



Standard Guide for Defining the Test Result of a Test Method¹

This standard is issued under the fixed designation E 2282; 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 reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

1. Scope

1.1 The purpose of this standard guide is to provide guidelines for identifying the elements that comprise the test result of a test method and to illustrate how these elements combine into the test result.

2. Referenced Documents

2.1 ASTM Standards:²

E 177 Practice for Use of the Terms Precision and Bias in ASTM Test Methods

E 456 Terminology Related Relating to Quality and Statistics

2.2 International Standard:

International Vocabulary of Basic and General Terms in Metrology (VIM) ISO Standard:³

ISO 3534 Statistics--Vocabulary and Symbols, Part 2: Applied Statistics

3. Terminology

3.1

3.1 Terminology E 456 provides a more extensive list of terms in E11 standards.

3.2 Definitions:

3.1.1

3.2.1 *characteristic, n*—a property of items in a sample or population which, when measured, counted or otherwise observed, helps to distinguish between the items.

3.1.2

3.2.2 *observation, n*—the process of obtaining information regarding the presence or absence of an attribute of a test specimen, or of making a reading on a characteristic or dimension of a test specimen.

NOTE 1—Observation is also associated with the attribute or measurement information obtained from the process. The term “observed value” is preferred for this second usage.

3.1.3

3.2.3 *observed value, n*—the value obtained by making an observation.

3.1.4

3.2.4 *test determination, n*—the value of a characteristic or dimension of a single test specimen derived from one or more observed values.

3.1.5

3.2.5 *test method, n*—a definitive procedure that produces a test result.

3.1.5.1

3.2.5.1 *Discussion*—Examples of test methods include, but are not limited to: identification, measurement, and evaluation of one or more qualities, characteristics, or properties. [ASTM Regulations 2.2.6]

3.1.6

3.2.6 *test observation, n*—see *observation*.

3.1.7

3.2.7 *test result, n*—the value of a characteristic obtained by carrying out a specified test method.

¹ This guide is under the jurisdiction of ASTM Committee E11 on Quality and Statistics and is the direct responsibility of Subcommittee E11.20 on Test Method Evaluation and Quality Control.

Current edition approved May 10, 2003. Published August 2003 on Test Method Evaluation and Quality Control

Current edition approved May 15, 2009. Published June 2009. Originally approved in 2003. Last previous edition approved in 2003 as E 2282-03.

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, Vol 14.02, volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from International Organization for Standardization (ISO), 1, ch. de la Voie-Creuse, Case postale 56, CH-1211, Geneva 20, Switzerland, <http://www.iso.ch>.