Third edition 2007-09-01

Photography — Determination of flash guide numbers for electronic flash equipment

Photographie — Détermination des nombres guides des appareils à éclairs



Reference number ISO 1230:2007(E)

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Published in Switzerland

Foreword

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ISO 1230 was prepared by Technical Committee ISO/TC 42, Photography.

This third edition cancels and replaces the second edition (ISO 1230:1992), which has been technically revised.

Introduction

In general flash photography, where the flash light source is mounted on a camera, the product of the camera lens *f*-number and the distance from the flash light source to the subject is a constant with respect to the ISO speed of the film or the digital still camera to be used. The illuminance of the subject varies with the distance according to the inverse-square law and, in order to obtain the same suitable exposure on film or image sensor, the *f*-number is adjusted with respect to the square root of the illuminance of the subject.

The constant is named "flash guide number" and is a very useful guide for flash photographers, because the guide number represents, in a sense, the power of illumination of the light source, for both flash lamps with and without integral reflectors and electronic flash equipment. The camera lens *f*-number setting can easily be calculated by dividing the guide number by the distance from the flash light source to the subject.