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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GA/T 539-2005

General specification for ultra-violet photography stand

紫外翻拍仪通用技术要求

(English Translation)

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Foreword

This standard is proposed and managed by the National Criminal Technology Standardization Technical Committee.

This standard was drafted. Ministry of Public Security Material Certification Center, Shanghai Hengguang Police Equipment Co., Ltd.

Introduction

The UV remake meter is a special equipment for special photography. The quality of the UV remake meter directly affects the results of photography, especially the technical requirements of the light source.

At present, the filter of the ultraviolet light source generally adopts the colored glass of the domestic ZWB3 grade, which is equivalent to the colored glass of the foreign UG5 grade.

The transmittance of such colored glass after a period of use will be seriously degraded. In addition, after the lamp of the light source is used for a period of time, the ultraviolet radiation is strong.

The degree will also be seriously attenuated, directly affecting the effect of handling cases. And this phenomenon is sometimes difficult to find by the human eye, so the manufacturer must be in the product manual.

The detailed requirements for the use of the filter and the service life, attenuation of the light source and inspection are given.

When the intensity of the light source decreases, the wavelength is 254 nm, the intensity of

ultraviolet radiation drops to 10 uw/cm² x 100; the wavelength is 365 nm, ultraviolet radiation the strength drops to 30uw/cm²x100, and the lamp or filter should be replaced after checking the cause.

After using the colored glass filter for 100h, always check the transmittance. When the long wavelength 365nm transmittance drops below 25%, it is short.

The transmittance of the wave at 254 nm drops below 10%, and a new filter needs to be replaced.

The source and filter can be checked by referring to the methods in 5.2.2 and 5.3.2 of this standard.

General technical requirements for UV remake

1 Scope

This standard specifies the general technical requirements for the UV remake.

This standard is applicable to light sources with ultraviolet 365nm wavelength and ultraviolet 254nm wavelength in special photography, and can be fixed to the camera for purple.

Externally photographed instruments.

2 Normative references

The terms in the following documents become the terms of this standard by reference to this standard. All dated references, followed by all Modifications (not including errata content) or revisions do not apply to this standard, however, parties to agreements based on this standard are encouraged to study is it possible to use the latest version of these files? For undated references, the latest edition applies to this standard.

GB/T 191-2000 Packaging Storage and Transportation Graphic Mark (eqv ISO 780:1997)
GB/T 15488-1995 filter glass GB/T 15489.2-1995 Filter glass test method bubble GB
4706.1-1998 Safety of household and similar electrical appliances Part 1. General requirements (eqv IEC 335-1:1991) JB/T 8226.6-1999 Optical parts coated narrow-band interference filter

3 Terms and definitions

The following terms and definitions identified in JB/T 8226.6-1999 apply to this standard.

It has a light source with ultraviolet wavelengths of 365nm and 254nm, and has a device capable of fixing the camera to be lifted and photographed within a certain range, A device that can be placed together with a countertop of a photographic object.

4.1 Normal working conditions

4.1.1

Ambient temperature. $-10^{\circ}\text{C} \sim 50^{\circ}\text{C}$.

4.1.2

Relative humidity is not more than 85%.

4.1.3

AC power. $(220 \pm 22)\text{V}$; frequency $(50 \pm 5)\text{Hz}$; DC power. $(36 \pm 3.6)\text{V}$.

4.2 Mechanical structure

4.2.1

The length of the screw that secures the camera to the internal thread on the camera must not be less than 4mm.

4.2.2

The camera is fixed on the lifting frame, and the distance between the lens of the camera and the work surface can be greater than 500mm.

4.2.3

The device for installing the light source is distributed on both sides of the camera and can be adjusted in angle.

4.2.4

Removable and rotating light source devices and other electric devices require a limited structure.

4.2.5

Fixing devices such as hooks and buckles used on parts that may be removed during installation or maintenance shall not deteriorate in their fixing performance.

4.2.6

The UV remake is tilted 15° in the front, rear, left and right directions and does not fall to the ground.

4.2.7

The structure of the UV remake can lock the camera with a mass of less than 2.5kg.

4.2.8

It has sufficient mechanical strength and its structure should withstand the movements that may occur during normal use.

4.2.9

Electrical installations and electrical connections are in accordance with the requirements of Chapter 28 of GB 4706.1-1998.

4.2.10

The surface of the metal parts is all treated with an anti-oxidation process.