



Standard Practice for Description and Selection of Conditions for Photographing Specimens Using Analog (Film) Cameras and Digital Still Cameras (DSC)¹

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INTRODUCTION

Photographs are often used to convey information about the appearance of objects, materials, or phenomena involved in testing. The appearance of a photograph of an object depends not only on the appearance of the object, but on the conditions of formation of the optical image, the conditions of formation of the photographic record, and the conditions of viewing the photograph. If the photographic method of recording appearance is to be reproducible from one laboratory to another and if photographs of various specimens or one specimen at various times are to be used for valid comparisons, there must be an established method of describing pertinent conditions, so they may be recorded, communicated, and standardized. The purpose of this practice is to provide such a method of description.

1. Scope

1.1 This practice defines terms and symbols and provides a systematic method of describing the arrangement of lights, camera, and subject, the characteristics of the illumination, the nature of the photographic process, and the viewing system. Conditions for photographing certain common forms of specimens are recommended. Although this practice is applicable to photographic documentation in general, it is intended for use in describing the photography of specimens involved in testing and in standardizing such procedures for particular kinds of specimens. This practice is applicable to macrophotography but photomicrography is excluded from the scope of this practice.

1.2 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

¹ This practice is under the jurisdiction of ASTM Committee E12 on Color and Appearance and is the direct responsibility of Subcommittee E12.03 on Geometry. Current edition approved June 1, 2011. Published June 2011. Originally approved in 1966. Last previous edition approved in 2006 as E312 – 06. DOI: 10.1520/E0312-06R11.

2. Referenced Documents

2.1 ASTM Standards:²

D1535 Practice for Specifying Color by the Munsell System
E284 Terminology of Appearance

E1360 Practice for Specifying Color by Using the Optical Society of America Uniform Color Scales System

E1541 Practice for Specifying and Matching Color Using the Colorcurve System (Withdrawn 2007)³

2.2 ANSI Standards:⁴

ANSI/ISO 517-1996 Apertures and Related Properties Pertaining to Photographic Lenses—Designations and Measurements

ISO 3664:2000 Viewing Conditions—Graphic Technology and Photography

ISO 18920:2000 Imaging Materials Processed Photographic Reflection Prints – Storage Practices

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ The last approved version of this historical standard is referenced on www.astm.org.

⁴ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.