\[
\bar{x} = \frac{1}{n} \sum_{i=1}^{n} x_i
\]

and, \( \bar{x} \) is the sample mean; \( n \) is the number of samples; and \( x_i \) is the \( i^{th} \) sample.

Or,

(B) The lower 97.5 percent confidence limit (LCL) of the true mean divided by 0.95, where:

\[
LCL = \bar{x} - t_{0.975} \left( \frac{s}{\sqrt{n}} \right)
\]

And \( \bar{x} \) is the sample mean; \( s \) is the sample standard deviation; \( n \) is the number of samples; and \( t_{0.975} \) is the \( t \) statistic for a 97.5% one-tailed confidence interval with \( n-1 \) degrees of freedom (from Appendix A of this part).

(b) Certification reports. [Reserved]

[76 FR 12451, Mar. 7, 2011; 76 FR 24774, May 2, 2011]

§ 429.40 Candelabra base incandescent lamps and intermediate base incandescent lamps.

(a) Sampling plan for selection of units for testing. (1) The requirements of § 429.11 are applicable to candelabra base incandescent lamps; and

(2) For each basic model of candelabra base incandescent lamp and intermediate base incandescent lamp, a minimum sample of 21 lamps shall be randomly selected and tested. Any represented value of lamp wattage of a basic model shall be based on the sample and shall be less than or equal to the lower of:

(i) The mean of the sample, where:

\[
\bar{x} = \frac{1}{n} \sum_{i=1}^{n} x_i
\]

and, \( \bar{x} \) is the sample mean; \( n \) is the number of samples; and \( x_i \) is the \( i^{th} \) sample.

Or,

(ii) The lower 97.5 percent confidence limit (LCL) of the true mean divided by 0.95, where:

\[
LCL = \bar{x} - t_{0.975} \left( \frac{s}{\sqrt{n}} \right)
\]

And \( \bar{x} \) is the sample mean; \( s \) is the sample standard deviation; \( n \) is the number of samples; and \( t_{0.975} \) is the \( t \) statistic for a 97.5% one-tailed confidence interval with \( n-1 \) degrees of freedom (from Appendix A of this part).
§ 429.41 Electric motors. [Reserved]

§ 429.42 Commercial refrigerators, freezers, and refrigerator-freezers.

(a) Sampling plan for selection of units for testing. (1) The requirements of § 429.11 are applicable to commercial refrigerators, freezers, and refrigerator-freezers; and

(2) For each basic model of commercial refrigerator, freezer, or refrigerator-freezer selected for testing, a sample of sufficient size shall be randomly selected and tested to ensure that—

(i) Any value of estimated maximum daily energy consumption or other measure of energy consumption of a basic model for which consumers would favor lower values shall be greater than or equal to the higher of:

(A) The mean of the sample, where:

\[ \bar{x} = \frac{1}{n} \sum_{i=1}^{n} x_i \]

and, \( \bar{x} \) is the sample mean; \( n \) is the number of samples; and \( x_i \) is the maximum of the \( i^{th} \) sample;

Or,

(B) The upper 95 percent confidence limit (UCL) of the true mean divided by 1.10, where:

\[ UCL = \bar{x} + t_{0.95} \left( \frac{s}{\sqrt{n}} \right) \]

And \( \bar{x} \) is the sample mean; \( s \) is the sample standard deviation; \( n \) is the number of samples; and \( t_{0.95} \) is the t statistic for a 95% one-tailed confidence interval with \( n-1 \) degrees of freedom (from Appendix A).

and

(ii) Any represented value of the energy efficiency or other measure of energy consumption of a basic model for which consumers would favor higher values shall be less than or equal to the lower of:

(A) The mean of the sample, where: