Designation: E456 – 13a$^{\varepsilon 3}$

An American National Standard

Standard Terminology Relating to Quality and Statistics[1]

This standard is issued under the fixed designation E456; 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.

This standard has been approved for use by agencies of the U.S. Department of Defense.

ε[1] NOTE—New terms were added and other terms were corrected editorially in May 2014.
ε[2] NOTE—New terms were added and other terms were corrected editorially in March 2015.
ε[3] NOTE—New terms were added and other terms were corrected editorially in April 2016.

1. Scope

1.1 This standard is the general terminology standard for terms defined in the standards of Committee E11 on Quality and Statistics.

1.2 A term in this standard which lists an attribution to an E11 technical standard indicates that the standard is normative for that term. Any changes in the term definition in the normative standard will be editorially changed in this standard. Any terms added to an E11 standard will be editorially added to this standard with an attribution to that standard.

1.3 Term definitions that are similar to ISO 3534 will be noted in this standard, but ISO 3534 will not be considered normative for any E11 terms.

2. Referenced Documents

2.1 *ASTM E11 Standards with Terms in This Standard:*[2]

E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications
E105 Practice for Probability Sampling of Materials
E141 Practice for Acceptance of Evidence Based on the Results of Probability Sampling
E177 Practice for Use of the Terms Precision and Bias in ASTM Test Methods
E178 Practice for Dealing With Outlying Observations
E691 Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method
E1169 Practice for Conducting Ruggedness Tests
E1325 Terminology Relating to Design of Experiments
E1402 Guide for Sampling Design
E1488 Guide for Statistical Procedures to Use in Developing and Applying Test Methods
E1994 Practice for Use of Process Oriented AOQL and LTPD Sampling Plans
E2234 Practice for Sampling a Stream of Product by Attributes Indexed by AQL
E2281 Practice for Process Capability and Performance Measurement
E2282 Guide for Defining the Test Result of a Test Method
E2334 Practice for Setting an Upper Confidence Bound For a Fraction or Number of Non-Conforming items, or a Rate of Occurrence for Non-conformities, Using Attribute Data, When There is a Zero Response in the Sample
E2489 Practice for Statistical Analysis of One-Sample and Two-Sample Interlaboratory Proficiency Testing Programs
E2554 Practice for Estimating and Monitoring the Uncertainty of Test Results of a Test Method Using Control Chart Techniques
E2555 Practice for Factors and Procedures for Applying the MIL-STD-105 Plans in Life and Reliability Inspection
E2586 Practice for Calculating and Using Basic Statistics
E2587 Practice for Use of Control Charts in Statistical Process Control
E2655 Guide for Reporting Uncertainty of Test Results and Use of the Term Measurement Uncertainty in ASTM Test Methods
E2696 Practice for Life and Reliability Testing Based on the Exponential Distribution
E2709 Practice for Demonstrating Capability to Comply with an Acceptance Procedure
E2762 Practice for Sampling a Stream of Product by Variables Indexed by AQL
E2782 Guide for Measurement Systems Analysis (MSA)
E2819 Practice for Single- and Multi-Level Continuous Sampling of a Stream of Product by Attributes Indexed by AQL
E2935 Practice for Conducting Equivalence Testing in Laboratory Applications

[1] This terminology is under the jurisdiction of ASTM Committee E11 on Quality and Statistics and is the direct responsibility of Subcommittee E11.70 on Editorial/Terminology.

Current edition approved Nov. 15, 2013. Published December 2013. Originally approved in 1972. Last previous edition approved in 2013 as E456 – 13. DOI: 10.1520/E0456-13AE03.

[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.

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