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[6450-01-P]

**DEPARTMENT OF ENERGY**

**10 CFR Part 430**

**[EERE-2017-BT-TP-0012]**

**RIN 1904-AD47**

**Energy Conservation Program: Test Procedure for Room Air Conditioners; Correction**

**AGENCY:** Office of Energy Efficiency and Renewable Energy, Department of Energy.

**ACTION:** Final rule; correction.

**SUMMARY:** On March 29, 2021 the U.S. Department of Energy (“DOE”) published a final rule adopting test procedures for room air conditioners (hereafter the “March 2021 final rule”).

This document corrects errors and omissions in the Federal test procedure for room air conditioners as amended by the March 2021 final rule, including an incorrect mathematical notation and missing detail regarding the full compressor speed setpoint in the testing instructions. Neither the errors and omissions, nor the corrections in this document, affect the substance of the rulemaking or any conclusions reached in support of the final rule.

**DATES:** Effective [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

**FOR FURTHER INFORMATION CONTACT:**

Mr. Bryan Berringer, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE-5B, 1000 Independence Avenue SW.,

Washington, DC 20585-0121. Telephone: (202) 586-0371.

Email: *ApplianceStandardsQuestions@ee.doe.gov*

Ms. Sarah Butler, U.S. Department of Energy, Office of the General Counsel, GC-33,  
1000 Independence Avenue SW., Washington, DC 20585-0121. Telephone: (202) 586-1777.

Email: *Sarah.Butler@hq.doe.gov*.

## **SUPPLEMENTARY INFORMATION:**

### **I. Background**

DOE published a final rule in the *Federal Register* on March 29, 2021, establishing test procedures for room air conditioners in appendix F to subpart B of Title 10 of the Code of Federal Regulations (CFR) part 430 (“appendix F”). 86 FR 16446. Following publication of the March 2021 final rule, DOE received a request on April 12, 2021 from the Association of Home Appliance Manufacturers to correct an error to a mathematical notation in the calculation for annual energy consumption in inactive and off mode.<sup>1</sup> DOE reviewed the test procedure as amended and agrees that the mathematical notation as finalized in the March 2021 final rule is incorrect. Upon review, DOE also identified an omission in the regulatory text as amended by the March 2021 final rule regarding a detail for the full compressor speed setpoint in the testing instructions. As discussed in the following paragraphs, the errors and omission in the regulatory text were correctly presented in the preamble to the March 2021 final rule. This correction rule revises appendix F to correct these typographical errors.

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<sup>1</sup> The Association of Home Appliance Manufacturers’ request is filed in the docket of this test procedure rulemaking (Docket No. EERE-2017-BT-TP-0012-0022) and available for review at [http:// www.regulations.gov](http://www.regulations.gov).

The appendix F test procedure specifies a formula to calculate annual energy consumption in inactive and off mode. Section 5.1 of appendix F. However, the formula as established by the March 2021 final rule does not properly size one of the subscripts and inadvertently uses an incorrect mathematical notation. DOE is therefore fixing these issues in this notice, and notes that the “ia” in the “P<sub>ia</sub>” variable should be in subscript, and the addition symbol in the second parenthetical term should instead be a multiplication symbol. The parenthetical term refers to the annual energy consumption of the room air conditioner in off mode, in kilowatt-hours (“kWh”) per year, which is the product of the measured average power in off mode, P<sub>om</sub>, in watts (“W”), and the annual operating hours in off mode multiplied by a conversion factor from watt-hours to kWh, t<sub>om</sub>, in kWh/W. It would therefore be mathematically incorrect to sum P<sub>om</sub> and t<sub>om</sub> to obtain an annual energy consumption term, rather than multiply the two variables. The corrected equation is as follows:

$$AEC_{ia/om} = (P_{ia} \times t_{ia}) + (P_{om} \times t_{om}).$$

The March 2021 final rule amended appendix F to include a definition of “full compressor speed (full),” which is referenced in the procedure for testing variable-speed room air conditioners. 86 FR 16446, 16477; *see also* section 2.12 of appendix F. Although the preamble to the March 2021 final rule stated that the full compressor speed is achieved when testing using a 75 °F setpoint, that testing instruction was inadvertently omitted in the regulatory text. 86 FR 16446, 16456. Thus, DOE revises the definition for full compressor speed as discussed in the preamble of the March 2021 final rule as follows:

2.12 “Full compressor speed (full)” means the compressor speed at which the unit operates at full load test conditions, when using user settings with a unit thermostat setpoint of

75 °F to achieve maximum cooling capacity, according to the instructions in ANSI/ASHRAE Standard 16–2016 Section 6.1.1.4.”

## **II. Need for Correction**

As published, the regulatory text in March 2021 final rule may result in confusion due to the typographical errors and omission explained above. Because this final rule would simply correct errors in the text without making substantive changes in the March 2021 final rule, the changes addressed in this document are technical in nature.

## **III. Procedural Issues and Regulatory Review**

DOE has concluded that the determinations made pursuant to the various procedural requirements applicable to the March 2021 final rule remain unchanged for this final rule technical correction. These determinations are set forth in the March 2021 final rule. 86 FR 16446, 16472.

Pursuant to the Administrative Procedure Act, 5 U.S.C. 553(b), DOE has determined there is good cause to find that prior notice and opportunity for public comment on the changes contained in this document are impracticable, unnecessary, and contrary to the public interest. Neither the errors nor the corrections in this document affect the substance of the March 2021 final rule or any of the conclusions reached in support of the final rule. Providing prior notice and an opportunity for public comment on correcting objective, typographical errors and omissions that do not change the substance of the test procedure serves no useful purpose. As such, this rule is not subject to the 30-day delay in effective date requirement of 5 U.S.C. 553(d) otherwise applicable to rules that make substantive changes.

## List of Subjects in 10 CFR Part 430

Administrative practice and procedure, Confidential business information, Energy conservation, Household appliances, Imports, Incorporation by reference, Intergovernmental relations, Small businesses.

## Signing Authority

This document of the Department of Energy was signed on May 2, 2021, by Kelly Speakes-Backman, Principal Deputy Assistant Secretary and Acting Assistant Secretary for Energy Efficiency and Renewable Energy, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, DC, on May 2, 2021

 Kelly Speakes-Backman Digitally signed by Kelly Speakes-Backman  
Date: 2021.05.02 16:23:00 -04'00'

Kelly Speakes-Backman  
Principal Deputy Assistant Secretary and  
Acting Assistant Secretary  
Energy Efficiency and Renewable Energy



For the reasons stated in the preamble, DOE corrects part 430 of chapter II, subchapter D, of title 10 of the Code of Federal Regulations by making the following correcting amendments:

**PART 430-ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS**

1. The authority citation for part 430 continues to read as follows:

**Authority:** 42 U.S.C. 6291-6309; 28 U.S.C. 2461 note.

2. Appendix F to subpart B of part 430 is amended by revising section 2.12 and section 5.1 to read as follows:

**APPENDIX F TO SUBPART B OF PART 430—UNIFORM TEST METHOD FOR MEASURING THE ENERGY CONSUMPTION OF ROOM AIR CONDITIONERS**

\* \* \* \* \*

2.12 “Full compressor speed (full)” means the compressor speed at which the unit operates at full load test conditions, when using user settings with a unit thermostat setpoint of 75 °F to achieve maximum cooling capacity, according to the instructions in ANSI/ASHRAE Standard 16–2016.

\* \* \* \* \*

5.1 *Annual energy consumption in inactive mode and off mode.* Calculate the annual energy consumption in inactive mode and off mode,  $AEC_{ia/om}$ , expressed in kilowatt-hours per year (kWh/year).

$$AEC_{ia/om} = (P_{ia} \times t_{ia}) + (P_{om} \times t_{om})$$



Where:

$AEC_{ia/om}$  = annual energy consumption in inactive mode and off mode, in kWh/year.

$P_{ia}$  = average power in inactive mode, in watts, determined in section 4.2 of this appendix.

$P_{om}$  = average power in off mode, in watts, determined in section 4.2 of this appendix.

$t_{ia}$  = annual operating hours in inactive mode and multiplied by a 0.001 kWh/Wh conversion factor from watt-hours to kilowatt-hours. This value is 5.115 kWh/W if the unit has inactive mode and no off mode, 2.5575 kWh/W if the unit has both inactive and off mode, and 0 kWh/W if the unit does not have inactive mode.

$t_{om}$  = annual operating hours in off mode and multiplied by a 0.001 kWh/Wh conversion factor from watt-hours to kilowatt-hours. This value is 5.115 kWh/W if the unit has off mode and no inactive mode, 2.5575 kWh/W if the unit has both inactive and off mode, and 0 kWh/W if the unit does not have off mode.

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