§ 429.20 Residential clothes washers.

(a) Sampling plan for selection of units for testing. (1) The requirements of §429.11 are applicable to residential clothes washers; and

(2) For each basic model of residential clothes washers, a sample of sufficient size shall be randomly selected and tested to ensure that—

(i) Any represented value of the water factor, integrated water factor, the estimated annual operating cost, the energy or water consumption, or other measure of energy or water 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:

\[ \bar{x}_1 = \frac{1}{n} \sum_{i=1}^{n} x_i \]

and, \( \bar{x}_1 \) is the sample mean; \( n \) is the number of samples; and \( x_i \) is the \( i^{th} \) sample;

Or,

(B) The upper 97\( \frac{1}{2} \) percent confidence limit (UCL) of the true mean divided by 1.05, where:

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

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).

and

(ii) Any represented value of the modified energy factor, integrated modified energy factor, or other measure of energy or water 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:

\[ \bar{x}_2 = \frac{1}{n} \sum_{i=1}^{n} x_i \]

and, \( \bar{x}_2 \) is the sample mean; \( n \) is the number of samples; and \( x_i \) is the \( i^{th} \) sample;

Or,

(B) The lower 97\( \frac{1}{2} \) percent confidence limit (LCL) of the true mean divided by 0.95, where:

\[ LCL = \bar{x} - t_{0.975} \left( \frac{s}{\sqrt{n}} \right) \]
§ 429.21 Residential clothes dryers.

(a) Sampling plan for selection of units for testing. (1) The requirements of §429.11 are applicable to clothes dryers; and

(2) For each basic model of clothes dryers a sample of sufficient size shall be randomly selected and tested to ensure that—

(i) Any represented value of estimated annual operating cost, 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:

\[ LCL = \bar{x} - \frac{t_{0.975}}{\sqrt{n}} \]

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).

(b) Certification reports. (1) The requirements of §429.12 are applicable to residential clothes washers; and

(2) Pursuant to §429.12(b)(13), a certification report shall include the following public product-specific information:

(i) For residential clothes washers manufactured before March 7, 2015: The modified energy factor (MEF) in cubic feet per kilowatt hour per cycle (cu ft/kWh/cycle) and the capacity in cubic feet (cu ft). For standard-size residential clothes washers, a water factor (WF) in gallons per cycle per cubic feet (gal/cycle/cu ft).

(ii) For residential clothes washers manufactured on or after March 7, 2015: The integrated modified energy factor (IMEF) in cu ft/kWh/cycle, the integrated water factor (IWF) in gal/cycle/cu ft, the capacity in cu ft and the type of loading (top-loading or front-loading).

(3) Pursuant to §429.12(b)(13), a certification report shall include the following additional product-specific information: When using appendix J2, a list of all cycle selections comprising the complete energy test cycle for each basic model.