

Section 5.59. Electronic Livestock, Meat, and Poultry Evaluation Systems and/or Devices - Tentative Code

This tentative code has only a trial or experimental status and is not intended to be enforced. The requirements are designed for study prior to the development and adoption of a final Code for Livestock, Meat, and Poultry Evaluation Systems and/or Devices. Officials wanting to conduct an official examination of a device or system are advised to see paragraph G-A.3. Special and Unclassified Equipment.

A. Application

A.1. This code applies to electronic devices or systems for measuring the composition or quality constituents of live animals, livestock and poultry carcasses, and individual cuts of meat or a combination thereof for the purpose of determining value.

A.2. See also Section 1.10. General Code requirements.

A.3. This code does not apply to scales used to weigh live animals, livestock and poultry carcasses, and individual cuts of meat unless the scales are part of an integrated system designed to measure composition or quality constituents. Scales used in integrated systems must also meet NIST Handbook 44 Section 2.20. Scale requirements.

S. Specifications

S.1. Design and Manufacture. – All design and manufacturing specifications shall comply with American Society for Testing Materials (ASTM) International Standard F 2342 Standard Specification for Design and Construction of Composition or Quality Constituent Measuring Devices or Systems.

N. Notes

N.1. Method of Test. – Performance tests shall be conducted in accordance with ASTM Standard F 2343 Test Method for Livestock, Meat, and Poultry Evaluation Devices.

N.2. Testing Standards. – ASTM Standard F 2343 requires device or system users to maintain accurate reference standards that meet the tolerance expressed in NIST Handbook 44 Fundamental Considerations, paragraph 3.2. (i.e., one-third of the smallest tolerance applied.)

N.3. Verification. – Device or system users are required to verify and document the accuracy of a device or system on each production day as specified by ASTM Standard F 2341 Standard Practice of User Requirements for Livestock, Meat, and Poultry Evaluation Devices or Systems.

N.3.1. Official Tests. – Officials are encouraged to periodically witness the required “in house” verification of accuracy. Officials may also conduct official tests using the on-site testing standards or other appropriate standards belonging to the jurisdiction with statutory authority over the device or system.

T. Tolerances

T.1. Tolerances on Individual Measurements. – Maintenance and acceptance tolerances on an individual measurement shall be as shown in Table T.1.

Table T.1. Tolerances	
Individual linear measurement of a single constituent	∇ 1 mm (0.039 in)
Measurement of area	∇ 1.6 cm ² (0.25 in ²)
For measurements of other constituents	As specified in ASTM Standard F 2343

UR. User Requirements

UR.1. Installation Requirements.

UR.1.1. Installation. – All devices and systems shall be installed in accordance with manufacturer's instructions.

UR.2. Maintenance of Equipment.

UR.2.1. Maintenance. – All devices and systems shall be continually maintained in an accurate condition and in accordance with the manufacturer's instructions and ASTM Standard F 2341.

UR.3. Use requirements.

UR.3.1. Limitation of Use. – All devices and systems shall be used to make measurements in a manner specified by the manufacturer.

UR.4. Testing Standards. – The user of a commercial device shall make available to the official with statutory authority over the device testing standards that meet the tolerance expressed in Fundamental Considerations, paragraph 3.2. (i.e., one-third of the smallest tolerance applied). The accuracy of the testing standards shall be verified annually or on a frequency as required by the official with statutory authority and shall be traceable to the appropriate SI standard.