



Standard Terminology for Digital and Multimedia Evidence Examination¹

This standard is issued under the fixed designation E2916; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This is a compilation of terms and corresponding definitions used in the examination of digital and multimedia evidence to include the areas of computer forensics, image analysis, video analysis, forensic audio, and facial identification.

1.2 Legal or scientific terms that generally are understood or defined adequately in other readily available sources may not be included.

2. Referenced Documents

2.1 ASTM Standards:²

C670 Practice for Preparing Precision and Bias Statements for Test Methods for Construction Materials

E177 Practice for Use of the Terms Precision and Bias in ASTM Test Methods

E456 Terminology Relating to Quality and Statistics

E691 Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method

E1732 Terminology Relating to Forensic Science

E2808 Guide for Microspectrophotometry and Color Measurement in Forensic Paint Analysis

2.2 ANSI/NIST Standards:³

ANSI/NIST-ITL 1-2011 Data Format for the Interchange of Fingerprint, Facial, and Other Biometric Information

NIST SP 800-86 Guide to Integrating Forensic Techniques into Incident Response

NIST SP 800-88 Guidelines for Media Sanitization

2.3 ISO Standards:⁴

ISO 9000 Quality Management

ISO/IEC Guide 2:2004 Standardization and Related Activities — General Vocabulary

ISO/IEC 19794-5 Information Technology — Biometric Data Interchange Formats — Part 5: Face Image Data

2.4 IEEE Standards:⁵

IEEE 100-2000 The Authoritative Dictionary of IEEE Standards Terms, 7th Edition

2.5 ASCLD/LAB Publication:⁶

ASCLD/LAB International Supplemental Requirements (Testing), 2011 Edition

3. Significance and Use

3.1 This terminology includes general as well as discipline-specific definitions as they apply across the spectrum of image analysis, computer forensics, video analysis, forensic audio, and facial identification.

4. Terminology: Terms and Definitions

4.1 Definitions:

achievable resolution, resolving power, *n*—the measure of imaging system's practical limit to distinguish between separate adjacent elements, typically by imaging a known reference standard.

acquisition, *n*—in computer forensics, the process of using an access interface to read digital data from a digital source and to create a destination object.

ad hoc image, *n*—see **uncontrolled image**.

administrative review, *n*—a procedure used to check case-work for consistency with agency/laboratory policy and editorial practice.

allocated space, allocated storage, *n*—in computer forensics, the portions of storage that are assigned or reserved for active instructions or for data.

IEEE 100-2000, (C) 610.10-1994w

¹ This terminology is under the jurisdiction of ASTM Committee E30 on Forensic Sciences and is the direct responsibility of Subcommittee E30.12 on Digital and Multimedia Evidence.

Current edition approved June 1, 2013. Published July 2013. DOI: 10.1520/E2916-13.

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 Available from National Institute of Standards and Technology (NIST), 100 Bureau Dr., Stop 1070, Gaithersburg, MD 20899-1070, <http://www.nist.gov>.

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

⁵ Available from Institute of Electrical and Electronics Engineers, Inc. (IEEE), 445 Hoes Ln., Piscataway, NJ 08854, <http://www.ieee.org>.

⁶ Available from American Society of Crime Laboratory Directors Laboratory Accreditation Board (ASCLD/LAB), 139 J Technology Drive, Garner, NC 27529, <http://www.asclld-lab.org>.