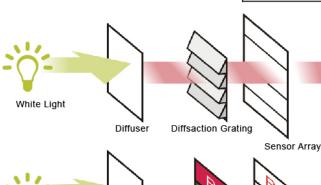


#### Differences Between Spectral Type and RGB Filter Type

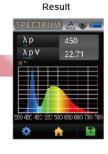
Туре	Technology	Components	Concept	Result	
	Spectral Type	Diffuser	Light source goes through the "Diffraction Grating and Sensor Array" to collect the spectrum and dispers the light for analysis.	Obtain spectral energy and come out the CIE XYZ	
Spectrometer		Diffraction Grating			
		Sensor Array			
	RGB Filter Type	Diffuser	Light source goes through the "Filter and Sensor" and execute light analysis.	Sensor provides the CIE XYZ directly.	
Color Analyzer		Filter			
		Sensor			
Summary.					

1.Spectrum information: Spectrometer ( 🗸 ); Color Analyzer ( 🗶 )

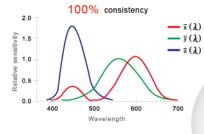
2. CIE XYZ accuracy: Spectrometer > Color Analyzer



Diffuser

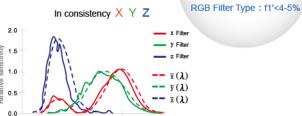


Result

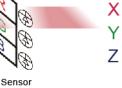


characteristics (f1') Spectral Type: f1'<1%

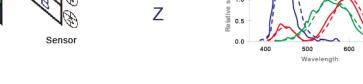
In consistency X Y Z













### Product Features & Competitive Advantages

- O In-house RD team, one-step production and direct sale service.
- O All in One design with multi-measurement.
- OProfessional spectrometer tool with post-analysis software.
- Integration ability on optical, mechanical and electronic for customized service.
- O Globalization of marketing and support service system guaranteed.





















White Light



# **UPRtek**



Are you worried of blue light hazard(BLH)? Are its effects serious? Recently, it's a trend to use smart phone, TV and electronic products frequently. Over a long period of time, it causes and increases in the amount of macular toxins and eye disease risks. Some relative light industry supply chain has found out the business chances and started to develop" Anti-Blue Light/ Filter Blue Light "products. These products reduce the proportion of blue-ray and keep the color fidelity. All of them are the best fighters to protect consumers'vision. But how do we examine the product's efficiently? How will we know the blue light harmful level and prevent it? How do we confirm the effects of Anti-Blue light products?

Based on consumers' concerns, we adopted the IEC/TR 62778 blue light damage on human eye safety regulation and embedded 3 parameters which are Blue Light Weighted Irradiance (EB), BLH efficacy of luminous radiation(Kbv) and Risk Group (RG). Depending on the RG value, users can assess the risk level and prevent blue light. Also, Transmittance Mode is another good tool to inspect blue light. It doesn't only detect the anti-blue light goods but also presents the spectrum and figures on the screen timely which provides the assessment and understanding for users.

MK350S Premium is a professional blue light detection spectrum analyzer. It can be widely used in LCD Panel, Light Industry and Electronic-Film.



#### Recommended Measurement Functions

#### Blue Light Evaluation Index

•Transmit Mode- Examination of the proportion of HEV blue light transmittance rate and avoidance of the human eye damage from LED blue light.



Sample	A	B
Range	430~500nm Wavelength	
Description	Light Yellow	Transparent
Anti-blue light(%)	24.5%	5.3%
Result	TRANSMIT A B 75.5%	TRANSMIT A B 94.7%

●Blue Light Hazard Mode- Adopting the Blue Light Hazard safety evaluation International Standard (IEC/ TR 62778) to help manufacturers in the actual use of LED and lighting fixtures for blue light hazard (BLH) evaluation.

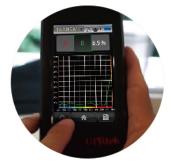


Risk Group(RG)	Risk Level	Maximum exposure time (s)
RG0	Exempt	>10000 sec
RG1	Low Risk	>100~10000 sec
RG2	Moderate Risk	0.25~100 sec
RG3	High Risk	<0.25 sec

UPRtek provides the best tool for industries to prevent Blue light, it can be used from main users such as manufacturers, retailers, even professional engineers, designers and others. Through the handheld spectrometer to keep the quality of users' products and services. One reminder, no matter how good Anti-blue light related tools or products are, the only way to protect the eyesight is to reduce the usage time of 3C products and develop a routine of using these goods correctly.



#### Measurement Description







▲ Stand-alone Measurement

▲ APP Measurement

▲ PC SW Measurement

## *₹*

### **Application Categories**

