MFL-300/500 闪光灯光学性能分析系统（可见-红外）
MFL-300/500 flash lamp optical performance analysis system (visible infrared)

● MFL-300/500手机闪光灯光学性能分析系统测量系统，采用国际专利设计，主要用于测量手机闪光灯的9通道同步记录快速变化闪光灯的闪光特性曲线，同步记录快速变化红外光源的辐照度变化曲线，积分辐照度值、分析辐照度分布均匀性分析光度分布均匀性、及闪光指数、闪光持续时间、曝光量等。

The MFL-300/500 mobile phone flash light optical performance analysis system measurement system, which is designed with international patents, is mainly used to measure the flash characteristic curve of the mobile phone flash light in 9 channels to synchronously record the fast changing flash light, synchronously record the irradiance change curve of the fast changing infrared light source, integrate the irradiance value, analyze the irradiance distribution uniformity, analyze the photometric distribution uniformity, and flash index, flash duration, exposure, etc.

● 其中中间光谱通道可测试色坐标，色温，显色指数，相对光谱功率分布等。通过专业分析软件得到整个受照平面内的光照均匀性及色度情况，用以评价手机闪光灯的相关光学特性。

The intermediate spectral channel can be used to test color coordinates, color temperature, color rendering index, relative spectral power distribution, etc. The illumination uniformity and chromaticity in the whole illumination plane are obtained through professional analysis software to evaluate the relevant optical characteristics of mobile phone flash.

特点与优势 Characteristics and advantage

● 闪光波形的同步快速捕捉
采样速度快，达到20kS/s，可快速准确捕捉精细的闪光特性曲线，并准确得到闪光指数、闪光峰值照度等参数。
Synchronous fast capture of flash waveform
The sampling speed is fast, reaching 20kS/s, which can quickly and accurately capture the fine flash characteristic curve, and accurately obtain the flash index, flash peak illuminance and other parameters.

● 多通道的高精度测量
9通道布阵测量，而且9个通道必须保持高度同步，以准确获取闪光灯在每个时刻点的光分布特征以及总曝光量均匀性。
Multi channel high-precision measurement
9 channel array measurement, and 9 channels must be highly synchronized to accurately obtain the light distribution characteristics of the flash at each time point and the uniformity of the total exposure.

● 色彩再现以及逼真度评价参数
具备瞬态光谱测量技术，可快速准确地测量并分析色温、显色指数以及SDI等。这对评价闪光灯的彩色复现质量极其重要。
Color reproduction and fidelity evaluation parameters
It has transient spectrum measurement technology, which can quickly and accurately measure and analyze color temperature, color rendering index, SDI, etc. This is very important for evaluating the color reproduction quality of flash lamps.

技术参数 Specifications

● **可见光度参数：**
Visible photometric parameters:
1）照度测量范围：0.1lx～200klx
1) Illumination measurement range: 0.1lx ～ 200klx
2）照度准确度：3%读数+1个字
2) Illuminance accuracy: 3% reading+1 word
3）采样速率：20kHz，以便快速记录闪光灯的闪光特性曲线
3) Sampling rate: 20kHz, so as to quickly record the flash characteristic curve of the flash lamp

● **红外光度参数：**
Infrared photometric parameters:
1）红外辐射探测器，专用的940nm波段标定
1) Infrared radiation detector, special 940nm band calibration
2）测试范围：0.1-2000μW/cm2
2) Test range: 0.1-2000 μ W/cm2
3）辐照度测量精度：5%
3) Irradiance measurement accuracy: 5%

● **色度参数：**
Chromaticity parameters:
1）光谱波长范围：380nm-780nm
1) Spectral wavelength range: 380nm-780nm
2）波长准确度：0.5nm
2) Wavelength accuracy: 0.5nm
3）色坐标准确度：0.001（相对于稳定度优于±0.0001的标准光源和NIM溯源值）
3) Color setting standard accuracy: 0.001 (relative to the standard light source with stability better than ± 0.0001 and NIM traceability value)
4）显色指数：Ra; Ri (i=1～14) (特殊可计算R15)
4) Color rendering index: Ra; Ri (i=1 ～ 14) (R15 can be calculated specially)

● **机械装置及其它功能：**
Mechanical device and other functions:
1）照射屏尺寸：1.8m*1.8m；屏上装有刻度标尺；
1) Radiation screen size: 1.8m * 1.8m; The screen is equipped with a scale ruler;
2）配置手机装夹的工装及移动滑轨，测试距离移动范围：30cm～100cm，方便用户测量
2) The tooling and mobile slide rail for mobile phone clamping are configured. The test distance and moving range are 30cm~100cm, which is convenient for users to measure
3）软件可设定照度、均匀度、色坐标、显色指数等判定限值，软件自动判定合格与否
3) The software can set the judgment limit values of illuminance, uniformity, color coordinate, color rendering index, etc., and the software automatically determines whether it is qualified or not