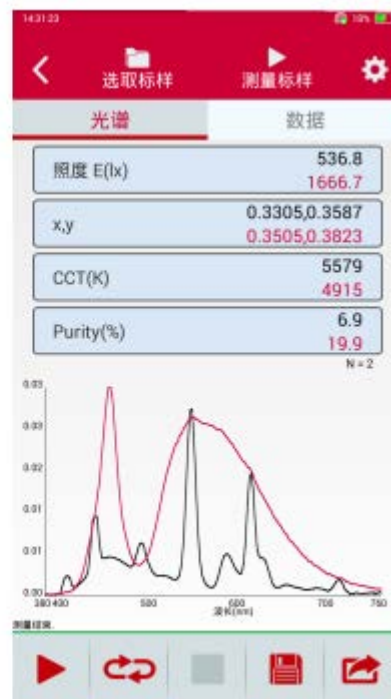
- 现场照明：分析多点测量的平均值和均匀性。  
Site lighting: analyze the average value and uniformity of multi-point measurement.



- 数据比对：不同灯光同一测试界面实现现场对比分析。  
Data comparison: the same test interface with different lights can be used for on-site comparison and analysis.



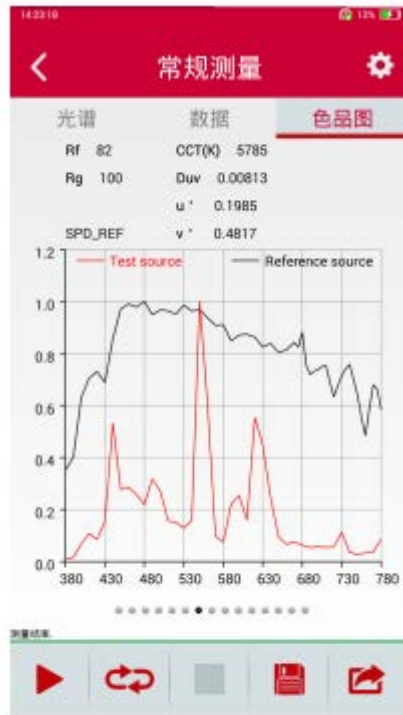
选取标样界面



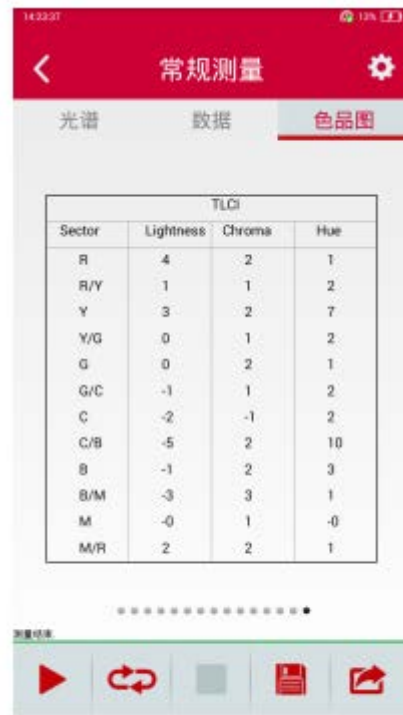
对比测量界面

**技术参数 Specifications**

- **TM30及TLCI相关参数测试。**  
TM30 and TLCI related parameter test.



TM30 相关参数



TLCI 相关参数

- **大容量存储：6G大容量存储，现场邮件方式实时传输。**  
Large capacity storage: 6G large capacity storage, real-time transmission by on-site mail.

